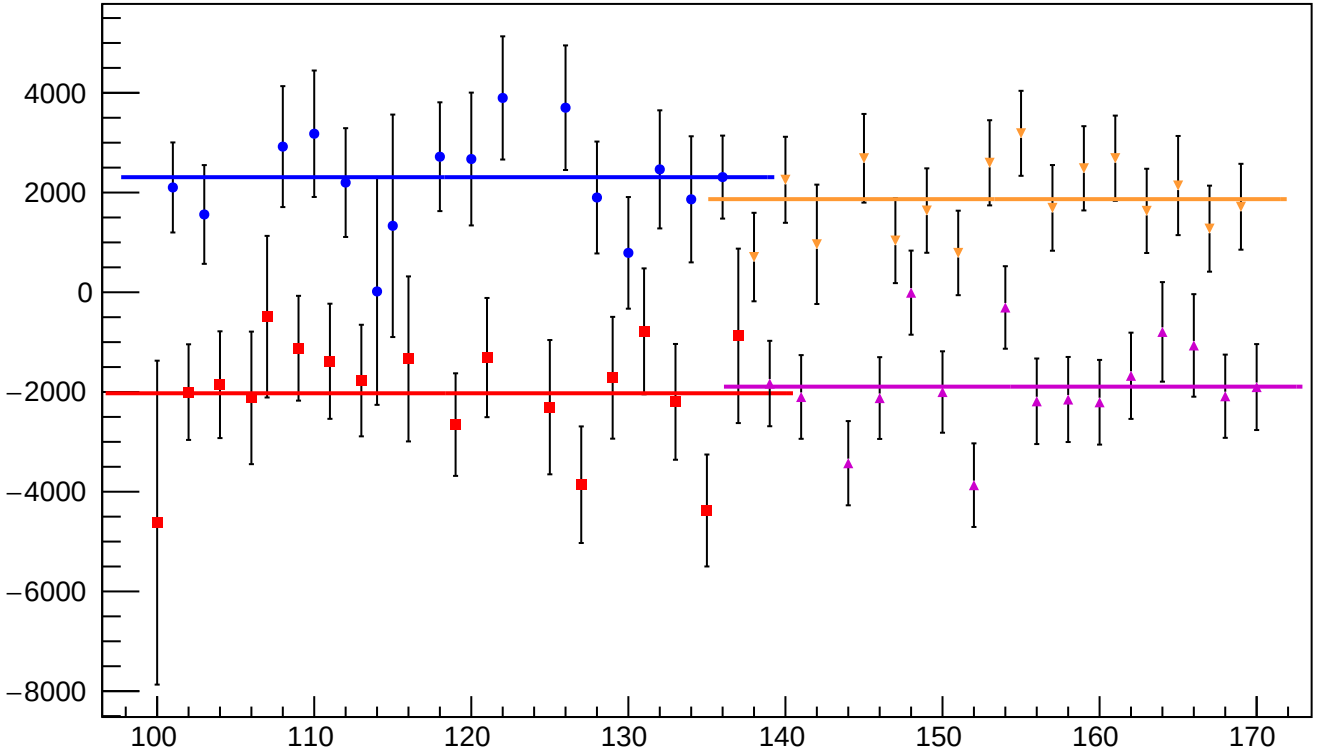
# reg_asym_us_avg_mean vs Slug




Right In: 2308.155+/-290.431 $\chi^2$/NDF: 7.8/15

Left Out: 1867.804+/-219.708 $\chi^2$/NDF:11.3/15

Right Out: -2025.627+/-289.797 $\chi^2$/NDF: 11.9/17

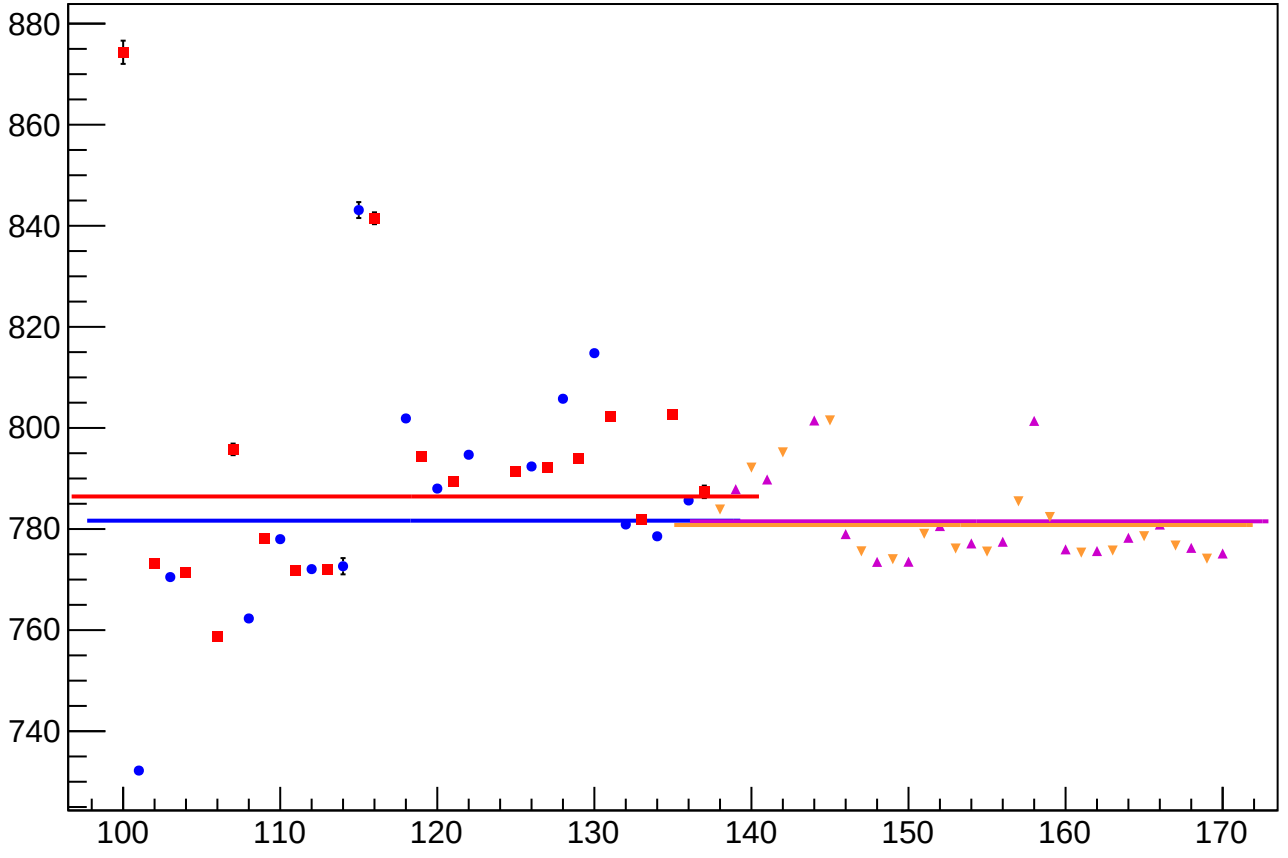
Left In: -1892.914+/-214.947 $\chi^2$/NDF:20.0/15

+ sign 2028.082+/-175.219 $\chi^2$/NDF: 20.5/31

All: 14.635+/-122.977 $\chi^2$/NDF: 312.8/65

- sign -1940.013+/-172.642 $\chi^2$/NDF: 32.1/33

# reg_asym_us_avg_rms vs Slug




Right In: 781.654+/-0.205 $\chi^2$/NDF: 12319.0/15

Left Out: 780.796+/-0.155 $\chi^2$/NDF:2482.2/15

Right Out: 786.443+/-0.205 $\chi^2$/NDF: 7201.6/17

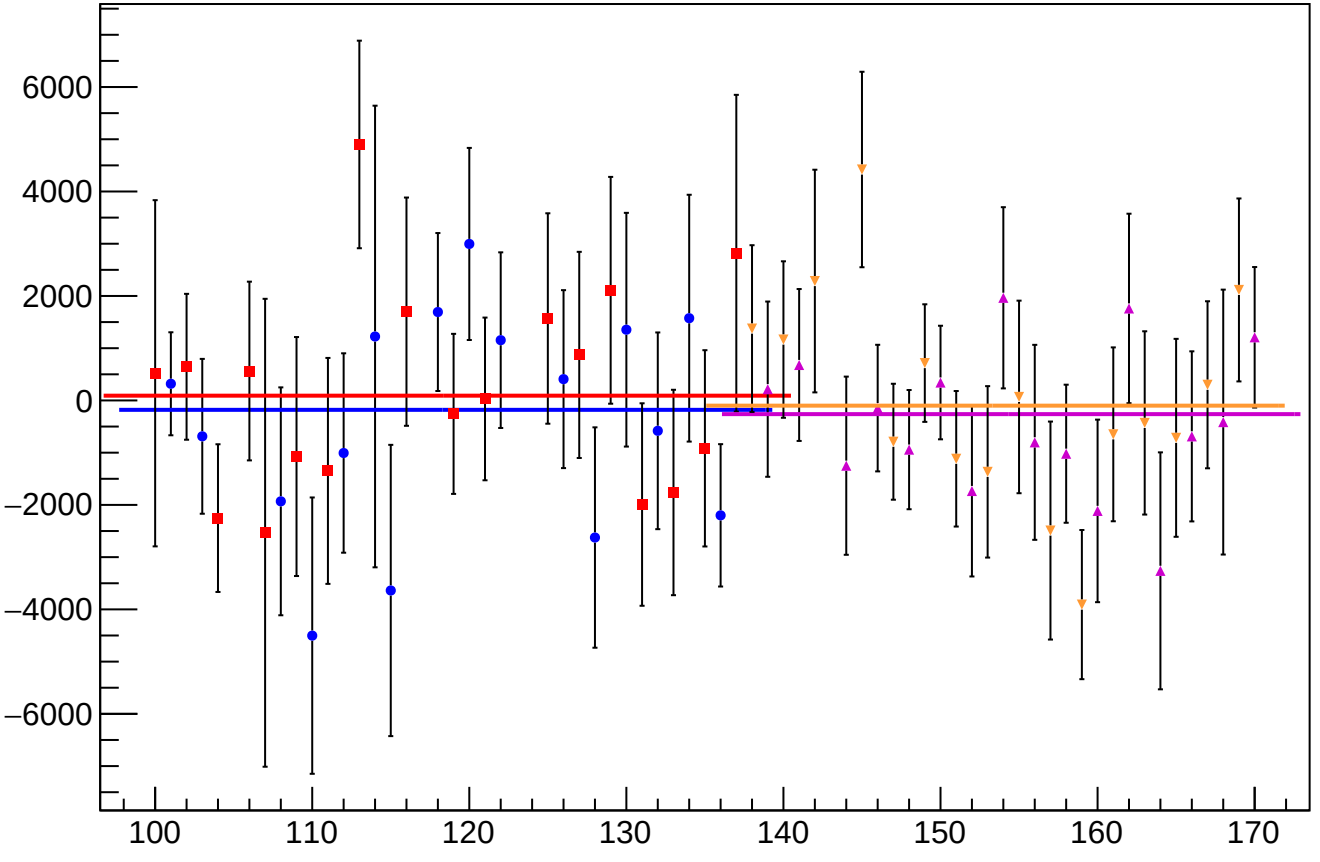
Left In: 781.527+/-0.152 $\chi^2$/NDF:3388.3/15

+ sign 781.108+/-0.124 $\chi^2$/NDF: 14812.4/31

All: 782.206+/-0.087 $\chi^2$/NDF: 25928.3/65

- sign 783.272+/-0.122 $\chi^2$/NDF: 10961.2/33

# asym_us_avg_reg_correction_mean vs Slug




Right In: -179.929+/-440.772 $\chi^2$/NDF: 15.4/15

Left Out: -99.764+/-389.039 $\chi^2$/NDF:21.1/15

Right Out: 91.288+/-454.811 $\chi^2$/NDF: 15.2/17

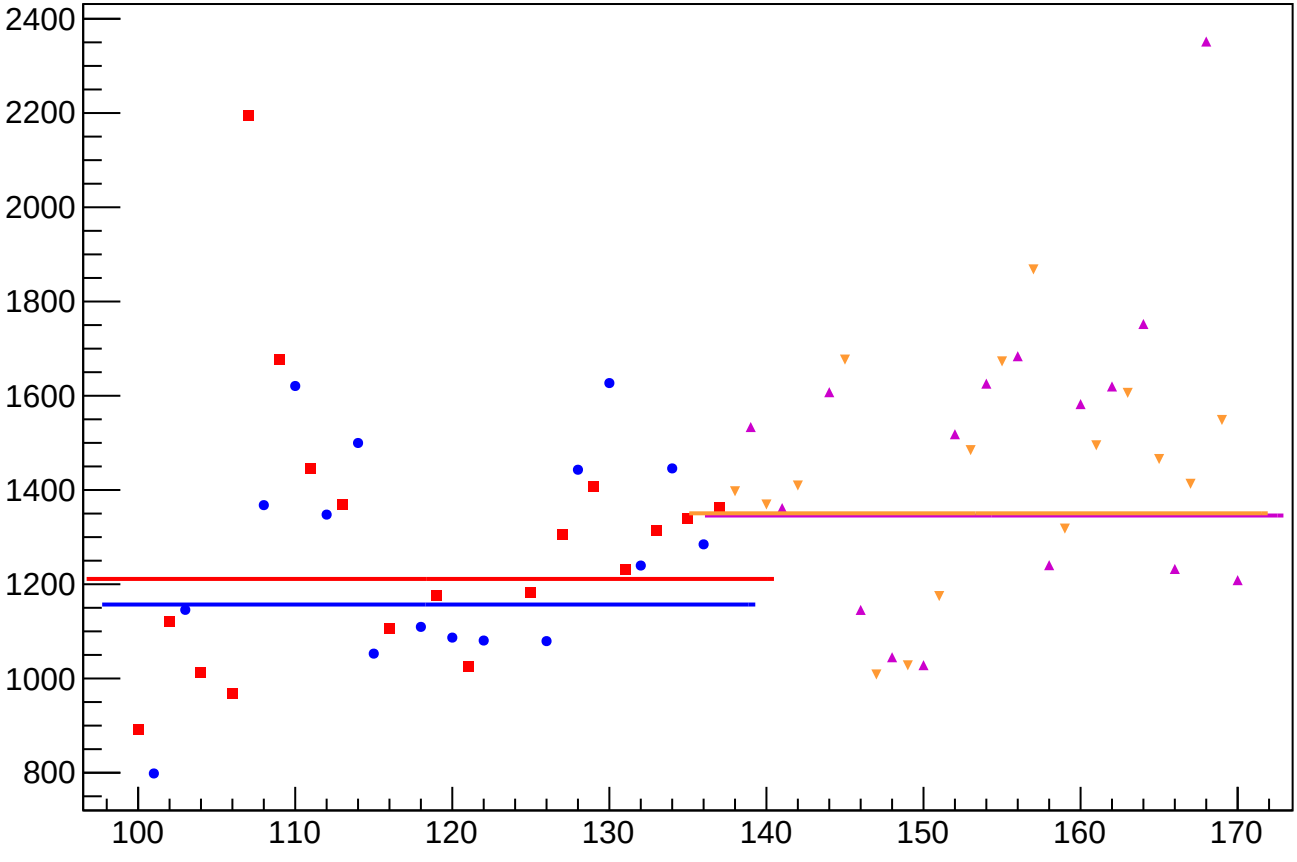
Left In: -262.172+/-379.486 $\chi^2$/NDF:9.8/15

+ sign -134.868+/-291.676 $\chi^2$/NDF: 36.5/31

All: -125.973+/-206.141 $\chi^2$/NDF: 61.9/65

- sign -117.096+/-291.379 $\chi^2$/NDF: 25.3/33

# asym_us_avg_reg_correction_rms vs Slug




Right In: 1156.948+/-0.312 $\chi^2$/NDF: 569119.8/15

Left Out: 1350.531+/-0.275 $\chi^2$/NDF:747508.3/15

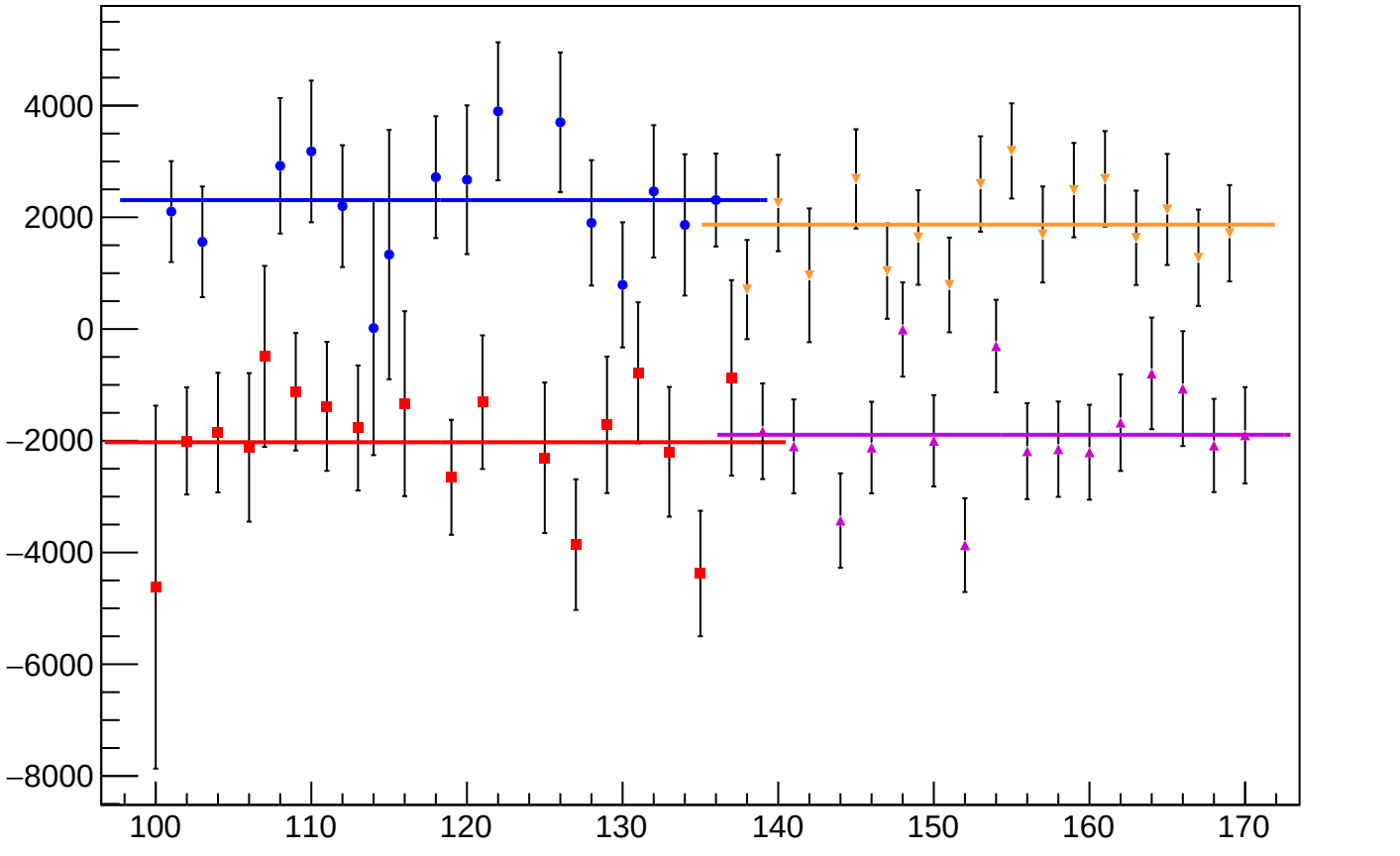
Right Out: 1211.264+/-0.322 $\chi^2$/NDF: 397714.5/17

Left In: 1345.853+/-0.268 $\chi^2$/NDF:1080924.1/15

+ sign 1265.761+/-0.206 $\chi^2$/NDF: 1533474.2/31

All: 1278.199+/-0.146 $\chi^2$/NDF: 3122633.9/65

- sign 1290.611+/-0.206 $\chi^2$/NDF: 1581893.7/33




Right In: 2308.155+/-290.431 $\chi^2$/NDF: 7.8/15

Left Out: 1867.804+/-219.708 $\chi^2$/NDF:11.3/15

Right Out: -2025.627+/-289.797 $\chi^2$/NDF: 11.9/17

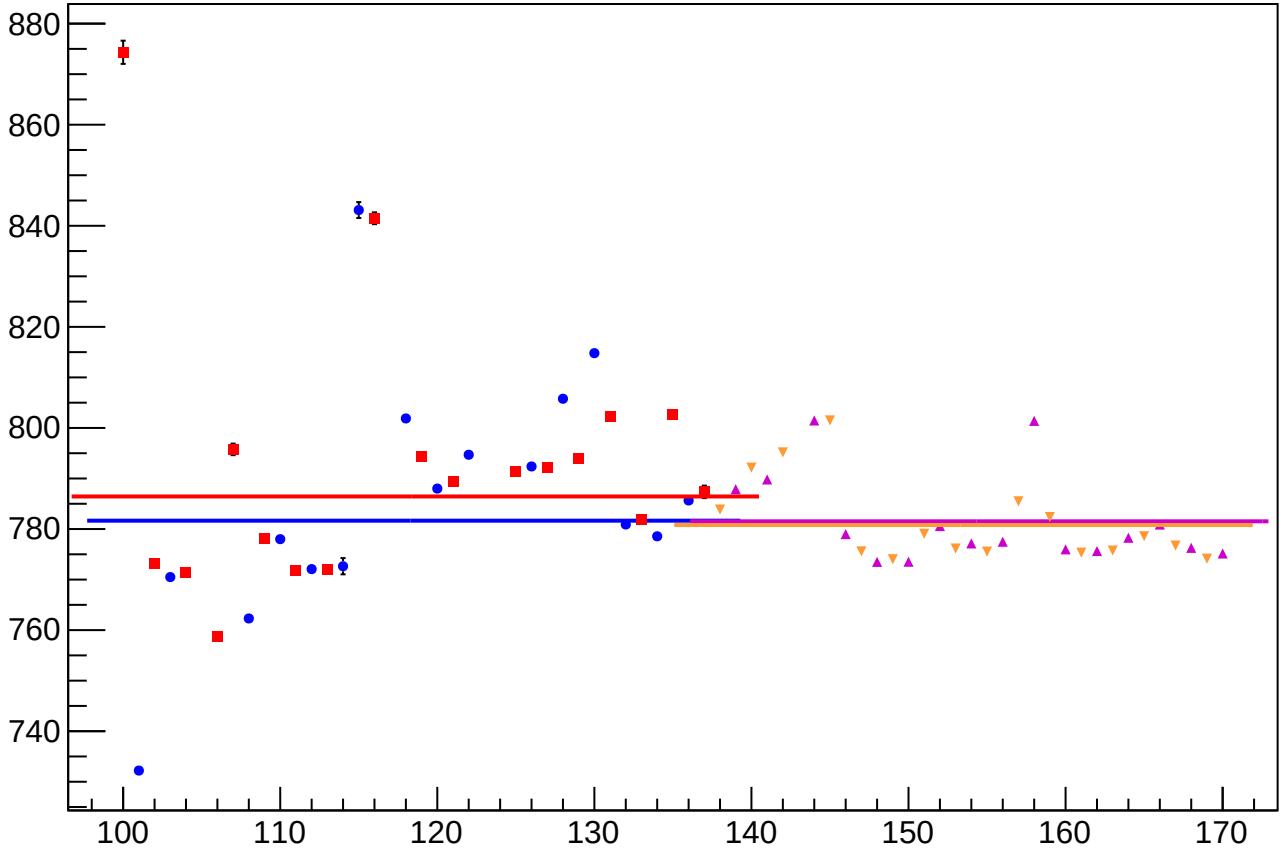
Left In: -1892.914+/-214.947 $\chi^2$/NDF:20.0/15

+ sign 2028.082+/-175.219 $\chi^2$/NDF: 20.5/31

All: 14.635+/-122.977 $\chi^2$/NDF: 312.8/65

- sign -1940.013+/-172.642 $\chi^2$/NDF: 32.1/33

# cor_asym_us_avg_rms vs Slug




Right In: 781.654+/-0.205 $\chi^2$/NDF: 12319.0/15

Left Out: 780.796+/-0.155 $\chi^2$/NDF:2482.2/15

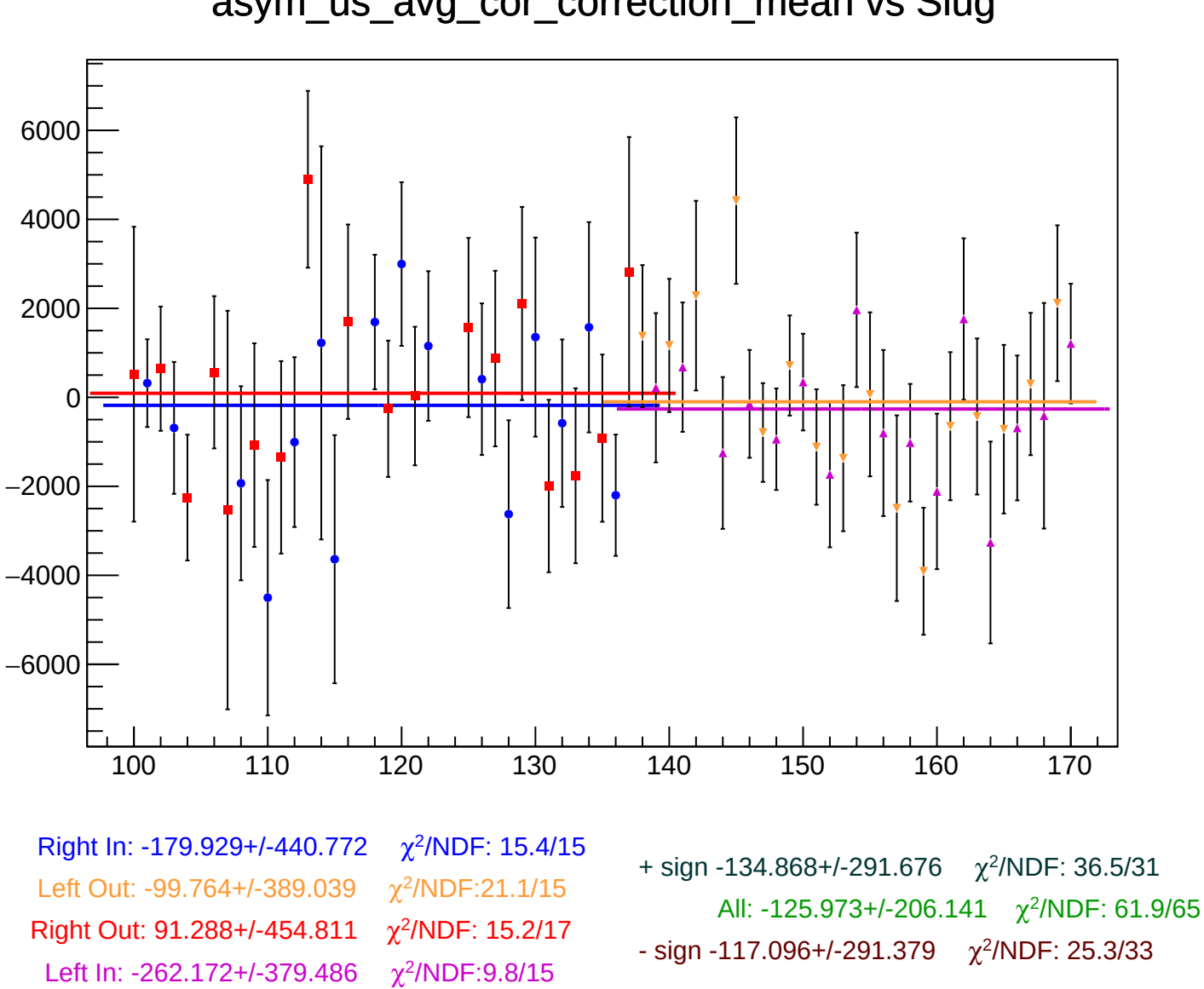
Right Out: 786.443+/-0.205 $\chi^2$/NDF: 7201.6/17

Left In: 781.527+/-0.152 $\chi^2$/NDF:3388.3/15

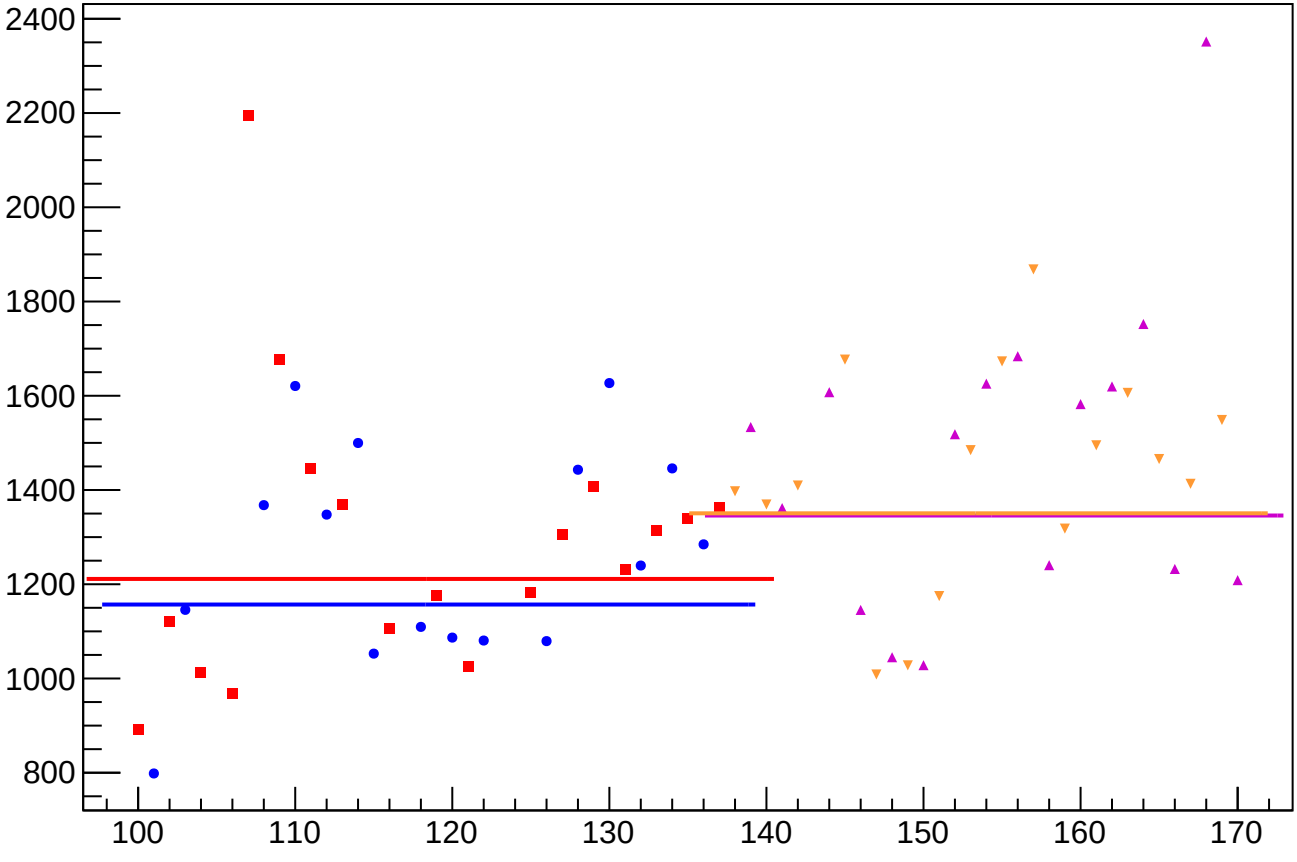
+ sign 781.108+/-0.124 $\chi^2$/NDF: 14812.4/31

All: 782.206+/-0.087 $\chi^2$/NDF: 25928.3/65

- sign 783.272+/-0.122 $\chi^2$/NDF: 10961.2/33


asym_us_avg_cor_correction_mean vs Slug
6000
4000
2000
0
−2000
−4000
−6000
100
110
120
130
140
150
160
170
Right In: -179.929+/-440.772 χ²/NDF: 15.4/15
Left Out: -99.764+/-389.039 χ²/NDF:21.1/15
Right Out: 91.288+/-454.811 χ²/NDF: 15.2/17
Left In: -262.172+/-379.486 χ²/NDF:9.8/15
+ sign -134.868+/-291.676 χ²/NDF: 36.5/31
All: -125.973+/-206.141 χ²/NDF: 61.9/65
- sign -117.096+/-291.379 χ²/NDF: 25.3/33

# asym_us_avg_cor_correction_rms vs Slug




Right In: 1156.948+/-0.312 $\chi^2$/NDF: 569119.8/15

Left Out: 1350.531+/-0.275 $\chi^2$/NDF:747508.3/15

Right Out: 1211.264+/-0.322 $\chi^2$/NDF: 397714.5/17

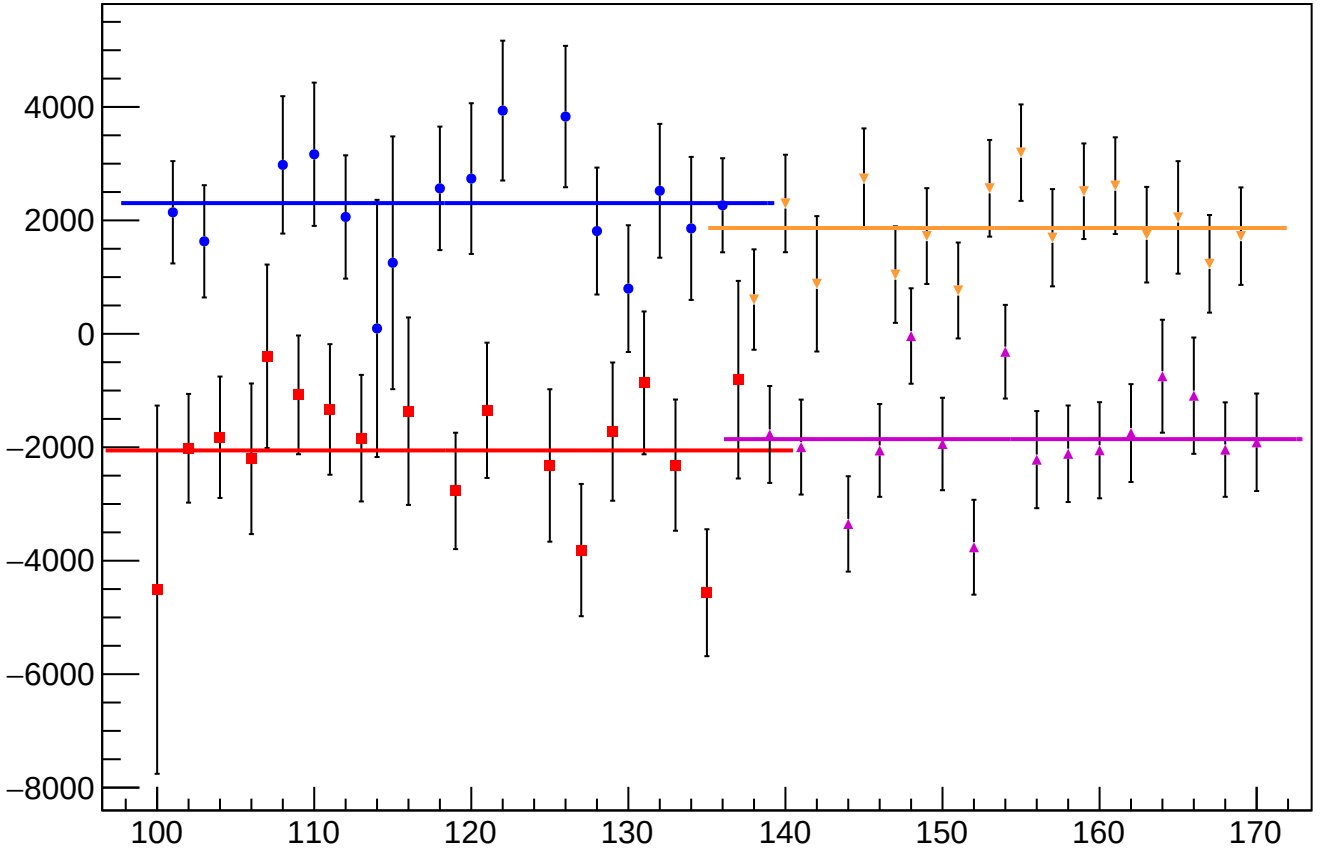
Left In: 1345.853+/-0.268 $\chi^2$/NDF:1080924.1/15

+ sign 1265.761+/-0.206 $\chi^2$/NDF: 1533474.2/31

All: 1278.199+/-0.146 $\chi^2$/NDF: 3122633.9/65

- sign 1290.611+/-0.206 $\chi^2$/NDF: 1581893.7/33

# overload_cor_asym_us_avg_mean vs Slug




Right In: 2304.852+/-289.704 $\chi^2$/NDF: 8.1/15

Left Out: 1865.995+/-219.126 $\chi^2$/NDF:11.7/15

Right Out: -2055.666+/-289.090 $\chi^2$/NDF: 12.9/17

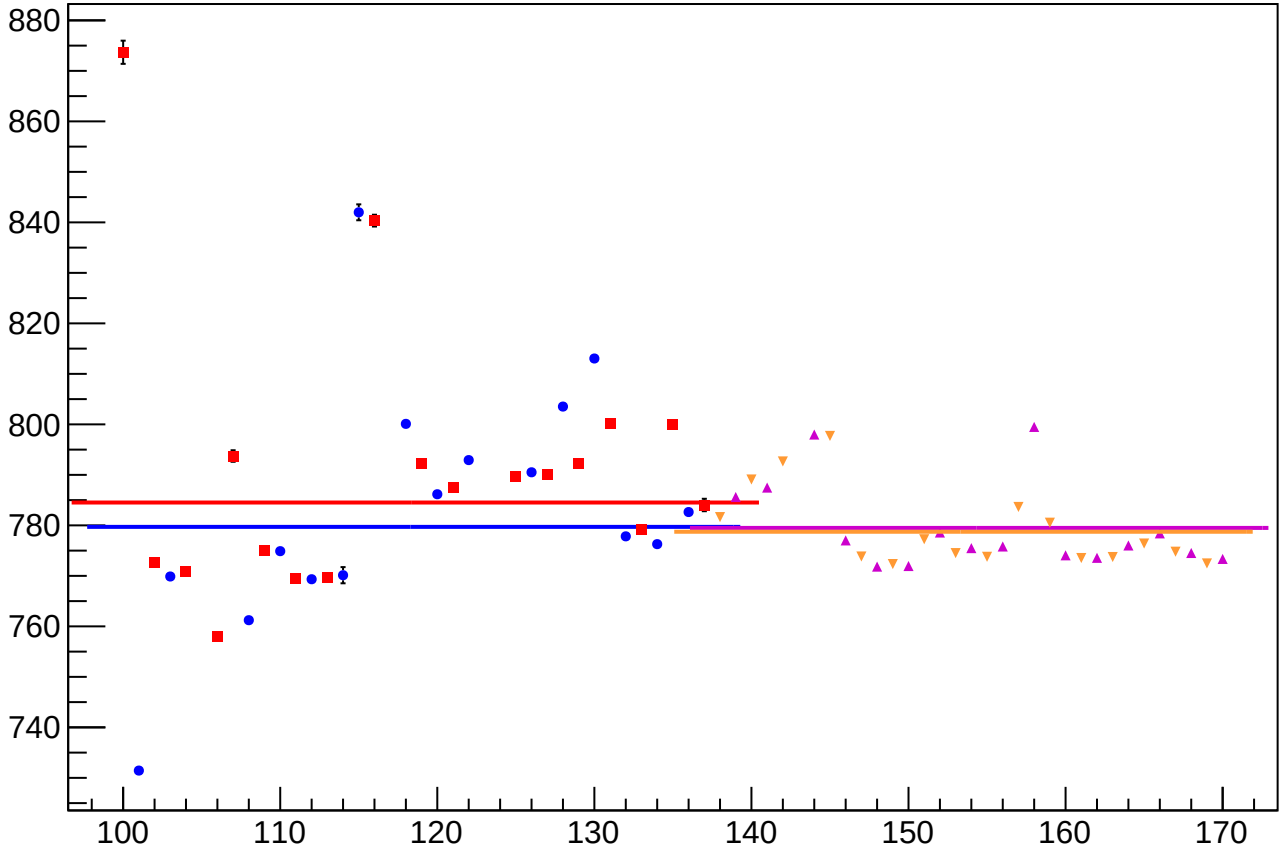
Left In: -1856.180+/-214.387 $\chi^2$/NDF:18.8/15

+ sign 2025.700+/-174.764 $\chi^2$/NDF: 21.3/31

All: 20.185+/-122.661 $\chi^2$/NDF: 312.8/65

- sign -1926.963+/-172.202 $\chi^2$/NDF: 32.0/33

# overload_cor_asym_us_avg_rms vs Slug




Right In: 779.702+/-0.205 $\chi^2$/NDF: 12060.2/15

Left Out: 778.737+/-0.155 $\chi^2$/NDF:2187.4/15

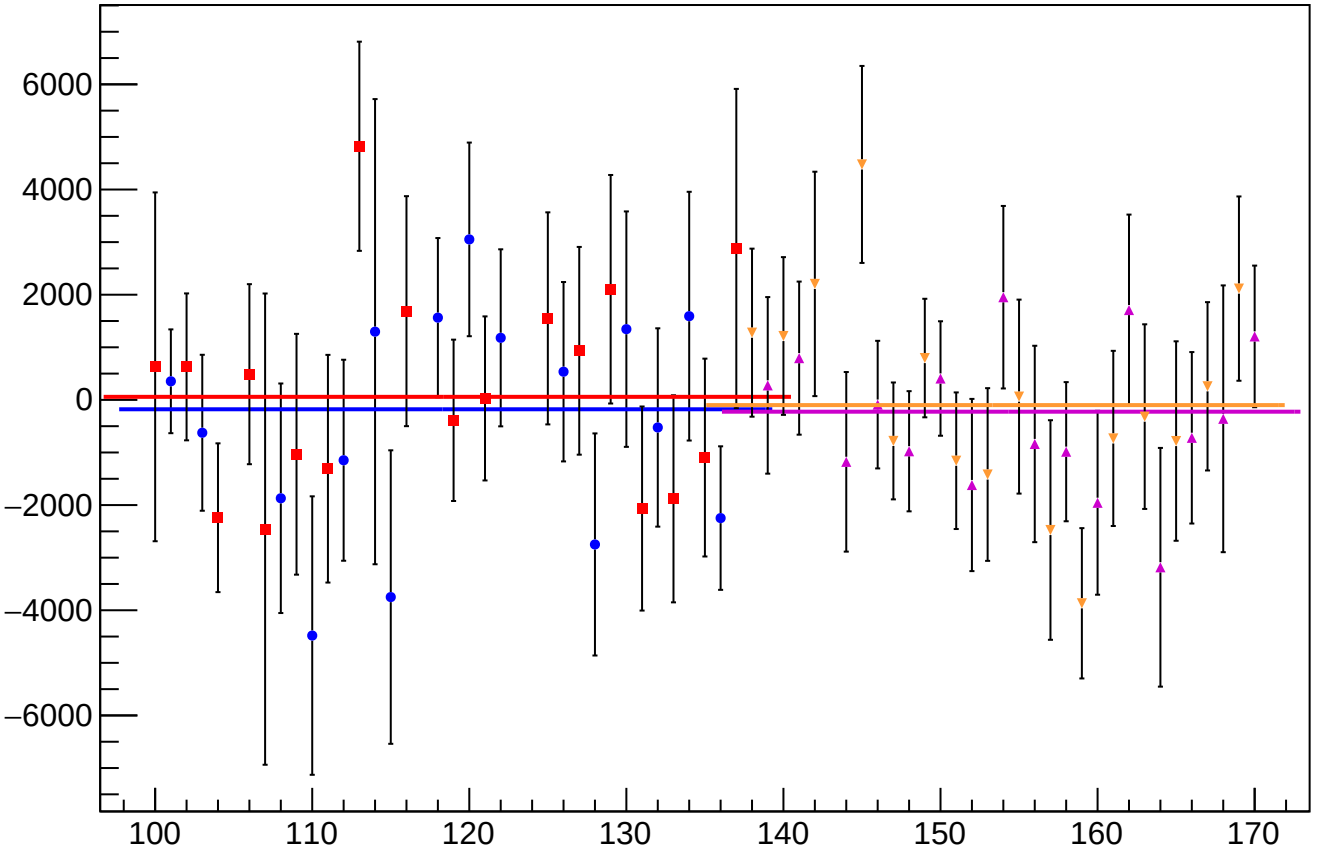
Right Out: 784.524+/-0.204 $\chi^2$/NDF: 7160.0/17

Left In: 779.495+/-0.152 $\chi^2$/NDF:3174.1/15

+ sign 779.088+/-0.124 $\chi^2$/NDF: 14261.8/31

All: 780.200+/-0.087 $\chi^2$/NDF: 25146.0/65

- sign 781.280+/-0.122 $\chi^2$/NDF: 10724.6/33




Right In: -178.457+/-441.218 $\chi^2$/NDF: 15.7/15

Left Out: -99.112+/-389.405 $\chi^2$/NDF:21.2/15

Right Out: 58.040+/-455.216 $\chi^2$/NDF: 15.3/17

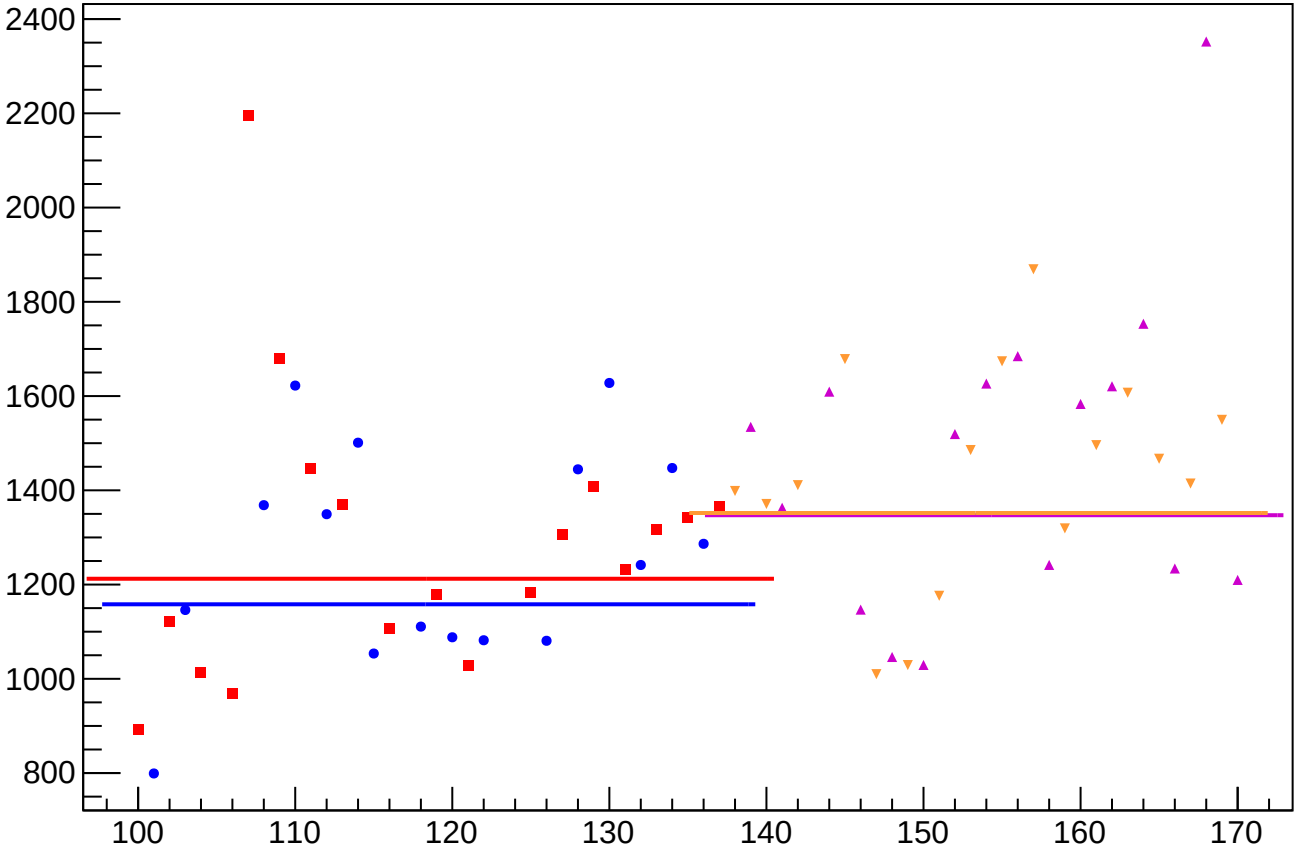
Left In: -224.427+/-379.839 $\chi^2$/NDF:9.5/15

+ sign -133.854+/-291.959 $\chi^2$/NDF: 36.9/31

All: -121.156+/-206.335 $\chi^2$/NDF: 61.8/65

- sign -108.484+/-291.645 $\chi^2$/NDF: 24.9/33

# asym_us_avg_overload_cor_correction_rms vs Slug




Right In: 1158.134+/-0.312 $\chi^2$/NDF: 569144.8/15

Left Out: 1351.883+/-0.275 $\chi^2$/NDF:745473.9/15

Right Out: 1212.347+/-0.322 $\chi^2$/NDF: 397938.1/17

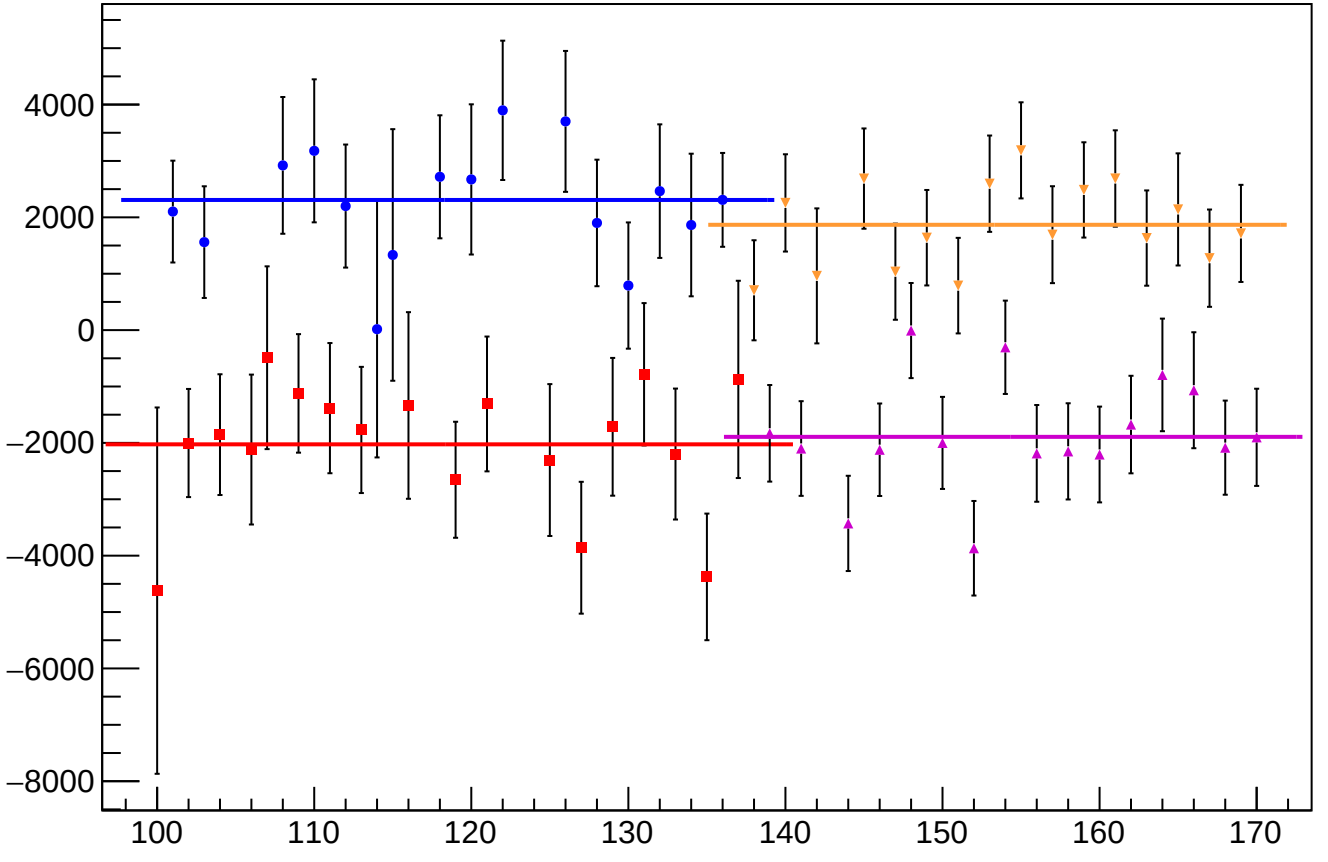
Left In: 1347.179+/-0.269 $\chi^2$/NDF:1078525.7/15

+ sign 1267.047+/-0.206 $\chi^2$/NDF: 1531413.4/31

All: 1279.455+/-0.146 $\chi^2$/NDF: 3118534.7/65

- sign 1291.835+/-0.206 $\chi^2$/NDF: 1579905.2/33

# eigen_cor_asym_us_avg_mean vs Slug




Right In: 2308.155+/-290.431 $\chi^2$/NDF: 7.8/15

Left Out: 1867.804+/-219.708 $\chi^2$/NDF:11.3/15

Right Out: -2025.627+/-289.797 $\chi^2$/NDF: 11.9/17

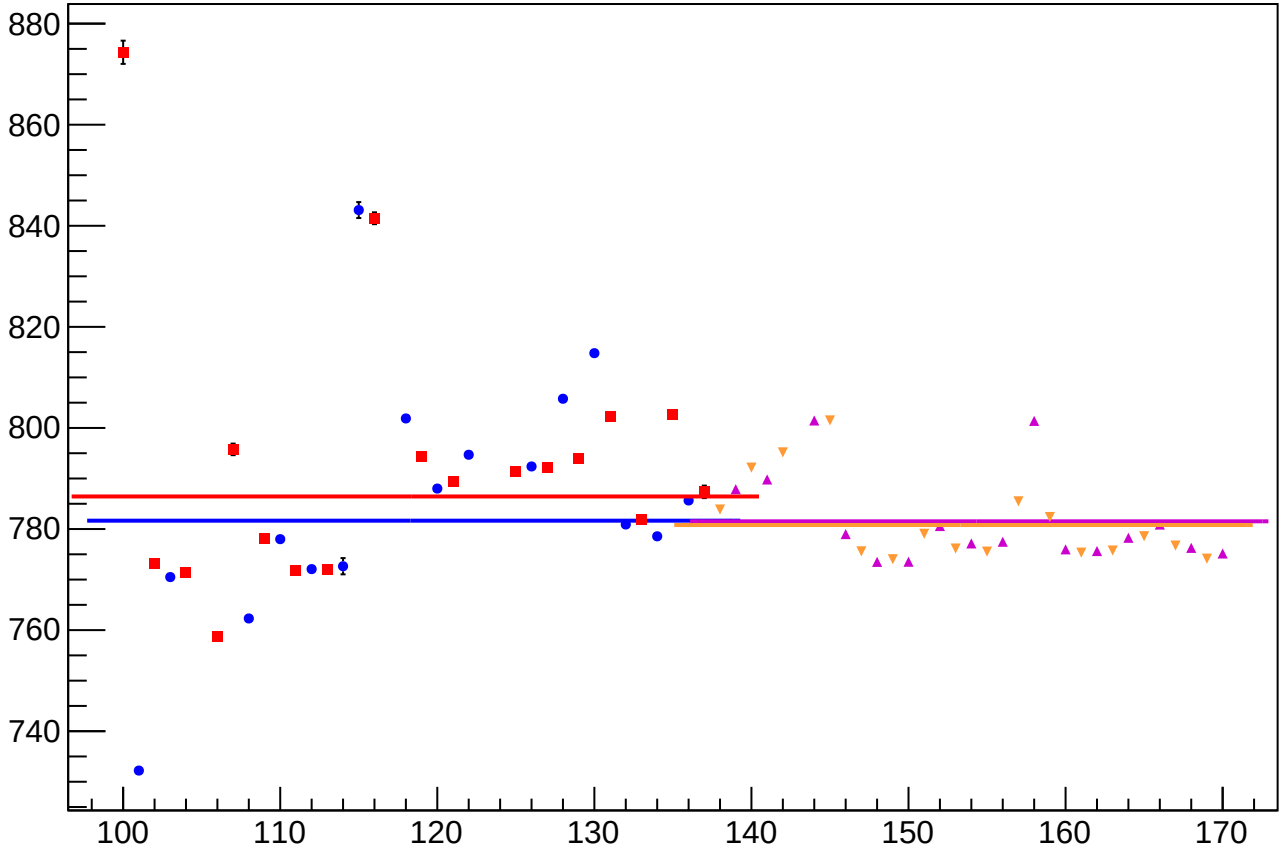
Left In: -1892.914+/-214.947 $\chi^2$/NDF:20.0/15

+ sign 2028.082+/-175.219 $\chi^2$/NDF: 20.5/31

All: 14.635+/-122.977 $\chi^2$/NDF: 312.8/65

- sign -1940.013+/-172.642 $\chi^2$/NDF: 32.1/33

# eigen_cor_asym_us_avg_rms vs Slug




Right In: 781.654+/-0.205 $\chi^2$/NDF: 12319.0/15

Left Out: 780.796+/-0.155 $\chi^2$/NDF:2482.2/15

Right Out: 786.443+/-0.205 $\chi^2$/NDF: 7201.6/17

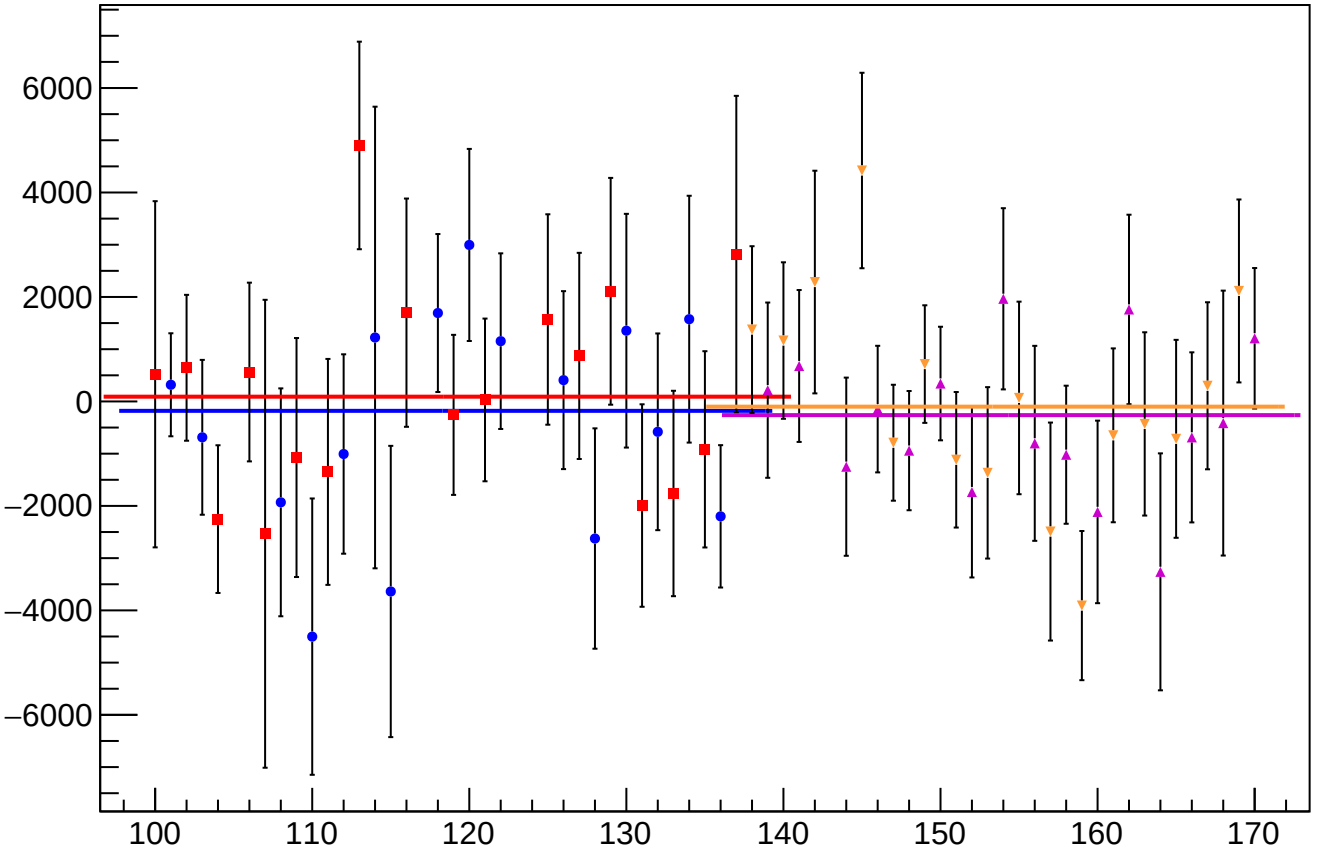
Left In: 781.527+/-0.152 $\chi^2$/NDF:3388.3/15

+ sign 781.108+/-0.124 $\chi^2$/NDF: 14812.4/31

All: 782.206+/-0.087 $\chi^2$/NDF: 25928.3/65

- sign 783.272+/-0.122 $\chi^2$/NDF: 10961.2/33

# asym_us_avg_eigen_cor_correction_mean vs Slug




Right In: -179.929+/-440.772 $\chi^2$/NDF: 15.4/15

Left Out: -99.764+/-389.039 $\chi^2$/NDF:21.1/15

Right Out: 91.288+/-454.811 $\chi^2$/NDF: 15.2/17

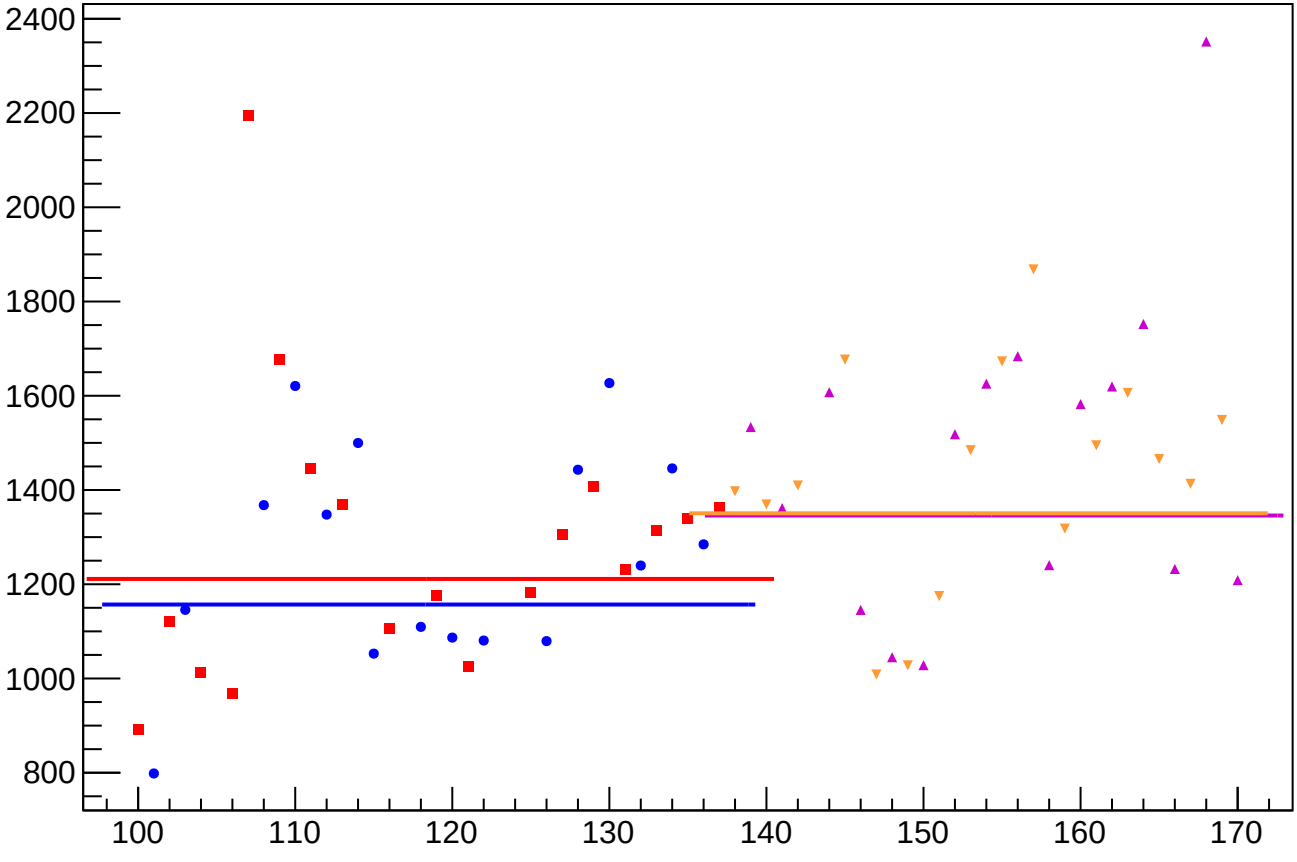
Left In: -262.172+/-379.486 $\chi^2$/NDF:9.8/15

+ sign -134.868+/-291.676 $\chi^2$/NDF: 36.5/31

All: -125.973+/-206.141 $\chi^2$/NDF: 61.9/65

- sign -117.096+/-291.379 $\chi^2$/NDF: 25.3/33

# asym_us_avg_eigen_cor_correction_rms vs Slug




Right In: 1156.948+/-0.312 $\chi^2$/NDF: 569119.8/15

Left Out: 1350.531+/-0.275 $\chi^2$/NDF:747508.3/15

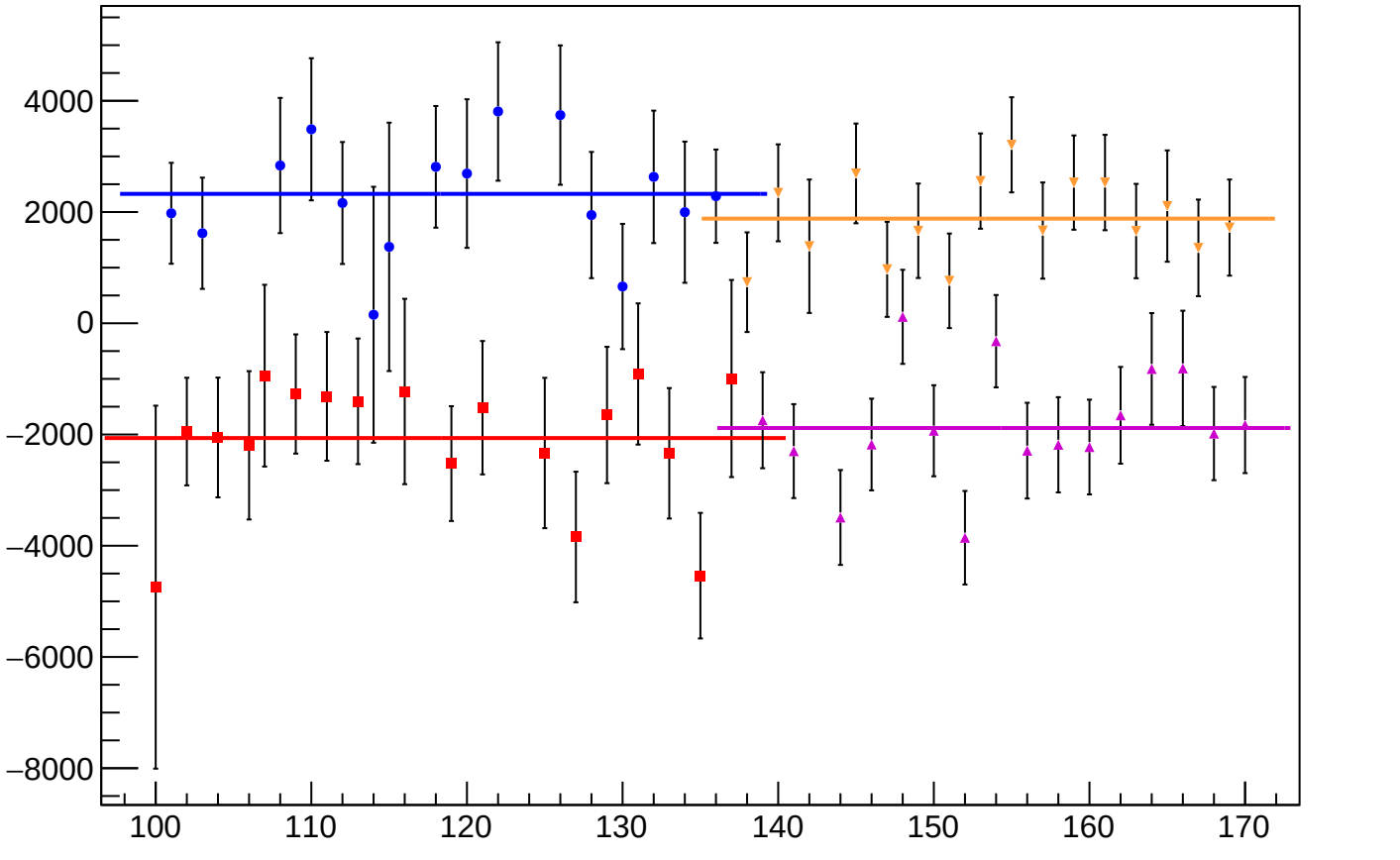
Right Out: 1211.264+/-0.322 $\chi^2$/NDF: 397714.5/17

Left In: 1345.853+/-0.268 $\chi^2$/NDF:1080924.1/15

+ sign 1265.761+/-0.206 $\chi^2$/NDF: 1533474.2/31

All: 1278.199+/-0.146 $\chi^2$/NDF: 3122633.9/65

- sign 1290.611+/-0.206 $\chi^2$/NDF: 1581893.7/33




Right In: 2326.430+/-292.176 $\chi^2$/NDF: 8.1/15

Left Out: 1881.080+/-220.793 $\chi^2$/NDF:10.6/15

Right Out: -2063.976+/-291.790 $\chi^2$/NDF: 11.6/17

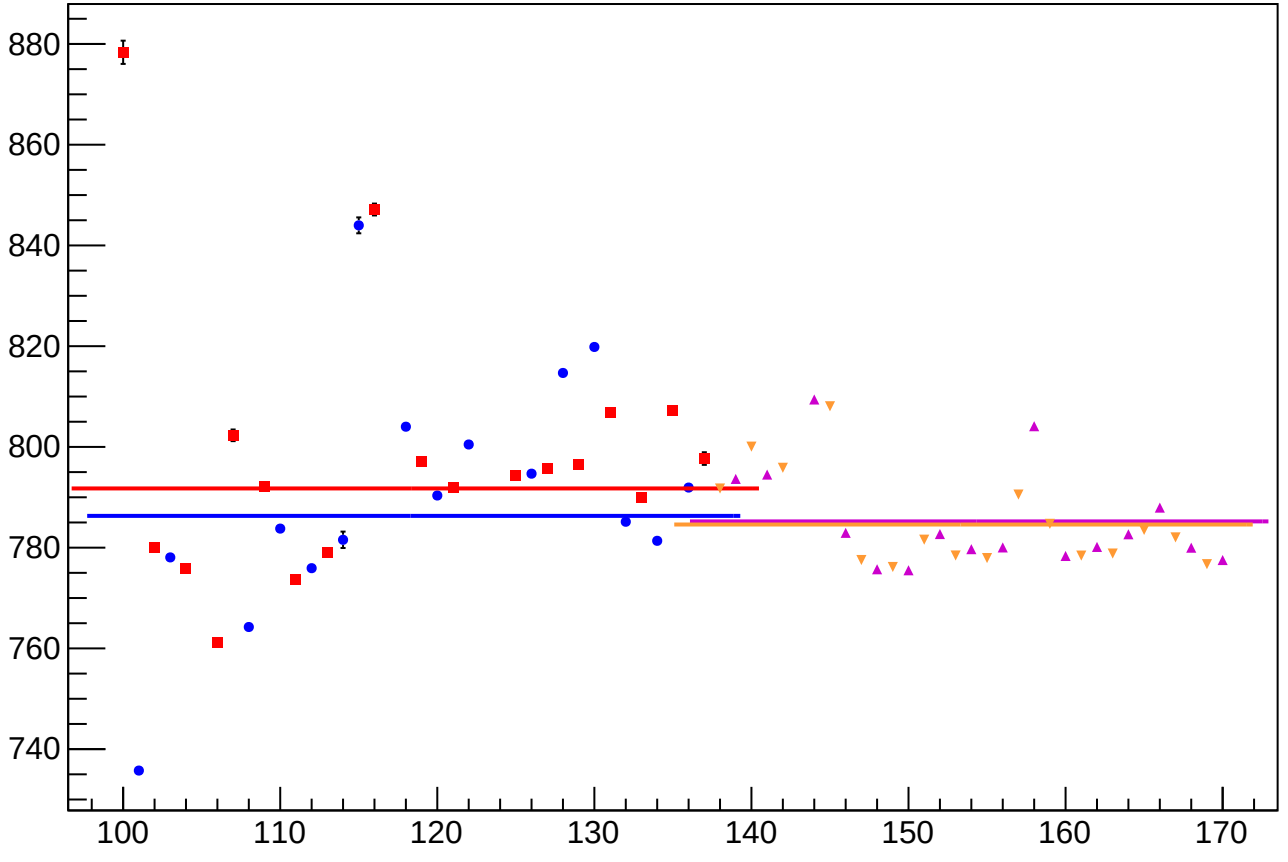
Left In: -1883.298+/-215.971 $\chi^2$/NDF:21.4/15

+ sign 2042.960+/-176.153 $\chi^2$/NDF: 20.2/31

All: 18.660+/-123.644 $\chi^2$/NDF: 313.8/65

- sign -1947.247+/-173.593 $\chi^2$/NDF: 33.2/33

# dit_asym_us_avg_rms vs Slug




Right In: 786.309+/-0.207 $\chi^2$/NDF: 12571.1/15

Left Out: 784.596+/-0.156 $\chi^2$/NDF:3362.8/15

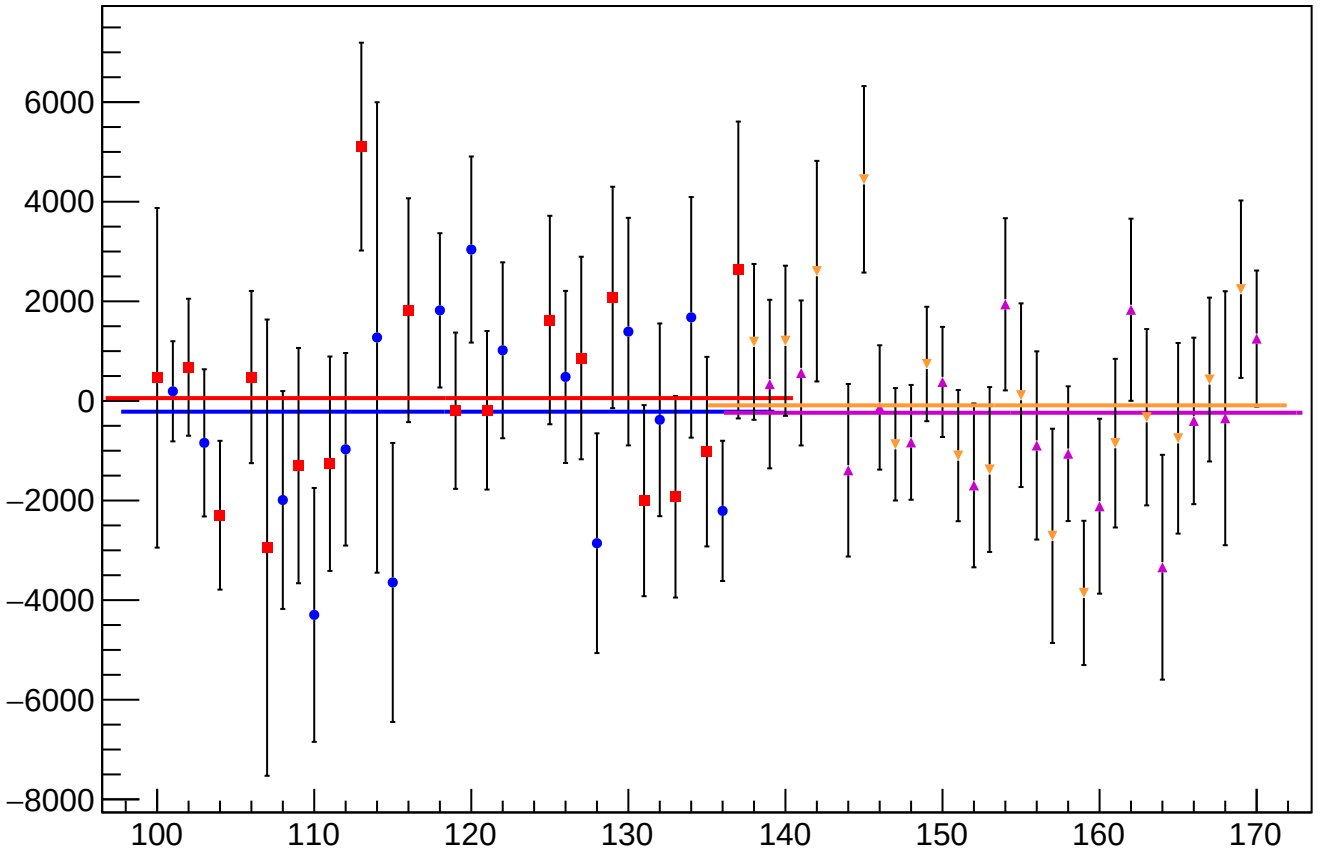
Right Out: 791.756+/-0.206 $\chi^2$/NDF: 7015.1/17

Left In: 785.213+/-0.153 $\chi^2$/NDF:4204.1/15

+ sign 785.219+/-0.125 $\chi^2$/NDF: 15977.7/31

All: 786.391+/-0.087 $\chi^2$/NDF: 28021.1/65

- sign 787.529+/-0.123 $\chi^2$/NDF: 11868.9/33




Right In: -216.184+/-449.537 $\chi^2$/NDF: 15.3/15

Left Out: -88.596+/-394.211 $\chi^2$/NDF:21.4/15

Right Out: 56.784+/-463.978 $\chi^2$/NDF: 15.1/17

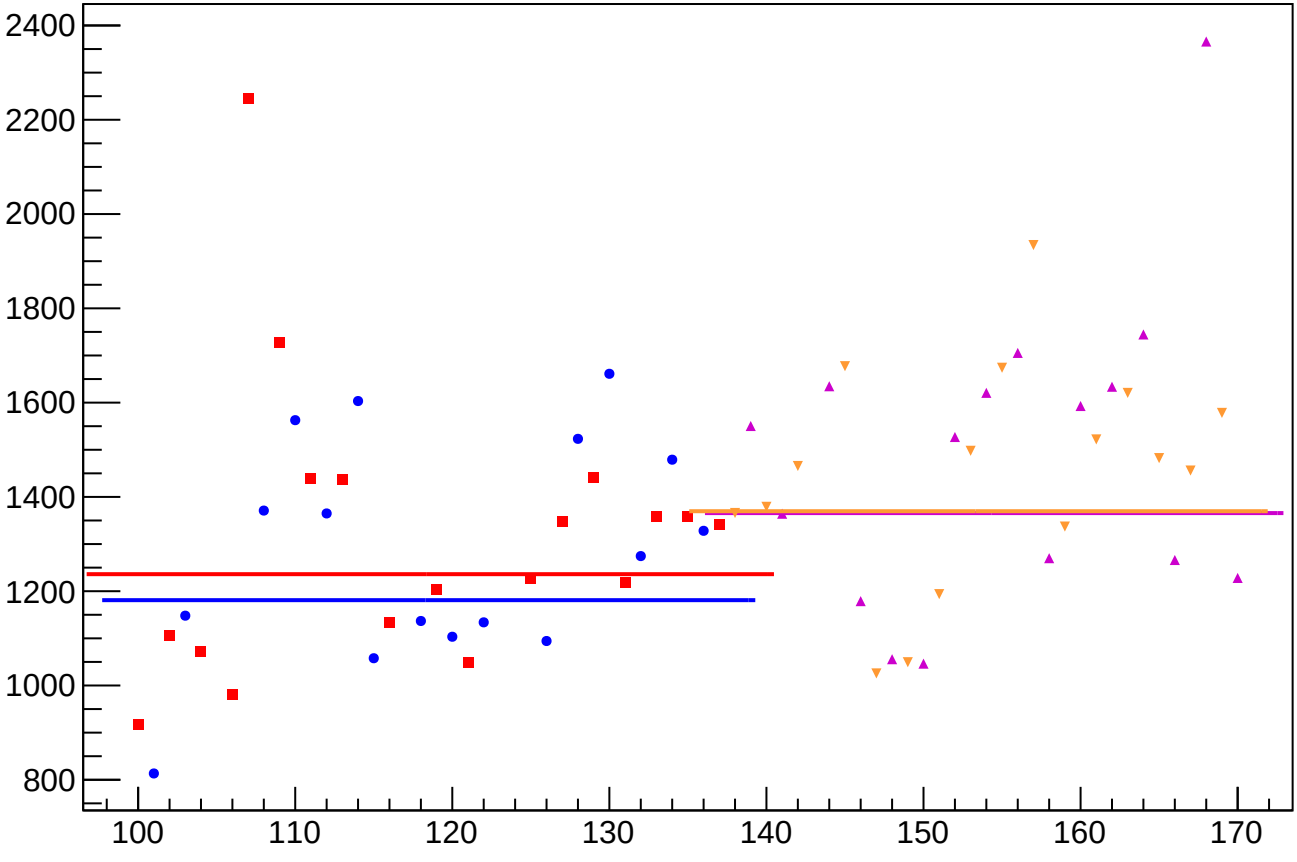
Left In: -237.472+/-384.518 $\chi^2$/NDF:9.8/15

+ sign -144.060+/-296.391 $\chi^2$/NDF: 36.7/31

All: -130.846+/-209.464 $\chi^2$/NDF: 61.9/65

- sign -117.661+/-296.062 $\chi^2$/NDF: 25.2/33

# asym_us_avg_dit_correction_rms vs Slug




Right In: 1180.998+/-0.318 $\chi^2$/NDF: 571107.8/15

Left Out: 1369.682+/-0.279 $\chi^2$/NDF:736346.1/15

Right Out: 1236.134+/-0.328 $\chi^2$/NDF: 397242.2/17

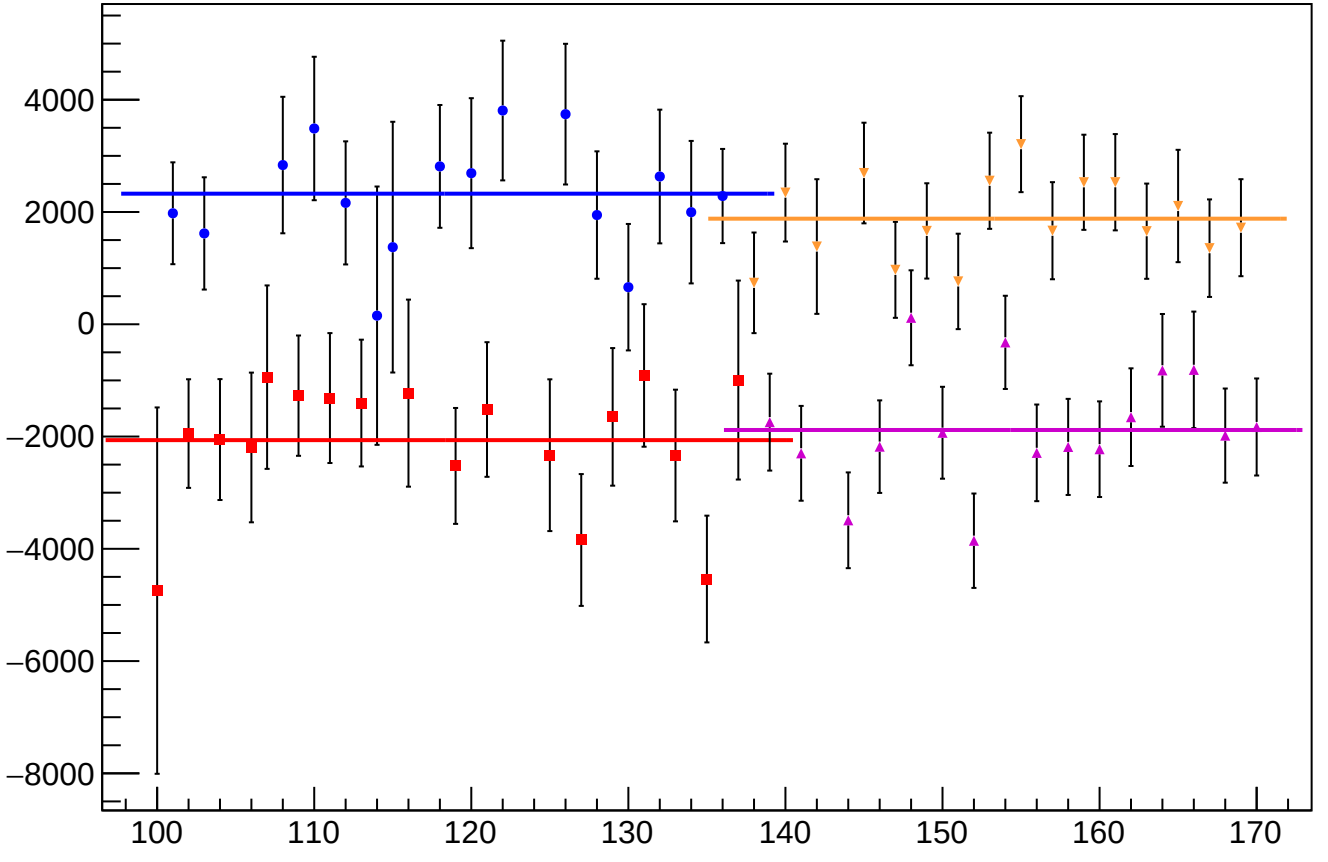
Left In: 1365.697+/-0.272 $\chi^2$/NDF:1033442.6/15

+ sign 1287.659+/-0.210 $\chi^2$/NDF: 1506631.8/31

All: 1300.315+/-0.148 $\chi^2$/NDF: 3037055.8/65

- sign 1312.943+/-0.209 $\chi^2$/NDF: 1523138.8/33

# eigen_dit_asym_us_avg_mean vs Slug




Right In: 2326.429+/-292.176 $\chi^2$/NDF: 8.1/15

Left Out: 1881.077+/-220.793 $\chi^2$/NDF:10.6/15

Right Out: -2063.975+/-291.790 $\chi^2$/NDF: 11.6/17

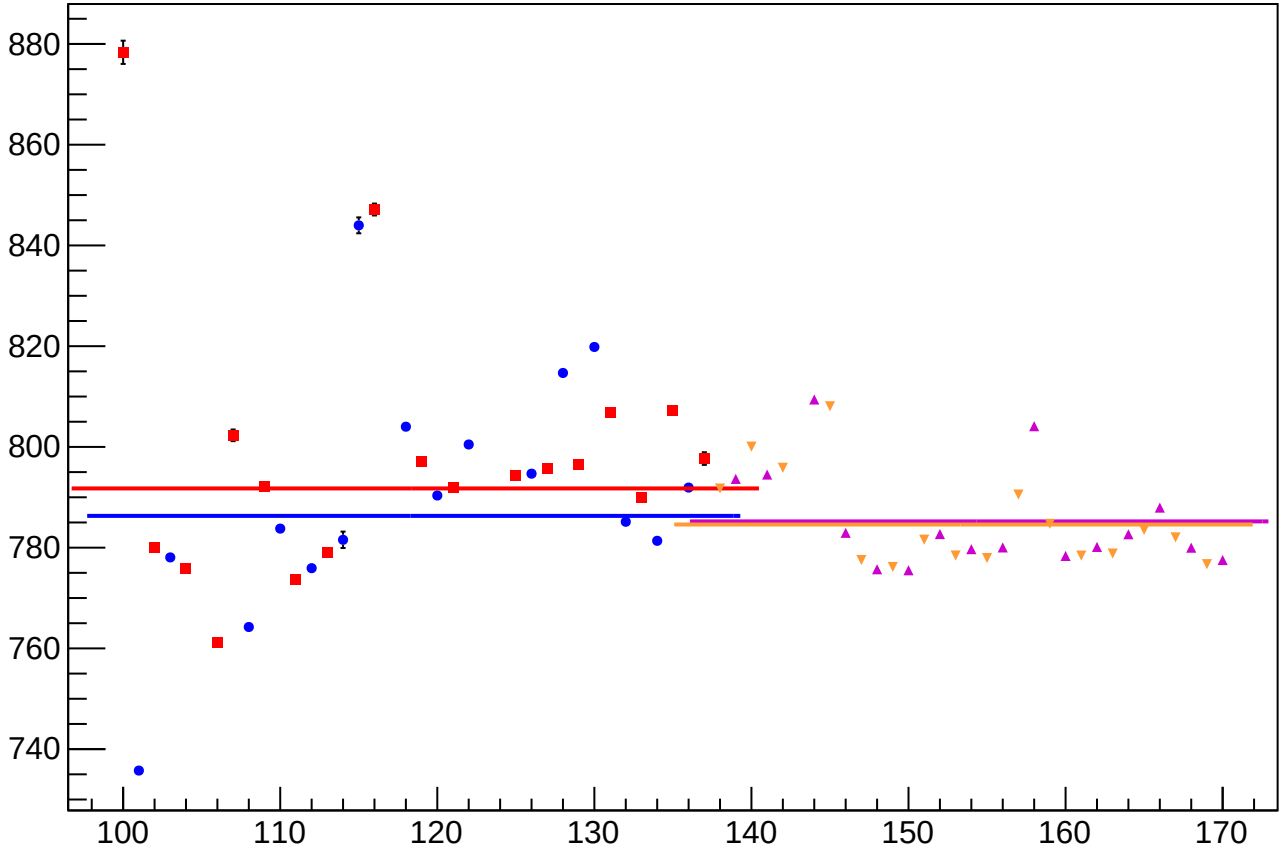
Left In: -1883.299+/-215.971 $\chi^2$/NDF:21.4/15

+ sign 2042.957+/-176.153 $\chi^2$/NDF: 20.2/31

All: 18.659+/-123.644 $\chi^2$/NDF: 313.8/65

- sign -1947.247+/-173.593 $\chi^2$/NDF: 33.2/33

# eigen_dit_asym_us_avg_rms vs Slug




Right In: 786.309+/-0.207 $\chi^2$/NDF: 12571.0/15

Left Out: 784.596+/-0.156 $\chi^2$/NDF:3362.8/15

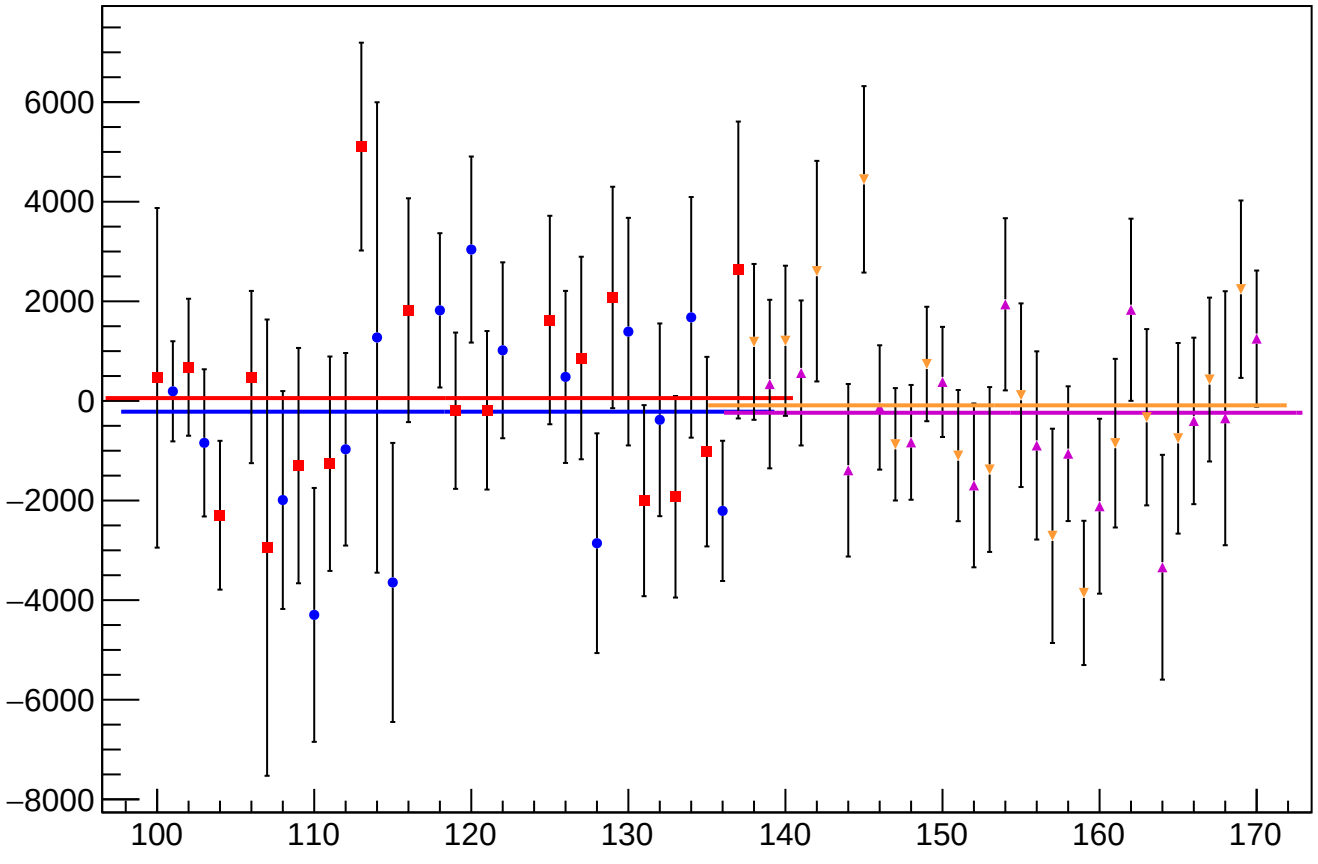
Right Out: 791.756+/-0.206 $\chi^2$/NDF: 7015.1/17

Left In: 785.213+/-0.153 $\chi^2$/NDF:4204.1/15

+ sign 785.219+/-0.125 $\chi^2$/NDF: 15977.6/31

All: 786.391+/-0.087 $\chi^2$/NDF: 28021.0/65

- sign 787.529+/-0.123 $\chi^2$/NDF: 11868.9/33




Right In: -216.183+/-449.536 $\chi^2$/NDF: 15.3/15

Left Out: -88.600+/-394.212 $\chi^2$/NDF:21.4/15

Right Out: 56.784+/-463.977 $\chi^2$/NDF: 15.1/17

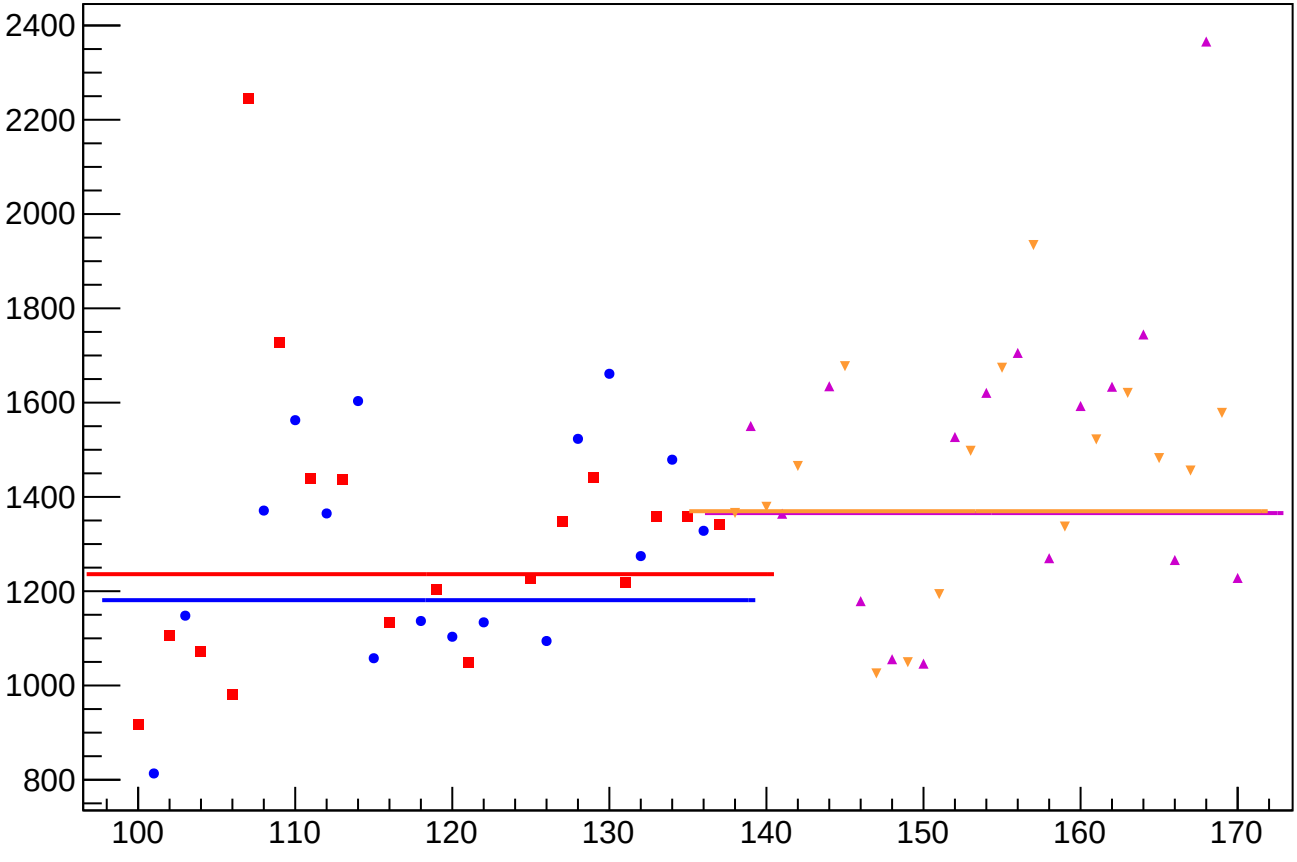
Left In: -237.473+/-384.519 $\chi^2$/NDF:9.8/15

+ sign -144.062+/-296.391 $\chi^2$/NDF: 36.7/31

All: -130.847+/-209.464 $\chi^2$/NDF: 61.9/65

- sign -117.661+/-296.062 $\chi^2$/NDF: 25.2/33

# asym_us_avg_eigen_dit_correction_rms vs Slug




Right In: 1180.995+/-0.318 $\chi^2$/NDF: 571105.7/15

Left Out: 1369.684+/-0.279 $\chi^2$/NDF:736347.9/15

Right Out: 1236.131+/-0.328 $\chi^2$/NDF: 397240.7/17

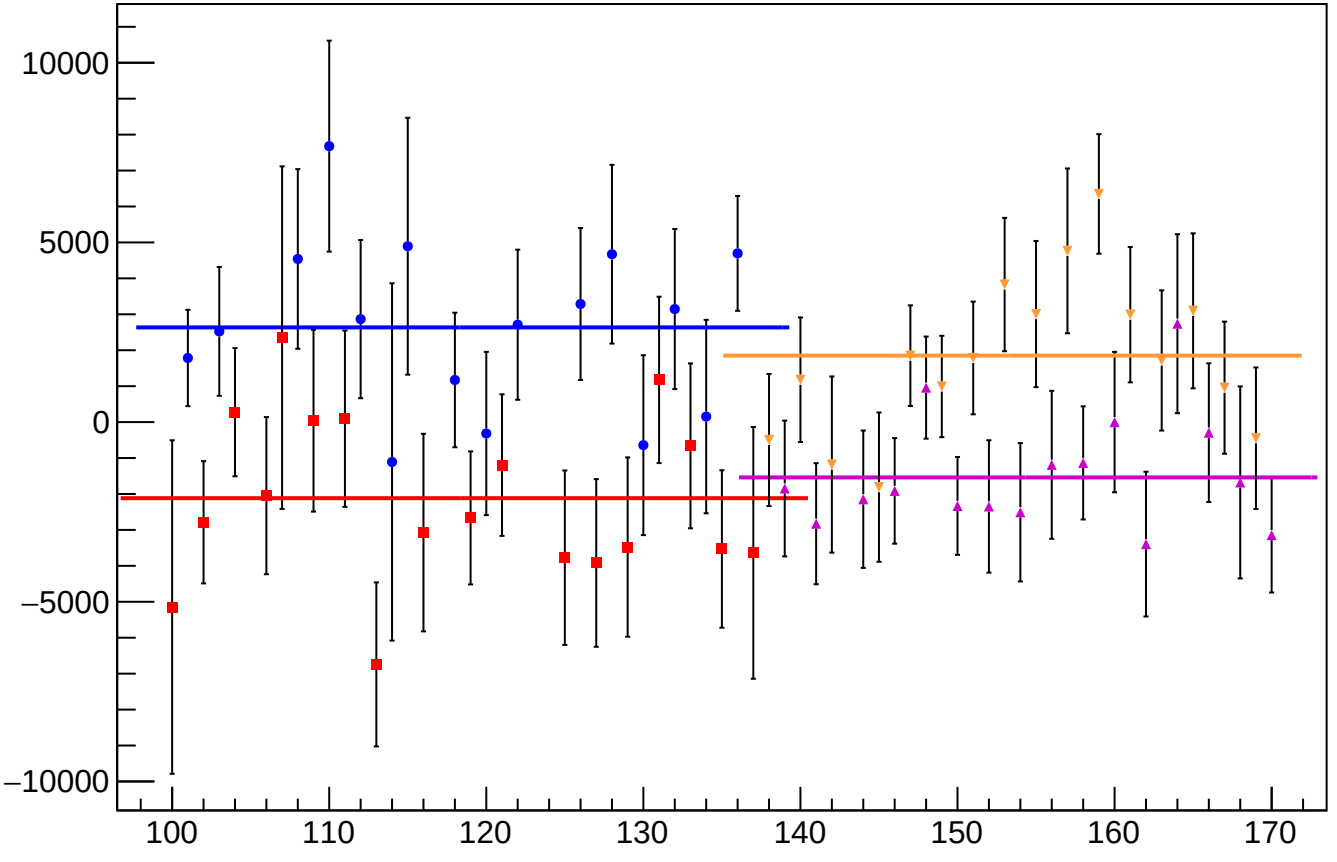
Left In: 1365.699+/-0.272 $\chi^2$/NDF:1033443.4/15

+ sign 1287.659+/-0.210 $\chi^2$/NDF: 1506643.3/31

All: 1300.315+/-0.148 $\chi^2$/NDF: 3037075.2/65

- sign 1312.943+/-0.209 $\chi^2$/NDF: 1523146.6/33

# asym_us_avg_mean vs Slug




Right In: 2635.397+/-538.034 $\chi^2$/NDF: 12.3/15

Left Out: 1850.695+/-454.391 $\chi^2$/NDF:19.5/15

Right Out: -2117.162+/-547.483 $\chi^2$/NDF: 13.7/17

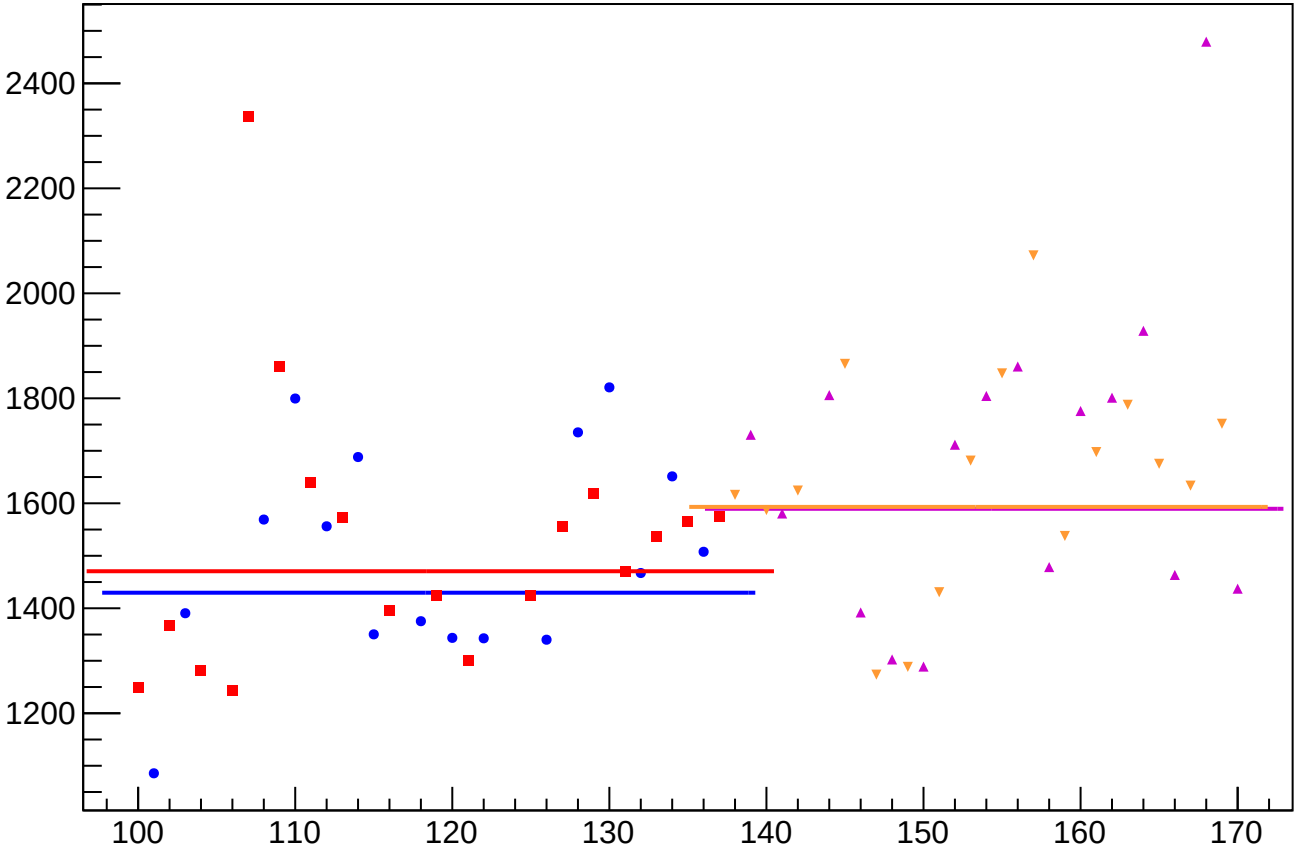
Left In: -1539.645+/-443.786 $\chi^2$/NDF:10.6/15

+ sign 2177.377+/-347.152 $\chi^2$/NDF: 33.0/31

All: 190.668+/-244.620 $\chi^2$/NDF: 123.0/65

- sign -1768.643+/-344.750 $\chi^2$/NDF: 25.0/33

# asym_us_avg_rms vs Slug




Right In: 1429.654+/-0.380 $\chi^2$/NDF: 293388.5/15

Left Out: 1593.134+/-0.321 $\chi^2$/NDF:422234.0/15

Right Out: 1470.565+/-0.387 $\chi^2$/NDF: 218067.5/17

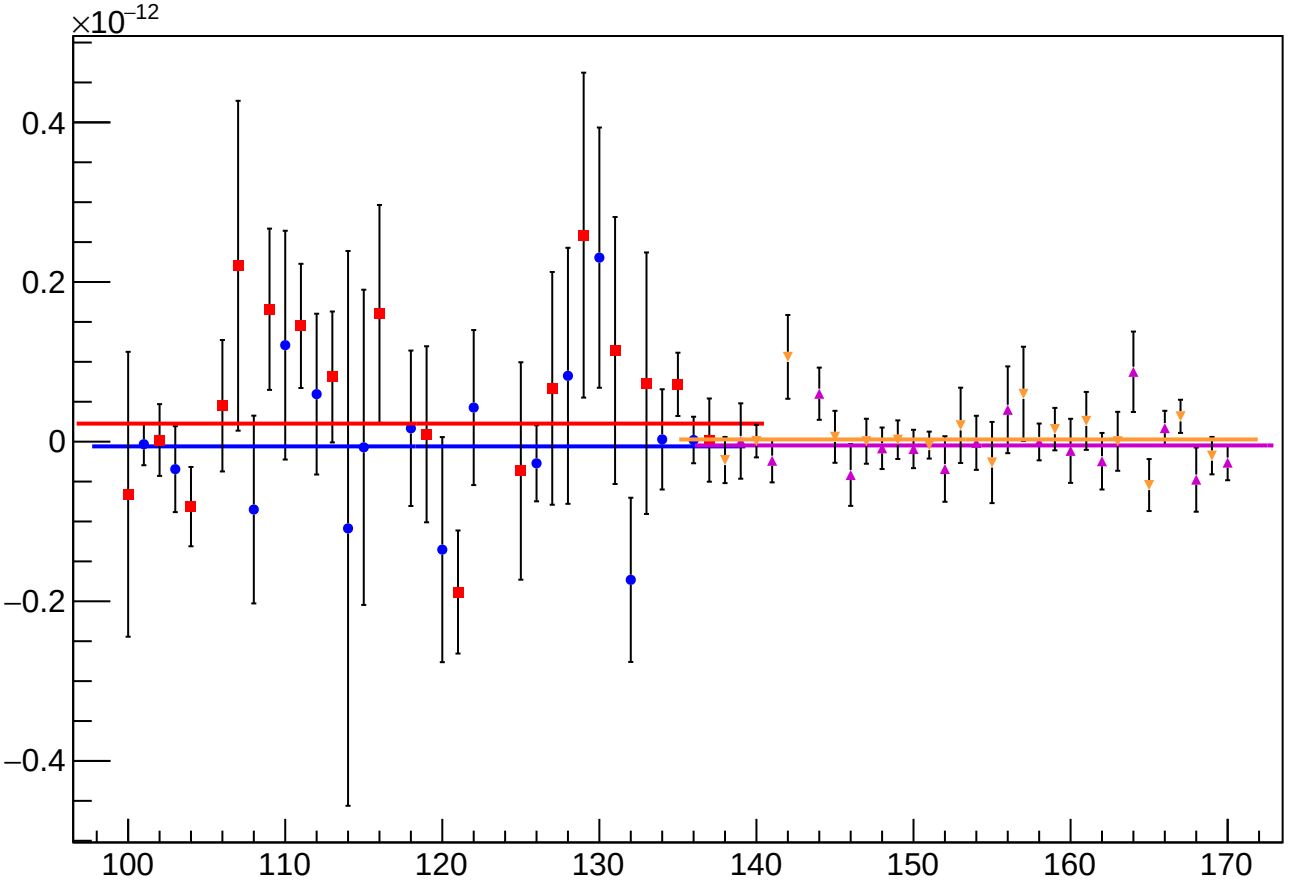
Left In: 1589.528+/-0.314 $\chi^2$/NDF:656227.3/15

+ sign 1525.075+/-0.245 $\chi^2$/NDF: 823397.8/31

All: 1533.776+/-0.173 $\chi^2$/NDF: 1757175.0/65

- sign 1542.357+/-0.244 $\chi^2$/NDF: 931281.8/33

# asym_us_avg_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 8.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.7/15

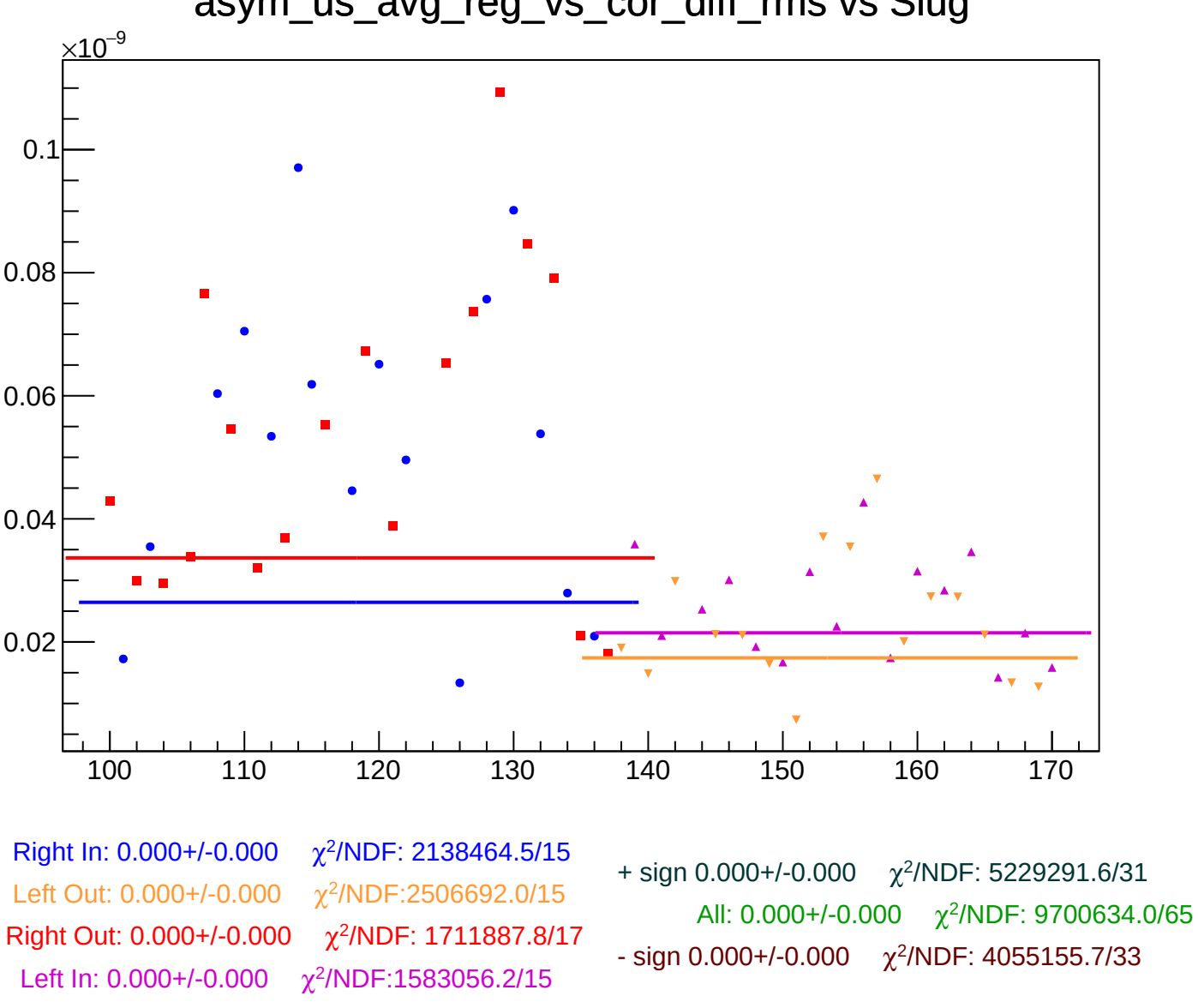
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 23.1/17

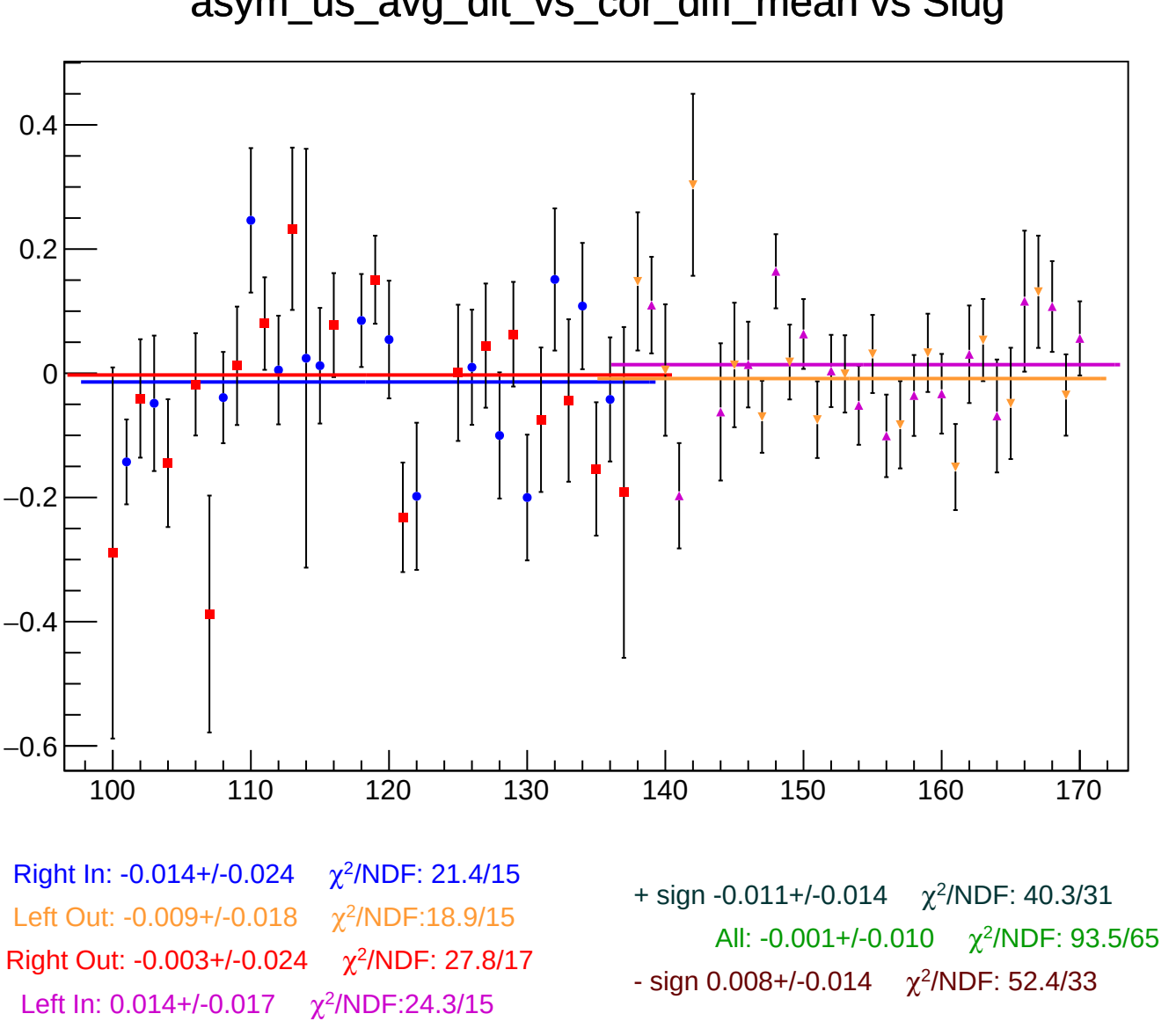
Left In: -0.000+/-0.000 $\chi^2$/NDF:13.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 21.5/31

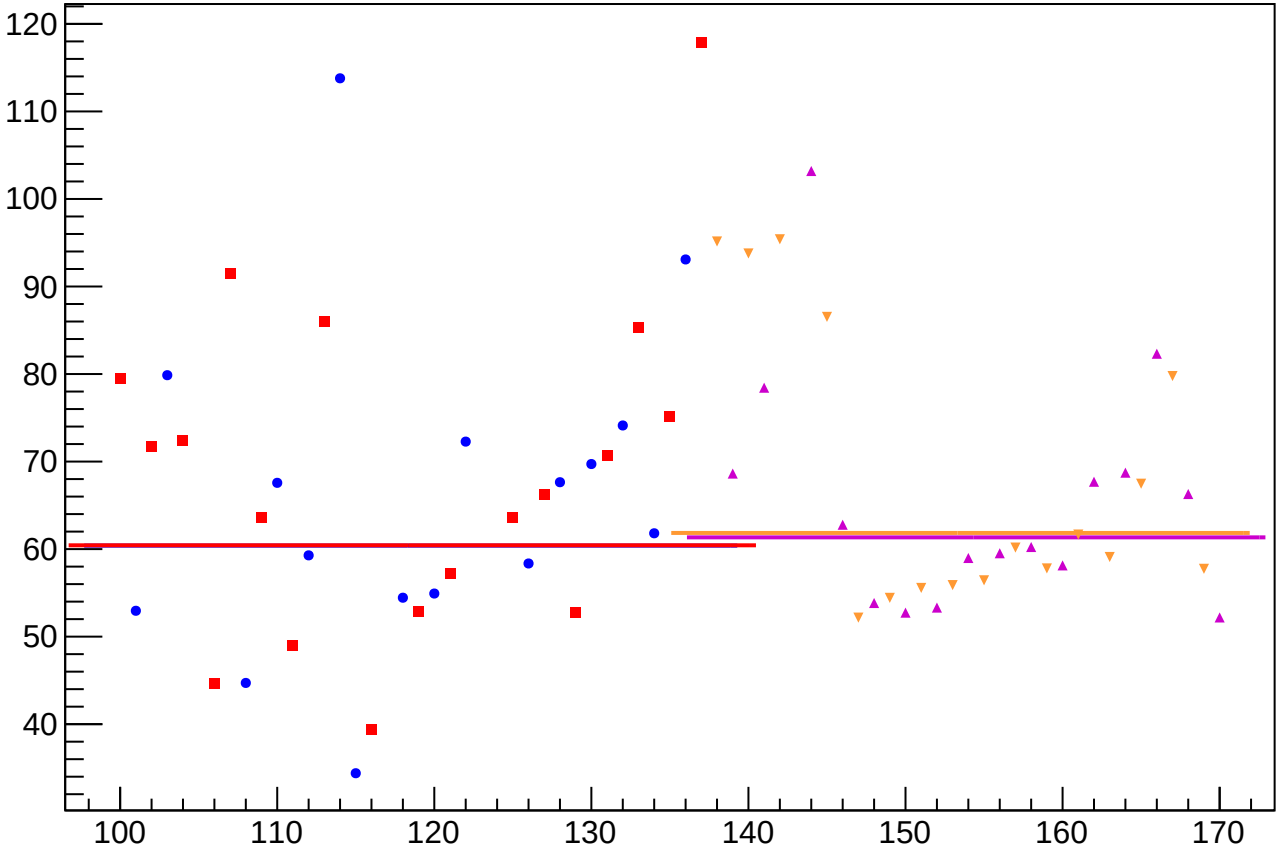
All: 0.000+/-0.000 $\chi^2$/NDF: 59.9/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 38.4/33


asym_us_avg_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.1
0.08
0.06
0.04
0.02
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2138464.5/15
Left Out: 0.000+/-0.000 χ²/NDF:2506692.0/15
Right Out: 0.000+/-0.000 χ²/NDF: 1711887.8/17
Left In: 0.000+/-0.000 χ²/NDF:1583056.2/15
+ sign 0.000+/-0.000 χ²/NDF: 5229291.6/31
All: 0.000+/-0.000 χ²/NDF: 9700634.0/65
- sign 0.000+/-0.000 χ²/NDF: 4055155.7/33


asym_us_avg_dit_vs_cor_diff_mean vs Slug
0.4
0.2
0
−0.2
−0.4
−0.6
100
110
120
130
140
150
160
170
Right In: -0.014+/-0.024 χ²/NDF: 21.4/15
Left Out: -0.009+/-0.018 χ²/NDF:18.9/15
Right Out: -0.003+/-0.024 χ²/NDF: 27.8/17
Left In: 0.014+/-0.017 χ²/NDF:24.3/15
+ sign -0.011+/-0.014 χ²/NDF: 40.3/31
All: -0.001+/-0.010 χ²/NDF: 93.5/65
- sign 0.008+/-0.014 χ²/NDF: 52.4/33

# asym_us_avg_dit_vs_cor_diff_rms vs Slug




Right In: 60.399+/-0.017 $\chi^2$/NDF: 703157.1/15

Left Out: 61.847+/-0.013 $\chi^2$/NDF:834331.4/15

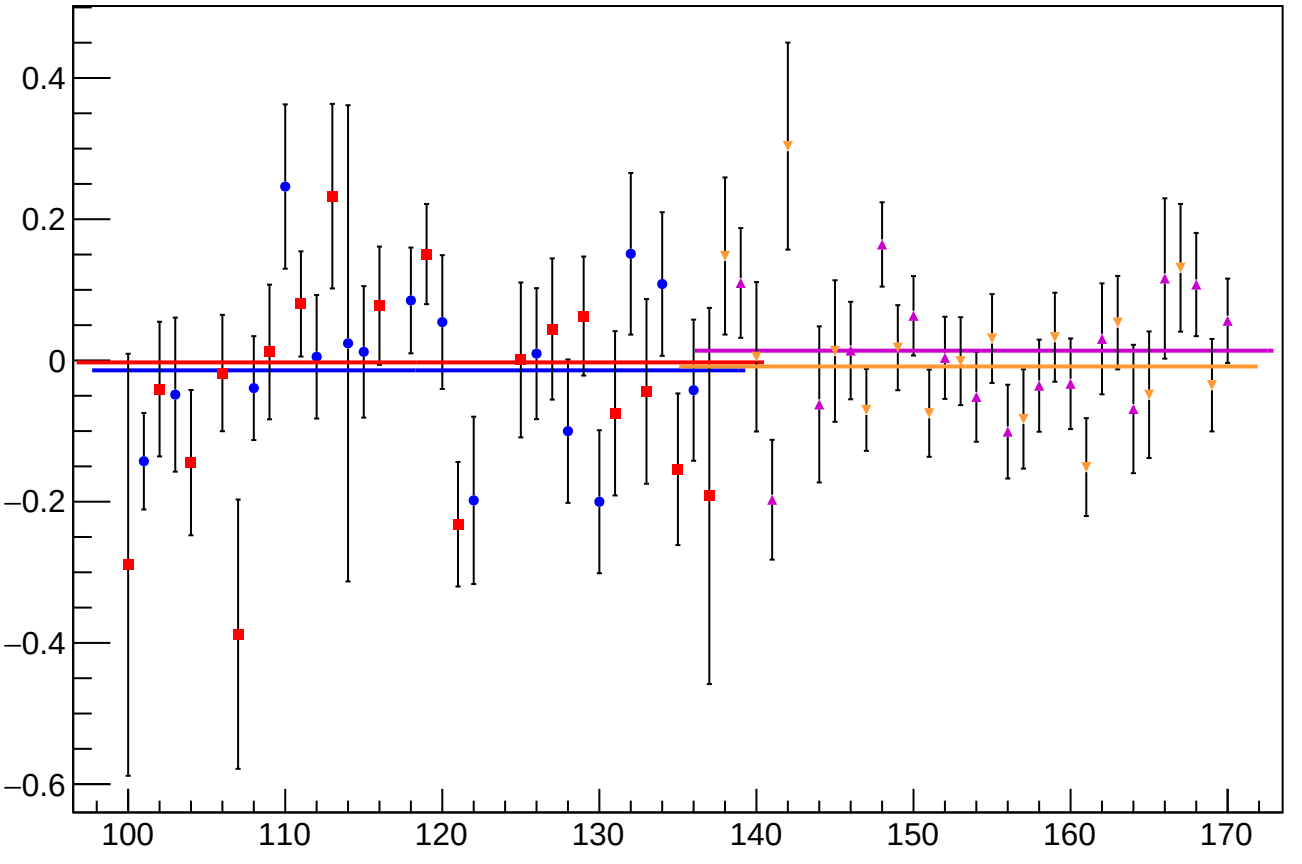
Right Out: 60.434+/-0.017 $\chi^2$/NDF: 711093.4/17

Left In: 61.341+/-0.012 $\chi^2$/NDF:663461.0/15

+ sign 61.316+/-0.010 $\chi^2$/NDF: 1542151.7/31

All: 61.166+/-0.007 $\chi^2$/NDF: 2919013.8/65

- sign 61.023+/-0.010 $\chi^2$/NDF: 1376439.0/33




Right In: -0.014+/-0.024 $\chi^2$/NDF: 21.4/15

Left Out: -0.009+/-0.018 $\chi^2$/NDF:18.9/15

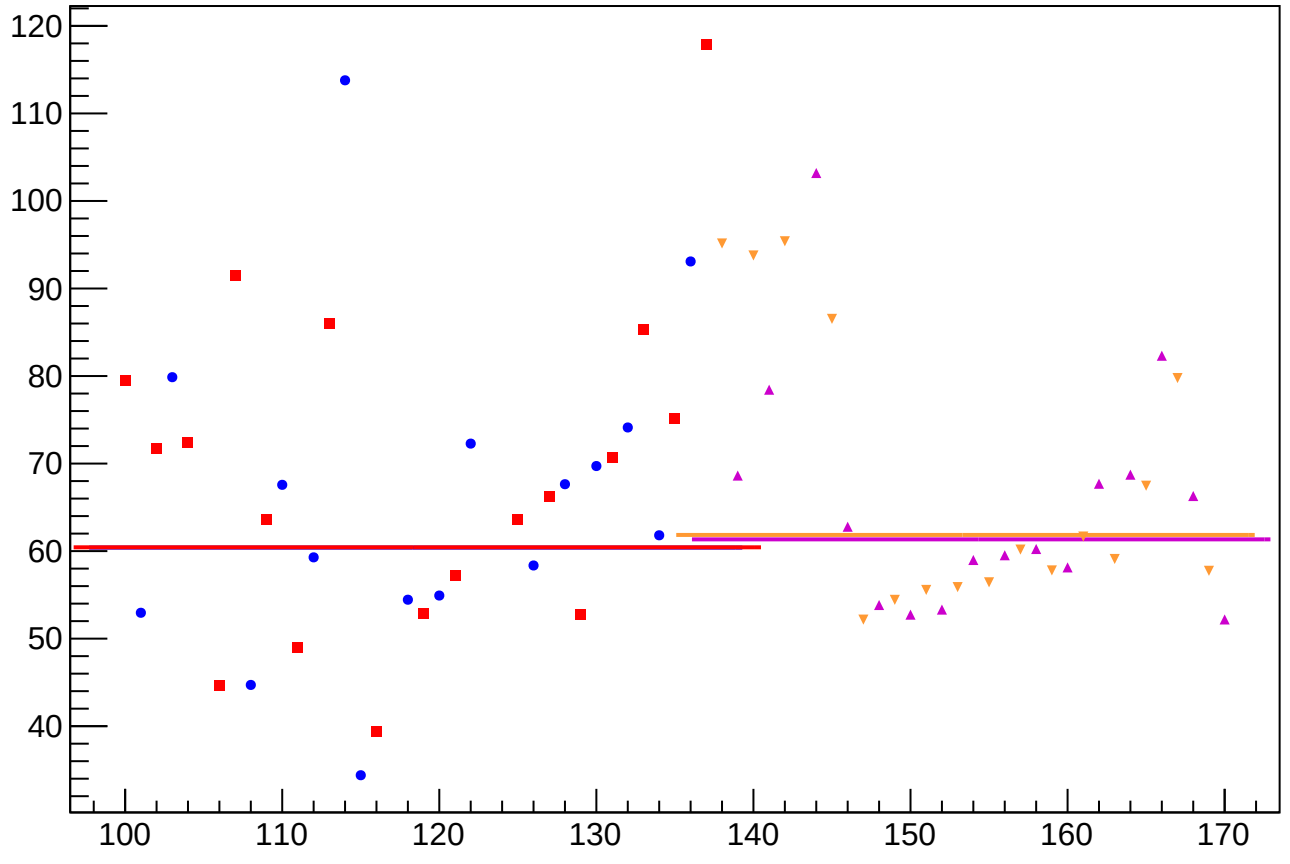
Right Out: -0.003+/-0.024 $\chi^2$/NDF: 27.8/17

Left In: 0.014+/-0.017 $\chi^2$/NDF:24.3/15

+ sign -0.011+/-0.014 $\chi^2$/NDF: 40.3/31

All: -0.001+/-0.010 $\chi^2$/NDF: 93.5/65

- sign 0.008+/-0.014 $\chi^2$/NDF: 52.4/33




Right In: 60.399+/-0.017 $\chi^2$/NDF: 703157.1/15

Left Out: 61.847+/-0.013 $\chi^2$/NDF:834331.4/15

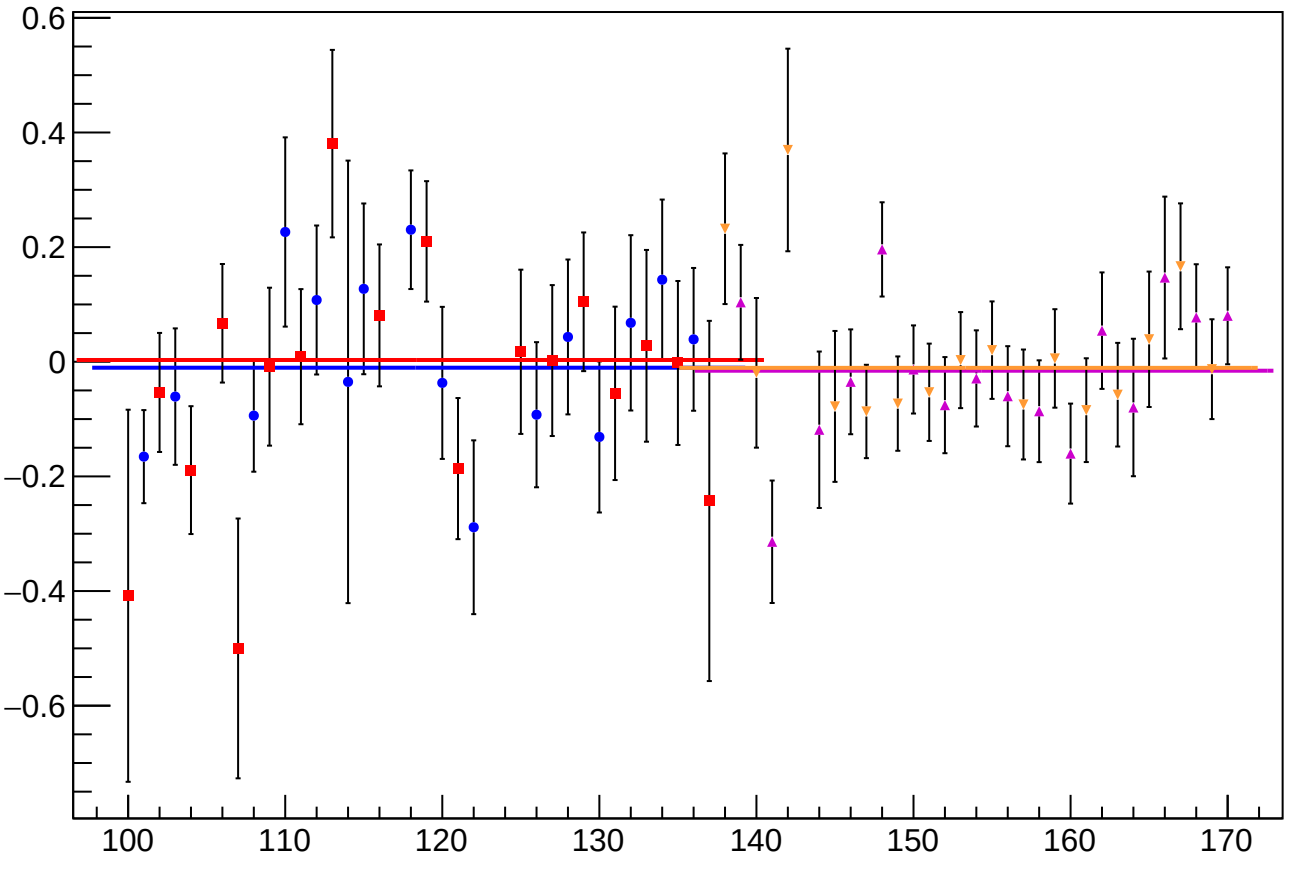
Right Out: 60.434+/-0.017 $\chi^2$/NDF: 711093.4/17

Left In: 61.341+/-0.012 $\chi^2$/NDF:663461.0/15

+ sign 61.316+/-0.010 $\chi^2$/NDF: 1542151.7/31

All: 61.166+/-0.007 $\chi^2$/NDF: 2919013.8/65

- sign 61.023+/-0.010 $\chi^2$/NDF: 1376439.0/33




Right In: -0.010+/-0.032 $\chi^2$/NDF: 20.2/15

Left Out: -0.011+/-0.024 $\chi^2$/NDF:14.4/15

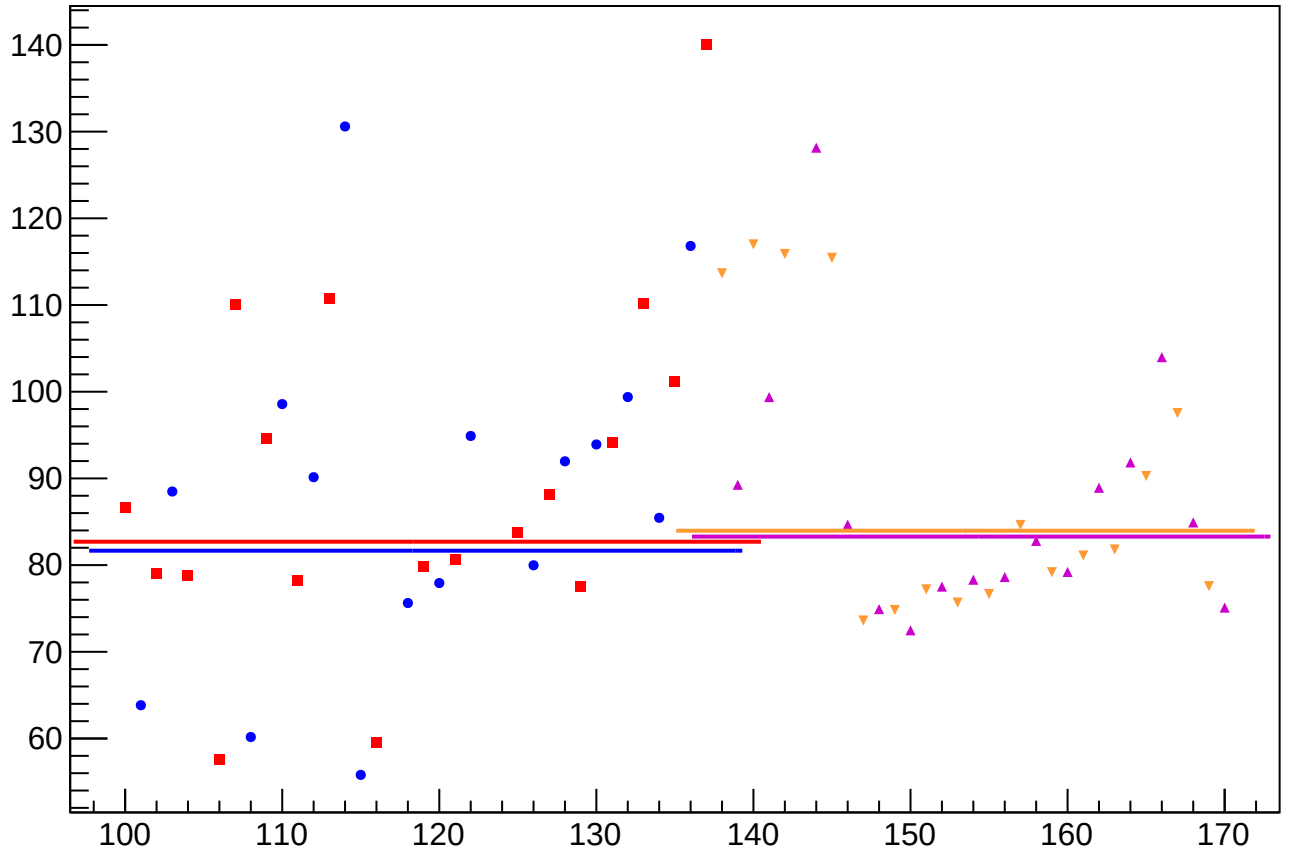
Right Out: 0.003+/-0.032 $\chi^2$/NDF: 23.7/17

Left In: -0.016+/-0.023 $\chi^2$/NDF:25.0/15

+ sign -0.011+/-0.019 $\chi^2$/NDF: 34.5/31

All: -0.010+/-0.013 $\chi^2$/NDF: 83.4/65

- sign -0.009+/-0.019 $\chi^2$/NDF: 48.9/33




Right In: 81.664+/-0.022 $\chi^2$/NDF: 561848.8/15

Left Out: 83.968+/-0.017 $\chi^2$/NDF:570295.4/15

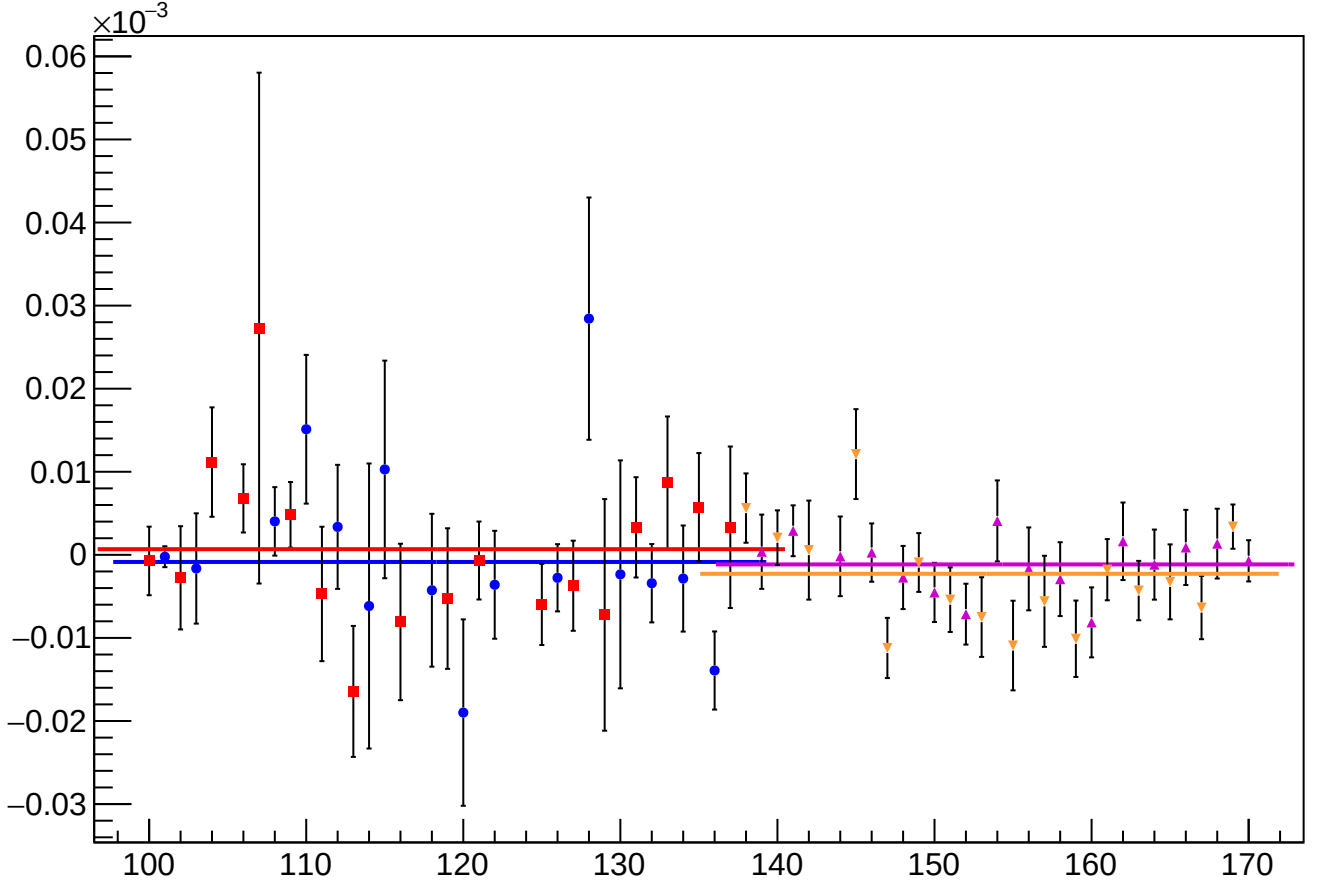
Right Out: 82.701+/-0.022 $\chi^2$/NDF: 473065.7/17

Left In: 83.290+/-0.017 $\chi^2$/NDF:434652.8/15

+ sign 83.114+/-0.014 $\chi^2$/NDF: 1138832.7/31

All: 83.098+/-0.010 $\chi^2$/NDF: 2046999.7/65

- sign 83.083+/-0.013 $\chi^2$/NDF: 908164.4/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 21.3/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:32.6/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.3/17

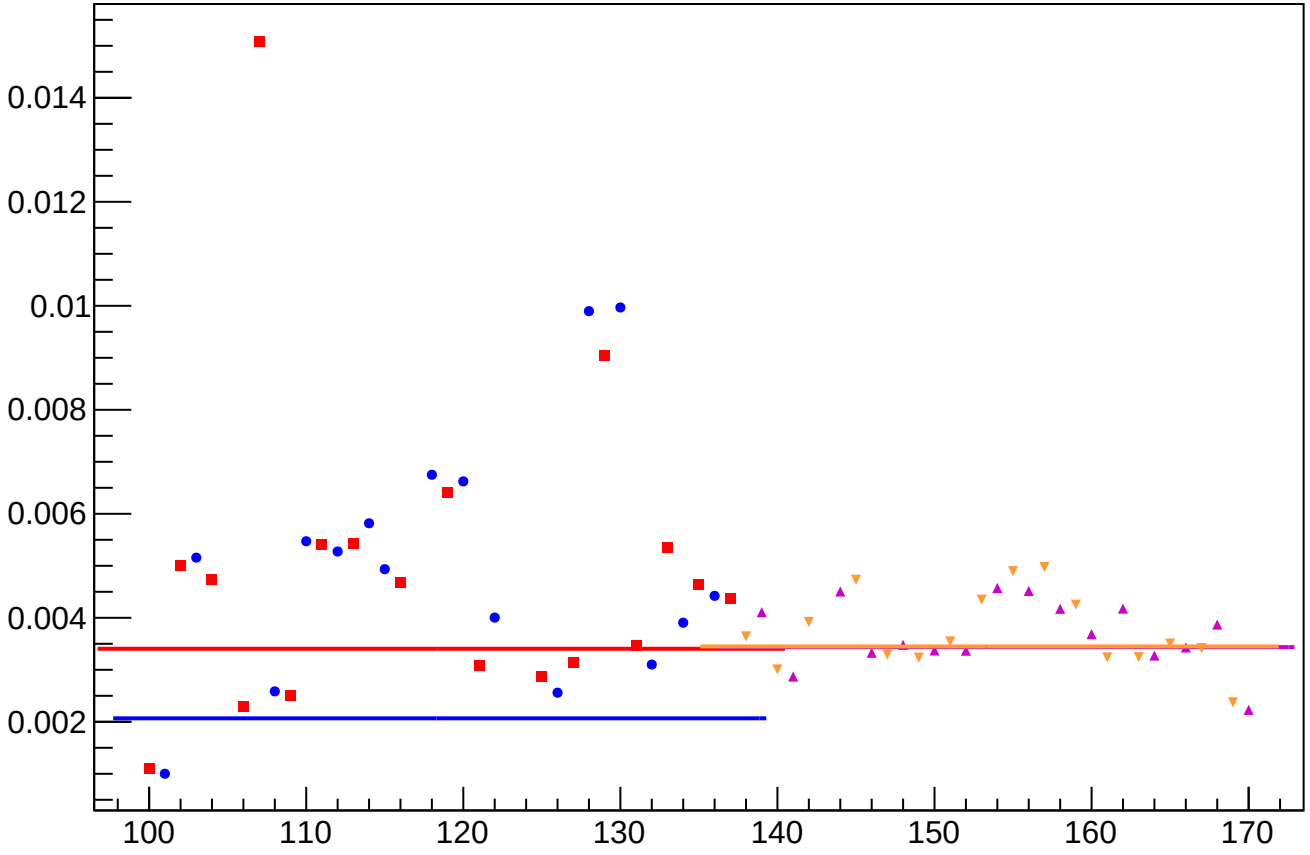
Left In: -0.000+/-0.000 $\chi^2$/NDF:10.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 54.9/31

All: -0.000+/-0.000 $\chi^2$/NDF: 86.1/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 30.3/33

# asym_us_avg_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 5813338.1/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:947875.0/15

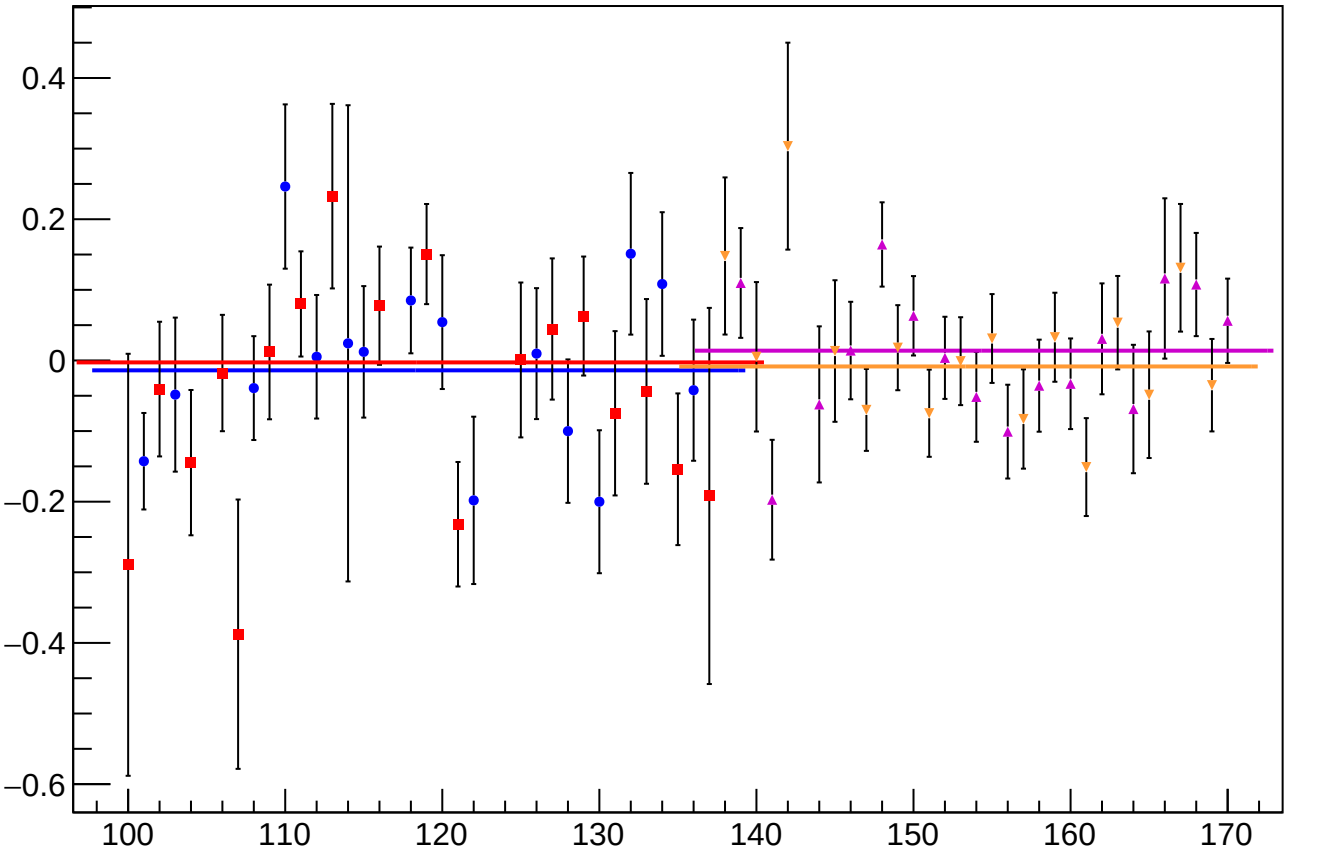
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 2491305.2/17

Left In: 0.003+/-0.000 $\chi^2$/NDF:1029554.9/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 8659010.7/31

All: 0.003+/-0.000 $\chi^2$/NDF: 12942956.7/65

- sign 0.003+/-0.000 $\chi^2$/NDF: 3521525.8/33




Right In: -0.014+/-0.024 $\chi^2$/NDF: 21.4/15

Left Out: -0.009+/-0.018 $\chi^2$/NDF:18.9/15

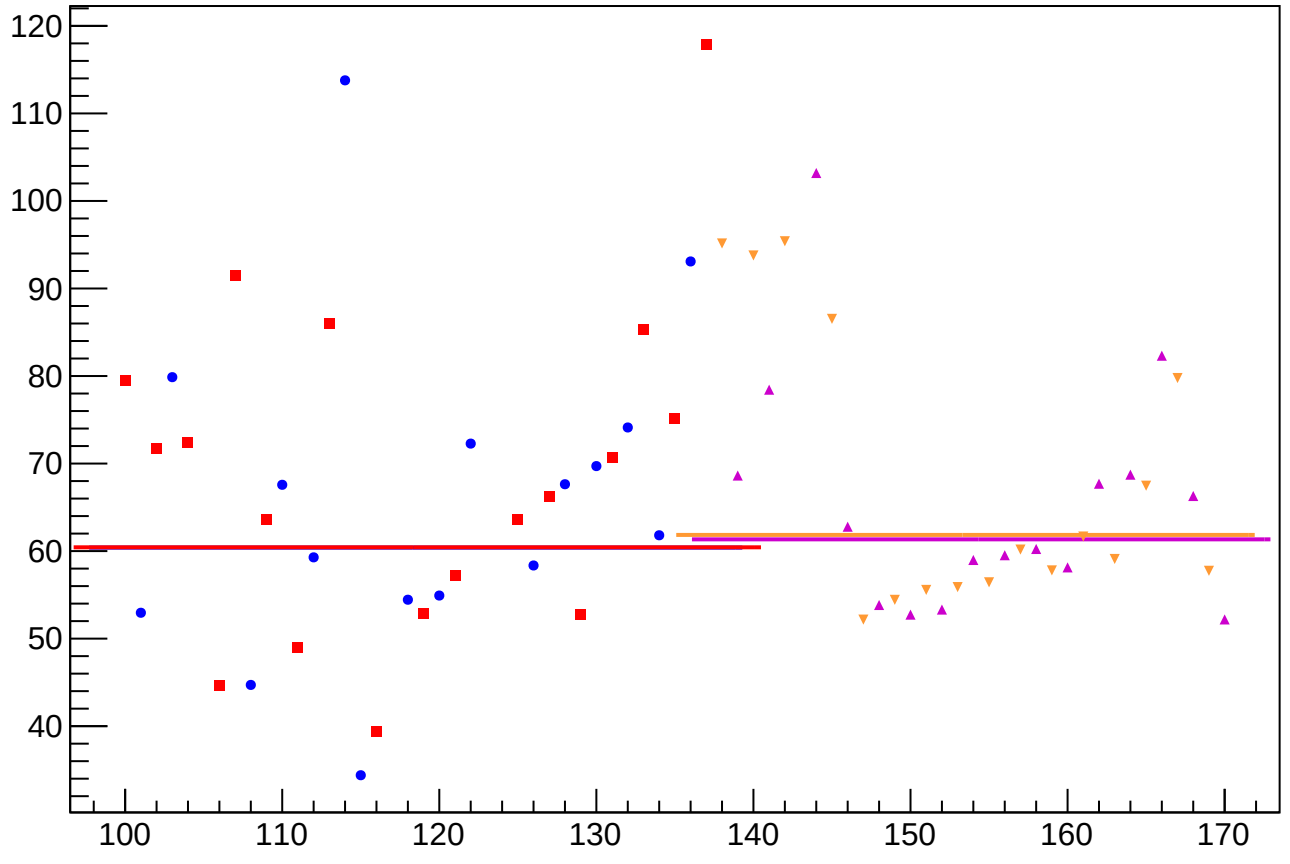
Right Out: -0.003+/-0.024 $\chi^2$/NDF: 27.8/17

Left In: 0.014+/-0.017 $\chi^2$/NDF:24.3/15

+ sign -0.011+/-0.014 $\chi^2$/NDF: 40.3/31

All: -0.001+/-0.010 $\chi^2$/NDF: 93.5/65

- sign 0.008+/-0.014 $\chi^2$/NDF: 52.4/33




Right In: 60.398+/-0.017 $\chi^2$/NDF: 703169.3/15

Left Out: 61.848+/-0.013 $\chi^2$/NDF:834328.4/15

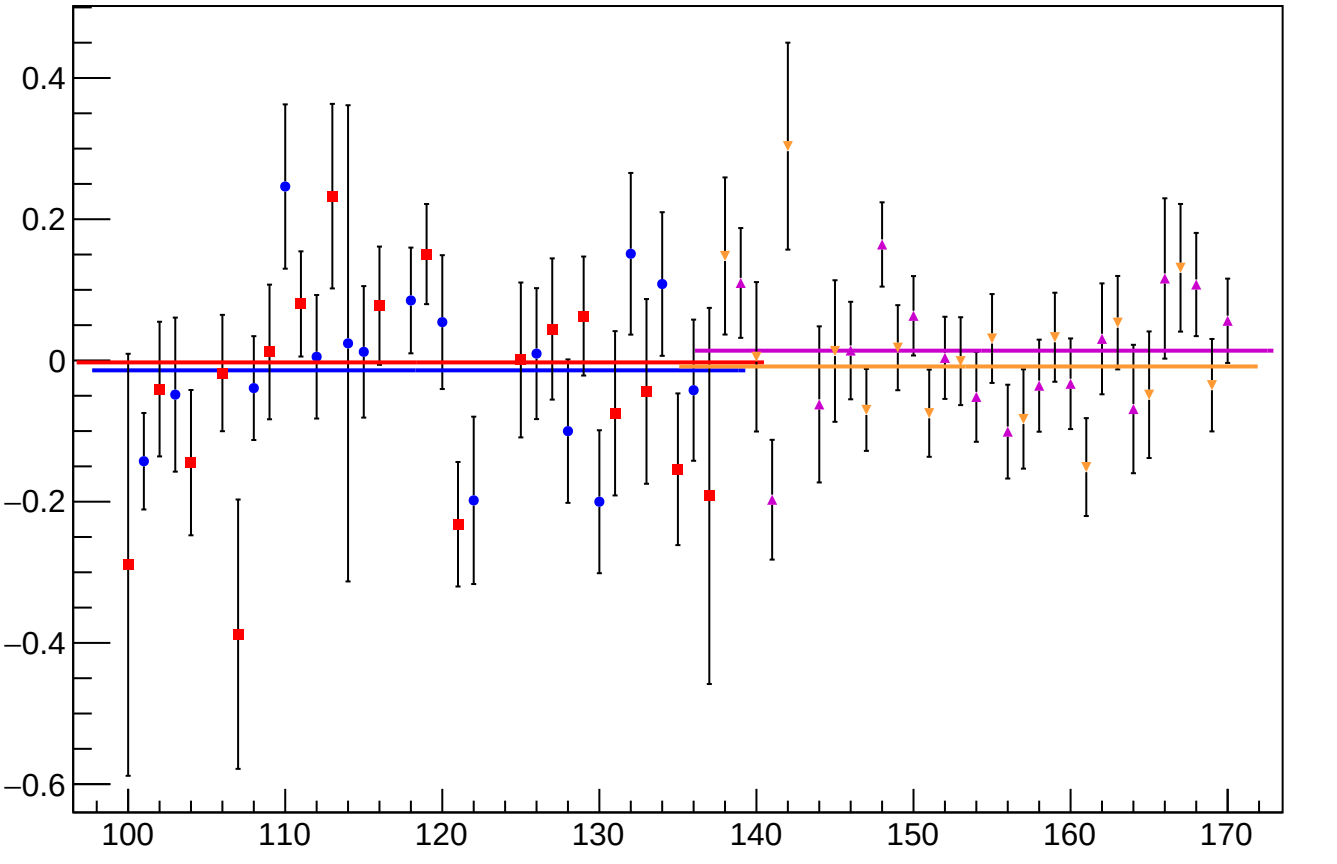
Right Out: 60.432+/-0.017 $\chi^2$/NDF: 711122.4/17

Left In: 61.341+/-0.012 $\chi^2$/NDF:663457.2/15

+ sign 61.316+/-0.010 $\chi^2$/NDF: 1542172.1/31

All: 61.165+/-0.007 $\chi^2$/NDF: 2919068.0/65

- sign 61.022+/-0.010 $\chi^2$/NDF: 1376472.2/33




Right In: -0.014+/-0.024 $\chi^2$/NDF: 21.4/15

Left Out: -0.009+/-0.018 $\chi^2$/NDF:18.9/15

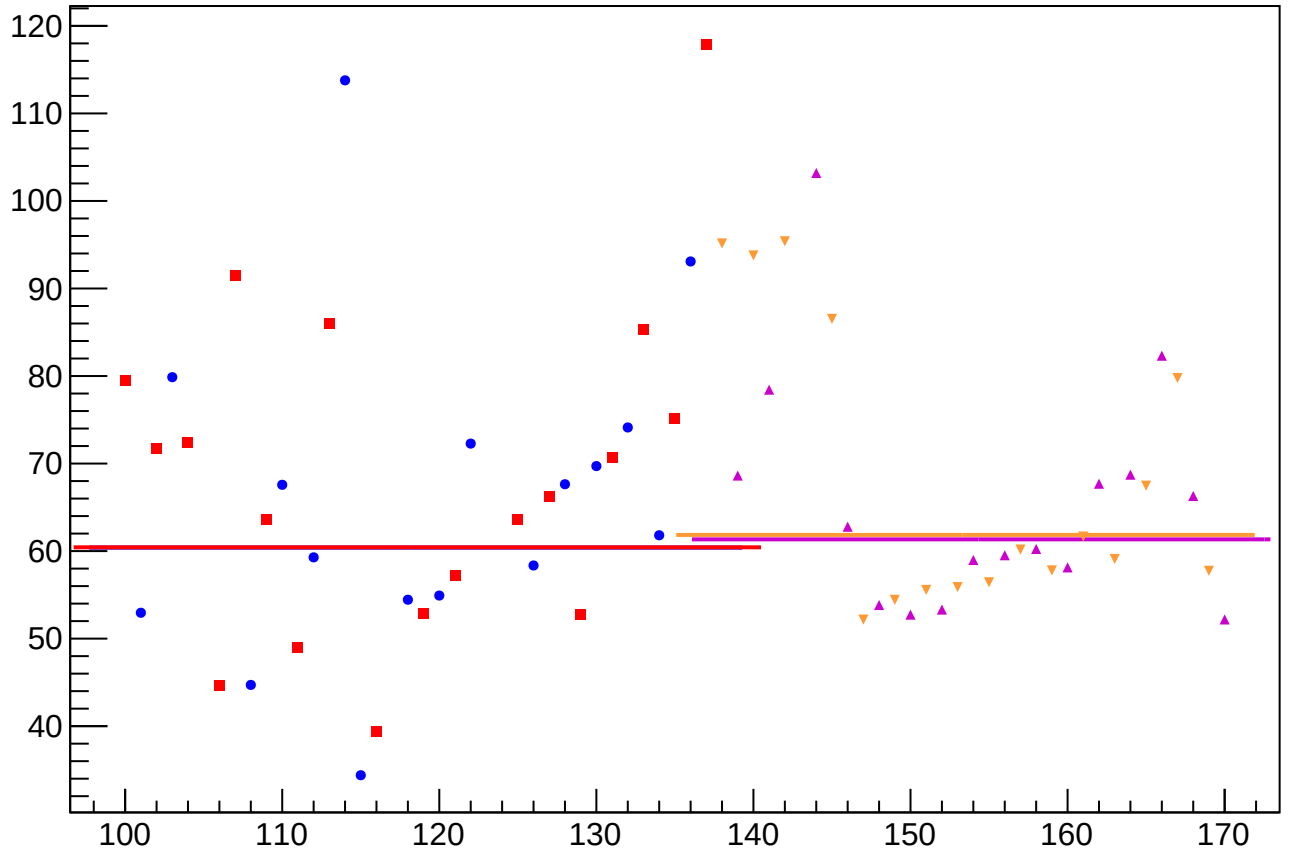
Right Out: -0.003+/-0.024 $\chi^2$/NDF: 27.8/17

Left In: 0.014+/-0.017 $\chi^2$/NDF:24.3/15

+ sign -0.011+/-0.014 $\chi^2$/NDF: 40.3/31

All: -0.001+/-0.010 $\chi^2$/NDF: 93.5/65

- sign 0.008+/-0.014 $\chi^2$/NDF: 52.4/33




Right In: 60.398+/-0.017 $\chi^2$/NDF: 703169.3/15

Left Out: 61.848+/-0.013 $\chi^2$/NDF:834328.4/15

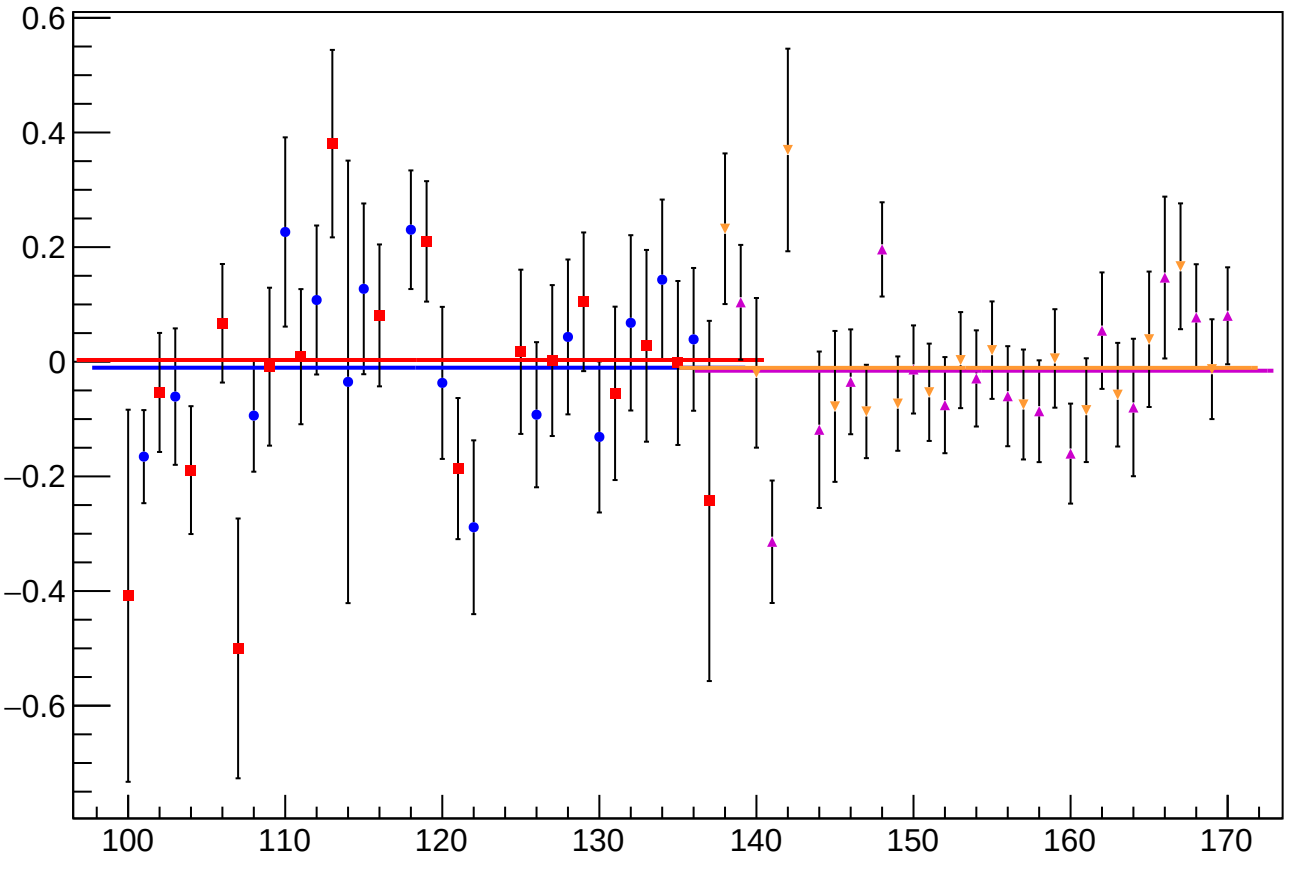
Right Out: 60.432+/-0.017 $\chi^2$/NDF: 711122.4/17

Left In: 61.341+/-0.012 $\chi^2$/NDF:663457.2/15

+ sign 61.316+/-0.010 $\chi^2$/NDF: 1542172.1/31

All: 61.165+/-0.007 $\chi^2$/NDF: 2919068.0/65

- sign 61.022+/-0.010 $\chi^2$/NDF: 1376472.2/33




Right In: -0.010+/-0.032 $\chi^2$/NDF: 20.2/15

Left Out: -0.011+/-0.024 $\chi^2$/NDF:14.4/15

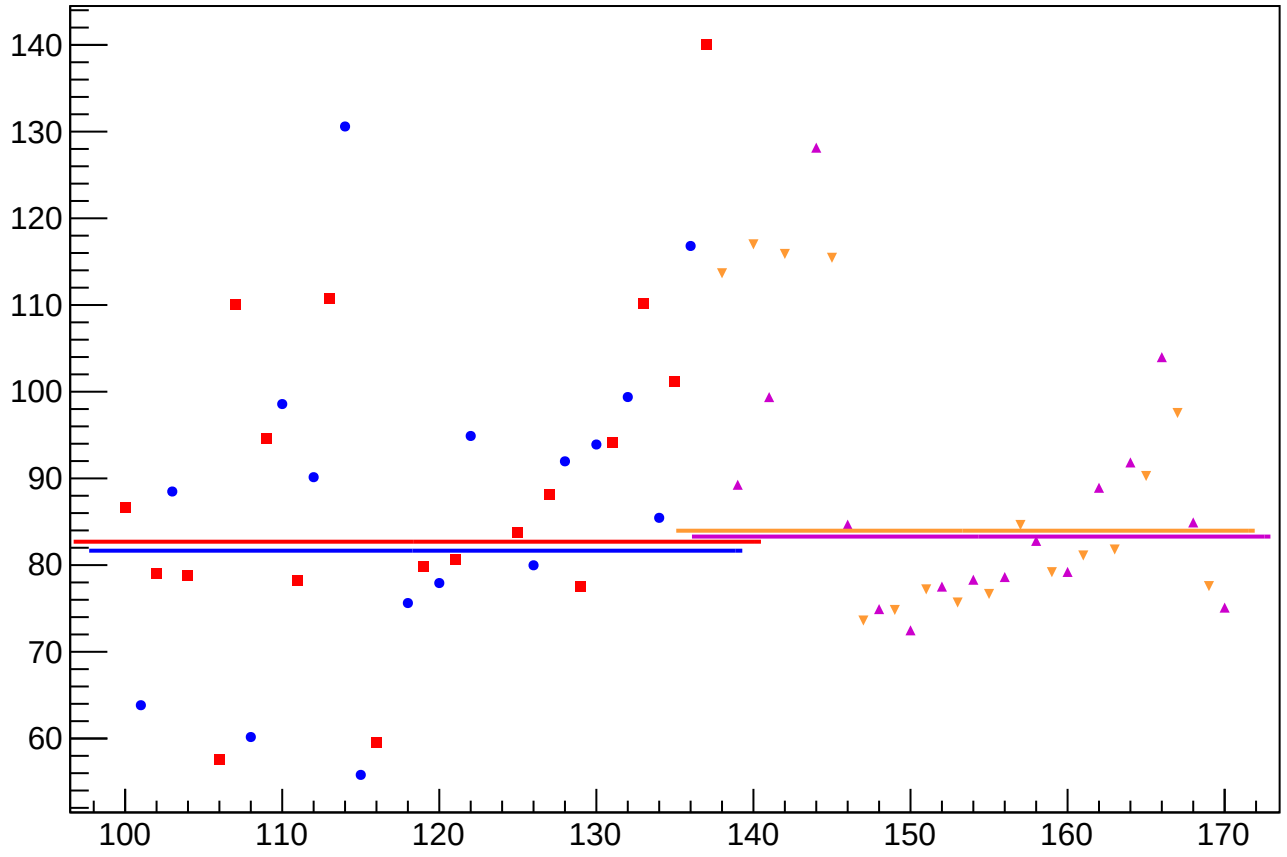
Right Out: 0.003+/-0.032 $\chi^2$/NDF: 23.7/17

Left In: -0.016+/-0.023 $\chi^2$/NDF:25.0/15

+ sign -0.011+/-0.019 $\chi^2$/NDF: 34.5/31

All: -0.010+/-0.013 $\chi^2$/NDF: 83.4/65

- sign -0.009+/-0.019 $\chi^2$/NDF: 48.9/33




Right In: 81.663+/-0.022 $\chi^2$/NDF: 561836.4/15

Left Out: 83.968+/-0.017 $\chi^2$/NDF:570293.0/15

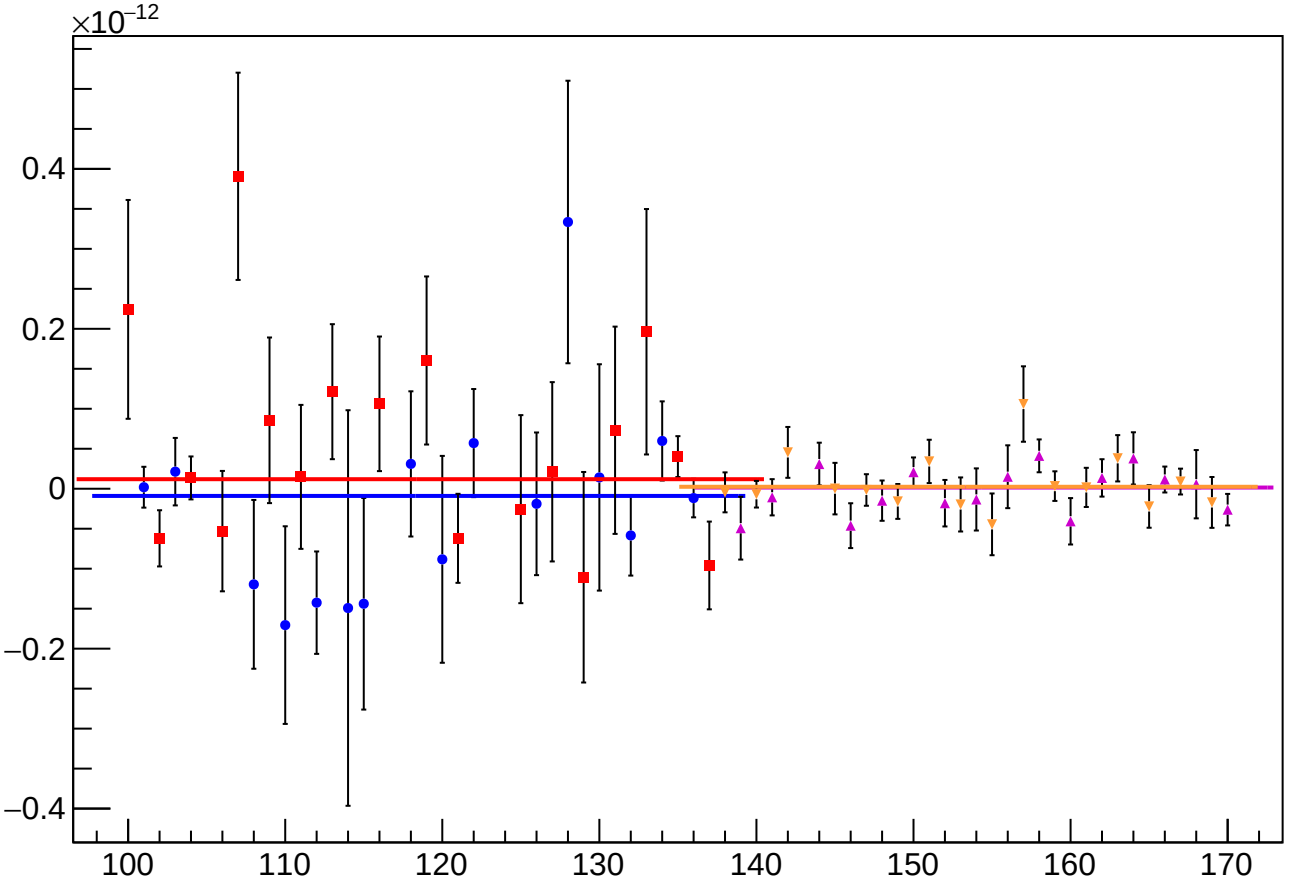
Right Out: 82.700+/-0.022 $\chi^2$/NDF: 473062.4/17

Left In: 83.290+/-0.017 $\chi^2$/NDF:434652.3/15

+ sign 83.114+/-0.014 $\chi^2$/NDF: 1138824.5/31

All: 83.098+/-0.010 $\chi^2$/NDF: 2046989.6/65

- sign 83.082+/-0.013 $\chi^2$/NDF: 908162.3/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 17.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:14.0/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 31.1/17

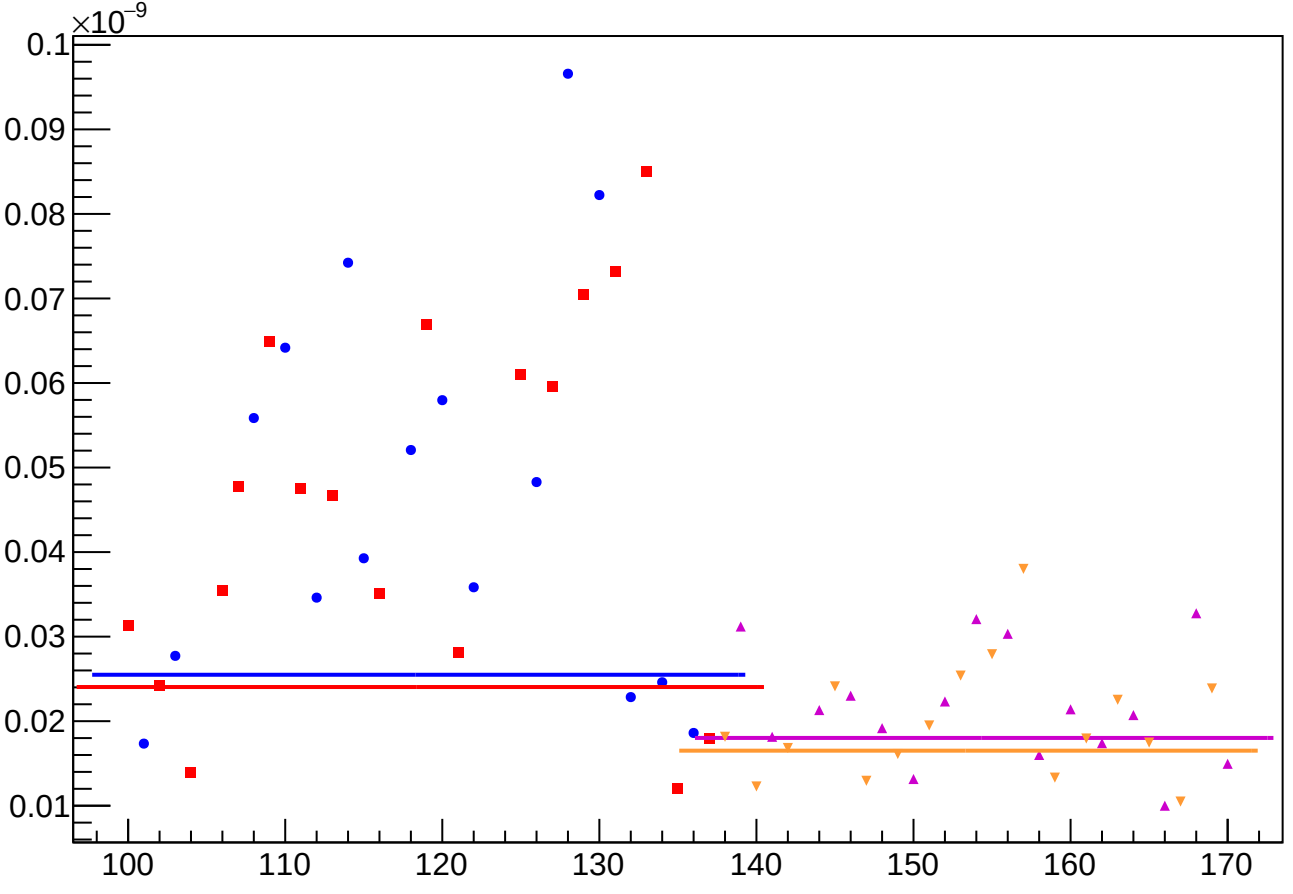
Left In: 0.000+/-0.000 $\chi^2$/NDF:18.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 32.0/31

All: 0.000+/-0.000 $\chi^2$/NDF: 81.8/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 49.6/33

# asym_us_avg_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1999848.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1607612.7/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3084598.6/17

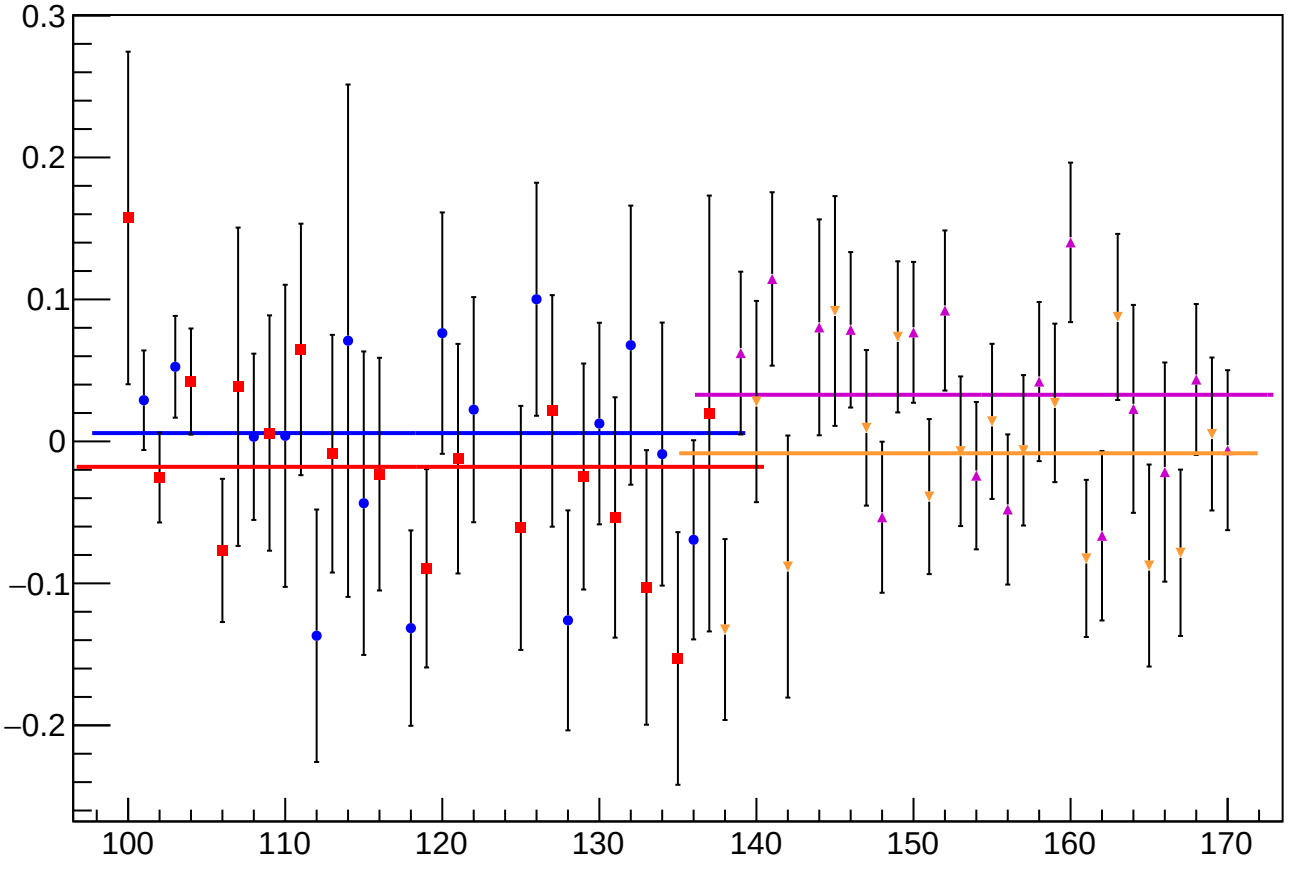
Left In: 0.000+/-0.000 $\chi^2$/NDF:1803250.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4367032.5/31

All: 0.000+/-0.000 $\chi^2$/NDF: 9620405.9/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 5219582.6/33

# asym_us_avg_overload_cor_vs_cor_diff_mean vs Slug




Right In: 0.006+/-0.017 $\chi^2$/NDF: 15.6/15

Left Out: -0.008+/-0.015 $\chi^2$/NDF:16.9/15

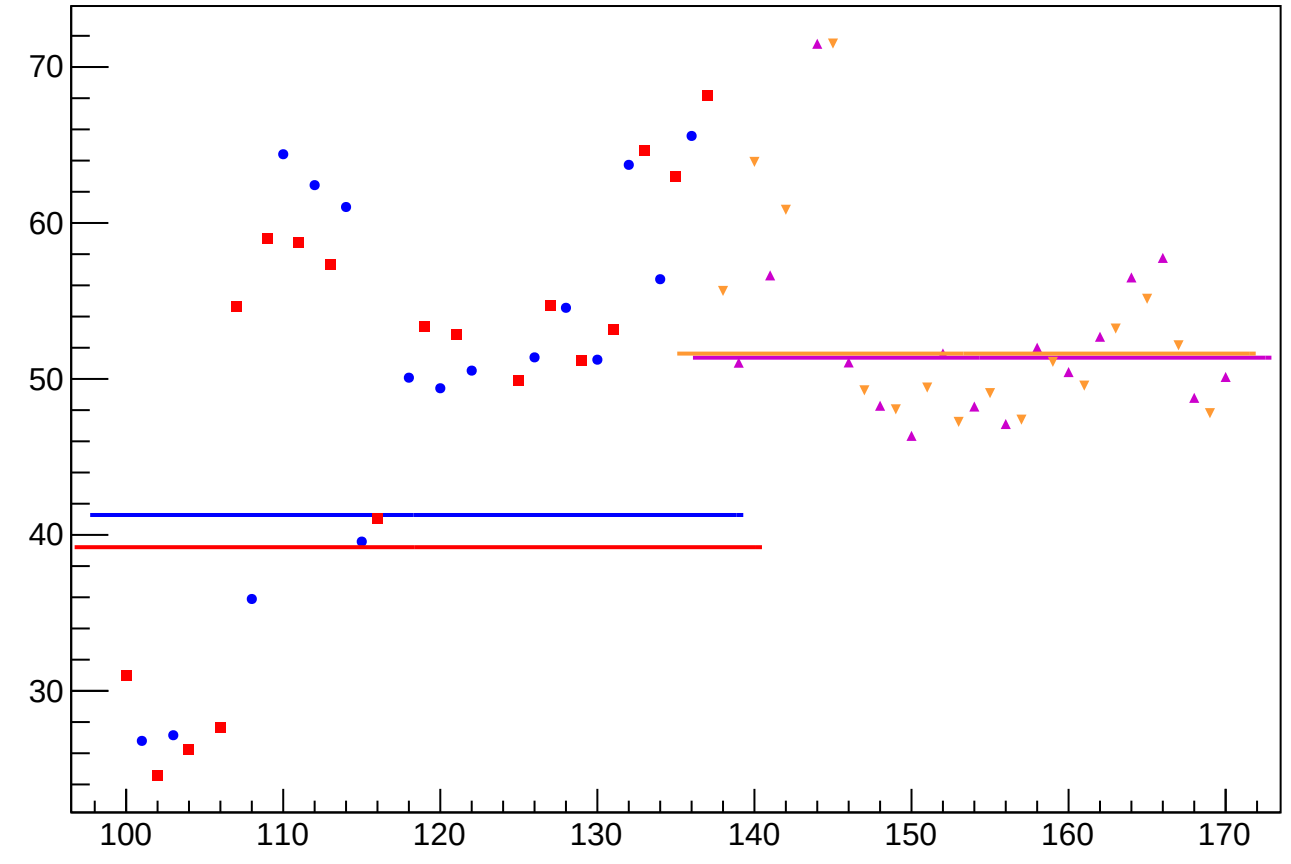
Right Out: -0.018+/-0.016 $\chi^2$/NDF: 12.3/17

Left In: 0.033+/-0.014 $\chi^2$/NDF:18.7/15

+ sign -0.002+/-0.011 $\chi^2$/NDF: 32.9/31

All: 0.004+/-0.008 $\chi^2$/NDF: 70.2/65

- sign 0.010+/-0.011 $\chi^2$/NDF: 36.7/33




Right In: 41.277+/-0.012 $\chi^2$/NDF: 1505245.8/15

Left Out: 51.626+/-0.010 $\chi^2$/NDF:275156.0/15

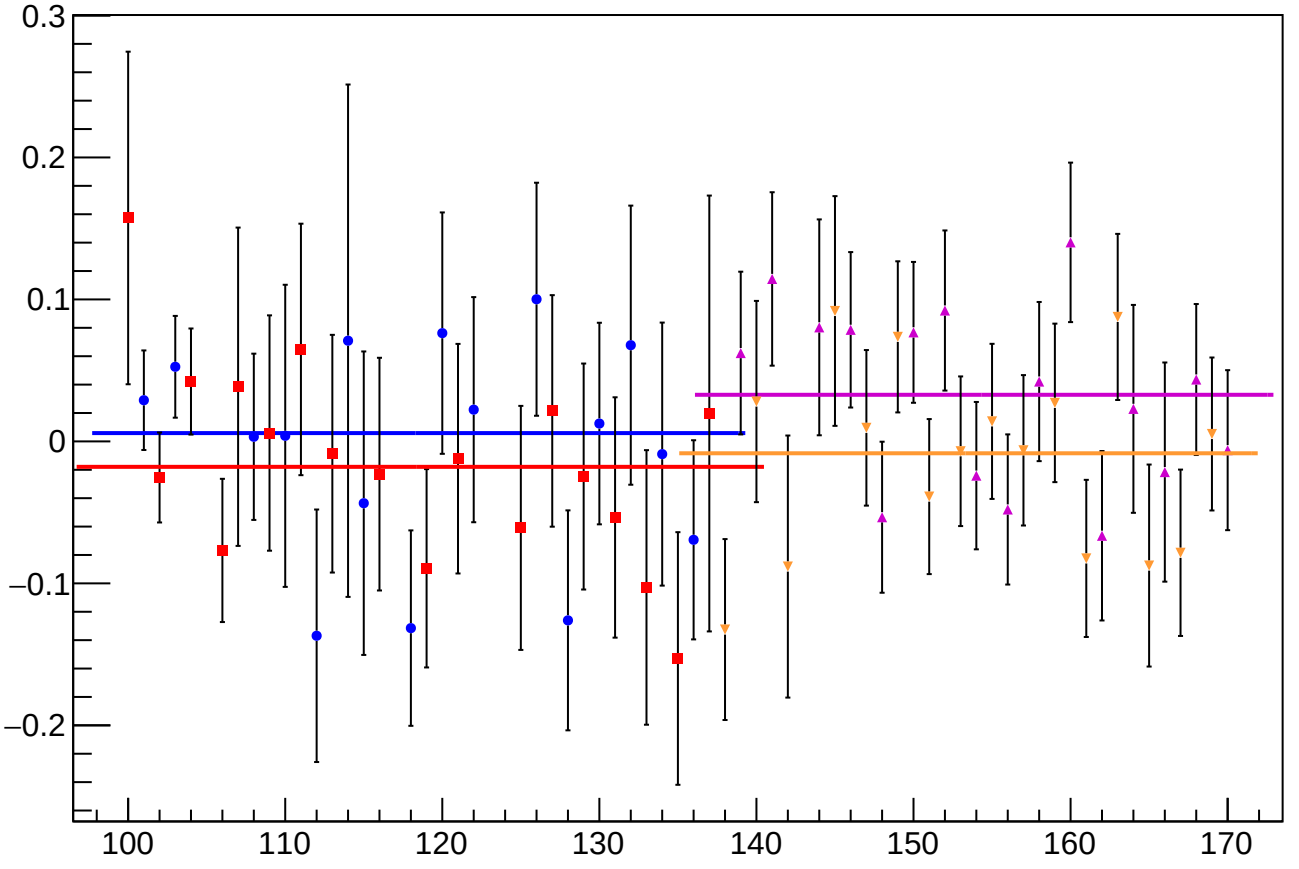
Right Out: 39.212+/-0.011 $\chi^2$/NDF: 1819921.9/17

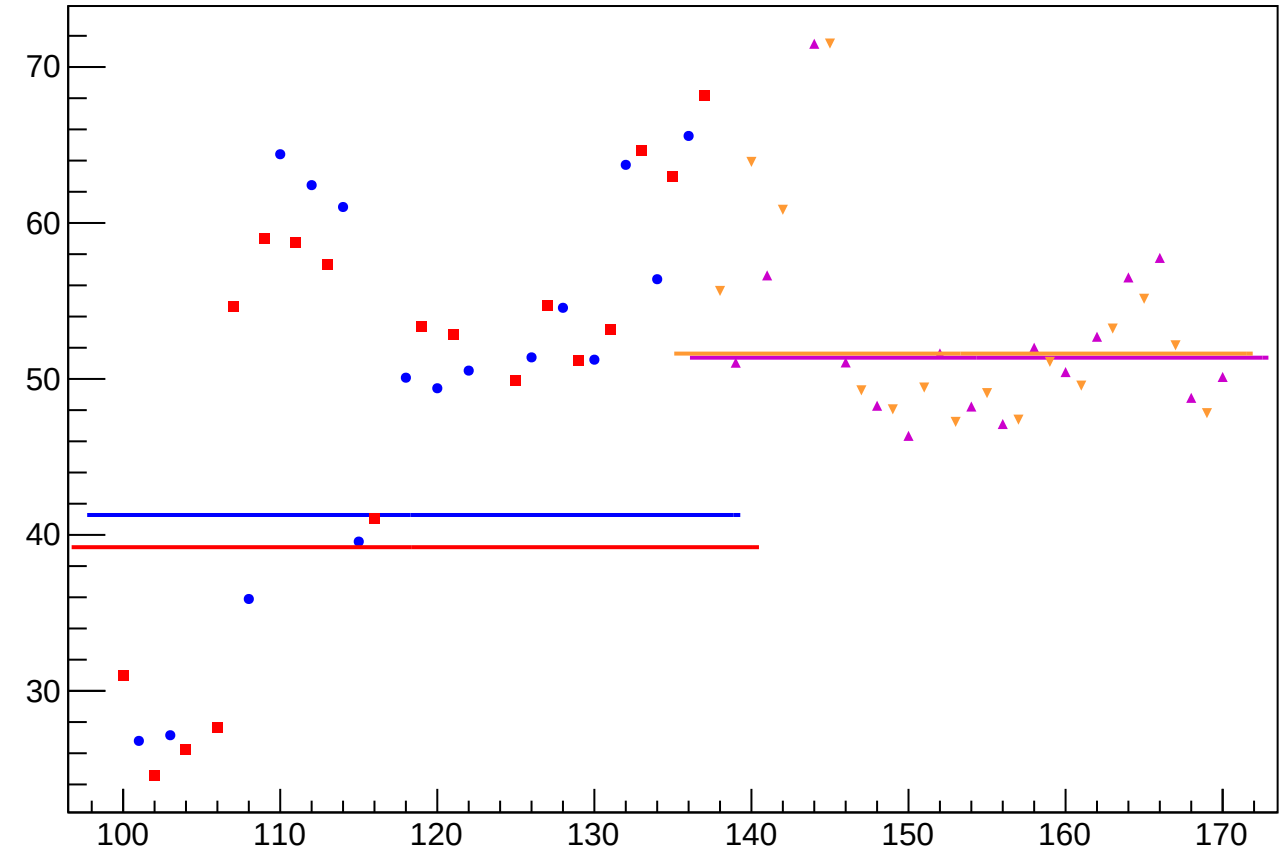
Left In: 51.363+/-0.010 $\chi^2$/NDF:233682.3/15

+ sign 47.017+/-0.008 $\chi^2$/NDF: 2215489.9/31

All: 46.398+/-0.005 $\chi^2$/NDF: 4930289.5/65

- sign 45.823+/-0.008 $\chi^2$/NDF: 2702639.7/33


asym_us_avg_overload_cor_vs_eigen_cor_diff_mean vs Slug
0.3
0.2
0.1
0
−0.1
−0.2
100
110
120
130
140
150
160
170
Right In: 0.006+/-0.017 χ²/NDF: 15.6/15
Left Out: -0.008+/-0.015 χ²/NDF:16.9/15
Right Out: -0.018+/-0.016 χ²/NDF: 12.3/17
Left In: 0.033+/-0.014 χ²/NDF:18.7/15
+ sign -0.002+/-0.011 χ²/NDF: 32.9/31
All: 0.004+/-0.008 χ²/NDF: 70.2/65
- sign 0.010+/-0.011 χ²/NDF: 36.7/33




Right In: 41.277+/-0.012 $\chi^2$/NDF: 1505245.8/15

Left Out: 51.626+/-0.010 $\chi^2$/NDF:275156.0/15

Right Out: 39.212+/-0.011 $\chi^2$/NDF: 1819921.9/17

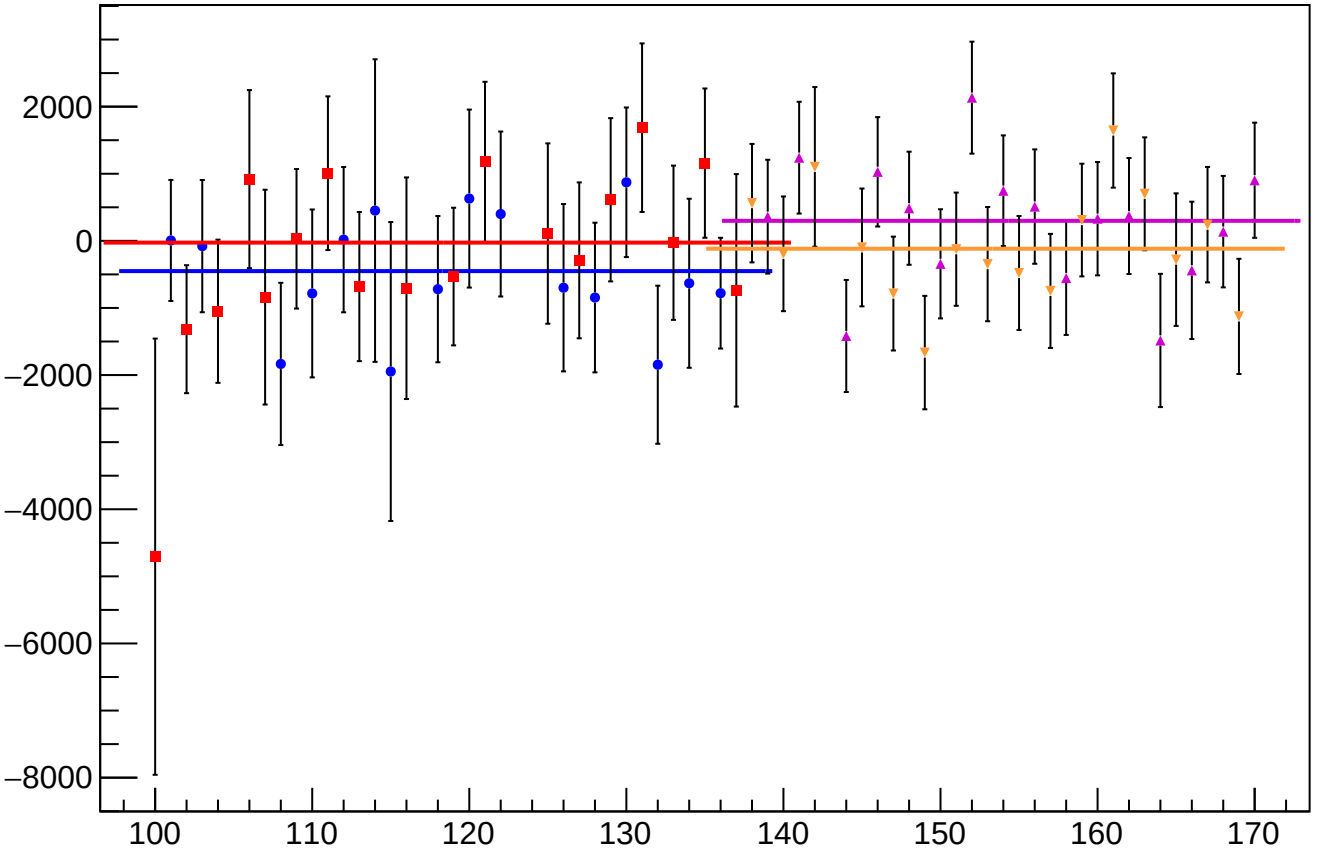
Left In: 51.363+/-0.010 $\chi^2$/NDF:233682.3/15

+ sign 47.017+/-0.008 $\chi^2$/NDF: 2215489.9/31

All: 46.398+/-0.005 $\chi^2$/NDF: 4930289.5/65

- sign 45.823+/-0.008 $\chi^2$/NDF: 2702639.7/33

# reg_asym_us_dd_mean vs Slug




Right In: -450.953+/-288.950 $\chi^2$/NDF: 6.9/15

Left Out: -117.320+/-218.508 $\chi^2$/NDF:13.5/15

Right Out: -26.099+/-288.079 $\chi^2$/NDF: 11.7/17

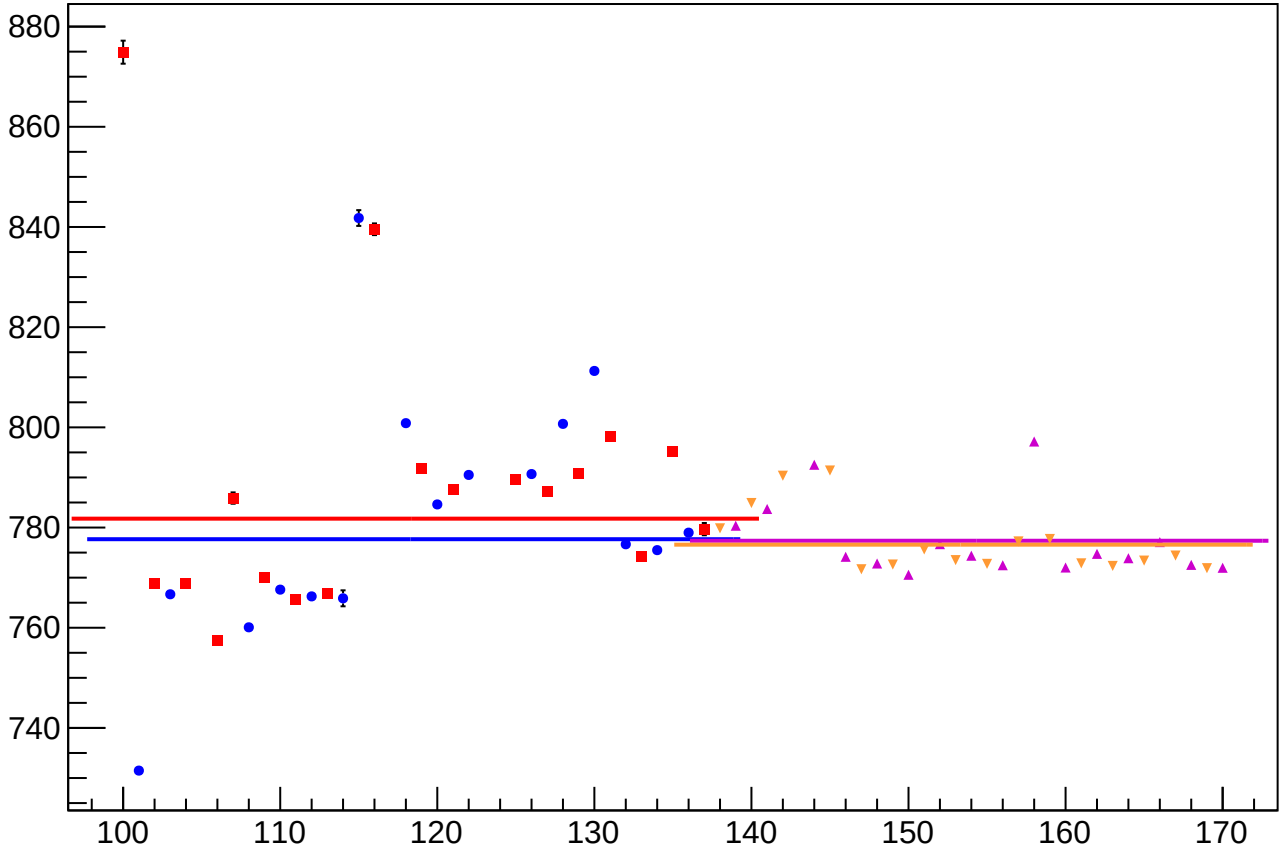
Left In: 298.365+/-213.793 $\chi^2$/NDF:17.5/15

+ sign -238.699+/-174.285 $\chi^2$/NDF: 21.3/31

All: -24.609+/-122.307 $\chi^2$/NDF: 54.2/65

- sign 183.130+/-171.680 $\chi^2$/NDF: 30.0/33

# reg_asym_us_dd_rms vs Slug




Right In: 777.674+/-0.204 $\chi^2$/NDF: 12055.4/15

Left Out: 776.584+/-0.155 $\chi^2$/NDF:1420.9/15

Right Out: 781.777+/-0.204 $\chi^2$/NDF: 7626.3/17

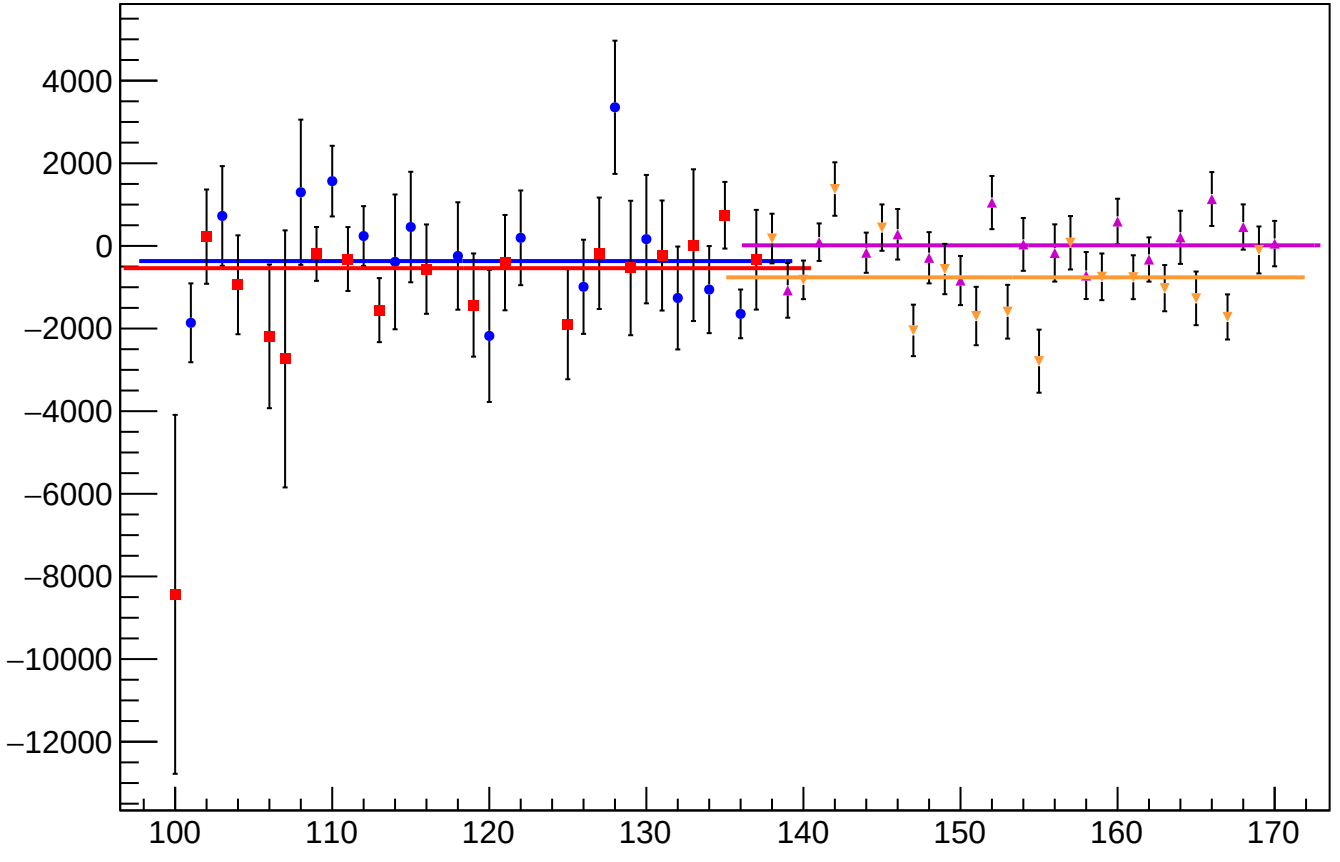
Left In: 777.365+/-0.151 $\chi^2$/NDF:2481.4/15

+ sign 776.981+/-0.123 $\chi^2$/NDF: 13494.4/31

All: 777.971+/-0.086 $\chi^2$/NDF: 24031.9/65

- sign 778.932+/-0.121 $\chi^2$/NDF: 10410.2/33

# asym_us_dd_reg_correction_mean vs Slug




Right In: -367.008+/-266.698 $\chi^2$/NDF: 23.3/15

Left Out: -760.592+/-148.476 $\chi^2$/NDF:39.7/15

Right Out: -538.887+/-262.907 $\chi^2$/NDF: 11.7/17

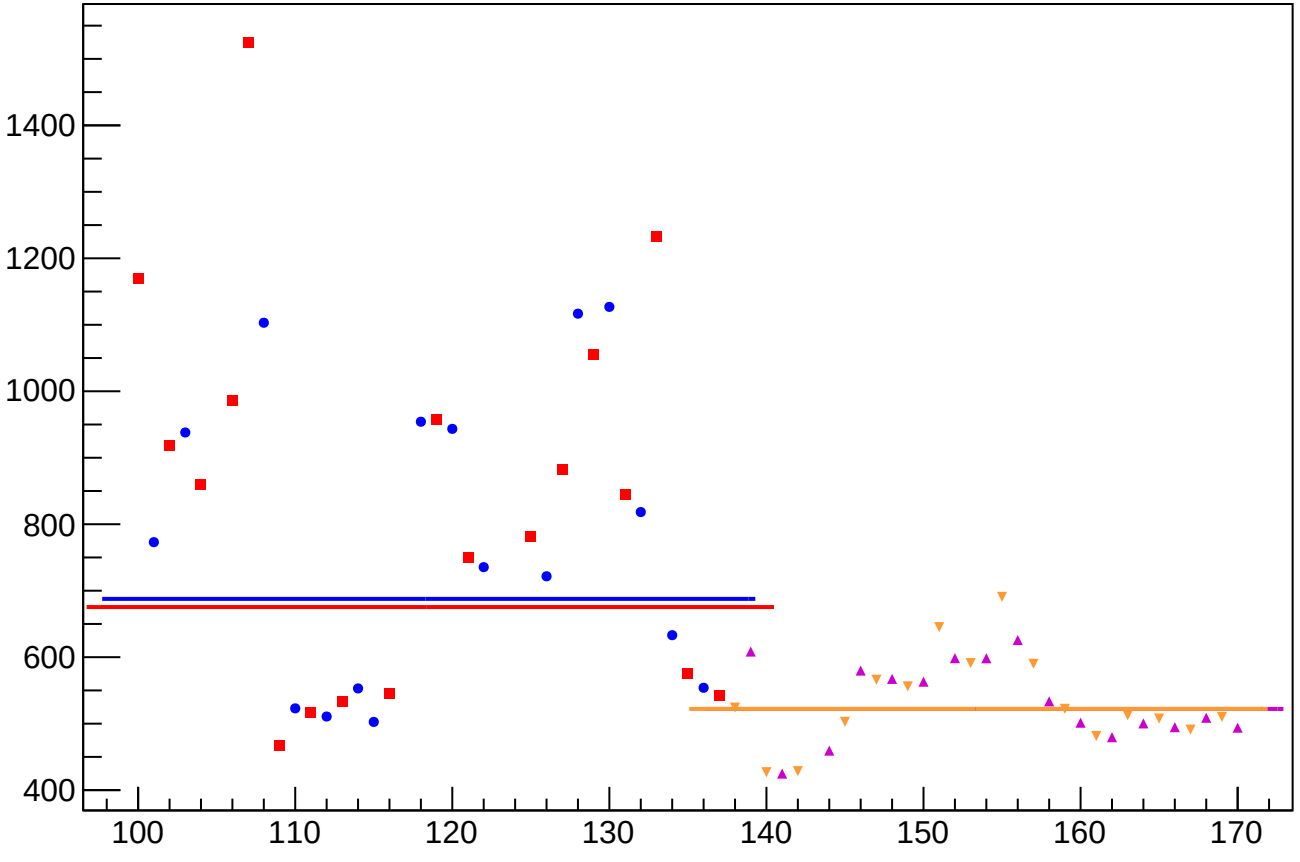
Left In: 14.183+/-144.785 $\chi^2$/NDF:14.9/15

+ sign -667.469+/-129.727 $\chi^2$/NDF: 64.7/31

All: -384.740+/-90.688 $\chi^2$/NDF: 103.9/65

- sign -114.519+/-126.825 $\chi^2$/NDF: 29.9/33

# asym_us_dd_reg_correction_rms vs Slug




Right In: 687.717+/-0.189 $\chi^2$/NDF: 1031906.6/15

Left Out: 522.154+/-0.105 $\chi^2$/NDF:366831.4/15

Right Out: 675.410+/-0.186 $\chi^2$/NDF: 1313004.6/17

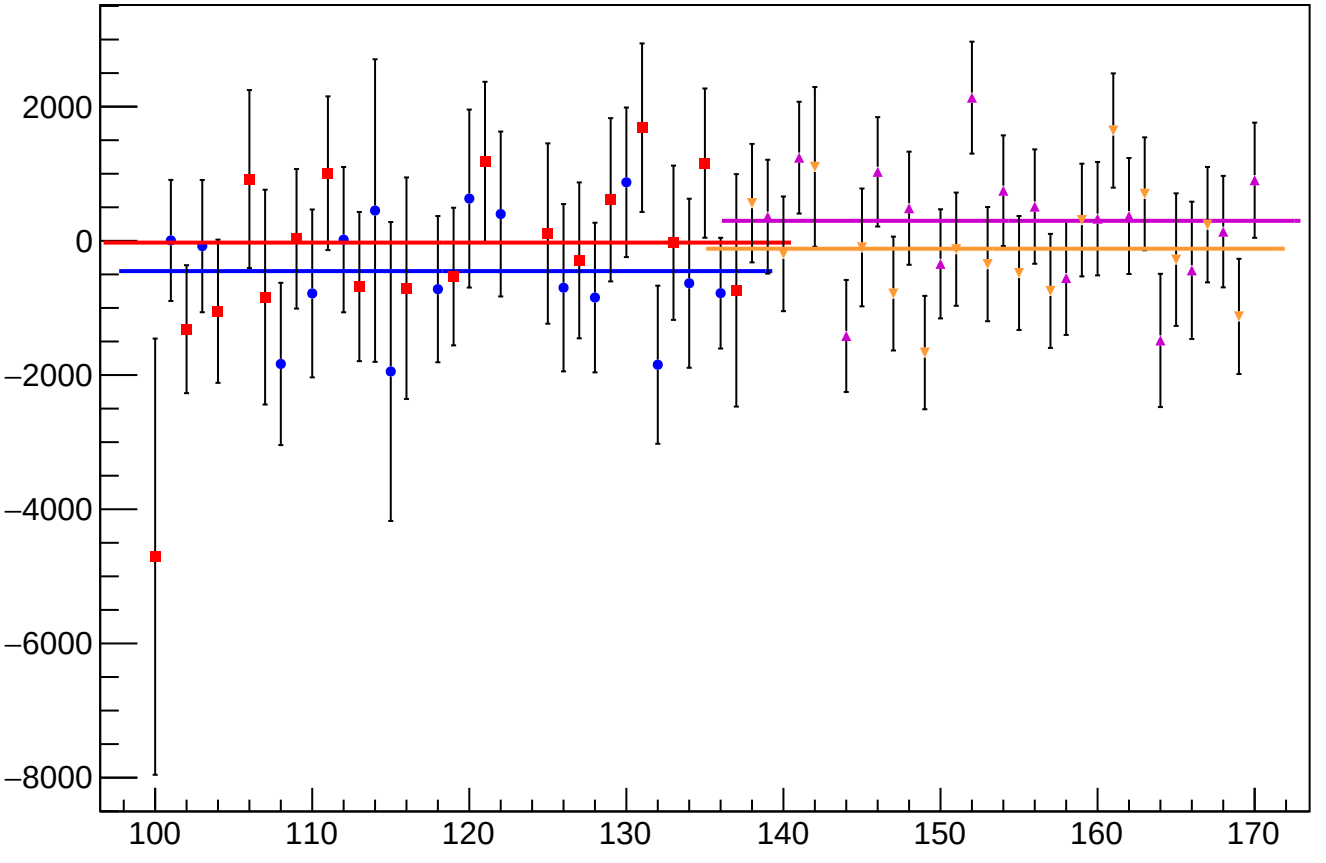
Left In: 522.118+/-0.102 $\chi^2$/NDF:326809.3/15

+ sign 561.327+/-0.092 $\chi^2$/NDF: 1987124.8/31

All: 559.518+/-0.064 $\chi^2$/NDF: 4149405.3/65

- sign 557.790+/-0.090 $\chi^2$/NDF: 2161520.1/33

# cor_asym_us_dd_mean vs Slug




Right In: -450.953+/-288.950 $\chi^2$/NDF: 6.9/15

Left Out: -117.320+/-218.508 $\chi^2$/NDF:13.5/15

Right Out: -26.099+/-288.079 $\chi^2$/NDF: 11.7/17

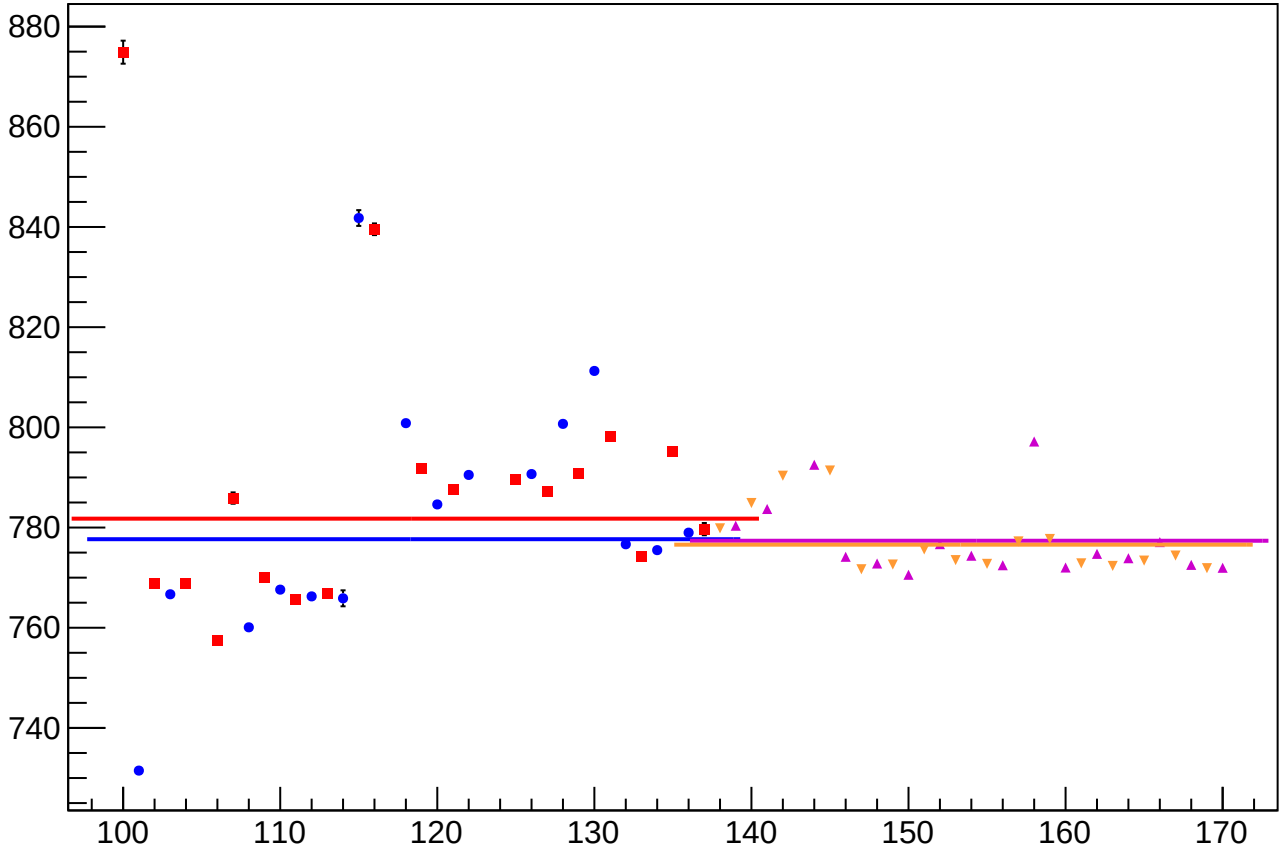
Left In: 298.365+/-213.793 $\chi^2$/NDF:17.5/15

+ sign -238.699+/-174.285 $\chi^2$/NDF: 21.3/31

All: -24.609+/-122.307 $\chi^2$/NDF: 54.2/65

- sign 183.130+/-171.680 $\chi^2$/NDF: 30.0/33

# cor_asym_us_dd_rms vs Slug




Right In: 777.674+/-0.204 $\chi^2$/NDF: 12055.4/15

Left Out: 776.584+/-0.155 $\chi^2$/NDF:1420.9/15

Right Out: 781.777+/-0.204 $\chi^2$/NDF: 7626.3/17

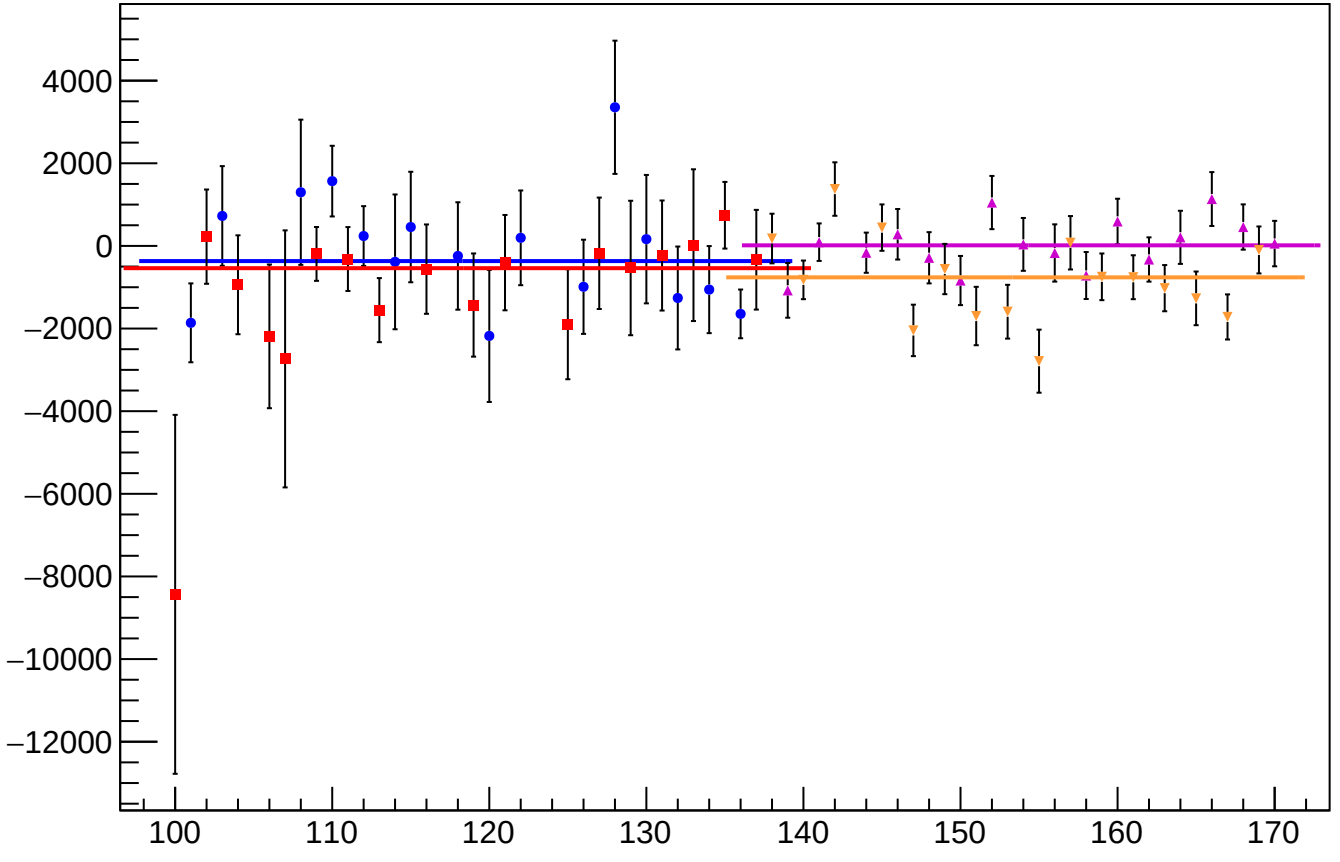
Left In: 777.365+/-0.151 $\chi^2$/NDF:2481.4/15

+ sign 776.981+/-0.123 $\chi^2$/NDF: 13494.4/31

All: 777.971+/-0.086 $\chi^2$/NDF: 24031.9/65

- sign 778.932+/-0.121 $\chi^2$/NDF: 10410.2/33

# asym_us_dd_cor_correction_mean vs Slug




Right In: -367.008+/-266.698 $\chi^2$/NDF: 23.3/15

Left Out: -760.592+/-148.476 $\chi^2$/NDF:39.7/15

Right Out: -538.887+/-262.907 $\chi^2$/NDF: 11.7/17

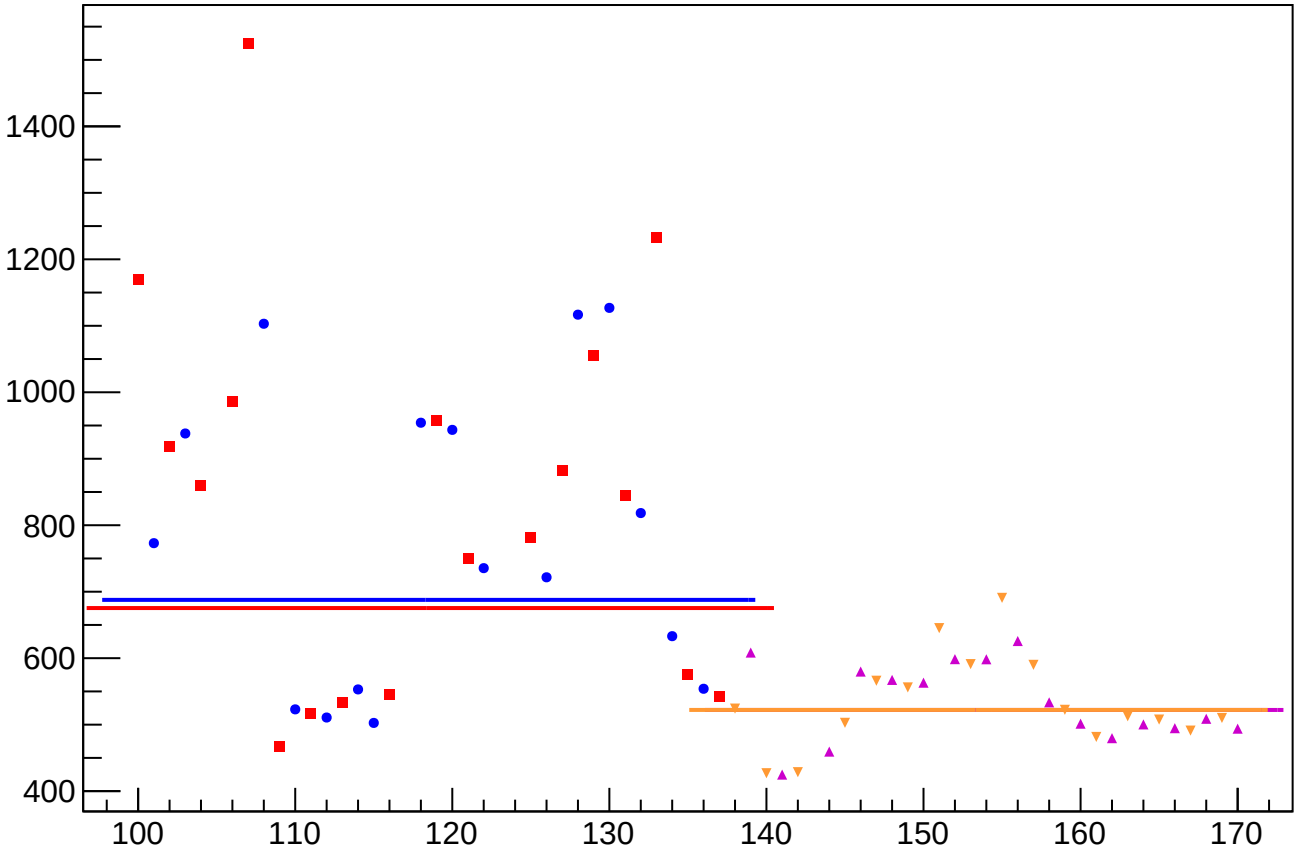
Left In: 14.183+/-144.785 $\chi^2$/NDF:14.9/15

+ sign -667.469+/-129.727 $\chi^2$/NDF: 64.7/31

All: -384.740+/-90.688 $\chi^2$/NDF: 103.9/65

- sign -114.519+/-126.825 $\chi^2$/NDF: 29.9/33

# asym_us_dd_cor_correction_rms vs Slug




Right In: 687.717+/-0.189 $\chi^2$/NDF: 1031906.6/15

Left Out: 522.154+/-0.105 $\chi^2$/NDF:366831.4/15

Right Out: 675.410+/-0.186 $\chi^2$/NDF: 1313004.6/17

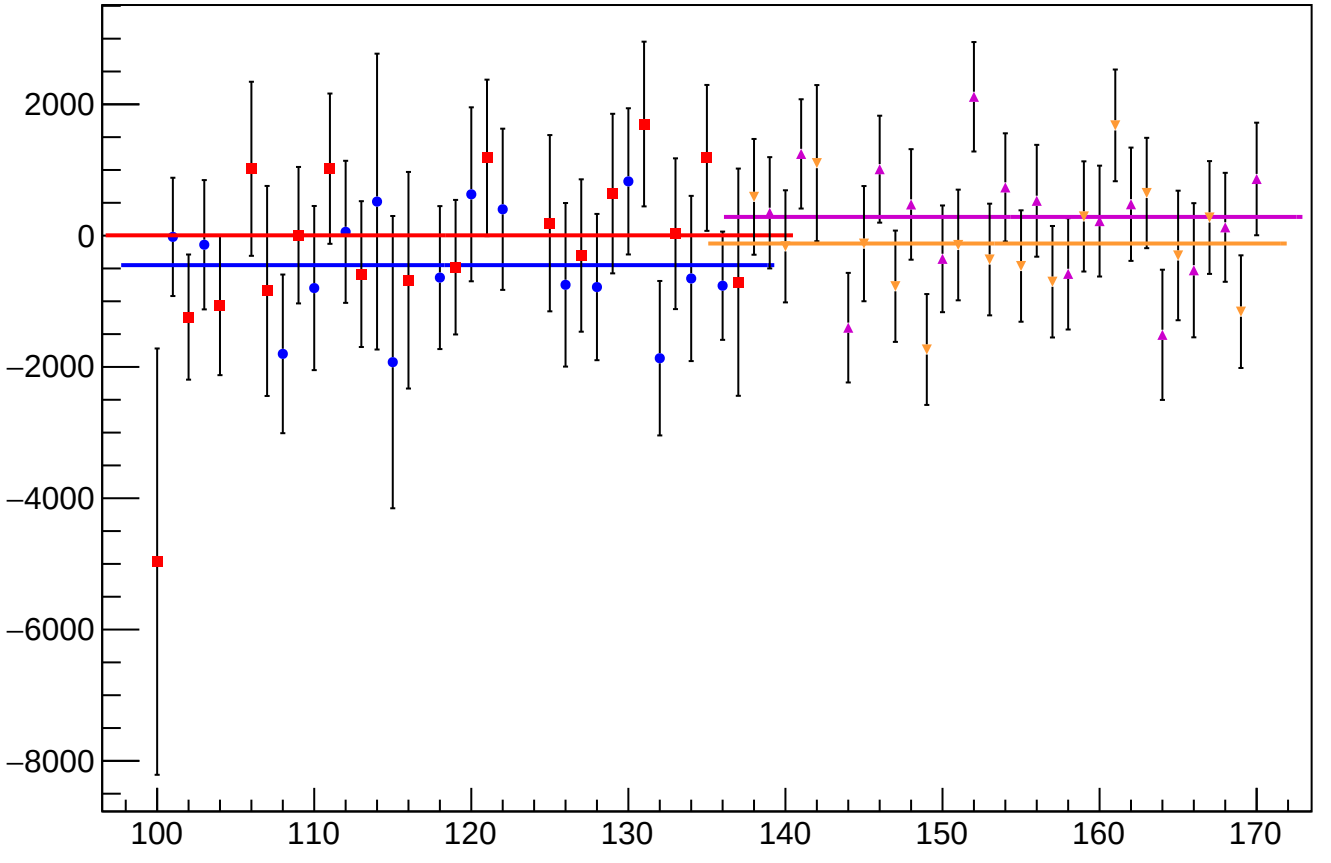
Left In: 522.118+/-0.102 $\chi^2$/NDF:326809.3/15

+ sign 561.327+/-0.092 $\chi^2$/NDF: 1987124.8/31

All: 559.518+/-0.064 $\chi^2$/NDF: 4149405.3/65

- sign 557.790+/-0.090 $\chi^2$/NDF: 2161520.1/33

# overload_cor_asym_us_dd_mean vs Slug




Right In: -449.430+/-288.668 $\chi^2$/NDF: 6.8/15

Left Out: -120.132+/-218.308 $\chi^2$/NDF:13.9/15

Right Out: 4.645+/-287.815 $\chi^2$/NDF: 11.8/17

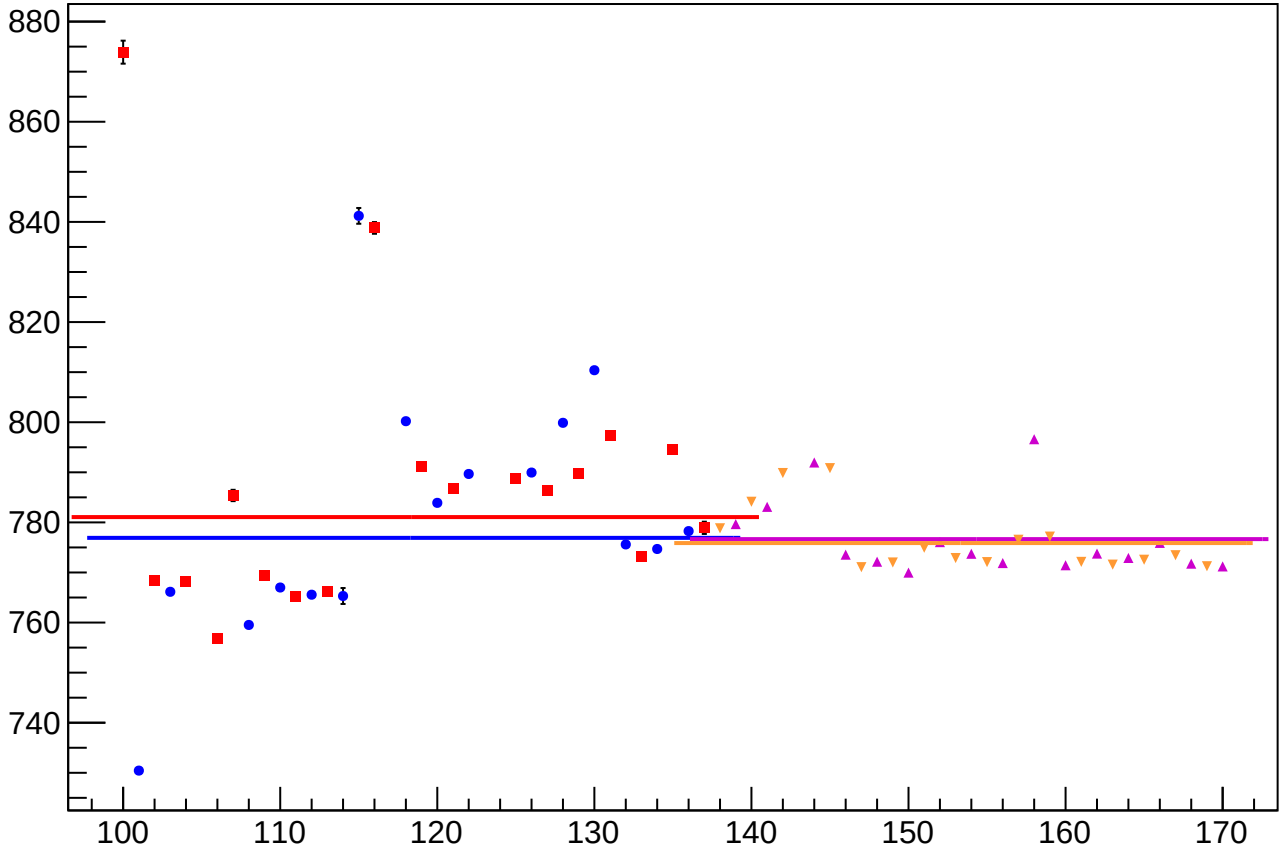
Left In: 285.073+/-213.600 $\chi^2$/NDF:17.6/15

+ sign -239.943+/-174.122 $\chi^2$/NDF: 21.5/31

All: -24.037+/-122.194 $\chi^2$/NDF: 54.6/65

- sign 185.476+/-171.525 $\chi^2$/NDF: 30.0/33

# overload_cor_asym_us_dd_rms vs Slug




Right In: 776.913+/-0.204 $\chi^2$/NDF: 12123.6/15

Left Out: 775.874+/-0.154 $\chi^2$/NDF:1435.6/15

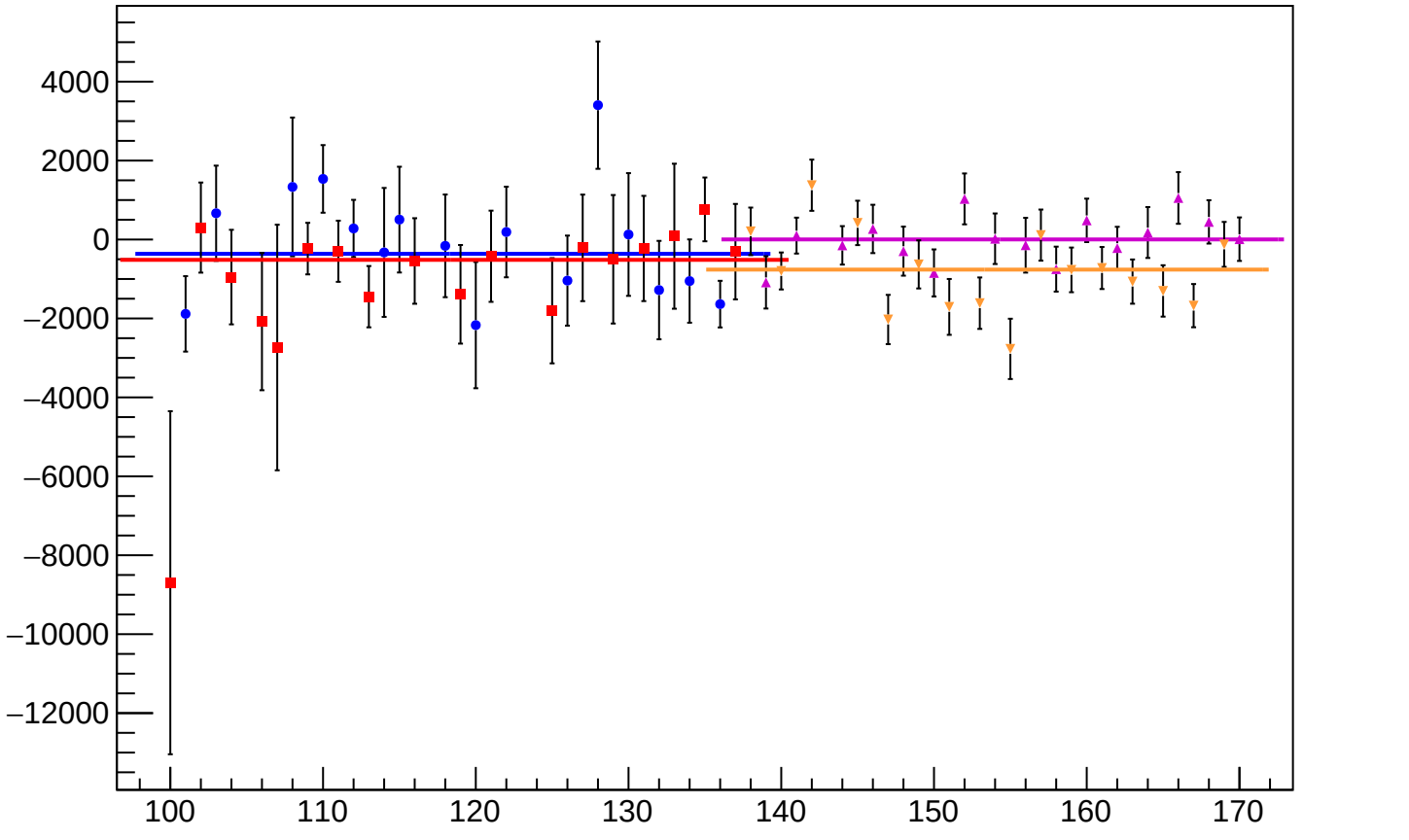
Right Out: 781.061+/-0.204 $\chi^2$/NDF: 7585.8/17

Left In: 776.663+/-0.151 $\chi^2$/NDF:2514.0/15

+ sign 776.252+/-0.123 $\chi^2$/NDF: 13575.7/31

All: 777.253+/-0.086 $\chi^2$/NDF: 24107.0/65

- sign 778.225+/-0.121 $\chi^2$/NDF: 10401.0/33




Right In: -362.811+/-267.086 $\chi^2$/NDF: 23.4/15

Left Out: -762.255+/-148.797 $\chi^2$/NDF:39.3/15

Right Out: -515.295+/-263.302 $\chi^2$/NDF: 11.4/17

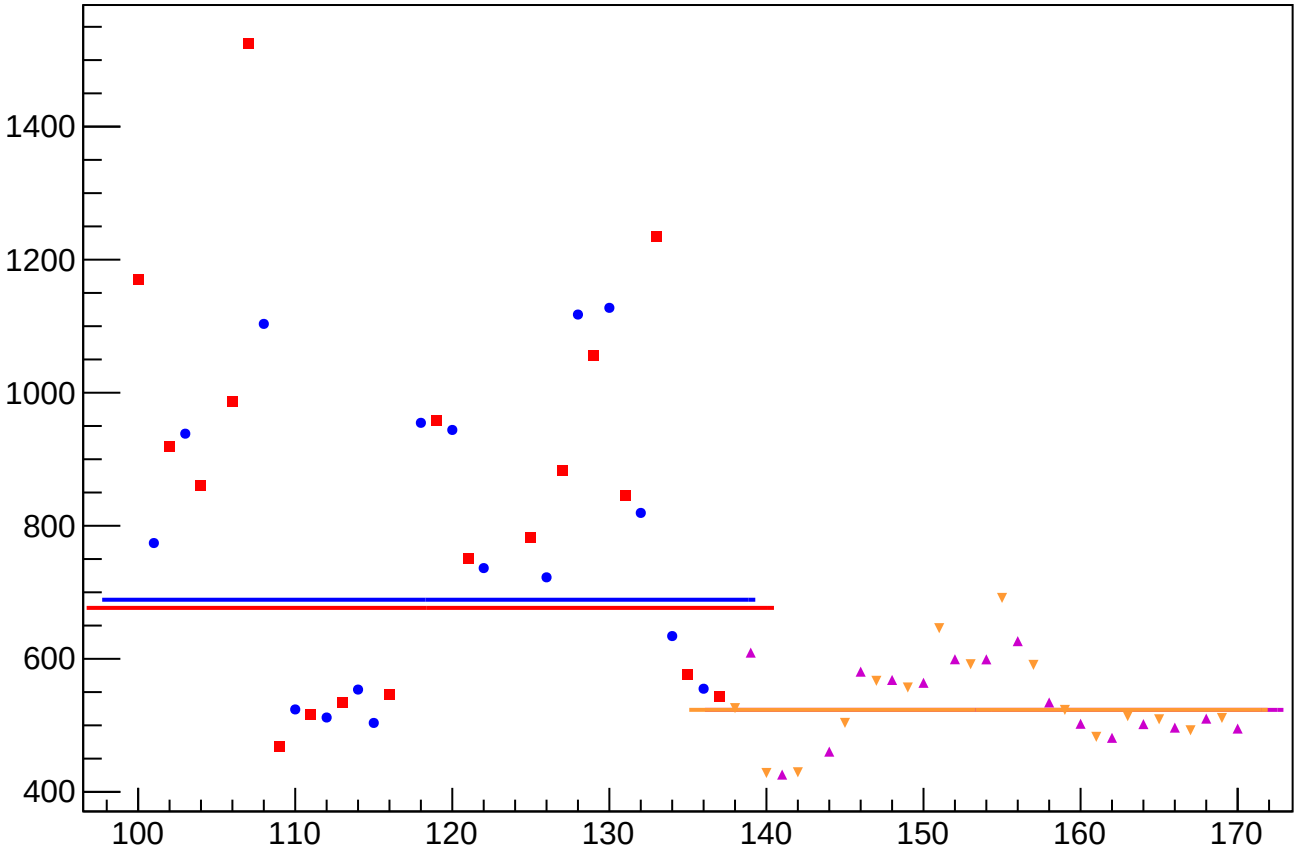
Left In: 2.365+/-145.094 $\chi^2$/NDF:13.9/15

+ sign -667.643+/-129.986 $\chi^2$/NDF: 64.4/31

All: -386.713+/-90.868 $\chi^2$/NDF: 101.7/65

- sign -118.214+/-127.077 $\chi^2$/NDF: 28.2/33

# asym_us_dd_overload_cor_correction_rms vs Slug




Right In: 688.828+/-0.189 $\chi^2$/NDF: 1028118.5/15

Left Out: 523.329+/-0.105 $\chi^2$/NDF:363625.7/15

Right Out: 676.572+/-0.186 $\chi^2$/NDF: 1308036.1/17

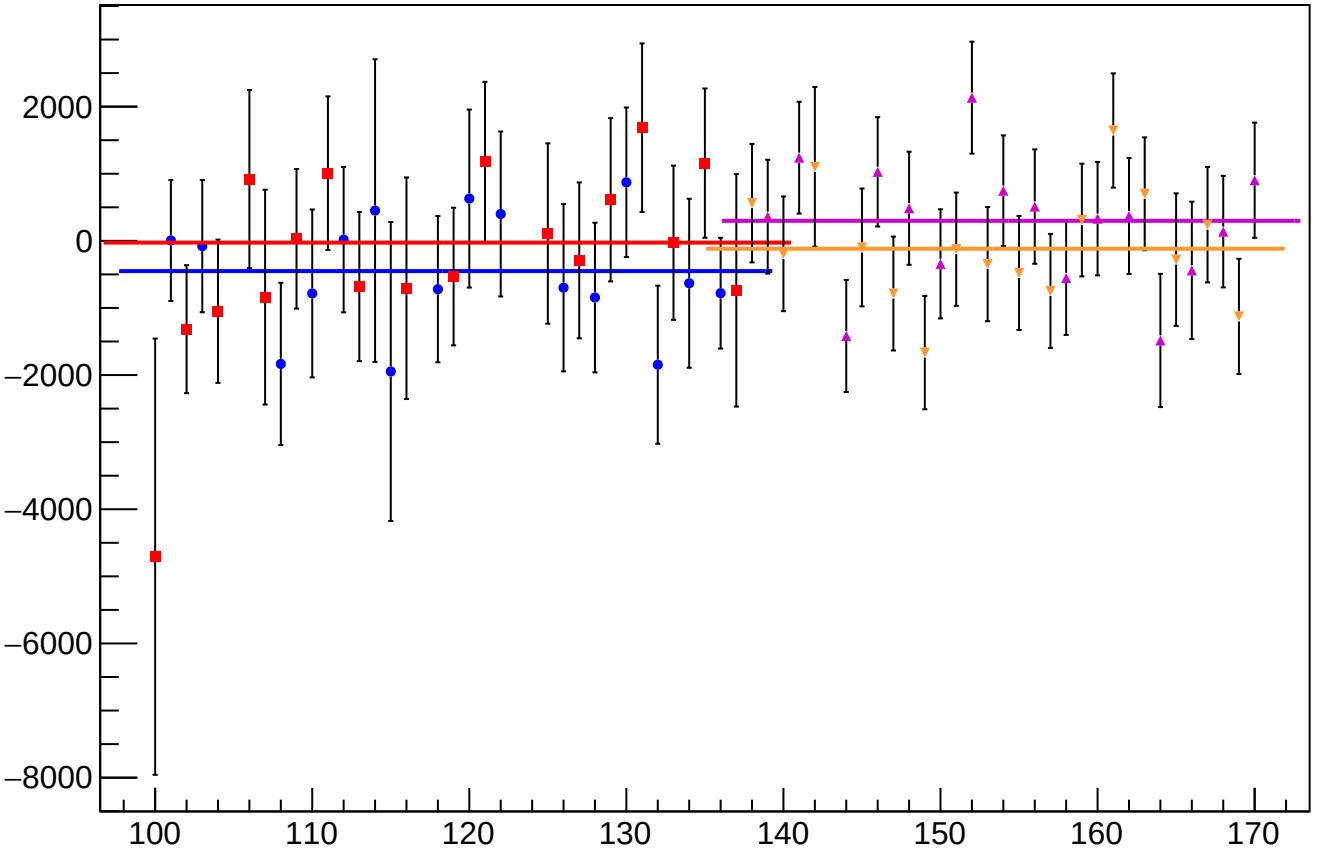
Left In: 523.270+/-0.103 $\chi^2$/NDF:323790.3/15

+ sign 562.529+/-0.092 $\chi^2$/NDF: 1977781.3/31

All: 560.714+/-0.064 $\chi^2$/NDF: 4130429.6/65

- sign 558.979+/-0.090 $\chi^2$/NDF: 2151885.3/33

# eigen_cor_asym_us_dd_mean vs Slug




Right In: -450.953+/-288.950 $\chi^2$/NDF: 6.9/15

Left Out: -117.320+/-218.508 $\chi^2$/NDF:13.5/15

Right Out: -26.099+/-288.079 $\chi^2$/NDF: 11.7/17

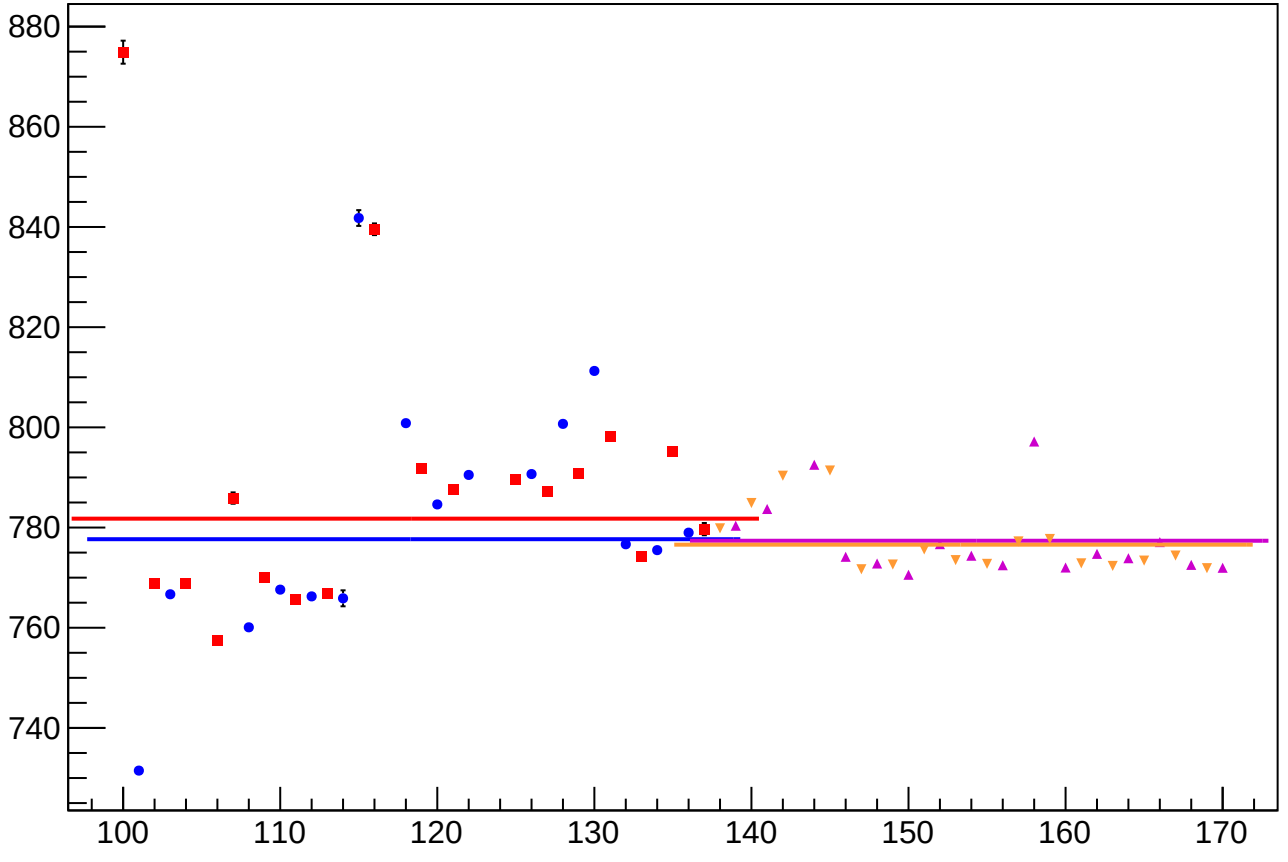
Left In: 298.365+/-213.793 $\chi^2$/NDF:17.5/15

+ sign -238.699+/-174.285 $\chi^2$/NDF: 21.3/31

All: -24.609+/-122.307 $\chi^2$/NDF: 54.2/65

- sign 183.130+/-171.680 $\chi^2$/NDF: 30.0/33

# eigen_cor_asym_us_dd_rms vs Slug




Right In: 777.674+/-0.204 $\chi^2$/NDF: 12055.4/15

Left Out: 776.584+/-0.155 $\chi^2$/NDF:1420.9/15

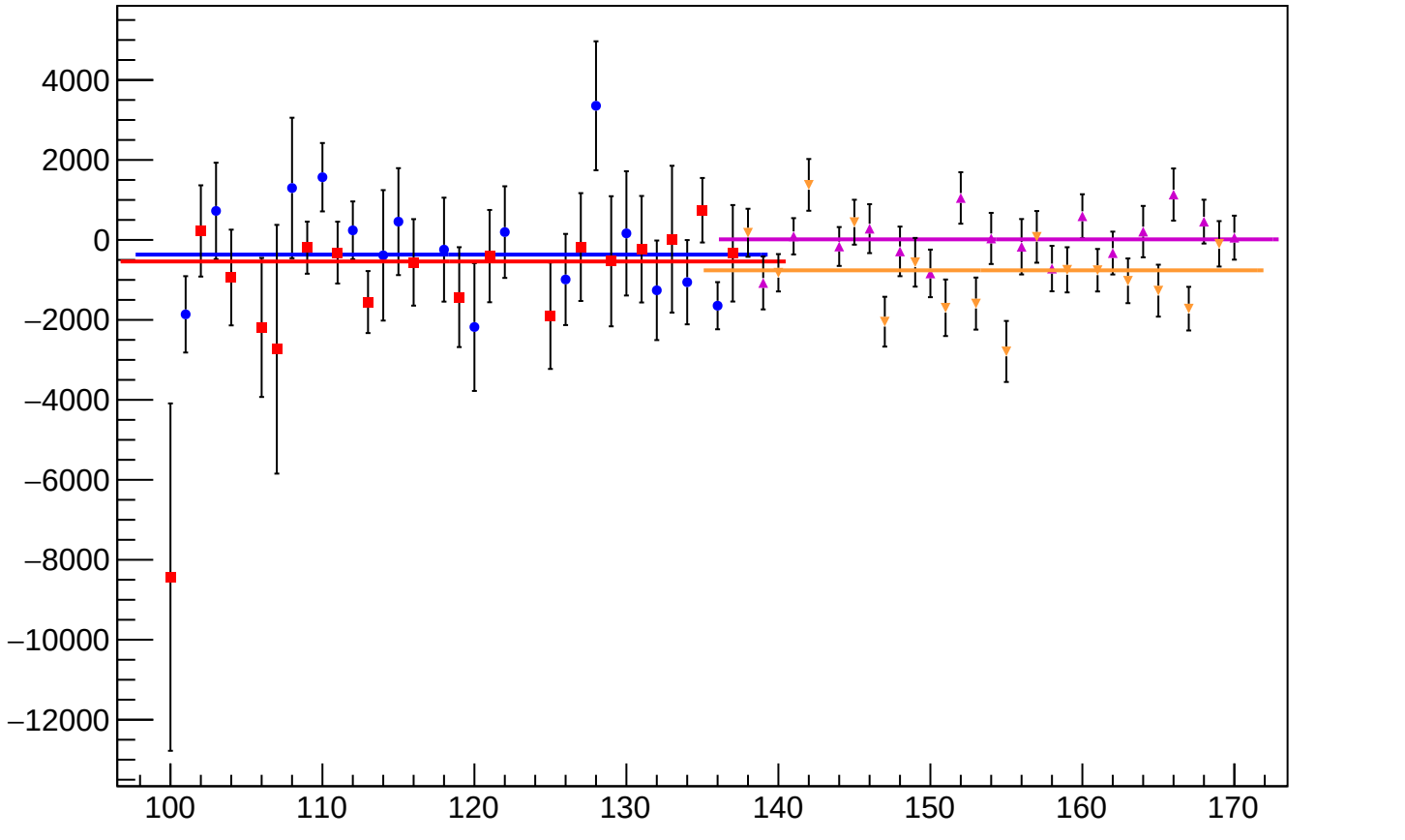
Right Out: 781.777+/-0.204 $\chi^2$/NDF: 7626.3/17

Left In: 777.365+/-0.151 $\chi^2$/NDF:2481.4/15

+ sign 776.981+/-0.123 $\chi^2$/NDF: 13494.4/31

All: 777.971+/-0.086 $\chi^2$/NDF: 24031.9/65

- sign 778.932+/-0.121 $\chi^2$/NDF: 10410.2/33




Right In: -367.008+/-266.698 $\chi^2$/NDF: 23.3/15

Left Out: -760.592+/-148.476 $\chi^2$/NDF:39.7/15

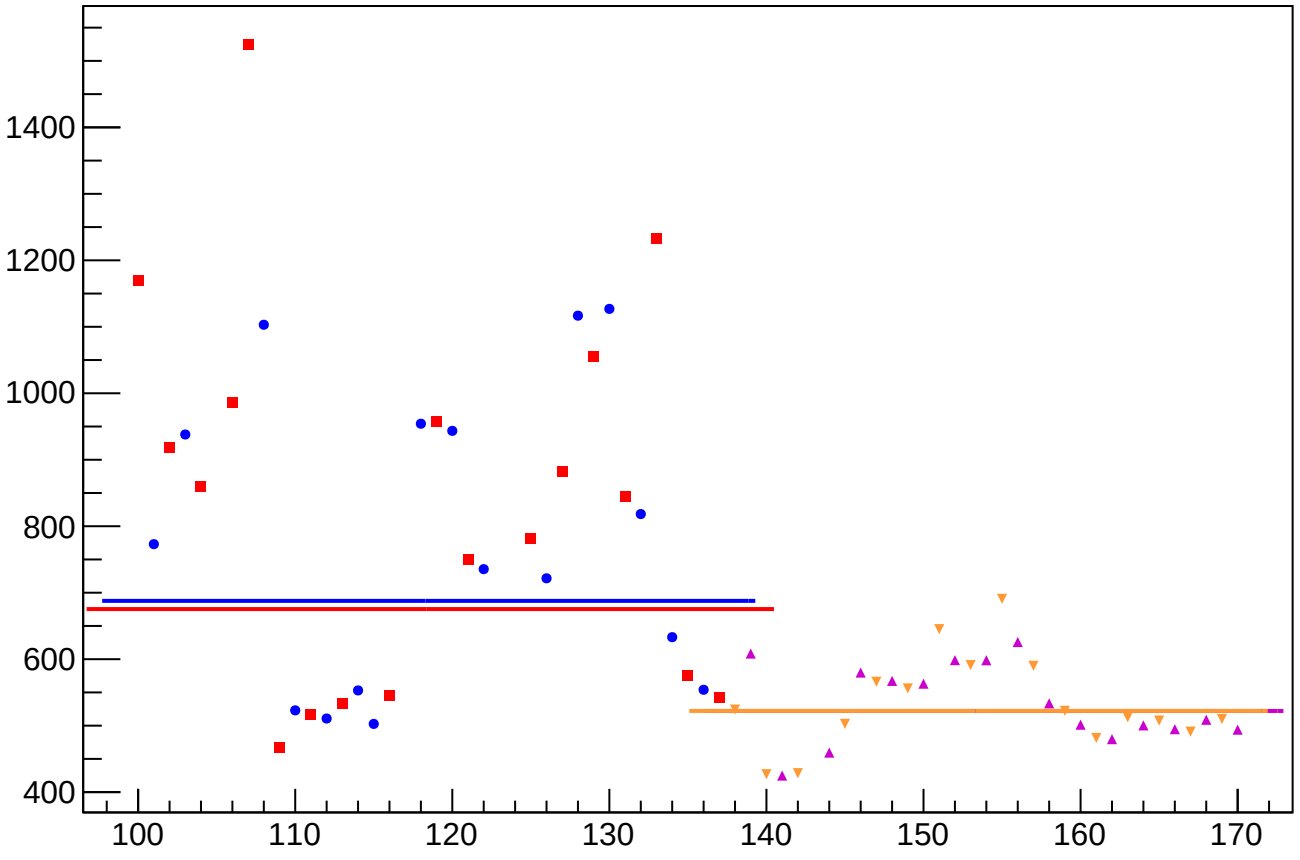
Right Out: -538.887+/-262.907 $\chi^2$/NDF: 11.7/17

Left In: 14.183+/-144.785 $\chi^2$/NDF:14.9/15

+ sign -667.469+/-129.727 $\chi^2$/NDF: 64.7/31

All: -384.740+/-90.688 $\chi^2$/NDF: 103.9/65

- sign -114.519+/-126.825 $\chi^2$/NDF: 29.9/33




Right In: 687.717+/-0.189 $\chi^2$/NDF: 1031906.6/15

Left Out: 522.154+/-0.105 $\chi^2$/NDF:366831.4/15

Right Out: 675.410+/-0.186 $\chi^2$/NDF: 1313004.6/17

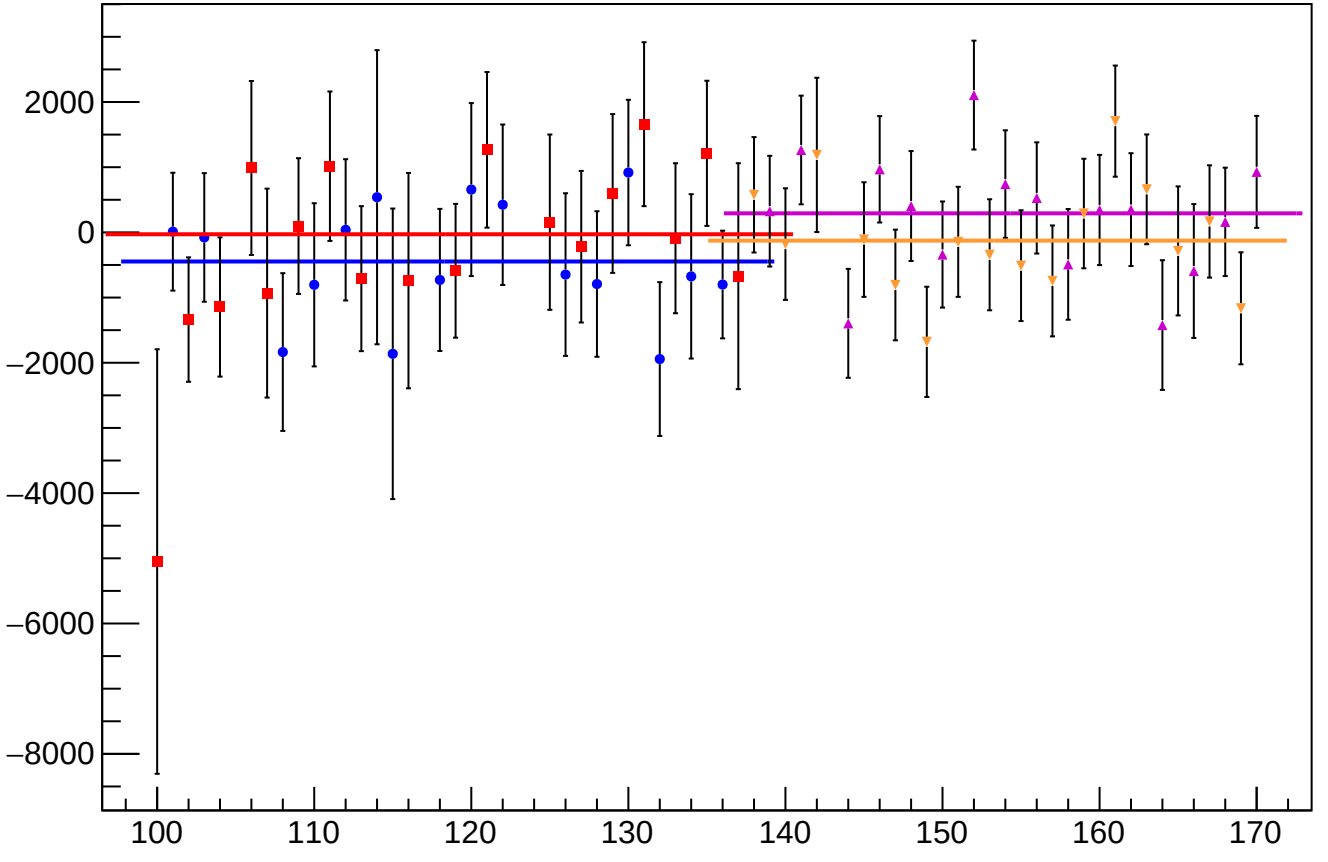
Left In: 522.118+/-0.102 $\chi^2$/NDF:326809.3/15

+ sign 561.327+/-0.092 $\chi^2$/NDF: 1987124.8/31

All: 559.518+/-0.064 $\chi^2$/NDF: 4149405.3/65

- sign 557.790+/-0.090 $\chi^2$/NDF: 2161520.1/33

# dit_asym_us_dd_mean vs Slug




Right In: -446.659+/-289.238 $\chi^2$/NDF: 7.3/15

Left Out: -126.157+/-218.693 $\chi^2$/NDF:14.0/15

Right Out: -28.787+/-288.372 $\chi^2$/NDF: 12.6/17

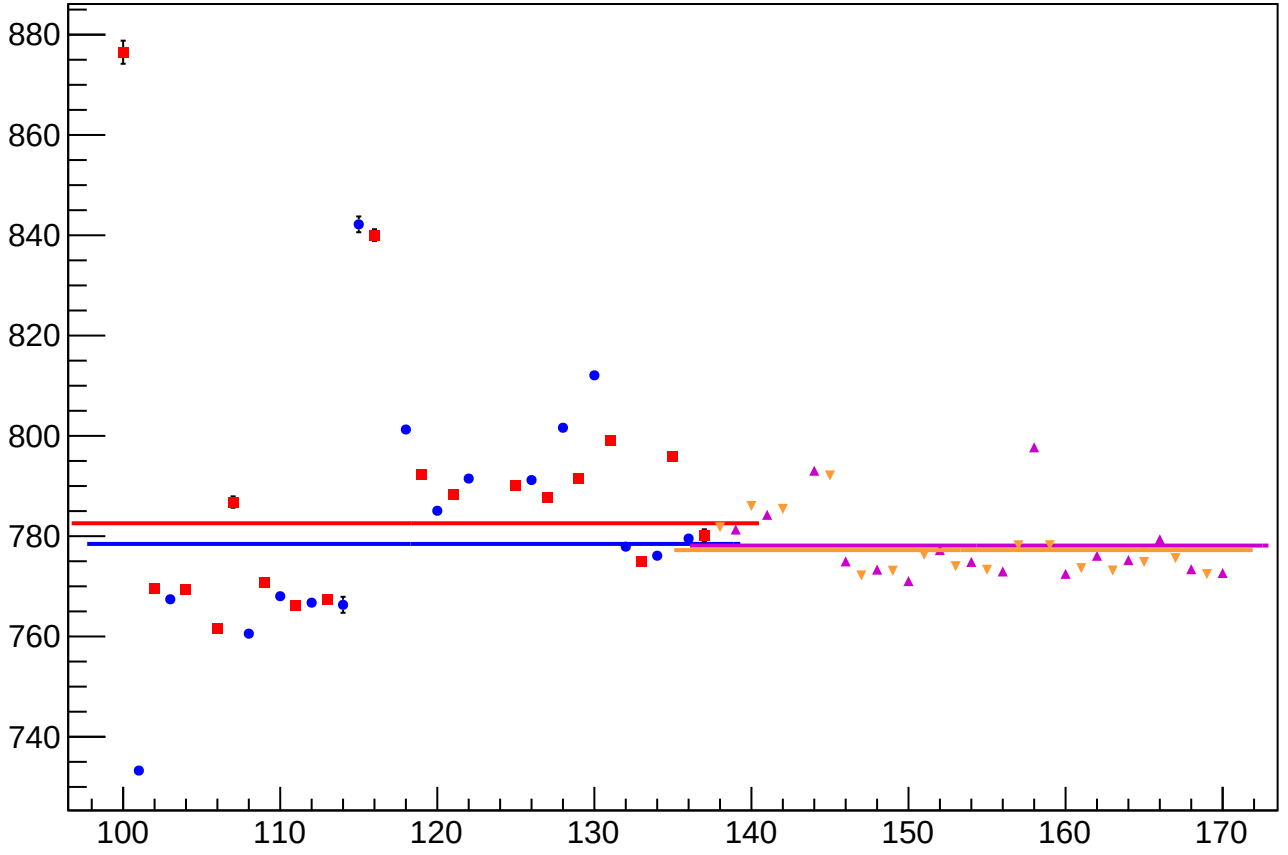
Left In: 291.891+/-214.002 $\chi^2$/NDF:17.0/15

+ sign -242.737+/-174.443 $\chi^2$/NDF: 22.1/31

All: -29.217+/-122.423 $\chi^2$/NDF: 55.5/65

- sign 178.006+/-171.851 $\chi^2$/NDF: 30.4/33

# dit_asym_us_dd_rms vs Slug




Right In: 778.456+/-0.205 $\chi^2$/NDF: 11795.2/15

Left Out: 777.219+/-0.155 $\chi^2$/NDF:1293.9/15

Right Out: 782.575+/-0.204 $\chi^2$/NDF: 7481.4/17

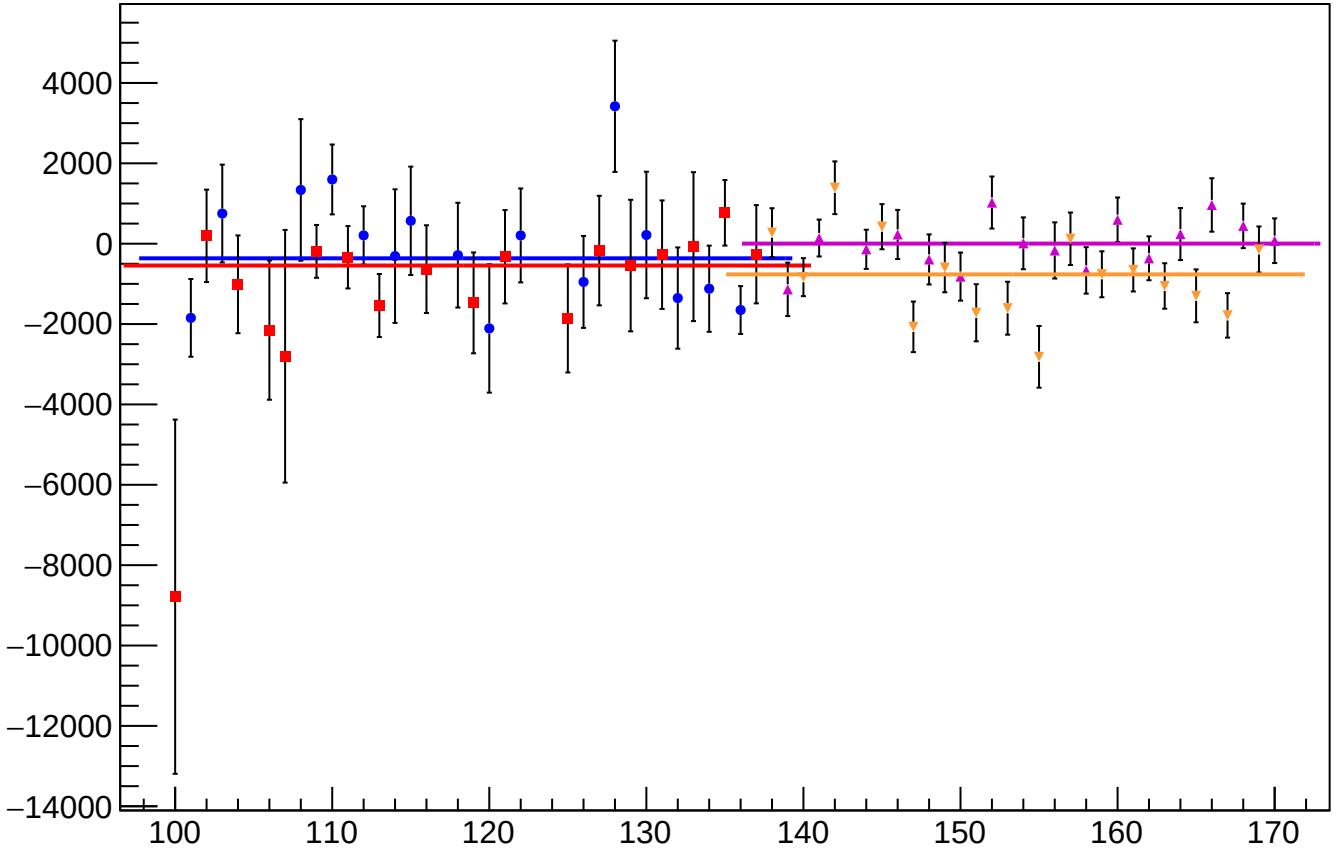
Left In: 778.127+/-0.151 $\chi^2$/NDF:2456.9/15

+ sign 777.669+/-0.123 $\chi^2$/NDF: 13112.3/31

All: 778.703+/-0.087 $\chi^2$/NDF: 23496.1/65

- sign 779.707+/-0.122 $\chi^2$/NDF: 10245.2/33

# asym_us_dd_dit_correction_mean vs Slug




Right In: -363.977+/-269.316 $\chi^2$/NDF: 23.3/15

Left Out: -763.777+/-149.995 $\chi^2$/NDF:40.5/15

Right Out: -542.879+/-265.273 $\chi^2$/NDF: 11.8/17

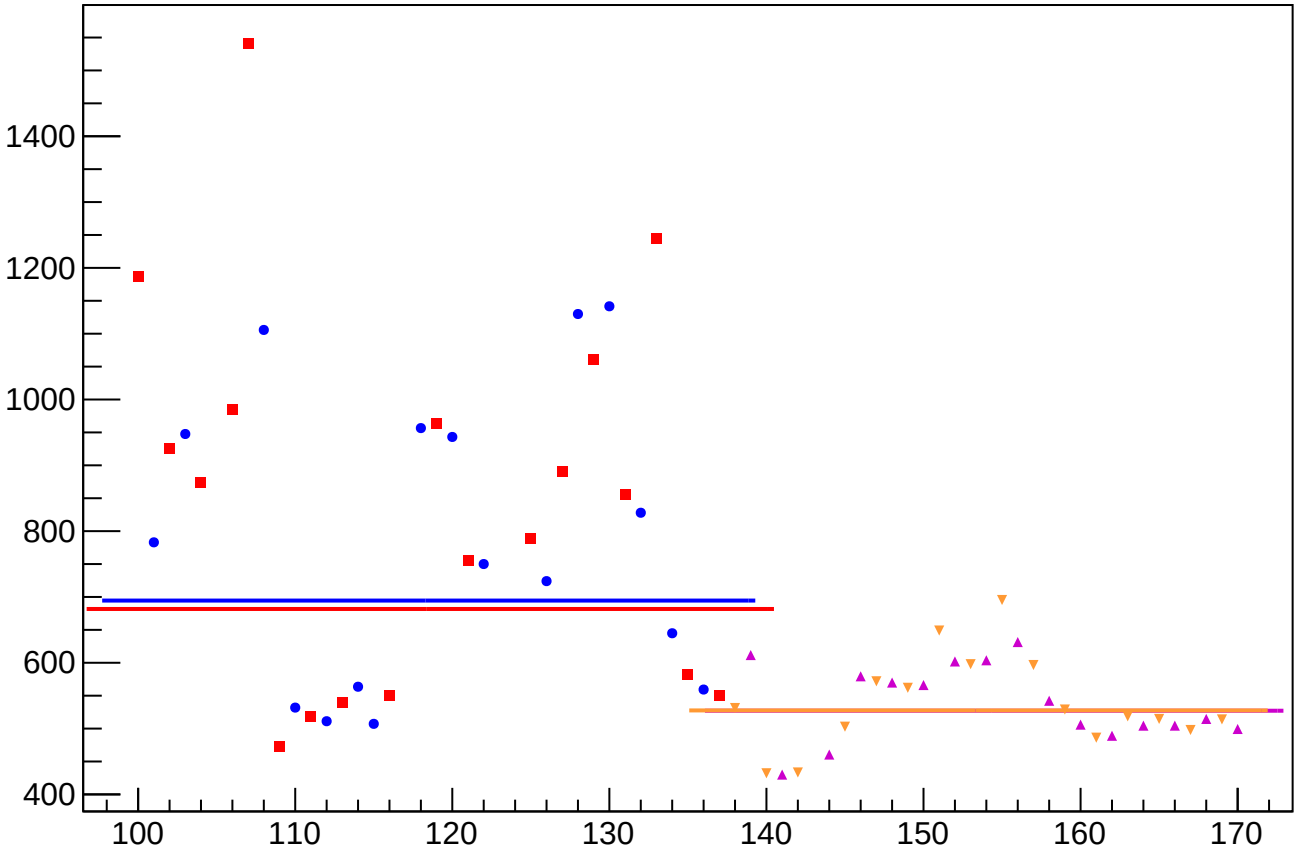
Left In: 2.400+/-146.122 $\chi^2$/NDF:13.9/15

+ sign -669.123+/-131.042 $\chi^2$/NDF: 65.5/31

All: -390.412+/-91.562 $\chi^2$/NDF: 103.3/65

- sign -124.534+/-127.989 $\chi^2$/NDF: 28.9/33

# asym_us_dd_dit_correction_rms vs Slug




Right In: 694.522+/-0.190 $\chi^2$/NDF: 1029884.9/15

Left Out: 527.593+/-0.106 $\chi^2$/NDF:361962.4/15

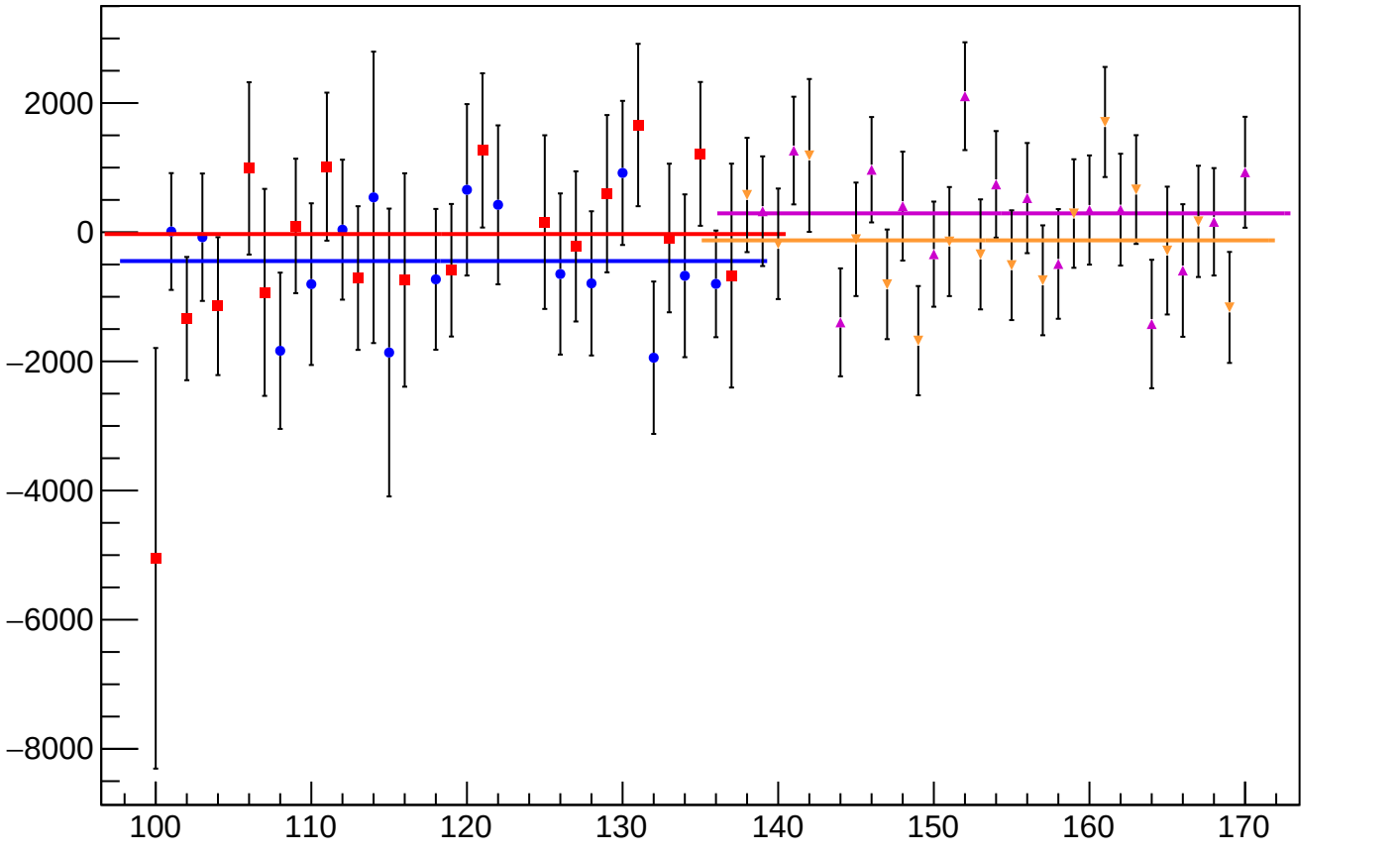
Right Out: 681.744+/-0.188 $\chi^2$/NDF: 1311322.6/17

Left In: 527.134+/-0.103 $\chi^2$/NDF:315833.2/15

+ sign 567.114+/-0.093 $\chi^2$/NDF: 1978304.3/31

All: 565.073+/-0.065 $\chi^2$/NDF: 4127644.2/65

- sign 563.125+/-0.091 $\chi^2$/NDF: 2148391.2/33




Right In: -446.659+/-289.238 $\chi^2$/NDF: 7.3/15

Left Out: -126.158+/-218.693 $\chi^2$/NDF:14.0/15

Right Out: -28.786+/-288.372 $\chi^2$/NDF: 12.6/17

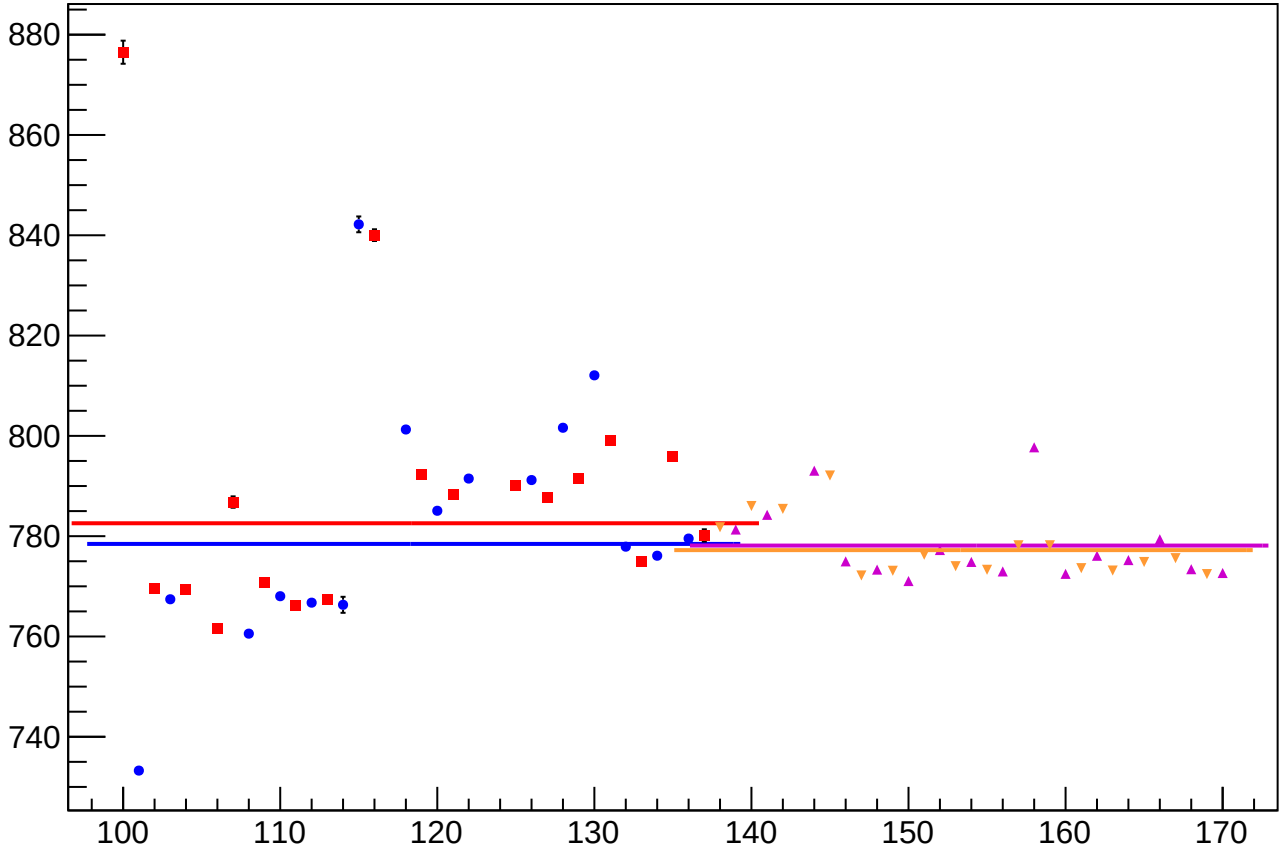
Left In: 291.890+/-214.002 $\chi^2$/NDF:17.0/15

+ sign -242.738+/-174.443 $\chi^2$/NDF: 22.1/31

All: -29.217+/-122.423 $\chi^2$/NDF: 55.5/65

- sign 178.006+/-171.851 $\chi^2$/NDF: 30.4/33

# eigen_dit_asym_us_dd_rms vs Slug




Right In: 778.456+/-0.205 $\chi^2$/NDF: 11795.2/15

Left Out: 777.219+/-0.155 $\chi^2$/NDF:1293.9/15

Right Out: 782.575+/-0.204 $\chi^2$/NDF: 7481.4/17

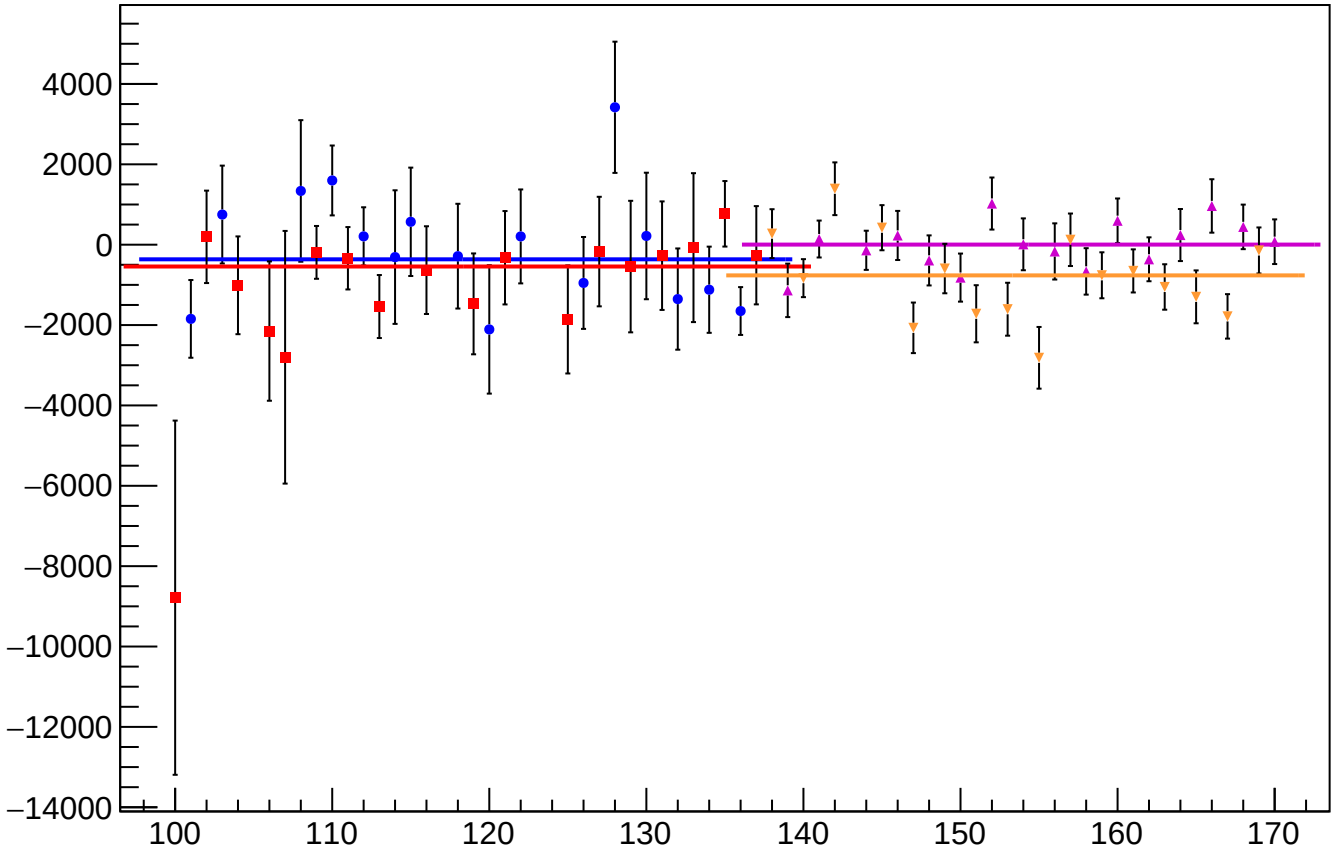
Left In: 778.127+/-0.151 $\chi^2$/NDF:2456.9/15

+ sign 777.669+/-0.123 $\chi^2$/NDF: 13112.3/31

All: 778.703+/-0.087 $\chi^2$/NDF: 23496.0/65

- sign 779.707+/-0.122 $\chi^2$/NDF: 10245.2/33

# asym_us_dd_eigen_dit_correction_mean vs Slug




Right In: -363.973+/-269.314 $\chi^2$/NDF: 23.3/15

Left Out: -763.777+/-149.995 $\chi^2$/NDF:40.5/15

Right Out: -542.878+/-265.272 $\chi^2$/NDF: 11.8/17

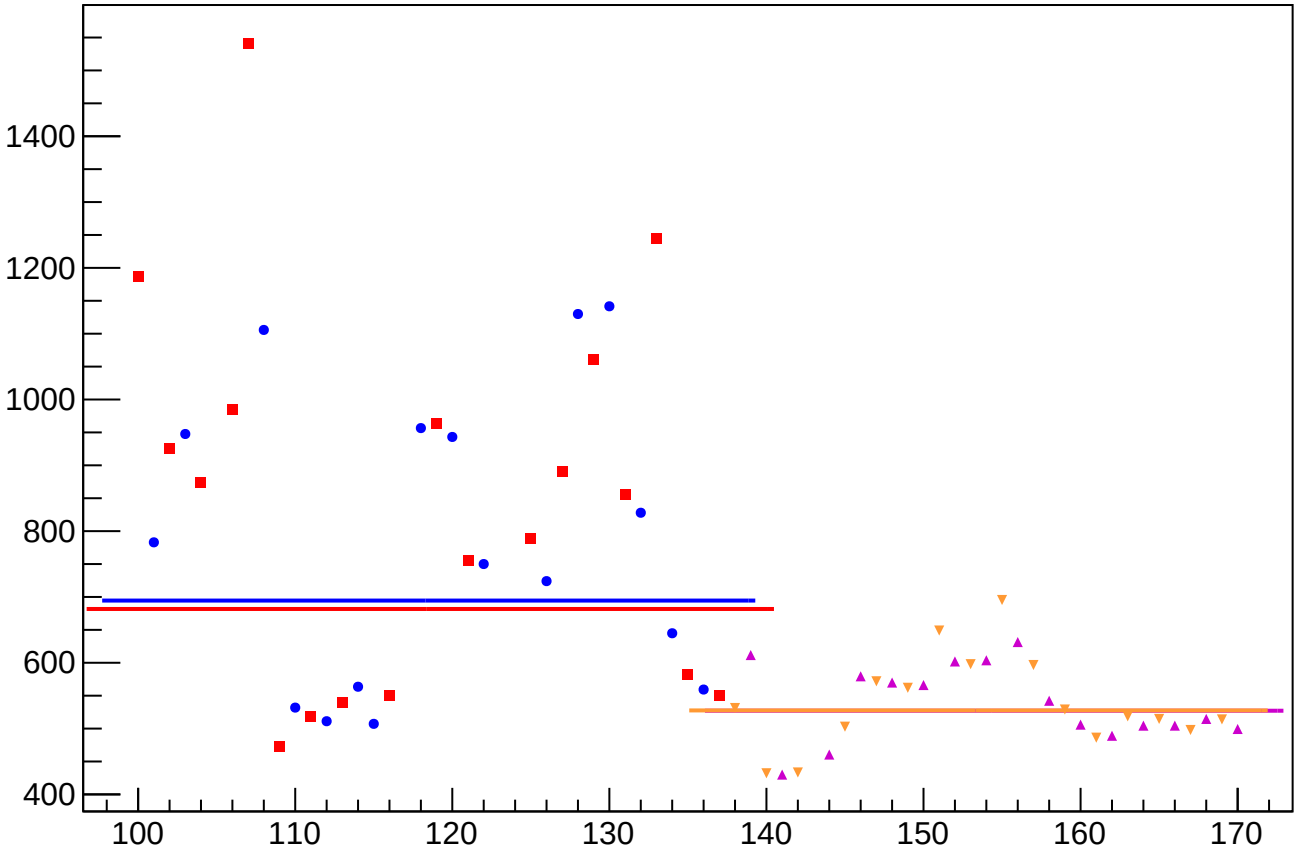
Left In: 2.401+/-146.122 $\chi^2$/NDF:13.9/15

+ sign -669.121+/-131.042 $\chi^2$/NDF: 65.5/31

All: -390.411+/-91.562 $\chi^2$/NDF: 103.3/65

- sign -124.534+/-127.989 $\chi^2$/NDF: 28.9/33

# asym_us_dd_eigen_dit_correction_rms vs Slug




Right In: 694.519+/-0.190 $\chi^2$/NDF: 1029897.1/15

Left Out: 527.593+/-0.106 $\chi^2$/NDF:361974.9/15

Right Out: 681.740+/-0.188 $\chi^2$/NDF: 1311342.6/17

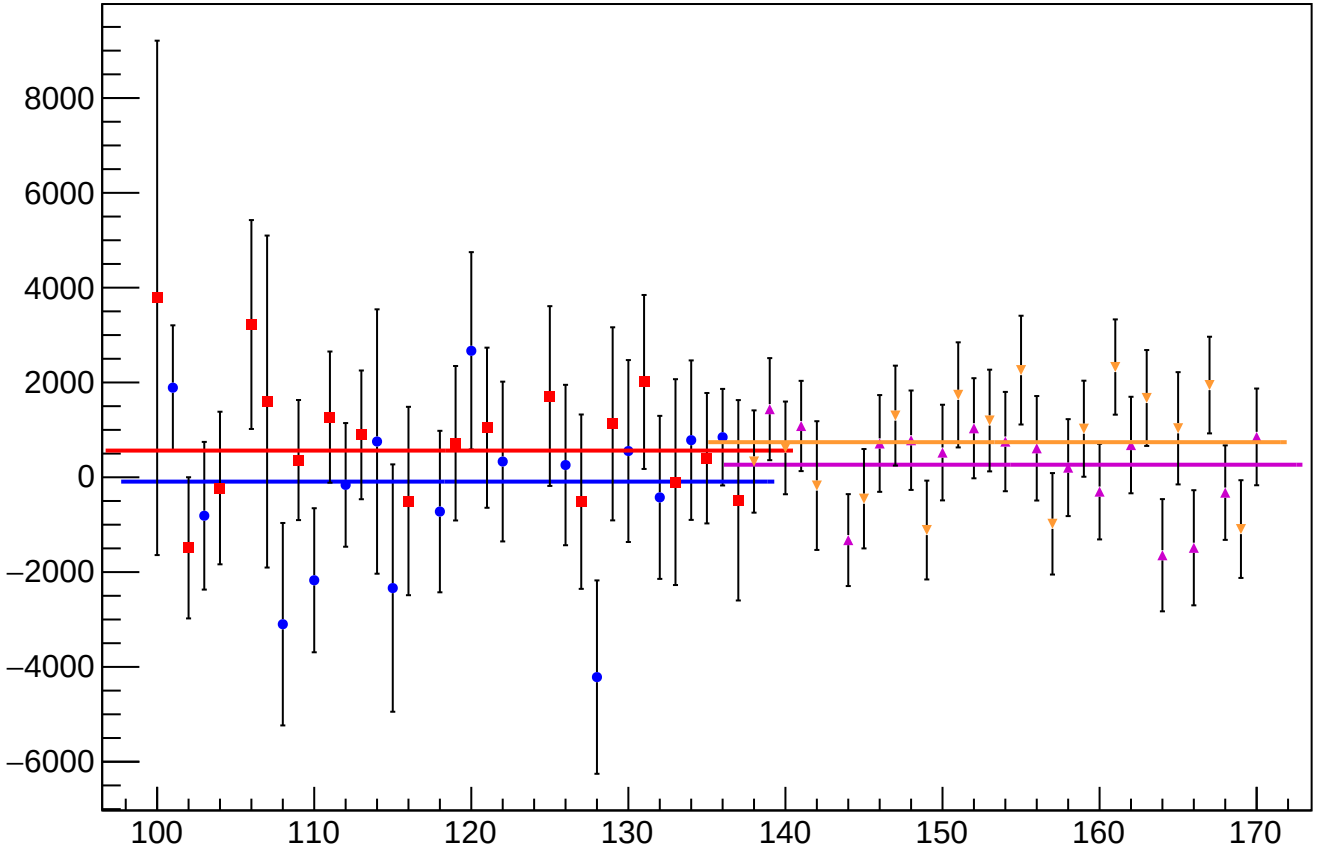
Left In: 527.134+/-0.103 $\chi^2$/NDF:315846.0/15

+ sign 567.114+/-0.093 $\chi^2$/NDF: 1978308.2/31

All: 565.072+/-0.065 $\chi^2$/NDF: 4127661.2/65

- sign 563.124+/-0.091 $\chi^2$/NDF: 2148404.4/33

# asym_us_dd_mean vs Slug




Right In: -91.305+/-409.957 $\chi^2$/NDF: 14.5/15

Left Out: 740.700+/-266.756 $\chi^2$/NDF:18.7/15

Right Out: 563.292+/-411.565 $\chi^2$/NDF: 6.5/17

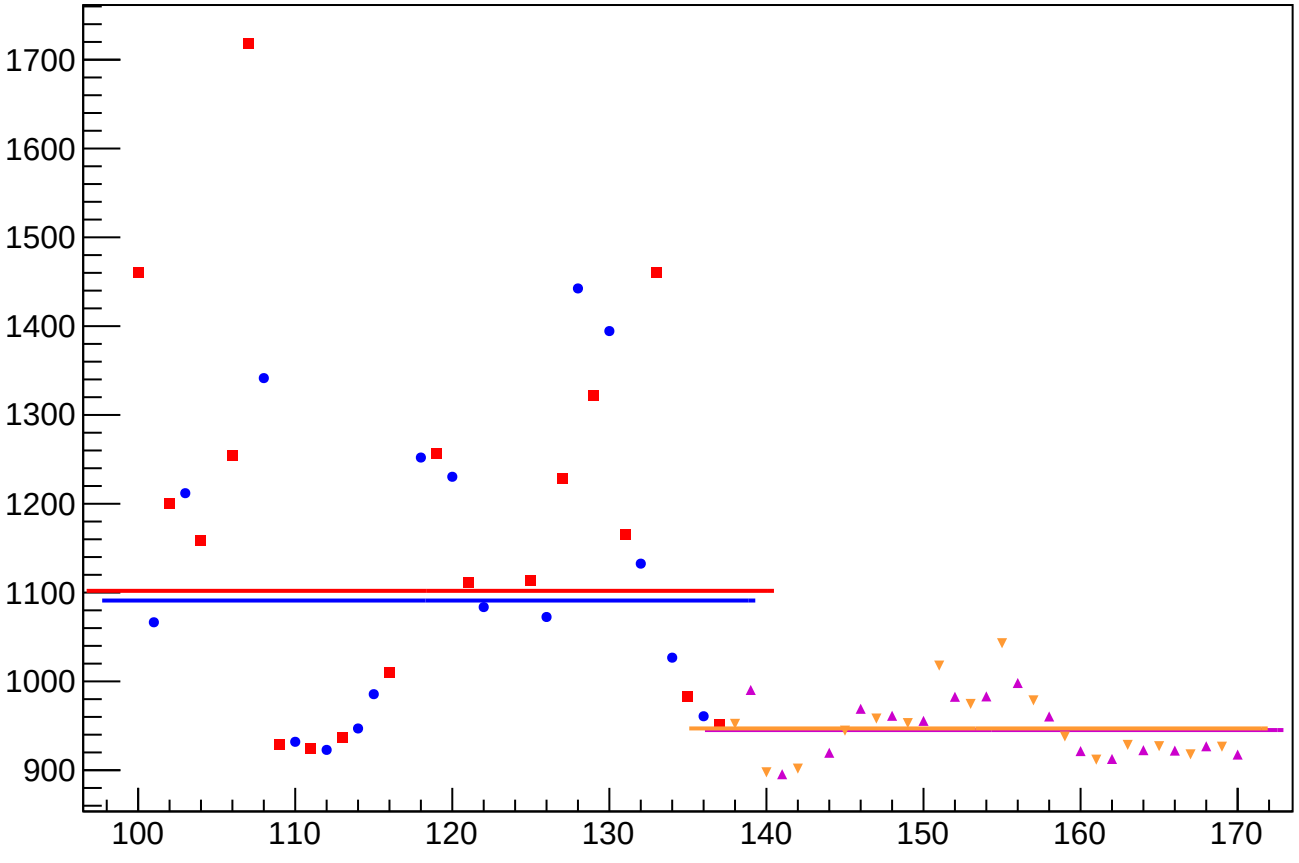
Left In: 265.116+/-260.140 $\chi^2$/NDF:11.8/15

+ sign 493.214+/-223.589 $\chi^2$/NDF: 36.1/31

All: 420.534+/-156.779 $\chi^2$/NDF: 55.1/65

- sign 350.236+/-219.896 $\chi^2$/NDF: 18.7/33

# asym_us_dd_rms vs Slug




Right In: 1091.041+/-0.290 $\chi^2$/NDF: 277304.9/15

Left Out: 947.026+/-0.189 $\chi^2$/NDF:39156.2/15

Right Out: 1101.953+/-0.291 $\chi^2$/NDF: 328107.6/17

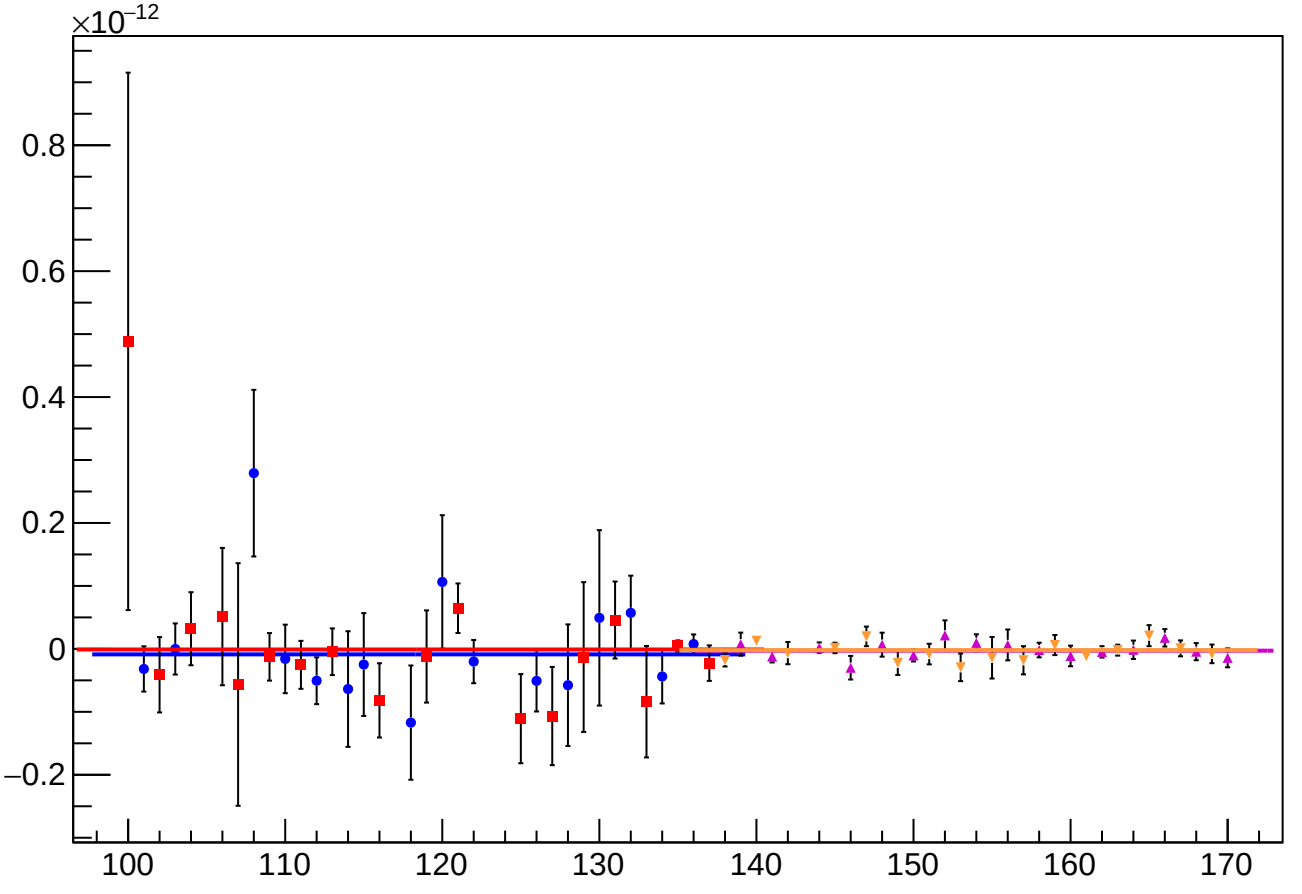
Left In: 945.202+/-0.184 $\chi^2$/NDF:29090.4/15

+ sign 989.864+/-0.158 $\chi^2$/NDF: 489857.8/31

All: 989.908+/-0.111 $\chi^2$/NDF: 1054354.8/65

- sign 989.949+/-0.155 $\chi^2$/NDF: 564496.8/33

# asym_us_dd_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 13.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:15.6/15

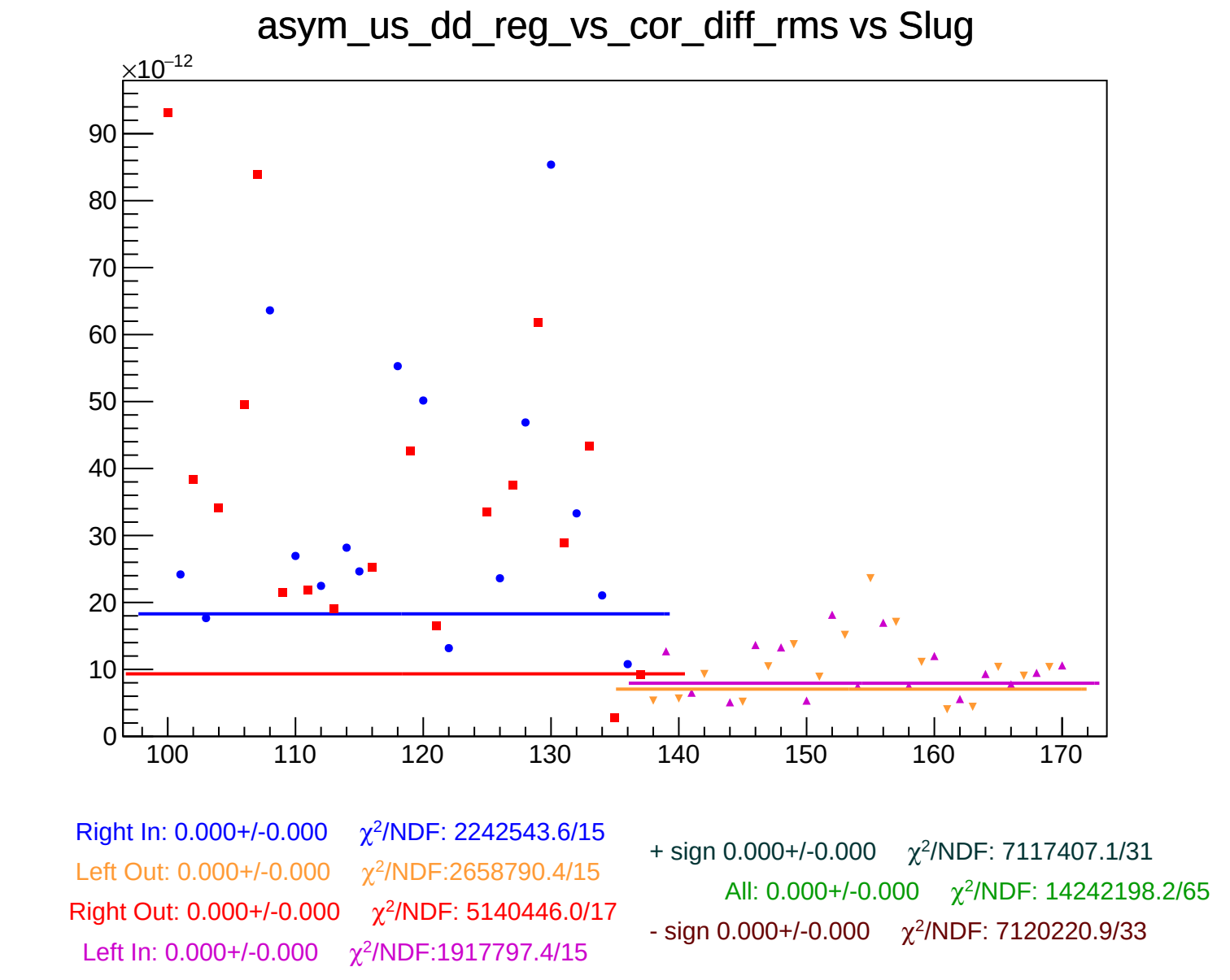
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 14.3/17

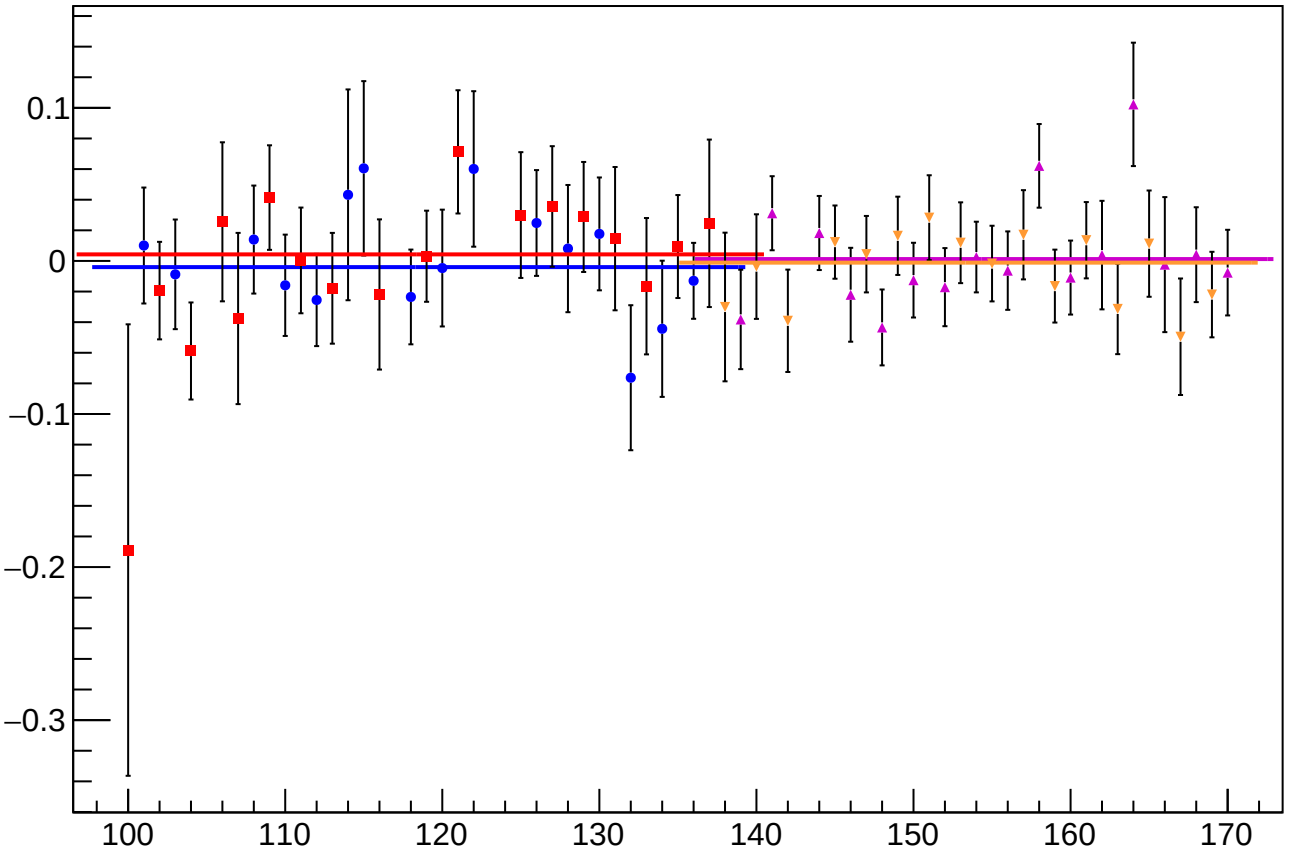
Left In: -0.000+/-0.000 $\chi^2$/NDF:9.7/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 29.8/31

All: -0.000+/-0.000 $\chi^2$/NDF: 53.9/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 24.1/33


asym_us_dd_reg_vs_cor_diff_rms vs Slug
×10^−12
90
80
70
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2242543.6/15
Left Out: 0.000+/-0.000 χ²/NDF:2658790.4/15
Right Out: 0.000+/-0.000 χ²/NDF: 5140446.0/17
Left In: 0.000+/-0.000 χ²/NDF:1917797.4/15
+ sign 0.000+/-0.000 χ²/NDF: 7117407.1/31
All: 0.000+/-0.000 χ²/NDF: 14242198.2/65
- sign 0.000+/-0.000 χ²/NDF: 7120220.9/33




Right In: -0.004+/-0.009 $\chi^2$/NDF: 9.2/15

Left Out: -0.001+/-0.007 $\chi^2$/NDF:8.4/15

Right Out: 0.004+/-0.009 $\chi^2$/NDF: 13.5/17

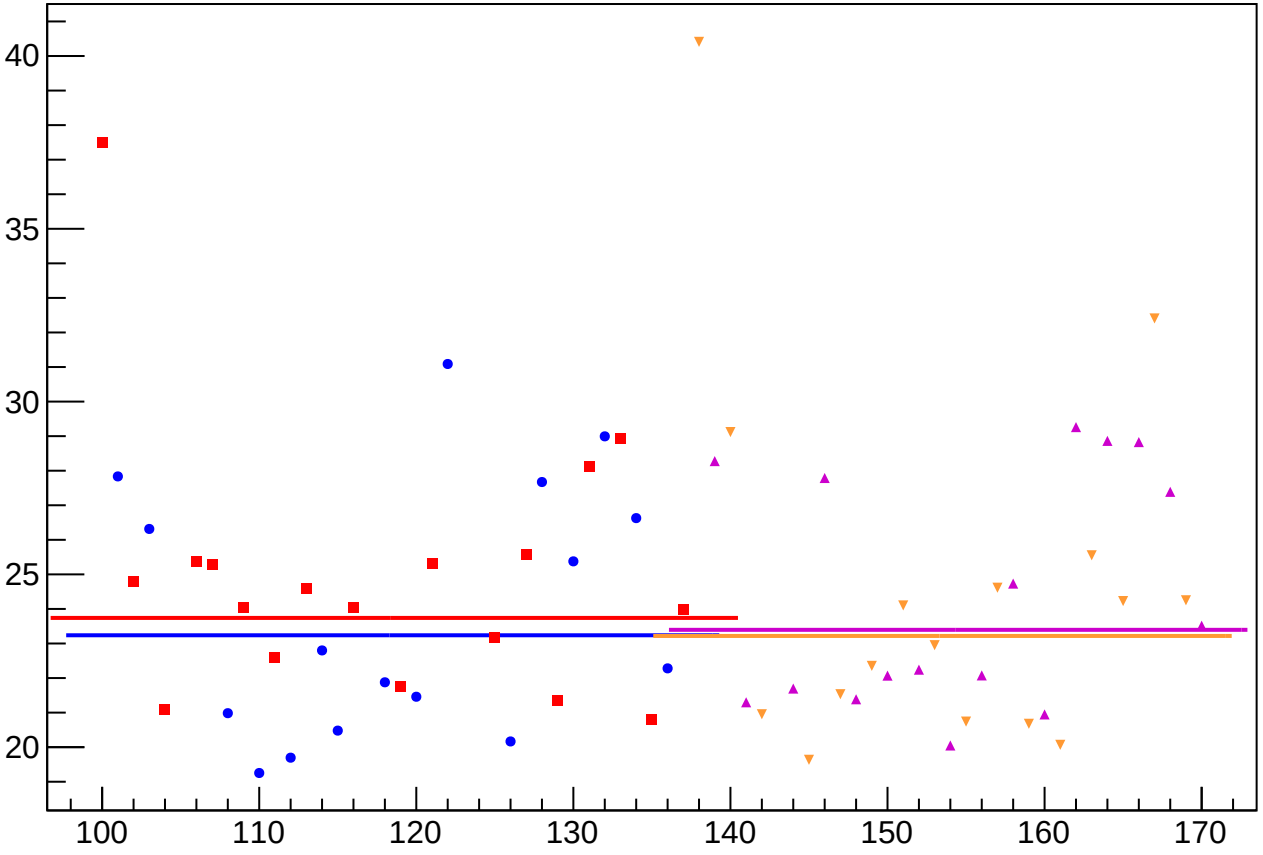
Left In: 0.001+/-0.007 $\chi^2$/NDF:19.9/15

+ sign -0.002+/-0.006 $\chi^2$/NDF: 17.6/31

All: 0.000+/-0.004 $\chi^2$/NDF: 51.4/65

- sign 0.002+/-0.006 $\chi^2$/NDF: 33.4/33

# asym_us_dd_dit_vs_cor_diff_rms vs Slug




Right In: 23.238+/-0.007 $\chi^2$/NDF: 259235.5/15

Left Out: 23.219+/-0.005 $\chi^2$/NDF:590876.9/15

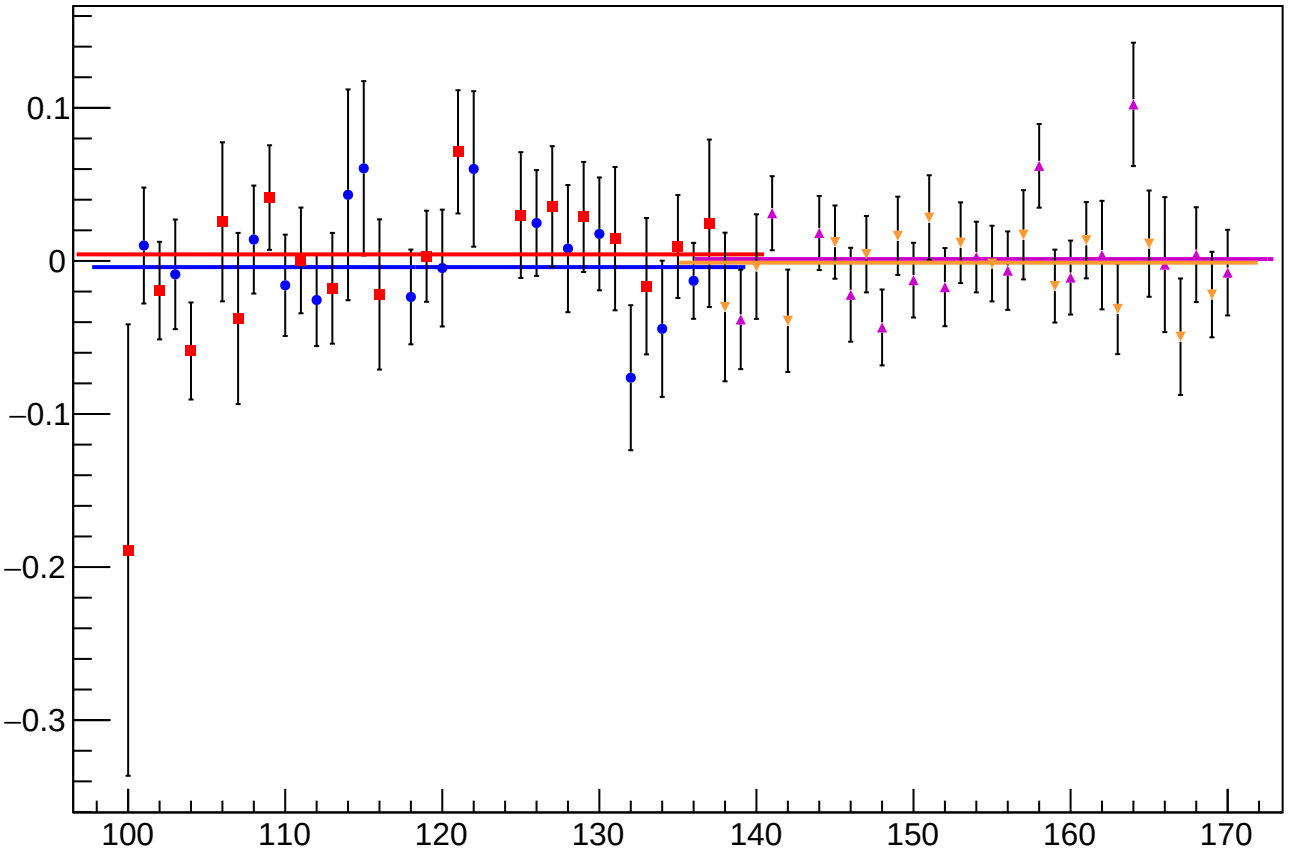
Right Out: 23.740+/-0.007 $\chi^2$/NDF: 126183.6/17

Left In: 23.396+/-0.005 $\chi^2$/NDF:362013.8/15

+ sign 23.226+/-0.004 $\chi^2$/NDF: 850117.9/31

All: 23.374+/-0.003 $\chi^2$/NDF: 1342815.9/65

- sign 23.518+/-0.004 $\chi^2$/NDF: 489964.8/33




Right In: -0.004+/-0.009 $\chi^2$/NDF: 9.2/15

Left Out: -0.001+/-0.007 $\chi^2$/NDF:8.4/15

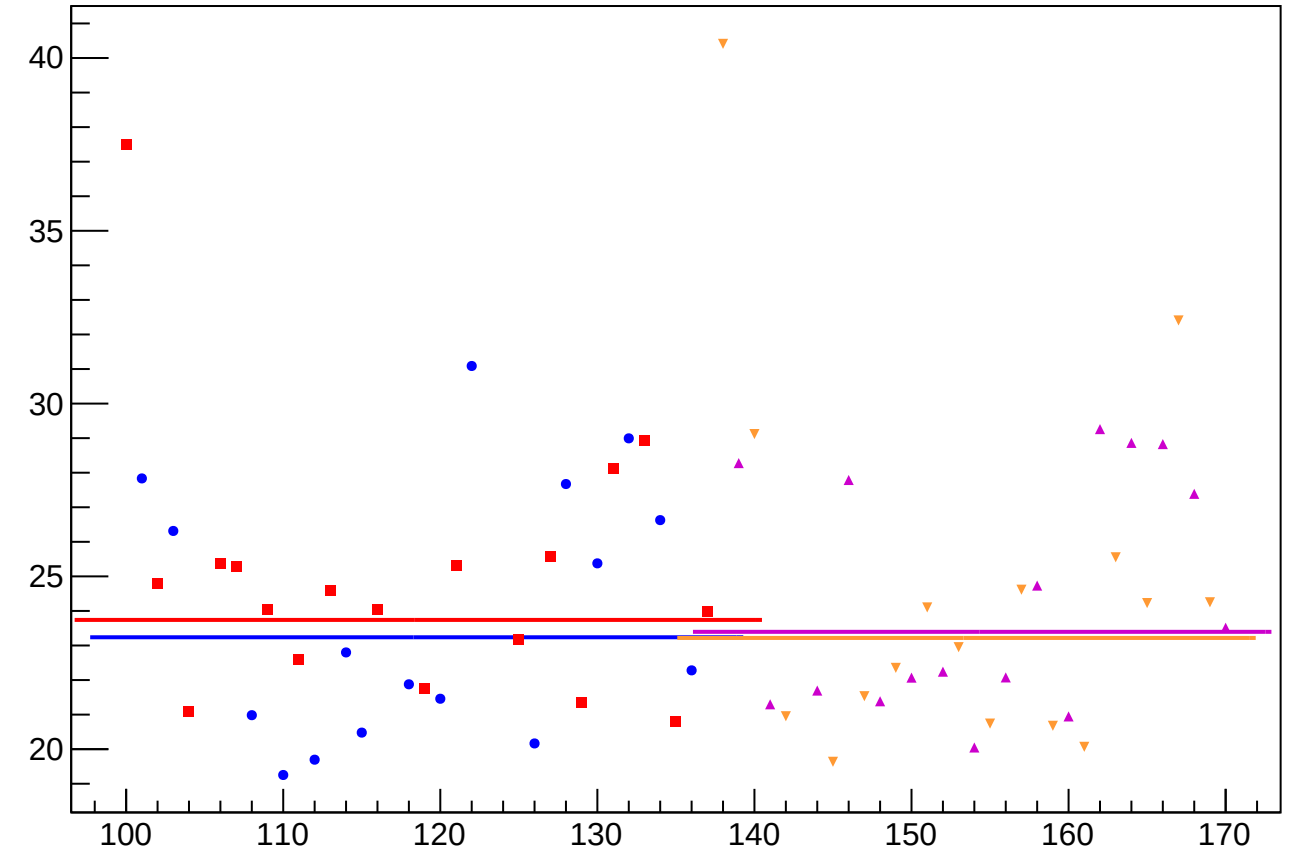
Right Out: 0.004+/-0.009 $\chi^2$/NDF: 13.5/17

Left In: 0.001+/-0.007 $\chi^2$/NDF:19.9/15

+ sign -0.002+/-0.006 $\chi^2$/NDF: 17.6/31

All: 0.000+/-0.004 $\chi^2$/NDF: 51.4/65

- sign 0.002+/-0.006 $\chi^2$/NDF: 33.4/33




Right In: 23.238+/-0.007 $\chi^2$/NDF: 259235.5/15

Left Out: 23.219+/-0.005 $\chi^2$/NDF:590876.9/15

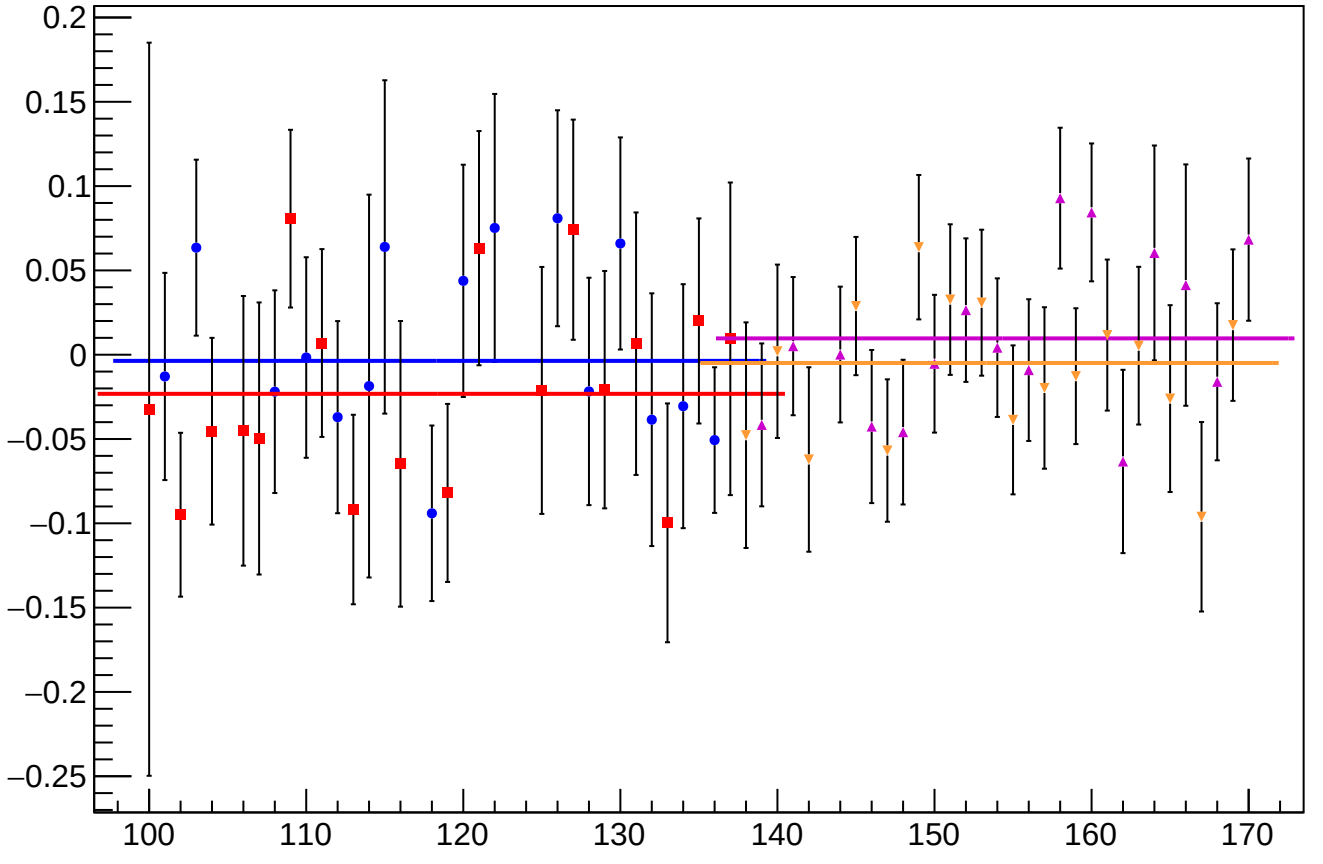
Right Out: 23.740+/-0.007 $\chi^2$/NDF: 126183.6/17

Left In: 23.396+/-0.005 $\chi^2$/NDF:362013.8/15

+ sign 23.226+/-0.004 $\chi^2$/NDF: 850117.9/31

All: 23.374+/-0.003 $\chi^2$/NDF: 1342815.9/65

- sign 23.518+/-0.004 $\chi^2$/NDF: 489964.8/33




Right In: -0.004+/-0.016 $\chi^2$/NDF: 11.7/15

Left Out: -0.005+/-0.012 $\chi^2$/NDF:11.6/15

Right Out: -0.023+/-0.016 $\chi^2$/NDF: 15.4/17

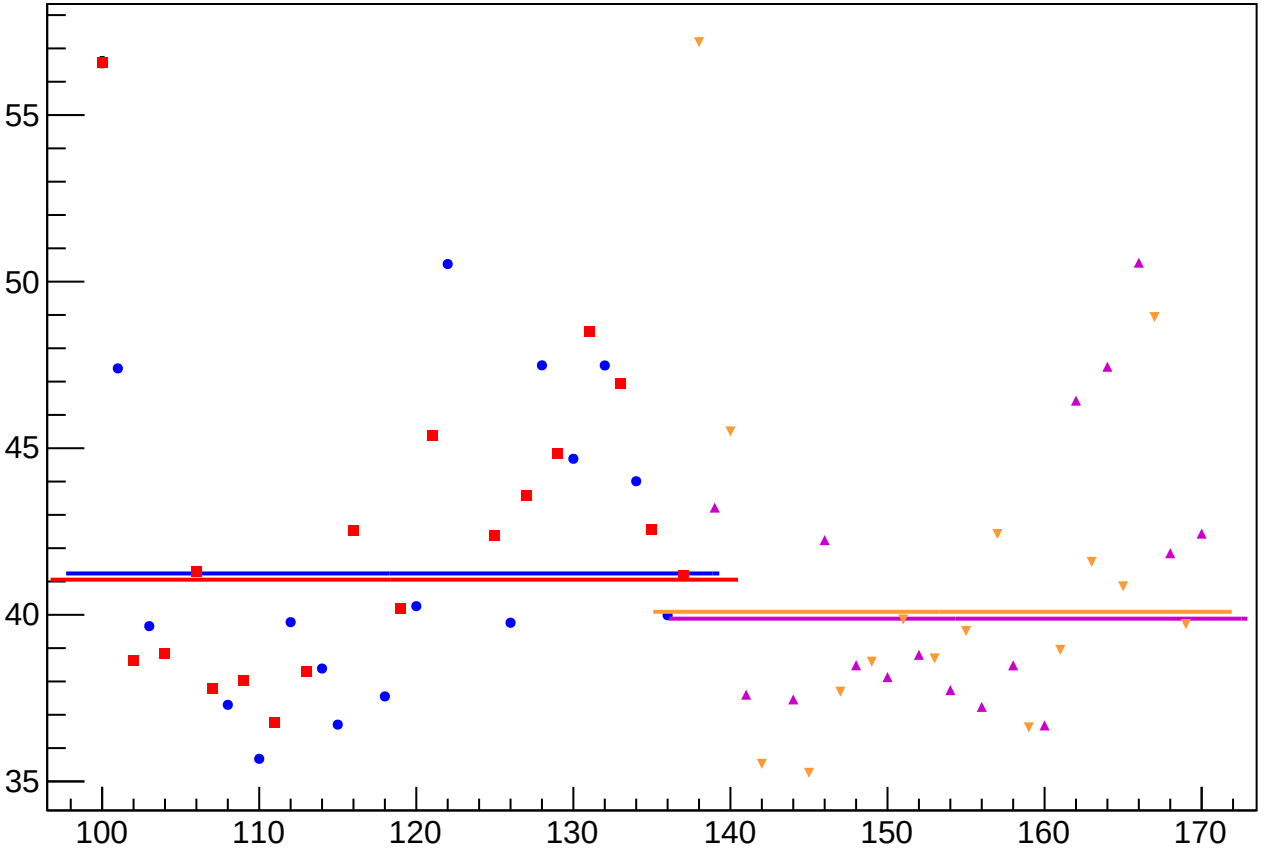
Left In: 0.010+/-0.011 $\chi^2$/NDF:16.4/15

+ sign -0.004+/-0.009 $\chi^2$/NDF: 23.3/31

All: -0.003+/-0.007 $\chi^2$/NDF: 58.1/65

- sign -0.002+/-0.009 $\chi^2$/NDF: 34.8/33

# asym_us_dd_dit_vs_overload_cor_diff_rms vs Slug




Right In: 41.242+/-0.011 $\chi^2$/NDF: 135279.1/15

Left Out: 40.091+/-0.008 $\chi^2$/NDF:278820.0/15

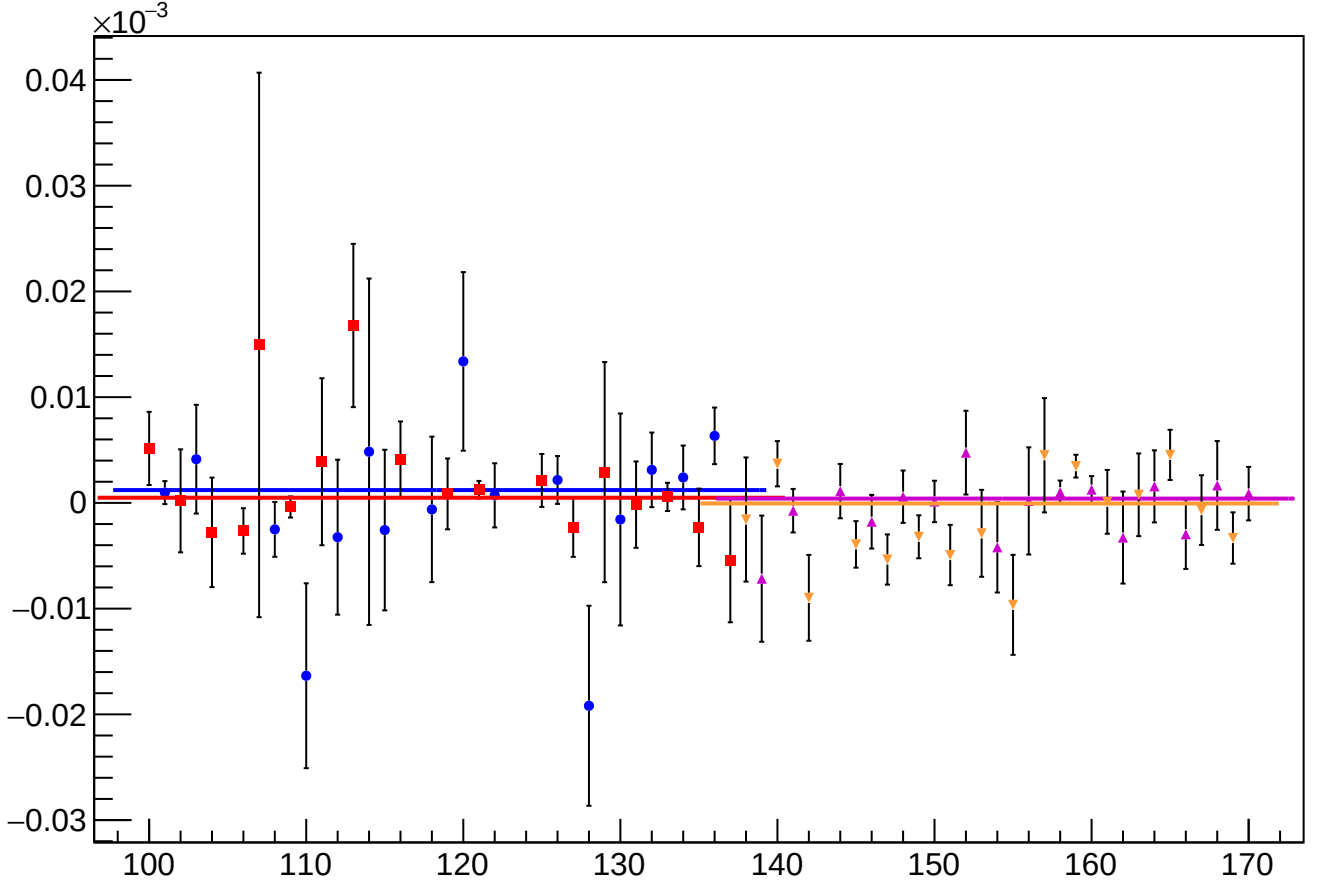
Right Out: 41.055+/-0.011 $\chi^2$/NDF: 96560.6/17

Left In: 39.885+/-0.008 $\chi^2$/NDF:174266.3/15

+ sign 40.500+/-0.007 $\chi^2$/NDF: 420996.6/31

All: 40.392+/-0.005 $\chi^2$/NDF: 699769.4/65

- sign 40.291+/-0.006 $\chi^2$/NDF: 278263.5/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 18.3/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:43.0/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.0/17

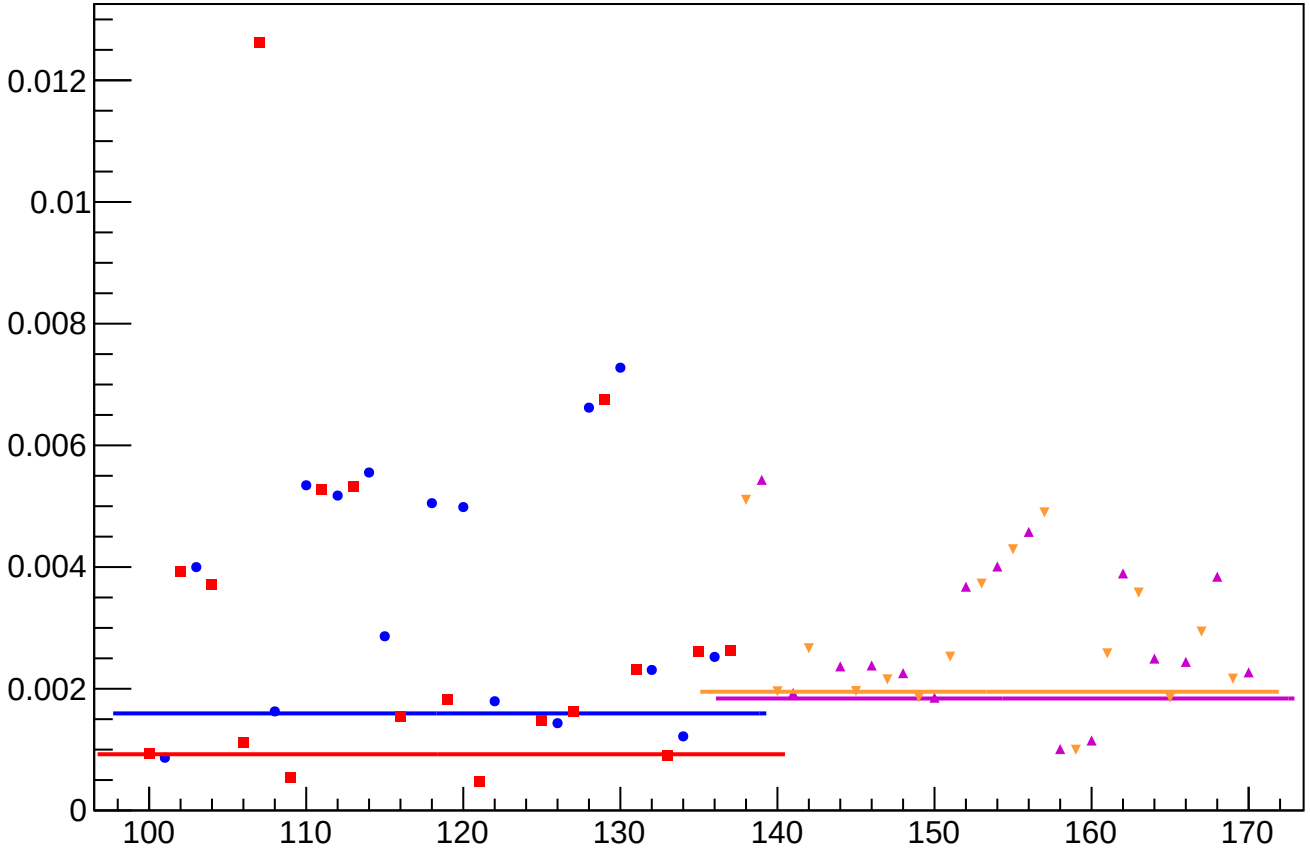
Left In: 0.000+/-0.000 $\chi^2$/NDF:7.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 63.1/31

All: 0.000+/-0.000 $\chi^2$/NDF: 85.9/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 22.9/33

# asym_us_dd_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 4762068.1/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:4394940.5/15

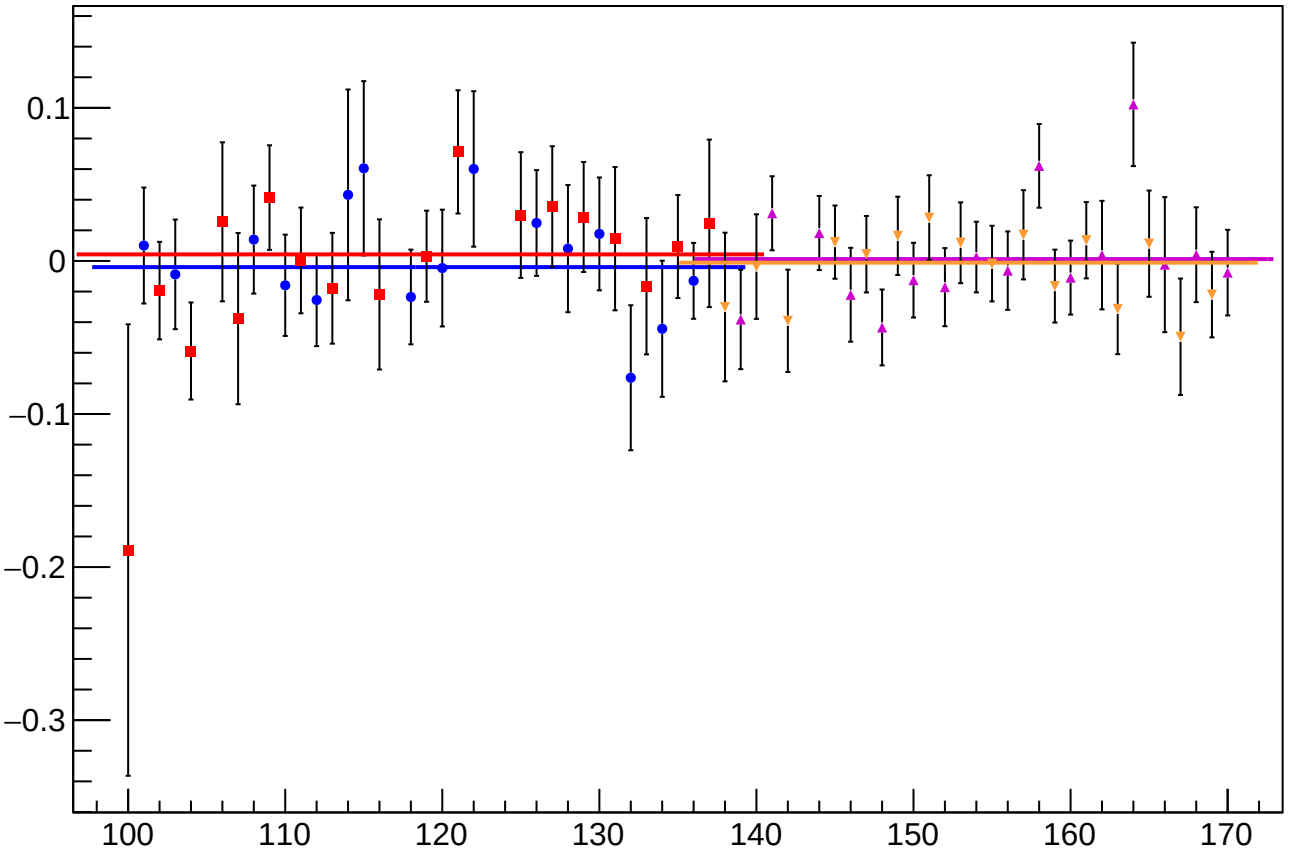
Right Out: 0.001+/-0.000 $\chi^2$/NDF: 5780451.3/17

Left In: 0.002+/-0.000 $\chi^2$/NDF:5305741.4/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 9427468.6/31

All: 0.002+/-0.000 $\chi^2$/NDF: 24748574.6/65

- sign 0.001+/-0.000 $\chi^2$/NDF: 13993771.8/33




Right In: -0.004+/-0.009 $\chi^2$/NDF: 9.2/15

Left Out: -0.001+/-0.007 $\chi^2$/NDF:8.4/15

Right Out: 0.004+/-0.009 $\chi^2$/NDF: 13.5/17

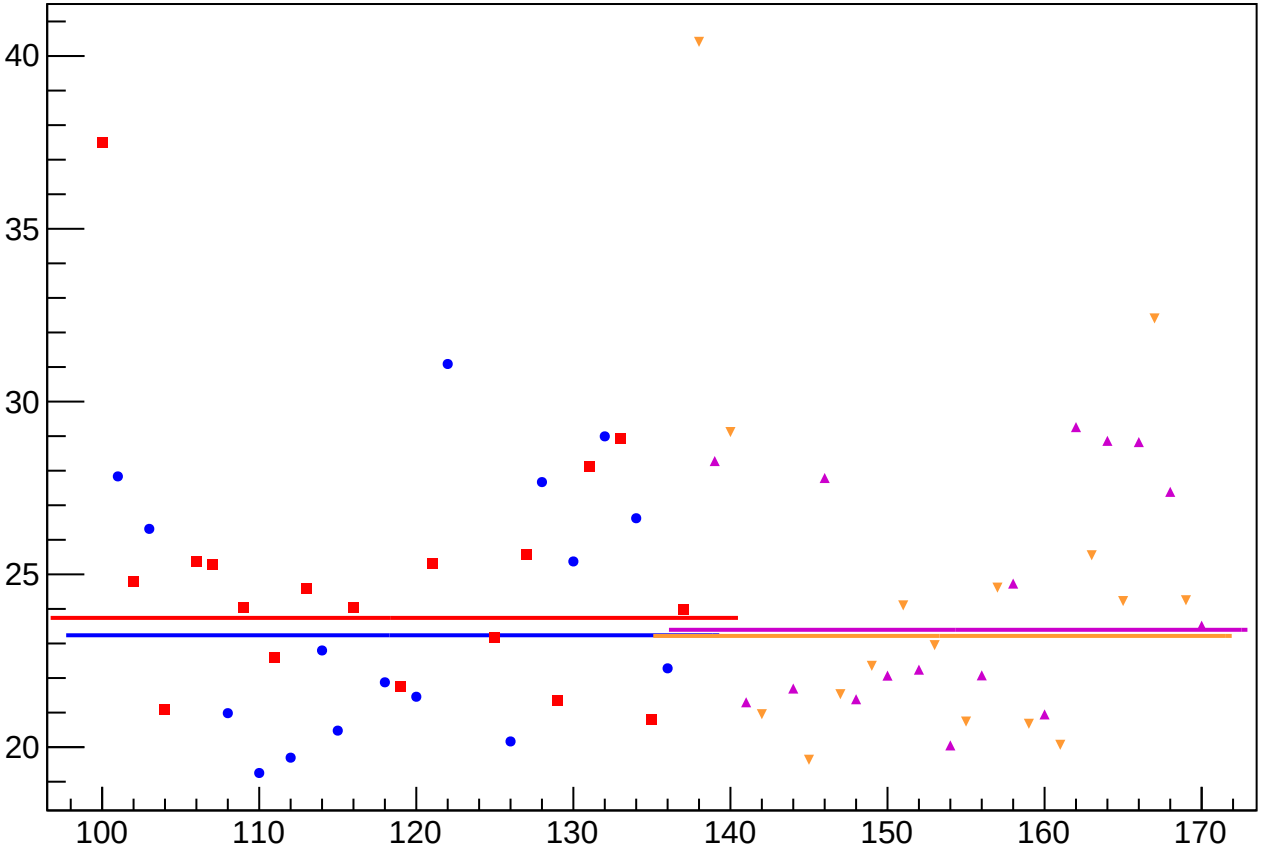
Left In: 0.001+/-0.007 $\chi^2$/NDF:19.9/15

+ sign -0.002+/-0.006 $\chi^2$/NDF: 17.6/31

All: 0.000+/-0.004 $\chi^2$/NDF: 51.4/65

- sign 0.002+/-0.006 $\chi^2$/NDF: 33.4/33

# asym_us_dd_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 23.237+/-0.007 $\chi^2$/NDF: 259224.2/15

Left Out: 23.219+/-0.005 $\chi^2$/NDF:590899.3/15

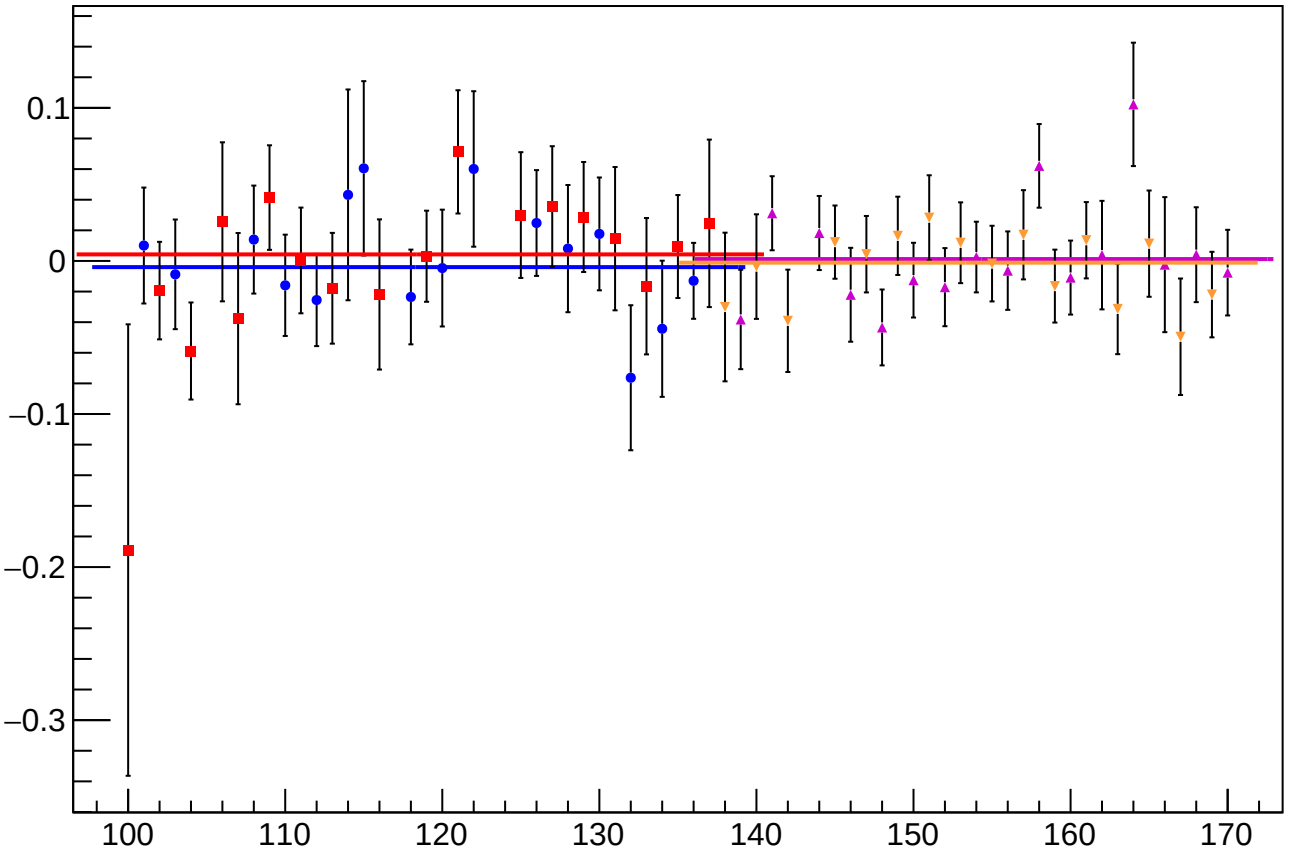
Right Out: 23.741+/-0.007 $\chi^2$/NDF: 126132.7/17

Left In: 23.396+/-0.005 $\chi^2$/NDF:361965.2/15

+ sign 23.226+/-0.004 $\chi^2$/NDF: 850128.6/31

All: 23.374+/-0.003 $\chi^2$/NDF: 1342735.6/65

- sign 23.518+/-0.004 $\chi^2$/NDF: 489864.8/33




Right In: -0.004+/-0.009 $\chi^2$/NDF: 9.2/15

Left Out: -0.001+/-0.007 $\chi^2$/NDF:8.4/15

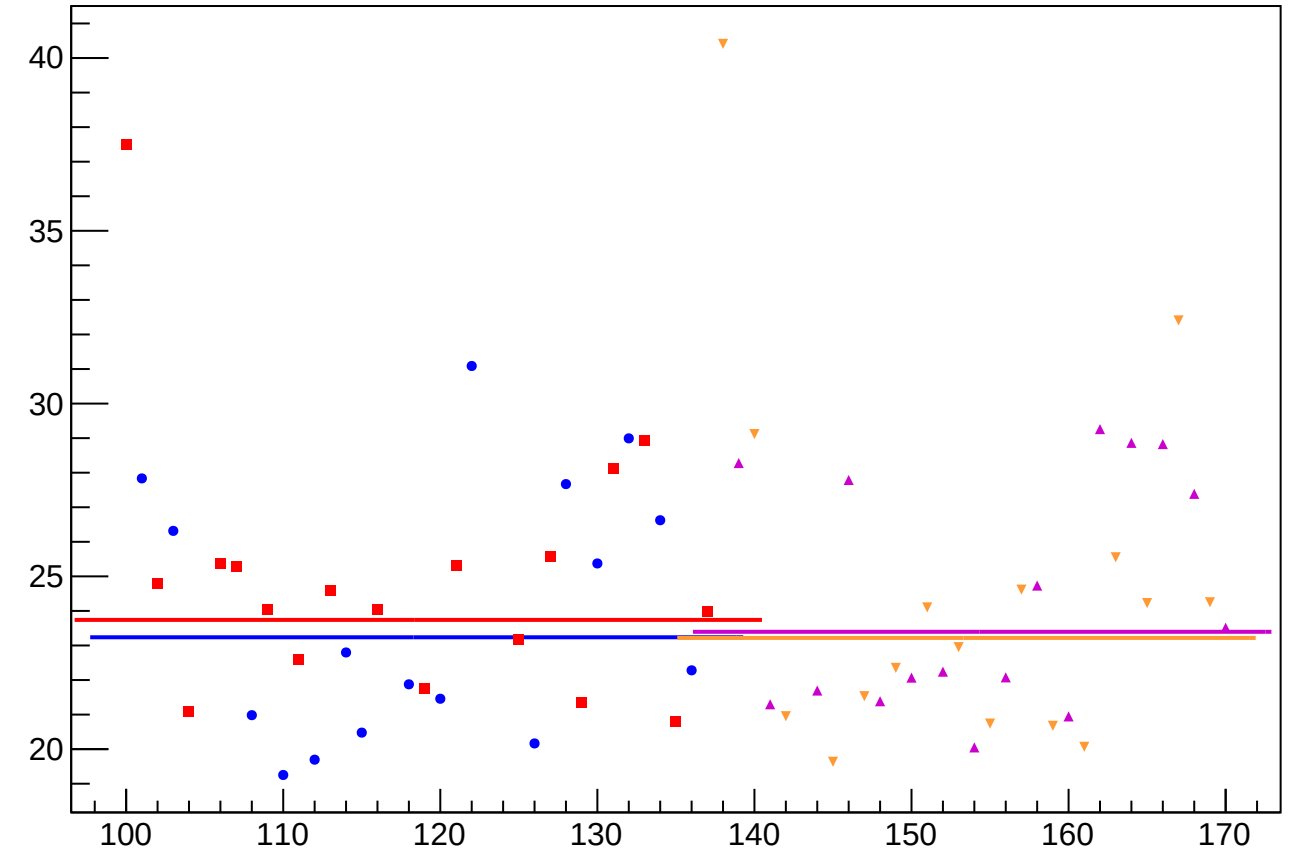
Right Out: 0.004+/-0.009 $\chi^2$/NDF: 13.5/17

Left In: 0.001+/-0.007 $\chi^2$/NDF:19.9/15

+ sign -0.002+/-0.006 $\chi^2$/NDF: 17.6/31

All: 0.000+/-0.004 $\chi^2$/NDF: 51.4/65

- sign 0.002+/-0.006 $\chi^2$/NDF: 33.4/33




Right In: 23.237+/-0.007 $\chi^2$/NDF: 259224.2/15

Left Out: 23.219+/-0.005 $\chi^2$/NDF:590899.3/15

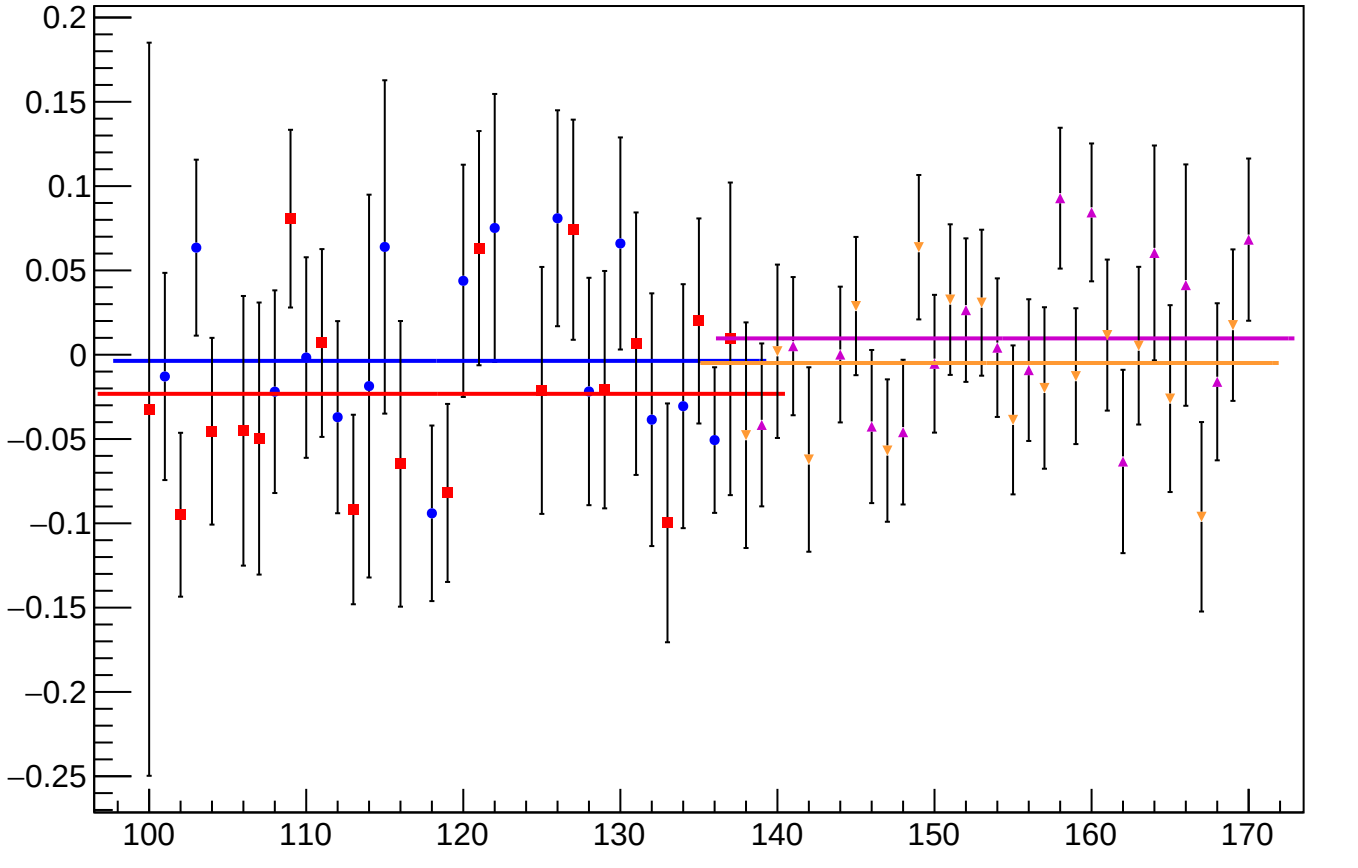
Right Out: 23.741+/-0.007 $\chi^2$/NDF: 126132.7/17

Left In: 23.396+/-0.005 $\chi^2$/NDF:361965.2/15

+ sign 23.226+/-0.004 $\chi^2$/NDF: 850128.6/31

All: 23.374+/-0.003 $\chi^2$/NDF: 1342735.6/65

- sign 23.518+/-0.004 $\chi^2$/NDF: 489864.8/33




Right In: -0.004+/-0.016 $\chi^2$/NDF: 11.7/15

Left Out: -0.005+/-0.012 $\chi^2$/NDF:11.6/15

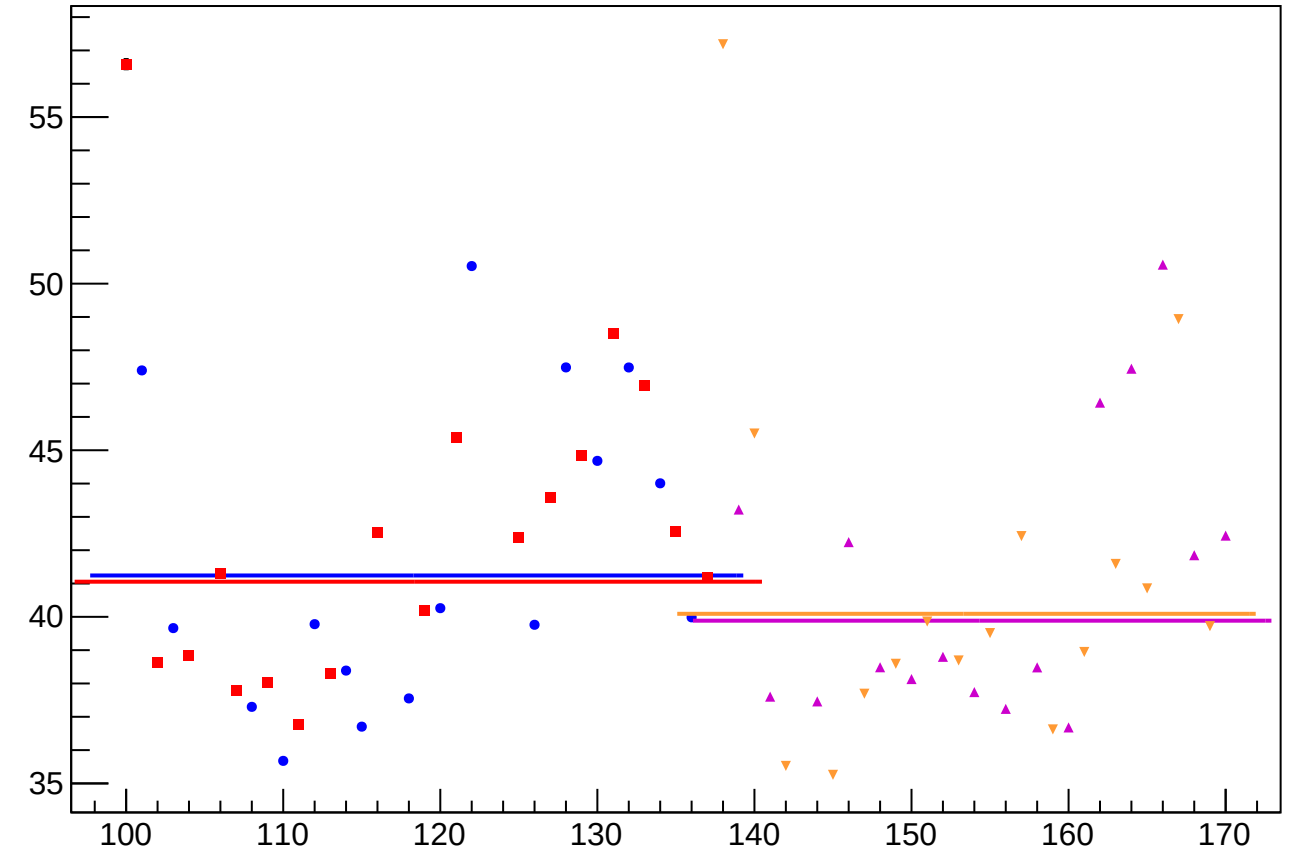
Right Out: -0.023+/-0.016 $\chi^2$/NDF: 15.4/17

Left In: 0.010+/-0.011 $\chi^2$/NDF:16.4/15

+ sign -0.004+/-0.009 $\chi^2$/NDF: 23.3/31

All: -0.003+/-0.007 $\chi^2$/NDF: 58.1/65

- sign -0.002+/-0.009 $\chi^2$/NDF: 34.8/33




Right In: 41.241+/-0.011 $\chi^2$/NDF: 135256.9/15

Left Out: 40.091+/-0.008 $\chi^2$/NDF:278823.8/15

Right Out: 41.055+/-0.011 $\chi^2$/NDF: 96549.4/17

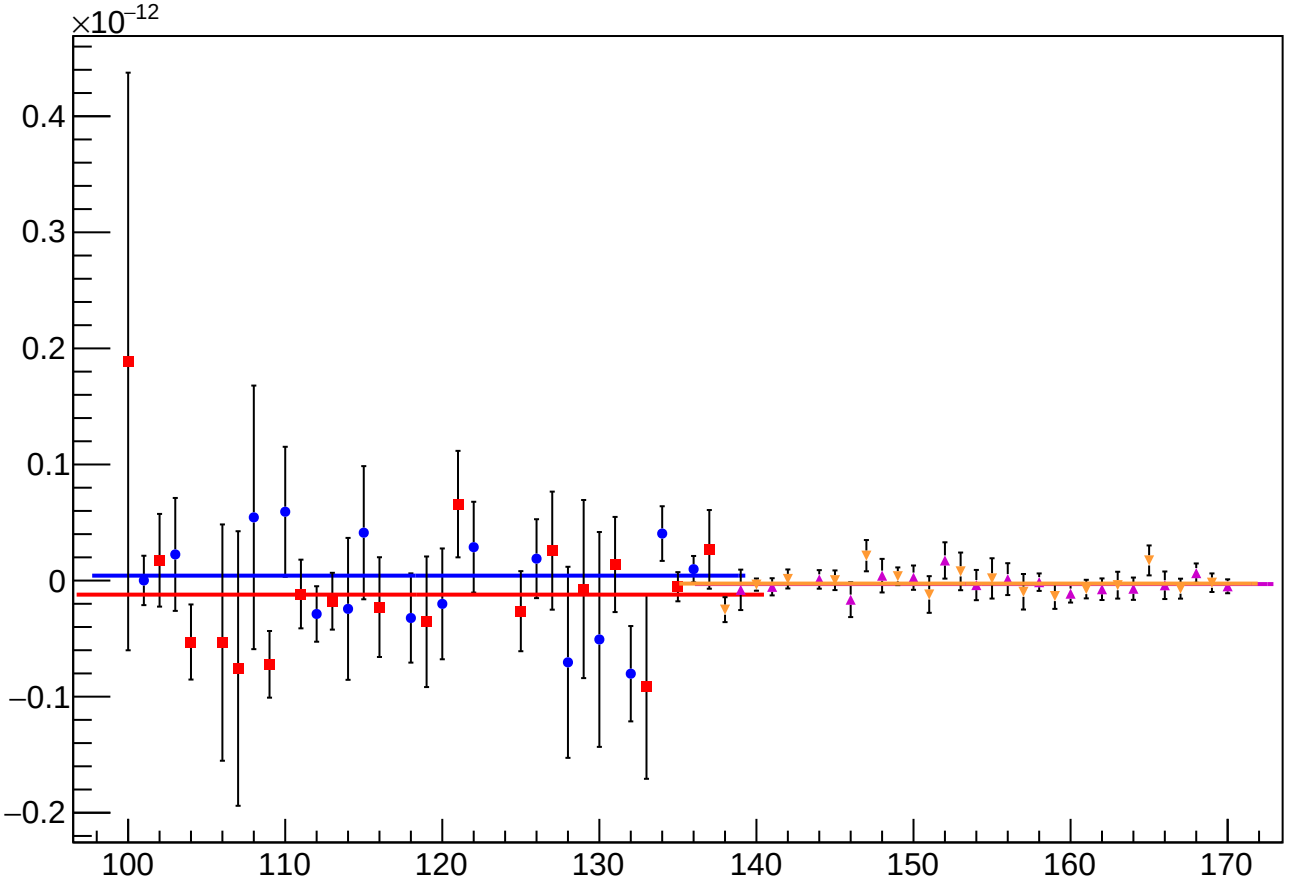
Left In: 39.885+/-0.008 $\chi^2$/NDF:174273.2/15

+ sign 40.500+/-0.007 $\chi^2$/NDF: 420974.6/31

All: 40.393+/-0.005 $\chi^2$/NDF: 699740.5/65

- sign 40.291+/-0.006 $\chi^2$/NDF: 278257.2/33

# asym_us_dd_eigen_cor_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 13.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:13.7/15

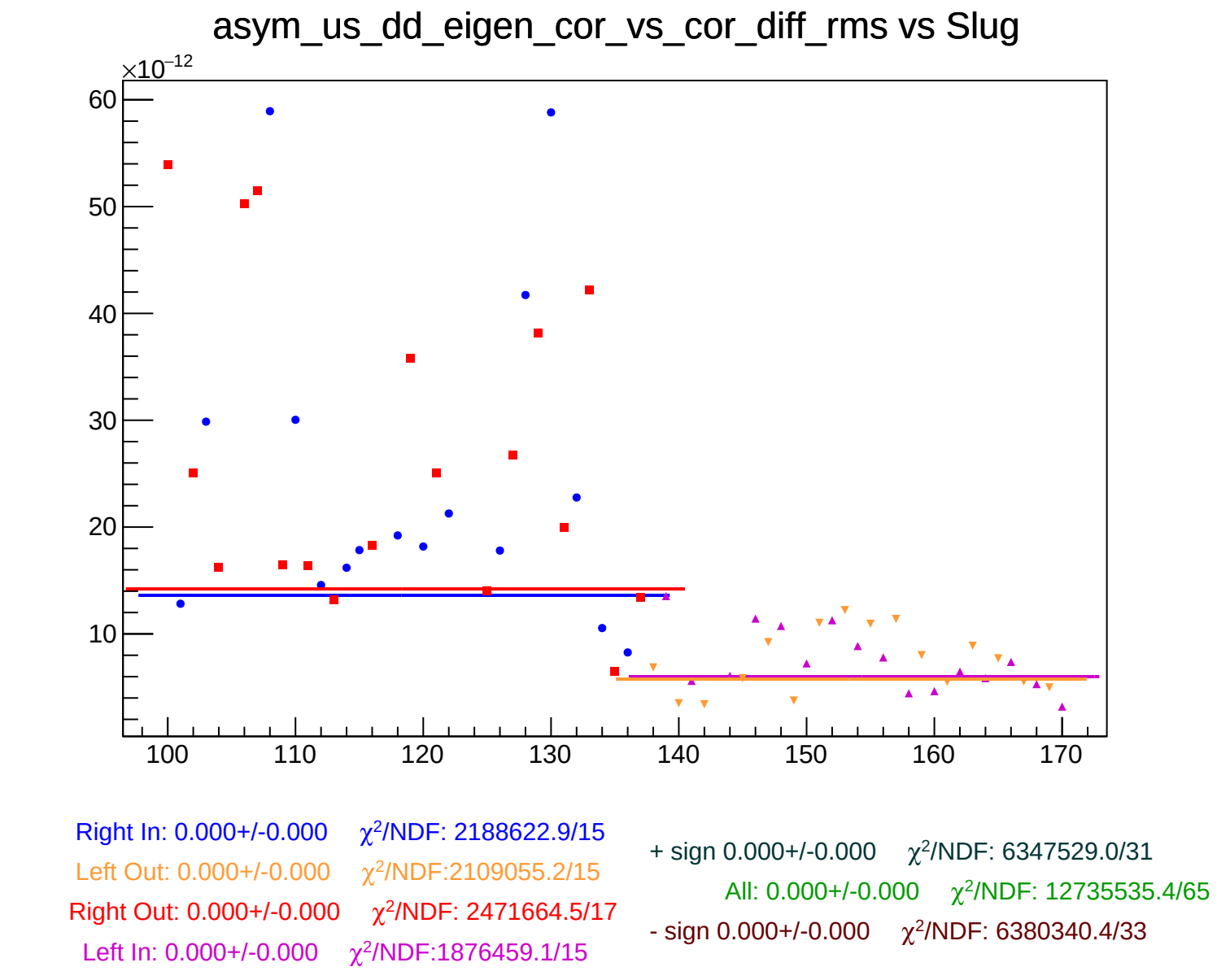
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 14.5/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:6.6/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 28.1/31

All: -0.000+/-0.000 $\chi^2$/NDF: 50.8/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 22.3/33


asym_us_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
60
50
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20
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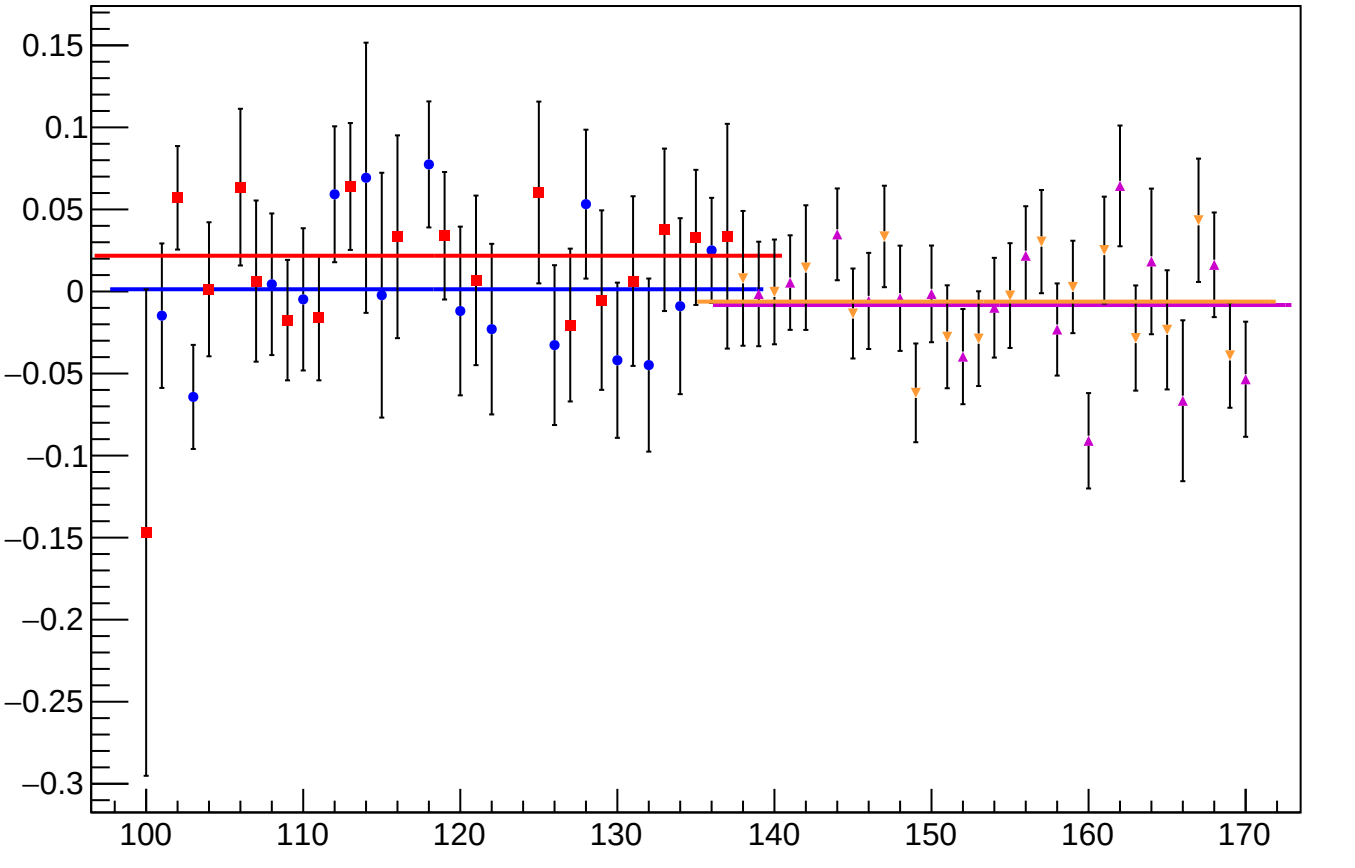
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2188622.9/15
Left Out: 0.000+/-0.000 χ²/NDF:2109055.2/15
Right Out: 0.000+/-0.000 χ²/NDF: 2471664.5/17
Left In: 0.000+/-0.000 χ²/NDF:1876459.1/15
+ sign 0.000+/-0.000 χ²/NDF: 6347529.0/31
All: 0.000+/-0.000 χ²/NDF: 12735535.4/65
- sign 0.000+/-0.000 χ²/NDF: 6380340.4/33




Right In: 0.001+/-0.011 $\chi^2$/NDF: 15.3/15

Left Out: -0.006+/-0.008 $\chi^2$/NDF:12.6/15

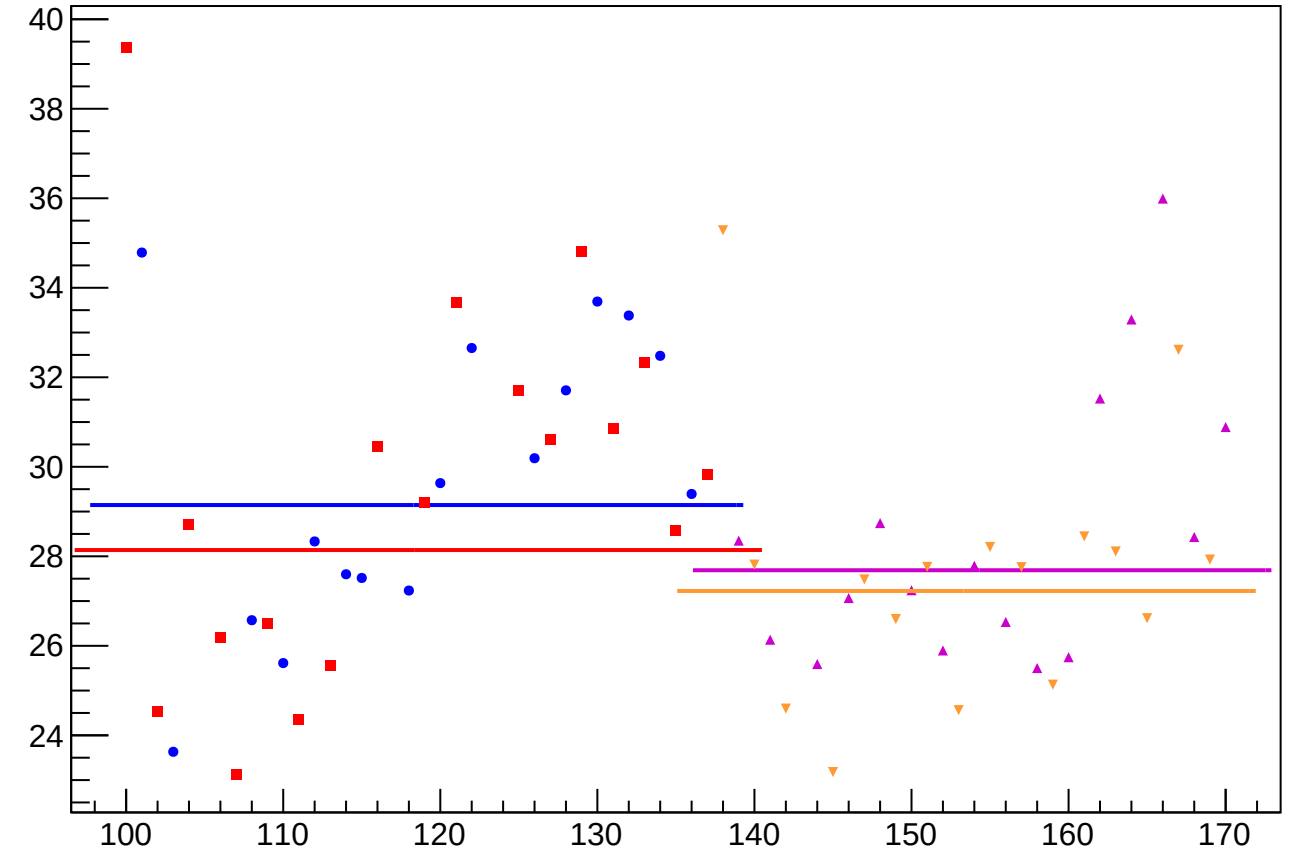
Right Out: 0.022+/-0.011 $\chi^2$/NDF: 9.0/17

Left In: -0.008+/-0.008 $\chi^2$/NDF:21.2/15

+ sign -0.004+/-0.007 $\chi^2$/NDF: 28.1/31

All: -0.001+/-0.005 $\chi^2$/NDF: 63.8/65

- sign 0.002+/-0.006 $\chi^2$/NDF: 35.3/33




Right In: 29.146+/-0.008 $\chi^2$/NDF: 176889.4/15

Left Out: 27.225+/-0.006 $\chi^2$/NDF:209932.2/15

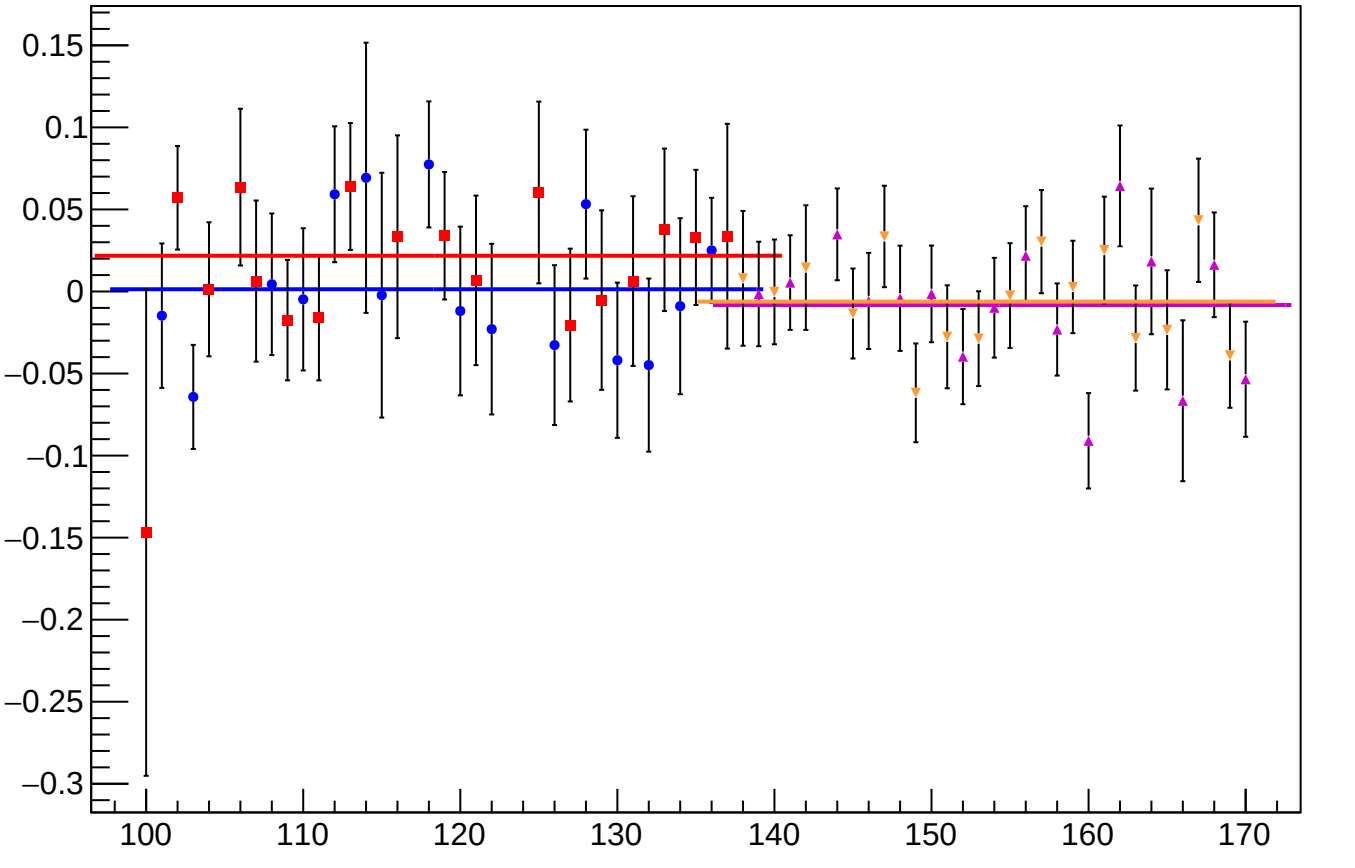
Right Out: 28.140+/-0.008 $\chi^2$/NDF: 187103.8/17

Left In: 27.689+/-0.006 $\chi^2$/NDF:181758.9/15

+ sign 27.874+/-0.005 $\chi^2$/NDF: 425657.0/31

All: 27.860+/-0.003 $\chi^2$/NDF: 796820.3/65

- sign 27.846+/-0.005 $\chi^2$/NDF: 371144.5/33




Right In: 0.001+/-0.011 $\chi^2$/NDF: 15.3/15

Left Out: -0.006+/-0.008 $\chi^2$/NDF:12.6/15

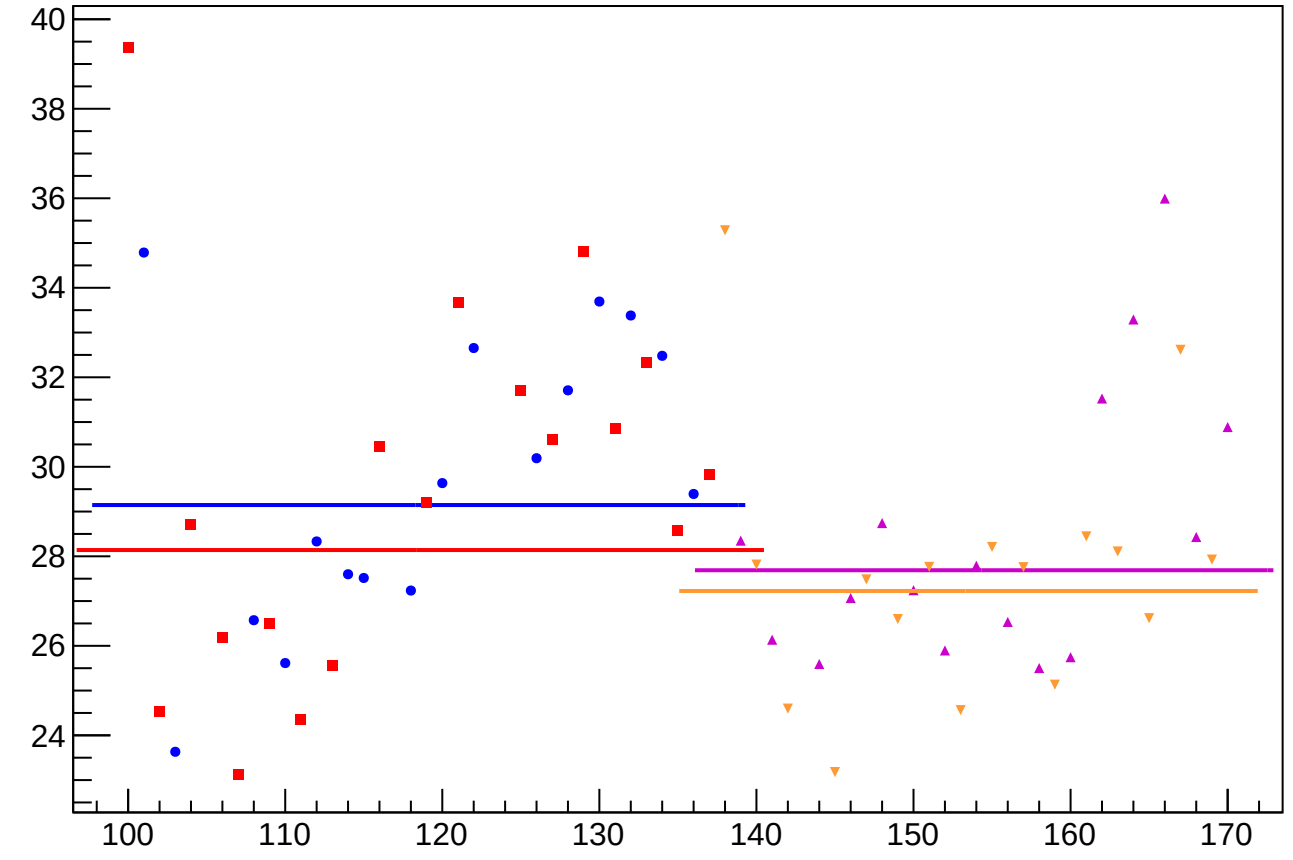
Right Out: 0.022+/-0.011 $\chi^2$/NDF: 9.0/17

Left In: -0.008+/-0.008 $\chi^2$/NDF:21.2/15

+ sign -0.004+/-0.007 $\chi^2$/NDF: 28.1/31

All: -0.001+/-0.005 $\chi^2$/NDF: 63.8/65

- sign 0.002+/-0.006 $\chi^2$/NDF: 35.3/33




Right In: 29.146+/-0.008 $\chi^2$/NDF: 176889.4/15

Left Out: 27.225+/-0.006 $\chi^2$/NDF:209932.2/15

Right Out: 28.140+/-0.008 $\chi^2$/NDF: 187103.8/17

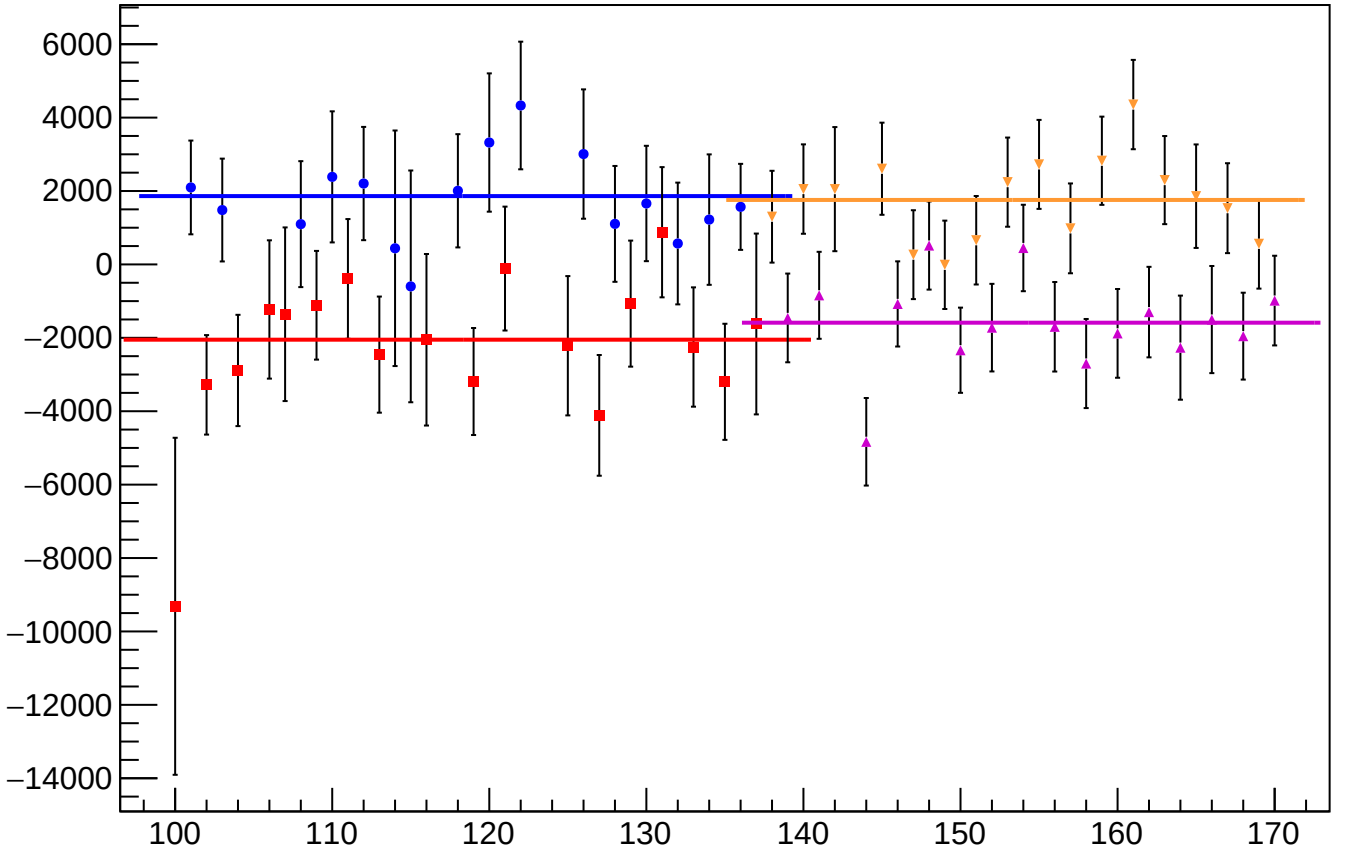
Left In: 27.689+/-0.006 $\chi^2$/NDF:181758.9/15

+ sign 27.874+/-0.005 $\chi^2$/NDF: 425657.0/31

All: 27.860+/-0.003 $\chi^2$/NDF: 796820.3/65

- sign 27.846+/-0.005 $\chi^2$/NDF: 371144.5/33

# reg_asym_usl_mean vs Slug




Right In: 1861.525+/-409.524 $\chi^2$/NDF: 5.3/15

Left Out: 1756.575+/-311.809 $\chi^2$/NDF:12.9/15

Right Out: -2050.842+/-409.249 $\chi^2$/NDF: 12.5/17

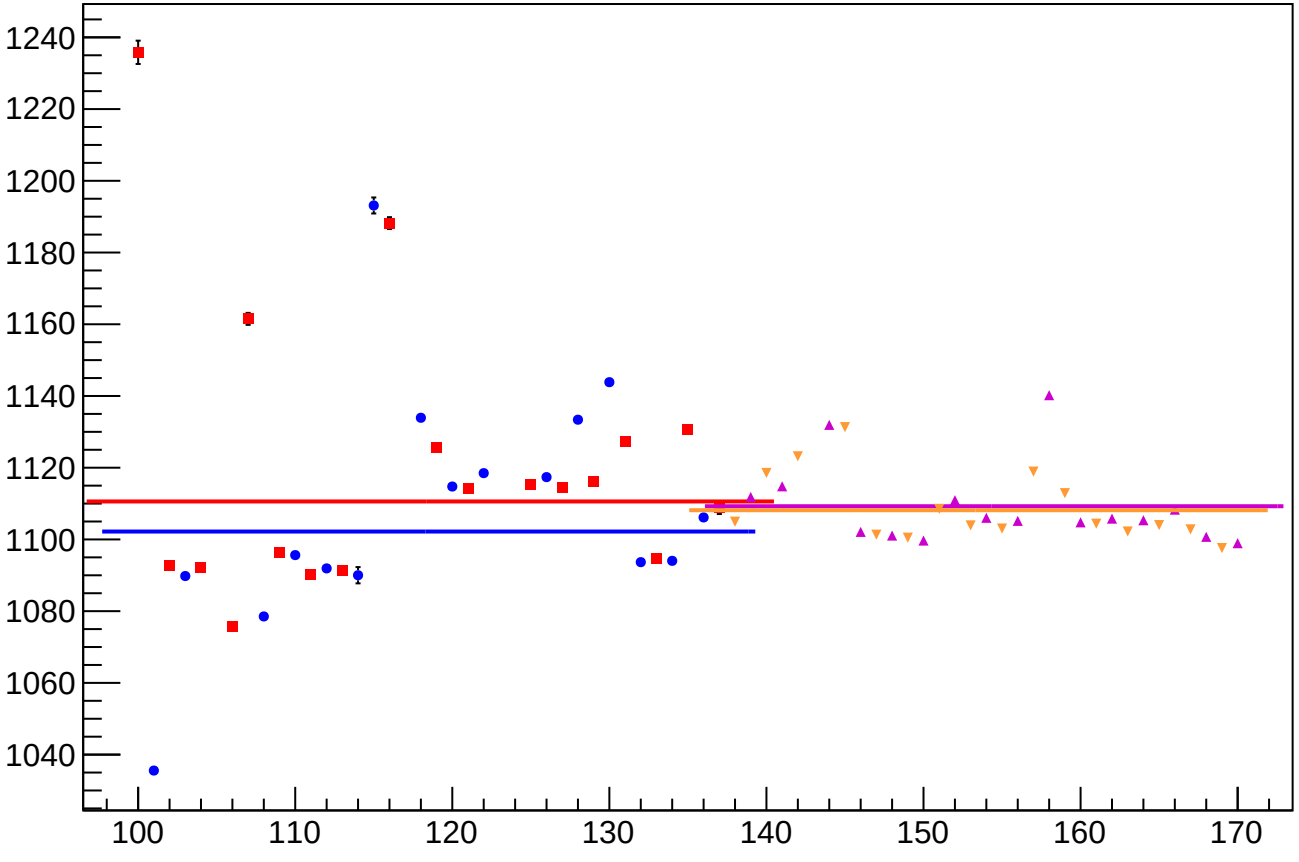
Left In: -1587.918+/-305.079 $\chi^2$/NDF:16.0/15

+ sign 1795.089+/-248.084 $\chi^2$/NDF: 18.3/31

All: -4.220+/-174.175 $\chi^2$/NDF: 151.4/65

- sign -1753.277+/-244.595 $\chi^2$/NDF: 29.4/33

# reg_asym_usl_rms vs Slug




Right In: 1102.205+/-0.290 $\chi^2$/NDF: 11348.9/15

Left Out: 1108.148+/-0.220 $\chi^2$/NDF:1661.3/15

Right Out: 1110.592+/-0.289 $\chi^2$/NDF: 7696.0/17

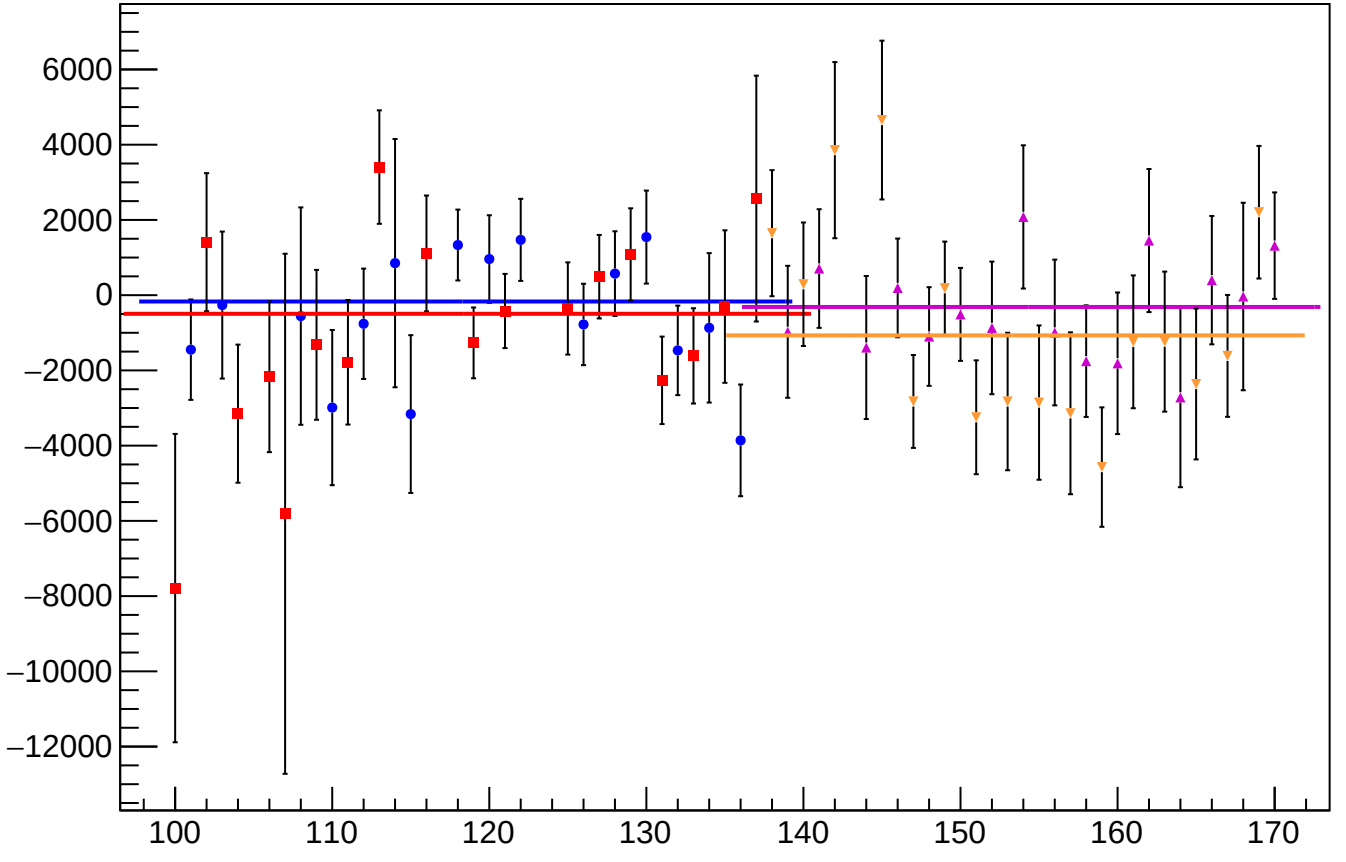
Left In: 1109.258+/-0.216 $\chi^2$/NDF:2729.6/15

+ sign 1105.967+/-0.175 $\chi^2$/NDF: 13276.8/31

All: 1107.878+/-0.123 $\chi^2$/NDF: 23950.0/65

- sign 1109.735+/-0.173 $\chi^2$/NDF: 10439.3/33

# asym_usl_reg_correction_mean vs Slug




Right In: -167.891+/-345.441 $\chi^2$/NDF: 21.0/15

Left Out: -1068.715+/-422.984 $\chi^2$/NDF:31.7/15

Right Out: -495.172+/-345.054 $\chi^2$/NDF: 23.3/17

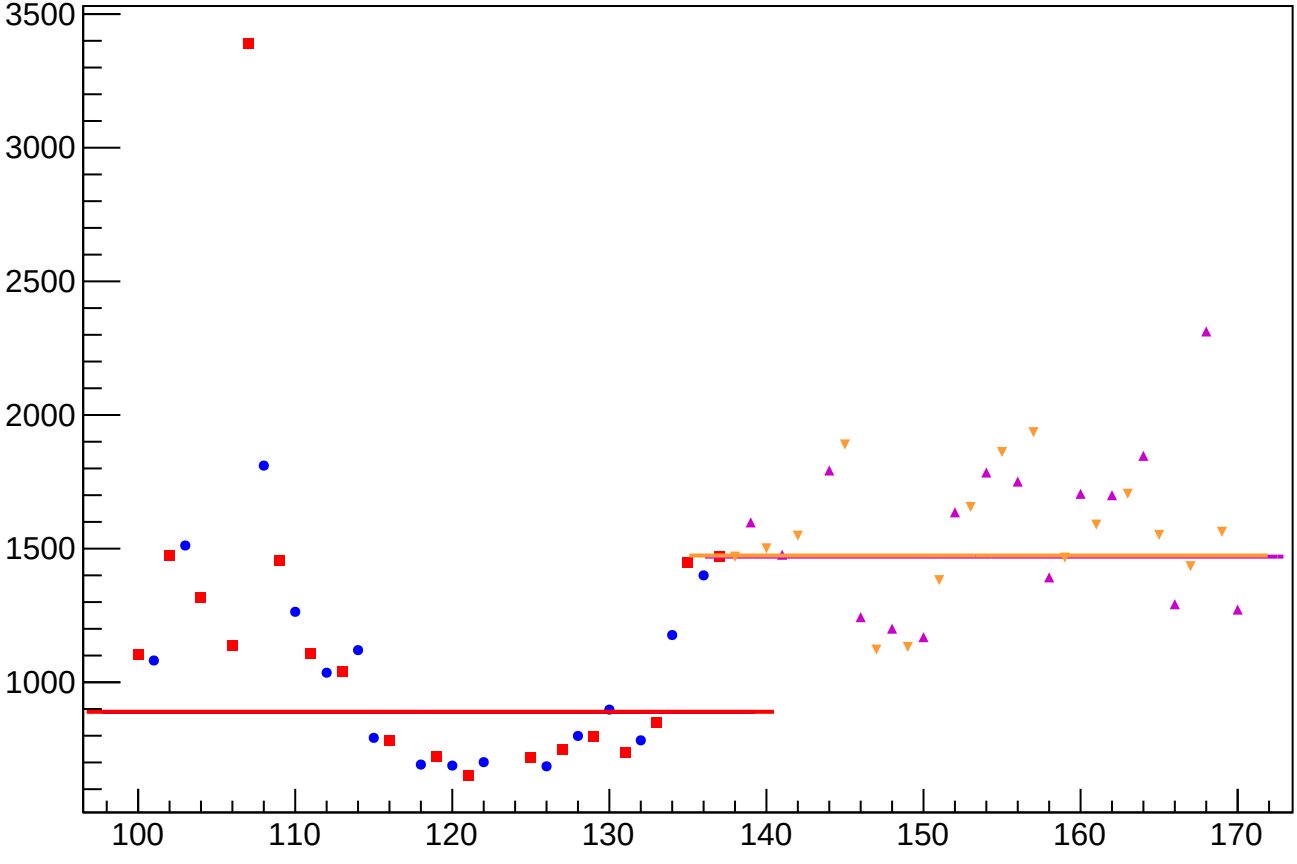
Left In: -313.565+/-412.509 $\chi^2$/NDF:8.2/15

+ sign -528.316+/-267.554 $\chi^2$/NDF: 55.4/31

All: -473.779+/-188.161 $\chi^2$/NDF: 87.1/65

- sign -420.412+/-264.668 $\chi^2$/NDF: 31.6/33

# asym_usl_reg_correction_rms vs Slug




Right In: 888.956+/-0.244 $\chi^2$/NDF: 1132766.3/15

Left Out: 1474.275+/-0.299 $\chi^2$/NDF:634290.1/15

Right Out: 889.478+/-0.244 $\chi^2$/NDF: 1345750.2/17

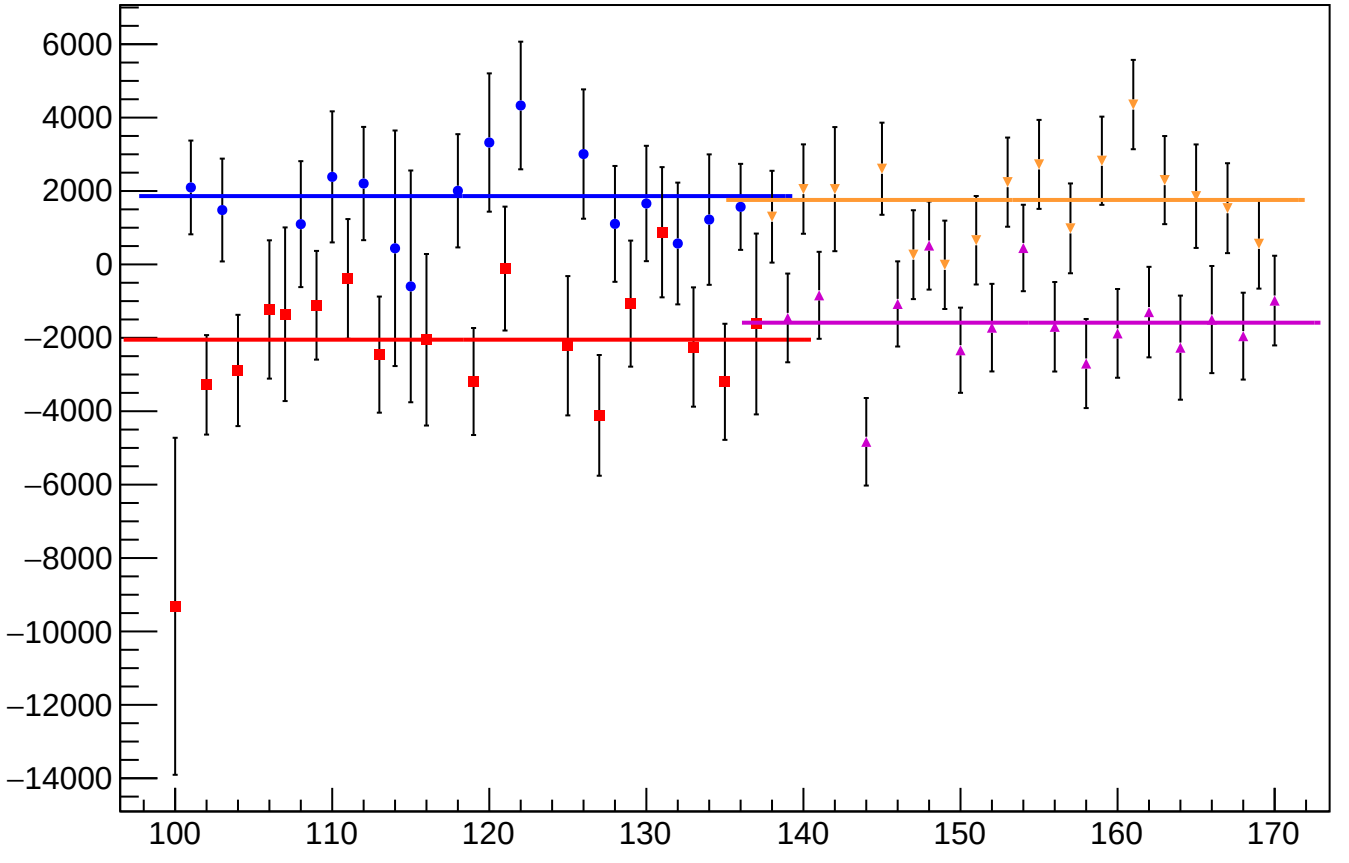
Left In: 1470.074+/-0.292 $\chi^2$/NDF:850518.8/15

+ sign 1123.146+/-0.189 $\chi^2$/NDF: 4064487.3/31

All: 1125.844+/-0.133 $\chi^2$/NDF: 8592145.8/65

- sign 1128.485+/-0.187 $\chi^2$/NDF: 4527256.0/33

# cor_asym_usl_mean vs Slug




Right In: 1861.525+/-409.524 $\chi^2$/NDF: 5.3/15

Left Out: 1756.575+/-311.809 $\chi^2$/NDF:12.9/15

Right Out: -2050.842+/-409.249 $\chi^2$/NDF: 12.5/17

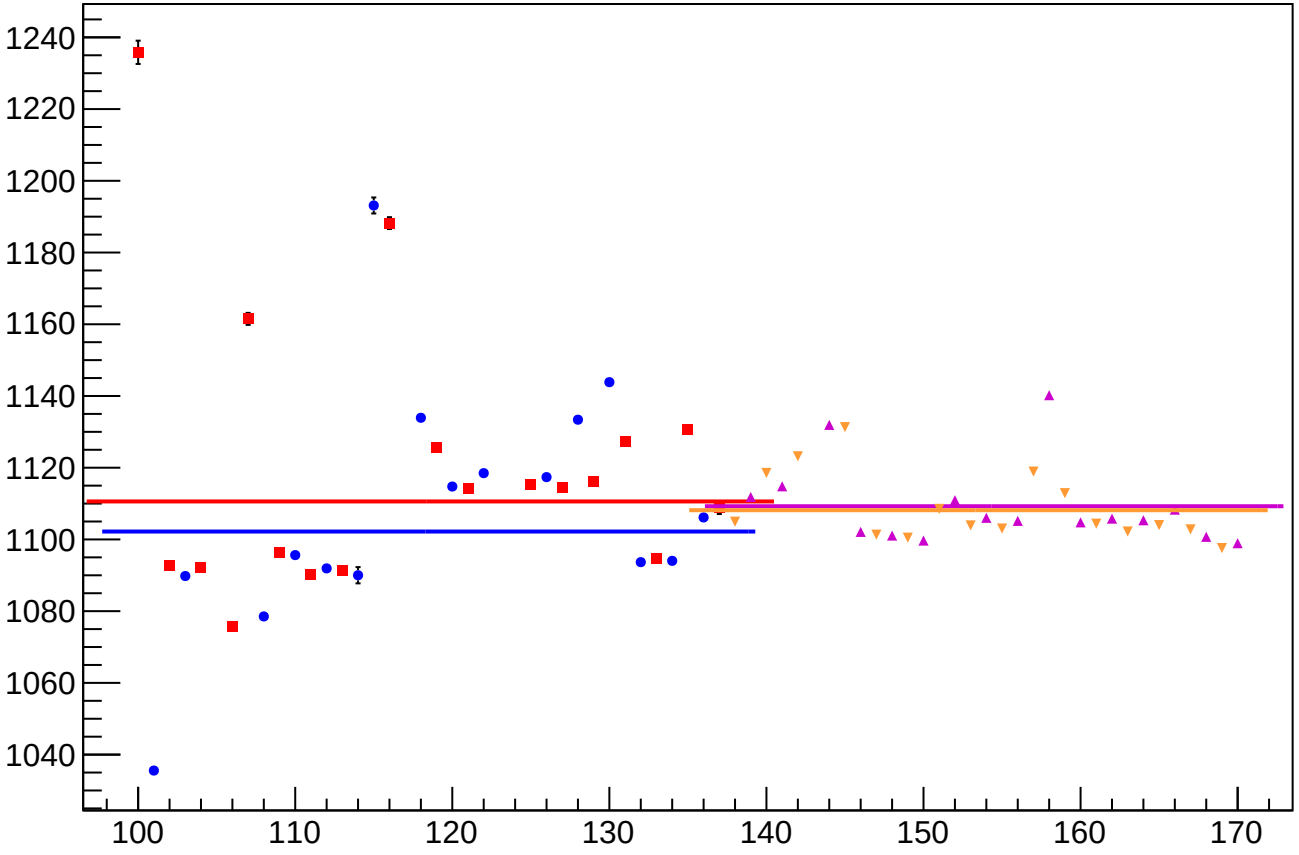
Left In: -1587.918+/-305.079 $\chi^2$/NDF:16.0/15

+ sign 1795.089+/-248.084 $\chi^2$/NDF: 18.3/31

All: -4.220+/-174.175 $\chi^2$/NDF: 151.4/65

- sign -1753.277+/-244.595 $\chi^2$/NDF: 29.4/33

# cor_asym_usl_rms vs Slug




Right In: 1102.205+/-0.290 $\chi^2$/NDF: 11348.9/15

Left Out: 1108.148+/-0.220 $\chi^2$/NDF:1661.3/15

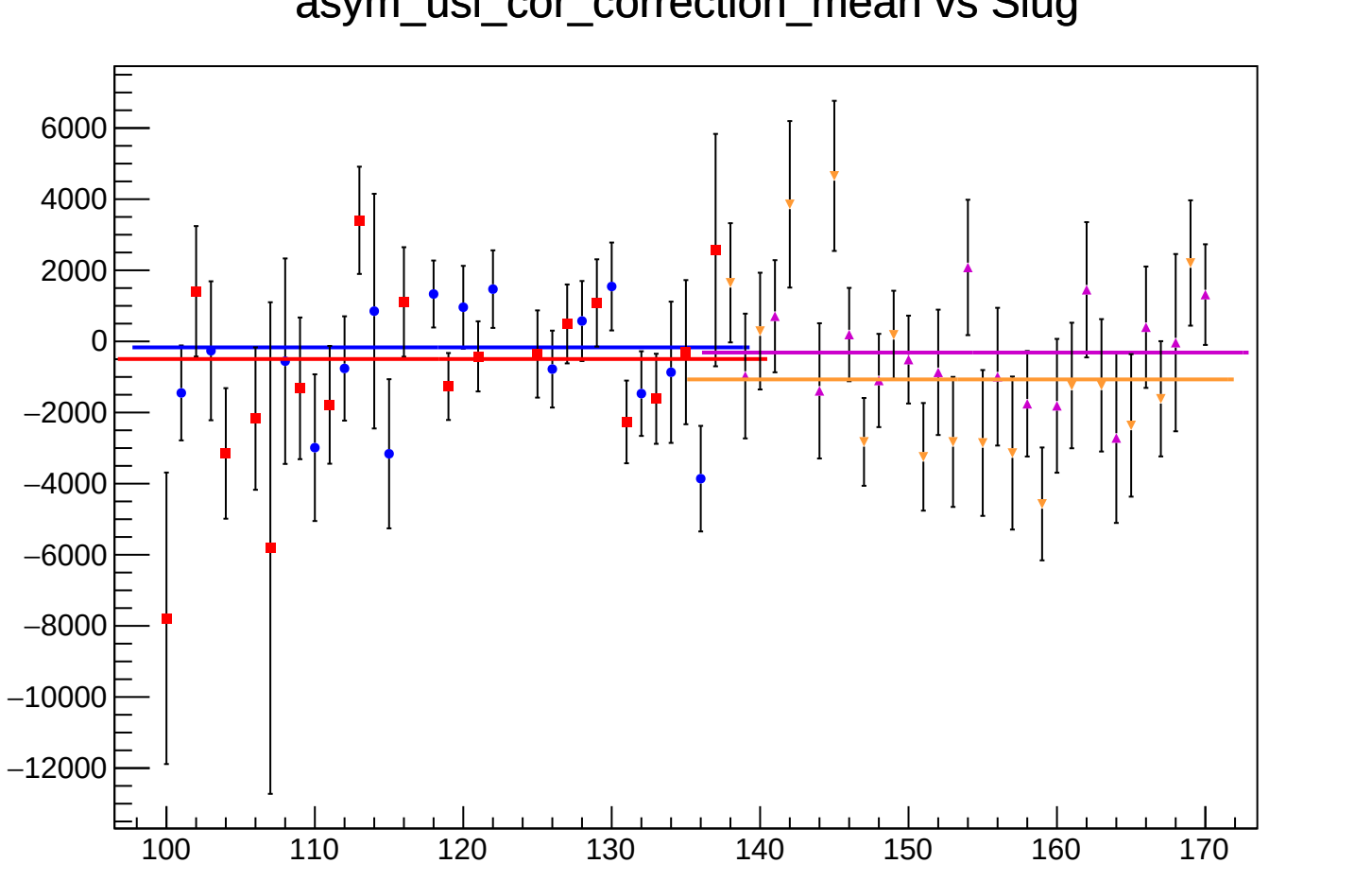
Right Out: 1110.592+/-0.289 $\chi^2$/NDF: 7696.0/17

Left In: 1109.258+/-0.216 $\chi^2$/NDF:2729.6/15

\+ sign 1105.967+/-0.175 $\chi^2$/NDF: 13276.8/31

All: 1107.878+/-0.123 $\chi^2$/NDF: 23950.0/65

\- sign 1109.735+/-0.173 $\chi^2$/NDF: 10439.3/33




Right In: -167.891+/-345.441 $\chi^2$/NDF: 21.0/15

Left Out: -1068.715+/-422.984 $\chi^2$/NDF:31.7/15

Right Out: -495.172+/-345.054 $\chi^2$/NDF: 23.3/17

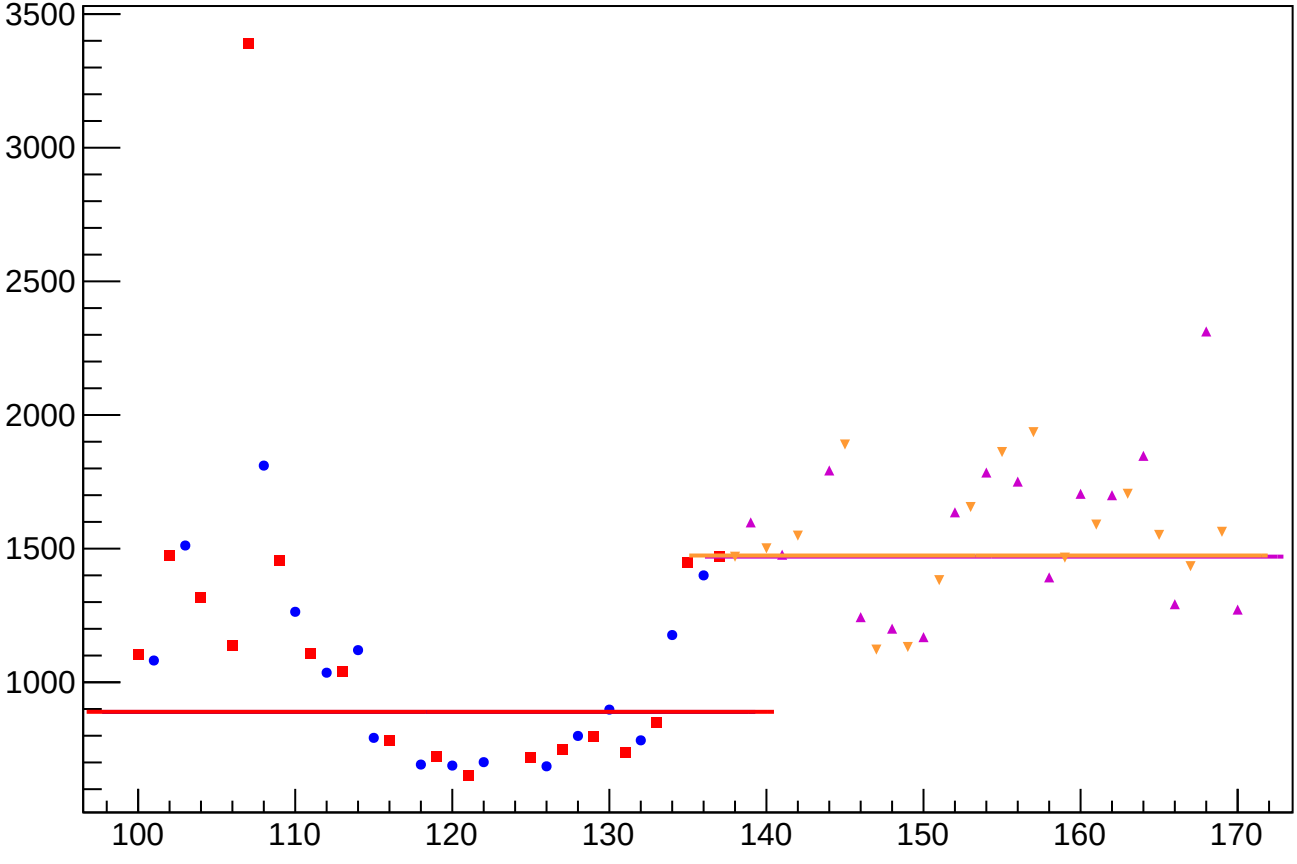
Left In: -313.565+/-412.509 $\chi^2$/NDF:8.2/15

+ sign -528.316+/-267.554 $\chi^2$/NDF: 55.4/31

All: -473.779+/-188.161 $\chi^2$/NDF: 87.1/65

- sign -420.412+/-264.668 $\chi^2$/NDF: 31.6/33

# asym_usl_cor_correction_rms vs Slug




Right In: 888.956+/-0.244 $\chi^2$/NDF: 1132766.3/15

Left Out: 1474.275+/-0.299 $\chi^2$/NDF:634290.1/15

Right Out: 889.478+/-0.244 $\chi^2$/NDF: 1345750.2/17

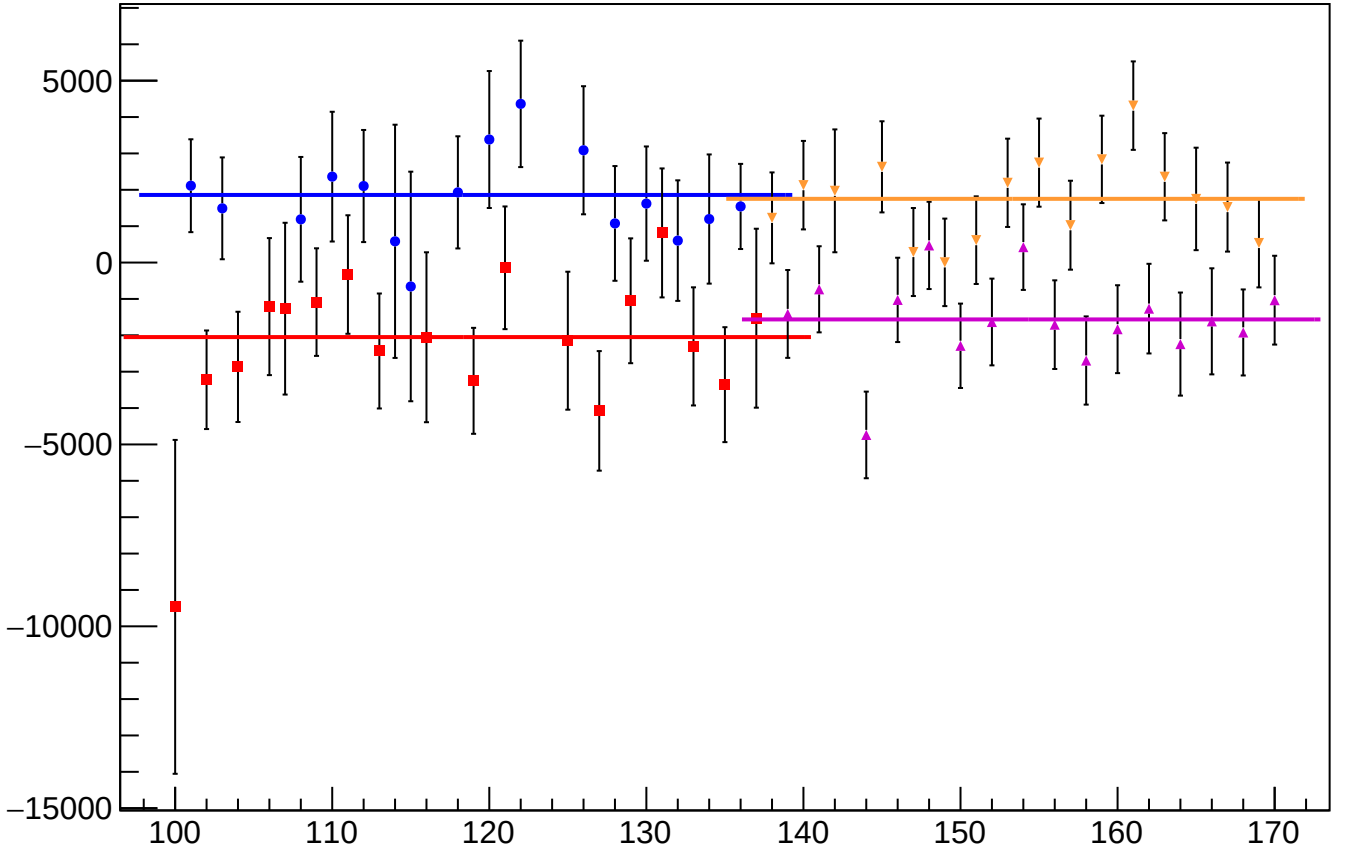
Left In: 1470.074+/-0.292 $\chi^2$/NDF:850518.8/15

+ sign 1123.146+/-0.189 $\chi^2$/NDF: 4064487.3/31

All: 1125.844+/-0.133 $\chi^2$/NDF: 8592145.8/65

- sign 1128.485+/-0.187 $\chi^2$/NDF: 4527256.0/33

# overload_cor_asym_usl_mean vs Slug




Right In: 1858.683+/-409.170 $\chi^2$/NDF: 5.4/15

Left Out: 1751.614+/-311.493 $\chi^2$/NDF:12.9/15

Right Out: -2048.674+/-408.894 $\chi^2$/NDF: 12.7/17

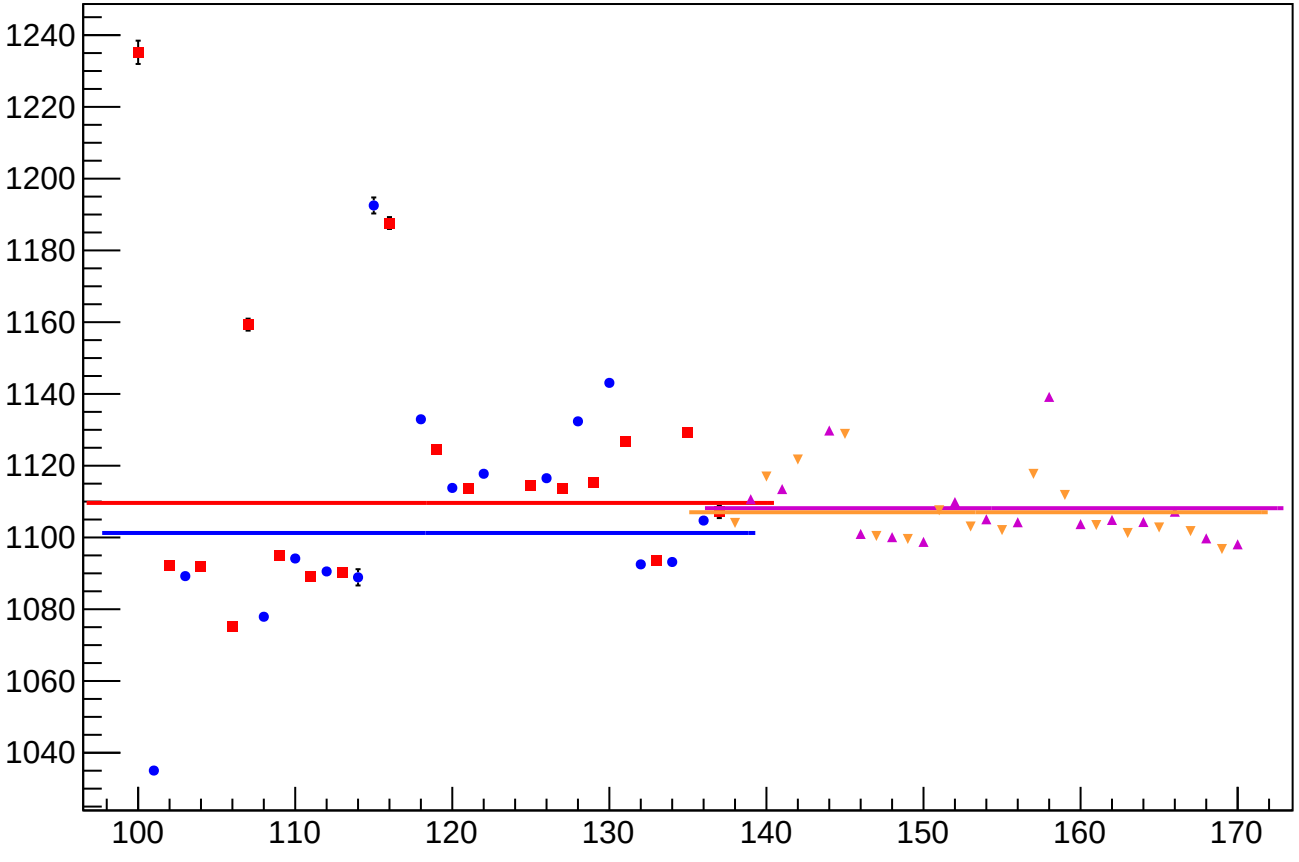
Left In: -1563.403+/-304.776 $\chi^2$/NDF:15.5/15

+ sign 1790.898+/-247.846 $\chi^2$/NDF: 18.4/31

All: 2.129+/-174.009 $\chi^2$/NDF: 150.2/65

- sign -1736.717+/-244.363 $\chi^2$/NDF: 29.1/33

# overload_cor_asym_usl_rms vs Slug




Right In: 1101.254+/-0.289 $\chi^2$/NDF: 11308.3/15

Left Out: 1107.031+/-0.220 $\chi^2$/NDF:1541.8/15

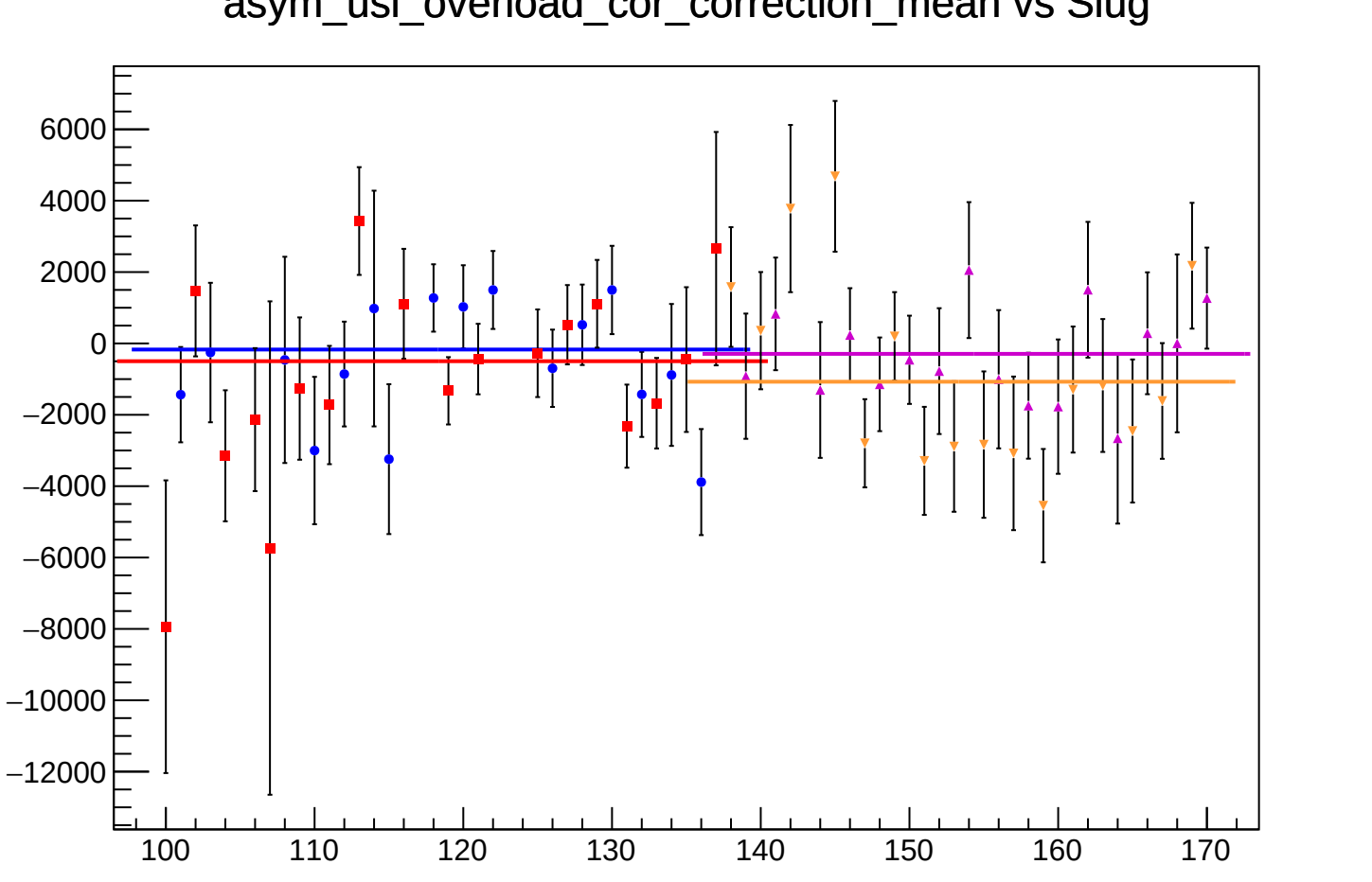
Right Out: 1109.629+/-0.289 $\chi^2$/NDF: 7673.1/17

Left In: 1108.158+/-0.216 $\chi^2$/NDF:2649.6/15

+ sign 1104.912+/-0.175 $\chi^2$/NDF: 13102.5/31

All: 1106.824+/-0.123 $\chi^2$/NDF: 23676.6/65

- sign 1108.683+/-0.173 $\chi^2$/NDF: 10339.2/33




Right In: -170.930+/-345.980 $\chi^2$/NDF: 20.9/15

Left Out: -1072.854+/-423.230 $\chi^2$/NDF:31.5/15

Right Out: -497.957+/-345.565 $\chi^2$/NDF: 23.9/17

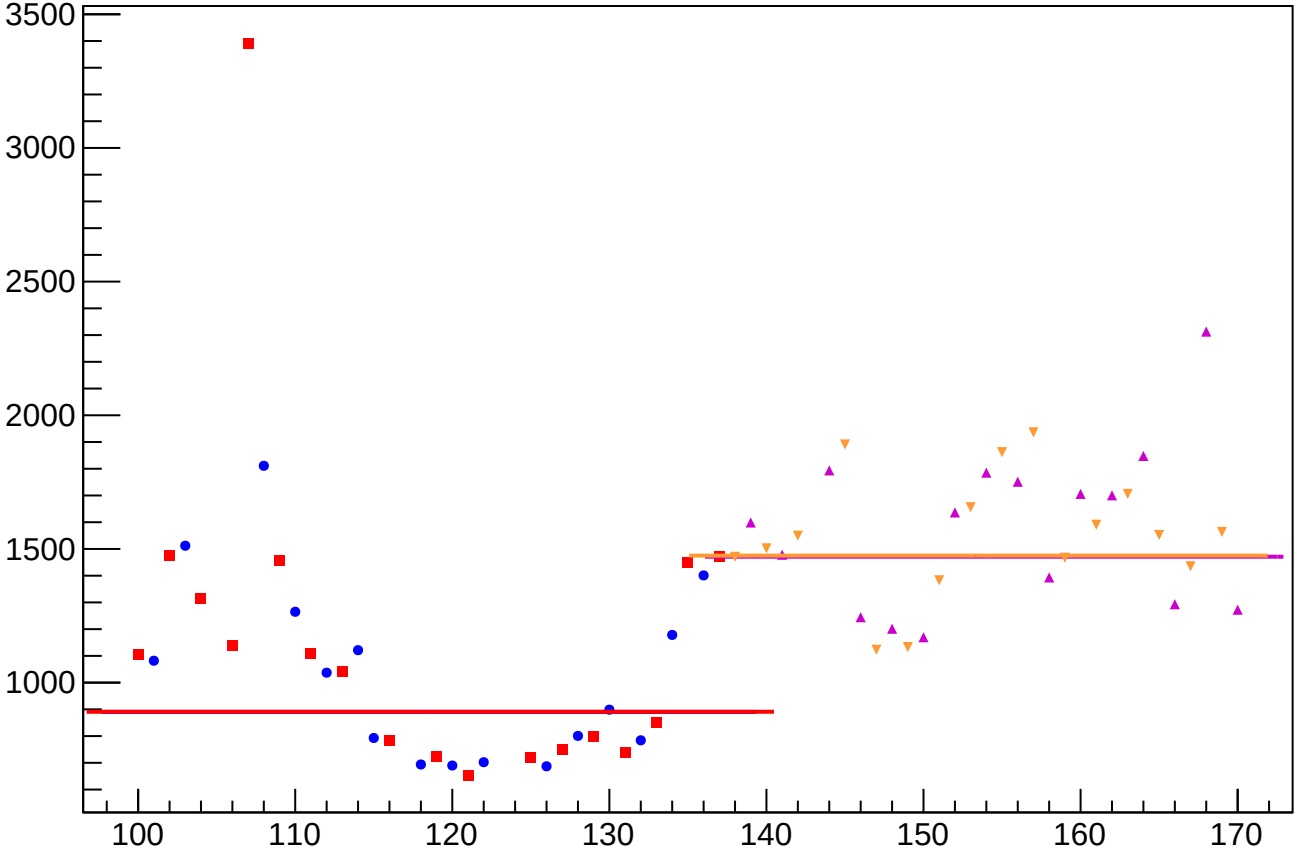
Left In: -292.183+/-412.753 $\chi^2$/NDF:8.0/15

+ sign -532.218+/-267.867 $\chi^2$/NDF: 55.1/31

All: -472.040+/-188.376 $\chi^2$/NDF: 87.3/65

- sign -413.160+/-264.963 $\chi^2$/NDF: 32.1/33

# asym_usl_overload_cor_correction_rms vs Slug




Right In: 890.495+/-0.245 $\chi^2$/NDF: 1128739.3/15

Left Out: 1475.178+/-0.299 $\chi^2$/NDF:633286.4/15

Right Out: 890.938+/-0.244 $\chi^2$/NDF: 1341804.2/17

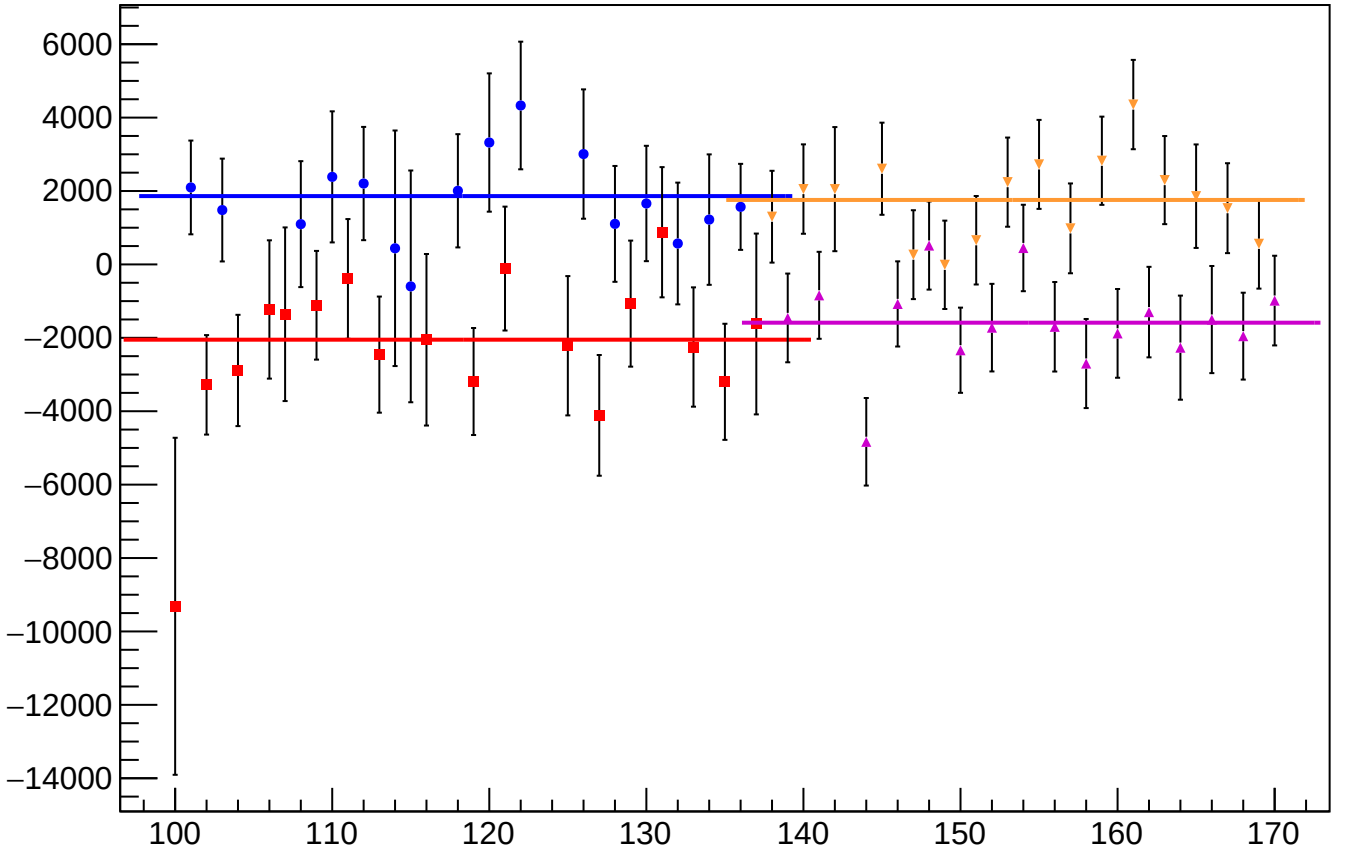
Left In: 1470.987+/-0.292 $\chi^2$/NDF:849220.0/15

+ sign 1124.704+/-0.189 $\chi^2$/NDF: 4050010.0/31

All: 1127.366+/-0.133 $\chi^2$/NDF: 8563575.8/65

- sign 1129.970+/-0.187 $\chi^2$/NDF: 4513175.1/33

# eigen_cor_asym_usl_mean vs Slug




Right In: 1861.525+/-409.524 $\chi^2$/NDF: 5.3/15

Left Out: 1756.575+/-311.809 $\chi^2$/NDF:12.9/15

Right Out: -2050.842+/-409.249 $\chi^2$/NDF: 12.5/17

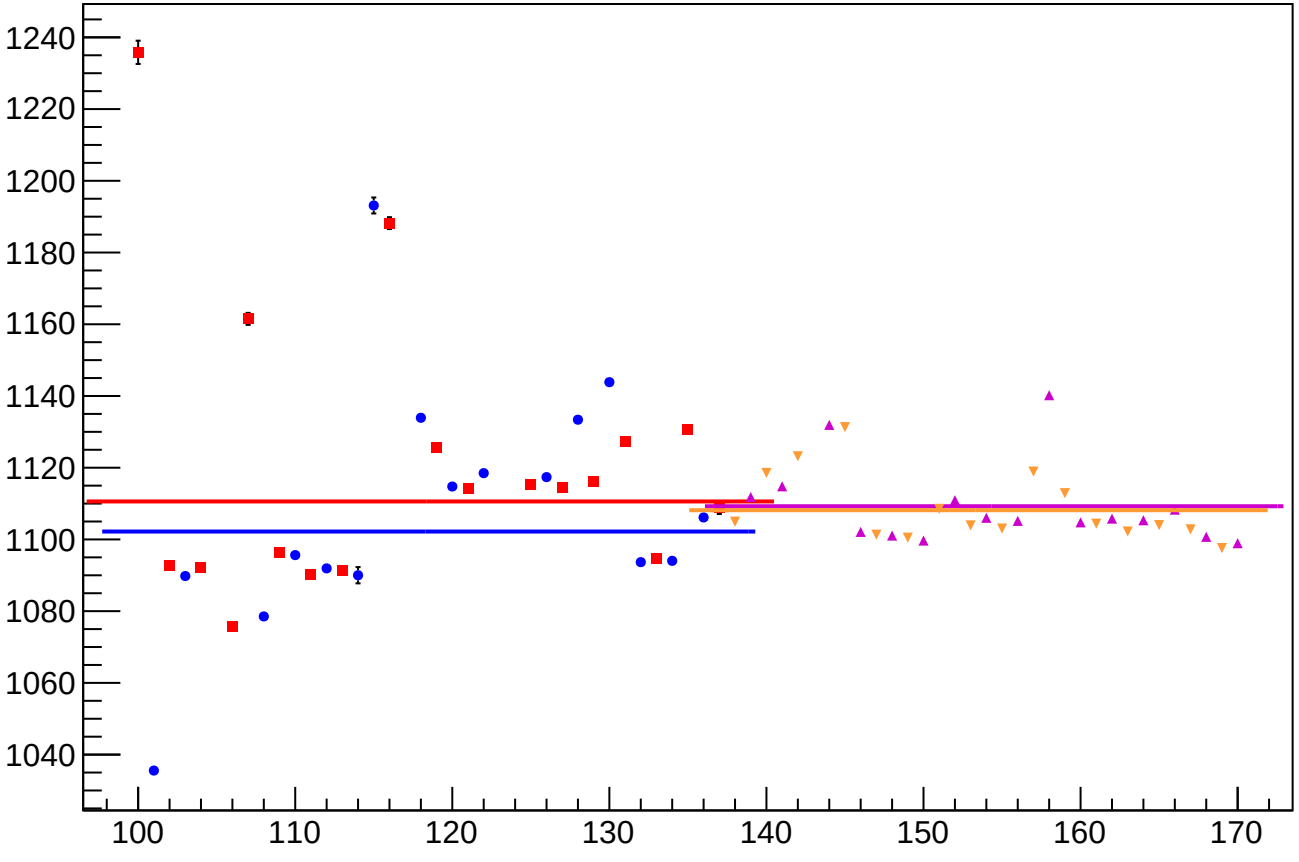
Left In: -1587.918+/-305.079 $\chi^2$/NDF:16.0/15

+ sign 1795.089+/-248.084 $\chi^2$/NDF: 18.3/31

All: -4.220+/-174.175 $\chi^2$/NDF: 151.4/65

- sign -1753.277+/-244.595 $\chi^2$/NDF: 29.4/33

# eigen_cor_asym_usl_rms vs Slug




Right In: 1102.205+/-0.290 $\chi^2$/NDF: 11348.9/15

Left Out: 1108.148+/-0.220 $\chi^2$/NDF:1661.3/15

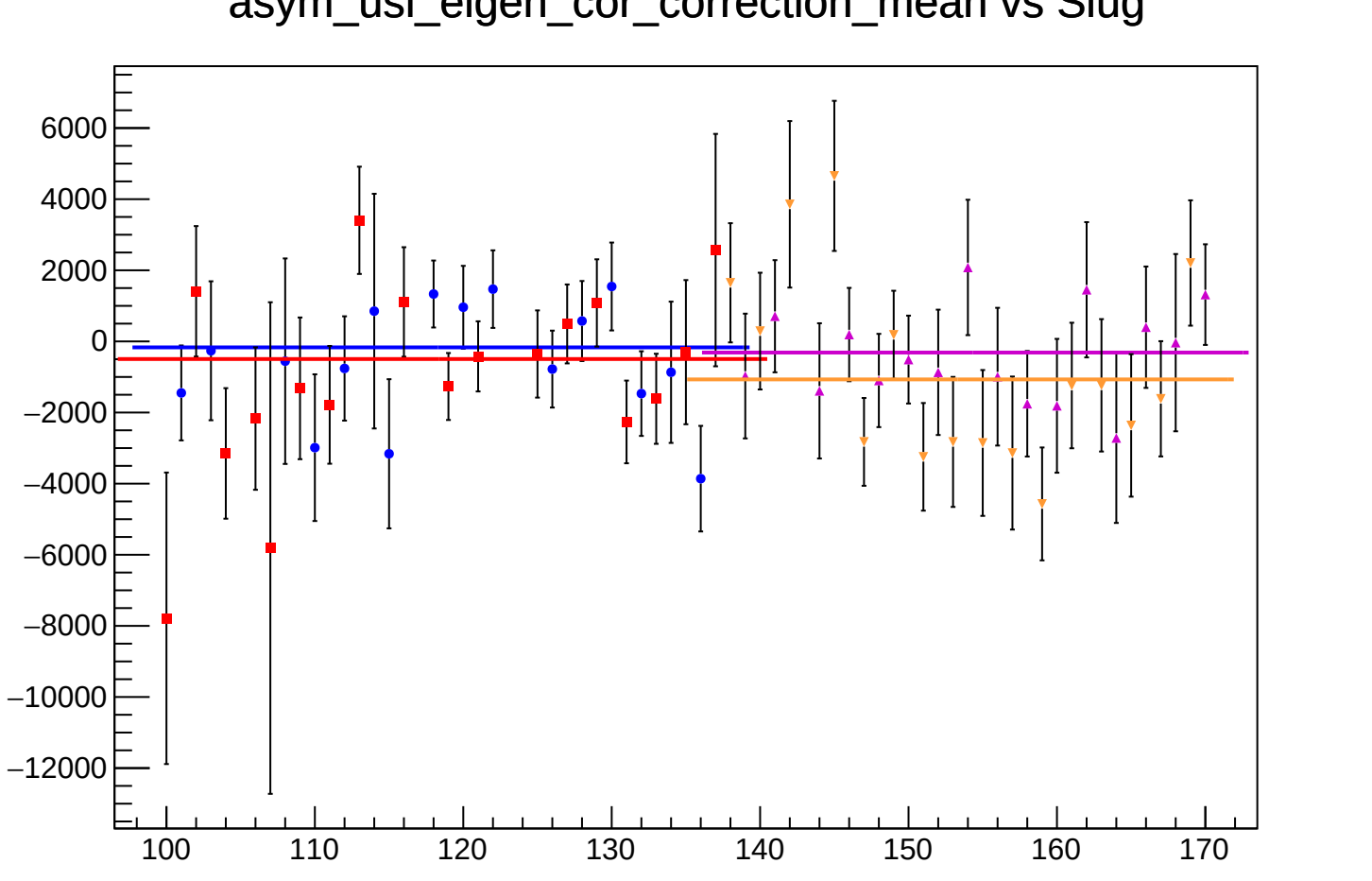
Right Out: 1110.592+/-0.289 $\chi^2$/NDF: 7696.0/17

Left In: 1109.258+/-0.216 $\chi^2$/NDF:2729.6/15

\+ sign 1105.967+/-0.175 $\chi^2$/NDF: 13276.8/31

All: 1107.878+/-0.123 $\chi^2$/NDF: 23950.0/65

\- sign 1109.735+/-0.173 $\chi^2$/NDF: 10439.3/33




Right In: -167.891+/-345.441 $\chi^2$/NDF: 21.0/15

Left Out: -1068.715+/-422.984 $\chi^2$/NDF:31.7/15

Right Out: -495.172+/-345.054 $\chi^2$/NDF: 23.3/17

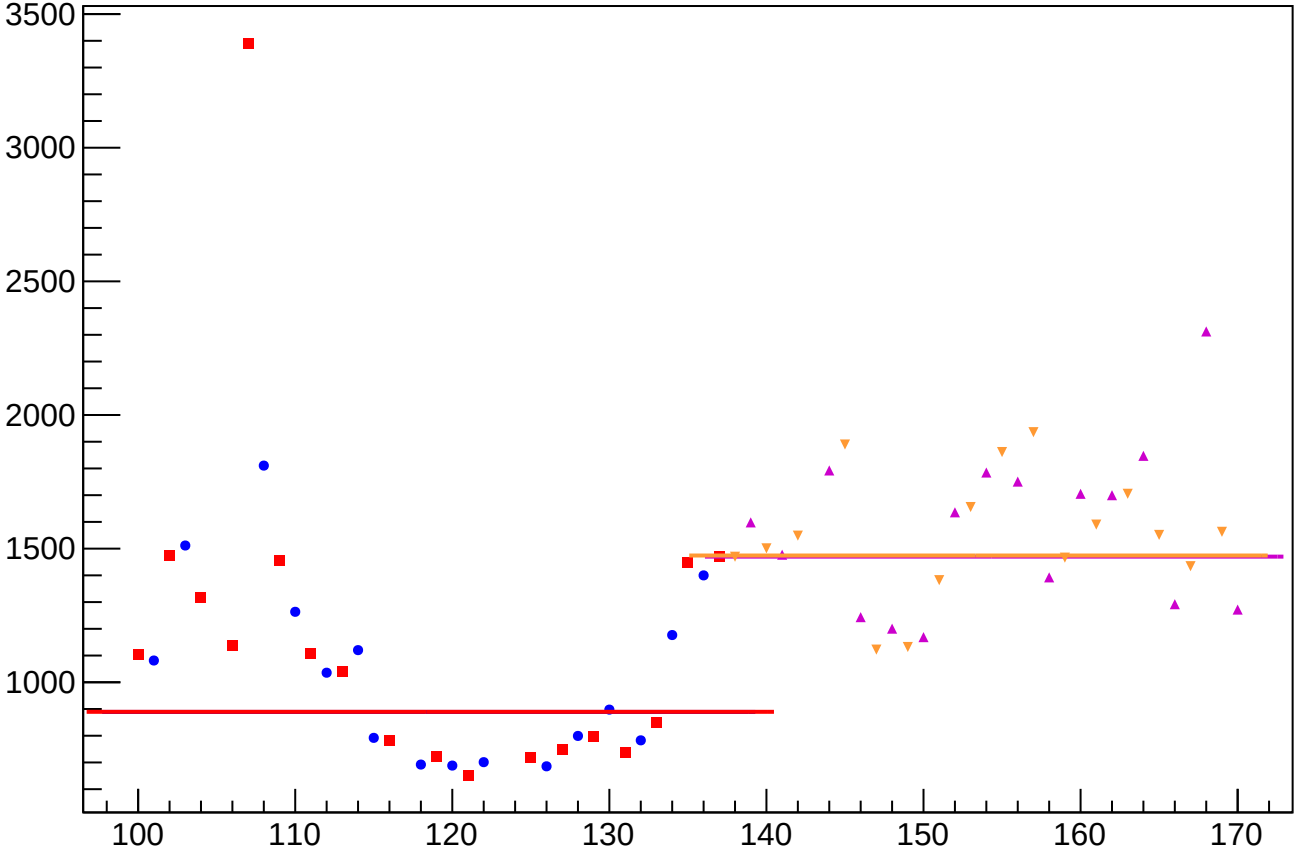
Left In: -313.565+/-412.509 $\chi^2$/NDF:8.2/15

+ sign -528.316+/-267.554 $\chi^2$/NDF: 55.4/31

All: -473.779+/-188.161 $\chi^2$/NDF: 87.1/65

- sign -420.412+/-264.668 $\chi^2$/NDF: 31.6/33

# asym_usl_eigen_cor_correction_rms vs Slug




Right In: 888.956+/-0.244 $\chi^2$/NDF: 1132766.3/15

Left Out: 1474.275+/-0.299 $\chi^2$/NDF:634290.1/15

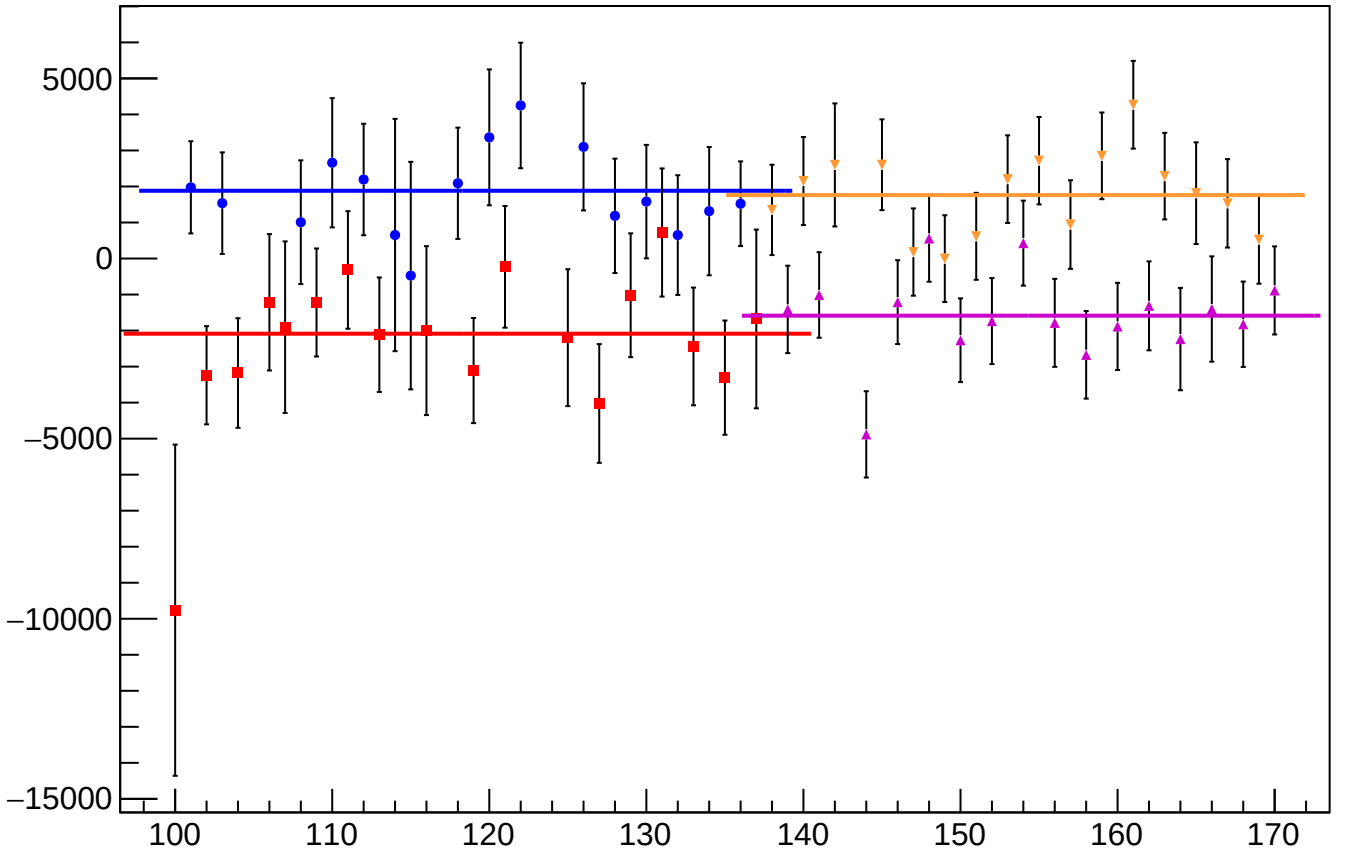
Right Out: 889.478+/-0.244 $\chi^2$/NDF: 1345750.2/17

Left In: 1470.074+/-0.292 $\chi^2$/NDF:850518.8/15

+ sign 1123.146+/-0.189 $\chi^2$/NDF: 4064487.3/31

All: 1125.844+/-0.133 $\chi^2$/NDF: 8592145.8/65

- sign 1128.485+/-0.187 $\chi^2$/NDF: 4527256.0/33




Right In: 1881.524+/-410.700 $\chi^2$/NDF: 5.2/15

Left Out: 1761.192+/-312.465 $\chi^2$/NDF:13.1/15

Right Out: -2086.886+/-410.785 $\chi^2$/NDF: 12.4/17

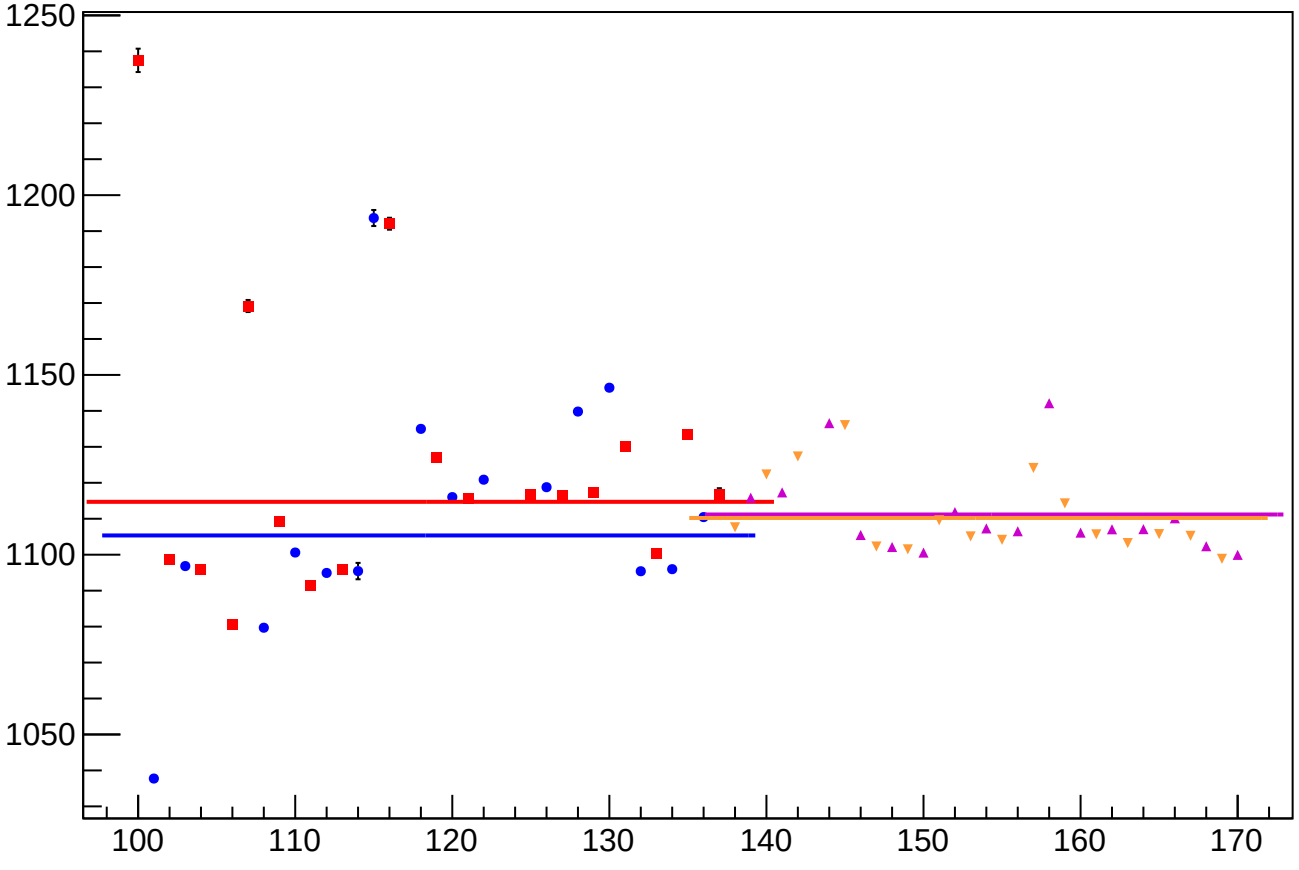
Left In: -1586.352+/-305.615 $\chi^2$/NDF:15.9/15

+ sign 1805.308+/-248.676 $\chi^2$/NDF: 18.4/31

All: -4.821+/-174.598 $\chi^2$/NDF: 152.1/65

- sign -1764.689+/-245.199 $\chi^2$/NDF: 29.3/33

# dit_asym_usl_rms vs Slug




Right In: 1105.355+/-0.290 $\chi^2$/NDF: 11330.9/15

Left Out: 1110.219+/-0.221 $\chi^2$/NDF:2121.8/15

Right Out: 1114.705+/-0.290 $\chi^2$/NDF: 7330.3/17

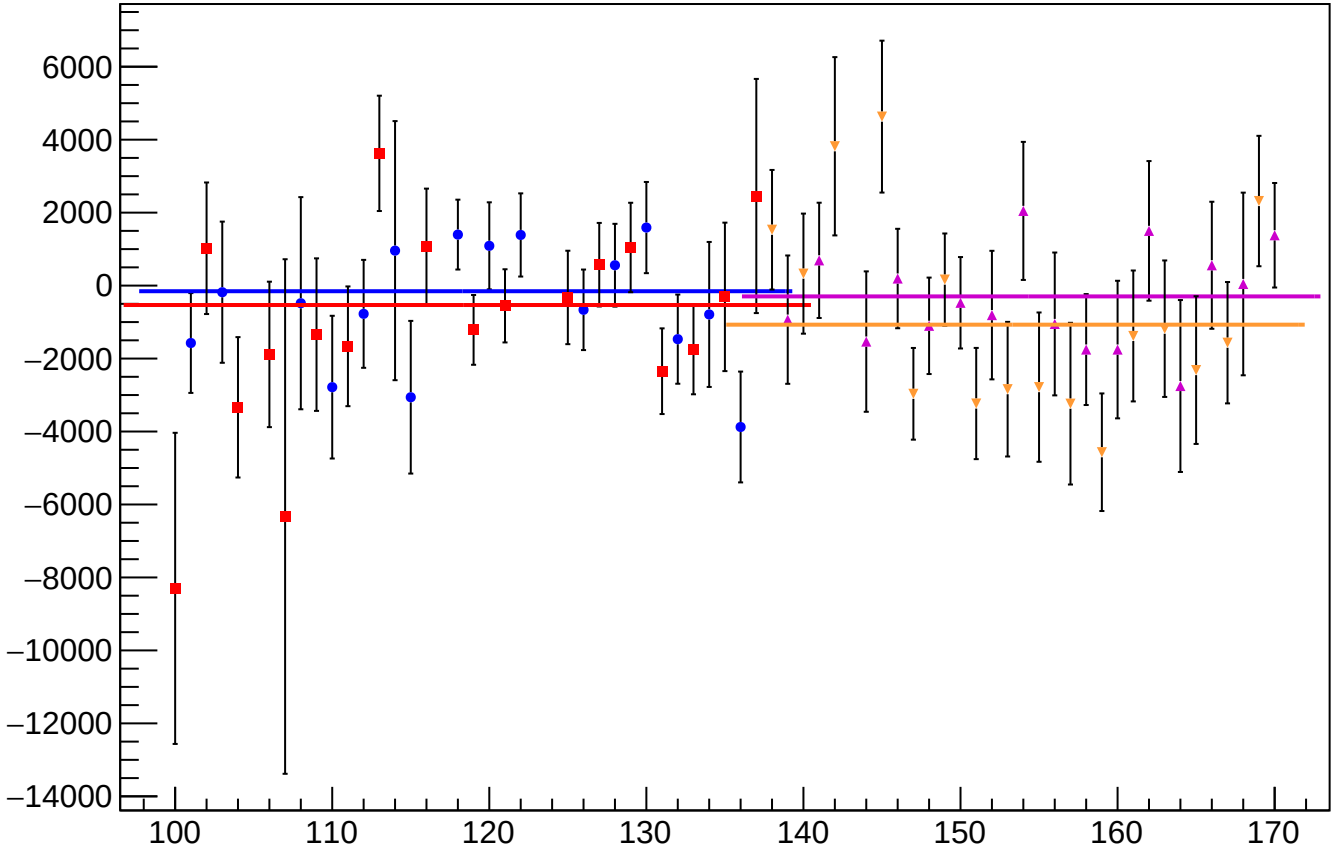
Left In: 1111.183+/-0.216 $\chi^2$/NDF:3011.3/15

+ sign 1108.436+/-0.176 $\chi^2$/NDF: 13630.4/31

All: 1110.465+/-0.123 $\chi^2$/NDF: 24329.2/65

- sign 1112.438+/-0.173 $\chi^2$/NDF: 10436.2/33

# asym_usl_dit_correction_mean vs Slug




Right In: -153.999+/-351.318 $\chi^2$/NDF: 20.5/15

Left Out: -1071.116+/-427.764 $\chi^2$/NDF:31.4/15

Right Out: -532.155+/-350.407 $\chi^2$/NDF: 23.2/17

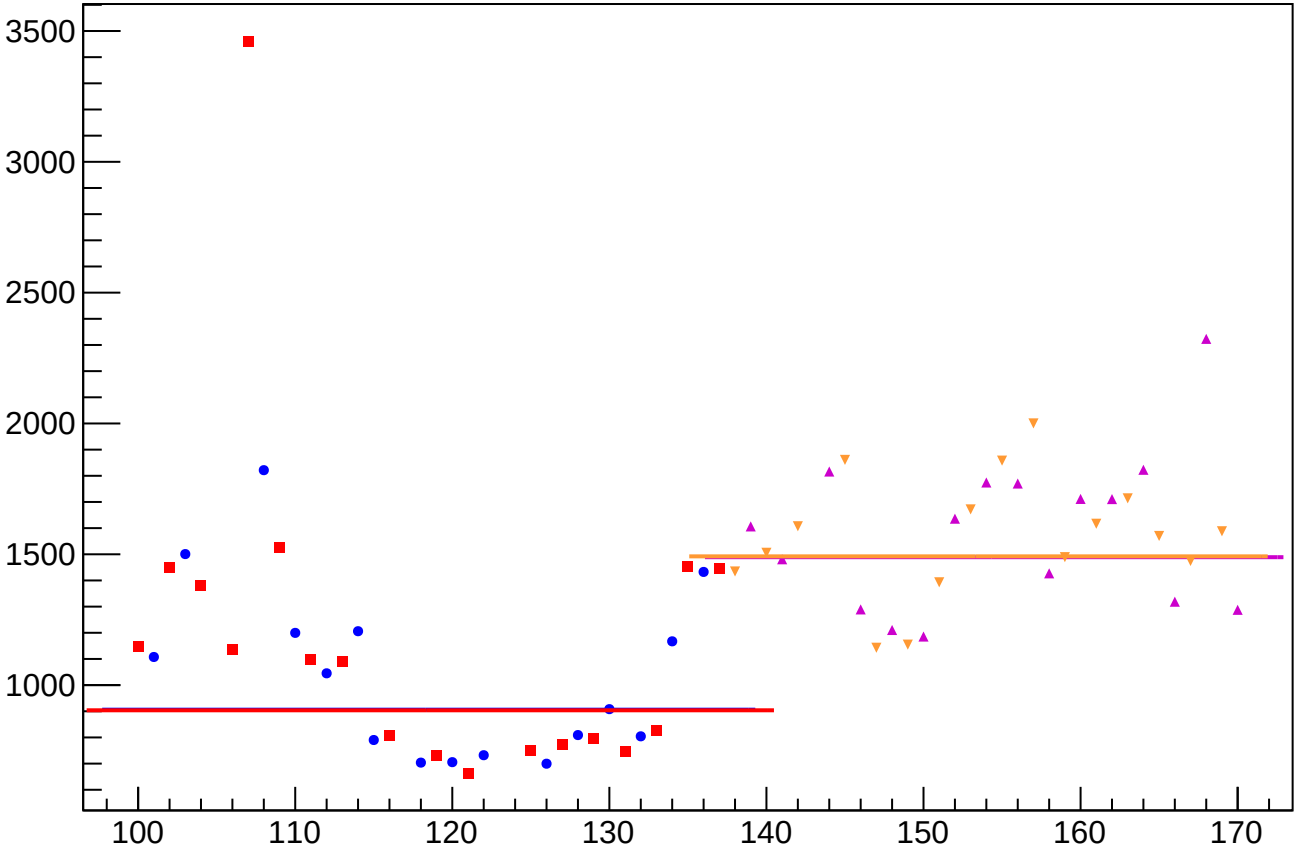
Left In: -296.140+/-417.121 $\chi^2$/NDF:8.3/15

+ sign -523.425+/-271.491 $\chi^2$/NDF: 54.6/31

All: -478.441+/-190.835 $\chi^2$/NDF: 86.4/65

- sign -434.508+/-268.300 $\chi^2$/NDF: 31.7/33

# asym_usl_dit_correction_rms vs Slug




Right In: 906.036+/-0.248 $\chi^2$/NDF: 1079435.1/15

Left Out: 1492.093+/-0.302 $\chi^2$/NDF:609926.2/15

Right Out: 903.753+/-0.248 $\chi^2$/NDF: 1339982.2/17

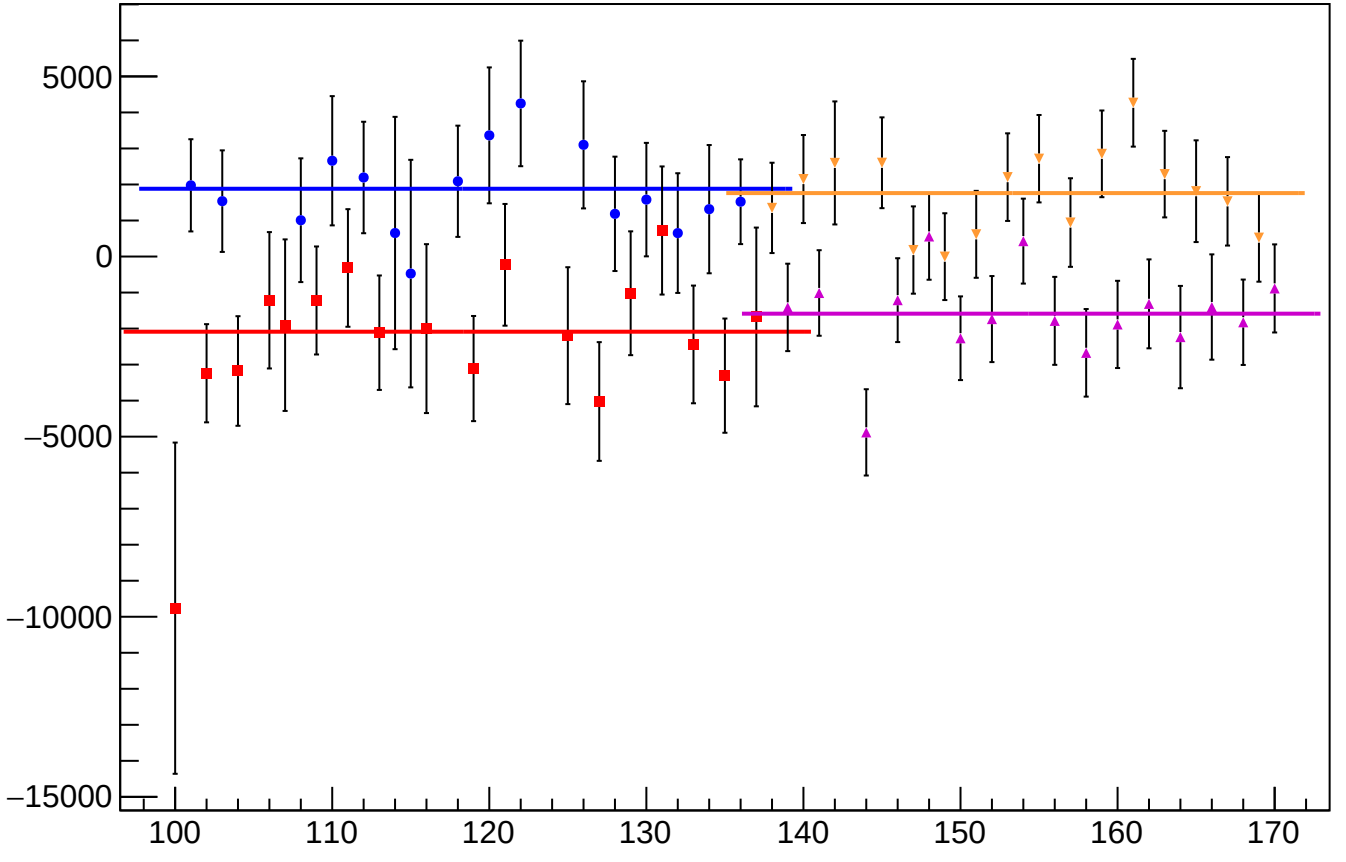
Left In: 1488.919+/-0.295 $\chi^2$/NDF:795437.9/15

+ sign 1142.107+/-0.192 $\chi^2$/NDF: 3931241.0/31

All: 1144.003+/-0.135 $\chi^2$/NDF: 8374457.4/65

- sign 1145.855+/-0.190 $\chi^2$/NDF: 4443023.5/33

# eigen_dit_asym_usl_mean vs Slug




Right In: 1881.523+/-410.700 $\chi^2$/NDF: 5.2/15

Left Out: 1761.187+/-312.465 $\chi^2$/NDF:13.1/15

Right Out: -2086.884+/-410.785 $\chi^2$/NDF: 12.4/17

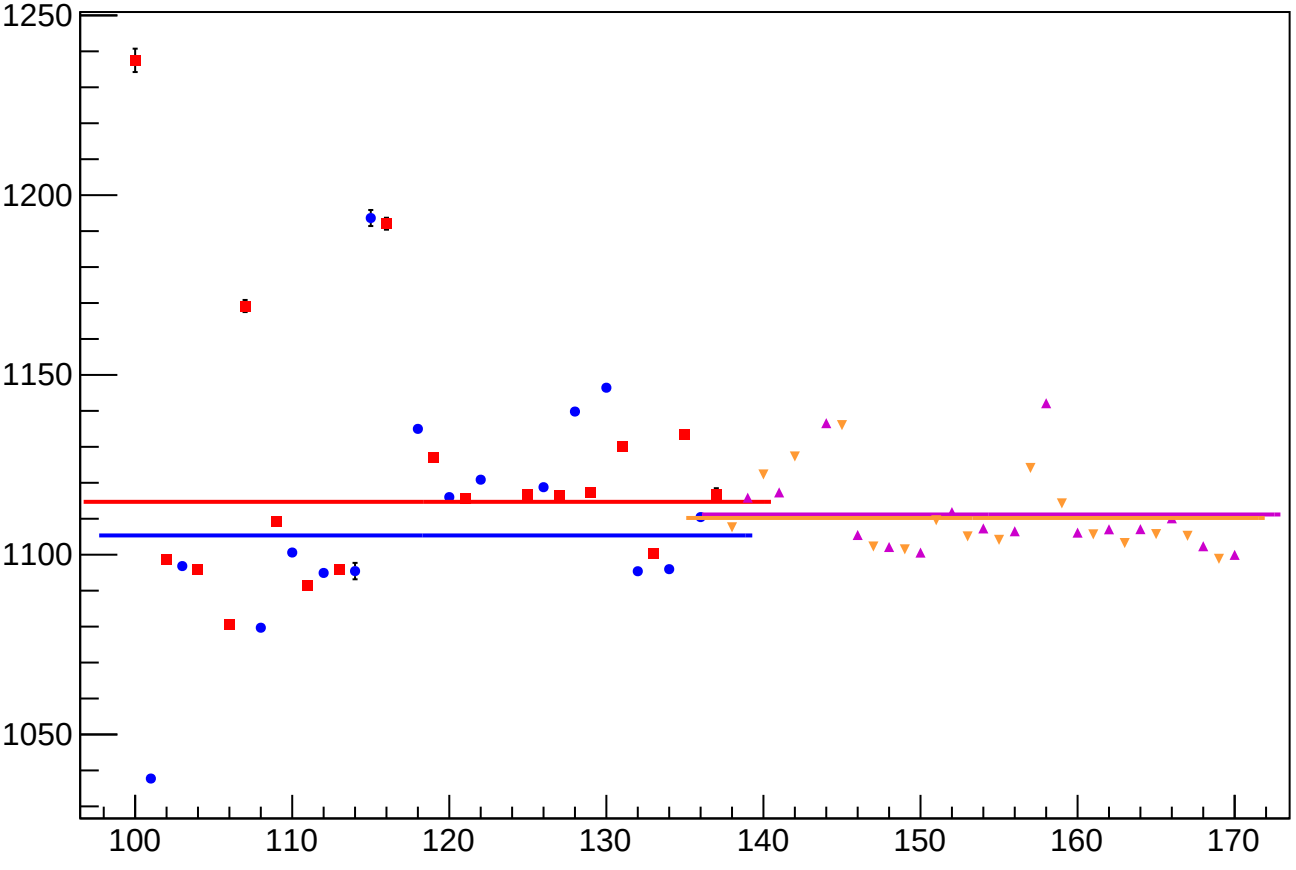
Left In: -1586.354+/-305.615 $\chi^2$/NDF:15.9/15

+ sign 1805.305+/-248.676 $\chi^2$/NDF: 18.4/31

All: -4.823+/-174.598 $\chi^2$/NDF: 152.1/65

- sign -1764.690+/-245.199 $\chi^2$/NDF: 29.3/33

# eigen_dit_asym_usl_rms vs Slug




Right In: 1105.355+/-0.290 $\chi^2$/NDF: 11330.9/15

Left Out: 1110.219+/-0.221 $\chi^2$/NDF:2121.8/15

Right Out: 1114.705+/-0.290 $\chi^2$/NDF: 7330.2/17

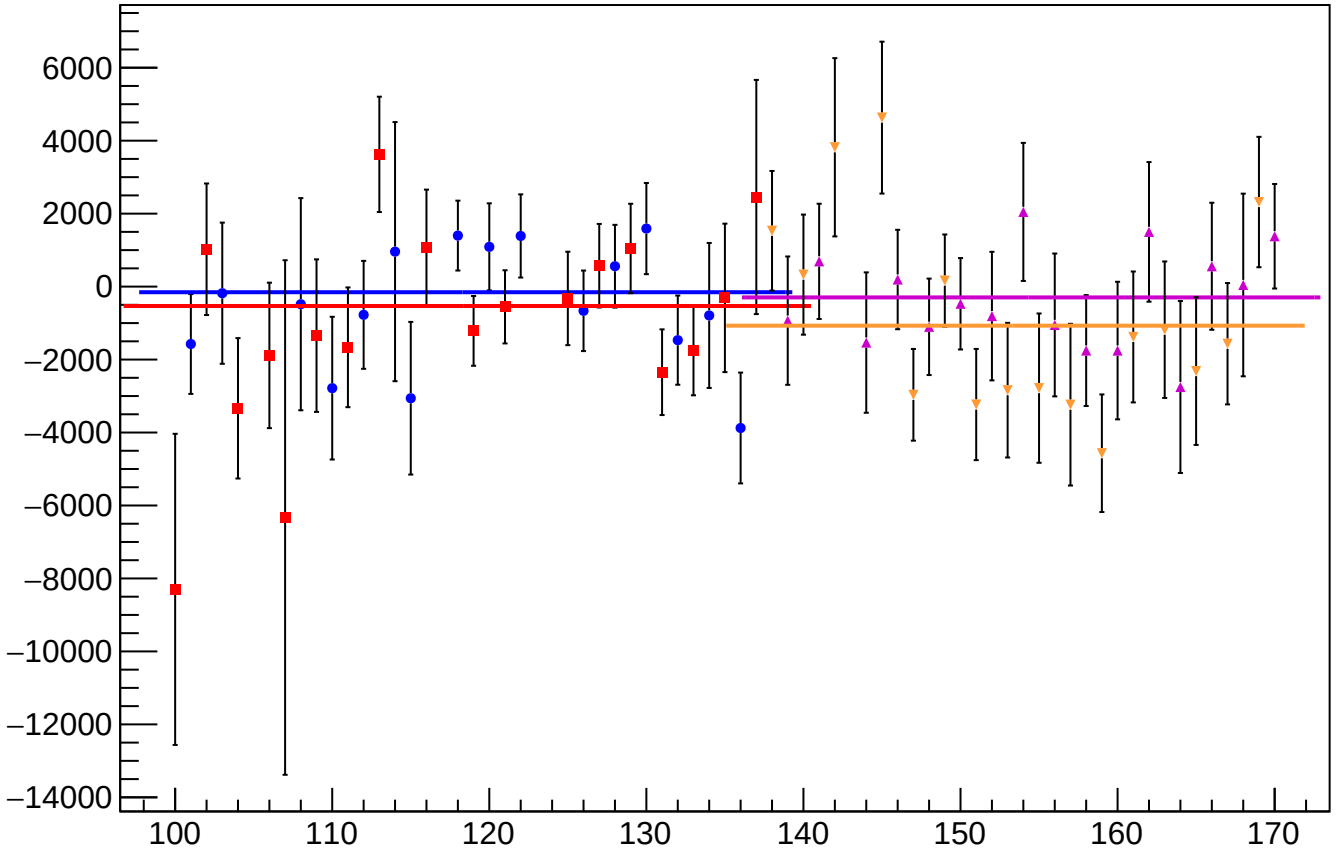
Left In: 1111.183+/-0.216 $\chi^2$/NDF:3011.3/15

+ sign 1108.436+/-0.176 $\chi^2$/NDF: 13630.4/31

All: 1110.465+/-0.123 $\chi^2$/NDF: 24329.2/65

- sign 1112.438+/-0.173 $\chi^2$/NDF: 10436.2/33

# asym_usl_eigen_dit_correction_mean vs Slug




Right In: -153.998+/-351.317 $\chi^2$/NDF: 20.5/15

Left Out: -1071.121+/-427.764 $\chi^2$/NDF:31.4/15

Right Out: -532.154+/-350.406 $\chi^2$/NDF: 23.2/17

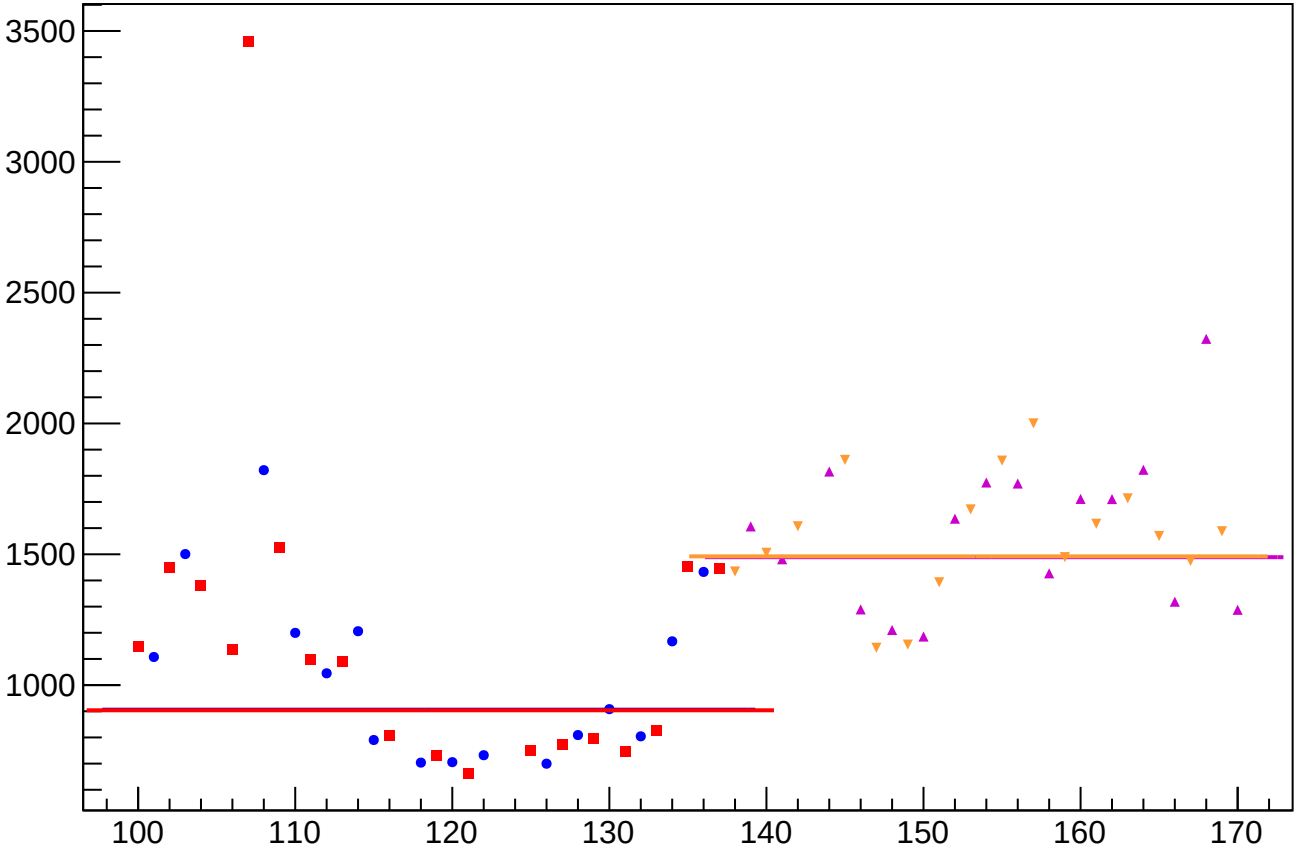
Left In: -296.141+/-417.121 $\chi^2$/NDF:8.3/15

+ sign -523.425+/-271.491 $\chi^2$/NDF: 54.6/31

All: -478.441+/-190.835 $\chi^2$/NDF: 86.4/65

- sign -434.508+/-268.300 $\chi^2$/NDF: 31.7/33

# asym_usl_eigen_dit_correction_rms vs Slug




Right In: 906.034+/-0.248 $\chi^2$/NDF: 1079440.1/15

Left Out: 1492.094+/-0.302 $\chi^2$/NDF:609922.6/15

Right Out: 903.751+/-0.248 $\chi^2$/NDF: 1339985.4/17

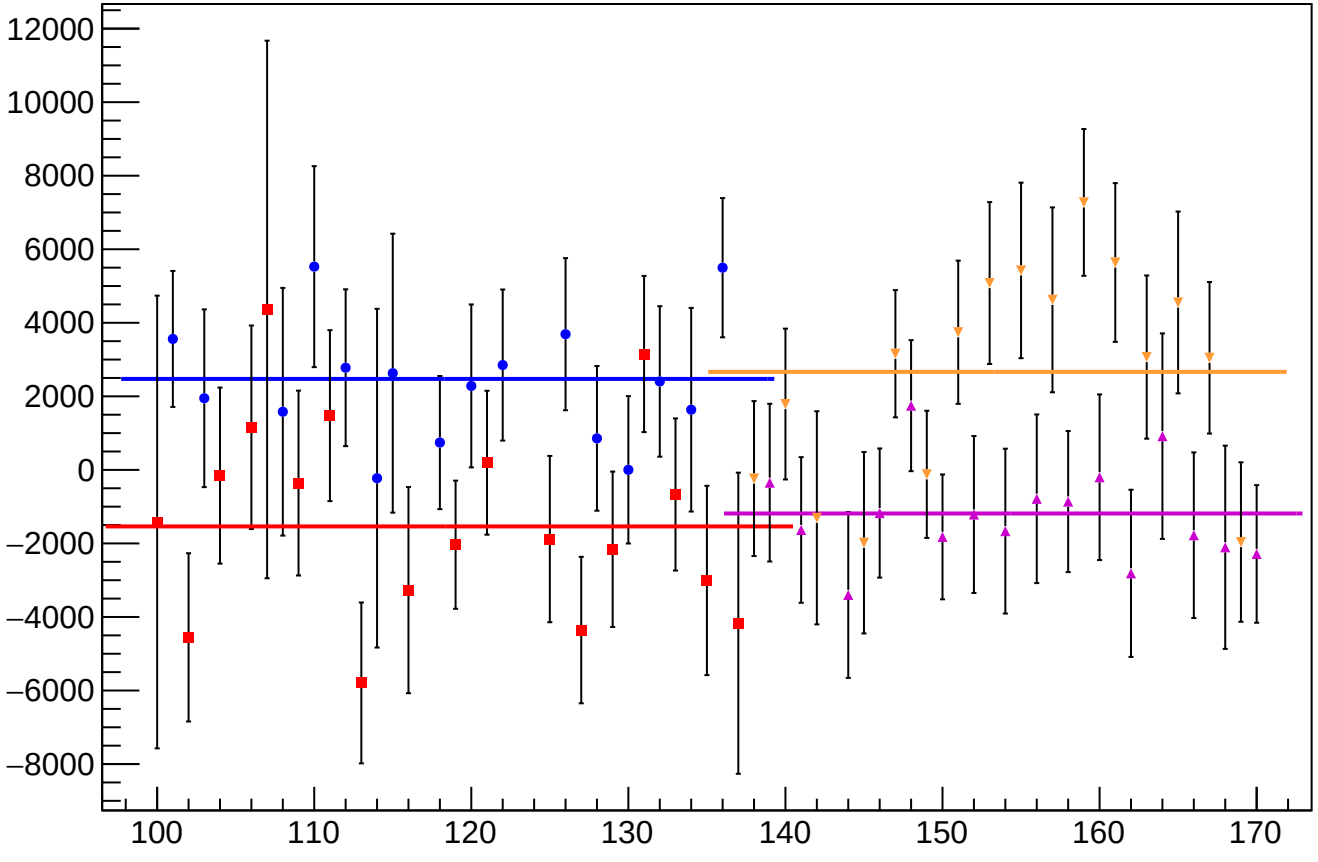
Left In: 1488.921+/-0.295 $\chi^2$/NDF:795434.7/15

+ sign 1142.105+/-0.192 $\chi^2$/NDF: 3931271.7/31

All: 1144.002+/-0.135 $\chi^2$/NDF: 8374518.4/65

- sign 1145.853+/-0.190 $\chi^2$/NDF: 4443053.8/33

# asym_usl_mean vs Slug




Right In: 2474.066+/-562.796 $\chi^2$/NDF: 8.2/15

Left Out: 2666.418+/-534.584 $\chi^2$/NDF:26.1/15

Right Out: -1537.435+/-563.556 $\chi^2$/NDF: 18.5/17

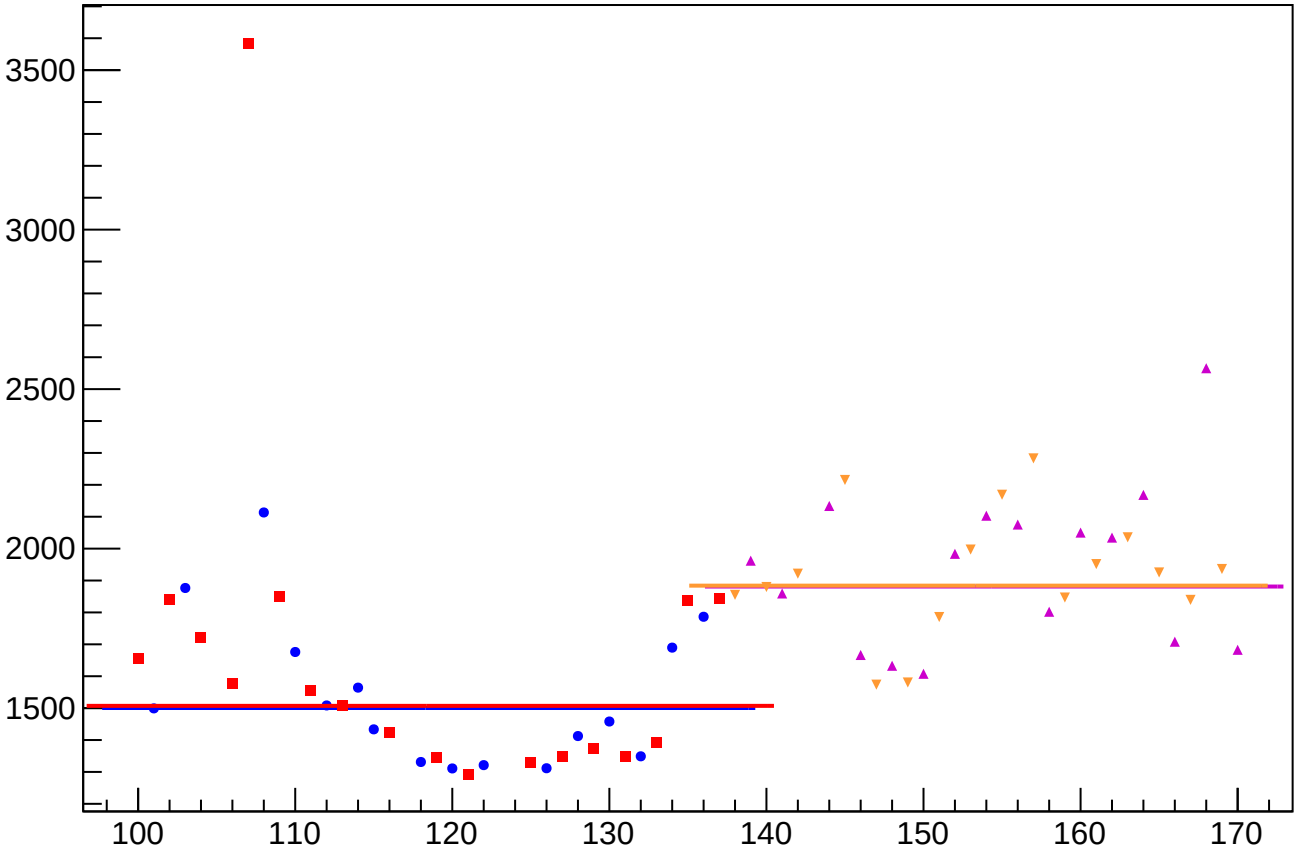
Left In: -1185.533+/-522.137 $\chi^2$/NDF:5.9/15

+ sign 2575.183+/-387.598 $\chi^2$/NDF: 34.3/31

All: 590.212+/-272.438 $\chi^2$/NDF: 110.8/65

- sign -1348.079+/-383.013 $\chi^2$/NDF: 24.6/33

# asym_usl_rms vs Slug




Right In: 1500.377+/-0.398 $\chi^2$/NDF: 258792.8/15

Left Out: 1883.949+/-0.378 $\chi^2$/NDF:266701.2/15

Right Out: 1507.098+/-0.398 $\chi^2$/NDF: 401227.7/17

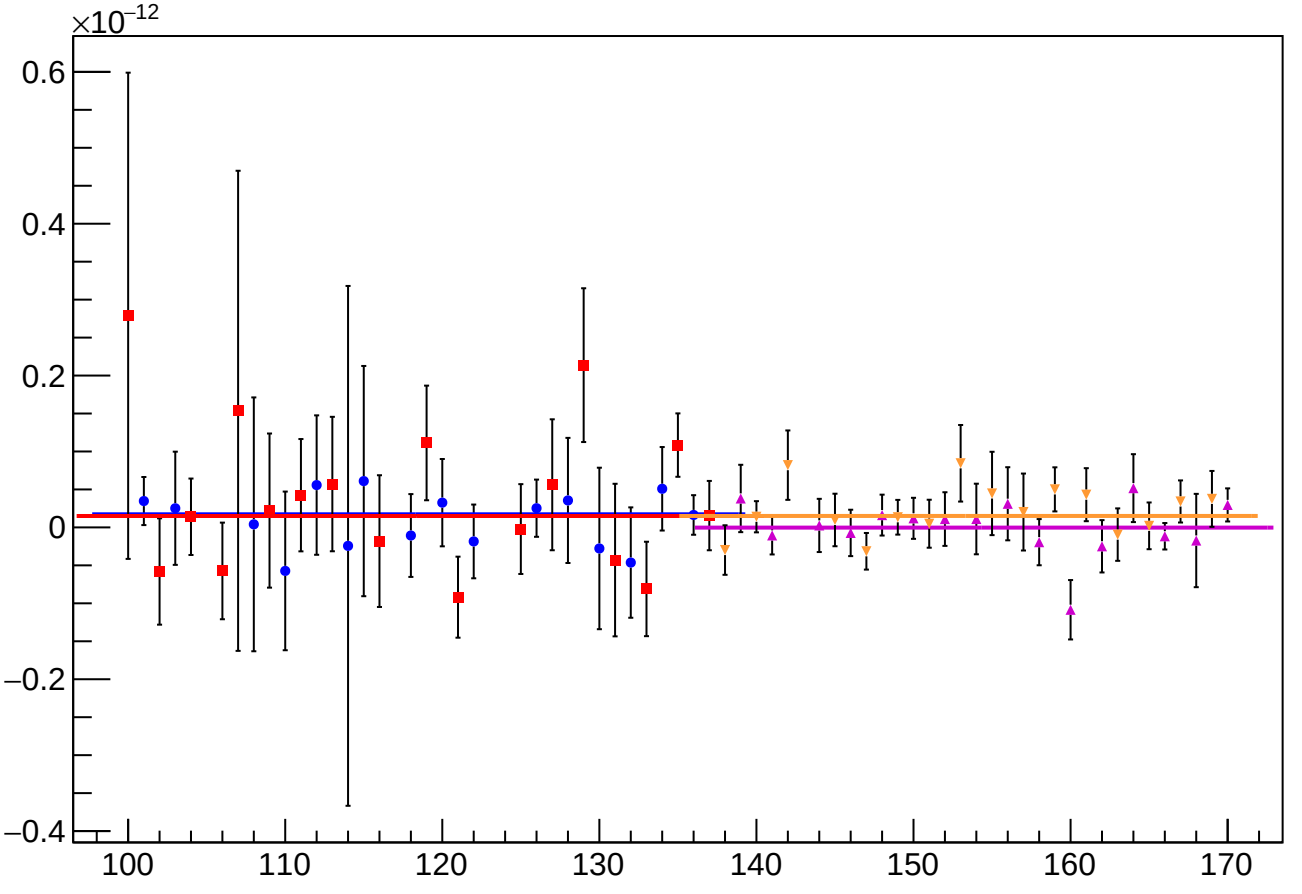
Left In: 1881.175+/-0.369 $\chi^2$/NDF:389237.3/15

+ sign 1702.017+/-0.274 $\chi^2$/NDF: 1013867.1/31

All: 1705.240+/-0.193 $\chi^2$/NDF: 2278778.4/65

- sign 1708.387+/-0.271 $\chi^2$/NDF: 1264638.1/33

# asym_usl_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13.7/15

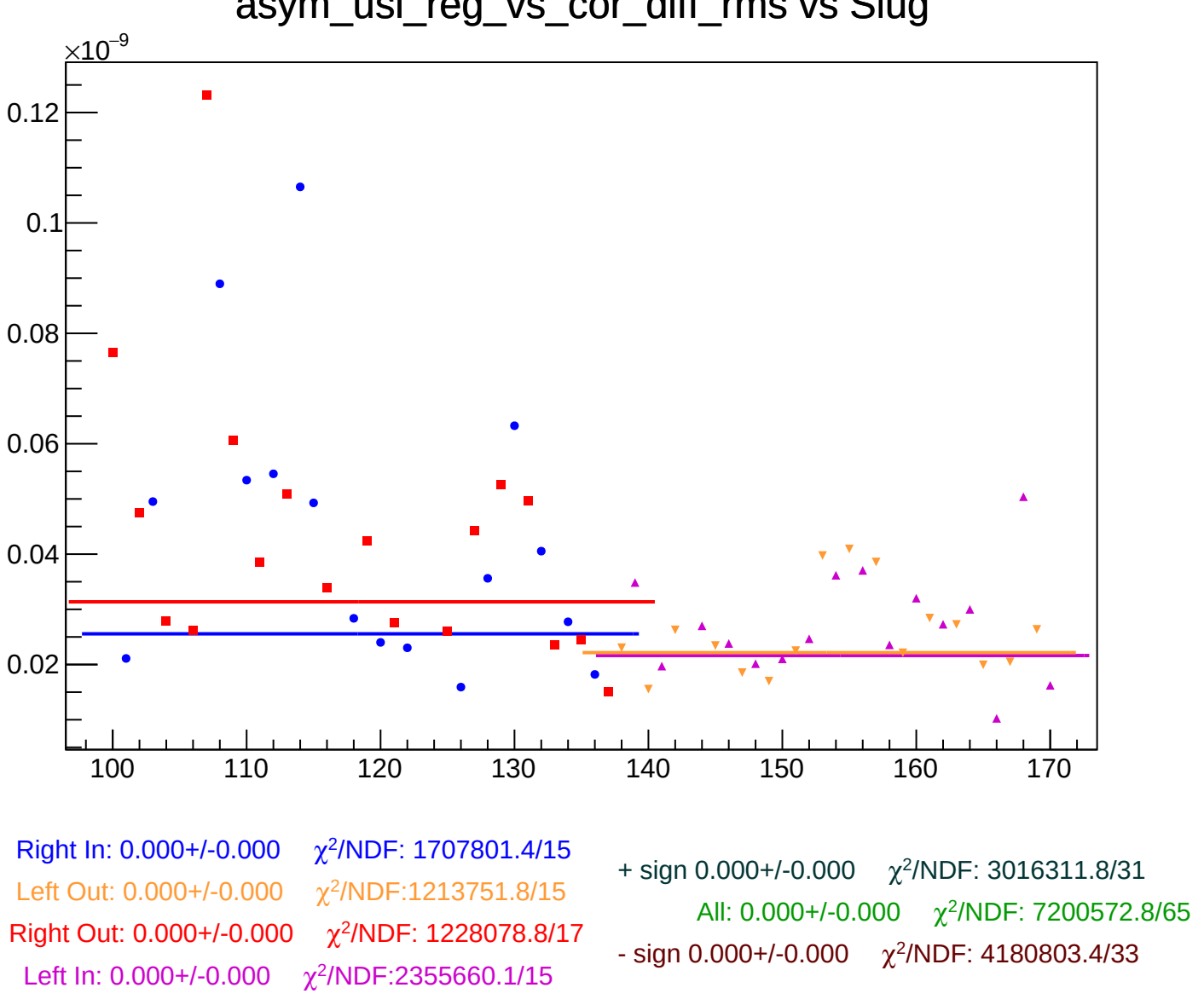
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.3/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:14.4/15

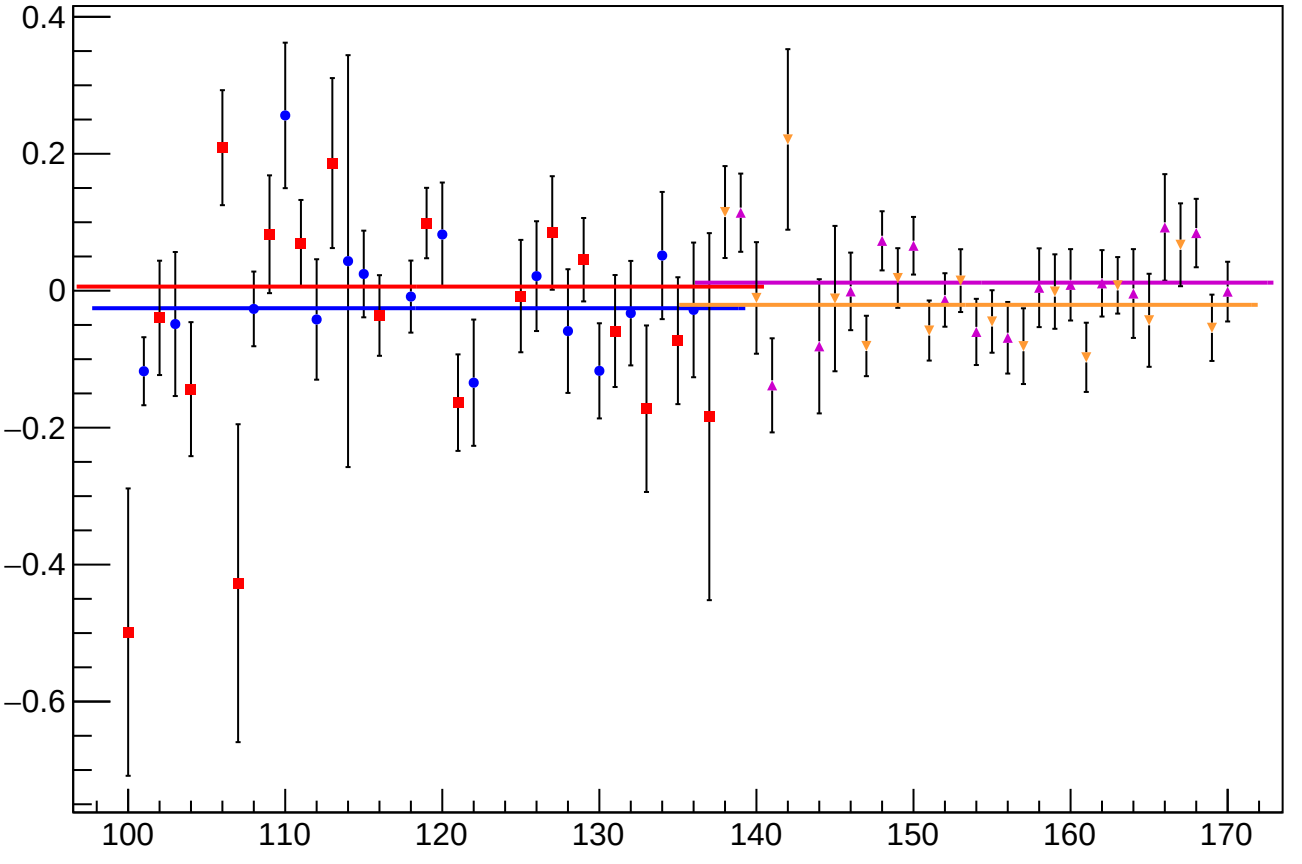
+ sign 0.000+/-0.000 $\chi^2$/NDF: 17.1/31

All: 0.000+/-0.000 $\chi^2$/NDF: 55.4/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 36.5/33


asym_usl_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.12
0.1
0.08
0.06
0.04
0.02
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1707801.4/15
Left Out: 0.000+/-0.000 χ²/NDF:1213751.8/15
Right Out: 0.000+/-0.000 χ²/NDF: 1228078.8/17
Left In: 0.000+/-0.000 χ²/NDF:2355660.1/15
+ sign 0.000+/-0.000 χ²/NDF: 3016311.8/31
All: 0.000+/-0.000 χ²/NDF: 7200572.8/65
- sign 0.000+/-0.000 χ²/NDF: 4180803.4/33

# asym_usl_dit_vs_cor_diff_mean vs Slug




Right In: -0.026+/-0.019 $\chi^2$/NDF: 17.6/15

Left Out: -0.021+/-0.013 $\chi^2$/NDF:18.5/15

Right Out: 0.006+/-0.019 $\chi^2$/NDF: 36.5/17

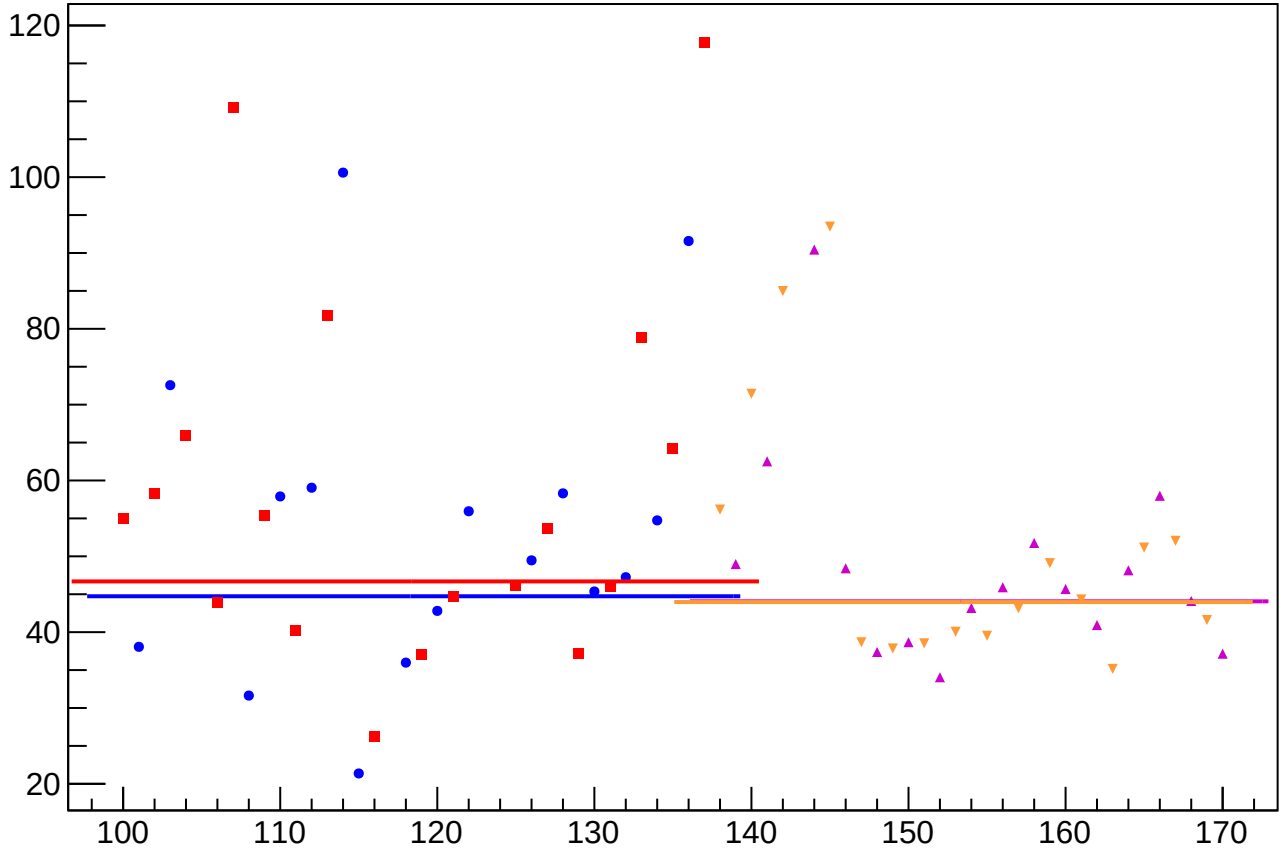
Left In: 0.012+/-0.013 $\chi^2$/NDF:20.9/15

+ sign -0.022+/-0.011 $\chi^2$/NDF: 36.2/31

All: -0.006+/-0.008 $\chi^2$/NDF: 98.1/65

- sign 0.010+/-0.011 $\chi^2$/NDF: 57.5/33

# asym_usl_dit_vs_cor_diff_rms vs Slug




Right In: 44.733+/-0.013 $\chi^2$/NDF: 1334541.9/15

Left Out: 43.969+/-0.009 $\chi^2$/NDF:1226671.6/15

Right Out: 46.691+/-0.014 $\chi^2$/NDF: 1195464.6/17

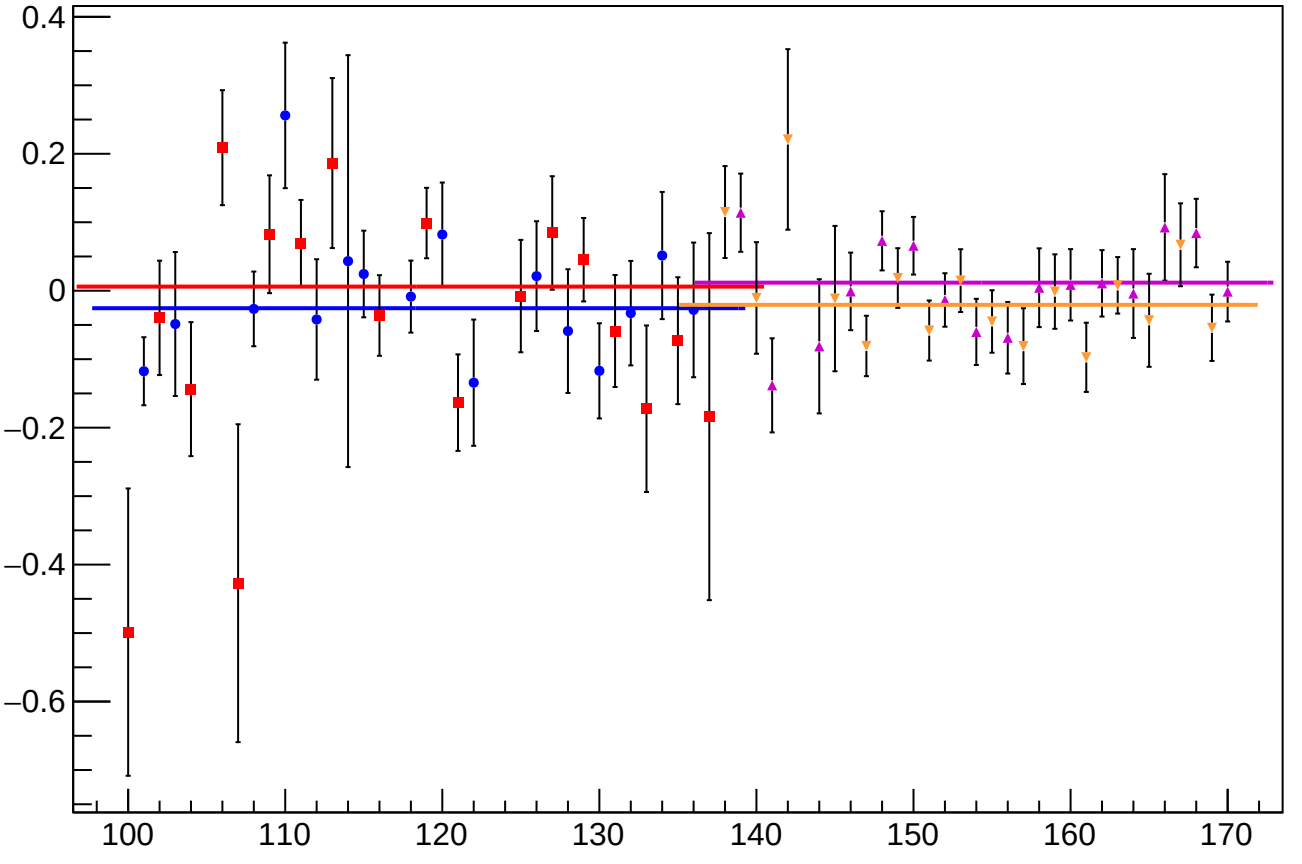
Left In: 44.064+/-0.009 $\chi^2$/NDF:1002391.5/15

+ sign 44.227+/-0.008 $\chi^2$/NDF: 2563409.9/31

All: 44.555+/-0.005 $\chi^2$/NDF: 4790193.9/65

- sign 44.879+/-0.008 $\chi^2$/NDF: 2223165.8/33

# asym_usl_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.026+/-0.019 $\chi^2$/NDF: 17.6/15

Left Out: -0.021+/-0.013 $\chi^2$/NDF:18.5/15

Right Out: 0.006+/-0.019 $\chi^2$/NDF: 36.5/17

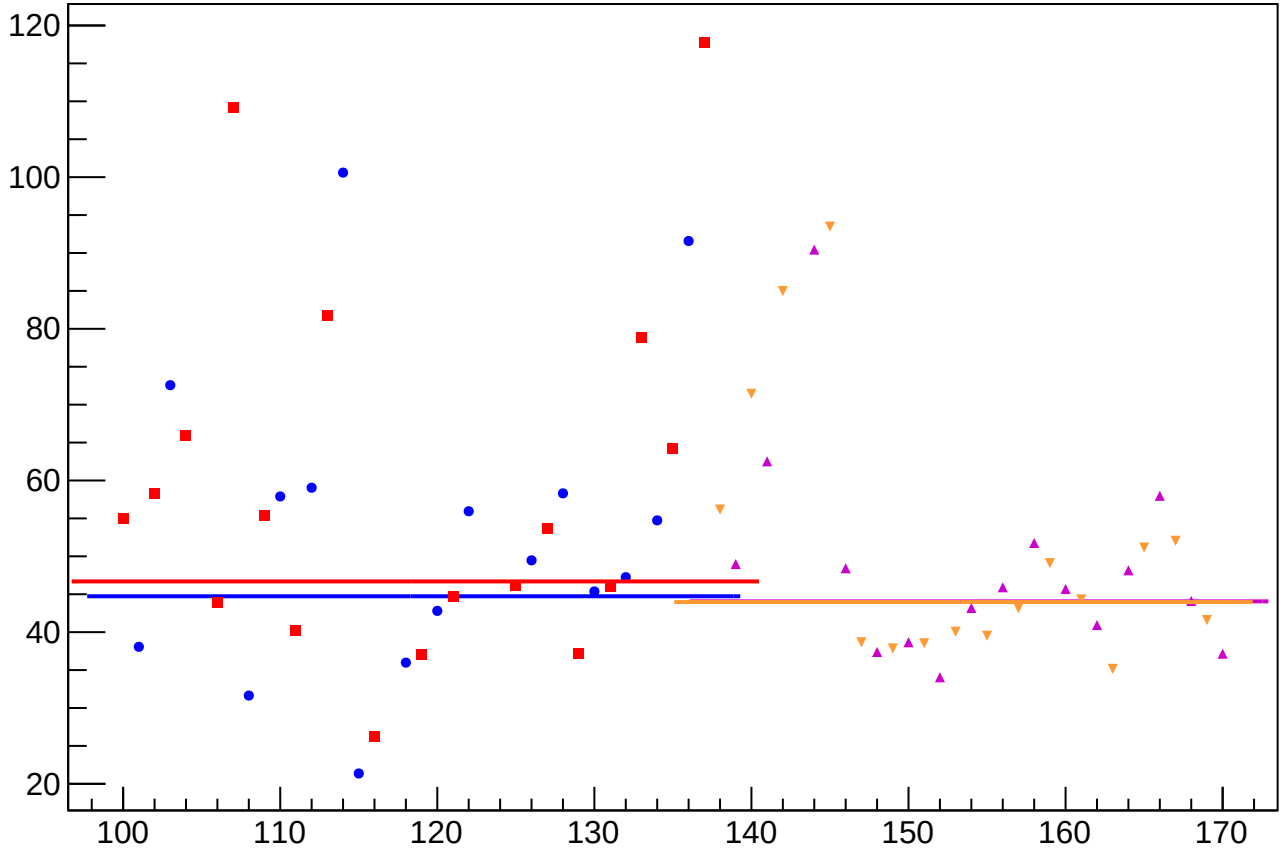
Left In: 0.012+/-0.013 $\chi^2$/NDF:20.9/15

+ sign -0.022+/-0.011 $\chi^2$/NDF: 36.2/31

All: -0.006+/-0.008 $\chi^2$/NDF: 98.1/65

- sign 0.010+/-0.011 $\chi^2$/NDF: 57.5/33

# asym_usl_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 44.733+/-0.013 $\chi^2$/NDF: 1334541.9/15

Left Out: 43.969+/-0.009 $\chi^2$/NDF:1226671.6/15

Right Out: 46.691+/-0.014 $\chi^2$/NDF: 1195464.6/17

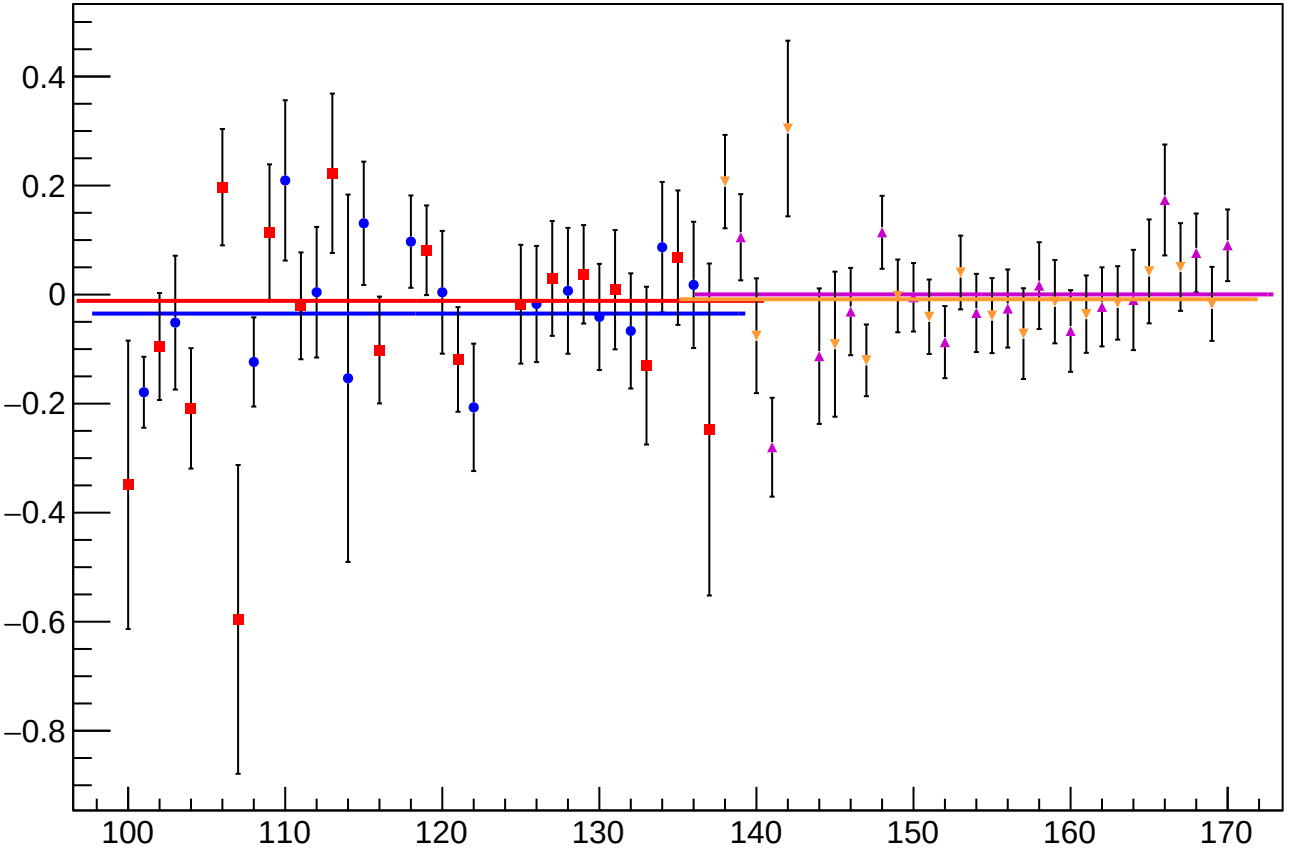
Left In: 44.064+/-0.009 $\chi^2$/NDF:1002391.5/15

+ sign 44.227+/-0.008 $\chi^2$/NDF: 2563409.9/31

All: 44.555+/-0.005 $\chi^2$/NDF: 4790193.9/65

- sign 44.879+/-0.008 $\chi^2$/NDF: 2223165.8/33

# asym_usl_dit_vs_overload_cor_diff_mean vs Slug




Right In: -0.035+/-0.026 $\chi^2$/NDF: 17.4/15

Left Out: -0.009+/-0.019 $\chi^2$/NDF:16.3/15

Right Out: -0.012+/-0.027 $\chi^2$/NDF: 22.8/17

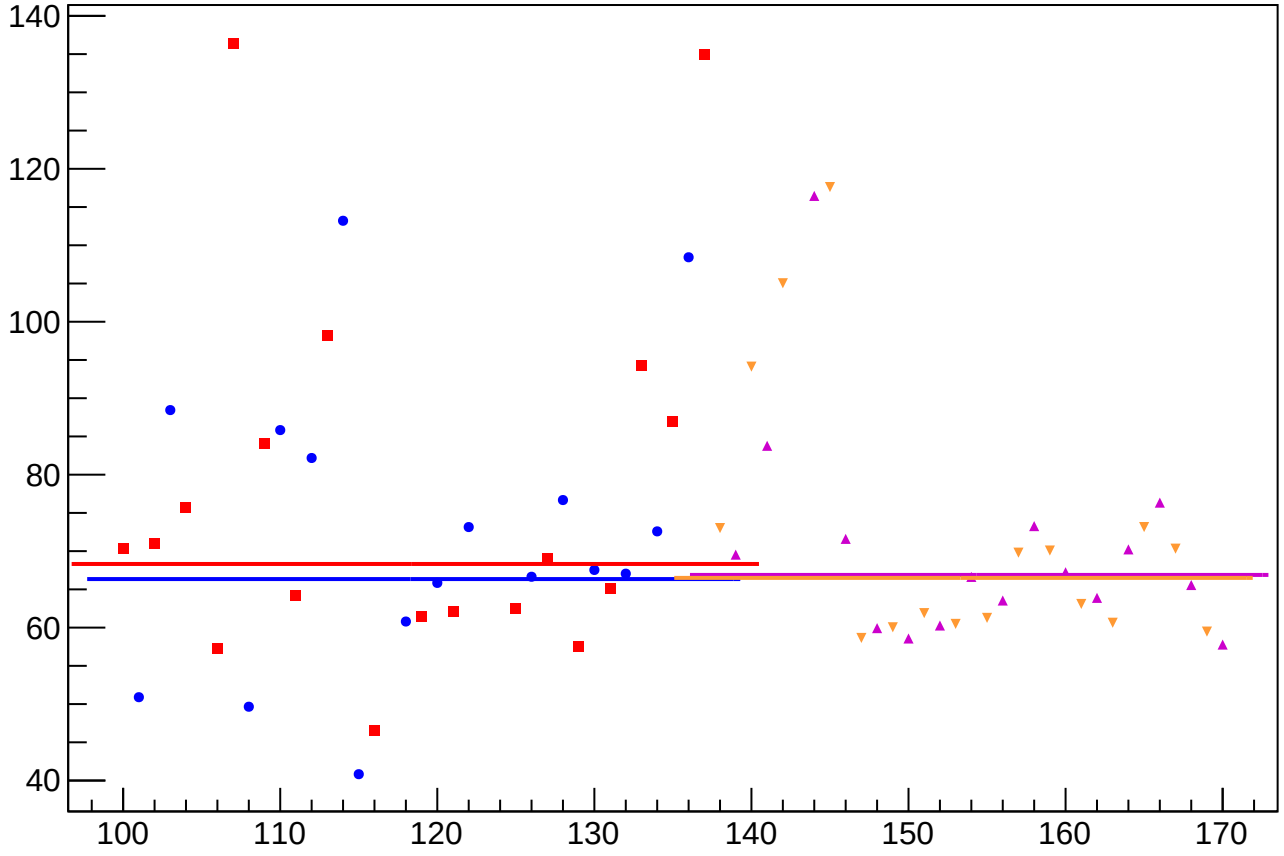
Left In: 0.000+/-0.019 $\chi^2$/NDF:24.1/15

+ sign -0.018+/-0.016 $\chi^2$/NDF: 34.4/31

All: -0.011+/-0.011 $\chi^2$/NDF: 81.9/65

- sign -0.004+/-0.016 $\chi^2$/NDF: 47.0/33

# asym_usl_dit_vs_overload_cor_diff_rms vs Slug




Right In: 66.348+/-0.019 $\chi^2$/NDF: 772653.3/15

Left Out: 66.501+/-0.014 $\chi^2$/NDF:705754.4/15

Right Out: 68.322+/-0.019 $\chi^2$/NDF: 629670.0/17

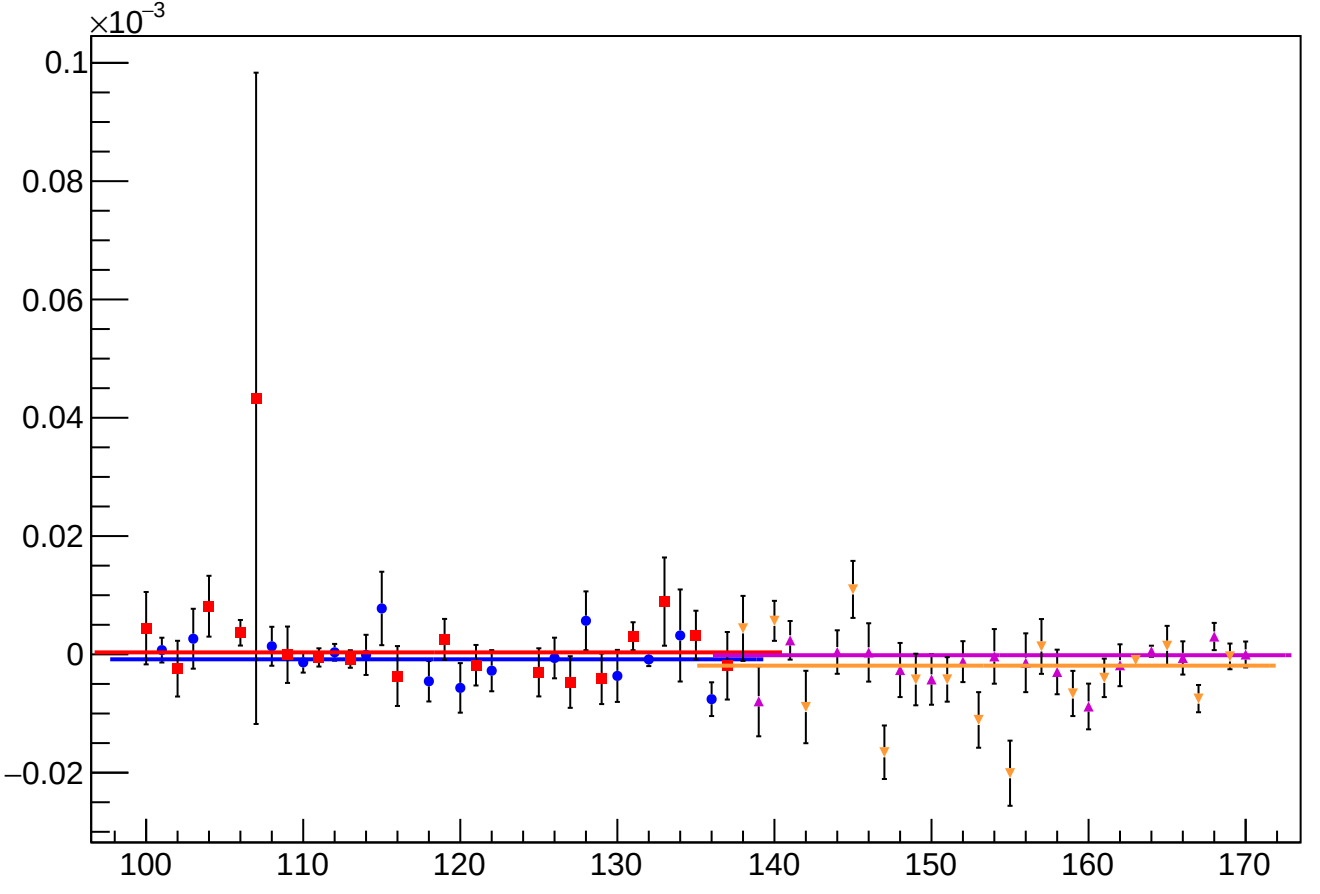
Left In: 66.890+/-0.013 $\chi^2$/NDF:552875.0/15

+ sign 66.447+/-0.011 $\chi^2$/NDF: 1478451.3/31

All: 66.910+/-0.008 $\chi^2$/NDF: 2668261.0/65

- sign 67.368+/-0.011 $\chi^2$/NDF: 1186323.1/33

# asym_usl_eigen_dit_vs_dit_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:51.9/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.8/17

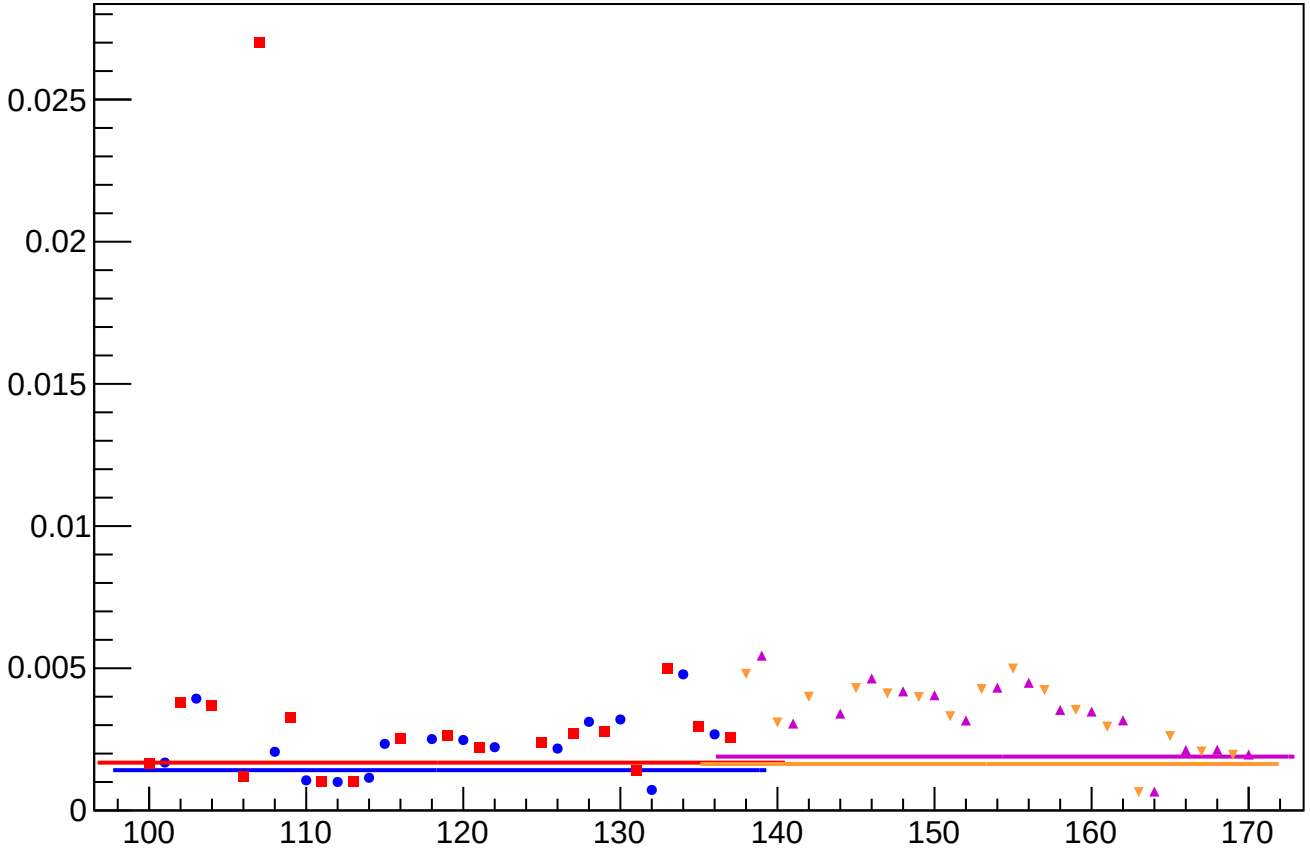
Left In: -0.000+/-0.000 $\chi^2$/NDF:12.0/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 68.5/31

All: -0.000+/-0.000 $\chi^2$/NDF: 100.6/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 27.0/33

# asym_usl_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.001+/-0.000 $\chi^2$/NDF: 3547259.2/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:9838150.5/15

Right Out: 0.002+/-0.000 $\chi^2$/NDF: 3427218.5/17

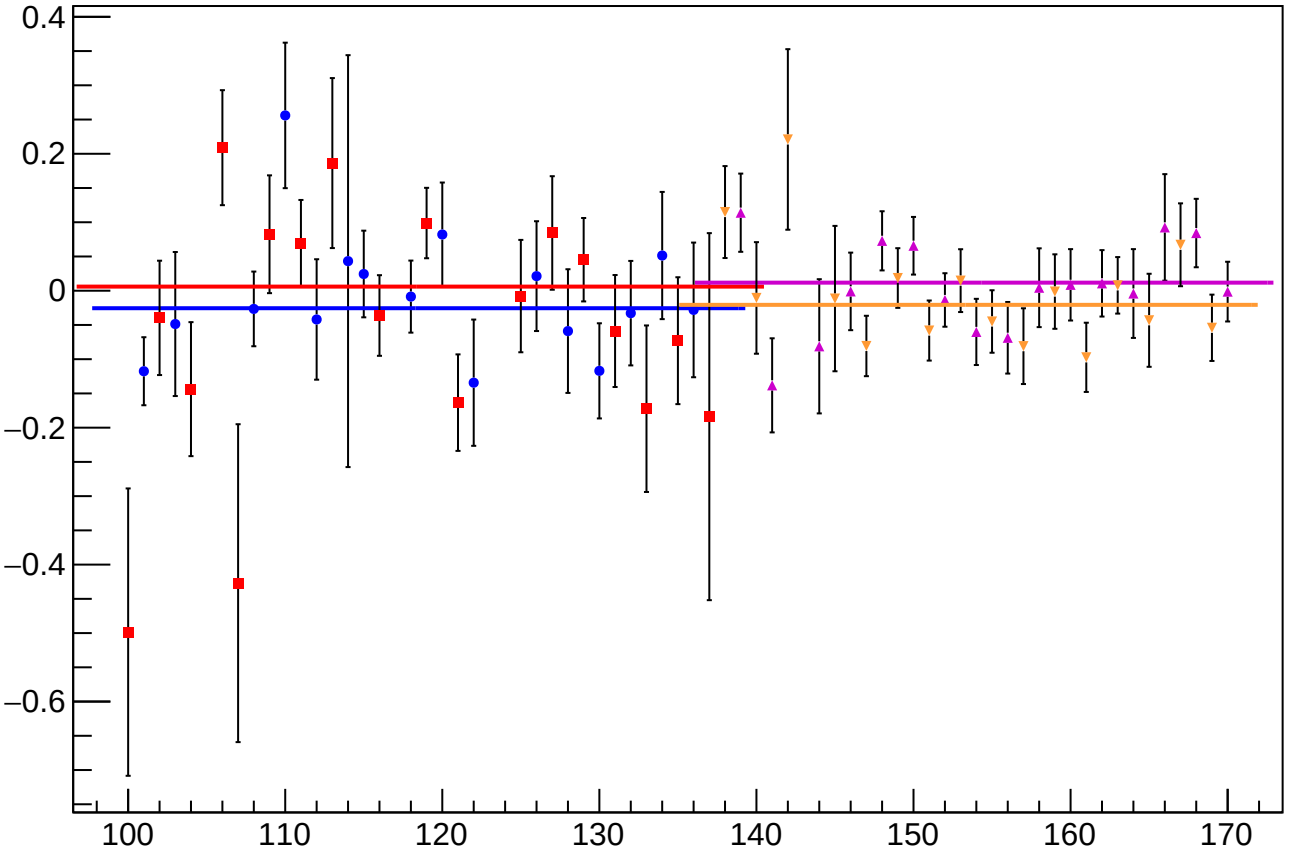
Left In: 0.002+/-0.000 $\chi^2$/NDF:8774636.2/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 13511390.5/31

All: 0.002+/-0.000 $\chi^2$/NDF: 26160983.6/65

- sign 0.002+/-0.000 $\chi^2$/NDF: 12296967.2/33

# asym_usl_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.026+/-0.019 $\chi^2$/NDF: 17.6/15

Left Out: -0.021+/-0.013 $\chi^2$/NDF:18.5/15

Right Out: 0.006+/-0.019 $\chi^2$/NDF: 36.5/17

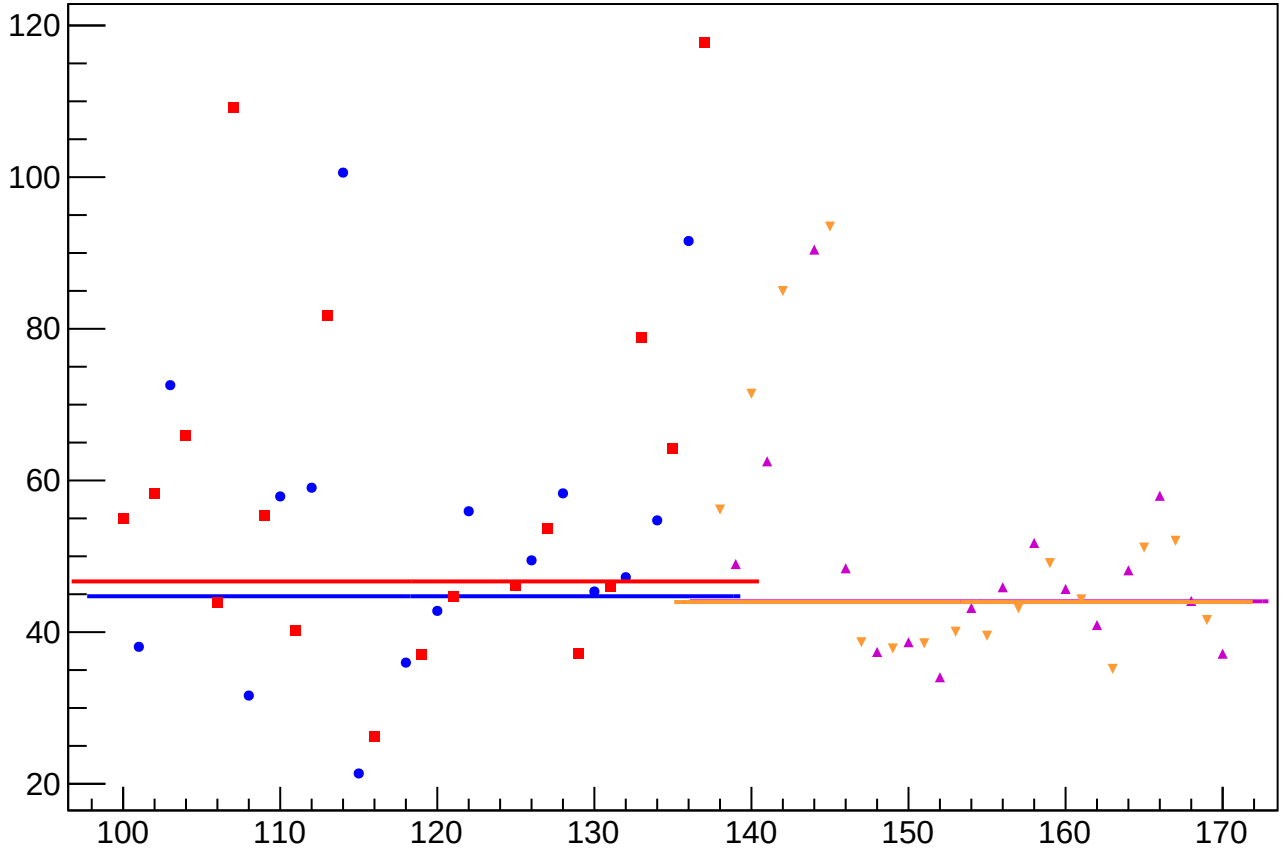
Left In: 0.012+/-0.013 $\chi^2$/NDF:20.9/15

+ sign -0.022+/-0.011 $\chi^2$/NDF: 36.2/31

All: -0.006+/-0.008 $\chi^2$/NDF: 98.1/65

- sign 0.010+/-0.011 $\chi^2$/NDF: 57.5/33

# asym_usl_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 44.732+/-0.013 $\chi^2$/NDF: 1334604.0/15

Left Out: 43.970+/-0.009 $\chi^2$/NDF:1226637.2/15

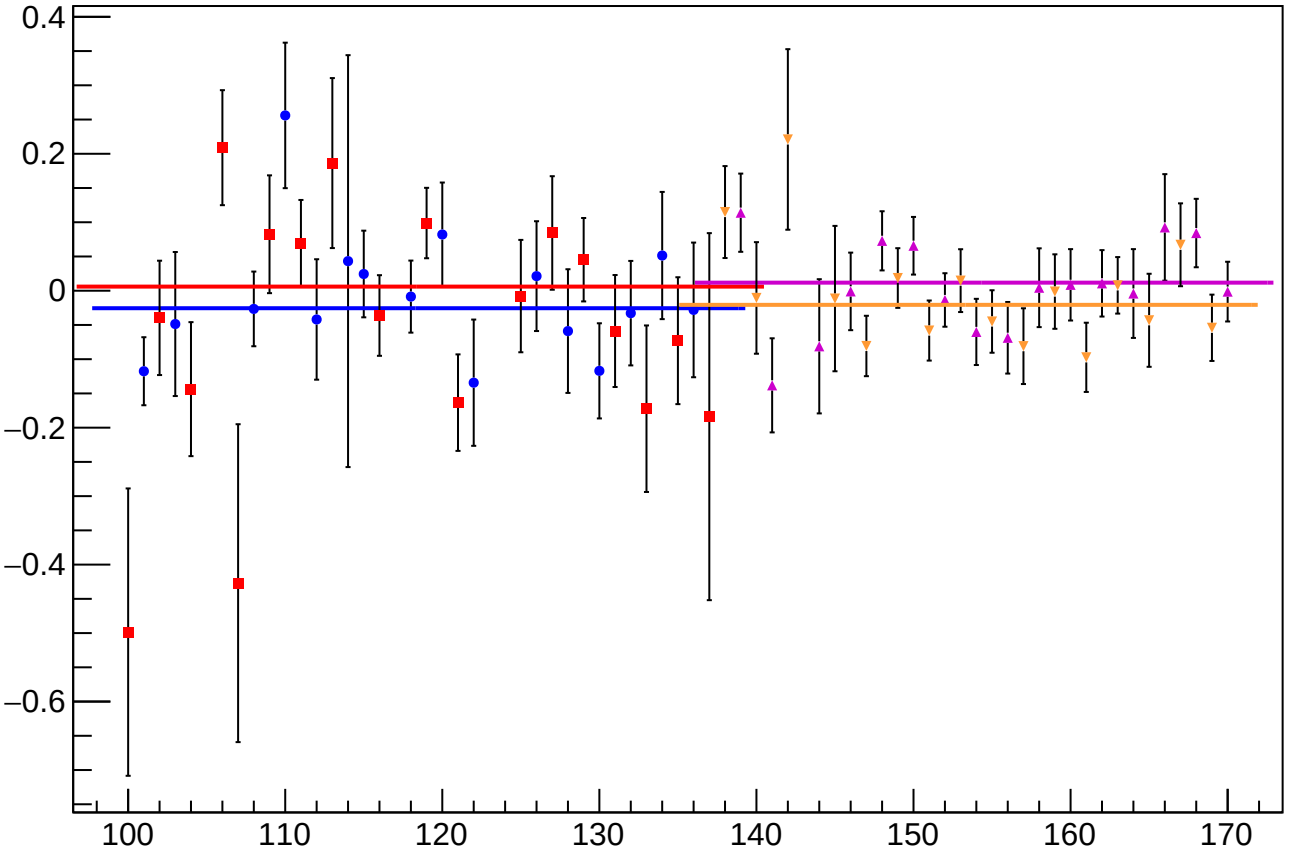
Right Out: 46.690+/-0.014 $\chi^2$/NDF: 1195504.1/17

Left In: 44.064+/-0.009 $\chi^2$/NDF:1002372.0/15

+ sign 44.226+/-0.008 $\chi^2$/NDF: 2563431.1/31

All: 44.555+/-0.005 $\chi^2$/NDF: 4790214.4/65

- sign 44.879+/-0.008 $\chi^2$/NDF: 2223164.9/33




Right In: -0.026+/-0.019 $\chi^2$/NDF: 17.6/15

Left Out: -0.021+/-0.013 $\chi^2$/NDF:18.5/15

Right Out: 0.006+/-0.019 $\chi^2$/NDF: 36.5/17

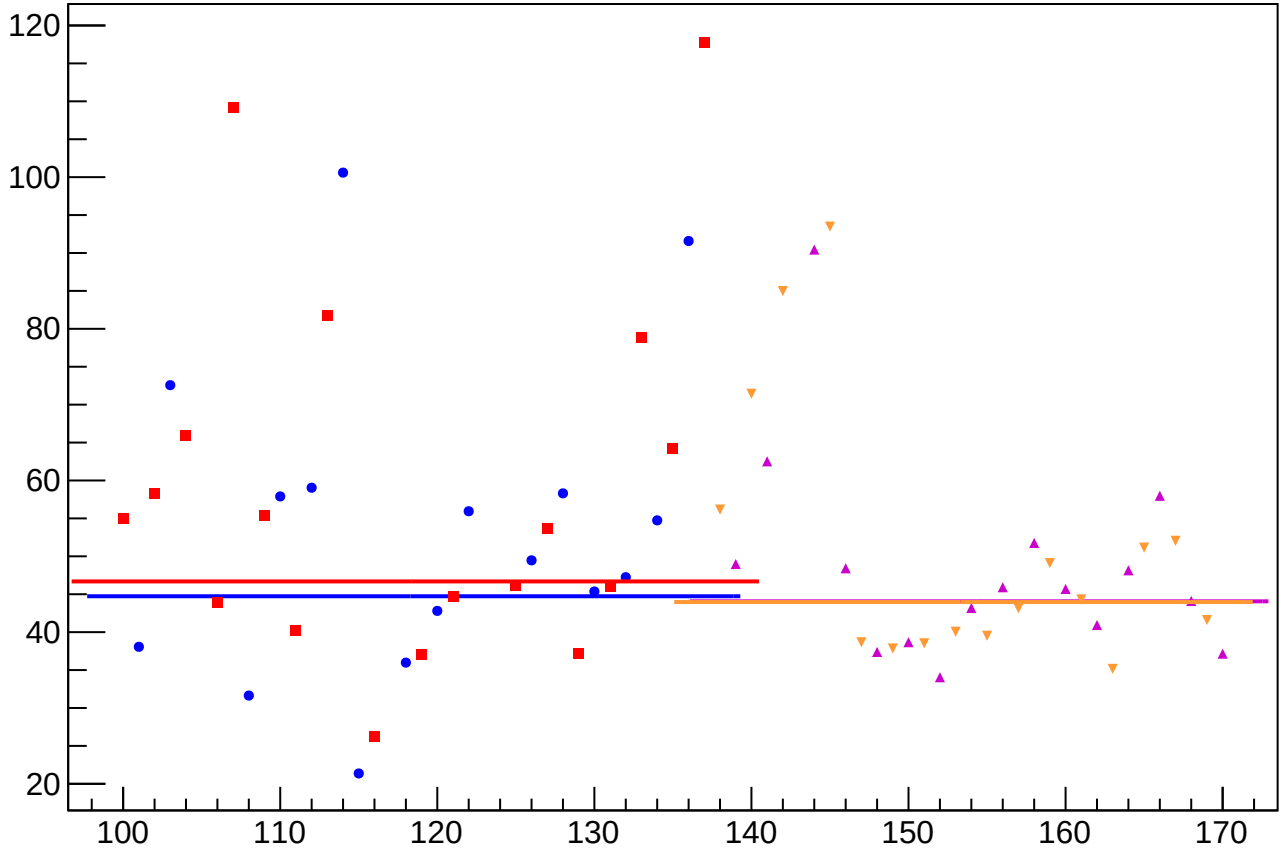
Left In: 0.012+/-0.013 $\chi^2$/NDF:20.9/15

+ sign -0.022+/-0.011 $\chi^2$/NDF: 36.2/31

All: -0.006+/-0.008 $\chi^2$/NDF: 98.1/65

- sign 0.010+/-0.011 $\chi^2$/NDF: 57.5/33

# asym_usl_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 44.732+/-0.013 $\chi^2$/NDF: 1334604.0/15

Left Out: 43.970+/-0.009 $\chi^2$/NDF:1226637.2/15

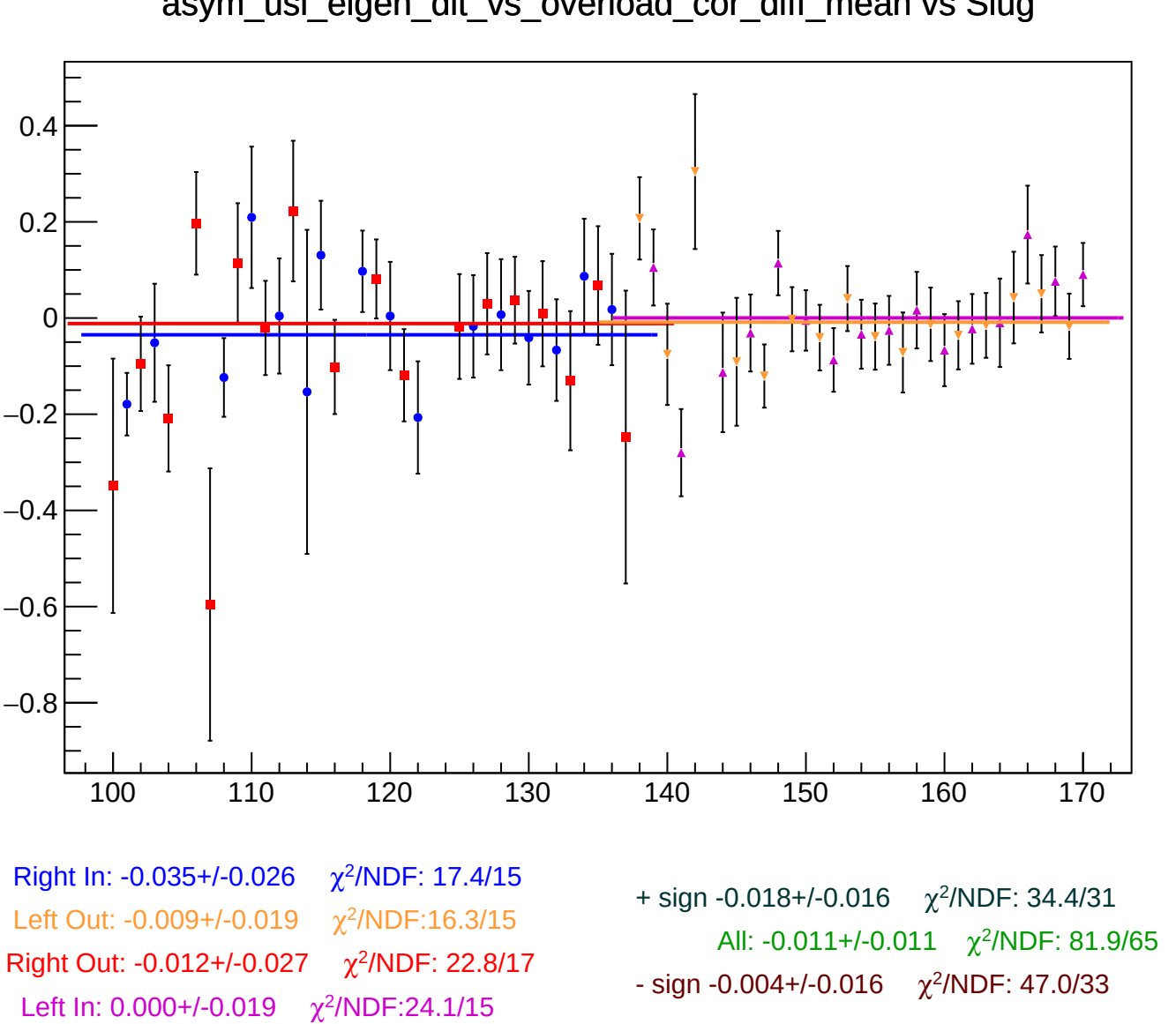
Right Out: 46.690+/-0.014 $\chi^2$/NDF: 1195504.1/17

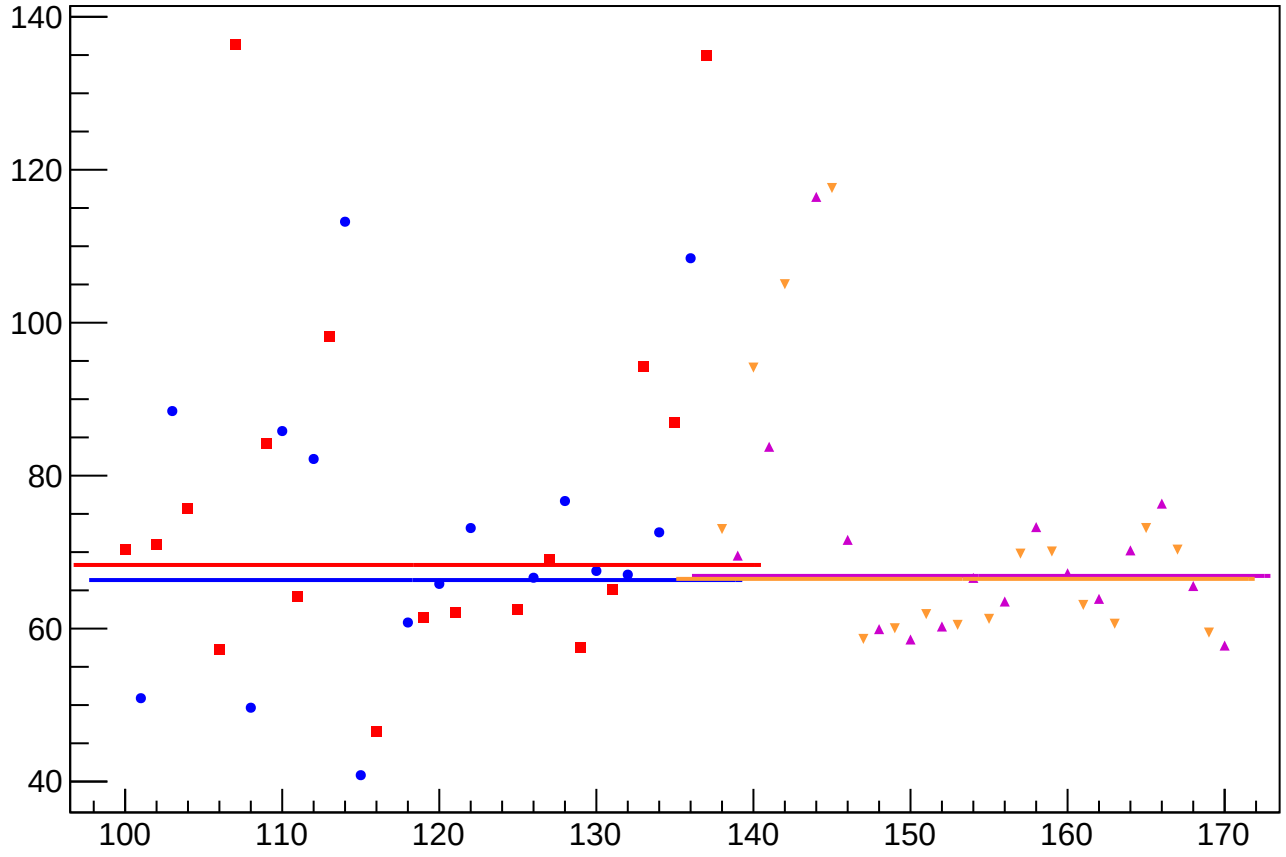
Left In: 44.064+/-0.009 $\chi^2$/NDF:1002372.0/15

+ sign 44.226+/-0.008 $\chi^2$/NDF: 2563431.1/31

All: 44.555+/-0.005 $\chi^2$/NDF: 4790214.4/65

- sign 44.879+/-0.008 $\chi^2$/NDF: 2223164.9/33


asym_usl_eigen_dit_vs_overload_cor_diff_mean vs Slug
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
100
110
120
130
140
150
160
170
Right In: -0.035+/-0.026 χ²/NDF: 17.4/15
Left Out: -0.009+/-0.019 χ²/NDF:16.3/15
Right Out: -0.012+/-0.027 χ²/NDF: 22.8/17
Left In: 0.000+/-0.019 χ²/NDF:24.1/15
+ sign -0.018+/-0.016 χ²/NDF: 34.4/31
All: -0.011+/-0.011 χ²/NDF: 81.9/65
- sign -0.004+/-0.016 χ²/NDF: 47.0/33




Right In: 66.348+/-0.019 $\chi^2$/NDF: 772660.4/15

Left Out: 66.501+/-0.014 $\chi^2$/NDF:705741.0/15

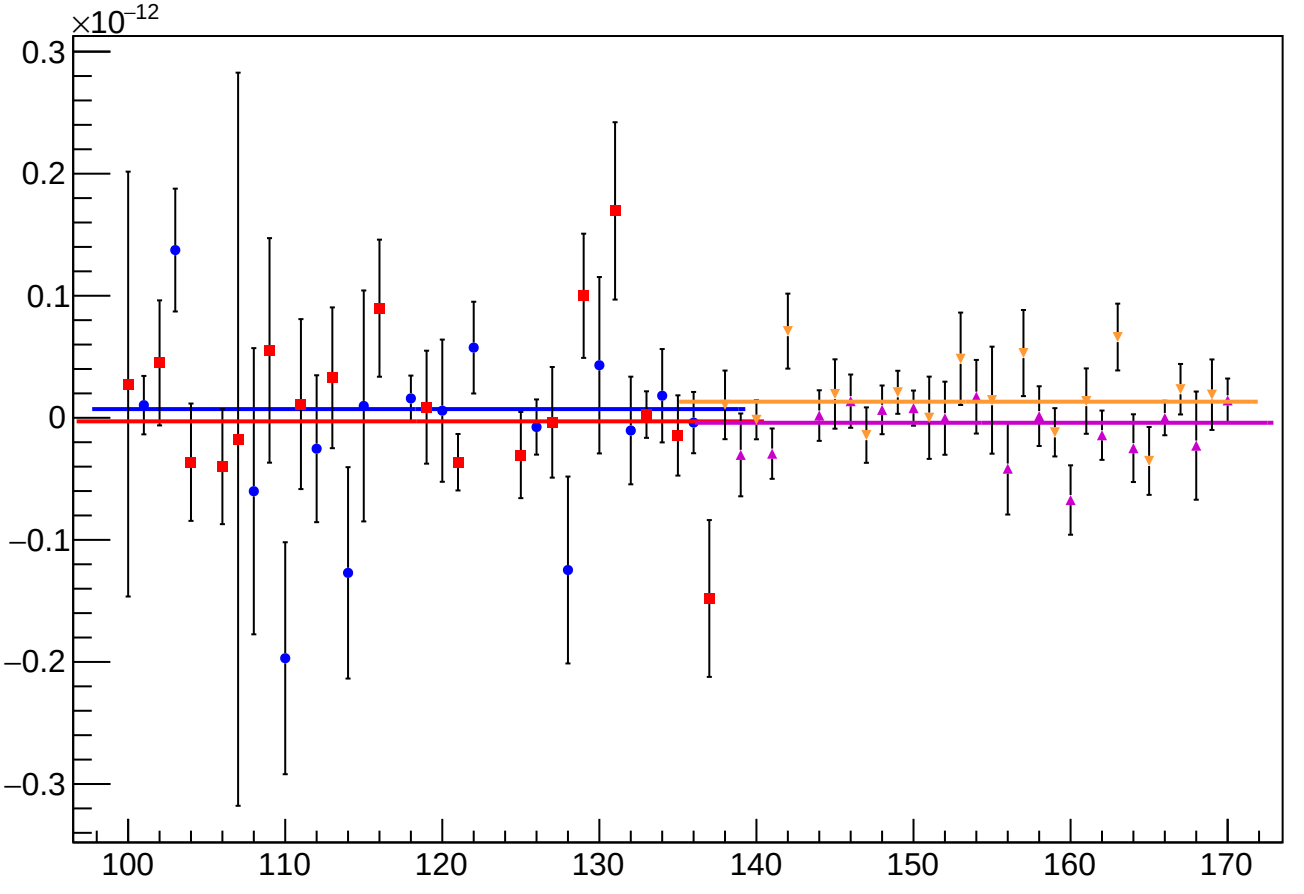
Right Out: 68.321+/-0.019 $\chi^2$/NDF: 629665.7/17

Left In: 66.890+/-0.013 $\chi^2$/NDF:552866.9/15

+ sign 66.447+/-0.011 $\chi^2$/NDF: 1478445.5/31

All: 66.910+/-0.008 $\chi^2$/NDF: 2668238.1/65

- sign 67.367+/-0.011 $\chi^2$/NDF: 1186306.5/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 20.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:17.1/15

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 23.4/17

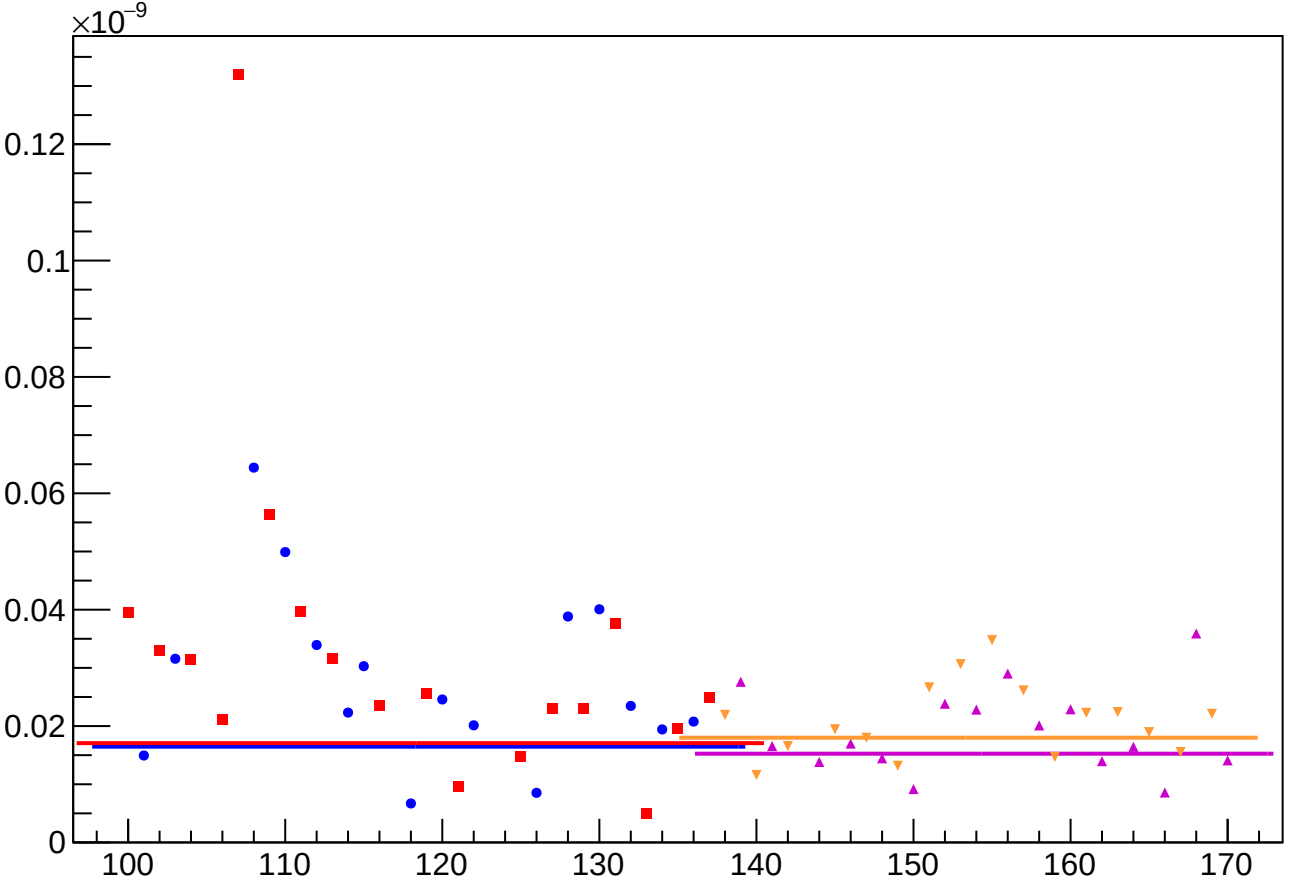
Left In: -0.000+/-0.000 $\chi^2$/NDF:12.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 37.8/31

All: 0.000+/-0.000 $\chi^2$/NDF: 78.2/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 35.8/33

# asym_usl_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2345888.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1503826.0/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2791354.7/17

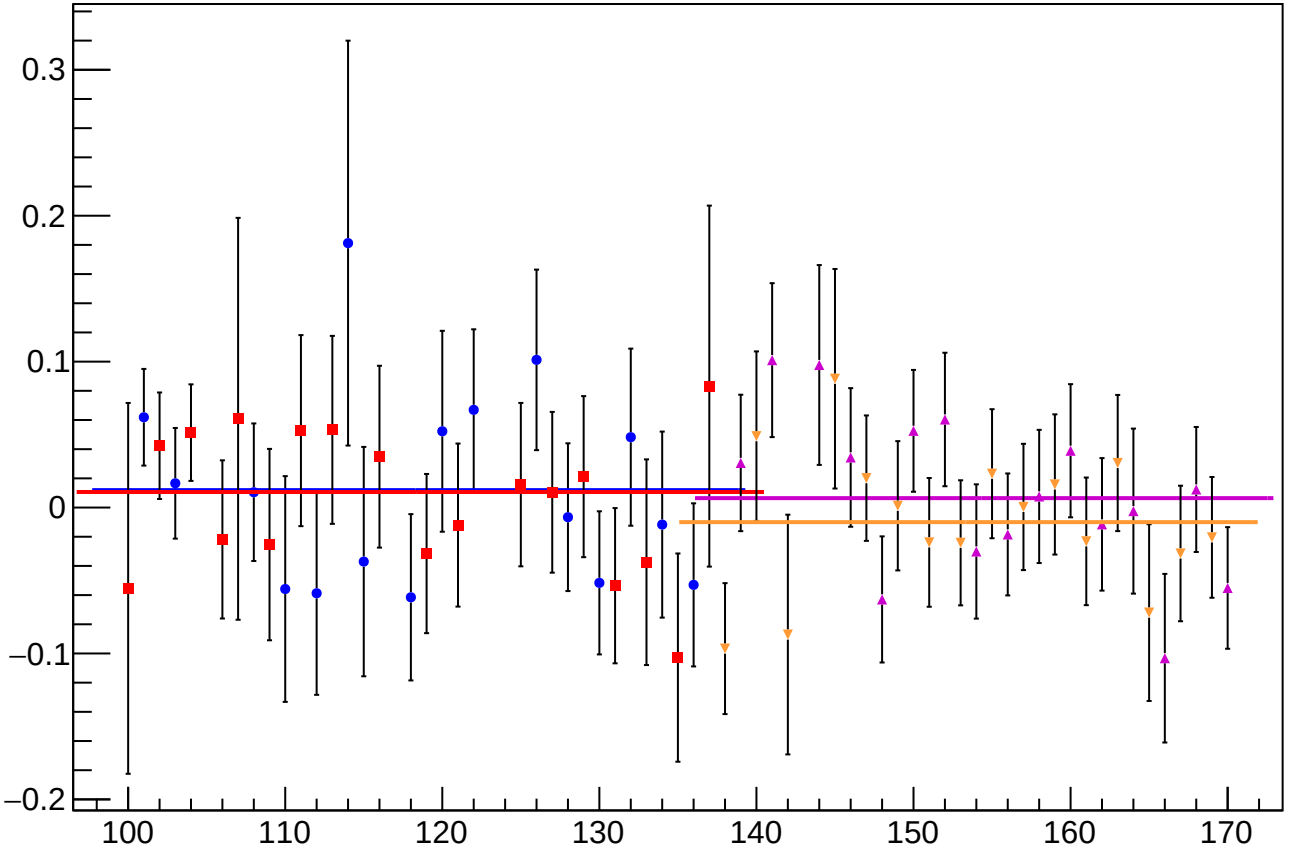
Left In: 0.000+/-0.000 $\chi^2$/NDF:2338217.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3887947.4/31

All: 0.000+/-0.000 $\chi^2$/NDF: 9204586.2/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 5181683.7/33

# asym_usl_overload_cor_vs_cor_diff_mean vs Slug




Right In: 0.012+/-0.014 $\chi^2$/NDF: 14.7/15

Left Out: -0.010+/-0.012 $\chi^2$/NDF:11.2/15

Right Out: 0.011+/-0.013 $\chi^2$/NDF: 9.9/17

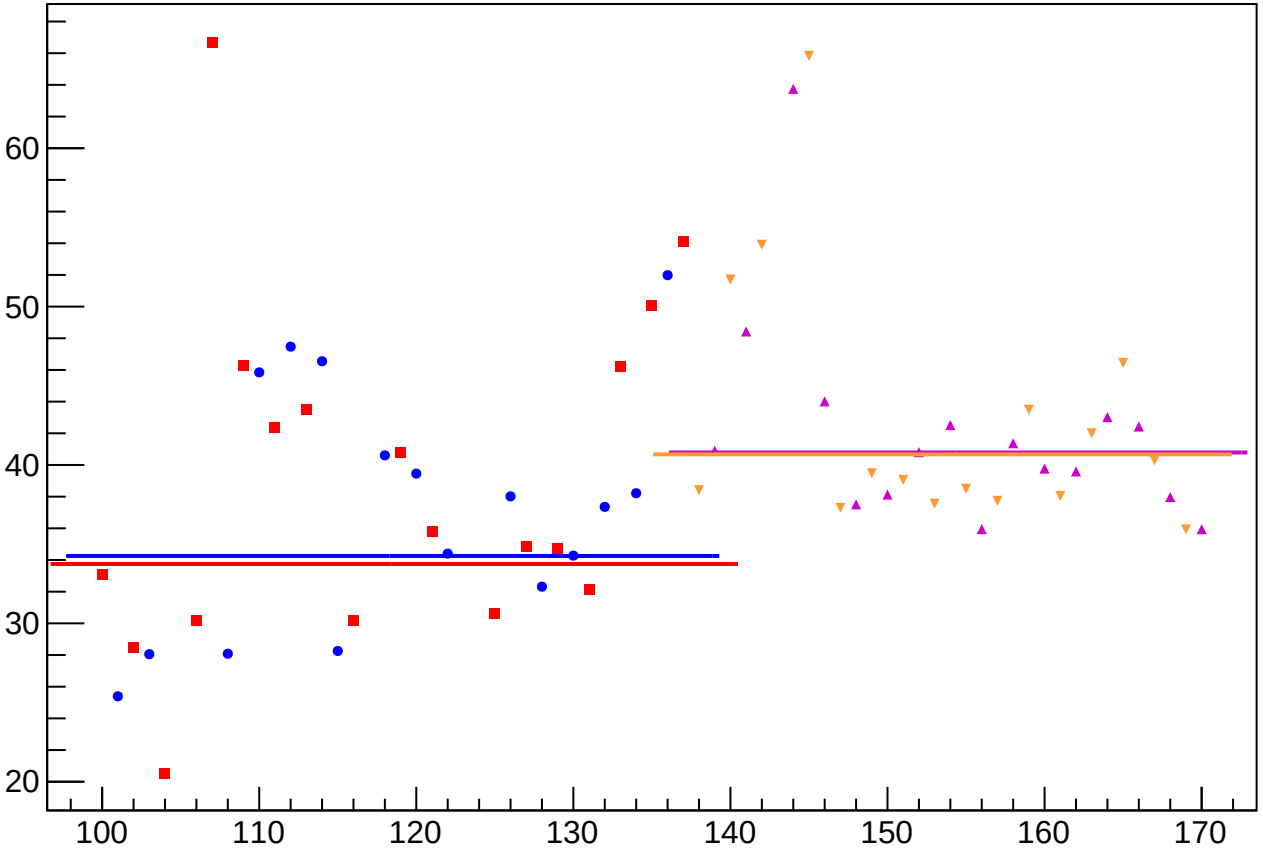
Left In: 0.006+/-0.012 $\chi^2$/NDF:18.3/15

+ sign -0.000+/-0.009 $\chi^2$/NDF: 27.4/31

All: 0.004+/-0.006 $\chi^2$/NDF: 56.1/65

- sign 0.008+/-0.009 $\chi^2$/NDF: 28.3/33

# asym_usl_overload_cor_vs_cor_diff_rms vs Slug




Right In: 34.254+/-0.010 $\chi^2$/NDF: 636017.1/15

Left Out: 40.669+/-0.008 $\chi^2$/NDF:454242.5/15

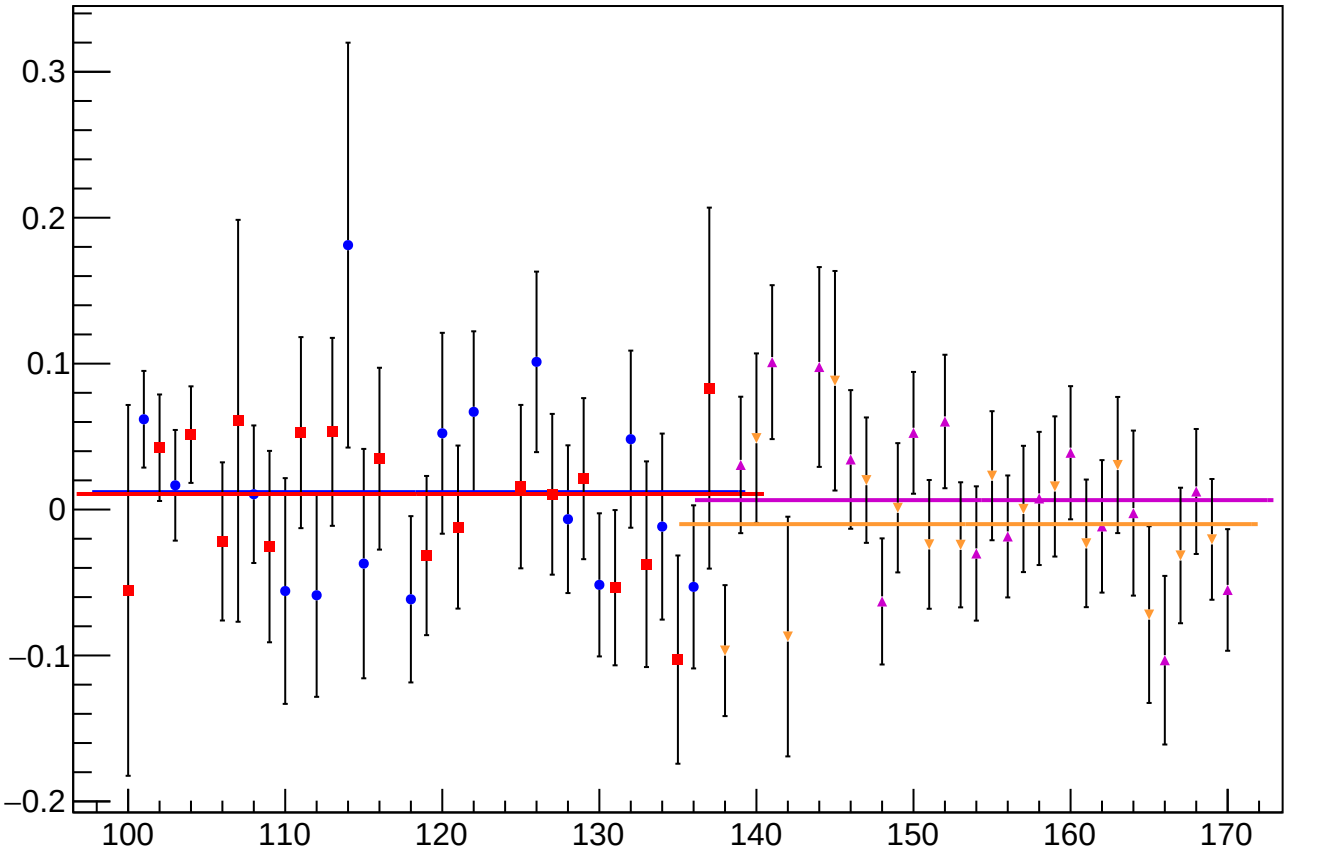
Right Out: 33.746+/-0.010 $\chi^2$/NDF: 911938.6/17

Left In: 40.788+/-0.008 $\chi^2$/NDF:368422.4/15

+ sign 37.879+/-0.006 $\chi^2$/NDF: 1341196.1/31

All: 37.812+/-0.004 $\chi^2$/NDF: 2933662.7/65

- sign 37.748+/-0.006 $\chi^2$/NDF: 1592249.7/33




Right In: 0.012+/-0.014 $\chi^2$/NDF: 14.7/15

Left Out: -0.010+/-0.012 $\chi^2$/NDF:11.2/15

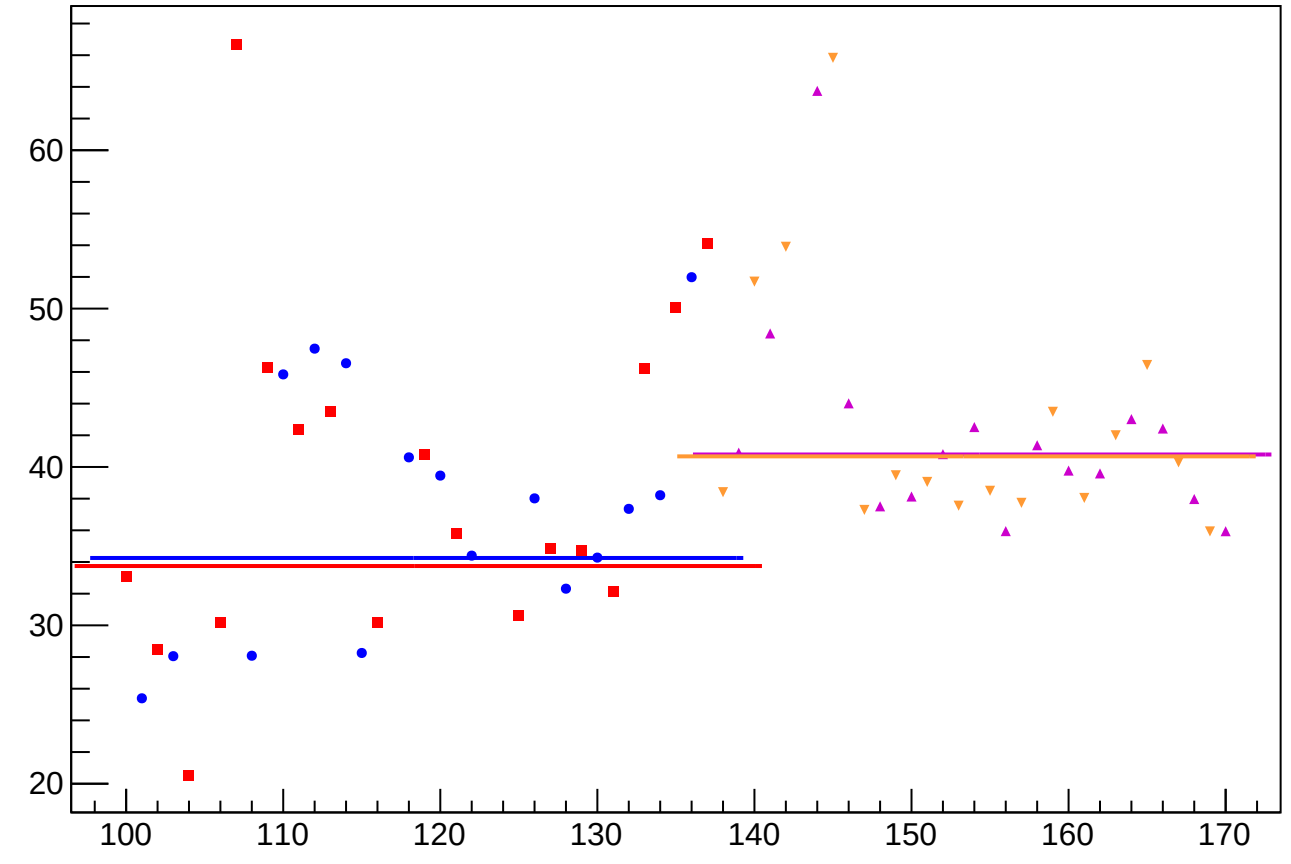
Right Out: 0.011+/-0.013 $\chi^2$/NDF: 9.9/17

Left In: 0.006+/-0.012 $\chi^2$/NDF:18.3/15

+ sign -0.000+/-0.009 $\chi^2$/NDF: 27.4/31

All: 0.004+/-0.006 $\chi^2$/NDF: 56.1/65

- sign 0.008+/-0.009 $\chi^2$/NDF: 28.3/33




Right In: 34.254+/-0.010 $\chi^2$/NDF: 636017.1/15

Left Out: 40.669+/-0.008 $\chi^2$/NDF:454242.5/15

Right Out: 33.746+/-0.010 $\chi^2$/NDF: 911938.6/17

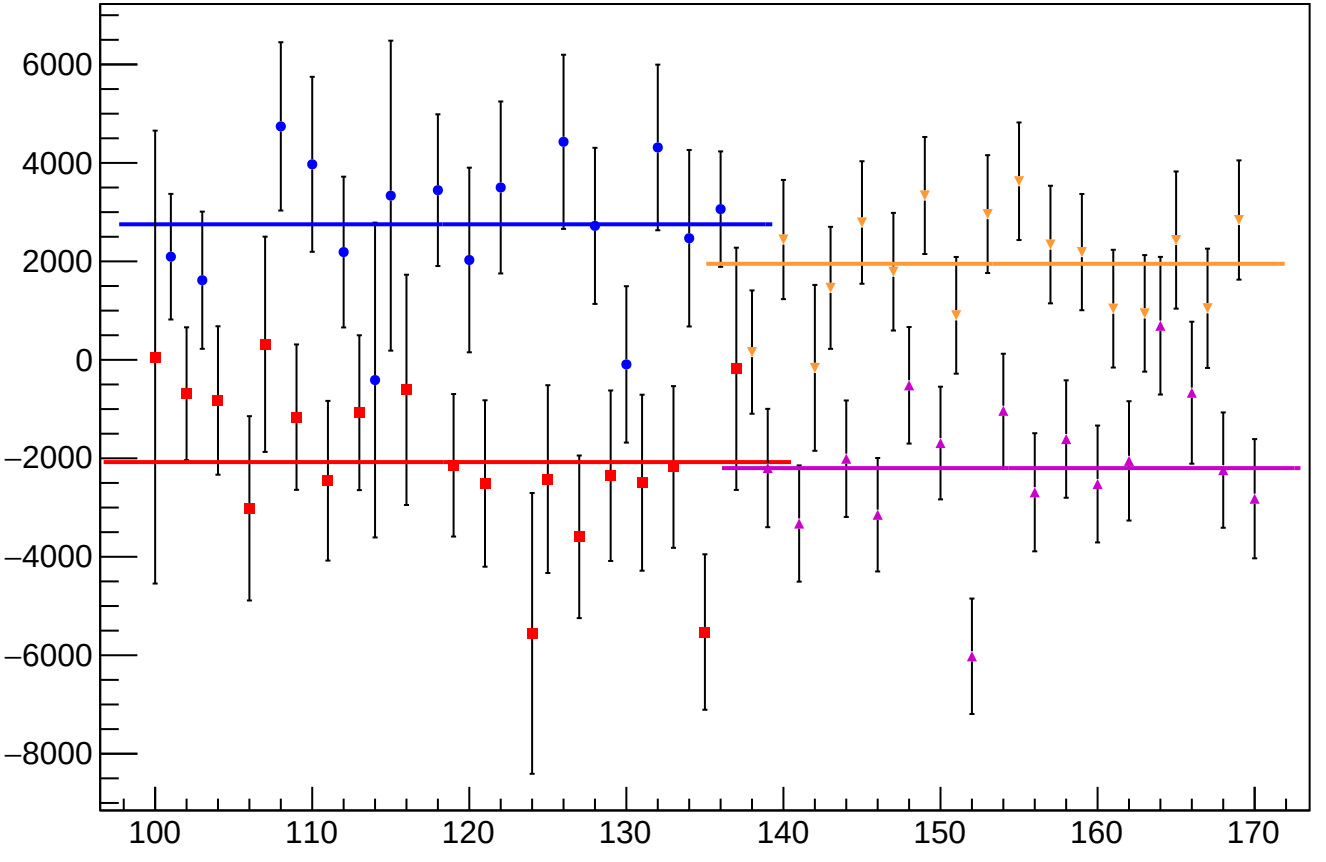
Left In: 40.788+/-0.008 $\chi^2$/NDF:368422.4/15

+ sign 37.879+/-0.006 $\chi^2$/NDF: 1341196.1/31

All: 37.812+/-0.004 $\chi^2$/NDF: 2933662.7/65

- sign 37.748+/-0.006 $\chi^2$/NDF: 1592249.7/33

# reg_asym_usr_mean vs Slug




Right In: 2753.123+/-409.837 $\chi^2$/NDF: 9.5/15

Left Out: 1951.407+/-298.833 $\chi^2$/NDF:11.9/16

Right Out: -2076.471+/-403.796 $\chi^2$/NDF: 12.5/18

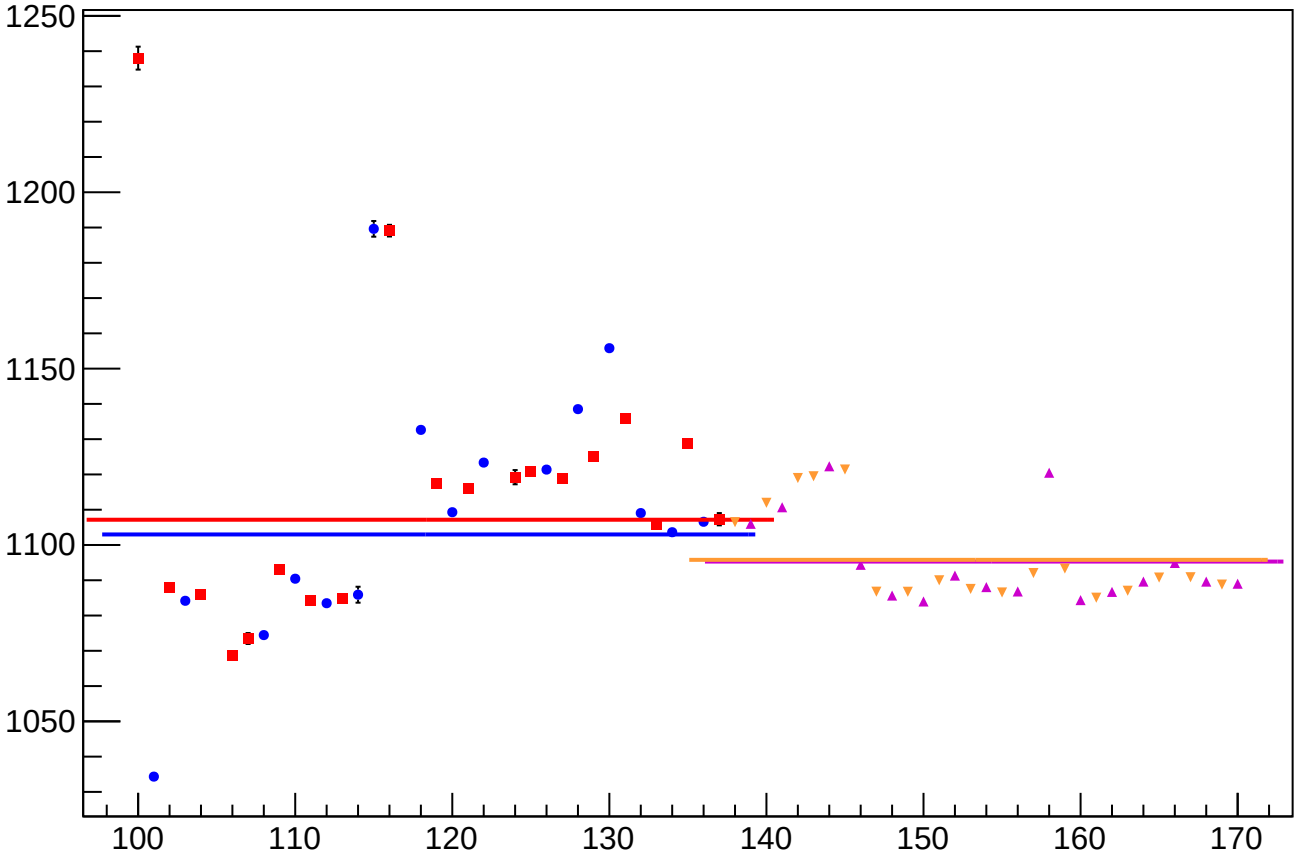
Left In: -2198.880+/-301.238 $\chi^2$/NDF:21.6/15

+ sign 2229.694+/-241.461 $\chi^2$/NDF: 23.9/32

All: 37.199+/-170.735 $\chi^2$/NDF: 223.0/67

- sign -2155.113+/-241.451 $\chi^2$/NDF: 34.2/34

# reg_asym_usr_rms vs Slug




Right In: 1102.988+/-0.290 $\chi^2$/NDF: 13223.8/15

Left Out: 1095.788+/-0.211 $\chi^2$/NDF:3378.6/16

Right Out: 1107.159+/-0.286 $\chi^2$/NDF: 8683.4/18

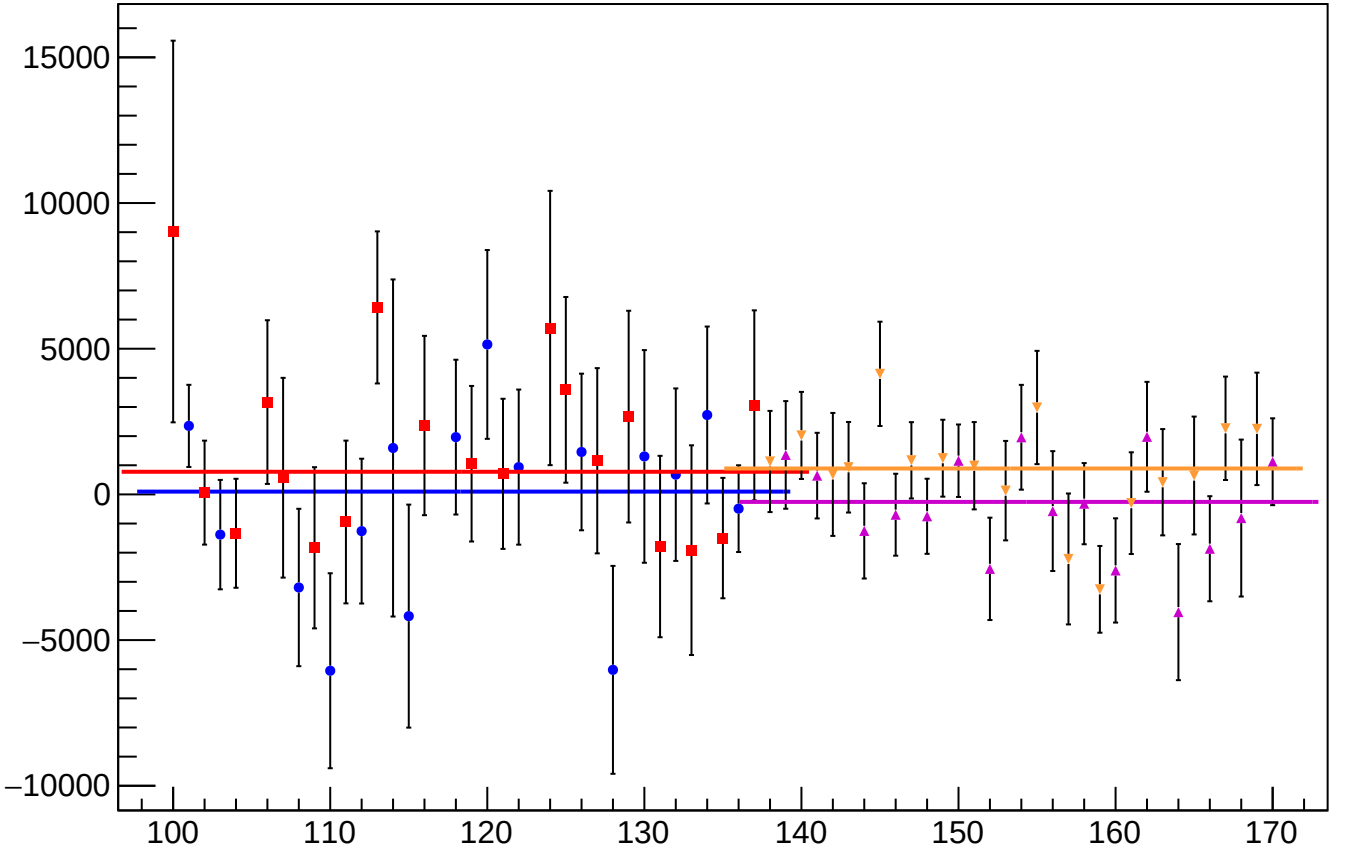
Left In: 1095.298+/-0.213 $\chi^2$/NDF:3368.2/15

+ sign 1098.287+/-0.171 $\chi^2$/NDF: 17005.3/32

All: 1098.913+/-0.121 $\chi^2$/NDF: 30192.4/67

- sign 1099.539+/-0.171 $\chi^2$/NDF: 13160.2/34

# asym_usr_reg_correction_mean vs Slug




Right In: 95.955+/-618.095 $\chi^2$/NDF: 16.9/15

Left Out: 889.509+/-406.579 $\chi^2$/NDF:16.7/16

Right Out: 776.996+/-636.966 $\chi^2$/NDF: 15.1/18

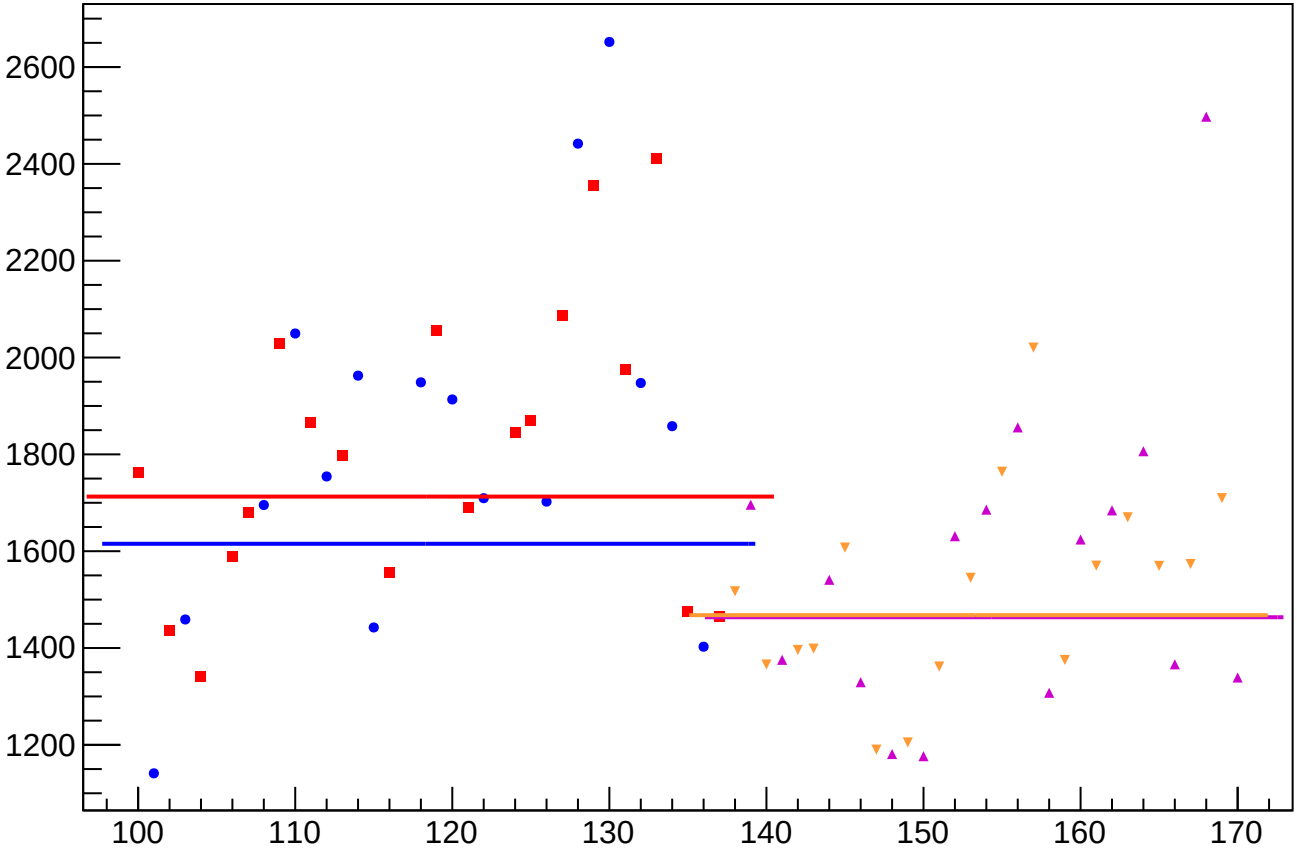
Left In: -257.666+/-410.230 $\chi^2$/NDF:13.7/15

+ sign 649.844+/-339.679 $\chi^2$/NDF: 34.8/32

All: 352.359+/-242.011 $\chi^2$/NDF: 67.0/67

- sign 45.674+/-344.891 $\chi^2$/NDF: 30.7/34

# asym_usr_reg_correction_rms vs Slug




Right In: 1615.316+/-0.437 $\chi^2$/NDF: 693630.0/15

Left Out: 1467.849+/-0.287 $\chi^2$/NDF:462971.7/16

Right Out: 1712.798+/-0.450 $\chi^2$/NDF: 428065.0/18

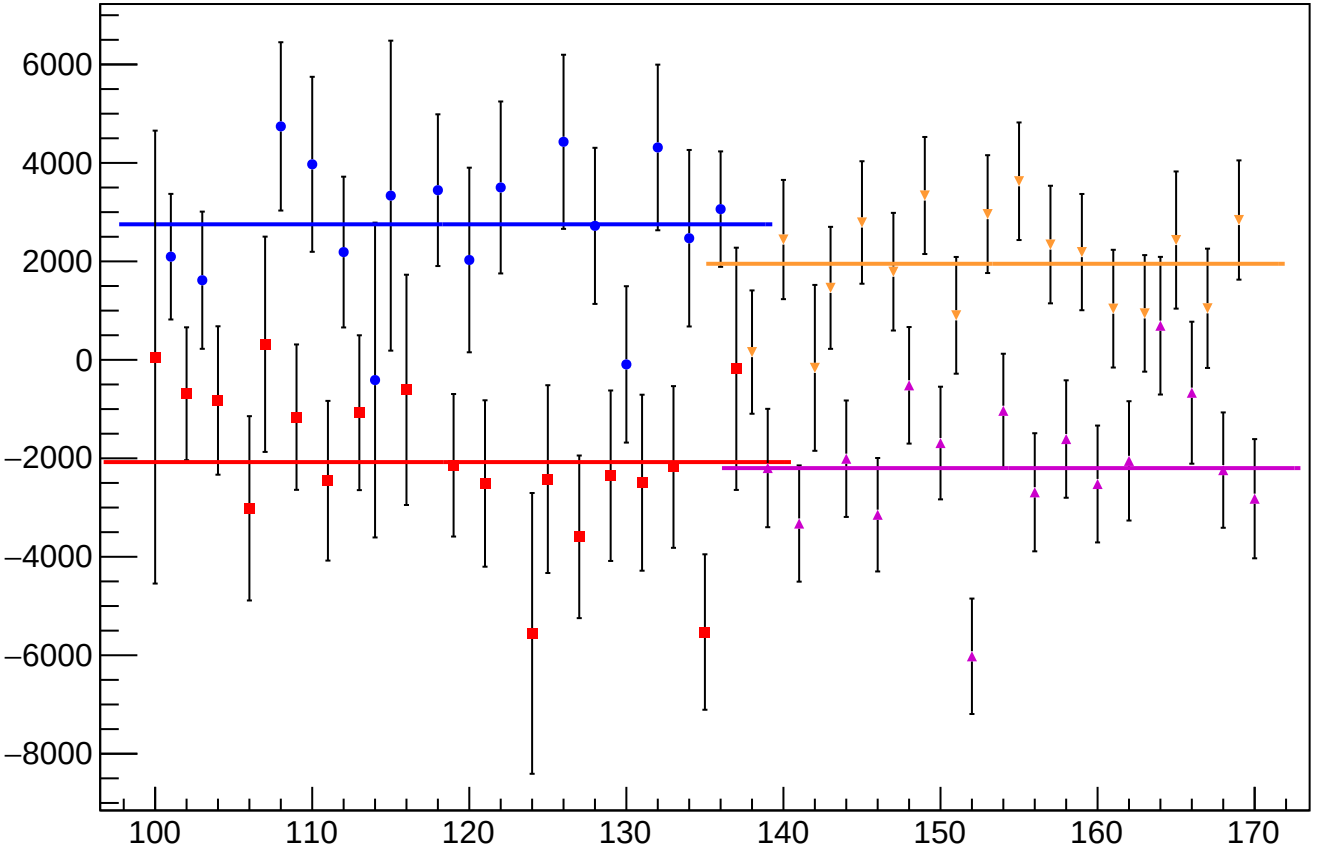
Left In: 1463.565+/-0.290 $\chi^2$/NDF:811740.7/15

+ sign 1512.386+/-0.240 $\chi^2$/NDF: 1236062.5/32

All: 1524.326+/-0.171 $\chi^2$/NDF: 2697316.6/67

- sign 1536.635+/-0.244 $\chi^2$/NDF: 1456235.4/34

# cor_asym_usr_mean vs Slug




Right In: 2753.123+/-409.837 $\chi^2$/NDF: 9.5/15

Left Out: 1951.407+/-298.833 $\chi^2$/NDF:11.9/16

Right Out: -2076.471+/-403.796 $\chi^2$/NDF: 12.5/18

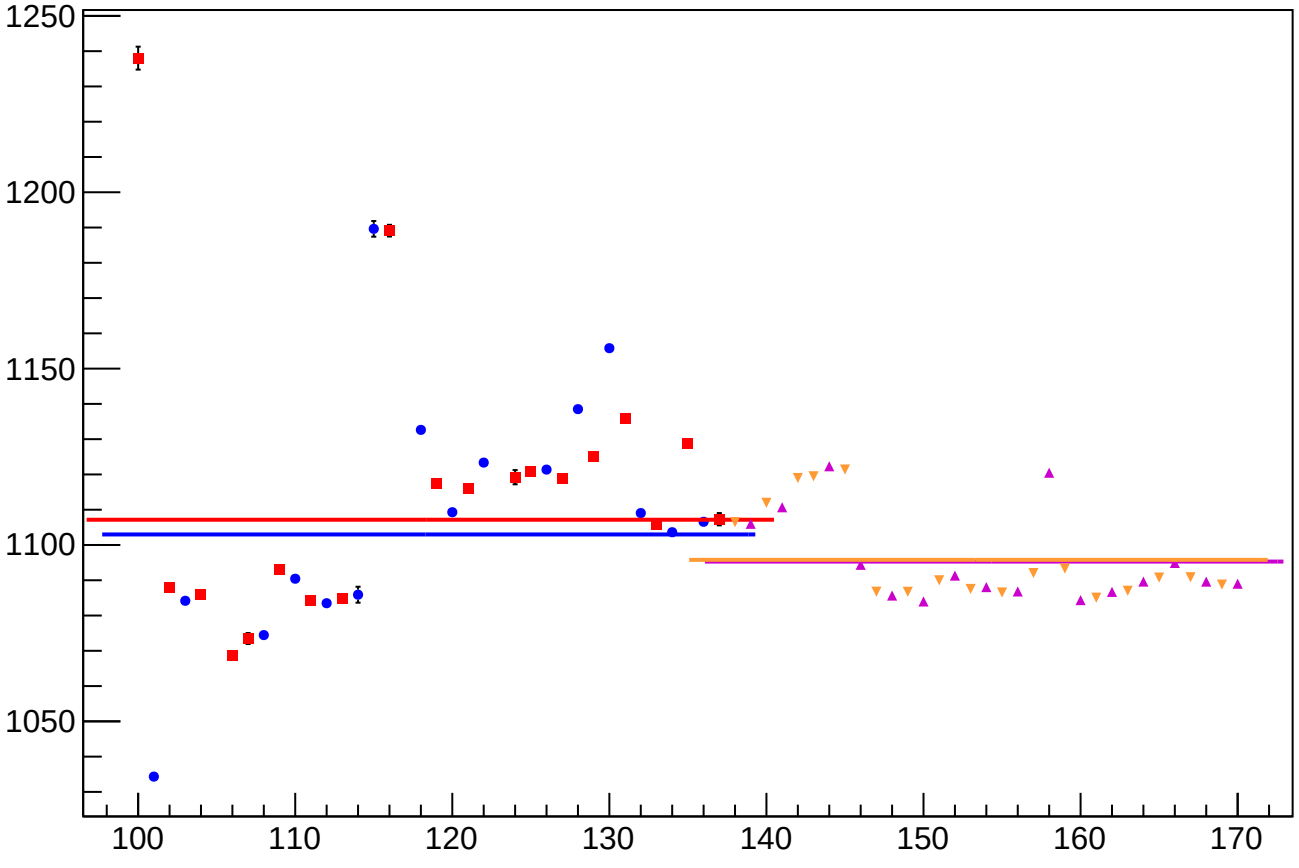
Left In: -2198.880+/-301.238 $\chi^2$/NDF:21.6/15

+ sign 2229.694+/-241.461 $\chi^2$/NDF: 23.9/32

All: 37.199+/-170.735 $\chi^2$/NDF: 223.0/67

- sign -2155.113+/-241.451 $\chi^2$/NDF: 34.2/34

# cor_asym_usr_rms vs Slug




Right In: 1102.988+/-0.290 $\chi^2$/NDF: 13223.8/15

Left Out: 1095.788+/-0.211 $\chi^2$/NDF:3378.6/16

Right Out: 1107.159+/-0.286 $\chi^2$/NDF: 8683.4/18

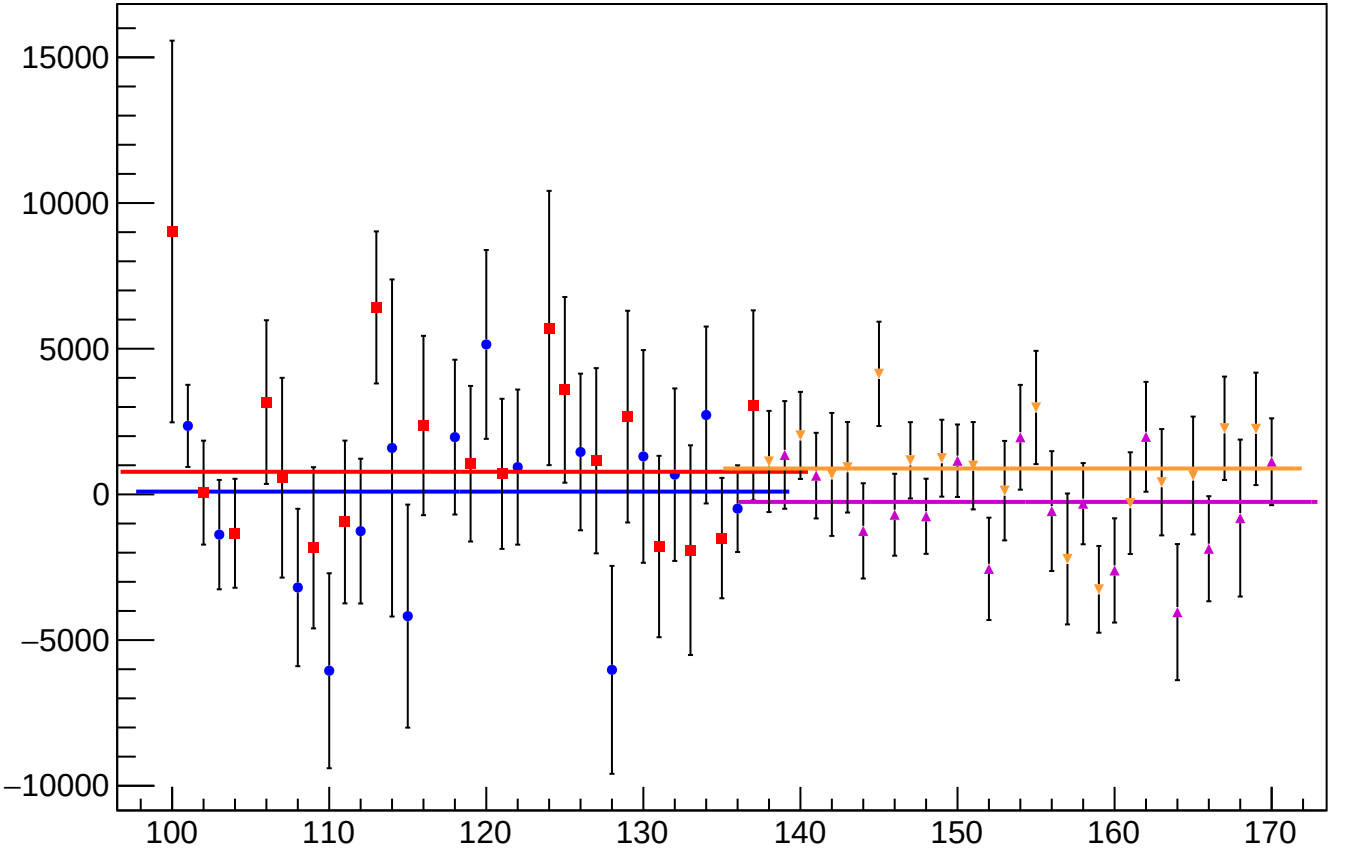
Left In: 1095.298+/-0.213 $\chi^2$/NDF:3368.2/15

+ sign 1098.287+/-0.171 $\chi^2$/NDF: 17005.3/32

All: 1098.913+/-0.121 $\chi^2$/NDF: 30192.4/67

- sign 1099.539+/-0.171 $\chi^2$/NDF: 13160.2/34

# asym_usr_cor_correction_mean vs Slug




Right In: 95.955+/-618.095 $\chi^2$/NDF: 16.9/15

Left Out: 889.509+/-406.579 $\chi^2$/NDF:16.7/16

Right Out: 776.996+/-636.966 $\chi^2$/NDF: 15.1/18

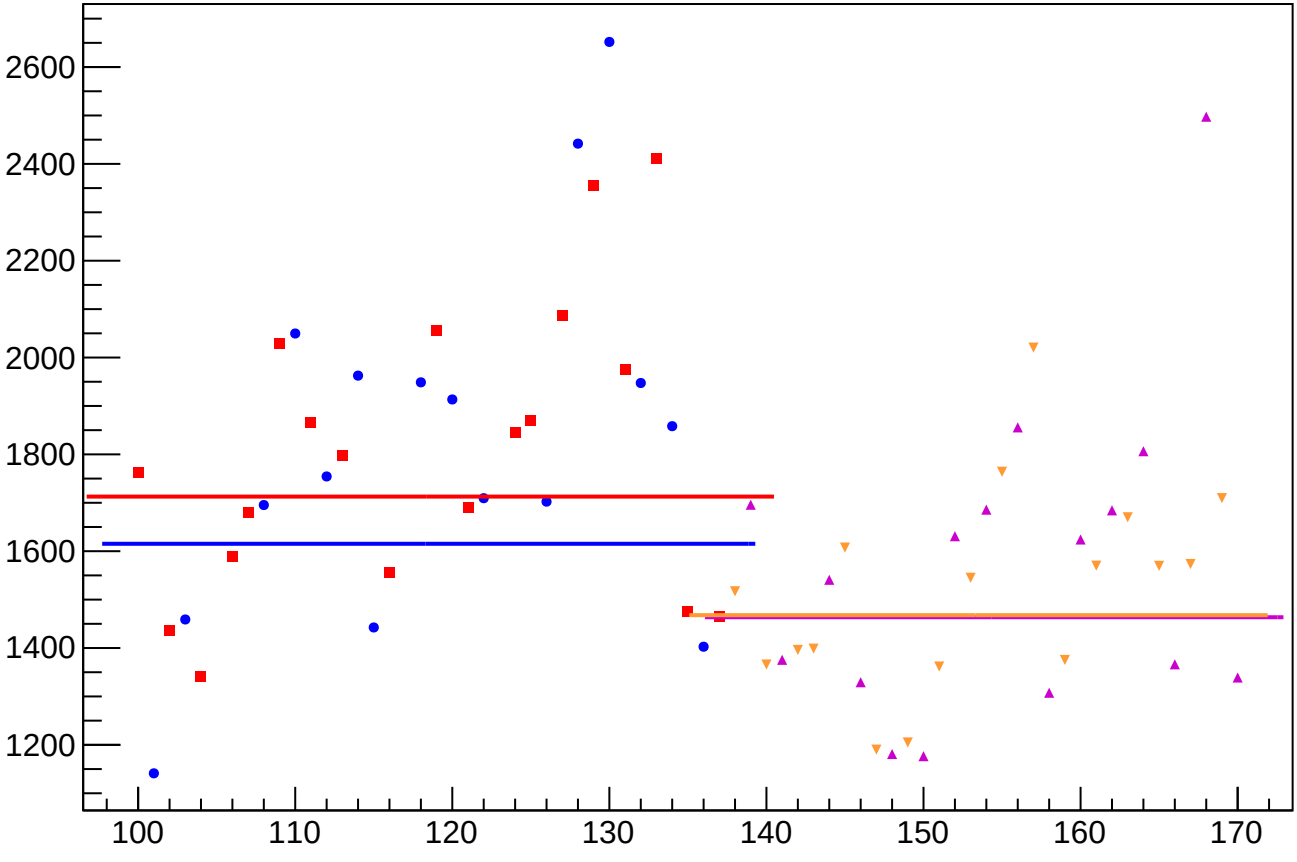
Left In: -257.666+/-410.230 $\chi^2$/NDF:13.7/15

+ sign 649.844+/-339.679 $\chi^2$/NDF: 34.8/32

All: 352.359+/-242.011 $\chi^2$/NDF: 67.0/67

- sign 45.674+/-344.891 $\chi^2$/NDF: 30.7/34

# asym_usr_cor_correction_rms vs Slug




Right In: 1615.316+/-0.437 $\chi^2$/NDF: 693630.0/15

Left Out: 1467.849+/-0.287 $\chi^2$/NDF:462971.7/16

Right Out: 1712.798+/-0.450 $\chi^2$/NDF: 428065.0/18

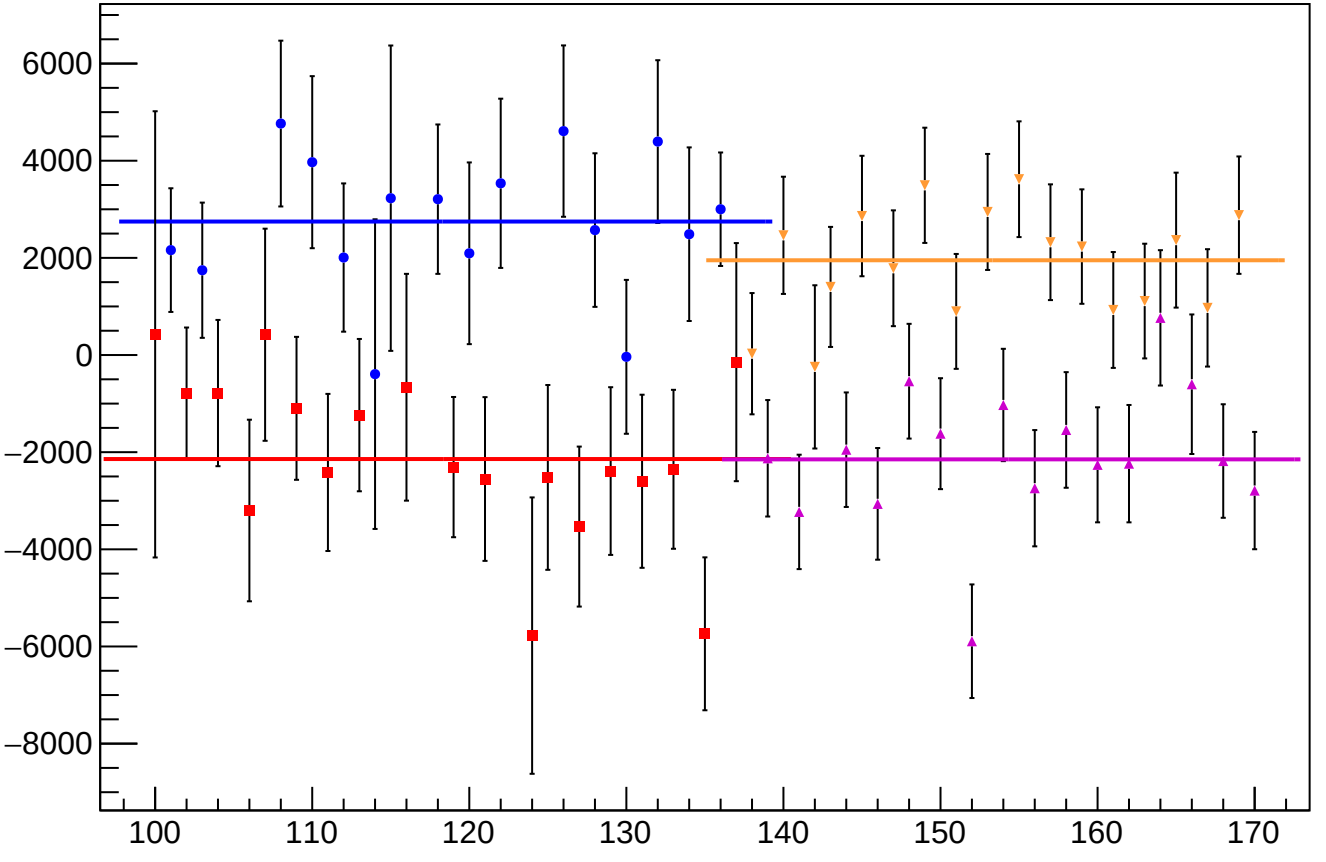
Left In: 1463.565+/-0.290 $\chi^2$/NDF:811740.7/15

+ sign 1512.386+/-0.240 $\chi^2$/NDF: 1236062.5/32

All: 1524.326+/-0.171 $\chi^2$/NDF: 2697316.6/67

- sign 1536.635+/-0.244 $\chi^2$/NDF: 1456235.4/34

# overload_cor_asym_usr_mean vs Slug




Right In: 2747.939+/-408.759 $\chi^2$/NDF: 9.5/15

Left Out: 1950.632+/-298.057 $\chi^2$/NDF:12.9/16

Right Out: -2141.169+/-402.789 $\chi^2$/NDF: 13.6/18

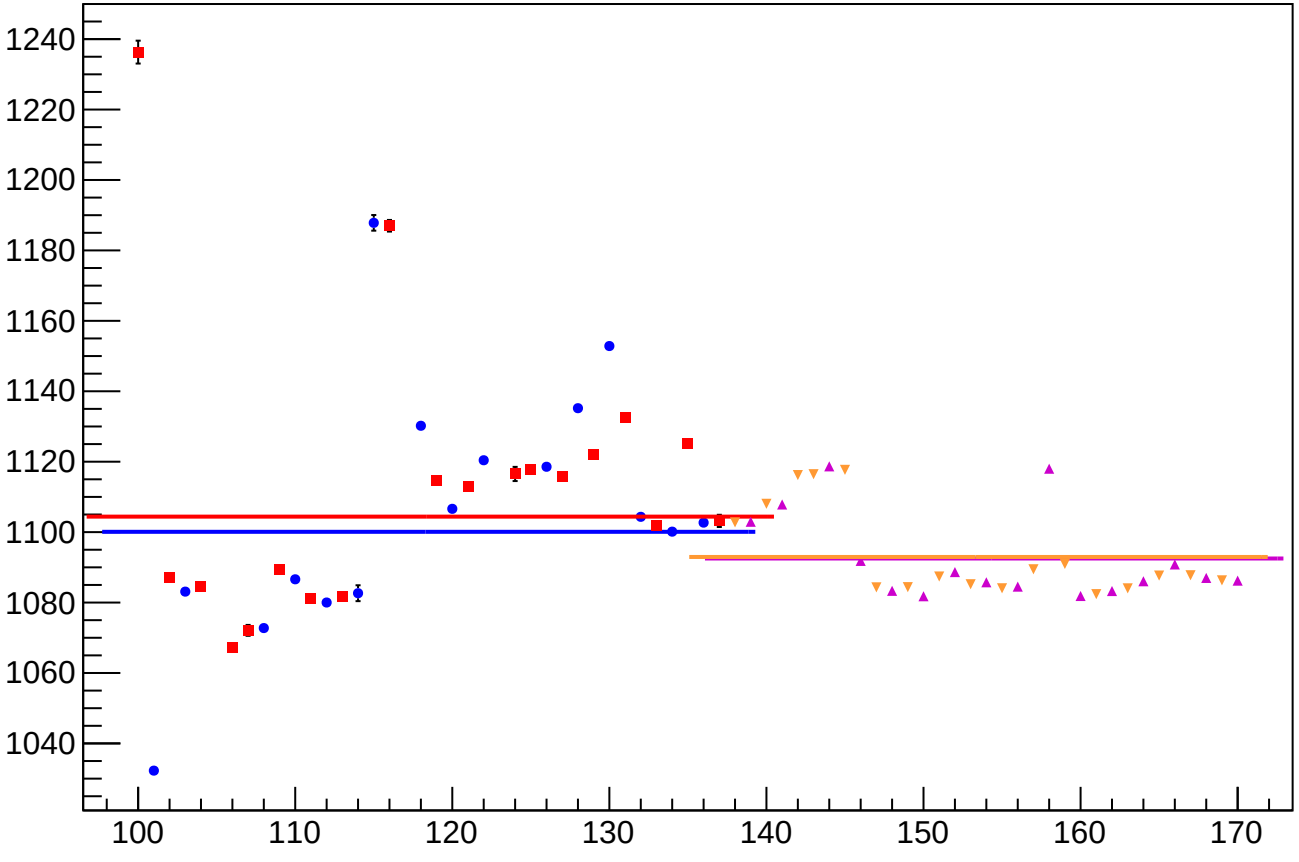
Left In: -2147.945+/-300.471 $\chi^2$/NDF:21.1/15

+ sign 2227.400+/-240.831 $\chi^2$/NDF: 24.9/32

All: 41.027+/-170.297 $\chi^2$/NDF: 224.4/67

- sign -2145.522+/-240.841 $\chi^2$/NDF: 34.7/34

# overload_cor_asym_usr_rms vs Slug




Right In: 1100.090+/-0.289 $\chi^2$/NDF: 13077.1/15

Left Out: 1092.946+/-0.211 $\chi^2$/NDF:3208.4/16

Right Out: 1104.403+/-0.285 $\chi^2$/NDF: 8543.5/18

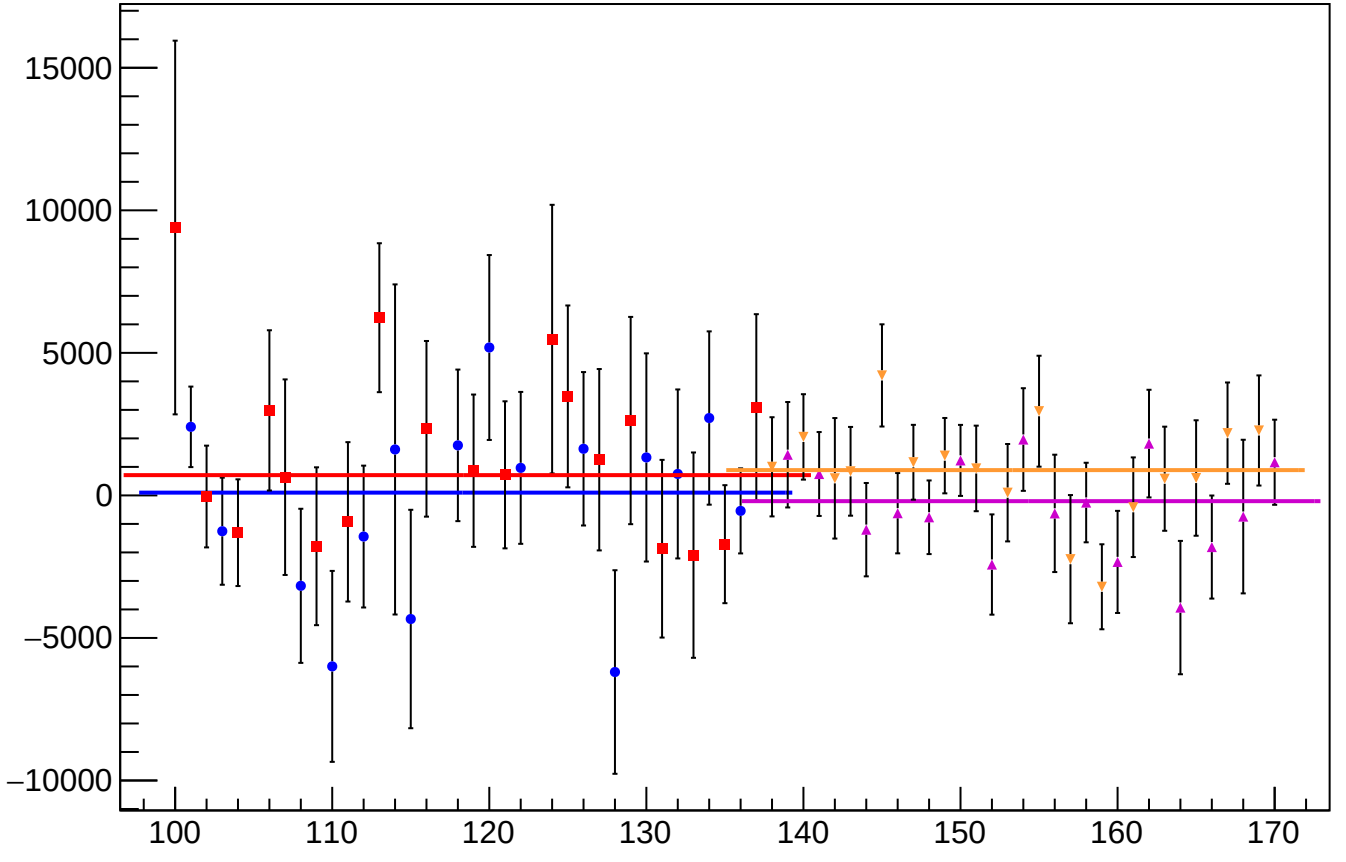
Left In: 1092.510+/-0.212 $\chi^2$/NDF:3294.4/15

+ sign 1095.426+/-0.170 $\chi^2$/NDF: 16684.4/32

All: 1096.094+/-0.120 $\chi^2$/NDF: 29673.2/67

- sign 1096.762+/-0.170 $\chi^2$/NDF: 12958.1/34

# asym_usr_overload_cor_correction_mean vs Slug




Right In: 97.435+/-618.876 $\chi^2$/NDF: 17.2/15

Left Out: 887.268+/-407.200 $\chi^2$/NDF:16.7/16

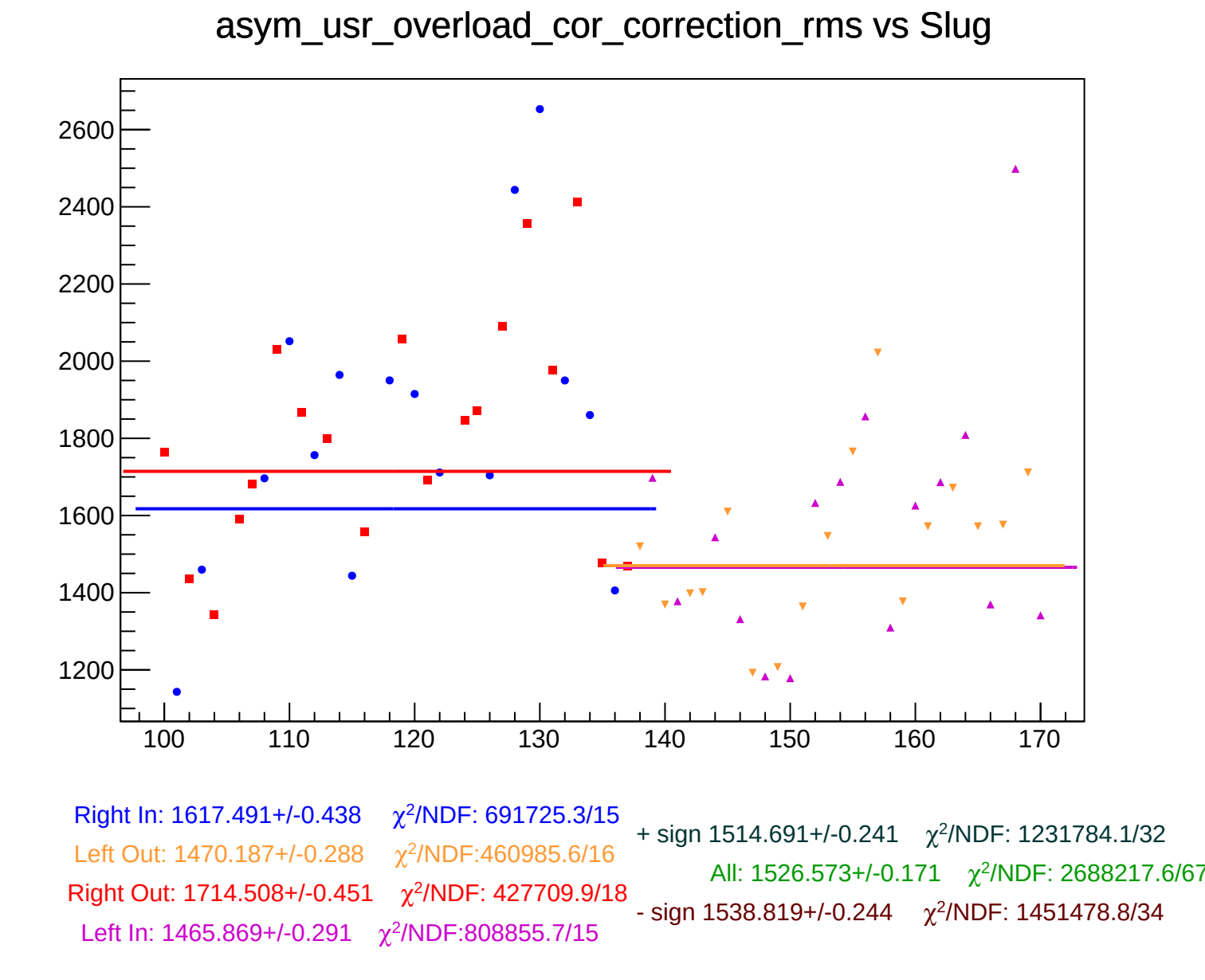
Right Out: 711.287+/-637.587 $\chi^2$/NDF: 14.9/18

Left In: -201.706+/-410.846 $\chi^2$/NDF:13.0/15

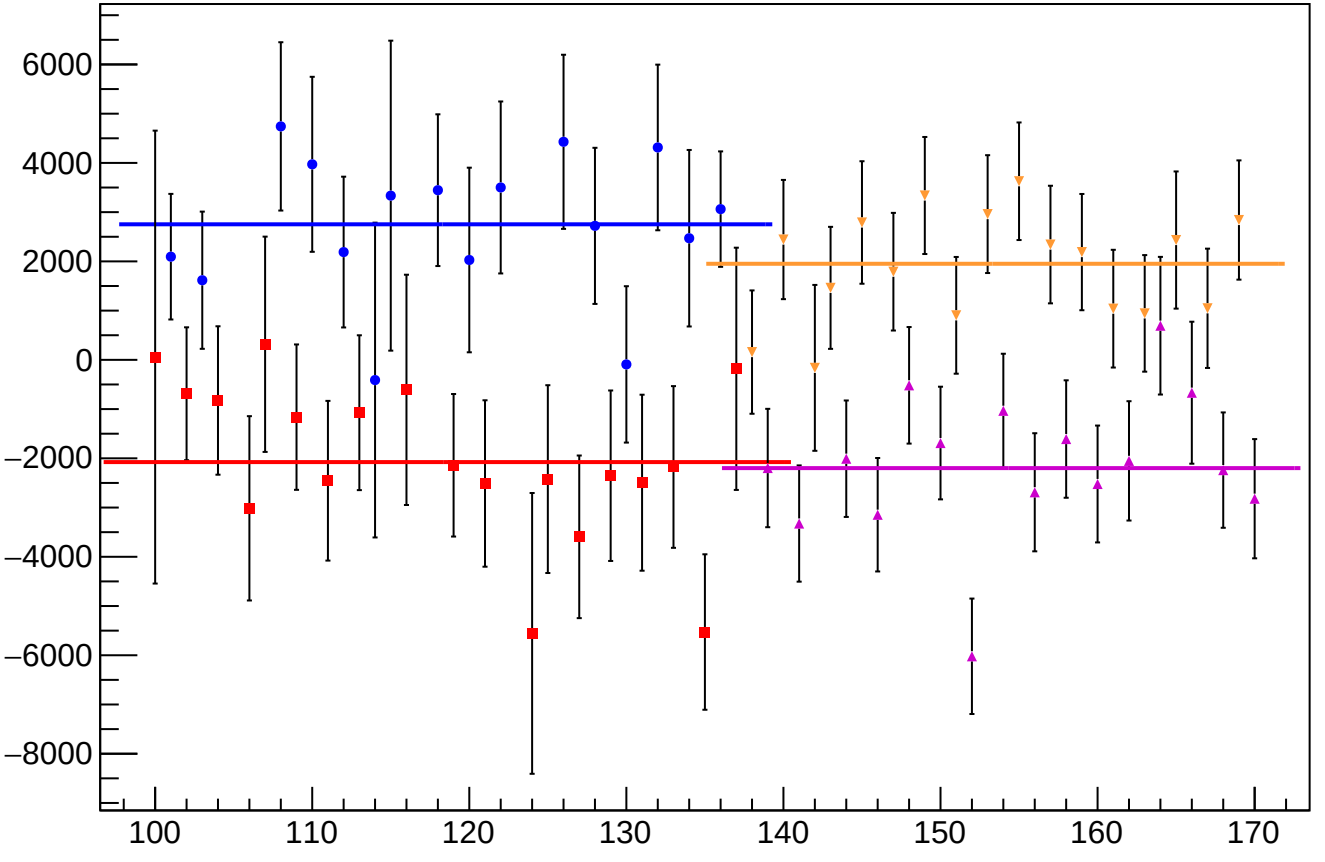
\+ sign 648.640+/-340.170 $\chi^2$/NDF: 35.1/32

All: 361.808+/-242.349 $\chi^2$/NDF: 65.9/67

\- sign 66.163+/-345.356 $\chi^2$/NDF: 29.4/34


asym_usr_overload_cor_correction_rms vs Slug
2600
2400
2200
2000
1800
1600
1400
1200
100
110
120
130
140
150
160
170
Right In: 1617.491+/-0.438 χ²/NDF: 691725.3/15
Left Out: 1470.187+/-0.288 χ²/NDF:460985.6/16
Right Out: 1714.508+/-0.451 χ²/NDF: 427709.9/18
Left In: 1465.869+/-0.291 χ²/NDF:808855.7/15
+ sign 1514.691+/-0.241 χ²/NDF: 1231784.1/32
All: 1526.573+/-0.171 χ²/NDF: 2688217.6/67
- sign 1538.819+/-0.244 χ²/NDF: 1451478.8/34

# eigen_cor_asym_usr_mean vs Slug




Right In: 2753.123+/-409.837 $\chi^2$/NDF: 9.5/15

Left Out: 1951.407+/-298.833 $\chi^2$/NDF:11.9/16

Right Out: -2076.471+/-403.796 $\chi^2$/NDF: 12.5/18

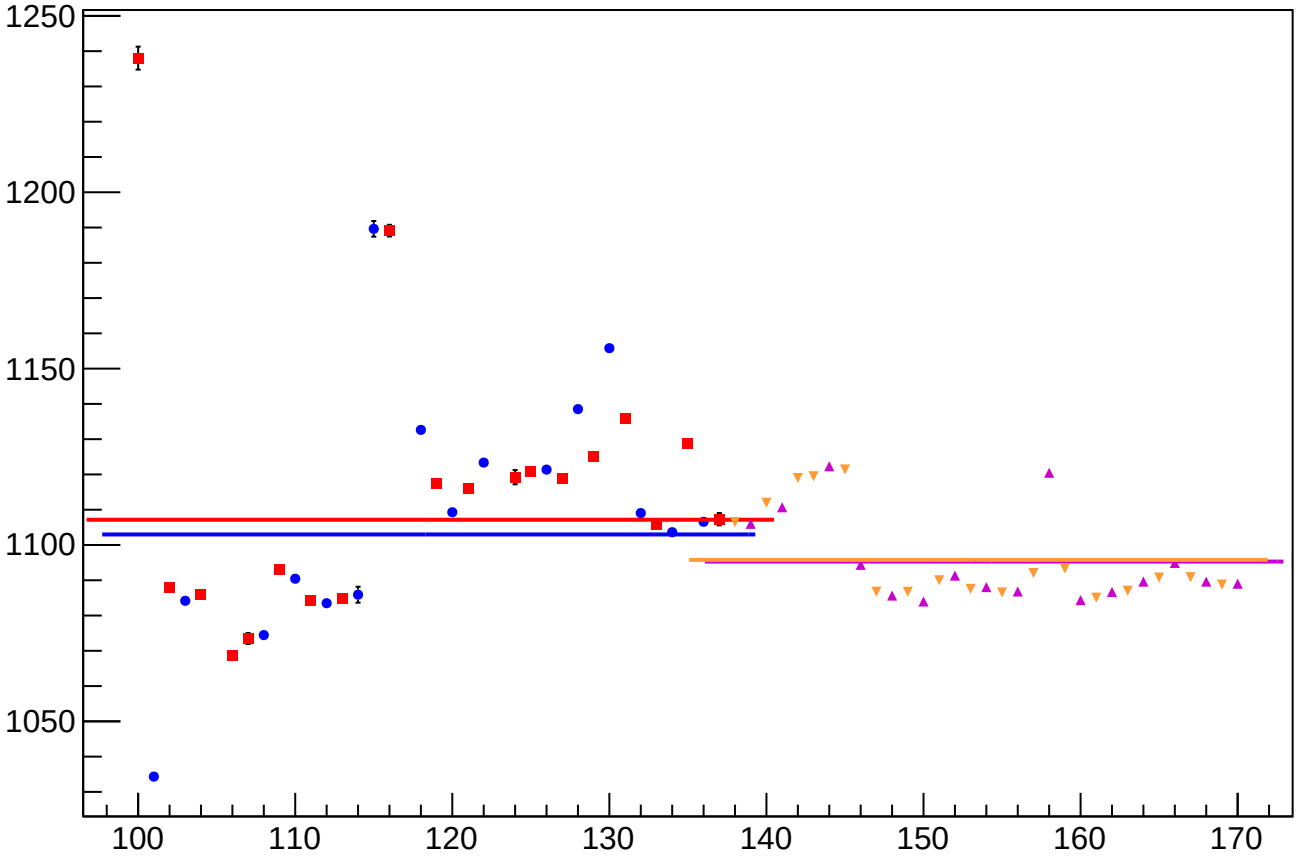
Left In: -2198.880+/-301.238 $\chi^2$/NDF:21.6/15

+ sign 2229.694+/-241.461 $\chi^2$/NDF: 23.9/32

All: 37.199+/-170.735 $\chi^2$/NDF: 223.0/67

- sign -2155.113+/-241.451 $\chi^2$/NDF: 34.2/34

# eigen_cor_asym_usr_rms vs Slug




Right In: 1102.988+/-0.290 $\chi^2$/NDF: 13223.8/15

Left Out: 1095.788+/-0.211 $\chi^2$/NDF:3378.6/16

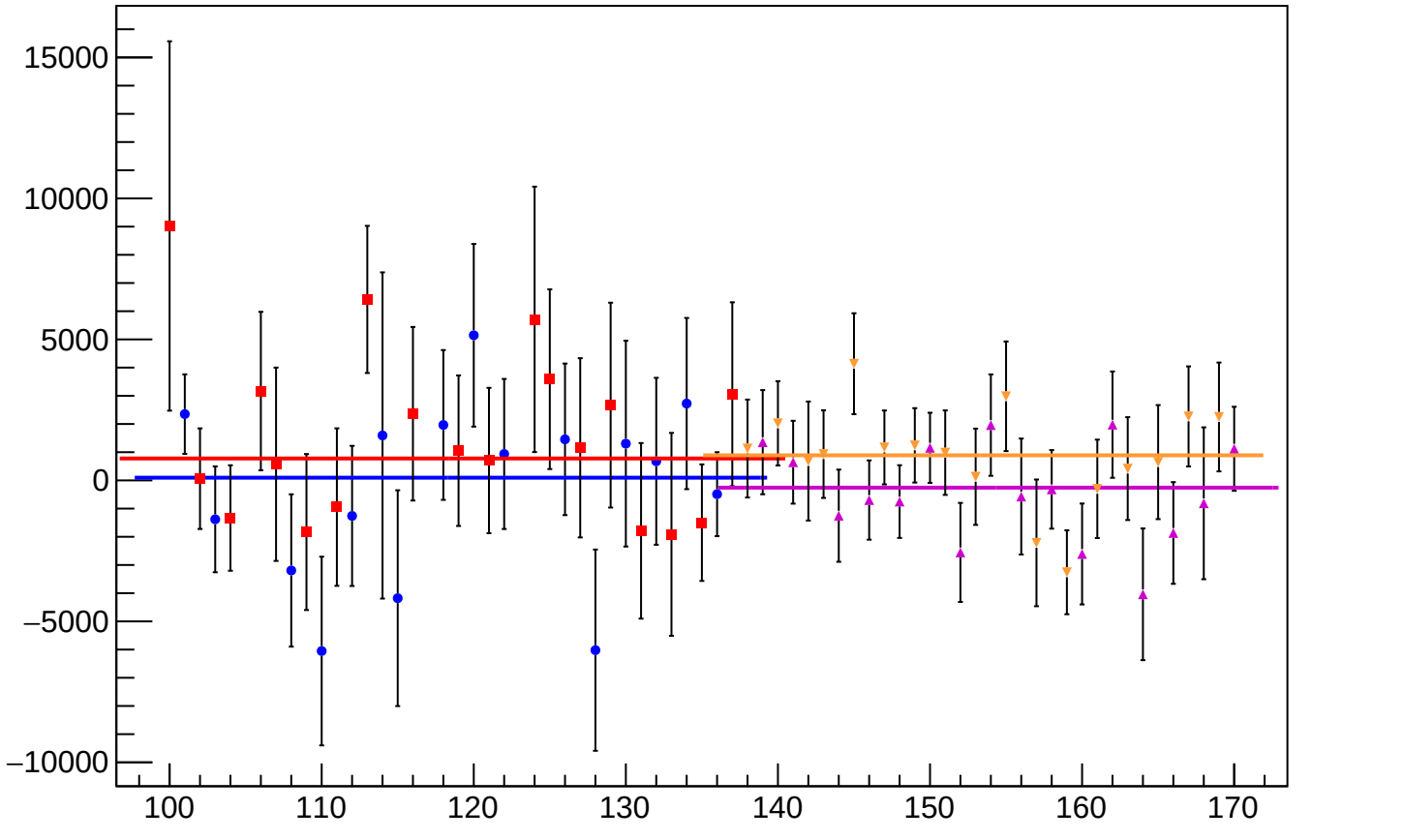
Right Out: 1107.159+/-0.286 $\chi^2$/NDF: 8683.4/18

Left In: 1095.298+/-0.213 $\chi^2$/NDF:3368.2/15

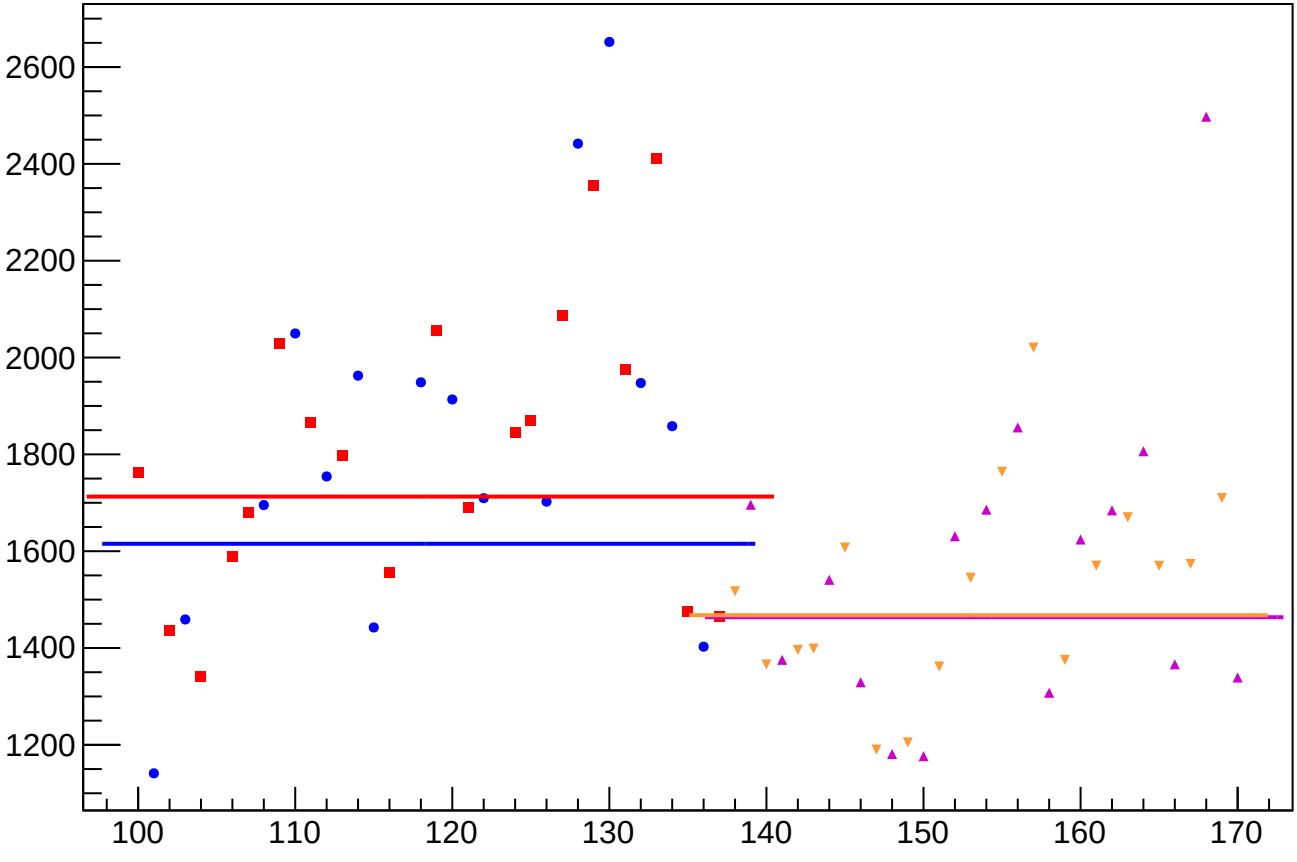
\+ sign 1098.287+/-0.171 $\chi^2$/NDF: 17005.3/32

All: 1098.913+/-0.121 $\chi^2$/NDF: 30192.4/67

\- sign 1099.539+/-0.171 $\chi^2$/NDF: 13160.2/34


asym_usr_eigen_cor_correction_mean vs Slug
15000
10000
5000
0
−5000
−10000
100
110
120
130
140
150
160
170
Right In: 95.955+/-618.095 χ²/NDF: 16.9/15
Left Out: 889.509+/-406.579 χ²/NDF:16.7/16
Right Out: 776.996+/-636.966 χ²/NDF: 15.1/18
Left In: -257.666+/-410.230 χ²/NDF:13.7/15
+ sign 649.844+/-339.679 χ²/NDF: 34.8/32
All: 352.359+/-242.011 χ²/NDF: 67.0/67
- sign 45.674+/-344.891 χ²/NDF: 30.7/34

# asym_usr_eigen_cor_correction_rms vs Slug




Right In: 1615.316+/-0.437 $\chi^2$/NDF: 693630.0/15

Left Out: 1467.849+/-0.287 $\chi^2$/NDF:462971.7/16

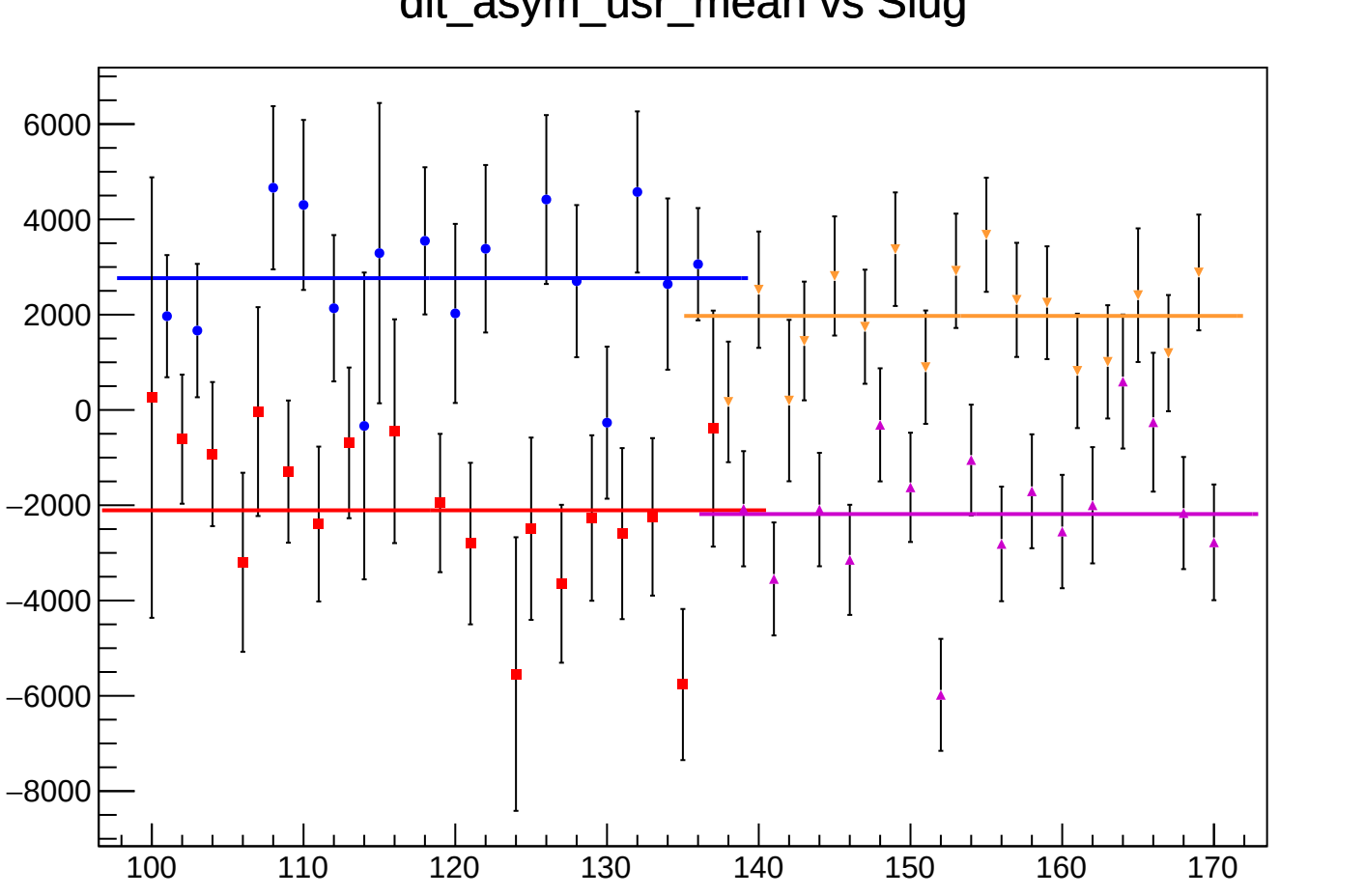
Right Out: 1712.798+/-0.450 $\chi^2$/NDF: 428065.0/18

Left In: 1463.565+/-0.290 $\chi^2$/NDF:811740.7/15

+ sign 1512.386+/-0.240 $\chi^2$/NDF: 1236062.5/32

All: 1524.326+/-0.171 $\chi^2$/NDF: 2697316.6/67

- sign 1536.635+/-0.244 $\chi^2$/NDF: 1456235.4/34




Right In: 2766.657+/-411.563 $\chi^2$/NDF: 10.3/15

Left Out: 1973.432+/-300.163 $\chi^2$/NDF:11.6/16

Right Out: -2106.358+/-405.586 $\chi^2$/NDF: 13.4/18

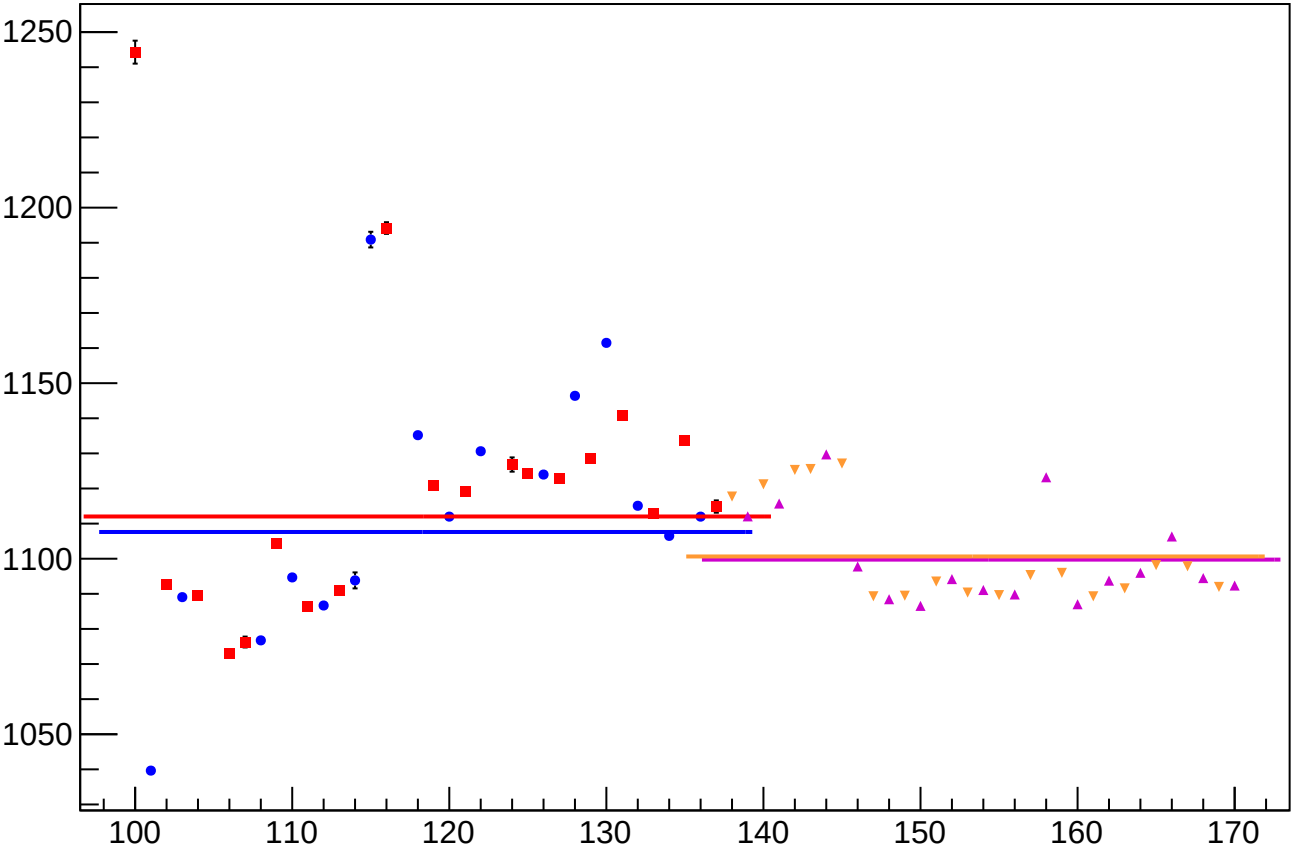
Left In: -2185.141+/-302.466 $\chi^2$/NDF:22.6/15

+ sign 2248.858+/-242.516 $\chi^2$/NDF: 24.4/32

All: 45.489+/-171.467 $\chi^2$/NDF: 225.4/67

- sign -2156.985+/-242.467 $\chi^2$/NDF: 36.0/34

# dit_asym_usr_rms vs Slug




Right In: 1107.613+/-0.291 $\chi^2$/NDF: 13220.8/15

Left Out: 1100.639+/-0.212 $\chi^2$/NDF:4278.2/16

Right Out: 1112.029+/-0.287 $\chi^2$/NDF: 8653.5/18

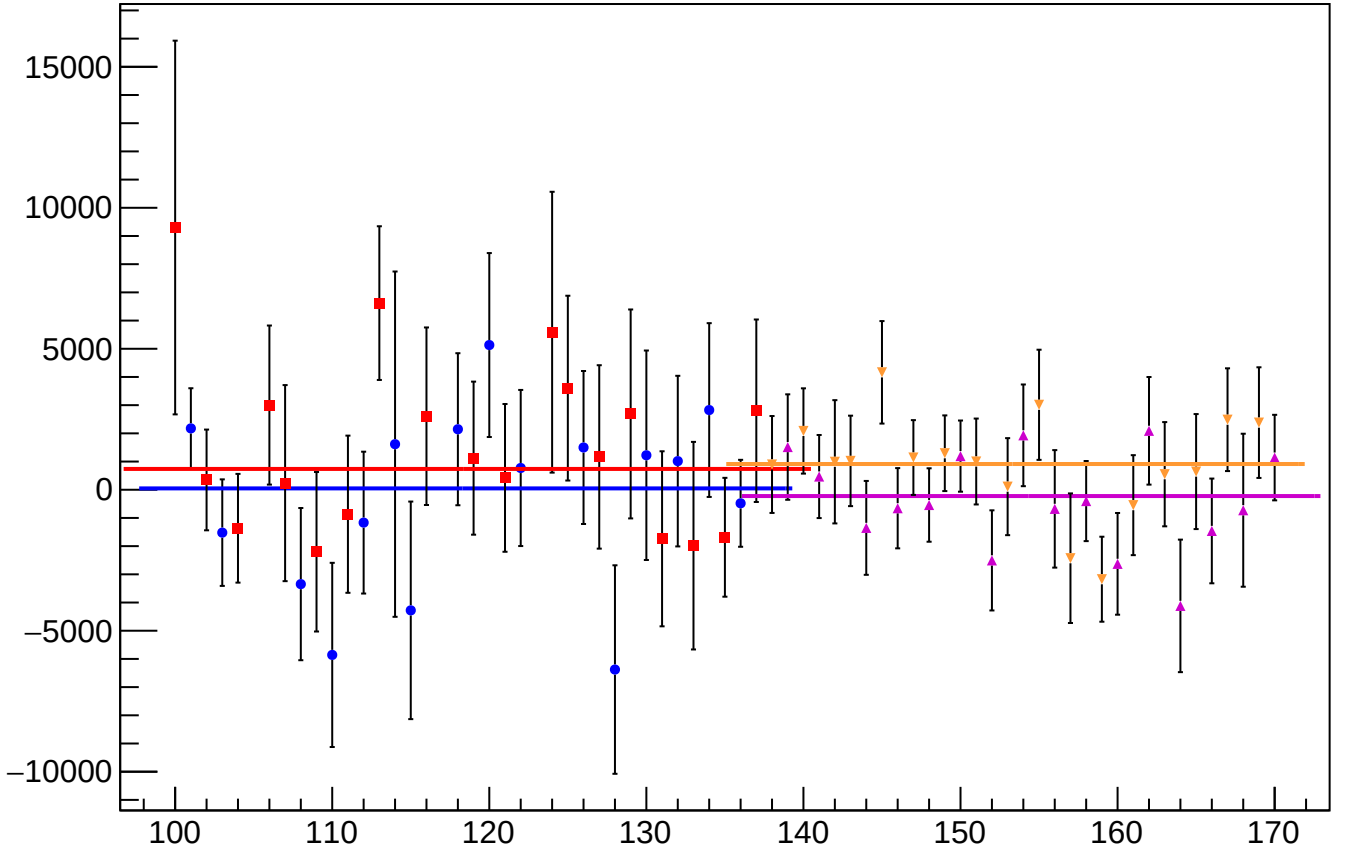
Left In: 1099.743+/-0.214 $\chi^2$/NDF:3795.4/15

+ sign 1103.061+/-0.171 $\chi^2$/NDF: 17873.9/32

All: 1103.597+/-0.121 $\chi^2$/NDF: 31521.7/67

- sign 1104.134+/-0.171 $\chi^2$/NDF: 13628.2/34

# asym_usr_dit_correction_mean vs Slug




Right In: 47.817+/-628.060 $\chi^2$/NDF: 16.9/15

Left Out: 912.784+/-412.650 $\chi^2$/NDF:16.8/16

Right Out: 738.185+/-647.795 $\chi^2$/NDF: 14.9/18

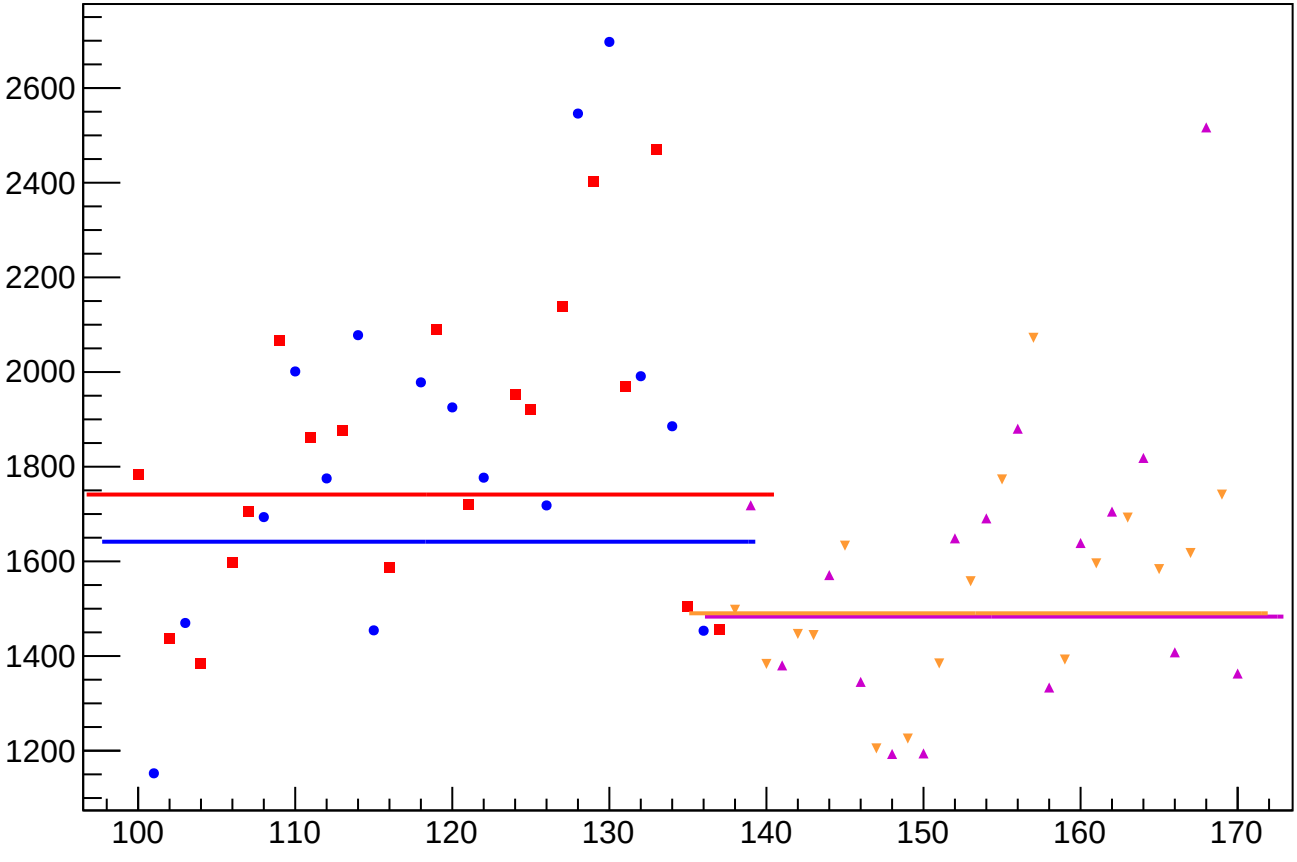
Left In: -223.547+/-415.485 $\chi^2$/NDF:13.4/15

+ sign 651.980+/-344.873 $\chi^2$/NDF: 35.0/32

All: 358.537+/-245.562 $\chi^2$/NDF: 66.3/67

- sign 56.768+/-349.731 $\chi^2$/NDF: 29.9/34

# asym_usr_dit_correction_rms vs Slug




Right In: 1641.538+/-0.444 $\chi^2$/NDF: 701311.4/15

Left Out: 1490.274+/-0.292 $\chi^2$/NDF:464295.0/16

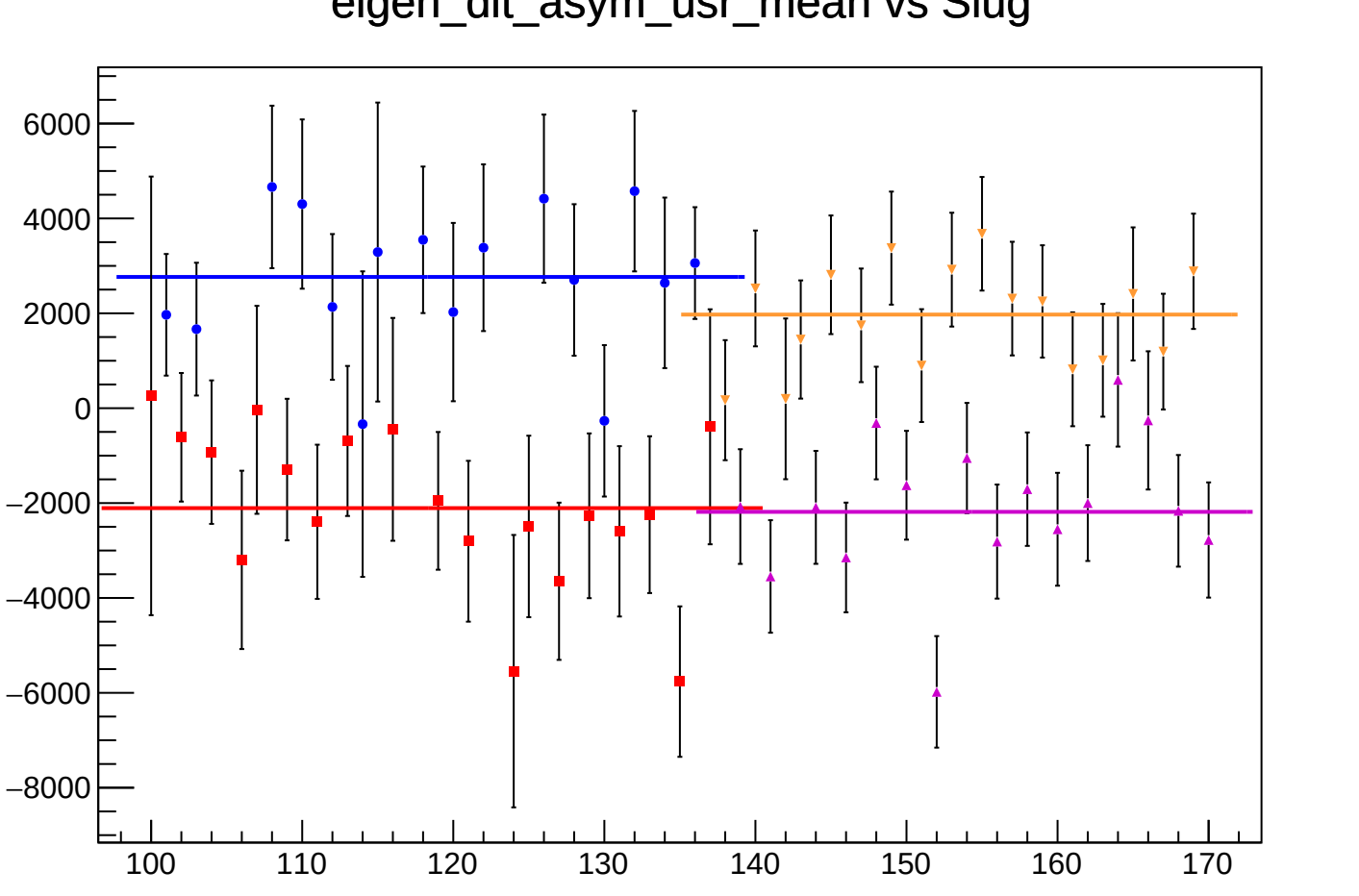
Right Out: 1741.200+/-0.458 $\chi^2$/NDF: 438336.6/18

Left In: 1483.299+/-0.294 $\chi^2$/NDF:797371.6/15

+ sign 1535.883+/-0.244 $\chi^2$/NDF: 1246637.9/32

All: 1547.018+/-0.174 $\chi^2$/NDF: 2711180.6/67

- sign 1558.469+/-0.247 $\chi^2$/NDF: 1460313.5/34




Right In: 2766.656+/-411.563 $\chi^2$/NDF: 10.3/15

Left Out: 1973.430+/-300.163 $\chi^2$/NDF:11.6/16

Right Out: -2106.360+/-405.586 $\chi^2$/NDF: 13.4/18

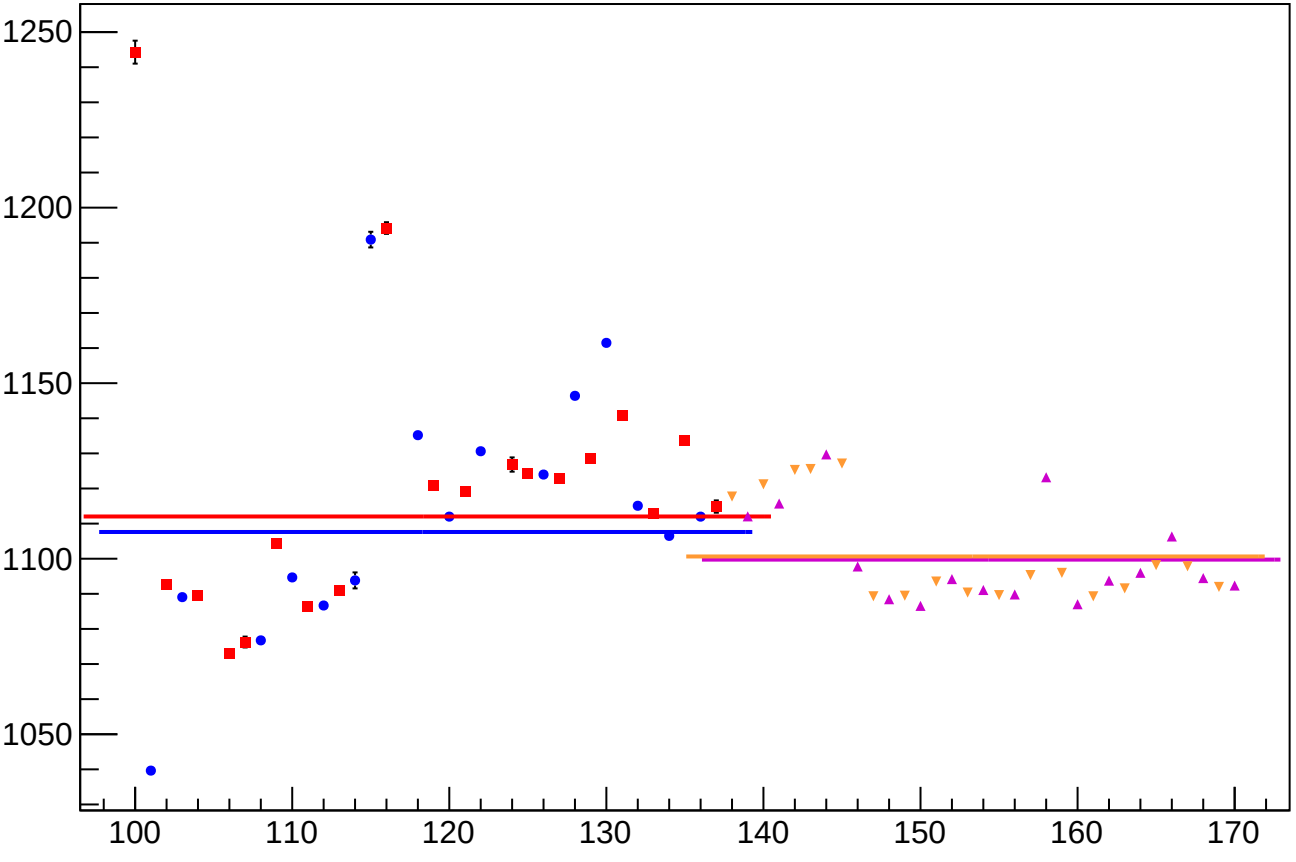
Left In: -2185.142+/-302.466 $\chi^2$/NDF:22.6/15

+ sign 2248.856+/-242.516 $\chi^2$/NDF: 24.4/32

All: 45.487+/-171.467 $\chi^2$/NDF: 225.4/67

- sign -2156.986+/-242.467 $\chi^2$/NDF: 36.0/34

# eigen_dit_asym_usr_rms vs Slug




Right In: 1107.613+/-0.291 $\chi^2$/NDF: 13220.7/15

Left Out: 1100.639+/-0.212 $\chi^2$/NDF:4278.2/16

Right Out: 1112.029+/-0.287 $\chi^2$/NDF: 8653.5/18

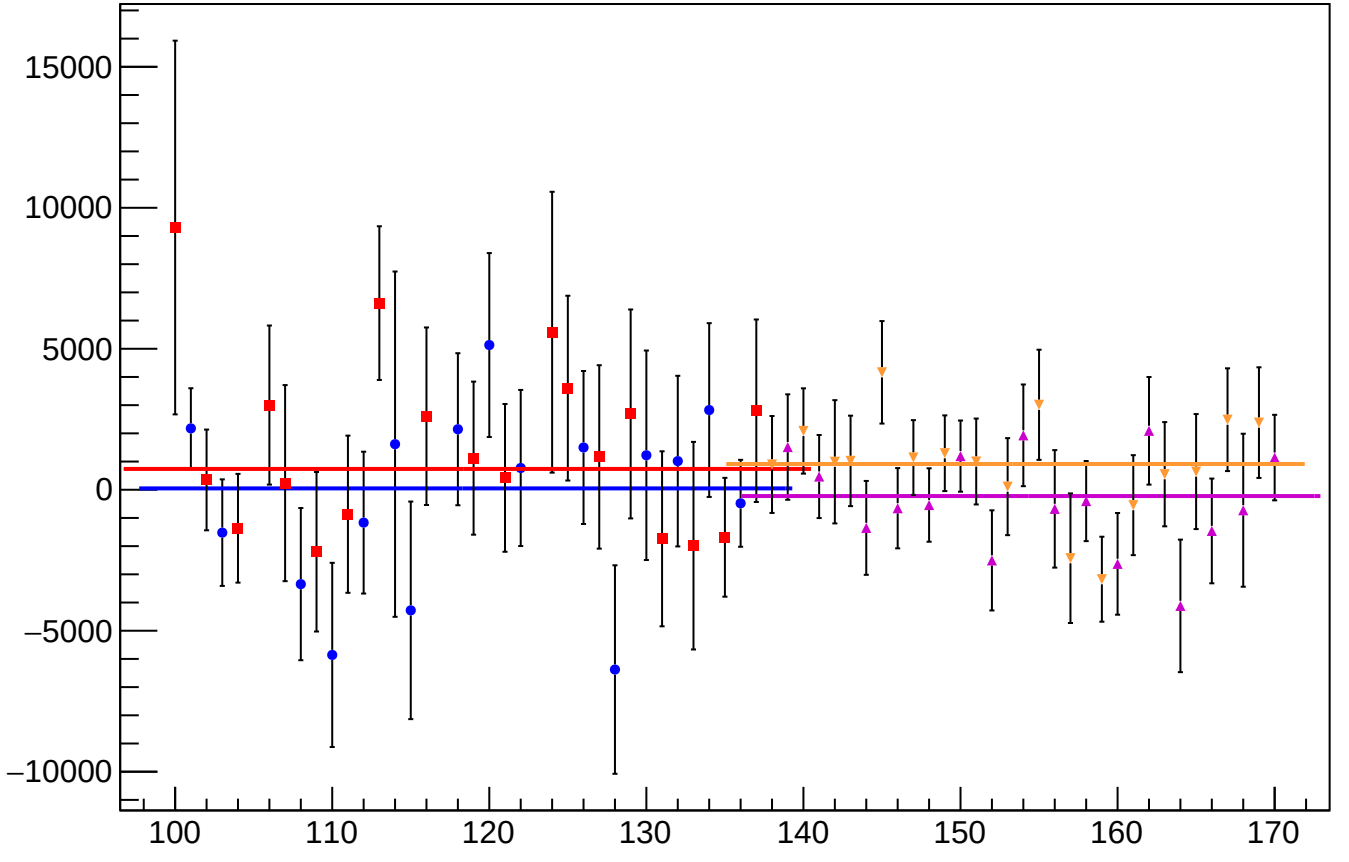
Left In: 1099.743+/-0.214 $\chi^2$/NDF:3795.4/15

+ sign 1103.061+/-0.171 $\chi^2$/NDF: 17873.8/32

All: 1103.597+/-0.121 $\chi^2$/NDF: 31521.6/67

- sign 1104.134+/-0.171 $\chi^2$/NDF: 13628.2/34

# asym_usr_eigen_dit_correction_mean vs Slug




Right In: 47.813+/-628.059 $\chi^2$/NDF: 16.9/15

Left Out: 912.783+/-412.651 $\chi^2$/NDF:16.8/16

Right Out: 738.188+/-647.795 $\chi^2$/NDF: 14.9/18

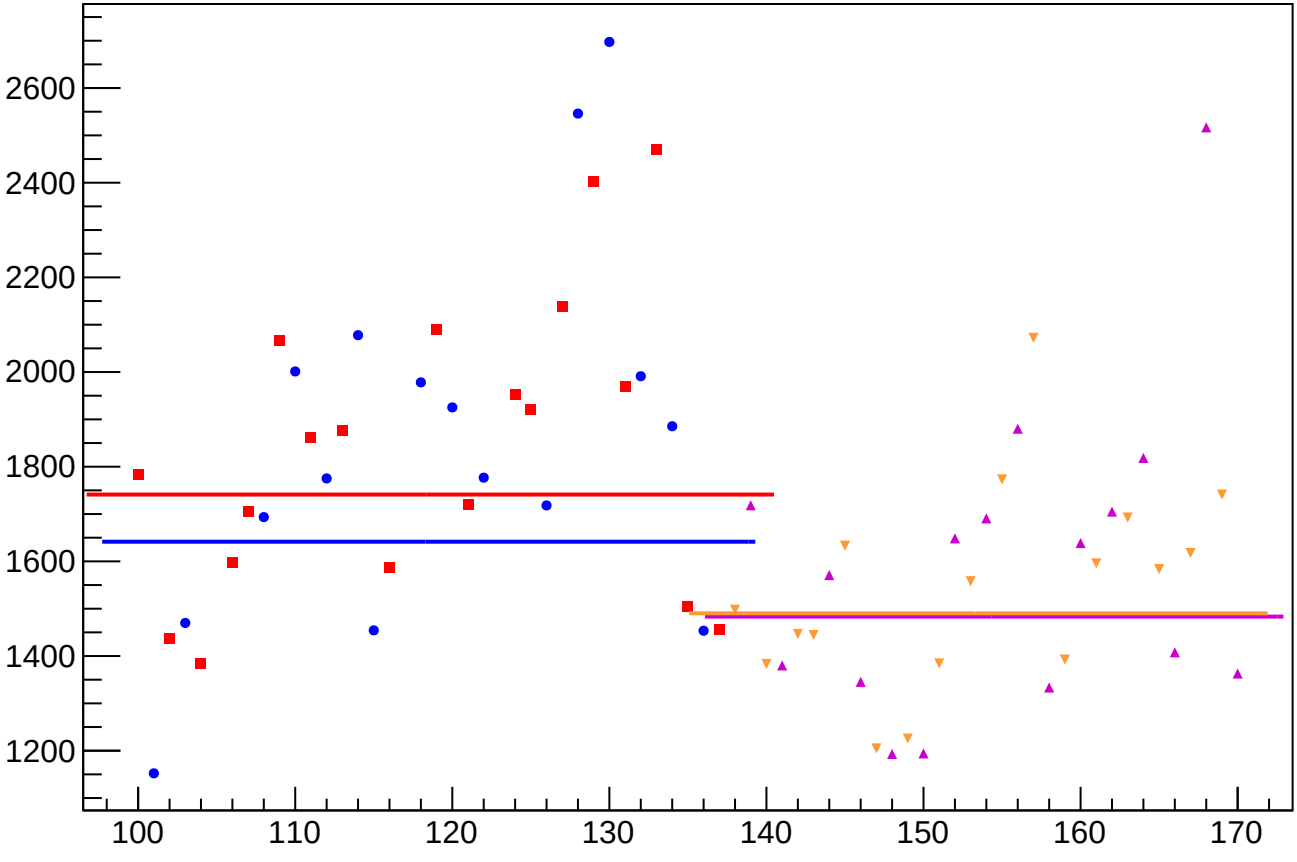
Left In: -223.548+/-415.486 $\chi^2$/NDF:13.4/15

+ sign 651.976+/-344.873 $\chi^2$/NDF: 35.0/32

All: 358.536+/-245.562 $\chi^2$/NDF: 66.3/67

- sign 56.770+/-349.732 $\chi^2$/NDF: 29.9/34

# asym_usr_eigen_dit_correction_rms vs Slug




Right In: 1641.536+/-0.444 $\chi^2$/NDF: 701299.1/15

Left Out: 1490.277+/-0.292 $\chi^2$/NDF:464299.3/16

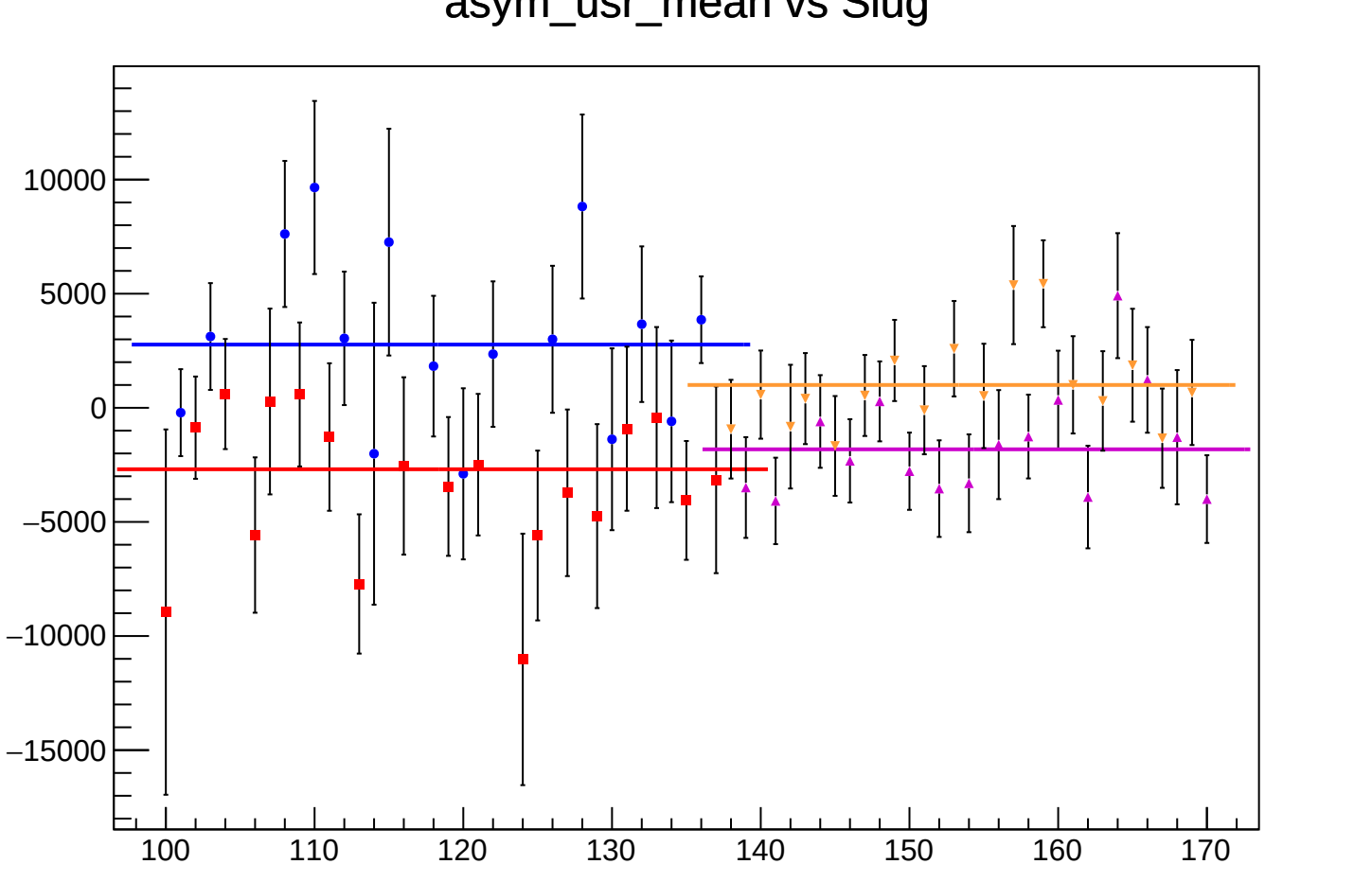
Right Out: 1741.199+/-0.458 $\chi^2$/NDF: 438324.1/18

Left In: 1483.302+/-0.294 $\chi^2$/NDF:797377.3/15

+ sign 1535.885+/-0.244 $\chi^2$/NDF: 1246624.1/32

All: 1547.020+/-0.174 $\chi^2$/NDF: 2711151.8/67

- sign 1558.472+/-0.247 $\chi^2$/NDF: 1460298.3/34




Right In: 2769.952+/-757.109 $\chi^2$/NDF: 16.4/15

Left Out: 1000.616+/-511.738 $\chi^2$/NDF:13.9/16

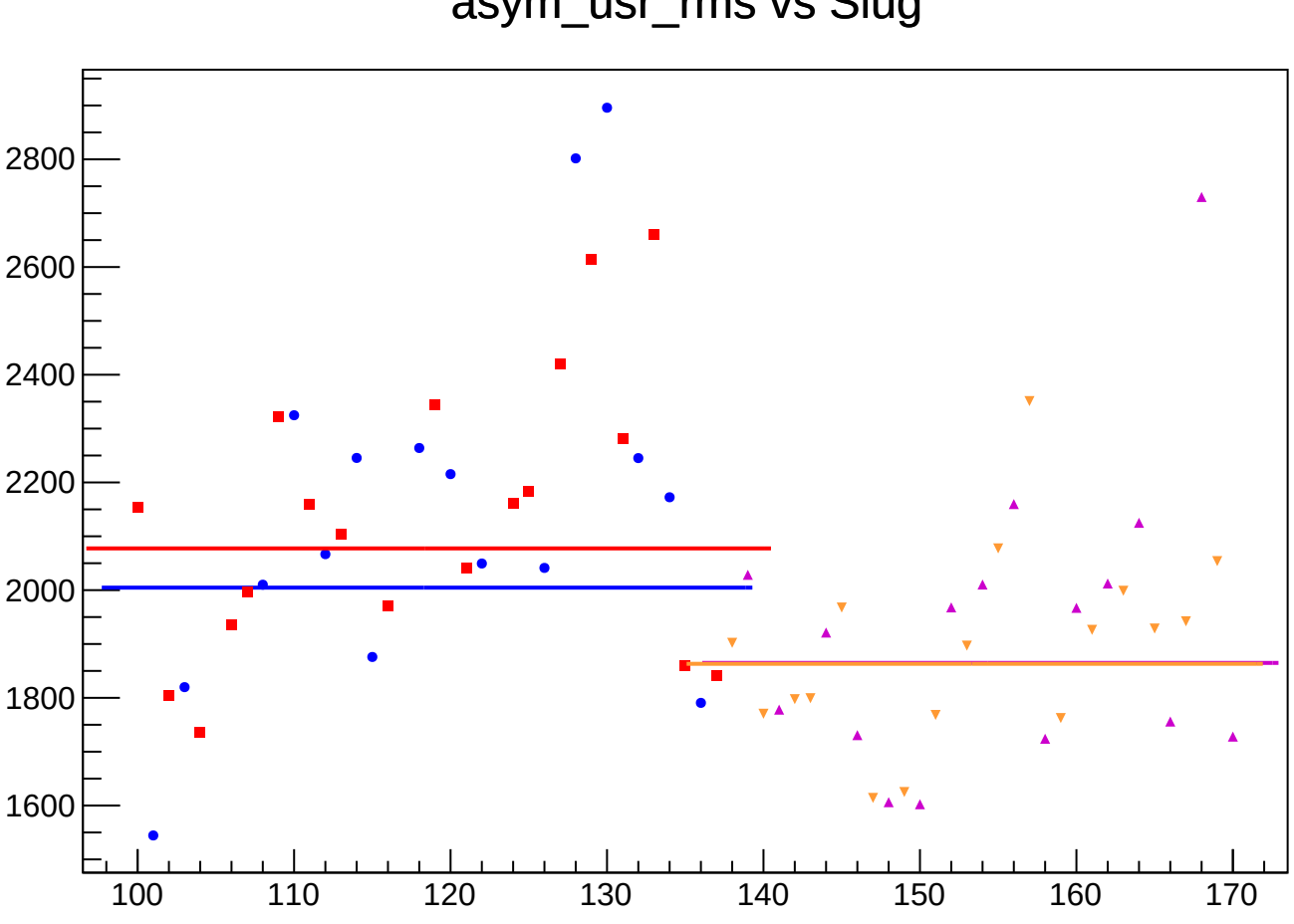
Right Out: -2692.625+/-765.754 $\chi^2$/NDF: 12.5/18

Left In: -1818.949+/-517.532 $\chi^2$/NDF:16.4/15

+ sign 1555.462+/-423.974 $\chi^2$/NDF: 34.1/32

All: -248.123+/-301.482 $\chi^2$/NDF: 100.6/67

- sign -2092.890+/-428.787 $\chi^2$/NDF: 29.8/34




Right In: 2004.635+/-0.535 $\chi^2$/NDF: 387567.3/15

Left Out: 1863.195+/-0.362 $\chi^2$/NDF:215083.8/16

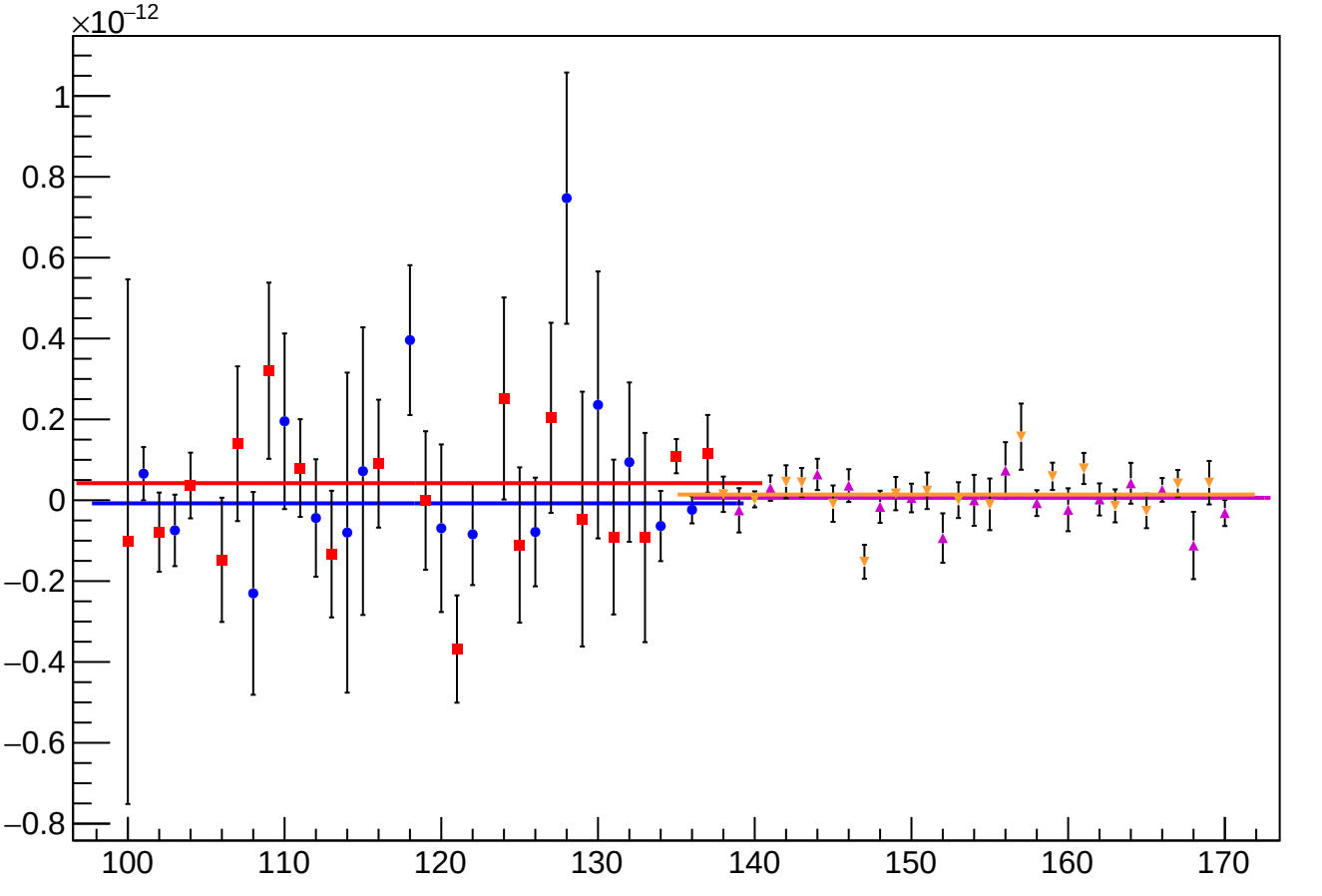
Right Out: 2077.500+/-0.541 $\chi^2$/NDF: 230482.0/18

Left In: 1864.865+/-0.366 $\chi^2$/NDF:394167.3/15

+ sign 1907.549+/-0.300 $\chi^2$/NDF: 650562.8/32

All: 1919.408+/-0.213 $\chi^2$/NDF: 1384236.5/67

- sign 1931.537+/-0.303 $\chi^2$/NDF: 730508.9/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:27.8/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.8/18

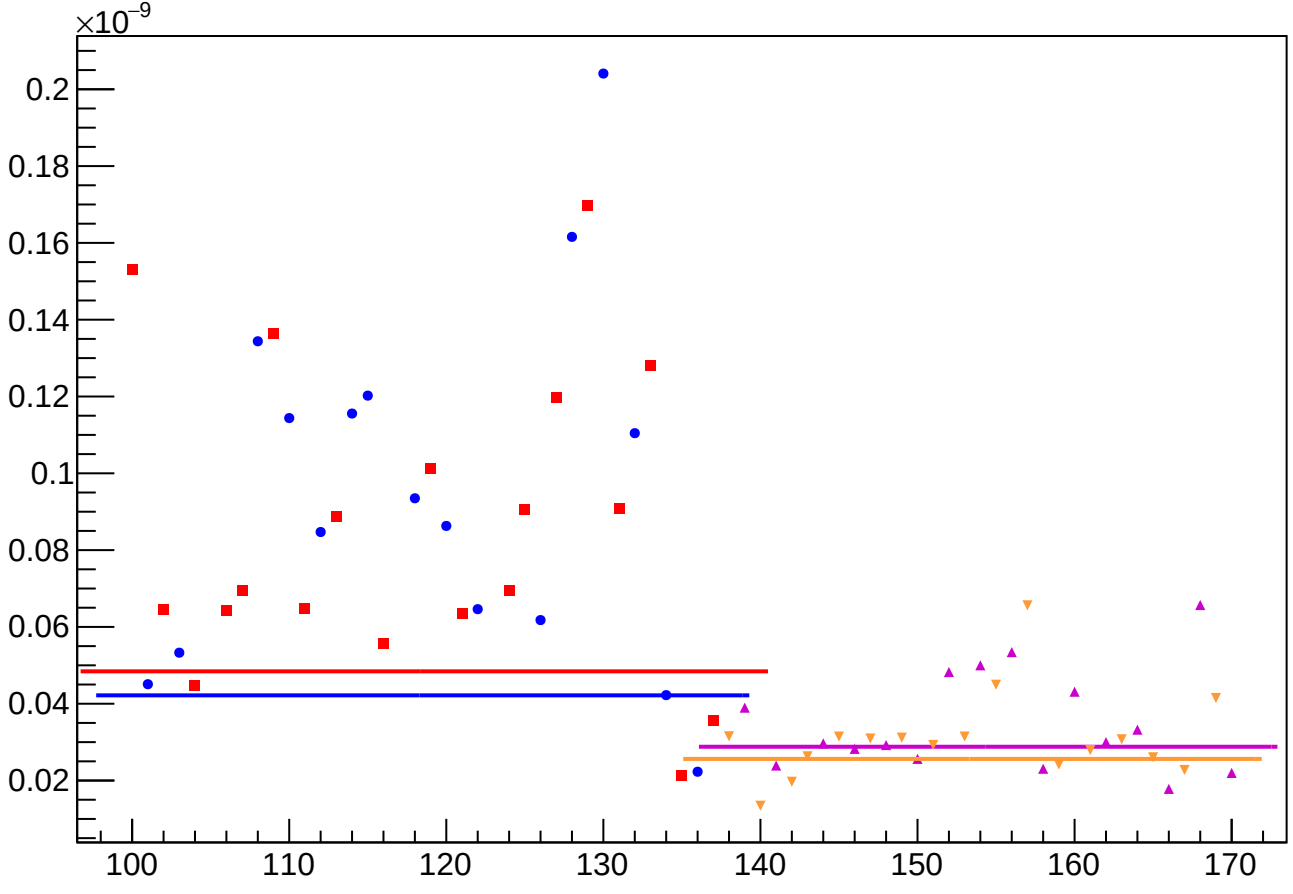
Left In: 0.000+/-0.000 $\chi^2$/NDF:12.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 45.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 80.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 35.7/34

# asym_usr_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2933545.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1878752.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2604483.4/18

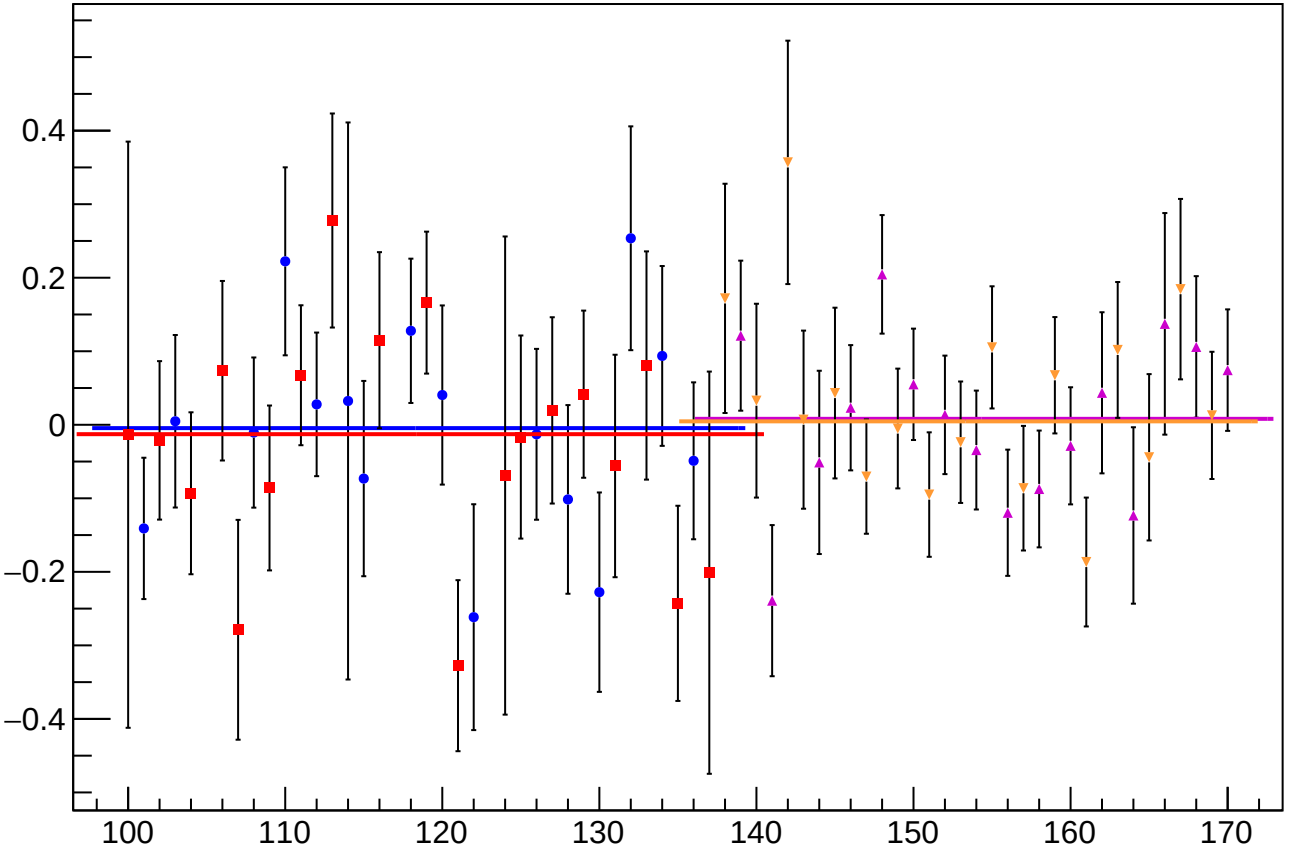
Left In: 0.000+/-0.000 $\chi^2$/NDF:1800289.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5621190.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 11095611.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5326854.7/34

# asym_usr_dit_vs_cor_diff_mean vs Slug




Right In: -0.005+/-0.030 $\chi^2$/NDF: 17.3/15

Left Out: 0.005+/-0.023 $\chi^2$/NDF:19.7/16

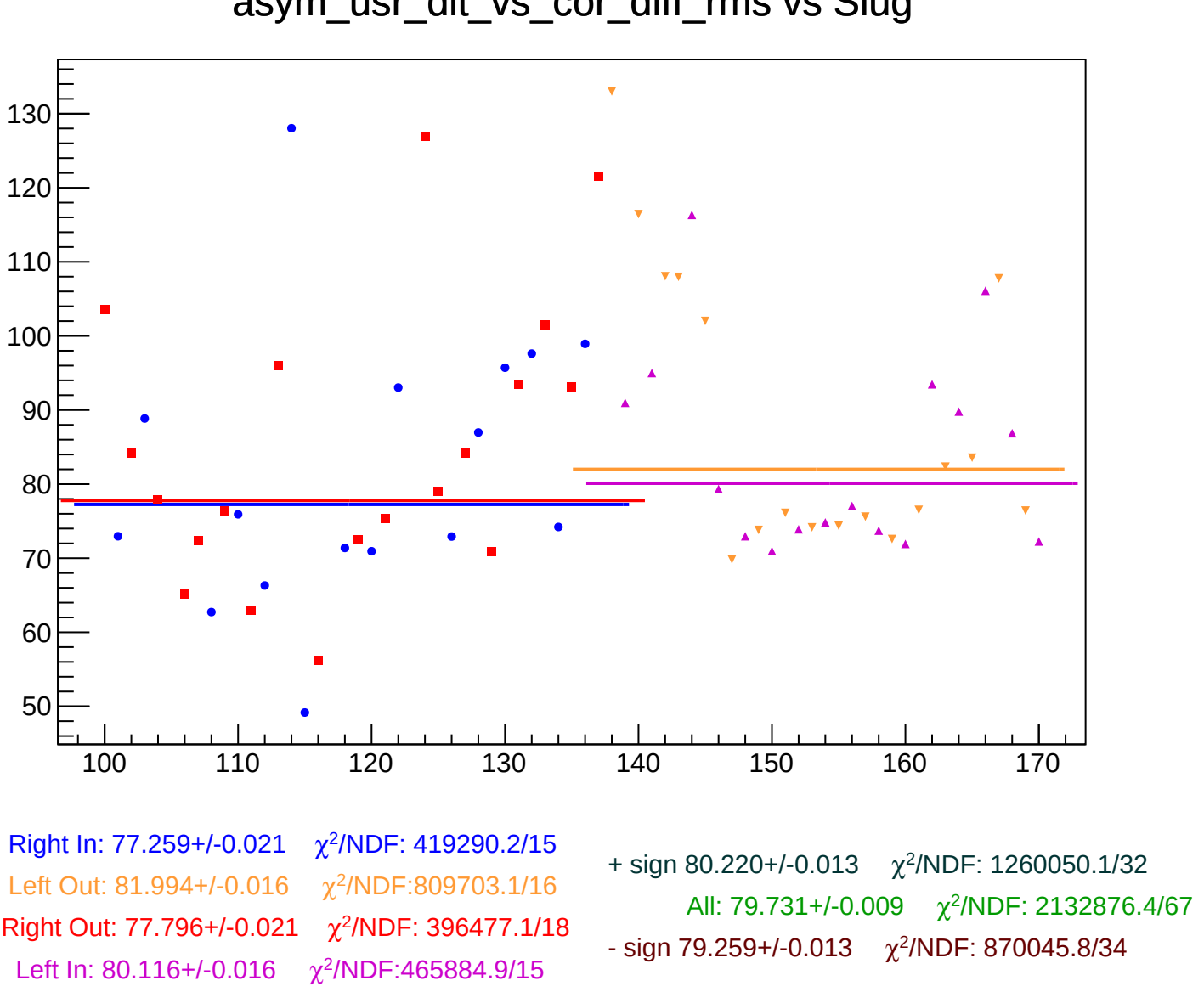
Right Out: -0.013+/-0.030 $\chi^2$/NDF: 25.5/18

Left In: 0.008+/-0.023 $\chi^2$/NDF:21.5/15

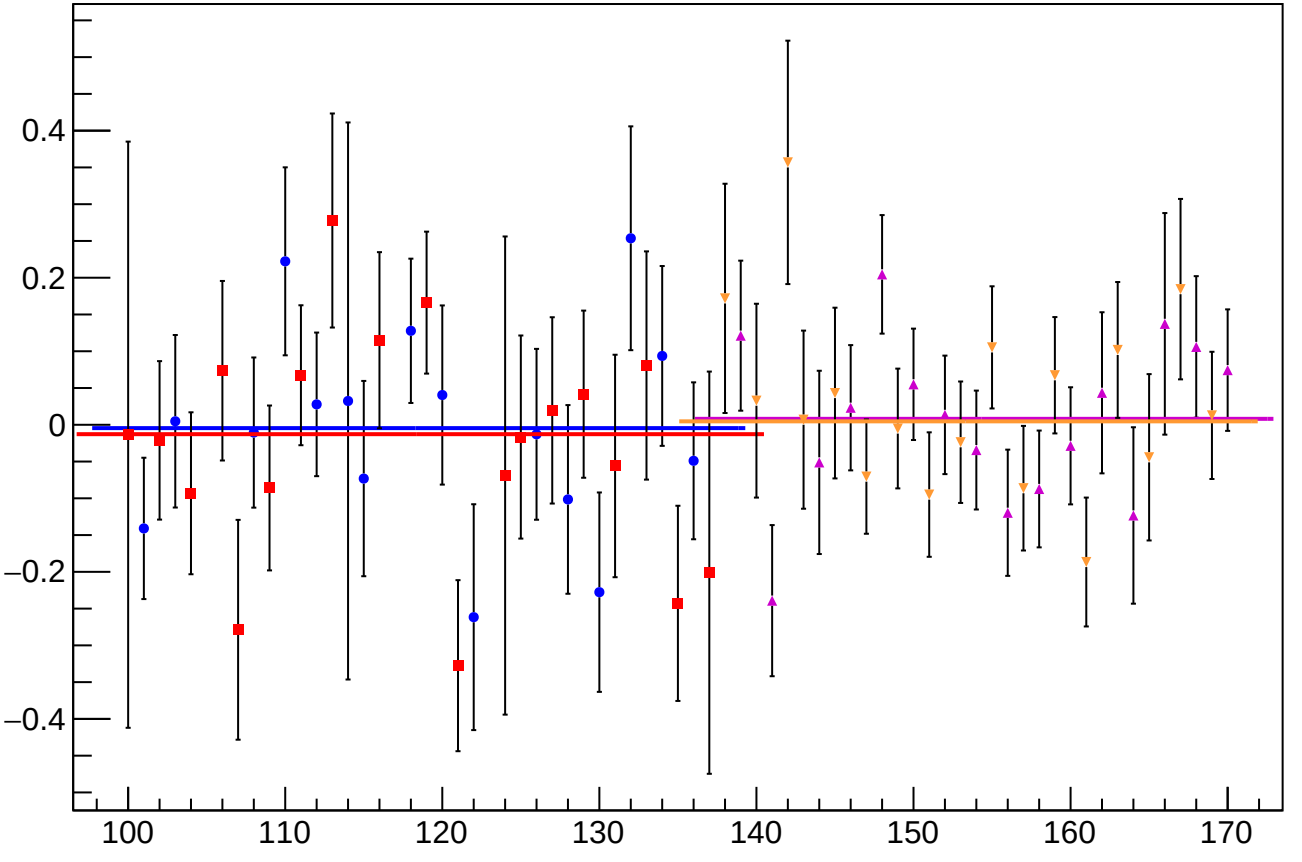
+ sign 0.001+/-0.018 $\chi^2$/NDF: 37.1/32

All: 0.001+/-0.013 $\chi^2$/NDF: 84.4/67

- sign 0.000+/-0.018 $\chi^2$/NDF: 47.2/34


asym_usr_dit_vs_cor_diff_rms vs Slug
130
120
110
100
90
80
70
60
50
100
110
120
130
140
150
160
170
Right In: 77.259+/-0.021 χ²/NDF: 419290.2/15
Left Out: 81.994+/-0.016 χ²/NDF:809703.1/16
Right Out: 77.796+/-0.021 χ²/NDF: 396477.1/18
Left In: 80.116+/-0.016 χ²/NDF:465884.9/15
+ sign 80.220+/-0.013 χ²/NDF: 1260050.1/32
All: 79.731+/-0.009 χ²/NDF: 2132876.4/67
- sign 79.259+/-0.013 χ²/NDF: 870045.8/34

# asym_usr_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.005+/-0.030 $\chi^2$/NDF: 17.3/15

Left Out: 0.005+/-0.023 $\chi^2$/NDF:19.7/16

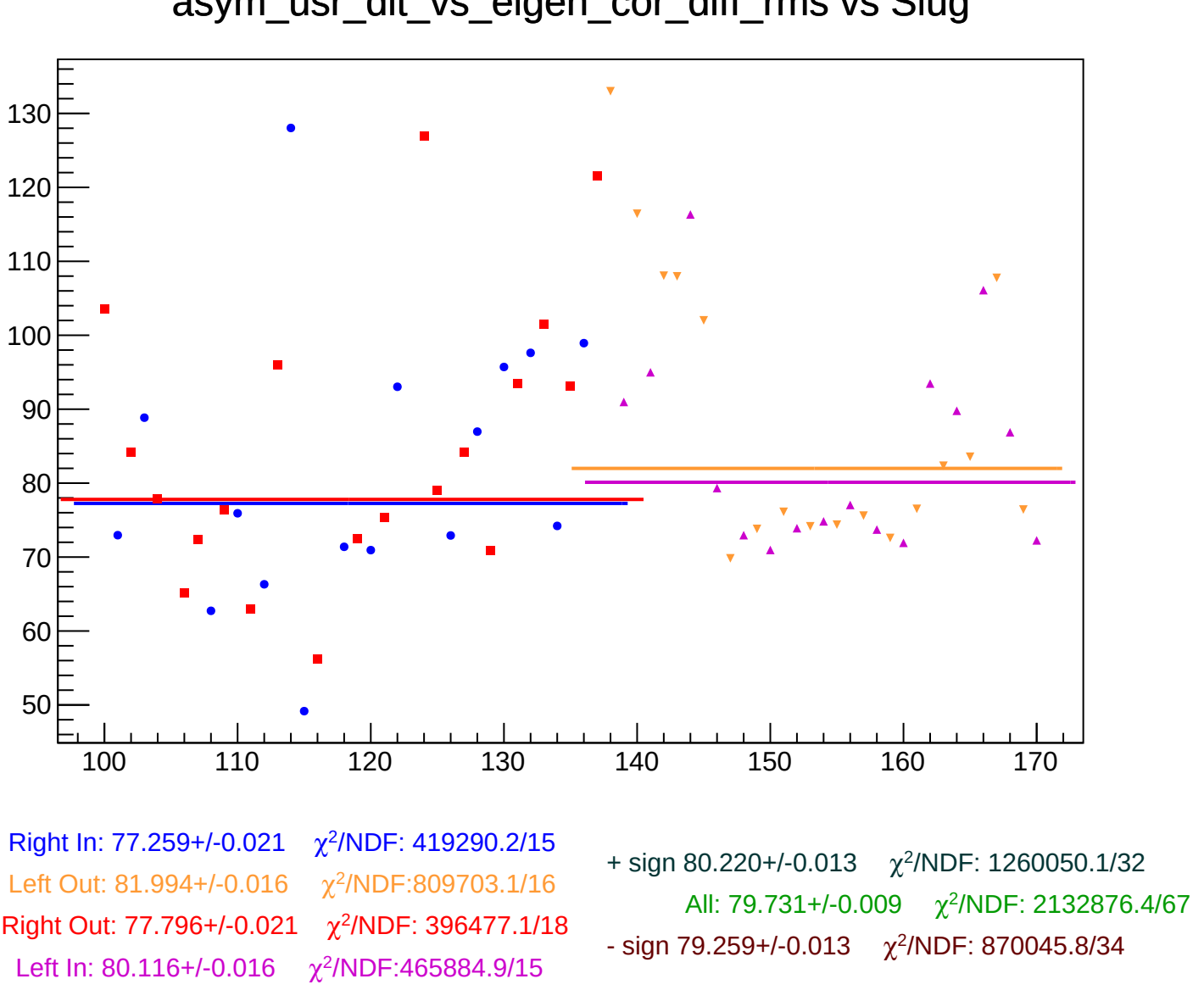
Right Out: -0.013+/-0.030 $\chi^2$/NDF: 25.5/18

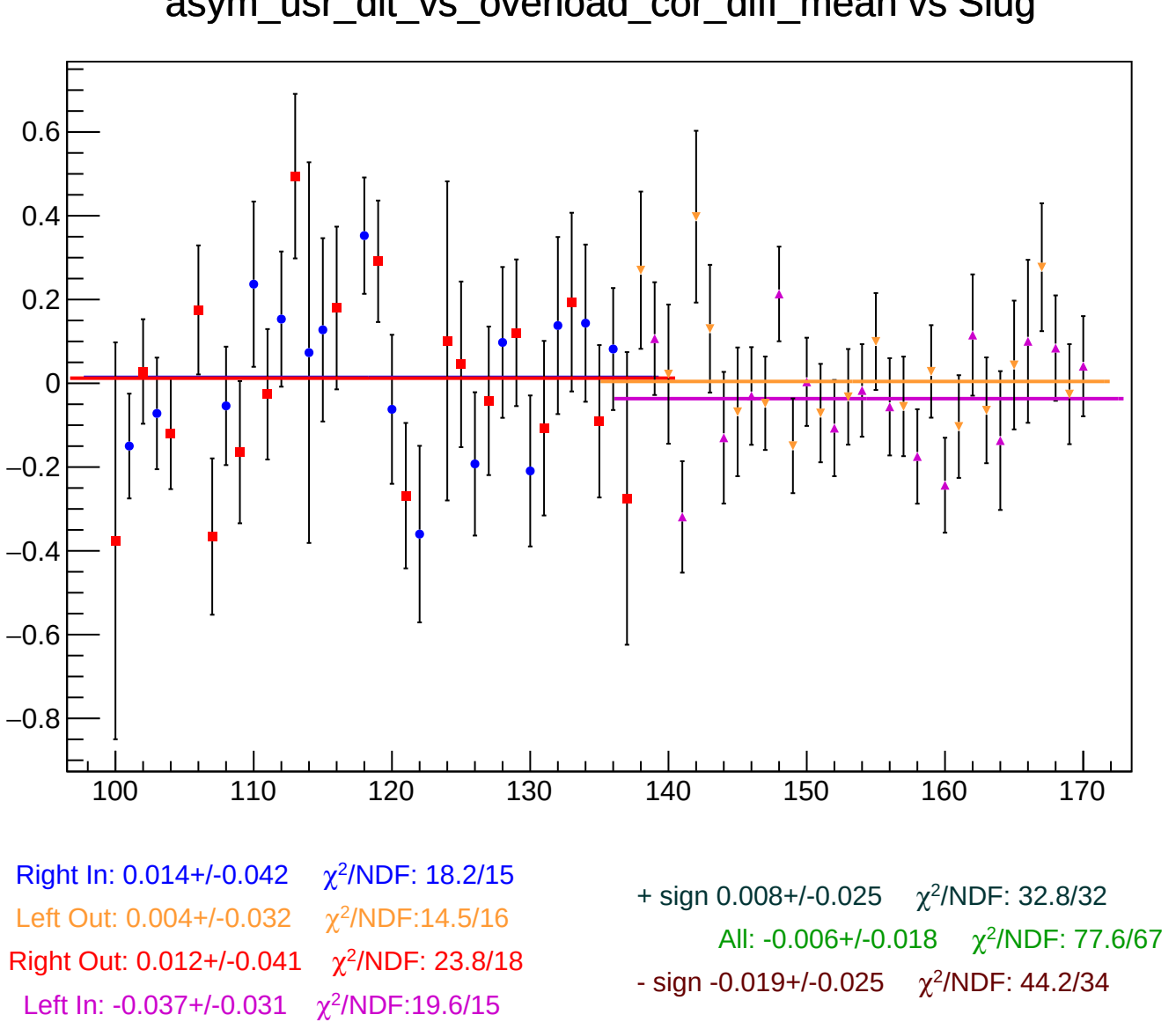
Left In: 0.008+/-0.023 $\chi^2$/NDF:21.5/15

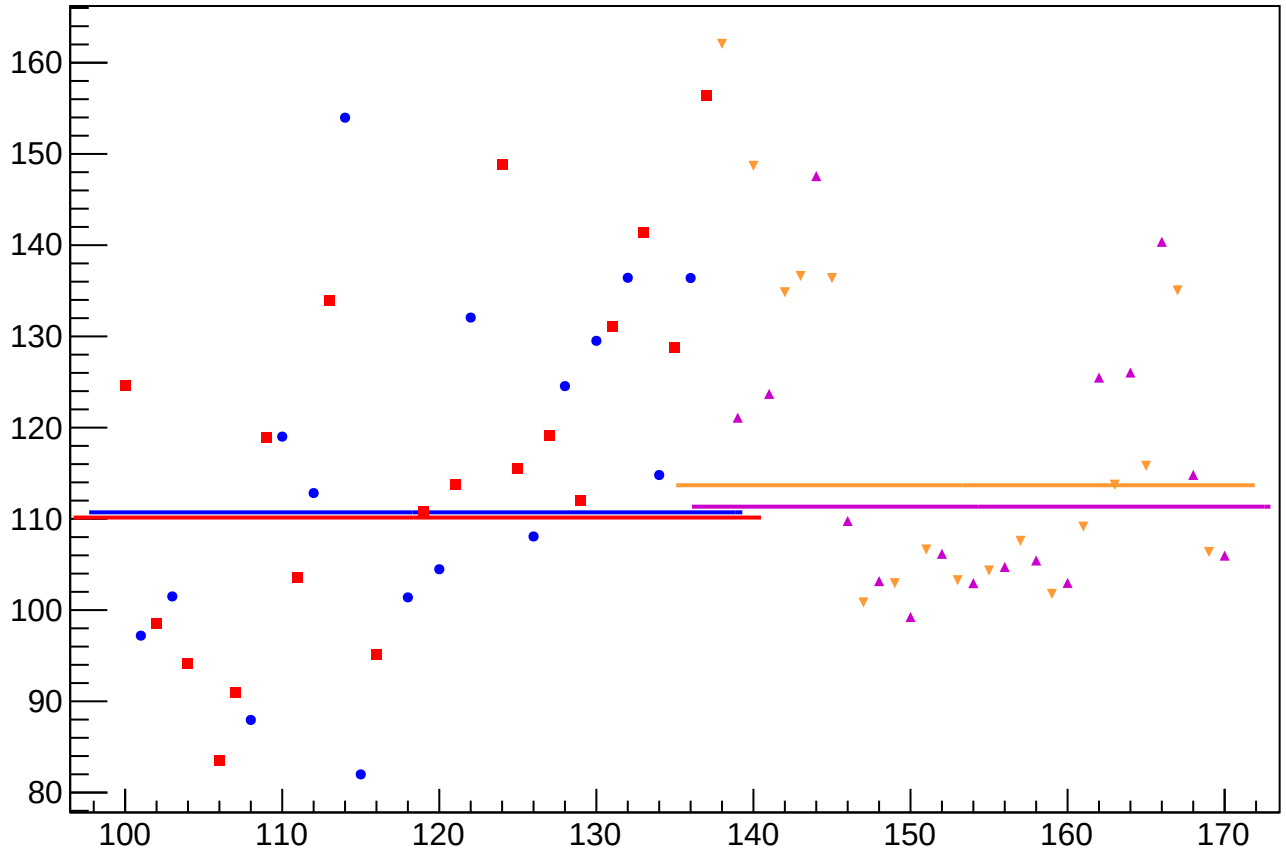
+ sign 0.001+/-0.018 $\chi^2$/NDF: 37.1/32

All: 0.001+/-0.013 $\chi^2$/NDF: 84.4/67

- sign 0.000+/-0.018 $\chi^2$/NDF: 47.2/34


asym_usr_dit_vs_eigen_cor_diff_rms vs Slug
130
120
110
100
90
80
70
60
50
100
110
120
130
140
150
160
170
Right In: 77.259+/-0.021 χ²/NDF: 419290.2/15
Left Out: 81.994+/-0.016 χ²/NDF:809703.1/16
Right Out: 77.796+/-0.021 χ²/NDF: 396477.1/18
Left In: 80.116+/-0.016 χ²/NDF:465884.9/15
+ sign 80.220+/-0.013 χ²/NDF: 1260050.1/32
All: 79.731+/-0.009 χ²/NDF: 2132876.4/67
- sign 79.259+/-0.013 χ²/NDF: 870045.8/34


asym_usr_dit_vs_overload_cor_diff_mean vs Slug
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
100
110
120
130
140
150
160
170
Right In: 0.014+/-0.042 χ²/NDF: 18.2/15
Left Out: 0.004+/-0.032 χ²/NDF:14.5/16
Right Out: 0.012+/-0.041 χ²/NDF: 23.8/18
Left In: -0.037+/-0.031 χ²/NDF:19.6/15
+ sign 0.008+/-0.025 χ²/NDF: 32.8/32
All: -0.006+/-0.018 χ²/NDF: 77.6/67
- sign -0.019+/-0.025 χ²/NDF: 44.2/34




Right In: 110.714+/-0.030 $\chi^2$/NDF: 299972.8/15

Left Out: 113.686+/-0.022 $\chi^2$/NDF:491484.2/16

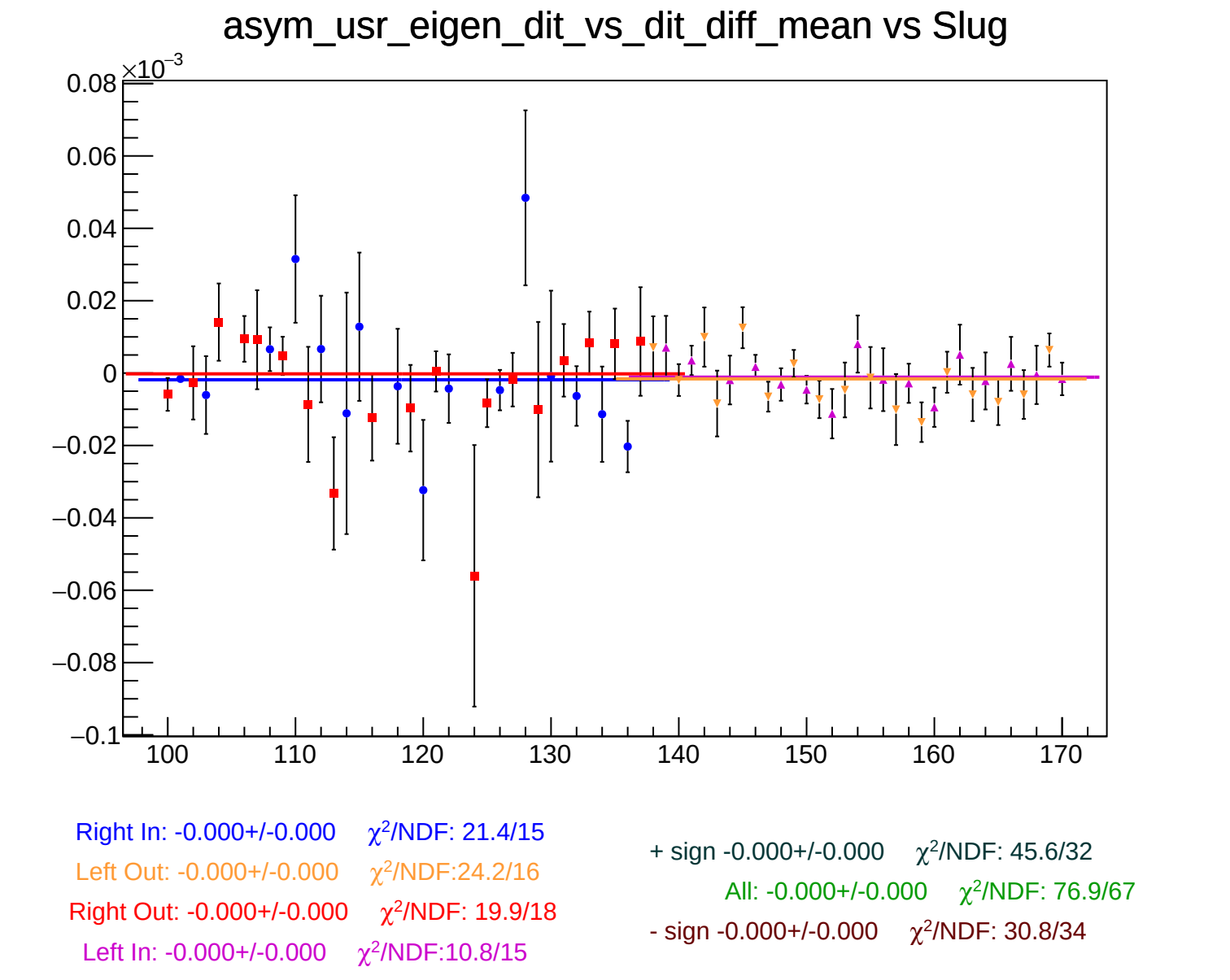
Right Out: 110.145+/-0.029 $\chi^2$/NDF: 326726.5/18

Left In: 111.336+/-0.022 $\chi^2$/NDF:294452.0/15

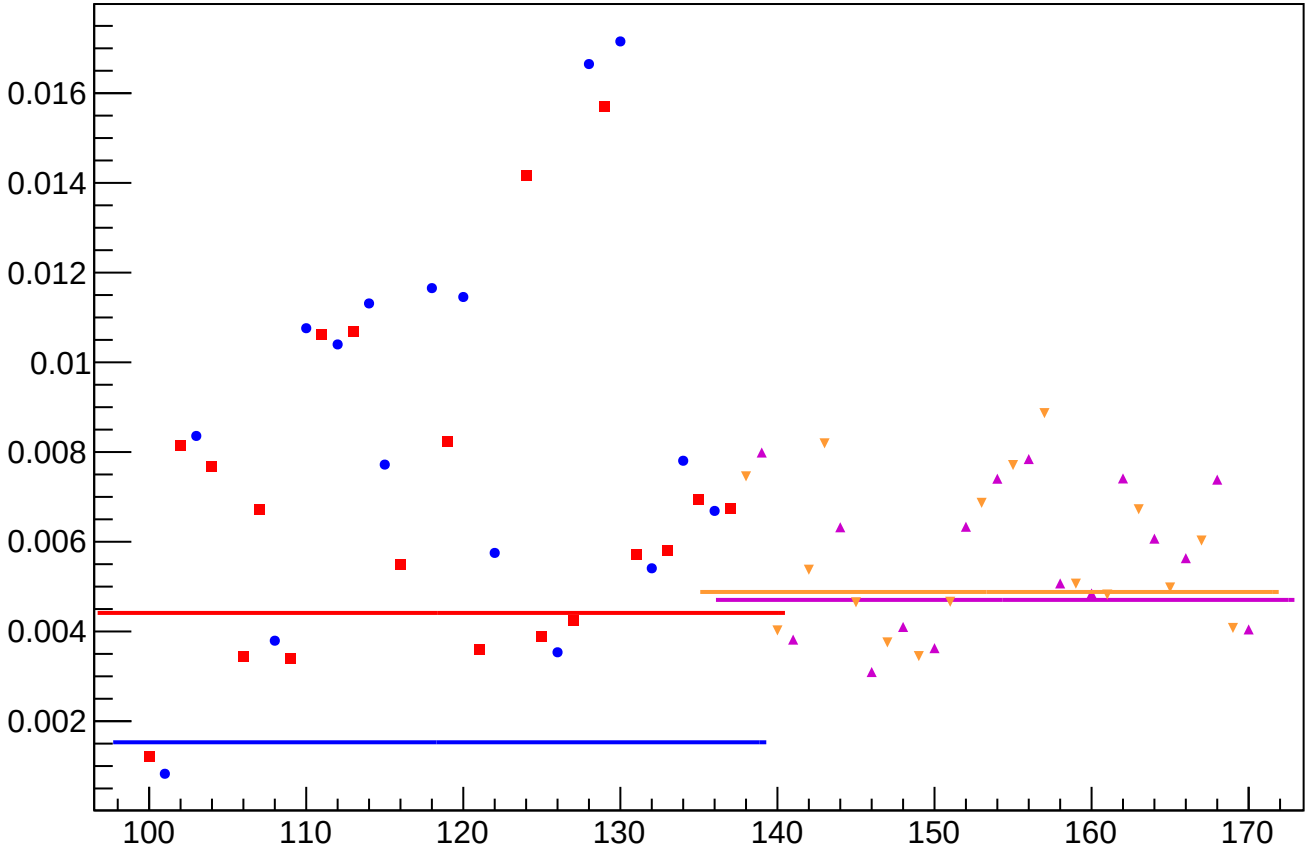
+ sign 112.615+/-0.018 $\chi^2$/NDF: 797778.4/32

All: 111.743+/-0.013 $\chi^2$/NDF: 1424652.1/67

- sign 110.903+/-0.018 $\chi^2$/NDF: 622237.4/34


asym_usr_eigen_dit_vs_dit_diff_mean vs Slug
×10⁻³
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 21.4/15
Left Out: -0.000+/-0.000 χ²/NDF:24.2/16
Right Out: -0.000+/-0.000 χ²/NDF: 19.9/18
Left In: -0.000+/-0.000 χ²/NDF:10.8/15
+ sign -0.000+/-0.000 χ²/NDF: 45.6/32
All: -0.000+/-0.000 χ²/NDF: 76.9/67
- sign -0.000+/-0.000 χ²/NDF: 30.8/34

# asym_usr_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 9222940.9/15

Left Out: 0.005+/-0.000 $\chi^2$/NDF:1908980.4/16

Right Out: 0.004+/-0.000 $\chi^2$/NDF: 3388069.5/18

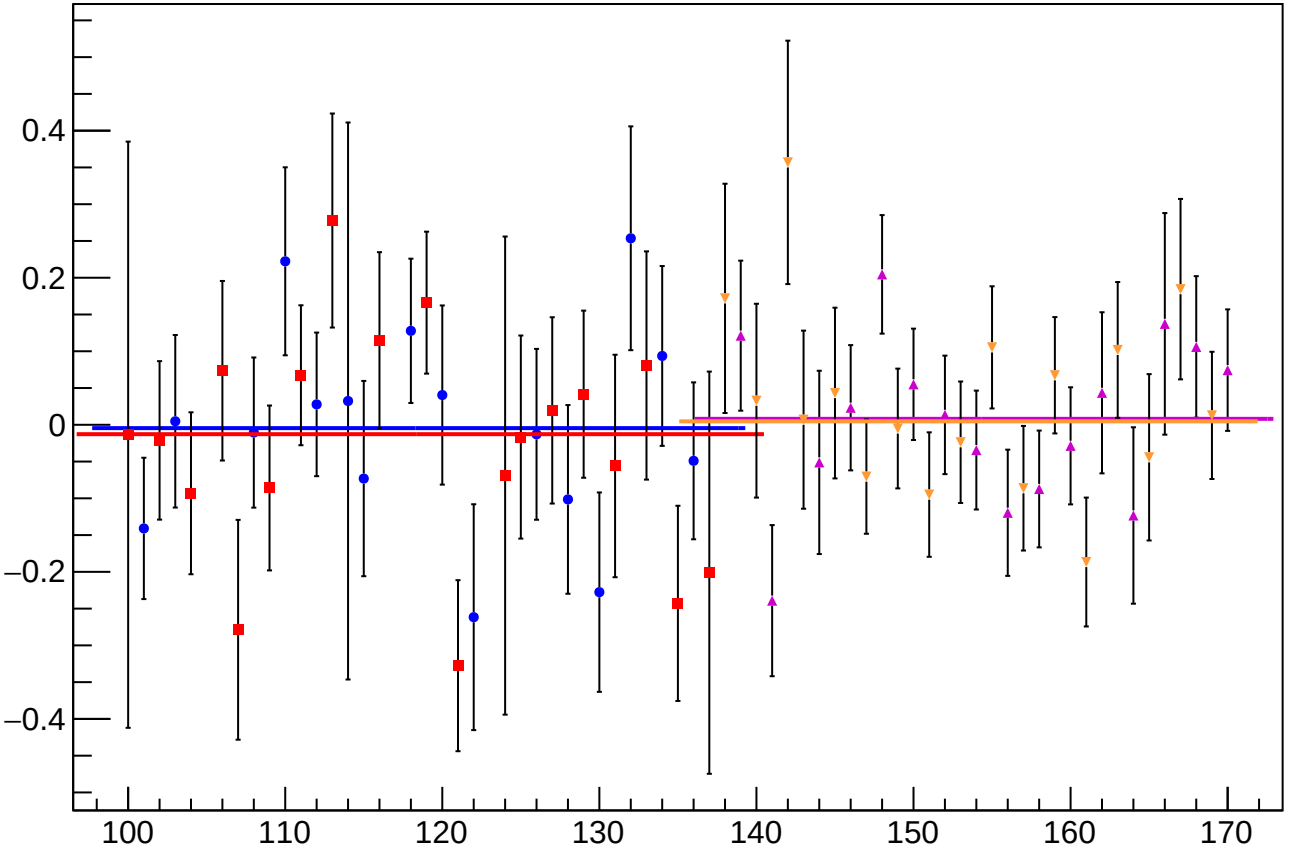
Left In: 0.005+/-0.000 $\chi^2$/NDF:2345162.8/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 18836749.3/32

All: 0.003+/-0.000 $\chi^2$/NDF: 28809913.5/67

- sign 0.005+/-0.000 $\chi^2$/NDF: 5763468.2/34

# asym_usr_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.005+/-0.030 $\chi^2$/NDF: 17.3/15

Left Out: 0.005+/-0.023 $\chi^2$/NDF:19.7/16

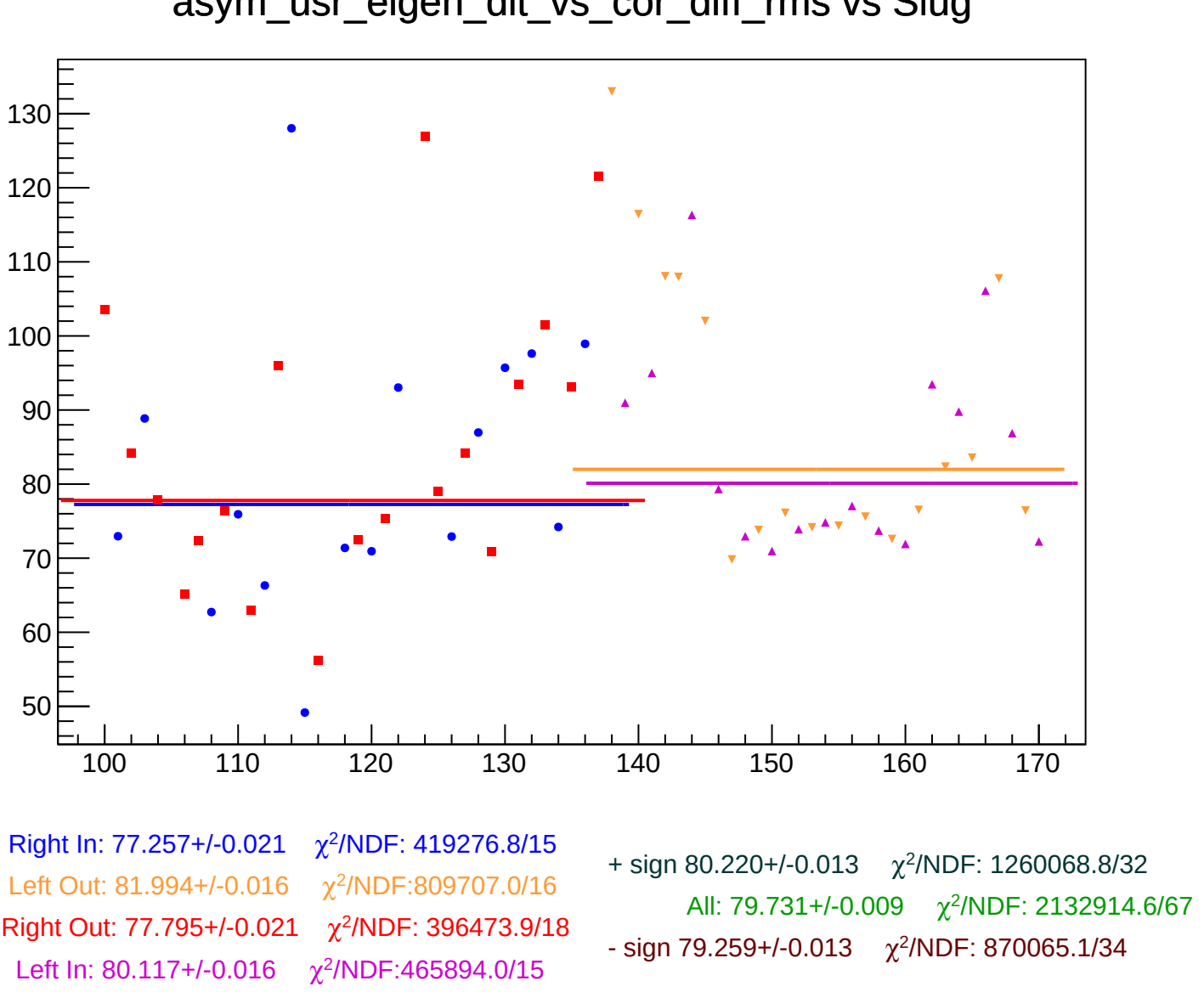
Right Out: -0.013+/-0.030 $\chi^2$/NDF: 25.5/18

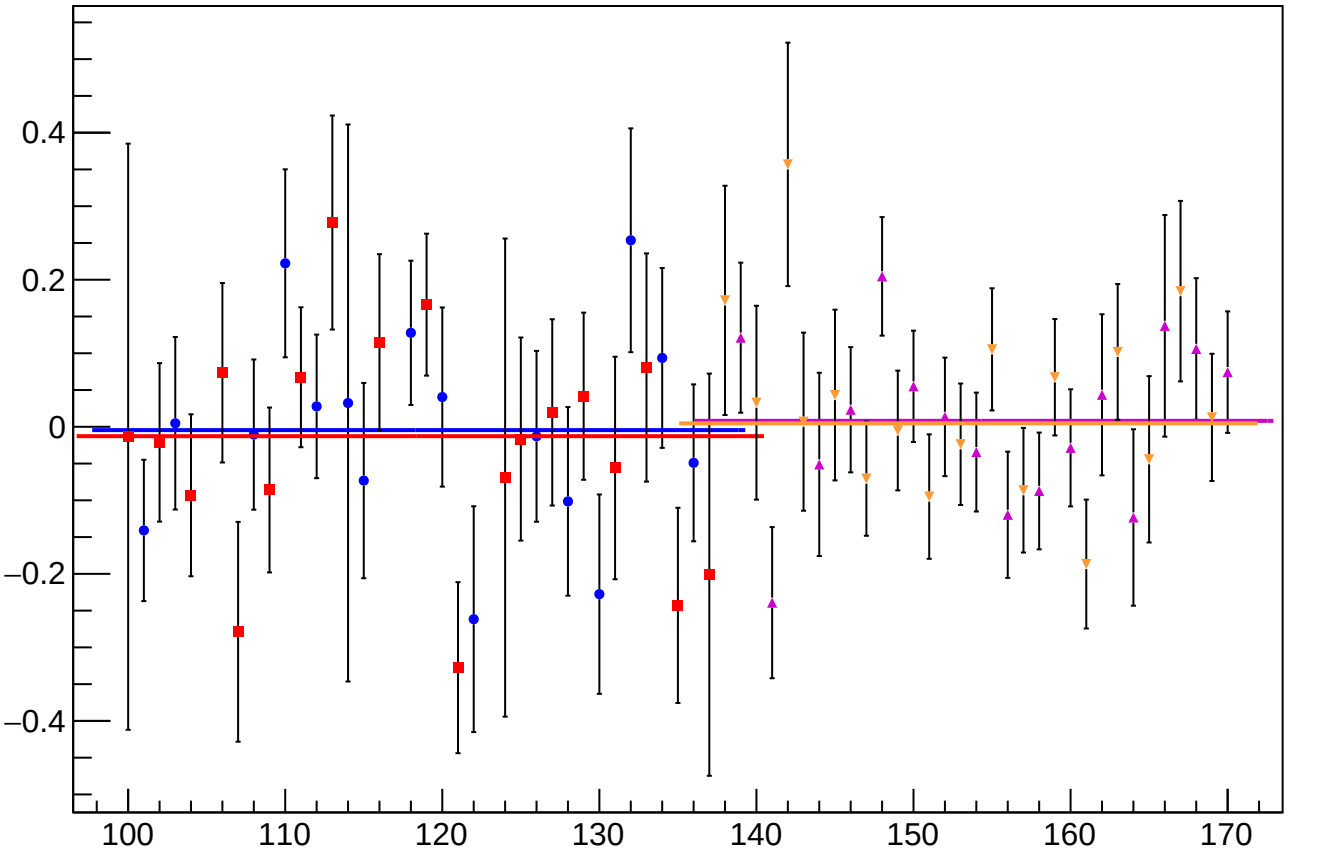
Left In: 0.008+/-0.023 $\chi^2$/NDF:21.5/15

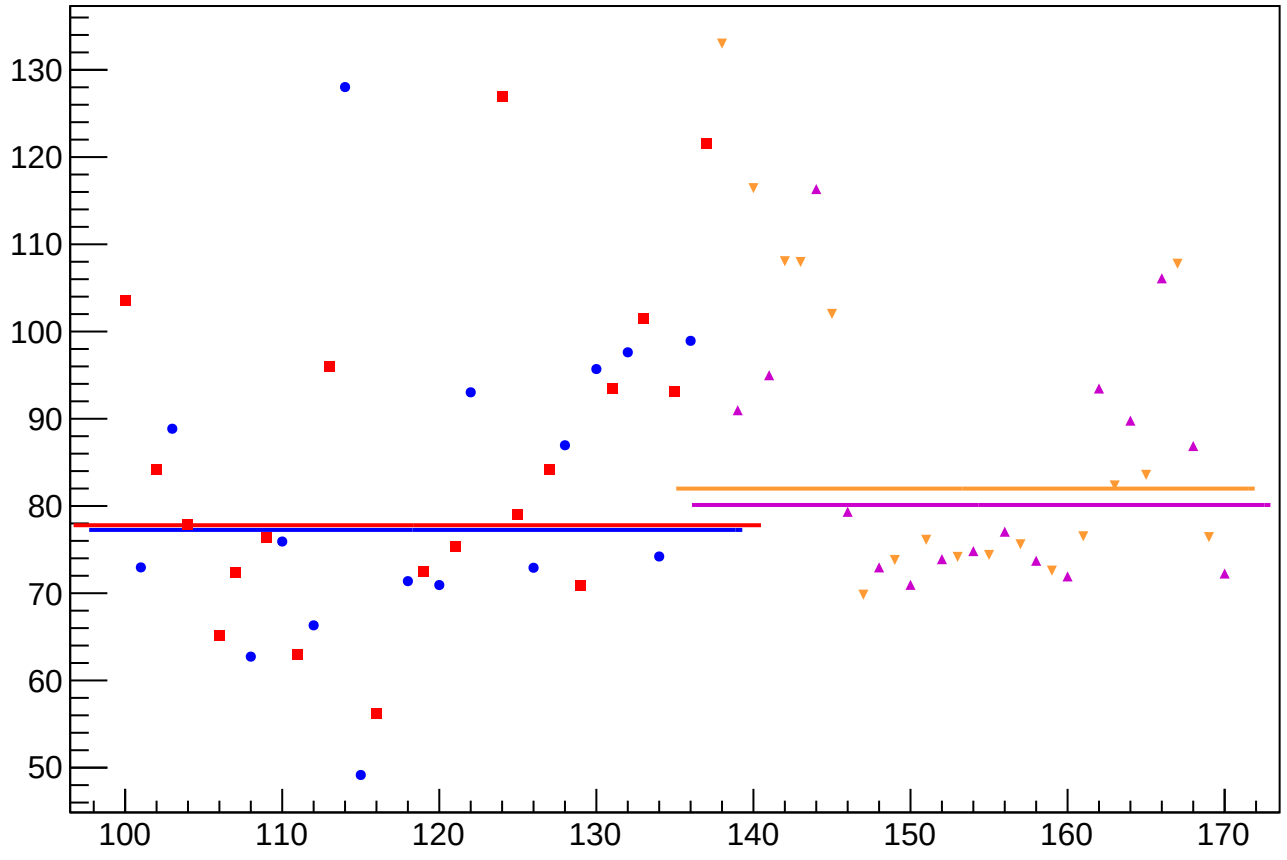
+ sign 0.001+/-0.018 $\chi^2$/NDF: 37.1/32

All: 0.001+/-0.013 $\chi^2$/NDF: 84.4/67

- sign 0.000+/-0.018 $\chi^2$/NDF: 47.2/34


asym_usr_eigen_dit_vs_cor_diff_rms vs Slug
130
120
110
100
90
80
70
60
50
100
110
120
130
140
150
160
170
Right In: 77.257+/-0.021 χ²/NDF: 419276.8/15
Left Out: 81.994+/-0.016 χ²/NDF:809707.0/16
Right Out: 77.795+/-0.021 χ²/NDF: 396473.9/18
Left In: 80.117+/-0.016 χ²/NDF:465894.0/15
+ sign 80.220+/-0.013 χ²/NDF: 1260068.8/32
All: 79.731+/-0.009 χ²/NDF: 2132914.6/67
- sign 79.259+/-0.013 χ²/NDF: 870065.1/34


asym_usr_eigen_dit_vs_eigen_cor_diff_mean vs Slug
0.4
0.2
0
−0.2
−0.4
100
110
120
130
140
150
160
170
Right In: -0.005+/-0.030 χ²/NDF: 17.3/15
Left Out: 0.005+/-0.023 χ²/NDF:19.7/16
Right Out: -0.013+/-0.030 χ²/NDF: 25.5/18
Left In: 0.008+/-0.023 χ²/NDF:21.5/15
+ sign 0.001+/-0.018 χ²/NDF: 37.1/32
All: 0.001+/-0.013 χ²/NDF: 84.4/67
- sign 0.000+/-0.018 χ²/NDF: 47.2/34




Right In: 77.257+/-0.021 $\chi^2$/NDF: 419276.8/15

Left Out: 81.994+/-0.016 $\chi^2$/NDF:809707.0/16

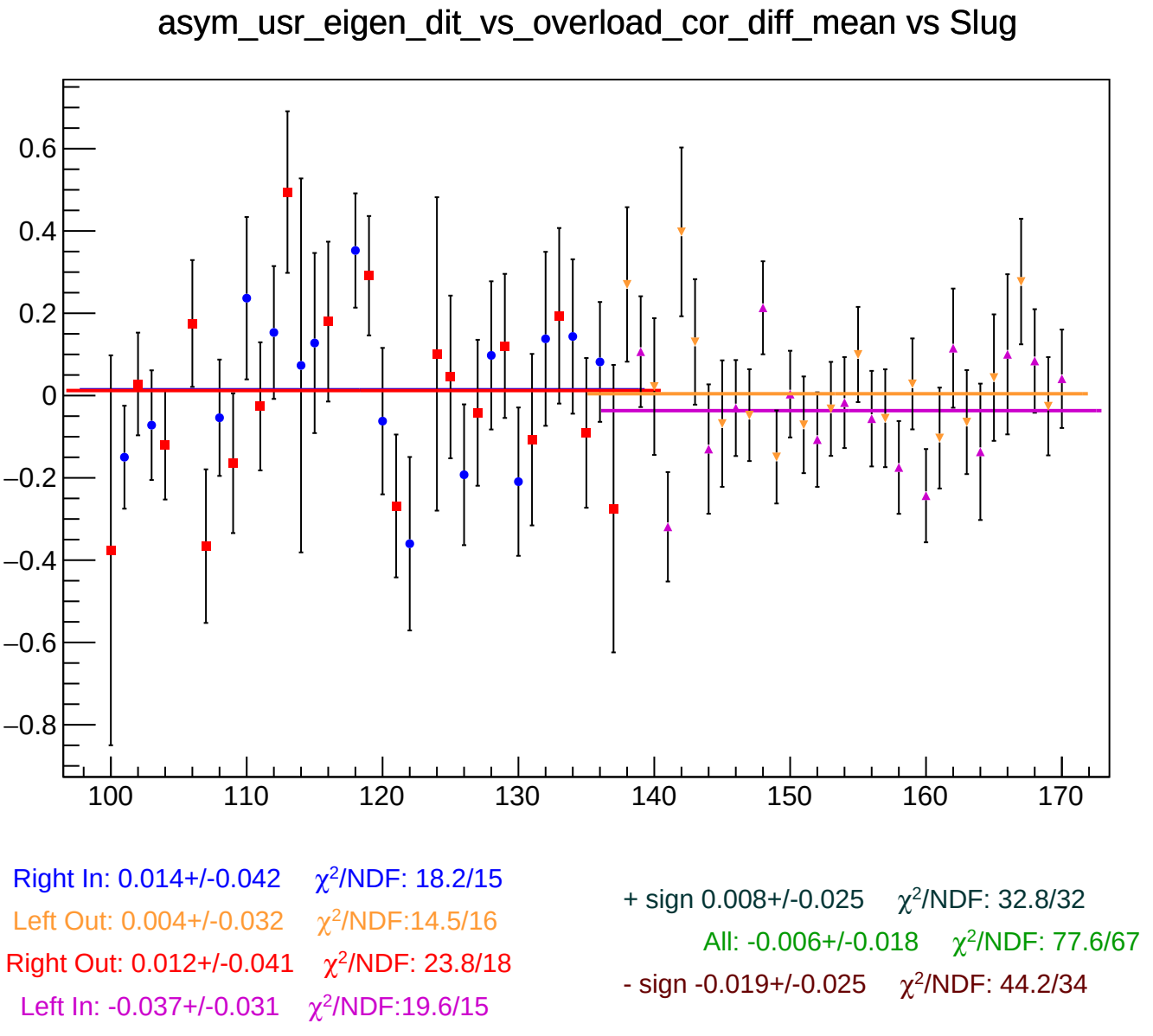
Right Out: 77.795+/-0.021 $\chi^2$/NDF: 396473.9/18

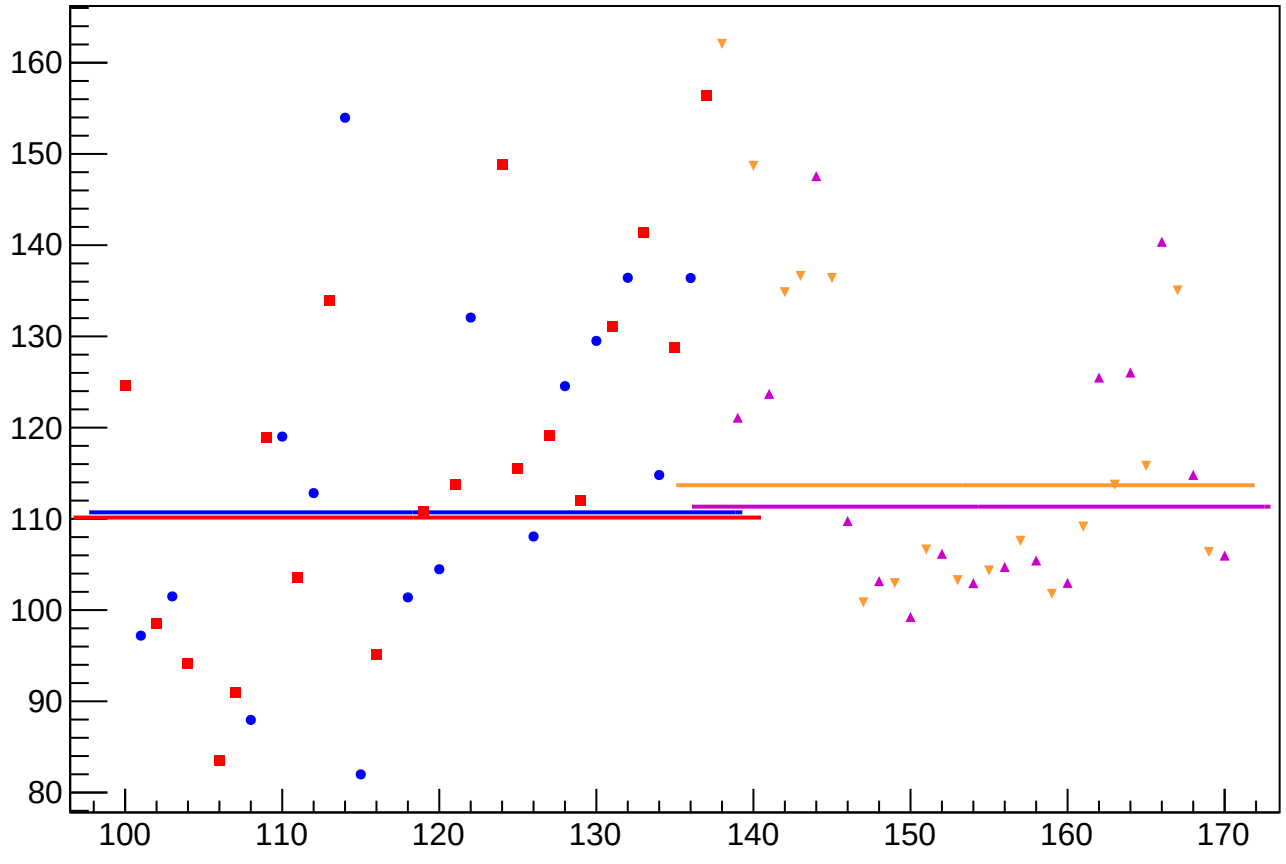
Left In: 80.117+/-0.016 $\chi^2$/NDF:465894.0/15

+ sign 80.220+/-0.013 $\chi^2$/NDF: 1260068.8/32

All: 79.731+/-0.009 $\chi^2$/NDF: 2132914.6/67

- sign 79.259+/-0.013 $\chi^2$/NDF: 870065.1/34


asym_usr_eigen_dit_vs_overload_cor_diff_mean vs Slug
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
100
110
120
130
140
150
160
170
Right In: 0.014+/-0.042 χ²/NDF: 18.2/15
Left Out: 0.004+/-0.032 χ²/NDF:14.5/16
Right Out: 0.012+/-0.041 χ²/NDF: 23.8/18
Left In: -0.037+/-0.031 χ²/NDF:19.6/15
+ sign 0.008+/-0.025 χ²/NDF: 32.8/32
All: -0.006+/-0.018 χ²/NDF: 77.6/67
- sign -0.019+/-0.025 χ²/NDF: 44.2/34




Right In: 110.714+/-0.030 $\chi^2$/NDF: 299948.2/15

Left Out: 113.686+/-0.022 $\chi^2$/NDF:491485.1/16

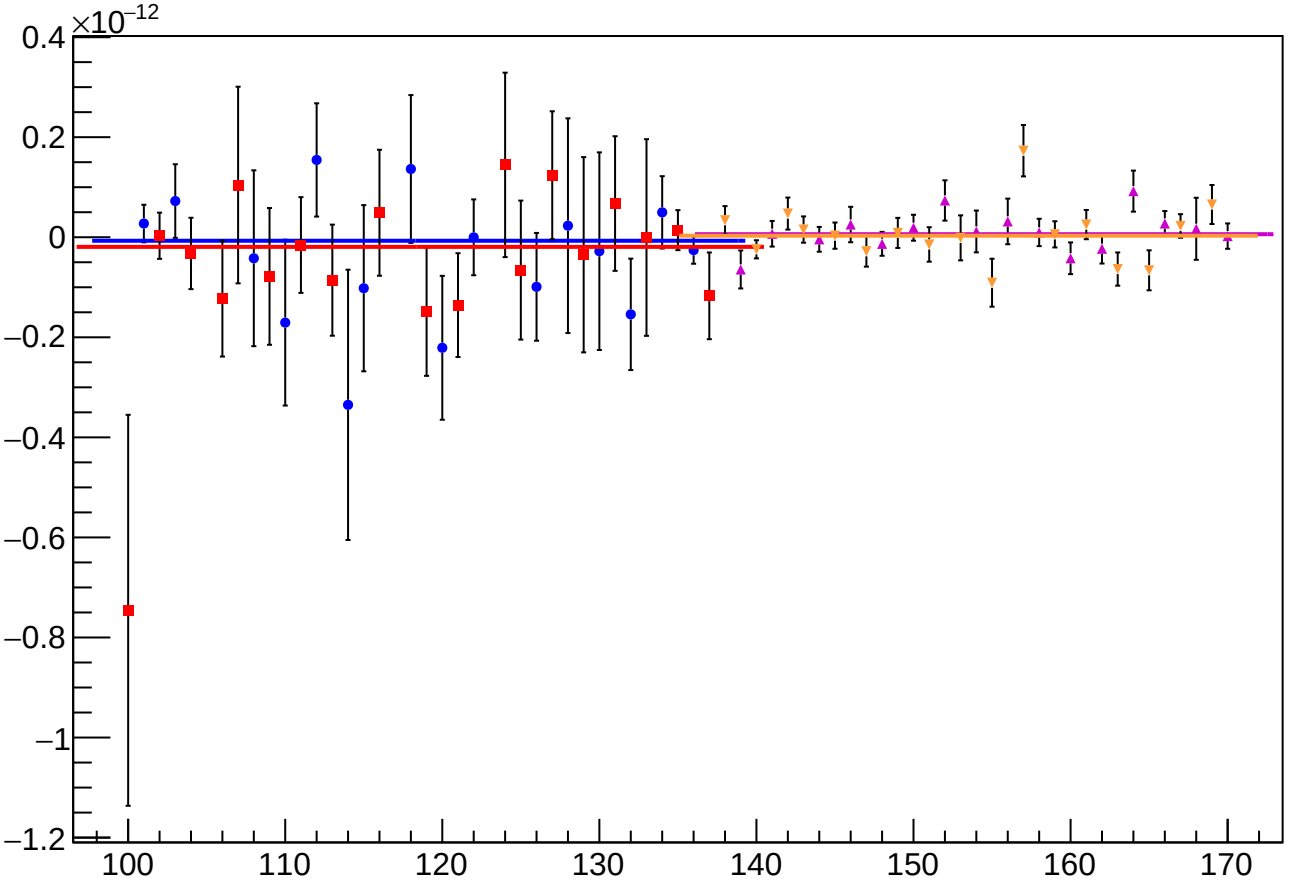
Right Out: 110.144+/-0.029 $\chi^2$/NDF: 326696.7/18

Left In: 111.336+/-0.022 $\chi^2$/NDF:294457.0/15

+ sign 112.615+/-0.018 $\chi^2$/NDF: 797760.4/32

All: 111.743+/-0.013 $\chi^2$/NDF: 1424611.3/67

- sign 110.903+/-0.018 $\chi^2$/NDF: 622214.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 13.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:32.6/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 12.6/18

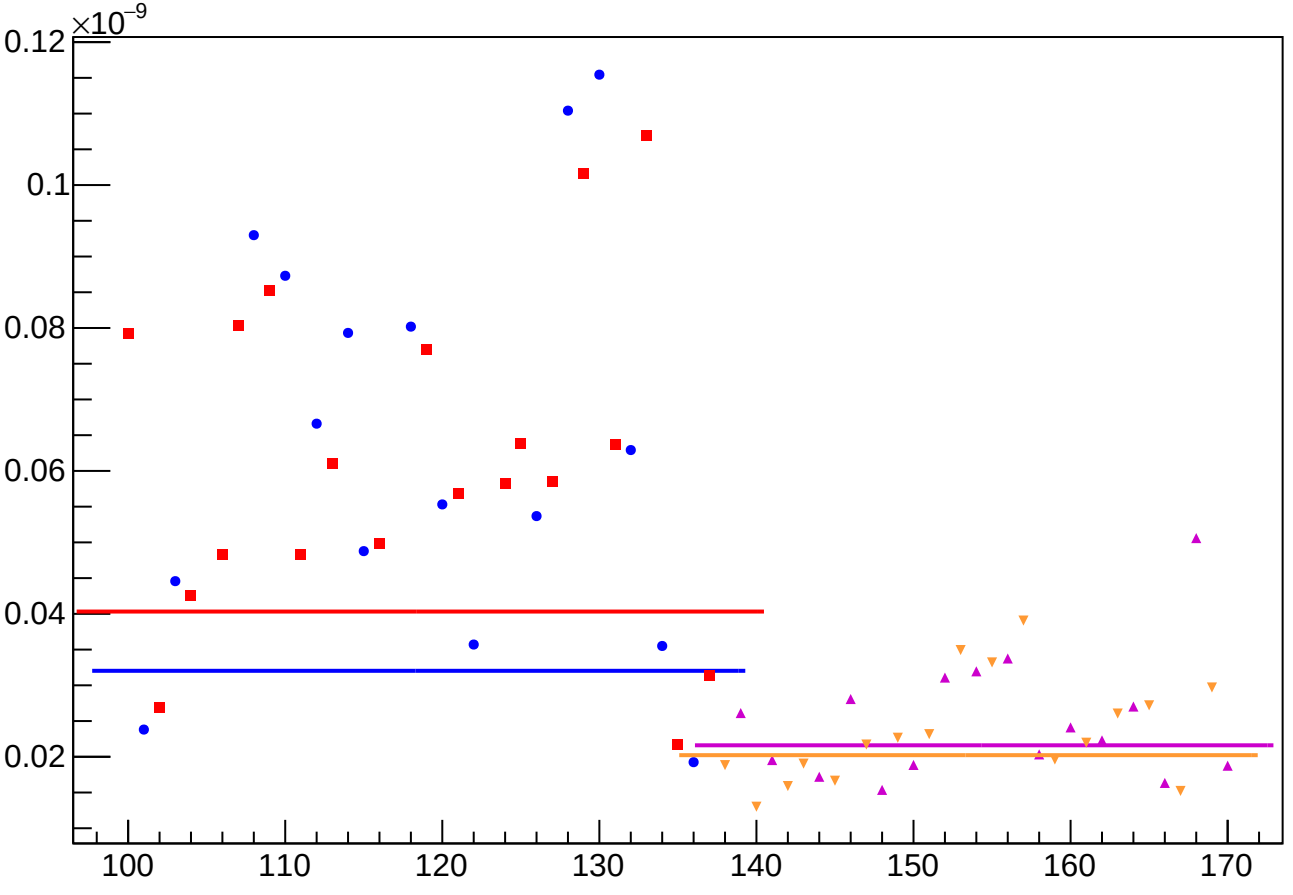
Left In: 0.000+/-0.000 $\chi^2$/NDF:16.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 46.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 76.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 30.3/34

# asym_usr_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2459312.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1400032.9/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1866332.6/18

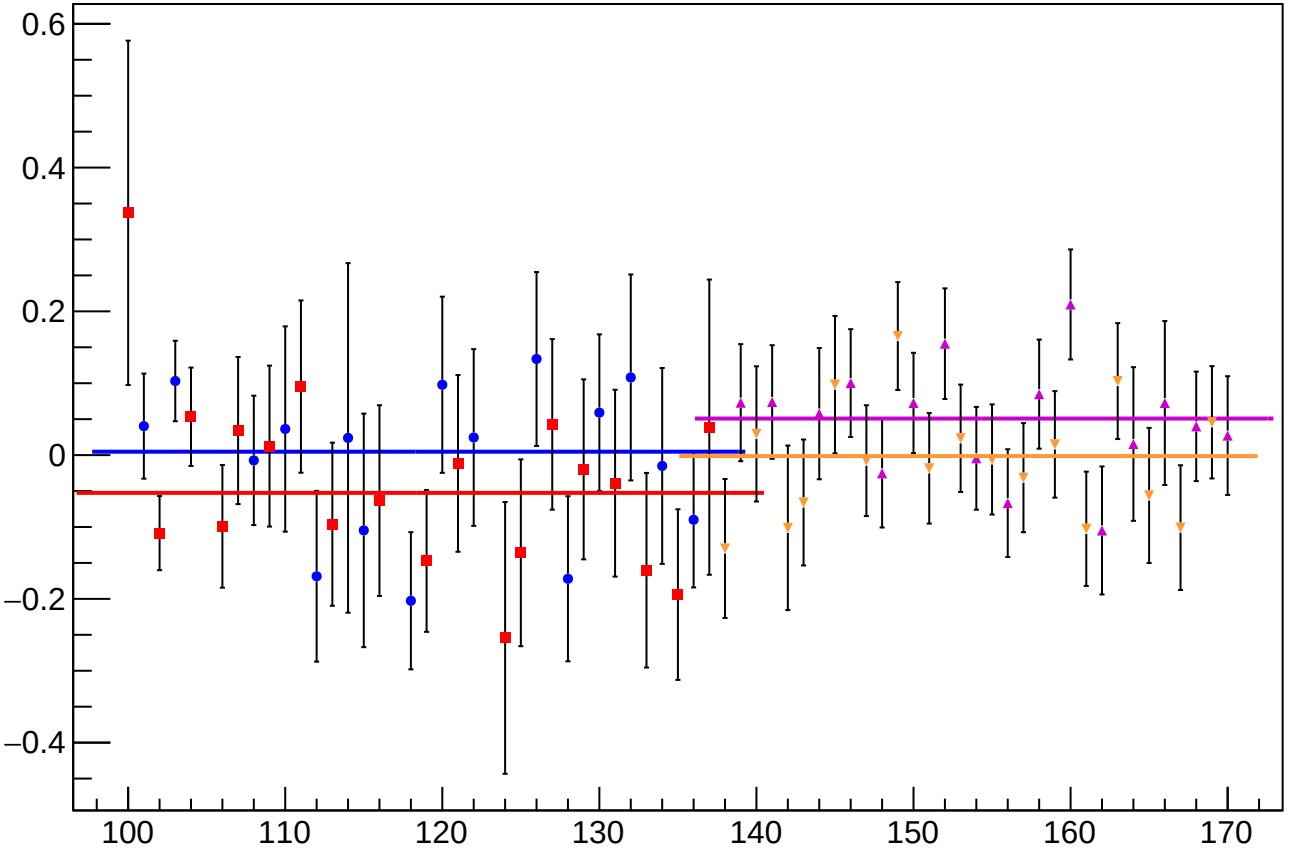
Left In: 0.000+/-0.000 $\chi^2$/NDF:1309751.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4605768.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 9244644.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4564137.3/34

# asym_usr_overload_cor_vs_cor_diff_mean vs Slug




Right In: 0.005+/-0.026 $\chi^2$/NDF: 16.6/15

Left Out: -0.001+/-0.020 $\chi^2$/NDF:14.9/16

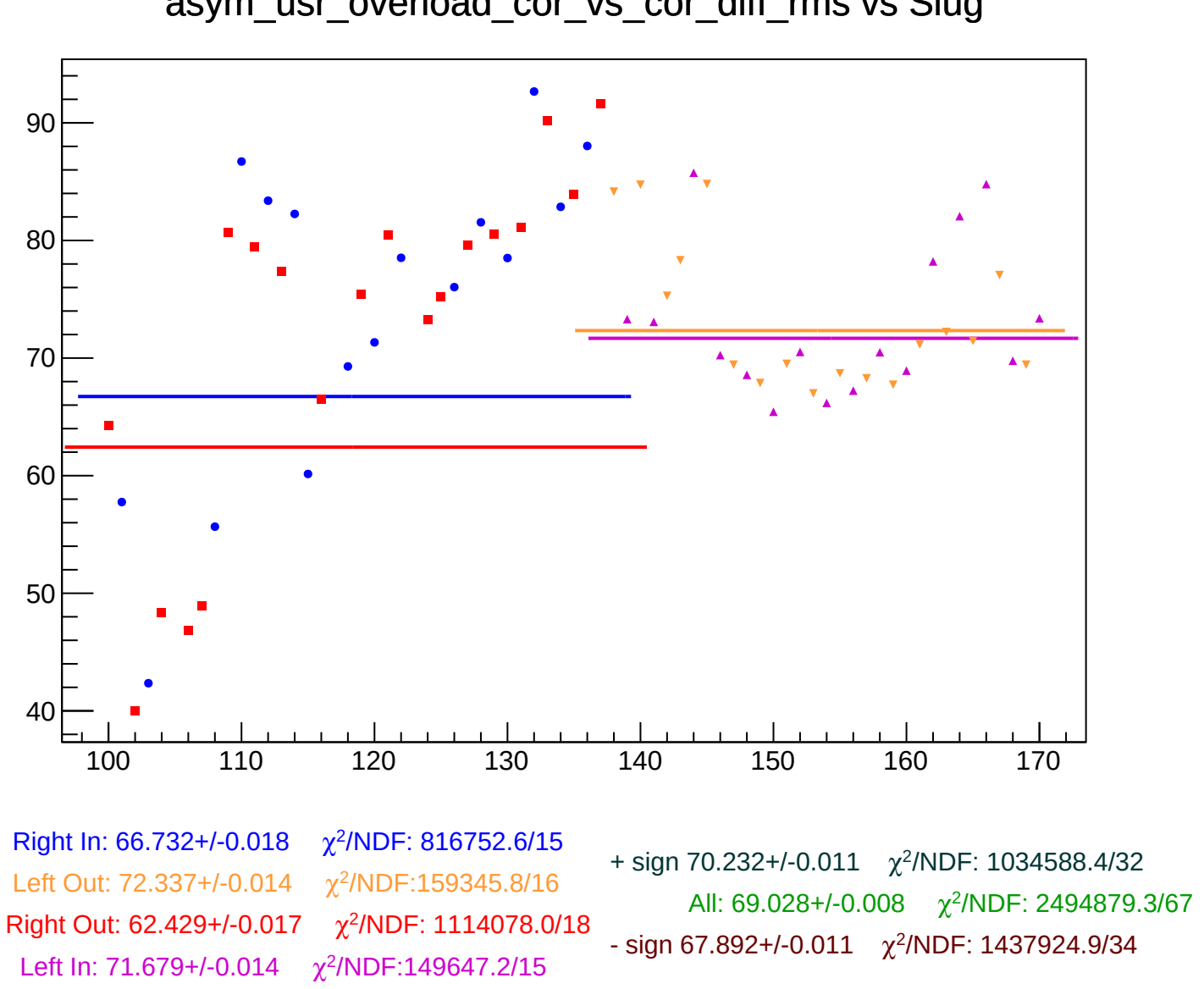
Right Out: -0.053+/-0.024 $\chi^2$/NDF: 14.8/18

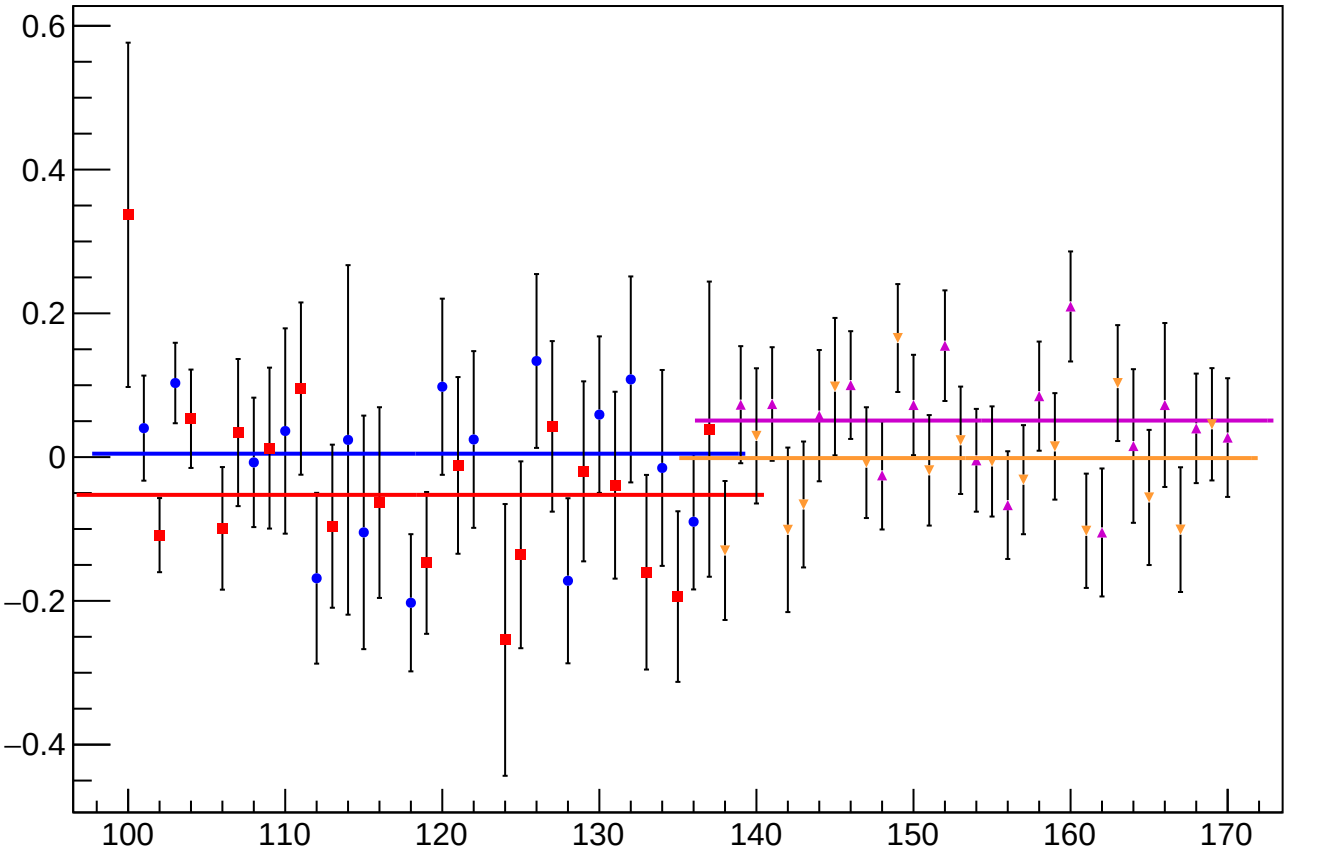
Left In: 0.051+/-0.020 $\chi^2$/NDF:14.4/15

+ sign 0.001+/-0.016 $\chi^2$/NDF: 31.5/32

All: 0.005+/-0.011 $\chi^2$/NDF: 71.8/67

- sign 0.009+/-0.015 $\chi^2$/NDF: 40.1/34


asym_usr_overload_cor_vs_cor_diff_rms vs Slug
90
80
70
60
50
40
100
110
120
130
140
150
160
170
Right In: 66.732+/-0.018 χ²/NDF: 816752.6/15
Left Out: 72.337+/-0.014 χ²/NDF:159345.8/16
Right Out: 62.429+/-0.017 χ²/NDF: 1114078.0/18
Left In: 71.679+/-0.014 χ²/NDF:149647.2/15
+ sign 70.232+/-0.011 χ²/NDF: 1034588.4/32
All: 69.028+/-0.008 χ²/NDF: 2494879.3/67
- sign 67.892+/-0.011 χ²/NDF: 1437924.9/34




Right In: 0.005+/-0.026 $\chi^2$/NDF: 16.6/15

Left Out: -0.001+/-0.020 $\chi^2$/NDF:14.9/16

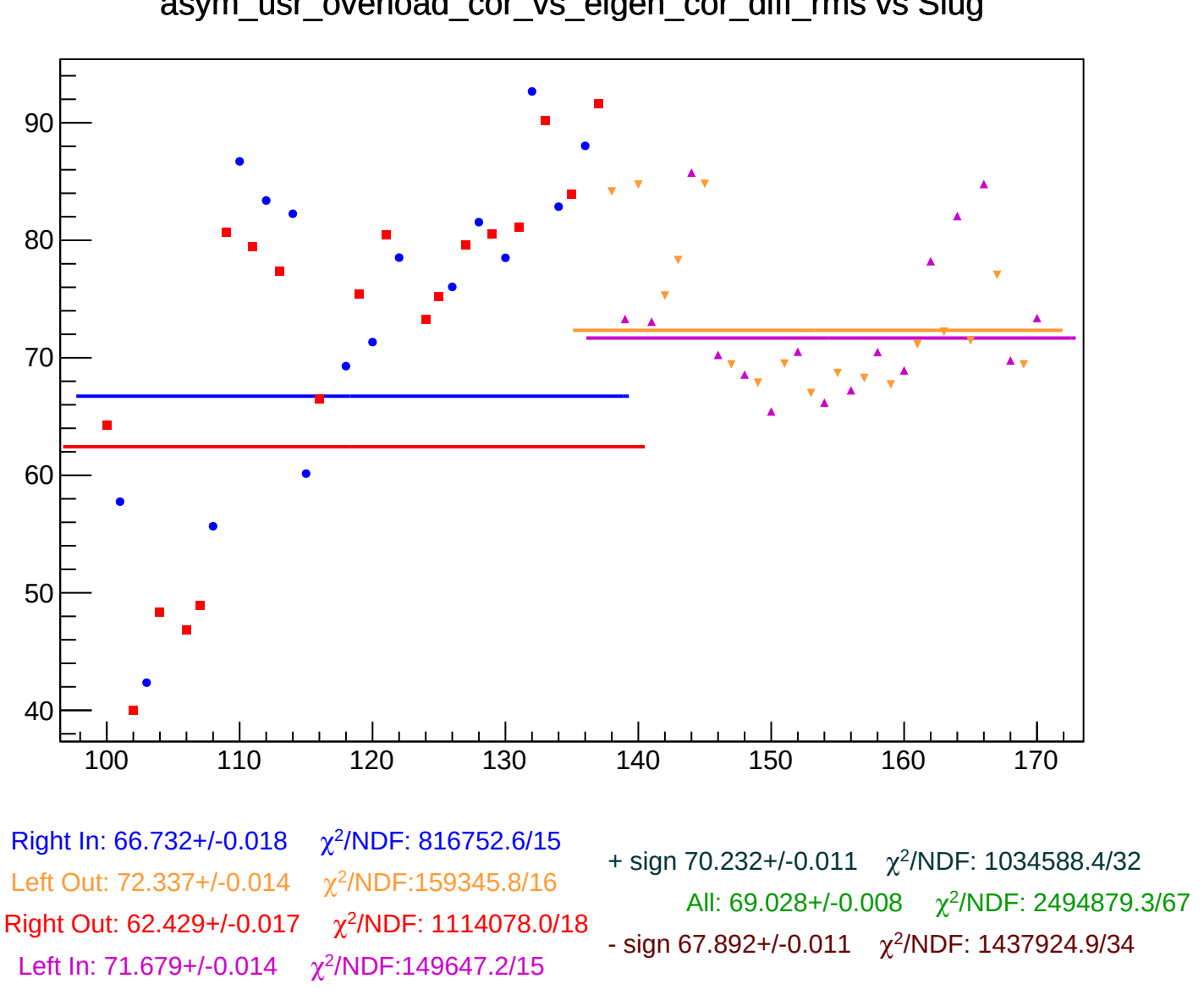
Right Out: -0.053+/-0.024 $\chi^2$/NDF: 14.8/18

Left In: 0.051+/-0.020 $\chi^2$/NDF:14.4/15

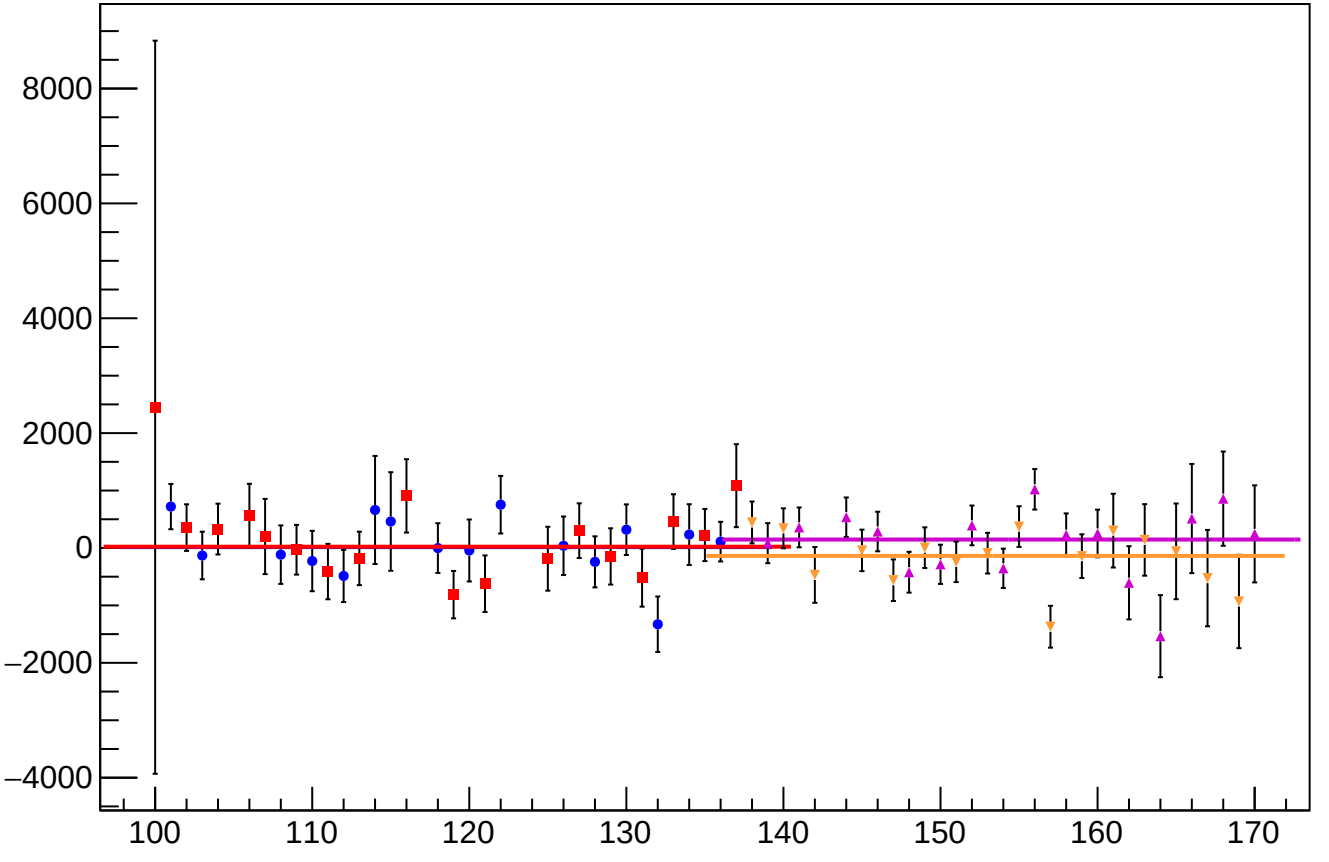
+ sign 0.001+/-0.016 $\chi^2$/NDF: 31.5/32

All: 0.005+/-0.011 $\chi^2$/NDF: 71.8/67

- sign 0.009+/-0.015 $\chi^2$/NDF: 40.1/34


asym_usr_overload_cor_vs_eigen_cor_diff_rms vs Slug
90
80
70
60
50
40
100
110
120
130
140
150
160
170
Right In: 66.732+/-0.018 χ²/NDF: 816752.6/15
Left Out: 72.337+/-0.014 χ²/NDF:159345.8/16
Right Out: 62.429+/-0.017 χ²/NDF: 1114078.0/18
Left In: 71.679+/-0.014 χ²/NDF:149647.2/15
+ sign 70.232+/-0.011 χ²/NDF: 1034588.4/32
All: 69.028+/-0.008 χ²/NDF: 2494879.3/67
- sign 67.892+/-0.011 χ²/NDF: 1437924.9/34

# asym_dsl_mean vs Slug




Right In: 15.517+/-119.431 $\chi^2$/NDF: 16.5/15

Left Out: -137.888+/-104.752 $\chi^2$/NDF:22.0/15

Right Out: 22.145+/-119.211 $\chi^2$/NDF: 16.0/17

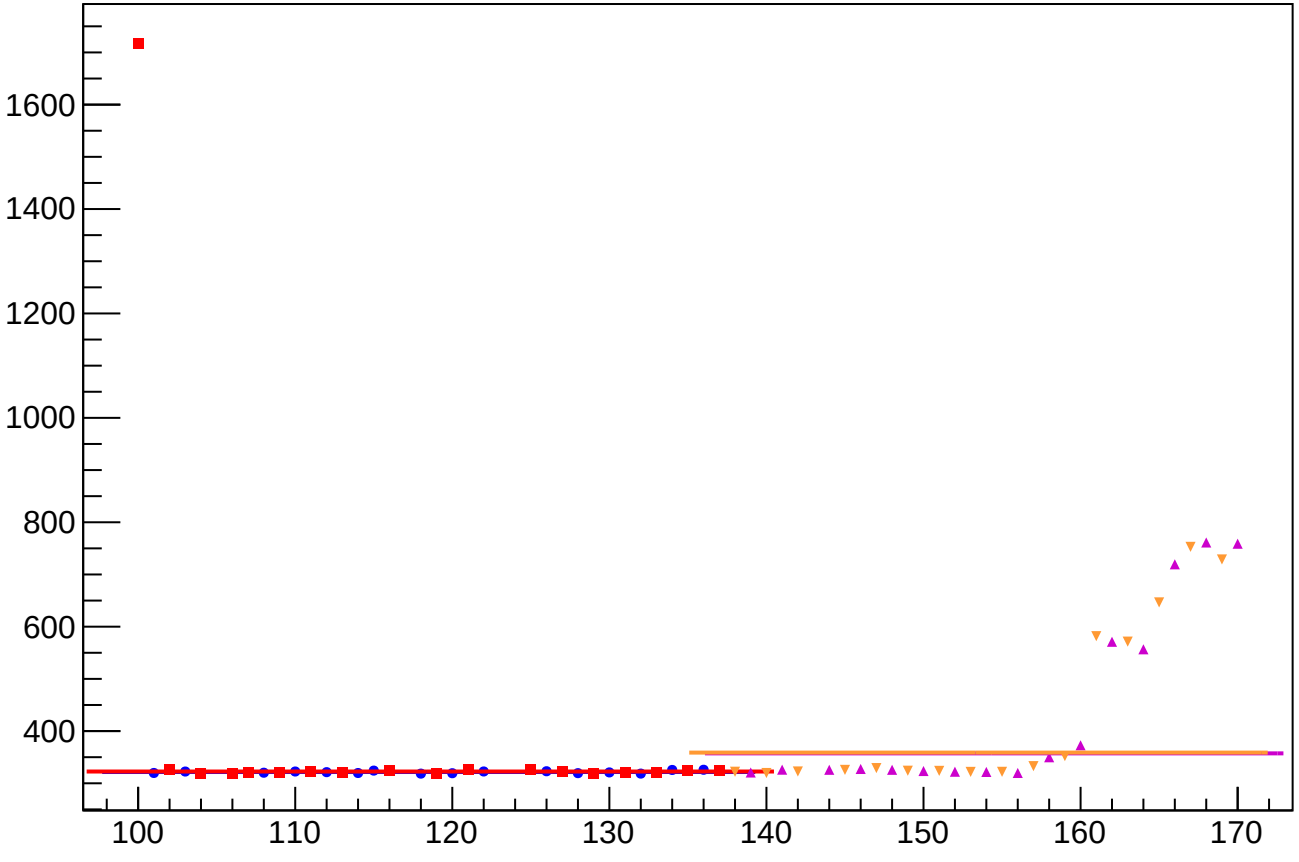
Left In: 146.748+/-101.926 $\chi^2$/NDF:22.8/15

+ sign -71.188+/-78.752 $\chi^2$/NDF: 39.5/31

All: 12.827+/-55.227 $\chi^2$/NDF: 81.1/65

- sign 94.127+/-77.470 $\chi^2$/NDF: 39.4/33

# asym_dsl_rms vs Slug




Right In: 321.604+/-0.084 $\chi^2$/NDF: 822.9/15

Left Out: 358.801+/-0.074 $\chi^2$/NDF:1747813.8/15

Right Out: 322.553+/-0.084 $\chi^2$/NDF: 96891.9/17

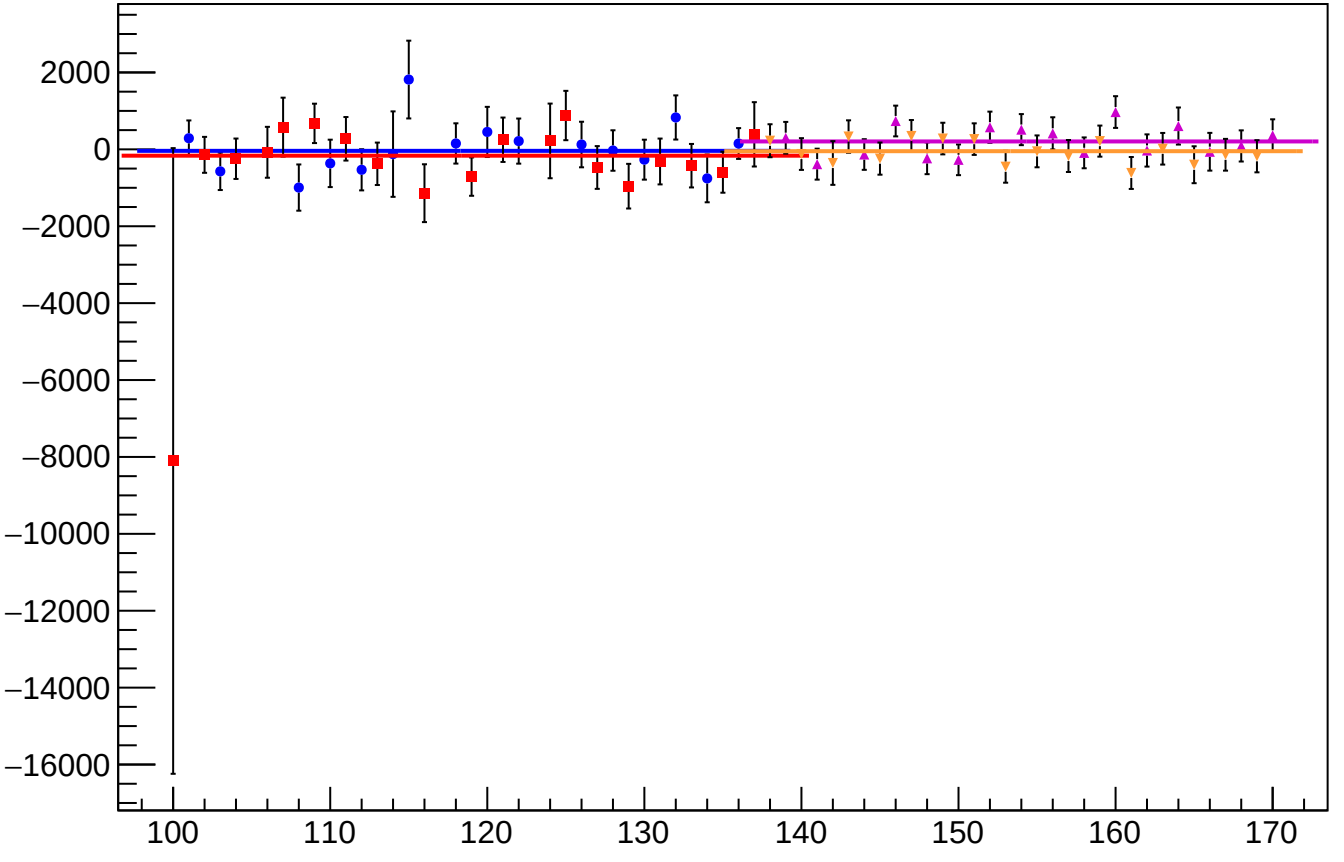
Left In: 357.318+/-0.072 $\chi^2$/NDF:1780447.6/15

\+ sign 342.628+/-0.056 $\chi^2$/NDF: 1858291.0/31

All: 342.632+/-0.039 $\chi^2$/NDF: 3833894.1/65

\- sign 342.637+/-0.055 $\chi^2$/NDF: 1975603.0/33

# asym_dsr_mean vs Slug




Right In: -38.914+/-140.720 $\chi^2$/NDF: 13.7/15

Left Out: -47.929+/-102.857 $\chi^2$/NDF:7.9/16

Right Out: -164.639+/-138.962 $\chi^2$/NDF: 15.1/18

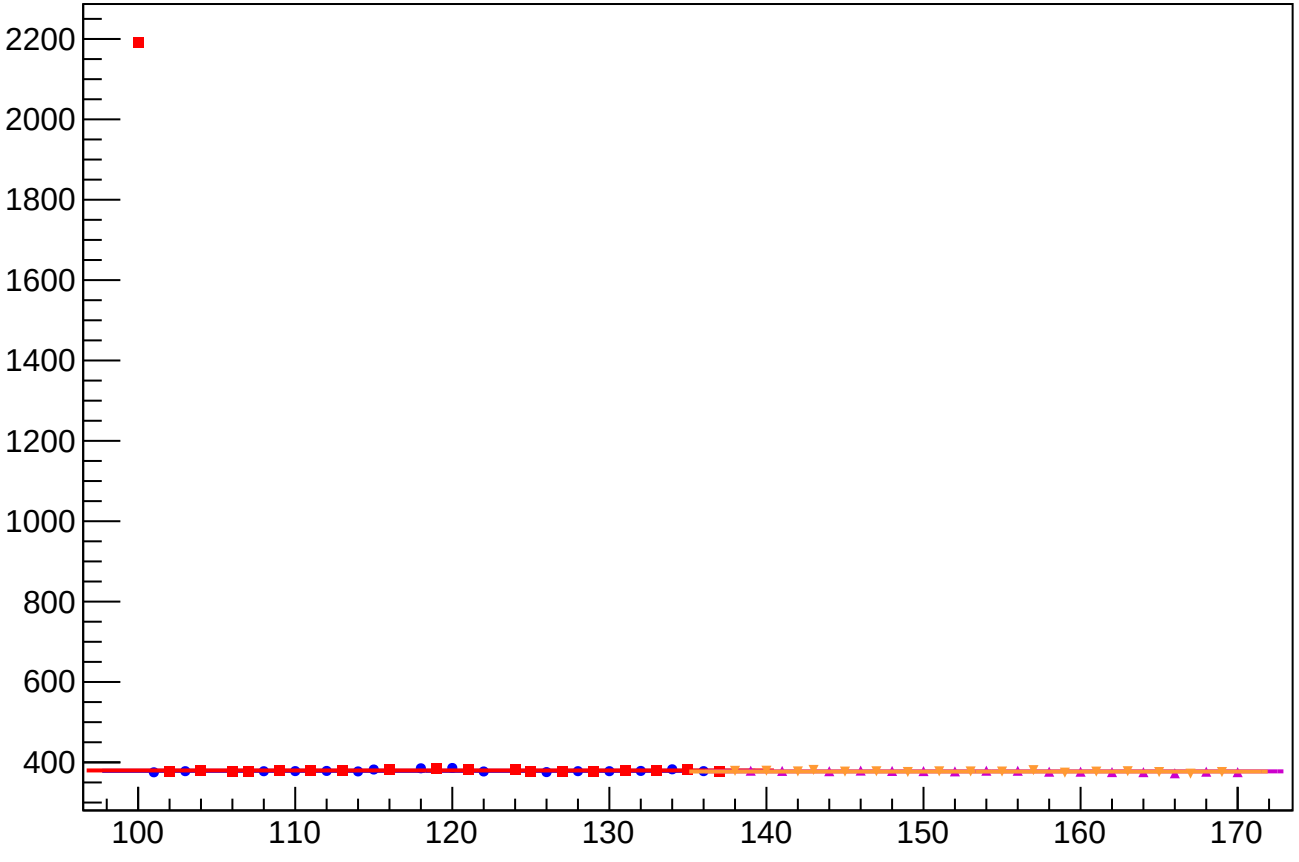
Left In: 205.553+/-103.849 $\chi^2$/NDF:14.4/15

+ sign -44.790+/-83.039 $\chi^2$/NDF: 21.6/32

All: 13.948+/-58.770 $\chi^2$/NDF: 56.7/67

- sign 72.894+/-83.186 $\chi^2$/NDF: 34.1/34

# asym_dsr_rms vs Slug




Right In: 378.910+/-0.100 $\chi^2$/NDF: 851.2/15

Left Out: 377.177+/-0.073 $\chi^2$/NDF:876.7/16

Right Out: 379.878+/-0.098 $\chi^2$/NDF: 99621.5/18

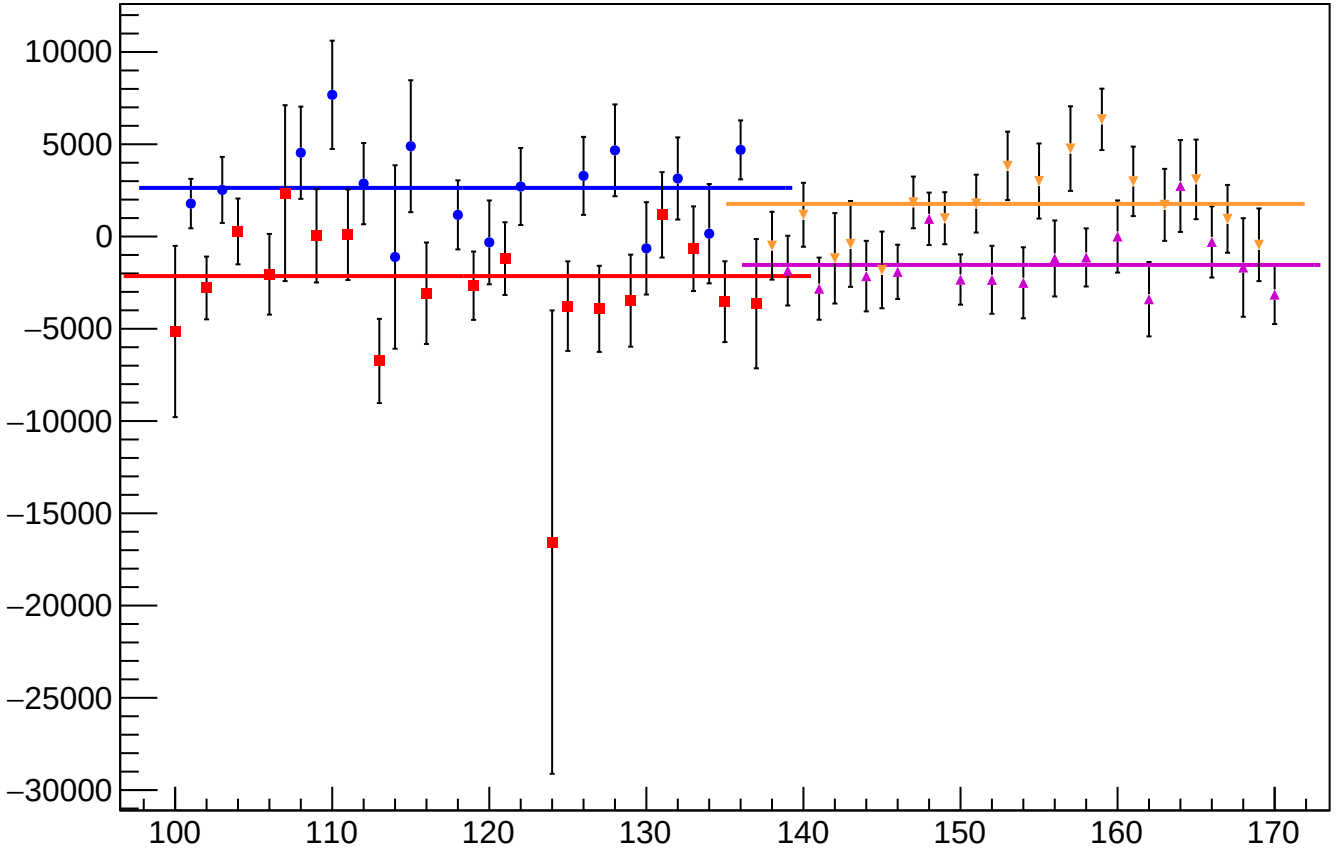
Left In: 377.594+/-0.073 $\chi^2$/NDF:503.5/15

\+ sign 377.780+/-0.059 $\chi^2$/NDF: 1925.6/32

All: 378.096+/-0.042 $\chi^2$/NDF: 102455.1/67

\- sign 378.412+/-0.059 $\chi^2$/NDF: 100471.7/34

# asym_us_agg_avg_mean vs Slug




Right In: 2635.397+/-538.034 $\chi^2$/NDF: 12.3/15

Left Out: 1768.003+/-445.967 $\chi^2$/NDF:20.4/16

Right Out: -2144.569+/-546.963 $\chi^2$/NDF: 15.0/18

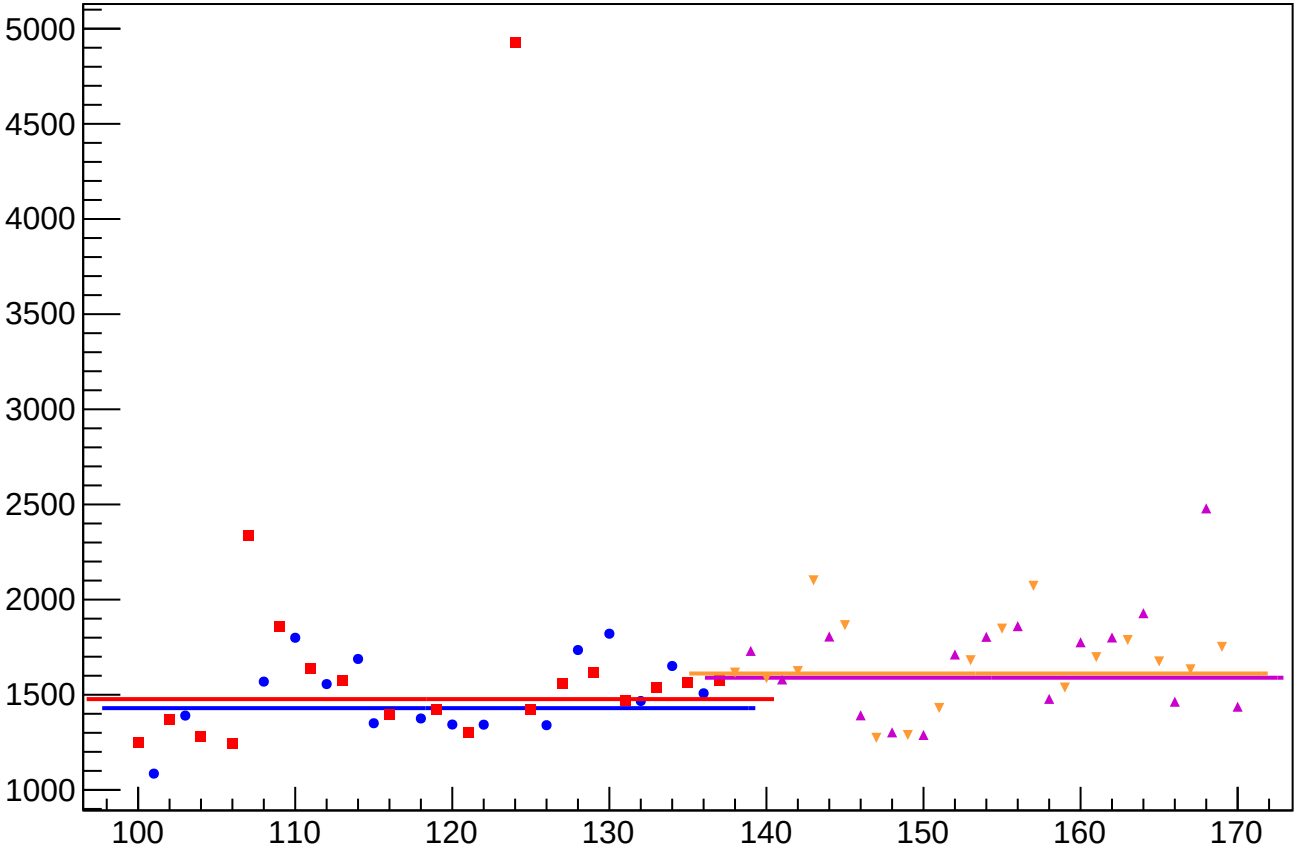
Left In: -1539.645+/-443.786 $\chi^2$/NDF:10.6/15

+ sign 2121.247+/-343.352 $\chi^2$/NDF: 34.2/32

All: 177.924+/-243.234 $\chi^2$/NDF: 124.9/67

- sign -1779.786+/-344.620 $\chi^2$/NDF: 26.4/34

# asym_us_agg_avg_rms vs Slug




Right In: 1429.654+/-0.380 $\chi^2$/NDF: 293388.5/15

Left Out: 1611.797+/-0.315 $\chi^2$/NDF:514073.5/16

Right Out: 1477.126+/-0.387 $\chi^2$/NDF: 369430.6/18

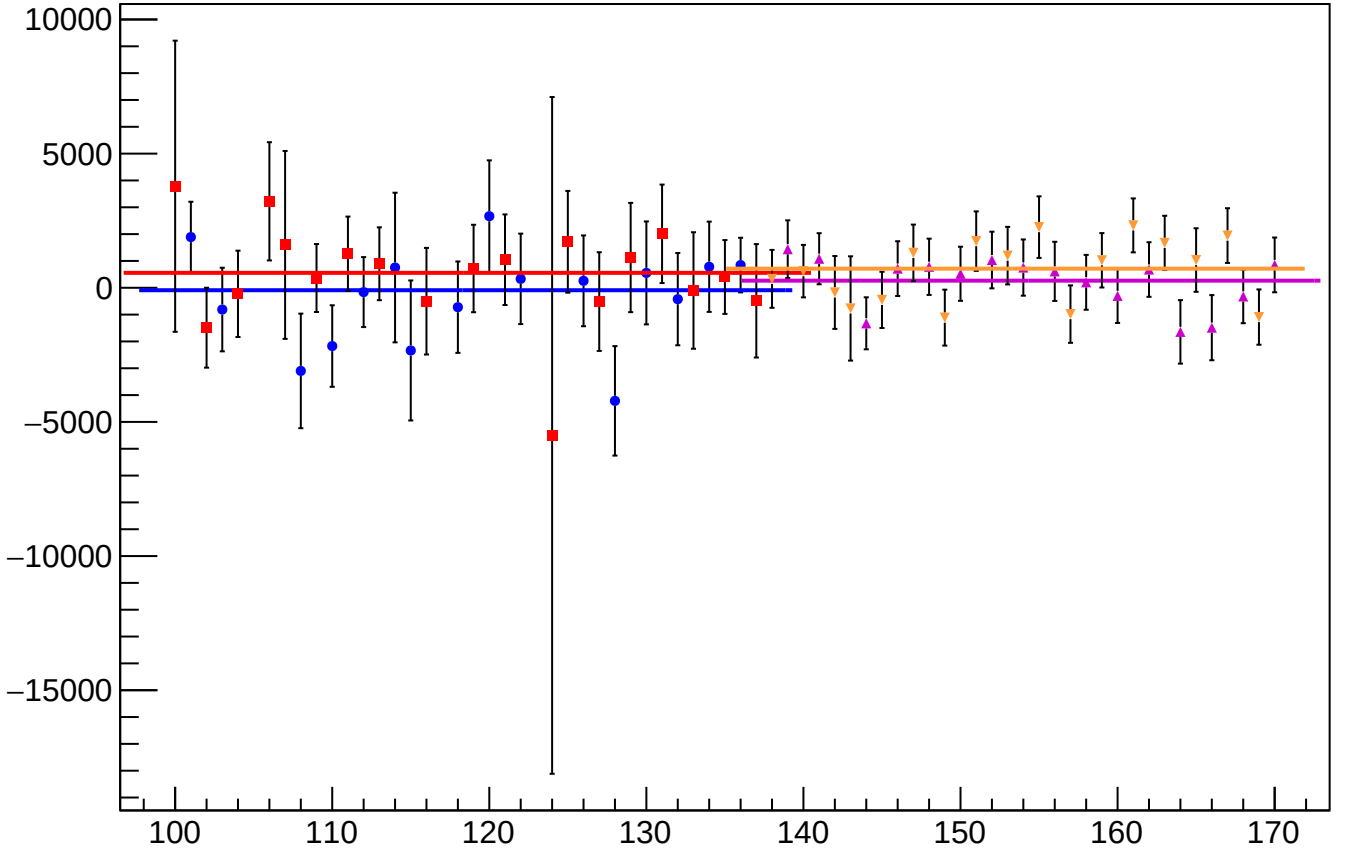
Left In: 1589.528+/-0.314 $\chi^2$/NDF:656227.3/15

+ sign 1537.620+/-0.243 $\chi^2$/NDF: 943327.4/32

All: 1541.250+/-0.172 $\chi^2$/NDF: 2020367.2/67

- sign 1544.907+/-0.244 $\chi^2$/NDF: 1076591.0/34

# asym_us_agg_dd_mean vs Slug




Right In: -91.305+/-409.957 $\chi^2$/NDF: 14.5/15

Left Out: 712.746+/-264.277 $\chi^2$/NDF:19.3/16

Right Out: 556.840+/-411.346 $\chi^2$/NDF: 6.8/18

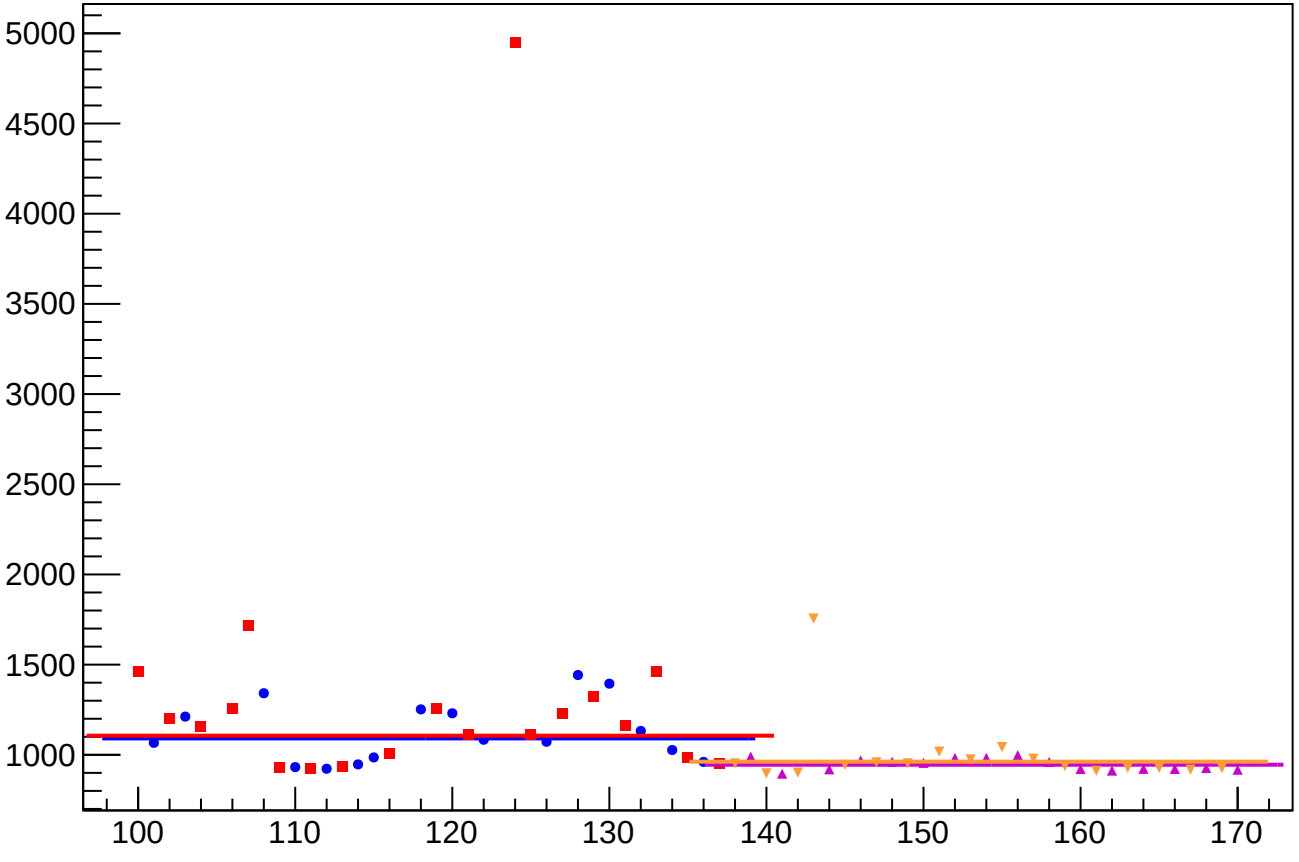
Left In: 265.116+/-260.140 $\chi^2$/NDF:11.8/15

+ sign 476.700+/-222.123 $\chi^2$/NDF: 36.6/32

All: 411.922+/-156.260 $\chi^2$/NDF: 55.7/67

- sign 348.457+/-219.863 $\chi^2$/NDF: 18.9/34

# asym_us_agg_dd_rms vs Slug




Right In: 1091.041+/-0.290 $\chi^2$/NDF: 277304.9/15

Left Out: 961.981+/-0.187 $\chi^2$/NDF:378986.8/16

Right Out: 1106.046+/-0.291 $\chi^2$/NDF: 514097.9/18

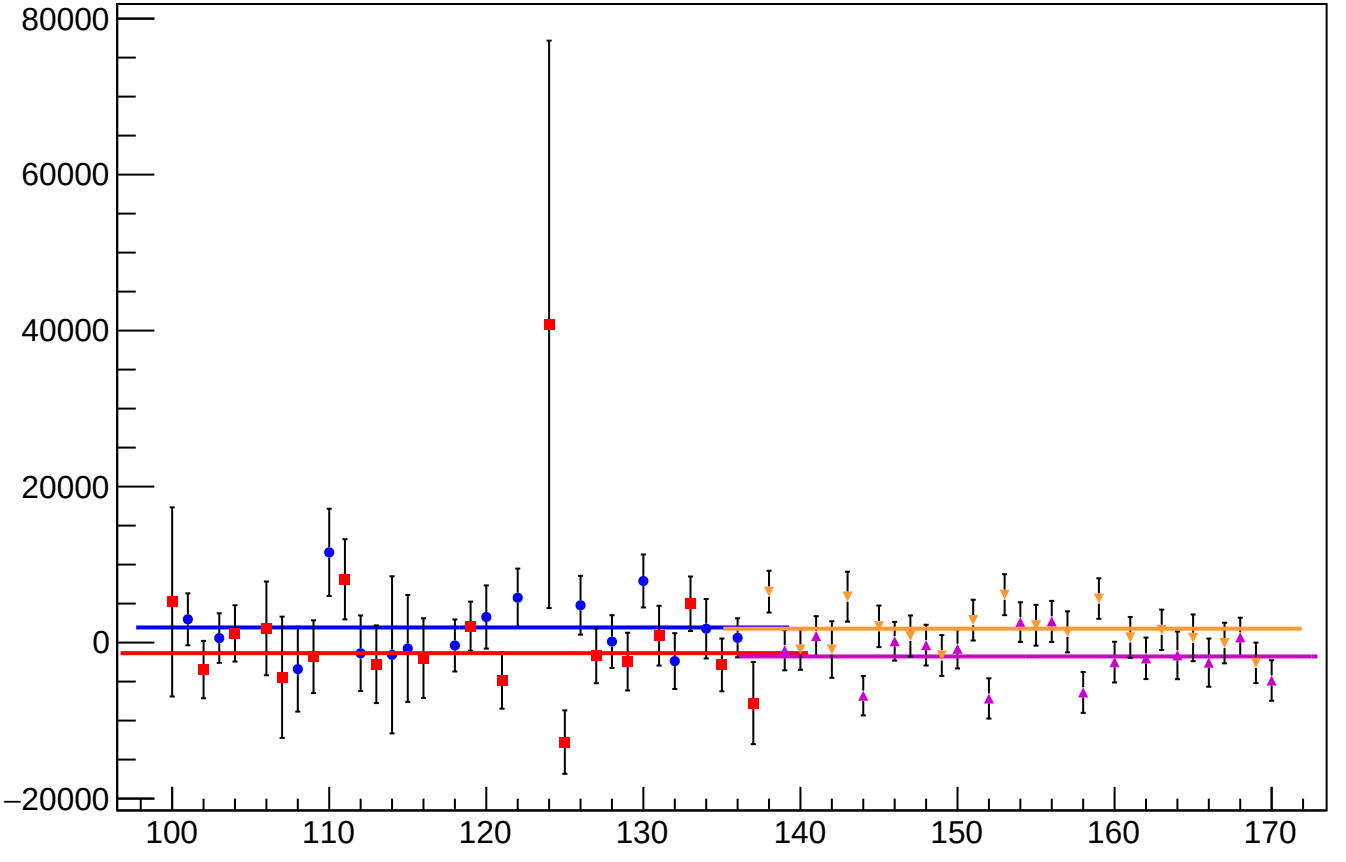
Left In: 945.202+/-0.184 $\chi^2$/NDF:29090.4/15

+ sign 999.869+/-0.157 $\chi^2$/NDF: 796317.2/32

All: 995.466+/-0.110 $\chi^2$/NDF: 1559493.5/67

- sign 991.153+/-0.155 $\chi^2$/NDF: 761620.6/34

# reg_asym_atl1_mean vs Slug




Right In: 1939.656+/-952.537 $\chi^2$/NDF: 12.2/15

Left Out: 1784.452+/-655.846 $\chi^2$/NDF:17.1/16

Right Out: -1353.428+/-985.119 $\chi^2$/NDF: 21.8/18

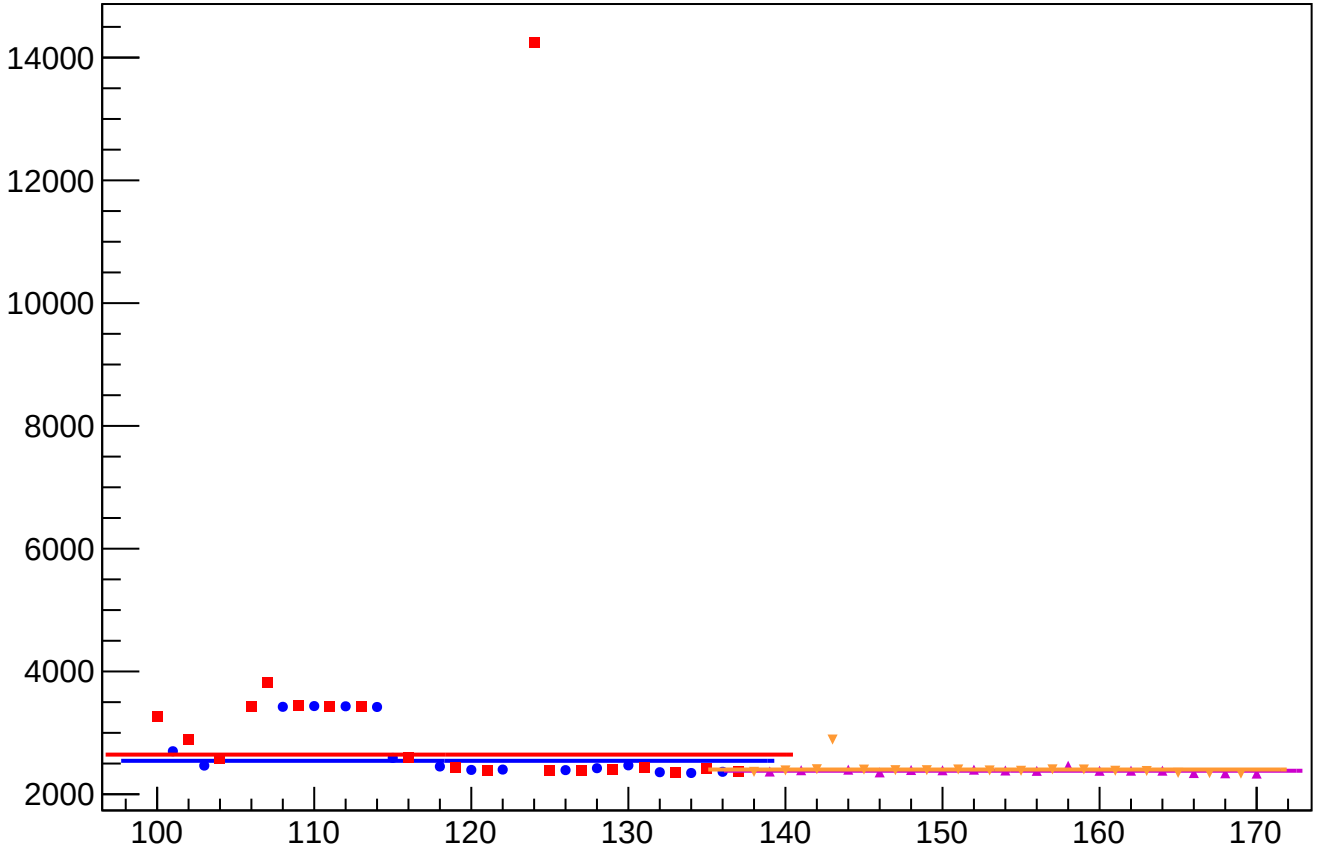
Left In: -1778.713+/-655.288 $\chi^2$/NDF:22.1/15

+ sign 1834.366+/-540.186 $\chi^2$/NDF: 29.4/32

All: 110.434+/-383.871 $\chi^2$/NDF: 94.0/67

- sign -1648.259+/-545.605 $\chi^2$/NDF: 44.0/34

# reg_asym_atl1_rms vs Slug




Right In: 2544.416+/-0.674 $\chi^2$/NDF: 225614.0/15

Left Out: 2402.803+/-0.464 $\chi^2$/NDF:50613.2/16

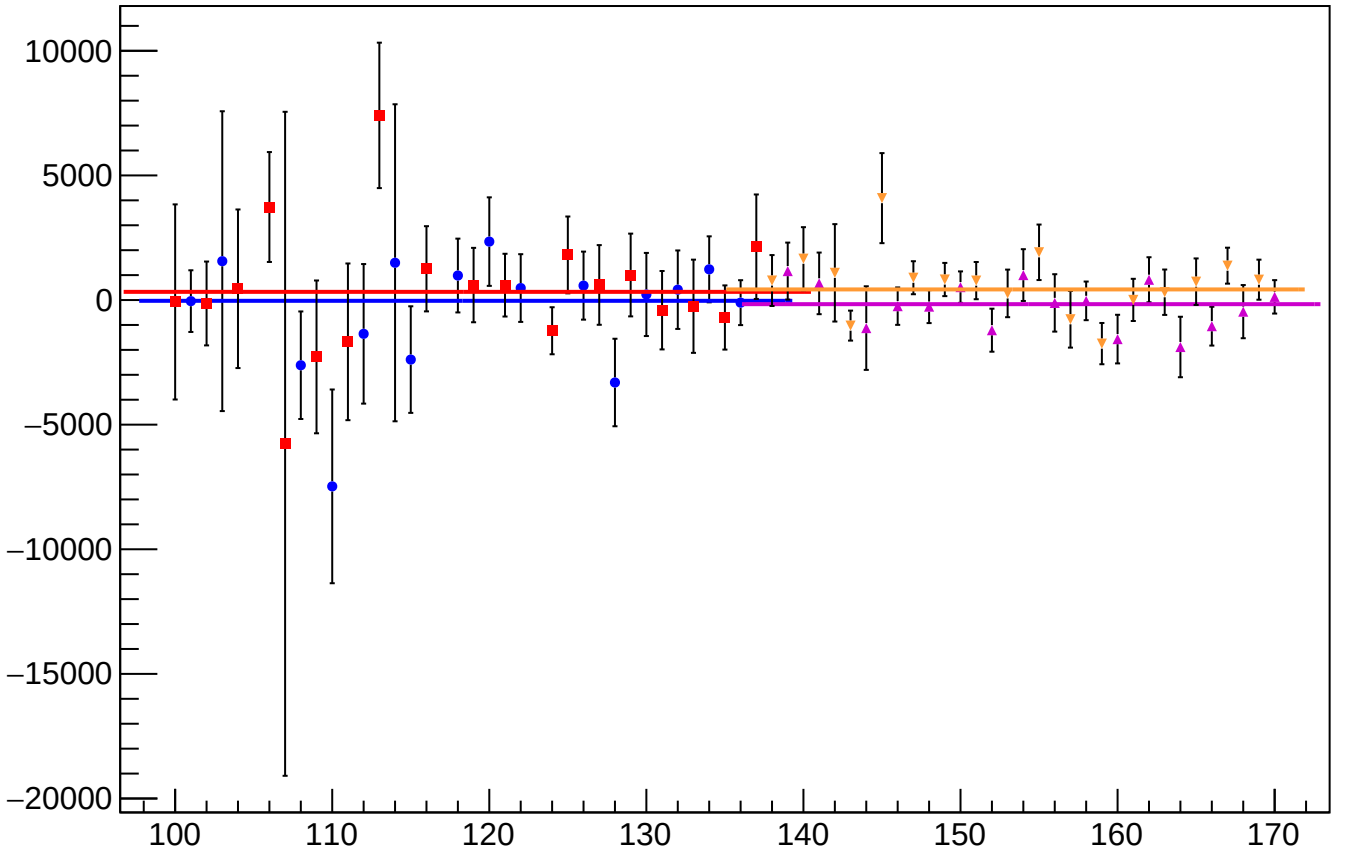
Right Out: 2645.647+/-0.697 $\chi^2$/NDF: 536965.2/18

Left In: 2382.594+/-0.463 $\chi^2$/NDF:3927.6/15

+ sign 2448.346+/-0.382 $\chi^2$/NDF: 306215.7/32

All: 2455.741+/-0.271 $\chi^2$/NDF: 946727.8/67

- sign 2463.284+/-0.386 $\chi^2$/NDF: 639755.0/34




Right In: -31.191+/-405.726 $\chi^2$/NDF: 13.8/15

Left Out: 425.827+/-210.357 $\chi^2$/NDF:24.4/16

Right Out: 328.475+/-398.568 $\chi^2$/NDF: 15.6/18

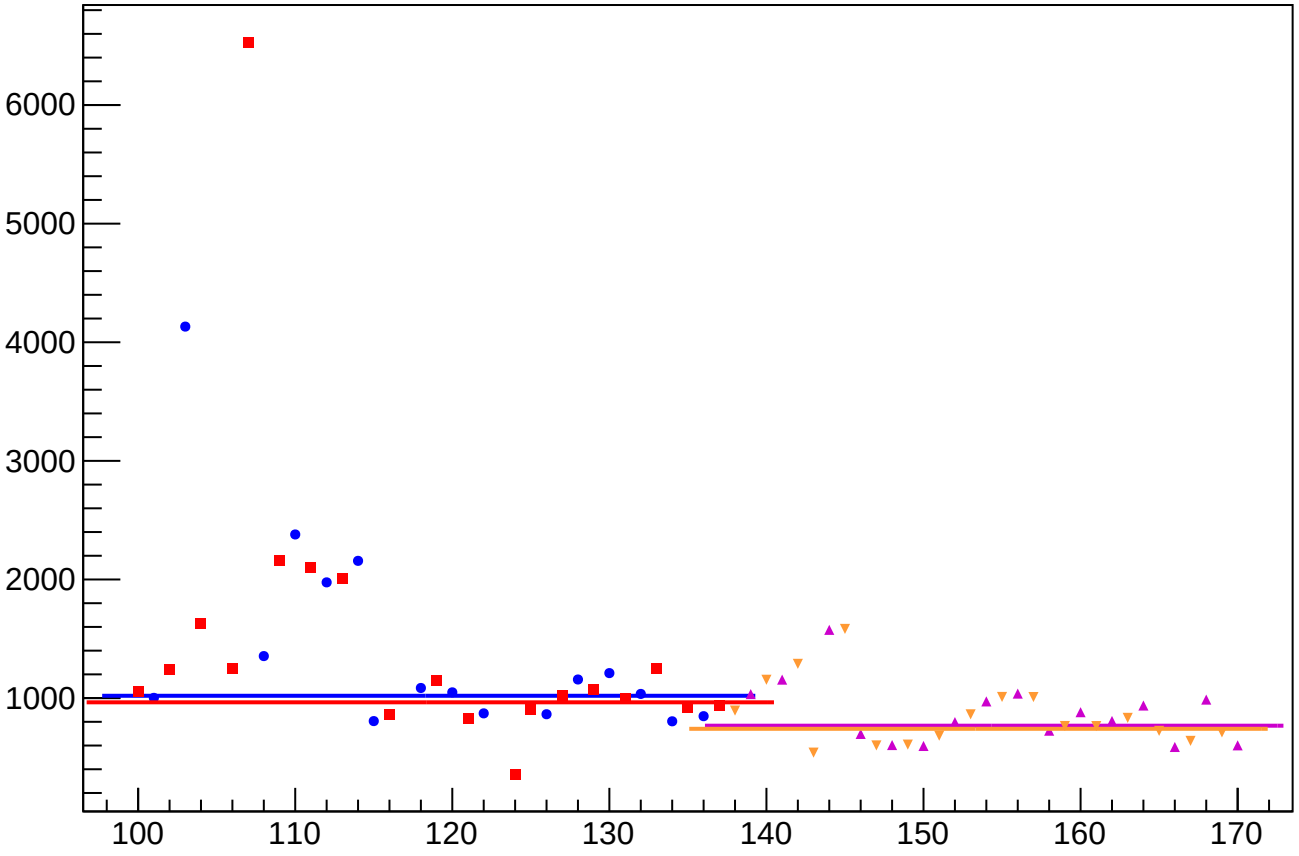
Left In: -165.484+/-219.563 $\chi^2$/NDF:12.9/15

+ sign 329.003+/-186.749 $\chi^2$/NDF: 39.2/32

All: 144.830+/-133.975 $\chi^2$/NDF: 70.9/67

- sign -50.482+/-192.313 $\chi^2$/NDF: 29.7/34

# asym_atl1_reg_correction_rms vs Slug




Right In: 1019.523+/-0.287 $\chi^2$/NDF: 1364745.9/15

Left Out: 741.038+/-0.149 $\chi^2$/NDF:1582142.1/16

Right Out: 964.379+/-0.282 $\chi^2$/NDF: 2309359.3/18

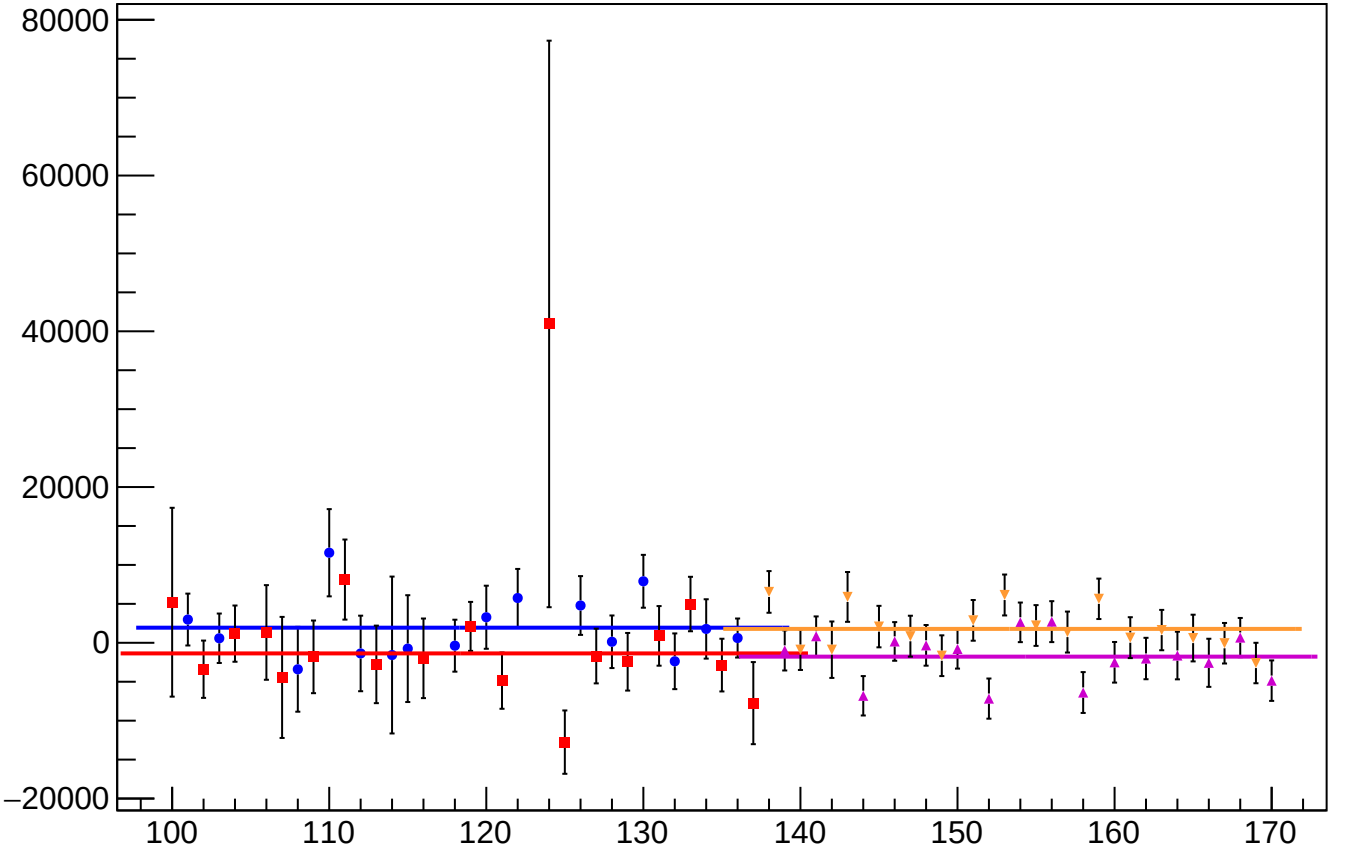
Left In: 767.242+/-0.155 $\chi^2$/NDF:1636185.2/15

+ sign 800.038+/-0.132 $\chi^2$/NDF: 3689511.0/32

All: 806.396+/-0.095 $\chi^2$/NDF: 8015203.0/67

- sign 813.139+/-0.136 $\chi^2$/NDF: 4320915.4/34

# cor_asym_atl1_mean vs Slug




Right In: 1940.005+/-952.537 $\chi^2$/NDF: 12.2/15

Left Out: 1784.366+/-655.846 $\chi^2$/NDF:17.1/16

Right Out: -1363.089+/-985.420 $\chi^2$/NDF: 21.7/18

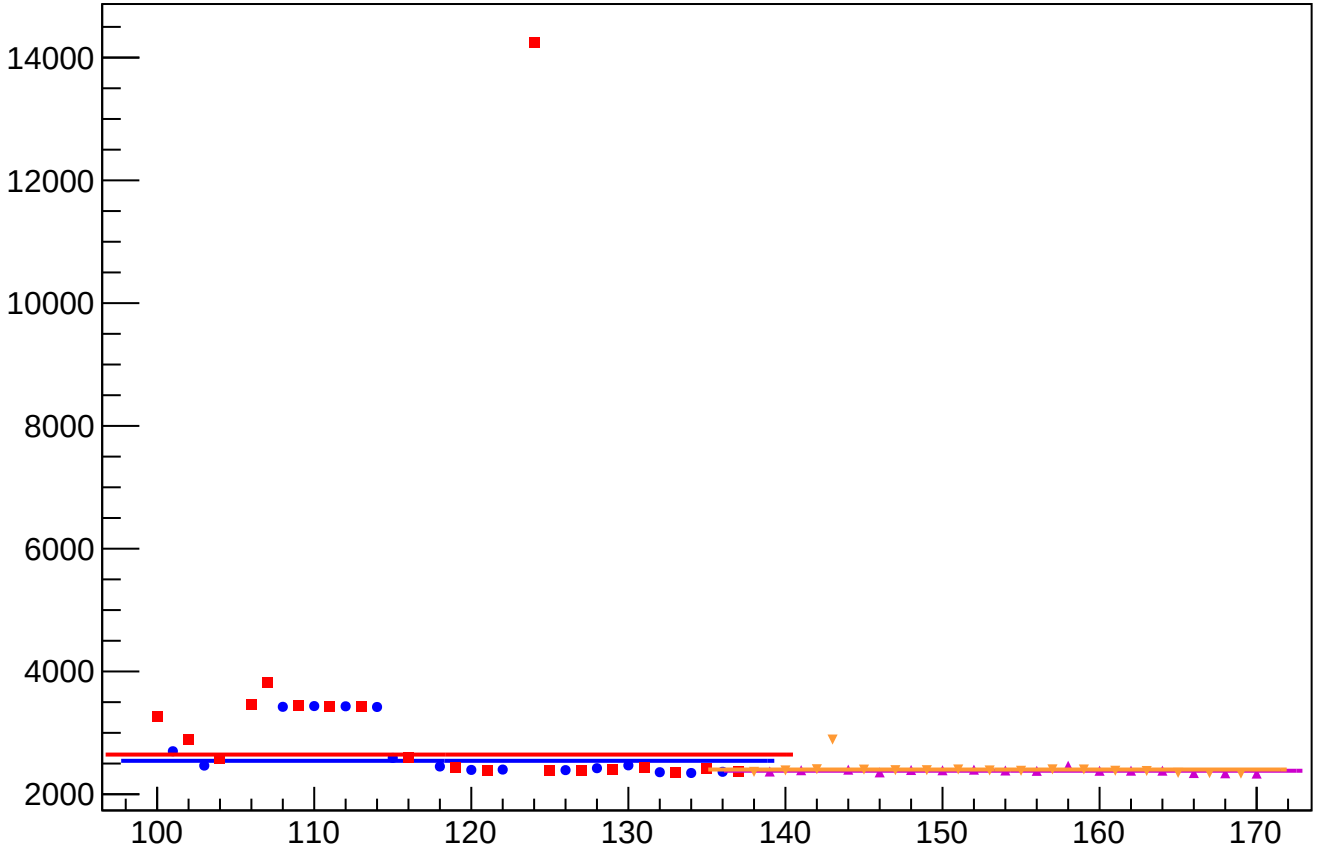
Left In: -1778.751+/-655.288 $\chi^2$/NDF:22.1/15

+ sign 1834.420+/-540.186 $\chi^2$/NDF: 29.4/32

All: 109.118+/-383.888 $\chi^2$/NDF: 93.9/67

- sign -1651.303+/-545.656 $\chi^2$/NDF: 43.9/34

# cor_asym_atl1_rms vs Slug




Right In: 2544.416+/-0.674 $\chi^2$/NDF: 225614.0/15

Left Out: 2402.803+/-0.464 $\chi^2$/NDF:50613.2/16

Right Out: 2646.203+/-0.697 $\chi^2$/NDF: 539546.8/18

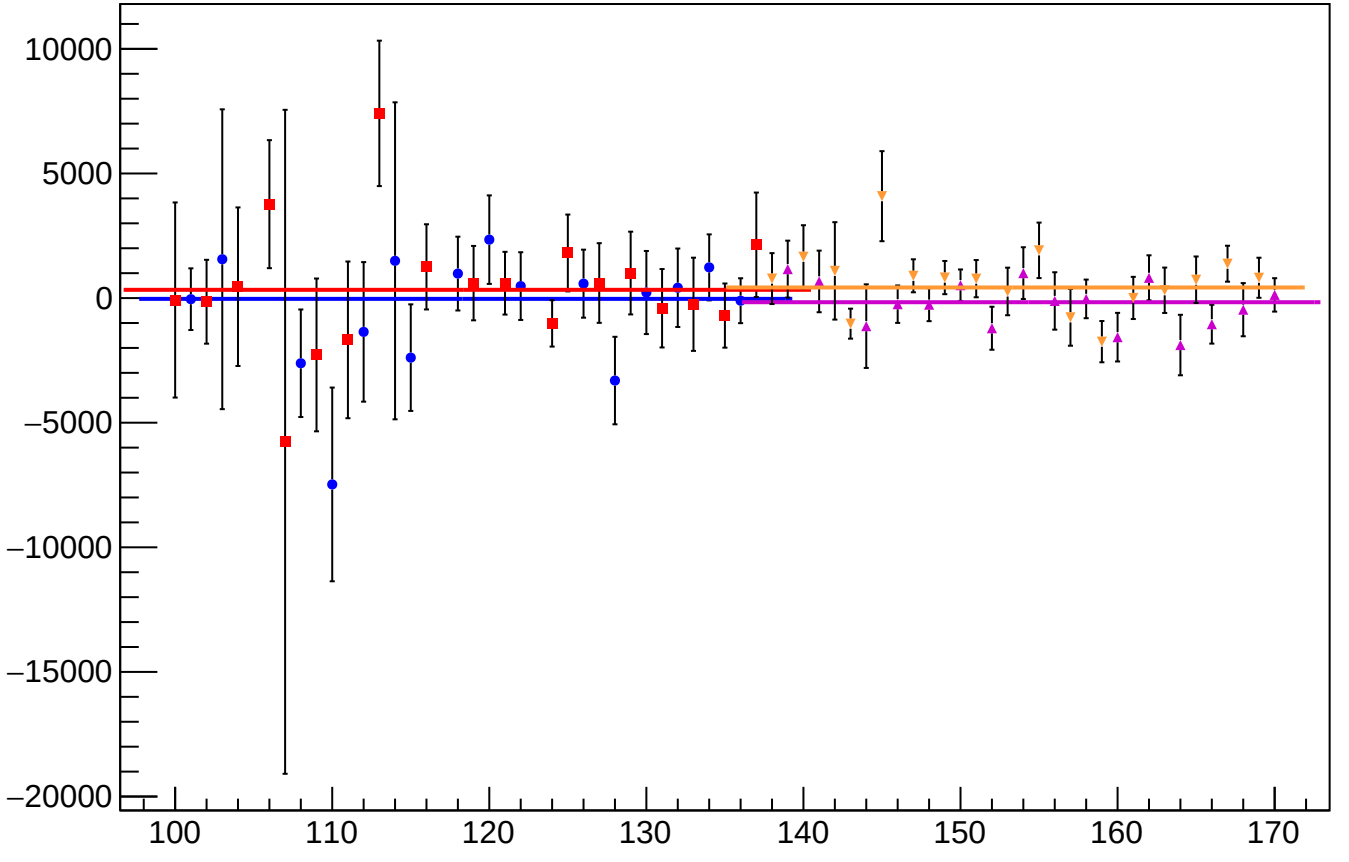
Left In: 2382.594+/-0.463 $\chi^2$/NDF:3927.6/15

+ sign 2448.346+/-0.382 $\chi^2$/NDF: 306215.7/32

All: 2455.808+/-0.271 $\chi^2$/NDF: 949699.8/67

- sign 2463.421+/-0.386 $\chi^2$/NDF: 642713.1/34

# asym_atl1_cor_correction_mean vs Slug




Right In: -31.253+/-405.723 $\chi^2$/NDF: 13.8/15

Left Out: 425.785+/-210.359 $\chi^2$/NDF:24.4/16

Right Out: 331.962+/-399.334 $\chi^2$/NDF: 14.4/18

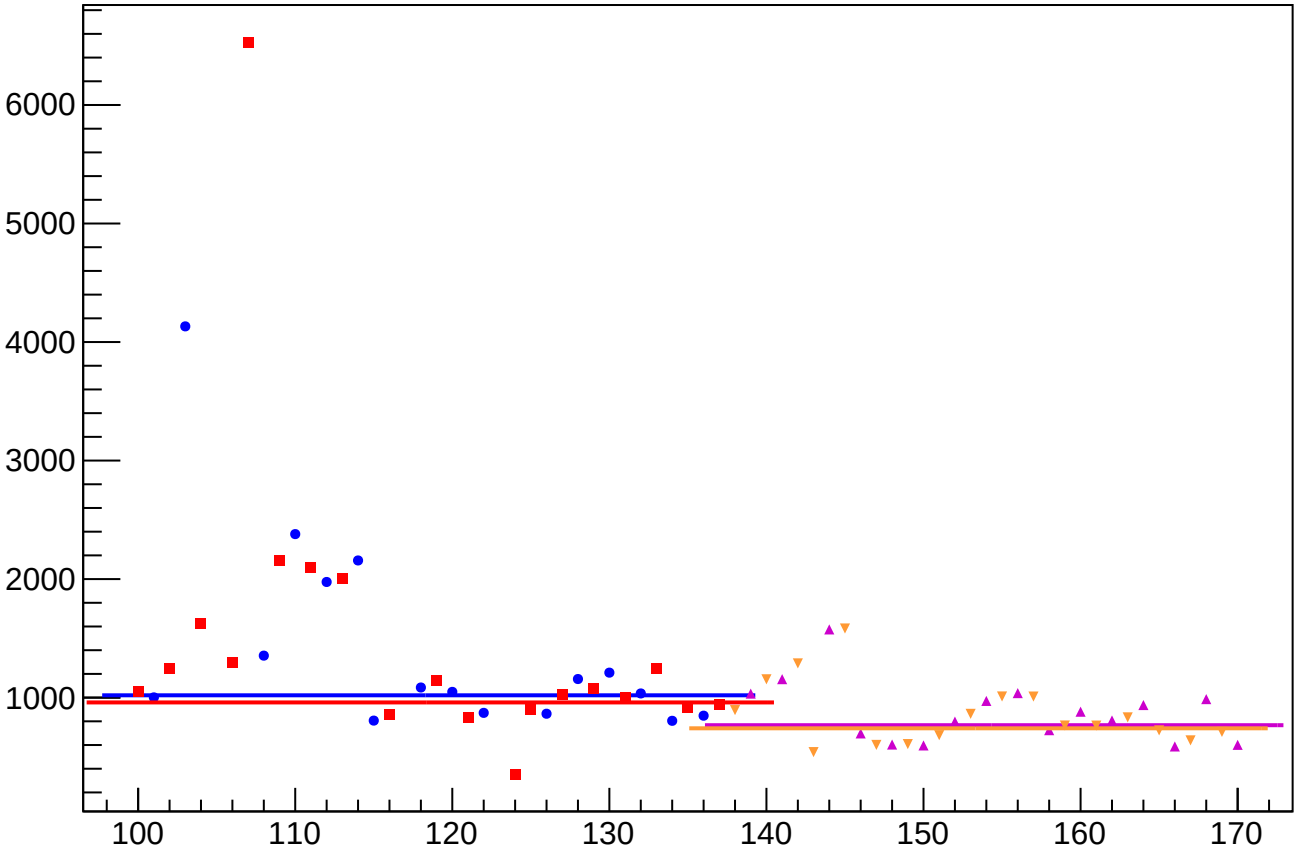
Left In: -165.479+/-219.563 $\chi^2$/NDF:12.9/15

+ sign 328.954+/-186.750 $\chi^2$/NDF: 39.2/32

All: 145.118+/-134.005 $\chi^2$/NDF: 69.6/67

- sign -50.008+/-192.399 $\chi^2$/NDF: 28.5/34

# asym_atl1_cor_correction_rms vs Slug




Right In: 1019.514+/-0.287 $\chi^2$/NDF: 1364741.0/15

Left Out: 741.046+/-0.149 $\chi^2$/NDF:1582153.0/16

Right Out: 959.344+/-0.282 $\chi^2$/NDF: 2344434.8/18

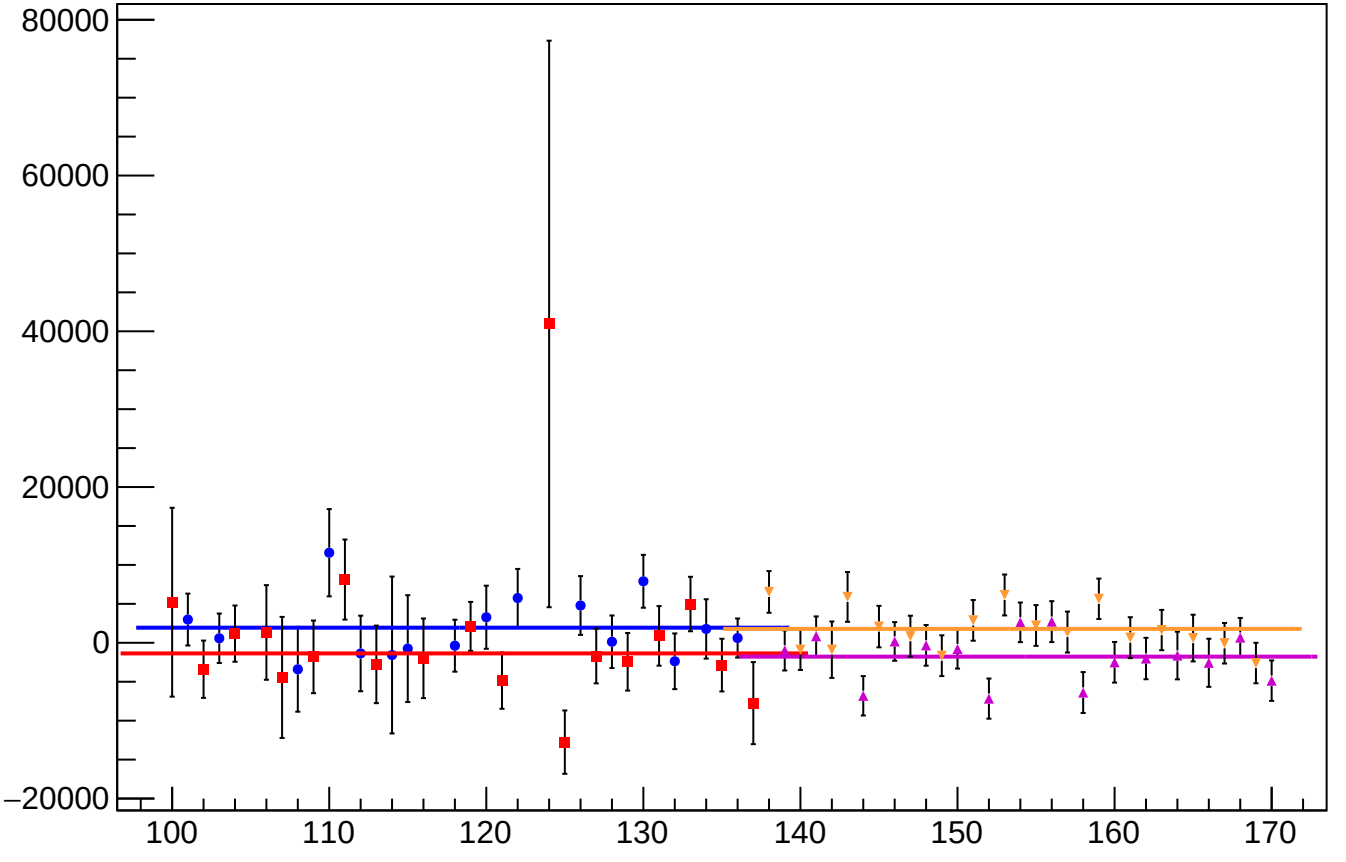
Left In: 767.239+/-0.155 $\chi^2$/NDF:1636371.6/15

+ sign 800.044+/-0.132 $\chi^2$/NDF: 3689434.0/32

All: 805.763+/-0.095 $\chi^2$/NDF: 8029511.1/67

- sign 811.832+/-0.136 $\chi^2$/NDF: 4336211.6/34

# eigen_cor_asym_atl1_mean vs Slug




Right In: 1940.005+/-952.537 $\chi^2$/NDF: 12.2/15

Left Out: 1784.366+/-655.846 $\chi^2$/NDF:17.1/16

Right Out: -1363.089+/-985.420 $\chi^2$/NDF: 21.7/18

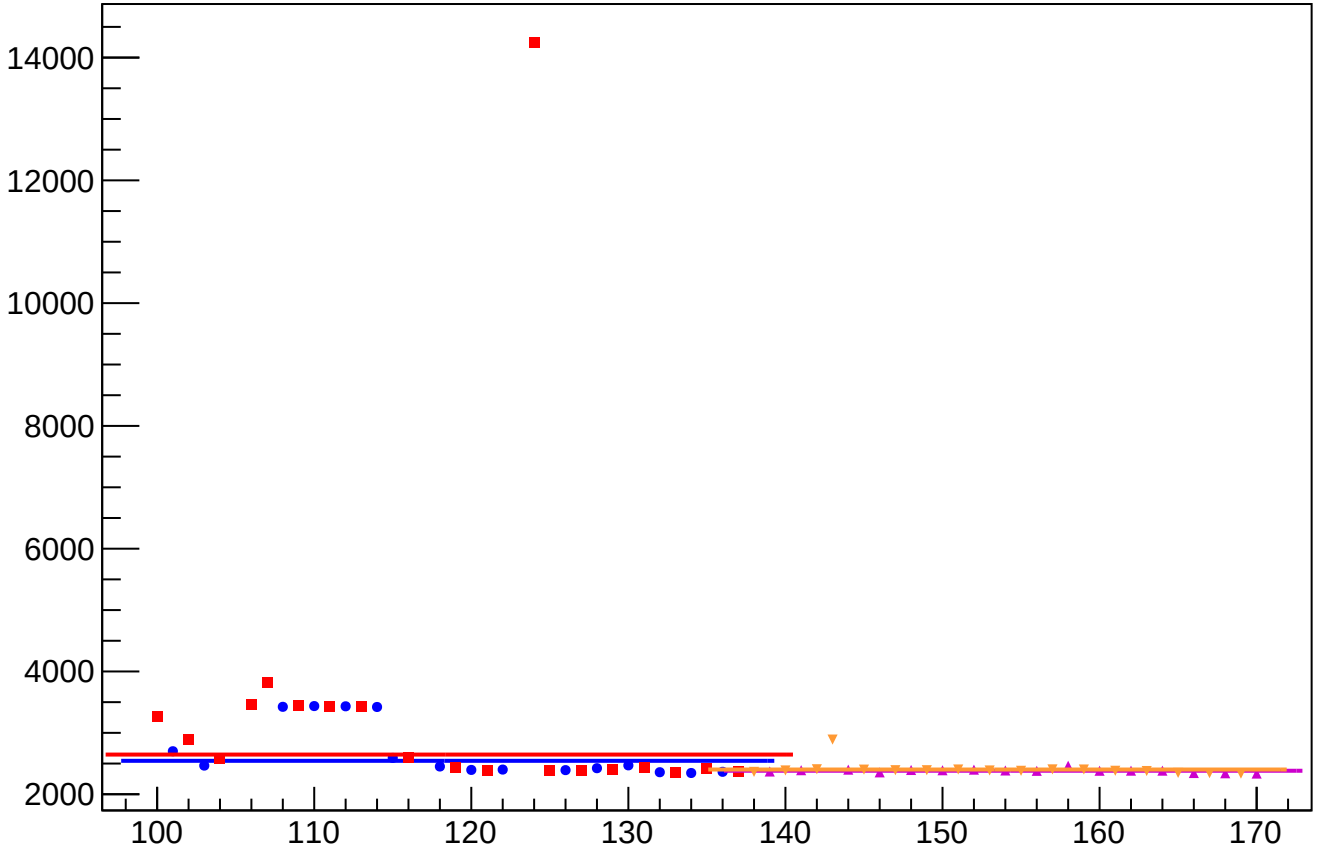
Left In: -1778.751+/-655.288 $\chi^2$/NDF:22.1/15

+ sign 1834.420+/-540.186 $\chi^2$/NDF: 29.4/32

All: 109.118+/-383.888 $\chi^2$/NDF: 93.9/67

- sign -1651.303+/-545.656 $\chi^2$/NDF: 43.9/34

# eigen_cor_asym_atl1_rms vs Slug




Right In: 2544.416+/-0.674 $\chi^2$/NDF: 225614.0/15

Left Out: 2402.803+/-0.464 $\chi^2$/NDF:50613.2/16

Right Out: 2646.203+/-0.697 $\chi^2$/NDF: 539546.8/18

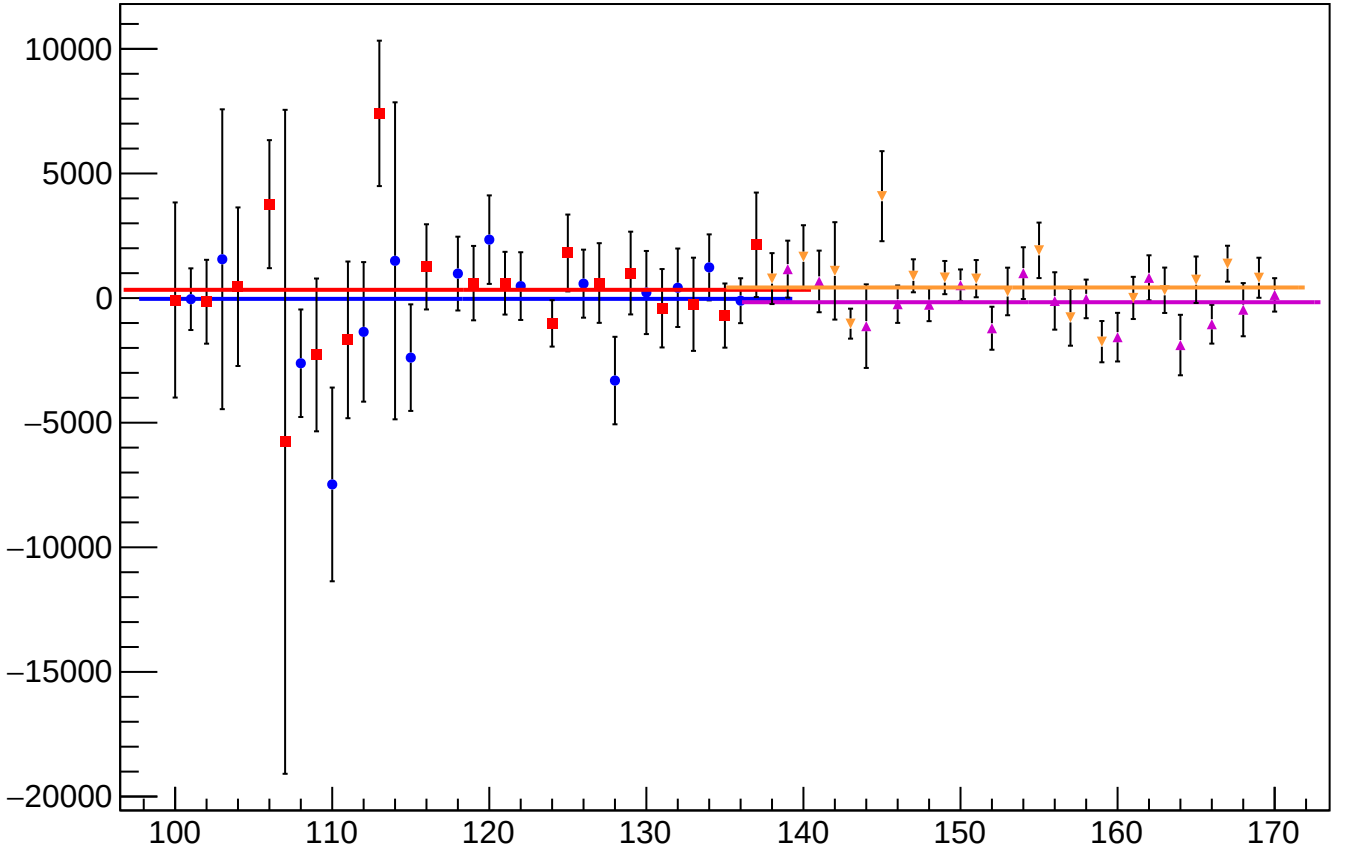
Left In: 2382.594+/-0.463 $\chi^2$/NDF:3927.6/15

+ sign 2448.346+/-0.382 $\chi^2$/NDF: 306215.7/32

All: 2455.808+/-0.271 $\chi^2$/NDF: 949699.8/67

- sign 2463.421+/-0.386 $\chi^2$/NDF: 642713.1/34

# asym_atl1_eigen_cor_correction_mean vs Slug




Right In: -31.253+/-405.723 $\chi^2$/NDF: 13.8/15

Left Out: 425.785+/-210.359 $\chi^2$/NDF:24.4/16

Right Out: 331.962+/-399.334 $\chi^2$/NDF: 14.4/18

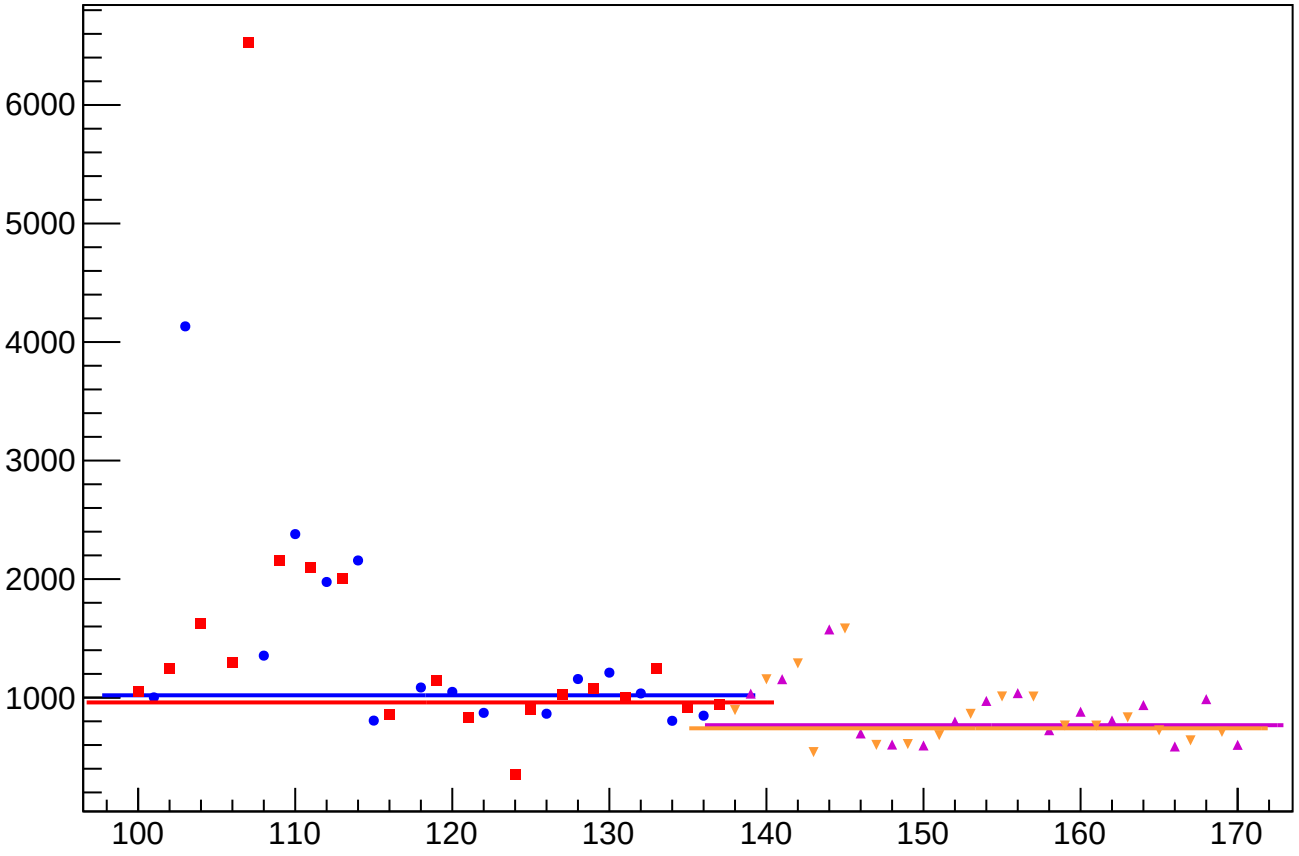
Left In: -165.479+/-219.563 $\chi^2$/NDF:12.9/15

+ sign 328.954+/-186.750 $\chi^2$/NDF: 39.2/32

All: 145.118+/-134.005 $\chi^2$/NDF: 69.6/67

- sign -50.008+/-192.399 $\chi^2$/NDF: 28.5/34

# asym_atl1_eigen_cor_correction_rms vs Slug




Right In: 1019.514+/-0.287 $\chi^2$/NDF: 1364741.0/15

Left Out: 741.046+/-0.149 $\chi^2$/NDF:1582153.0/16

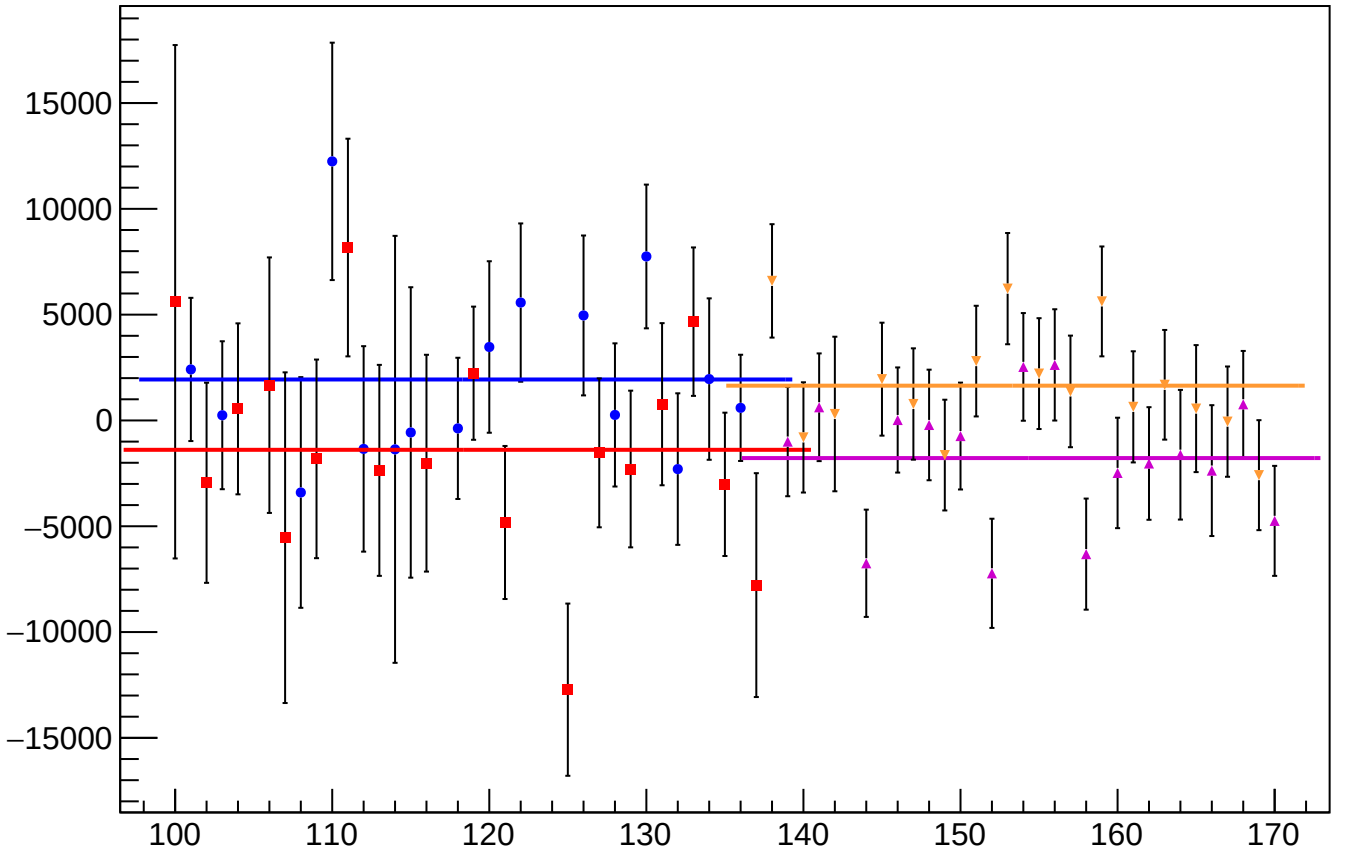
Right Out: 959.344+/-0.282 $\chi^2$/NDF: 2344434.8/18

Left In: 767.239+/-0.155 $\chi^2$/NDF:1636371.6/15

+ sign 800.044+/-0.132 $\chi^2$/NDF: 3689434.0/32

All: 805.763+/-0.095 $\chi^2$/NDF: 8029511.1/67

- sign 811.832+/-0.136 $\chi^2$/NDF: 4336211.6/34




Right In: 1935.992+/-962.322 $\chi^2$/NDF: 12.4/15

Left Out: 1643.749+/-670.883 $\chi^2$/NDF:15.1/15

Right Out: -1387.548+/-1009.105 $\chi^2$/NDF: 19.8/17

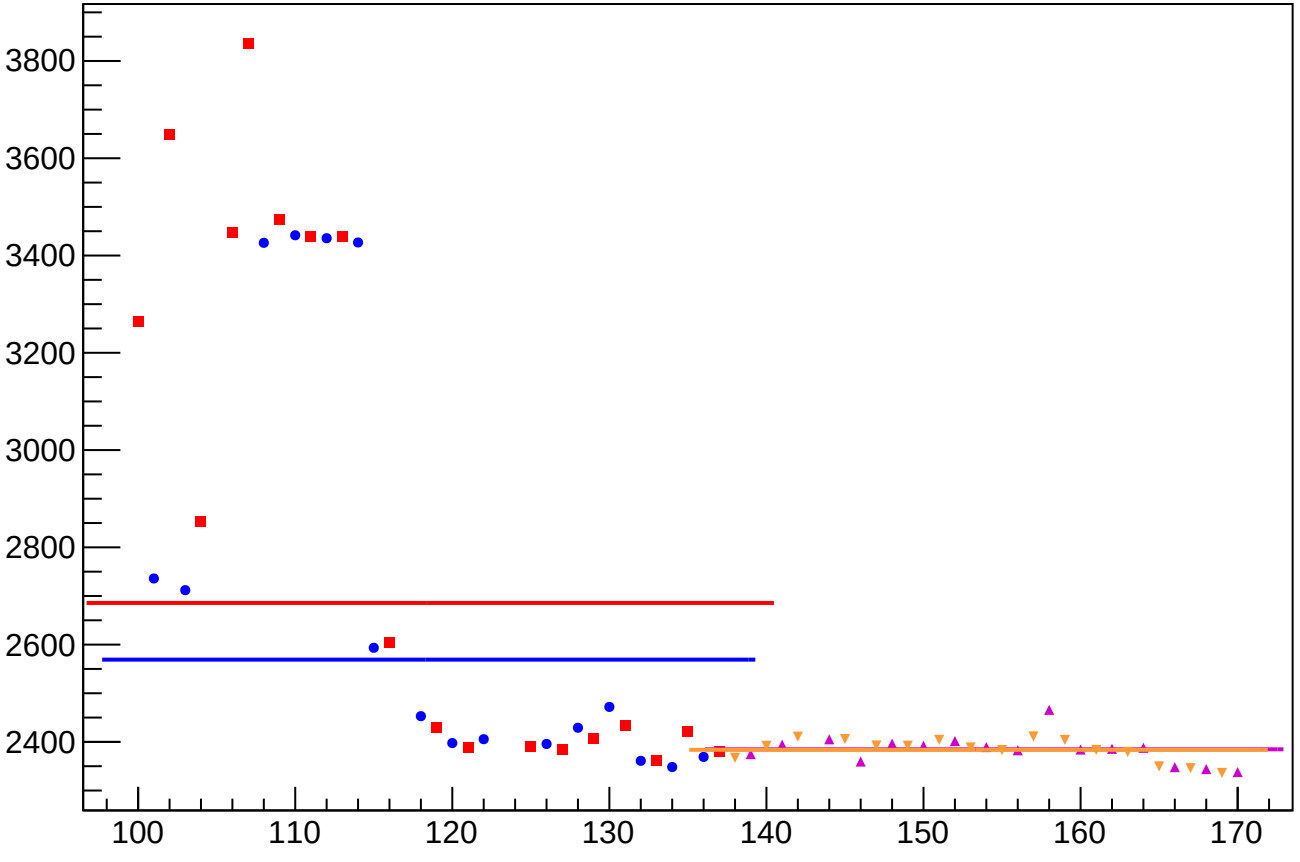
Left In: -1778.112+/-655.883 $\chi^2$/NDF:21.4/15

+ sign 1739.330+/-550.345 $\chi^2$/NDF: 27.5/31

All: 37.324+/-389.006 $\chi^2$/NDF: 88.0/65

- sign -1662.118+/-549.930 $\chi^2$/NDF: 41.3/33

# dit_asym_atl1_rms vs Slug




Right In: 2569.130+/-0.680 $\chi^2$/NDF: 229487.5/15

Left Out: 2383.744+/-0.474 $\chi^2$/NDF:2206.0/15

Right Out: 2685.675+/-0.714 $\chi^2$/NDF: 419264.8/17

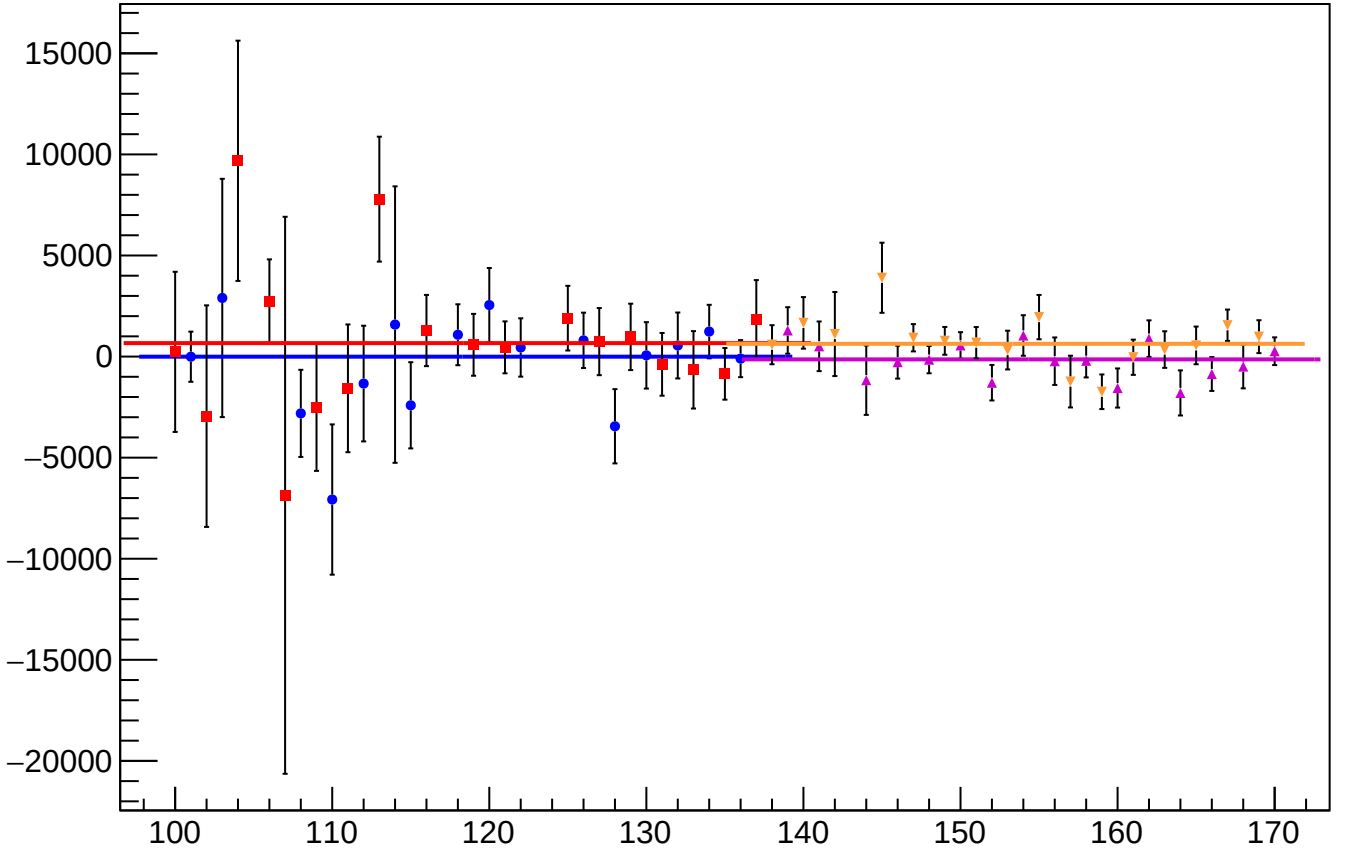
Left In: 2384.748+/-0.464 $\chi^2$/NDF:3912.8/15

+ sign 2444.376+/-0.389 $\chi^2$/NDF: 281641.7/31

All: 2459.260+/-0.275 $\chi^2$/NDF: 832779.5/65

- sign 2474.120+/-0.389 $\chi^2$/NDF: 548214.6/33

# asym_atl1_dit_correction_mean vs Slug




Right In: -5.169+/-412.248 $\chi^2$/NDF: 14.5/15

Left Out: 630.787+/-229.382 $\chi^2$/NDF:18.2/15

Right Out: 665.952+/-460.513 $\chi^2$/NDF: 14.4/17

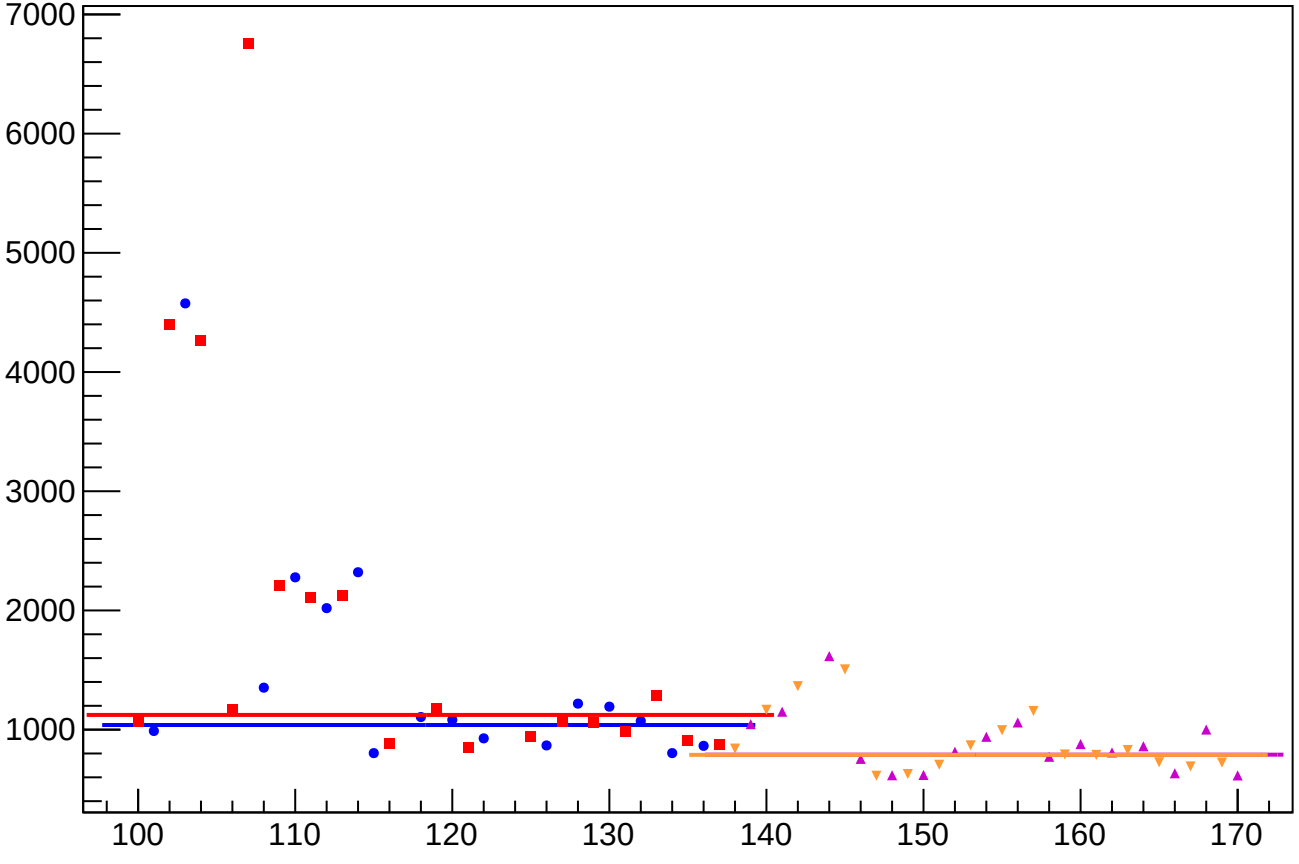
Left In: -139.400+/-224.792 $\chi^2$/NDF:13.3/15

+ sign 480.441+/-200.442 $\chi^2$/NDF: 34.5/31

All: 249.816+/-142.285 $\chi^2$/NDF: 67.3/65

- sign 15.570+/-202.010 $\chi^2$/NDF: 30.1/33

# asym_atl1_dit_correction_rms vs Slug




Right In: 1038.803+/-0.292 $\chi^2$/NDF: 1539731.1/15

Left Out: 788.495+/-0.162 $\chi^2$/NDF:1252066.8/15

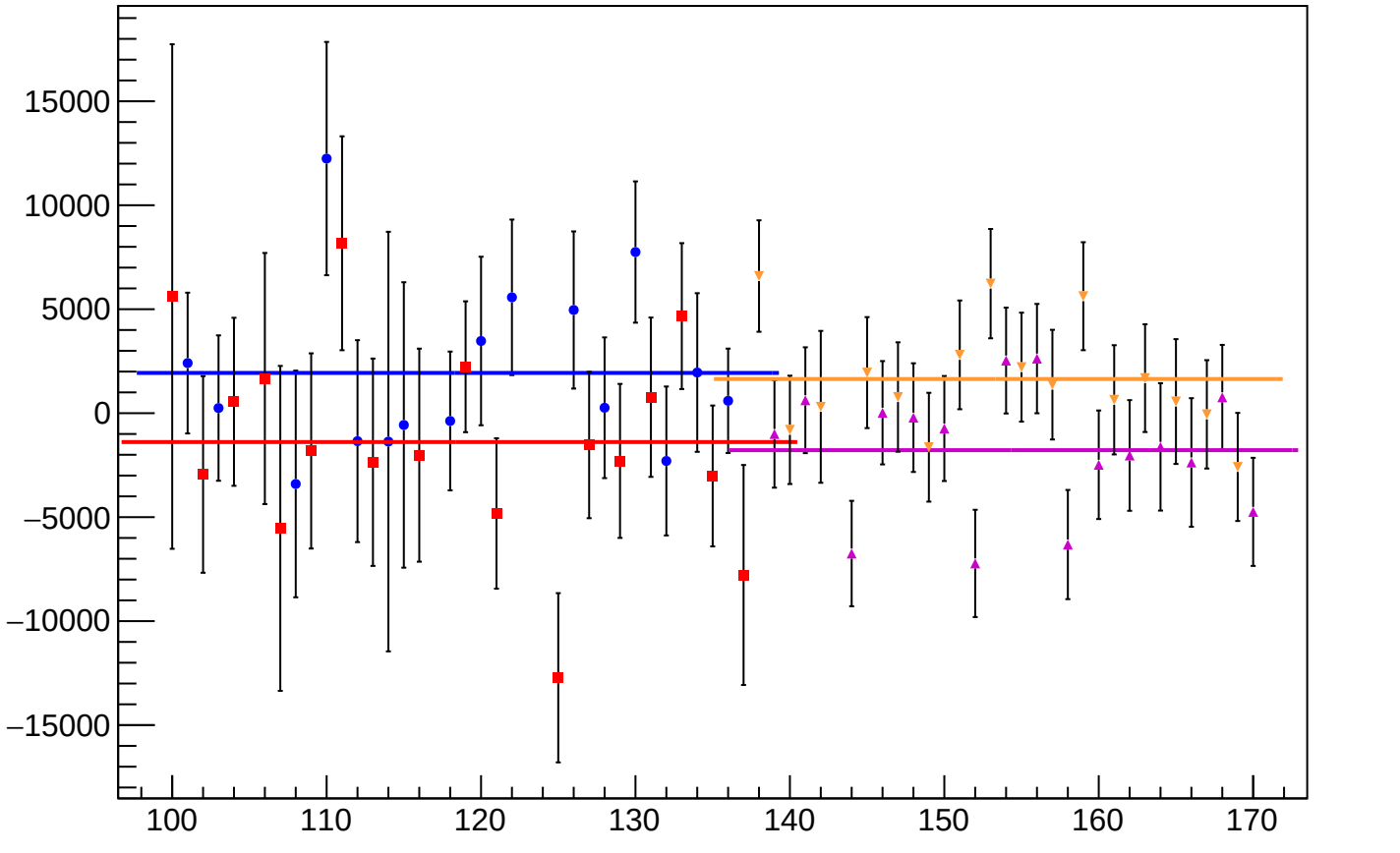
Right Out: 1123.474+/-0.326 $\chi^2$/NDF: 2535511.7/17

Left In: 790.008+/-0.159 $\chi^2$/NDF:1458707.5/15

+ sign 847.670+/-0.142 $\chi^2$/NDF: 3354818.5/31

All: 850.897+/-0.101 $\chi^2$/NDF: 8196983.1/65

- sign 854.176+/-0.143 $\chi^2$/NDF: 4841119.3/33




Right In: 1935.988+/-962.322 $\chi^2$/NDF: 12.4/15

Left Out: 1643.749+/-670.883 $\chi^2$/NDF:15.1/15

Right Out: -1387.545+/-1009.105 $\chi^2$/NDF: 19.8/17

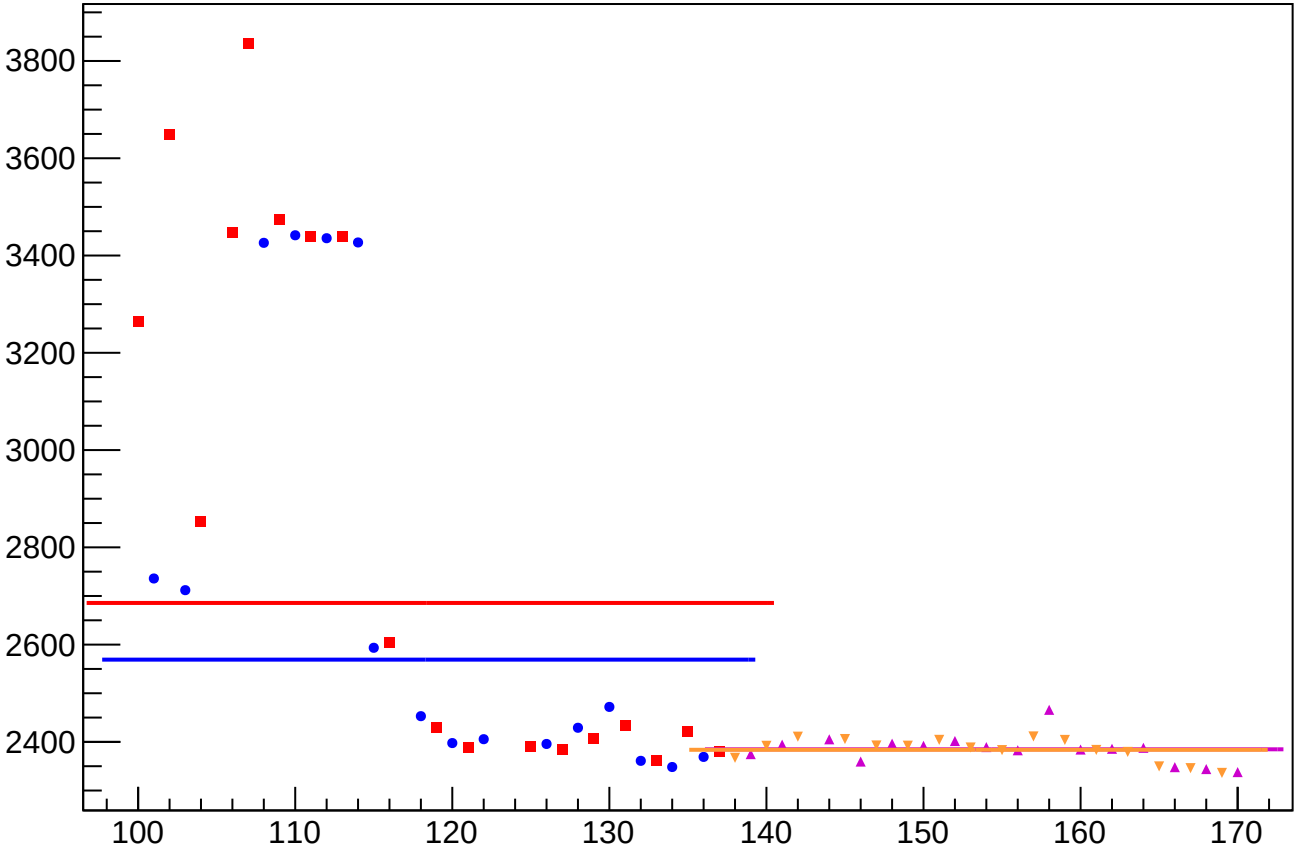
Left In: -1778.112+/-655.883 $\chi^2$/NDF:21.4/15

+ sign 1739.329+/-550.345 $\chi^2$/NDF: 27.5/31

All: 37.323+/-389.006 $\chi^2$/NDF: 88.0/65

- sign -1662.118+/-549.930 $\chi^2$/NDF: 41.3/33

# eigen_dit_asym_atl1_rms vs Slug




Right In: 2569.130+/-0.680 $\chi^2$/NDF: 229487.3/15

Left Out: 2383.744+/-0.474 $\chi^2$/NDF:2206.0/15

Right Out: 2685.674+/-0.714 $\chi^2$/NDF: 419264.2/17

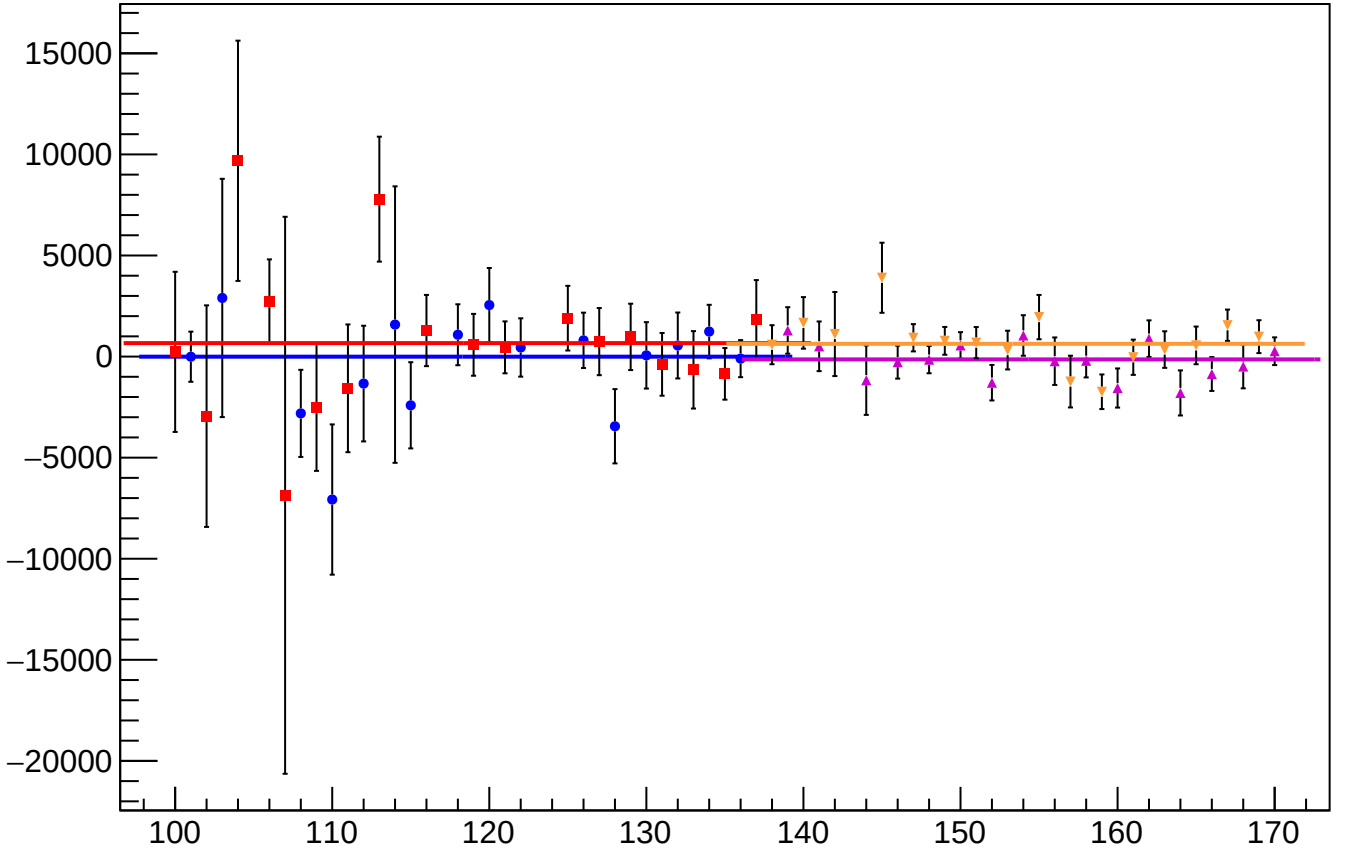
Left In: 2384.748+/-0.464 $\chi^2$/NDF:3912.8/15

+ sign 2444.376+/-0.389 $\chi^2$/NDF: 281641.2/31

All: 2459.260+/-0.275 $\chi^2$/NDF: 832778.1/65

- sign 2474.120+/-0.389 $\chi^2$/NDF: 548213.7/33

# asym_atl1_eigen_dit_correction_mean vs Slug




Right In: -5.172+/-412.248 $\chi^2$/NDF: 14.5/15

Left Out: 630.786+/-229.382 $\chi^2$/NDF:18.2/15

Right Out: 665.953+/-460.513 $\chi^2$/NDF: 14.4/17

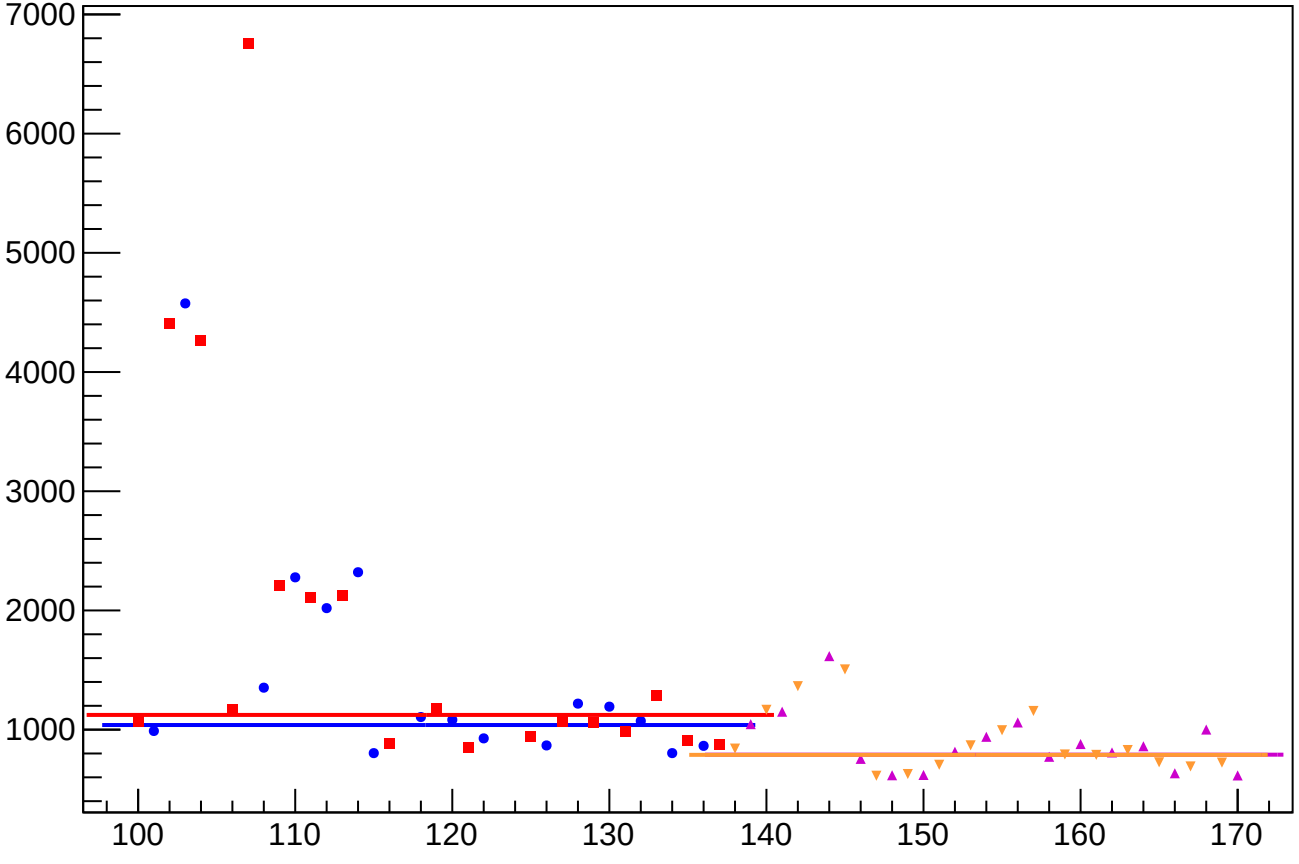
Left In: -139.400+/-224.792 $\chi^2$/NDF:13.3/15

+ sign 480.440+/-200.443 $\chi^2$/NDF: 34.5/31

All: 249.816+/-142.285 $\chi^2$/NDF: 67.3/65

- sign 15.571+/-202.010 $\chi^2$/NDF: 30.1/33

# asym_atl1_eigen_dit_correction_rms vs Slug




Right In: 1038.804+/-0.292 $\chi^2$/NDF: 1539724.8/15

Left Out: 788.496+/-0.162 $\chi^2$/NDF:1252064.5/15

Right Out: 1123.474+/-0.326 $\chi^2$/NDF: 2535509.9/17

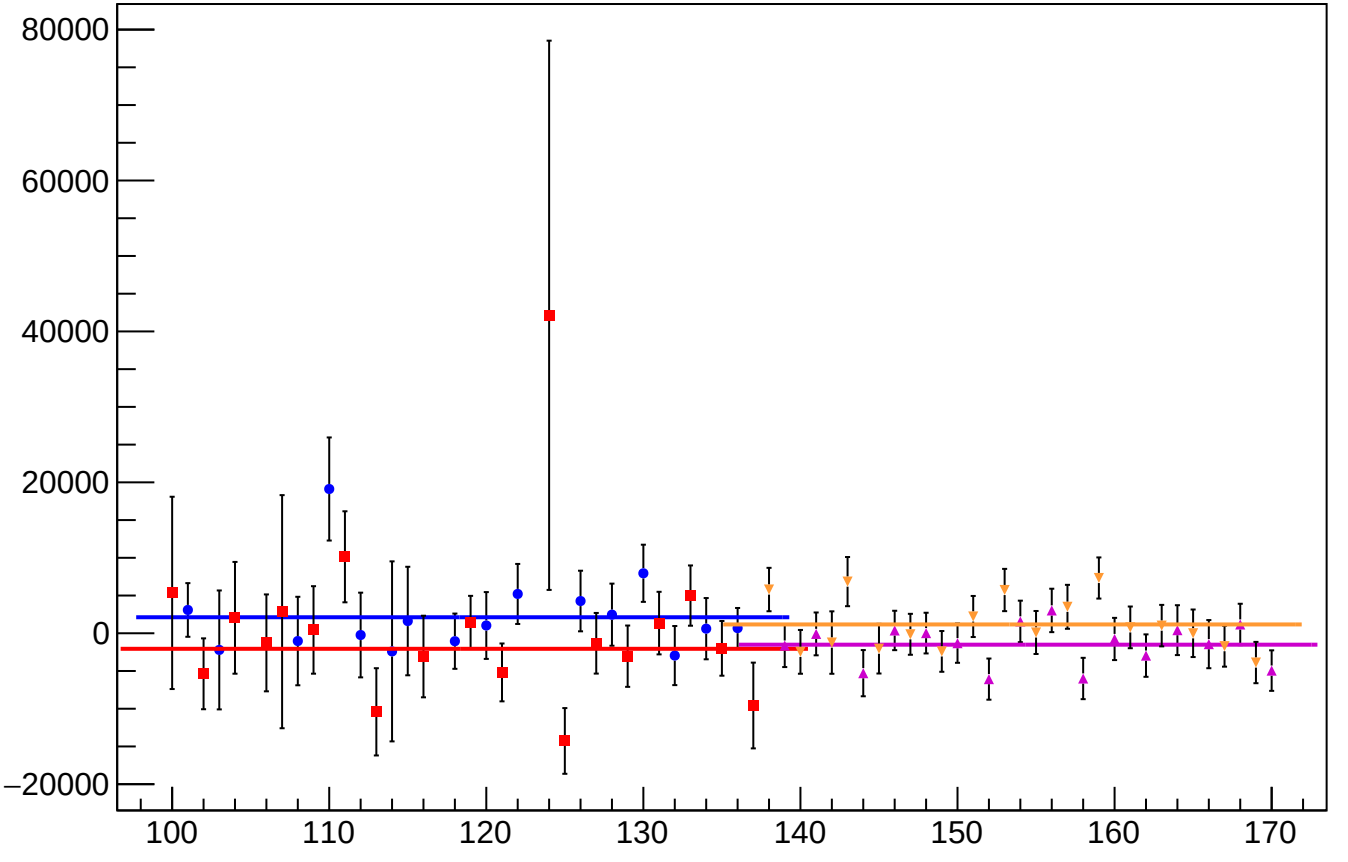
Left In: 790.010+/-0.159 $\chi^2$/NDF:1458705.8/15

+ sign 847.671+/-0.142 $\chi^2$/NDF: 3354805.5/31

All: 850.899+/-0.101 $\chi^2$/NDF: 8196958.8/65

- sign 854.177+/-0.143 $\chi^2$/NDF: 4841108.0/33

# asym_atl1_mean vs Slug




Right In: 2121.991+/-1084.700 $\chi^2$/NDF: 13.4/15

Left Out: 1169.253+/-702.066 $\chi^2$/NDF:23.8/16

Right Out: -2059.741+/-1136.807 $\chi^2$/NDF: 24.3/18

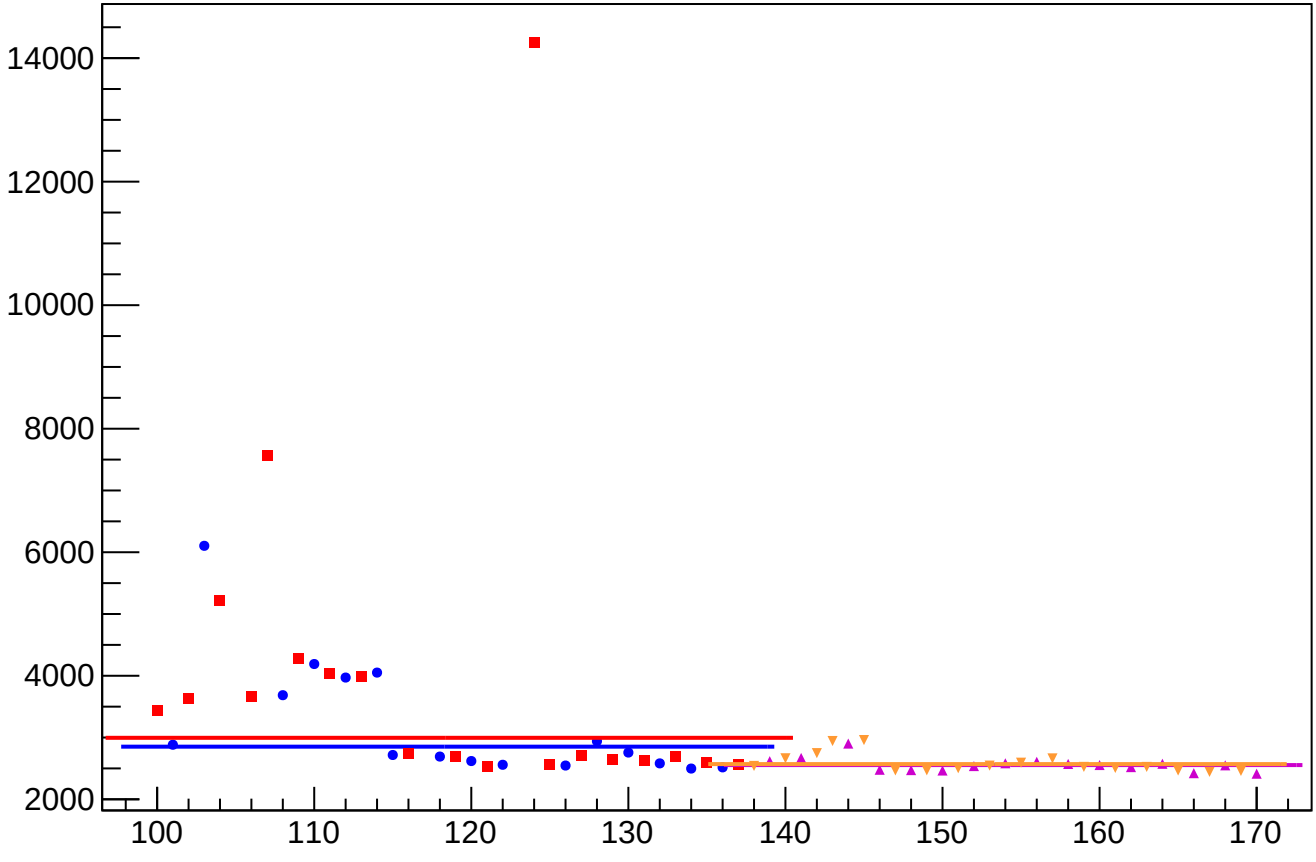
Left In: -1513.424+/-703.148 $\chi^2$/NDF:15.1/15

+ sign 1450.541+/-589.384 $\chi^2$/NDF: 37.7/32

All: -84.423+/-419.771 $\chi^2$/NDF: 91.1/67

- sign -1664.597+/-598.001 $\chi^2$/NDF: 39.6/34

# asym_atl1_rms vs Slug




Right In: 2852.206+/-0.767 $\chi^2$/NDF: 648715.2/15

Left Out: 2569.952+/-0.496 $\chi^2$/NDF:81240.5/16

Right Out: 2995.525+/-0.804 $\chi^2$/NDF: 979168.6/18

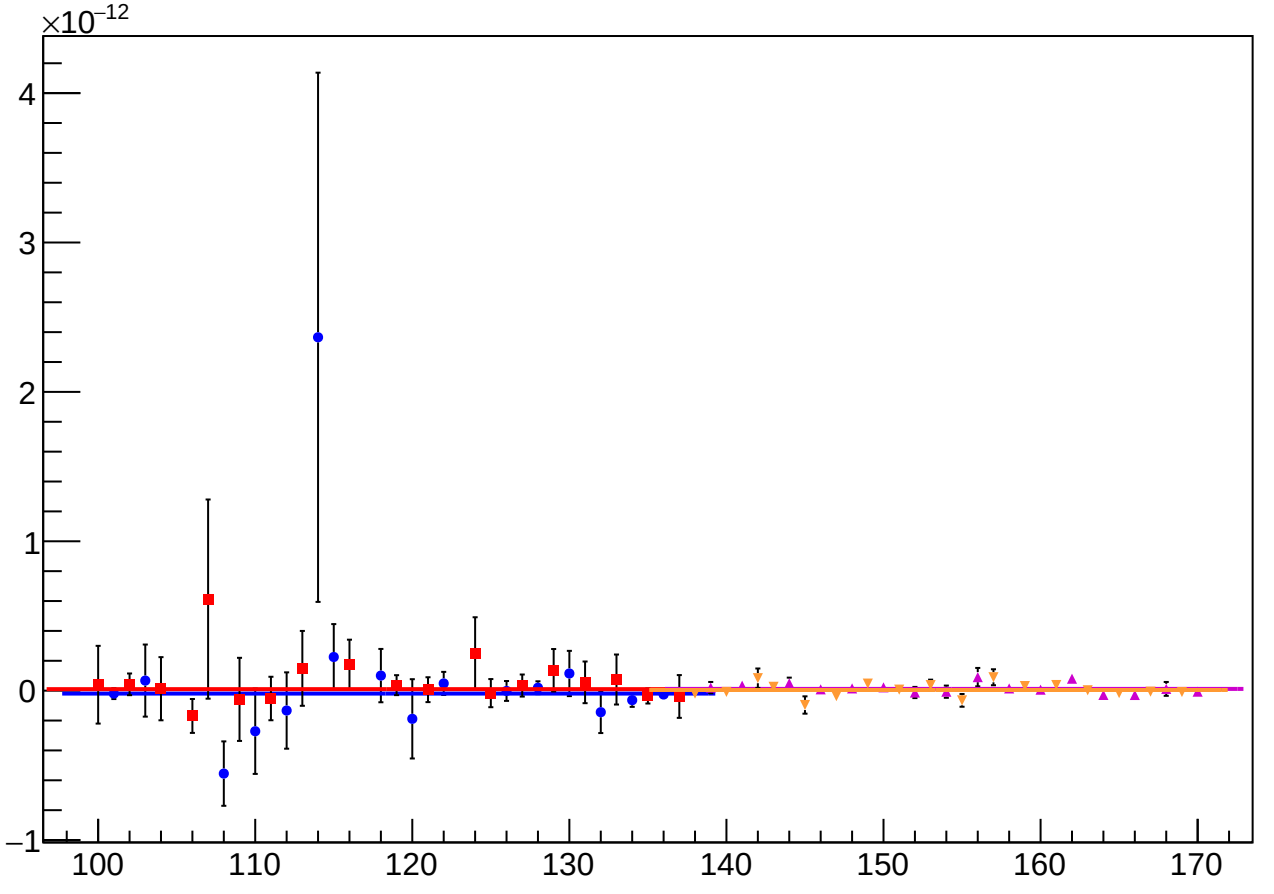
Left In: 2553.974+/-0.497 $\chi^2$/NDF:46110.4/15

+ sign 2653.285+/-0.417 $\chi^2$/NDF: 825395.7/32

All: 2664.555+/-0.297 $\chi^2$/NDF: 2070395.9/67

- sign 2676.157+/-0.423 $\chi^2$/NDF: 1243516.1/34

# asym_atl1_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:22.2/16

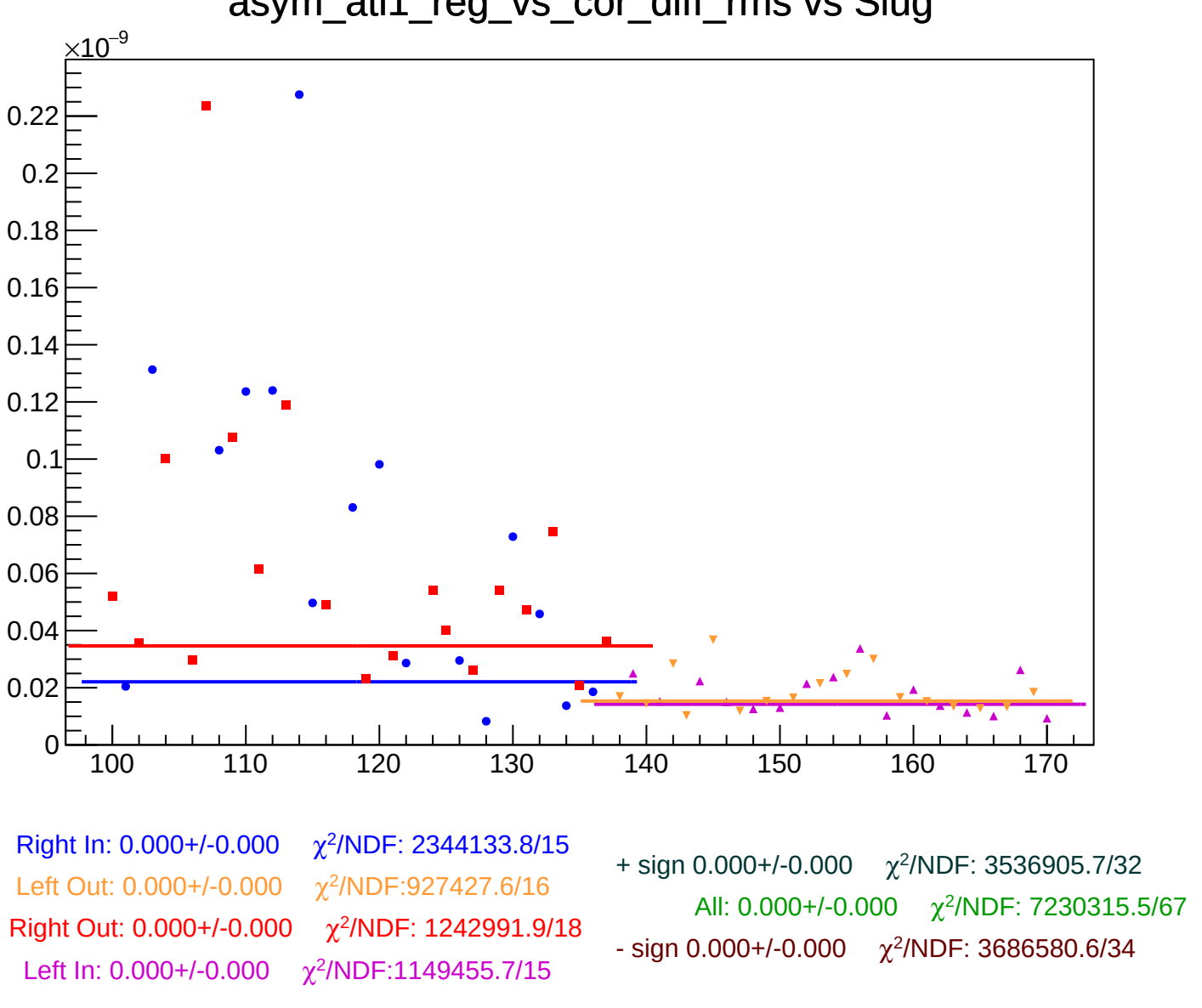
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 8.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:18.4/15

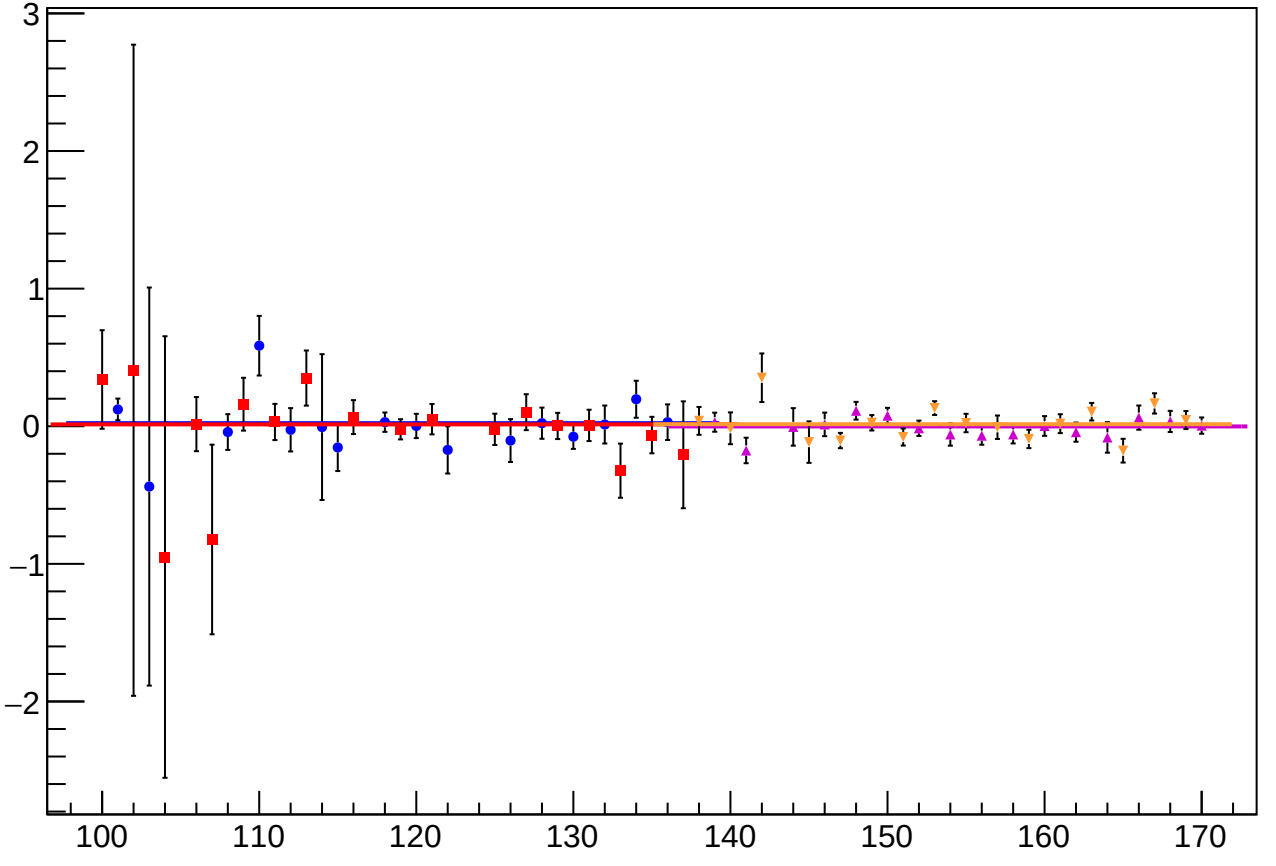
+ sign 0.000+/-0.000 $\chi^2$/NDF: 39.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 67.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 26.7/34


asym_atl1_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2344133.8/15
Left Out: 0.000+/-0.000 χ²/NDF:927427.6/16
Right Out: 0.000+/-0.000 χ²/NDF: 1242991.9/18
Left In: 0.000+/-0.000 χ²/NDF:1149455.7/15
+ sign 0.000+/-0.000 χ²/NDF: 3536905.7/32
All: 0.000+/-0.000 χ²/NDF: 7230315.5/67
- sign 0.000+/-0.000 χ²/NDF: 3686580.6/34

# asym_atl1_dit_vs_cor_diff_mean vs Slug




Right In: 0.022+/-0.030 $\chi^2$/NDF: 14.8/15

Left Out: 0.015+/-0.018 $\chi^2$/NDF:30.9/15

Right Out: 0.013+/-0.033 $\chi^2$/NDF: 10.8/17

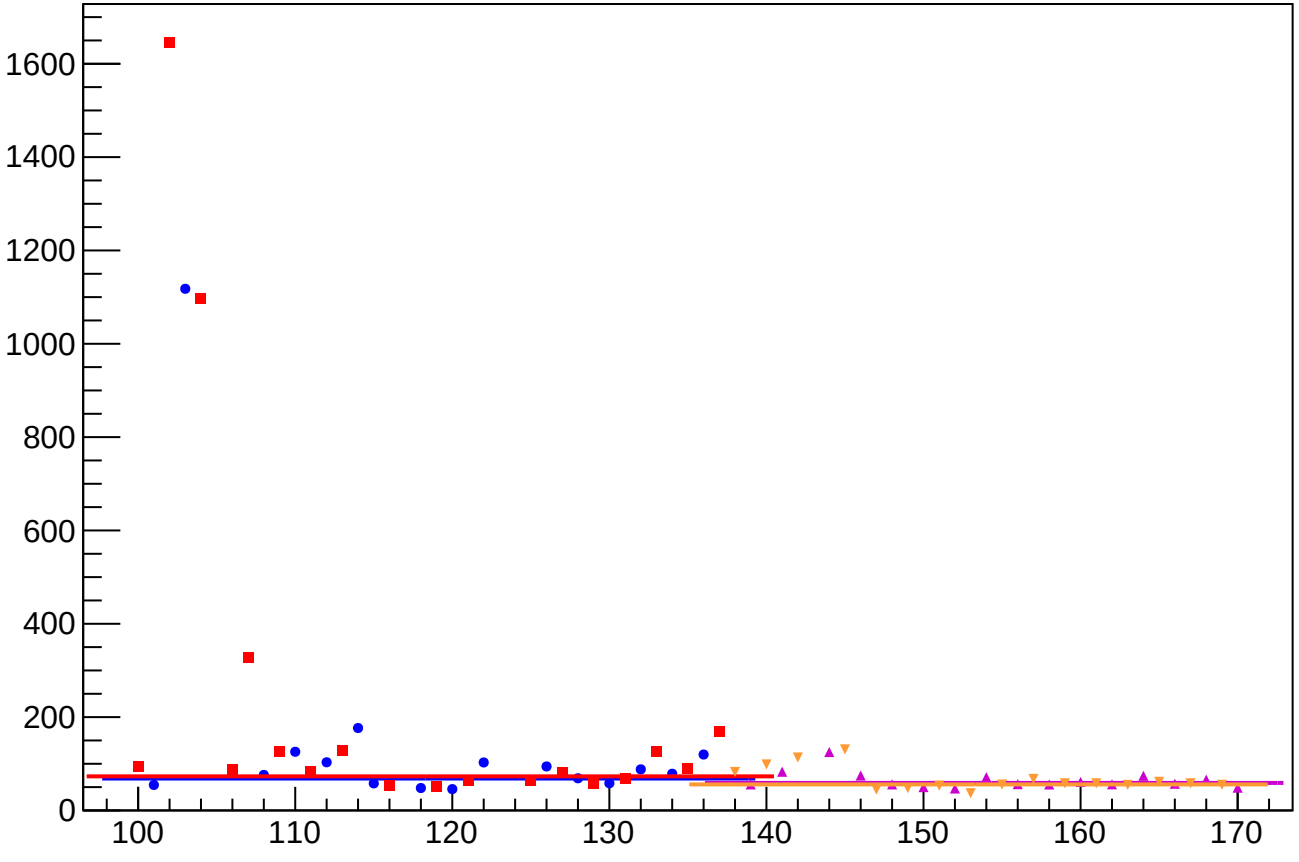
Left In: -0.001+/-0.018 $\chi^2$/NDF:12.9/15

+ sign 0.017+/-0.015 $\chi^2$/NDF: 45.7/31

All: 0.010+/-0.011 $\chi^2$/NDF: 70.0/65

- sign 0.002+/-0.016 $\chi^2$/NDF: 23.8/33

# asym_atl1_dit_vs_cor_diff_rms vs Slug




Right In: 68.429+/-0.021 $\chi^2$/NDF: 2278083.9/15

Left Out: 55.786+/-0.013 $\chi^2$/NDF:1585080.2/15

Right Out: 73.072+/-0.024 $\chi^2$/NDF: 2913147.6/17

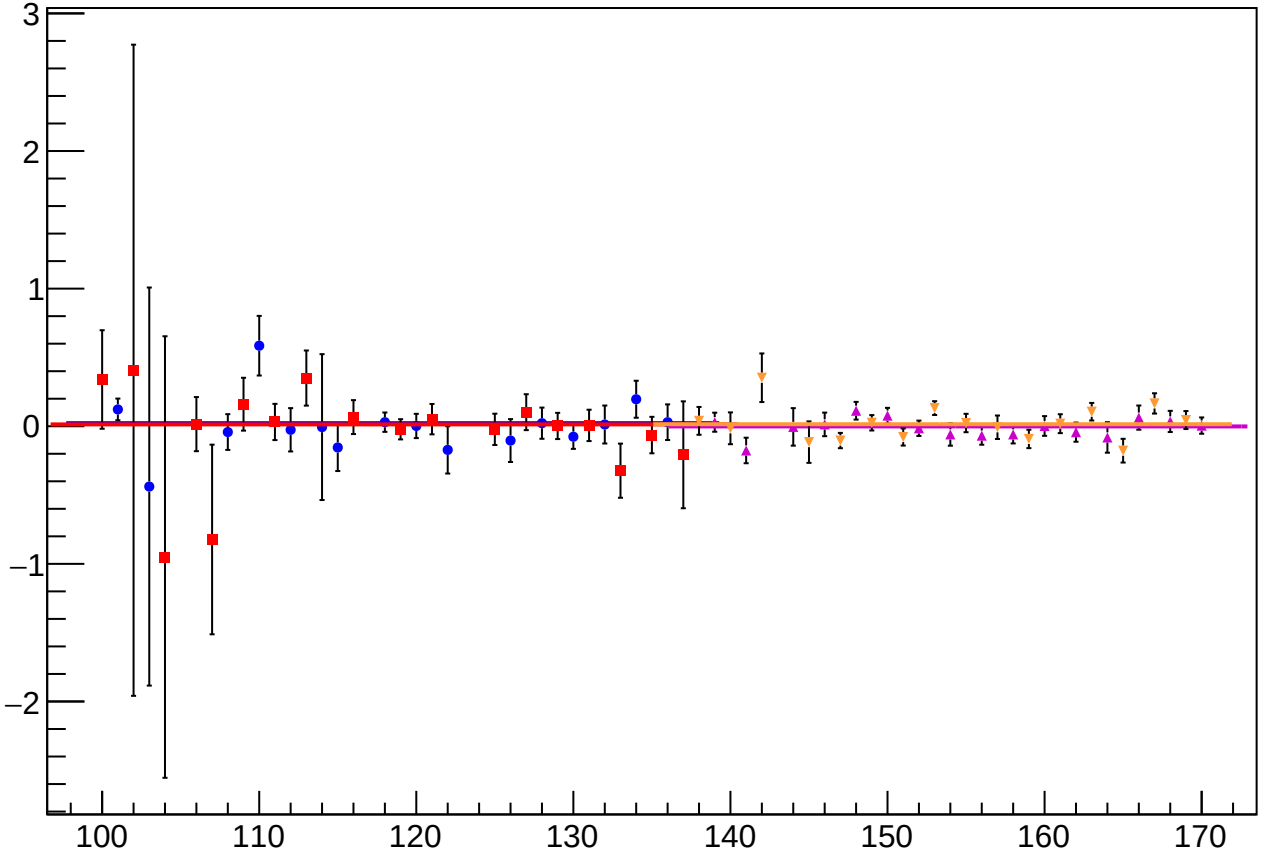
Left In: 59.021+/-0.013 $\chi^2$/NDF:999973.8/15

+ sign 59.064+/-0.011 $\chi^2$/NDF: 4123673.3/31

All: 60.572+/-0.008 $\chi^2$/NDF: 8349681.7/65

- sign 62.186+/-0.011 $\chi^2$/NDF: 4186074.2/33

# asym_atl1_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.022+/-0.030 $\chi^2$/NDF: 14.8/15

Left Out: 0.015+/-0.018 $\chi^2$/NDF:30.9/15

Right Out: 0.013+/-0.033 $\chi^2$/NDF: 10.8/17

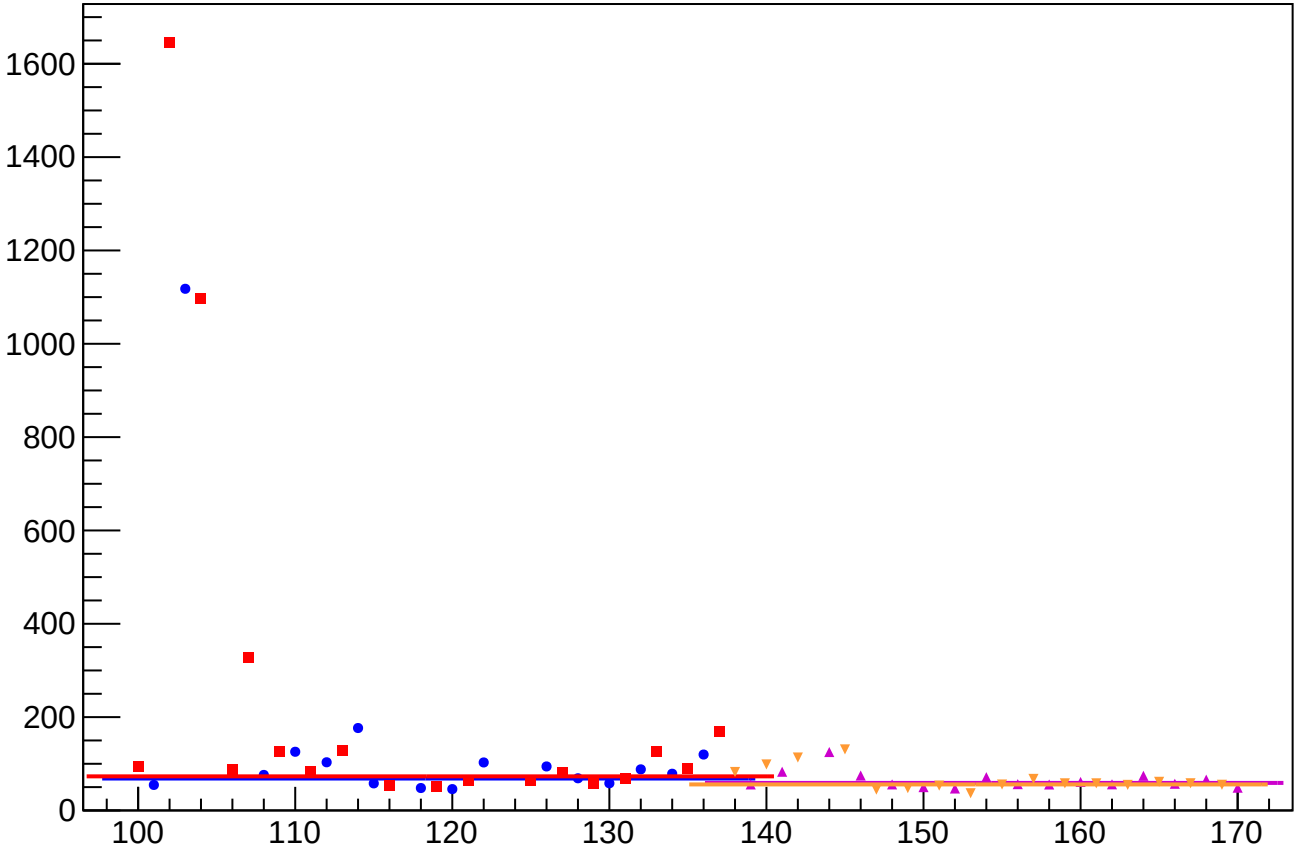
Left In: -0.001+/-0.018 $\chi^2$/NDF:12.9/15

+ sign 0.017+/-0.015 $\chi^2$/NDF: 45.7/31

All: 0.010+/-0.011 $\chi^2$/NDF: 70.0/65

- sign 0.002+/-0.016 $\chi^2$/NDF: 23.8/33

# asym_atl1_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 68.429+/-0.021 $\chi^2$/NDF: 2278083.9/15

Left Out: 55.786+/-0.013 $\chi^2$/NDF:1585080.2/15

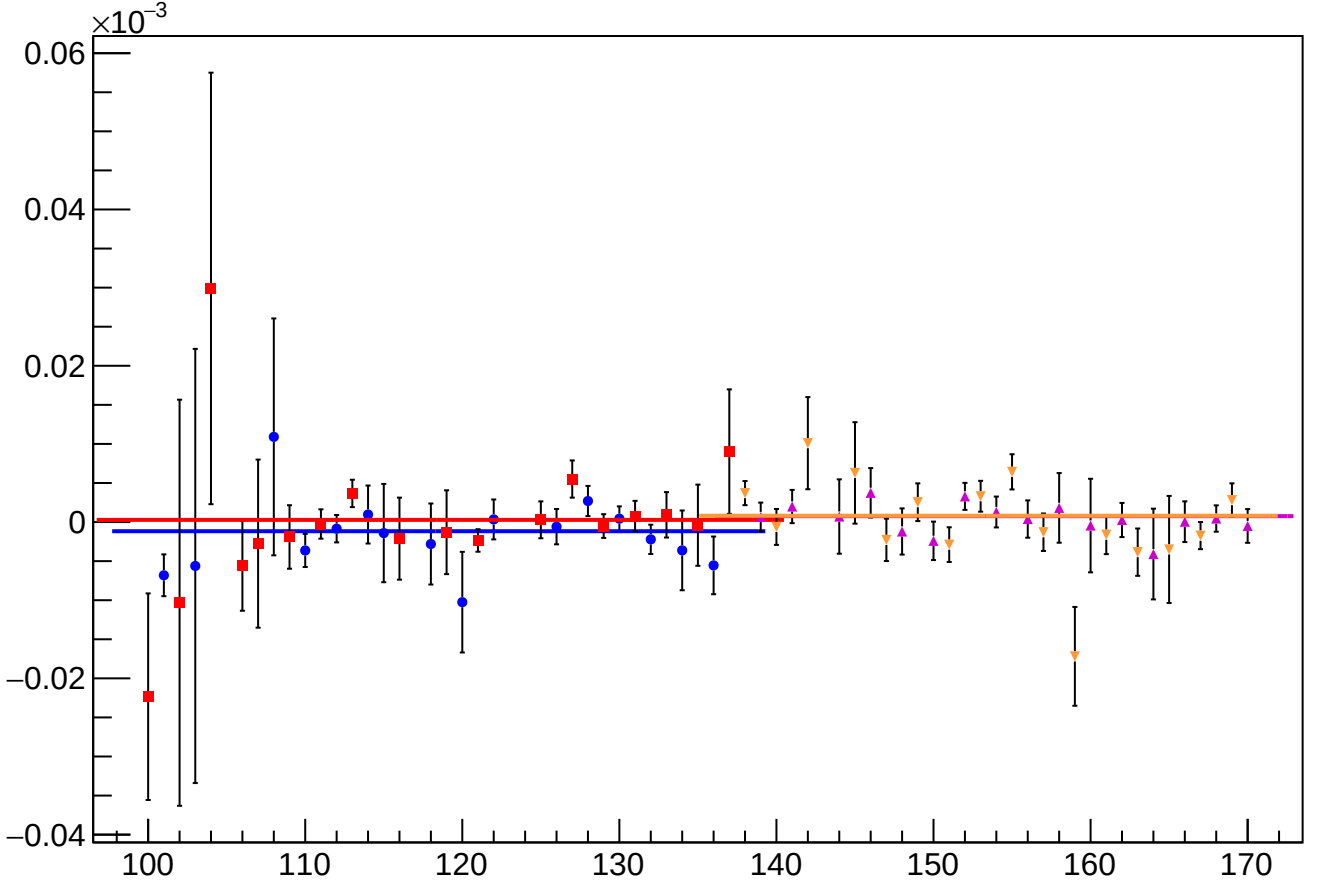
Right Out: 73.072+/-0.024 $\chi^2$/NDF: 2913147.6/17

Left In: 59.021+/-0.013 $\chi^2$/NDF:999973.8/15

+ sign 59.064+/-0.011 $\chi^2$/NDF: 4123673.3/31

All: 60.572+/-0.008 $\chi^2$/NDF: 8349681.7/65

- sign 62.186+/-0.011 $\chi^2$/NDF: 4186074.2/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:35.1/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 19.5/17

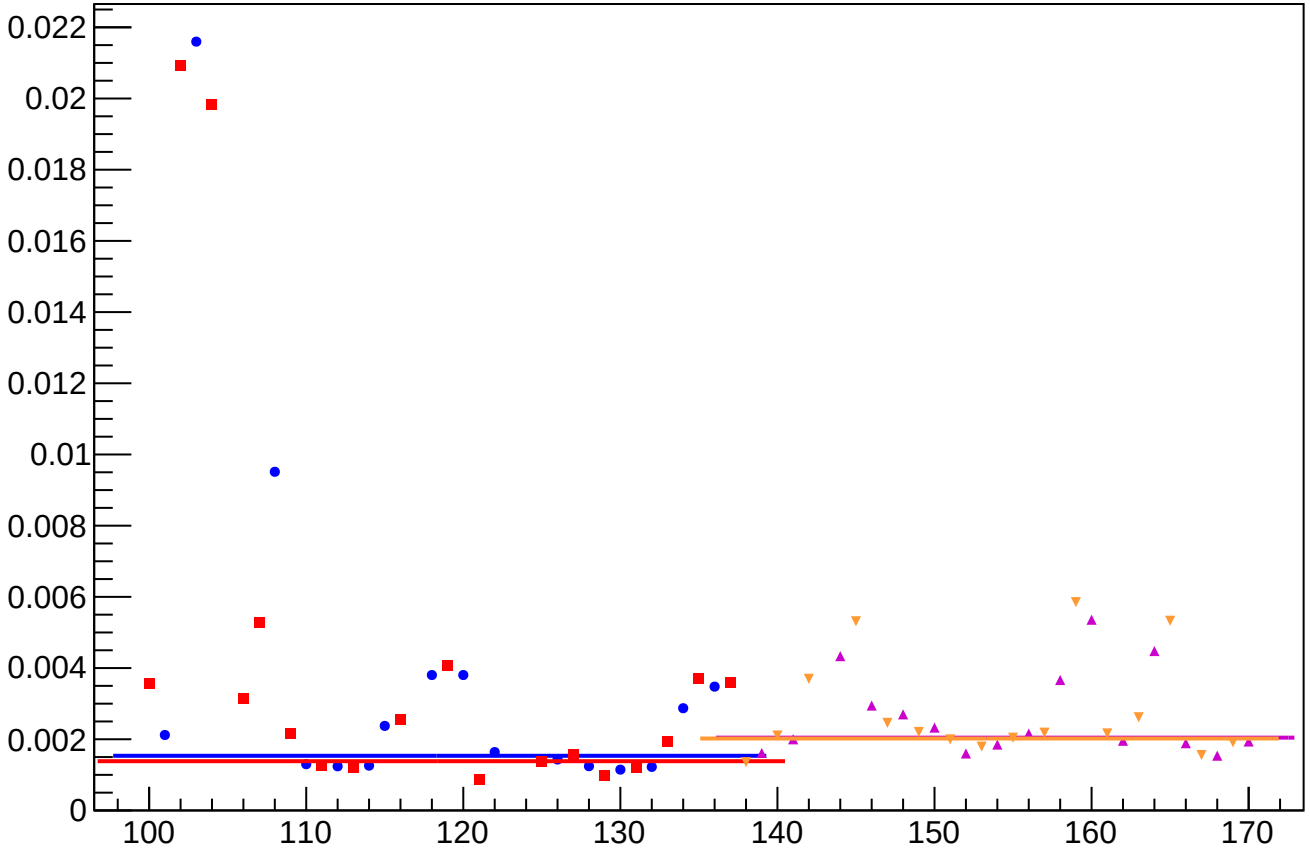
Left In: 0.000+/-0.000 $\chi^2$/NDF:6.9/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 56.2/31

All: 0.000+/-0.000 $\chi^2$/NDF: 83.9/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 26.7/33

# asym_atl1_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 3373907.9/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:2584844.3/15

Right Out: 0.001+/-0.000 $\chi^2$/NDF: 4269081.2/17

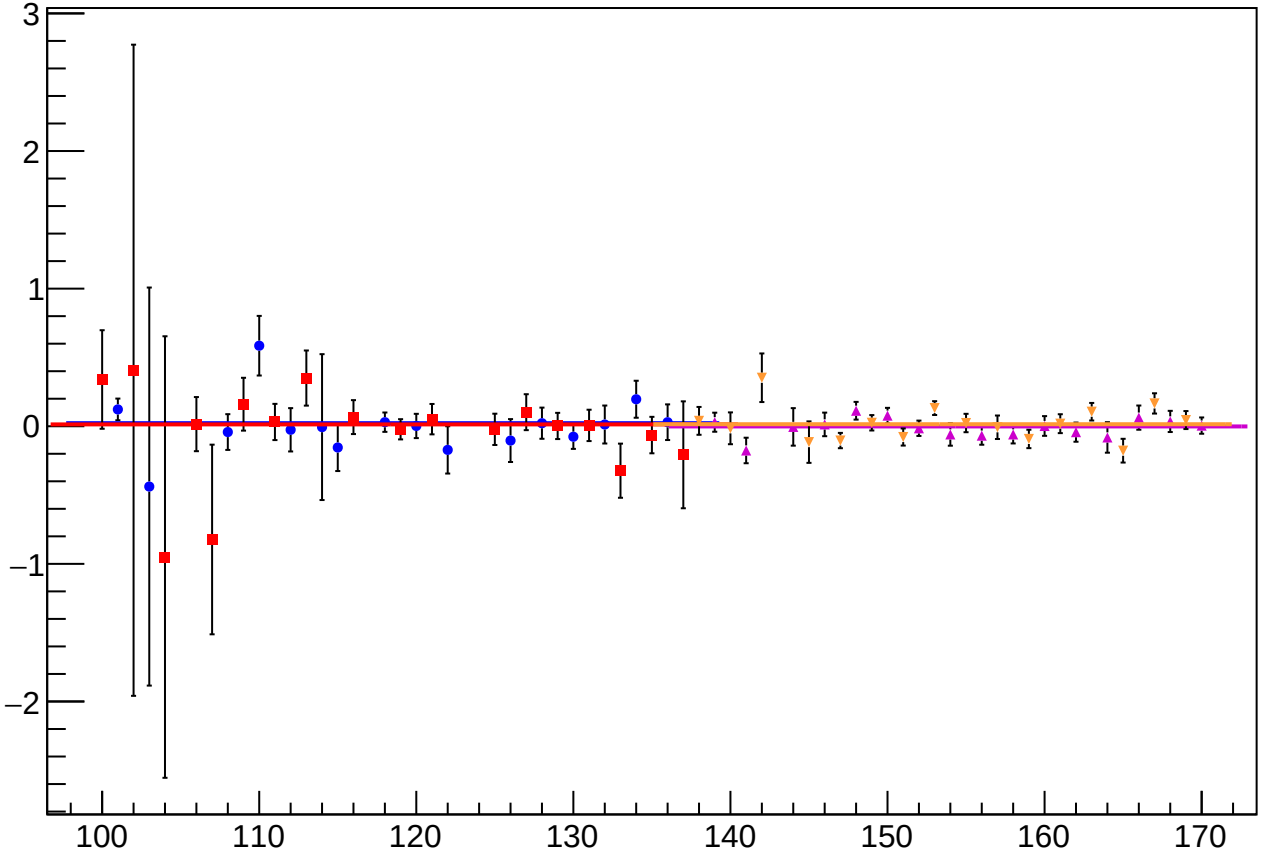
Left In: 0.002+/-0.000 $\chi^2$/NDF:2440913.5/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 6536254.4/31

All: 0.002+/-0.000 $\chi^2$/NDF: 14412572.8/65

- sign 0.002+/-0.000 $\chi^2$/NDF: 7852620.8/33

# asym_atl1_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.022+/-0.030 $\chi^2$/NDF: 14.8/15

Left Out: 0.015+/-0.018 $\chi^2$/NDF:30.9/15

Right Out: 0.013+/-0.033 $\chi^2$/NDF: 10.8/17

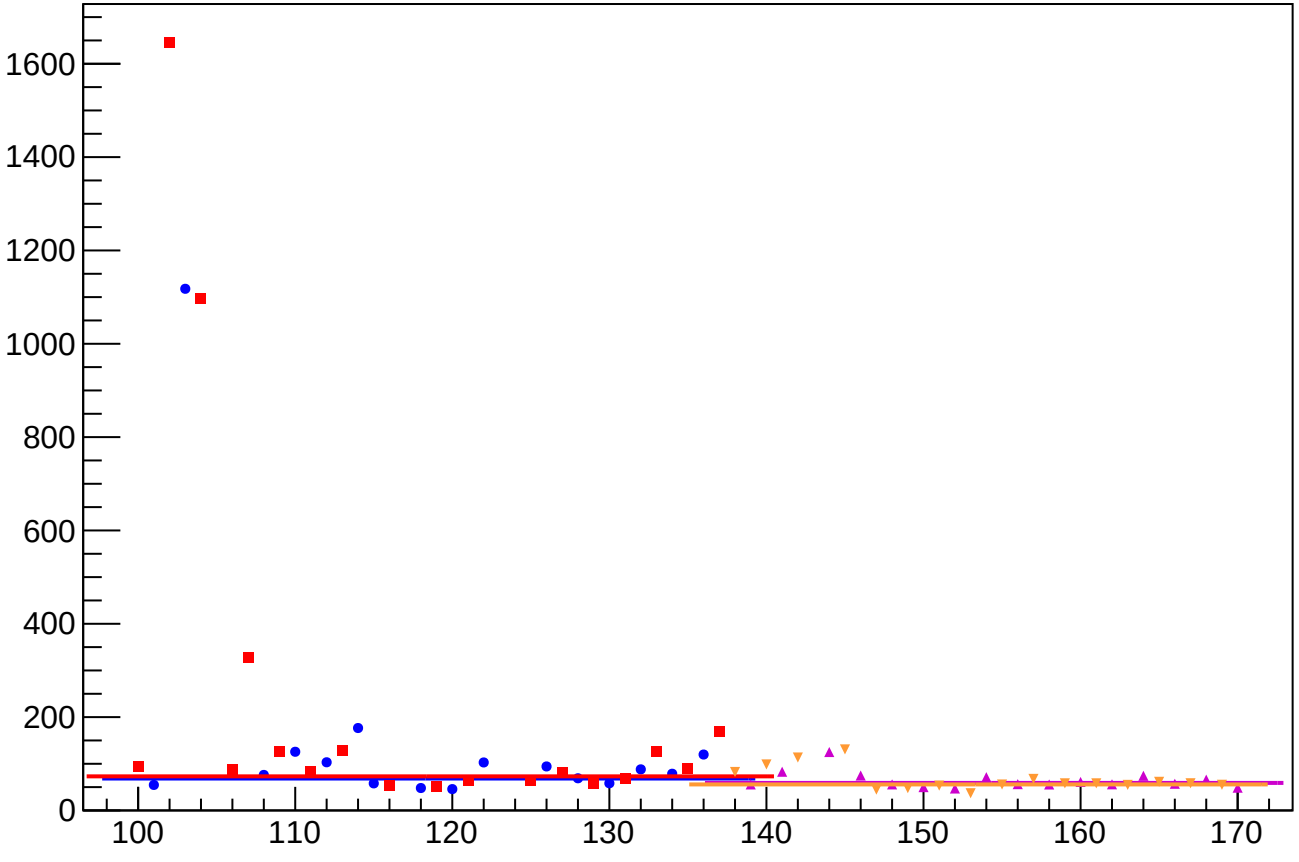
Left In: -0.001+/-0.018 $\chi^2$/NDF:12.9/15

+ sign 0.017+/-0.015 $\chi^2$/NDF: 45.7/31

All: 0.010+/-0.011 $\chi^2$/NDF: 70.0/65

- sign 0.002+/-0.016 $\chi^2$/NDF: 23.8/33

# asym_atl1_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 68.428+/-0.021 $\chi^2$/NDF: 2278168.9/15

Left Out: 55.786+/-0.013 $\chi^2$/NDF:1585154.6/15

Right Out: 73.072+/-0.024 $\chi^2$/NDF: 2913161.9/17

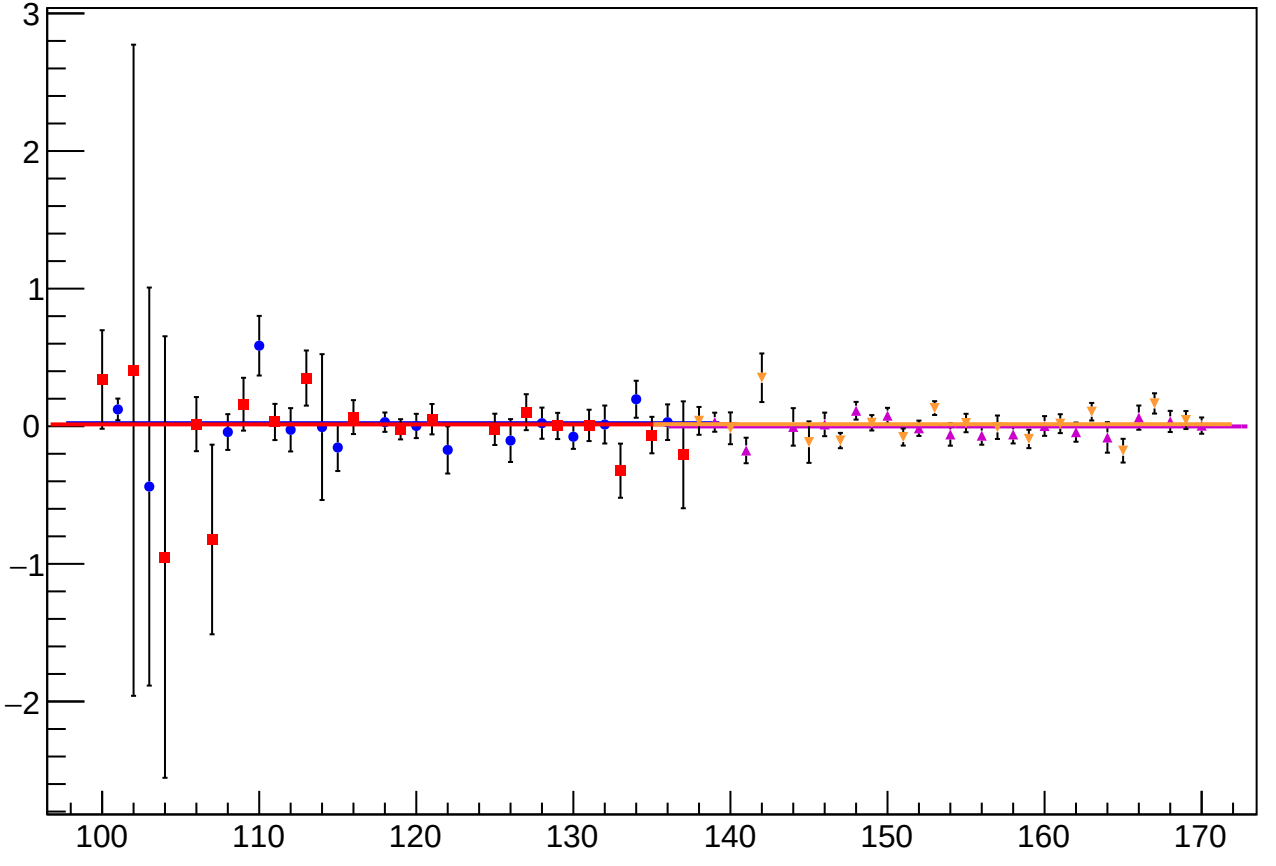
Left In: 59.021+/-0.013 $\chi^2$/NDF:999944.7/15

+ sign 59.064+/-0.011 $\chi^2$/NDF: 4123799.2/31

All: 60.572+/-0.008 $\chi^2$/NDF: 8349773.6/65

- sign 62.187+/-0.011 $\chi^2$/NDF: 4186030.4/33

# asym_atl1_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.022+/-0.030 $\chi^2$/NDF: 14.8/15

Left Out: 0.015+/-0.018 $\chi^2$/NDF:30.9/15

Right Out: 0.013+/-0.033 $\chi^2$/NDF: 10.8/17

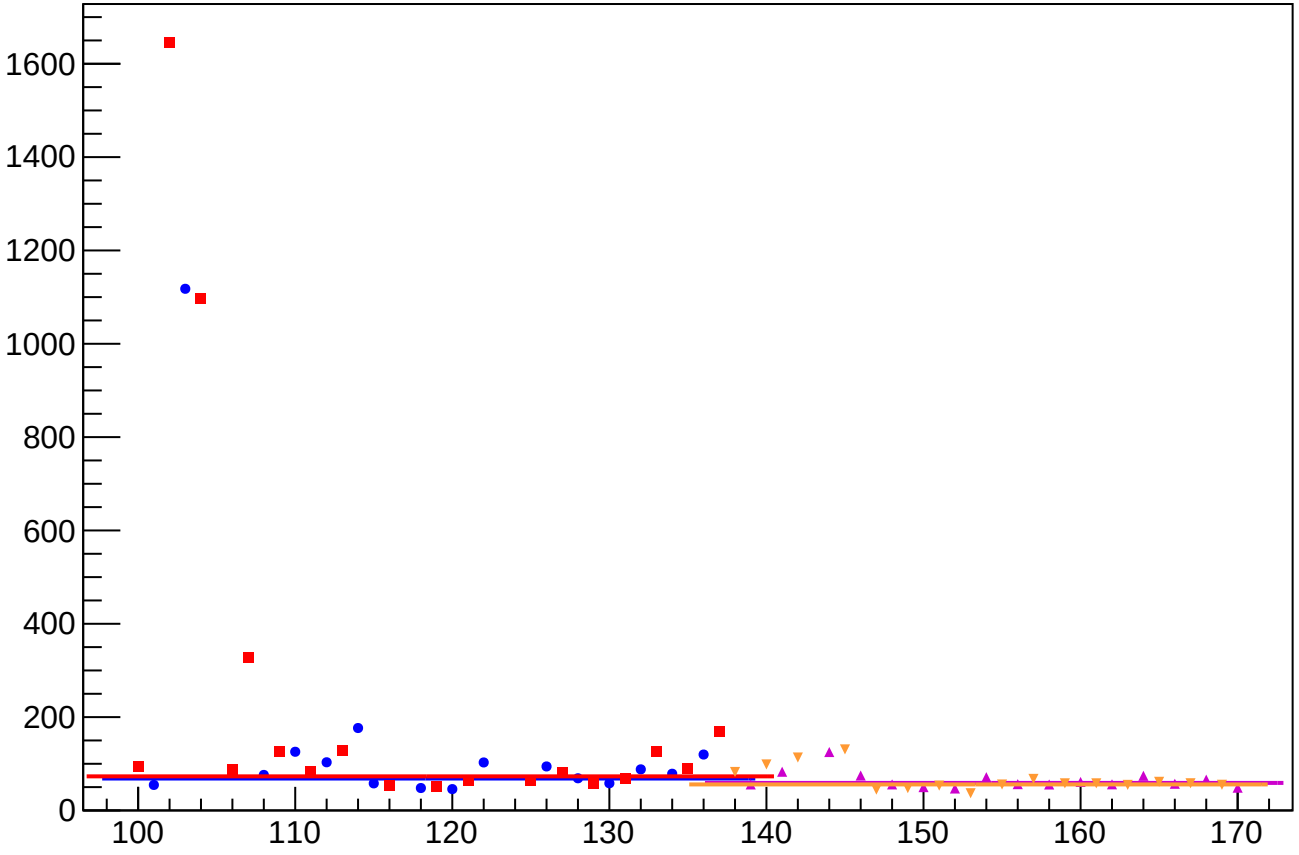
Left In: -0.001+/-0.018 $\chi^2$/NDF:12.9/15

+ sign 0.017+/-0.015 $\chi^2$/NDF: 45.7/31

All: 0.010+/-0.011 $\chi^2$/NDF: 70.0/65

- sign 0.002+/-0.016 $\chi^2$/NDF: 23.8/33

# asym_atl1_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 68.428+/-0.021 $\chi^2$/NDF: 2278168.9/15

Left Out: 55.786+/-0.013 $\chi^2$/NDF:1585154.6/15

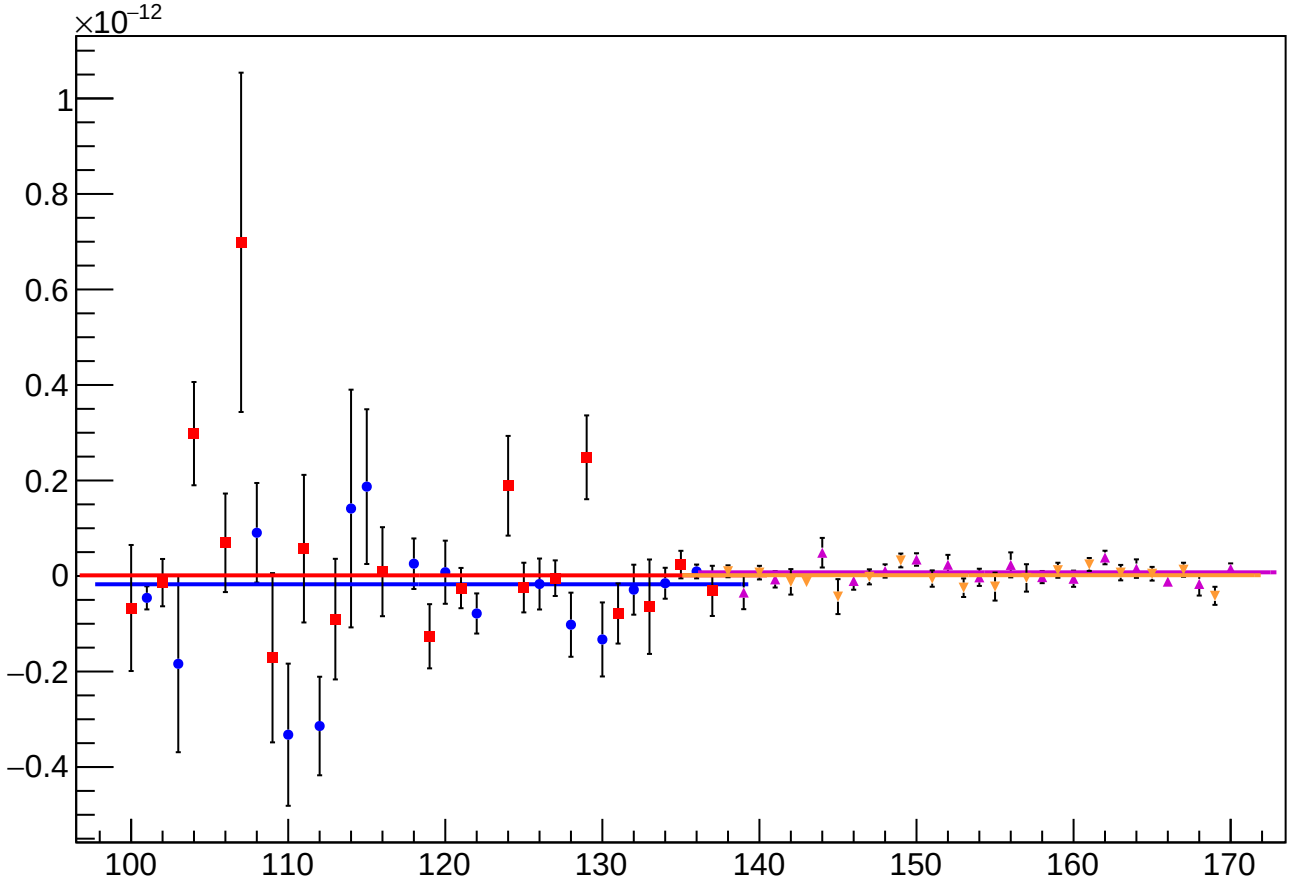
Right Out: 73.072+/-0.024 $\chi^2$/NDF: 2913161.9/17

Left In: 59.021+/-0.013 $\chi^2$/NDF:999944.7/15

+ sign 59.064+/-0.011 $\chi^2$/NDF: 4123799.2/31

All: 60.572+/-0.008 $\chi^2$/NDF: 8349773.6/65

- sign 62.187+/-0.011 $\chi^2$/NDF: 4186030.4/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 28.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:21.1/16

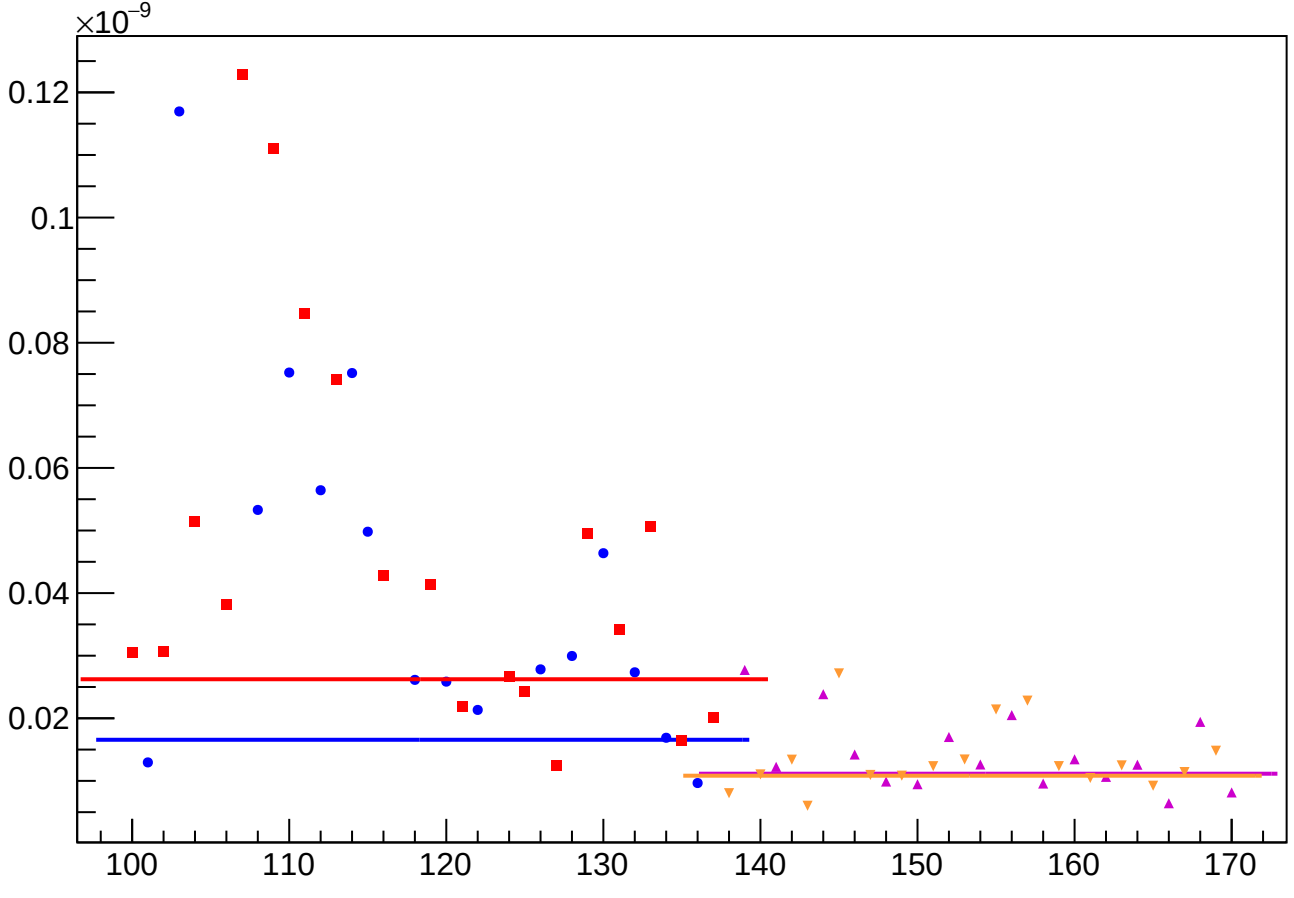
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 32.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:21.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 52.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 109.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 54.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2823424.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1865916.8/16

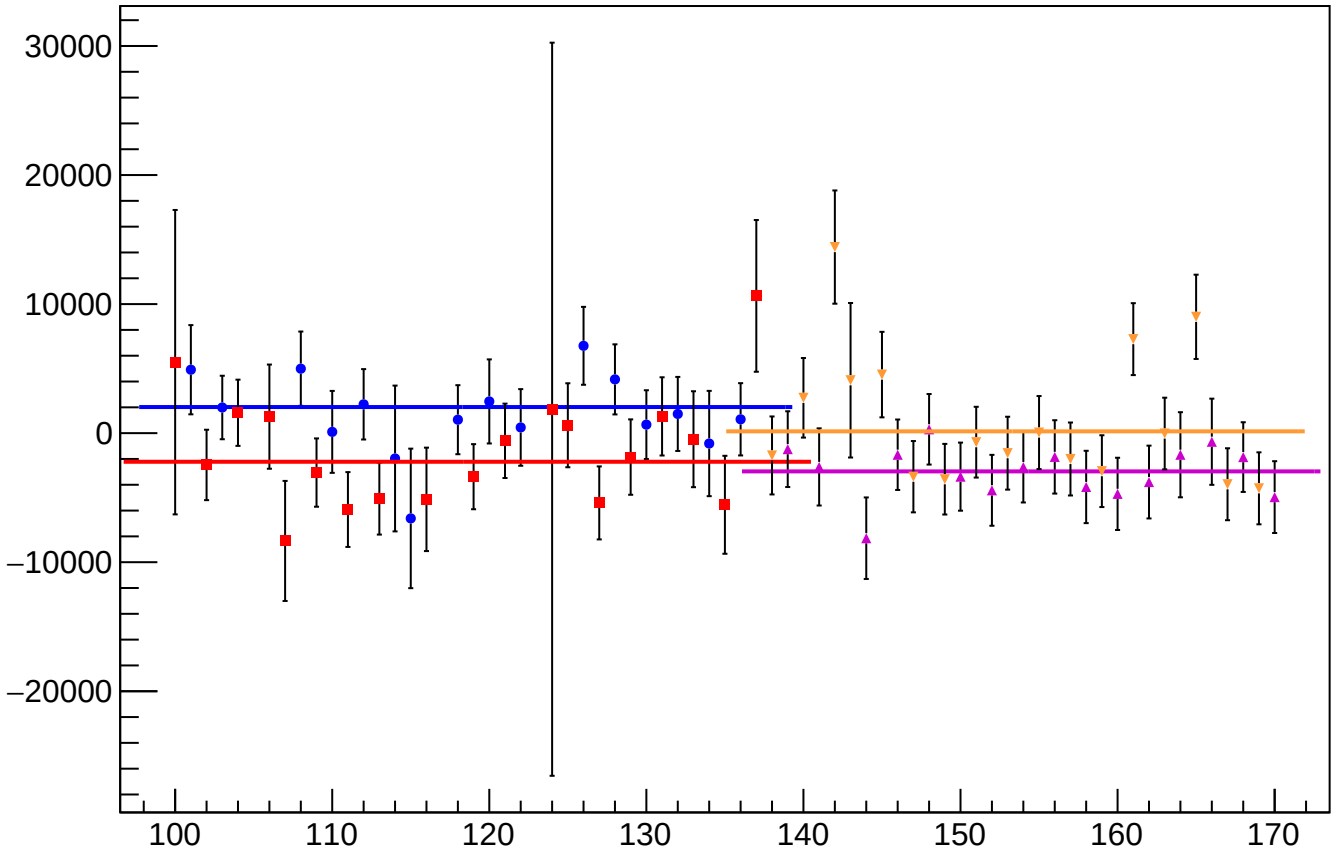
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2346394.7/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:2216079.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5264742.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 11938155.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 6640286.4/34




Right In: 2022.690+/-764.357 $\chi^2$/NDF: 9.6/15

Left Out: 139.194+/-725.958 $\chi^2$/NDF:38.2/16

Right Out: -2217.261+/-756.139 $\chi^2$/NDF: 18.1/18

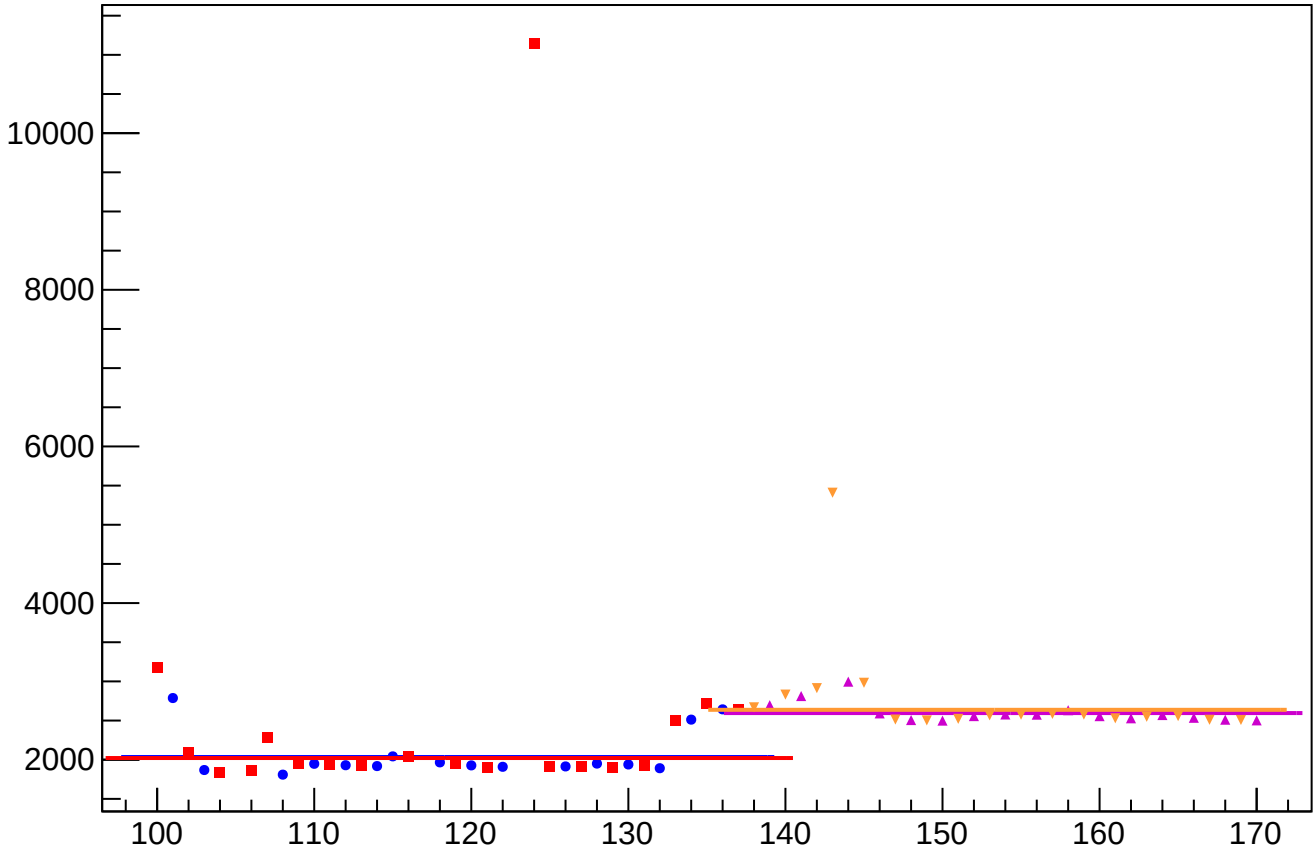
Left In: -2963.697+/-714.697 $\chi^2$/NDF:7.1/15

+ sign 1032.445+/-526.382 $\chi^2$/NDF: 51.0/32

All: -813.850+/-369.715 $\chi^2$/NDF: 101.1/67

- sign -2611.494+/-519.400 $\chi^2$/NDF: 25.8/34

# reg_asym_atl2_rms vs Slug




Right In: 2034.159+/-0.540 $\chi^2$/NDF: 262960.7/15

Left Out: 2637.146+/-0.513 $\chi^2$/NDF:497755.5/16

Right Out: 2021.545+/-0.535 $\chi^2$/NDF: 390321.3/18

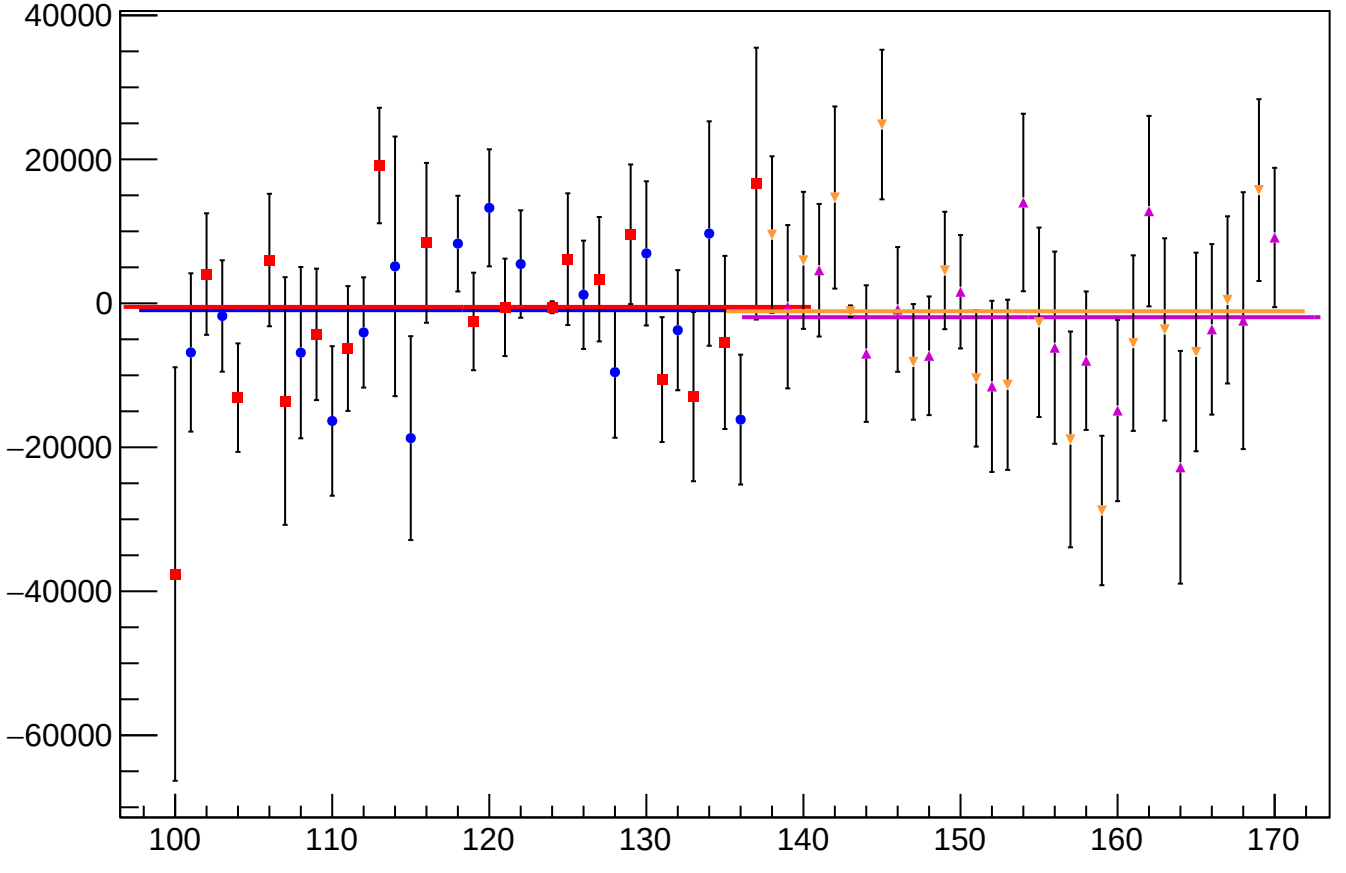
Left In: 2595.611+/-0.505 $\chi^2$/NDF:57381.9/15

+ sign 2351.178+/-0.372 $\chi^2$/NDF: 1415098.6/32

All: 2337.783+/-0.261 $\chi^2$/NDF: 2474208.6/67

- sign 2324.740+/-0.367 $\chi^2$/NDF: 1056553.6/34

# asym_atl2_reg_correction_mean vs Slug




Right In: -950.519+/-2278.532 $\chi^2$/NDF: 15.3/15

Left Out: -1101.493+/-773.776 $\chi^2$/NDF:22.9/16

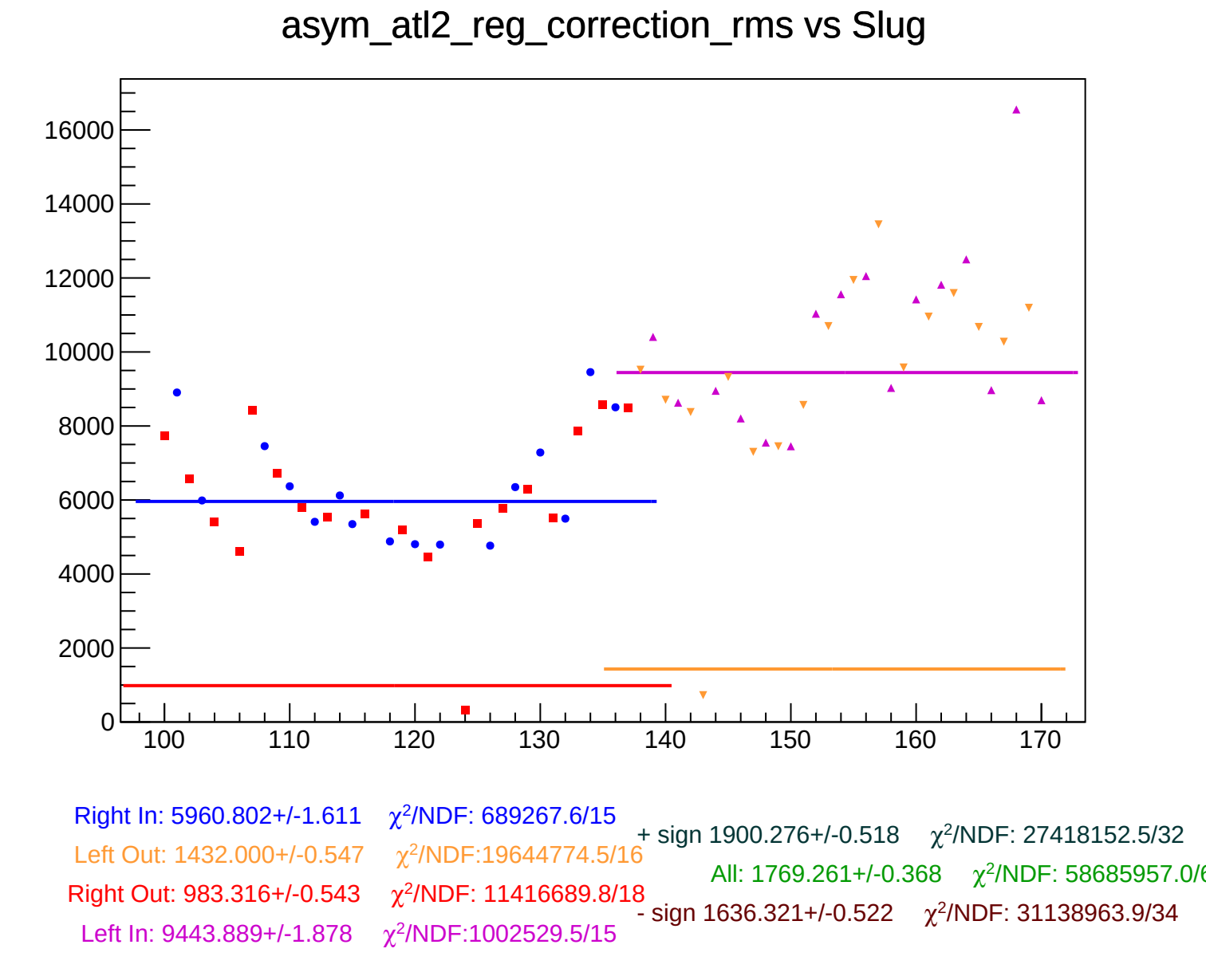
Right Out: -497.346+/-768.286 $\chi^2$/NDF: 18.5/18

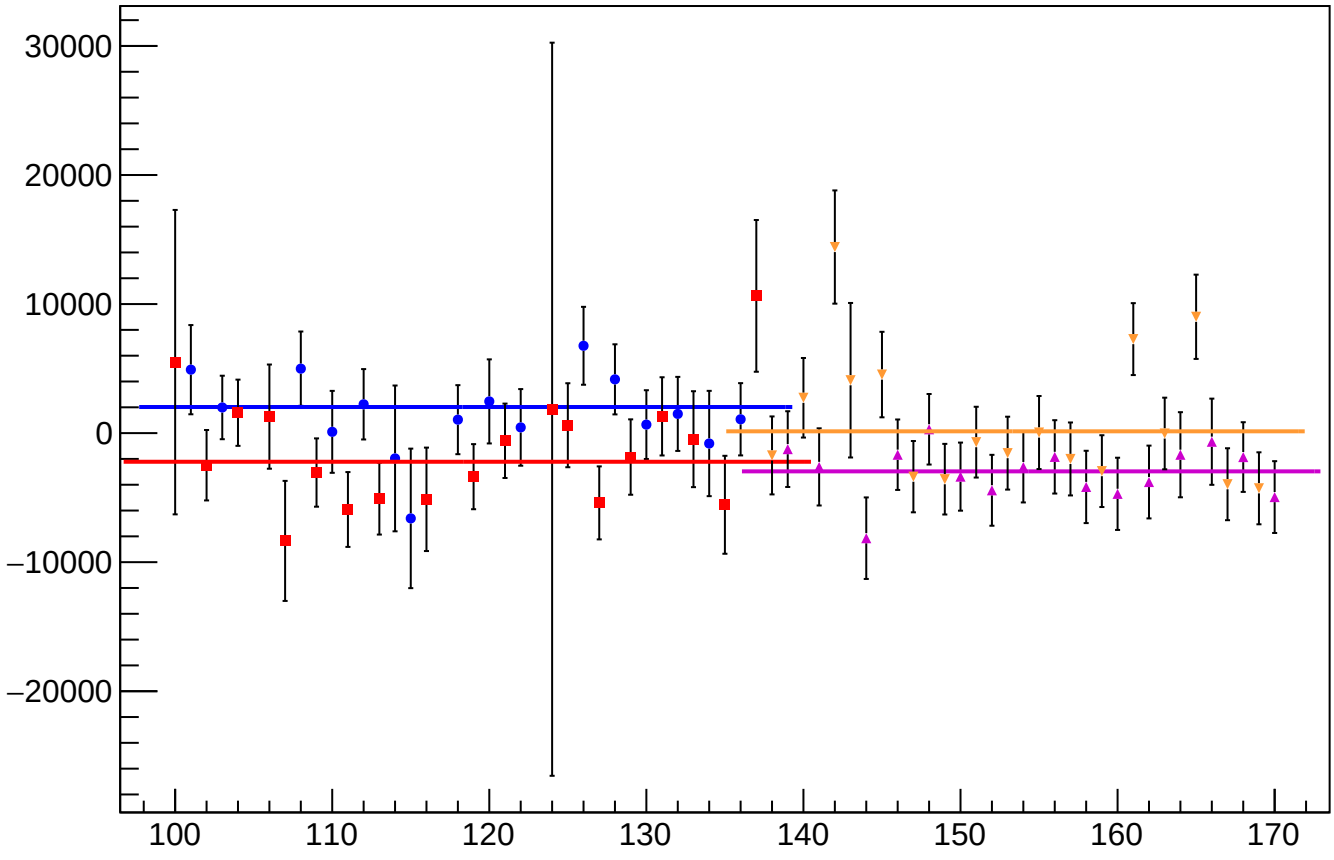
Left In: -1929.109+/-2656.579 $\chi^2$/NDF:9.6/15

+ sign -1085.883+/-732.680 $\chi^2$/NDF: 38.3/32

All: -848.610+/-519.969 $\chi^2$/NDF: 66.8/67

- sign -607.853+/-738.042 $\chi^2$/NDF: 28.3/34


asym_atl2_reg_correction_rms vs Slug
16000
14000
12000
10000
8000
6000
4000
2000
0
100
110
120
130
140
150
160
170
Right In: 5960.802+/-1.611 χ²/NDF: 689267.6/15
Left Out: 1432.000+/-0.547 χ²/NDF:19644774.5/16
Right Out: 983.316+/-0.543 χ²/NDF: 11416689.8/18
Left In: 9443.889+/-1.878 χ²/NDF:1002529.5/15
+ sign 1900.276+/-0.518 χ²/NDF: 27418152.5/32
All: 1769.261+/-0.368 χ²/NDF: 58685957.0/6
- sign 1636.321+/-0.522 χ²/NDF: 31138963.9/34




Right In: 2022.816+/-764.357 $\chi^2$/NDF: 9.6/15

Left Out: 139.215+/-725.958 $\chi^2$/NDF:38.2/16

Right Out: -2219.099+/-756.147 $\chi^2$/NDF: 18.1/18

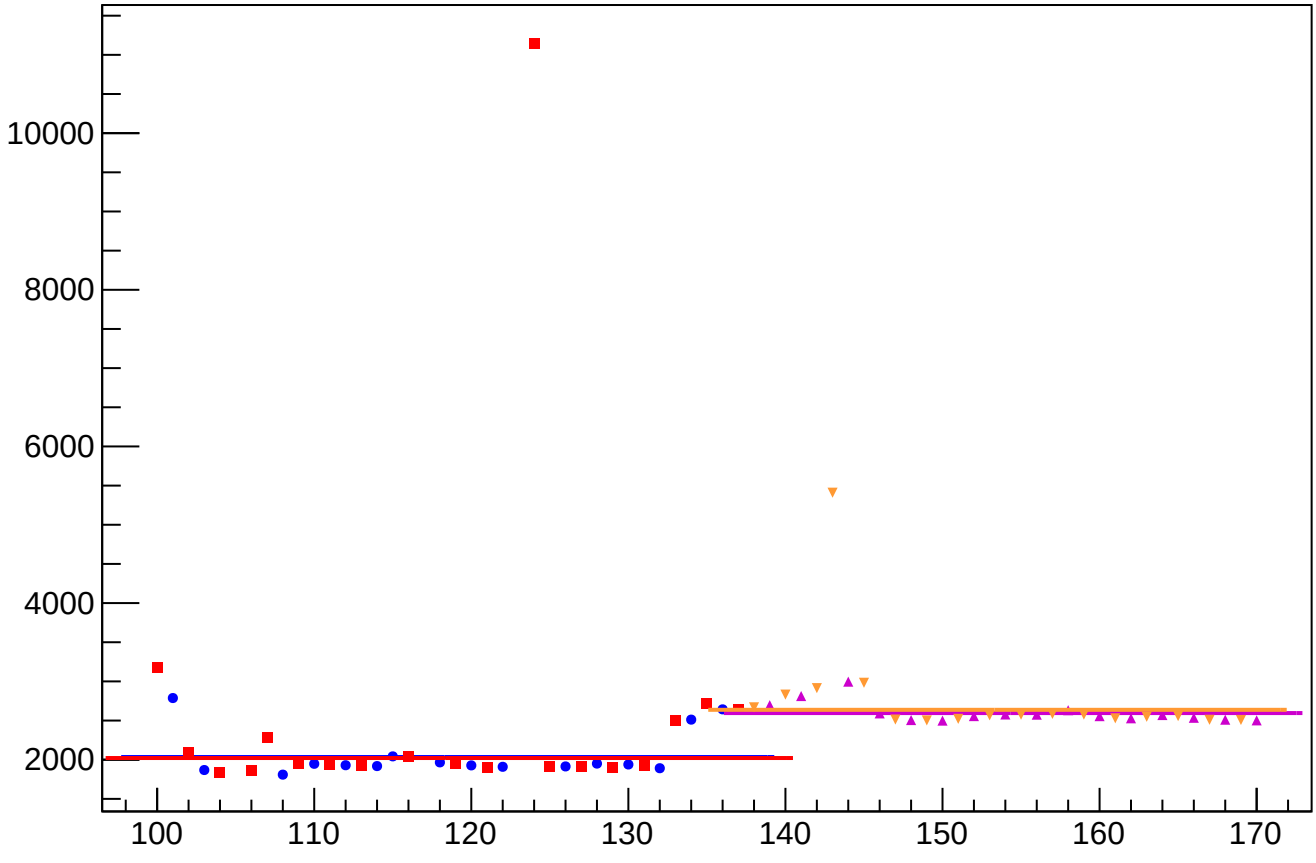
Left In: -2963.809+/-714.697 $\chi^2$/NDF:7.1/15

+ sign 1032.516+/-526.382 $\chi^2$/NDF: 51.0/32

All: -814.277+/-369.716 $\chi^2$/NDF: 101.1/67

- sign -2612.425+/-519.403 $\chi^2$/NDF: 25.8/34

# cor_asym_atl2_rms vs Slug




Right In: 2034.159+/-0.540 $\chi^2$/NDF: 262960.5/15

Left Out: 2637.146+/-0.513 $\chi^2$/NDF:497755.5/16

Right Out: 2021.566+/-0.535 $\chi^2$/NDF: 390333.0/18

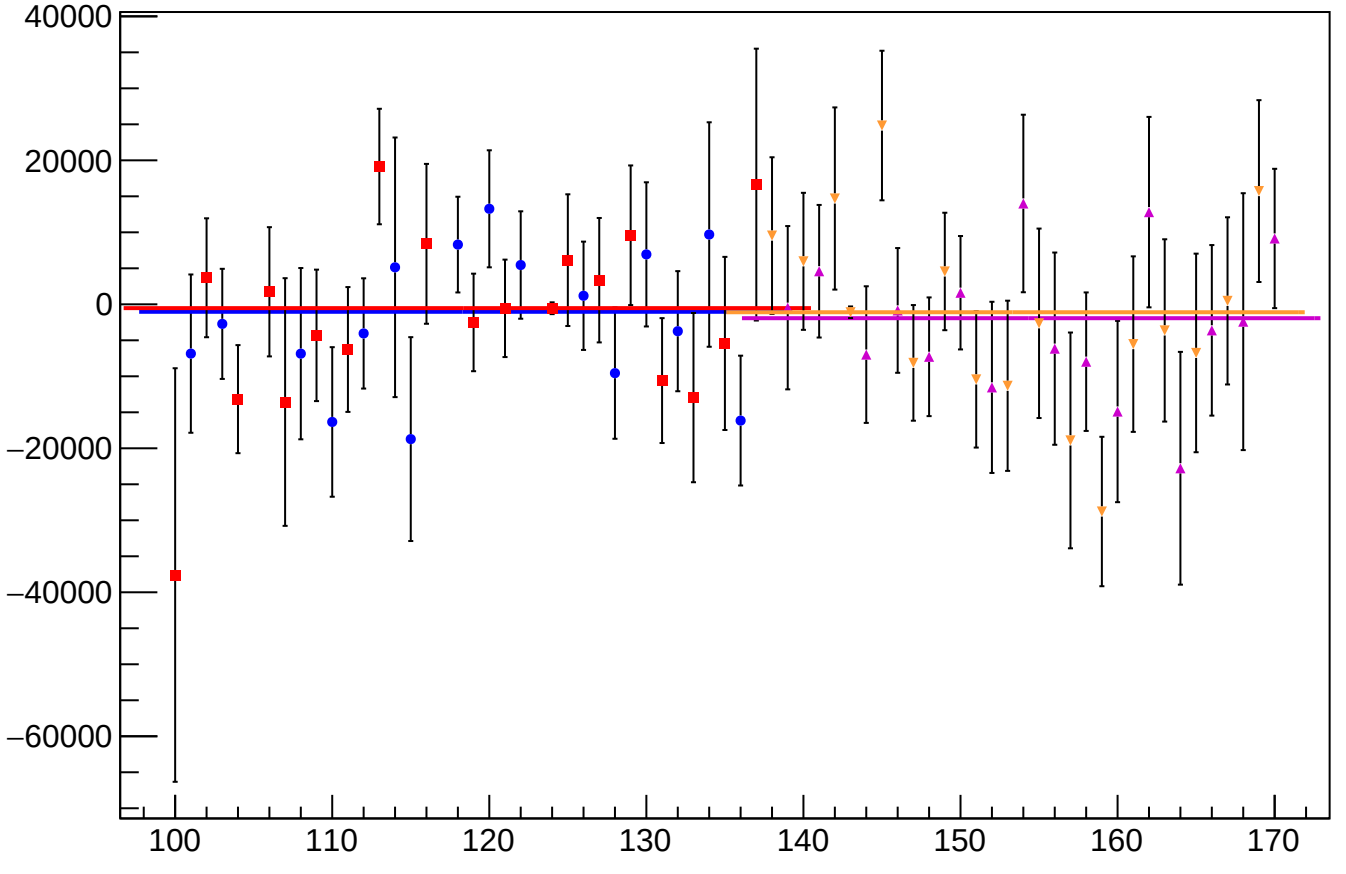
Left In: 2595.611+/-0.505 $\chi^2$/NDF:57381.9/15

+ sign 2351.178+/-0.372 $\chi^2$/NDF: 1415098.8/32

All: 2337.789+/-0.261 $\chi^2$/NDF: 2474165.9/67

- sign 2324.753+/-0.367 $\chi^2$/NDF: 1056513.3/34

# asym_atl2_cor_correction_mean vs Slug




Right In: -1037.942+/-2276.180 $\chi^2$/NDF: 15.4/15

Left Out: -1101.258+/-773.707 $\chi^2$/NDF:22.9/16

Right Out: -530.662+/-767.947 $\chi^2$/NDF: 18.0/18

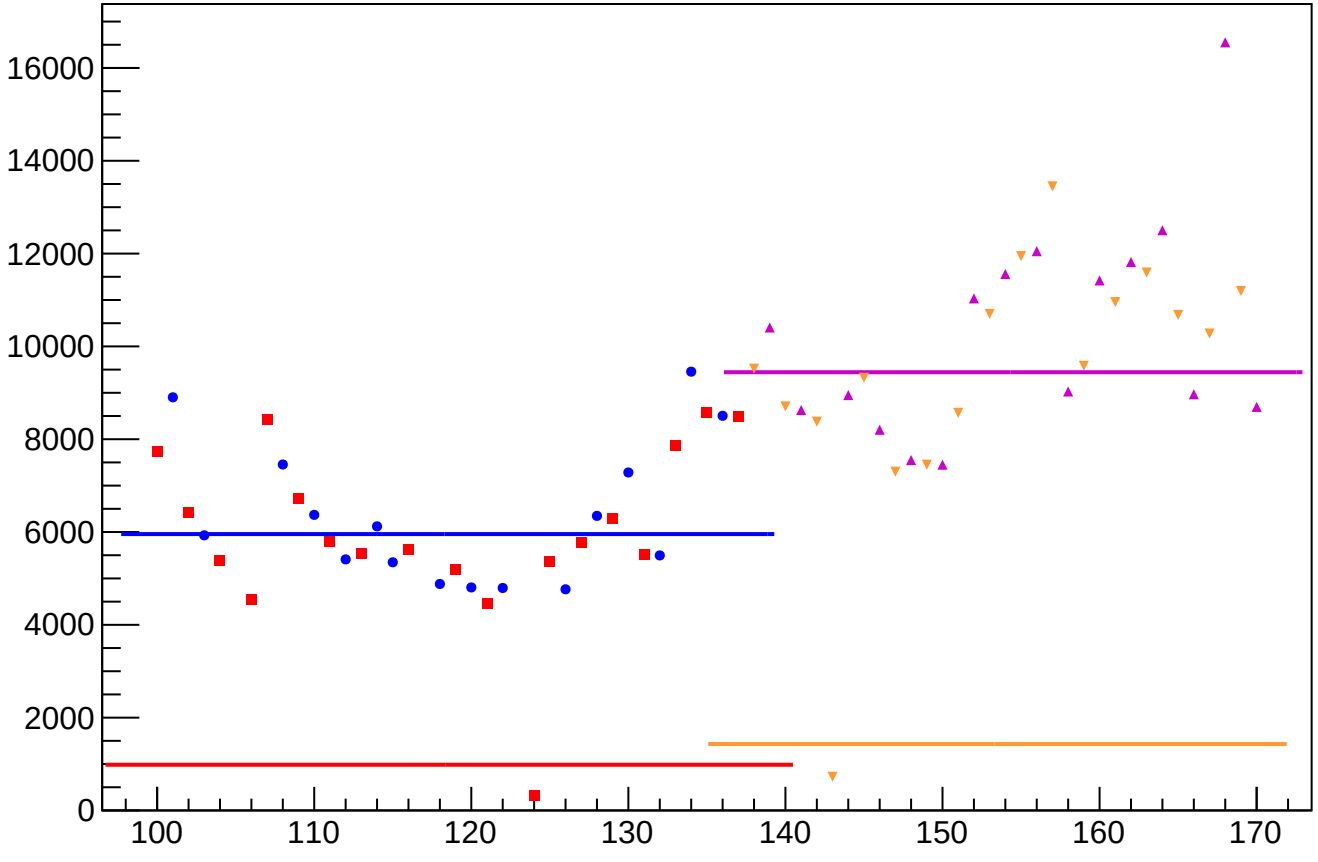
Left In: -1929.250+/-2656.576 $\chi^2$/NDF:9.6/15

+ sign -1094.700+/-732.543 $\chi^2$/NDF: 38.3/32

All: -868.223+/-519.814 $\chi^2$/NDF: 66.4/67

- sign -638.520+/-737.741 $\chi^2$/NDF: 27.8/34

# asym_atl2_cor_correction_rms vs Slug




Right In: 5955.638+/-1.610 $\chi^2$/NDF: 689141.5/15

Left Out: 1431.811+/-0.547 $\chi^2$/NDF:19645368.4/16

Right Out: 985.045+/-0.543 $\chi^2$/NDF: 11412843.1/18

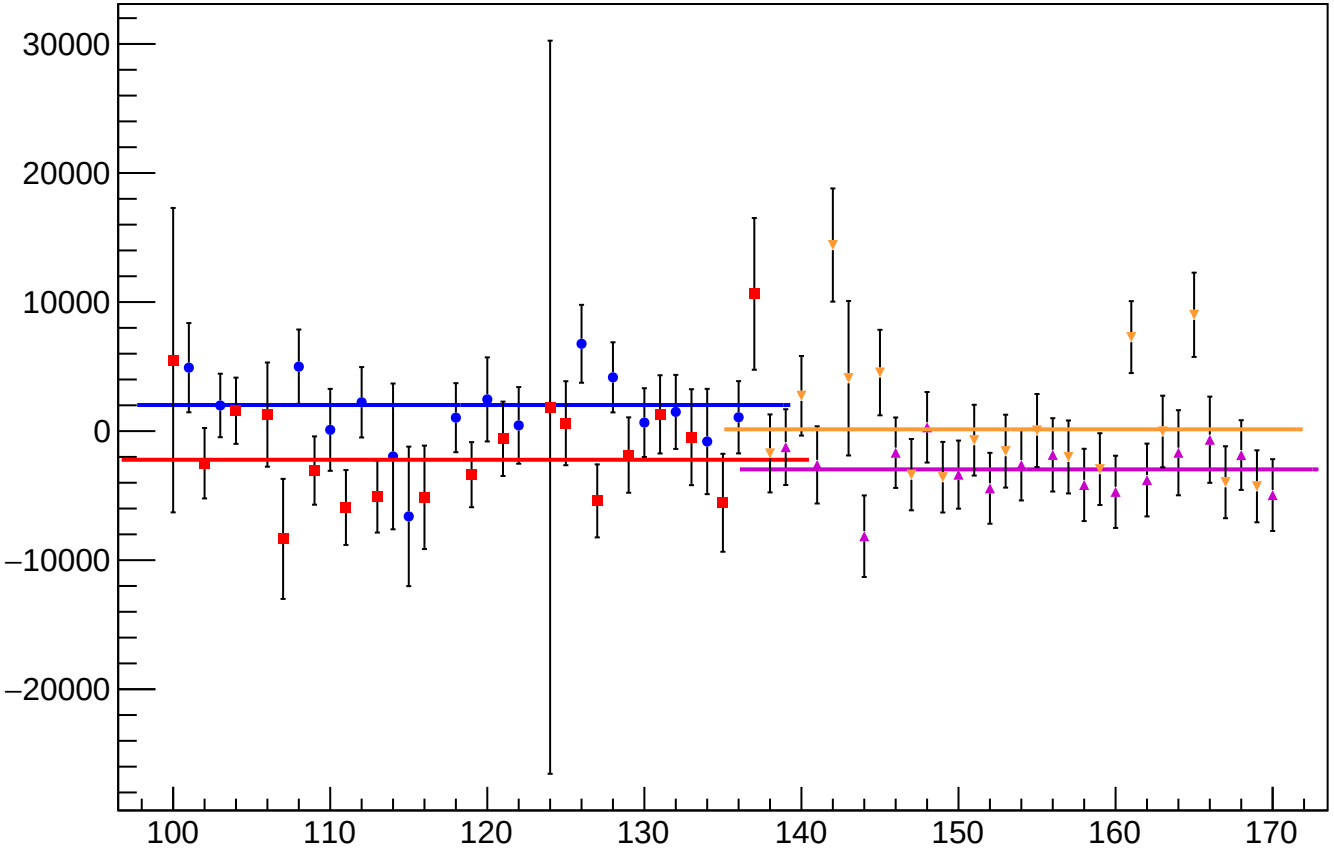
Left In: 9443.877+/-1.878 $\chi^2$/NDF:1002537.2/15

+ sign 1900.365+/-0.518 $\chi^2$/NDF: 27416294.7/32

All: 1769.804+/-0.368 $\chi^2$/NDF: 58673003.9/6

- sign 1637.384+/-0.522 $\chi^2$/NDF: 31128741.8/34

# eigen_cor_asym_atl2_mean vs Slug




Right In: 2022.816+/-764.357 $\chi^2$/NDF: 9.6/15

Left Out: 139.215+/-725.958 $\chi^2$/NDF:38.2/16

Right Out: -2219.099+/-756.147 $\chi^2$/NDF: 18.1/18

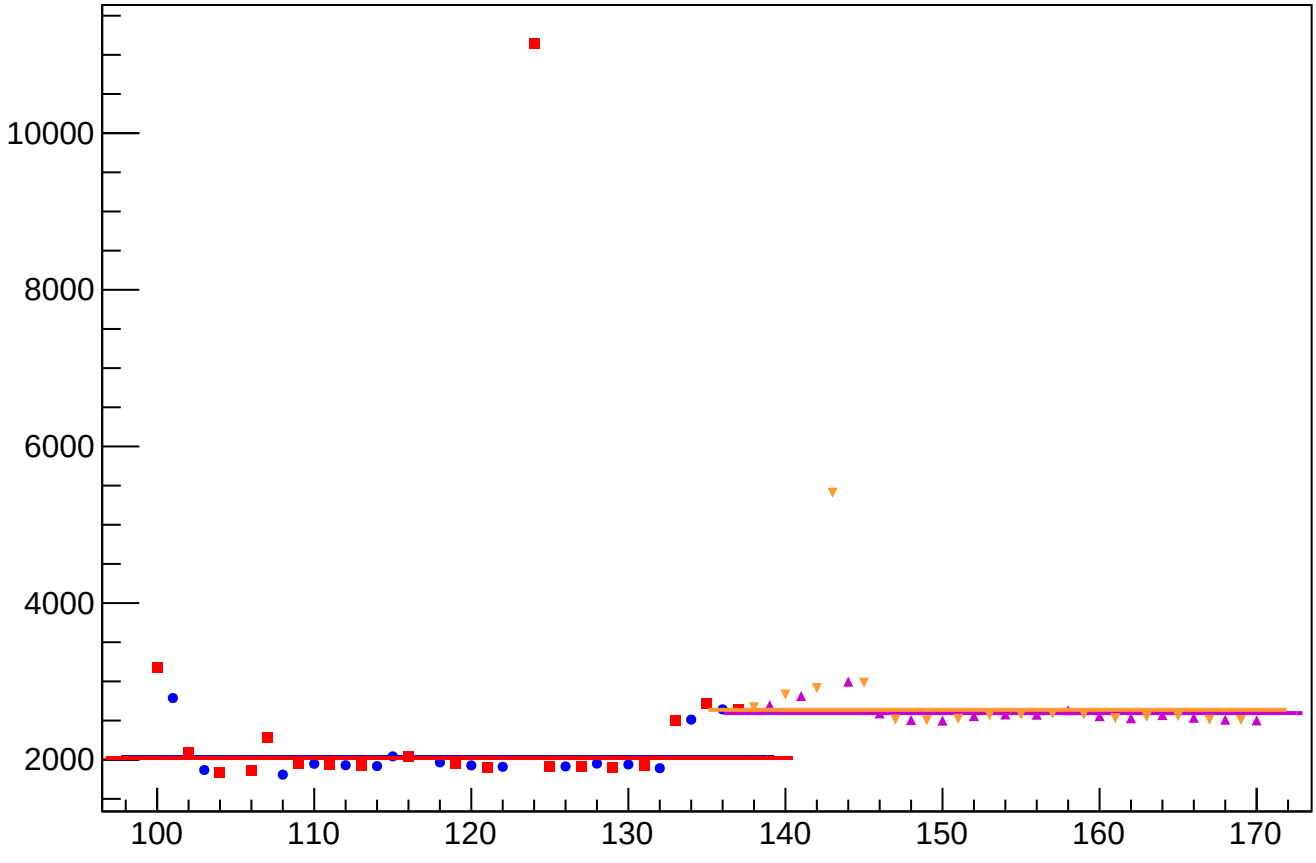
Left In: -2963.809+/-714.697 $\chi^2$/NDF:7.1/15

+ sign 1032.516+/-526.382 $\chi^2$/NDF: 51.0/32

All: -814.277+/-369.716 $\chi^2$/NDF: 101.1/67

- sign -2612.425+/-519.403 $\chi^2$/NDF: 25.8/34

# eigen_cor_asym_atl2_rms vs Slug




Right In: 2034.159+/-0.540 $\chi^2$/NDF: 262960.5/15

Left Out: 2637.146+/-0.513 $\chi^2$/NDF:497755.5/16

Right Out: 2021.566+/-0.535 $\chi^2$/NDF: 390333.0/18

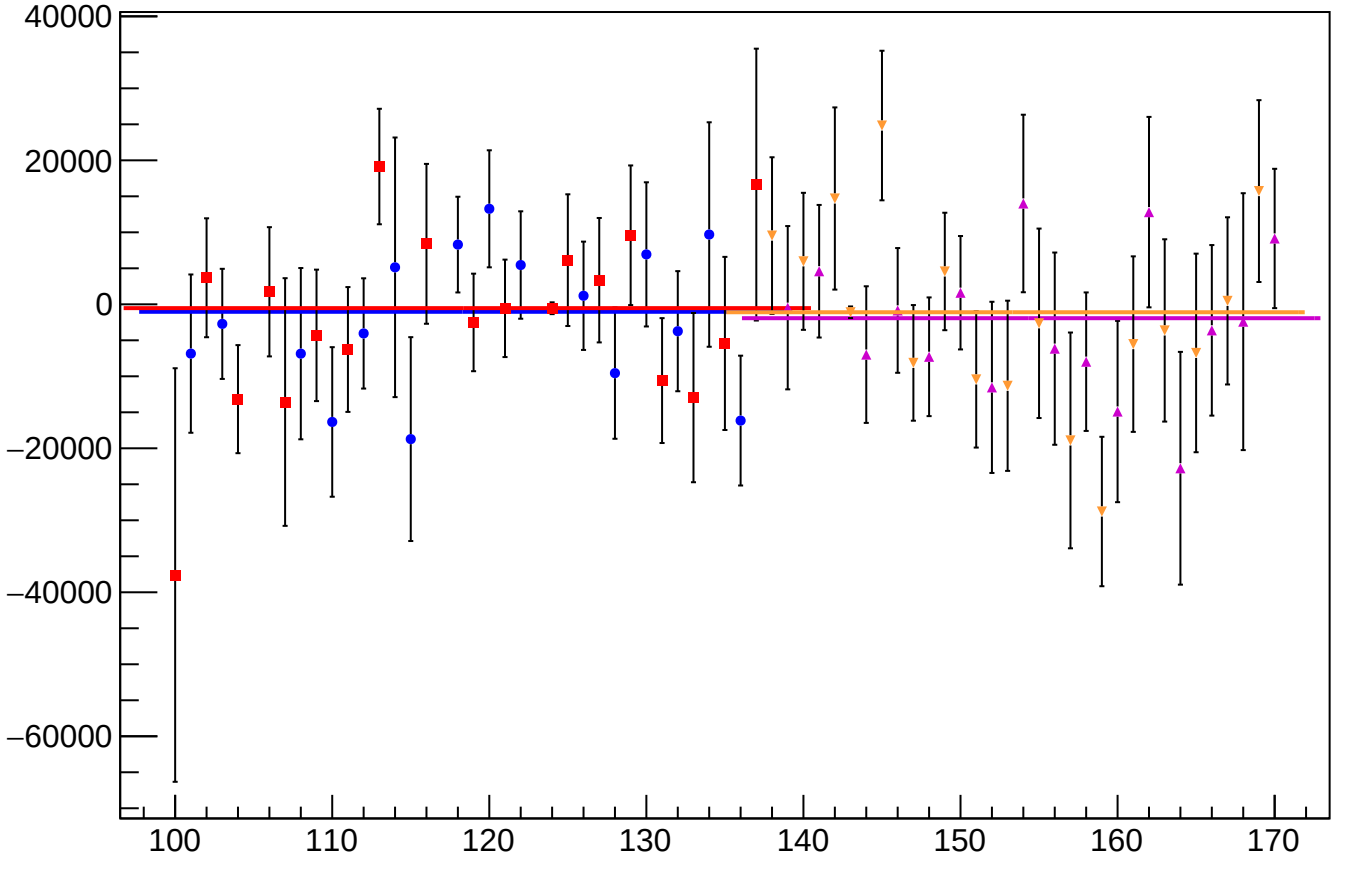
Left In: 2595.611+/-0.505 $\chi^2$/NDF:57381.9/15

+ sign 2351.178+/-0.372 $\chi^2$/NDF: 1415098.8/32

All: 2337.789+/-0.261 $\chi^2$/NDF: 2474165.9/67

- sign 2324.753+/-0.367 $\chi^2$/NDF: 1056513.3/34

# asym_atl2_eigen_cor_correction_mean vs Slug




Right In: -1037.942+/-2276.180 $\chi^2$/NDF: 15.4/15

Left Out: -1101.258+/-773.707 $\chi^2$/NDF:22.9/16

Right Out: -530.662+/-767.947 $\chi^2$/NDF: 18.0/18

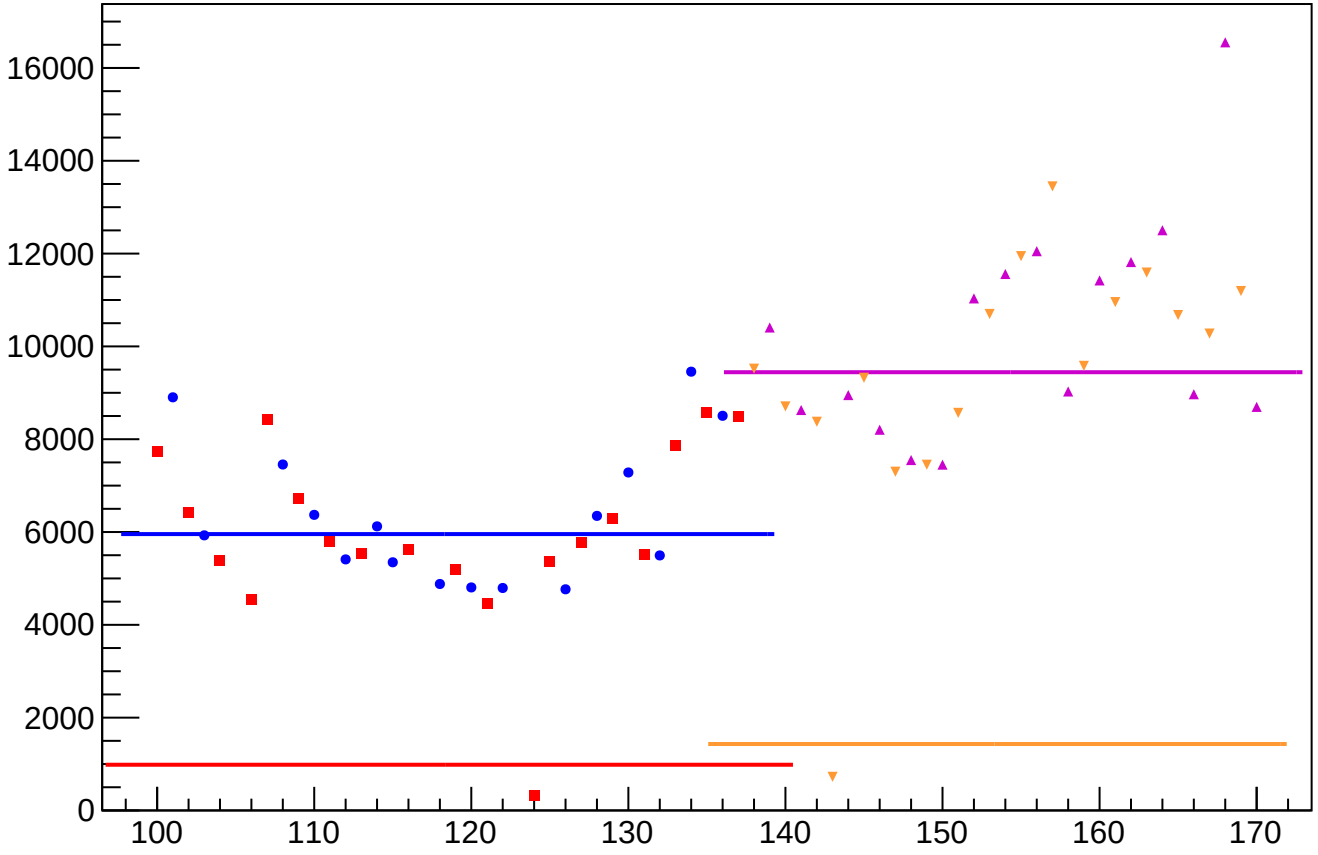
Left In: -1929.250+/-2656.576 $\chi^2$/NDF:9.6/15

+ sign -1094.700+/-732.543 $\chi^2$/NDF: 38.3/32

All: -868.223+/-519.814 $\chi^2$/NDF: 66.4/67

- sign -638.520+/-737.741 $\chi^2$/NDF: 27.8/34

# asym_atl2_eigen_cor_correction_rms vs Slug




Right In: 5955.638+/-1.610 $\chi^2$/NDF: 689141.5/15

Left Out: 1431.811+/-0.547 $\chi^2$/NDF:19645368.4/16

Right Out: 985.045+/-0.543 $\chi^2$/NDF: 11412843.1/18

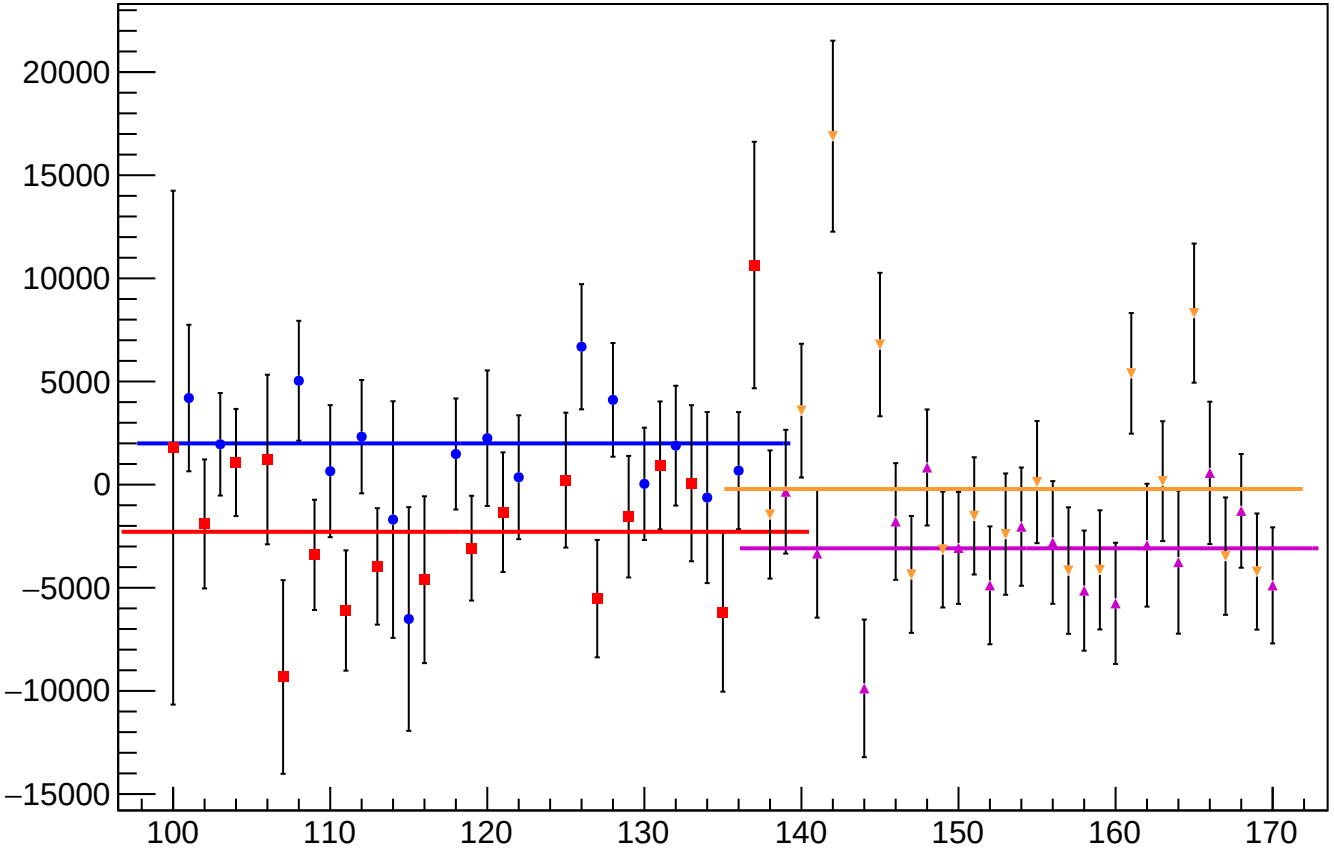
Left In: 9443.877+/-1.878 $\chi^2$/NDF:1002537.2/15

+ sign 1900.365+/-0.518 $\chi^2$/NDF: 27416294.7/32

All: 1769.804+/-0.368 $\chi^2$/NDF: 58673003.9/6

- sign 1637.384+/-0.522 $\chi^2$/NDF: 31128741.8/34

# dit_asym_atl2_mean vs Slug




Right In: 1999.214+/-773.538 $\chi^2$/NDF: 9.0/15

Left Out: -211.206+/-759.833 $\chi^2$/NDF:40.2/15

Right Out: -2285.899+/-771.299 $\chi^2$/NDF: 16.7/17

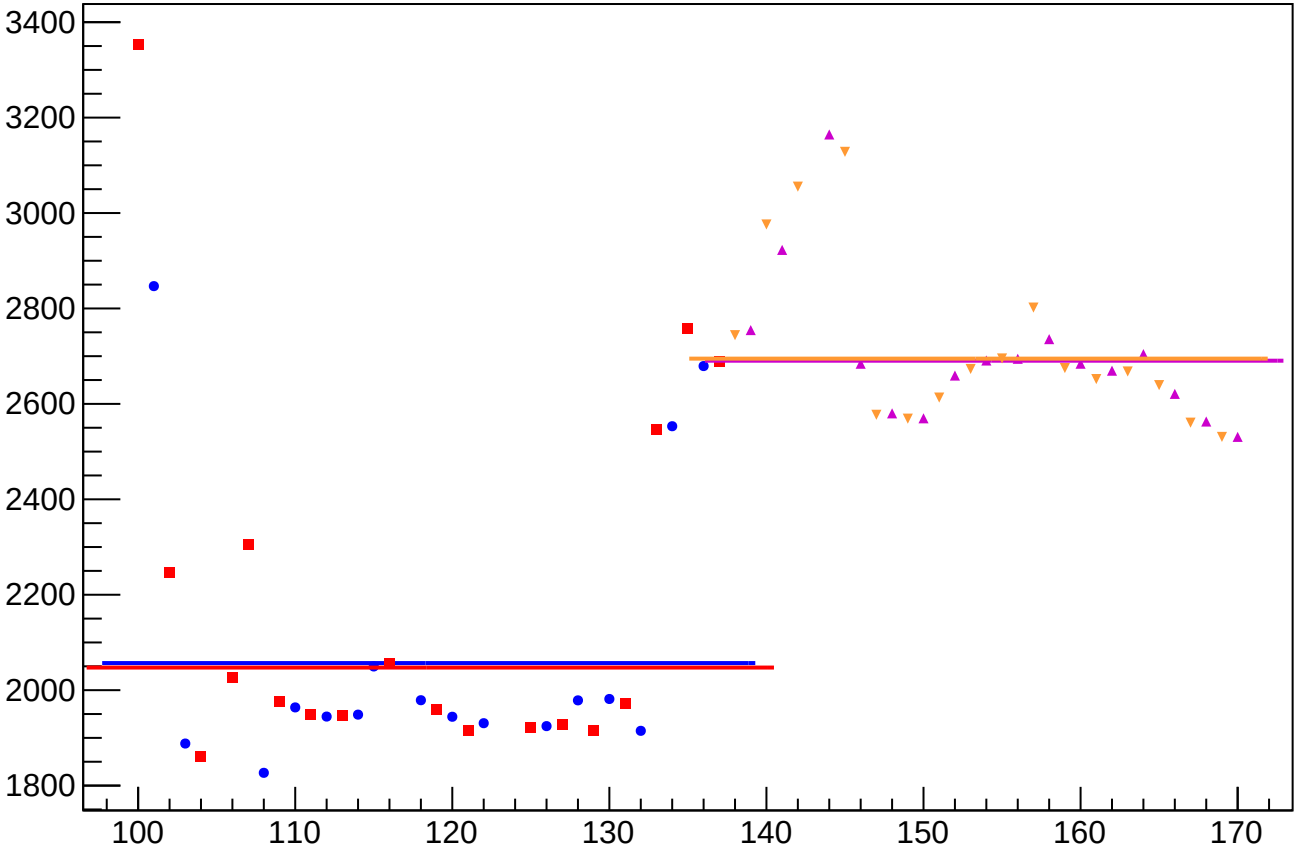
Left In: -3088.172+/-741.114 $\chi^2$/NDF:11.0/15

+ sign 874.249+/-542.063 $\chi^2$/NDF: 53.3/31

All: -939.864+/-380.558 $\chi^2$/NDF: 103.6/65

- sign -2703.041+/-534.399 $\chi^2$/NDF: 28.2/33

# dit_asym_atl2_rms vs Slug




Right In: 2056.796+/-0.547 $\chi^2$/NDF: 270454.5/15

Left Out: 2694.855+/-0.537 $\chi^2$/NDF:82876.7/15

Right Out: 2047.400+/-0.545 $\chi^2$/NDF: 196523.0/17

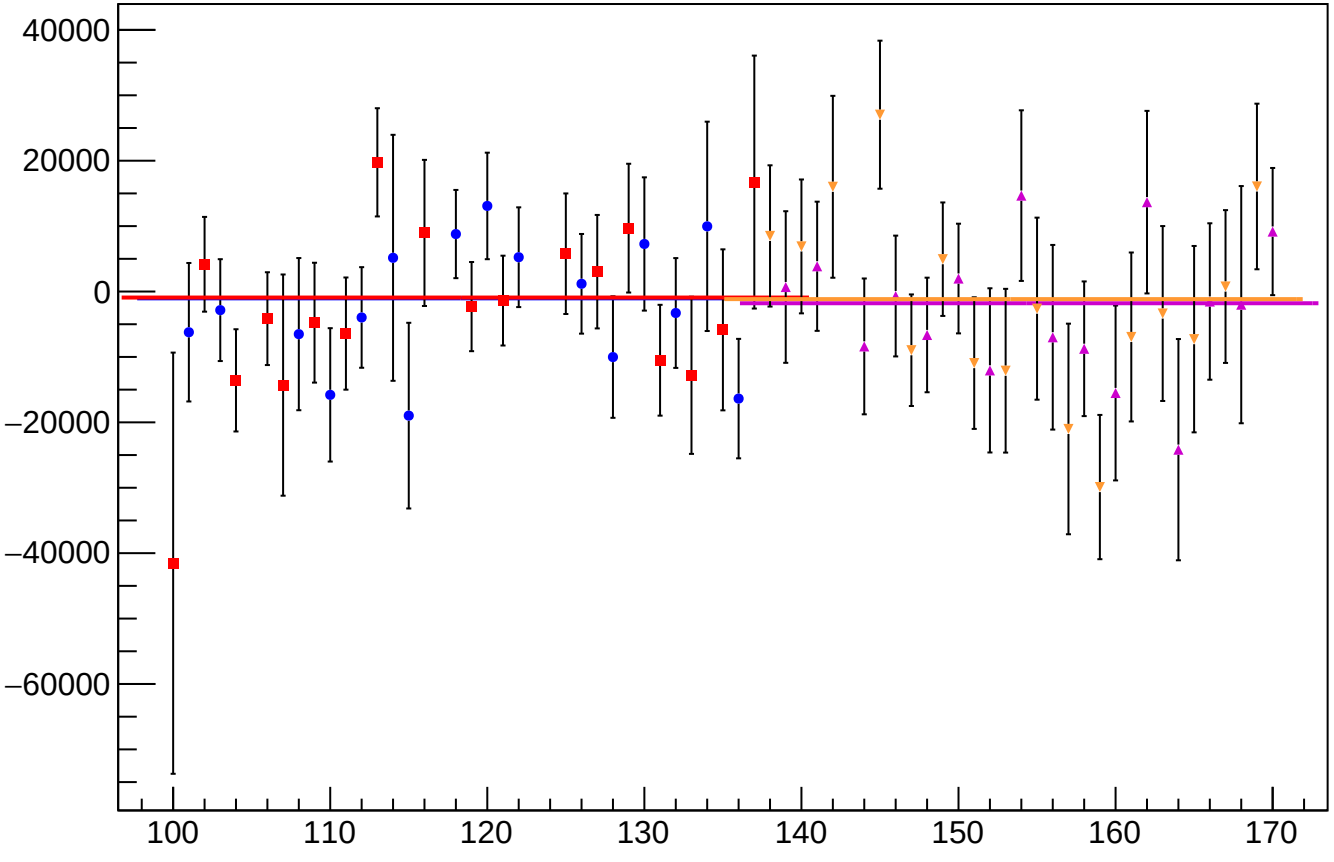
Left In: 2690.520+/-0.524 $\chi^2$/NDF:71936.9/15

+ sign 2381.528+/-0.383 $\chi^2$/NDF: 1045885.7/31

All: 2381.415+/-0.269 $\chi^2$/NDF: 2038467.4/65

- sign 2381.305+/-0.378 $\chi^2$/NDF: 992581.5/33

# asym_atl2_dit_correction_mean vs Slug




Right In: -1042.515+/-2294.607 $\chi^2$/NDF: 15.3/15

Left Out: -1159.777+/-2866.186 $\chi^2$/NDF:22.8/15

Right Out: -919.663+/-2150.895 $\chi^2$/NDF: 18.4/17

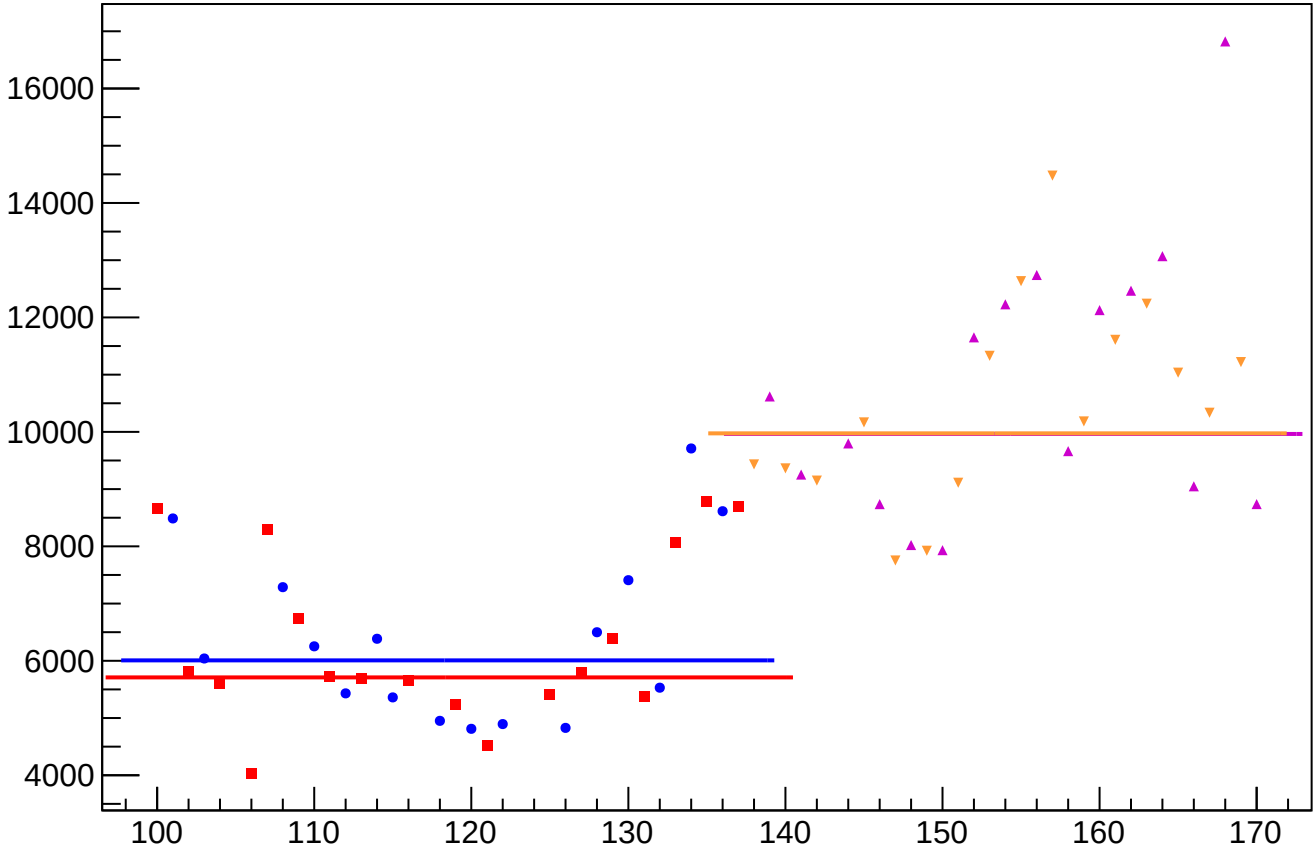
Left In: -1790.455+/-2800.796 $\chi^2$/NDF:9.5/15

+ sign -1088.316+/-1791.281 $\chi^2$/NDF: 38.1/31

All: -1169.277+/-1235.335 $\chi^2$/NDF: 66.0/65

- sign -1242.704+/-1705.899 $\chi^2$/NDF: 27.9/33

# asym_atl2_dit_correction_rms vs Slug




Right In: 6007.425+/-1.623 $\chi^2$/NDF: 653996.7/15

Left Out: 9974.198+/-2.027 $\chi^2$/NDF:657543.3/15

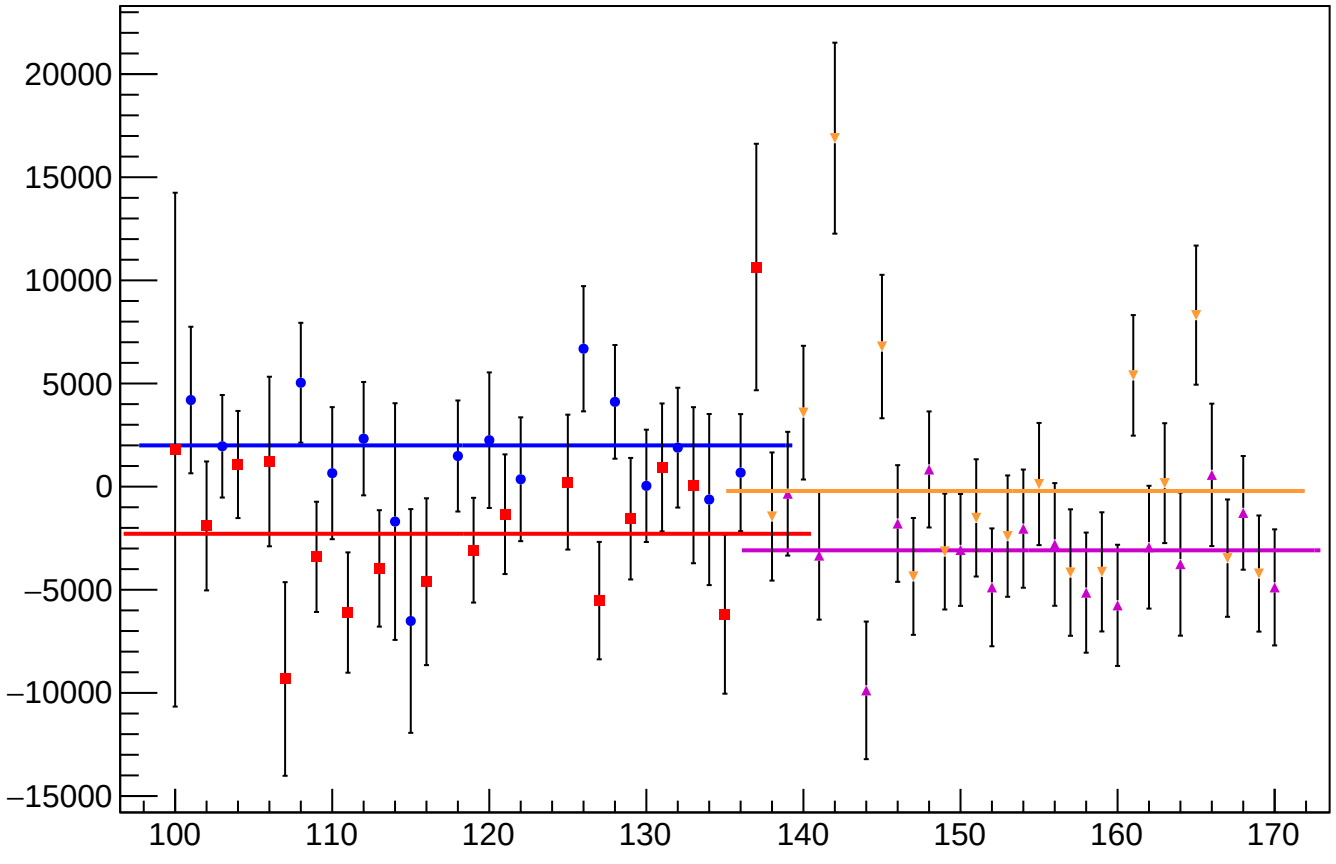
Right Out: 5709.903+/-1.521 $\chi^2$/NDF: 535926.2/17

Left In: 9963.734+/-1.980 $\chi^2$/NDF:957510.6/15

+ sign 7556.798+/-1.267 $\chi^2$/NDF: 3646110.0/31

All: 7415.822+/-0.874 $\chi^2$/NDF: 8065160.3/65

- sign 7287.965+/-1.206 $\chi^2$/NDF: 4395427.4/33




Right In: 1999.218+/-773.538 $\chi^2$/NDF: 9.0/15

Left Out: -211.217+/-759.834 $\chi^2$/NDF:40.2/15

Right Out: -2285.903+/-771.299 $\chi^2$/NDF: 16.7/17

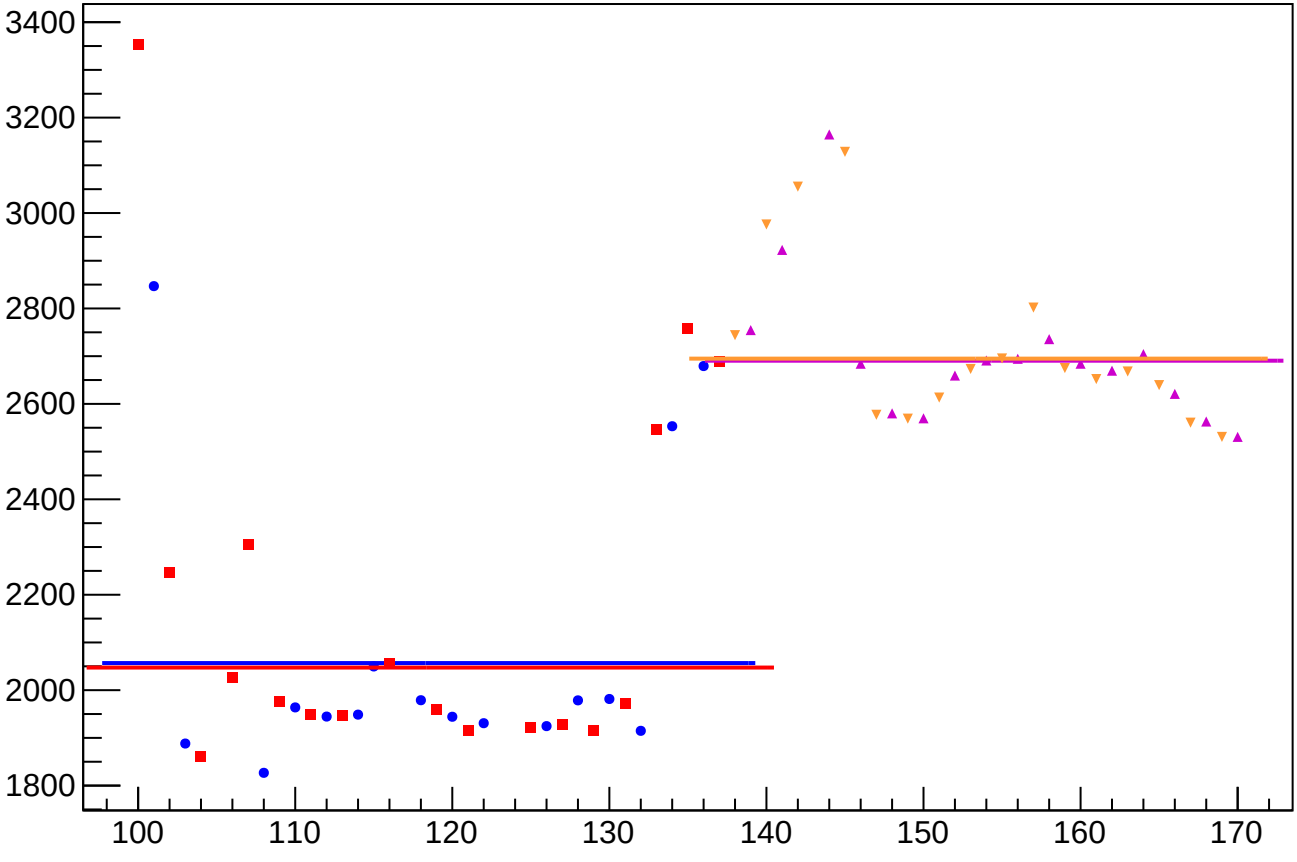
Left In: -3088.174+/-741.115 $\chi^2$/NDF:11.0/15

+ sign 874.247+/-542.064 $\chi^2$/NDF: 53.3/31

All: -939.866+/-380.558 $\chi^2$/NDF: 103.6/65

- sign -2703.043+/-534.399 $\chi^2$/NDF: 28.2/33

# eigen_dit_asym_atl2_rms vs Slug




Right In: 2056.796+/-0.547 $\chi^2$/NDF: 270454.5/15

Left Out: 2694.858+/-0.537 $\chi^2$/NDF:82878.3/15

Right Out: 2047.400+/-0.545 $\chi^2$/NDF: 196523.3/17

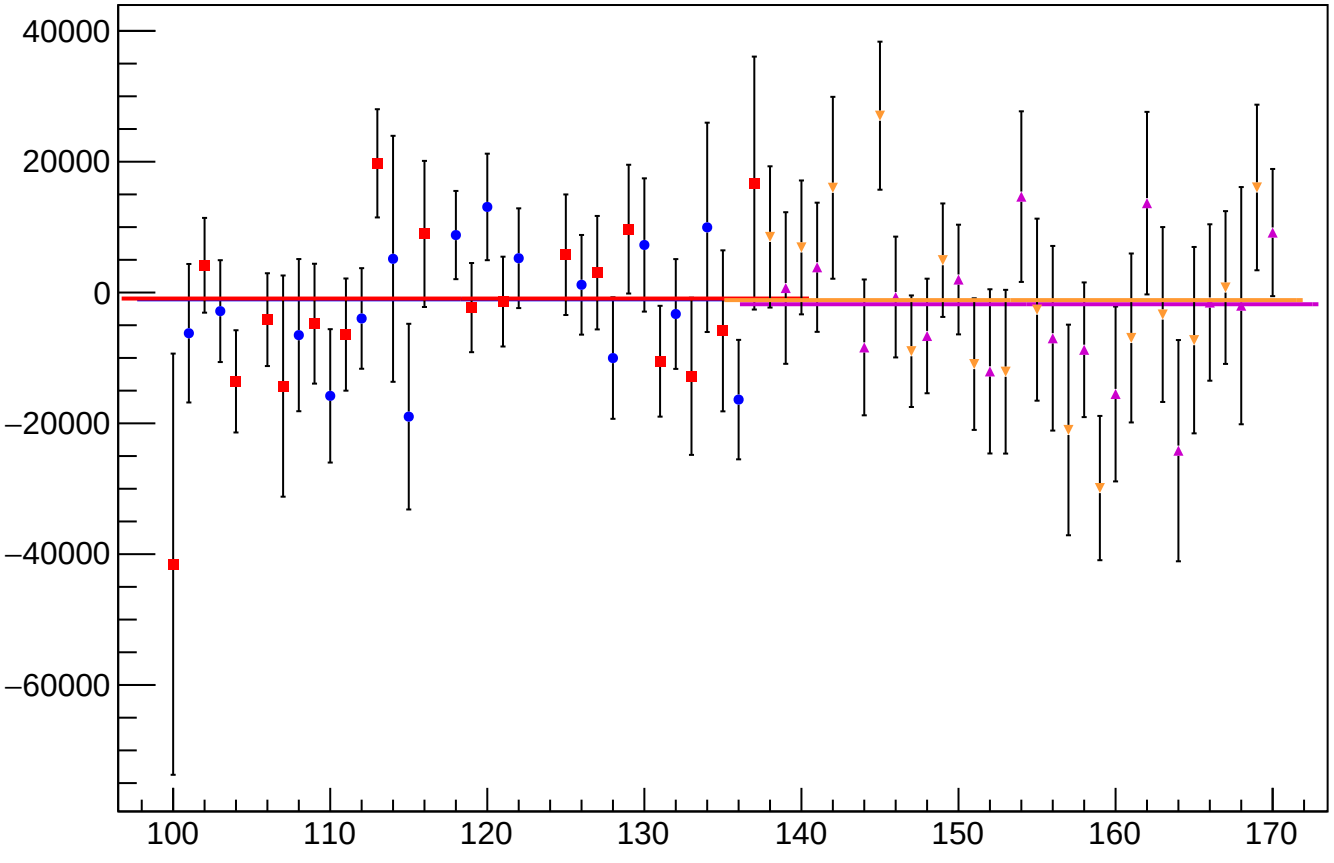
Left In: 2690.522+/-0.524 $\chi^2$/NDF:71937.8/15

+ sign 2381.529+/-0.383 $\chi^2$/NDF: 1045892.0/31

All: 2381.416+/-0.269 $\chi^2$/NDF: 2038480.5/65

- sign 2381.306+/-0.378 $\chi^2$/NDF: 992588.4/33

# asym_atl2_eigen_dit_correction_mean vs Slug




Right In: -1042.503+/-2294.600 $\chi^2$/NDF: 15.3/15

Left Out: -1159.786+/-2866.190 $\chi^2$/NDF:22.8/15

Right Out: -919.667+/-2150.889 $\chi^2$/NDF: 18.4/17

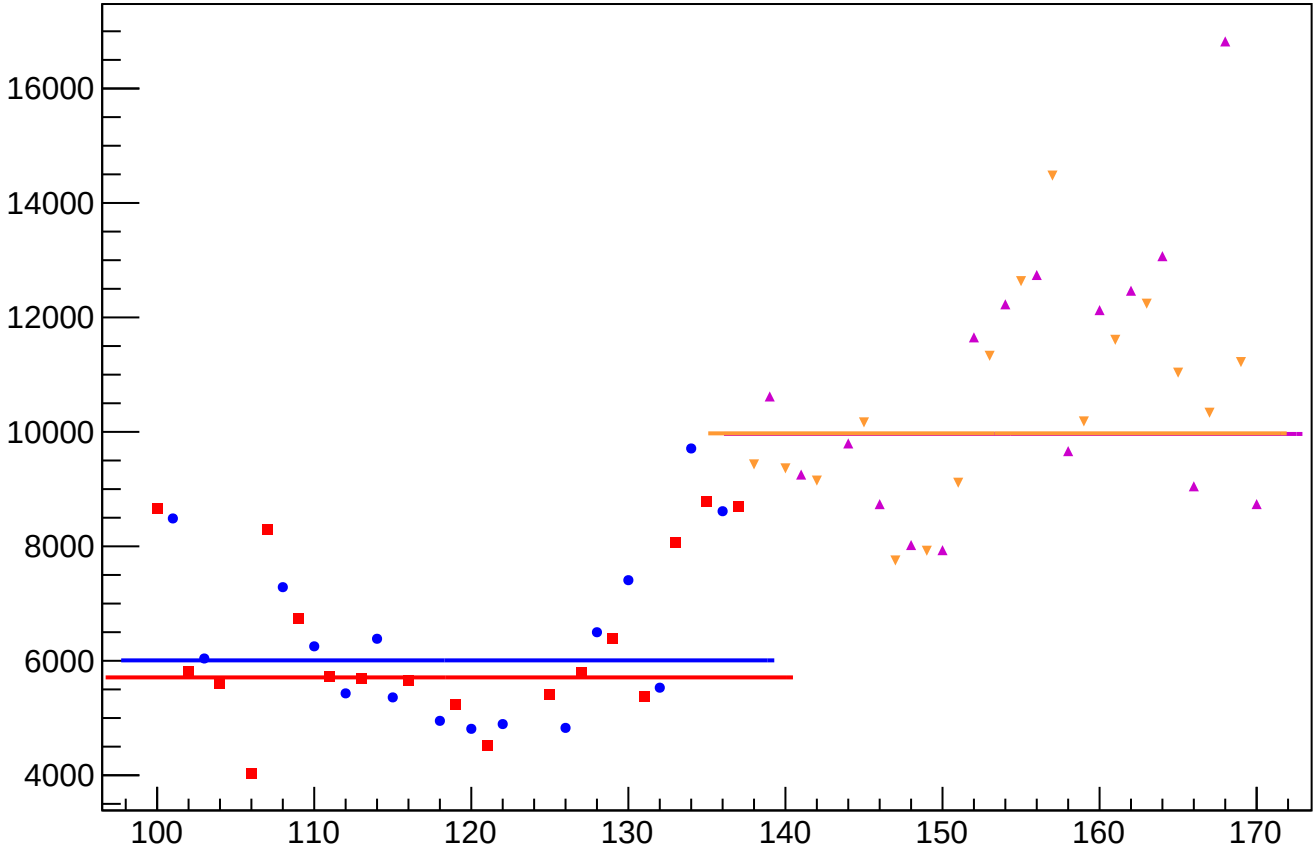
Left In: -1790.454+/-2800.799 $\chi^2$/NDF:9.5/15

+ sign -1088.312+/-1791.279 $\chi^2$/NDF: 38.1/31

All: -1169.276+/-1235.333 $\chi^2$/NDF: 66.0/65

- sign -1242.705+/-1705.897 $\chi^2$/NDF: 27.9/33

# asym_atl2_eigen_dit_correction_rms vs Slug




Right In: 6007.405+/-1.623 $\chi^2$/NDF: 654004.9/15

Left Out: 9974.211+/-2.027 $\chi^2$/NDF:657546.2/15

Right Out: 5709.885+/-1.521 $\chi^2$/NDF: 535929.9/17

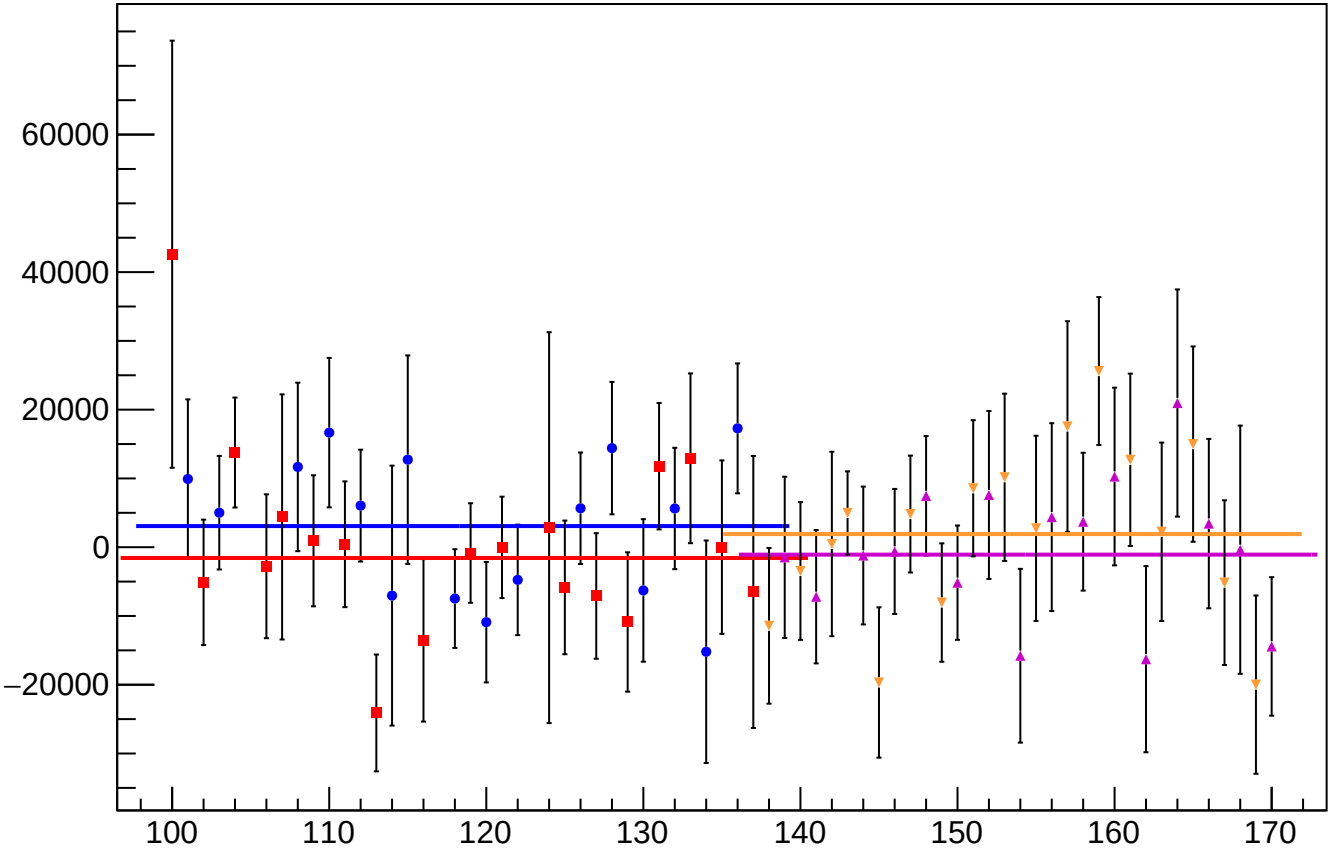
Left In: 9963.745+/-1.980 $\chi^2$/NDF:957514.3/15

+ sign 7556.783+/-1.267 $\chi^2$/NDF: 3646161.3/31

All: 7415.807+/-0.874 $\chi^2$/NDF: 8065259.8/65

- sign 7287.950+/-1.206 $\chi^2$/NDF: 4395475.7/33

# asym_atl2_mean vs Slug




Right In: 3070.293+/-2420.721 $\chi^2$/NDF: 14.9/15

Left Out: 1909.312+/-2564.802 $\chi^2$/NDF:18.9/16

Right Out: -1567.088+/-2335.884 $\chi^2$/NDF: 19.2/18

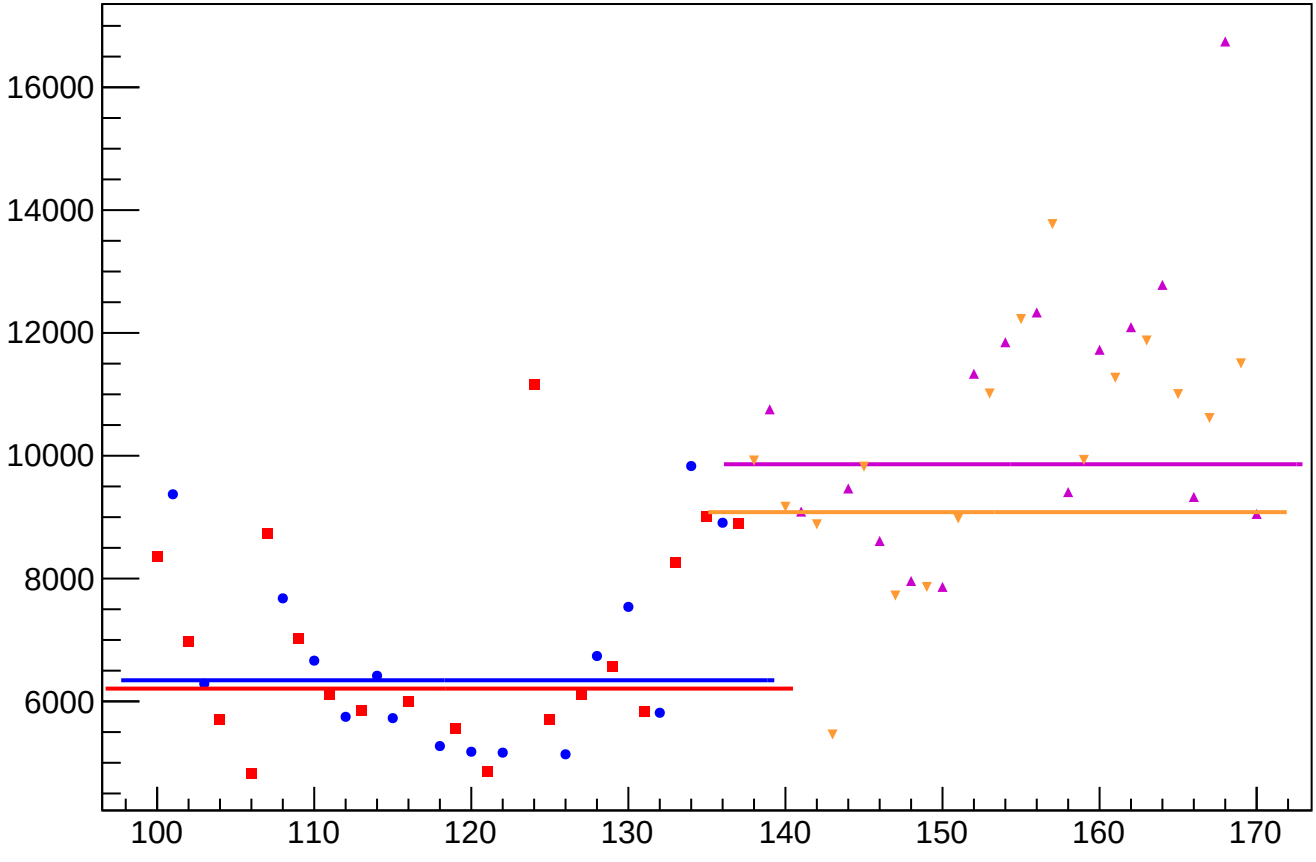
Left In: -1082.592+/-2766.859 $\chi^2$/NDF:9.6/15

+ sign 2523.327+/-1760.441 $\chi^2$/NDF: 33.9/32

All: 605.720+/-1253.367 $\chi^2$/NDF: 65.1/67

- sign -1365.470+/-1784.868 $\chi^2$/NDF: 28.8/34

# asym_atl2_rms vs Slug




Right In: 6343.796+/-1.712 $\chi^2$/NDF: 621240.2/15

Left Out: 9081.515+/-1.814 $\chi^2$/NDF:1482947.1/16

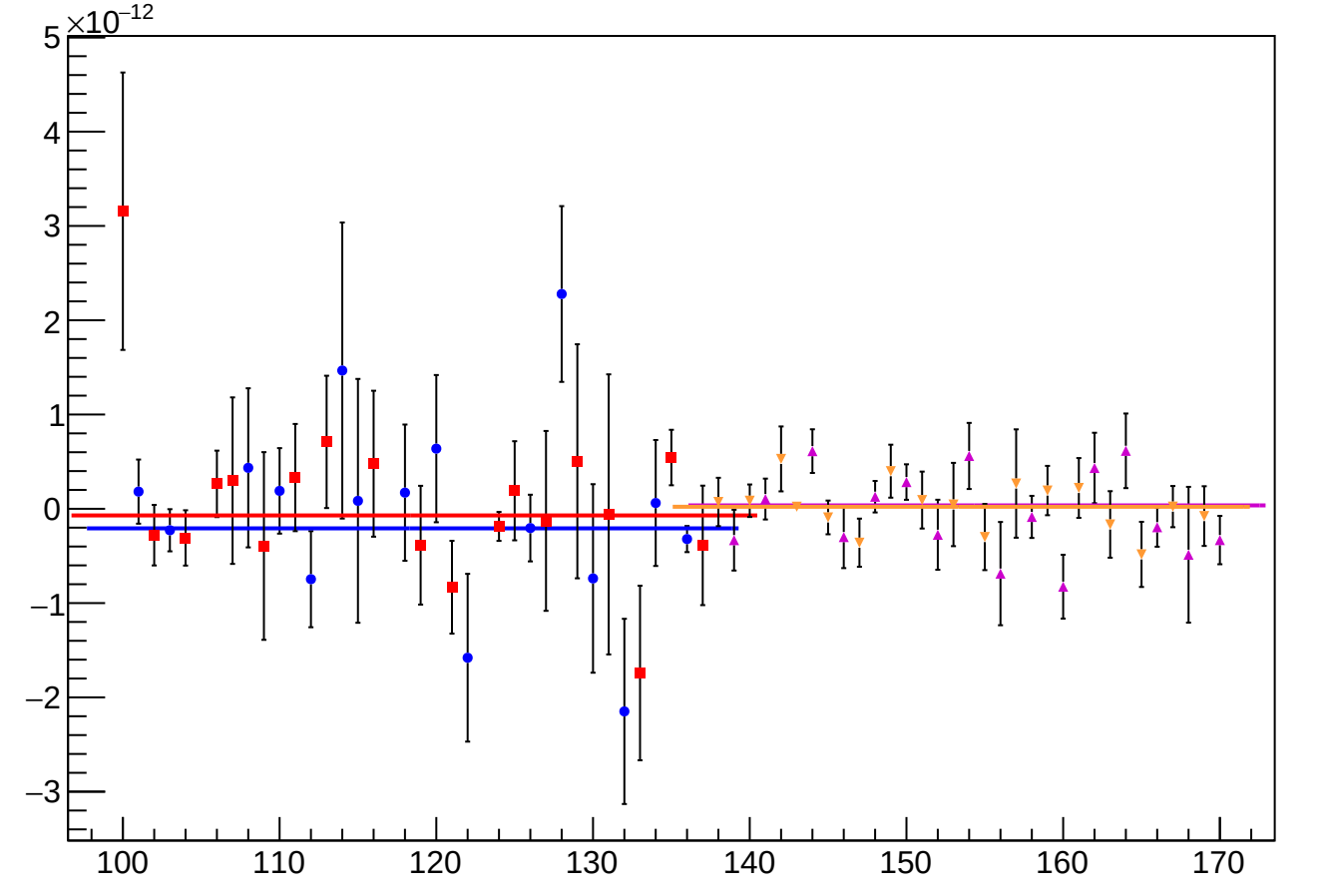
Right Out: 6208.099+/-1.652 $\chi^2$/NDF: 471840.9/18

Left In: 9861.516+/-1.956 $\chi^2$/NDF:890847.4/15

+ sign 7633.600+/-1.245 $\chi^2$/NDF: 3309373.7/32

All: 7680.358+/-0.886 $\chi^2$/NDF: 6710863.4/67

- sign 7728.422+/-1.262 $\chi^2$/NDF: 3398628.5/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 20.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11.2/16

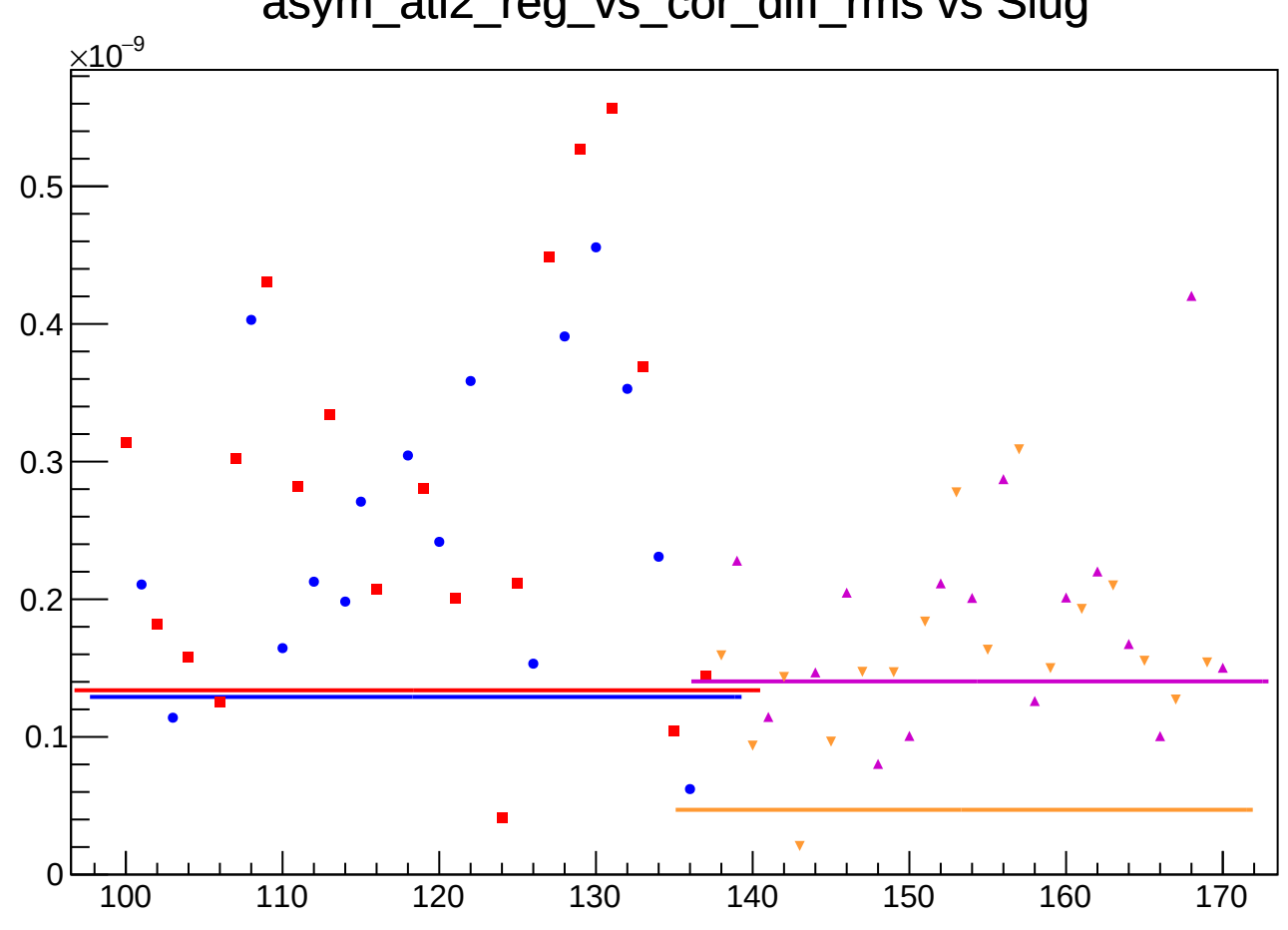
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 20.9/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:29.2/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 37.4/32

All: -0.000+/-0.000 $\chi^2$/NDF: 88.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 50.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1720321.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:5937462.8/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2304489.5/18

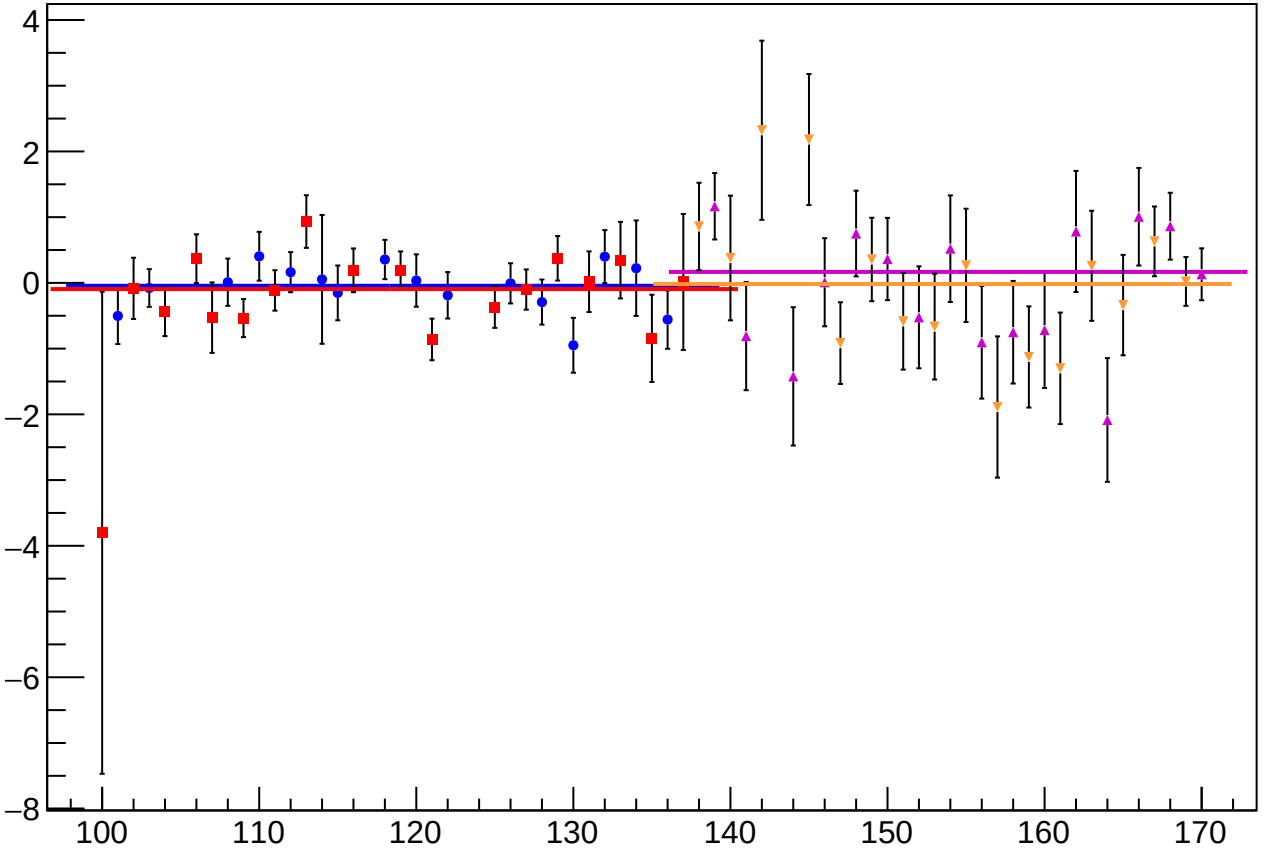
Left In: 0.000+/-0.000 $\chi^2$/NDF:1431242.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 8993164.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 16280860.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3741840.7/34

# asym_atl2_dit_vs_cor_diff_mean vs Slug




Right In: -0.044+/-0.094 $\chi^2$/NDF: 13.1/15

Left Out: -0.018+/-0.175 $\chi^2$/NDF:22.7/15

Right Out: -0.094+/-0.090 $\chi^2$/NDF: 25.3/17

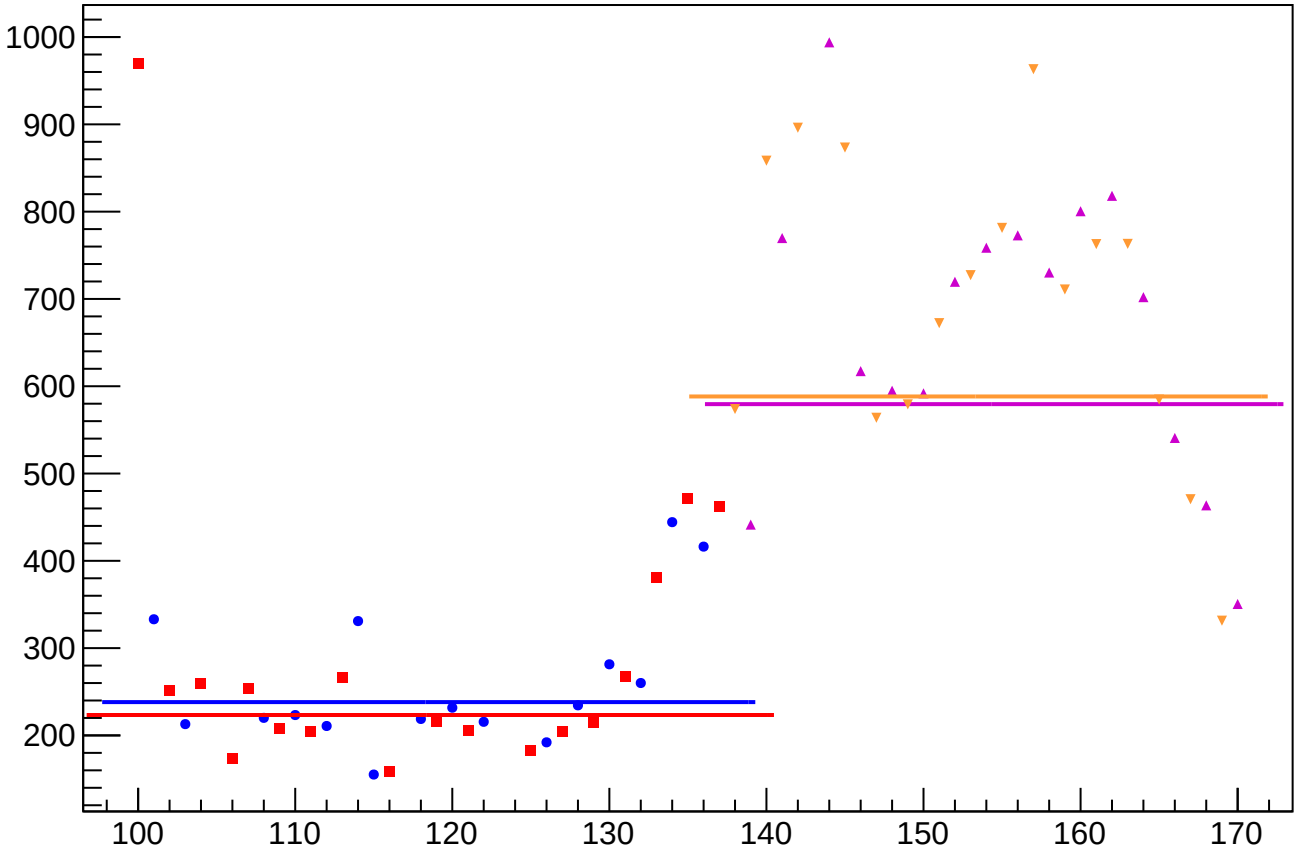
Left In: 0.167+/-0.168 $\chi^2$/NDF:22.8/15

+ sign -0.038+/-0.083 $\chi^2$/NDF: 35.8/31

All: -0.037+/-0.057 $\chi^2$/NDF: 85.8/65

- sign -0.036+/-0.079 $\chi^2$/NDF: 50.0/33

# asym_atl2_dit_vs_cor_diff_rms vs Slug




Right In: 238.165+/-0.066 $\chi^2$/NDF: 807205.2/15

Left Out: 588.279+/-0.124 $\chi^2$/NDF:2140753.8/15

Right Out: 223.388+/-0.064 $\chi^2$/NDF: 862425.5/17

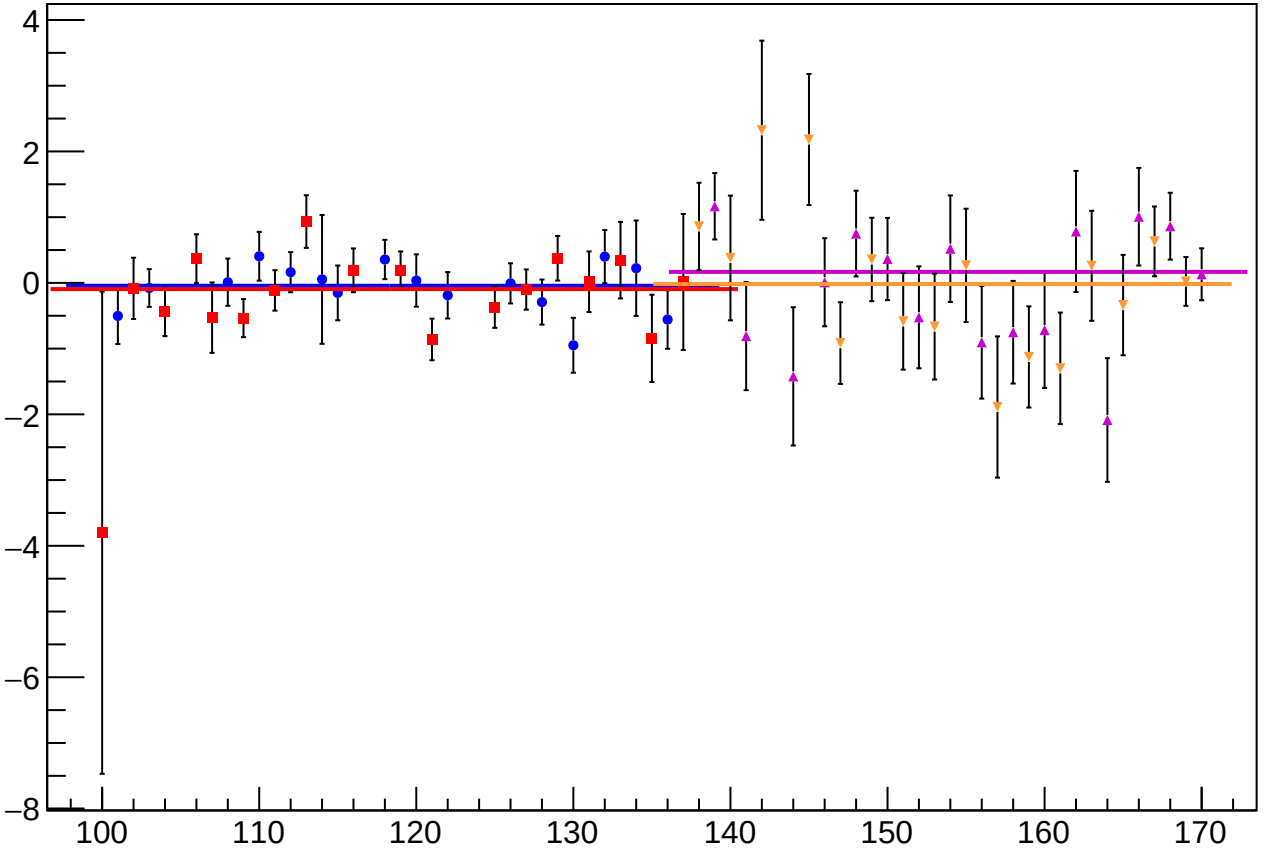
Left In: 579.495+/-0.119 $\chi^2$/NDF:1990028.4/15

+ sign 316.258+/-0.058 $\chi^2$/NDF: 9163164.5/31

All: 309.166+/-0.040 $\chi^2$/NDF: 19005925.8/65

- sign 302.627+/-0.056 $\chi^2$/NDF: 9814479.6/33

# asym_atl2_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.044+/-0.094 $\chi^2$/NDF: 13.1/15

Left Out: -0.018+/-0.175 $\chi^2$/NDF:22.7/15

Right Out: -0.094+/-0.090 $\chi^2$/NDF: 25.3/17

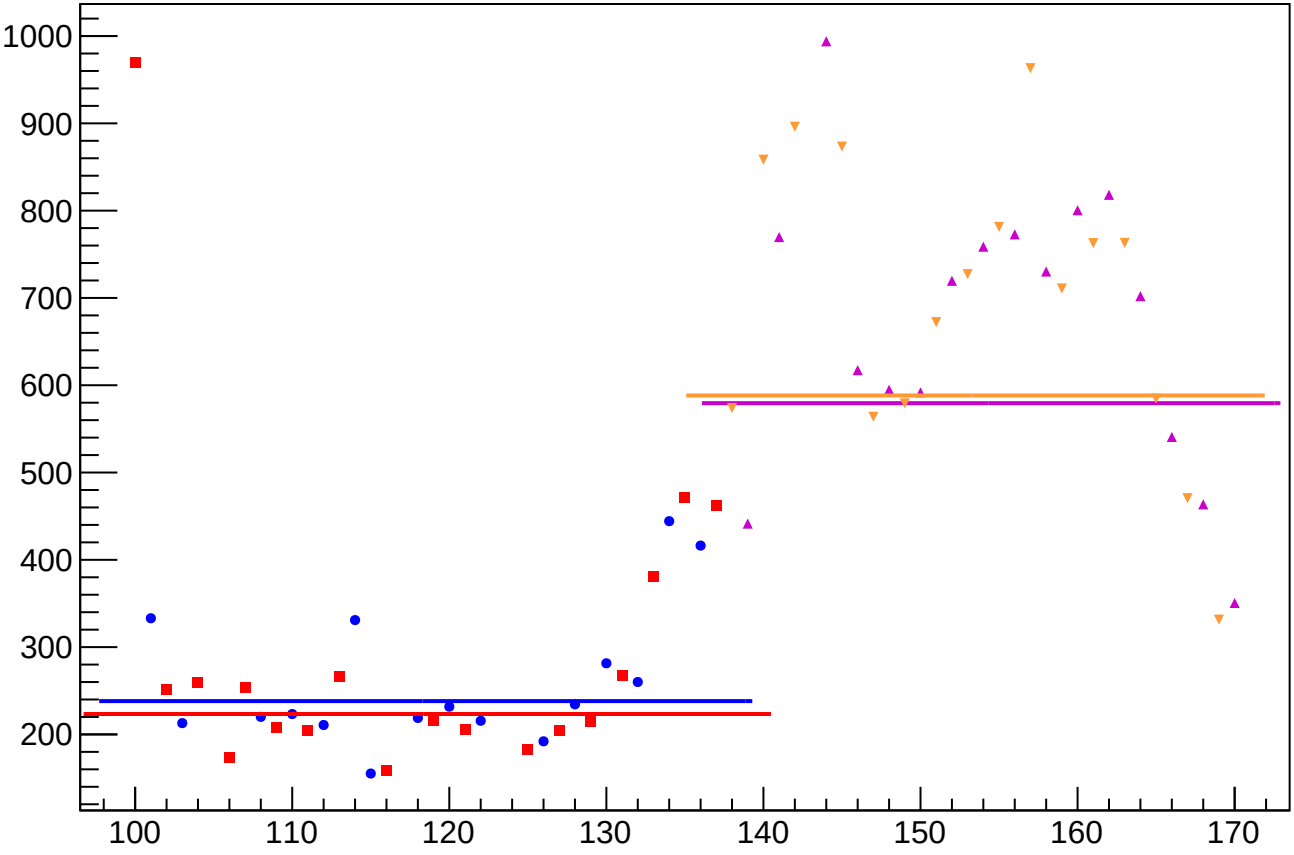
Left In: 0.167+/-0.168 $\chi^2$/NDF:22.8/15

+ sign -0.038+/-0.083 $\chi^2$/NDF: 35.8/31

All: -0.037+/-0.057 $\chi^2$/NDF: 85.8/65

- sign -0.036+/-0.079 $\chi^2$/NDF: 50.0/33

# asym_atl2_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 238.165+/-0.066 $\chi^2$/NDF: 807205.2/15

Left Out: 588.279+/-0.124 $\chi^2$/NDF:2140753.8/15

Right Out: 223.388+/-0.064 $\chi^2$/NDF: 862425.5/17

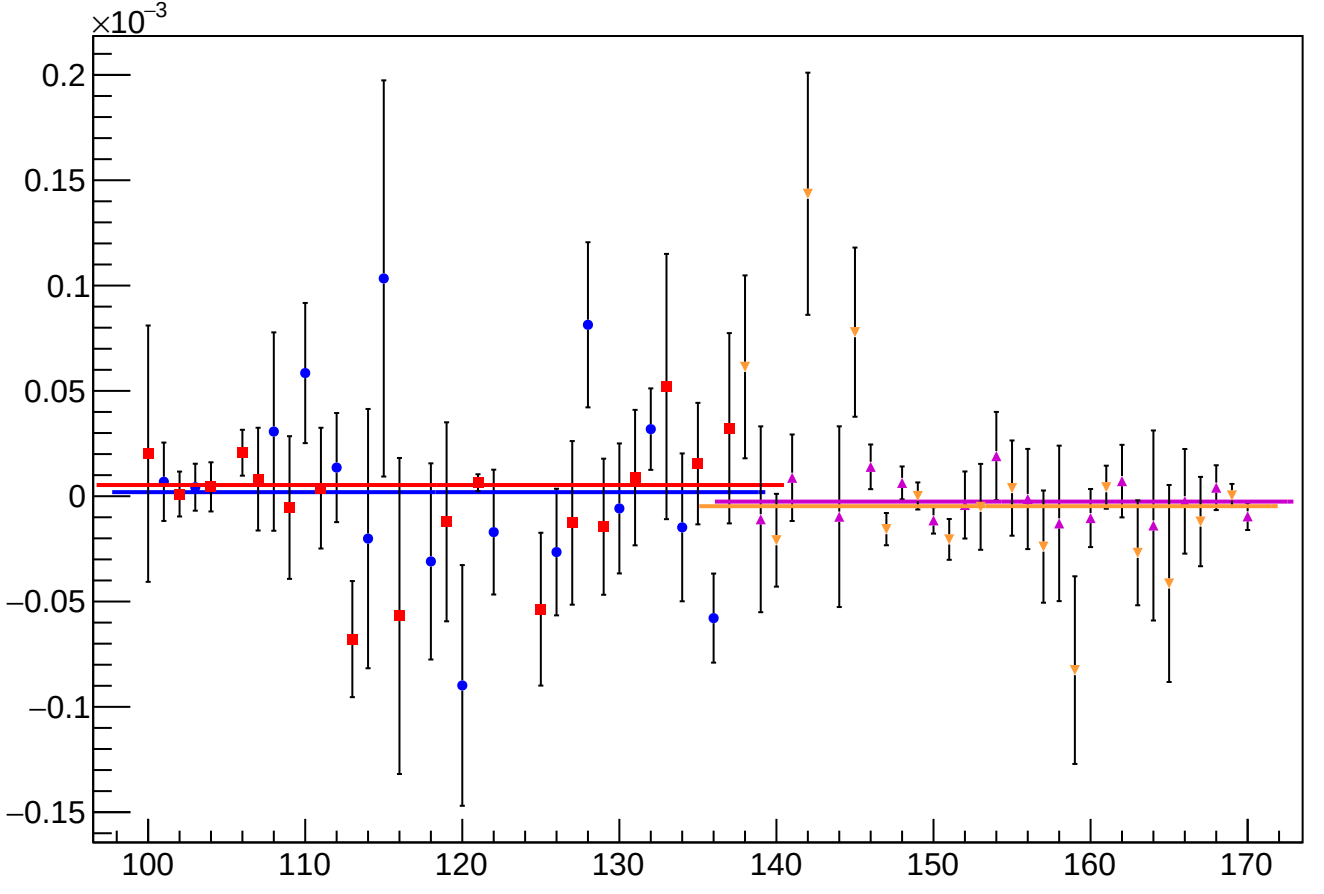
Left In: 579.495+/-0.119 $\chi^2$/NDF:1990028.4/15

+ sign 316.258+/-0.058 $\chi^2$/NDF: 9163164.5/31

All: 309.166+/-0.040 $\chi^2$/NDF: 19005925.8/65

- sign 302.627+/-0.056 $\chi^2$/NDF: 9814479.6/33

# asym_atl2_eigen_dit_vs_dit_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 24.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:25.9/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.5/17

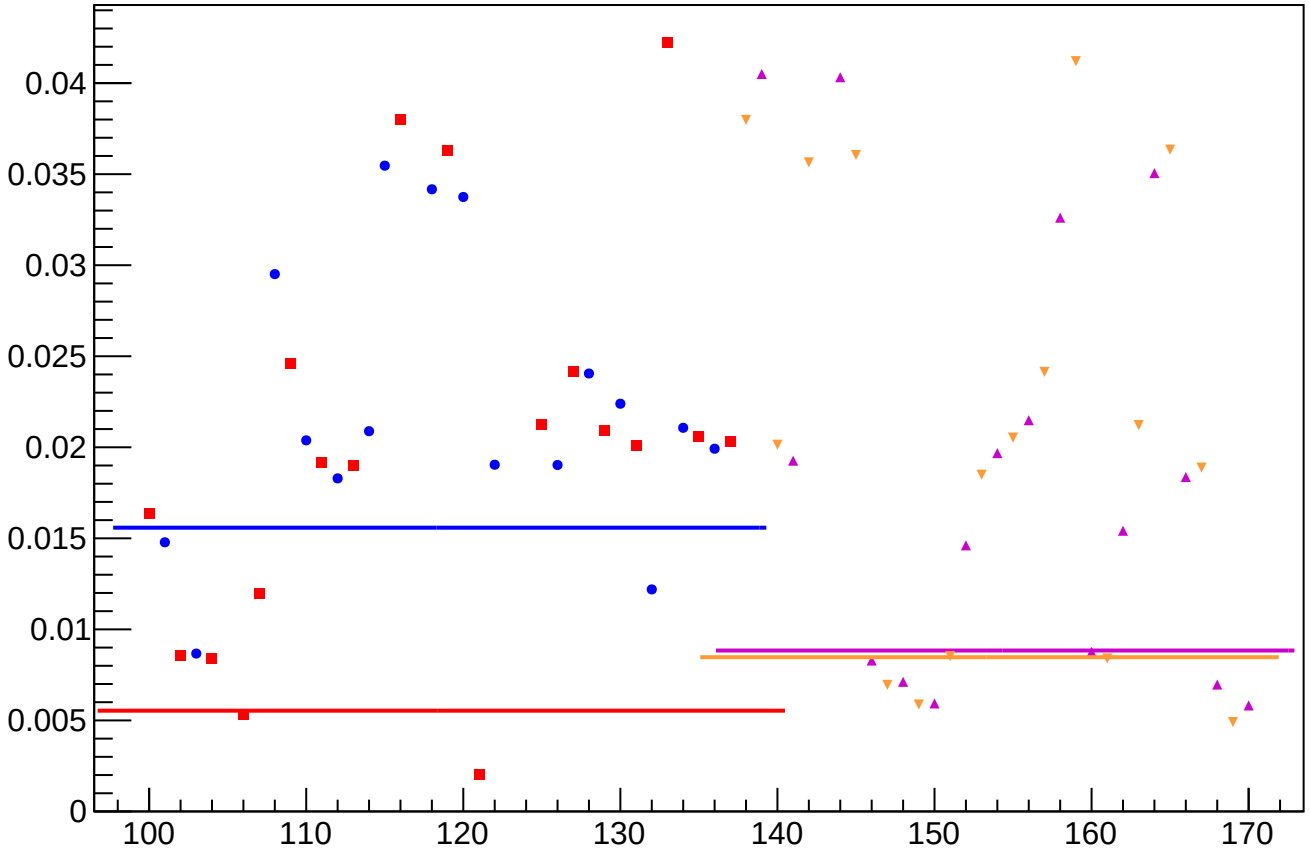
Left In: -0.000+/-0.000 $\chi^2$/NDF:9.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 50.8/31

All: -0.000+/-0.000 $\chi^2$/NDF: 79.8/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 27.2/33

# asym_atl2_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.016+/-0.000 $\chi^2$/NDF: 2074656.7/15

Left Out: 0.008+/-0.000 $\chi^2$/NDF:8670082.0/15

Right Out: 0.006+/-0.000 $\chi^2$/NDF: 7954965.8/17

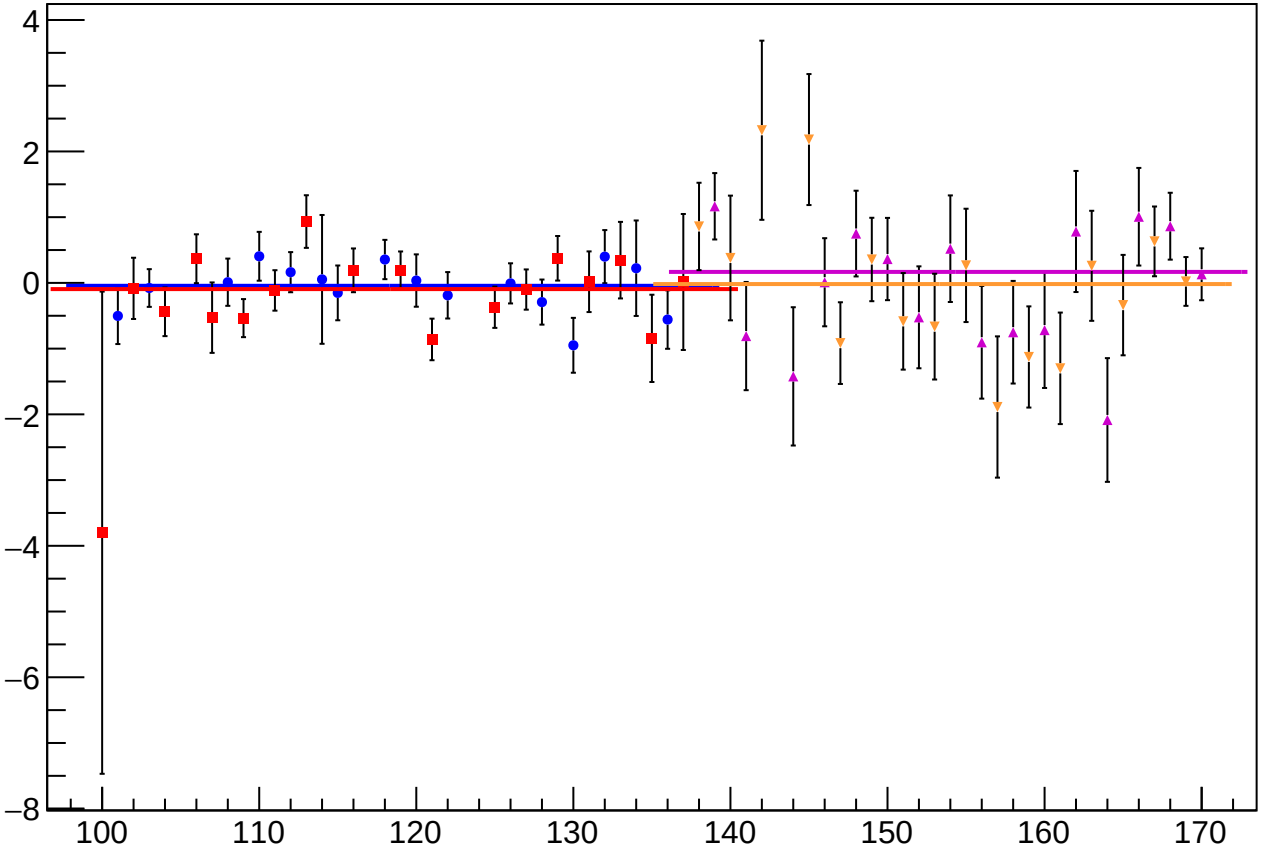
Left In: 0.009+/-0.000 $\chi^2$/NDF:7105762.2/15

+ sign 0.010+/-0.000 $\chi^2$/NDF: 12775571.4/31

All: 0.008+/-0.000 $\chi^2$/NDF: 29978141.2/65

- sign 0.007+/-0.000 $\chi^2$/NDF: 16173287.2/33

# asym_atl2_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.044+/-0.094 $\chi^2$/NDF: 13.1/15

Left Out: -0.018+/-0.175 $\chi^2$/NDF:22.7/15

Right Out: -0.094+/-0.090 $\chi^2$/NDF: 25.3/17

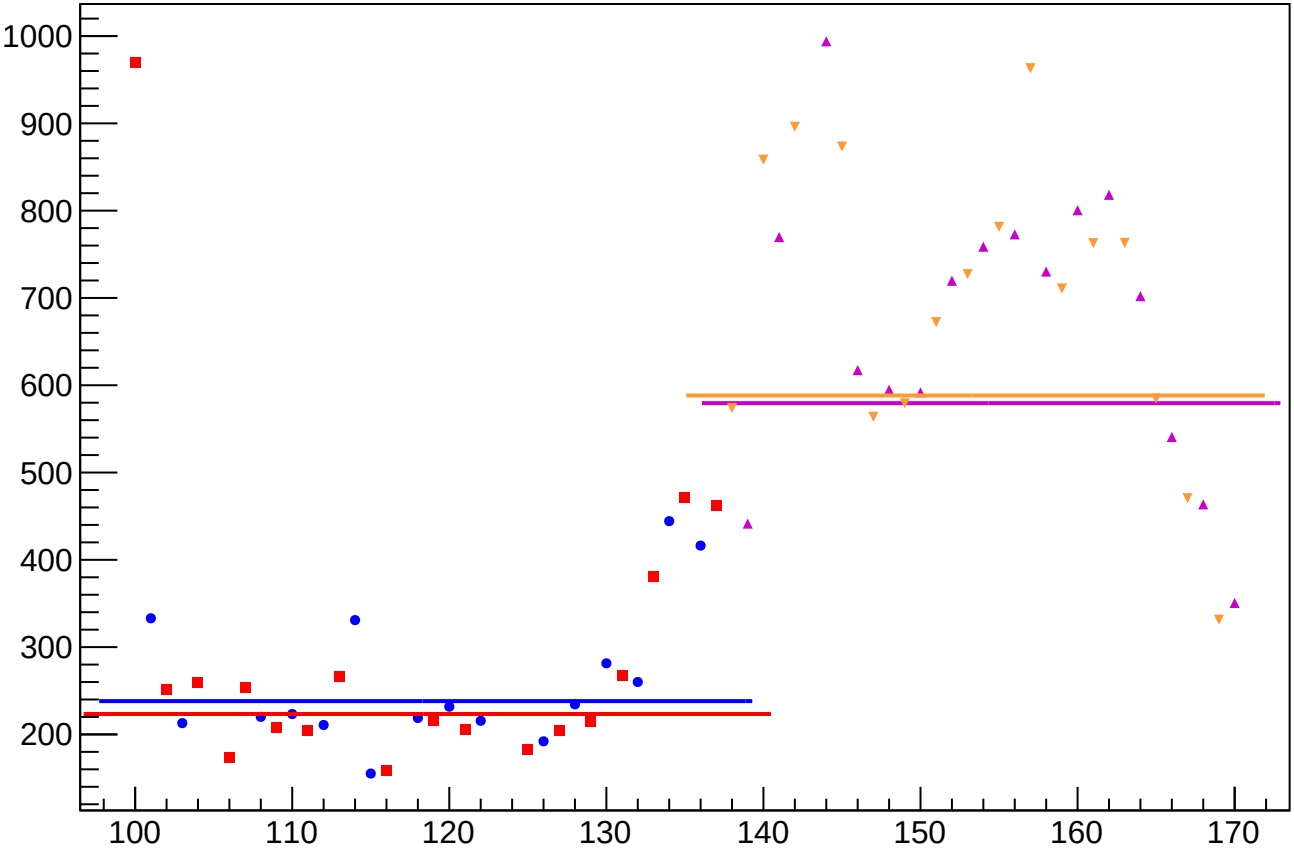
Left In: 0.167+/-0.168 $\chi^2$/NDF:22.8/15

+ sign -0.038+/-0.083 $\chi^2$/NDF: 35.8/31

All: -0.037+/-0.057 $\chi^2$/NDF: 85.8/65

- sign -0.036+/-0.079 $\chi^2$/NDF: 50.0/33

# asym_atl2_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 238.165+/-0.066 $\chi^2$/NDF: 807170.1/15

Left Out: 588.284+/-0.124 $\chi^2$/NDF:2140839.6/15

Right Out: 223.390+/-0.064 $\chi^2$/NDF: 862366.3/17

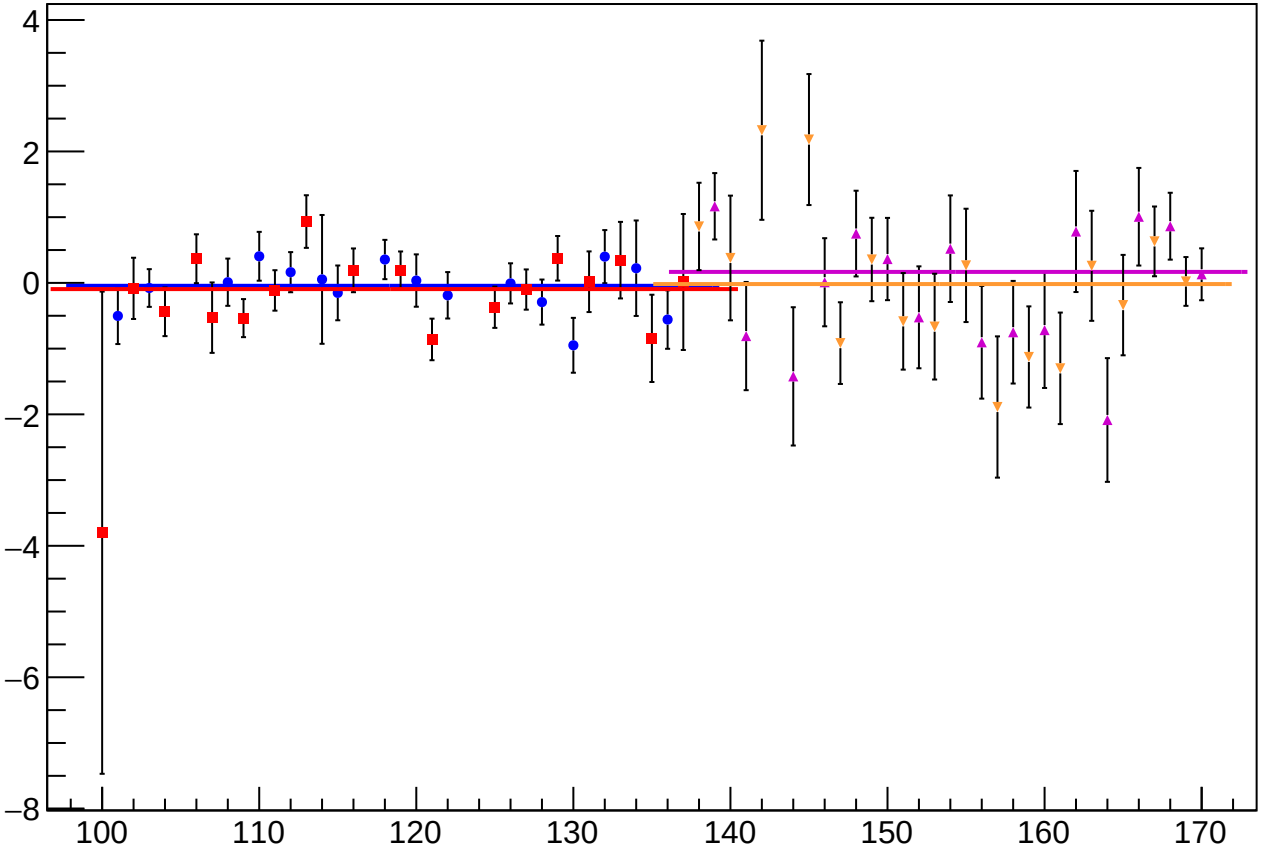
Left In: 579.503+/-0.119 $\chi^2$/NDF:1990050.5/15

+ sign 316.258+/-0.058 $\chi^2$/NDF: 9163266.3/31

All: 309.167+/-0.040 $\chi^2$/NDF: 19006062.1/65

- sign 302.629+/-0.056 $\chi^2$/NDF: 9814518.5/33

# asym_atl2_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.044+/-0.094 $\chi^2$/NDF: 13.1/15

Left Out: -0.018+/-0.175 $\chi^2$/NDF:22.7/15

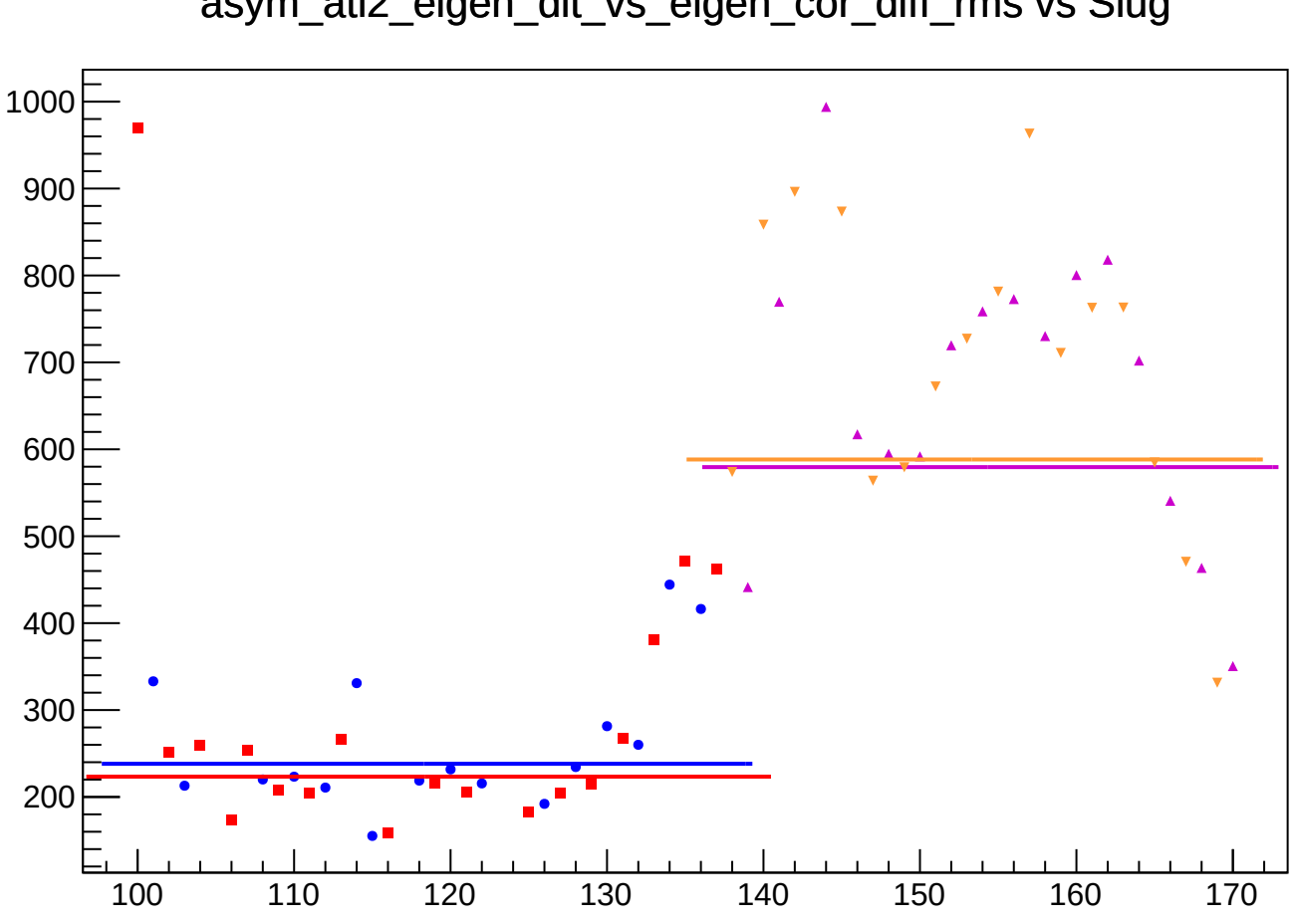
Right Out: -0.094+/-0.090 $\chi^2$/NDF: 25.3/17

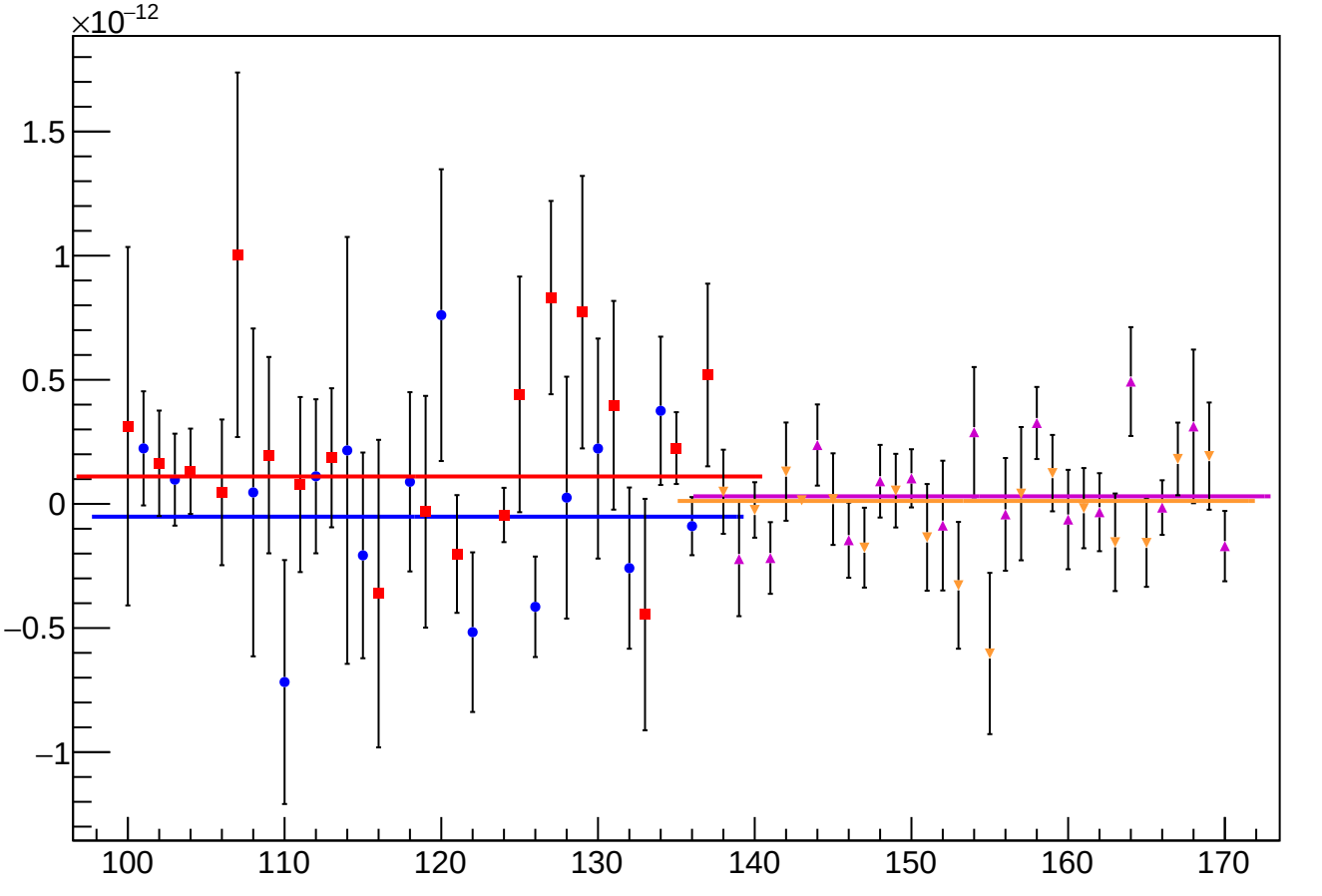
Left In: 0.167+/-0.168 $\chi^2$/NDF:22.8/15

+ sign -0.038+/-0.083 $\chi^2$/NDF: 35.8/31

All: -0.037+/-0.057 $\chi^2$/NDF: 85.8/65

- sign -0.036+/-0.079 $\chi^2$/NDF: 50.0/33


asym_atl2_eigen_dit_vs_eigen_cor_diff_rms vs Slug
1000
900
800
700
600
500
400
300
200
100
110
120
130
140
150
160
170
Right In: 238.165+/-0.066 χ²/NDF: 807170.1/15
Left Out: 588.284+/-0.124 χ²/NDF:2140839.6/15
Right Out: 223.390+/-0.064 χ²/NDF: 862366.3/17
Left In: 579.503+/-0.119 χ²/NDF:1990050.5/15
+ sign 316.258+/-0.058 χ²/NDF: 9163266.3/31
All: 309.167+/-0.040 χ²/NDF: 19006062.1/65
- sign 302.629+/-0.056 χ²/NDF: 9814518.5/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.0/16

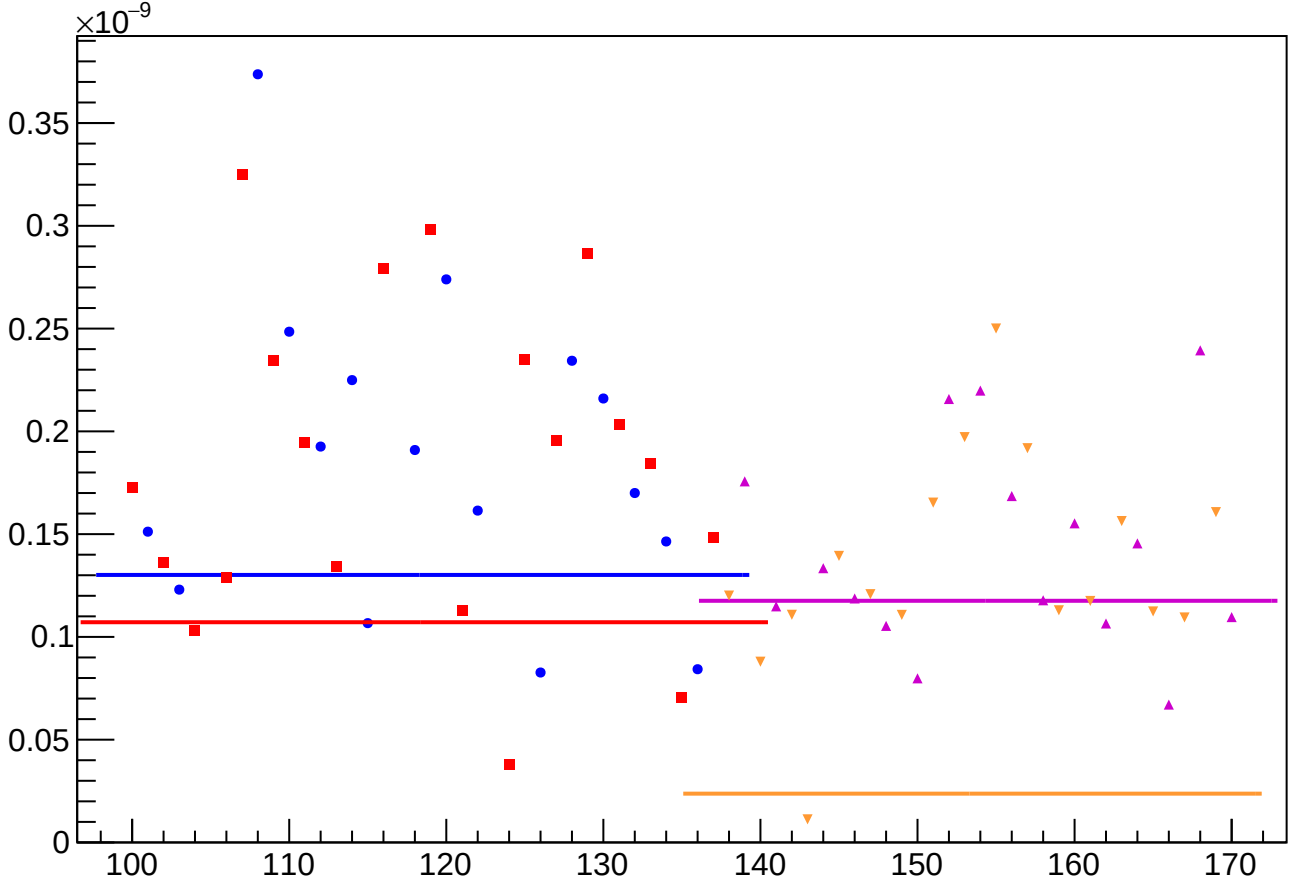
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:20.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 27.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 66.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 37.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1334266.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13006680.3/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2656168.1/18

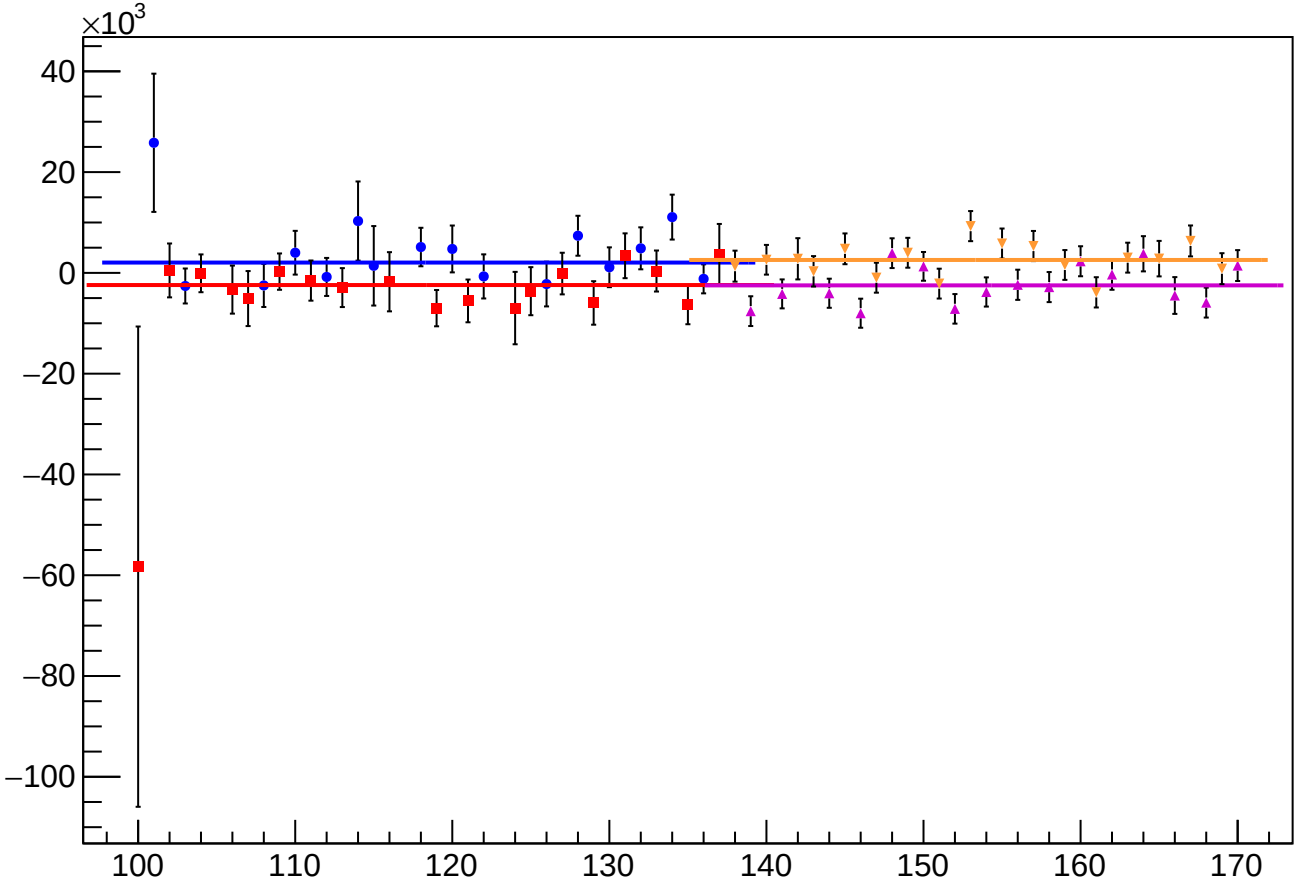
Left In: 0.000+/-0.000 $\chi^2$/NDF:1905847.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 19092673.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 34665113.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4604072.1/34

# reg_asym_atr1_mean vs Slug




Right In: 2049.493+/-1070.395 $\chi^2$/NDF: 17.8/15

Left Out: 2565.360+/-744.049 $\chi^2$/NDF:19.0/16

Right Out: -2411.858+/-1035.471 $\chi^2$/NDF: 10.8/18

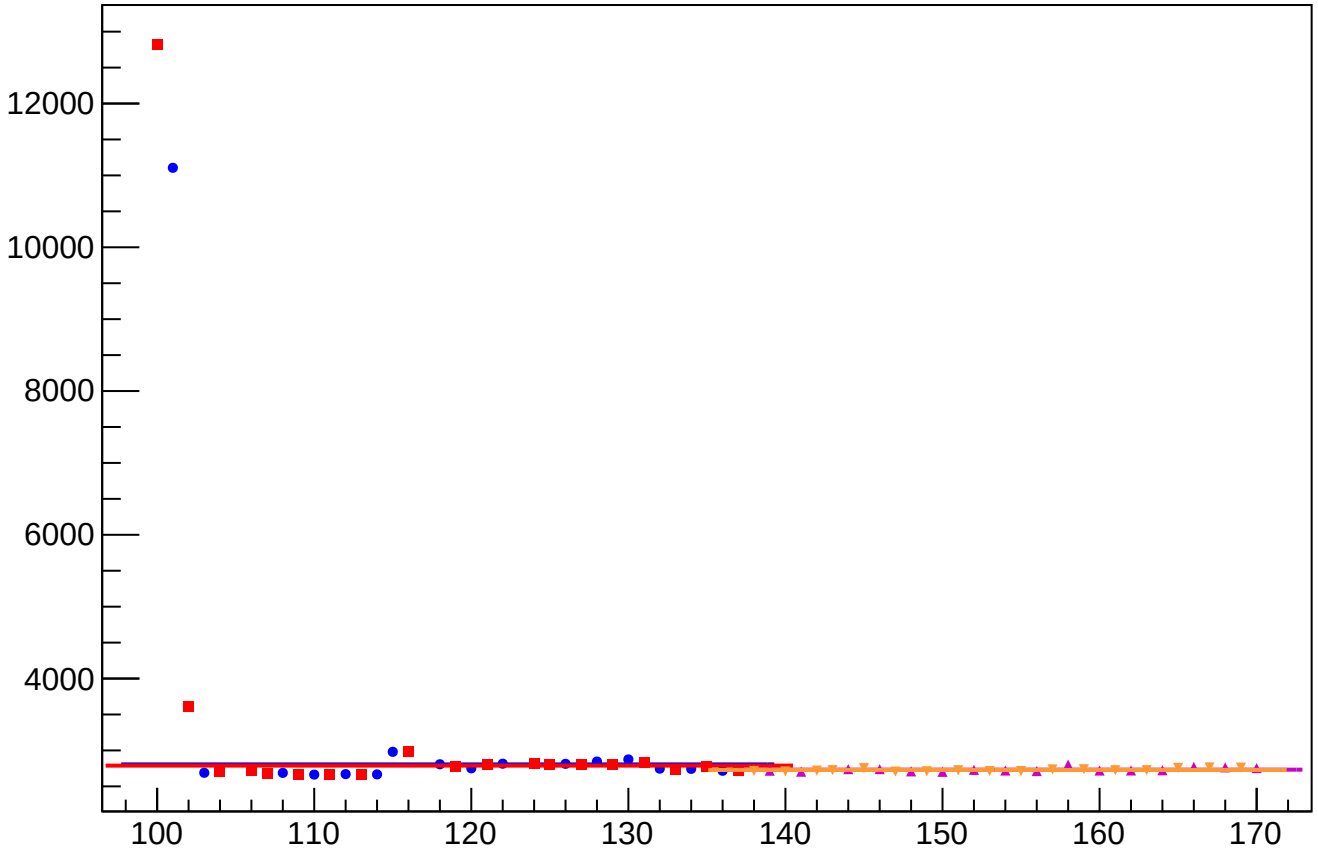
Left In: -2477.175+/-751.473 $\chi^2$/NDF:26.1/15

+ sign 2397.303+/-610.947 $\chi^2$/NDF: 37.0/32

All: -39.645+/-431.026 $\chi^2$/NDF: 105.5/67

- sign -2454.642+/-608.189 $\chi^2$/NDF: 36.8/34

# reg_asym_atr1_rms vs Slug




Right In: 2805.446+/-0.757 $\chi^2$/NDF: 746240.6/15

Left Out: 2728.484+/-0.526 $\chi^2$/NDF:1249.0/16

Right Out: 2788.820+/-0.732 $\chi^2$/NDF: 146998.3/18

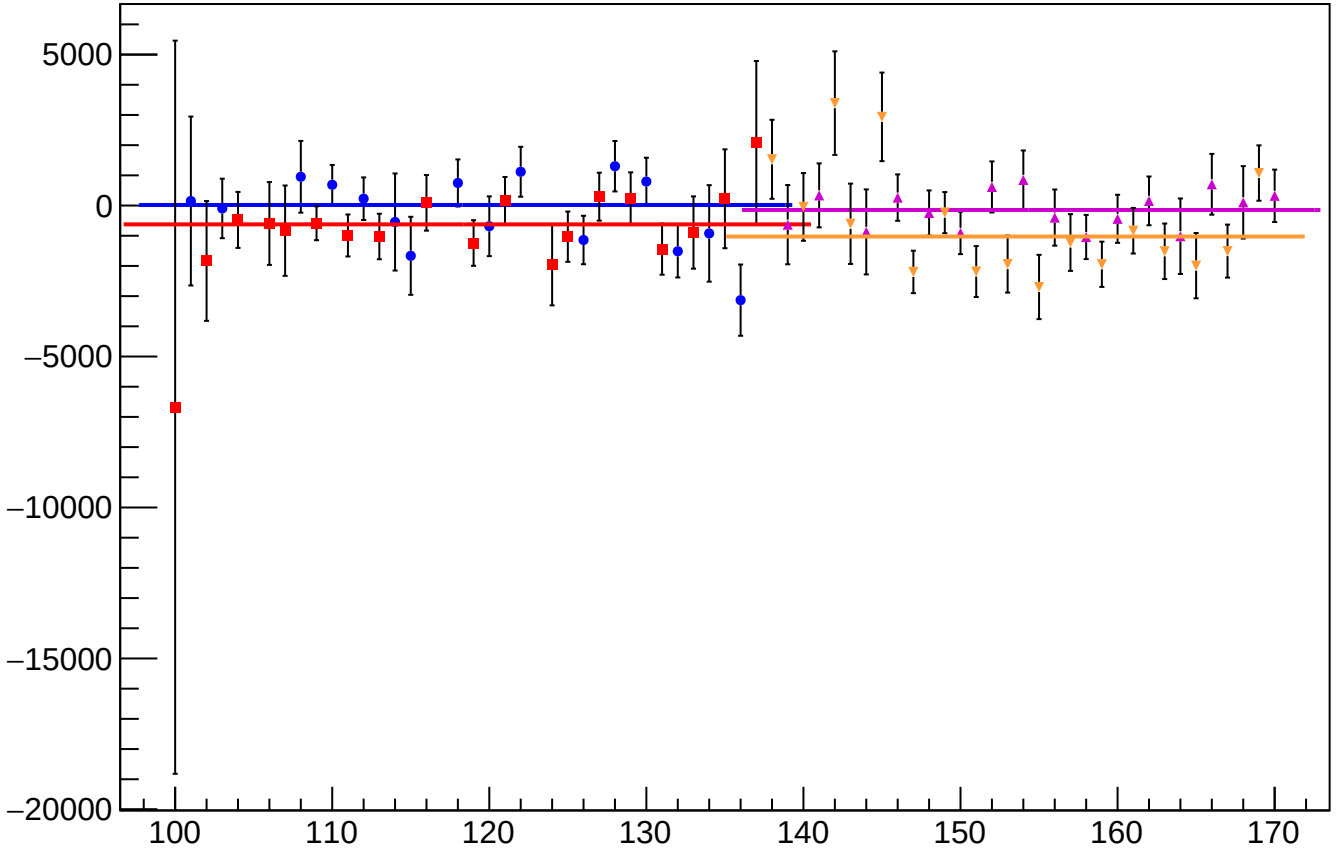
Left In: 2732.408+/-0.531 $\chi^2$/NDF:2504.6/15

+ sign 2753.556+/-0.432 $\chi^2$/NDF: 754460.7/32

All: 2752.709+/-0.305 $\chi^2$/NDF: 907859.5/67

- sign 2751.870+/-0.430 $\chi^2$/NDF: 153391.2/34

# asym_atr1_reg_correction_mean vs Slug




Right In: 18.981+/-233.483 $\chi^2$/NDF: 22.8/15

Left Out: -1025.404+/-226.256 $\chi^2$/NDF:36.3/16

Right Out: -623.107+/-215.948 $\chi^2$/NDF: 9.3/18

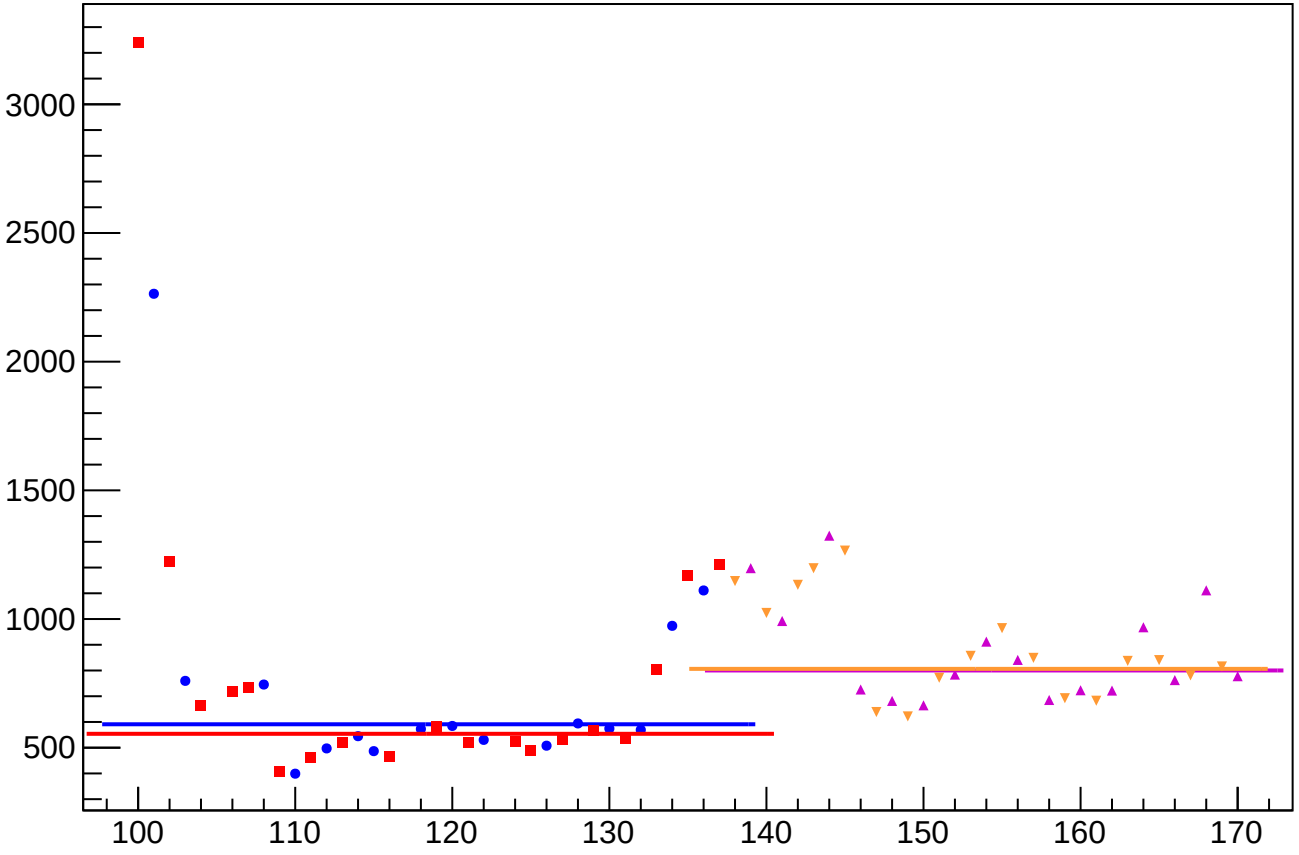
Left In: -146.733+/-225.133 $\chi^2$/NDF:7.3/15

+ sign -519.625+/-162.482 $\chi^2$/NDF: 69.4/32

All: -454.630+/-112.472 $\chi^2$/NDF: 88.6/67

- sign -394.836+/-155.844 $\chi^2$/NDF: 18.9/34

# asym_atr1_reg_correction_rms vs Slug




Right In: 591.041+/-0.165 $\chi^2$/NDF: 1567663.5/15

Left Out: 806.333+/-0.160 $\chi^2$/NDF:1077571.7/16

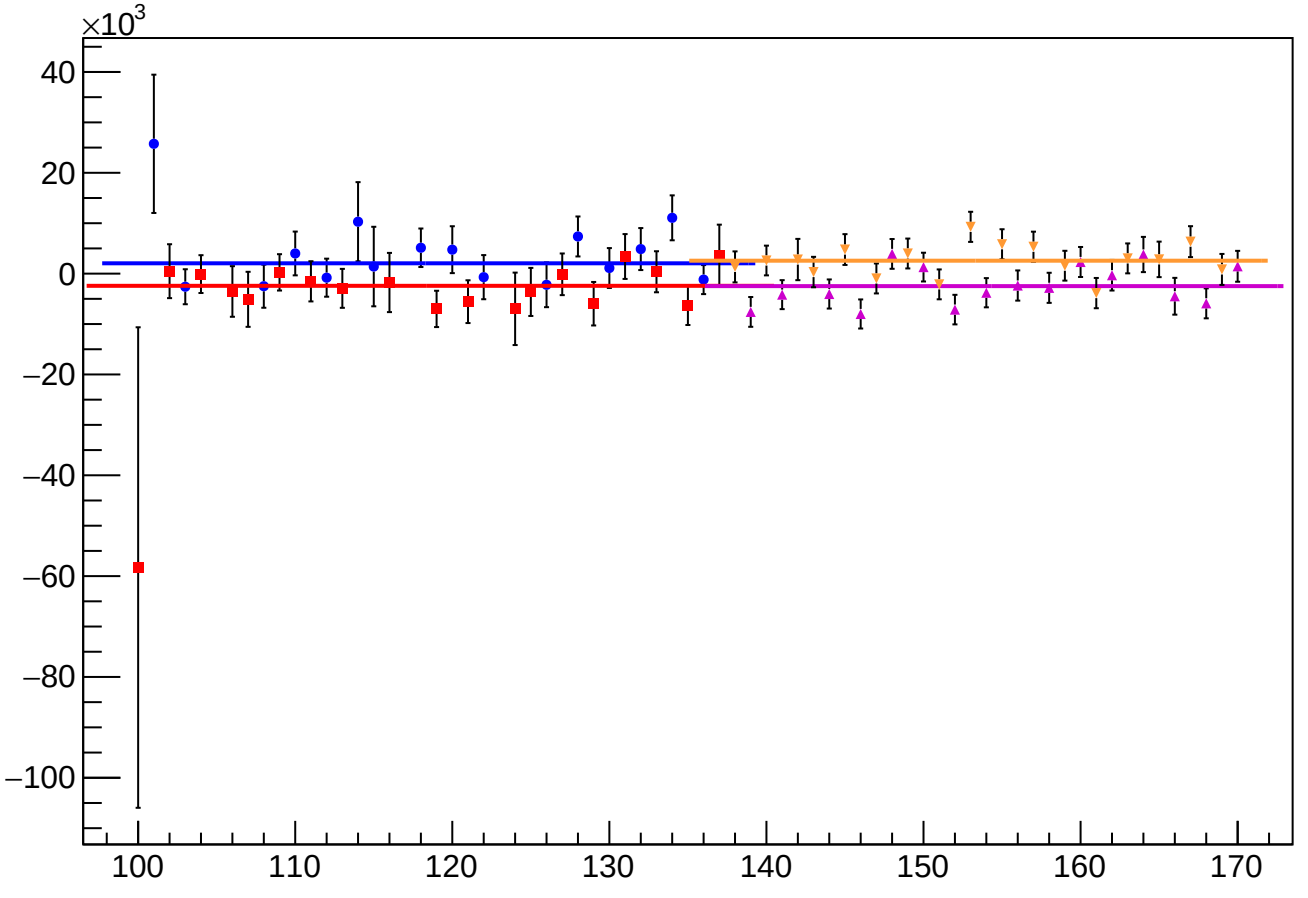
Right Out: 553.982+/-0.153 $\chi^2$/NDF: 1116915.2/18

Left In: 800.113+/-0.159 $\chi^2$/NDF:961519.1/15

+ sign 702.070+/-0.115 $\chi^2$/NDF: 3522204.6/32

All: 686.369+/-0.080 $\chi^2$/NDF: 6881495.0/67

- sign 671.924+/-0.110 $\chi^2$/NDF: 3323432.0/34




Right In: 2048.688+/-1070.395 $\chi^2$/NDF: 17.8/15

Left Out: 2565.371+/-744.049 $\chi^2$/NDF:19.0/16

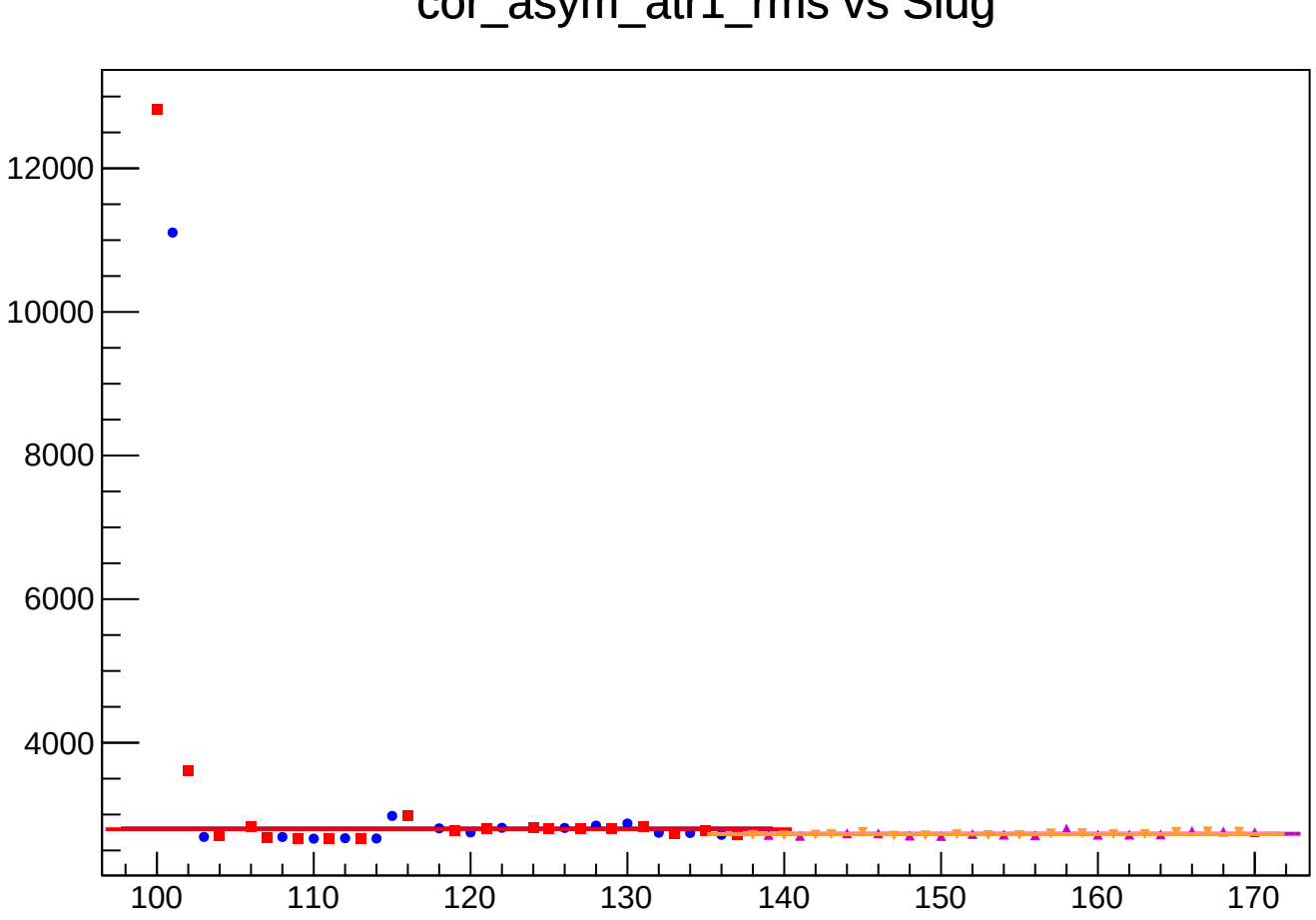
Right Out: -2417.909+/-1037.856 $\chi^2$/NDF: 10.8/18

Left In: -2477.231+/-751.473 $\chi^2$/NDF:26.1/15

+ sign 2397.048+/-610.947 $\chi^2$/NDF: 37.0/32

All: -38.947+/-431.198 $\chi^2$/NDF: 105.5/67

- sign -2456.828+/-608.671 $\chi^2$/NDF: 36.8/34




Right In: 2805.446+/-0.757 $\chi^2$/NDF: 746239.8/15

Left Out: 2728.484+/-0.526 $\chi^2$/NDF:1249.0/16

Right Out: 2794.157+/-0.734 $\chi^2$/NDF: 146744.3/18

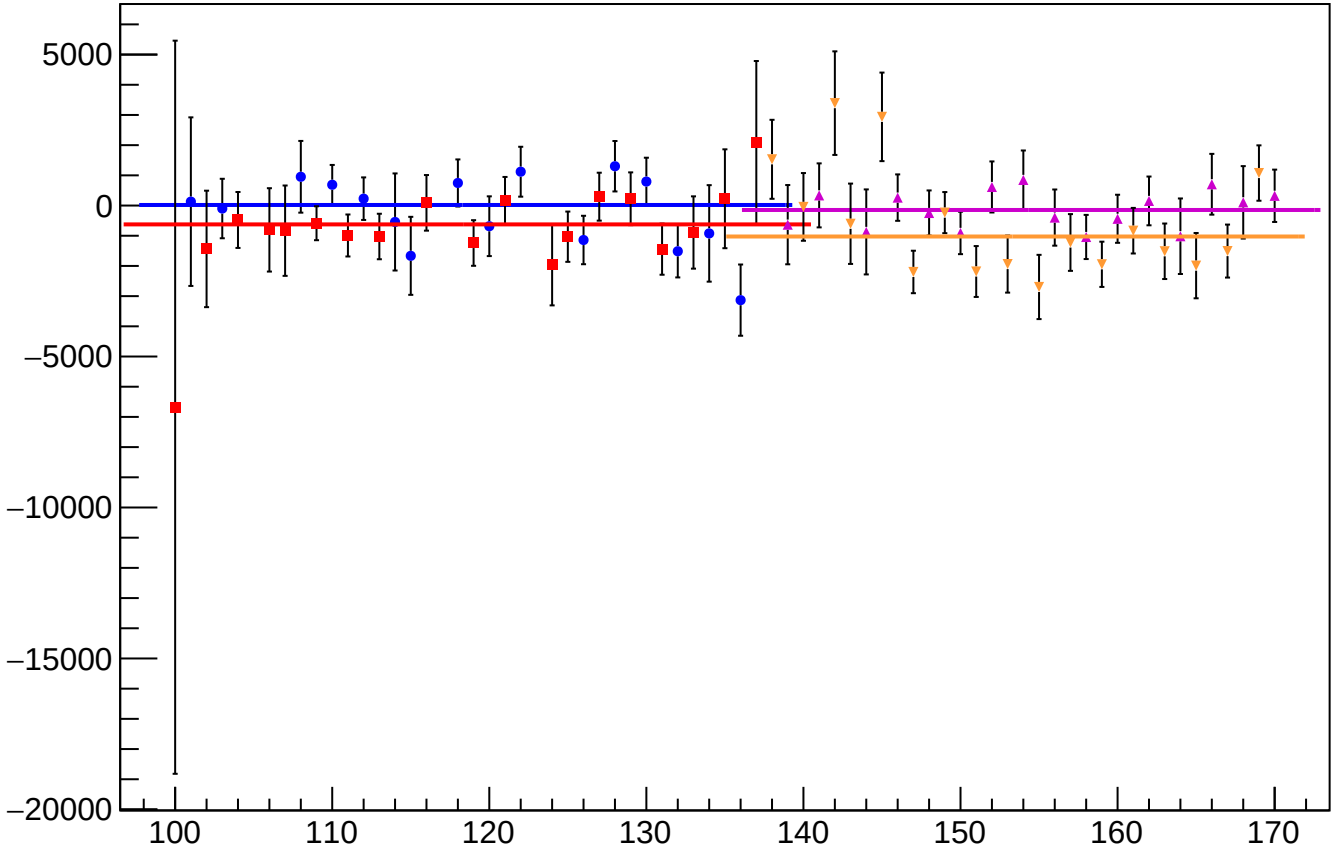
Left In: 2732.408+/-0.531 $\chi^2$/NDF:2504.6/15

+ sign 2753.556+/-0.432 $\chi^2$/NDF: 754459.8/32

All: 2753.602+/-0.305 $\chi^2$/NDF: 908353.3/67

- sign 2753.647+/-0.430 $\chi^2$/NDF: 153893.6/34

# asym_atr1_cor_correction_mean vs Slug




Right In: 18.940+/-233.471 $\chi^2$/NDF: 22.8/15

Left Out: -1025.278+/-226.254 $\chi^2$/NDF:36.3/16

Right Out: -624.217+/-215.902 $\chi^2$/NDF: 9.1/18

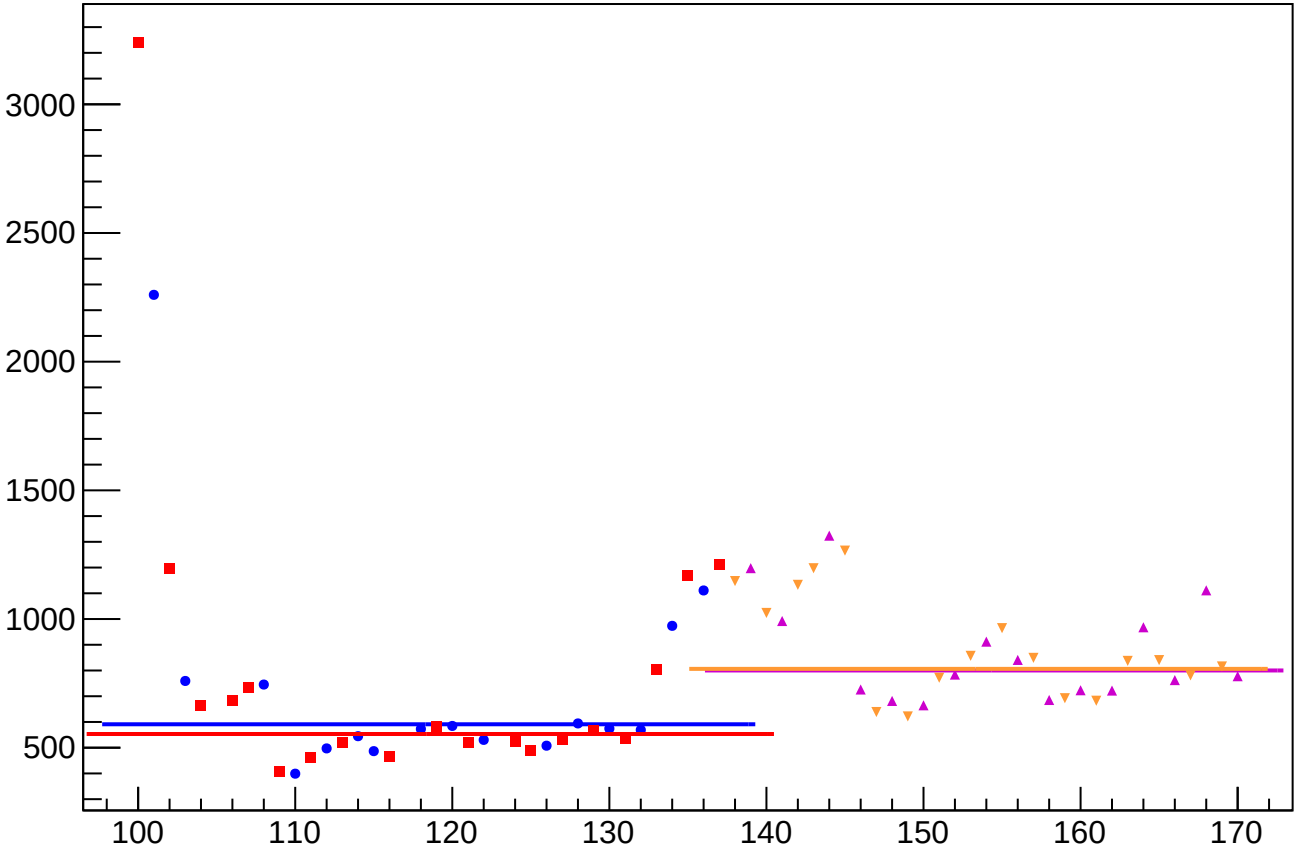
Left In: -146.790+/-225.132 $\chi^2$/NDF:7.3/15

\+ sign -519.558+/-162.477 $\chi^2$/NDF: 69.4/32

All: -454.933+/-112.464 $\chi^2$/NDF: 88.4/67

\- sign -395.491+/-155.826 $\chi^2$/NDF: 18.8/34

# asym_atr1_cor_correction_rms vs Slug




Right In: 591.039+/-0.165 $\chi^2$/NDF: 1566635.0/15

Left Out: 806.325+/-0.160 $\chi^2$/NDF:1077595.7/16

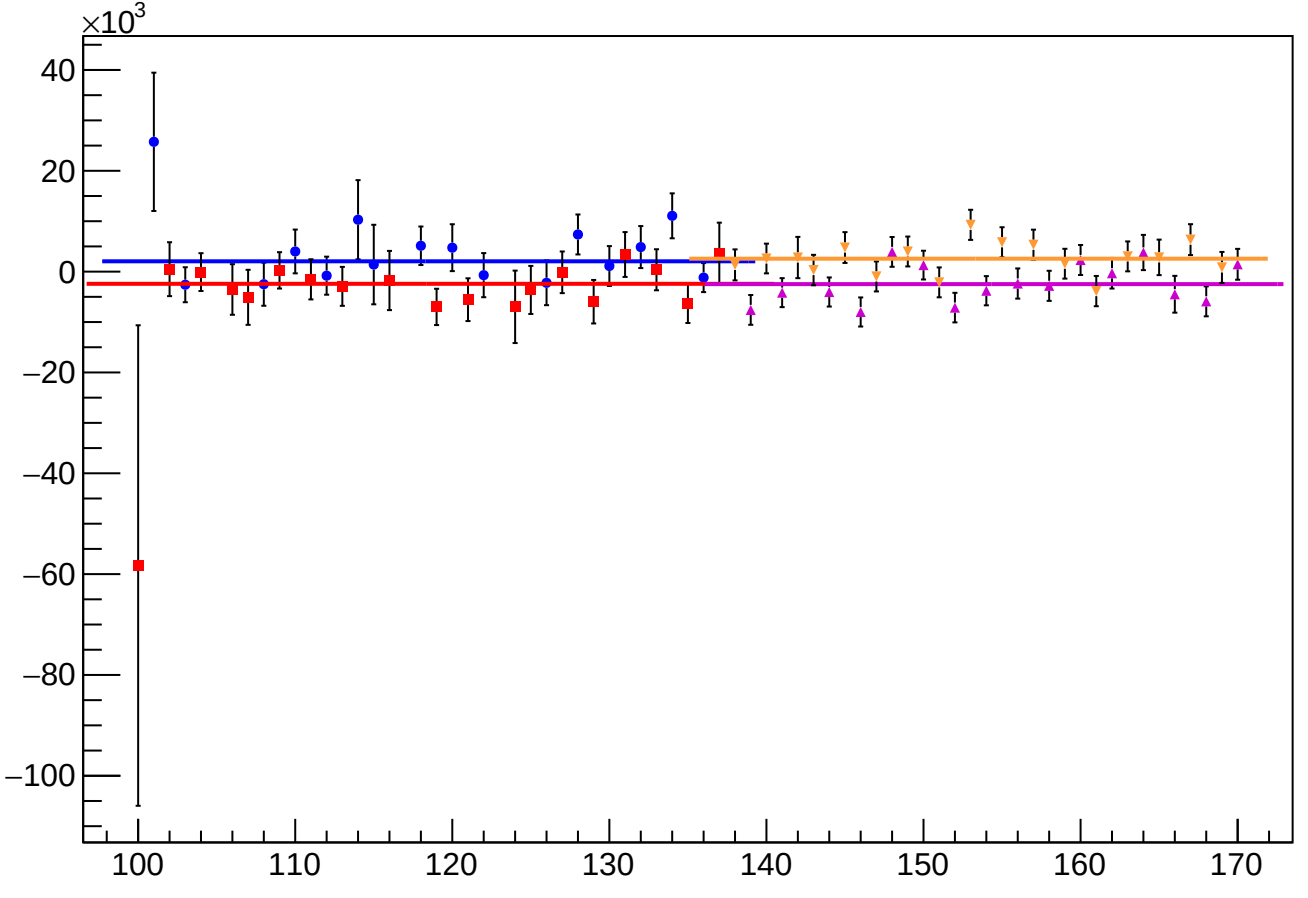
Right Out: 553.233+/-0.153 $\chi^2$/NDF: 1101651.0/18

Left In: 800.108+/-0.159 $\chi^2$/NDF:961506.7/15

+ sign 702.061+/-0.115 $\chi^2$/NDF: 3521203.0/32

All: 686.145+/-0.080 $\chi^2$/NDF: 6874006.1/67

- sign 671.506+/-0.110 $\chi^2$/NDF: 3315960.5/34




Right In: 2048.688+/-1070.395 $\chi^2$/NDF: 17.8/15

Left Out: 2565.371+/-744.049 $\chi^2$/NDF:19.0/16

Right Out: -2417.909+/-1037.856 $\chi^2$/NDF: 10.8/18

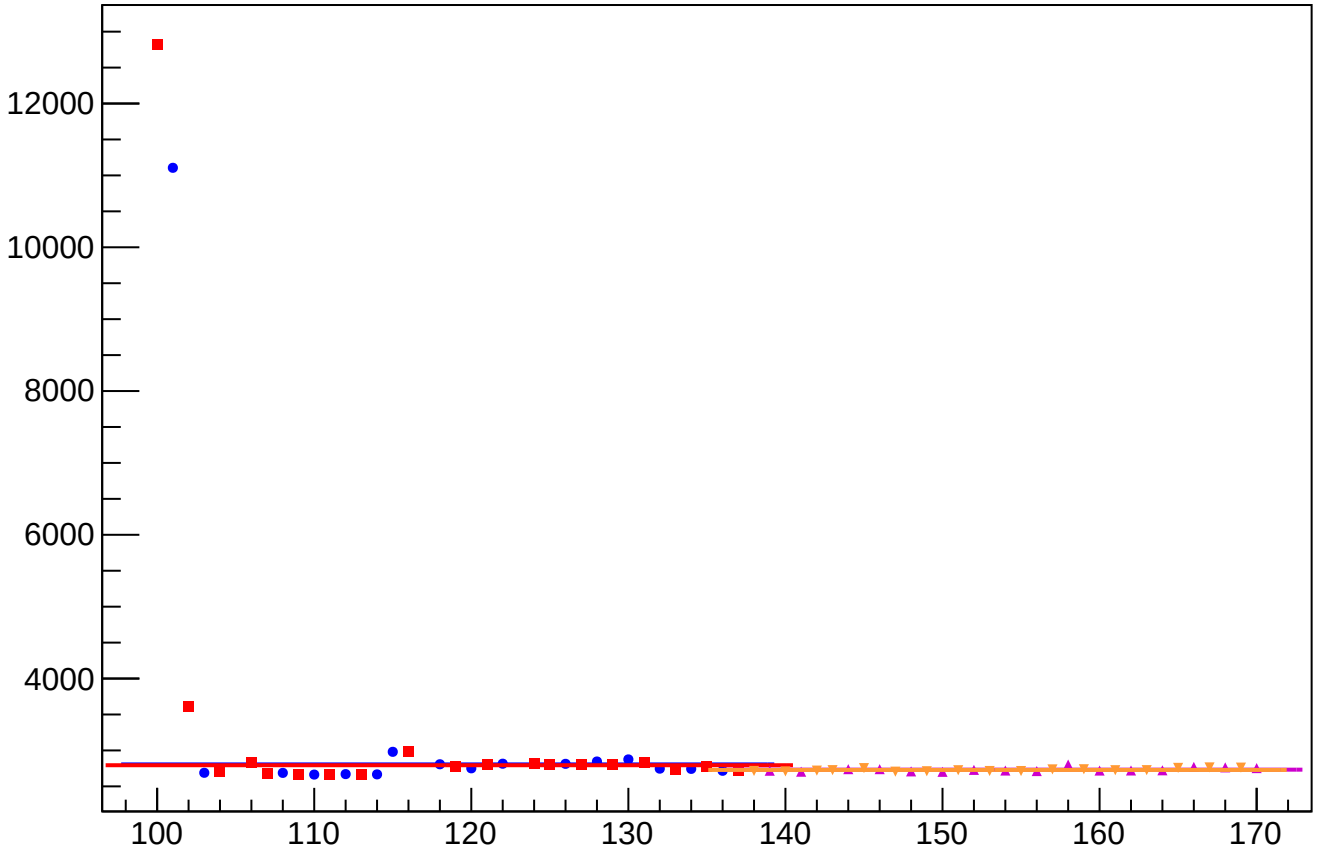
Left In: -2477.231+/-751.473 $\chi^2$/NDF:26.1/15

+ sign 2397.048+/-610.947 $\chi^2$/NDF: 37.0/32

All: -38.947+/-431.198 $\chi^2$/NDF: 105.5/67

- sign -2456.828+/-608.671 $\chi^2$/NDF: 36.8/34

# eigen_cor_asym_atr1_rms vs Slug




Right In: 2805.446+/-0.757 $\chi^2$/NDF: 746239.8/15

Left Out: 2728.484+/-0.526 $\chi^2$/NDF:1249.0/16

Right Out: 2794.157+/-0.734 $\chi^2$/NDF: 146744.3/18

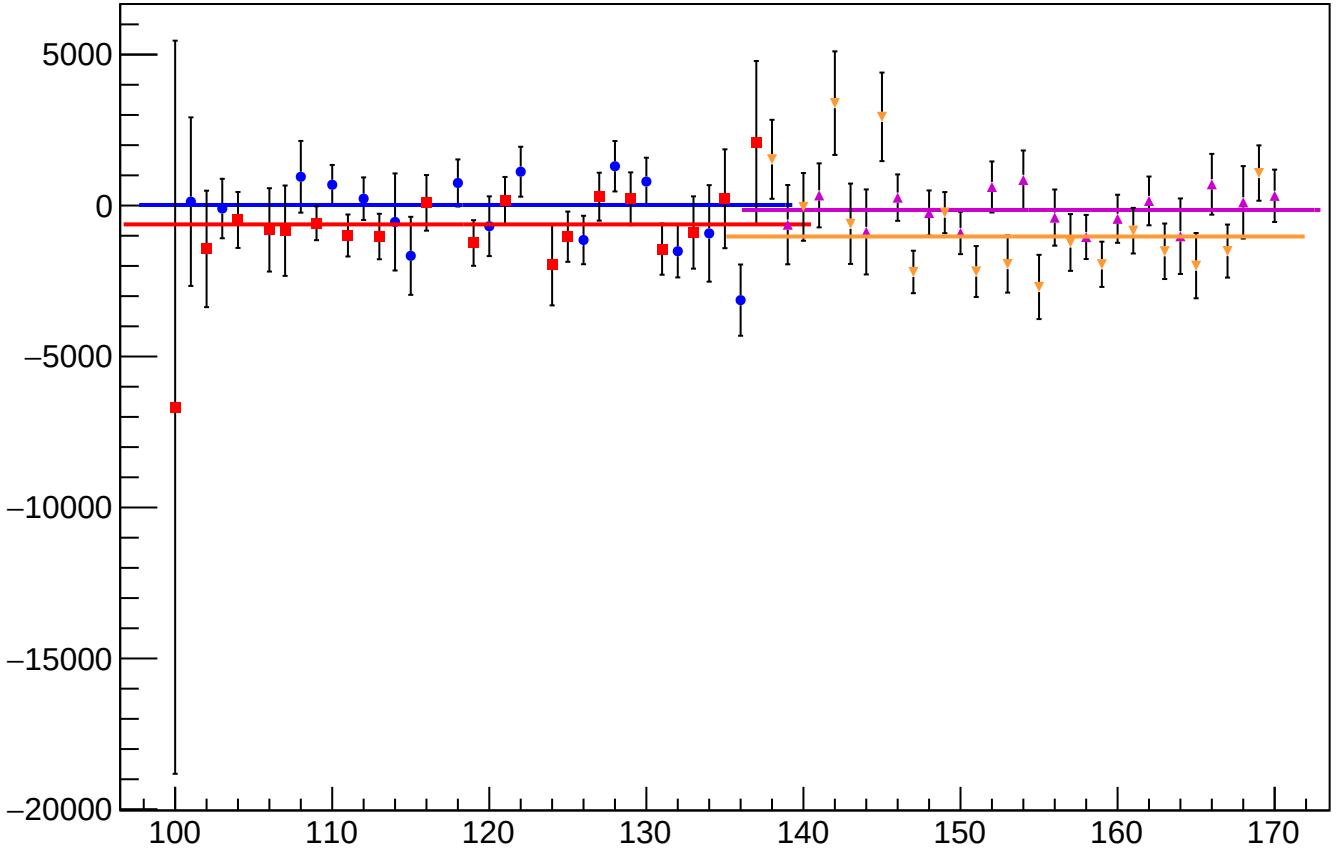
Left In: 2732.408+/-0.531 $\chi^2$/NDF:2504.6/15

+ sign 2753.556+/-0.432 $\chi^2$/NDF: 754459.8/32

All: 2753.602+/-0.305 $\chi^2$/NDF: 908353.3/67

- sign 2753.647+/-0.430 $\chi^2$/NDF: 153893.6/34

# asym_atr1_eigen_cor_correction_mean vs Slug




Right In: 18.940+/-233.471 $\chi^2$/NDF: 22.8/15

Left Out: -1025.278+/-226.254 $\chi^2$/NDF:36.3/16

Right Out: -624.217+/-215.902 $\chi^2$/NDF: 9.1/18

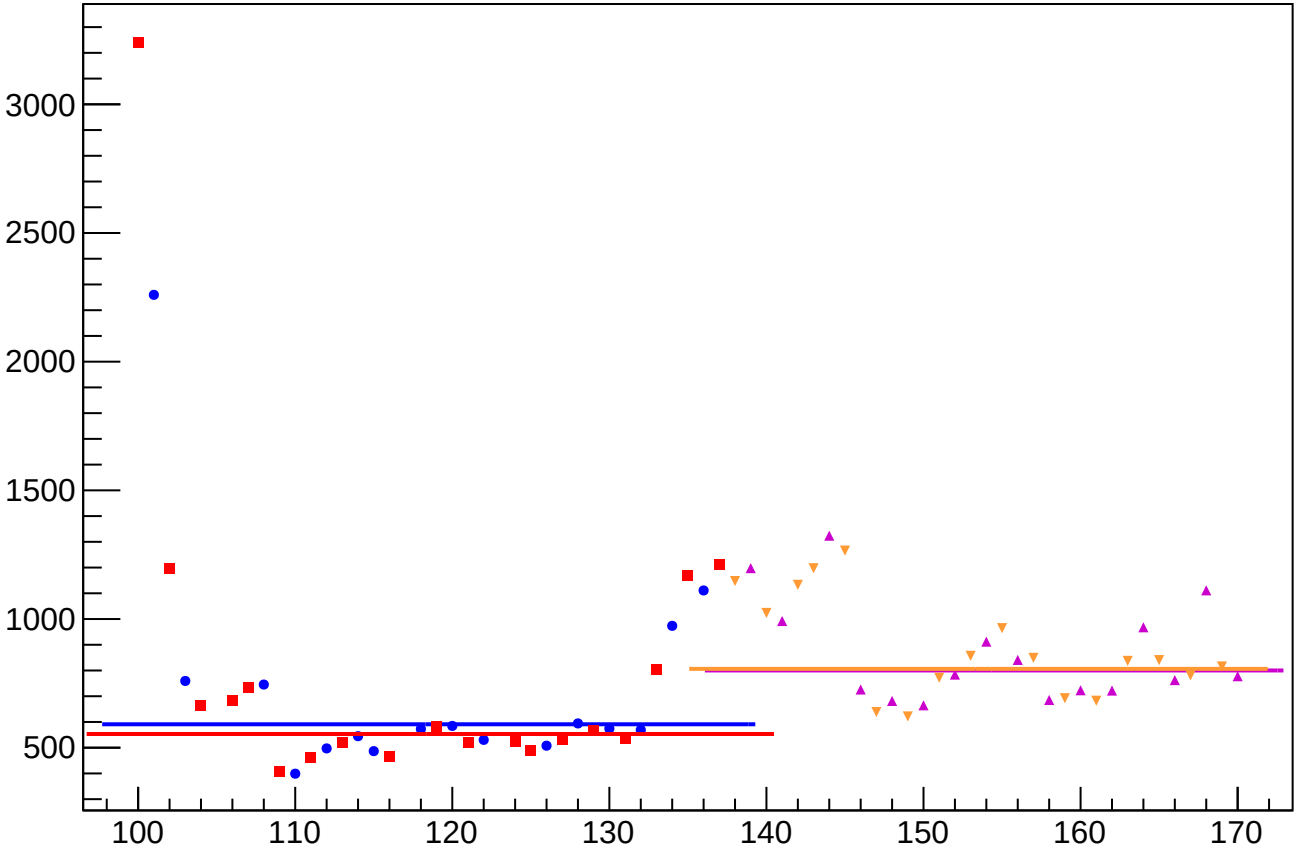
Left In: -146.790+/-225.132 $\chi^2$/NDF:7.3/15

\+ sign -519.558+/-162.477 $\chi^2$/NDF: 69.4/32

All: -454.933+/-112.464 $\chi^2$/NDF: 88.4/67

\- sign -395.491+/-155.826 $\chi^2$/NDF: 18.8/34

# asym_atr1_eigen_cor_correction_rms vs Slug




Right In: 591.039+/-0.165 $\chi^2$/NDF: 1566635.0/15

Left Out: 806.325+/-0.160 $\chi^2$/NDF:1077595.7/16

Right Out: 553.233+/-0.153 $\chi^2$/NDF: 1101651.0/18

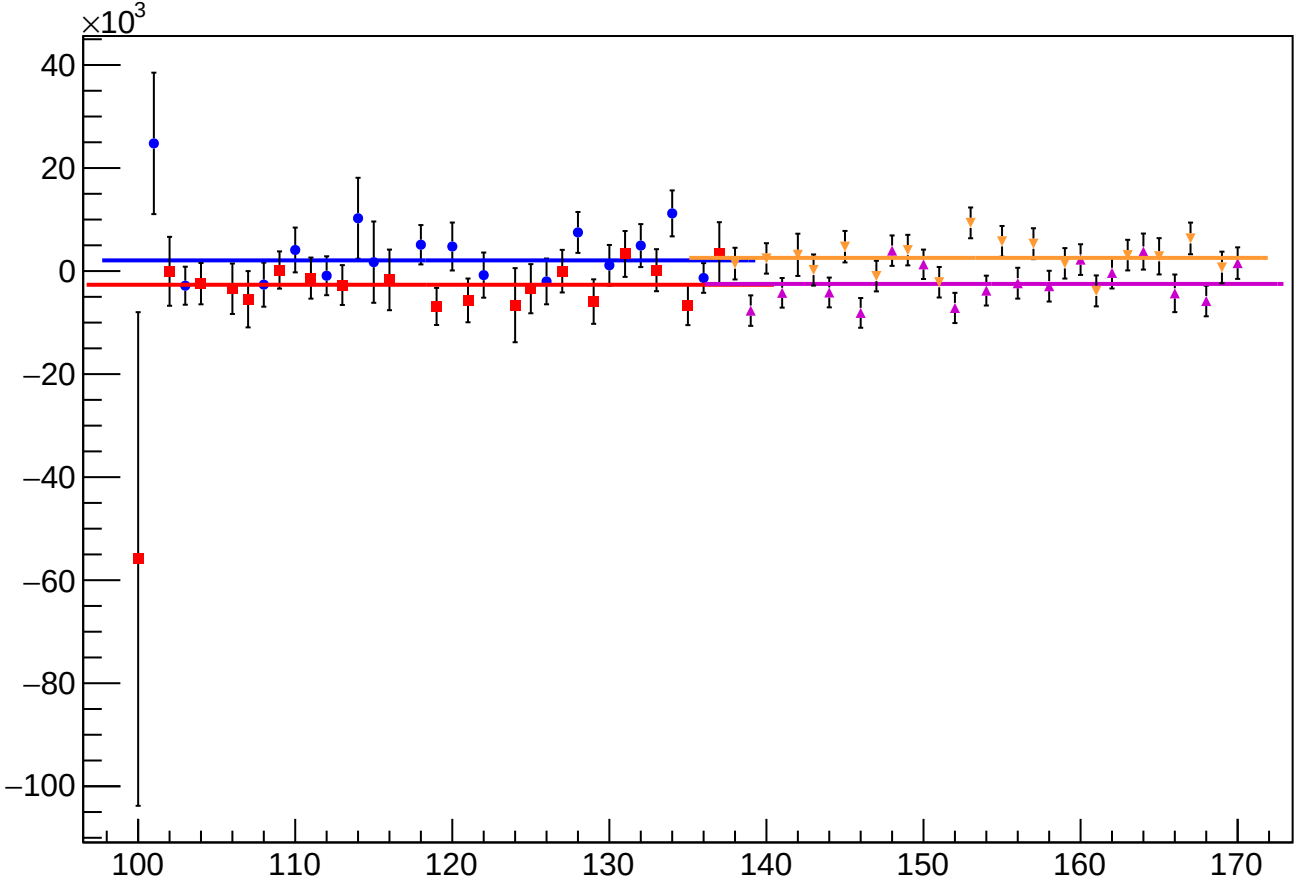
Left In: 800.108+/-0.159 $\chi^2$/NDF:961506.7/15

+ sign 702.061+/-0.115 $\chi^2$/NDF: 3521203.0/32

All: 686.145+/-0.080 $\chi^2$/NDF: 6874006.1/67

- sign 671.506+/-0.110 $\chi^2$/NDF: 3315960.5/34

# dit_asym_atr1_mean vs Slug




Right In: 2074.766+/-1077.182 $\chi^2$/NDF: 17.9/15

Left Out: 2560.905+/-744.574 $\chi^2$/NDF:19.2/16

Right Out: -2657.301+/-1049.868 $\chi^2$/NDF: 9.9/18

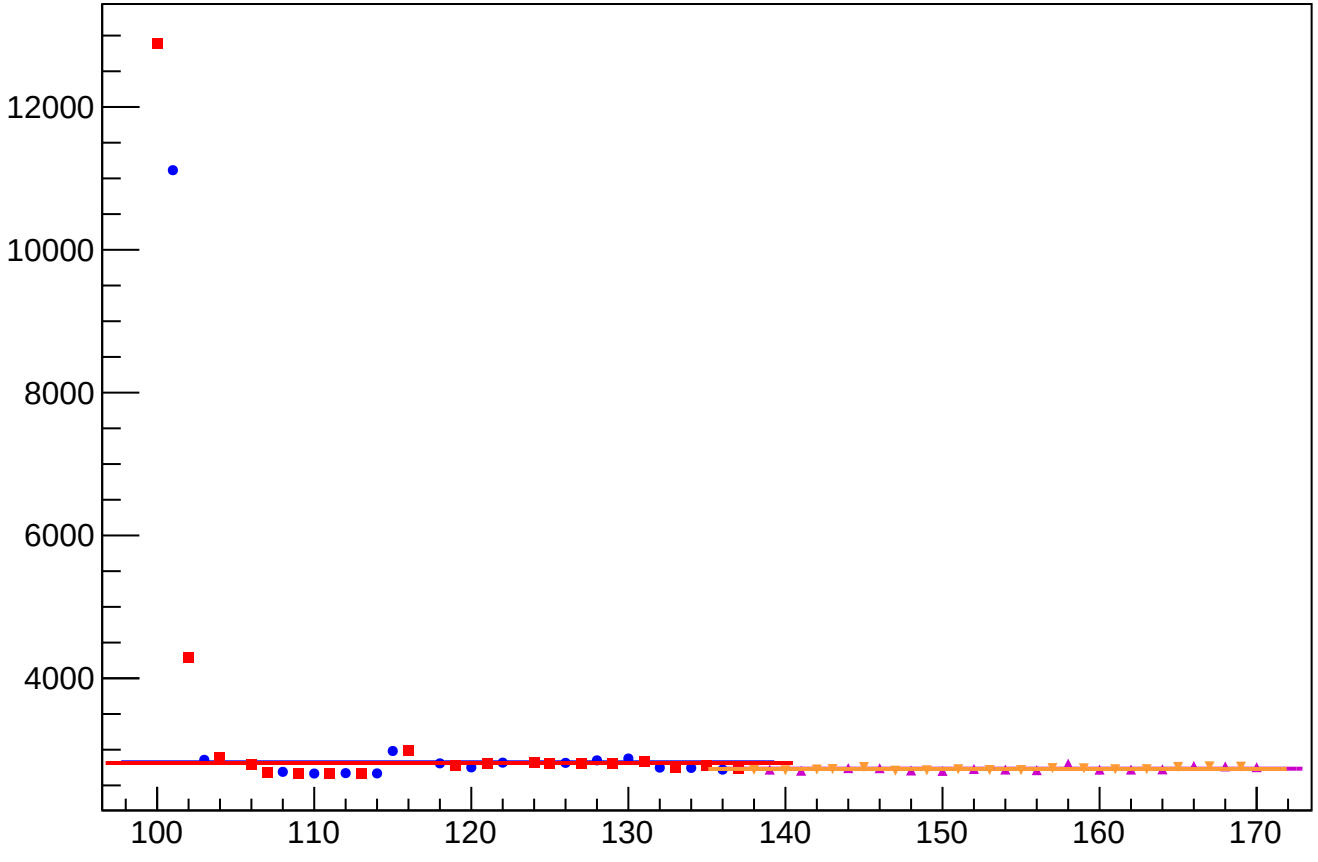
Left In: -2493.280+/-751.920 $\chi^2$/NDF:26.3/15

+ sign 2403.729+/-612.493 $\chi^2$/NDF: 37.3/32

All: -77.380+/-432.678 $\chi^2$/NDF: 106.3/67

- sign -2548.890+/-611.307 $\chi^2$/NDF: 36.3/34

# dit_asym_atr1_rms vs Slug




Right In: 2823.448+/-0.762 $\chi^2$/NDF: 743916.1/15

Left Out: 2730.401+/-0.526 $\chi^2$/NDF:1280.9/16

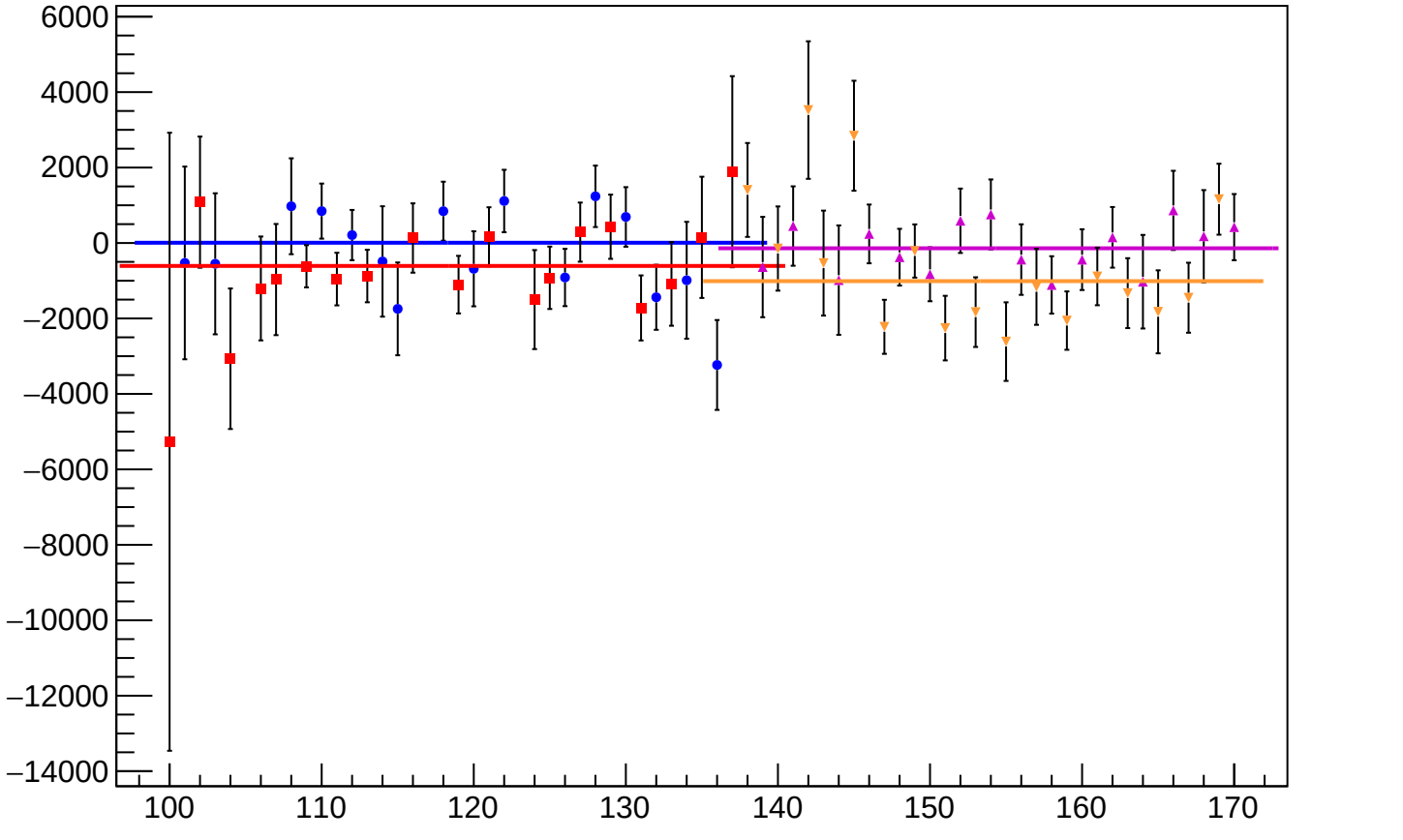
Right Out: 2813.821+/-0.742 $\chi^2$/NDF: 200511.9/18

Left In: 2734.025+/-0.532 $\chi^2$/NDF:2520.4/15

+ sign 2760.484+/-0.433 $\chi^2$/NDF: 755295.2/32

All: 2760.782+/-0.306 $\chi^2$/NDF: 965965.0/67

- sign 2761.079+/-0.432 $\chi^2$/NDF: 210668.8/34




Right In: 7.048+/-237.455 $\chi^2$/NDF: 22.8/15

Left Out: -1010.506+/-230.542 $\chi^2$/NDF:35.2/16

Right Out: -607.647+/-217.093 $\chi^2$/NDF: 12.2/18

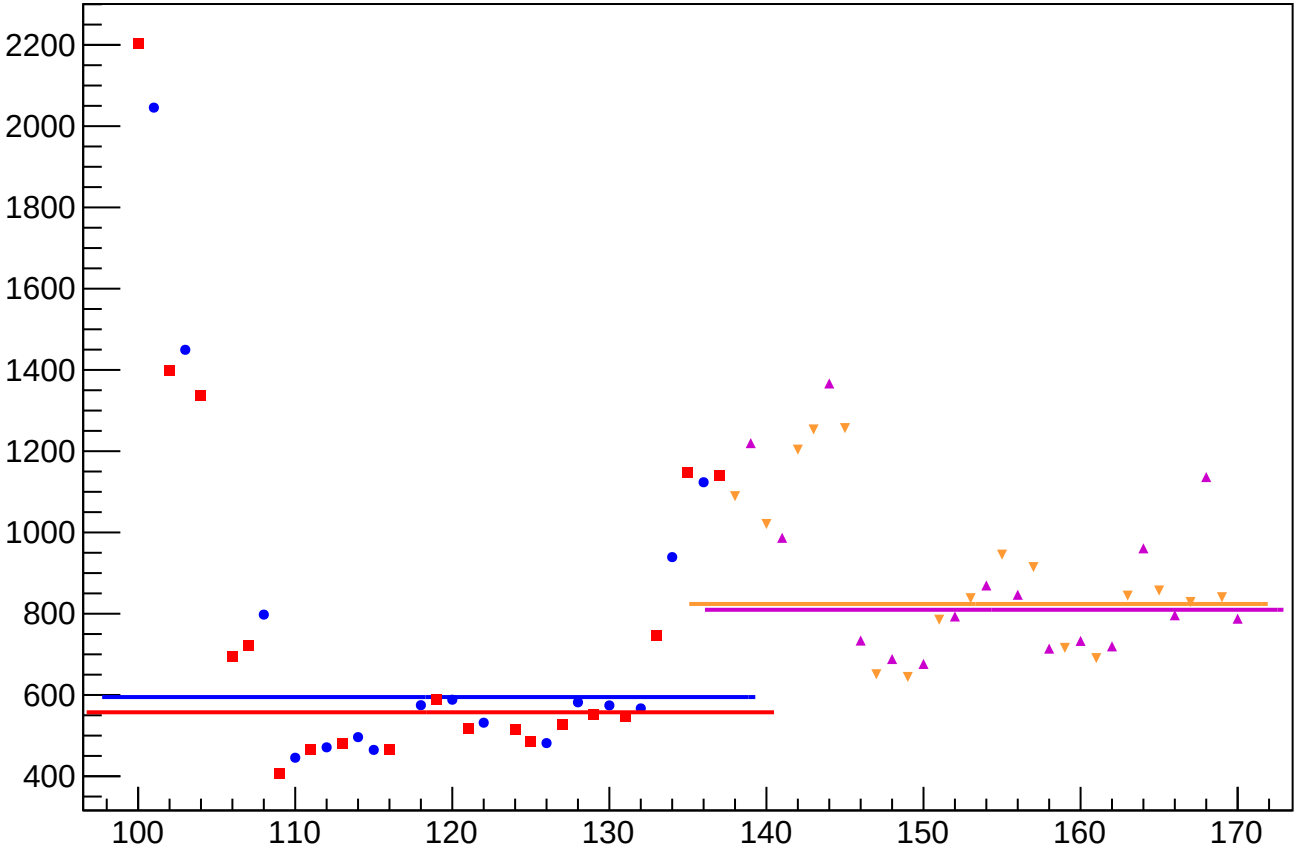
Left In: -139.935+/-227.391 $\chi^2$/NDF:7.6/15

+ sign -516.756+/-165.408 $\chi^2$/NDF: 67.4/32

All: -447.255+/-113.881 $\chi^2$/NDF: 89.8/67

- sign -384.621+/-157.023 $\chi^2$/NDF: 22.0/34

# asym_atr1_dit_correction_rms vs Slug




Right In: 594.858+/-0.168 $\chi^2$/NDF: 1852655.3/15

Left Out: 824.030+/-0.163 $\chi^2$/NDF:1005050.6/16

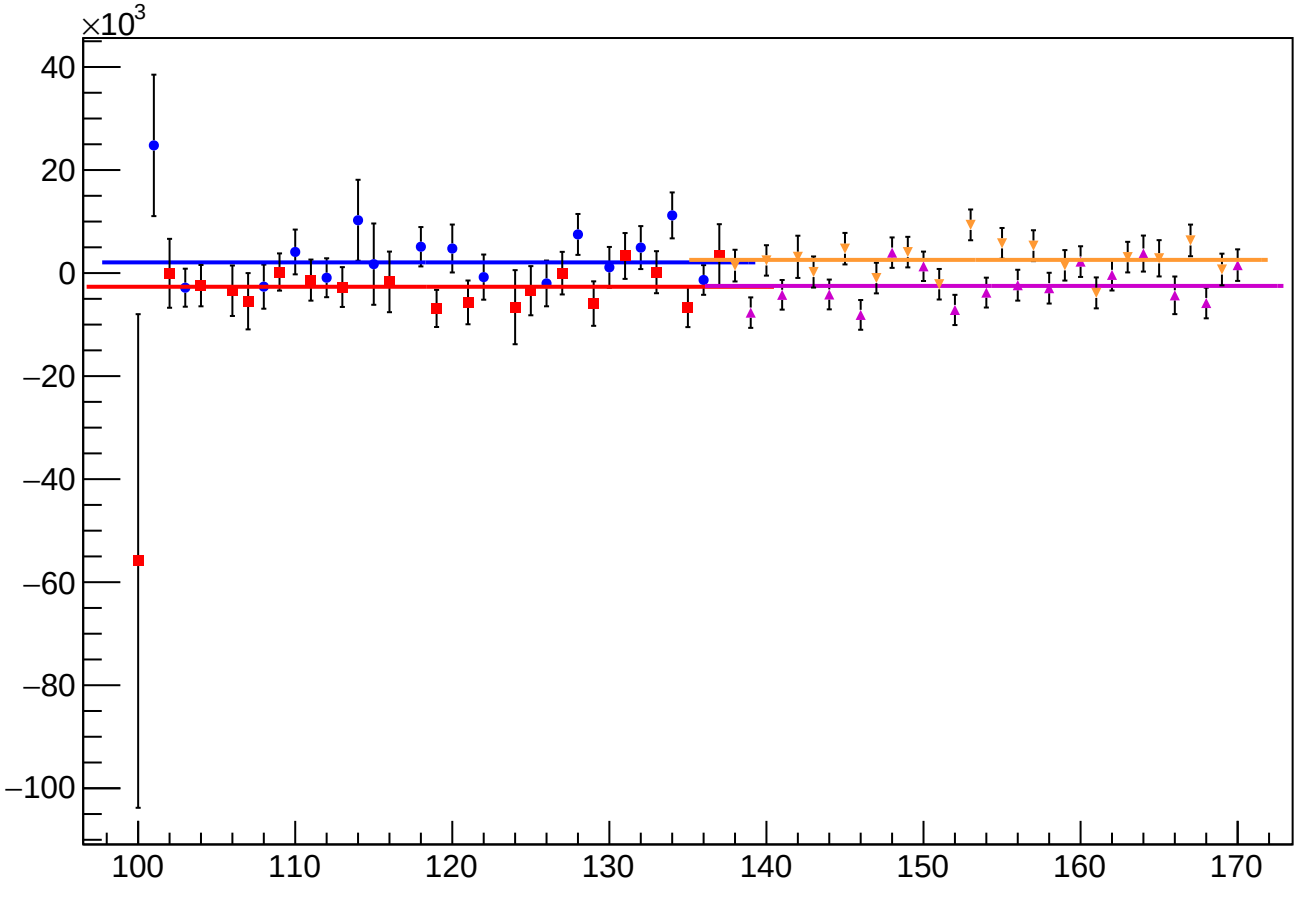
Right Out: 557.397+/-0.154 $\chi^2$/NDF: 1631309.6/18

Left In: 809.679+/-0.161 $\chi^2$/NDF:943178.6/15

+ sign 712.828+/-0.117 $\chi^2$/NDF: 3816671.2/32

All: 694.349+/-0.081 $\chi^2$/NDF: 7726523.4/67

- sign 677.696+/-0.111 $\chi^2$/NDF: 3862394.9/34




Right In: 2074.766+/-1077.182 $\chi^2$/NDF: 17.9/15

Left Out: 2560.906+/-744.574 $\chi^2$/NDF:19.2/16

Right Out: -2657.300+/-1049.868 $\chi^2$/NDF: 9.9/18

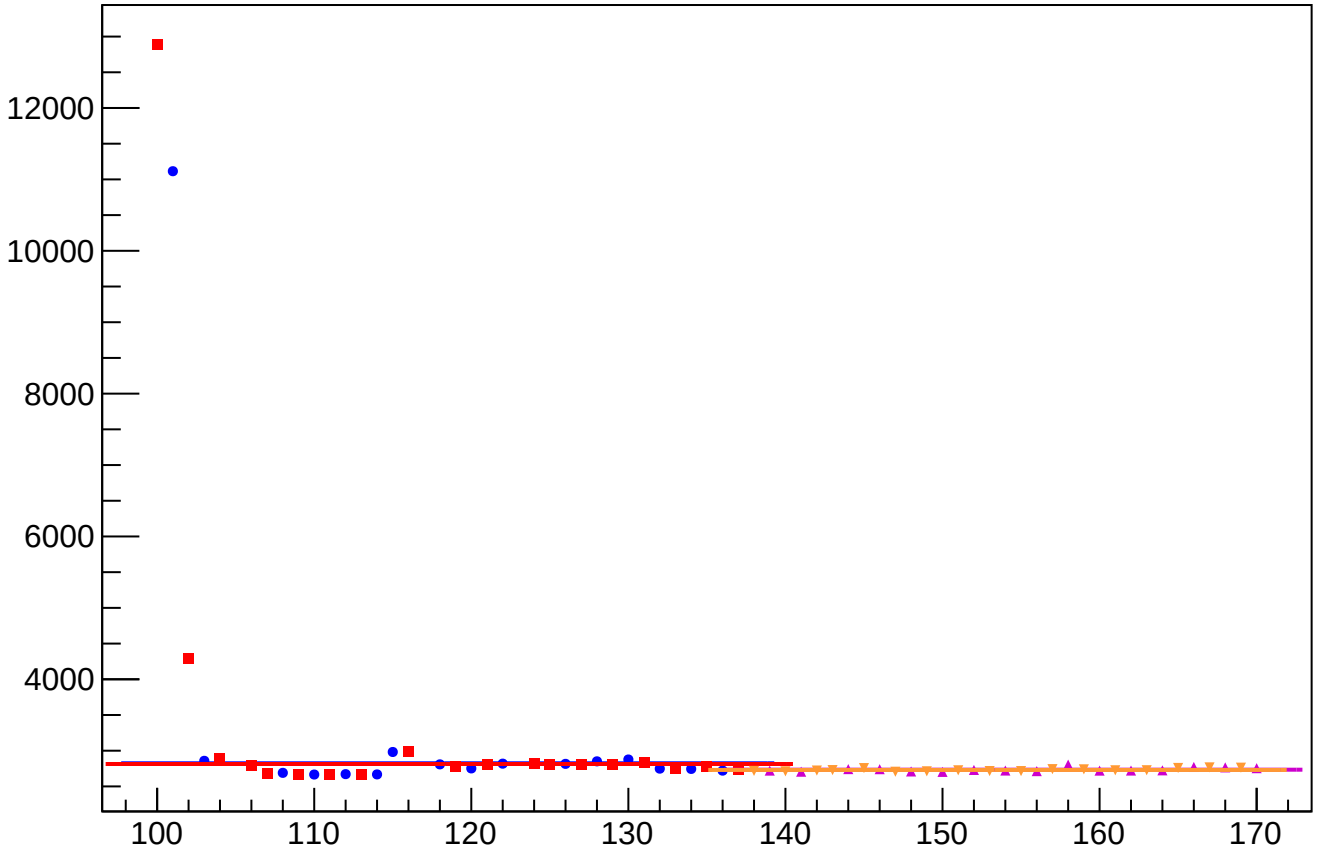
Left In: -2493.280+/-751.920 $\chi^2$/NDF:26.3/15

+ sign 2403.730+/-612.493 $\chi^2$/NDF: 37.3/32

All: -77.379+/-432.678 $\chi^2$/NDF: 106.3/67

- sign -2548.889+/-611.307 $\chi^2$/NDF: 36.3/34

# eigen_dit_asym_atr1_rms vs Slug




Right In: 2823.448+/-0.762 $\chi^2$/NDF: 743916.1/15

Left Out: 2730.401+/-0.526 $\chi^2$/NDF:1280.9/16

Right Out: 2813.821+/-0.742 $\chi^2$/NDF: 200511.7/18

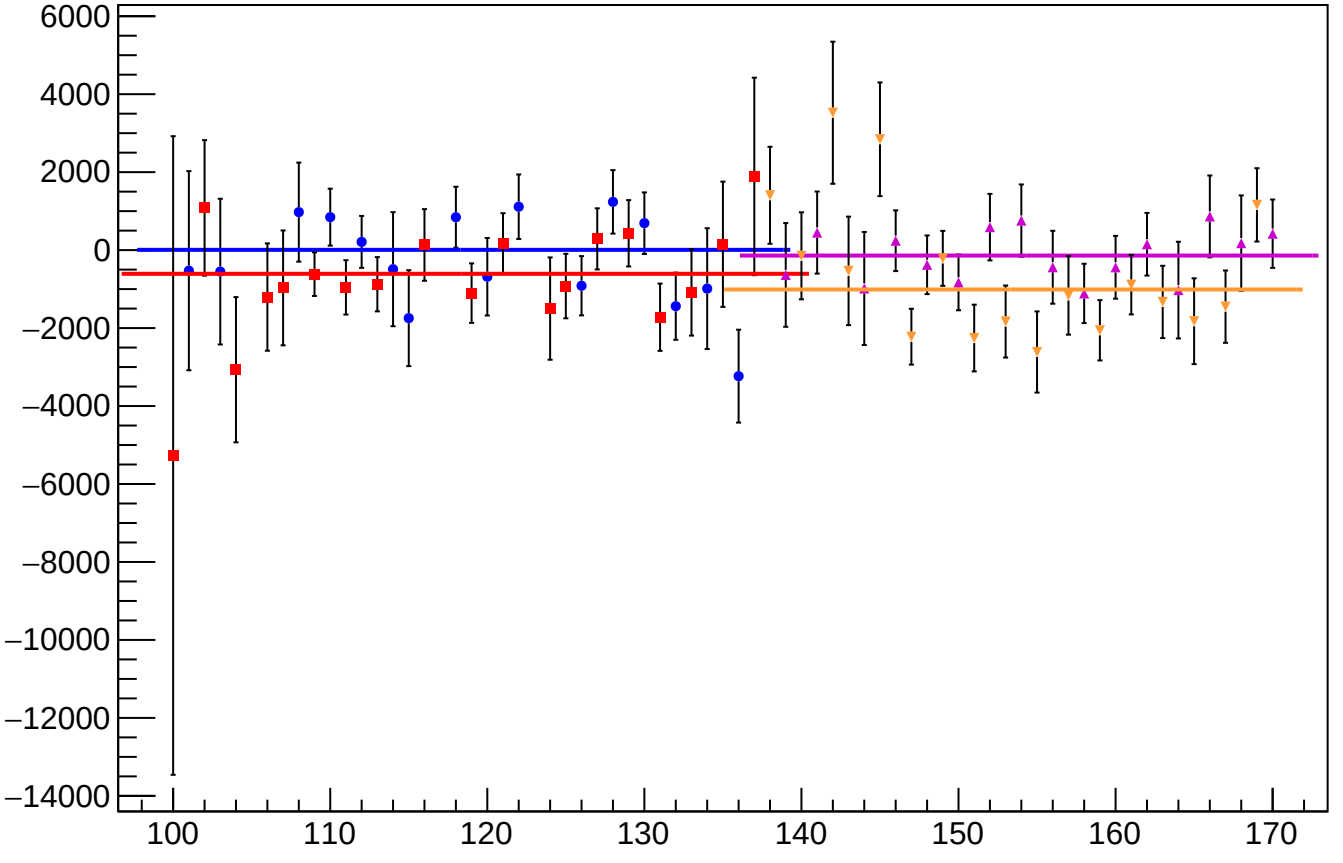
Left In: 2734.025+/-0.532 $\chi^2$/NDF:2520.4/15

+ sign 2760.484+/-0.433 $\chi^2$/NDF: 755295.2/32

All: 2760.782+/-0.306 $\chi^2$/NDF: 965964.7/67

- sign 2761.079+/-0.432 $\chi^2$/NDF: 210668.6/34

# asym_atr1_eigen_dit_correction_mean vs Slug




Right In: 7.049+/-237.455 $\chi^2$/NDF: 22.8/15

Left Out: -1010.507+/-230.542 $\chi^2$/NDF:35.2/16

Right Out: -607.647+/-217.094 $\chi^2$/NDF: 12.2/18

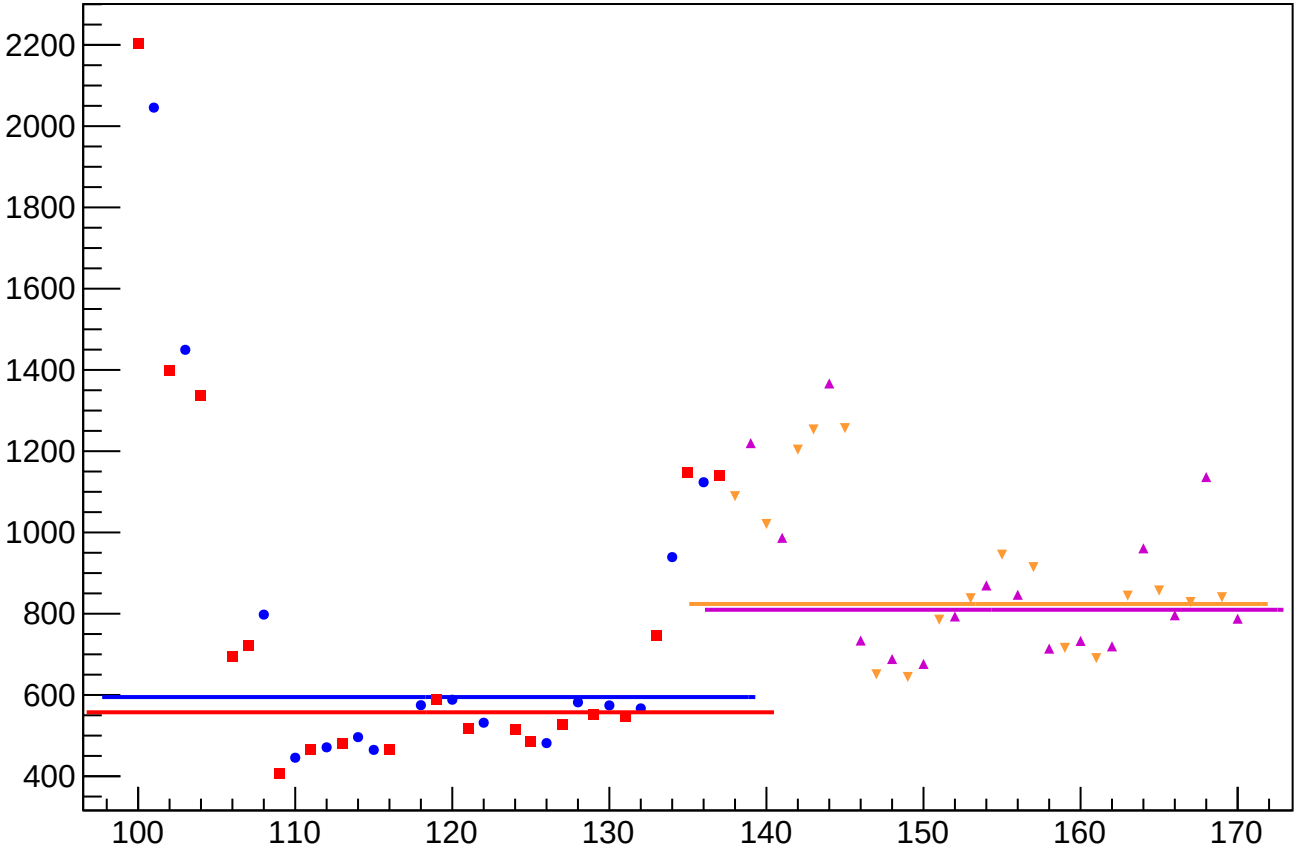
Left In: -139.935+/-227.391 $\chi^2$/NDF:7.6/15

+ sign -516.757+/-165.408 $\chi^2$/NDF: 67.4/32

All: -447.255+/-113.881 $\chi^2$/NDF: 89.8/67

- sign -384.621+/-157.023 $\chi^2$/NDF: 22.0/34

# asym_atr1_eigen_dit_correction_rms vs Slug




Right In: 594.858+/-0.168 $\chi^2$/NDF: 1852649.9/15

Left Out: 824.030+/-0.163 $\chi^2$/NDF:1005052.8/16

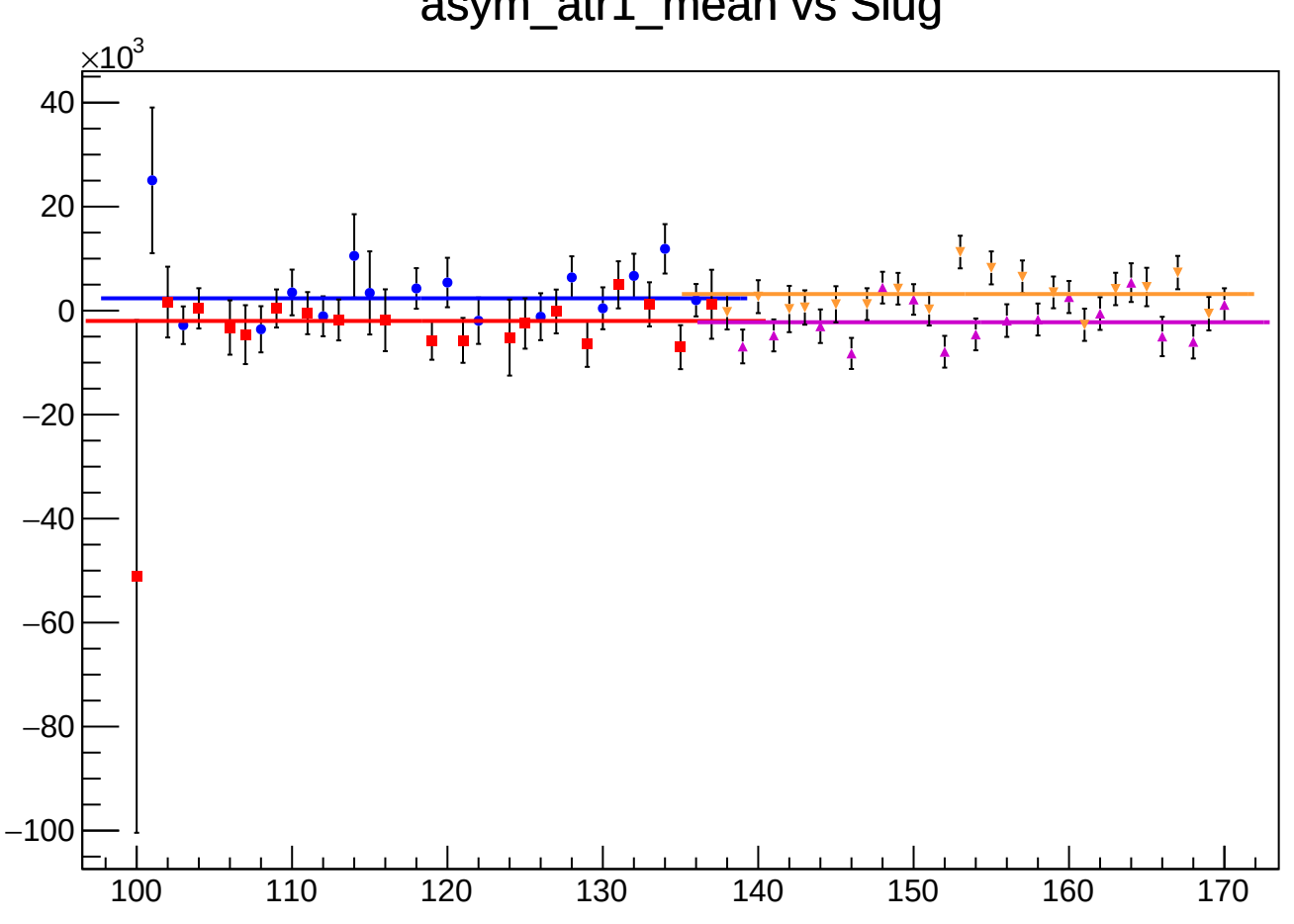
Right Out: 557.397+/-0.154 $\chi^2$/NDF: 1631307.0/18

Left In: 809.679+/-0.161 $\chi^2$/NDF:943181.9/15

+ sign 712.829+/-0.117 $\chi^2$/NDF: 3816664.9/32

All: 694.349+/-0.081 $\chi^2$/NDF: 7726516.5/67

- sign 677.696+/-0.111 $\chi^2$/NDF: 3862393.7/34




Right In: 2367.173+/-1106.203 $\chi^2$/NDF: 16.8/15

Left Out: 3186.349+/-786.172 $\chi^2$/NDF:21.1/16

Right Out: -1987.039+/-1075.310 $\chi^2$/NDF: 10.3/18

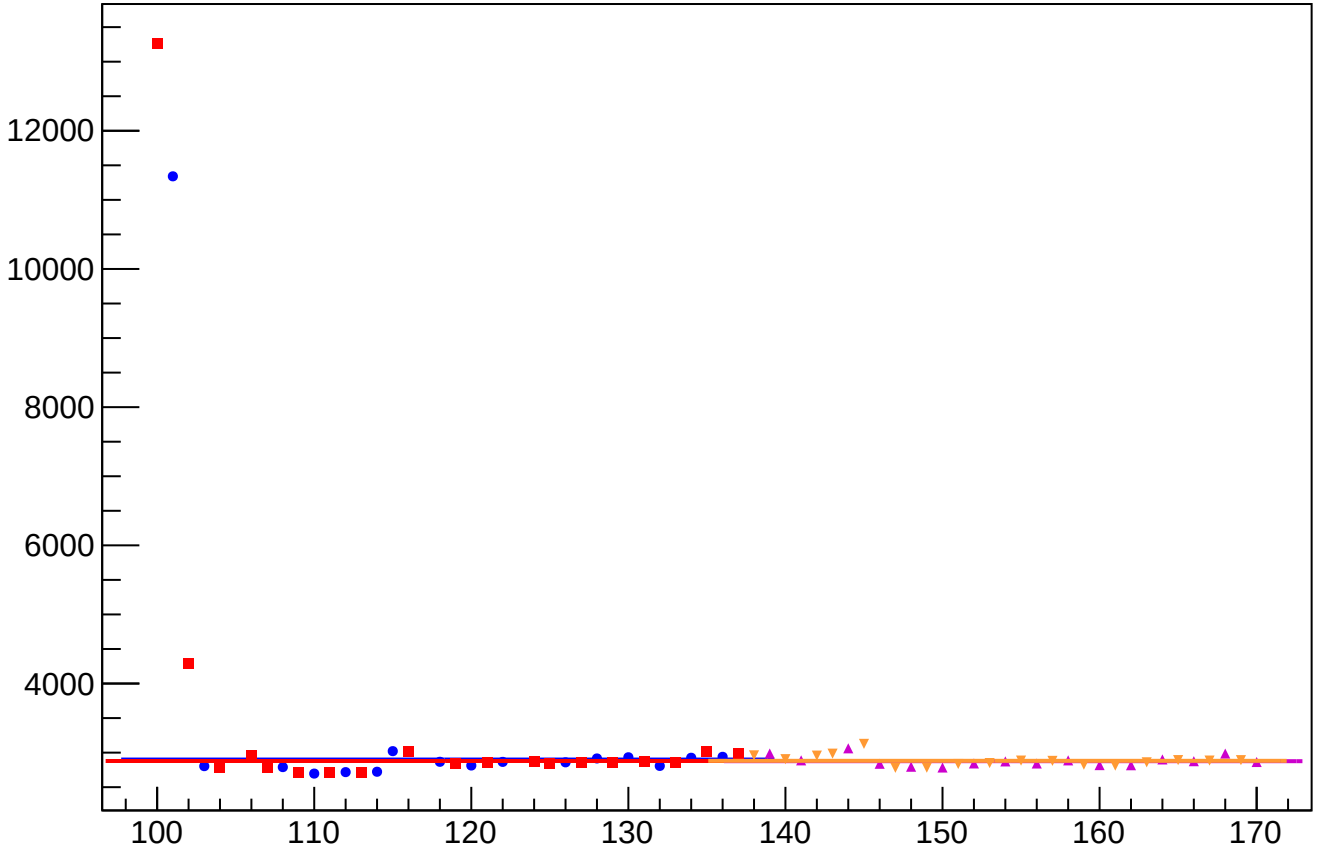
Left In: -2234.098+/-791.292 $\chi^2$/NDF:27.8/15

+ sign 2911.445+/-640.821 $\chi^2$/NDF: 38.3/32

All: 368.247+/-451.889 $\chi^2$/NDF: 107.7/67

- sign -2147.310+/-637.329 $\chi^2$/NDF: 38.1/34

# asym_atr1_rms vs Slug




Right In: 2899.827+/-0.782 $\chi^2$/NDF: 741818.2/15

Left Out: 2881.442+/-0.556 $\chi^2$/NDF:20553.2/16

Right Out: 2878.957+/-0.760 $\chi^2$/NDF: 193282.4/18

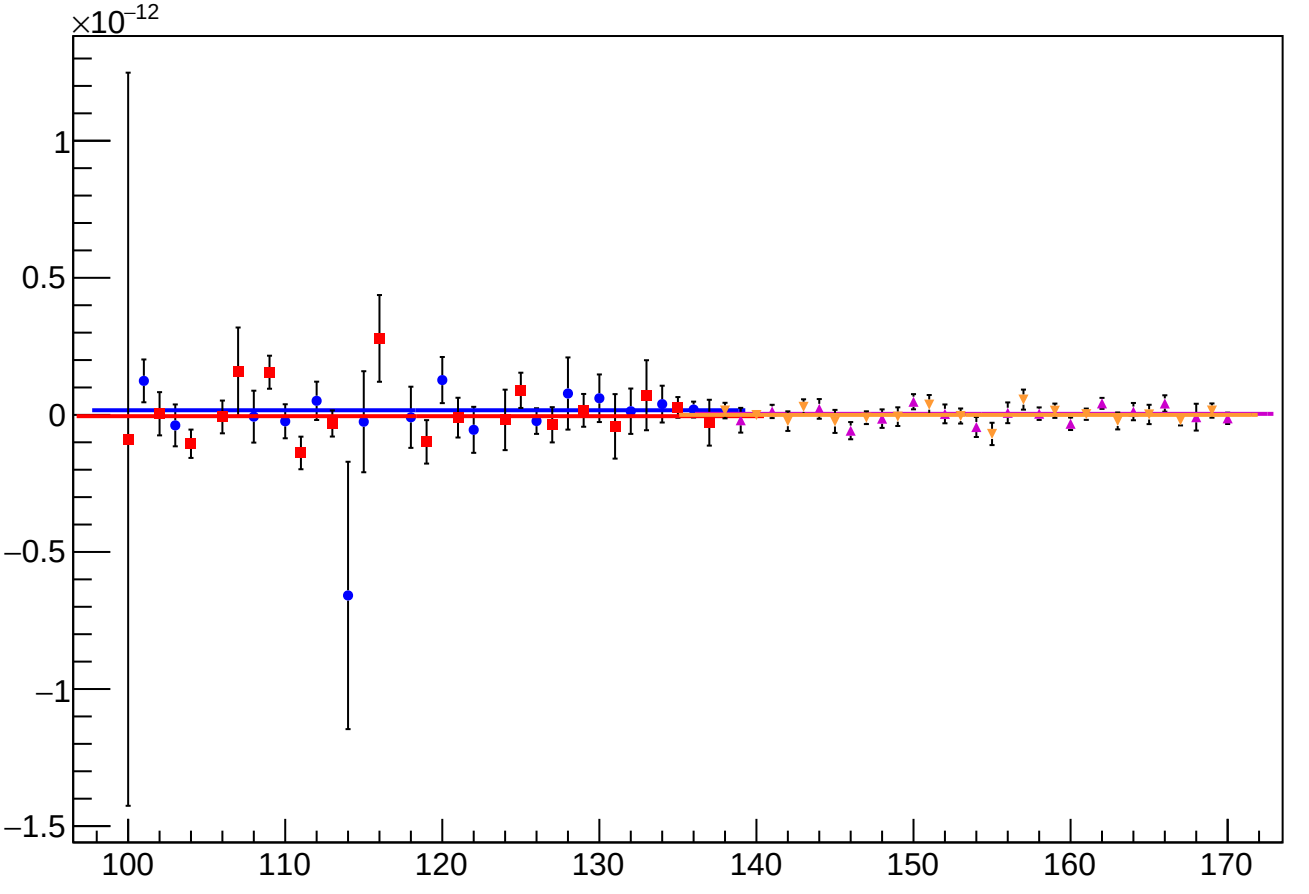
Left In: 2876.151+/-0.560 $\chi^2$/NDF:16980.3/15

+ sign 2887.612+/-0.453 $\chi^2$/NDF: 762738.4/32

All: 2882.346+/-0.320 $\chi^2$/NDF: 973278.7/67

- sign 2877.137+/-0.451 $\chi^2$/NDF: 210271.6/34

# asym_atr1_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 8.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11.1/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 25.7/18

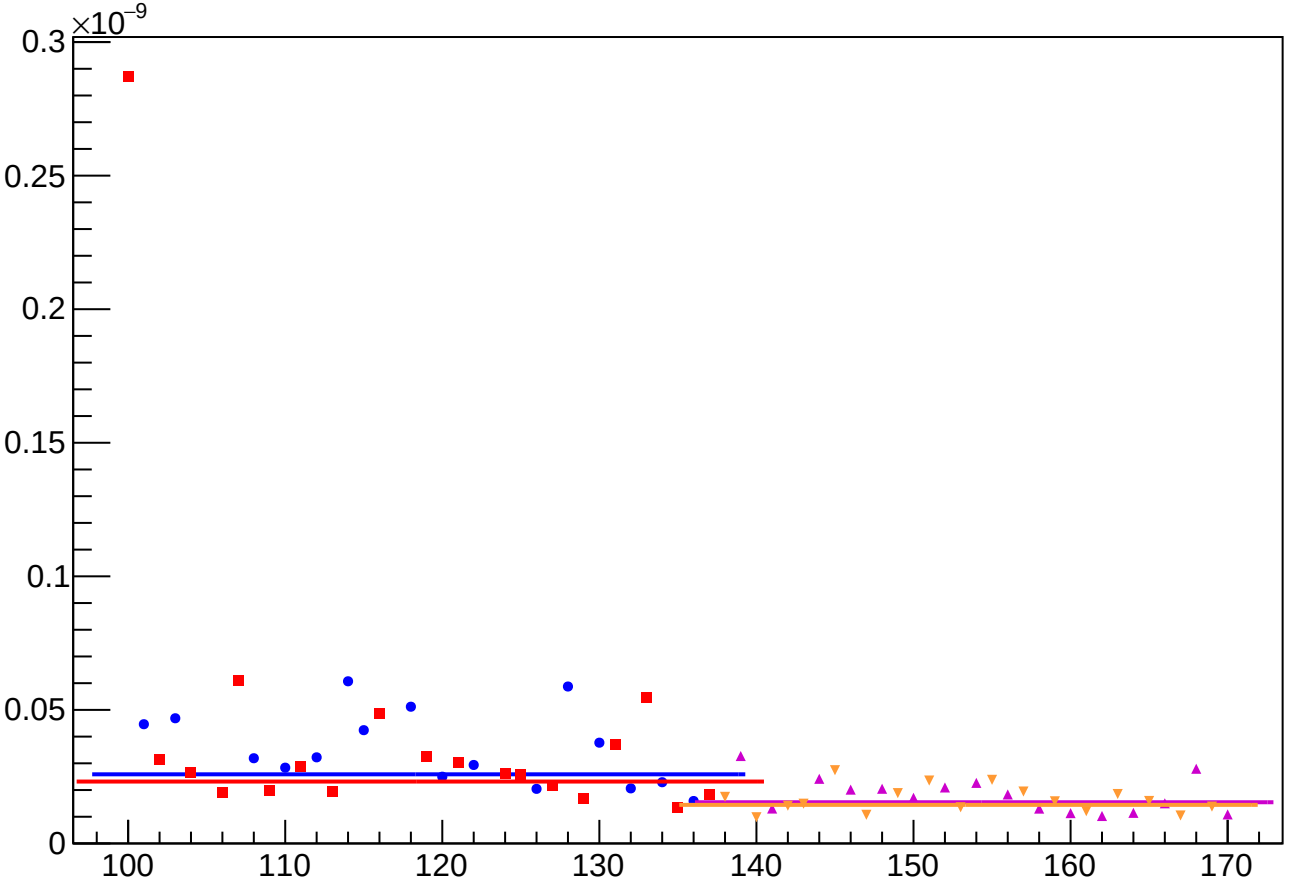
Left In: 0.000+/-0.000 $\chi^2$/NDF:17.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 20.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 64.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 43.5/34

# asym_atr1_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 865479.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:862861.7/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 688853.9/18

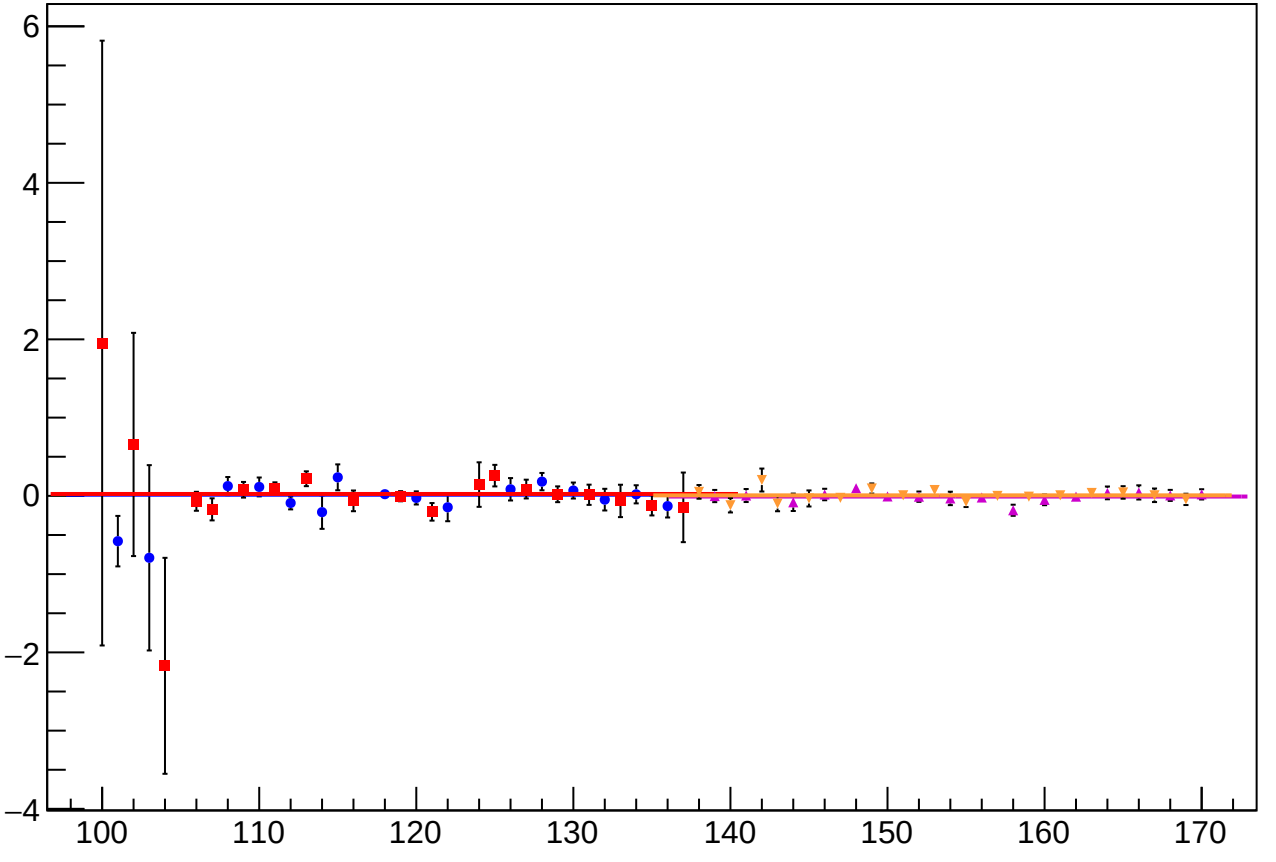
Left In: 0.000+/-0.000 $\chi^2$/NDF:1150178.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2525327.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 4784347.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 2243457.9/34

# asym_atr1_dit_vs_cor_diff_mean vs Slug




Right In: 0.015+/-0.028 $\chi^2$/NDF: 15.0/15

Left Out: 0.007+/-0.017 $\chi^2$/NDF:11.3/16

Right Out: 0.024+/-0.028 $\chi^2$/NDF: 20.8/18

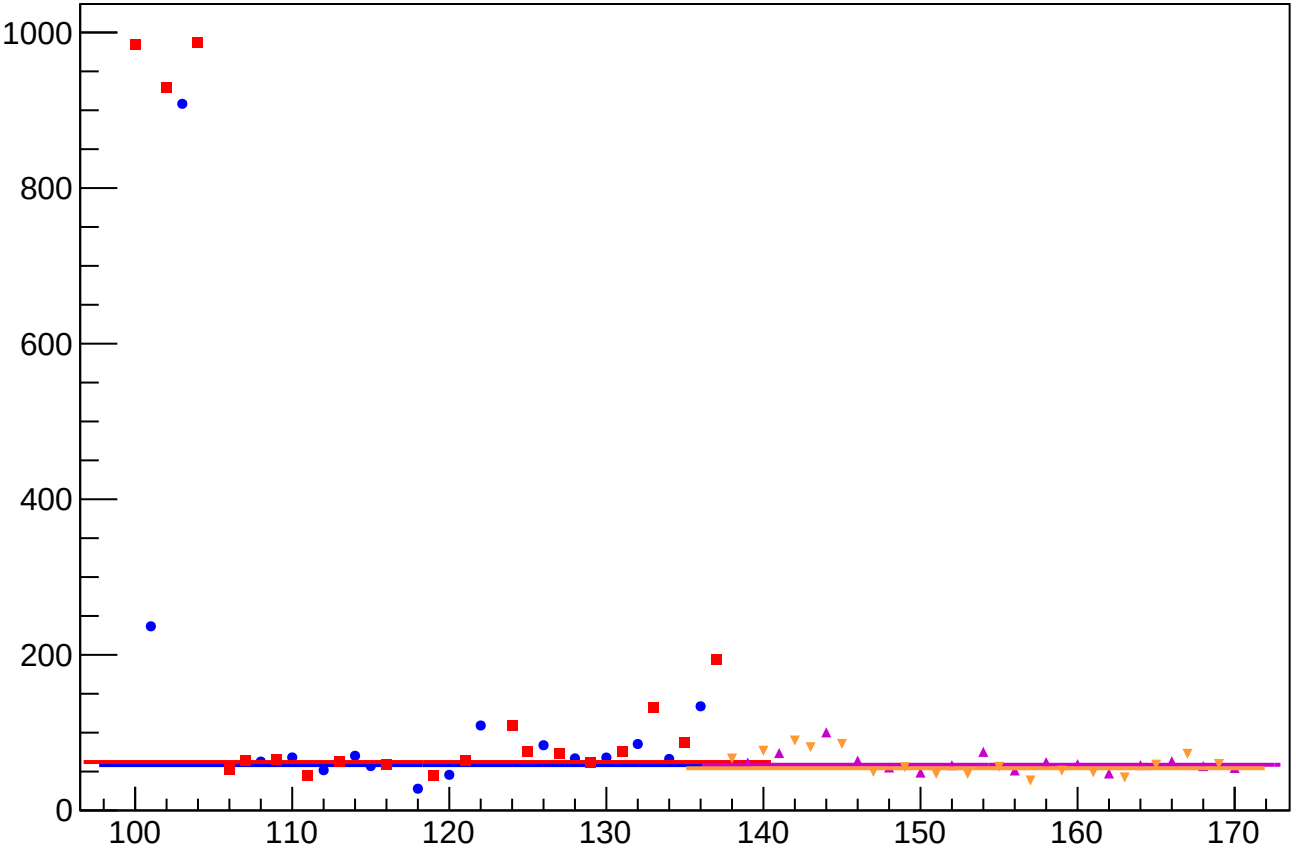
Left In: -0.009+/-0.018 $\chi^2$/NDF:10.9/15

+ sign 0.009+/-0.014 $\chi^2$/NDF: 26.4/32

All: 0.005+/-0.010 $\chi^2$/NDF: 59.2/67

- sign 0.001+/-0.015 $\chi^2$/NDF: 32.6/34

# asym_atr1_dit_vs_cor_diff_rms vs Slug




Right In: 58.313+/-0.020 $\chi^2$/NDF: 3260404.3/15

Left Out: 54.238+/-0.012 $\chi^2$/NDF:1057430.3/16

Right Out: 62.235+/-0.020 $\chi^2$/NDF: 2627030.1/18

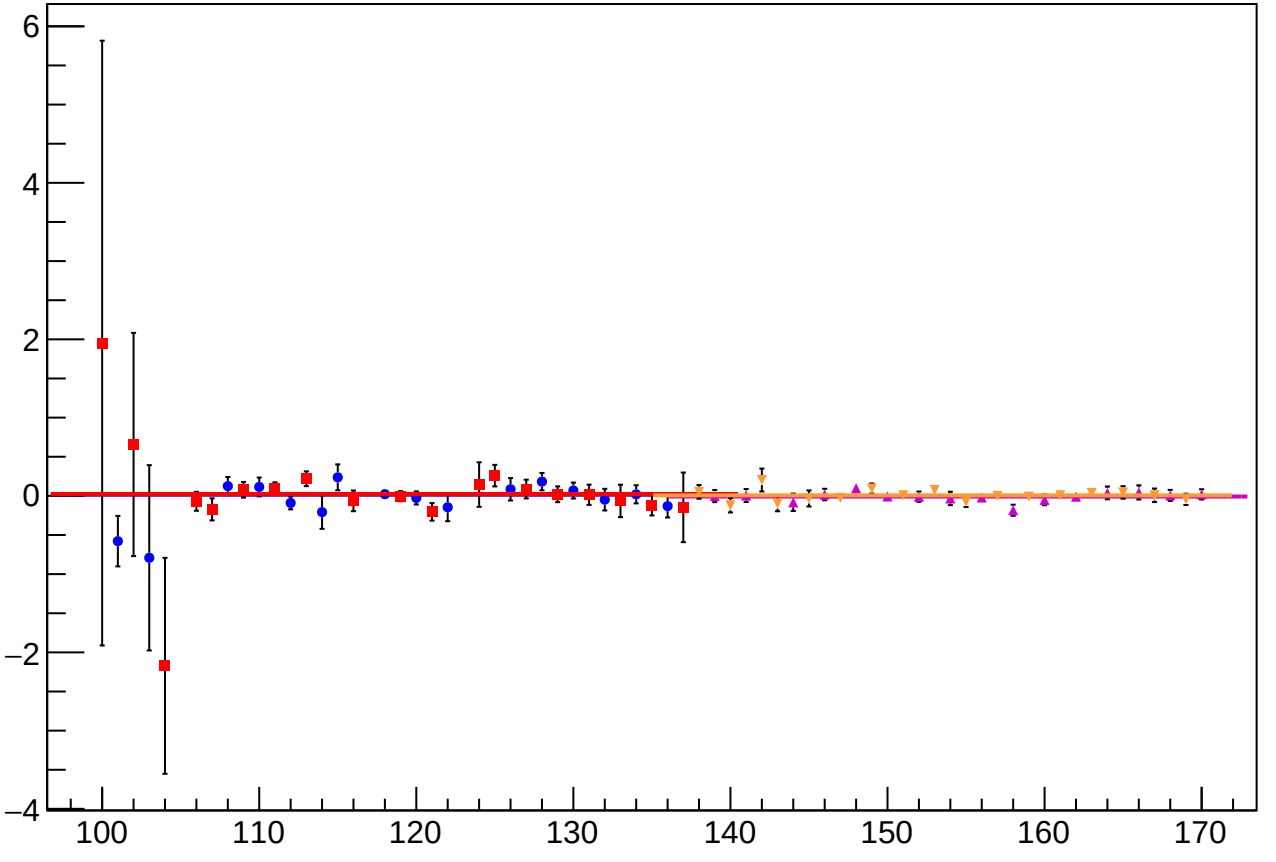
Left In: 58.720+/-0.013 $\chi^2$/NDF:624563.3/15

+ sign 55.334+/-0.010 $\chi^2$/NDF: 4349176.1/32

All: 57.447+/-0.007 $\chi^2$/NDF: 7712355.9/67

- sign 59.723+/-0.011 $\chi^2$/NDF: 3274076.9/34

# asym_atr1_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.015+/-0.028 $\chi^2$/NDF: 15.0/15

Left Out: 0.007+/-0.017 $\chi^2$/NDF:11.3/16

Right Out: 0.024+/-0.028 $\chi^2$/NDF: 20.8/18

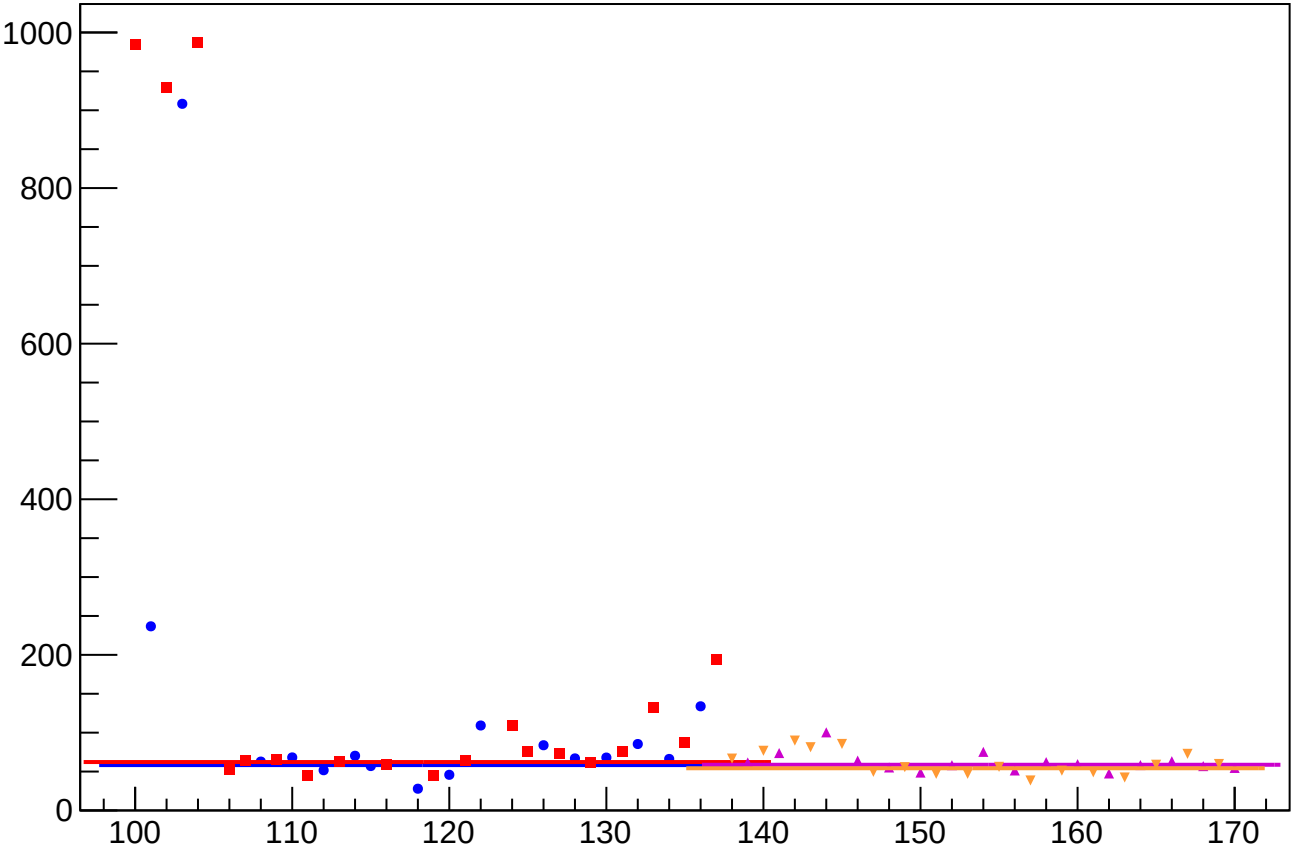
Left In: -0.009+/-0.018 $\chi^2$/NDF:10.9/15

+ sign 0.009+/-0.014 $\chi^2$/NDF: 26.4/32

All: 0.005+/-0.010 $\chi^2$/NDF: 59.2/67

- sign 0.001+/-0.015 $\chi^2$/NDF: 32.6/34

# asym_atr1_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 58.313+/-0.020 $\chi^2$/NDF: 3260404.3/15

Left Out: 54.238+/-0.012 $\chi^2$/NDF:1057430.3/16

Right Out: 62.235+/-0.020 $\chi^2$/NDF: 2627030.1/18

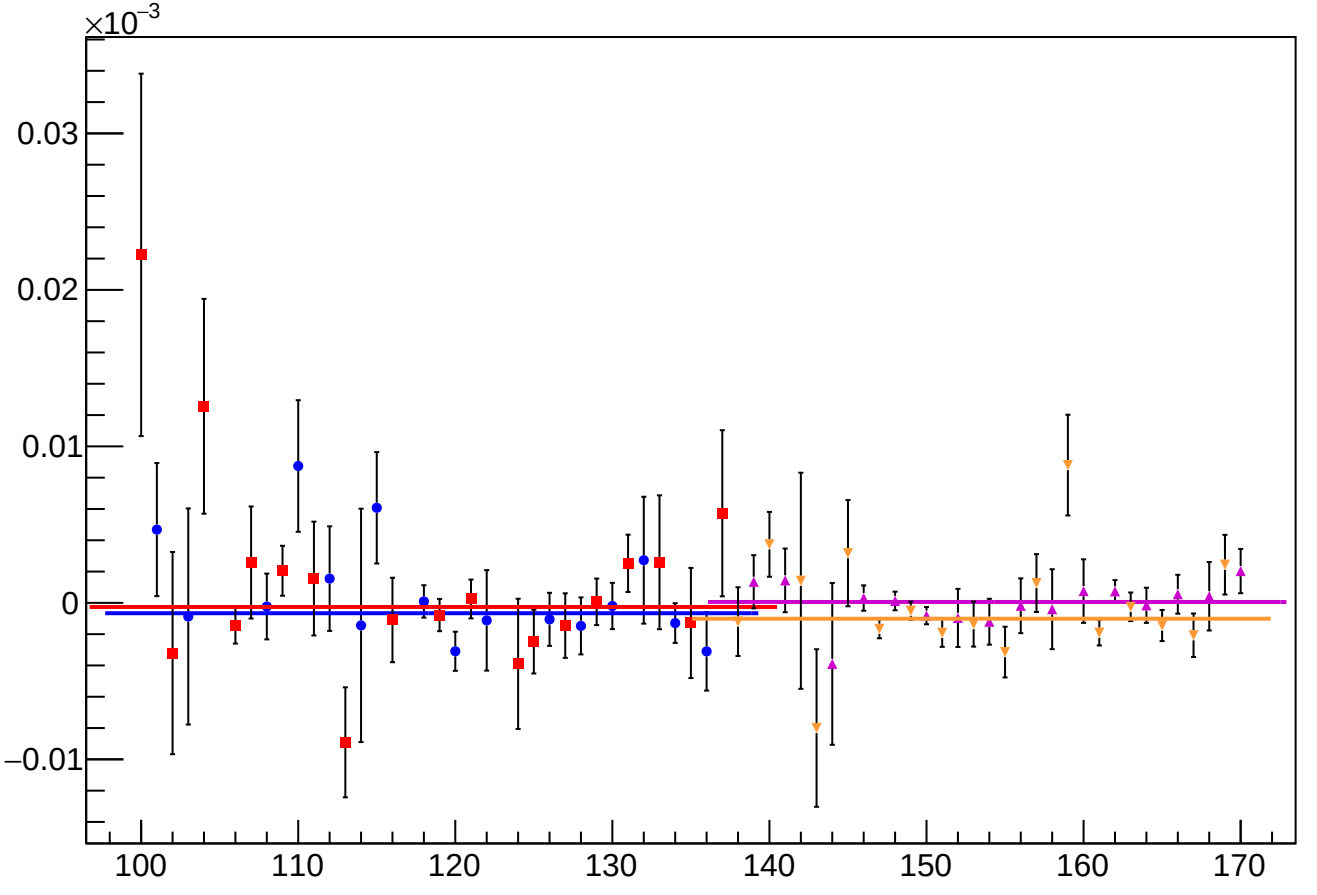
Left In: 58.720+/-0.013 $\chi^2$/NDF:624563.3/15

+ sign 55.334+/-0.010 $\chi^2$/NDF: 4349176.1/32

All: 57.447+/-0.007 $\chi^2$/NDF: 7712355.9/67

- sign 59.723+/-0.011 $\chi^2$/NDF: 3274076.9/34

# asym_atr1_eigen_dit_vs_dit_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 17.2/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:30.3/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 24.6/18

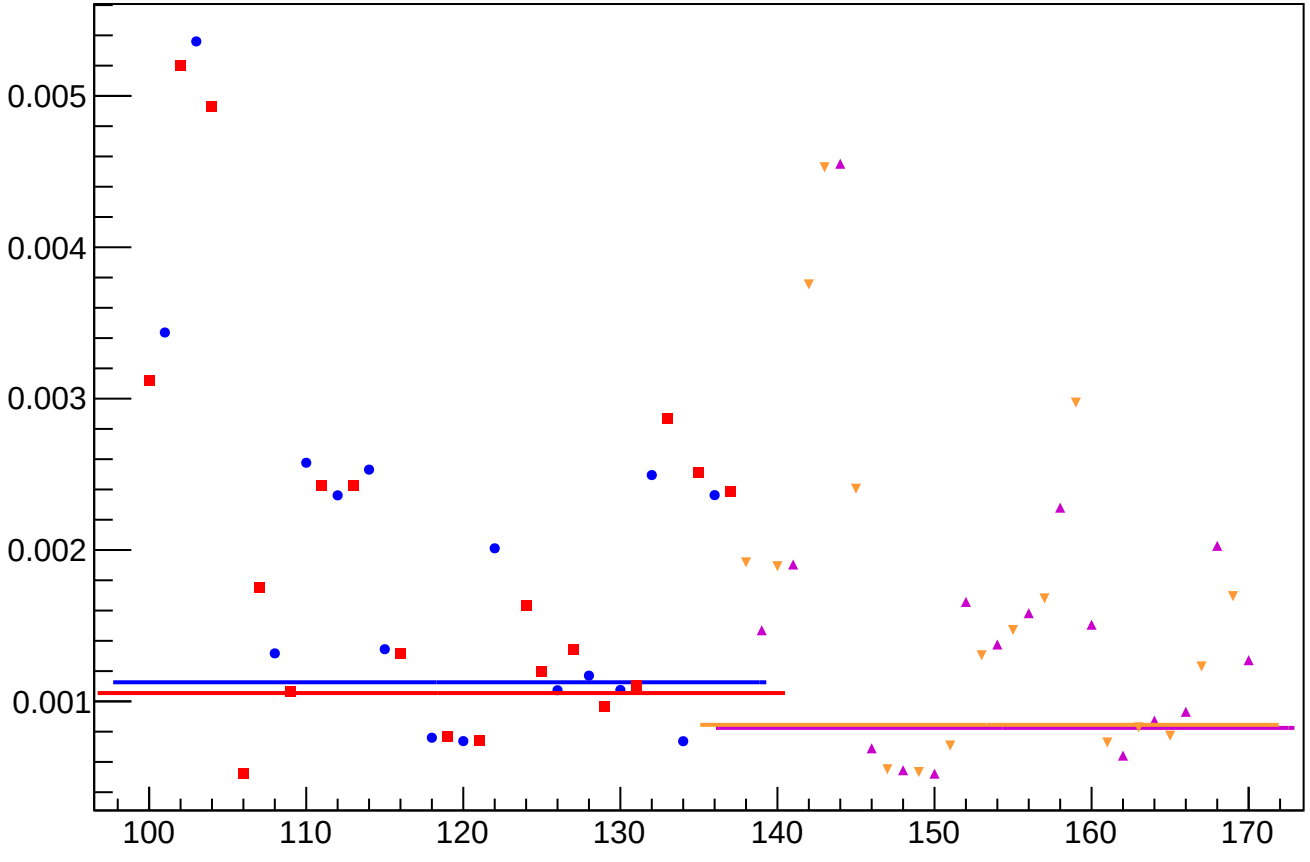
Left In: 0.000+/-0.000 $\chi^2$/NDF:8.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 47.9/32

All: -0.000+/-0.000 $\chi^2$/NDF: 88.7/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 33.4/34

# asym_atr1_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.001+/-0.000 $\chi^2$/NDF: 3453081.7/15

Left Out: 0.001+/-0.000 $\chi^2$/NDF:6313885.6/16

Right Out: 0.001+/-0.000 $\chi^2$/NDF: 3848500.2/18

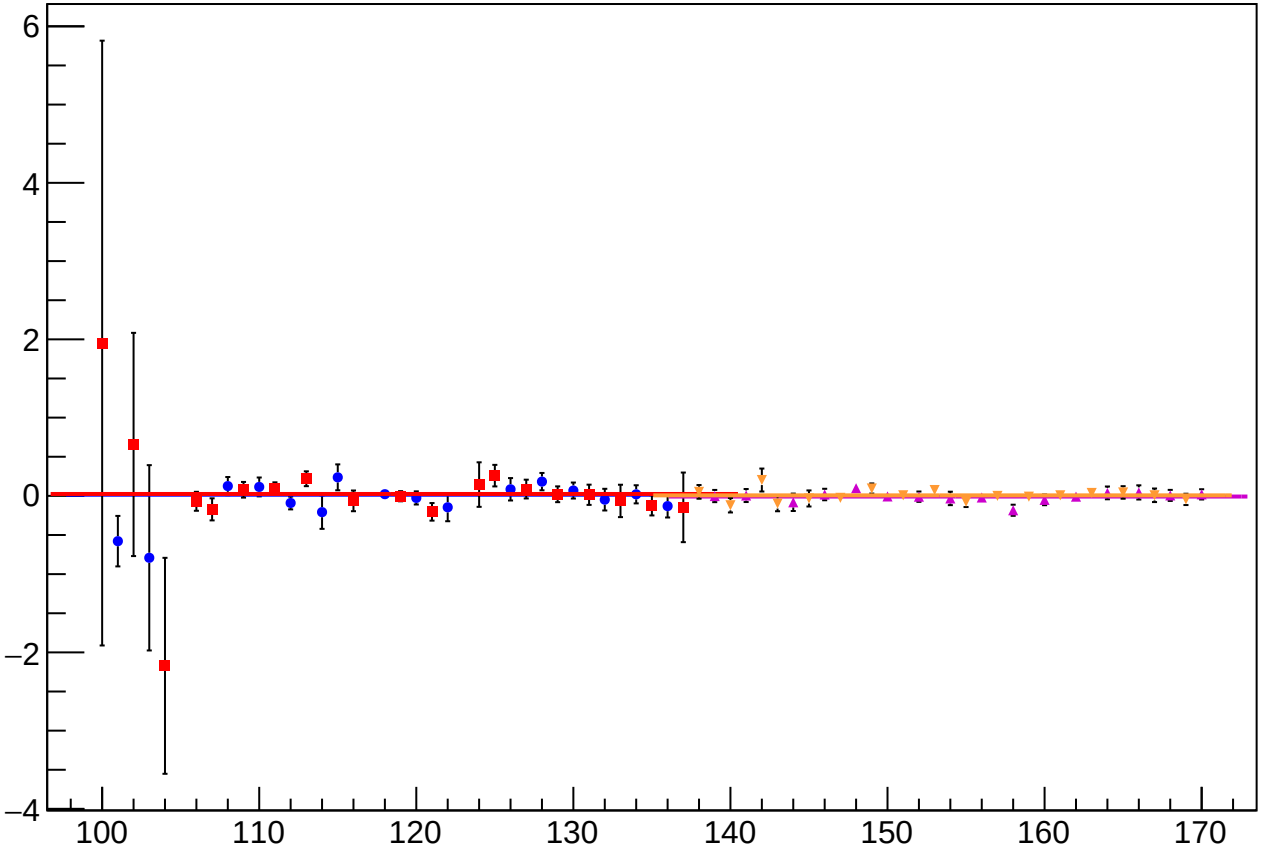
Left In: 0.001+/-0.000 $\chi^2$/NDF:5868200.6/15

+ sign 0.001+/-0.000 $\chi^2$/NDF: 10267562.4/32

All: 0.001+/-0.000 $\chi^2$/NDF: 20367369.1/67

- sign 0.001+/-0.000 $\chi^2$/NDF: 10083967.0/34

# asym_atr1_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.015+/-0.028 $\chi^2$/NDF: 15.0/15

Left Out: 0.007+/-0.017 $\chi^2$/NDF:11.3/16

Right Out: 0.024+/-0.028 $\chi^2$/NDF: 20.8/18

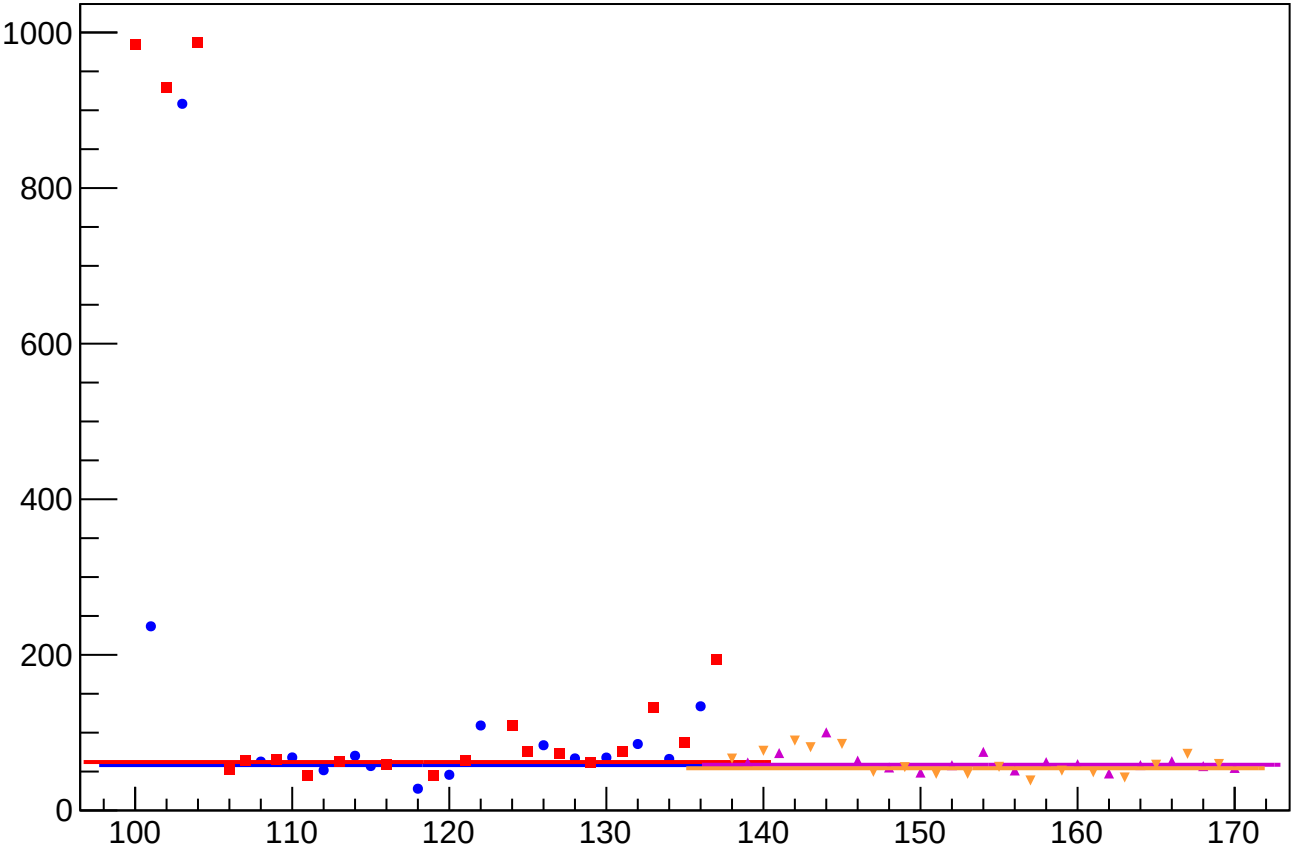
Left In: -0.009+/-0.018 $\chi^2$/NDF:10.9/15

+ sign 0.009+/-0.014 $\chi^2$/NDF: 26.4/32

All: 0.005+/-0.010 $\chi^2$/NDF: 59.2/67

- sign 0.001+/-0.015 $\chi^2$/NDF: 32.6/34

# asym_atr1_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 58.312+/-0.020 $\chi^2$/NDF: 3260484.2/15

Left Out: 54.238+/-0.012 $\chi^2$/NDF:1057501.8/16

Right Out: 62.235+/-0.020 $\chi^2$/NDF: 2627022.3/18

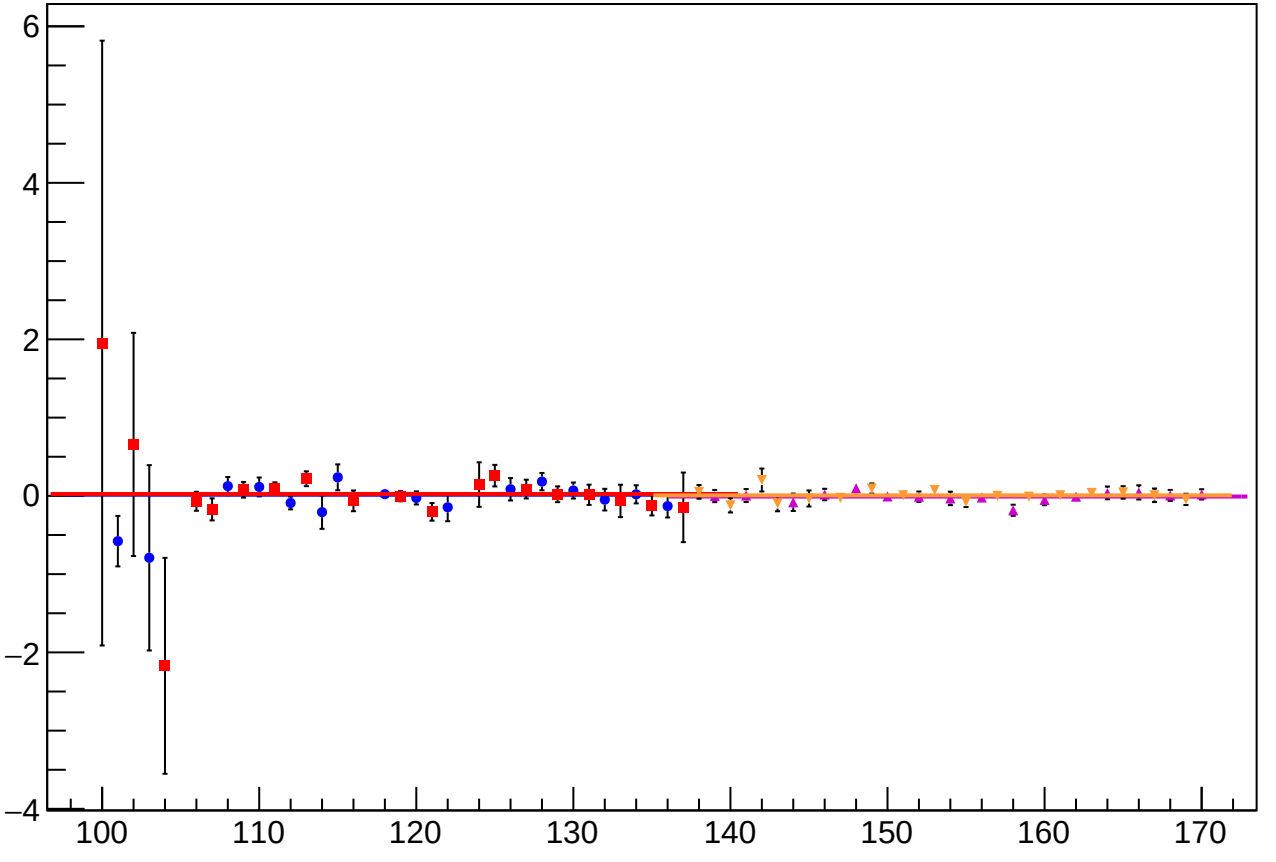
Left In: 58.720+/-0.013 $\chi^2$/NDF:624586.3/15

+ sign 55.333+/-0.010 $\chi^2$/NDF: 4349324.2/32

All: 57.447+/-0.007 $\chi^2$/NDF: 7712543.0/67

- sign 59.723+/-0.011 $\chi^2$/NDF: 3274089.4/34

# asym_atr1_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.015+/-0.028 $\chi^2$/NDF: 15.0/15

Left Out: 0.007+/-0.017 $\chi^2$/NDF:11.3/16

Right Out: 0.024+/-0.028 $\chi^2$/NDF: 20.8/18

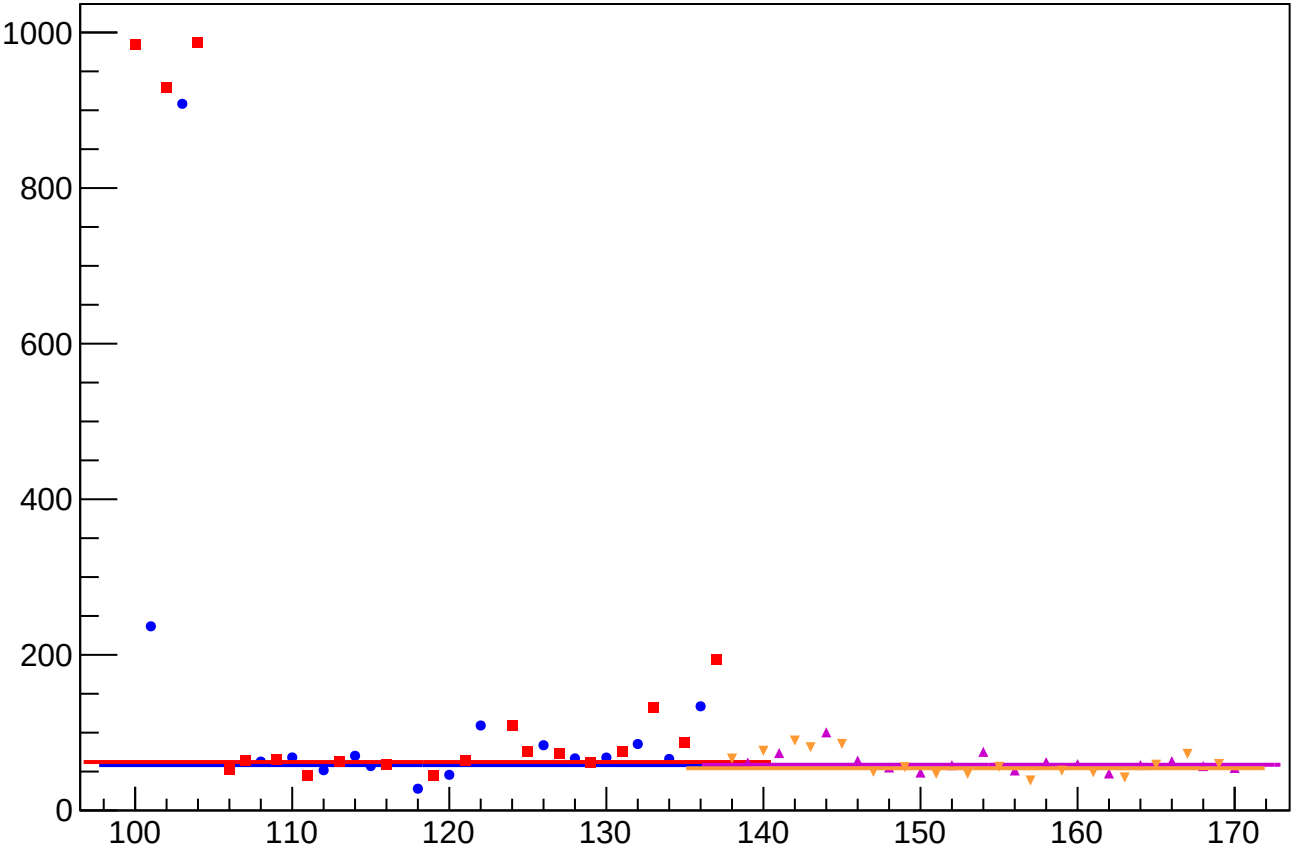
Left In: -0.009+/-0.018 $\chi^2$/NDF:10.9/15

+ sign 0.009+/-0.014 $\chi^2$/NDF: 26.4/32

All: 0.005+/-0.010 $\chi^2$/NDF: 59.2/67

- sign 0.001+/-0.015 $\chi^2$/NDF: 32.6/34

# asym_atr1_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 58.312+/-0.020 $\chi^2$/NDF: 3260484.2/15

Left Out: 54.238+/-0.012 $\chi^2$/NDF:1057501.8/16

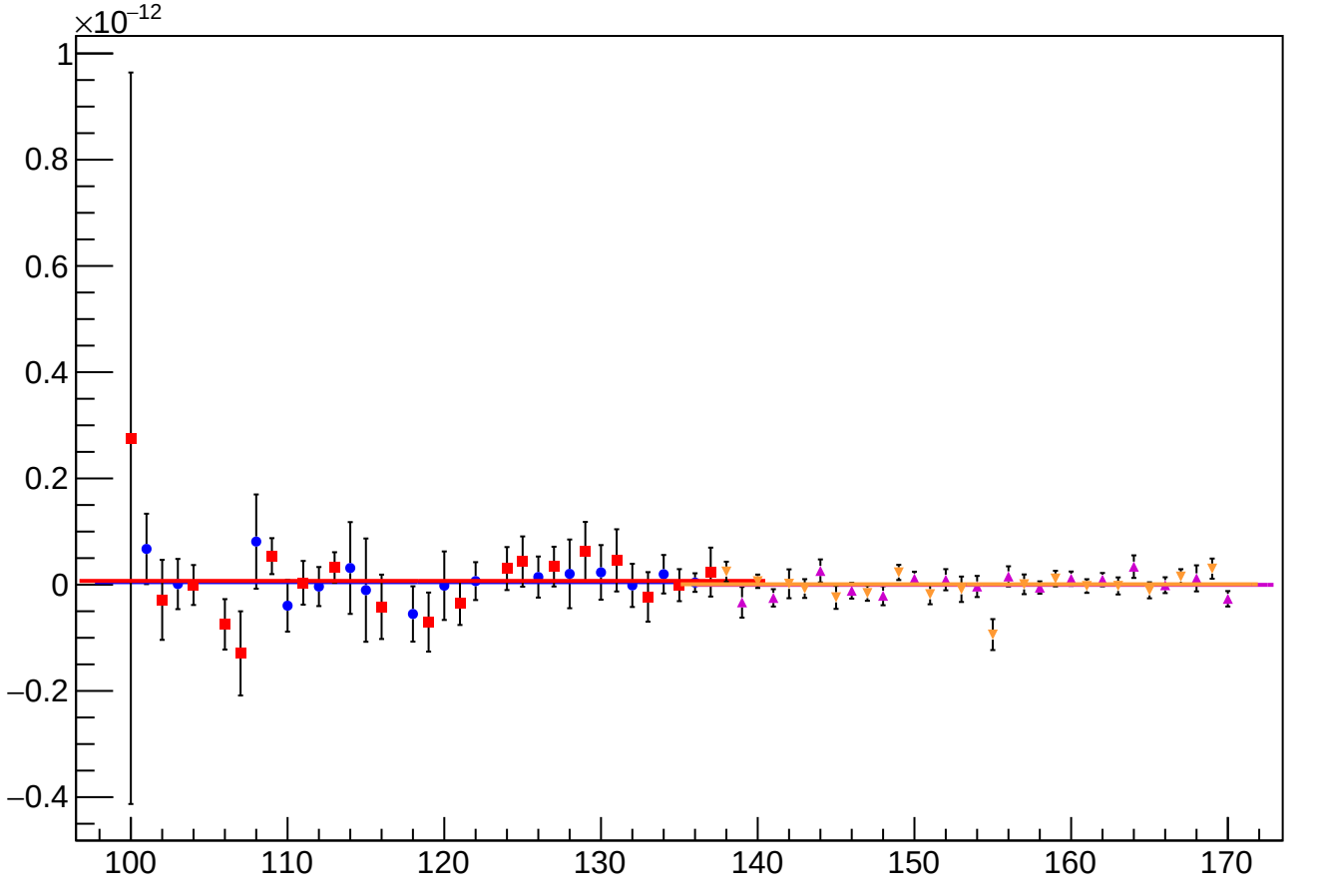
Right Out: 62.235+/-0.020 $\chi^2$/NDF: 2627022.3/18

Left In: 58.720+/-0.013 $\chi^2$/NDF:624586.3/15

+ sign 55.333+/-0.010 $\chi^2$/NDF: 4349324.2/32

All: 57.447+/-0.007 $\chi^2$/NDF: 7712543.0/67

- sign 59.723+/-0.011 $\chi^2$/NDF: 3274089.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 4.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:23.4/16

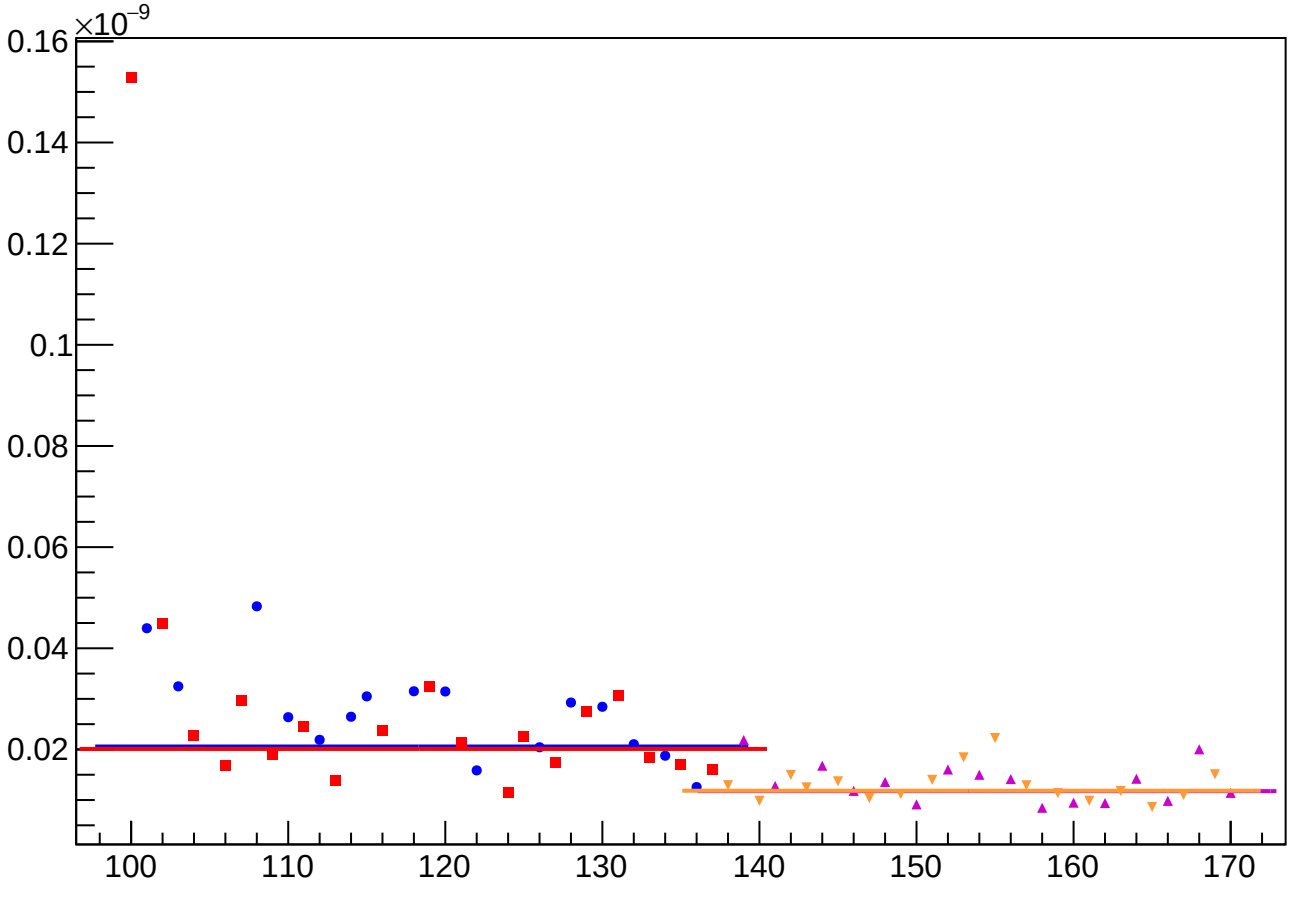
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 16.1/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:16.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 28.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 60.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 32.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1319631.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:771534.9/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 812191.2/18

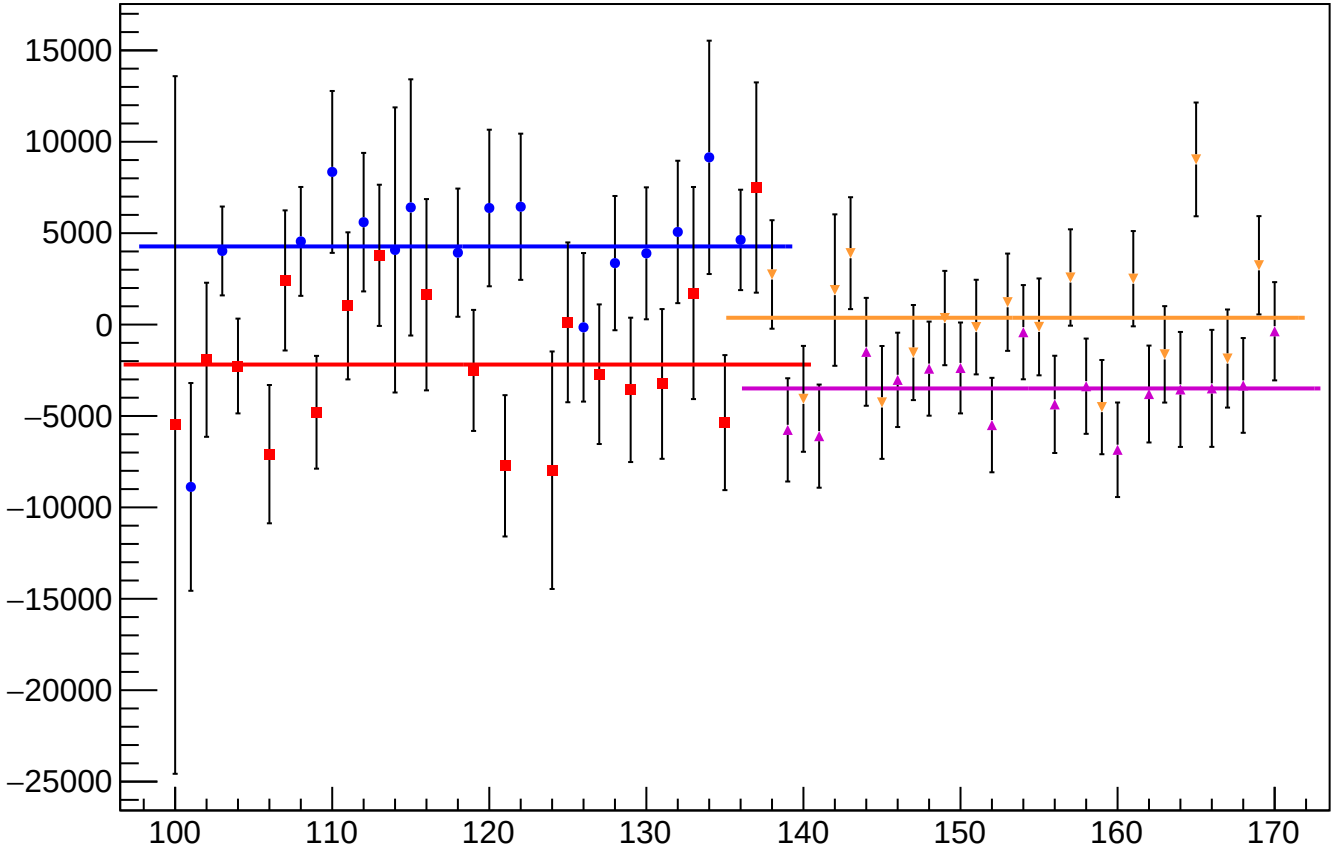
Left In: 0.000+/-0.000 $\chi^2$/NDF:1214005.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3348429.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 6545802.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3196595.1/34

# reg_asym_atr2_mean vs Slug




Right In: 4274.393+/-951.956 $\chi^2$/NDF: 8.9/15

Left Out: 372.586+/-674.243 $\chi^2$/NDF:22.5/16

Right Out: -2186.264+/-922.104 $\chi^2$/NDF: 14.8/18

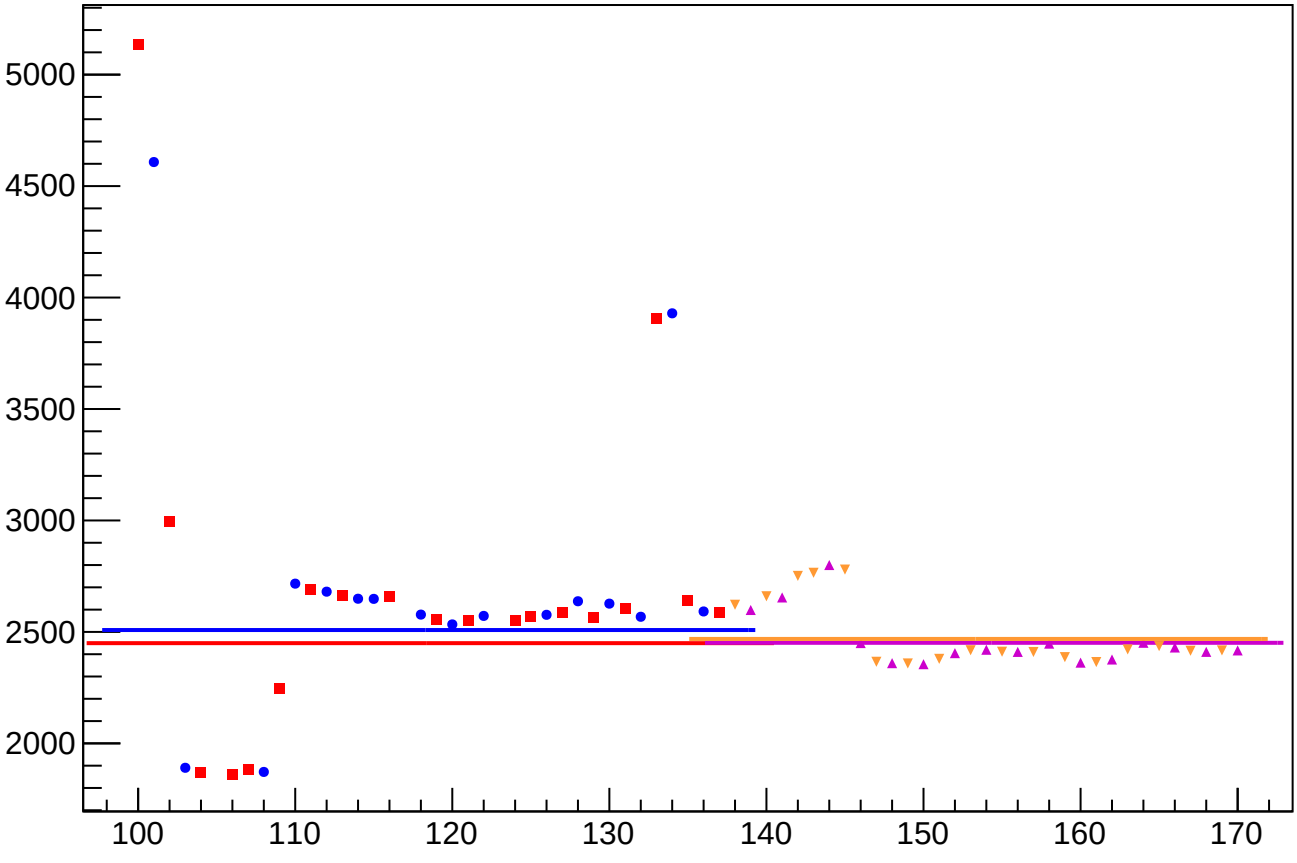
Left In: -3493.944+/-674.833 $\chi^2$/NDF:7.6/15

+ sign 1676.044+/-550.215 $\chi^2$/NDF: 42.6/32

All: -705.180+/-387.052 $\chi^2$/NDF: 103.4/67

- sign -3037.845+/-544.576 $\chi^2$/NDF: 23.7/34

# reg_asym_atr2_rms vs Slug




Right In: 2508.466+/-0.673 $\chi^2$/NDF: 611589.6/15

Left Out: 2468.556+/-0.477 $\chi^2$/NDF:81815.7/16

Right Out: 2449.623+/-0.652 $\chi^2$/NDF: 436901.0/18

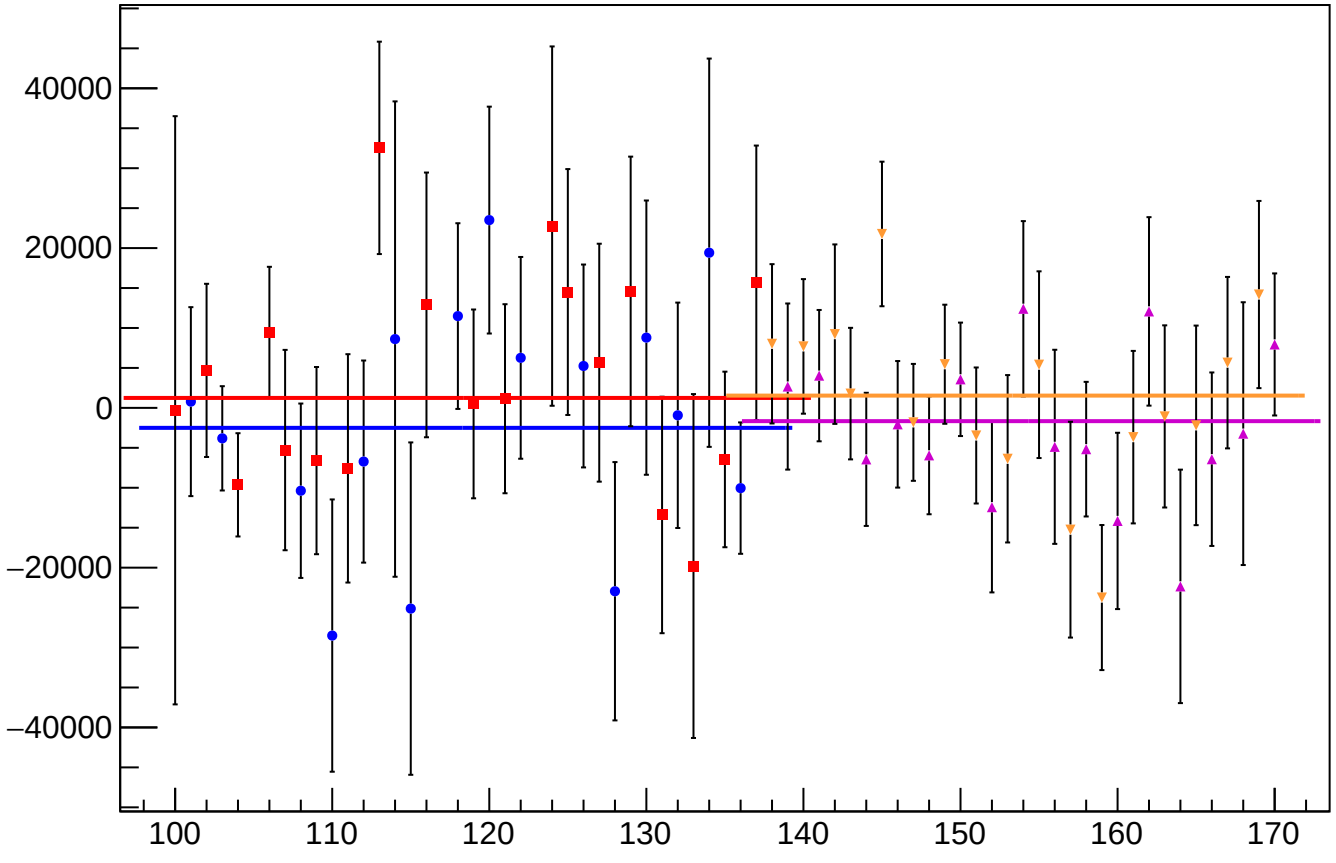
Left In: 2451.169+/-0.477 $\chi^2$/NDF:55560.6/15

+ sign 2481.889+/-0.389 $\chi^2$/NDF: 695746.3/32

All: 2466.098+/-0.274 $\chi^2$/NDF: 1191472.5/67

- sign 2450.630+/-0.385 $\chi^2$/NDF: 492465.3/34

# asym_atr2_reg_correction_mean vs Slug




Right In: -2500.602+/-3075.580 $\chi^2$/NDF: 13.8/15

Left Out: 1536.167+/-2342.485 $\chi^2$/NDF:18.9/16

Right Out: 1244.352+/-2852.739 $\chi^2$/NDF: 16.6/18

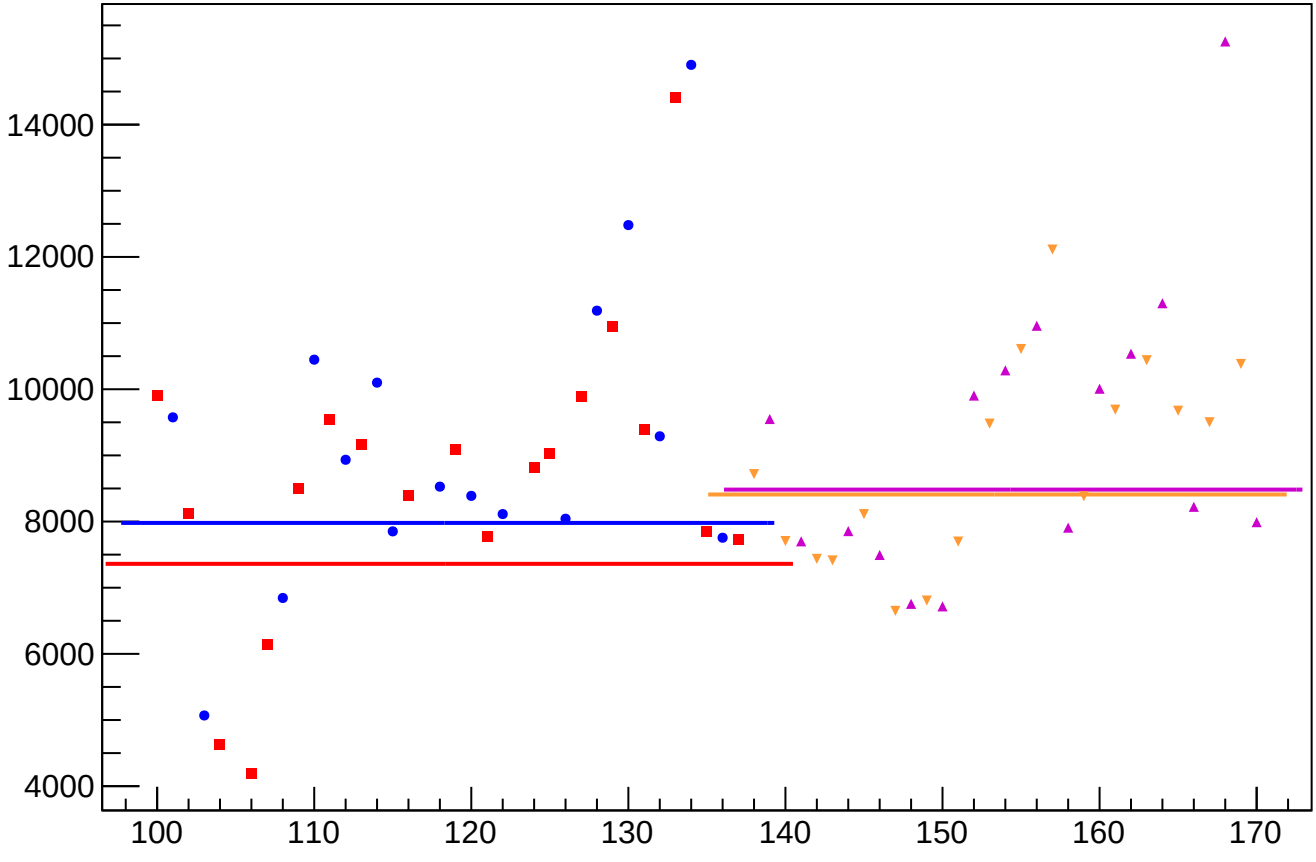
Left In: -1661.961+/-2387.139 $\chi^2$/NDF:10.8/15

+ sign 54.161+/-1863.525 $\chi^2$/NDF: 33.8/32

All: -210.041+/-1305.964 $\chi^2$/NDF: 61.8/67

- sign -465.028+/-1830.736 $\chi^2$/NDF: 28.0/34

# asym_atr2_reg_correction_rms vs Slug




Right In: 7979.488+/-2.175 $\chi^2$/NDF: 923083.9/15

Left Out: 8409.102+/-1.656 $\chi^2$/NDF:716095.0/16

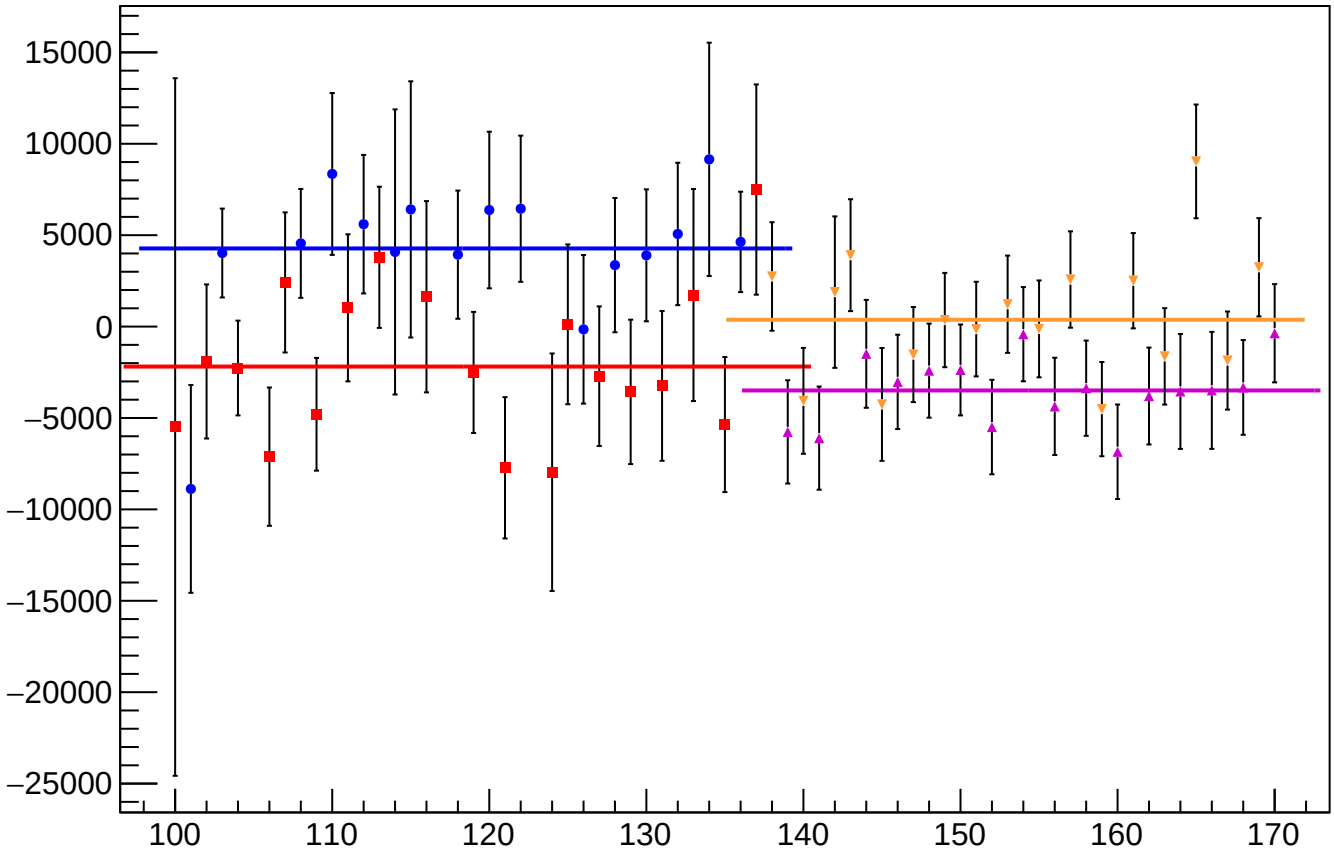
Right Out: 7360.741+/-2.017 $\chi^2$/NDF: 1286008.5/18

Left In: 8483.102+/-1.688 $\chi^2$/NDF:1016581.3/15

+ sign 8251.379+/-1.318 $\chi^2$/NDF: 1663876.1/32

All: 8134.079+/-0.923 $\chi^2$/NDF: 4164120.0/67

- sign 8020.870+/-1.295 $\chi^2$/NDF: 2484671.8/34




Right In: 4273.903+/-951.956 $\chi^2$/NDF: 8.9/15

Left Out: 372.333+/-674.243 $\chi^2$/NDF:22.5/16

Right Out: -2186.887+/-922.111 $\chi^2$/NDF: 14.8/18

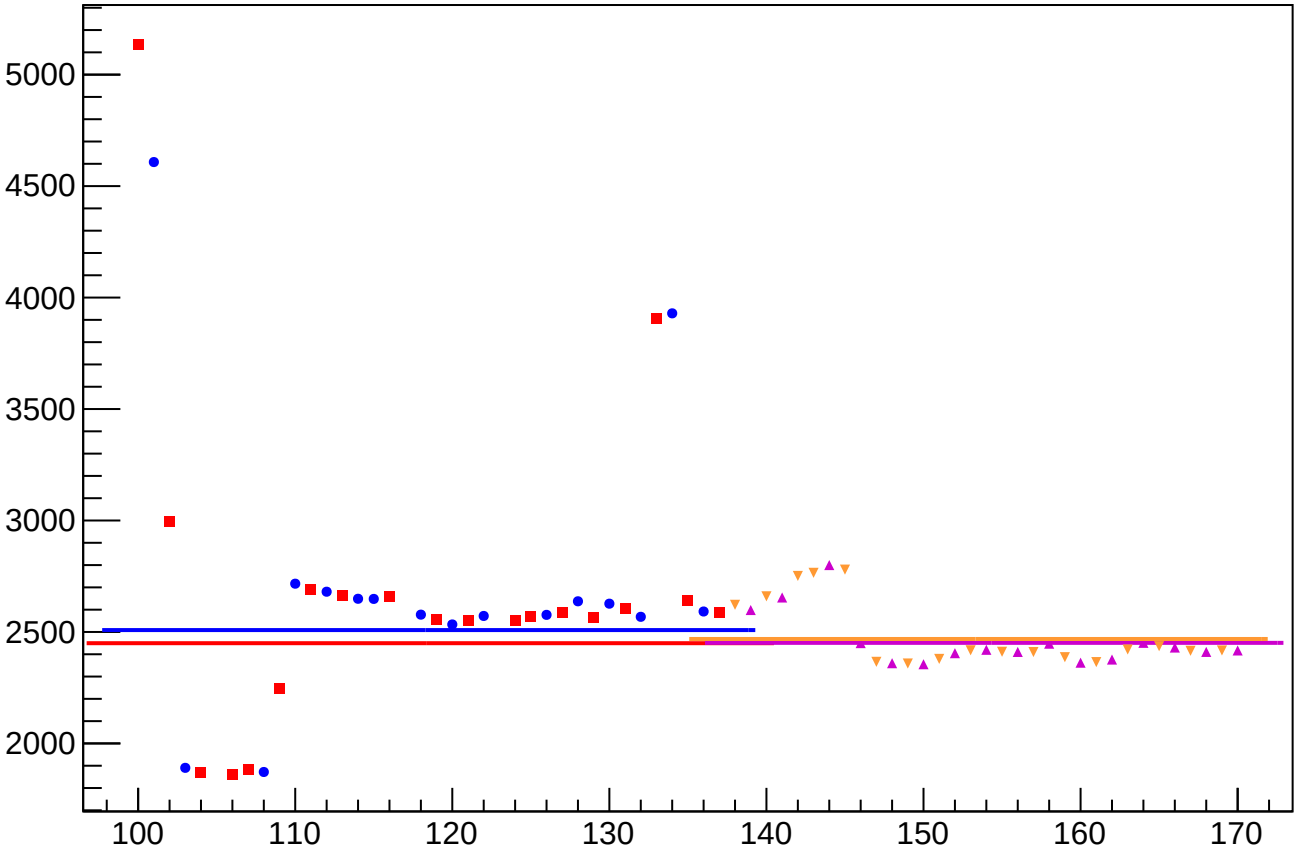
Left In: -3493.854+/-674.833 $\chi^2$/NDF:7.6/15

+ sign 1675.712+/-550.215 $\chi^2$/NDF: 42.6/32

All: -705.421+/-387.052 $\chi^2$/NDF: 103.4/67

- sign -3038.009+/-544.577 $\chi^2$/NDF: 23.7/34

# cor_asym_atr2_rms vs Slug




Right In: 2508.467+/-0.673 $\chi^2$/NDF: 611587.4/15

Left Out: 2468.556+/-0.477 $\chi^2$/NDF:81815.7/16

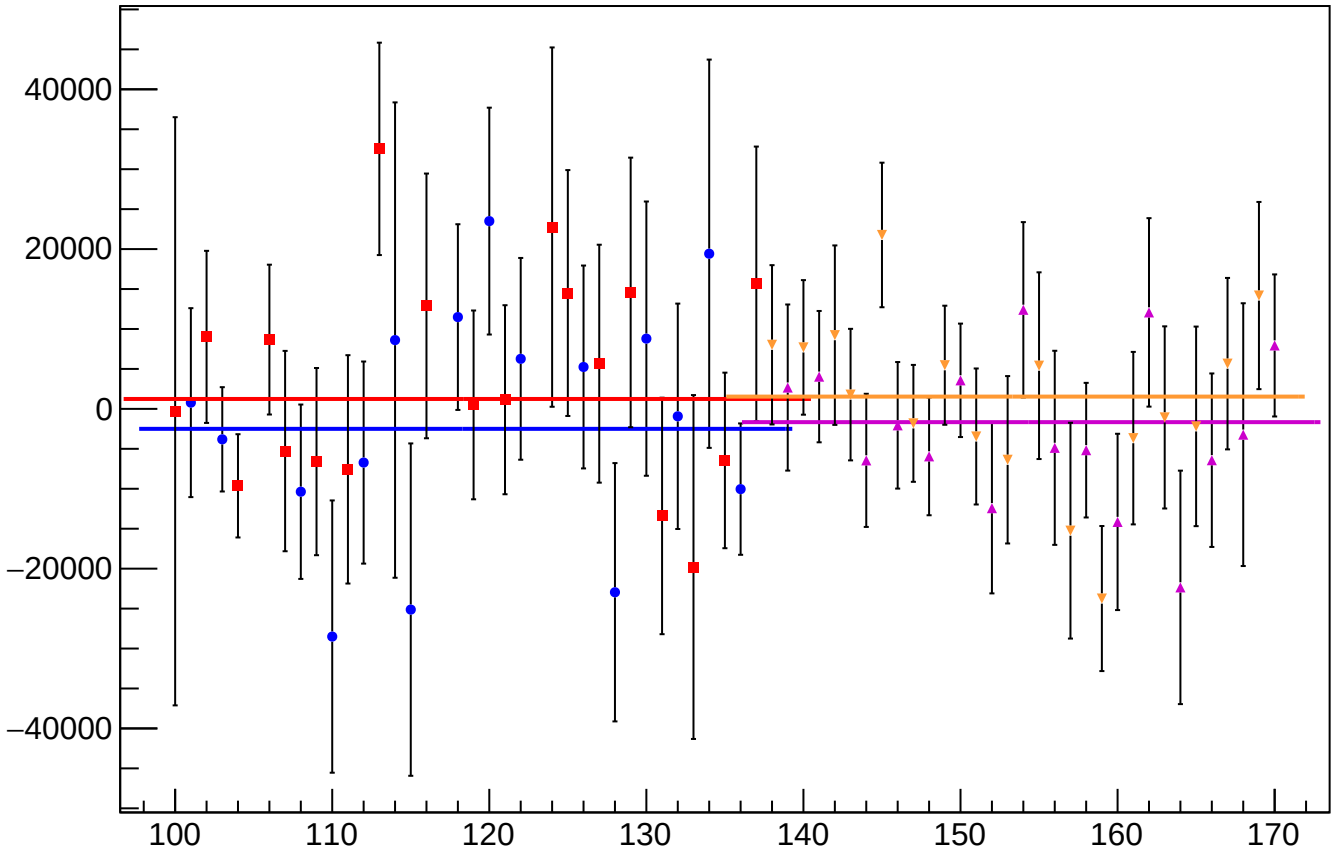
Right Out: 2449.647+/-0.652 $\chi^2$/NDF: 436846.6/18

Left In: 2451.169+/-0.477 $\chi^2$/NDF:55560.6/15

+ sign 2481.889+/-0.389 $\chi^2$/NDF: 695744.3/32

All: 2466.103+/-0.274 $\chi^2$/NDF: 1191414.2/67

- sign 2450.638+/-0.385 $\chi^2$/NDF: 492410.8/34




Right In: -2500.380+/-3075.668 $\chi^2$/NDF: 13.8/15

Left Out: 1536.126+/-2342.481 $\chi^2$/NDF:18.9/16

Right Out: 1239.896+/-2893.464 $\chi^2$/NDF: 16.6/18

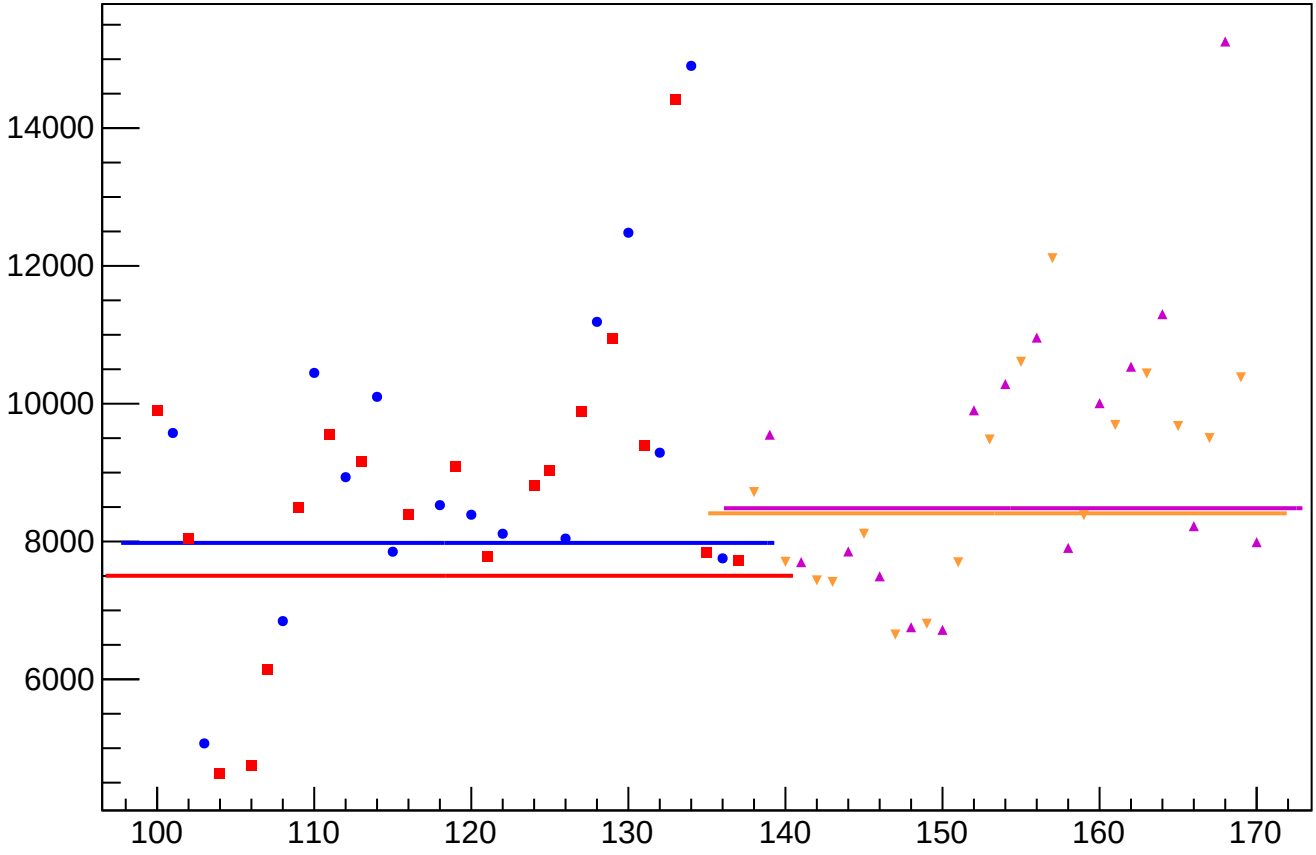
Left In: -1662.033+/-2387.138 $\chi^2$/NDF:10.8/15

+ sign 54.273+/-1863.542 $\chi^2$/NDF: 33.8/32

All: -219.494+/-1309.812 $\chi^2$/NDF: 61.8/67

- sign -486.783+/-1841.365 $\chi^2$/NDF: 28.0/34

# asym_atr2_cor_correction_rms vs Slug




Right In: 7979.812+/-2.175 $\chi^2$/NDF: 922785.4/15

Left Out: 8409.087+/-1.656 $\chi^2$/NDF:716099.8/16

Right Out: 7502.685+/-2.046 $\chi^2$/NDF: 1135523.5/18

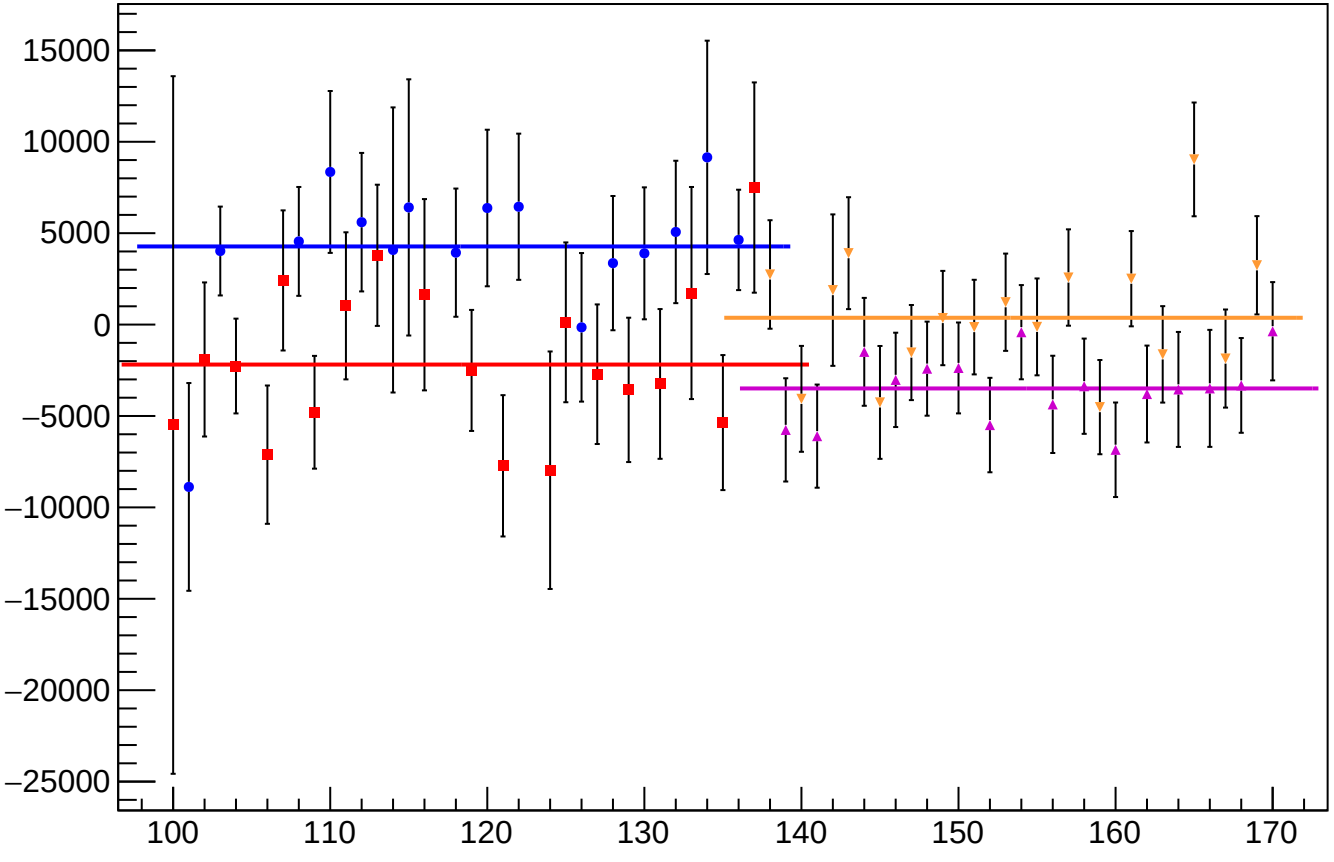
Left In: 8483.097+/-1.688 $\chi^2$/NDF:1016584.1/15

+ sign 8251.494+/-1.318 $\chi^2$/NDF: 1663542.7/32

All: 8167.777+/-0.926 $\chi^2$/NDF: 3960254.1/67

- sign 8086.041+/-1.302 $\chi^2$/NDF: 2288734.4/34

# eigen_cor_asym_atr2_mean vs Slug




Right In: 4273.903+/-951.956 $\chi^2$/NDF: 8.9/15

Left Out: 372.333+/-674.243 $\chi^2$/NDF:22.5/16

Right Out: -2186.887+/-922.111 $\chi^2$/NDF: 14.8/18

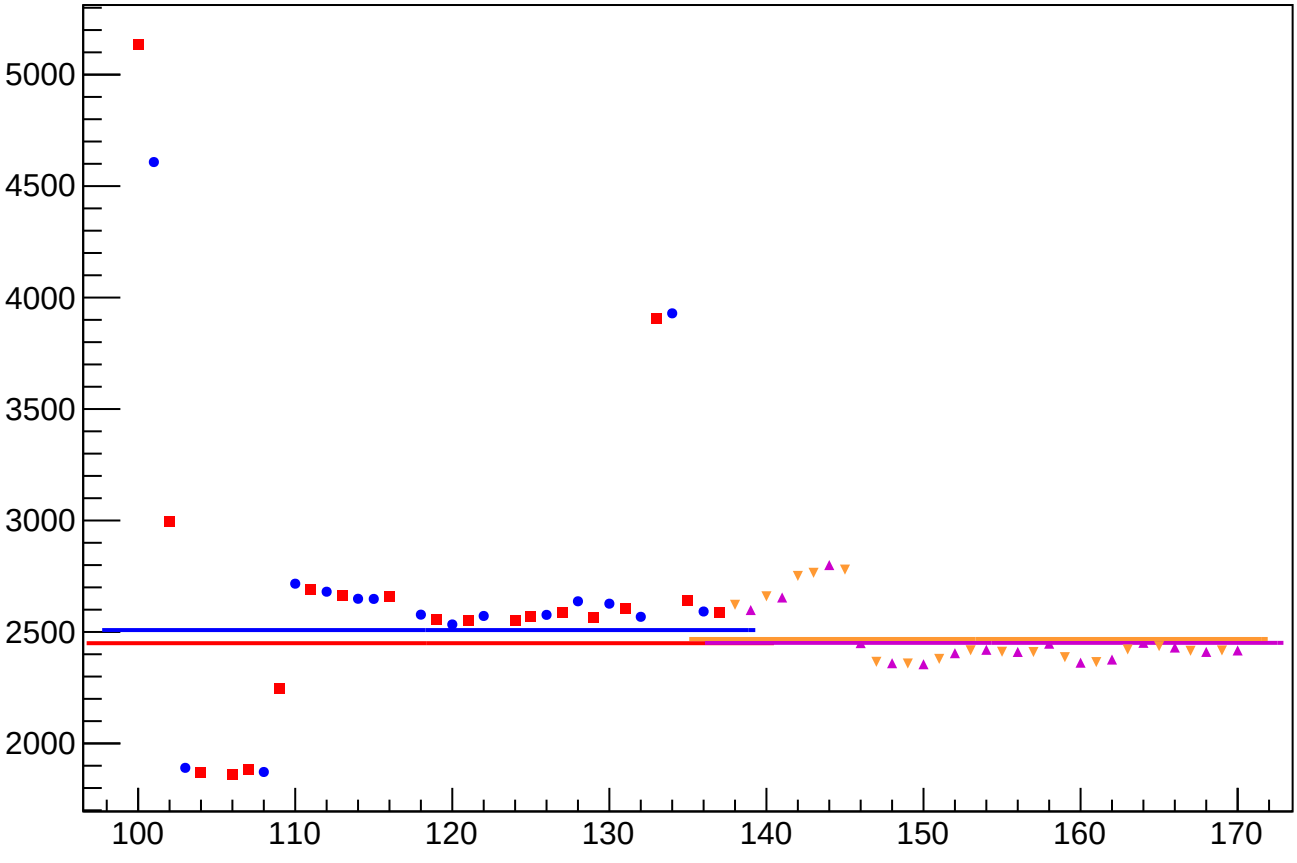
Left In: -3493.854+/-674.833 $\chi^2$/NDF:7.6/15

+ sign 1675.712+/-550.215 $\chi^2$/NDF: 42.6/32

All: -705.421+/-387.052 $\chi^2$/NDF: 103.4/67

- sign -3038.009+/-544.577 $\chi^2$/NDF: 23.7/34

# eigen_cor_asym_atr2_rms vs Slug




Right In: 2508.467+/-0.673 $\chi^2$/NDF: 611587.4/15

Left Out: 2468.556+/-0.477 $\chi^2$/NDF:81815.7/16

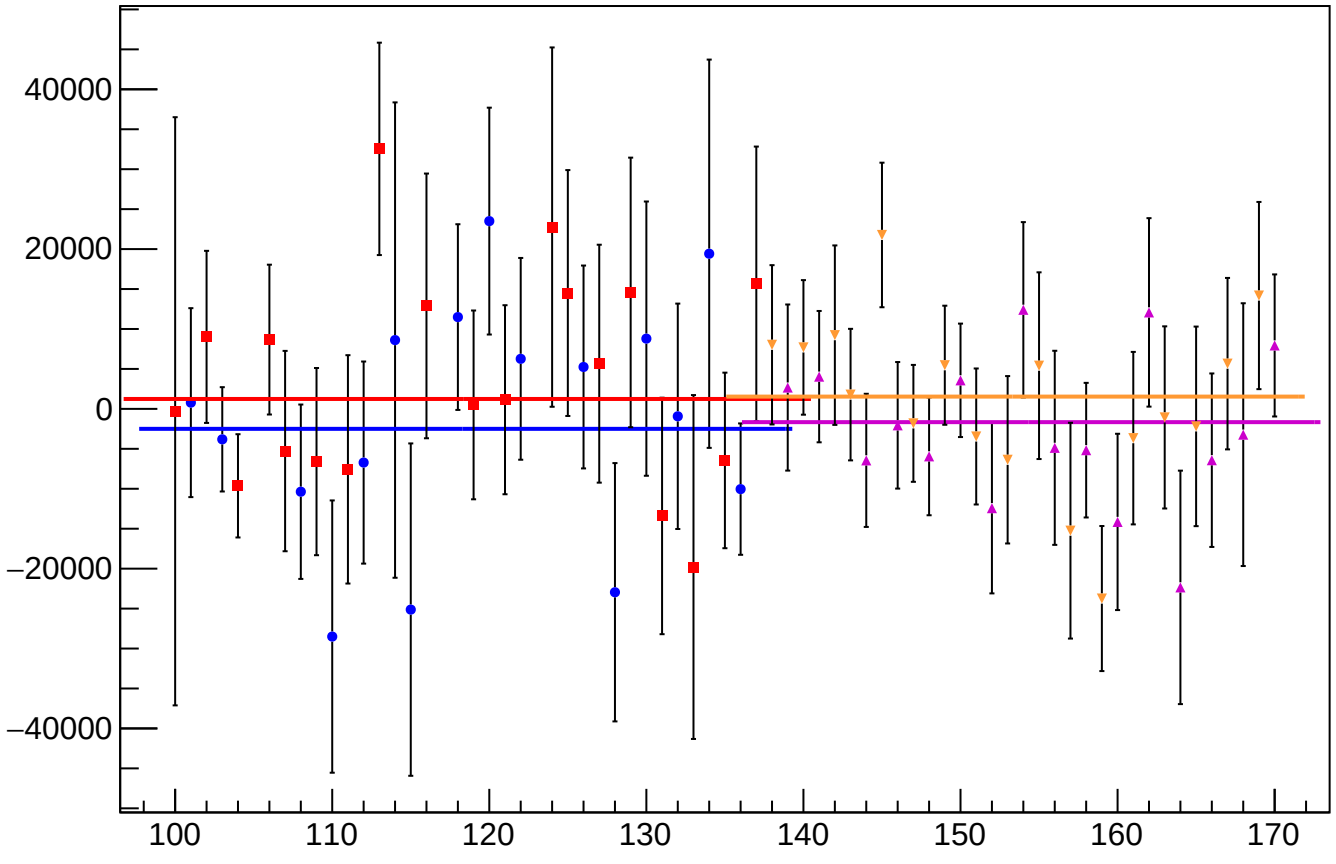
Right Out: 2449.647+/-0.652 $\chi^2$/NDF: 436846.6/18

Left In: 2451.169+/-0.477 $\chi^2$/NDF:55560.6/15

+ sign 2481.889+/-0.389 $\chi^2$/NDF: 695744.3/32

All: 2466.103+/-0.274 $\chi^2$/NDF: 1191414.2/67

- sign 2450.638+/-0.385 $\chi^2$/NDF: 492410.8/34




Right In: -2500.380+/-3075.668 $\chi^2$/NDF: 13.8/15

Left Out: 1536.126+/-2342.481 $\chi^2$/NDF:18.9/16

Right Out: 1239.896+/-2893.464 $\chi^2$/NDF: 16.6/18

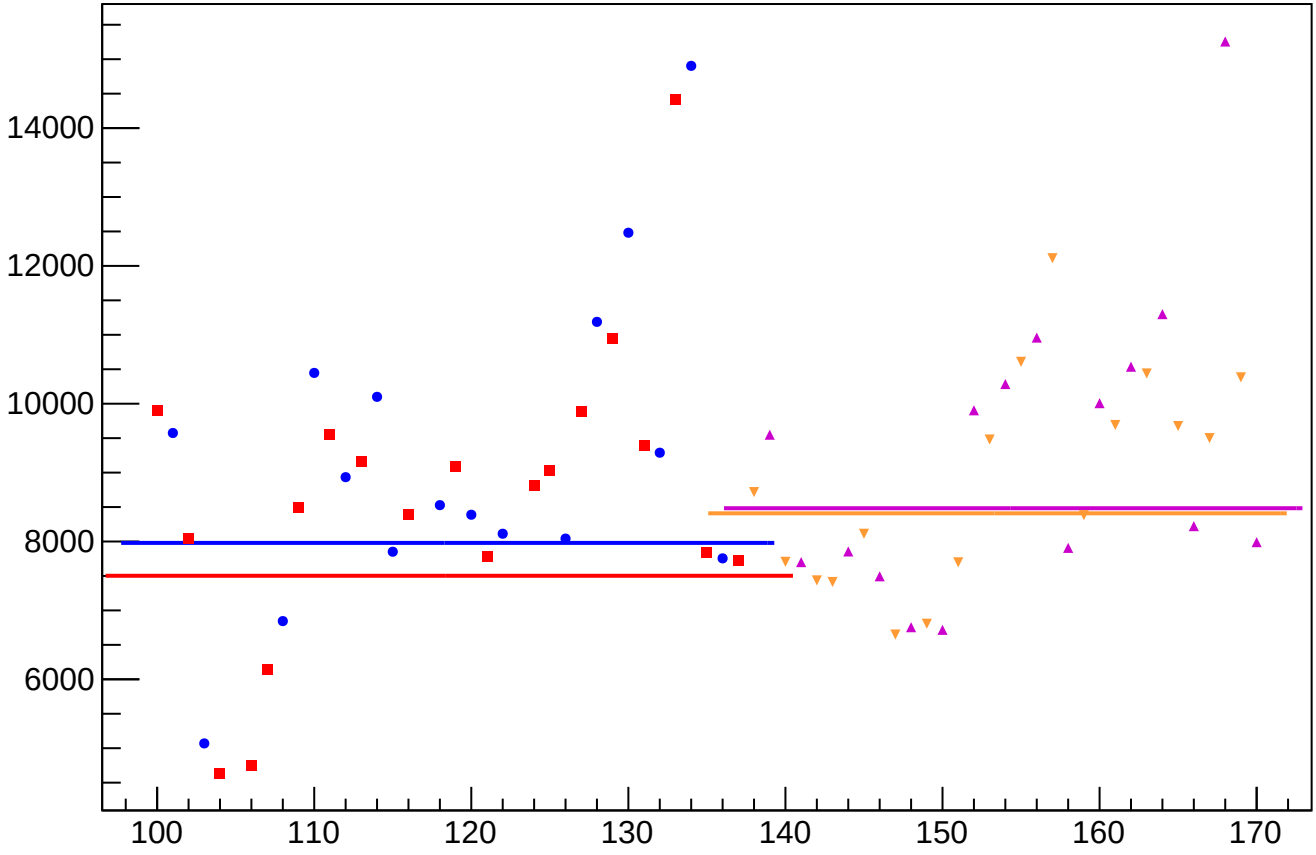
Left In: -1662.033+/-2387.138 $\chi^2$/NDF:10.8/15

+ sign 54.273+/-1863.542 $\chi^2$/NDF: 33.8/32

All: -219.494+/-1309.812 $\chi^2$/NDF: 61.8/67

- sign -486.783+/-1841.365 $\chi^2$/NDF: 28.0/34

# asym_atr2_eigen_cor_correction_rms vs Slug




Right In: 7979.812+/-2.175 $\chi^2$/NDF: 922785.4/15

Left Out: 8409.087+/-1.656 $\chi^2$/NDF:716099.8/16

Right Out: 7502.685+/-2.046 $\chi^2$/NDF: 1135523.5/18

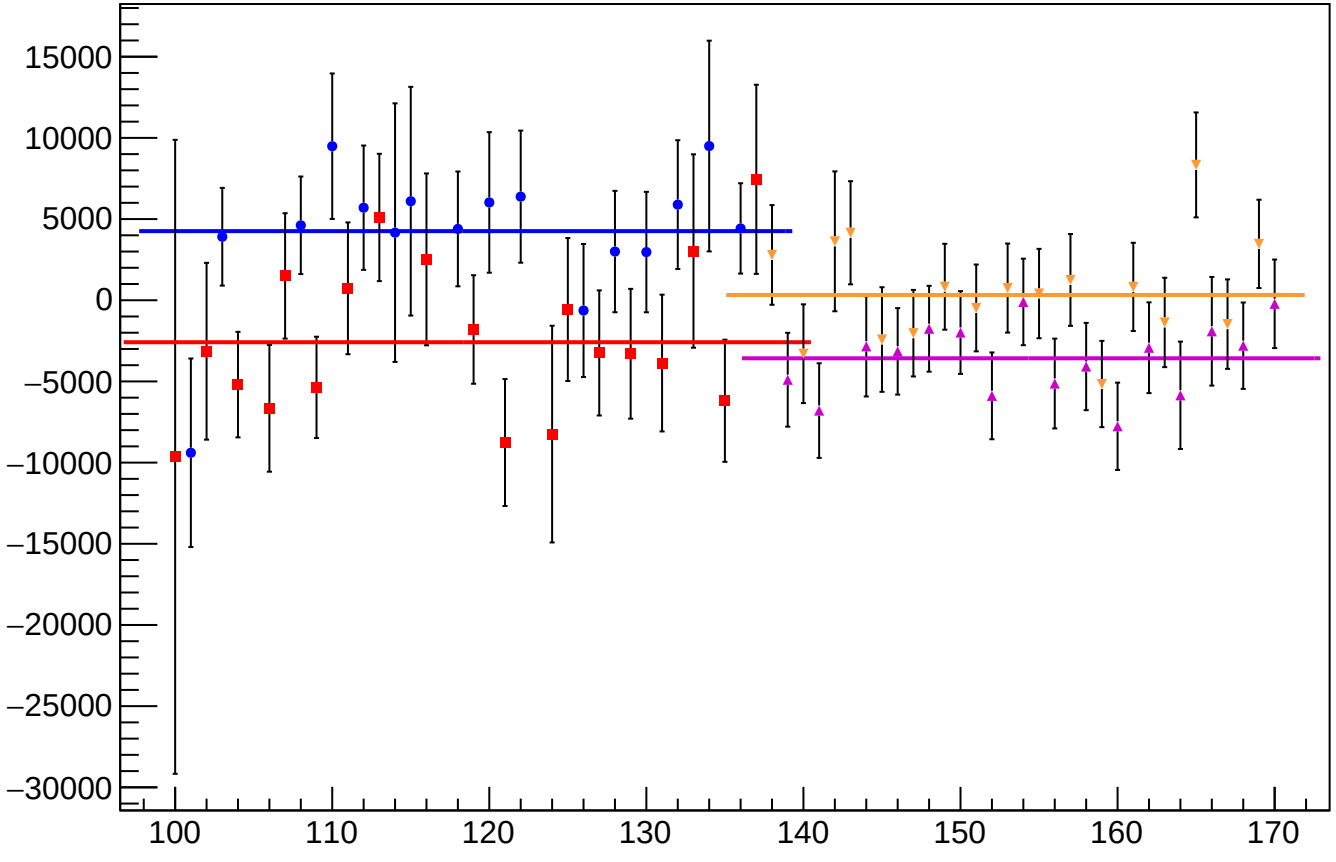
Left In: 8483.097+/-1.688 $\chi^2$/NDF:1016584.1/15

+ sign 8251.494+/-1.318 $\chi^2$/NDF: 1663542.7/32

All: 8167.777+/-0.926 $\chi^2$/NDF: 3960254.1/67

- sign 8086.041+/-1.302 $\chi^2$/NDF: 2288734.4/34

# dit_asym_atr2_mean vs Slug




Right In: 4256.977+/-990.542 $\chi^2$/NDF: 10.1/15

Left Out: 324.978+/-698.605 $\chi^2$/NDF:18.4/16

Right Out: -2584.689+/-966.049 $\chi^2$/NDF: 17.6/18

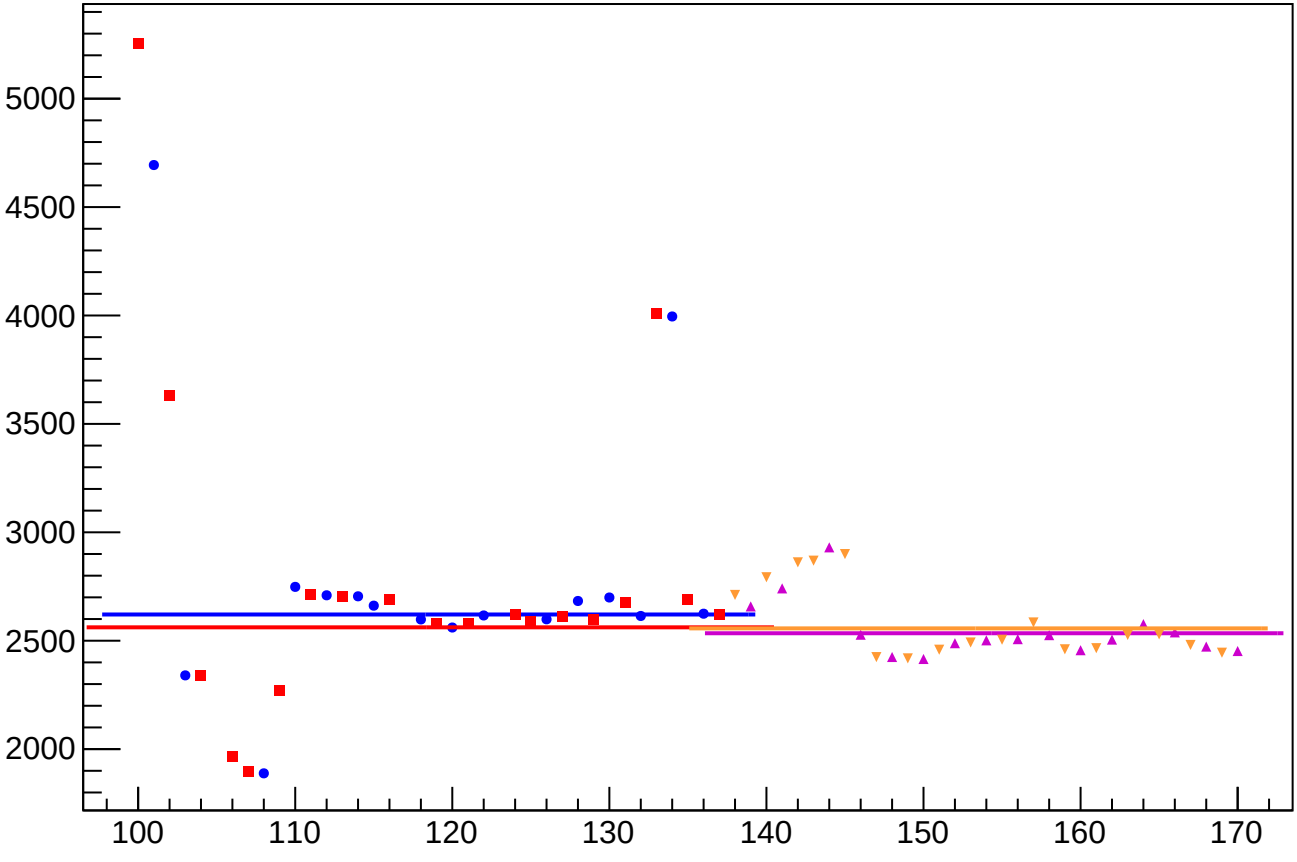
Left In: -3574.104+/-697.899 $\chi^2$/NDF:10.0/15

+ sign 1631.117+/-570.901 $\chi^2$/NDF: 39.0/32

All: -824.037+/-401.843 $\chi^2$/NDF: 104.0/67

- sign -3234.807+/-565.717 $\chi^2$/NDF: 28.3/34

# dit_asym_atr2_rms vs Slug




Right In: 2620.964+/-0.700 $\chi^2$/NDF: 485914.1/15

Left Out: 2556.905+/-0.494 $\chi^2$/NDF:94435.1/16

Right Out: 2561.718+/-0.683 $\chi^2$/NDF: 378259.5/18

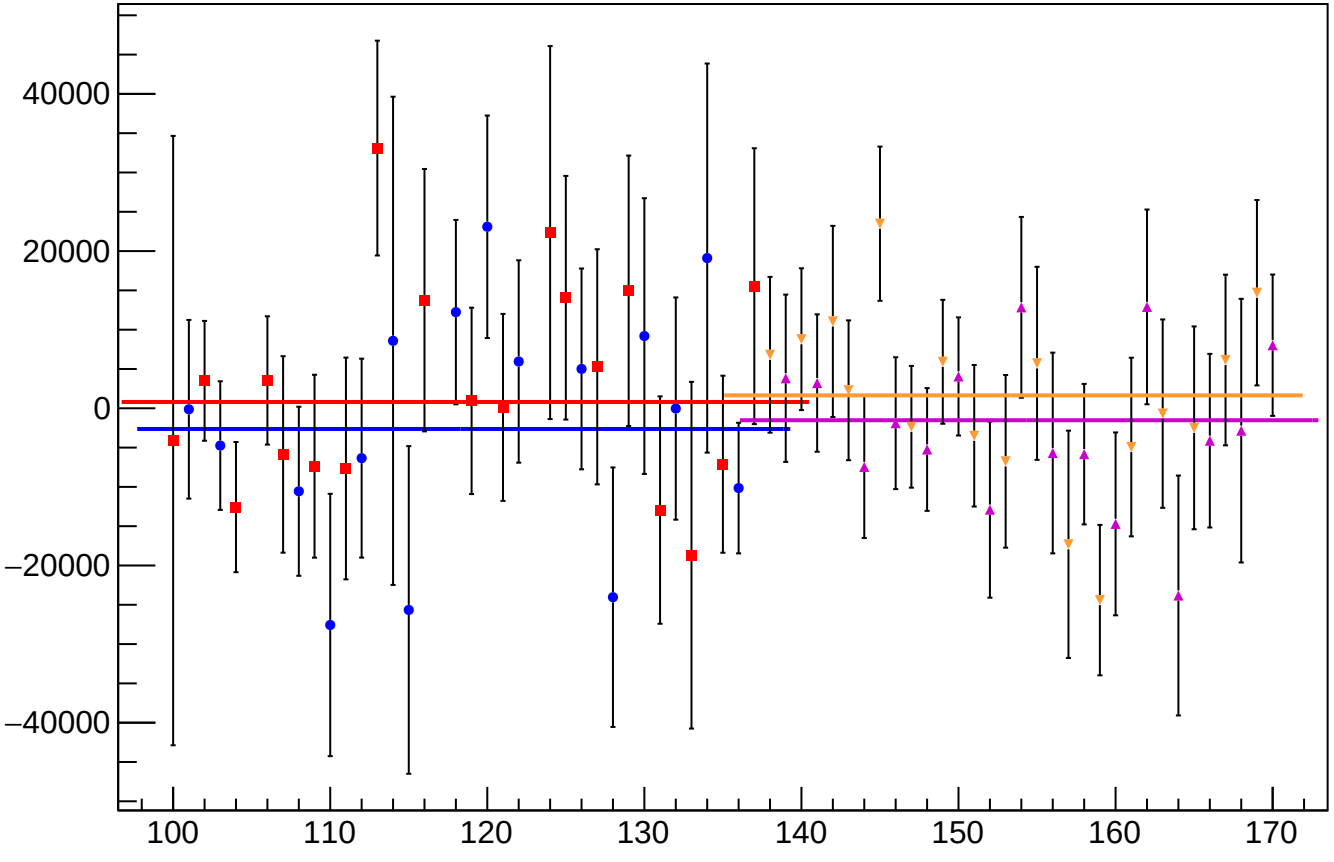
Left In: 2534.458+/-0.493 $\chi^2$/NDF:60661.7/15

+ sign 2578.184+/-0.404 $\chi^2$/NDF: 585935.1/32

All: 2560.839+/-0.284 $\chi^2$/NDF: 1029561.9/67

- sign 2543.814+/-0.400 $\chi^2$/NDF: 439968.4/34

# asym_atr2_dit_correction_mean vs Slug




Right In: -2631.921+/-3211.506 $\chi^2$/NDF: 13.8/15

Left Out: 1646.113+/-2466.470 $\chi^2$/NDF:19.0/16

Right Out: 802.880+/-2872.934 $\chi^2$/NDF: 15.4/18

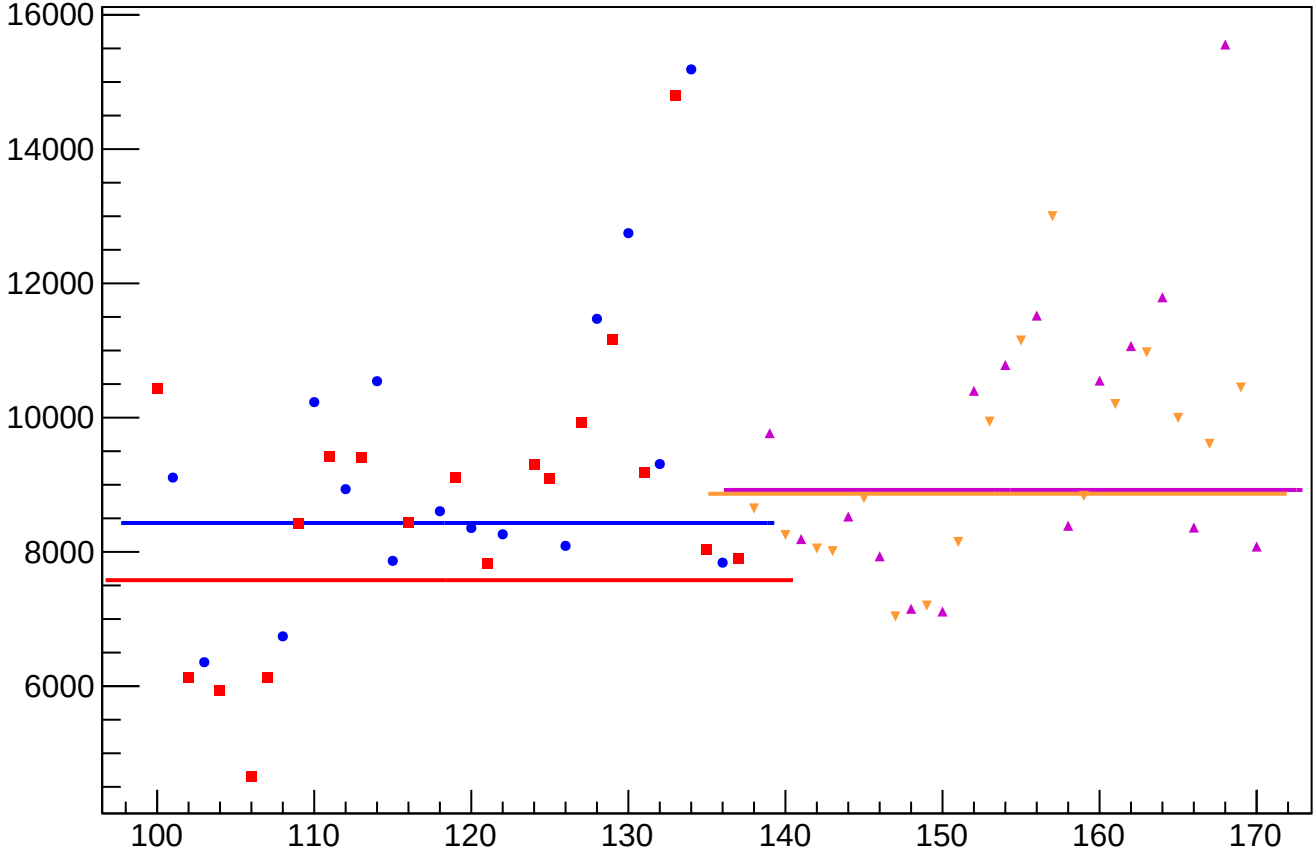
Left In: -1521.036+/-2508.277 $\chi^2$/NDF:10.6/15

+ sign 58.937+/-1956.136 $\chi^2$/NDF: 34.0/32

All: -238.411+/-1359.016 $\chi^2$/NDF: 60.4/67

- sign -515.839+/-1889.475 $\chi^2$/NDF: 26.4/34

# asym_atr2_dit_correction_rms vs Slug




Right In: 8430.768+/-2.271 $\chi^2$/NDF: 580295.1/15

Left Out: 8866.327+/-1.744 $\chi^2$/NDF:653282.7/16

Right Out: 7579.112+/-2.031 $\chi^2$/NDF: 974126.9/18

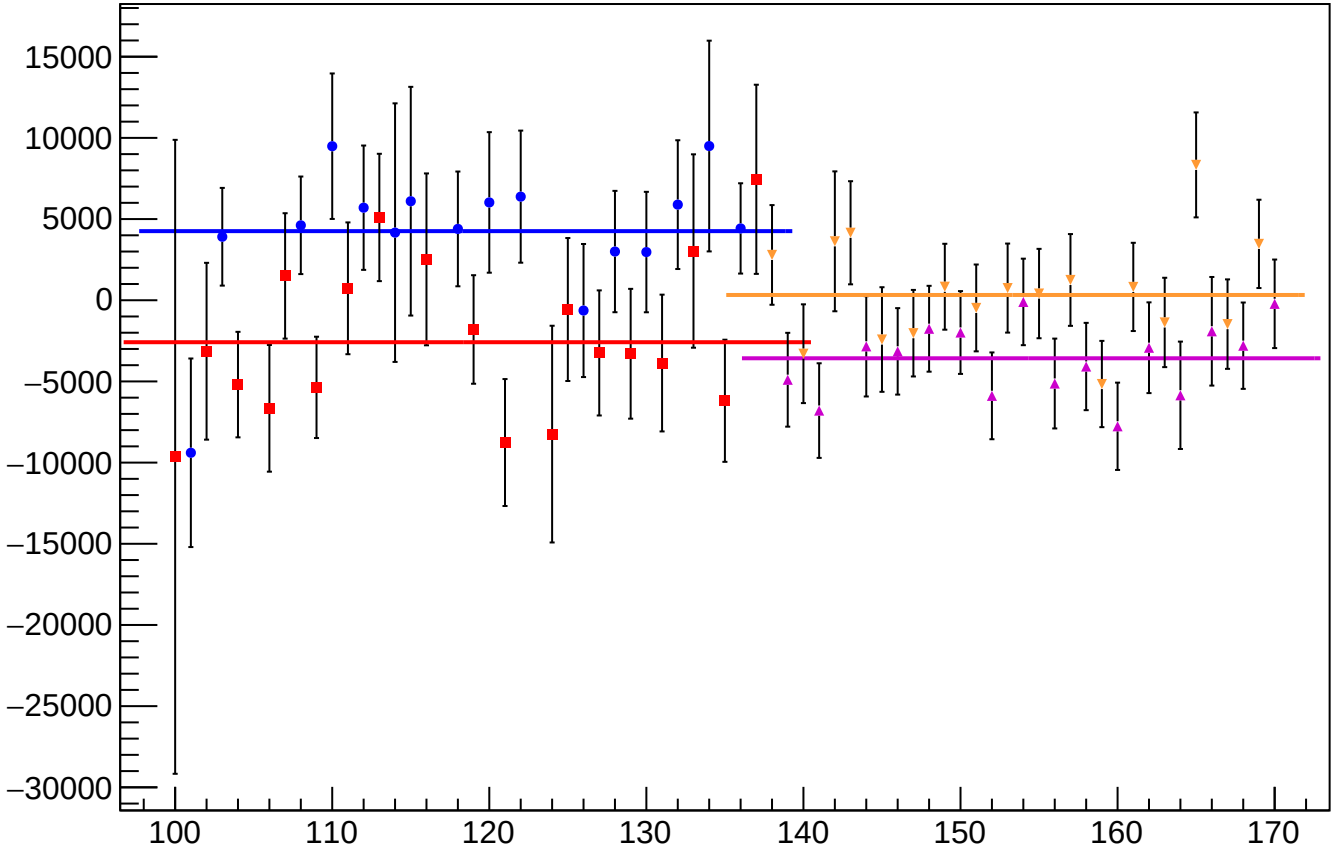
Left In: 8922.771+/-1.774 $\chi^2$/NDF:959702.8/15

+ sign 8704.732+/-1.383 $\chi^2$/NDF: 1256717.3/32

All: 8516.862+/-0.961 $\chi^2$/NDF: 3474456.4/67

- sign 8341.578+/-1.336 $\chi^2$/NDF: 2182079.1/34

# eigen_dit_asym_atr2_mean vs Slug




Right In: 4256.984+/-990.541 $\chi^2$/NDF: 10.1/15

Left Out: 324.961+/-698.606 $\chi^2$/NDF:18.4/16

Right Out: -2584.699+/-966.048 $\chi^2$/NDF: 17.6/18

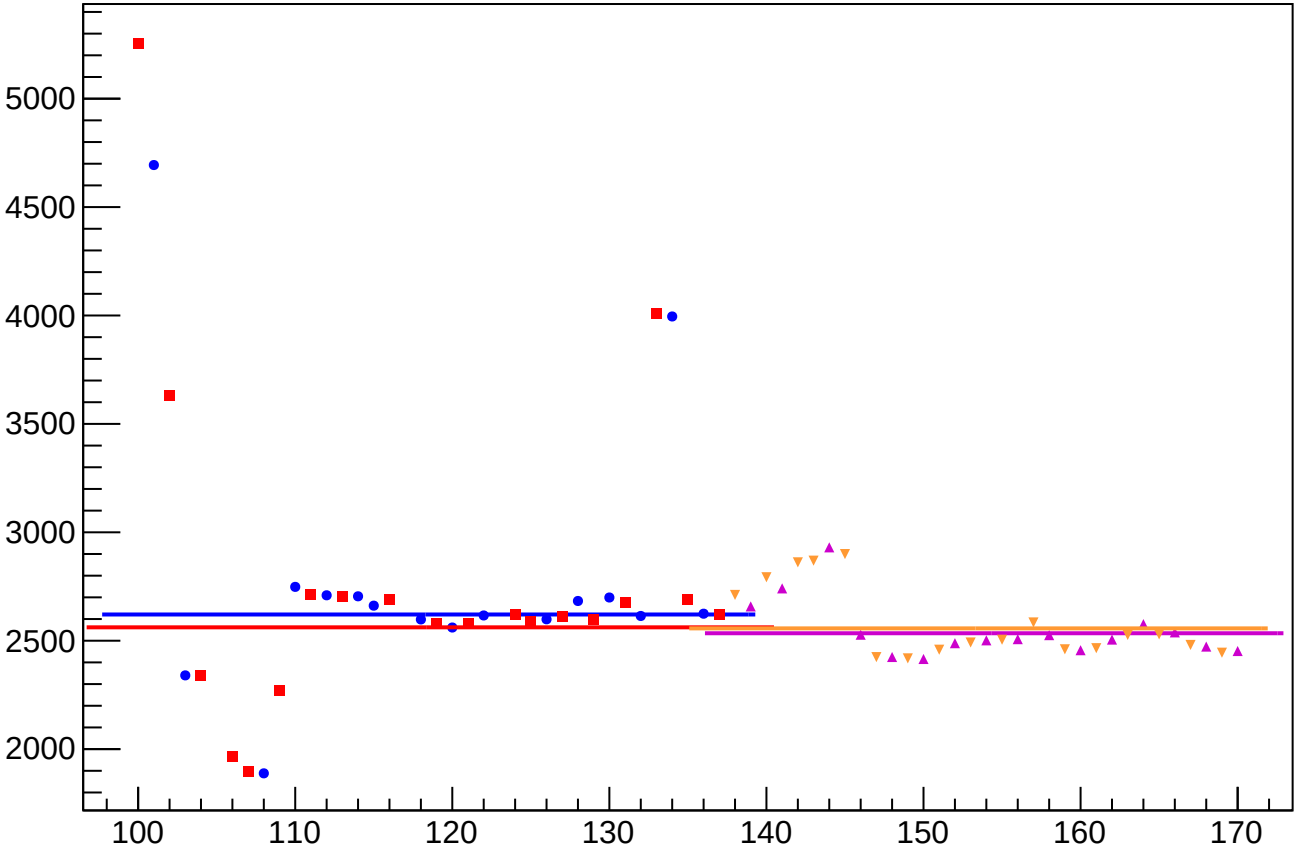
Left In: -3574.109+/-697.899 $\chi^2$/NDF:10.0/15

+ sign 1631.110+/-570.901 $\chi^2$/NDF: 39.0/32

All: -824.043+/-401.843 $\chi^2$/NDF: 104.0/67

- sign -3234.814+/-565.718 $\chi^2$/NDF: 28.3/34

# eigen_dit_asym_atr2_rms vs Slug




Right In: 2620.963+/-0.700 $\chi^2$/NDF: 485914.3/15

Left Out: 2556.908+/-0.494 $\chi^2$/NDF:94435.1/16

Right Out: 2561.718+/-0.683 $\chi^2$/NDF: 378258.9/18

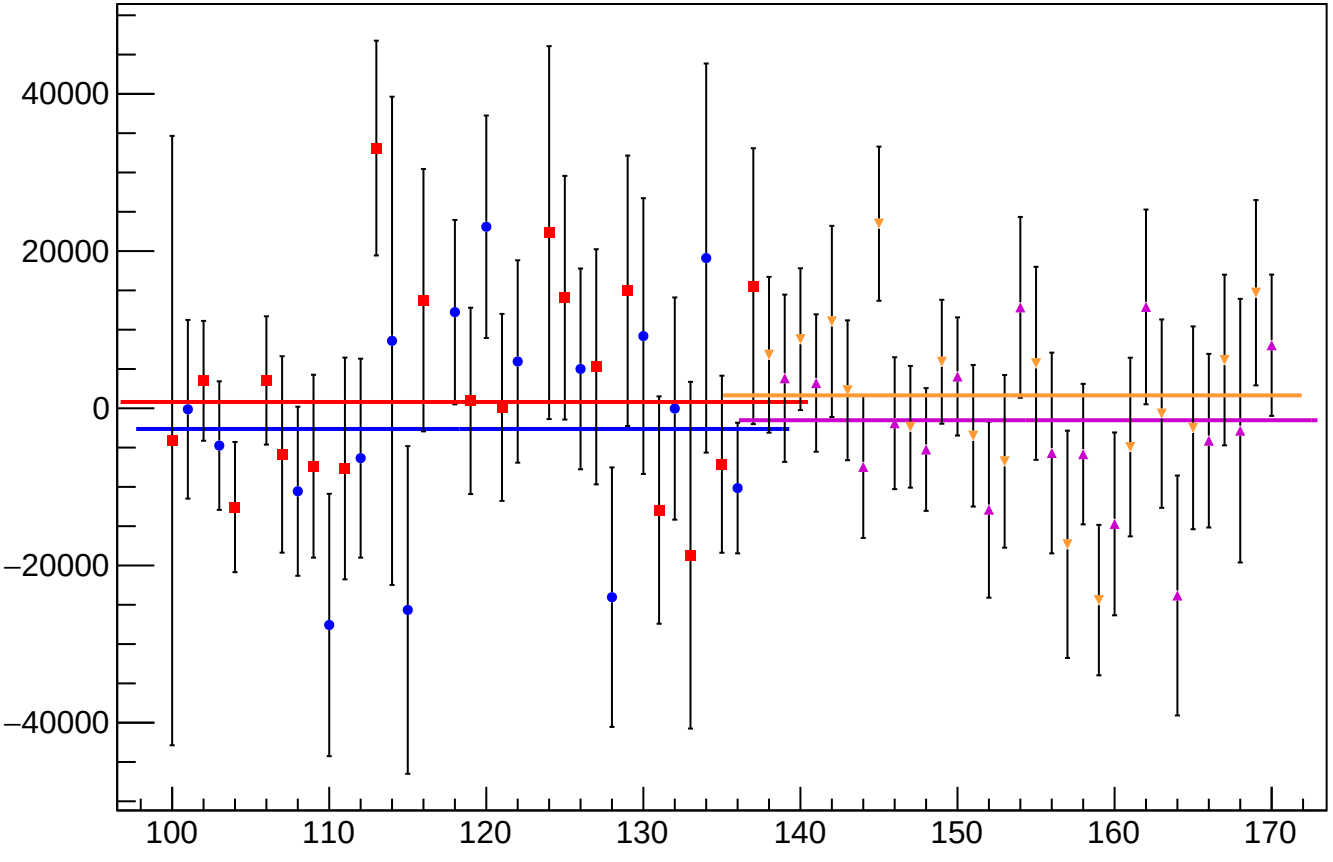
Left In: 2534.461+/-0.493 $\chi^2$/NDF:60661.4/15

+ sign 2578.186+/-0.404 $\chi^2$/NDF: 585934.8/32

All: 2560.840+/-0.284 $\chi^2$/NDF: 1029560.4/67

- sign 2543.815+/-0.400 $\chi^2$/NDF: 439967.3/34

# asym_atr2_eigen_dit_correction_mean vs Slug




Right In: -2631.887+/-3211.501 $\chi^2$/NDF: 13.8/15

Left Out: 1646.107+/-2466.474 $\chi^2$/NDF:19.0/16

Right Out: 802.875+/-2872.930 $\chi^2$/NDF: 15.4/18

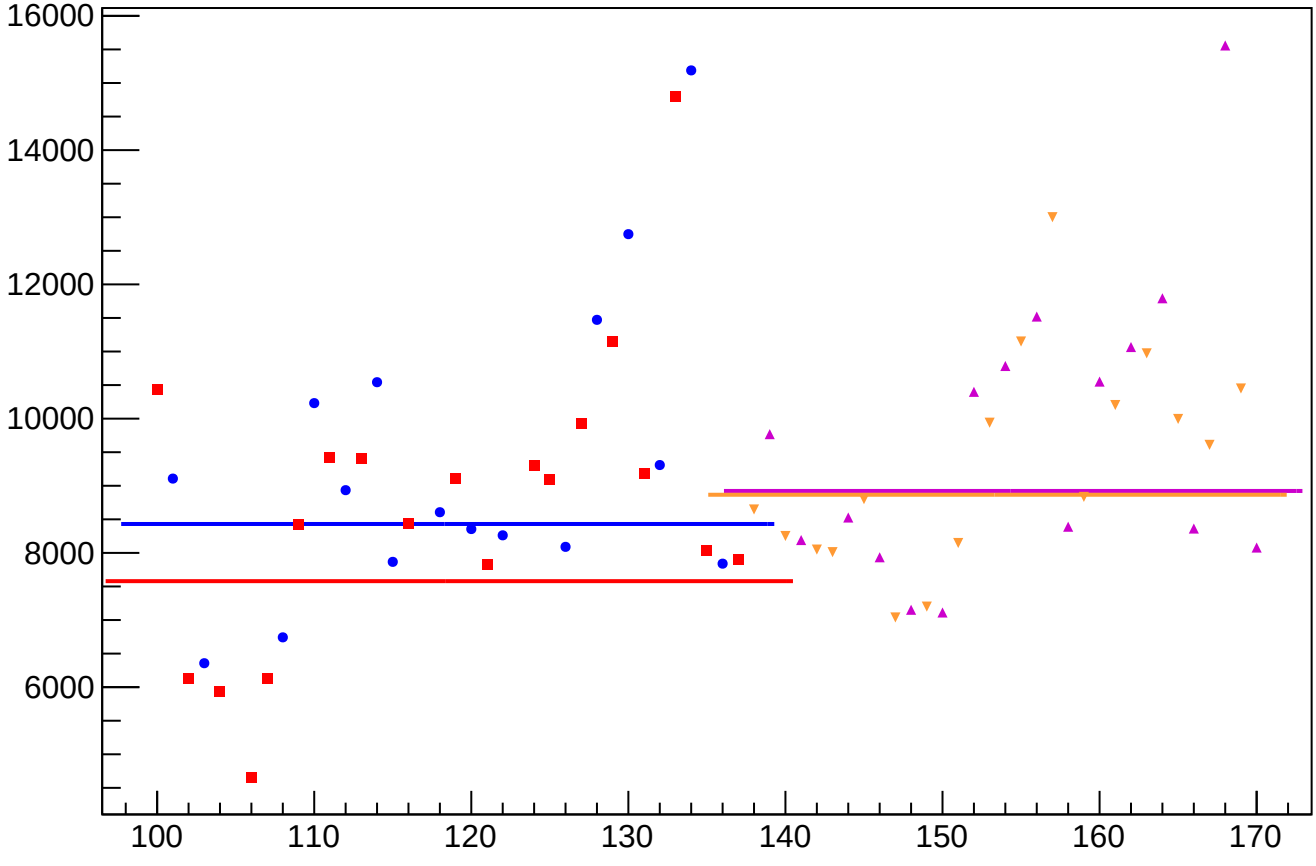
Left In: -1521.032+/-2508.280 $\chi^2$/NDF:10.6/15

+ sign 58.941+/-1956.137 $\chi^2$/NDF: 34.0/32

All: -238.407+/-1359.017 $\chi^2$/NDF: 60.4/67

- sign -515.834+/-1889.476 $\chi^2$/NDF: 26.4/34

# asym_atr2_eigen_dit_correction_rms vs Slug




Right In: 8430.758+/-2.271 $\chi^2$/NDF: 580289.4/15

Left Out: 8866.342+/-1.744 $\chi^2$/NDF:653282.9/16

Right Out: 7579.100+/-2.031 $\chi^2$/NDF: 974123.2/18

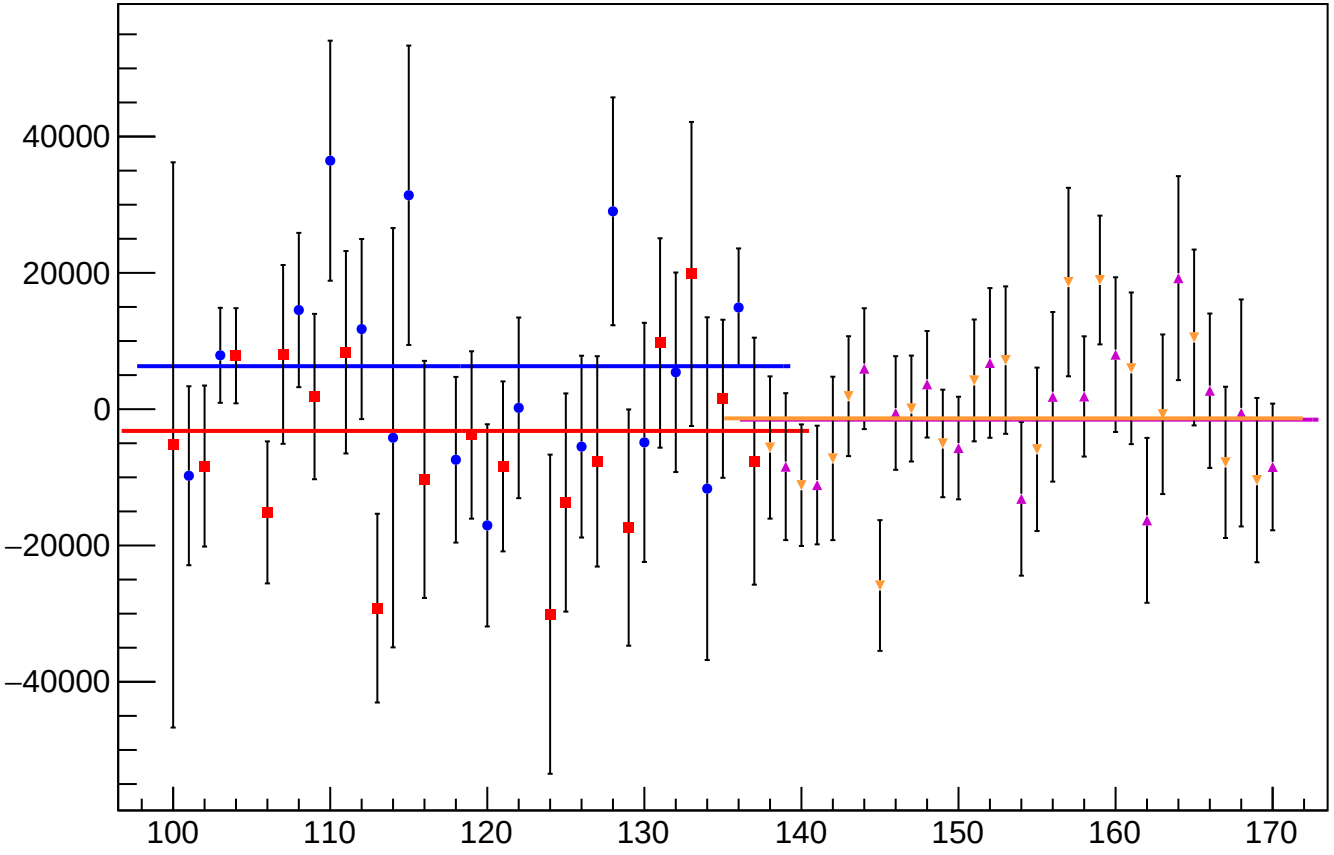
Left In: 8922.784+/-1.774 $\chi^2$/NDF:959703.9/15

+ sign 8704.737+/-1.383 $\chi^2$/NDF: 1256714.3/32

All: 8516.865+/-0.961 $\chi^2$/NDF: 3474460.9/67

- sign 8341.579+/-1.336 $\chi^2$/NDF: 2182085.8/34

# asym_atr2_mean vs Slug




Right In: 6307.034+/-3239.703 $\chi^2$/NDF: 15.1/15

Left Out: -1345.676+/-2454.598 $\chi^2$/NDF:18.6/16

Right Out: -3189.356+/-3068.645 $\chi^2$/NDF: 13.9/18

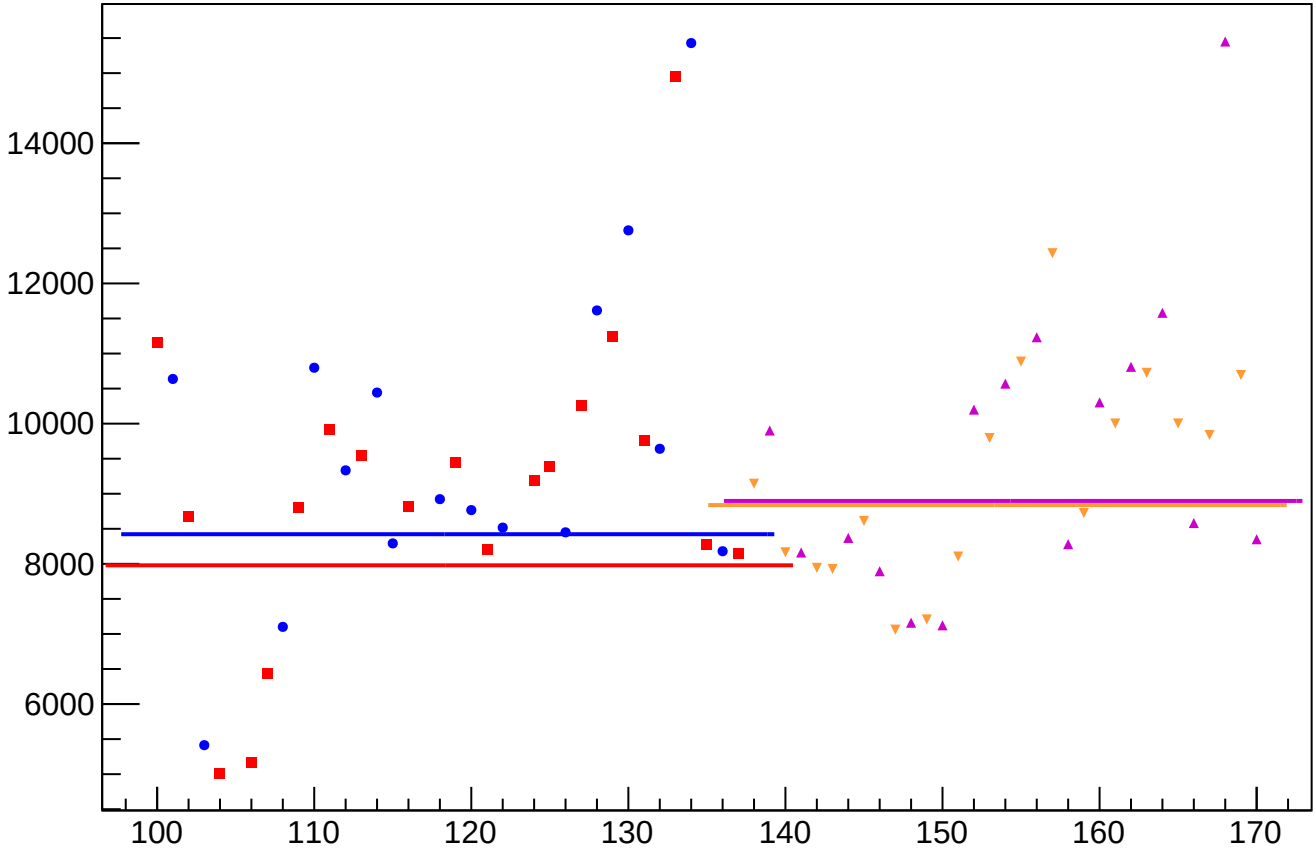
Left In: -1538.046+/-2496.504 $\chi^2$/NDF:9.8/15

+ sign 1445.241+/-1956.460 $\chi^2$/NDF: 37.2/32

All: -393.832+/-1376.342 $\chi^2$/NDF: 62.8/67

- sign -2195.709+/-1936.574 $\chi^2$/NDF: 23.8/34

# asym_atr2_rms vs Slug




Right In: 8422.717+/-2.291 $\chi^2$/NDF: 881833.9/15

Left Out: 8838.190+/-1.736 $\chi^2$/NDF:613442.2/16

Right Out: 7978.997+/-2.170 $\chi^2$/NDF: 1016019.0/18

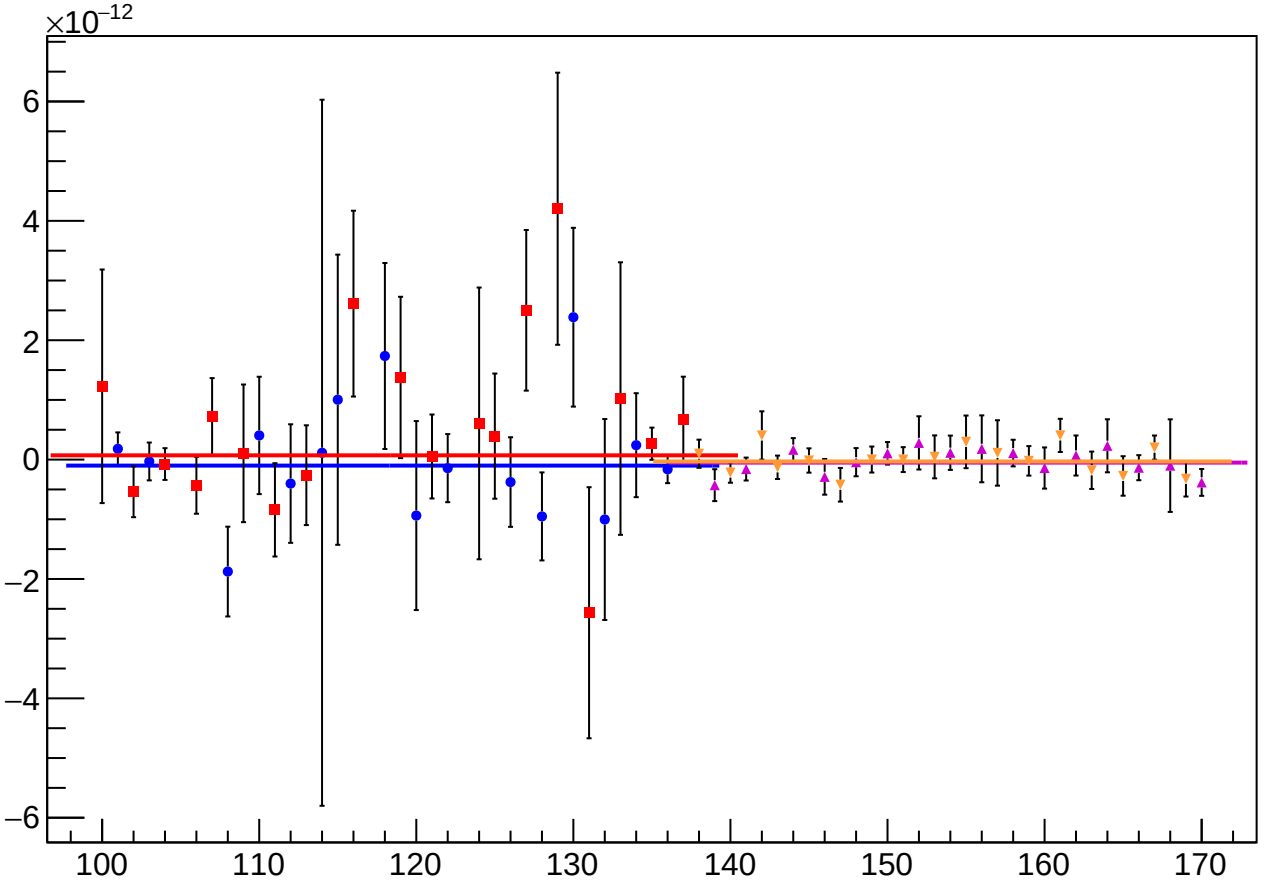
Left In: 8897.461+/-1.765 $\chi^2$/NDF:893186.8/15

+ sign 8686.669+/-1.383 $\chi^2$/NDF: 1516173.2/32

All: 8608.371+/-0.973 $\chi^2$/NDF: 3539534.3/67

- sign 8531.659+/-1.369 $\chi^2$/NDF: 2017019.6/34

# asym_atr2_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 13.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:11.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 19.6/18

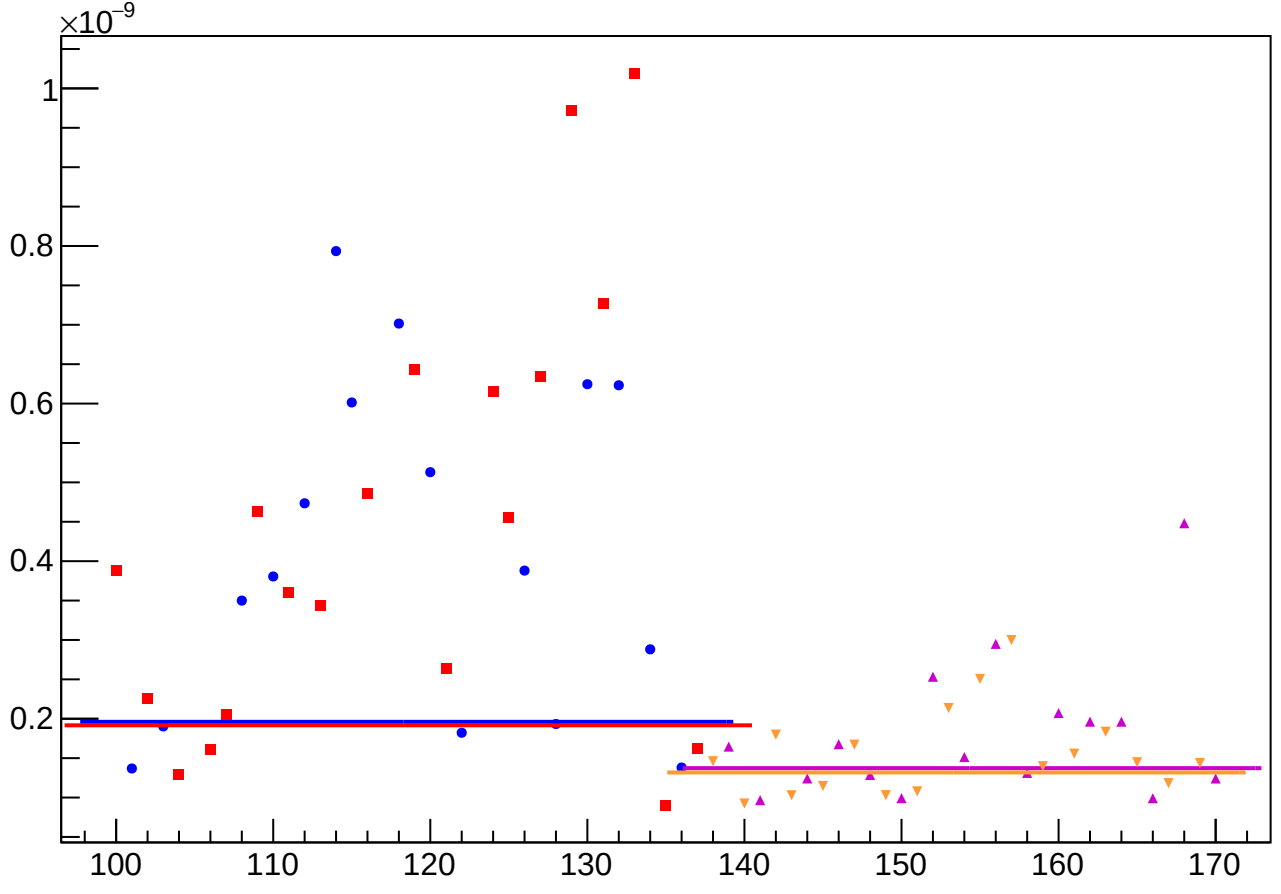
Left In: -0.000+/-0.000 $\chi^2$/NDF:9.4/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 24.9/32

All: -0.000+/-0.000 $\chi^2$/NDF: 54.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 29.6/34

# asym_atr2_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1342263.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:816291.6/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2066454.3/18

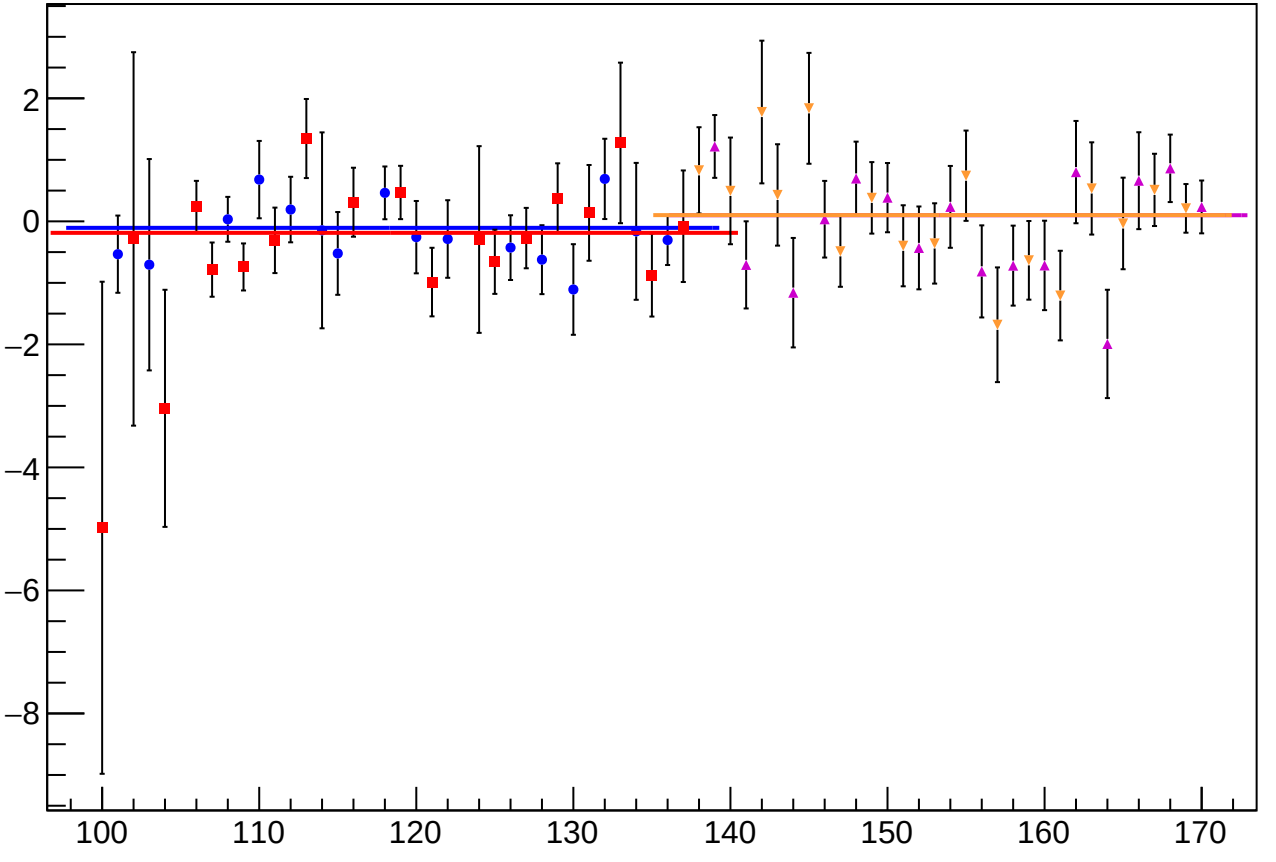
Left In: 0.000+/-0.000 $\chi^2$/NDF:1097535.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2537483.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 5956282.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3413232.8/34

# asym_atr2_dit_vs_cor_diff_mean vs Slug




Right In: -0.105+/-0.145 $\chi^2$/NDF: 9.7/15

Left Out: 0.101+/-0.163 $\chi^2$/NDF:19.5/16

Right Out: -0.187+/-0.137 $\chi^2$/NDF: 23.9/18

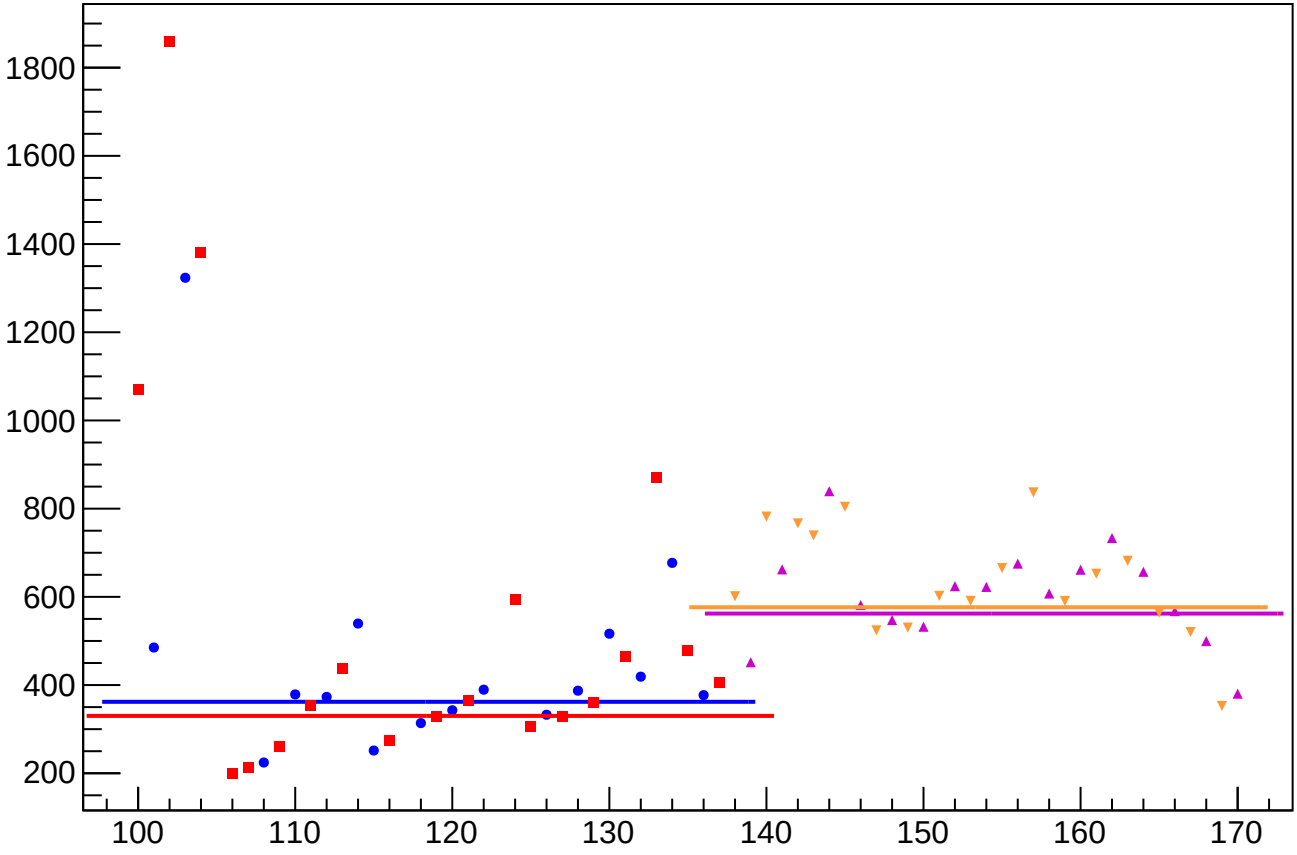
Left In: 0.100+/-0.160 $\chi^2$/NDF:23.3/15

+ sign -0.014+/-0.108 $\chi^2$/NDF: 30.1/32

All: -0.041+/-0.075 $\chi^2$/NDF: 79.2/67

- sign -0.065+/-0.104 $\chi^2$/NDF: 49.0/34

# asym_atr2_dit_vs_cor_diff_rms vs Slug




Right In: 362.037+/-0.102 $\chi^2$/NDF: 1377330.2/15

Left Out: 576.400+/-0.115 $\chi^2$/NDF:1315042.1/16

Right Out: 330.084+/-0.097 $\chi^2$/NDF: 2246513.0/18

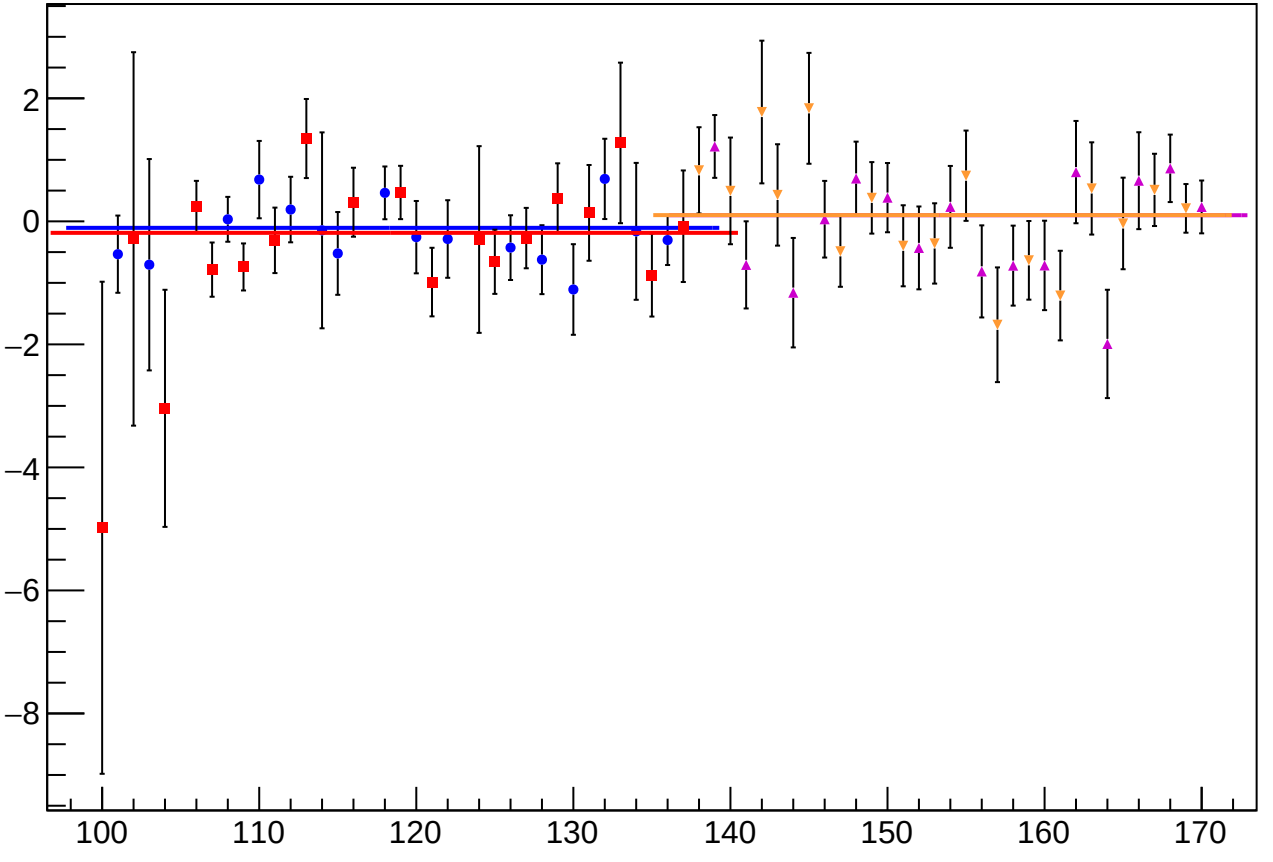
Left In: 562.098+/-0.113 $\chi^2$/NDF:955221.6/15

+ sign 456.513+/-0.077 $\chi^2$/NDF: 4627249.8/32

All: 442.125+/-0.053 $\chi^2$/NDF: 10322886.3/67

- sign 428.792+/-0.074 $\chi^2$/NDF: 5627501.7/34

# asym_atr2_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.105+/-0.145 $\chi^2$/NDF: 9.7/15

Left Out: 0.101+/-0.163 $\chi^2$/NDF:19.5/16

Right Out: -0.187+/-0.137 $\chi^2$/NDF: 23.9/18

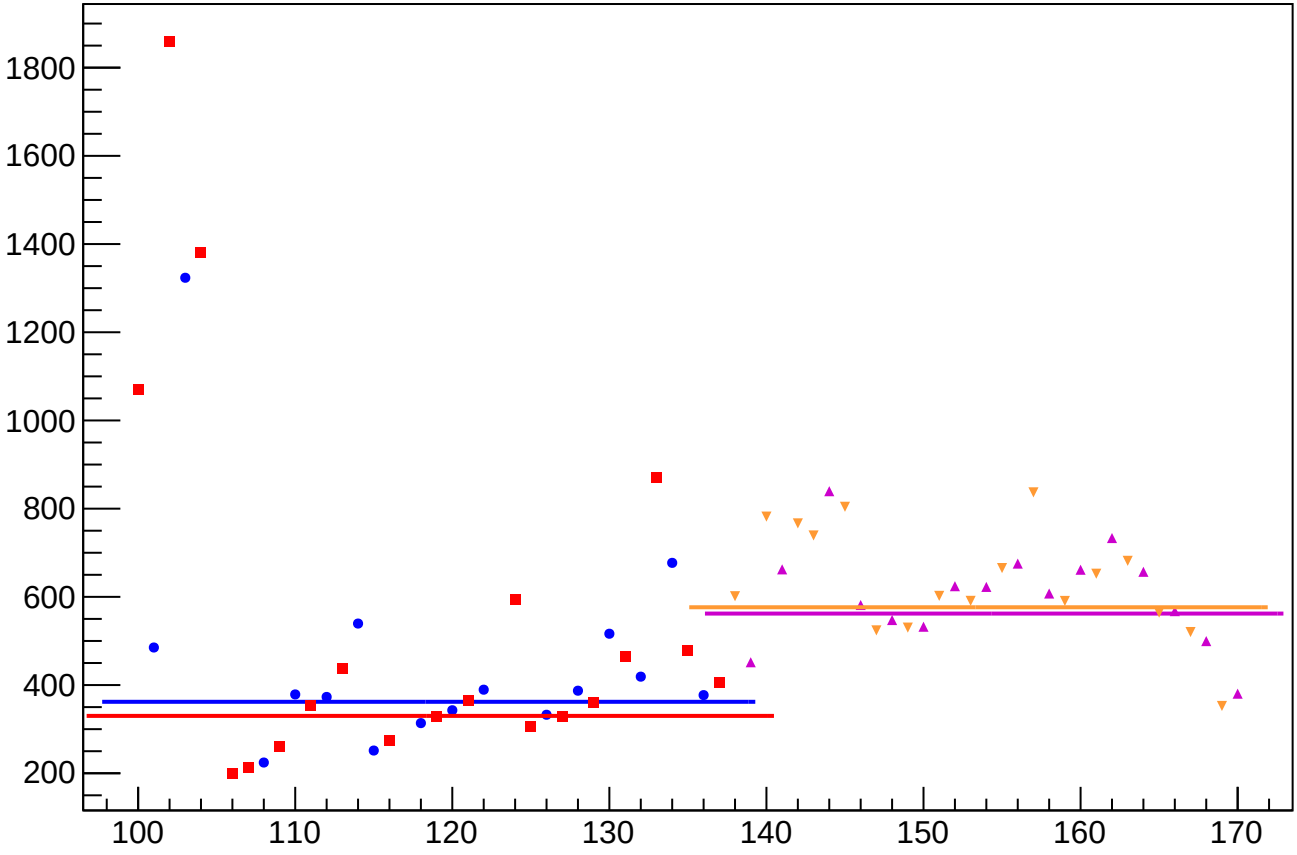
Left In: 0.100+/-0.160 $\chi^2$/NDF:23.3/15

+ sign -0.014+/-0.108 $\chi^2$/NDF: 30.1/32

All: -0.041+/-0.075 $\chi^2$/NDF: 79.2/67

- sign -0.065+/-0.104 $\chi^2$/NDF: 49.0/34

# asym_atr2_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 362.037+/-0.102 $\chi^2$/NDF: 1377330.2/15

Left Out: 576.400+/-0.115 $\chi^2$/NDF:1315042.1/16

Right Out: 330.084+/-0.097 $\chi^2$/NDF: 2246513.0/18

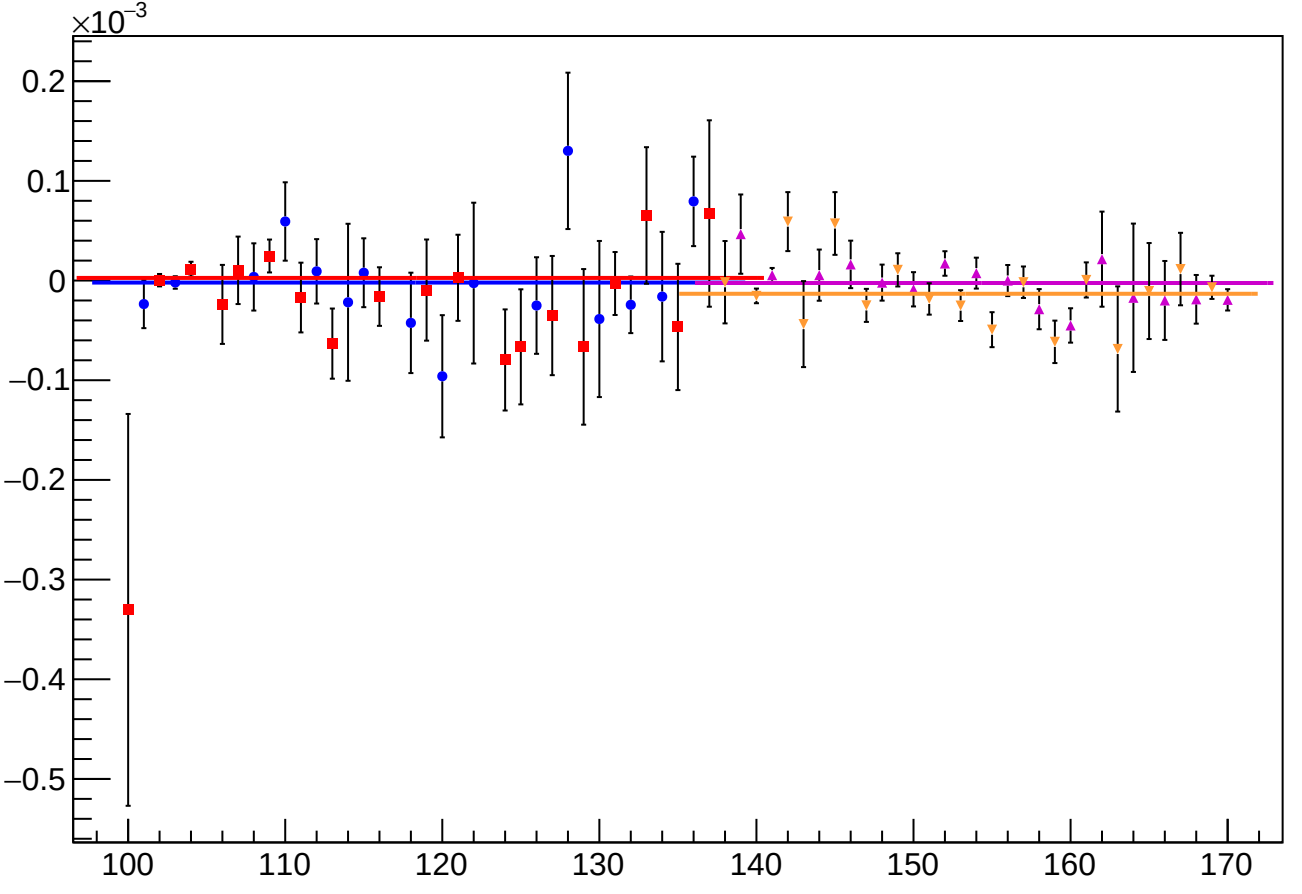
Left In: 562.098+/-0.113 $\chi^2$/NDF:955221.6/15

+ sign 456.513+/-0.077 $\chi^2$/NDF: 4627249.8/32

All: 442.125+/-0.053 $\chi^2$/NDF: 10322886.3/67

- sign 428.792+/-0.074 $\chi^2$/NDF: 5627501.7/34

# asym_atr2_eigen_dit_vs_dit_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 13.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:27.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.2/18

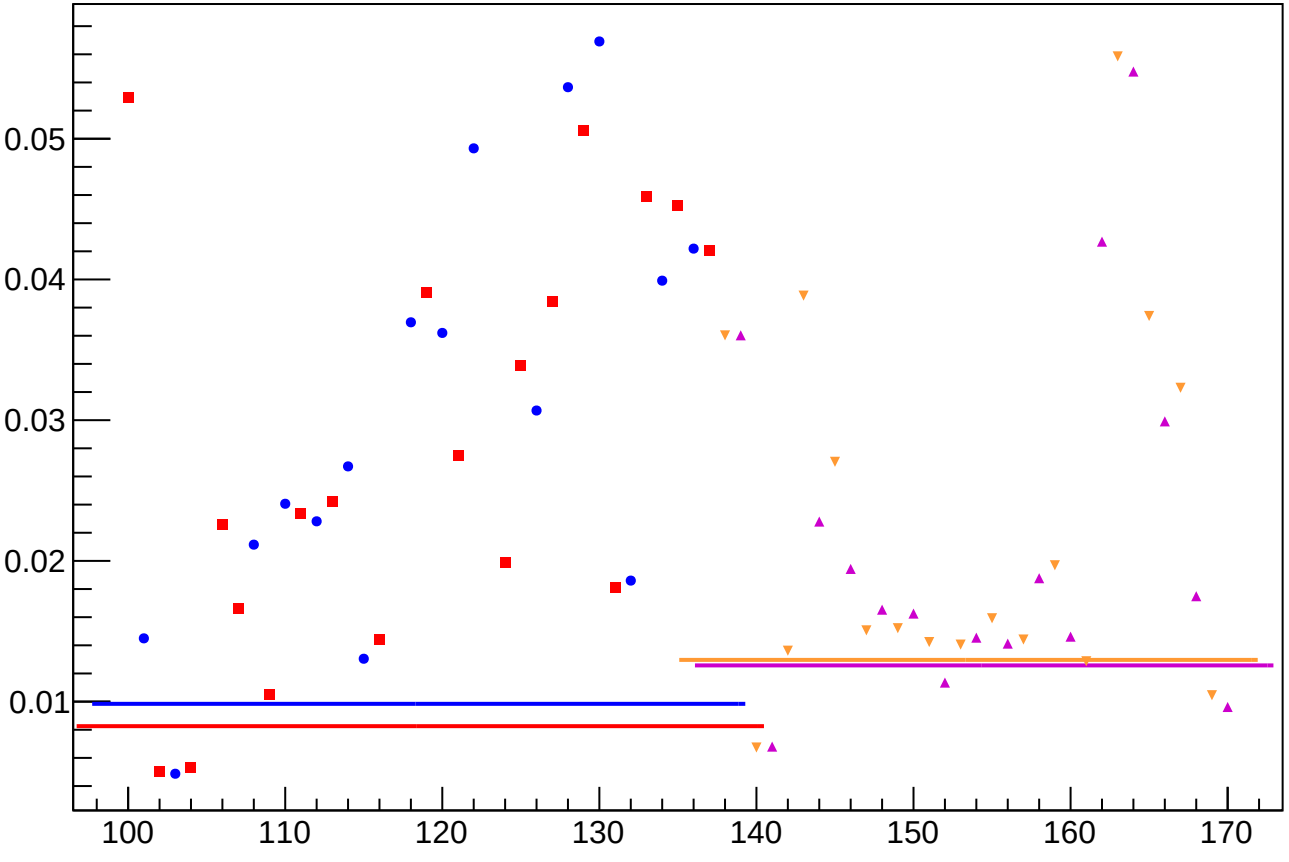
Left In: -0.000+/-0.000 $\chi^2$/NDF:17.7/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 43.5/32

All: -0.000+/-0.000 $\chi^2$/NDF: 84.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 36.7/34

# asym_atr2_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.010+/-0.000 $\chi^2$/NDF: 7052383.3/15

Left Out: 0.013+/-0.000 $\chi^2$/NDF:5651421.0/16

Right Out: 0.008+/-0.000 $\chi^2$/NDF: 6740964.7/18

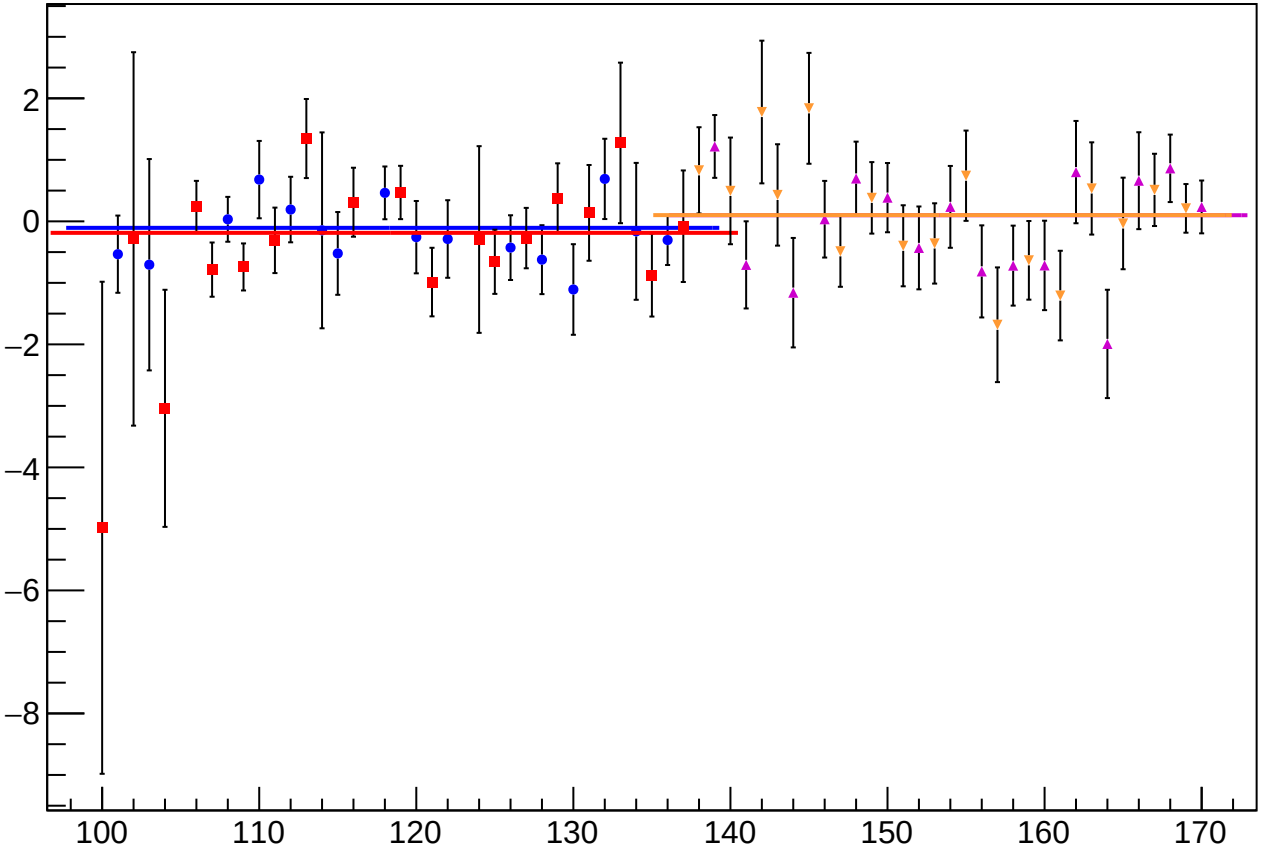
Left In: 0.013+/-0.000 $\chi^2$/NDF:4983216.3/15

+ sign 0.012+/-0.000 $\chi^2$/NDF: 13125250.4/32

All: 0.011+/-0.000 $\chi^2$/NDF: 26118791.3/67

- sign 0.011+/-0.000 $\chi^2$/NDF: 12819277.7/34

# asym_atr2_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.105+/-0.145 $\chi^2$/NDF: 9.7/15

Left Out: 0.101+/-0.163 $\chi^2$/NDF:19.5/16

Right Out: -0.187+/-0.137 $\chi^2$/NDF: 23.9/18

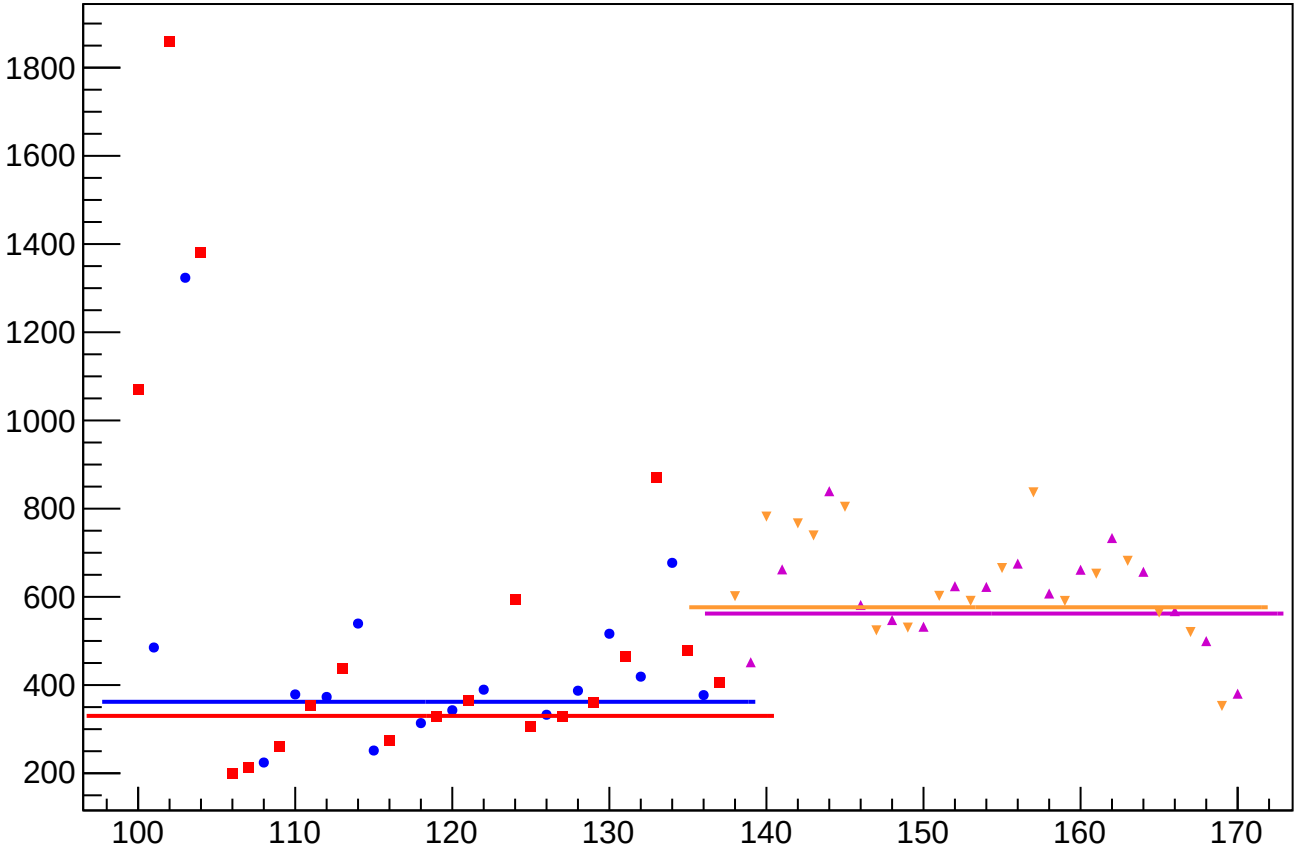
Left In: 0.100+/-0.160 $\chi^2$/NDF:23.3/15

+ sign -0.014+/-0.108 $\chi^2$/NDF: 30.1/32

All: -0.041+/-0.075 $\chi^2$/NDF: 79.2/67

- sign -0.065+/-0.104 $\chi^2$/NDF: 49.0/34

# asym_atr2_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 362.034+/-0.102 $\chi^2$/NDF: 1377333.3/15

Left Out: 576.406+/-0.115 $\chi^2$/NDF:1315109.7/16

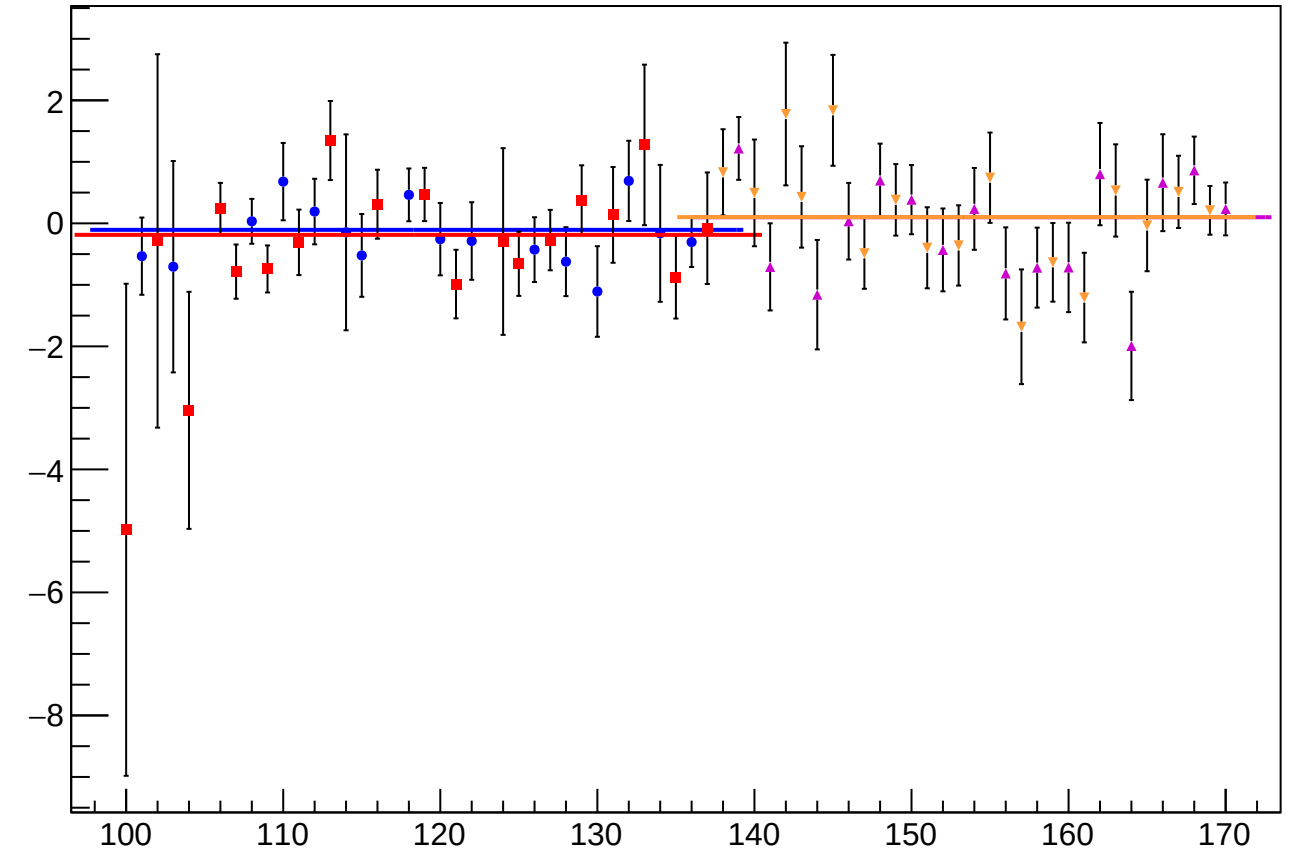
Right Out: 330.082+/-0.097 $\chi^2$/NDF: 2246503.8/18

Left In: 562.106+/-0.113 $\chi^2$/NDF:955244.8/15

+ sign 456.512+/-0.077 $\chi^2$/NDF: 4627468.1/32

All: 442.125+/-0.053 $\chi^2$/NDF: 10323267.6/67

- sign 428.792+/-0.074 $\chi^2$/NDF: 5627670.4/34




Right In: -0.105+/-0.145 $\chi^2$/NDF: 9.7/15

Left Out: 0.101+/-0.163 $\chi^2$/NDF:19.5/16

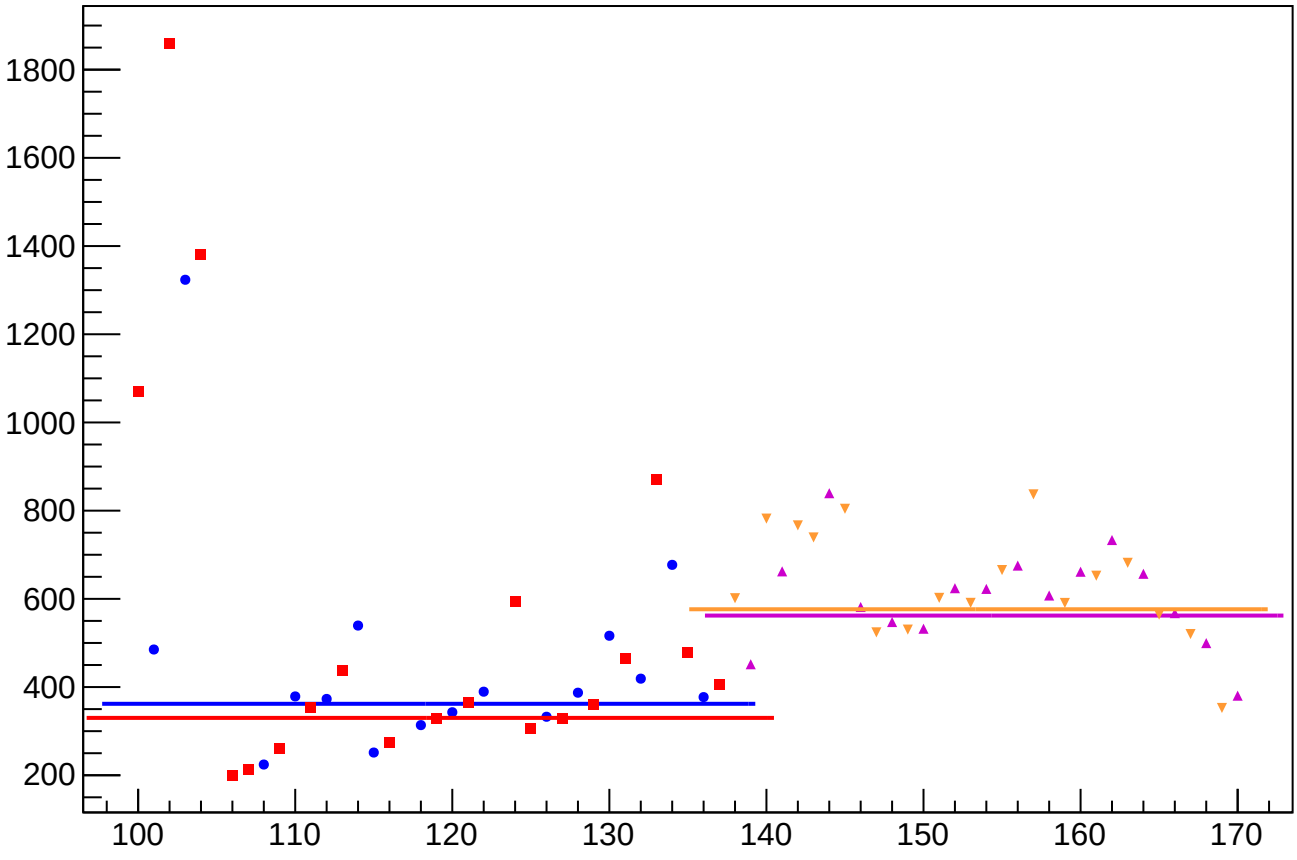
Right Out: -0.187+/-0.137 $\chi^2$/NDF: 23.9/18

Left In: 0.100+/-0.160 $\chi^2$/NDF:23.3/15

+ sign -0.014+/-0.108 $\chi^2$/NDF: 30.1/32

All: -0.041+/-0.075 $\chi^2$/NDF: 79.2/67

- sign -0.065+/-0.104 $\chi^2$/NDF: 49.0/34




Right In: 362.034+/-0.102 $\chi^2$/NDF: 1377333.3/15

Left Out: 576.406+/-0.115 $\chi^2$/NDF:1315109.7/16

Right Out: 330.082+/-0.097 $\chi^2$/NDF: 2246503.8/18

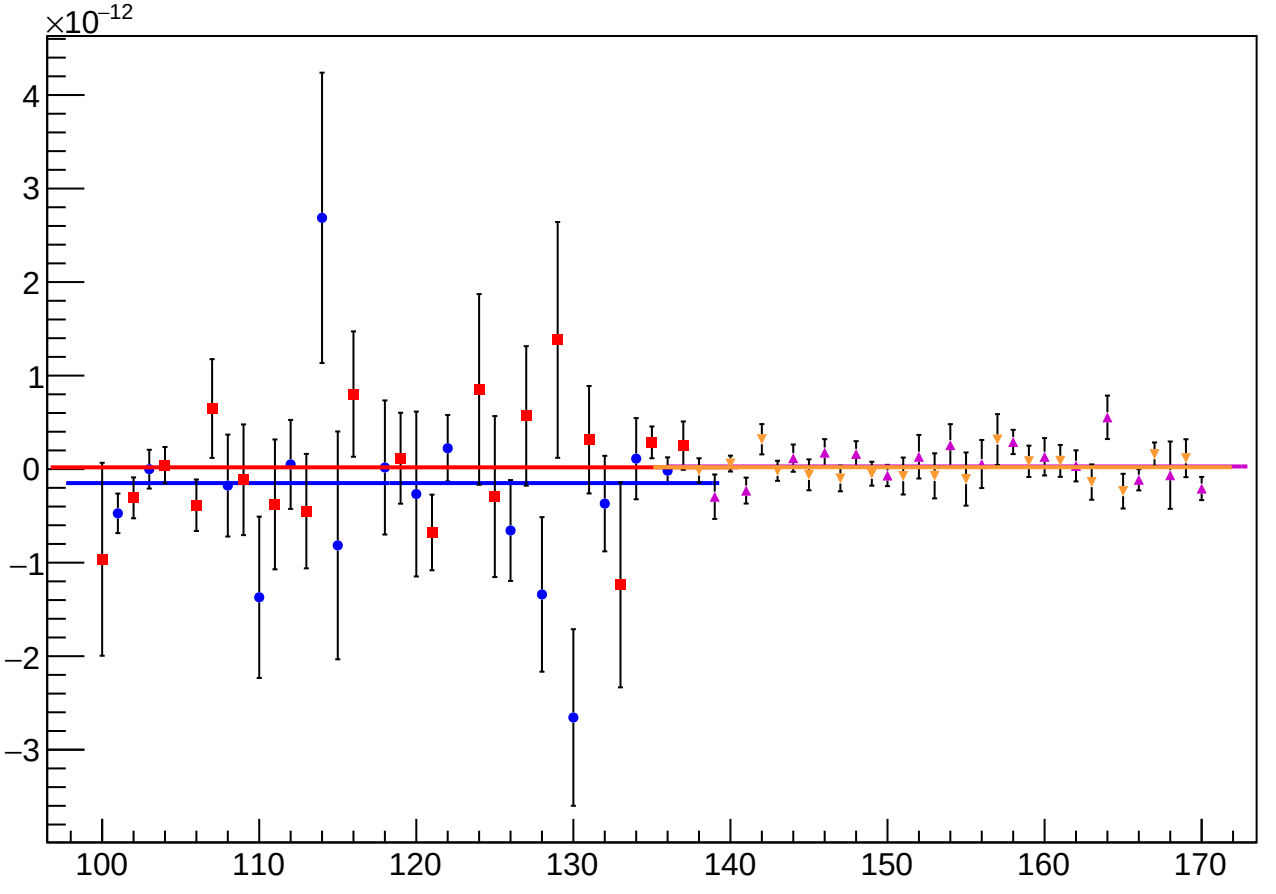
Left In: 562.106+/-0.113 $\chi^2$/NDF:955244.8/15

+ sign 456.512+/-0.077 $\chi^2$/NDF: 4627468.1/32

All: 442.125+/-0.053 $\chi^2$/NDF: 10323267.6/67

- sign 428.792+/-0.074 $\chi^2$/NDF: 5627670.4/34

# asym_atr2_eigen_cor_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 21.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11.2/16

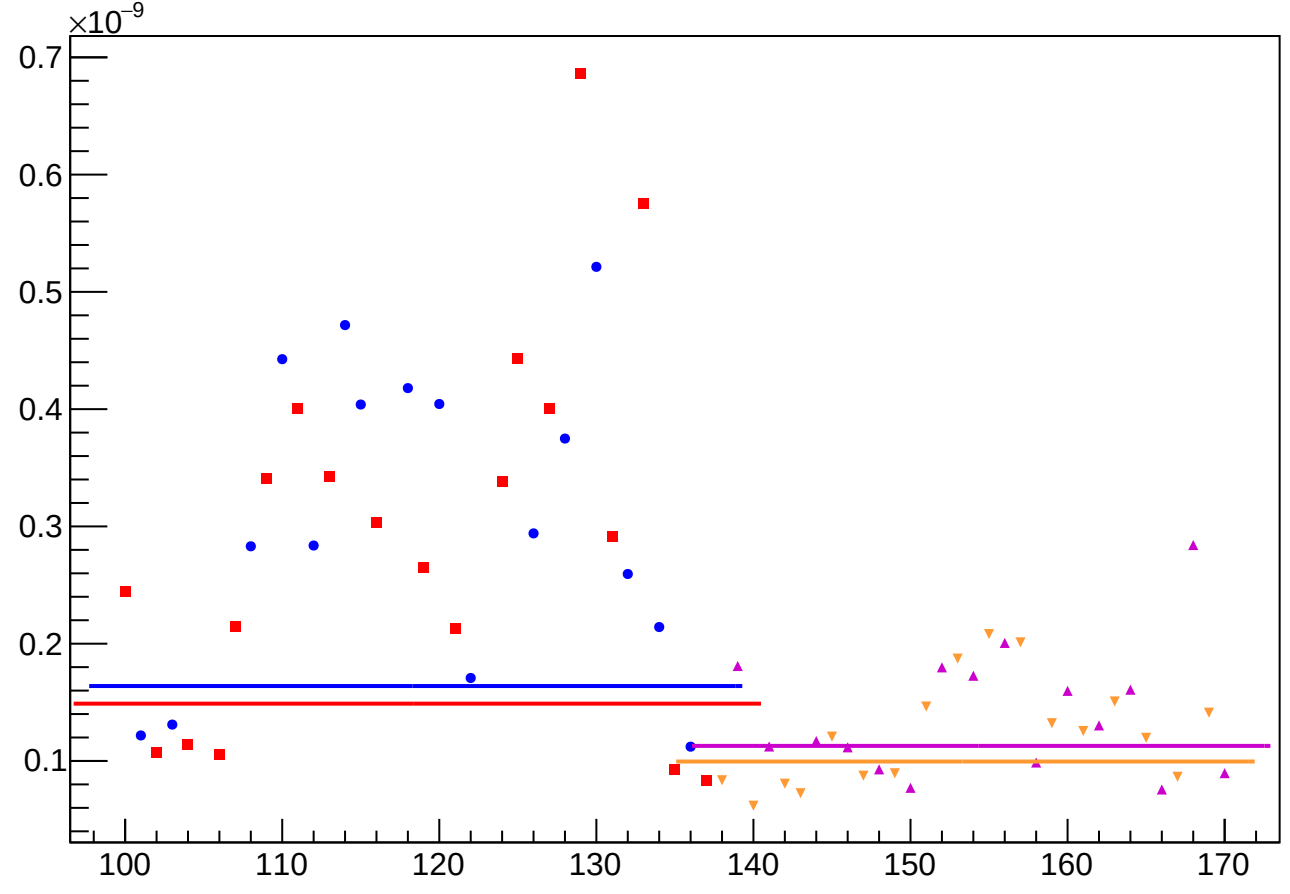
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 19.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:24.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 35.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 80.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 43.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2011207.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1985414.4/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2846265.5/18

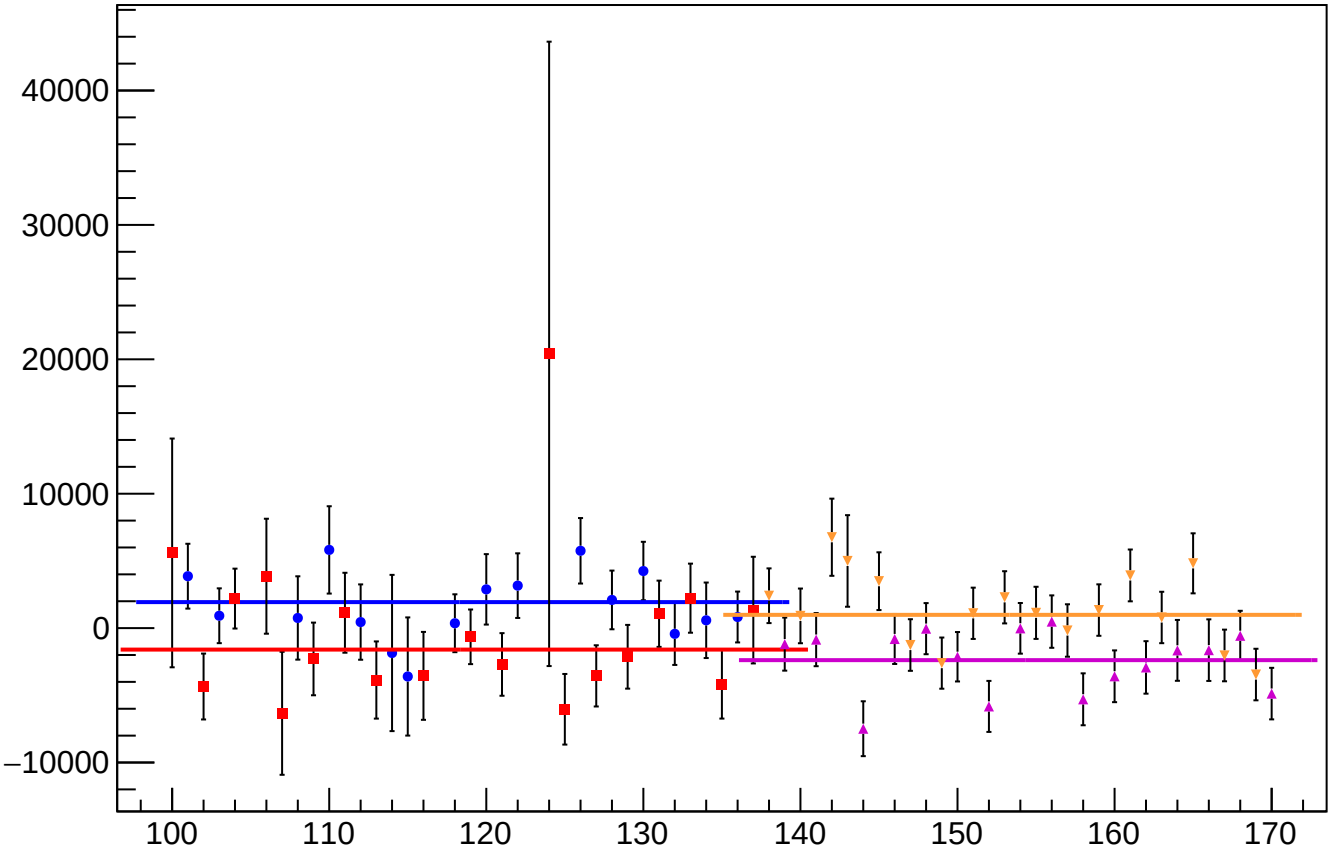
Left In: 0.000+/-0.000 $\chi^2$/NDF:1927724.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4923241.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10090886.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5077726.8/34

# reg_asym_atl_avg_mean vs Slug




Right In: 1934.755+/-627.874 $\chi^2$/NDF: 10.9/15

Left Out: 987.135+/-495.009 $\chi^2$/NDF:26.2/16

Right Out: -1597.959+/-642.207 $\chi^2$/NDF: 19.4/18

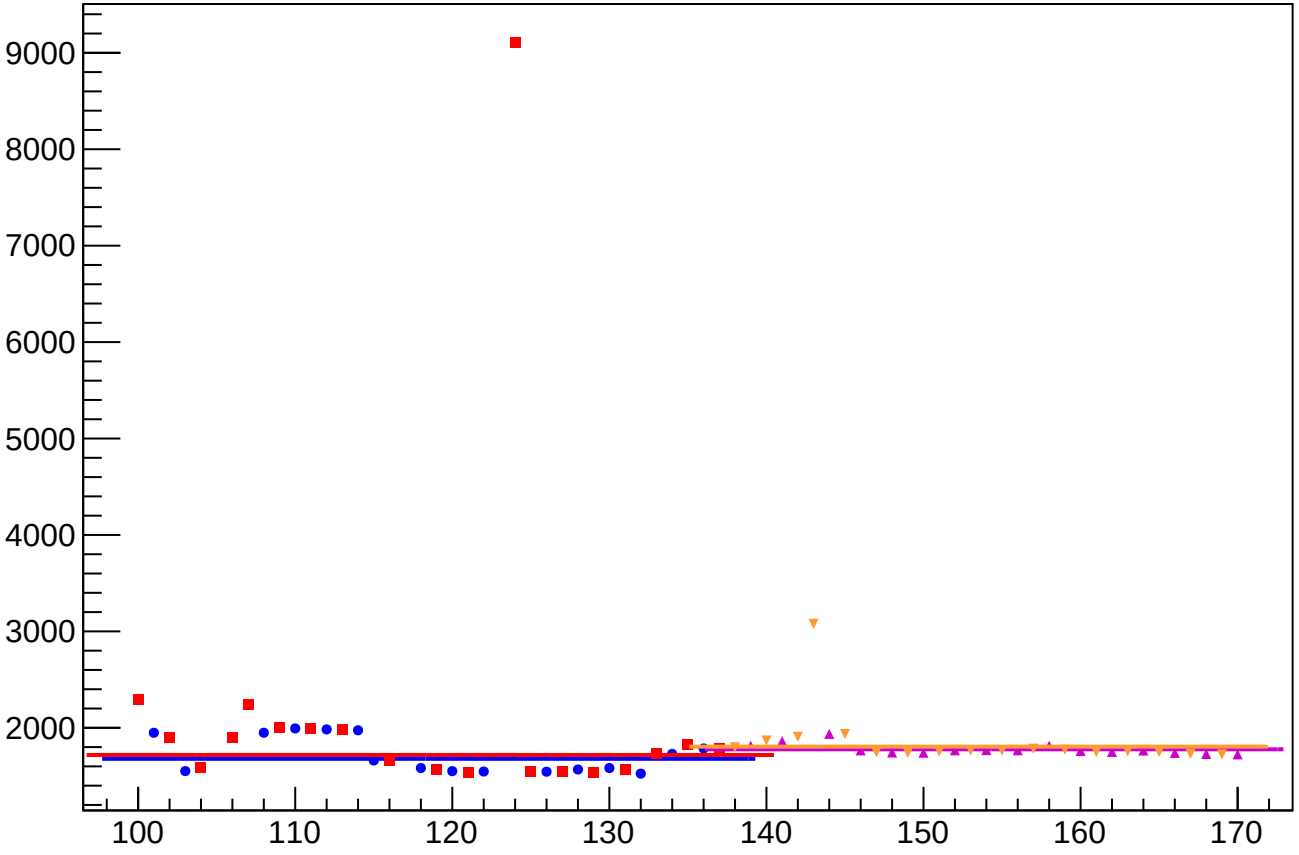
Left In: -2383.083+/-488.989 $\chi^2$/NDF:22.1/15

+ sign 1350.366+/-388.729 $\chi^2$/NDF: 38.5/32

All: -370.876+/-274.986 $\chi^2$/NDF: 120.1/67

- sign -2094.948+/-389.048 $\chi^2$/NDF: 42.4/34

# reg_asym_atl_avg_rms vs Slug




Right In: 1678.543+/-0.444 $\chi^2$/NDF: 141482.6/15

Left Out: 1804.647+/-0.350 $\chi^2$/NDF:310164.1/16

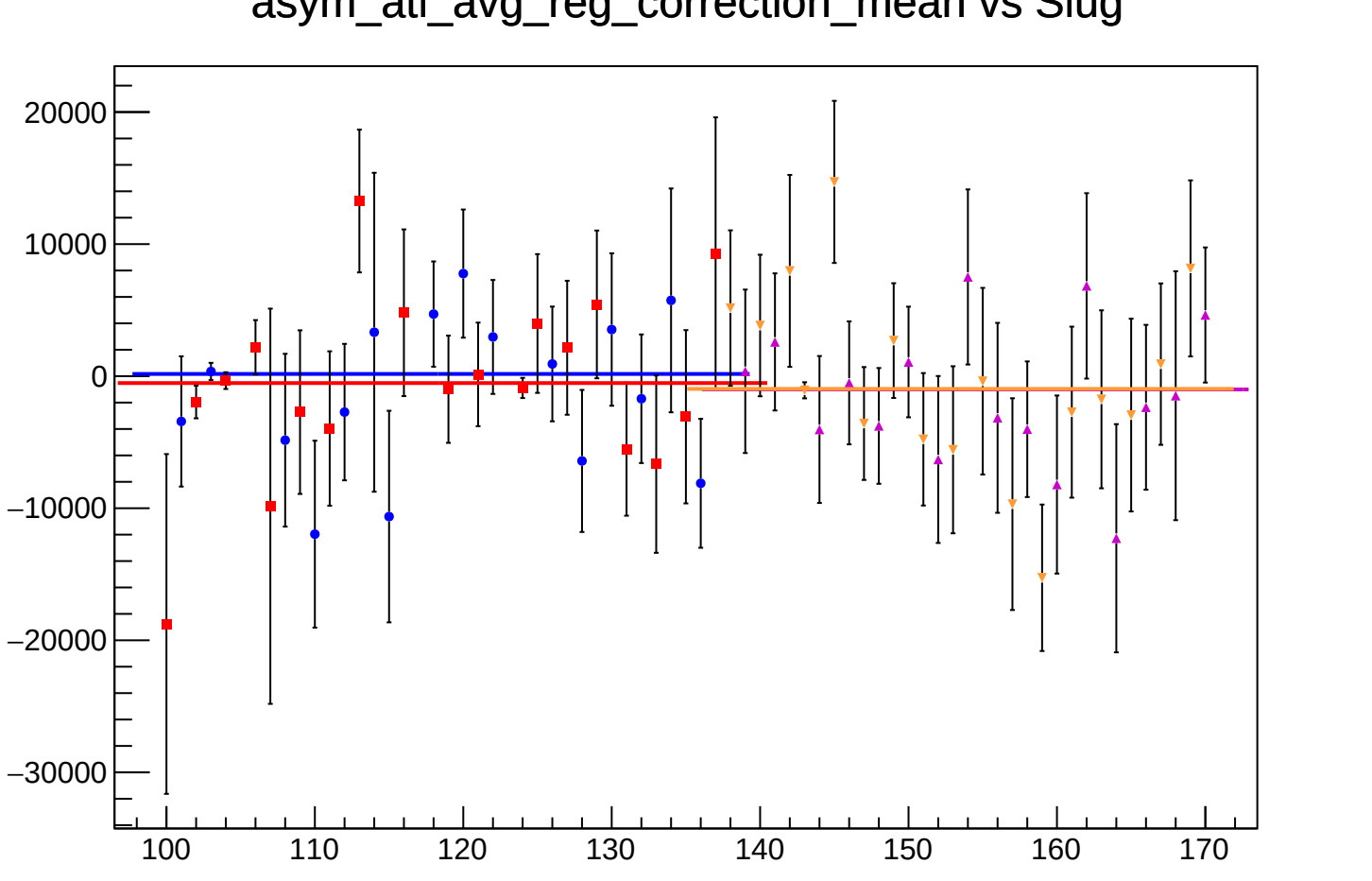
Right Out: 1718.312+/-0.452 $\chi^2$/NDF: 383179.3/18

Left In: 1777.148+/-0.346 $\chi^2$/NDF:22937.7/15

+ sign 1756.310+/-0.275 $\chi^2$/NDF: 501398.9/32

All: 1755.868+/-0.194 $\chi^2$/NDF: 918211.1/67

- sign 1755.426+/-0.275 $\chi^2$/NDF: 416807.0/34




Right In: 168.283+/-591.607 $\chi^2$/NDF: 15.8/15

Left Out: -964.497+/-563.643 $\chi^2$/NDF:22.1/16

Right Out: -521.080+/-424.783 $\chi^2$/NDF: 18.5/18

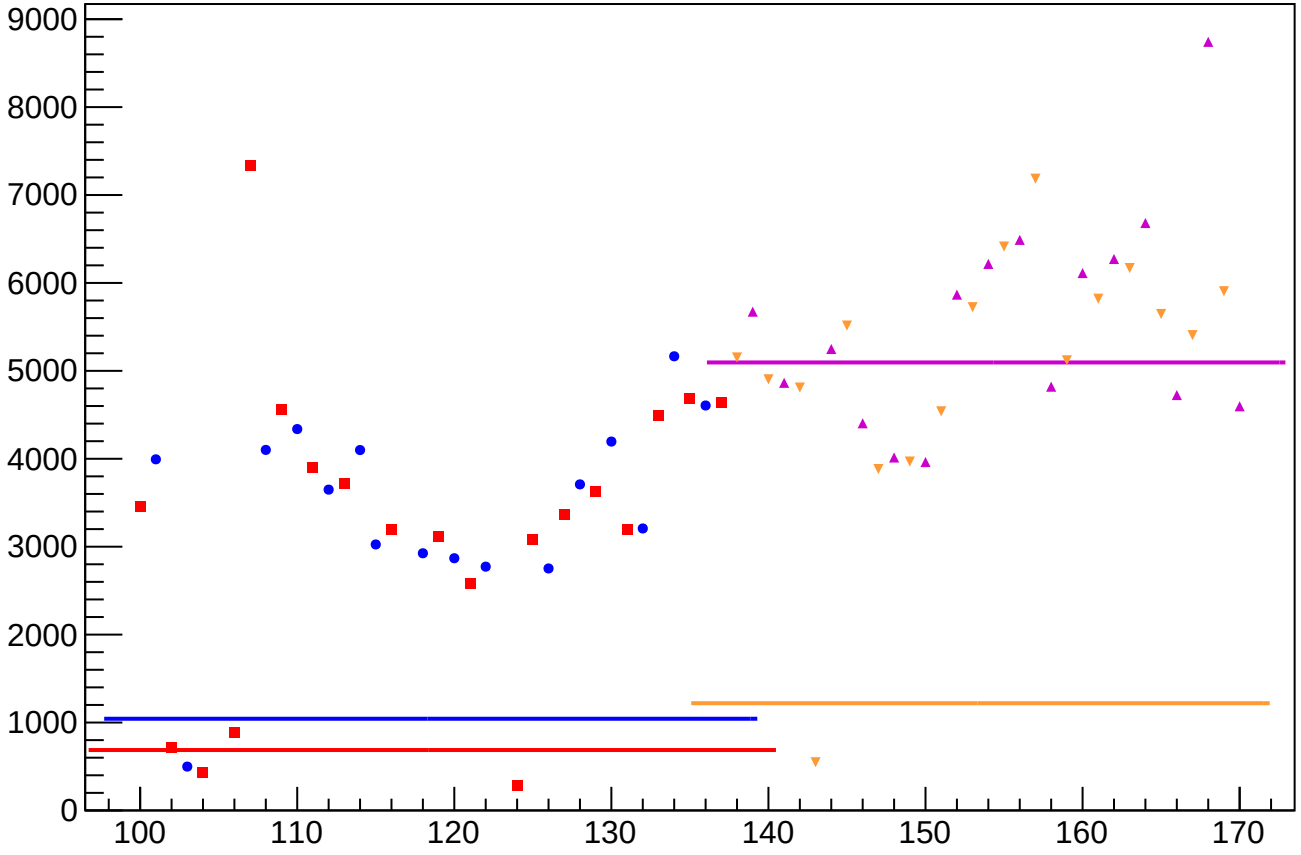
Left In: -1006.020+/-1433.587 $\chi^2$/NDF:9.6/15

+ sign -425.510+/-408.084 $\chi^2$/NDF: 39.9/32

All: -492.998+/-288.274 $\chi^2$/NDF: 68.2/67

- sign -560.221+/-407.280 $\chi^2$/NDF: 28.3/34

# asym_atl_avg_reg_correction_rms vs Slug




Right In: 1043.117+/-0.418 $\chi^2$/NDF: 8111897.6/15

Left Out: 1219.860+/-0.399 $\chi^2$/NDF:17123458.6/16

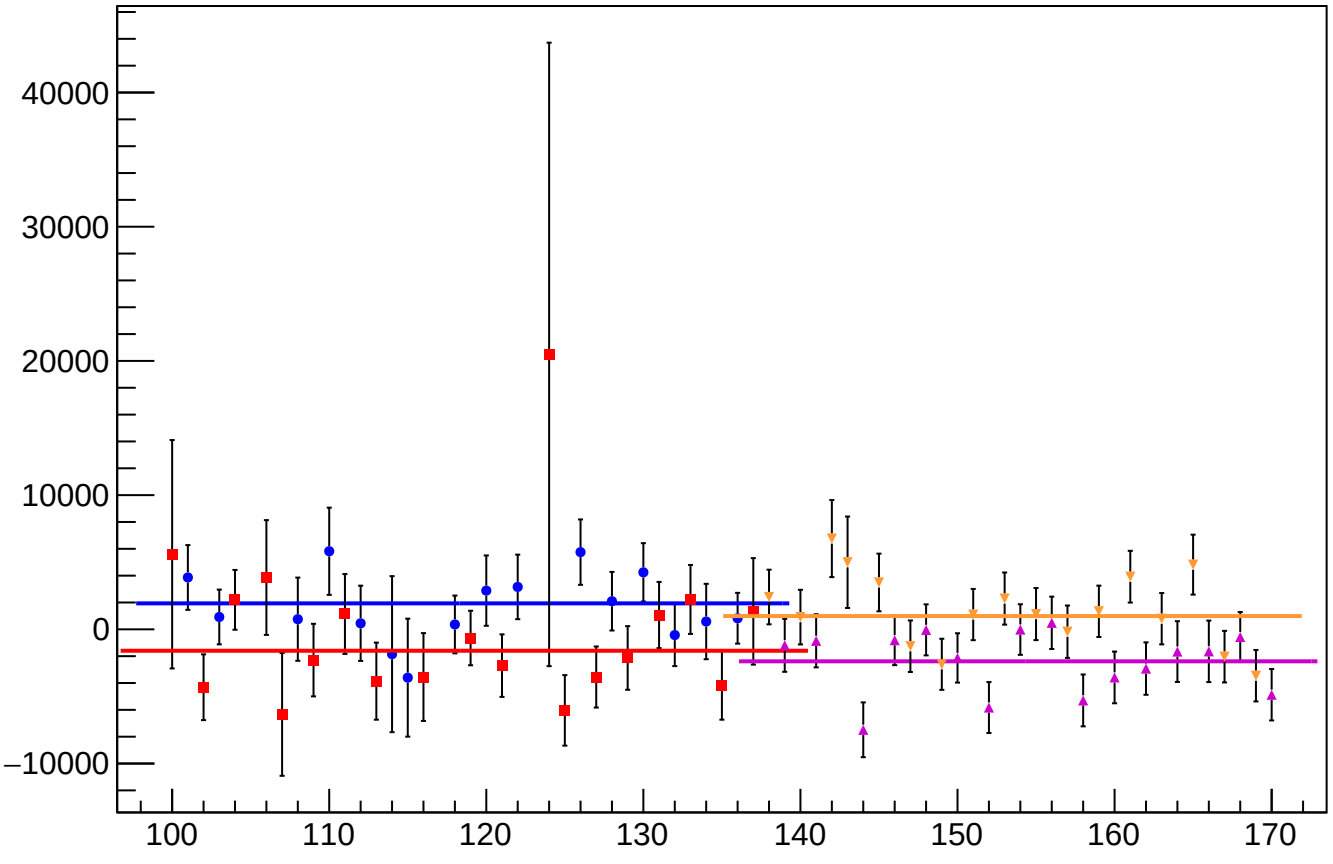
Right Out: 687.329+/-0.300 $\chi^2$/NDF: 8631529.6/18

Left In: 5095.661+/-1.014 $\chi^2$/NDF:997418.2/15

+ sign 1135.764+/-0.289 $\chi^2$/NDF: 25328926.2/32

All: 1089.358+/-0.204 $\chi^2$/NDF: 52394796.0/6

- sign 1043.134+/-0.288 $\chi^2$/NDF: 27014244.7/34




Right In: 1934.871+/-627.874 $\chi^2$/NDF: 10.9/15

Left Out: 987.097+/-495.009 $\chi^2$/NDF:26.2/16

Right Out: -1595.521+/-642.212 $\chi^2$/NDF: 19.4/18

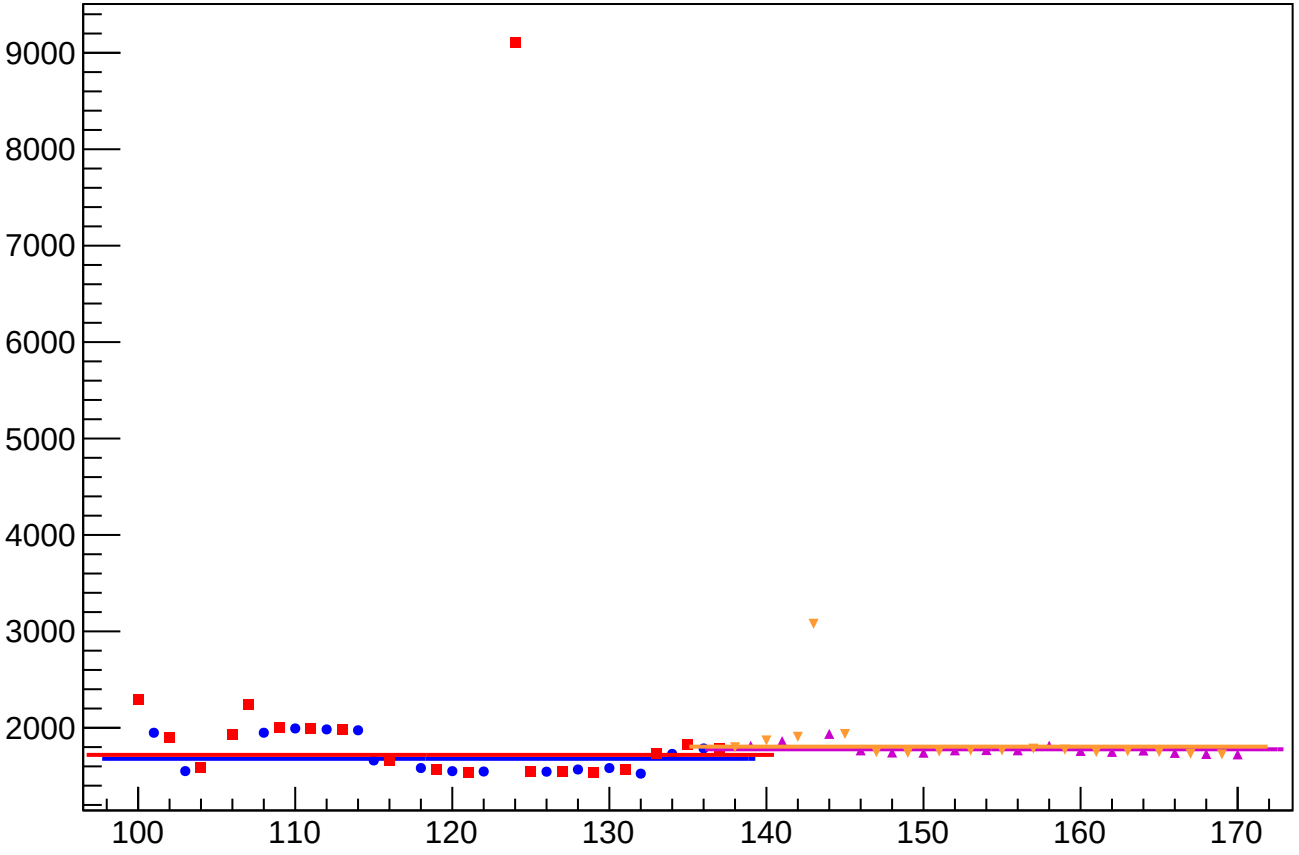
Left In: -2383.159+/-488.989 $\chi^2$/NDF:22.1/15

+ sign 1350.387+/-388.729 $\chi^2$/NDF: 38.5/32

All: -370.439+/-274.986 $\chi^2$/NDF: 120.1/67

- sign -2094.104+/-389.050 $\chi^2$/NDF: 42.4/34

# cor_asym_atl_avg_rms vs Slug




Right In: 1678.543+/-0.444 $\chi^2$/NDF: 141482.7/15

Left Out: 1804.647+/-0.350 $\chi^2$/NDF:310164.1/16

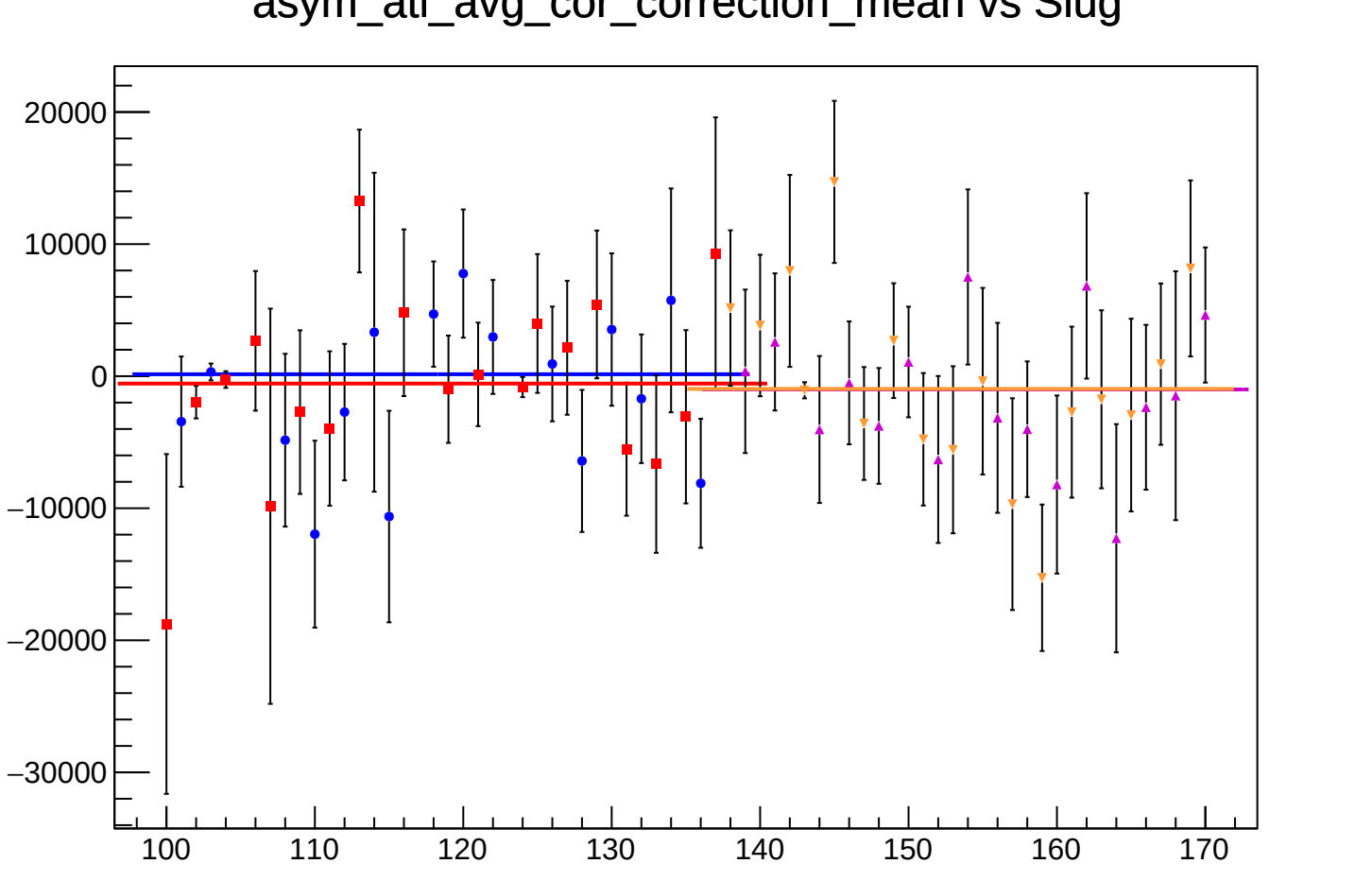
Right Out: 1719.146+/-0.452 $\chi^2$/NDF: 384922.3/18

Left In: 1777.148+/-0.346 $\chi^2$/NDF:22937.7/15

+ sign 1756.310+/-0.275 $\chi^2$/NDF: 501399.1/32

All: 1756.029+/-0.194 $\chi^2$/NDF: 919643.8/67

- sign 1755.748+/-0.275 $\chi^2$/NDF: 418242.6/34




Right In: 146.548+/-579.356 $\chi^2$/NDF: 15.8/15

Left Out: -964.156+/-563.624 $\chi^2$/NDF:22.1/16

Right Out: -561.454+/-430.621 $\chi^2$/NDF: 17.2/18

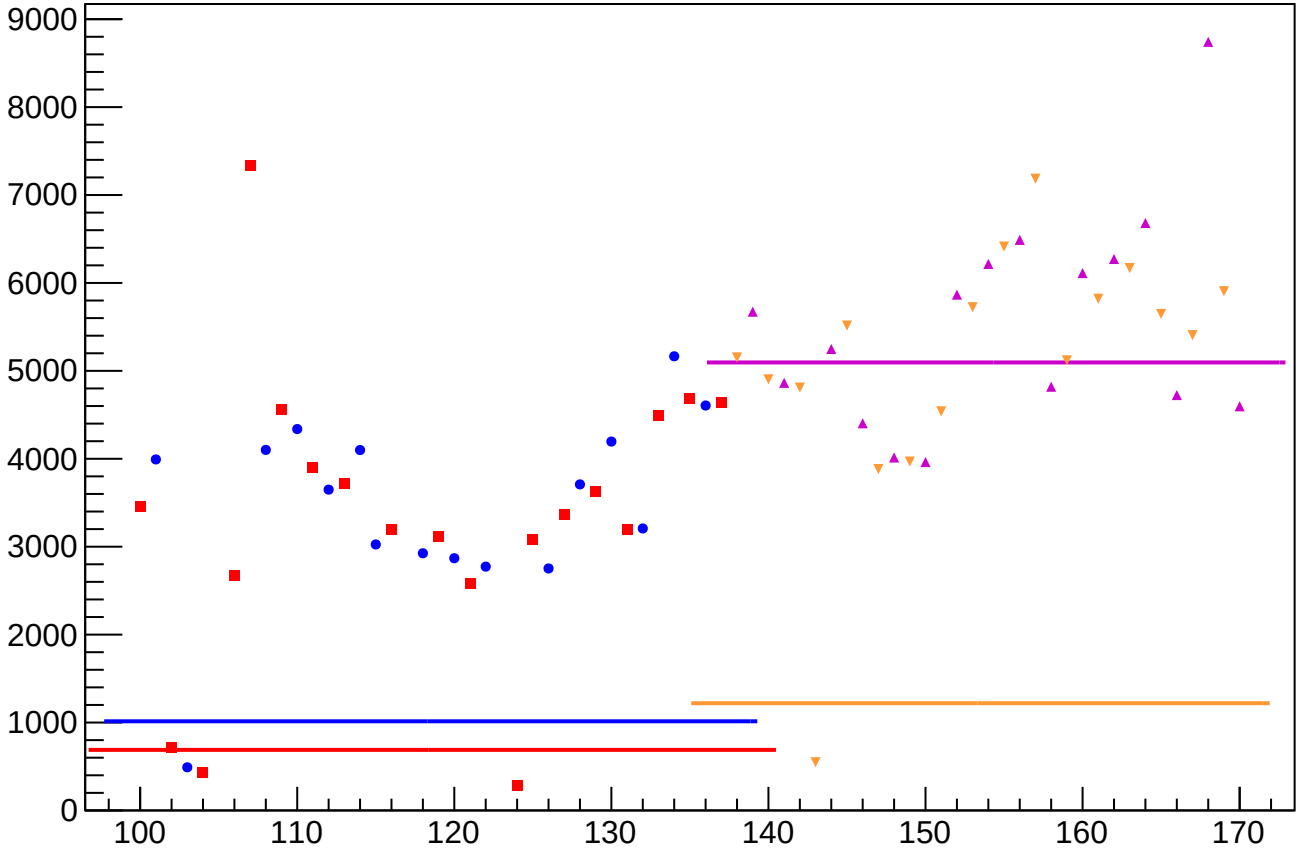
Left In: -1006.115+/-1433.586 $\chi^2$/NDF:9.6/15

+ sign -424.090+/-403.990 $\chi^2$/NDF: 39.8/32

All: -509.375+/-288.597 $\chi^2$/NDF: 66.8/67

- sign -598.255+/-412.417 $\chi^2$/NDF: 26.9/34

# asym_atl_avg_cor_correction_rms vs Slug




Right In: 1014.094+/-0.410 $\chi^2$/NDF: 8223017.6/15

Left Out: 1219.794+/-0.399 $\chi^2$/NDF:17123823.6/16

Right Out: 689.055+/-0.304 $\chi^2$/NDF: 8910364.4/18

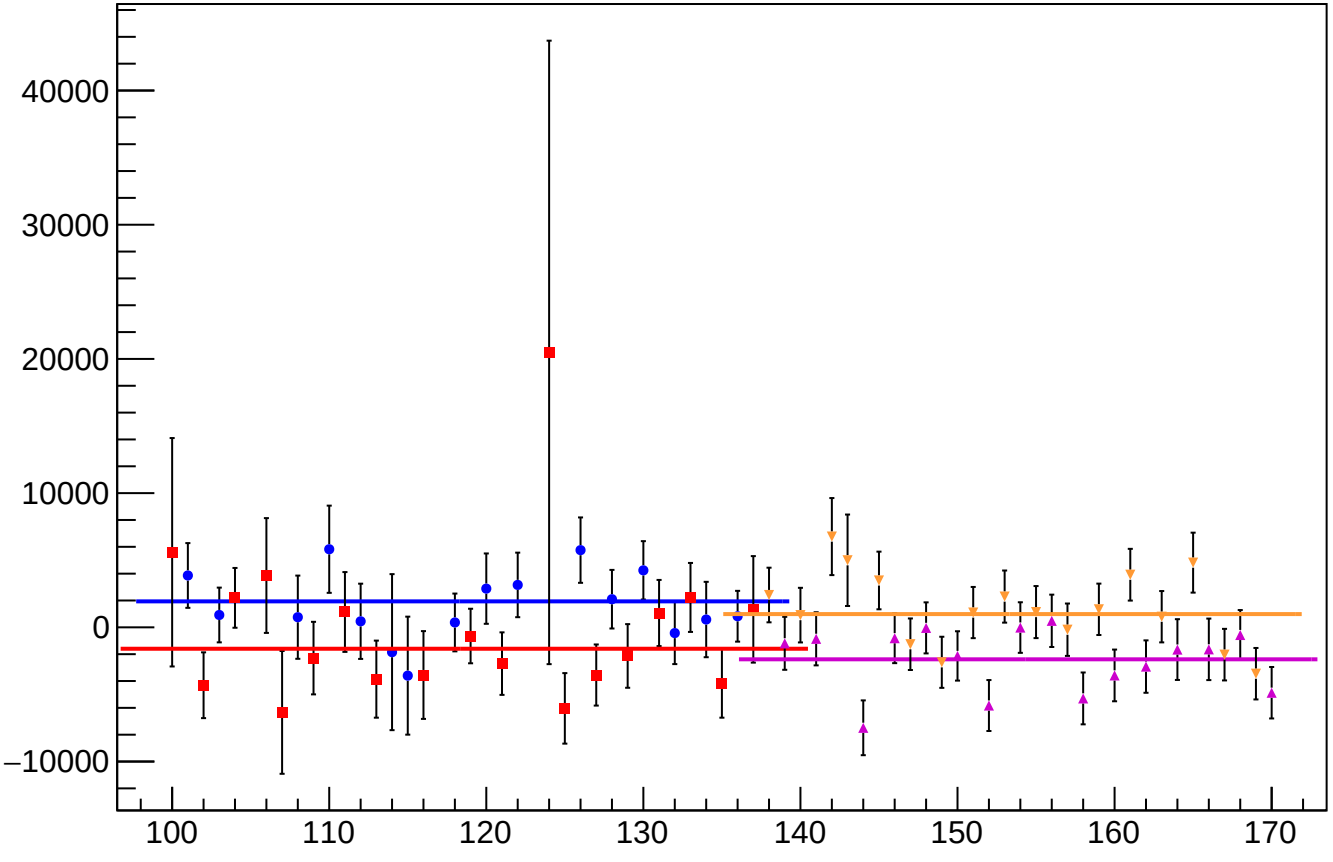
Left In: 5095.655+/-1.014 $\chi^2$/NDF:997438.3/15

+ sign 1119.775+/-0.286 $\chi^2$/NDF: 25476369.9/32

All: 1087.444+/-0.204 $\chi^2$/NDF: 52743281.5/6

- sign 1053.750+/-0.292 $\chi^2$/NDF: 27240752.7/34

# eigen_cor_asym_atl_avg_mean vs Slug




Right In: 1934.871+/-627.874 $\chi^2$/NDF: 10.9/15

Left Out: 987.097+/-495.009 $\chi^2$/NDF:26.2/16

Right Out: -1595.521+/-642.212 $\chi^2$/NDF: 19.4/18

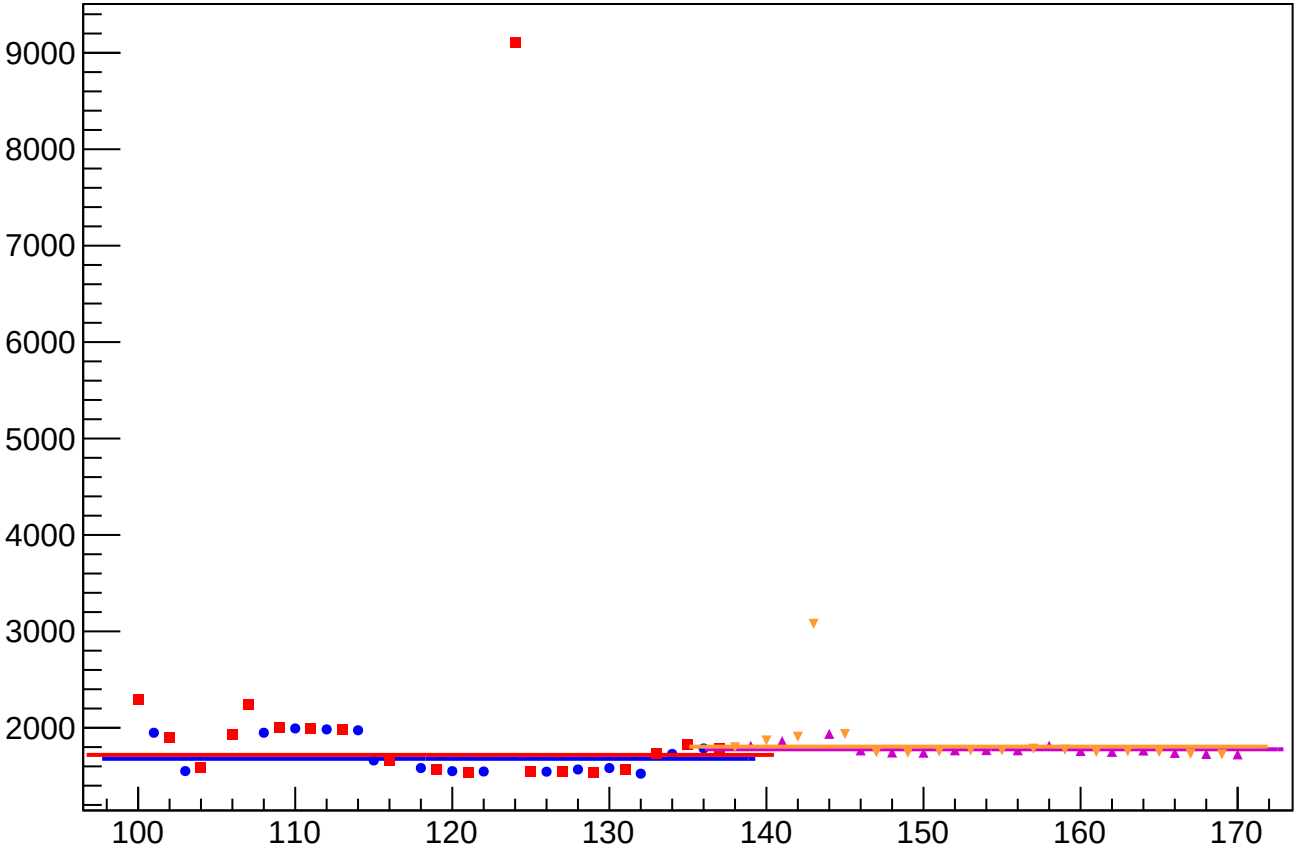
Left In: -2383.159+/-488.989 $\chi^2$/NDF:22.1/15

+ sign 1350.387+/-388.729 $\chi^2$/NDF: 38.5/32

All: -370.439+/-274.986 $\chi^2$/NDF: 120.1/67

- sign -2094.104+/-389.050 $\chi^2$/NDF: 42.4/34

# eigen_cor_asym_atl_avg_rms vs Slug




Right In: 1678.543+/-0.444 $\chi^2$/NDF: 141482.7/15

Left Out: 1804.647+/-0.350 $\chi^2$/NDF:310164.1/16

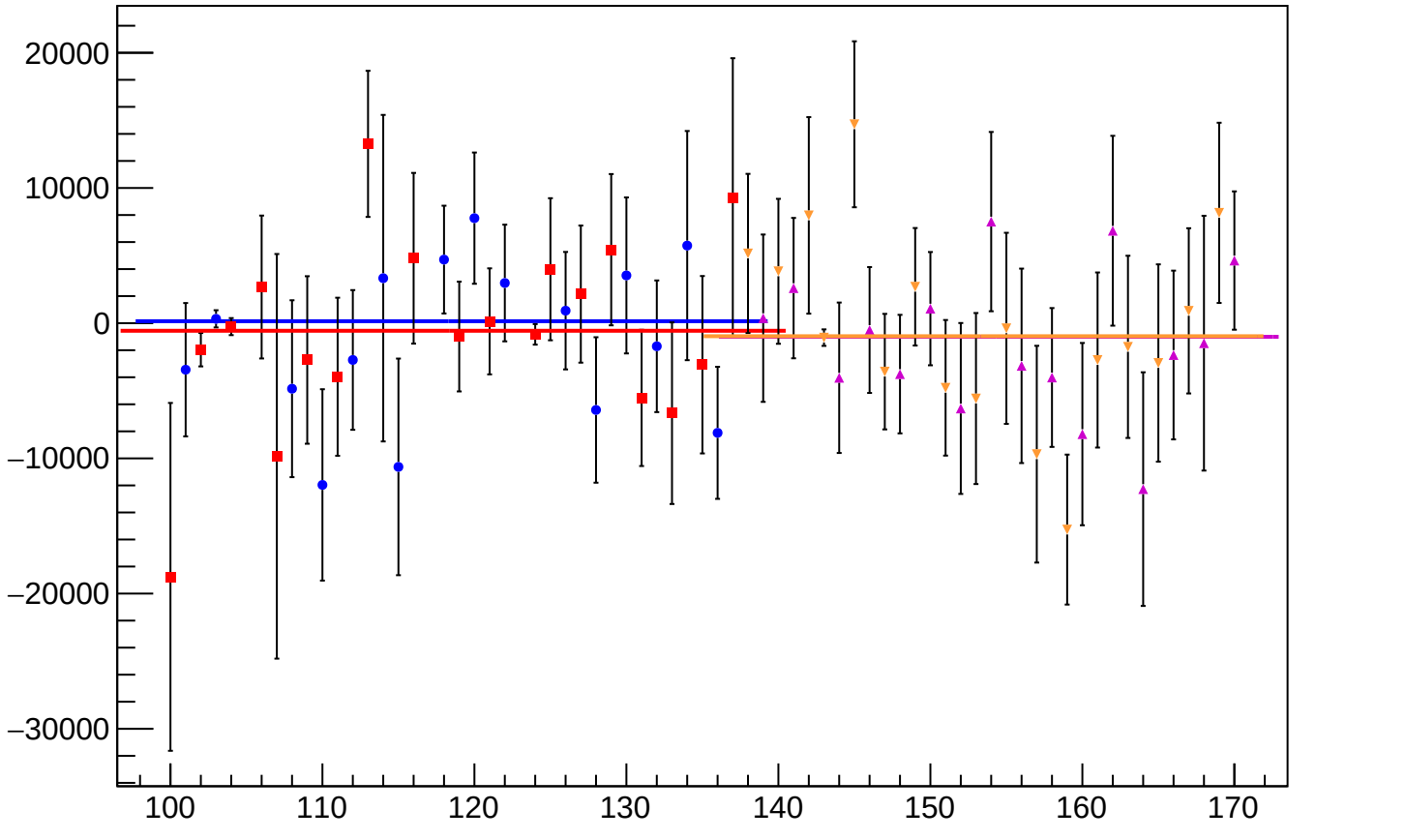
Right Out: 1719.146+/-0.452 $\chi^2$/NDF: 384922.3/18

Left In: 1777.148+/-0.346 $\chi^2$/NDF:22937.7/15

+ sign 1756.310+/-0.275 $\chi^2$/NDF: 501399.1/32

All: 1756.029+/-0.194 $\chi^2$/NDF: 919643.8/67

- sign 1755.748+/-0.275 $\chi^2$/NDF: 418242.6/34




Right In: 146.548+/-579.356 $\chi^2$/NDF: 15.8/15

Left Out: -964.156+/-563.624 $\chi^2$/NDF:22.1/16

Right Out: -561.454+/-430.621 $\chi^2$/NDF: 17.2/18

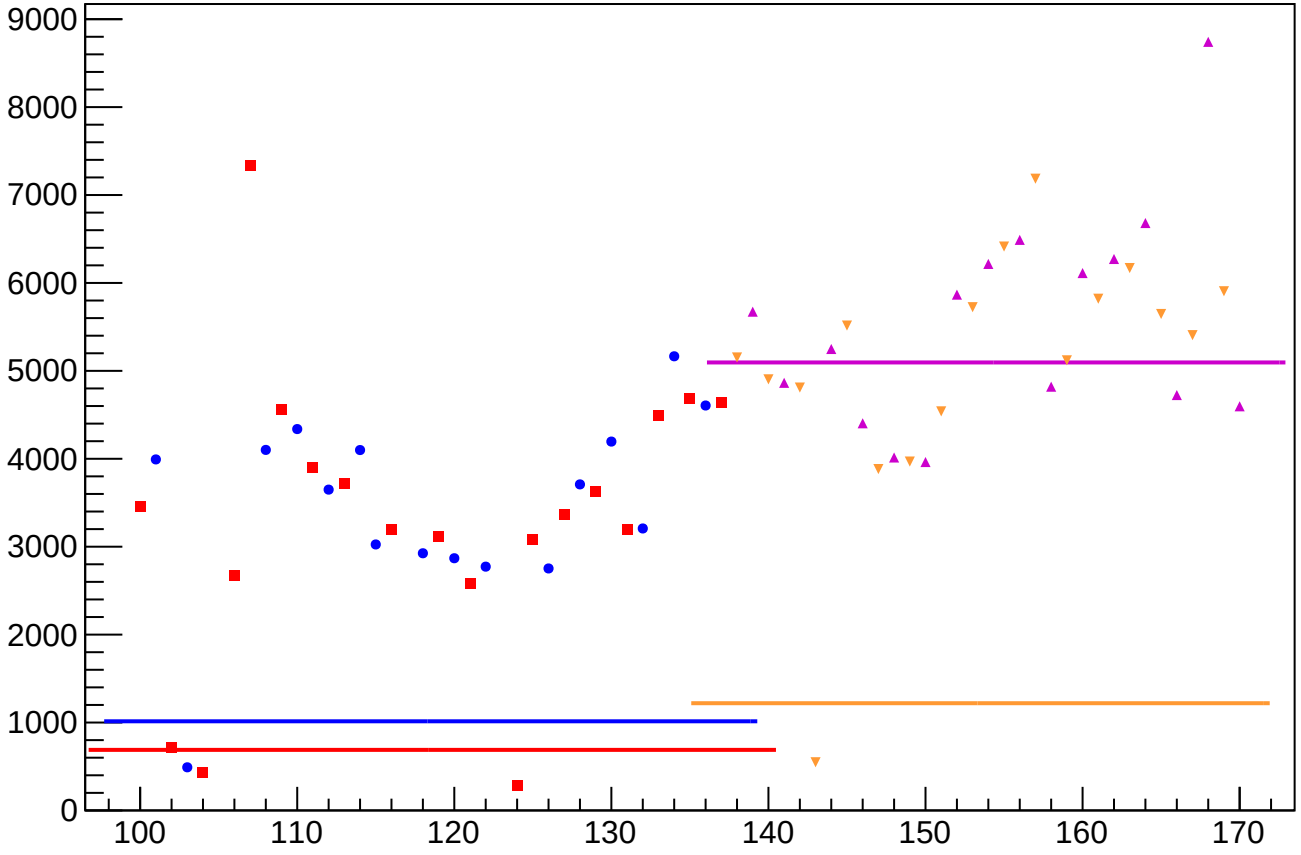
Left In: -1006.115+/-1433.586 $\chi^2$/NDF:9.6/15

+ sign -424.090+/-403.990 $\chi^2$/NDF: 39.8/32

All: -509.375+/-288.597 $\chi^2$/NDF: 66.8/67

- sign -598.255+/-412.417 $\chi^2$/NDF: 26.9/34

# asym_atl_avg_eigen_cor_correction_rms vs Slug




Right In: 1014.094+/-0.410 $\chi^2$/NDF: 8223017.6/15

Left Out: 1219.794+/-0.399 $\chi^2$/NDF:17123823.6/16

Right Out: 689.055+/-0.304 $\chi^2$/NDF: 8910364.4/18

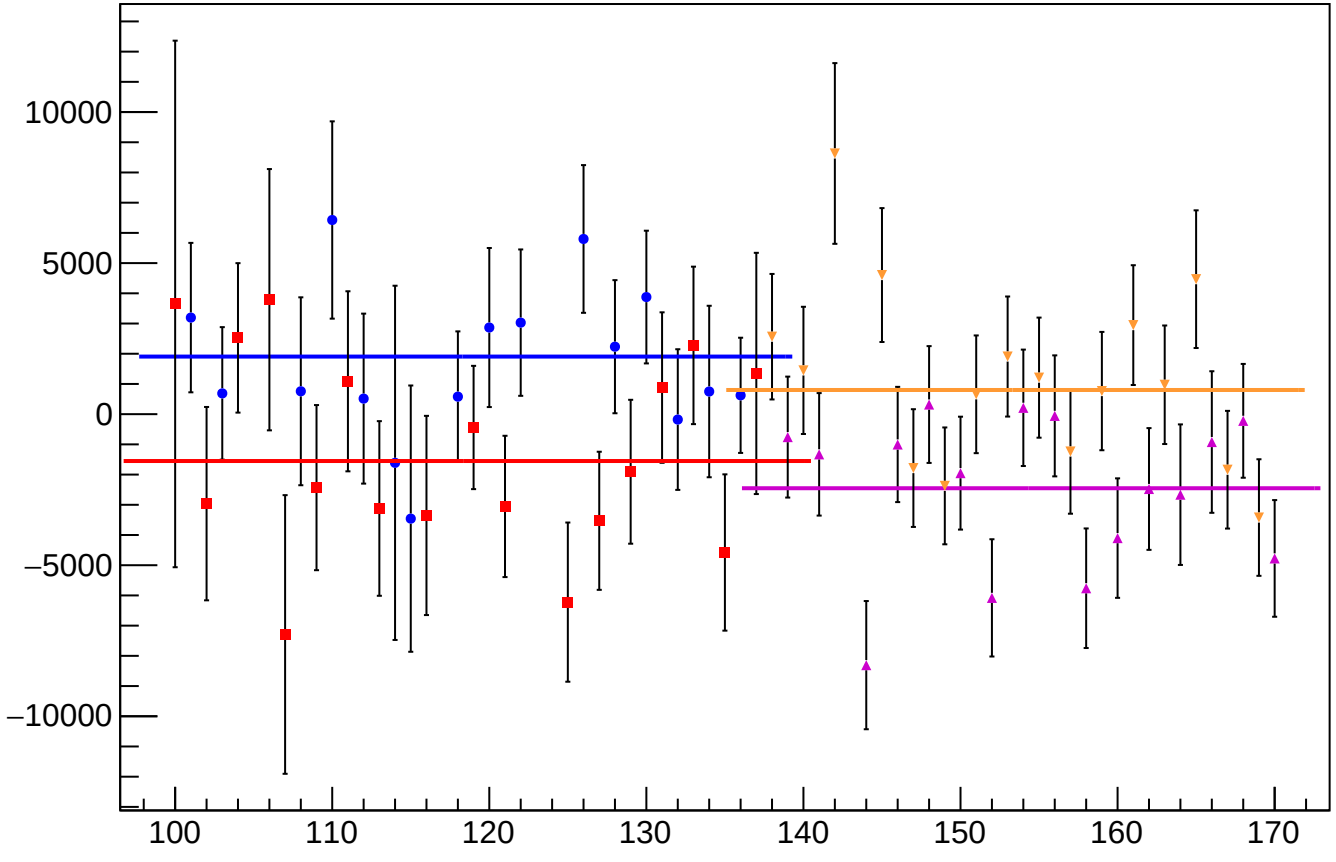
Left In: 5095.655+/-1.014 $\chi^2$/NDF:997438.3/15

\+ sign 1119.775+/-0.286 $\chi^2$/NDF: 25476369.9/32

All: 1087.444+/-0.204 $\chi^2$/NDF: 52743281.5/6

\- sign 1053.750+/-0.292 $\chi^2$/NDF: 27240752.7/34

# dit_asym_atl_avg_mean vs Slug




Right In: 1906.205+/-636.433 $\chi^2$/NDF: 10.2/15

Left Out: 800.242+/-512.390 $\chi^2$/NDF:26.8/15

Right Out: -1550.986+/-661.054 $\chi^2$/NDF: 17.5/17

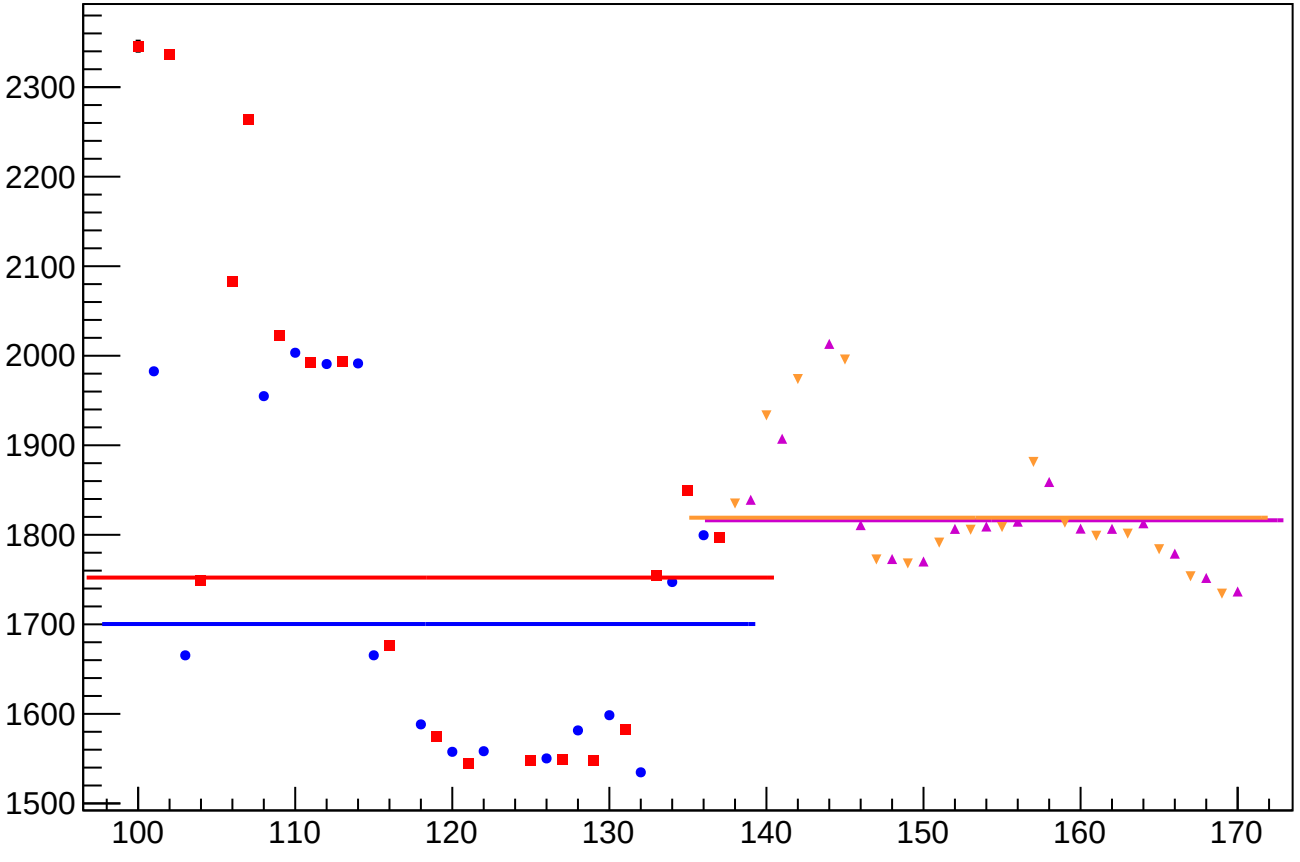
Left In: -2451.859+/-499.847 $\chi^2$/NDF:25.0/15

+ sign 1235.184+/-399.115 $\chi^2$/NDF: 38.9/31

All: -446.232+/-282.070 $\chi^2$/NDF: 117.9/65

- sign -2124.154+/-398.700 $\chi^2$/NDF: 43.6/33

# dit_asym_atl_avg_rms vs Slug




Right In: 1700.357+/-0.450 $\chi^2$/NDF: 135419.2/15

Left Out: 1819.113+/-0.362 $\chi^2$/NDF:36001.1/15

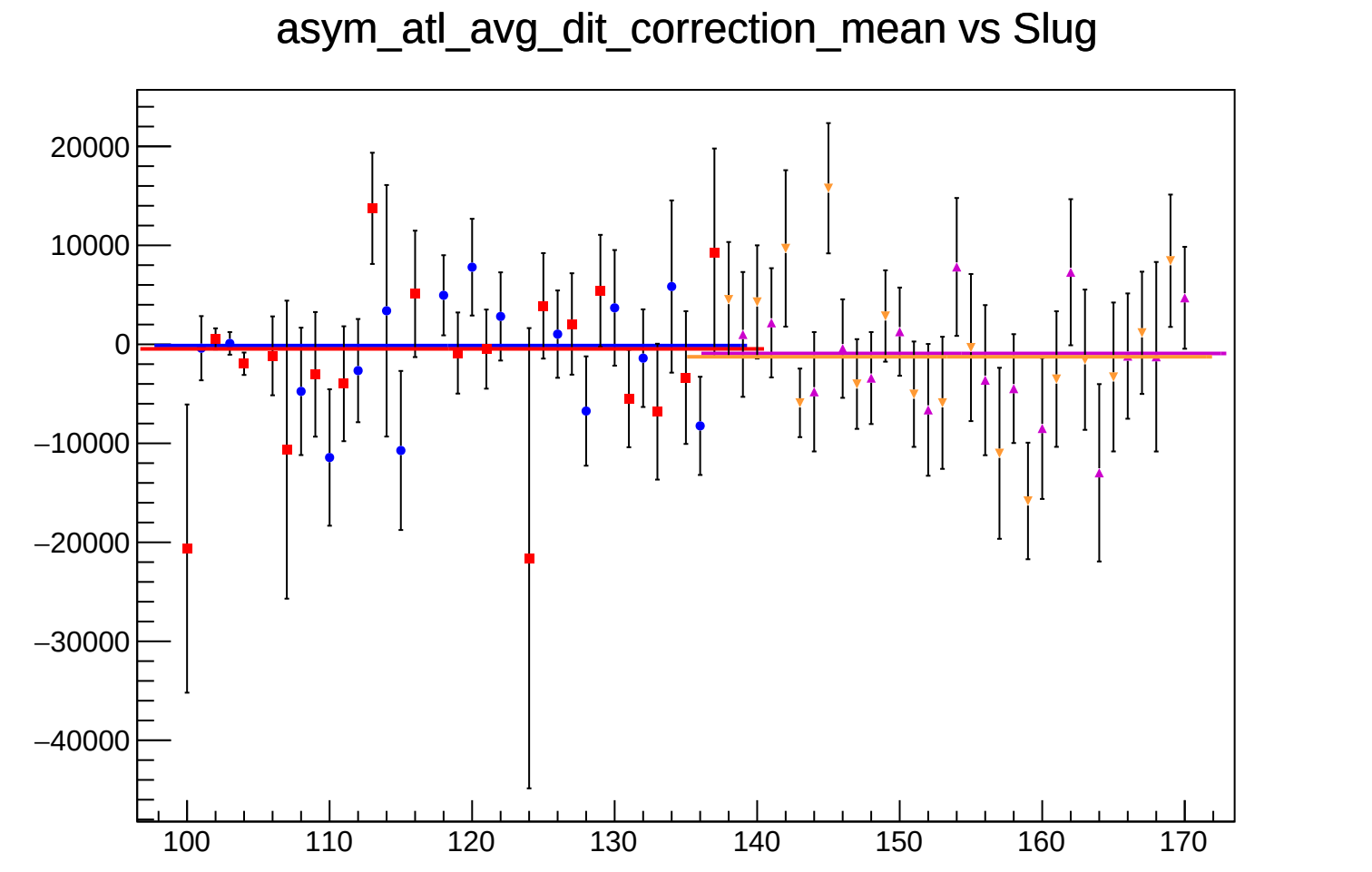
Right Out: 1752.239+/-0.466 $\chi^2$/NDF: 247952.8/17

Left In: 1816.224+/-0.353 $\chi^2$/NDF:31113.4/15

+ sign 1772.410+/-0.282 $\chi^2$/NDF: 213670.4/31

All: 1782.664+/-0.199 $\chi^2$/NDF: 507328.5/65

- sign 1792.881+/-0.282 $\chi^2$/NDF: 291022.4/33




Right In: -125.468+/-867.645 $\chi^2$/NDF: 15.1/15

Left Out: -1258.274+/-1408.682 $\chi^2$/NDF:24.4/16

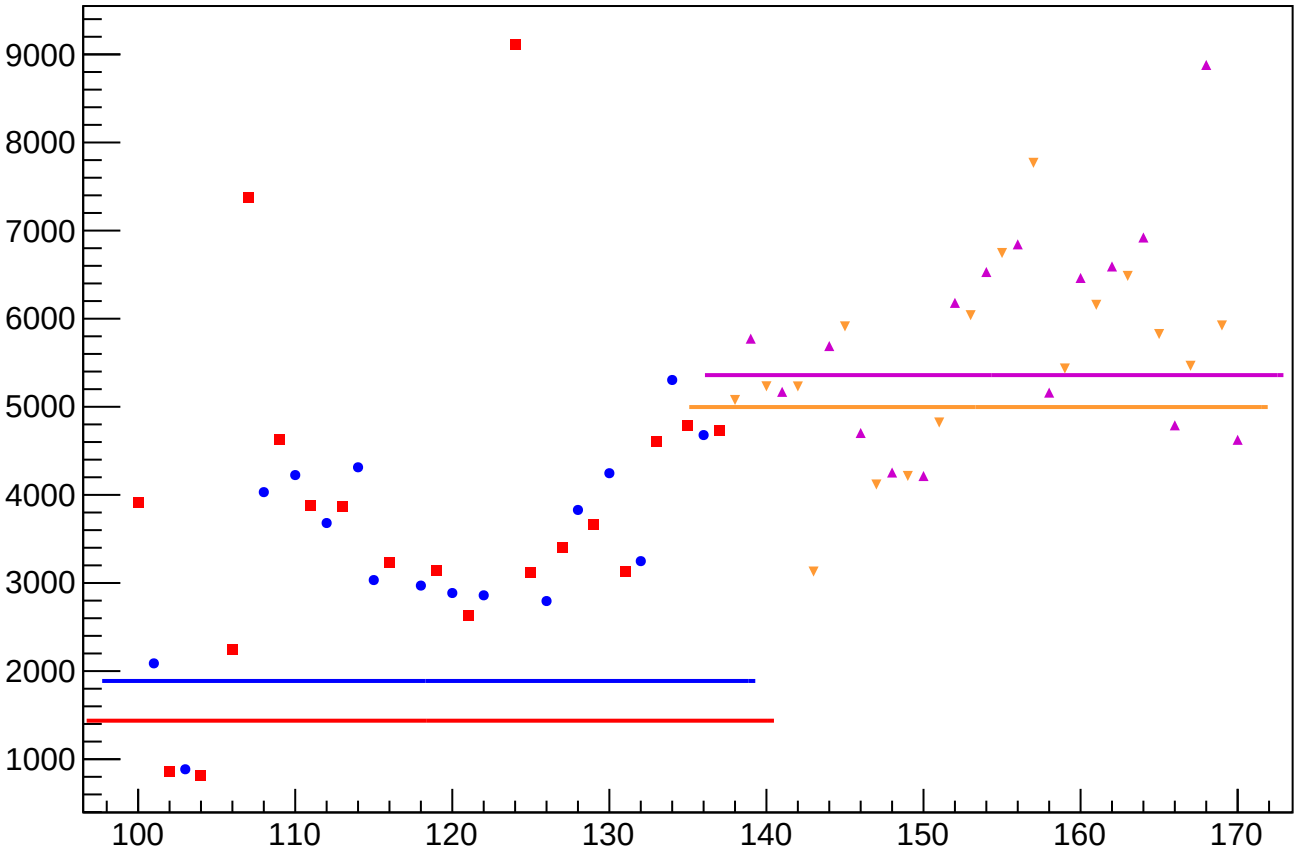
Right Out: -459.431+/-679.157 $\chi^2$/NDF: 18.5/18

Left In: -921.064+/-1506.710 $\chi^2$/NDF:9.6/15

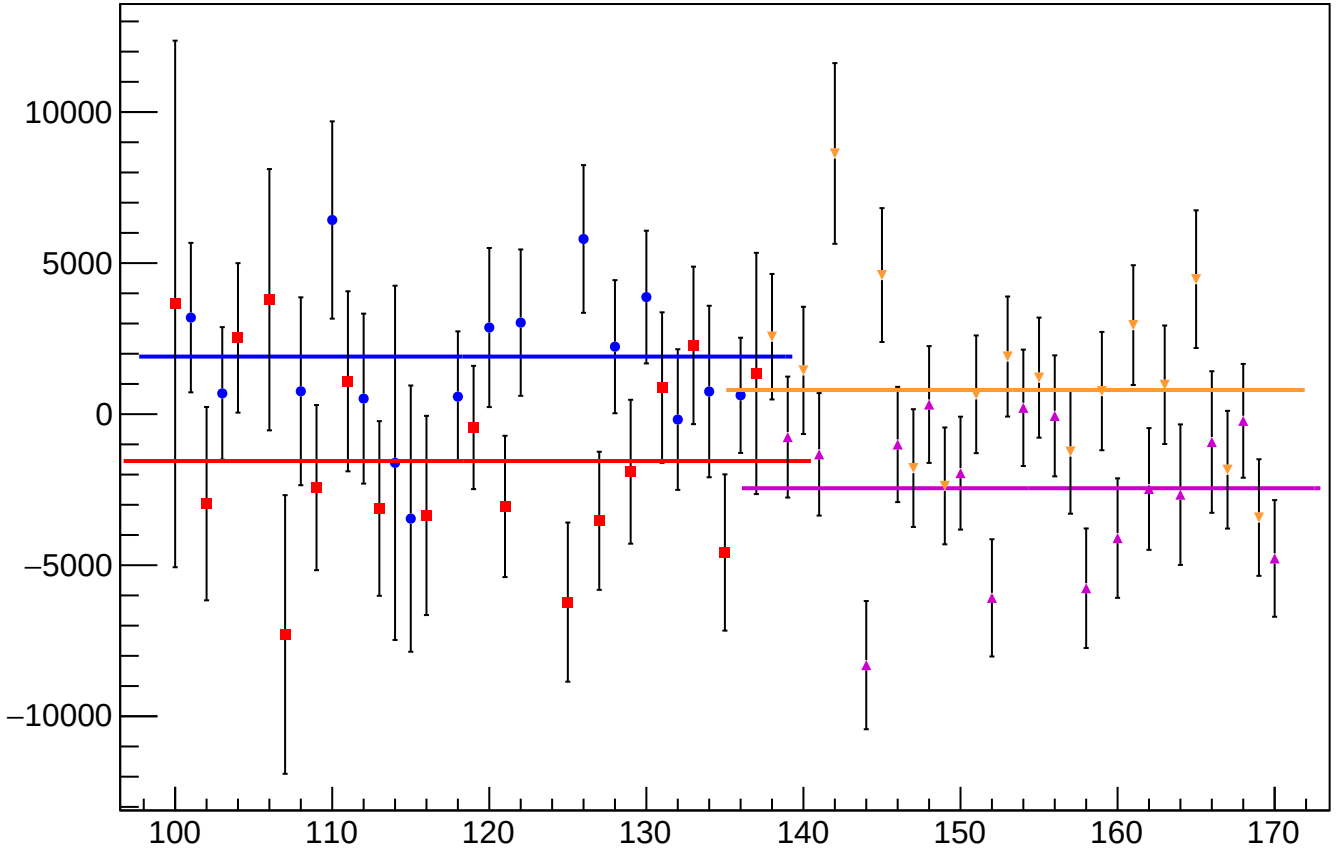
+ sign -437.023+/-738.758 $\chi^2$/NDF: 39.9/32

All: -495.976+/-474.537 $\chi^2$/NDF: 68.1/67

- sign -537.387+/-619.163 $\chi^2$/NDF: 28.2/34


asym_atl_avg_dit_correction_rms vs Slug
9000
8000
7000
6000
5000
4000
3000
2000
1000
100
110
120
130
140
150
160
170
Right In: 1887.999+/-0.614 χ²/NDF: 4425691.6/15
Left Out: 4997.095+/-0.996 χ²/NDF:1356676.2/16
Right Out: 1437.108+/-0.480 χ²/NDF: 5964193.5/18
Left In: 5359.534+/-1.065 χ²/NDF:955515.6/15
+ sign 2743.091+/-0.522 χ²/NDF: 12845432.1/32
All: 2365.040+/-0.336 χ²/NDF: 31922275.6/6
- sign 2099.485+/-0.438 χ²/NDF: 18185189.8/34

# eigen_dit_asym_atl_avg_mean vs Slug




Right In: 1906.203+/-636.433 $\chi^2$/NDF: 10.2/15

Left Out: 800.238+/-512.390 $\chi^2$/NDF:26.8/15

Right Out: -1550.983+/-661.054 $\chi^2$/NDF: 17.5/17

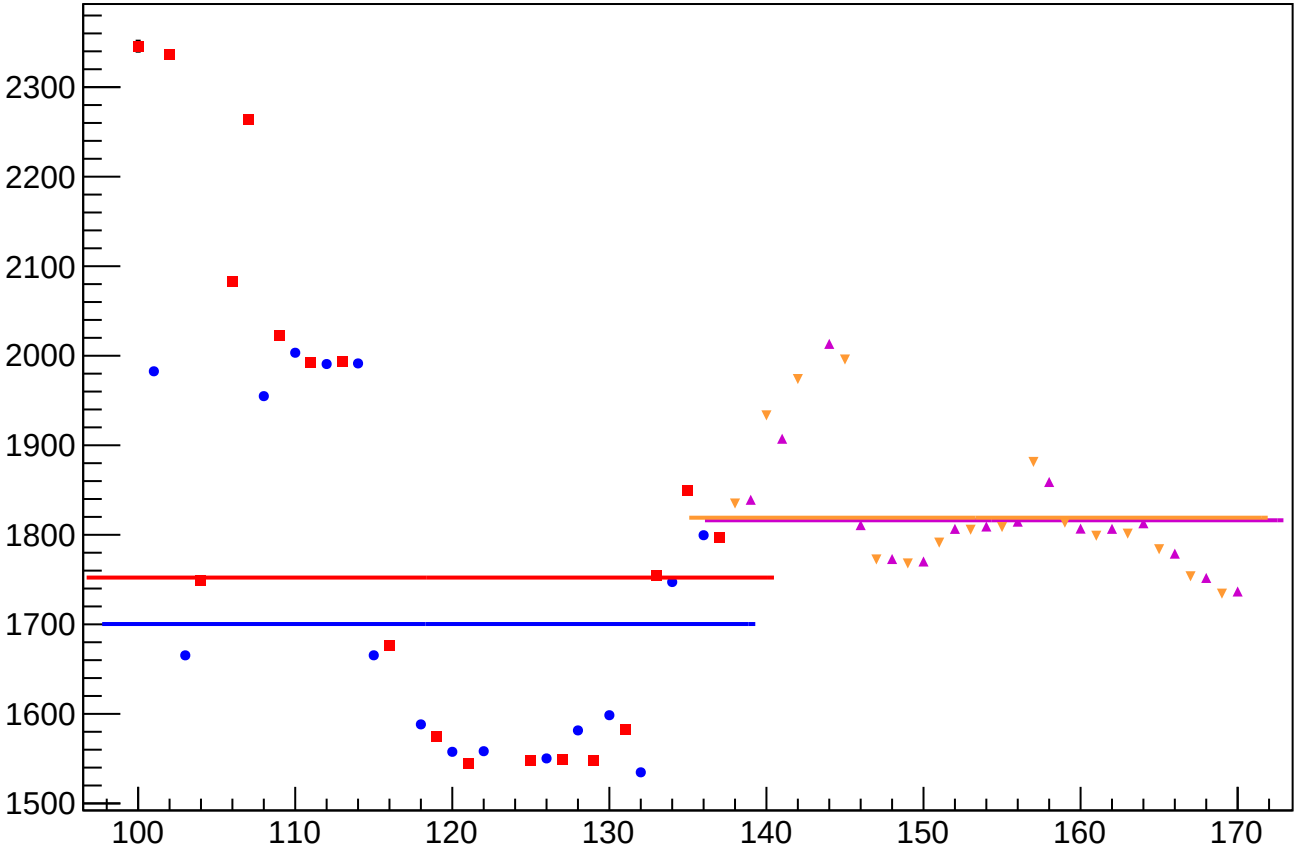
Left In: -2451.860+/-499.848 $\chi^2$/NDF:25.0/15

+ sign 1235.181+/-399.115 $\chi^2$/NDF: 38.9/31

All: -446.233+/-282.070 $\chi^2$/NDF: 117.9/65

- sign -2124.154+/-398.701 $\chi^2$/NDF: 43.6/33

# eigen_dit_asym_atl_avg_rms vs Slug




Right In: 1700.357+/-0.450 $\chi^2$/NDF: 135419.5/15

Left Out: 1819.114+/-0.362 $\chi^2$/NDF:36001.8/15

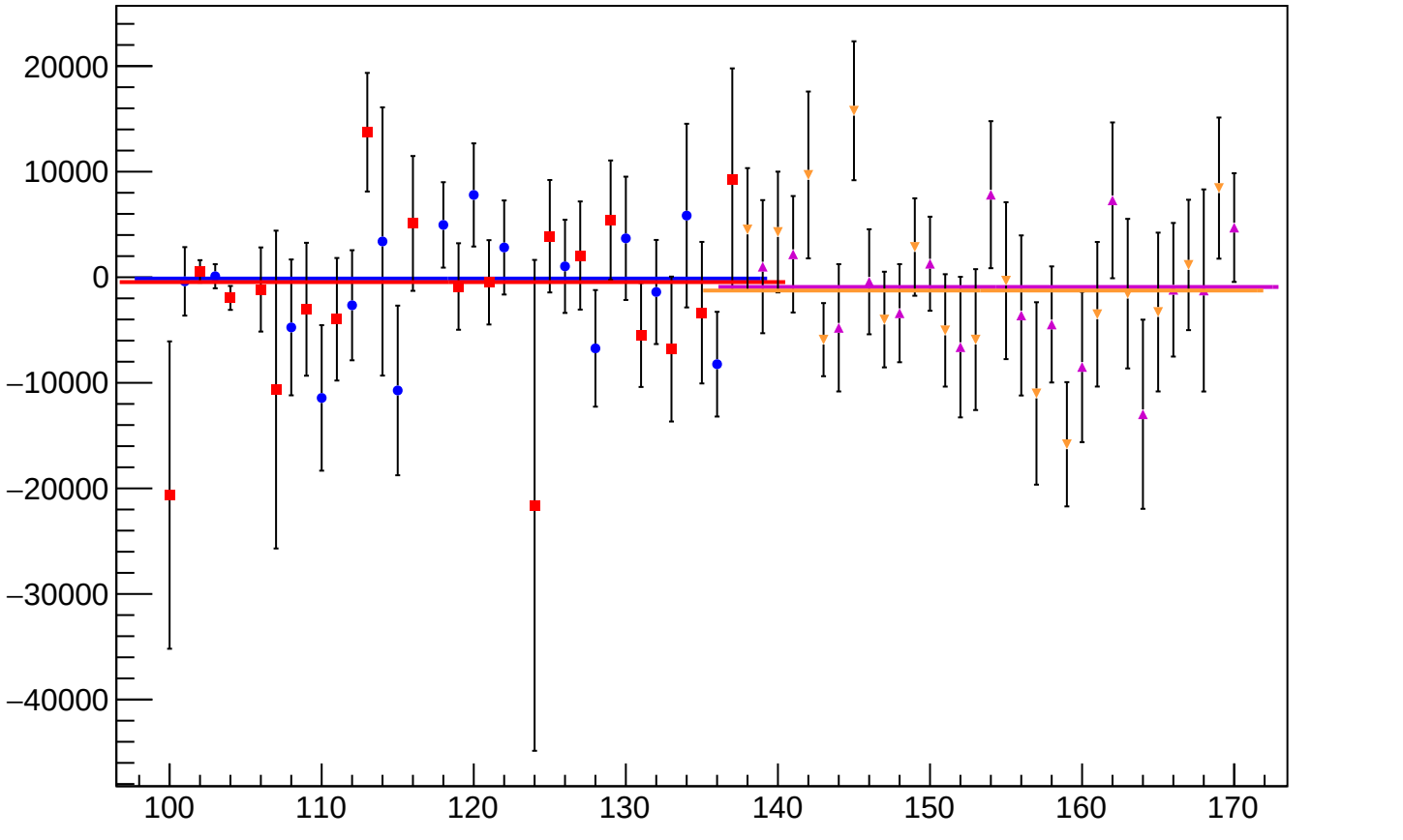
Right Out: 1752.238+/-0.466 $\chi^2$/NDF: 247952.3/17

Left In: 1816.225+/-0.353 $\chi^2$/NDF:31113.8/15

+ sign 1772.410+/-0.282 $\chi^2$/NDF: 213672.3/31

All: 1782.665+/-0.199 $\chi^2$/NDF: 507331.1/65

- sign 1792.881+/-0.282 $\chi^2$/NDF: 291023.0/33




Right In: -125.464+/-867.639 $\chi^2$/NDF: 15.1/15

Left Out: -1258.280+/-1408.683 $\chi^2$/NDF:24.4/16

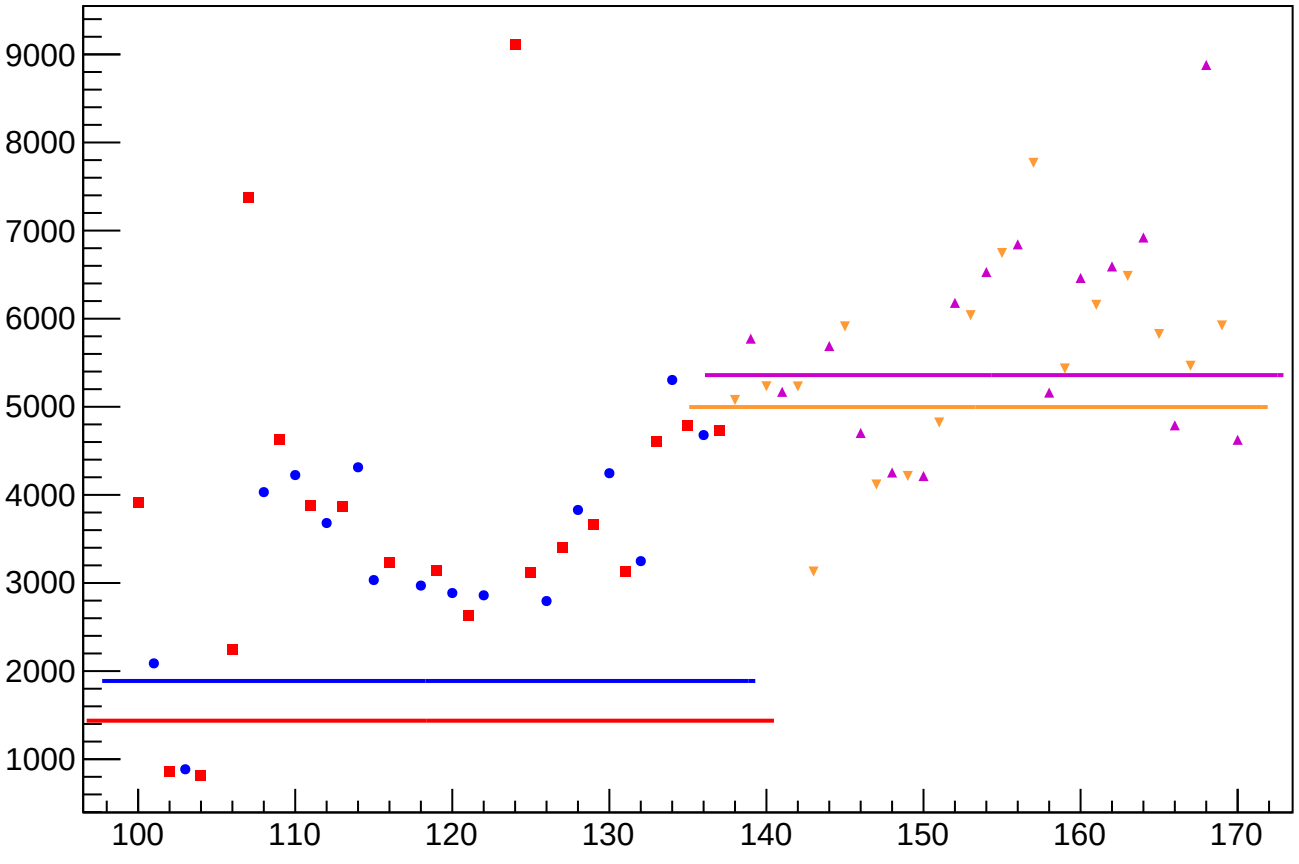
Right Out: -459.430+/-679.152 $\chi^2$/NDF: 18.5/18

Left In: -921.063+/-1506.712 $\chi^2$/NDF:9.6/15

+ sign -437.018+/-738.755 $\chi^2$/NDF: 39.9/32

All: -495.973+/-474.534 $\chi^2$/NDF: 68.1/67

- sign -537.384+/-619.159 $\chi^2$/NDF: 28.2/34




Right In: 1887.982+/-0.614 $\chi^2$/NDF: 4425728.6/15

Left Out: 4997.100+/-0.996 $\chi^2$/NDF:1356683.7/16

Right Out: 1437.095+/-0.480 $\chi^2$/NDF: 5964228.2/18

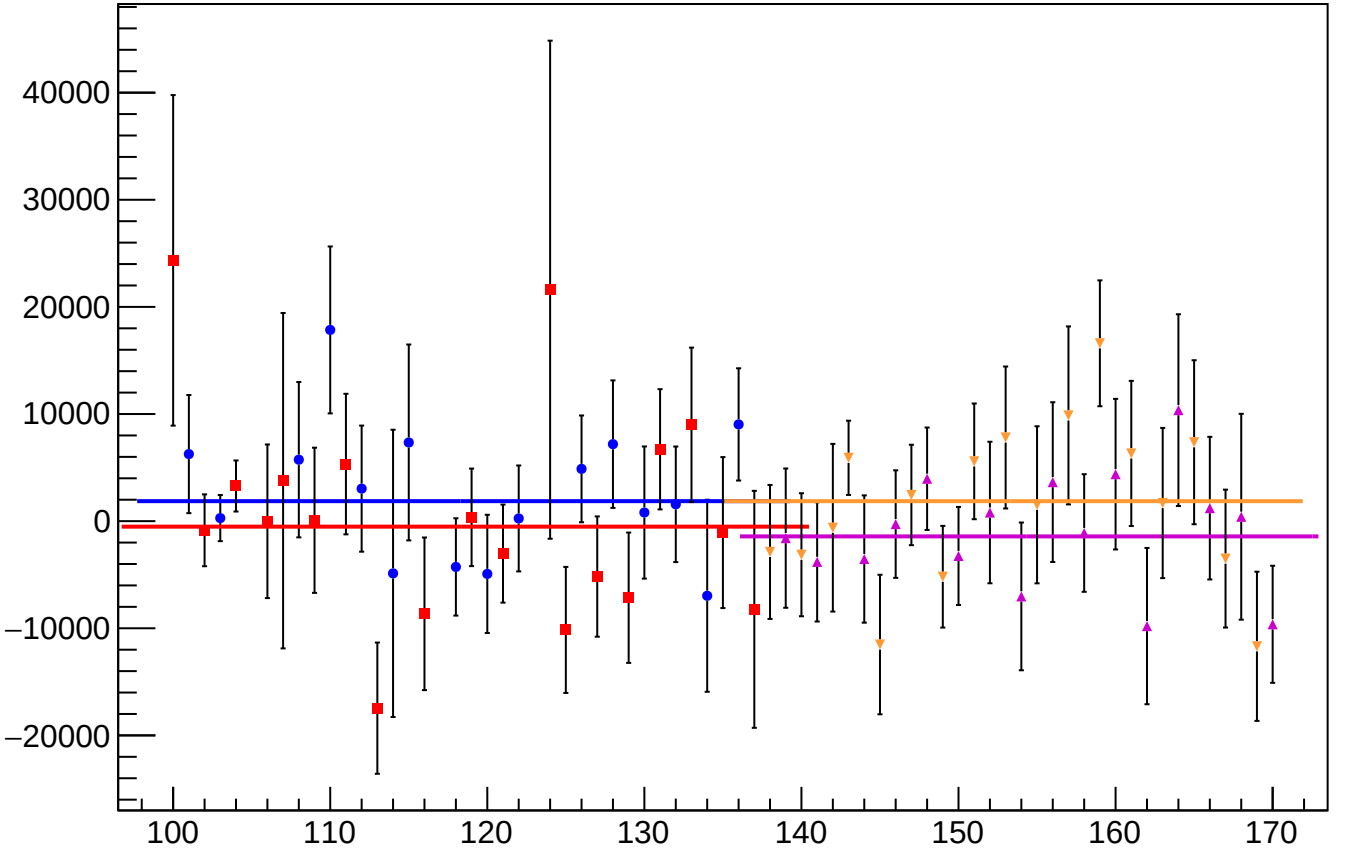
Left In: 5359.540+/-1.065 $\chi^2$/NDF:955519.5/15

+ sign 2743.071+/-0.522 $\chi^2$/NDF: 12845587.8/32

All: 2365.020+/-0.336 $\chi^2$/NDF: 31922597.4/6

- sign 2099.465+/-0.438 $\chi^2$/NDF: 18185347.6/34

# asym_atl_avg_mean vs Slug




Right In: 1866.618+/-1259.187 $\chi^2$/NDF: 13.8/15

Left Out: 1864.745+/-1425.489 $\chi^2$/NDF:23.2/16

Right Out: -512.528+/-1241.513 $\chi^2$/NDF: 24.7/18

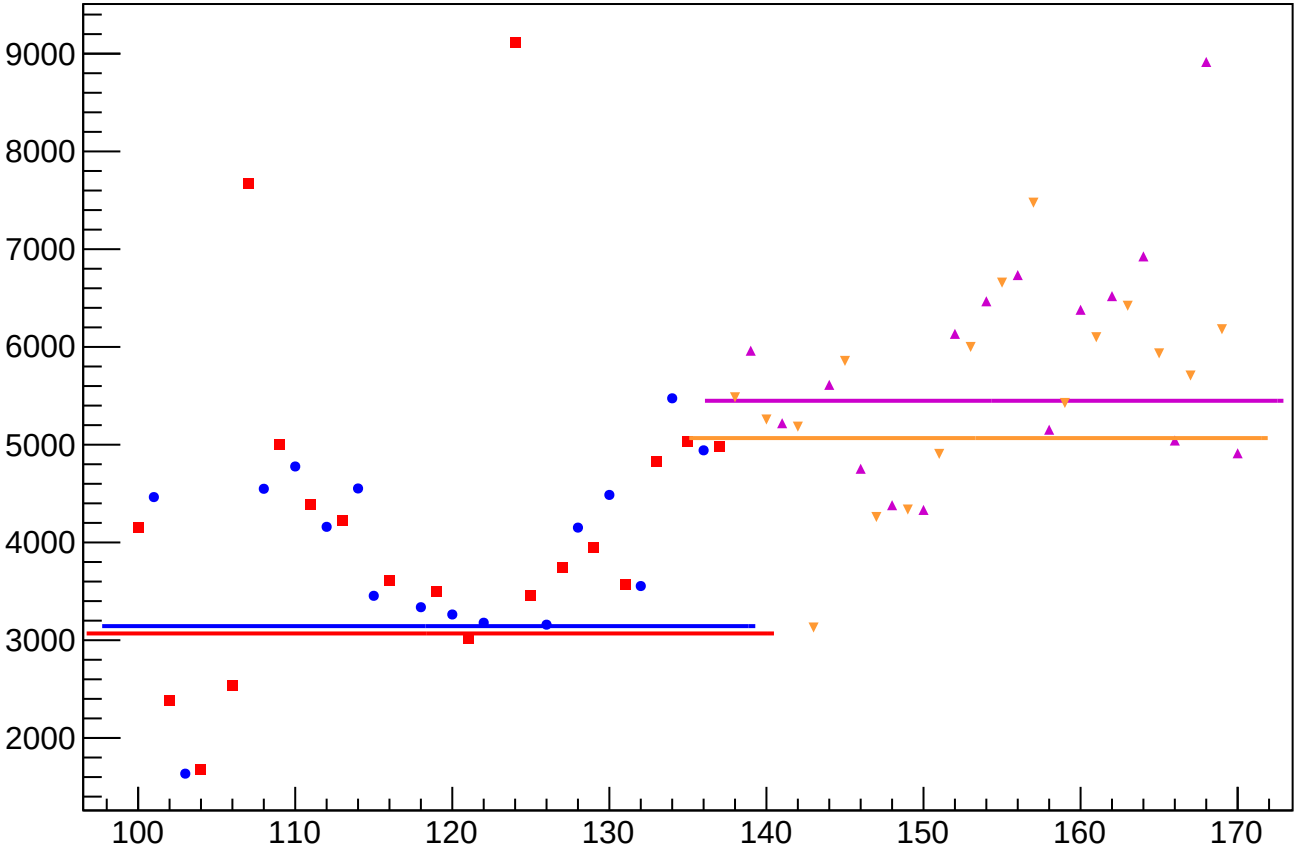
Left In: -1422.664+/-1526.899 $\chi^2$/NDF:9.2/15

+ sign 1865.797+/-943.725 $\chi^2$/NDF: 37.0/32

All: 523.611+/-674.120 $\chi^2$/NDF: 75.2/67

- sign -874.760+/-963.275 $\chi^2$/NDF: 34.1/34

# asym_atl_avg_rms vs Slug




Right In: 3144.136+/-0.890 $\chi^2$/NDF: 1883139.2/15

Left Out: 5067.660+/-1.008 $\chi^2$/NDF:1301926.2/16

Right Out: 3069.098+/-0.864 $\chi^2$/NDF: 1881644.6/18

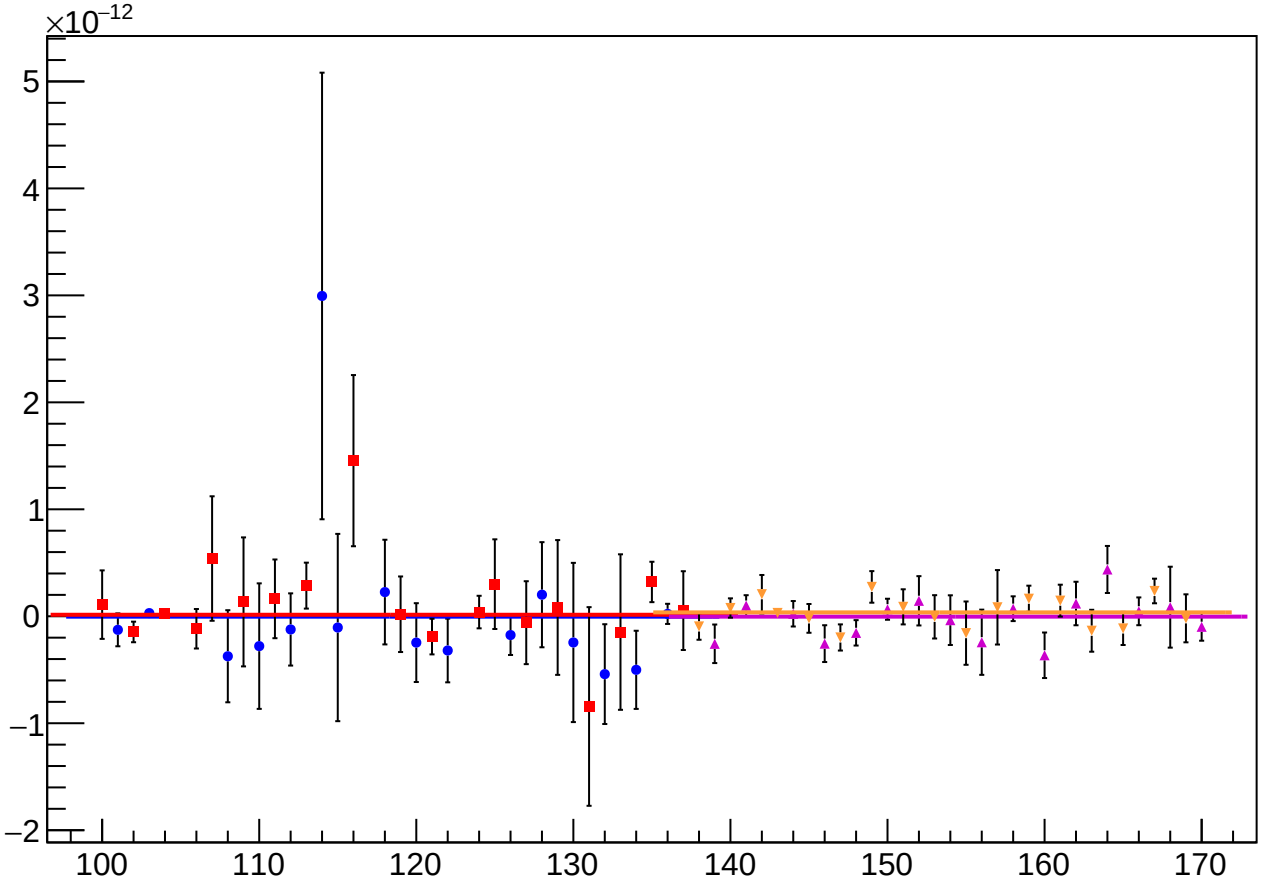
Left In: 5449.230+/-1.080 $\chi^2$/NDF:824386.9/15

+ sign 3987.199+/-0.667 $\chi^2$/NDF: 5230608.8/32

All: 3992.804+/-0.474 $\chi^2$/NDF: 10898798.9/6

- sign 3998.533+/-0.675 $\chi^2$/NDF: 5668047.4/34

# asym_atl_avg_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 10.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:15.7/16

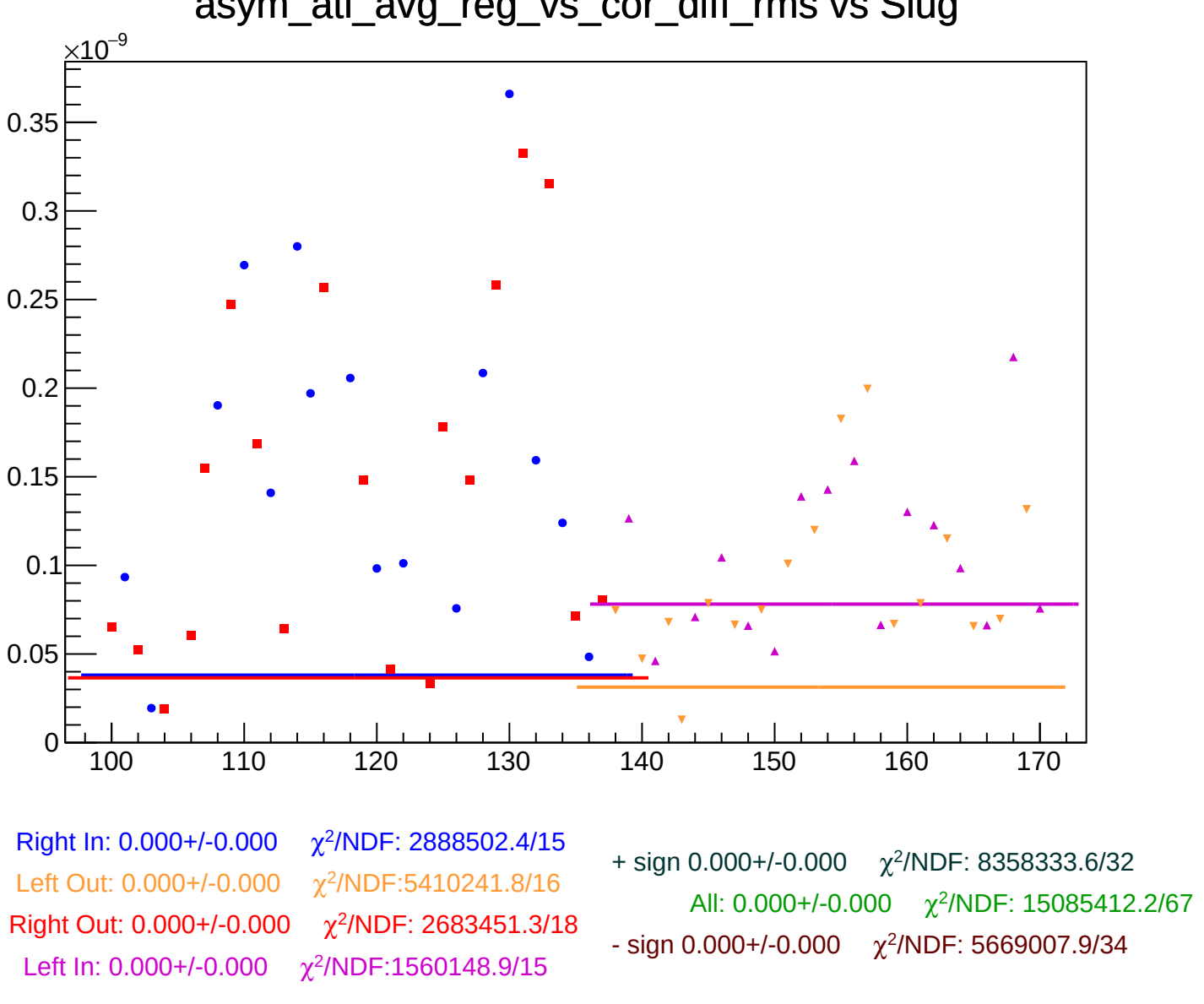
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:16.9/15

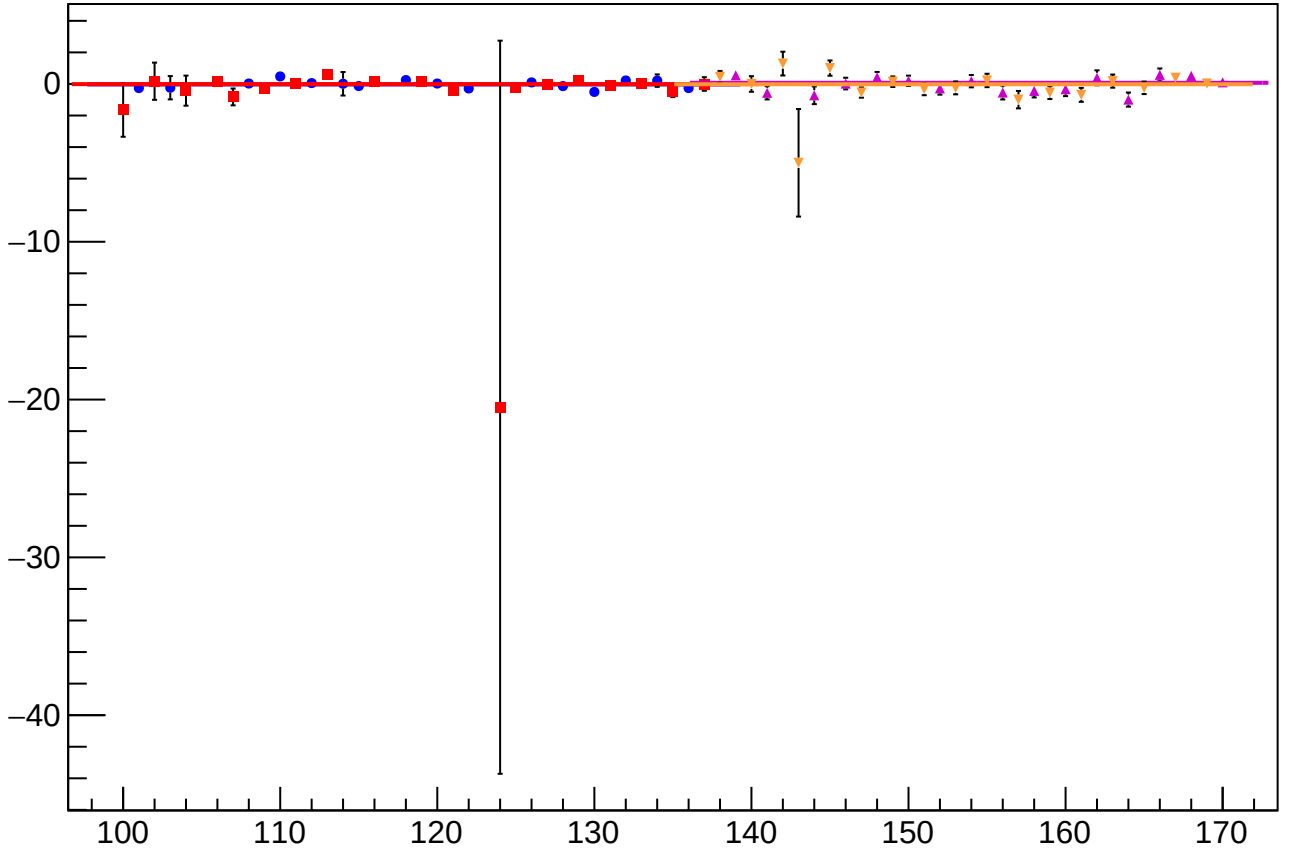
+ sign 0.000+/-0.000 $\chi^2$/NDF: 27.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 59.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 31.9/34


asym_atl_avg_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2888502.4/15
Left Out: 0.000+/-0.000 χ²/NDF:5410241.8/16
Right Out: 0.000+/-0.000 χ²/NDF: 2683451.3/18
Left In: 0.000+/-0.000 χ²/NDF:1560148.9/15
+ sign 0.000+/-0.000 χ²/NDF: 8358333.6/32
All: 0.000+/-0.000 χ²/NDF: 15085412.2/67
- sign 0.000+/-0.000 χ²/NDF: 5669007.9/34

# asym_atl_avg_dit_vs_cor_diff_mean vs Slug




Right In: -0.029+/-0.058 $\chi^2$/NDF: 17.2/15

Left Out: -0.020+/-0.092 $\chi^2$/NDF:25.1/16

Right Out: -0.011+/-0.057 $\chi^2$/NDF: 21.8/18

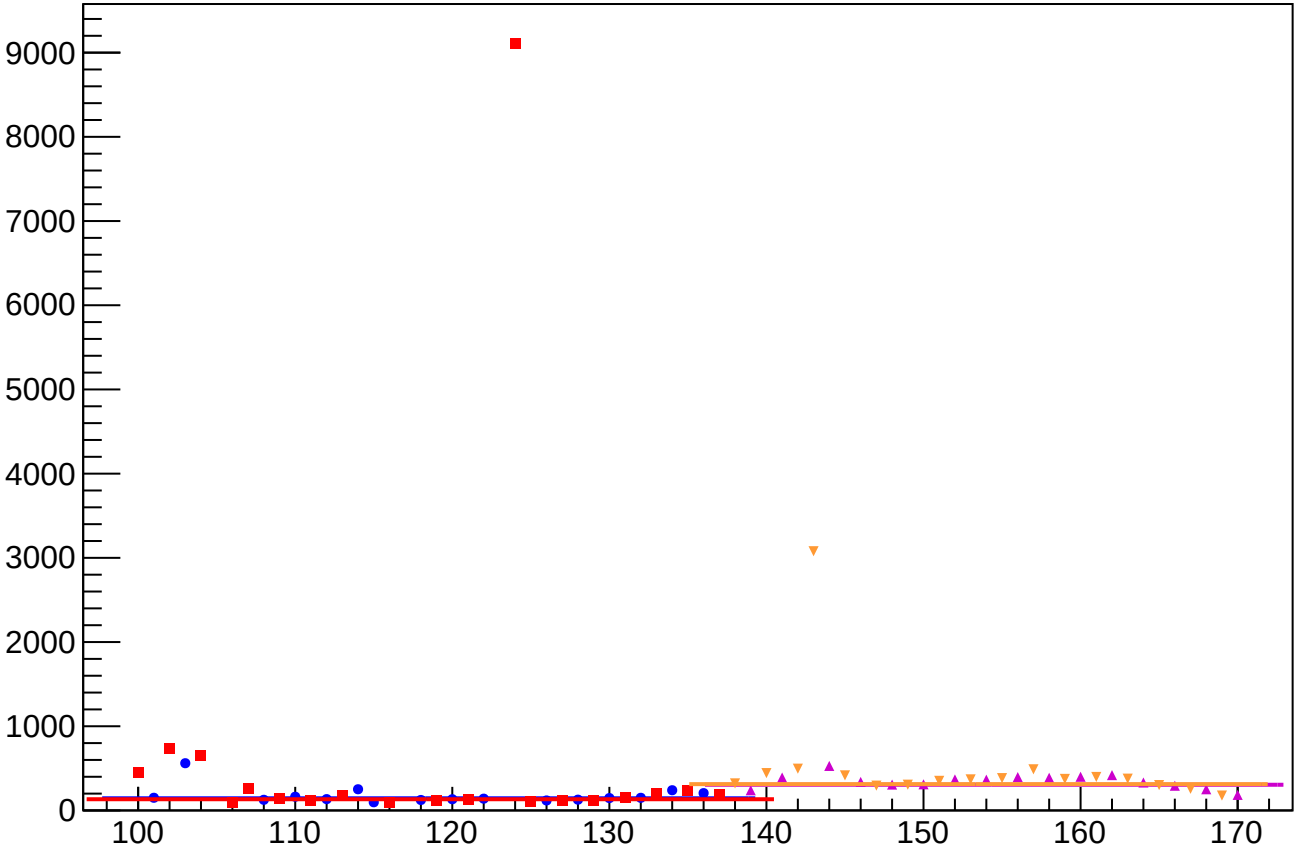
Left In: 0.074+/-0.088 $\chi^2$/NDF:23.8/15

+ sign -0.026+/-0.049 $\chi^2$/NDF: 42.3/32

All: -0.006+/-0.034 $\chi^2$/NDF: 88.9/67

- sign 0.014+/-0.048 $\chi^2$/NDF: 46.3/34

# asym_atl_avg_dit_vs_cor_diff_rms vs Slug




Right In: 144.291+/-0.041 $\chi^2$/NDF: 1128779.2/15

Left Out: 312.578+/-0.065 $\chi^2$/NDF:3163767.4/16

Right Out: 133.253+/-0.040 $\chi^2$/NDF: 2220645.6/18

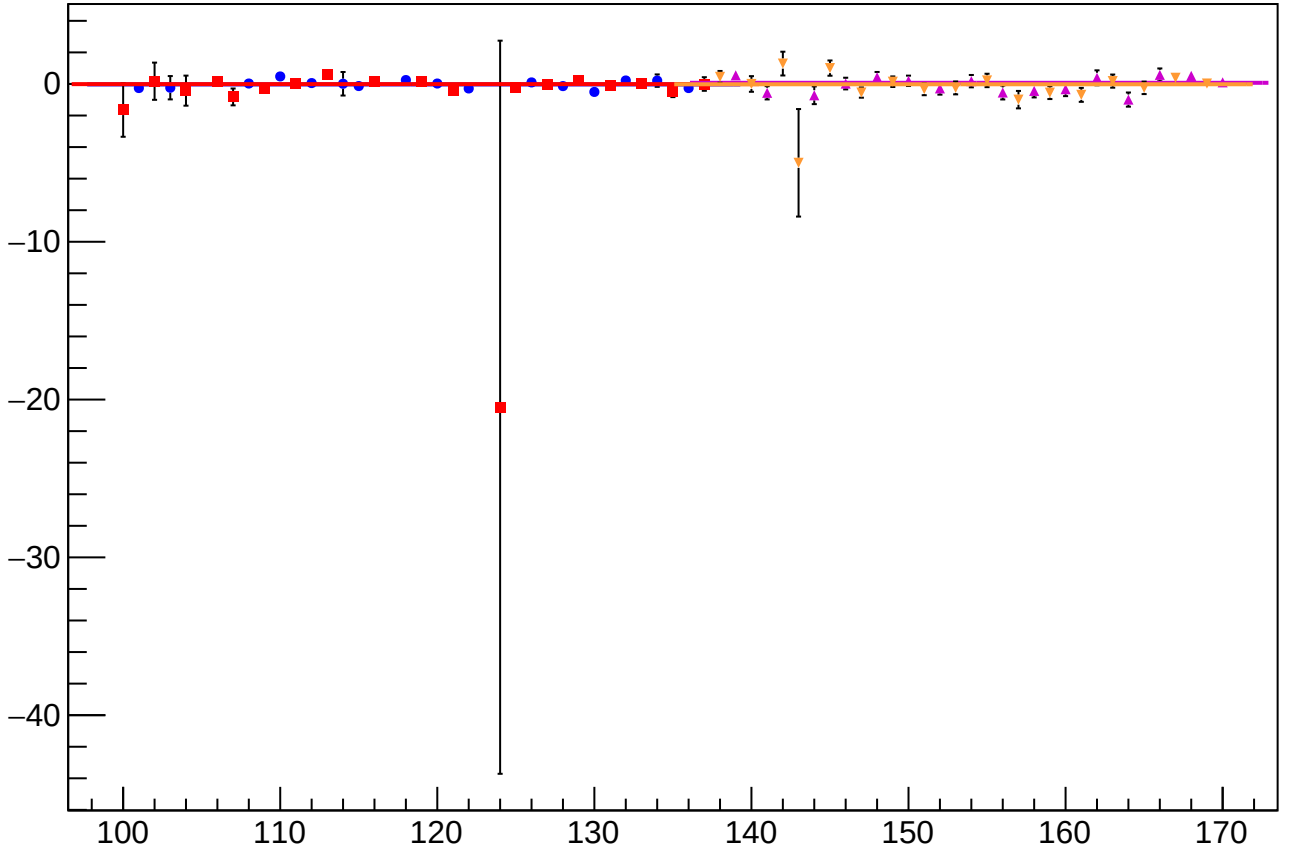
Left In: 305.182+/-0.063 $\chi^2$/NDF:1750851.6/15

+ sign 191.752+/-0.035 $\chi^2$/NDF: 9069526.5/32

All: 187.308+/-0.024 $\chi^2$/NDF: 18441185.4/67

- sign 183.110+/-0.034 $\chi^2$/NDF: 9339668.1/34

# asym_atl_avg_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.029+/-0.058 $\chi^2$/NDF: 17.2/15

Left Out: -0.020+/-0.092 $\chi^2$/NDF:25.1/16

Right Out: -0.011+/-0.057 $\chi^2$/NDF: 21.8/18

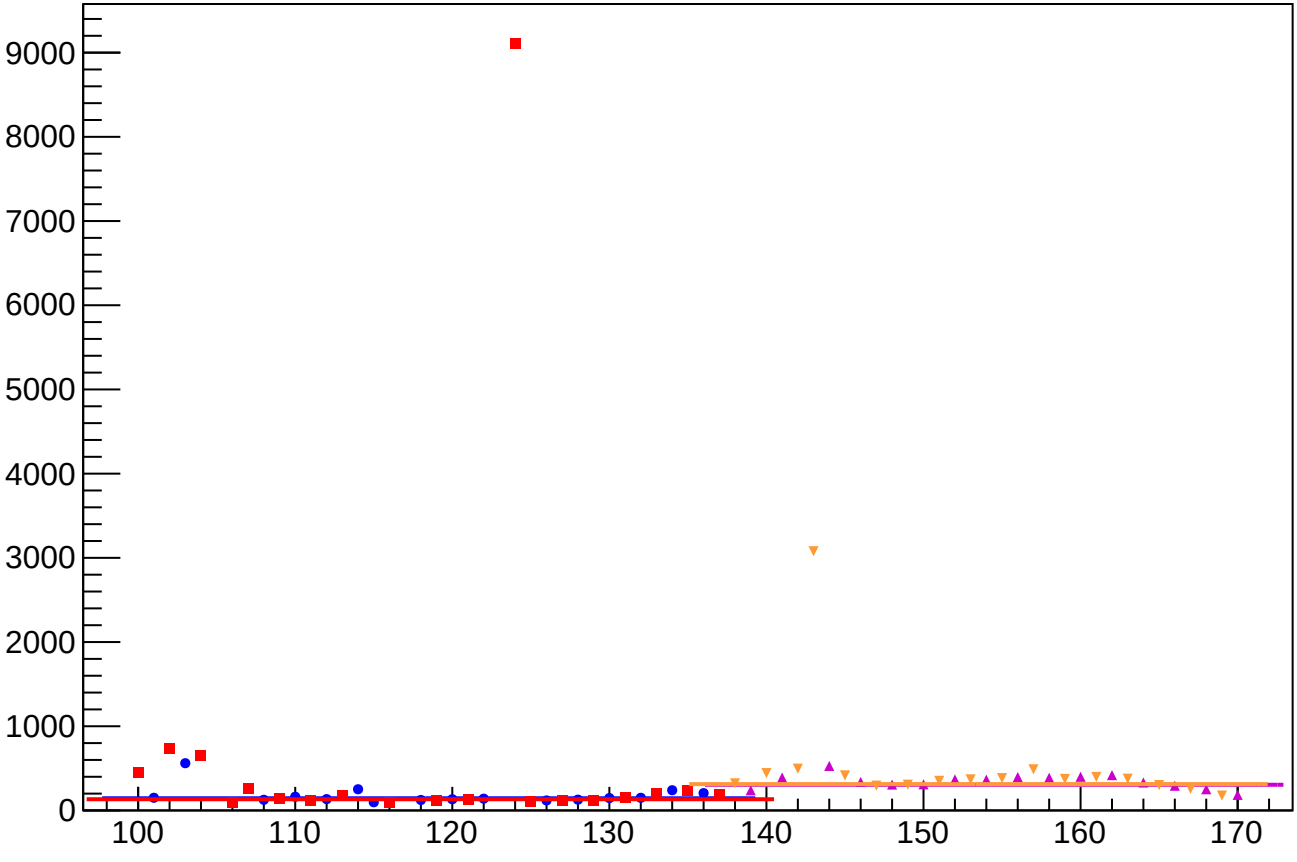
Left In: 0.074+/-0.088 $\chi^2$/NDF:23.8/15

+ sign -0.026+/-0.049 $\chi^2$/NDF: 42.3/32

All: -0.006+/-0.034 $\chi^2$/NDF: 88.9/67

- sign 0.014+/-0.048 $\chi^2$/NDF: 46.3/34

# asym_atl_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 144.291+/-0.041 $\chi^2$/NDF: 1128779.2/15

Left Out: 312.578+/-0.065 $\chi^2$/NDF:3163767.4/16

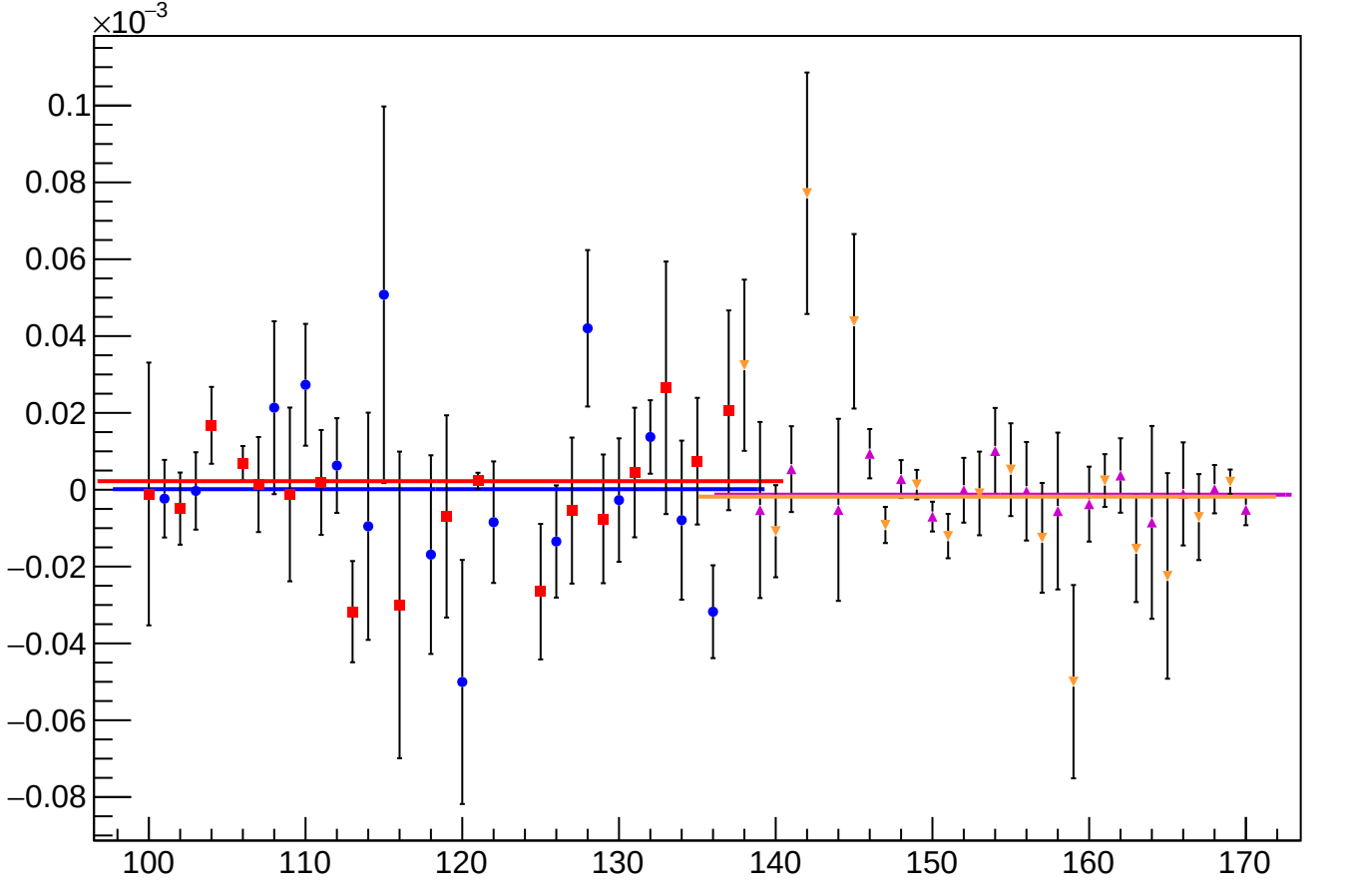
Right Out: 133.253+/-0.040 $\chi^2$/NDF: 2220645.6/18

Left In: 305.182+/-0.063 $\chi^2$/NDF:1750851.6/15

+ sign 191.752+/-0.035 $\chi^2$/NDF: 9069526.5/32

All: 187.308+/-0.024 $\chi^2$/NDF: 18441185.4/67

- sign 183.110+/-0.034 $\chi^2$/NDF: 9339668.1/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 22.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:27.8/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.6/17

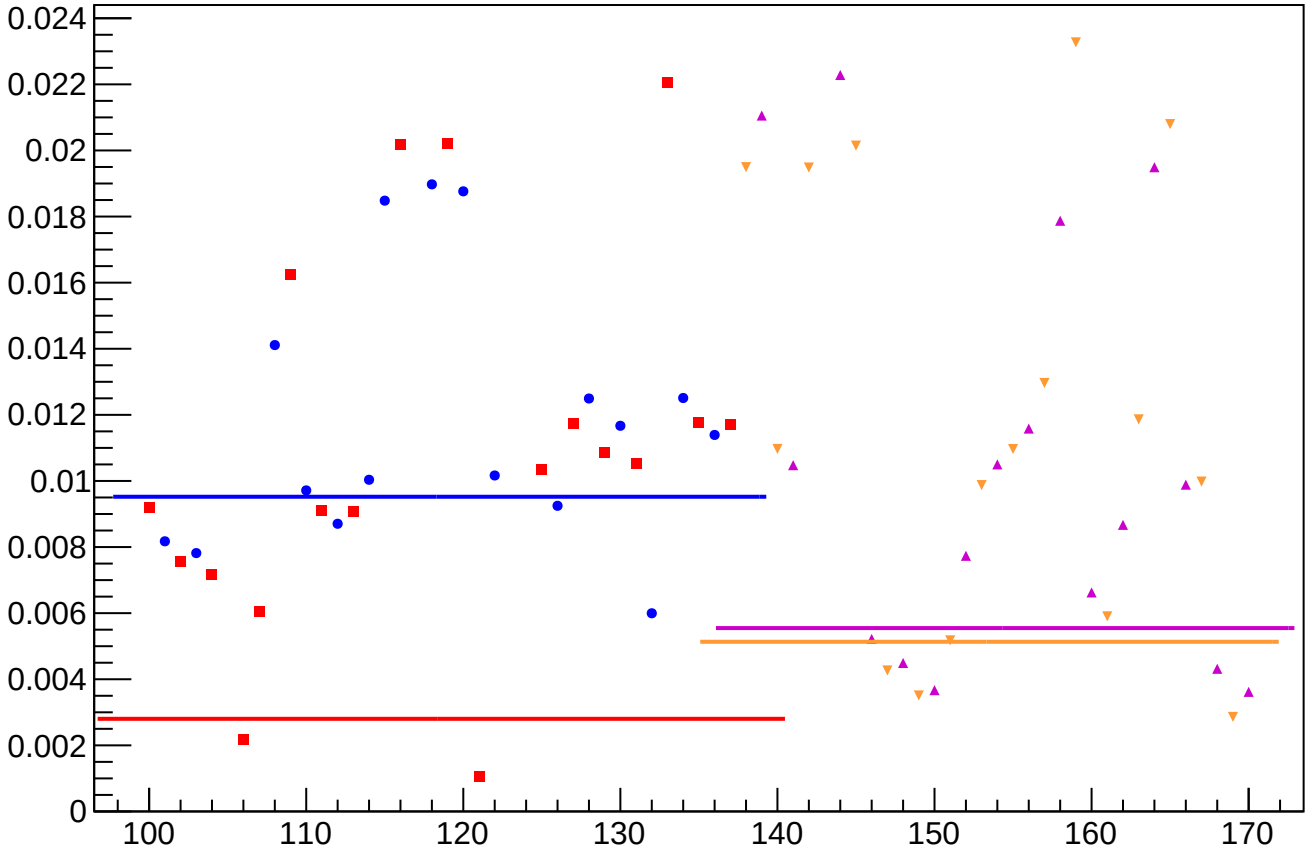
Left In: -0.000+/-0.000 $\chi^2$/NDF:8.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 50.8/31

All: -0.000+/-0.000 $\chi^2$/NDF: 77.8/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 26.0/33

# asym_atl_avg_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.010+/-0.000 $\chi^2$/NDF: 1132946.4/15

Left Out: 0.005+/-0.000 $\chi^2$/NDF:8081192.2/15

Right Out: 0.003+/-0.000 $\chi^2$/NDF: 8568874.3/17

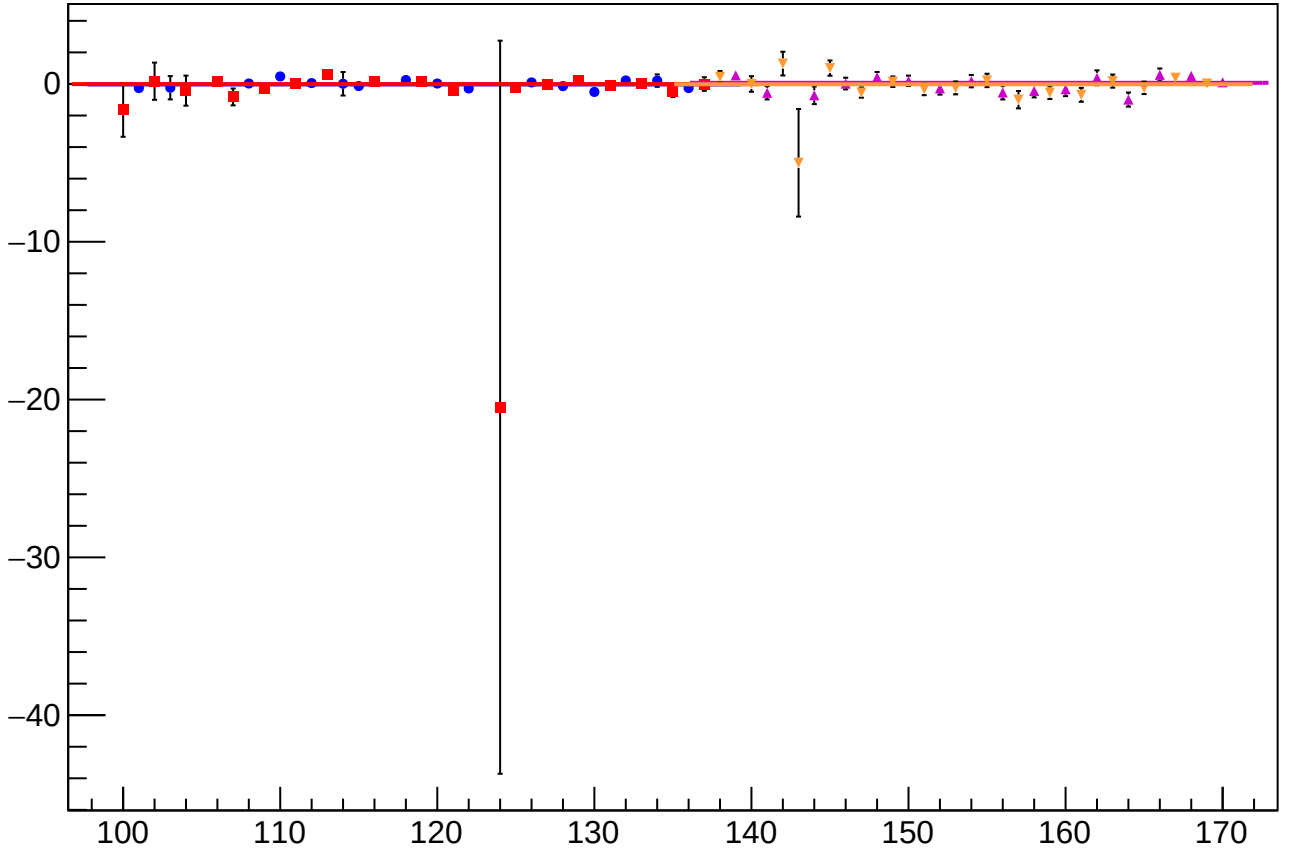
Left In: 0.006+/-0.000 $\chi^2$/NDF:6160746.4/15

+ sign 0.006+/-0.000 $\chi^2$/NDF: 11448562.5/31

All: 0.005+/-0.000 $\chi^2$/NDF: 30214225.9/65

- sign 0.004+/-0.000 $\chi^2$/NDF: 17080019.1/33

# asym_atl_avg_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.029+/-0.058 $\chi^2$/NDF: 17.2/15

Left Out: -0.020+/-0.092 $\chi^2$/NDF:25.1/16

Right Out: -0.011+/-0.057 $\chi^2$/NDF: 21.8/18

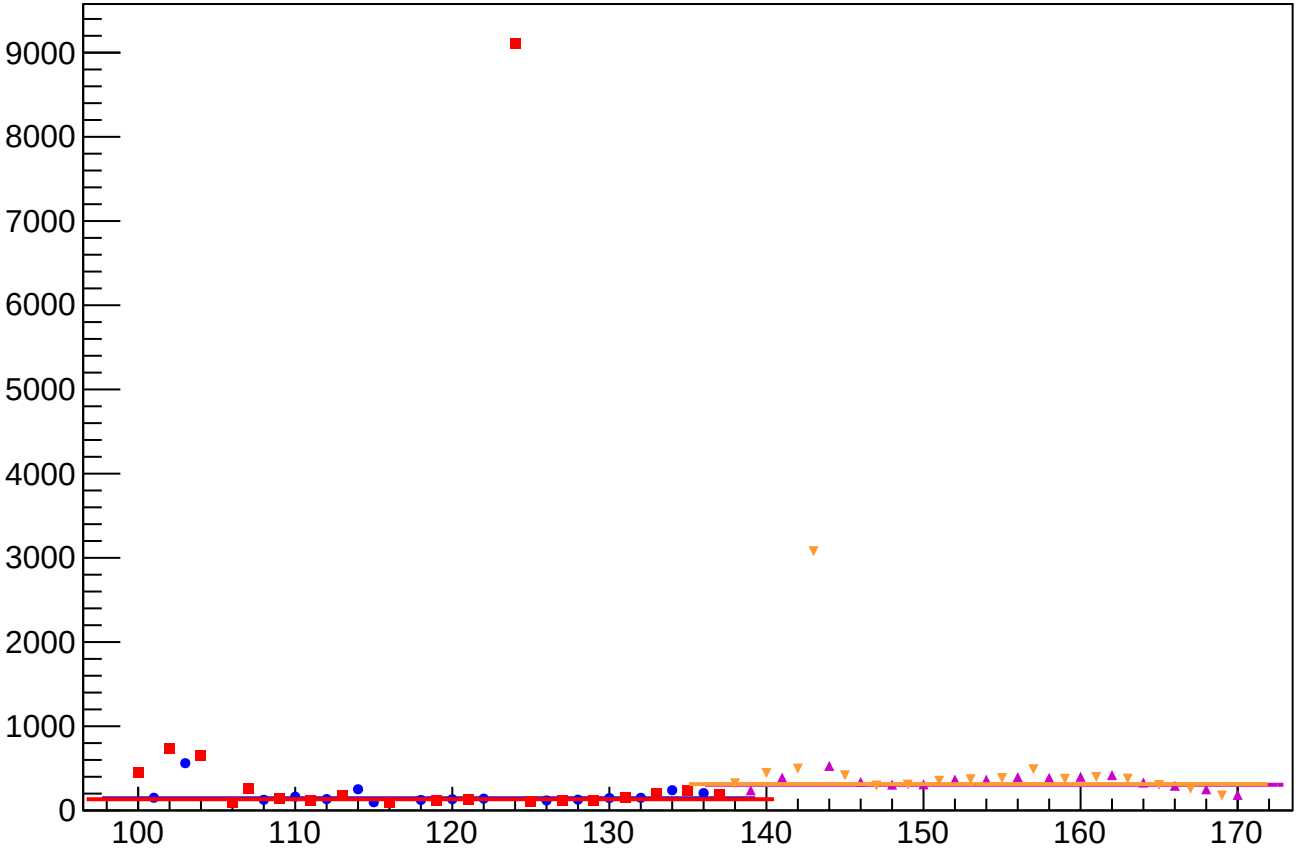
Left In: 0.074+/-0.088 $\chi^2$/NDF:23.8/15

+ sign -0.026+/-0.049 $\chi^2$/NDF: 42.3/32

All: -0.006+/-0.034 $\chi^2$/NDF: 88.9/67

- sign 0.014+/-0.048 $\chi^2$/NDF: 46.3/34

# asym_atl_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 144.289+/-0.041 $\chi^2$/NDF: 1128804.3/15

Left Out: 312.581+/-0.065 $\chi^2$/NDF:3163847.0/16

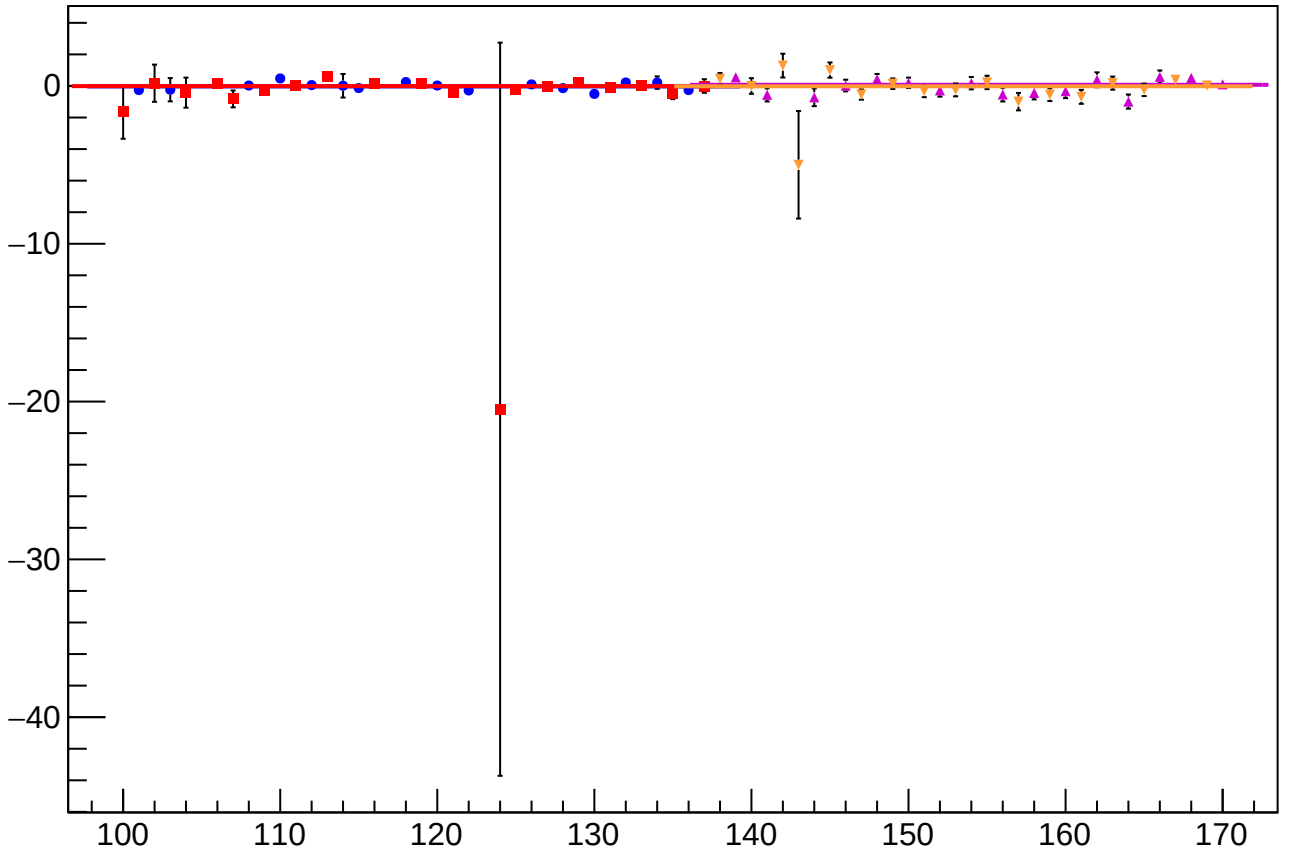
Right Out: 133.253+/-0.040 $\chi^2$/NDF: 2220606.0/18

Left In: 305.186+/-0.063 $\chi^2$/NDF:1750887.9/15

+ sign 191.750+/-0.035 $\chi^2$/NDF: 9069835.7/32

All: 187.306+/-0.024 $\chi^2$/NDF: 18441676.3/67

- sign 183.110+/-0.034 $\chi^2$/NDF: 9339855.5/34




Right In: -0.029+/-0.058 $\chi^2$/NDF: 17.2/15

Left Out: -0.020+/-0.092 $\chi^2$/NDF:25.1/16

Right Out: -0.011+/-0.057 $\chi^2$/NDF: 21.8/18

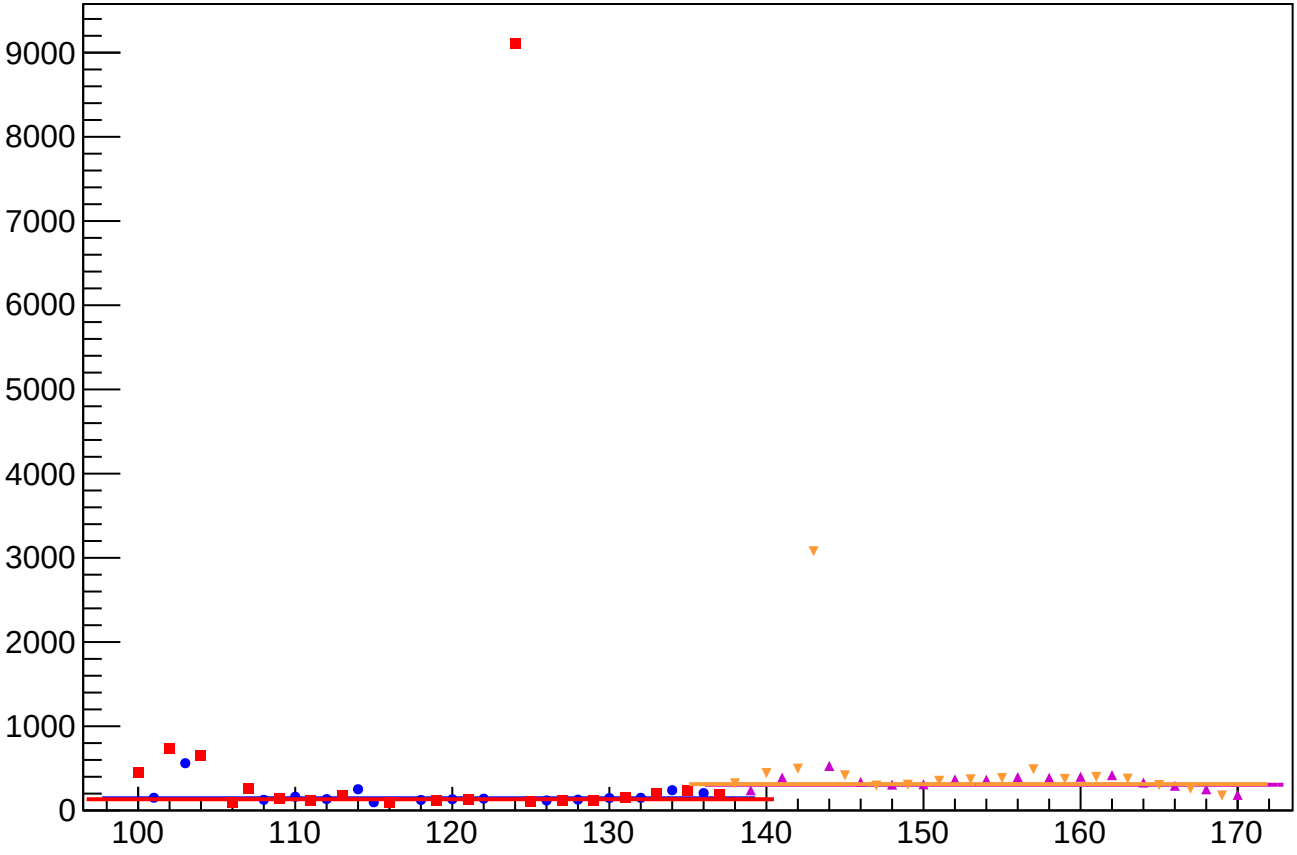
Left In: 0.074+/-0.088 $\chi^2$/NDF:23.8/15

+ sign -0.026+/-0.049 $\chi^2$/NDF: 42.3/32

All: -0.006+/-0.034 $\chi^2$/NDF: 88.9/67

- sign 0.014+/-0.048 $\chi^2$/NDF: 46.3/34

# asym_atl_avg_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 144.289+/-0.041 $\chi^2$/NDF: 1128804.3/15

Left Out: 312.581+/-0.065 $\chi^2$/NDF:3163847.0/16

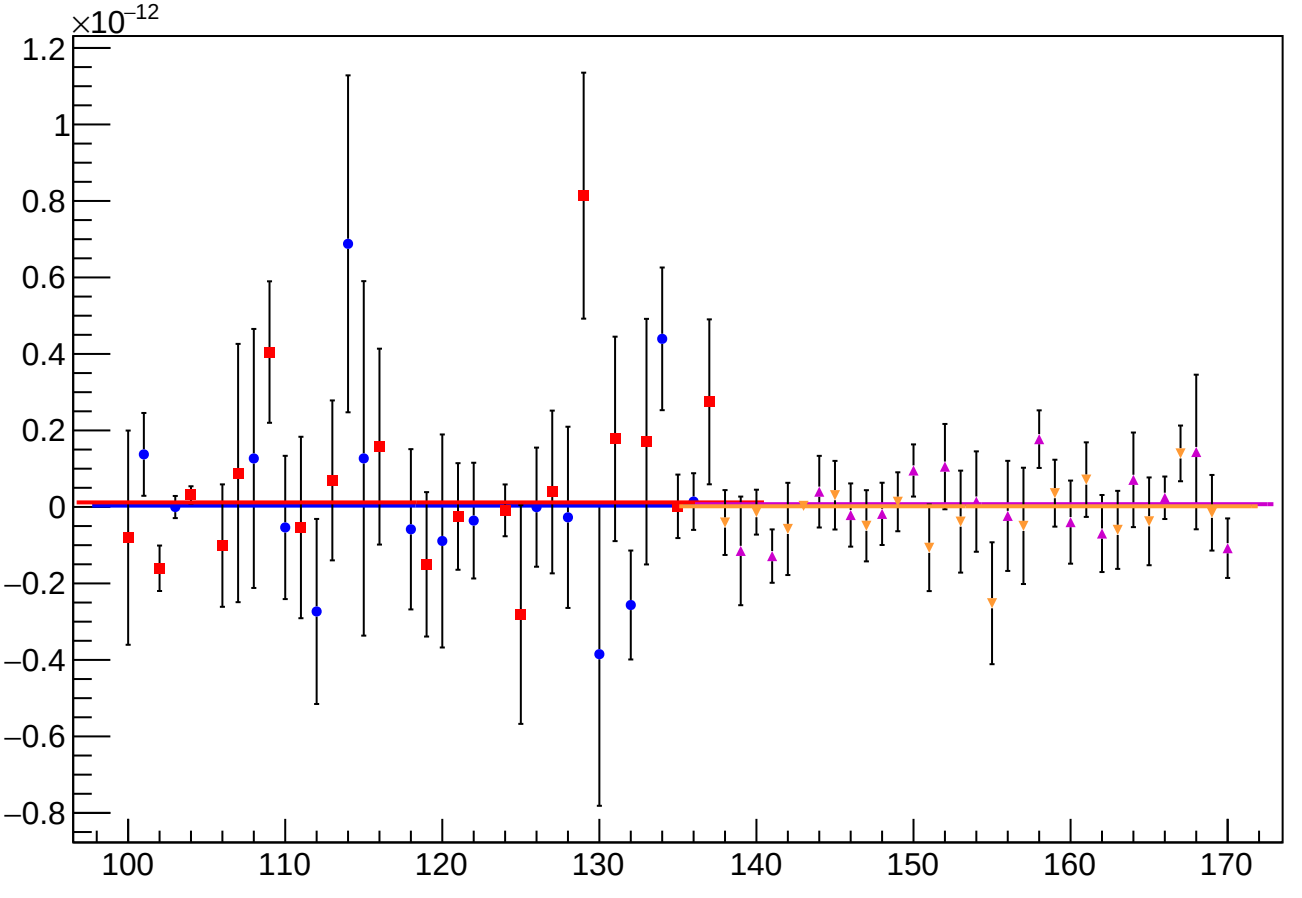
Right Out: 133.253+/-0.040 $\chi^2$/NDF: 2220606.0/18

Left In: 305.186+/-0.063 $\chi^2$/NDF:1750887.9/15

+ sign 191.750+/-0.035 $\chi^2$/NDF: 9069835.7/32

All: 187.306+/-0.024 $\chi^2$/NDF: 18441676.3/67

- sign 183.110+/-0.034 $\chi^2$/NDF: 9339855.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 15.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:9.4/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 25.1/18

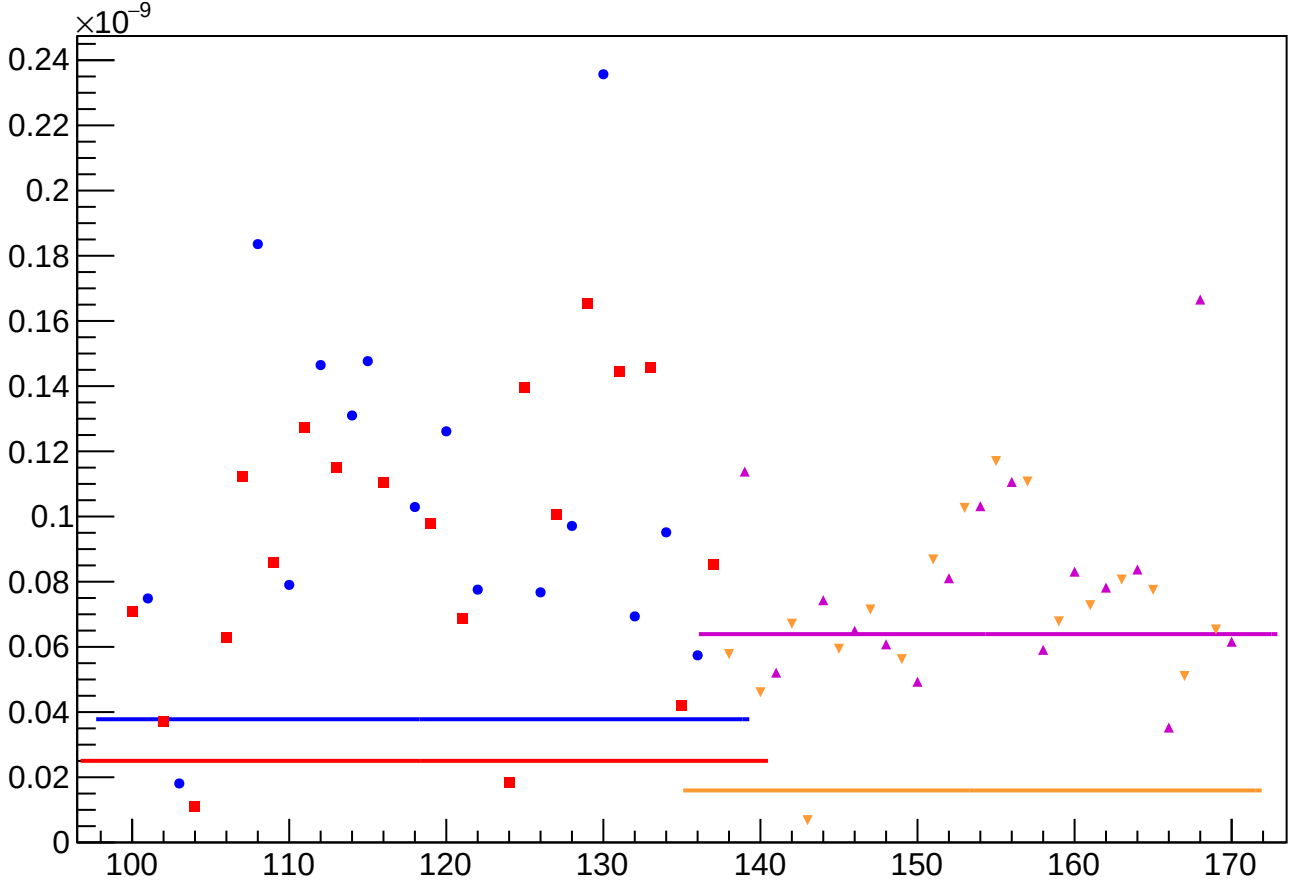
Left In: 0.000+/-0.000 $\chi^2$/NDF:16.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 25.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 66.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 41.4/34

# asym_atl_avg_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3942675.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11687479.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 4701757.7/18

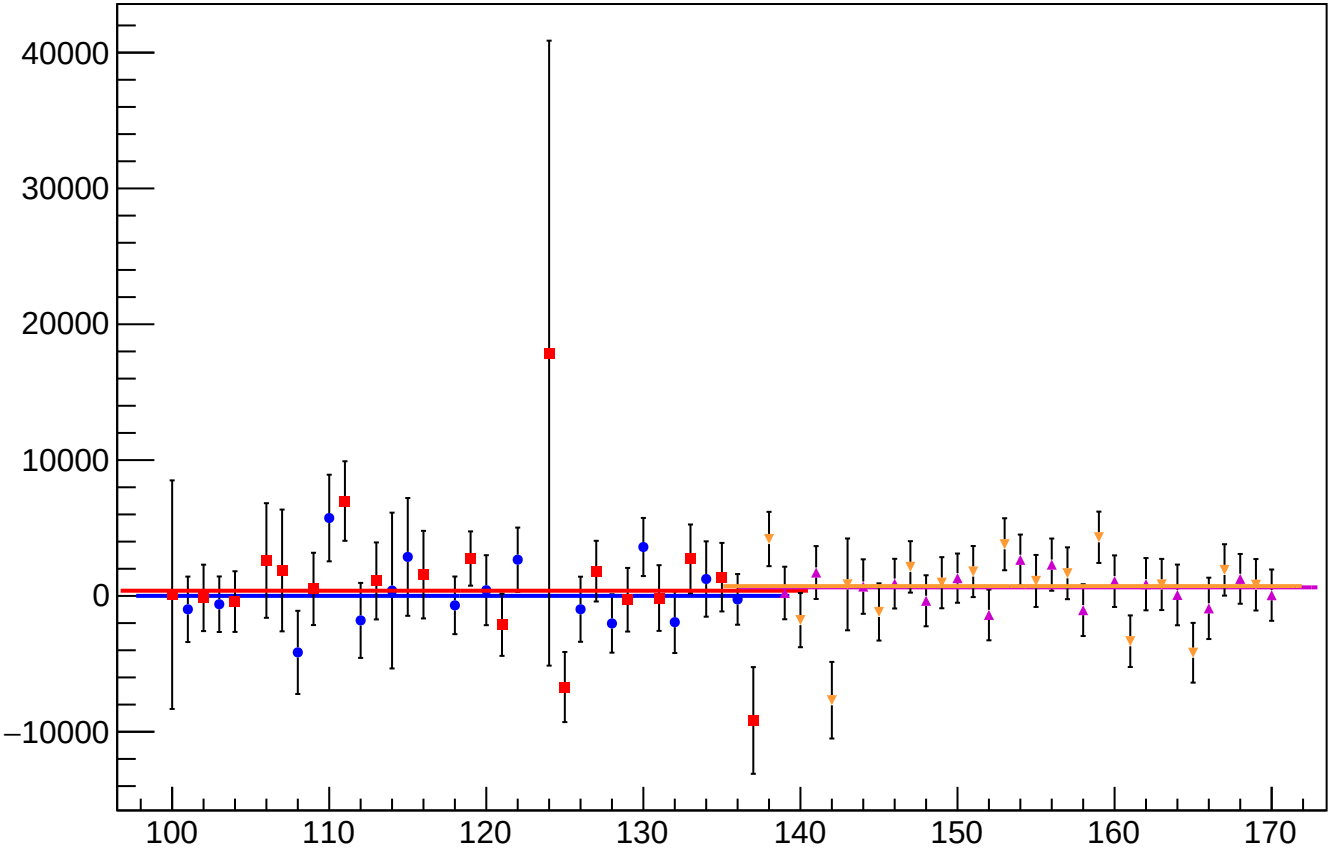
Left In: 0.000+/-0.000 $\chi^2$/NDF:2073094.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 17081833.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 30973309.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 10364072.7/34

# reg_asym_atl_dd_mean vs Slug




Right In: 4.373+/-619.905 $\chi^2$/NDF: 12.4/15

Left Out: 723.315+/-487.564 $\chi^2$/NDF:31.6/16

Right Out: 384.758+/-633.682 $\chi^2$/NDF: 24.1/18

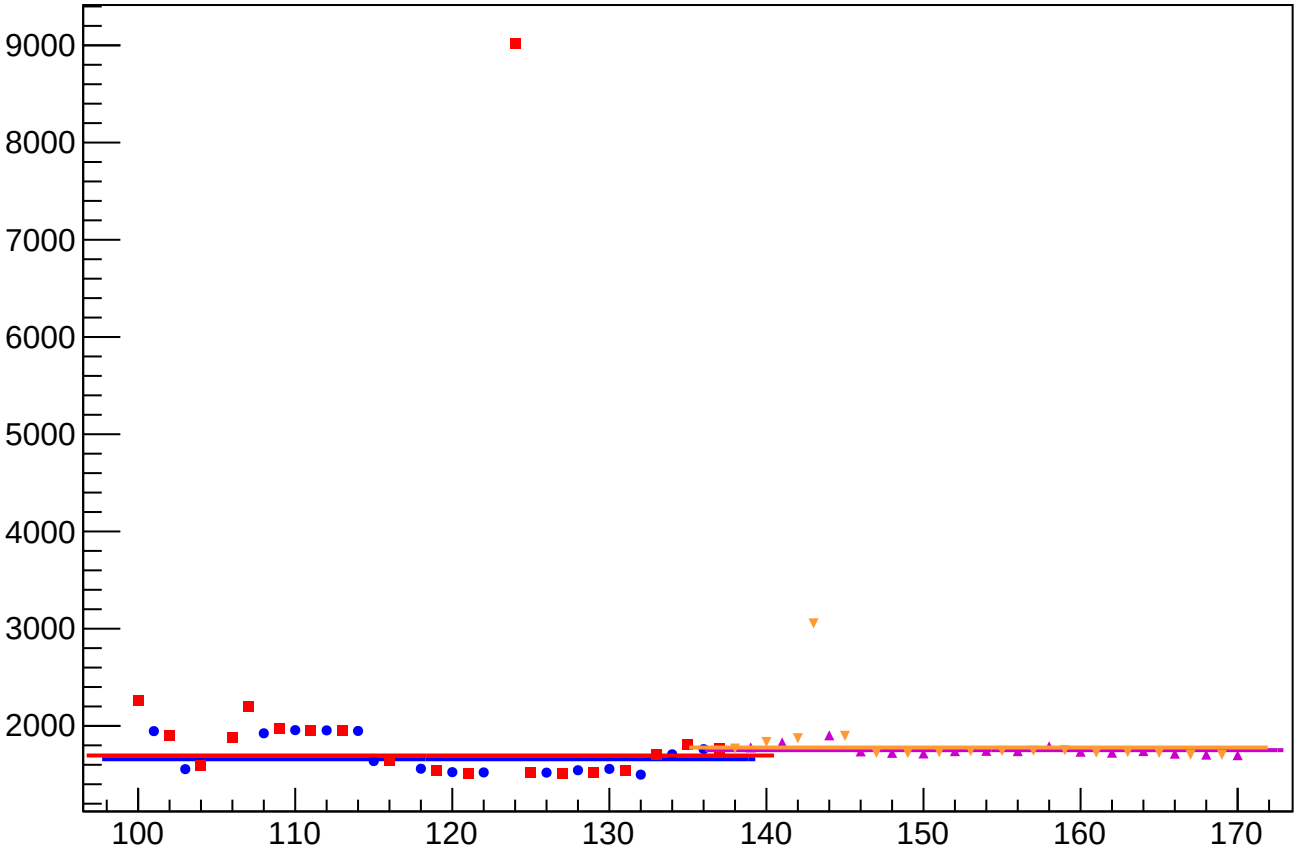
Left In: 631.184+/-481.649 $\chi^2$/NDF:5.5/15

\+ sign 448.547+/-383.232 $\chi^2$/NDF: 44.9/32

All: 494.721+/-271.065 $\chi^2$/NDF: 74.6/67

\- sign 540.949+/-383.456 $\chi^2$/NDF: 29.7/34

# reg_asym_atl_dd_rms vs Slug




Right In: 1657.119+/-0.438 $\chi^2$/NDF: 143982.4/15

Left Out: 1777.456+/-0.345 $\chi^2$/NDF:313540.1/16

Right Out: 1695.649+/-0.446 $\chi^2$/NDF: 386216.2/18

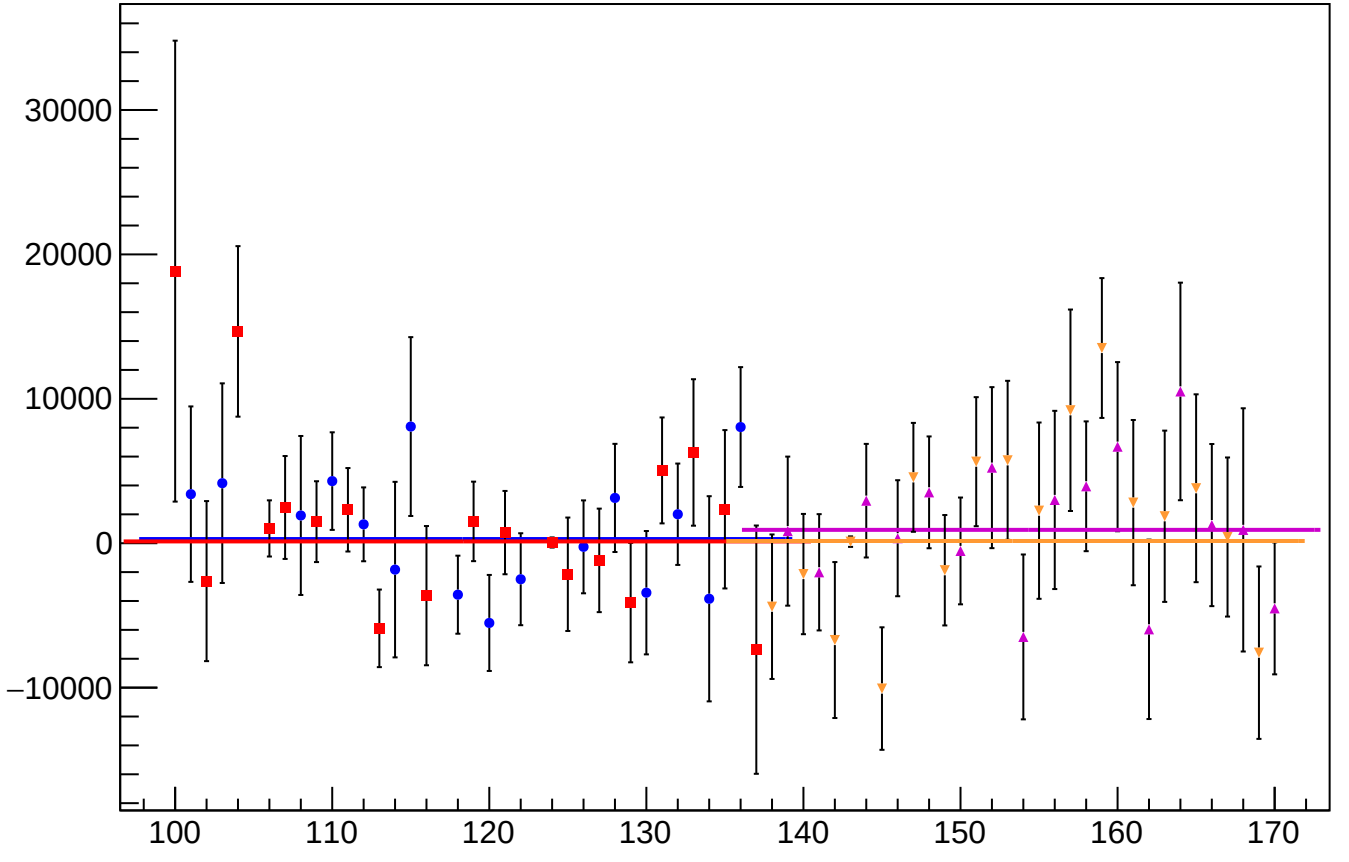
Left In: 1750.607+/-0.341 $\chi^2$/NDF:21399.1/15

+ sign 1731.465+/-0.271 $\chi^2$/NDF: 504085.1/32

All: 1730.914+/-0.192 $\chi^2$/NDF: 921299.3/67

- sign 1730.365+/-0.271 $\chi^2$/NDF: 417206.0/34

# asym_atl_dd_reg_correction_mean vs Slug




Right In: 289.262+/-961.071 $\chi^2$/NDF: 15.2/15

Left Out: 154.995+/-349.530 $\chi^2$/NDF:24.5/16

Right Out: 125.586+/-323.715 $\chi^2$/NDF: 20.8/18

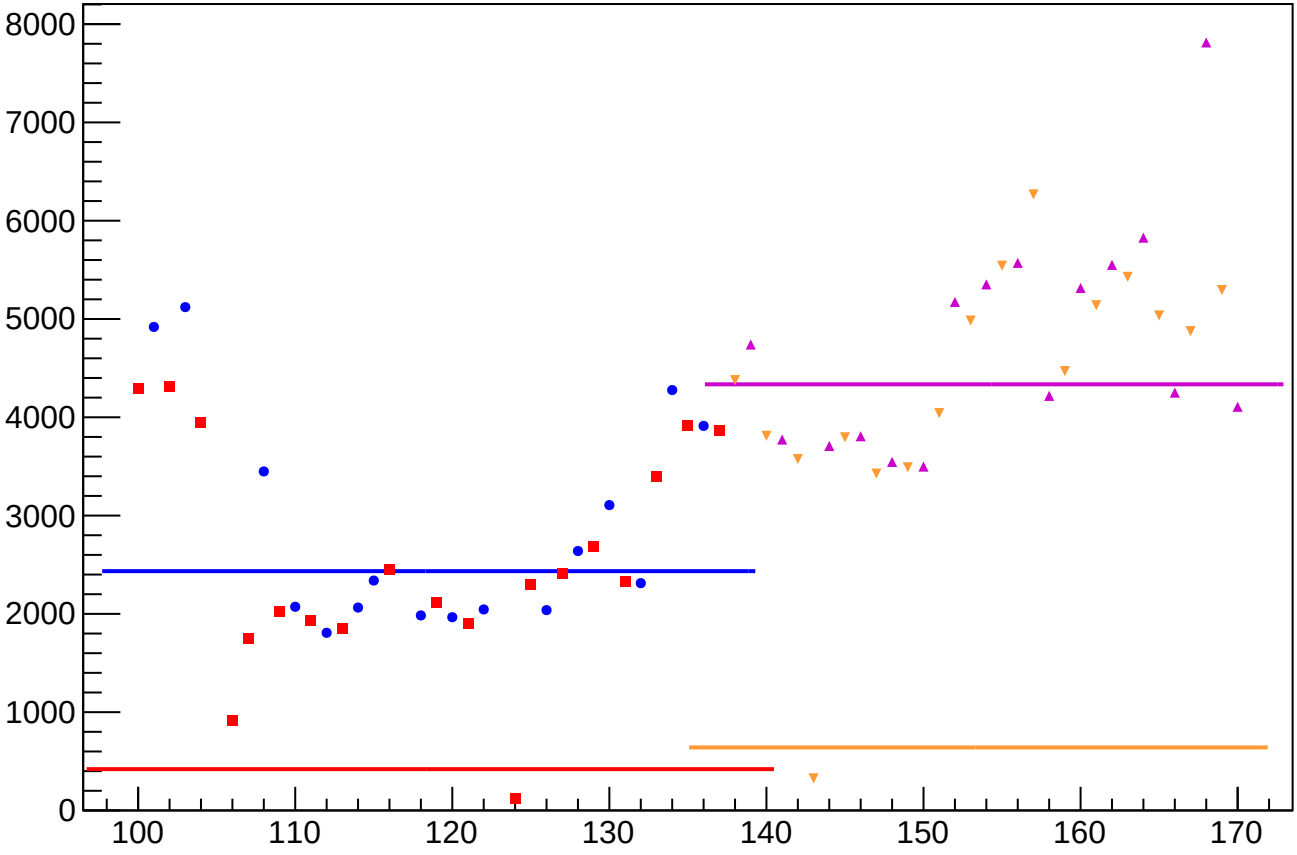
Left In: 925.824+/-1220.993 $\chi^2$/NDF:9.5/15

\+ sign 170.680+/-328.480 $\chi^2$/NDF: 39.7/32

All: 174.592+/-226.563 $\chi^2$/NDF: 70.5/67

\- sign 178.141+/-312.904 $\chi^2$/NDF: 30.7/34

# asym_atl_dd_reg_correction_rms vs Slug




Right In: 2434.593+/-0.680 $\chi^2$/NDF: 1457721.5/15

Left Out: 640.960+/-0.247 $\chi^2$/NDF:19762758.2/16

Right Out: 420.292+/-0.229 $\chi^2$/NDF: 11063973.9/18

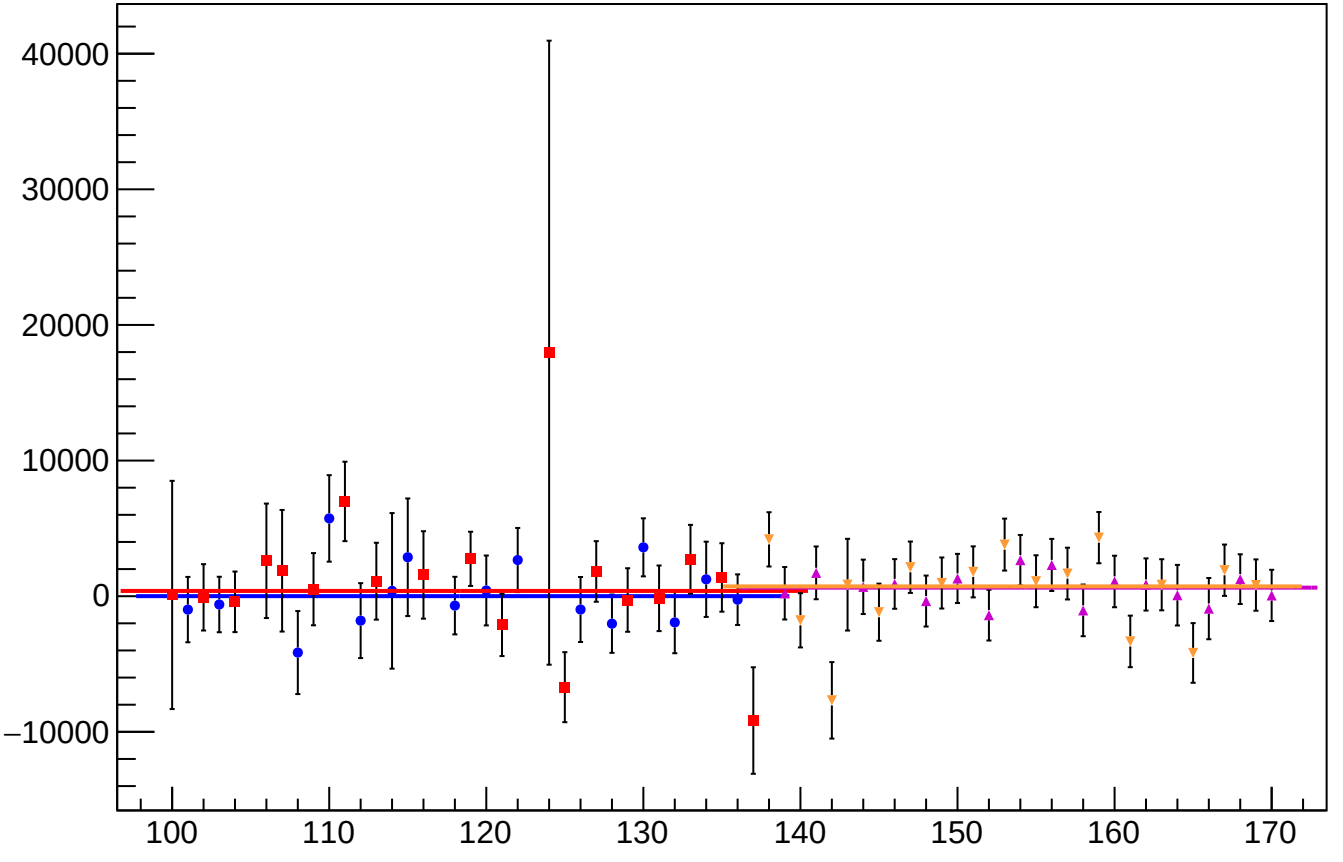
Left In: 4335.459+/-0.863 $\chi^2$/NDF:1070258.7/15

+ sign 850.488+/-0.232 $\chi^2$/NDF: 27372771.1/32

All: 759.753+/-0.160 $\chi^2$/NDF: 59011400.7/67

- sign 677.419+/-0.221 $\chi^2$/NDF: 31347553.6/34

# cor_asym_atl_dd_mean vs Slug




Right In: 4.295+/-619.905 $\chi^2$/NDF: 12.4/15

Left Out: 723.252+/-487.564 $\chi^2$/NDF:31.6/16

Right Out: 389.054+/-633.688 $\chi^2$/NDF: 24.0/18

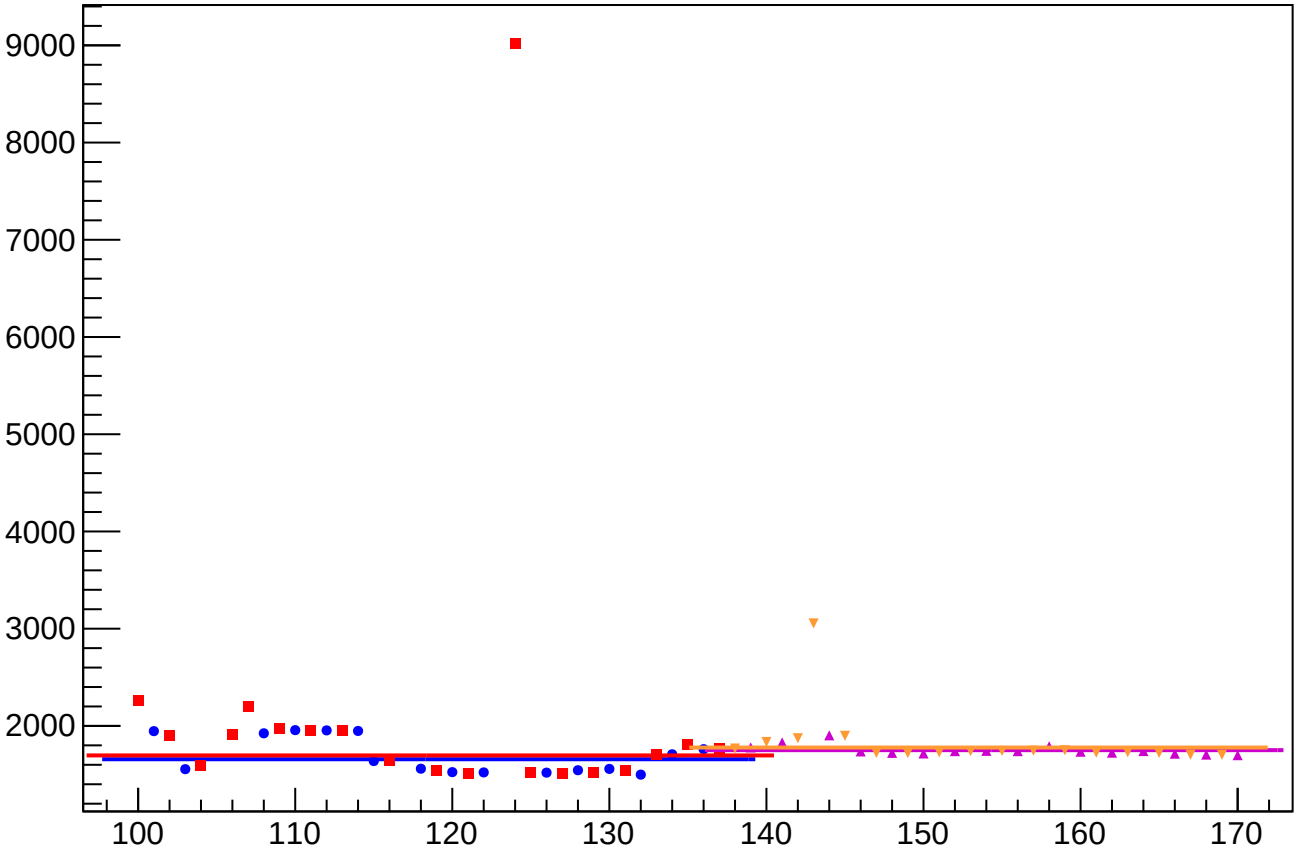
Left In: 631.224+/-481.649 $\chi^2$/NDF:5.5/15

\+ sign 448.479+/-383.232 $\chi^2$/NDF: 44.9/32

All: 495.486+/-271.065 $\chi^2$/NDF: 74.5/67

\- sign 542.549+/-383.457 $\chi^2$/NDF: 29.7/34

# cor_asym_atl_dd_rms vs Slug




Right In: 1657.119+/-0.438 $\chi^2$/NDF: 143982.5/15

Left Out: 1777.456+/-0.345 $\chi^2$/NDF:313540.1/16

Right Out: 1696.442+/-0.446 $\chi^2$/NDF: 387974.4/18

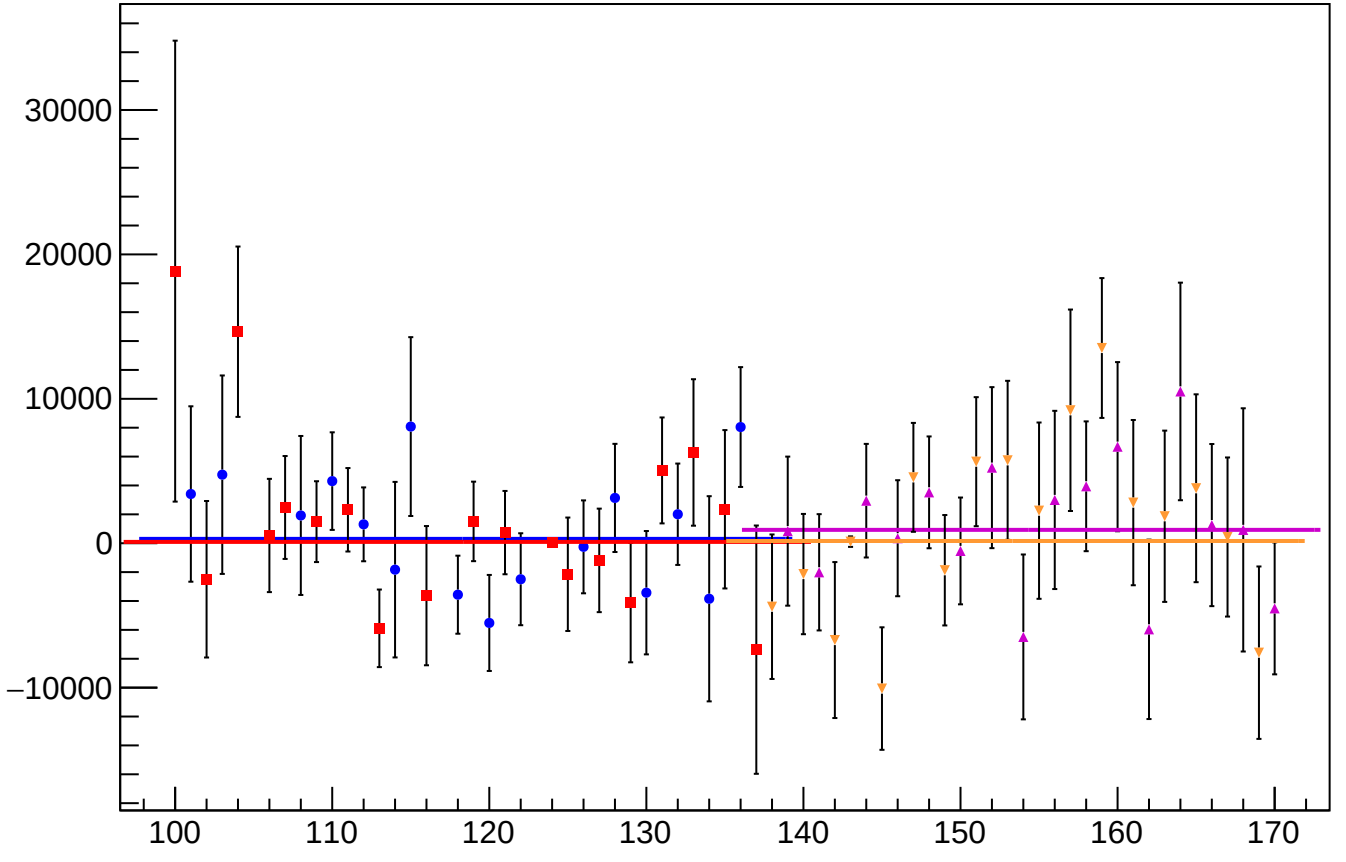
Left In: 1750.607+/-0.341 $\chi^2$/NDF:21399.1/15

+ sign 1731.465+/-0.271 $\chi^2$/NDF: 504085.2/32

All: 1731.067+/-0.192 $\chi^2$/NDF: 922773.2/67

- sign 1730.669+/-0.271 $\chi^2$/NDF: 418683.6/34

# asym_atl_dd_cor_correction_mean vs Slug




Right In: 301.839+/-960.952 $\chi^2$/NDF: 15.3/15

Left Out: 155.426+/-349.504 $\chi^2$/NDF:24.5/16

Right Out: 92.243+/-315.757 $\chi^2$/NDF: 20.6/18

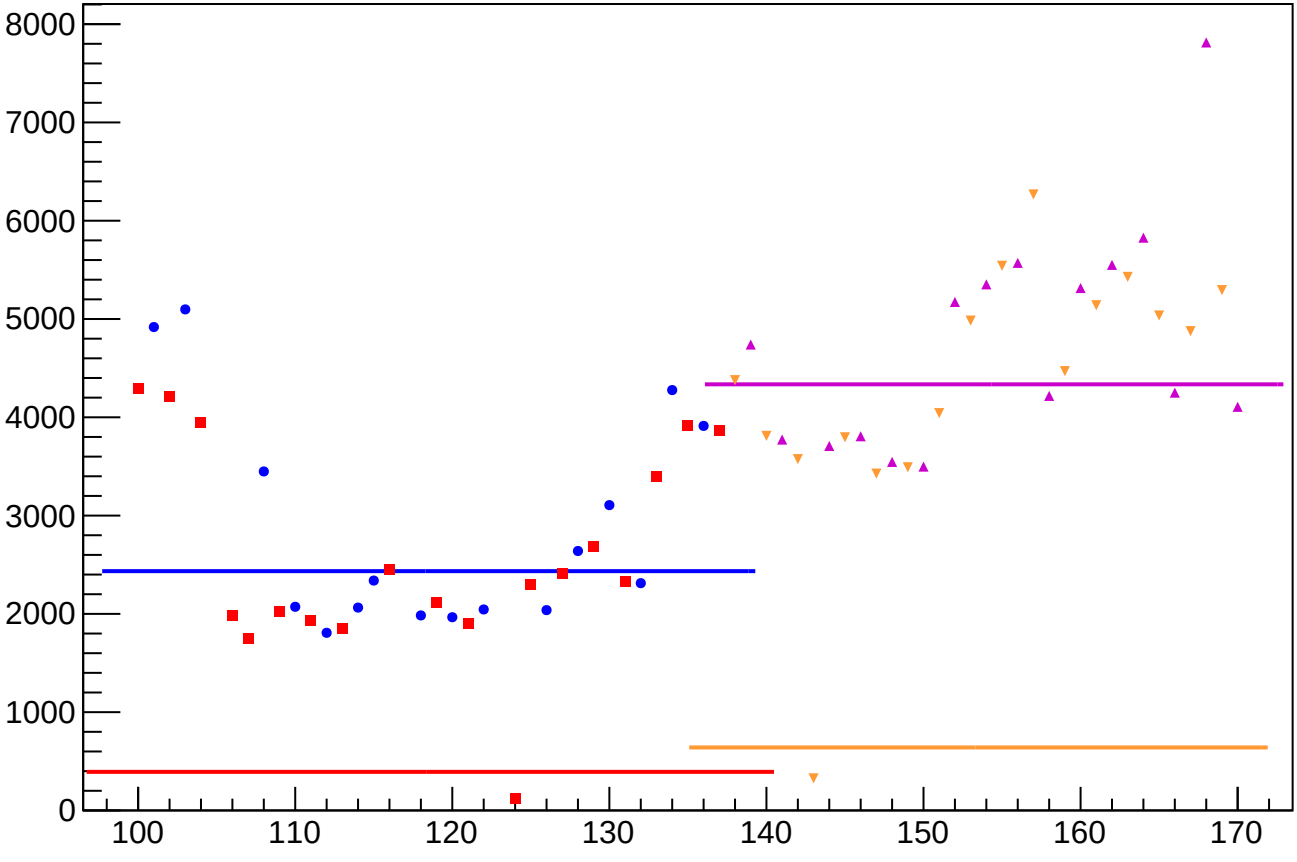
Left In: 925.867+/-1220.992 $\chi^2$/NDF:9.5/15

+ sign 172.531+/-328.454 $\chi^2$/NDF: 39.8/32

All: 157.511+/-223.775 $\chi^2$/NDF: 70.4/67

- sign 144.499+/-305.700 $\chi^2$/NDF: 30.6/34

# asym_atl_dd_cor_correction_rms vs Slug




Right In: 2434.758+/-0.679 $\chi^2$/NDF: 1456027.7/15

Left Out: 640.888+/-0.247 $\chi^2$/NDF:19763260.1/16

Right Out: 392.666+/-0.223 $\chi^2$/NDF: 11408006.3/18

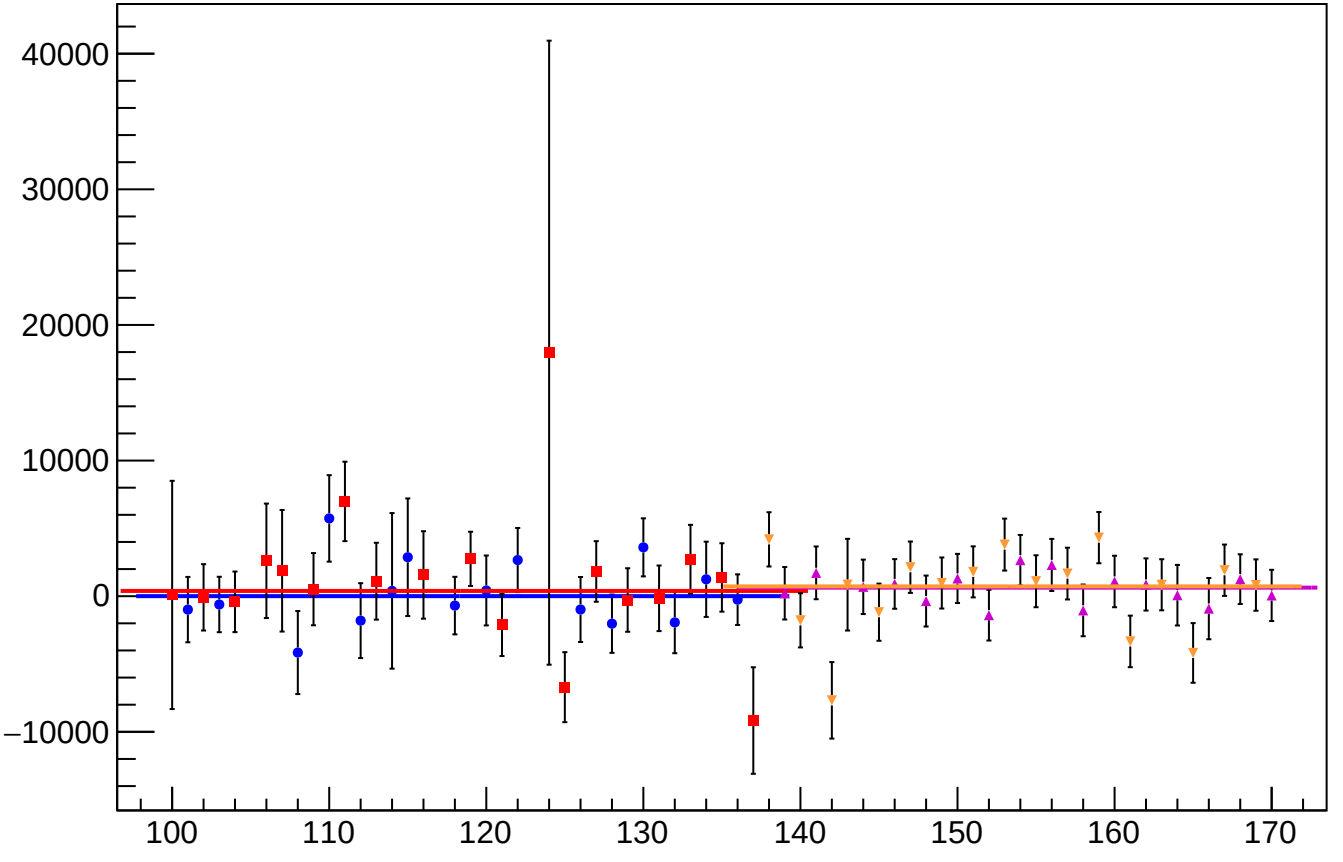
Left In: 4335.455+/-0.863 $\chi^2$/NDF:1070250.8/15

+ sign 850.462+/-0.232 $\chi^2$/NDF: 27374654.7/32

All: 737.593+/-0.158 $\chi^2$/NDF: 59841431.4/67

- sign 639.821+/-0.216 $\chi^2$/NDF: 32026024.0/34

# eigen_cor_asym_atl_dd_mean vs Slug




Right In: 4.295+/-619.905 $\chi^2$/NDF: 12.4/15

Left Out: 723.252+/-487.564 $\chi^2$/NDF:31.6/16

Right Out: 389.054+/-633.688 $\chi^2$/NDF: 24.0/18

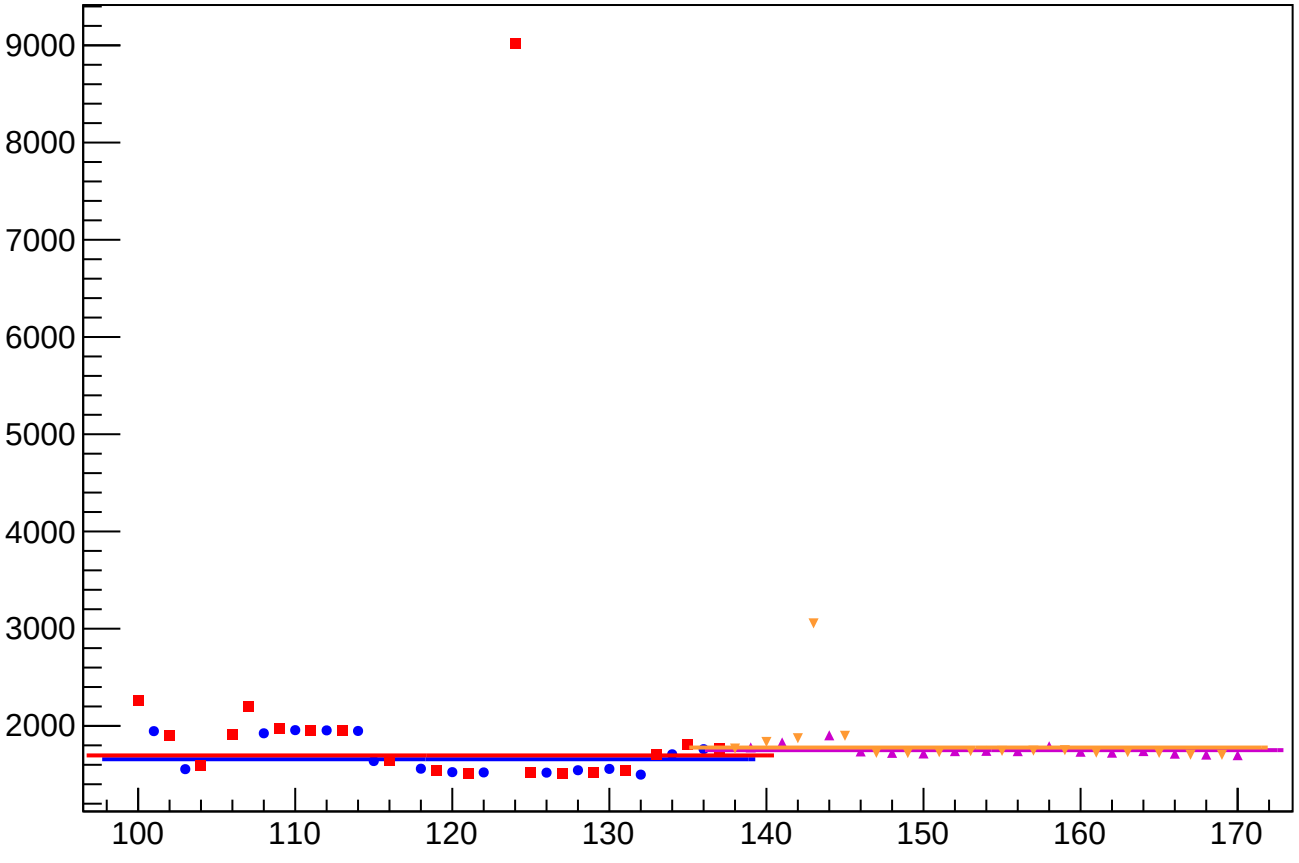
Left In: 631.224+/-481.649 $\chi^2$/NDF:5.5/15

+ sign 448.479+/-383.232 $\chi^2$/NDF: 44.9/32

All: 495.486+/-271.065 $\chi^2$/NDF: 74.5/67

- sign 542.549+/-383.457 $\chi^2$/NDF: 29.7/34

# eigen_cor_asym_atl_dd_rms vs Slug




Right In: 1657.119+/-0.438 $\chi^2$/NDF: 143982.5/15

Left Out: 1777.456+/-0.345 $\chi^2$/NDF:313540.1/16

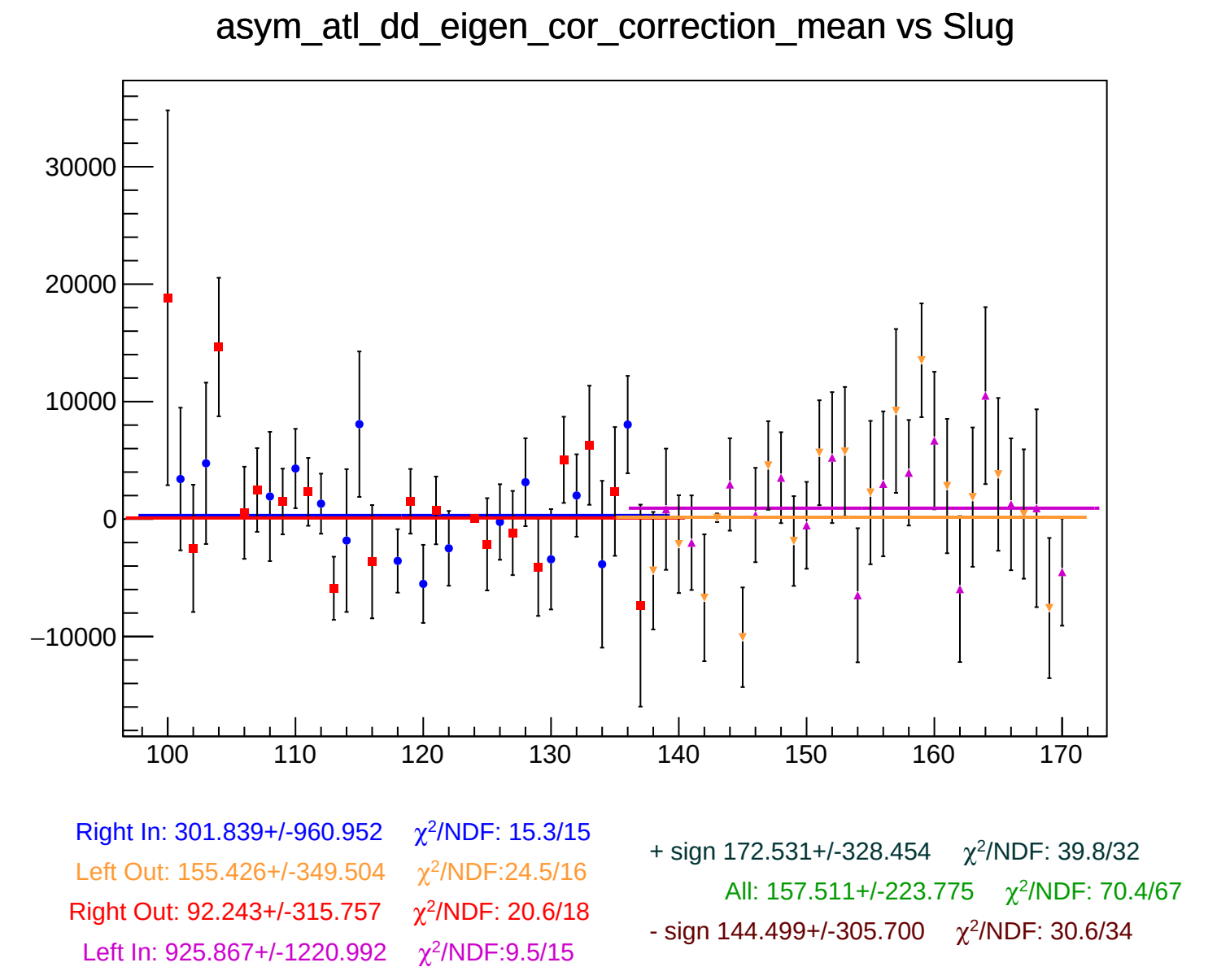
Right Out: 1696.442+/-0.446 $\chi^2$/NDF: 387974.4/18

Left In: 1750.607+/-0.341 $\chi^2$/NDF:21399.1/15

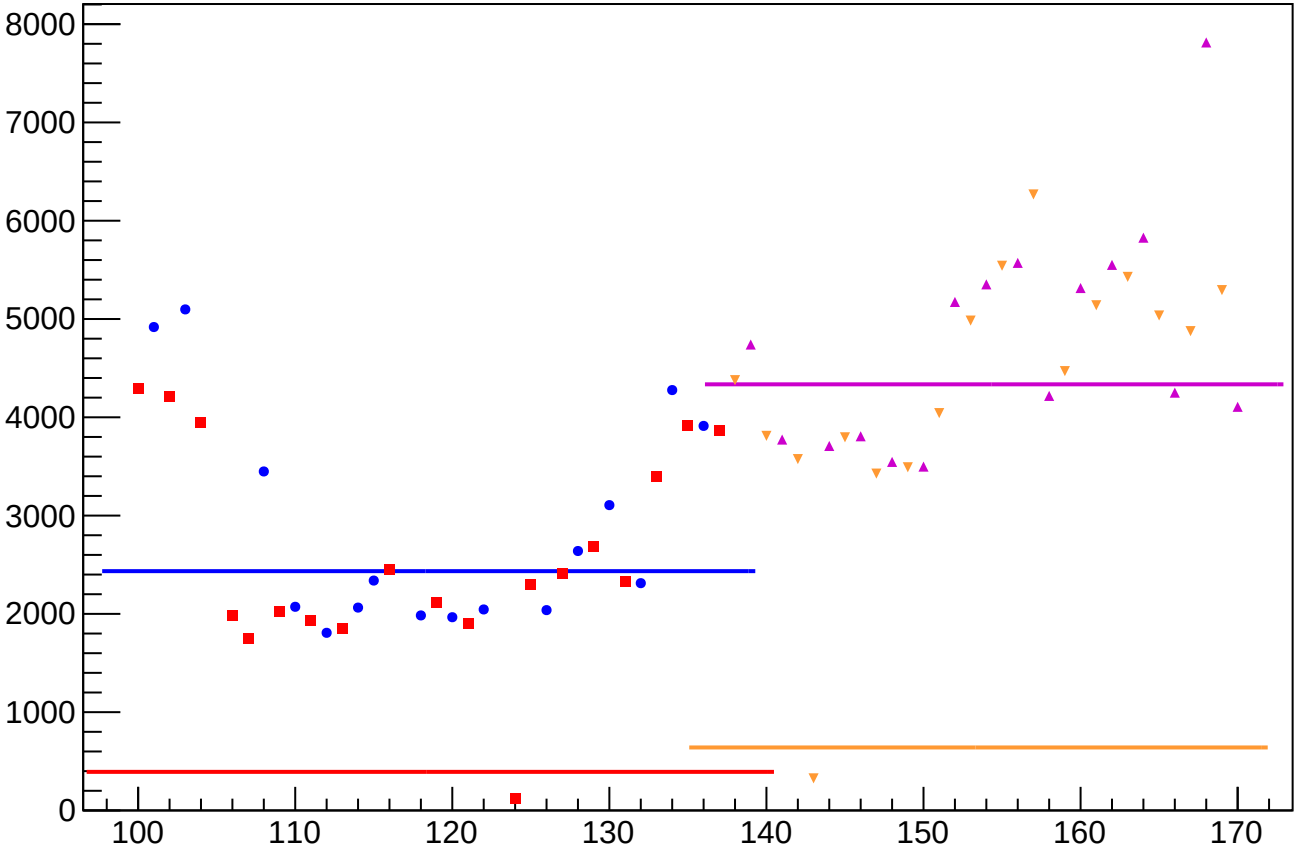
+ sign 1731.465+/-0.271 $\chi^2$/NDF: 504085.2/32

All: 1731.067+/-0.192 $\chi^2$/NDF: 922773.2/67

- sign 1730.669+/-0.271 $\chi^2$/NDF: 418683.6/34


asym_atl_dd_eigen_cor_correction_mean vs Slug
30000
20000
10000
0
−10000
100
110
120
130
140
150
160
170
Right In: 301.839+/-960.952 χ²/NDF: 15.3/15
Left Out: 155.426+/-349.504 χ²/NDF:24.5/16
Right Out: 92.243+/-315.757 χ²/NDF: 20.6/18
Left In: 925.867+/-1220.992 χ²/NDF:9.5/15
+ sign 172.531+/-328.454 χ²/NDF: 39.8/32
All: 157.511+/-223.775 χ²/NDF: 70.4/67
- sign 144.499+/-305.700 χ²/NDF: 30.6/34

# asym_atl_dd_eigen_cor_correction_rms vs Slug




Right In: 2434.758+/-0.679 $\chi^2$/NDF: 1456027.7/15

Left Out: 640.888+/-0.247 $\chi^2$/NDF:19763260.1/16

Right Out: 392.666+/-0.223 $\chi^2$/NDF: 11408006.3/18

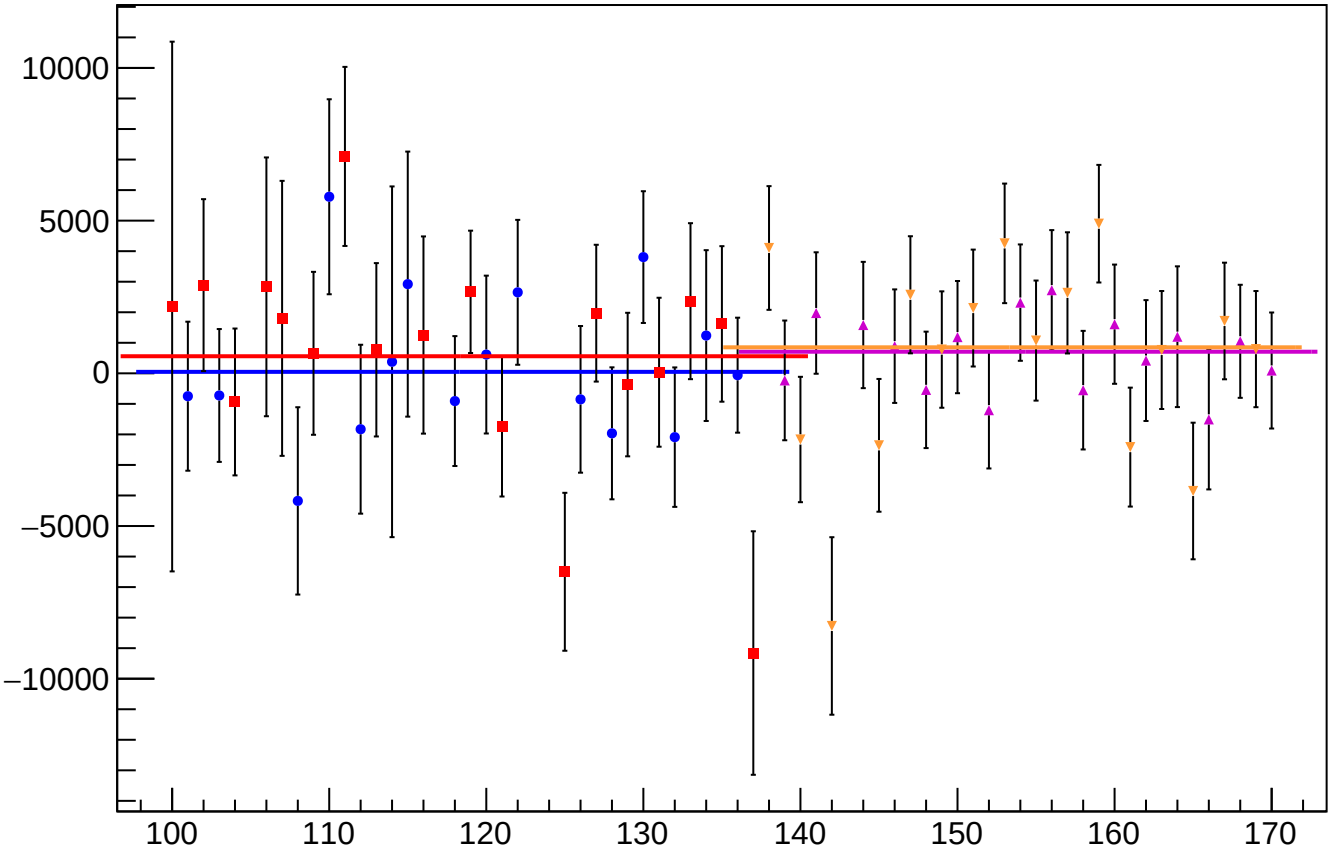
Left In: 4335.455+/-0.863 $\chi^2$/NDF:1070250.8/15

+ sign 850.462+/-0.232 $\chi^2$/NDF: 27374654.7/32

All: 737.593+/-0.158 $\chi^2$/NDF: 59841431.4/67

- sign 639.821+/-0.216 $\chi^2$/NDF: 32026024.0/34

# dit_asym_atl_dd_mean vs Slug




Right In: 48.331+/-626.151 $\chi^2$/NDF: 12.8/15

Left Out: 851.860+/-502.700 $\chi^2$/NDF:33.7/15

Right Out: 559.598+/-645.291 $\chi^2$/NDF: 23.3/17

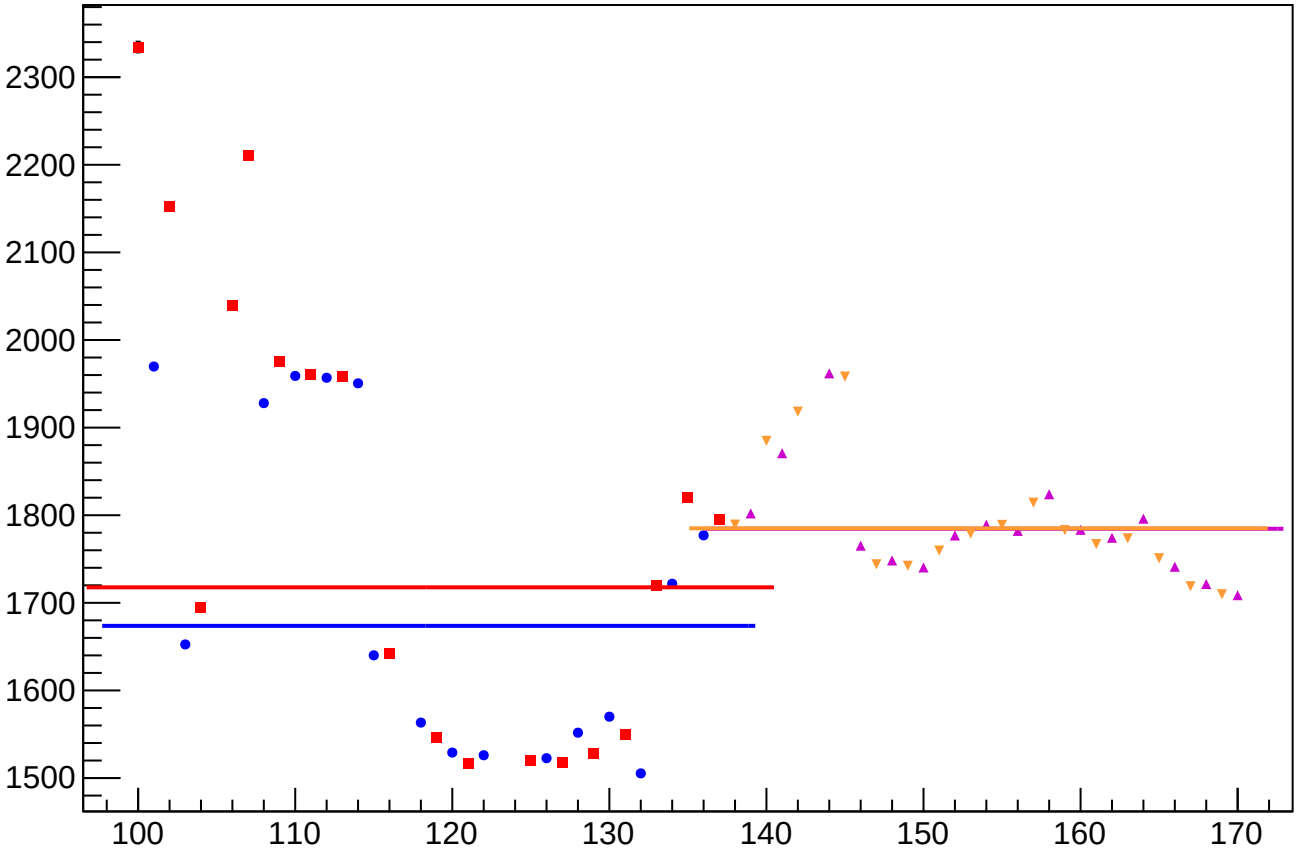
Left In: 707.399+/-491.064 $\chi^2$/NDF:5.9/15

+ sign 536.931+/-391.999 $\chi^2$/NDF: 47.6/31

All: 595.245+/-276.753 $\chi^2$/NDF: 76.8/65

- sign 653.196+/-390.779 $\chi^2$/NDF: 29.2/33

# dit_asym_atl_dd_rms vs Slug




Right In: 1673.729+/-0.443 $\chi^2$/NDF: 140873.1/15

Left Out: 1785.065+/-0.355 $\chi^2$/NDF:30600.9/15

Right Out: 1717.713+/-0.455 $\chi^2$/NDF: 227642.0/17

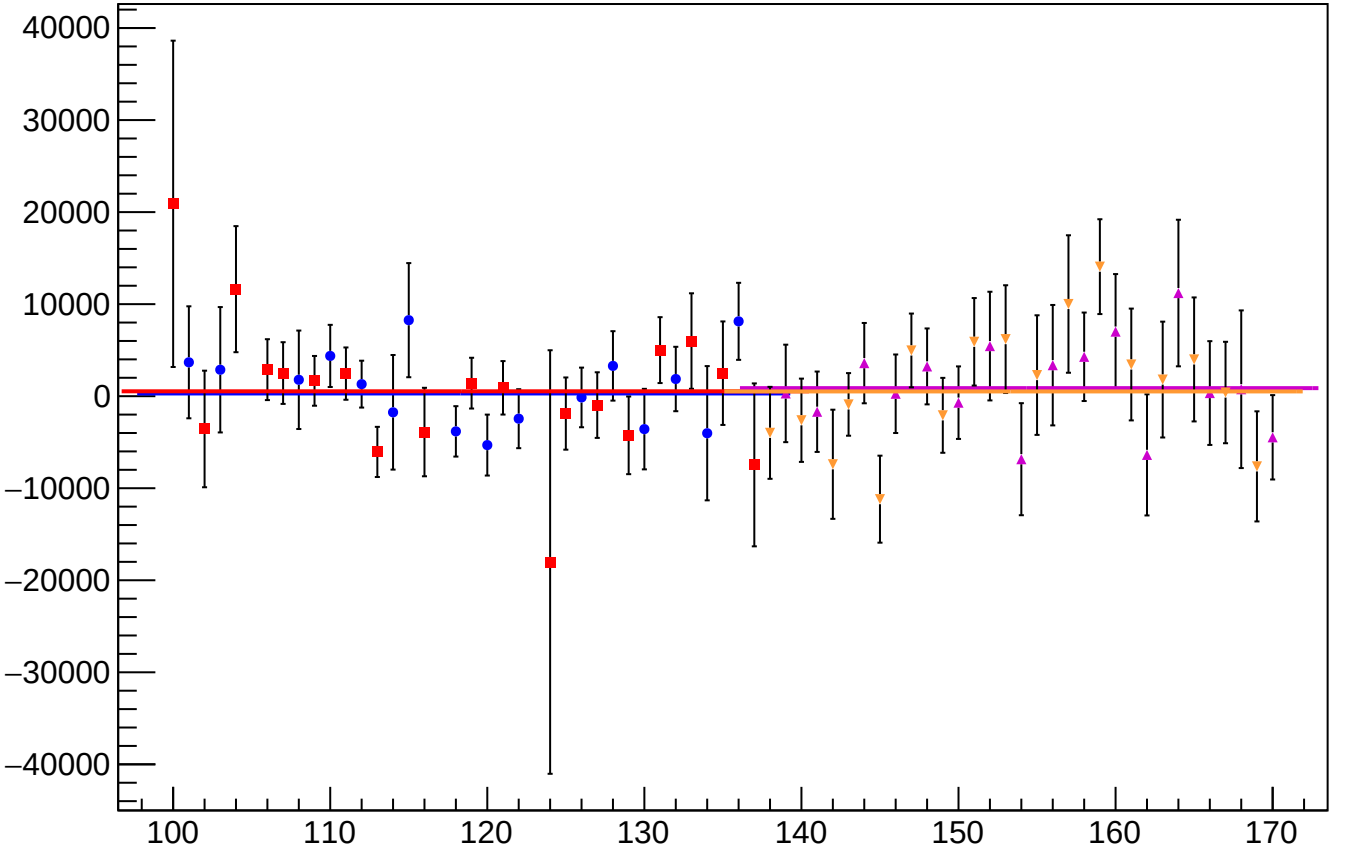
Left In: 1784.532+/-0.347 $\chi^2$/NDF:27930.7/15

+ sign 1741.428+/-0.277 $\chi^2$/NDF: 209924.1/31

All: 1750.729+/-0.196 $\chi^2$/NDF: 481359.1/65

- sign 1759.955+/-0.276 $\chi^2$/NDF: 269192.4/33

# asym_atl_dd_dit_correction_mean vs Slug




Right In: 296.517+/-964.677 $\chi^2$/NDF: 15.3/15

Left Out: 517.442+/-1231.739 $\chi^2$/NDF:24.3/16

Right Out: 531.007+/-883.969 $\chi^2$/NDF: 18.8/18

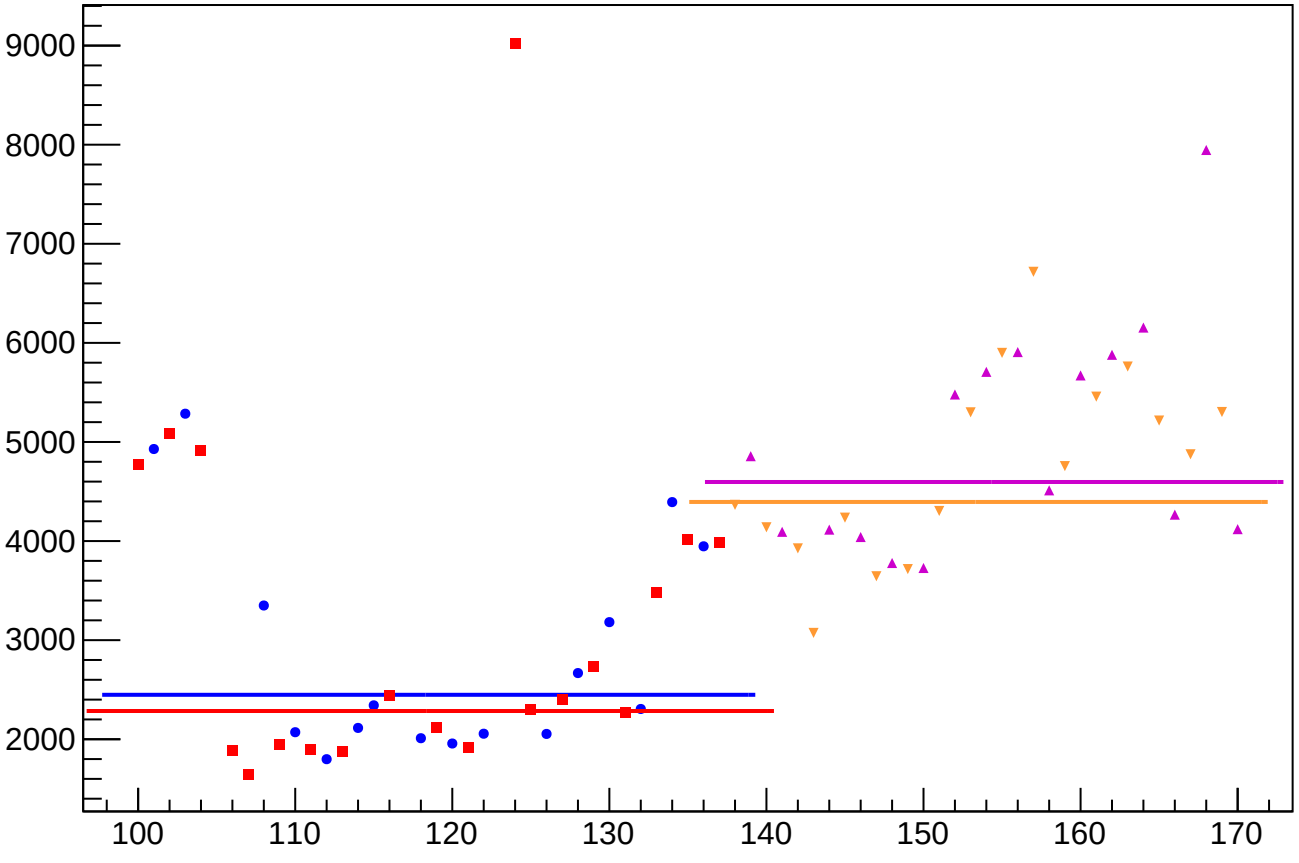
Left In: 874.294+/-1292.989 $\chi^2$/NDF:9.3/15

+ sign 380.508+/-759.476 $\chi^2$/NDF: 39.5/32

All: 515.617+/-526.200 $\chi^2$/NDF: 67.8/67

- sign 640.351+/-729.732 $\chi^2$/NDF: 28.2/34

# asym_atl_dd_dit_correction_rms vs Slug




Right In: 2448.598+/-0.682 $\chi^2$/NDF: 1517585.7/15

Left Out: 4394.733+/-0.871 $\chi^2$/NDF:1053952.5/16

Right Out: 2285.075+/-0.625 $\chi^2$/NDF: 1548819.2/18

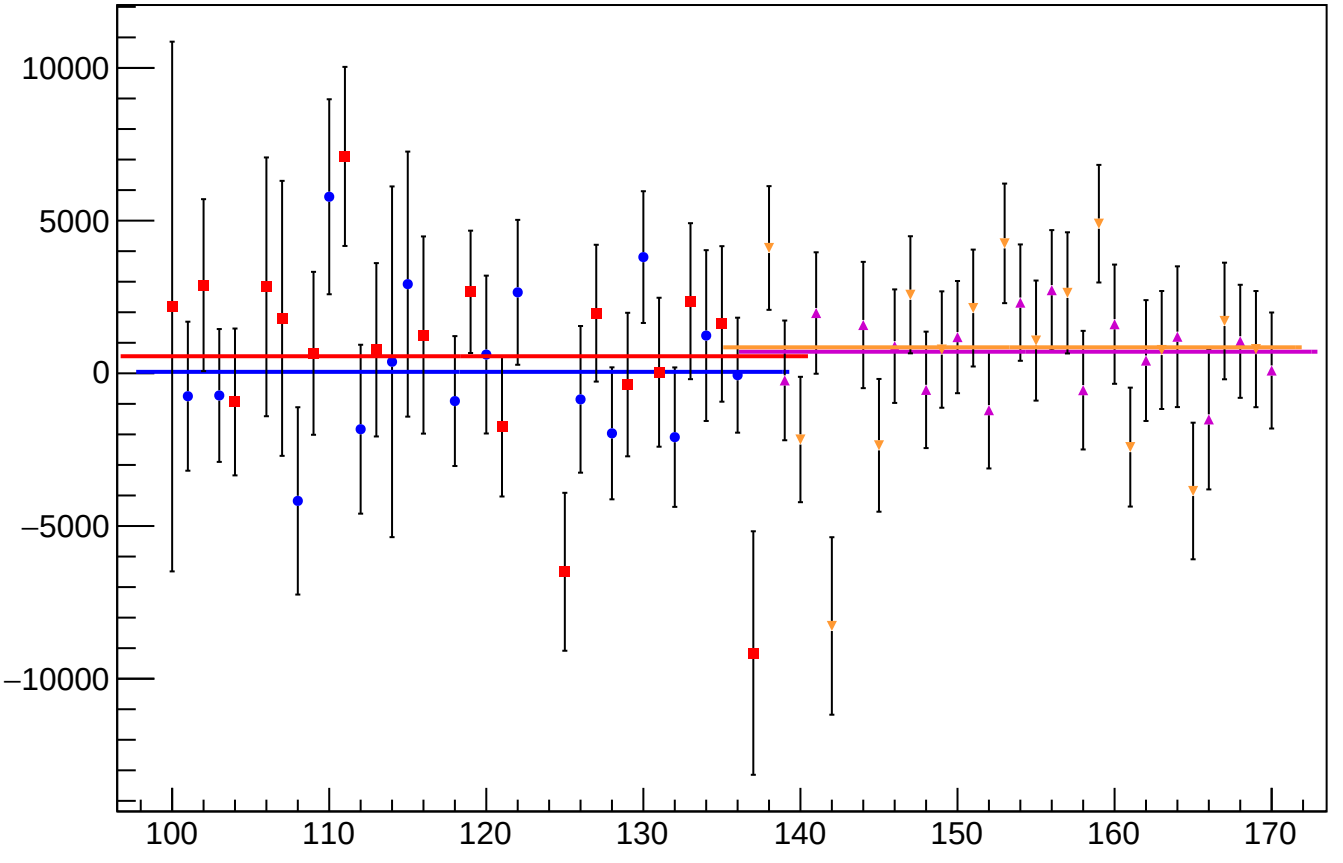
Left In: 4596.111+/-0.914 $\chi^2$/NDF:1003735.2/15

+ sign 3188.483+/-0.537 $\chi^2$/NDF: 5666127.0/32

All: 3101.494+/-0.372 $\chi^2$/NDF: 12623324.5/6

- sign 3021.186+/-0.516 $\chi^2$/NDF: 6906737.4/34

# eigen_dit_asym_atl_dd_mean vs Slug




Right In: 48.329+/-626.151 $\chi^2$/NDF: 12.8/15

Left Out: 851.864+/-502.700 $\chi^2$/NDF:33.7/15

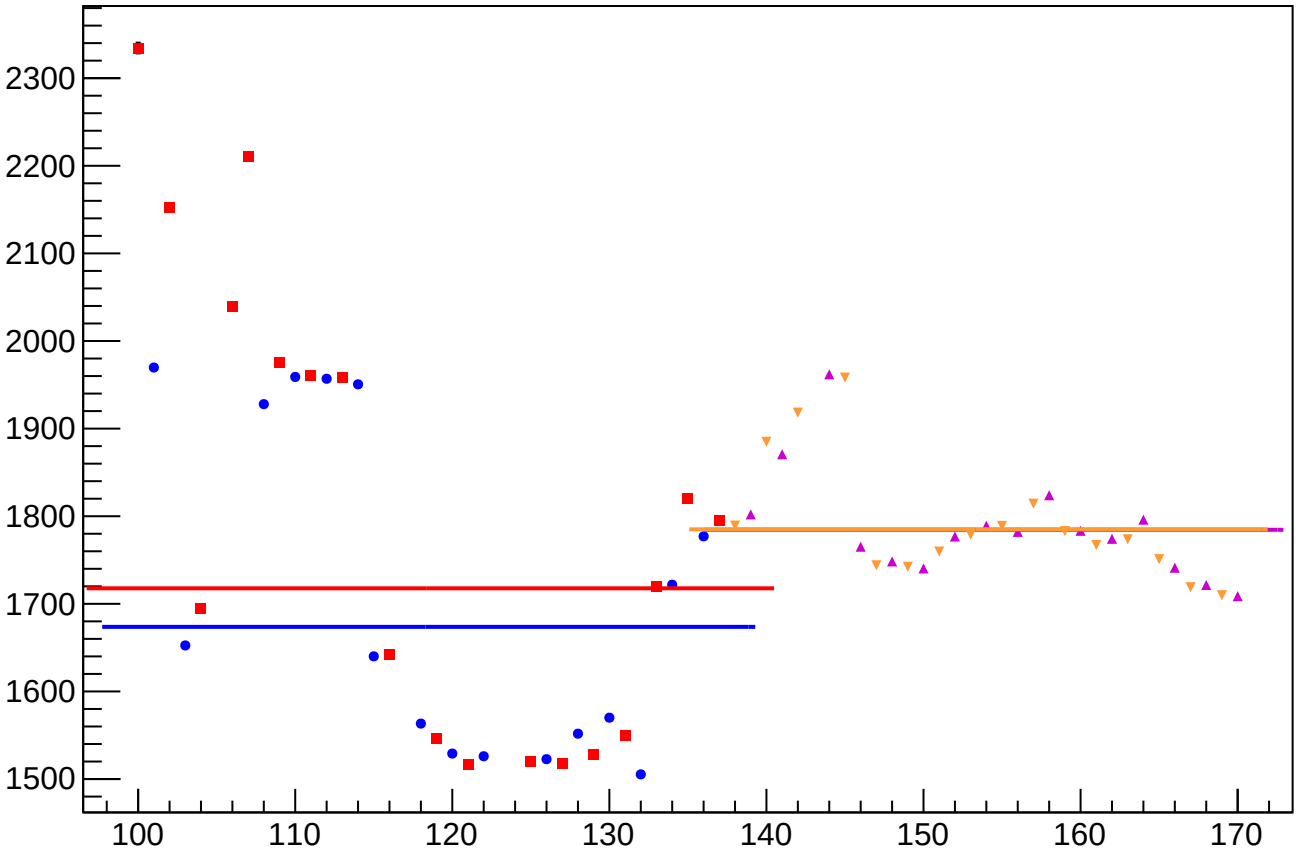
Right Out: 559.600+/-645.291 $\chi^2$/NDF: 23.3/17

Left In: 707.400+/-491.064 $\chi^2$/NDF:5.9/15

+ sign 536.932+/-391.999 $\chi^2$/NDF: 47.6/31

All: 595.246+/-276.753 $\chi^2$/NDF: 76.8/65

- sign 653.197+/-390.779 $\chi^2$/NDF: 29.2/33




Right In: 1673.728+/-0.443 $\chi^2$/NDF: 140873.1/15

Left Out: 1785.066+/-0.355 $\chi^2$/NDF:30601.5/15

Right Out: 1717.713+/-0.455 $\chi^2$/NDF: 227641.3/17

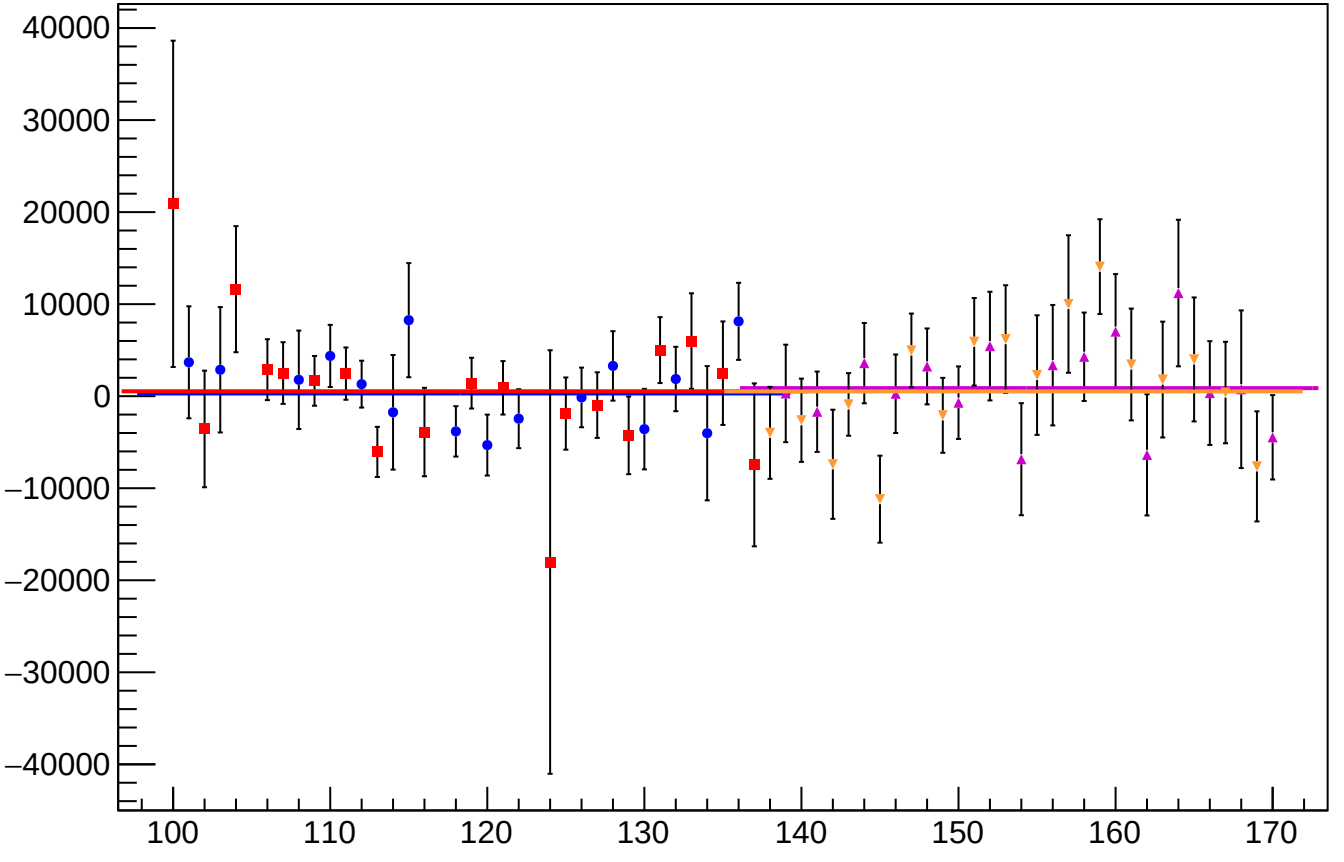
Left In: 1784.532+/-0.347 $\chi^2$/NDF:27931.1/15

+ sign 1741.429+/-0.277 $\chi^2$/NDF: 209925.5/31

All: 1750.729+/-0.196 $\chi^2$/NDF: 481360.5/65

- sign 1759.956+/-0.276 $\chi^2$/NDF: 269192.5/33

# asym_atl_dd_eigen_dit_correction_mean vs Slug




Right In: 296.511+/-964.673 $\chi^2$/NDF: 15.3/15

Left Out: 517.446+/-1231.741 $\chi^2$/NDF:24.3/16

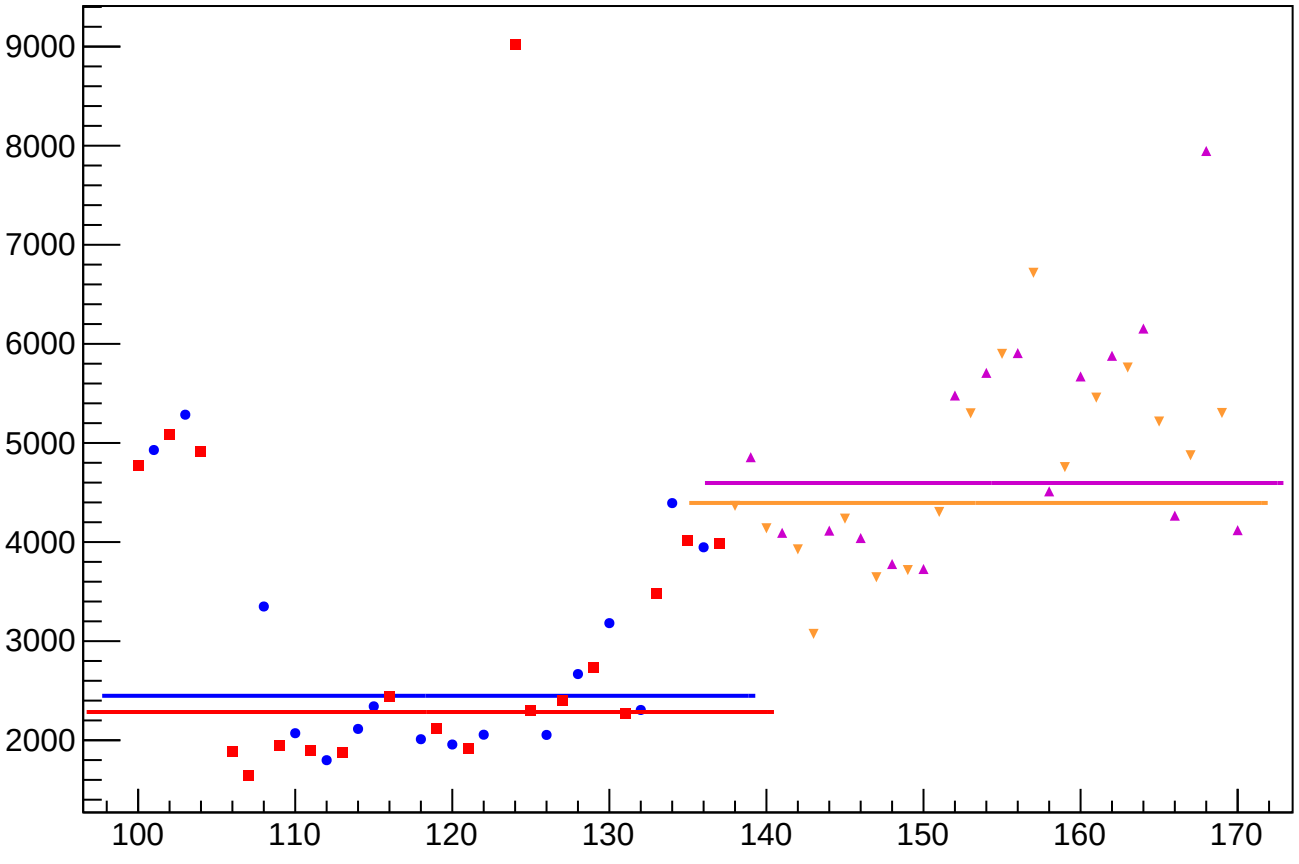
Right Out: 531.009+/-883.966 $\chi^2$/NDF: 18.8/18

Left In: 874.294+/-1292.991 $\chi^2$/NDF:9.3/15

\+ sign 380.506+/-759.475 $\chi^2$/NDF: 39.5/32

All: 515.616+/-526.199 $\chi^2$/NDF: 67.8/67

\- sign 640.351+/-729.731 $\chi^2$/NDF: 28.2/34


asym_atl_dd_eigen_dit_correction_rms vs Slug
9000
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140
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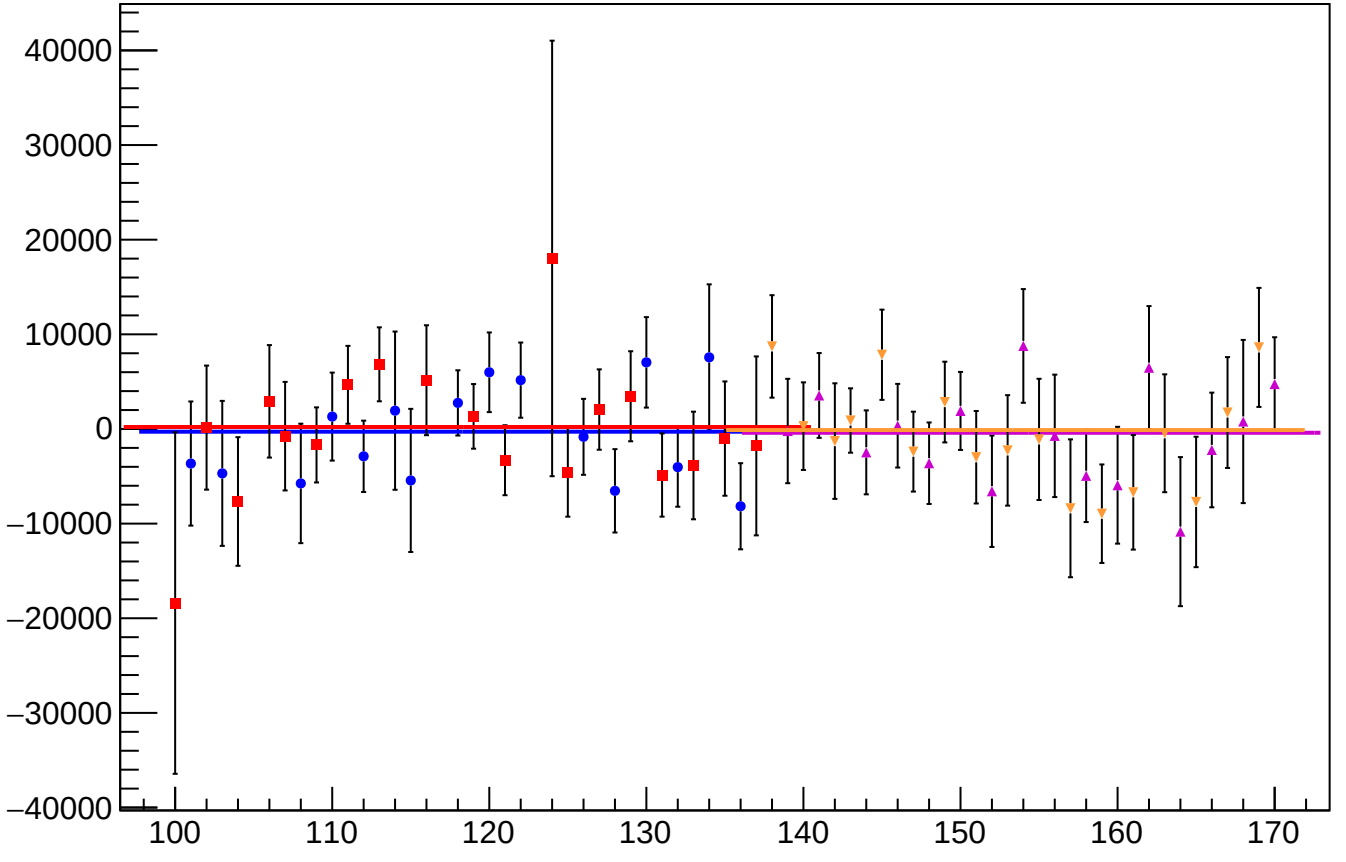
160
170
Right In: 2448.587+/-0.682 χ²/NDF: 1517598.4/15
Left Out: 4394.738+/-0.871 χ²/NDF:1053956.7/16
Right Out: 2285.066+/-0.625 χ²/NDF: 1548827.3/18
Left In: 4596.116+/-0.914 χ²/NDF:1003738.3/15
+ sign 3188.473+/-0.537 χ²/NDF: 5666198.3/32
All: 3101.485+/-0.372 χ²/NDF: 12623461.8/6
- sign 3021.177+/-0.516 χ²/NDF: 6906803.6/34

# asym_atl_dd_mean vs Slug




Right In: -287.276+/-1197.339 $\chi^2$/NDF: 16.6/15

Left Out: -116.825+/-1260.739 $\chi^2$/NDF:15.5/16

Right Out: 209.473+/-1153.742 $\chi^2$/NDF: 12.9/18

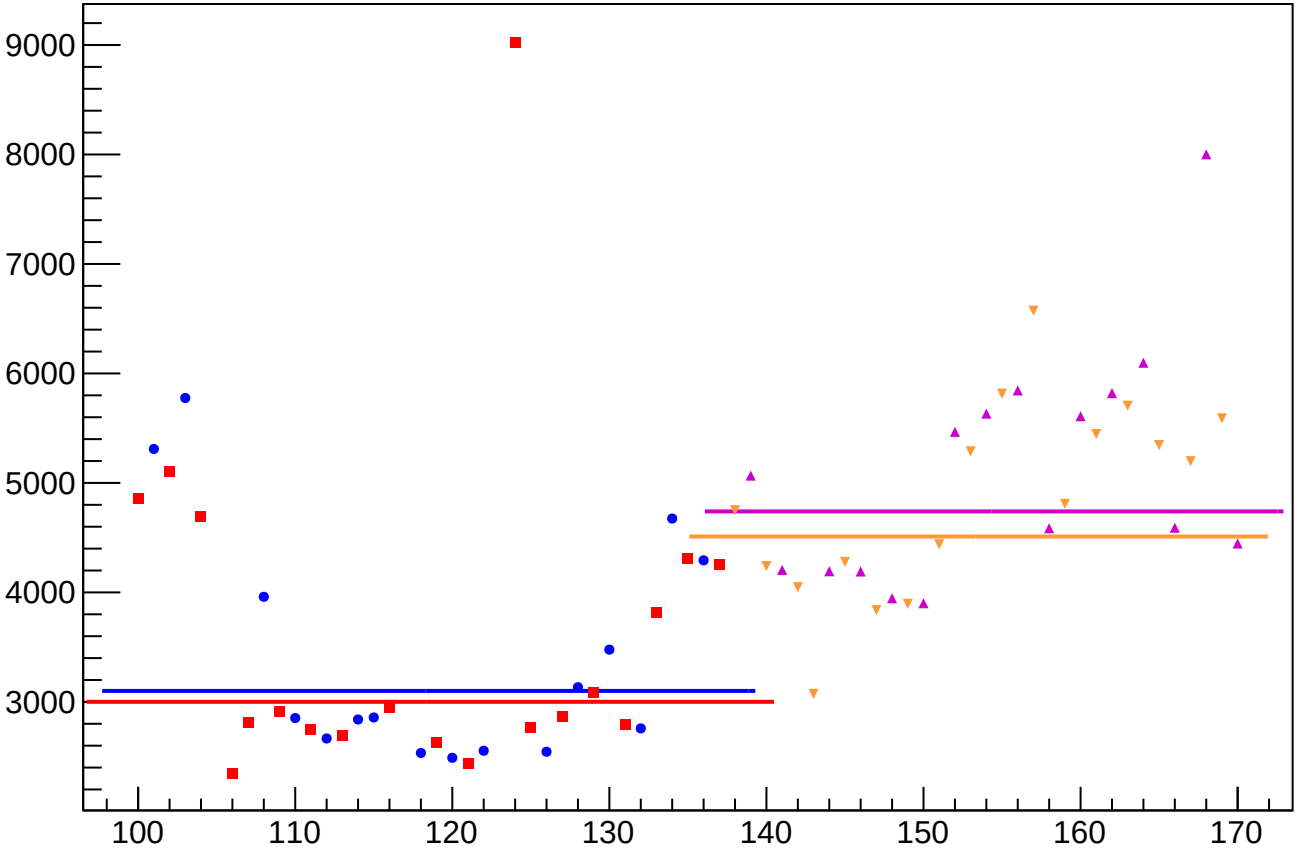
Left In: -400.202+/-1327.561 $\chi^2$/NDF:11.1/15

+ sign -206.444+/-868.195 $\chi^2$/NDF: 32.0/32

All: -129.887+/-614.837 $\chi^2$/NDF: 56.1/67

- sign -52.865+/-870.834 $\chi^2$/NDF: 24.0/34

# asym_atl_dd_rms vs Slug




Right In: 3100.135+/-0.847 $\chi^2$/NDF: 963669.6/15

Left Out: 4510.399+/-0.891 $\chi^2$/NDF:999539.6/16

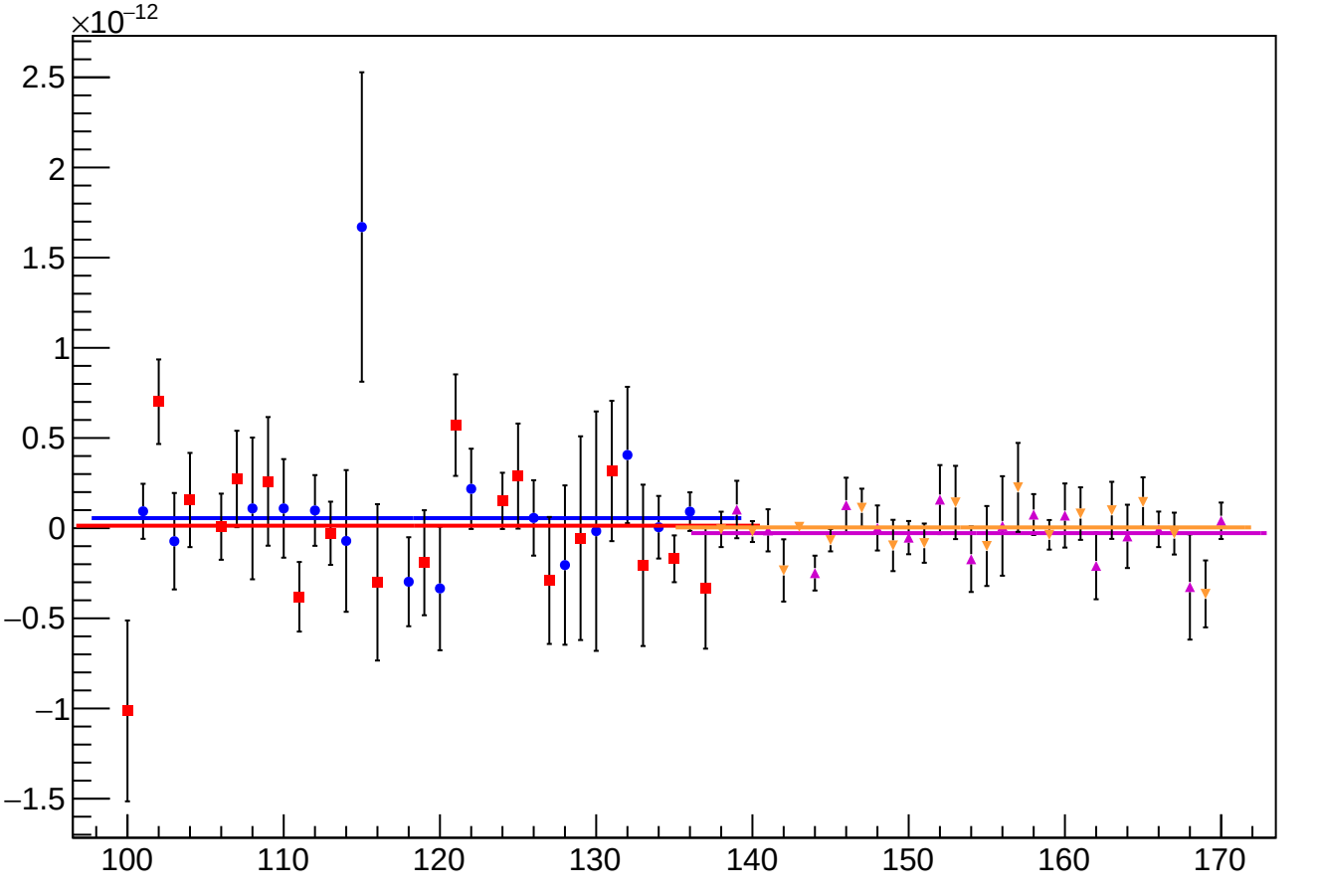
Right Out: 3000.750+/-0.805 $\chi^2$/NDF: 806601.4/18

Left In: 4739.667+/-0.939 $\chi^2$/NDF:831263.7/15

+ sign 3768.916+/-0.614 $\chi^2$/NDF: 3278983.6/32

All: 3753.096+/-0.433 $\chi^2$/NDF: 6895925.1/67

- sign 3737.425+/-0.611 $\chi^2$/NDF: 3615619.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 9.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13.1/16

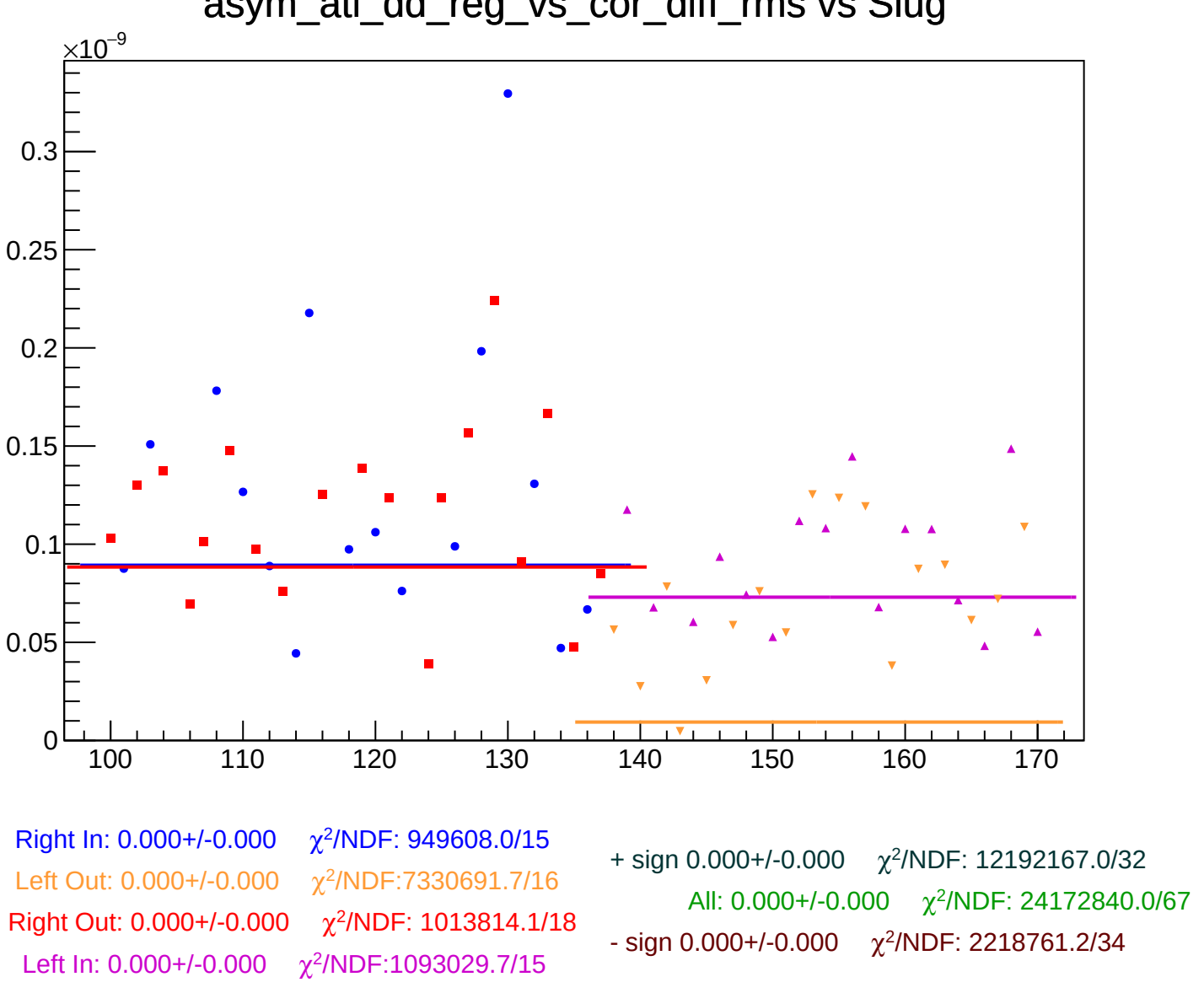
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 30.0/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:12.4/15

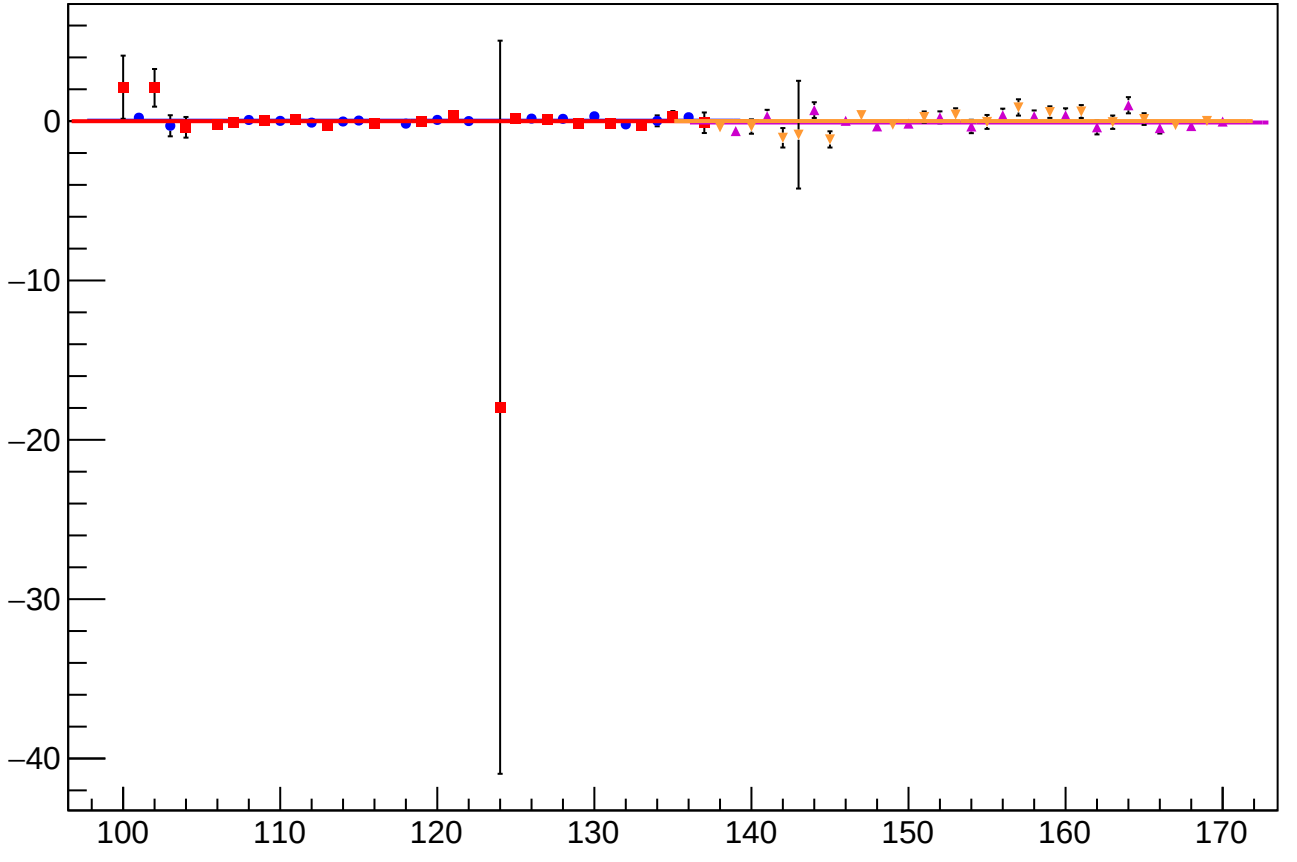
+ sign 0.000+/-0.000 $\chi^2$/NDF: 23.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 66.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 42.8/34


asym_atl_dd_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.3
0.25
0.2
0.15
0.1
0.05
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 949608.0/15
Left Out: 0.000+/-0.000 χ²/NDF:7330691.7/16
Right Out: 0.000+/-0.000 χ²/NDF: 1013814.1/18
Left In: 0.000+/-0.000 χ²/NDF:1093029.7/15
+ sign 0.000+/-0.000 χ²/NDF: 12192167.0/32
All: 0.000+/-0.000 χ²/NDF: 24172840.0/67
- sign 0.000+/-0.000 χ²/NDF: 2218761.2/34

# asym_atl_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.028+/-0.045 $\chi^2$/NDF: 8.9/15

Left Out: 0.005+/-0.083 $\chi^2$/NDF:22.8/16

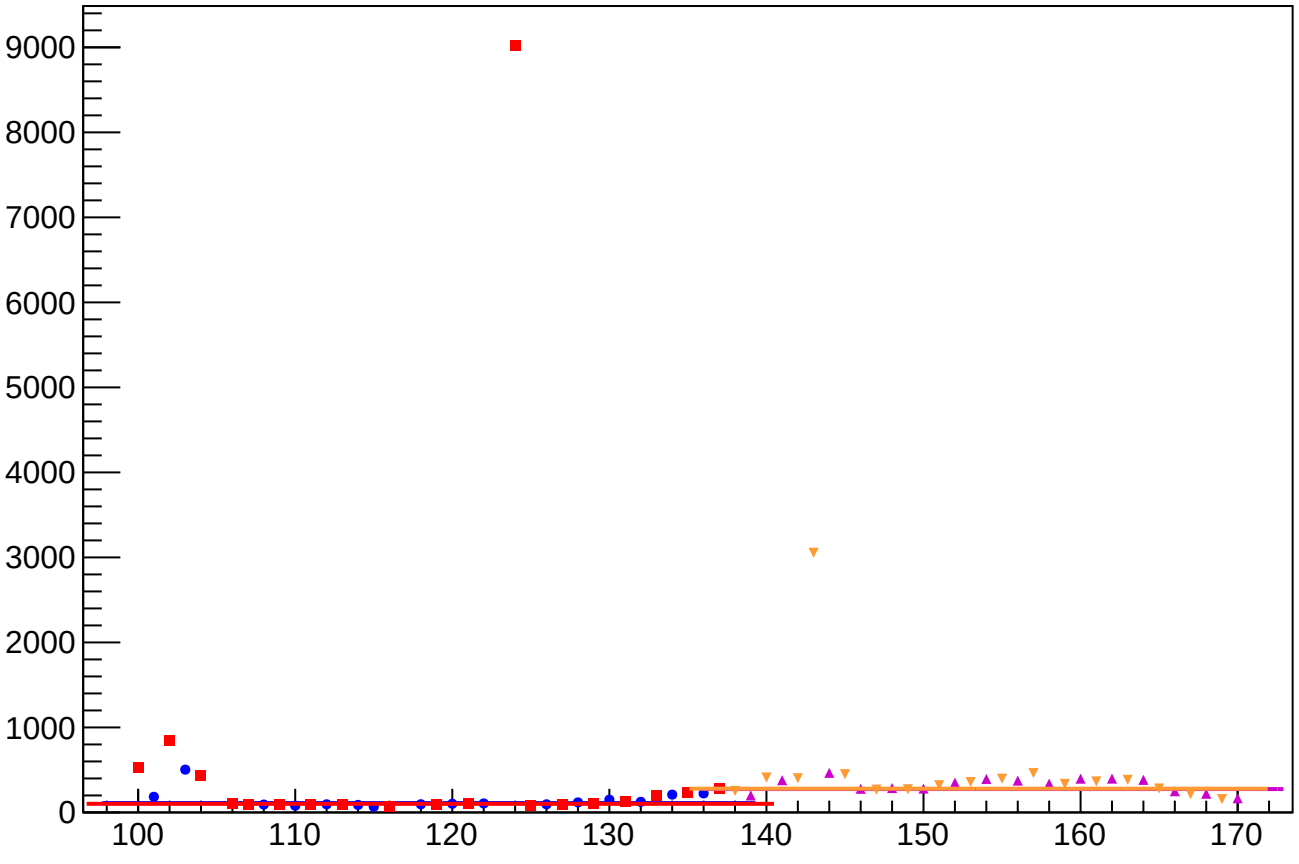
Right Out: -0.003+/-0.043 $\chi^2$/NDF: 22.4/18

Left In: -0.086+/-0.080 $\chi^2$/NDF:21.1/15

+ sign 0.023+/-0.040 $\chi^2$/NDF: 31.7/32

All: -0.000+/-0.028 $\chi^2$/NDF: 76.6/67

- sign -0.022+/-0.038 $\chi^2$/NDF: 44.3/34




Right In: 109.988+/-0.032 $\chi^2$/NDF: 1930558.2/15

Left Out: 279.689+/-0.059 $\chi^2$/NDF:3710237.4/16

Right Out: 101.852+/-0.031 $\chi^2$/NDF: 2589792.8/18

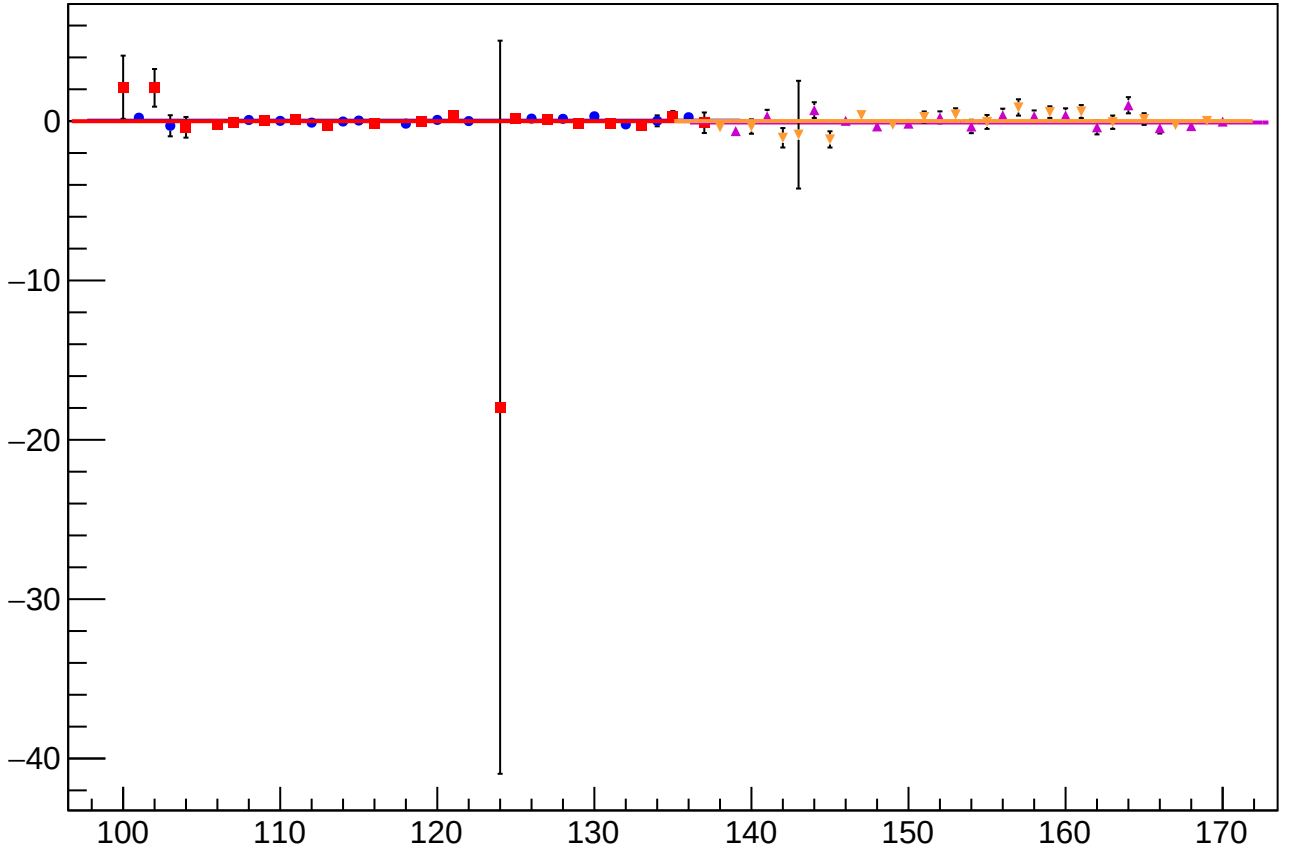
Left In: 275.115+/-0.057 $\chi^2$/NDF:2225464.1/15

+ sign 148.953+/-0.028 $\chi^2$/NDF: 12085060.7/32

All: 144.818+/-0.019 $\chi^2$/NDF: 24155687.6/67

- sign 141.011+/-0.027 $\chi^2$/NDF: 12029093.1/34

# asym_atl_dd_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.028+/-0.045 $\chi^2$/NDF: 8.9/15

Left Out: 0.005+/-0.083 $\chi^2$/NDF:22.8/16

Right Out: -0.003+/-0.043 $\chi^2$/NDF: 22.4/18

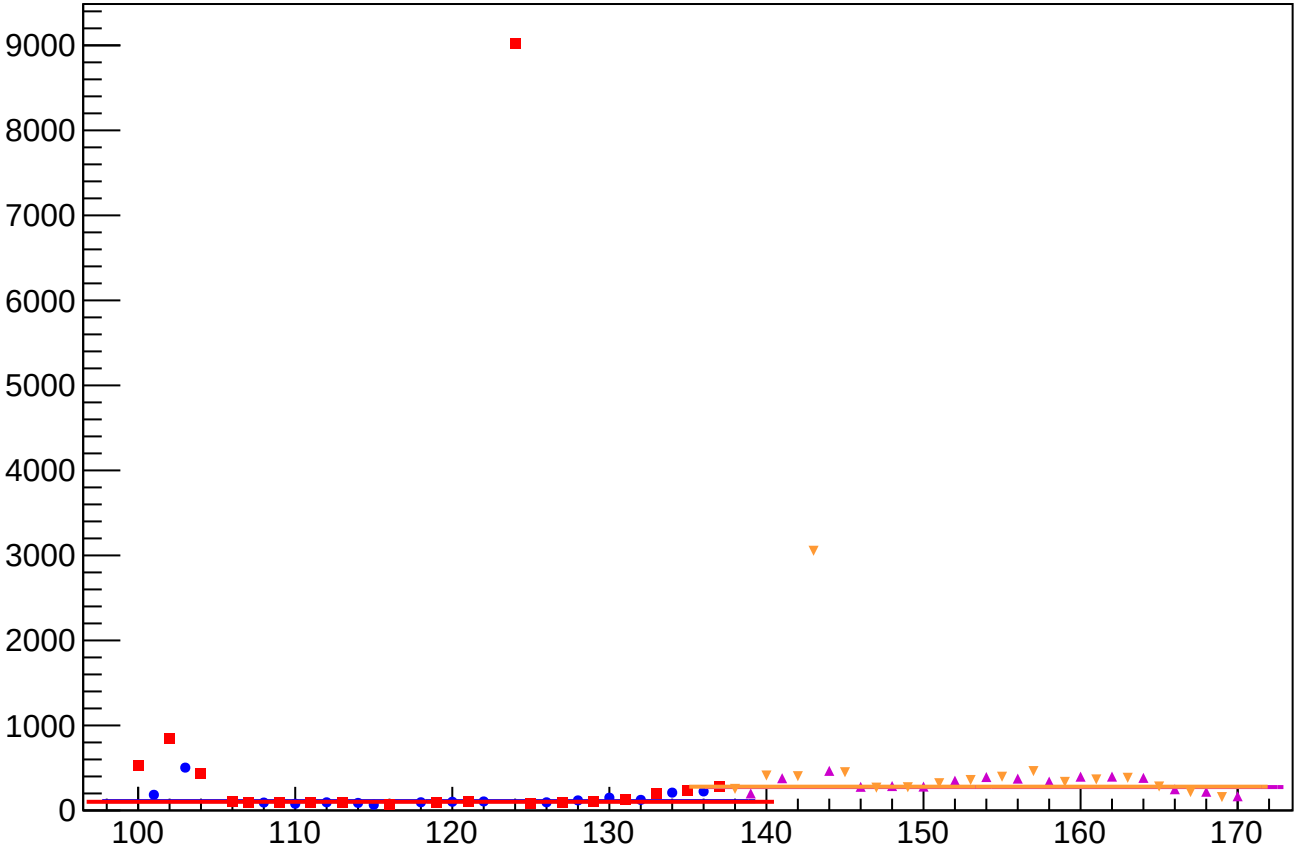
Left In: -0.086+/-0.080 $\chi^2$/NDF:21.1/15

+ sign 0.023+/-0.040 $\chi^2$/NDF: 31.7/32

All: -0.000+/-0.028 $\chi^2$/NDF: 76.6/67

- sign -0.022+/-0.038 $\chi^2$/NDF: 44.3/34

# asym_atl_dd_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 109.988+/-0.032 $\chi^2$/NDF: 1930558.2/15

Left Out: 279.689+/-0.059 $\chi^2$/NDF:3710237.4/16

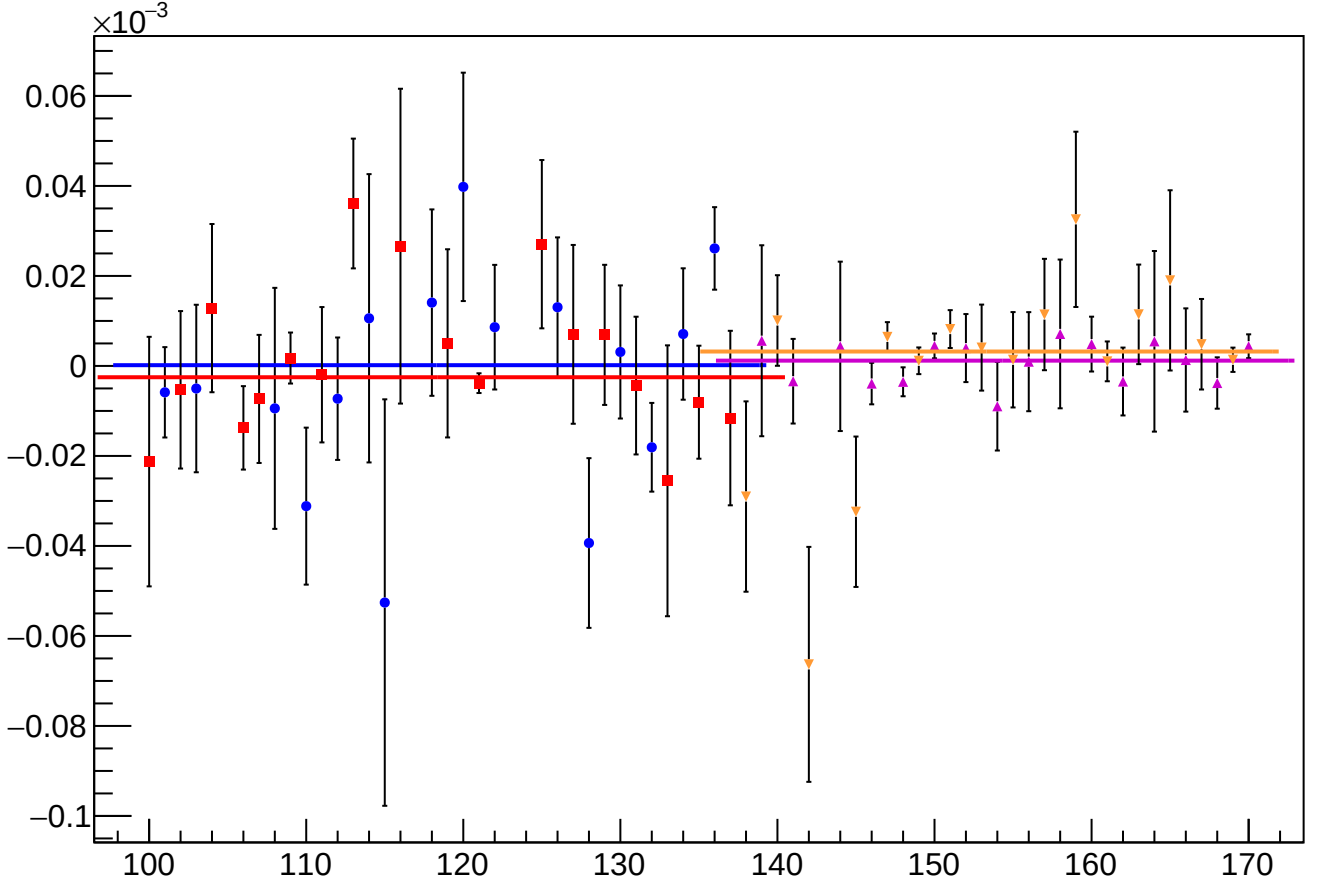
Right Out: 101.852+/-0.031 $\chi^2$/NDF: 2589792.8/18

Left In: 275.115+/-0.057 $\chi^2$/NDF:2225464.1/15

+ sign 148.953+/-0.028 $\chi^2$/NDF: 12085060.7/32

All: 144.818+/-0.019 $\chi^2$/NDF: 24155687.6/67

- sign 141.011+/-0.027 $\chi^2$/NDF: 12029093.1/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 25.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:22.0/15

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.8/17

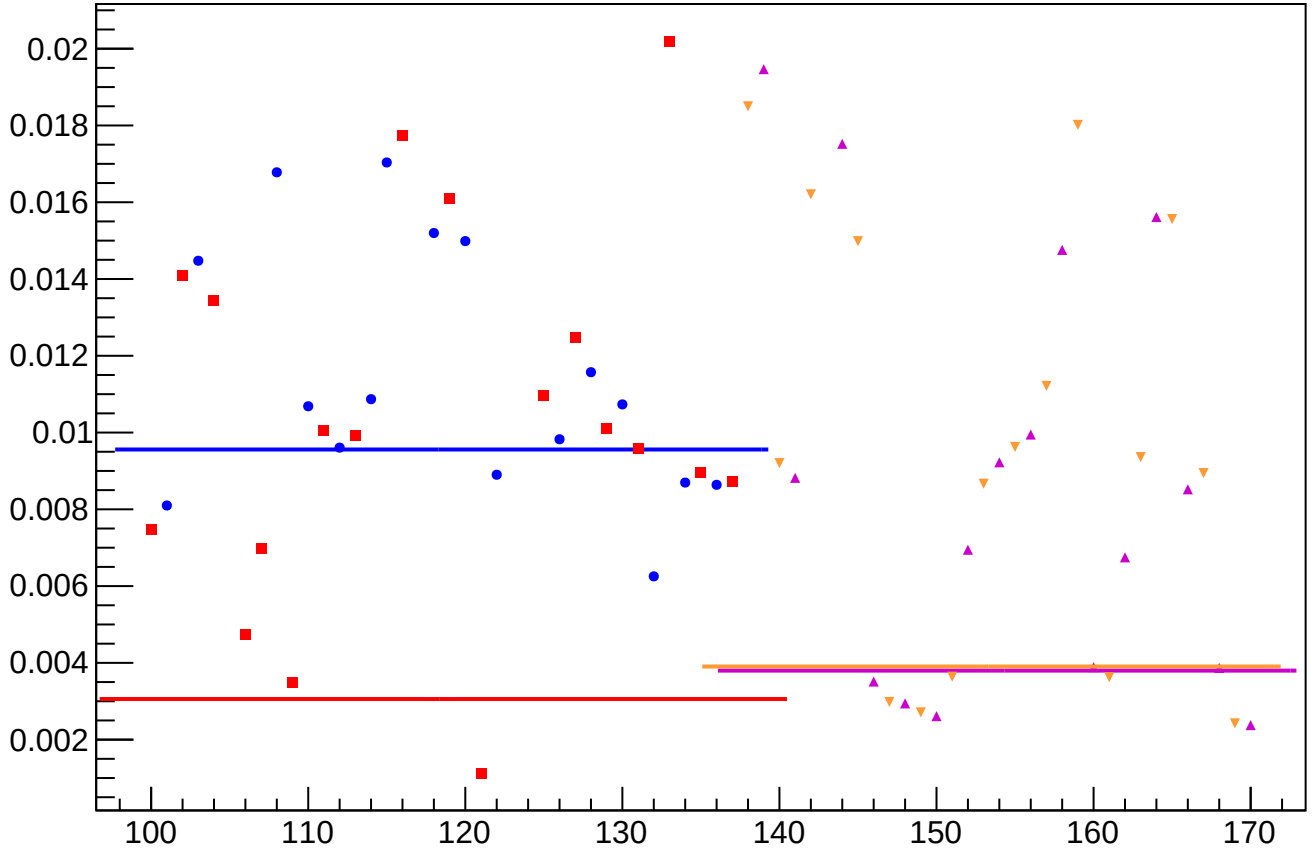
Left In: 0.000+/-0.000 $\chi^2$/NDF:9.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 48.1/31

All: 0.000+/-0.000 $\chi^2$/NDF: 79.0/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.8/33

# asym_atl_dd_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.010+/-0.000 $\chi^2$/NDF: 926018.8/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:8424112.7/15

Right Out: 0.003+/-0.000 $\chi^2$/NDF: 8122378.4/17

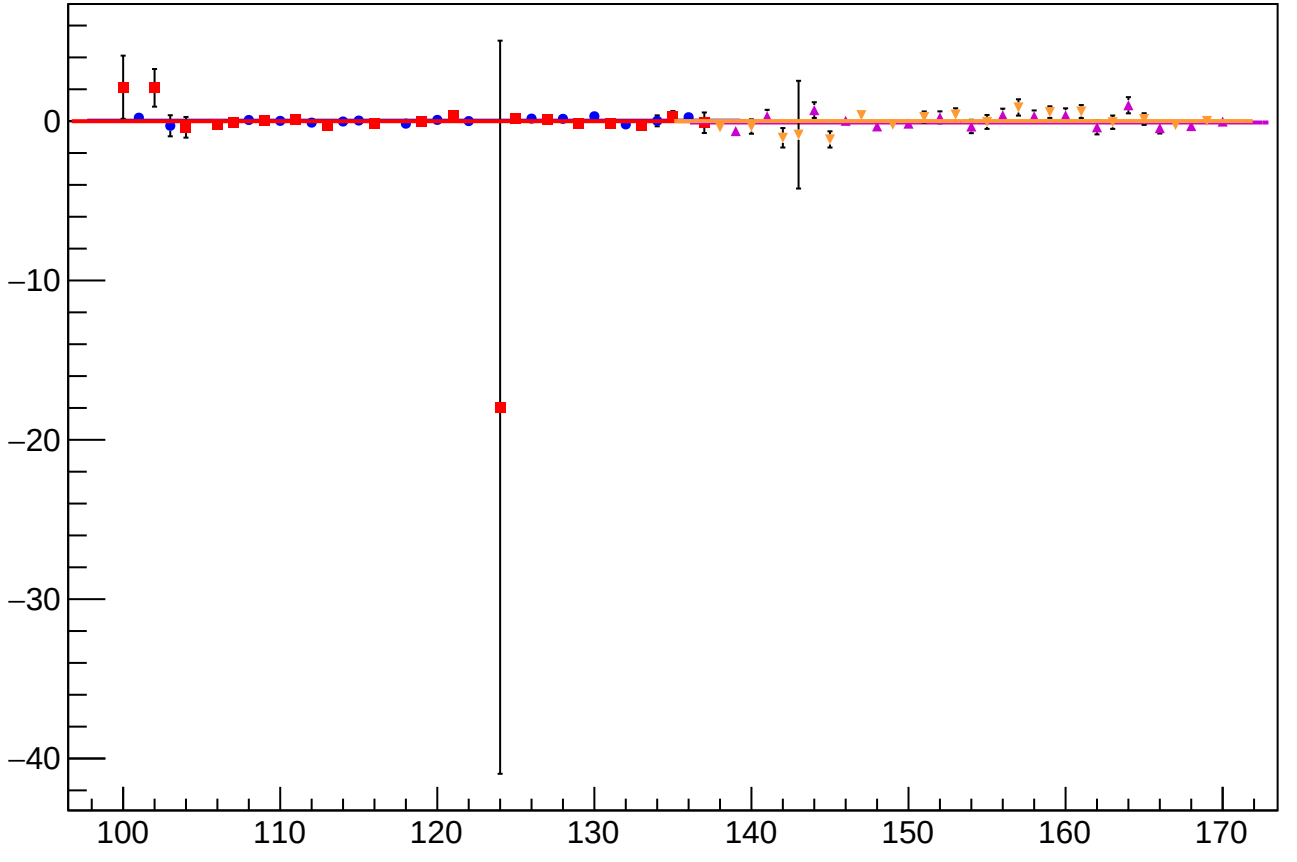
Left In: 0.004+/-0.000 $\chi^2$/NDF:7616166.4/15

+ sign 0.005+/-0.000 $\chi^2$/NDF: 13384895.7/31

All: 0.004+/-0.000 $\chi^2$/NDF: 30112123.0/65

- sign 0.004+/-0.000 $\chi^2$/NDF: 15951883.6/33

# asym_atl_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.028+/-0.045 $\chi^2$/NDF: 8.9/15

Left Out: 0.005+/-0.083 $\chi^2$/NDF:22.8/16

Right Out: -0.003+/-0.043 $\chi^2$/NDF: 22.4/18

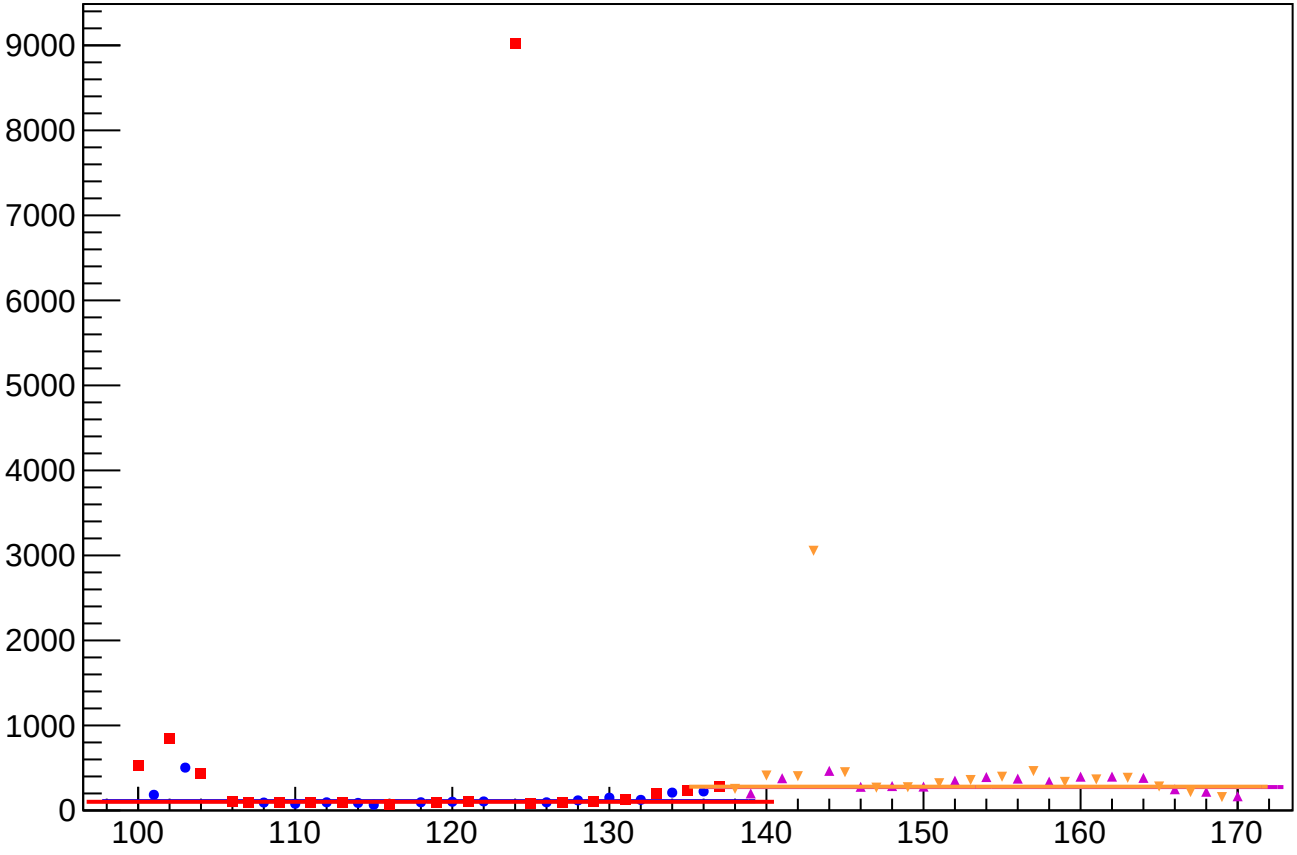
Left In: -0.086+/-0.080 $\chi^2$/NDF:21.1/15

+ sign 0.023+/-0.040 $\chi^2$/NDF: 31.7/32

All: -0.000+/-0.028 $\chi^2$/NDF: 76.7/67

- sign -0.022+/-0.038 $\chi^2$/NDF: 44.3/34

# asym_atl_dd_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 109.989+/-0.032 $\chi^2$/NDF: 1930489.2/15

Left Out: 279.691+/-0.059 $\chi^2$/NDF:3710319.4/16

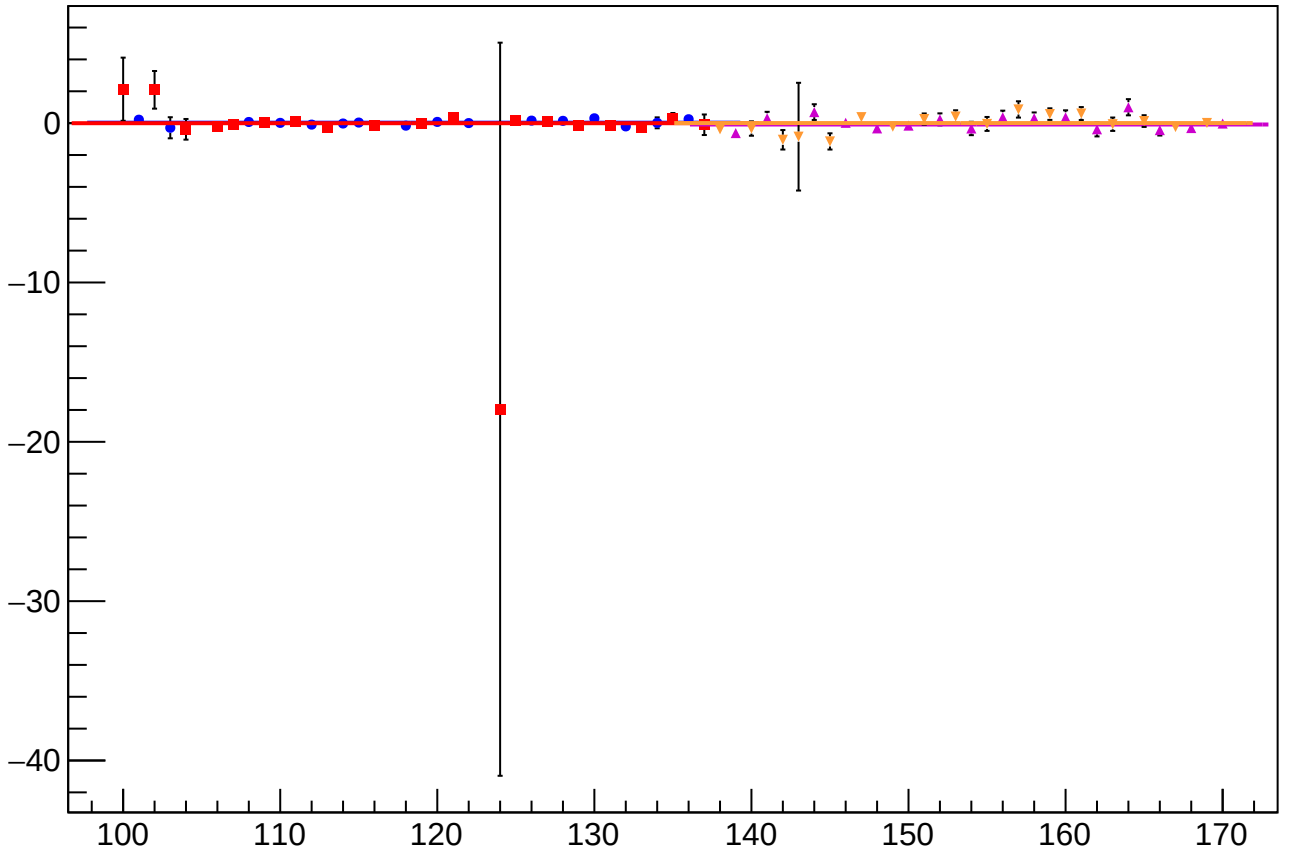
Right Out: 101.853+/-0.031 $\chi^2$/NDF: 2589710.5/18

Left In: 275.118+/-0.057 $\chi^2$/NDF:2225466.1/15

+ sign 148.954+/-0.028 $\chi^2$/NDF: 12085058.0/32

All: 144.820+/-0.019 $\chi^2$/NDF: 24155619.4/67

- sign 141.013+/-0.027 $\chi^2$/NDF: 12029033.8/34




Right In: 0.028+/-0.045 $\chi^2$/NDF: 8.9/15

Left Out: 0.005+/-0.083 $\chi^2$/NDF:22.8/16

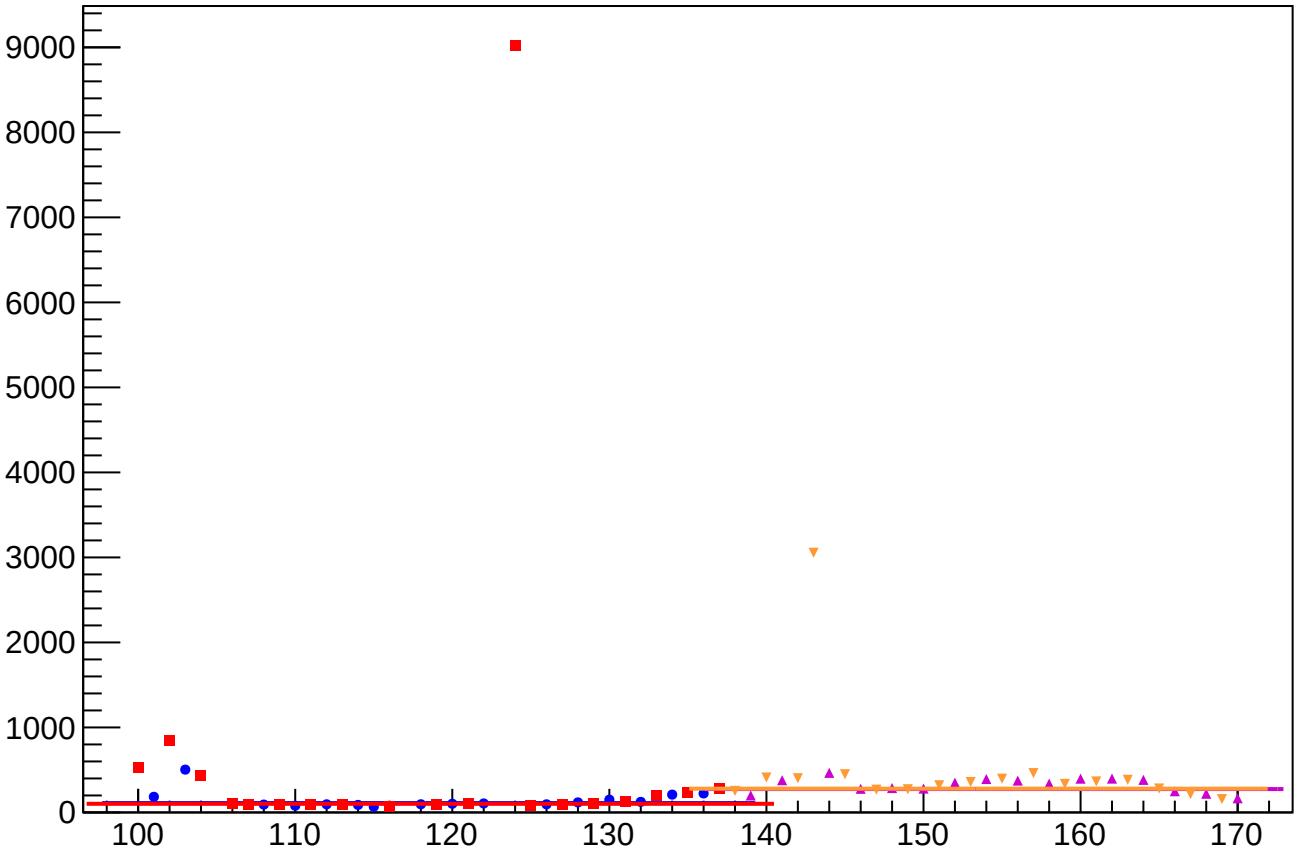
Right Out: -0.003+/-0.043 $\chi^2$/NDF: 22.4/18

Left In: -0.086+/-0.080 $\chi^2$/NDF:21.1/15

+ sign 0.023+/-0.040 $\chi^2$/NDF: 31.7/32

All: -0.000+/-0.028 $\chi^2$/NDF: 76.7/67

- sign -0.022+/-0.038 $\chi^2$/NDF: 44.3/34




Right In: 109.989+/-0.032 $\chi^2$/NDF: 1930489.2/15

Left Out: 279.691+/-0.059 $\chi^2$/NDF:3710319.4/16

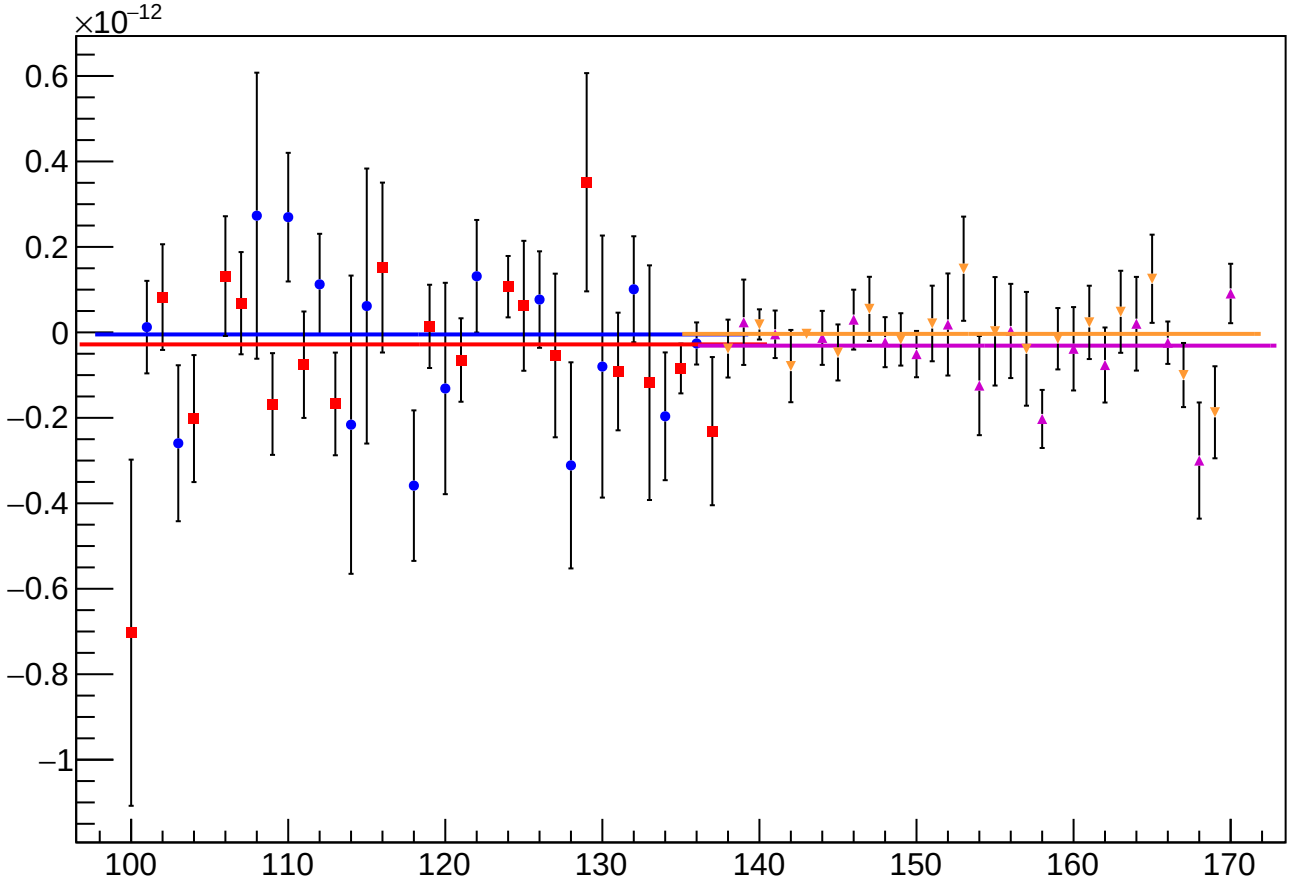
Right Out: 101.853+/-0.031 $\chi^2$/NDF: 2589710.5/18

Left In: 275.118+/-0.057 $\chi^2$/NDF:2225466.1/15

+ sign 148.954+/-0.028 $\chi^2$/NDF: 12085058.0/32

All: 144.820+/-0.019 $\chi^2$/NDF: 24155619.4/67

- sign 141.013+/-0.027 $\chi^2$/NDF: 12029033.8/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 17.5/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:10.8/16

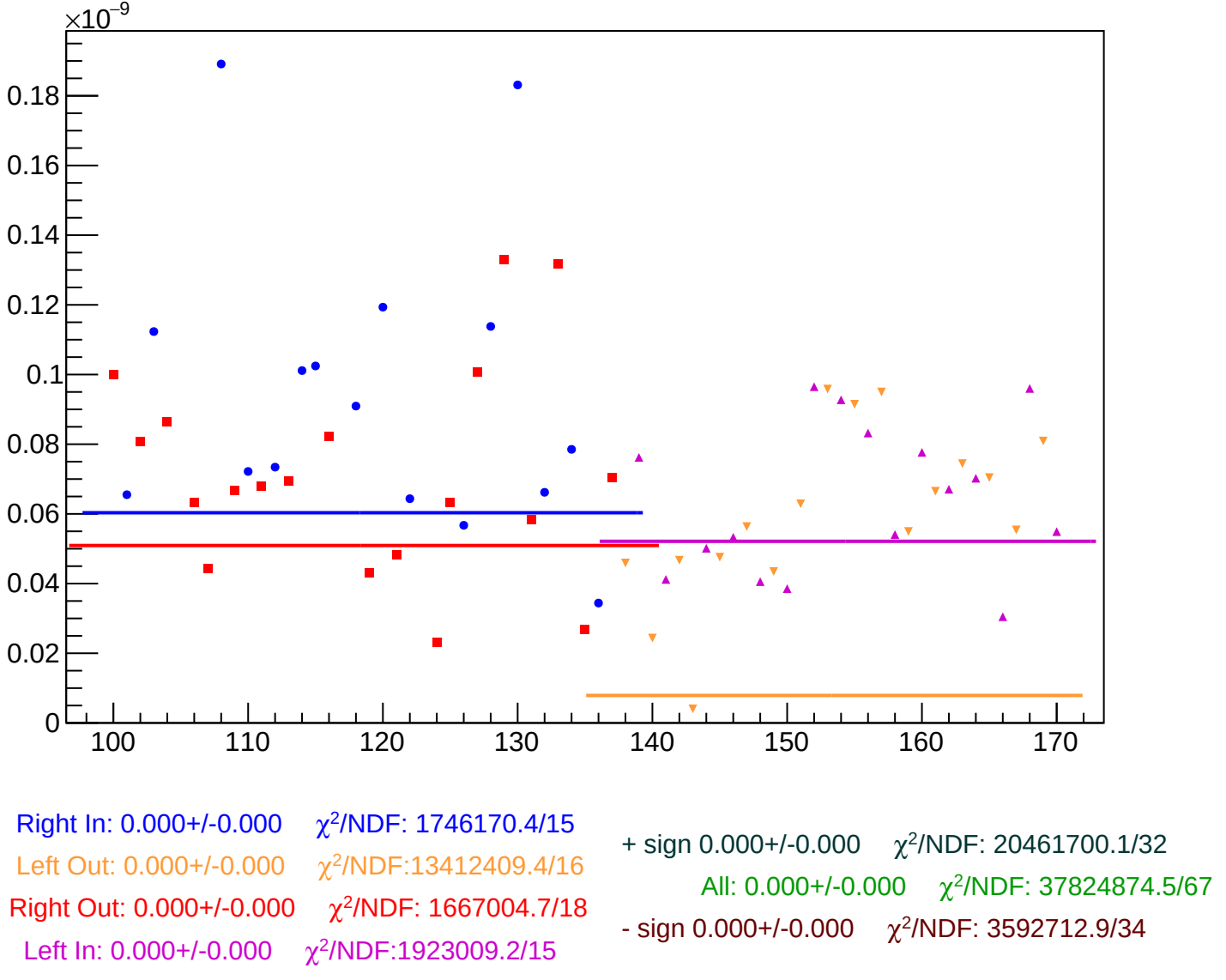
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 19.6/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:16.3/15

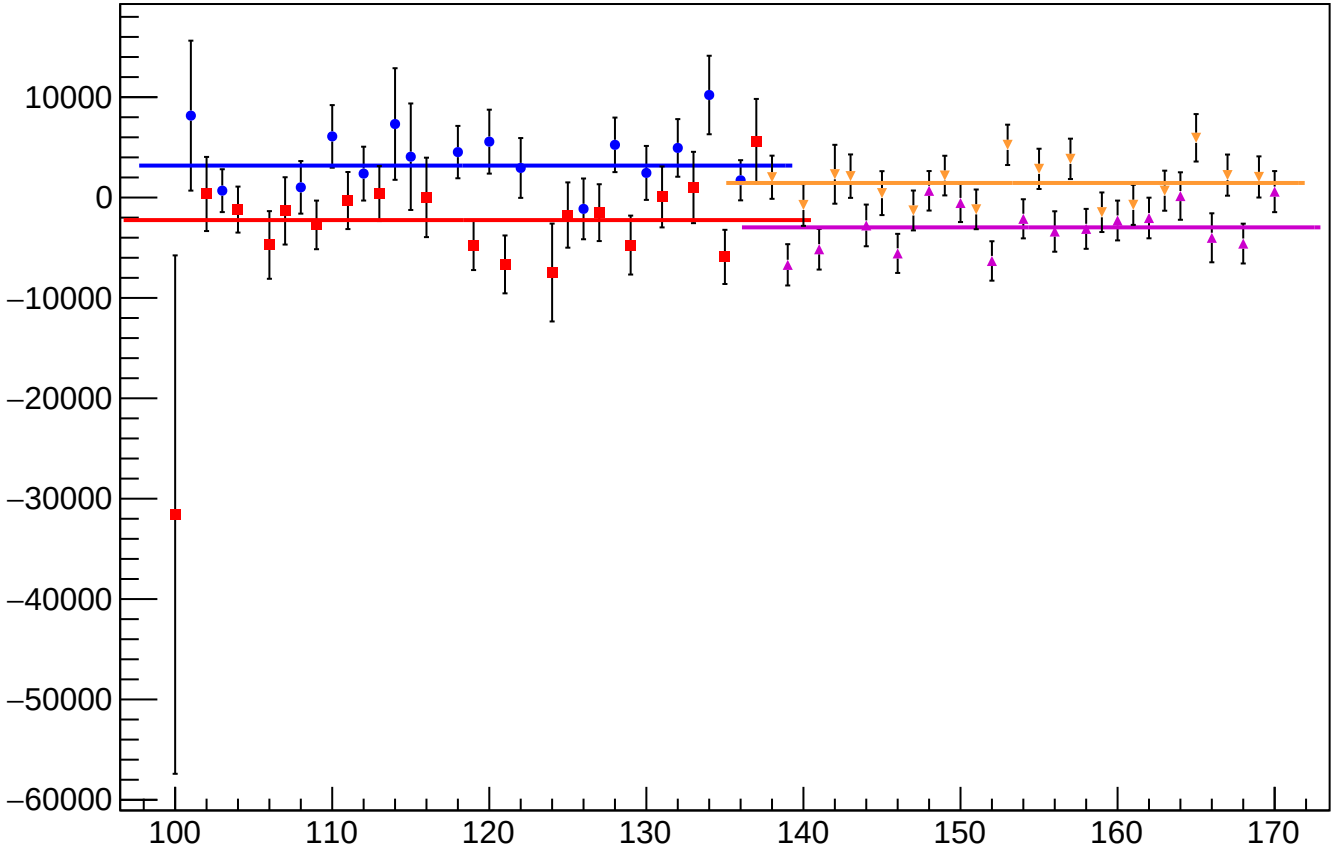
+ sign -0.000+/-0.000 $\chi^2$/NDF: 28.3/32

All: -0.000+/-0.000 $\chi^2$/NDF: 66.9/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 36.0/34


asym_atl_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10⁻⁹
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1746170.4/15
Left Out: 0.000+/-0.000 χ²/NDF:13412409.4/16
Right Out: 0.000+/-0.000 χ²/NDF: 1667004.7/18
Left In: 0.000+/-0.000 χ²/NDF:1923009.2/15
+ sign 0.000+/-0.000 χ²/NDF: 20461700.1/32
All: 0.000+/-0.000 χ²/NDF: 37824874.5/67
- sign 0.000+/-0.000 χ²/NDF: 3592712.9/34

# reg_asym_atr_avg_mean vs Slug




Right In: 3183.705+/-731.133 $\chi^2$/NDF: 11.7/15

Left Out: 1452.658+/-505.747 $\chi^2$/NDF:18.3/16

Right Out: -2246.057+/-710.912 $\chi^2$/NDF: 16.5/18

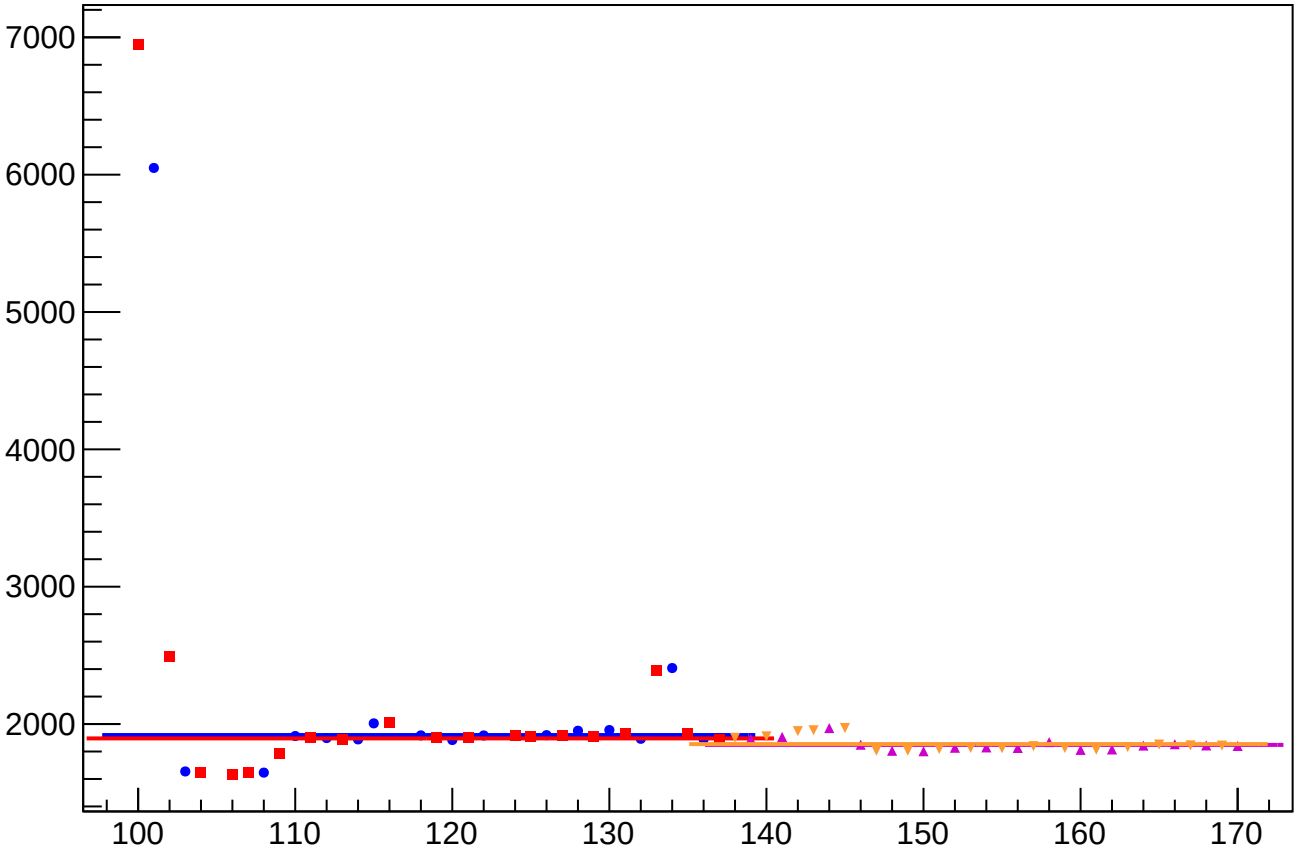
Left In: -2970.267+/-508.356 $\chi^2$/NDF:20.4/15

+ sign 2012.885+/-415.934 $\chi^2$/NDF: 33.8/32

All: -370.015+/-293.249 $\chi^2$/NDF: 136.6/67

- sign -2725.243+/-413.511 $\chi^2$/NDF: 37.6/34

# reg_asym_atr_avg_rms vs Slug




Right In: 1919.827+/-0.517 $\chi^2$/NDF: 697331.5/15

Left Out: 1853.894+/-0.358 $\chi^2$/NDF:19977.3/16

Right Out: 1895.361+/-0.501 $\chi^2$/NDF: 222273.9/18

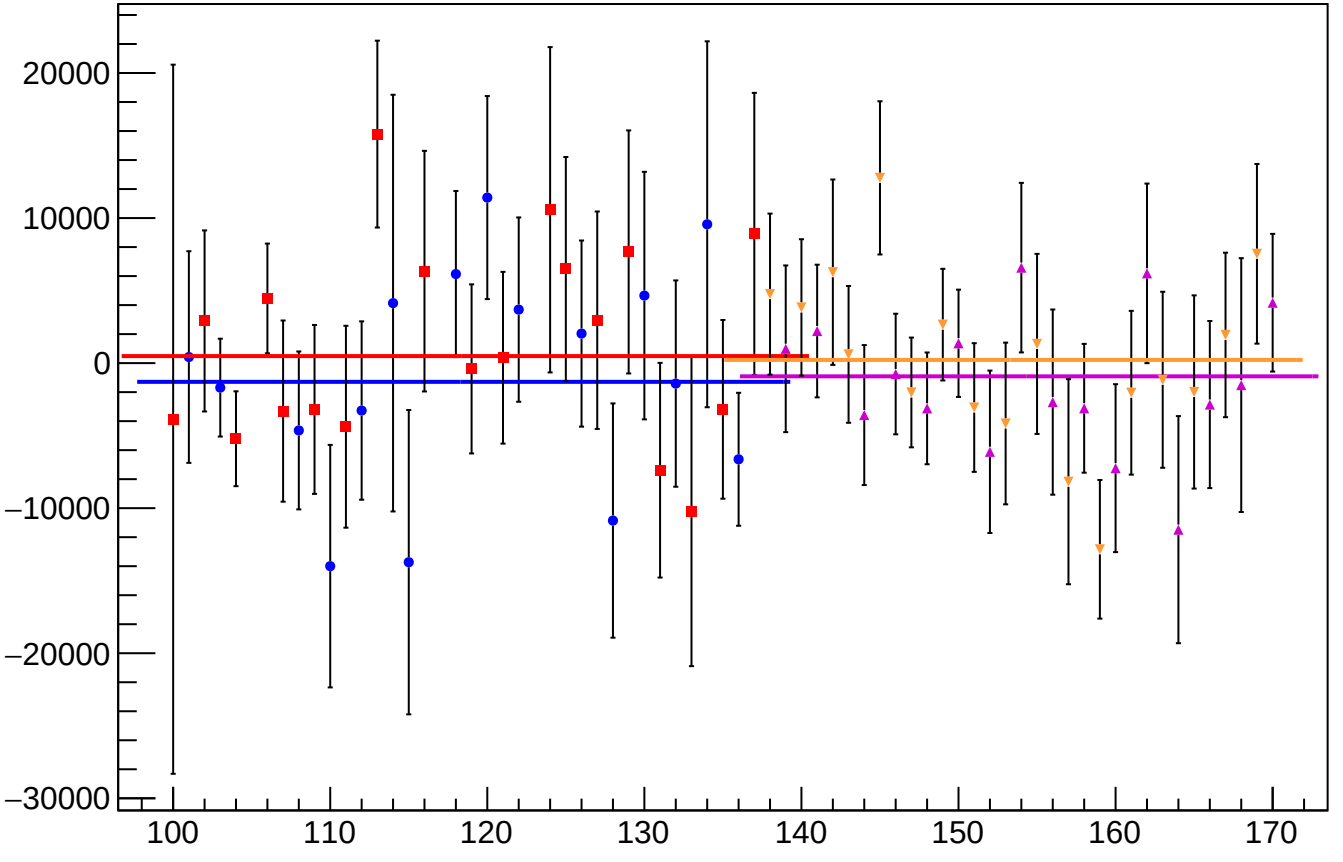
Left In: 1847.989+/-0.359 $\chi^2$/NDF:13754.9/15

+ sign 1875.232+/-0.294 $\chi^2$/NDF: 728309.7/32

All: 1869.622+/-0.207 $\chi^2$/NDF: 970964.3/67

- sign 1864.090+/-0.292 $\chi^2$/NDF: 241932.0/34

# asym_atr_avg_reg_correction_mean vs Slug




Right In: -1290.495+/-1585.432 $\chi^2$/NDF: 14.3/15

Left Out: 221.359+/-1258.445 $\chi^2$/NDF:20.4/16

Right Out: 485.214+/-1437.465 $\chi^2$/NDF: 17.2/18

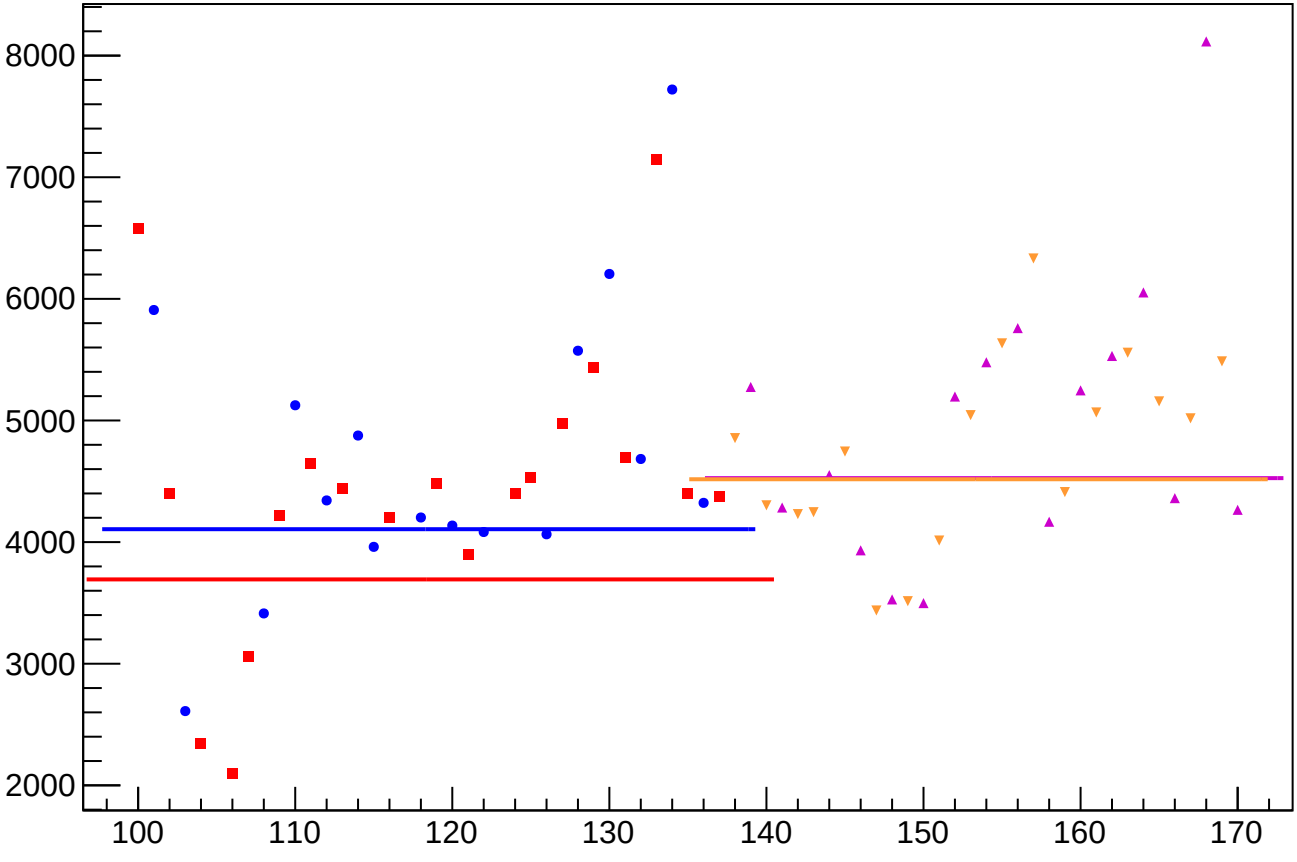
Left In: -911.610+/-1274.400 $\chi^2$/NDF:10.0/15

+ sign -363.004+/-985.676 $\chi^2$/NDF: 35.3/32

All: -328.852+/-685.356 $\chi^2$/NDF: 63.1/67

- sign -296.886+/-953.600 $\chi^2$/NDF: 27.8/34

# asym_atr_avg_reg_correction_rms vs Slug




Right In: 4106.141+/-1.121 $\chi^2$/NDF: 956130.4/15

Left Out: 4516.757+/-0.890 $\chi^2$/NDF:726628.5/16

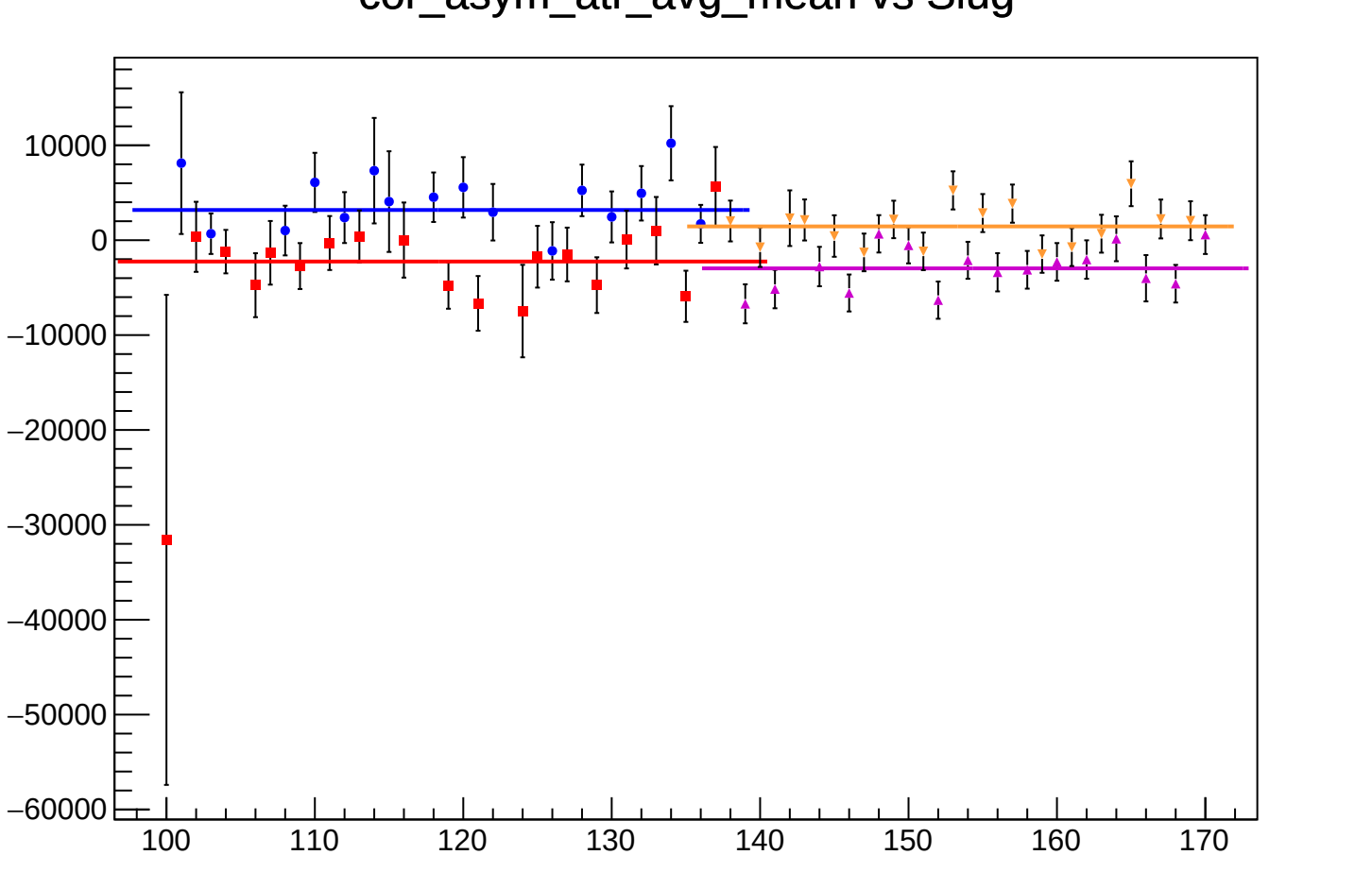
Right Out: 3693.266+/-1.016 $\chi^2$/NDF: 1356643.3/18

Left In: 4525.994+/-0.901 $\chi^2$/NDF:1042782.3/15

+ sign 4358.046+/-0.697 $\chi^2$/NDF: 1765060.0/32

All: 4255.501+/-0.485 $\chi^2$/NDF: 4582197.5/67

- sign 4159.522+/-0.674 $\chi^2$/NDF: 2775230.5/34




Right In: 3182.973+/-731.133 $\chi^2$/NDF: 11.7/15

Left Out: 1452.533+/-505.747 $\chi^2$/NDF:18.3/16

Right Out: -2247.193+/-710.916 $\chi^2$/NDF: 16.5/18

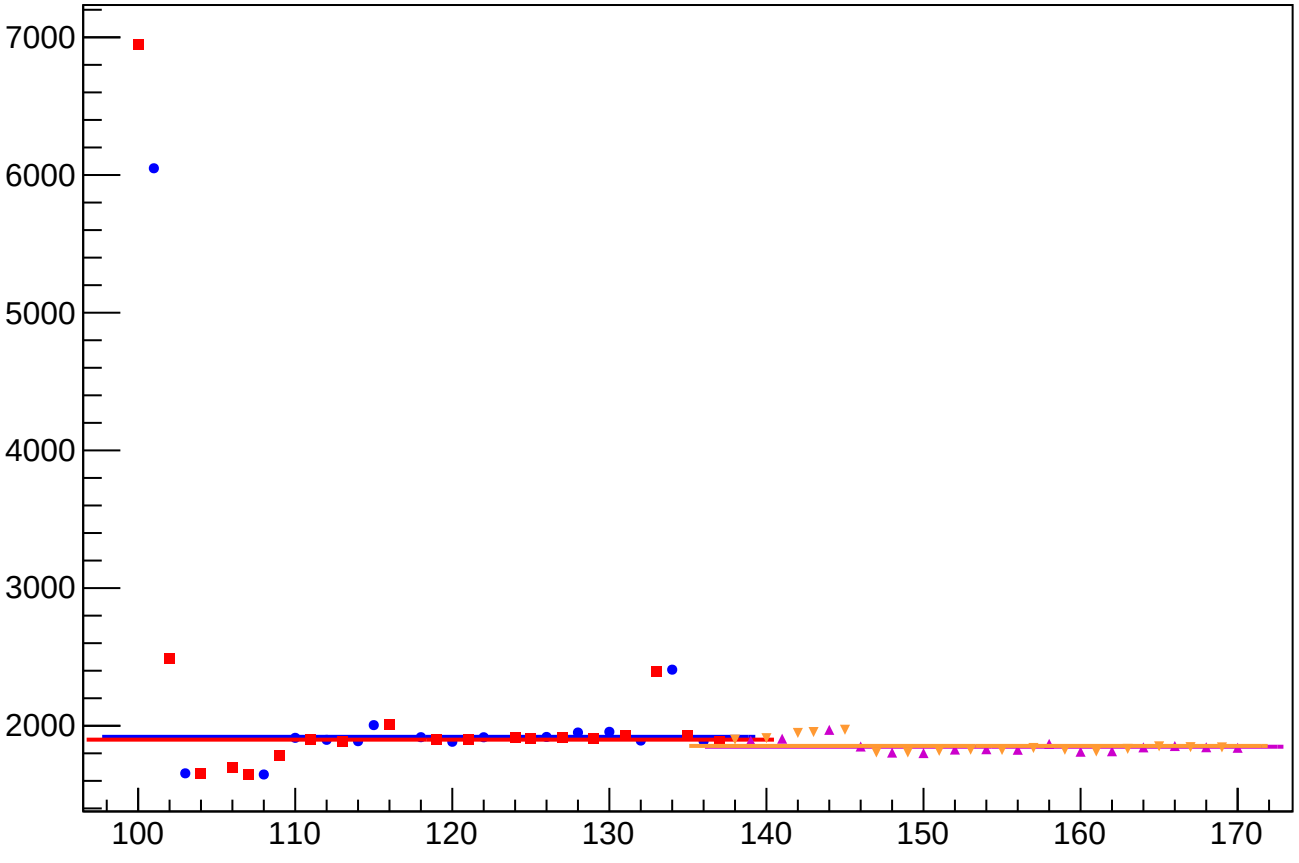
Left In: -2970.252+/-508.356 $\chi^2$/NDF:20.4/15

+ sign 2012.563+/-415.934 $\chi^2$/NDF: 33.7/32

All: -370.359+/-293.250 $\chi^2$/NDF: 136.6/67

- sign -2725.619+/-413.512 $\chi^2$/NDF: 37.6/34

# cor_asym_atr_avg_rms vs Slug




Right In: 1919.827+/-0.517 $\chi^2$/NDF: 697330.6/15

Left Out: 1853.894+/-0.358 $\chi^2$/NDF:19977.3/16

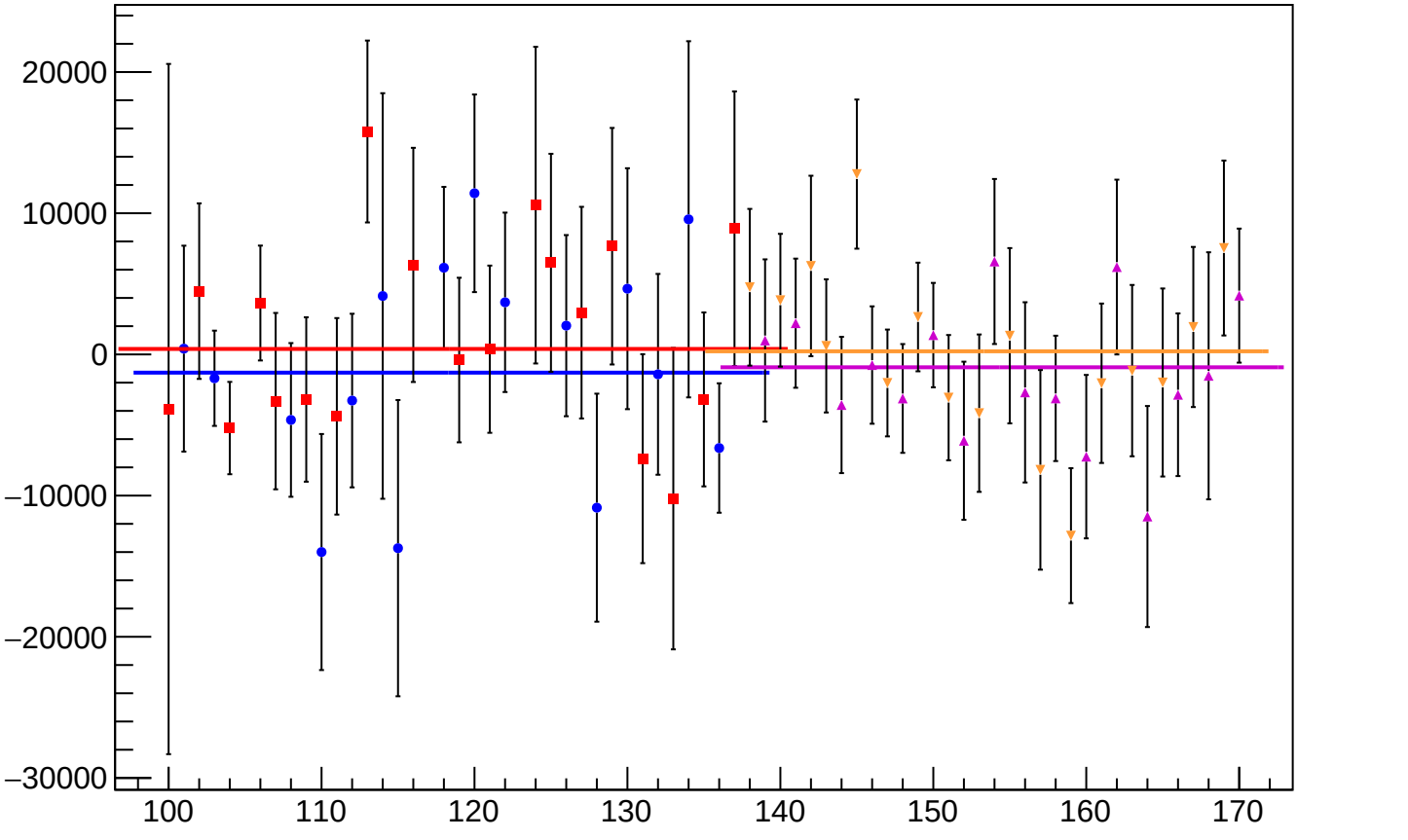
Right Out: 1899.364+/-0.502 $\chi^2$/NDF: 215654.1/18

Left In: 1847.989+/-0.359 $\chi^2$/NDF:13754.9/15

+ sign 1875.232+/-0.294 $\chi^2$/NDF: 728308.9/32

All: 1870.288+/-0.207 $\chi^2$/NDF: 965205.0/67

- sign 1865.407+/-0.292 $\chi^2$/NDF: 236334.5/34




Right In: -1290.862+/-1585.435 $\chi^2$/NDF: 14.3/15

Left Out: 221.333+/-1258.442 $\chi^2$/NDF:20.4/16

Right Out: 387.626+/-1451.530 $\chi^2$/NDF: 17.0/18

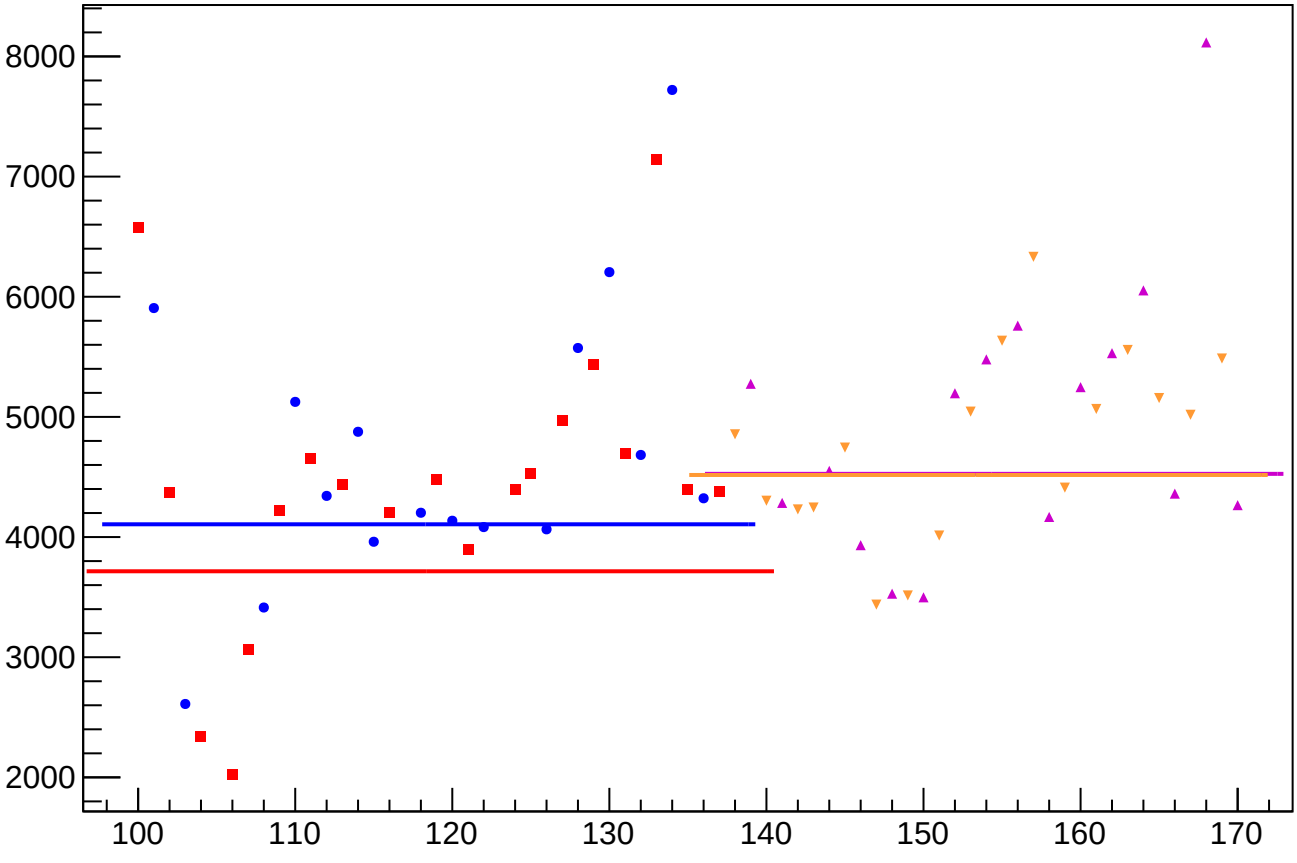
Left In: -911.632+/-1274.401 $\chi^2$/NDF:10.0/15

+ sign -363.159+/-985.675 $\chi^2$/NDF: 35.3/32

All: -354.370+/-686.863 $\chi^2$/NDF: 62.7/67

- sign -346.073+/-957.673 $\chi^2$/NDF: 27.5/34

# asym_atr_avg_cor_correction_rms vs Slug




Right In: 4106.234+/-1.121 $\chi^2$/NDF: 955631.2/15

Left Out: 4516.745+/-0.890 $\chi^2$/NDF:726643.0/16

Right Out: 3715.202+/-1.026 $\chi^2$/NDF: 1335100.7/18

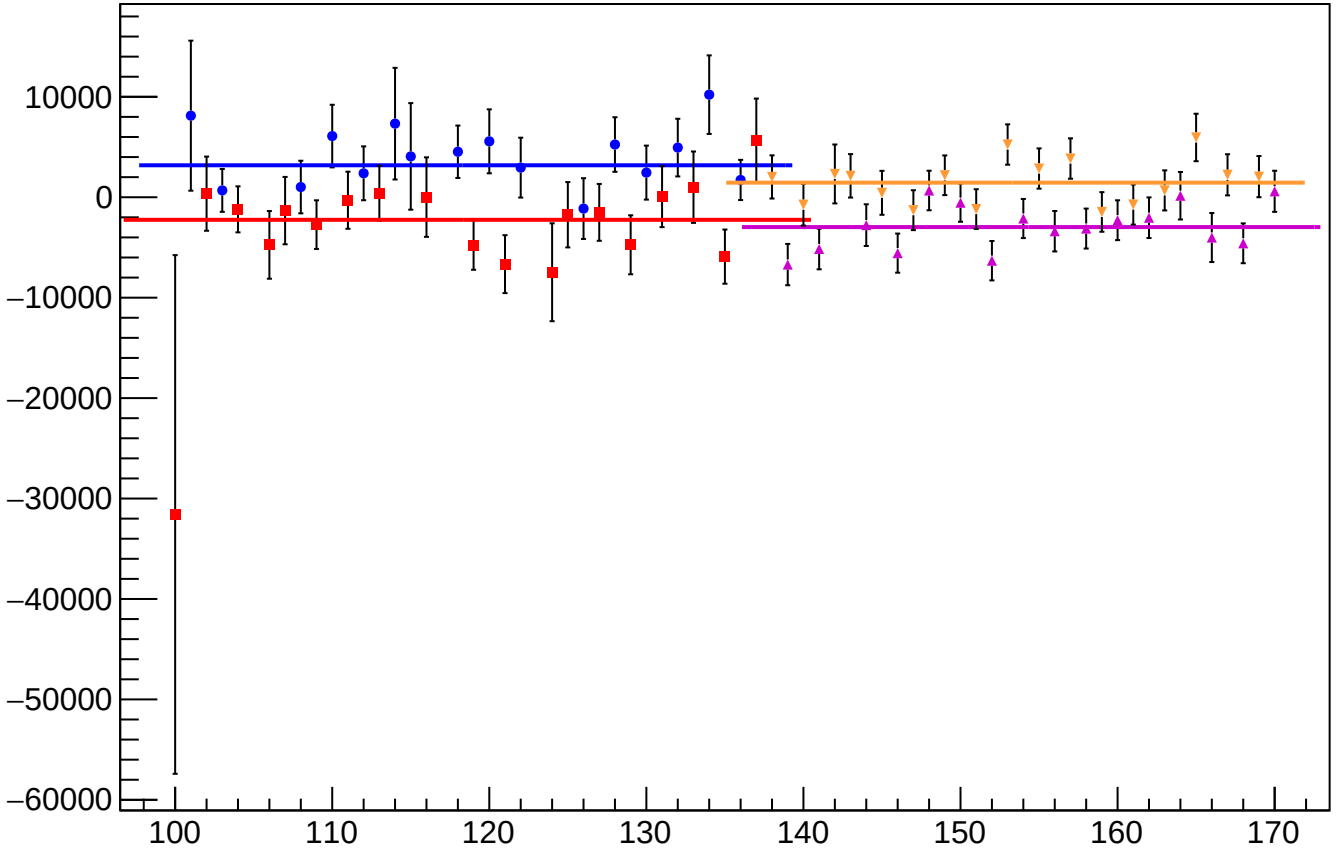
Left In: 4525.995+/-0.901 $\chi^2$/NDF:1042776.1/15

+ sign 4358.075+/-0.697 $\chi^2$/NDF: 1764533.2/32

All: 4262.903+/-0.486 $\chi^2$/NDF: 4531044.0/67

- sign 4173.062+/-0.677 $\chi^2$/NDF: 2730264.0/34

# eigen_cor_asym_atr_avg_mean vs Slug




Right In: 3182.973+/-731.133 $\chi^2$/NDF: 11.7/15

Left Out: 1452.533+/-505.747 $\chi^2$/NDF:18.3/16

Right Out: -2247.193+/-710.916 $\chi^2$/NDF: 16.5/18

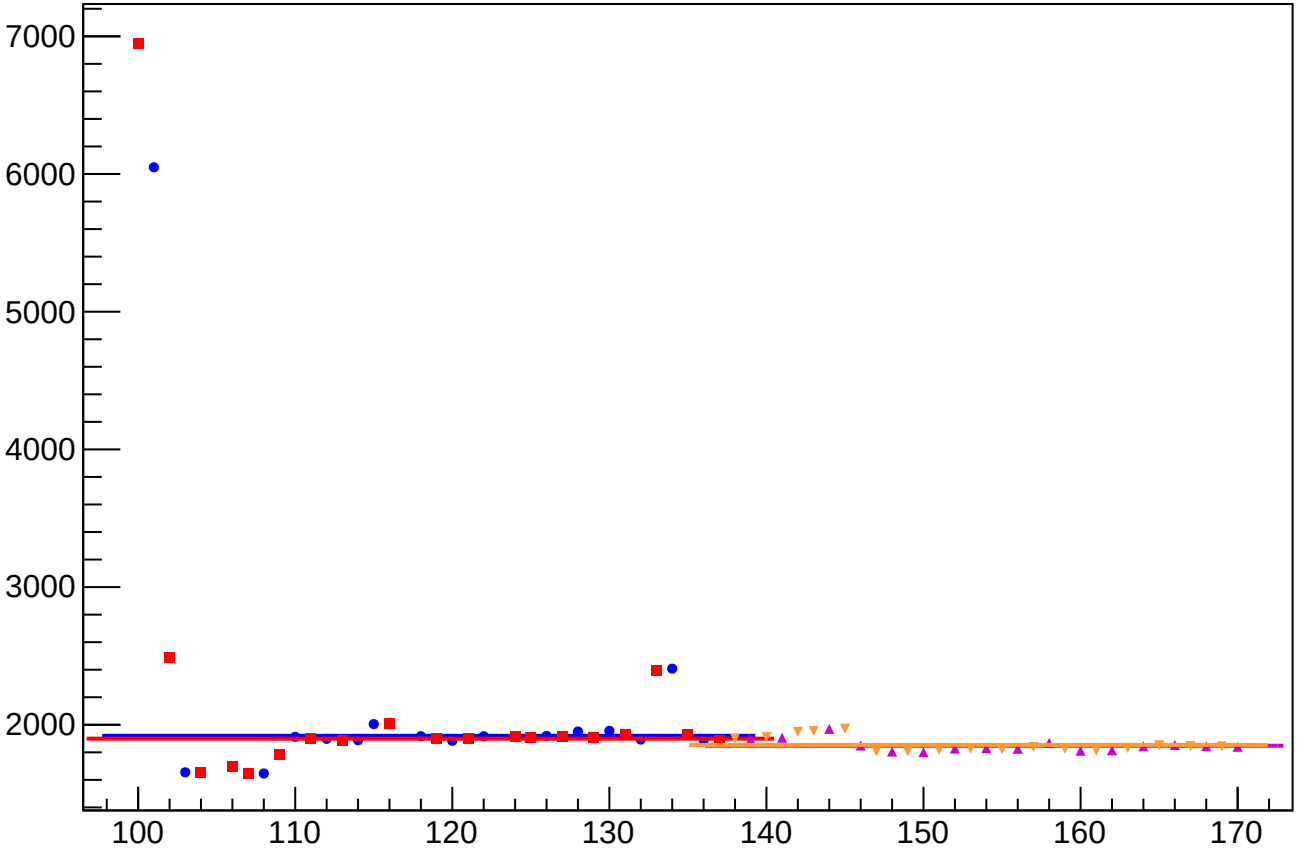
Left In: -2970.252+/-508.356 $\chi^2$/NDF:20.4/15

+ sign 2012.563+/-415.934 $\chi^2$/NDF: 33.7/32

All: -370.359+/-293.250 $\chi^2$/NDF: 136.6/67

- sign -2725.619+/-413.512 $\chi^2$/NDF: 37.6/34

# eigen_cor_asym_atr_avg_rms vs Slug




Right In: 1919.827+/-0.517 $\chi^2$/NDF: 697330.6/15

Left Out: 1853.894+/-0.358 $\chi^2$/NDF:19977.3/16

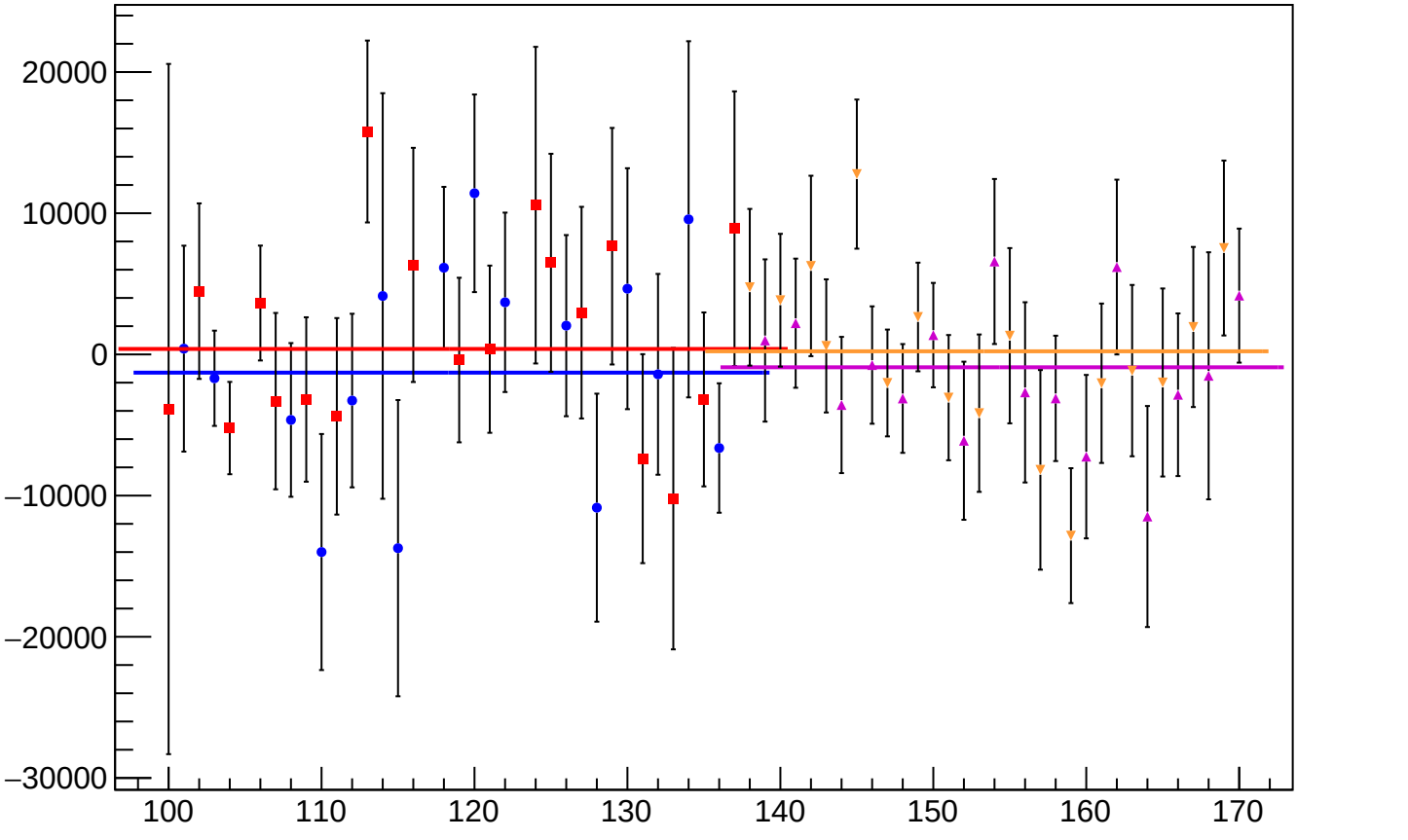
Right Out: 1899.364+/-0.502 $\chi^2$/NDF: 215654.1/18

Left In: 1847.989+/-0.359 $\chi^2$/NDF:13754.9/15

+ sign 1875.232+/-0.294 $\chi^2$/NDF: 728308.9/32

All: 1870.288+/-0.207 $\chi^2$/NDF: 965205.0/67

- sign 1865.407+/-0.292 $\chi^2$/NDF: 236334.5/34




Right In: -1290.862+/-1585.435 $\chi^2$/NDF: 14.3/15

Left Out: 221.333+/-1258.442 $\chi^2$/NDF:20.4/16

Right Out: 387.626+/-1451.530 $\chi^2$/NDF: 17.0/18

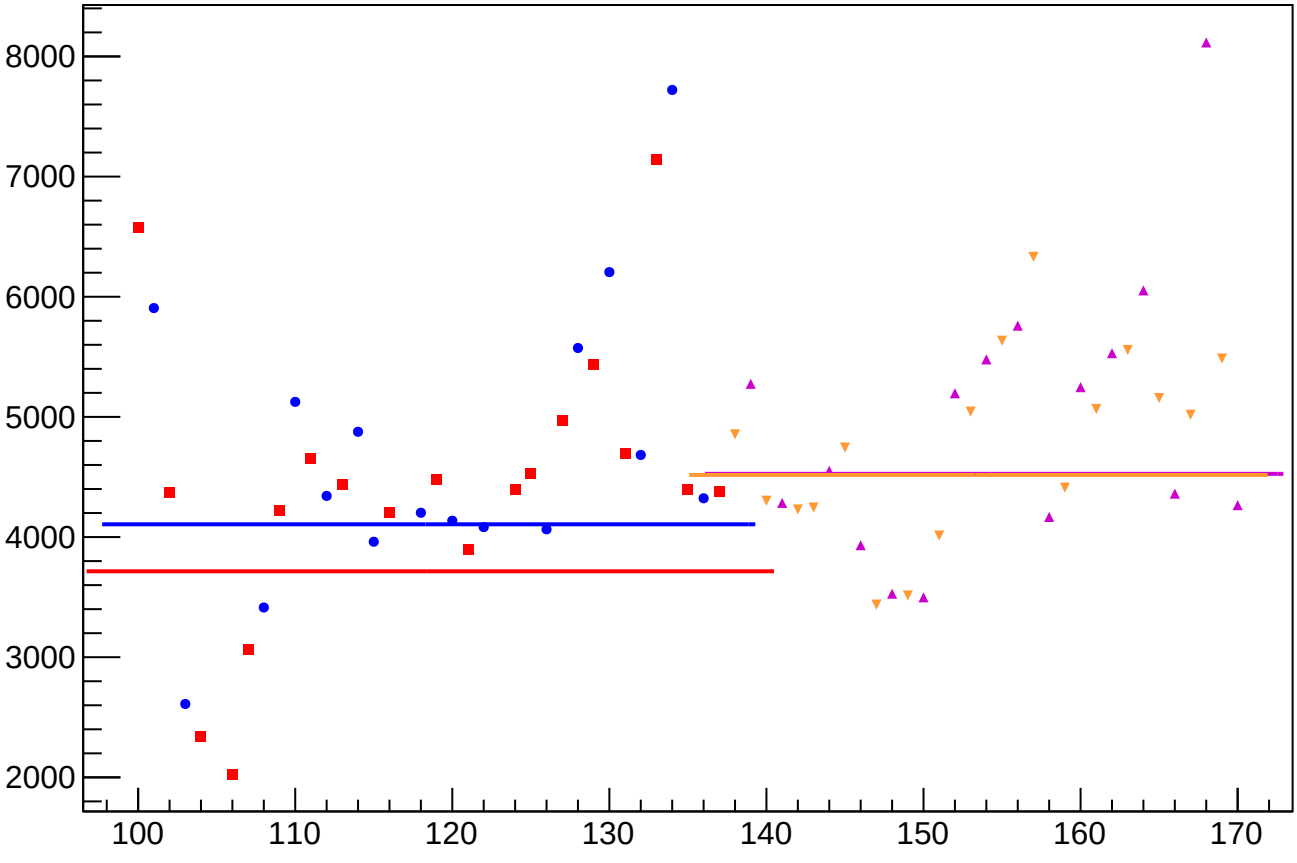
Left In: -911.632+/-1274.401 $\chi^2$/NDF:10.0/15

\+ sign -363.159+/-985.675 $\chi^2$/NDF: 35.3/32

All: -354.370+/-686.863 $\chi^2$/NDF: 62.7/67

\- sign -346.073+/-957.673 $\chi^2$/NDF: 27.5/34

# asym_atr_avg_eigen_cor_correction_rms vs Slug




Right In: 4106.234+/-1.121 $\chi^2$/NDF: 955631.2/15

Left Out: 4516.745+/-0.890 $\chi^2$/NDF:726643.0/16

Right Out: 3715.202+/-1.026 $\chi^2$/NDF: 1335100.7/18

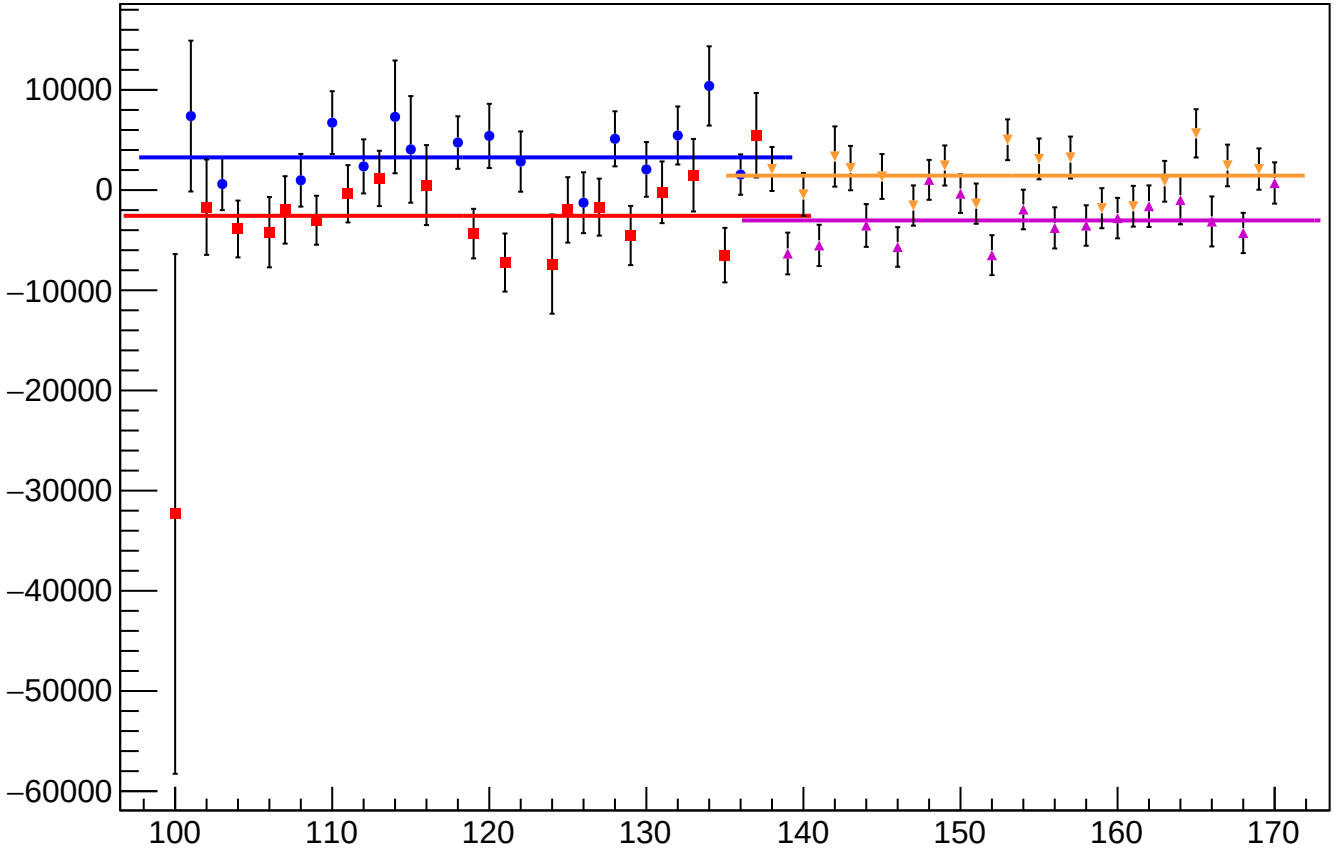
Left In: 4525.995+/-0.901 $\chi^2$/NDF:1042776.1/15

+ sign 4358.075+/-0.697 $\chi^2$/NDF: 1764533.2/32

All: 4262.903+/-0.486 $\chi^2$/NDF: 4531044.0/67

- sign 4173.062+/-0.677 $\chi^2$/NDF: 2730264.0/34

# dit_asym_atr_avg_mean vs Slug




Right In: 3264.639+/-750.865 $\chi^2$/NDF: 12.2/15

Left Out: 1444.217+/-515.110 $\chi^2$/NDF:18.7/16

Right Out: -2566.683+/-734.876 $\chi^2$/NDF: 17.0/18

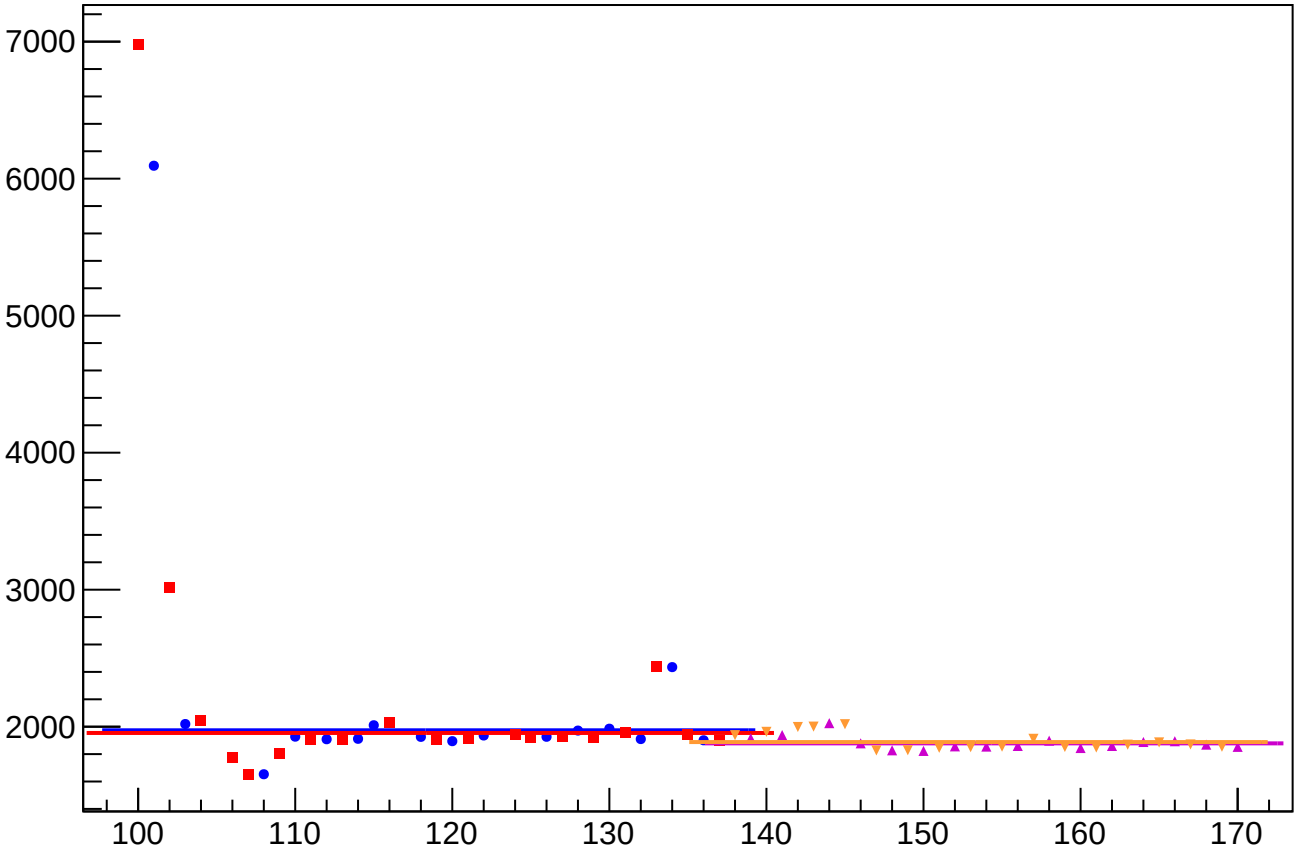
Left In: -3027.881+/-516.766 $\chi^2$/NDF:20.3/15

+ sign 2026.784+/-424.765 $\chi^2$/NDF: 34.8/32

All: -436.110+/-299.626 $\chi^2$/NDF: 139.3/67

- sign -2875.281+/-422.714 $\chi^2$/NDF: 37.6/34

# dit_asym_atr_avg_rms vs Slug




Right In: 1973.748+/-0.531 $\chi^2$/NDF: 665124.2/15

Left Out: 1887.905+/-0.364 $\chi^2$/NDF:26381.3/16

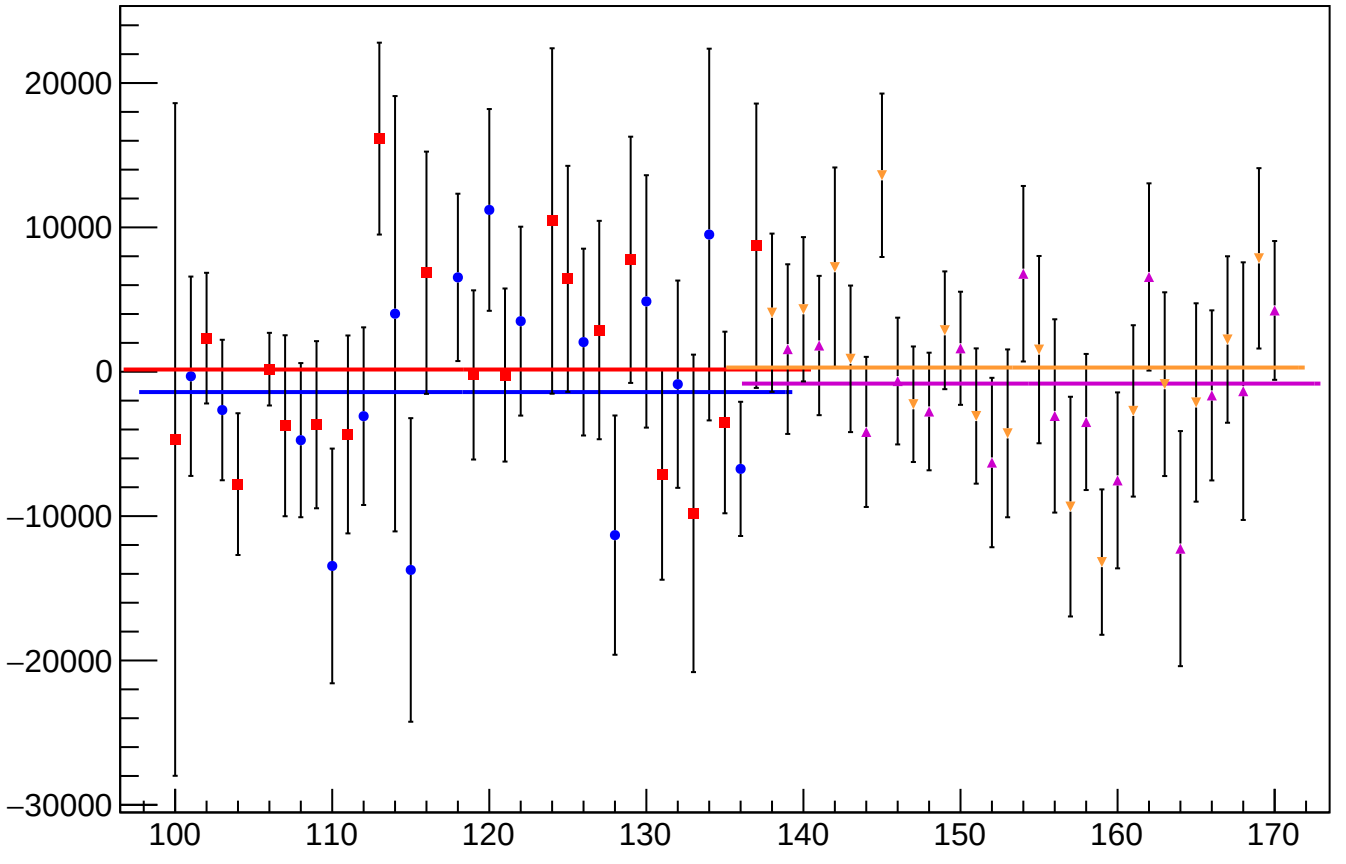
Right Out: 1954.339+/-0.519 $\chi^2$/NDF: 246211.3/18

Left In: 1878.392+/-0.365 $\chi^2$/NDF:16918.1/15

+ sign 1915.376+/-0.300 $\chi^2$/NDF: 709280.7/32

All: 1909.433+/-0.212 $\chi^2$/NDF: 987499.2/67

- sign 1903.551+/-0.299 $\chi^2$/NDF: 277439.4/34




Right In: -1407.382+/-1689.989 $\chi^2$/NDF: 14.2/15

Left Out: 291.664+/-1321.767 $\chi^2$/NDF:20.4/16

Right Out: 155.271+/-1363.642 $\chi^2$/NDF: 15.8/18

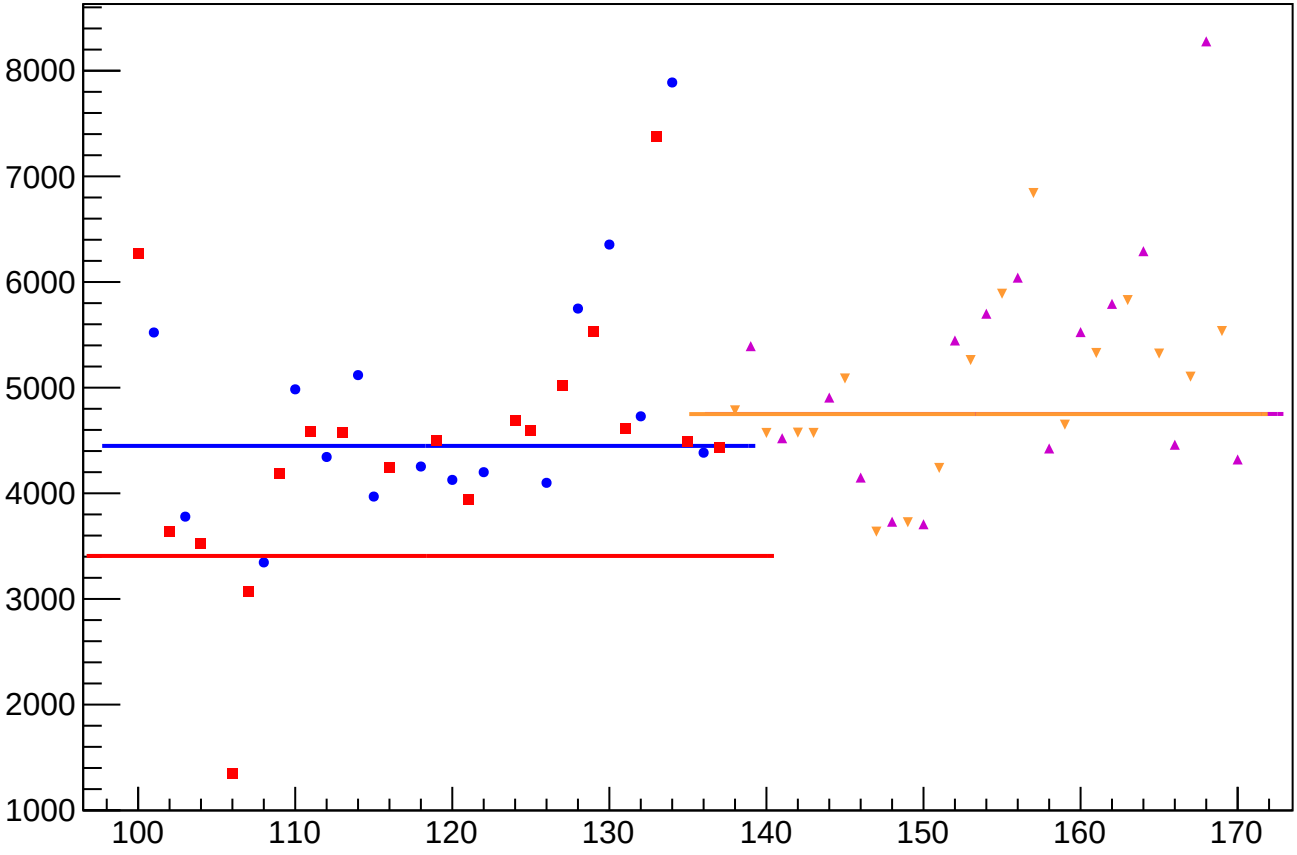
Left In: -820.339+/-1336.257 $\chi^2$/NDF:10.0/15

+ sign -353.190+/-1041.147 $\chi^2$/NDF: 35.3/32

All: -347.343+/-703.539 $\chi^2$/NDF: 61.3/67

- sign -342.429+/-954.411 $\chi^2$/NDF: 26.1/34

# asym_atr_avg_dit_correction_rms vs Slug




Right In: 4448.711+/-1.195 $\chi^2$/NDF: 494613.5/15

Left Out: 4749.944+/-0.935 $\chi^2$/NDF:676585.3/16

Right Out: 3407.128+/-0.964 $\chi^2$/NDF: 2326060.4/18

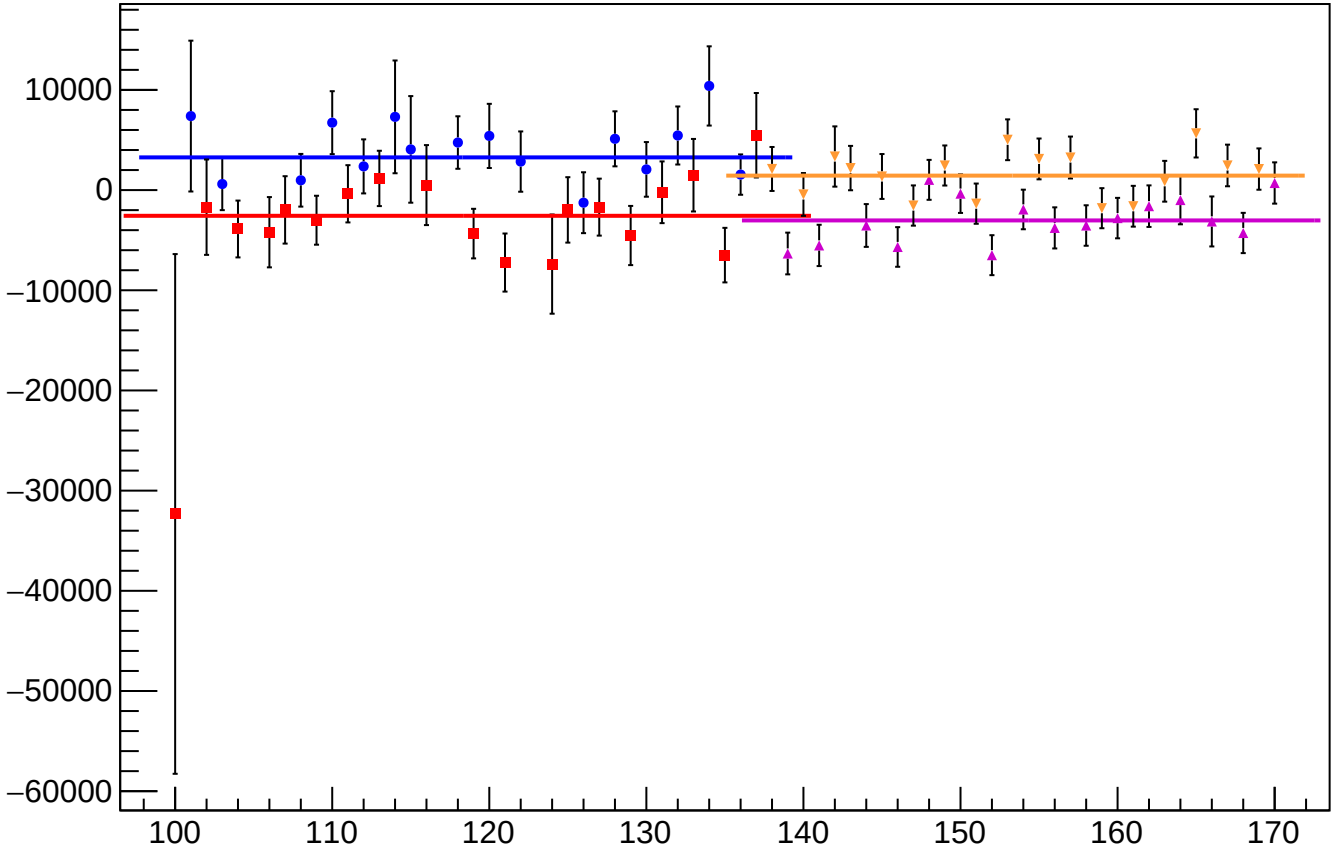
Left In: 4751.021+/-0.945 $\chi^2$/NDF:984855.8/15

+ sign 4635.614+/-0.736 $\chi^2$/NDF: 1210624.6/32

All: 4340.606+/-0.497 $\chi^2$/NDF: 5807992.8/67

- sign 4092.705+/-0.675 $\chi^2$/NDF: 4301862.3/34

# eigen_dit_asym_atr_avg_mean vs Slug




Right In: 3264.644+/-750.865 $\chi^2$/NDF: 12.2/15

Left Out: 1444.209+/-515.110 $\chi^2$/NDF:18.7/16

Right Out: -2566.689+/-734.875 $\chi^2$/NDF: 17.0/18

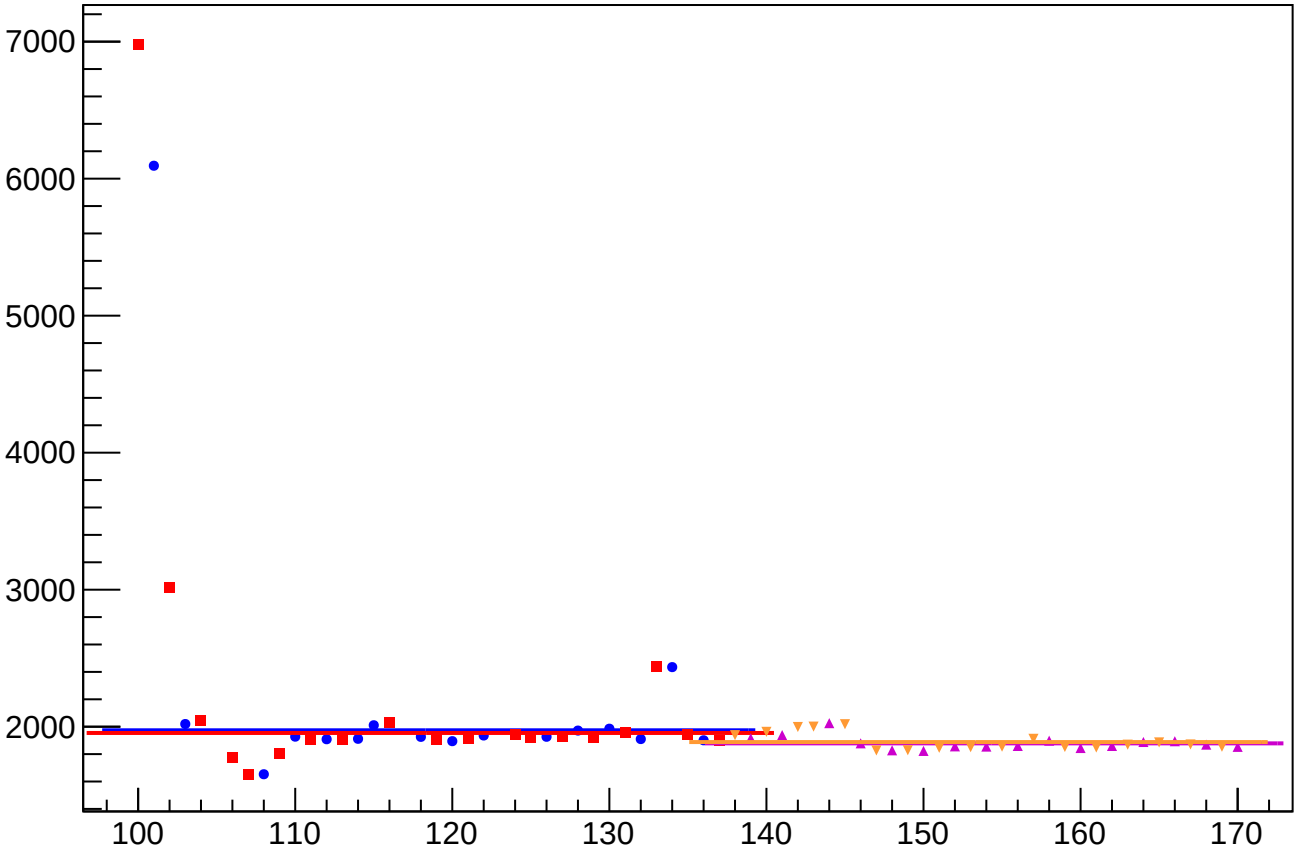
Left In: -3027.884+/-516.766 $\chi^2$/NDF:20.3/15

+ sign 2026.780+/-424.765 $\chi^2$/NDF: 34.8/32

All: -436.113+/-299.627 $\chi^2$/NDF: 139.3/67

- sign -2875.285+/-422.714 $\chi^2$/NDF: 37.6/34

# eigen_dit_asym_atr_avg_rms vs Slug




Right In: 1973.748+/-0.531 $\chi^2$/NDF: 665124.2/15

Left Out: 1887.906+/-0.364 $\chi^2$/NDF:26381.4/16

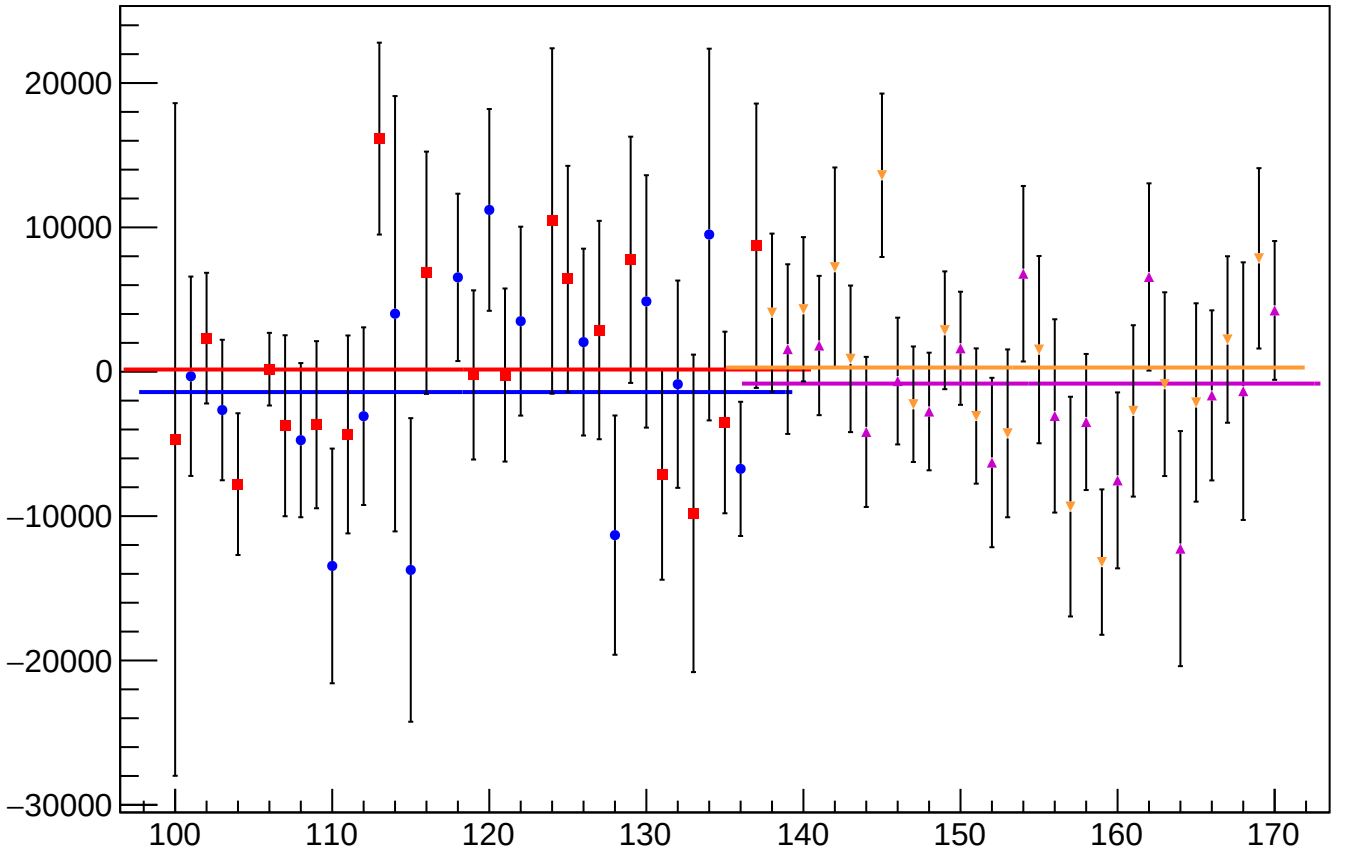
Right Out: 1954.339+/-0.519 $\chi^2$/NDF: 246210.8/18

Left In: 1878.393+/-0.365 $\chi^2$/NDF:16918.1/15

+ sign 1915.377+/-0.300 $\chi^2$/NDF: 709280.2/32

All: 1909.434+/-0.212 $\chi^2$/NDF: 987497.8/67

- sign 1903.551+/-0.299 $\chi^2$/NDF: 277438.5/34




Right In: -1407.363+/-1689.986 $\chi^2$/NDF: 14.2/15

Left Out: 291.660+/-1321.769 $\chi^2$/NDF:20.4/16

Right Out: 155.272+/-1363.639 $\chi^2$/NDF: 15.8/18

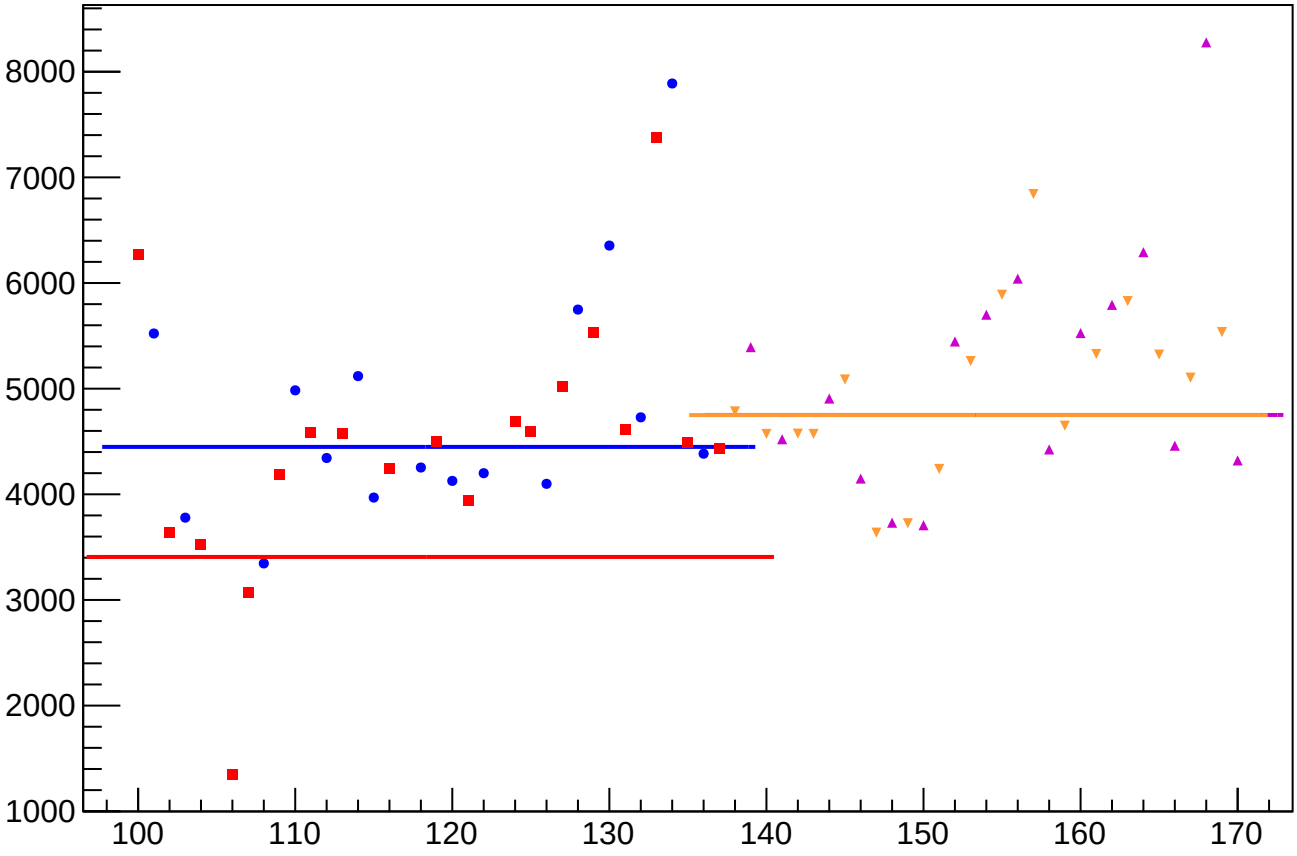
Left In: -820.337+/-1336.258 $\chi^2$/NDF:10.0/15

+ sign -353.188+/-1041.147 $\chi^2$/NDF: 35.3/32

All: -347.340+/-703.539 $\chi^2$/NDF: 61.3/67

- sign -342.425+/-954.411 $\chi^2$/NDF: 26.1/34

# asym_atr_avg_eigen_dit_correction_rms vs Slug




Right In: 4448.704+/-1.195 $\chi^2$/NDF: 494610.6/15

Left Out: 4749.951+/-0.935 $\chi^2$/NDF:676585.3/16

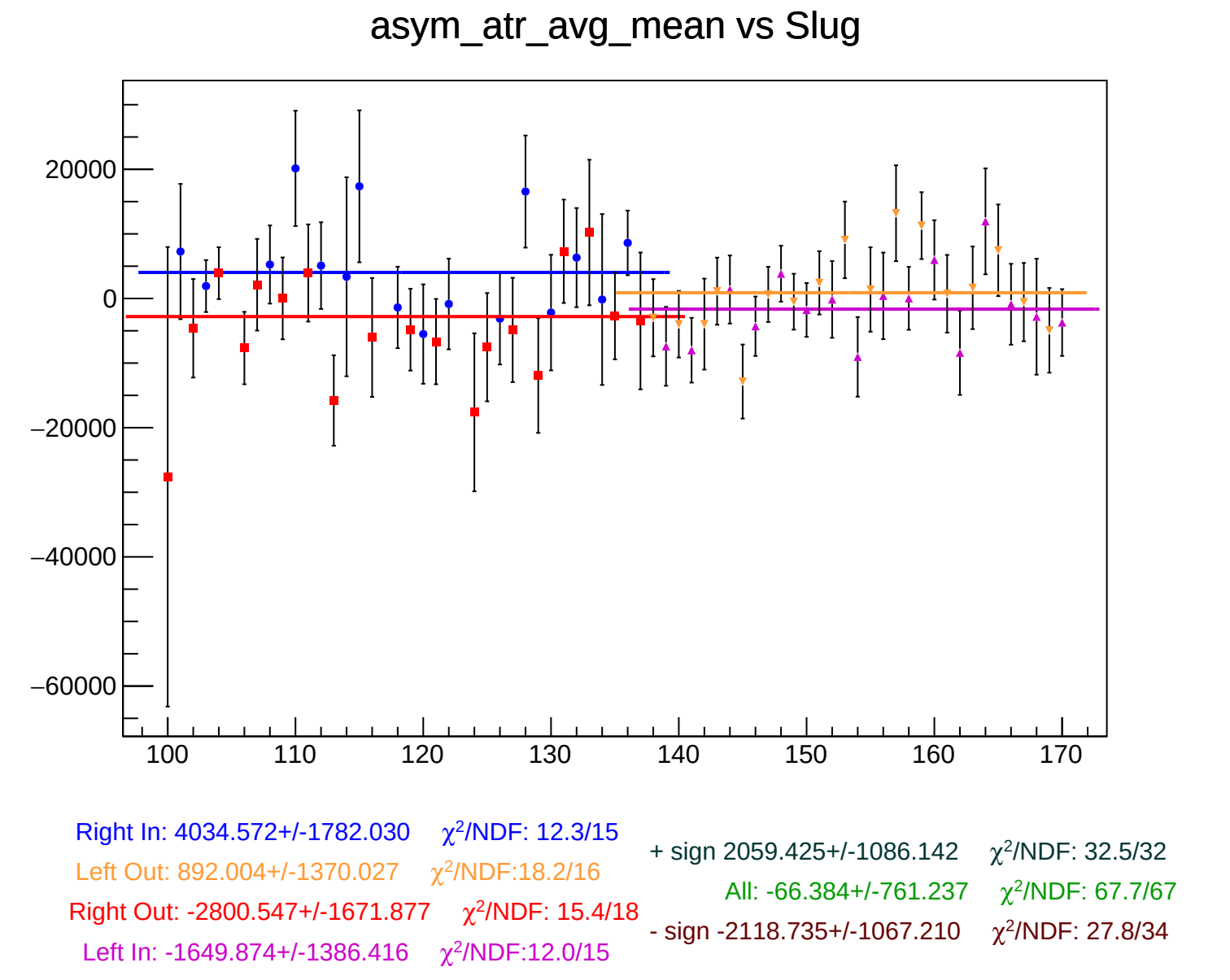
Right Out: 3407.120+/-0.964 $\chi^2$/NDF: 2326064.2/18

Left In: 4751.028+/-0.945 $\chi^2$/NDF:984856.0/15

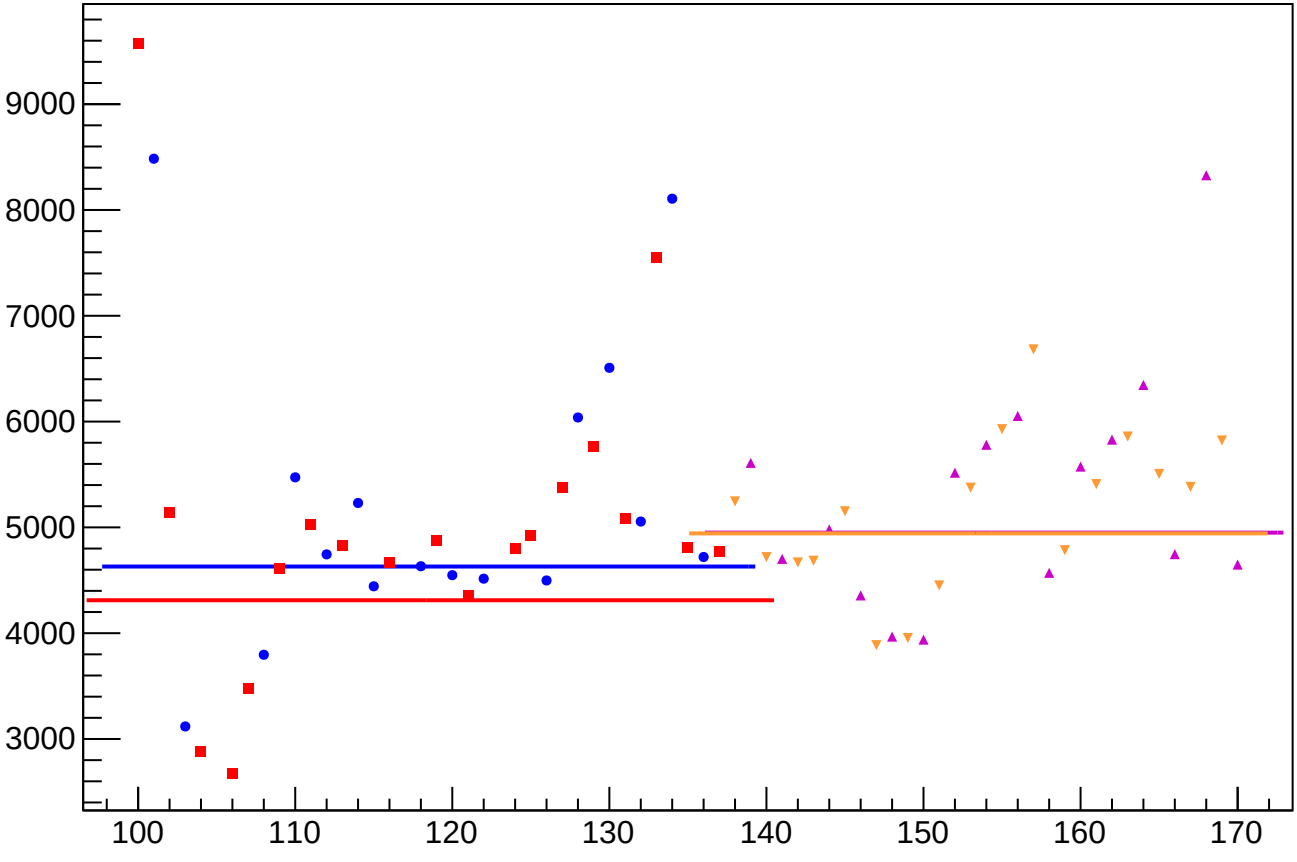
+ sign 4635.615+/-0.736 $\chi^2$/NDF: 1210625.6/32

All: 4340.605+/-0.497 $\chi^2$/NDF: 5808025.6/67

- sign 4092.702+/-0.675 $\chi^2$/NDF: 4301889.4/34


asym_atr_avg_mean vs Slug
20000
0
−20000
−40000
−60000
100
110
120
130
140
150
160
170
Right In: 4034.572+/-1782.030 χ²/NDF: 12.3/15
Left Out: 892.004+/-1370.027 χ²/NDF:18.2/16
Right Out: -2800.547+/-1671.877 χ²/NDF: 15.4/18
Left In: -1649.874+/-1386.416 χ²/NDF:12.0/15
+ sign 2059.425+/-1086.142 χ²/NDF: 32.5/32
All: -66.384+/-761.237 χ²/NDF: 67.7/67
- sign -2118.735+/-1067.210 χ²/NDF: 27.8/34

# asym_atr_avg_rms vs Slug




Right In: 4629.967+/-1.260 $\chi^2$/NDF: 900246.3/15

Left Out: 4943.278+/-0.969 $\chi^2$/NDF:546040.8/16

Right Out: 4311.218+/-1.172 $\chi^2$/NDF: 904737.2/18

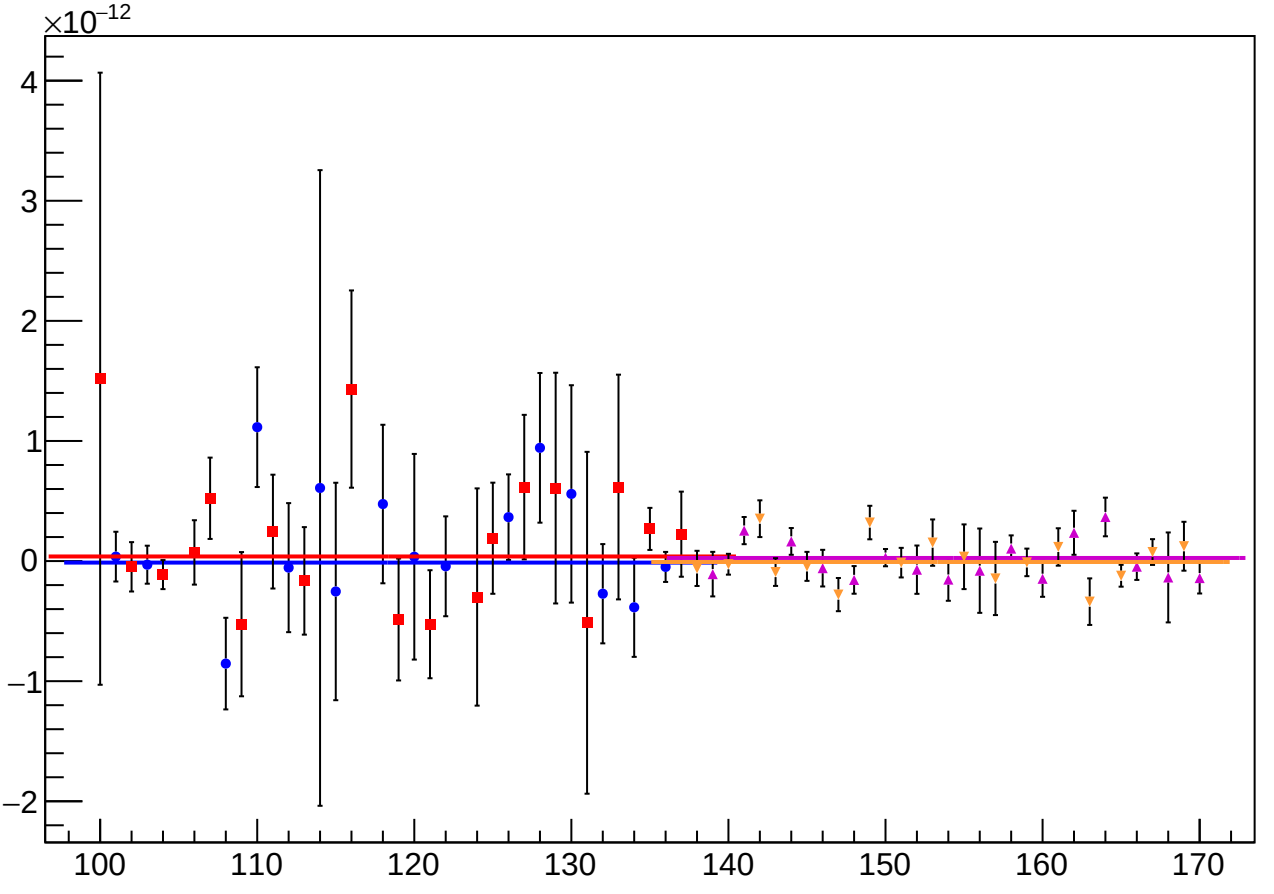
Left In: 4950.421+/-0.980 $\chi^2$/NDF:810481.9/15

+ sign 4826.888+/-0.768 $\chi^2$/NDF: 1485143.9/32

All: 4755.609+/-0.537 $\chi^2$/NDF: 3392245.7/67

- sign 4687.281+/-0.752 $\chi^2$/NDF: 1890231.6/34

# asym_atr_avg_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:22.8/16

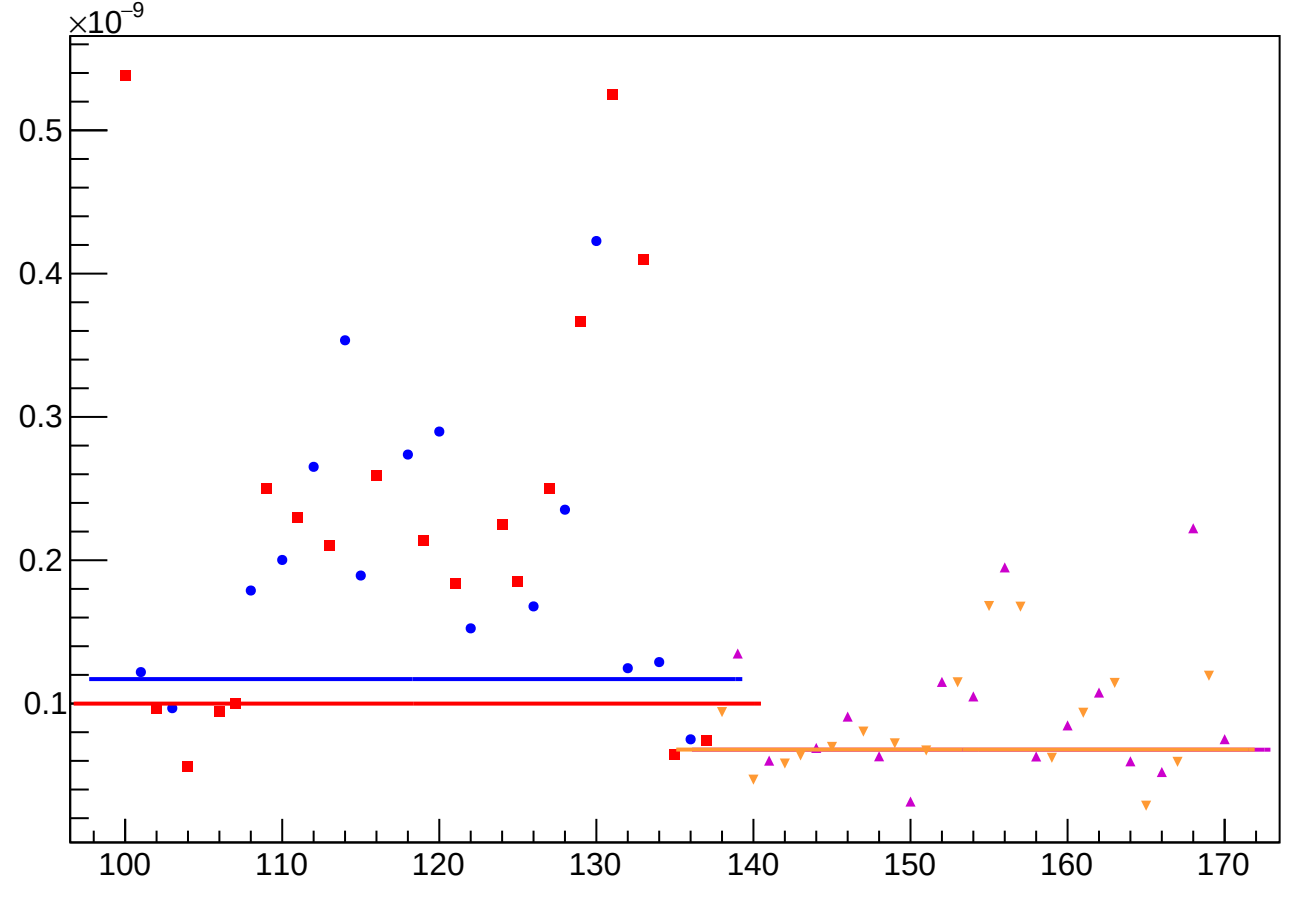
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.0/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:20.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 38.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 74.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 35.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1100462.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1505256.5/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1844111.3/18

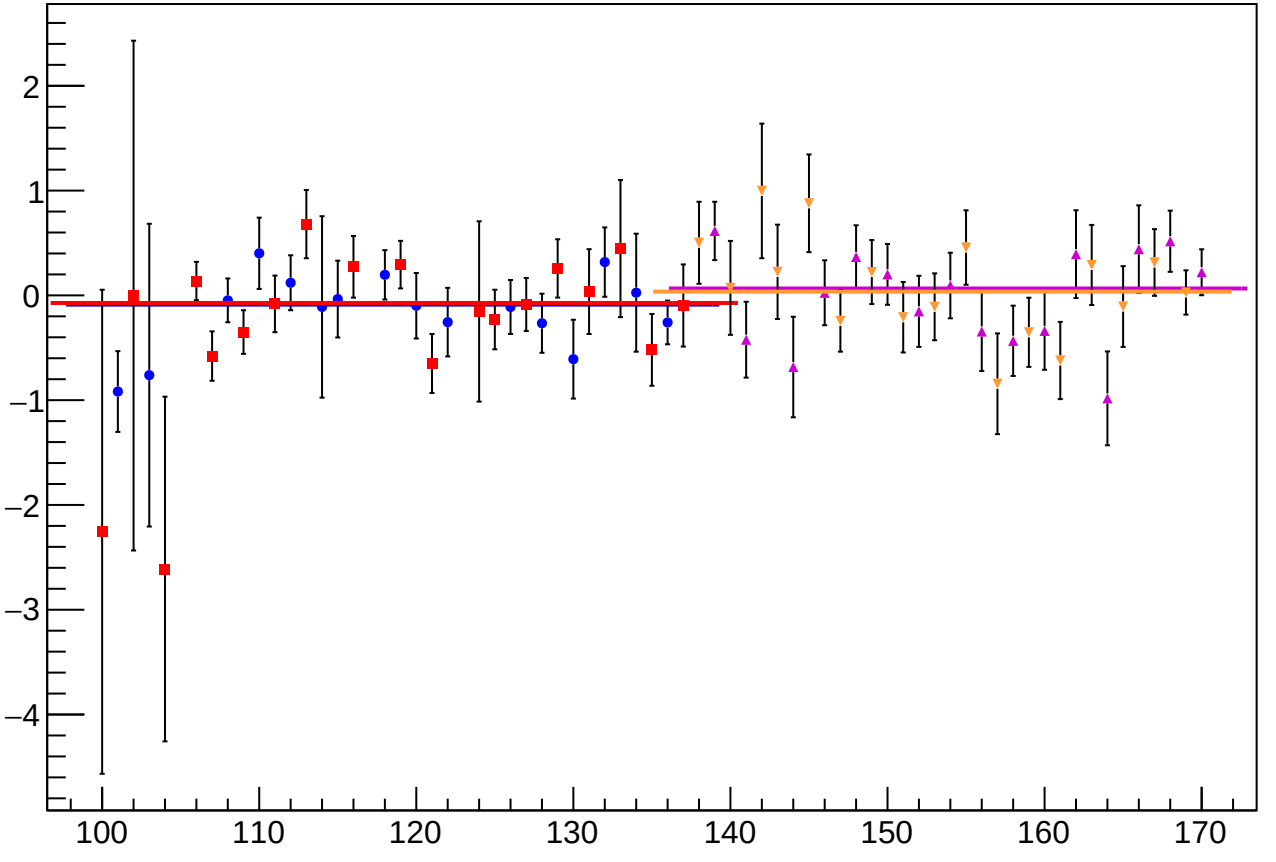
Left In: 0.000+/-0.000 $\chi^2$/NDF:1804325.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3324388.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 7302087.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3972542.8/34

# asym_atr_avg_dit_vs_cor_diff_mean vs Slug




Right In: -0.088+/-0.077 $\chi^2$/NDF: 13.9/15

Left Out: 0.036+/-0.085 $\chi^2$/NDF:19.8/16

Right Out: -0.072+/-0.070 $\chi^2$/NDF: 28.7/18

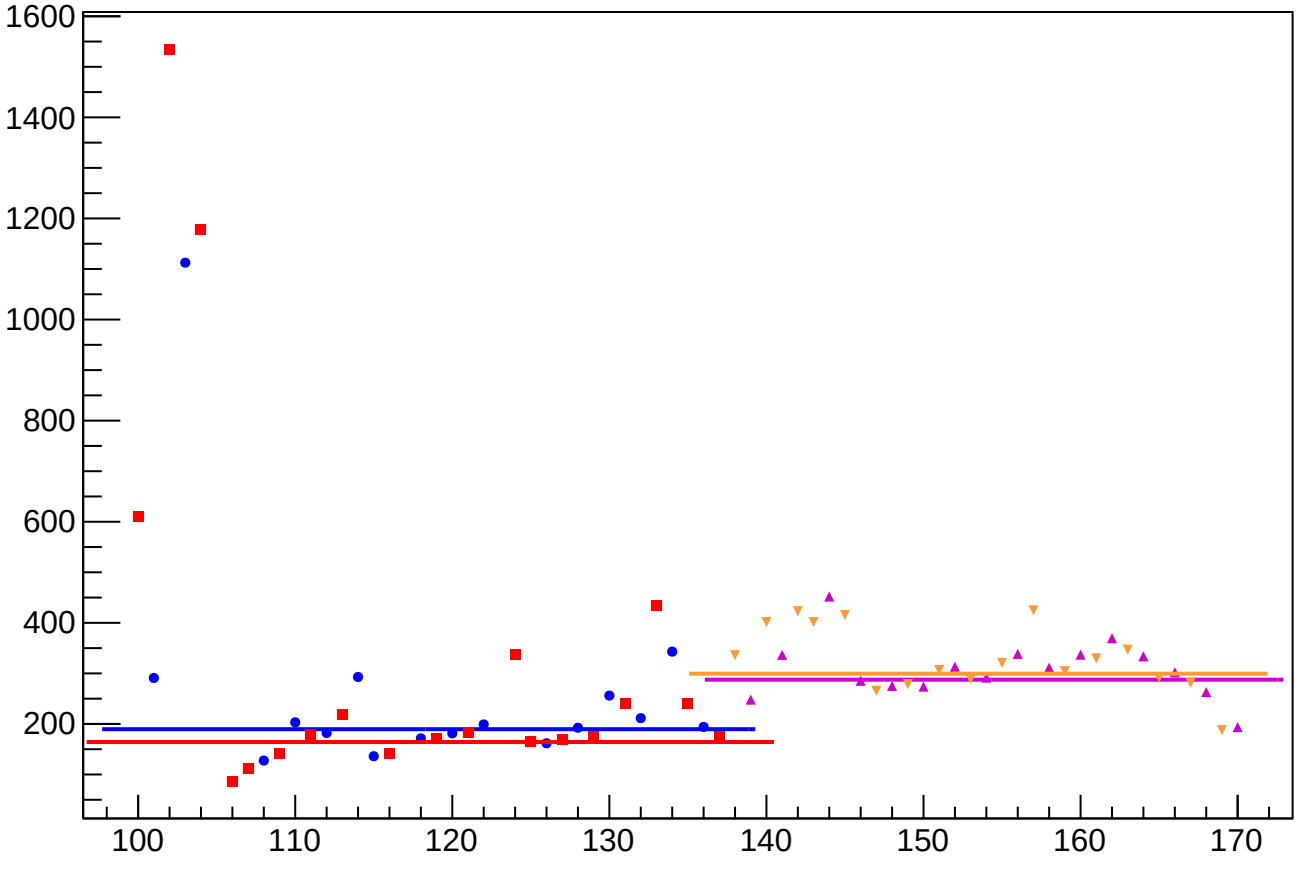
Left In: 0.066+/-0.082 $\chi^2$/NDF:24.2/15

+ sign -0.032+/-0.057 $\chi^2$/NDF: 34.8/32

All: -0.023+/-0.039 $\chi^2$/NDF: 89.4/67

- sign -0.014+/-0.053 $\chi^2$/NDF: 54.5/34

# asym_atr_avg_dit_vs_cor_diff_rms vs Slug




Right In: 189.628+/-0.054 $\chi^2$/NDF: 1465476.9/15

Left Out: 299.402+/-0.060 $\chi^2$/NDF:1213125.1/16

Right Out: 164.287+/-0.050 $\chi^2$/NDF: 2643490.2/18

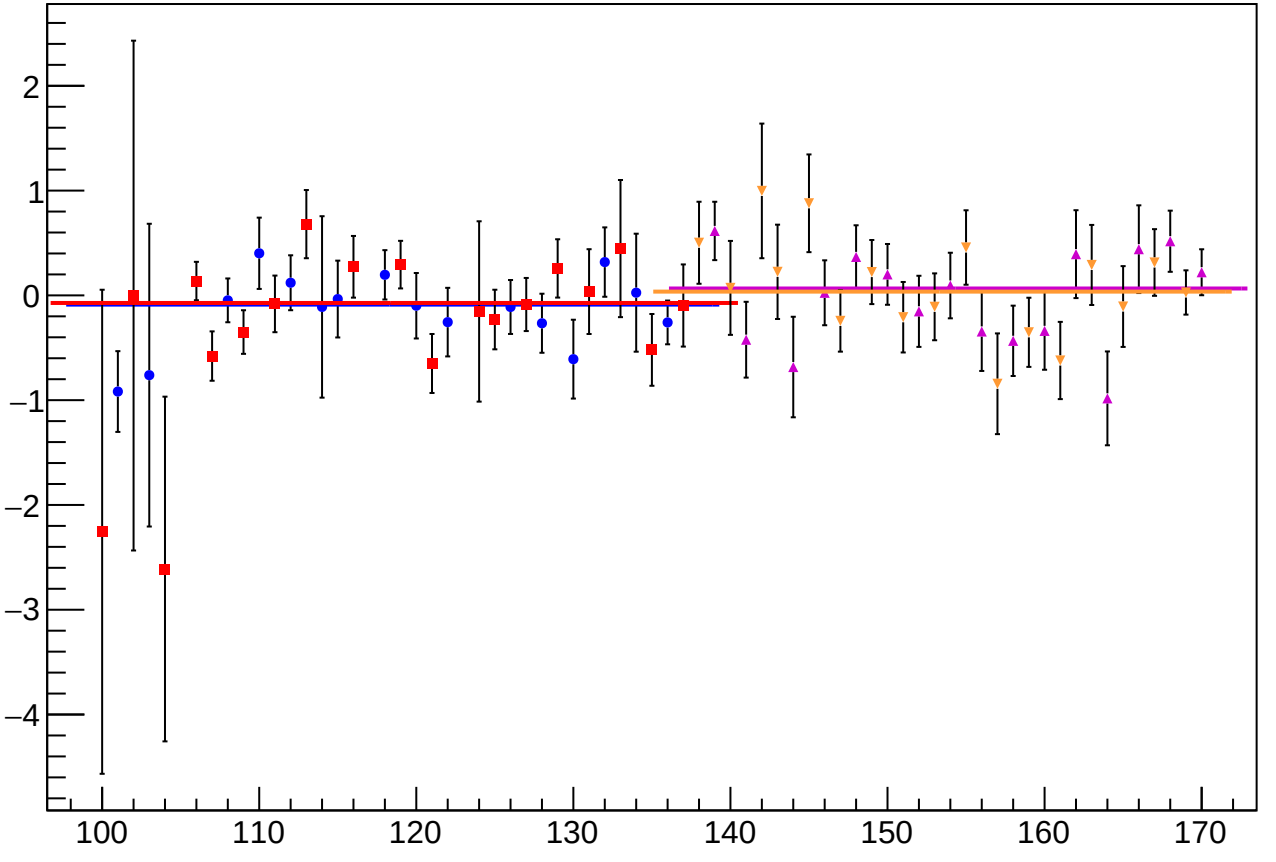
Left In: 287.574+/-0.058 $\chi^2$/NDF:894687.3/15

+ sign 239.070+/-0.040 $\chi^2$/NDF: 4520427.2/32

All: 226.951+/-0.027 $\chi^2$/NDF: 10847749.3/67

- sign 216.357+/-0.038 $\chi^2$/NDF: 6157368.0/34

# asym_atr_avg_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.088+/-0.077 $\chi^2$/NDF: 13.9/15

Left Out: 0.036+/-0.085 $\chi^2$/NDF:19.8/16

Right Out: -0.072+/-0.070 $\chi^2$/NDF: 28.7/18

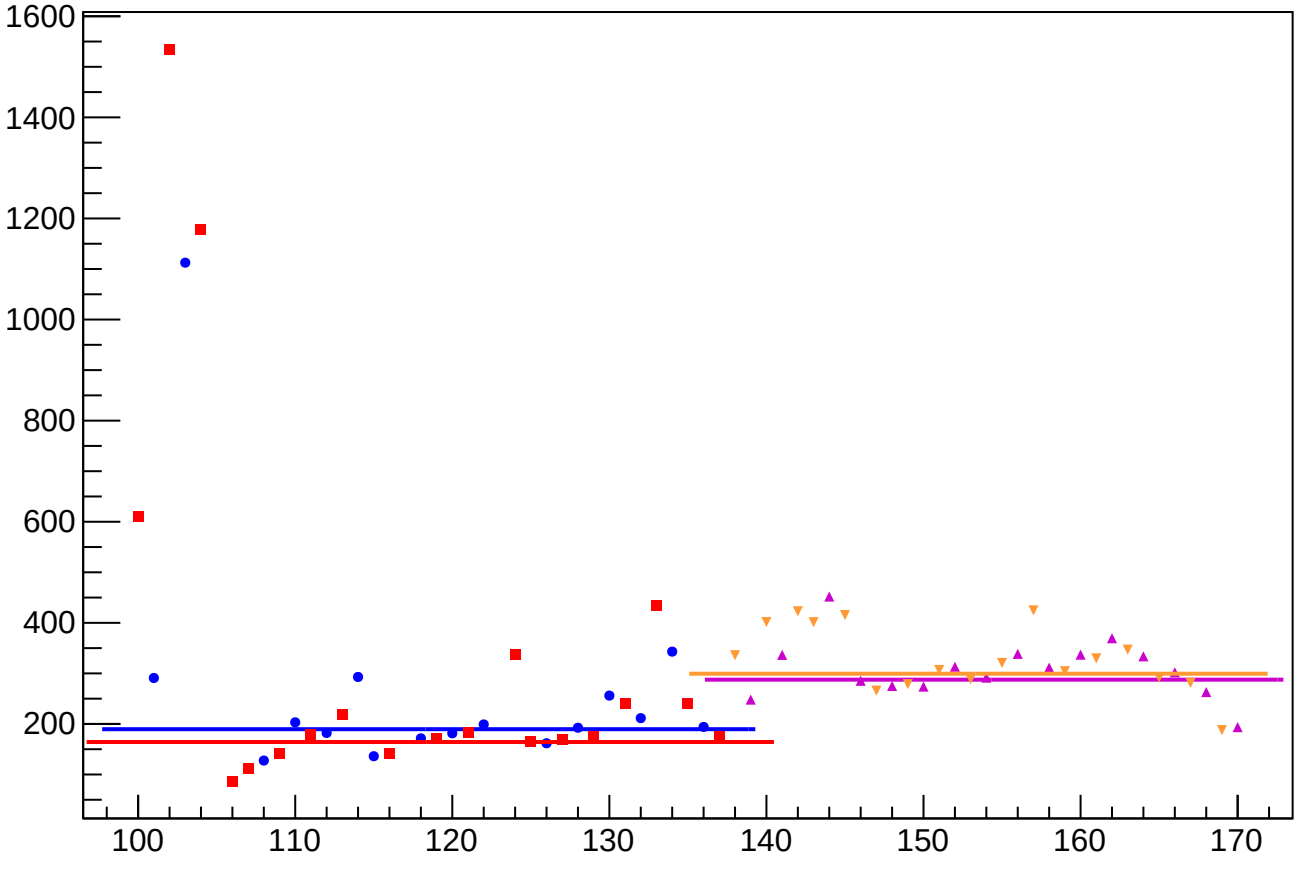
Left In: 0.066+/-0.082 $\chi^2$/NDF:24.2/15

+ sign -0.032+/-0.057 $\chi^2$/NDF: 34.8/32

All: -0.023+/-0.039 $\chi^2$/NDF: 89.4/67

- sign -0.014+/-0.053 $\chi^2$/NDF: 54.5/34

# asym_atr_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 189.628+/-0.054 $\chi^2$/NDF: 1465476.9/15

Left Out: 299.402+/-0.060 $\chi^2$/NDF:1213125.1/16

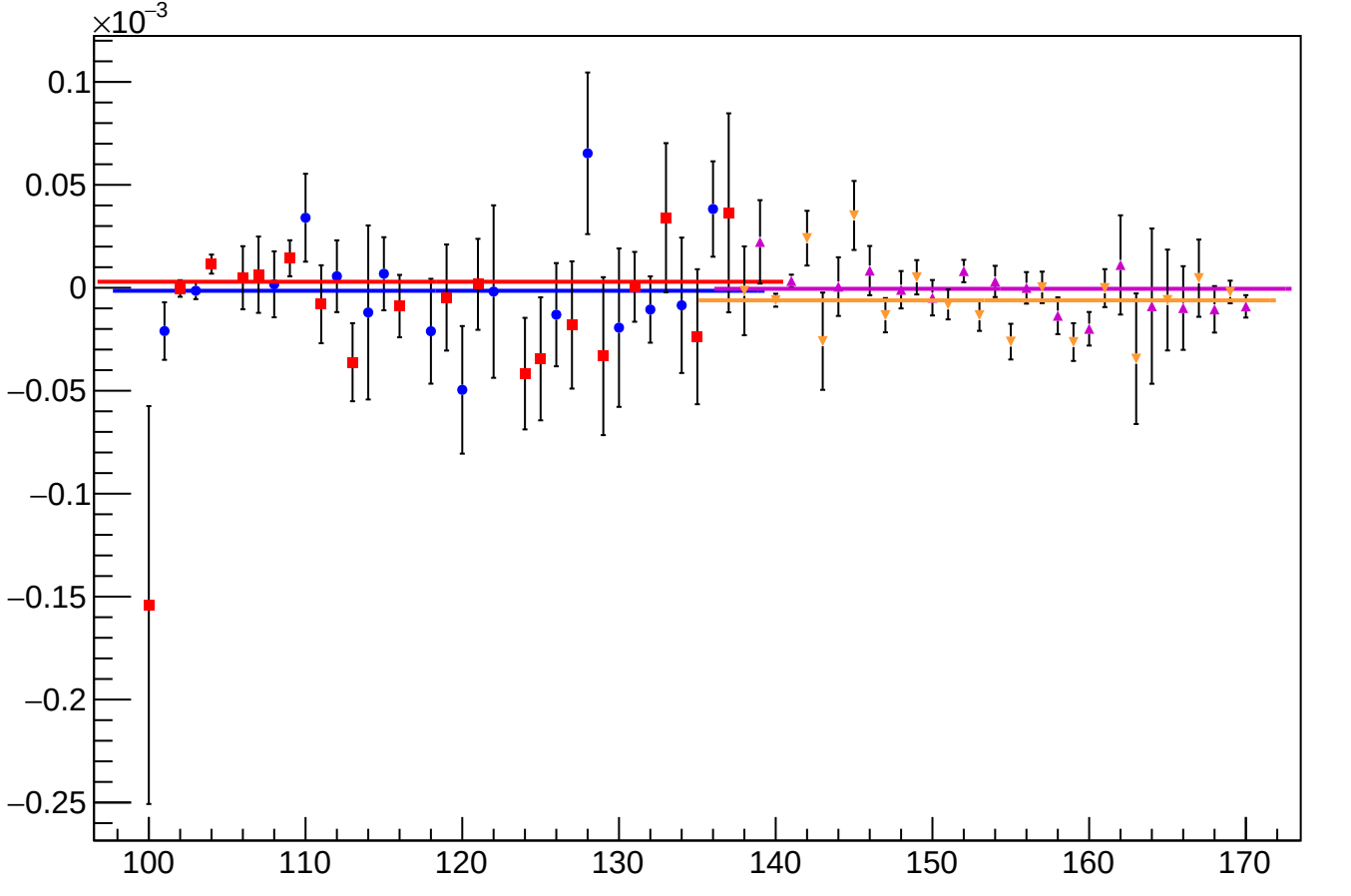
Right Out: 164.287+/-0.050 $\chi^2$/NDF: 2643490.2/18

Left In: 287.574+/-0.058 $\chi^2$/NDF:894687.3/15

+ sign 239.070+/-0.040 $\chi^2$/NDF: 4520427.2/32

All: 226.951+/-0.027 $\chi^2$/NDF: 10847749.3/67

- sign 216.357+/-0.038 $\chi^2$/NDF: 6157368.0/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:28.5/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.3/18

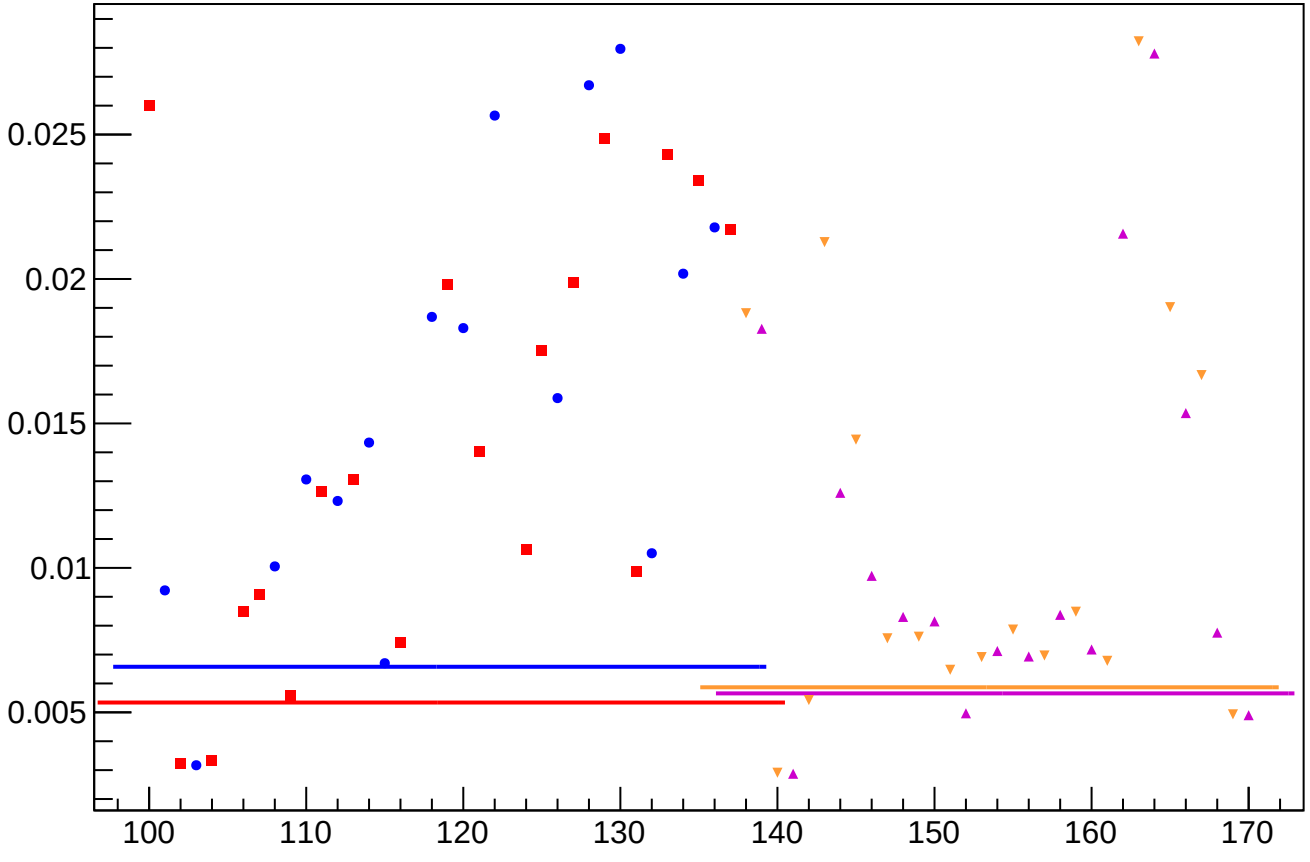
Left In: -0.000+/-0.000 $\chi^2$/NDF:17.9/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 44.8/32

All: -0.000+/-0.000 $\chi^2$/NDF: 91.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 40.4/34

# asym_atr_avg_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.007+/-0.000 $\chi^2$/NDF: 5928012.0/15

Left Out: 0.006+/-0.000 $\chi^2$/NDF:6677717.4/16

Right Out: 0.005+/-0.000 $\chi^2$/NDF: 5685915.4/18

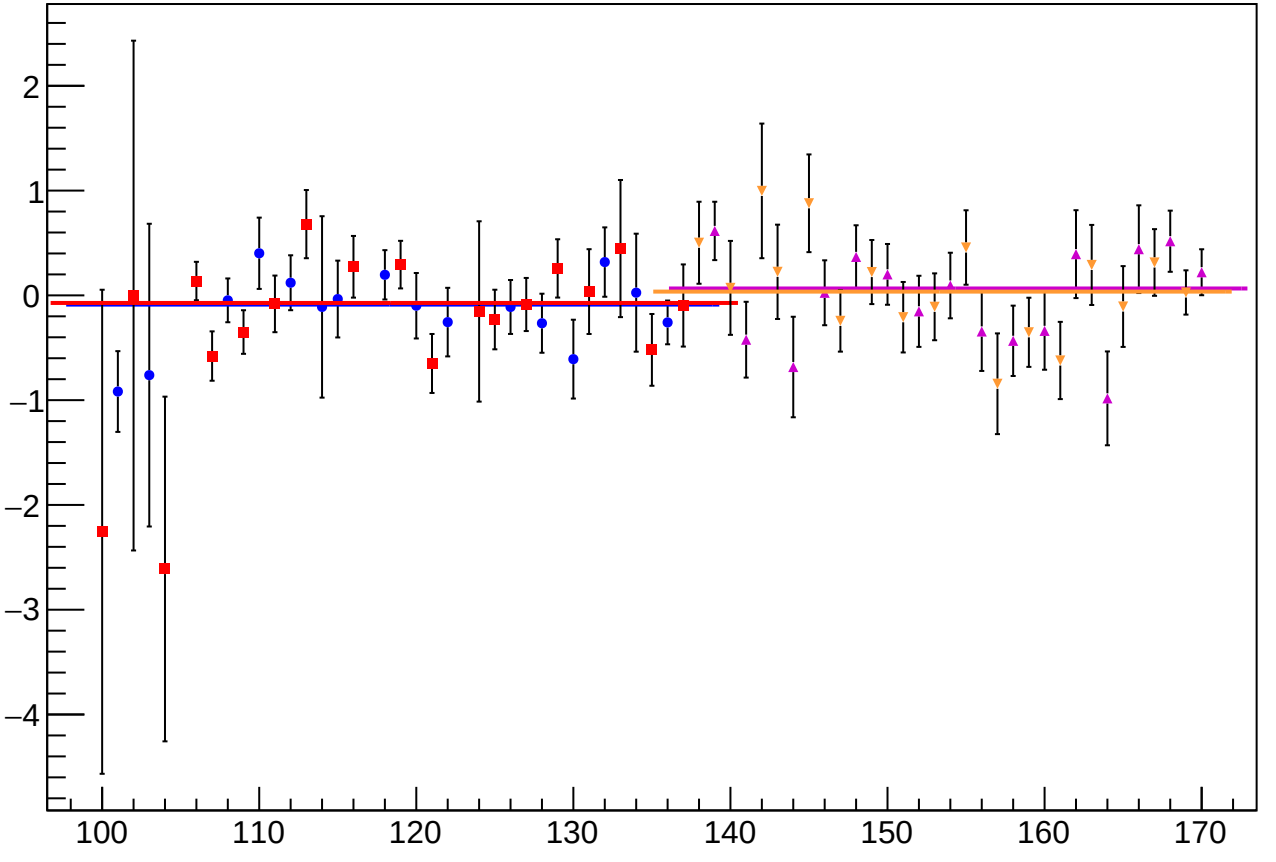
Left In: 0.006+/-0.000 $\chi^2$/NDF:6014291.5/15

+ sign 0.006+/-0.000 $\chi^2$/NDF: 12674437.9/32

All: 0.006+/-0.000 $\chi^2$/NDF: 24493538.8/67

- sign 0.006+/-0.000 $\chi^2$/NDF: 11720131.0/34

# asym_atr_avg_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.088+/-0.077 $\chi^2$/NDF: 13.9/15

Left Out: 0.036+/-0.085 $\chi^2$/NDF:19.8/16

Right Out: -0.072+/-0.070 $\chi^2$/NDF: 28.7/18

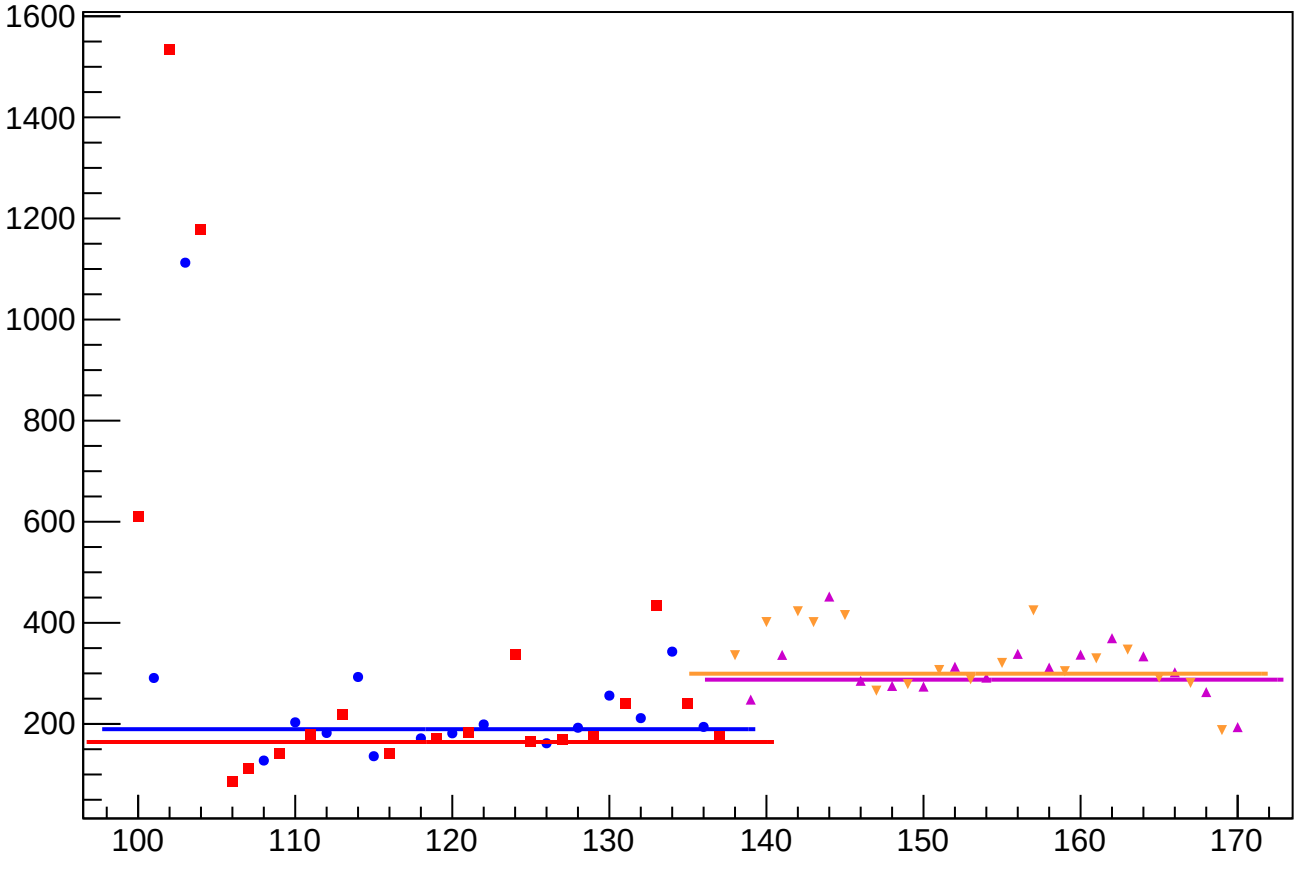
Left In: 0.066+/-0.082 $\chi^2$/NDF:24.2/15

+ sign -0.032+/-0.057 $\chi^2$/NDF: 34.8/32

All: -0.023+/-0.039 $\chi^2$/NDF: 89.4/67

- sign -0.014+/-0.053 $\chi^2$/NDF: 54.5/34

# asym_atr_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 189.628+/-0.054 $\chi^2$/NDF: 1465464.1/15

Left Out: 299.405+/-0.060 $\chi^2$/NDF:1213179.8/16

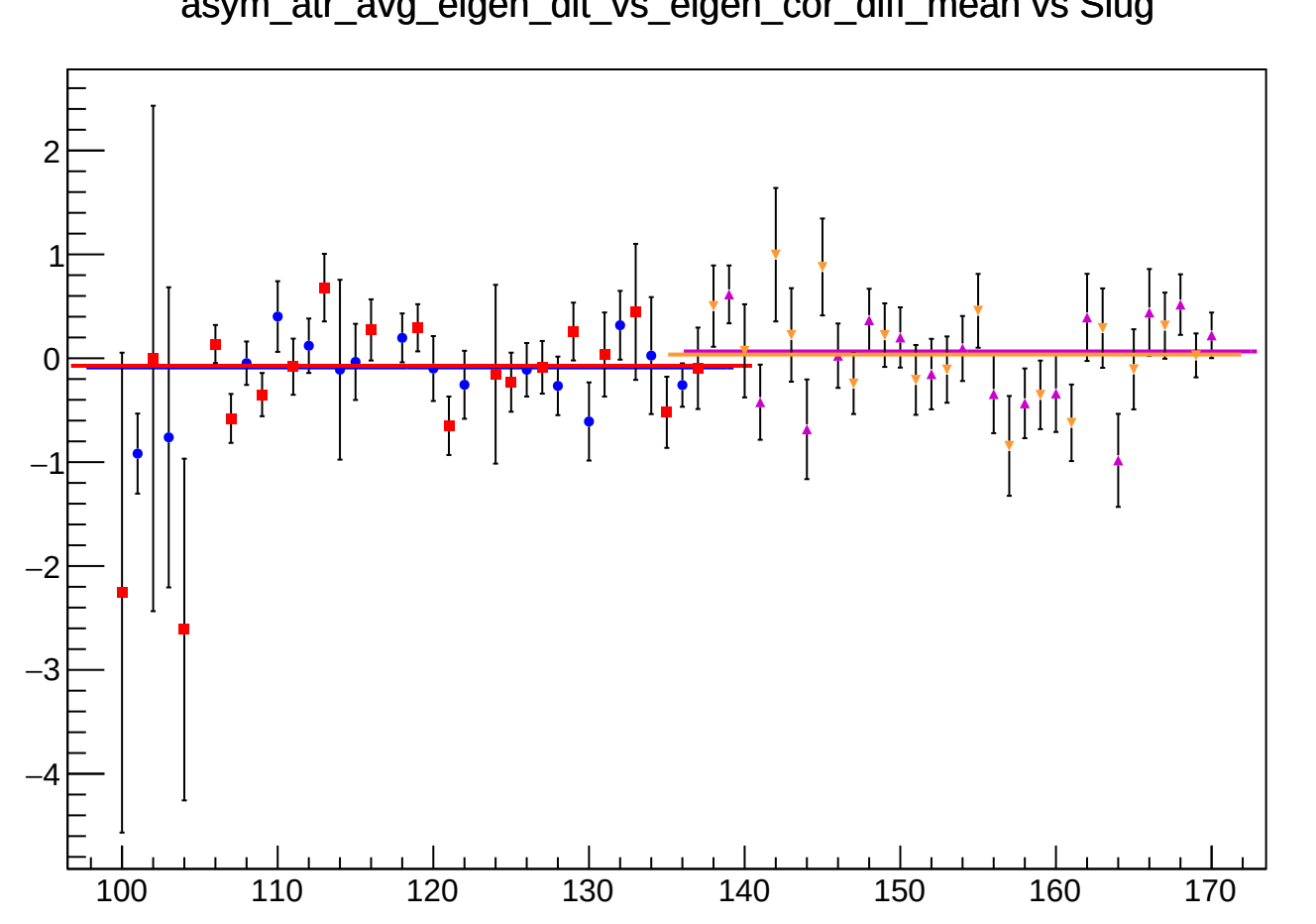
Right Out: 164.286+/-0.050 $\chi^2$/NDF: 2643465.6/18

Left In: 287.577+/-0.058 $\chi^2$/NDF:894720.2/15

+ sign 239.070+/-0.040 $\chi^2$/NDF: 4520588.5/32

All: 226.951+/-0.027 $\chi^2$/NDF: 10848075.3/67

- sign 216.357+/-0.038 $\chi^2$/NDF: 6157529.0/34




Right In: -0.088+/-0.077 $\chi^2$/NDF: 13.9/15

Left Out: 0.036+/-0.085 $\chi^2$/NDF:19.8/16

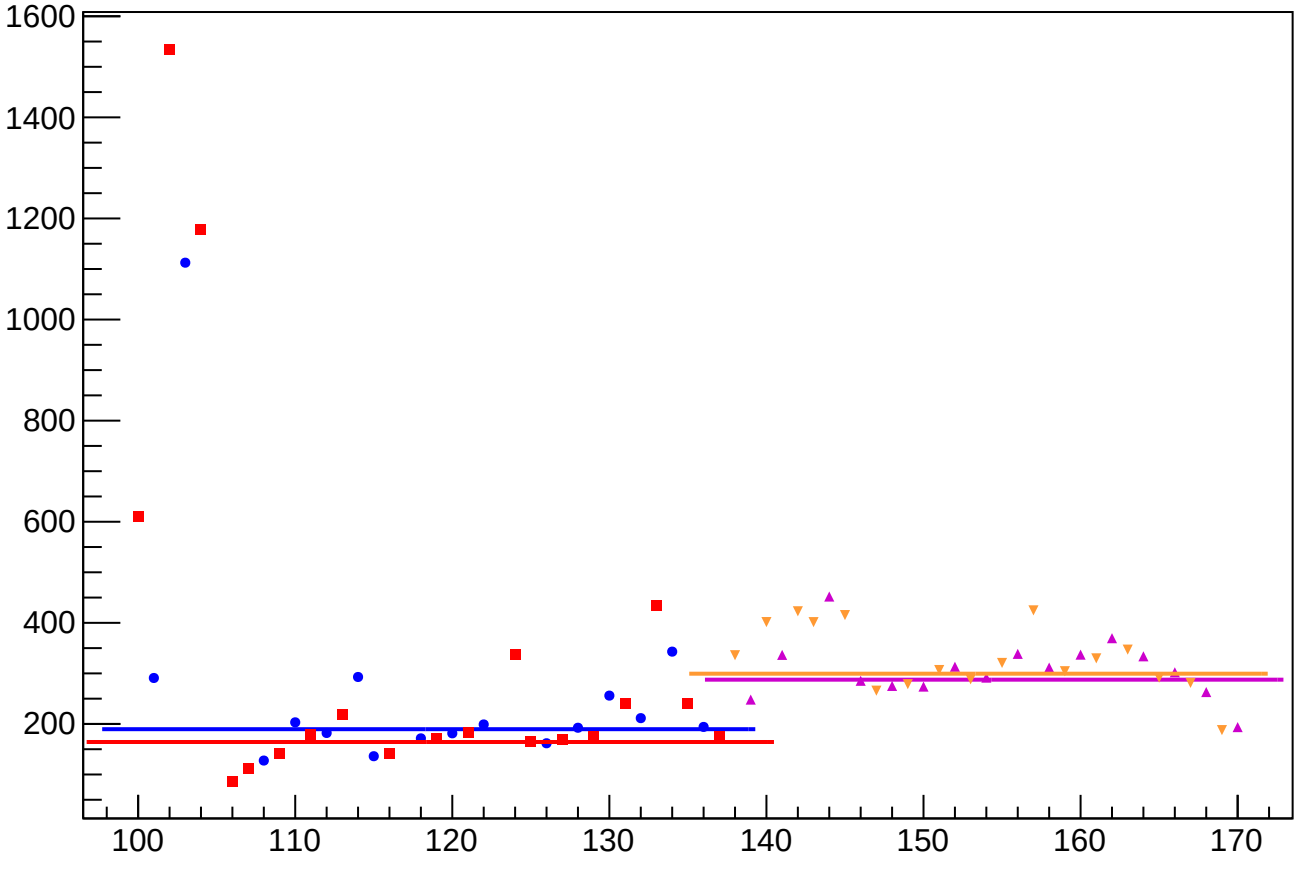
Right Out: -0.072+/-0.070 $\chi^2$/NDF: 28.7/18

Left In: 0.066+/-0.082 $\chi^2$/NDF:24.2/15

+ sign -0.032+/-0.057 $\chi^2$/NDF: 34.8/32

All: -0.023+/-0.039 $\chi^2$/NDF: 89.4/67

- sign -0.014+/-0.053 $\chi^2$/NDF: 54.5/34




Right In: 189.628+/-0.054 $\chi^2$/NDF: 1465464.1/15

Left Out: 299.405+/-0.060 $\chi^2$/NDF:1213179.8/16

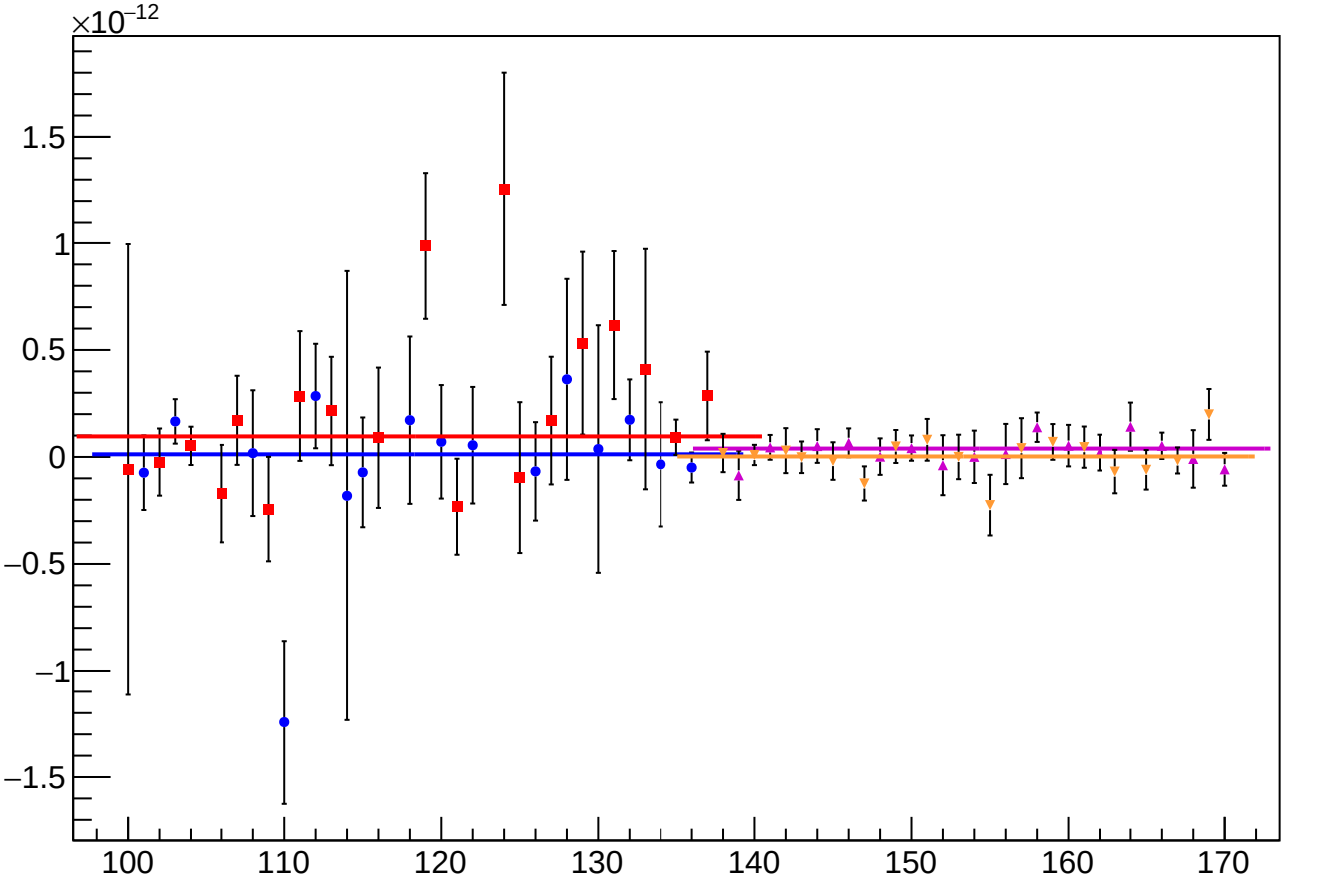
Right Out: 164.286+/-0.050 $\chi^2$/NDF: 2643465.6/18

Left In: 287.577+/-0.058 $\chi^2$/NDF:894720.2/15

+ sign 239.070+/-0.040 $\chi^2$/NDF: 4520588.5/32

All: 226.951+/-0.027 $\chi^2$/NDF: 10848075.3/67

- sign 216.357+/-0.038 $\chi^2$/NDF: 6157529.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 17.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11.0/16

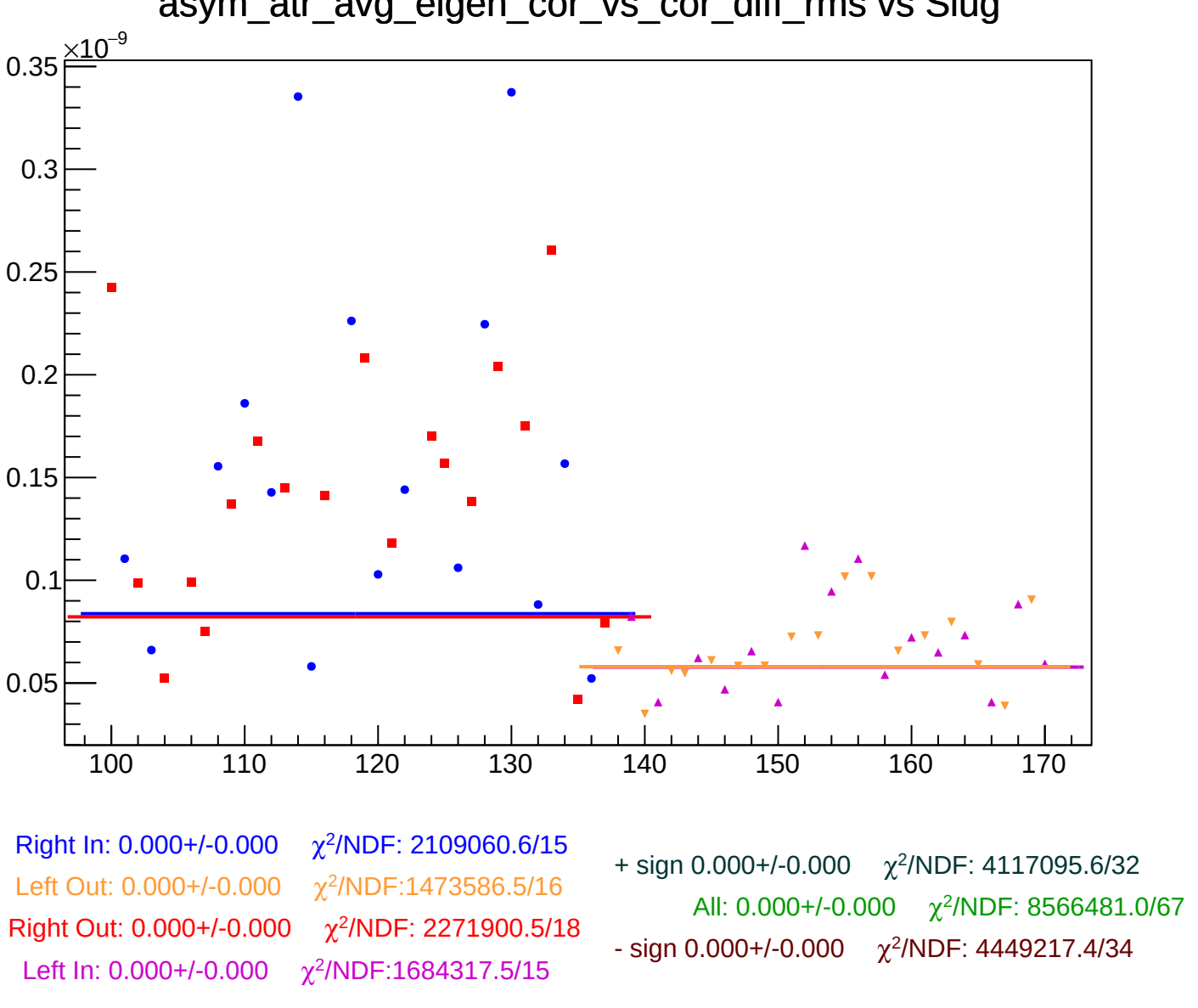
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 23.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:6.8/15

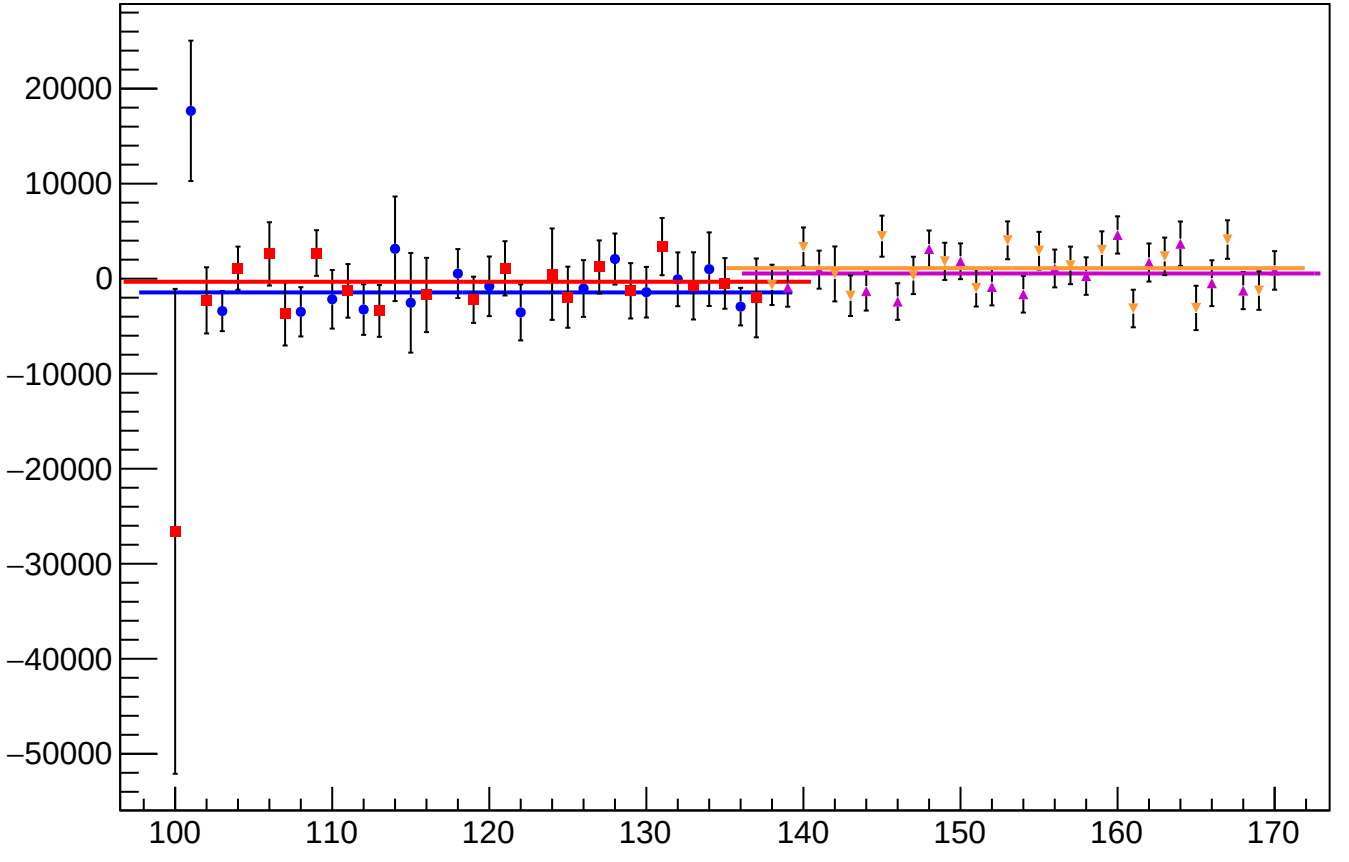
+ sign 0.000+/-0.000 $\chi^2$/NDF: 28.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 62.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 31.3/34


asym_atr_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10⁻⁹
0.35
0.3
0.25
0.2
0.15
0.1
0.05
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2109060.6/15
Left Out: 0.000+/-0.000 χ²/NDF:1473586.5/16
Right Out: 0.000+/-0.000 χ²/NDF: 2271900.5/18
Left In: 0.000+/-0.000 χ²/NDF:1684317.5/15
+ sign 0.000+/-0.000 χ²/NDF: 4117095.6/32
All: 0.000+/-0.000 χ²/NDF: 8566481.0/67
- sign 0.000+/-0.000 χ²/NDF: 4449217.4/34

# reg_asym_atr_dd_mean vs Slug




Right In: -1446.547+/-723.140 $\chi^2$/NDF: 13.5/15

Left Out: 1107.853+/-499.936 $\chi^2$/NDF:23.4/16

Right Out: -325.908+/-702.648 $\chi^2$/NDF: 9.9/18

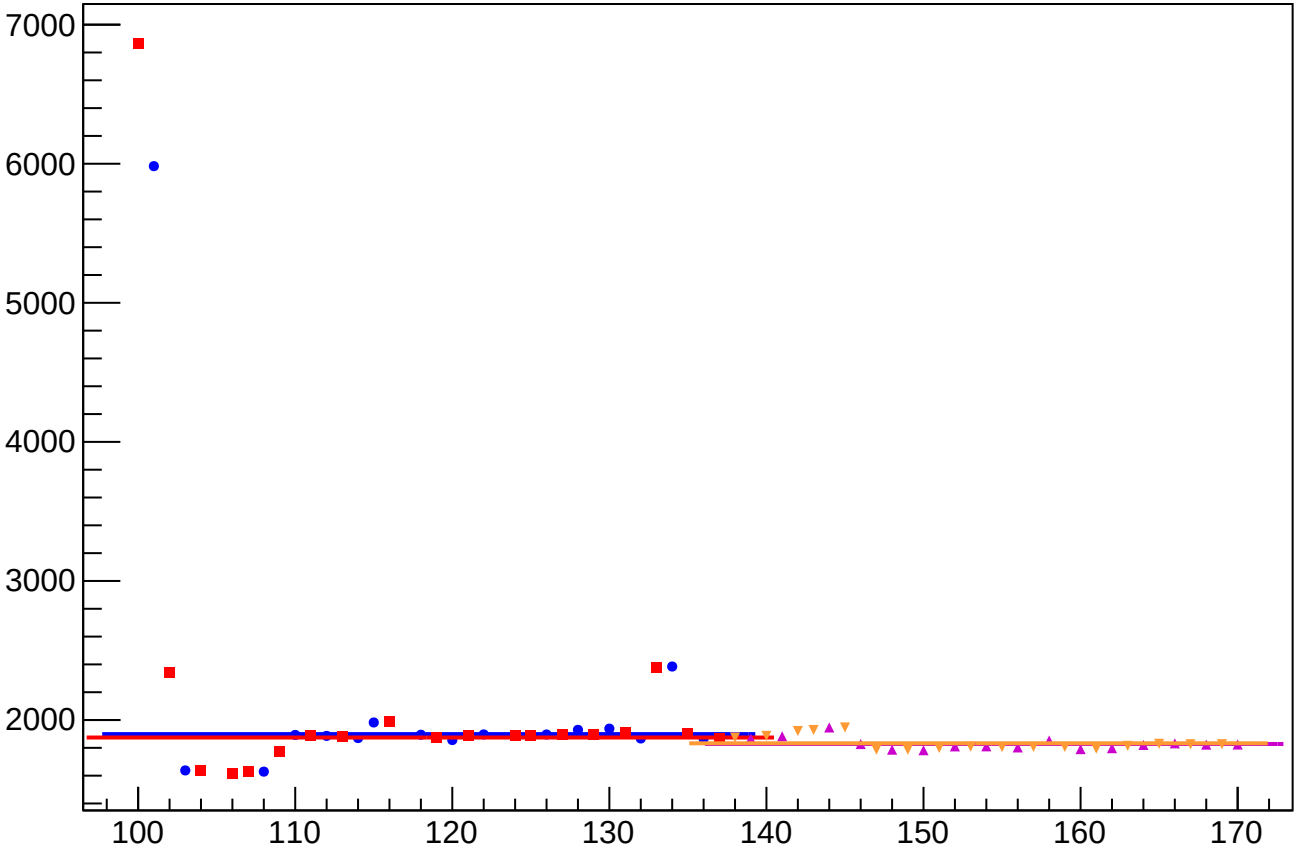
Left In: 546.605+/-502.766 $\chi^2$/NDF:15.3/15

+ sign 281.791+/-411.230 $\chi^2$/NDF: 45.4/32

All: 266.386+/-289.948 $\chi^2$/NDF: 71.6/67

- sign 251.157+/-408.877 $\chi^2$/NDF: 26.3/34

# reg_asym_atr_dd_rms vs Slug




Right In: 1898.826+/-0.511 $\chi^2$/NDF: 697514.2/15

Left Out: 1832.678+/-0.354 $\chi^2$/NDF:18657.3/16

Right Out: 1874.251+/-0.495 $\chi^2$/NDF: 207657.7/18

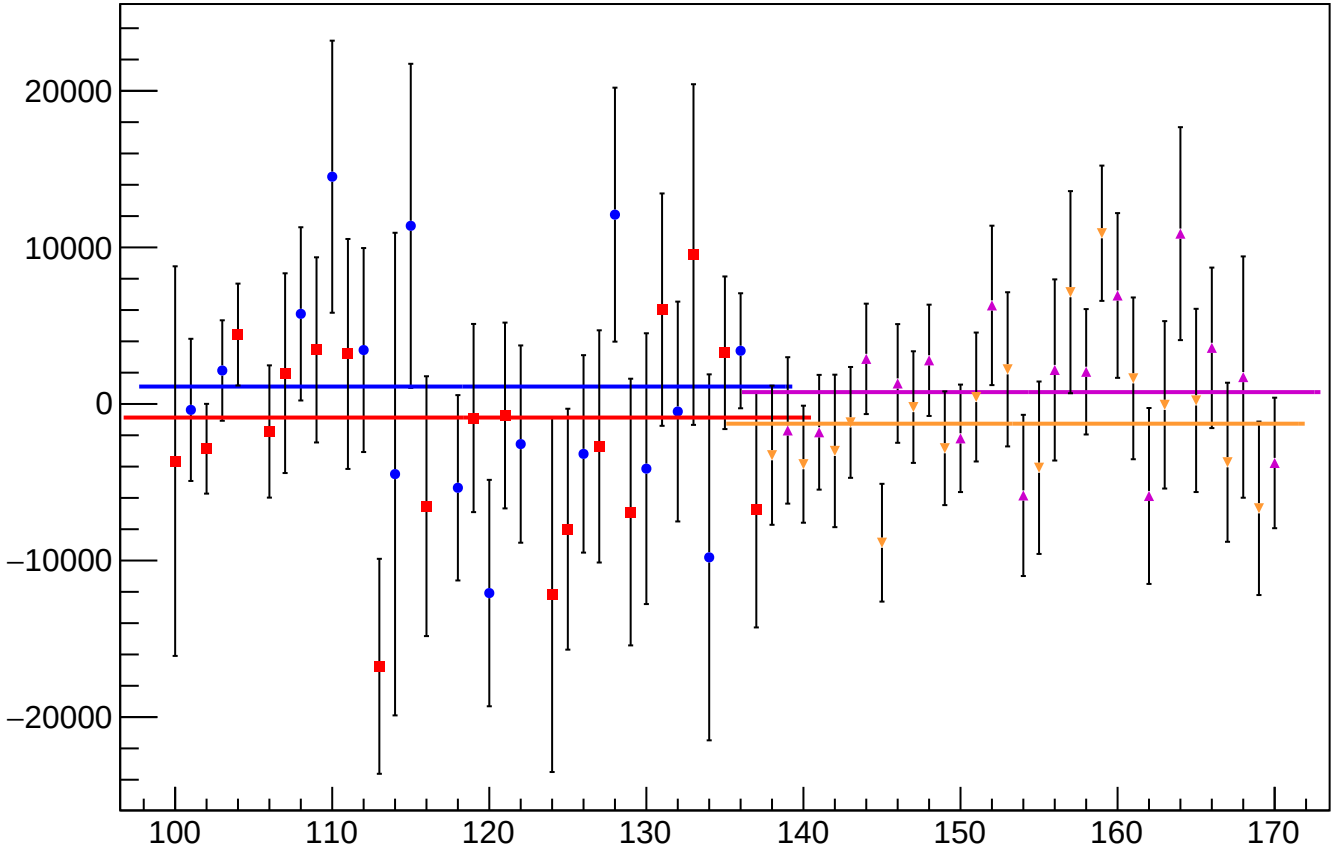
Left In: 1827.717+/-0.356 $\chi^2$/NDF:13160.1/15

\+ sign 1854.070+/-0.291 $\chi^2$/NDF: 727494.3/32

All: 1848.771+/-0.205 $\chi^2$/NDF: 954799.3/67

\- sign 1843.545+/-0.289 $\chi^2$/NDF: 226645.5/34

# asym_atr_dd_reg_correction_mean vs Slug




Right In: 1112.704+/-1479.265 $\chi^2$/NDF: 13.4/15

Left Out: -1259.253+/-1082.698 $\chi^2$/NDF:17.3/16

Right Out: -866.976+/-1307.223 $\chi^2$/NDF: 15.6/18

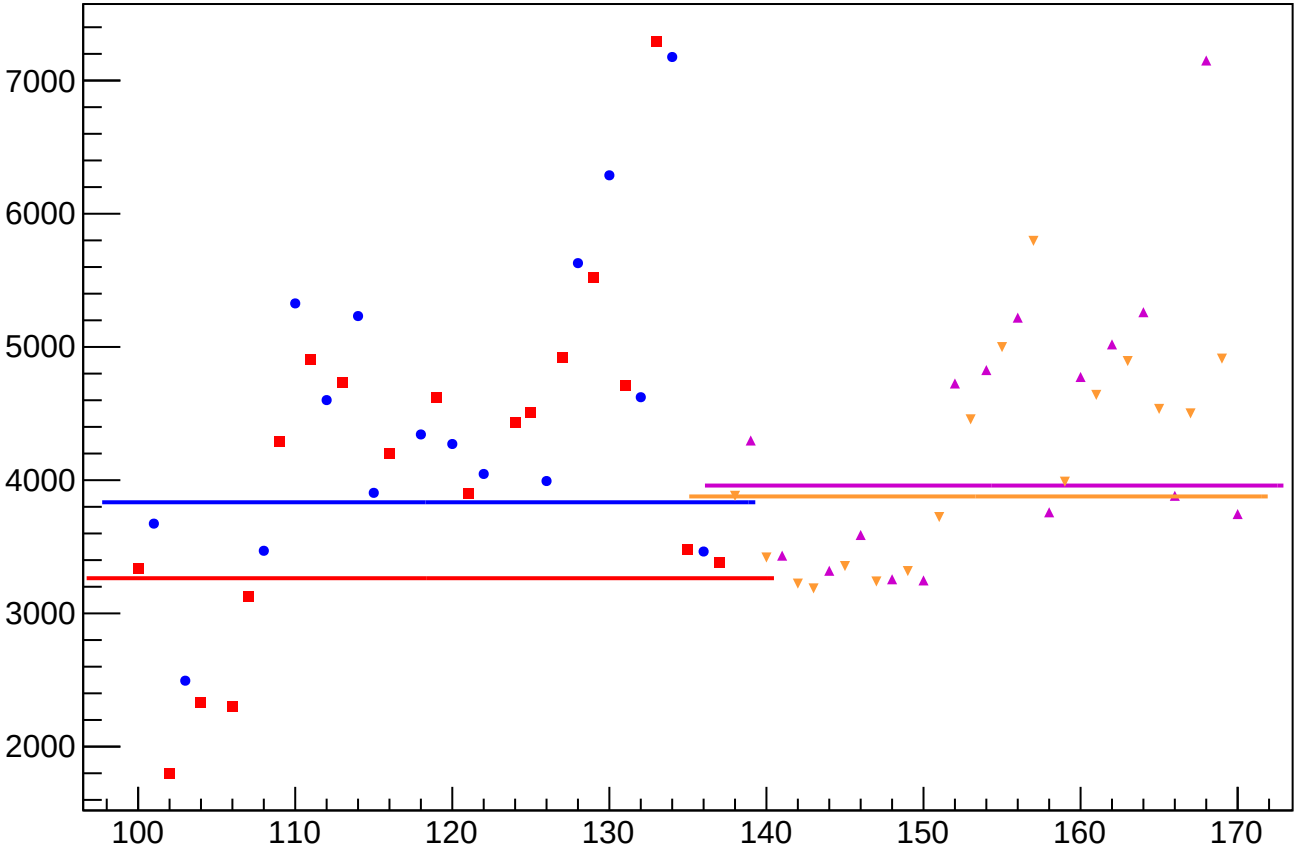
Left In: 757.298+/-1114.788 $\chi^2$/NDF:11.7/15

+ sign -431.839+/-873.683 $\chi^2$/NDF: 32.4/32

All: -171.751+/-608.589 $\chi^2$/NDF: 60.8/67

- sign 73.404+/-848.232 $\chi^2$/NDF: 28.2/34

# asym_atr_dd_reg_correction_rms vs Slug




Right In: 3834.164+/-1.046 $\chi^2$/NDF: 956775.6/15

Left Out: 3877.874+/-0.766 $\chi^2$/NDF:824656.7/16

Right Out: 3264.110+/-0.924 $\chi^2$/NDF: 1864241.4/18

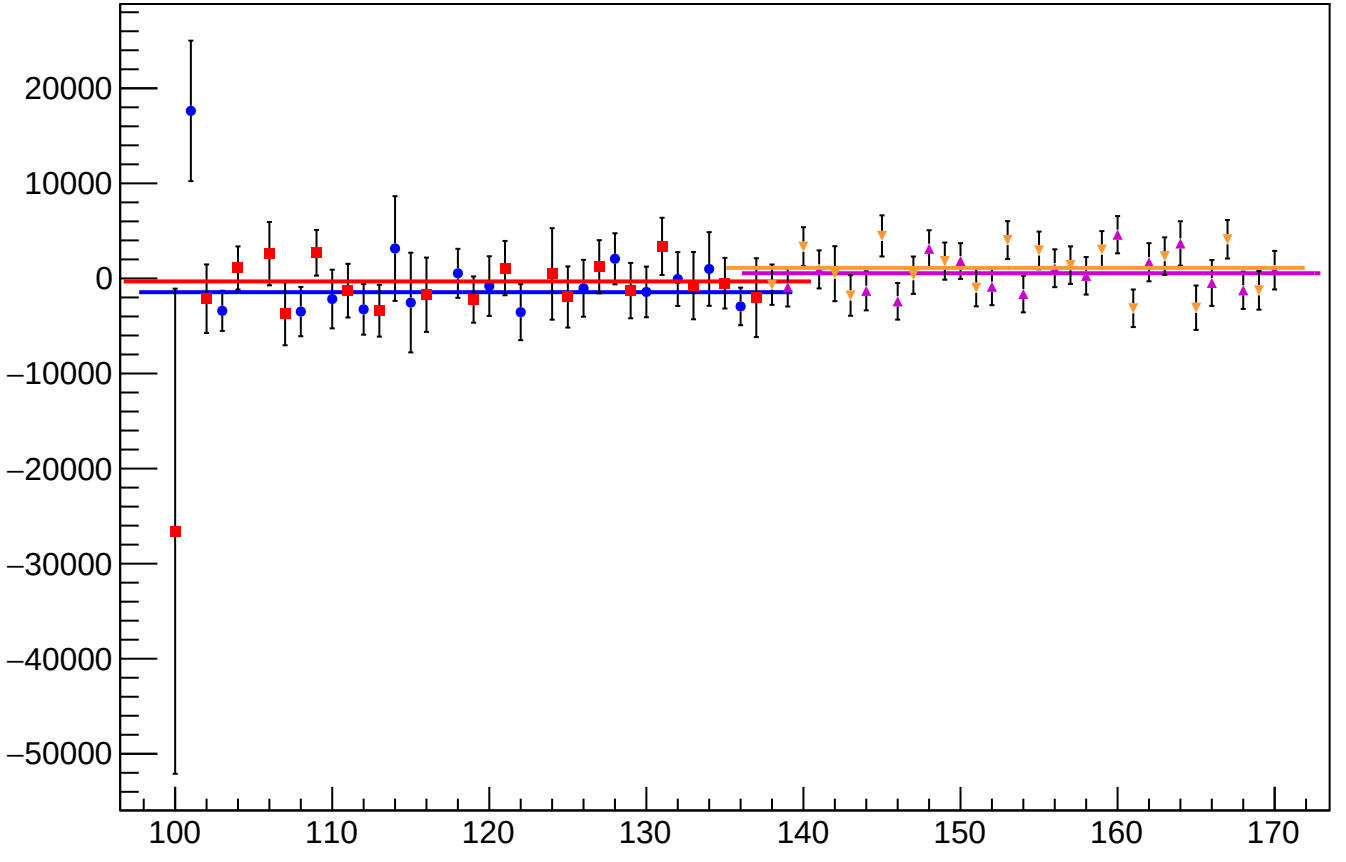
Left In: 3959.632+/-0.788 $\chi^2$/NDF:1043867.2/15

+ sign 3862.627+/-0.618 $\chi^2$/NDF: 1782569.4/32

All: 3761.812+/-0.430 $\chi^2$/NDF: 5070198.9/67

- sign 3666.785+/-0.600 $\chi^2$/NDF: 3235898.6/34

# cor_asym_atr_dd_mean vs Slug




Right In: -1446.933+/-723.140 $\chi^2$/NDF: 13.5/15

Left Out: 1107.976+/-499.936 $\chi^2$/NDF:23.4/16

Right Out: -315.462+/-703.596 $\chi^2$/NDF: 9.9/18

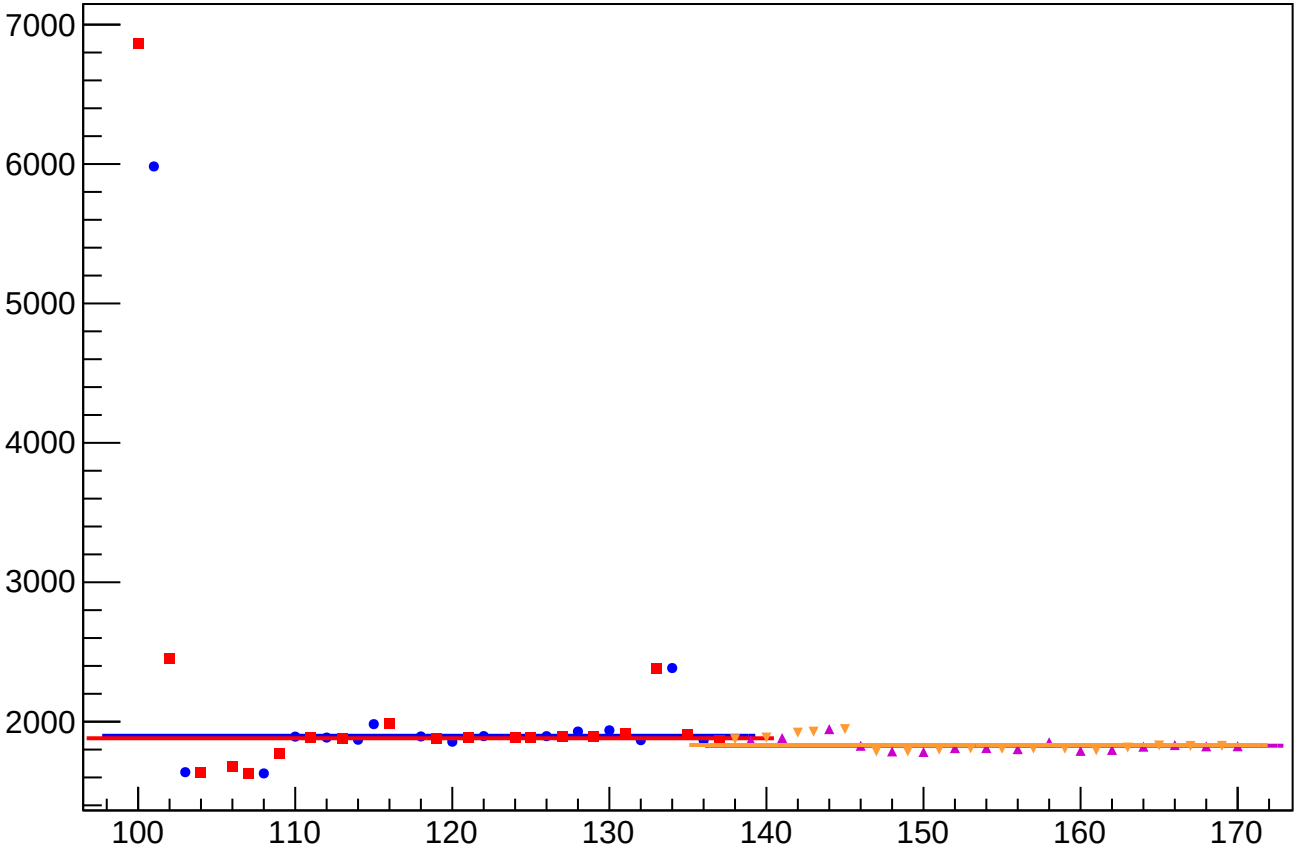
Left In: 546.539+/-502.766 $\chi^2$/NDF:15.3/15

+ sign 281.749+/-411.230 $\chi^2$/NDF: 45.3/32

All: 268.389+/-290.014 $\chi^2$/NDF: 71.5/67

- sign 255.170+/-409.063 $\chi^2$/NDF: 26.2/34

# cor_asym_atr_dd_rms vs Slug




Right In: 1898.826+/-0.511 $\chi^2$/NDF: 697514.4/15

Left Out: 1832.678+/-0.354 $\chi^2$/NDF:18657.3/16

Right Out: 1881.007+/-0.497 $\chi^2$/NDF: 216564.4/18

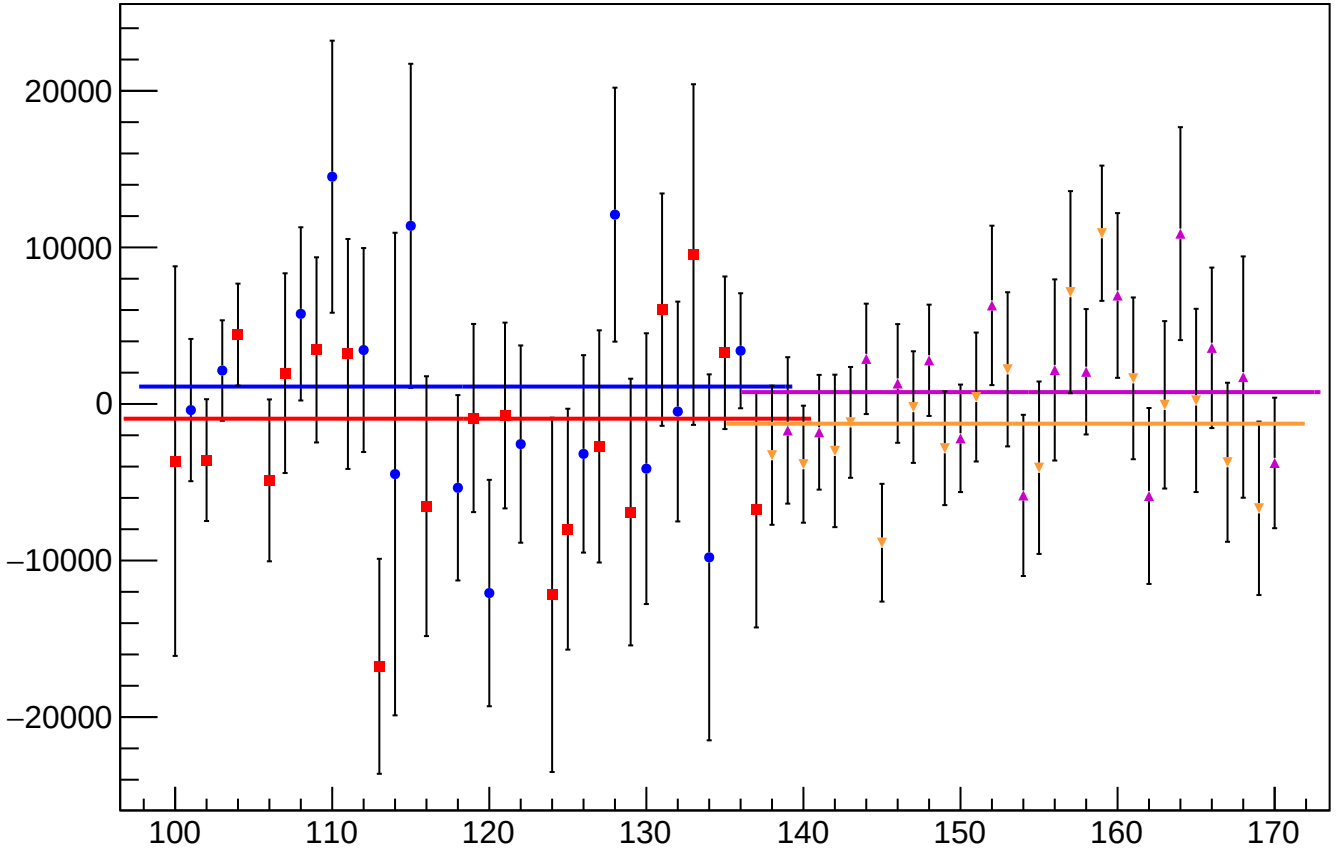
Left In: 1827.717+/-0.356 $\chi^2$/NDF:13160.1/15

+ sign 1854.070+/-0.291 $\chi^2$/NDF: 727494.4/32

All: 1849.894+/-0.205 $\chi^2$/NDF: 965239.3/67

- sign 1845.767+/-0.289 $\chi^2$/NDF: 237334.9/34

# asym_atr_dd_cor_correction_mean vs Slug




Right In: 1111.533+/-1479.438 $\chi^2$/NDF: 13.4/15

Left Out: -1259.206+/-1082.697 $\chi^2$/NDF:17.3/16

Right Out: -940.712+/-1398.993 $\chi^2$/NDF: 16.2/18

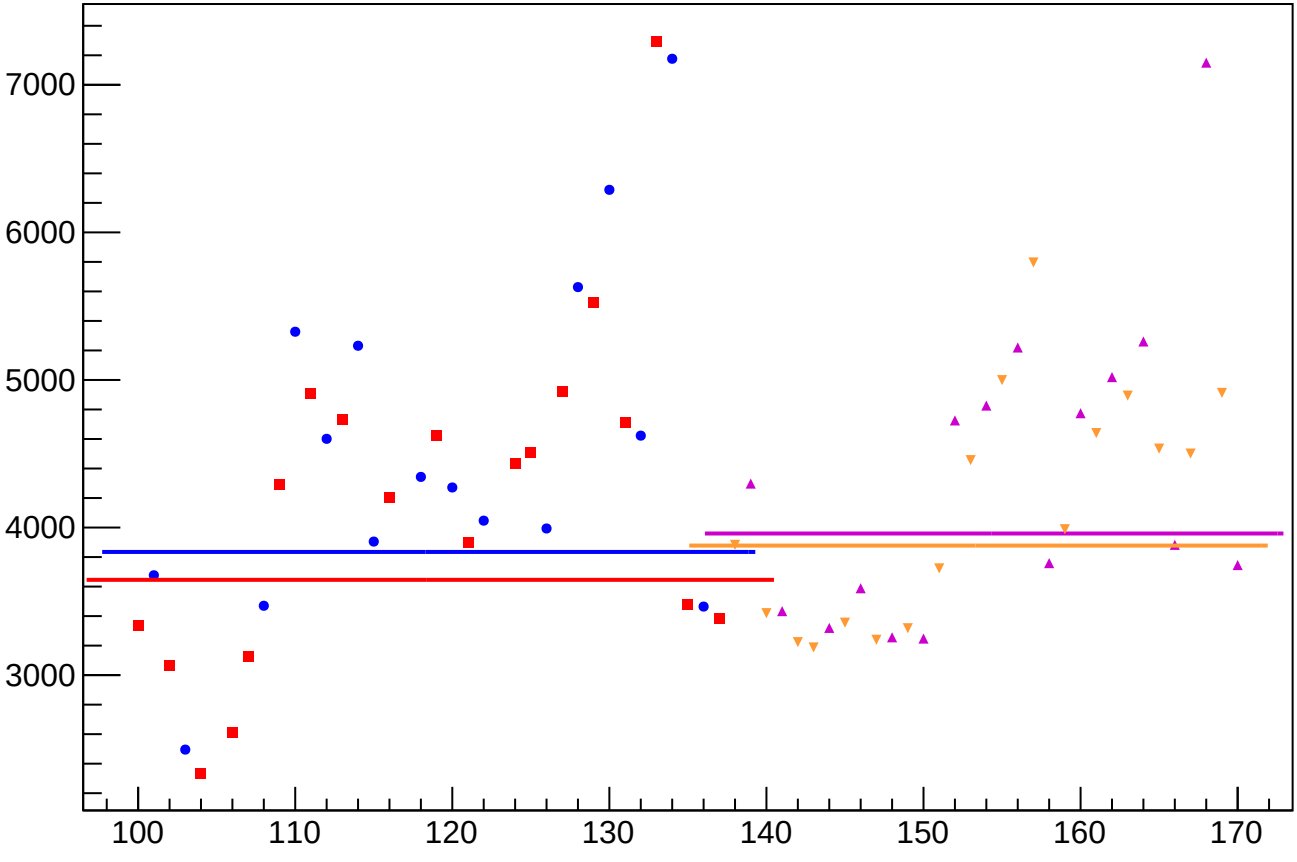
Left In: 757.351+/-1114.787 $\chi^2$/NDF:11.7/15

+ sign -432.344+/-873.718 $\chi^2$/NDF: 32.4/32

All: -166.662+/-617.147 $\chi^2$/NDF: 61.3/67

- sign 97.878+/-871.840 $\chi^2$/NDF: 28.8/34

# asym_atr_dd_cor_correction_rms vs Slug




Right In: 3834.690+/-1.046 $\chi^2$/NDF: 956312.2/15

Left Out: 3877.871+/-0.766 $\chi^2$/NDF:824652.1/16

Right Out: 3645.689+/-0.989 $\chi^2$/NDF: 1124981.4/18

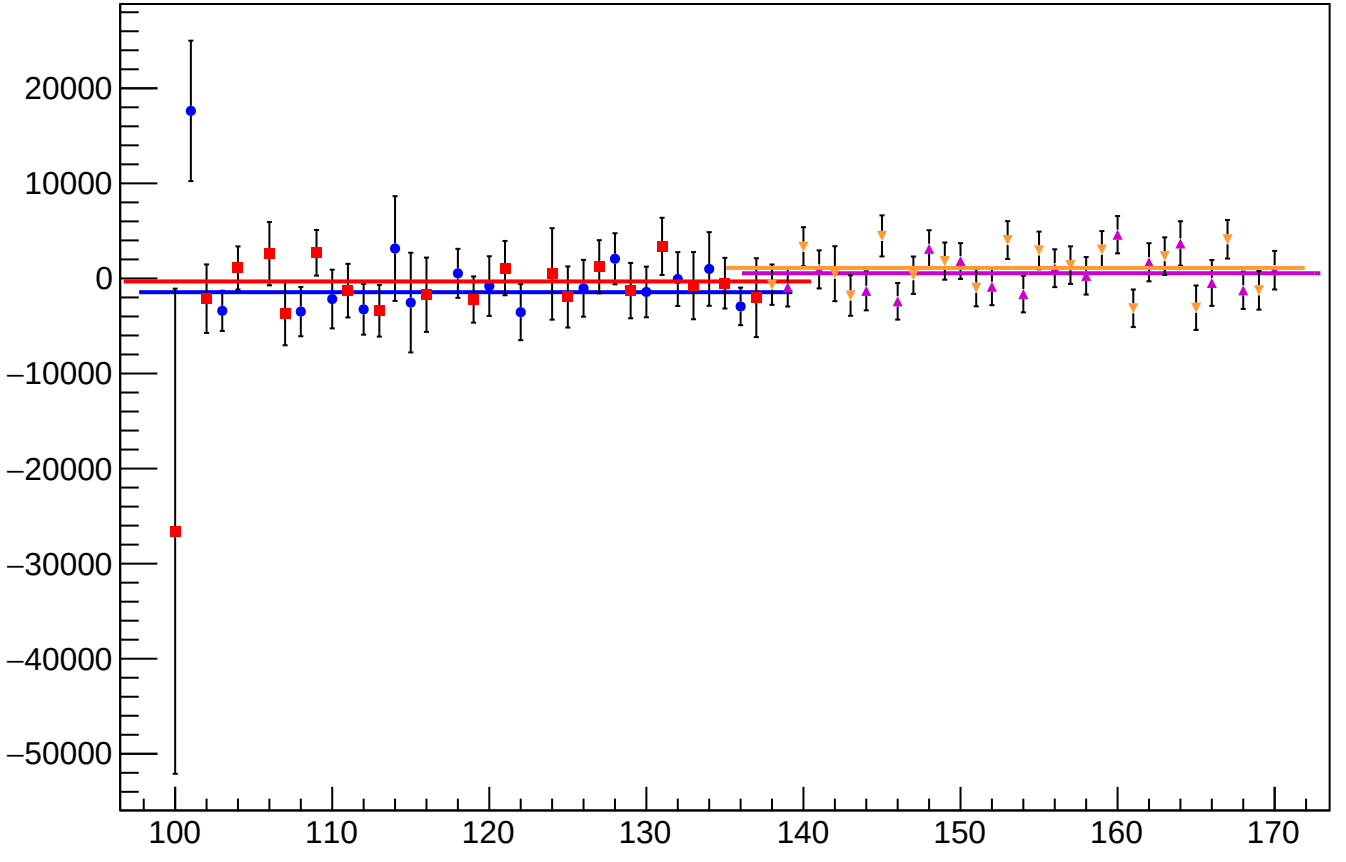
Left In: 3959.625+/-0.788 $\chi^2$/NDF:1043881.7/15

+ sign 3862.810+/-0.618 $\chi^2$/NDF: 1782073.9/32

All: 3850.229+/-0.436 $\chi^2$/NDF: 4013363.2/67

- sign 3837.702+/-0.616 $\chi^2$/NDF: 2230461.7/34

# eigen_cor_asym_atr_dd_mean vs Slug




Right In: -1446.933+/-723.140 $\chi^2$/NDF: 13.5/15

Left Out: 1107.976+/-499.936 $\chi^2$/NDF:23.4/16

Right Out: -315.462+/-703.596 $\chi^2$/NDF: 9.9/18

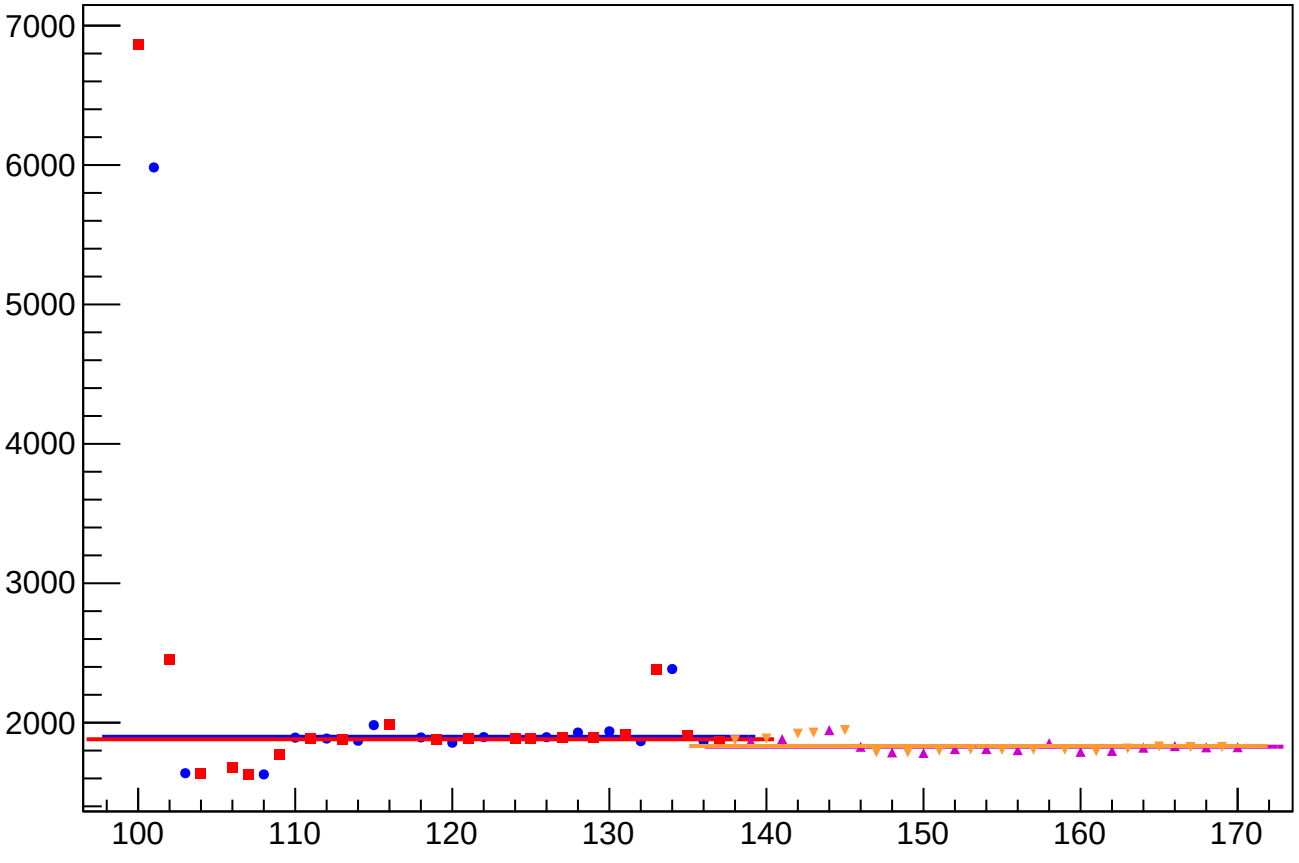
Left In: 546.539+/-502.766 $\chi^2$/NDF:15.3/15

+ sign 281.749+/-411.230 $\chi^2$/NDF: 45.3/32

All: 268.389+/-290.014 $\chi^2$/NDF: 71.5/67

- sign 255.170+/-409.063 $\chi^2$/NDF: 26.2/34

# eigen_cor_asym_atr_dd_rms vs Slug




Right In: 1898.826+/-0.511 $\chi^2$/NDF: 697514.4/15

Left Out: 1832.678+/-0.354 $\chi^2$/NDF:18657.3/16

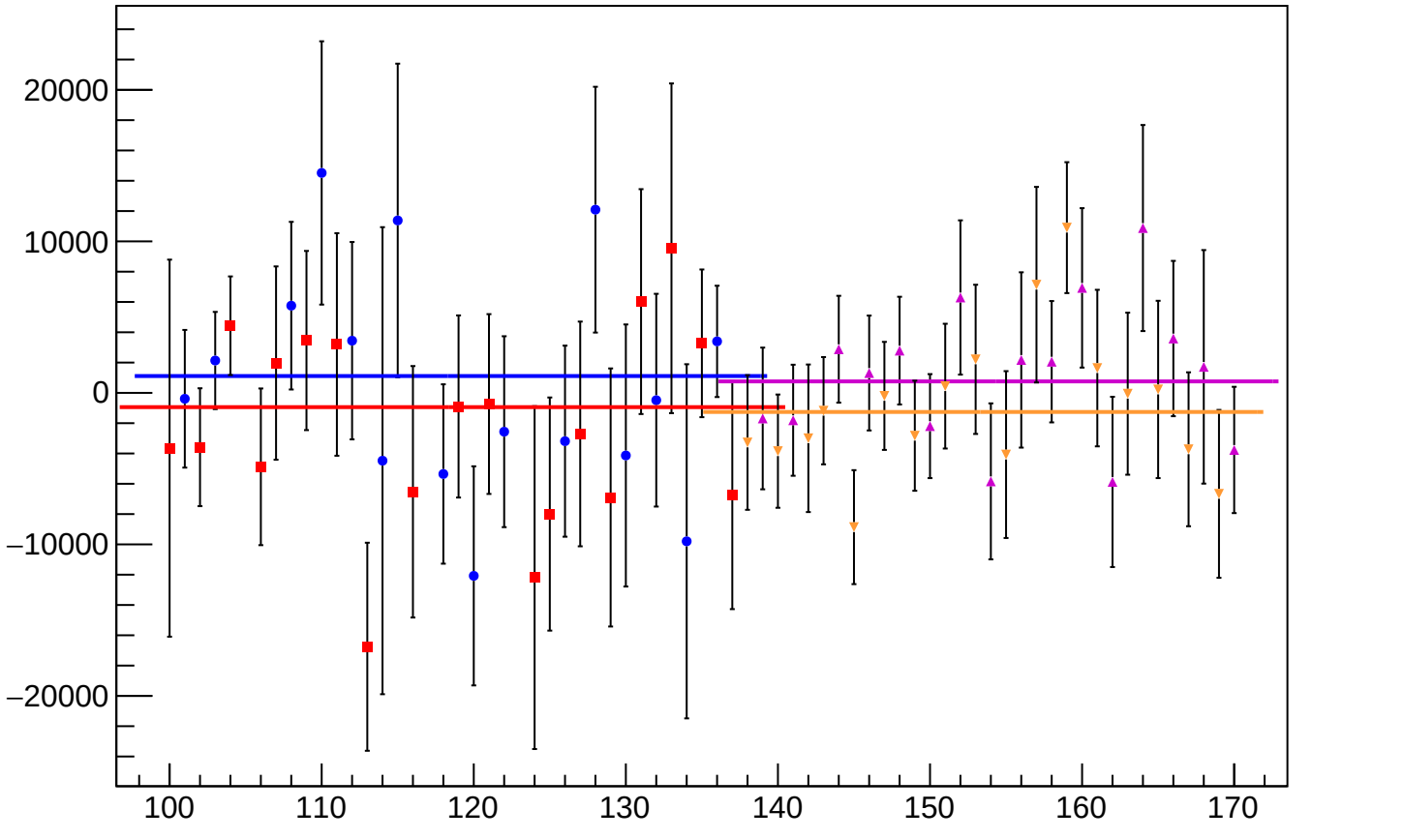
Right Out: 1881.007+/-0.497 $\chi^2$/NDF: 216564.4/18

Left In: 1827.717+/-0.356 $\chi^2$/NDF:13160.1/15

+ sign 1854.070+/-0.291 $\chi^2$/NDF: 727494.4/32

All: 1849.894+/-0.205 $\chi^2$/NDF: 965239.3/67

- sign 1845.767+/-0.289 $\chi^2$/NDF: 237334.9/34




Right In: 1111.533+/-1479.438 $\chi^2$/NDF: 13.4/15

Left Out: -1259.206+/-1082.697 $\chi^2$/NDF:17.3/16

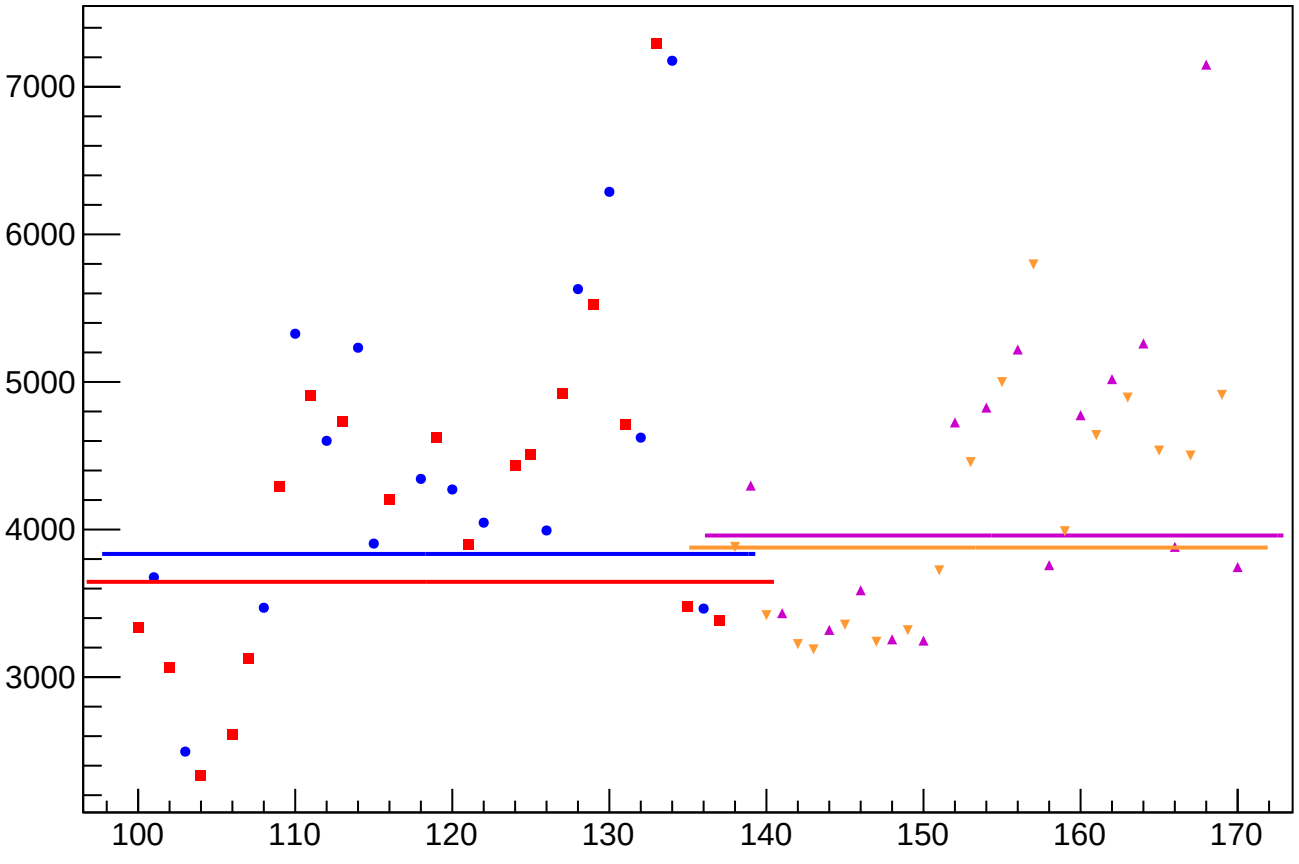
Right Out: -940.712+/-1398.993 $\chi^2$/NDF: 16.2/18

Left In: 757.351+/-1114.787 $\chi^2$/NDF:11.7/15

+ sign -432.344+/-873.718 $\chi^2$/NDF: 32.4/32

All: -166.662+/-617.147 $\chi^2$/NDF: 61.3/67

- sign 97.878+/-871.840 $\chi^2$/NDF: 28.8/34




Right In: 3834.690+/-1.046 $\chi^2$/NDF: 956312.2/15

Left Out: 3877.871+/-0.766 $\chi^2$/NDF:824652.1/16

Right Out: 3645.689+/-0.989 $\chi^2$/NDF: 1124981.4/18

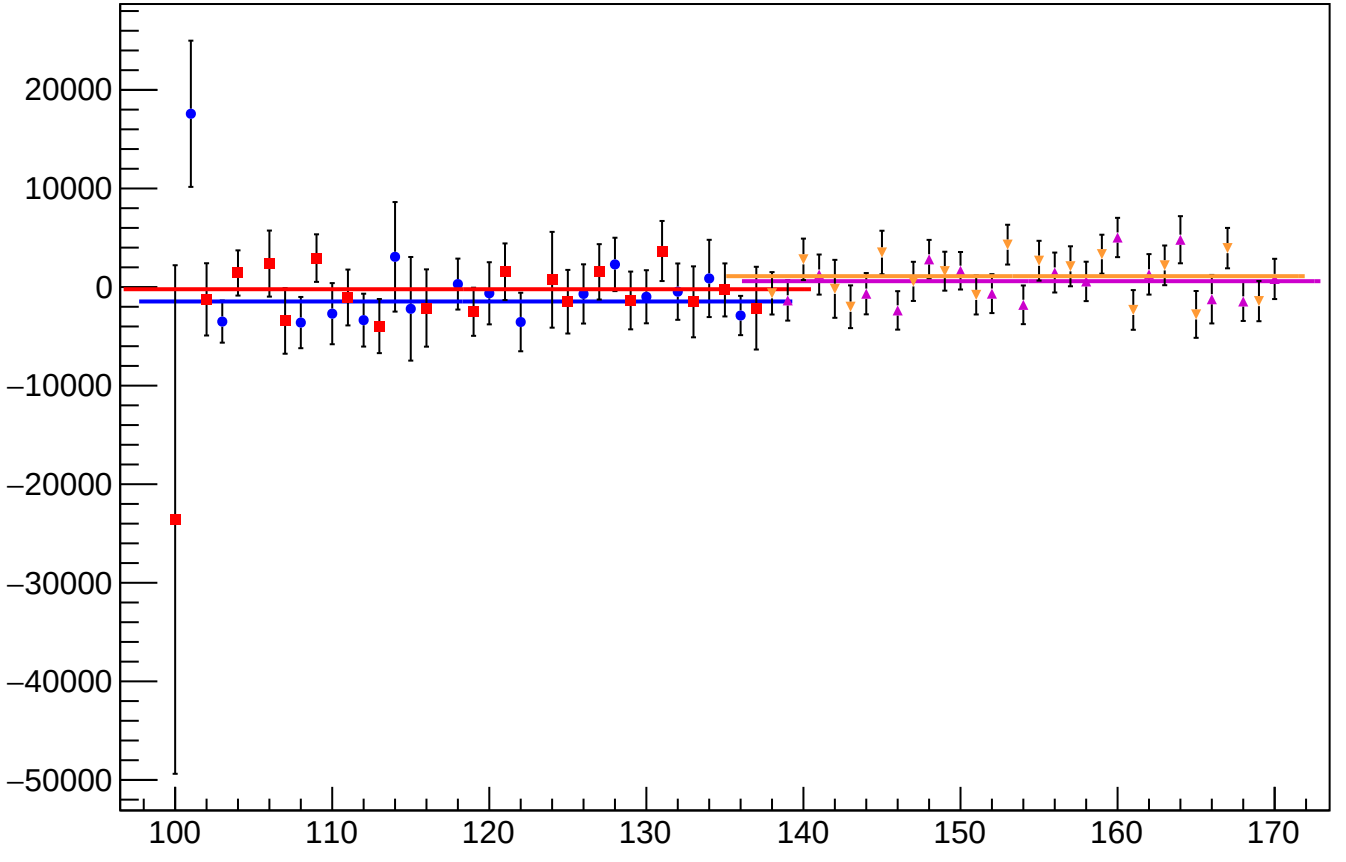
Left In: 3959.625+/-0.788 $\chi^2$/NDF:1043881.7/15

+ sign 3862.810+/-0.618 $\chi^2$/NDF: 1782073.9/32

All: 3850.229+/-0.436 $\chi^2$/NDF: 4013363.2/67

- sign 3837.702+/-0.616 $\chi^2$/NDF: 2230461.7/34

# dit_asym_atr_dd_mean vs Slug




Right In: -1462.640+/-728.274 $\chi^2$/NDF: 13.6/15

Left Out: 1104.201+/-507.786 $\chi^2$/NDF:19.7/16

Right Out: -219.726+/-708.852 $\chi^2$/NDF: 10.8/18

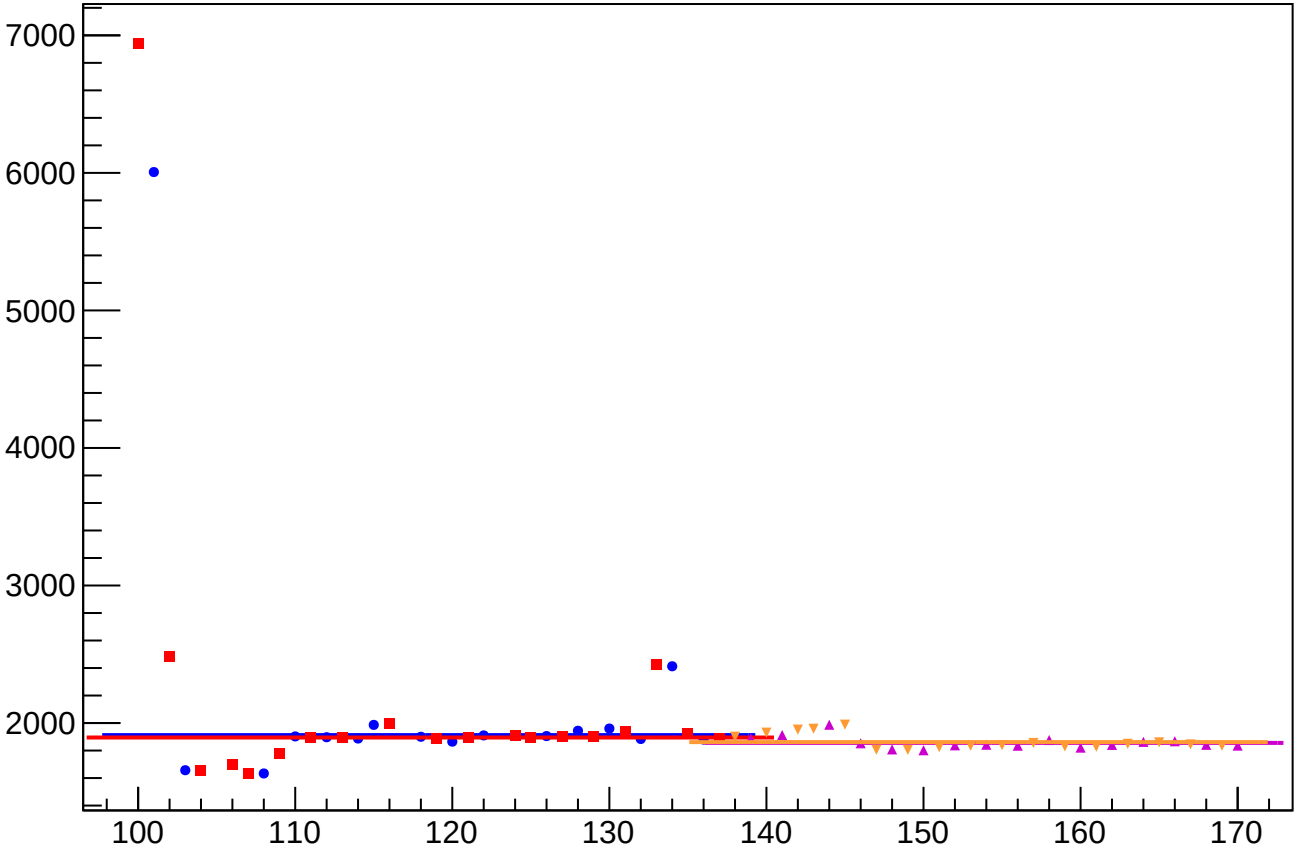
Left In: 595.893+/-510.441 $\chi^2$/NDF:17.1/15

+ sign 264.534+/-416.533 $\chi^2$/NDF: 41.7/32

All: 291.105+/-293.713 $\chi^2$/NDF: 70.5/67

- sign 317.382+/-414.222 $\chi^2$/NDF: 28.8/34

# dit_asym_atr_dd_rms vs Slug




Right In: 1912.378+/-0.515 $\chi^2$/NDF: 696220.3/15

Left Out: 1861.316+/-0.359 $\chi^2$/NDF:21441.4/16

Right Out: 1894.765+/-0.501 $\chi^2$/NDF: 219781.5/18

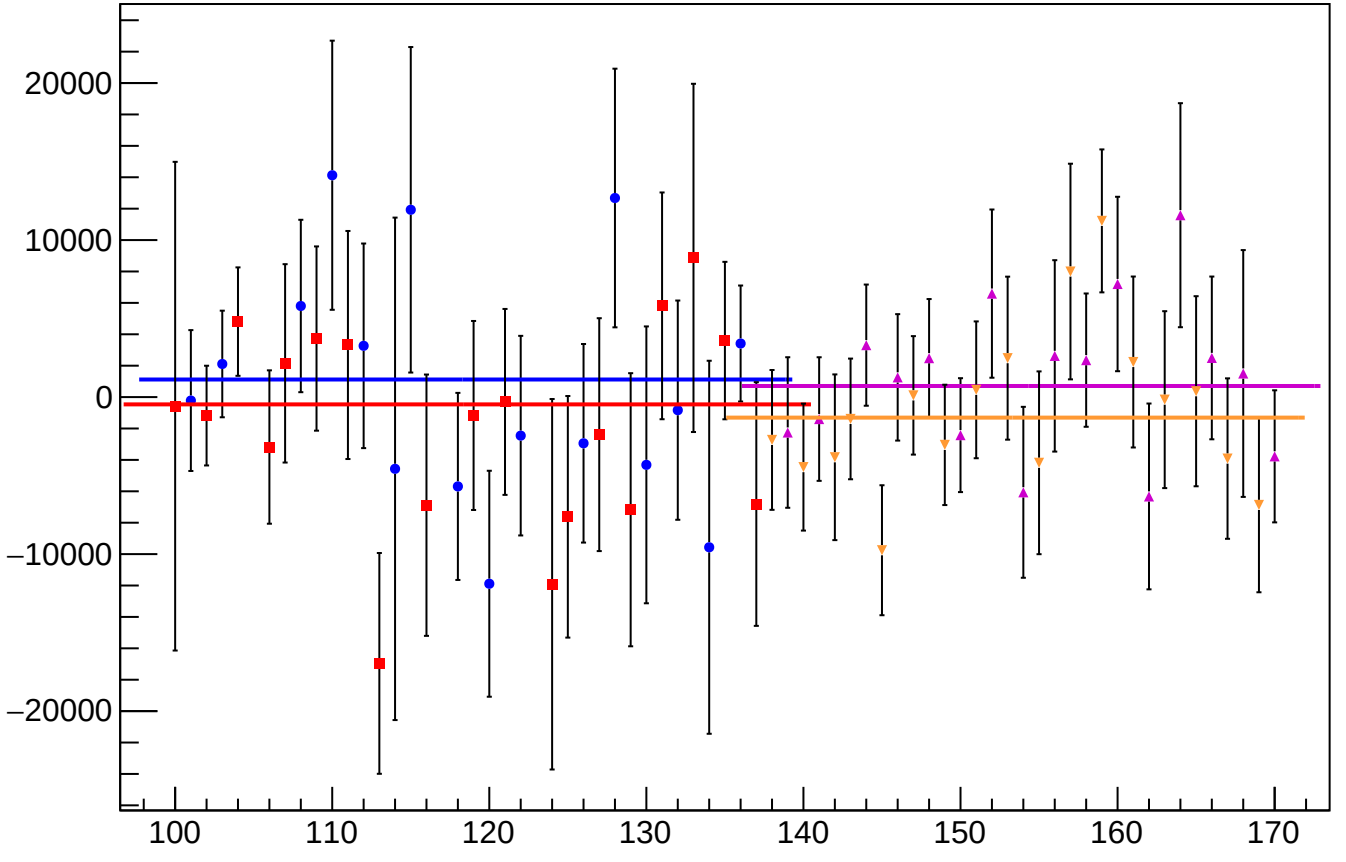
Left In: 1855.528+/-0.361 $\chi^2$/NDF:14516.3/15

+ sign 1878.019+/-0.295 $\chi^2$/NDF: 724277.4/32

All: 1873.455+/-0.208 $\chi^2$/NDF: 963093.7/67

- sign 1868.945+/-0.293 $\chi^2$/NDF: 238338.8/34

# asym_atr_dd_dit_correction_mean vs Slug




Right In: 1120.173+/-1497.671 $\chi^2$/NDF: 13.5/15

Left Out: -1307.323+/-1144.106 $\chi^2$/NDF:17.6/16

Right Out: -464.368+/-1370.818 $\chi^2$/NDF: 15.0/18

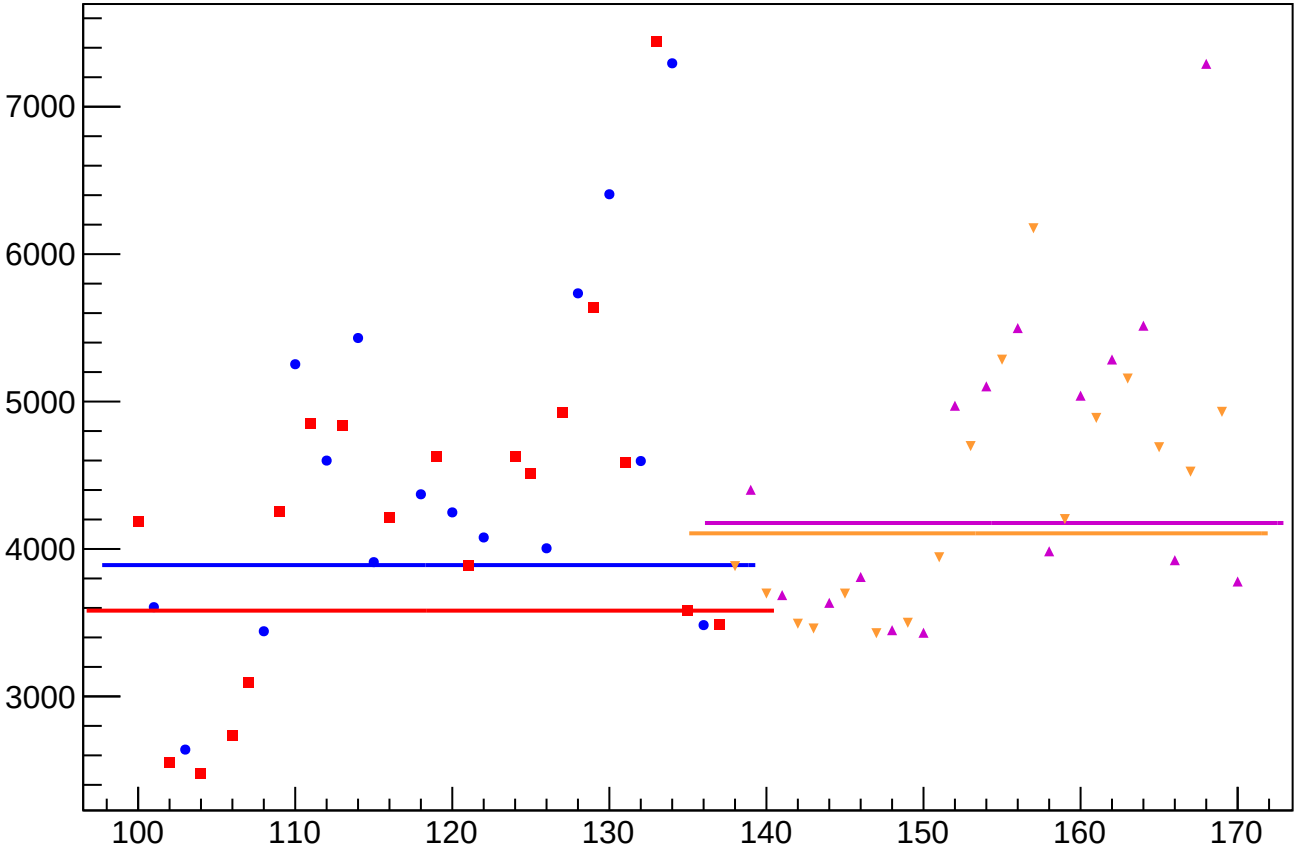
Left In: 706.898+/-1174.371 $\chi^2$/NDF:11.5/15

+ sign -412.744+/-909.172 $\chi^2$/NDF: 32.7/32

All: -94.805+/-636.668 $\chi^2$/NDF: 59.9/67

- sign 211.132+/-891.847 $\chi^2$/NDF: 26.9/34

# asym_atr_dd_dit_correction_rms vs Slug




Right In: 3890.708+/-1.059 $\chi^2$/NDF: 878418.2/15

Left Out: 4106.165+/-0.809 $\chi^2$/NDF:722978.3/16

Right Out: 3581.780+/-0.969 $\chi^2$/NDF: 1221855.2/18

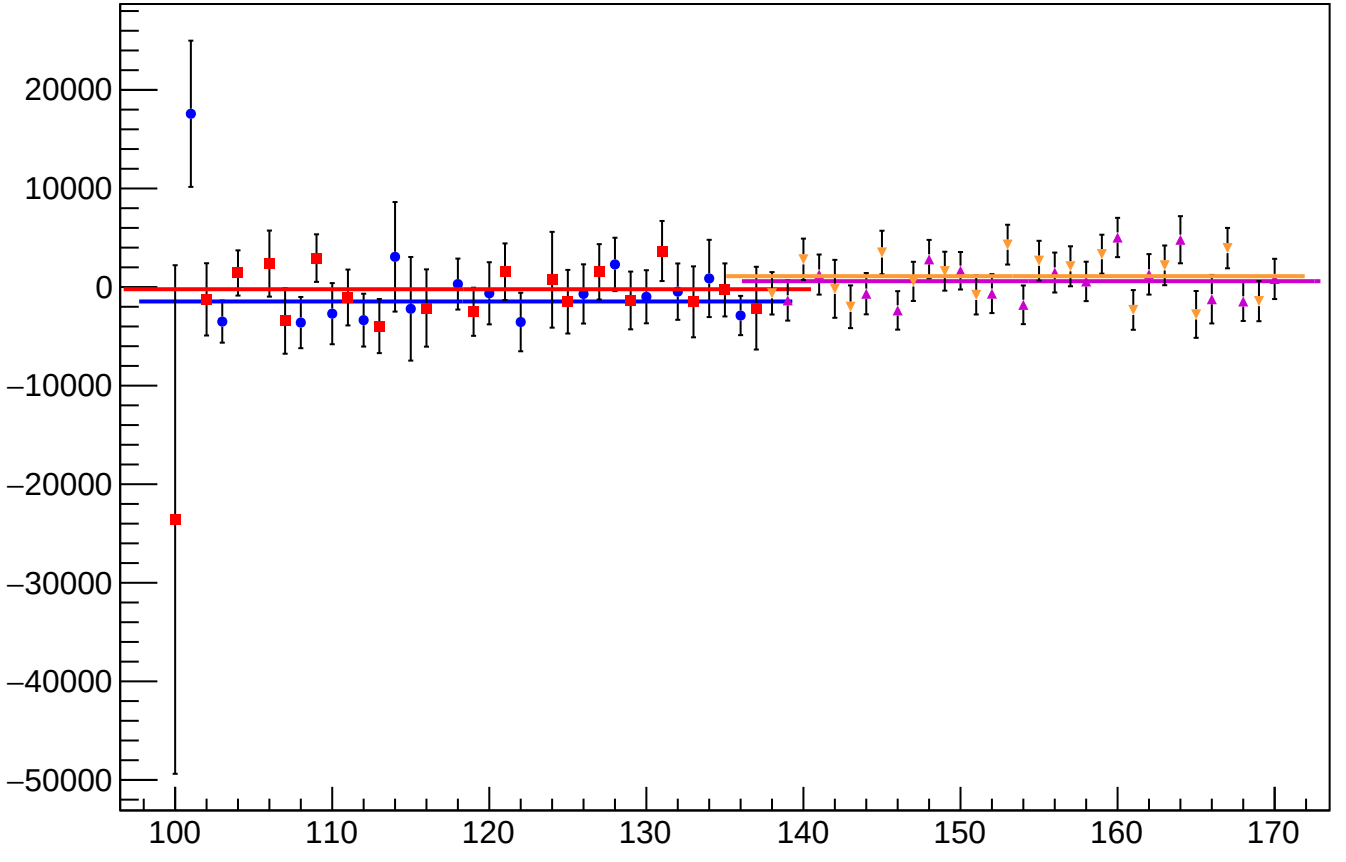
Left In: 4176.274+/-0.830 $\chi^2$/NDF:976034.6/15

+ sign 4026.765+/-0.643 $\chi^2$/NDF: 1627535.0/32

All: 3974.721+/-0.450 $\chi^2$/NDF: 4055222.5/67

- sign 3924.641+/-0.631 $\chi^2$/NDF: 2414827.5/34

# eigen_dit_asym_atr_dd_mean vs Slug




Right In: -1462.646+/-728.274 $\chi^2$/NDF: 13.6/15

Left Out: 1104.209+/-507.786 $\chi^2$/NDF:19.7/16

Right Out: -219.720+/-708.852 $\chi^2$/NDF: 10.8/18

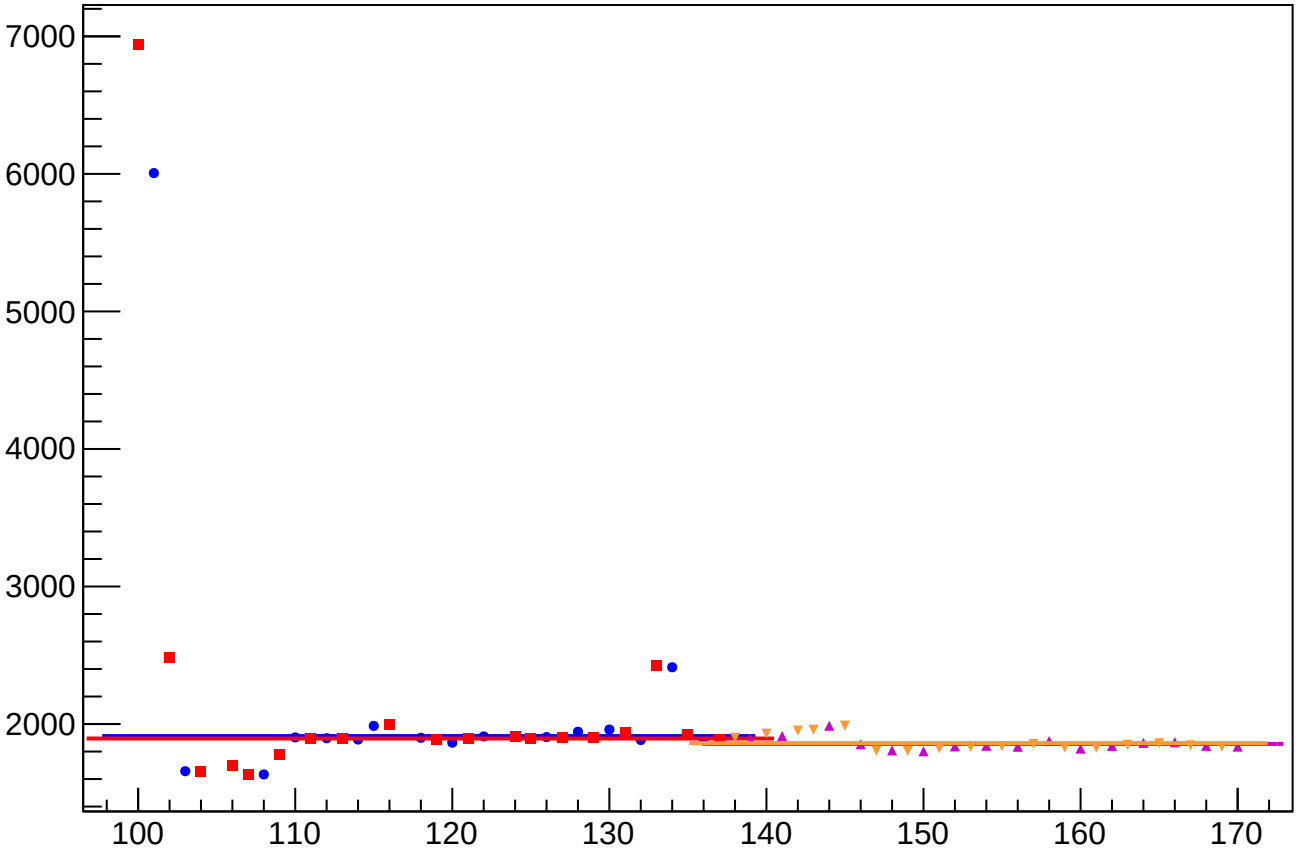
Left In: 595.896+/-510.441 $\chi^2$/NDF:17.1/15

+ sign 264.537+/-416.533 $\chi^2$/NDF: 41.7/32

All: 291.108+/-293.713 $\chi^2$/NDF: 70.5/67

- sign 317.386+/-414.222 $\chi^2$/NDF: 28.8/34

# eigen_dit_asym_atr_dd_rms vs Slug




Right In: 1912.378+/-0.515 $\chi^2$/NDF: 696220.1/15

Left Out: 1861.317+/-0.359 $\chi^2$/NDF:21441.4/16

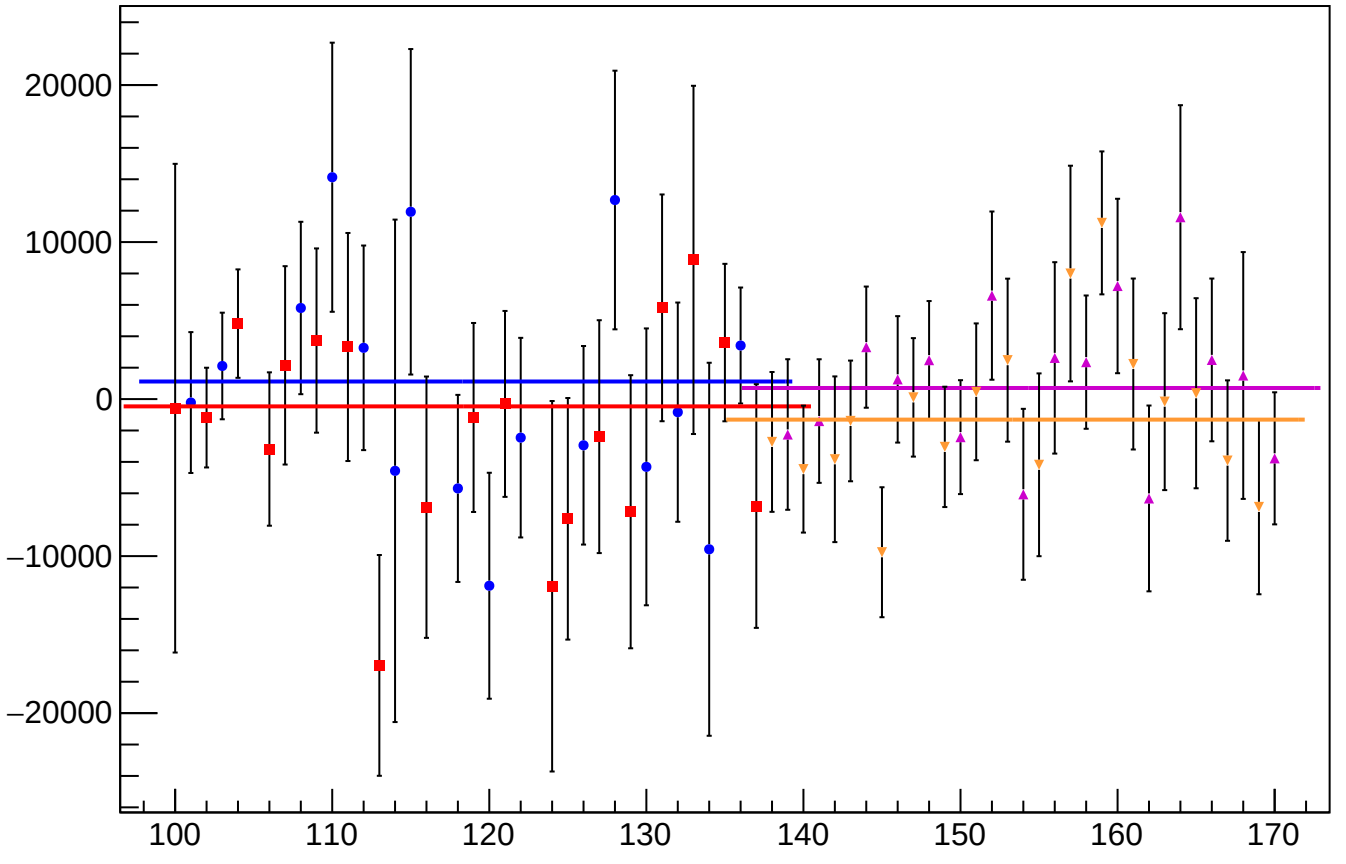
Right Out: 1894.765+/-0.501 $\chi^2$/NDF: 219781.5/18

Left In: 1855.529+/-0.361 $\chi^2$/NDF:14516.2/15

+ sign 1878.020+/-0.295 $\chi^2$/NDF: 724277.1/32

All: 1873.456+/-0.208 $\chi^2$/NDF: 963093.0/67

- sign 1868.946+/-0.293 $\chi^2$/NDF: 238338.6/34




Right In: 1120.159+/-1497.669 $\chi^2$/NDF: 13.5/15

Left Out: -1307.321+/-1144.108 $\chi^2$/NDF:17.6/16

Right Out: -464.367+/-1370.817 $\chi^2$/NDF: 15.0/18

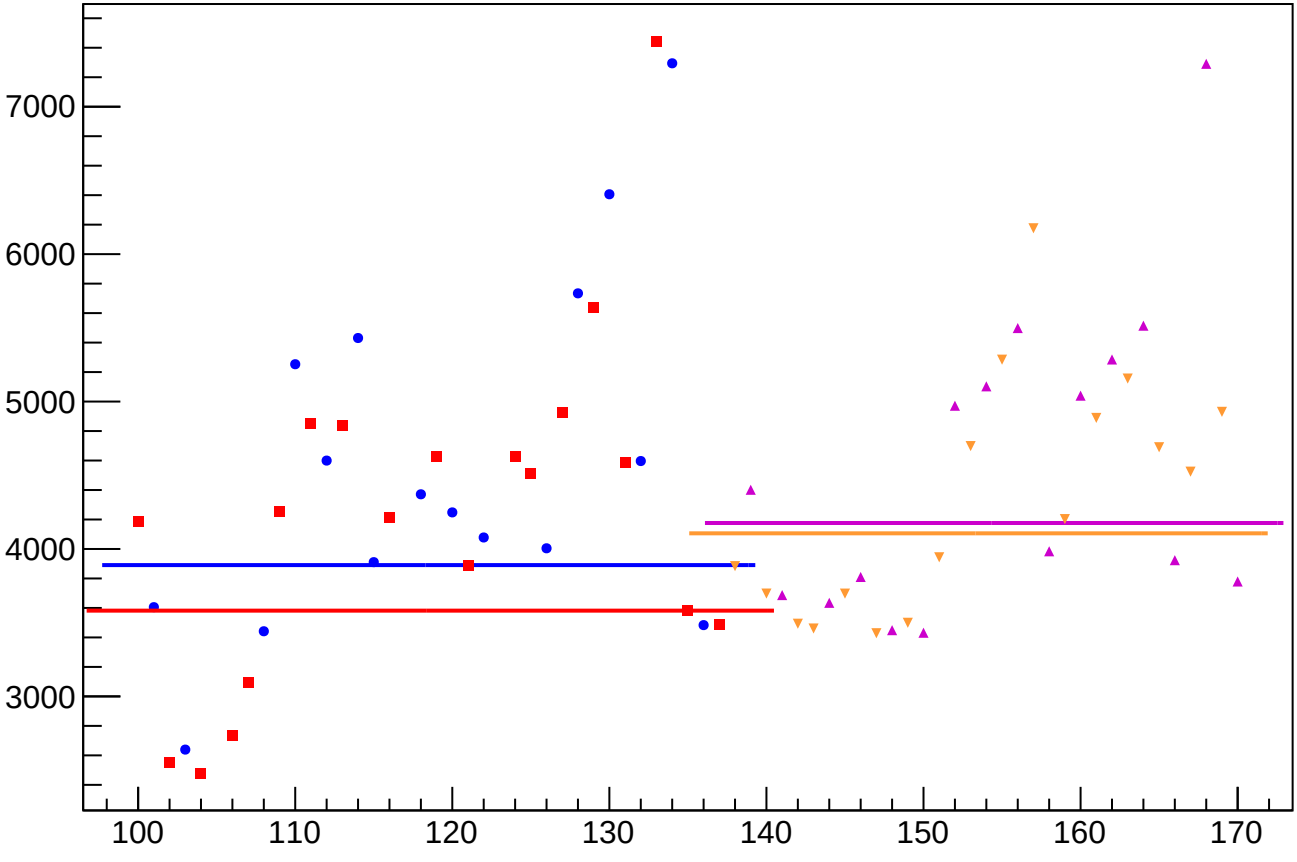
Left In: 706.896+/-1174.373 $\chi^2$/NDF:11.5/15

+ sign -412.745+/-909.173 $\chi^2$/NDF: 32.7/32

All: -94.807+/-636.668 $\chi^2$/NDF: 59.9/67

- sign 211.130+/-891.847 $\chi^2$/NDF: 26.9/34

# asym_atr_dd_eigen_dit_correction_rms vs Slug




Right In: 3890.705+/-1.059 $\chi^2$/NDF: 878409.2/15

Left Out: 4106.172+/-0.809 $\chi^2$/NDF:722978.9/16

Right Out: 3581.777+/-0.969 $\chi^2$/NDF: 1221846.6/18

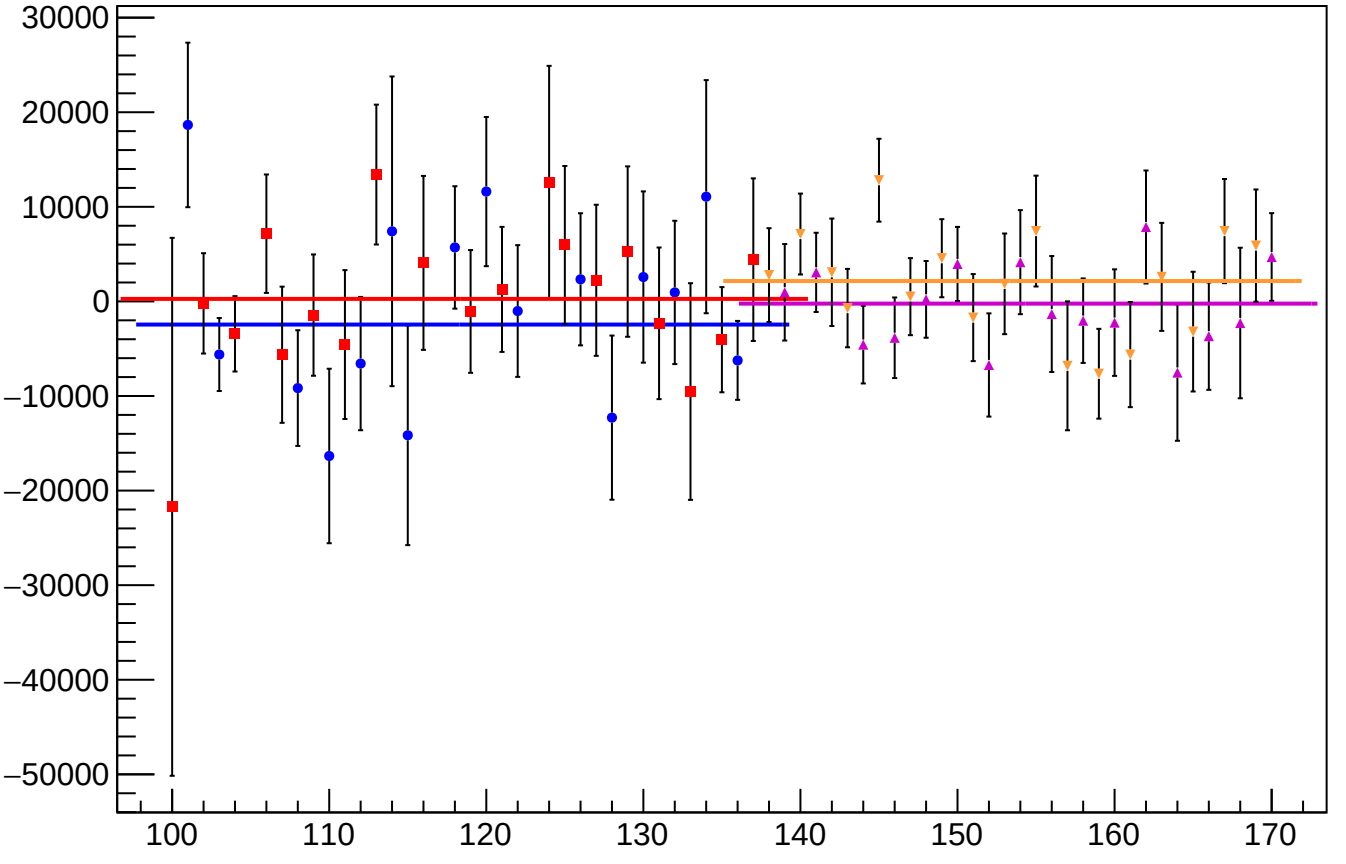
Left In: 4176.280+/-0.830 $\chi^2$/NDF:976037.1/15

+ sign 4026.768+/-0.643 $\chi^2$/NDF: 1627528.9/32

All: 3974.723+/-0.450 $\chi^2$/NDF: 4055217.2/67

- sign 3924.642+/-0.631 $\chi^2$/NDF: 2414827.8/34

# asym_atr_dd_mean vs Slug




Right In: -2448.262+/-1719.694 $\chi^2$/NDF: 20.9/15

Left Out: 2153.237+/-1210.352 $\chi^2$/NDF:19.8/16

Right Out: 265.886+/-1622.574 $\chi^2$/NDF: 10.7/18

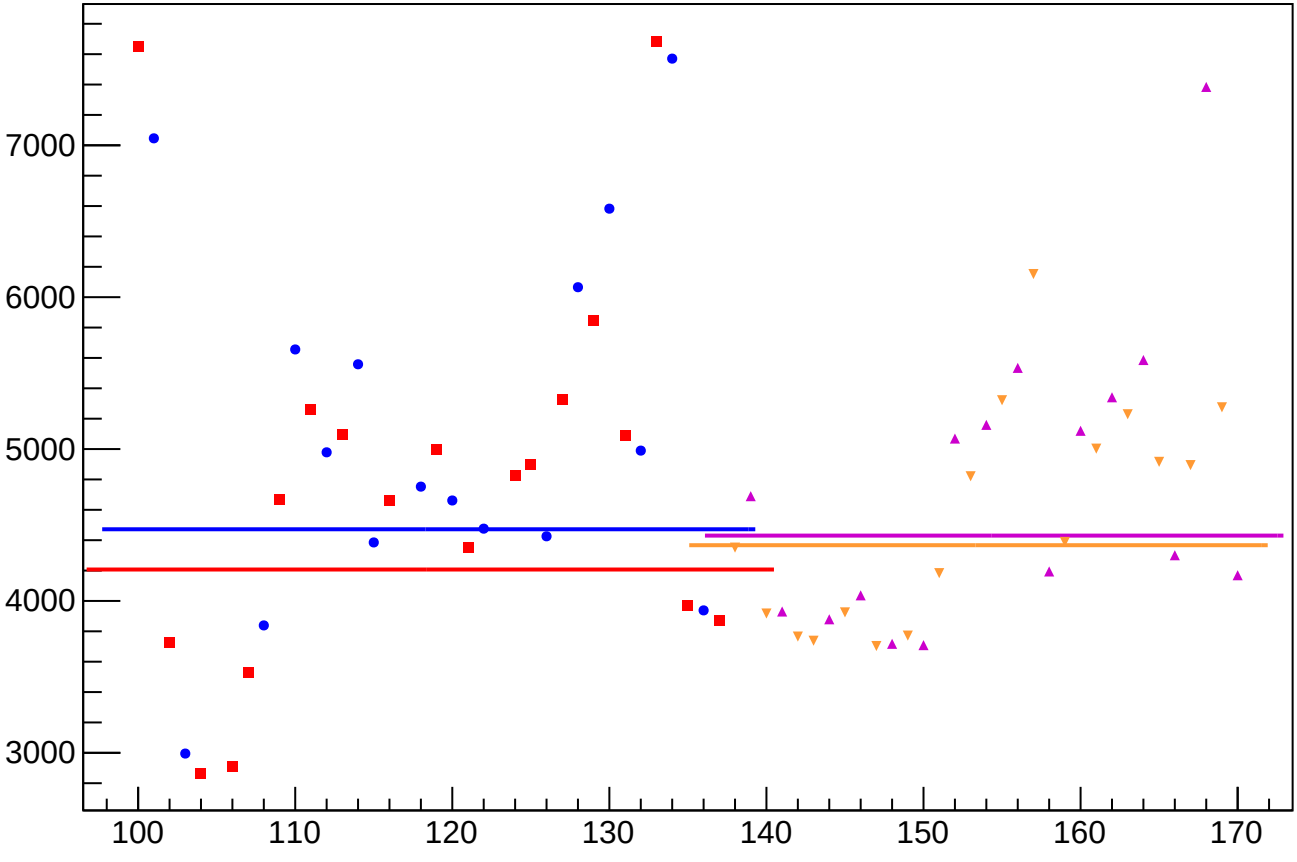
Left In: -235.053+/-1239.105 $\chi^2$/NDF:10.5/15

+ sign 628.922+/-989.780 $\chi^2$/NDF: 45.5/32

All: 287.480+/-698.108 $\chi^2$/NDF: 66.9/67

- sign -50.526+/-984.787 $\chi^2$/NDF: 21.2/34

# asym_atr_dd_rms vs Slug




Right In: 4471.904+/-1.216 $\chi^2$/NDF: 891678.4/15

Left Out: 4366.970+/-0.856 $\chi^2$/NDF:565899.3/16

Right Out: 4206.907+/-1.138 $\chi^2$/NDF: 846525.2/18

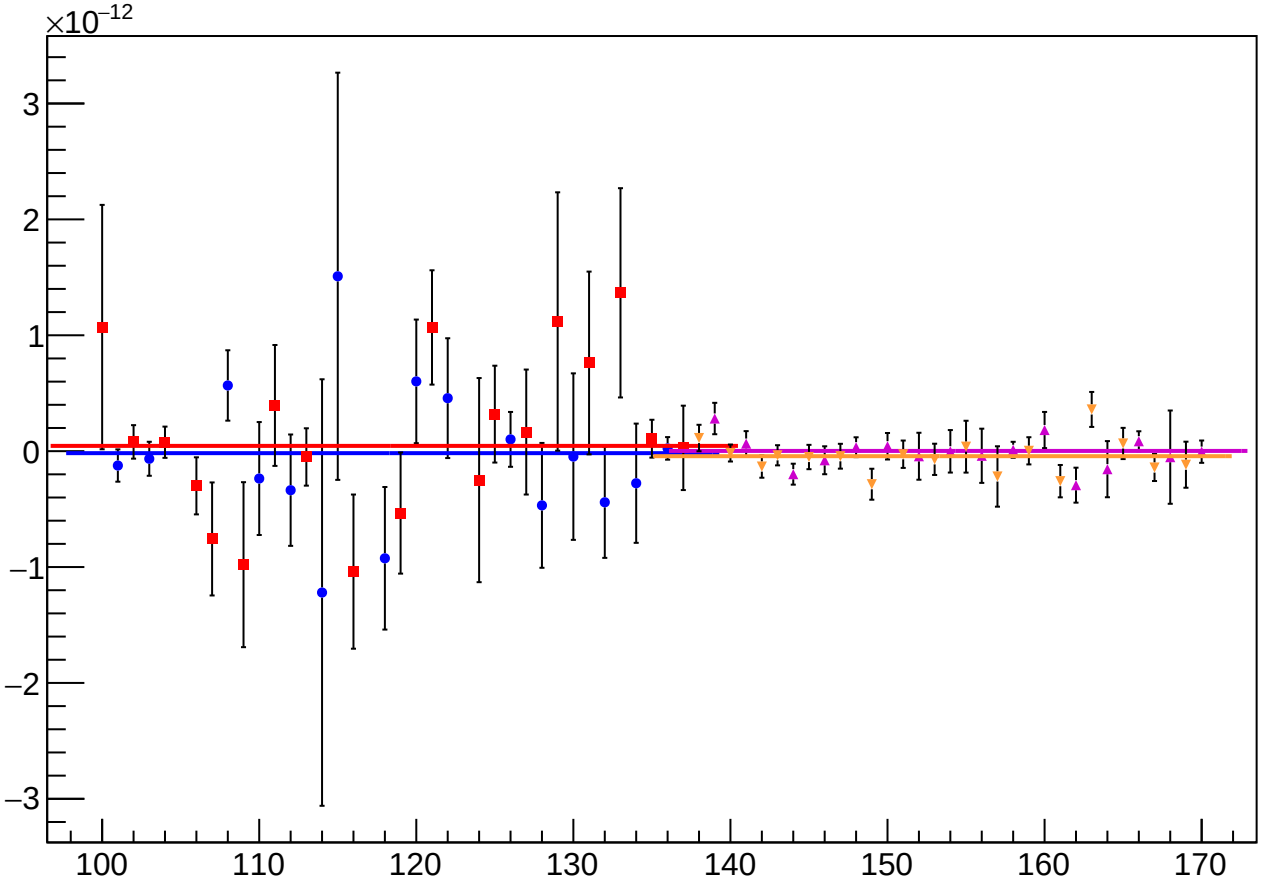
Left In: 4430.240+/-0.876 $\chi^2$/NDF:760222.5/15

+ sign 4401.731+/-0.700 $\chi^2$/NDF: 1462557.5/32

All: 4374.204+/-0.493 $\chi^2$/NDF: 3096555.3/67

- sign 4347.119+/-0.694 $\chi^2$/NDF: 1630928.8/34

# asym_atr_dd_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 12.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:18.0/16

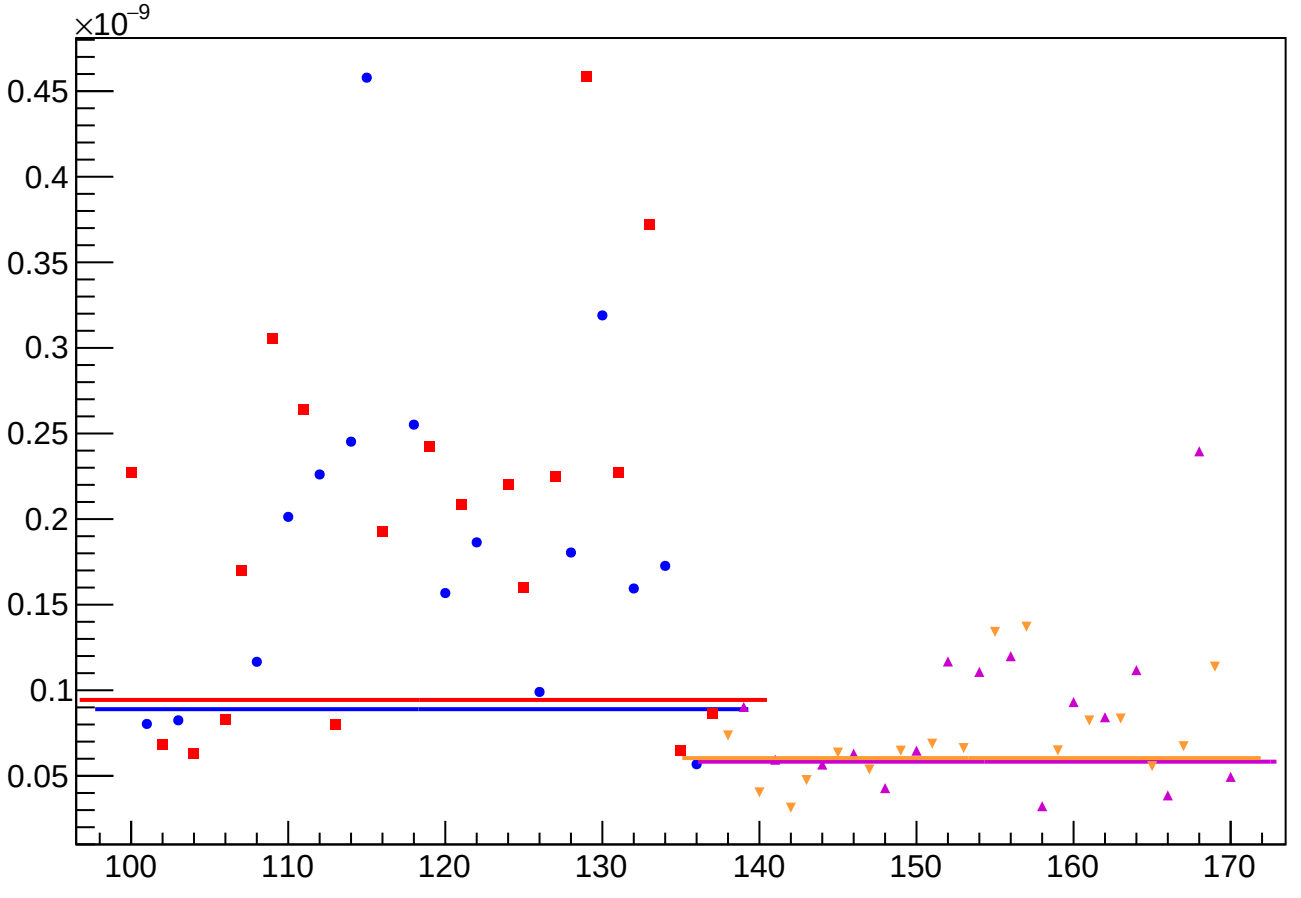
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:16.9/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 30.9/32

All: -0.000+/-0.000 $\chi^2$/NDF: 71.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 38.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1230222.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1071171.4/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1695078.0/18

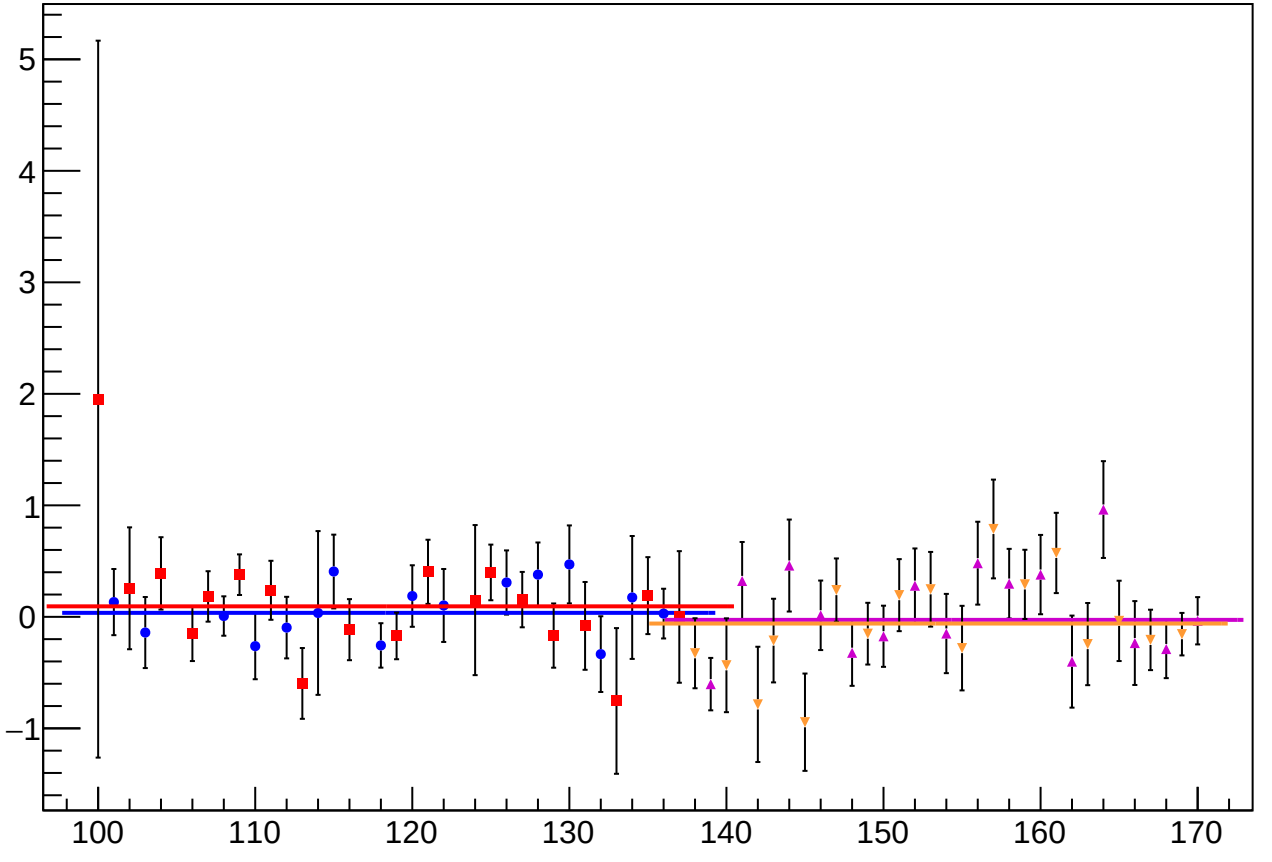
Left In: 0.000+/-0.000 $\chi^2$/NDF:1724158.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2656376.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 6553970.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3893835.1/34

# asym_atr_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.036+/-0.071 $\chi^2$/NDF: 10.5/15

Left Out: -0.060+/-0.079 $\chi^2$/NDF:19.6/16

Right Out: 0.094+/-0.068 $\chi^2$/NDF: 17.6/18

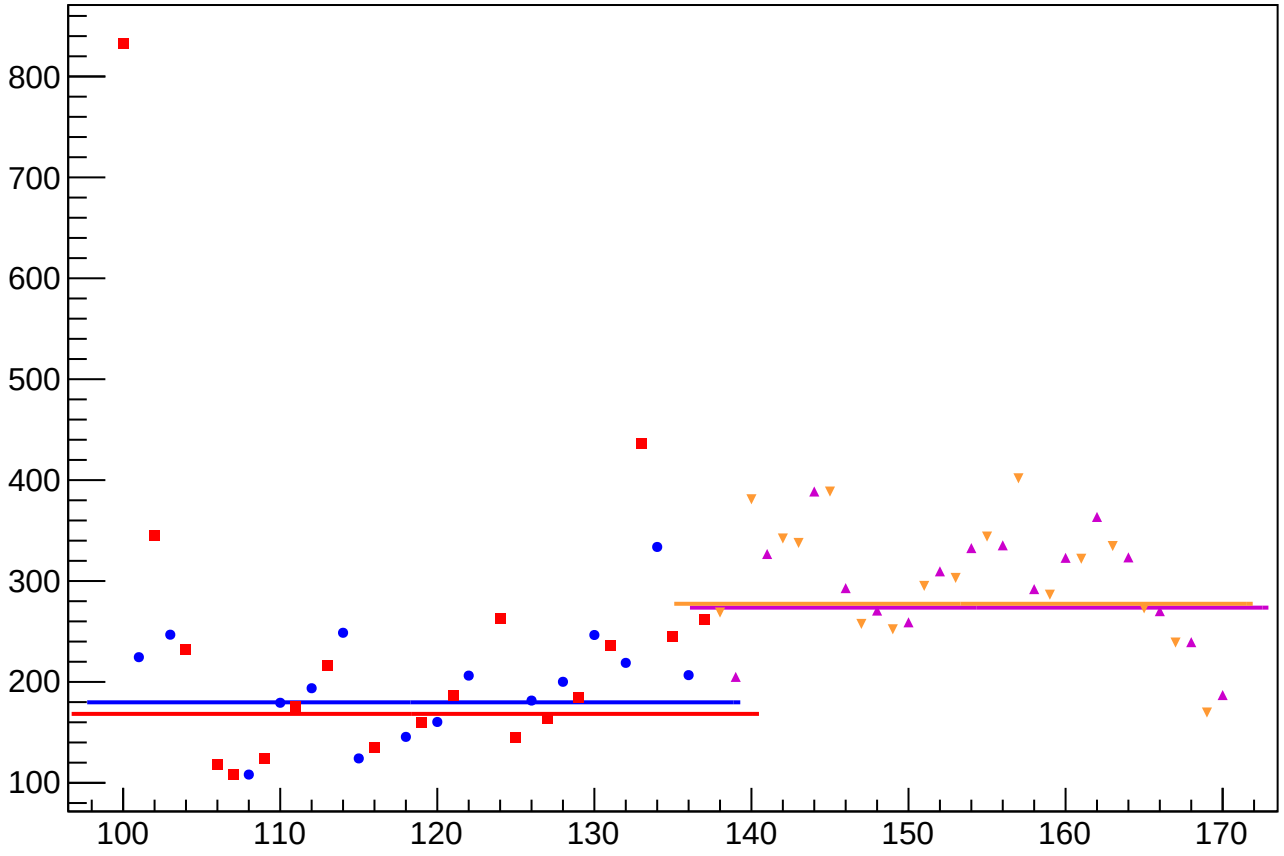
Left In: -0.027+/-0.078 $\chi^2$/NDF:22.2/15

+ sign -0.007+/-0.052 $\chi^2$/NDF: 31.0/32

All: 0.018+/-0.037 $\chi^2$/NDF: 72.7/67

- sign 0.042+/-0.051 $\chi^2$/NDF: 41.3/34

# asym_atr_dd_dit_vs_cor_diff_rms vs Slug




Right In: 179.796+/-0.050 $\chi^2$/NDF: 918536.0/15

Left Out: 277.455+/-0.056 $\chi^2$/NDF:1359893.5/16

Right Out: 168.334+/-0.048 $\chi^2$/NDF: 1409290.2/18

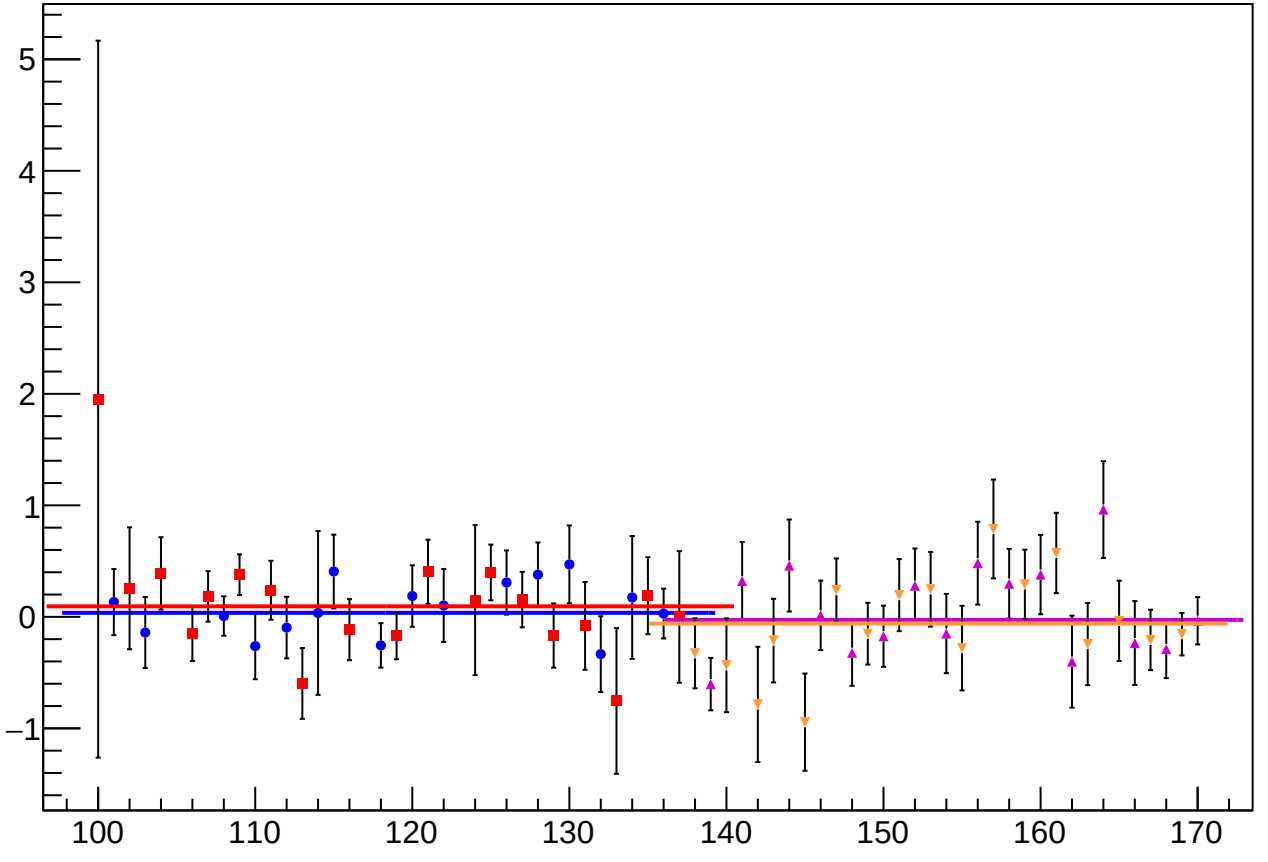
Left In: 273.625+/-0.055 $\chi^2$/NDF:1054523.2/15

+ sign 223.445+/-0.037 $\chi^2$/NDF: 3989887.1/32

All: 218.365+/-0.026 $\chi^2$/NDF: 8571850.2/67

- sign 213.553+/-0.036 $\chi^2$/NDF: 4545482.0/34

# asym_atr_dd_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.036+/-0.071 $\chi^2$/NDF: 10.5/15

Left Out: -0.060+/-0.079 $\chi^2$/NDF:19.6/16

Right Out: 0.094+/-0.068 $\chi^2$/NDF: 17.6/18

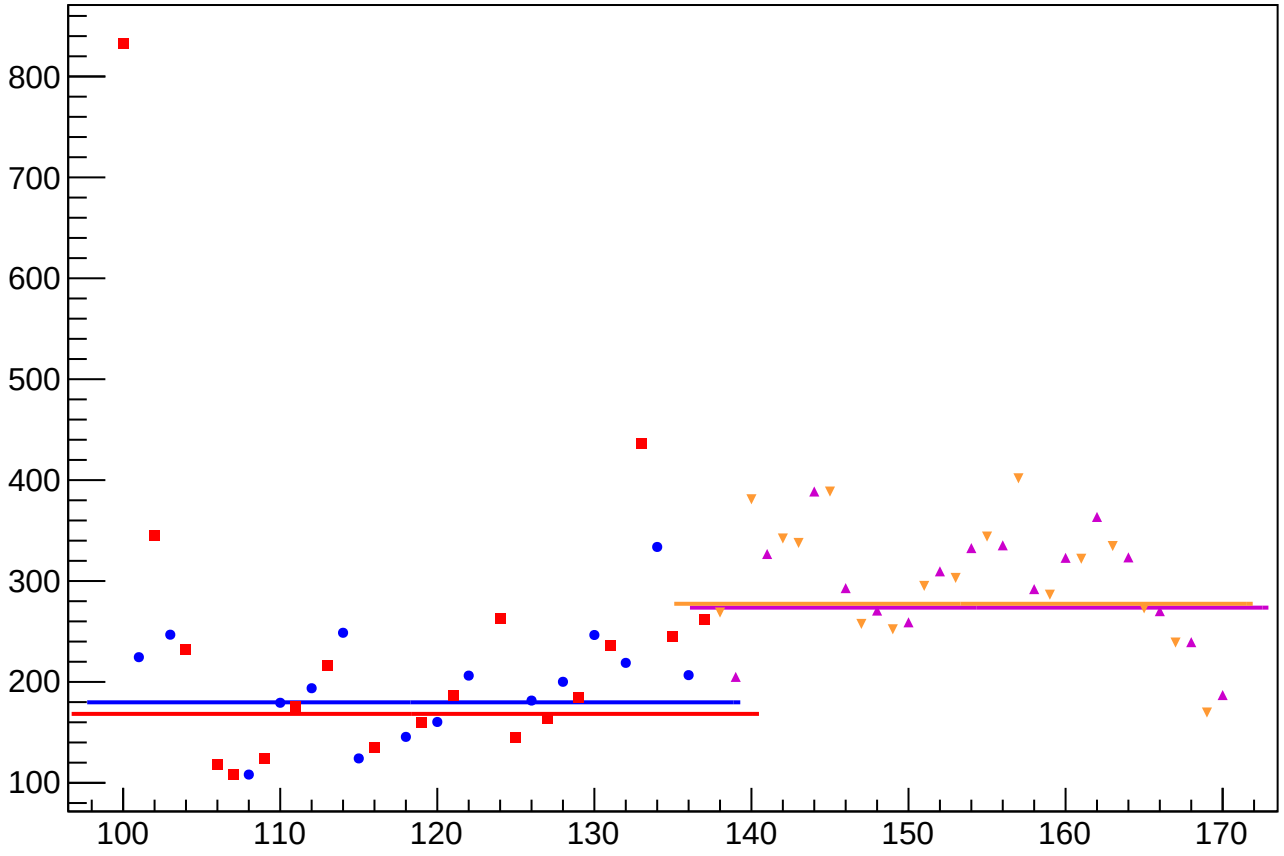
Left In: -0.027+/-0.078 $\chi^2$/NDF:22.2/15

+ sign -0.007+/-0.052 $\chi^2$/NDF: 31.0/32

All: 0.018+/-0.037 $\chi^2$/NDF: 72.7/67

- sign 0.042+/-0.051 $\chi^2$/NDF: 41.3/34

# asym_atr_dd_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 179.796+/-0.050 $\chi^2$/NDF: 918536.0/15

Left Out: 277.455+/-0.056 $\chi^2$/NDF:1359893.5/16

Right Out: 168.334+/-0.048 $\chi^2$/NDF: 1409290.2/18

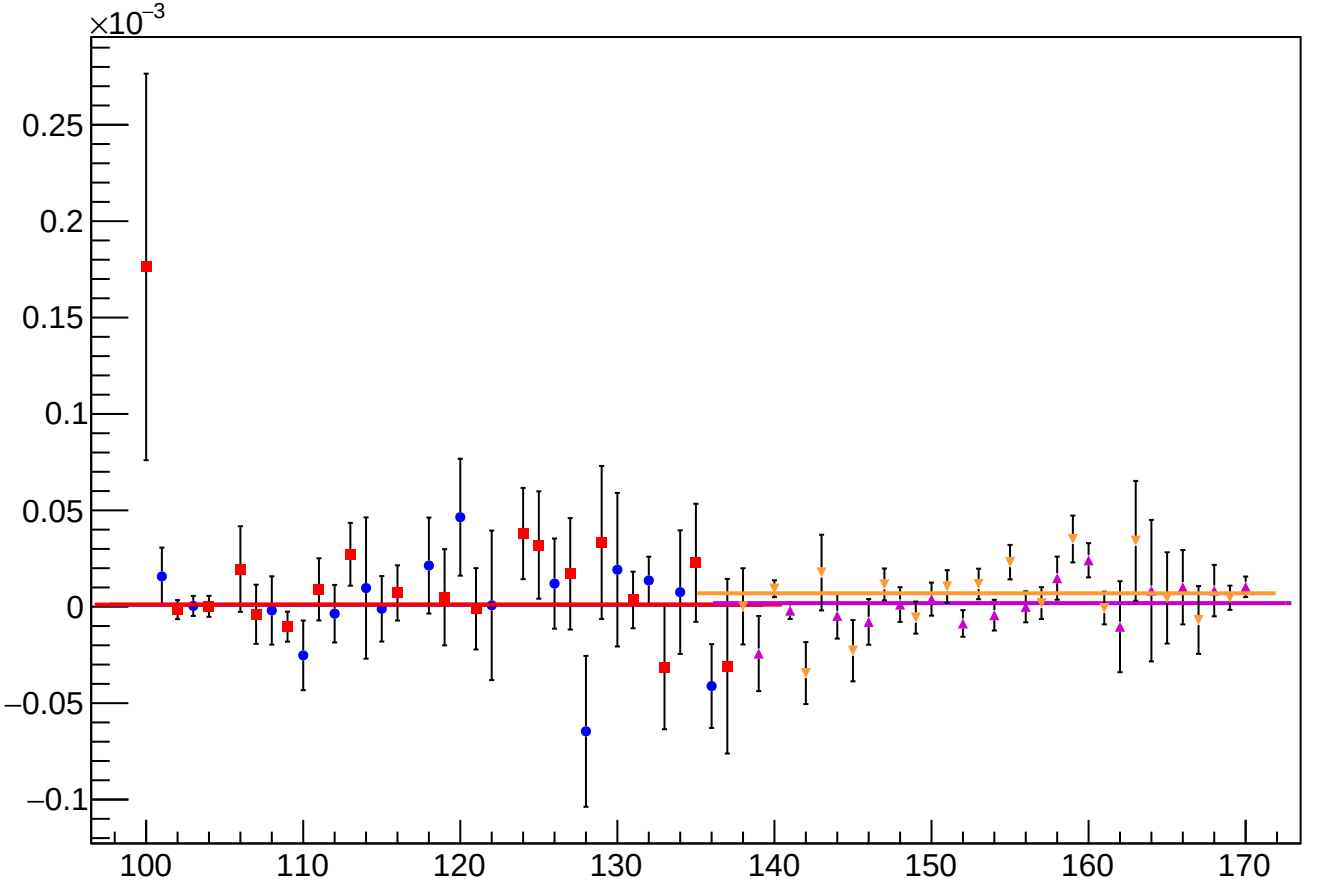
Left In: 273.625+/-0.055 $\chi^2$/NDF:1054523.2/15

+ sign 223.445+/-0.037 $\chi^2$/NDF: 3989887.1/32

All: 218.365+/-0.026 $\chi^2$/NDF: 8571850.2/67

- sign 213.553+/-0.036 $\chi^2$/NDF: 4545482.0/34

# asym_atr_dd_eigen_dit_vs_dit_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:25.3/16

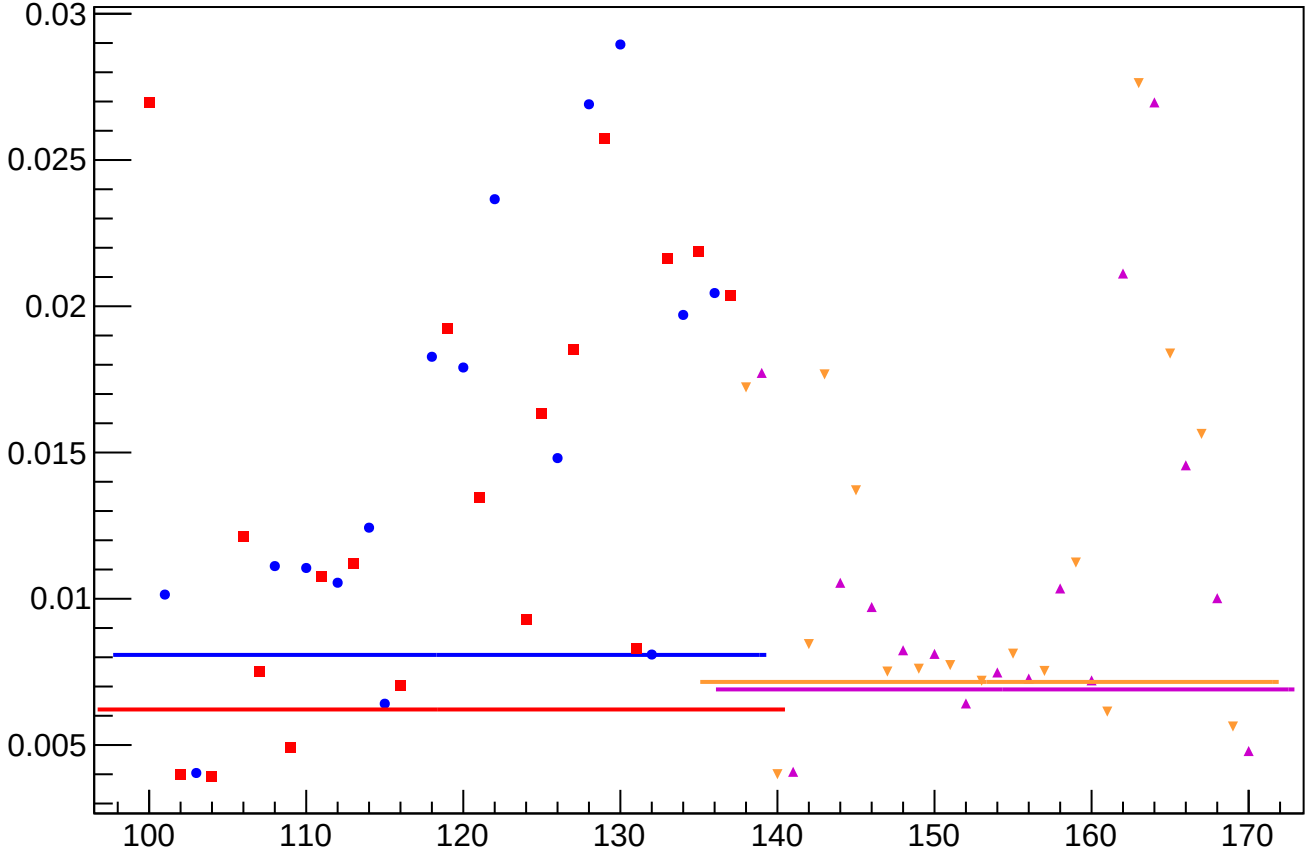
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 16.0/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:17.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 41.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 77.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 33.5/34




Right In: 0.008+/-0.000 $\chi^2$/NDF: 4413462.8/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:4690868.8/16

Right Out: 0.006+/-0.000 $\chi^2$/NDF: 4560988.3/18

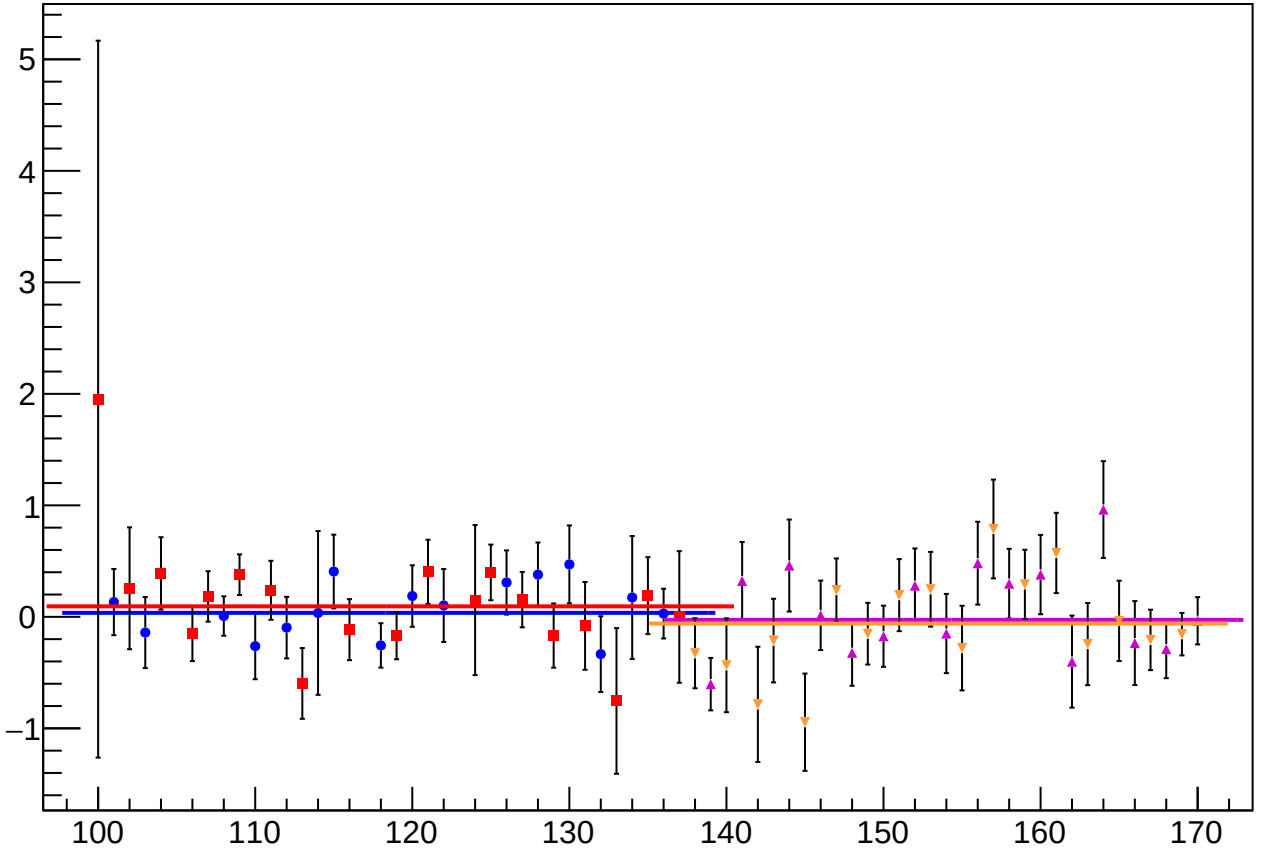
Left In: 0.007+/-0.000 $\chi^2$/NDF:4121408.3/15

+ sign 0.007+/-0.000 $\chi^2$/NDF: 9195571.4/32

All: 0.007+/-0.000 $\chi^2$/NDF: 18125571.9/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 8757086.6/34

# asym_atr_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.036+/-0.071 $\chi^2$/NDF: 10.5/15

Left Out: -0.060+/-0.079 $\chi^2$/NDF:19.6/16

Right Out: 0.094+/-0.068 $\chi^2$/NDF: 17.6/18

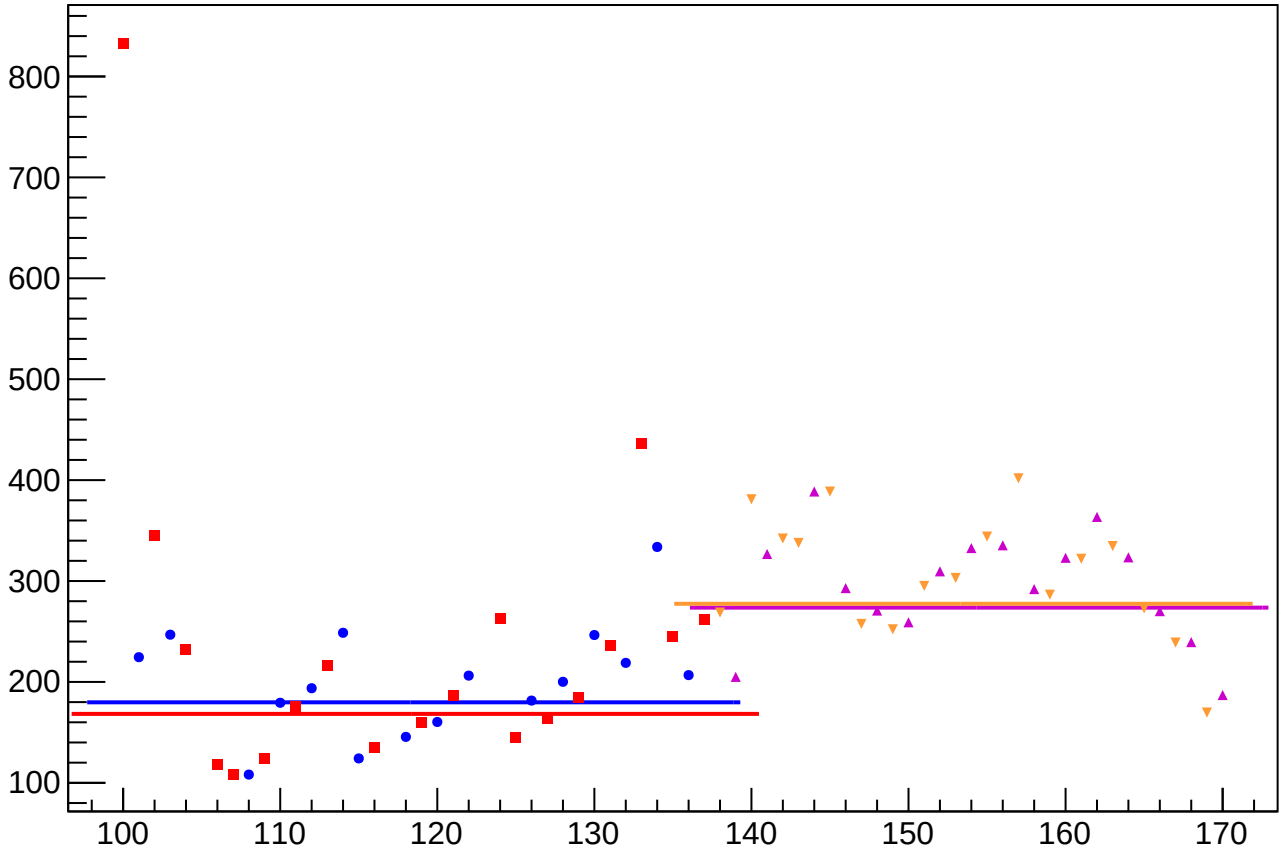
Left In: -0.027+/-0.078 $\chi^2$/NDF:22.2/15

+ sign -0.007+/-0.052 $\chi^2$/NDF: 31.0/32

All: 0.018+/-0.037 $\chi^2$/NDF: 72.7/67

- sign 0.042+/-0.051 $\chi^2$/NDF: 41.3/34

# asym_atr_dd_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 179.793+/-0.050 $\chi^2$/NDF: 918583.7/15

Left Out: 277.458+/-0.056 $\chi^2$/NDF:1359967.5/16

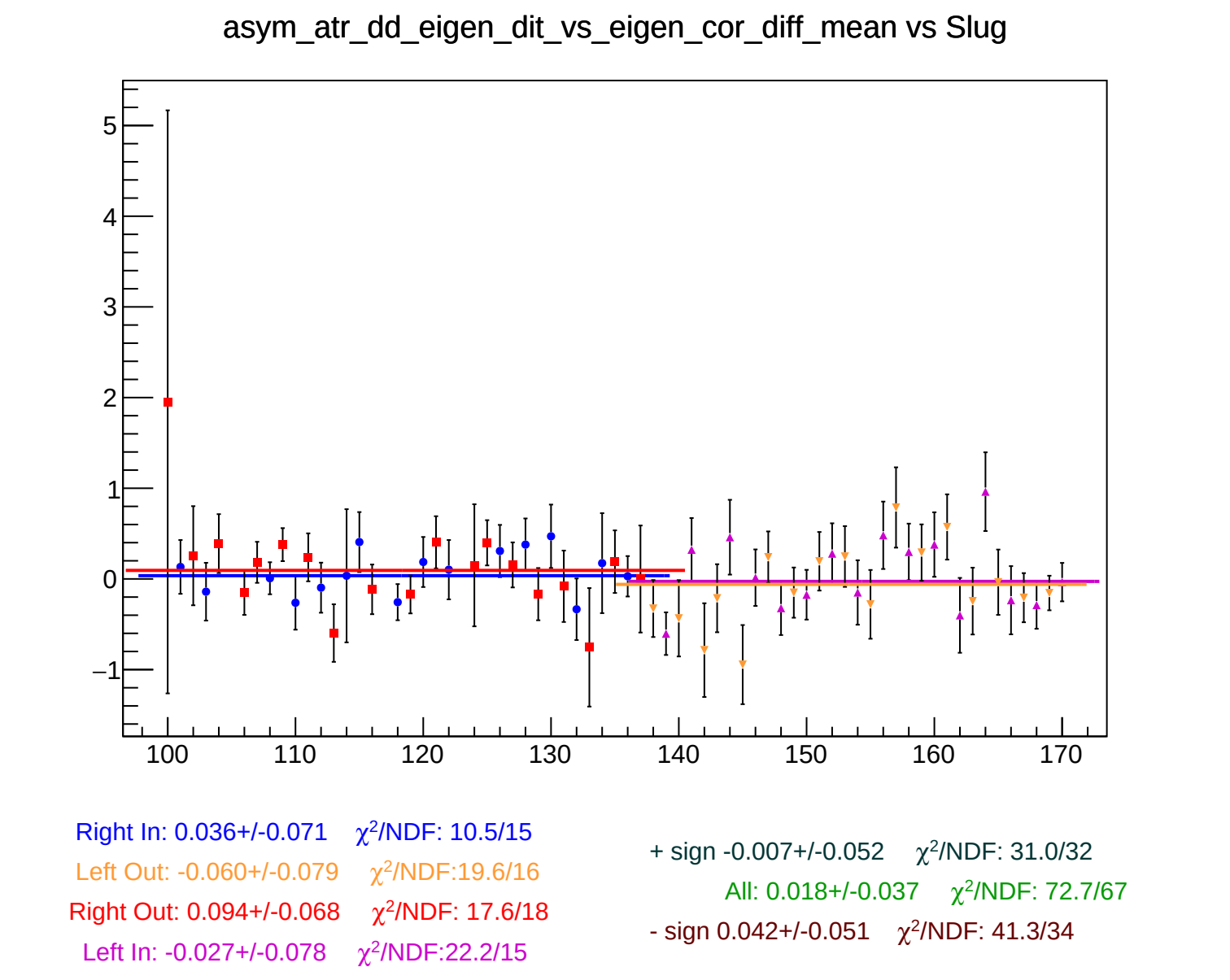
Right Out: 168.334+/-0.048 $\chi^2$/NDF: 1409289.2/18

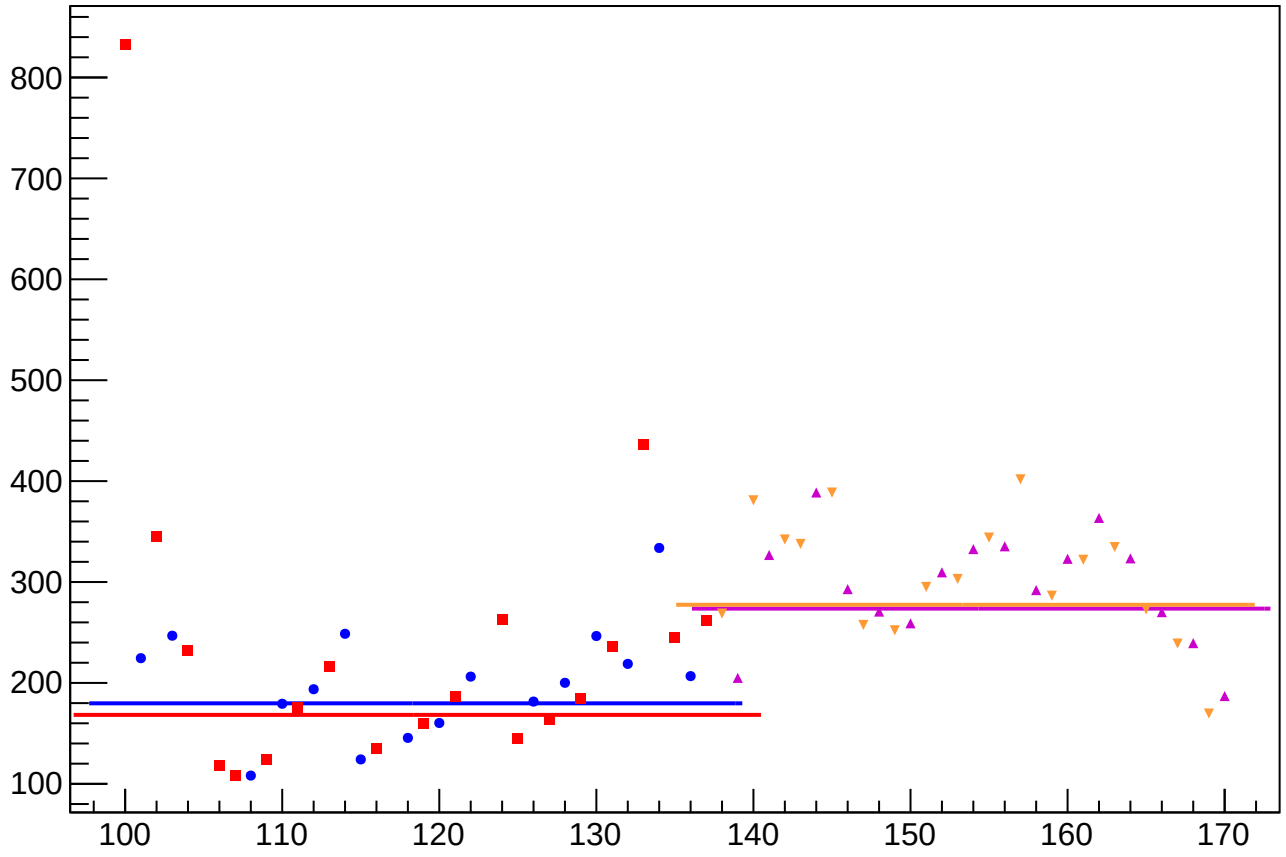
Left In: 273.629+/-0.055 $\chi^2$/NDF:1054538.2/15

+ sign 223.444+/-0.037 $\chi^2$/NDF: 3990197.4/32

All: 218.365+/-0.026 $\chi^2$/NDF: 8572284.3/67

- sign 213.554+/-0.036 $\chi^2$/NDF: 4545621.0/34


asym_atr_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug
5
4
3
2
1
0
−1
100
110
120
130
140
150
160
170
Right In: 0.036+/-0.071 χ²/NDF: 10.5/15
Left Out: -0.060+/-0.079 χ²/NDF:19.6/16
Right Out: 0.094+/-0.068 χ²/NDF: 17.6/18
Left In: -0.027+/-0.078 χ²/NDF:22.2/15
+ sign -0.007+/-0.052 χ²/NDF: 31.0/32
All: 0.018+/-0.037 χ²/NDF: 72.7/67
- sign 0.042+/-0.051 χ²/NDF: 41.3/34




Right In: 179.793+/-0.050 $\chi^2$/NDF: 918583.7/15

Left Out: 277.458+/-0.056 $\chi^2$/NDF:1359967.5/16

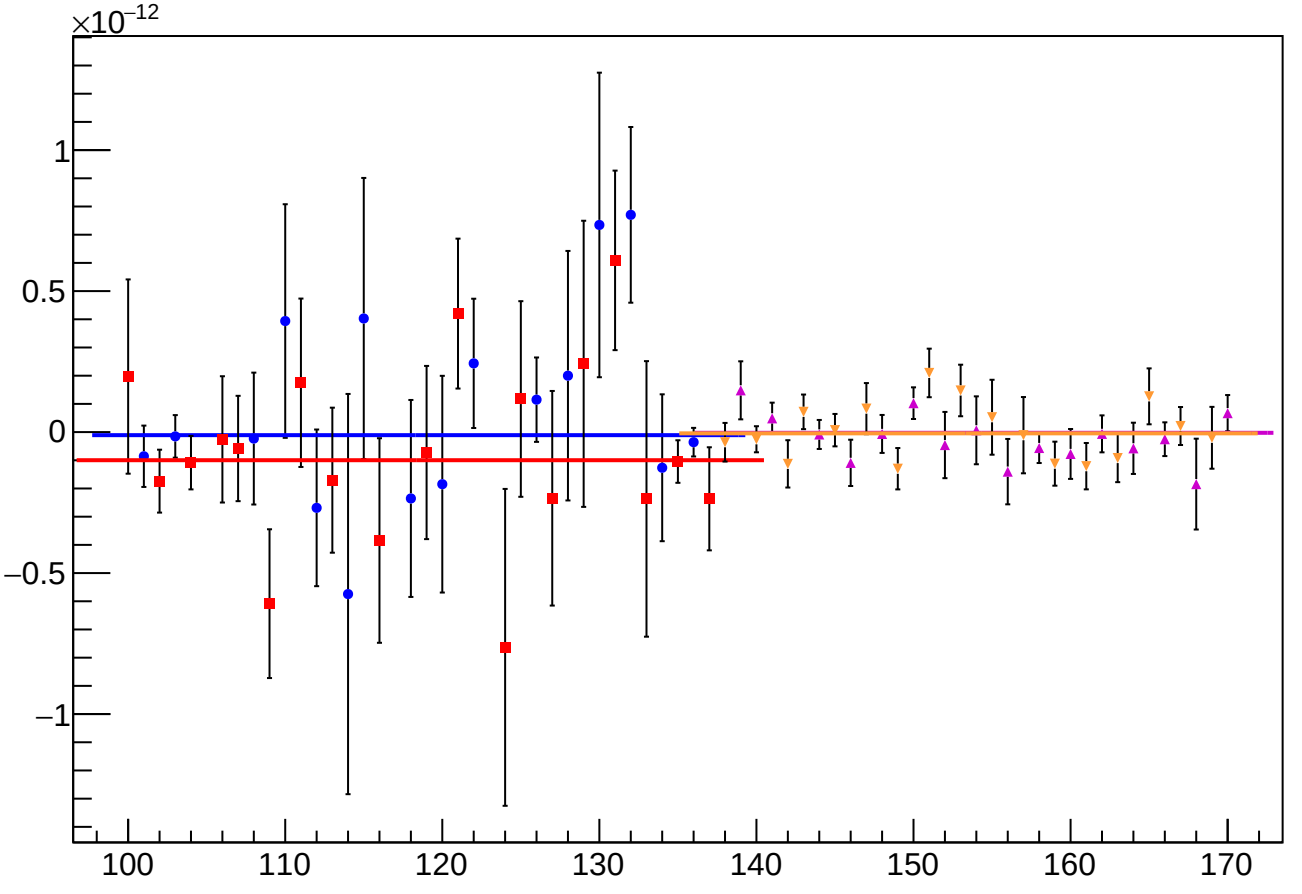
Right Out: 168.334+/-0.048 $\chi^2$/NDF: 1409289.2/18

Left In: 273.629+/-0.055 $\chi^2$/NDF:1054538.2/15

+ sign 223.444+/-0.037 $\chi^2$/NDF: 3990197.4/32

All: 218.365+/-0.026 $\chi^2$/NDF: 8572284.3/67

- sign 213.554+/-0.036 $\chi^2$/NDF: 4545621.0/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:23.5/16

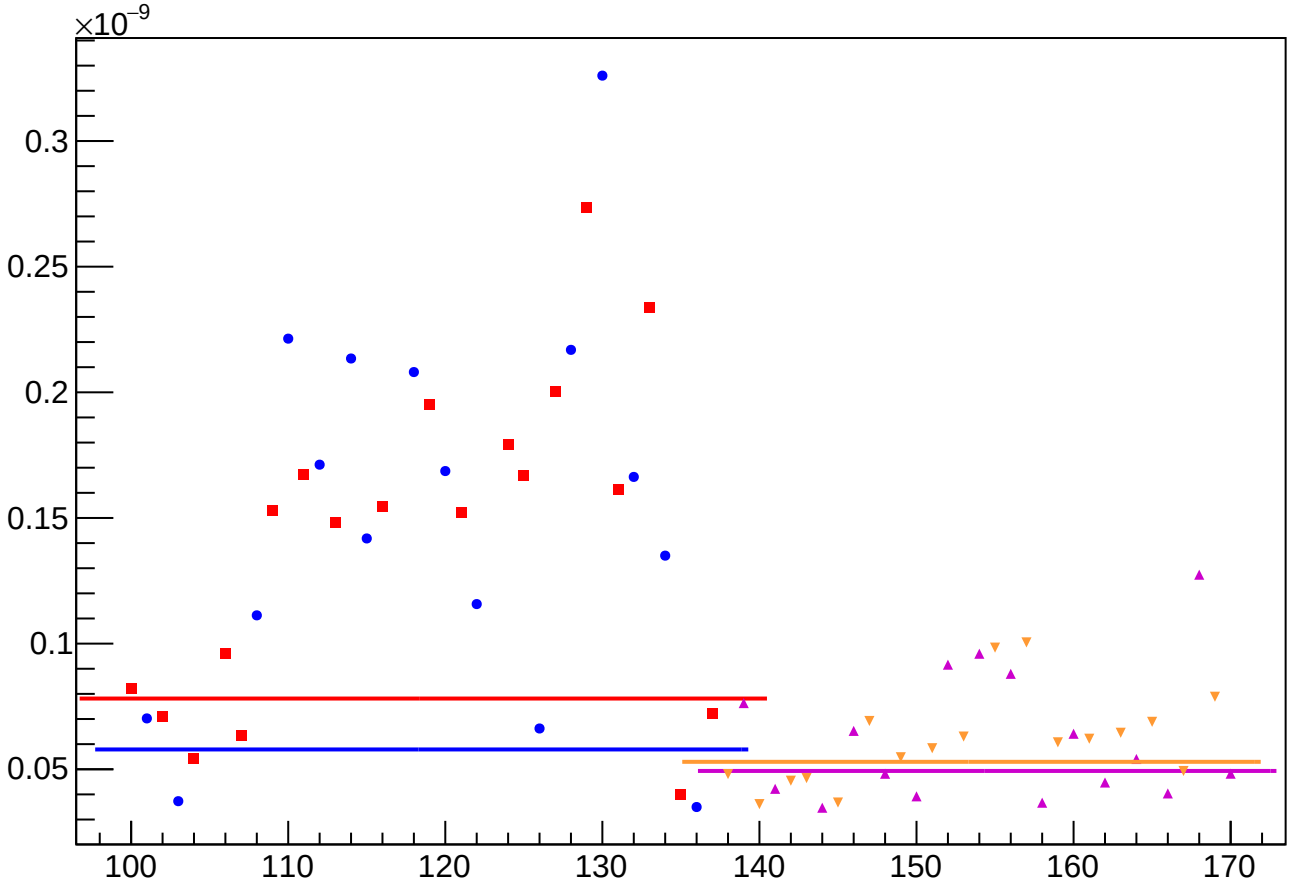
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.4/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:14.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 38.6/32

All: -0.000+/-0.000 $\chi^2$/NDF: 76.2/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 37.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3322992.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1300775.8/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2732134.4/18

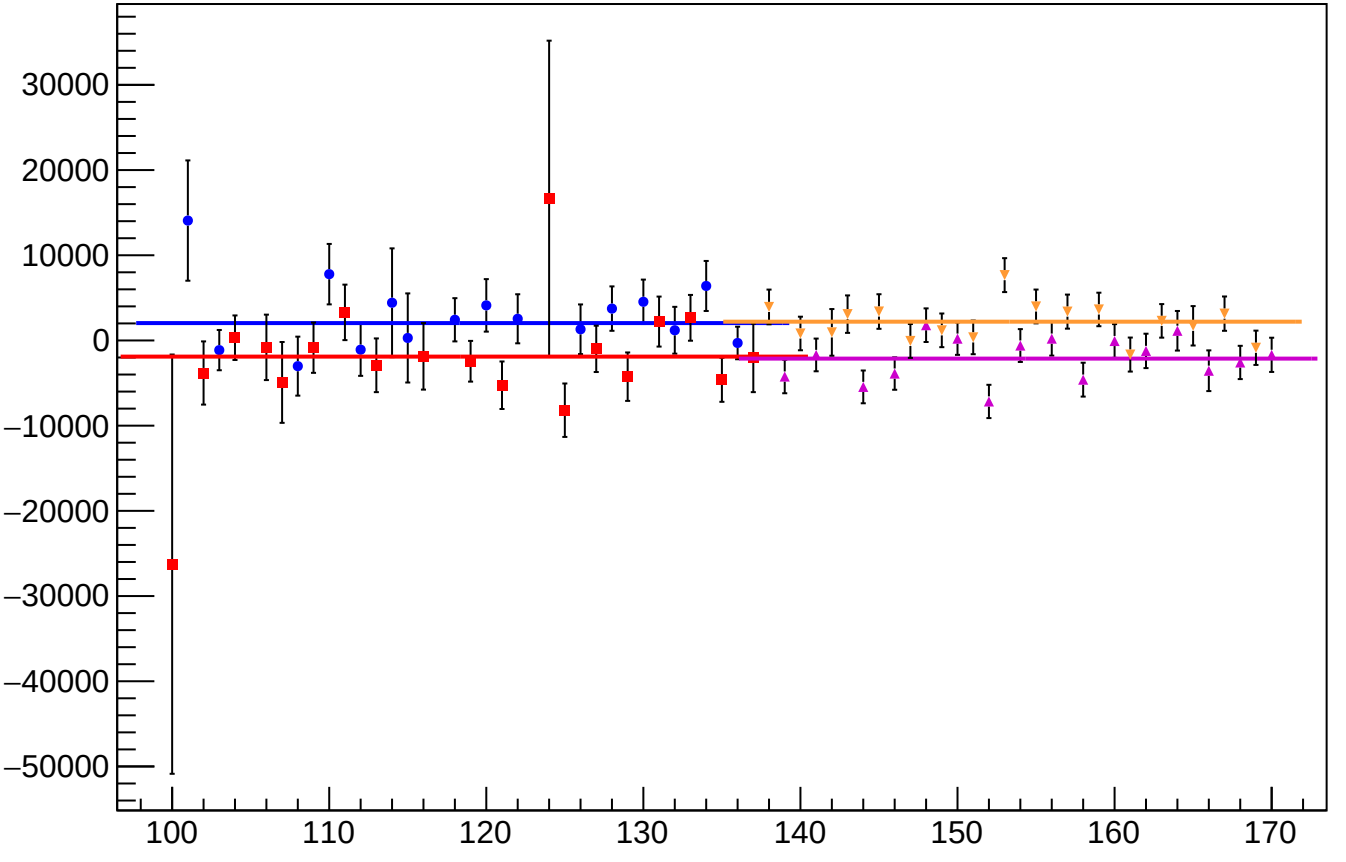
Left In: 0.000+/-0.000 $\chi^2$/NDF:1953469.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4654308.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10131665.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5477125.4/34

# reg_asym_at1_avg_mean vs Slug




Right In: 2039.211+/-736.211 $\chi^2$/NDF: 16.4/15

Left Out: 2203.969+/-496.898 $\chi^2$/NDF:19.9/16

Right Out: -1895.242+/-736.762 $\chi^2$/NDF: 18.5/18

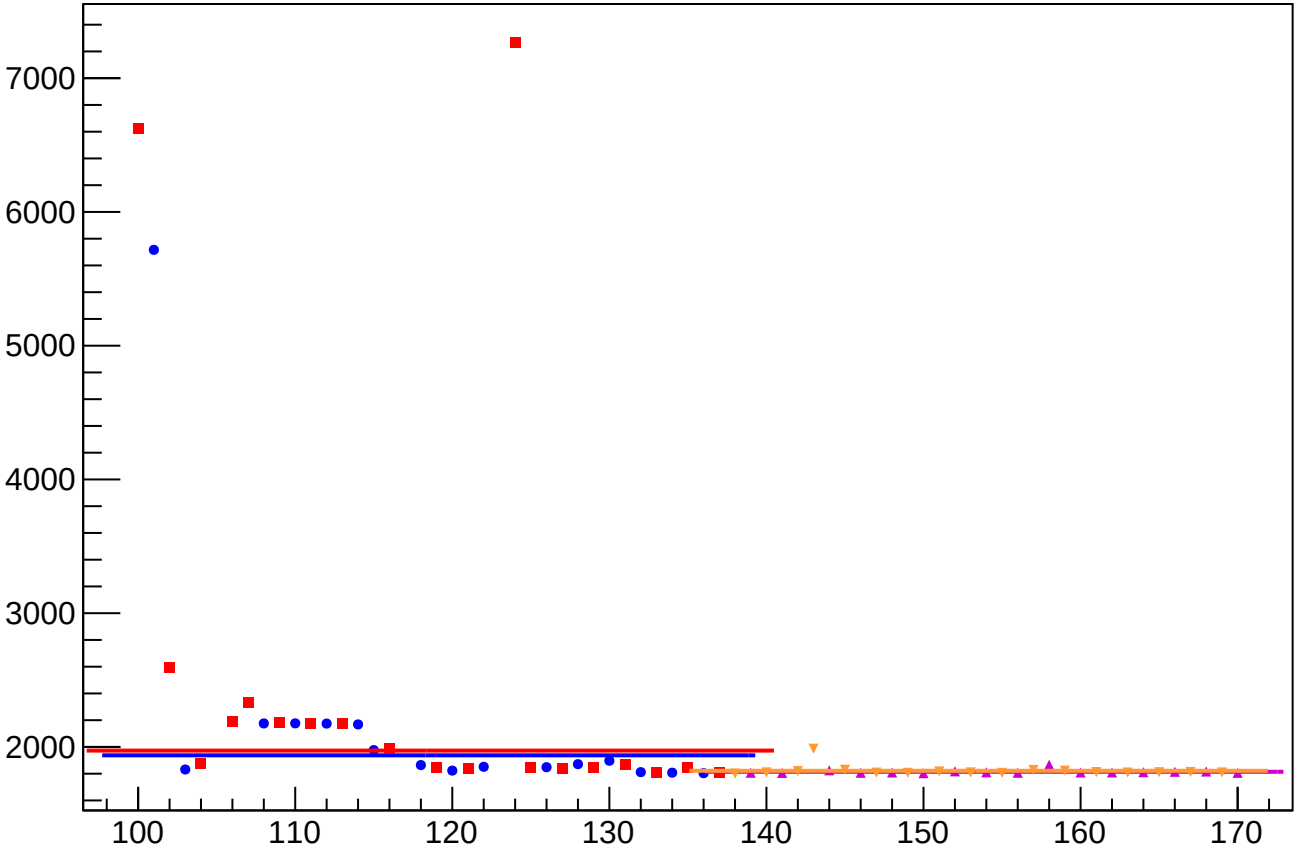
Left In: -2130.315+/-498.950 $\chi^2$/NDF:24.4/15

+ sign 2152.404+/-411.865 $\chi^2$/NDF: 36.4/32

All: 54.446+/-291.678 $\chi^2$/NDF: 131.4/67

- sign -2056.402+/-413.128 $\chi^2$/NDF: 43.0/34

# reg_asym_at1_avg_rms vs Slug




Right In: 1937.251+/-0.521 $\chi^2$/NDF: 638092.5/15

Left Out: 1821.748+/-0.351 $\chi^2$/NDF:12351.6/16

Right Out: 1972.760+/-0.521 $\chi^2$/NDF: 377537.1/18

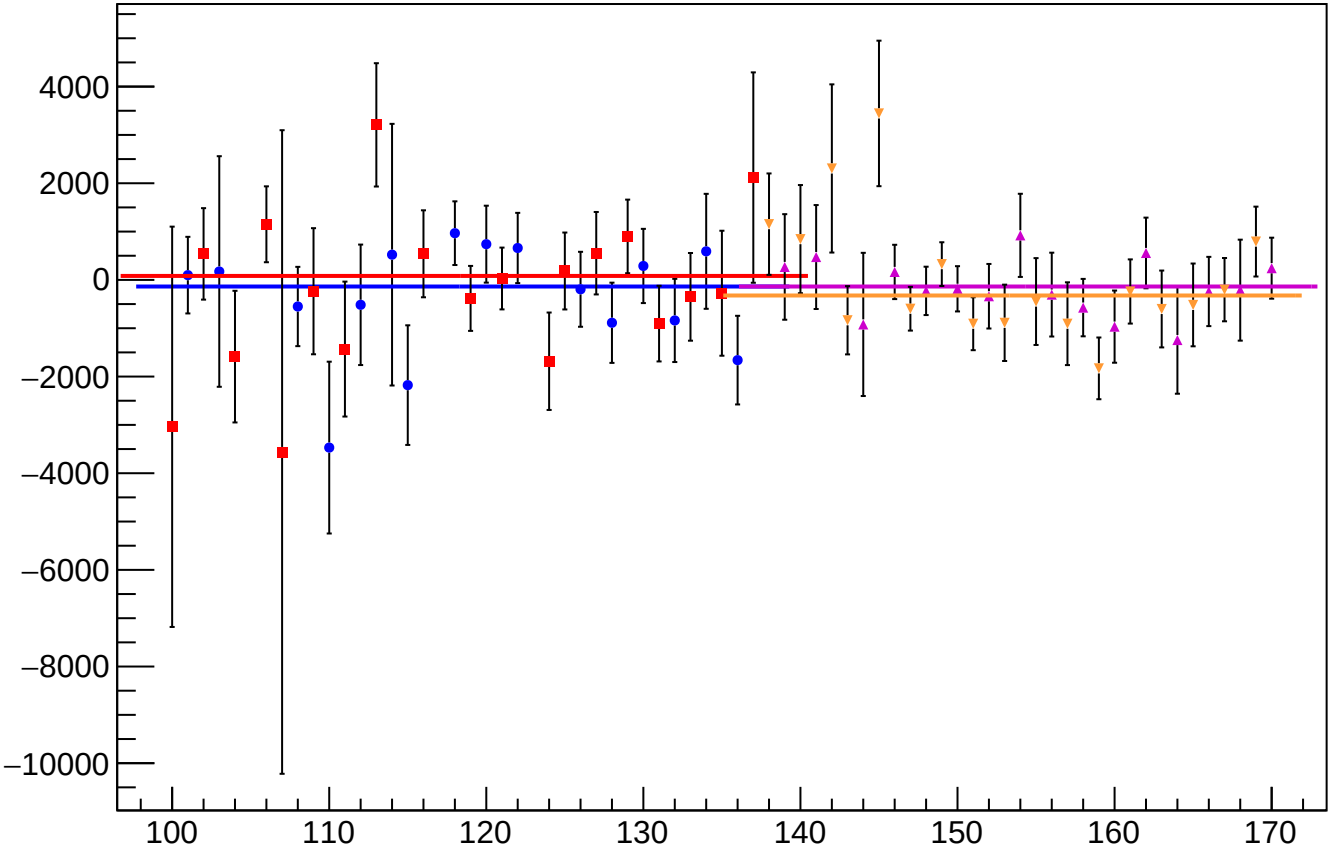
Left In: 1814.228+/-0.353 $\chi^2$/NDF:1752.3/15

+ sign 1857.897+/-0.291 $\chi^2$/NDF: 684264.9/32

All: 1860.977+/-0.206 $\chi^2$/NDF: 1127262.9/67

- sign 1864.074+/-0.292 $\chi^2$/NDF: 442773.8/34

# asym_at1_avg_reg_correction_mean vs Slug




Right In: -136.643+/-230.431 $\chi^2$/NDF: 16.9/15

Left Out: -322.492+/-172.239 $\chi^2$/NDF:24.9/16

Right Out: 82.296+/-222.019 $\chi^2$/NDF: 19.7/18

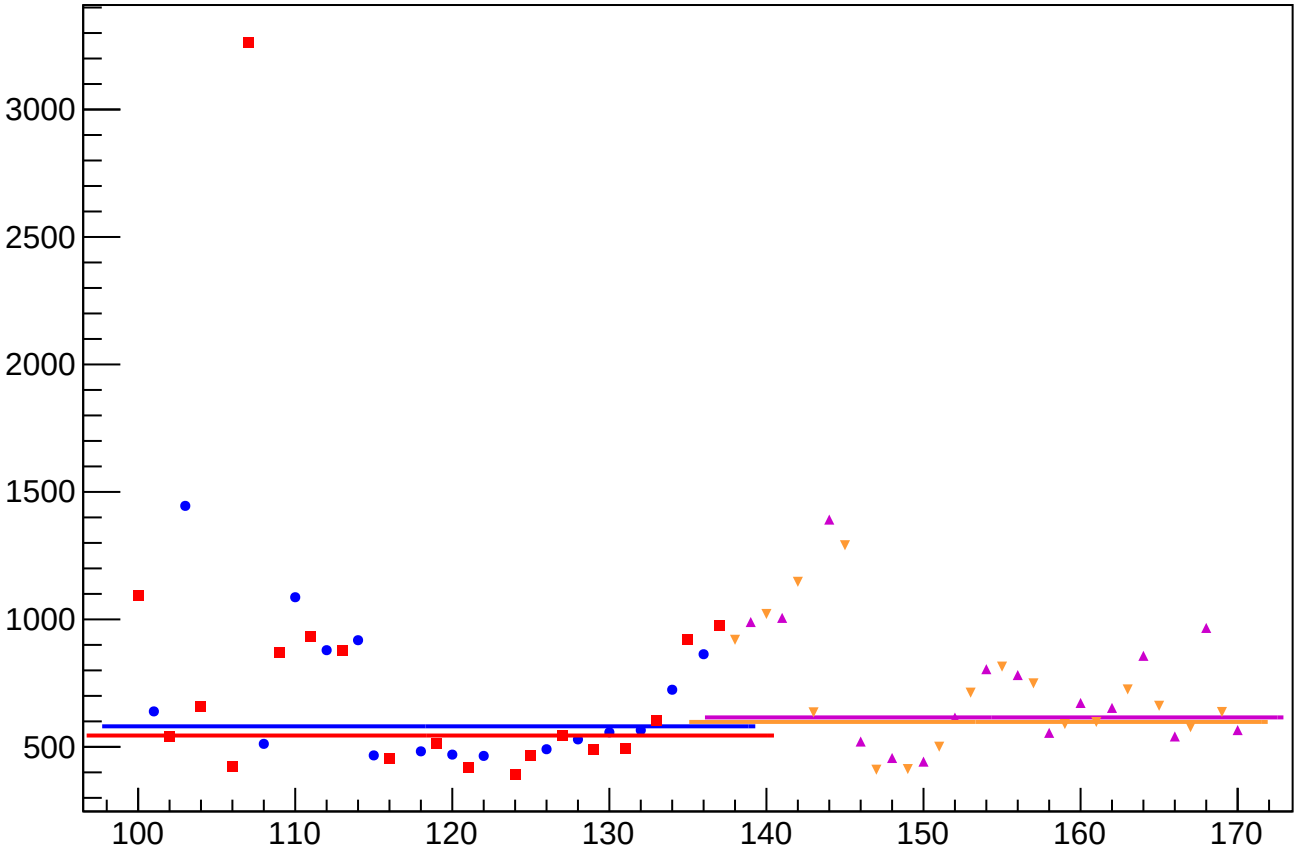
Left In: -136.618+/-178.209 $\chi^2$/NDF:6.8/15

+ sign -255.876+/-137.959 $\chi^2$/NDF: 42.2/32

All: -154.111+/-97.909 $\chi^2$/NDF: 70.4/67

- sign -50.840+/-138.976 $\chi^2$/NDF: 27.1/34

# asym_at1_avg_reg_correction_rms vs Slug




Right In: 580.611+/-0.163 $\chi^2$/NDF: 1003410.8/15

Left Out: 597.895+/-0.122 $\chi^2$/NDF:2136073.2/16

Right Out: 544.530+/-0.157 $\chi^2$/NDF: 1287643.0/18

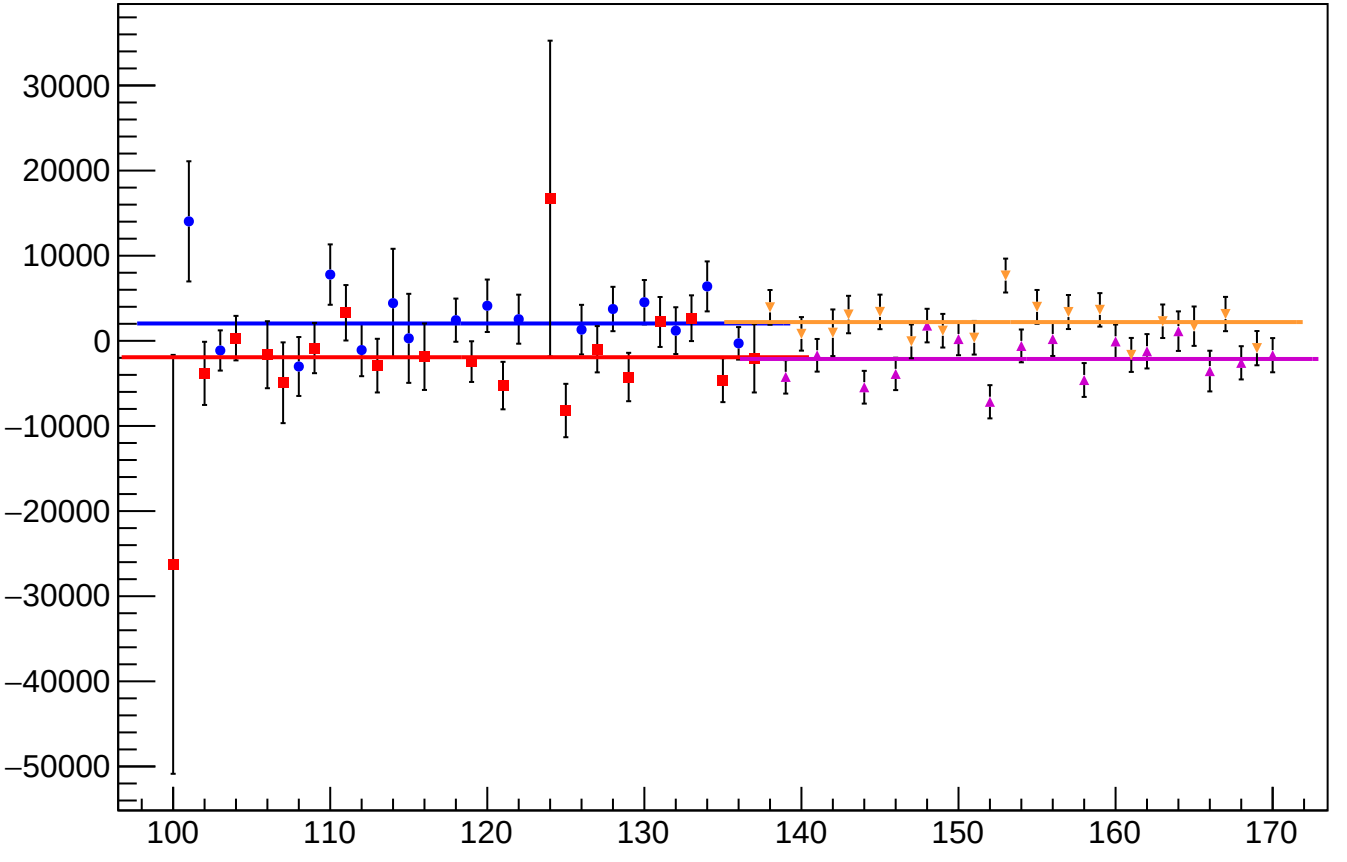
Left In: 615.612+/-0.126 $\chi^2$/NDF:2142366.2/15

+ sign 591.700+/-0.098 $\chi^2$/NDF: 3146703.4/32

All: 589.744+/-0.069 $\chi^2$/NDF: 6702199.1/67

- sign 587.760+/-0.098 $\chi^2$/NDF: 3554686.1/34

# cor_asym_at1_avg_mean vs Slug




Right In: 2038.842+/-736.211 $\chi^2$/NDF: 16.4/15

Left Out: 2203.926+/-496.898 $\chi^2$/NDF:19.9/16

Right Out: -1926.264+/-737.411 $\chi^2$/NDF: 18.4/18

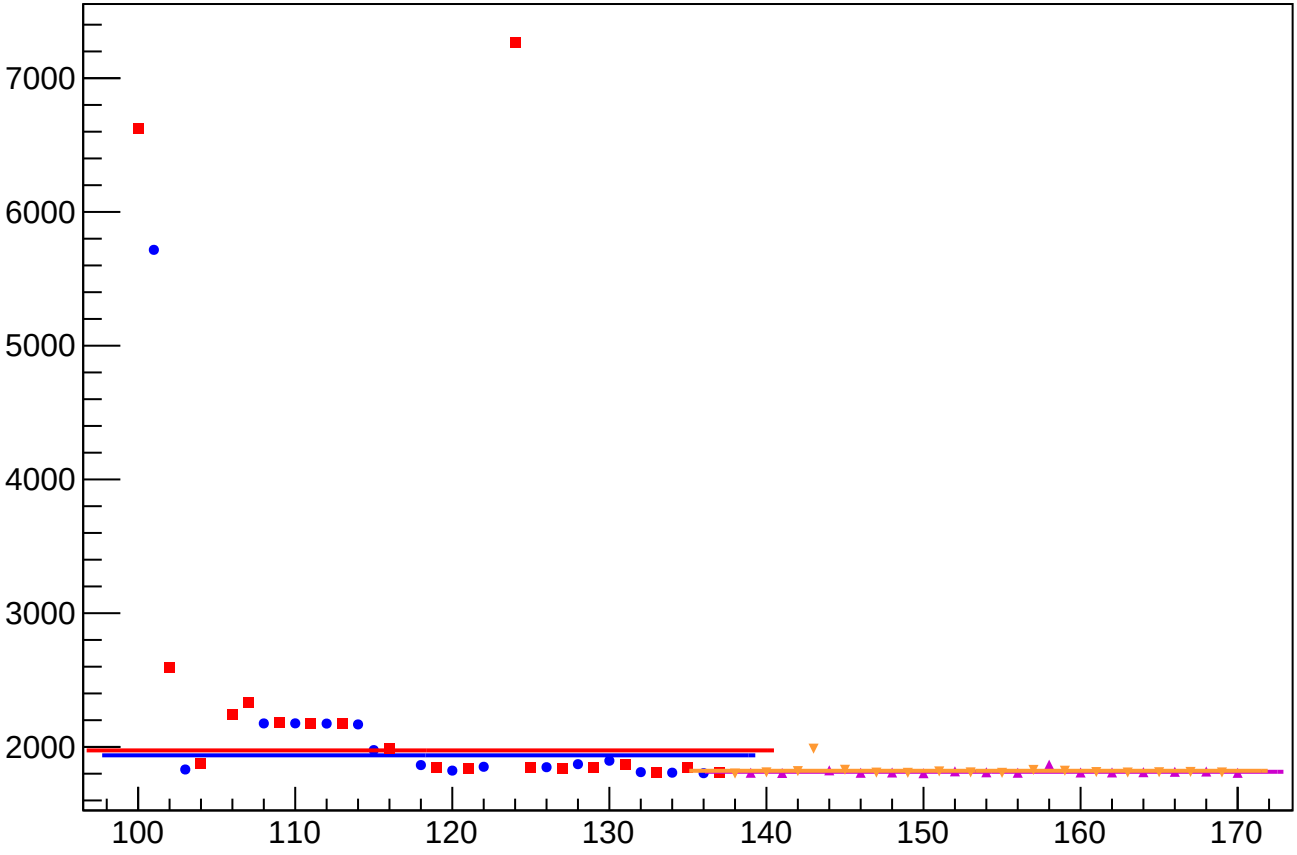
Left In: -2130.364+/-498.950 $\chi^2$/NDF:24.4/15

+ sign 2152.259+/-411.865 $\chi^2$/NDF: 36.4/32

All: 50.039+/-291.718 $\chi^2$/NDF: 131.5/67

- sign -2066.267+/-413.242 $\chi^2$/NDF: 42.9/34

# cor_asym_at1_avg_rms vs Slug




Right In: 1937.251+/-0.521 $\chi^2$/NDF: 638092.5/15

Left Out: 1821.749+/-0.351 $\chi^2$/NDF:12351.6/16

Right Out: 1974.155+/-0.521 $\chi^2$/NDF: 380430.7/18

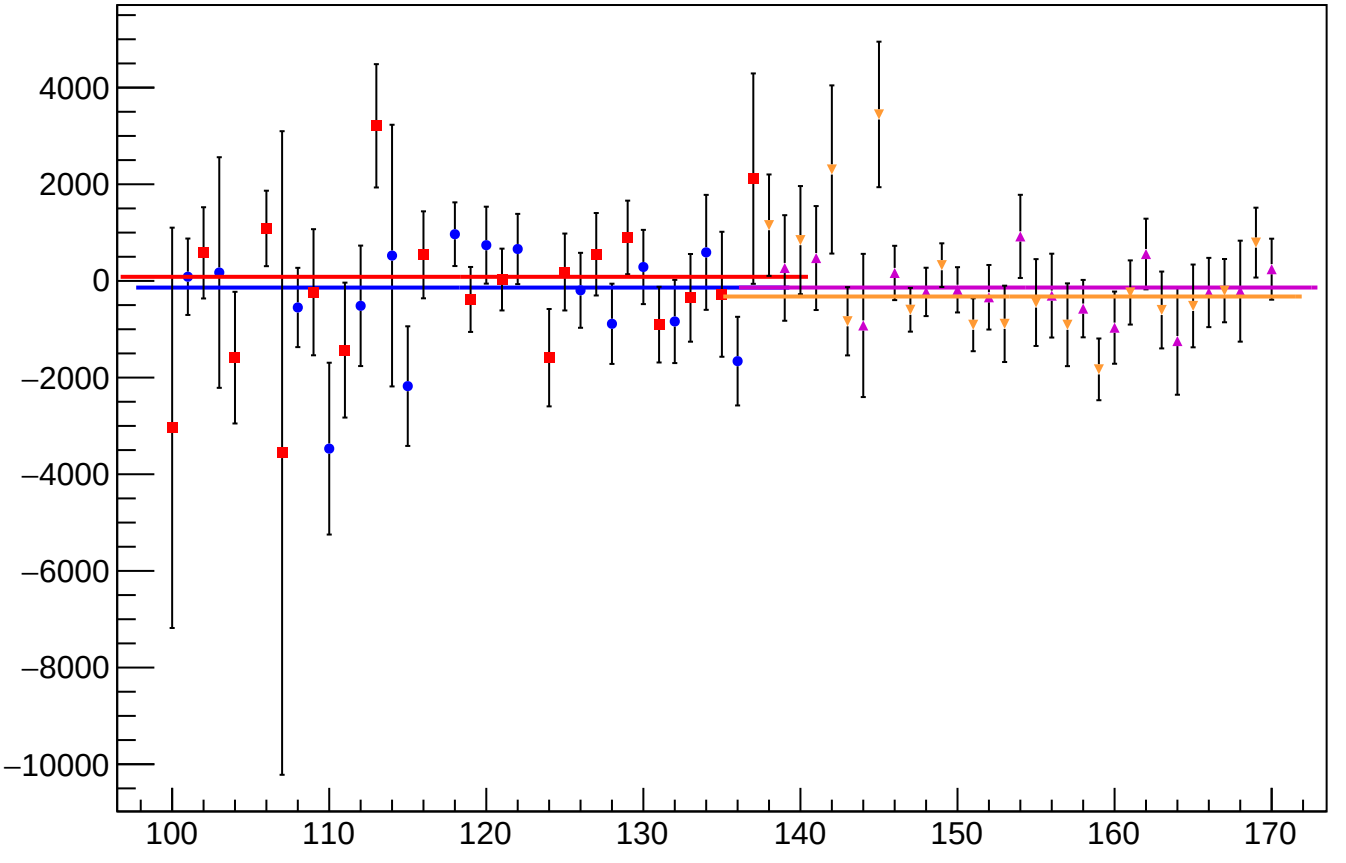
Left In: 1814.228+/-0.353 $\chi^2$/NDF:1752.3/15

+ sign 1857.897+/-0.291 $\chi^2$/NDF: 684264.9/32

All: 1861.164+/-0.206 $\chi^2$/NDF: 1131228.6/67

- sign 1864.452+/-0.292 $\chi^2$/NDF: 446711.3/34

# asym_at1_avg_cor_correction_mean vs Slug




Right In: -137.491+/-230.382 $\chi^2$/NDF: 16.9/15

Left Out: -322.549+/-172.239 $\chi^2$/NDF:24.9/16

Right Out: 84.947+/-221.881 $\chi^2$/NDF: 19.3/18

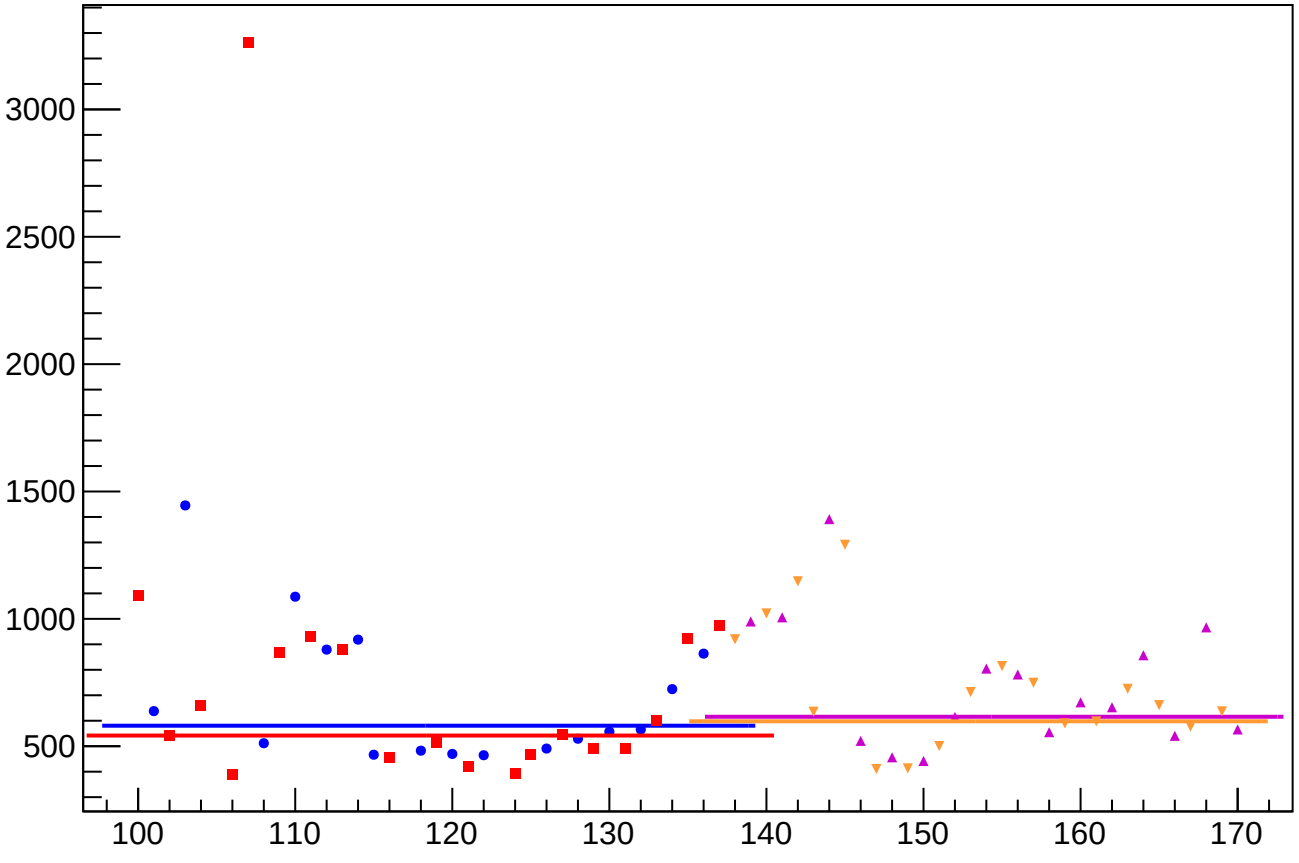
Left In: -136.609+/-178.210 $\chi^2$/NDF:6.8/15

+ sign -256.199+/-137.948 $\chi^2$/NDF: 42.2/32

All: -153.706+/-97.894 $\chi^2$/NDF: 69.9/67

- sign -49.729+/-138.943 $\chi^2$/NDF: 26.7/34

# asym_at1_avg_cor_correction_rms vs Slug




Right In: 580.519+/-0.163 $\chi^2$/NDF: 1002900.5/15

Left Out: 597.893+/-0.122 $\chi^2$/NDF:2136194.5/16

Right Out: 541.939+/-0.157 $\chi^2$/NDF: 1318850.5/18

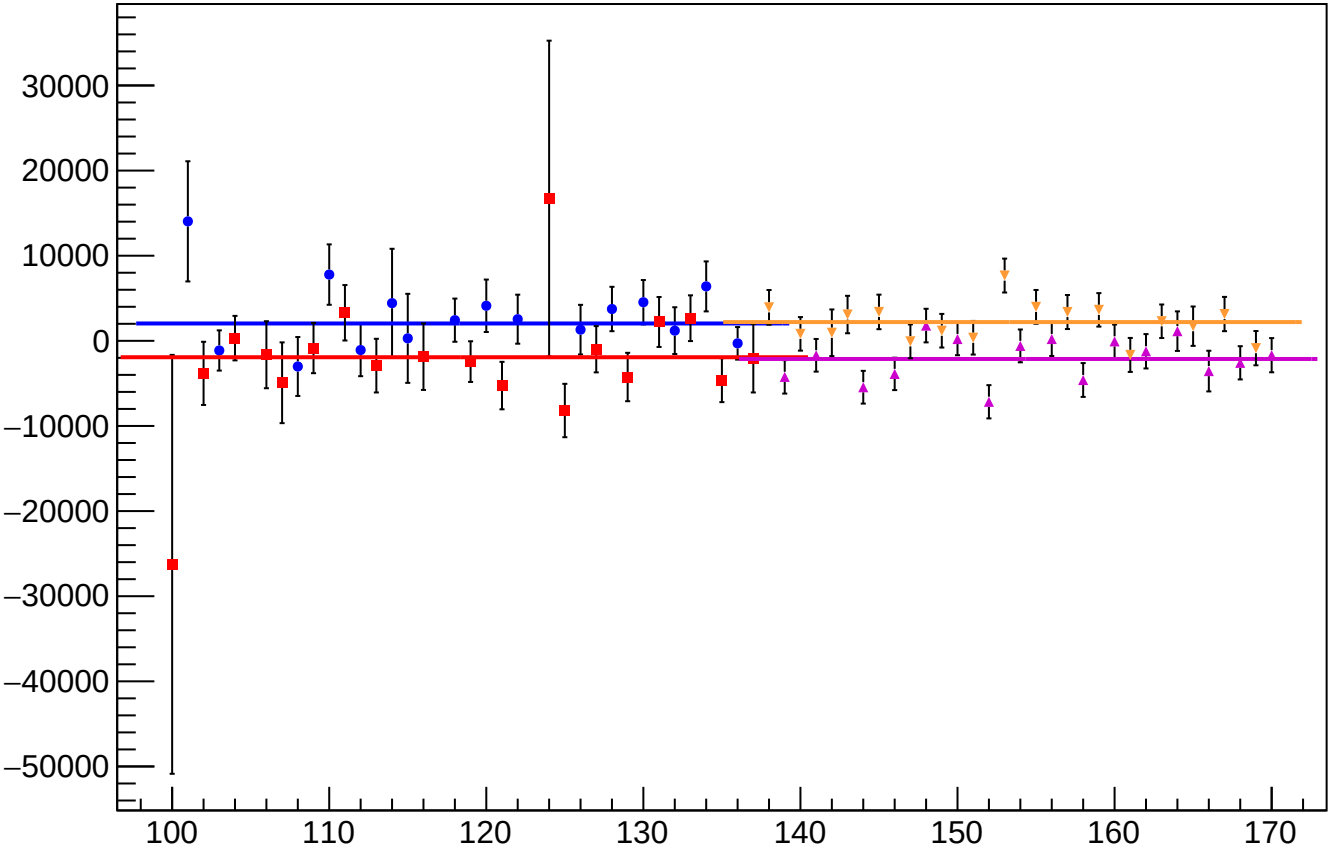
Left In: 615.614+/-0.126 $\chi^2$/NDF:2142428.7/15

+ sign 591.663+/-0.098 $\chi^2$/NDF: 3146391.3/32

All: 589.211+/-0.069 $\chi^2$/NDF: 6742987.0/67

- sign 586.724+/-0.098 $\chi^2$/NDF: 3595322.6/34

# eigen_cor_asym_at1_avg_mean vs Slug




Right In: 2038.842+/-736.211 $\chi^2$/NDF: 16.4/15

Left Out: 2203.926+/-496.898 $\chi^2$/NDF:19.9/16

Right Out: -1926.264+/-737.411 $\chi^2$/NDF: 18.4/18

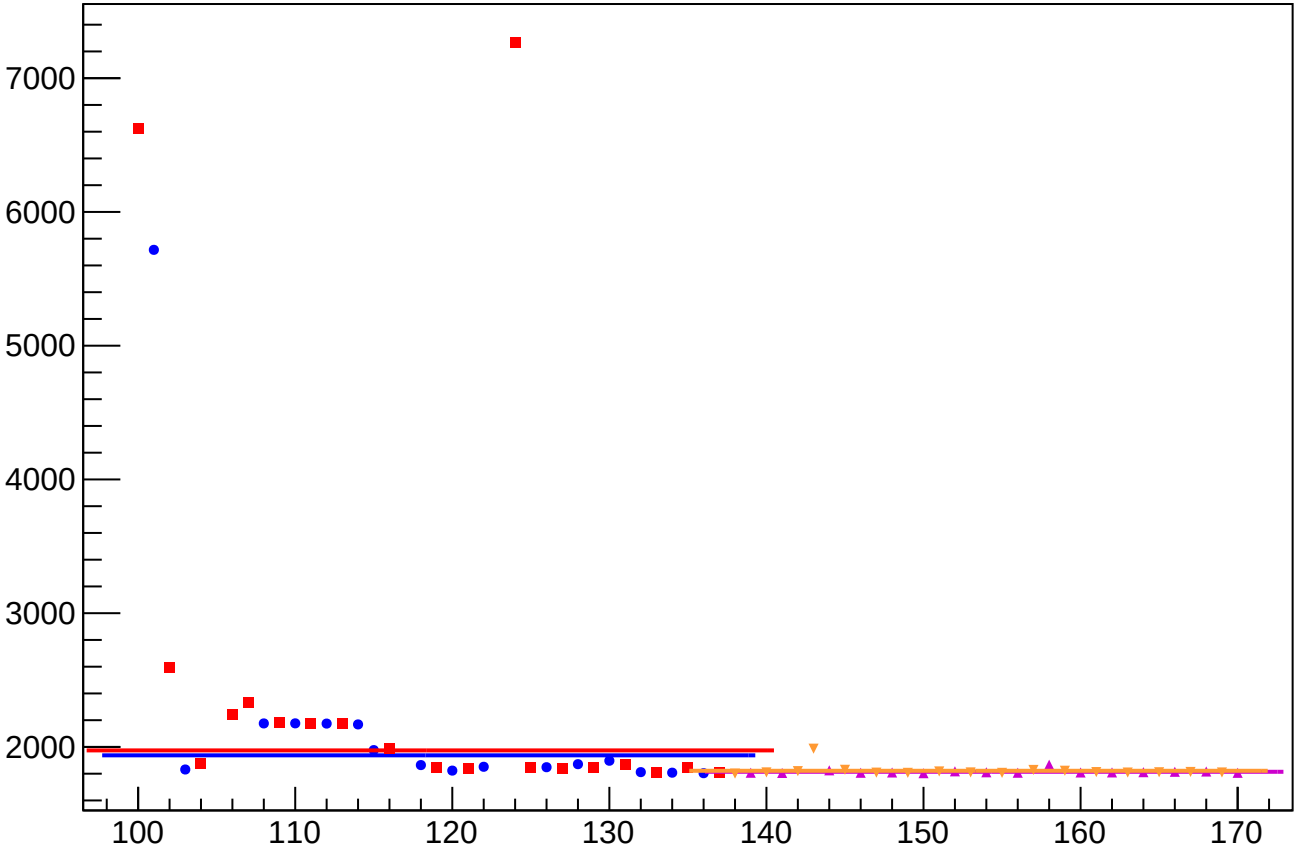
Left In: -2130.364+/-498.950 $\chi^2$/NDF:24.4/15

+ sign 2152.259+/-411.865 $\chi^2$/NDF: 36.4/32

All: 50.039+/-291.718 $\chi^2$/NDF: 131.5/67

- sign -2066.267+/-413.242 $\chi^2$/NDF: 42.9/34

# eigen_cor_asym_at1_avg_rms vs Slug




Right In: 1937.251+/-0.521 $\chi^2$/NDF: 638092.5/15

Left Out: 1821.749+/-0.351 $\chi^2$/NDF:12351.6/16

Right Out: 1974.155+/-0.521 $\chi^2$/NDF: 380430.7/18

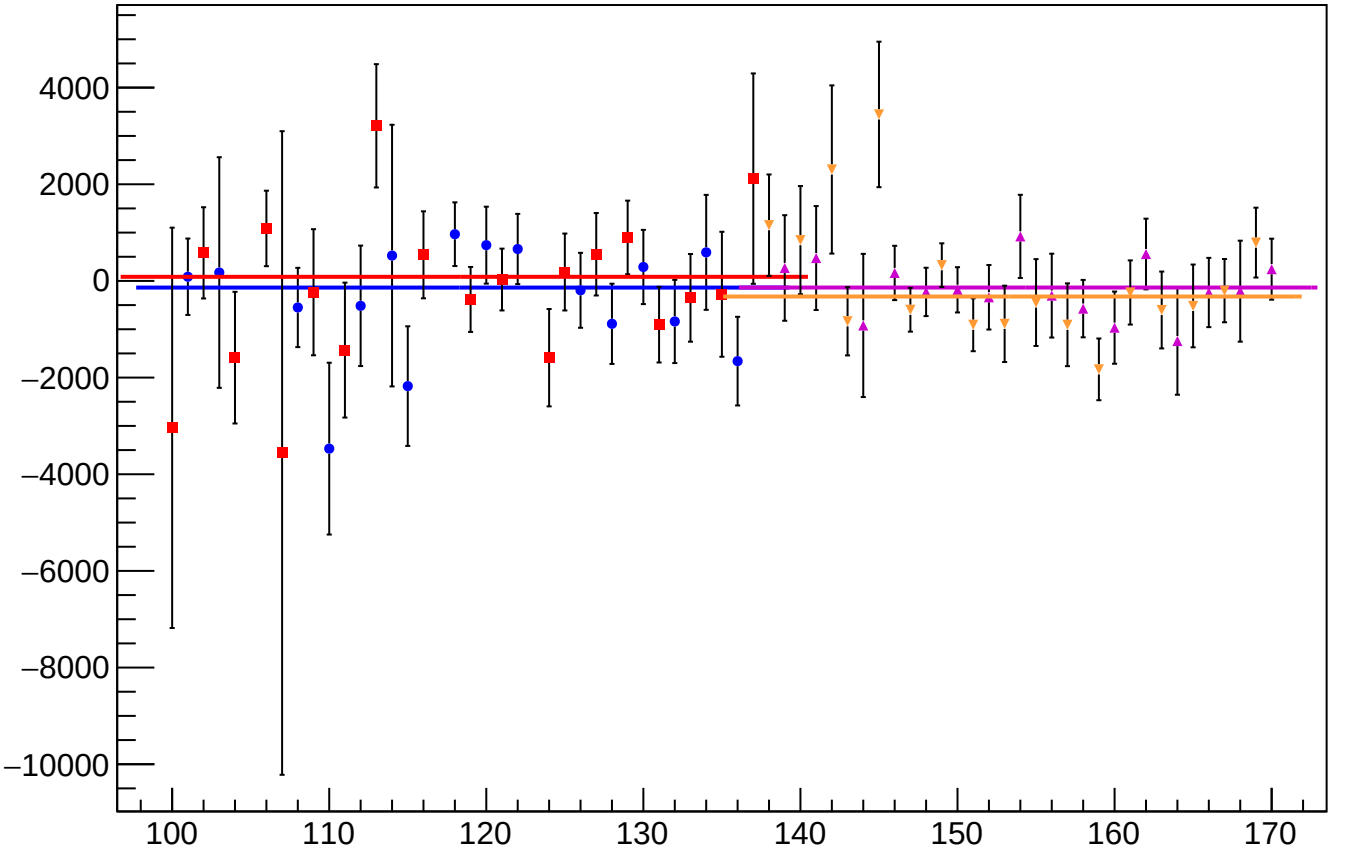
Left In: 1814.228+/-0.353 $\chi^2$/NDF:1752.3/15

+ sign 1857.897+/-0.291 $\chi^2$/NDF: 684264.9/32

All: 1861.164+/-0.206 $\chi^2$/NDF: 1131228.6/67

- sign 1864.452+/-0.292 $\chi^2$/NDF: 446711.3/34

# asym_at1_avg_eigen_cor_correction_mean vs Slug




Right In: -137.491+/-230.382 $\chi^2$/NDF: 16.9/15

Left Out: -322.549+/-172.239 $\chi^2$/NDF:24.9/16

Right Out: 84.947+/-221.881 $\chi^2$/NDF: 19.3/18

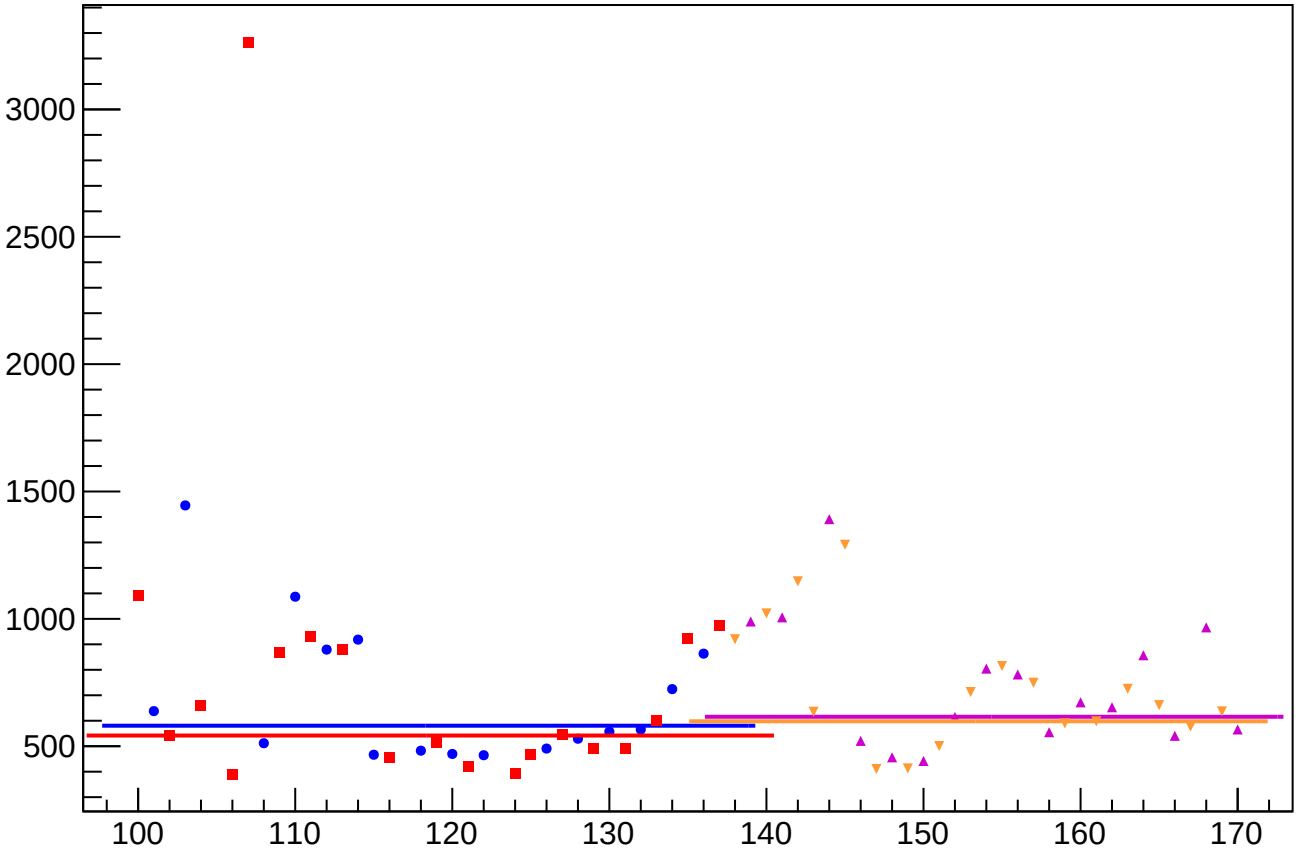
Left In: -136.609+/-178.210 $\chi^2$/NDF:6.8/15

+ sign -256.199+/-137.948 $\chi^2$/NDF: 42.2/32

All: -153.706+/-97.894 $\chi^2$/NDF: 69.9/67

- sign -49.729+/-138.943 $\chi^2$/NDF: 26.7/34

# asym_at1_avg_eigen_cor_correction_rms vs Slug




Right In: 580.519+/-0.163 $\chi^2$/NDF: 1002900.5/15

Left Out: 597.893+/-0.122 $\chi^2$/NDF:2136194.5/16

Right Out: 541.939+/-0.157 $\chi^2$/NDF: 1318850.5/18

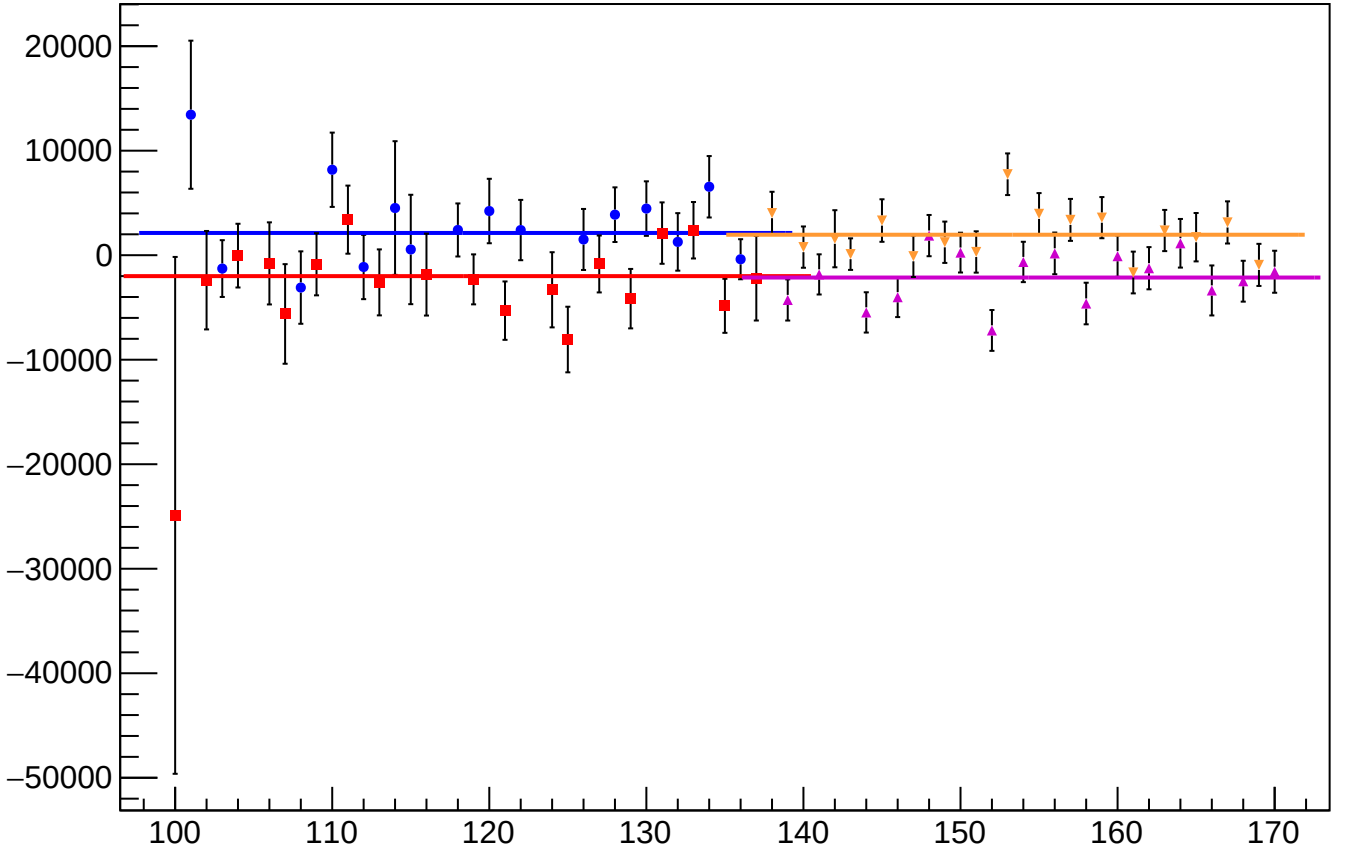
Left In: 615.614+/-0.126 $\chi^2$/NDF:2142428.7/15

+ sign 591.663+/-0.098 $\chi^2$/NDF: 3146391.3/32

All: 589.211+/-0.069 $\chi^2$/NDF: 6742987.0/67

- sign 586.724+/-0.098 $\chi^2$/NDF: 3595322.6/34

# dit_asym_at1_avg_mean vs Slug




Right In: 2128.748+/-746.242 $\chi^2$/NDF: 16.5/15

Left Out: 1958.048+/-483.747 $\chi^2$/NDF:21.6/16

Right Out: -2002.220+/-737.195 $\chi^2$/NDF: 16.7/18

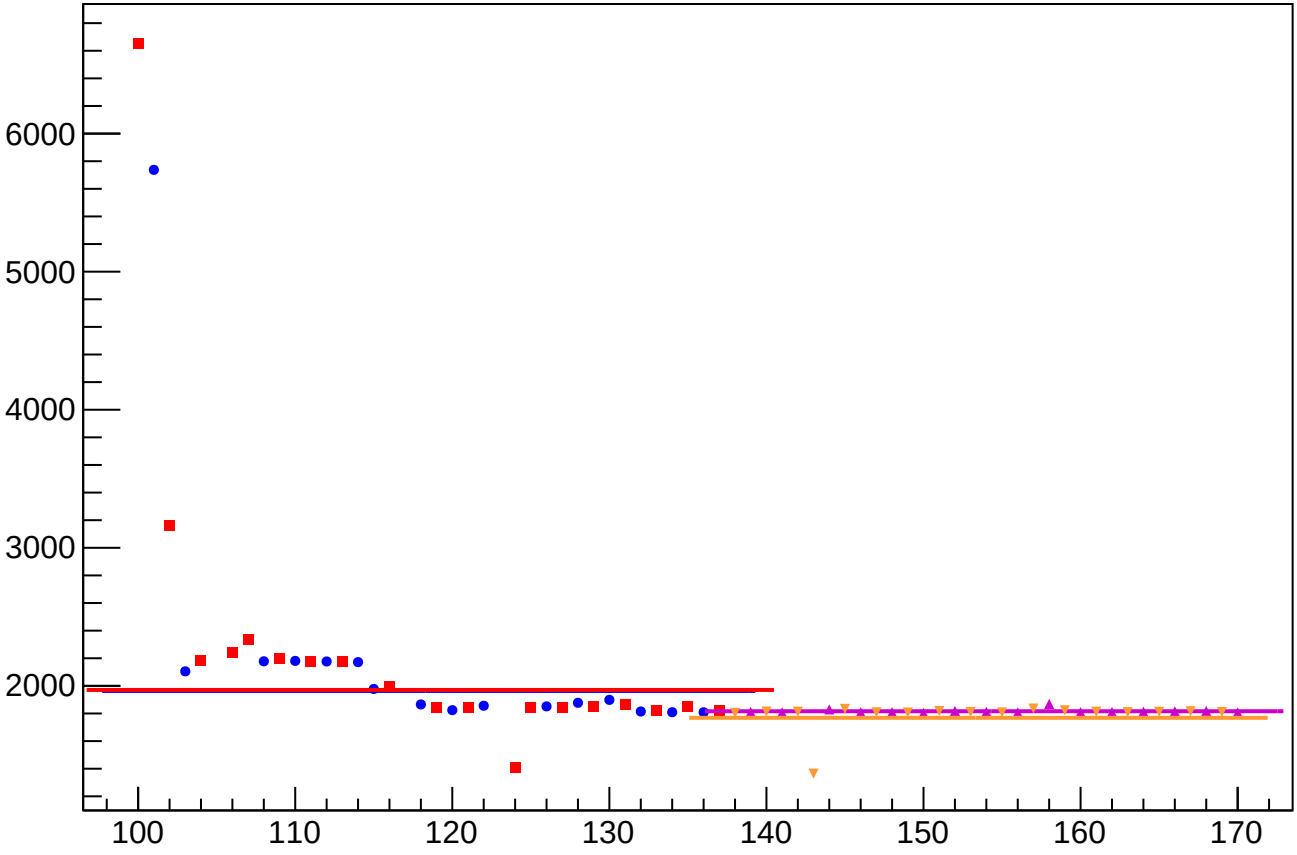
Left In: -2137.125+/-499.500 $\chi^2$/NDF:24.7/15

+ sign 2008.555+/-405.920 $\chi^2$/NDF: 38.2/32

All: -5.023+/-289.677 $\chi^2$/NDF: 129.8/67

- sign -2094.678+/-413.517 $\chi^2$/NDF: 41.5/34

# dit_asym_at1_avg_rms vs Slug




Right In: 1963.415+/-0.528 $\chi^2$/NDF: 640254.1/15

Left Out: 1768.590+/-0.342 $\chi^2$/NDF:160425.8/16

Right Out: 1970.459+/-0.521 $\chi^2$/NDF: 345133.0/18

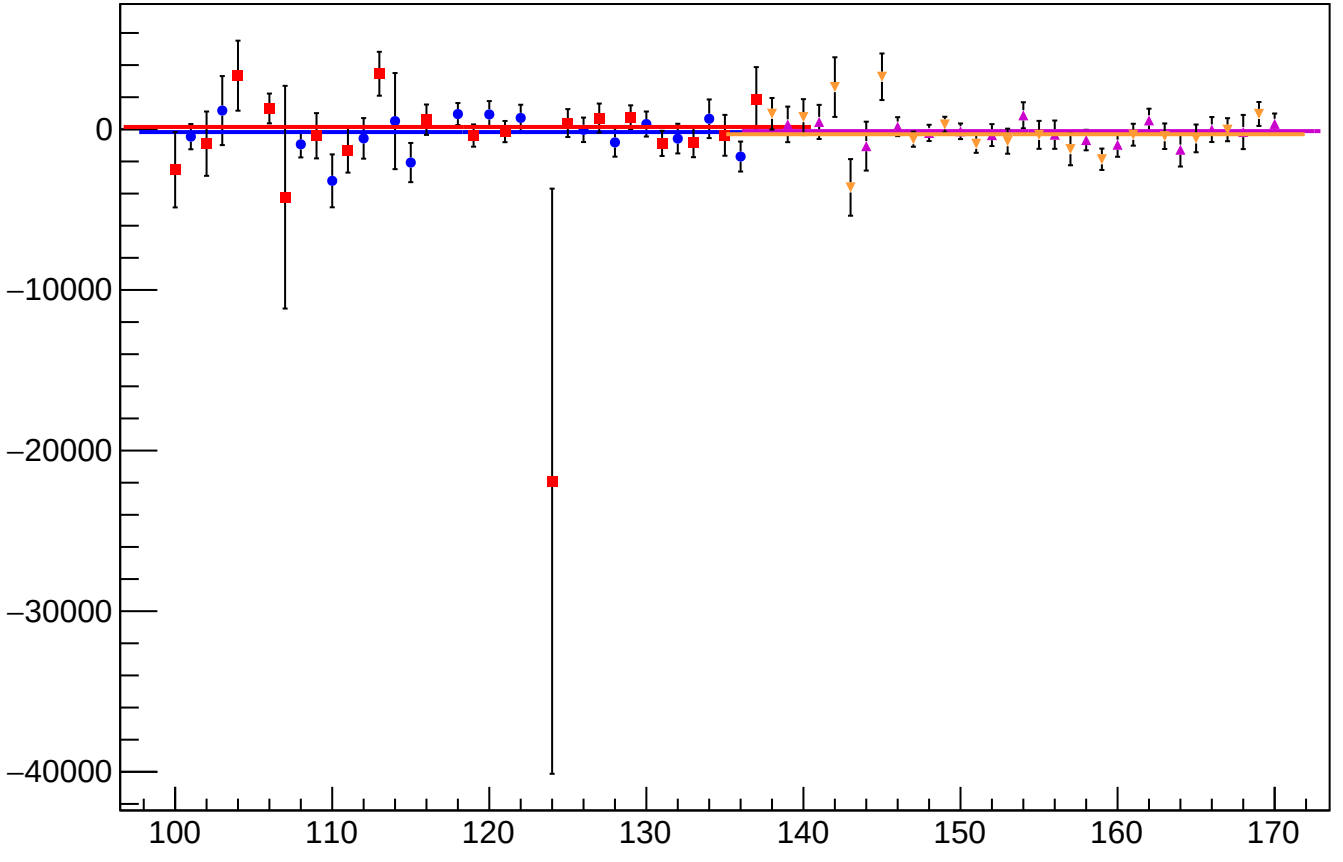
Left In: 1816.208+/-0.353 $\chi^2$/NDF:1797.8/15

+ sign 1826.236+/-0.287 $\chi^2$/NDF: 896665.0/32

All: 1845.132+/-0.205 $\chi^2$/NDF: 1312440.0/67

- sign 1864.743+/-0.292 $\chi^2$/NDF: 406942.6/34

# asym_at1_avg_dit_correction_mean vs Slug




Right In: -170.774+/-236.912 $\chi^2$/NDF: 17.2/15

Left Out: -304.865+/-182.700 $\chi^2$/NDF:27.6/16

Right Out: 147.489+/-242.848 $\chi^2$/NDF: 20.1/18

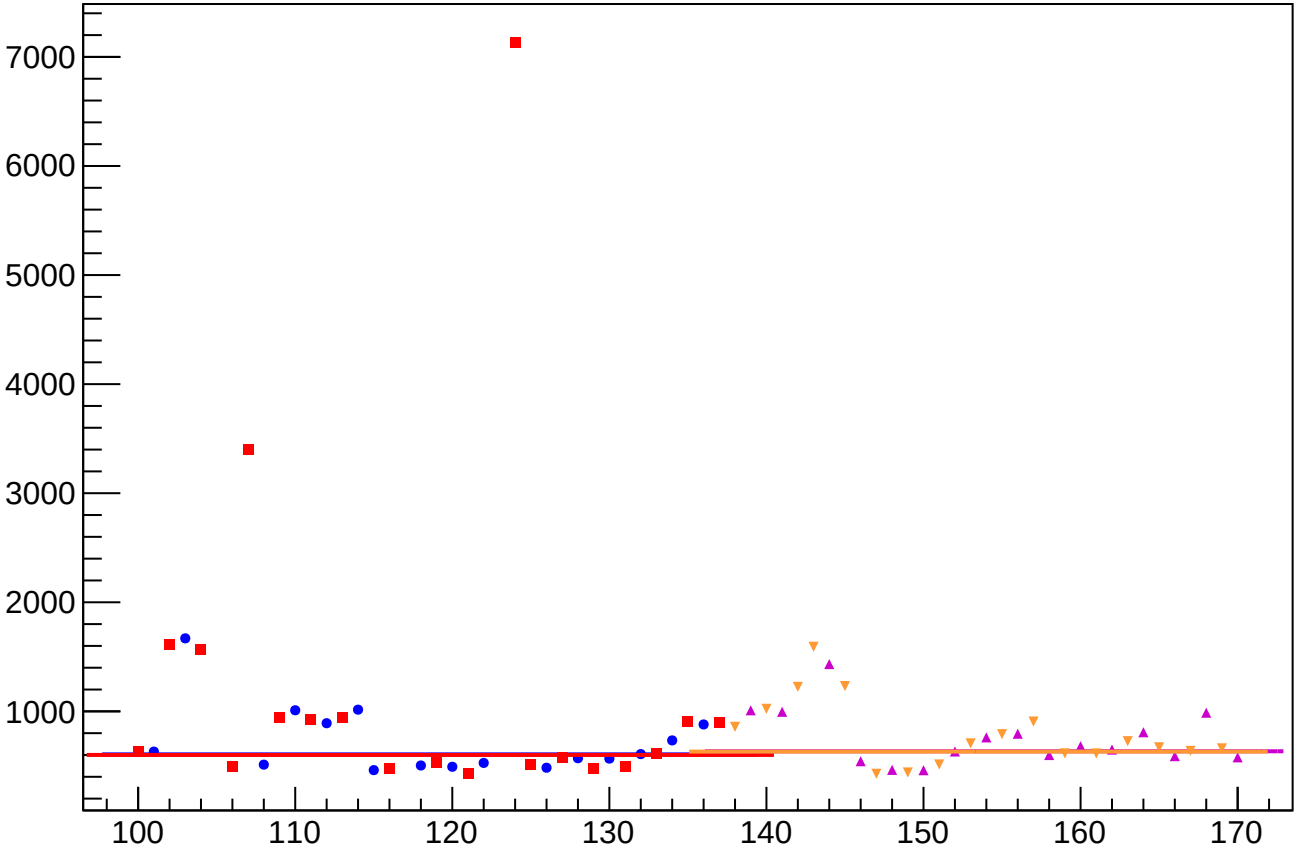
Left In: -110.578+/-182.408 $\chi^2$/NDF:7.3/15

+ sign -254.859+/-144.676 $\chi^2$/NDF: 45.1/32

All: -137.135+/-102.713 $\chi^2$/NDF: 74.6/67

- sign -17.496+/-145.848 $\chi^2$/NDF: 28.2/34

# asym_at1_avg_dit_correction_rms vs Slug




Right In: 605.430+/-0.168 $\chi^2$/NDF: 1162454.5/15

Left Out: 631.184+/-0.129 $\chi^2$/NDF:2546176.7/16

Right Out: 600.447+/-0.172 $\chi^2$/NDF: 2328523.8/18

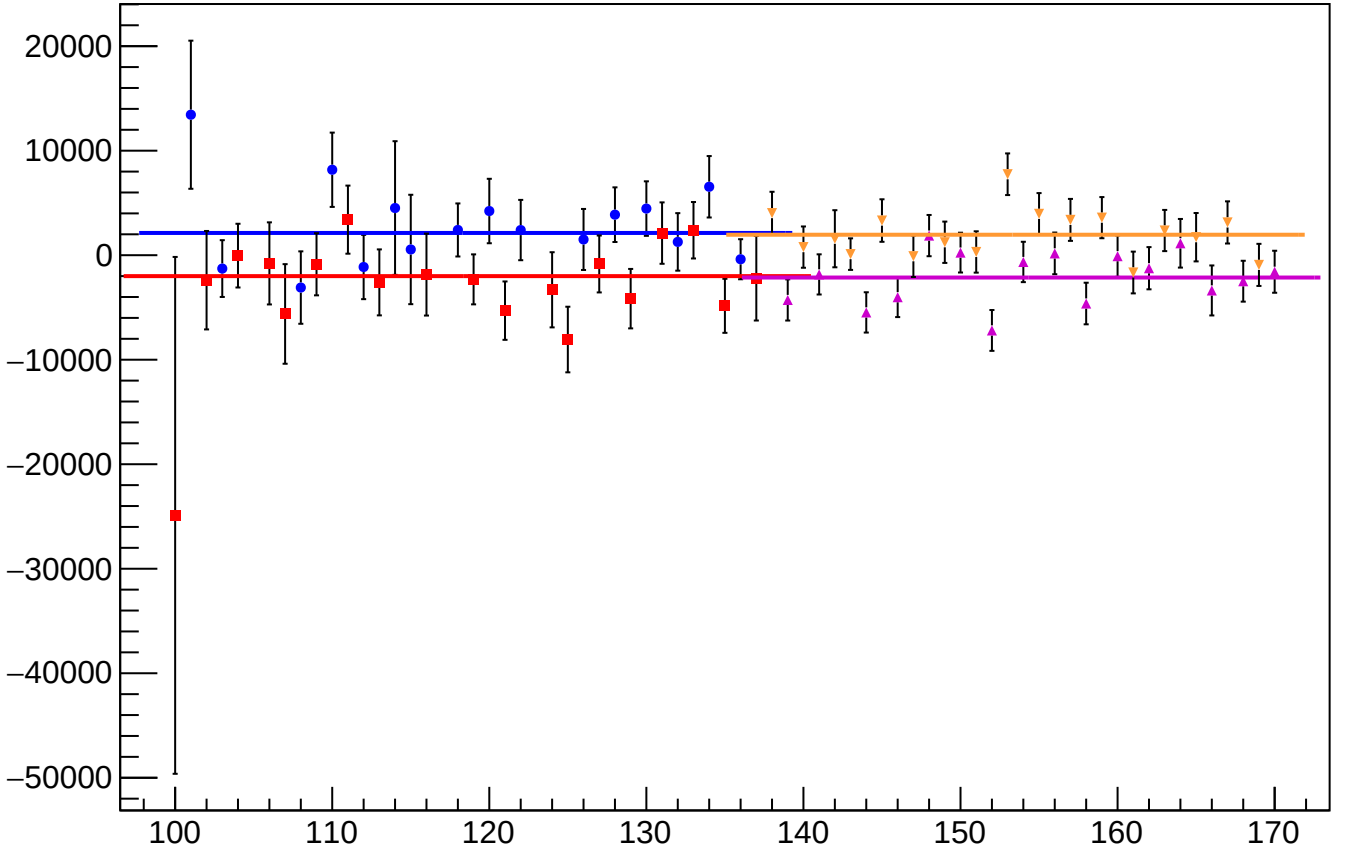
Left In: 633.971+/-0.129 $\chi^2$/NDF:1972006.2/15

+ sign 621.579+/-0.102 $\chi^2$/NDF: 3723451.8/32

All: 621.728+/-0.073 $\chi^2$/NDF: 8048352.2/67

- sign 621.879+/-0.103 $\chi^2$/NDF: 4324896.2/34

# eigen_dit_asym_at1_avg_mean vs Slug




Right In: 2128.746+/-746.242 $\chi^2$/NDF: 16.5/15

Left Out: 1958.048+/-483.747 $\chi^2$/NDF:21.6/16

Right Out: -2002.218+/-737.195 $\chi^2$/NDF: 16.7/18

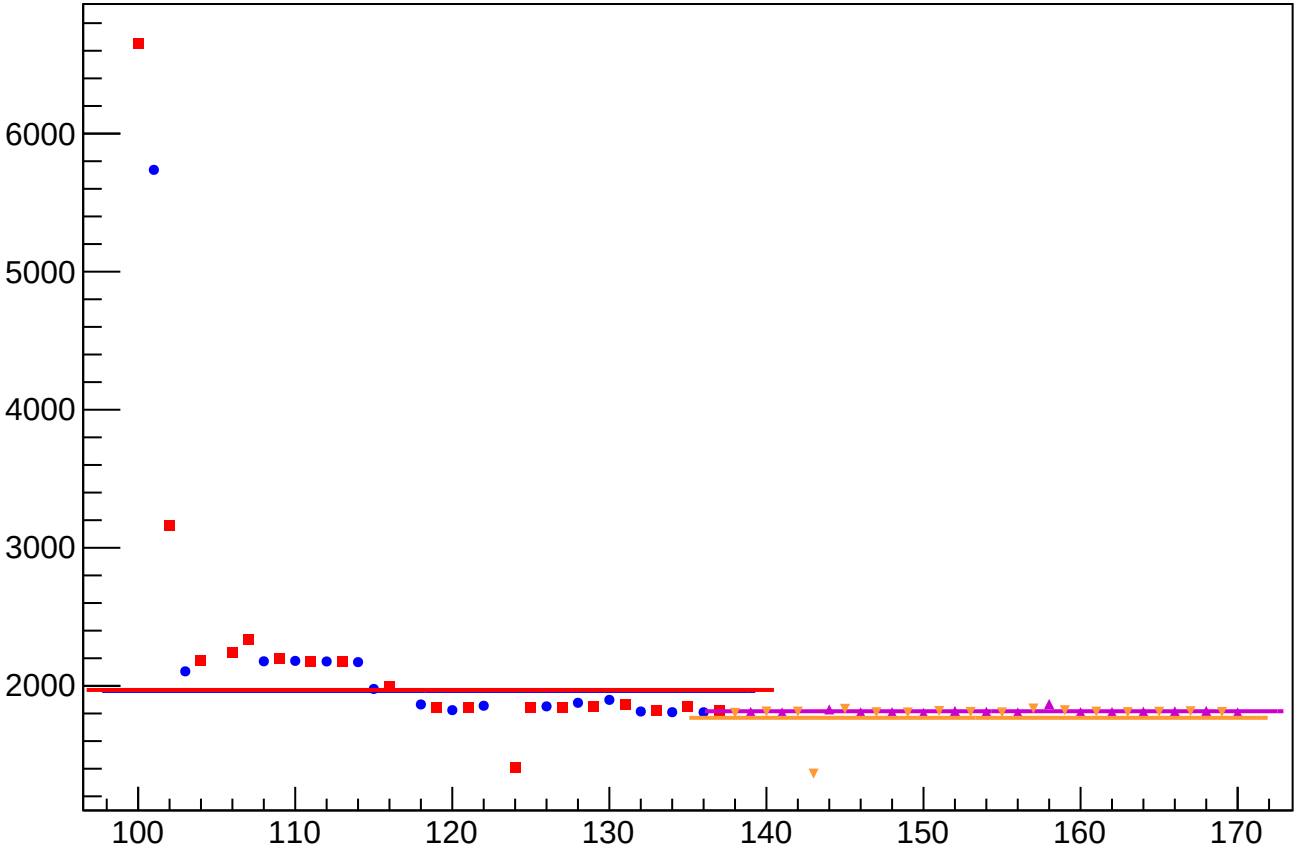
Left In: -2137.125+/-499.500 $\chi^2$/NDF:24.7/15

+ sign 2008.555+/-405.920 $\chi^2$/NDF: 38.2/32

All: -5.023+/-289.677 $\chi^2$/NDF: 129.8/67

- sign -2094.677+/-413.517 $\chi^2$/NDF: 41.5/34

# eigen_dit_asym_at1_avg_rms vs Slug




Right In: 1963.415+/-0.528 $\chi^2$/NDF: 640253.8/15

Left Out: 1768.590+/-0.342 $\chi^2$/NDF:160425.8/16

Right Out: 1970.459+/-0.521 $\chi^2$/NDF: 345131.7/18

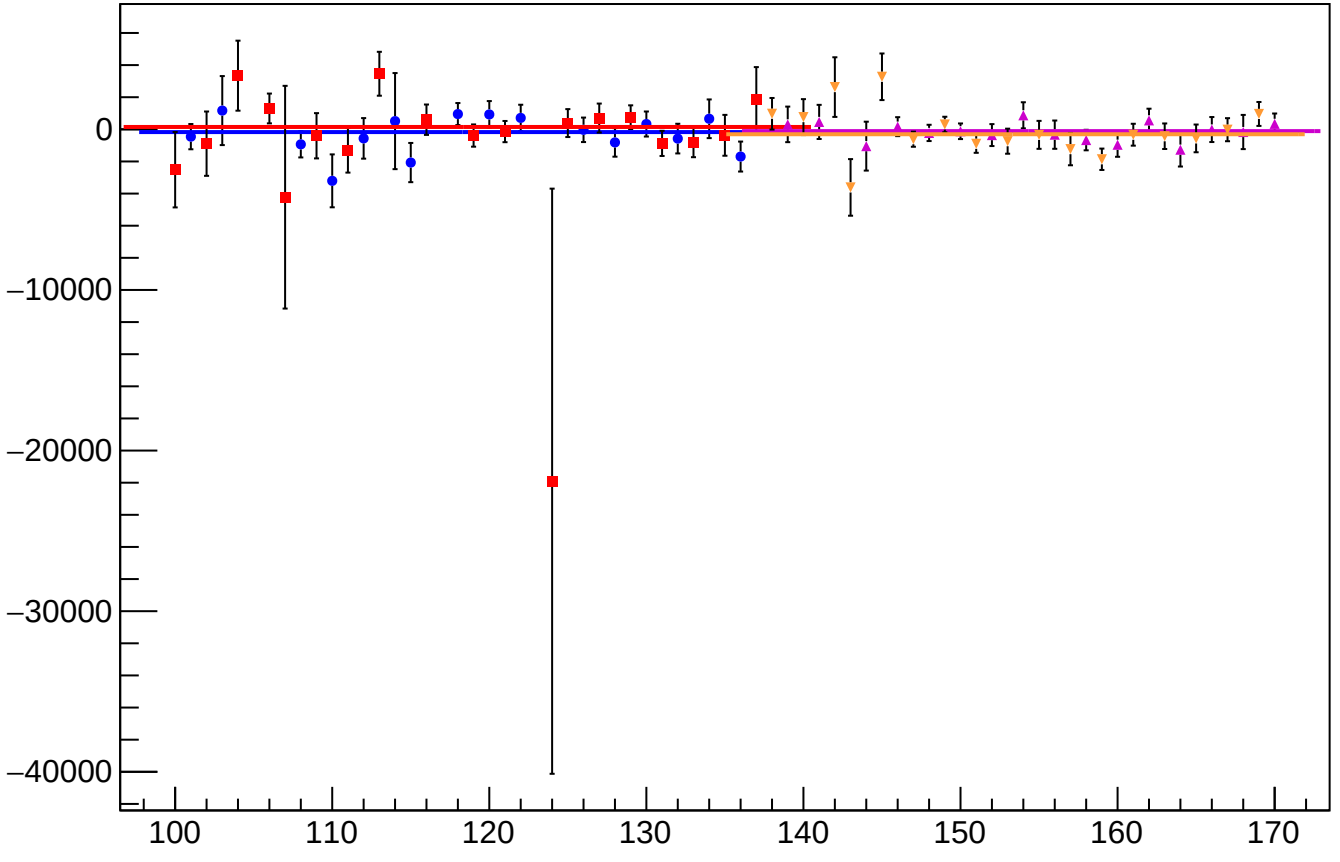
Left In: 1816.208+/-0.353 $\chi^2$/NDF:1797.8/15

+ sign 1826.236+/-0.287 $\chi^2$/NDF: 896664.5/32

All: 1845.132+/-0.205 $\chi^2$/NDF: 1312438.0/67

- sign 1864.743+/-0.292 $\chi^2$/NDF: 406941.1/34

# asym_at1_avg_eigen_dit_correction_mean vs Slug




Right In: -170.773+/-236.912 $\chi^2$/NDF: 17.2/15

Left Out: -304.865+/-182.700 $\chi^2$/NDF:27.6/16

Right Out: 147.489+/-242.847 $\chi^2$/NDF: 20.1/18

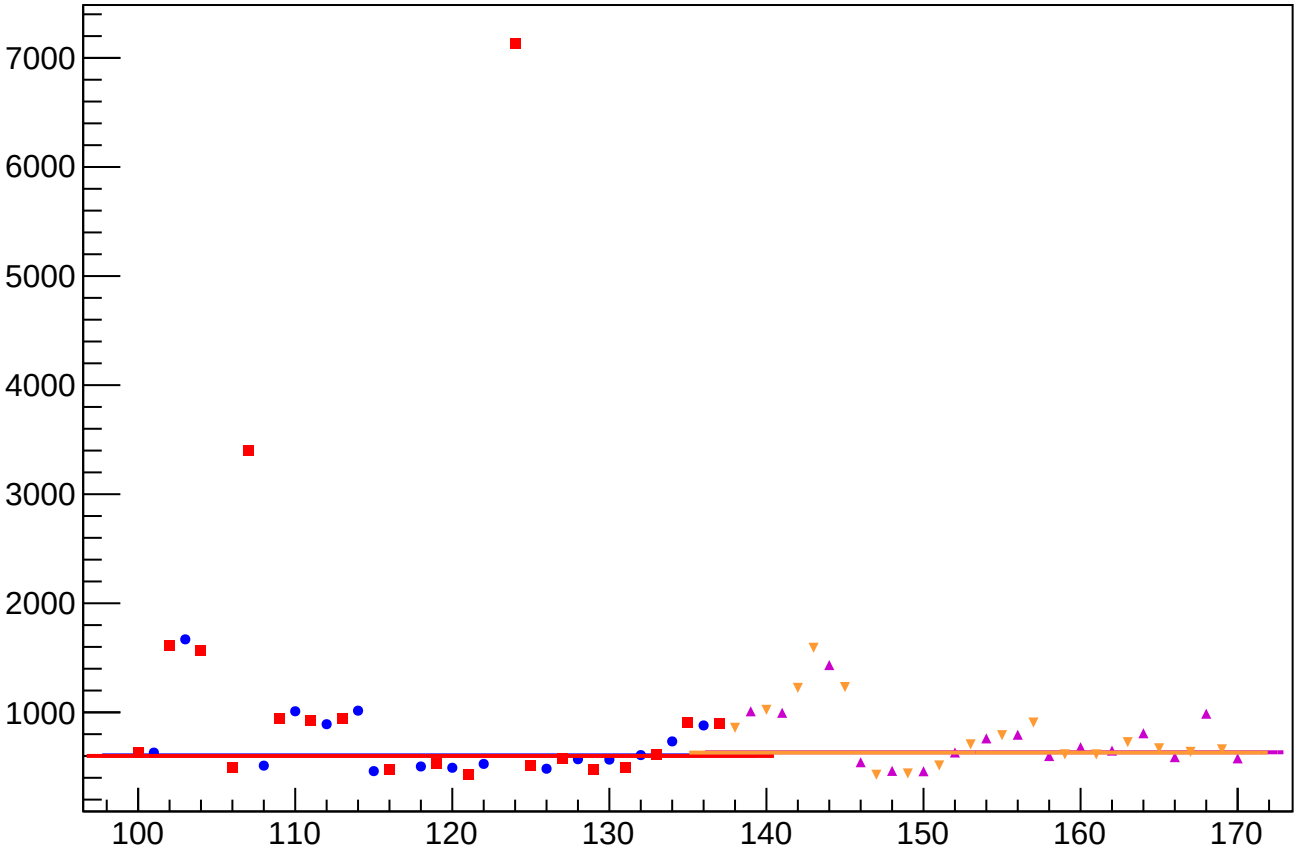
Left In: -110.577+/-182.409 $\chi^2$/NDF:7.3/15

+ sign -254.859+/-144.676 $\chi^2$/NDF: 45.1/32

All: -137.134+/-102.713 $\chi^2$/NDF: 74.6/67

- sign -17.495+/-145.848 $\chi^2$/NDF: 28.2/34

# asym_at1_avg_eigen_dit_correction_rms vs Slug




Right In: 605.429+/-0.168 $\chi^2$/NDF: 1162462.4/15

Left Out: 631.185+/-0.129 $\chi^2$/NDF:2546168.9/16

Right Out: 600.446+/-0.172 $\chi^2$/NDF: 2328531.9/18

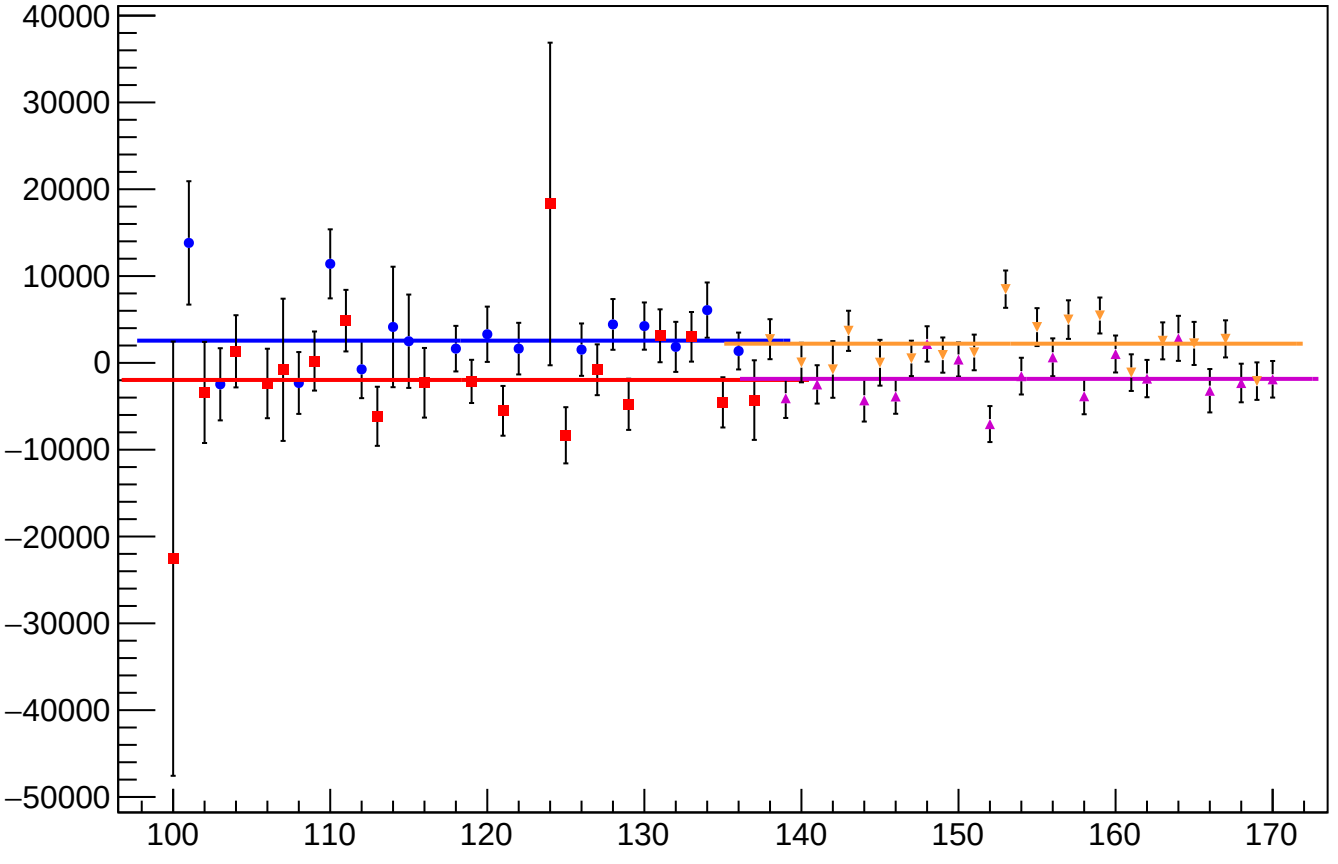
Left In: 633.972+/-0.129 $\chi^2$/NDF:1972000.9/15

+ sign 621.580+/-0.102 $\chi^2$/NDF: 3723454.4/32

All: 621.728+/-0.073 $\chi^2$/NDF: 8048360.4/67

- sign 621.879+/-0.103 $\chi^2$/NDF: 4324901.8/34

# asym_at1_avg_mean vs Slug




Right In: 2560.971+/-809.658 $\chi^2$/NDF: 14.6/15

Left Out: 2210.323+/-540.017 $\chi^2$/NDF:24.1/16

Right Out: -1966.731+/-818.839 $\chi^2$/NDF: 21.6/18

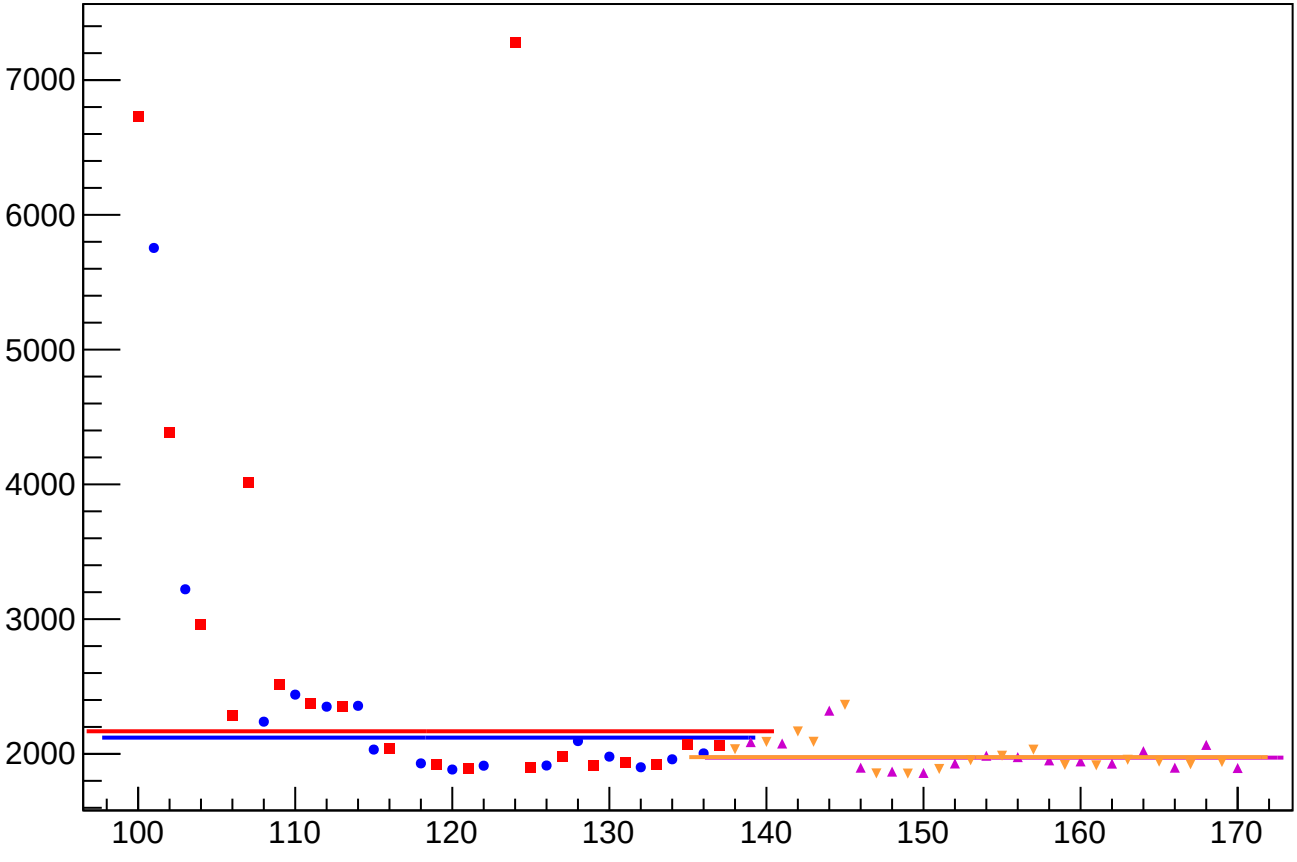
Left In: -1842.811+/-543.348 $\chi^2$/NDF:22.2/15

+ sign 2318.282+/-449.259 $\chi^2$/NDF: 38.9/32

All: 235.007+/-318.898 $\chi^2$/NDF: 126.0/67

- sign -1880.694+/-452.741 $\chi^2$/NDF: 43.8/34

# asym_at1_avg_rms vs Slug




Right In: 2120.778+/-0.573 $\chi^2$/NDF: 759969.1/15

Left Out: 1975.939+/-0.382 $\chi^2$/NDF:86199.1/16

Right Out: 2167.840+/-0.579 $\chi^2$/NDF: 823925.5/18

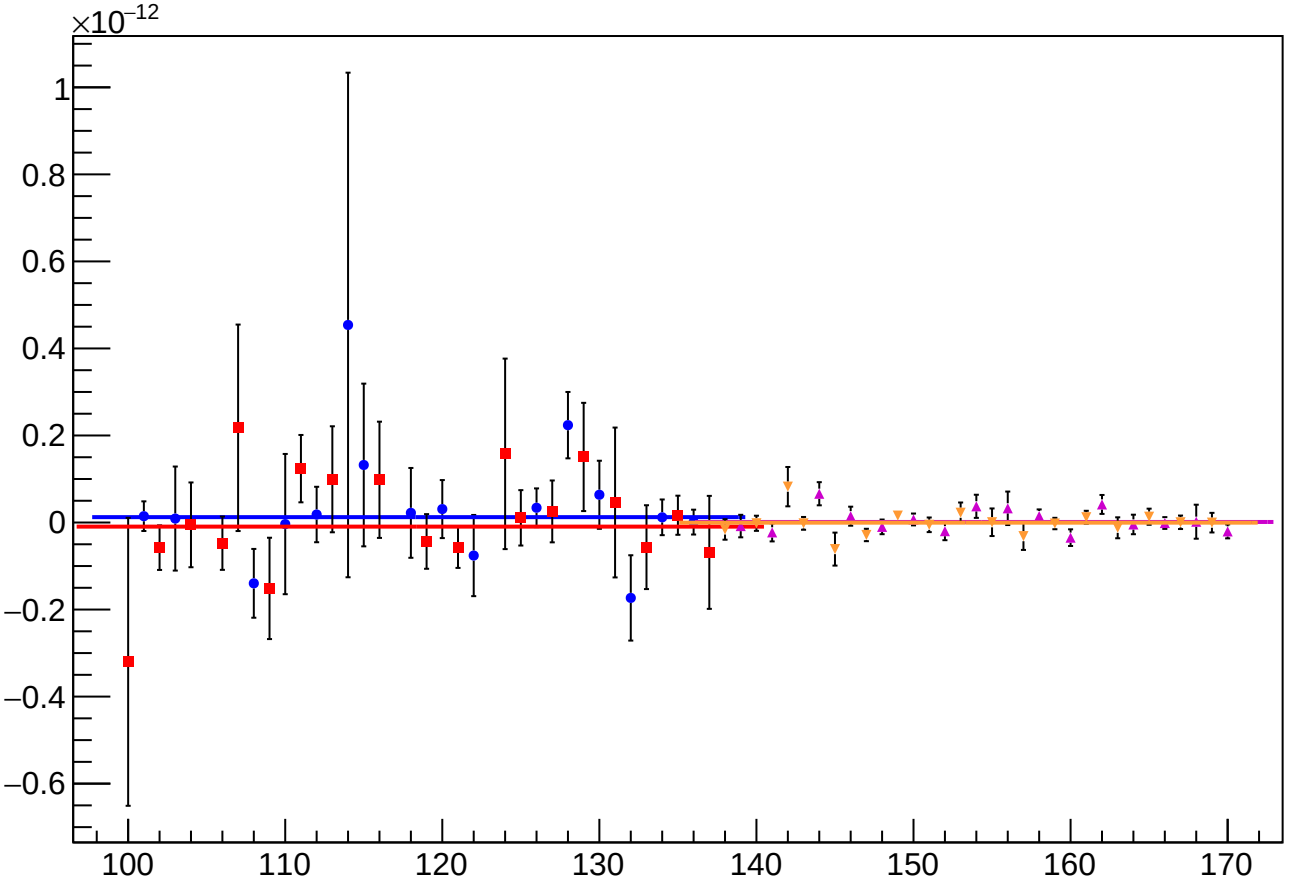
Left In: 1972.173+/-0.384 $\chi^2$/NDF:75847.5/15

+ sign 2020.533+/-0.318 $\chi^2$/NDF: 890464.9/32

All: 2026.217+/-0.225 $\chi^2$/NDF: 1870171.9/67

- sign 2031.990+/-0.320 $\chi^2$/NDF: 979061.7/34

# asym_at1_avg_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 17.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:15.8/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 13.8/18

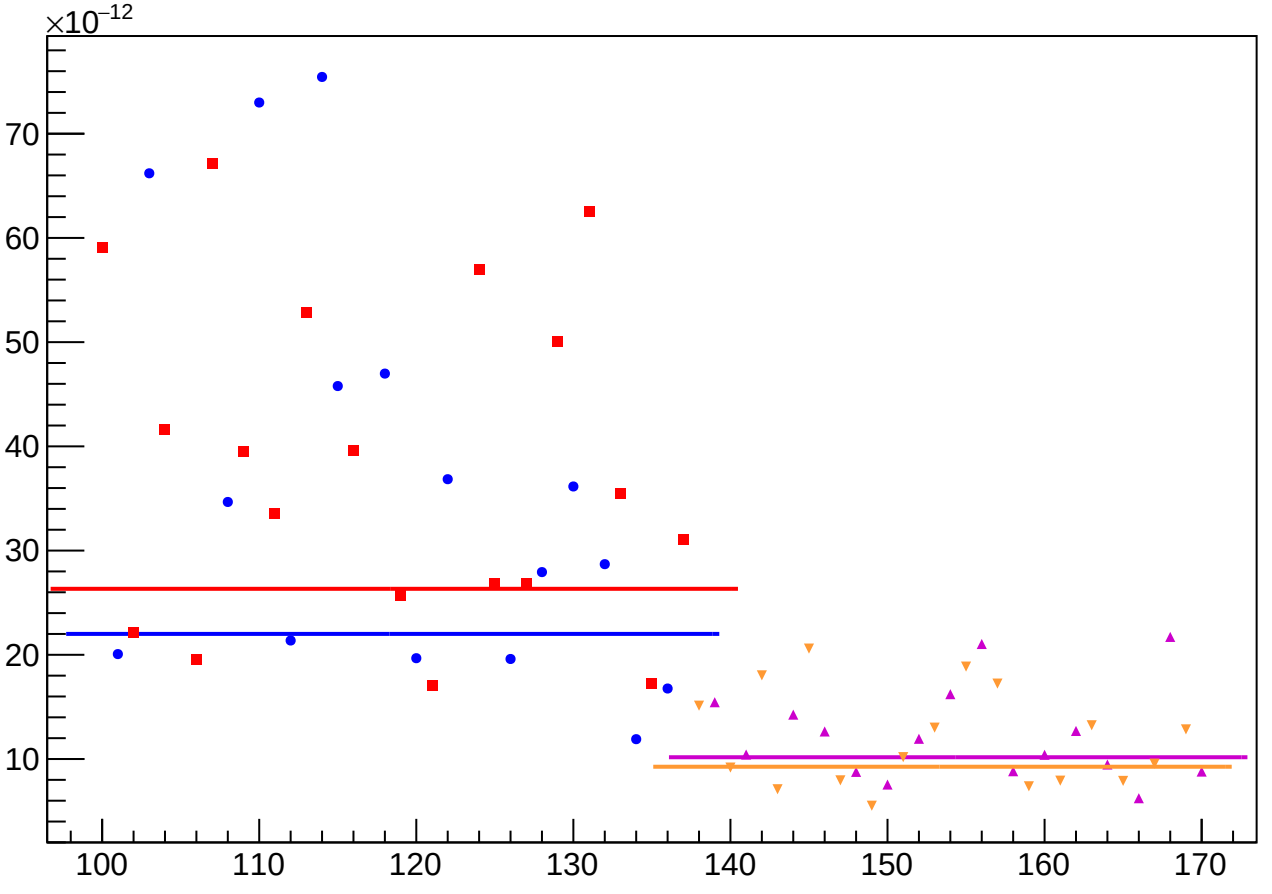
Left In: 0.000+/-0.000 $\chi^2$/NDF:21.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 34.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 70.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 35.7/34

# asym_at1_avg_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1032604.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1187641.3/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 705211.2/18

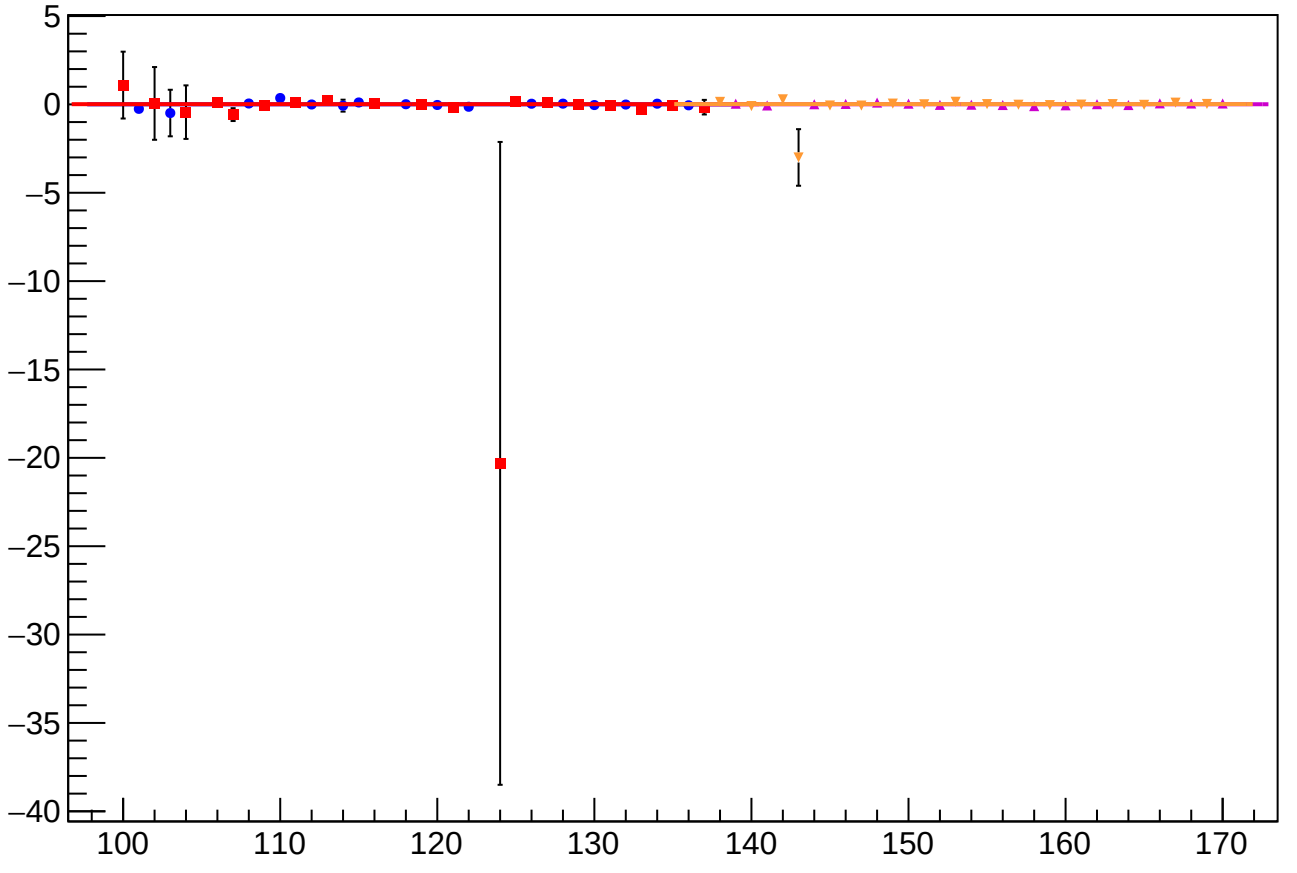
Left In: 0.000+/-0.000 $\chi^2$/NDF:925132.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3594929.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 6768975.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3126324.7/34

# asym_at1_avg_dit_vs_cor_diff_mean vs Slug




Right In: 0.004+/-0.027 $\chi^2$/NDF: 11.4/15

Left Out: 0.016+/-0.015 $\chi^2$/NDF:24.3/16

Right Out: 0.013+/-0.026 $\chi^2$/NDF: 17.6/18

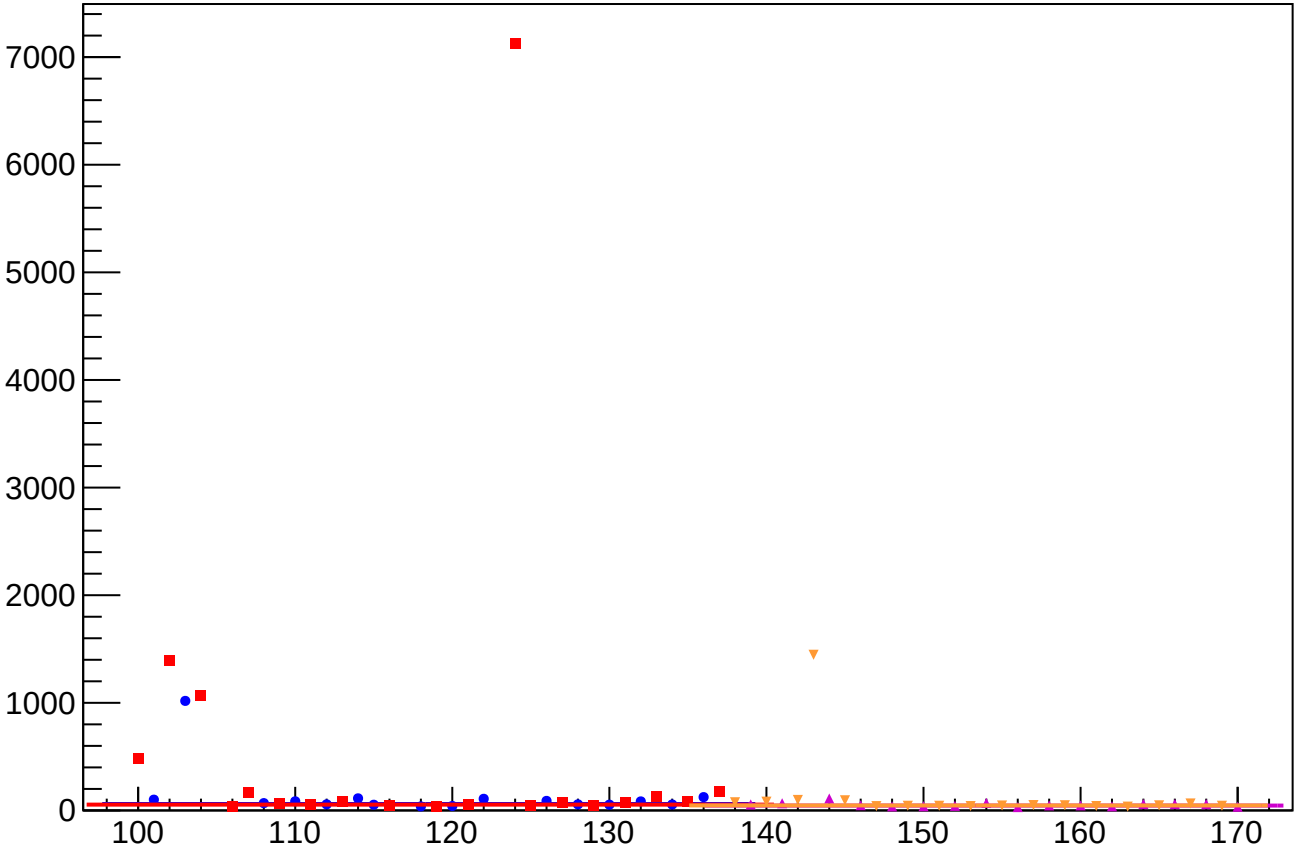
Left In: 0.008+/-0.014 $\chi^2$/NDF:14.4/15

+ sign 0.013+/-0.013 $\chi^2$/NDF: 35.8/32

All: 0.011+/-0.009 $\chi^2$/NDF: 67.9/67

- sign 0.009+/-0.012 $\chi^2$/NDF: 32.0/34

# asym_at1_avg_dit_vs_cor_diff_rms vs Slug




Right In: 59.840+/-0.019 $\chi^2$/NDF: 2538867.4/15

Left Out: 46.725+/-0.010 $\chi^2$/NDF:2936133.0/16

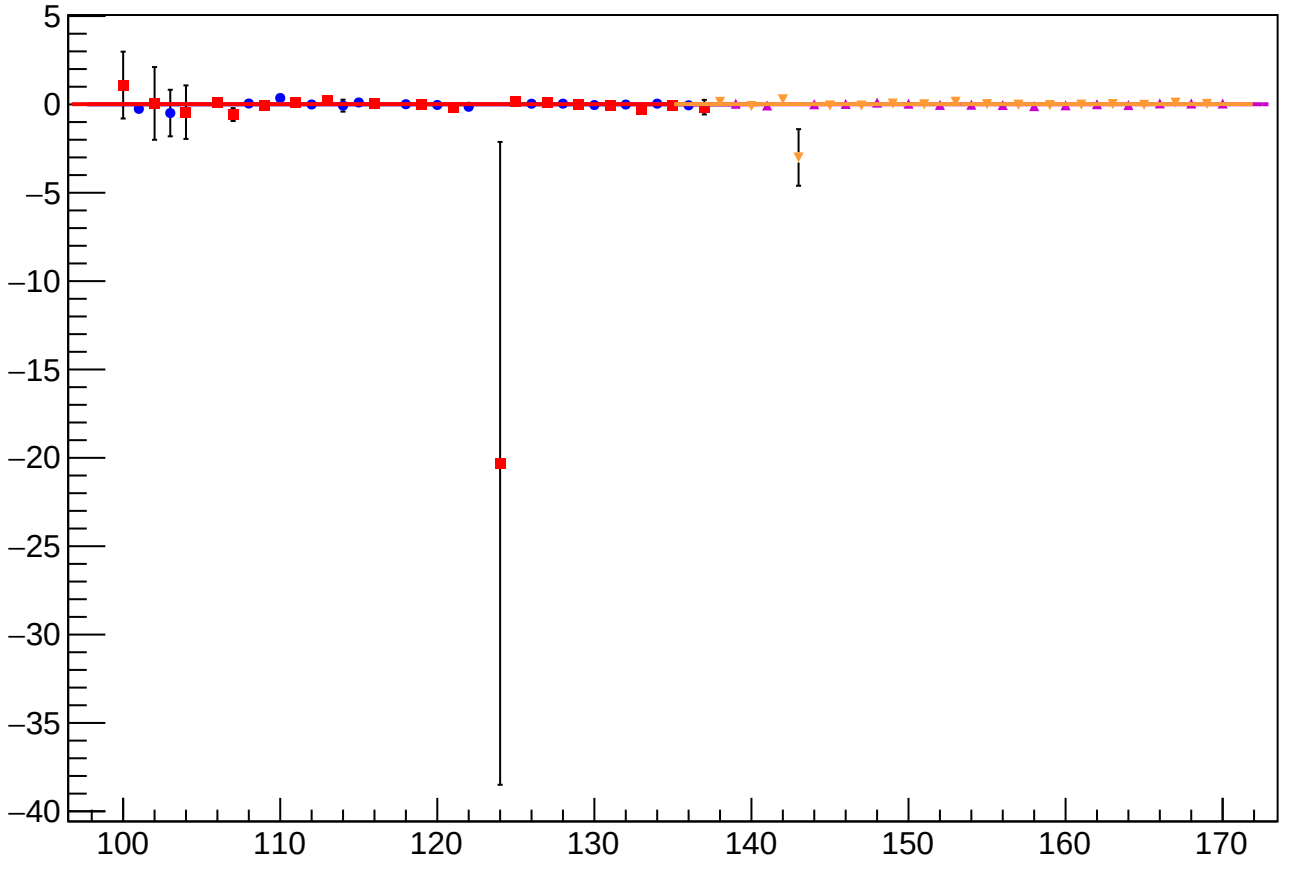
Right Out: 54.249+/-0.018 $\chi^2$/NDF: 3521580.5/18

Left In: 45.347+/-0.010 $\chi^2$/NDF:1676528.5/15

+ sign 49.788+/-0.009 $\chi^2$/NDF: 5844359.2/32

All: 48.550+/-0.006 $\chi^2$/NDF: 11260668.1/67

- sign 47.406+/-0.009 $\chi^2$/NDF: 5380967.4/34




Right In: 0.004+/-0.027 $\chi^2$/NDF: 11.4/15

Left Out: 0.016+/-0.015 $\chi^2$/NDF:24.3/16

Right Out: 0.013+/-0.026 $\chi^2$/NDF: 17.6/18

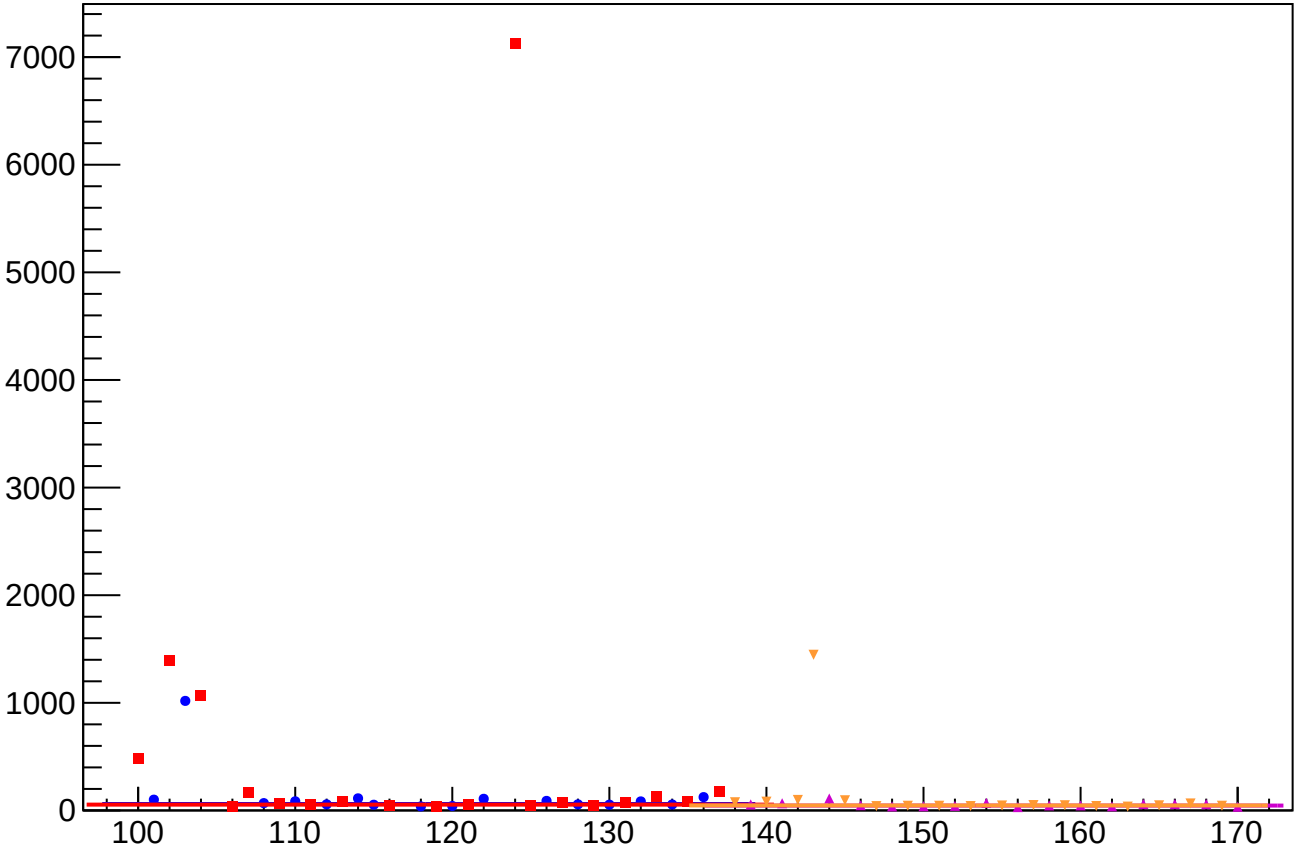
Left In: 0.008+/-0.014 $\chi^2$/NDF:14.4/15

+ sign 0.013+/-0.013 $\chi^2$/NDF: 35.8/32

All: 0.011+/-0.009 $\chi^2$/NDF: 67.9/67

- sign 0.009+/-0.012 $\chi^2$/NDF: 32.0/34

# asym_at1_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 59.840+/-0.019 $\chi^2$/NDF: 2538867.4/15

Left Out: 46.725+/-0.010 $\chi^2$/NDF:2936133.0/16

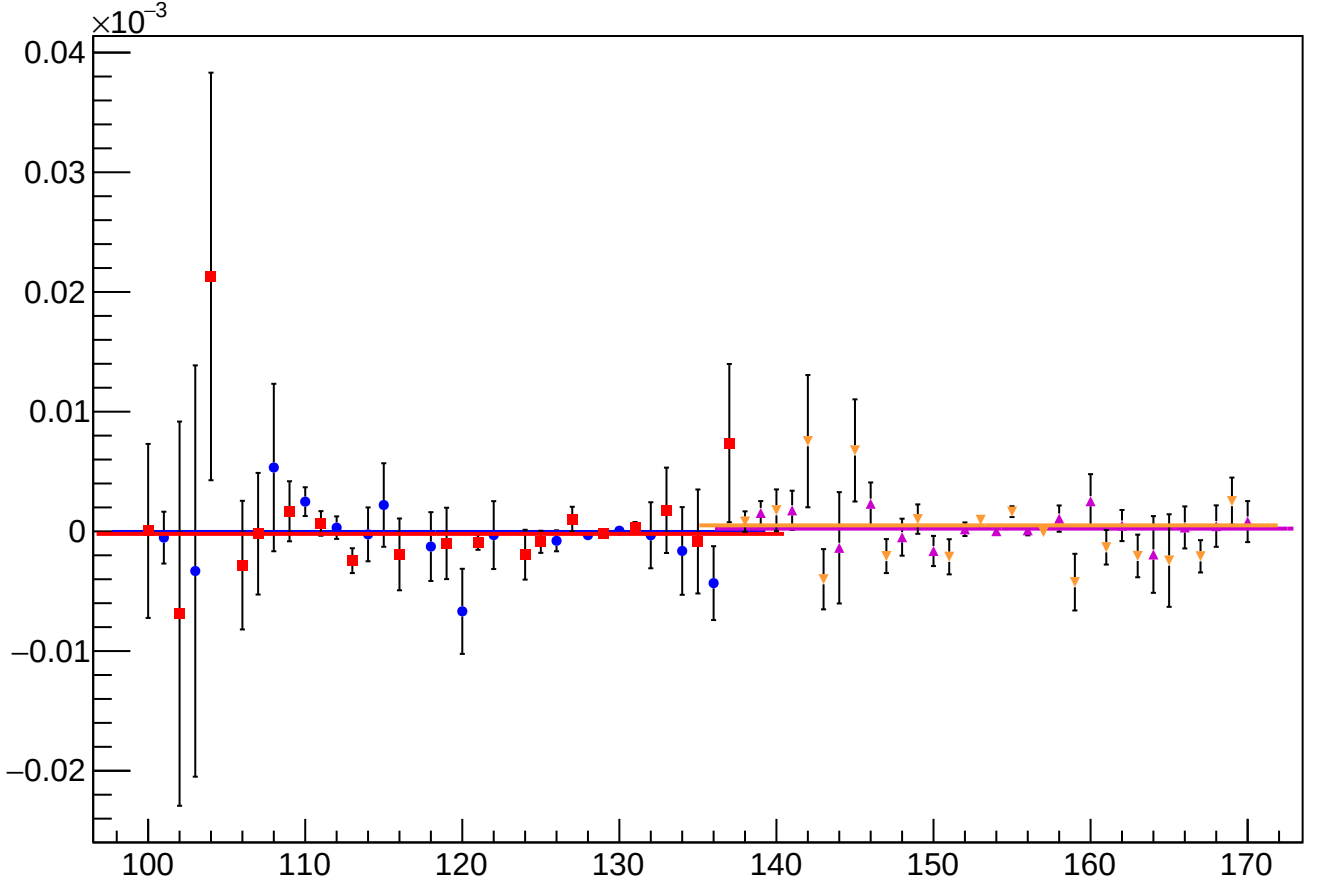
Right Out: 54.249+/-0.018 $\chi^2$/NDF: 3521580.5/18

Left In: 45.347+/-0.010 $\chi^2$/NDF:1676528.5/15

+ sign 49.788+/-0.009 $\chi^2$/NDF: 5844359.2/32

All: 48.550+/-0.006 $\chi^2$/NDF: 11260668.1/67

- sign 47.406+/-0.009 $\chi^2$/NDF: 5380967.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 12.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:37.1/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.6/18

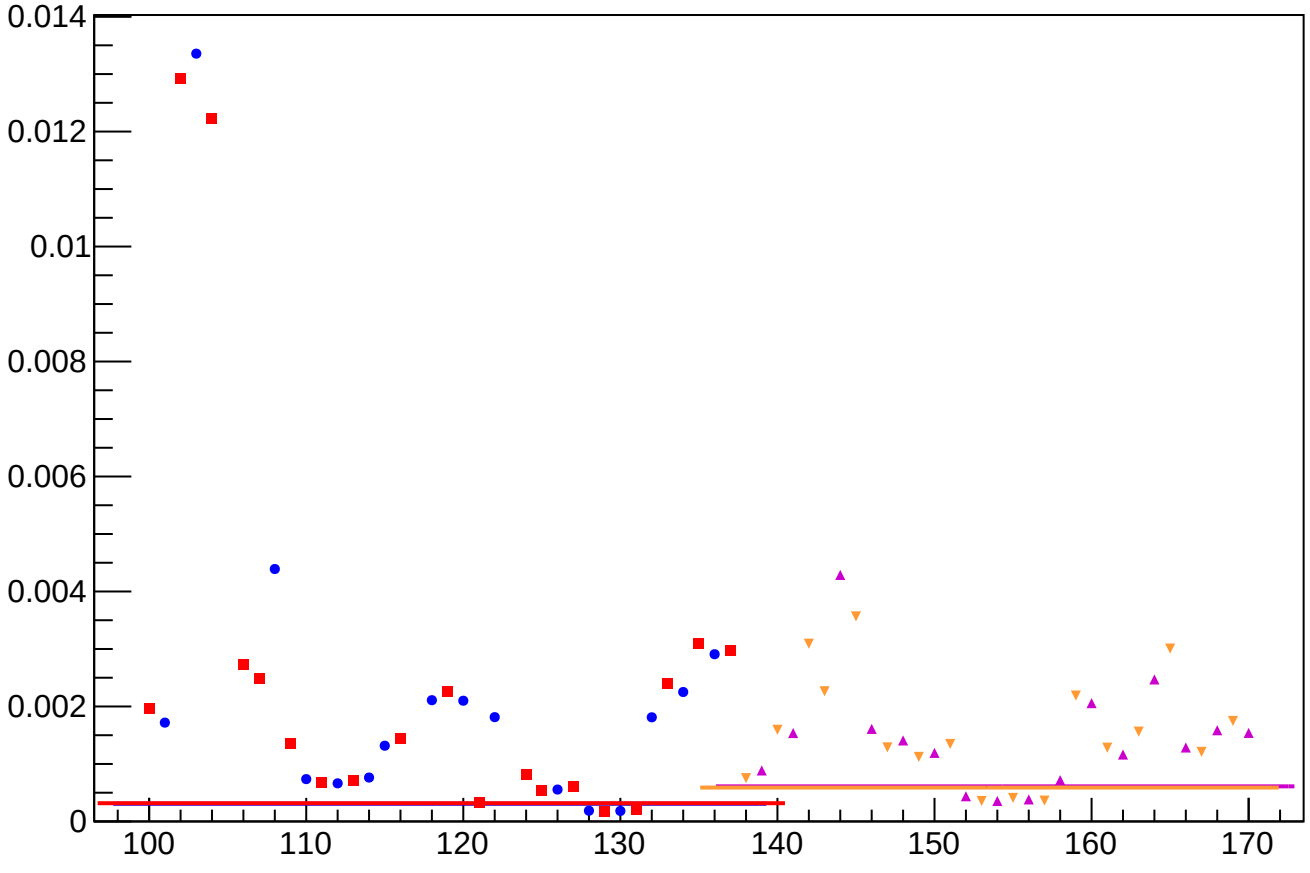
Left In: 0.000+/-0.000 $\chi^2$/NDF:9.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 53.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 82.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.1/34

# asym_at1_avg_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 8756212.9/15

Left Out: 0.001+/-0.000 $\chi^2$/NDF:9955388.6/16

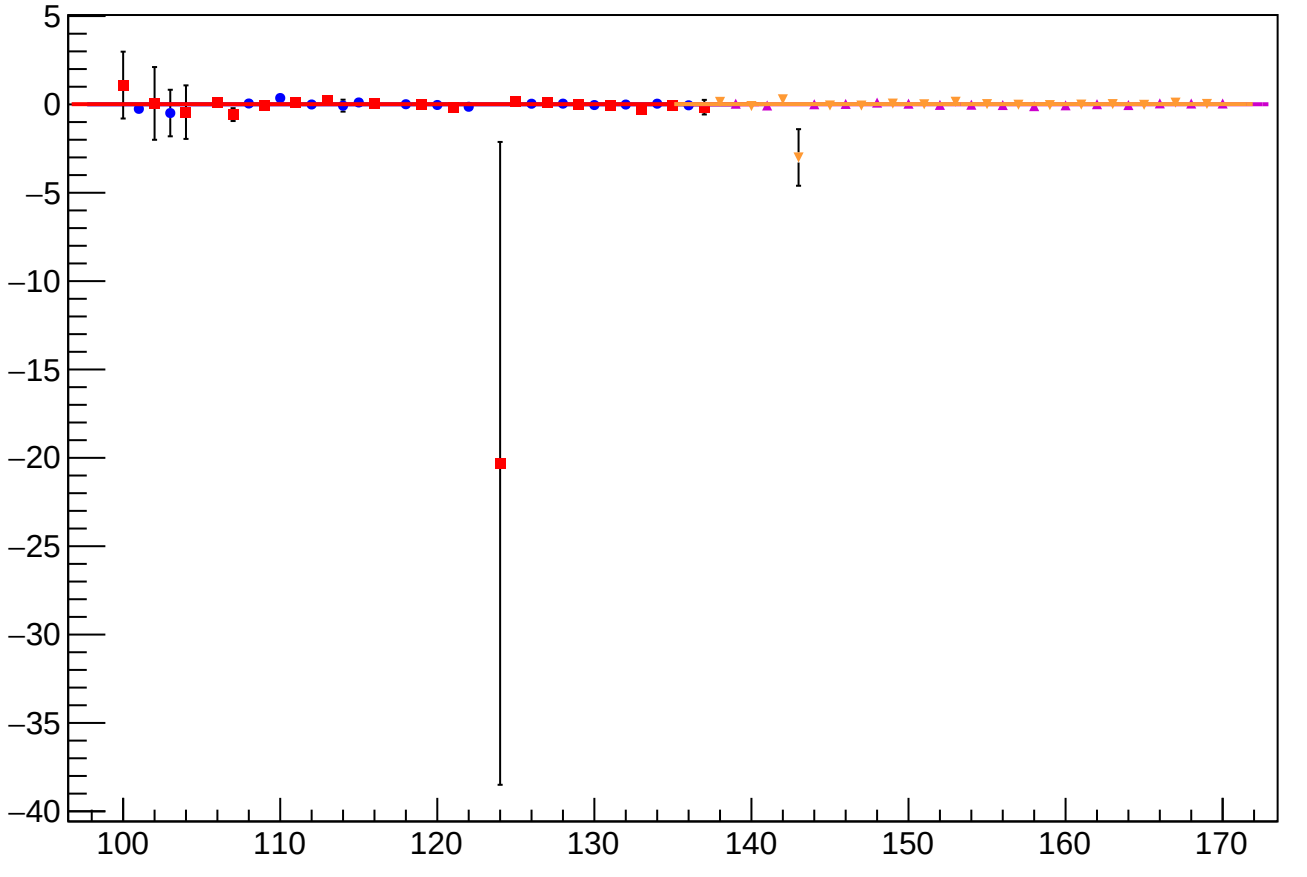
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 8015537.3/18

Left In: 0.001+/-0.000 $\chi^2$/NDF:8682875.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 20673110.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 39409967.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 18734331.2/34




Right In: 0.004+/-0.027 $\chi^2$/NDF: 11.4/15

Left Out: 0.016+/-0.015 $\chi^2$/NDF:24.3/16

Right Out: 0.013+/-0.026 $\chi^2$/NDF: 17.6/18

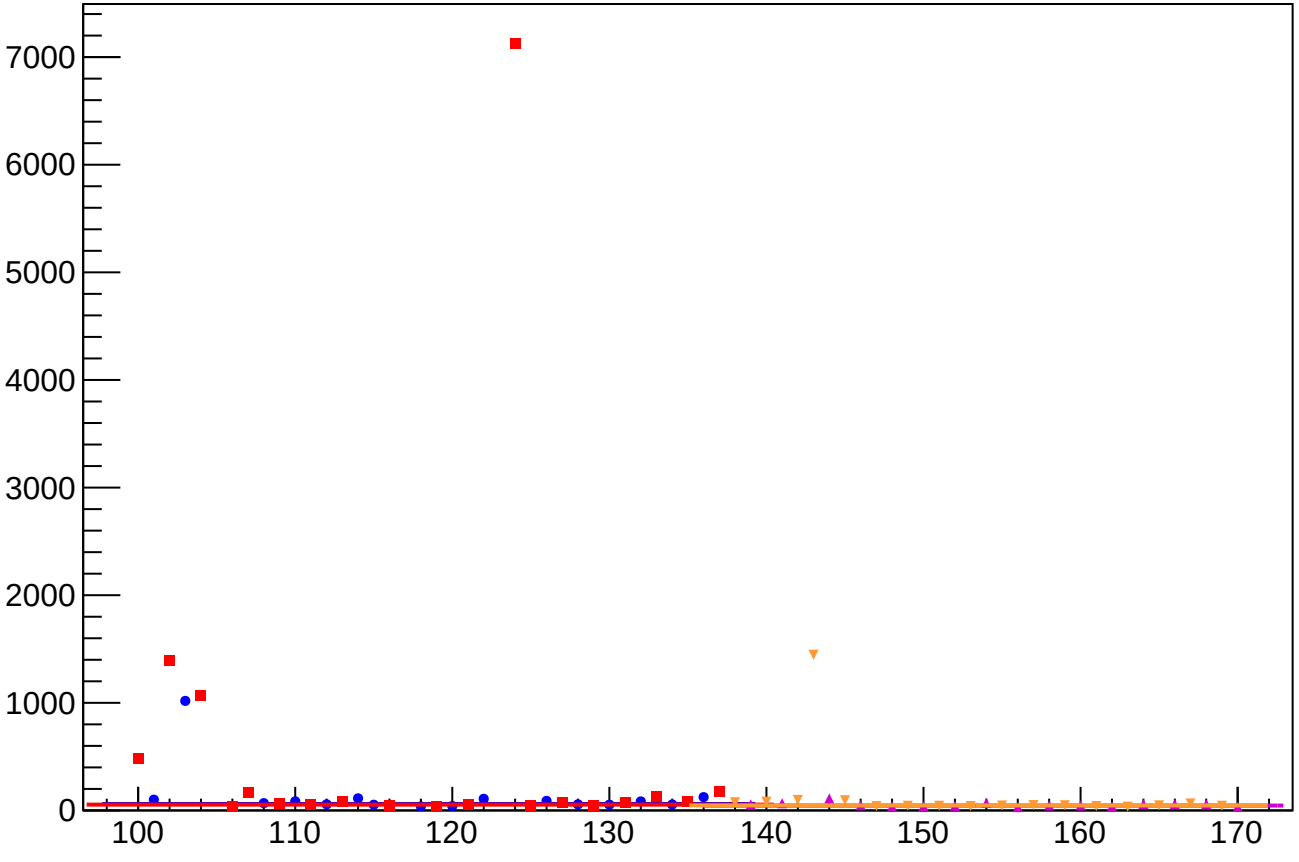
Left In: 0.008+/-0.014 $\chi^2$/NDF:14.4/15

+ sign 0.013+/-0.013 $\chi^2$/NDF: 35.8/32

All: 0.011+/-0.009 $\chi^2$/NDF: 67.9/67

- sign 0.009+/-0.012 $\chi^2$/NDF: 32.0/34

# asym_at1_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 59.839+/-0.019 $\chi^2$/NDF: 2538881.2/15

Left Out: 46.725+/-0.010 $\chi^2$/NDF:2936118.0/16

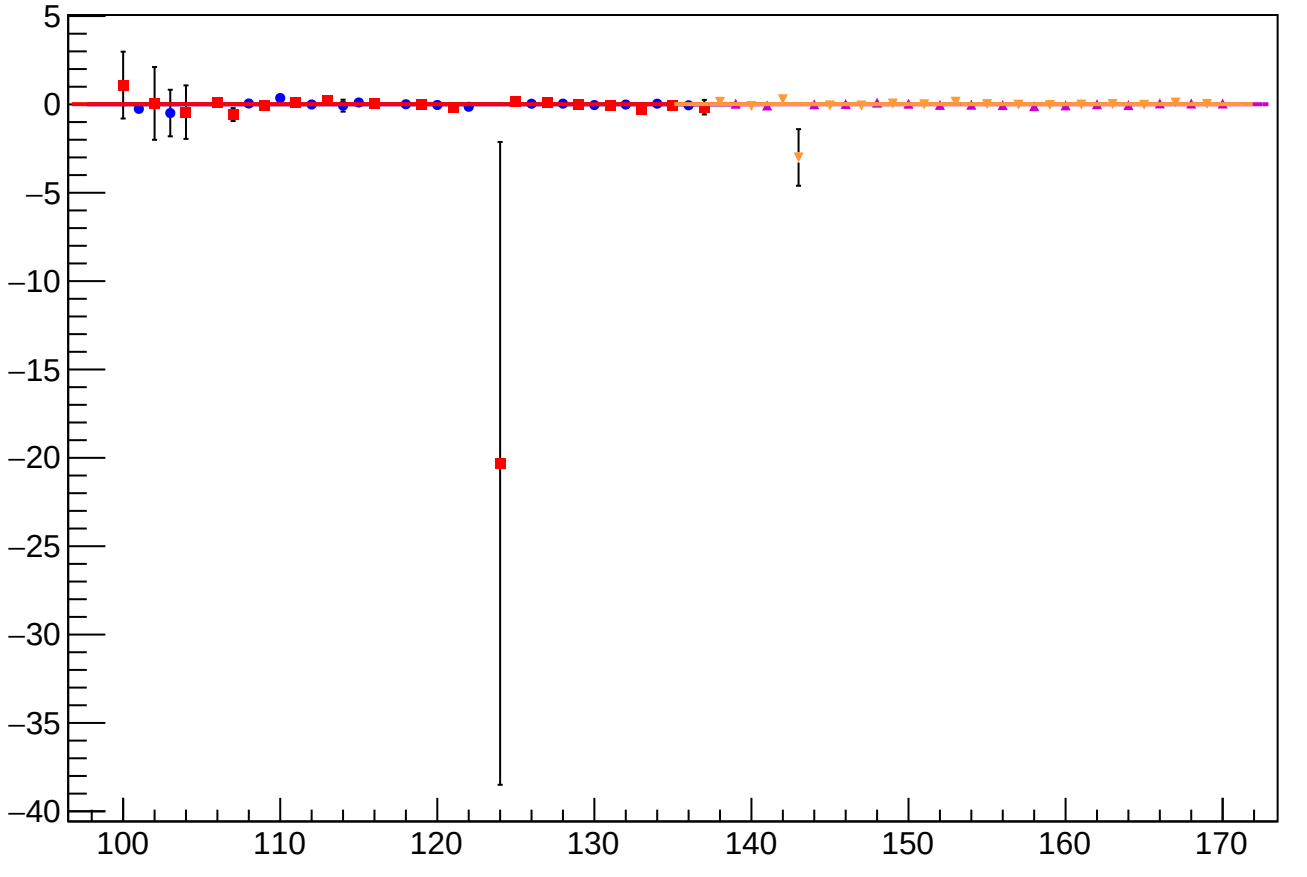
Right Out: 54.248+/-0.018 $\chi^2$/NDF: 3521640.4/18

Left In: 45.347+/-0.010 $\chi^2$/NDF:1676531.0/15

+ sign 49.788+/-0.009 $\chi^2$/NDF: 5844333.5/32

All: 48.550+/-0.006 $\chi^2$/NDF: 11260676.5/67

- sign 47.406+/-0.009 $\chi^2$/NDF: 5380990.5/34




Right In: 0.004+/-0.027 $\chi^2$/NDF: 11.4/15

Left Out: 0.016+/-0.015 $\chi^2$/NDF:24.3/16

Right Out: 0.013+/-0.026 $\chi^2$/NDF: 17.6/18

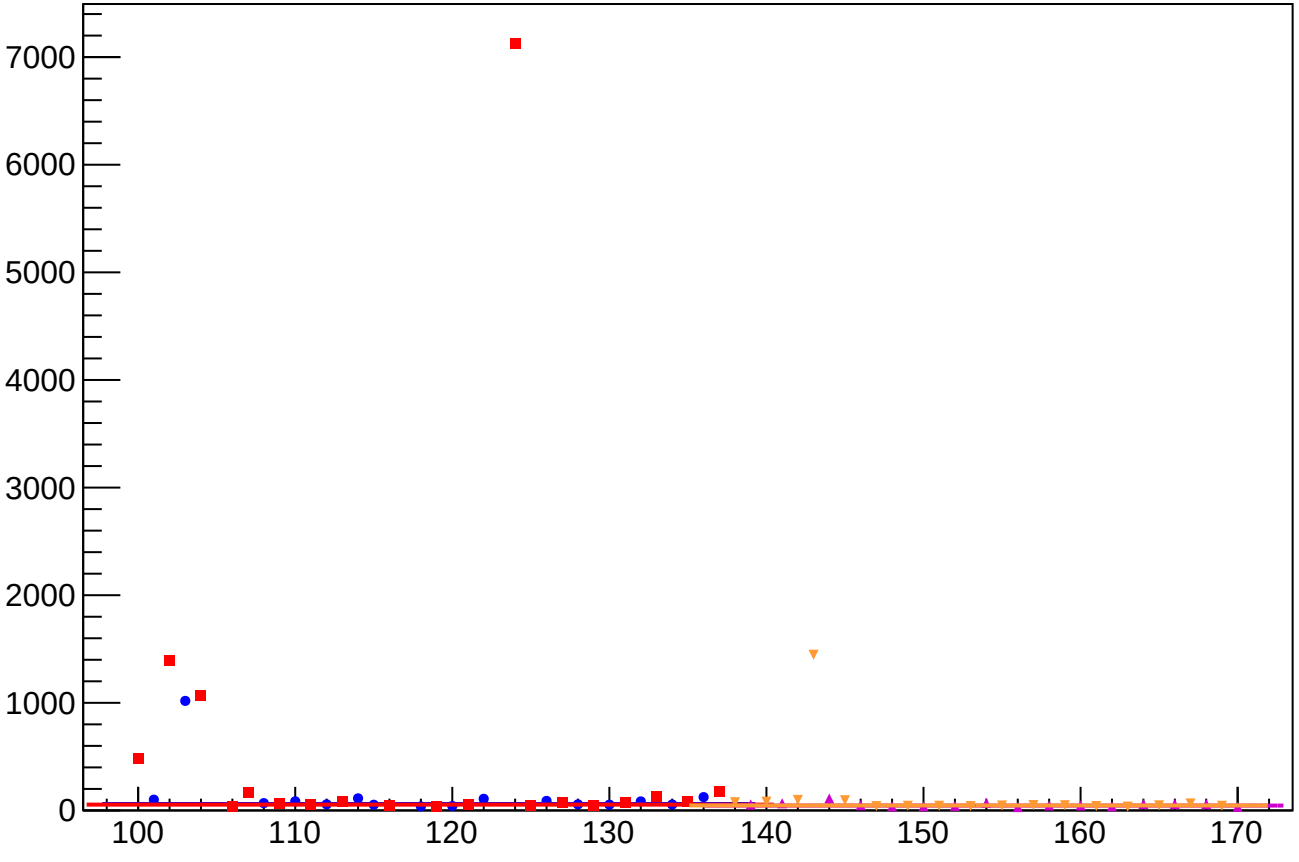
Left In: 0.008+/-0.014 $\chi^2$/NDF:14.4/15

+ sign 0.013+/-0.013 $\chi^2$/NDF: 35.8/32

All: 0.011+/-0.009 $\chi^2$/NDF: 67.9/67

- sign 0.009+/-0.012 $\chi^2$/NDF: 32.0/34

# asym_at1_avg_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 59.839+/-0.019 $\chi^2$/NDF: 2538881.2/15

Left Out: 46.725+/-0.010 $\chi^2$/NDF:2936118.0/16

Right Out: 54.248+/-0.018 $\chi^2$/NDF: 3521640.4/18

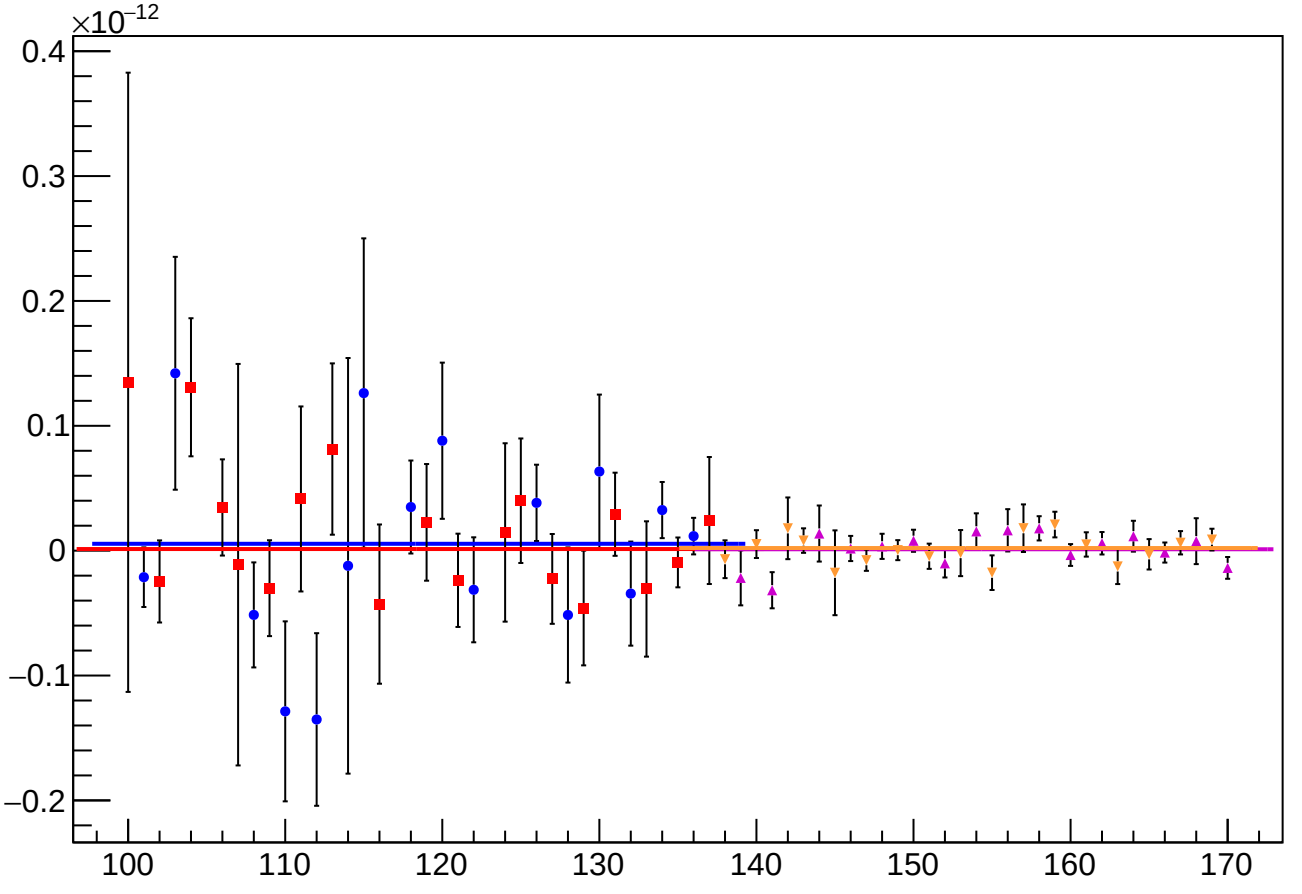
Left In: 45.347+/-0.010 $\chi^2$/NDF:1676531.0/15

\+ sign 49.788+/-0.009 $\chi^2$/NDF: 5844333.5/32

All: 48.550+/-0.006 $\chi^2$/NDF: 11260676.5/67

\- sign 47.406+/-0.009 $\chi^2$/NDF: 5380990.5/34

# asym_at1_avg_eigen_cor_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 22.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11.6/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.3/18

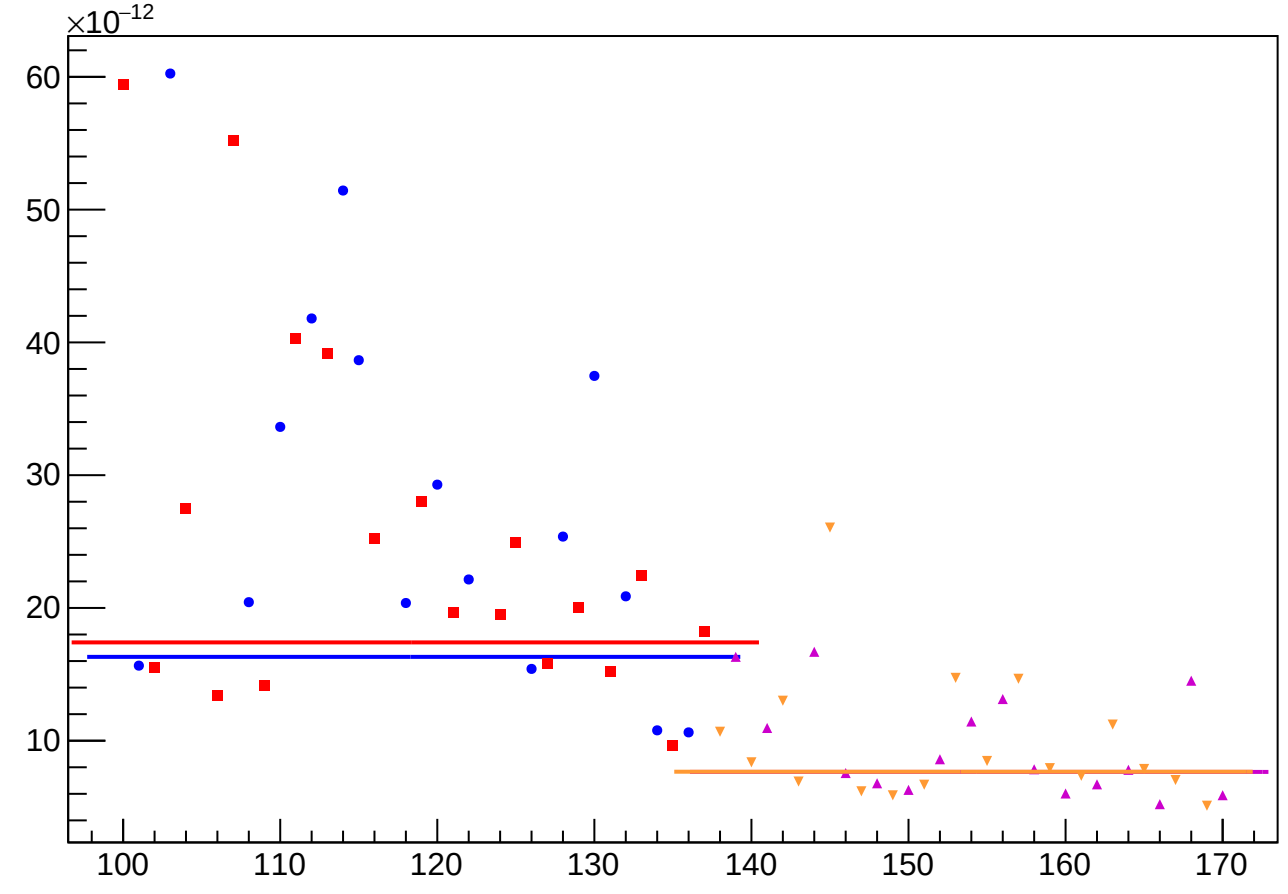
Left In: 0.000+/-0.000 $\chi^2$/NDF:17.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 34.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 66.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 31.7/34

# asym_at1_avg_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1895019.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1838674.8/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1197059.5/18

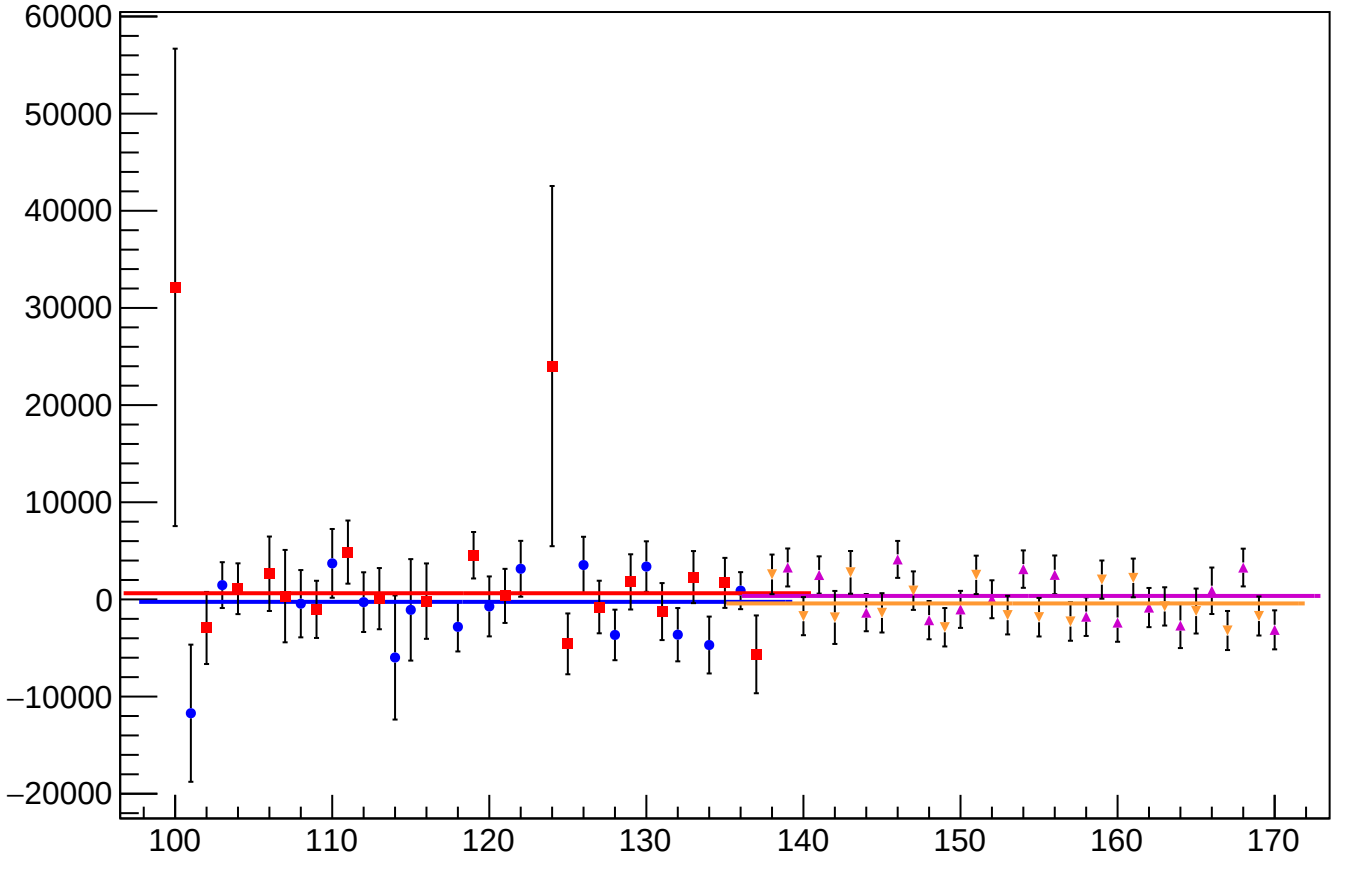
Left In: 0.000+/-0.000 $\chi^2$/NDF:1798089.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5550699.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10391654.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4839684.9/34

# reg_asym_at1_dd_mean vs Slug




Right In: -251.297+/-735.111 $\chi^2$/NDF: 17.3/15

Left Out: -413.806+/-495.915 $\chi^2$/NDF:17.0/16

Right Out: 636.082+/-735.477 $\chi^2$/NDF: 15.9/18

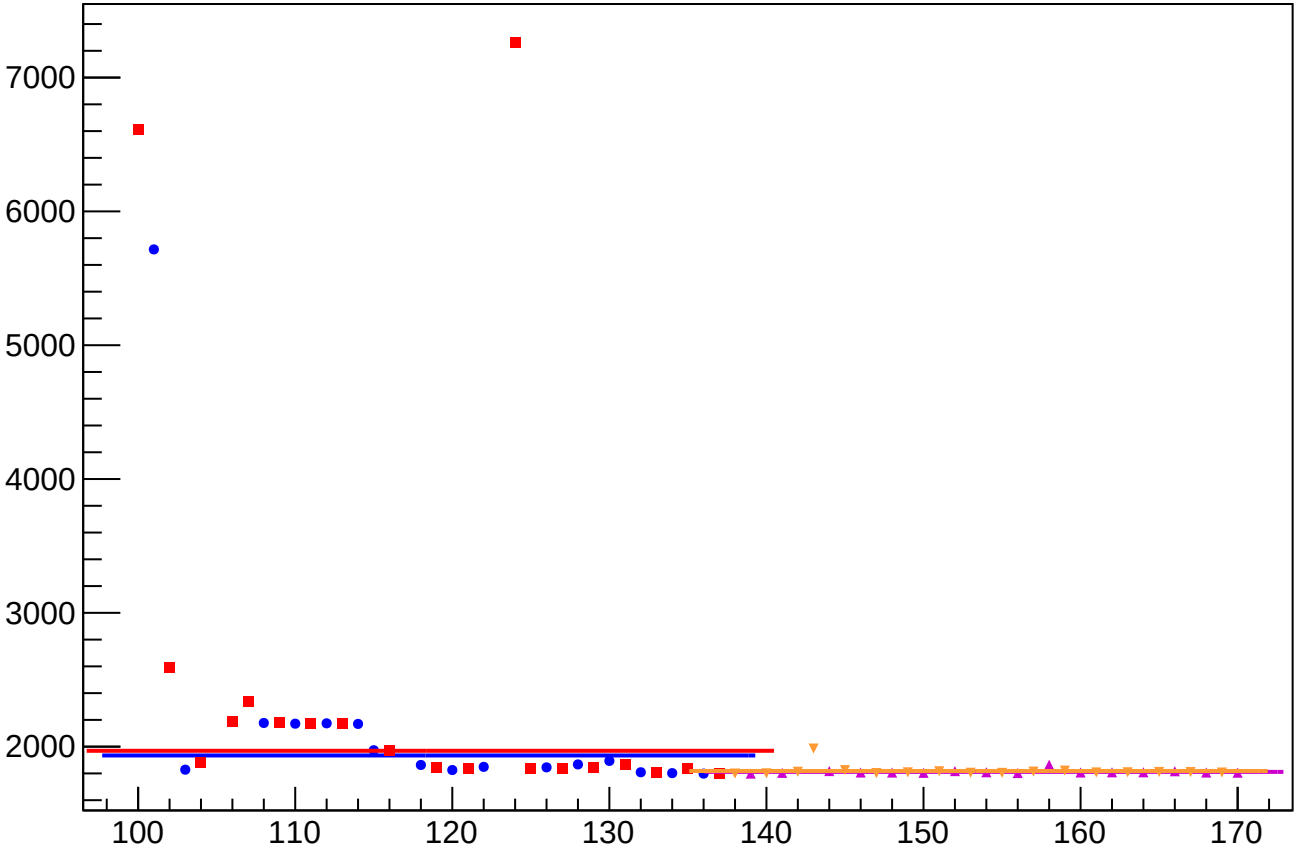
Left In: 359.358+/-498.205 $\chi^2$/NDF:24.1/15

+ sign -362.979+/-411.113 $\chi^2$/NDF: 34.2/32

All: 40.366+/-291.182 $\chi^2$/NDF: 76.3/67

- sign 446.397+/-412.479 $\chi^2$/NDF: 40.1/34

# reg_asym_at1_dd_rms vs Slug




Right In: 1934.217+/-0.520 $\chi^2$/NDF: 639920.0/15

Left Out: 1818.185+/-0.351 $\chi^2$/NDF:12620.6/16

Right Out: 1969.204+/-0.520 $\chi^2$/NDF: 378378.8/18

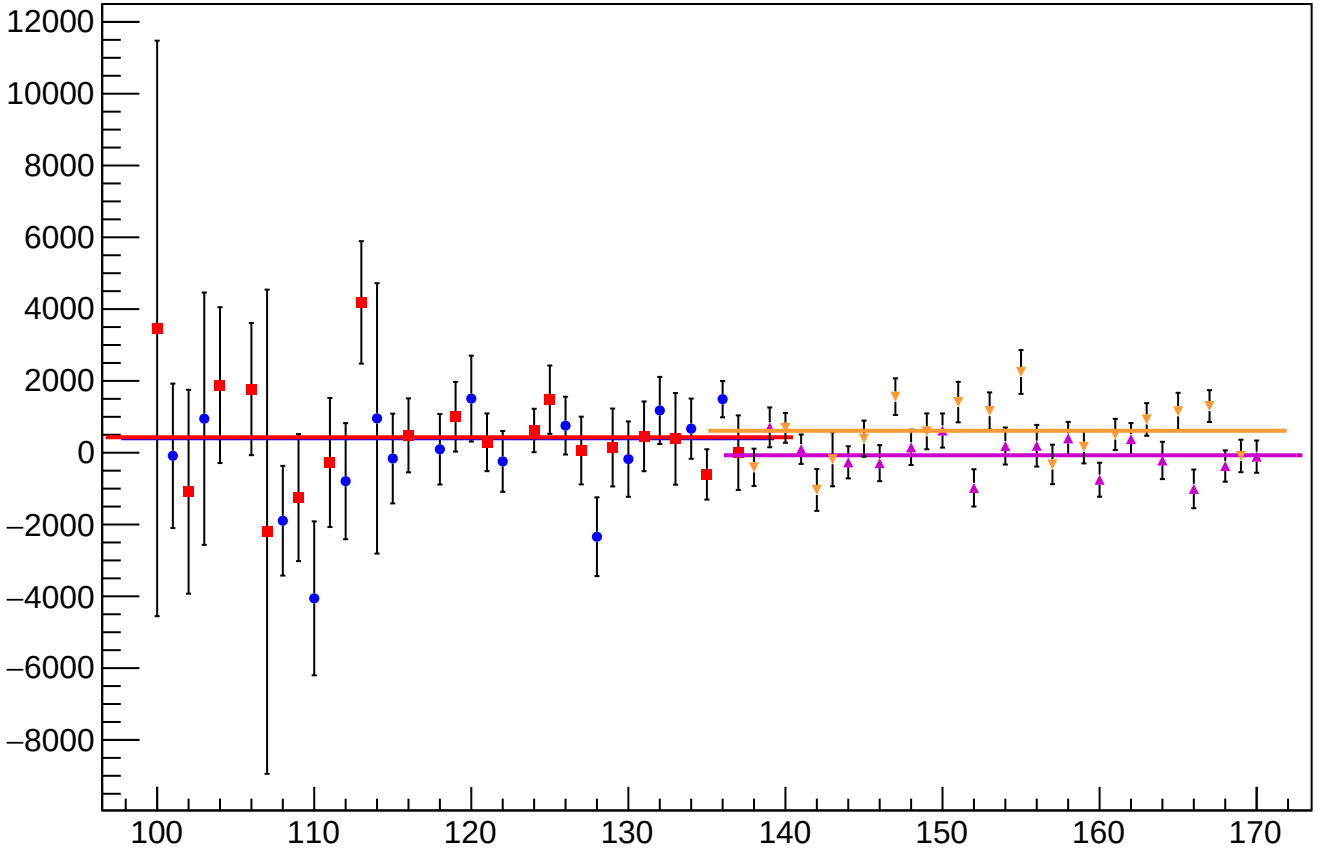
Left In: 1811.539+/-0.352 $\chi^2$/NDF:1770.8/15

+ sign 1854.475+/-0.291 $\chi^2$/NDF: 686784.5/32

All: 1857.791+/-0.206 $\chi^2$/NDF: 1130197.1/67

- sign 1861.130+/-0.292 $\chi^2$/NDF: 443151.4/34

# asym_at1_dd_reg_correction_mean vs Slug




Right In: 402.626+/-258.574 $\chi^2$/NDF: 21.1/15

Left Out: 611.004+/-121.859 $\chi^2$/NDF:37.2/16

Right Out: 430.066+/-252.823 $\chi^2$/NDF: 11.7/18

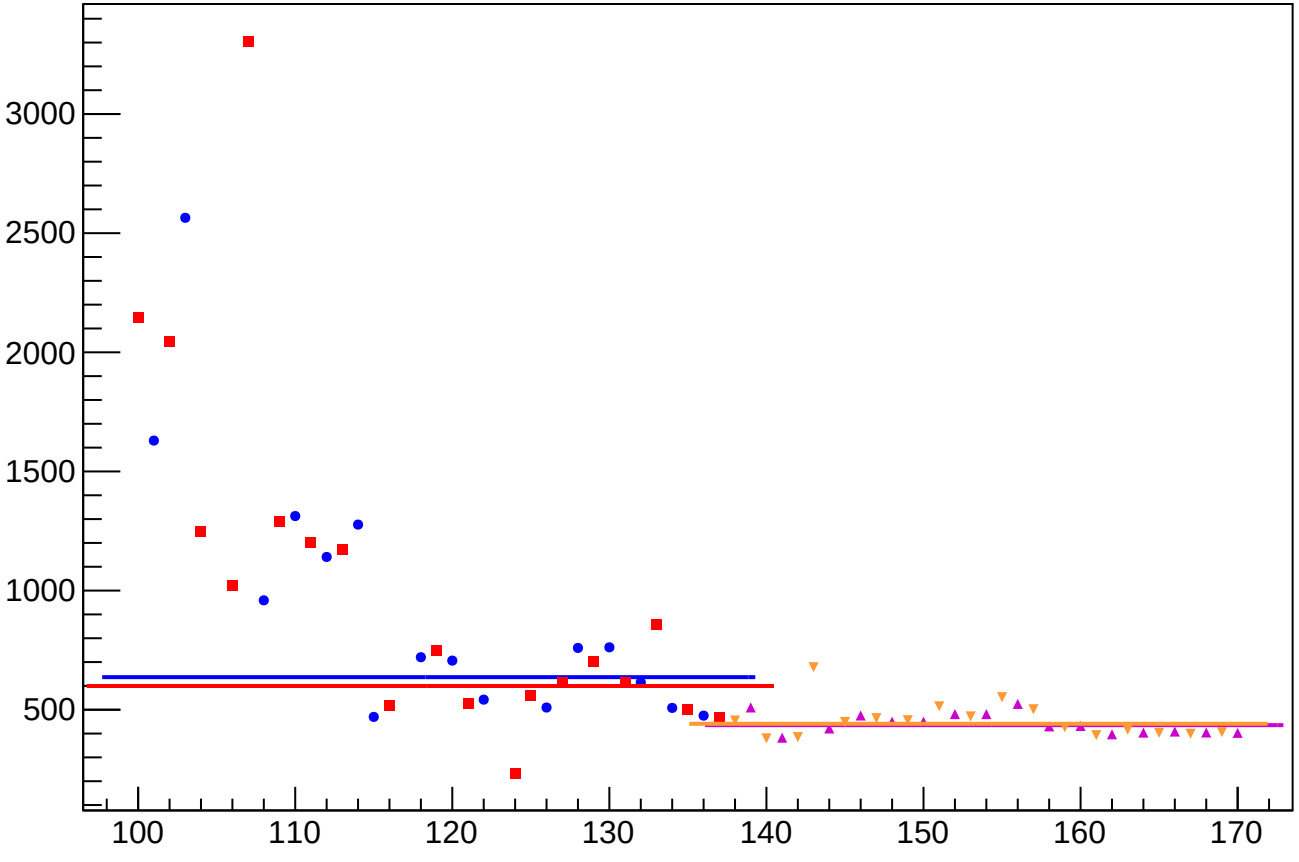
Left In: -71.038+/-120.559 $\chi^2$/NDF:16.1/15

+ sign 573.134+/-110.231 $\chi^2$/NDF: 58.9/32

All: 293.914+/-77.441 $\chi^2$/NDF: 102.6/67

- sign 21.797+/-108.820 $\chi^2$/NDF: 31.0/34

# asym_at1_dd_reg_correction_rms vs Slug




Right In: 636.700+/-0.183 $\chi^2$/NDF: 2066891.4/15

Left Out: 441.040+/-0.086 $\chi^2$/NDF:472143.6/16

Right Out: 599.631+/-0.179 $\chi^2$/NDF: 2944100.6/18

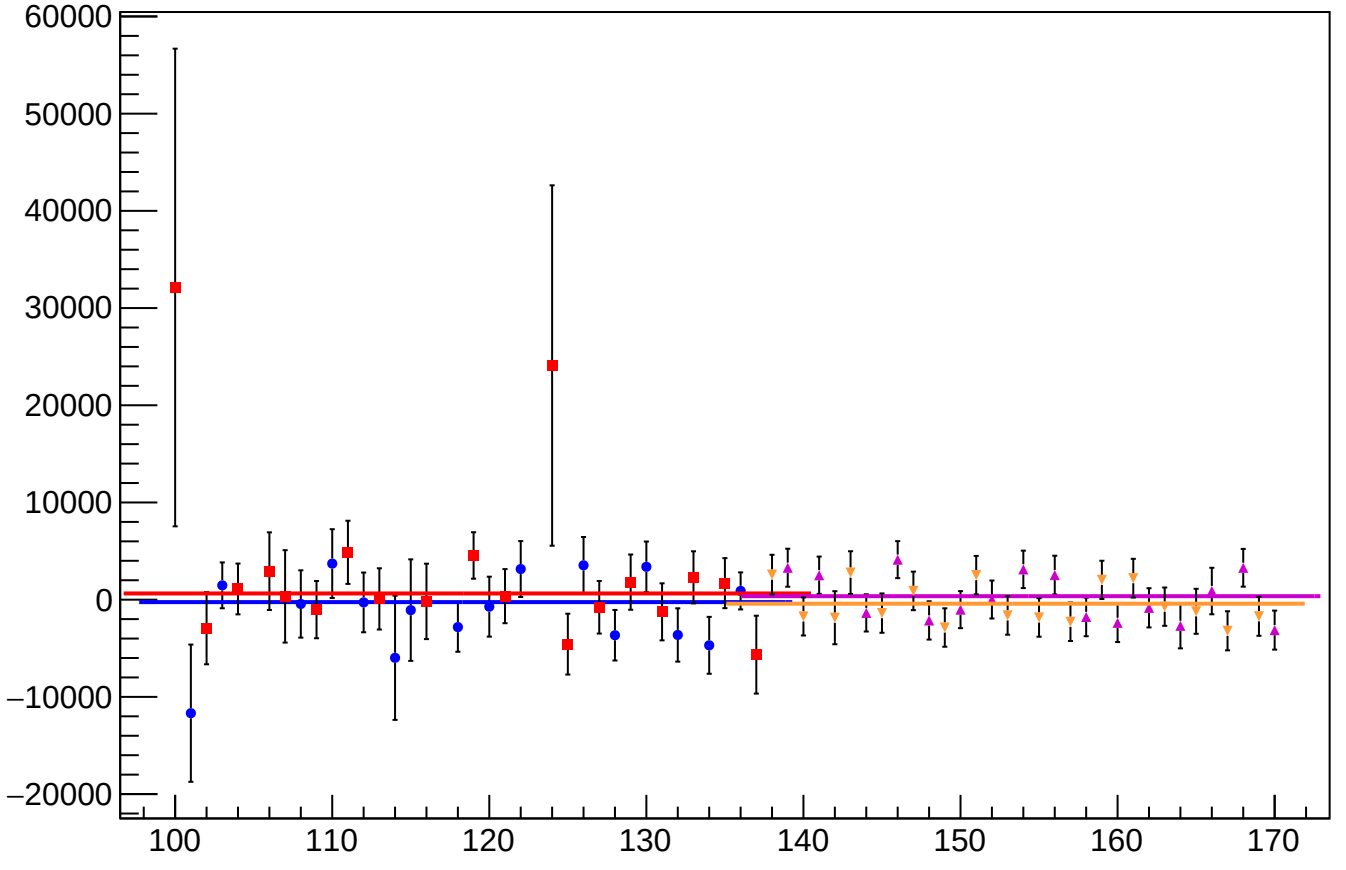
Left In: 435.231+/-0.085 $\chi^2$/NDF:214789.9/15

+ sign 476.598+/-0.078 $\chi^2$/NDF: 3476071.5/32

All: 471.073+/-0.055 $\chi^2$/NDF: 7333889.1/67

- sign 465.687+/-0.077 $\chi^2$/NDF: 3847893.7/34

# cor_asym_at1_dd_mean vs Slug




Right In: -250.487+/-735.112 $\chi^2$/NDF: 17.2/15

Left Out: -413.852+/-495.915 $\chi^2$/NDF:16.9/16

Right Out: 640.865+/-736.549 $\chi^2$/NDF: 16.0/18

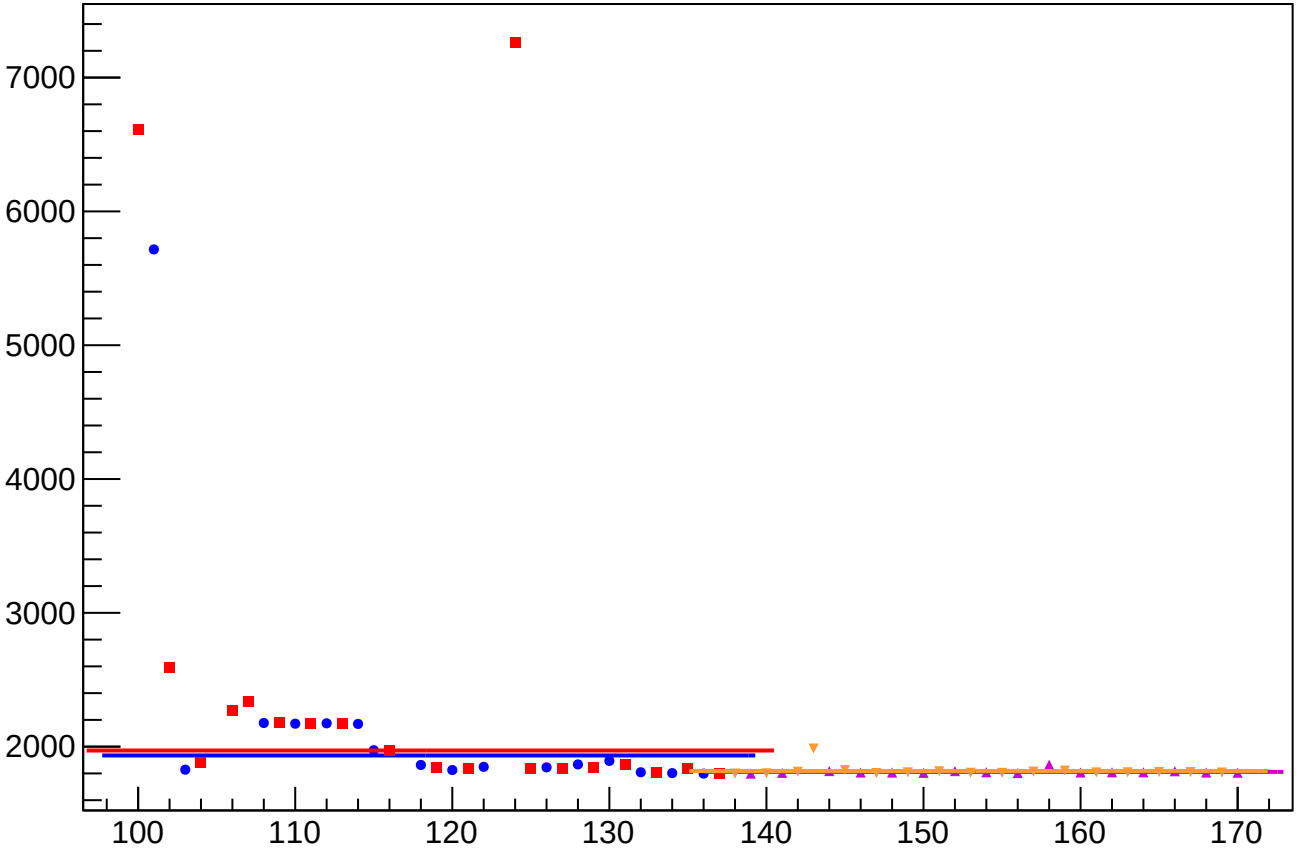
Left In: 359.366+/-498.205 $\chi^2$/NDF:24.1/15

+ sign -362.758+/-411.113 $\chi^2$/NDF: 34.2/32

All: 40.956+/-291.249 $\chi^2$/NDF: 76.3/67

- sign 447.730+/-412.667 $\chi^2$/NDF: 40.2/34

# cor_asym_at1_dd_rms vs Slug




Right In: 1934.217+/-0.520 $\chi^2$/NDF: 639919.9/15

Left Out: 1818.185+/-0.351 $\chi^2$/NDF:12620.6/16

Right Out: 1971.357+/-0.521 $\chi^2$/NDF: 383176.6/18

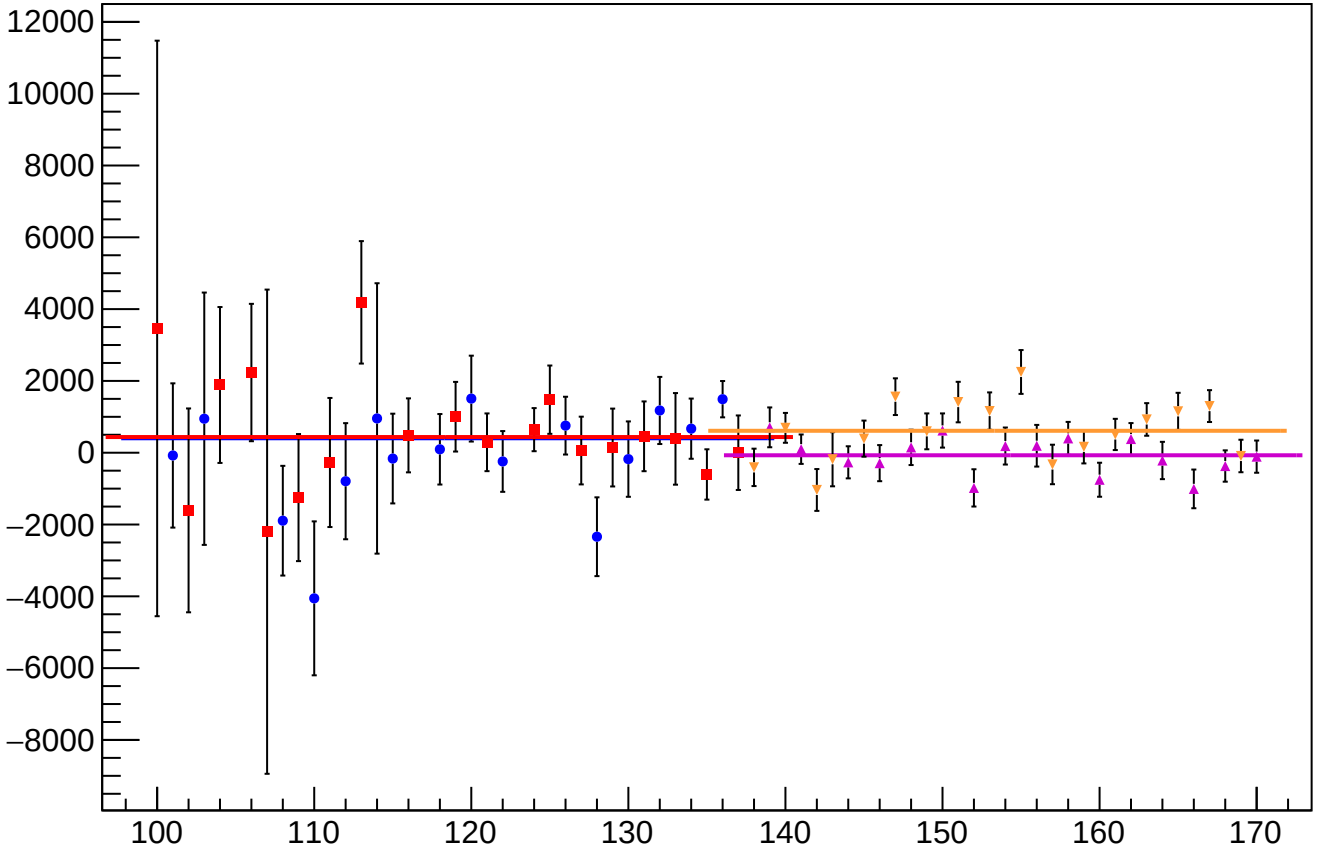
Left In: 1811.539+/-0.352 $\chi^2$/NDF:1770.8/15

+ sign 1854.475+/-0.291 $\chi^2$/NDF: 686784.4/32

All: 1858.077+/-0.206 $\chi^2$/NDF: 1136644.9/67

- sign 1861.706+/-0.292 $\chi^2$/NDF: 449552.2/34

# asym_at1_dd_cor_correction_mean vs Slug




Right In: 402.701+/-258.564 $\chi^2$/NDF: 21.1/15

Left Out: 610.938+/-121.859 $\chi^2$/NDF:37.2/16

Right Out: 436.691+/-252.672 $\chi^2$/NDF: 12.4/18

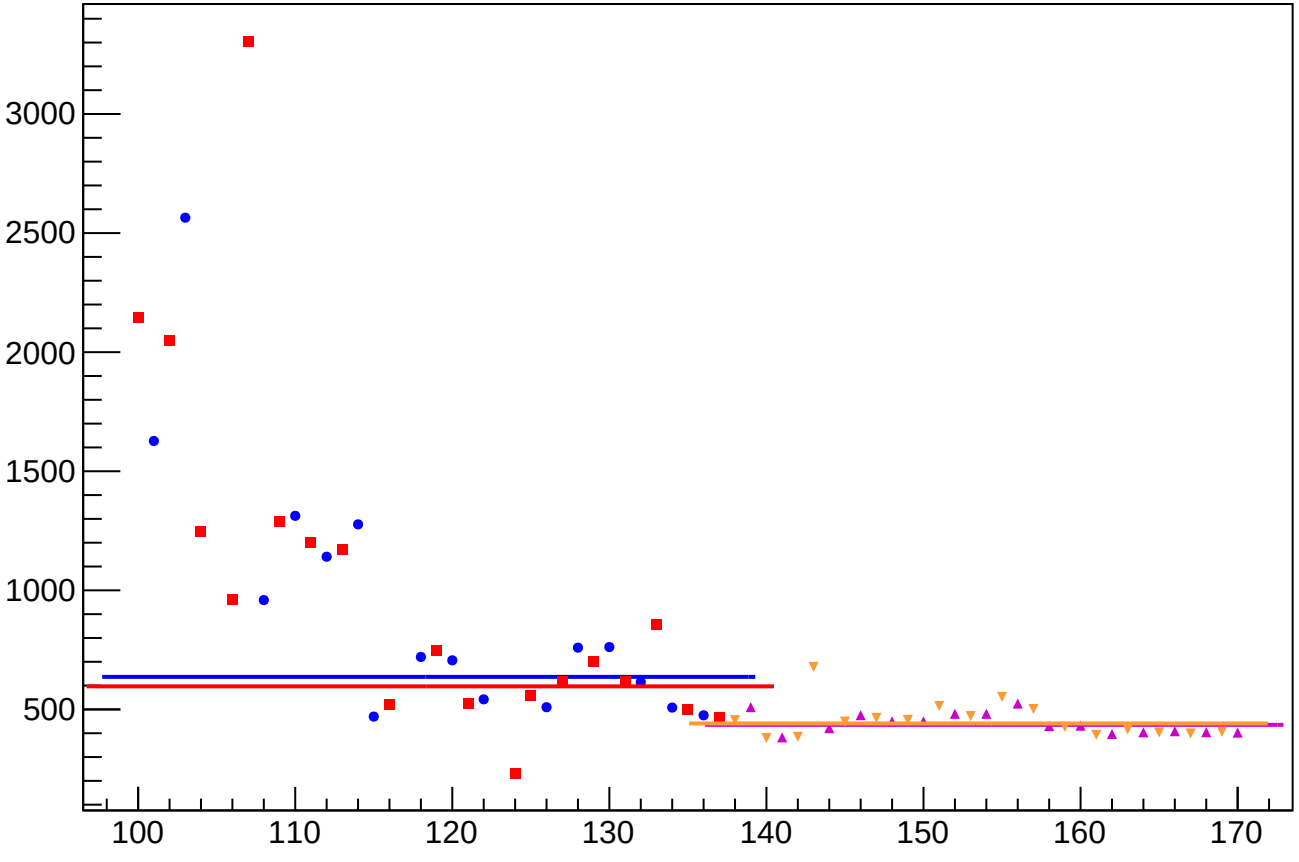
Left In: -71.059+/-120.558 $\chi^2$/NDF:16.1/15

+ sign 573.092+/-110.230 $\chi^2$/NDF: 58.9/32

All: 294.521+/-77.437 $\chi^2$/NDF: 103.3/67

- sign 23.097+/-108.807 $\chi^2$/NDF: 31.7/34

# asym_at1_dd_cor_correction_rms vs Slug




Right In: 636.698+/-0.183 $\chi^2$/NDF: 2066022.1/15

Left Out: 441.042+/-0.086 $\chi^2$/NDF:472100.4/16

Right Out: 596.862+/-0.179 $\chi^2$/NDF: 2930443.7/18

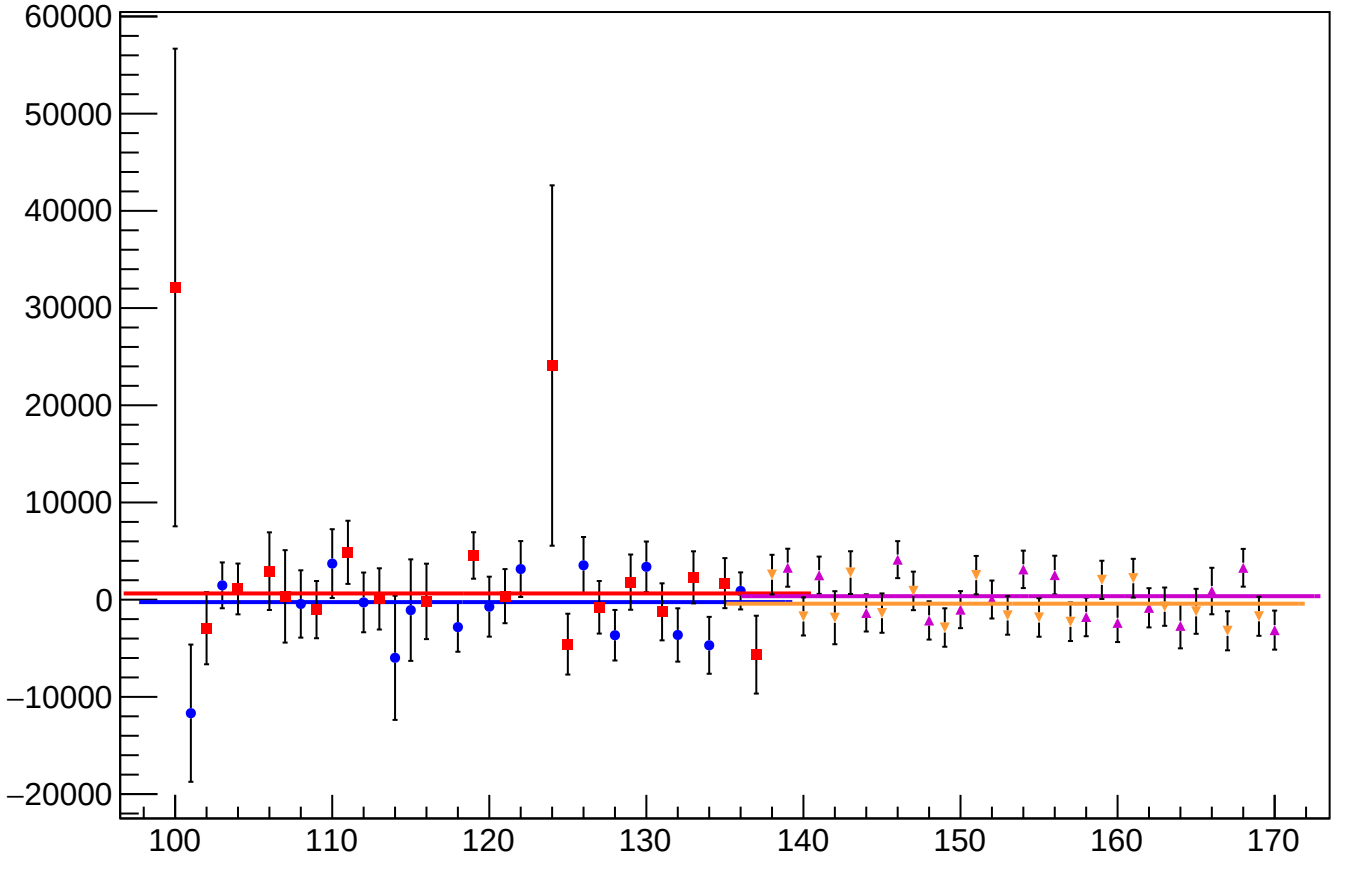
Left In: 435.227+/-0.085 $\chi^2$/NDF:214790.2/15

+ sign 476.602+/-0.078 $\chi^2$/NDF: 3475185.8/32

All: 470.827+/-0.055 $\chi^2$/NDF: 7297926.3/67

- sign 465.200+/-0.077 $\chi^2$/NDF: 3811902.1/34

# eigen_cor_asym_at1_dd_mean vs Slug




Right In: -250.487+/-735.112 $\chi^2$/NDF: 17.2/15

Left Out: -413.852+/-495.915 $\chi^2$/NDF:16.9/16

Right Out: 640.865+/-736.549 $\chi^2$/NDF: 16.0/18

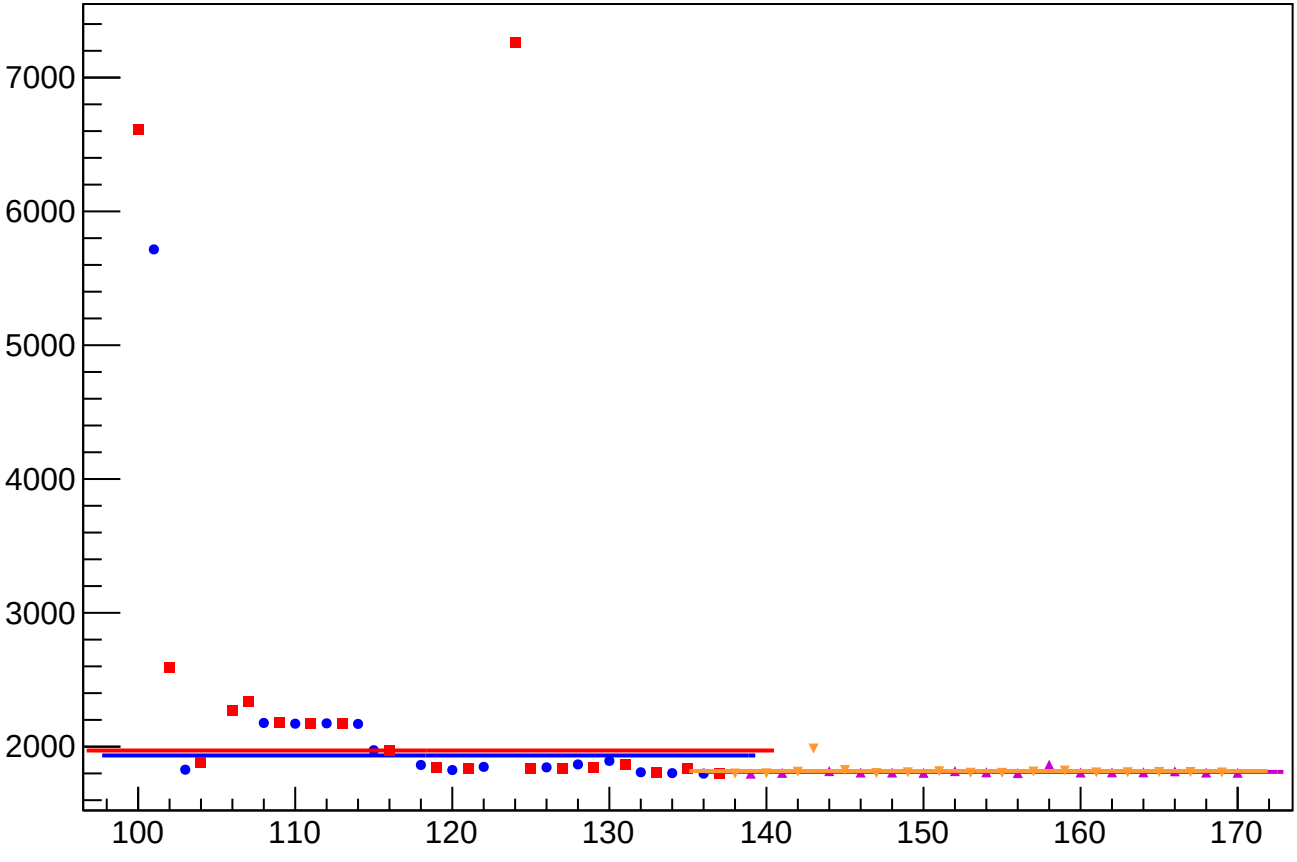
Left In: 359.366+/-498.205 $\chi^2$/NDF:24.1/15

+ sign -362.758+/-411.113 $\chi^2$/NDF: 34.2/32

All: 40.956+/-291.249 $\chi^2$/NDF: 76.3/67

- sign 447.730+/-412.667 $\chi^2$/NDF: 40.2/34

# eigen_cor_asym_at1_dd_rms vs Slug




Right In: 1934.217+/-0.520 $\chi^2$/NDF: 639919.9/15

Left Out: 1818.185+/-0.351 $\chi^2$/NDF:12620.6/16

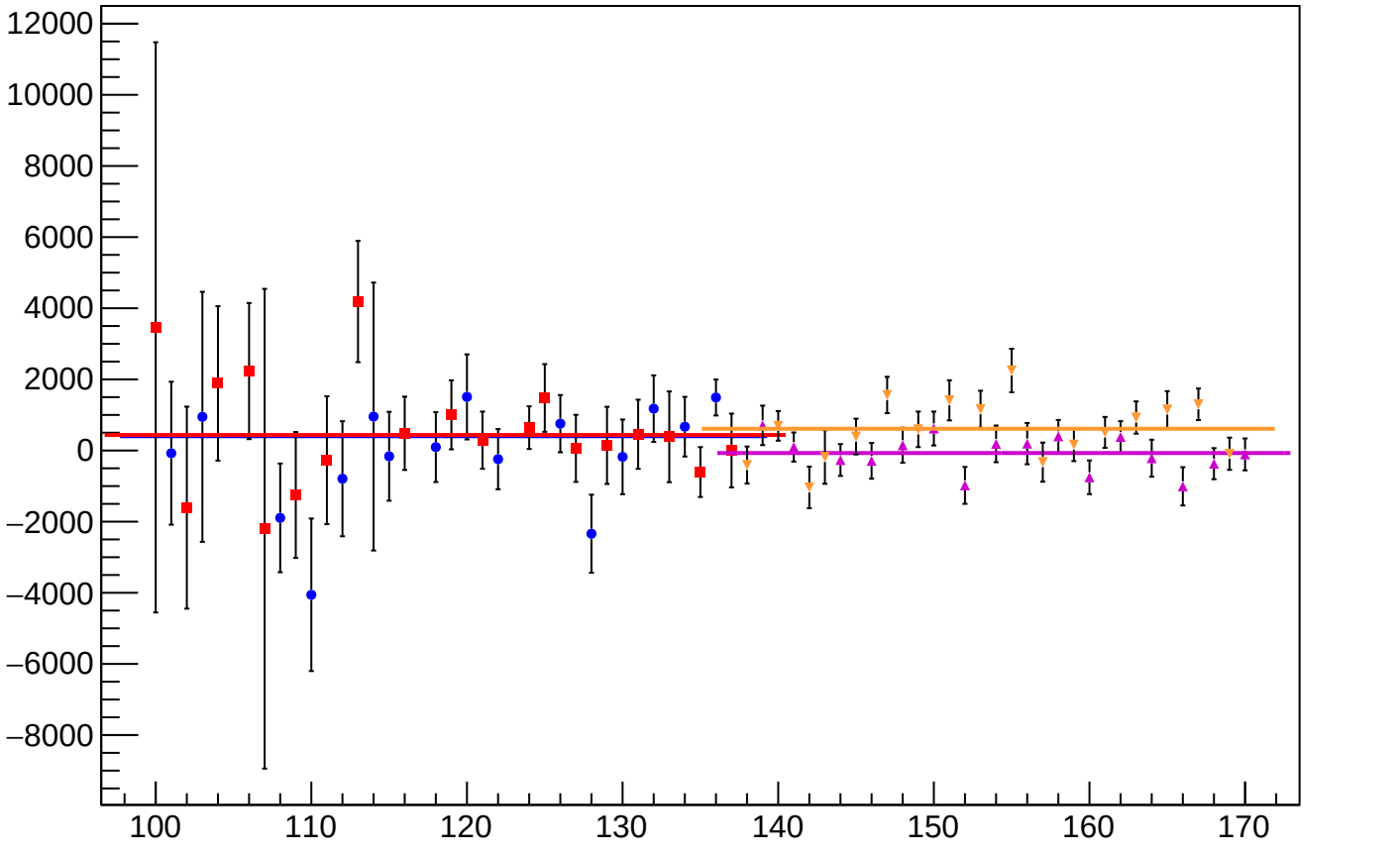
Right Out: 1971.357+/-0.521 $\chi^2$/NDF: 383176.6/18

Left In: 1811.539+/-0.352 $\chi^2$/NDF:1770.8/15

+ sign 1854.475+/-0.291 $\chi^2$/NDF: 686784.4/32

All: 1858.077+/-0.206 $\chi^2$/NDF: 1136644.9/67

- sign 1861.706+/-0.292 $\chi^2$/NDF: 449552.2/34




Right In: 402.701+/-258.564 $\chi^2$/NDF: 21.1/15

Left Out: 610.938+/-121.859 $\chi^2$/NDF:37.2/16

Right Out: 436.691+/-252.672 $\chi^2$/NDF: 12.4/18

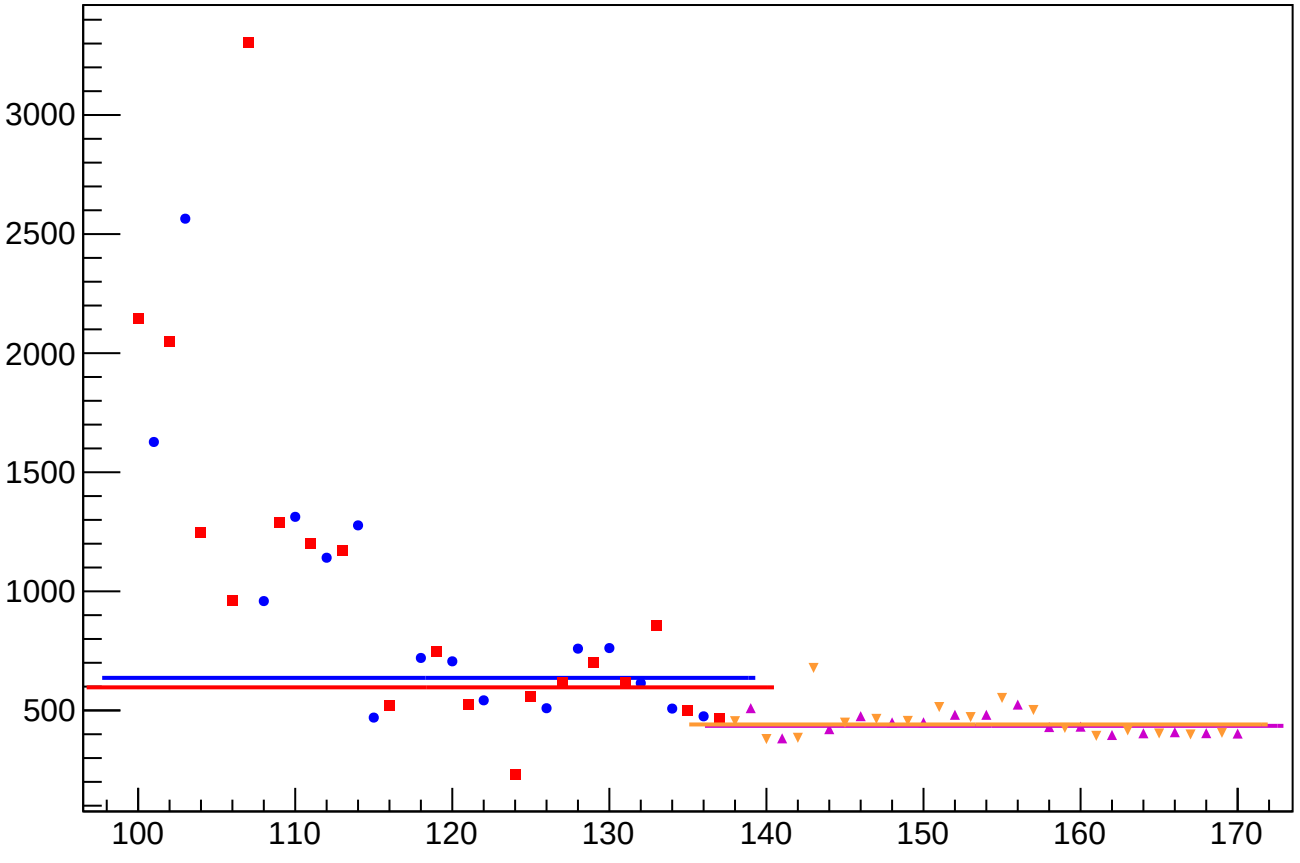
Left In: -71.059+/-120.558 $\chi^2$/NDF:16.1/15

\+ sign 573.092+/-110.230 $\chi^2$/NDF: 58.9/32

All: 294.521+/-77.437 $\chi^2$/NDF: 103.3/67

\- sign 23.097+/-108.807 $\chi^2$/NDF: 31.7/34

# asym_at1_dd_eigen_cor_correction_rms vs Slug




Right In: 636.698+/-0.183 $\chi^2$/NDF: 2066022.1/15

Left Out: 441.042+/-0.086 $\chi^2$/NDF:472100.4/16

Right Out: 596.862+/-0.179 $\chi^2$/NDF: 2930443.7/18

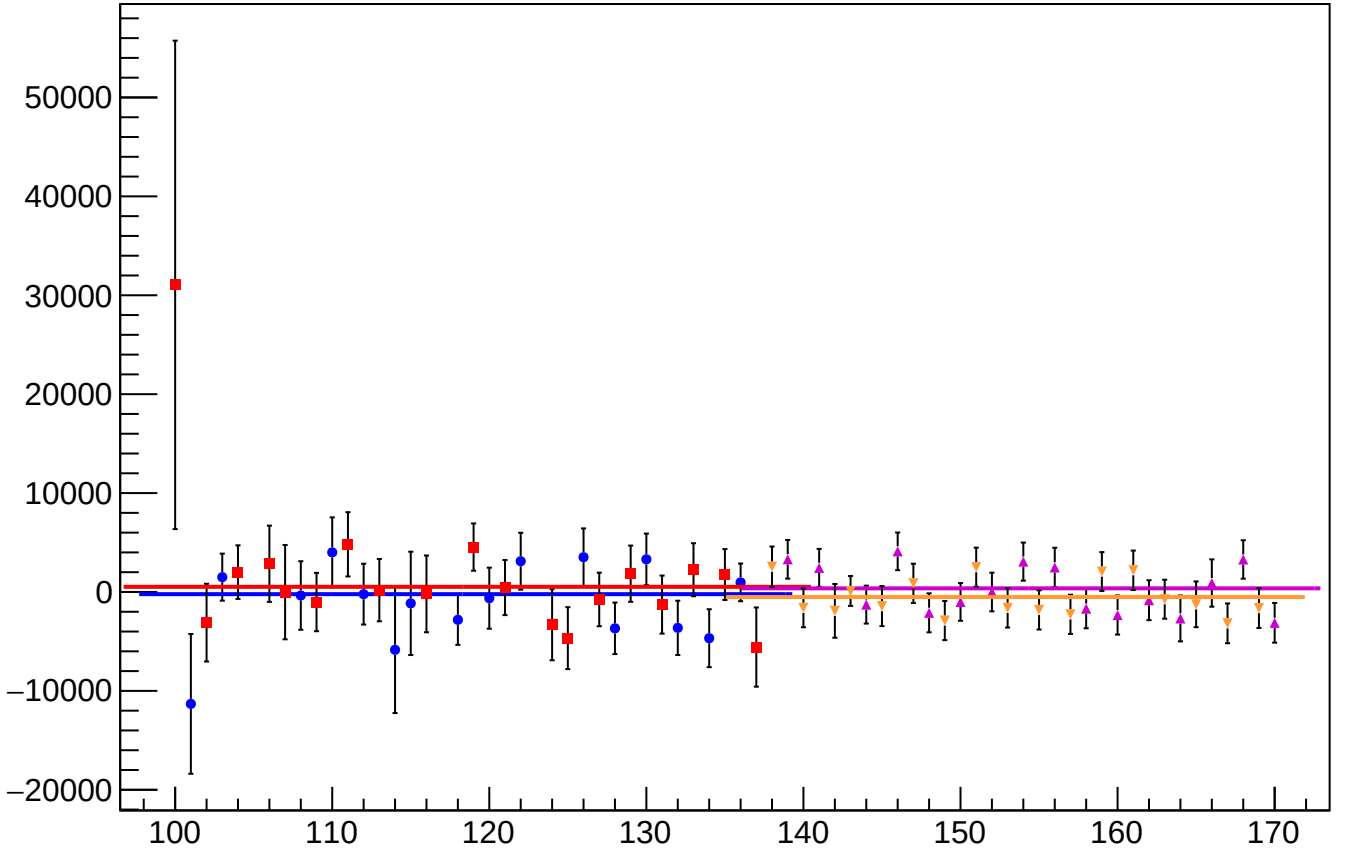
Left In: 435.227+/-0.085 $\chi^2$/NDF:214790.2/15

+ sign 476.602+/-0.078 $\chi^2$/NDF: 3475185.8/32

All: 470.827+/-0.055 $\chi^2$/NDF: 7297926.3/67

- sign 465.200+/-0.077 $\chi^2$/NDF: 3811902.1/34

# dit_asym_at1_dd_mean vs Slug




Right In: -220.393+/-735.888 $\chi^2$/NDF: 17.1/15

Left Out: -512.642+/-482.436 $\chi^2$/NDF:14.7/16

Right Out: 520.265+/-724.980 $\chi^2$/NDF: 15.6/18

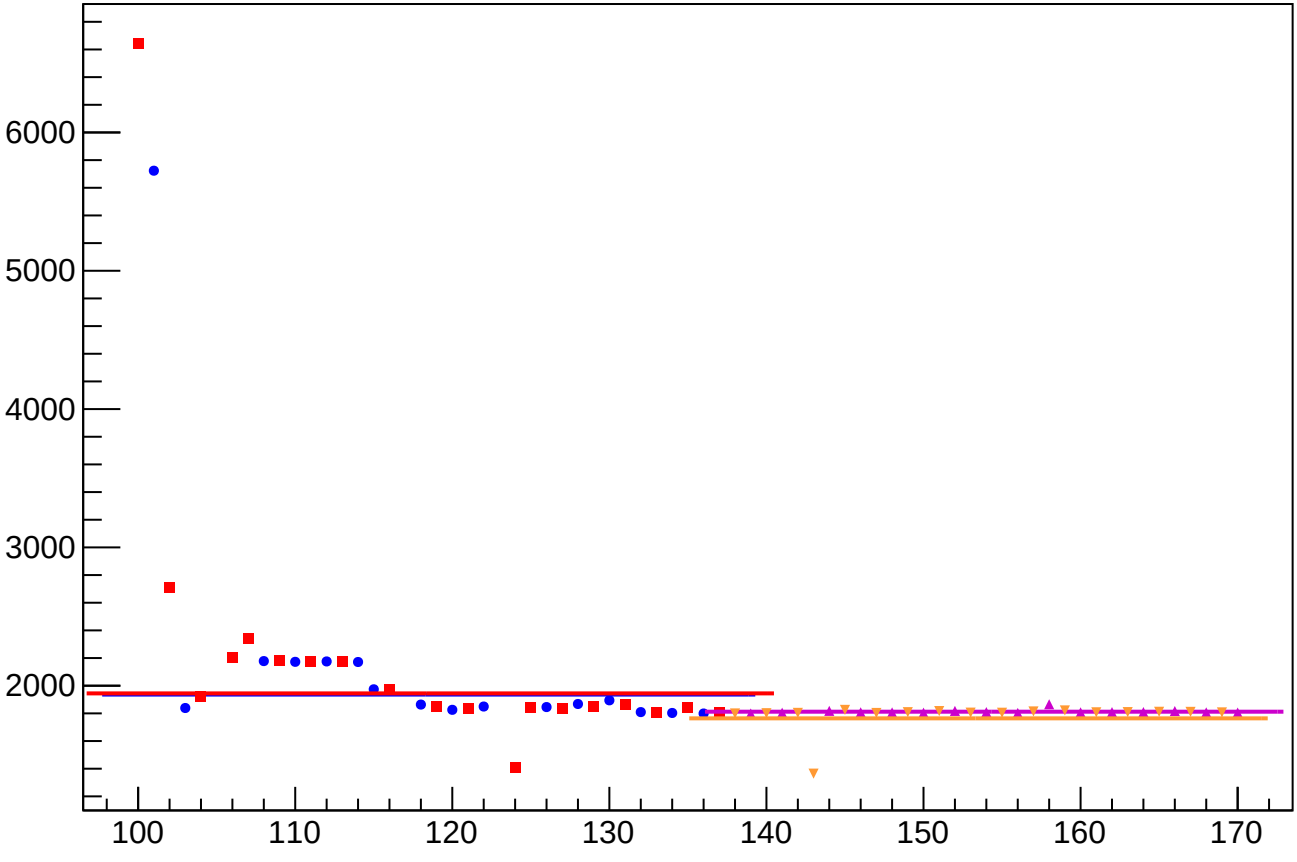
Left In: 367.353+/-498.372 $\chi^2$/NDF:23.6/15

+ sign -424.793+/-403.463 $\chi^2$/NDF: 31.9/32

All: -11.654+/-287.814 $\chi^2$/NDF: 73.3/67

- sign 416.424+/-410.693 $\chi^2$/NDF: 39.2/34

# dit_asym_at1_dd_rms vs Slug




Right In: 1935.974+/-0.520 $\chi^2$/NDF: 639808.0/15

Left Out: 1763.990+/-0.341 $\chi^2$/NDF:156496.8/16

Right Out: 1944.495+/-0.513 $\chi^2$/NDF: 276223.6/18

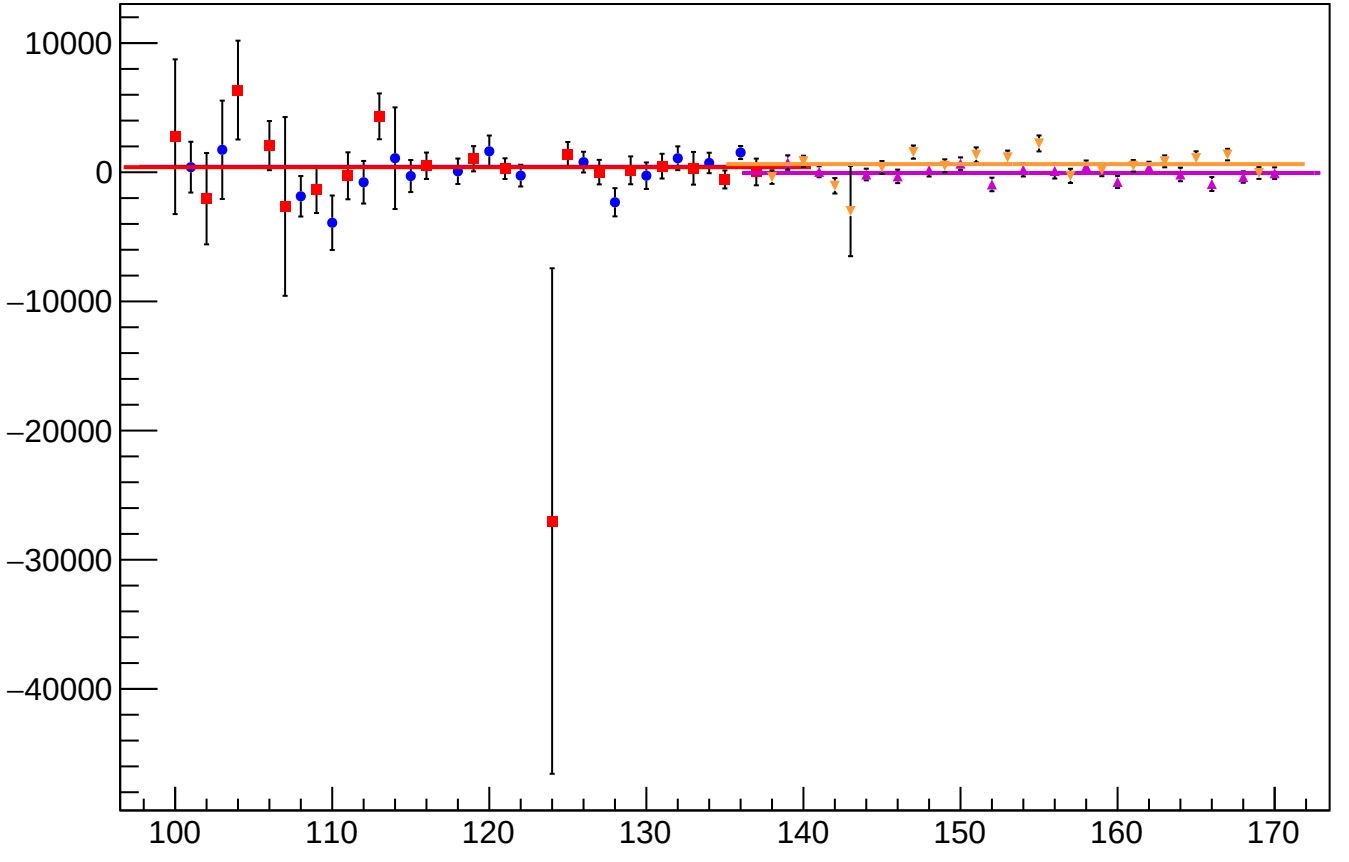
Left In: 1812.148+/-0.352 $\chi^2$/NDF:1766.3/15

+ sign 1815.688+/-0.285 $\chi^2$/NDF: 872708.1/32

All: 1834.808+/-0.204 $\chi^2$/NDF: 1205105.5/67

- sign 1854.620+/-0.290 $\chi^2$/NDF: 323251.6/34

# asym_at1_dd_dit_correction_mean vs Slug




Right In: 421.145+/-256.749 $\chi^2$/NDF: 21.5/15

Left Out: 631.244+/-125.148 $\chi^2$/NDF:35.6/16

Right Out: 393.590+/-279.562 $\chi^2$/NDF: 15.9/18

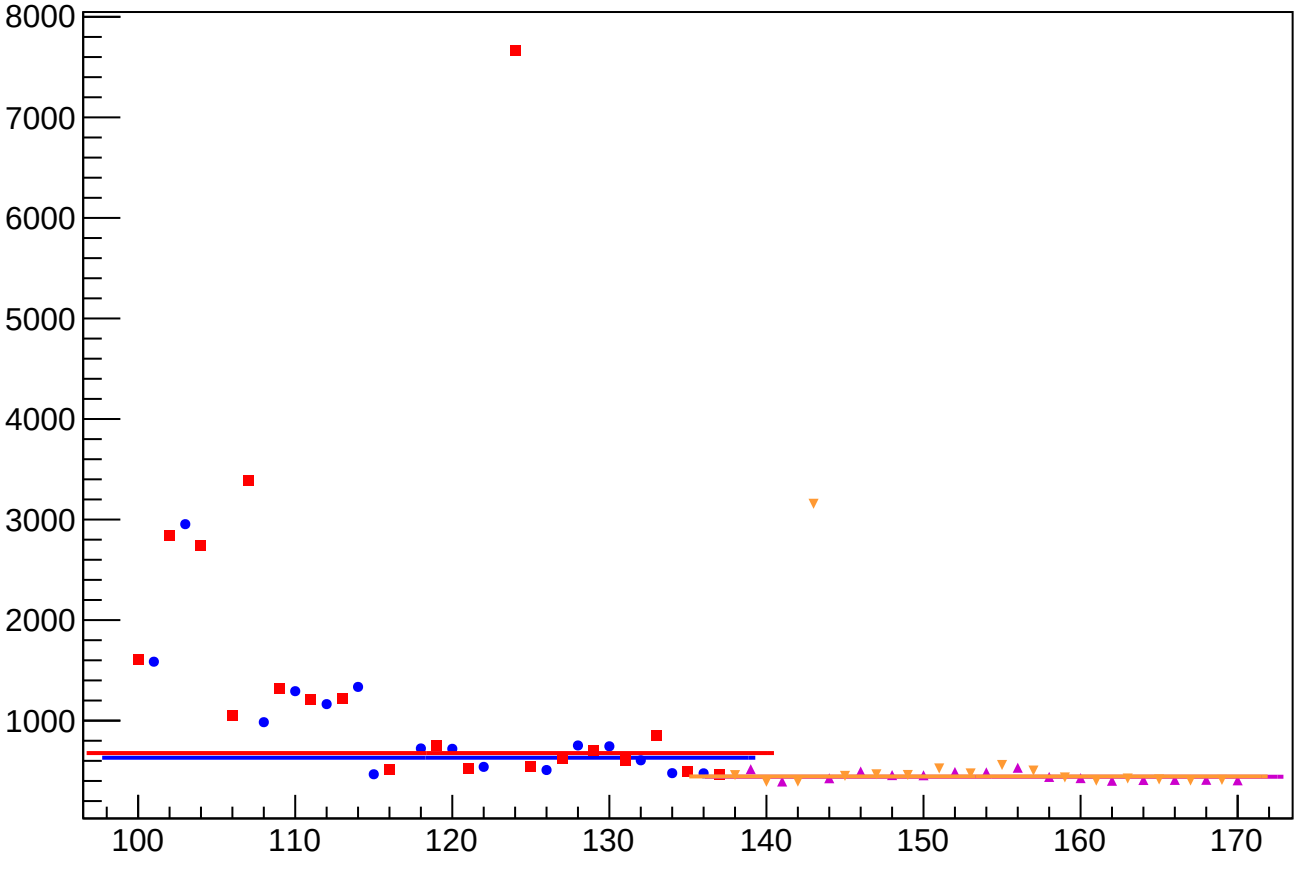
Left In: -56.667+/-122.304 $\chi^2$/NDF:15.2/15

+ sign 590.910+/-112.496 $\chi^2$/NDF: 57.6/32

All: 302.146+/-79.389 $\chi^2$/NDF: 104.0/67

- sign 15.665+/-112.050 $\chi^2$/NDF: 33.3/34

# asym_at1_dd_dit_correction_rms vs Slug




Right In: 631.140+/-0.182 $\chi^2$/NDF: 2234480.1/15

Left Out: 444.982+/-0.088 $\chi^2$/NDF:1449060.0/16

Right Out: 677.438+/-0.198 $\chi^2$/NDF: 3081569.8/18

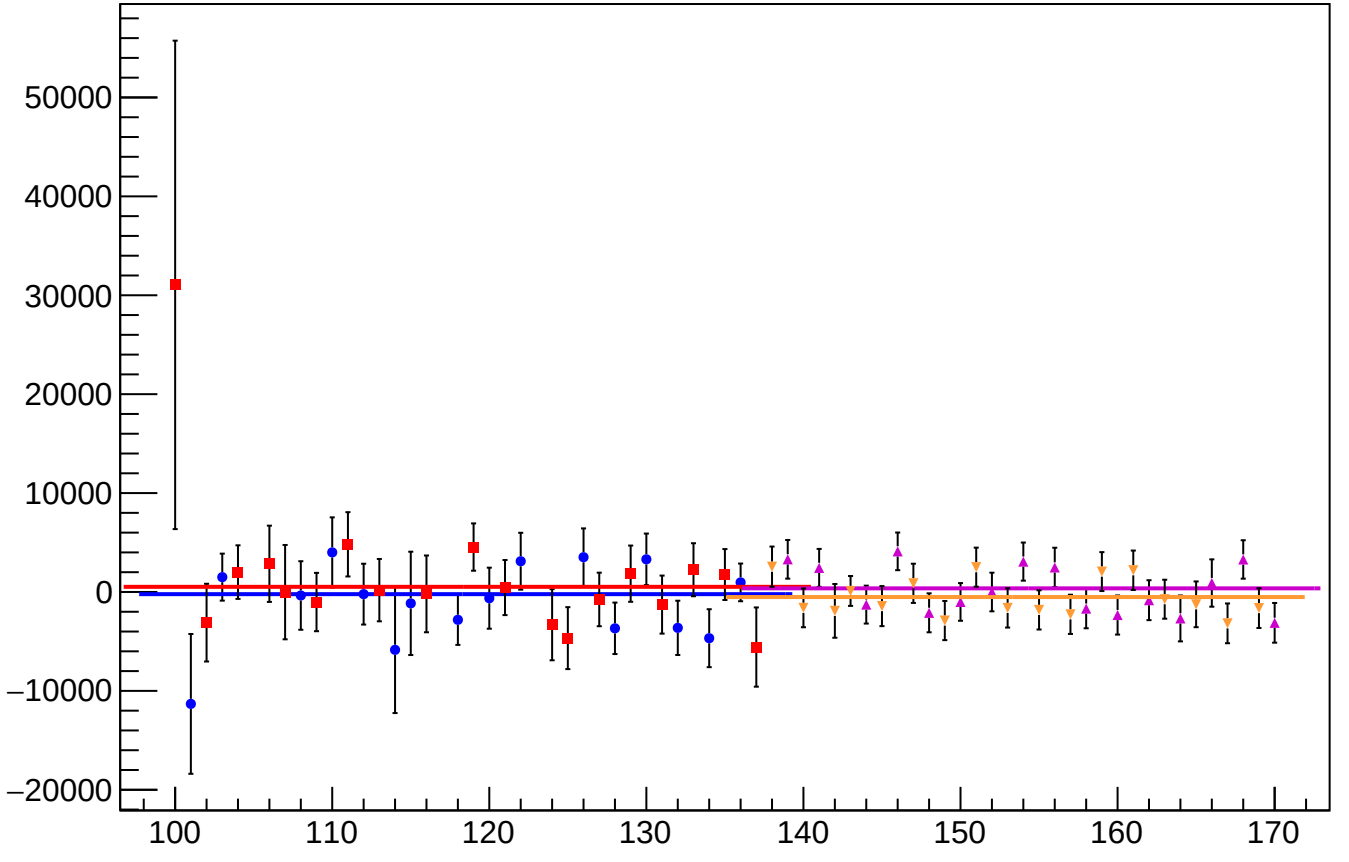
Left In: 441.960+/-0.086 $\chi^2$/NDF:216531.4/15

+ sign 480.720+/-0.080 $\chi^2$/NDF: 4533106.1/32

All: 480.253+/-0.056 $\chi^2$/NDF: 9022287.9/67

- sign 479.789+/-0.079 $\chi^2$/NDF: 4489113.0/34

# eigen_dit_asym_at1_dd_mean vs Slug




Right In: -220.393+/-735.888 $\chi^2$/NDF: 17.1/15

Left Out: -512.643+/-482.436 $\chi^2$/NDF:14.7/16

Right Out: 520.265+/-724.980 $\chi^2$/NDF: 15.6/18

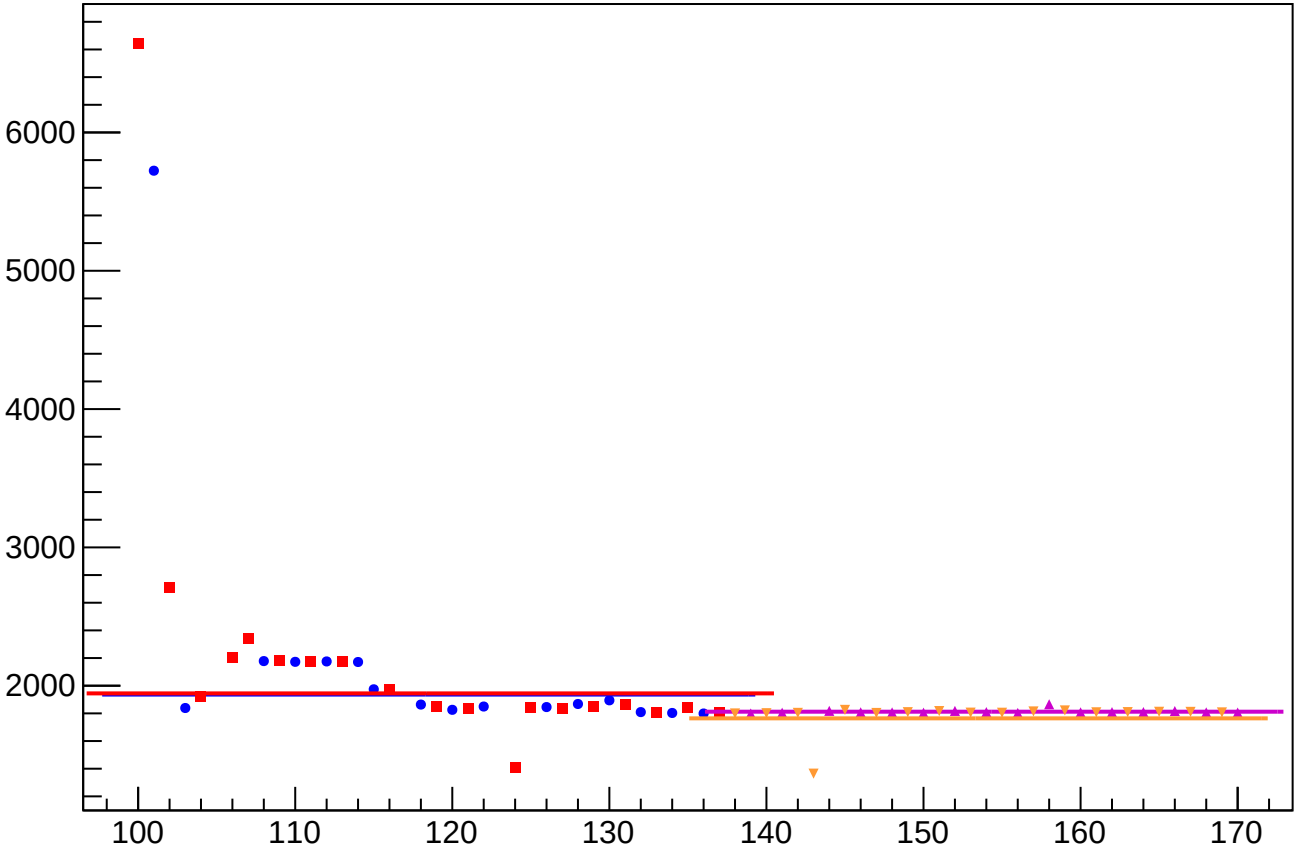
Left In: 367.353+/-498.372 $\chi^2$/NDF:23.6/15

+ sign -424.794+/-403.463 $\chi^2$/NDF: 31.9/32

All: -11.655+/-287.814 $\chi^2$/NDF: 73.3/67

- sign 416.424+/-410.693 $\chi^2$/NDF: 39.2/34

# eigen_dit_asym_at1_dd_rms vs Slug




Right In: 1935.974+/-0.520 $\chi^2$/NDF: 639808.0/15

Left Out: 1763.990+/-0.341 $\chi^2$/NDF:156496.8/16

Right Out: 1944.495+/-0.513 $\chi^2$/NDF: 276223.5/18

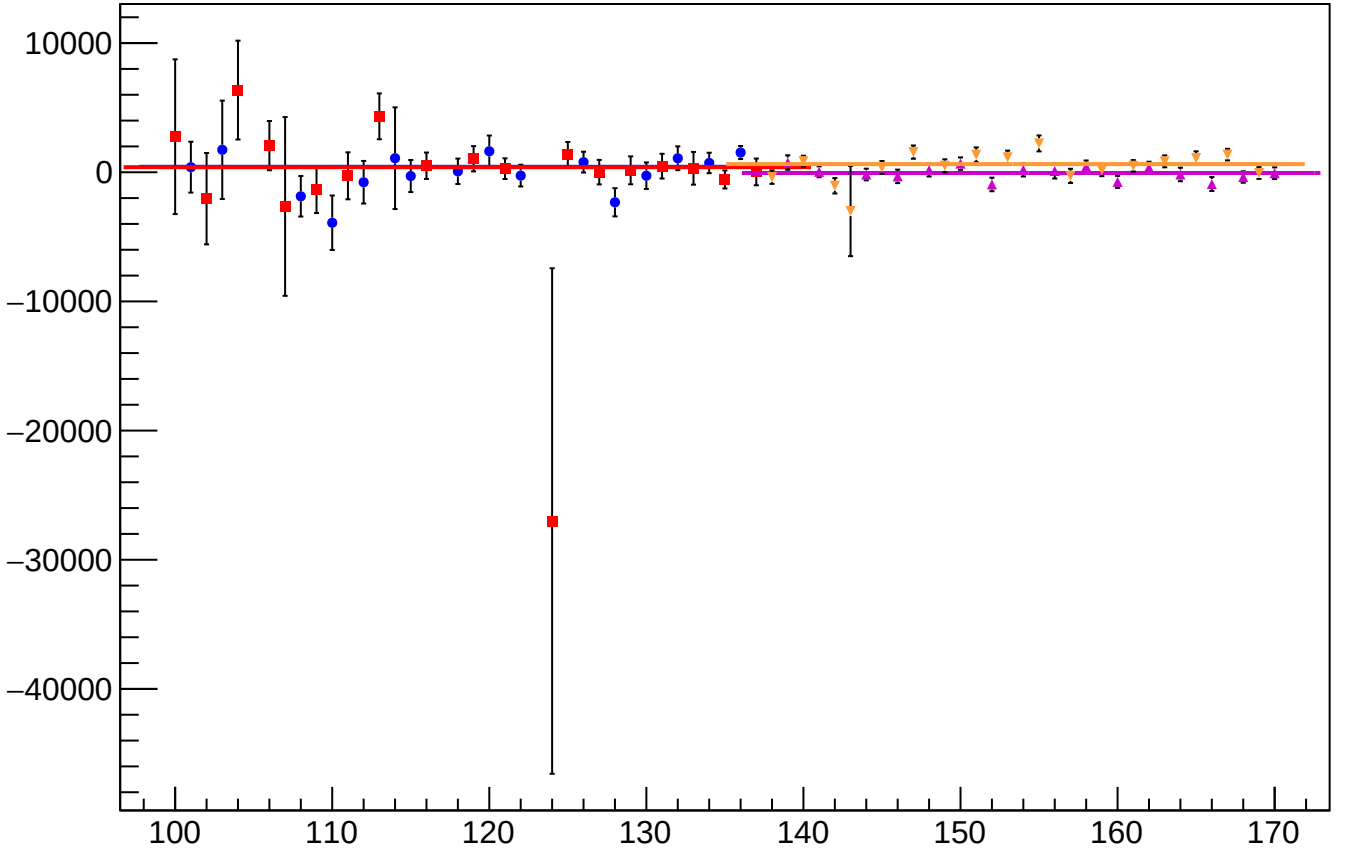
Left In: 1812.148+/-0.352 $\chi^2$/NDF:1766.3/15

+ sign 1815.688+/-0.285 $\chi^2$/NDF: 872708.1/32

All: 1834.808+/-0.204 $\chi^2$/NDF: 1205105.3/67

- sign 1854.620+/-0.290 $\chi^2$/NDF: 323251.4/34

# asym_at1_dd_eigen_dit_correction_mean vs Slug




Right In: 421.144+/-256.749 $\chi^2$/NDF: 21.5/15

Left Out: 631.243+/-125.148 $\chi^2$/NDF:35.6/16

Right Out: 393.591+/-279.562 $\chi^2$/NDF: 15.9/18

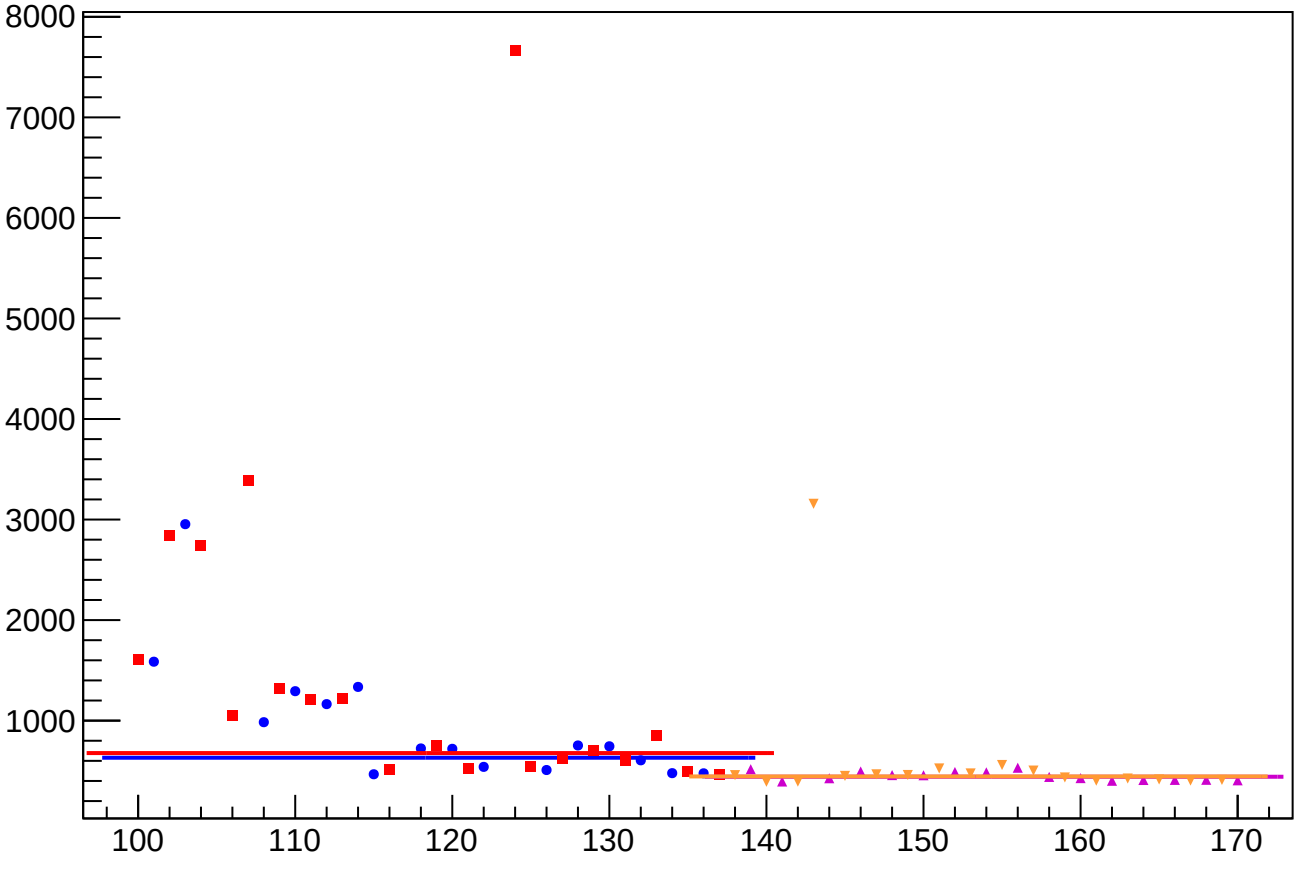
Left In: -56.668+/-122.304 $\chi^2$/NDF:15.2/15

+ sign 590.909+/-112.496 $\chi^2$/NDF: 57.6/32

All: 302.145+/-79.388 $\chi^2$/NDF: 104.0/67

- sign 15.664+/-112.050 $\chi^2$/NDF: 33.3/34

# asym_at1_dd_eigen_dit_correction_rms vs Slug




Right In: 631.139+/-0.182 $\chi^2$/NDF: 2234479.1/15

Left Out: 444.981+/-0.088 $\chi^2$/NDF:1449062.1/16

Right Out: 677.437+/-0.198 $\chi^2$/NDF: 3081570.5/18

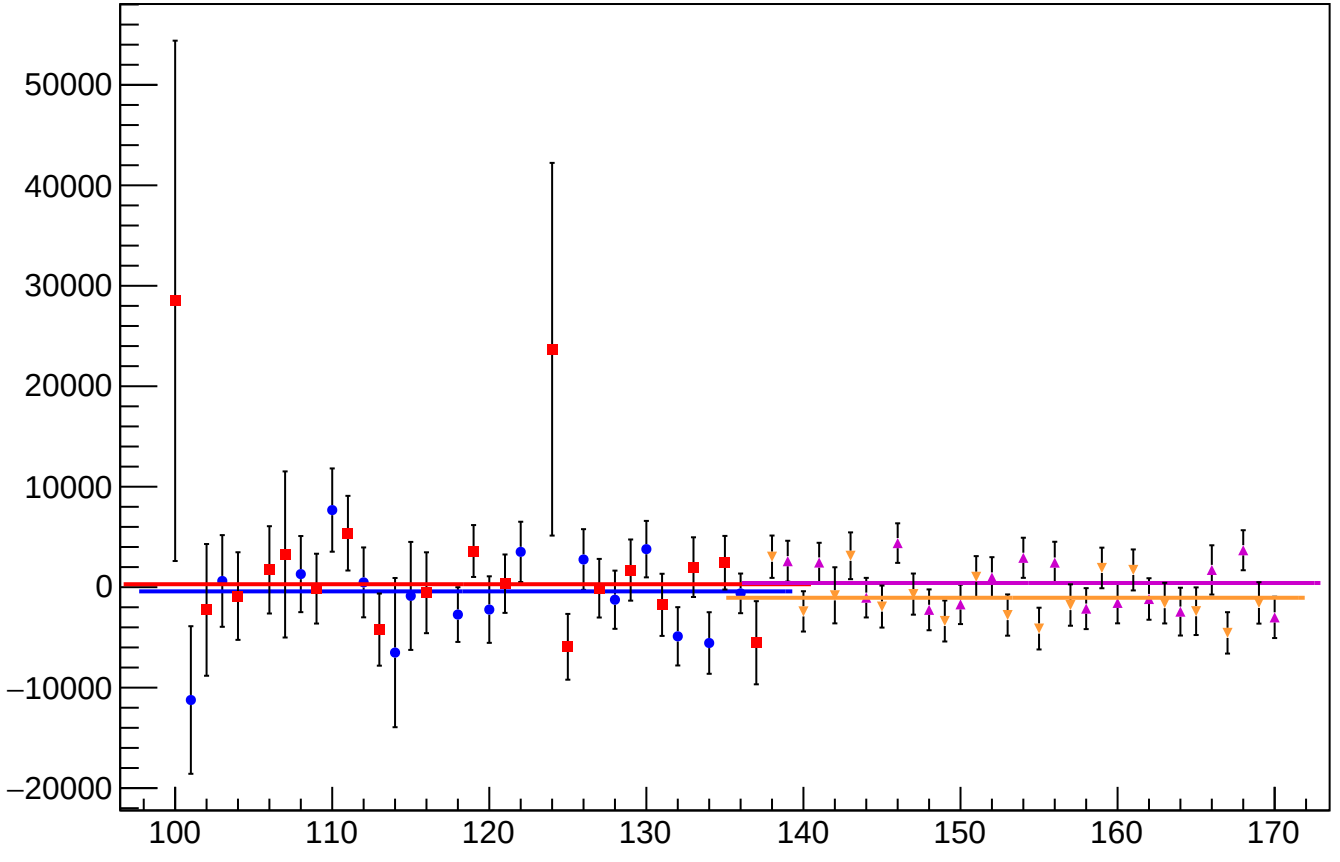
Left In: 441.960+/-0.086 $\chi^2$/NDF:216534.1/15

+ sign 480.720+/-0.080 $\chi^2$/NDF: 4533108.7/32

All: 480.252+/-0.056 $\chi^2$/NDF: 9022294.4/67

- sign 479.788+/-0.079 $\chi^2$/NDF: 4489116.8/34

# asym_at1_dd_mean vs Slug




Right In: -417.662+/-815.370 $\chi^2$/NDF: 18.3/15

Left Out: -1054.156+/-512.108 $\chi^2$/NDF:20.3/16

Right Out: 294.527+/-831.610 $\chi^2$/NDF: 15.6/18

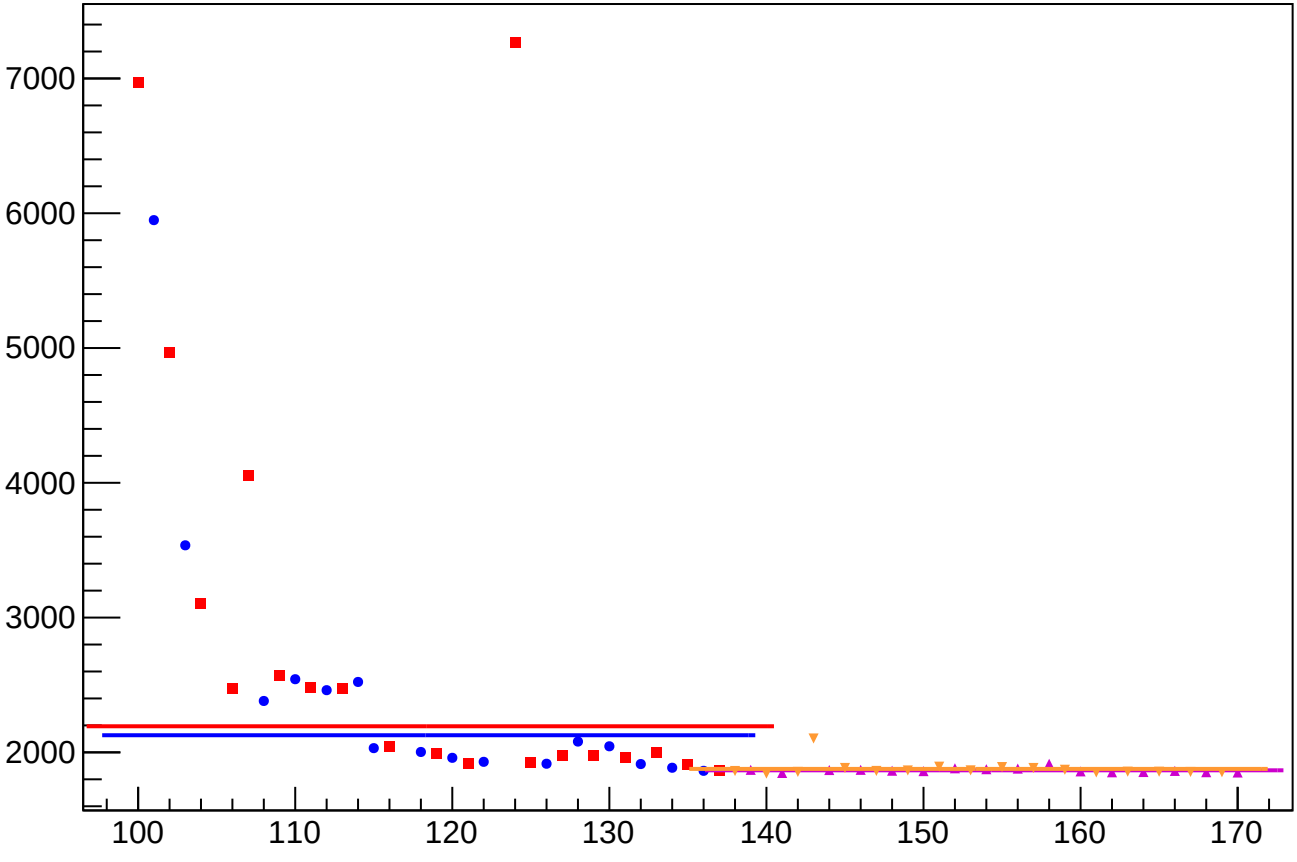
Left In: 416.544+/-513.411 $\chi^2$/NDF:22.6/15

+ sign -874.103+/-433.668 $\chi^2$/NDF: 39.1/32

All: -250.230+/-307.773 $\chi^2$/NDF: 81.5/67

- sign 382.872+/-436.863 $\chi^2$/NDF: 38.3/34

# asym_at1_dd_rms vs Slug




Right In: 2127.041+/-0.577 $\chi^2$/NDF: 875078.1/15

Left Out: 1877.228+/-0.362 $\chi^2$/NDF:21359.1/16

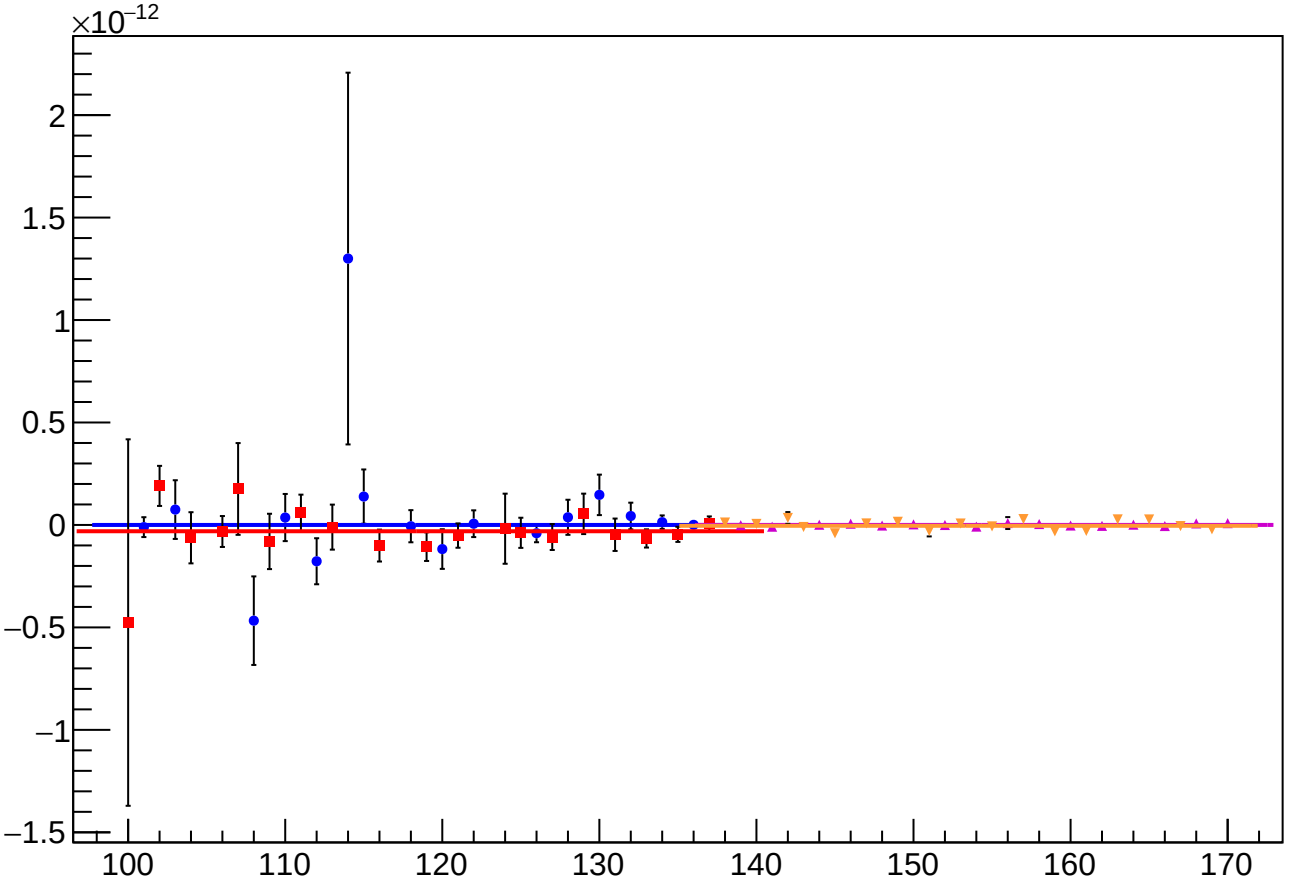
Right Out: 2193.560+/-0.588 $\chi^2$/NDF: 942581.2/18

Left In: 1866.809+/-0.363 $\chi^2$/NDF:1995.8/15

+ sign 1947.895+/-0.307 $\chi^2$/NDF: 1031067.8/32

All: 1952.405+/-0.218 $\chi^2$/NDF: 2199635.9/67

- sign 1956.981+/-0.309 $\chi^2$/NDF: 1168132.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.1/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:29.1/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 12.4/18

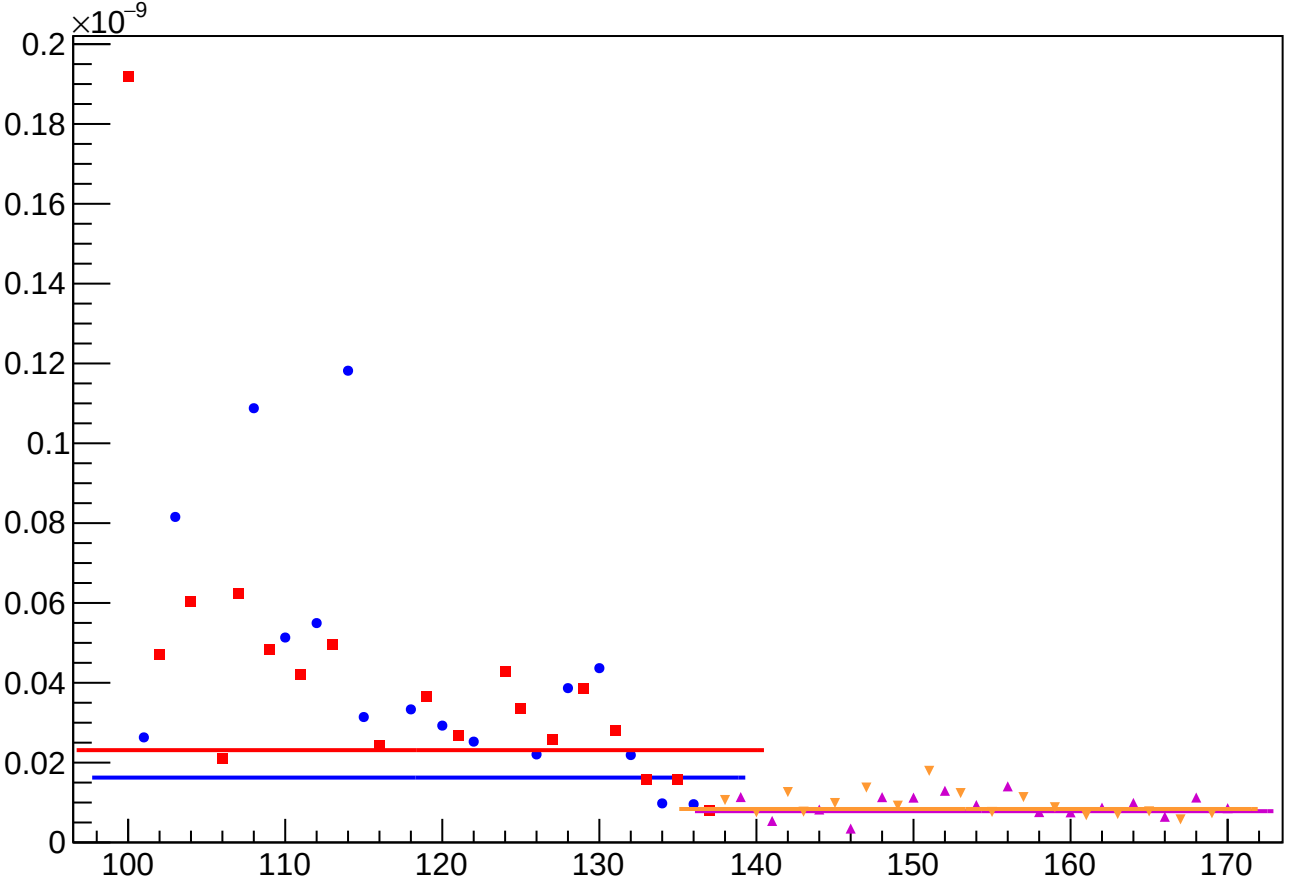
Left In: 0.000+/-0.000 $\chi^2$/NDF:2.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 45.3/32

All: -0.000+/-0.000 $\chi^2$/NDF: 63.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 18.1/34

# asym_at1_dd_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2286703.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:752389.9/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1411720.5/18

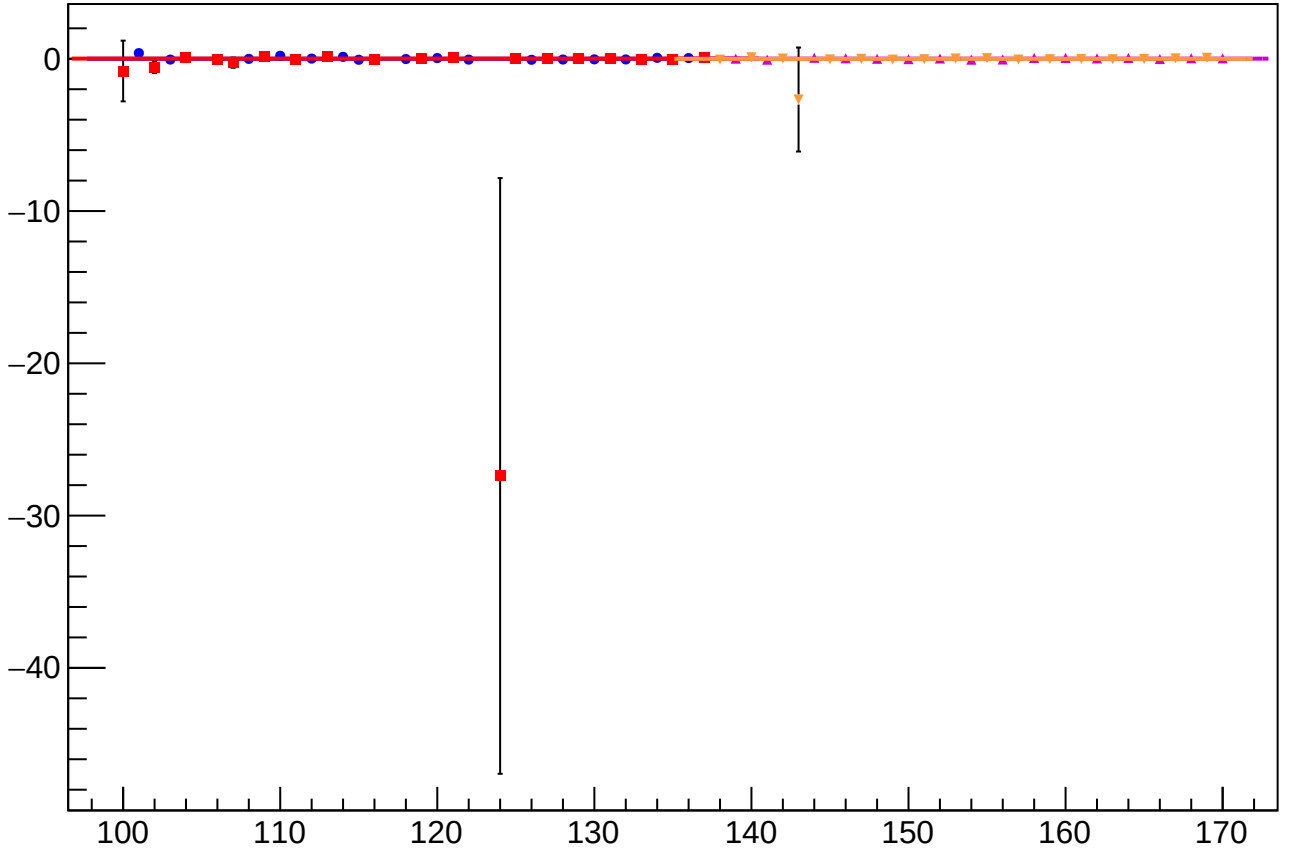
Left In: 0.000+/-0.000 $\chi^2$/NDF:984223.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3831167.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 8022337.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4177368.4/34

# asym_at1_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.002+/-0.015 $\chi^2$/NDF: 21.0/15

Left Out: -0.004+/-0.010 $\chi^2$/NDF:21.1/16

Right Out: 0.012+/-0.015 $\chi^2$/NDF: 14.2/18

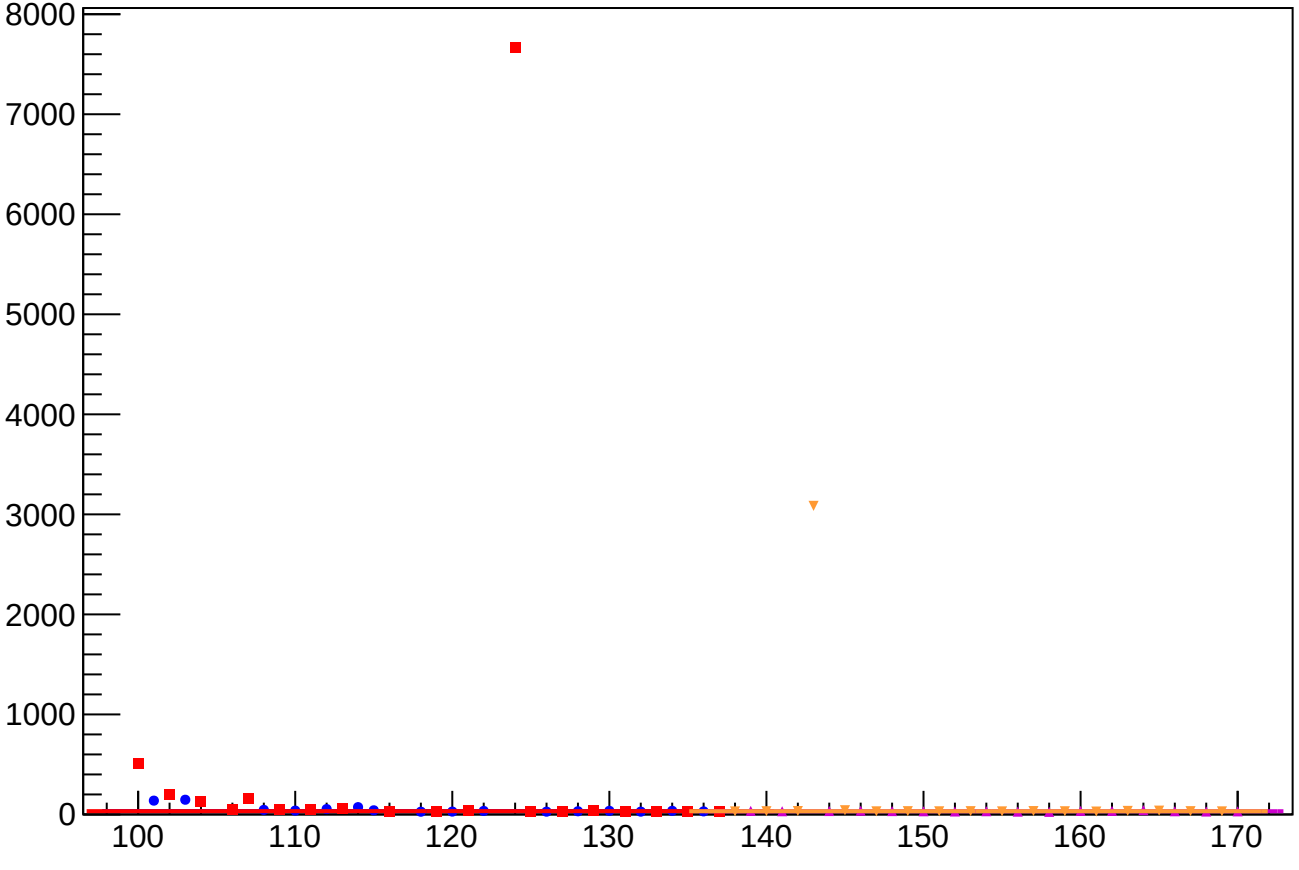
Left In: 0.008+/-0.010 $\chi^2$/NDF:17.2/15

+ sign -0.003+/-0.008 $\chi^2$/NDF: 42.2/32

All: 0.003+/-0.006 $\chi^2$/NDF: 74.8/67

- sign 0.009+/-0.008 $\chi^2$/NDF: 31.5/34

# asym_at1_dd_dit_vs_cor_diff_rms vs Slug




Right In: 34.055+/-0.010 $\chi^2$/NDF: 1717266.1/15

Left Out: 32.417+/-0.007 $\chi^2$/NDF:1755476.9/16

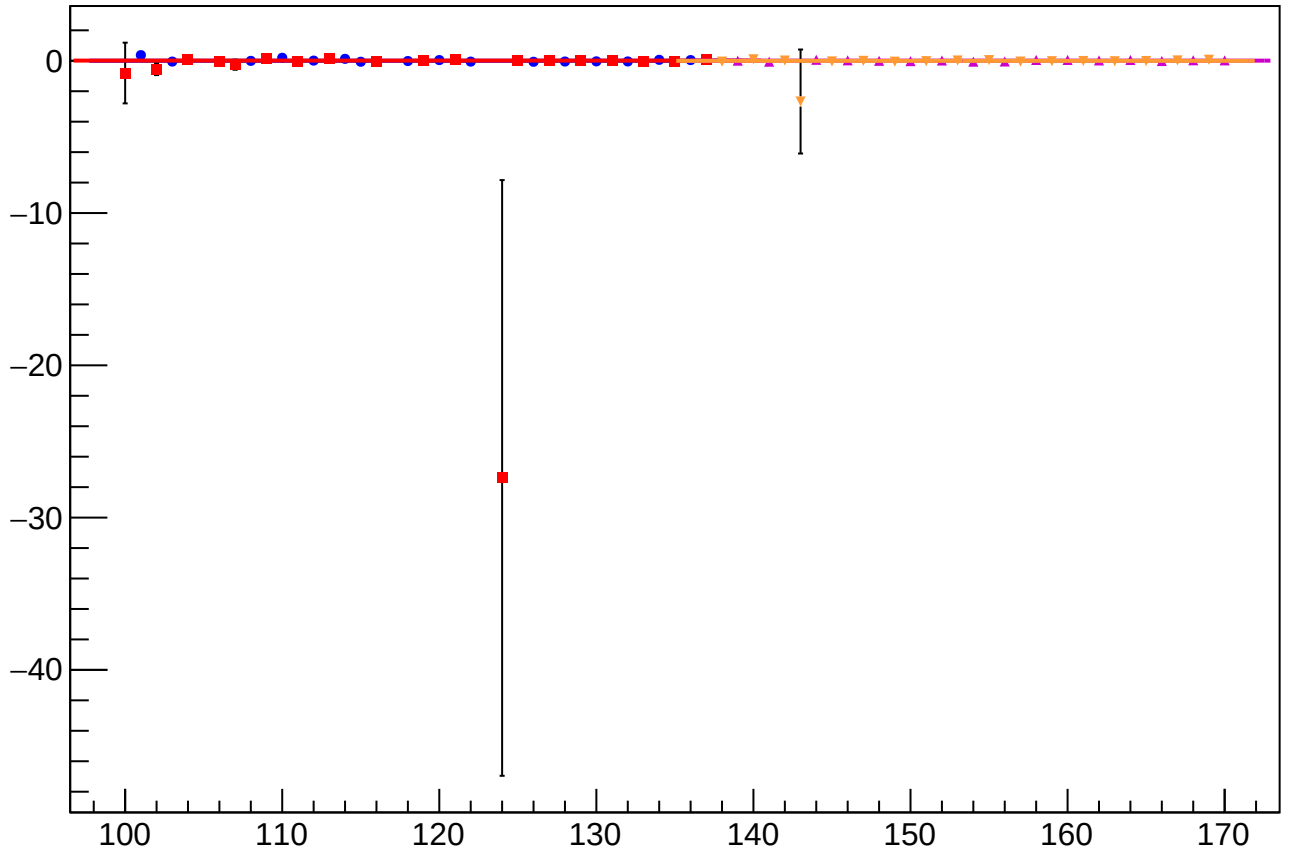
Right Out: 33.084+/-0.011 $\chi^2$/NDF: 2075124.6/18

Left In: 32.284+/-0.007 $\chi^2$/NDF:266839.0/15

+ sign 32.923+/-0.006 $\chi^2$/NDF: 3489787.7/32

All: 32.721+/-0.004 $\chi^2$/NDF: 5838224.0/67

- sign 32.522+/-0.006 $\chi^2$/NDF: 2346027.4/34




Right In: 0.002+/-0.015 $\chi^2$/NDF: 21.0/15

Left Out: -0.004+/-0.010 $\chi^2$/NDF:21.1/16

Right Out: 0.012+/-0.015 $\chi^2$/NDF: 14.2/18

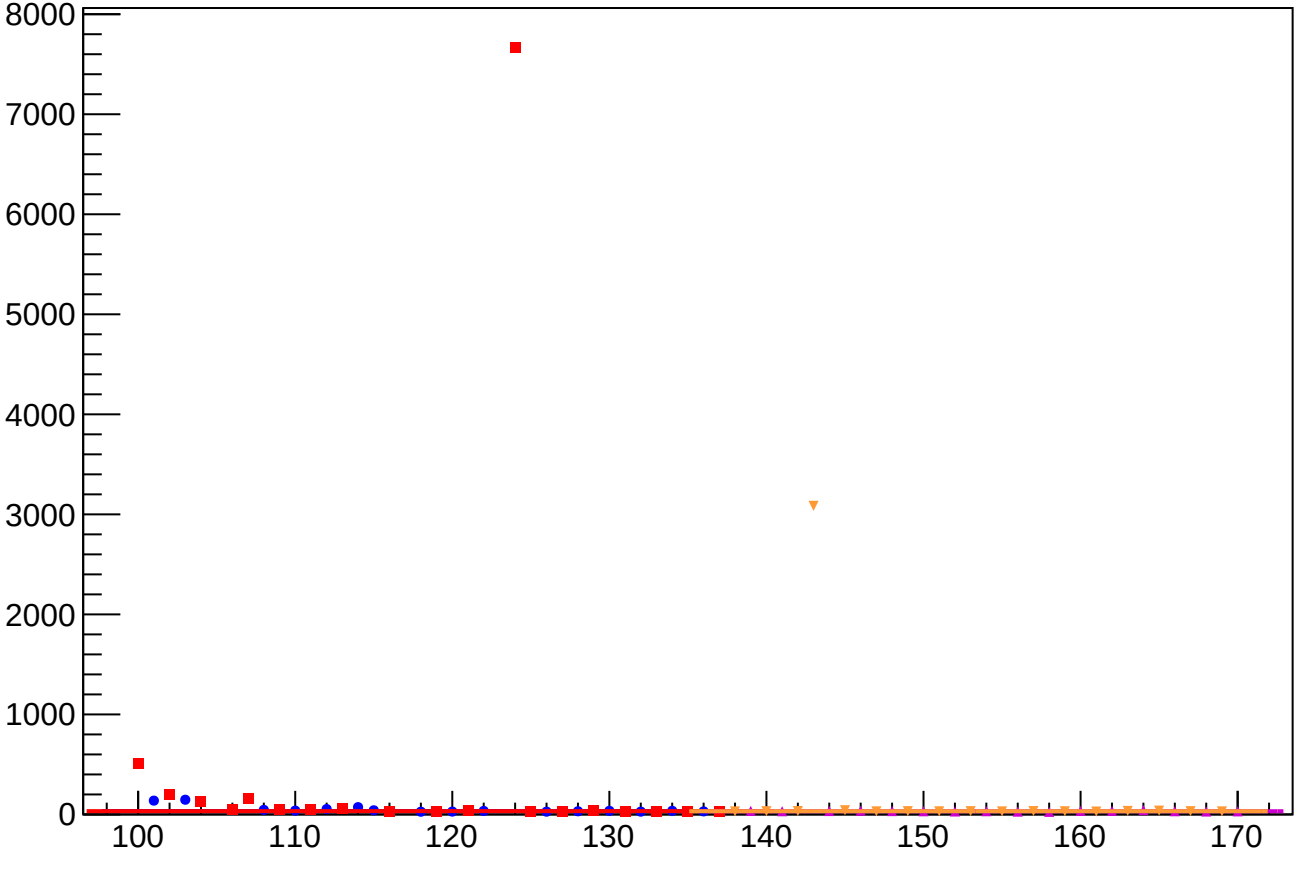
Left In: 0.008+/-0.010 $\chi^2$/NDF:17.2/15

\+ sign -0.003+/-0.008 $\chi^2$/NDF: 42.2/32

All: 0.003+/-0.006 $\chi^2$/NDF: 74.8/67

\- sign 0.009+/-0.008 $\chi^2$/NDF: 31.5/34

# asym_at1_dd_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 34.055+/-0.010 $\chi^2$/NDF: 1717266.1/15

Left Out: 32.417+/-0.007 $\chi^2$/NDF:1755476.9/16

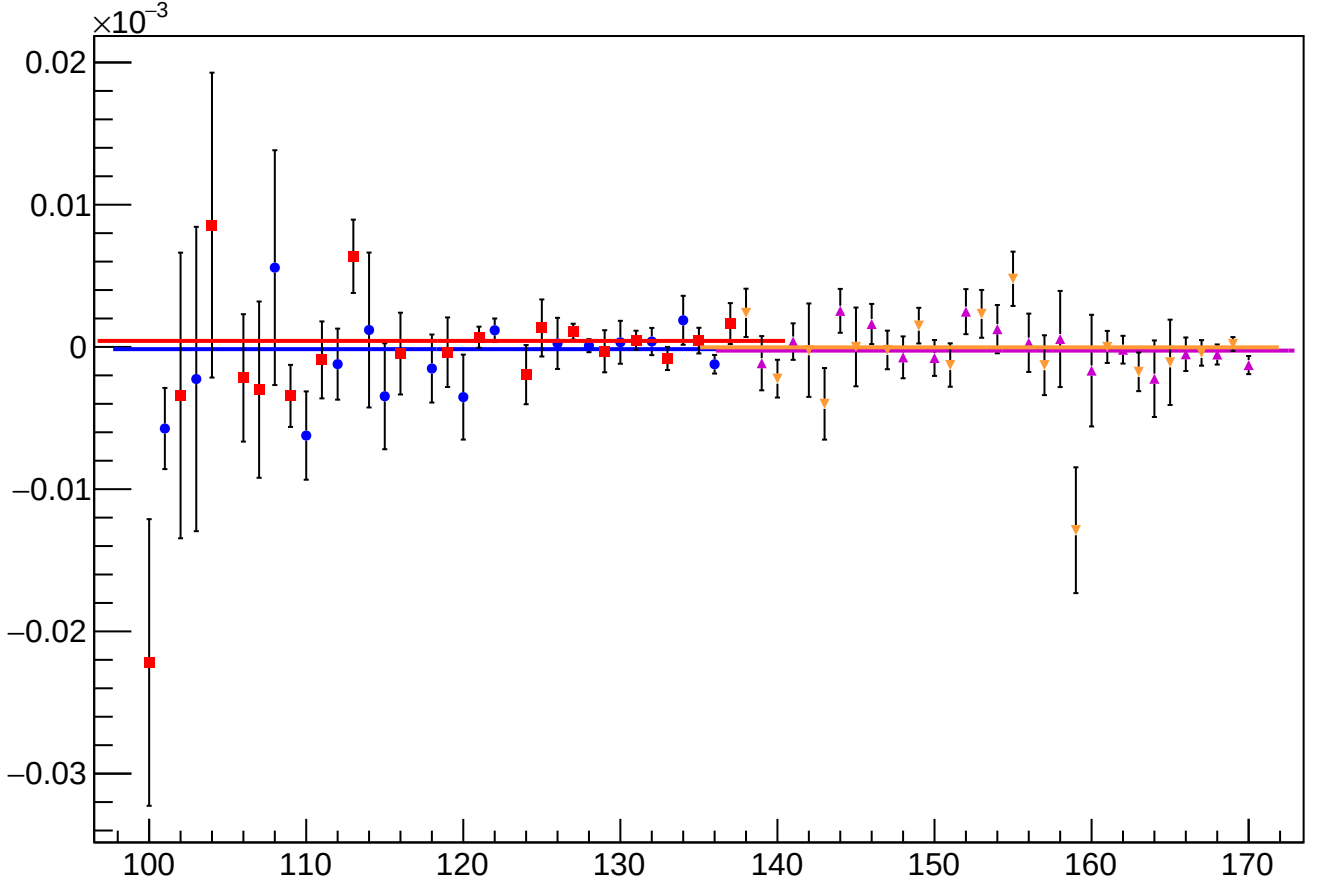
Right Out: 33.084+/-0.011 $\chi^2$/NDF: 2075124.6/18

Left In: 32.284+/-0.007 $\chi^2$/NDF:266839.0/15

+ sign 32.923+/-0.006 $\chi^2$/NDF: 3489787.7/32

All: 32.721+/-0.004 $\chi^2$/NDF: 5838224.0/67

- sign 32.522+/-0.006 $\chi^2$/NDF: 2346027.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 18.2/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:28.7/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.6/18

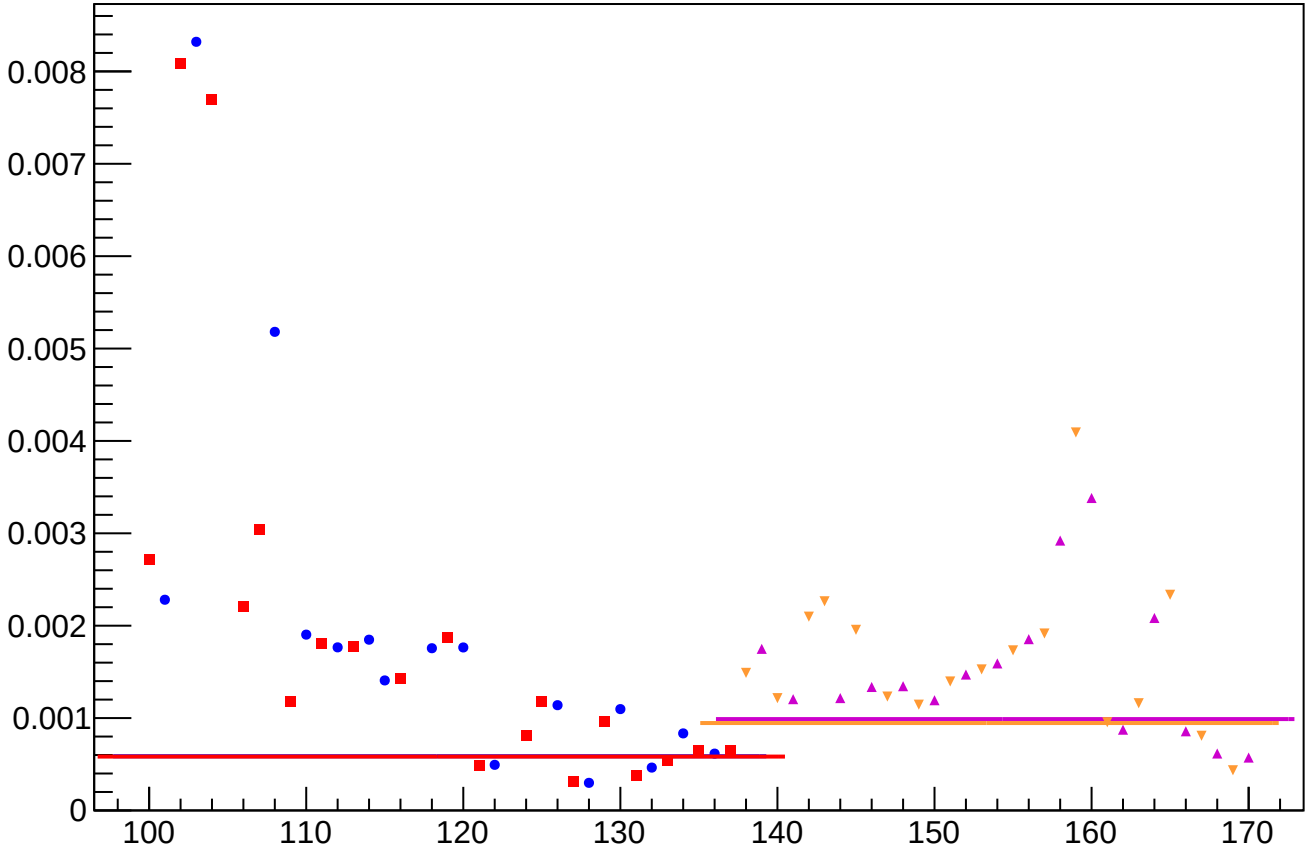
Left In: -0.000+/-0.000 $\chi^2$/NDF:13.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 47.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 84.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 37.3/34

# asym_at1_dd_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.001+/-0.000 $\chi^2$/NDF: 5485949.6/15

Left Out: 0.001+/-0.000 $\chi^2$/NDF:6418767.3/16

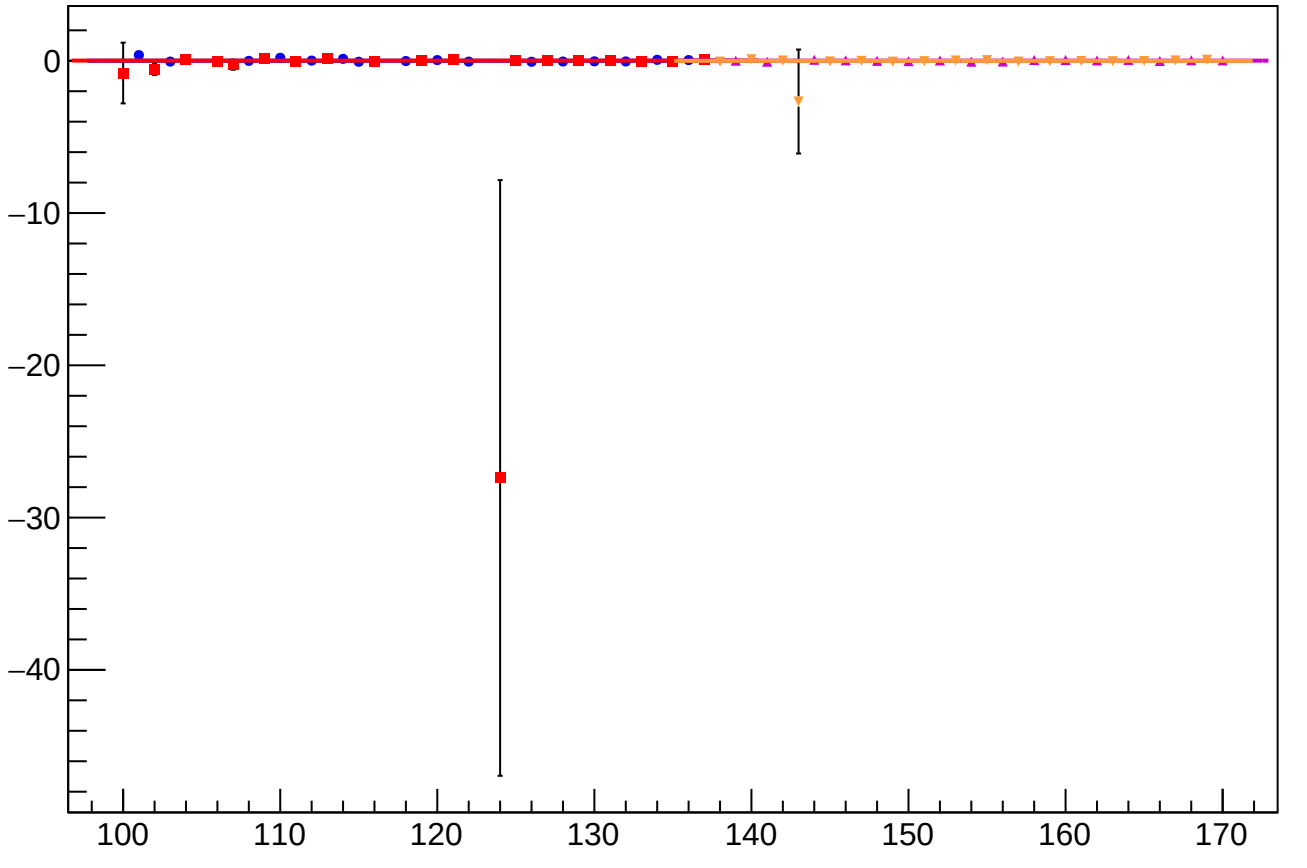
Right Out: 0.001+/-0.000 $\chi^2$/NDF: 5431787.1/18

Left In: 0.001+/-0.000 $\chi^2$/NDF:4690996.3/15

+ sign 0.001+/-0.000 $\chi^2$/NDF: 13346248.2/32

All: 0.001+/-0.000 $\chi^2$/NDF: 25329255.6/67

- sign 0.001+/-0.000 $\chi^2$/NDF: 11981018.4/34




Right In: 0.002+/-0.015 $\chi^2$/NDF: 21.0/15

Left Out: -0.004+/-0.010 $\chi^2$/NDF:21.1/16

Right Out: 0.012+/-0.015 $\chi^2$/NDF: 14.2/18

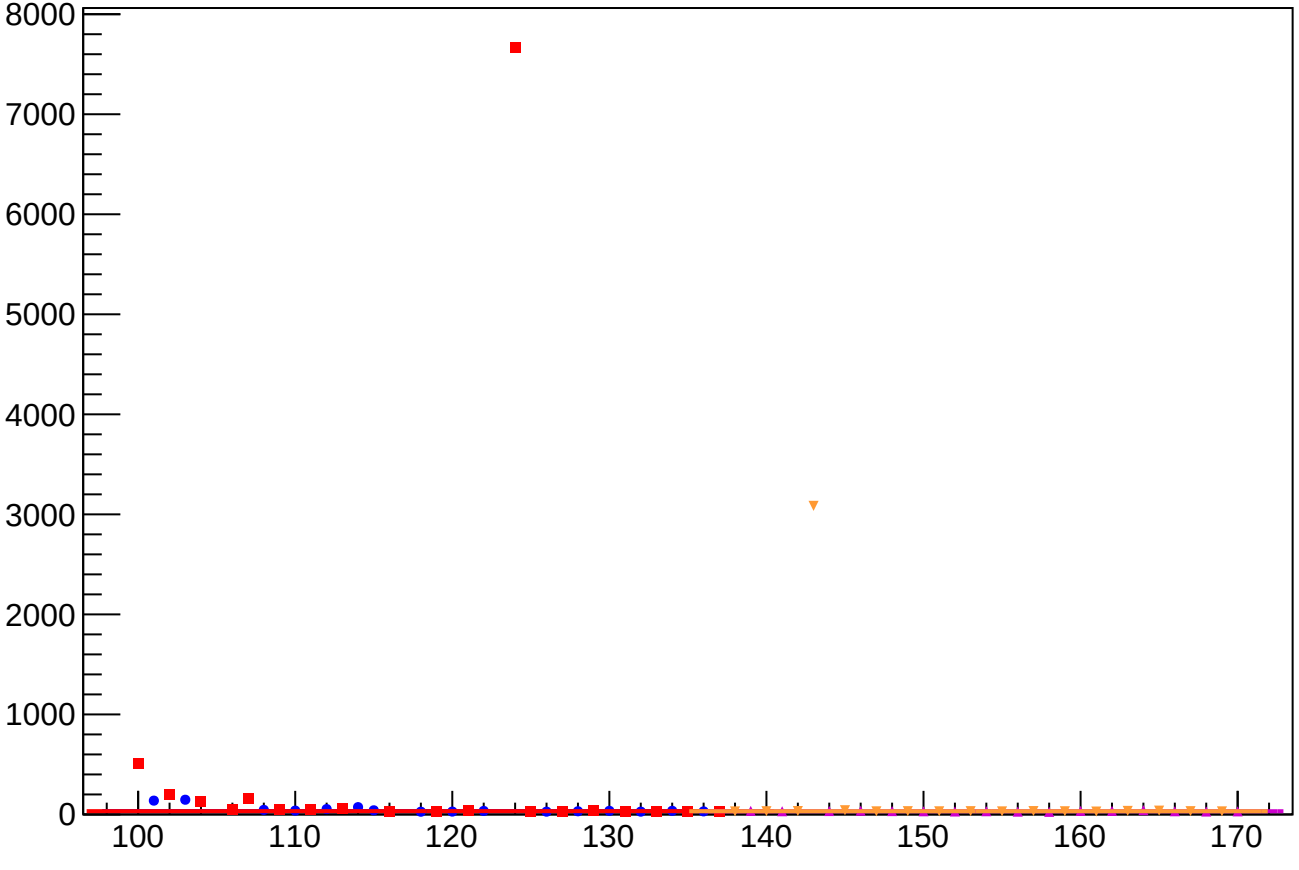
Left In: 0.008+/-0.010 $\chi^2$/NDF:17.2/15

+ sign -0.003+/-0.008 $\chi^2$/NDF: 42.2/32

All: 0.003+/-0.006 $\chi^2$/NDF: 74.8/67

- sign 0.009+/-0.008 $\chi^2$/NDF: 31.5/34

# asym_at1_dd_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 34.055+/-0.010 $\chi^2$/NDF: 1717254.5/15

Left Out: 32.417+/-0.007 $\chi^2$/NDF:1755471.8/16

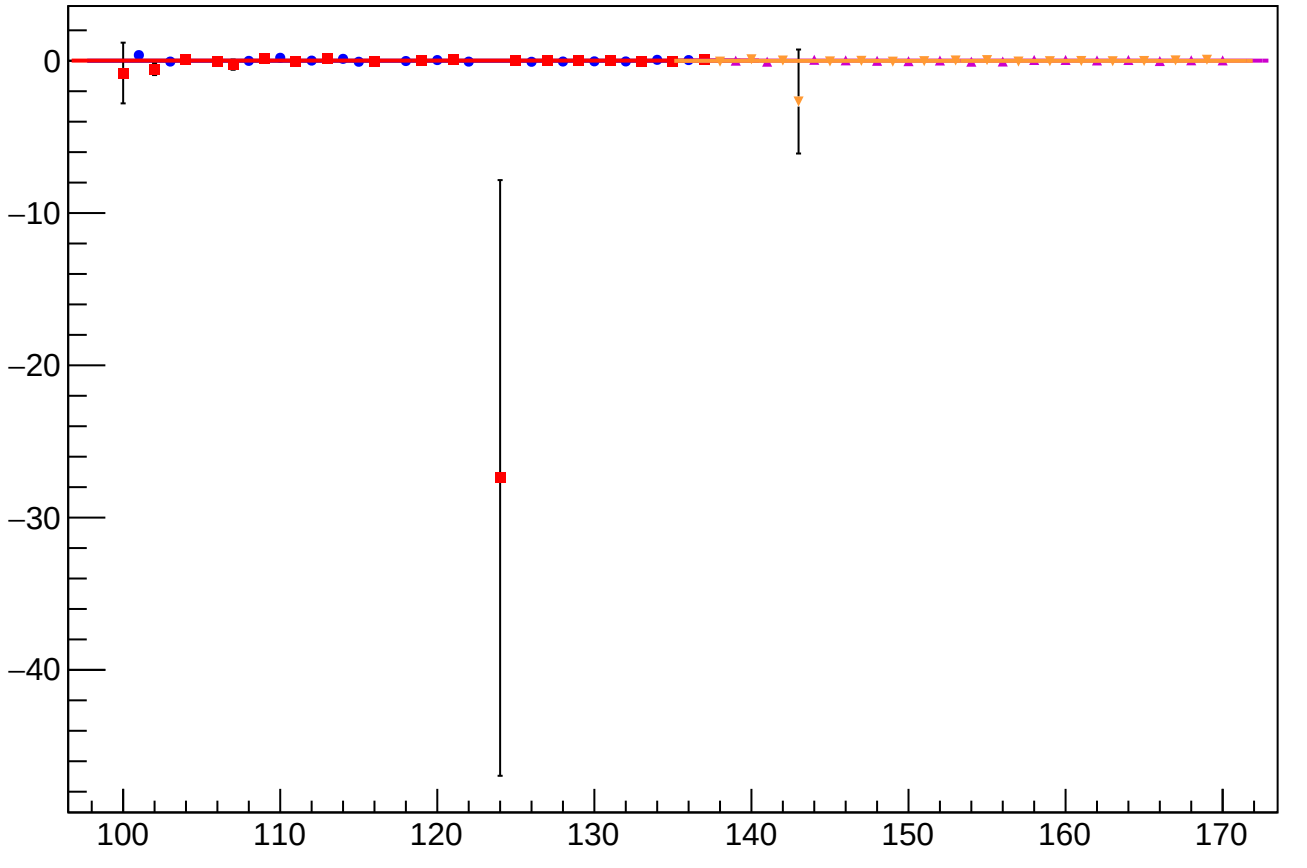
Right Out: 33.083+/-0.011 $\chi^2$/NDF: 2075105.8/18

Left In: 32.284+/-0.007 $\chi^2$/NDF:266763.0/15

+ sign 32.923+/-0.006 $\chi^2$/NDF: 3489770.7/32

All: 32.721+/-0.004 $\chi^2$/NDF: 5838107.3/67

- sign 32.523+/-0.006 $\chi^2$/NDF: 2345929.1/34




Right In: 0.002+/-0.015 $\chi^2$/NDF: 21.0/15

Left Out: -0.004+/-0.010 $\chi^2$/NDF:21.1/16

Right Out: 0.012+/-0.015 $\chi^2$/NDF: 14.2/18

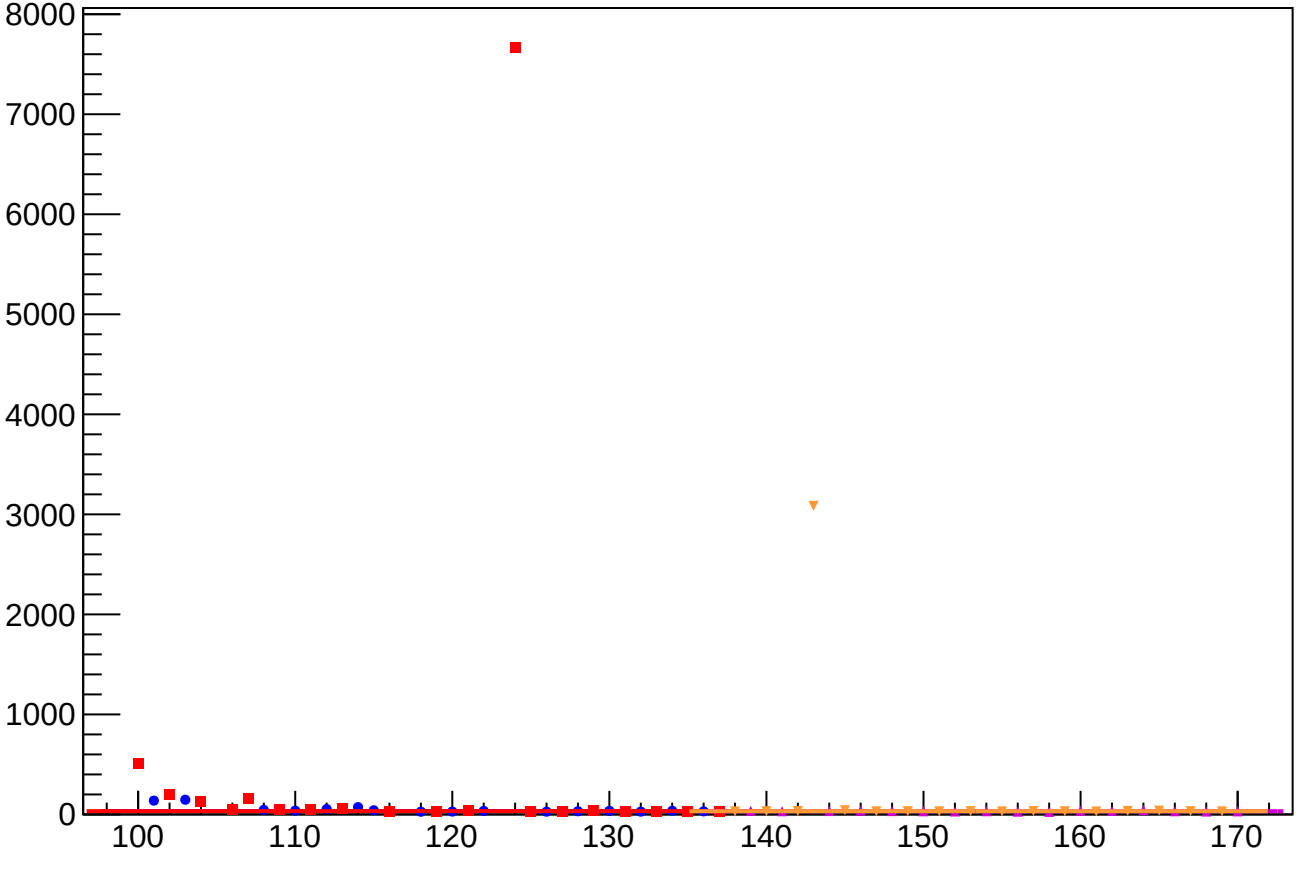
Left In: 0.008+/-0.010 $\chi^2$/NDF:17.2/15

+ sign -0.003+/-0.008 $\chi^2$/NDF: 42.2/32

All: 0.003+/-0.006 $\chi^2$/NDF: 74.8/67

- sign 0.009+/-0.008 $\chi^2$/NDF: 31.5/34

# asym_at1_dd_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 34.055+/-0.010 $\chi^2$/NDF: 1717254.5/15

Left Out: 32.417+/-0.007 $\chi^2$/NDF:1755471.8/16

Right Out: 33.083+/-0.011 $\chi^2$/NDF: 2075105.8/18

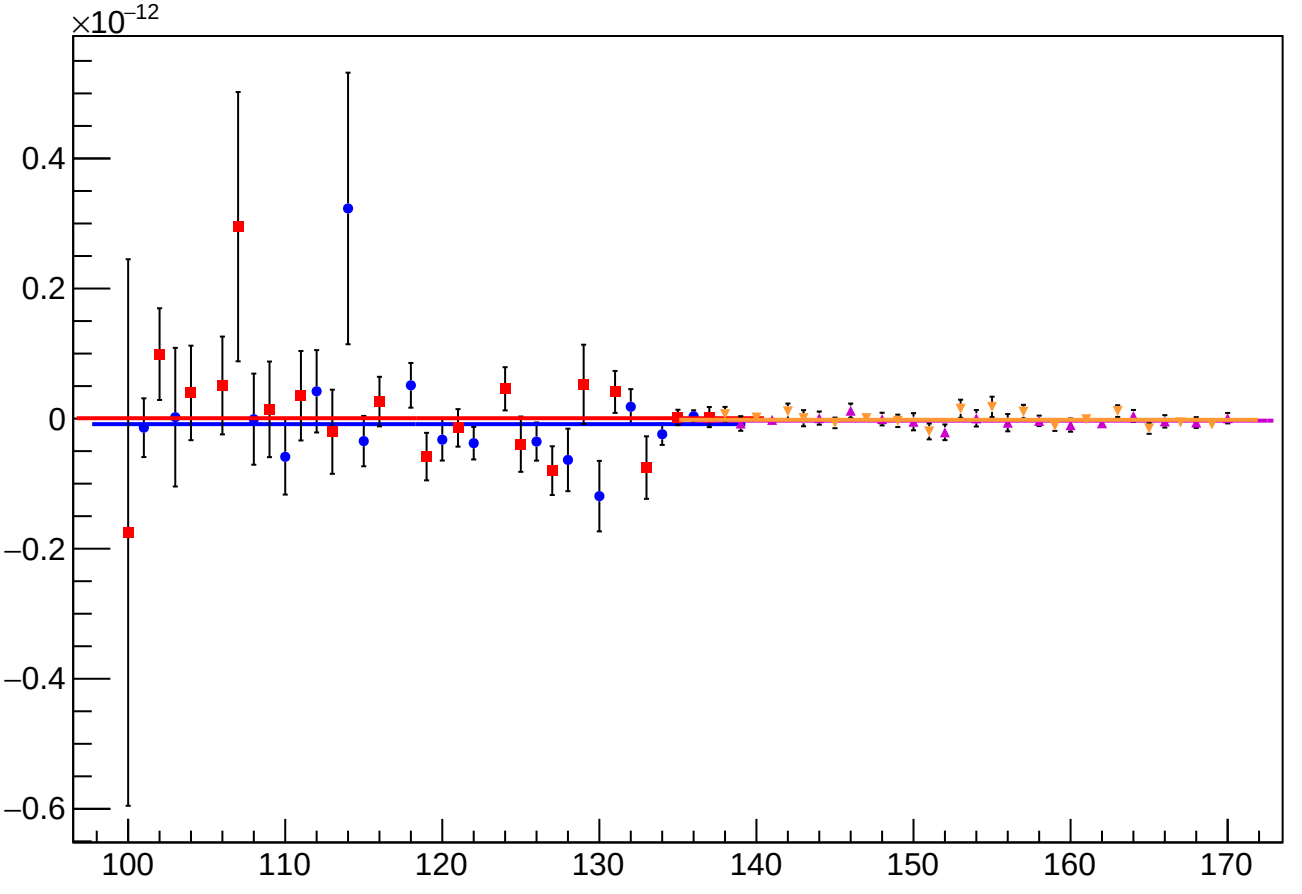
Left In: 32.284+/-0.007 $\chi^2$/NDF:266763.0/15

\+ sign 32.923+/-0.006 $\chi^2$/NDF: 3489770.7/32

All: 32.721+/-0.004 $\chi^2$/NDF: 5838107.3/67

\- sign 32.523+/-0.006 $\chi^2$/NDF: 2345929.1/34

# asym_at1_dd_eigen_cor_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 19.3/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:16.7/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 20.8/18

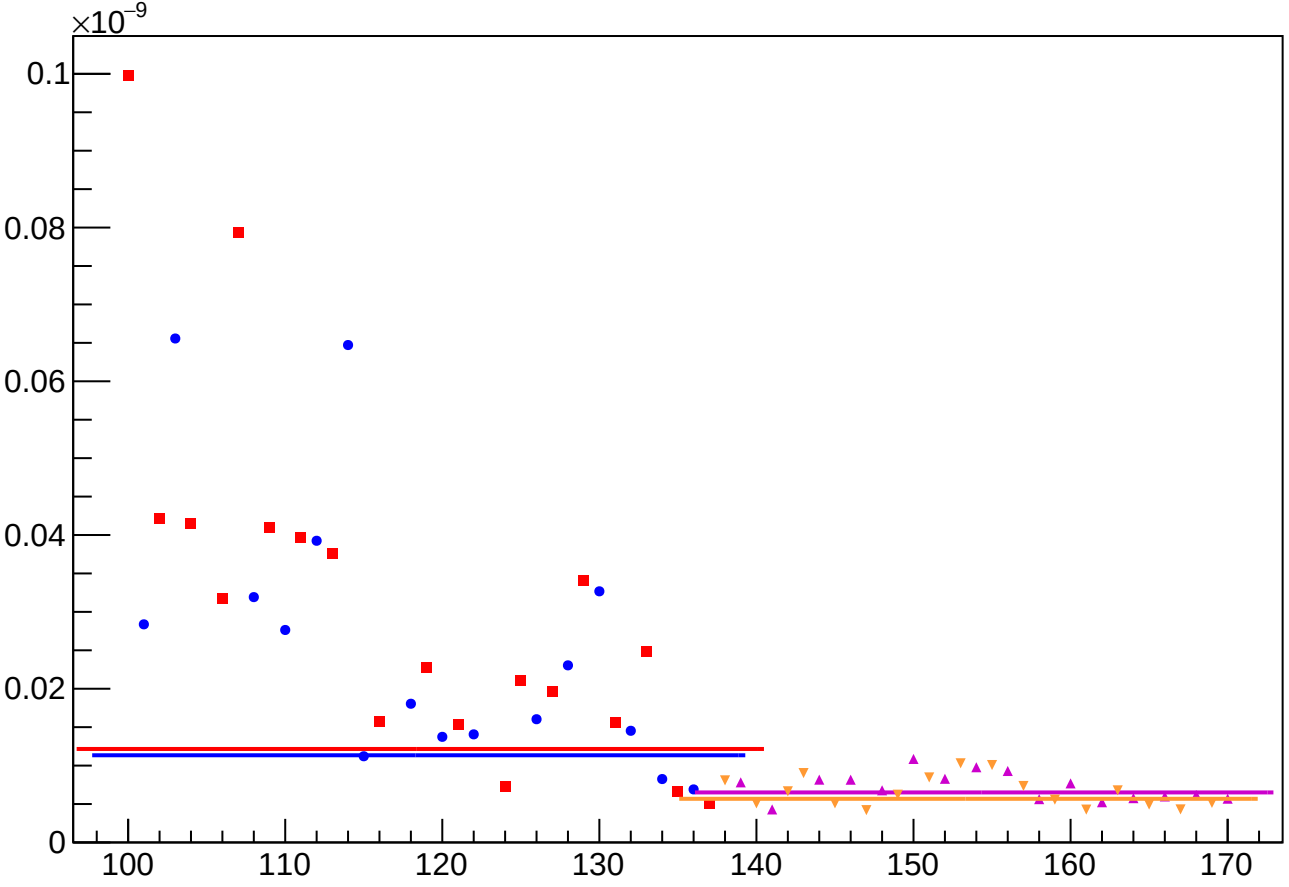
Left In: -0.000+/-0.000 $\chi^2$/NDF:6.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 37.0/32

All: -0.000+/-0.000 $\chi^2$/NDF: 64.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.5/34

# asym_at1_dd_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2813598.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1146807.0/16

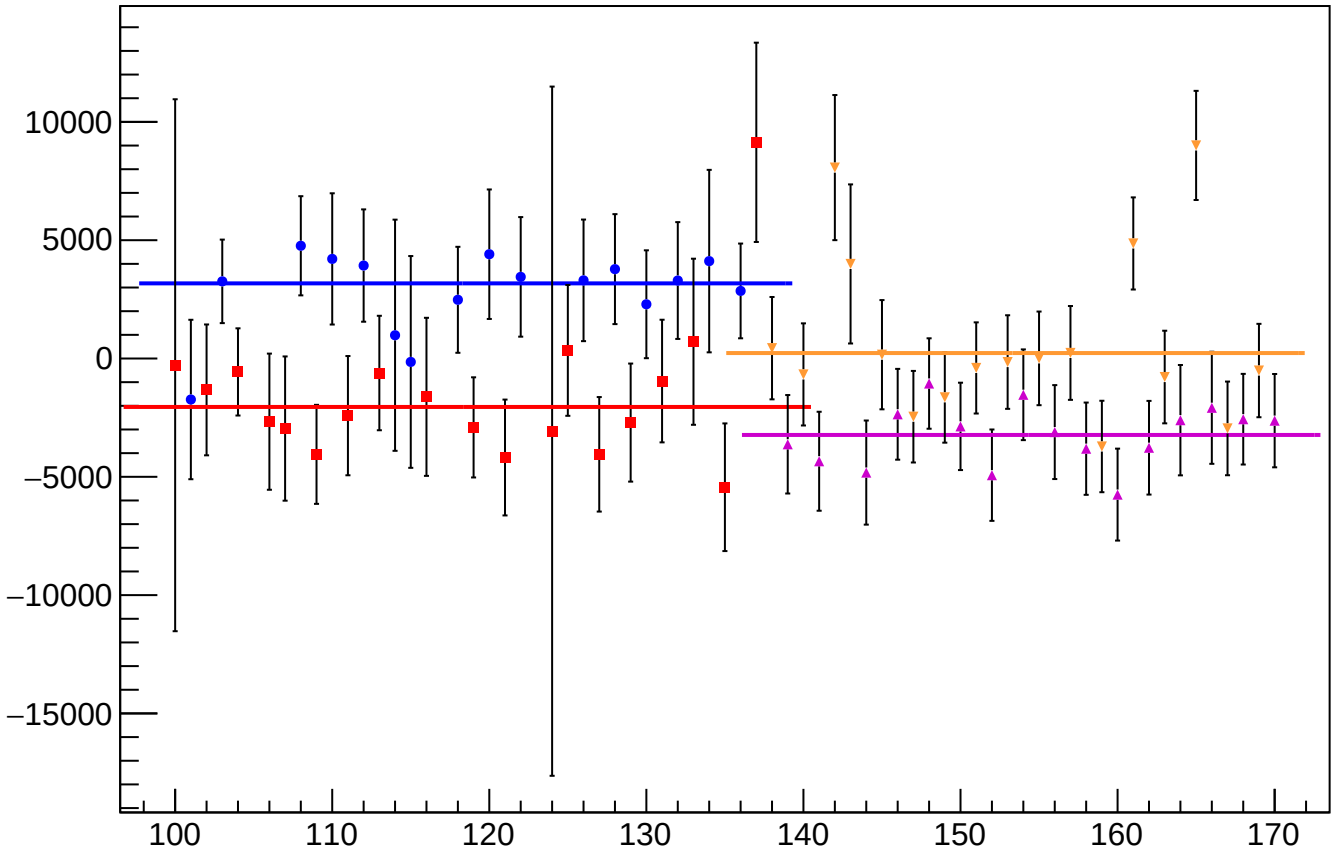
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3757412.0/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:1024682.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5374234.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 11404136.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5884452.8/34




Right In: 3175.599+/-627.992 $\chi^2$/NDF: 4.3/15

Left Out: 230.659+/-507.790 $\chi^2$/NDF:38.3/16

Right Out: -2047.403+/-621.498 $\chi^2$/NDF: 14.0/18

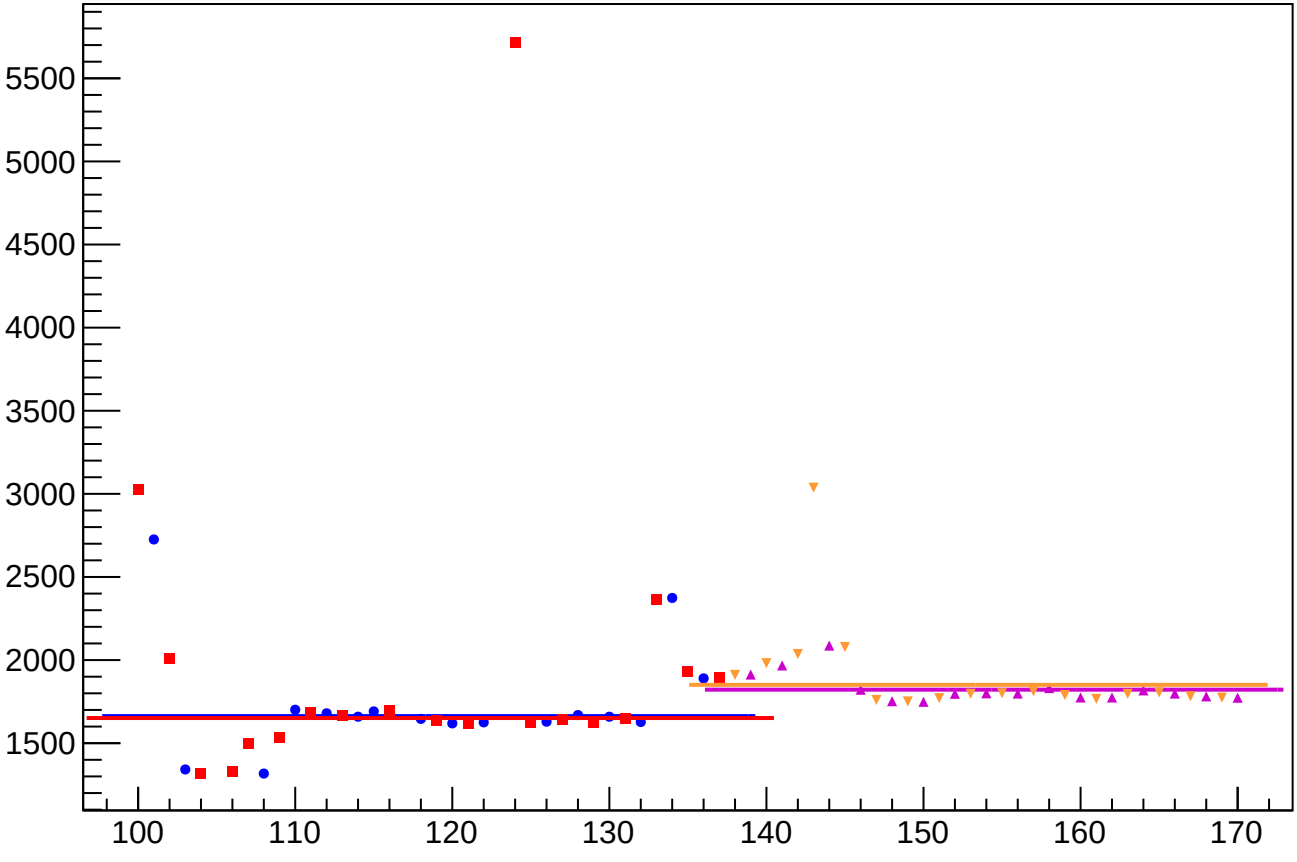
Left In: -3230.804+/-501.629 $\chi^2$/NDF:6.3/15

+ sign 1394.913+/-394.857 $\chi^2$/NDF: 55.9/32

All: -708.430+/-277.597 $\chi^2$/NDF: 134.6/67

- sign -2763.983+/-390.345 $\chi^2$/NDF: 22.6/34

# reg_asym_at2_avg_rms vs Slug




Right In: 1662.901+/-0.444 $\chi^2$/NDF: 415630.7/15

Left Out: 1850.985+/-0.359 $\chi^2$/NDF:315016.9/16

Right Out: 1651.322+/-0.439 $\chi^2$/NDF: 431965.1/18

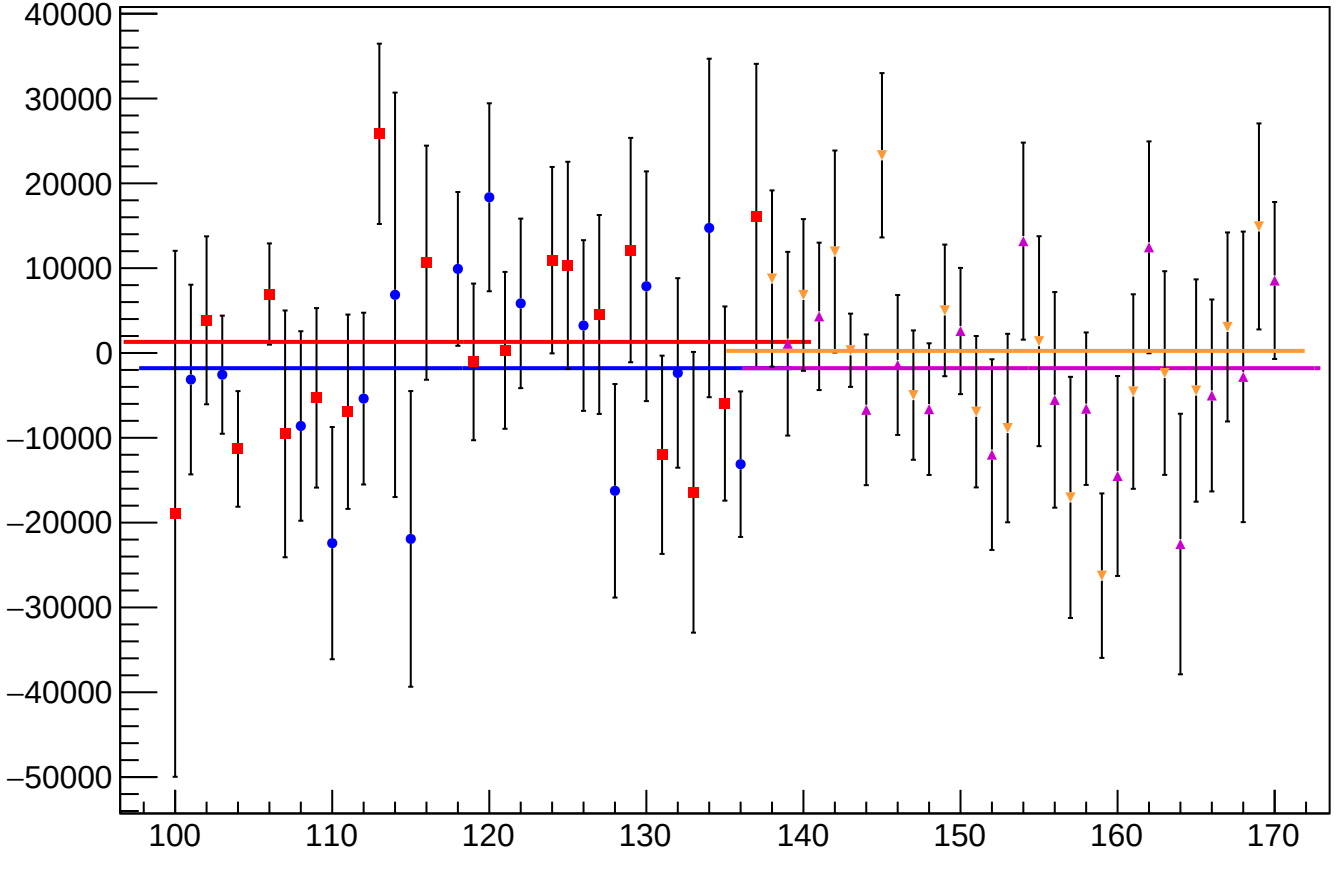
Left In: 1821.985+/-0.355 $\chi^2$/NDF:53854.7/15

+ sign 1776.628+/-0.279 $\chi^2$/NDF: 839124.5/32

All: 1765.519+/-0.196 $\chi^2$/NDF: 1419394.4/67

- sign 1754.663+/-0.276 $\chi^2$/NDF: 577139.8/34

# asym_at2_avg_reg_correction_mean vs Slug




Right In: -1791.030+/-2743.617 $\chi^2$/NDF: 14.3/15

Left Out: 247.875+/-2209.305 $\chi^2$/NDF:20.8/16

Right Out: 1306.311+/-2430.063 $\chi^2$/NDF: 17.7/18

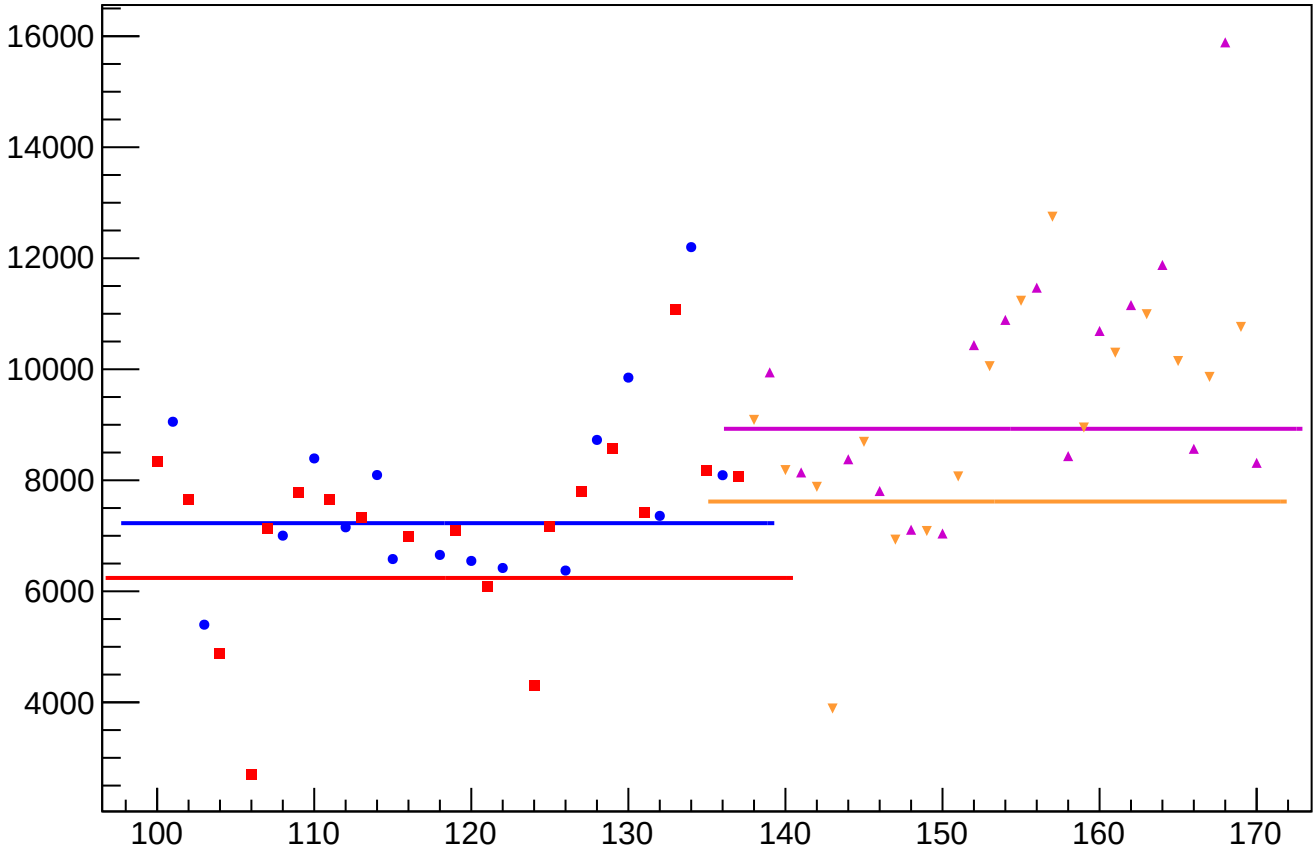
Left In: -1790.384+/-2512.286 $\chi^2$/NDF:10.1/15

\+ sign -554.155+/-1720.759 $\chi^2$/NDF: 35.5/32

All: -375.060+/-1225.815 $\chi^2$/NDF: 64.1/67

\- sign -190.533+/-1746.659 $\chi^2$/NDF: 28.6/34

# asym_at2_avg_reg_correction_rms vs Slug




Right In: 7227.590+/-1.940 $\chi^2$/NDF: 503260.9/15

Left Out: 7617.269+/-1.562 $\chi^2$/NDF:2718312.0/16

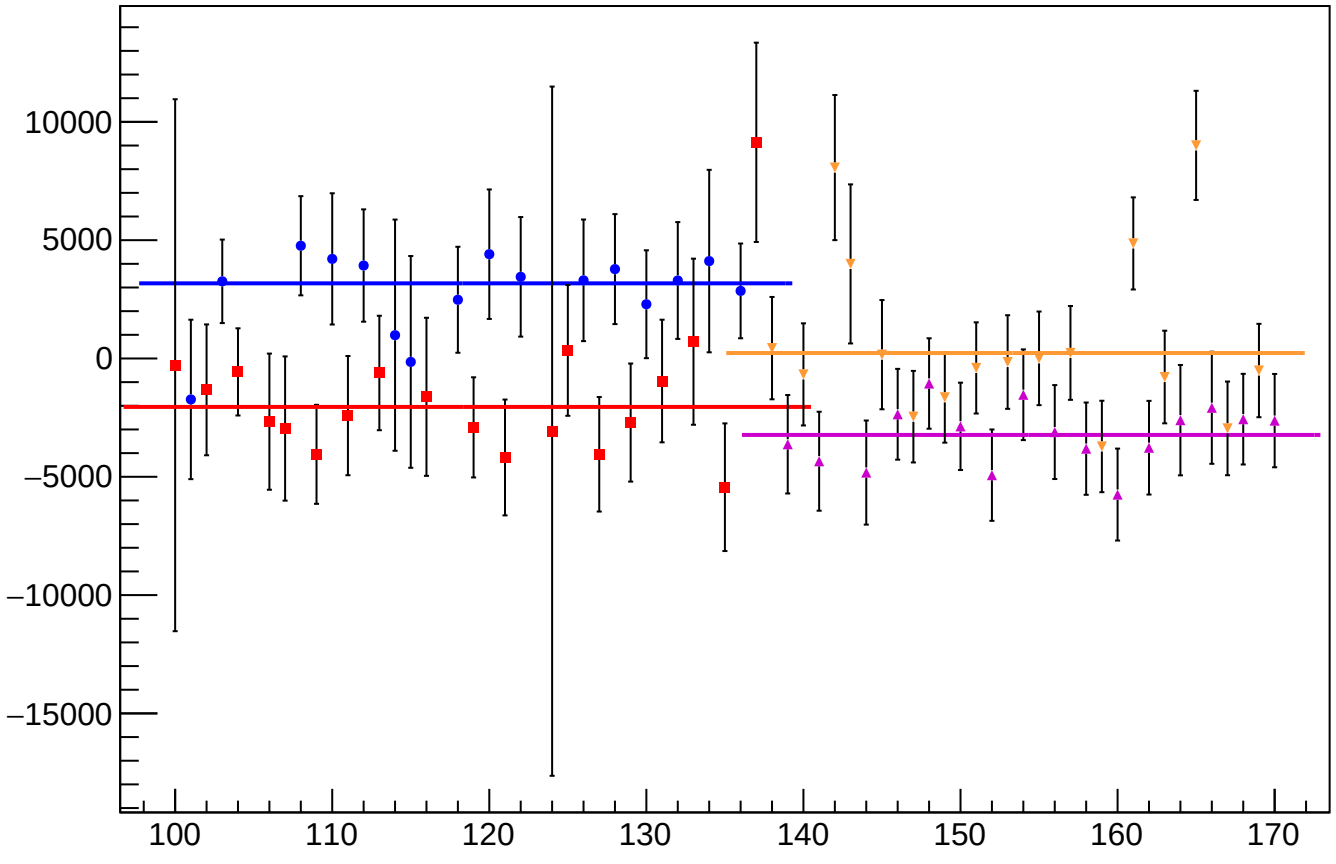
Right Out: 6240.557+/-1.718 $\chi^2$/NDF: 1399077.4/18

Left In: 8927.546+/-1.776 $\chi^2$/NDF:1019362.1/15

+ sign 7463.984+/-1.217 $\chi^2$/NDF: 3246048.1/32

All: 7501.110+/-0.867 $\chi^2$/NDF: 6848342.6/67

- sign 7539.362+/-1.235 $\chi^2$/NDF: 3600404.3/34




Right In: 3175.689+/-627.992 $\chi^2$/NDF: 4.3/15

Left Out: 230.540+/-507.790 $\chi^2$/NDF:38.3/16

Right Out: -2047.209+/-621.498 $\chi^2$/NDF: 14.0/18

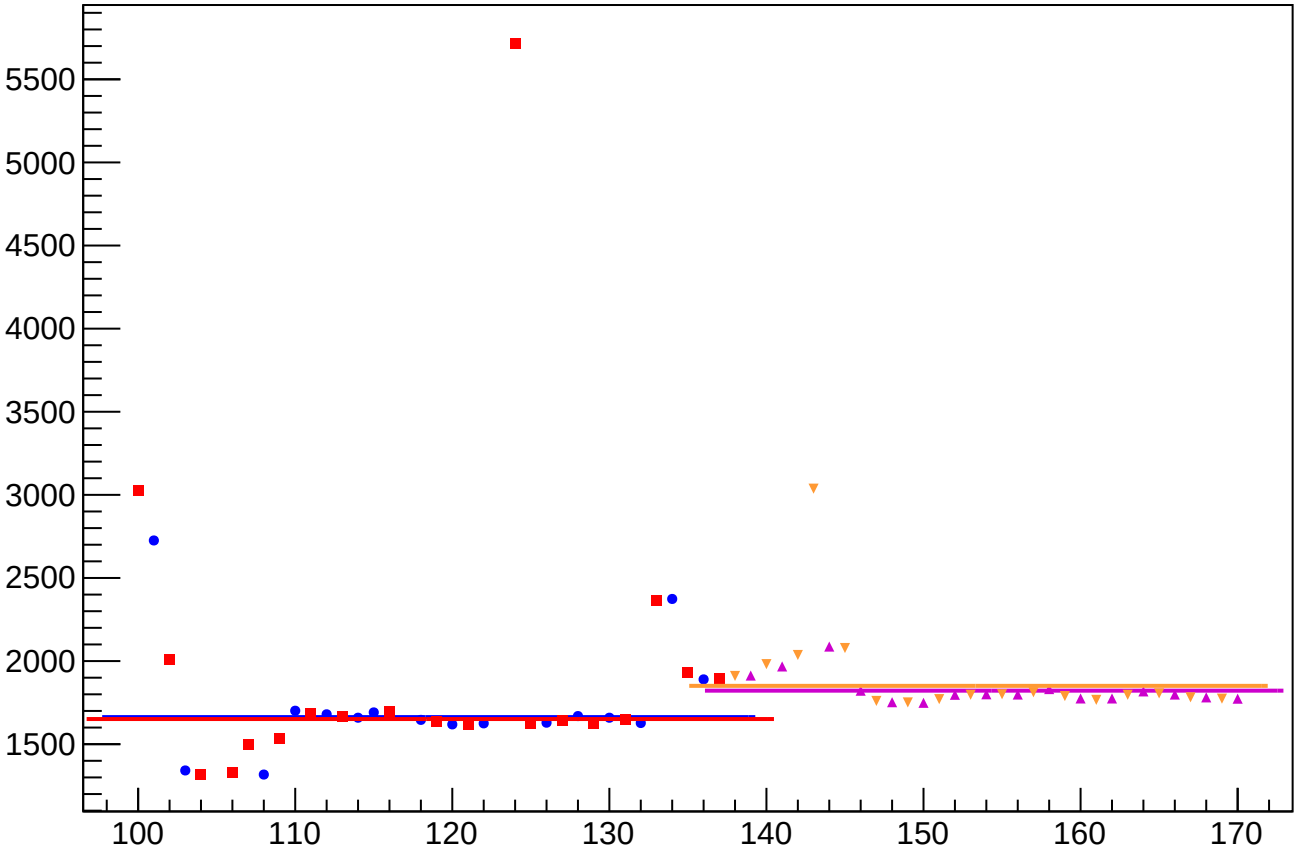
Left In: -3230.815+/-501.629 $\chi^2$/NDF:6.3/15

+ sign 1394.876+/-394.857 $\chi^2$/NDF: 55.9/32

All: -708.412+/-277.597 $\chi^2$/NDF: 134.6/67

- sign -2763.913+/-390.345 $\chi^2$/NDF: 22.6/34

# cor_asym_at2_avg_rms vs Slug




Right In: 1662.901+/-0.444 $\chi^2$/NDF: 415631.0/15

Left Out: 1850.986+/-0.359 $\chi^2$/NDF:315016.9/16

Right Out: 1651.322+/-0.439 $\chi^2$/NDF: 431965.2/18

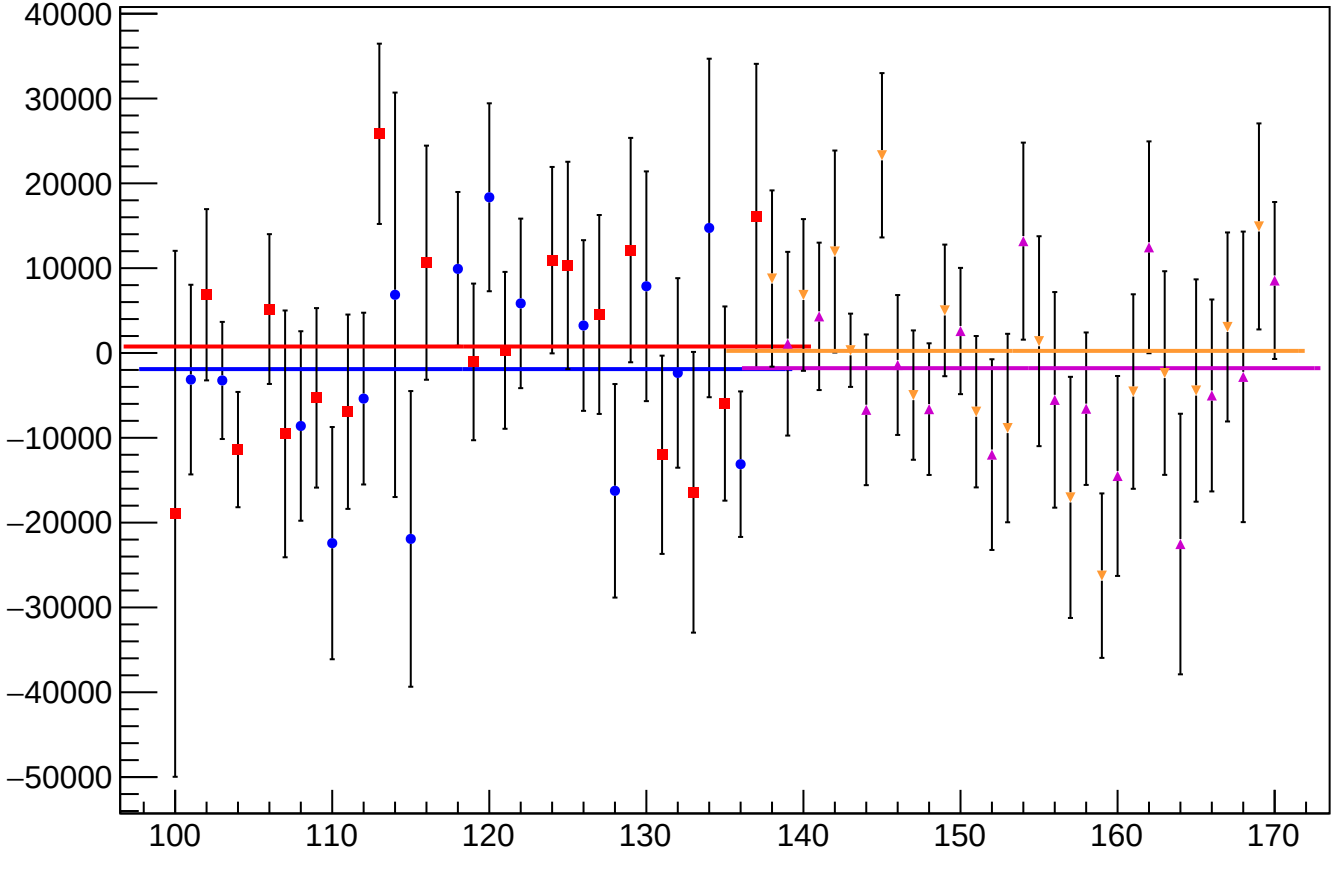
Left In: 1821.985+/-0.355 $\chi^2$/NDF:53854.7/15

+ sign 1776.628+/-0.279 $\chi^2$/NDF: 839125.0/32

All: 1765.519+/-0.196 $\chi^2$/NDF: 1419395.1/67

- sign 1754.663+/-0.276 $\chi^2$/NDF: 577140.0/34

# asym_at2_avg_cor_correction_mean vs Slug




Right In: -1900.125+/-2739.954 $\chi^2$/NDF: 14.4/15

Left Out: 247.774+/-2209.298 $\chi^2$/NDF:20.8/16

Right Out: 762.513+/-2549.943 $\chi^2$/NDF: 17.3/18

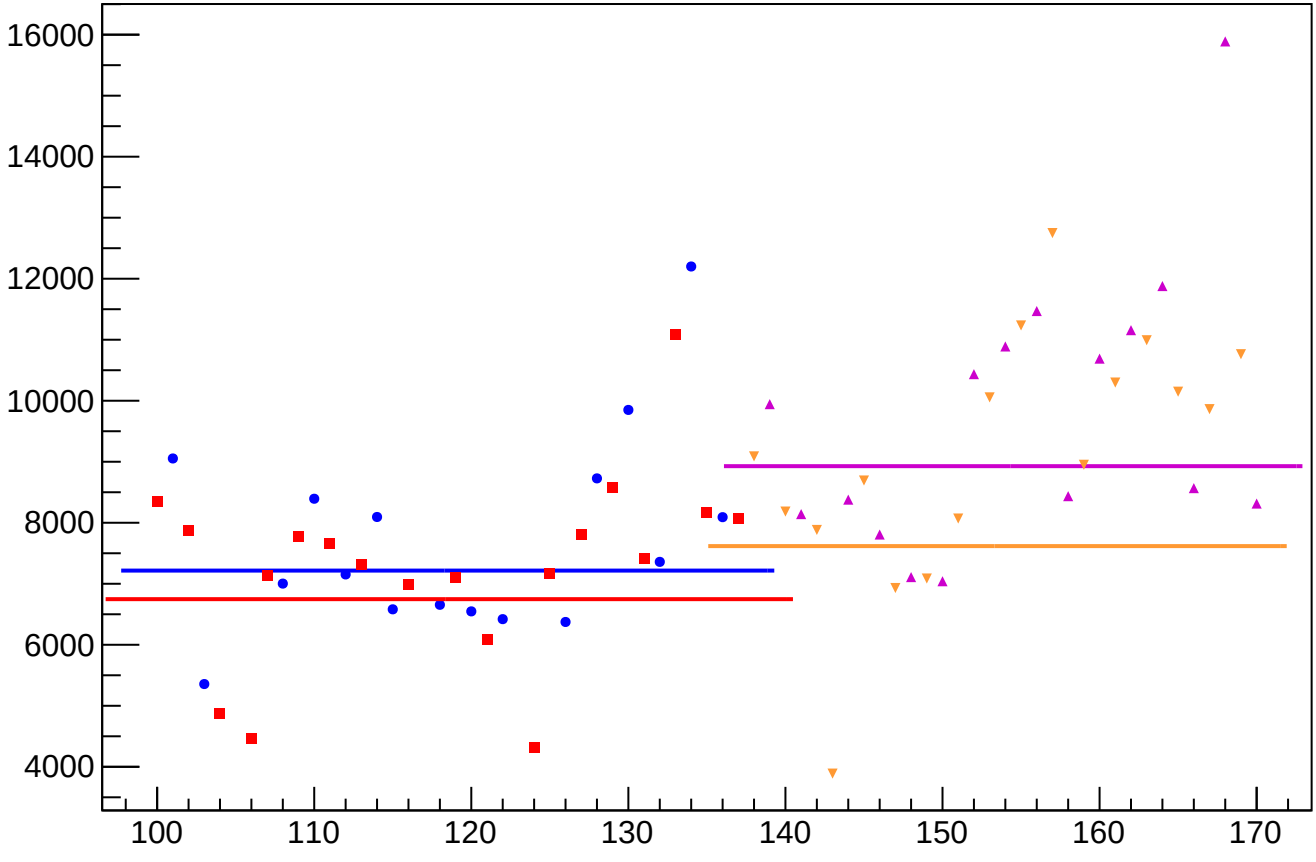
Left In: -1790.489+/-2512.284 $\chi^2$/NDF:10.1/15

\+ sign -598.496+/-1719.851 $\chi^2$/NDF: 35.6/32

All: -567.040+/-1240.050 $\chi^2$/NDF: 63.4/67

\- sign -532.980+/-1789.619 $\chi^2$/NDF: 27.9/34

# asym_at2_avg_cor_correction_rms vs Slug




Right In: 7216.029+/-1.937 $\chi^2$/NDF: 512126.4/15

Left Out: 7617.235+/-1.562 $\chi^2$/NDF:2718373.8/16

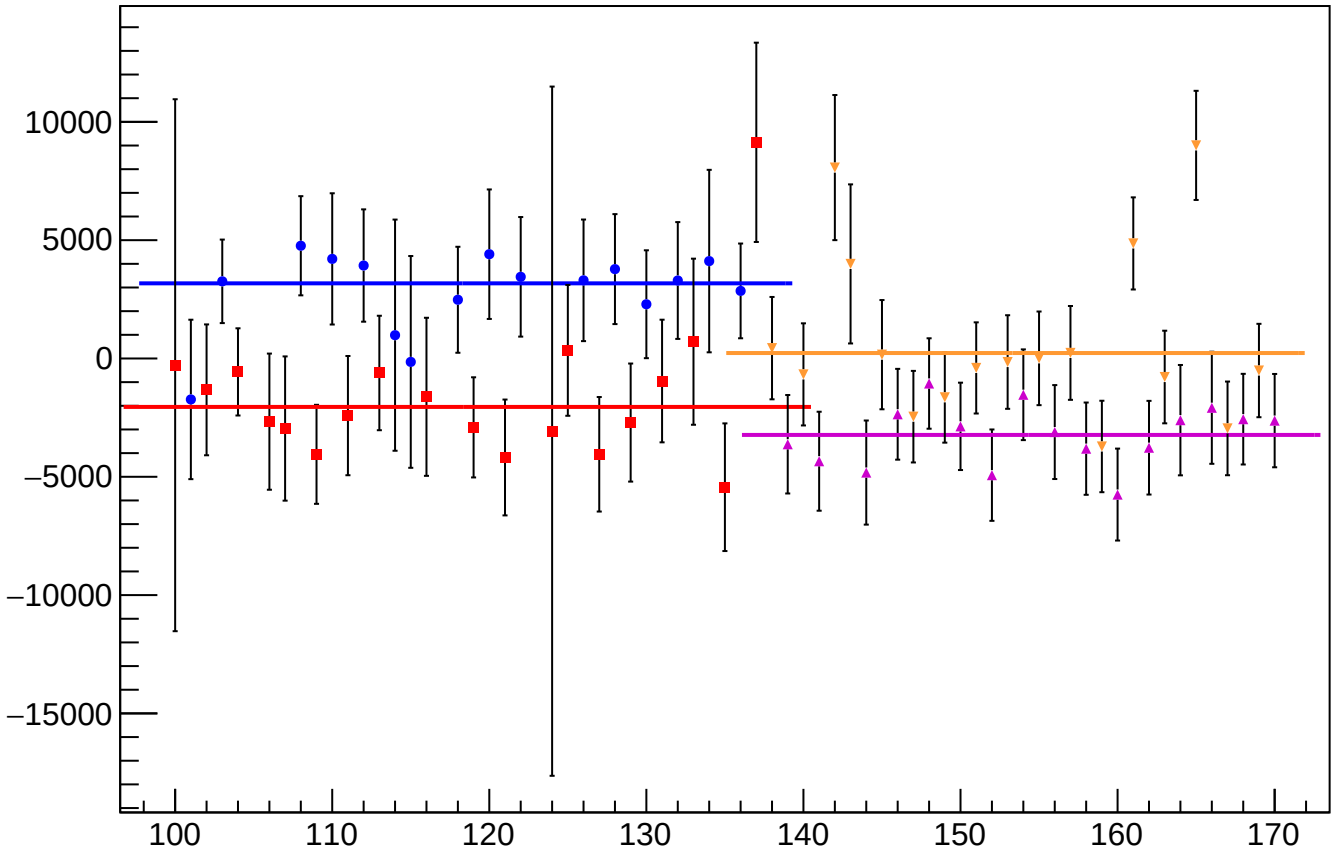
Right Out: 6747.736+/-1.803 $\chi^2$/NDF: 708793.3/18

Left In: 8927.538+/-1.776 $\chi^2$/NDF:1019367.0/15

+ sign 7459.160+/-1.216 $\chi^2$/NDF: 3256486.8/32

All: 7648.663+/-0.877 $\chi^2$/NDF: 5776849.3/67

- sign 7853.852+/-1.265 $\chi^2$/NDF: 2469789.1/34




Right In: 3175.689+/-627.992 $\chi^2$/NDF: 4.3/15

Left Out: 230.540+/-507.790 $\chi^2$/NDF:38.3/16

Right Out: -2047.209+/-621.498 $\chi^2$/NDF: 14.0/18

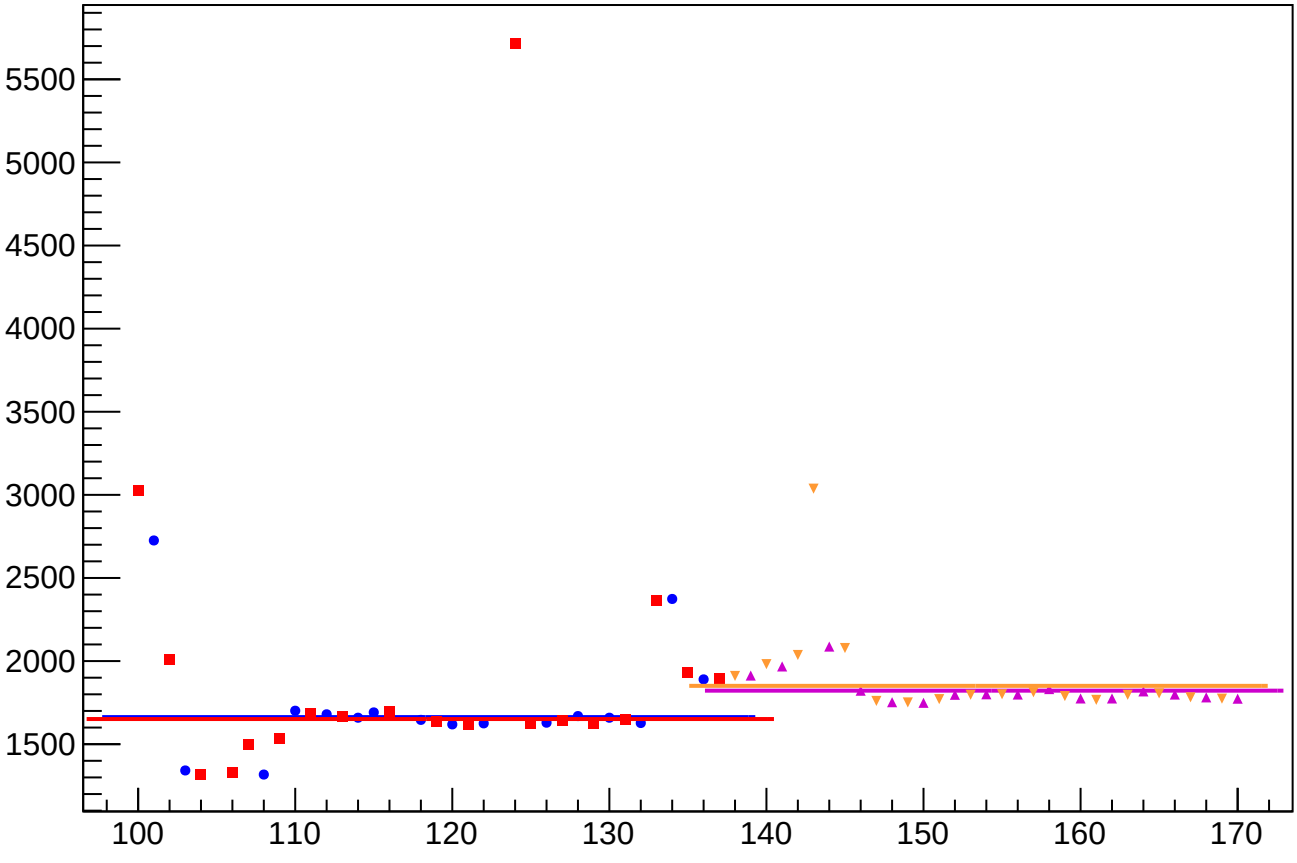
Left In: -3230.815+/-501.629 $\chi^2$/NDF:6.3/15

+ sign 1394.876+/-394.857 $\chi^2$/NDF: 55.9/32

All: -708.412+/-277.597 $\chi^2$/NDF: 134.6/67

- sign -2763.913+/-390.345 $\chi^2$/NDF: 22.6/34

# eigen_cor_asym_at2_avg_rms vs Slug




Right In: 1662.901+/-0.444 $\chi^2$/NDF: 415631.0/15

Left Out: 1850.986+/-0.359 $\chi^2$/NDF:315016.9/16

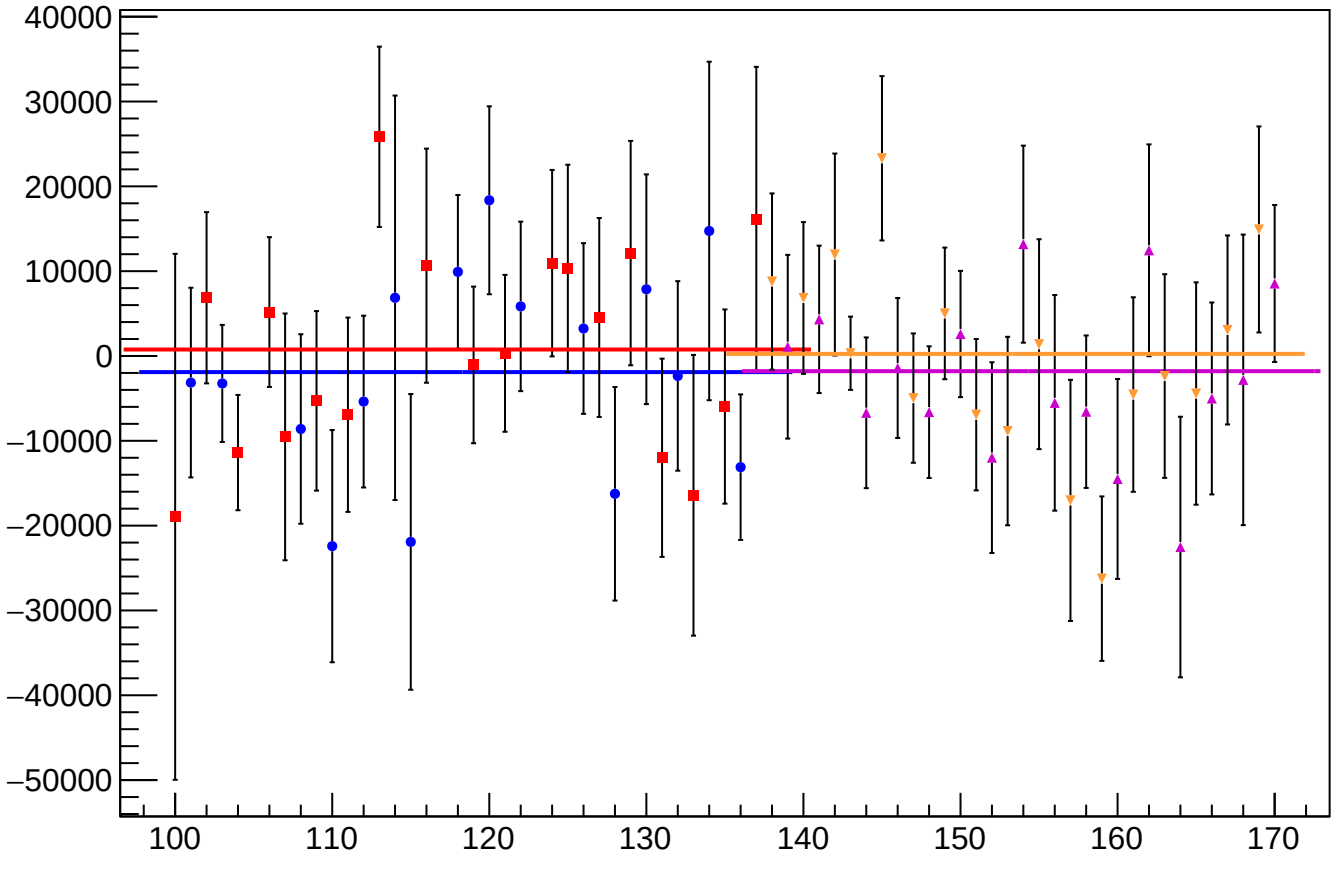
Right Out: 1651.322+/-0.439 $\chi^2$/NDF: 431965.2/18

Left In: 1821.985+/-0.355 $\chi^2$/NDF:53854.7/15

+ sign 1776.628+/-0.279 $\chi^2$/NDF: 839125.0/32

All: 1765.519+/-0.196 $\chi^2$/NDF: 1419395.1/67

- sign 1754.663+/-0.276 $\chi^2$/NDF: 577140.0/34




Right In: -1900.125+/-2739.954 $\chi^2$/NDF: 14.4/15

Left Out: 247.774+/-2209.298 $\chi^2$/NDF:20.8/16

Right Out: 762.513+/-2549.943 $\chi^2$/NDF: 17.3/18

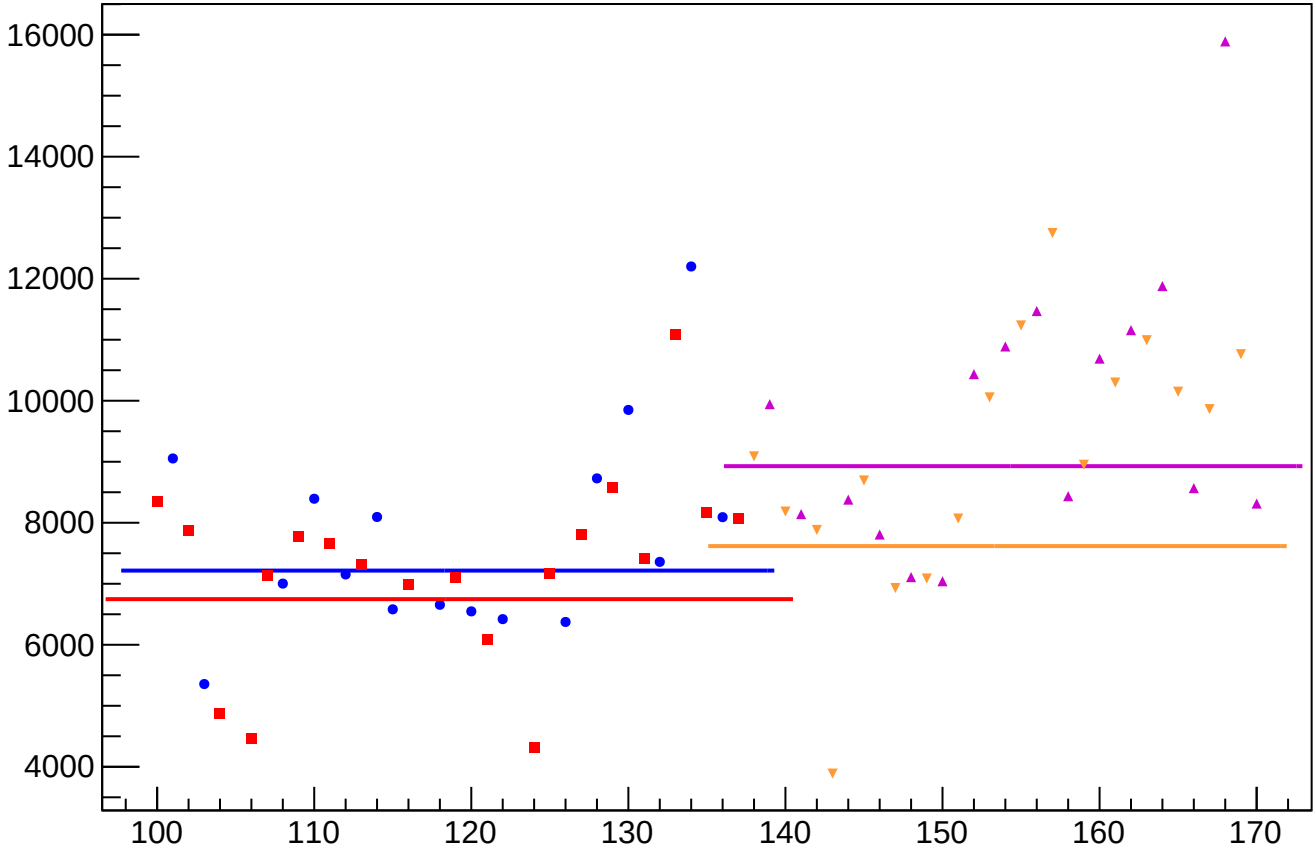
Left In: -1790.489+/-2512.284 $\chi^2$/NDF:10.1/15

\+ sign -598.496+/-1719.851 $\chi^2$/NDF: 35.6/32

All: -567.040+/-1240.050 $\chi^2$/NDF: 63.4/67

\- sign -532.980+/-1789.619 $\chi^2$/NDF: 27.9/34

# asym_at2_avg_eigen_cor_correction_rms vs Slug




Right In: 7216.029+/-1.937 $\chi^2$/NDF: 512126.4/15

Left Out: 7617.235+/-1.562 $\chi^2$/NDF:2718373.8/16

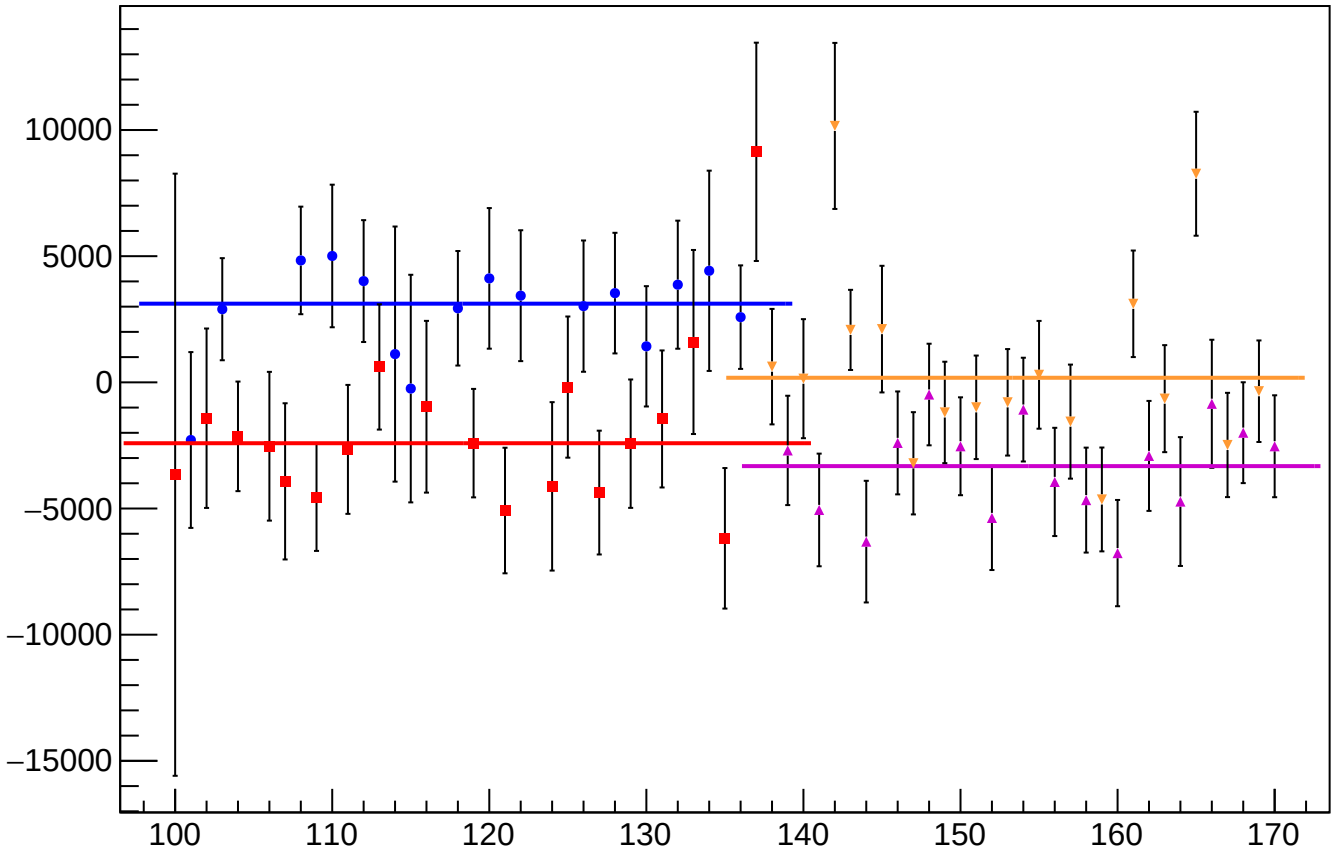
Right Out: 6747.736+/-1.803 $\chi^2$/NDF: 708793.3/18

Left In: 8927.538+/-1.776 $\chi^2$/NDF:1019367.0/15

\+ sign 7459.160+/-1.216 $\chi^2$/NDF: 3256486.8/32

All: 7648.663+/-0.877 $\chi^2$/NDF: 5776849.3/67

\- sign 7853.852+/-1.265 $\chi^2$/NDF: 2469789.1/34




Right In: 3117.878+/-651.119 $\chi^2$/NDF: 5.3/15

Left Out: 181.562+/-518.691 $\chi^2$/NDF:35.8/16

Right Out: -2412.473+/-639.018 $\chi^2$/NDF: 16.0/18

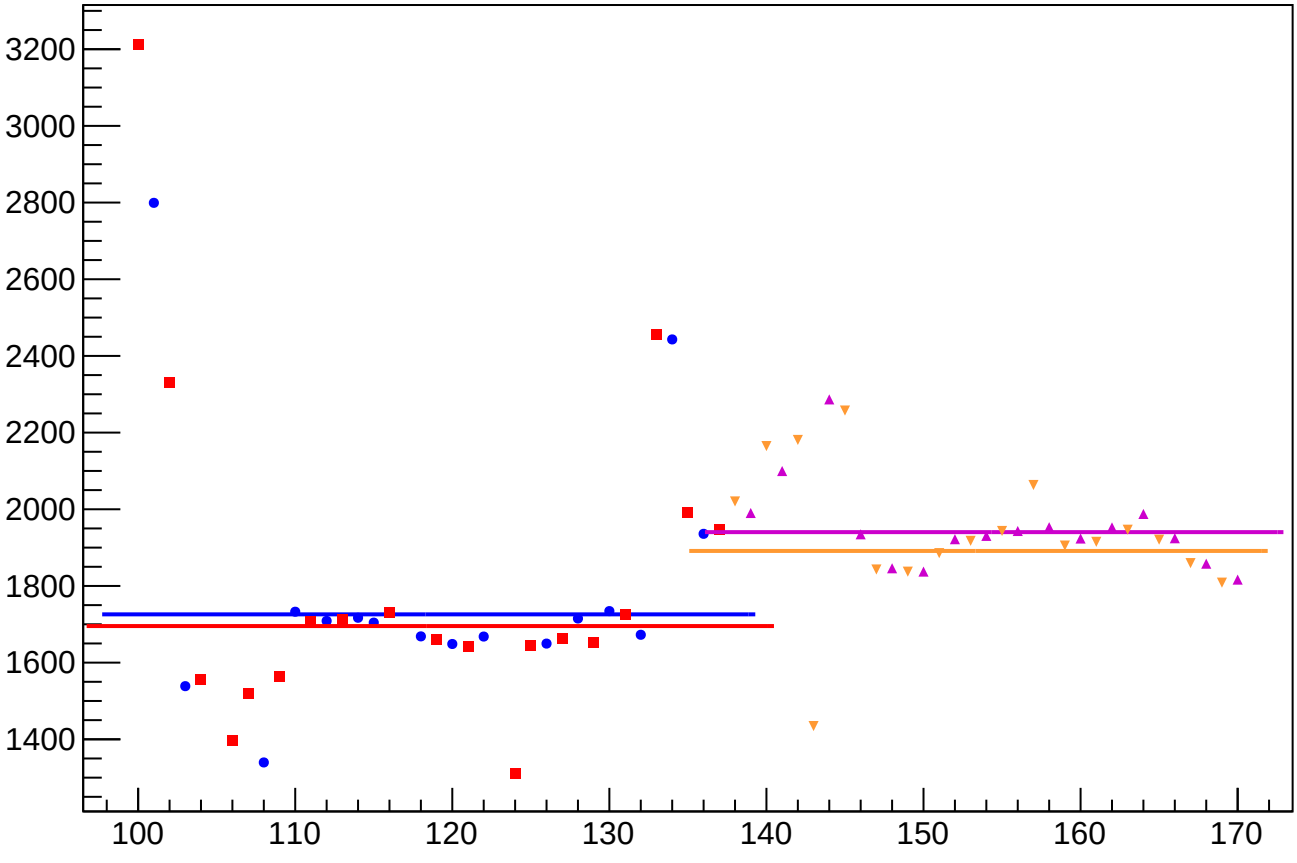
Left In: -3319.792+/-534.589 $\chi^2$/NDF:11.8/15

+ sign 1321.523+/-405.699 $\chi^2$/NDF: 53.5/32

All: -789.707+/-288.391 $\chi^2$/NDF: 137.3/67

- sign -2946.232+/-410.028 $\chi^2$/NDF: 29.0/34

# dit_asym_at2_avg_rms vs Slug




Right In: 1725.911+/-0.460 $\chi^2$/NDF: 365638.9/15

Left Out: 1891.323+/-0.367 $\chi^2$/NDF:278333.0/16

Right Out: 1695.387+/-0.452 $\chi^2$/NDF: 285622.0/18

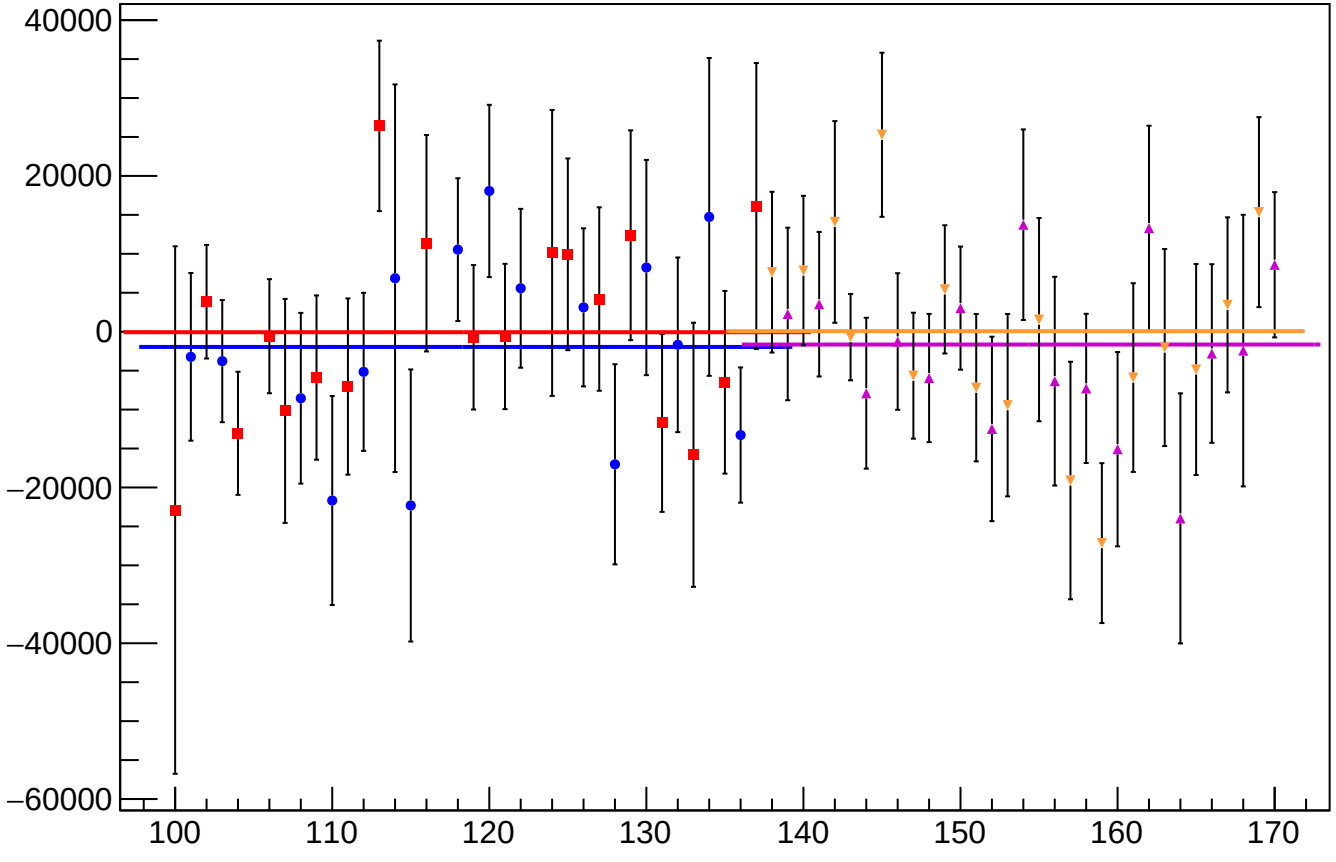
Left In: 1940.381+/-0.378 $\chi^2$/NDF:74708.4/15

+ sign 1827.105+/-0.287 $\chi^2$/NDF: 722936.7/32

All: 1833.222+/-0.204 $\chi^2$/NDF: 1257203.2/67

- sign 1839.468+/-0.290 $\chi^2$/NDF: 533347.6/34

# asym_at2_avg_dit_correction_mean vs Slug




Right In: -1958.559+/-2798.309 $\chi^2$/NDF: 14.4/15

Left Out: 66.062+/-2431.737 $\chi^2$/NDF:21.0/16

Right Out: -68.156+/-2529.527 $\chi^2$/NDF: 16.1/18

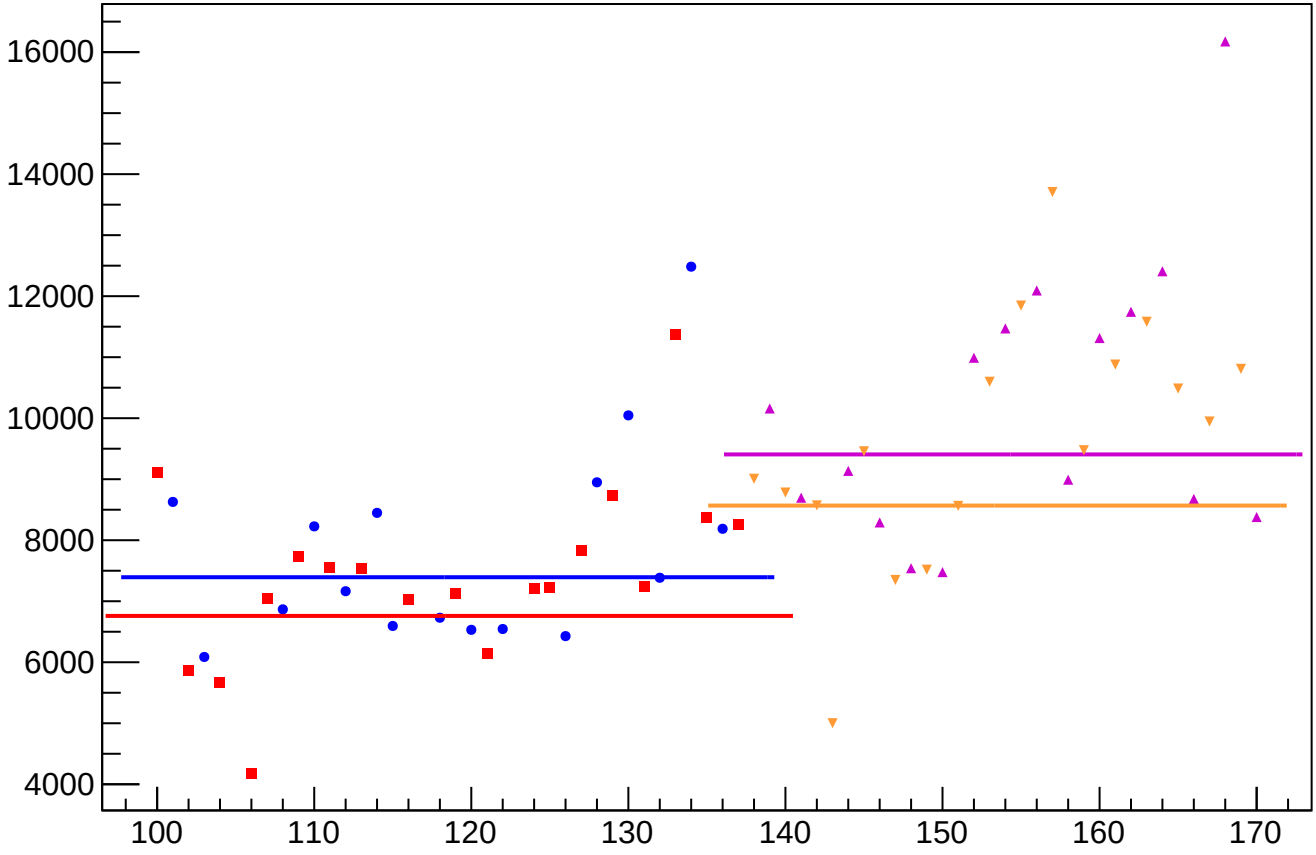
Left In: -1650.056+/-2644.699 $\chi^2$/NDF:10.0/15

+ sign -805.038+/-1835.514 $\chi^2$/NDF: 35.7/32

All: -814.514+/-1295.242 $\chi^2$/NDF: 61.9/67

- sign -823.912+/-1828.006 $\chi^2$/NDF: 26.3/34

# asym_at2_avg_dit_correction_rms vs Slug




Right In: 7393.622+/-1.979 $\chi^2$/NDF: 401826.8/15

Left Out: 8567.860+/-1.719 $\chi^2$/NDF:1678477.3/16

Right Out: 6759.428+/-1.789 $\chi^2$/NDF: 644290.9/18

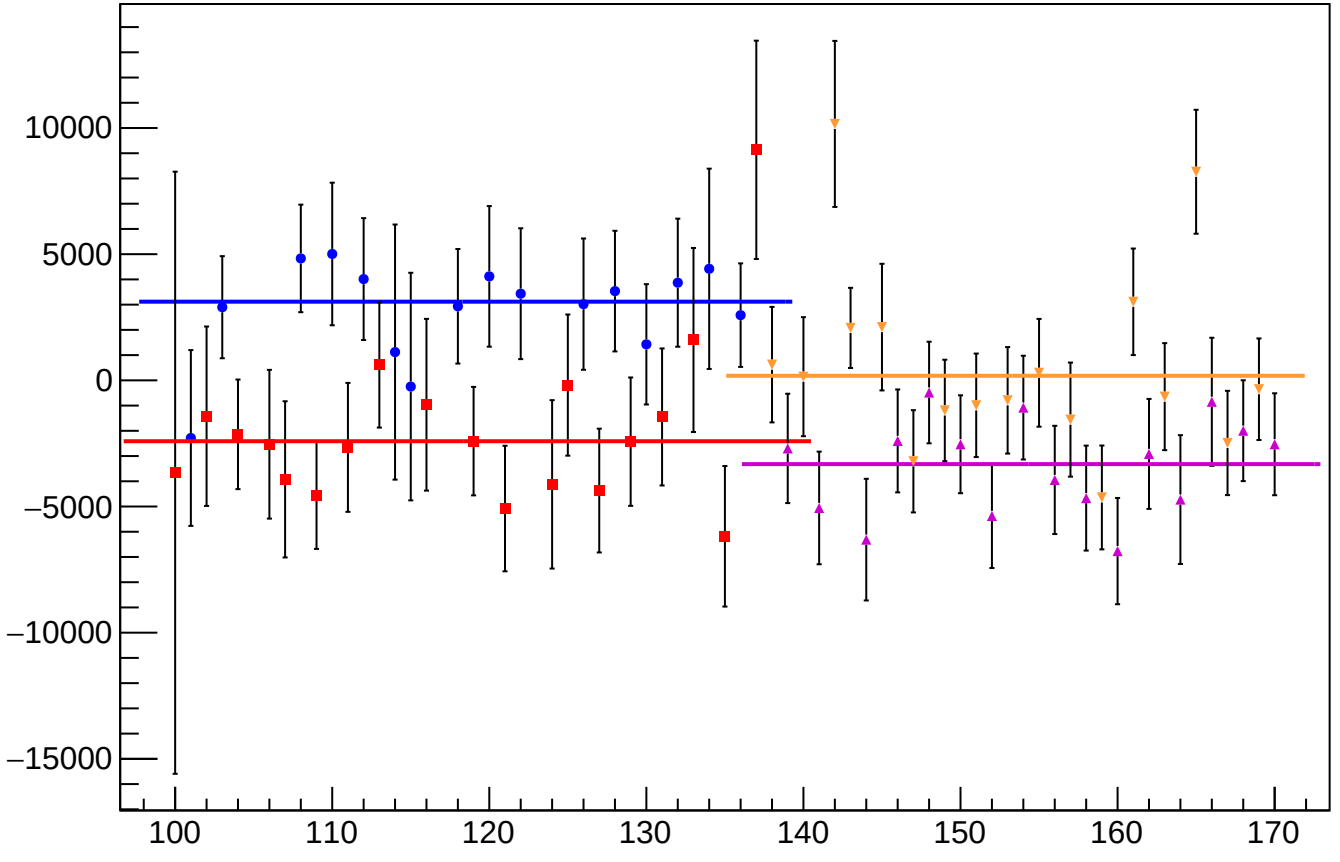
Left In: 9406.484+/-1.870 $\chi^2$/NDF:967287.3/15

+ sign 8062.640+/-1.298 $\chi^2$/NDF: 2280950.9/32

All: 8043.273+/-0.916 $\chi^2$/NDF: 4939330.8/67

- sign 8024.064+/-1.293 $\chi^2$/NDF: 2657936.4/34

# eigen_dit_asym_at2_avg_mean vs Slug




Right In: 3117.882+/-651.118 $\chi^2$/NDF: 5.3/15

Left Out: 181.548+/-518.692 $\chi^2$/NDF:35.8/16

Right Out: -2412.481+/-639.018 $\chi^2$/NDF: 16.0/18

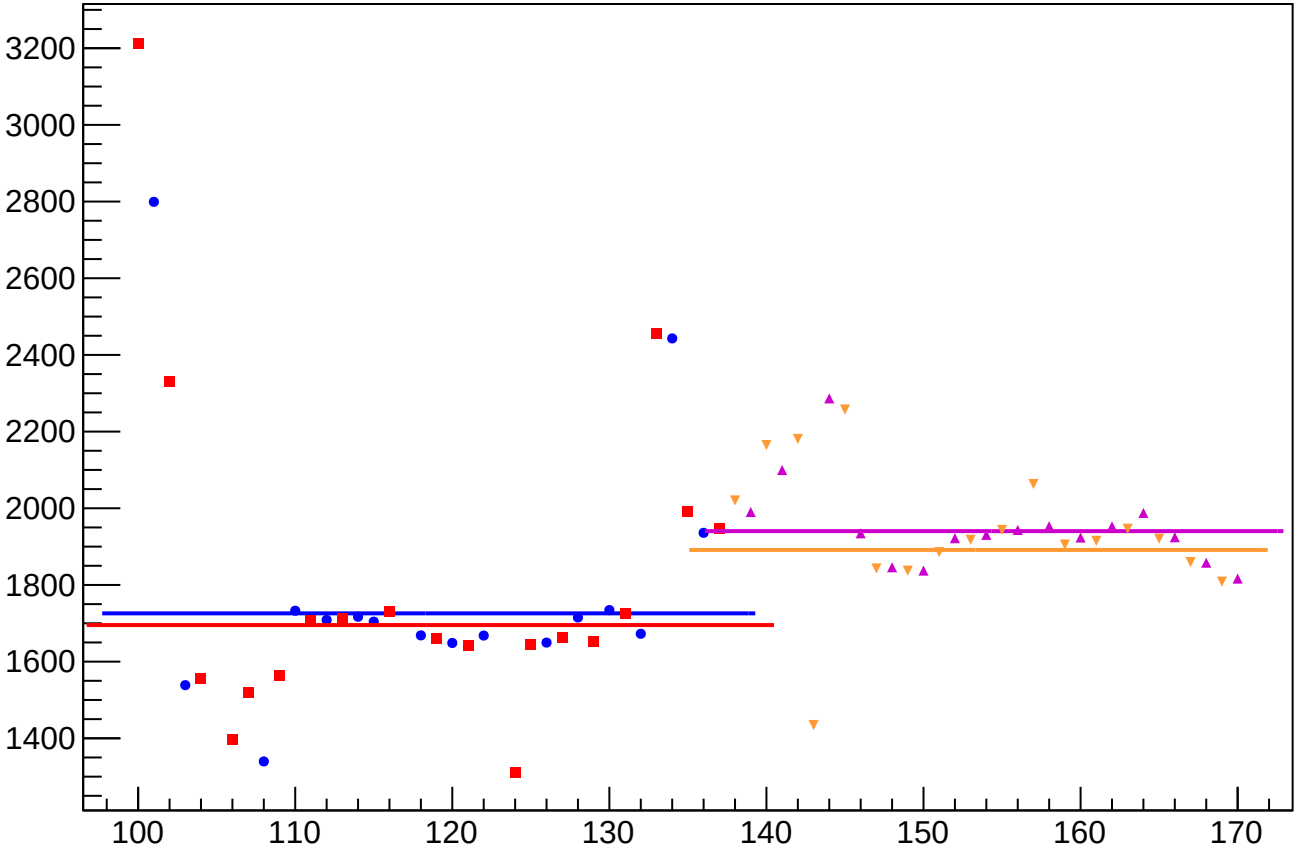
Left In: -3319.795+/-534.590 $\chi^2$/NDF:11.8/15

+ sign 1321.518+/-405.699 $\chi^2$/NDF: 53.5/32

All: -789.712+/-288.391 $\chi^2$/NDF: 137.3/67

- sign -2946.236+/-410.028 $\chi^2$/NDF: 29.0/34

# eigen_dit_asym_at2_avg_rms vs Slug




Right In: 1725.910+/-0.460 $\chi^2$/NDF: 365639.0/15

Left Out: 1891.326+/-0.367 $\chi^2$/NDF:278334.6/16

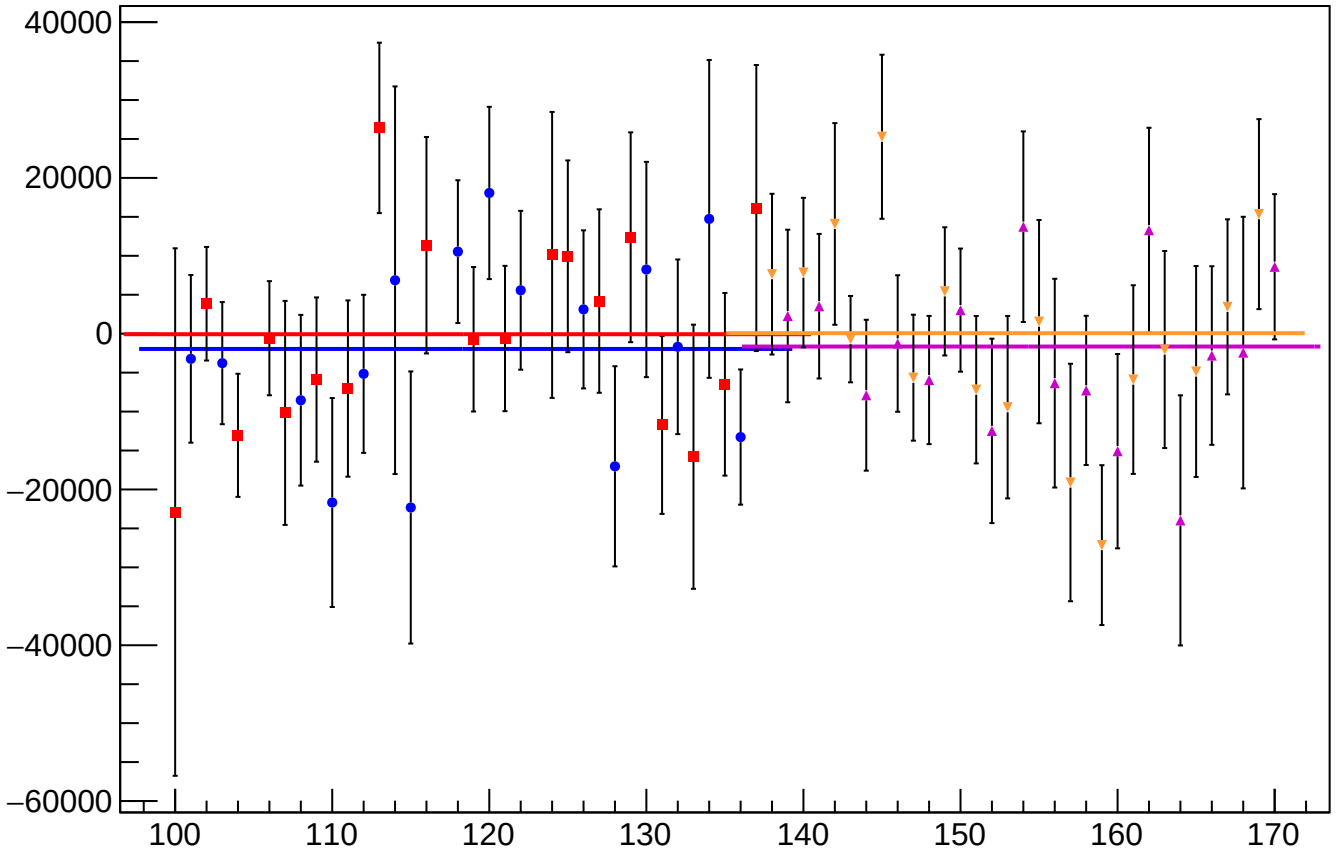
Right Out: 1695.387+/-0.452 $\chi^2$/NDF: 285622.3/18

Left In: 1940.384+/-0.378 $\chi^2$/NDF:74709.2/15

+ sign 1827.107+/-0.287 $\chi^2$/NDF: 722941.7/32

All: 1833.224+/-0.204 $\chi^2$/NDF: 1257214.4/67

- sign 1839.470+/-0.290 $\chi^2$/NDF: 533353.7/34




Right In: -1958.538+/-2798.302 $\chi^2$/NDF: 14.4/15

Left Out: 66.054+/-2431.741 $\chi^2$/NDF:21.0/16

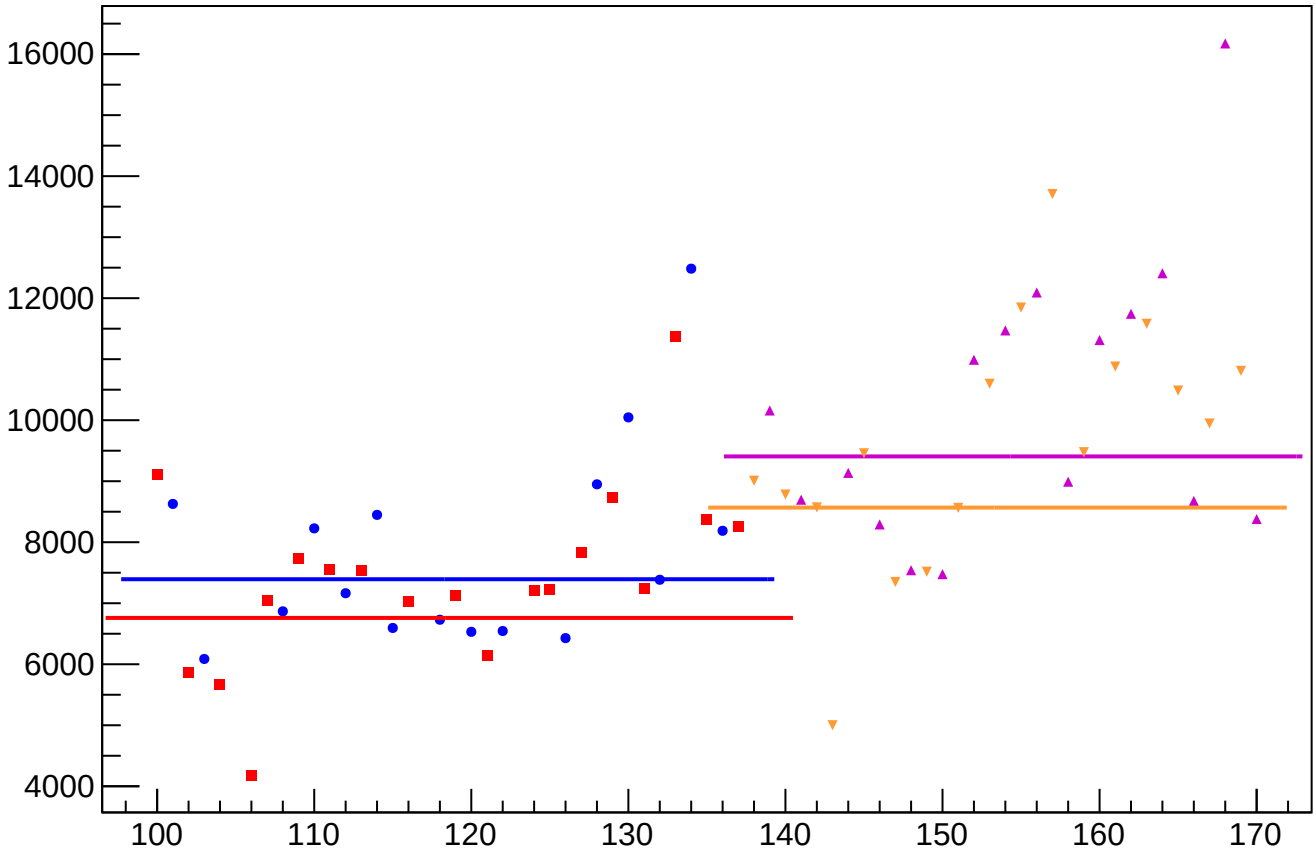
Right Out: -68.163+/-2529.521 $\chi^2$/NDF: 16.1/18

Left In: -1650.053+/-2644.703 $\chi^2$/NDF:10.0/15

+ sign -805.037+/-1835.513 $\chi^2$/NDF: 35.7/32

All: -814.513+/-1295.241 $\chi^2$/NDF: 61.9/67

- sign -823.912+/-1828.005 $\chi^2$/NDF: 26.3/34




Right In: 7393.605+/-1.979 $\chi^2$/NDF: 401829.0/15

Left Out: 8567.873+/-1.720 $\chi^2$/NDF:1678477.4/16

Right Out: 6759.413+/-1.789 $\chi^2$/NDF: 644289.7/18

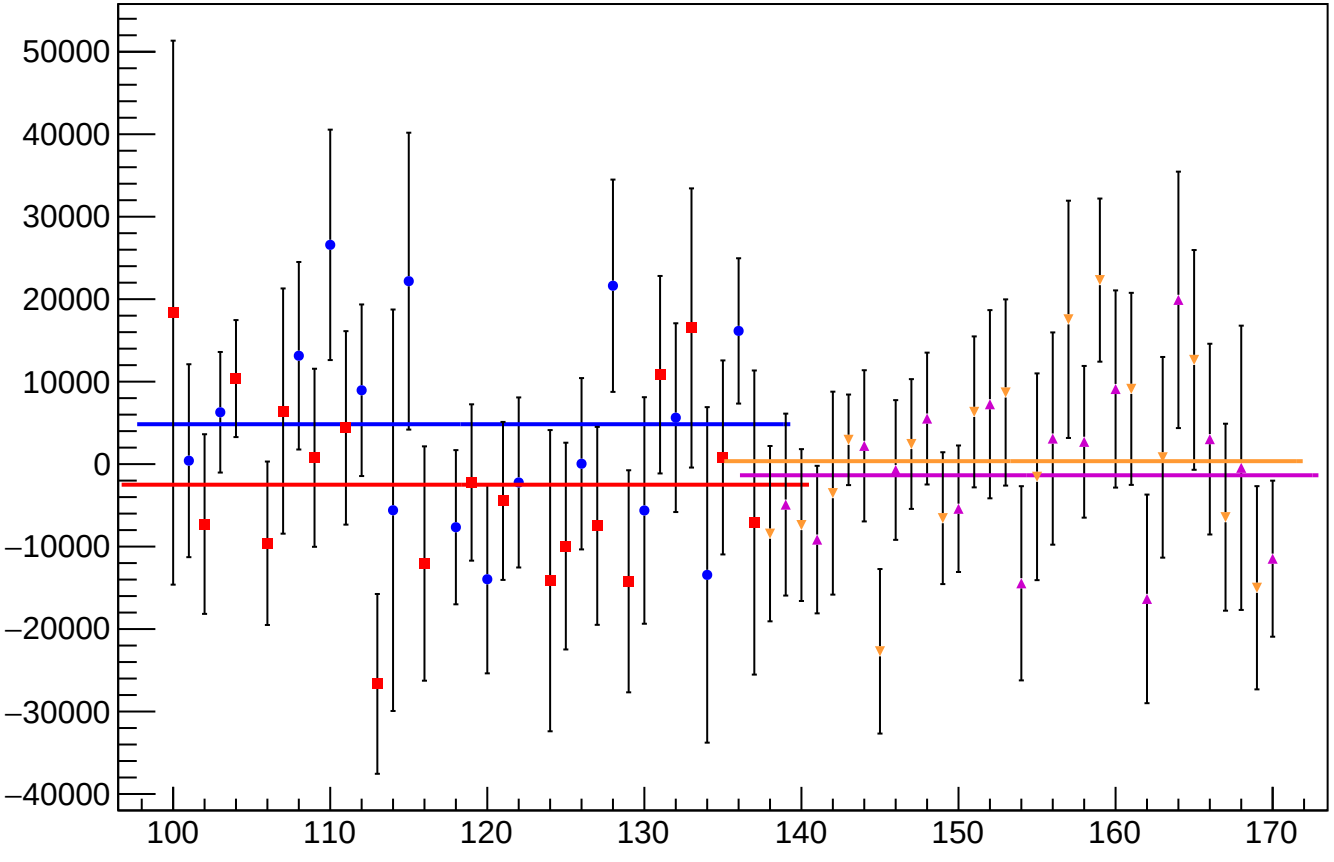
Left In: 9406.496+/-1.870 $\chi^2$/NDF:967289.6/15

+ sign 8062.638+/-1.298 $\chi^2$/NDF: 2280964.0/32

All: 8043.269+/-0.916 $\chi^2$/NDF: 4939367.0/67

- sign 8024.058+/-1.293 $\chi^2$/NDF: 2657959.4/34

# asym_at2_avg_mean vs Slug




Right In: 4837.820+/-2828.918 $\chi^2$/NDF: 14.3/15

Left Out: 357.096+/-2372.878 $\chi^2$/NDF:18.5/16

Right Out: -2495.844+/-2695.530 $\chi^2$/NDF: 14.9/18

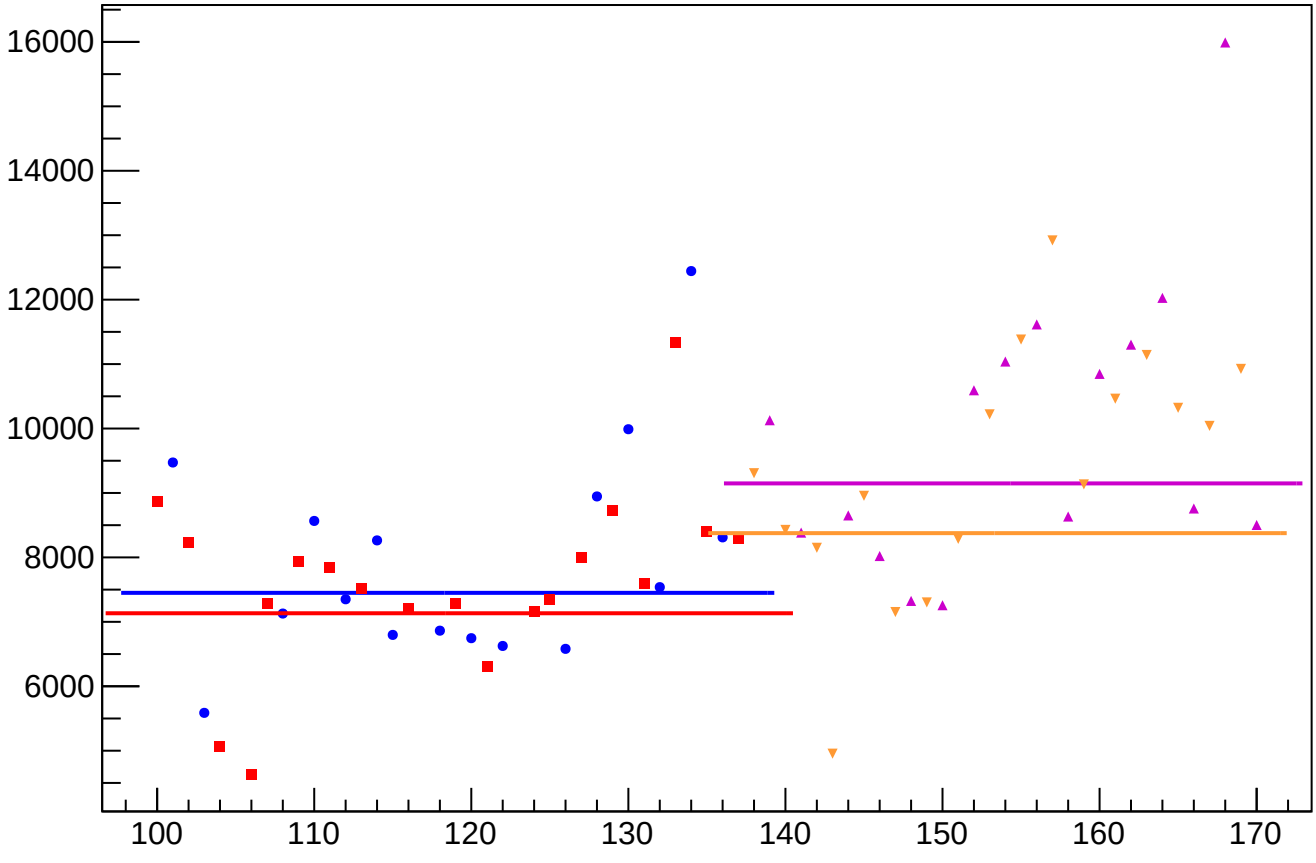
Left In: -1351.736+/-2570.511 $\chi^2$/NDF:9.5/15

+ sign 2207.630+/-1818.004 $\chi^2$/NDF: 34.4/32

All: 202.630+/-1300.203 $\chi^2$/NDF: 61.4/67

- sign -1896.643+/-1860.253 $\chi^2$/NDF: 24.5/34

# asym_at2_avg_rms vs Slug




Right In: 7449.985+/-2.000 $\chi^2$/NDF: 486427.7/15

Left Out: 8376.454+/-1.678 $\chi^2$/NDF:1602893.4/16

Right Out: 7133.115+/-1.906 $\chi^2$/NDF: 556993.0/18

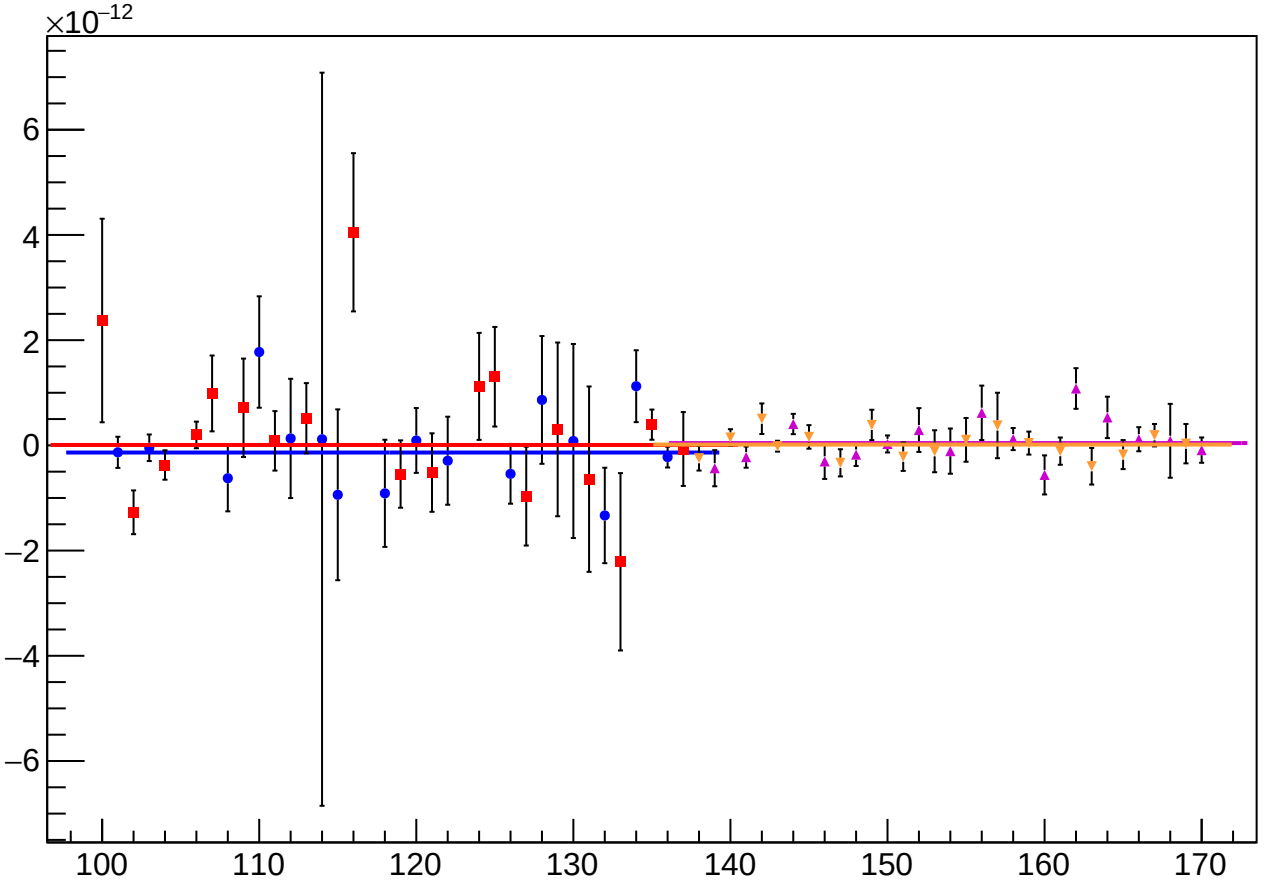
Left In: 9148.326+/-1.818 $\chi^2$/NDF:954442.4/15

+ sign 7993.820+/-1.286 $\chi^2$/NDF: 2215241.0/32

All: 8088.910+/-0.919 $\chi^2$/NDF: 4323366.9/67

- sign 8188.465+/-1.315 $\chi^2$/NDF: 2096925.7/34

# asym_at2_avg_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 11.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.8/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 32.8/18

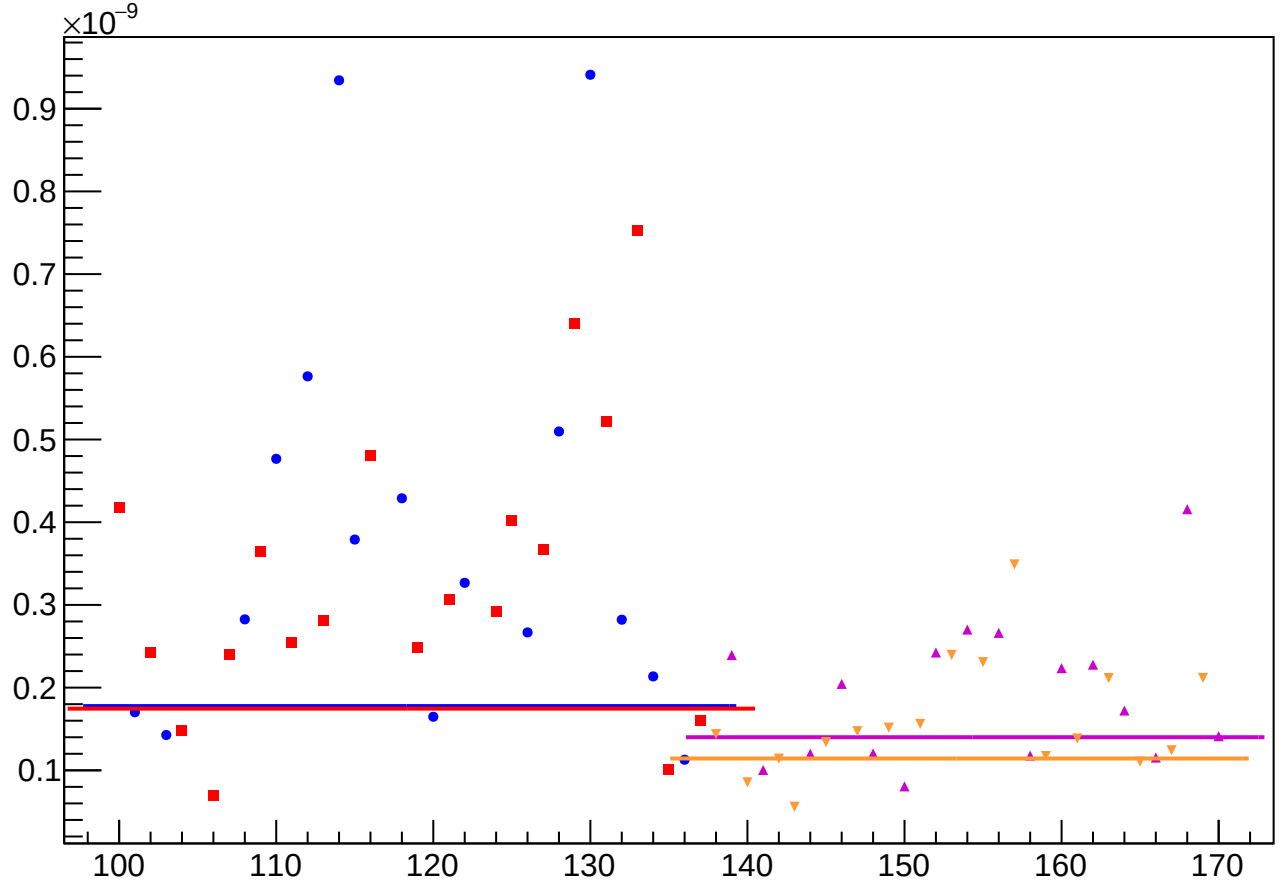
Left In: 0.000+/-0.000 $\chi^2$/NDF:23.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 25.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 82.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 55.9/34

# asym_at2_avg_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1530066.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1817687.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1641366.3/18

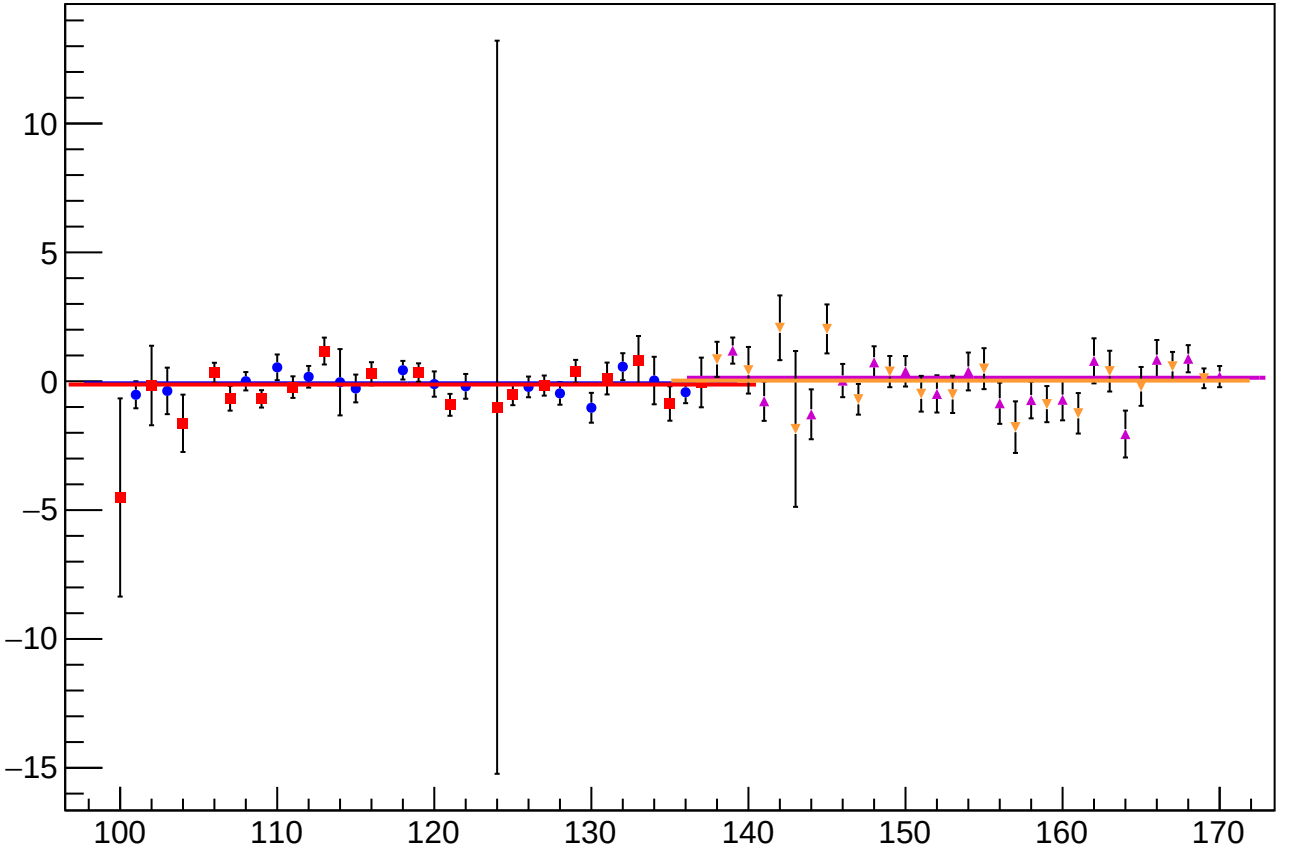
Left In: 0.000+/-0.000 $\chi^2$/NDF:1623276.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3807671.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 7361988.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3386681.6/34

# asym_at2_avg_dit_vs_cor_diff_mean vs Slug




Right In: -0.080+/-0.122 $\chi^2$/NDF: 10.8/15

Left Out: 0.025+/-0.171 $\chi^2$/NDF:21.3/16

Right Out: -0.128+/-0.117 $\chi^2$/NDF: 25.3/18

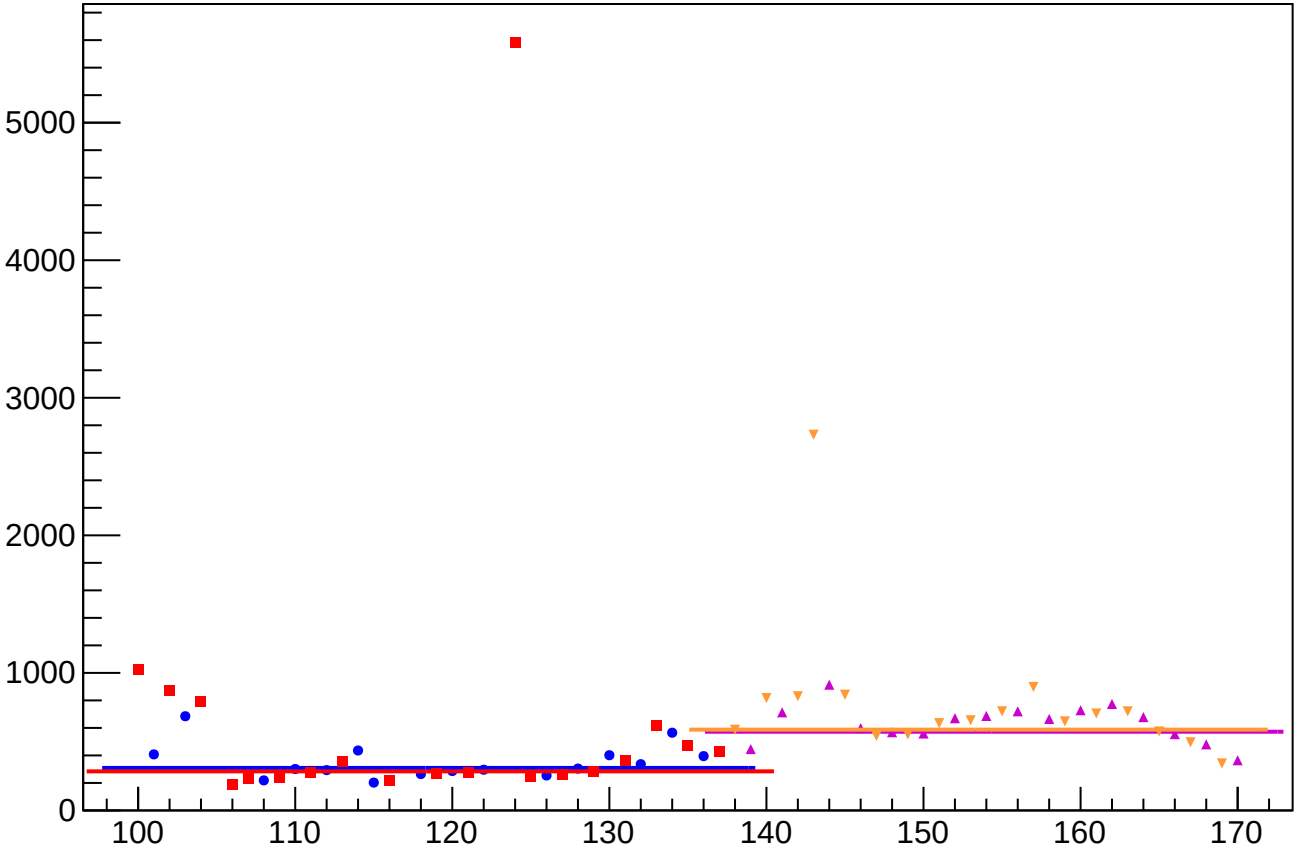
Left In: 0.136+/-0.164 $\chi^2$/NDF:23.2/15

+ sign -0.044+/-0.099 $\chi^2$/NDF: 32.3/32

All: -0.042+/-0.069 $\chi^2$/NDF: 82.5/67

- sign -0.039+/-0.095 $\chi^2$/NDF: 50.1/34

# asym_at2_avg_dit_vs_cor_diff_rms vs Slug




Right In: 309.093+/-0.086 $\chi^2$/NDF: 1014604.9/15

Left Out: 587.507+/-0.121 $\chi^2$/NDF:2641728.2/16

Right Out: 284.189+/-0.083 $\chi^2$/NDF: 1856451.4/18

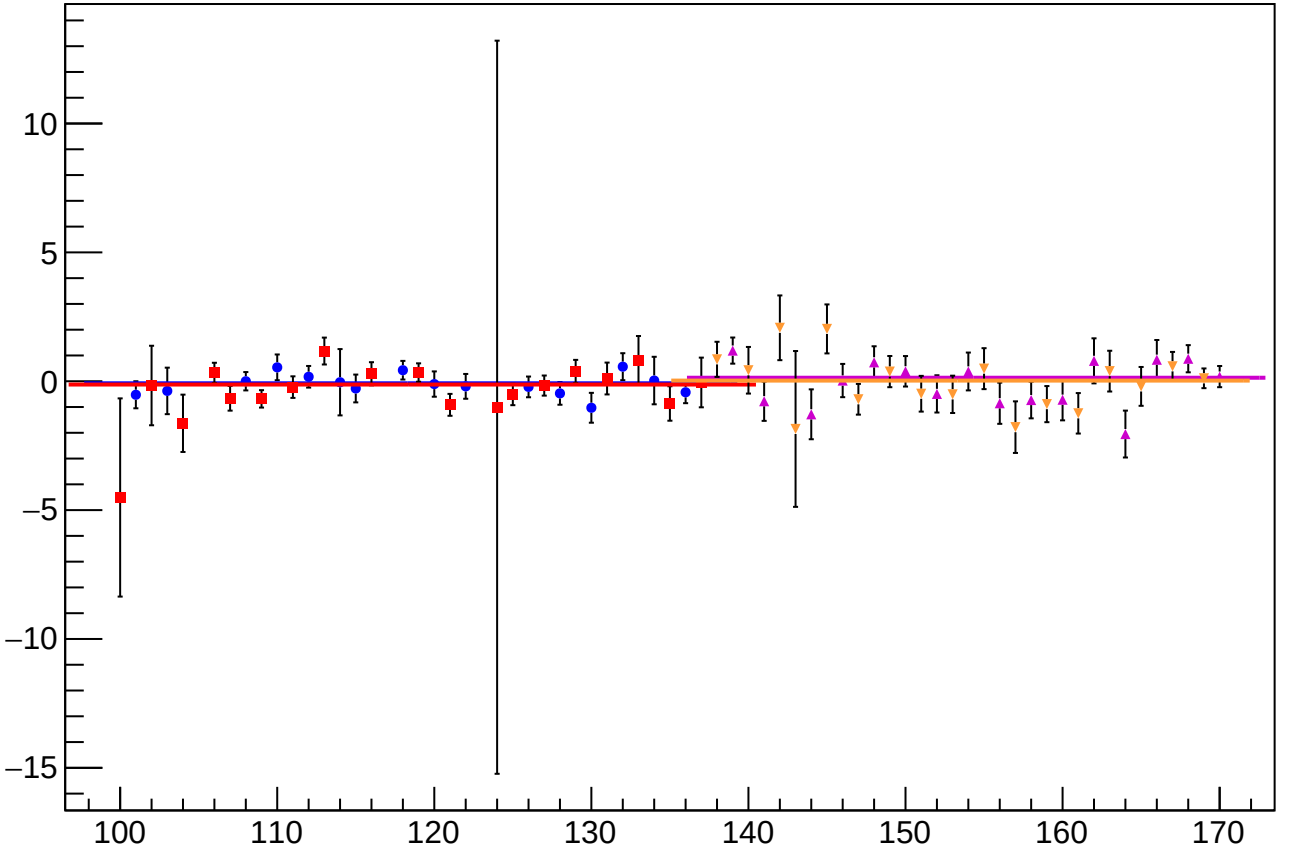
Left In: 572.358+/-0.116 $\chi^2$/NDF:1416561.5/15

+ sign 403.229+/-0.070 $\chi^2$/NDF: 7185778.3/32

All: 391.774+/-0.049 $\chi^2$/NDF: 14601118.4/67

- sign 381.209+/-0.067 $\chi^2$/NDF: 7364020.3/34

# asym_at2_avg_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.080+/-0.122 $\chi^2$/NDF: 10.8/15

Left Out: 0.025+/-0.171 $\chi^2$/NDF:21.3/16

Right Out: -0.128+/-0.117 $\chi^2$/NDF: 25.3/18

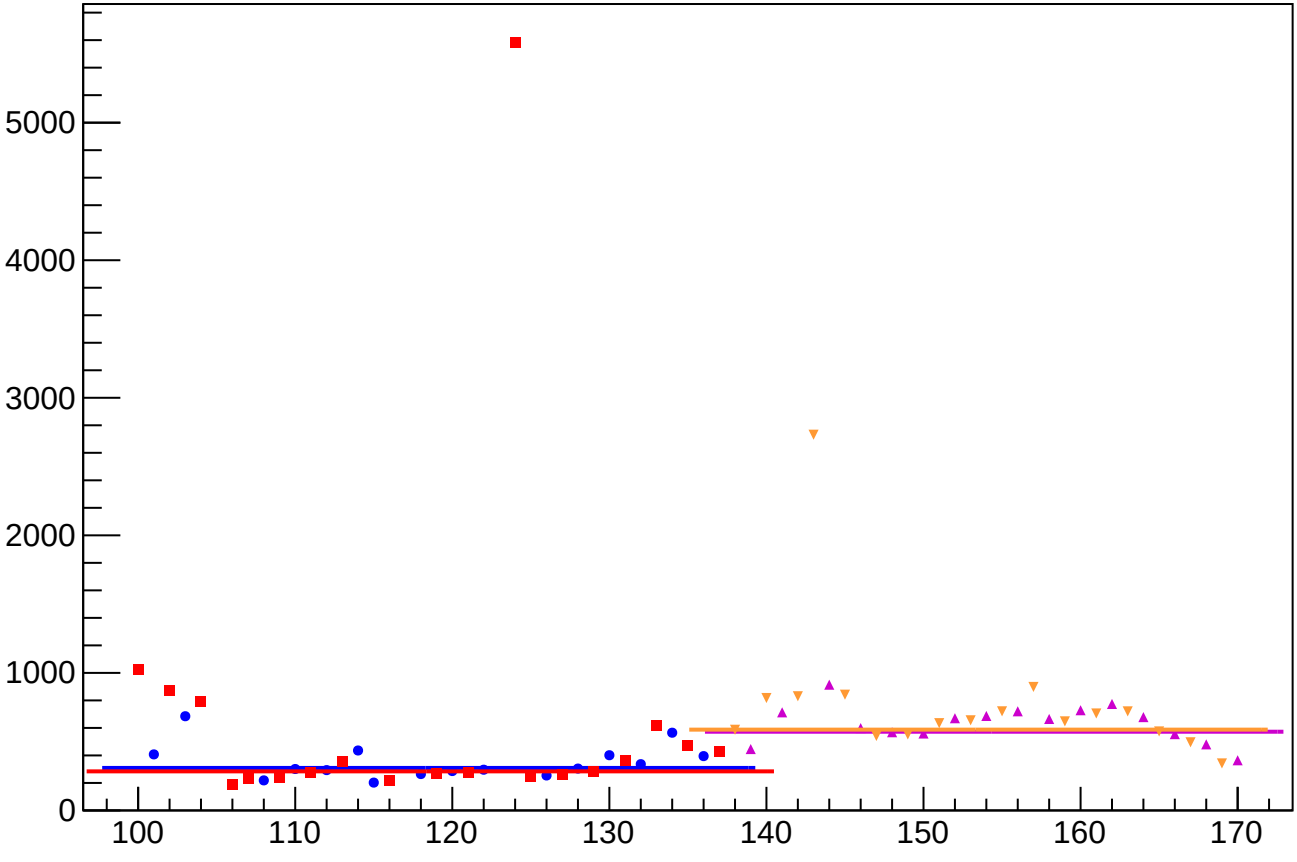
Left In: 0.136+/-0.164 $\chi^2$/NDF:23.2/15

+ sign -0.044+/-0.099 $\chi^2$/NDF: 32.3/32

All: -0.042+/-0.069 $\chi^2$/NDF: 82.5/67

- sign -0.039+/-0.095 $\chi^2$/NDF: 50.1/34

# asym_at2_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 309.093+/-0.086 $\chi^2$/NDF: 1014604.9/15

Left Out: 587.507+/-0.121 $\chi^2$/NDF:2641728.2/16

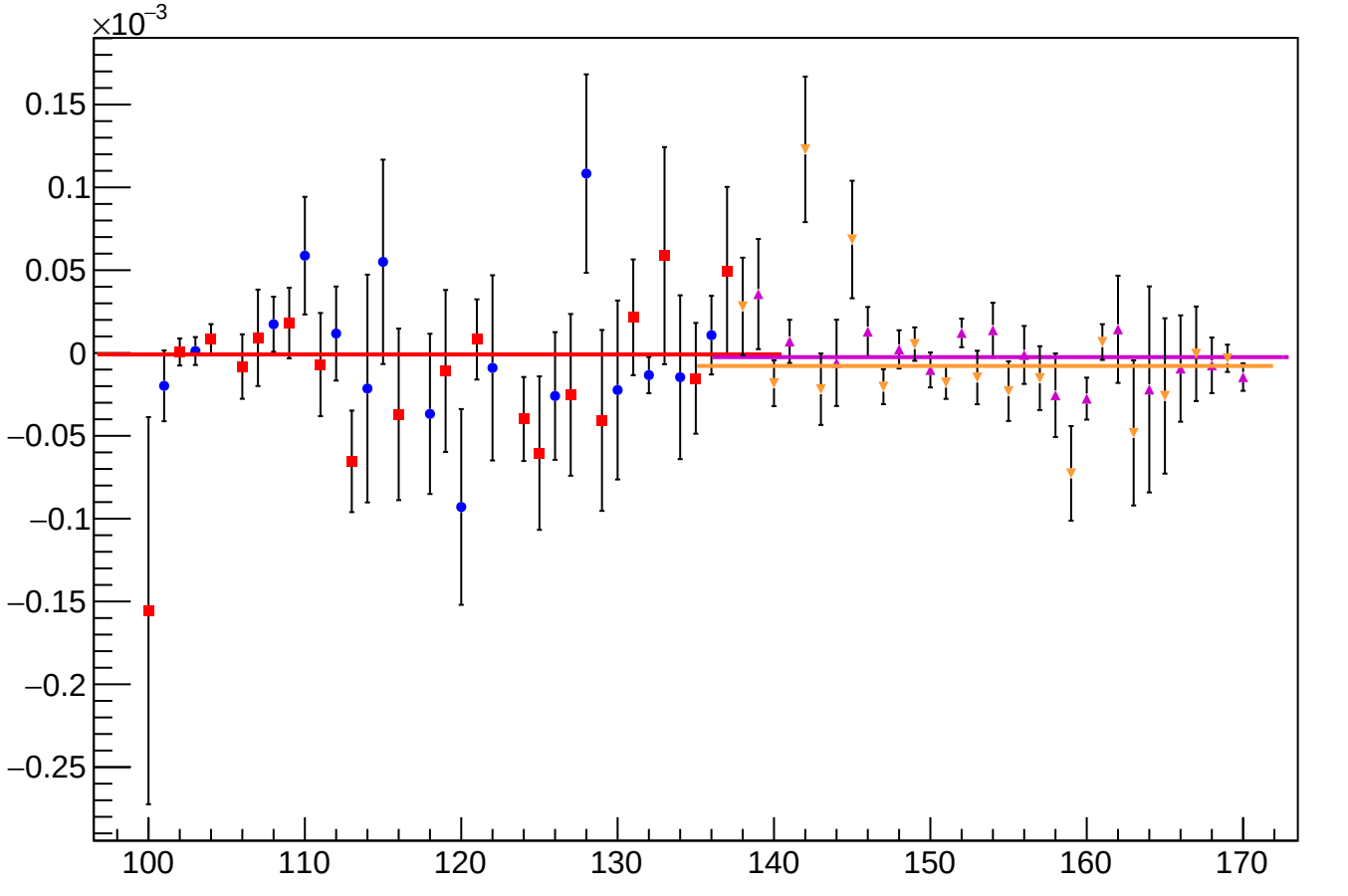
Right Out: 284.189+/-0.083 $\chi^2$/NDF: 1856451.4/18

Left In: 572.358+/-0.116 $\chi^2$/NDF:1416561.5/15

+ sign 403.229+/-0.070 $\chi^2$/NDF: 7185778.3/32

All: 391.774+/-0.049 $\chi^2$/NDF: 14601118.4/67

- sign 381.209+/-0.067 $\chi^2$/NDF: 7364020.3/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.5/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:29.5/16

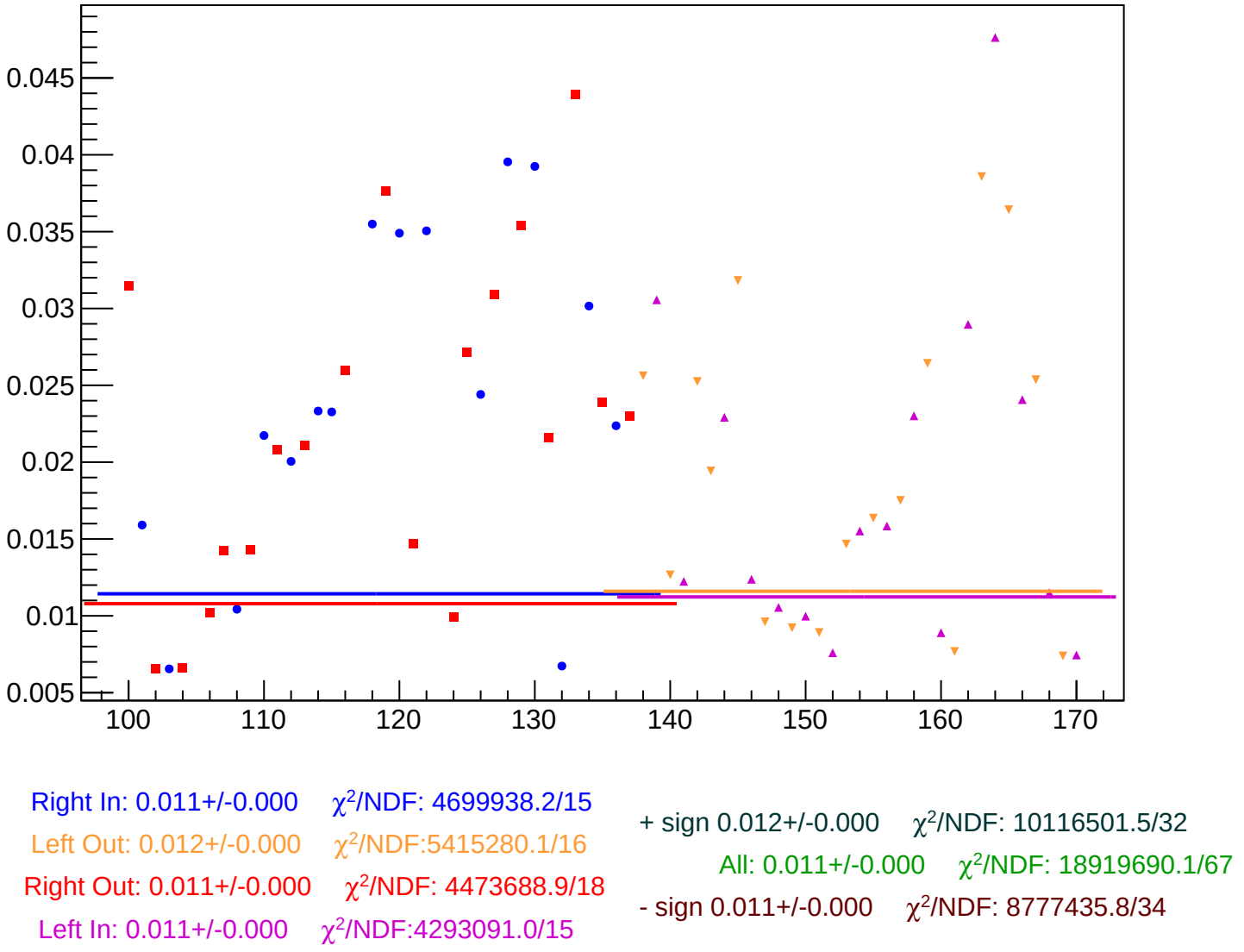
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 16.1/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:14.8/15

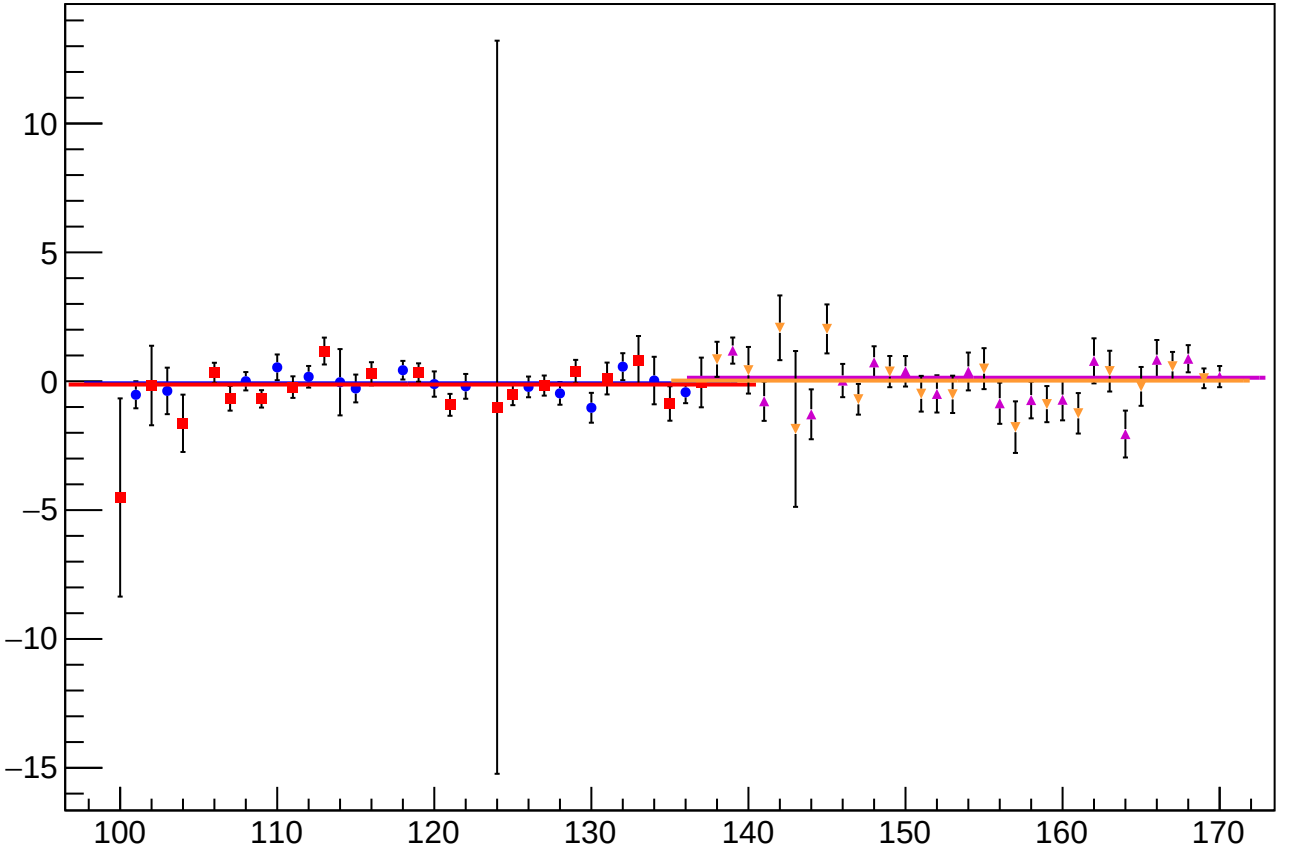
+ sign -0.000+/-0.000 $\chi^2$/NDF: 45.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 77.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 31.1/34


asym_at2_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
100
110
120
130
140
150
160
170
Right In: 0.011+/-0.000 χ²/NDF: 4699938.2/15
Left Out: 0.012+/-0.000 χ²/NDF:5415280.1/16
Right Out: 0.011+/-0.000 χ²/NDF: 4473688.9/18
Left In: 0.011+/-0.000 χ²/NDF:4293091.0/15
+ sign 0.012+/-0.000 χ²/NDF: 10116501.5/32
All: 0.011+/-0.000 χ²/NDF: 18919690.1/67
- sign 0.011+/-0.000 χ²/NDF: 8777435.8/34

# asym_at2_avg_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.080+/-0.122 $\chi^2$/NDF: 10.8/15

Left Out: 0.025+/-0.171 $\chi^2$/NDF:21.3/16

Right Out: -0.128+/-0.117 $\chi^2$/NDF: 25.3/18

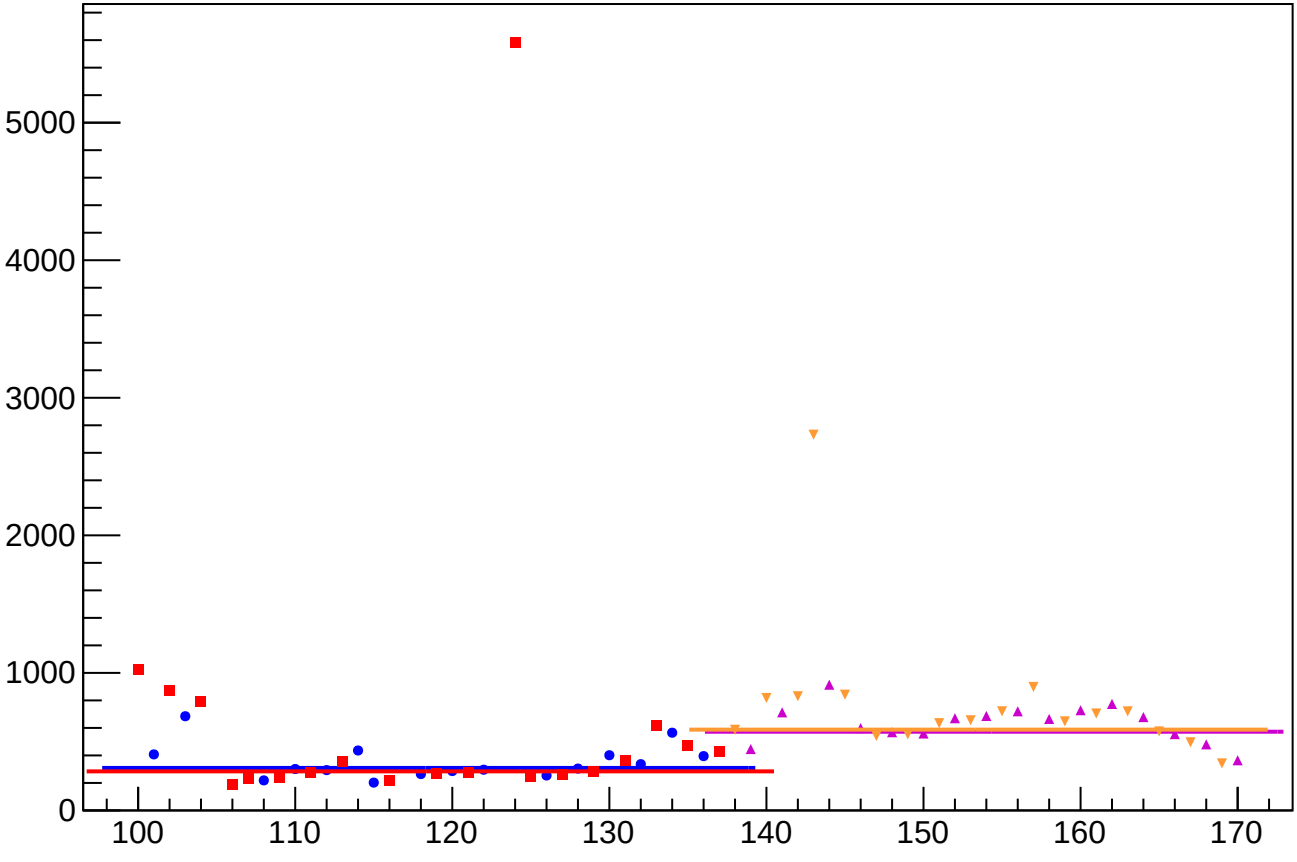
Left In: 0.136+/-0.164 $\chi^2$/NDF:23.2/15

+ sign -0.044+/-0.099 $\chi^2$/NDF: 32.3/32

All: -0.042+/-0.069 $\chi^2$/NDF: 82.5/67

- sign -0.039+/-0.095 $\chi^2$/NDF: 50.1/34

# asym_at2_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 309.093+/-0.086 $\chi^2$/NDF: 1014573.4/15

Left Out: 587.512+/-0.121 $\chi^2$/NDF:2641801.0/16

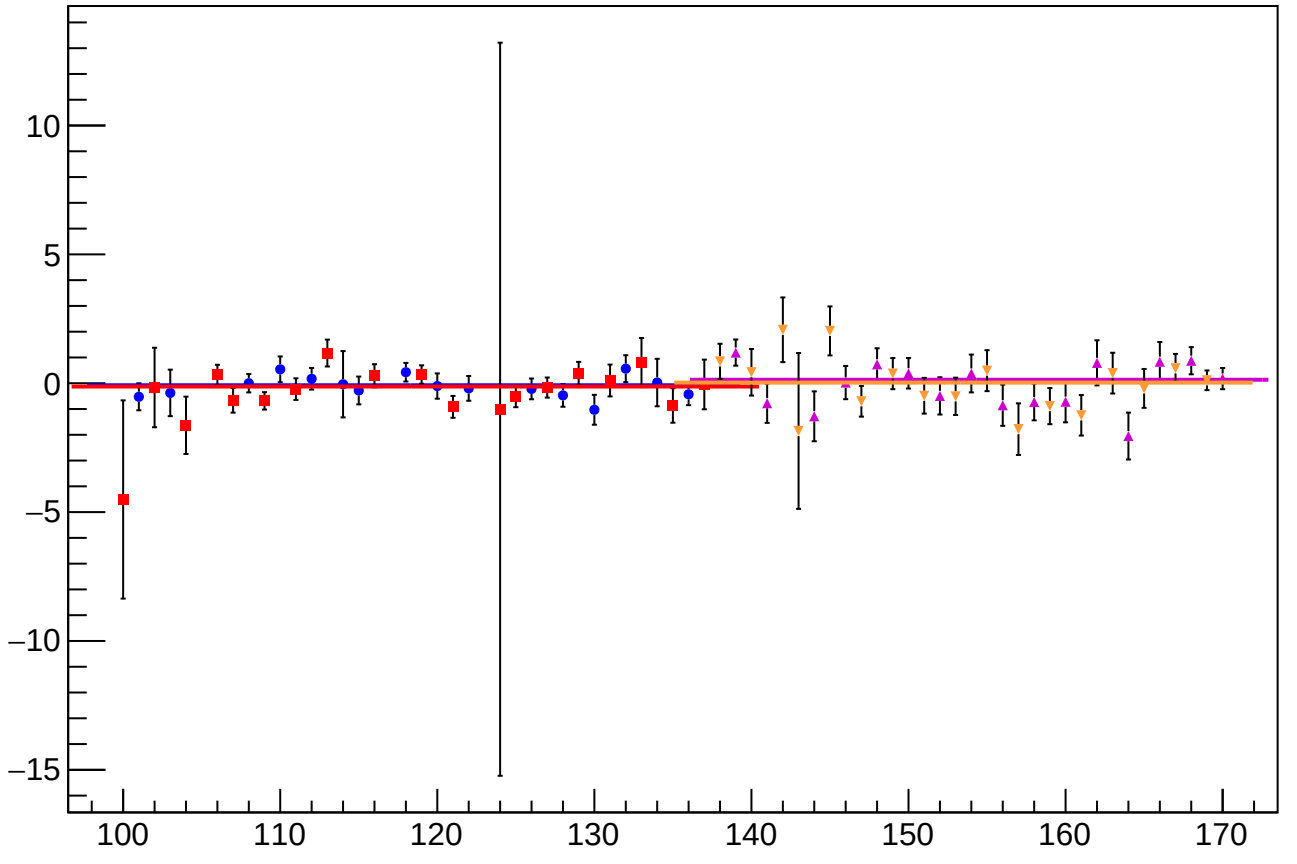
Right Out: 284.188+/-0.083 $\chi^2$/NDF: 1856434.1/18

Left In: 572.365+/-0.116 $\chi^2$/NDF:1416586.3/15

+ sign 403.228+/-0.070 $\chi^2$/NDF: 7185938.5/32

All: 391.774+/-0.049 $\chi^2$/NDF: 14601449.0/67

- sign 381.209+/-0.067 $\chi^2$/NDF: 7364192.4/34




Right In: -0.080+/-0.122 $\chi^2$/NDF: 10.8/15

Left Out: 0.025+/-0.171 $\chi^2$/NDF:21.3/16

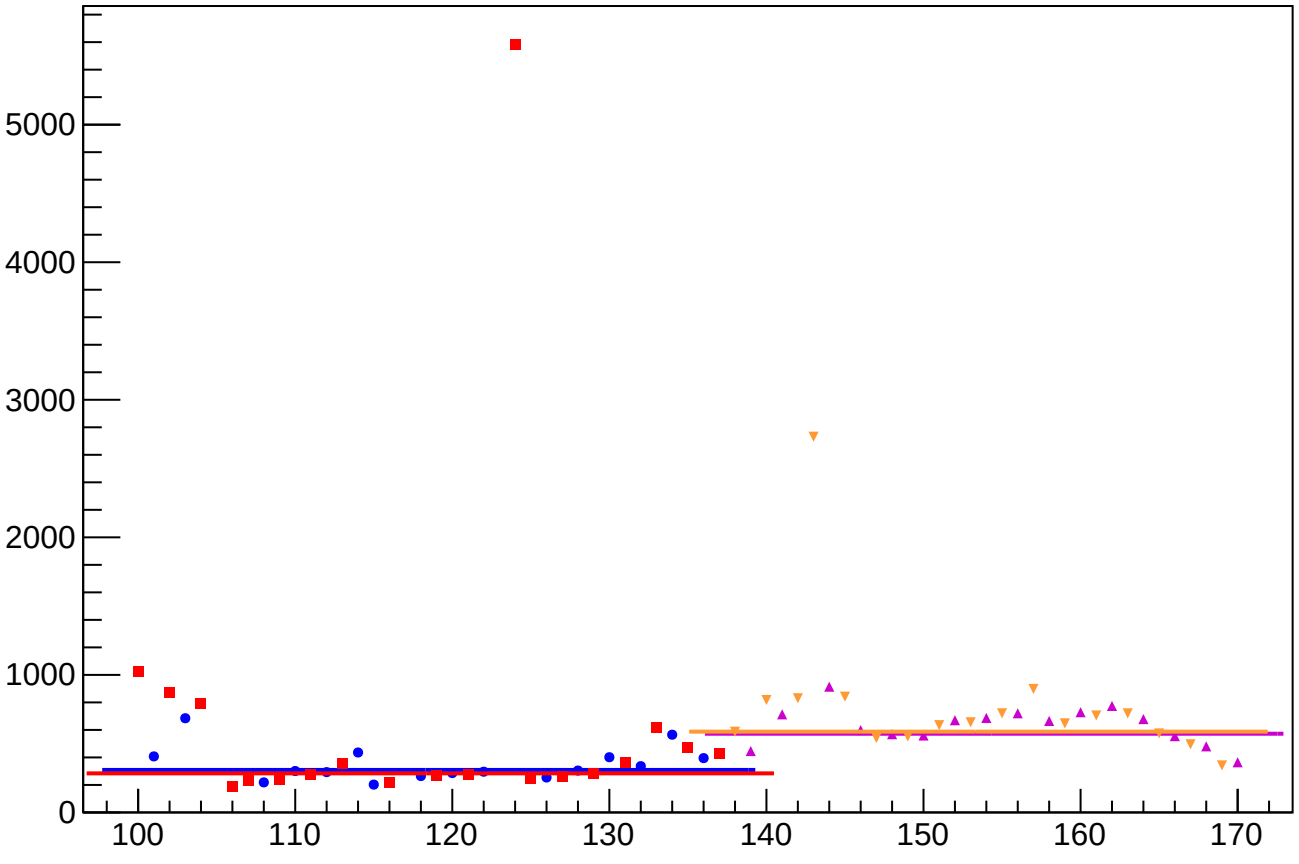
Right Out: -0.128+/-0.117 $\chi^2$/NDF: 25.3/18

Left In: 0.136+/-0.164 $\chi^2$/NDF:23.2/15

+ sign -0.044+/-0.099 $\chi^2$/NDF: 32.3/32

All: -0.042+/-0.069 $\chi^2$/NDF: 82.5/67

- sign -0.039+/-0.095 $\chi^2$/NDF: 50.1/34




Right In: 309.093+/-0.086 $\chi^2$/NDF: 1014573.4/15

Left Out: 587.512+/-0.121 $\chi^2$/NDF:2641801.0/16

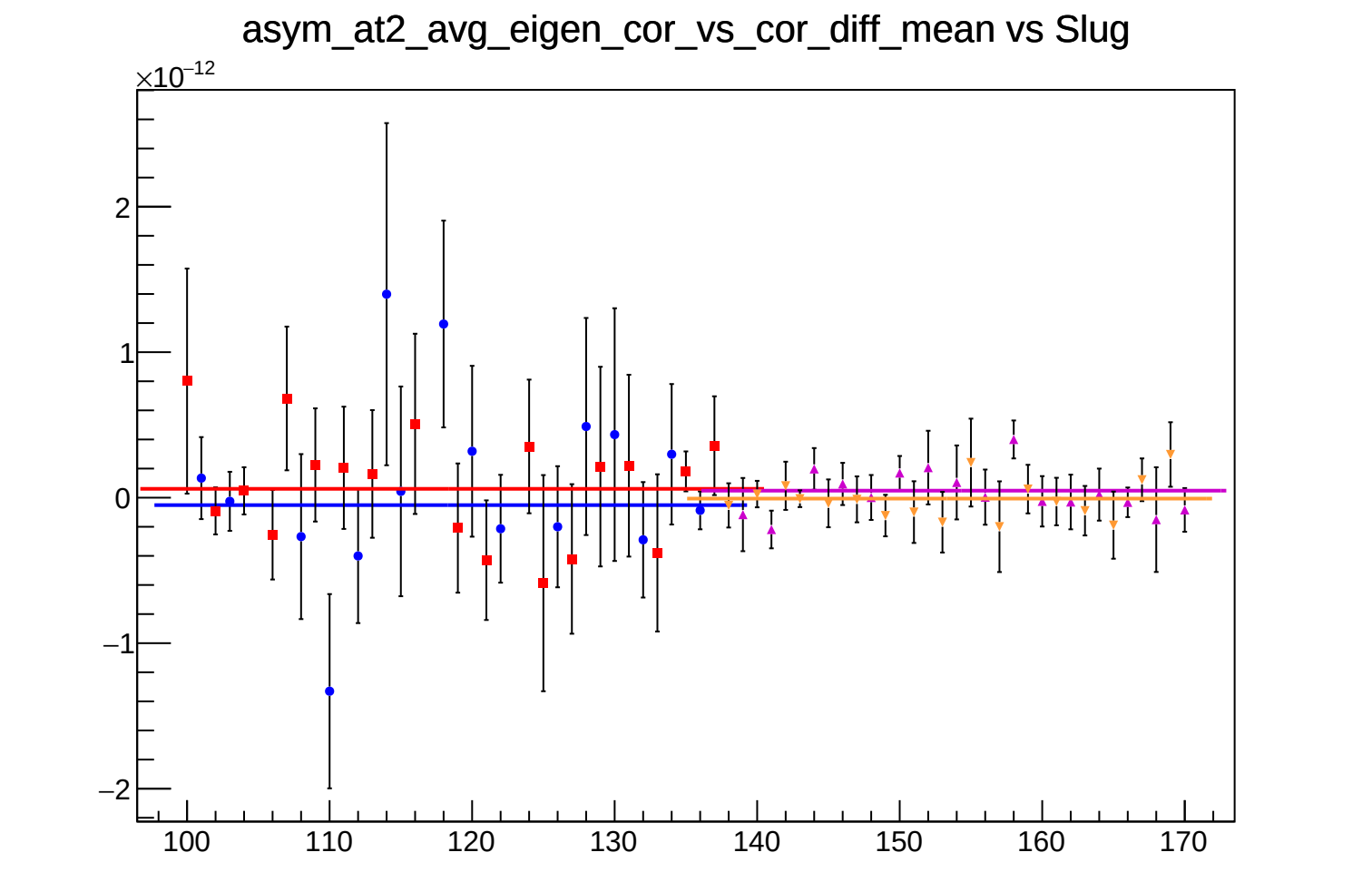
Right Out: 284.188+/-0.083 $\chi^2$/NDF: 1856434.1/18

Left In: 572.365+/-0.116 $\chi^2$/NDF:1416586.3/15

+ sign 403.228+/-0.070 $\chi^2$/NDF: 7185938.5/32

All: 391.774+/-0.049 $\chi^2$/NDF: 14601449.0/67

- sign 381.209+/-0.067 $\chi^2$/NDF: 7364192.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 12.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:6.7/16

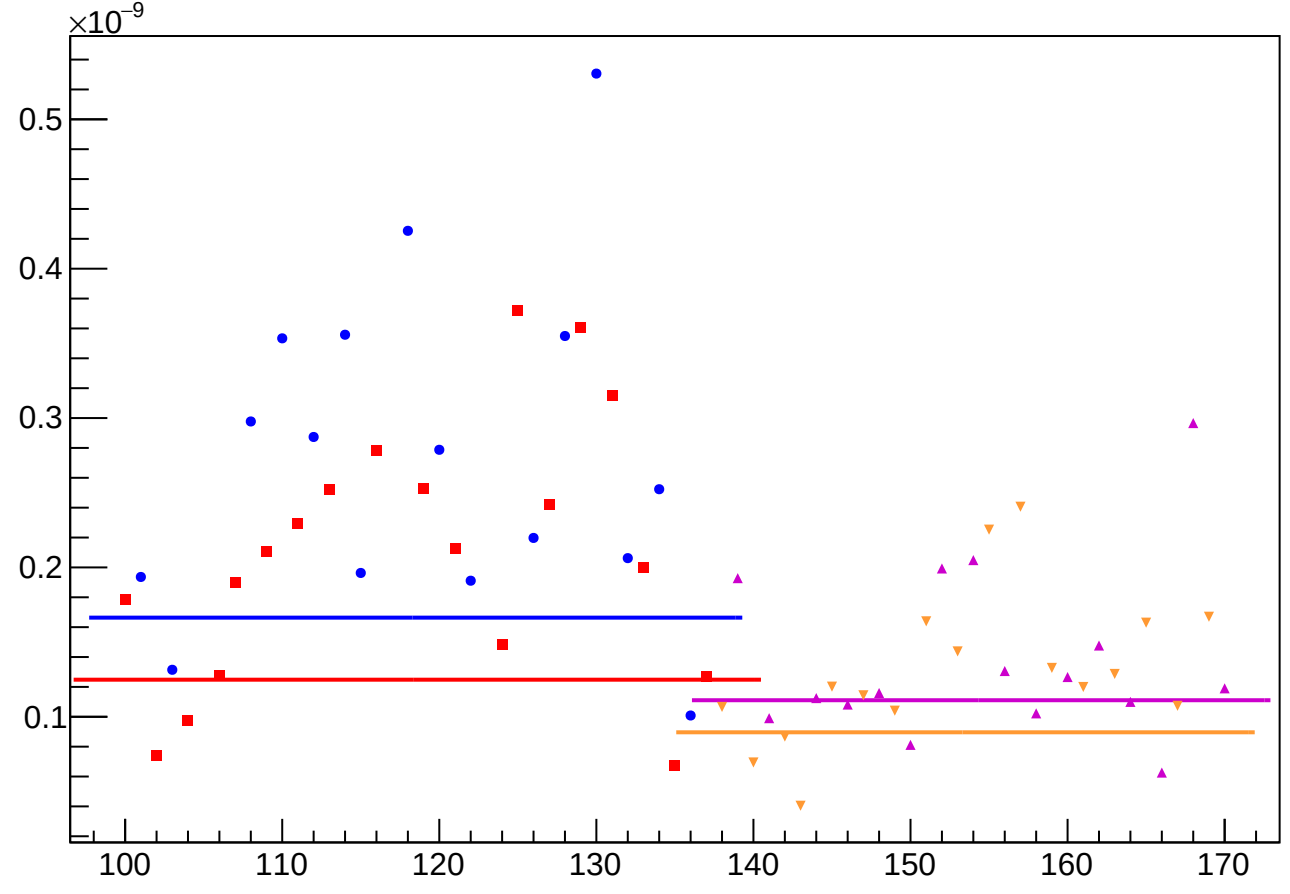
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 11.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:16.9/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 18.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 49.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 28.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1984237.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:3753728.3/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2209554.2/18

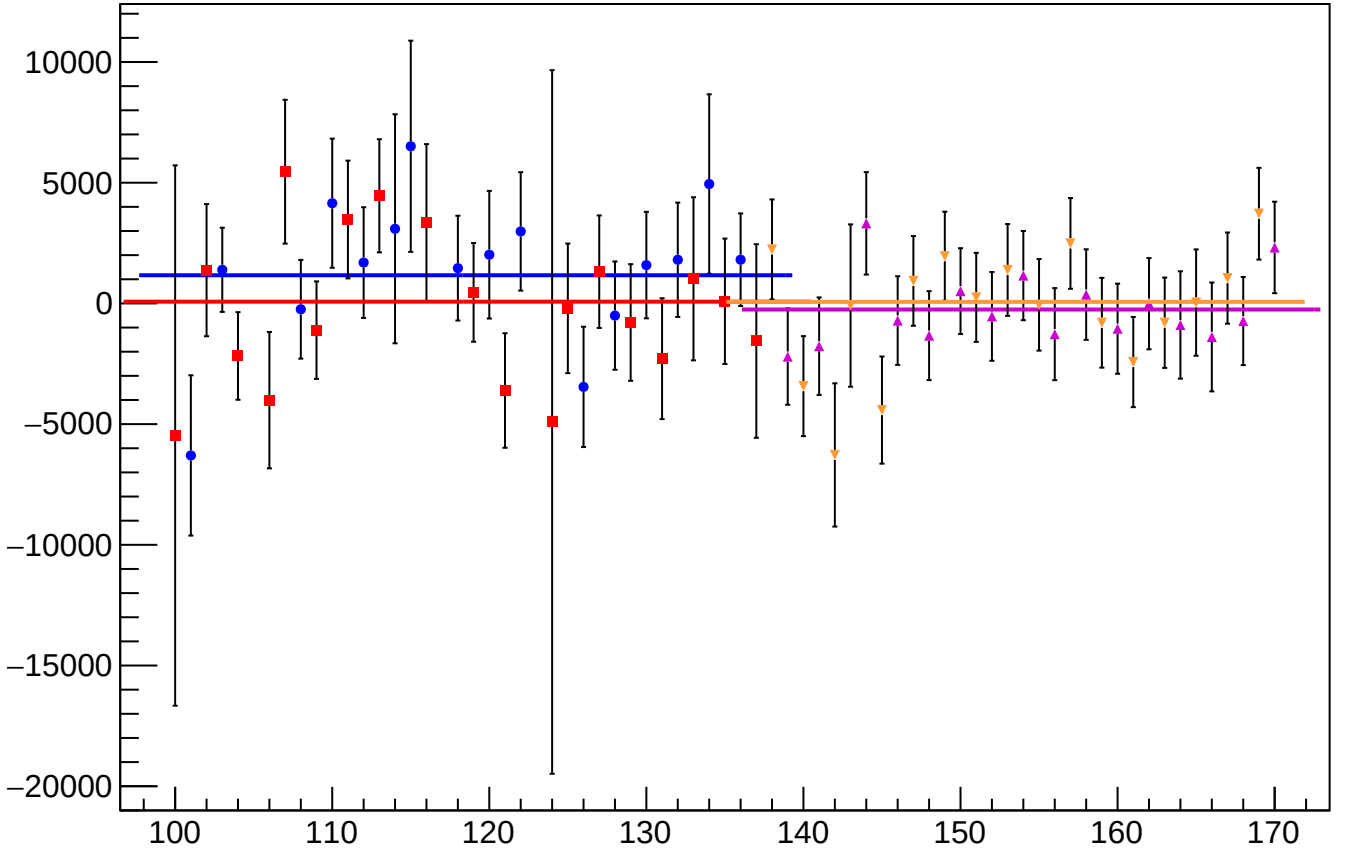
Left In: 0.000+/-0.000 $\chi^2$/NDF:1991397.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 7164552.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 11614357.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4259548.8/34

# reg_asym_at2_dd_mean vs Slug




Right In: 1166.862+/-609.171 $\chi^2$/NDF: 14.4/15

Left Out: 63.540+/-487.265 $\chi^2$/NDF:22.2/16

Right Out: 72.181+/-603.362 $\chi^2$/NDF: 18.3/18

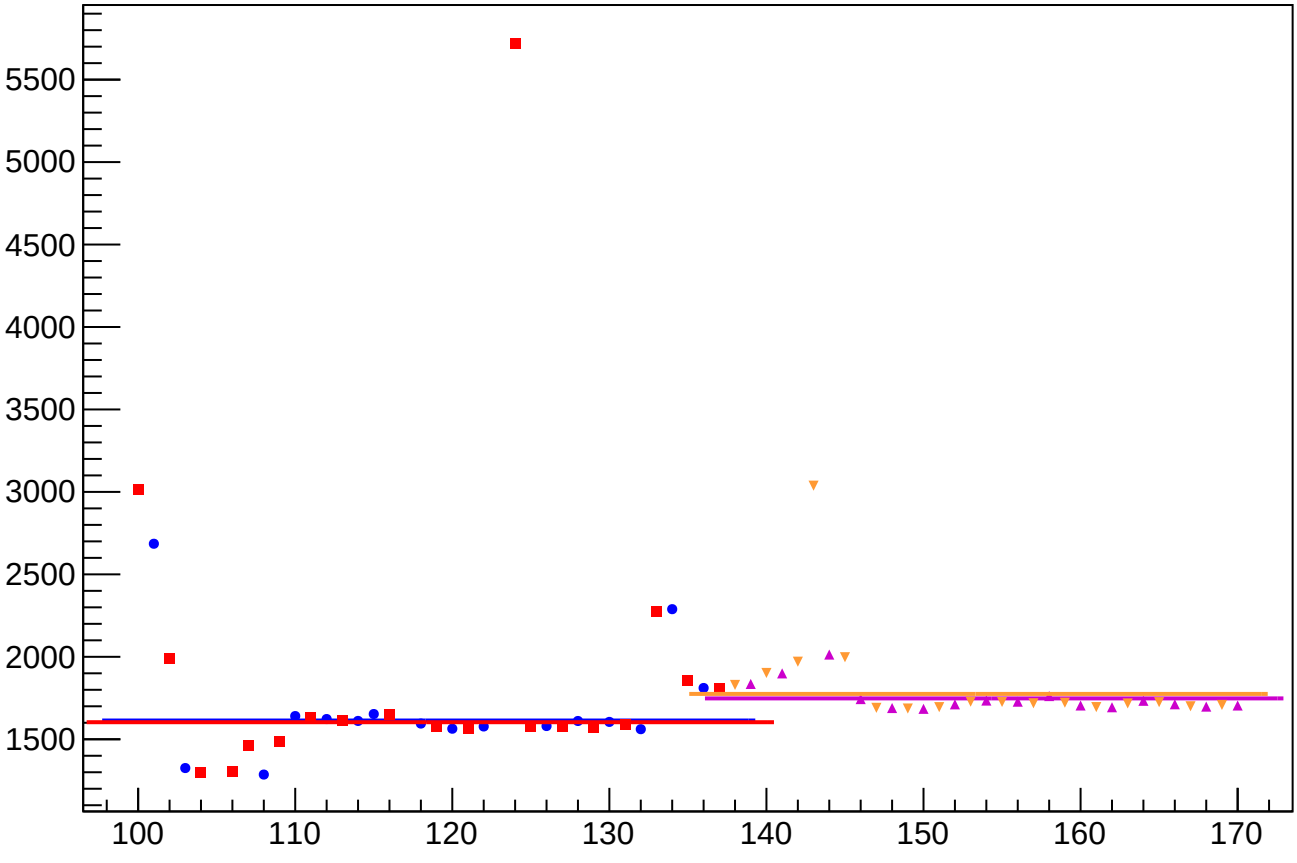
Left In: -252.596+/-481.223 $\chi^2$/NDF:8.4/15

+ sign 494.027+/-380.512 $\chi^2$/NDF: 38.6/32

All: 180.332+/-267.532 $\chi^2$/NDF: 66.8/67

- sign -126.323+/-376.218 $\chi^2$/NDF: 26.8/34

# reg_asym_at2_dd_rms vs Slug




Right In: 1613.674+/-0.431 $\chi^2$/NDF: 404688.5/15

Left Out: 1775.011+/-0.345 $\chi^2$/NDF:350518.6/16

Right Out: 1603.464+/-0.427 $\chi^2$/NDF: 425793.5/18

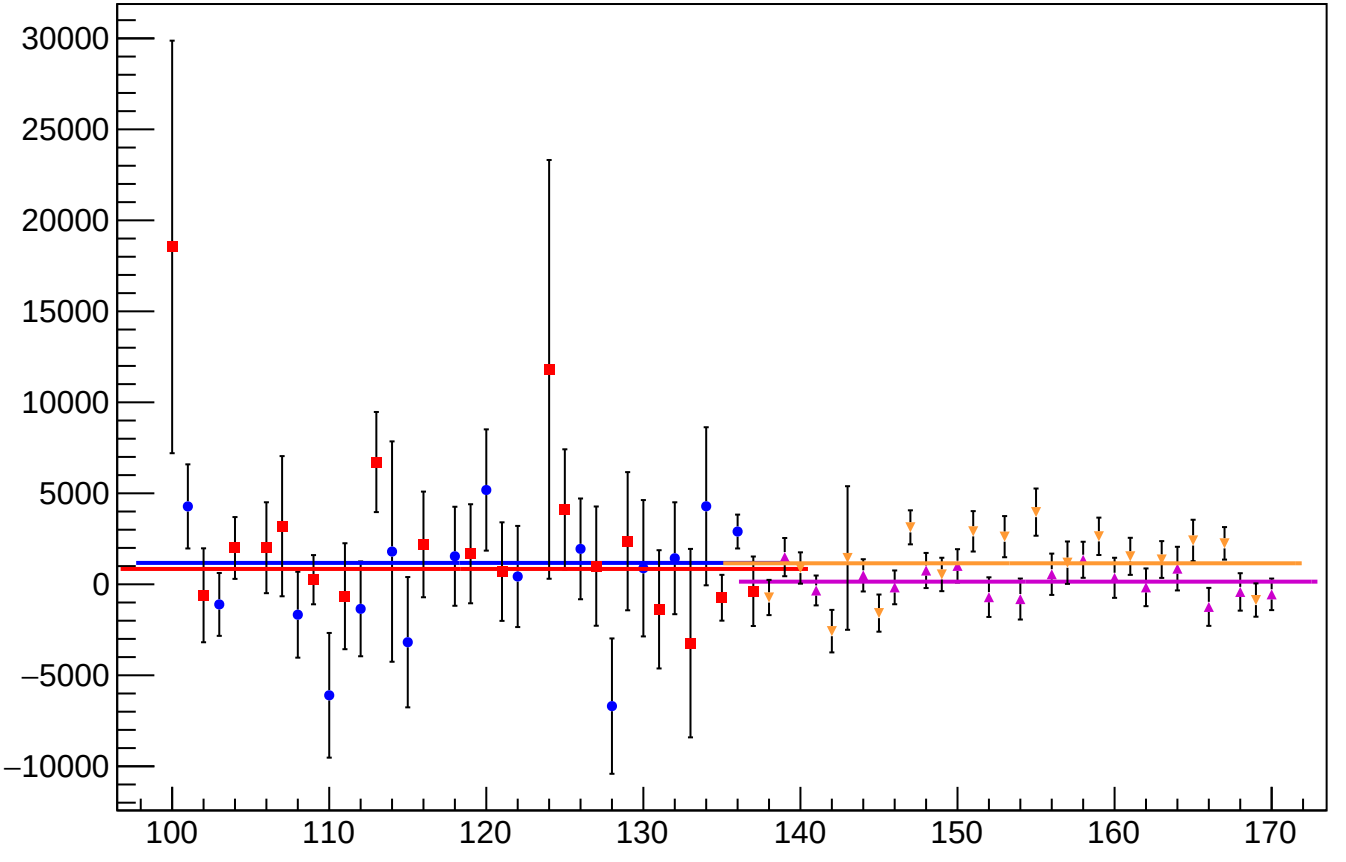
Left In: 1747.796+/-0.340 $\chi^2$/NDF:58055.5/15

+ sign 1712.062+/-0.269 $\chi^2$/NDF: 840758.7/32

All: 1701.755+/-0.189 $\chi^2$/NDF: 1397459.2/67

- sign 1691.680+/-0.266 $\chi^2$/NDF: 553799.0/34

# asym_at2_dd_reg_correction_mean vs Slug




Right In: 1175.479+/-579.062 $\chi^2$/NDF: 22.0/15

Left Out: 1154.982+/-253.706 $\chi^2$/NDF:44.9/16

Right Out: 843.857+/-557.438 $\chi^2$/NDF: 14.3/18

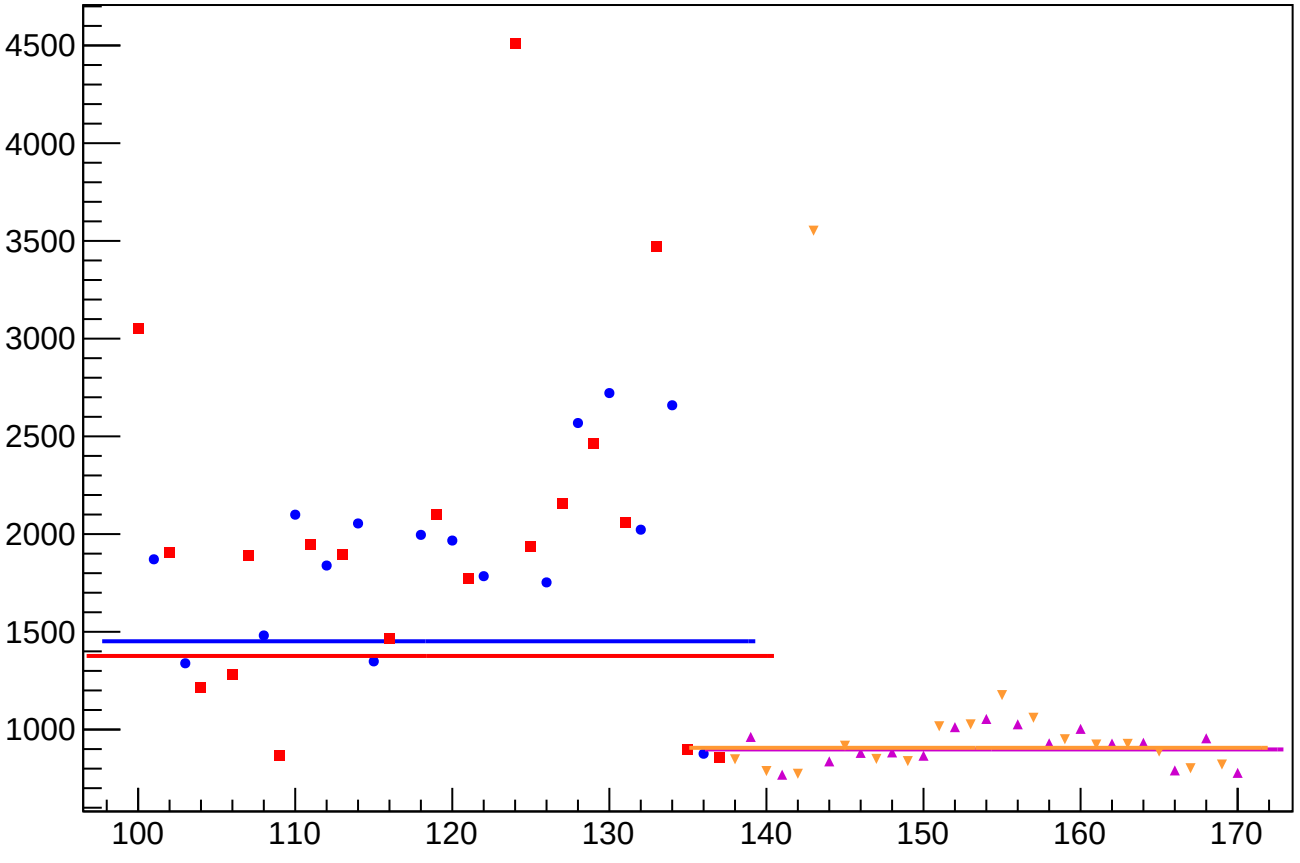
Left In: 145.500+/-248.711 $\chi^2$/NDF:9.7/15

+ sign 1158.283+/-232.381 $\chi^2$/NDF: 66.9/32

All: 699.613+/-162.430 $\chi^2$/NDF: 99.8/67

- sign 261.439+/-227.129 $\chi^2$/NDF: 25.3/34

# asym_at2_dd_reg_correction_rms vs Slug




Right In: 1451.631+/-0.409 $\chi^2$/NDF: 1790839.5/15

Left Out: 906.471+/-0.179 $\chi^2$/NDF:1203222.2/16

Right Out: 1376.470+/-0.394 $\chi^2$/NDF: 2132051.1/18

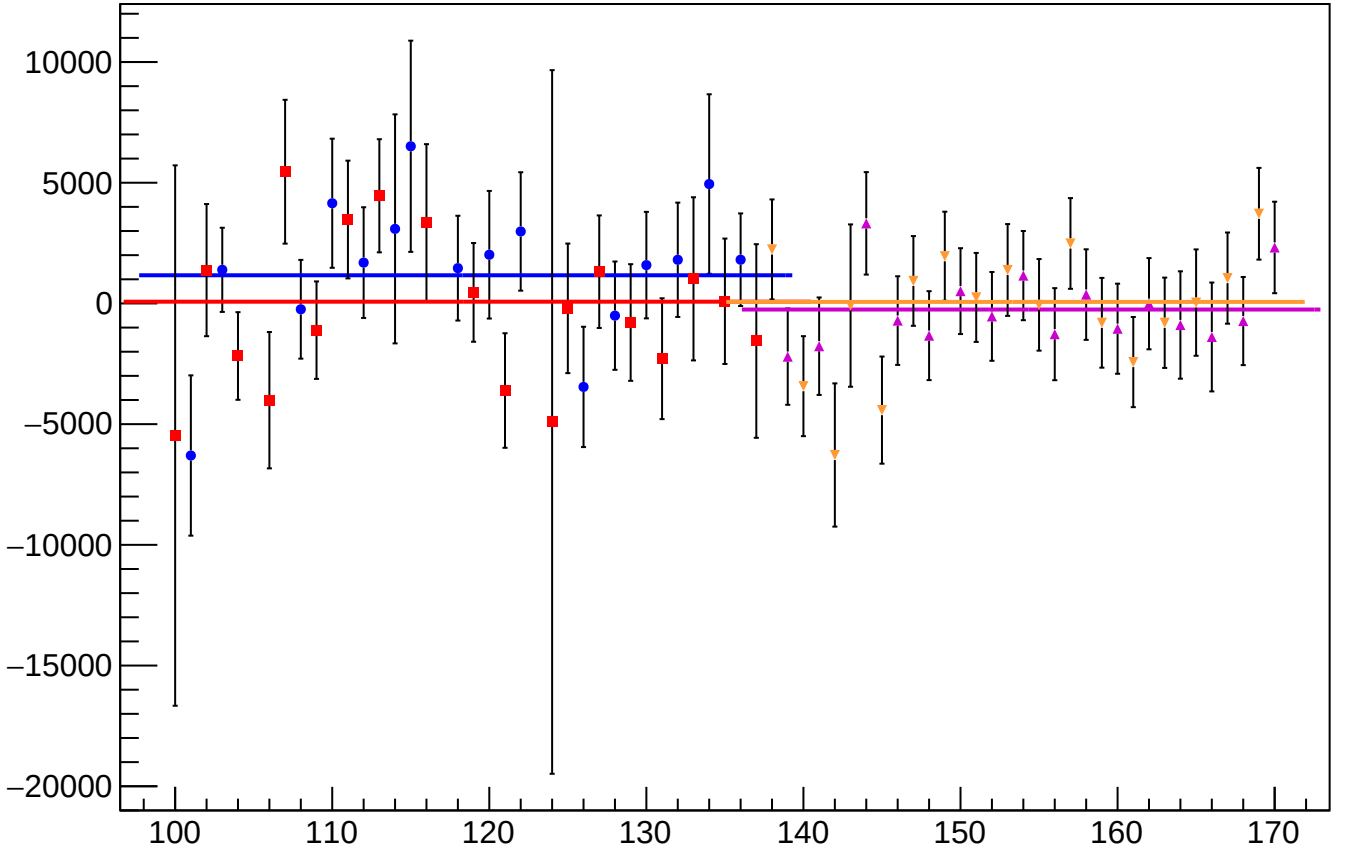
Left In: 898.181+/-0.176 $\chi^2$/NDF:245365.6/15

+ sign 994.267+/-0.164 $\chi^2$/NDF: 4481251.3/32

All: 985.735+/-0.115 $\chi^2$/NDF: 8091868.7/67

- sign 977.585+/-0.161 $\chi^2$/NDF: 3605346.6/34

# cor_asym_at2_dd_mean vs Slug




Right In: 1166.769+/-609.171 $\chi^2$/NDF: 14.4/15

Left Out: 63.398+/-487.265 $\chi^2$/NDF:22.2/16

Right Out: 72.499+/-603.362 $\chi^2$/NDF: 18.3/18

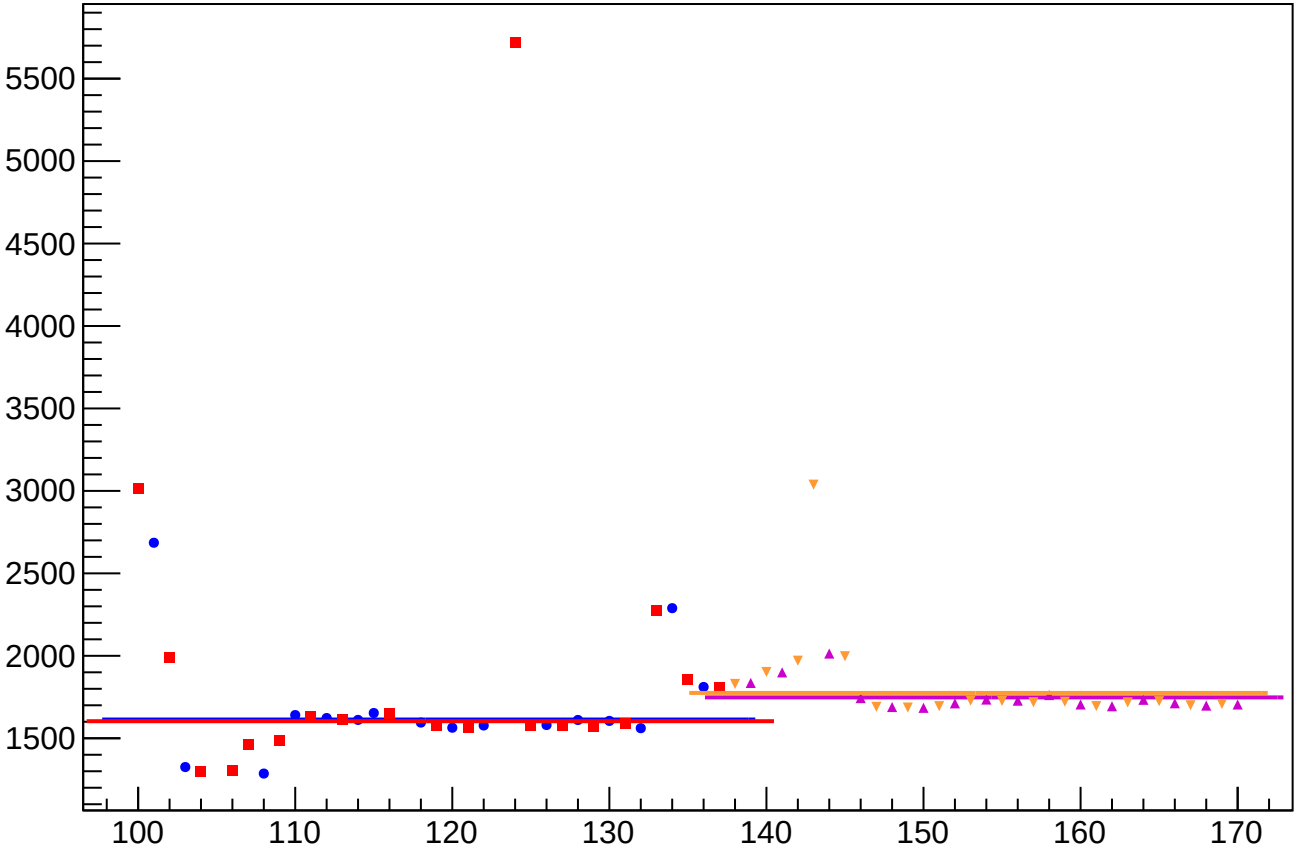
Left In: -252.493+/-481.223 $\chi^2$/NDF:8.4/15

+ sign 493.905+/-380.512 $\chi^2$/NDF: 38.6/32

All: 180.365+/-267.532 $\chi^2$/NDF: 66.8/67

- sign -126.137+/-376.218 $\chi^2$/NDF: 26.8/34

# cor_asym_at2_dd_rms vs Slug




Right In: 1613.674+/-0.431 $\chi^2$/NDF: 404688.8/15

Left Out: 1775.011+/-0.345 $\chi^2$/NDF:350518.6/16

Right Out: 1603.464+/-0.427 $\chi^2$/NDF: 425793.4/18

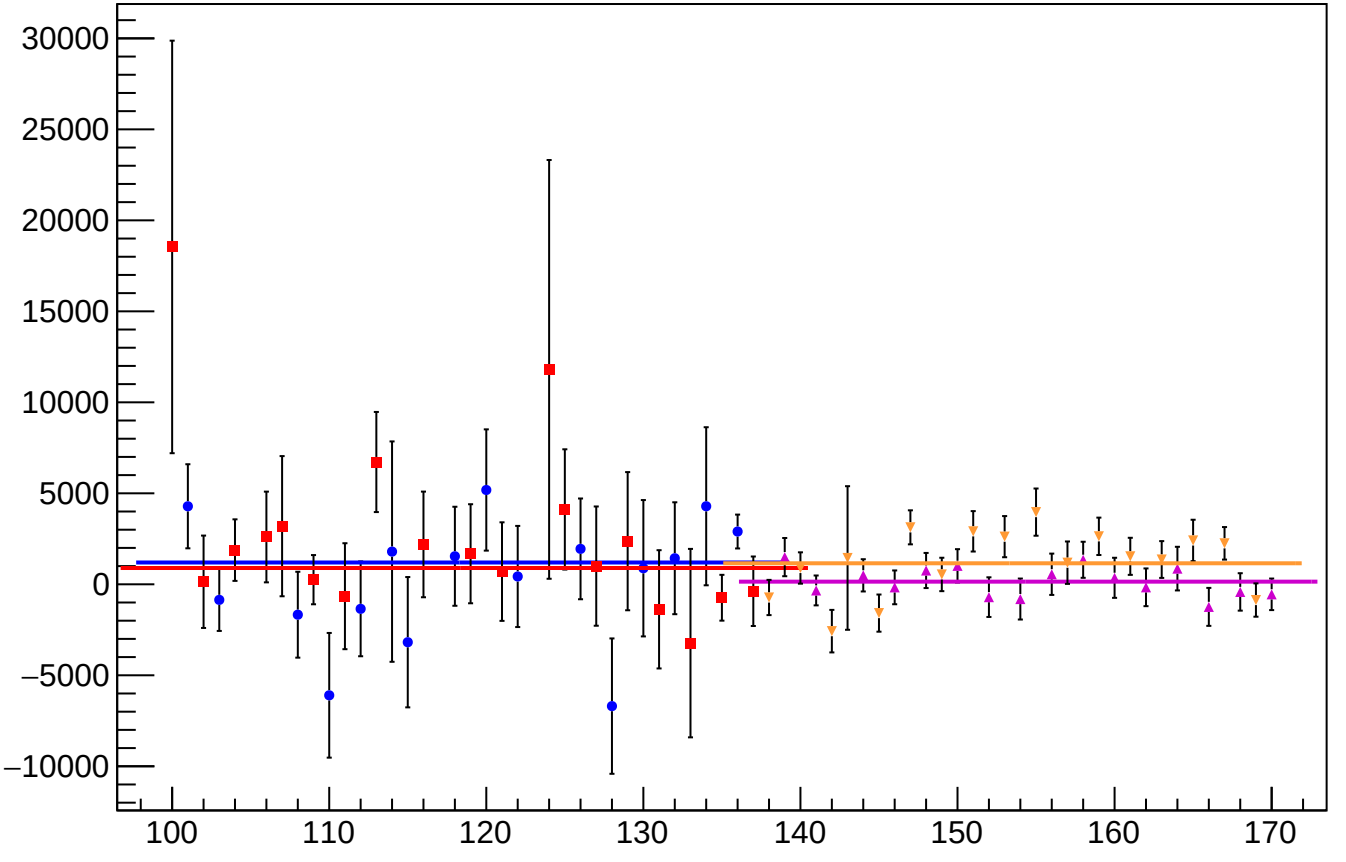
Left In: 1747.797+/-0.340 $\chi^2$/NDF:58055.5/15

+ sign 1712.061+/-0.269 $\chi^2$/NDF: 840759.1/32

All: 1701.755+/-0.189 $\chi^2$/NDF: 1397459.8/67

- sign 1691.680+/-0.266 $\chi^2$/NDF: 553799.1/34

# asym_at2_dd_cor_correction_mean vs Slug




Right In: 1198.338+/-578.240 $\chi^2$/NDF: 21.7/15

Left Out: 1155.021+/-253.709 $\chi^2$/NDF:44.9/16

Right Out: 895.463+/-556.666 $\chi^2$/NDF: 14.2/18

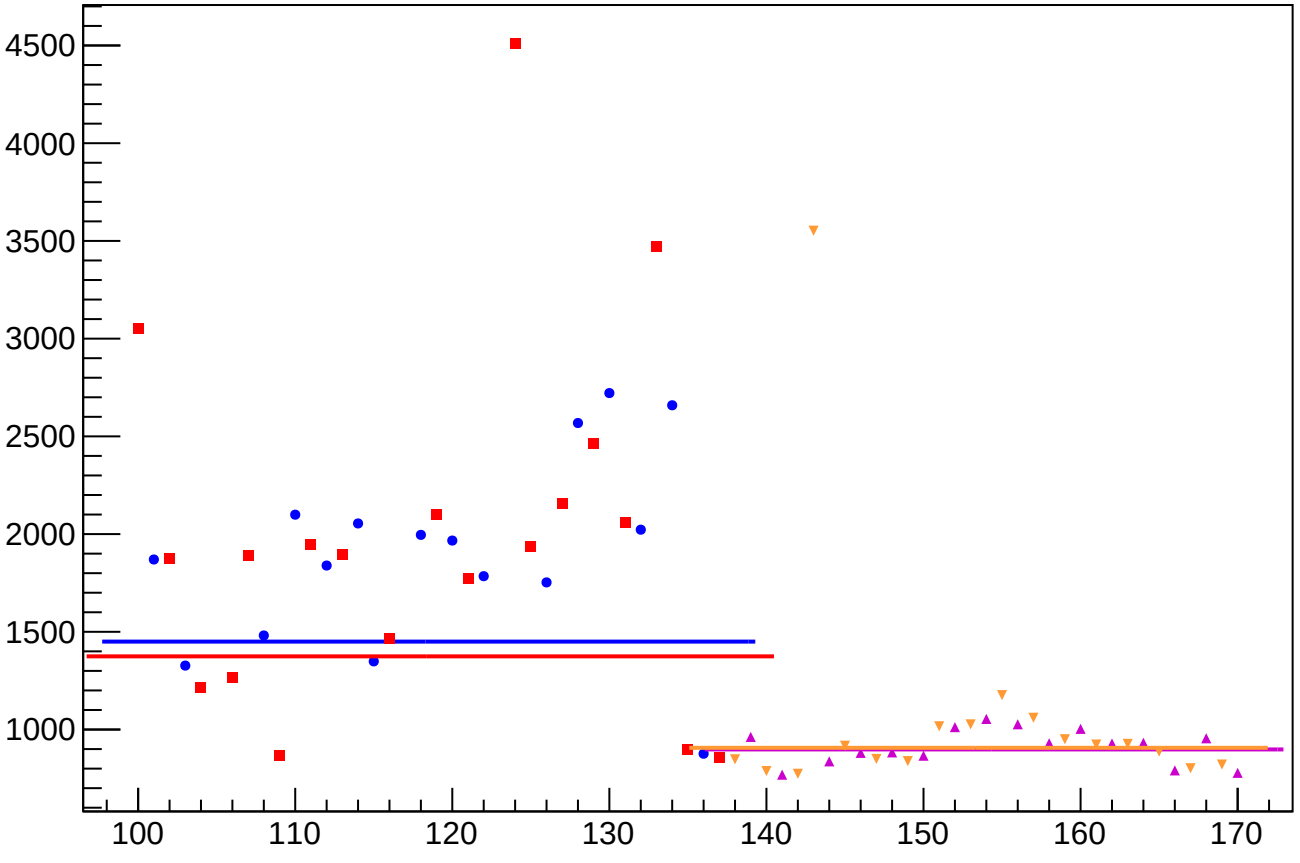
Left In: 145.437+/-248.710 $\chi^2$/NDF:9.7/15

+ sign 1162.014+/-232.330 $\chi^2$/NDF: 66.6/32

All: 705.931+/-162.393 $\chi^2$/NDF: 99.5/67

- sign 270.242+/-227.076 $\chi^2$/NDF: 25.4/34

# asym_at2_dd_cor_correction_rms vs Slug




Right In: 1449.939+/-0.409 $\chi^2$/NDF: 1792673.2/15

Left Out: 906.484+/-0.179 $\chi^2$/NDF:1203122.9/16

Right Out: 1374.438+/-0.394 $\chi^2$/NDF: 2127695.6/18

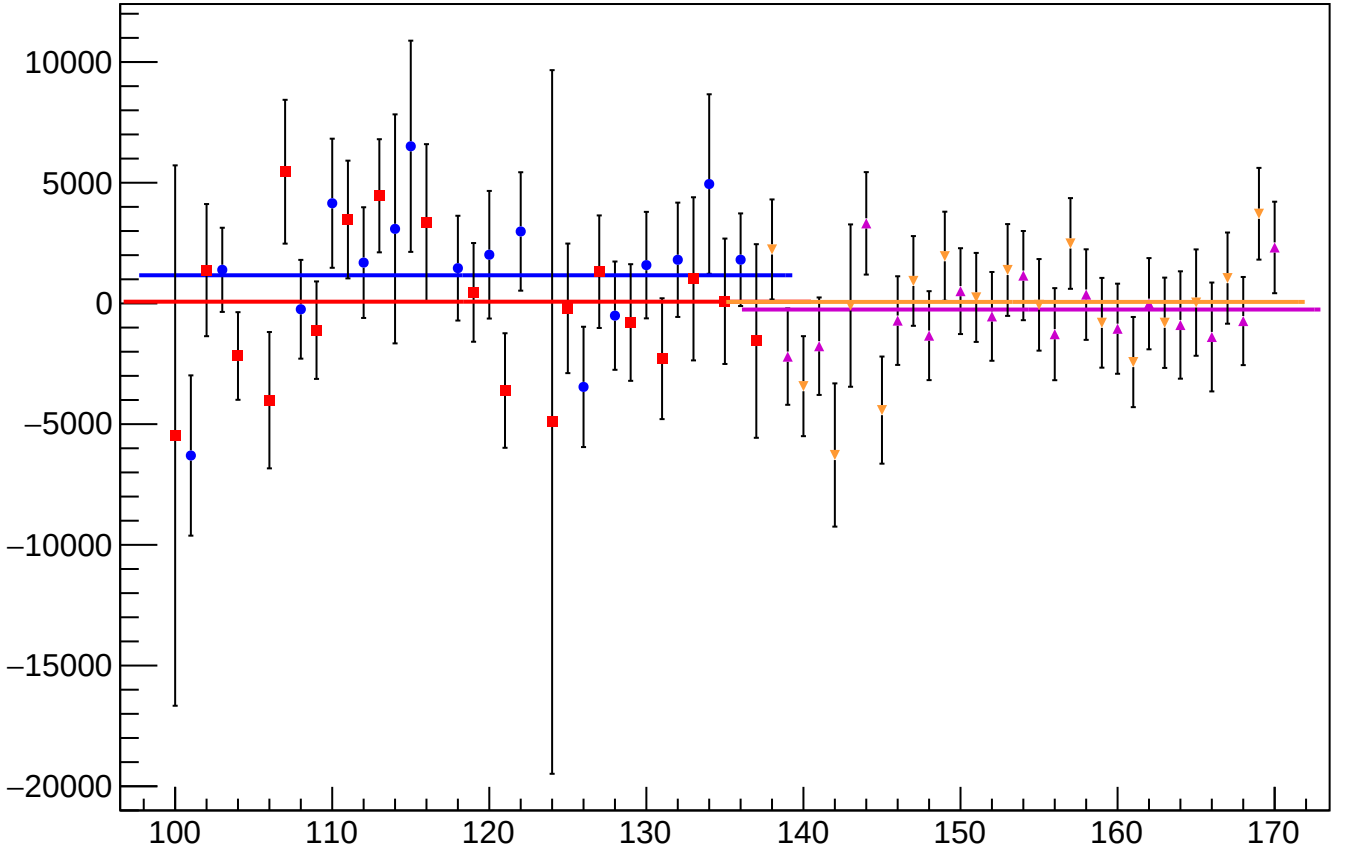
Left In: 898.177+/-0.176 $\chi^2$/NDF:245434.6/15

+ sign 994.216+/-0.164 $\chi^2$/NDF: 4477213.7/32

All: 985.629+/-0.115 $\chi^2$/NDF: 8076044.2/67

- sign 977.427+/-0.161 $\chi^2$/NDF: 3593489.1/34

# eigen_cor_asym_at2_dd_mean vs Slug




Right In: 1166.769+/-609.171 $\chi^2$/NDF: 14.4/15

Left Out: 63.398+/-487.265 $\chi^2$/NDF:22.2/16

Right Out: 72.499+/-603.362 $\chi^2$/NDF: 18.3/18

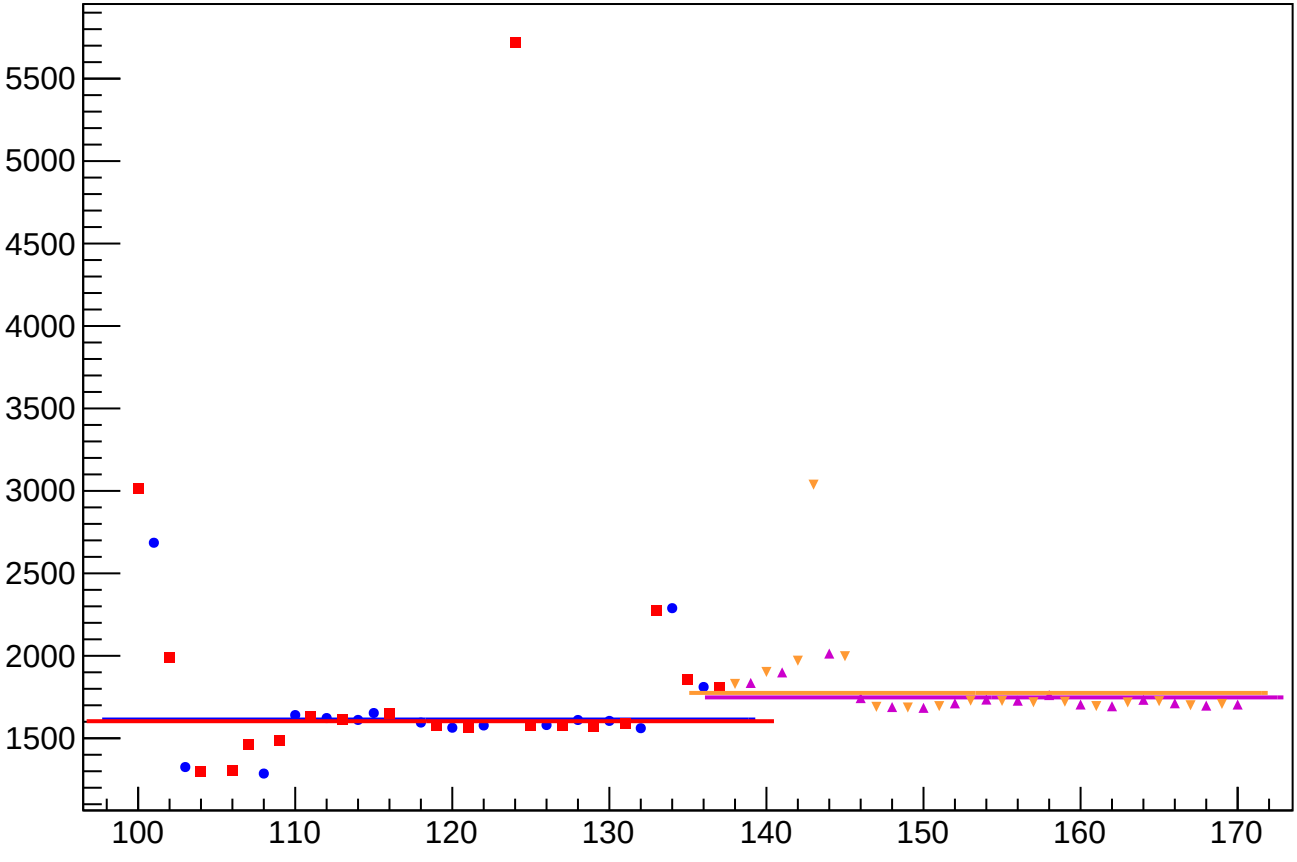
Left In: -252.493+/-481.223 $\chi^2$/NDF:8.4/15

+ sign 493.905+/-380.512 $\chi^2$/NDF: 38.6/32

All: 180.365+/-267.532 $\chi^2$/NDF: 66.8/67

- sign -126.137+/-376.218 $\chi^2$/NDF: 26.8/34

# eigen_cor_asym_at2_dd_rms vs Slug




Right In: 1613.674+/-0.431 $\chi^2$/NDF: 404688.8/15

Left Out: 1775.011+/-0.345 $\chi^2$/NDF:350518.6/16

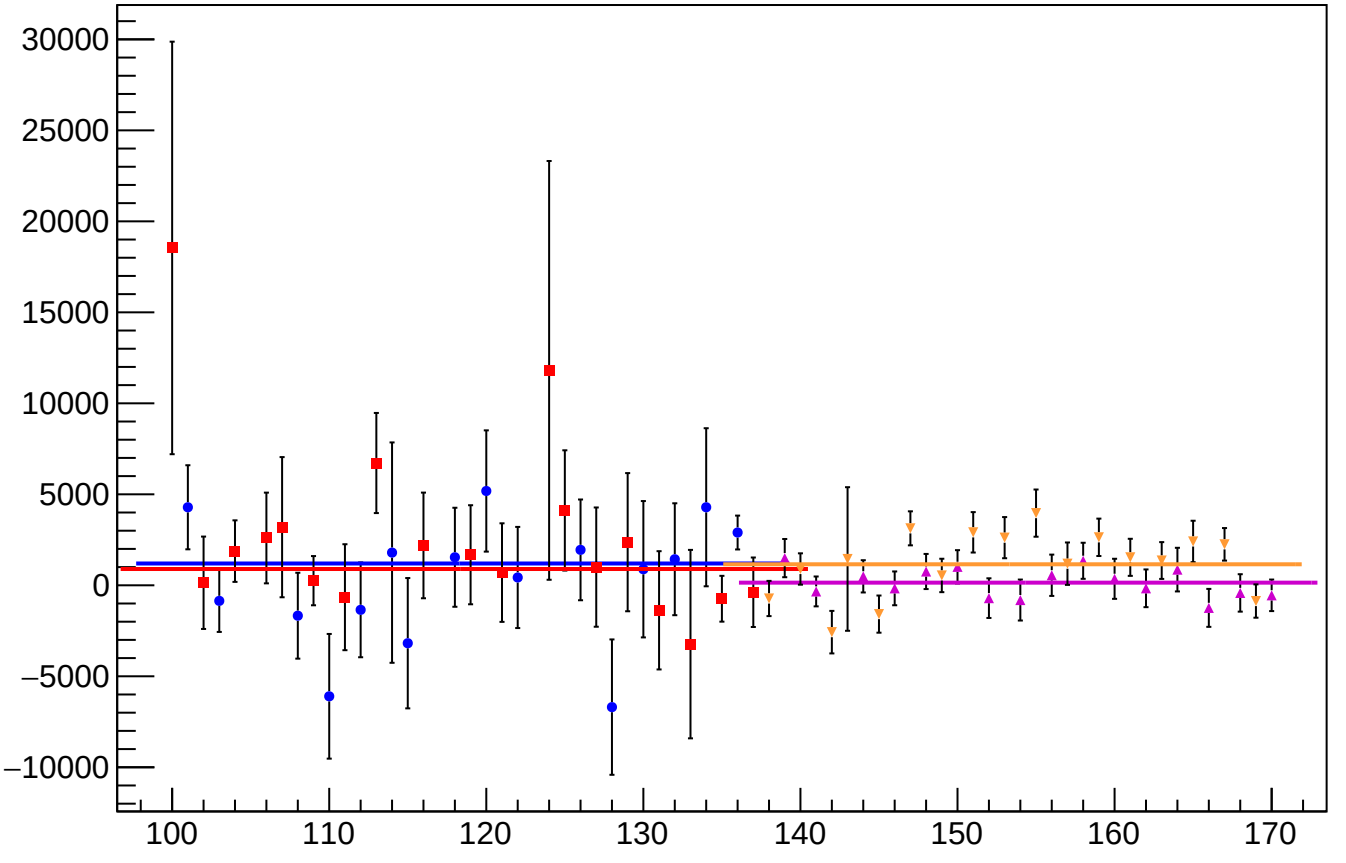
Right Out: 1603.464+/-0.427 $\chi^2$/NDF: 425793.4/18

Left In: 1747.797+/-0.340 $\chi^2$/NDF:58055.5/15

+ sign 1712.061+/-0.269 $\chi^2$/NDF: 840759.1/32

All: 1701.755+/-0.189 $\chi^2$/NDF: 1397459.8/67

- sign 1691.680+/-0.266 $\chi^2$/NDF: 553799.1/34




Right In: 1198.338+/-578.240 $\chi^2$/NDF: 21.7/15

Left Out: 1155.021+/-253.709 $\chi^2$/NDF:44.9/16

Right Out: 895.463+/-556.666 $\chi^2$/NDF: 14.2/18

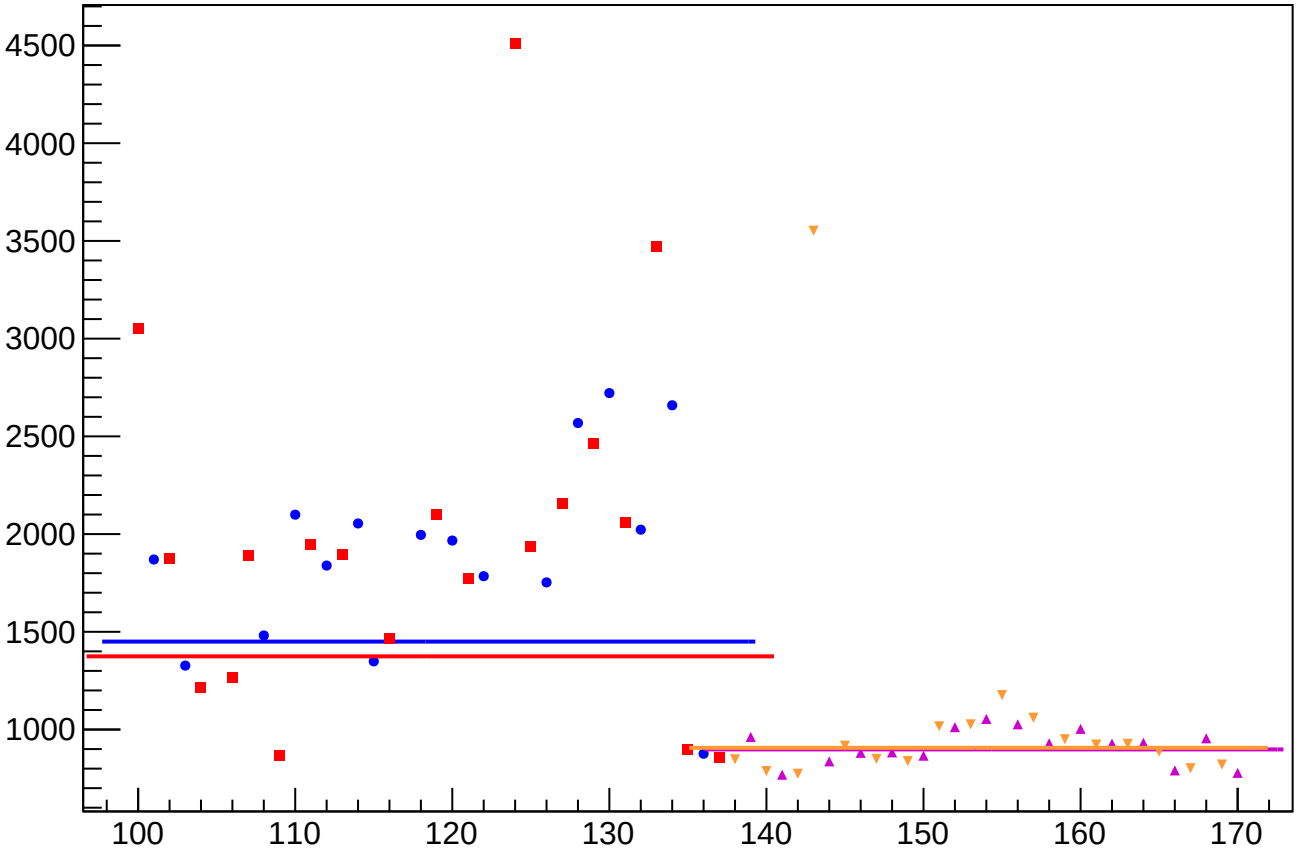
Left In: 145.437+/-248.710 $\chi^2$/NDF:9.7/15

+ sign 1162.014+/-232.330 $\chi^2$/NDF: 66.6/32

All: 705.931+/-162.393 $\chi^2$/NDF: 99.5/67

- sign 270.242+/-227.076 $\chi^2$/NDF: 25.4/34

# asym_at2_dd_eigen_cor_correction_rms vs Slug




Right In: 1449.939+/-0.409 $\chi^2$/NDF: 1792673.2/15

Left Out: 906.484+/-0.179 $\chi^2$/NDF:1203122.9/16

Right Out: 1374.438+/-0.394 $\chi^2$/NDF: 2127695.6/18

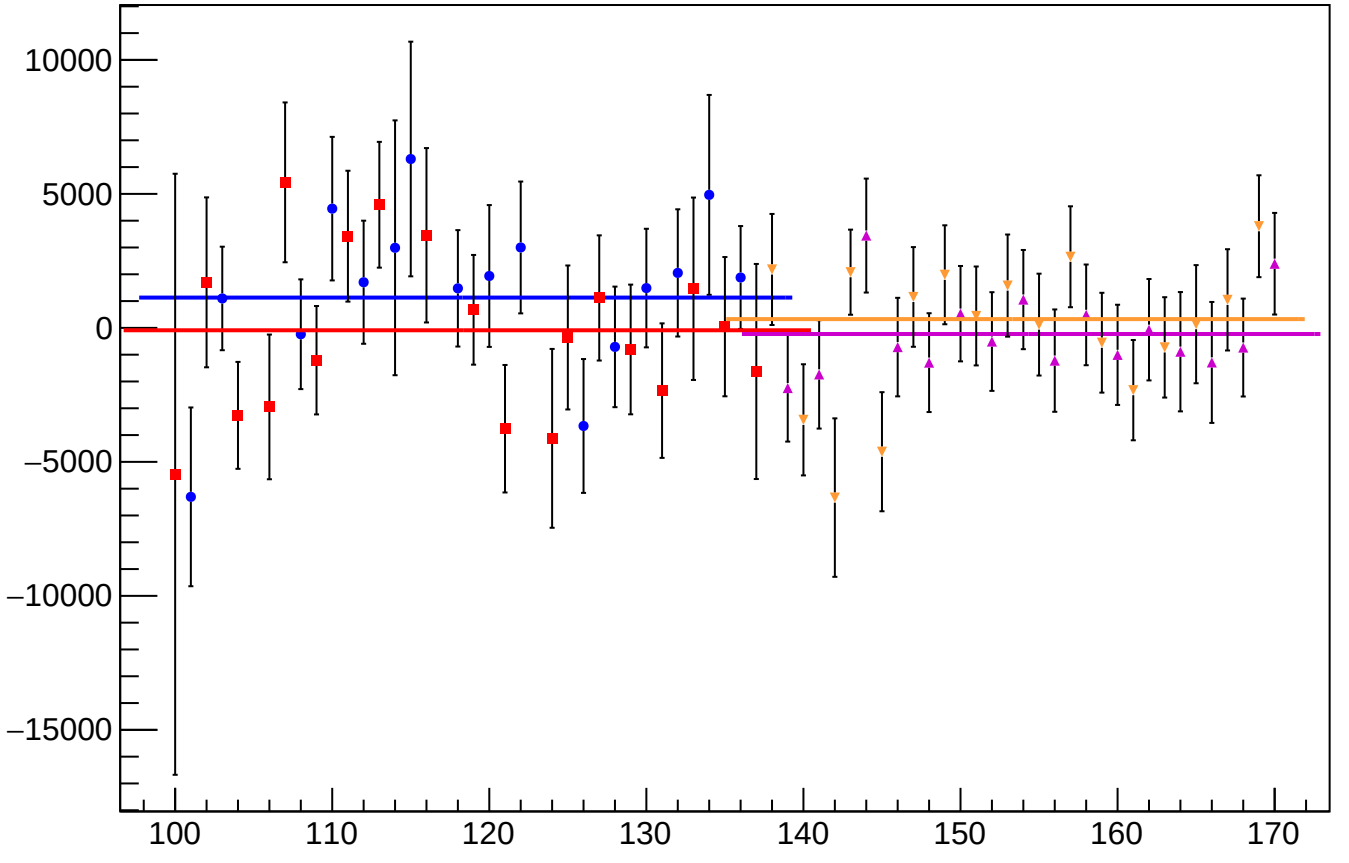
Left In: 898.177+/-0.176 $\chi^2$/NDF:245434.6/15

+ sign 994.216+/-0.164 $\chi^2$/NDF: 4477213.7/32

All: 985.629+/-0.115 $\chi^2$/NDF: 8076044.2/67

- sign 977.427+/-0.161 $\chi^2$/NDF: 3593489.1/34

# dit_asym_at2_dd_mean vs Slug




Right In: 1130.726+/-617.236 $\chi^2$/NDF: 15.0/15

Left Out: 327.445+/-470.824 $\chi^2$/NDF:24.3/16

Right Out: -89.220+/-603.072 $\chi^2$/NDF: 20.7/18

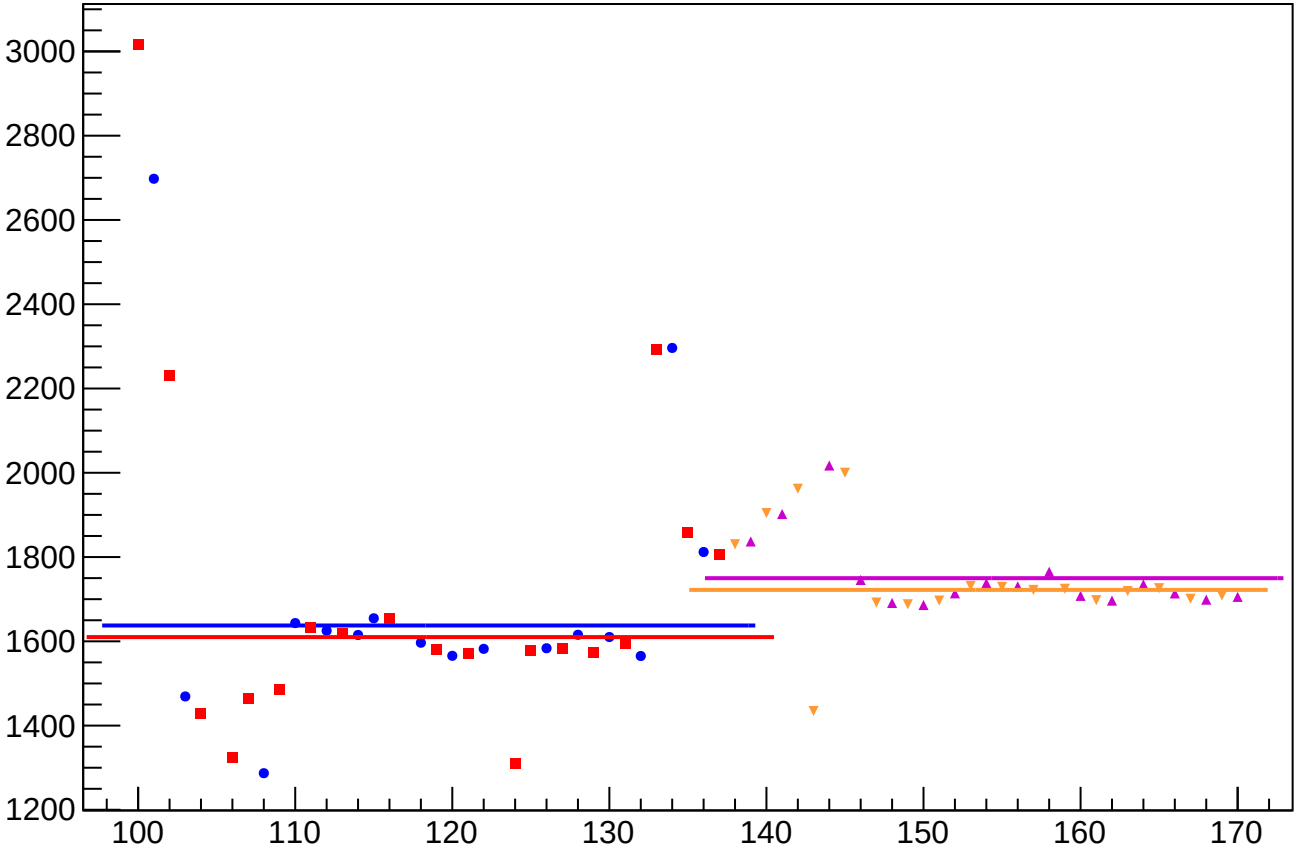
Left In: -228.459+/-481.799 $\chi^2$/NDF:8.5/15

+ sign 622.916+/-374.348 $\chi^2$/NDF: 40.4/32

All: 226.554+/-265.434 $\chi^2$/NDF: 71.9/67

- sign -174.213+/-376.422 $\chi^2$/NDF: 29.3/34

# dit_asym_at2_dd_rms vs Slug




Right In: 1637.574+/-0.436 $\chi^2$/NDF: 361417.0/15

Left Out: 1722.070+/-0.333 $\chi^2$/NDF:133336.8/16

Right Out: 1610.043+/-0.426 $\chi^2$/NDF: 280812.5/18

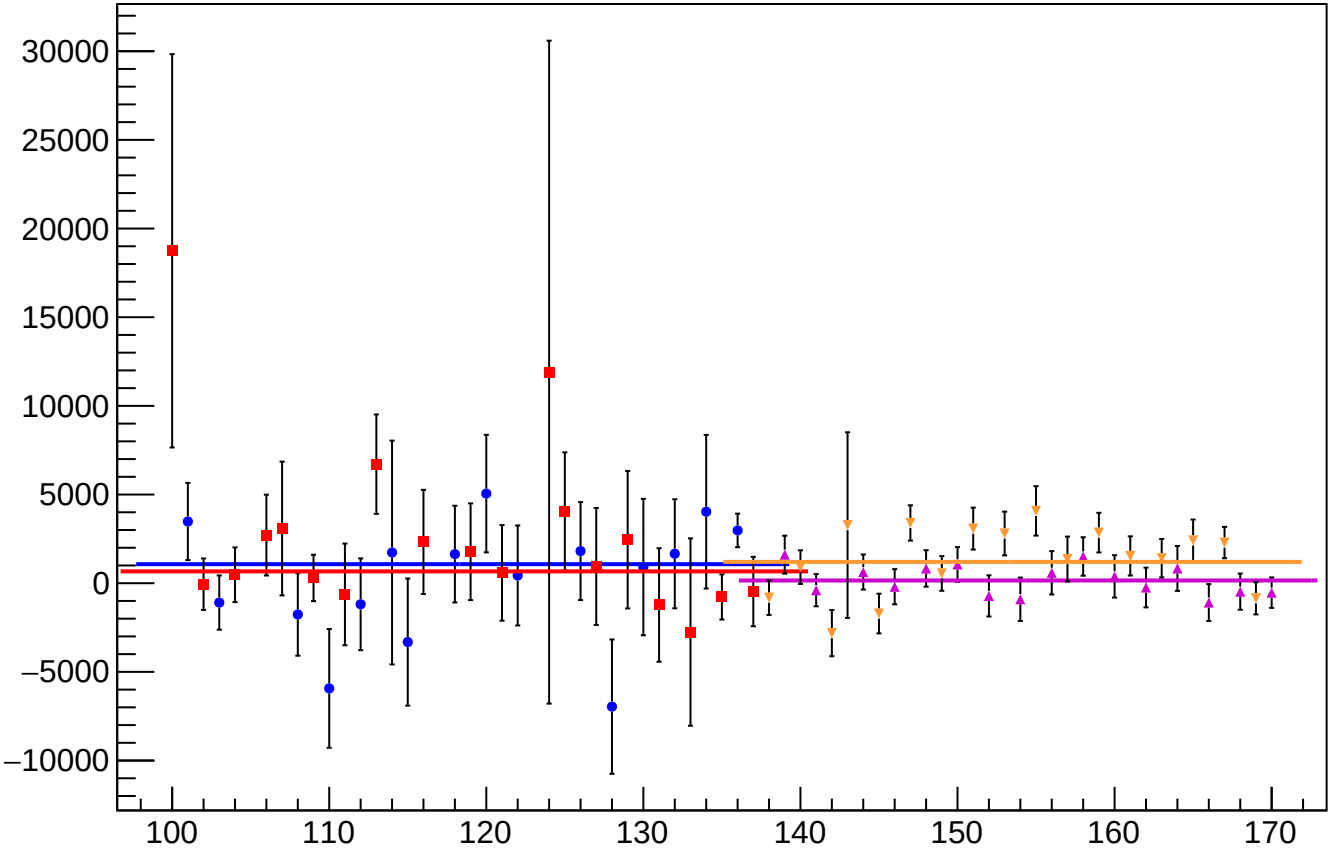
Left In: 1749.868+/-0.341 $\chi^2$/NDF:58415.5/15

+ sign 1690.990+/-0.265 $\chi^2$/NDF: 518447.7/32

All: 1693.179+/-0.188 $\chi^2$/NDF: 923439.5/67

- sign 1695.393+/-0.266 $\chi^2$/NDF: 404854.2/34

# asym_at2_dd_dit_correction_mean vs Slug




Right In: 1073.600+/-571.609 $\chi^2$/NDF: 22.0/15

Left Out: 1201.794+/-268.694 $\chi^2$/NDF:44.7/16

Right Out: 667.777+/-523.477 $\chi^2$/NDF: 13.6/18

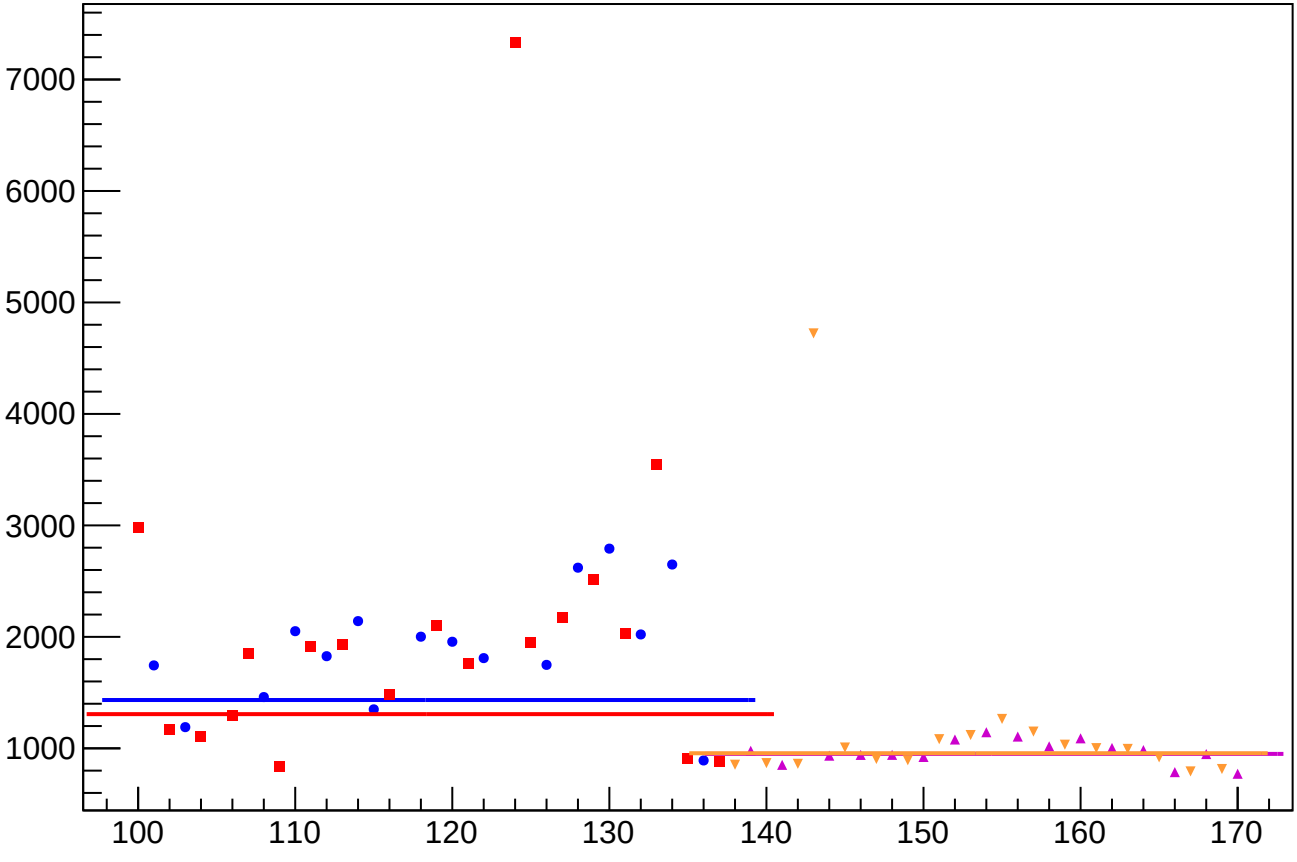
Left In: 154.158+/-263.400 $\chi^2$/NDF:9.8/15

+ sign 1178.594+/-243.169 $\chi^2$/NDF: 66.7/32

All: 703.110+/-169.093 $\chi^2$/NDF: 98.2/67

- sign 257.926+/-235.293 $\chi^2$/NDF: 24.1/34

# asym_at2_dd_dit_correction_rms vs Slug




Right In: 1433.477+/-0.404 $\chi^2$/NDF: 1763491.8/15

Left Out: 955.952+/-0.190 $\chi^2$/NDF:1440376.2/16

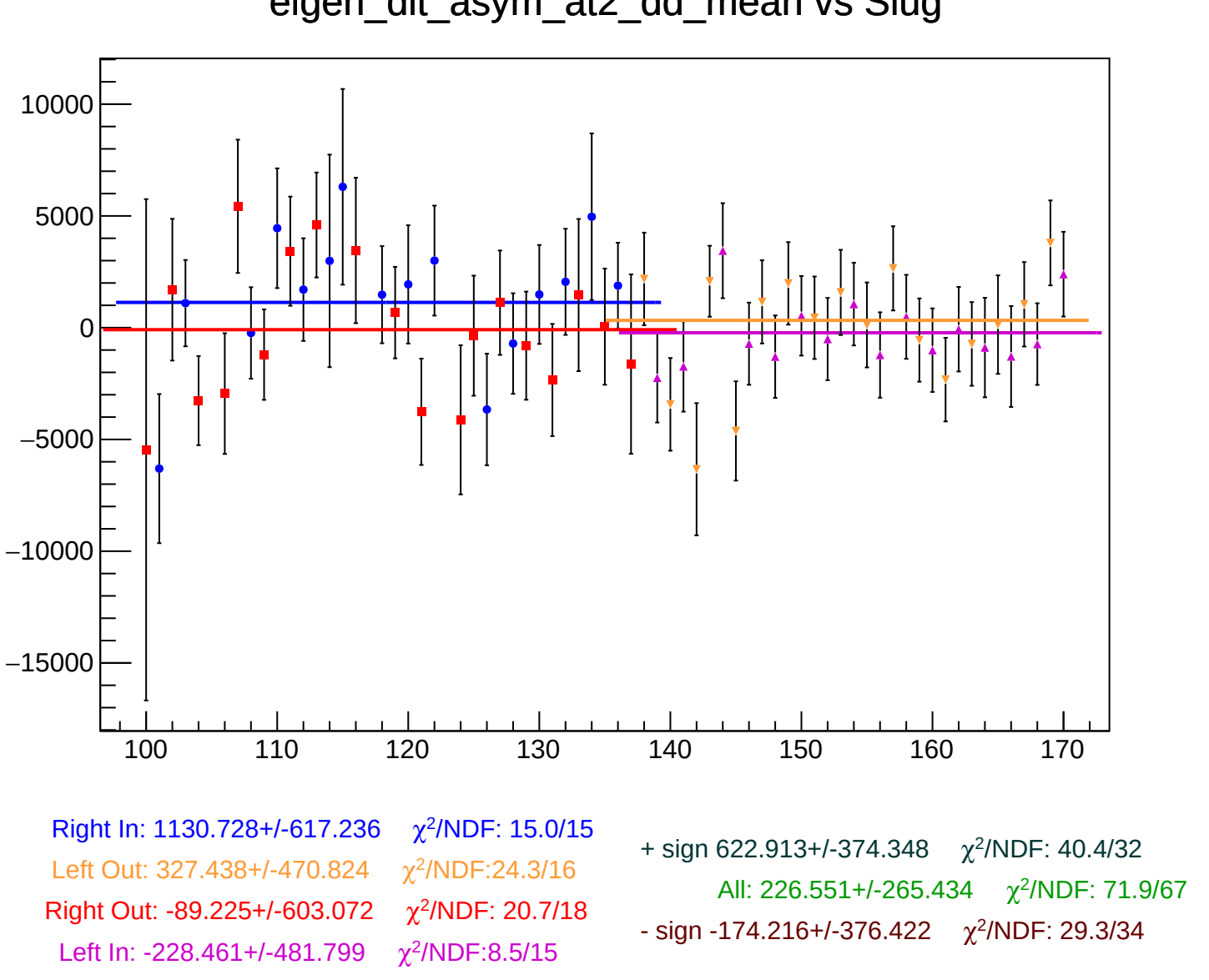
Right Out: 1306.866+/-0.370 $\chi^2$/NDF: 2183906.3/18

Left In: 950.086+/-0.186 $\chi^2$/NDF:311373.1/15

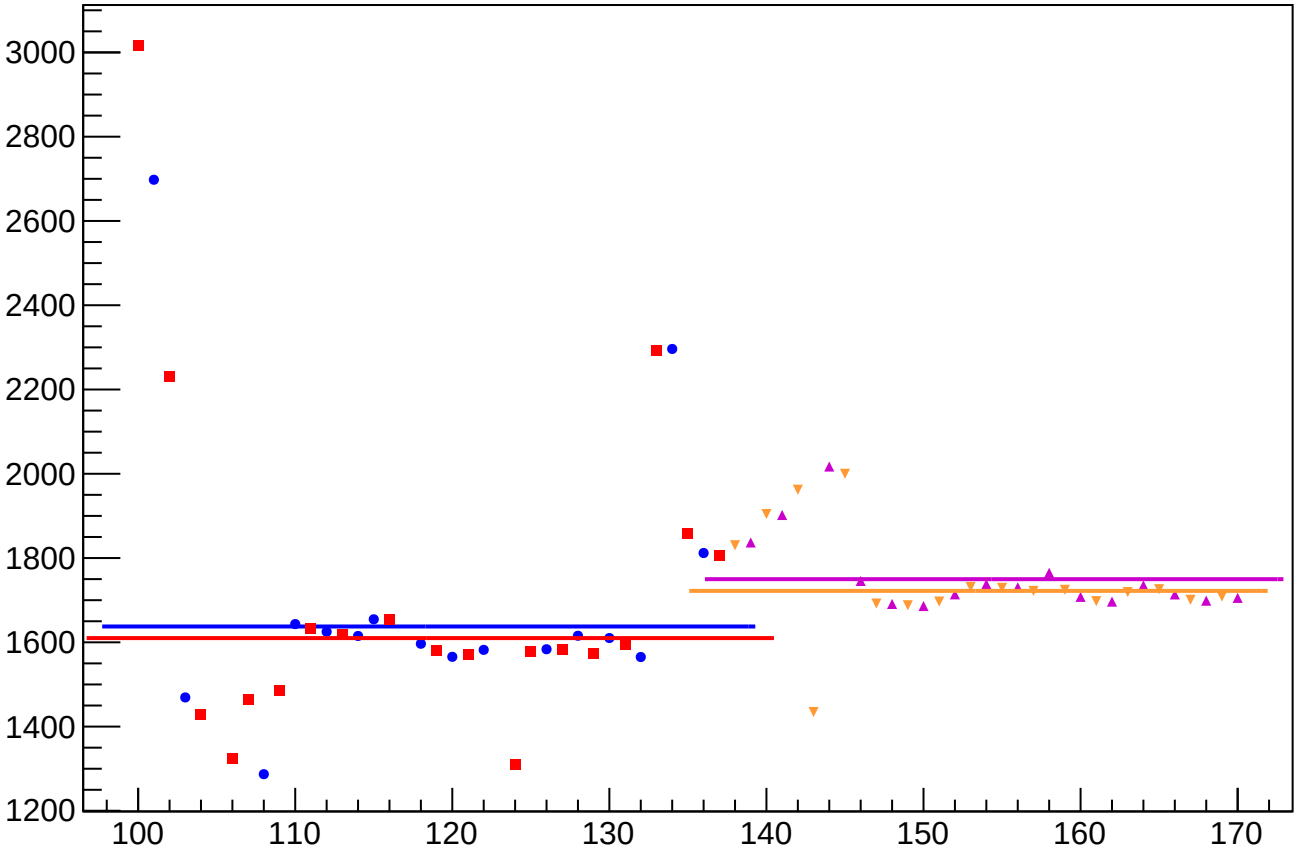
+ sign 1042.371+/-0.172 $\chi^2$/NDF: 4347068.7/32

All: 1031.937+/-0.120 $\chi^2$/NDF: 7590826.2/67

- sign 1022.167+/-0.166 $\chi^2$/NDF: 3236627.0/34


eigen_dit_asym_at2_dd_mean vs Slug
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: 1130.728+/-617.236 χ²/NDF: 15.0/15
Left Out: 327.438+/-470.824 χ²/NDF:24.3/16
Right Out: -89.225+/-603.072 χ²/NDF: 20.7/18
Left In: -228.461+/-481.799 χ²/NDF:8.5/15
+ sign 622.913+/-374.348 χ²/NDF: 40.4/32
All: 226.551+/-265.434 χ²/NDF: 71.9/67
- sign -174.216+/-376.422 χ²/NDF: 29.3/34

# eigen_dit_asym_at2_dd_rms vs Slug




Right In: 1637.574+/-0.436 $\chi^2$/NDF: 361416.8/15

Left Out: 1722.070+/-0.333 $\chi^2$/NDF:133335.8/16

Right Out: 1610.043+/-0.426 $\chi^2$/NDF: 280812.7/18

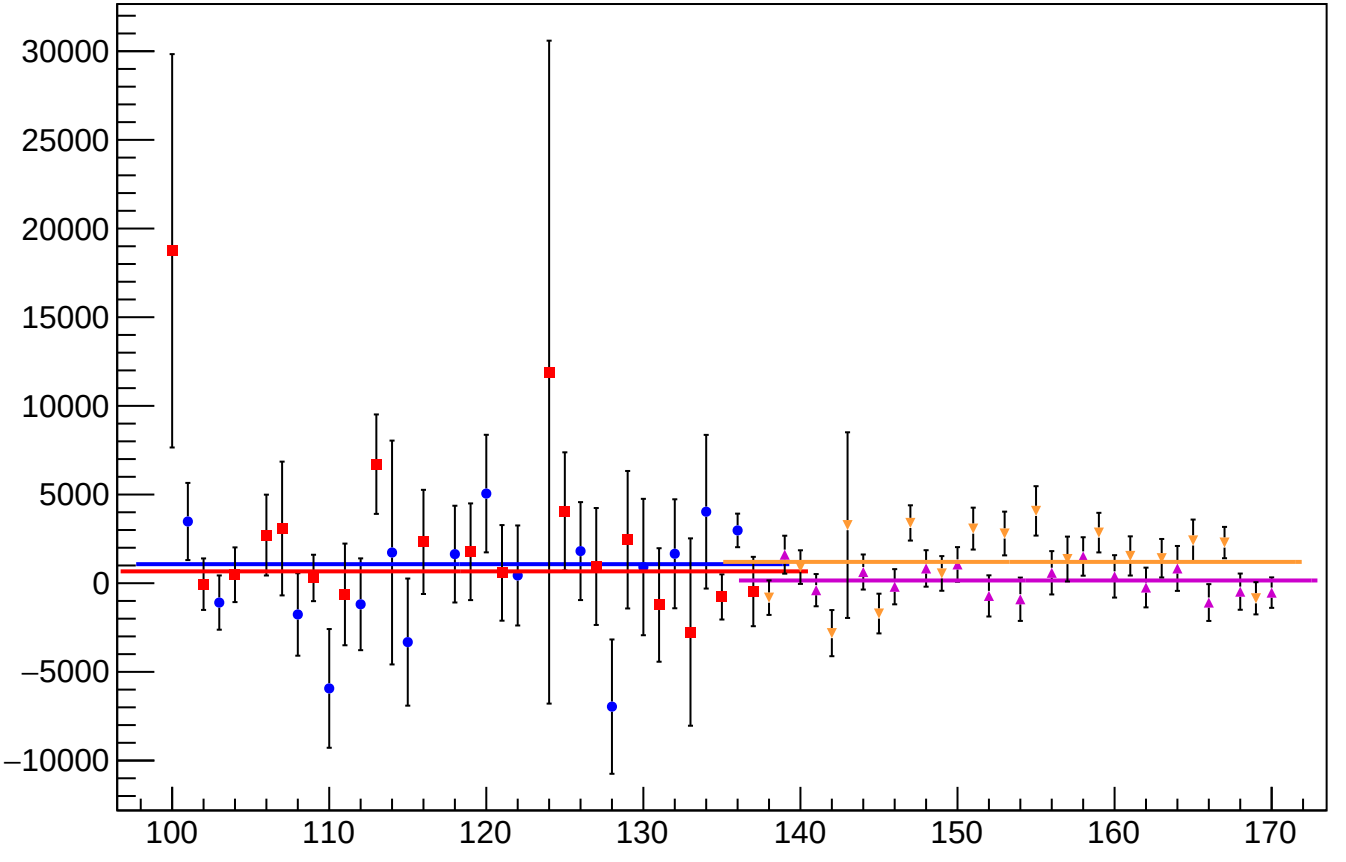
Left In: 1749.868+/-0.341 $\chi^2$/NDF:58415.6/15

+ sign 1690.990+/-0.265 $\chi^2$/NDF: 518446.6/32

All: 1693.179+/-0.188 $\chi^2$/NDF: 923438.9/67

- sign 1695.393+/-0.266 $\chi^2$/NDF: 404854.7/34

# asym_at2_dd_eigen_dit_correction_mean vs Slug




Right In: 1073.589+/-571.613 $\chi^2$/NDF: 22.0/15

Left Out: 1201.804+/-268.695 $\chi^2$/NDF:44.7/16

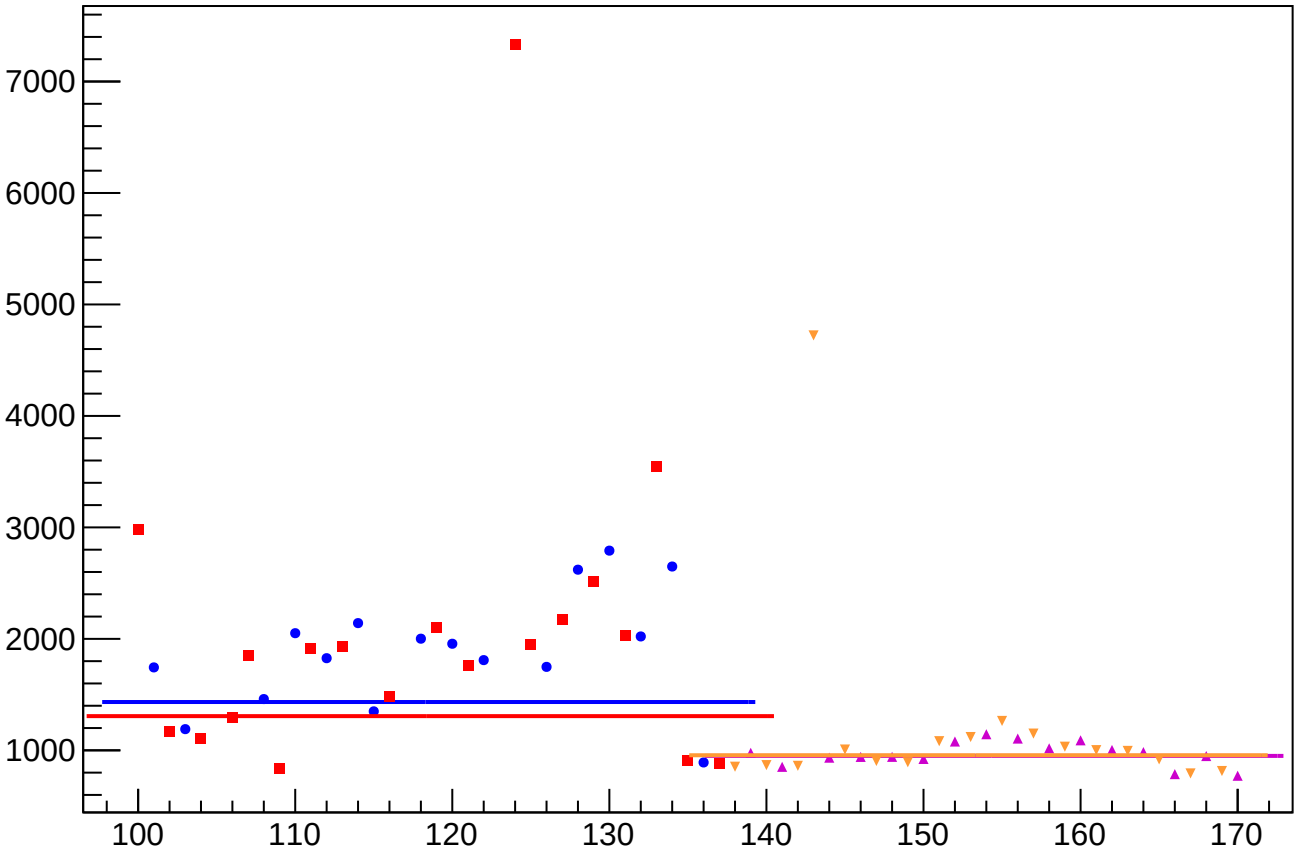
Right Out: 667.789+/-523.481 $\chi^2$/NDF: 13.6/18

Left In: 154.154+/-263.400 $\chi^2$/NDF:9.8/15

+ sign 1178.600+/-243.169 $\chi^2$/NDF: 66.7/32

All: 703.111+/-169.093 $\chi^2$/NDF: 98.2/67

- sign 257.924+/-235.293 $\chi^2$/NDF: 24.1/34




Right In: 1433.492+/-0.404 $\chi^2$/NDF: 1763397.4/15

Left Out: 955.953+/-0.190 $\chi^2$/NDF:1440360.8/16

Right Out: 1306.880+/-0.370 $\chi^2$/NDF: 2183835.0/18

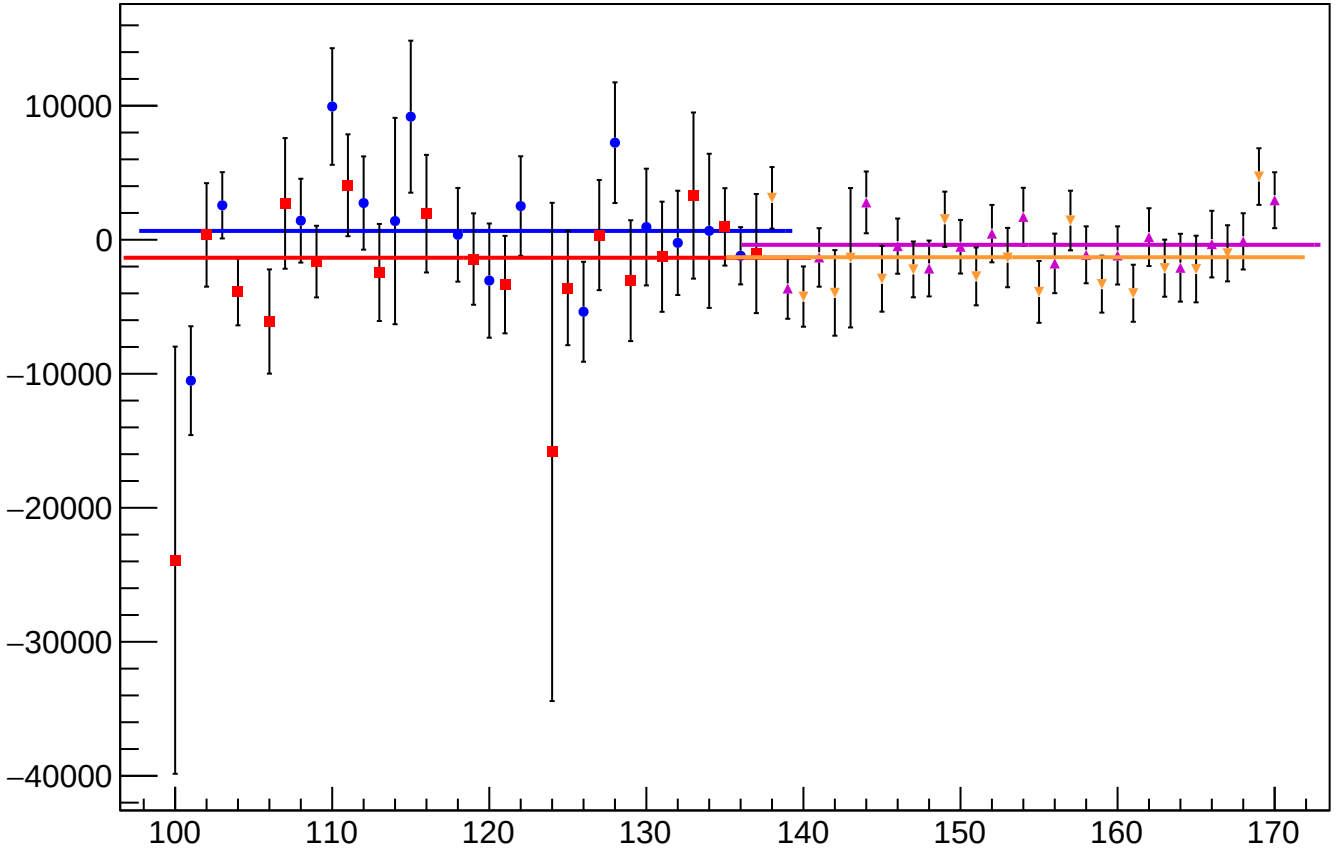
Left In: 950.086+/-0.186 $\chi^2$/NDF:311376.1/15

+ sign 1042.375+/-0.172 $\chi^2$/NDF: 4347009.7/32

All: 1031.939+/-0.120 $\chi^2$/NDF: 7590747.7/67

- sign 1022.169+/-0.166 $\chi^2$/NDF: 3236606.1/34

# asym_at2_dd_mean vs Slug




Right In: 659.458+/-909.570 $\chi^2$/NDF: 22.0/15

Left Out: -1304.517+/-555.567 $\chi^2$/NDF:22.7/16

Right Out: -1341.998+/-890.576 $\chi^2$/NDF: 10.8/18

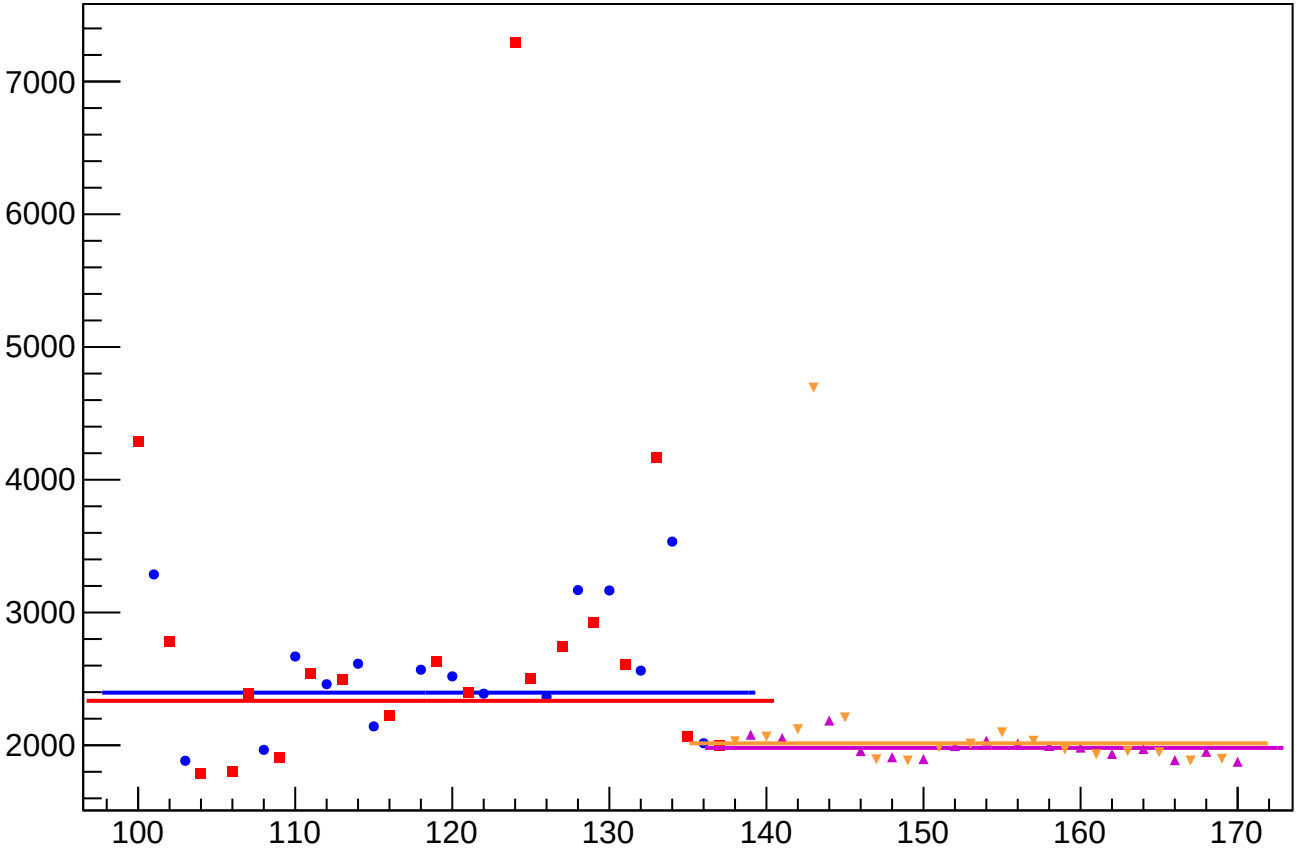
Left In: -378.439+/-545.001 $\chi^2$/NDF:9.7/15

+ sign -770.885+/-474.121 $\chi^2$/NDF: 48.1/32

All: -704.649+/-331.932 $\chi^2$/NDF: 69.5/67

- sign -640.974+/-464.863 $\chi^2$/NDF: 21.4/34

# asym_at2_dd_rms vs Slug




Right In: 2396.276+/-0.643 $\chi^2$/NDF: 507897.2/15

Left Out: 2014.587+/-0.393 $\chi^2$/NDF:585013.2/16

Right Out: 2334.592+/-0.630 $\chi^2$/NDF: 681568.6/18

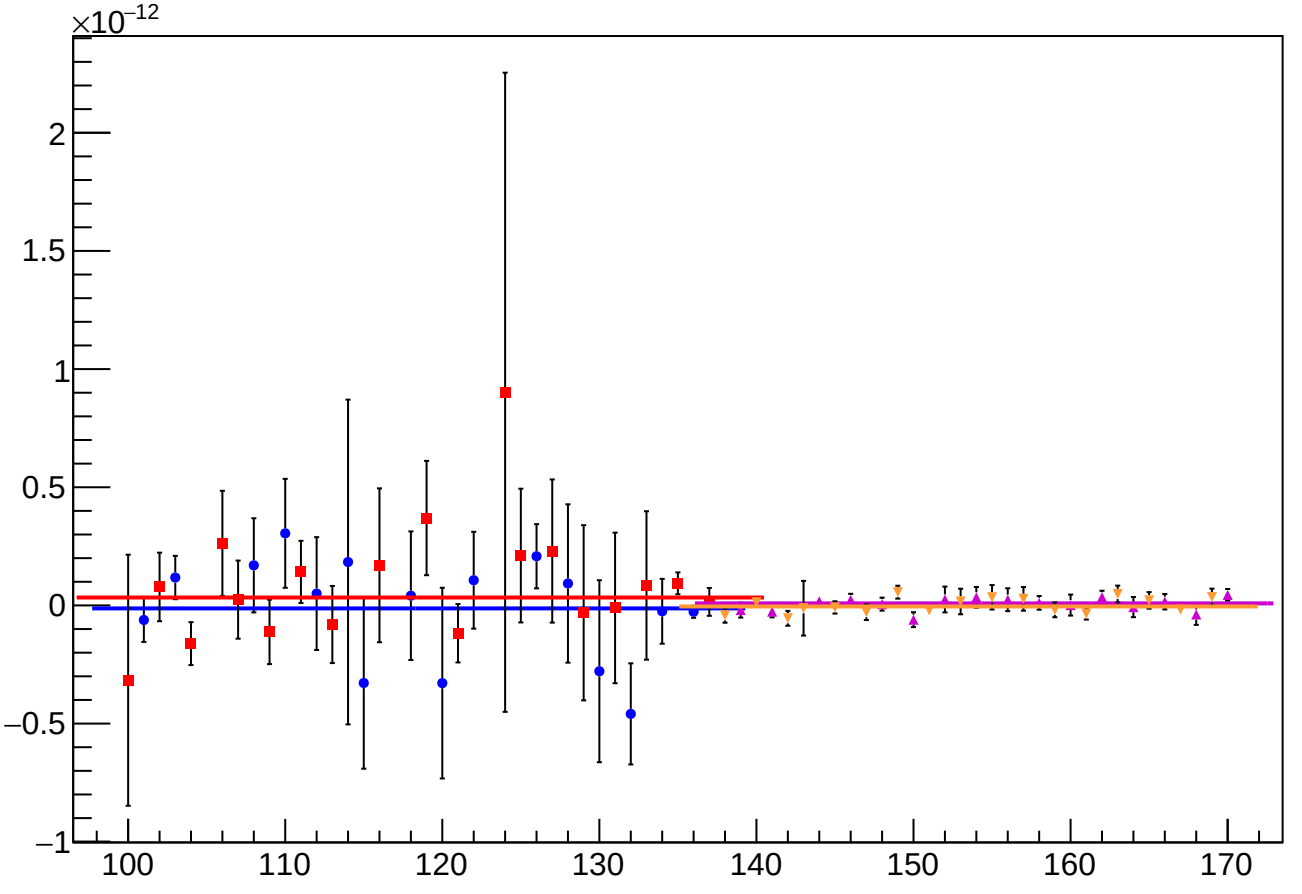
Left In: 1979.973+/-0.385 $\chi^2$/NDF:39219.7/15

+ sign 2118.296+/-0.335 $\chi^2$/NDF: 1349407.3/32

All: 2097.034+/-0.235 $\chi^2$/NDF: 2308797.5/67

- sign 2076.595+/-0.329 $\chi^2$/NDF: 951501.8/34

# asym_at2_dd_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:18.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.2/18

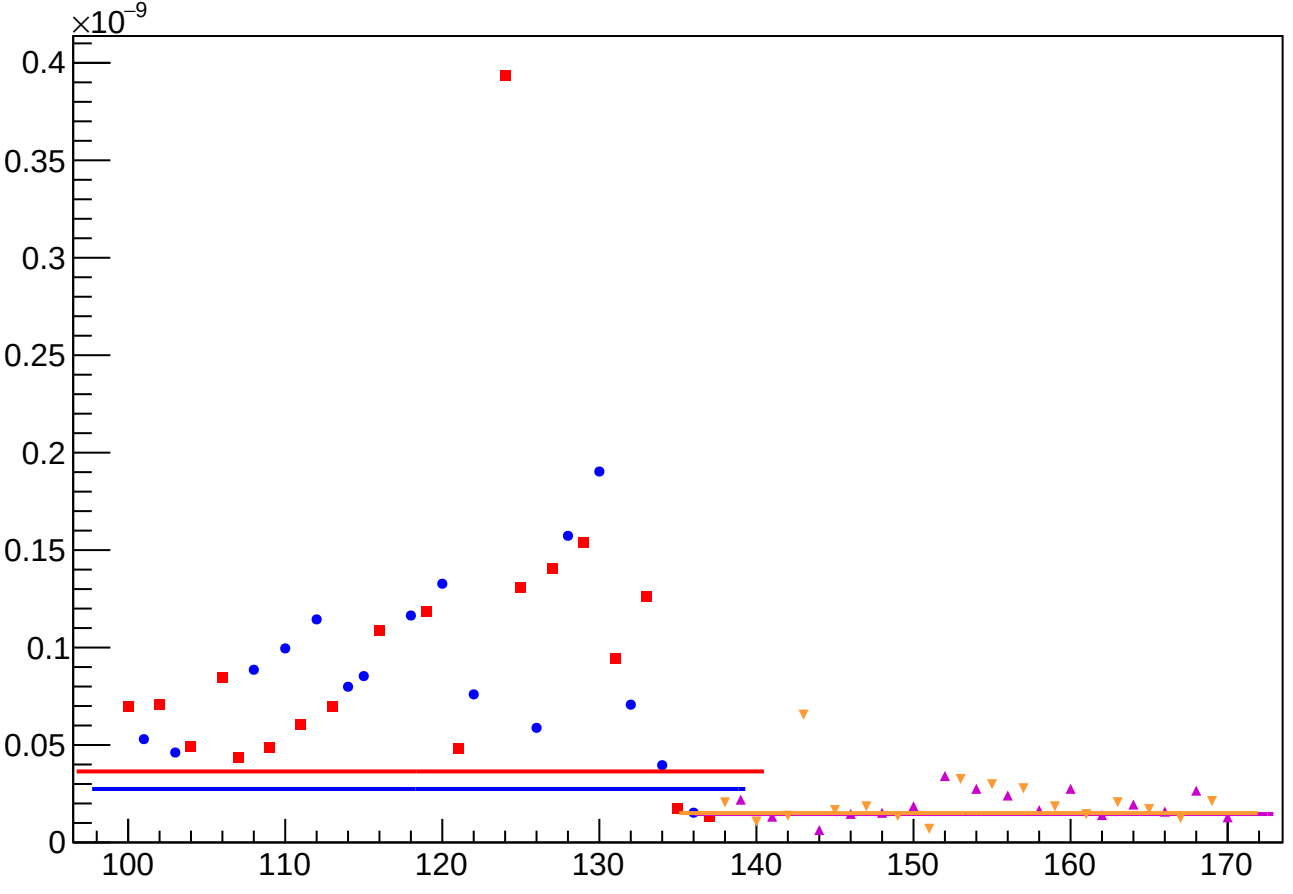
Left In: 0.000+/-0.000 $\chi^2$/NDF:13.2/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 33.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 64.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 29.2/34

# asym_at2_dd_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2728016.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1638482.8/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2442395.8/18

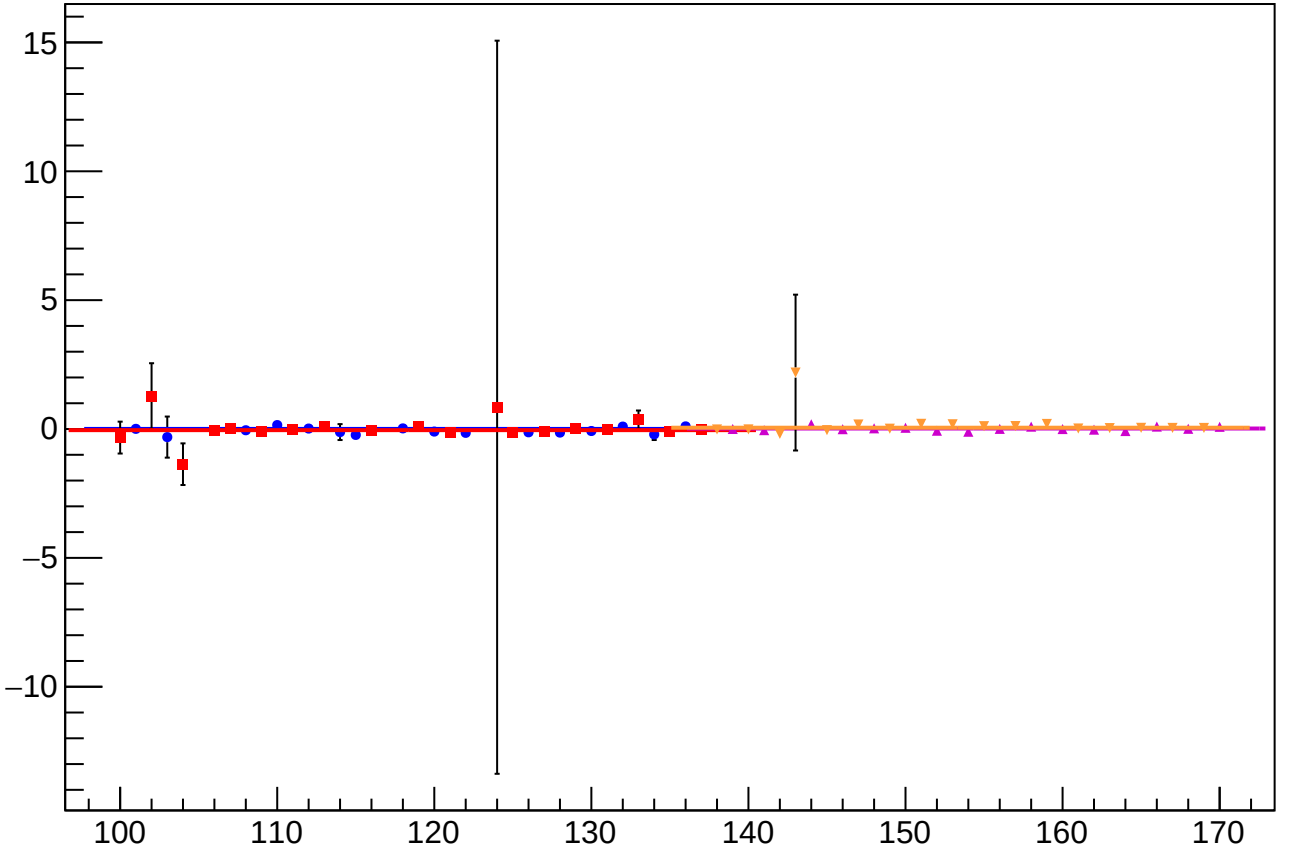
Left In: 0.000+/-0.000 $\chi^2$/NDF:1729553.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4929141.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10248953.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5317634.5/34

# asym_at2_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.003+/-0.027 $\chi^2$/NDF: 13.3/15

Left Out: 0.050+/-0.017 $\chi^2$/NDF:19.4/16

Right Out: -0.044+/-0.025 $\chi^2$/NDF: 12.7/18

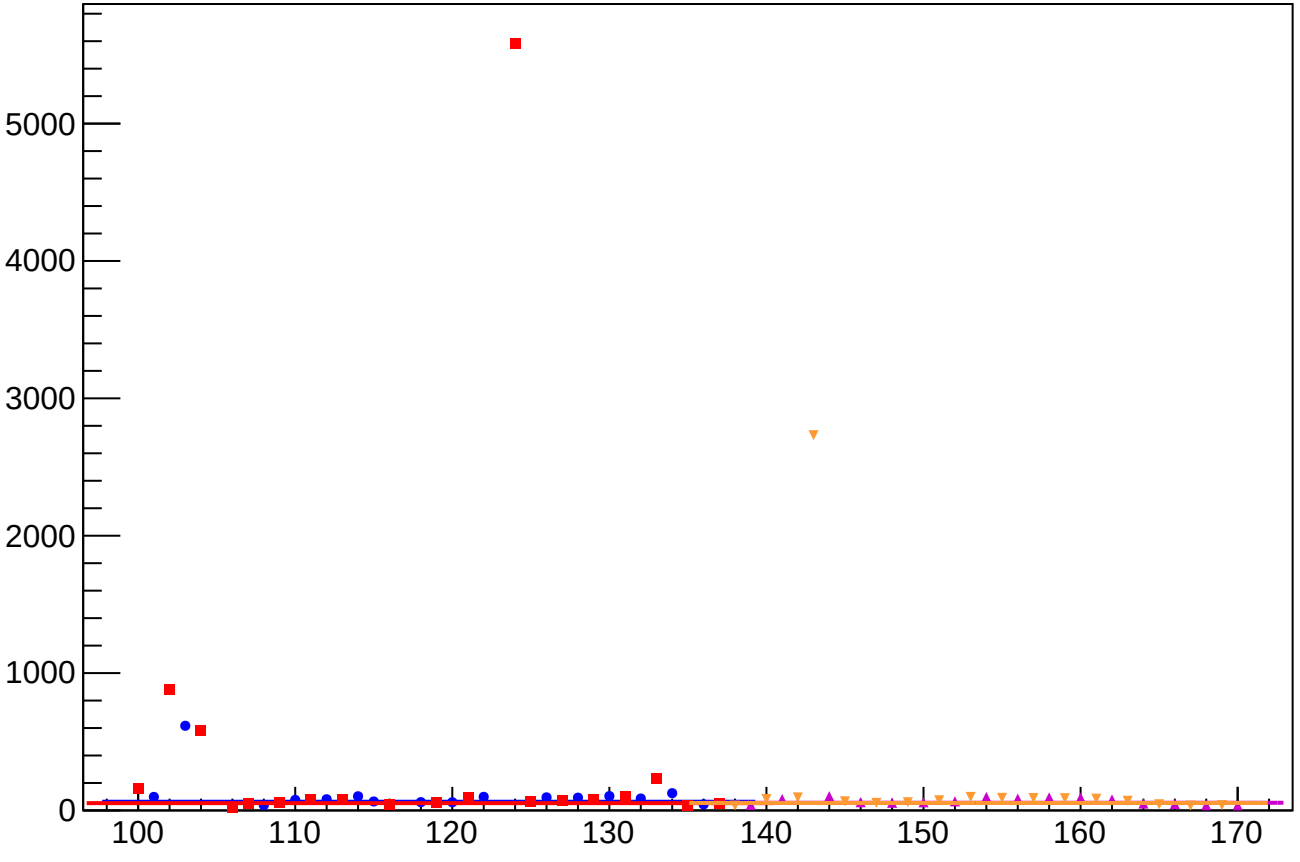
Left In: 0.019+/-0.017 $\chi^2$/NDF:11.8/15

+ sign 0.037+/-0.015 $\chi^2$/NDF: 34.8/32

All: 0.017+/-0.010 $\chi^2$/NDF: 67.1/67

- sign -0.001+/-0.014 $\chi^2$/NDF: 28.8/34

# asym_at2_dd_dit_vs_cor_diff_rms vs Slug




Right In: 63.454+/-0.019 $\chi^2$/NDF: 2445255.1/15

Left Out: 54.526+/-0.012 $\chi^2$/NDF:4501120.5/16

Right Out: 53.206+/-0.018 $\chi^2$/NDF: 3945779.6/18

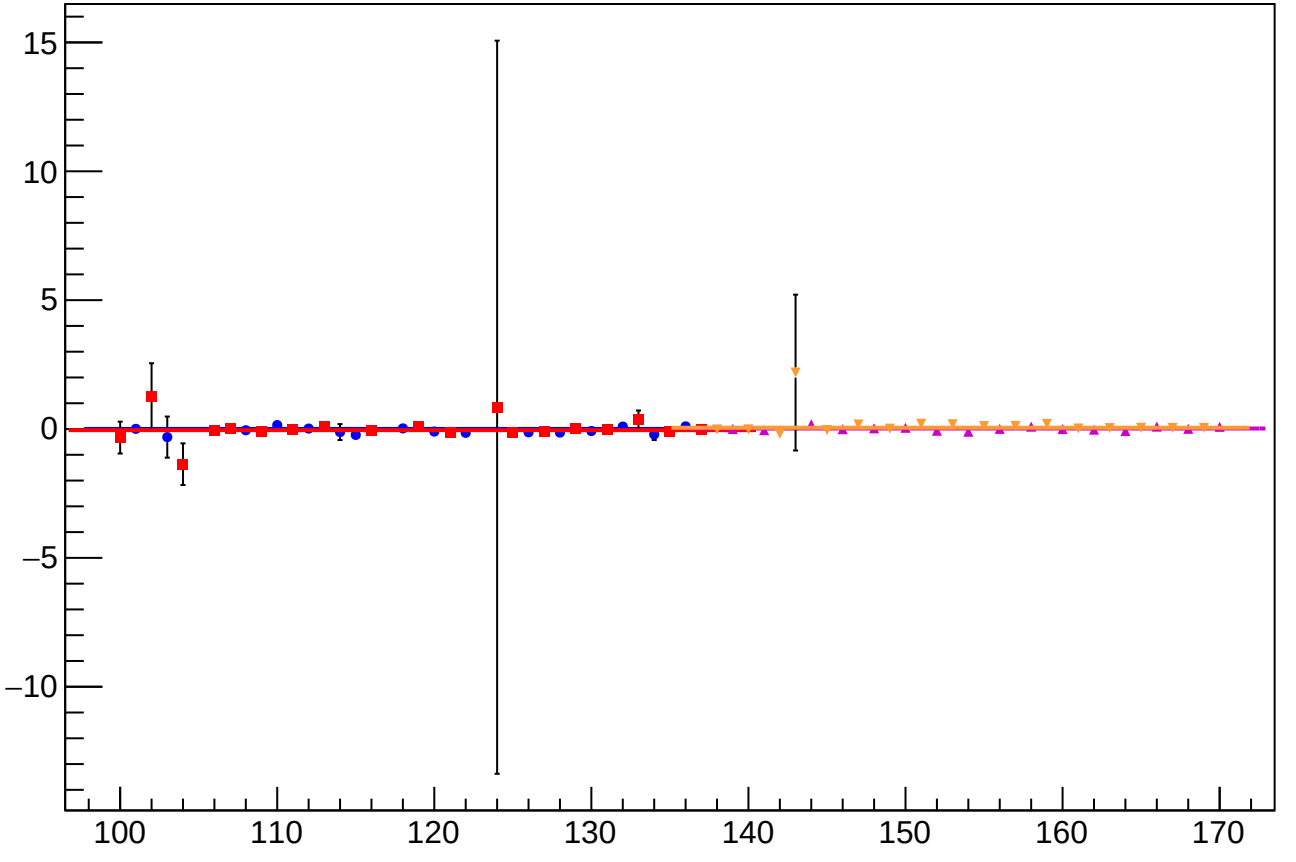
Left In: 55.974+/-0.012 $\chi^2$/NDF:2652111.3/15

+ sign 57.076+/-0.010 $\chi^2$/NDF: 7100161.5/32

All: 56.048+/-0.007 $\chi^2$/NDF: 13734265.1/67

- sign 55.078+/-0.010 $\chi^2$/NDF: 6614685.7/34

# asym_at2_dd_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.003+/-0.027 $\chi^2$/NDF: 13.3/15

Left Out: 0.050+/-0.017 $\chi^2$/NDF:19.4/16

Right Out: -0.044+/-0.025 $\chi^2$/NDF: 12.7/18

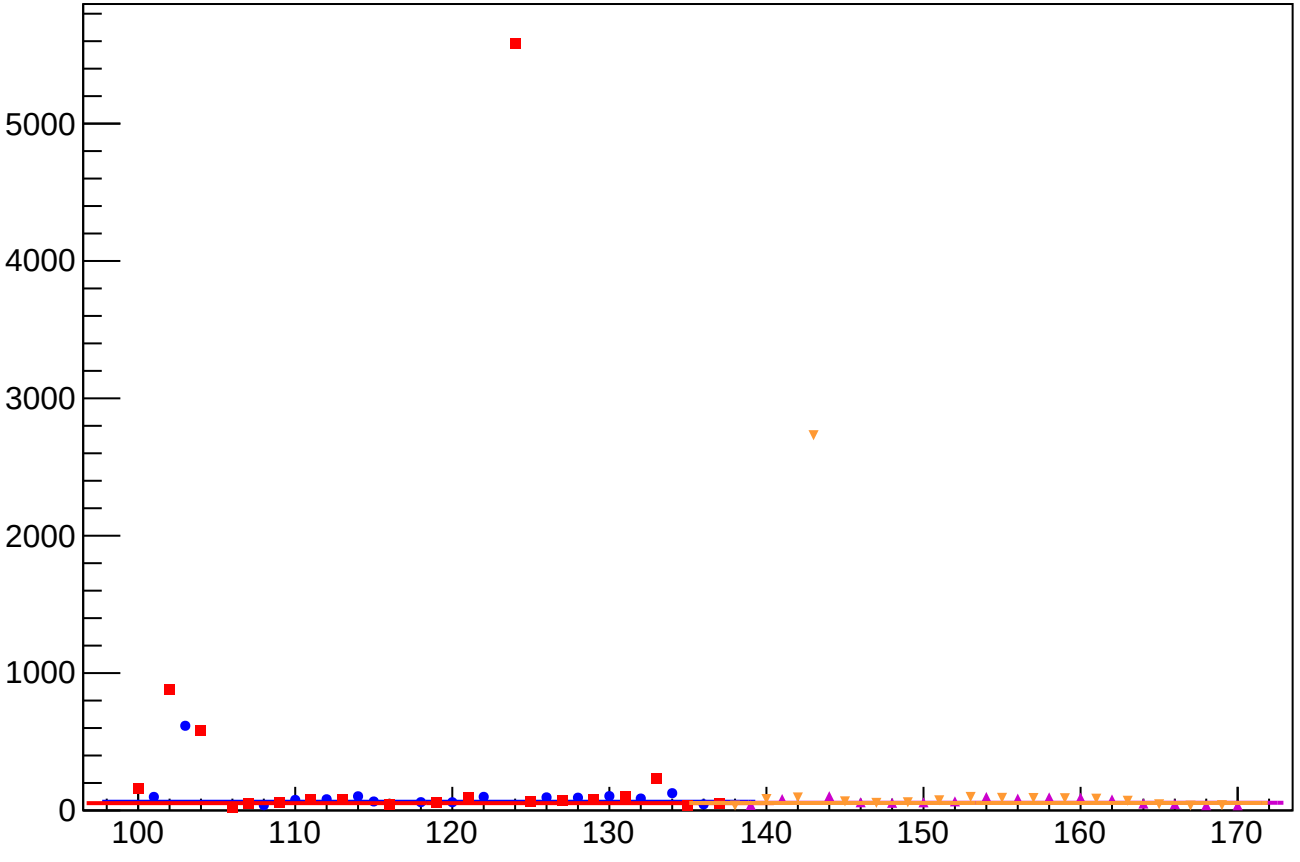
Left In: 0.019+/-0.017 $\chi^2$/NDF:11.8/15

+ sign 0.037+/-0.015 $\chi^2$/NDF: 34.8/32

All: 0.017+/-0.010 $\chi^2$/NDF: 67.1/67

- sign -0.001+/-0.014 $\chi^2$/NDF: 28.8/34

# asym_at2_dd_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 63.454+/-0.019 $\chi^2$/NDF: 2445255.1/15

Left Out: 54.526+/-0.012 $\chi^2$/NDF:4501120.5/16

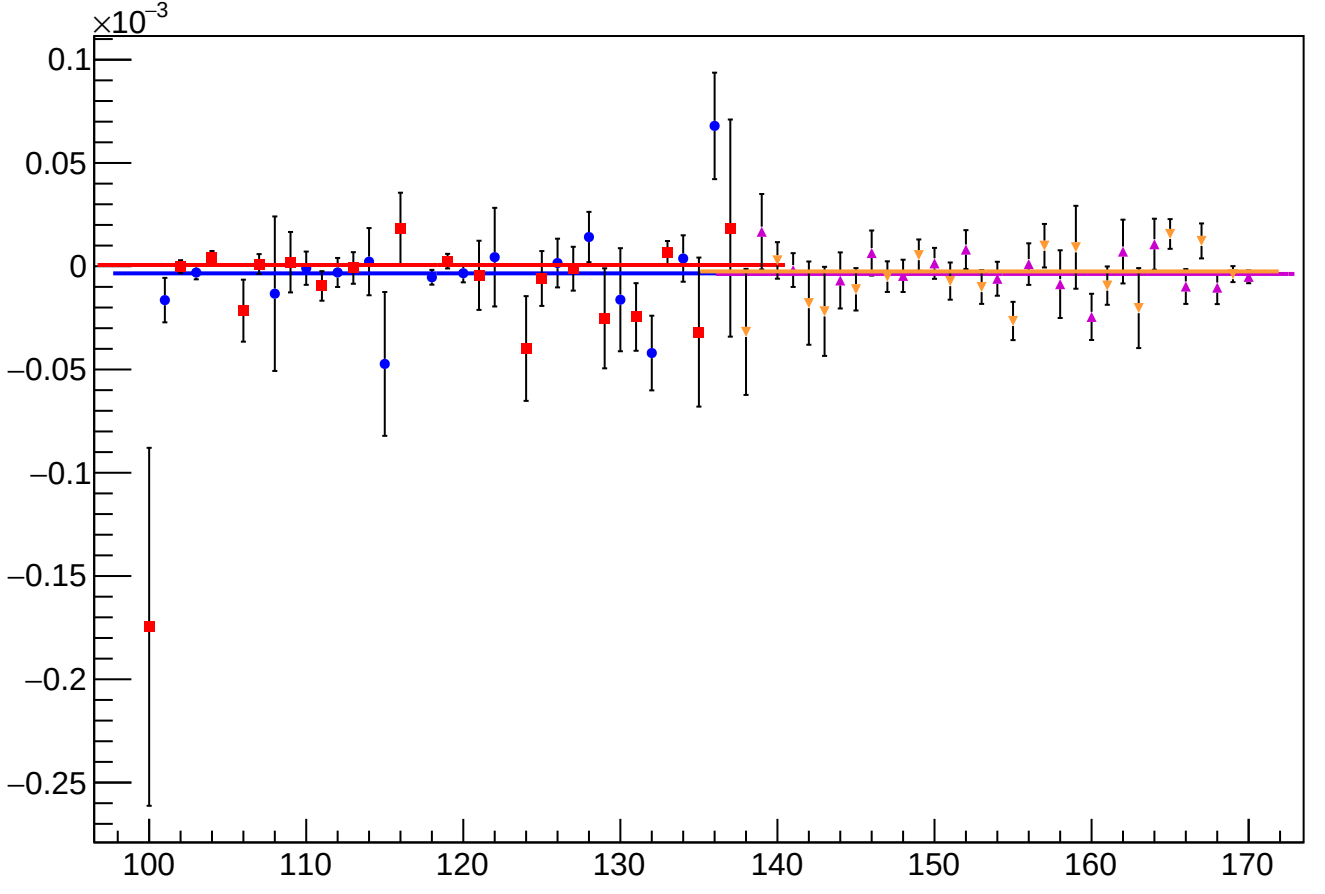
Right Out: 53.206+/-0.018 $\chi^2$/NDF: 3945779.6/18

Left In: 55.974+/-0.012 $\chi^2$/NDF:2652111.3/15

+ sign 57.076+/-0.010 $\chi^2$/NDF: 7100161.5/32

All: 56.048+/-0.007 $\chi^2$/NDF: 13734265.1/67

- sign 55.078+/-0.010 $\chi^2$/NDF: 6614685.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 18.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:25.0/16

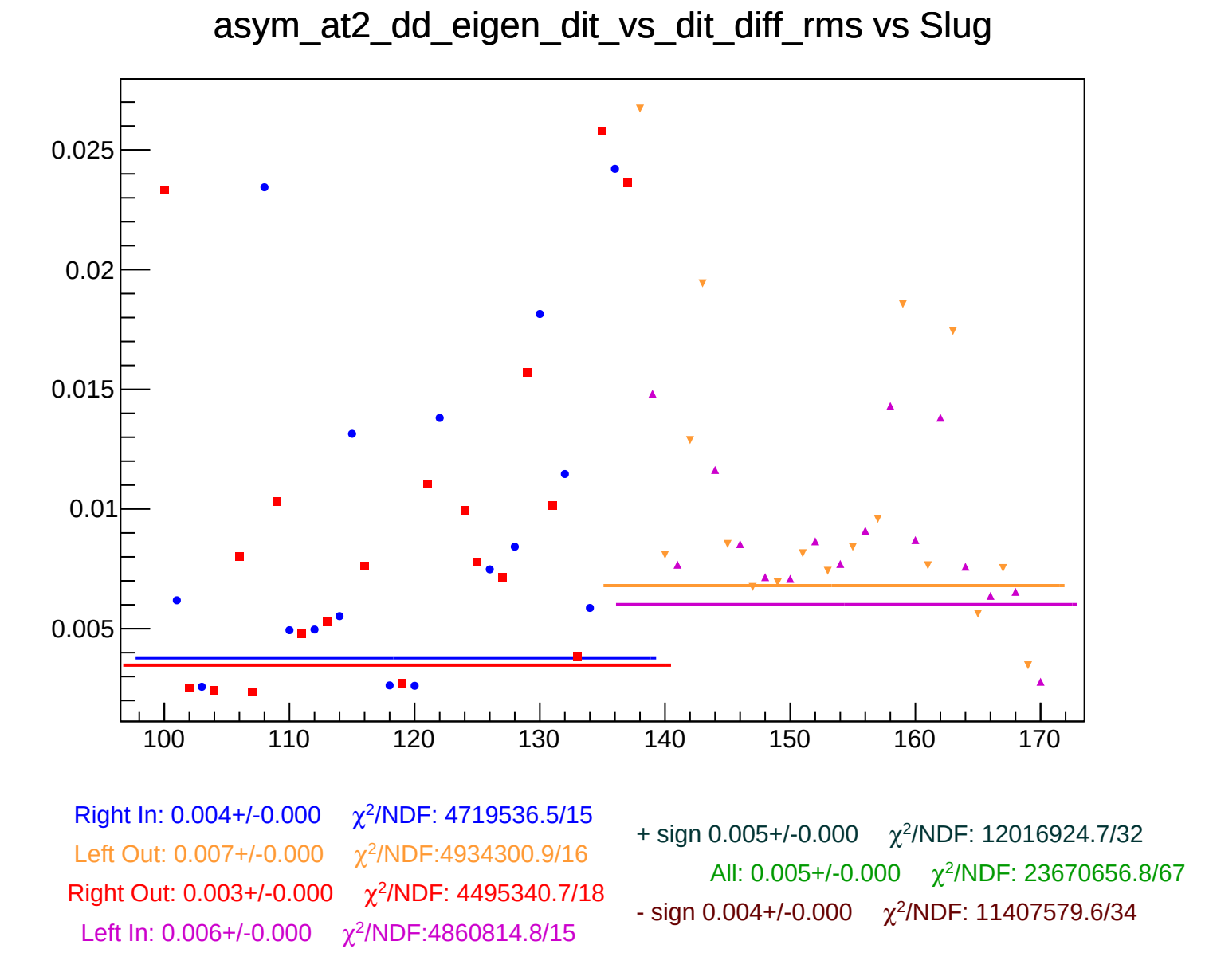
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 19.2/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:11.4/15

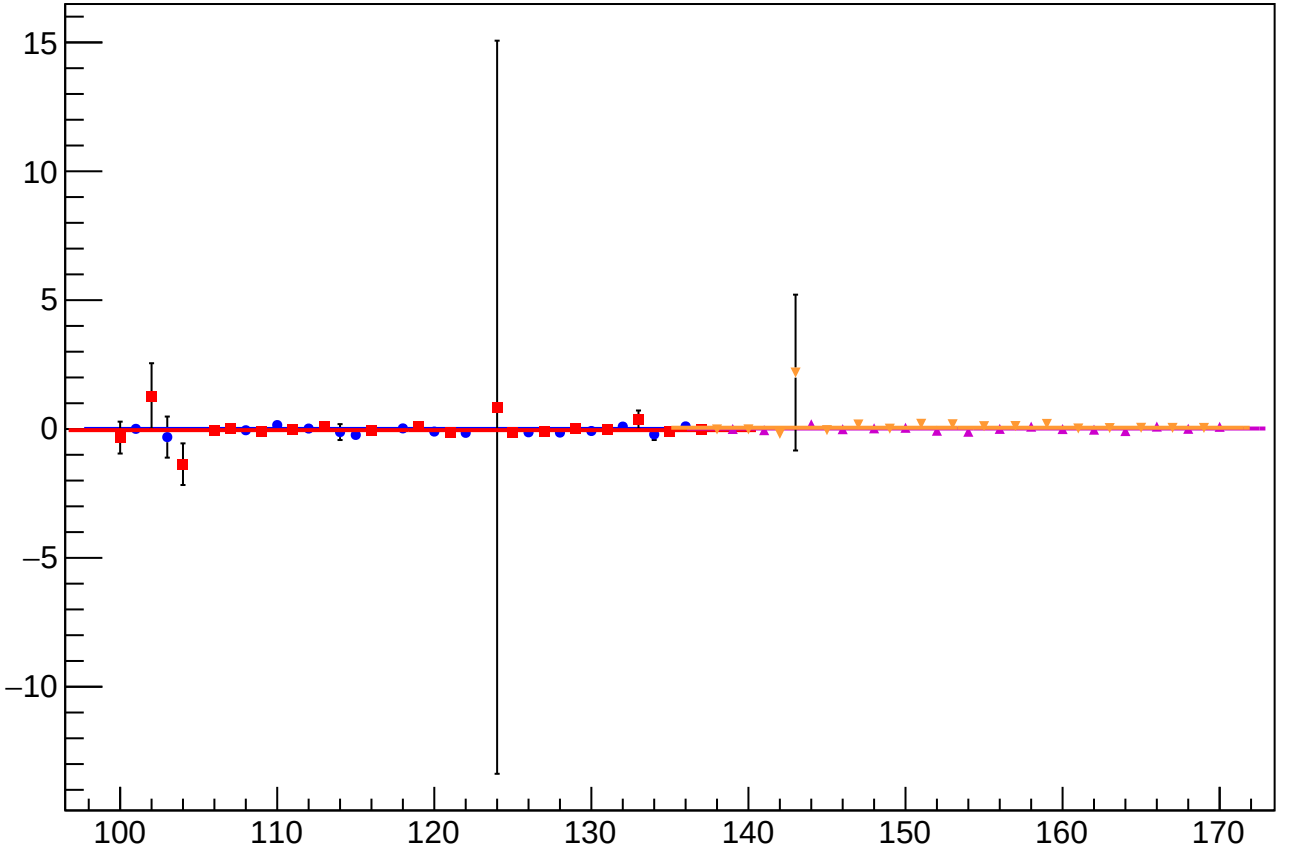
+ sign -0.000+/-0.000 $\chi^2$/NDF: 44.0/32

All: -0.000+/-0.000 $\chi^2$/NDF: 78.8/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 33.5/34


asym_at2_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.025
0.02
0.015
0.01
0.005
100
110
120
130
140
150
160
170
Right In: 0.004+/-0.000 χ²/NDF: 4719536.5/15
Left Out: 0.007+/-0.000 χ²/NDF:4934300.9/16
Right Out: 0.003+/-0.000 χ²/NDF: 4495340.7/18
Left In: 0.006+/-0.000 χ²/NDF:4860814.8/15
+ sign 0.005+/-0.000 χ²/NDF: 12016924.7/32
All: 0.005+/-0.000 χ²/NDF: 23670656.8/67
- sign 0.004+/-0.000 χ²/NDF: 11407579.6/34

# asym_at2_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.003+/-0.027 $\chi^2$/NDF: 13.3/15

Left Out: 0.050+/-0.017 $\chi^2$/NDF:19.4/16

Right Out: -0.044+/-0.025 $\chi^2$/NDF: 12.7/18

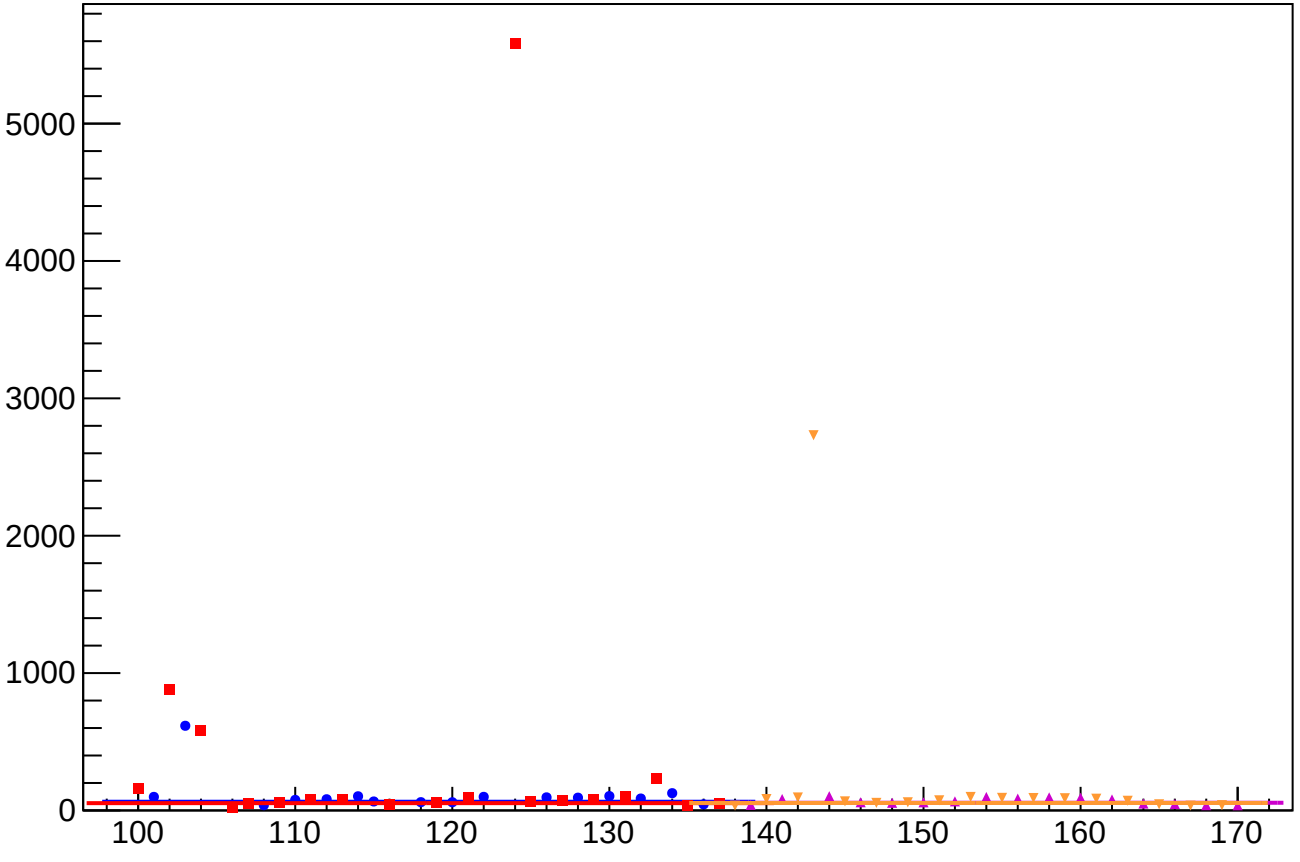
Left In: 0.019+/-0.017 $\chi^2$/NDF:11.8/15

+ sign 0.037+/-0.015 $\chi^2$/NDF: 34.8/32

All: 0.017+/-0.010 $\chi^2$/NDF: 67.1/67

- sign -0.001+/-0.014 $\chi^2$/NDF: 28.8/34

# asym_at2_dd_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 63.463+/-0.019 $\chi^2$/NDF: 2444357.3/15

Left Out: 54.524+/-0.012 $\chi^2$/NDF:4500836.5/16

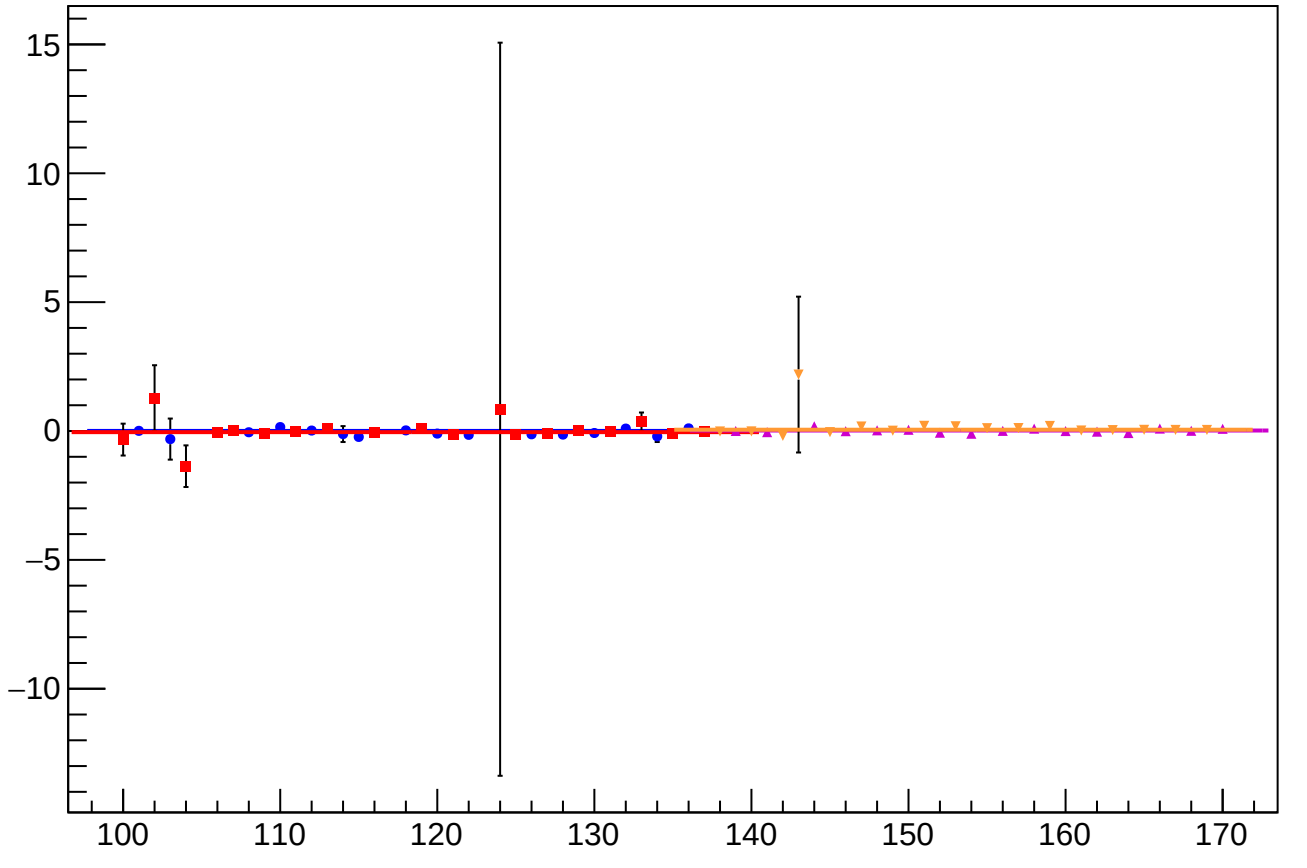
Right Out: 53.201+/-0.018 $\chi^2$/NDF: 3946328.9/18

Left In: 55.977+/-0.012 $\chi^2$/NDF:2651697.5/15

+ sign 57.078+/-0.010 $\chi^2$/NDF: 7099304.4/32

All: 56.049+/-0.007 $\chi^2$/NDF: 13733664.7/67

- sign 55.078+/-0.010 $\chi^2$/NDF: 6614911.7/34




Right In: 0.003+/-0.027 $\chi^2$/NDF: 13.3/15

Left Out: 0.050+/-0.017 $\chi^2$/NDF:19.4/16

Right Out: -0.044+/-0.025 $\chi^2$/NDF: 12.7/18

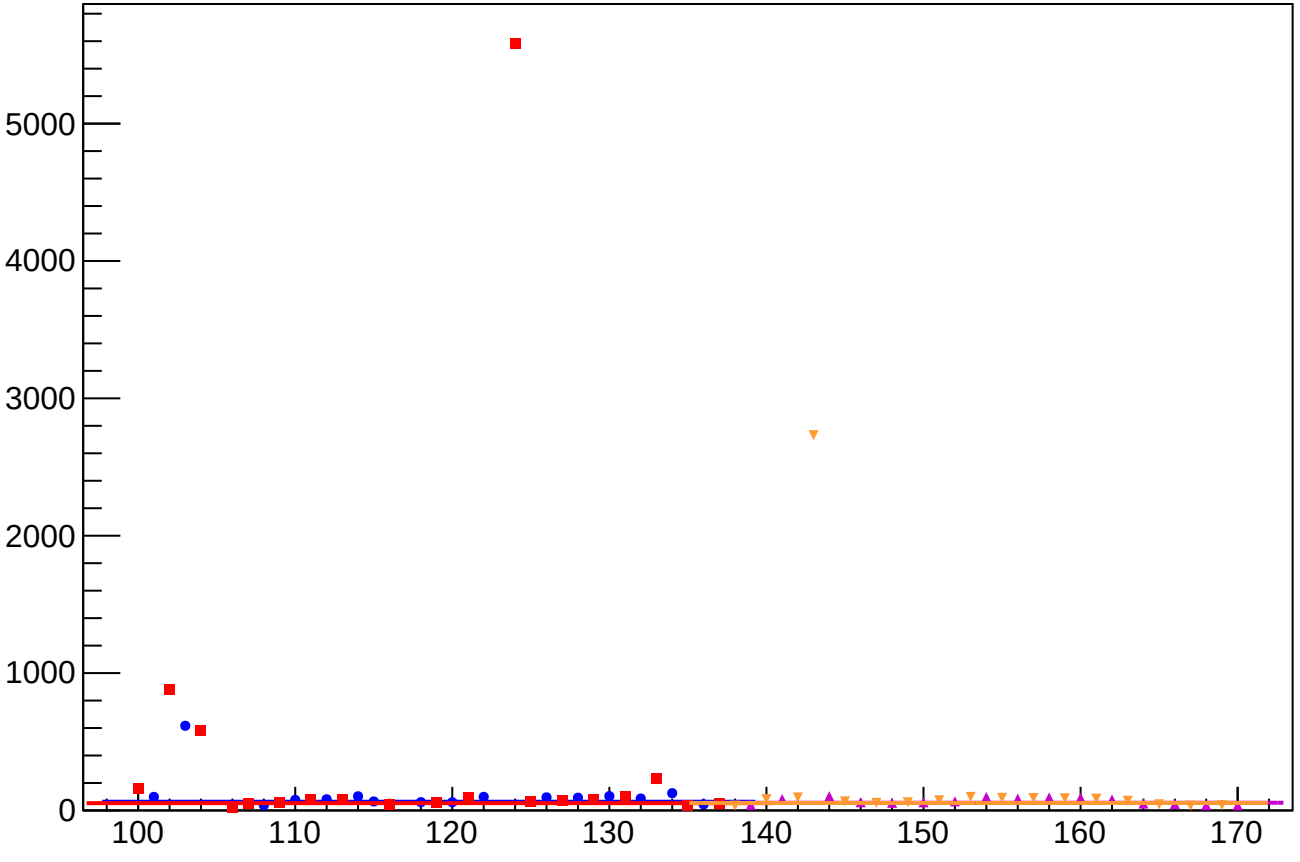
Left In: 0.019+/-0.017 $\chi^2$/NDF:11.8/15

+ sign 0.037+/-0.015 $\chi^2$/NDF: 34.8/32

All: 0.017+/-0.010 $\chi^2$/NDF: 67.1/67

- sign -0.001+/-0.014 $\chi^2$/NDF: 28.8/34

# asym_at2_dd_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 63.463+/-0.019 $\chi^2$/NDF: 2444357.3/15

Left Out: 54.524+/-0.012 $\chi^2$/NDF:4500836.5/16

Right Out: 53.201+/-0.018 $\chi^2$/NDF: 3946328.9/18

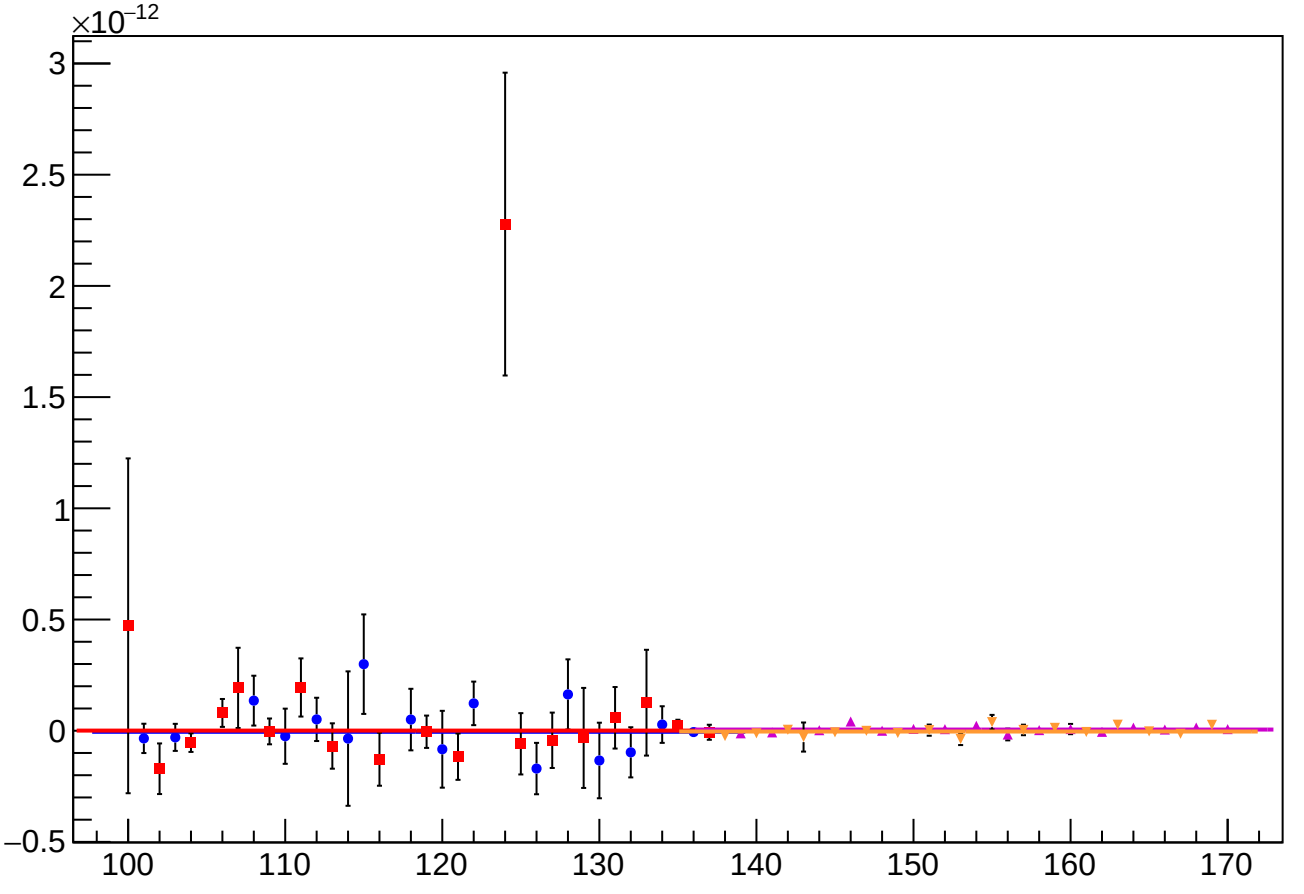
Left In: 55.977+/-0.012 $\chi^2$/NDF:2651697.5/15

+ sign 57.078+/-0.010 $\chi^2$/NDF: 7099304.4/32

All: 56.049+/-0.007 $\chi^2$/NDF: 13733664.7/67

- sign 55.078+/-0.010 $\chi^2$/NDF: 6614911.7/34

# asym_at2_dd_eigen_cor_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 10.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:12.7/16

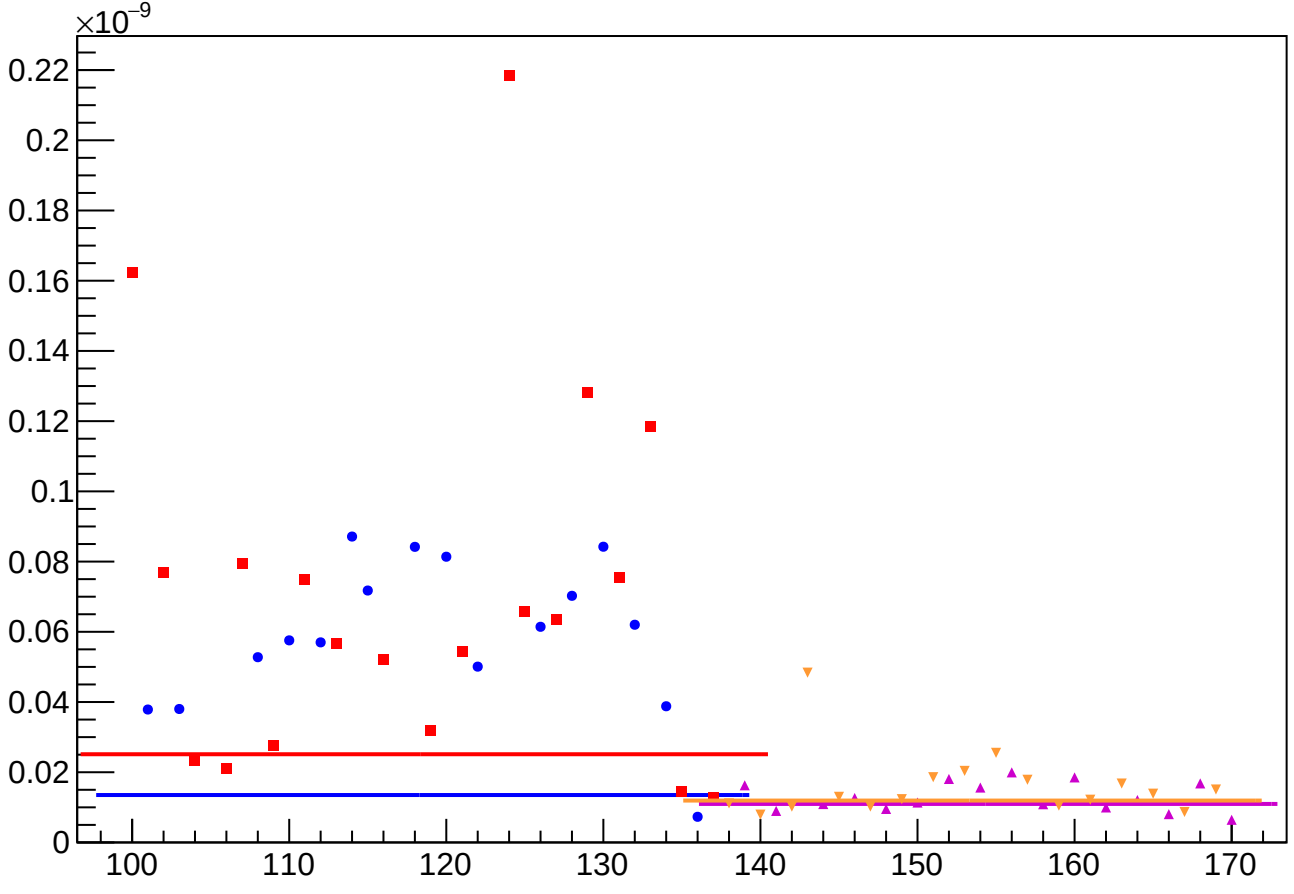
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 25.1/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:9.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 23.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 60.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 34.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 4993378.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2132918.5/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3578472.9/18

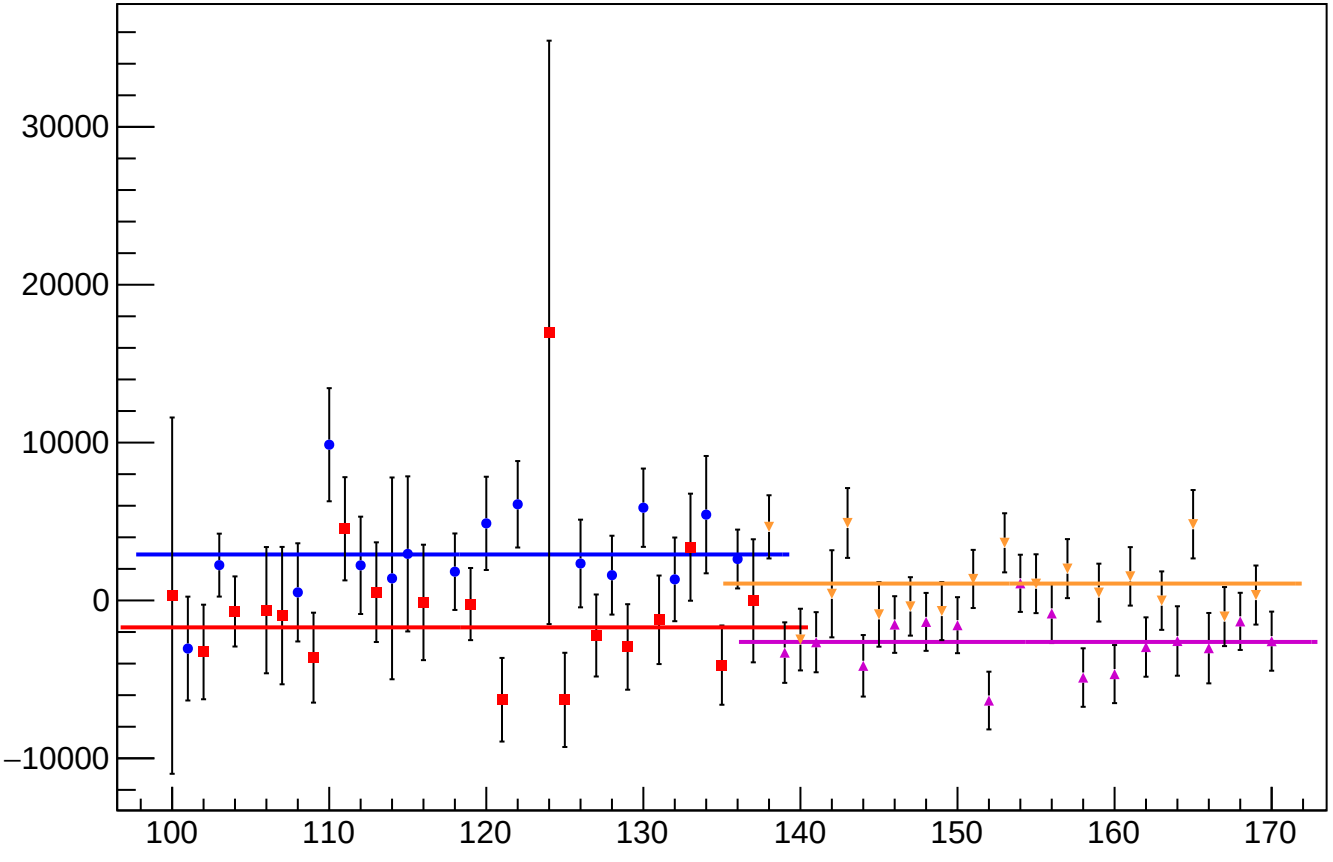
Left In: 0.000+/-0.000 $\chi^2$/NDF:1614599.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 7166809.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 14023403.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 6850880.3/34

# reg_asym_atl1r2_avg_mean vs Slug




Right In: 2912.991+/-695.062 $\chi^2$/NDF: 12.4/15

Left Out: 1069.181+/-471.849 $\chi^2$/NDF:19.1/16

Right Out: -1704.904+/-706.846 $\chi^2$/NDF: 15.8/18

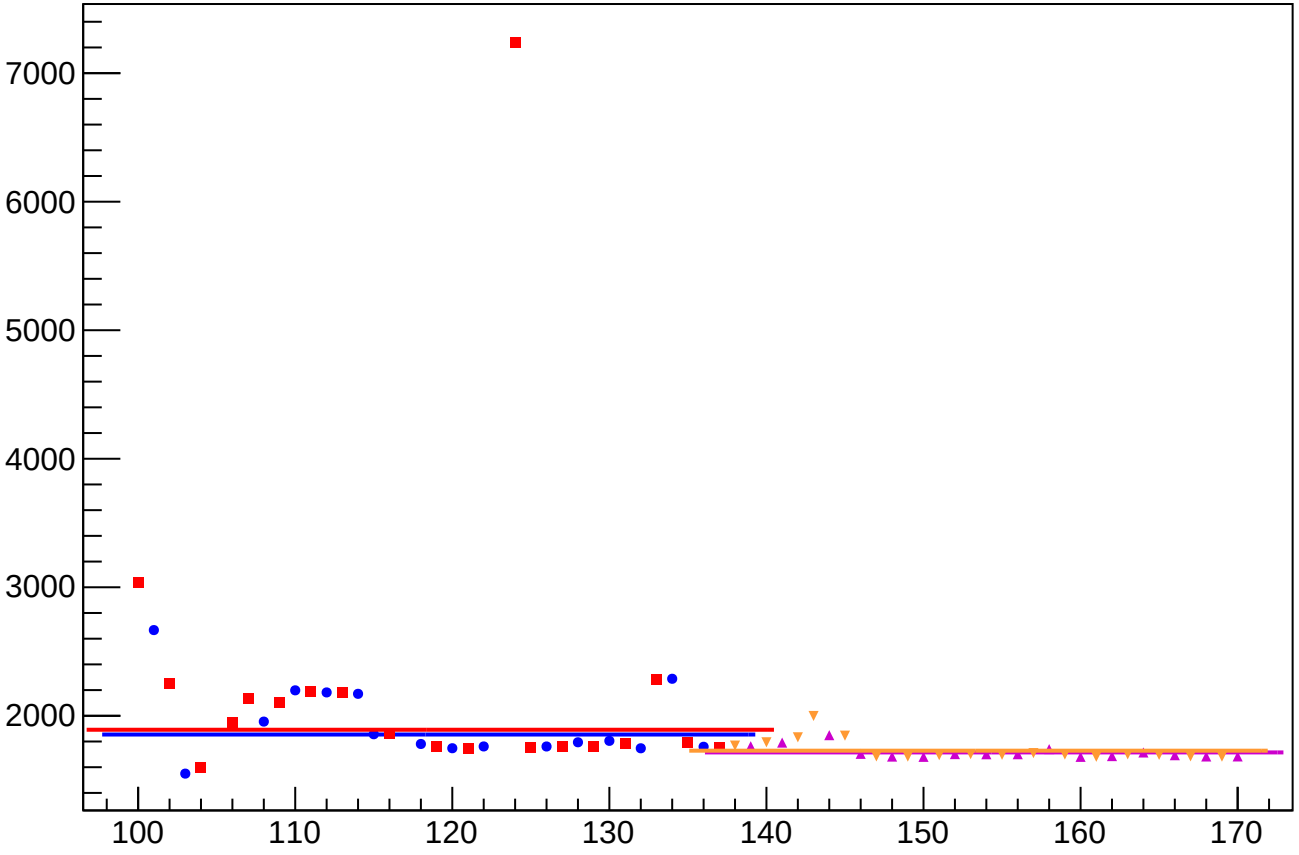
Left In: -2628.467+/-471.834 $\chi^2$/NDF:14.5/15

+ sign 1650.842+/-390.392 $\chi^2$/NDF: 36.4/32

All: -336.048+/-276.768 $\chi^2$/NDF: 119.9/67

- sign -2343.791+/-392.435 $\chi^2$/NDF: 31.5/34

# reg_asym_atl1r2_avg_rms vs Slug




Right In: 1854.314+/-0.491 $\chi^2$/NDF: 263322.7/15

Left Out: 1728.589+/-0.334 $\chi^2$/NDF:51697.7/16

Right Out: 1891.469+/-0.499 $\chi^2$/NDF: 364050.6/18

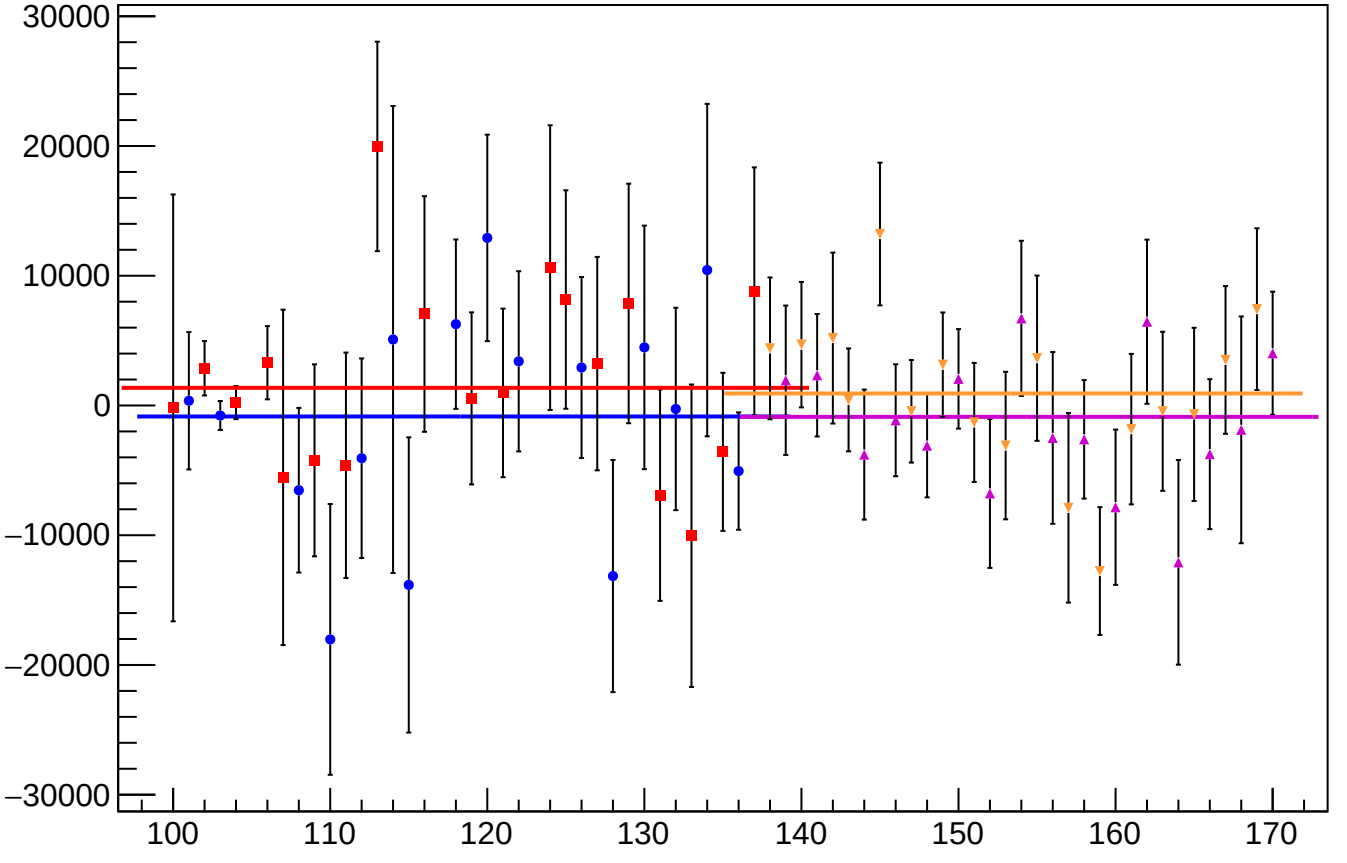
Left In: 1715.059+/-0.334 $\chi^2$/NDF:18661.7/15

+ sign 1768.251+/-0.276 $\chi^2$/NDF: 359814.4/32

All: 1768.927+/-0.196 $\chi^2$/NDF: 828990.8/67

- sign 1769.610+/-0.277 $\chi^2$/NDF: 469164.3/34

# asym_atl1r2_avg_reg_correction_mean vs Slug




Right In: -847.977+/-962.920 $\chi^2$/NDF: 13.9/15

Left Out: 923.897+/-1269.964 $\chi^2$/NDF:18.6/16

Right Out: 1361.523+/-915.925 $\chi^2$/NDF: 14.0/18

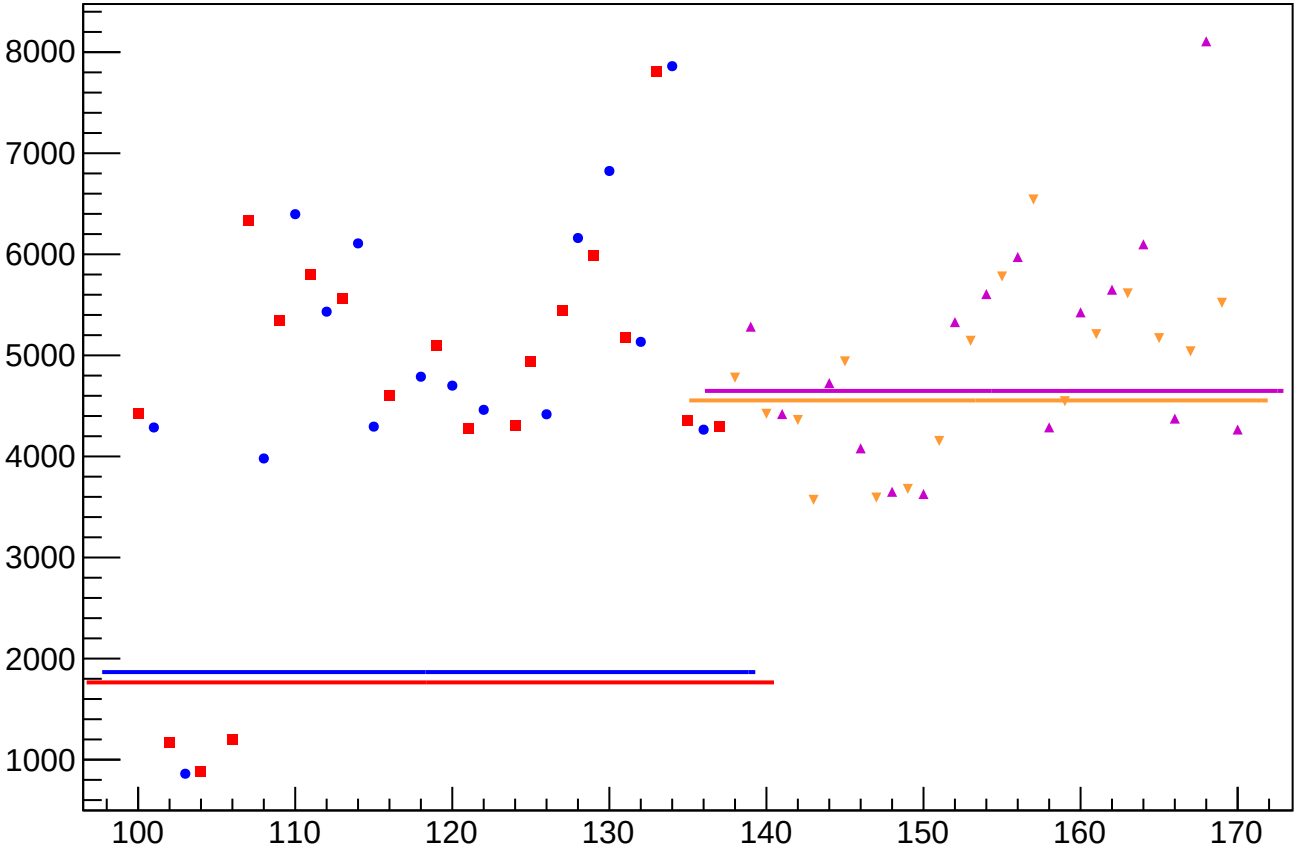
Left In: -879.610+/-1307.448 $\chi^2$/NDF:10.9/15

+ sign -201.169+/-767.295 $\chi^2$/NDF: 33.7/32

All: 220.596+/-536.400 $\chi^2$/NDF: 61.1/67

- sign 623.737+/-750.163 $\chi^2$/NDF: 26.8/34

# asym_atl1r2_avg_reg_correction_rms vs Slug




Right In: 1866.405+/-0.681 $\chi^2$/NDF: 6849638.3/15

Left Out: 4554.096+/-0.898 $\chi^2$/NDF:776431.3/16

Right Out: 1764.281+/-0.648 $\chi^2$/NDF: 6434807.7/18

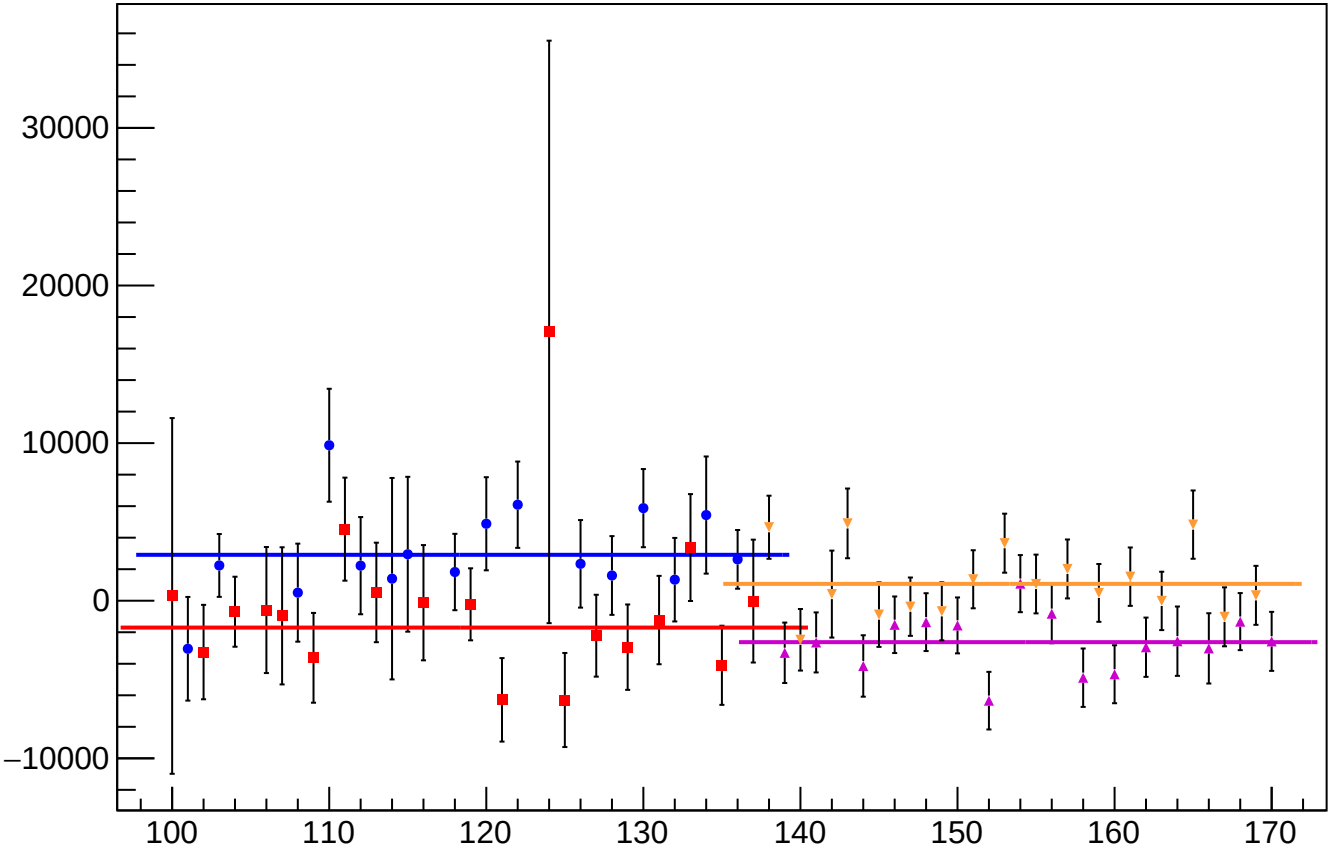
Left In: 4648.328+/-0.925 $\chi^2$/NDF:985414.7/15

+ sign 2847.525+/-0.543 $\chi^2$/NDF: 13313959.7/32

All: 2779.109+/-0.379 $\chi^2$/NDF: 27293242.0/6

- sign 2713.715+/-0.530 $\chi^2$/NDF: 13948183.5/34

# cor_asym_atl1r2_avg_mean vs Slug




Right In: 2913.091+/-695.062 $\chi^2$/NDF: 12.4/15

Left Out: 1069.010+/-471.849 $\chi^2$/NDF:19.1/16

Right Out: -1703.523+/-706.847 $\chi^2$/NDF: 15.8/18

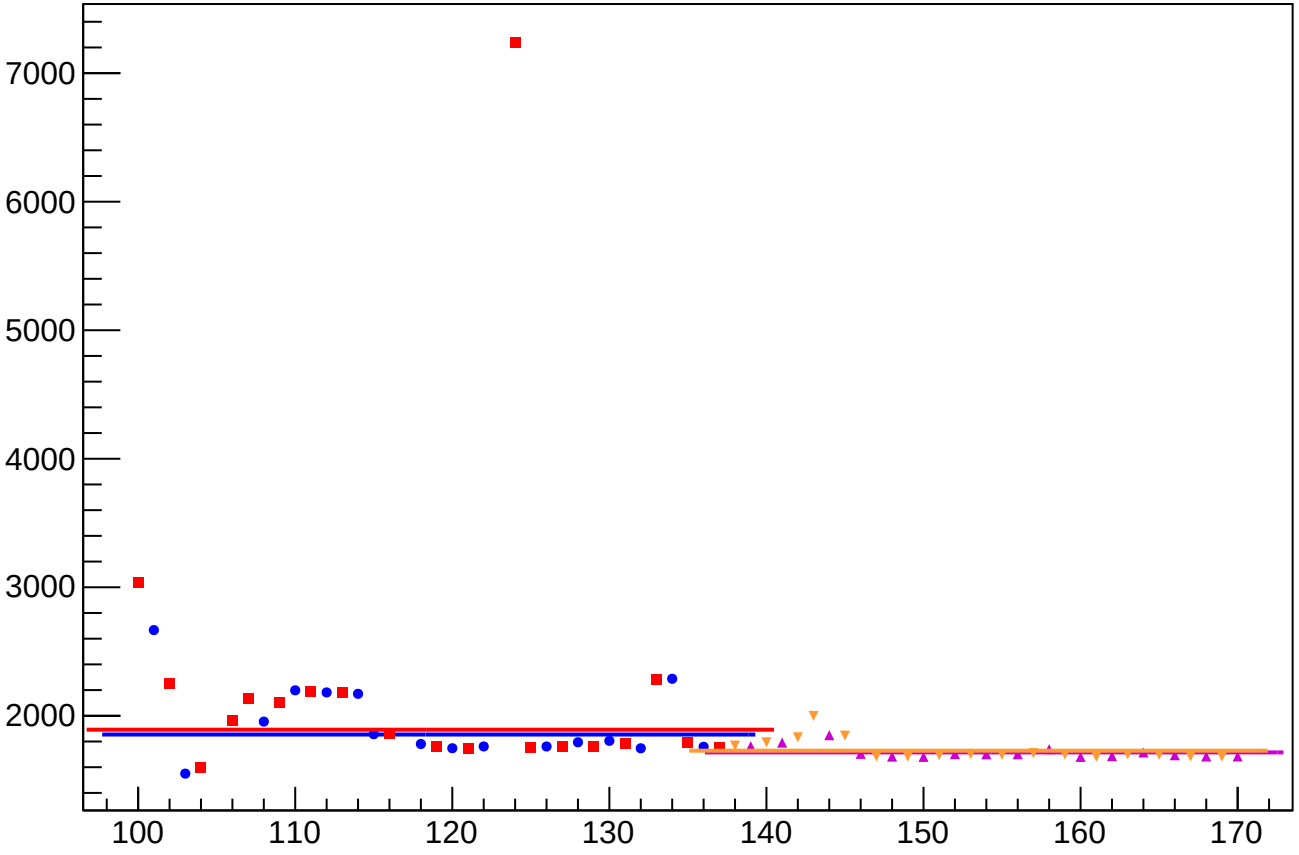
Left In: -2628.445+/-471.834 $\chi^2$/NDF:14.5/15

+ sign 1650.757+/-390.392 $\chi^2$/NDF: 36.4/32

All: -335.871+/-276.768 $\chi^2$/NDF: 119.9/67

- sign -2343.350+/-392.435 $\chi^2$/NDF: 31.5/34

# cor_asym_atl1r2_avg_rms vs Slug




Right In: 1854.314+/-0.491 $\chi^2$/NDF: 263322.5/15

Left Out: 1728.589+/-0.334 $\chi^2$/NDF:51697.7/16

Right Out: 1891.927+/-0.499 $\chi^2$/NDF: 364292.2/18

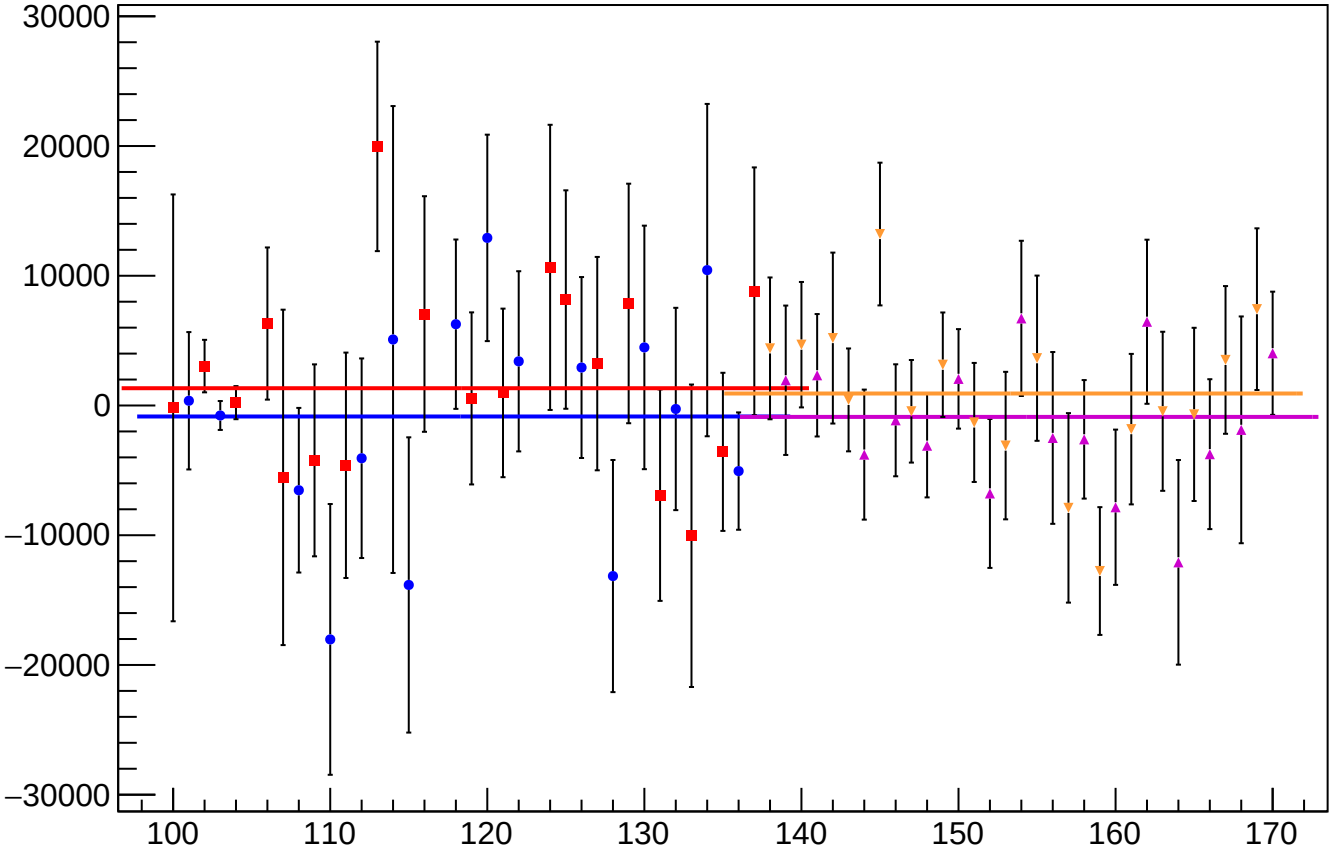
Left In: 1715.059+/-0.334 $\chi^2$/NDF:18661.7/15

+ sign 1768.251+/-0.276 $\chi^2$/NDF: 359814.3/32

All: 1768.989+/-0.196 $\chi^2$/NDF: 829657.1/67

- sign 1769.735+/-0.277 $\chi^2$/NDF: 469828.5/34

# asym_atl1r2_avg_cor_correction_mean vs Slug




Right In: -847.504+/-962.866 $\chi^2$/NDF: 13.9/15

Left Out: 923.862+/-1269.962 $\chi^2$/NDF:18.6/16

Right Out: 1331.371+/-948.163 $\chi^2$/NDF: 14.4/18

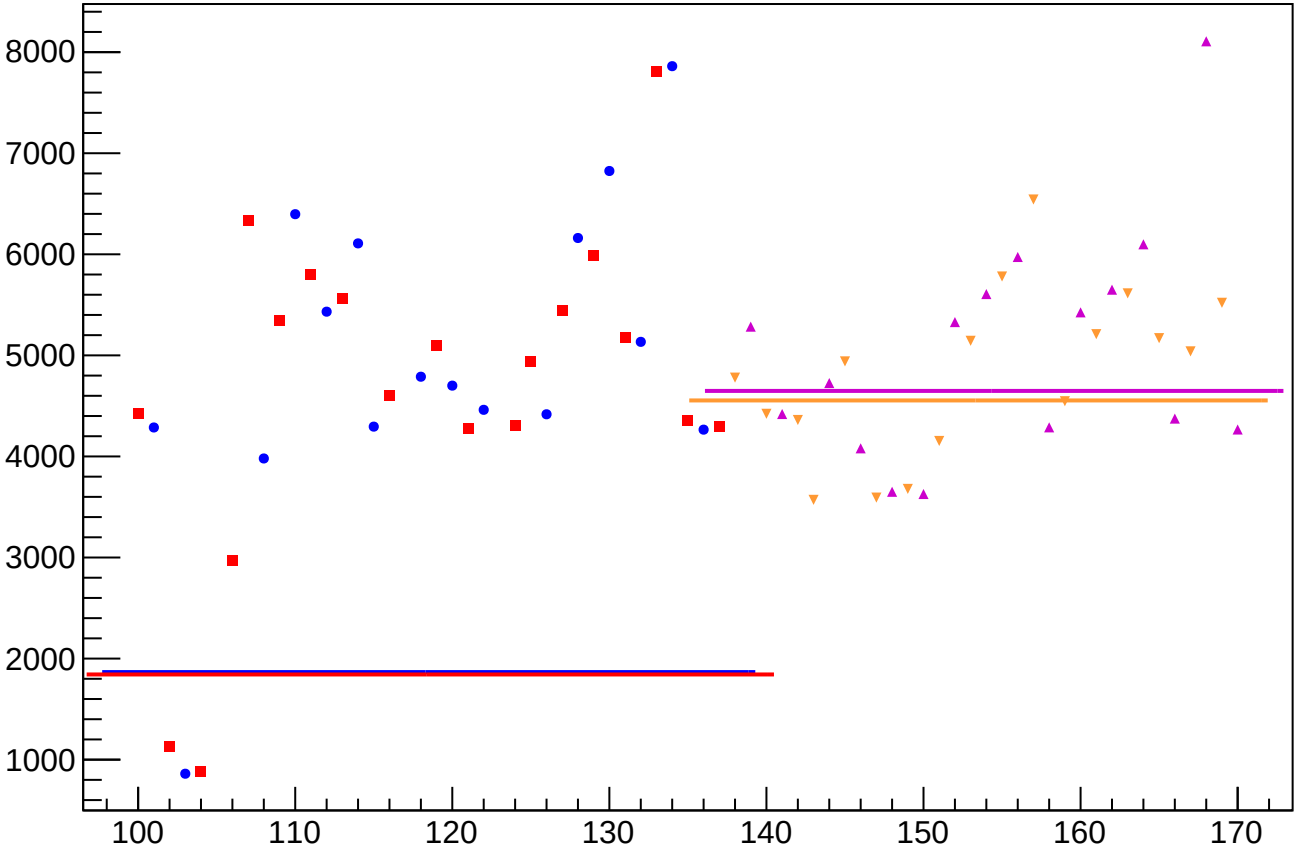
Left In: -879.669+/-1307.448 $\chi^2$/NDF:10.9/15

+ sign -200.925+/-767.268 $\chi^2$/NDF: 33.7/32

All: 184.047+/-542.647 $\chi^2$/NDF: 61.4/67

- sign 569.322+/-767.569 $\chi^2$/NDF: 27.2/34

# asym_atl1r2_avg_cor_correction_rms vs Slug




Right In: 1866.251+/-0.681 $\chi^2$/NDF: 6850061.4/15

Left Out: 4554.089+/-0.898 $\chi^2$/NDF:776441.6/16

Right Out: 1842.882+/-0.670 $\chi^2$/NDF: 6458456.4/18

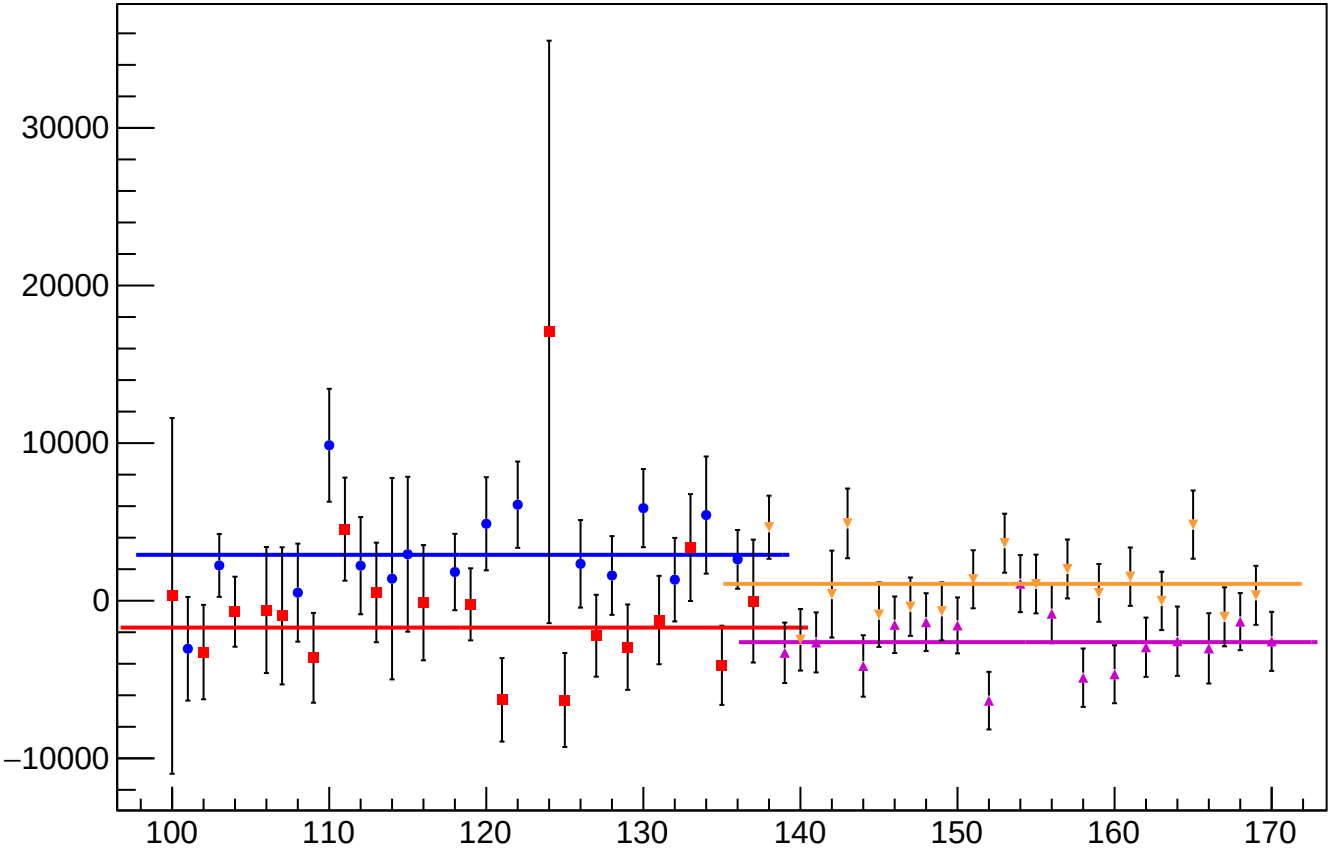
Left In: 4648.325+/-0.925 $\chi^2$/NDF:985430.5/15

+ sign 2847.358+/-0.543 $\chi^2$/NDF: 13315254.9/32

All: 2828.584+/-0.384 $\chi^2$/NDF: 26796206.7/6

- sign 2809.796+/-0.543 $\chi^2$/NDF: 13478556.2/34

# eigen_cor_asym_atl1r2_avg_mean vs Slug




Right In: 2913.091+/-695.062 $\chi^2$/NDF: 12.4/15

Left Out: 1069.010+/-471.849 $\chi^2$/NDF:19.1/16

Right Out: -1703.523+/-706.847 $\chi^2$/NDF: 15.8/18

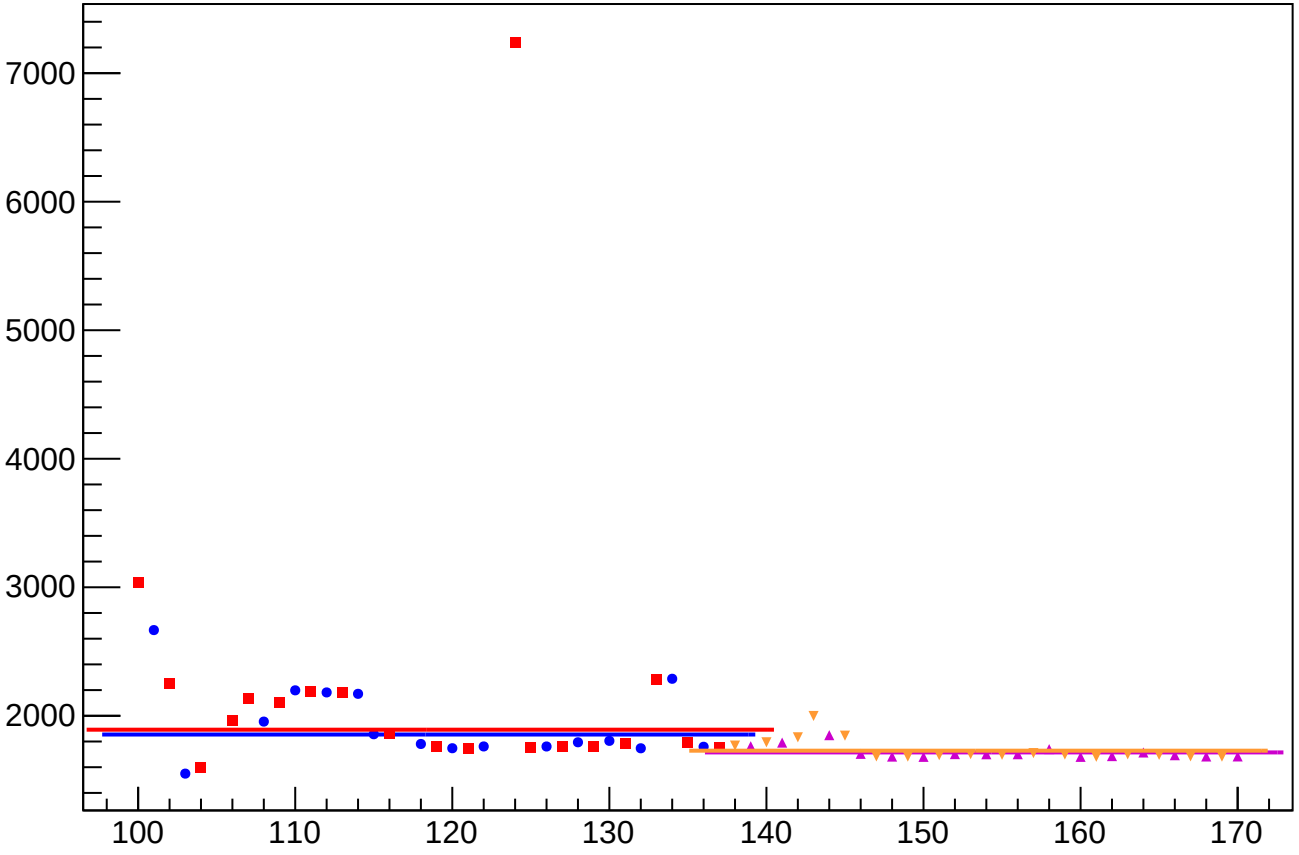
Left In: -2628.445+/-471.834 $\chi^2$/NDF:14.5/15

+ sign 1650.757+/-390.392 $\chi^2$/NDF: 36.4/32

All: -335.871+/-276.768 $\chi^2$/NDF: 119.9/67

- sign -2343.350+/-392.435 $\chi^2$/NDF: 31.5/34

# eigen_cor_asym_atl1r2_avg_rms vs Slug




Right In: 1854.314+/-0.491 $\chi^2$/NDF: 263322.5/15

Left Out: 1728.589+/-0.334 $\chi^2$/NDF:51697.7/16

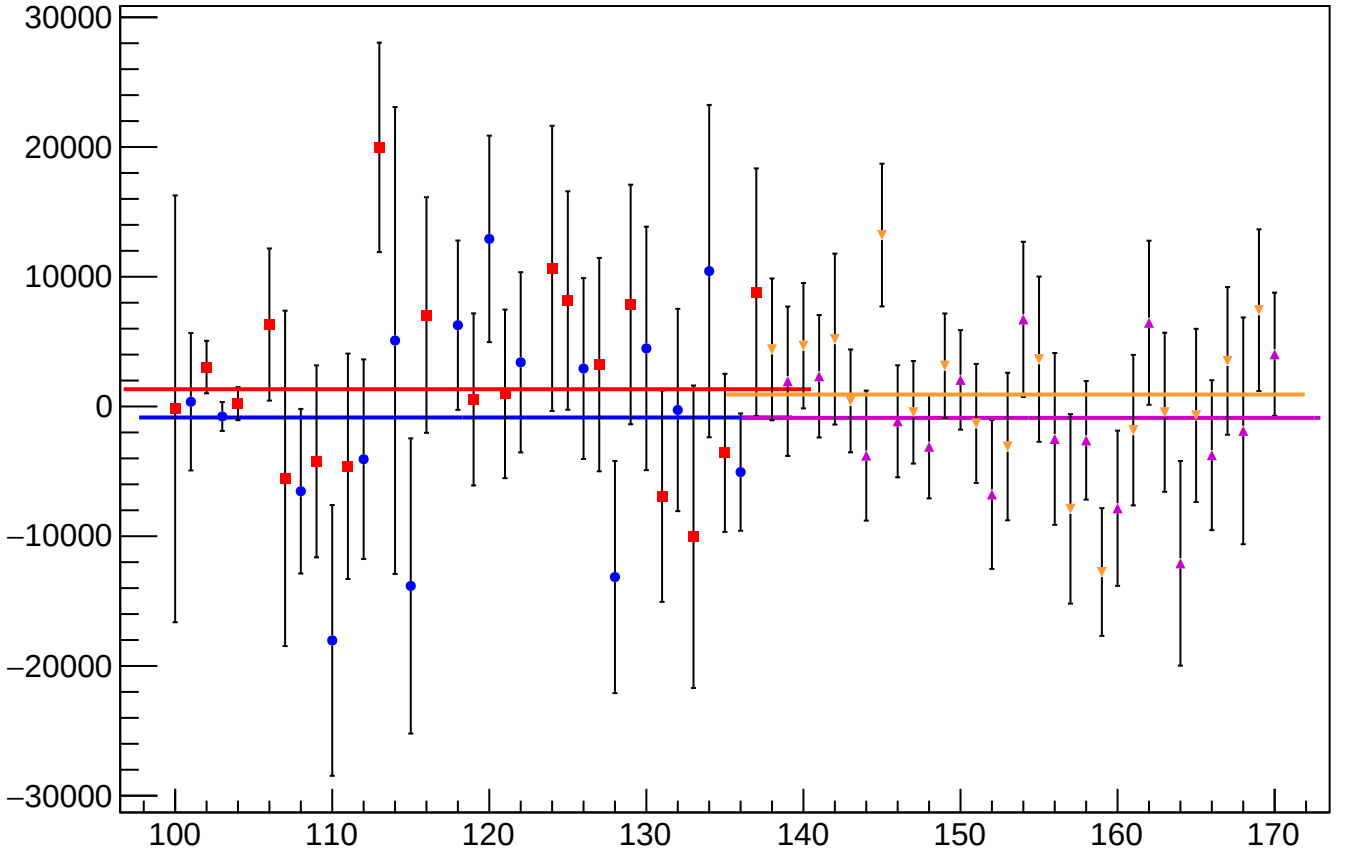
Right Out: 1891.927+/-0.499 $\chi^2$/NDF: 364292.2/18

Left In: 1715.059+/-0.334 $\chi^2$/NDF:18661.7/15

+ sign 1768.251+/-0.276 $\chi^2$/NDF: 359814.3/32

All: 1768.989+/-0.196 $\chi^2$/NDF: 829657.1/67

- sign 1769.735+/-0.277 $\chi^2$/NDF: 469828.5/34




Right In: -847.504+/-962.866 $\chi^2$/NDF: 13.9/15

Left Out: 923.862+/-1269.962 $\chi^2$/NDF:18.6/16

Right Out: 1331.371+/-948.163 $\chi^2$/NDF: 14.4/18

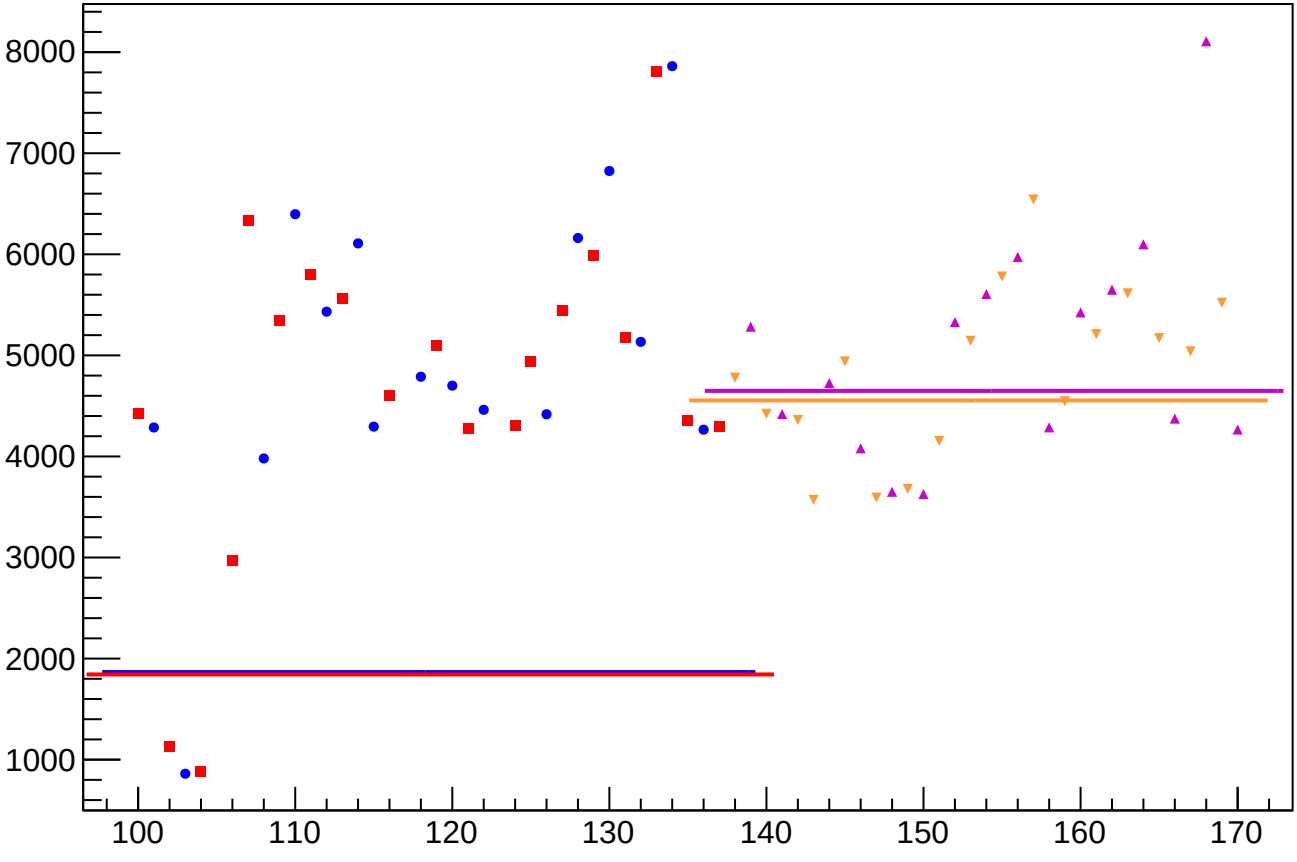
Left In: -879.669+/-1307.448 $\chi^2$/NDF:10.9/15

+ sign -200.925+/-767.268 $\chi^2$/NDF: 33.7/32

All: 184.047+/-542.647 $\chi^2$/NDF: 61.4/67

- sign 569.322+/-767.569 $\chi^2$/NDF: 27.2/34

# asym_atl1r2_avg_eigen_cor_correction_rms vs Slug




Right In: 1866.251+/-0.681 $\chi^2$/NDF: 6850061.4/15

Left Out: 4554.089+/-0.898 $\chi^2$/NDF:776441.6/16

Right Out: 1842.882+/-0.670 $\chi^2$/NDF: 6458456.4/18

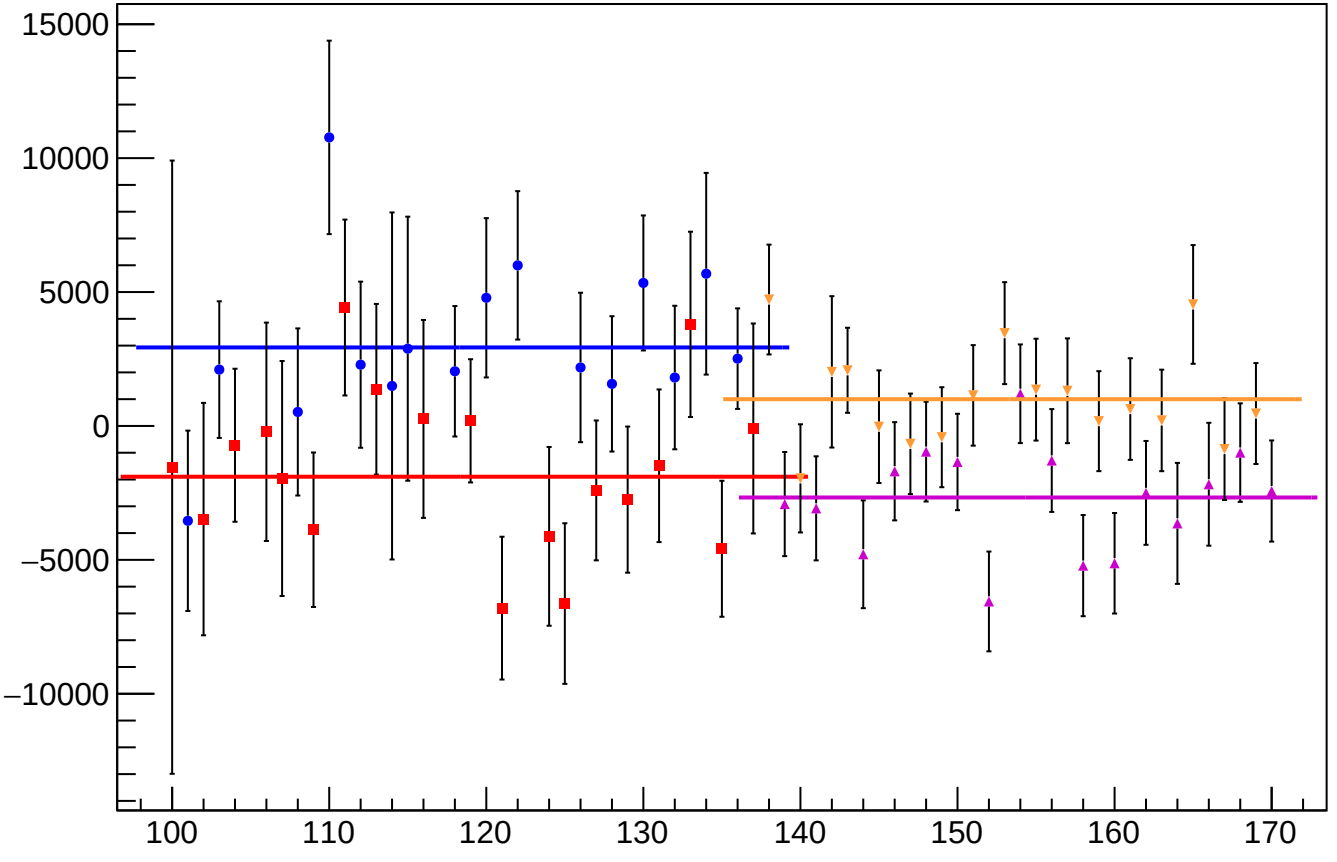
Left In: 4648.325+/-0.925 $\chi^2$/NDF:985430.5/15

+ sign 2847.358+/-0.543 $\chi^2$/NDF: 13315254.9/32

All: 2828.584+/-0.384 $\chi^2$/NDF: 26796206.7/6

- sign 2809.796+/-0.543 $\chi^2$/NDF: 13478556.2/34

# dit_asym_atl1r2_avg_mean vs Slug




Right In: 2931.691+/-718.305 $\chi^2$/NDF: 13.0/15

Left Out: 999.586+/-471.190 $\chi^2$/NDF:13.4/16

Right Out: -1895.503+/-721.954 $\chi^2$/NDF: 17.4/18

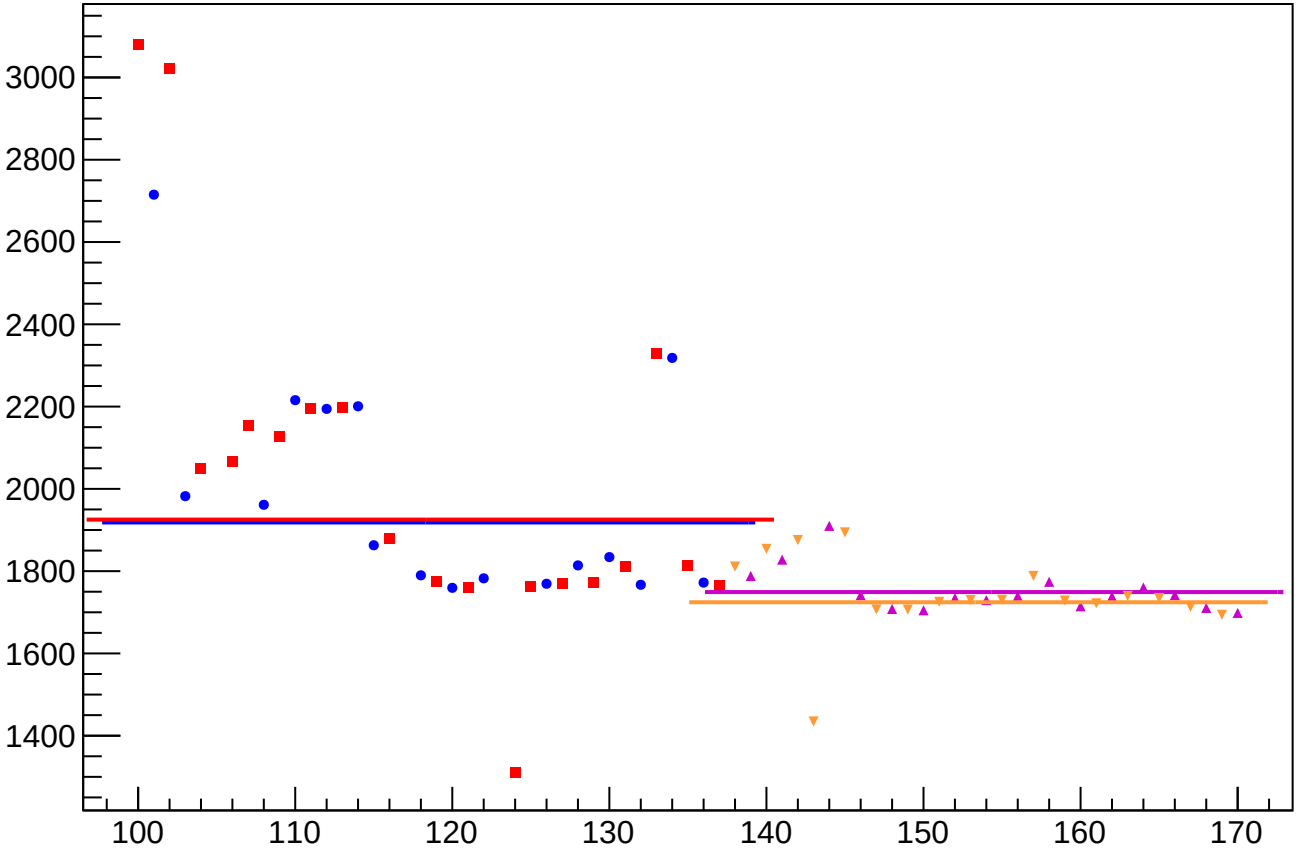
Left In: -2671.129+/-481.287 $\chi^2$/NDF:16.7/15

+ sign 1580.854+/-393.987 $\chi^2$/NDF: 31.4/32

All: -393.123+/-280.851 $\chi^2$/NDF: 117.4/67

- sign -2432.485+/-400.459 $\chi^2$/NDF: 34.9/34

# dit_asym_atl1r2_avg_rms vs Slug




Right In: 1918.367+/-0.508 $\chi^2$/NDF: 215592.7/15

Left Out: 1724.451+/-0.333 $\chi^2$/NDF:100534.3/16

Right Out: 1925.260+/-0.510 $\chi^2$/NDF: 339095.4/18

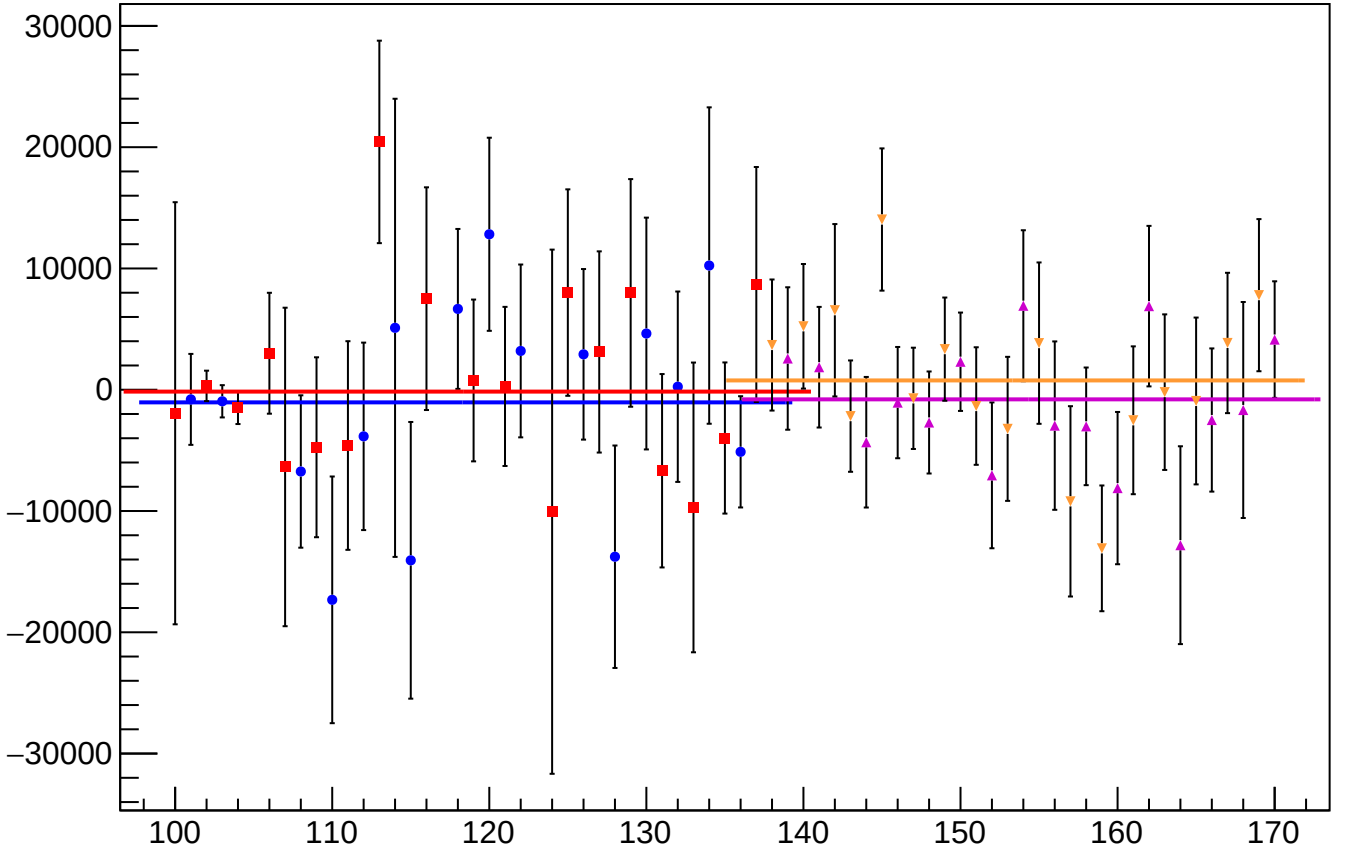
Left In: 1749.185+/-0.340 $\chi^2$/NDF:22978.2/15

+ sign 1782.790+/-0.279 $\chi^2$/NDF: 418035.9/32

All: 1792.940+/-0.199 $\chi^2$/NDF: 865260.3/67

- sign 1803.421+/-0.283 $\chi^2$/NDF: 444526.3/34

# asym_atl1r2_avg_dit_correction_mean vs Slug




Right In: -1041.908+/-1072.406 $\chi^2$/NDF: 13.8/15

Left Out: 767.639+/-1341.515 $\chi^2$/NDF:19.3/16

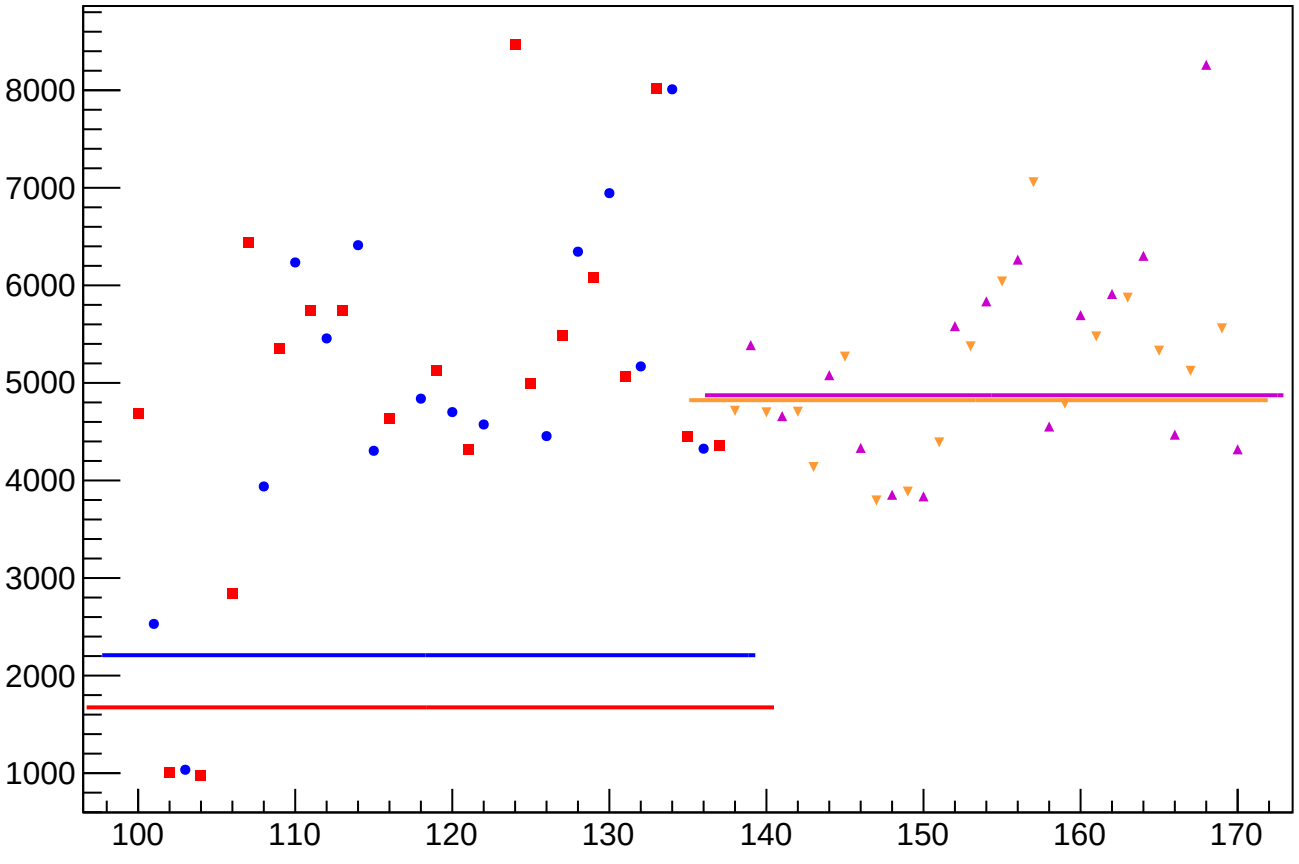
Right Out: -153.619+/-835.656 $\chi^2$/NDF: 13.7/18

Left In: -793.398+/-1369.367 $\chi^2$/NDF:10.8/15

+ sign -336.390+/-837.654 $\chi^2$/NDF: 34.2/32

All: -331.077+/-543.087 $\chi^2$/NDF: 58.9/67

- sign -327.225+/-713.323 $\chi^2$/NDF: 24.7/34




Right In: 2208.912+/-0.758 $\chi^2$/NDF: 5499011.4/15

Left Out: 4823.188+/-0.949 $\chi^2$/NDF:659637.7/16

Right Out: 1674.162+/-0.591 $\chi^2$/NDF: 6853212.9/18

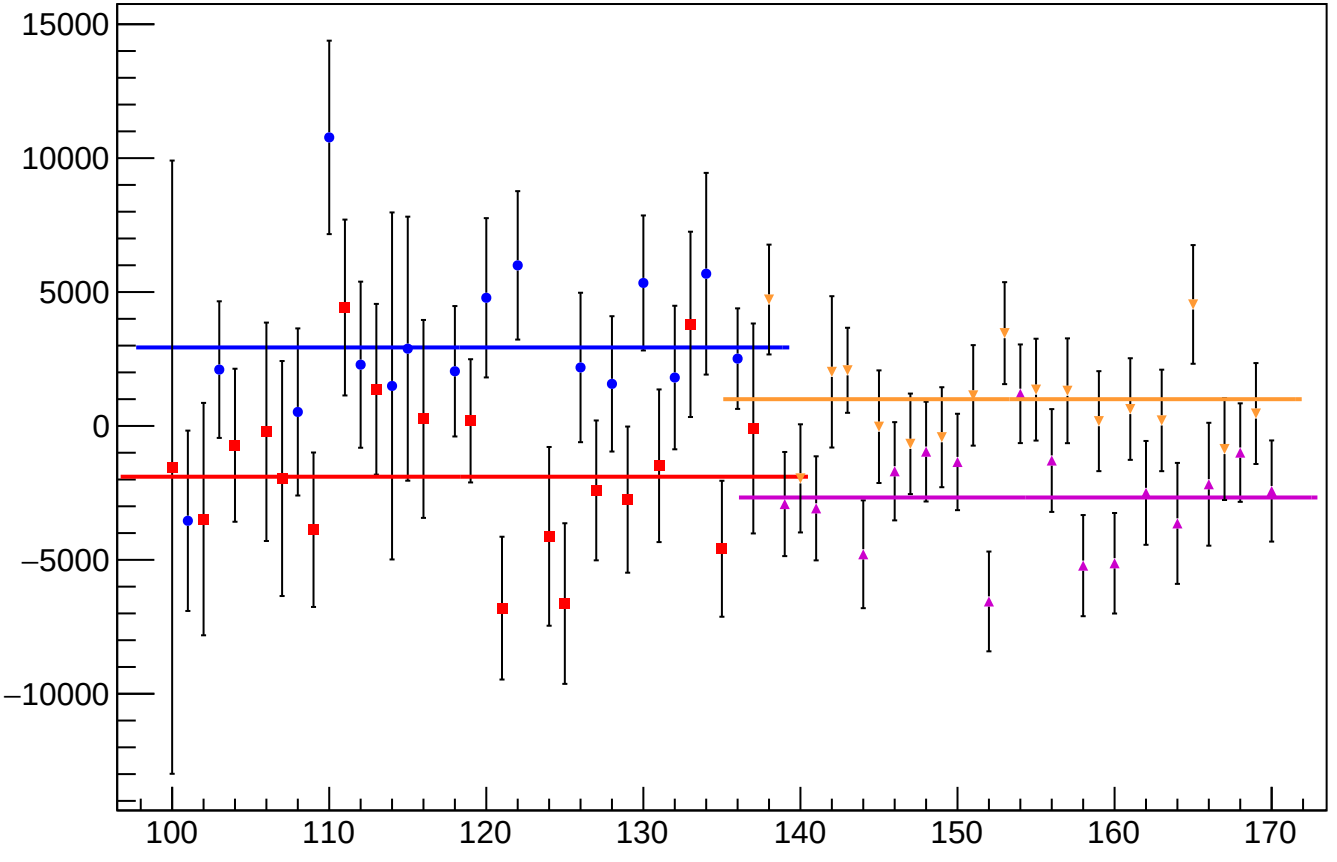
Left In: 4873.469+/-0.968 $\chi^2$/NDF:932558.2/15

+ sign 3228.183+/-0.592 $\chi^2$/NDF: 10792609.7/32

All: 2830.610+/-0.384 $\chi^2$/NDF: 27310274.6/6

- sign 2542.300+/-0.504 $\chi^2$/NDF: 15740403.9/34

# eigen_dit_asym_atl1r2_avg_mean vs Slug




Right In: 2931.693+/-718.305 $\chi^2$/NDF: 13.0/15

Left Out: 999.577+/-471.190 $\chi^2$/NDF:13.4/16

Right Out: -1895.508+/-721.953 $\chi^2$/NDF: 17.4/18

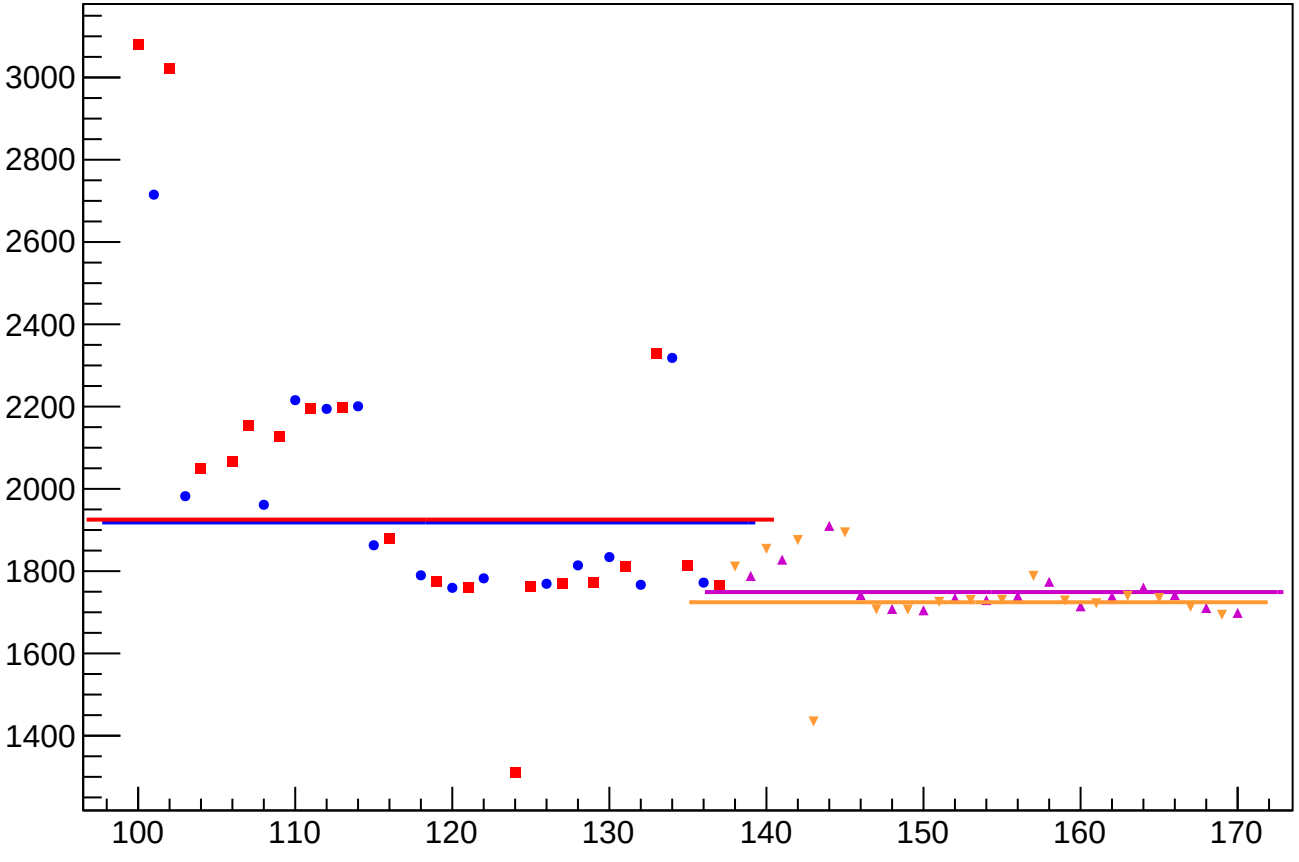
Left In: -2671.133+/-481.288 $\chi^2$/NDF:16.7/15

+ sign 1580.849+/-393.987 $\chi^2$/NDF: 31.4/32

All: -393.127+/-280.851 $\chi^2$/NDF: 117.4/67

- sign -2432.489+/-400.459 $\chi^2$/NDF: 34.9/34

# eigen_dit_asym_atl1r2_avg_rms vs Slug




Right In: 1918.367+/-0.508 $\chi^2$/NDF: 215592.7/15

Left Out: 1724.452+/-0.333 $\chi^2$/NDF:100533.4/16

Right Out: 1925.259+/-0.510 $\chi^2$/NDF: 339094.4/18

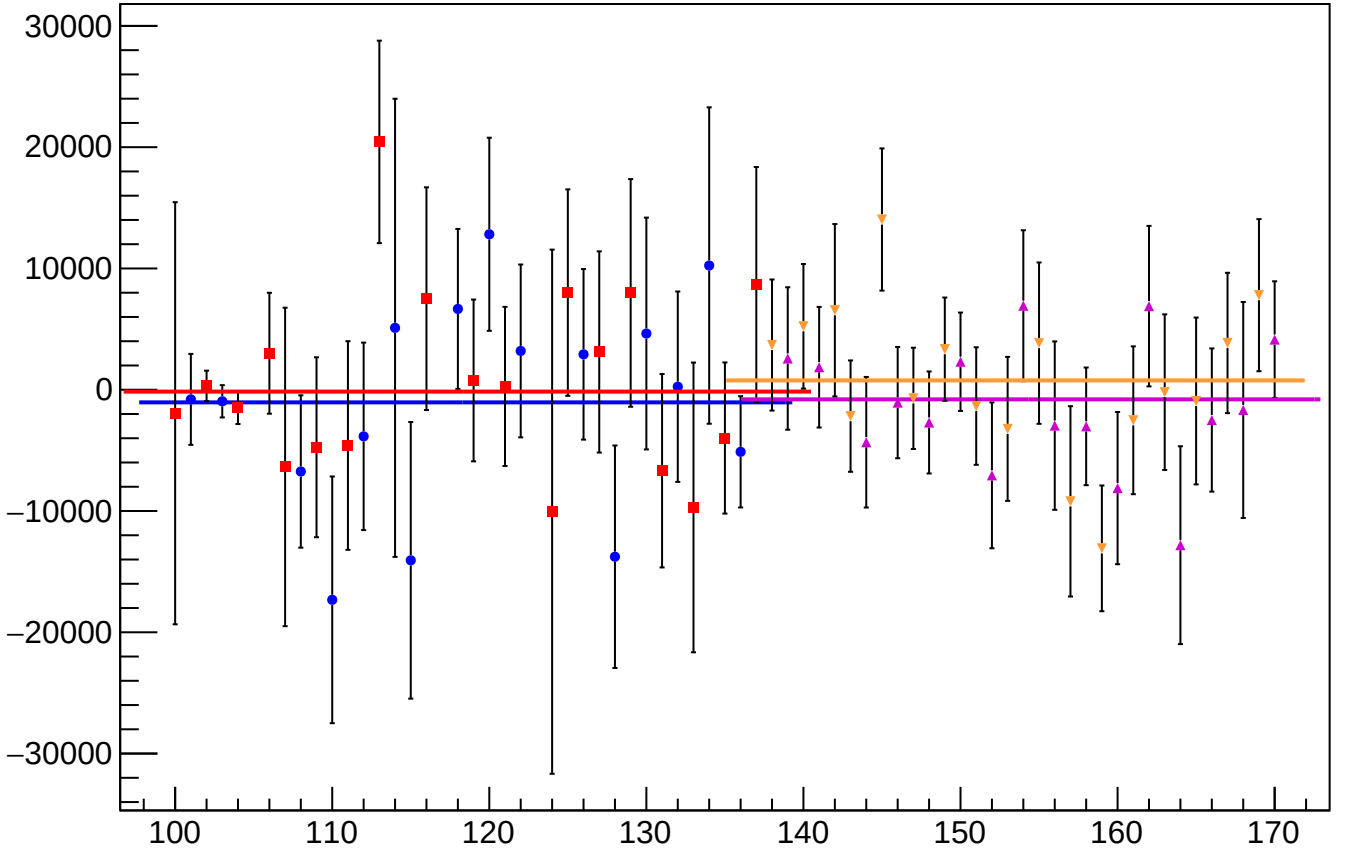
Left In: 1749.186+/-0.340 $\chi^2$/NDF:22978.2/15

+ sign 1782.791+/-0.279 $\chi^2$/NDF: 418033.3/32

All: 1792.941+/-0.199 $\chi^2$/NDF: 865255.1/67

- sign 1803.422+/-0.283 $\chi^2$/NDF: 444523.7/34

# asym_atl1r2_avg_eigen_dit_correction_mean vs Slug




Right In: -1041.906+/-1072.405 $\chi^2$/NDF: 13.8/15

Left Out: 767.636+/-1341.517 $\chi^2$/NDF:19.3/16

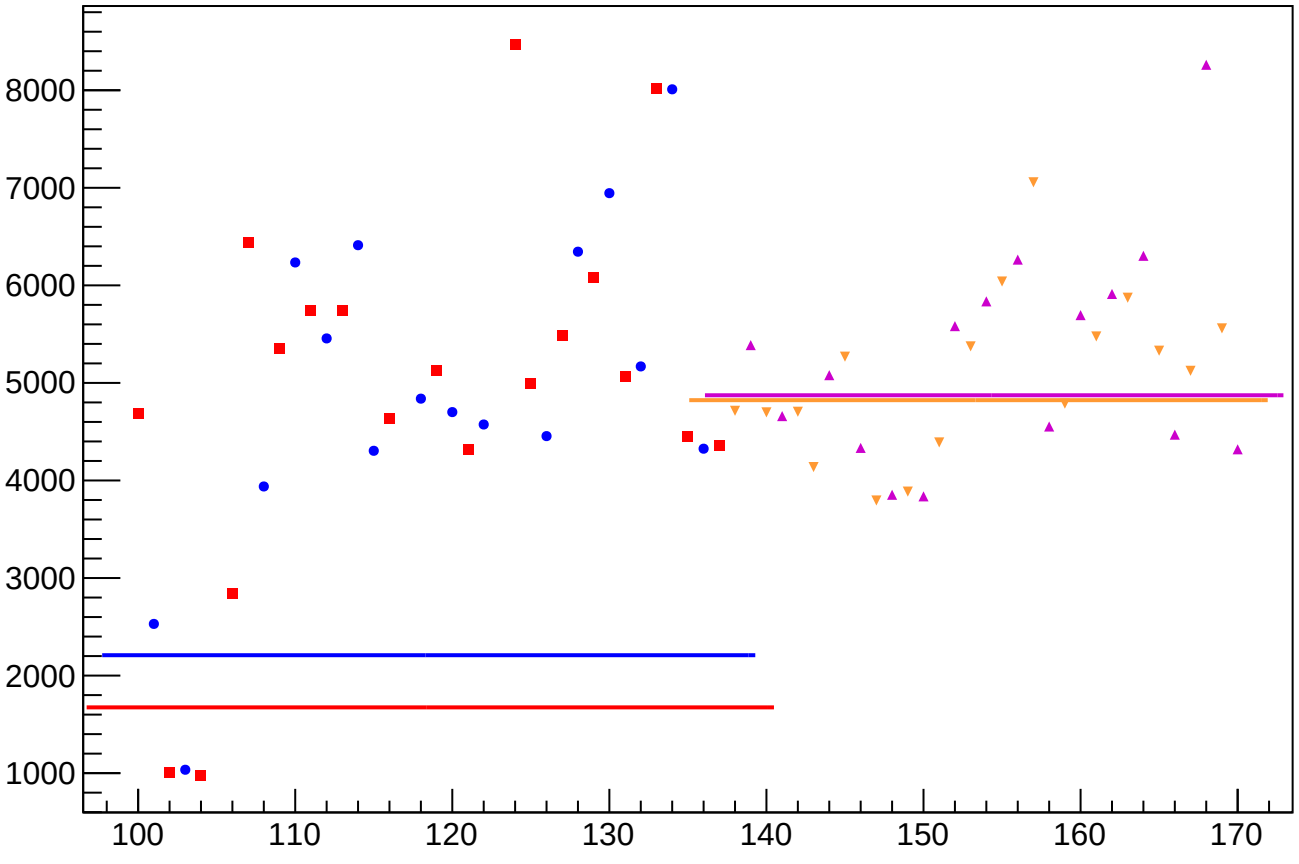
Right Out: -153.614+/-835.655 $\chi^2$/NDF: 13.7/18

Left In: -793.396+/-1369.369 $\chi^2$/NDF:10.8/15

\+ sign -336.392+/-837.654 $\chi^2$/NDF: 34.2/32

All: -331.075+/-543.087 $\chi^2$/NDF: 58.9/67

\- sign -327.220+/-713.323 $\chi^2$/NDF: 24.7/34




Right In: 2208.911+/-0.758 $\chi^2$/NDF: 5499004.2/15

Left Out: 4823.196+/-0.949 $\chi^2$/NDF:659637.2/16

Right Out: 1674.162+/-0.591 $\chi^2$/NDF: 6853204.8/18

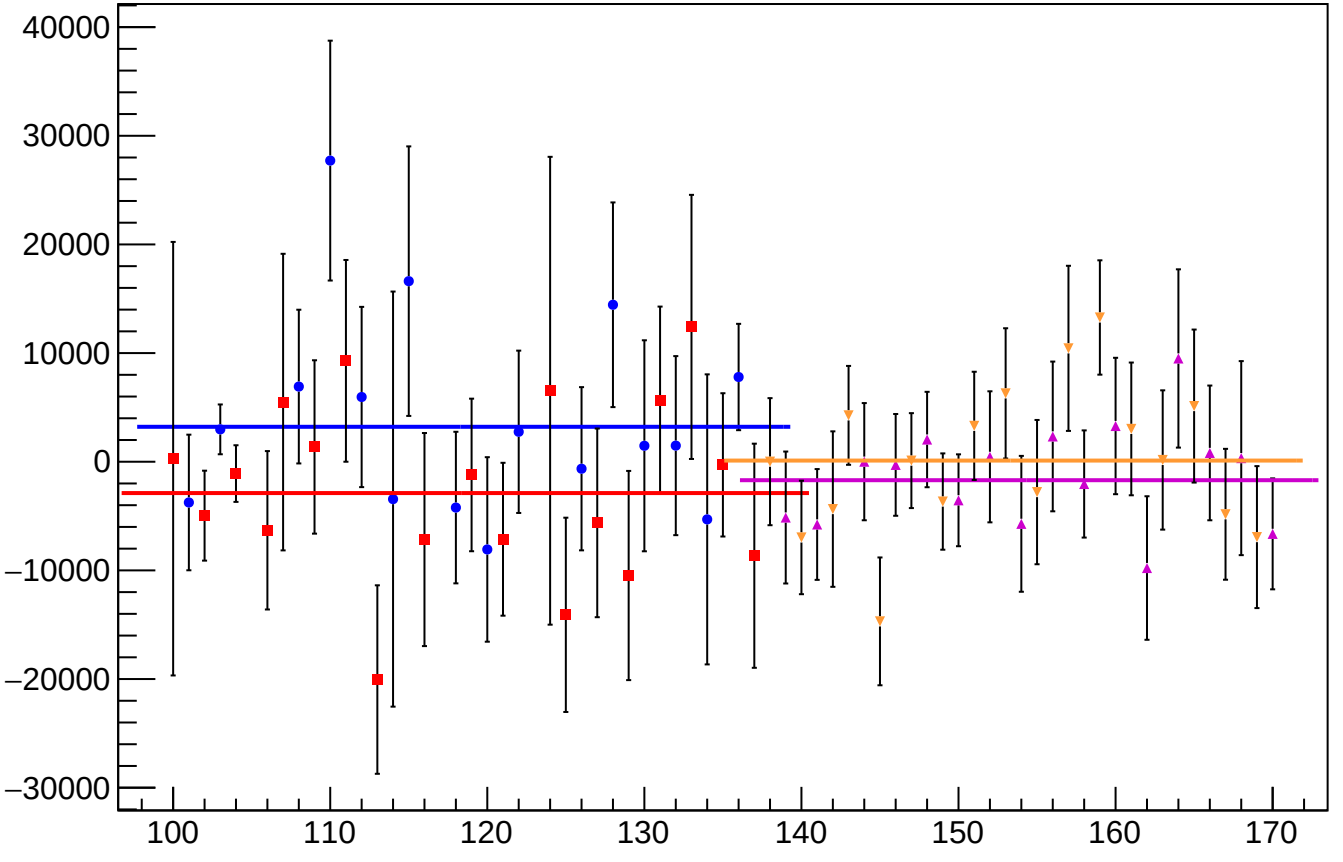
Left In: 4873.477+/-0.968 $\chi^2$/NDF:932558.6/15

+ sign 3228.182+/-0.592 $\chi^2$/NDF: 10792626.7/32

All: 2830.609+/-0.384 $\chi^2$/NDF: 27310308.0/6

- sign 2542.299+/-0.504 $\chi^2$/NDF: 15740419.1/34

# asym_atl1r2_avg_mean vs Slug




Right In: 3215.695+/-1539.262 $\chi^2$/NDF: 13.8/15

Left Out: 107.737+/-1370.362 $\chi^2$/NDF:22.5/16

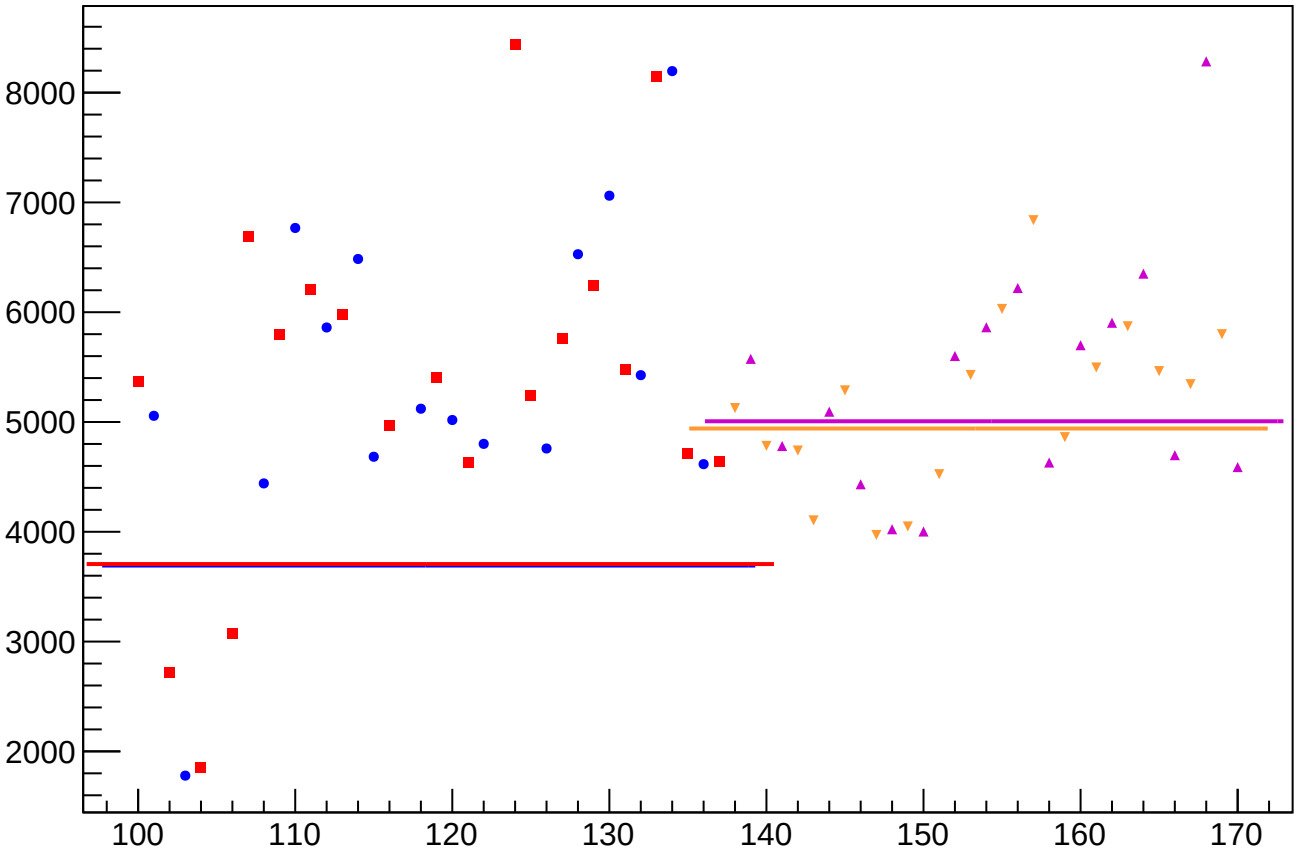
Right Out: -2883.411+/-1552.120 $\chi^2$/NDF: 13.4/18

Left In: -1699.412+/-1402.093 $\chi^2$/NDF:8.1/15

+ sign 1481.910+/-1023.518 $\chi^2$/NDF: 38.5/32

All: -344.326+/-729.645 $\chi^2$/NDF: 66.8/67

- sign -2231.437+/-1040.437 $\chi^2$/NDF: 21.8/34




Right In: 3692.815+/-1.088 $\chi^2$/NDF: 2885658.0/15

Left Out: 4940.606+/-0.969 $\chi^2$/NDF:579154.3/16

Right Out: 3706.081+/-1.087 $\chi^2$/NDF: 2684528.0/18

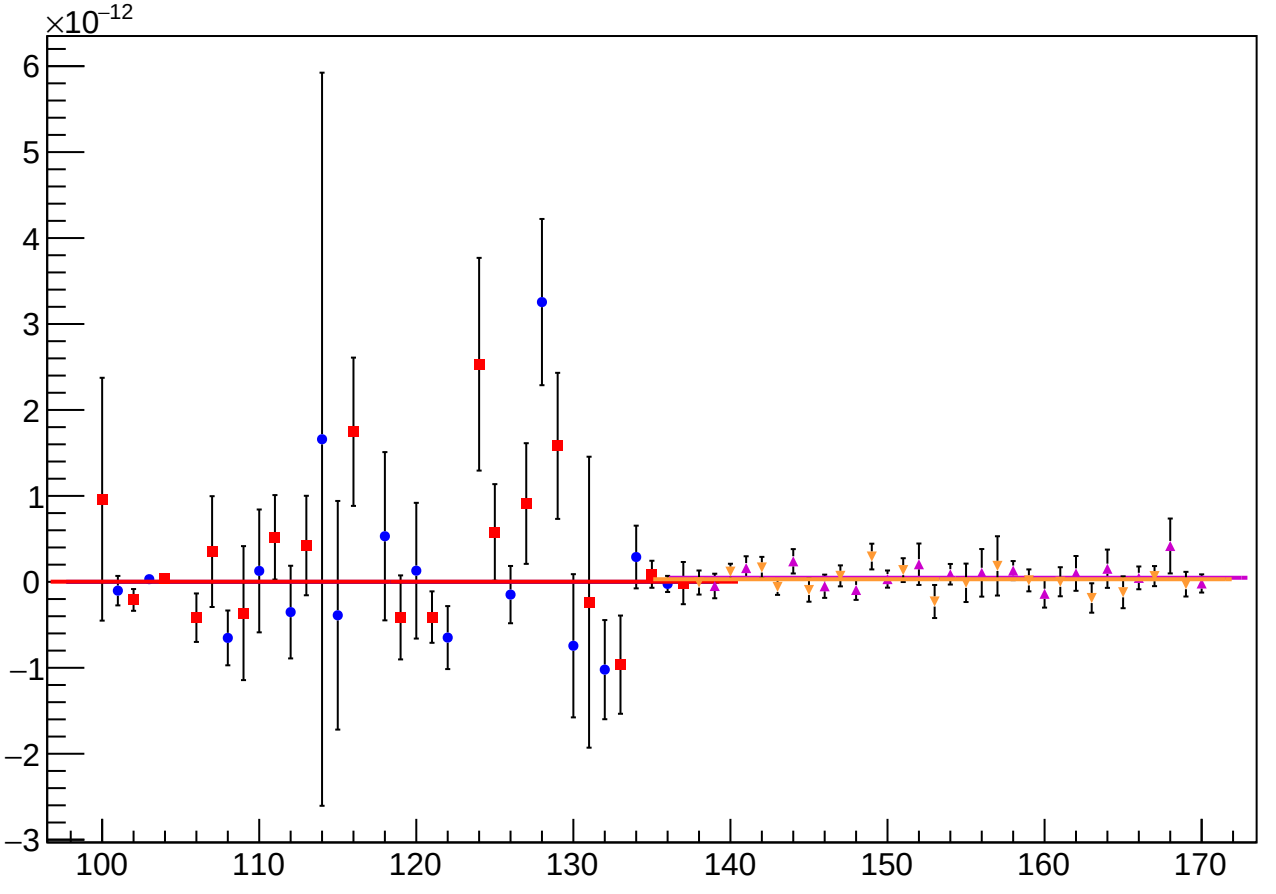
Left In: 5006.686+/-0.991 $\chi^2$/NDF:798555.7/15

+ sign 4388.900+/-0.724 $\chi^2$/NDF: 4197989.8/32

All: 4402.191+/-0.515 $\chi^2$/NDF: 8463609.0/67

- sign 4415.801+/-0.732 $\chi^2$/NDF: 4264936.6/34

# asym_atl1r2_avg_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 25.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.4/16

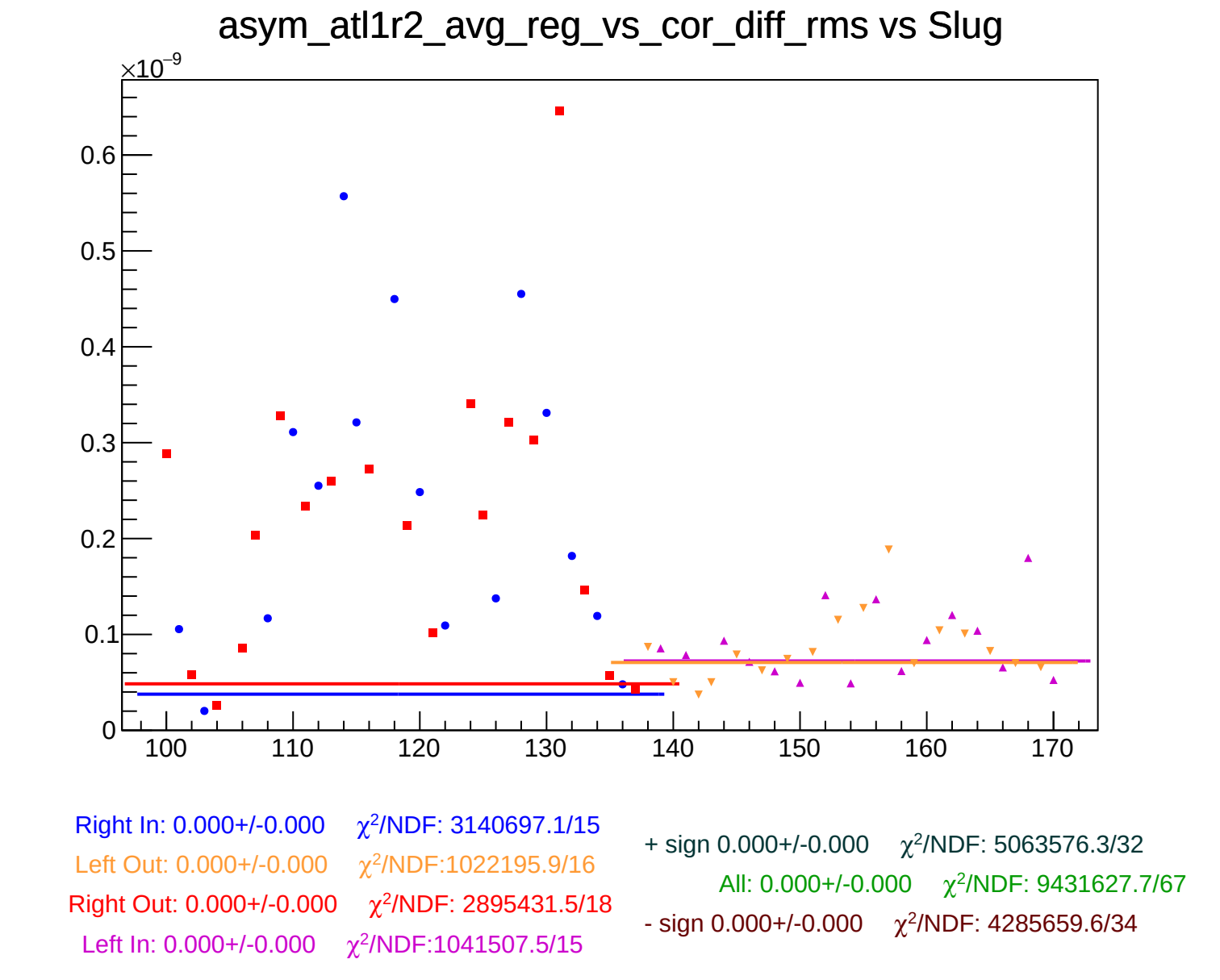
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 28.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:9.5/15

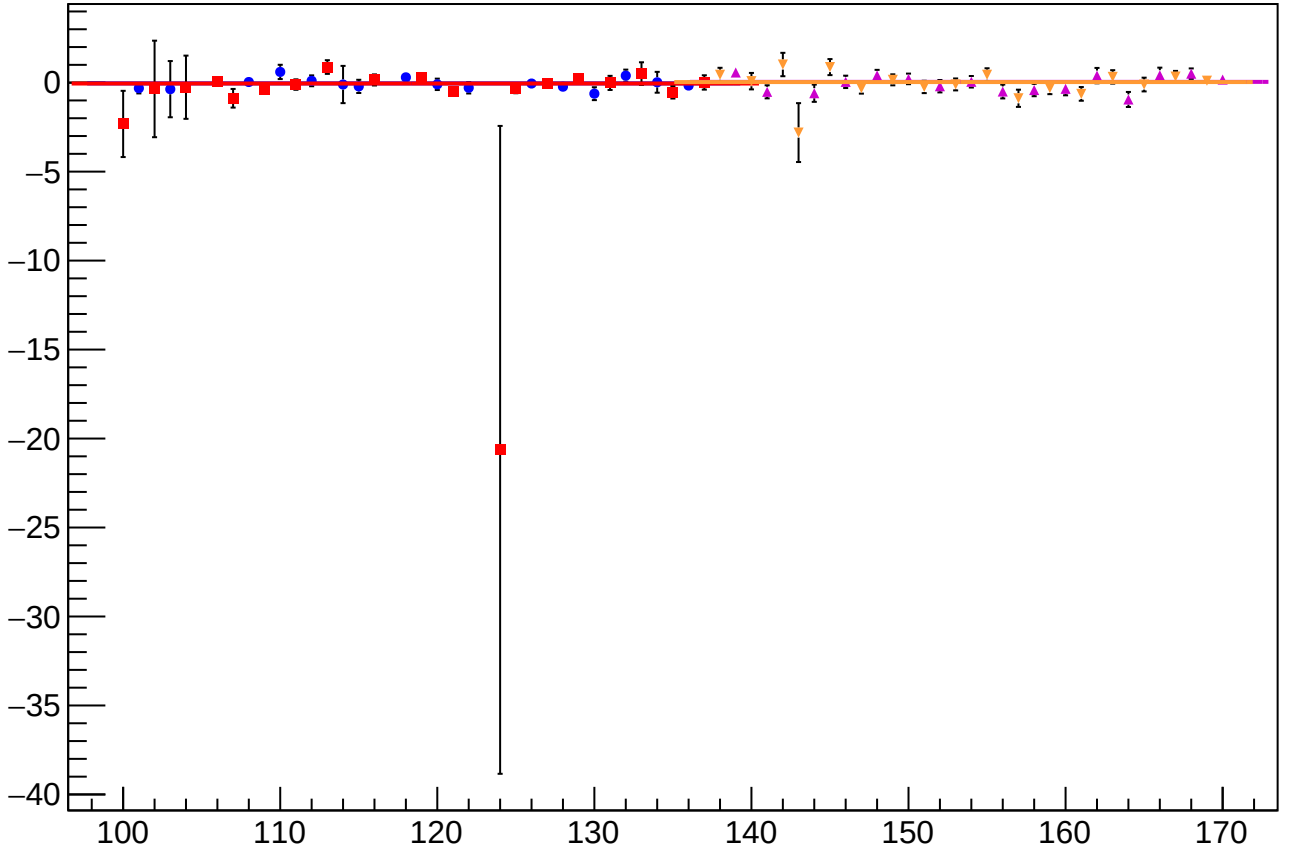
+ sign 0.000+/-0.000 $\chi^2$/NDF: 38.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 76.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 38.4/34


asym_atl1r2_avg_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.6
0.5
0.4
0.3
0.2
0.1
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3140697.1/15
Left Out: 0.000+/-0.000 χ²/NDF:1022195.9/16
Right Out: 0.000+/-0.000 χ²/NDF: 2895431.5/18
Left In: 0.000+/-0.000 χ²/NDF:1041507.5/15
+ sign 0.000+/-0.000 χ²/NDF: 5063576.3/32
All: 0.000+/-0.000 χ²/NDF: 9431627.7/67
- sign 0.000+/-0.000 χ²/NDF: 4285659.6/34

# asym_atl1r2_avg_dit_vs_cor_diff_mean vs Slug




Right In: -0.041+/-0.078 $\chi^2$/NDF: 11.7/15

Left Out: 0.033+/-0.088 $\chi^2$/NDF:22.5/16

Right Out: -0.049+/-0.079 $\chi^2$/NDF: 23.0/18

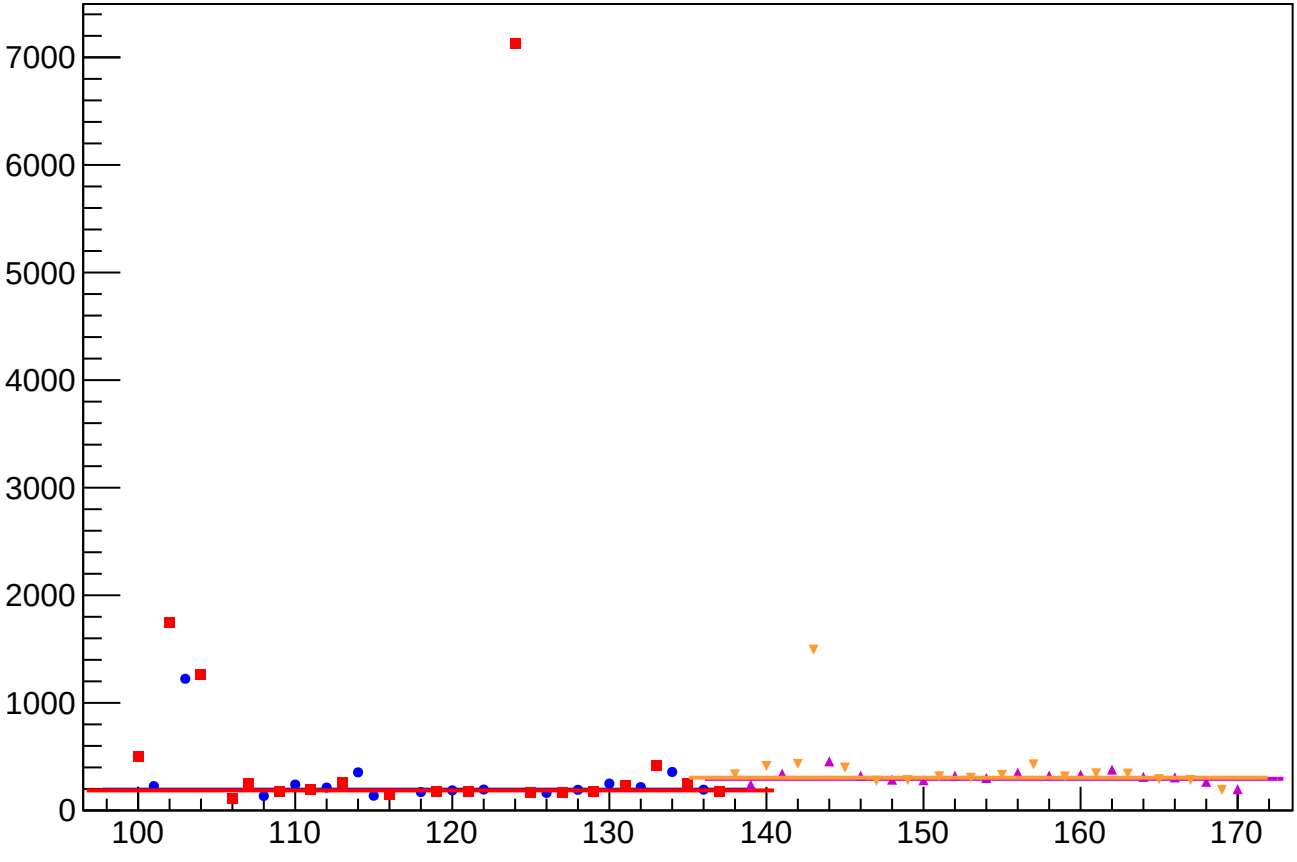
Left In: 0.043+/-0.084 $\chi^2$/NDF:24.3/15

+ sign -0.009+/-0.058 $\chi^2$/NDF: 34.7/32

All: -0.007+/-0.041 $\chi^2$/NDF: 82.7/67

- sign -0.006+/-0.057 $\chi^2$/NDF: 48.0/34

# asym_atl1r2_avg_dit_vs_cor_diff_rms vs Slug




Right In: 193.248+/-0.055 $\chi^2$/NDF: 1408397.0/15

Left Out: 304.447+/-0.062 $\chi^2$/NDF:2114991.5/16

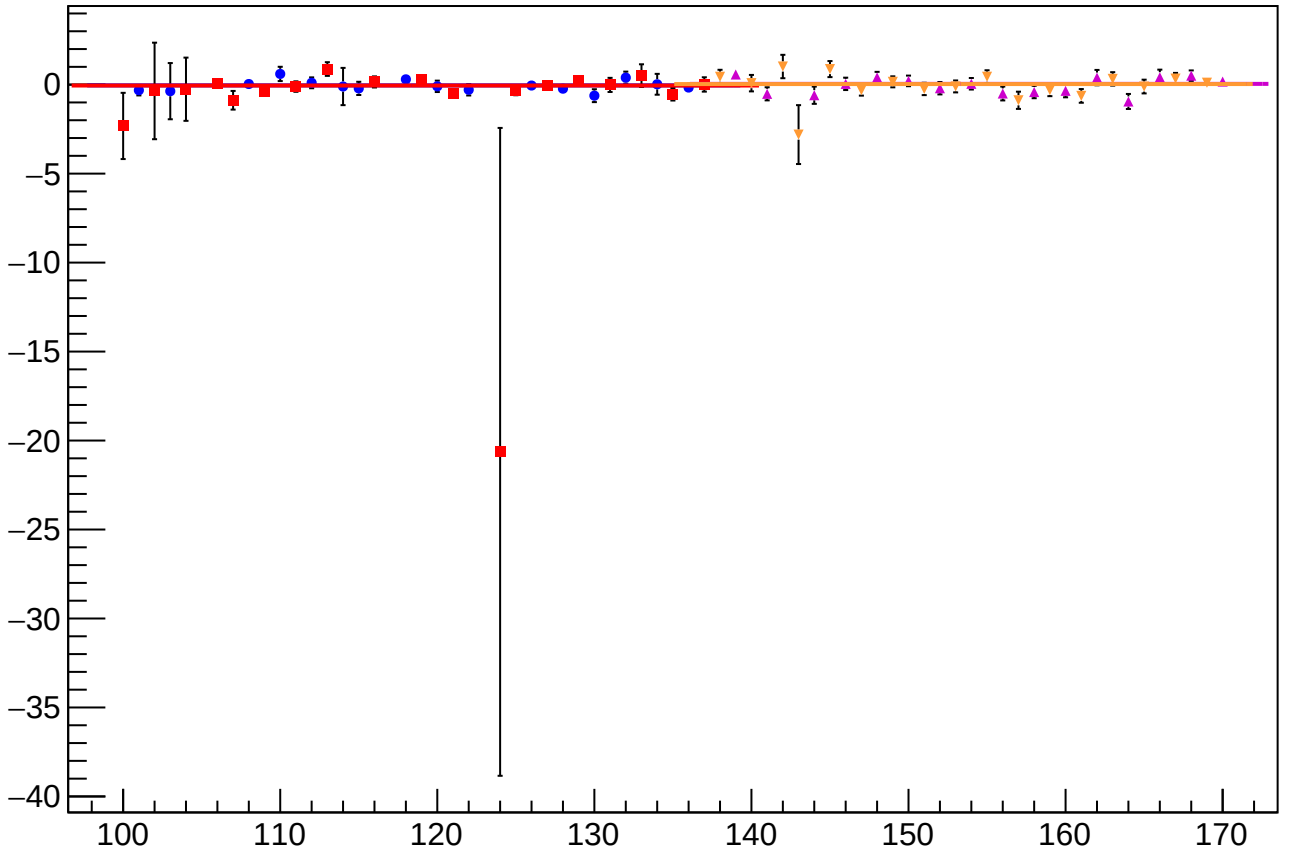
Right Out: 186.379+/-0.056 $\chi^2$/NDF: 2479083.9/18

Left In: 294.029+/-0.059 $\chi^2$/NDF:916324.6/15

+ sign 242.094+/-0.041 $\chi^2$/NDF: 5320194.8/32

All: 239.470+/-0.029 $\chi^2$/NDF: 10476505.9/67

- sign 236.922+/-0.041 $\chi^2$/NDF: 5148306.1/34




Right In: -0.041+/-0.078 $\chi^2$/NDF: 11.7/15

Left Out: 0.033+/-0.088 $\chi^2$/NDF:22.5/16

Right Out: -0.049+/-0.079 $\chi^2$/NDF: 23.0/18

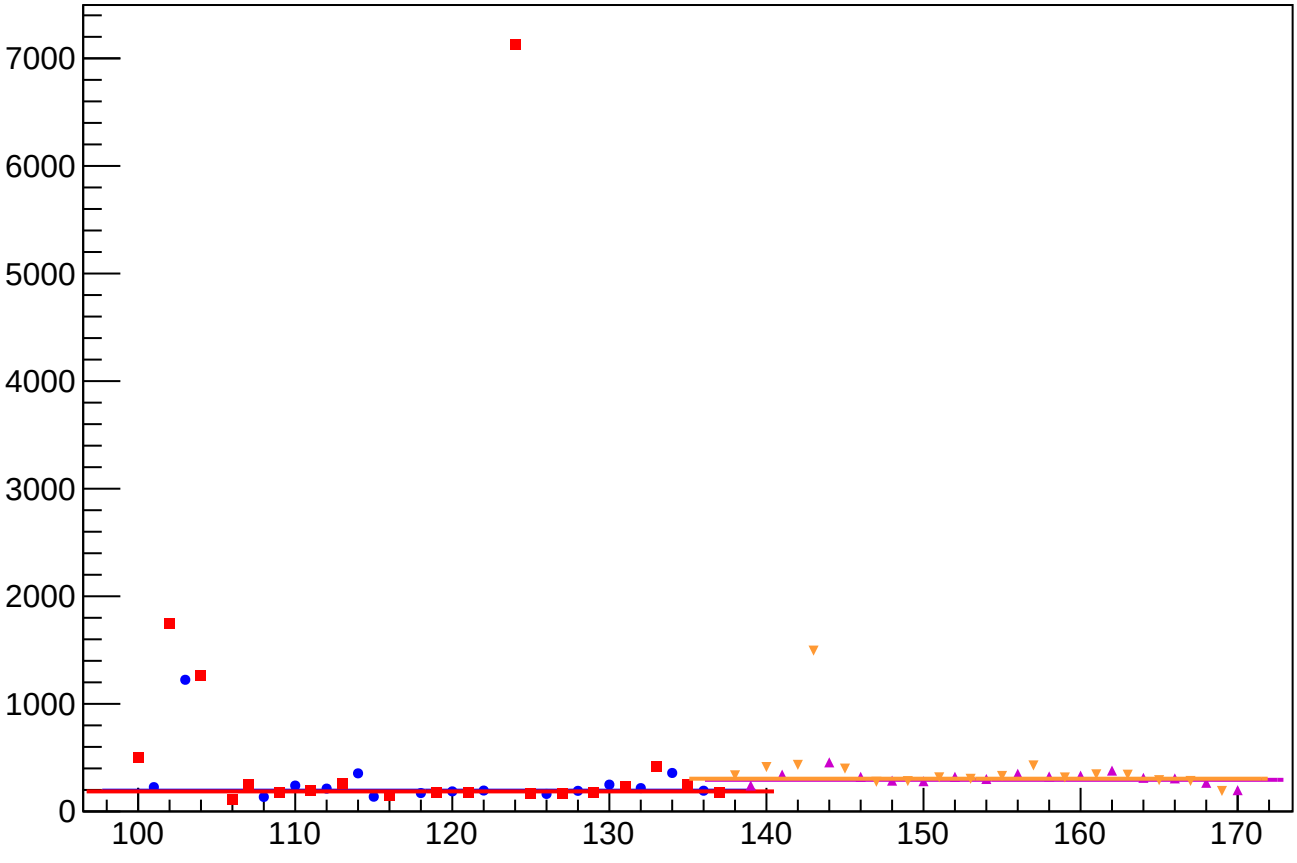
Left In: 0.043+/-0.084 $\chi^2$/NDF:24.3/15

+ sign -0.009+/-0.058 $\chi^2$/NDF: 34.7/32

All: -0.007+/-0.041 $\chi^2$/NDF: 82.7/67

- sign -0.006+/-0.057 $\chi^2$/NDF: 48.0/34

# asym_atl1r2_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 193.248+/-0.055 $\chi^2$/NDF: 1408397.0/15

Left Out: 304.447+/-0.062 $\chi^2$/NDF:2114991.5/16

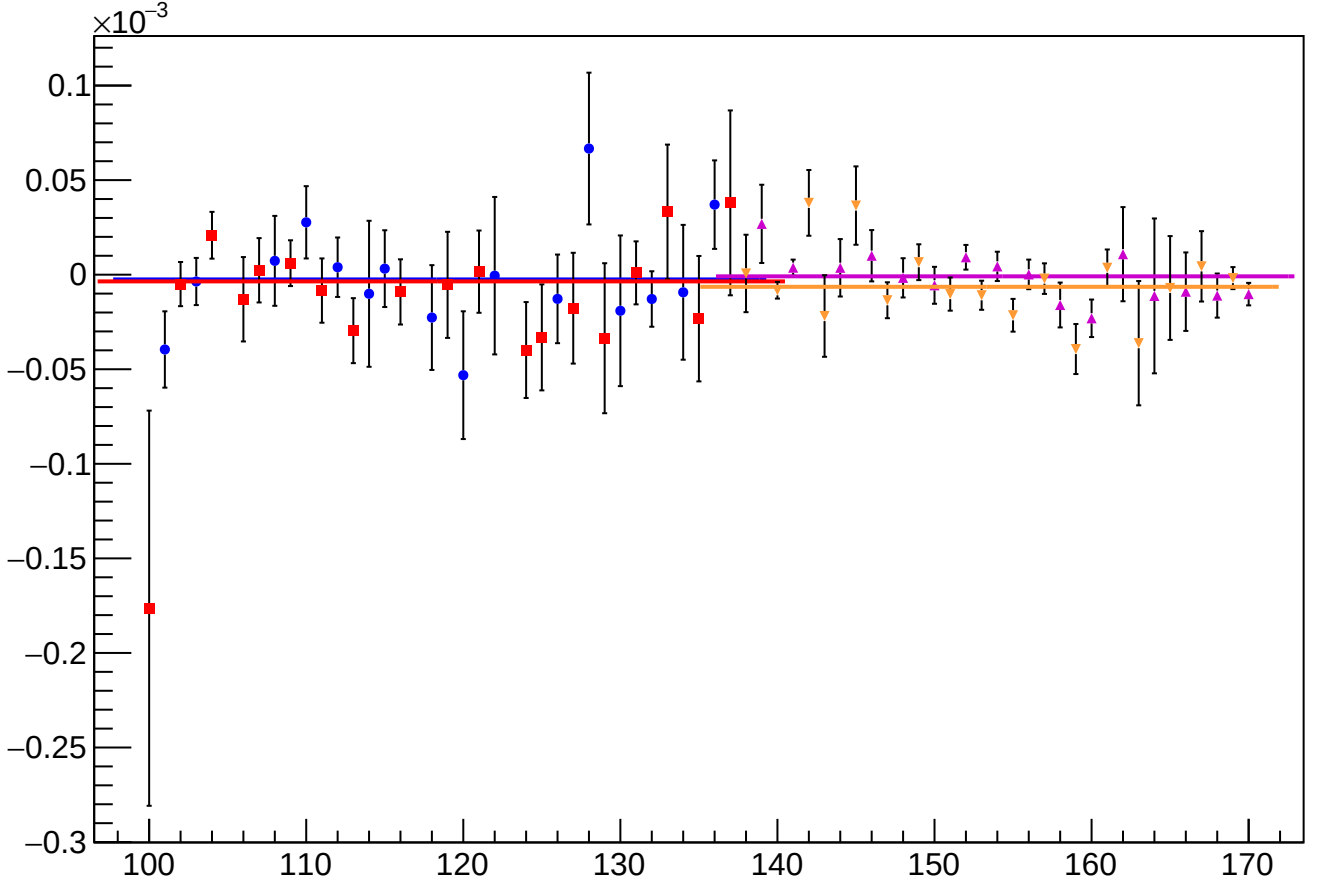
Right Out: 186.379+/-0.056 $\chi^2$/NDF: 2479083.9/18

Left In: 294.029+/-0.059 $\chi^2$/NDF:916324.6/15

+ sign 242.094+/-0.041 $\chi^2$/NDF: 5320194.8/32

All: 239.470+/-0.029 $\chi^2$/NDF: 10476505.9/67

- sign 236.922+/-0.041 $\chi^2$/NDF: 5148306.1/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:27.0/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 16.3/18

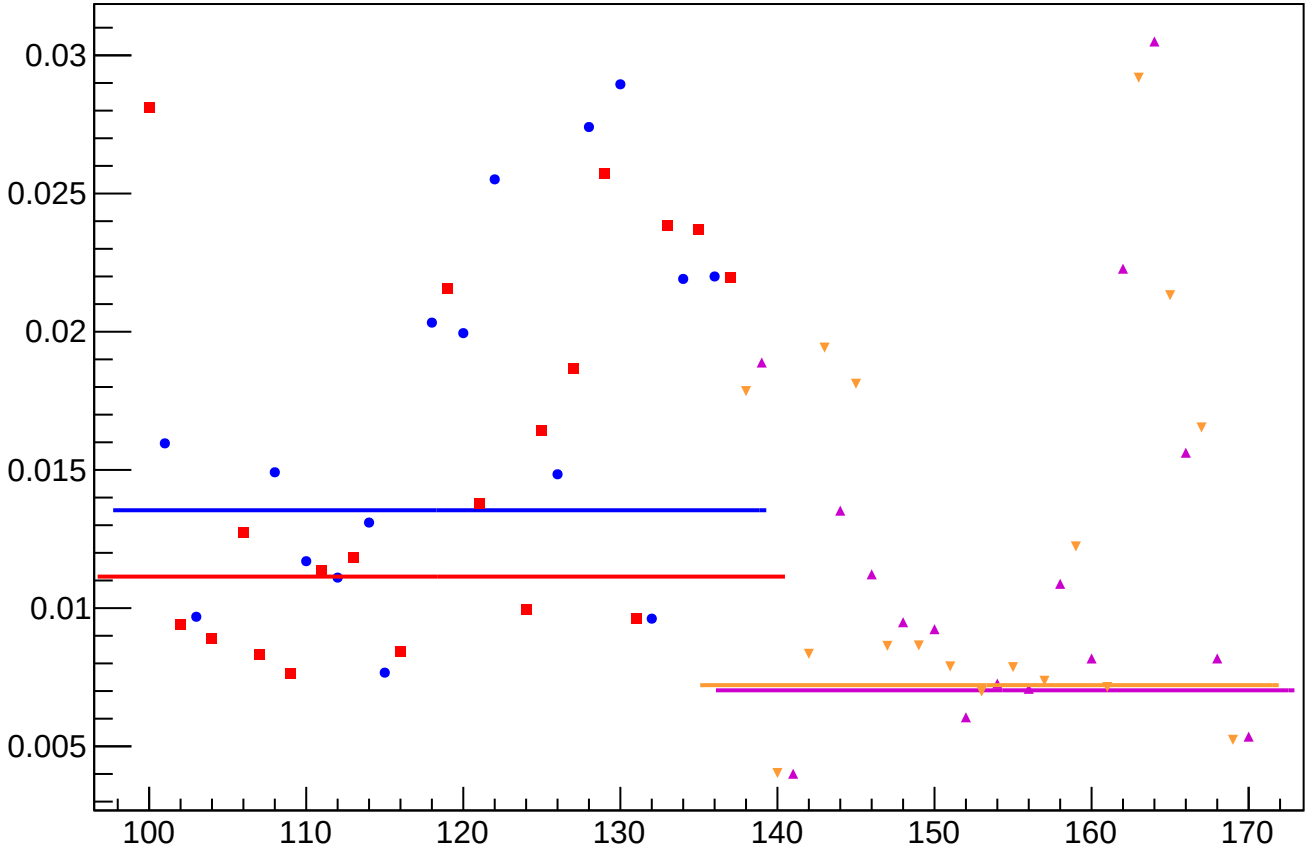
Left In: -0.000+/-0.000 $\chi^2$/NDF:17.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 43.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 79.3/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 33.7/34

# asym_atl1r2_avg_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.014+/-0.000 $\chi^2$/NDF: 1877615.1/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:5350058.4/16

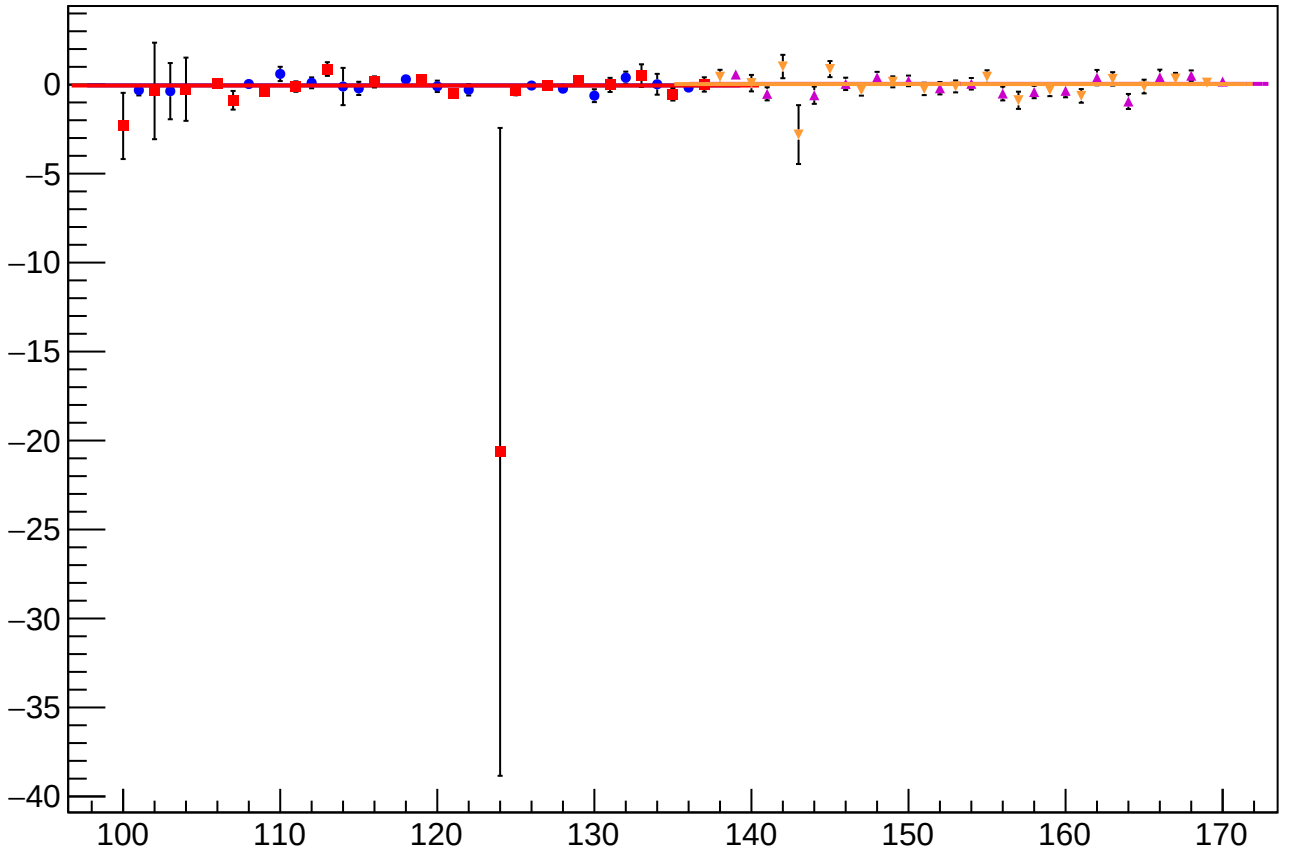
Right Out: 0.011+/-0.000 $\chi^2$/NDF: 1887740.8/18

Left In: 0.007+/-0.000 $\chi^2$/NDF:4646949.6/15

+ sign 0.008+/-0.000 $\chi^2$/NDF: 9522605.2/32

All: 0.008+/-0.000 $\chi^2$/NDF: 17438208.3/67

- sign 0.008+/-0.000 $\chi^2$/NDF: 7894126.4/34




Right In: -0.041+/-0.078 $\chi^2$/NDF: 11.7/15

Left Out: 0.033+/-0.088 $\chi^2$/NDF:22.5/16

Right Out: -0.049+/-0.079 $\chi^2$/NDF: 23.0/18

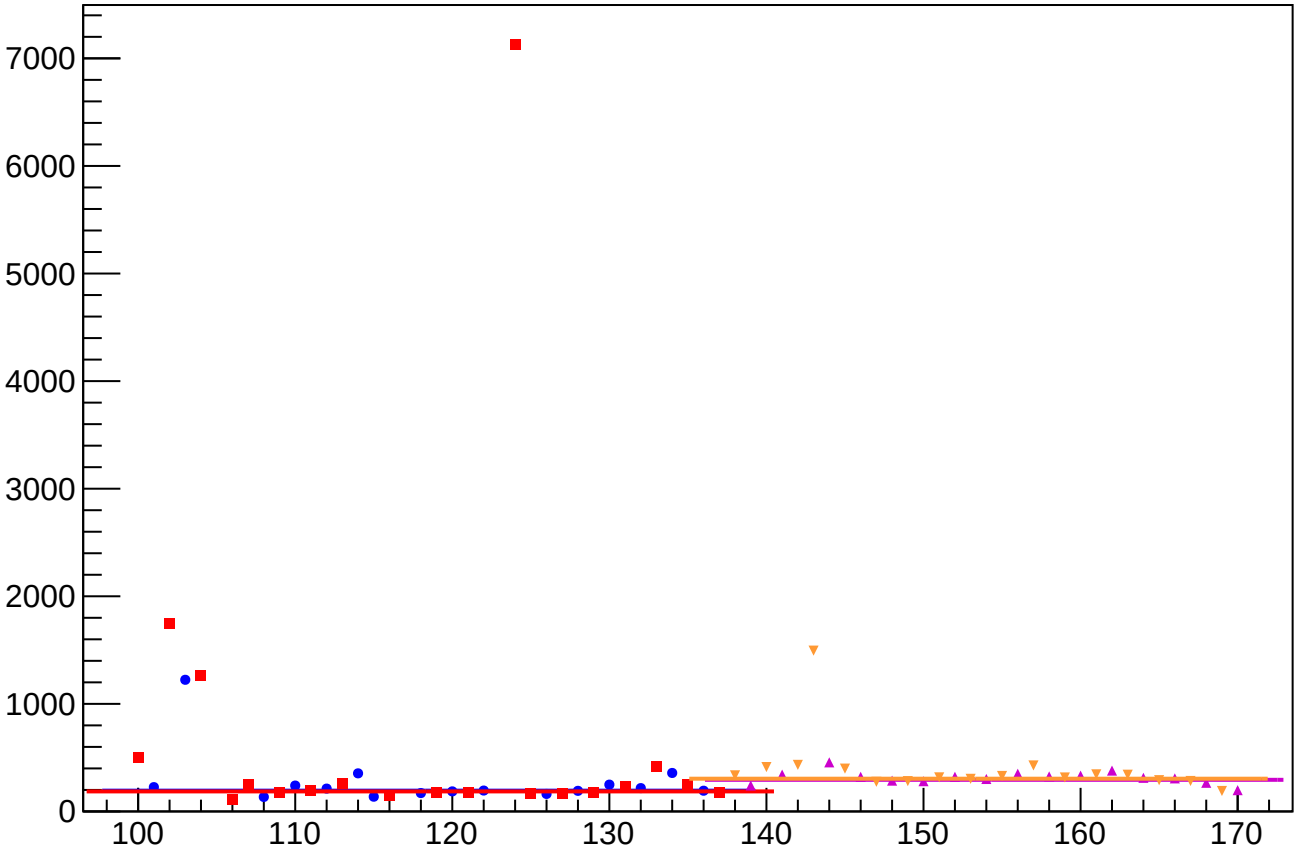
Left In: 0.043+/-0.084 $\chi^2$/NDF:24.3/15

+ sign -0.009+/-0.058 $\chi^2$/NDF: 34.7/32

All: -0.007+/-0.041 $\chi^2$/NDF: 82.7/67

- sign -0.006+/-0.057 $\chi^2$/NDF: 48.0/34

# asym_atl1r2_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 193.247+/-0.055 $\chi^2$/NDF: 1408390.6/15

Left Out: 304.450+/-0.062 $\chi^2$/NDF:2115032.1/16

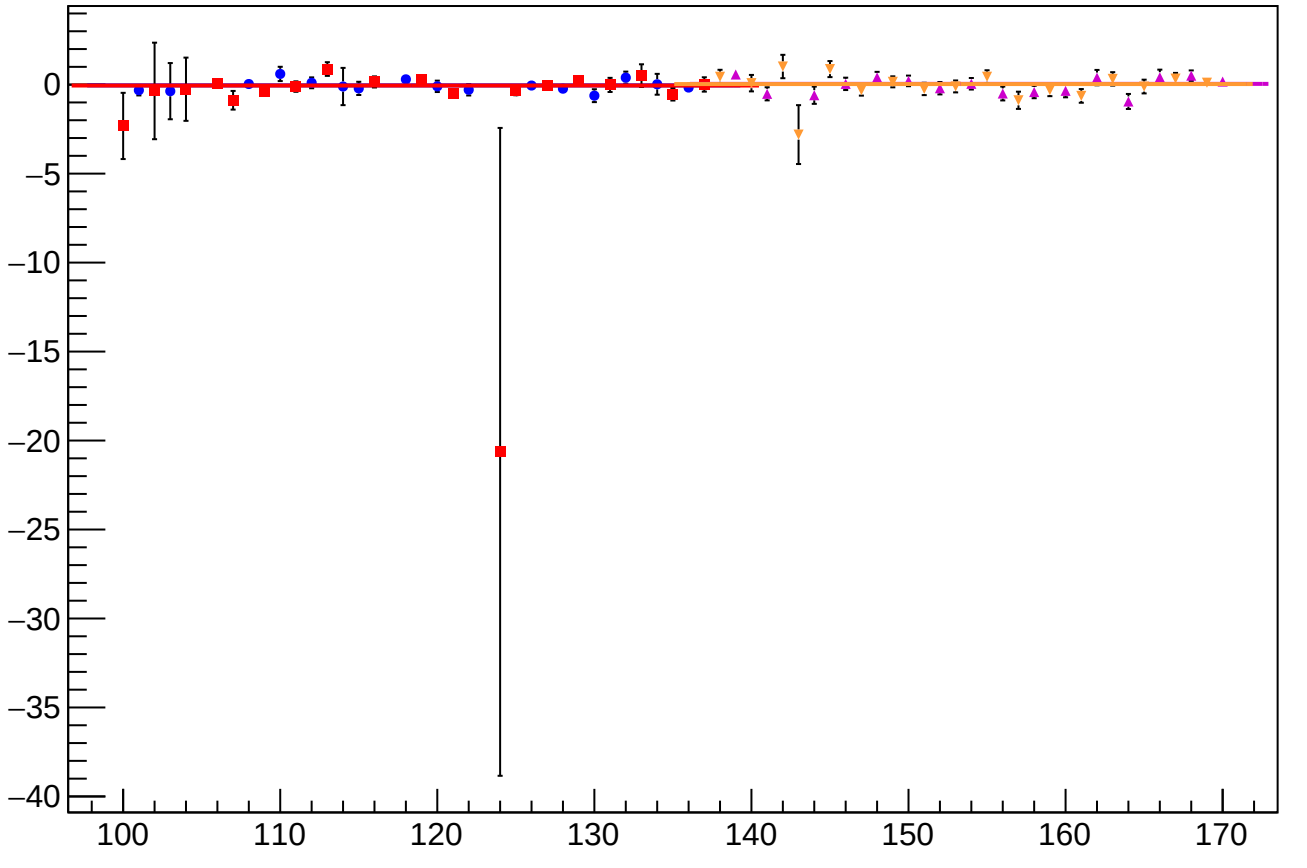
Right Out: 186.376+/-0.056 $\chi^2$/NDF: 2479113.1/18

Left In: 294.033+/-0.059 $\chi^2$/NDF:916354.0/15

+ sign 242.093+/-0.041 $\chi^2$/NDF: 5320374.8/32

All: 239.470+/-0.029 $\chi^2$/NDF: 10476930.5/67

- sign 236.921+/-0.041 $\chi^2$/NDF: 5148549.8/34




Right In: -0.041+/-0.078 $\chi^2$/NDF: 11.7/15

Left Out: 0.033+/-0.088 $\chi^2$/NDF:22.5/16

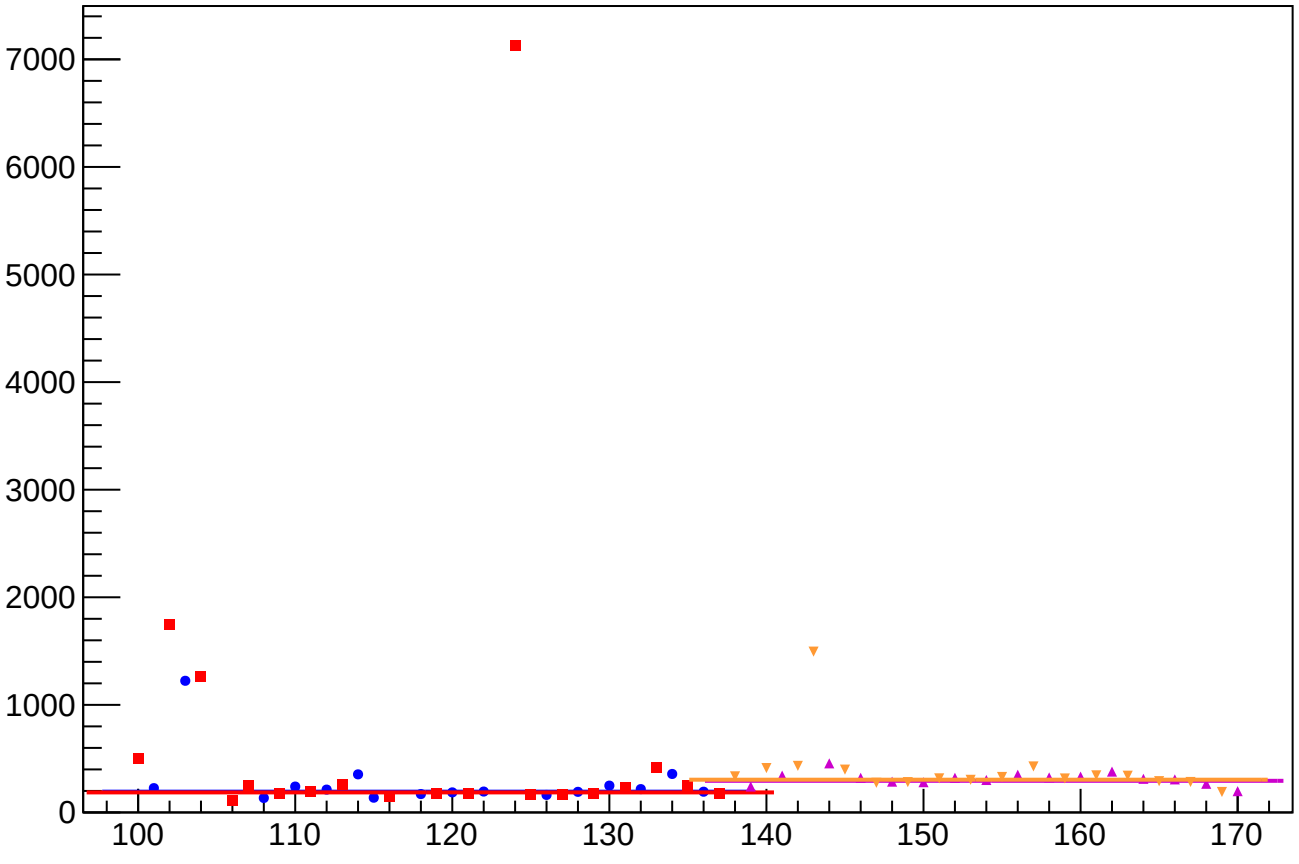
Right Out: -0.049+/-0.079 $\chi^2$/NDF: 23.0/18

Left In: 0.043+/-0.084 $\chi^2$/NDF:24.3/15

+ sign -0.009+/-0.058 $\chi^2$/NDF: 34.7/32

All: -0.007+/-0.041 $\chi^2$/NDF: 82.7/67

- sign -0.006+/-0.057 $\chi^2$/NDF: 48.0/34




Right In: 193.247+/-0.055 $\chi^2$/NDF: 1408390.6/15

Left Out: 304.450+/-0.062 $\chi^2$/NDF:2115032.1/16

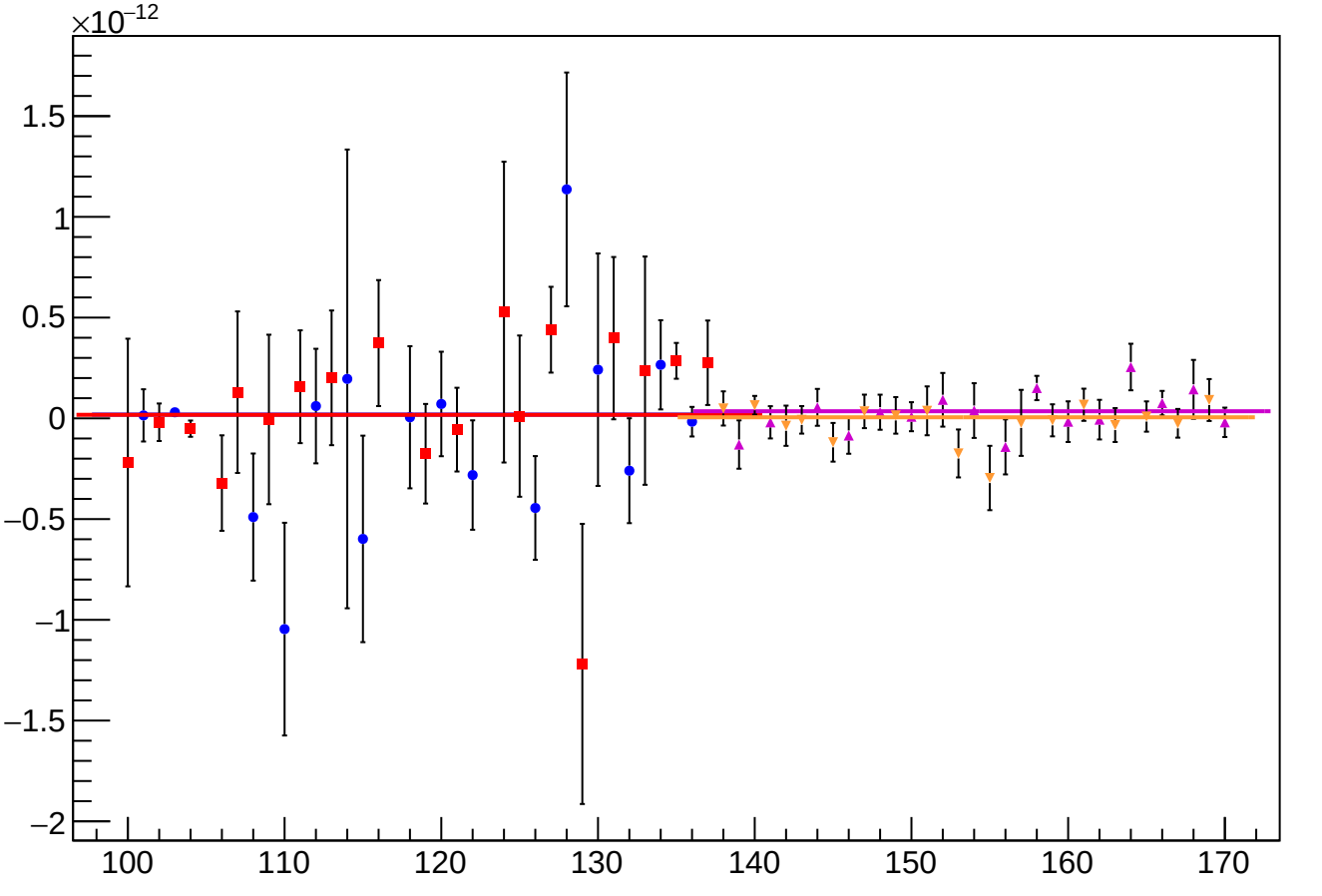
Right Out: 186.376+/-0.056 $\chi^2$/NDF: 2479113.1/18

Left In: 294.033+/-0.059 $\chi^2$/NDF:916354.0/15

+ sign 242.093+/-0.041 $\chi^2$/NDF: 5320374.8/32

All: 239.470+/-0.029 $\chi^2$/NDF: 10476930.5/67

- sign 236.921+/-0.041 $\chi^2$/NDF: 5148549.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 19.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11.6/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 27.1/18

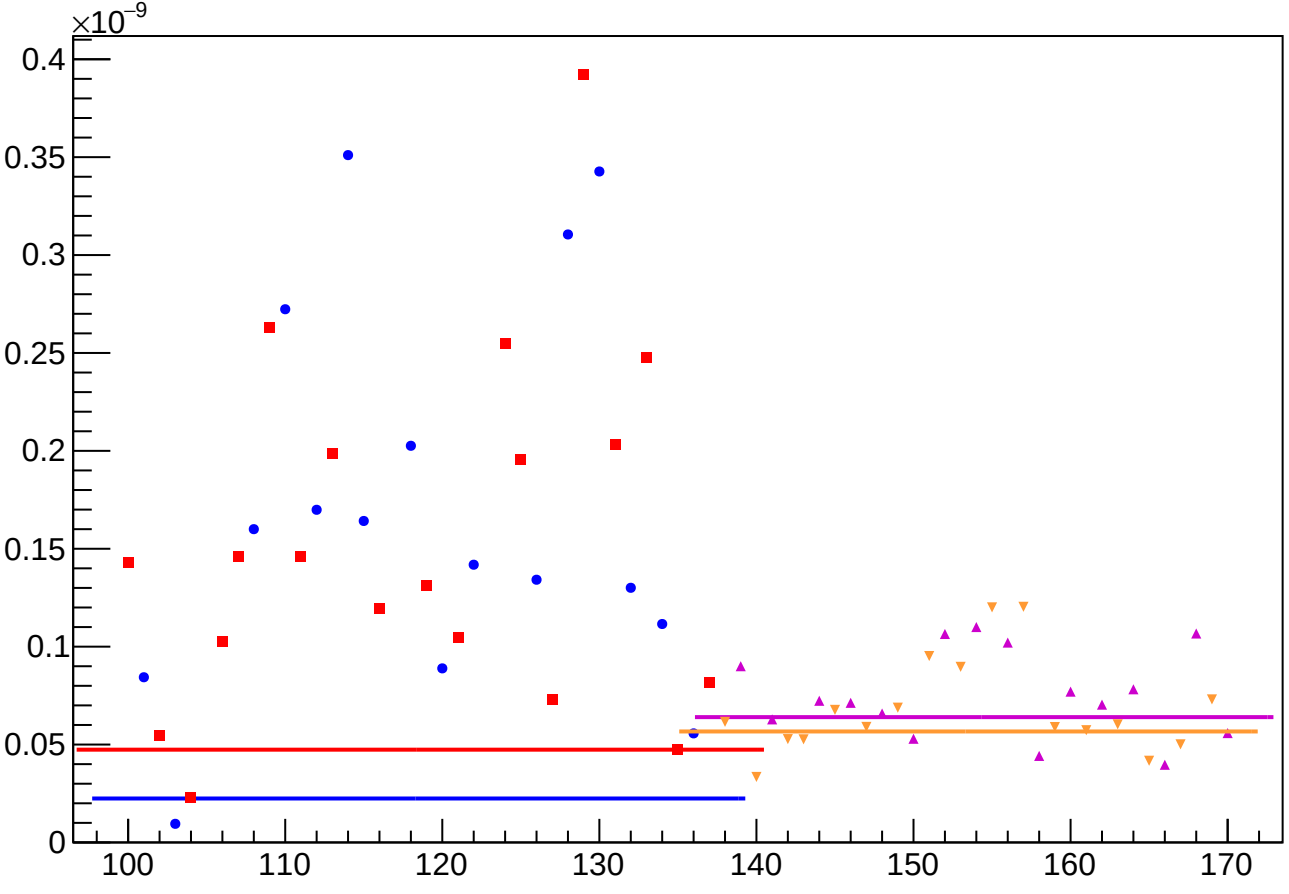
Left In: 0.000+/-0.000 $\chi^2$/NDF:15.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 31.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 74.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 42.8/34

# asym_atl1r2_avg_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 6410173.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1706333.9/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 4236050.4/18

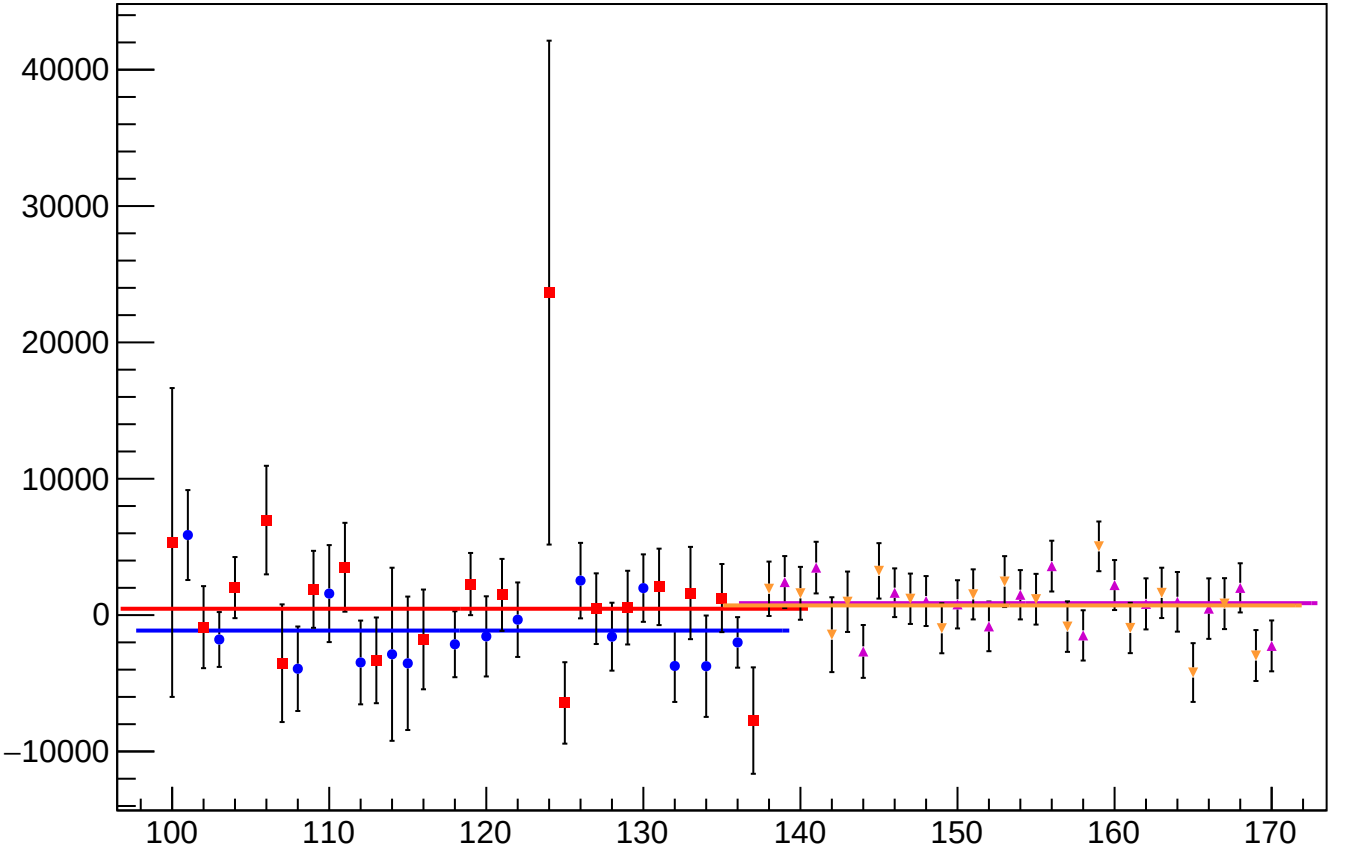
Left In: 0.000+/-0.000 $\chi^2$/NDF:1565523.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 10921692.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 18380226.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 6176932.7/34

# reg_asym_atl1r2_dd_mean vs Slug




Right In: -1134.630+/-693.782 $\chi^2$/NDF: 12.2/15

Left Out: 710.447+/-470.010 $\chi^2$/NDF:21.3/16

Right Out: 465.519+/-705.926 $\chi^2$/NDF: 20.0/18

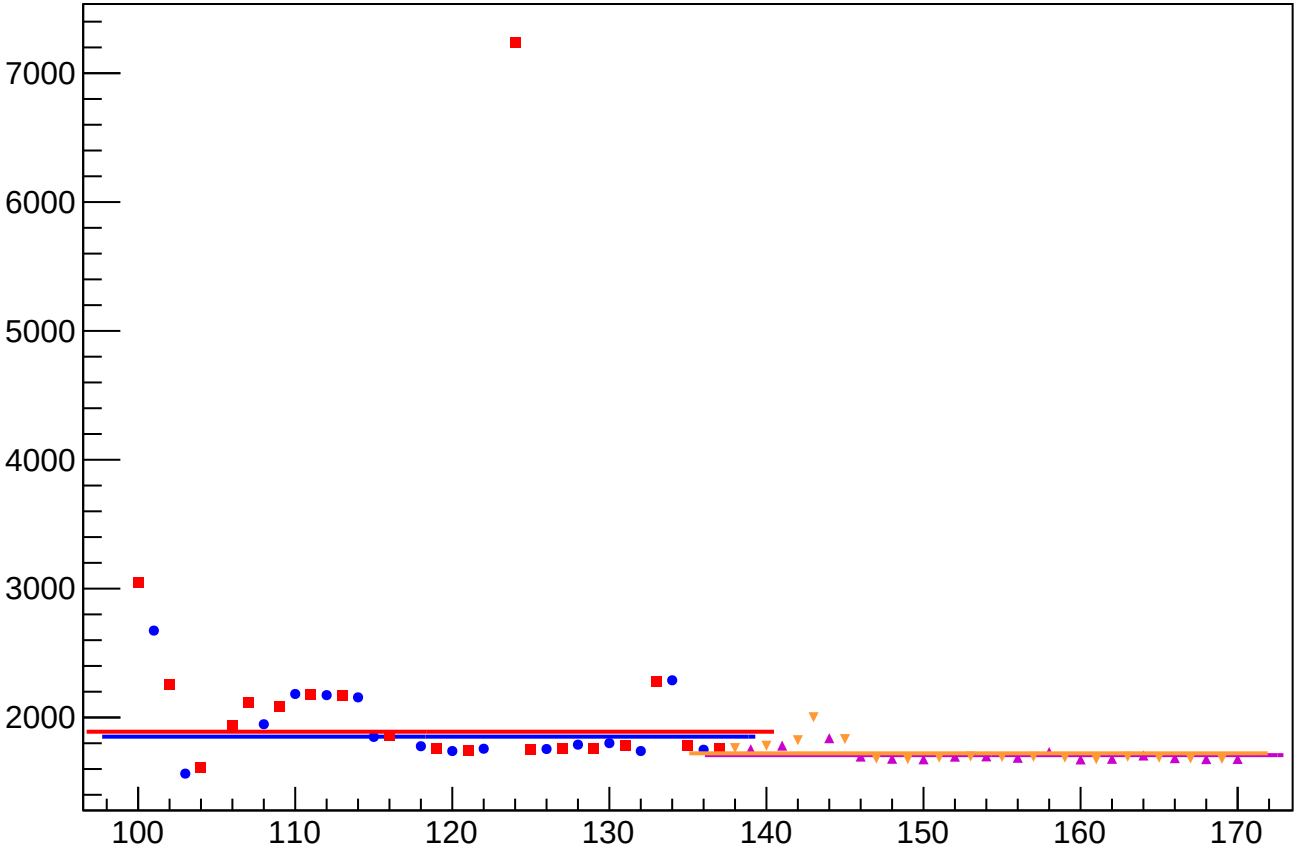
Left In: 875.487+/-469.832 $\chi^2$/NDF:14.6/15

+ sign 130.029+/-389.122 $\chi^2$/NDF: 38.4/32

All: 438.242+/-275.856 $\chi^2$/NDF: 74.5/67

- sign 749.634+/-391.124 $\chi^2$/NDF: 34.9/34

# reg_asym_atl1r2_dd_rms vs Slug




Right In: 1851.130+/-0.491 $\chi^2$/NDF: 259981.6/15

Left Out: 1721.876+/-0.332 $\chi^2$/NDF:52253.9/16

Right Out: 1889.528+/-0.498 $\chi^2$/NDF: 358902.6/18

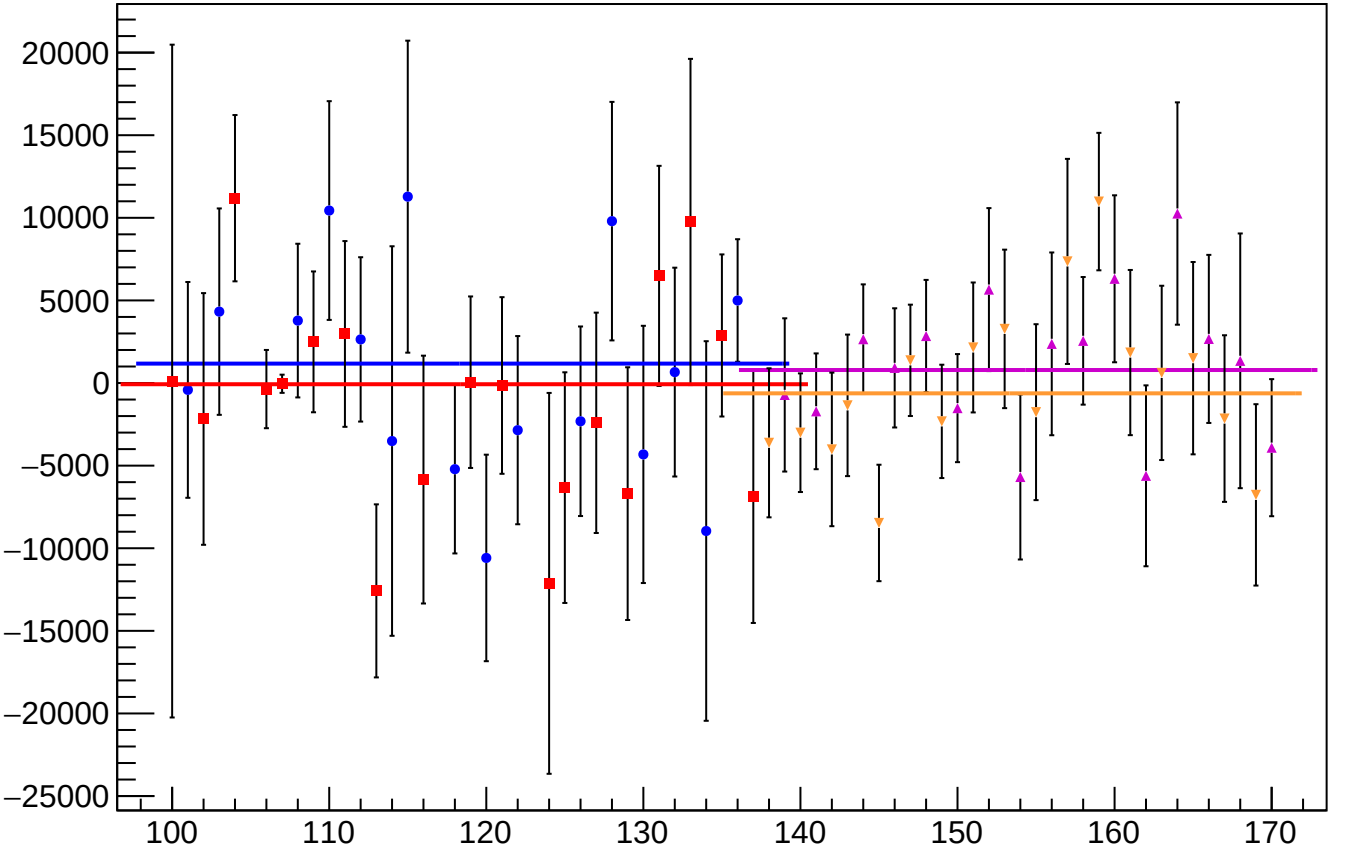
Left In: 1707.834+/-0.332 $\chi^2$/NDF:17766.4/15

+ sign 1762.536+/-0.275 $\chi^2$/NDF: 359816.4/32

All: 1763.160+/-0.195 $\chi^2$/NDF: 828610.5/67

- sign 1763.790+/-0.276 $\chi^2$/NDF: 468783.8/34

# asym_atl1r2_dd_reg_correction_mean vs Slug




Right In: 1175.430+/-1502.128 $\chi^2$/NDF: 13.7/15

Left Out: -624.206+/-1062.257 $\chi^2$/NDF:19.4/16

Right Out: -72.681+/-505.693 $\chi^2$/NDF: 17.9/18

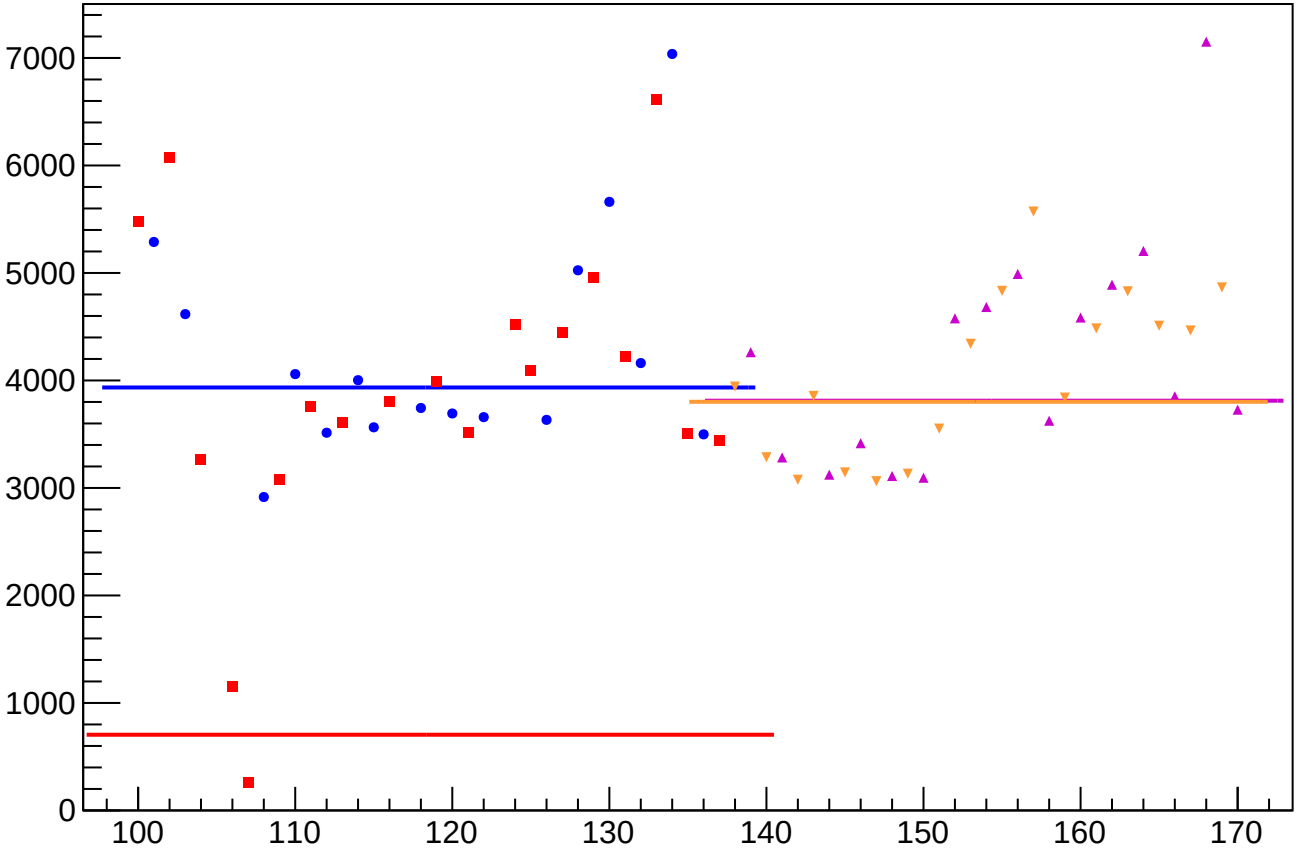
Left In: 787.809+/-1075.328 $\chi^2$/NDF:10.7/15

\+ sign -24.258+/-867.304 $\chi^2$/NDF: 34.1/32

All: 59.764+/-404.734 $\chi^2$/NDF: 63.3/67

\- sign 83.155+/-457.617 $\chi^2$/NDF: 29.2/34

# asym_atl1r2_dd_reg_correction_rms vs Slug




Right In: 3934.718+/-1.062 $\chi^2$/NDF: 560125.6/15

Left Out: 3801.637+/-0.751 $\chi^2$/NDF:857932.6/16

Right Out: 704.385+/-0.358 $\chi^2$/NDF: 10618643.5/18

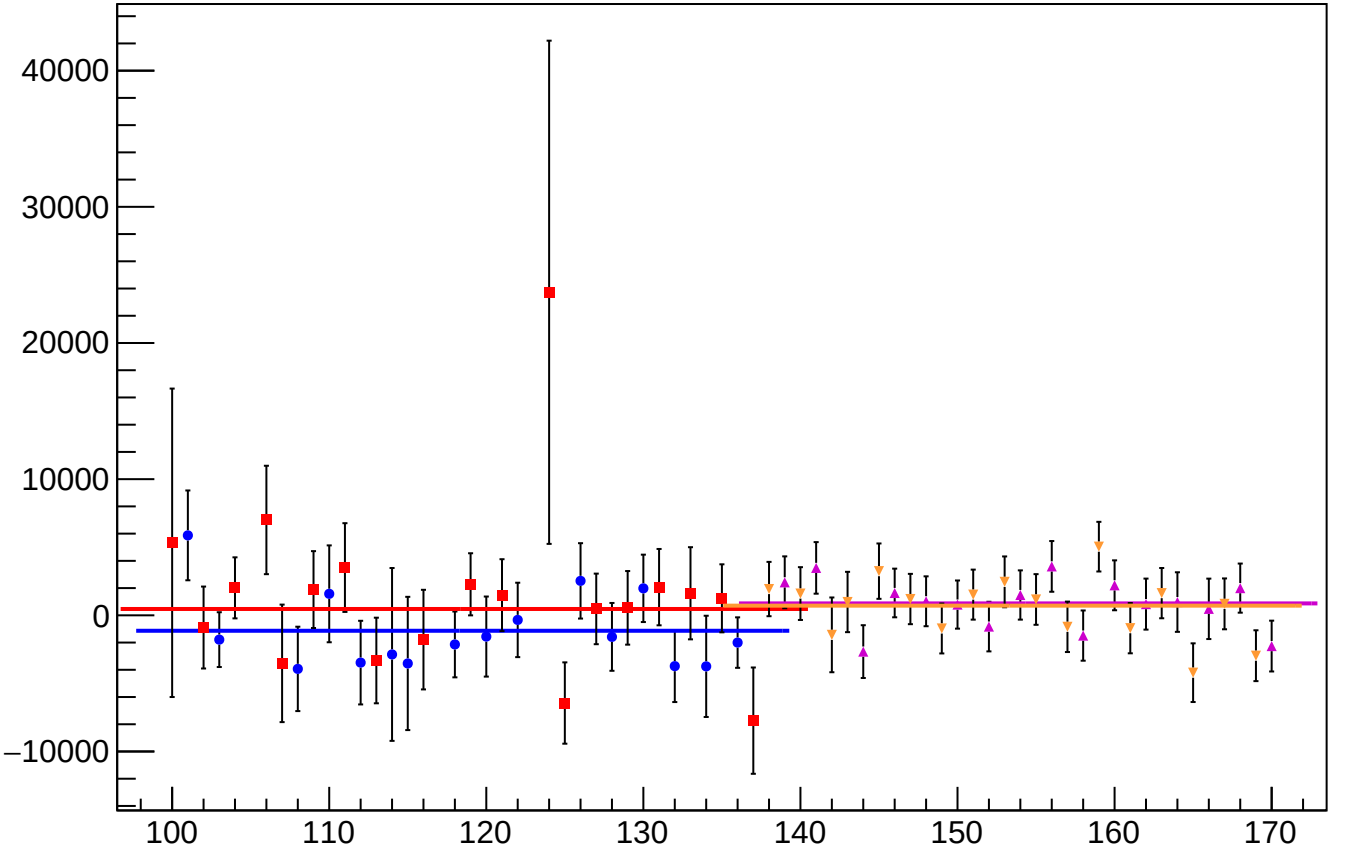
Left In: 3811.735+/-0.760 $\chi^2$/NDF:1146818.9/15

+ sign 3846.002+/-0.613 $\chi^2$/NDF: 1428523.1/32

All: 1828.730+/-0.286 $\chi^2$/NDF: 40701851.3/6

- sign 1267.132+/-0.324 $\chi^2$/NDF: 25441445.6/34

# cor_asym_atl1r2_dd_mean vs Slug




Right In: -1134.203+/-693.782 $\chi^2$/NDF: 12.2/15

Left Out: 710.527+/-470.010 $\chi^2$/NDF:21.3/16

Right Out: 465.899+/-705.928 $\chi^2$/NDF: 20.0/18

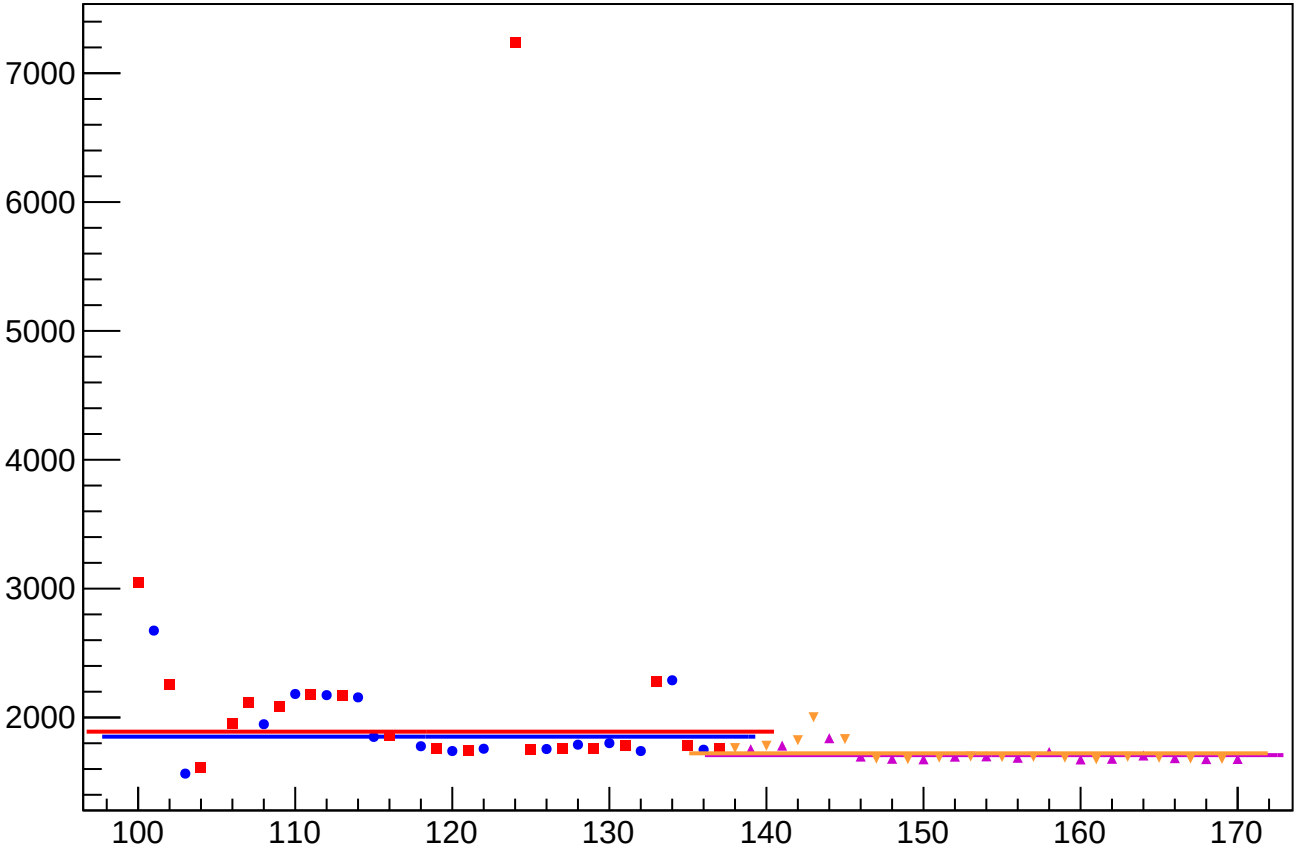
Left In: 875.425+/-469.832 $\chi^2$/NDF:14.6/15

+ sign 130.218+/-389.122 $\chi^2$/NDF: 38.4/32

All: 438.373+/-275.856 $\chi^2$/NDF: 74.5/67

- sign 749.709+/-391.125 $\chi^2$/NDF: 34.9/34

# cor_asym_atl1r2_dd_rms vs Slug




Right In: 1851.131+/-0.491 $\chi^2$/NDF: 259980.7/15

Left Out: 1721.876+/-0.332 $\chi^2$/NDF:52253.9/16

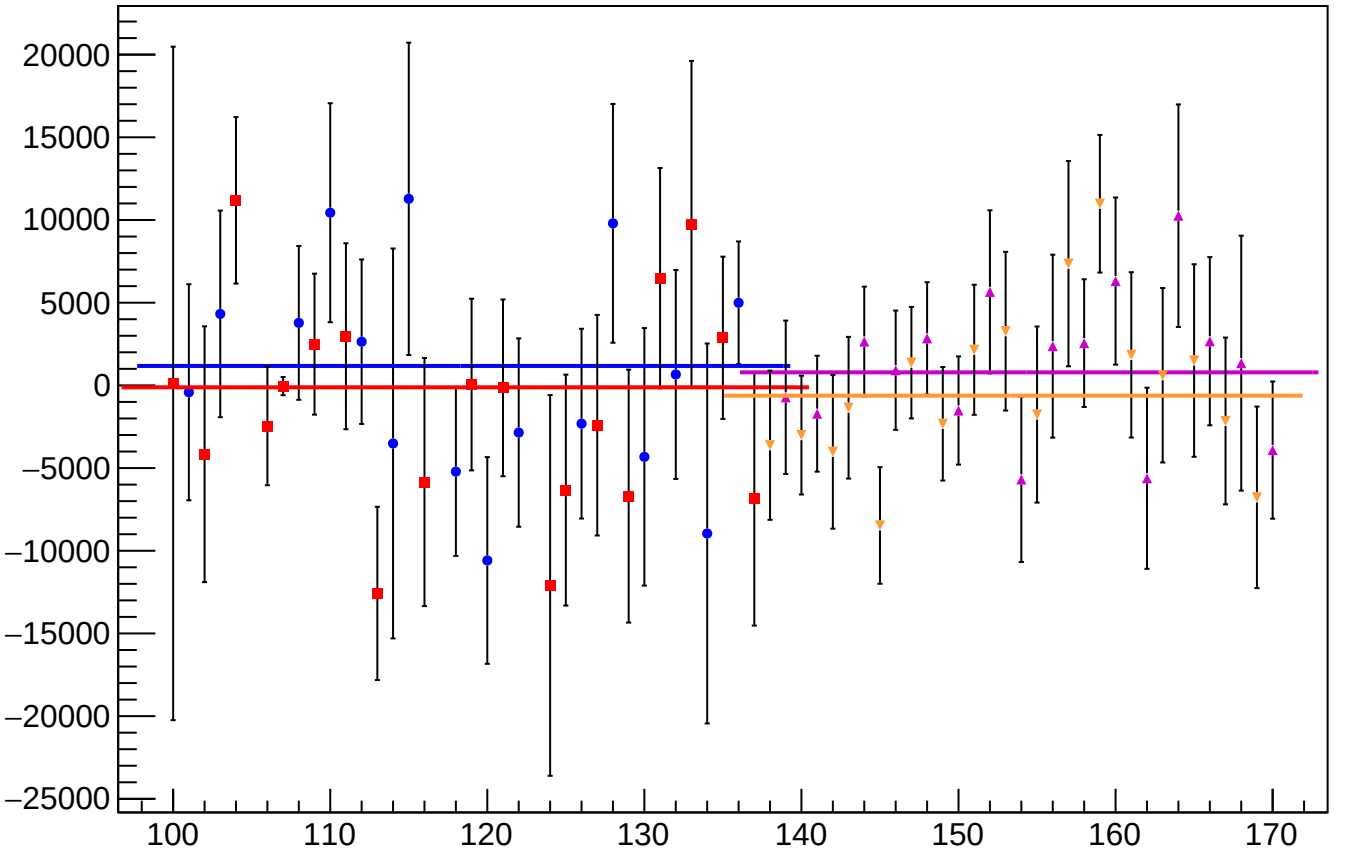
Right Out: 1889.986+/-0.498 $\chi^2$/NDF: 359122.3/18

Left In: 1707.834+/-0.332 $\chi^2$/NDF:17766.4/15

+ sign 1762.536+/-0.275 $\chi^2$/NDF: 359815.9/32

All: 1763.222+/-0.195 $\chi^2$/NDF: 829268.0/67

- sign 1763.914+/-0.276 $\chi^2$/NDF: 469439.7/34




Right In: 1175.408+/-1502.134 $\chi^2$/NDF: 13.7/15

Left Out: -624.193+/-1062.254 $\chi^2$/NDF:19.4/16

Right Out: -115.917+/-512.289 $\chi^2$/NDF: 18.6/18

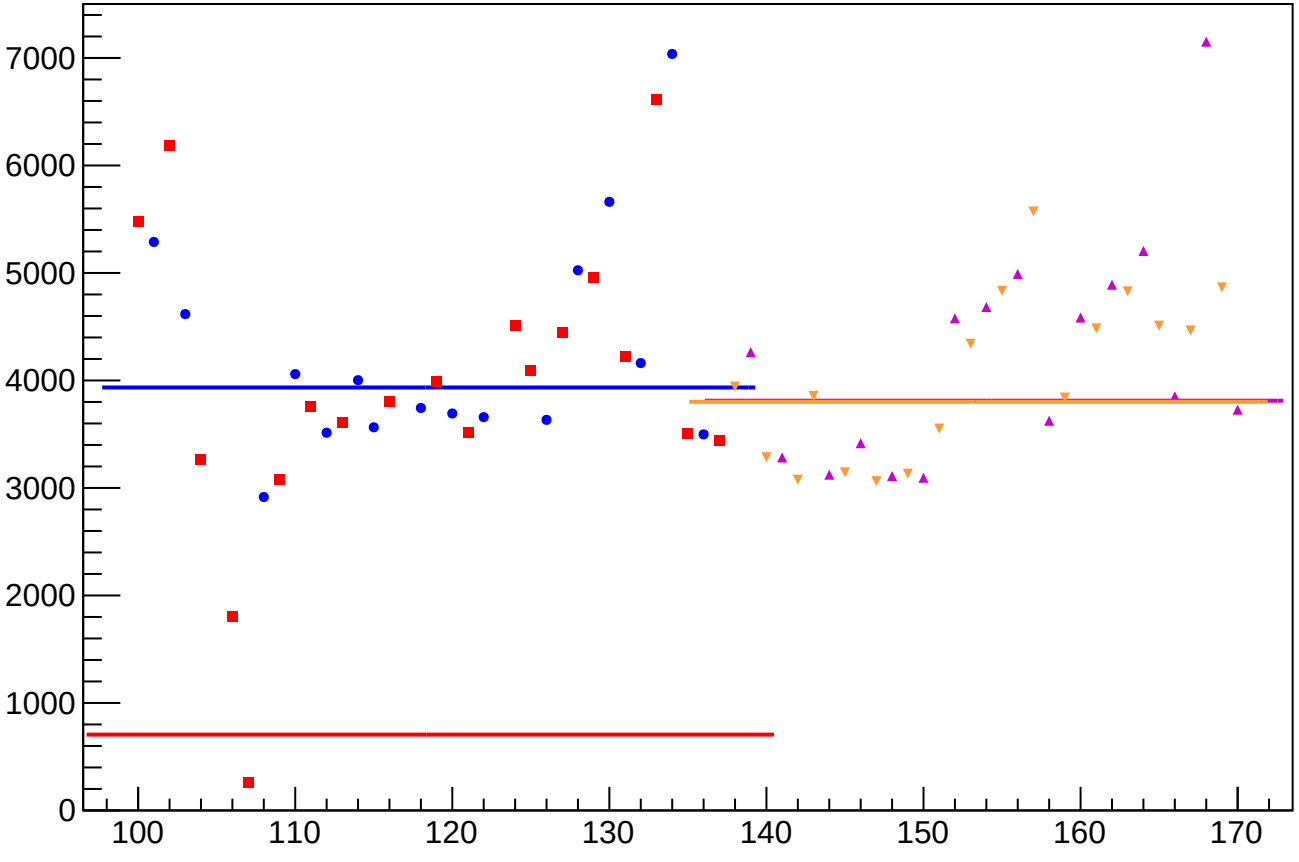
Left In: 787.817+/-1075.327 $\chi^2$/NDF:10.7/15

+ sign -24.262+/-867.304 $\chi^2$/NDF: 34.1/32

All: 34.535+/-408.092 $\chi^2$/NDF: 64.0/67

- sign 51.254+/-462.487 $\chi^2$/NDF: 29.8/34

# asym_atl1r2_dd_cor_correction_rms vs Slug




Right In: 3934.727+/-1.062 $\chi^2$/NDF: 560149.8/15

Left Out: 3801.626+/-0.751 $\chi^2$/NDF:857941.3/16

Right Out: 705.620+/-0.362 $\chi^2$/NDF: 10747208.1/18

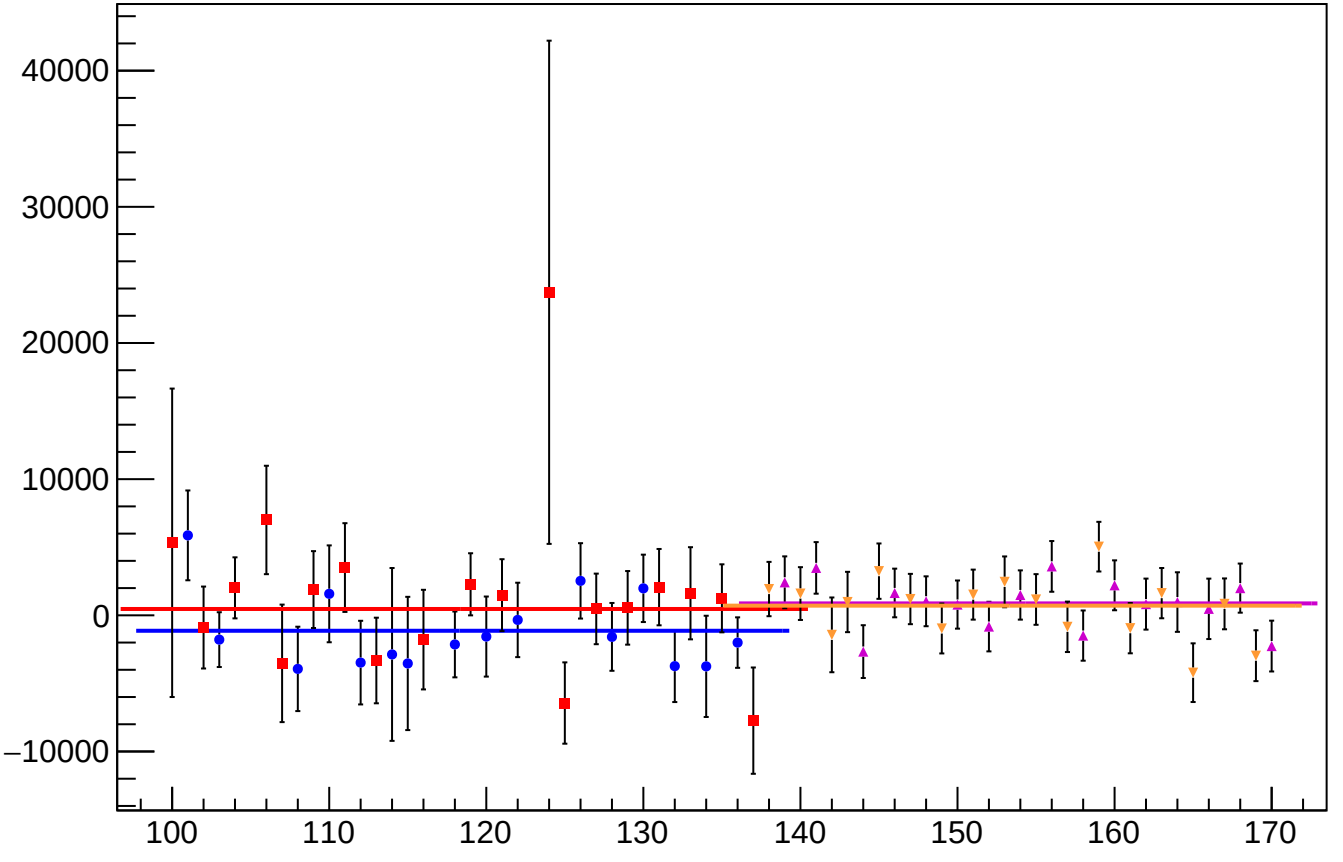
Left In: 3811.734+/-0.760 $\chi^2$/NDF:1146804.8/15

+ sign 3845.998+/-0.613 $\chi^2$/NDF: 1428558.9/32

All: 1848.247+/-0.289 $\chi^2$/NDF: 40551721.4/6

- sign 1280.181+/-0.327 $\chi^2$/NDF: 25494459.7/34

# eigen_cor_asym_atl1r2_dd_mean vs Slug




Right In: -1134.203+/-693.782 $\chi^2$/NDF: 12.2/15

Left Out: 710.527+/-470.010 $\chi^2$/NDF:21.3/16

Right Out: 465.899+/-705.928 $\chi^2$/NDF: 20.0/18

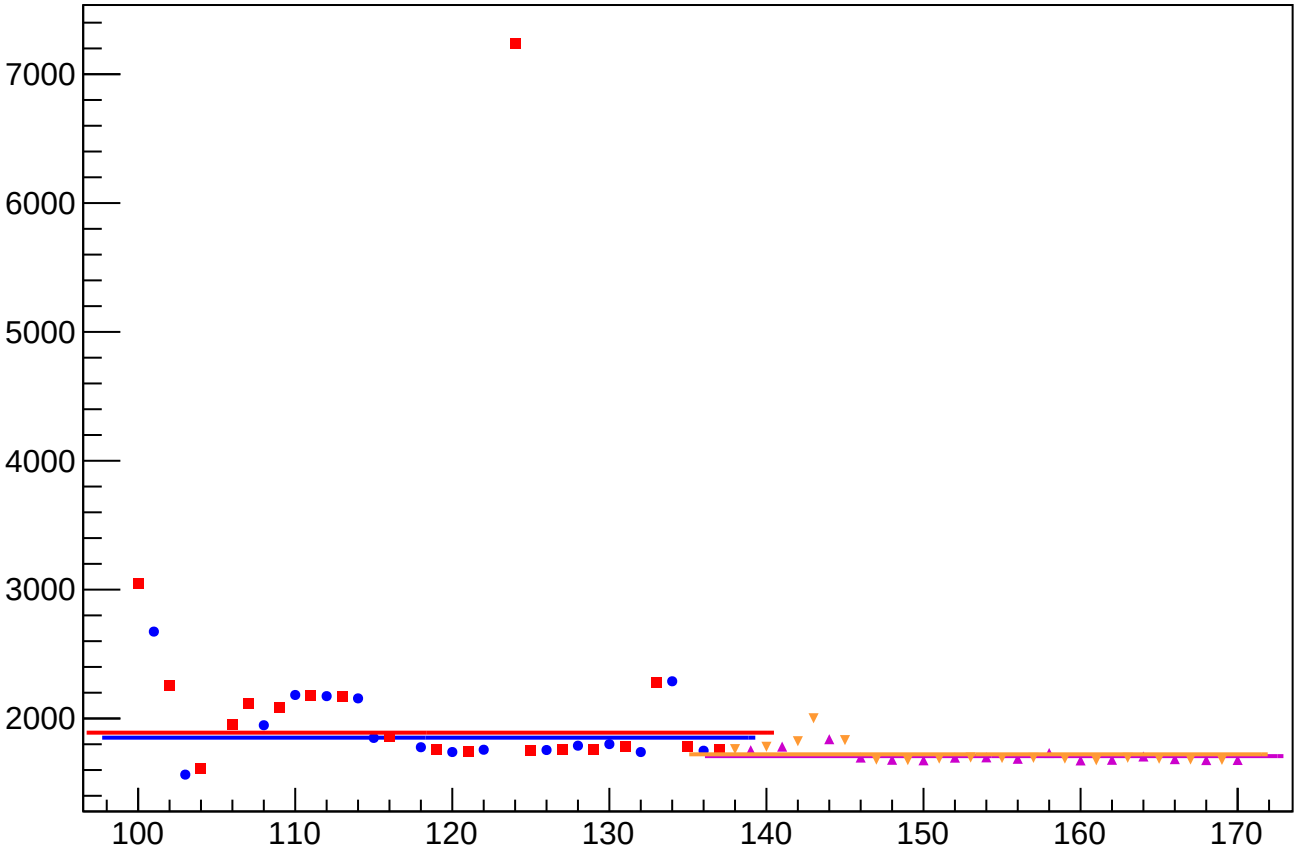
Left In: 875.425+/-469.832 $\chi^2$/NDF:14.6/15

+ sign 130.218+/-389.122 $\chi^2$/NDF: 38.4/32

All: 438.373+/-275.856 $\chi^2$/NDF: 74.5/67

- sign 749.709+/-391.125 $\chi^2$/NDF: 34.9/34

# eigen_cor_asym_atl1r2_dd_rms vs Slug




Right In: 1851.131+/-0.491 $\chi^2$/NDF: 259980.7/15

Left Out: 1721.876+/-0.332 $\chi^2$/NDF:52253.9/16

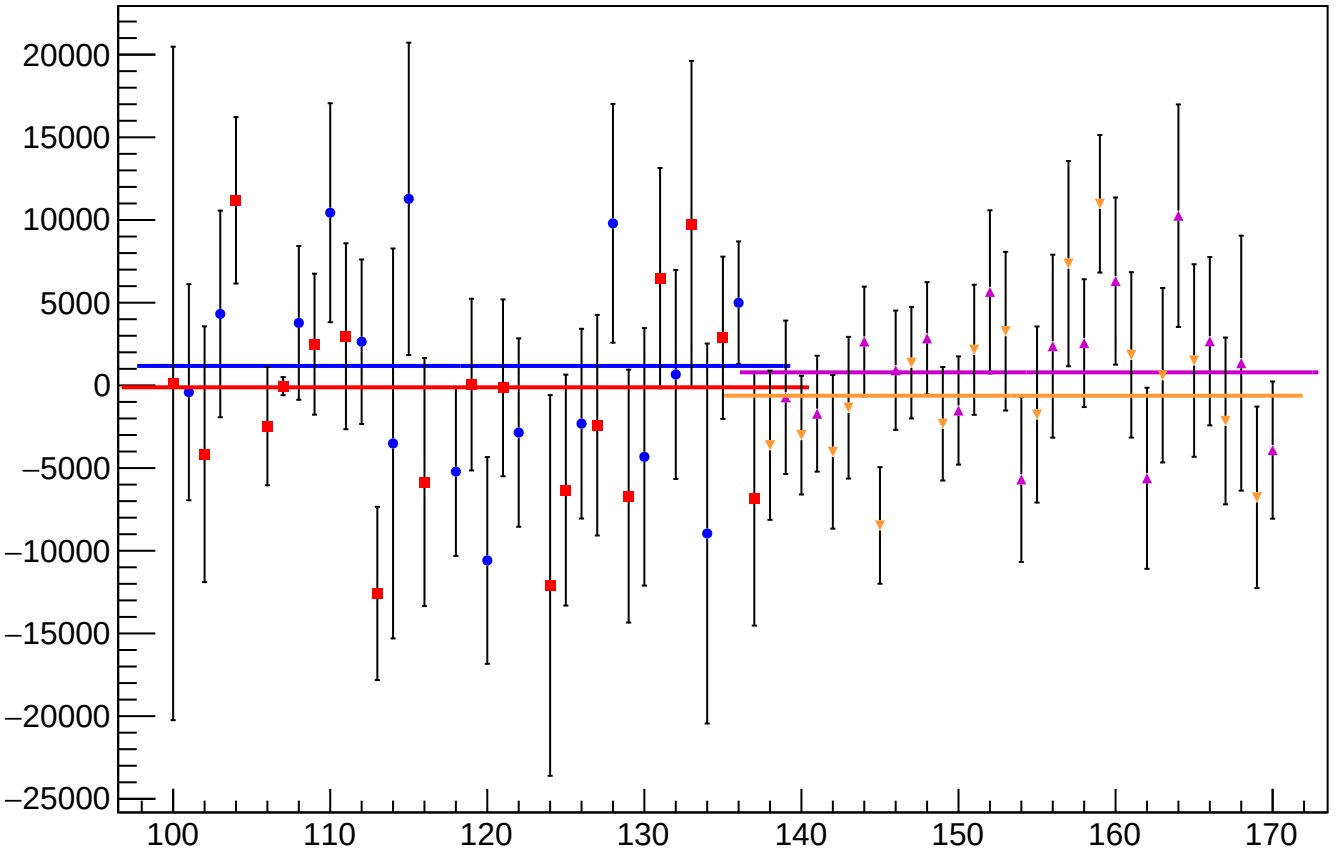
Right Out: 1889.986+/-0.498 $\chi^2$/NDF: 359122.3/18

Left In: 1707.834+/-0.332 $\chi^2$/NDF:17766.4/15

+ sign 1762.536+/-0.275 $\chi^2$/NDF: 359815.9/32

All: 1763.222+/-0.195 $\chi^2$/NDF: 829268.0/67

- sign 1763.914+/-0.276 $\chi^2$/NDF: 469439.7/34




Right In: 1175.408+/-1502.134 $\chi^2$/NDF: 13.7/15

Left Out: -624.193+/-1062.254 $\chi^2$/NDF:19.4/16

Right Out: -115.917+/-512.289 $\chi^2$/NDF: 18.6/18

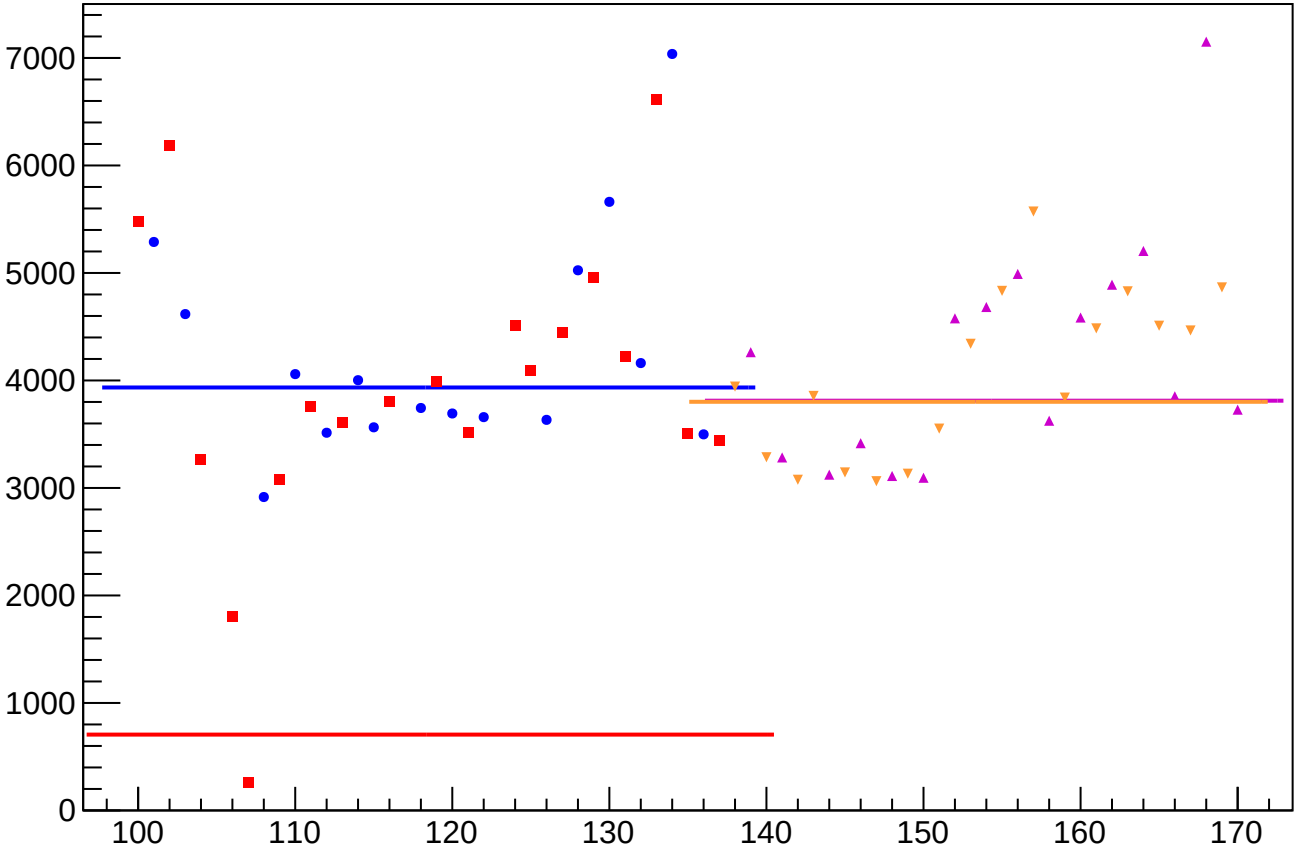
Left In: 787.817+/-1075.327 $\chi^2$/NDF:10.7/15

+ sign -24.262+/-867.304 $\chi^2$/NDF: 34.1/32

All: 34.535+/-408.092 $\chi^2$/NDF: 64.0/67

- sign 51.254+/-462.487 $\chi^2$/NDF: 29.8/34

# asym_atl1r2_dd_eigen_cor_correction_rms vs Slug




Right In: 3934.727+/-1.062 $\chi^2$/NDF: 560149.8/15

Left Out: 3801.626+/-0.751 $\chi^2$/NDF:857941.3/16

Right Out: 705.620+/-0.362 $\chi^2$/NDF: 10747208.1/18

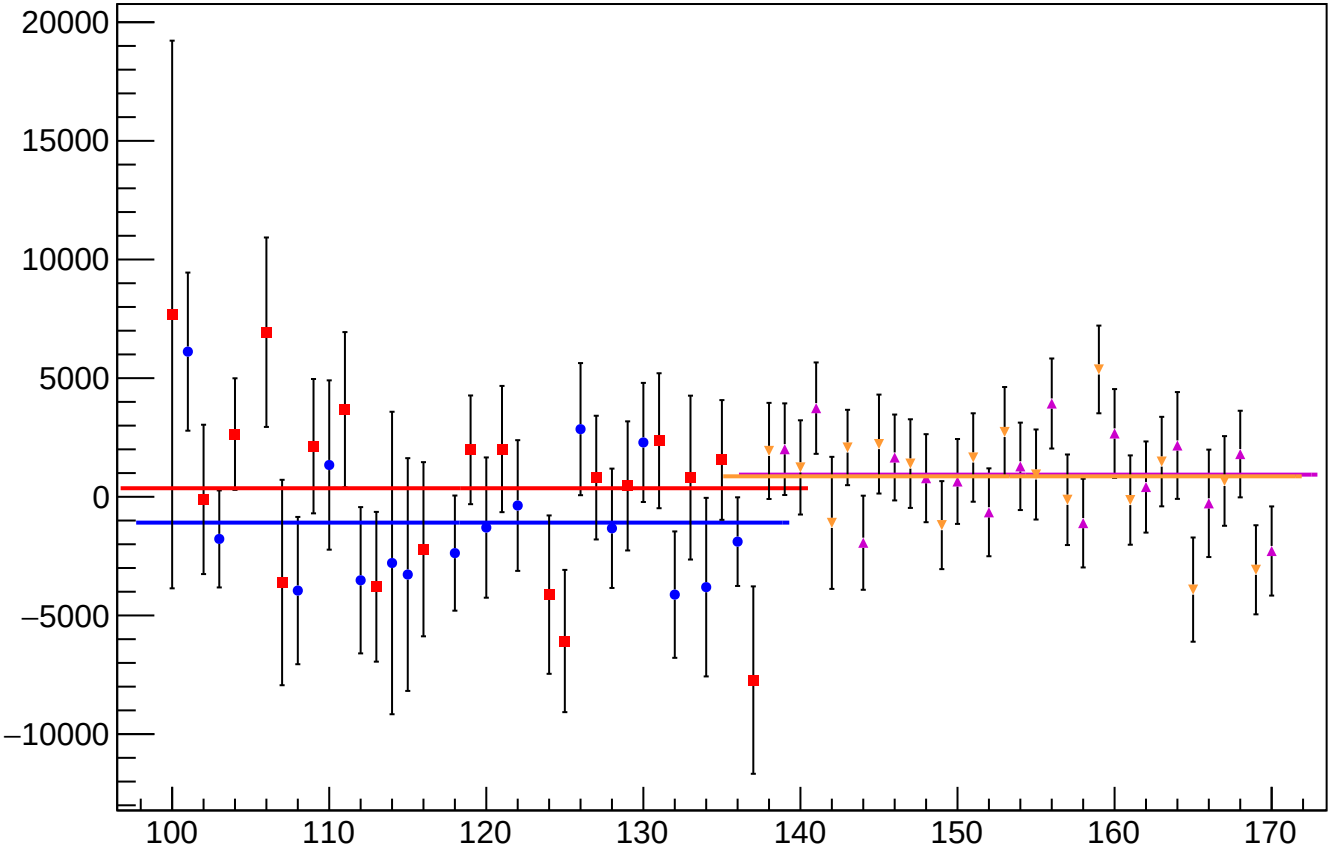
Left In: 3811.734+/-0.760 $\chi^2$/NDF:1146804.8/15

+ sign 3845.998+/-0.613 $\chi^2$/NDF: 1428558.9/32

All: 1848.247+/-0.289 $\chi^2$/NDF: 40551721.4/6

- sign 1280.181+/-0.327 $\chi^2$/NDF: 25494459.7/34

# dit_asym_atl1r2_dd_mean vs Slug




Right In: -1087.731+/-699.579 $\chi^2$/NDF: 13.2/15

Left Out: 863.337+/-467.417 $\chi^2$/NDF:20.0/16

Right Out: 361.218+/-699.665 $\chi^2$/NDF: 20.8/18

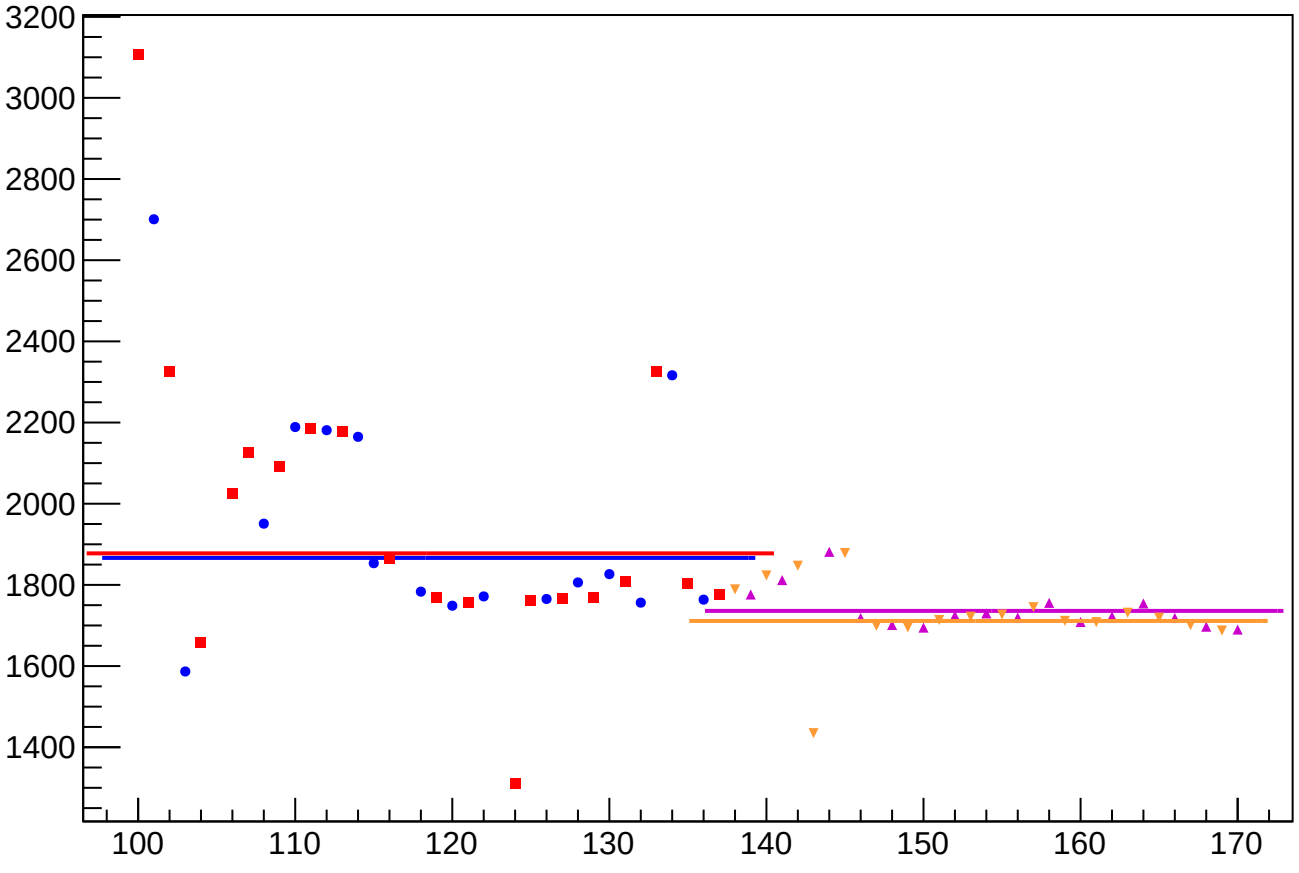
Left In: 934.082+/-477.584 $\chi^2$/NDF:13.8/15

\+ sign 261.171+/-388.650 $\chi^2$/NDF: 38.6/32

All: 502.951+/-276.845 $\chi^2$/NDF: 74.5/67

\- sign 752.003+/-394.452 $\chi^2$/NDF: 35.1/34

# dit_asym_atl1r2_dd_rms vs Slug




Right In: 1866.456+/-0.495 $\chi^2$/NDF: 256262.4/15

Left Out: 1711.134+/-0.331 $\chi^2$/NDF:89353.0/16

Right Out: 1877.659+/-0.494 $\chi^2$/NDF: 251850.5/18

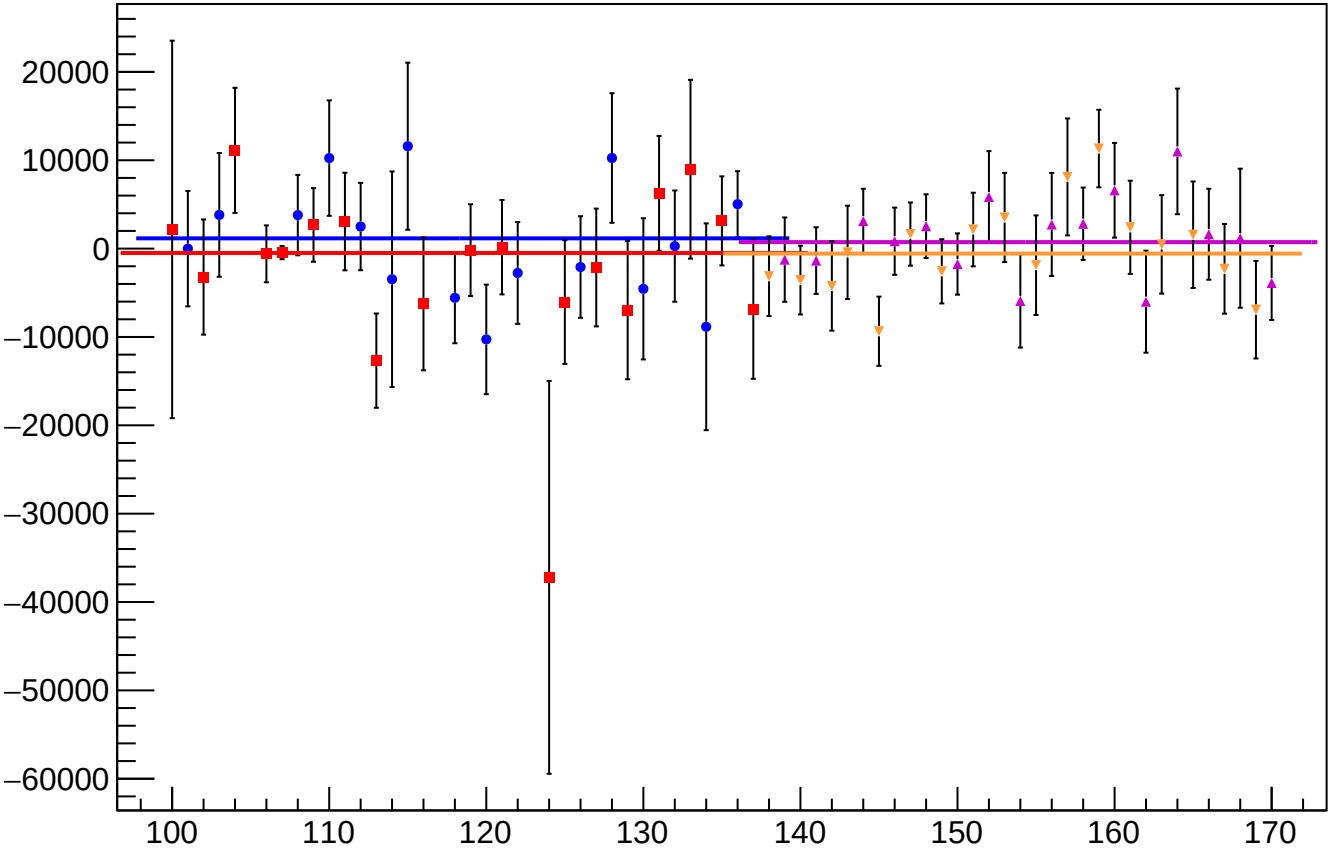
Left In: 1735.899+/-0.338 $\chi^2$/NDF:20070.2/15

+ sign 1759.072+/-0.275 $\chi^2$/NDF: 413775.4/32

All: 1769.879+/-0.196 $\chi^2$/NDF: 744905.6/67

- sign 1781.006+/-0.279 $\chi^2$/NDF: 327991.2/34

# asym_atl1r2_dd_dit_correction_mean vs Slug




Right In: 1161.124+/-1512.225 $\chi^2$/NDF: 13.7/15

Left Out: -561.971+/-1132.517 $\chi^2$/NDF:19.3/16

Right Out: -492.907+/-658.510 $\chi^2$/NDF: 16.9/18

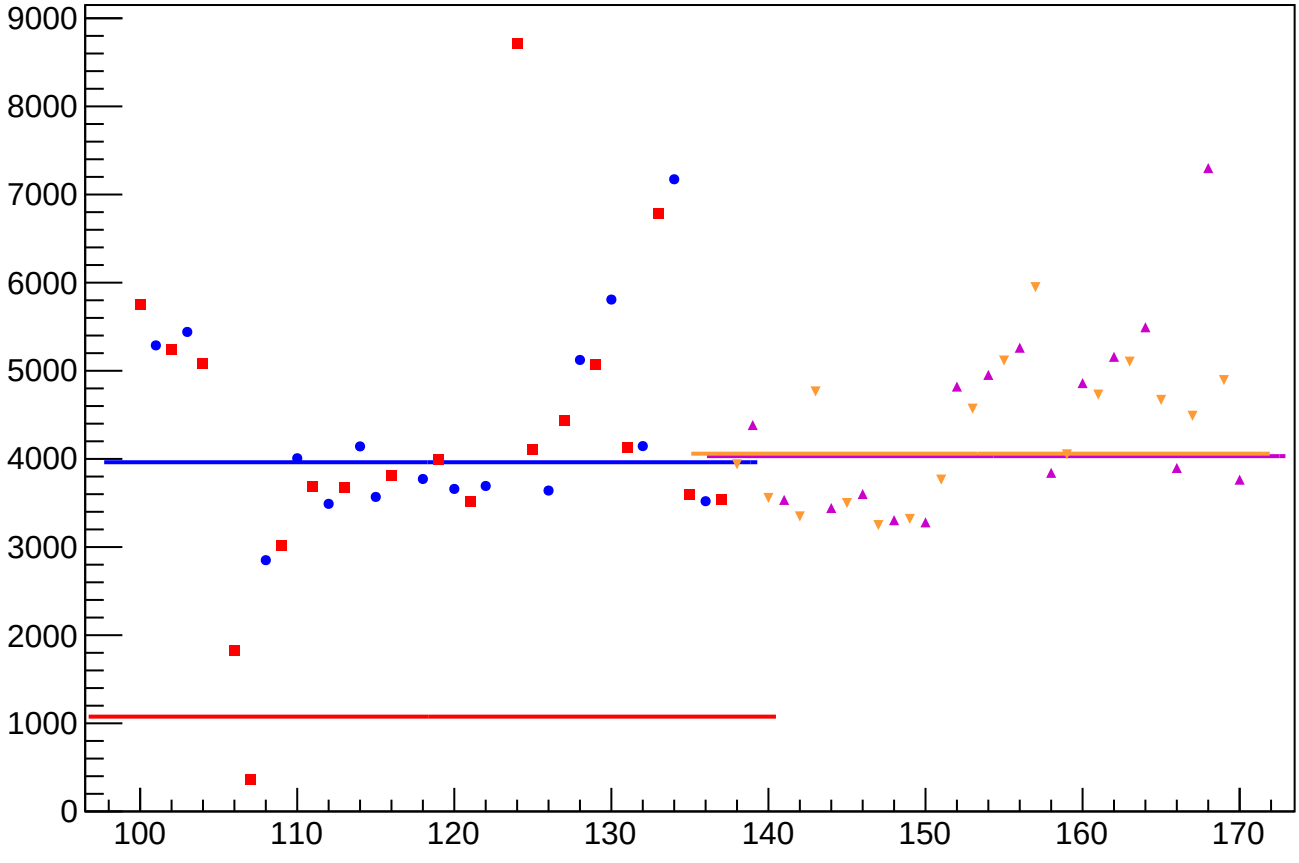
Left In: 735.430+/-1135.564 $\chi^2$/NDF:10.5/15

+ sign 57.186+/-906.488 $\chi^2$/NDF: 33.8/32

All: -115.568+/-482.325 $\chi^2$/NDF: 62.1/67

- sign -183.791+/-569.657 $\chi^2$/NDF: 28.3/34

# asym_atl1r2_dd_dit_correction_rms vs Slug




Right In: 3962.368+/-1.069 $\chi^2$/NDF: 668339.6/15

Left Out: 4059.570+/-0.801 $\chi^2$/NDF:783569.2/16

Right Out: 1075.957+/-0.466 $\chi^2$/NDF: 9558372.9/18

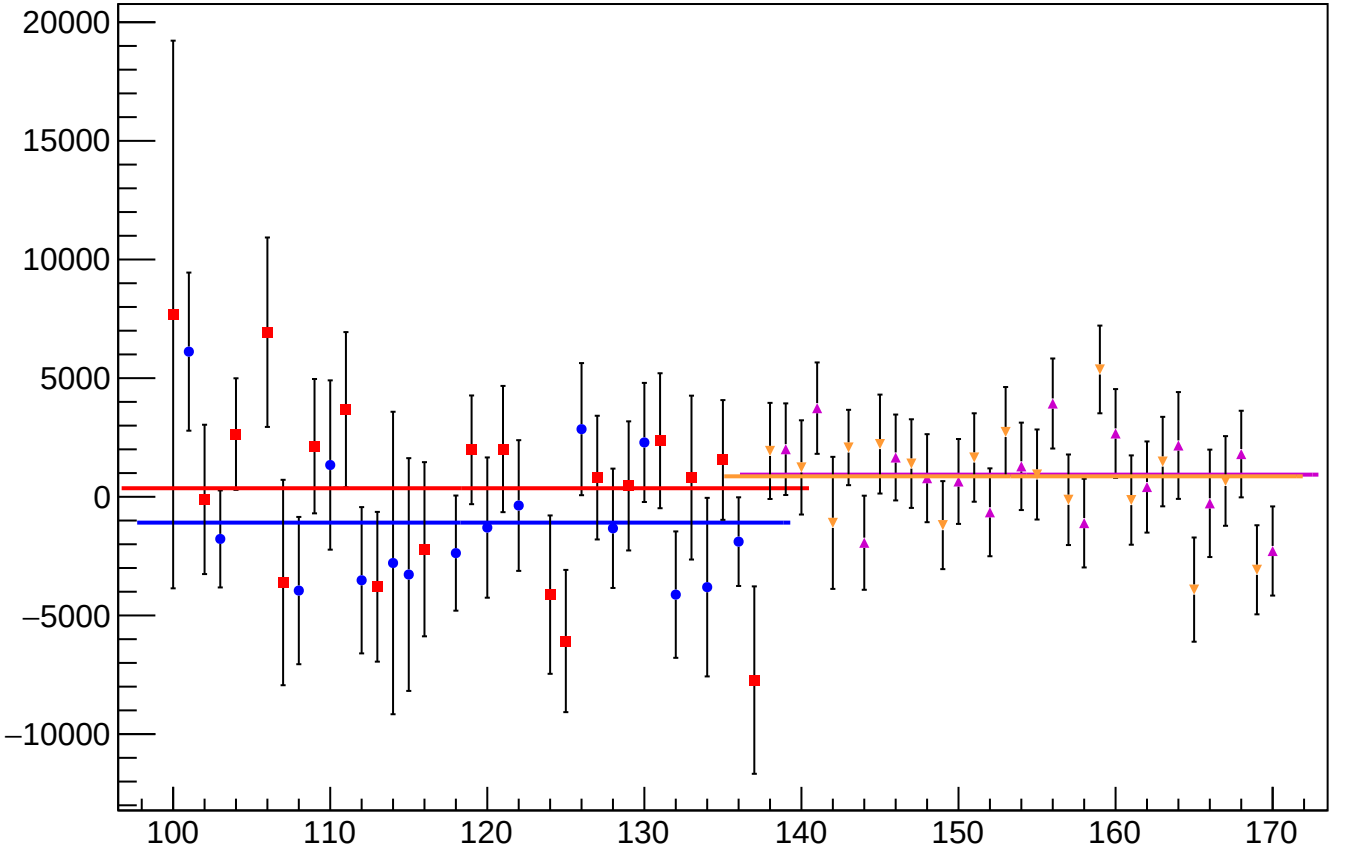
Left In: 4031.547+/-0.803 $\chi^2$/NDF:1061484.7/15

+ sign 4024.642+/-0.641 $\chi^2$/NDF: 1457202.7/32

All: 2443.973+/-0.341 $\chi^2$/NDF: 30698835.0/6

- sign 1819.744+/-0.403 $\chi^2$/NDF: 20758918.0/34

# eigen_dit_asym_atl1r2_dd_mean vs Slug




Right In: -1087.736+/-699.579 $\chi^2$/NDF: 13.2/15

Left Out: 863.342+/-467.417 $\chi^2$/NDF:20.0/16

Right Out: 361.223+/-699.665 $\chi^2$/NDF: 20.8/18

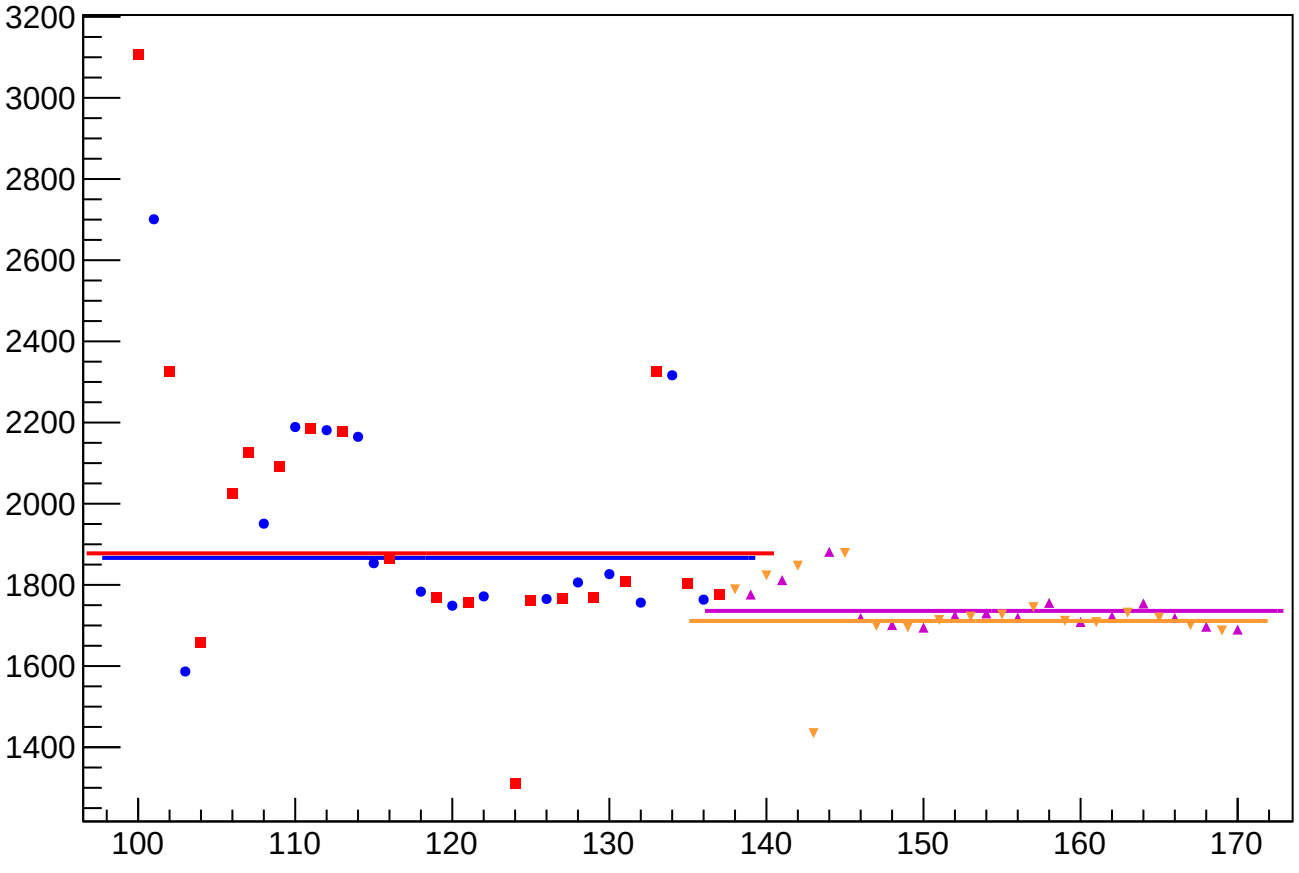
Left In: 934.084+/-477.585 $\chi^2$/NDF:13.8/15

\+ sign 261.172+/-388.650 $\chi^2$/NDF: 38.6/32

All: 502.953+/-276.846 $\chi^2$/NDF: 74.5/67

\- sign 752.007+/-394.452 $\chi^2$/NDF: 35.1/34

# eigen_dit_asym_atl1r2_dd_rms vs Slug




Right In: 1866.456+/-0.495 $\chi^2$/NDF: 256262.3/15

Left Out: 1711.135+/-0.331 $\chi^2$/NDF:89352.1/16

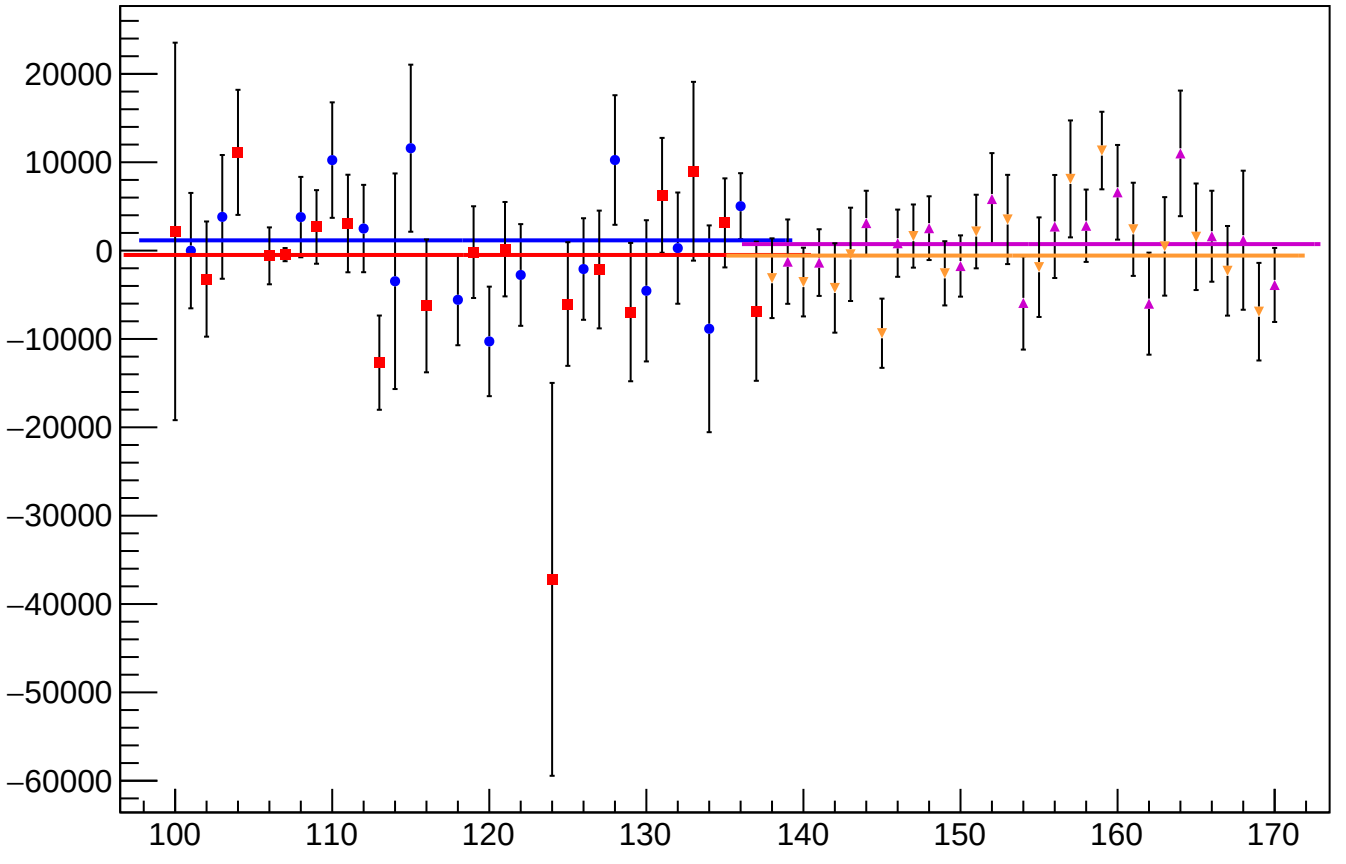
Right Out: 1877.659+/-0.494 $\chi^2$/NDF: 251850.8/18

Left In: 1735.900+/-0.338 $\chi^2$/NDF:20070.1/15

+ sign 1759.072+/-0.275 $\chi^2$/NDF: 413773.5/32

All: 1769.880+/-0.196 $\chi^2$/NDF: 744903.2/67

- sign 1781.007+/-0.279 $\chi^2$/NDF: 327990.8/34




Right In: 1161.104+/-1512.222 $\chi^2$/NDF: 13.7/15

Left Out: -561.971+/-1132.518 $\chi^2$/NDF:19.3/16

Right Out: -492.914+/-658.521 $\chi^2$/NDF: 16.9/18

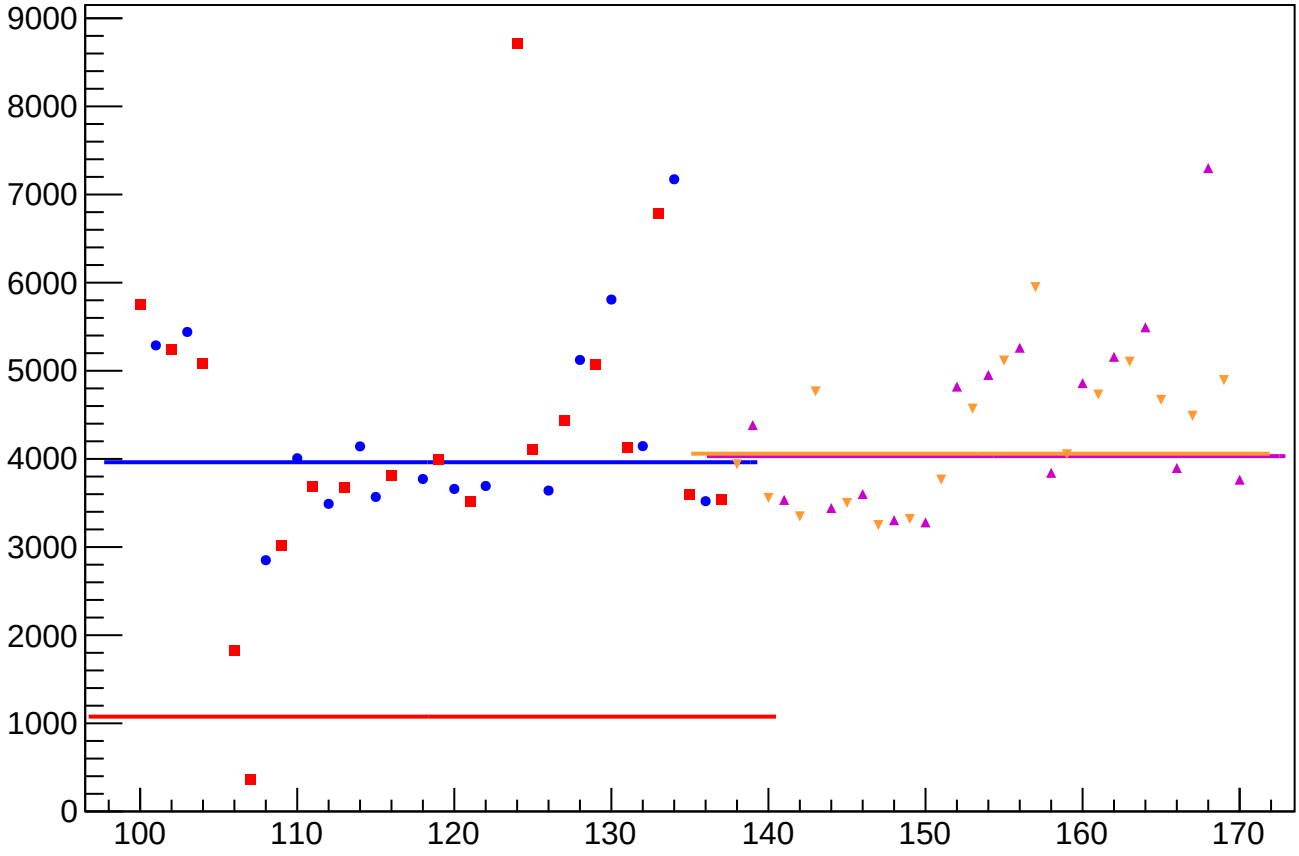
Left In: 735.428+/-1135.565 $\chi^2$/NDF:10.5/15

+ sign 57.181+/-906.489 $\chi^2$/NDF: 33.8/32

All: -115.567+/-482.330 $\chi^2$/NDF: 62.1/67

- sign -183.790+/-569.665 $\chi^2$/NDF: 28.3/34

# asym_atl1r2_dd_eigen_dit_correction_rms vs Slug




Right In: 3962.361+/-1.069 $\chi^2$/NDF: 668335.9/15

Left Out: 4059.575+/-0.801 $\chi^2$/NDF:783569.2/16

Right Out: 1075.988+/-0.466 $\chi^2$/NDF: 9558243.3/18

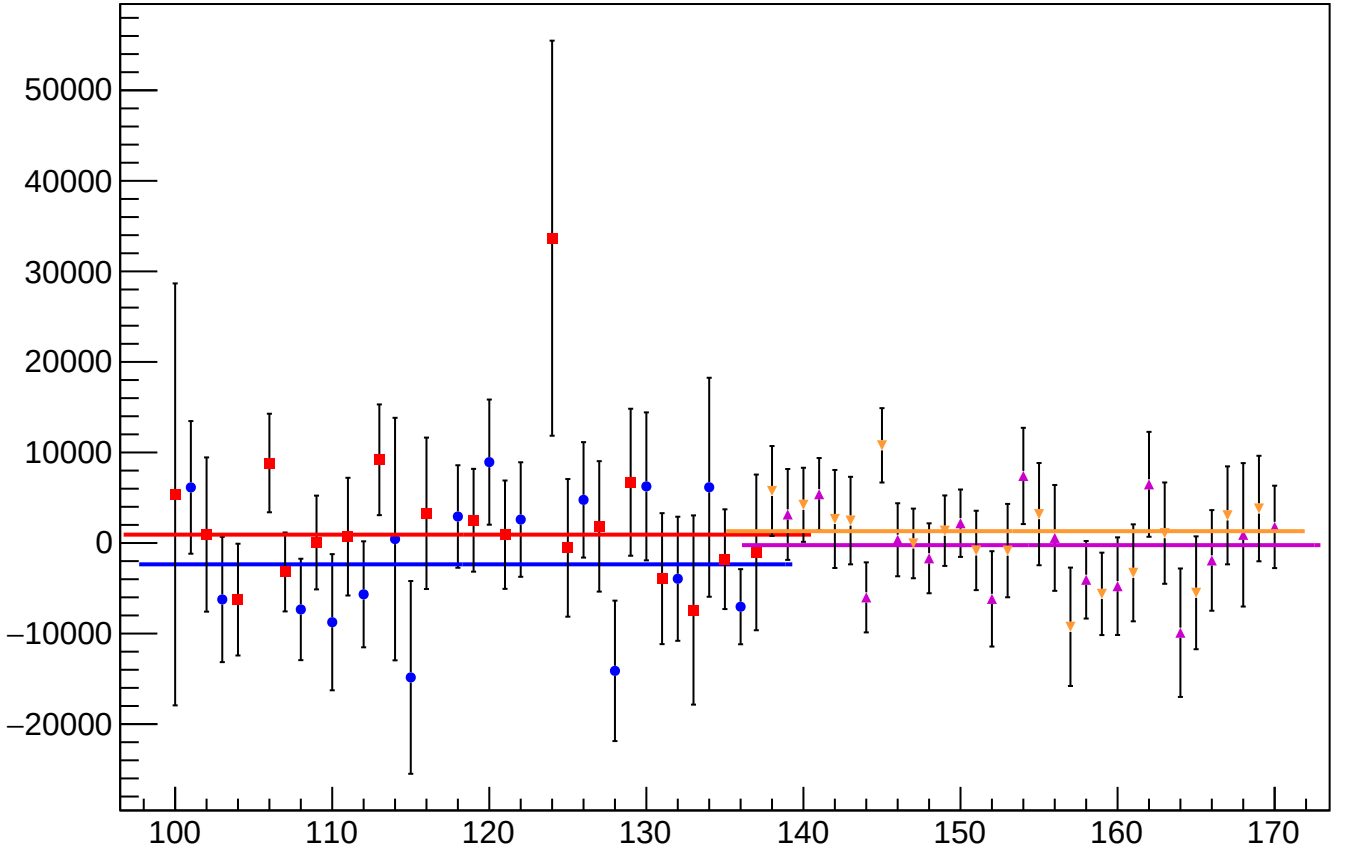
Left In: 4031.553+/-0.803 $\chi^2$/NDF:1061486.7/15

+ sign 4024.643+/-0.641 $\chi^2$/NDF: 1457200.4/32

All: 2444.014+/-0.341 $\chi^2$/NDF: 30698054.7/6

- sign 1819.786+/-0.403 $\chi^2$/NDF: 20758512.0/34

# asym_atl1r2_dd_mean vs Slug




Right In: -2354.851+/-1684.784 $\chi^2$/NDF: 15.5/15

Left Out: 1309.225+/-1179.247 $\chi^2$/NDF:14.5/16

Right Out: 924.896+/-1546.889 $\chi^2$/NDF: 10.6/18

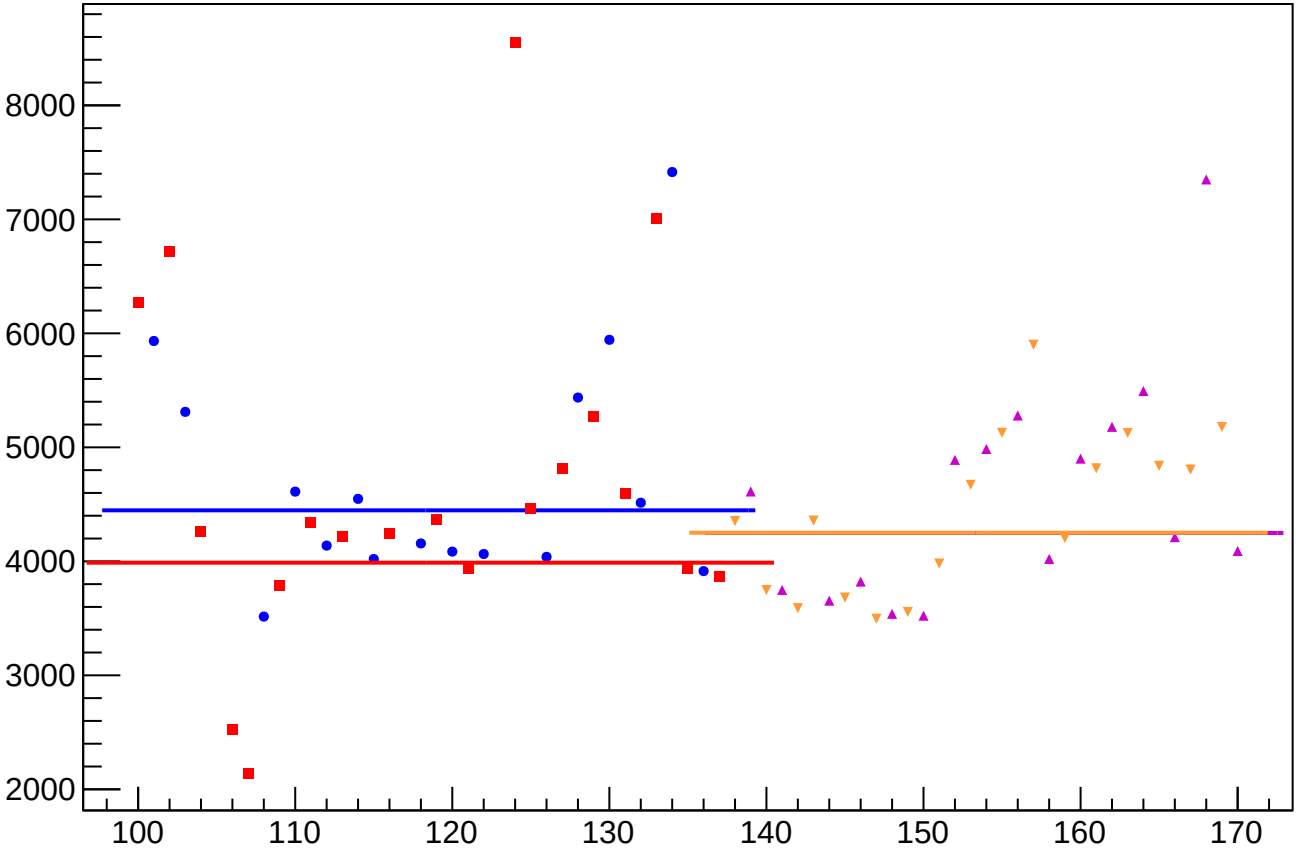
Left In: -235.007+/-1190.263 $\chi^2$/NDF:13.6/15

+ sign 104.400+/-966.105 $\chi^2$/NDF: 33.3/32

All: 151.467+/-674.942 $\chi^2$/NDF: 57.9/67

- sign 196.342+/-943.328 $\chi^2$/NDF: 24.6/34

# asym_atl1r2_dd_rms vs Slug




Right In: 4447.424+/-1.191 $\chi^2$/NDF: 458251.2/15

Left Out: 4251.017+/-0.834 $\chi^2$/NDF:598078.6/16

Right Out: 3988.249+/-1.083 $\chi^2$/NDF: 1143932.4/18

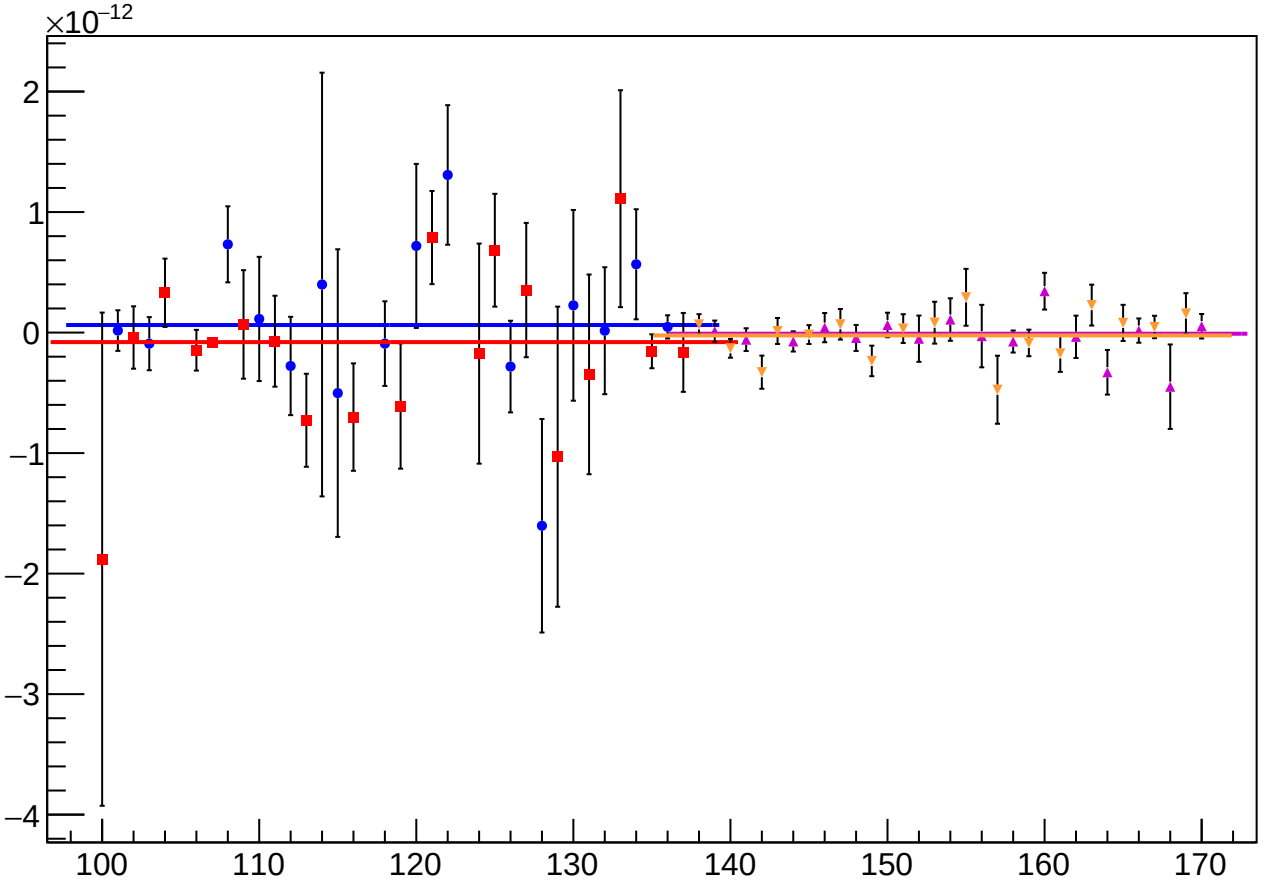
Left In: 4248.687+/-0.842 $\chi^2$/NDF:842303.5/15

+ sign 4315.599+/-0.683 $\chi^2$/NDF: 1074572.7/32

All: 4230.834+/-0.476 $\chi^2$/NDF: 3126830.9/67

- sign 4150.619+/-0.665 $\chi^2$/NDF: 2022291.9/34

# asym_atl1r2_dd_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 17.4/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:22.0/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 20.1/18

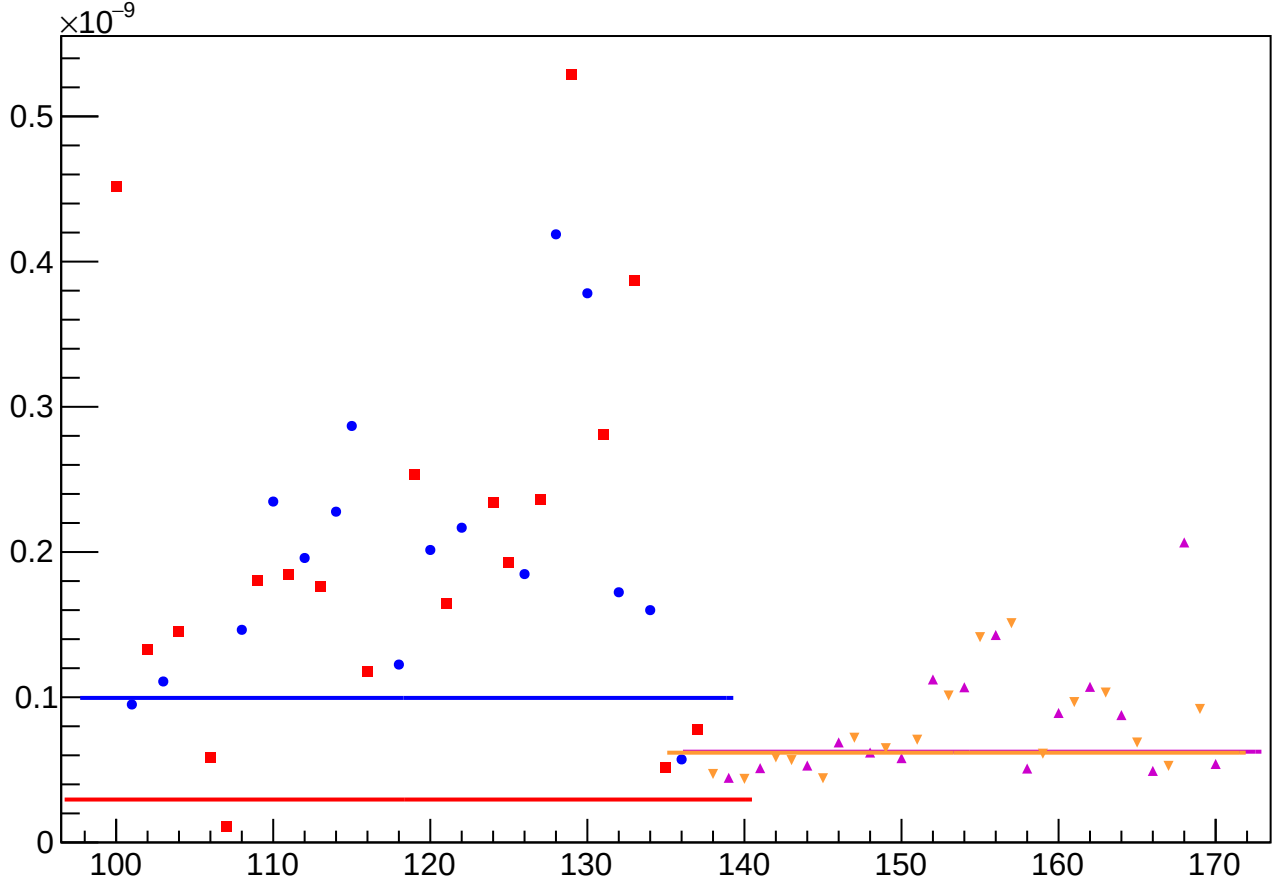
Left In: -0.000+/-0.000 $\chi^2$/NDF:13.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 40.8/32

All: -0.000+/-0.000 $\chi^2$/NDF: 77.1/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 35.6/34

# asym_atl1r2_dd_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1562904.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1137628.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 4363474.8/18

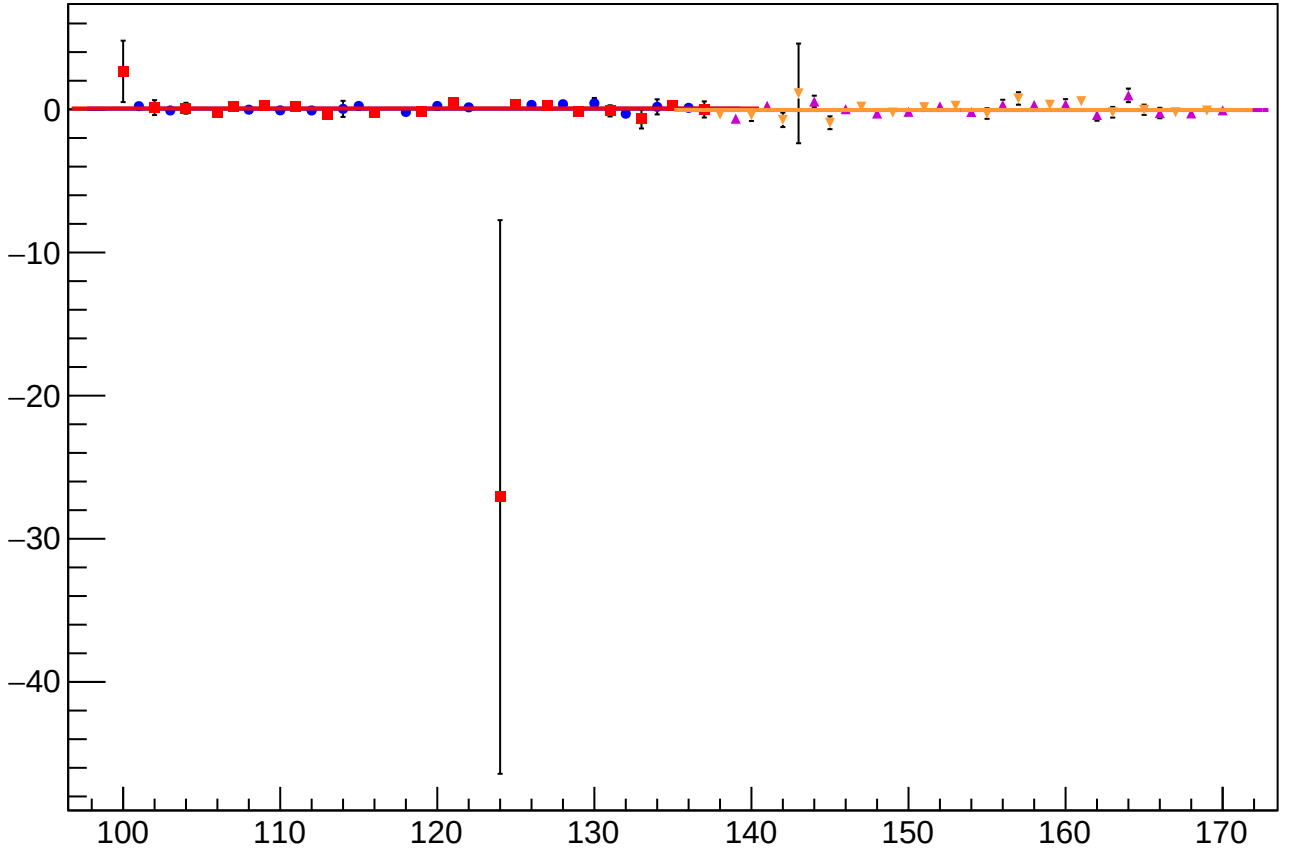
Left In: 0.000+/-0.000 $\chi^2$/NDF:1246112.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3221700.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10569583.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 6701669.1/34

# asym_atl1r2_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.048+/-0.066 $\chi^2$/NDF: 7.6/15

Left Out: -0.041+/-0.079 $\chi^2$/NDF:19.2/16

Right Out: 0.061+/-0.064 $\chi^2$/NDF: 18.4/18

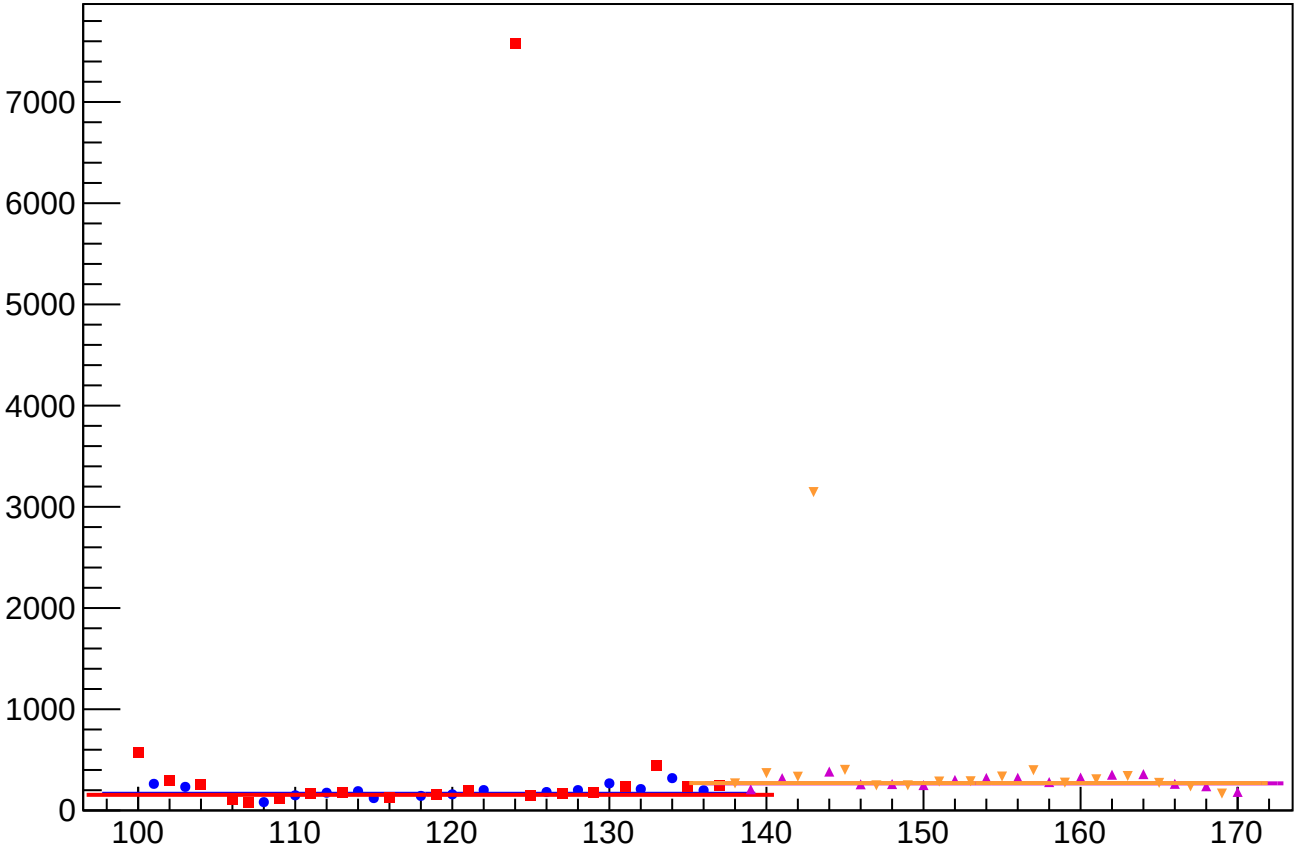
Left In: -0.048+/-0.076 $\chi^2$/NDF:21.3/15

+ sign 0.011+/-0.051 $\chi^2$/NDF: 27.6/32

All: 0.013+/-0.035 $\chi^2$/NDF: 68.5/67

- sign 0.016+/-0.049 $\chi^2$/NDF: 40.9/34

# asym_atl1r2_dd_dit_vs_cor_diff_rms vs Slug




Right In: 164.862+/-0.047 $\chi^2$/NDF: 1474718.1/15

Left Out: 270.484+/-0.056 $\chi^2$/NDF:2683170.9/16

Right Out: 154.388+/-0.046 $\chi^2$/NDF: 1921322.6/18

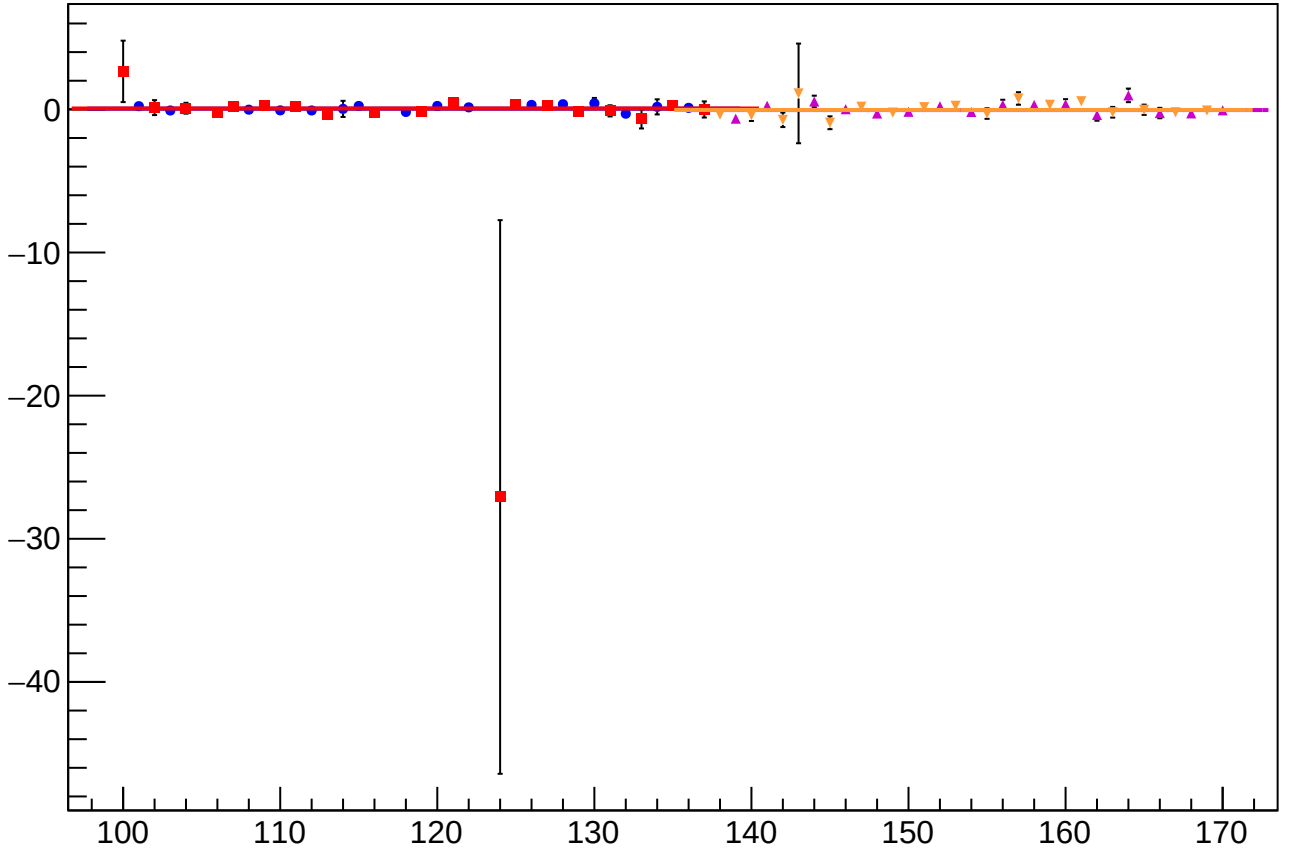
Left In: 267.773+/-0.054 $\chi^2$/NDF:1034376.0/15

+ sign 208.876+/-0.036 $\chi^2$/NDF: 6266269.1/32

All: 205.159+/-0.025 $\chi^2$/NDF: 11827498.2/67

- sign 201.664+/-0.035 $\chi^2$/NDF: 5540383.8/34

# asym_atl1r2_dd_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.048+/-0.066 $\chi^2$/NDF: 7.6/15

Left Out: -0.041+/-0.079 $\chi^2$/NDF:19.2/16

Right Out: 0.061+/-0.064 $\chi^2$/NDF: 18.4/18

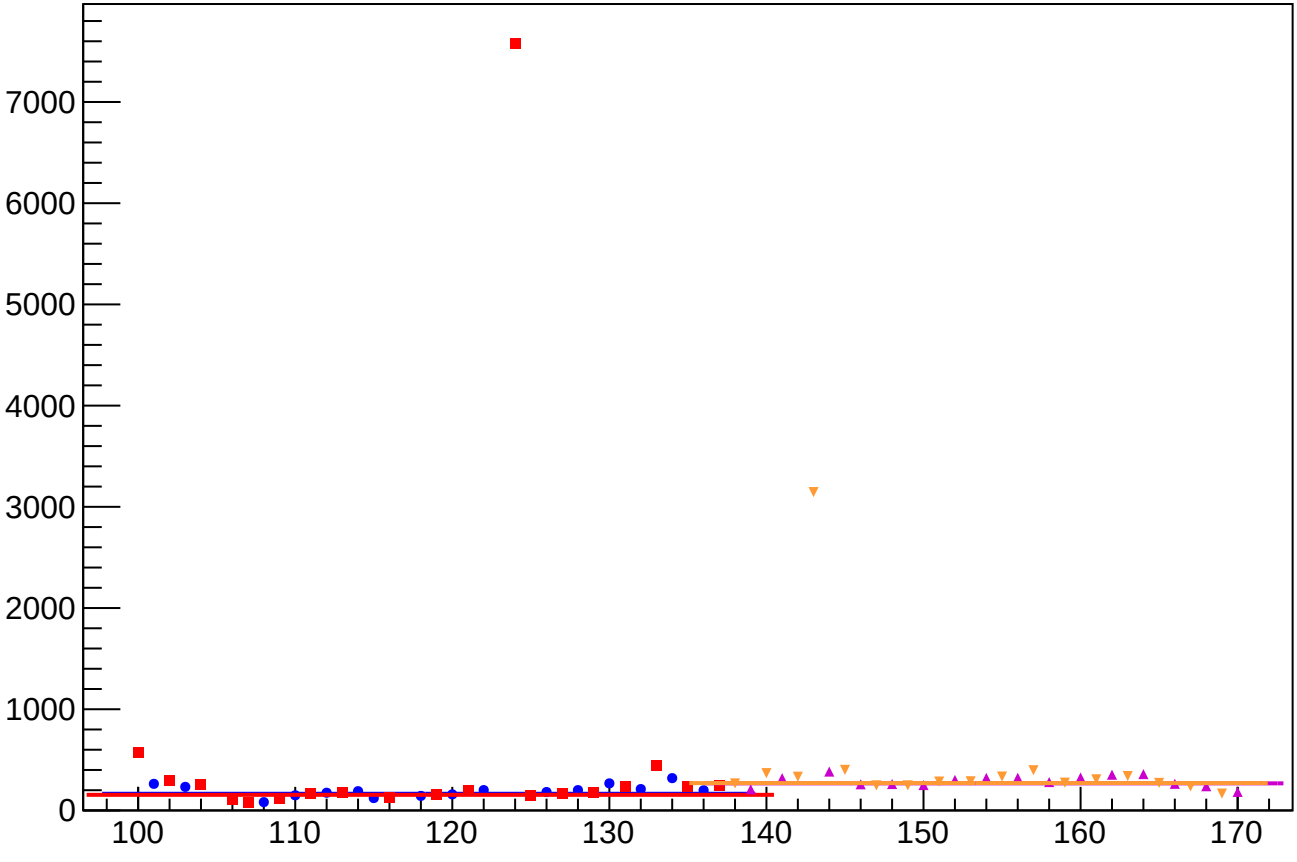
Left In: -0.048+/-0.076 $\chi^2$/NDF:21.3/15

+ sign 0.011+/-0.051 $\chi^2$/NDF: 27.6/32

All: 0.013+/-0.035 $\chi^2$/NDF: 68.5/67

- sign 0.016+/-0.049 $\chi^2$/NDF: 40.9/34

# asym_atl1r2_dd_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 164.862+/-0.047 $\chi^2$/NDF: 1474718.1/15

Left Out: 270.484+/-0.056 $\chi^2$/NDF:2683170.9/16

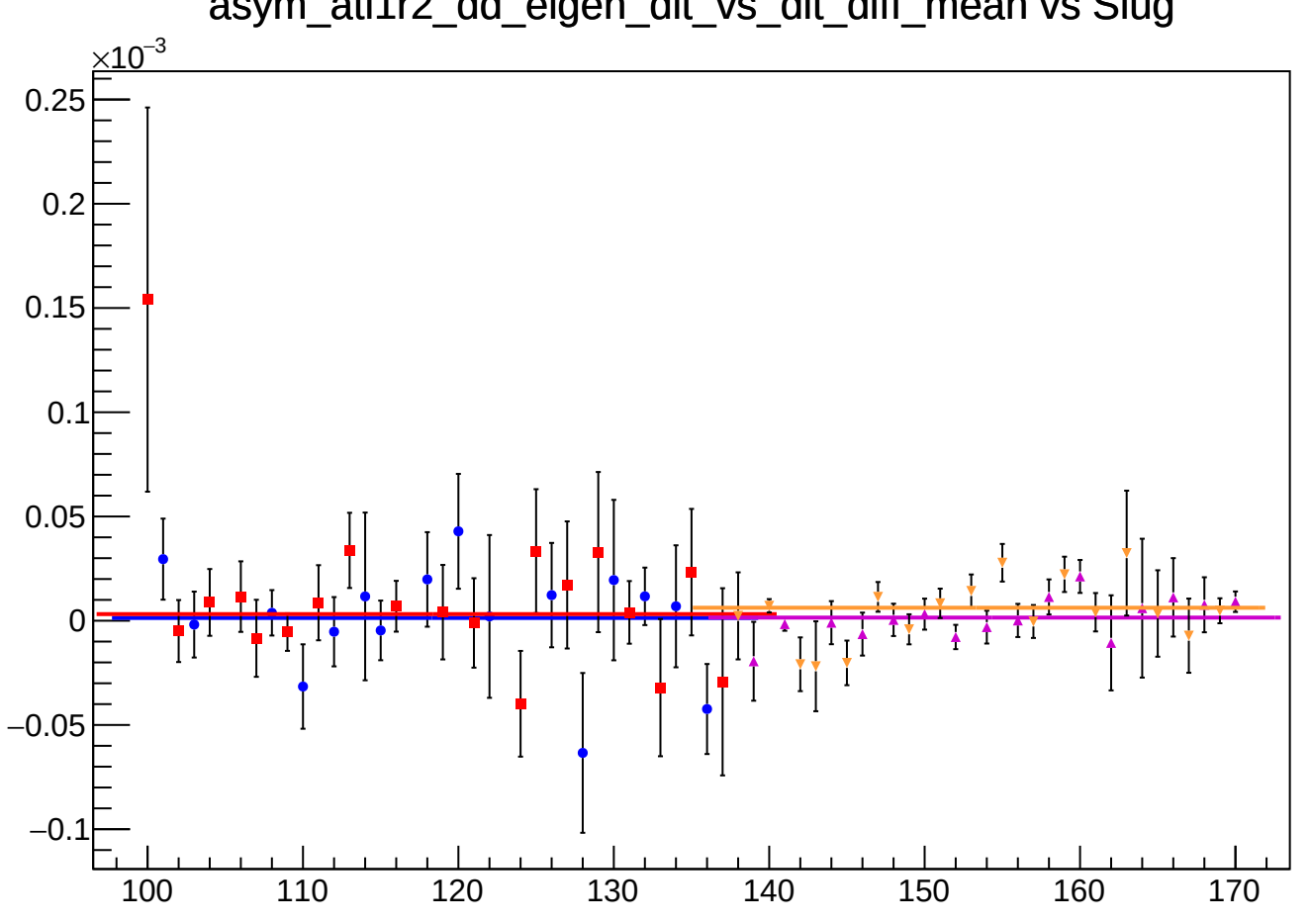
Right Out: 154.388+/-0.046 $\chi^2$/NDF: 1921322.6/18

Left In: 267.773+/-0.054 $\chi^2$/NDF:1034376.0/15

+ sign 208.876+/-0.036 $\chi^2$/NDF: 6266269.1/32

All: 205.159+/-0.025 $\chi^2$/NDF: 11827498.2/67

- sign 201.664+/-0.035 $\chi^2$/NDF: 5540383.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 16.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:27.5/16

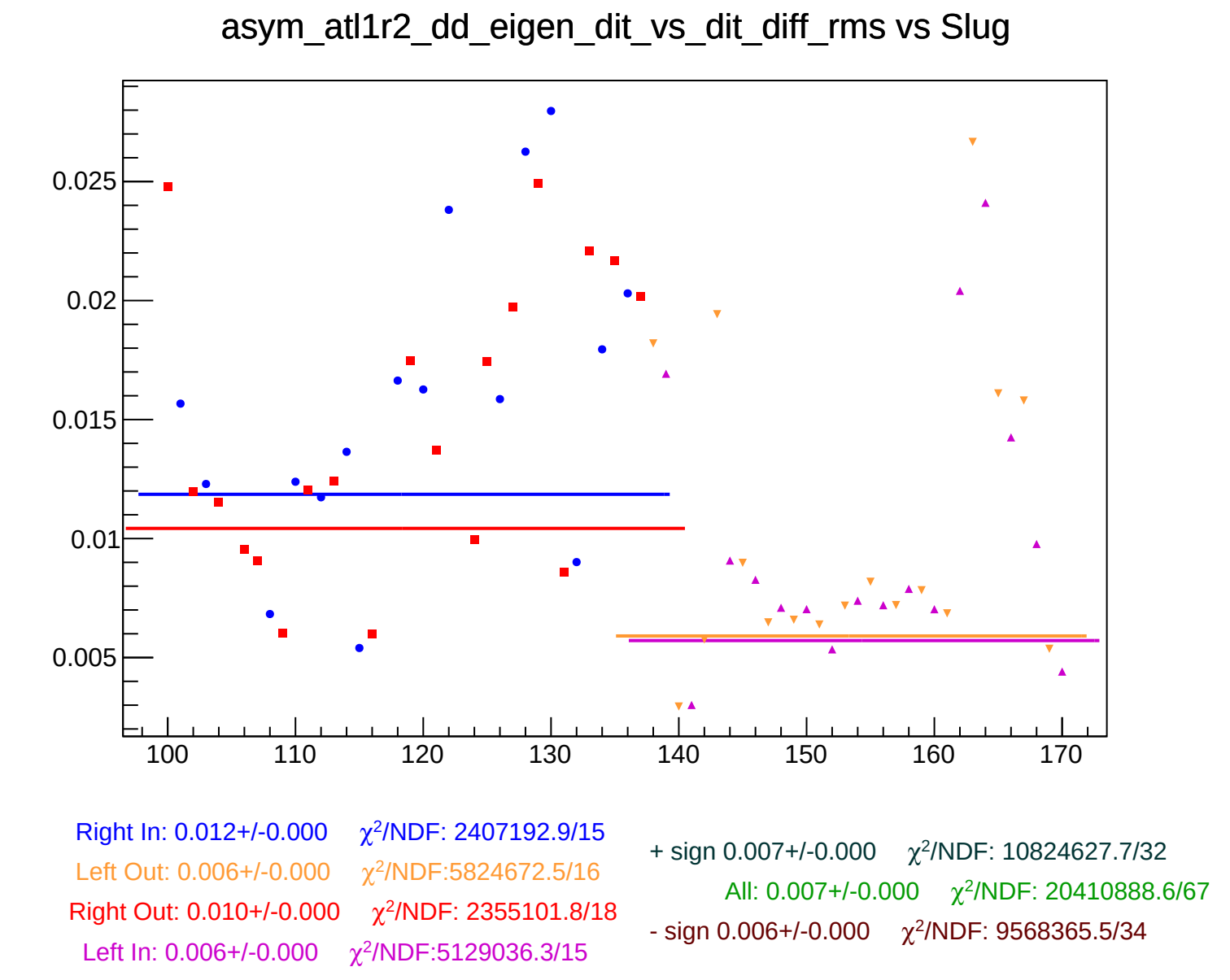
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.6/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:16.6/15

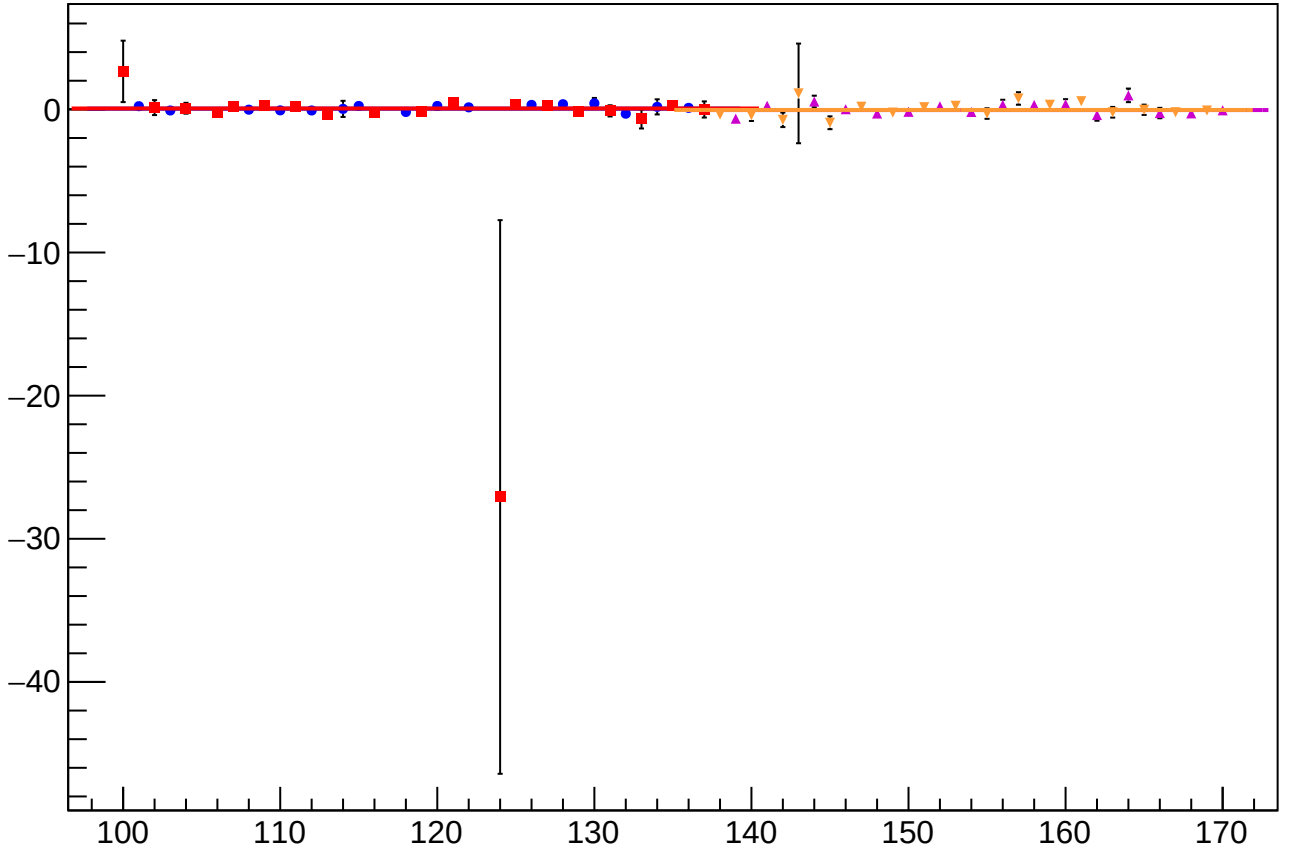
+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 78.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 31.3/34


asym_atl1r2_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.025
0.02
0.015
0.01
0.005
100
110
120
130
140
150
160
170
Right In: 0.012+/-0.000 χ²/NDF: 2407192.9/15
Left Out: 0.006+/-0.000 χ²/NDF:5824672.5/16
Right Out: 0.010+/-0.000 χ²/NDF: 2355101.8/18
Left In: 0.006+/-0.000 χ²/NDF:5129036.3/15
+ sign 0.007+/-0.000 χ²/NDF: 10824627.7/32
All: 0.007+/-0.000 χ²/NDF: 20410888.6/67
- sign 0.006+/-0.000 χ²/NDF: 9568365.5/34

# asym_atl1r2_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.048+/-0.066 $\chi^2$/NDF: 7.6/15

Left Out: -0.041+/-0.079 $\chi^2$/NDF:19.2/16

Right Out: 0.061+/-0.064 $\chi^2$/NDF: 18.4/18

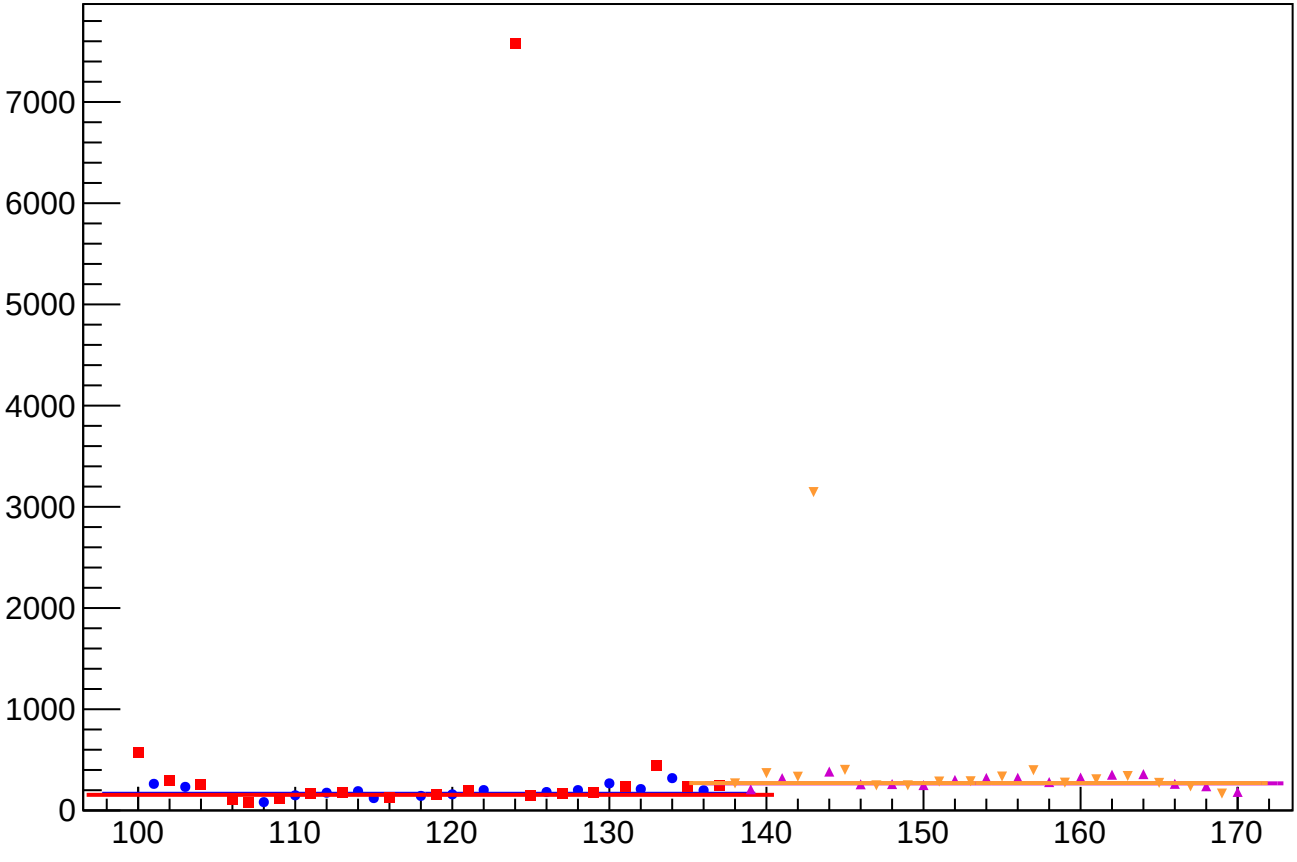
Left In: -0.048+/-0.076 $\chi^2$/NDF:21.3/15

+ sign 0.011+/-0.051 $\chi^2$/NDF: 27.6/32

All: 0.013+/-0.035 $\chi^2$/NDF: 68.5/67

- sign 0.016+/-0.049 $\chi^2$/NDF: 40.9/34

# asym_atl1r2_dd_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 164.862+/-0.047 $\chi^2$/NDF: 1474692.6/15

Left Out: 270.486+/-0.056 $\chi^2$/NDF:2683236.0/16

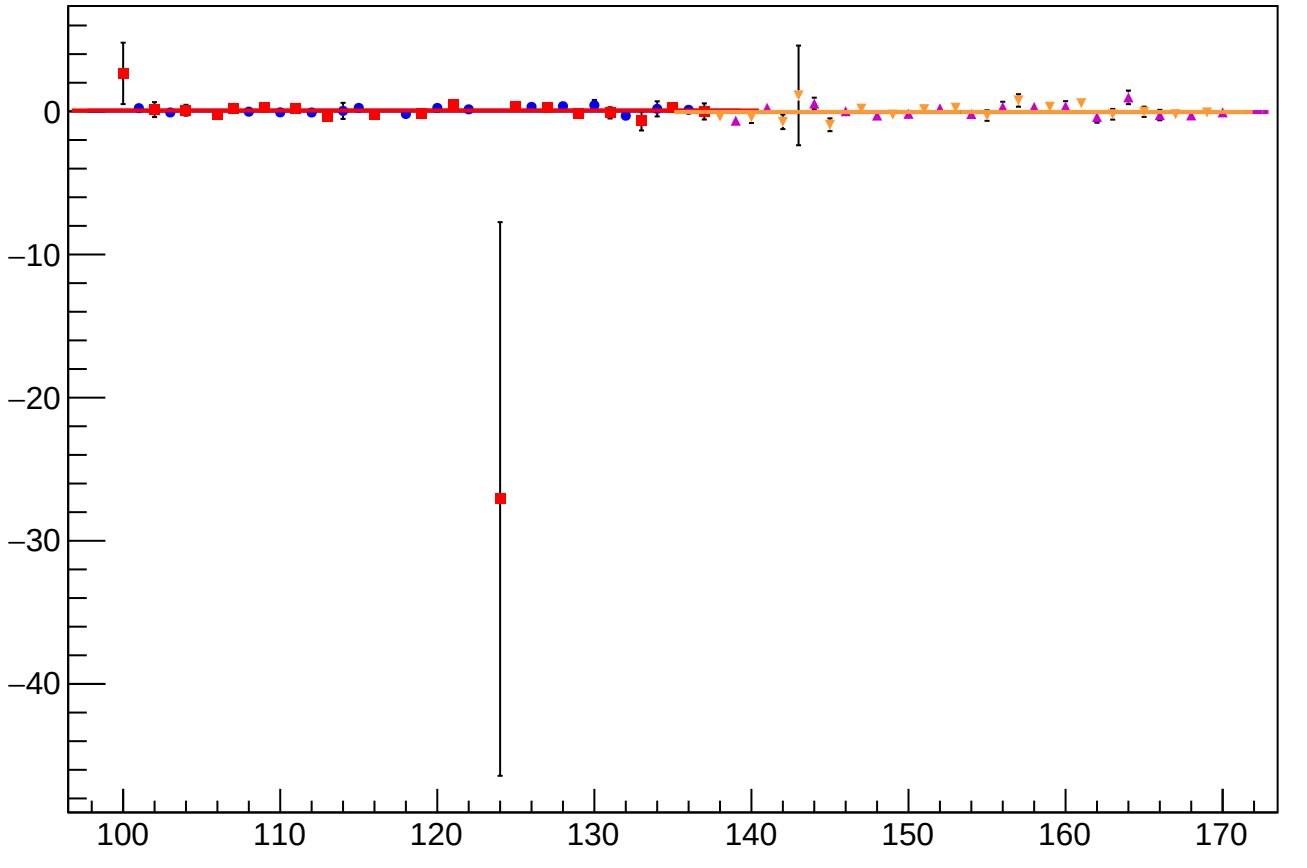
Right Out: 154.388+/-0.046 $\chi^2$/NDF: 1921346.3/18

Left In: 267.777+/-0.054 $\chi^2$/NDF:1034392.4/15

+ sign 208.876+/-0.036 $\chi^2$/NDF: 6266396.3/32

All: 205.159+/-0.025 $\chi^2$/NDF: 11827796.4/67

- sign 201.664+/-0.035 $\chi^2$/NDF: 5540556.4/34




Right In: 0.048+/-0.066 $\chi^2$/NDF: 7.6/15

Left Out: -0.041+/-0.079 $\chi^2$/NDF:19.2/16

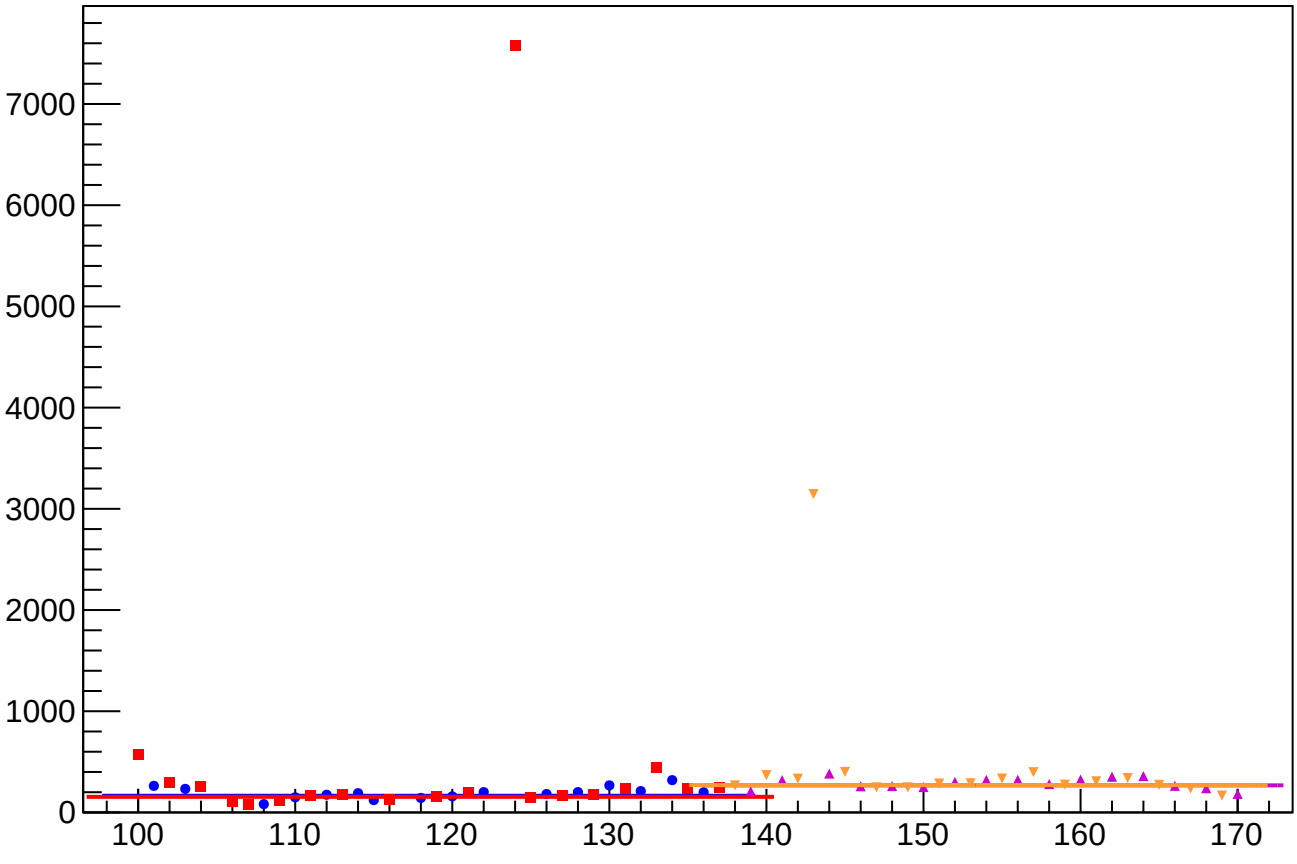
Right Out: 0.061+/-0.064 $\chi^2$/NDF: 18.4/18

Left In: -0.048+/-0.076 $\chi^2$/NDF:21.3/15

+ sign 0.011+/-0.051 $\chi^2$/NDF: 27.6/32

All: 0.013+/-0.035 $\chi^2$/NDF: 68.5/67

- sign 0.016+/-0.049 $\chi^2$/NDF: 40.9/34




Right In: 164.862+/-0.047 $\chi^2$/NDF: 1474692.6/15

Left Out: 270.486+/-0.056 $\chi^2$/NDF:2683236.0/16

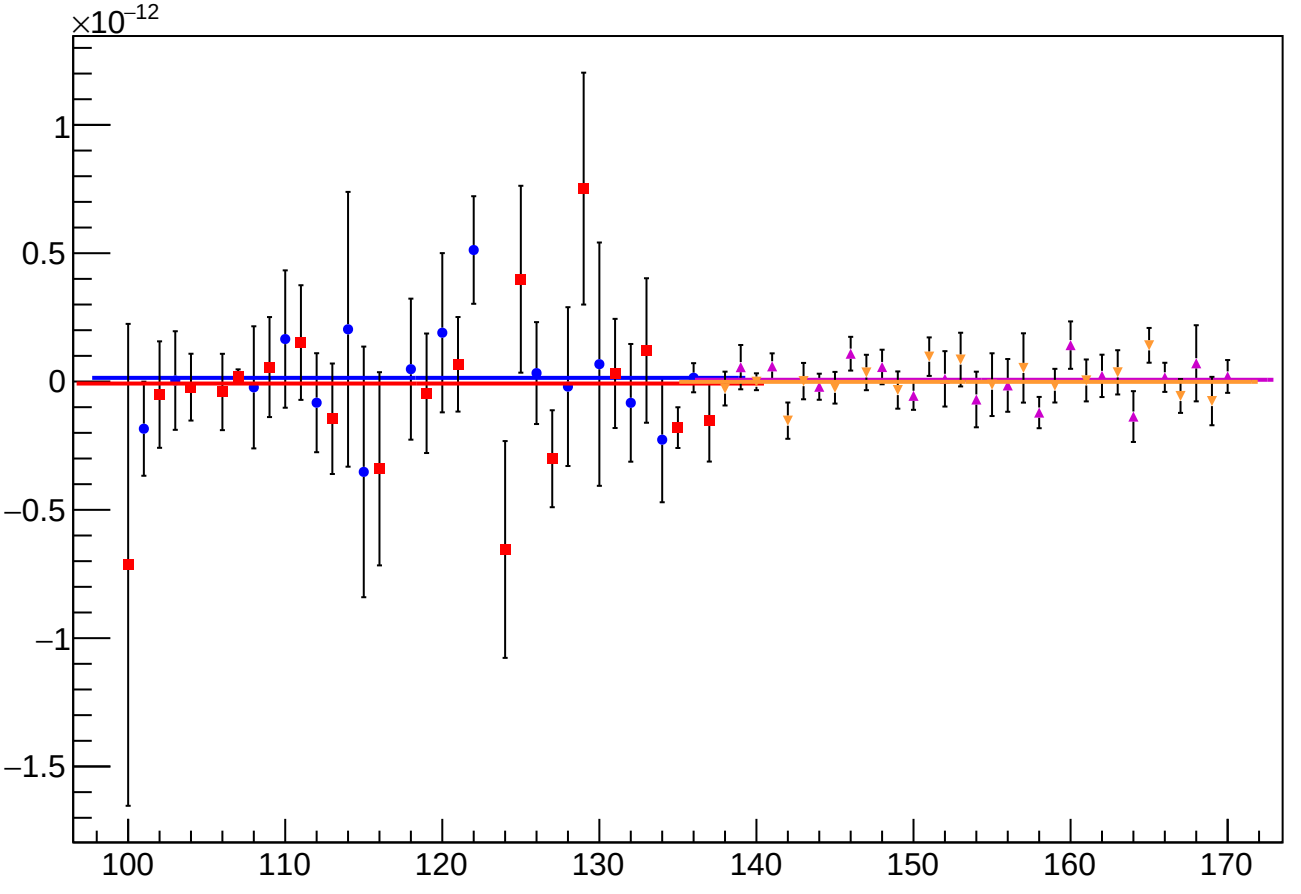
Right Out: 154.388+/-0.046 $\chi^2$/NDF: 1921346.3/18

Left In: 267.777+/-0.054 $\chi^2$/NDF:1034392.4/15

+ sign 208.876+/-0.036 $\chi^2$/NDF: 6266396.3/32

All: 205.159+/-0.025 $\chi^2$/NDF: 11827796.4/67

- sign 201.664+/-0.035 $\chi^2$/NDF: 5540556.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 9.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:13.9/16

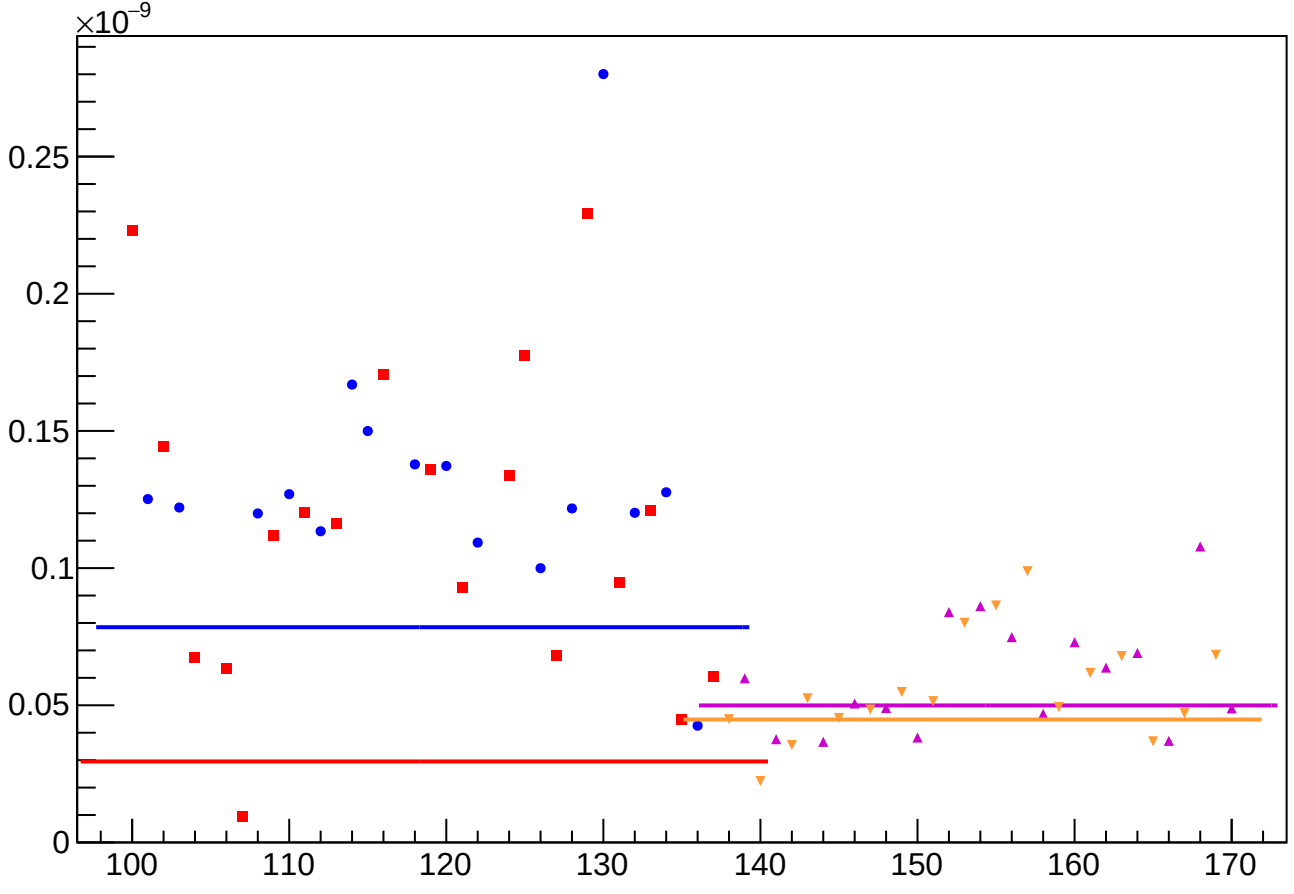
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:15.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 23.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 57.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 34.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2103056.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2228126.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 5487361.4/18

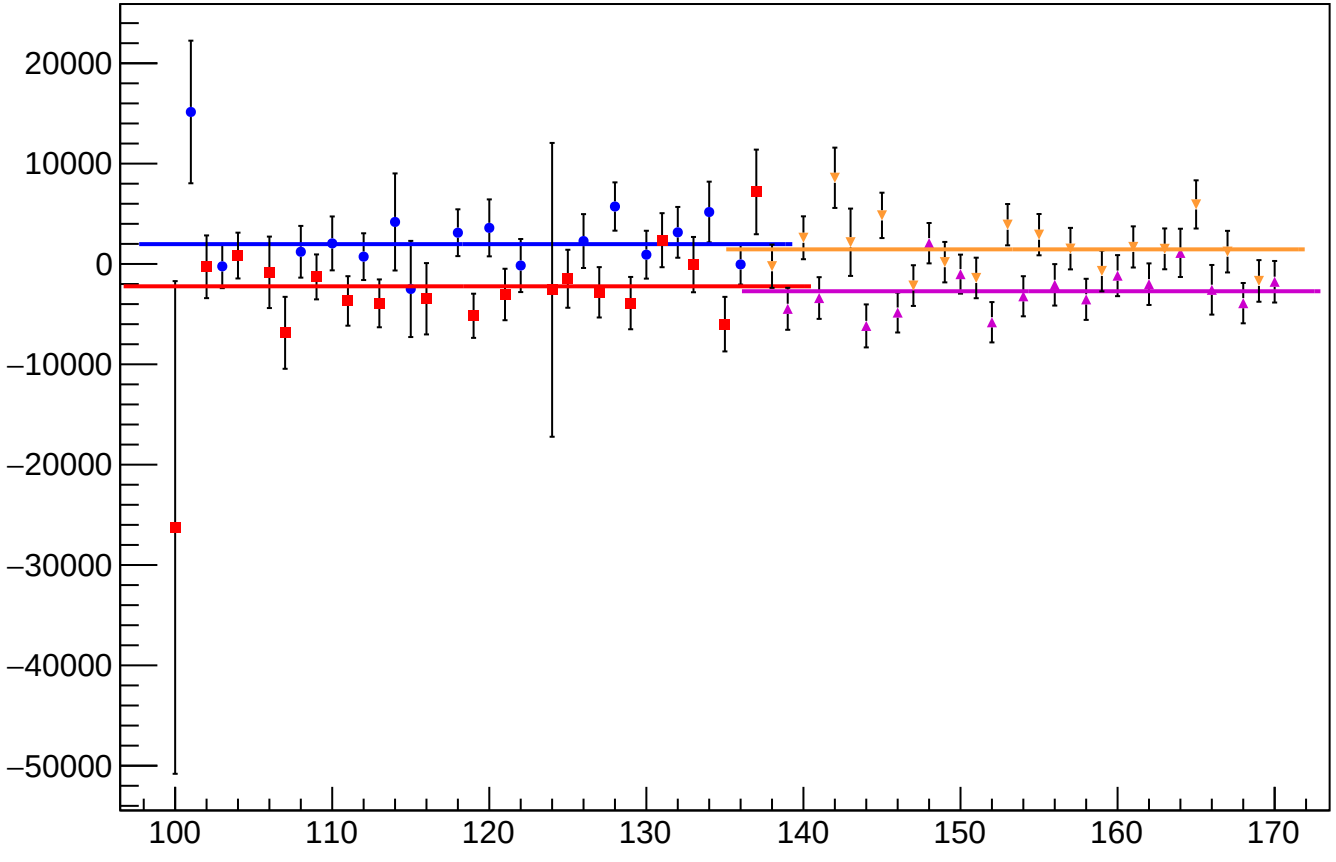
Left In: 0.000+/-0.000 $\chi^2$/NDF:1581524.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5425691.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 13709264.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 8064219.3/34

# reg_asym_atr1l2_avg_mean vs Slug




Right In: 1976.299+/-667.710 $\chi^2$/NDF: 12.1/15

Left Out: 1455.860+/-524.897 $\chi^2$/NDF:23.2/16

Right Out: -2226.171+/-656.286 $\chi^2$/NDF: 19.0/18

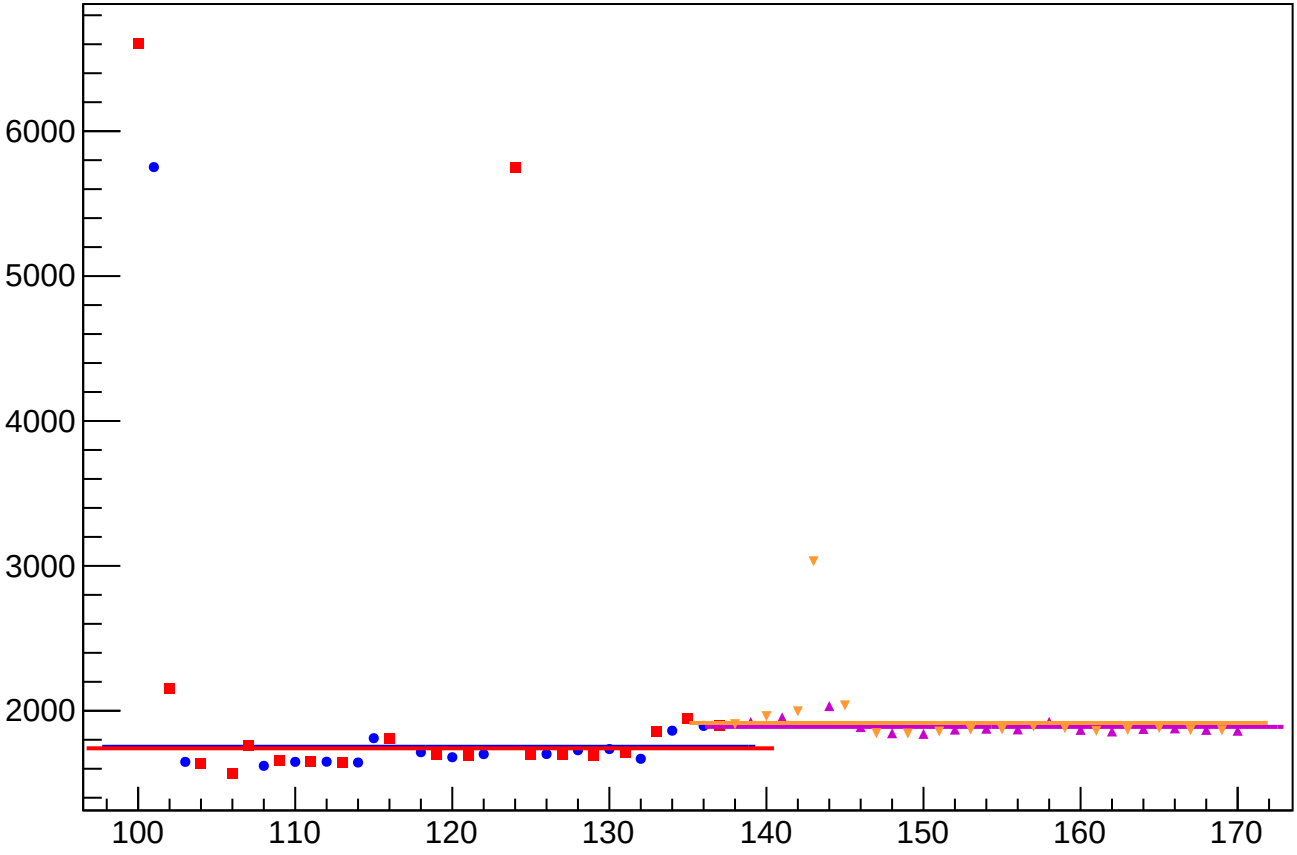
Left In: -2717.860+/-519.647 $\chi^2$/NDF:17.4/15

+ sign 1654.639+/-412.656 $\chi^2$/NDF: 35.7/32

All: -463.678+/-289.916 $\chi^2$/NDF: 124.5/67

- sign -2528.387+/-407.401 $\chi^2$/NDF: 36.8/34

# reg_asym_atr1l2_avg_rms vs Slug




Right In: 1751.607+/-0.472 $\chi^2$/NDF: 670651.4/15

Left Out: 1916.025+/-0.371 $\chi^2$/NDF:244114.9/16

Right Out: 1741.052+/-0.461 $\chi^2$/NDF: 304655.0/18

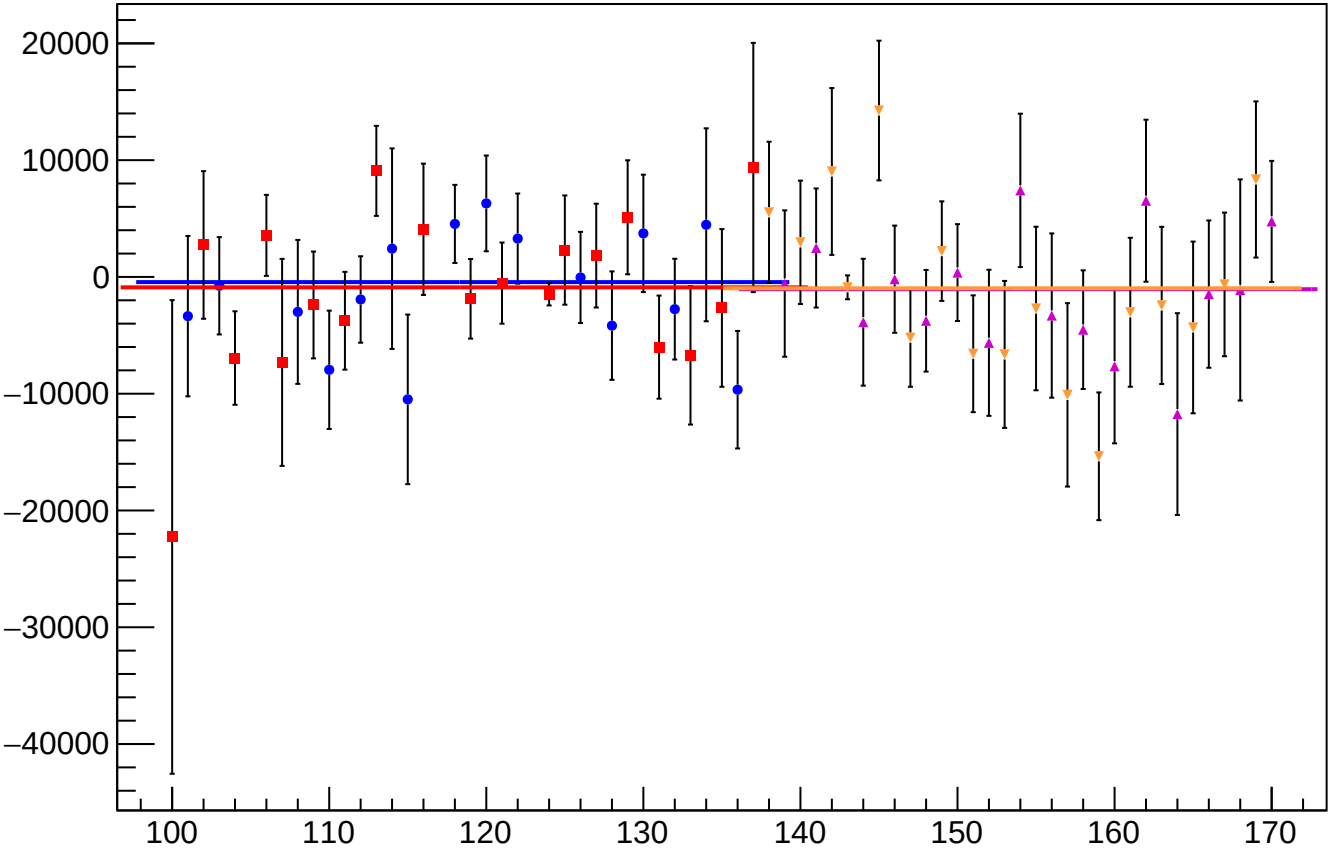
Left In: 1888.874+/-0.367 $\chi^2$/NDF:15943.2/15

+ sign 1853.226+/-0.292 $\chi^2$/NDF: 989718.0/32

All: 1842.138+/-0.205 $\chi^2$/NDF: 1376092.4/67

- sign 1831.393+/-0.287 $\chi^2$/NDF: 383531.1/34

# asym_atr1l2_avg_reg_correction_mean vs Slug




Right In: -444.273+/-1174.448 $\chi^2$/NDF: 15.9/15

Left Out: -974.114+/-836.808 $\chi^2$/NDF:24.4/16

Right Out: -892.237+/-725.737 $\chi^2$/NDF: 20.1/18

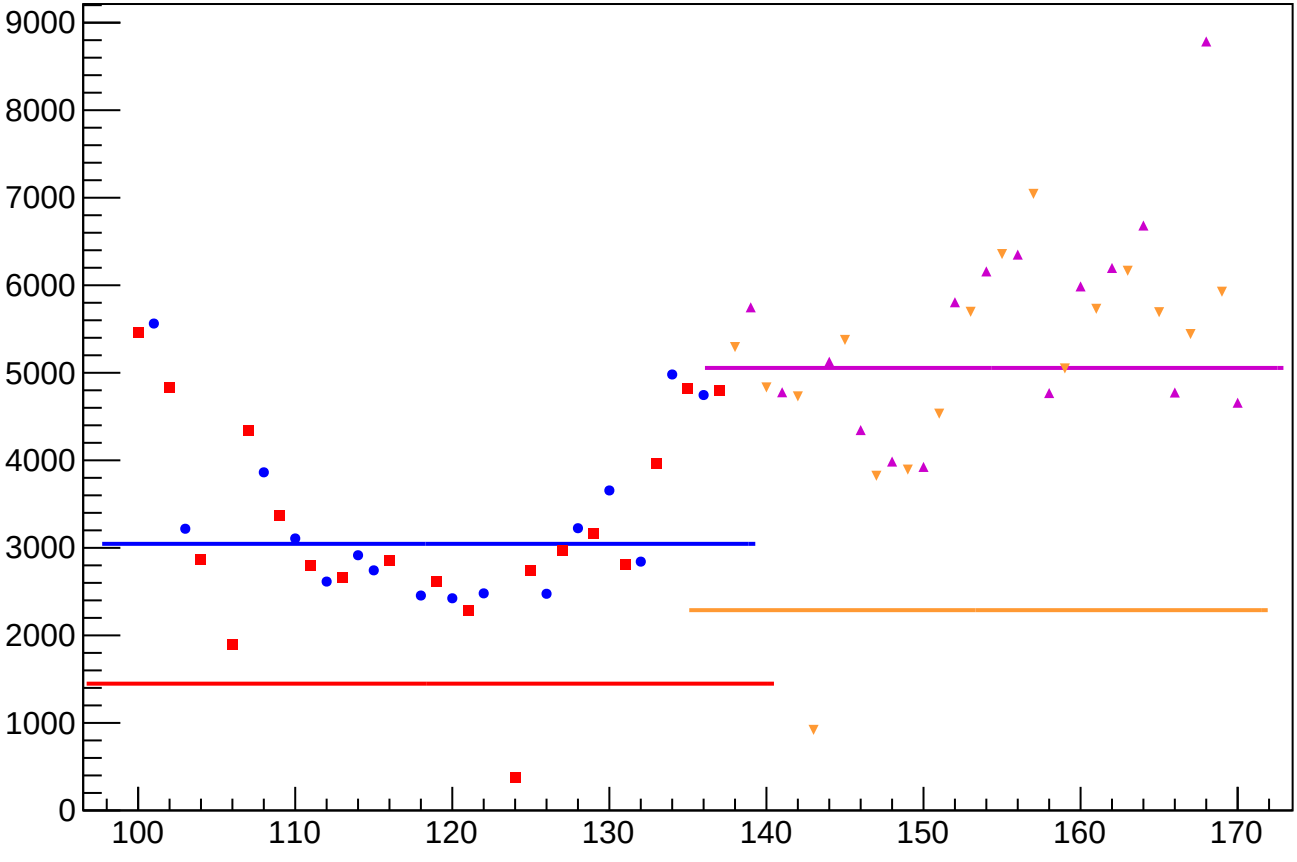
Left In: -1051.658+/-1422.084 $\chi^2$/NDF:9.0/15

+ sign -795.703+/-681.510 $\chi^2$/NDF: 40.5/32

All: -863.859+/-469.004 $\chi^2$/NDF: 69.6/67

- sign -925.178+/-646.425 $\chi^2$/NDF: 29.1/34

# asym_atr1l2_avg_reg_correction_rms vs Slug




Right In: 3045.917+/-0.830 $\chi^2$/NDF: 907385.5/15

Left Out: 2288.211+/-0.592 $\chi^2$/NDF:11554659.8/16

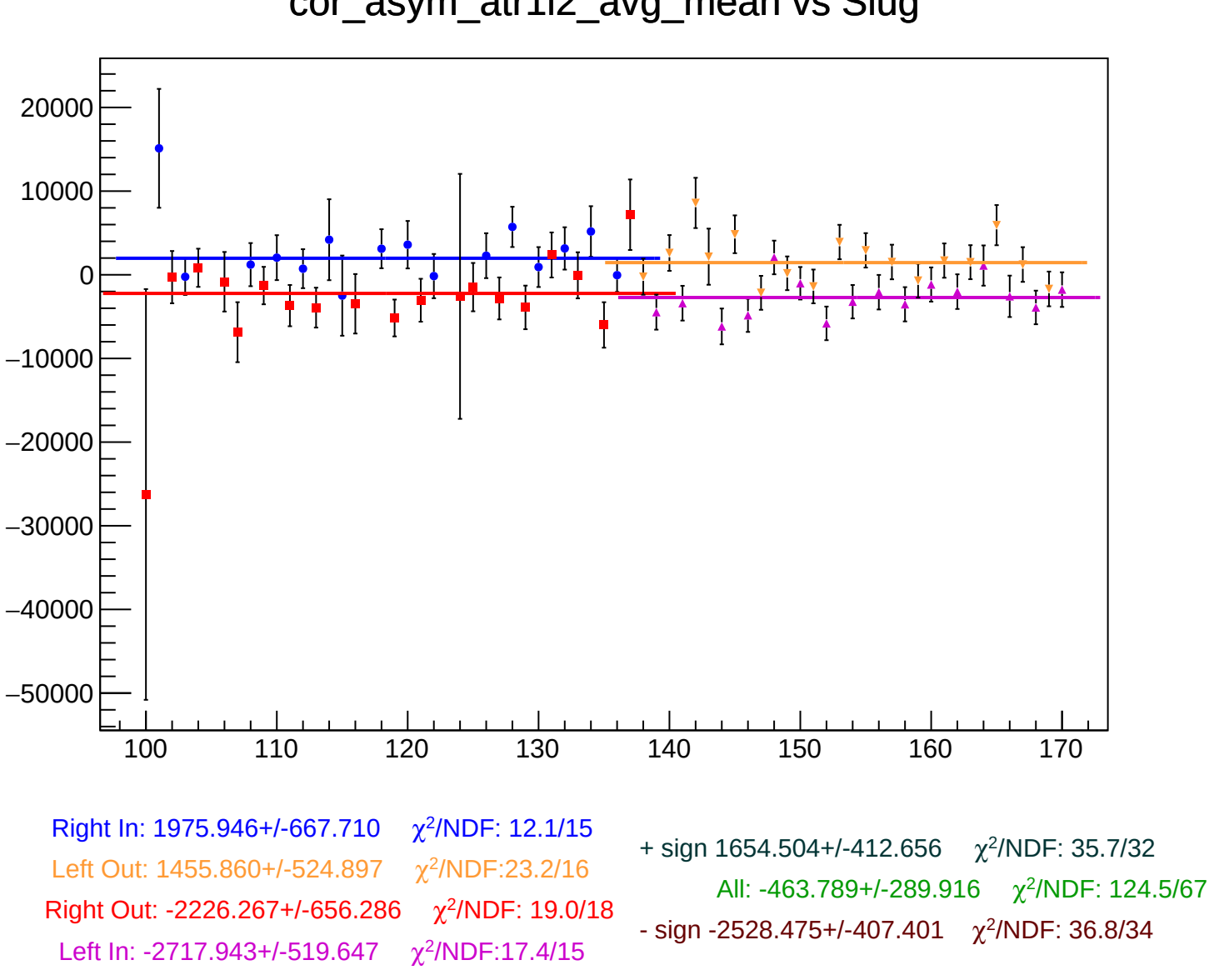
Right Out: 1448.519+/-0.513 $\chi^2$/NDF: 6786925.8/18

Left In: 5055.520+/-1.006 $\chi^2$/NDF:998057.3/15

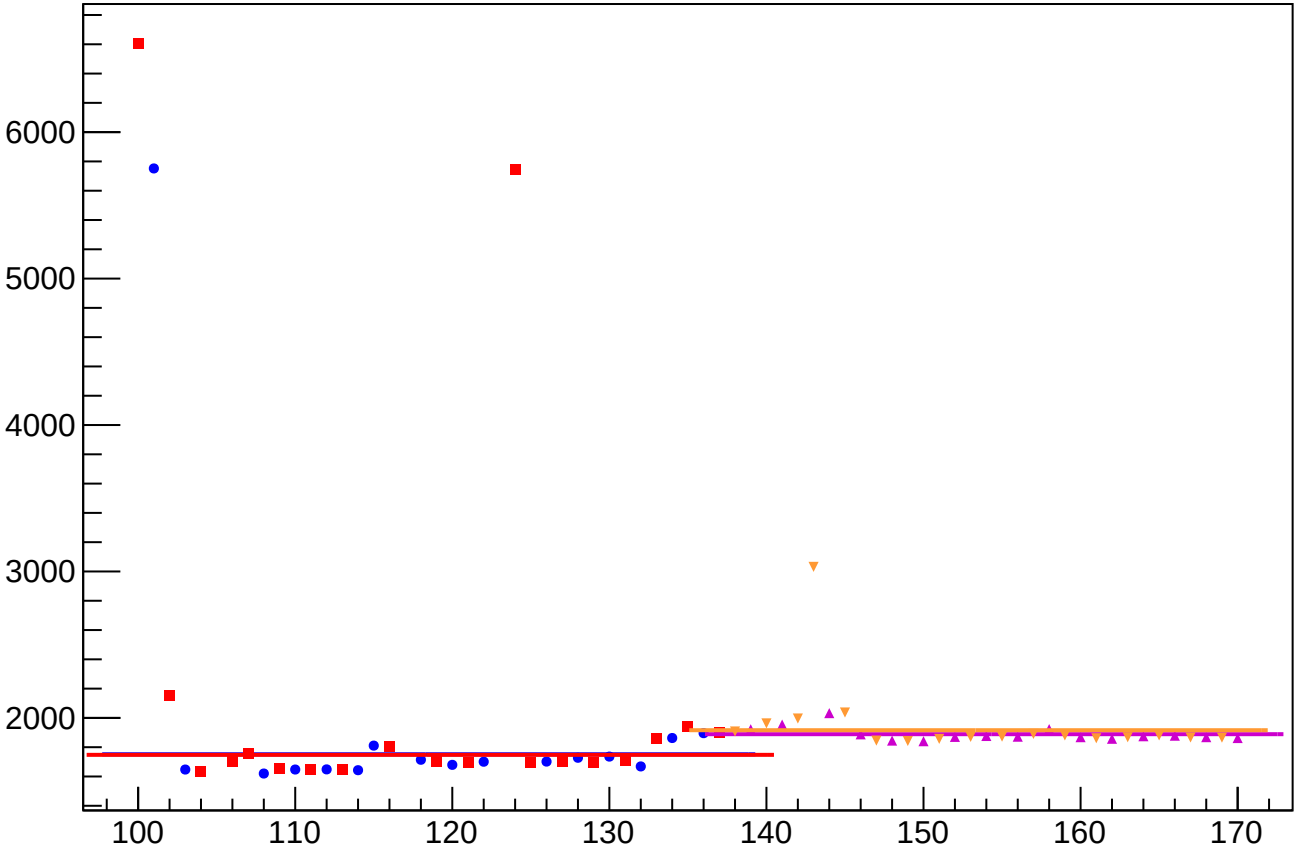
+ sign 2543.350+/-0.482 $\chi^2$/NDF: 13014195.8/32

All: 2359.357+/-0.332 $\chi^2$/NDF: 31284322.4/6

- sign 2193.821+/-0.457 $\chi^2$/NDF: 17993195.6/34


cor_asym_atr1l2_avg_mean vs Slug
20000
10000
0
−10000
−20000
−30000
−40000
−50000
100
110
120
130
140
150
160
170
Right In: 1975.946+/-667.710 χ²/NDF: 12.1/15
Left Out: 1455.860+/-524.897 χ²/NDF:23.2/16
Right Out: -2226.267+/-656.286 χ²/NDF: 19.0/18
Left In: -2717.943+/-519.647 χ²/NDF:17.4/15
+ sign 1654.504+/-412.656 χ²/NDF: 35.7/32
All: -463.789+/-289.916 χ²/NDF: 124.5/67
- sign -2528.475+/-407.401 χ²/NDF: 36.8/34

# cor_asym_atr1l2_avg_rms vs Slug




Right In: 1751.606+/-0.472 $\chi^2$/NDF: 670651.6/15

Left Out: 1916.025+/-0.371 $\chi^2$/NDF:244114.9/16

Right Out: 1747.786+/-0.462 $\chi^2$/NDF: 297917.6/18

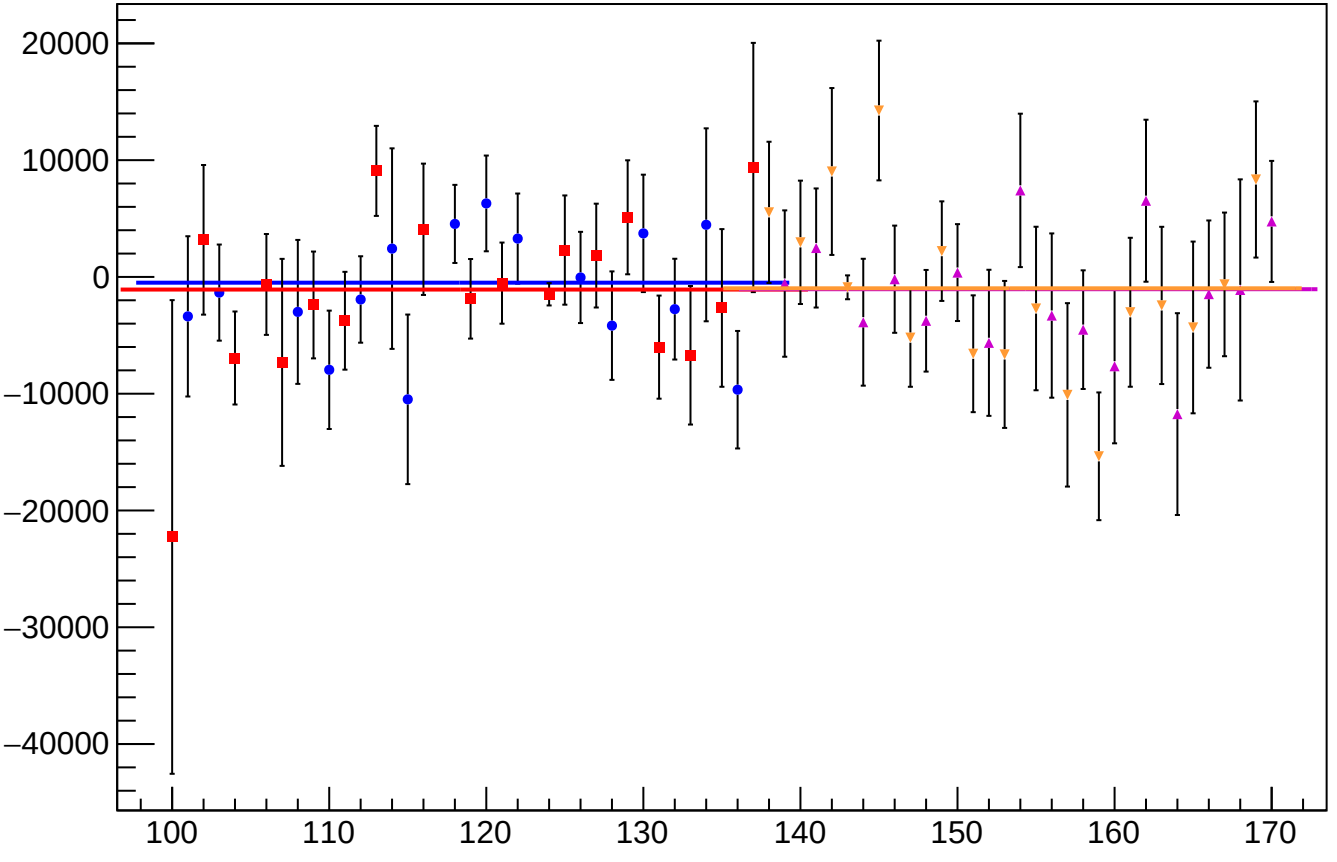
Left In: 1888.874+/-0.367 $\chi^2$/NDF:15943.2/15

+ sign 1853.226+/-0.292 $\chi^2$/NDF: 989718.5/32

All: 1843.605+/-0.205 $\chi^2$/NDF: 1362798.5/67

- sign 1834.255+/-0.288 $\chi^2$/NDF: 370936.2/34

# asym_atr1l2_avg_cor_correction_mean vs Slug




Right In: -492.916+/-1173.239 $\chi^2$/NDF: 16.0/15

Left Out: -973.935+/-836.785 $\chi^2$/NDF:24.4/16

Right Out: -1080.924+/-731.458 $\chi^2$/NDF: 18.5/18

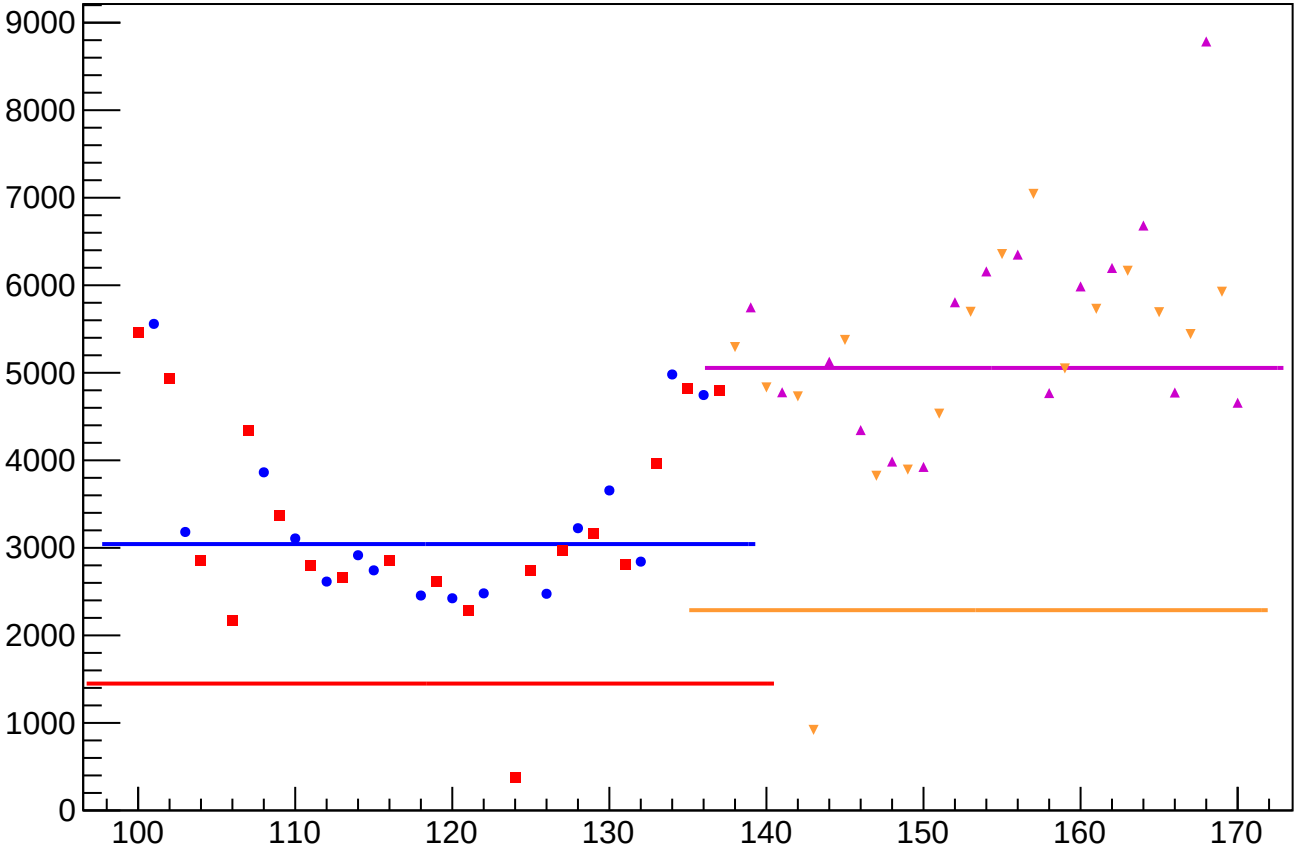
Left In: -1051.721+/-1422.083 $\chi^2$/NDF:9.0/15

+ sign -811.748+/-681.261 $\chi^2$/NDF: 40.5/32

All: -949.363+/-470.456 $\chi^2$/NDF: 68.1/67

- sign -1074.814+/-650.458 $\chi^2$/NDF: 27.5/34

# asym_atr1l2_avg_cor_correction_rms vs Slug




Right In: 3043.270+/-0.830 $\chi^2$/NDF: 905659.7/15

Left Out: 2288.110+/-0.592 $\chi^2$/NDF:11555145.6/16

Right Out: 1449.516+/-0.517 $\chi^2$/NDF: 6825716.5/18

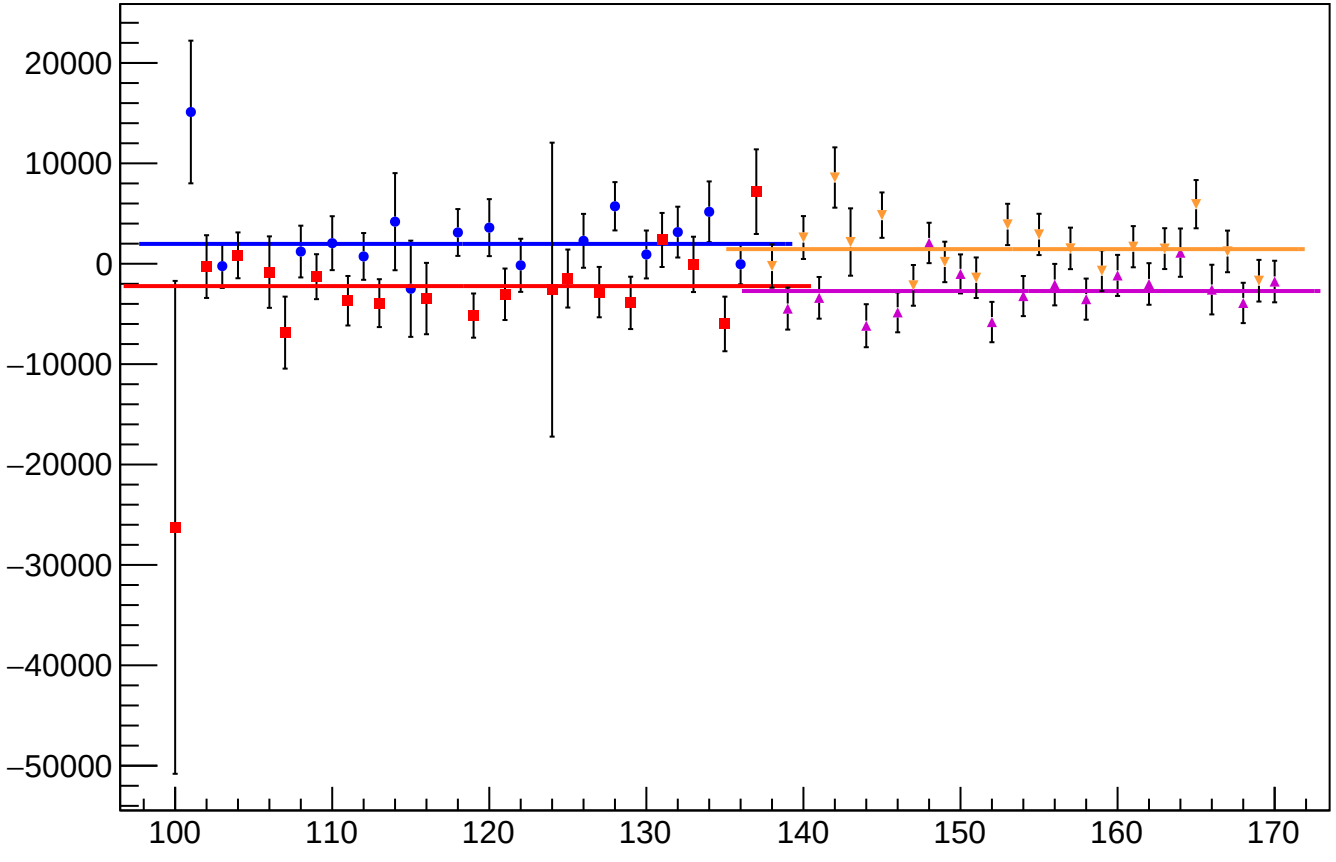
Left In: 5055.516+/-1.006 $\chi^2$/NDF:998058.7/15

+ sign 2542.730+/-0.482 $\chi^2$/NDF: 13010010.1/32

All: 2365.502+/-0.333 $\chi^2$/NDF: 31261833.5/6

- sign 2203.938+/-0.460 $\chi^2$/NDF: 17993079.2/34

# eigen_cor_asym_atr1l2_avg_mean vs Slug




Right In: 1975.946+/-667.710 $\chi^2$/NDF: 12.1/15

Left Out: 1455.860+/-524.897 $\chi^2$/NDF:23.2/16

Right Out: -2226.267+/-656.286 $\chi^2$/NDF: 19.0/18

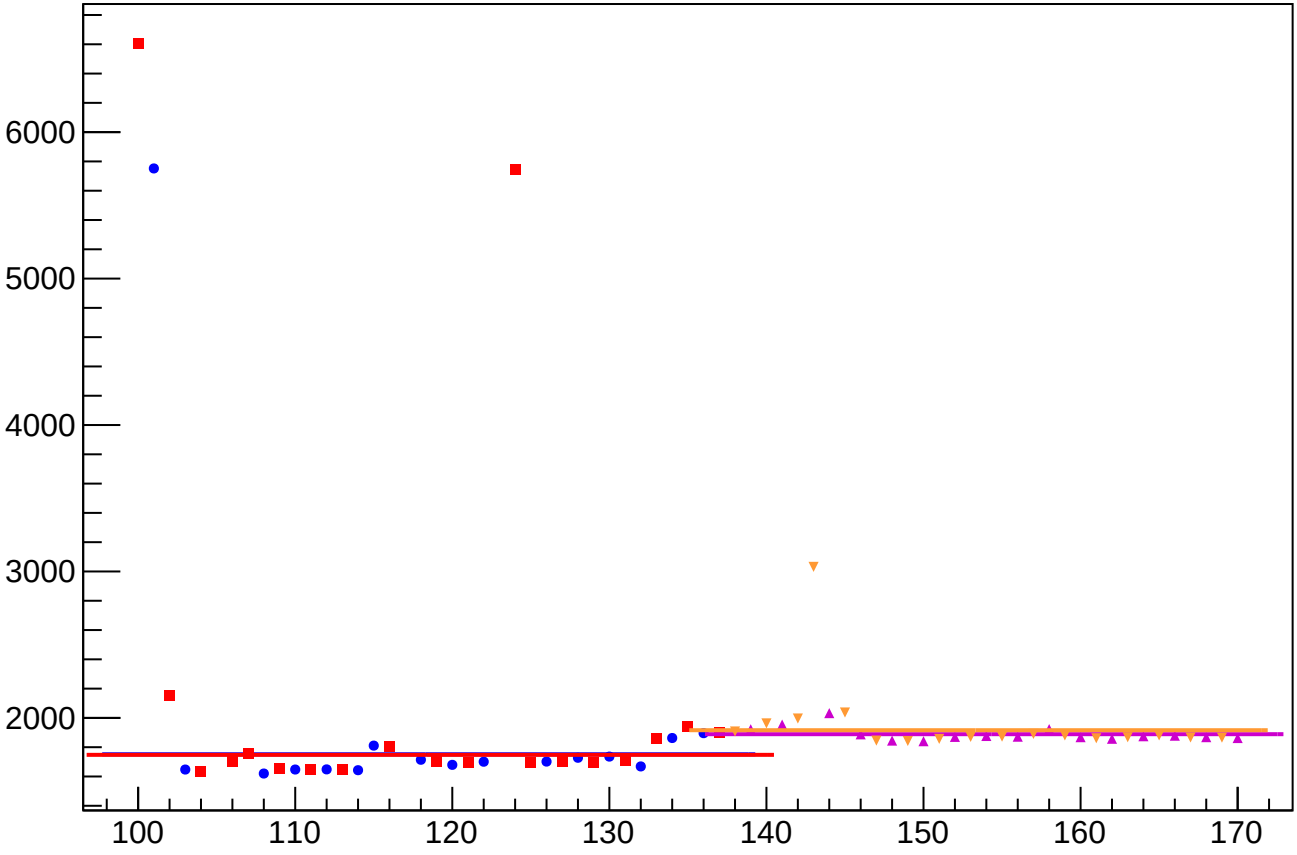
Left In: -2717.943+/-519.647 $\chi^2$/NDF:17.4/15

+ sign 1654.504+/-412.656 $\chi^2$/NDF: 35.7/32

All: -463.789+/-289.916 $\chi^2$/NDF: 124.5/67

- sign -2528.475+/-407.401 $\chi^2$/NDF: 36.8/34

# eigen_cor_asym_atr1l2_avg_rms vs Slug




Right In: 1751.606+/-0.472 $\chi^2$/NDF: 670651.6/15

Left Out: 1916.025+/-0.371 $\chi^2$/NDF:244114.9/16

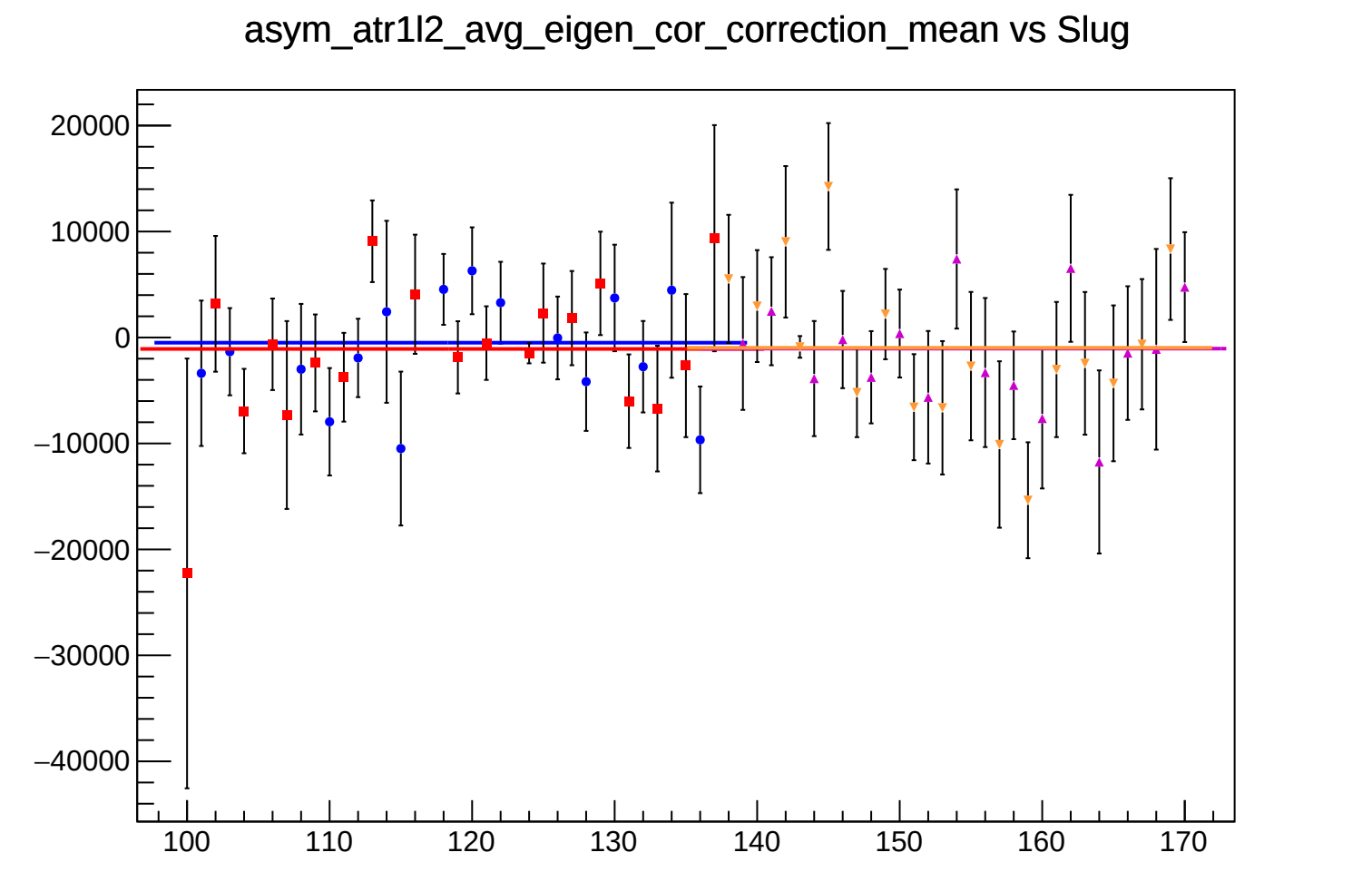
Right Out: 1747.786+/-0.462 $\chi^2$/NDF: 297917.6/18

Left In: 1888.874+/-0.367 $\chi^2$/NDF:15943.2/15

+ sign 1853.226+/-0.292 $\chi^2$/NDF: 989718.5/32

All: 1843.605+/-0.205 $\chi^2$/NDF: 1362798.5/67

- sign 1834.255+/-0.288 $\chi^2$/NDF: 370936.2/34




Right In: -492.916+/-1173.239 $\chi^2$/NDF: 16.0/15

Left Out: -973.935+/-836.785 $\chi^2$/NDF:24.4/16

Right Out: -1080.924+/-731.458 $\chi^2$/NDF: 18.5/18

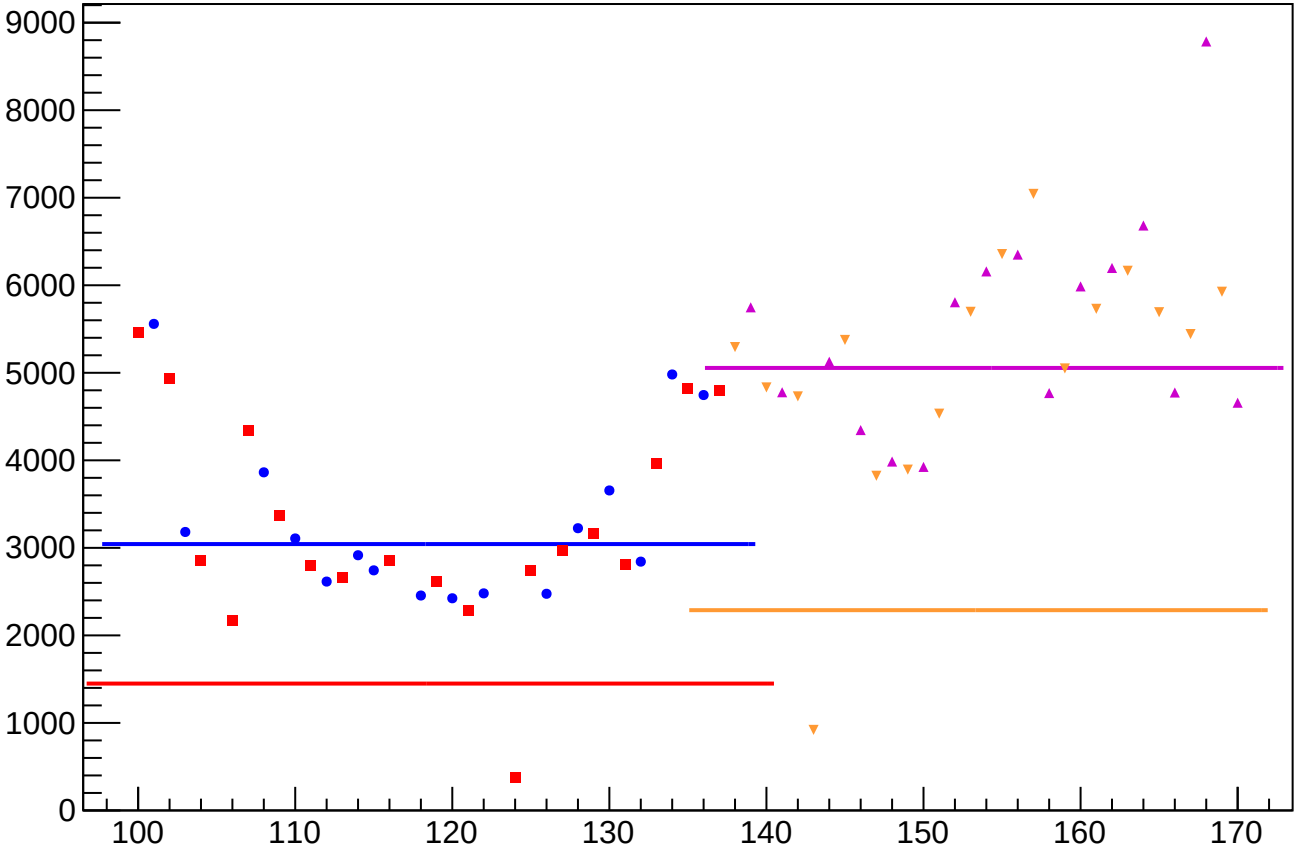
Left In: -1051.721+/-1422.083 $\chi^2$/NDF:9.0/15

+ sign -811.748+/-681.261 $\chi^2$/NDF: 40.5/32

All: -949.363+/-470.456 $\chi^2$/NDF: 68.1/67

- sign -1074.814+/-650.458 $\chi^2$/NDF: 27.5/34

# asym_atr1l2_avg_eigen_cor_correction_rms vs Slug




Right In: 3043.270+/-0.830 $\chi^2$/NDF: 905659.7/15

Left Out: 2288.110+/-0.592 $\chi^2$/NDF:11555145.6/16

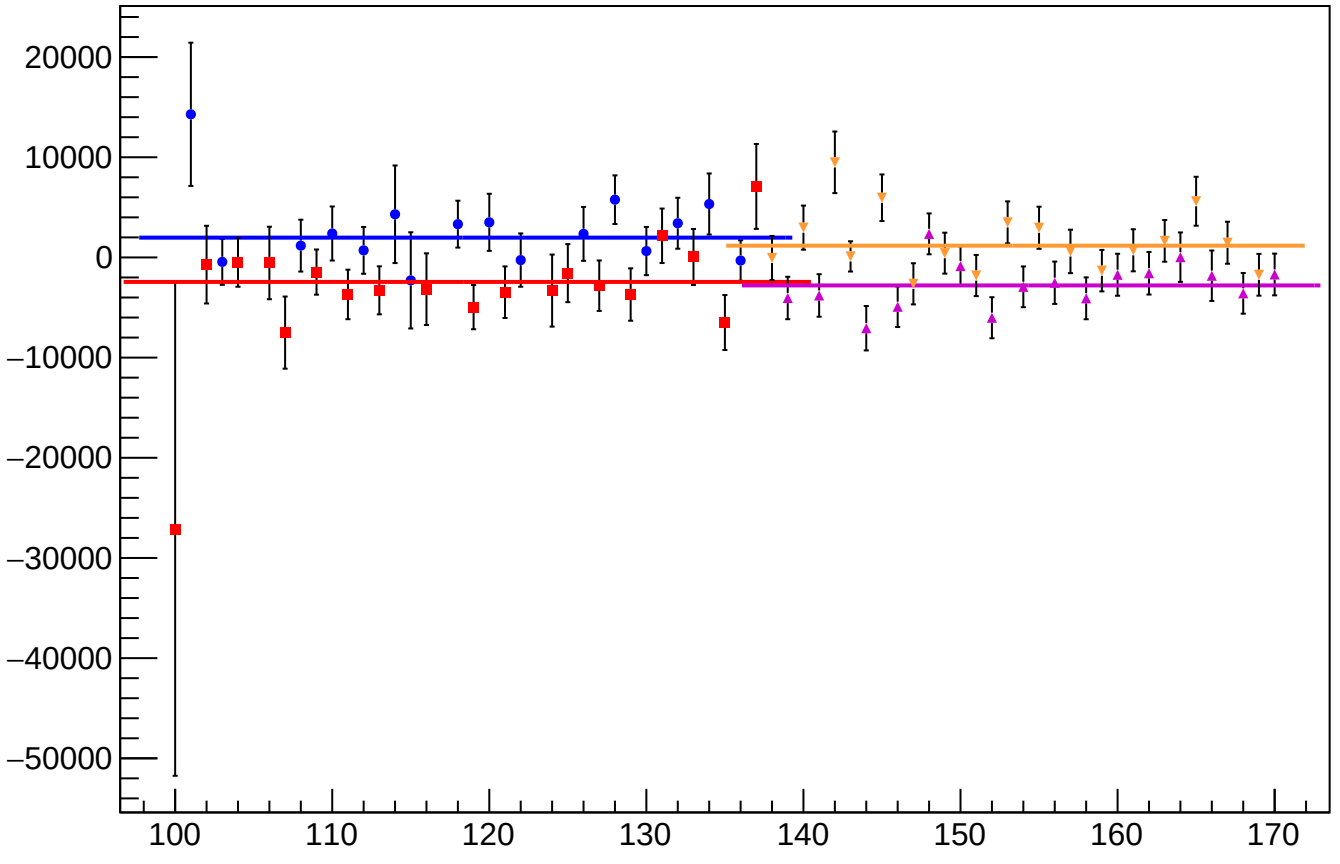
Right Out: 1449.516+/-0.517 $\chi^2$/NDF: 6825716.5/18

Left In: 5055.516+/-1.006 $\chi^2$/NDF:998058.7/15

+ sign 2542.730+/-0.482 $\chi^2$/NDF: 13010010.1/32

All: 2365.502+/-0.333 $\chi^2$/NDF: 31261833.5/6

- sign 2203.938+/-0.460 $\chi^2$/NDF: 17993079.2/34




Right In: 1975.804+/-674.086 $\chi^2$/NDF: 12.4/15

Left Out: 1174.660+/-510.447 $\chi^2$/NDF:27.5/16

Right Out: -2444.199+/-657.682 $\chi^2$/NDF: 17.5/18

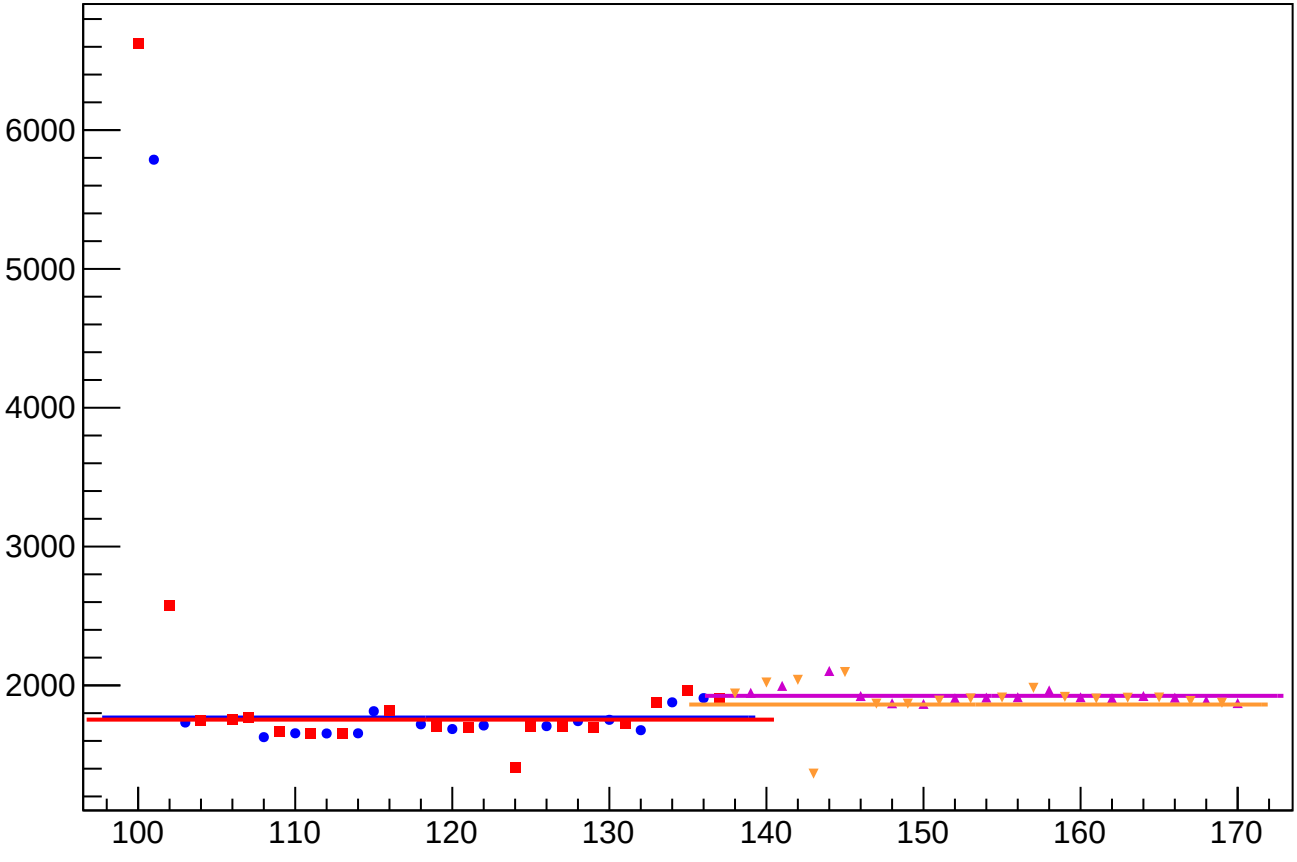
Left In: -2795.124+/-529.595 $\chi^2$/NDF:18.1/15

+ sign 1466.629+/-406.938 $\chi^2$/NDF: 40.9/32

All: -567.305+/-289.691 $\chi^2$/NDF: 127.2/67

- sign -2657.085+/-412.487 $\chi^2$/NDF: 35.7/34

# dit_asym_atr1l2_avg_rms vs Slug




Right In: 1768.480+/-0.477 $\chi^2$/NDF: 667367.4/15

Left Out: 1862.147+/-0.361 $\chi^2$/NDF:270457.5/16

Right Out: 1753.383+/-0.464 $\chi^2$/NDF: 218864.4/18

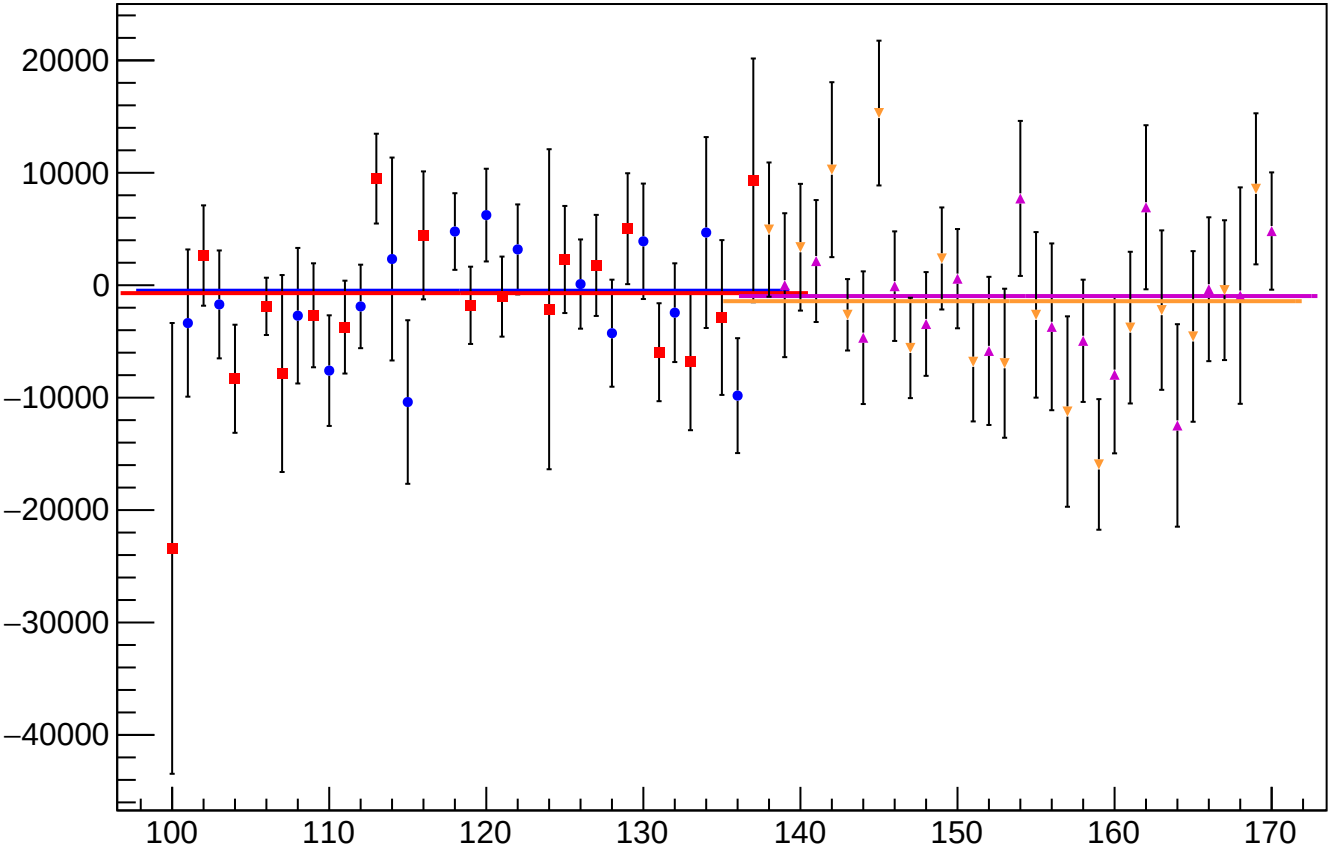
Left In: 1924.755+/-0.374 $\chi^2$/NDF:21692.3/15

+ sign 1828.011+/-0.288 $\chi^2$/NDF: 962367.7/32

All: 1842.387+/-0.205 $\chi^2$/NDF: 1290623.1/67

- sign 1857.127+/-0.291 $\chi^2$/NDF: 323200.2/34

# asym_atr1l2_avg_dit_correction_mean vs Slug




Right In: -488.104+/-1198.506 $\chi^2$/NDF: 15.8/15

Left Out: -1420.038+/-1379.288 $\chi^2$/NDF:24.5/16

Right Out: -703.324+/-1069.467 $\chi^2$/NDF: 18.8/18

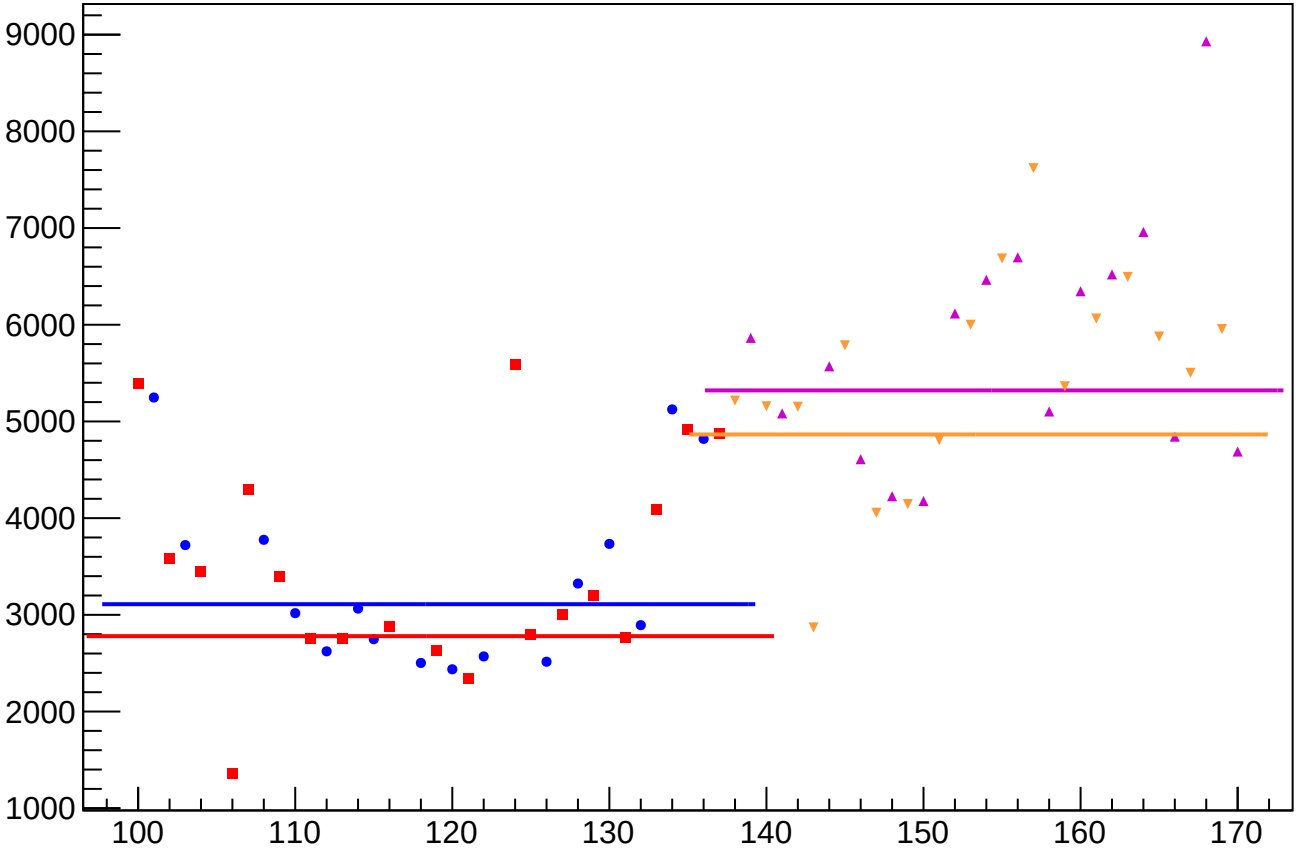
Left In: -963.062+/-1495.601 $\chi^2$/NDF:9.0/15

+ sign -889.034+/-904.683 $\chi^2$/NDF: 40.5/32

All: -838.203+/-627.062 $\chi^2$/NDF: 68.4/67

- sign -791.201+/-869.936 $\chi^2$/NDF: 27.9/34

# asym_atr1l2_avg_dit_correction_rms vs Slug




Right In: 3110.133+/-0.847 $\chi^2$/NDF: 883262.4/15

Left Out: 4865.340+/-0.975 $\chi^2$/NDF:1646820.7/16

Right Out: 2779.630+/-0.756 $\chi^2$/NDF: 1348141.7/18

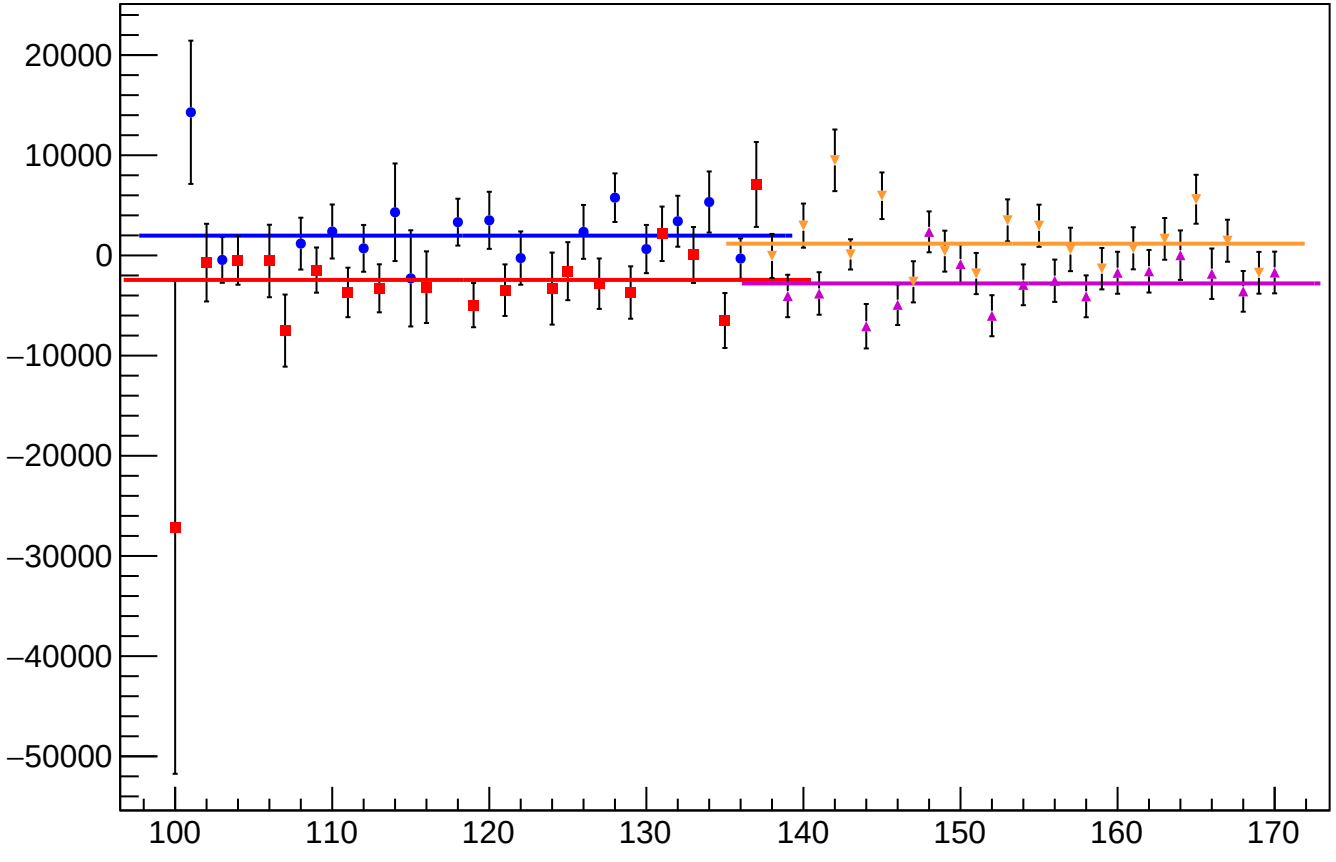
Left In: 5321.184+/-1.058 $\chi^2$/NDF:952490.2/15

+ sign 3865.245+/-0.640 $\chi^2$/NDF: 4375481.1/32

All: 3747.964+/-0.443 $\chi^2$/NDF: 10562331.9/6

- sign 3639.520+/-0.615 $\chi^2$/NDF: 6122159.9/34

# eigen_dit_asym_atr1l2_avg_mean vs Slug




Right In: 1975.805+/-674.086 $\chi^2$/NDF: 12.4/15

Left Out: 1174.656+/-510.447 $\chi^2$/NDF:27.5/16

Right Out: -2444.199+/-657.682 $\chi^2$/NDF: 17.5/18

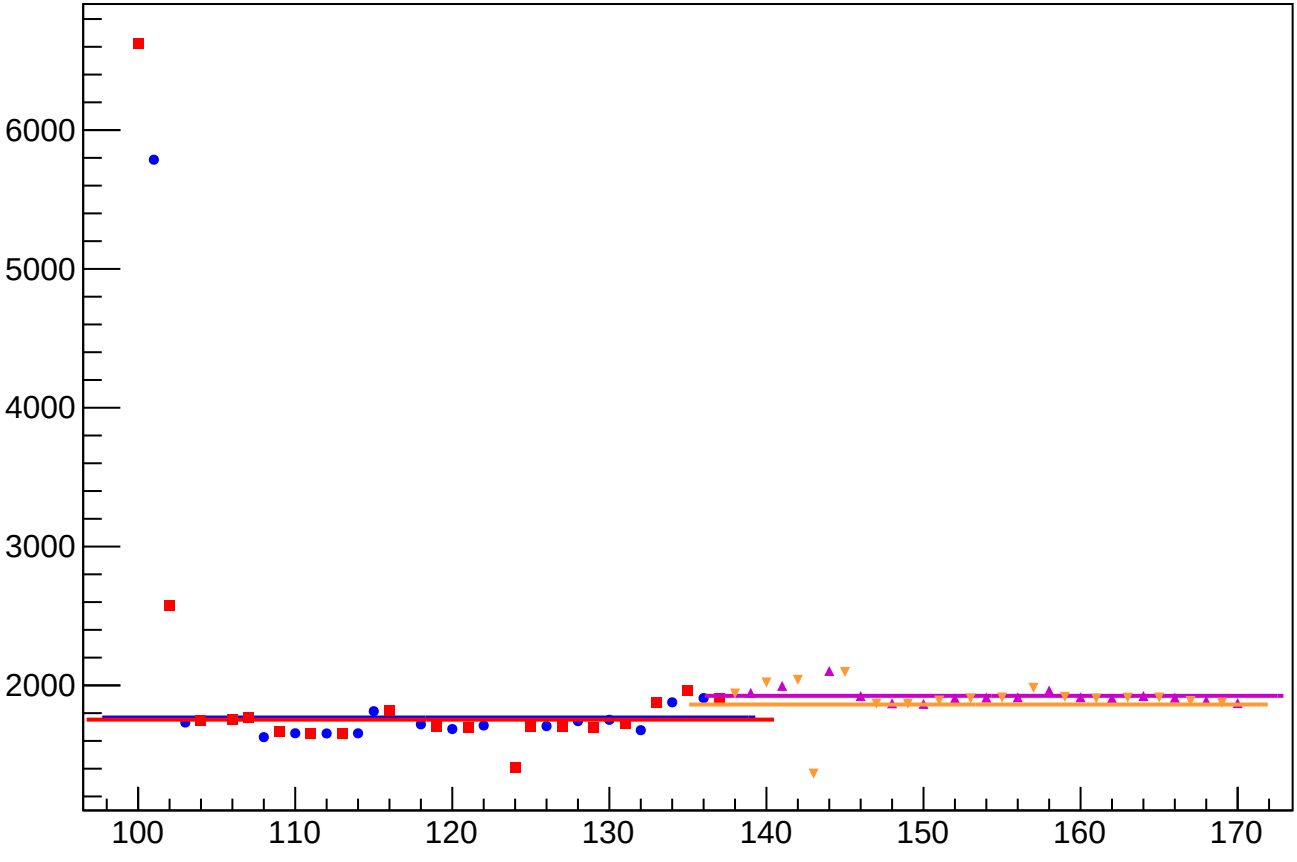
Left In: -2795.124+/-529.596 $\chi^2$/NDF:18.1/15

+ sign 1466.627+/-406.938 $\chi^2$/NDF: 40.9/32

All: -567.307+/-289.691 $\chi^2$/NDF: 127.2/67

- sign -2657.085+/-412.487 $\chi^2$/NDF: 35.7/34

# eigen_dit_asym_atr1l2_avg_rms vs Slug




Right In: 1768.480+/-0.477 $\chi^2$/NDF: 667367.4/15

Left Out: 1862.147+/-0.361 $\chi^2$/NDF:270458.8/16

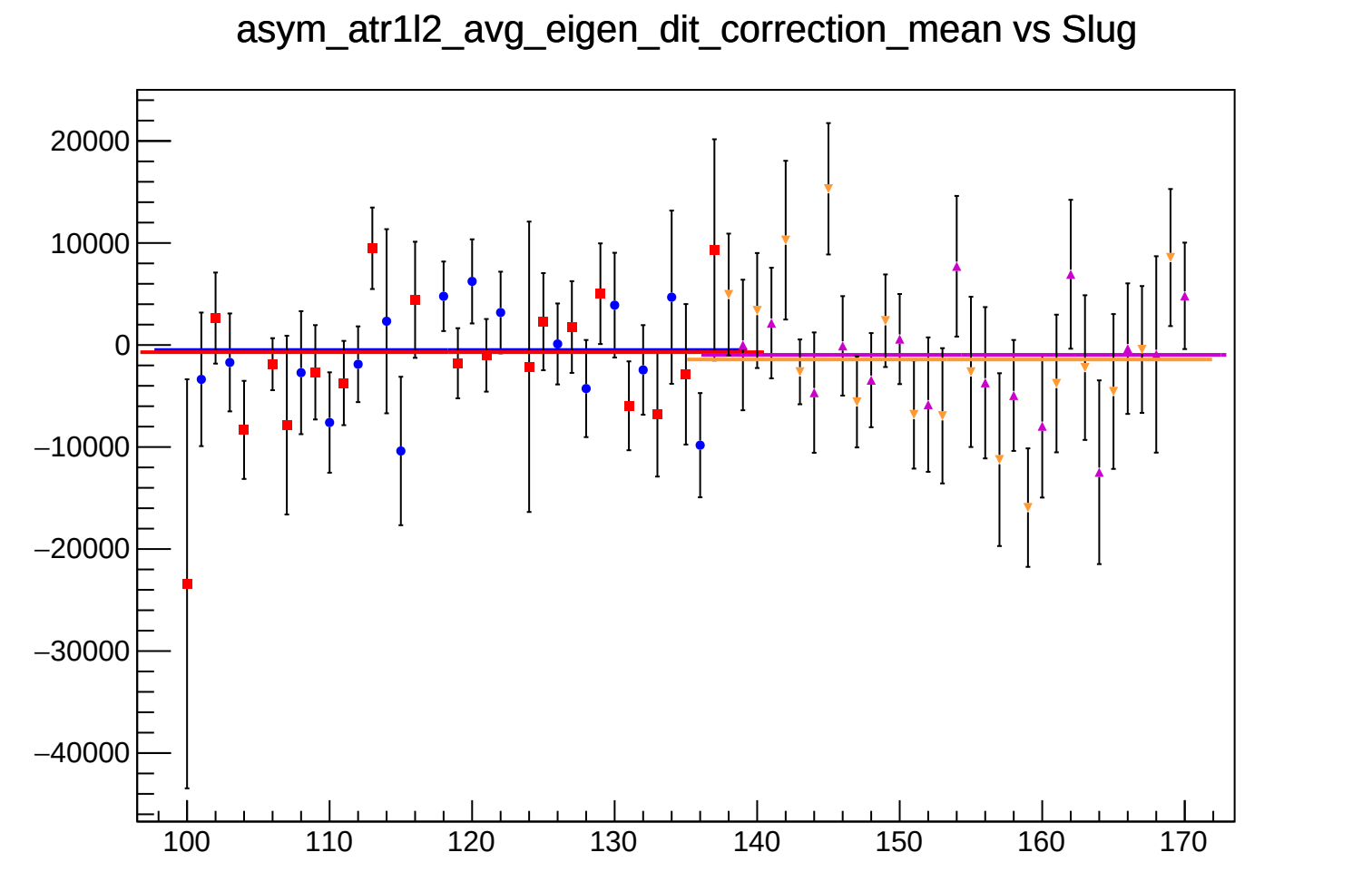
Right Out: 1753.382+/-0.464 $\chi^2$/NDF: 218864.3/18

Left In: 1924.756+/-0.374 $\chi^2$/NDF:21692.6/15

+ sign 1828.011+/-0.288 $\chi^2$/NDF: 962369.6/32

All: 1842.387+/-0.205 $\chi^2$/NDF: 1290626.4/67

- sign 1857.127+/-0.291 $\chi^2$/NDF: 323201.6/34




Right In: -488.098+/-1198.502 $\chi^2$/NDF: 15.8/15

Left Out: -1420.044+/-1379.290 $\chi^2$/NDF:24.5/16

Right Out: -703.325+/-1069.463 $\chi^2$/NDF: 18.8/18

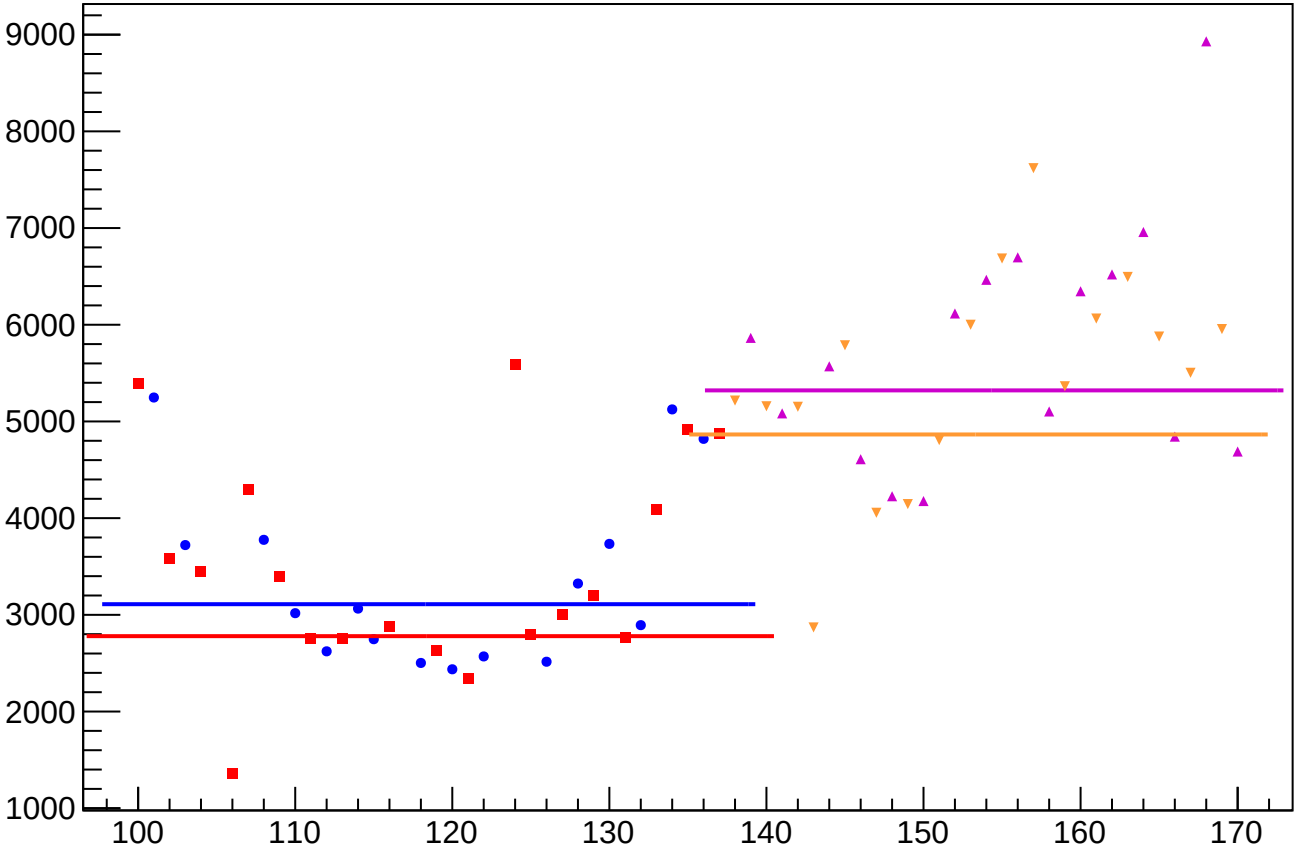
Left In: -963.061+/-1495.603 $\chi^2$/NDF:9.0/15

+ sign -889.031+/-904.682 $\chi^2$/NDF: 40.5/32

All: -838.201+/-627.061 $\chi^2$/NDF: 68.4/67

- sign -791.202+/-869.934 $\chi^2$/NDF: 27.9/34

# asym_atr1l2_avg_eigen_dit_correction_rms vs Slug




Right In: 3110.121+/-0.847 $\chi^2$/NDF: 883272.2/15

Left Out: 4865.345+/-0.975 $\chi^2$/NDF:1646828.4/16

Right Out: 2779.617+/-0.756 $\chi^2$/NDF: 1348160.7/18

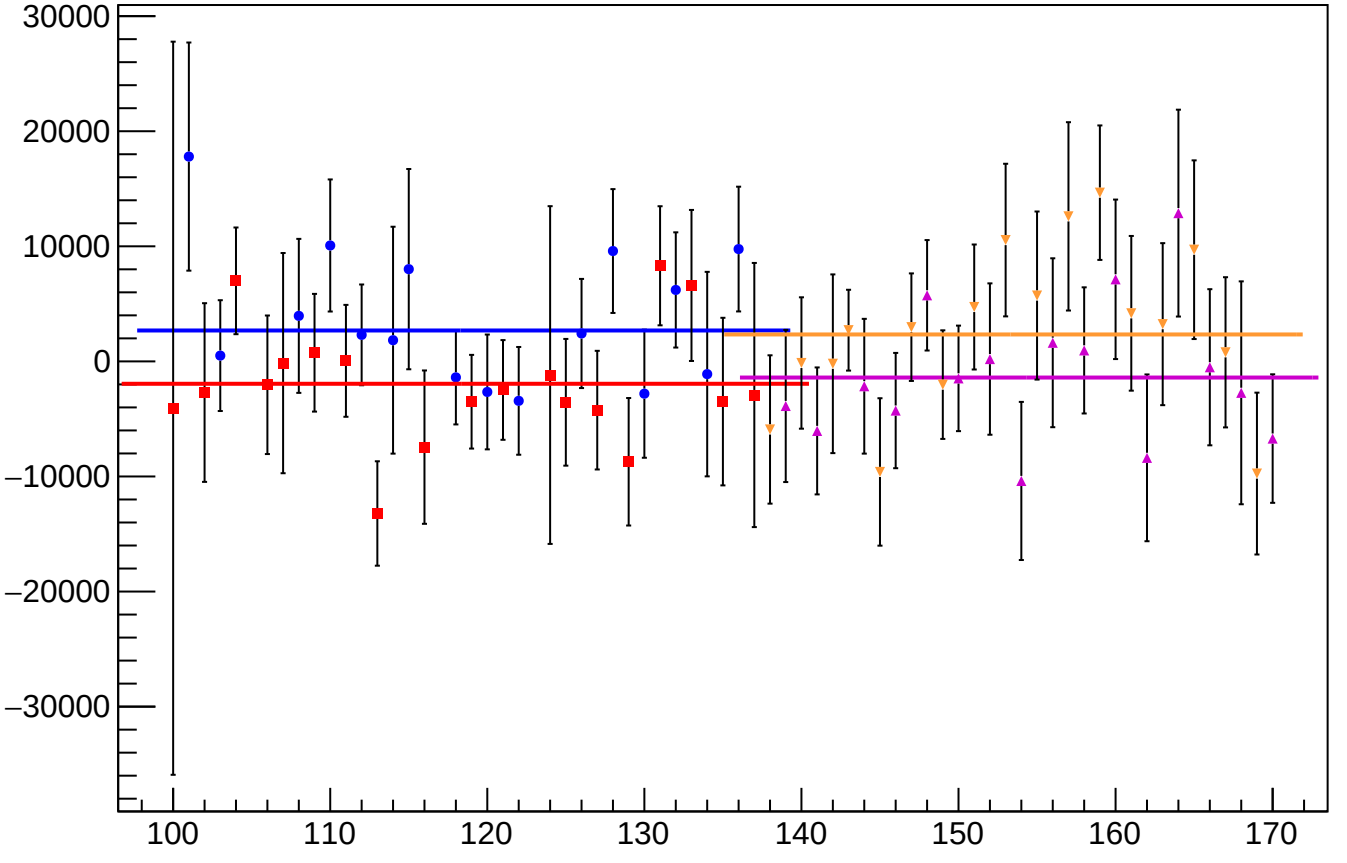
Left In: 5321.189+/-1.058 $\chi^2$/NDF:952494.2/15

+ sign 3865.237+/-0.640 $\chi^2$/NDF: 4375534.2/32

All: 3747.954+/-0.443 $\chi^2$/NDF: 10562470.9/6

- sign 3639.507+/-0.615 $\chi^2$/NDF: 6122243.2/34

# asym_atr1l2_avg_mean vs Slug




Right In: 2685.414+/-1379.907 $\chi^2$/NDF: 13.5/15

Left Out: 2340.396+/-1428.912 $\chi^2$/NDF:18.3/16

Right Out: -1945.685+/-1332.986 $\chi^2$/NDF: 18.7/18

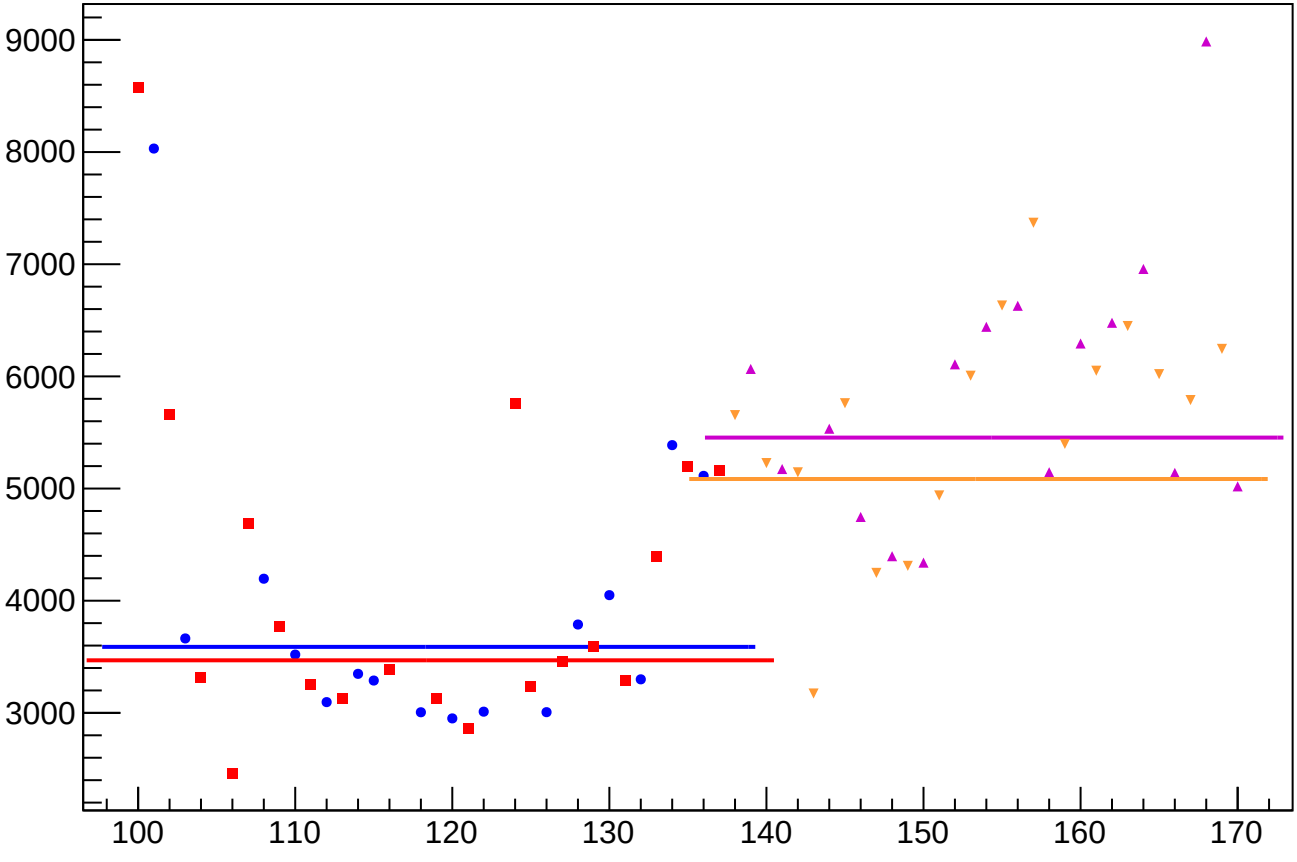
Left In: -1403.932+/-1527.405 $\chi^2$/NDF:11.4/15

+ sign 2518.923+/-992.614 $\chi^2$/NDF: 31.7/32

All: 428.511+/-705.983 $\chi^2$/NDF: 70.9/67

- sign -1711.462+/-1004.312 $\chi^2$/NDF: 30.2/34

# asym_atr1l2_avg_rms vs Slug




Right In: 3588.430+/-0.976 $\chi^2$/NDF: 845218.6/15

Left Out: 5085.104+/-1.010 $\chi^2$/NDF:1264803.9/16

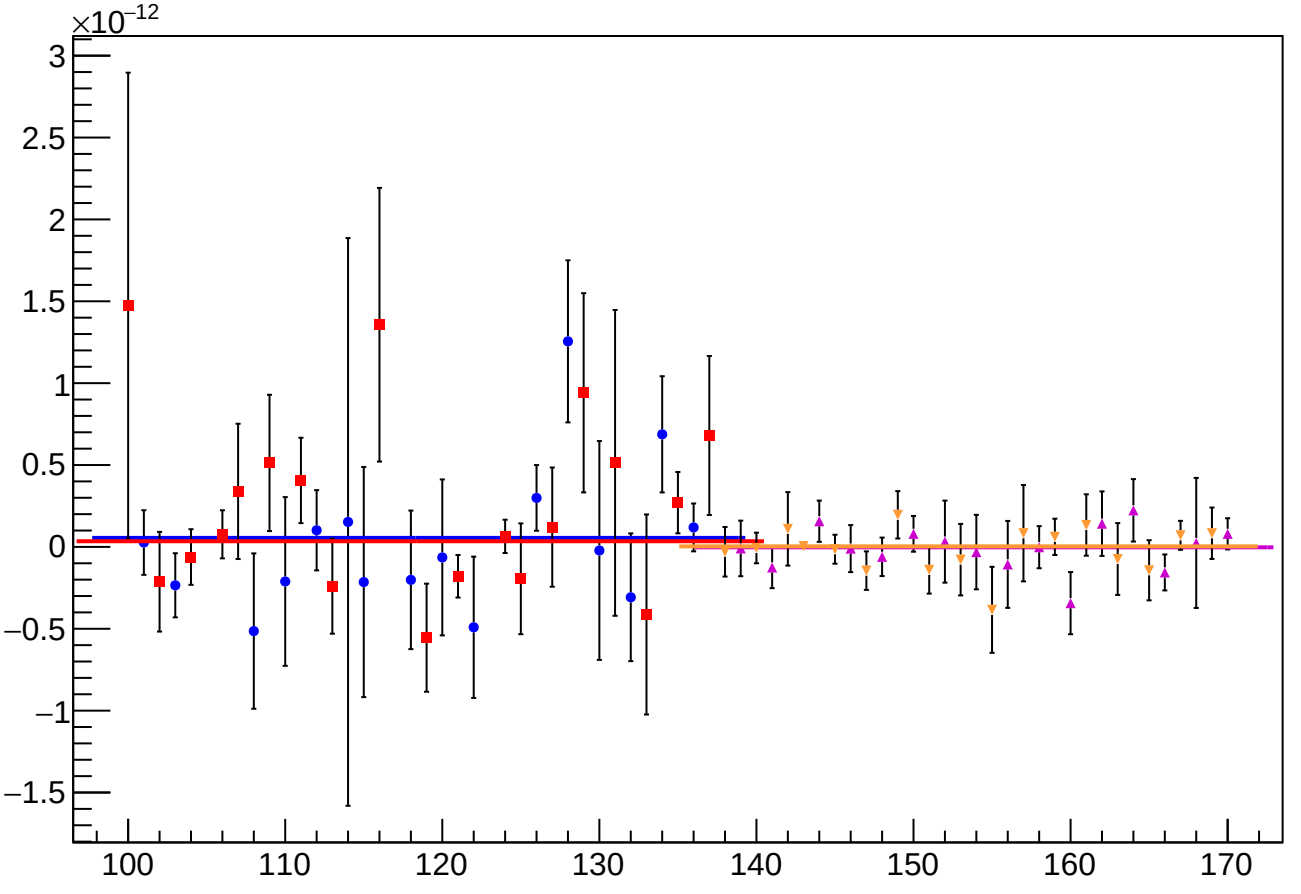
Right Out: 3468.624+/-0.928 $\chi^2$/NDF: 666541.5/18

Left In: 5454.308+/-1.080 $\chi^2$/NDF:804319.5/15

+ sign 4310.662+/-0.702 $\chi^2$/NDF: 3245388.2/32

All: 4311.448+/-0.497 $\chi^2$/NDF: 6660378.9/67

- sign 4312.238+/-0.704 $\chi^2$/NDF: 3414988.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 17.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:9.4/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 22.3/18

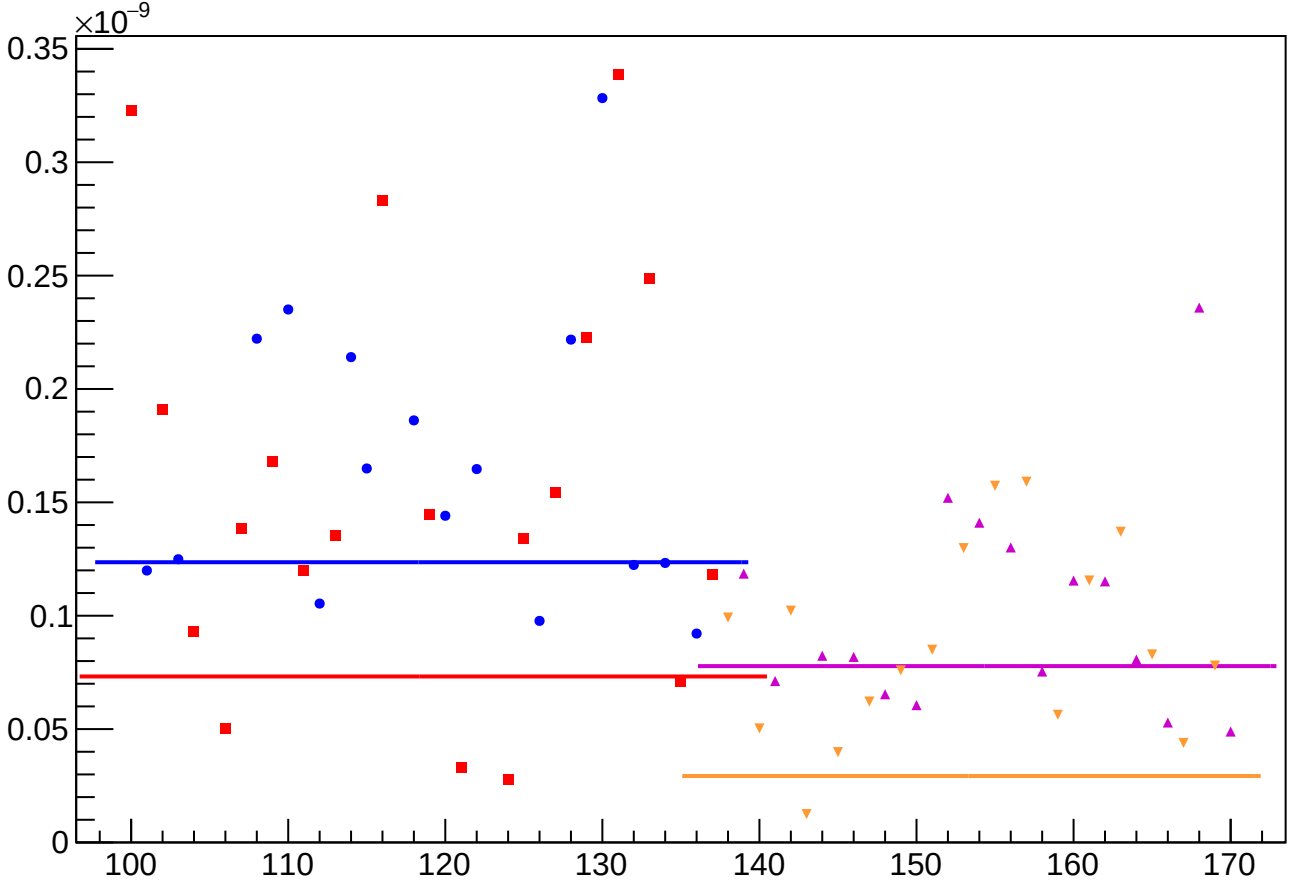
Left In: -0.000+/-0.000 $\chi^2$/NDF:11.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 27.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 61.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 34.0/34

# asym_atr1l2_avg_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 662149.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:5270435.3/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2188857.9/18

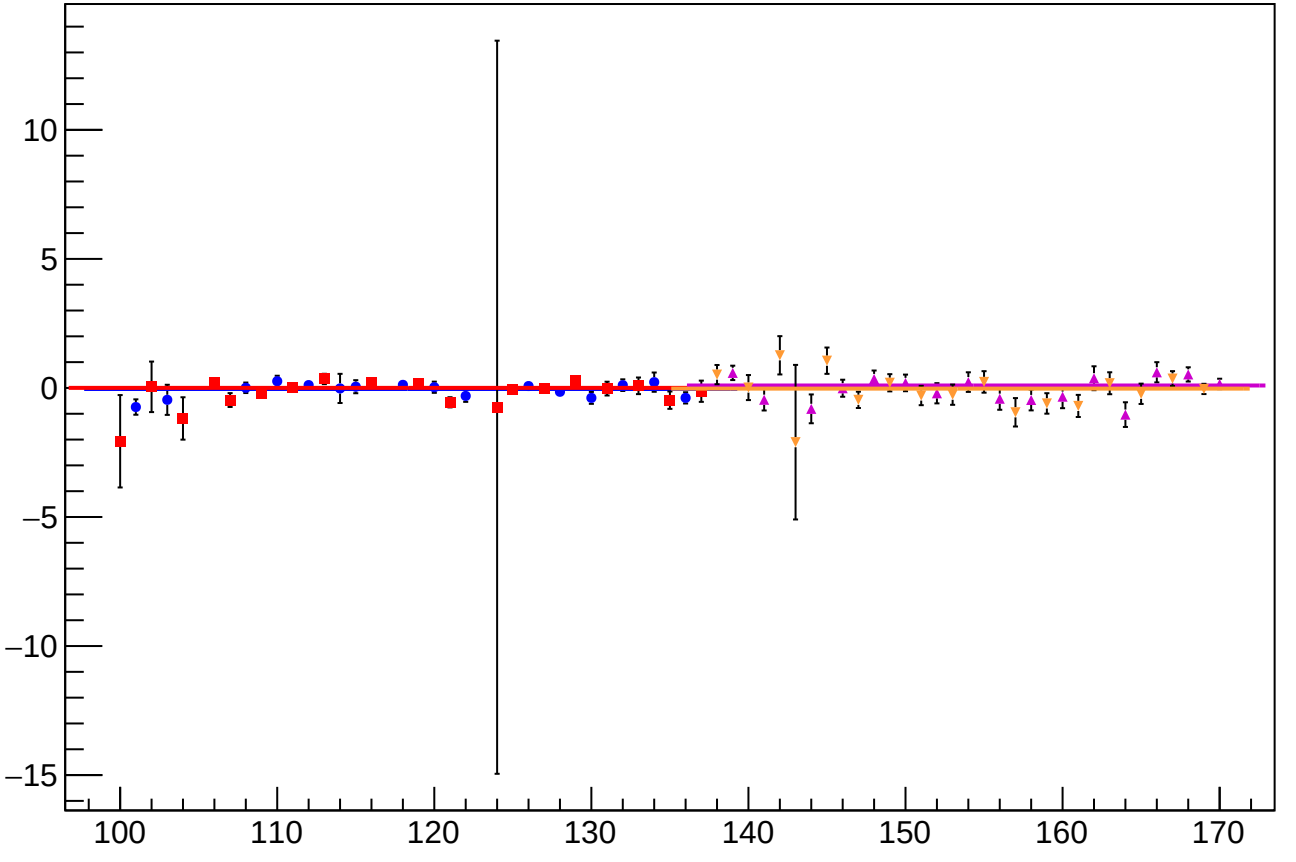
Left In: 0.000+/-0.000 $\chi^2$/NDF:1360046.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 9050493.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 15361801.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3558949.9/34

# asym_atr1l2_avg_dit_vs_cor_diff_mean vs Slug




Right In: -0.040+/-0.056 $\chi^2$/NDF: 17.9/15

Left Out: -0.026+/-0.091 $\chi^2$/NDF:23.4/16

Right Out: 0.003+/-0.051 $\chi^2$/NDF: 28.7/18

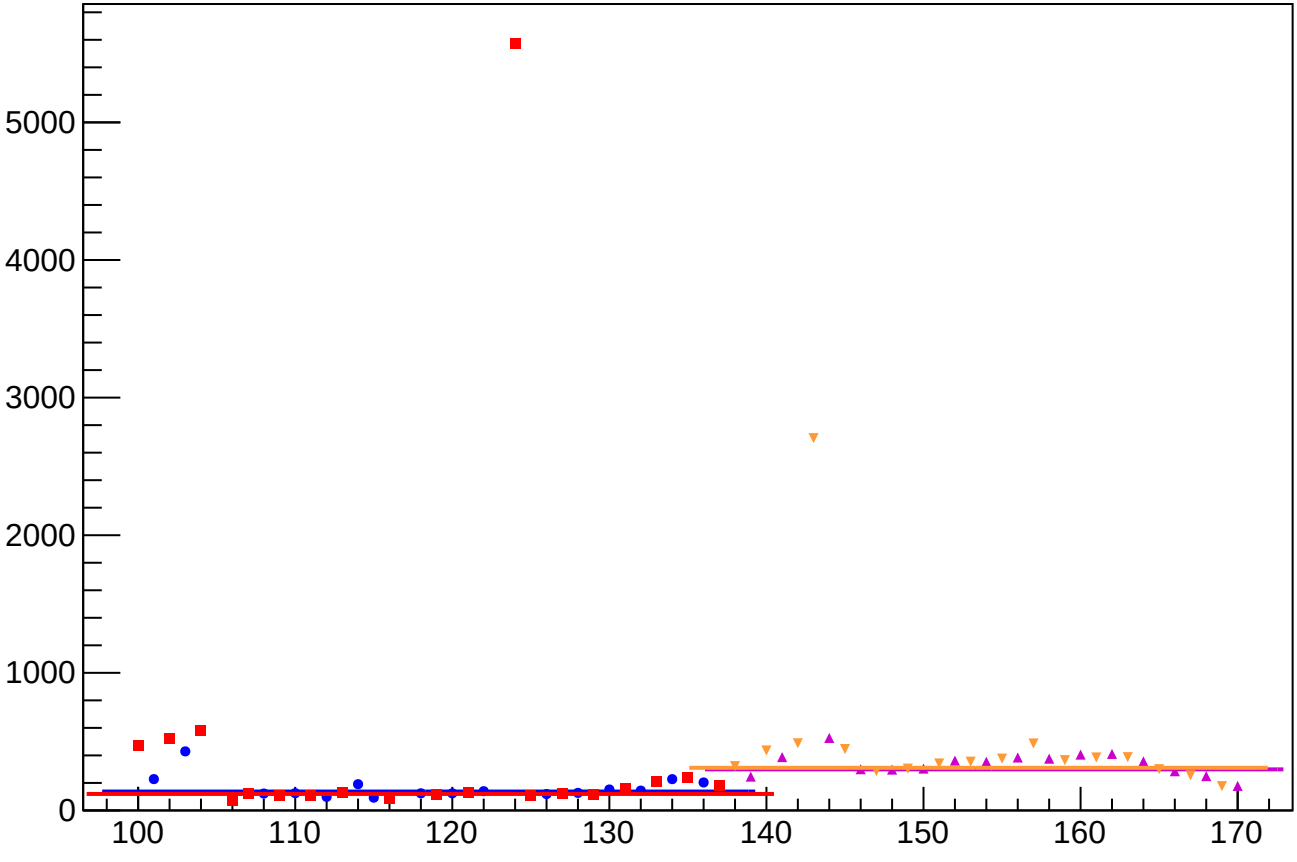
Left In: 0.095+/-0.087 $\chi^2$/NDF:23.4/15

+ sign -0.036+/-0.048 $\chi^2$/NDF: 41.3/32

All: -0.002+/-0.032 $\chi^2$/NDF: 95.2/67

- sign 0.027+/-0.044 $\chi^2$/NDF: 53.0/34

# asym_atr1l2_avg_dit_vs_cor_diff_rms vs Slug




Right In: 137.399+/-0.039 $\chi^2$/NDF: 1268257.0/15

Left Out: 310.001+/-0.065 $\chi^2$/NDF:3123791.3/16

Right Out: 120.006+/-0.036 $\chi^2$/NDF: 2139894.0/18

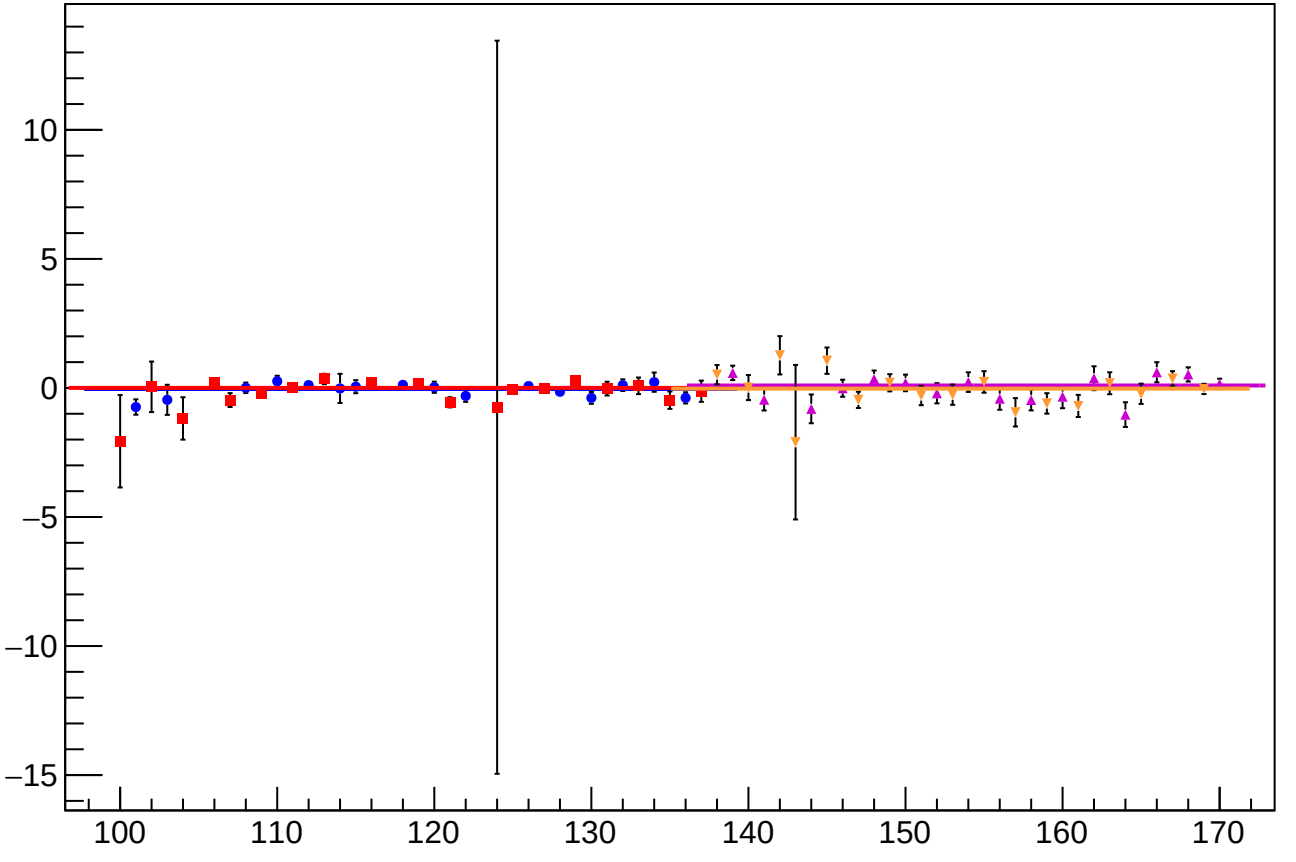
Left In: 298.616+/-0.061 $\chi^2$/NDF:1786622.5/15

+ sign 184.386+/-0.034 $\chi^2$/NDF: 9597467.5/32

All: 174.384+/-0.023 $\chi^2$/NDF: 20006282.6/67

- sign 165.884+/-0.031 $\chi^2$/NDF: 10245610.8/34

# asym_atr1l2_avg_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.040+/-0.056 $\chi^2$/NDF: 17.9/15

Left Out: -0.026+/-0.091 $\chi^2$/NDF:23.4/16

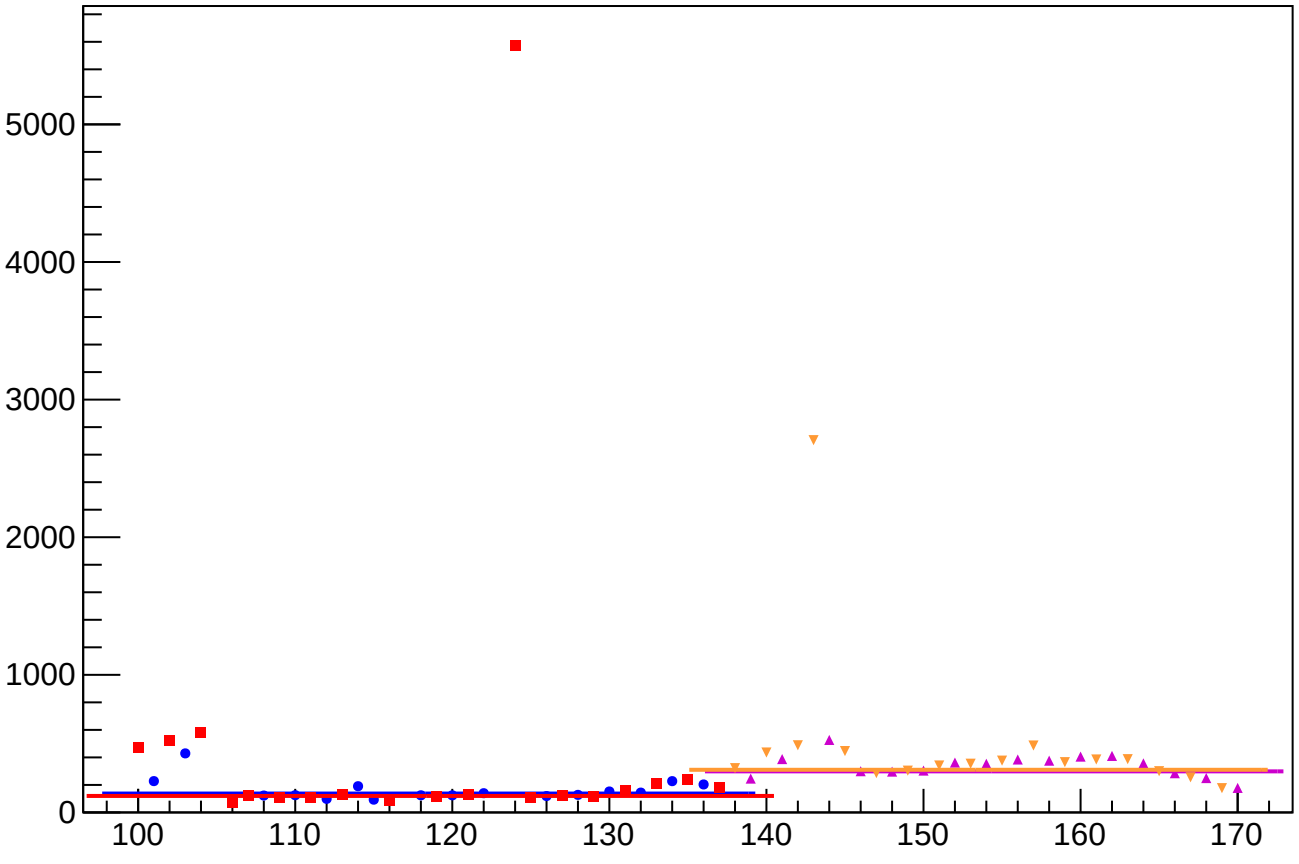
Right Out: 0.003+/-0.051 $\chi^2$/NDF: 28.7/18

Left In: 0.095+/-0.087 $\chi^2$/NDF:23.4/15

+ sign -0.036+/-0.048 $\chi^2$/NDF: 41.3/32

All: -0.002+/-0.032 $\chi^2$/NDF: 95.2/67

- sign 0.027+/-0.044 $\chi^2$/NDF: 53.0/34




Right In: 137.399+/-0.039 $\chi^2$/NDF: 1268257.0/15

Left Out: 310.001+/-0.065 $\chi^2$/NDF:3123791.3/16

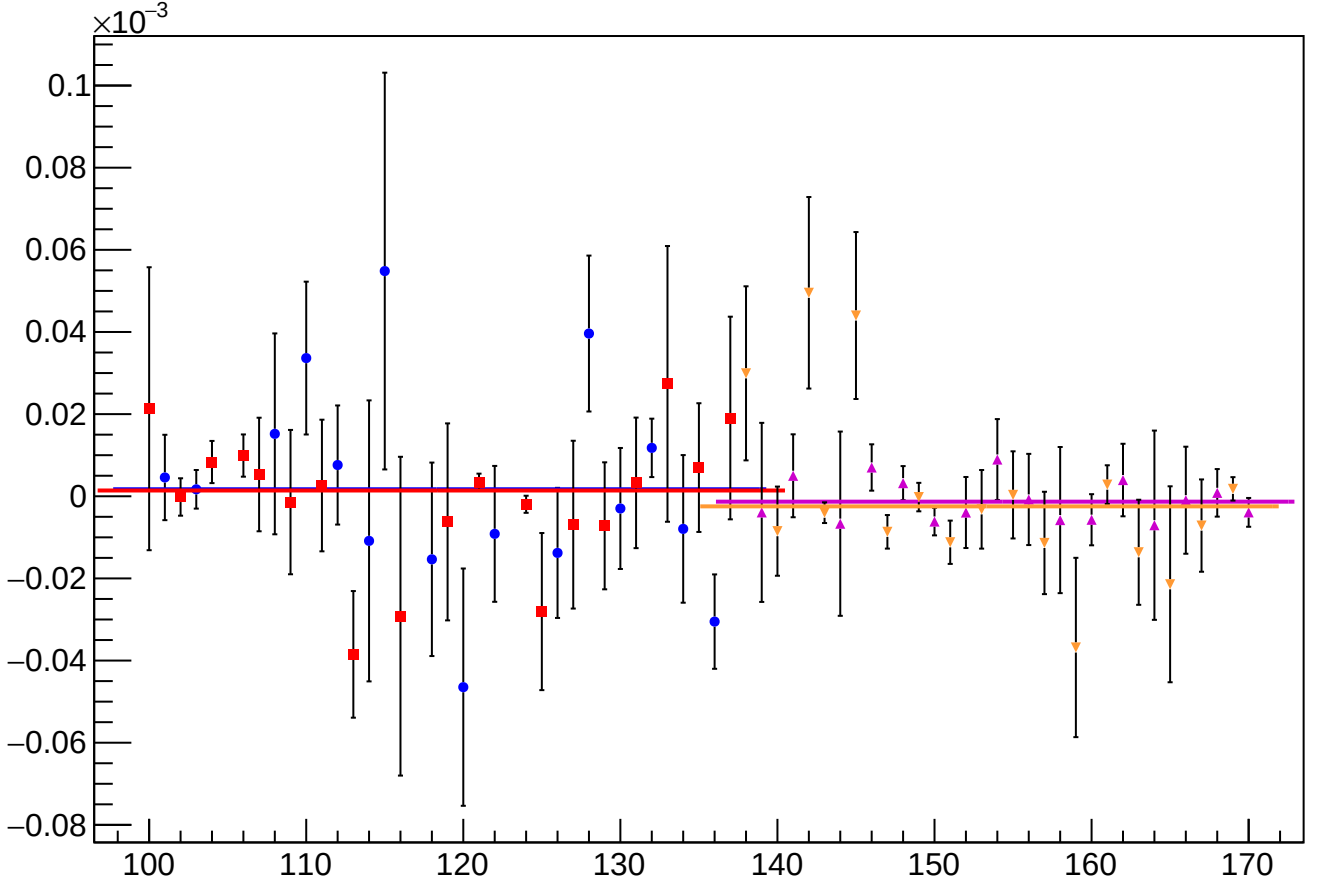
Right Out: 120.006+/-0.036 $\chi^2$/NDF: 2139894.0/18

Left In: 298.616+/-0.061 $\chi^2$/NDF:1786622.5/15

+ sign 184.386+/-0.034 $\chi^2$/NDF: 9597467.5/32

All: 174.384+/-0.023 $\chi^2$/NDF: 20006282.6/67

- sign 165.884+/-0.031 $\chi^2$/NDF: 10245610.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 23.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:26.8/16

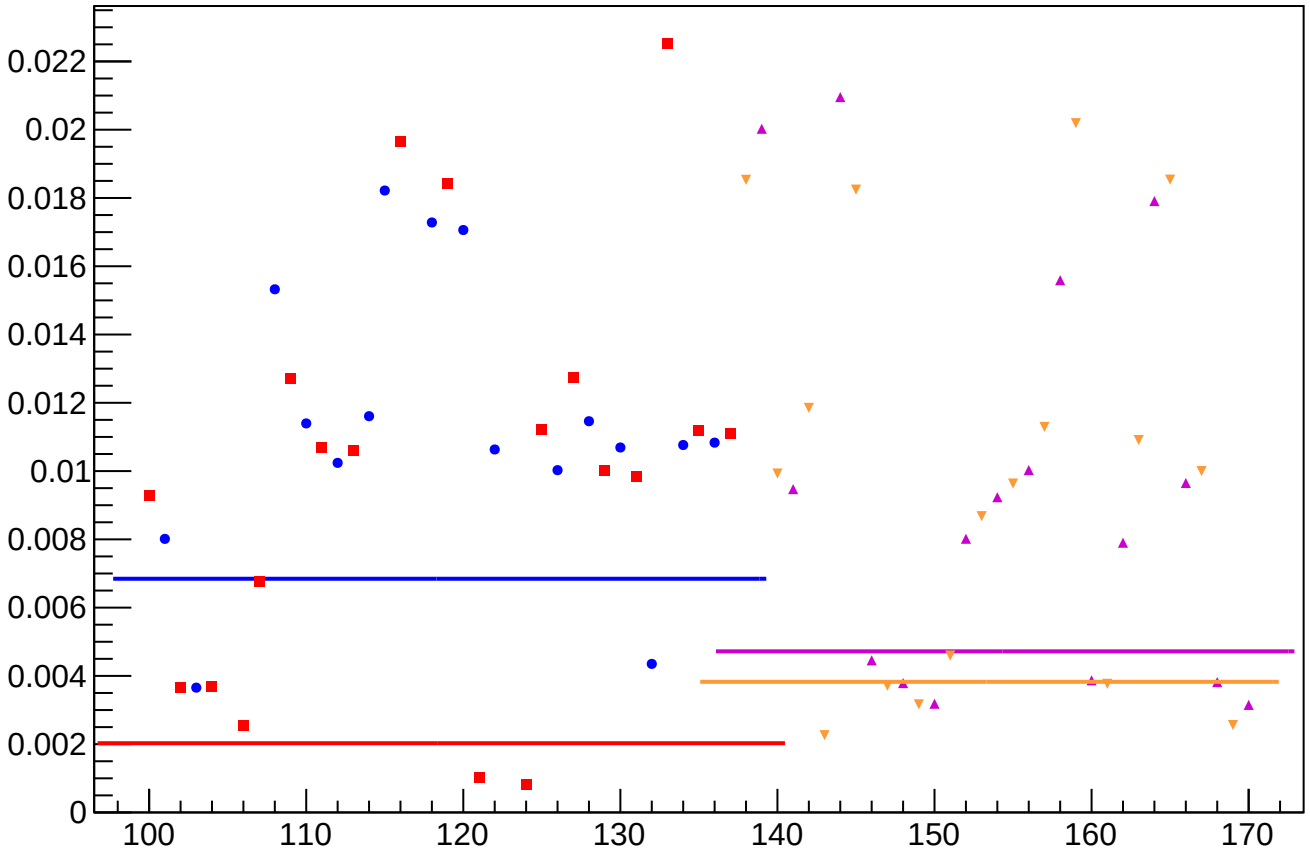
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 20.3/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:8.7/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 52.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 84.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 30.8/34




Right In: 0.007+/-0.000 $\chi^2$/NDF: 3230112.6/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:9053864.4/16

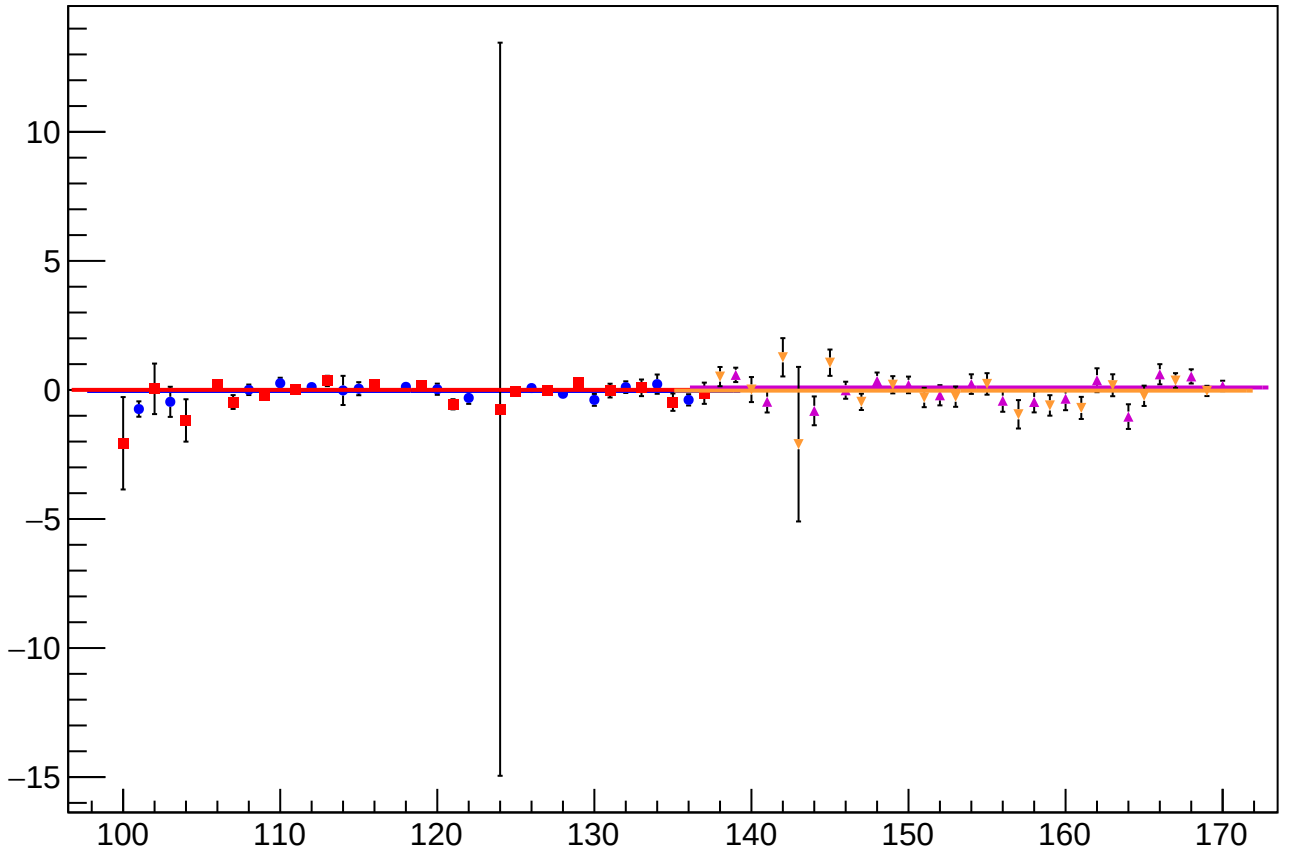
Right Out: 0.002+/-0.000 $\chi^2$/NDF: 9007527.0/18

Left In: 0.005+/-0.000 $\chi^2$/NDF:6601154.3/15

+ sign 0.004+/-0.000 $\chi^2$/NDF: 14007300.2/32

All: 0.004+/-0.000 $\chi^2$/NDF: 34429528.5/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 19071993.3/34




Right In: -0.040+/-0.056 $\chi^2$/NDF: 17.9/15

Left Out: -0.026+/-0.091 $\chi^2$/NDF:23.4/16

Right Out: 0.003+/-0.051 $\chi^2$/NDF: 28.7/18

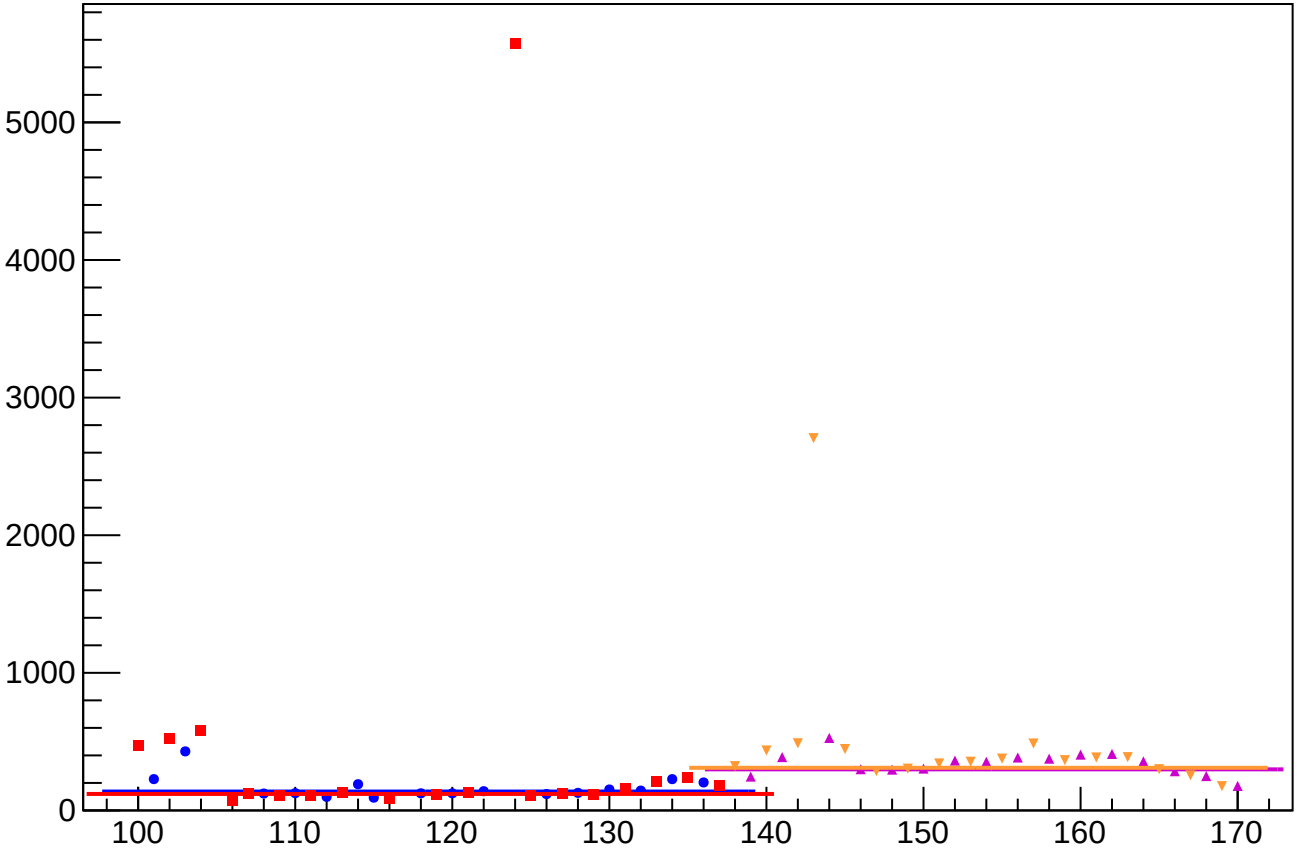
Left In: 0.095+/-0.087 $\chi^2$/NDF:23.4/15

\+ sign -0.036+/-0.048 $\chi^2$/NDF: 41.3/32

All: -0.002+/-0.032 $\chi^2$/NDF: 95.2/67

\- sign 0.027+/-0.044 $\chi^2$/NDF: 53.0/34

# asym_atr1l2_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 137.400+/-0.039 $\chi^2$/NDF: 1268197.9/15

Left Out: 310.004+/-0.065 $\chi^2$/NDF:3123859.8/16

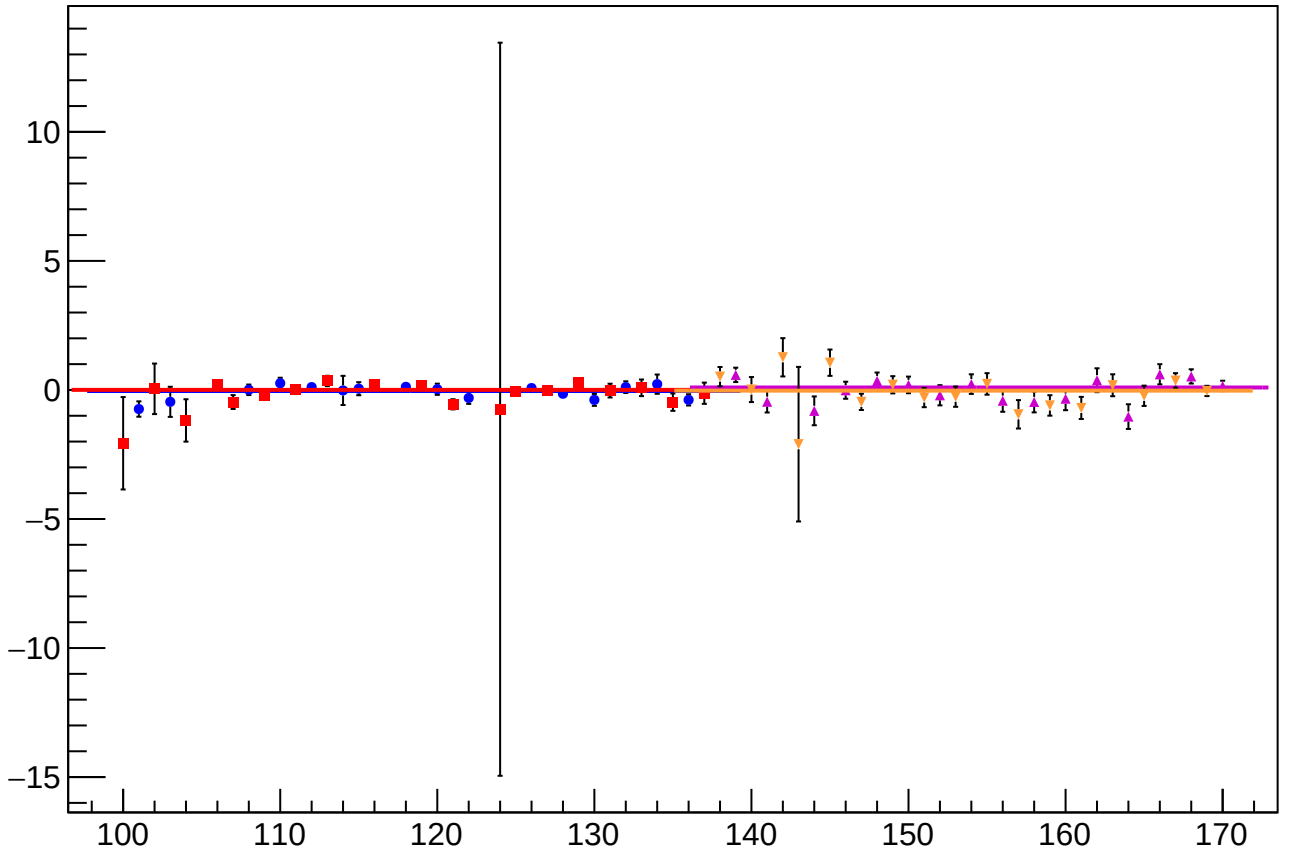
Right Out: 120.006+/-0.036 $\chi^2$/NDF: 2139820.8/18

Left In: 298.619+/-0.061 $\chi^2$/NDF:1786653.1/15

+ sign 184.387+/-0.034 $\chi^2$/NDF: 9597500.7/32

All: 174.384+/-0.023 $\chi^2$/NDF: 20006427.1/67

- sign 165.884+/-0.031 $\chi^2$/NDF: 10245703.6/34




Right In: -0.040+/-0.056 $\chi^2$/NDF: 17.9/15

Left Out: -0.026+/-0.091 $\chi^2$/NDF:23.4/16

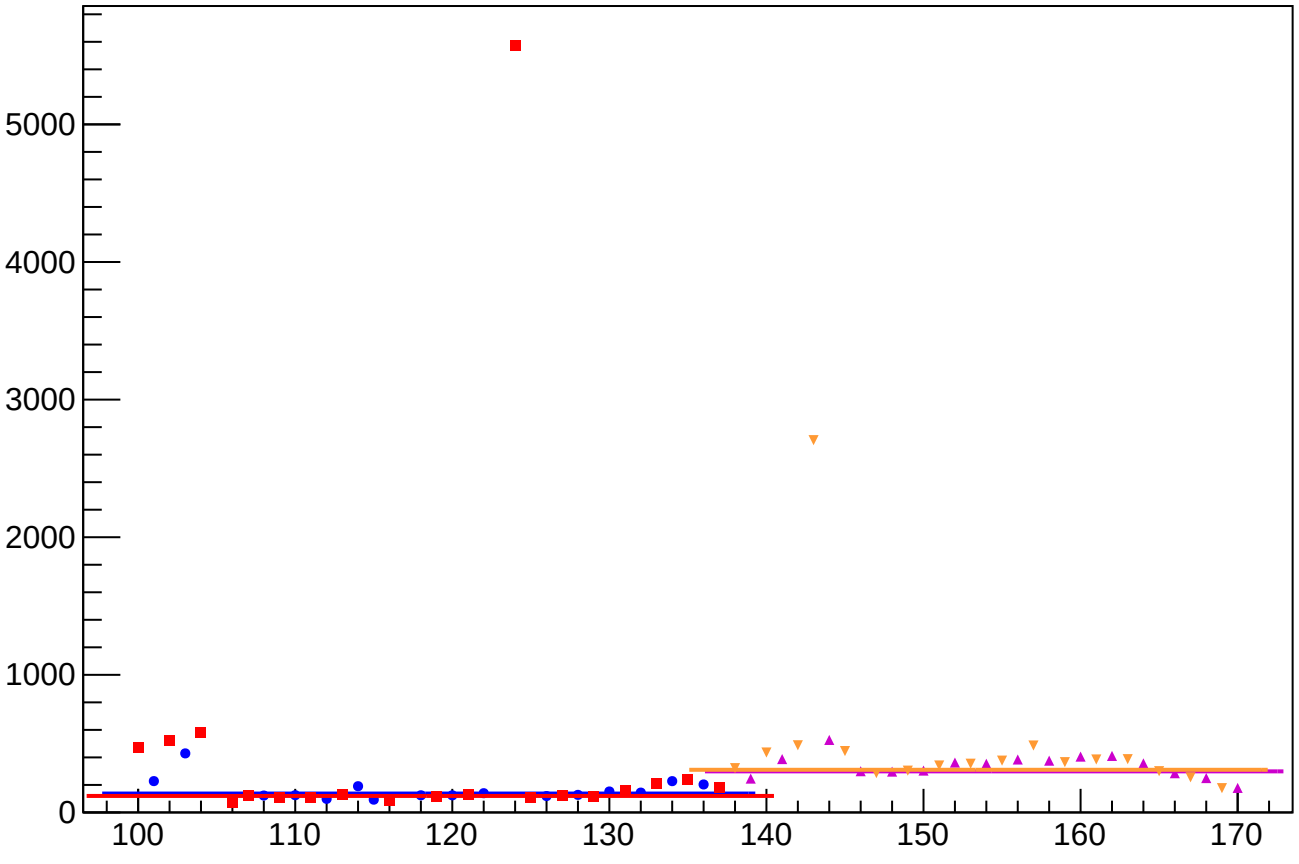
Right Out: 0.003+/-0.051 $\chi^2$/NDF: 28.7/18

Left In: 0.095+/-0.087 $\chi^2$/NDF:23.4/15

\+ sign -0.036+/-0.048 $\chi^2$/NDF: 41.3/32

All: -0.002+/-0.032 $\chi^2$/NDF: 95.2/67

\- sign 0.027+/-0.044 $\chi^2$/NDF: 53.0/34




Right In: 137.400+/-0.039 $\chi^2$/NDF: 1268197.9/15

Left Out: 310.004+/-0.065 $\chi^2$/NDF:3123859.8/16

Right Out: 120.006+/-0.036 $\chi^2$/NDF: 2139820.8/18

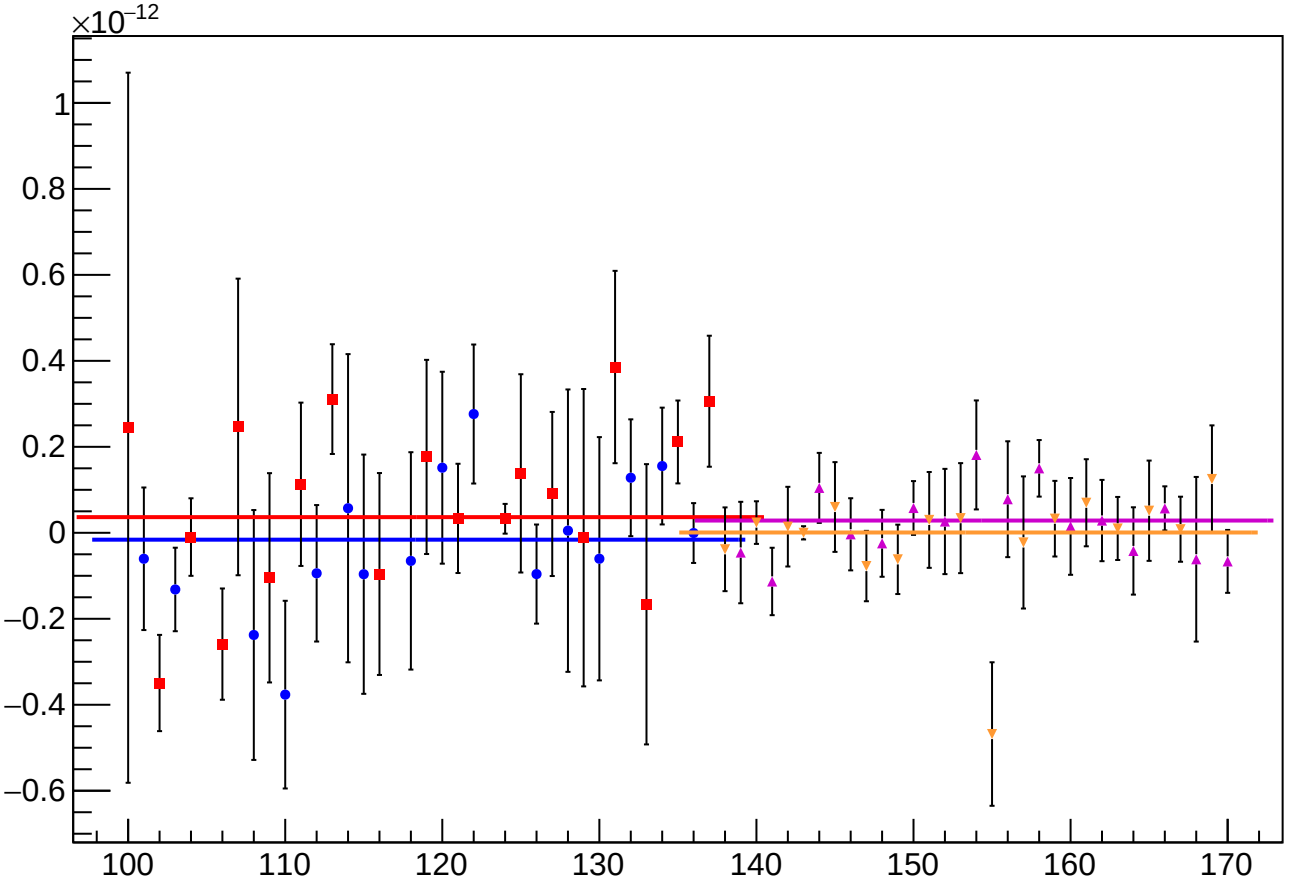
Left In: 298.619+/-0.061 $\chi^2$/NDF:1786653.1/15

+ sign 184.387+/-0.034 $\chi^2$/NDF: 9597500.7/32

All: 174.384+/-0.023 $\chi^2$/NDF: 20006427.1/67

- sign 165.884+/-0.031 $\chi^2$/NDF: 10245703.6/34

# asym_atr1l2_avg_eigen_cor_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 12.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.1/16

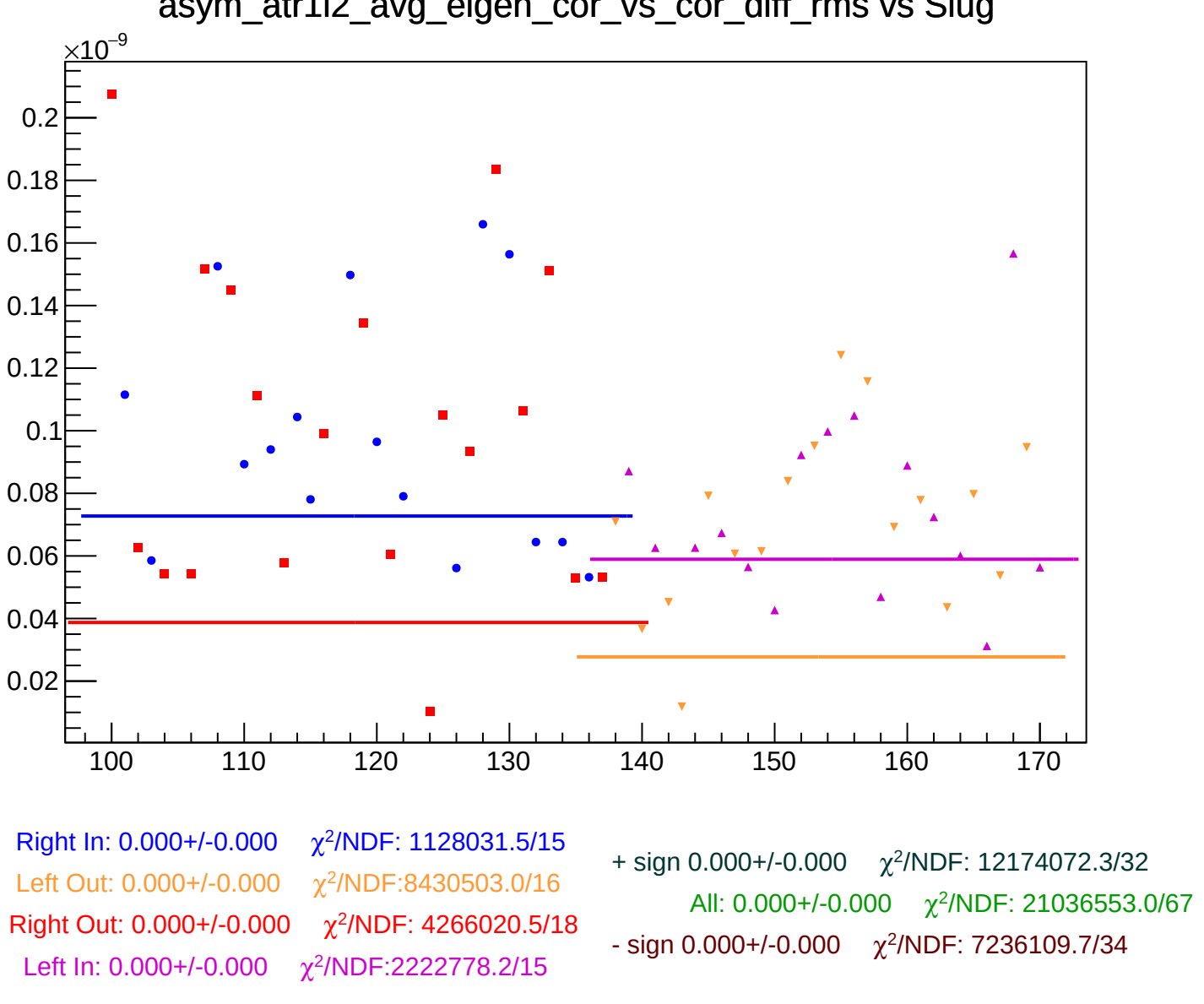
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 33.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:13.1/15

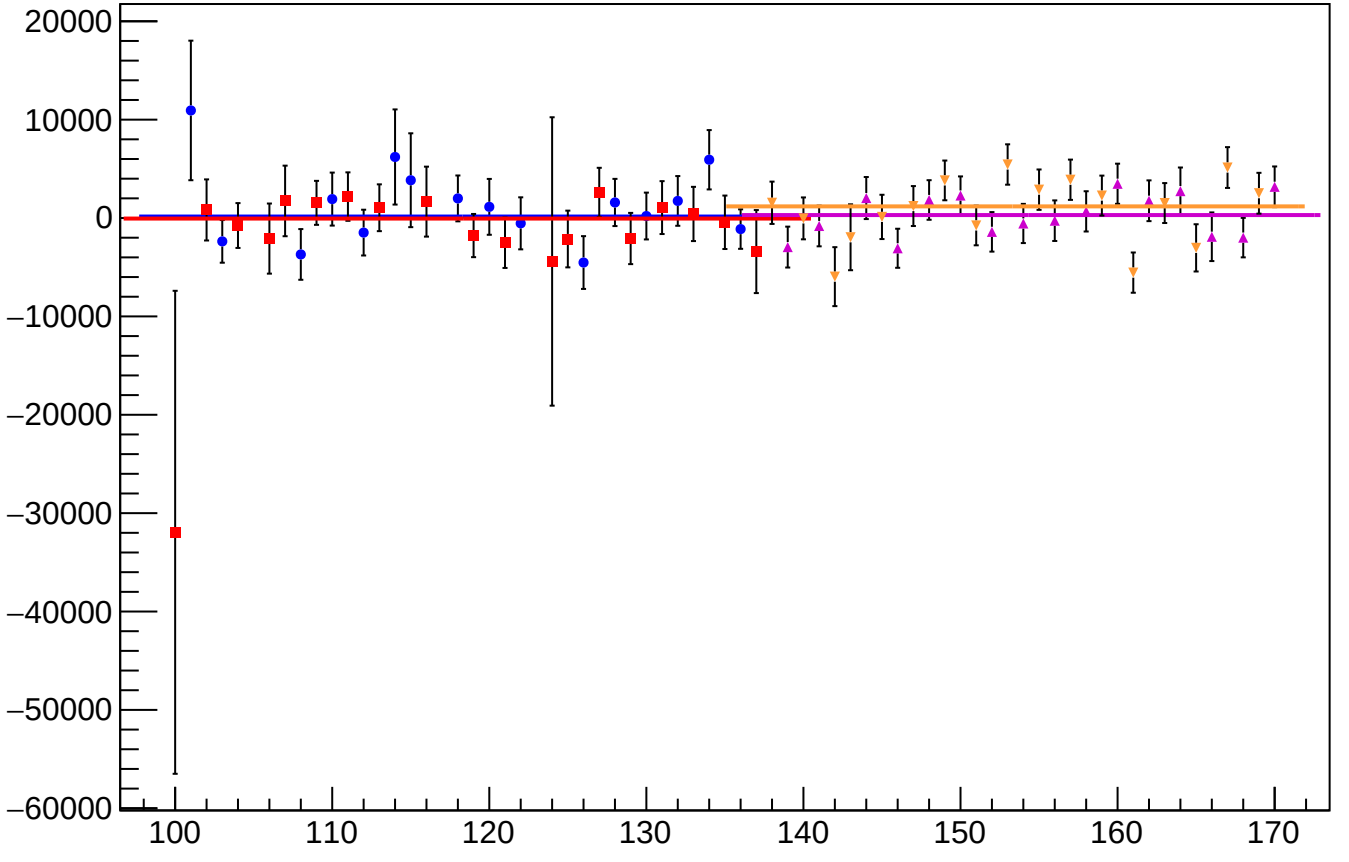
+ sign -0.000+/-0.000 $\chi^2$/NDF: 24.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 73.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 46.3/34


asym_atr1l2_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10⁻⁹
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1128031.5/15
Left Out: 0.000+/-0.000 χ²/NDF:8430503.0/16
Right Out: 0.000+/-0.000 χ²/NDF: 4266020.5/18
Left In: 0.000+/-0.000 χ²/NDF:2222778.2/15
+ sign 0.000+/-0.000 χ²/NDF: 12174072.3/32
All: 0.000+/-0.000 χ²/NDF: 21036553.0/67
- sign 0.000+/-0.000 χ²/NDF: 7236109.7/34

# reg_asym_atr1l2_dd_mean vs Slug




Right In: 150.722+/-667.029 $\chi^2$/NDF: 17.7/15

Left Out: 1183.936+/-523.808 $\chi^2$/NDF:34.8/16

Right Out: -54.106+/-655.266 $\chi^2$/NDF: 9.0/18

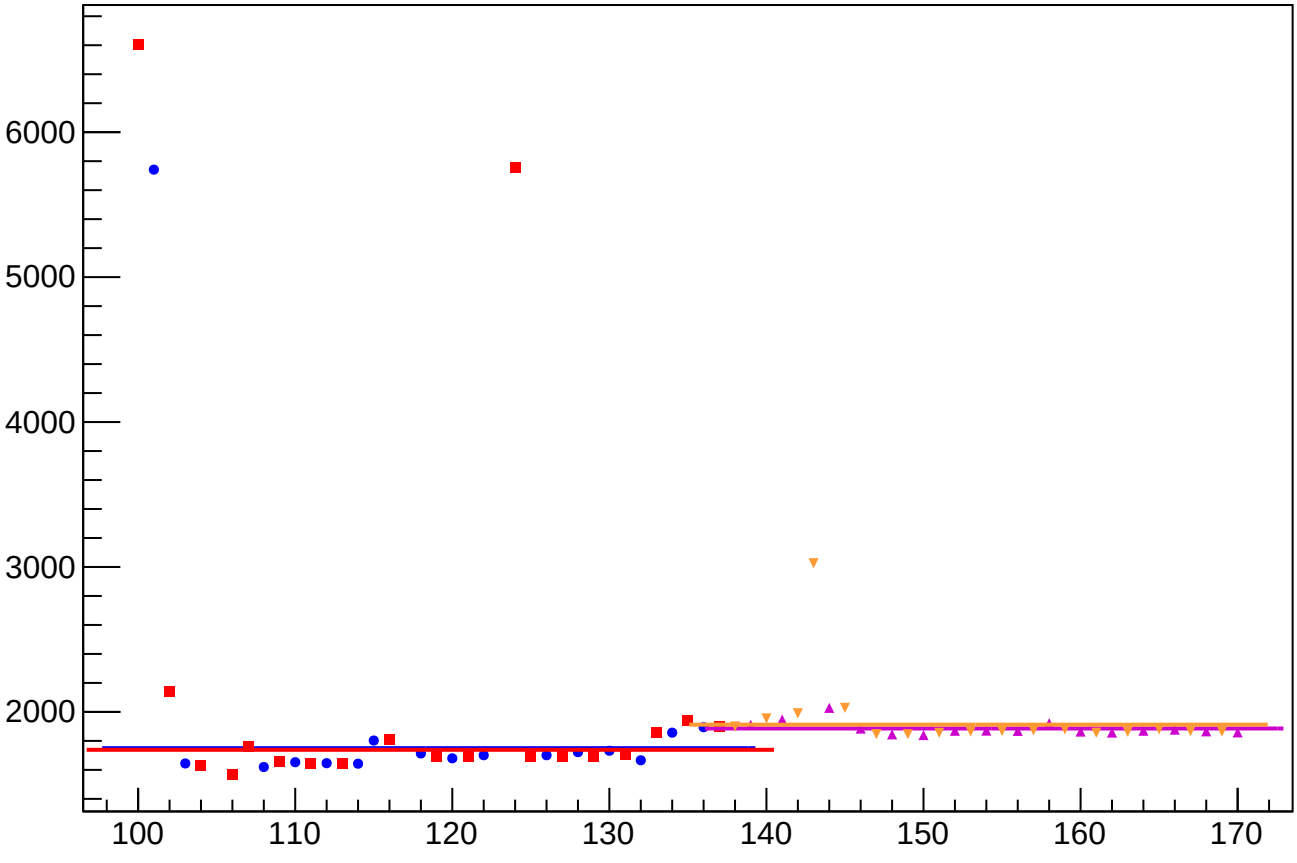
Left In: 301.482+/-518.731 $\chi^2$/NDF:16.9/15

+ sign 789.821+/-411.966 $\chi^2$/NDF: 53.9/32

All: 473.146+/-289.430 $\chi^2$/NDF: 81.2/67

- sign 164.491+/-406.715 $\chi^2$/NDF: 26.1/34

# reg_asym_atr1l2_dd_rms vs Slug




Right In: 1749.864+/-0.472 $\chi^2$/NDF: 669576.0/15

Left Out: 1912.151+/-0.370 $\chi^2$/NDF:242787.6/16

Right Out: 1738.493+/-0.460 $\chi^2$/NDF: 304493.3/18

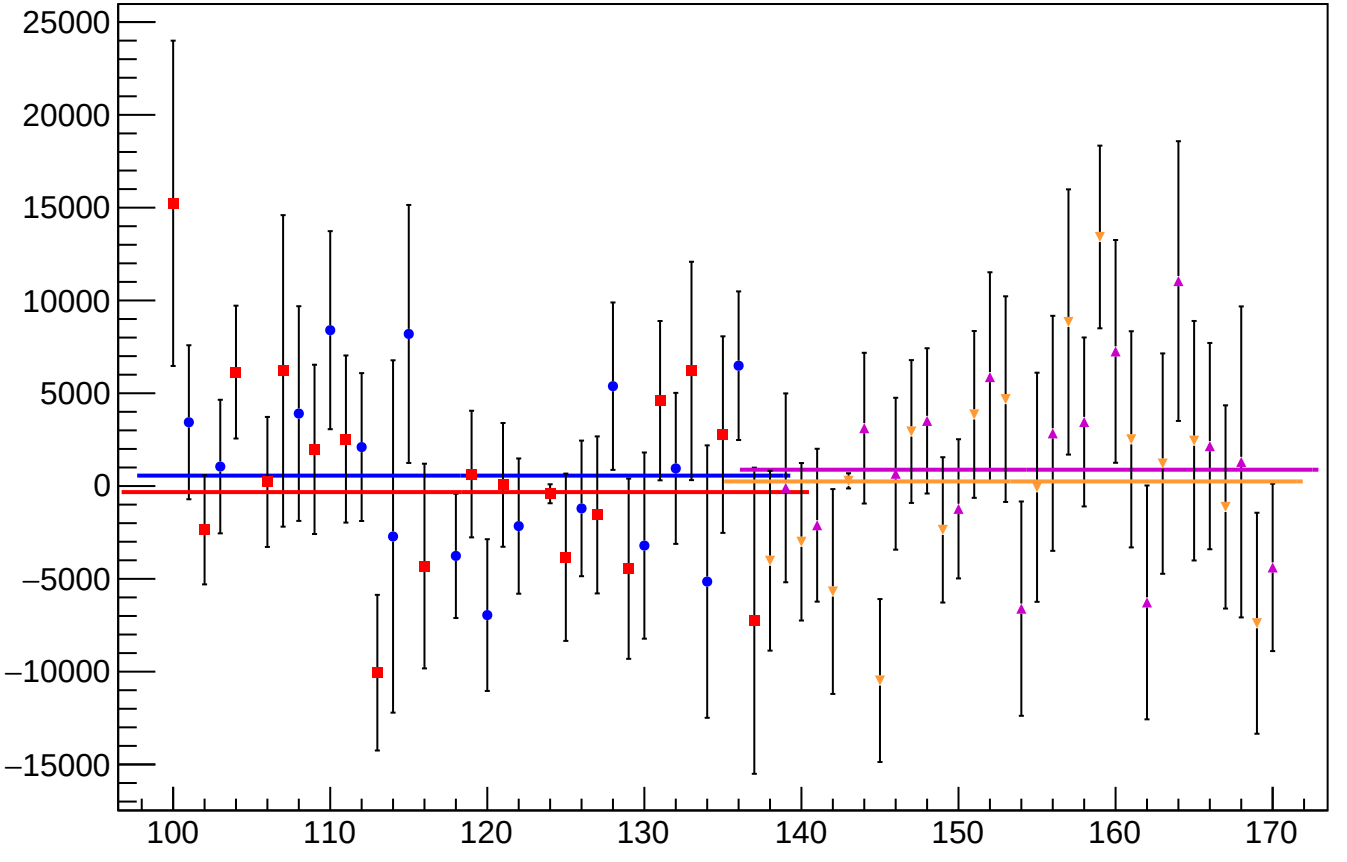
Left In: 1885.615+/-0.367 $\chi^2$/NDF:15061.1/15

+ sign 1850.248+/-0.291 $\chi^2$/NDF: 985593.0/32

All: 1839.164+/-0.204 $\chi^2$/NDF: 1370539.2/67

- sign 1828.422+/-0.287 $\chi^2$/NDF: 382095.5/34

# asym_atr1l2_dd_reg_correction_mean vs Slug




Right In: 562.339+/-1101.163 $\chi^2$/NDF: 14.8/15

Left Out: 249.230+/-389.146 $\chi^2$/NDF:21.3/16

Right Out: -325.567+/-457.948 $\chi^2$/NDF: 19.2/18

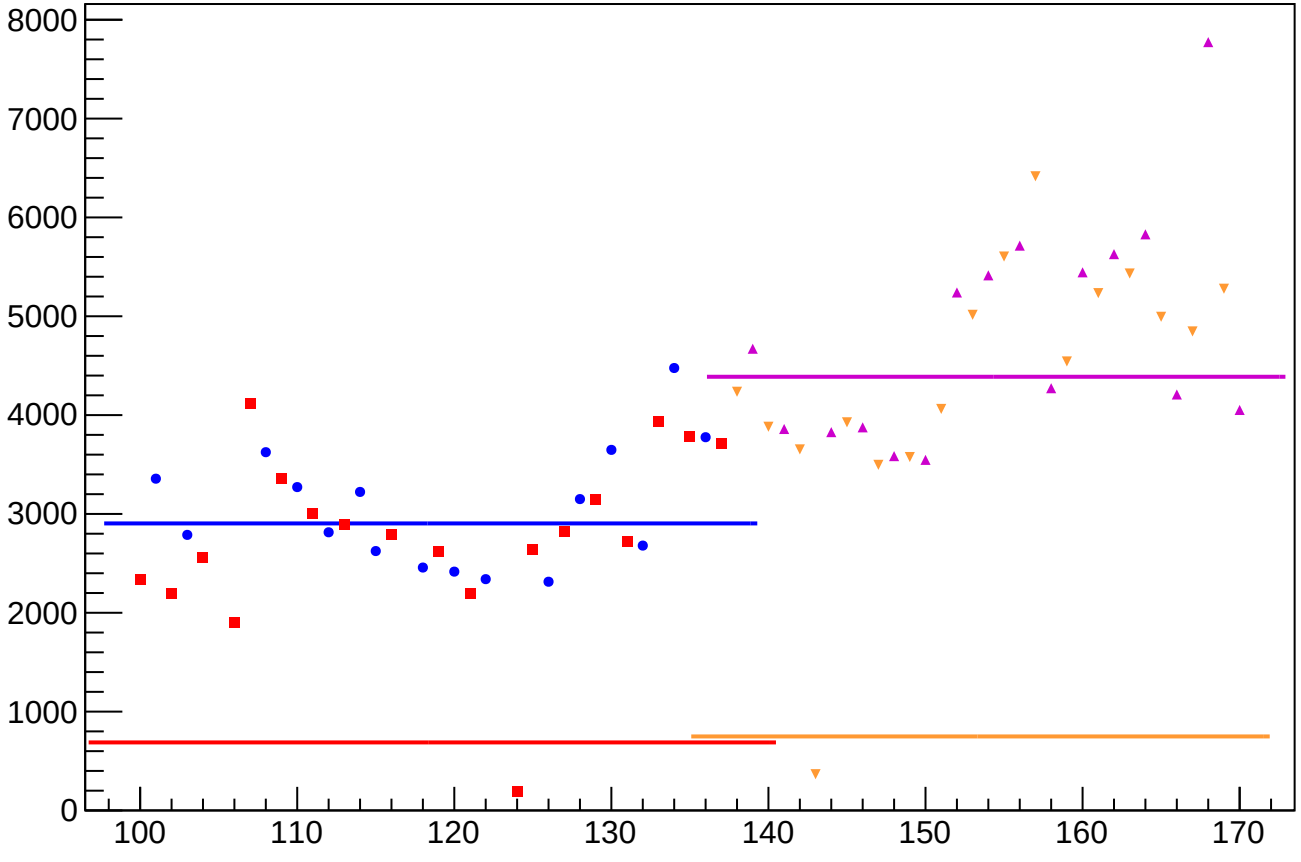
Left In: 880.667+/-1235.309 $\chi^2$/NDF:10.2/15

+ sign 283.992+/-366.909 $\chi^2$/NDF: 36.2/32

All: 88.256+/-278.944 $\chi^2$/NDF: 67.1/67

- sign -179.824+/-429.392 $\chi^2$/NDF: 30.2/34

# asym_atr1l2_dd_reg_correction_rms vs Slug




Right In: 2904.059+/-0.779 $\chi^2$/NDF: 479774.3/15

Left Out: 748.816+/-0.275 $\chi^2$/NDF:19069759.8/16

Right Out: 688.319+/-0.324 $\chi^2$/NDF: 10148914.1/18

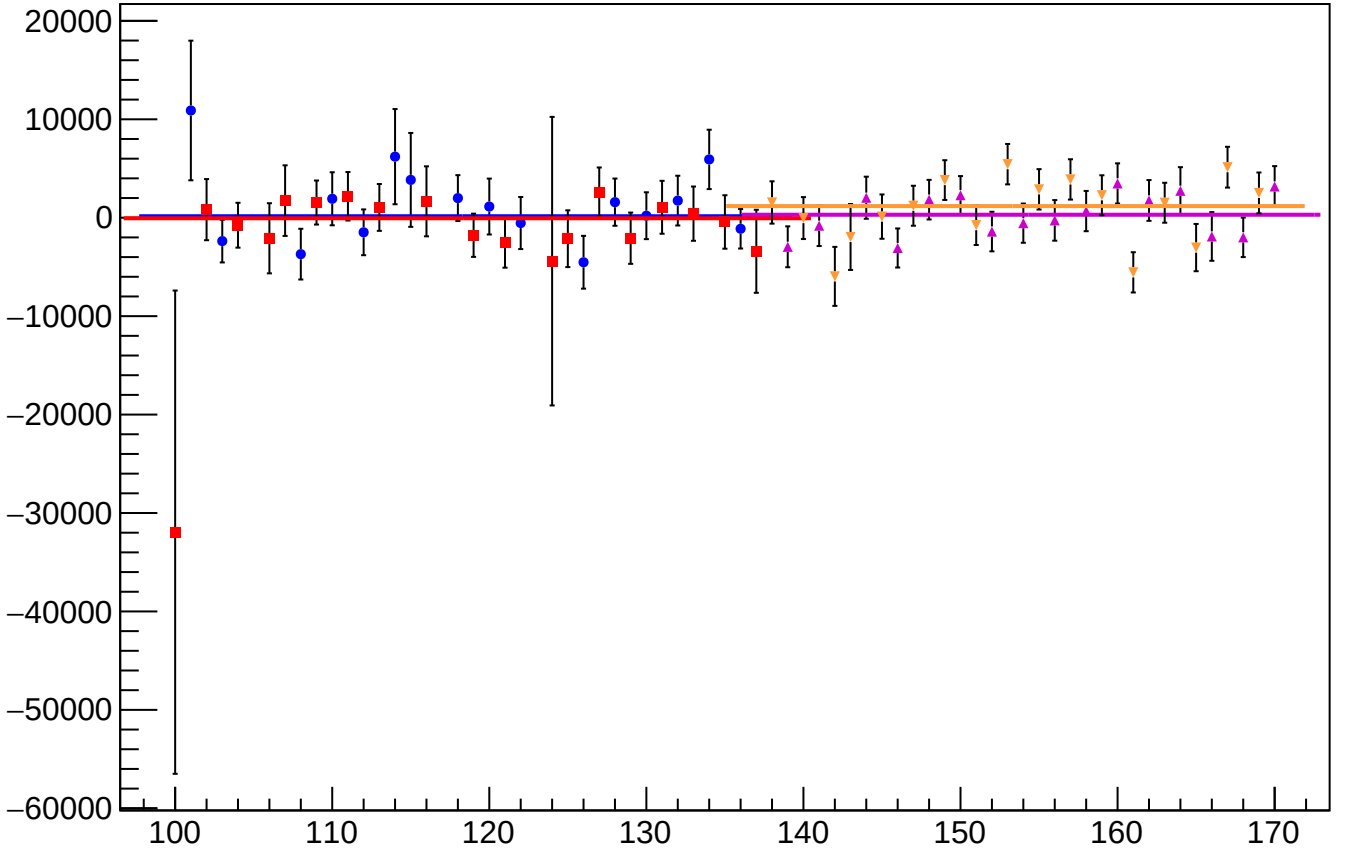
Left In: 4387.934+/-0.873 $\chi^2$/NDF:1043594.1/15

+ sign 988.097+/-0.259 $\chi^2$/NDF: 26360524.8/32

All: 1050.229+/-0.197 $\chi^2$/NDF: 53460213.8/6

- sign 1135.325+/-0.304 $\chi^2$/NDF: 26963789.9/34

# cor_asym_atr1l2_dd_mean vs Slug




Right In: 150.254+/-667.029 $\chi^2$/NDF: 17.6/15

Left Out: 1183.911+/-523.808 $\chi^2$/NDF:34.8/16

Right Out: -54.158+/-655.266 $\chi^2$/NDF: 9.0/18

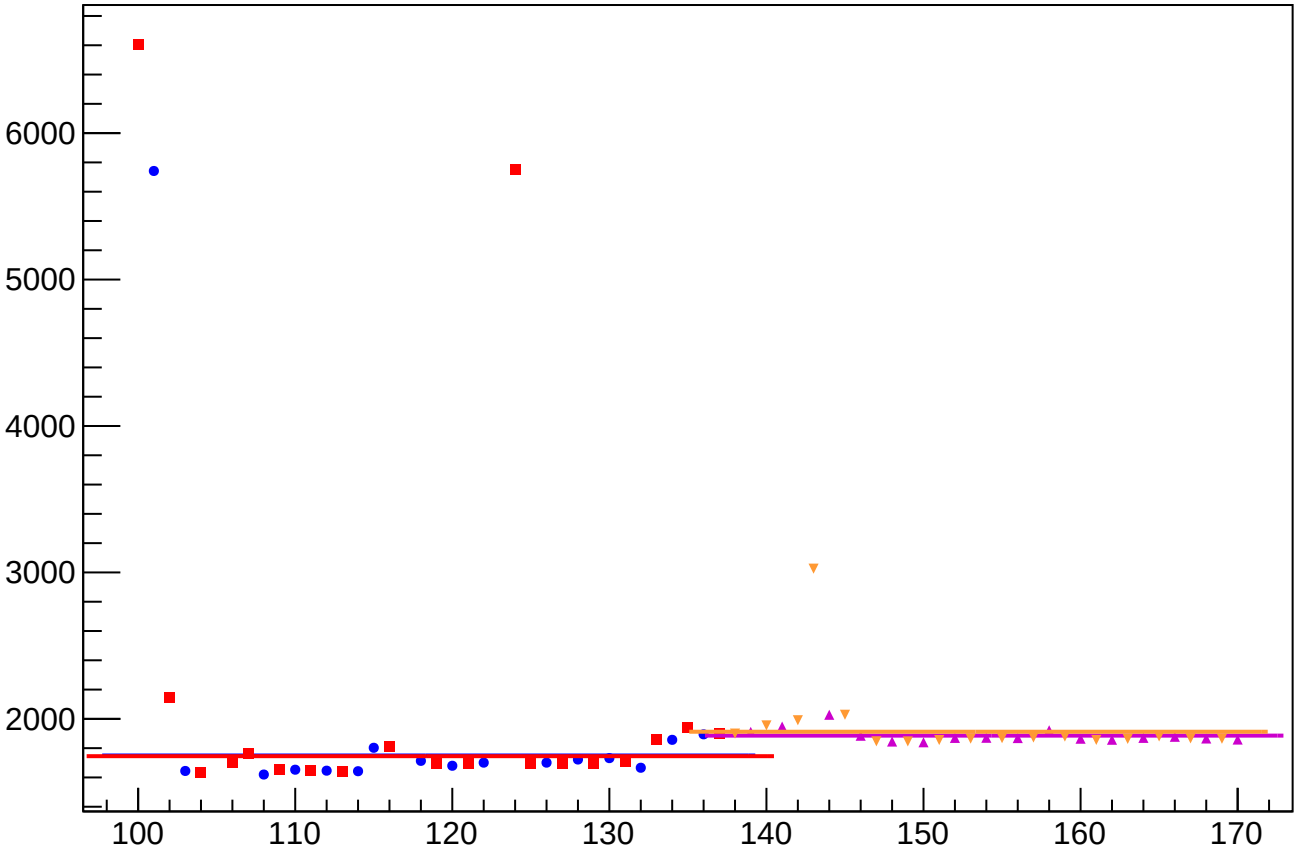
Left In: 301.513+/-518.731 $\chi^2$/NDF:16.9/15

+ sign 789.627+/-411.966 $\chi^2$/NDF: 53.9/32

All: 473.050+/-289.430 $\chi^2$/NDF: 81.2/67

- sign 164.490+/-406.715 $\chi^2$/NDF: 26.1/34

# cor_asym_atr1l2_dd_rms vs Slug




Right In: 1749.864+/-0.472 $\chi^2$/NDF: 669576.1/15

Left Out: 1912.151+/-0.370 $\chi^2$/NDF:242787.6/16

Right Out: 1745.188+/-0.462 $\chi^2$/NDF: 297979.0/18

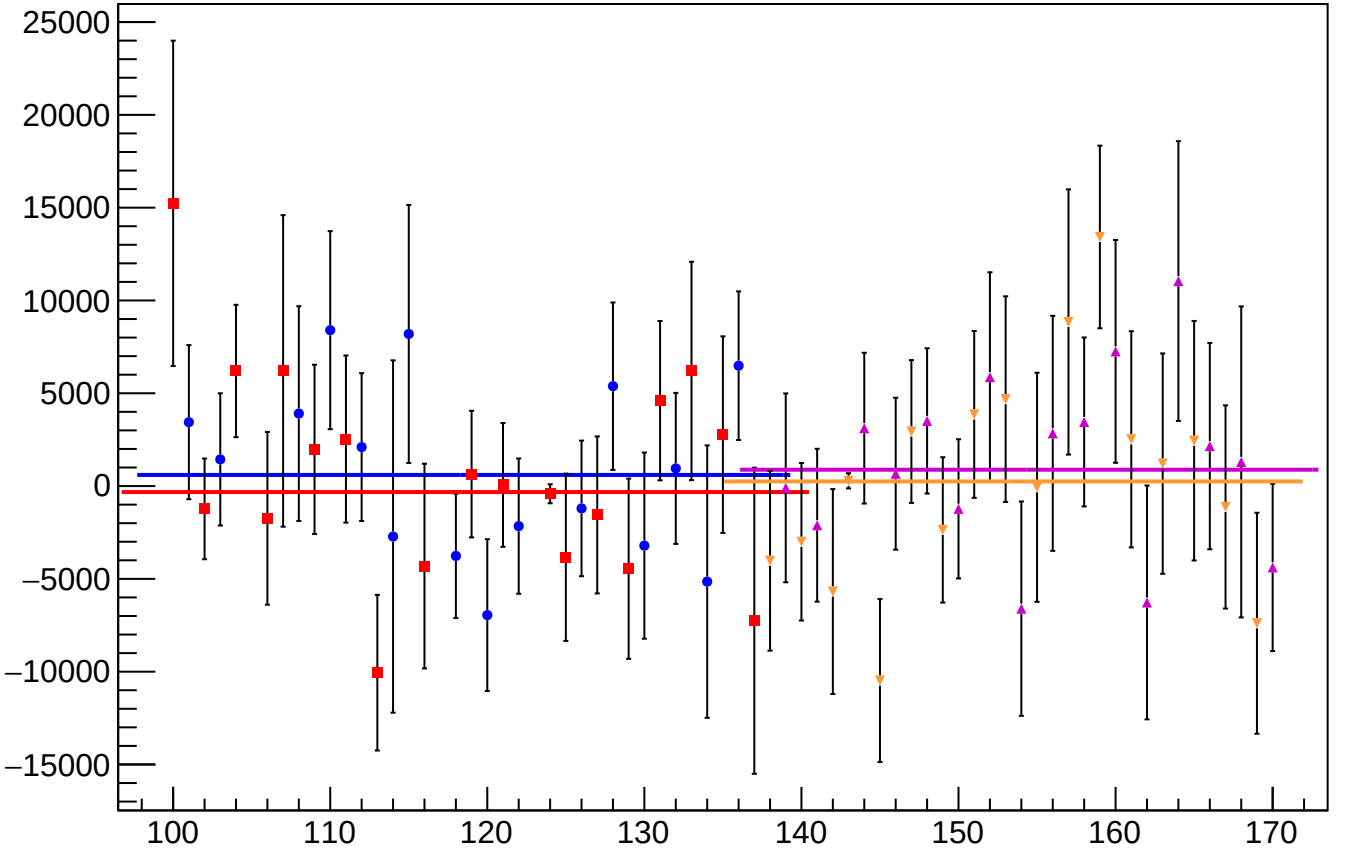
Left In: 1885.615+/-0.367 $\chi^2$/NDF:15061.1/15

+ sign 1850.248+/-0.291 $\chi^2$/NDF: 985593.5/32

All: 1840.621+/-0.205 $\chi^2$/NDF: 1357513.7/67

- sign 1831.266+/-0.287 $\chi^2$/NDF: 369767.0/34

# asym_atr1l2_dd_cor_correction_mean vs Slug




Right In: 600.202+/-1100.125 $\chi^2$/NDF: 14.9/15

Left Out: 250.176+/-389.177 $\chi^2$/NDF:21.3/16

Right Out: -323.164+/-458.862 $\chi^2$/NDF: 19.0/18

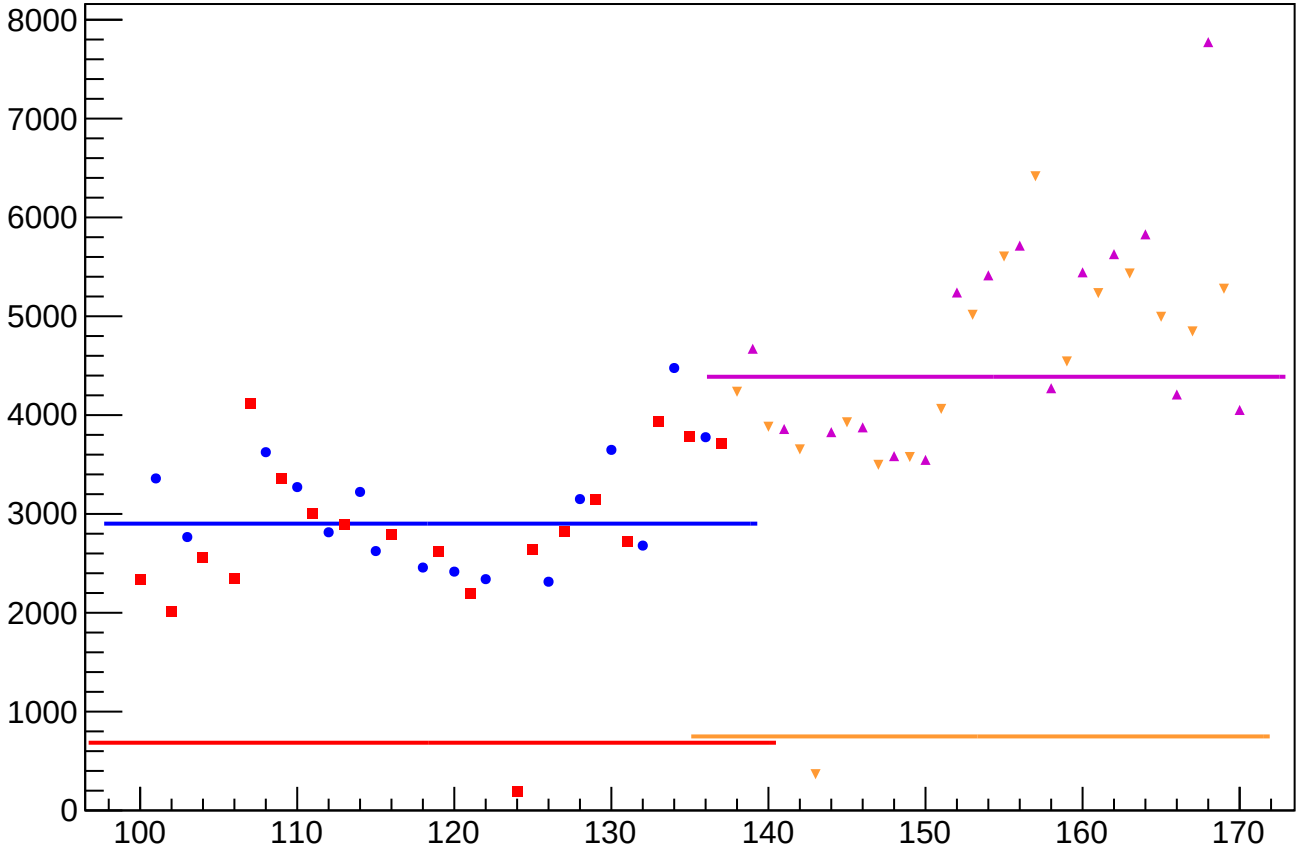
Left In: 880.746+/-1235.307 $\chi^2$/NDF:10.2/15

+ sign 289.108+/-366.896 $\chi^2$/NDF: 36.3/32

All: 92.730+/-279.145 $\chi^2$/NDF: 67.0/67

- sign -177.190+/-430.145 $\chi^2$/NDF: 30.0/34

# asym_atr1l2_dd_cor_correction_rms vs Slug




Right In: 2901.861+/-0.778 $\chi^2$/NDF: 480934.2/15

Left Out: 748.914+/-0.275 $\chi^2$/NDF:19069078.9/16

Right Out: 685.257+/-0.324 $\chi^2$/NDF: 10105797.4/18

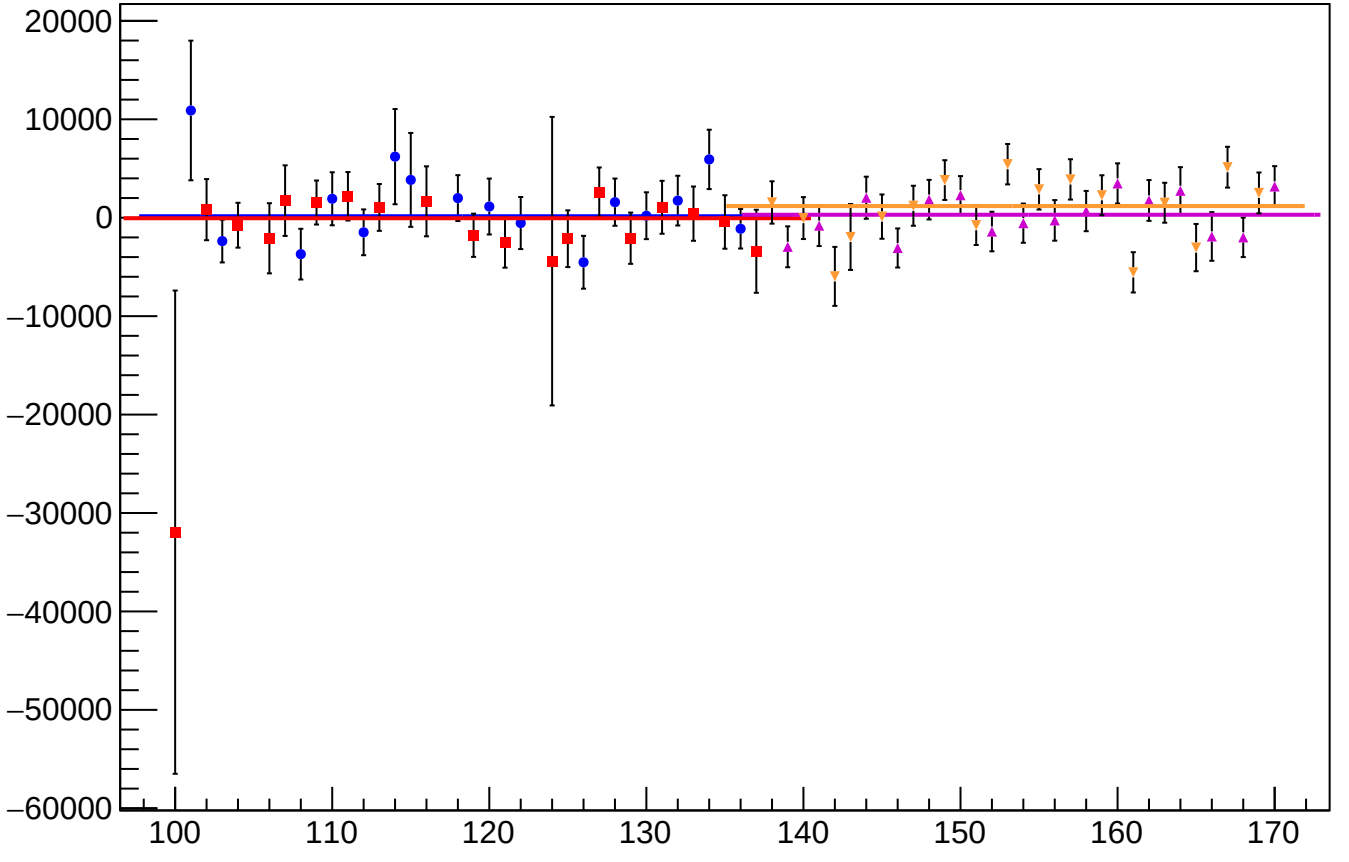
Left In: 4387.926+/-0.873 $\chi^2$/NDF:1043609.7/15

+ sign 988.376+/-0.259 $\chi^2$/NDF: 26357771.7/32

All: 1049.790+/-0.197 $\chi^2$/NDF: 53429991.4/6

- sign 1134.204+/-0.304 $\chi^2$/NDF: 26939157.5/34

# eigen_cor_asym_atr1l2_dd_mean vs Slug




Right In: 150.254+/-667.029 $\chi^2$/NDF: 17.6/15

Left Out: 1183.911+/-523.808 $\chi^2$/NDF:34.8/16

Right Out: -54.158+/-655.266 $\chi^2$/NDF: 9.0/18

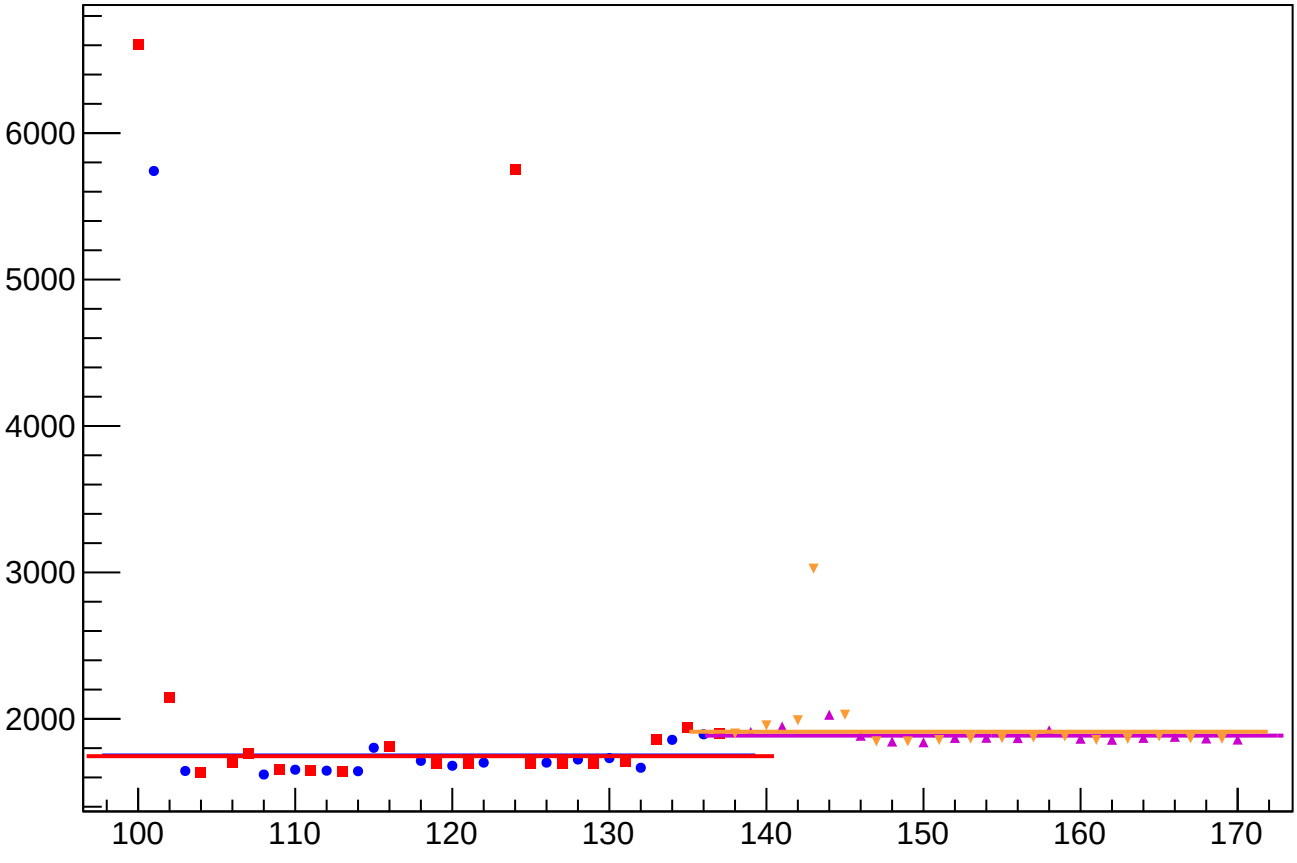
Left In: 301.513+/-518.731 $\chi^2$/NDF:16.9/15

+ sign 789.627+/-411.966 $\chi^2$/NDF: 53.9/32

All: 473.050+/-289.430 $\chi^2$/NDF: 81.2/67

- sign 164.490+/-406.715 $\chi^2$/NDF: 26.1/34

# eigen_cor_asym_atr1l2_dd_rms vs Slug




Right In: 1749.864+/-0.472 $\chi^2$/NDF: 669576.1/15

Left Out: 1912.151+/-0.370 $\chi^2$/NDF:242787.6/16

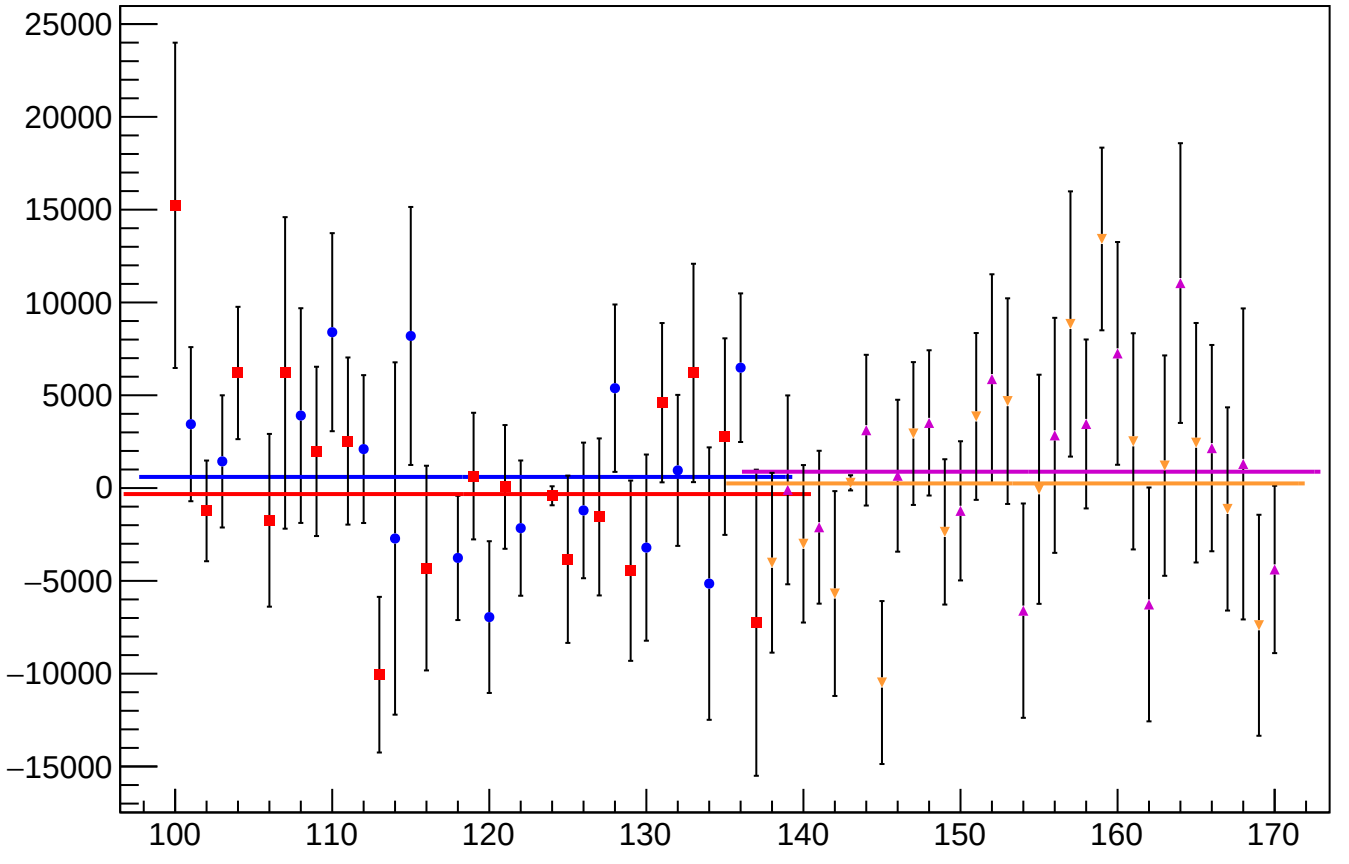
Right Out: 1745.188+/-0.462 $\chi^2$/NDF: 297979.0/18

Left In: 1885.615+/-0.367 $\chi^2$/NDF:15061.1/15

+ sign 1850.248+/-0.291 $\chi^2$/NDF: 985593.5/32

All: 1840.621+/-0.205 $\chi^2$/NDF: 1357513.7/67

- sign 1831.266+/-0.287 $\chi^2$/NDF: 369767.0/34




Right In: 600.202+/-1100.125 $\chi^2$/NDF: 14.9/15

Left Out: 250.176+/-389.177 $\chi^2$/NDF:21.3/16

Right Out: -323.164+/-458.862 $\chi^2$/NDF: 19.0/18

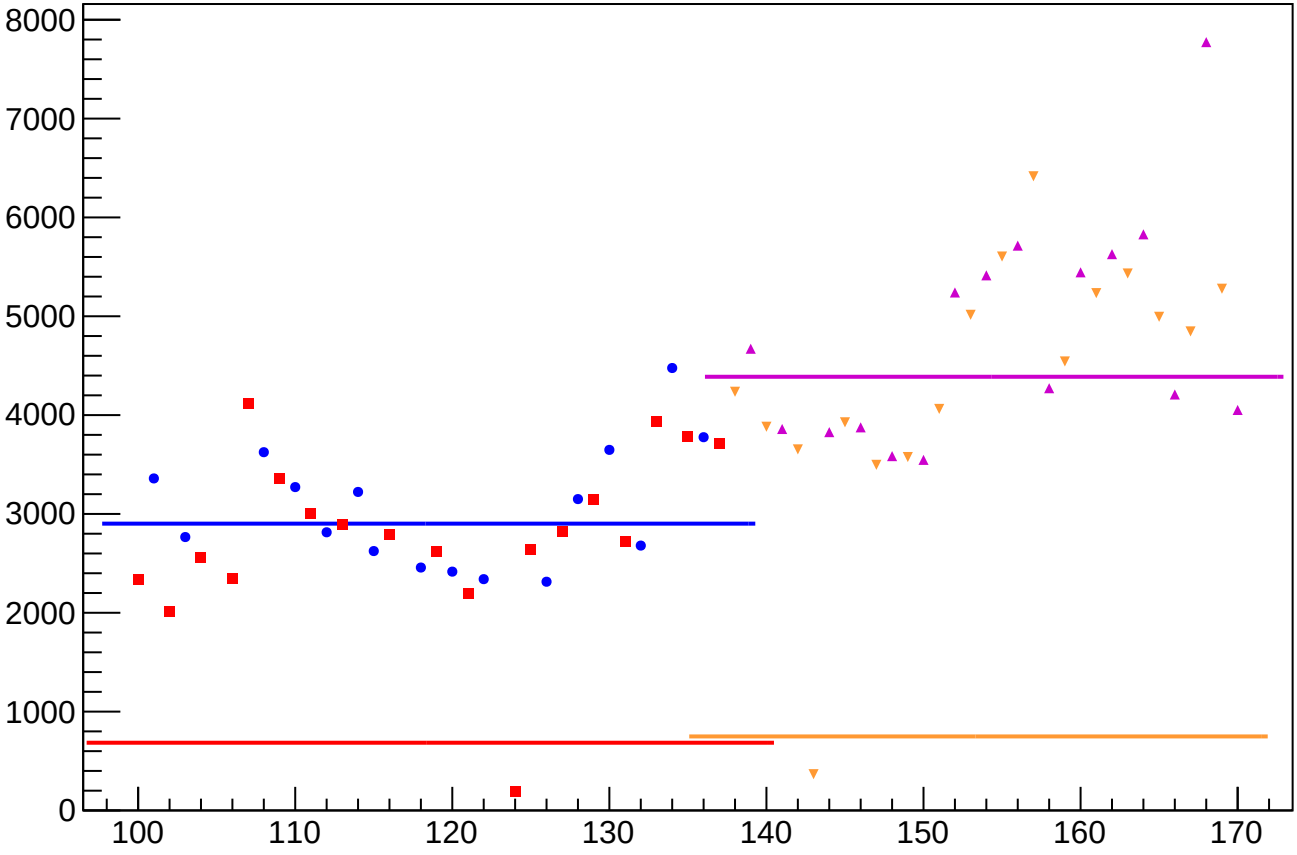
Left In: 880.746+/-1235.307 $\chi^2$/NDF:10.2/15

+ sign 289.108+/-366.896 $\chi^2$/NDF: 36.3/32

All: 92.730+/-279.145 $\chi^2$/NDF: 67.0/67

- sign -177.190+/-430.145 $\chi^2$/NDF: 30.0/34

# asym_atr1l2_dd_eigen_cor_correction_rms vs Slug




Right In: 2901.861+/-0.778 $\chi^2$/NDF: 480934.2/15

Left Out: 748.914+/-0.275 $\chi^2$/NDF:19069078.9/16

Right Out: 685.257+/-0.324 $\chi^2$/NDF: 10105797.4/18

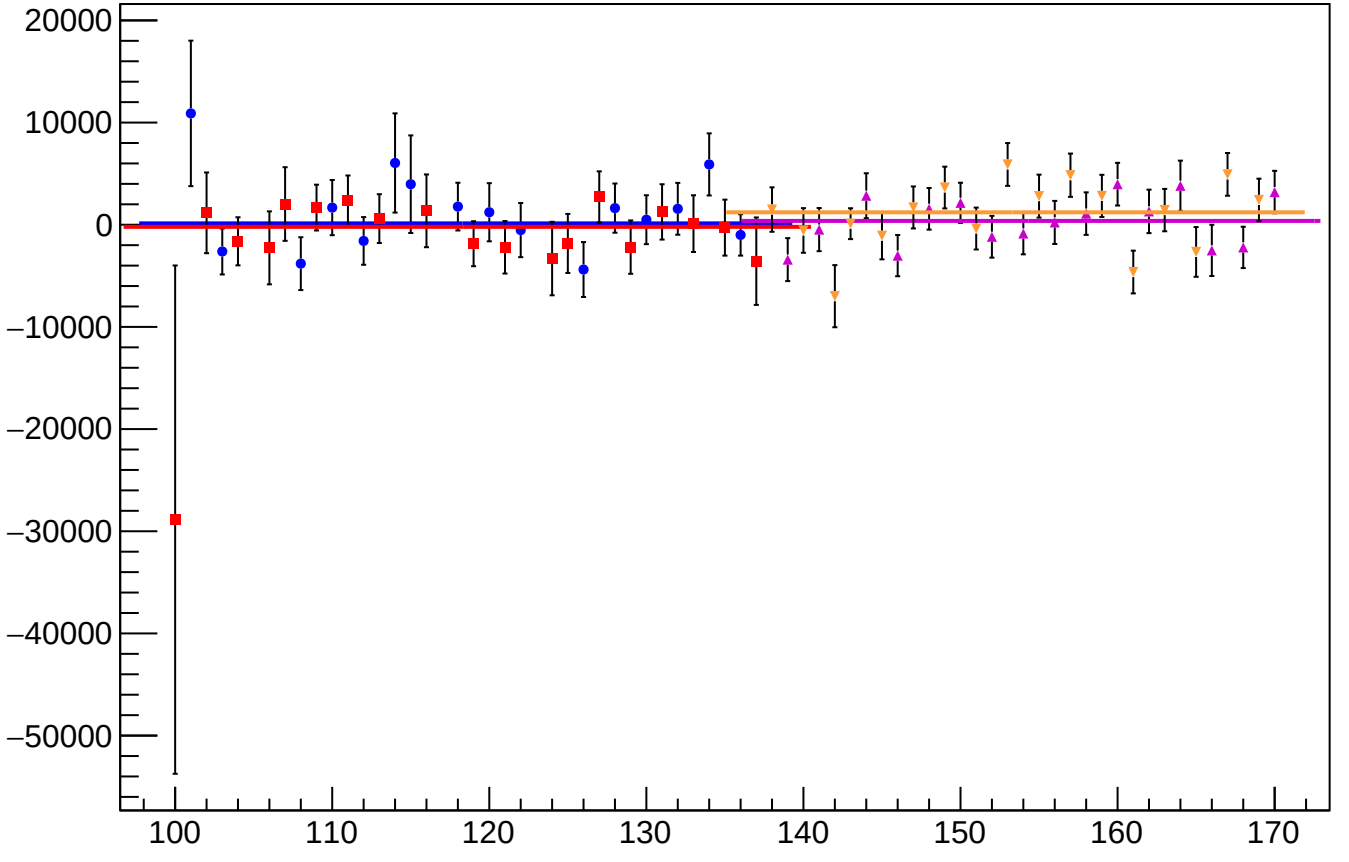
Left In: 4387.926+/-0.873 $\chi^2$/NDF:1043609.7/15

+ sign 988.376+/-0.259 $\chi^2$/NDF: 26357771.7/32

All: 1049.790+/-0.197 $\chi^2$/NDF: 53429991.4/6

- sign 1134.204+/-0.304 $\chi^2$/NDF: 26939157.5/34

# dit_asym_atr1l2_dd_mean vs Slug




Right In: 133.838+/-671.621 $\chi^2$/NDF: 17.3/15

Left Out: 1215.834+/-508.309 $\chi^2$/NDF:34.5/16

Right Out: -205.424+/-654.444 $\chi^2$/NDF: 9.7/18

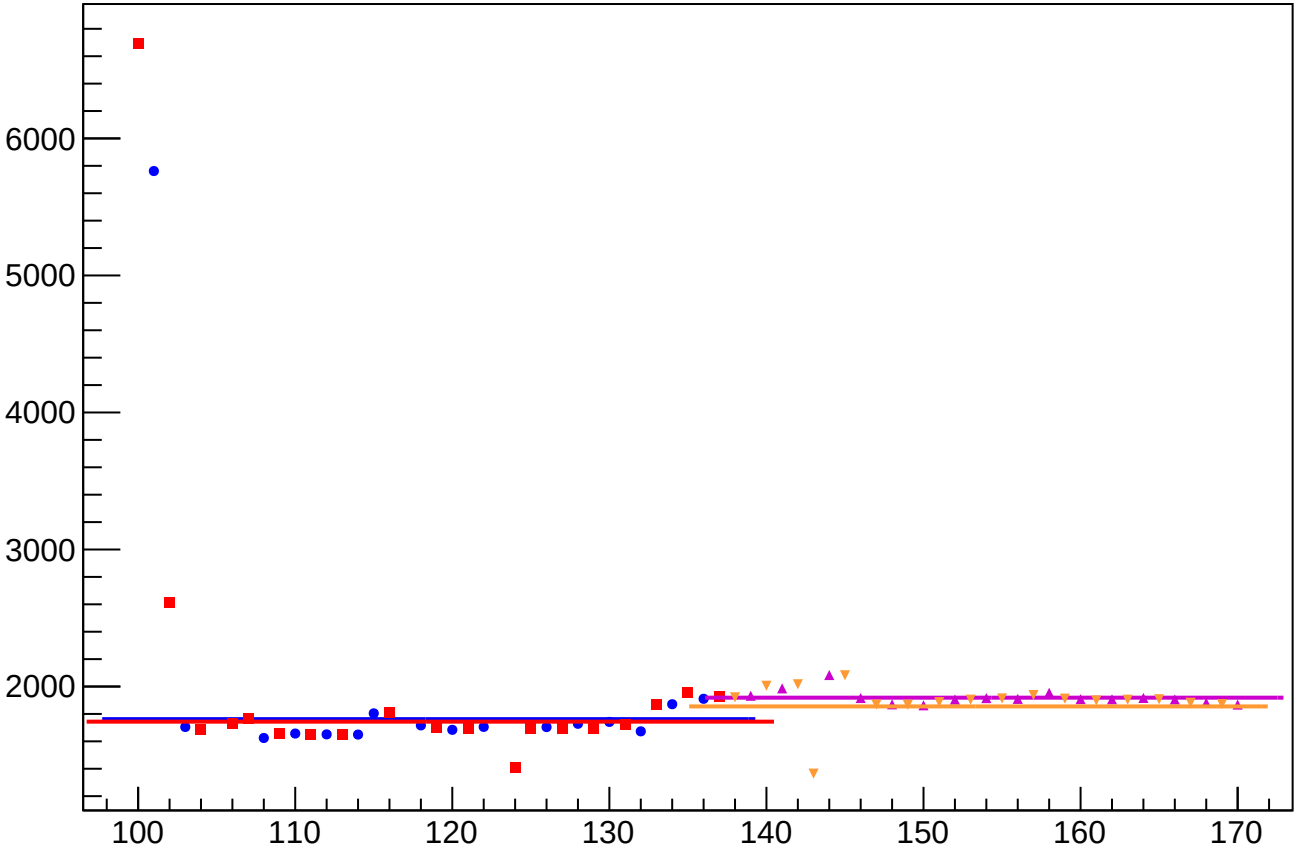
Left In: 374.579+/-527.905 $\chi^2$/NDF:19.6/15

+ sign 821.778+/-405.312 $\chi^2$/NDF: 53.4/32

All: 488.481+/-288.551 $\chi^2$/NDF: 84.6/67

- sign 145.949+/-410.889 $\chi^2$/NDF: 29.8/34

# dit_asym_atr1l2_dd_rms vs Slug




Right In: 1762.052+/-0.475 $\chi^2$/NDF: 667696.6/15

Left Out: 1854.883+/-0.359 $\chi^2$/NDF:258677.7/16

Right Out: 1743.723+/-0.461 $\chi^2$/NDF: 227762.1/18

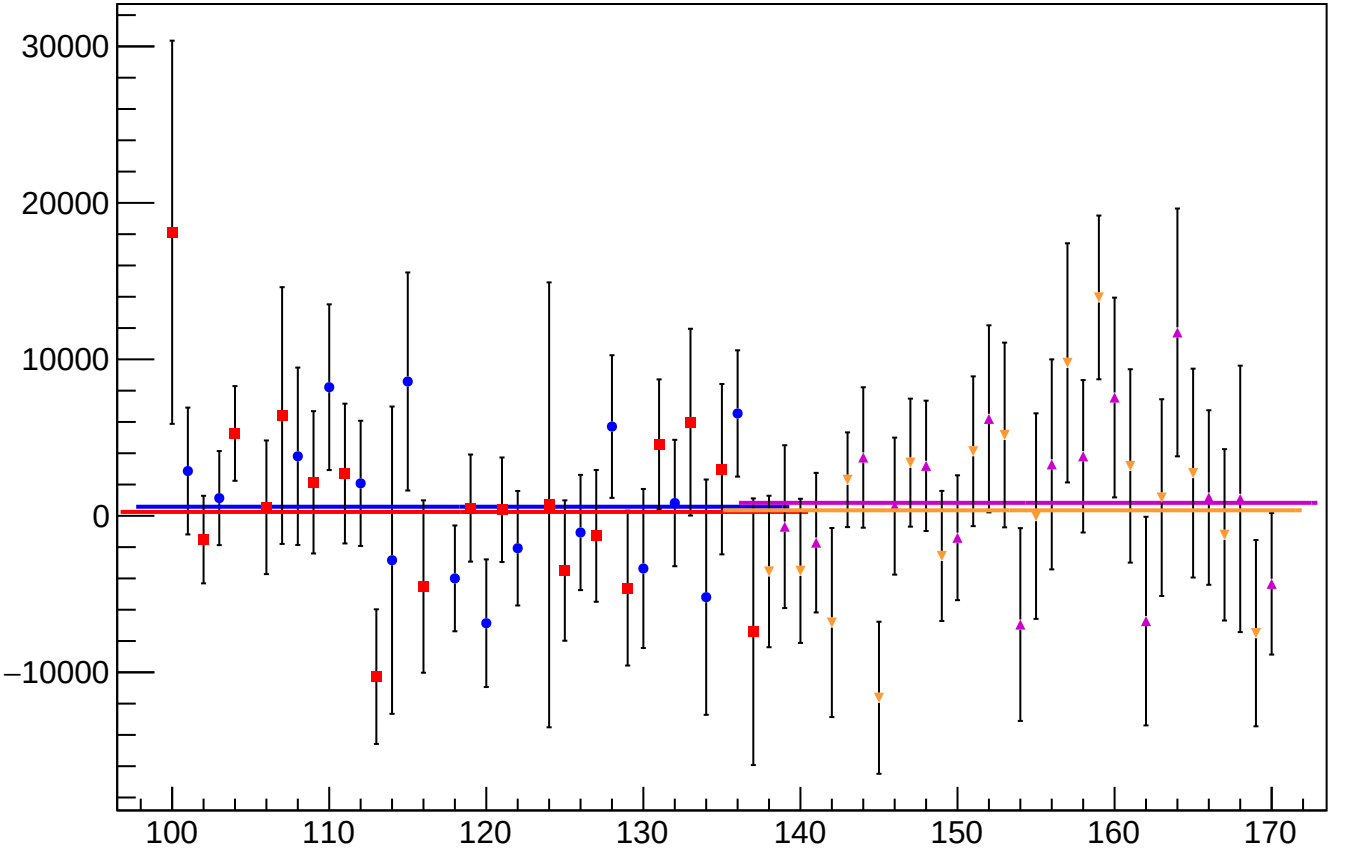
Left In: 1918.755+/-0.373 $\chi^2$/NDF:18974.3/15

+ sign 1821.075+/-0.287 $\chi^2$/NDF: 950668.2/32

All: 1835.118+/-0.204 $\chi^2$/NDF: 1289238.4/67

- sign 1849.518+/-0.290 $\chi^2$/NDF: 333707.1/34

# asym_atr1l2_dd_dit_correction_mean vs Slug




Right In: 582.223+/-1081.481 $\chi^2$/NDF: 14.9/15

Left Out: 354.550+/-1220.710 $\chi^2$/NDF:22.1/16

Right Out: 250.224+/-1021.012 $\chi^2$/NDF: 17.9/18

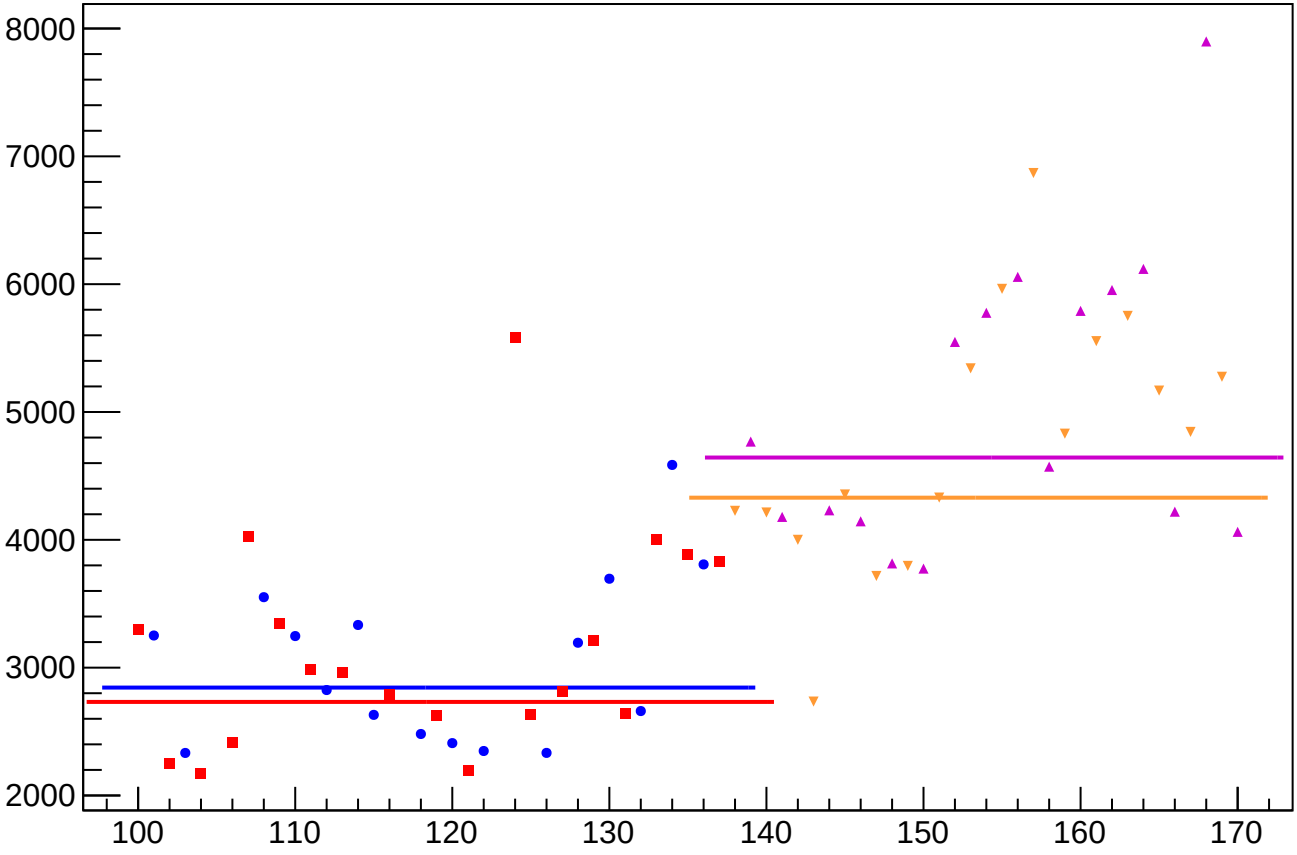
Left In: 831.091+/-1306.264 $\chi^2$/NDF:10.0/15

\+ sign 482.105+/-809.492 $\chi^2$/NDF: 36.9/32

All: 476.274+/-570.601 $\chi^2$/NDF: 65.0/67

\- sign 470.515+/-804.435 $\chi^2$/NDF: 28.0/34

# asym_atr1l2_dd_dit_correction_rms vs Slug




Right In: 2844.153+/-0.765 $\chi^2$/NDF: 542032.5/15

Left Out: 4329.742+/-0.863 $\chi^2$/NDF:1343766.3/16

Right Out: 2731.978+/-0.722 $\chi^2$/NDF: 611275.1/18

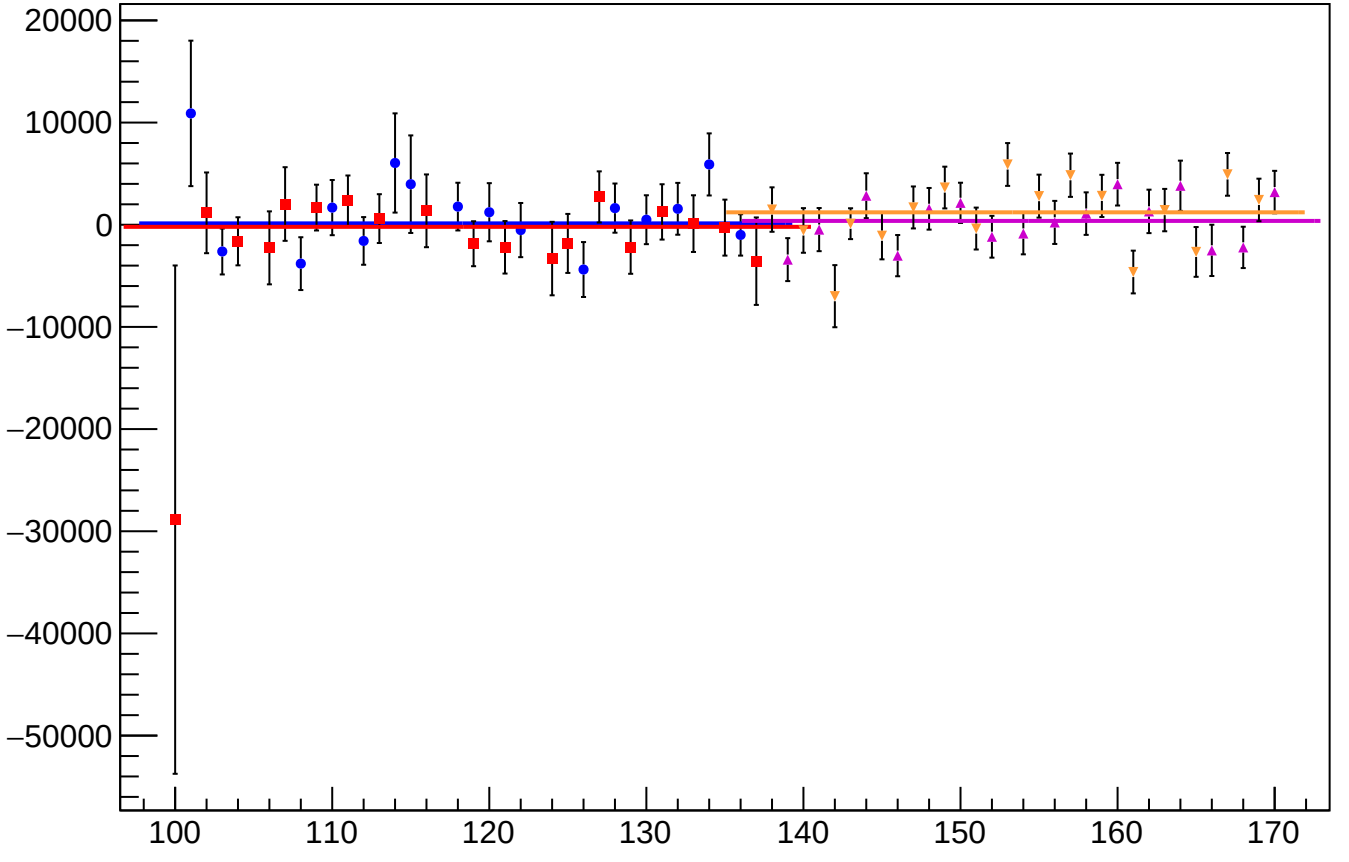
Left In: 4643.755+/-0.924 $\chi^2$/NDF:990476.8/15

\+ sign 3497.431+/-0.572 $\chi^2$/NDF: 3545344.6/32

All: 3477.094+/-0.403 $\chi^2$/NDF: 7808875.8/67

\- sign 3457.010+/-0.569 $\chi^2$/NDF: 4261022.2/34

# eigen_dit_asym_atr1l2_dd_mean vs Slug




Right In: 133.837+/-671.621 $\chi^2$/NDF: 17.3/15

Left Out: 1215.836+/-508.309 $\chi^2$/NDF:34.5/16

Right Out: -205.422+/-654.444 $\chi^2$/NDF: 9.7/18

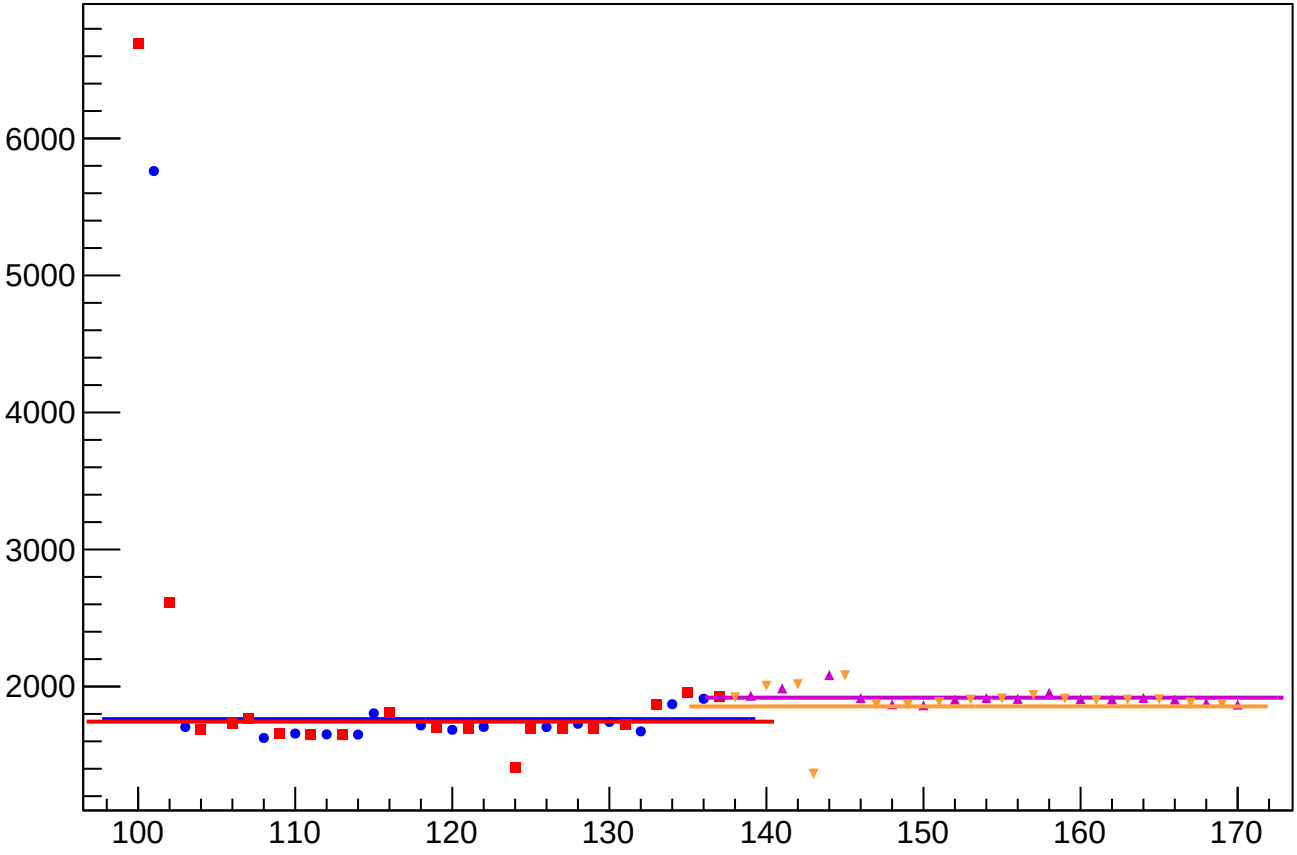
Left In: 374.582+/-527.905 $\chi^2$/NDF:19.6/15

+ sign 821.779+/-405.313 $\chi^2$/NDF: 53.4/32

All: 488.482+/-288.551 $\chi^2$/NDF: 84.6/67

- sign 145.951+/-410.889 $\chi^2$/NDF: 29.8/34

# eigen_dit_asym_atr1l2_dd_rms vs Slug




Right In: 1762.052+/-0.475 $\chi^2$/NDF: 667696.6/15

Left Out: 1854.884+/-0.359 $\chi^2$/NDF:258678.9/16

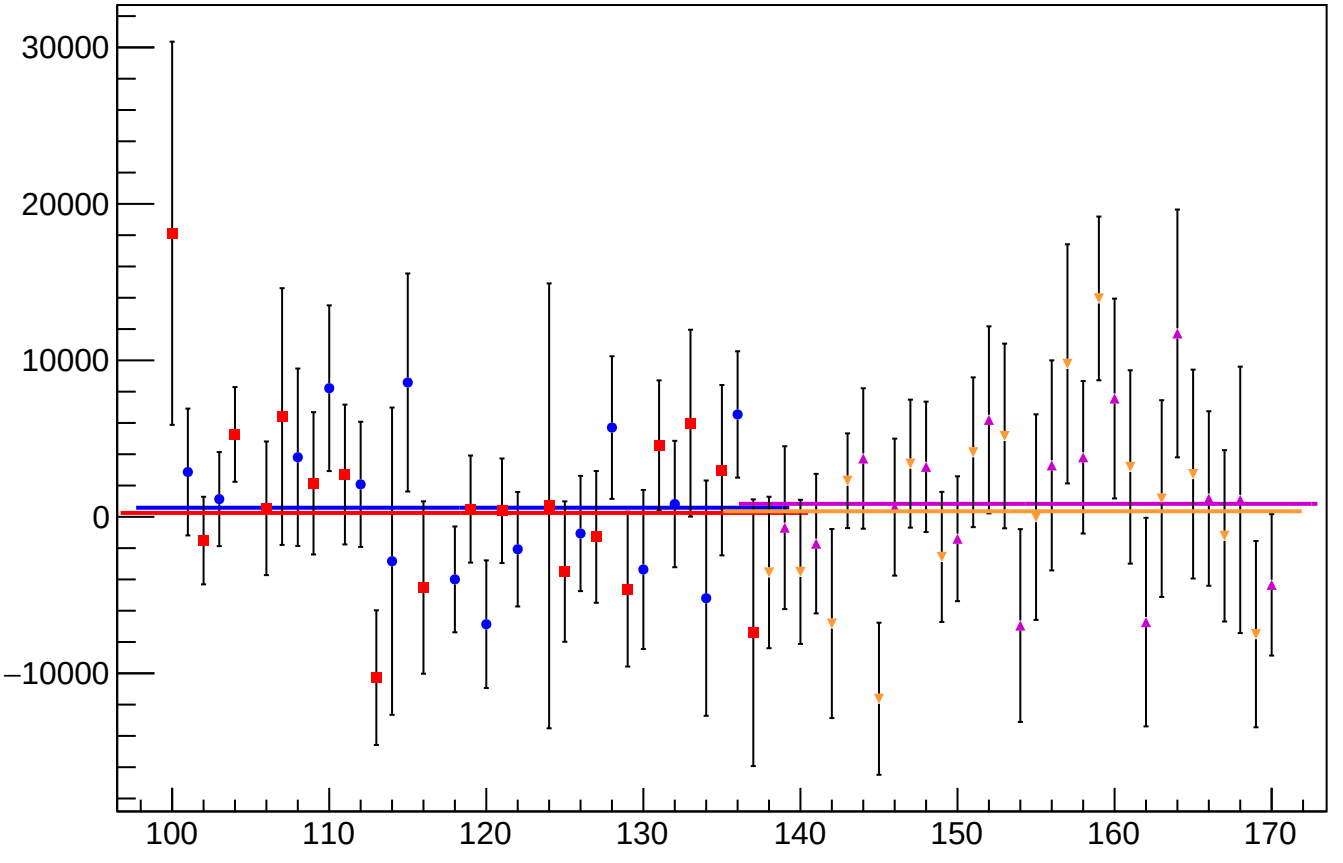
Right Out: 1743.723+/-0.461 $\chi^2$/NDF: 227762.1/18

Left In: 1918.756+/-0.373 $\chi^2$/NDF:18974.5/15

+ sign 1821.075+/-0.287 $\chi^2$/NDF: 950669.8/32

All: 1835.119+/-0.204 $\chi^2$/NDF: 1289241.2/67

- sign 1849.519+/-0.290 $\chi^2$/NDF: 333708.3/34




Right In: 582.219+/-1081.478 $\chi^2$/NDF: 14.9/15

Left Out: 354.553+/-1220.712 $\chi^2$/NDF:22.1/16

Right Out: 250.225+/-1021.010 $\chi^2$/NDF: 17.9/18

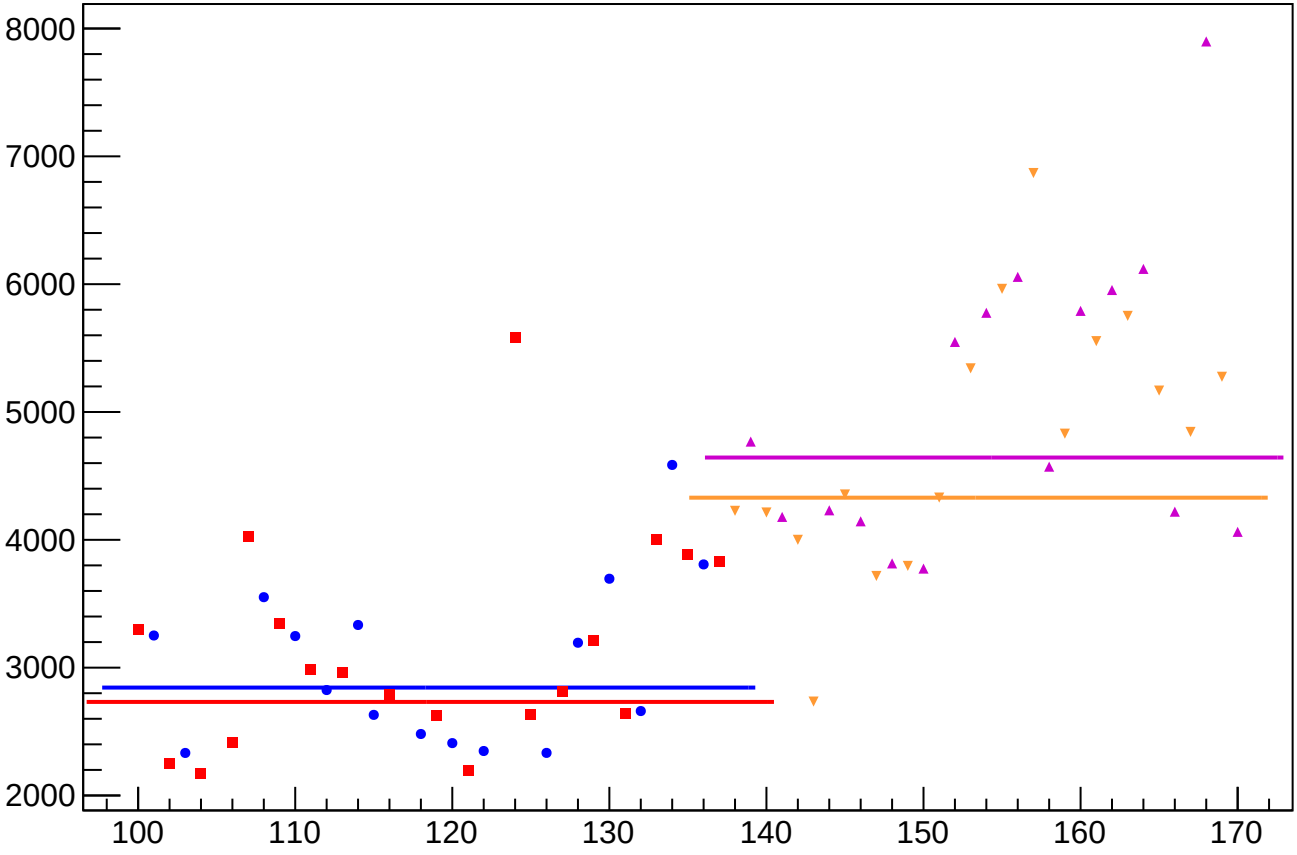
Left In: 831.090+/-1306.266 $\chi^2$/NDF:10.0/15

+ sign 482.105+/-809.491 $\chi^2$/NDF: 36.9/32

All: 476.273+/-570.600 $\chi^2$/NDF: 65.0/67

- sign 470.514+/-804.435 $\chi^2$/NDF: 28.0/34

# asym_atr1l2_dd_eigen_dit_correction_rms vs Slug




Right In: 2844.145+/-0.765 $\chi^2$/NDF: 542036.2/15

Left Out: 4329.747+/-0.863 $\chi^2$/NDF:1343772.0/16

Right Out: 2731.972+/-0.722 $\chi^2$/NDF: 611272.5/18

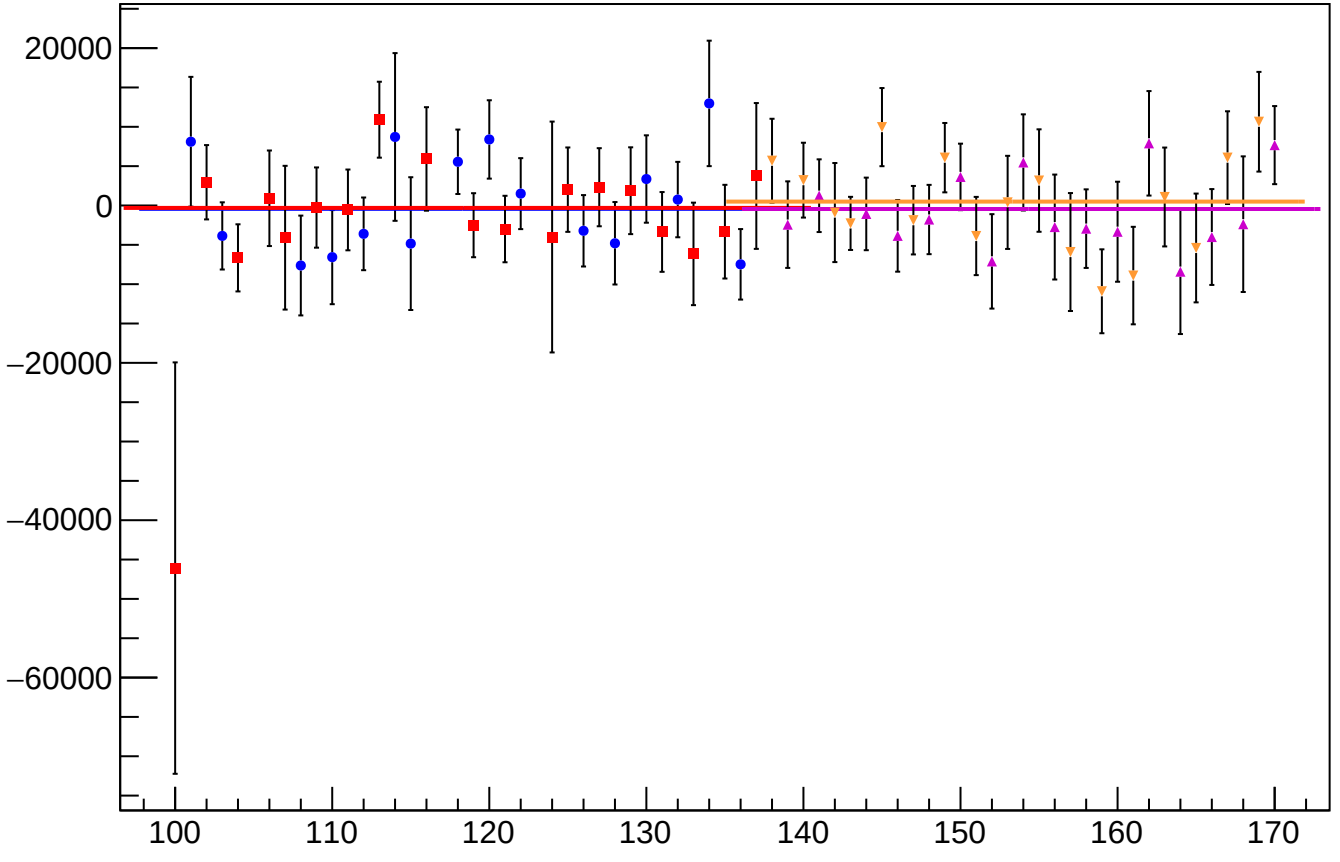
Left In: 4643.760+/-0.924 $\chi^2$/NDF:990479.9/15

+ sign 3497.426+/-0.572 $\chi^2$/NDF: 3545383.4/32

All: 3477.089+/-0.403 $\chi^2$/NDF: 7808947.0/67

- sign 3457.005+/-0.569 $\chi^2$/NDF: 4261054.6/34

# asym_atr1l2_dd_mean vs Slug




Right In: -423.131+/-1327.258 $\chi^2$/NDF: 17.9/15

Left Out: 494.674+/-1281.714 $\chi^2$/NDF:20.3/16

Right Out: -307.823+/-1275.718 $\chi^2$/NDF: 15.3/18

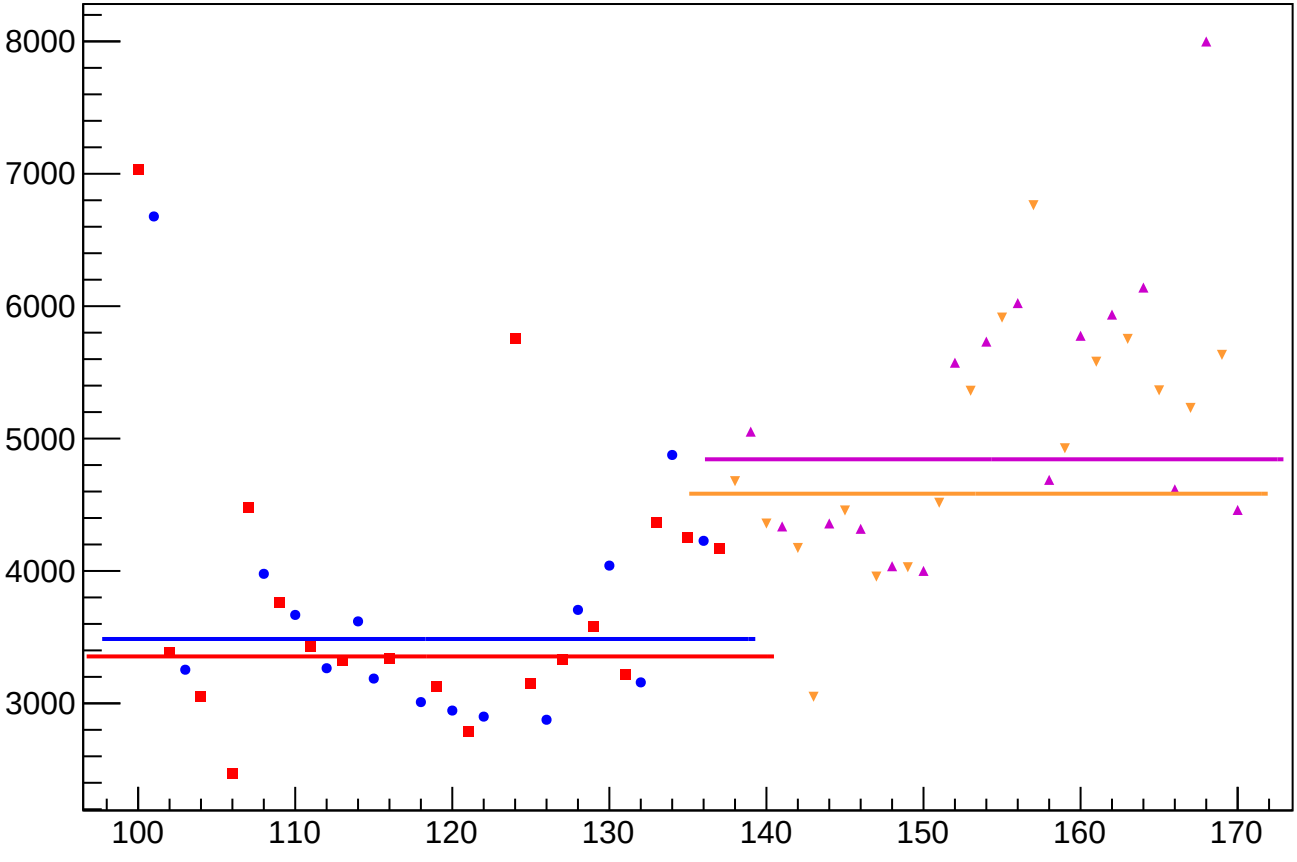
Left In: -446.037+/-1355.663 $\chi^2$/NDF:10.3/15

+ sign 51.789+/-921.989 $\chi^2$/NDF: 38.4/32

All: -158.855+/-654.426 $\chi^2$/NDF: 64.1/67

- sign -372.735+/-929.046 $\chi^2$/NDF: 25.5/34

# asym_atr1l2_dd_rms vs Slug




Right In: 3486.167+/-0.939 $\chi^2$/NDF: 595790.9/15

Left Out: 4583.568+/-0.906 $\chi^2$/NDF:1022106.1/16

Right Out: 3354.426+/-0.889 $\chi^2$/NDF: 376426.3/18

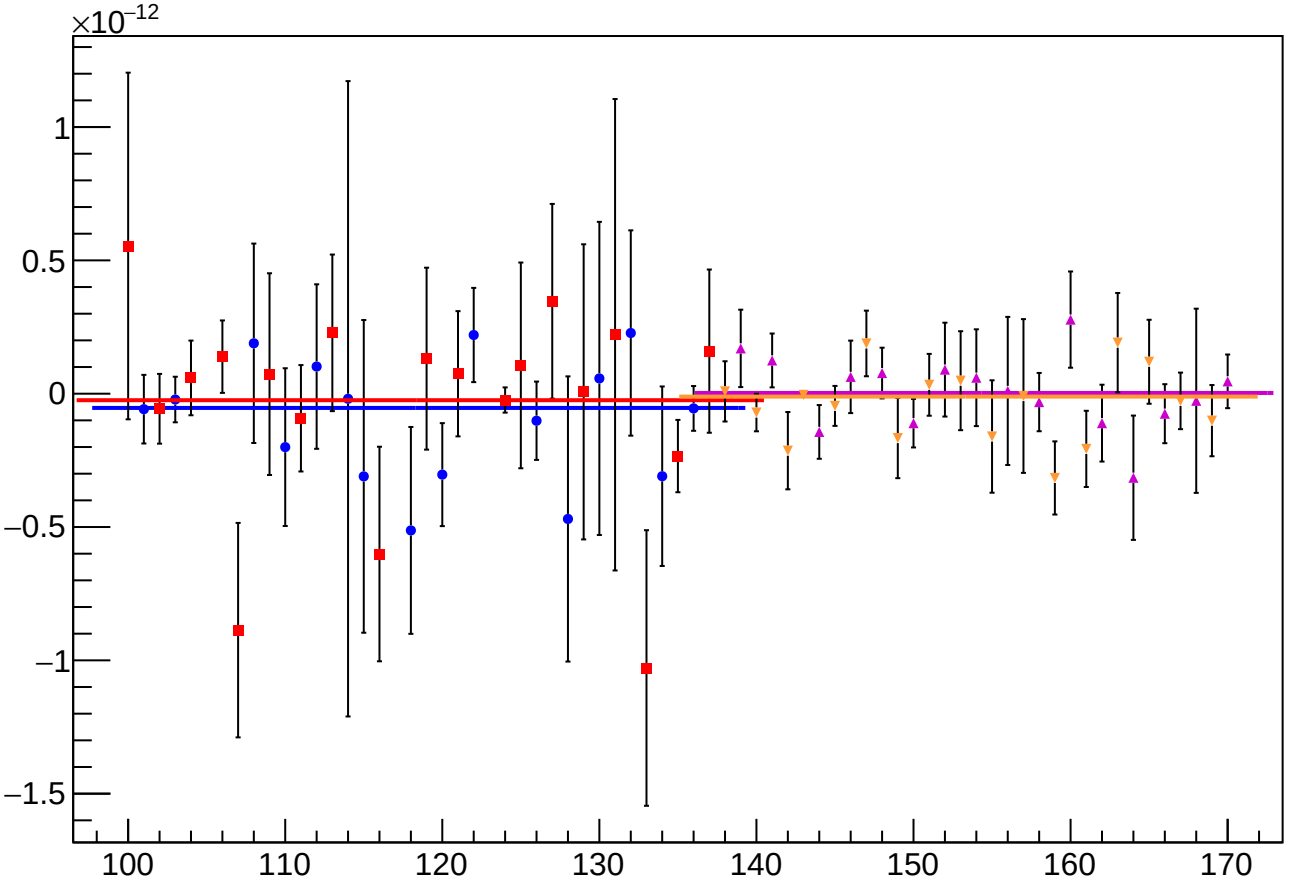
Left In: 4843.452+/-0.959 $\chi^2$/NDF:792403.6/15

+ sign 4054.017+/-0.652 $\chi^2$/NDF: 2325386.7/32

All: 4048.679+/-0.461 $\chi^2$/NDF: 4790874.9/67

- sign 4043.338+/-0.652 $\chi^2$/NDF: 2465354.0/34

# asym_atr1l2_dd_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 8.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:16.8/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.4/18

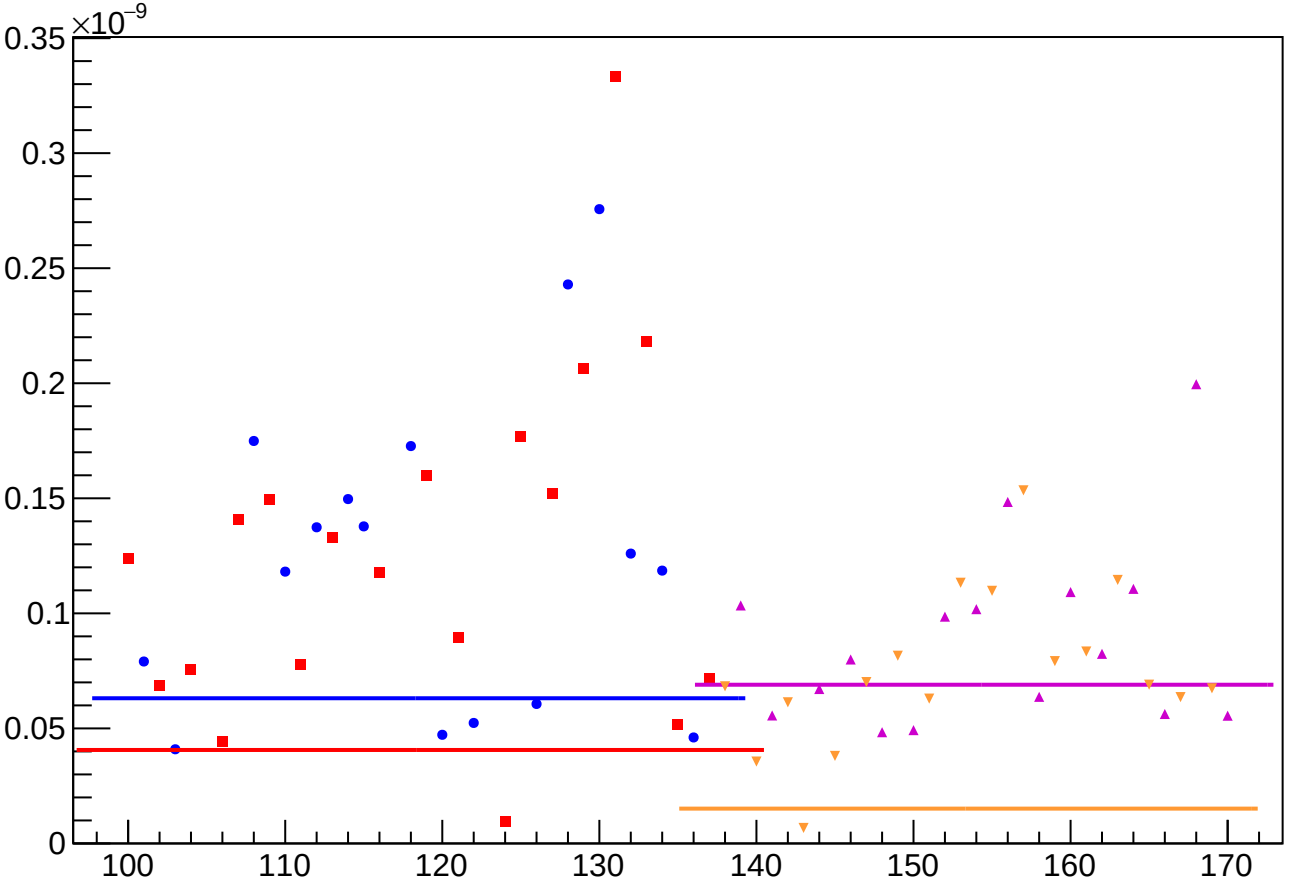
Left In: 0.000+/-0.000 $\chi^2$/NDF:13.2/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 26.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 58.1/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 31.9/34

# asym_atr1l2_dd_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1432018.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:6820638.8/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3172346.7/18

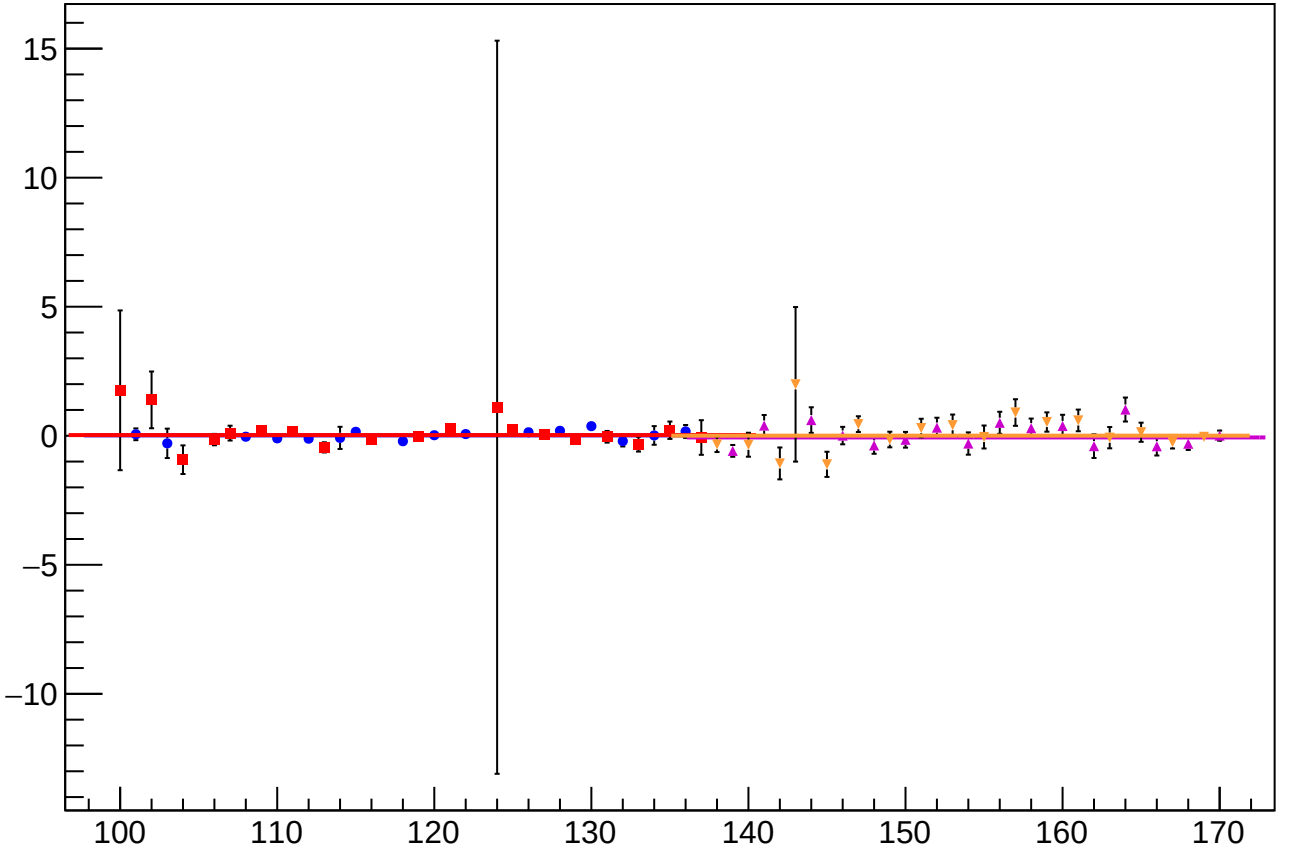
Left In: 0.000+/-0.000 $\chi^2$/NDF:1168849.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 10424589.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 19585350.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5039356.7/34

# asym_atr1l2_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.015+/-0.048 $\chi^2$/NDF: 11.8/15

Left Out: 0.004+/-0.084 $\chi^2$/NDF:22.9/16

Right Out: 0.026+/-0.047 $\chi^2$/NDF: 22.1/18

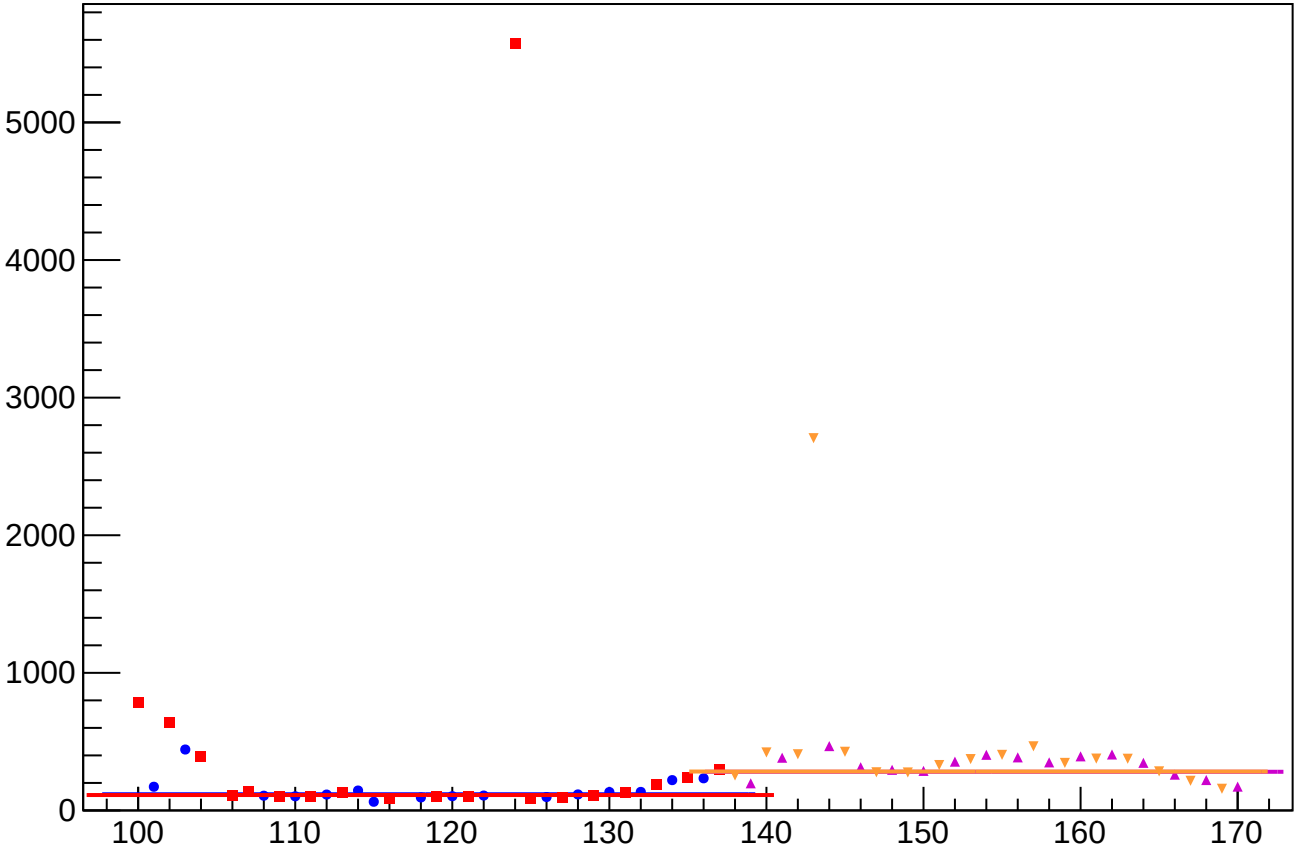
Left In: -0.065+/-0.082 $\chi^2$/NDF:22.4/15

+ sign 0.012+/-0.042 $\chi^2$/NDF: 34.7/32

All: 0.008+/-0.029 $\chi^2$/NDF: 80.1/67

- sign 0.003+/-0.041 $\chi^2$/NDF: 45.4/34

# asym_atr1l2_dd_dit_vs_cor_diff_rms vs Slug




Right In: 117.649+/-0.034 $\chi^2$/NDF: 1722401.0/15

Left Out: 282.897+/-0.059 $\chi^2$/NDF:3701271.9/16

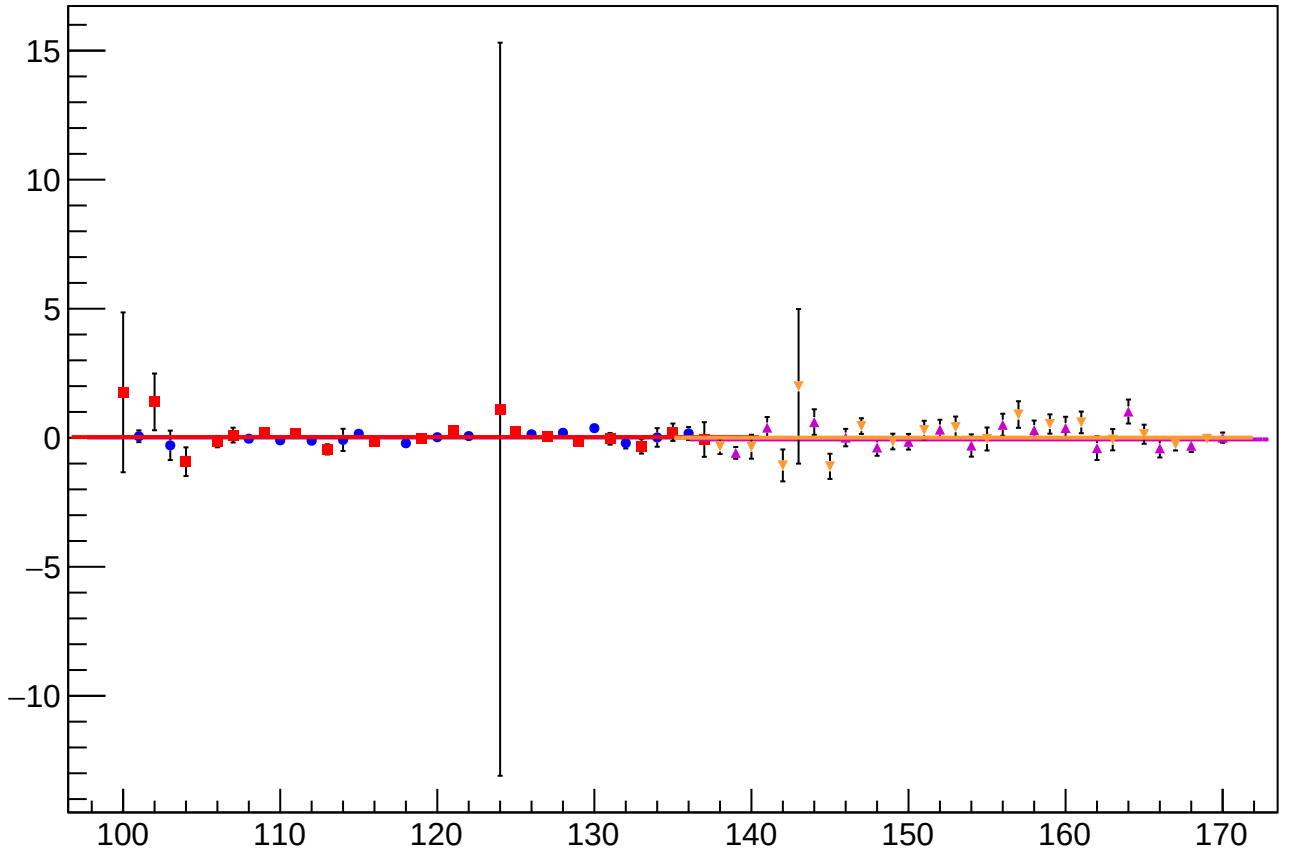
Right Out: 112.124+/-0.033 $\chi^2$/NDF: 2186364.8/18

Left In: 281.040+/-0.058 $\chi^2$/NDF:2183824.2/15

+ sign 158.150+/-0.029 $\chi^2$/NDF: 11259186.7/32

All: 155.869+/-0.021 $\chi^2$/NDF: 22040878.8/67

- sign 153.690+/-0.029 $\chi^2$/NDF: 10769942.2/34




Right In: 0.015+/-0.048 $\chi^2$/NDF: 11.8/15

Left Out: 0.004+/-0.084 $\chi^2$/NDF:22.9/16

Right Out: 0.026+/-0.047 $\chi^2$/NDF: 22.1/18

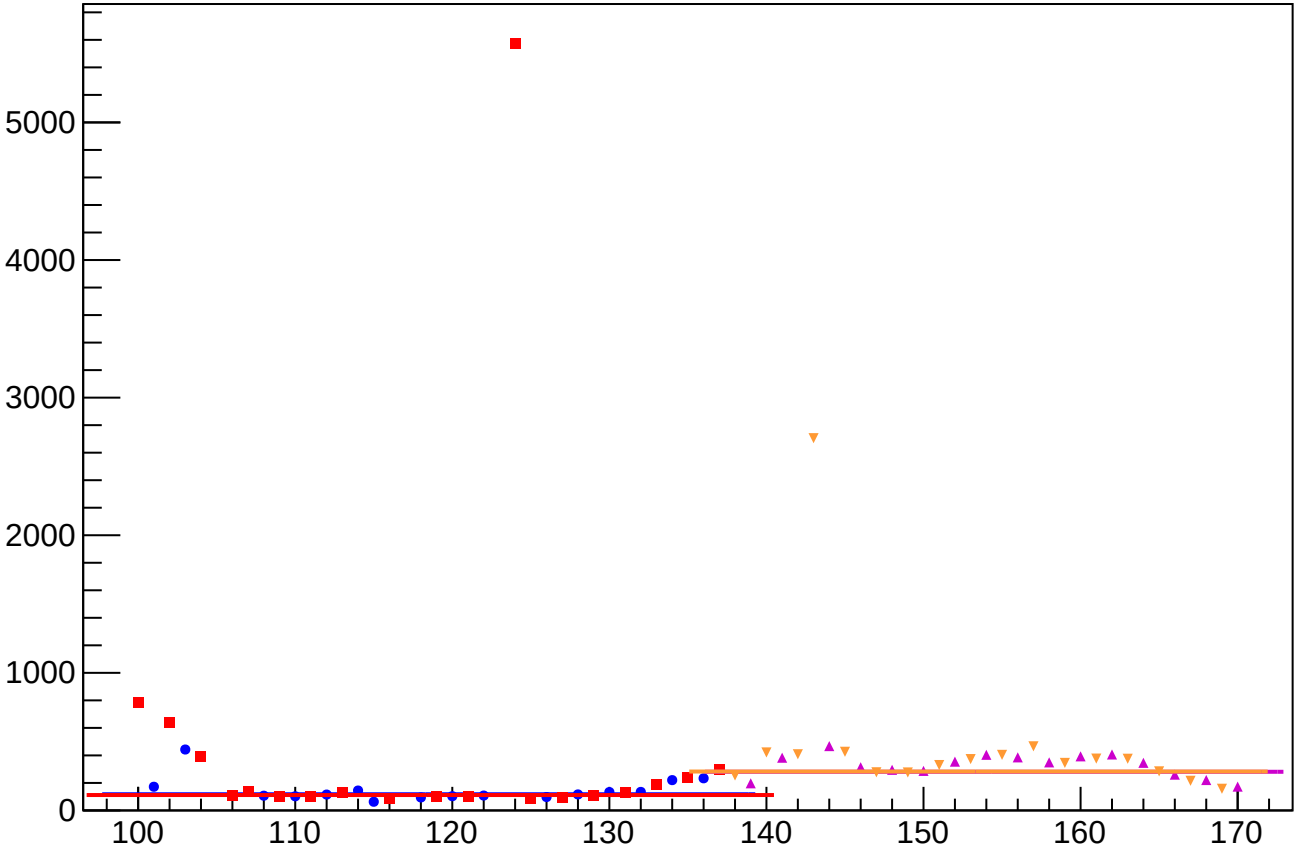
Left In: -0.065+/-0.082 $\chi^2$/NDF:22.4/15

+ sign 0.012+/-0.042 $\chi^2$/NDF: 34.7/32

All: 0.008+/-0.029 $\chi^2$/NDF: 80.1/67

- sign 0.003+/-0.041 $\chi^2$/NDF: 45.4/34

# asym_atr1l2_dd_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 117.649+/-0.034 $\chi^2$/NDF: 1722401.0/15

Left Out: 282.897+/-0.059 $\chi^2$/NDF:3701271.9/16

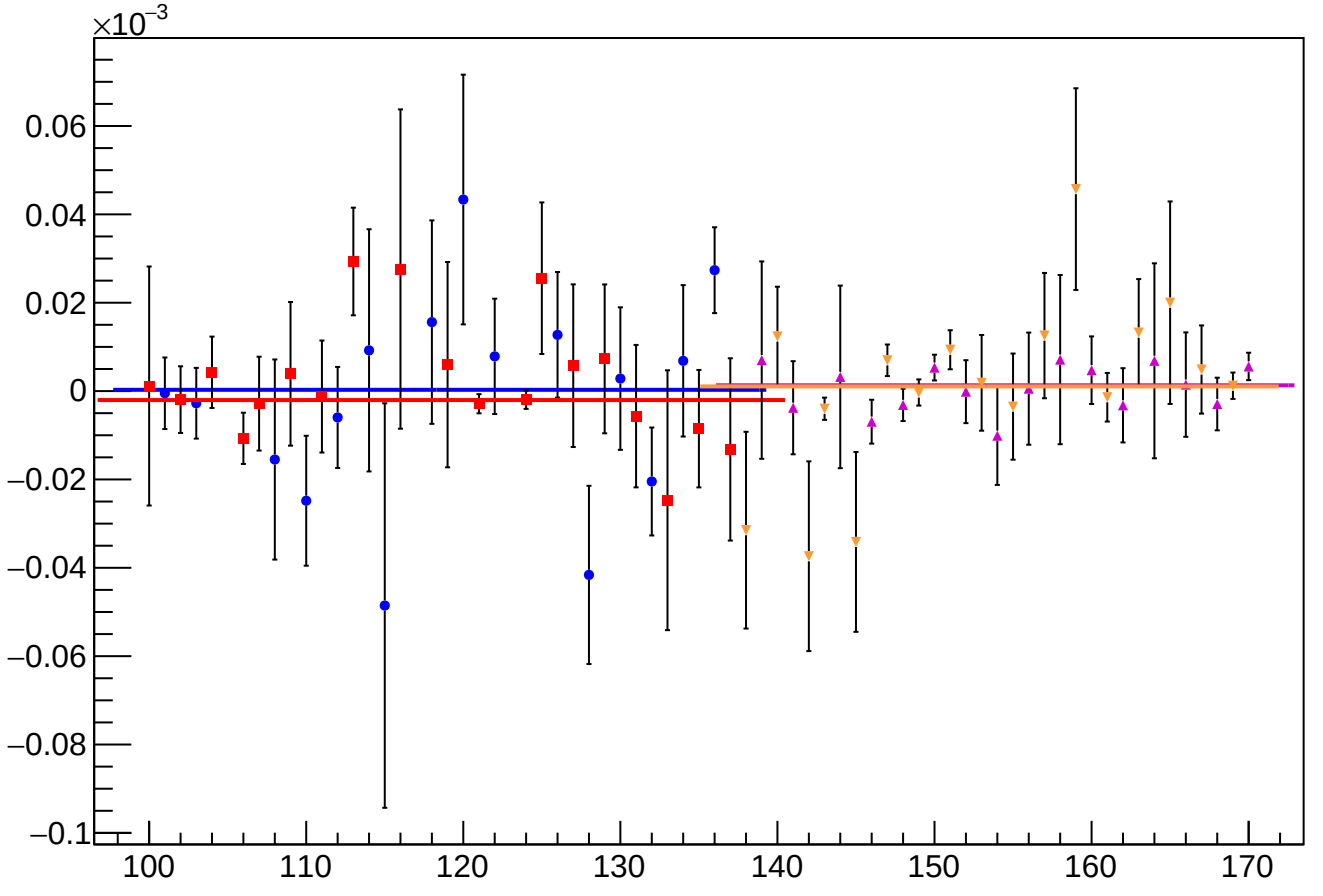
Right Out: 112.124+/-0.033 $\chi^2$/NDF: 2186364.8/18

Left In: 281.040+/-0.058 $\chi^2$/NDF:2183824.2/15

+ sign 158.150+/-0.029 $\chi^2$/NDF: 11259186.7/32

All: 155.869+/-0.021 $\chi^2$/NDF: 22040878.8/67

- sign 153.690+/-0.029 $\chi^2$/NDF: 10769942.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 24.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:26.5/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 14.8/18

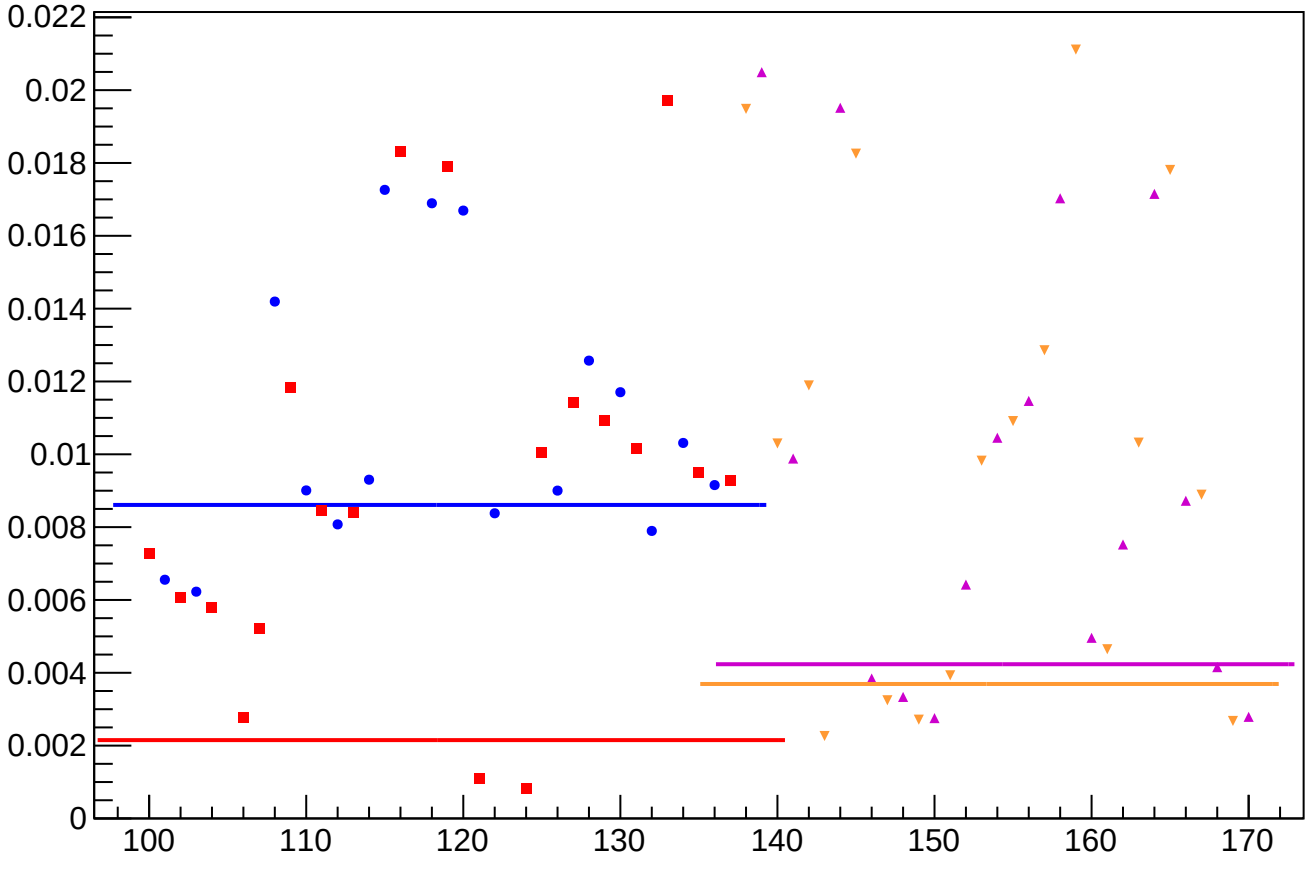
Left In: 0.000+/-0.000 $\chi^2$/NDF:10.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 50.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 79.7/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 28.2/34

# asym_atr1l2_dd_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.009+/-0.000 $\chi^2$/NDF: 1114251.2/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:9464028.7/16

Right Out: 0.002+/-0.000 $\chi^2$/NDF: 9086978.1/18

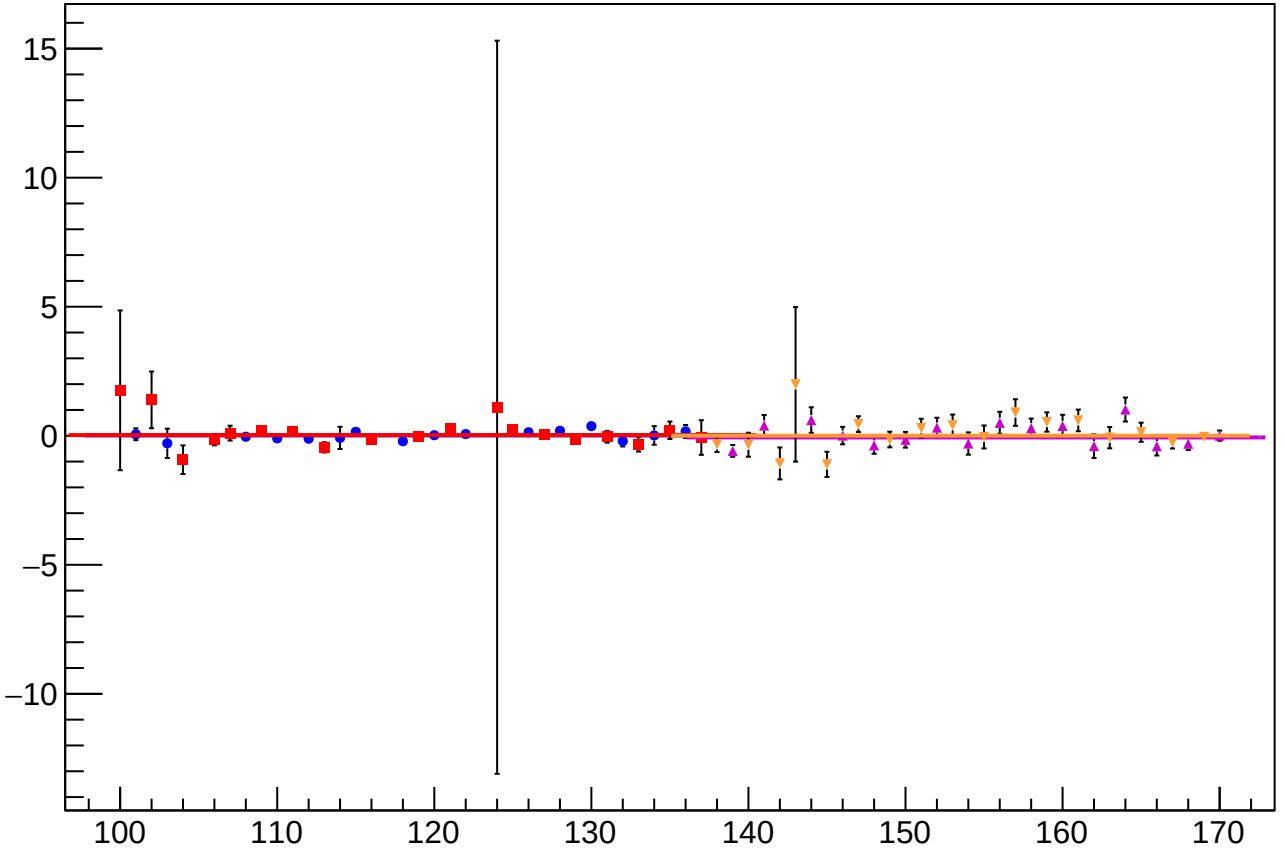
Left In: 0.004+/-0.000 $\chi^2$/NDF:7462980.3/15

+ sign 0.004+/-0.000 $\chi^2$/NDF: 14283907.3/32

All: 0.004+/-0.000 $\chi^2$/NDF: 34261471.3/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 18731463.0/34

# asym_atr1l2_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.015+/-0.048 $\chi^2$/NDF: 11.8/15

Left Out: 0.004+/-0.084 $\chi^2$/NDF:22.9/16

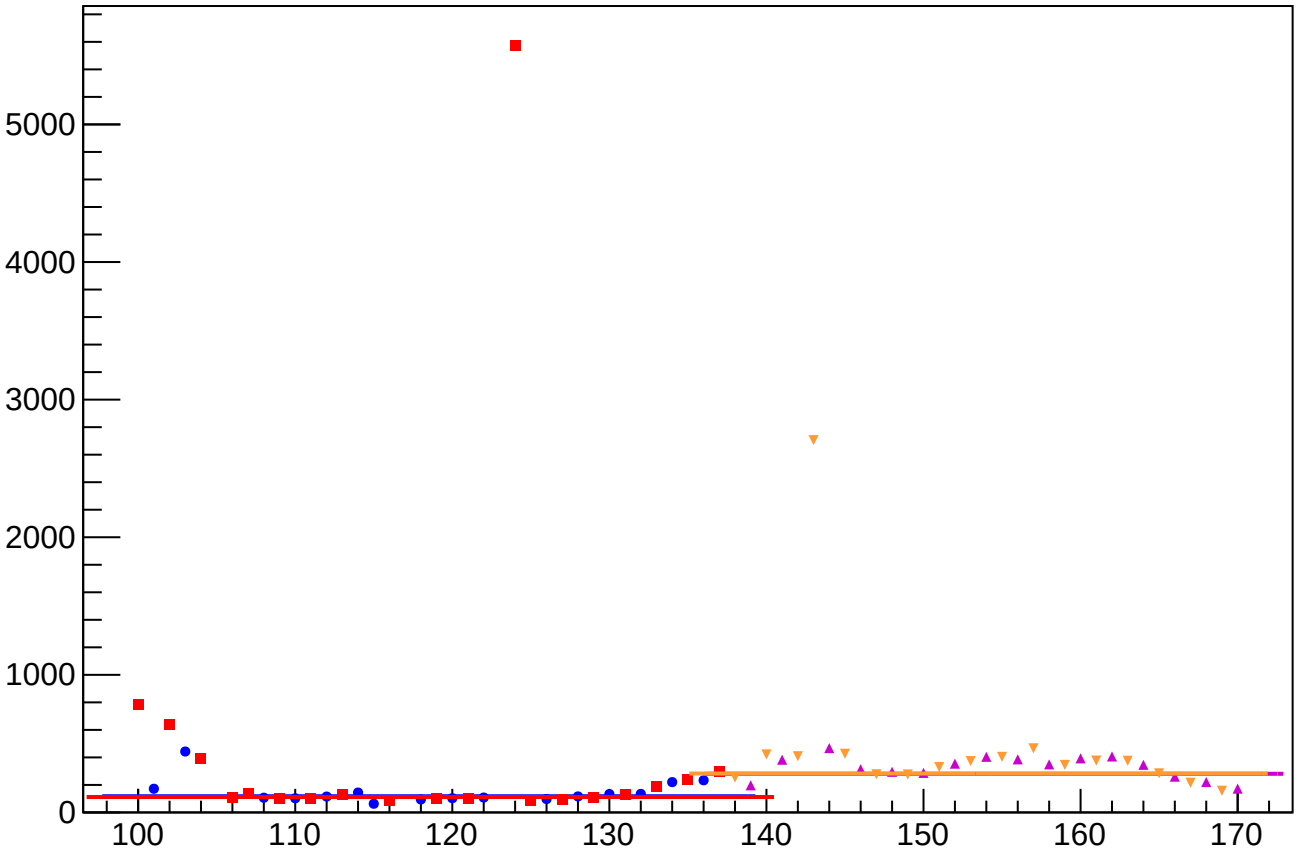
Right Out: 0.026+/-0.047 $\chi^2$/NDF: 22.1/18

Left In: -0.065+/-0.082 $\chi^2$/NDF:22.4/15

+ sign 0.012+/-0.042 $\chi^2$/NDF: 34.7/32

All: 0.008+/-0.029 $\chi^2$/NDF: 80.1/67

- sign 0.003+/-0.041 $\chi^2$/NDF: 45.4/34




Right In: 117.649+/-0.034 $\chi^2$/NDF: 1722367.8/15

Left Out: 282.899+/-0.059 $\chi^2$/NDF:3701367.2/16

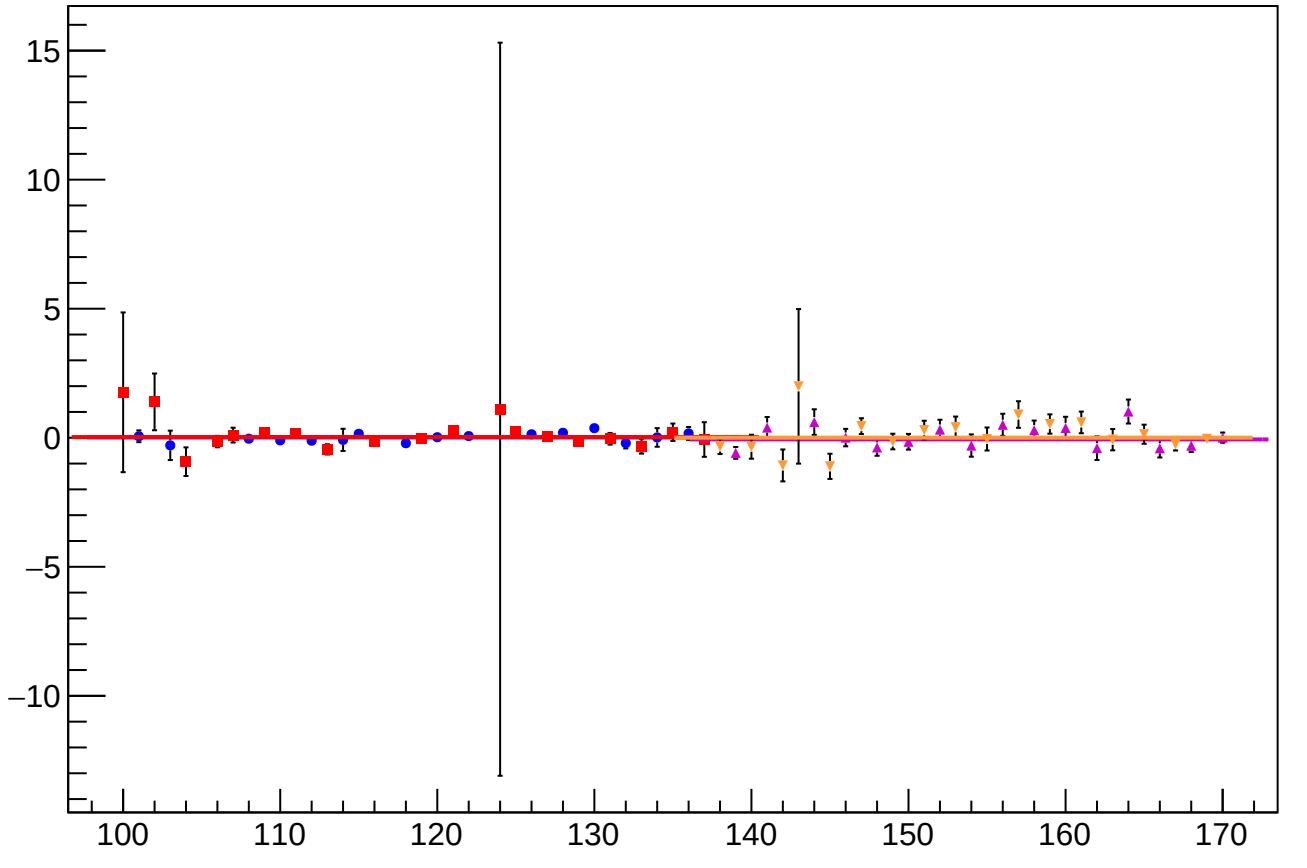
Right Out: 112.126+/-0.033 $\chi^2$/NDF: 2186296.2/18

Left In: 281.044+/-0.058 $\chi^2$/NDF:2183851.1/15

+ sign 158.150+/-0.029 $\chi^2$/NDF: 11259317.5/32

All: 155.870+/-0.021 $\chi^2$/NDF: 22040936.3/67

- sign 153.692+/-0.029 $\chi^2$/NDF: 10769879.4/34




Right In: 0.015+/-0.048 $\chi^2$/NDF: 11.8/15

Left Out: 0.004+/-0.084 $\chi^2$/NDF:22.9/16

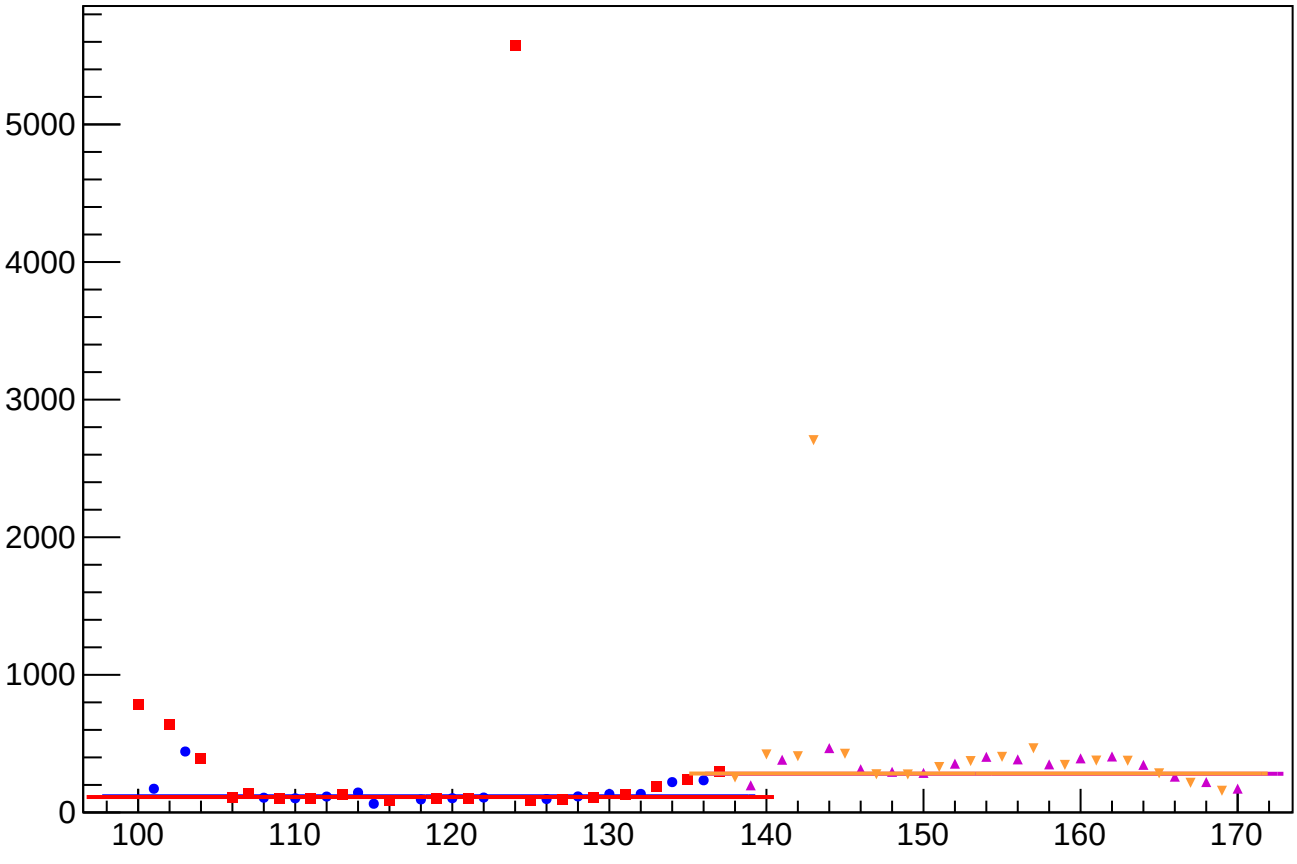
Right Out: 0.026+/-0.047 $\chi^2$/NDF: 22.1/18

Left In: -0.065+/-0.082 $\chi^2$/NDF:22.4/15

+ sign 0.012+/-0.042 $\chi^2$/NDF: 34.7/32

All: 0.008+/-0.029 $\chi^2$/NDF: 80.1/67

- sign 0.003+/-0.041 $\chi^2$/NDF: 45.4/34




Right In: 117.649+/-0.034 $\chi^2$/NDF: 1722367.8/15

Left Out: 282.899+/-0.059 $\chi^2$/NDF:3701367.2/16

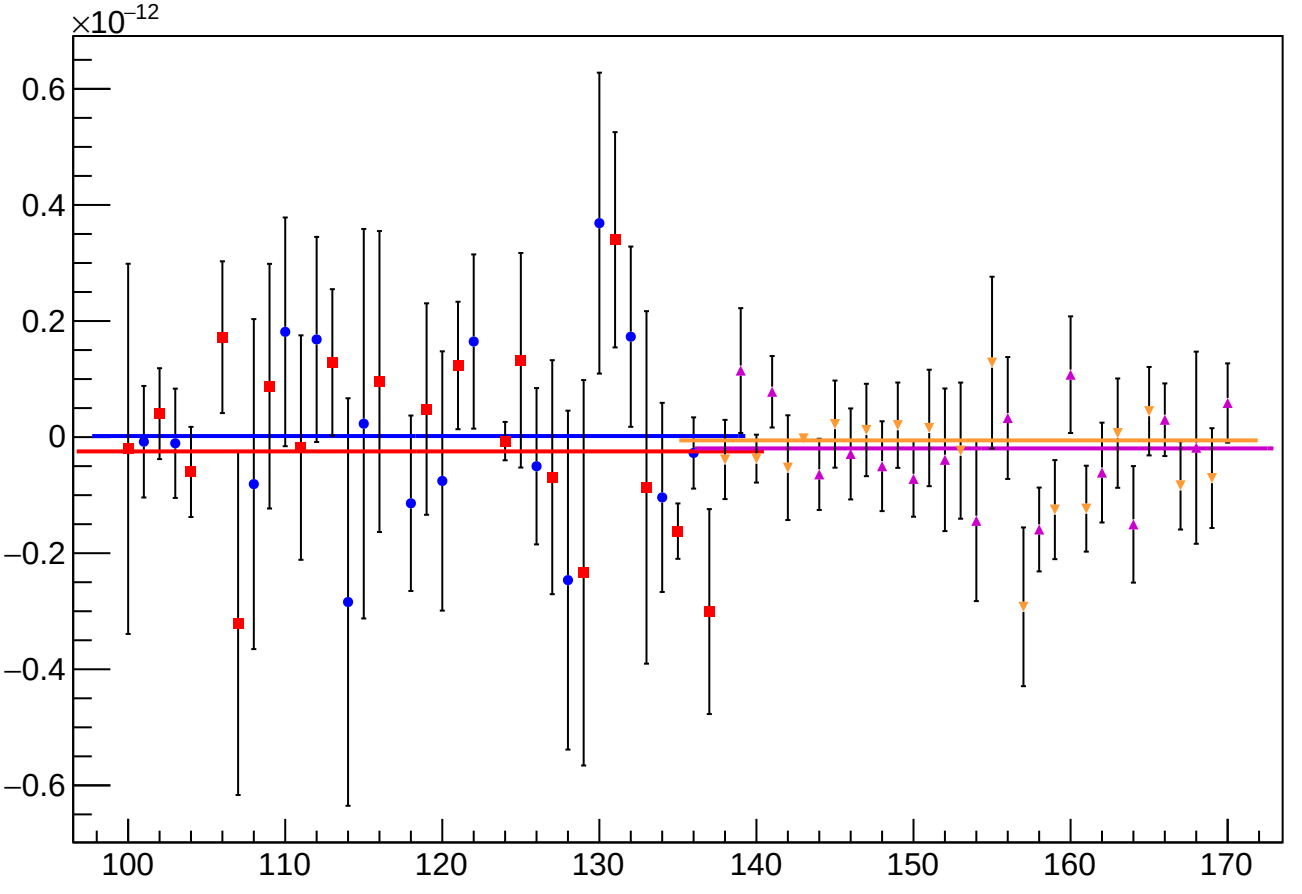
Right Out: 112.126+/-0.033 $\chi^2$/NDF: 2186296.2/18

Left In: 281.044+/-0.058 $\chi^2$/NDF:2183851.1/15

+ sign 158.150+/-0.029 $\chi^2$/NDF: 11259317.5/32

All: 155.870+/-0.021 $\chi^2$/NDF: 22040936.3/67

- sign 153.692+/-0.029 $\chi^2$/NDF: 10769879.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 9.1/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:13.5/16

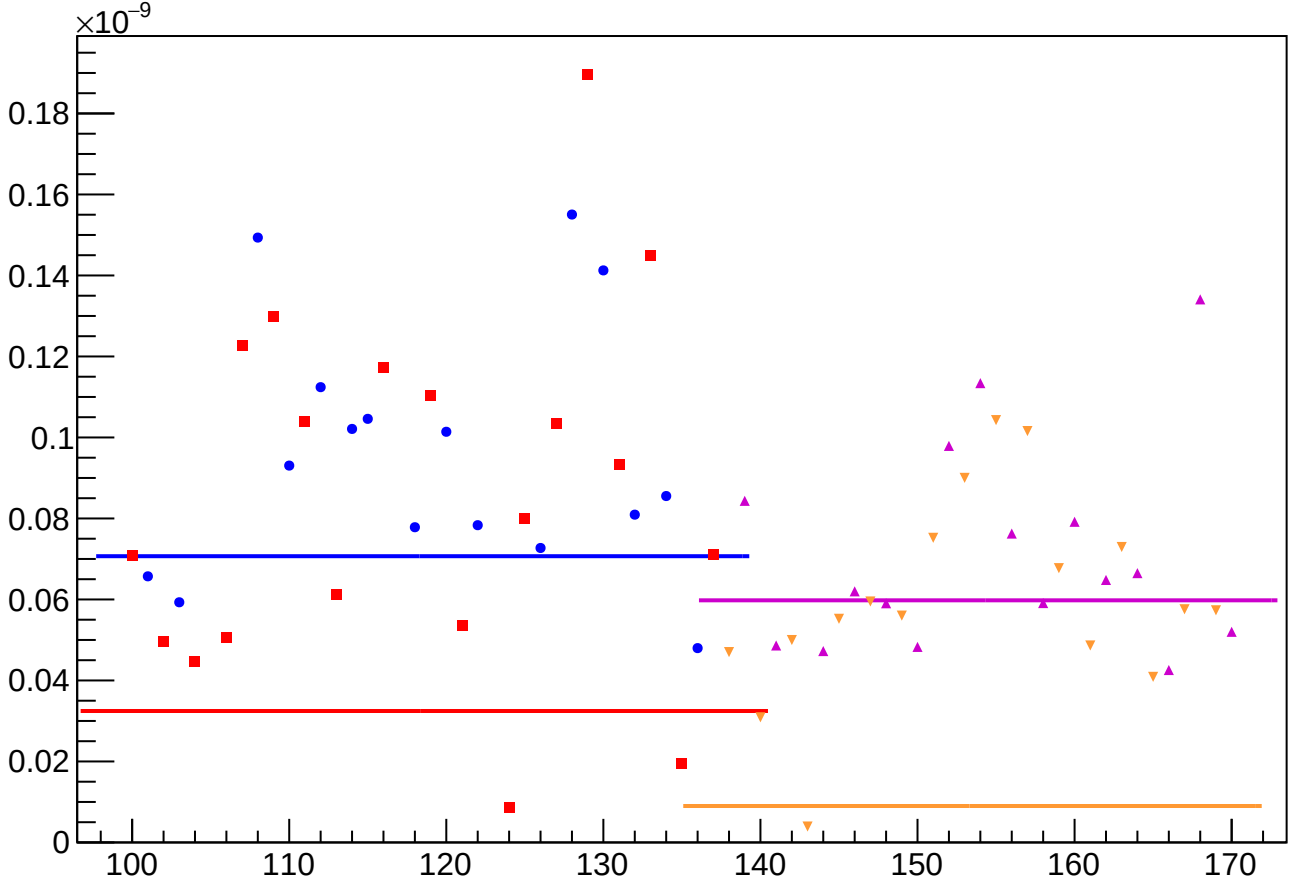
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 24.2/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:15.7/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 22.7/32

All: -0.000+/-0.000 $\chi^2$/NDF: 63.7/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 40.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1023708.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12964923.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 4449161.8/18

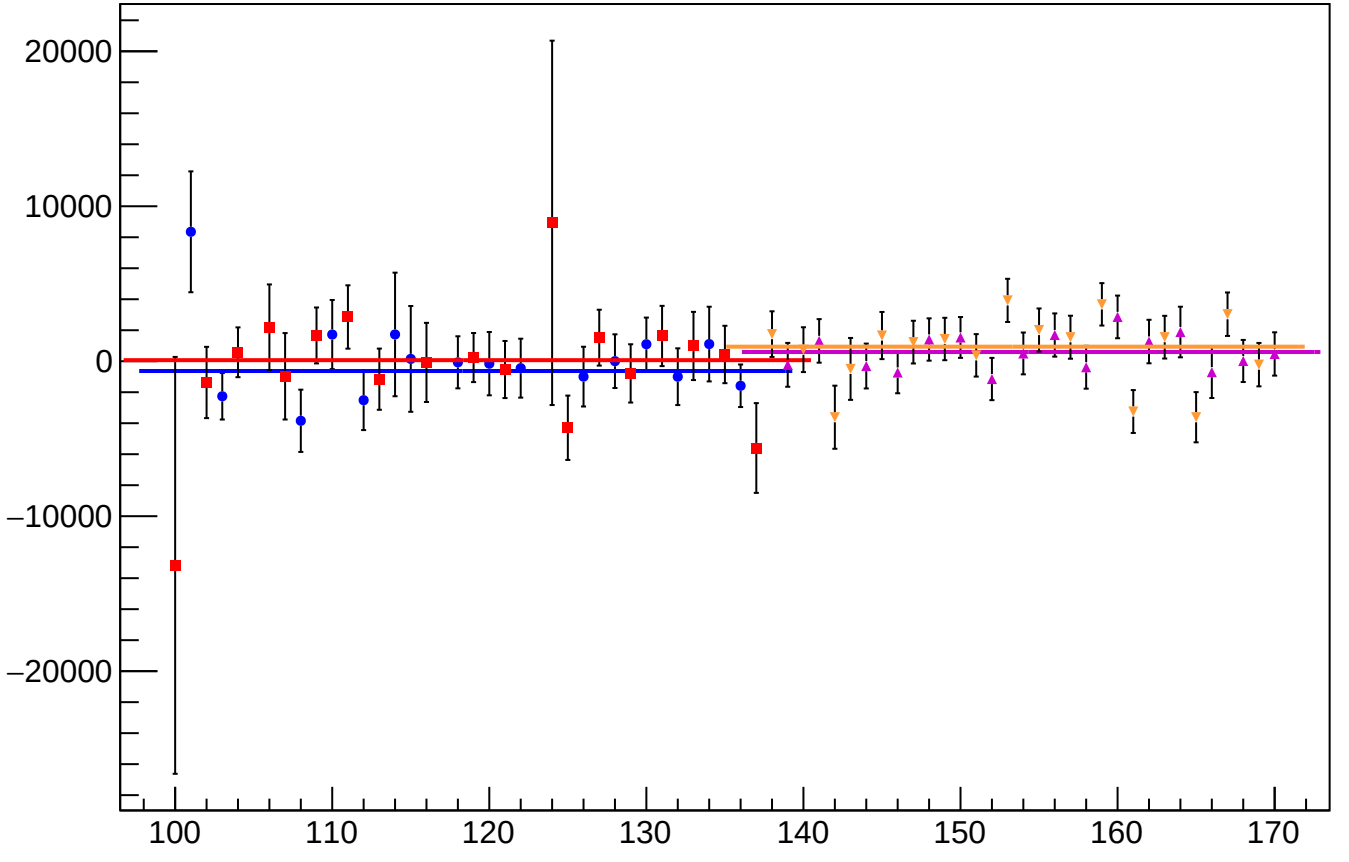
Left In: 0.000+/-0.000 $\chi^2$/NDF:1530593.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 20196439.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 37940092.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 7675733.6/34

# reg_asym_atl_dd_atr_dd_avg_mean vs Slug




Right In: -631.041+/-488.663 $\chi^2$/NDF: 13.9/15

Left Out: 939.060+/-353.814 $\chi^2$/NDF:35.9/16

Right Out: 67.642+/-487.761 $\chi^2$/NDF: 15.9/18

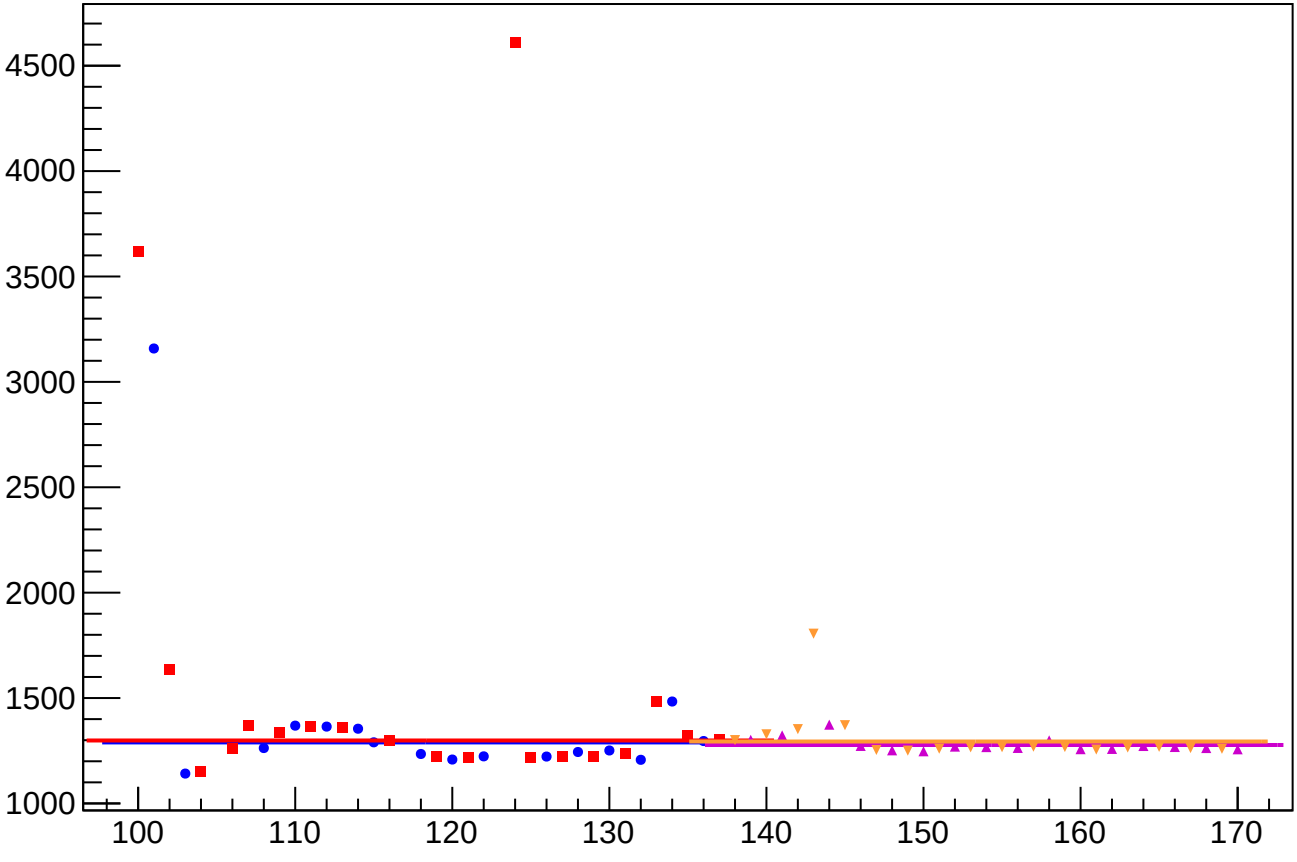
Left In: 594.475+/-351.364 $\chi^2$/NDF:9.9/15

+ sign 399.046+/-286.582 $\chi^2$/NDF: 56.6/32

All: 406.807+/-202.116 $\chi^2$/NDF: 83.2/67

- sign 414.489+/-285.095 $\chi^2$/NDF: 26.6/34

# reg_asym_atl_dd_atr_dd_avg_rms vs Slug




Right In: 1289.466+/-0.346 $\chi^2$/NDF: 514675.0/15

Left Out: 1293.789+/-0.250 $\chi^2$/NDF:151885.4/16

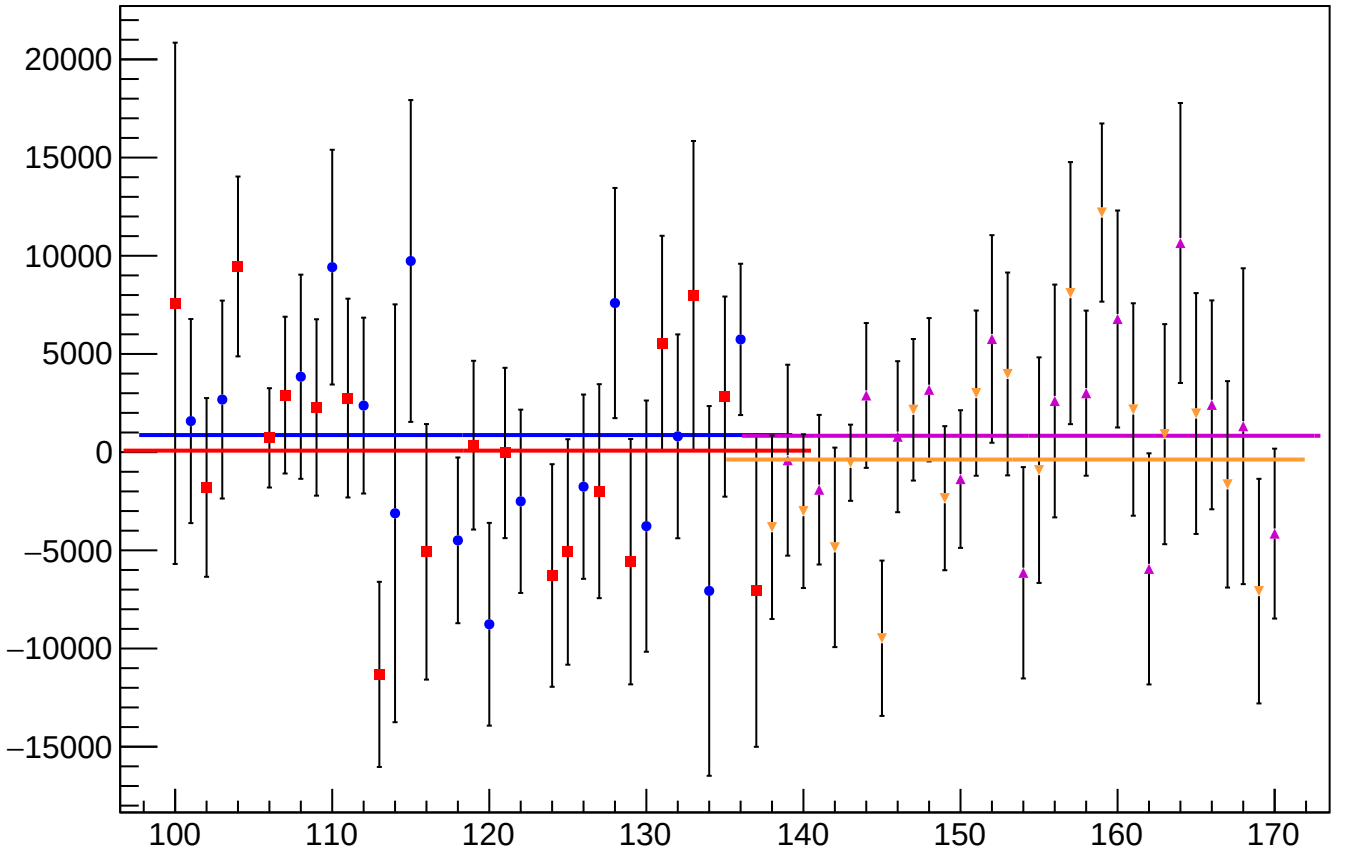
Right Out: 1298.656+/-0.344 $\chi^2$/NDF: 319374.9/18

Left In: 1277.240+/-0.248 $\chi^2$/NDF:15662.6/15

+ sign 1292.302+/-0.203 $\chi^2$/NDF: 666663.1/32

All: 1288.418+/-0.143 $\chi^2$/NDF: 1004977.8/67

- sign 1284.582+/-0.201 $\chi^2$/NDF: 337584.5/34




Right In: 870.295+/-1325.278 $\chi^2$/NDF: 14.0/15

Left Out: -376.488+/-1007.264 $\chi^2$/NDF:20.4/16

Right Out: 77.323+/-1111.074 $\chi^2$/NDF: 18.4/18

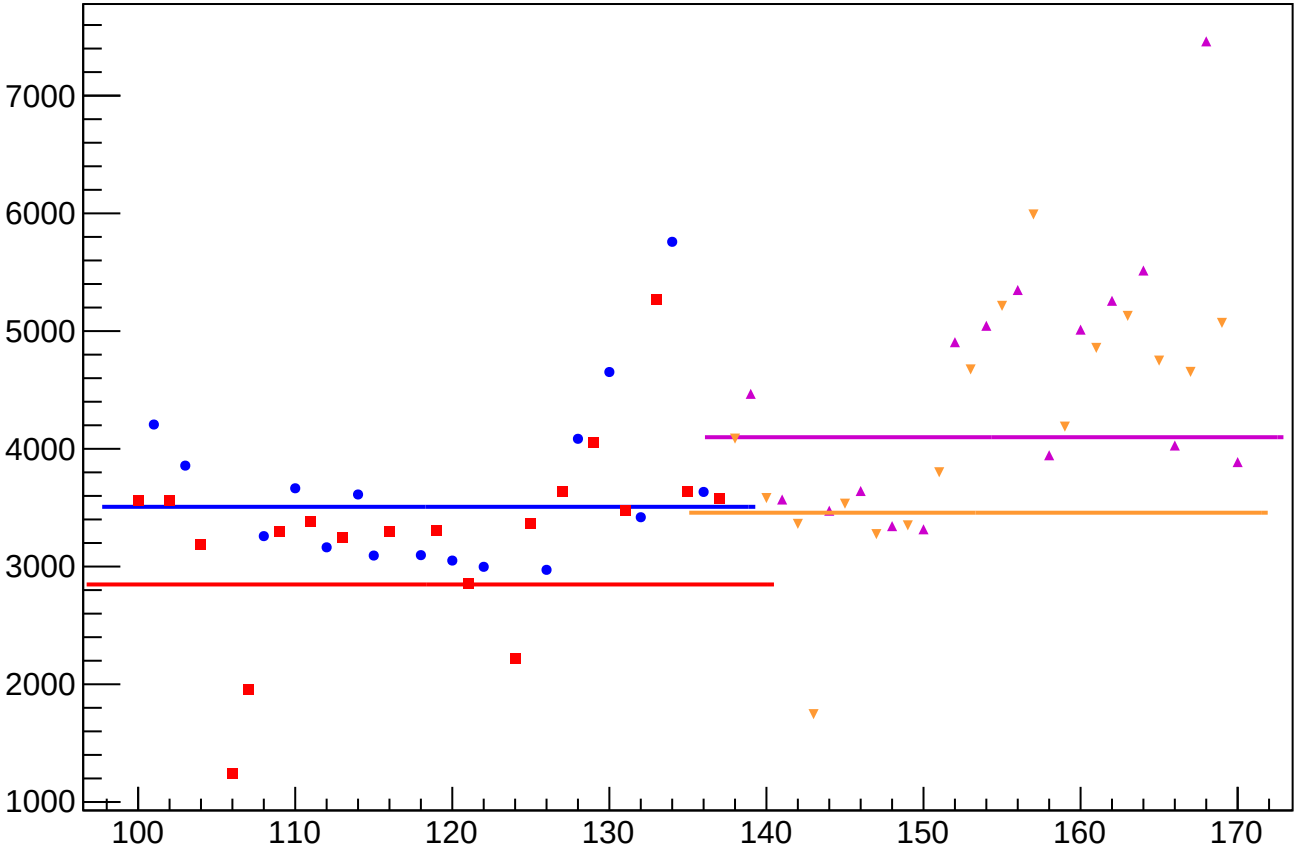
Left In: 834.151+/-1154.851 $\chi^2$/NDF:10.4/15

+ sign 80.021+/-801.930 $\chi^2$/NDF: 35.0/32

All: 260.854+/-566.607 $\chi^2$/NDF: 64.1/67

- sign 441.121+/-800.677 $\chi^2$/NDF: 29.0/34

# asym_atl_dd_atr_dd_avg_reg_correction_rms vs Slug




Right In: 3507.397+/-0.937 $\chi^2$/NDF: 353979.1/15

Left Out: 3457.353+/-0.712 $\chi^2$/NDF:2918517.7/16

Right Out: 2847.833+/-0.786 $\chi^2$/NDF: 1499373.6/18

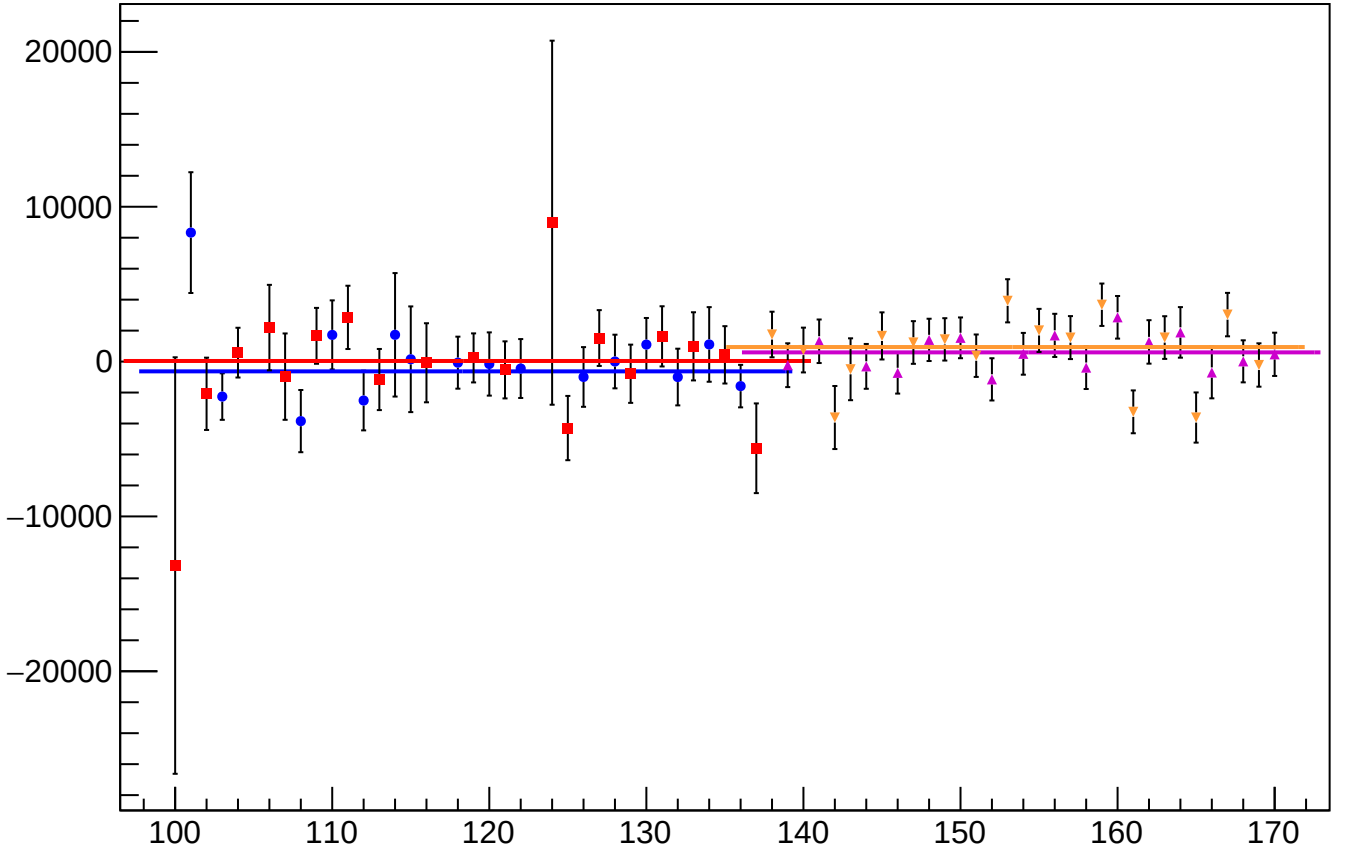
Left In: 4098.636+/-0.817 $\chi^2$/NDF:1087016.1/15

\+ sign 3475.676+/-0.567 $\chi^2$/NDF: 3274304.4/32

All: 3462.357+/-0.401 $\chi^2$/NDF: 7080182.5/67

\- sign 3449.079+/-0.566 $\chi^2$/NDF: 3804776.3/34

# cor_asym_atl_dd_atr_dd_avg_mean vs Slug




Right In: -631.427+/-488.663 $\chi^2$/NDF: 13.9/15

Left Out: 939.089+/-353.814 $\chi^2$/NDF:35.9/16

Right Out: 38.623+/-488.084 $\chi^2$/NDF: 16.3/18

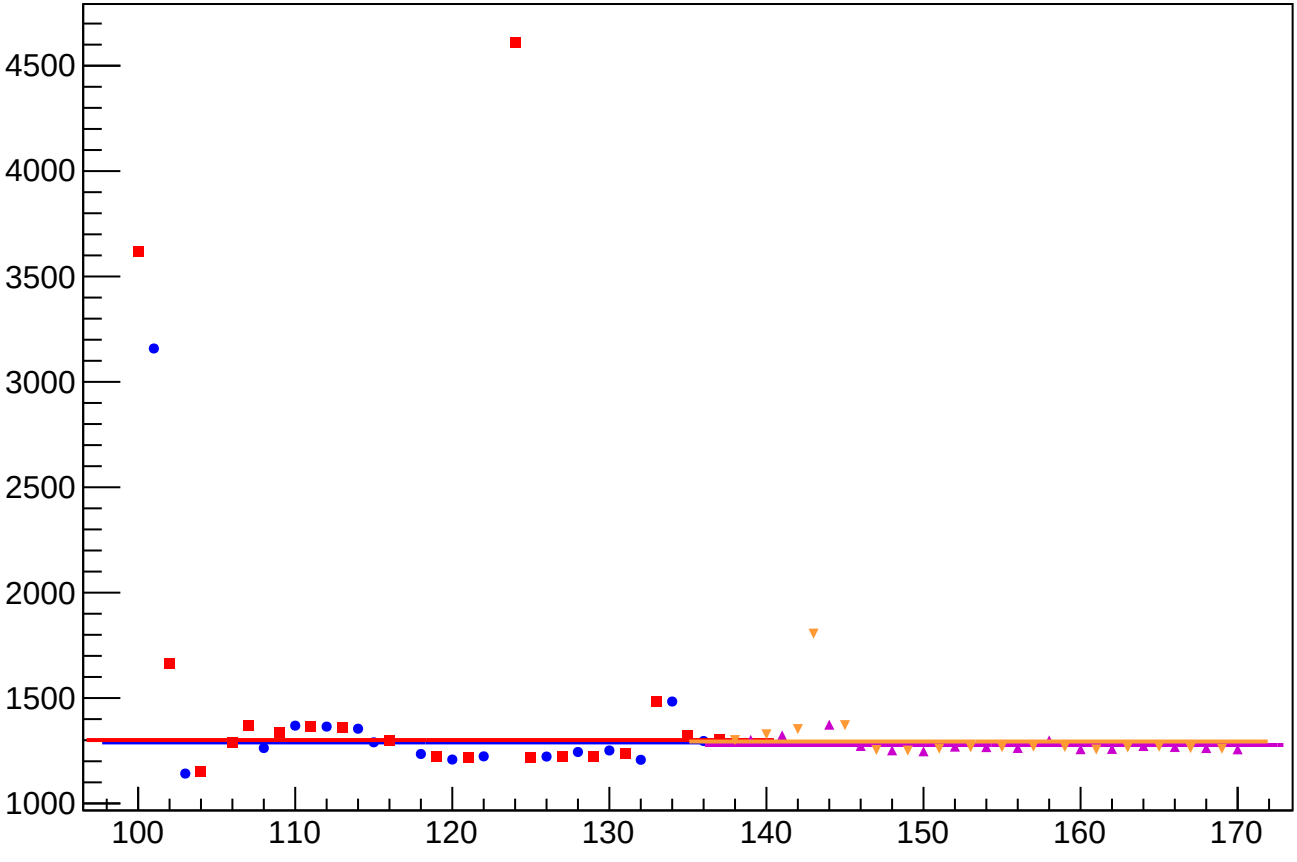
Left In: 594.460+/-351.364 $\chi^2$/NDF:9.9/15

+ sign 398.932+/-286.582 $\chi^2$/NDF: 56.6/32

All: 401.846+/-202.139 $\chi^2$/NDF: 83.7/67

- sign 404.731+/-285.160 $\chi^2$/NDF: 27.1/34

# cor_asym_atl_dd_atr_dd_avg_rms vs Slug




Right In: 1289.466+/-0.346 $\chi^2$/NDF: 514676.5/15

Left Out: 1293.789+/-0.250 $\chi^2$/NDF:151885.4/16

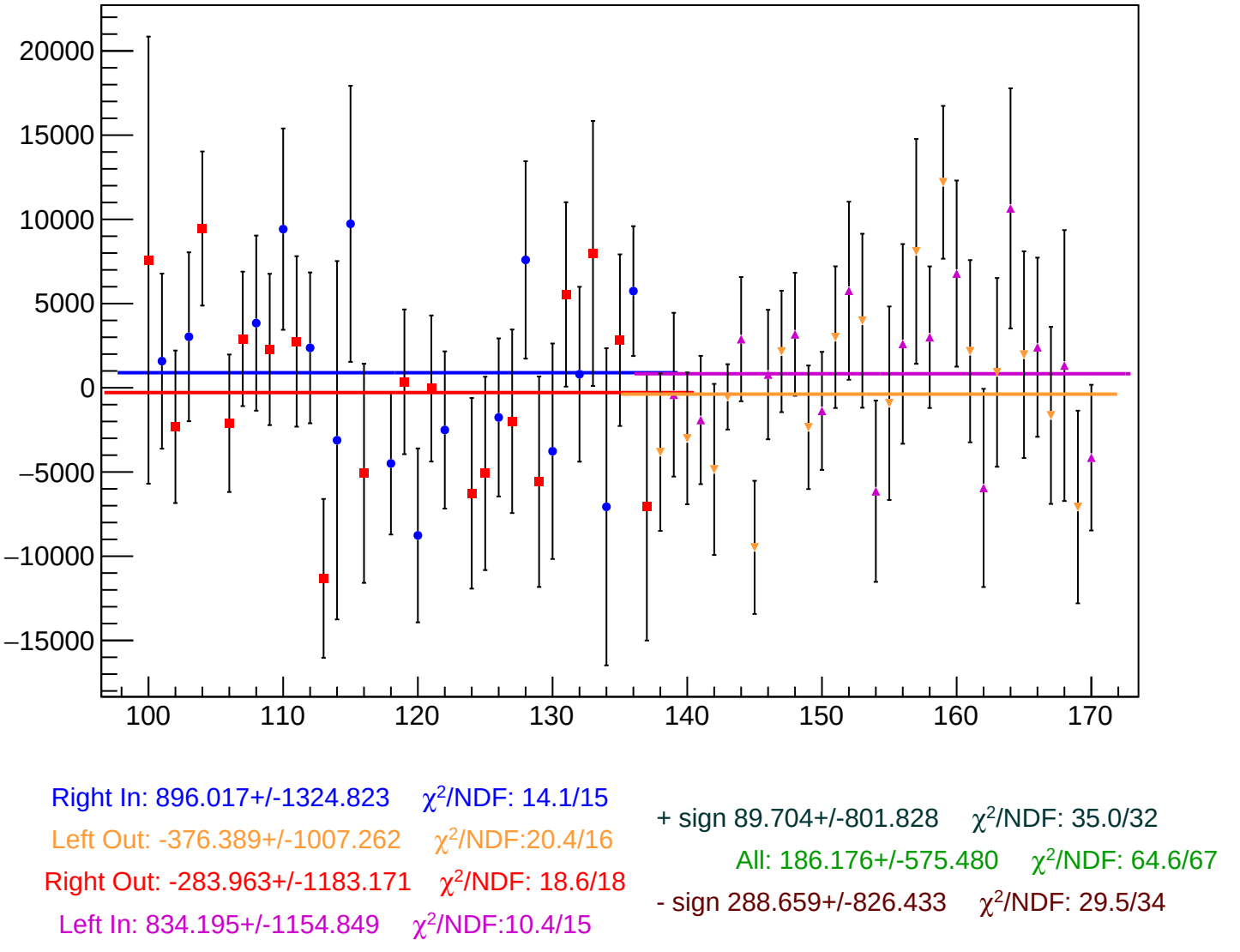
Right Out: 1300.684+/-0.344 $\chi^2$/NDF: 325907.6/18

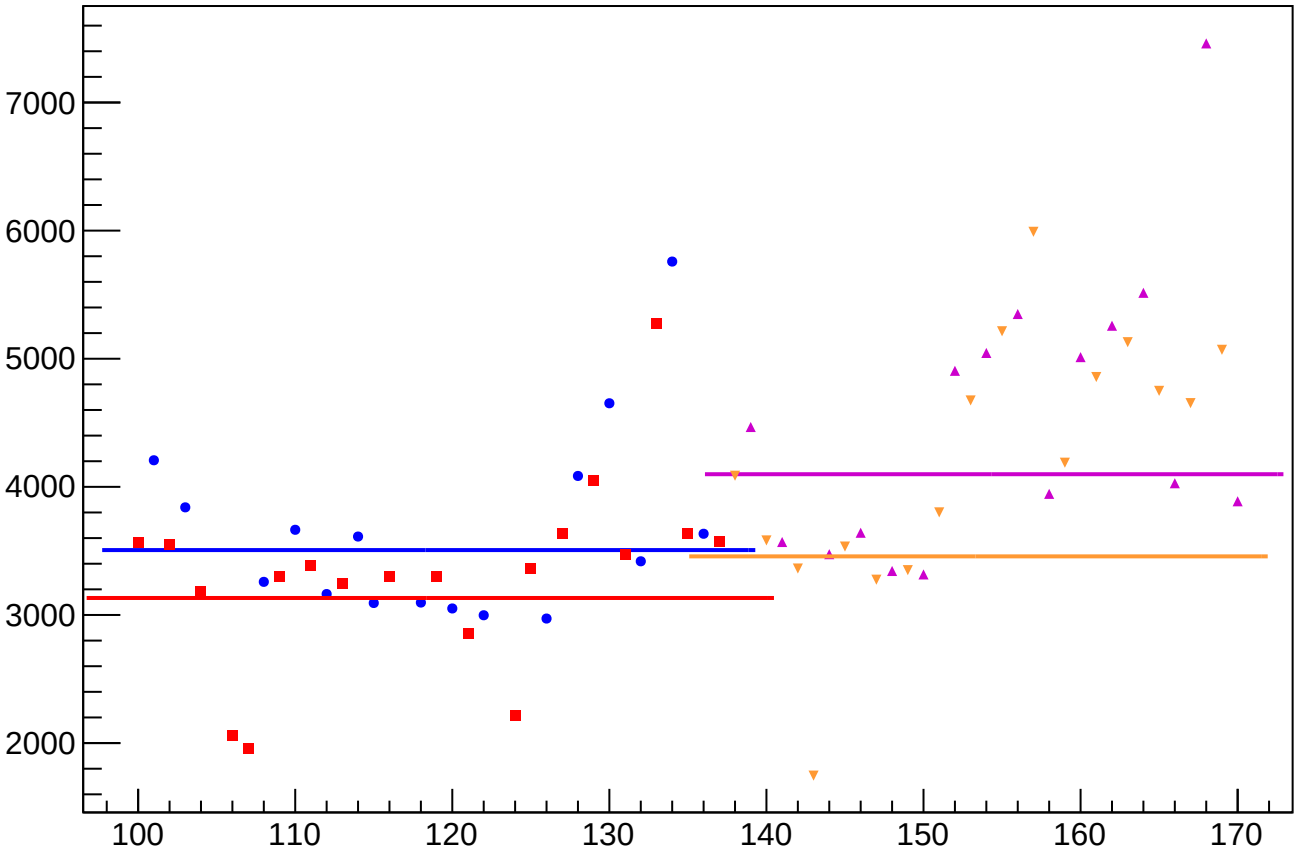
Left In: 1277.240+/-0.248 $\chi^2$/NDF:15662.6/15

+ sign 1292.302+/-0.203 $\chi^2$/NDF: 666664.6/32

All: 1288.762+/-0.143 $\chi^2$/NDF: 1011888.4/67

- sign 1285.262+/-0.202 $\chi^2$/NDF: 344616.9/34


asym_atl_dd_atr_dd_avg_cor_correction_mean vs Slug
20000
15000
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: 896.017+/-1324.823 χ²/NDF: 14.1/15
Left Out: -376.389+/-1007.262 χ²/NDF:20.4/16
Right Out: -283.963+/-1183.171 χ²/NDF: 18.6/18
Left In: 834.195+/-1154.849 χ²/NDF:10.4/15
+ sign 89.704+/-801.828 χ²/NDF: 35.0/32
All: 186.176+/-575.480 χ²/NDF: 64.6/67
- sign 288.659+/-826.433 χ²/NDF: 29.5/34




Right In: 3506.484+/-0.937 $\chi^2$/NDF: 353237.7/15

Left Out: 3457.343+/-0.712 $\chi^2$/NDF:2918548.6/16

Right Out: 3132.586+/-0.837 $\chi^2$/NDF: 649611.1/18

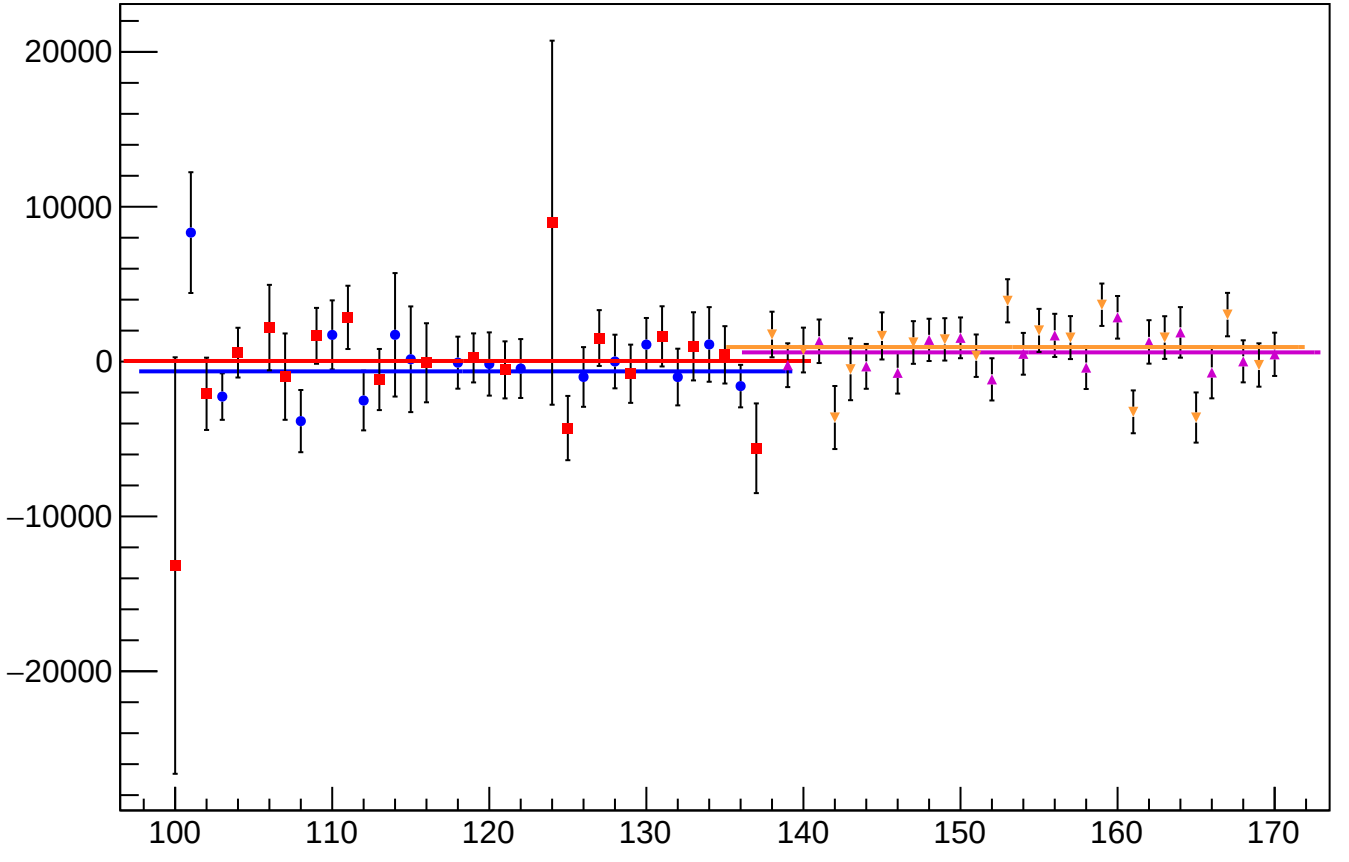
Left In: 4098.631+/-0.817 $\chi^2$/NDF:1087017.8/15

+ sign 3475.344+/-0.567 $\chi^2$/NDF: 3273530.0/32

All: 3549.031+/-0.407 $\chi^2$/NDF: 5727793.9/67

- sign 3627.310+/-0.584 $\chi^2$/NDF: 2419429.9/34

# eigen_cor_asym_atl_dd_atr_dd_avg_mean vs Slug




Right In: -631.427+/-488.663 $\chi^2$/NDF: 13.9/15

Left Out: 939.089+/-353.814 $\chi^2$/NDF:35.9/16

Right Out: 38.623+/-488.084 $\chi^2$/NDF: 16.3/18

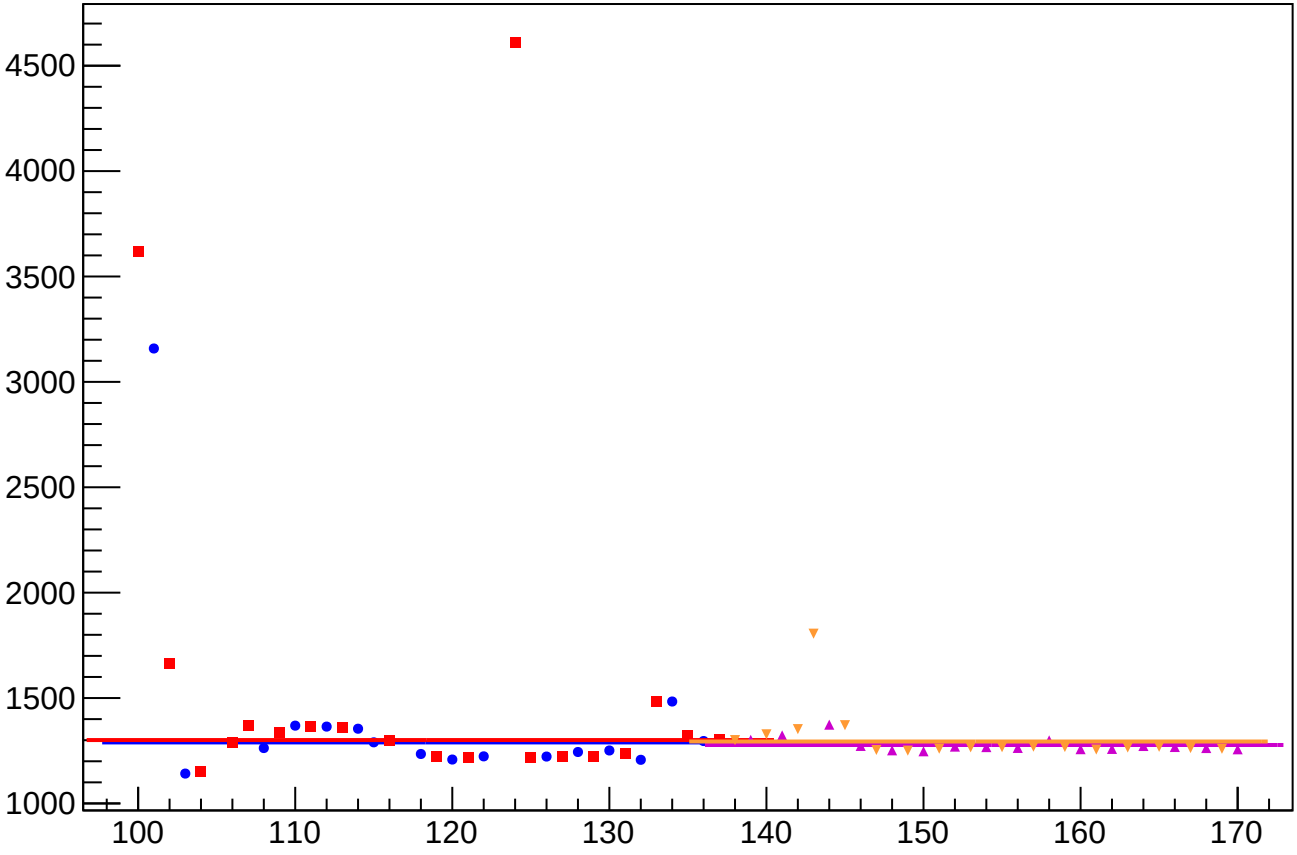
Left In: 594.460+/-351.364 $\chi^2$/NDF:9.9/15

+ sign 398.932+/-286.582 $\chi^2$/NDF: 56.6/32

All: 401.846+/-202.139 $\chi^2$/NDF: 83.7/67

- sign 404.731+/-285.160 $\chi^2$/NDF: 27.1/34

# eigen_cor_asym_atl_dd_atr_dd_avg_rms vs Slug




Right In: 1289.466+/-0.346 $\chi^2$/NDF: 514676.5/15

Left Out: 1293.789+/-0.250 $\chi^2$/NDF:151885.4/16

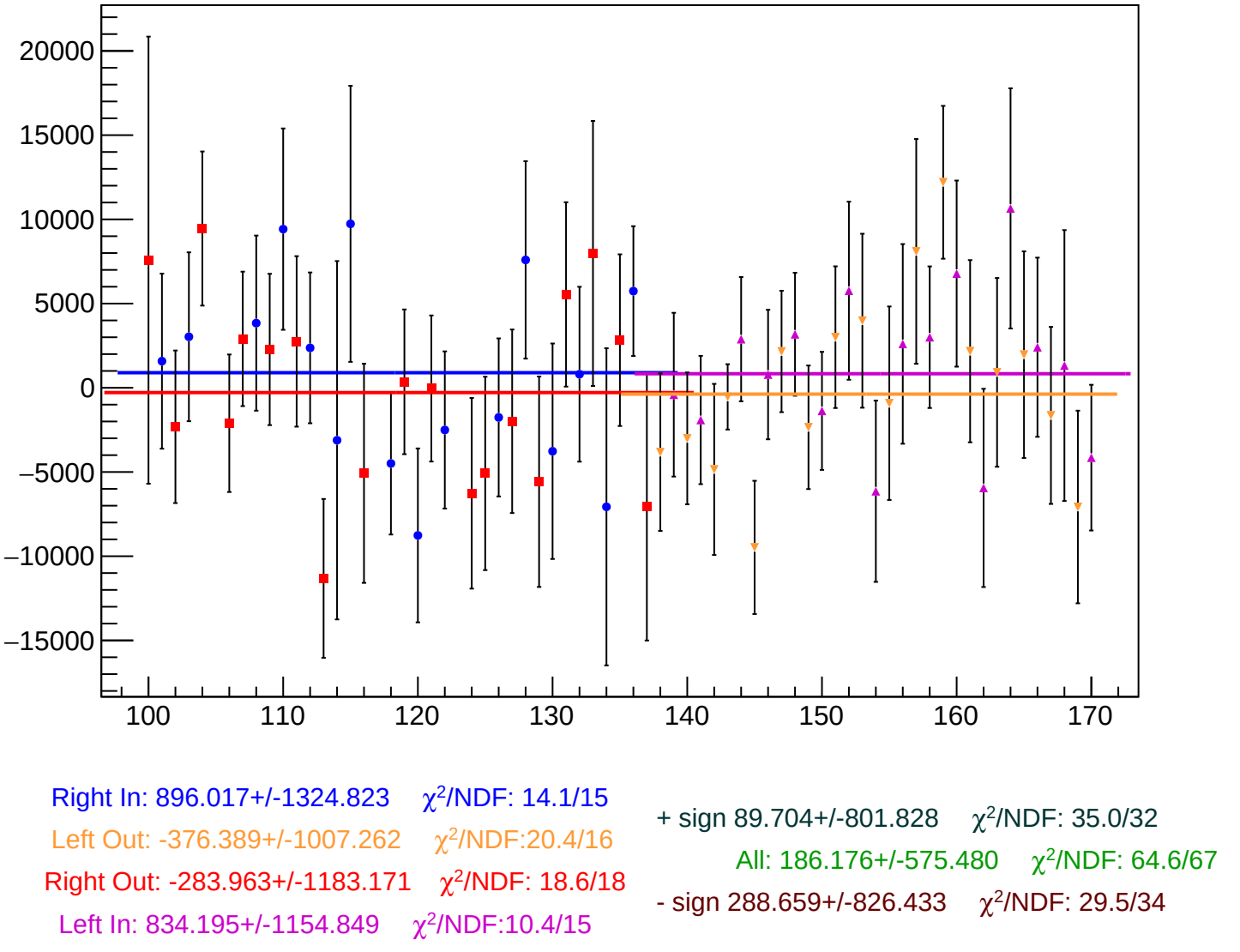
Right Out: 1300.684+/-0.344 $\chi^2$/NDF: 325907.6/18

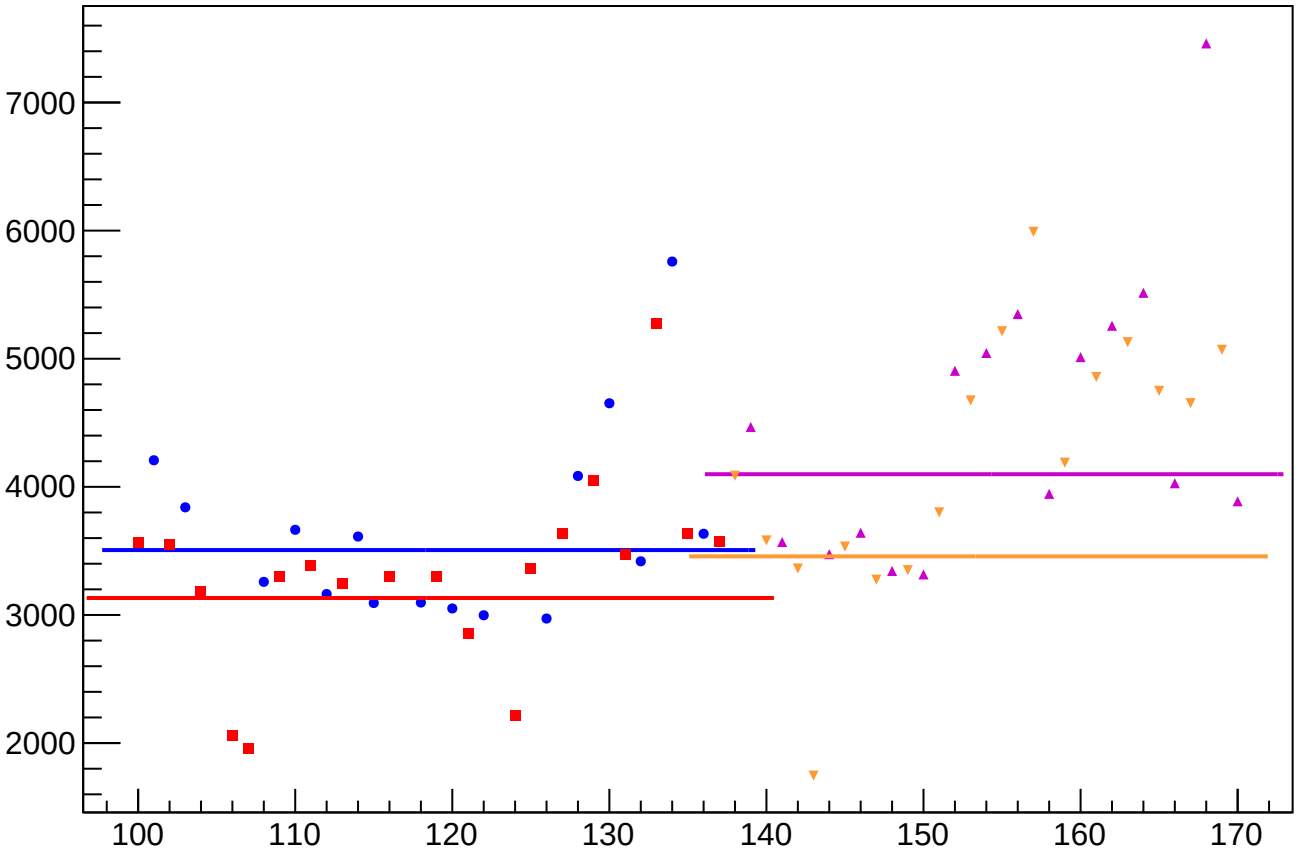
Left In: 1277.240+/-0.248 $\chi^2$/NDF:15662.6/15

+ sign 1292.302+/-0.203 $\chi^2$/NDF: 666664.6/32

All: 1288.762+/-0.143 $\chi^2$/NDF: 1011888.4/67

- sign 1285.262+/-0.202 $\chi^2$/NDF: 344616.9/34


asym_atl_dd_atr_dd_avg_eigen_cor_correction_mean vs Slug
20000
15000
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: 896.017+/-1324.823 χ²/NDF: 14.1/15
Left Out: -376.389+/-1007.262 χ²/NDF:20.4/16
Right Out: -283.963+/-1183.171 χ²/NDF: 18.6/18
Left In: 834.195+/-1154.849 χ²/NDF:10.4/15
+ sign 89.704+/-801.828 χ²/NDF: 35.0/32
All: 186.176+/-575.480 χ²/NDF: 64.6/67
- sign 288.659+/-826.433 χ²/NDF: 29.5/34




Right In: 3506.484+/-0.937 $\chi^2$/NDF: 353237.7/15

Left Out: 3457.343+/-0.712 $\chi^2$/NDF:2918548.6/16

Right Out: 3132.586+/-0.837 $\chi^2$/NDF: 649611.1/18

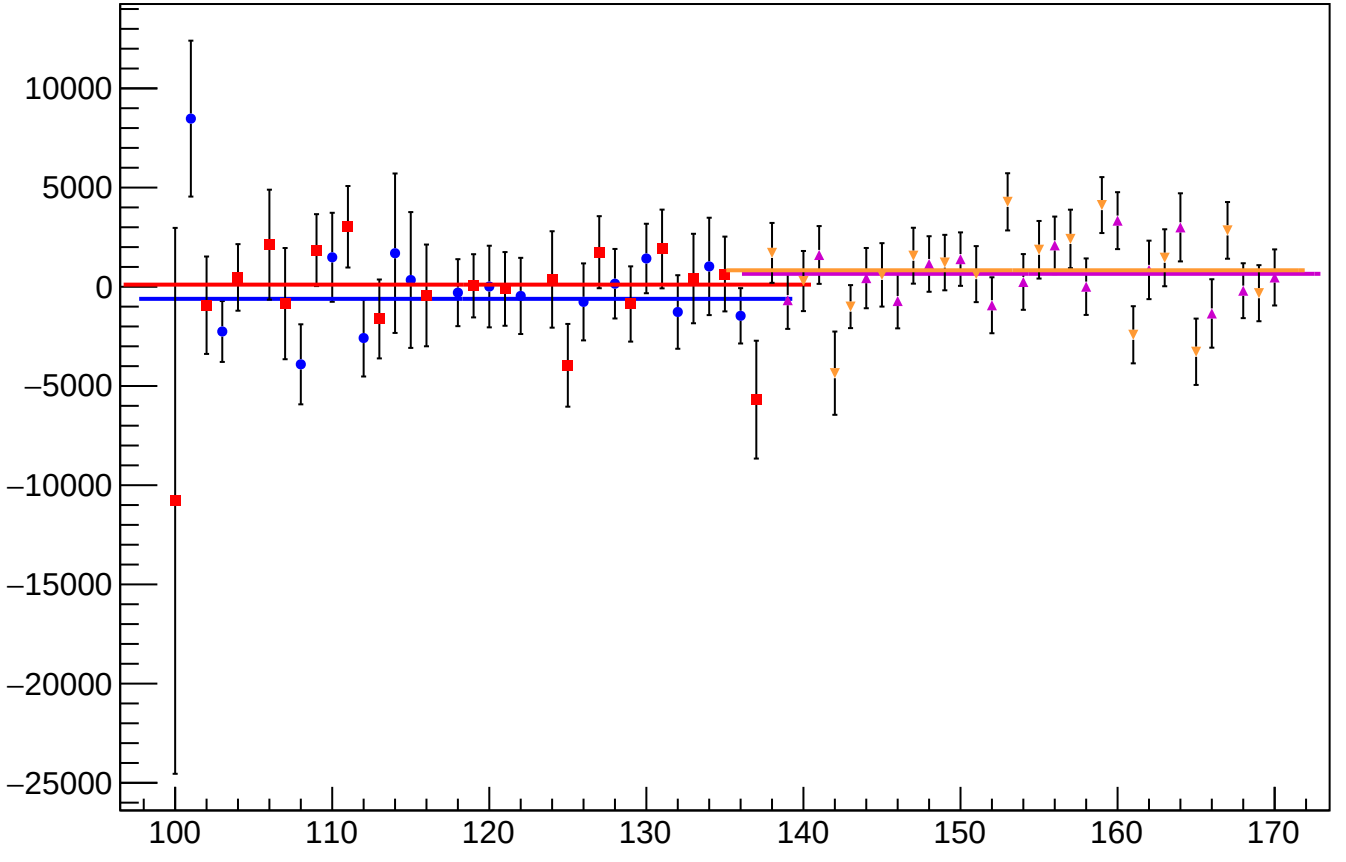
Left In: 4098.631+/-0.817 $\chi^2$/NDF:1087017.8/15

+ sign 3475.344+/-0.567 $\chi^2$/NDF: 3273530.0/32

All: 3549.031+/-0.407 $\chi^2$/NDF: 5727793.9/67

- sign 3627.310+/-0.584 $\chi^2$/NDF: 2419429.9/34

# dit_asym_atl_dd_atr_dd_avg_mean vs Slug




Right In: -607.831+/-494.182 $\chi^2$/NDF: 14.1/15

Left Out: 832.149+/-351.448 $\chi^2$/NDF:36.6/16

Right Out: 108.614+/-485.552 $\chi^2$/NDF: 14.9/18

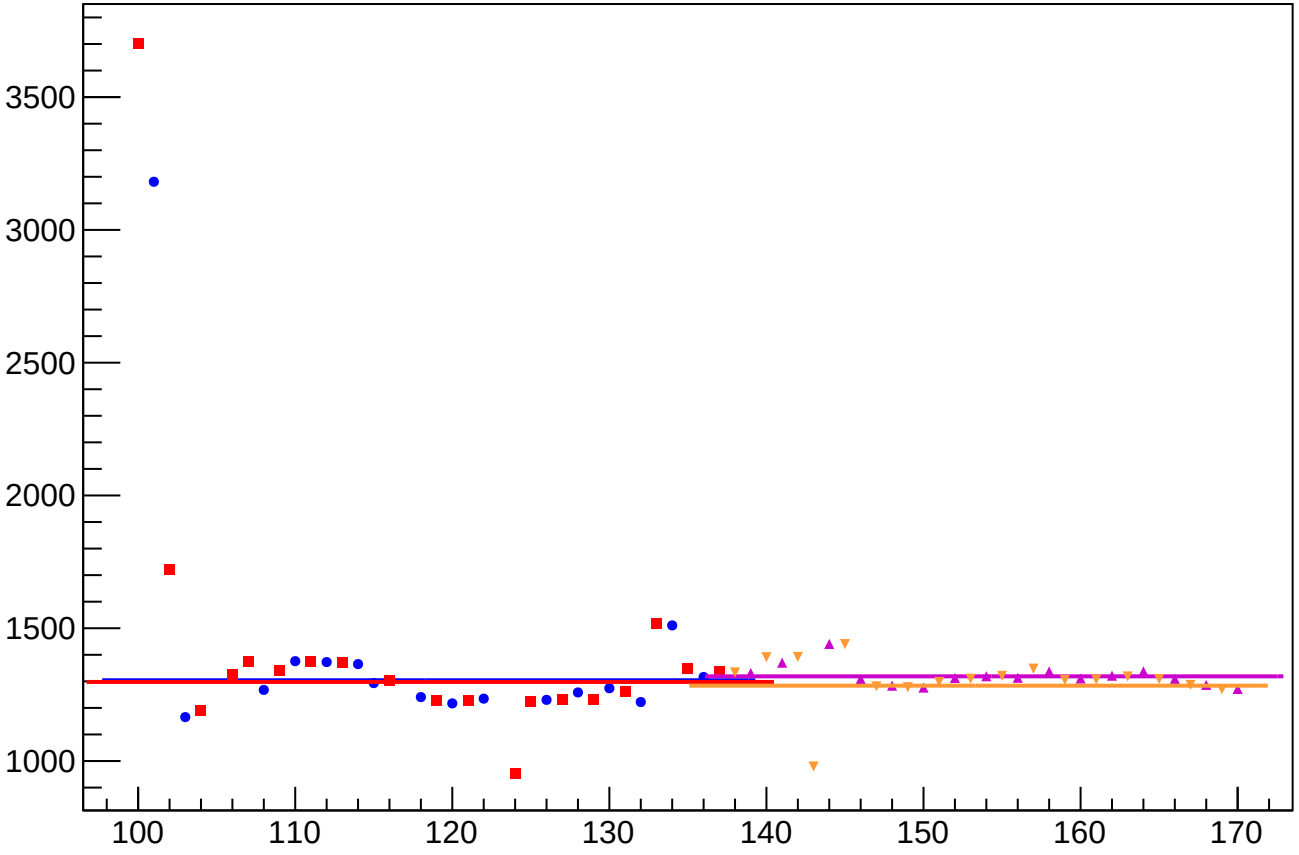
Left In: 653.590+/-362.908 $\chi^2$/NDF:12.3/15

+ sign 348.481+/-286.406 $\chi^2$/NDF: 56.4/32

All: 402.559+/-204.016 $\chi^2$/NDF: 84.4/67

- sign 458.266+/-290.687 $\chi^2$/NDF: 28.0/34

# dit_asym_atl_dd_atr_dd_avg_rms vs Slug




Right In: 1304.102+/-0.349 $\chi^2$/NDF: 510589.4/15

Left Out: 1283.747+/-0.249 $\chi^2$/NDF:203238.3/16

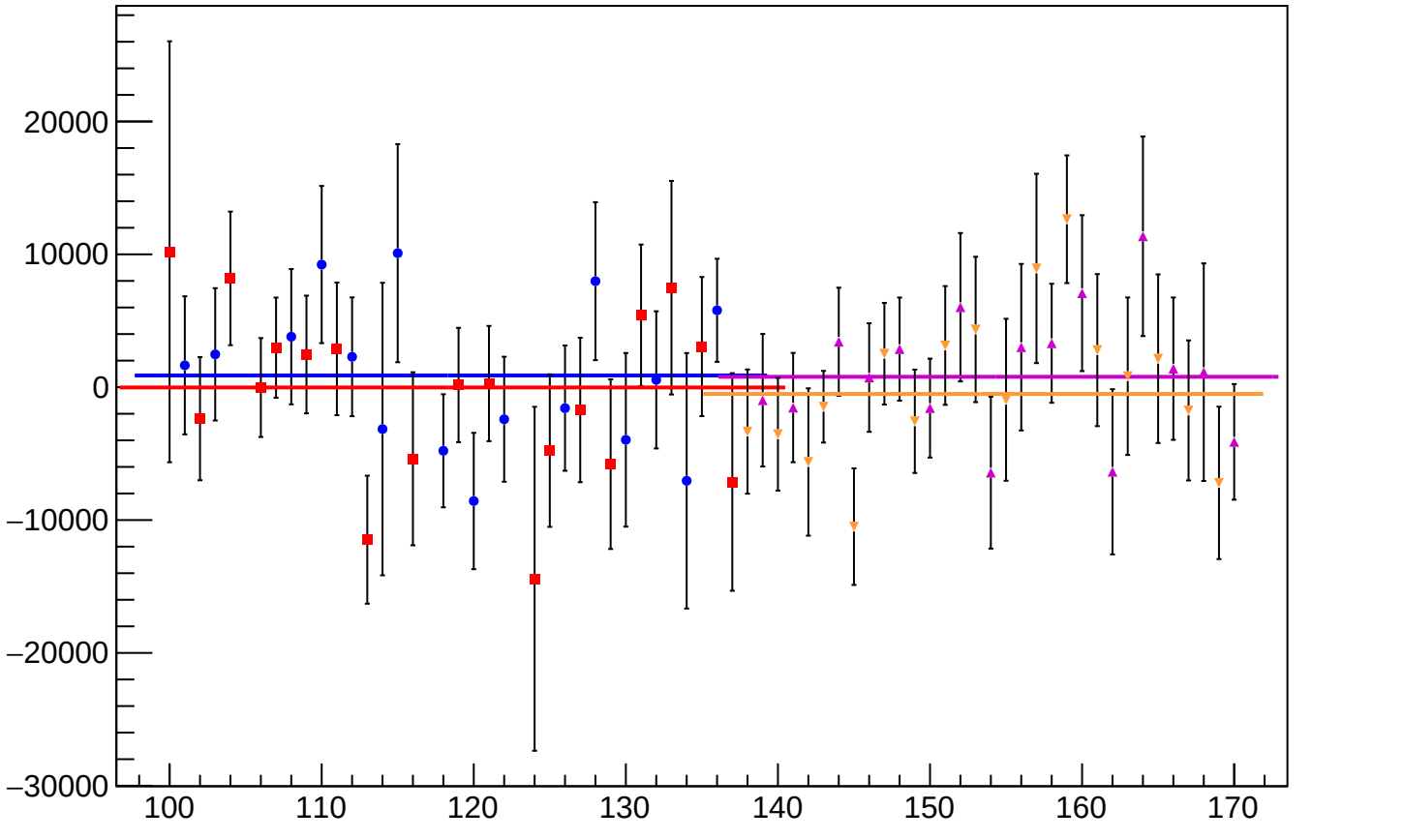
Right Out: 1297.796+/-0.343 $\chi^2$/NDF: 213096.9/18

Left In: 1318.907+/-0.257 $\chi^2$/NDF:23031.0/15

+ sign 1290.584+/-0.203 $\chi^2$/NDF: 716081.3/32

All: 1300.807+/-0.144 $\chi^2$/NDF: 959809.3/67

- sign 1311.333+/-0.205 $\chi^2$/NDF: 238555.8/34




Right In: 884.058+/-1327.399 $\chi^2$/NDF: 14.1/15

Left Out: -508.088+/-1131.417 $\chi^2$/NDF:20.6/16

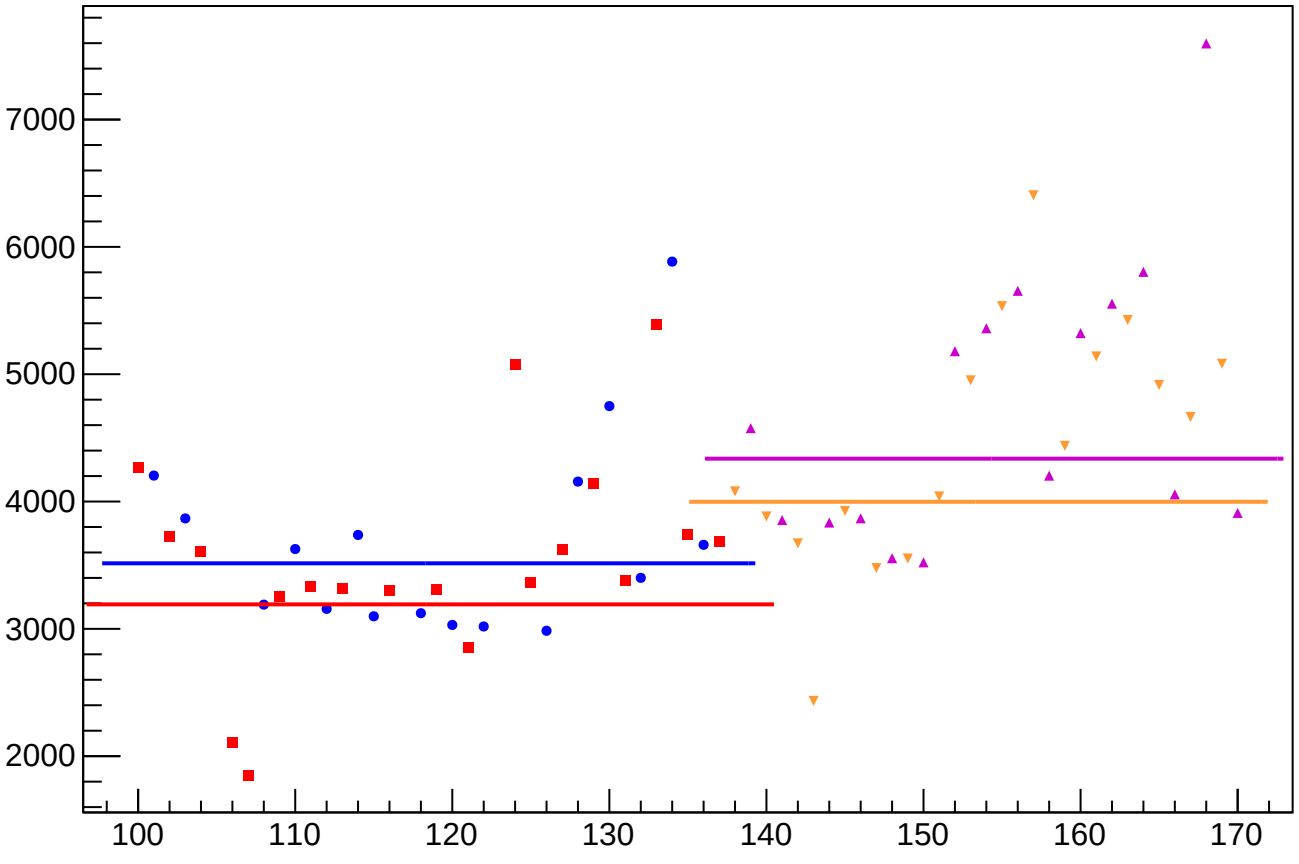
Right Out: -20.681+/-1200.015 $\chi^2$/NDF: 16.8/18

Left In: 782.966+/-1220.471 $\chi^2$/NDF:10.2/15

+ sign 77.723+/-861.069 $\chi^2$/NDF: 35.4/32

All: 226.968+/-606.953 $\chi^2$/NDF: 62.7/67

- sign 374.351+/-855.679 $\chi^2$/NDF: 27.3/34




Right In: 3514.746+/-0.939 $\chi^2$/NDF: 375078.6/15

Left Out: 3997.981+/-0.800 $\chi^2$/NDF:1518888.0/16

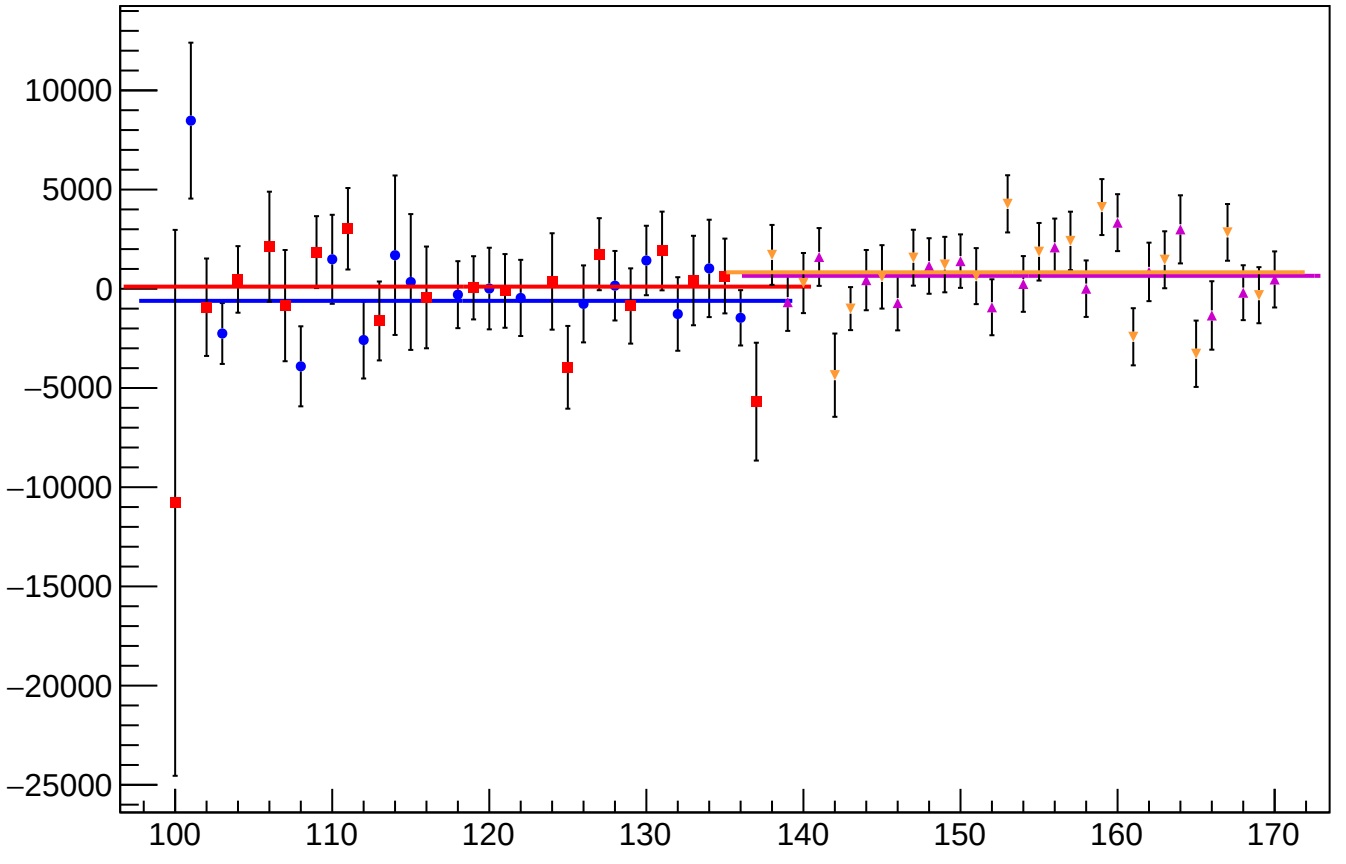
Right Out: 3192.203+/-0.849 $\chi^2$/NDF: 772495.7/18

Left In: 4336.689+/-0.863 $\chi^2$/NDF:1017162.9/15

+ sign 3794.637+/-0.609 $\chi^2$/NDF: 2047490.0/32

All: 3774.580+/-0.429 $\chi^2$/NDF: 4733525.4/67

- sign 3754.775+/-0.605 $\chi^2$/NDF: 2683878.8/34




Right In: -607.834+/-494.182 $\chi^2$/NDF: 14.1/15

Left Out: 832.154+/-351.448 $\chi^2$/NDF:36.6/16

Right Out: 108.619+/-485.553 $\chi^2$/NDF: 14.9/18

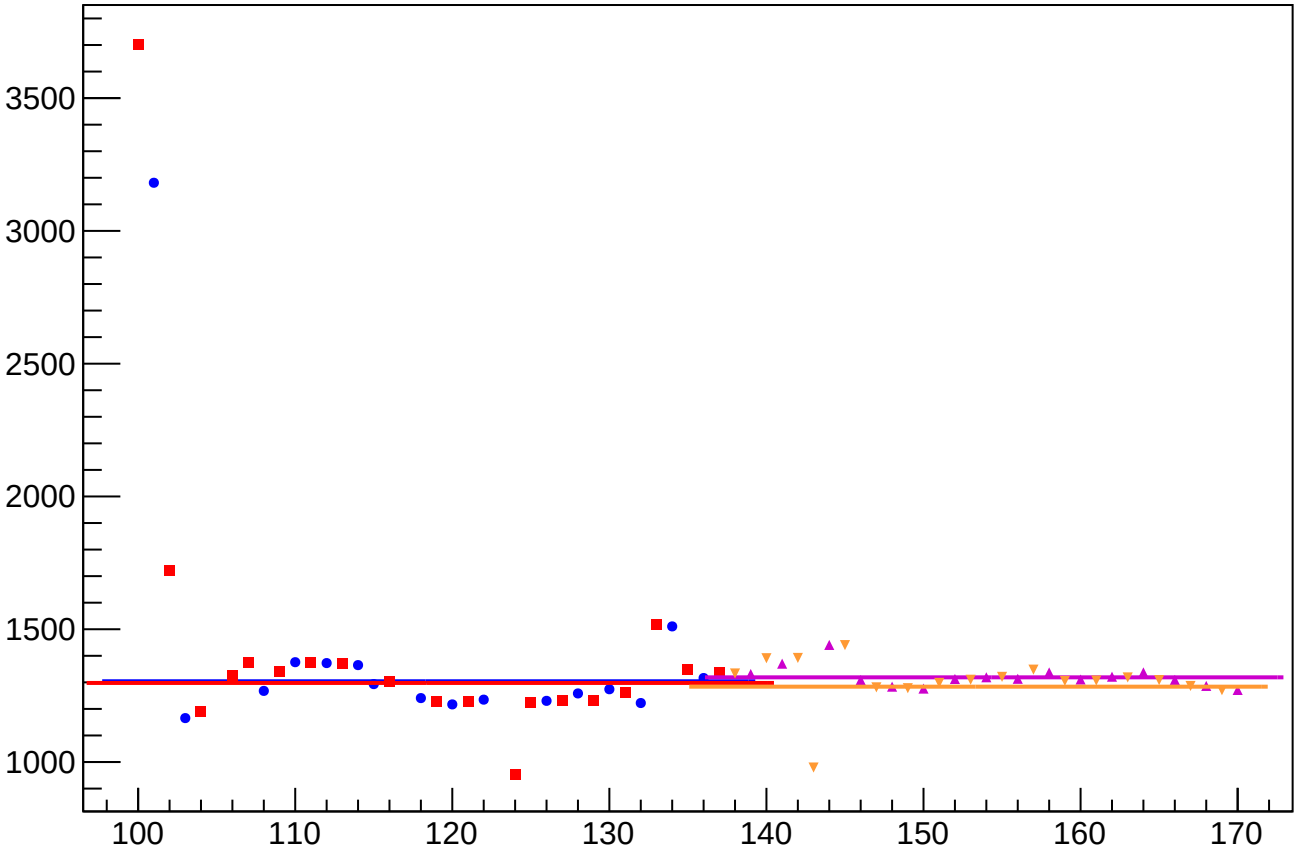
Left In: 653.591+/-362.908 $\chi^2$/NDF:12.3/15

+ sign 348.483+/-286.406 $\chi^2$/NDF: 56.4/32

All: 402.561+/-204.016 $\chi^2$/NDF: 84.4/67

- sign 458.268+/-290.687 $\chi^2$/NDF: 28.0/34

# eigen_dit_asym_atl_dd_atr_dd_avg_rms vs Slug




Right In: 1304.102+/-0.349 $\chi^2$/NDF: 510589.6/15

Left Out: 1283.748+/-0.249 $\chi^2$/NDF:203239.1/16

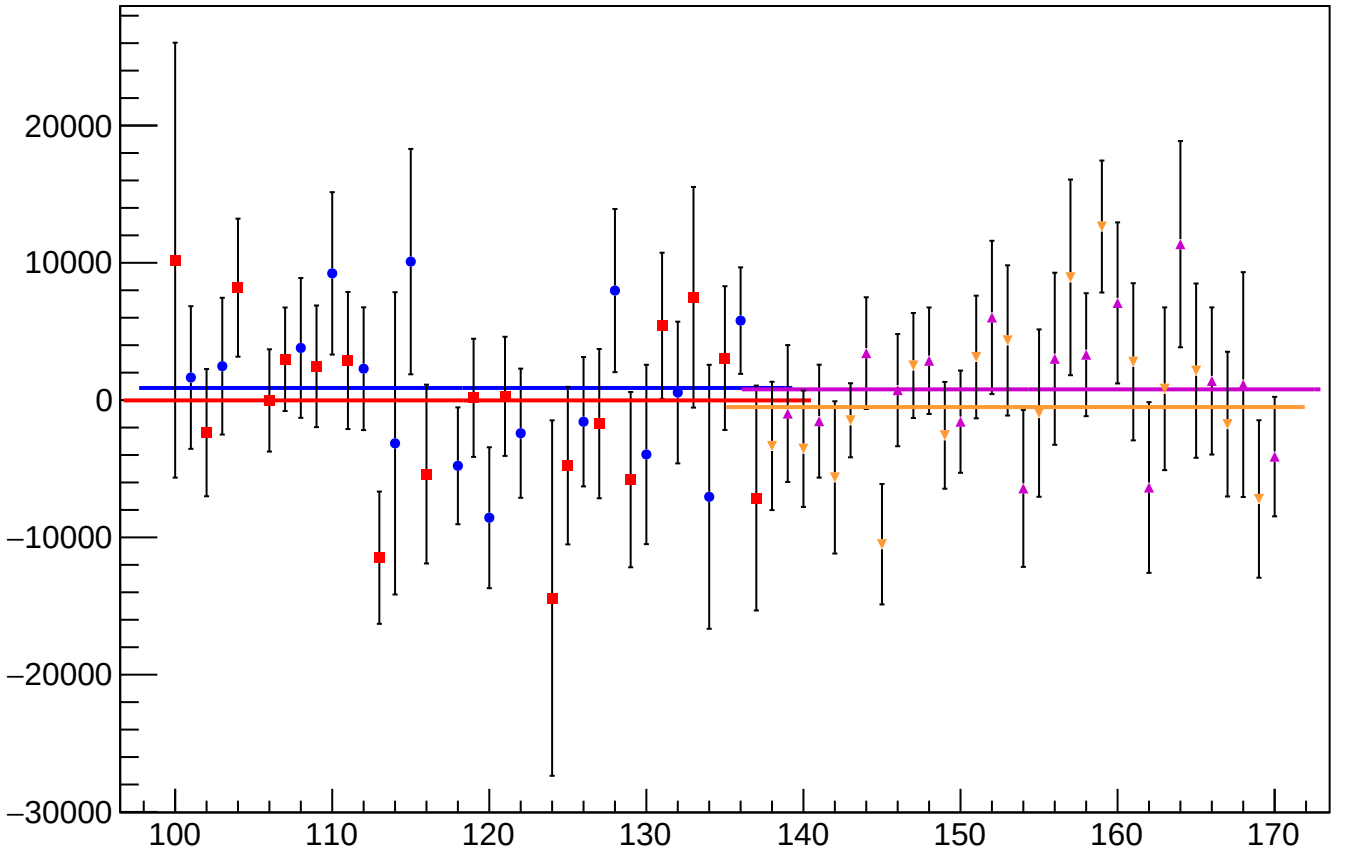
Right Out: 1297.796+/-0.343 $\chi^2$/NDF: 213097.0/18

Left In: 1318.908+/-0.257 $\chi^2$/NDF:23031.2/15

+ sign 1290.585+/-0.203 $\chi^2$/NDF: 716082.0/32

All: 1300.808+/-0.144 $\chi^2$/NDF: 959810.5/67

- sign 1311.334+/-0.205 $\chi^2$/NDF: 238556.4/34




Right In: 884.047+/-1327.396 $\chi^2$/NDF: 14.1/15

Left Out: -508.085+/-1131.418 $\chi^2$/NDF:20.6/16

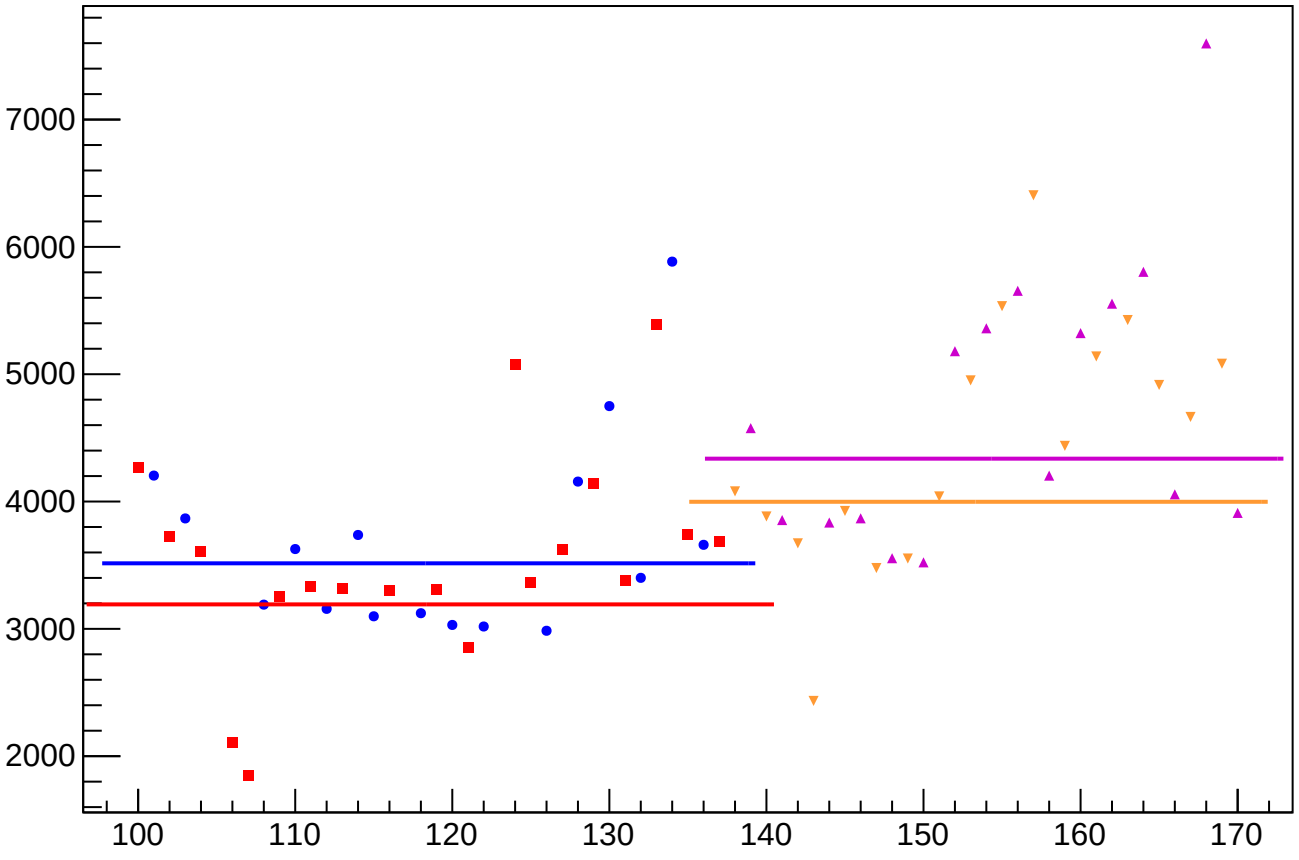
Right Out: -20.677+/-1200.012 $\chi^2$/NDF: 16.8/18

Left In: 782.965+/-1220.473 $\chi^2$/NDF:10.2/15

\+ sign 77.723+/-861.069 $\chi^2$/NDF: 35.4/32

All: 226.968+/-606.953 $\chi^2$/NDF: 62.7/67

\- sign 374.351+/-855.679 $\chi^2$/NDF: 27.3/34




Right In: 3514.737+/-0.939 $\chi^2$/NDF: 375082.8/15

Left Out: 3997.986+/-0.800 $\chi^2$/NDF:1518889.2/16

Right Out: 3192.196+/-0.849 $\chi^2$/NDF: 772497.9/18

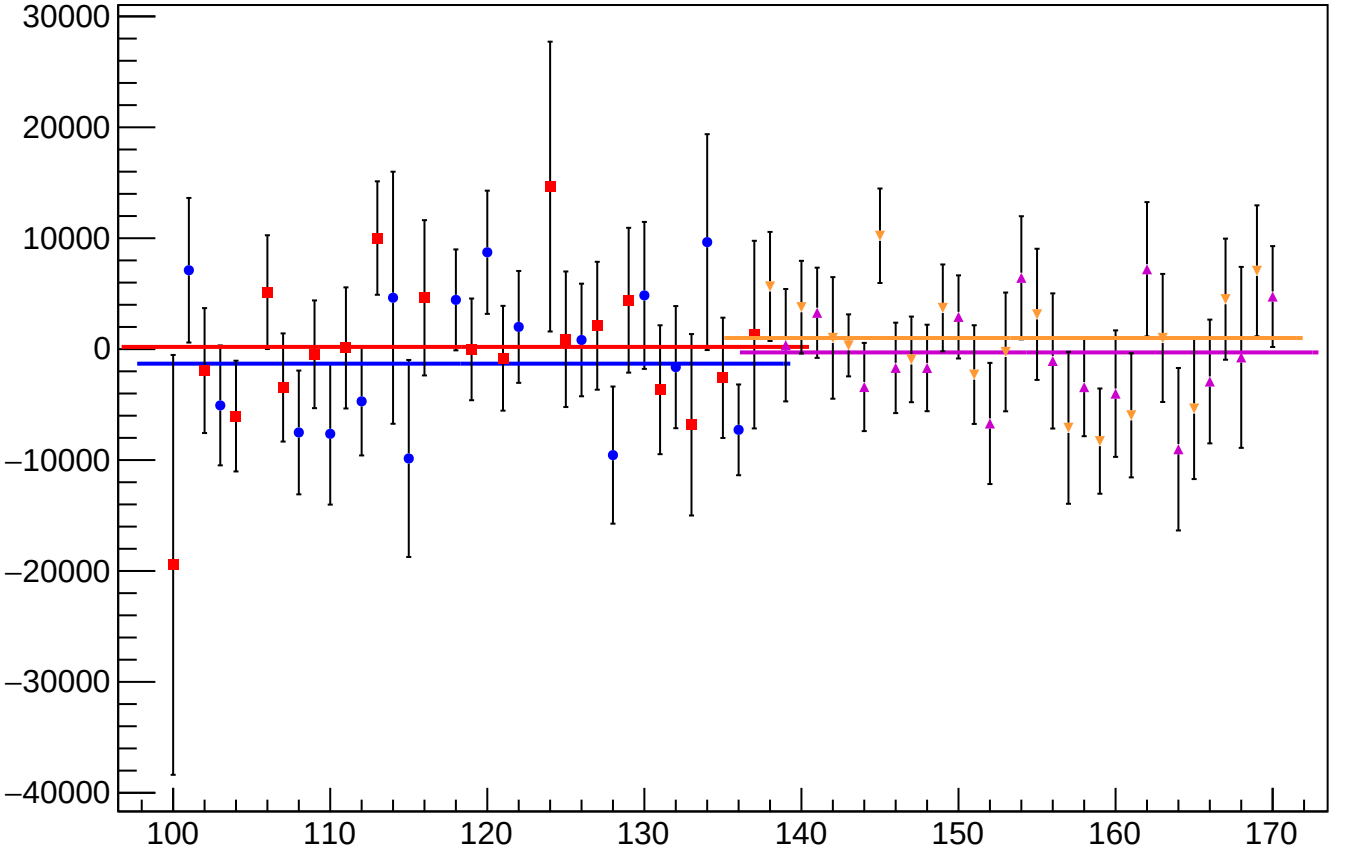
Left In: 4336.695+/-0.863 $\chi^2$/NDF:1017165.3/15

+ sign 3794.635+/-0.609 $\chi^2$/NDF: 2047505.0/32

All: 3774.578+/-0.429 $\chi^2$/NDF: 4733567.2/67

- sign 3754.771+/-0.605 $\chi^2$/NDF: 2683905.5/34

# asym_atl_dd_atr_dd_avg_mean vs Slug




Right In: -1309.349+/-1431.624 $\chi^2$/NDF: 17.6/15

Left Out: 1002.840+/-1135.187 $\chi^2$/NDF:16.8/16

Right Out: 201.593+/-1336.062 $\chi^2$/NDF: 11.6/18

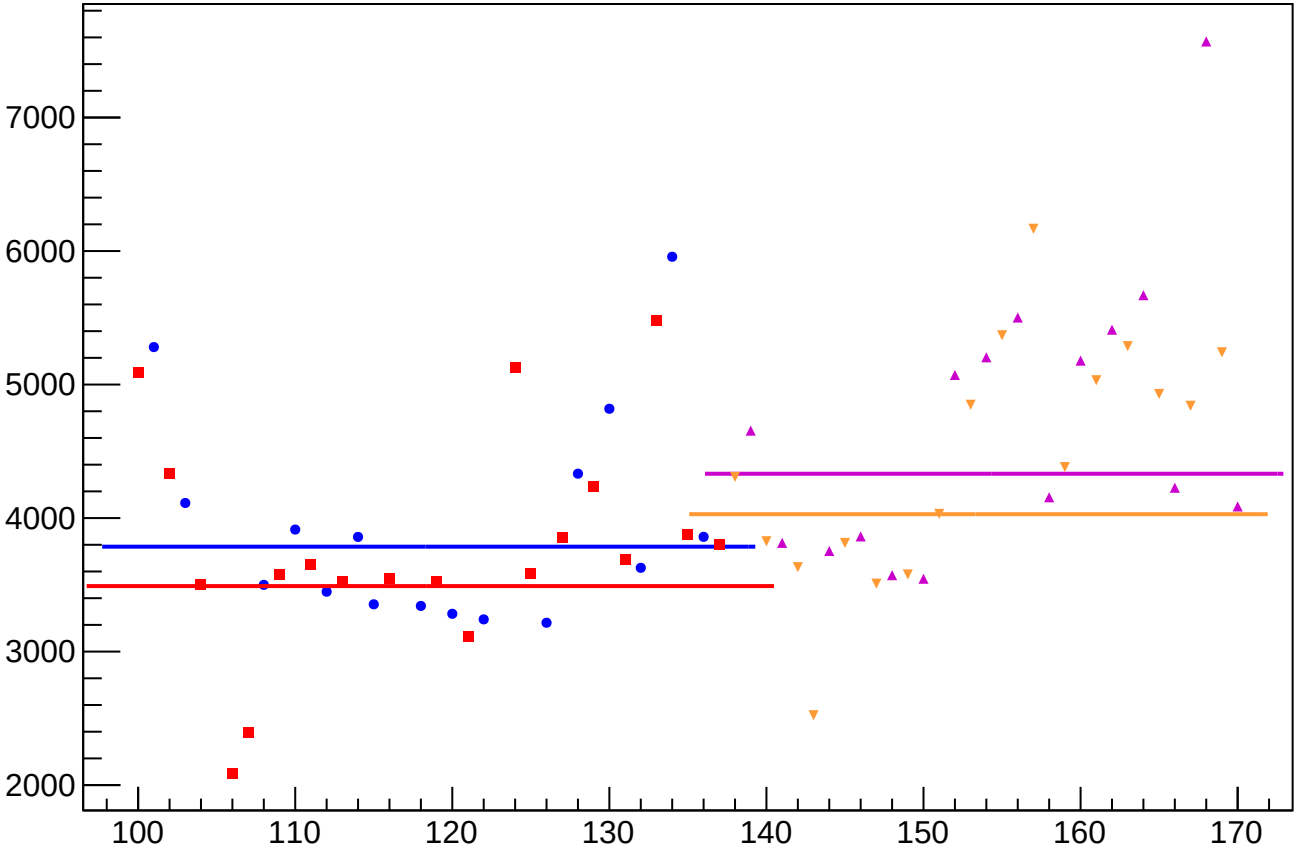
Left In: -295.262+/-1216.245 $\chi^2$/NDF:10.6/15

+ sign 110.262+/-889.488 $\chi^2$/NDF: 36.0/32

All: 21.076+/-632.438 $\chi^2$/NDF: 58.3/67

- sign -70.108+/-899.398 $\chi^2$/NDF: 22.3/34

# asym_atl_dd_atr_dd_avg_rms vs Slug




Right In: 3785.774+/-1.012 $\chi^2$/NDF: 382992.9/15

Left Out: 4029.140+/-0.803 $\chi^2$/NDF:1353686.2/16

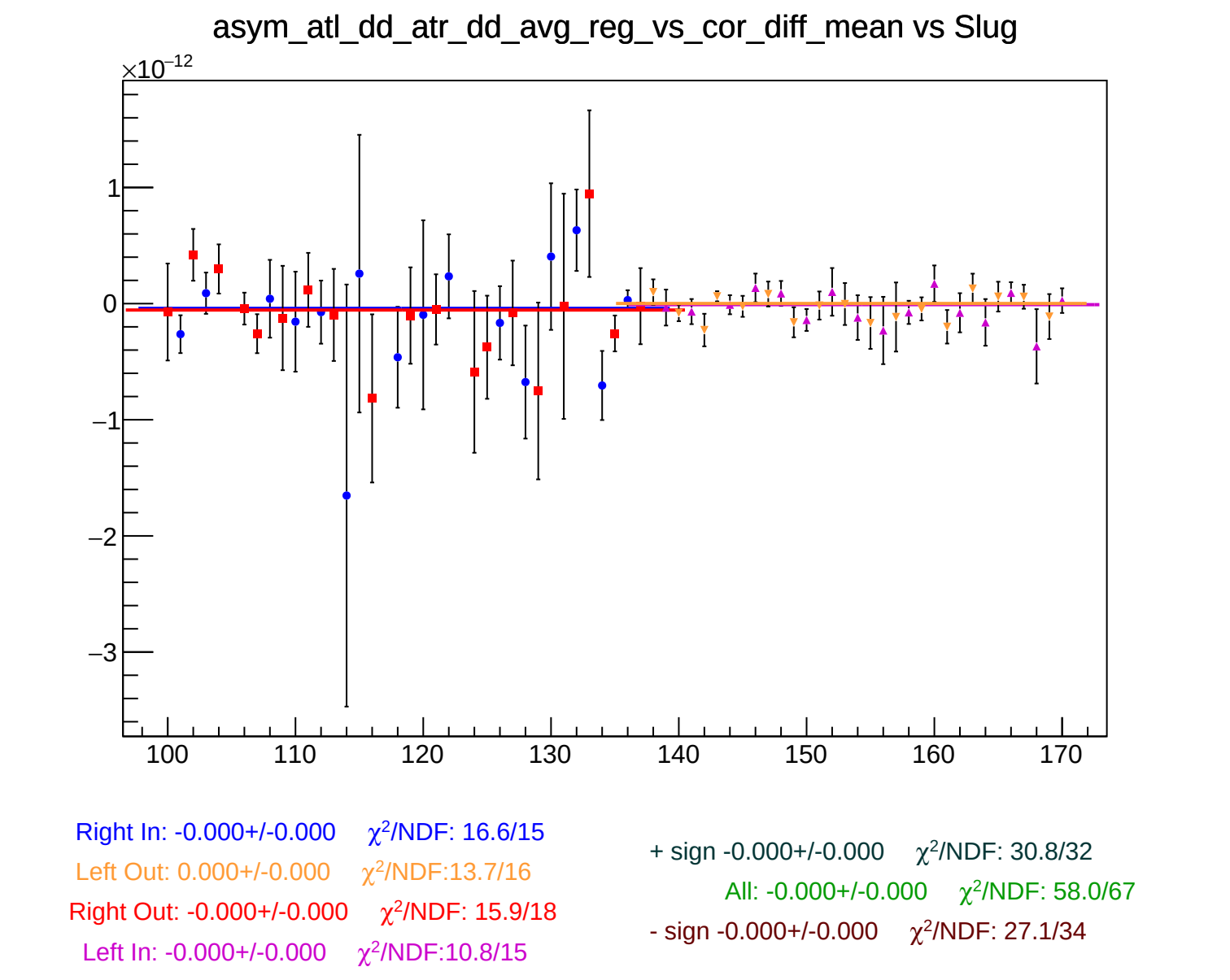
Right Out: 3490.614+/-0.932 $\chi^2$/NDF: 586715.1/18

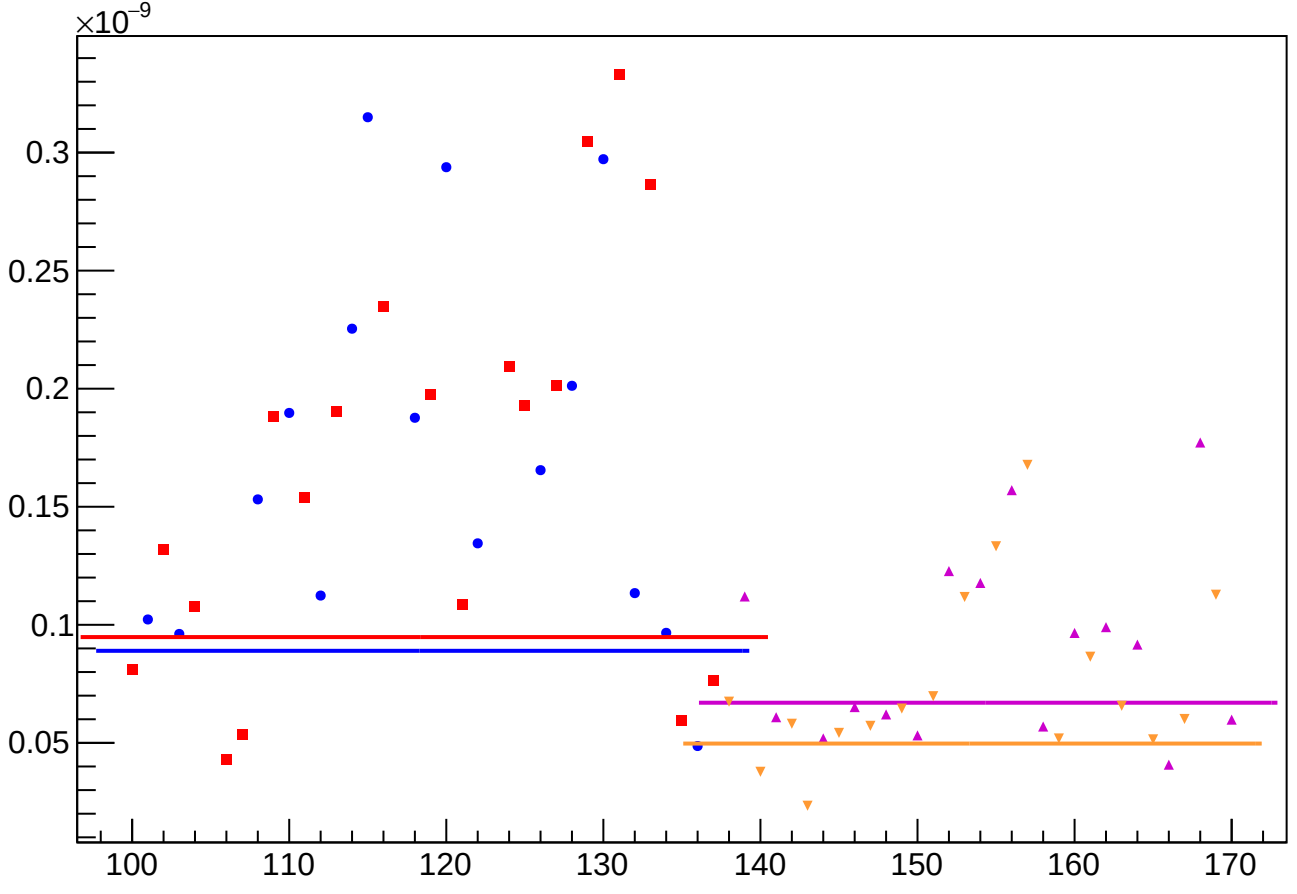
Left In: 4332.000+/-0.860 $\chi^2$/NDF:932259.8/15

+ sign 3935.192+/-0.629 $\chi^2$/NDF: 1772163.8/32

All: 3940.066+/-0.446 $\chi^2$/NDF: 3731518.9/67

- sign 3944.988+/-0.632 $\chi^2$/NDF: 1959234.4/34


asym_atl_dd_atr_dd_avg_reg_vs_cor_diff_mean vs Slug
×10^−12
1
0
−1
−2
−3
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 16.6/15
Left Out: 0.000+/-0.000 χ²/NDF:13.7/16
Right Out: -0.000+/-0.000 χ²/NDF: 15.9/18
Left In: -0.000+/-0.000 χ²/NDF:10.8/15
+ sign -0.000+/-0.000 χ²/NDF: 30.8/32
All: -0.000+/-0.000 χ²/NDF: 58.0/67
- sign -0.000+/-0.000 χ²/NDF: 27.1/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1460718.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2157329.3/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1734601.4/18

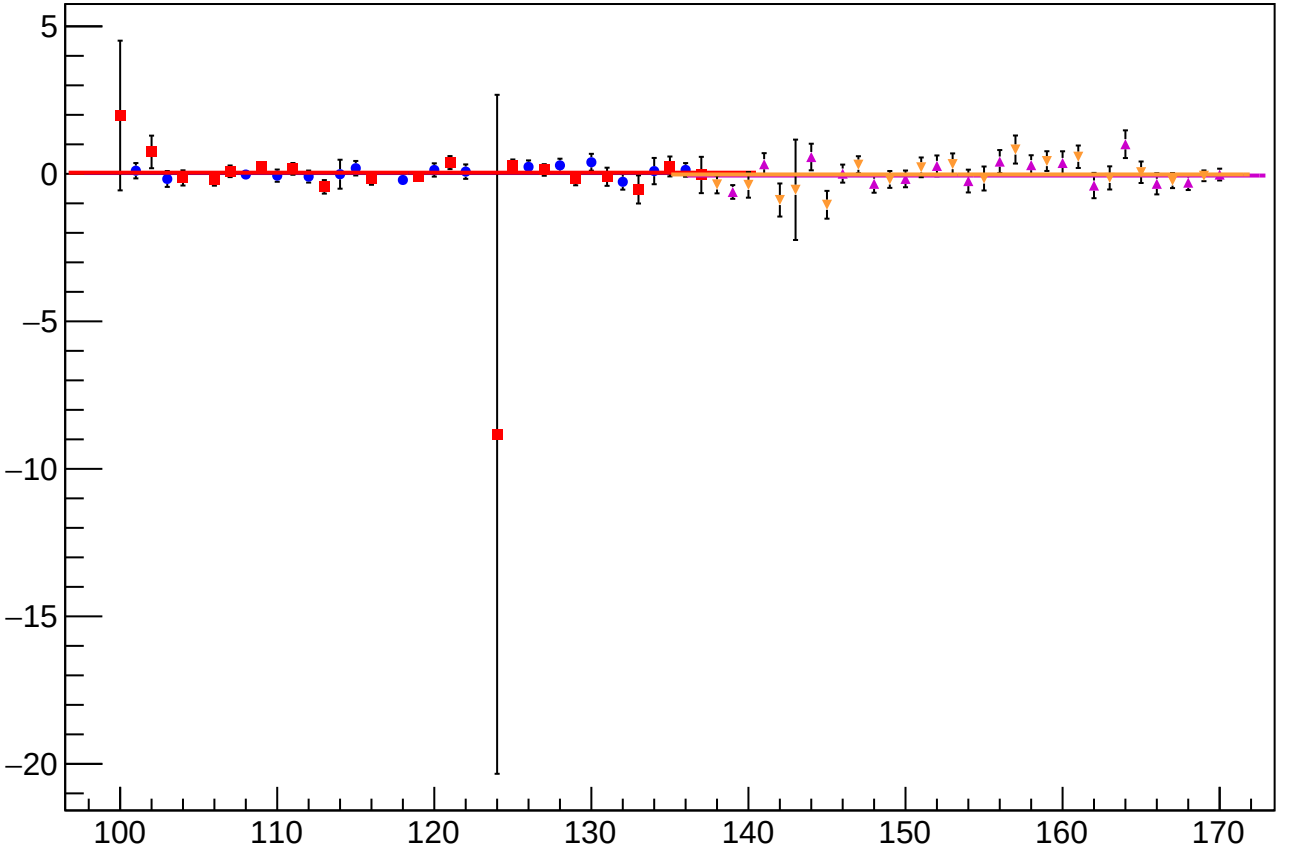
Left In: 0.000+/-0.000 $\chi^2$/NDF:1374533.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4372554.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 8218768.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3414108.5/34

# asym_atl_dd_atr_dd_avg_dit_vs_cor_diff_mean vs Slug




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

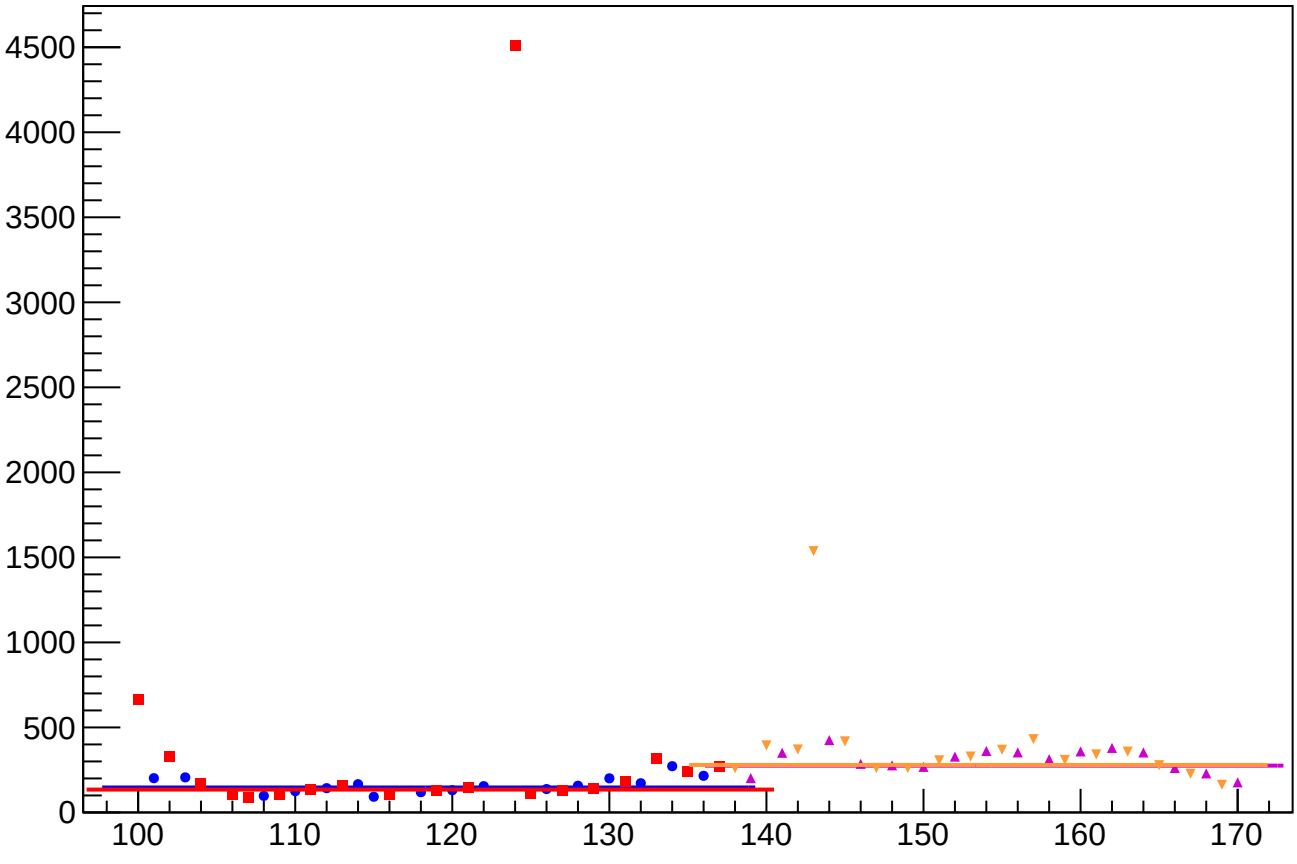
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998704.7/15

Left Out: 279.404+/-0.058 $\chi^2$/NDF:2889224.6/16

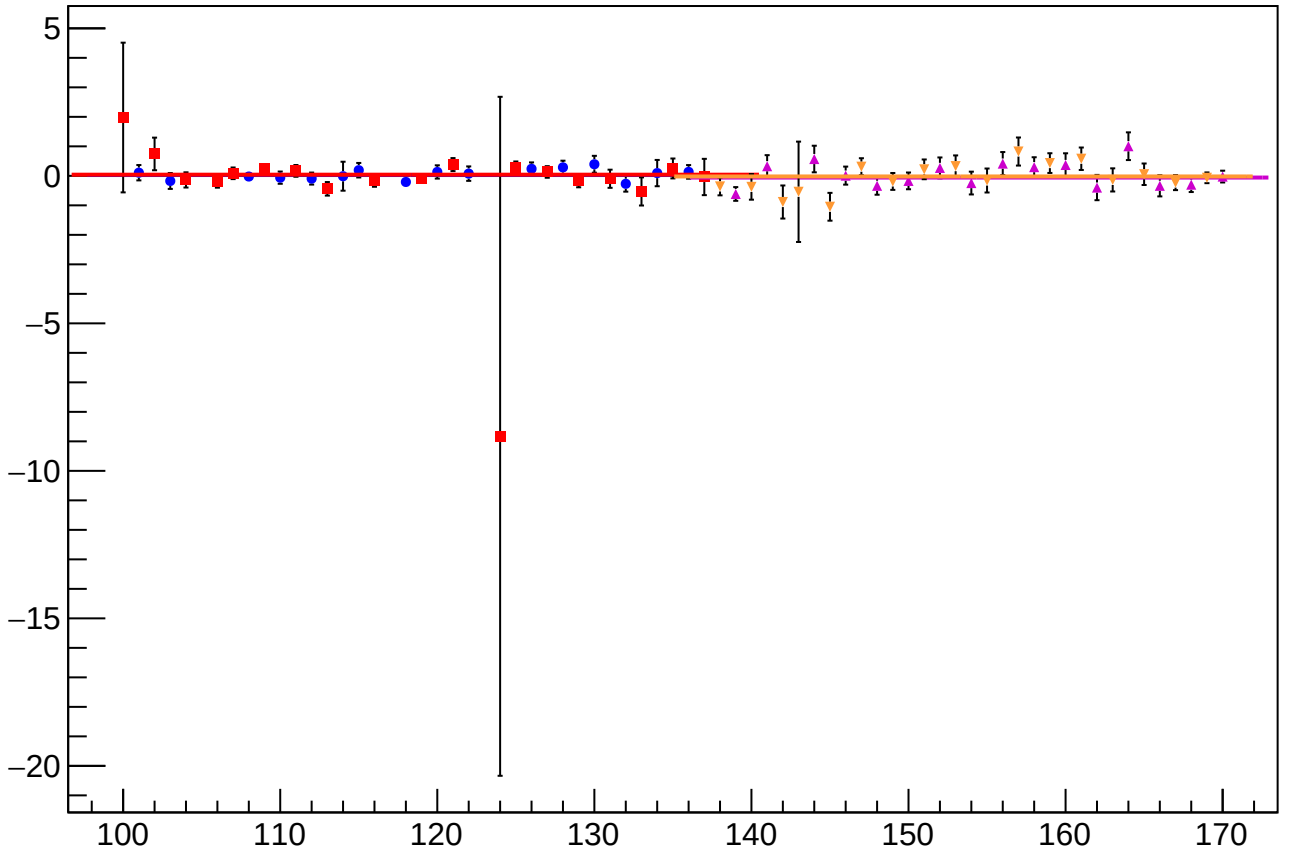
Right Out: 134.505+/-0.039 $\chi^2$/NDF: 1606383.2/18

Left In: 275.313+/-0.056 $\chi^2$/NDF:1567652.8/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417880.7/32

All: 185.396+/-0.023 $\chi^2$/NDF: 14930641.4/67

- sign 180.124+/-0.032 $\chi^2$/NDF: 7455426.0/34




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

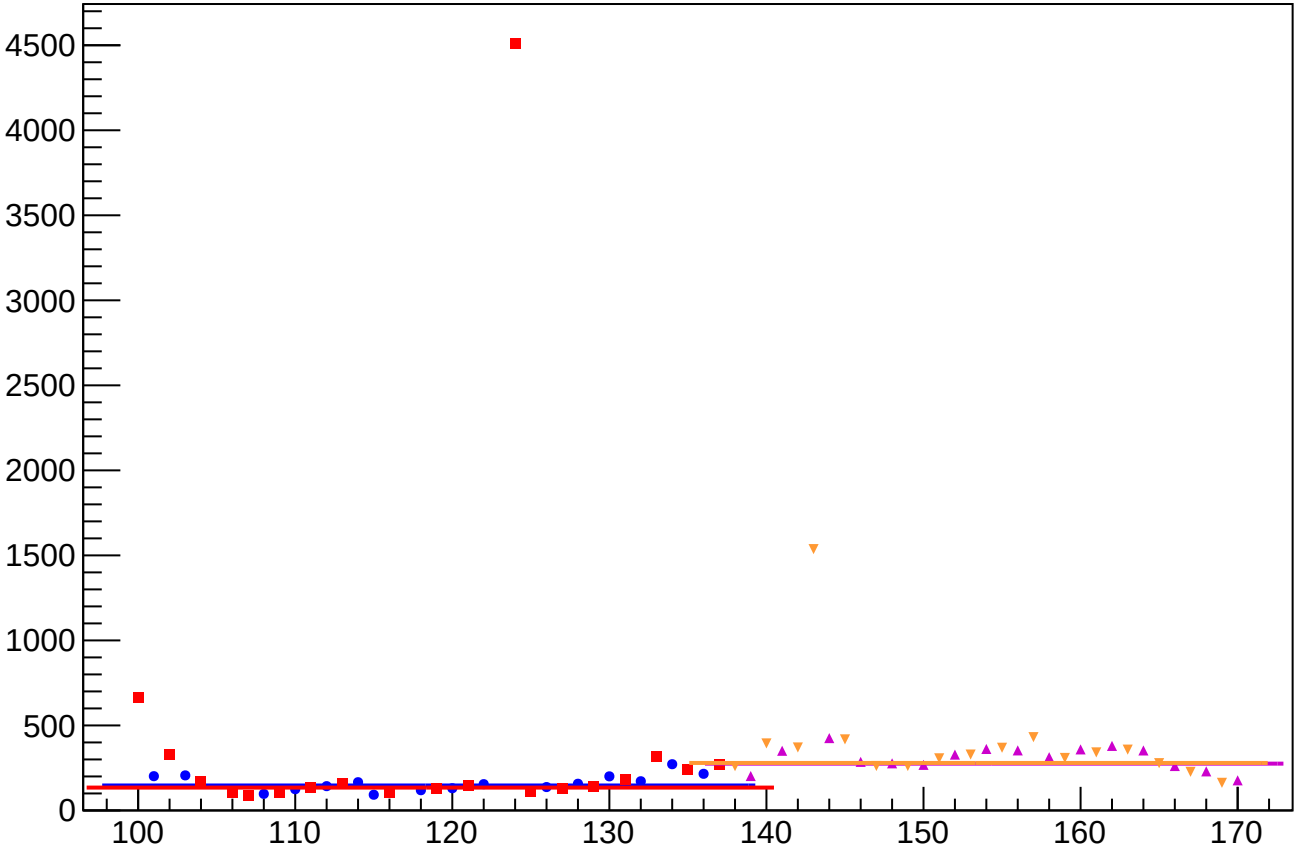
Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34

# asym_atl_dd_atr_dd_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998704.7/15

Left Out: 279.404+/-0.058 $\chi^2$/NDF:2889224.6/16

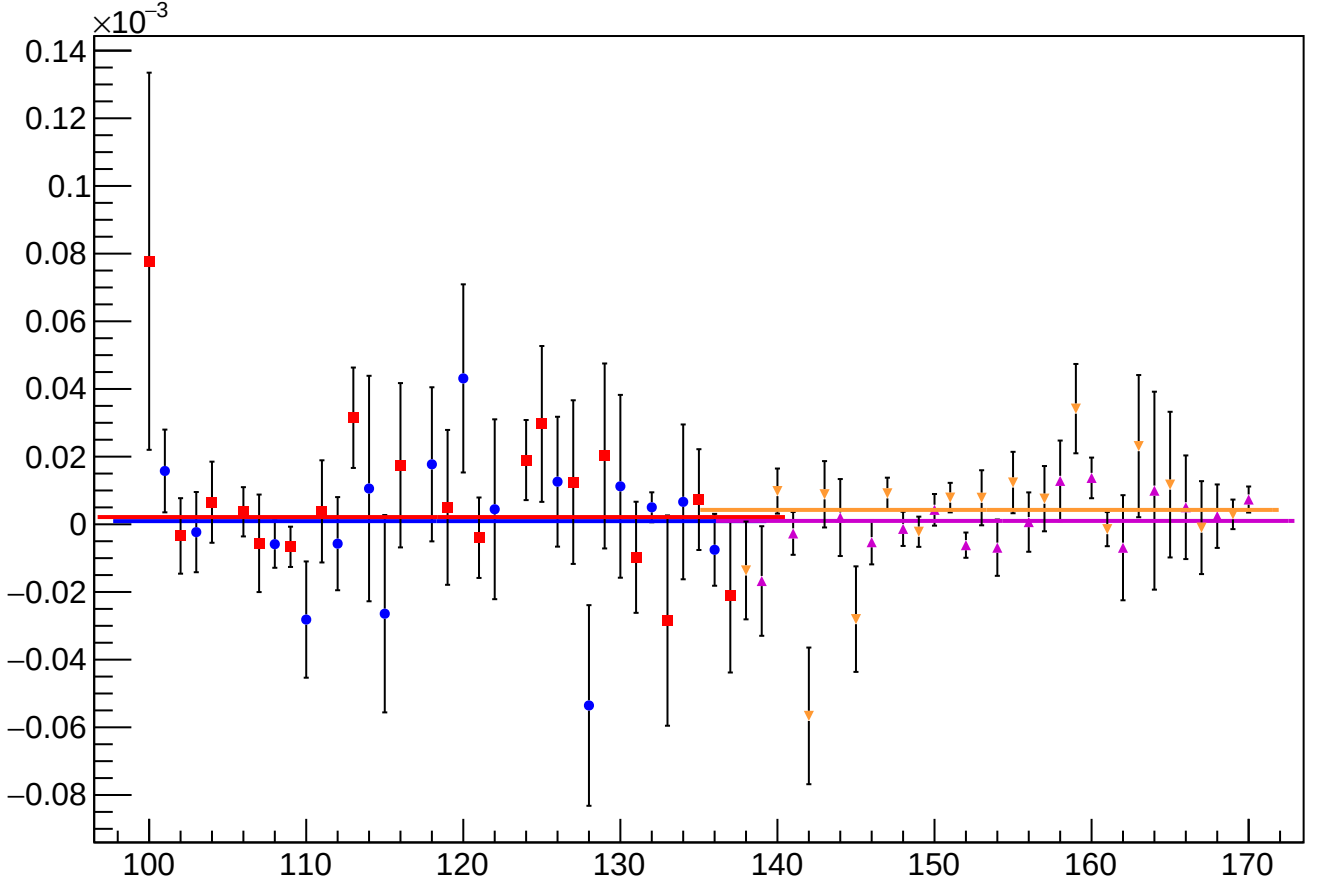
Right Out: 134.505+/-0.039 $\chi^2$/NDF: 1606383.2/18

Left In: 275.313+/-0.056 $\chi^2$/NDF:1567652.8/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417880.7/32

All: 185.396+/-0.023 $\chi^2$/NDF: 14930641.4/67

- sign 180.124+/-0.032 $\chi^2$/NDF: 7455426.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:28.4/16

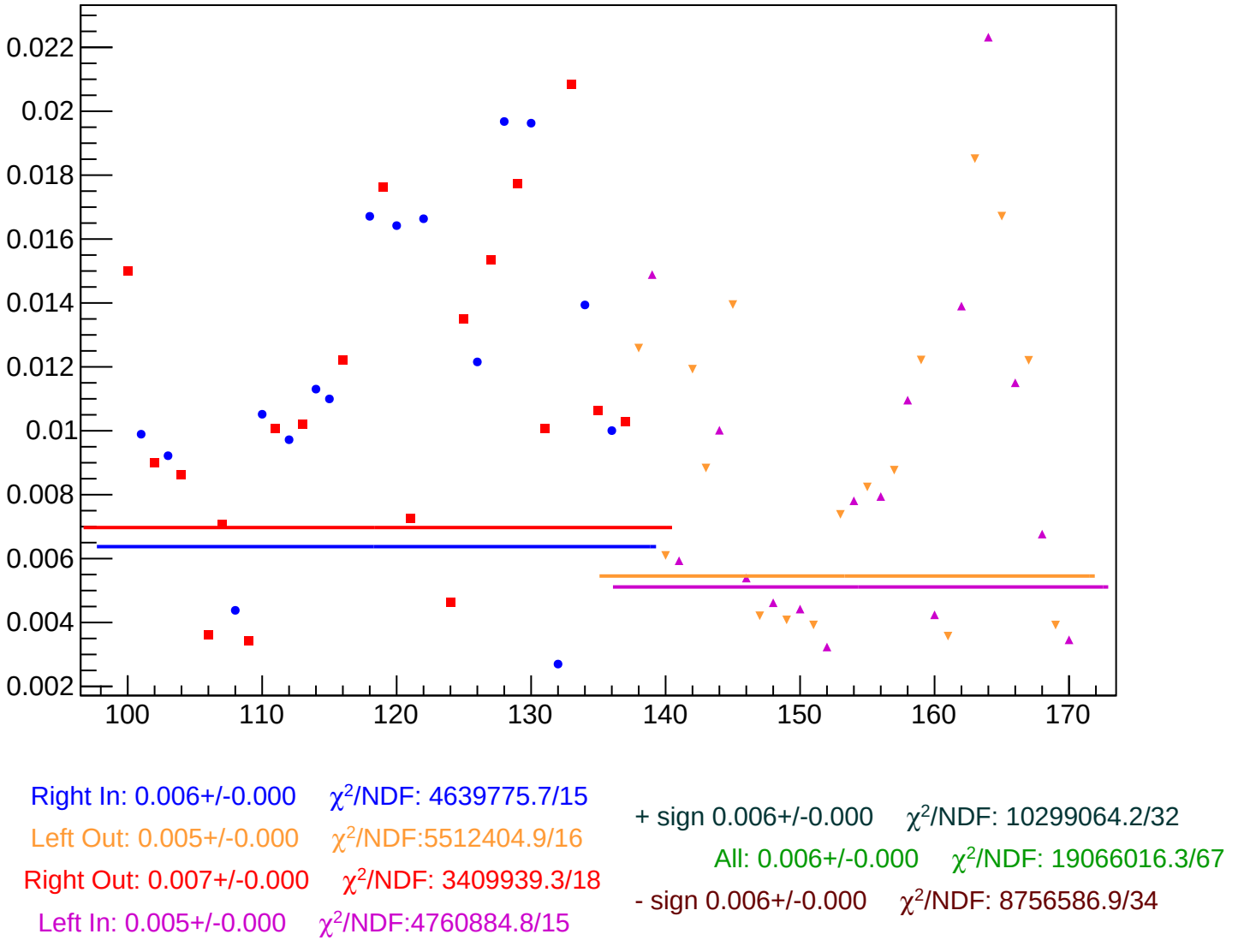
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 16.0/18

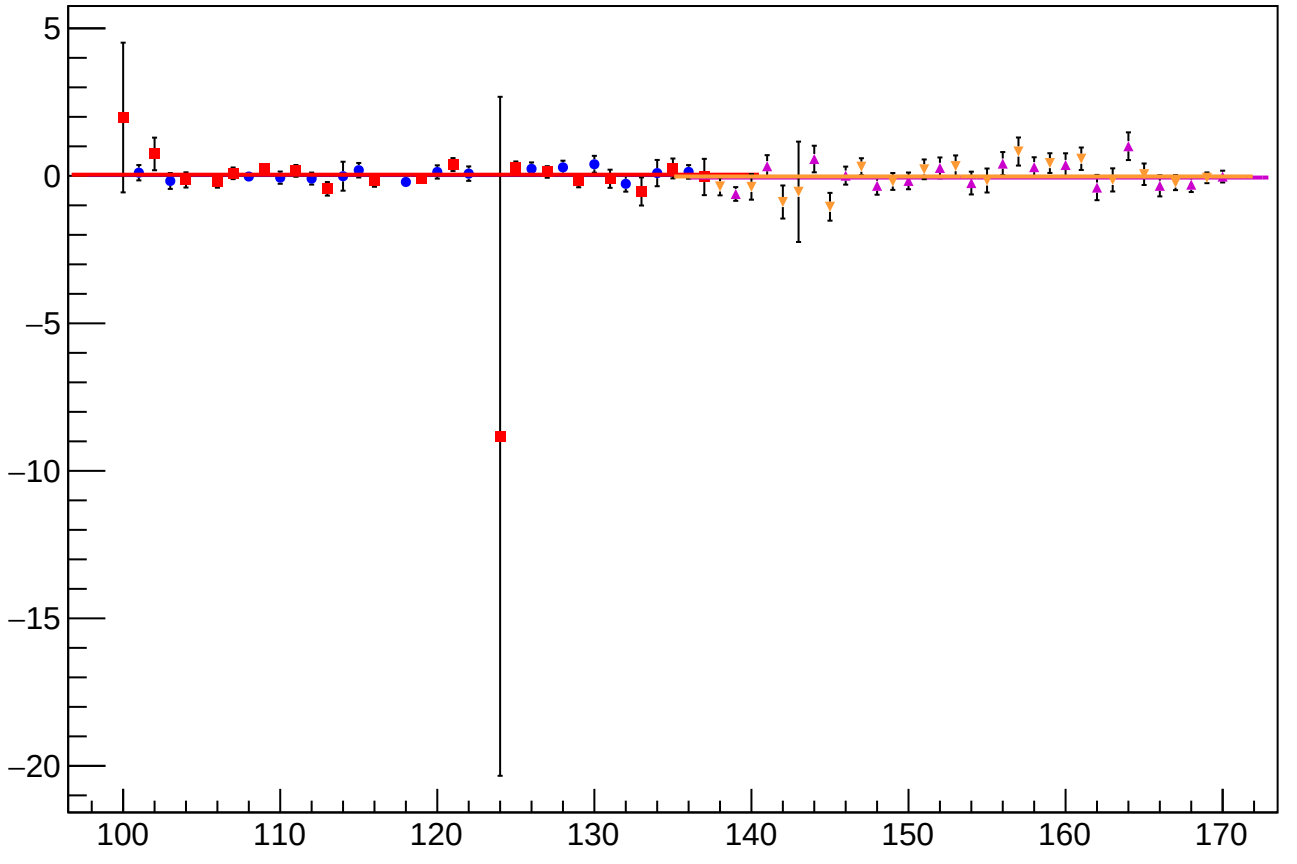
Left In: 0.000+/-0.000 $\chi^2$/NDF:16.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 77.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 32.5/34


asym_atl_dd_atr_dd_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
100
110
120
130
140
150
160
170
Right In: 0.006+/-0.000 χ²/NDF: 4639775.7/15
Left Out: 0.005+/-0.000 χ²/NDF:5512404.9/16
Right Out: 0.007+/-0.000 χ²/NDF: 3409939.3/18
Left In: 0.005+/-0.000 χ²/NDF:4760884.8/15
+ sign 0.006+/-0.000 χ²/NDF: 10299064.2/32
All: 0.006+/-0.000 χ²/NDF: 19066016.3/67
- sign 0.006+/-0.000 χ²/NDF: 8756586.9/34




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

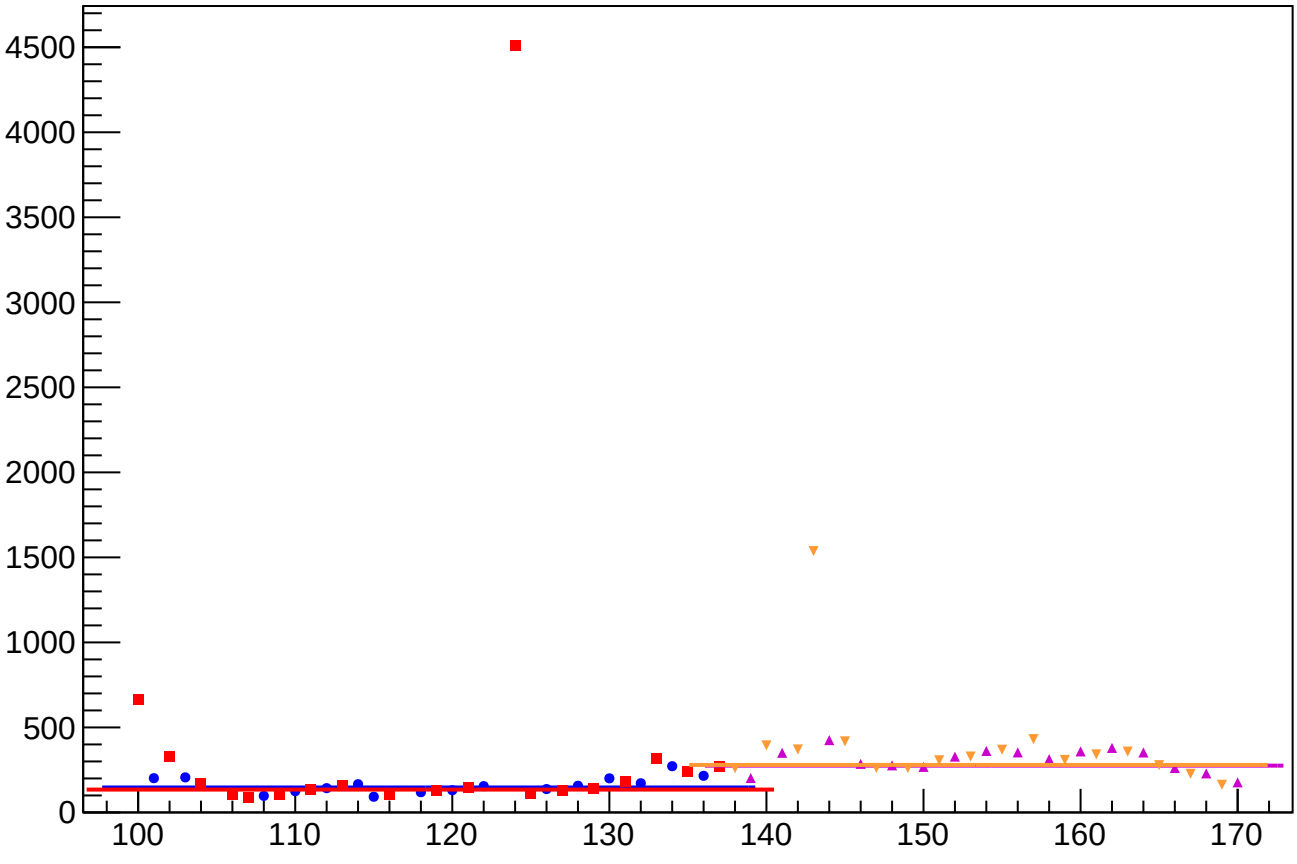
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998646.8/15

Left Out: 279.406+/-0.058 $\chi^2$/NDF:2889306.4/16

Right Out: 134.506+/-0.039 $\chi^2$/NDF: 1606310.4/18

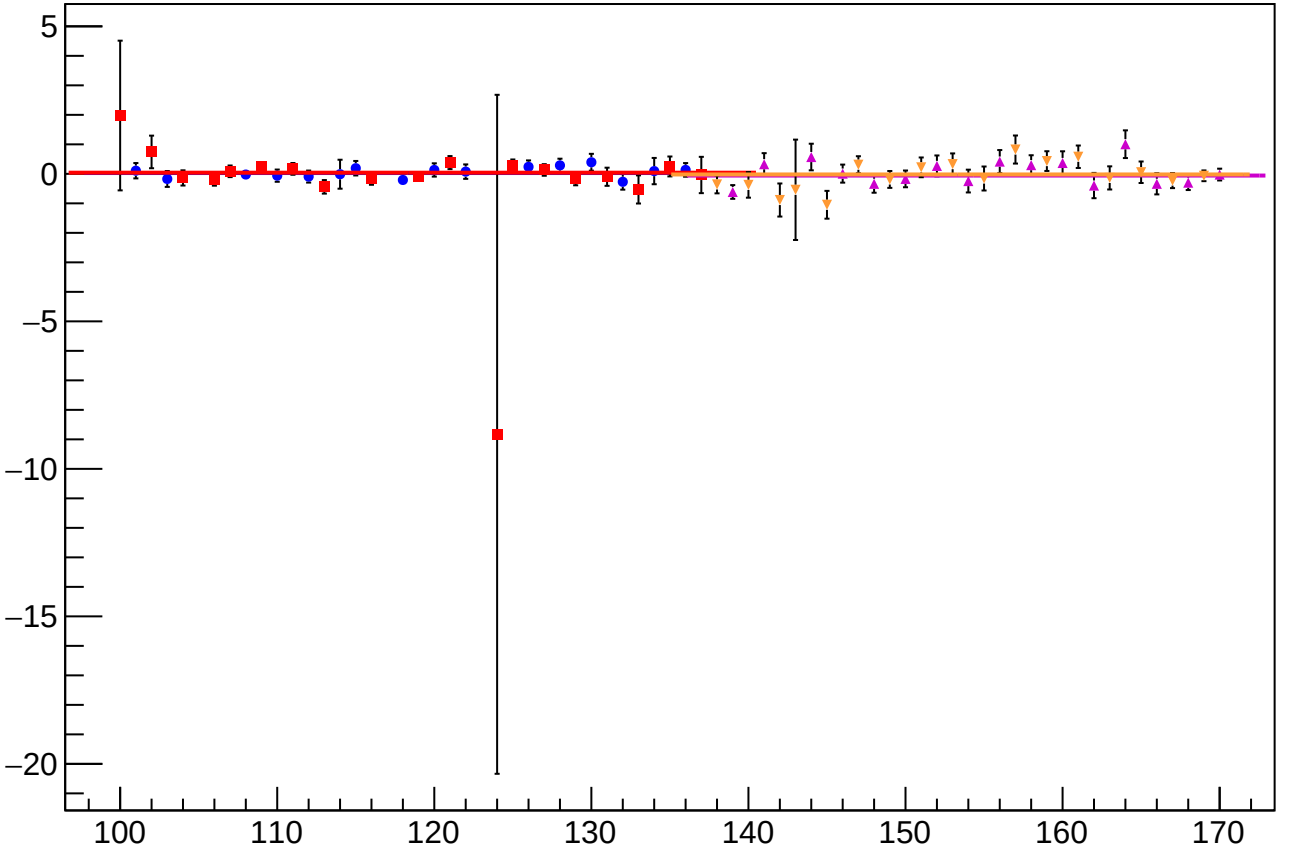
Left In: 275.317+/-0.056 $\chi^2$/NDF:1567670.2/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417992.1/32

All: 185.397+/-0.023 $\chi^2$/NDF: 14930726.9/67

- sign 180.126+/-0.032 $\chi^2$/NDF: 7455416.9/34

asym_atl_dd_atr_dd_avg_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

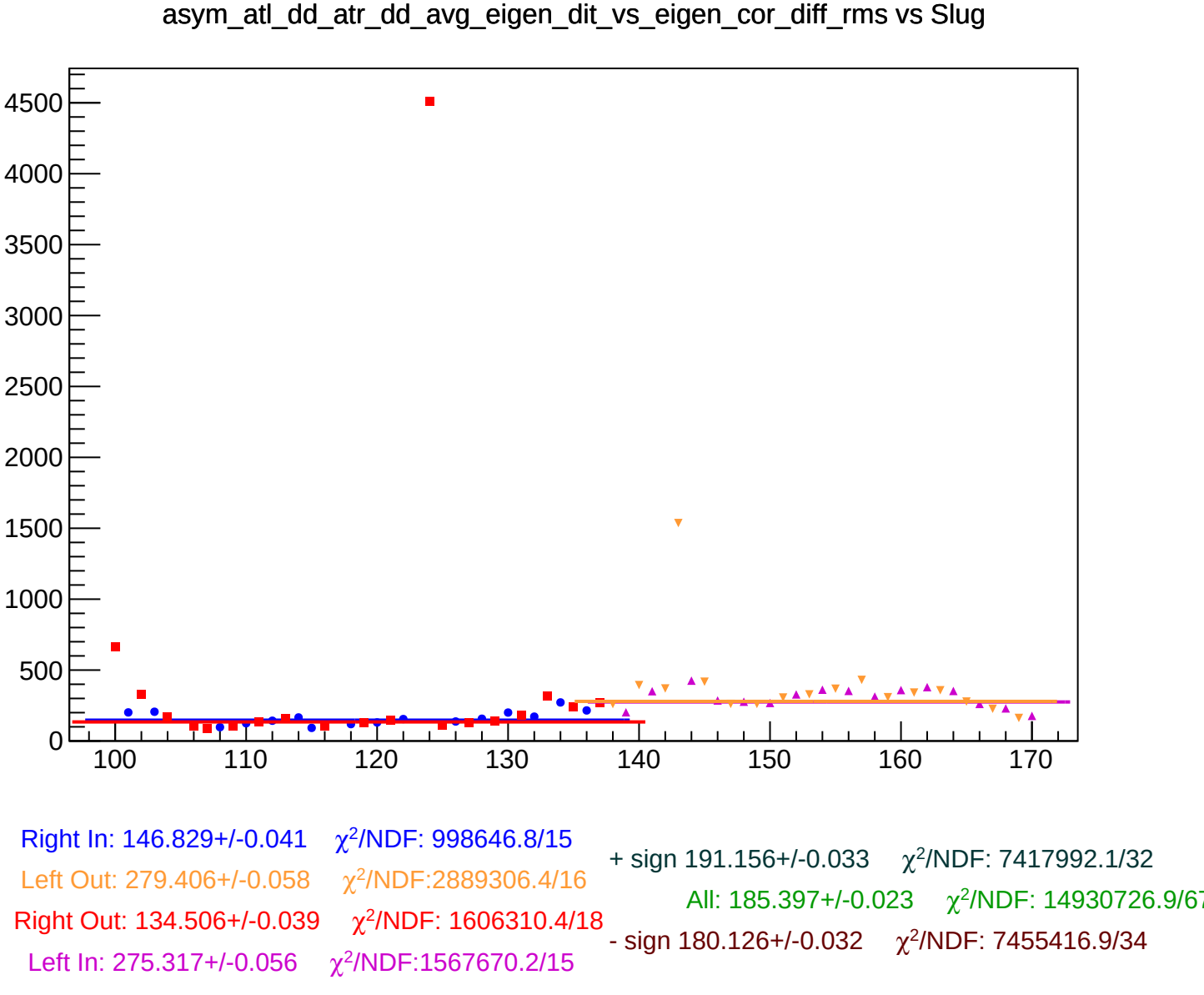
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

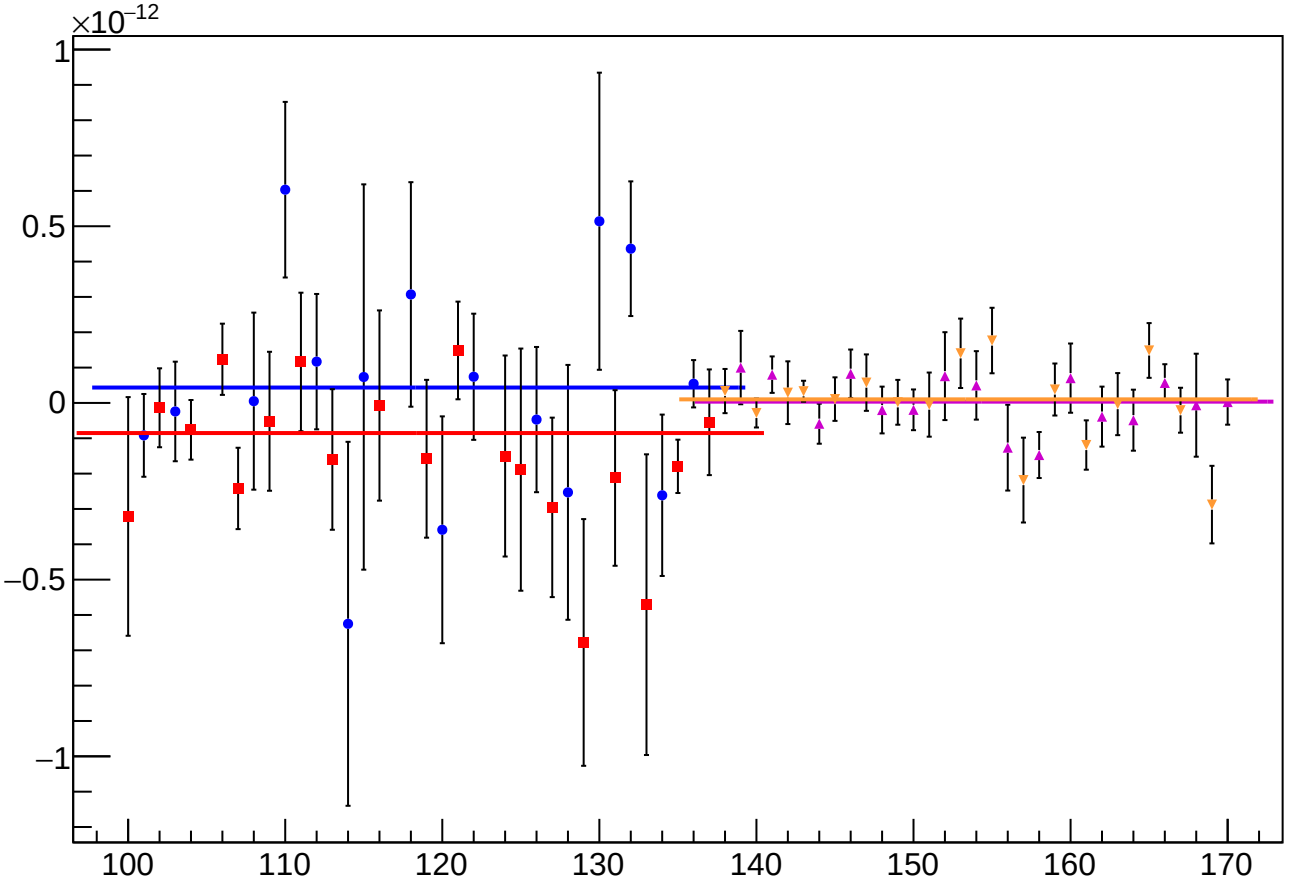
Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34


asym_atl_dd_atr_dd_avg_eigen_dit_vs_eigen_cor_diff_rms vs Slug
4500
4000
3500
3000
2500
2000
1500
1000
500
0
100
110
120
130
140
150
160
170
Right In: 146.829+/-0.041 χ²/NDF: 998646.8/15
Left Out: 279.406+/-0.058 χ²/NDF:2889306.4/16
Right Out: 134.506+/-0.039 χ²/NDF: 1606310.4/18
Left In: 275.317+/-0.056 χ²/NDF:1567670.2/15
+ sign 191.156+/-0.033 χ²/NDF: 7417992.1/32
All: 185.397+/-0.023 χ²/NDF: 14930726.9/67
- sign 180.126+/-0.032 χ²/NDF: 7455416.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 19.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:25.1/16

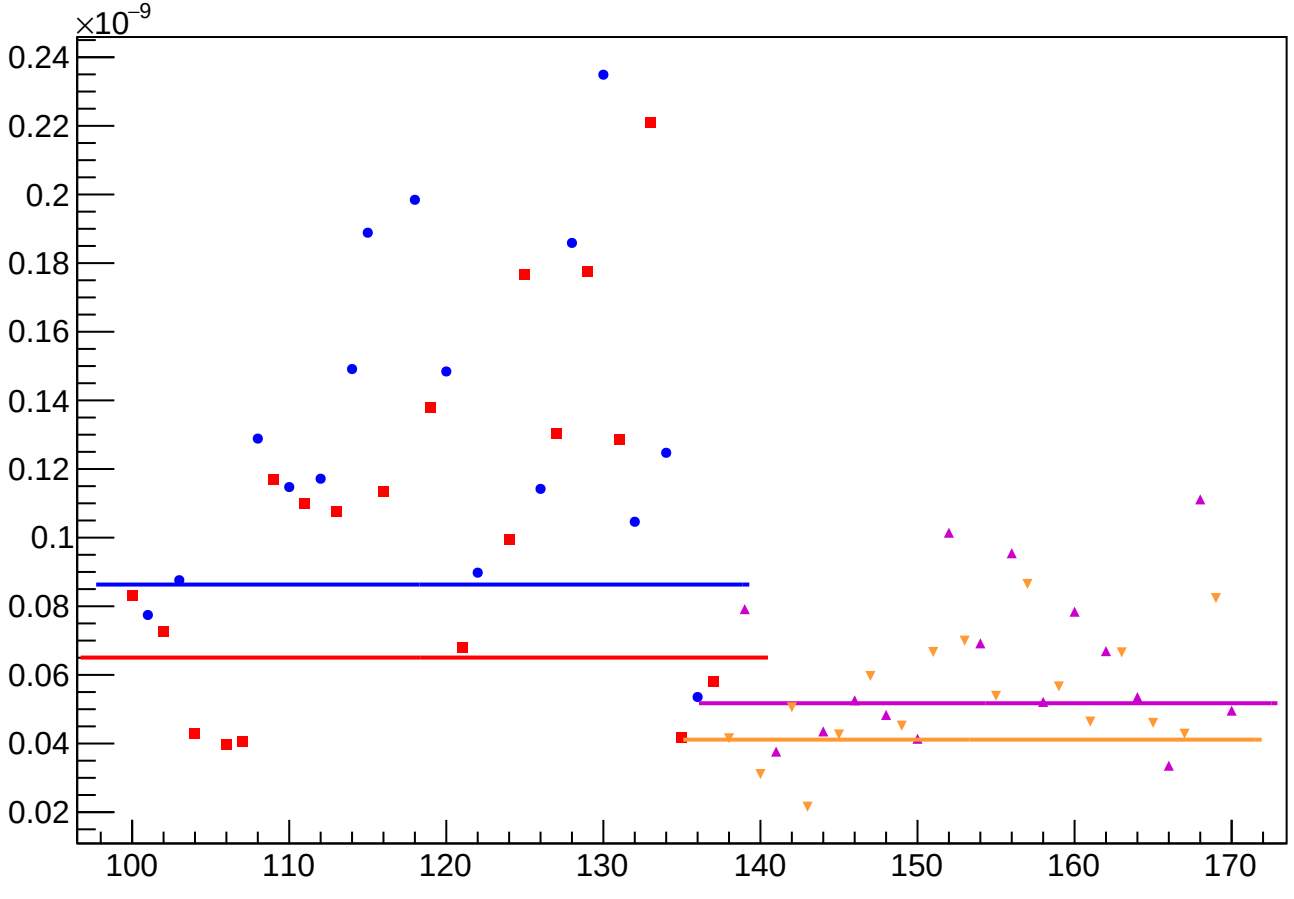
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:15.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 85.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 38.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1565662.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2344358.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2158861.4/18

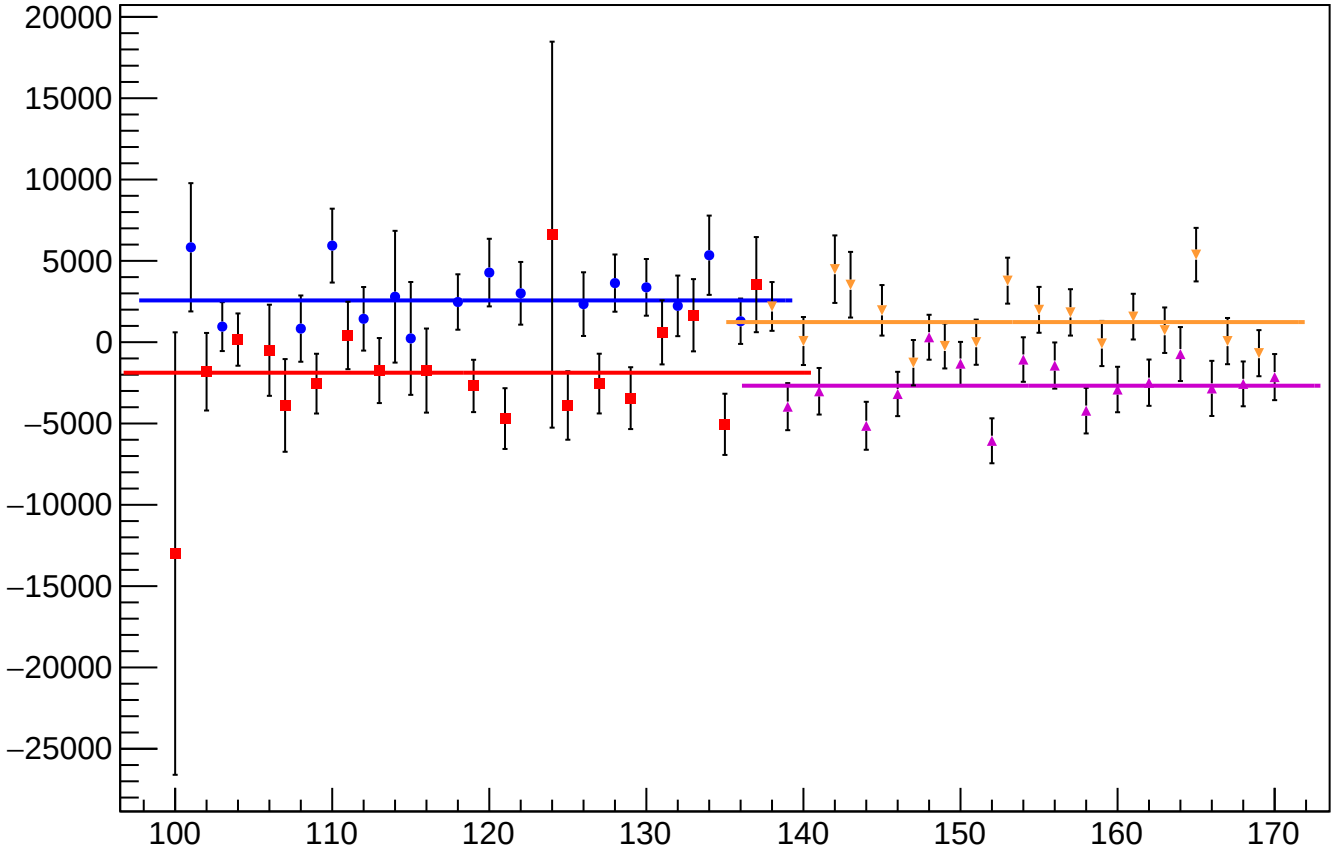
Left In: 0.000+/-0.000 $\chi^2$/NDF:1829490.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5889730.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10411356.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4224126.8/34

# reg_asym_atl_avg_atr_avg_avg_mean vs Slug




Right In: 2567.460+/-495.364 $\chi^2$/NDF: 9.0/15

Left Out: 1235.936+/-359.399 $\chi^2$/NDF:23.8/16

Right Out: -1878.030+/-494.719 $\chi^2$/NDF: 19.5/18

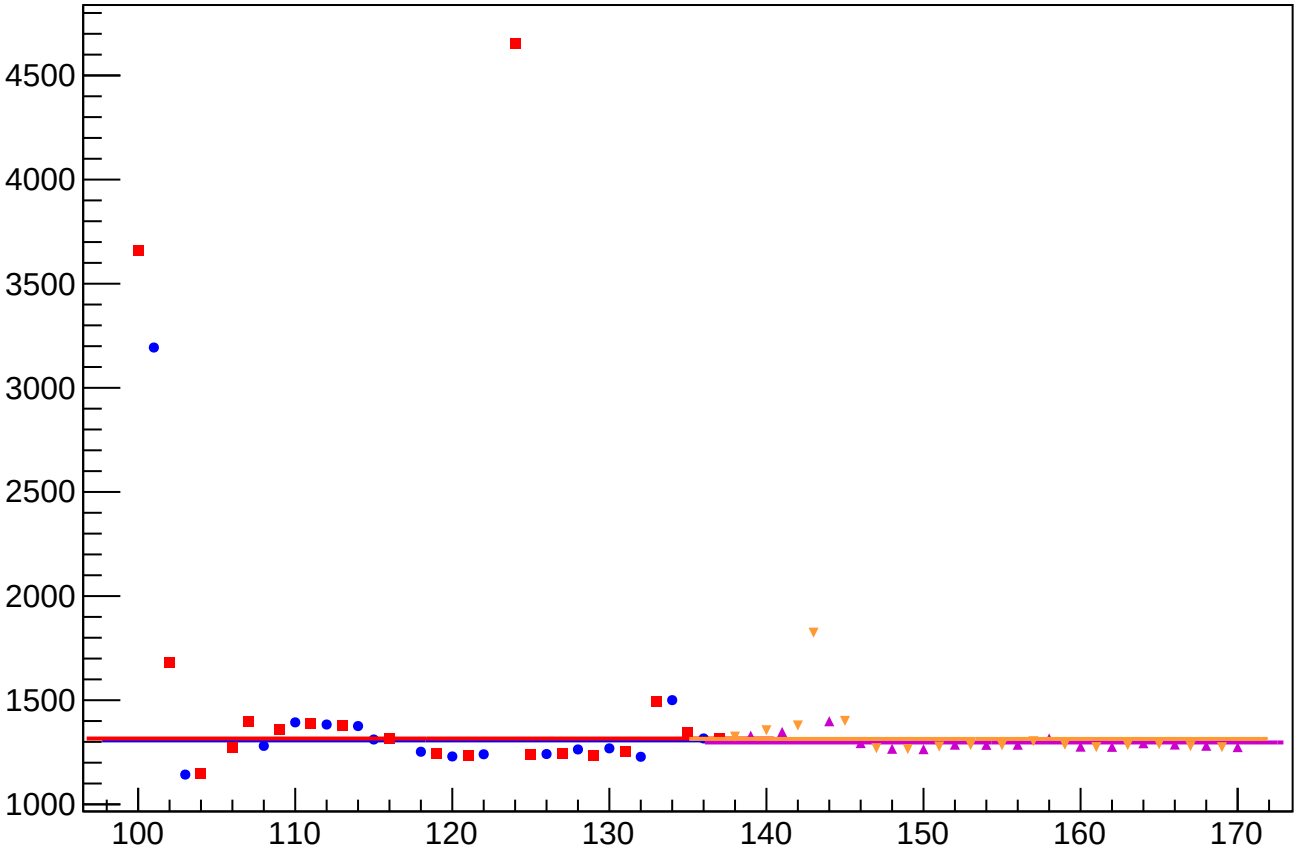
Left In: -2676.656+/-356.864 $\chi^2$/NDF:20.4/15

+ sign 1695.122+/-290.900 $\chi^2$/NDF: 37.5/32

All: -364.540+/-205.173 $\chi^2$/NDF: 178.9/67

- sign -2403.324+/-289.422 $\chi^2$/NDF: 41.7/34

# reg_asym_atl_avg_atr_avg_avg_rms vs Slug




Right In: 1307.068+/-0.350 $\chi^2$/NDF: 516249.0/15

Left Out: 1314.125+/-0.254 $\chi^2$/NDF:151820.8/16

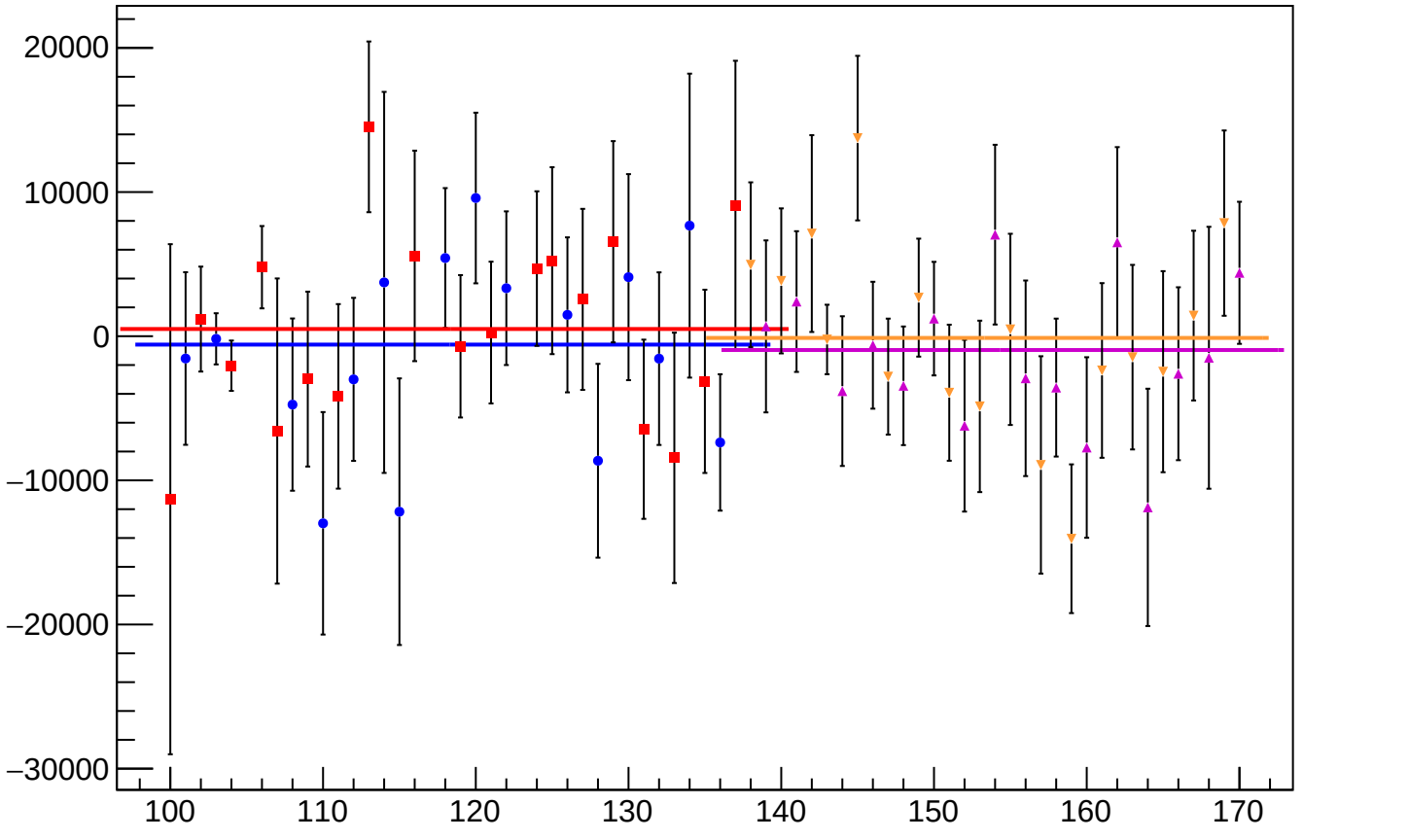
Right Out: 1315.999+/-0.349 $\chi^2$/NDF: 326420.0/18

Left In: 1297.114+/-0.252 $\chi^2$/NDF:17623.9/15

+ sign 1311.691+/-0.206 $\chi^2$/NDF: 668335.8/32

All: 1307.621+/-0.145 $\chi^2$/NDF: 1015081.8/67

- sign 1303.600+/-0.204 $\chi^2$/NDF: 345967.7/34




Right In: -581.790+/-1192.862 $\chi^2$/NDF: 14.7/15

Left Out: -118.924+/-1201.986 $\chi^2$/NDF:21.2/16

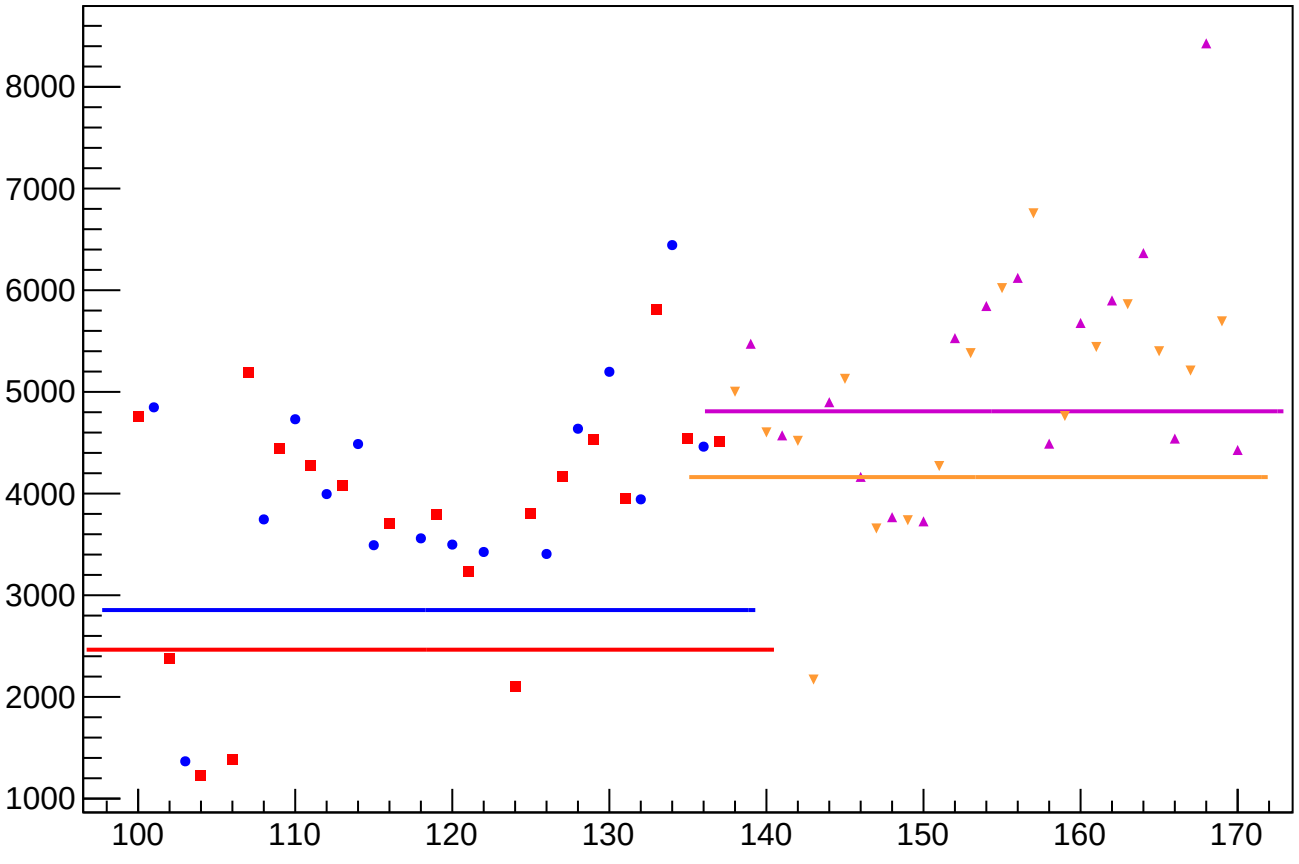
Right Out: 500.098+/-1055.434 $\chi^2$/NDF: 17.7/18

Left In: -958.872+/-1353.474 $\chi^2$/NDF:9.8/15

+ sign -352.121+/-846.688 $\chi^2$/NDF: 36.0/32

All: -199.283+/-593.545 $\chi^2$/NDF: 64.3/67

- sign -51.599+/-832.294 $\chi^2$/NDF: 28.2/34




Right In: 2854.300+/-0.843 $\chi^2$/NDF: 2904822.2/15

Left Out: 4162.094+/-0.850 $\chi^2$/NDF:2515108.7/16

Right Out: 2464.593+/-0.746 $\chi^2$/NDF: 3355947.0/18

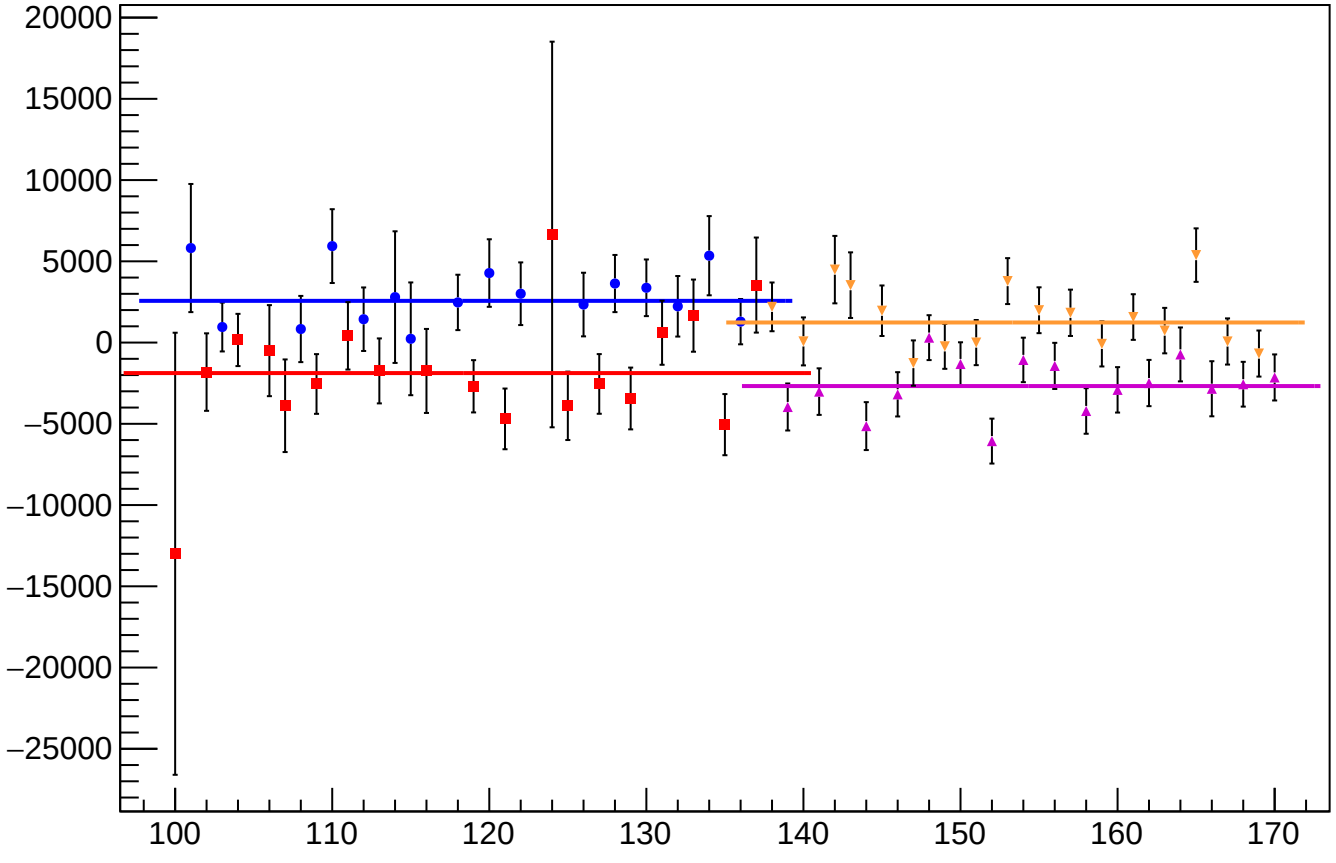
Left In: 4809.099+/-0.957 $\chi^2$/NDF:1017939.5/15

+ sign 3503.214+/-0.599 $\chi^2$/NDF: 6612754.9/32

All: 3425.877+/-0.420 $\chi^2$/NDF: 14751305.8/6

- sign 3351.148+/-0.589 $\chi^2$/NDF: 8105741.2/34

# cor_asym_atl_avg_atr_avg_avg_mean vs Slug




Right In: 2567.180+/-495.364 $\chi^2$/NDF: 9.0/15

Left Out: 1235.848+/-359.399 $\chi^2$/NDF:23.8/16

Right Out: -1877.774+/-494.719 $\chi^2$/NDF: 19.5/18

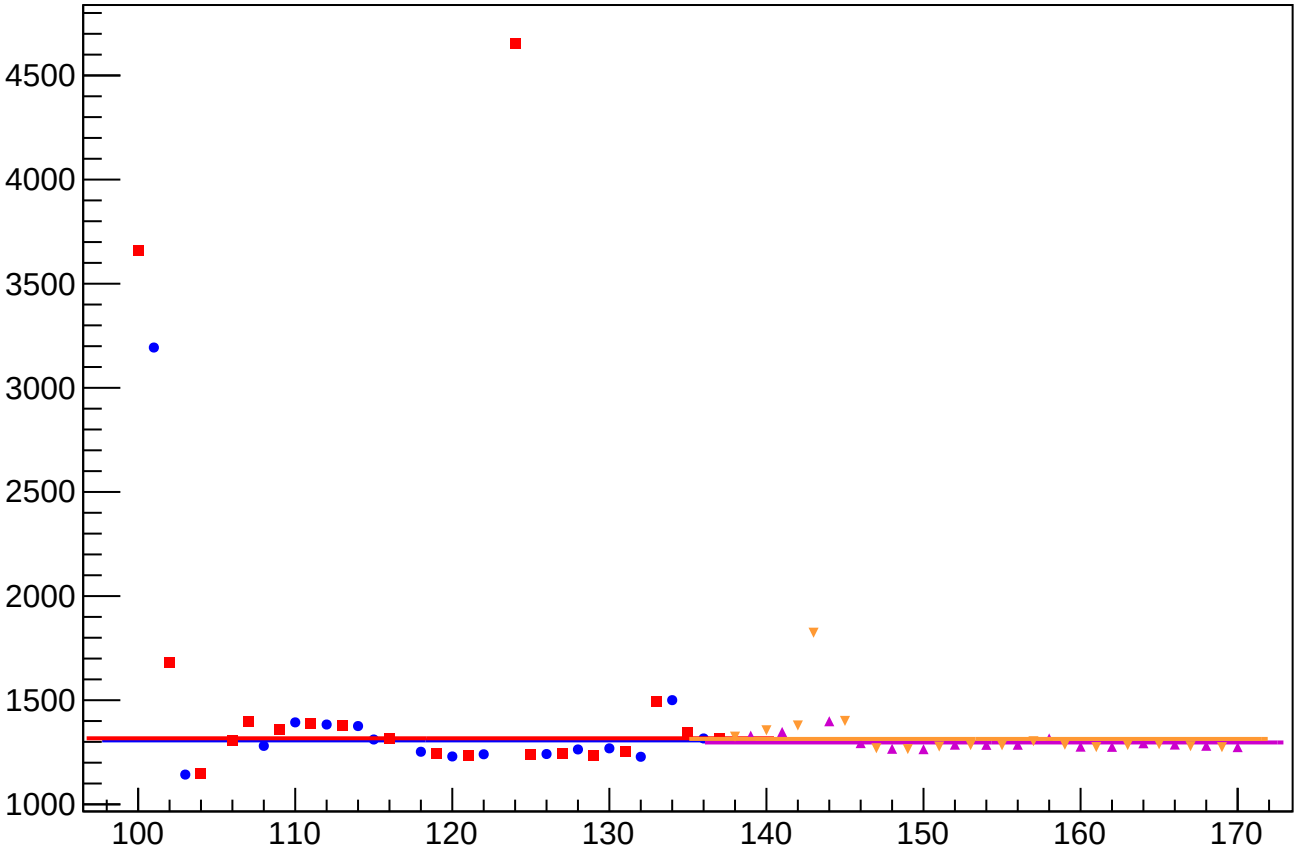
Left In: -2676.687+/-356.864 $\chi^2$/NDF:20.4/15

+ sign 1694.968+/-290.900 $\chi^2$/NDF: 37.5/32

All: -364.582+/-205.173 $\chi^2$/NDF: 178.9/67

- sign -2403.257+/-289.422 $\chi^2$/NDF: 41.7/34

# cor_asym_atl_avg_atr_avg_avg_rms vs Slug




Right In: 1307.068+/-0.350 $\chi^2$/NDF: 516250.6/15

Left Out: 1314.125+/-0.254 $\chi^2$/NDF:151820.8/16

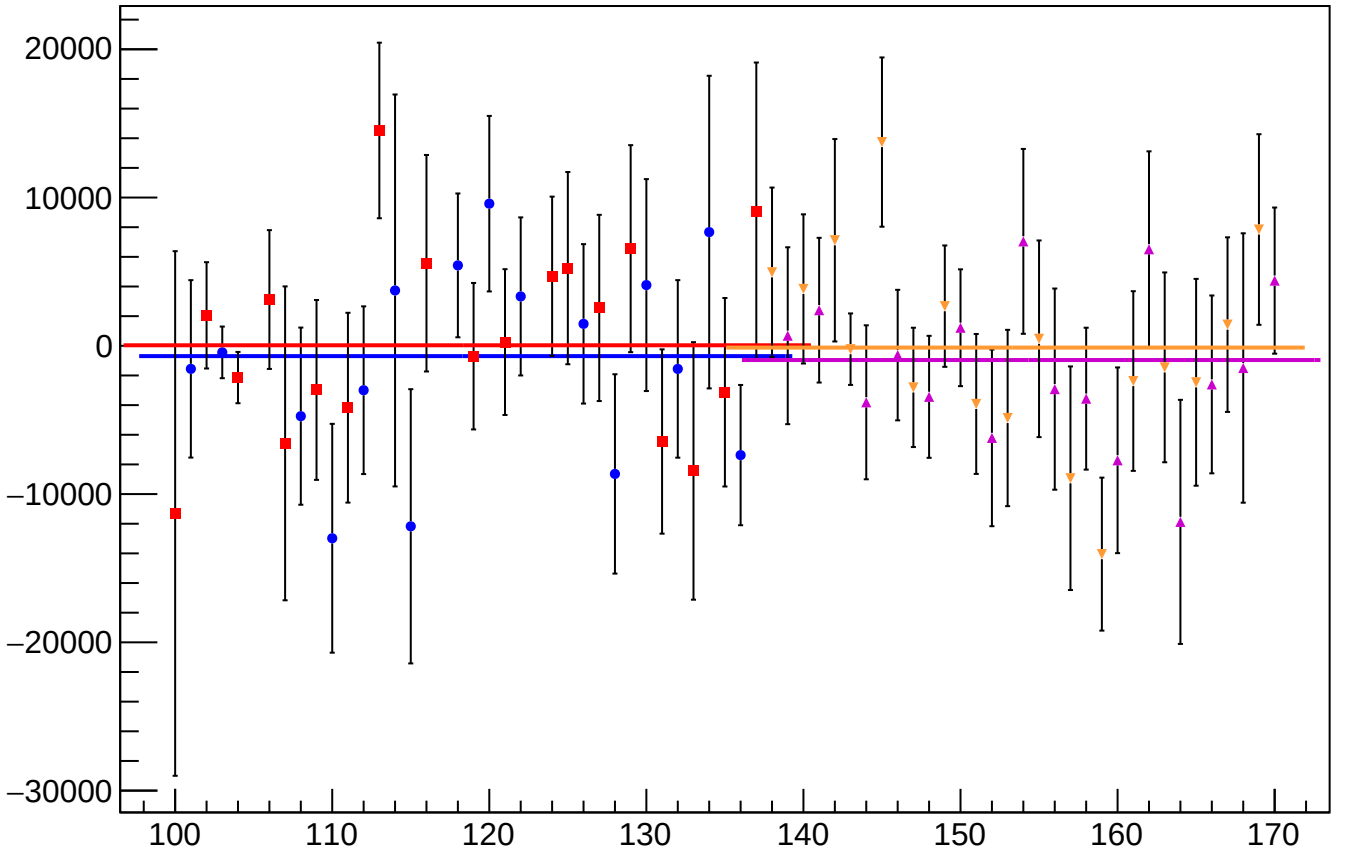
Right Out: 1317.128+/-0.349 $\chi^2$/NDF: 325926.8/18

Left In: 1297.114+/-0.252 $\chi^2$/NDF:17623.9/15

+ sign 1311.691+/-0.206 $\chi^2$/NDF: 668337.3/32

All: 1307.814+/-0.145 $\chi^2$/NDF: 1014753.0/67

- sign 1303.981+/-0.205 $\chi^2$/NDF: 345709.1/34




Right In: -695.249+/-1182.433 $\chi^2$/NDF: 14.7/15

Left Out: -118.943+/-1201.982 $\chi^2$/NDF:21.2/16

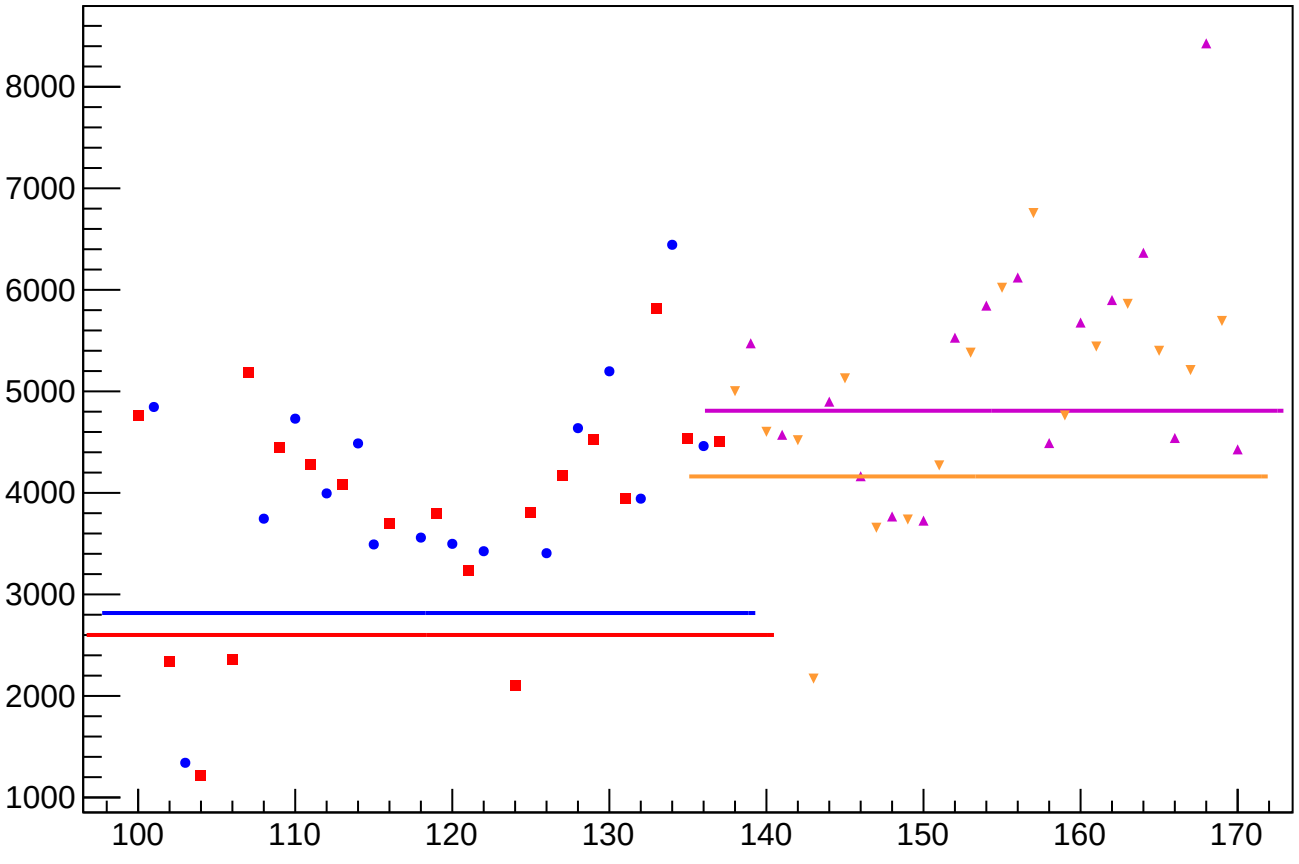
Right Out: 36.115+/-1098.207 $\chi^2$/NDF: 15.9/18

Left In: -958.931+/-1353.473 $\chi^2$/NDF:9.8/15

+ sign -411.821+/-842.933 $\chi^2$/NDF: 36.0/32

All: -385.676+/-599.499 $\chi^2$/NDF: 62.1/67

- sign -358.916+/-852.793 $\chi^2$/NDF: 26.1/34




Right In: 2816.784+/-0.836 $\chi^2$/NDF: 3007570.0/15

Left Out: 4162.071+/-0.850 $\chi^2$/NDF:2515185.1/16

Right Out: 2600.524+/-0.777 $\chi^2$/NDF: 3080771.9/18

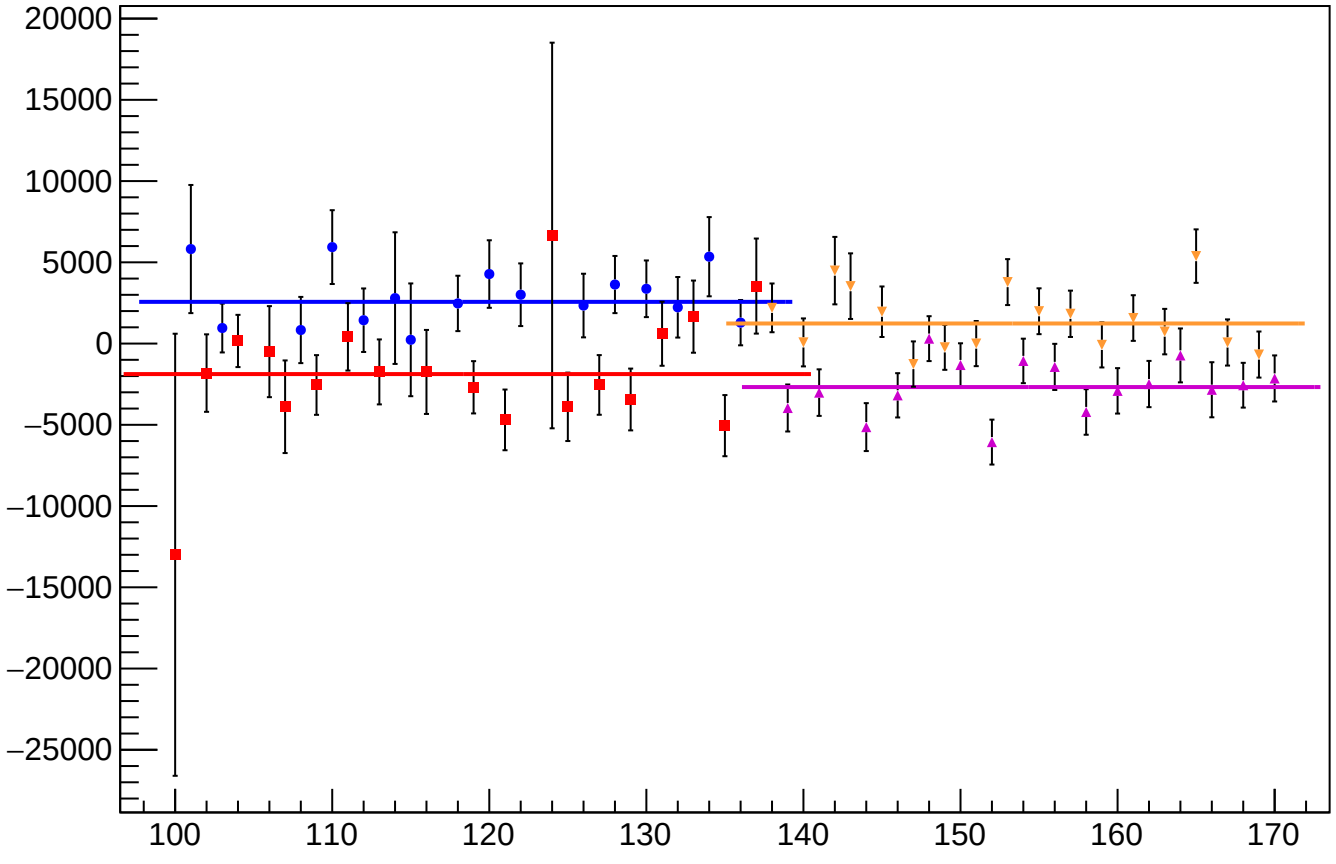
Left In: 4809.096+/-0.957 $\chi^2$/NDF:1017947.3/15

+ sign 3478.399+/-0.596 $\chi^2$/NDF: 6795958.0/32

All: 3477.867+/-0.424 $\chi^2$/NDF: 14105919.3/6

- sign 3477.322+/-0.603 $\chi^2$/NDF: 7309959.7/34

# eigen_cor_asym_atl_avg_atr_avg_avg_mean vs Slug




Right In: 2567.180+/-495.364 $\chi^2$/NDF: 9.0/15

Left Out: 1235.848+/-359.399 $\chi^2$/NDF:23.8/16

Right Out: -1877.774+/-494.719 $\chi^2$/NDF: 19.5/18

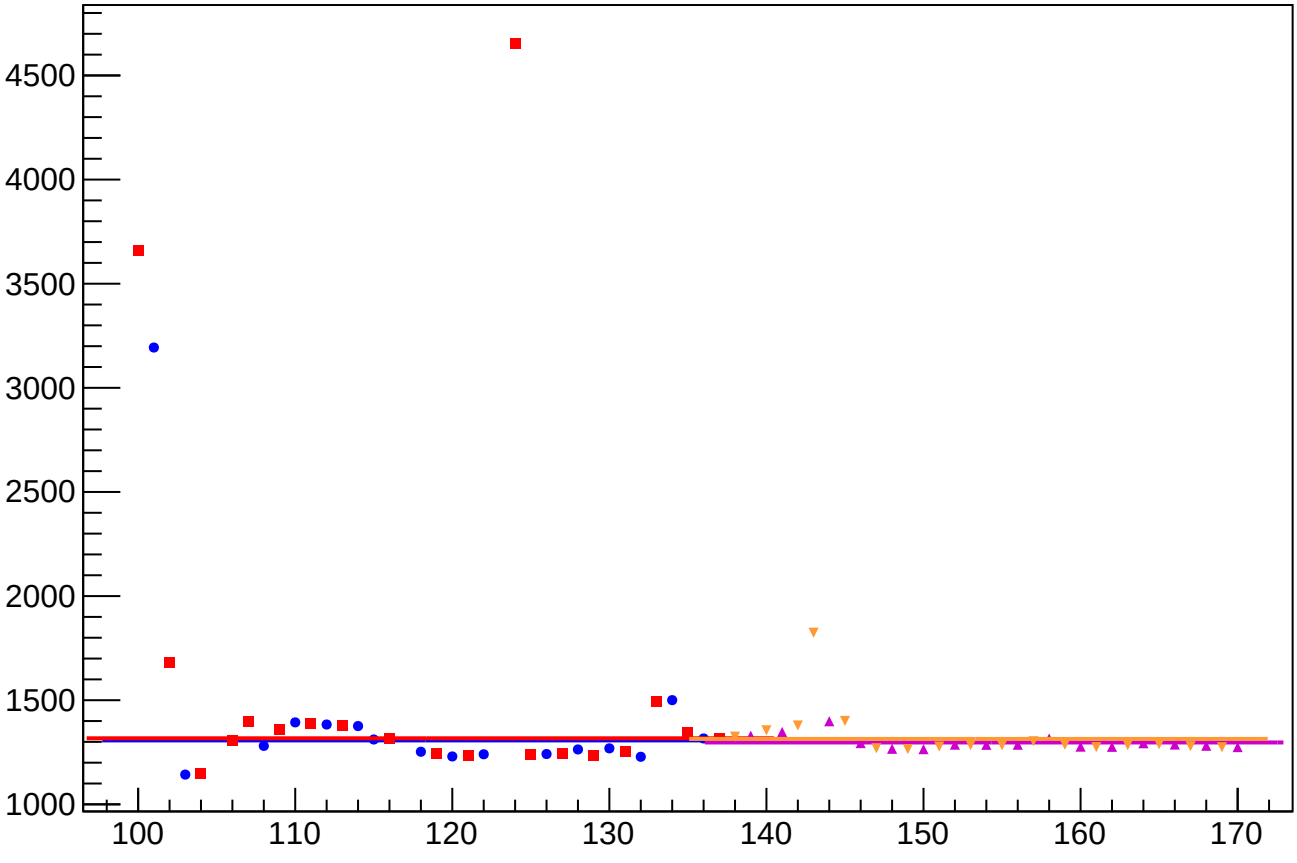
Left In: -2676.687+/-356.864 $\chi^2$/NDF:20.4/15

+ sign 1694.968+/-290.900 $\chi^2$/NDF: 37.5/32

All: -364.582+/-205.173 $\chi^2$/NDF: 178.9/67

- sign -2403.257+/-289.422 $\chi^2$/NDF: 41.7/34

# eigen_cor_asym_atl_avg_atr_avg_avg_rms vs Slug




Right In: 1307.068+/-0.350 $\chi^2$/NDF: 516250.6/15

Left Out: 1314.125+/-0.254 $\chi^2$/NDF:151820.8/16

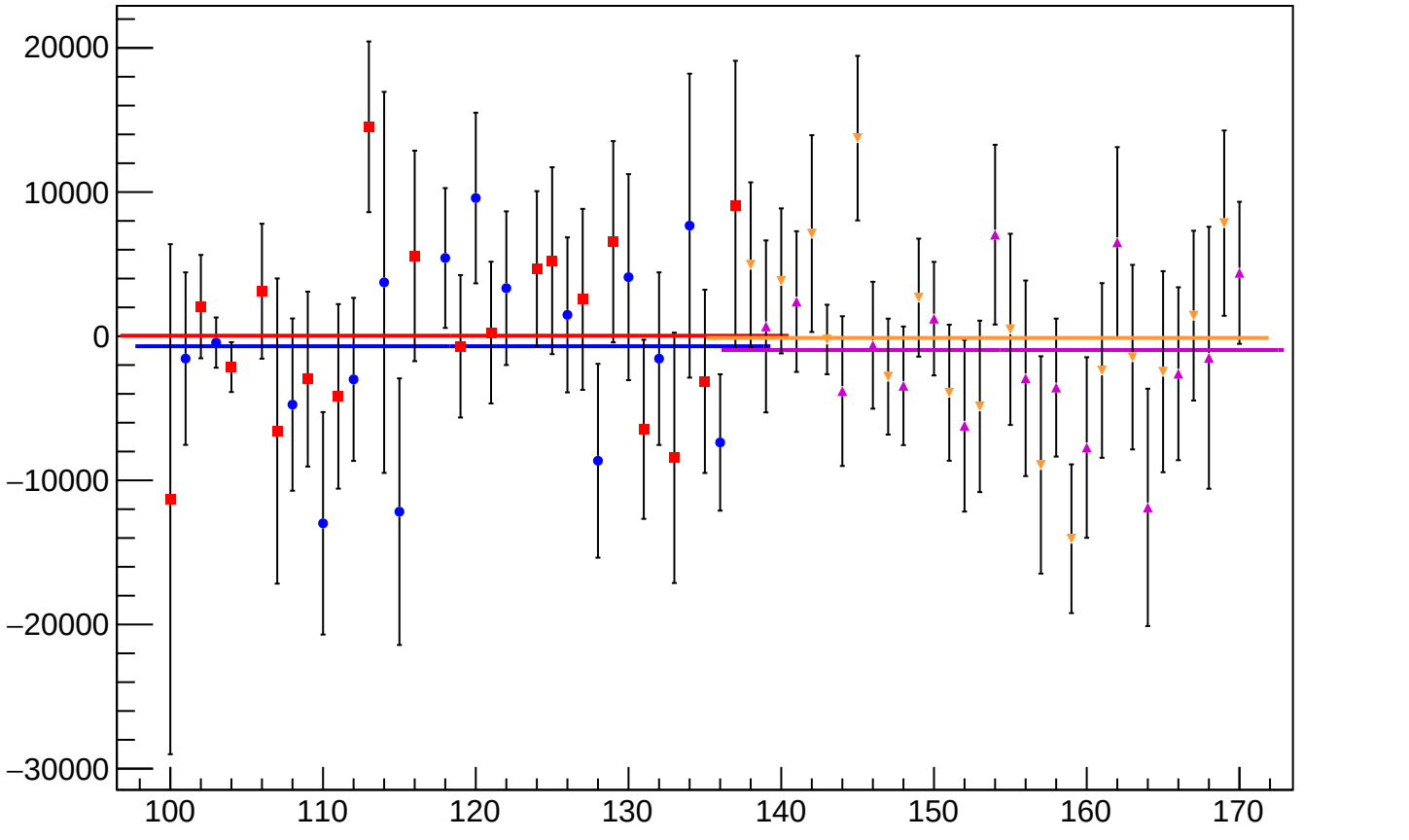
Right Out: 1317.128+/-0.349 $\chi^2$/NDF: 325926.8/18

Left In: 1297.114+/-0.252 $\chi^2$/NDF:17623.9/15

+ sign 1311.691+/-0.206 $\chi^2$/NDF: 668337.3/32

All: 1307.814+/-0.145 $\chi^2$/NDF: 1014753.0/67

- sign 1303.981+/-0.205 $\chi^2$/NDF: 345709.1/34




Right In: -695.249+/-1182.433 $\chi^2$/NDF: 14.7/15

Left Out: -118.943+/-1201.982 $\chi^2$/NDF:21.2/16

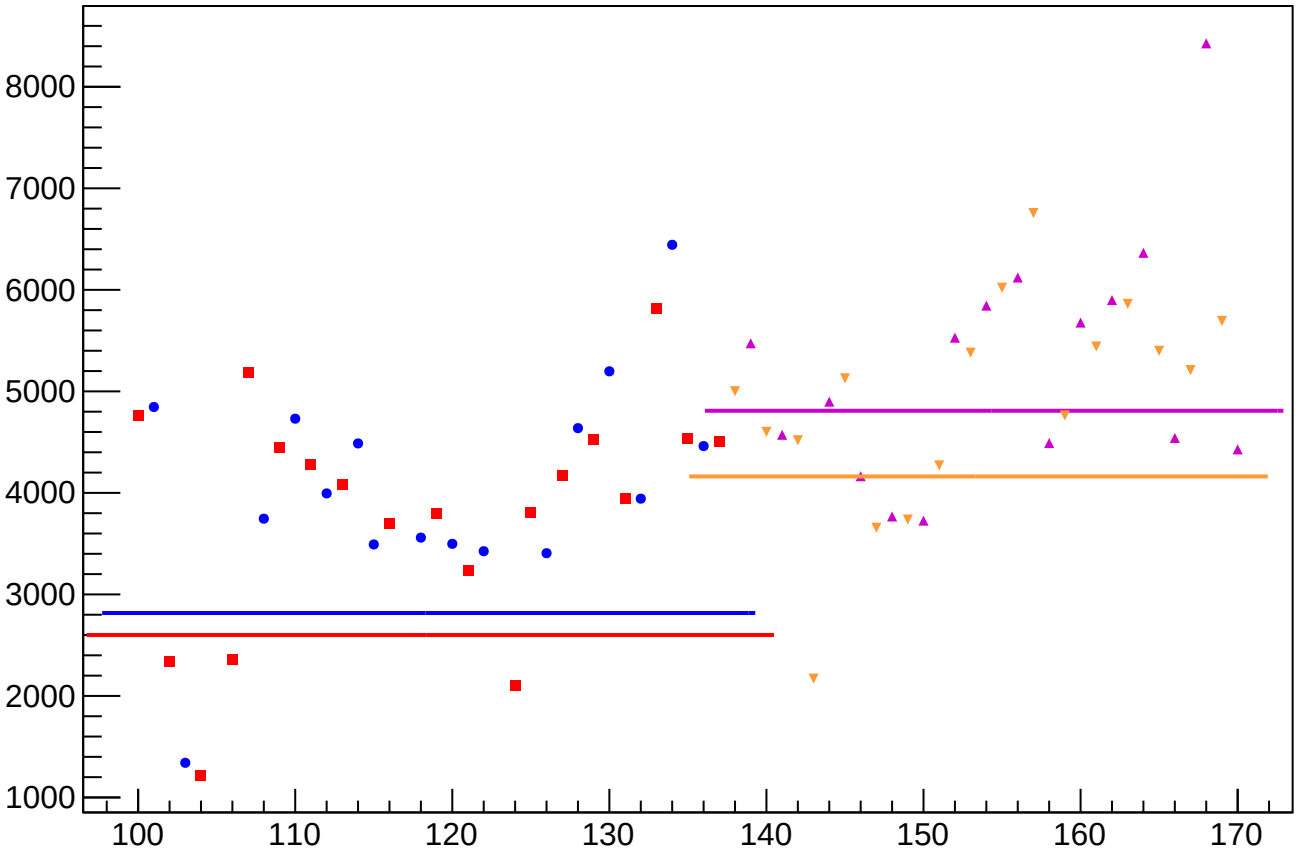
Right Out: 36.115+/-1098.207 $\chi^2$/NDF: 15.9/18

Left In: -958.931+/-1353.473 $\chi^2$/NDF:9.8/15

+ sign -411.821+/-842.933 $\chi^2$/NDF: 36.0/32

All: -385.676+/-599.499 $\chi^2$/NDF: 62.1/67

- sign -358.916+/-852.793 $\chi^2$/NDF: 26.1/34




Right In: 2816.784+/-0.836 $\chi^2$/NDF: 3007570.0/15

Left Out: 4162.071+/-0.850 $\chi^2$/NDF:2515185.1/16

Right Out: 2600.524+/-0.777 $\chi^2$/NDF: 3080771.9/18

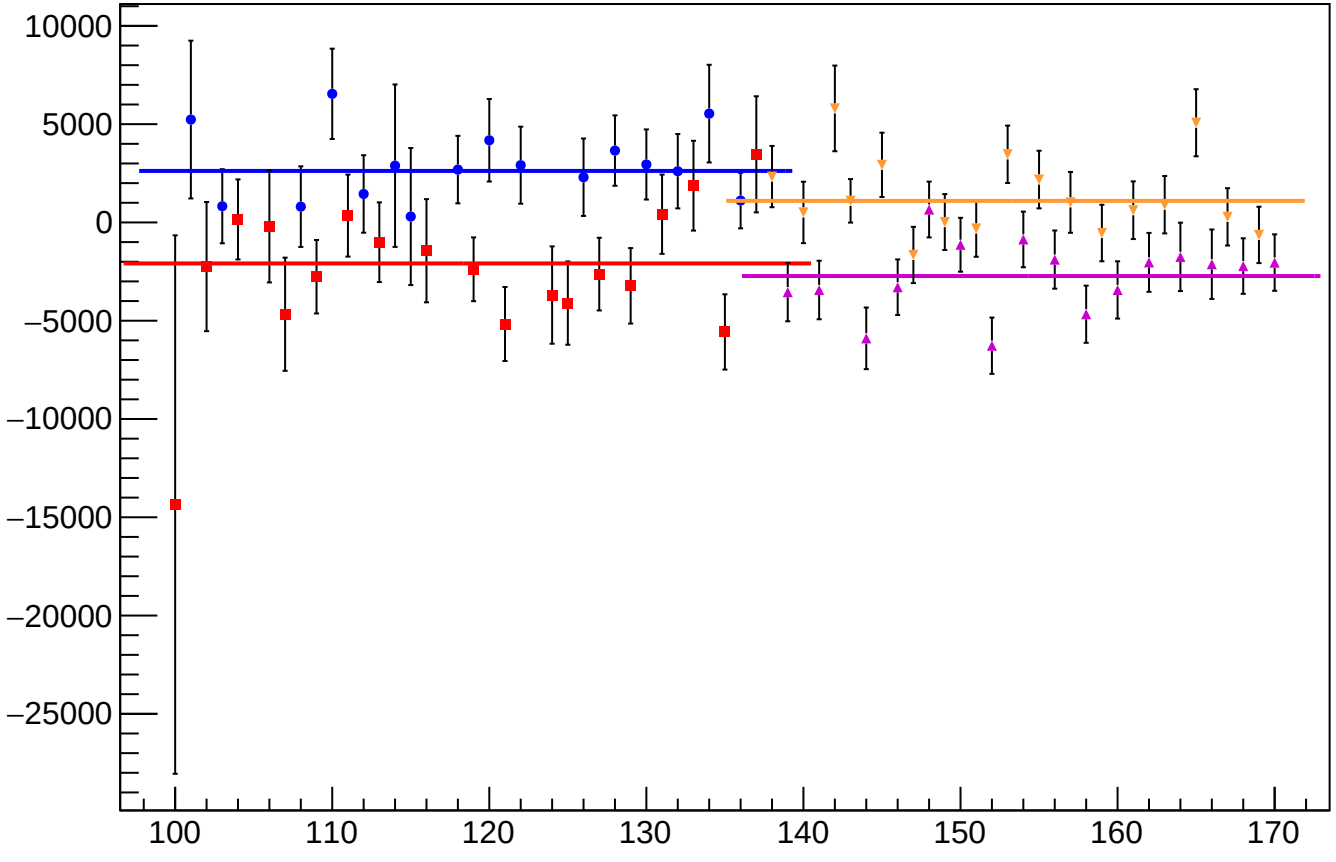
Left In: 4809.096+/-0.957 $\chi^2$/NDF:1017947.3/15

+ sign 3478.399+/-0.596 $\chi^2$/NDF: 6795958.0/32

All: 3477.867+/-0.424 $\chi^2$/NDF: 14105919.3/6

- sign 3477.322+/-0.603 $\chi^2$/NDF: 7309959.7/34

# dit_asym_atl_avg_atr_avg_avg_mean vs Slug




Right In: 2620.535+/-511.510 $\chi^2$/NDF: 9.3/15

Left Out: 1098.033+/-359.000 $\chi^2$/NDF:23.7/16

Right Out: -2085.606+/-504.873 $\chi^2$/NDF: 20.9/18

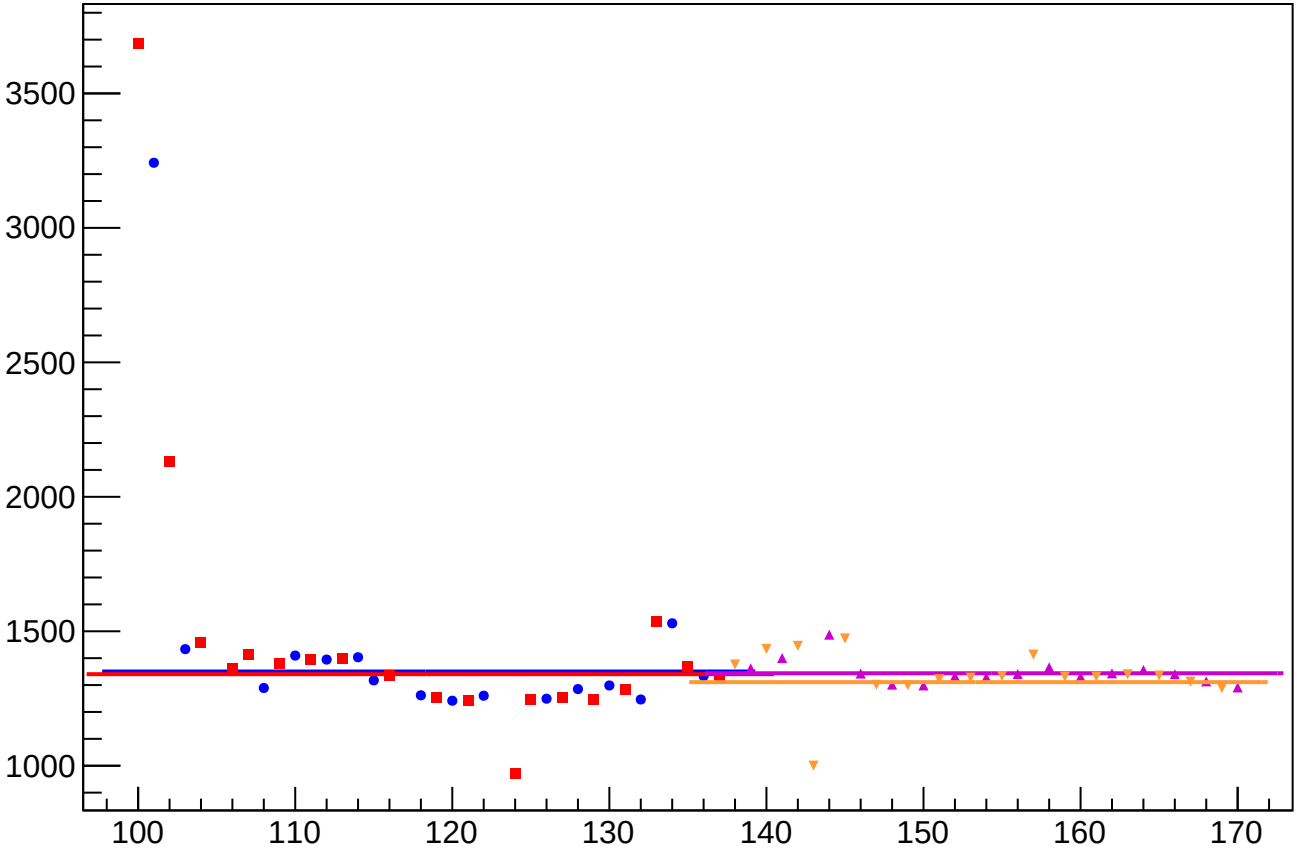
Left In: -2726.645+/-369.856 $\chi^2$/NDF:23.0/15

+ sign 1600.491+/-293.850 $\chi^2$/NDF: 39.0/32

All: -419.878+/-209.360 $\chi^2$/NDF: 180.0/67

- sign -2502.769+/-298.362 $\chi^2$/NDF: 45.0/34

# dit_asym_atl_avg_atr_avg_avg_rms vs Slug




Right In: 1350.369+/-0.362 $\chi^2$/NDF: 494051.1/15

Left Out: 1310.873+/-0.254 $\chi^2$/NDF:212982.5/16

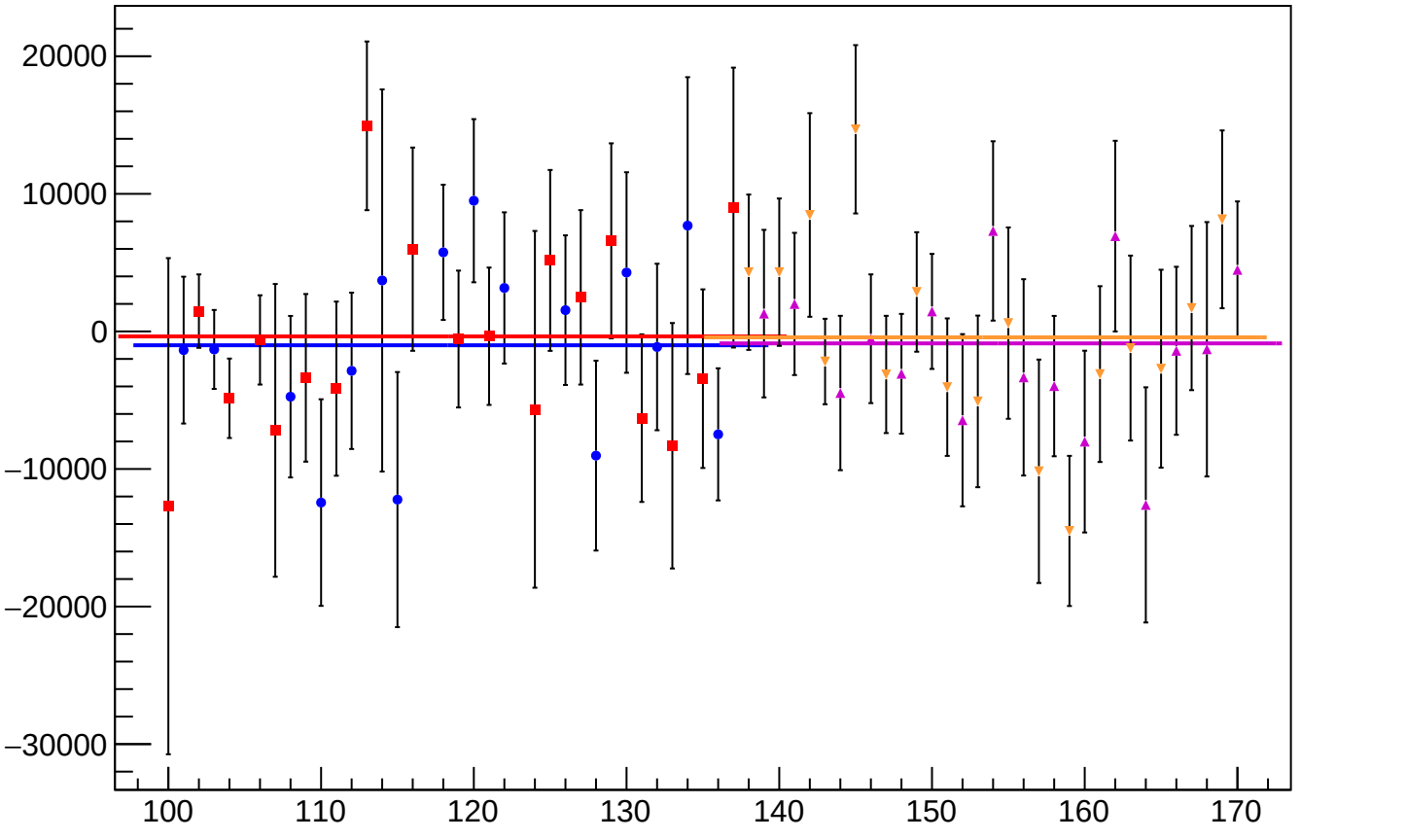
Right Out: 1340.429+/-0.357 $\chi^2$/NDF: 272183.5/18

Left In: 1343.884+/-0.262 $\chi^2$/NDF:28556.0/15

+ sign 1323.908+/-0.208 $\chi^2$/NDF: 715022.5/32

All: 1333.151+/-0.148 $\chi^2$/NDF: 1019841.4/67

- sign 1342.676+/-0.211 $\chi^2$/NDF: 300800.6/34




Right In: -1006.752+/-1404.458 $\chi^2$/NDF: 14.6/15

Left Out: -431.481+/-1317.609 $\chi^2$/NDF:21.7/16

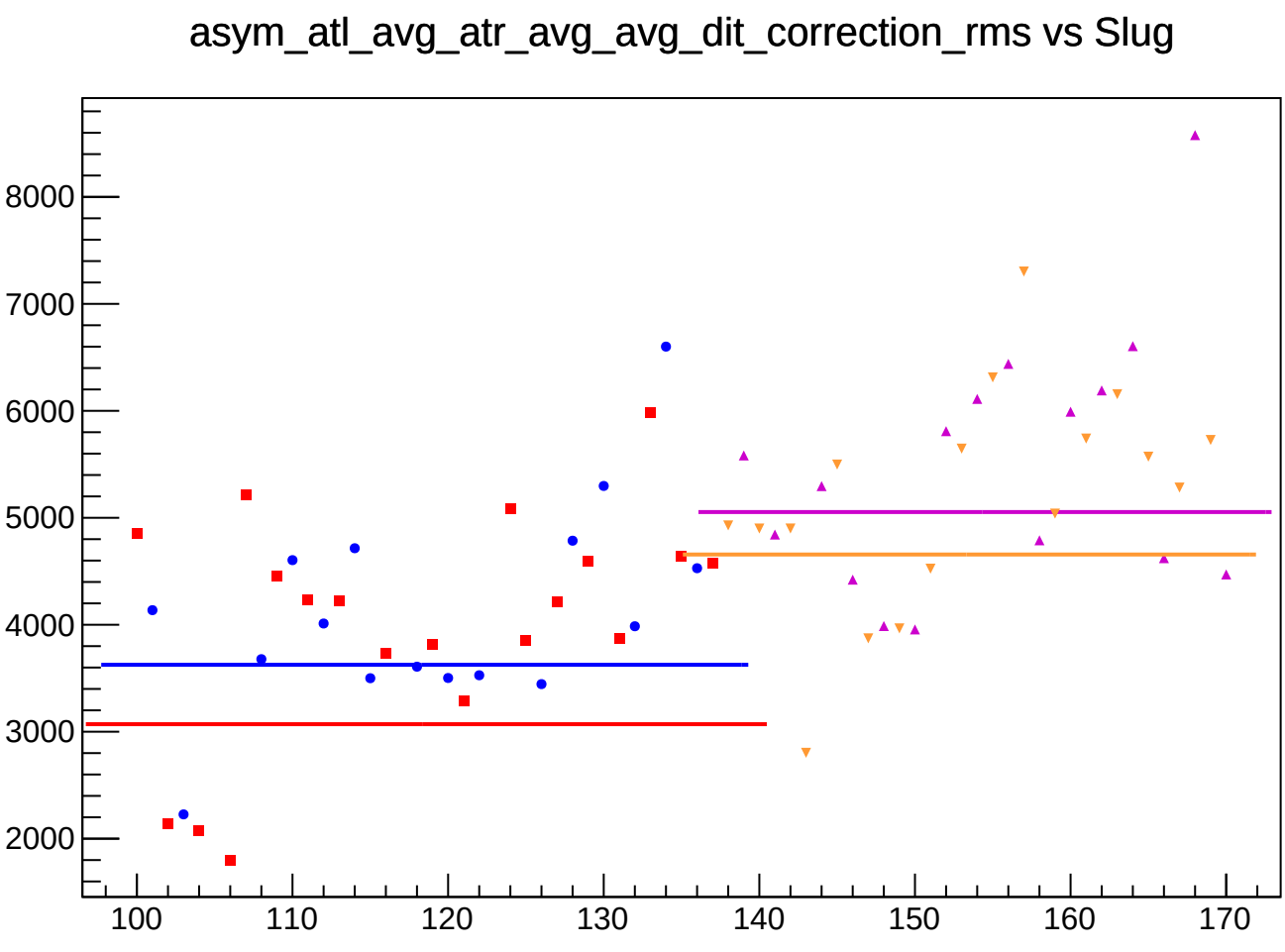
Right Out: -364.493+/-1202.498 $\chi^2$/NDF: 16.2/18

Left In: -870.881+/-1421.005 $\chi^2$/NDF:9.8/15

+ sign -700.780+/-960.928 $\chi^2$/NDF: 36.4/32

All: -635.433+/-663.757 $\chi^2$/NDF: 62.5/67

- sign -575.801+/-917.936 $\chi^2$/NDF: 26.1/34




Right In: 3625.512+/-0.993 $\chi^2$/NDF: 944905.4/15

Left Out: 4656.781+/-0.932 $\chi^2$/NDF:1532527.5/16

Right Out: 3070.442+/-0.850 $\chi^2$/NDF: 1838659.1/18

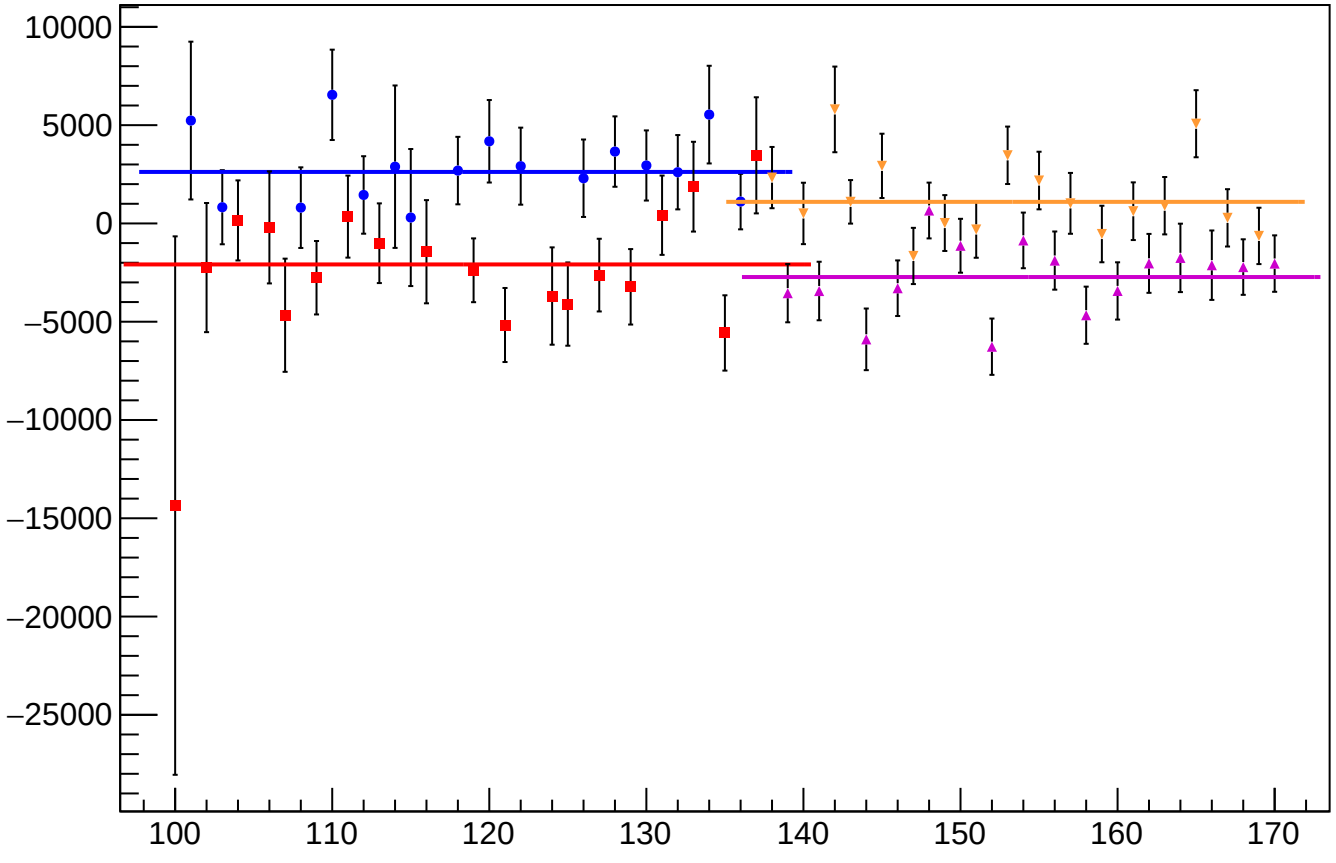
Left In: 5053.863+/-1.005 $\chi^2$/NDF:966794.7/15

+ sign 4174.016+/-0.679 $\chi^2$/NDF: 3050973.9/32

All: 4029.745+/-0.469 $\chi^2$/NDF: 8213162.5/67

- sign 3898.095+/-0.649 $\chi^2$/NDF: 5075967.8/34

# eigen_dit_asym_atl_avg_atr_avg_avg_mean vs Slug




Right In: 2620.535+/-511.510 $\chi^2$/NDF: 9.3/15

Left Out: 1098.026+/-359.001 $\chi^2$/NDF:23.7/16

Right Out: -2085.608+/-504.873 $\chi^2$/NDF: 20.9/18

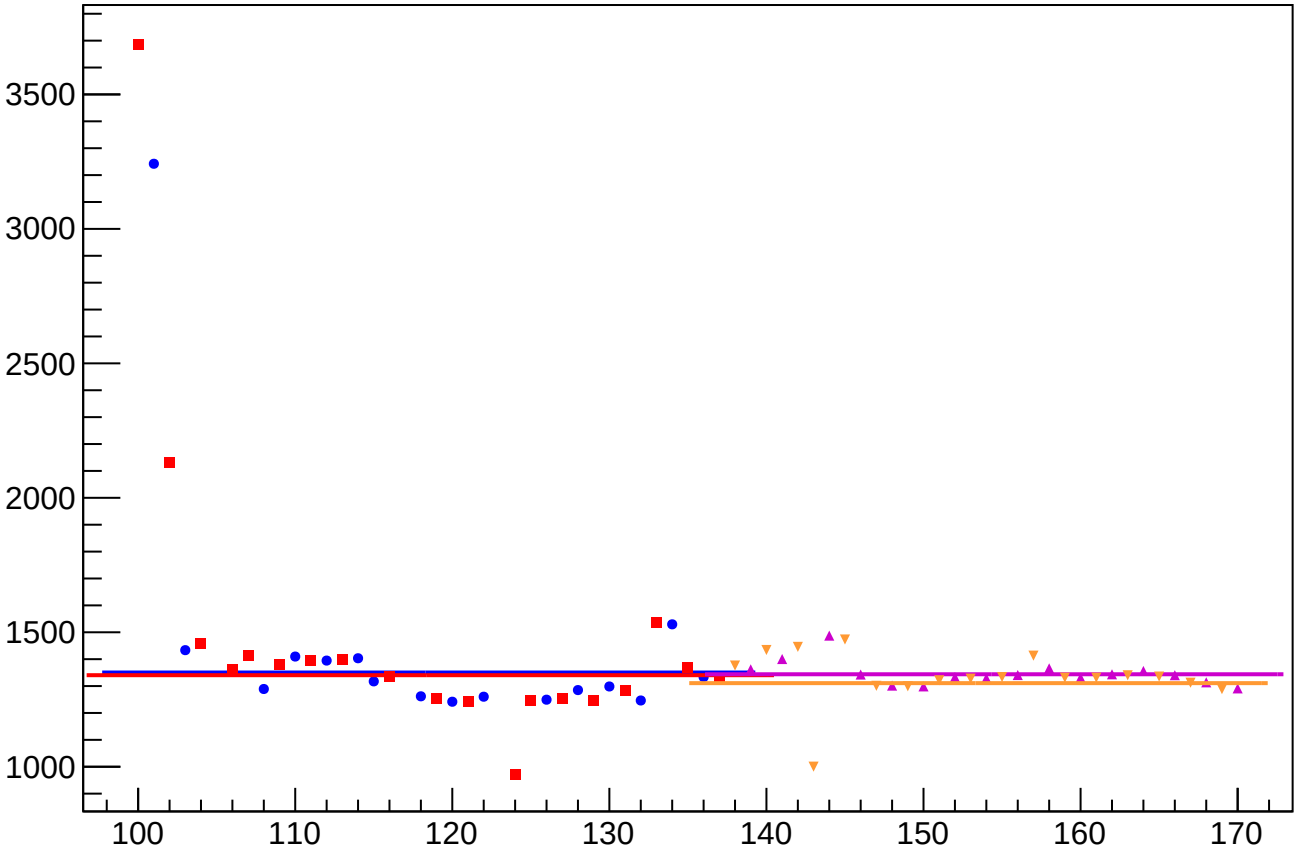
Left In: -2726.646+/-369.856 $\chi^2$/NDF:23.0/15

+ sign 1600.487+/-293.850 $\chi^2$/NDF: 39.0/32

All: -419.881+/-209.360 $\chi^2$/NDF: 180.0/67

- sign -2502.771+/-298.362 $\chi^2$/NDF: 45.0/34

# eigen_dit_asym_atl_avg_atr_avg_avg_rms vs Slug




Right In: 1350.369+/-0.362 $\chi^2$/NDF: 494051.2/15

Left Out: 1310.874+/-0.254 $\chi^2$/NDF:212983.2/16

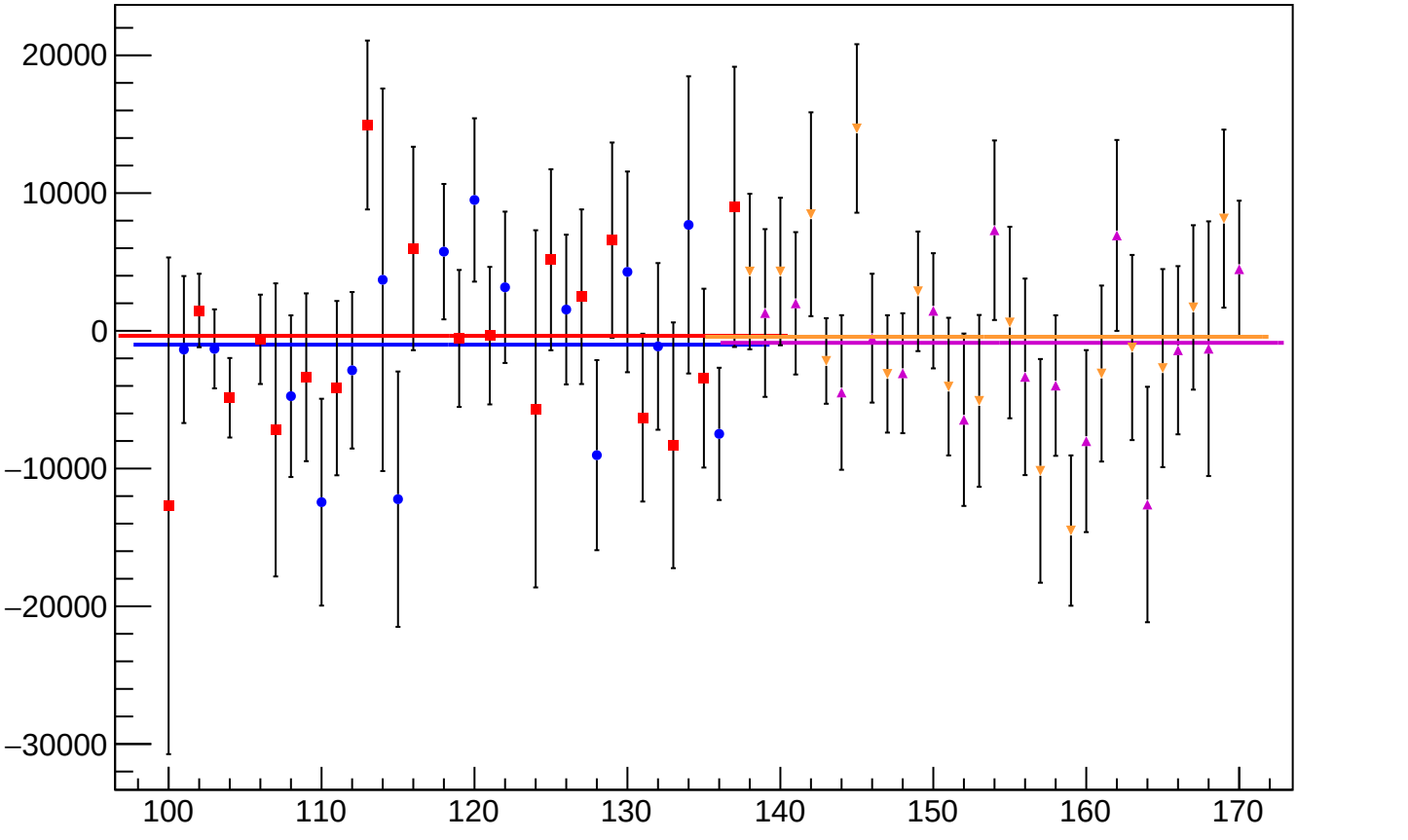
Right Out: 1340.428+/-0.357 $\chi^2$/NDF: 272182.5/18

Left In: 1343.885+/-0.262 $\chi^2$/NDF:28556.4/15

+ sign 1323.908+/-0.208 $\chi^2$/NDF: 715022.7/32

All: 1333.152+/-0.148 $\chi^2$/NDF: 1019841.0/67

- sign 1342.677+/-0.211 $\chi^2$/NDF: 300800.0/34




Right In: -1006.742+/-1404.455 $\chi^2$/NDF: 14.6/15

Left Out: -431.485+/-1317.611 $\chi^2$/NDF:21.7/16

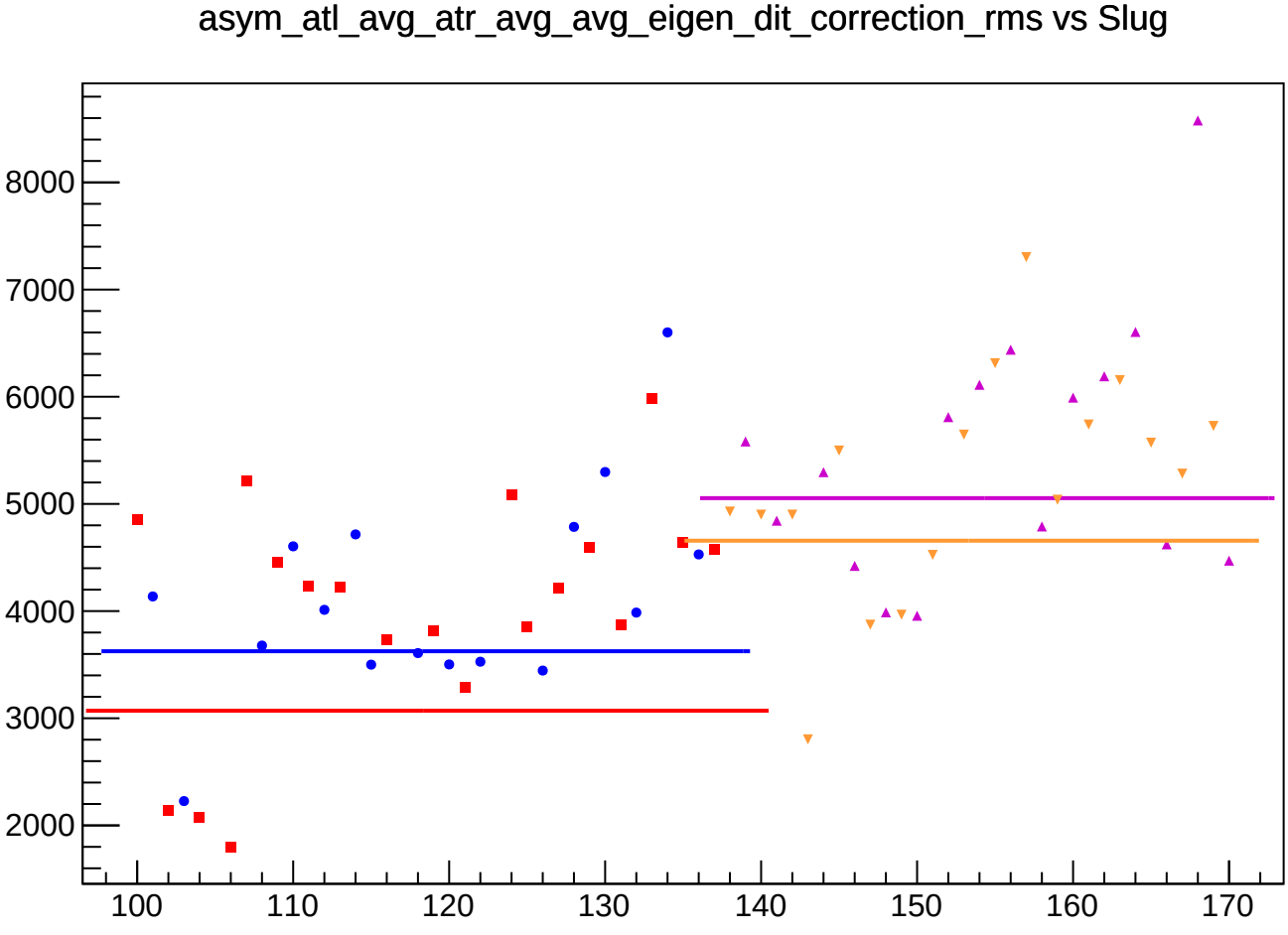
Right Out: -364.495+/-1202.495 $\chi^2$/NDF: 16.2/18

Left In: -870.879+/-1421.007 $\chi^2$/NDF:9.8/15

\+ sign -700.780+/-960.927 $\chi^2$/NDF: 36.4/32

All: -635.432+/-663.757 $\chi^2$/NDF: 62.5/67

\- sign -575.801+/-917.935 $\chi^2$/NDF: 26.1/34




Right In: 3625.503+/-0.993 $\chi^2$/NDF: 944907.6/15

Left Out: 4656.788+/-0.932 $\chi^2$/NDF:1532527.8/16

Right Out: 3070.434+/-0.850 $\chi^2$/NDF: 1838662.0/18

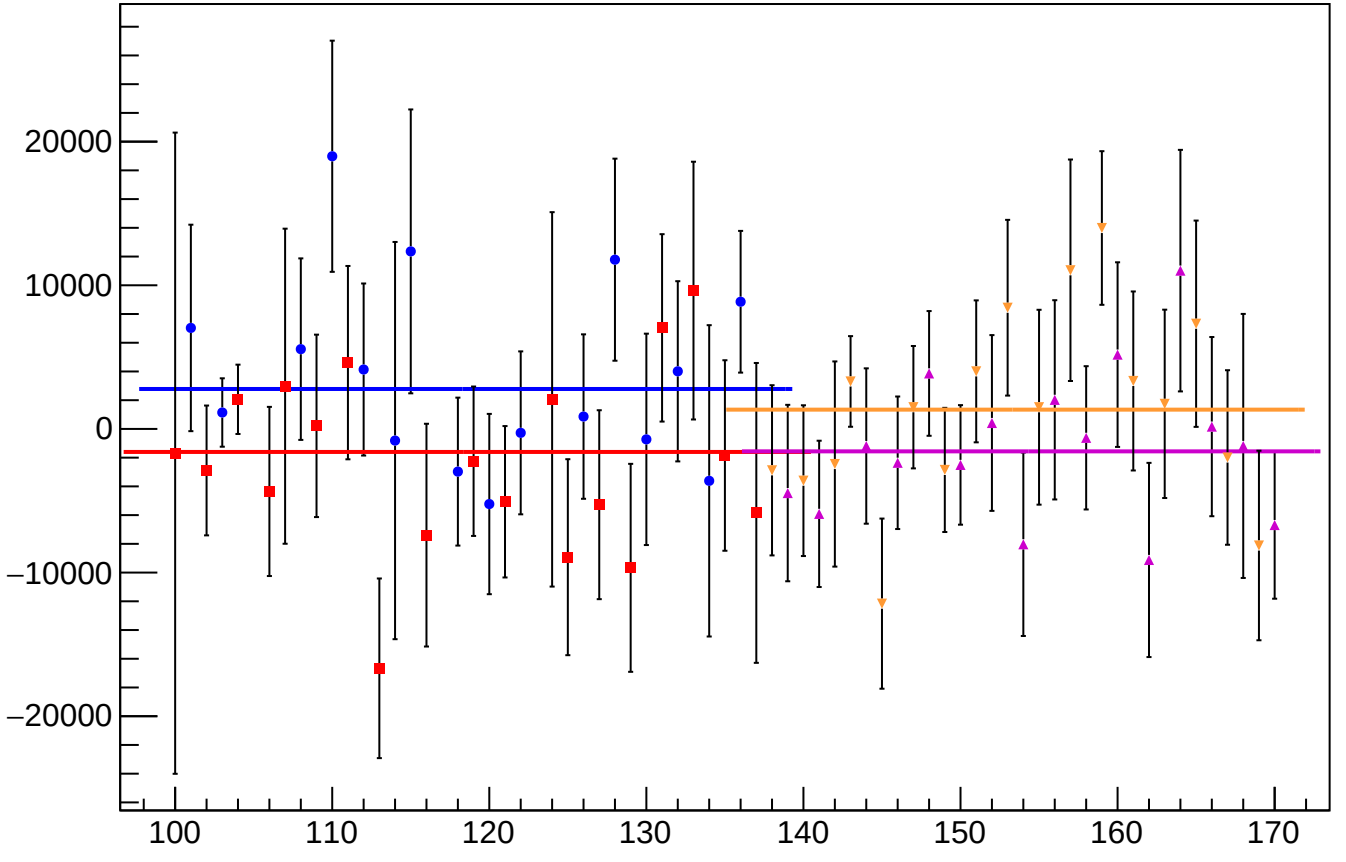
Left In: 5053.870+/-1.005 $\chi^2$/NDF:966796.8/15

+ sign 4174.014+/-0.679 $\chi^2$/NDF: 3050994.8/32

All: 4029.741+/-0.469 $\chi^2$/NDF: 8213227.2/67

- sign 3898.089+/-0.649 $\chi^2$/NDF: 5076009.2/34

# asym_atl_avg_atr_avg_avg_mean vs Slug




Right In: 2780.878+/-1389.439 $\chi^2$/NDF: 13.2/15

Left Out: 1342.516+/-1311.112 $\chi^2$/NDF:20.2/16

Right Out: -1602.626+/-1337.018 $\chi^2$/NDF: 16.8/18

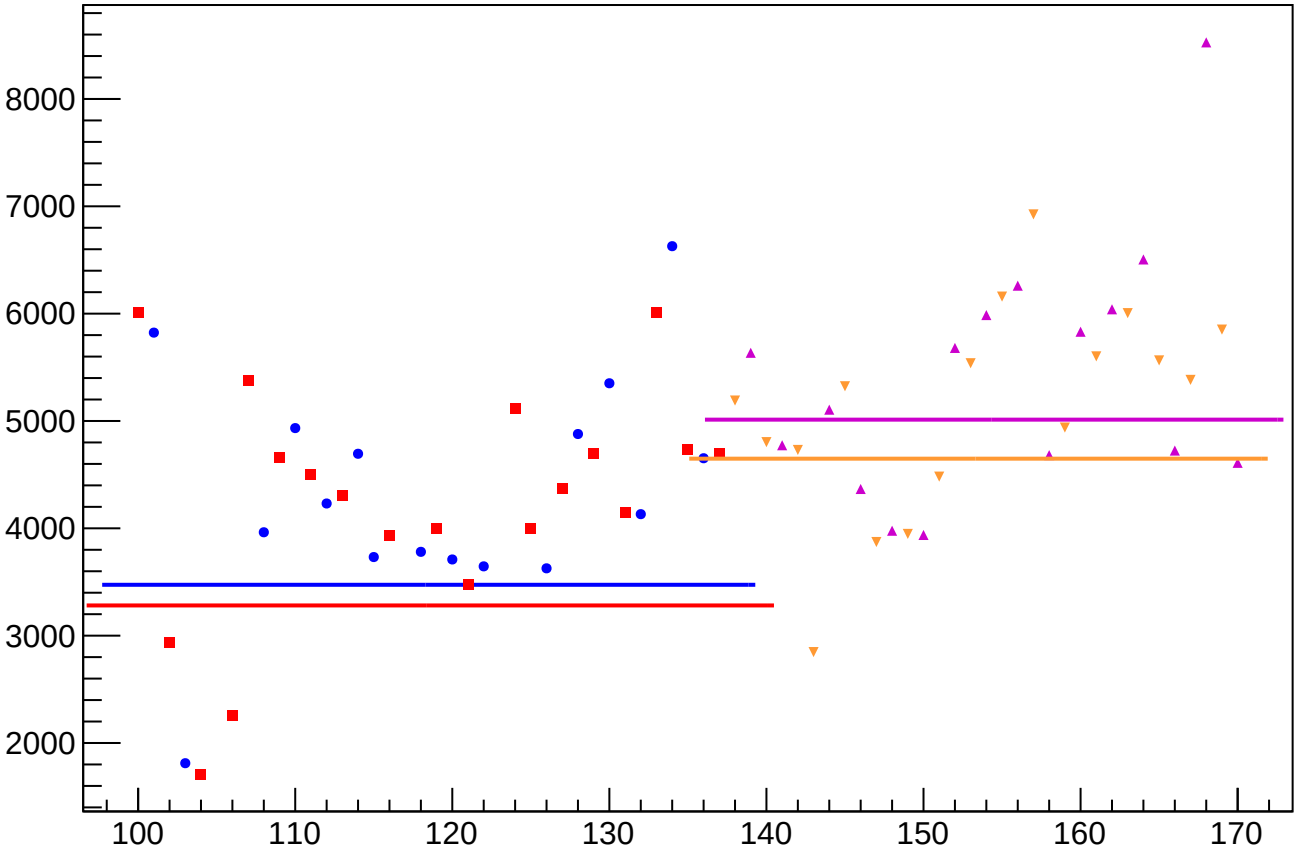
Left In: -1561.721+/-1407.050 $\chi^2$/NDF:9.7/15

+ sign 2020.014+/-953.585 $\chi^2$/NDF: 33.9/32

All: 247.709+/-679.749 $\chi^2$/NDF: 67.4/67

- sign -1583.217+/-969.227 $\chi^2$/NDF: 26.5/34

# asym_atl_avg_atr_avg_avg_rms vs Slug




Right In: 3473.898+/-0.982 $\chi^2$/NDF: 1843964.2/15

Left Out: 4648.904+/-0.927 $\chi^2$/NDF:1400523.8/16

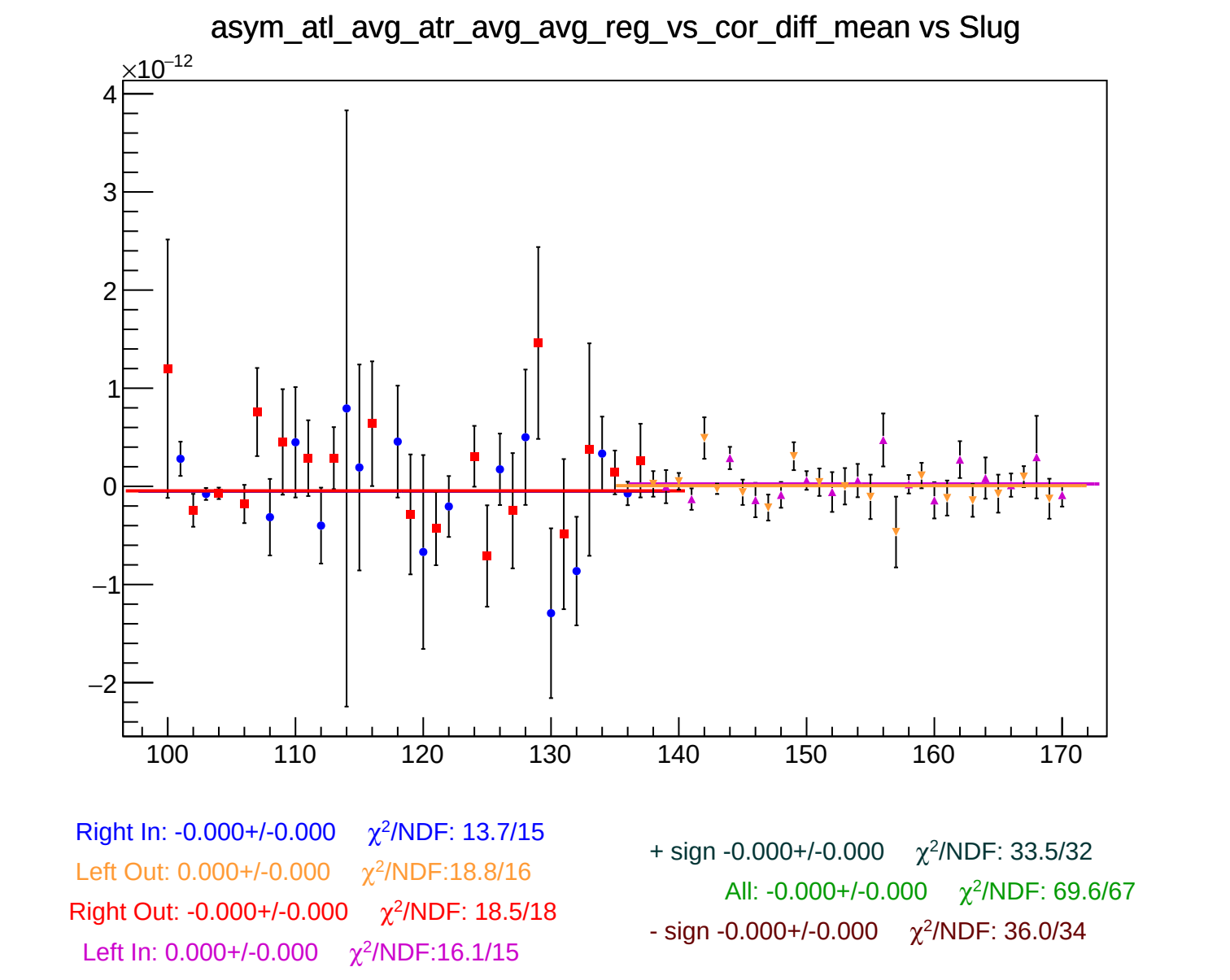
Right Out: 3281.478+/-0.932 $\chi^2$/NDF: 1875493.9/18

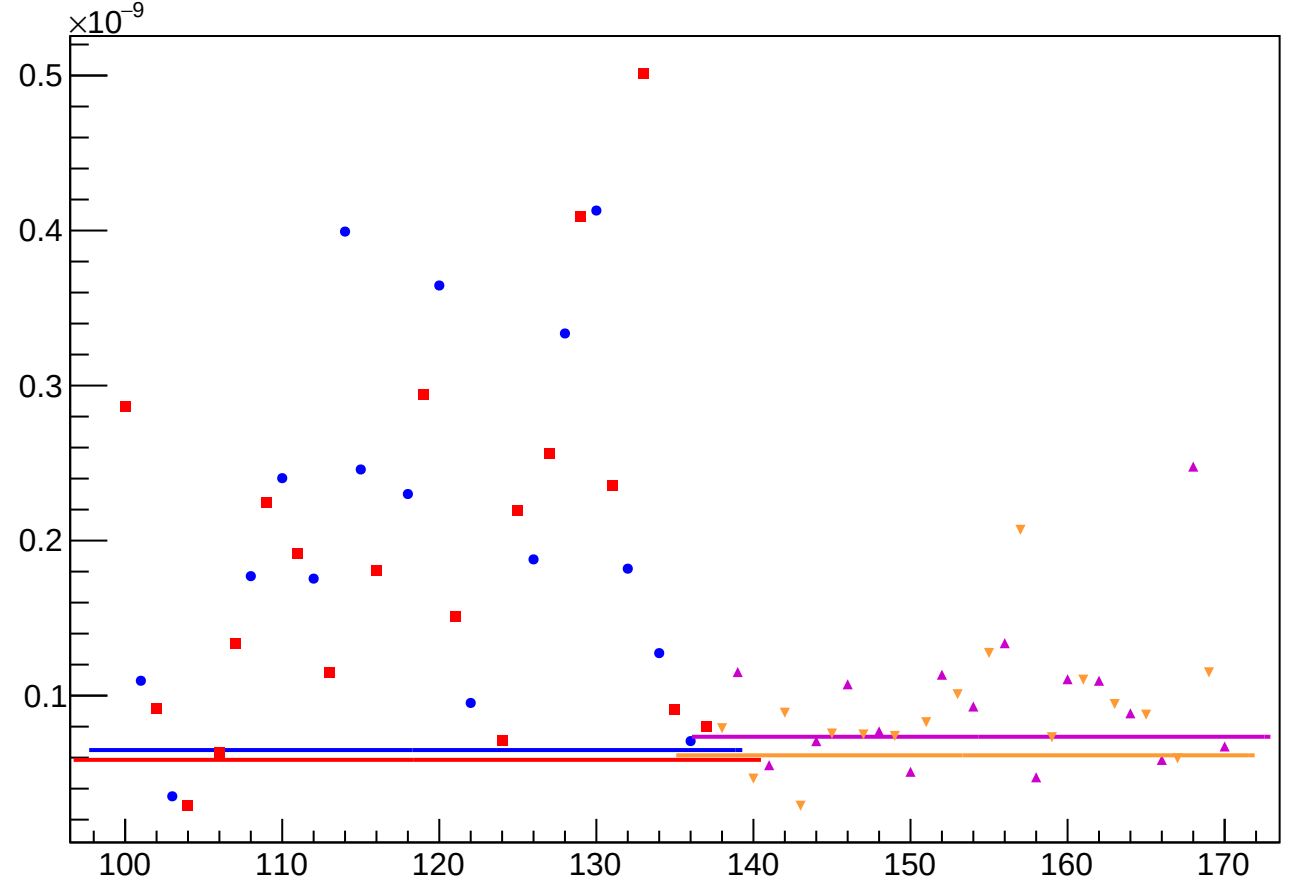
Left In: 5012.439+/-0.995 $\chi^2$/NDF:906497.6/15

+ sign 4095.448+/-0.674 $\chi^2$/NDF: 4001100.5/32

All: 4093.215+/-0.479 $\chi^2$/NDF: 8394473.4/67

- sign 4090.941+/-0.680 $\chi^2$/NDF: 4393350.7/34


asym_atl_avg_atr_avg_avg_reg_vs_cor_diff_mean vs Slug
×10^−12
4
3
2
1
0
−1
−2
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 13.7/15
Left Out: 0.000+/-0.000 χ²/NDF:18.8/16
Right Out: -0.000+/-0.000 χ²/NDF: 18.5/18
Left In: 0.000+/-0.000 χ²/NDF:16.1/15
+ sign -0.000+/-0.000 χ²/NDF: 33.5/32
All: -0.000+/-0.000 χ²/NDF: 69.6/67
- sign -0.000+/-0.000 χ²/NDF: 36.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2592912.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2000714.2/16

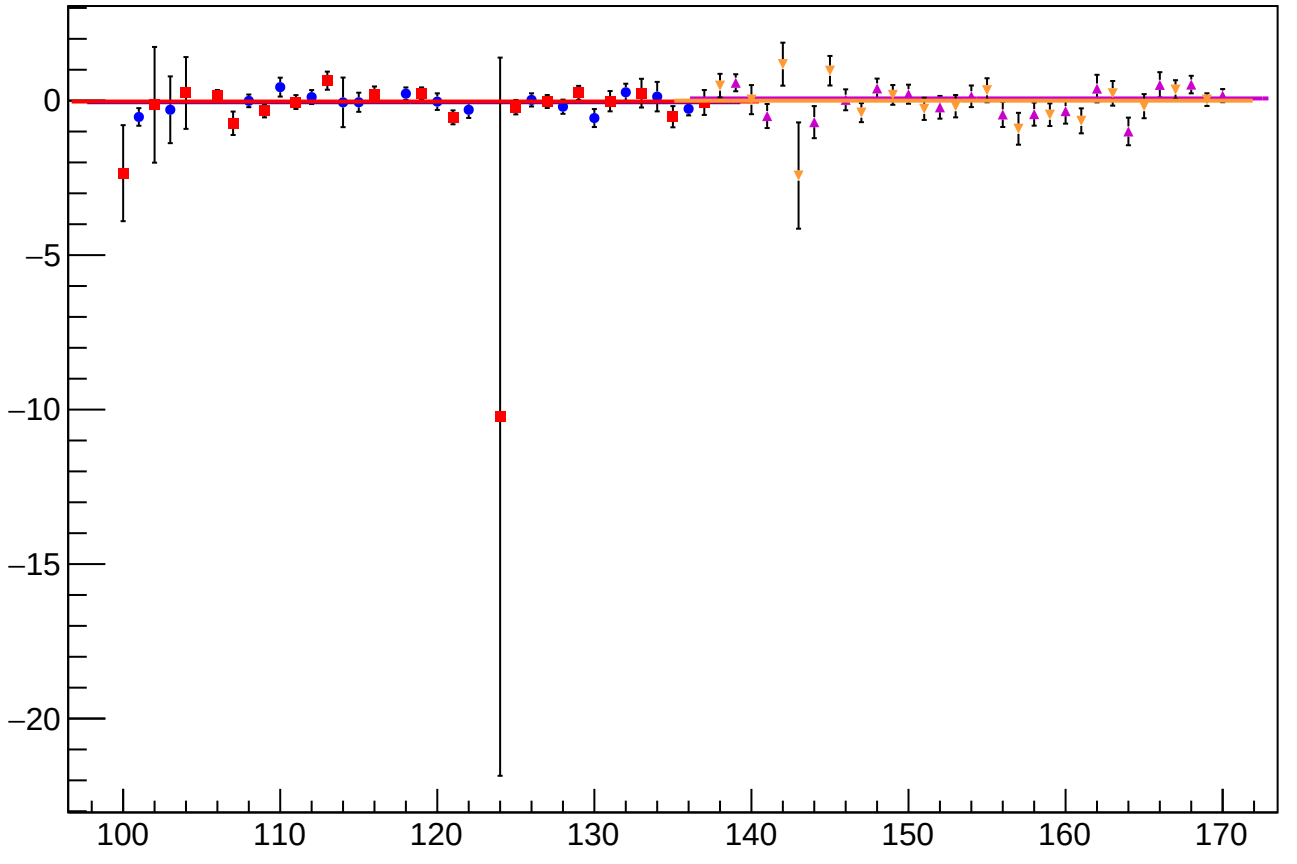
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2855105.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:1272588.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4600657.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 8901366.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4254670.2/34




Right In: -0.051+/-0.067 $\chi^2$/NDF: 14.9/15

Left Out: -0.001+/-0.089 $\chi^2$/NDF:23.3/16

Right Out: -0.029+/-0.064 $\chi^2$/NDF: 27.5/18

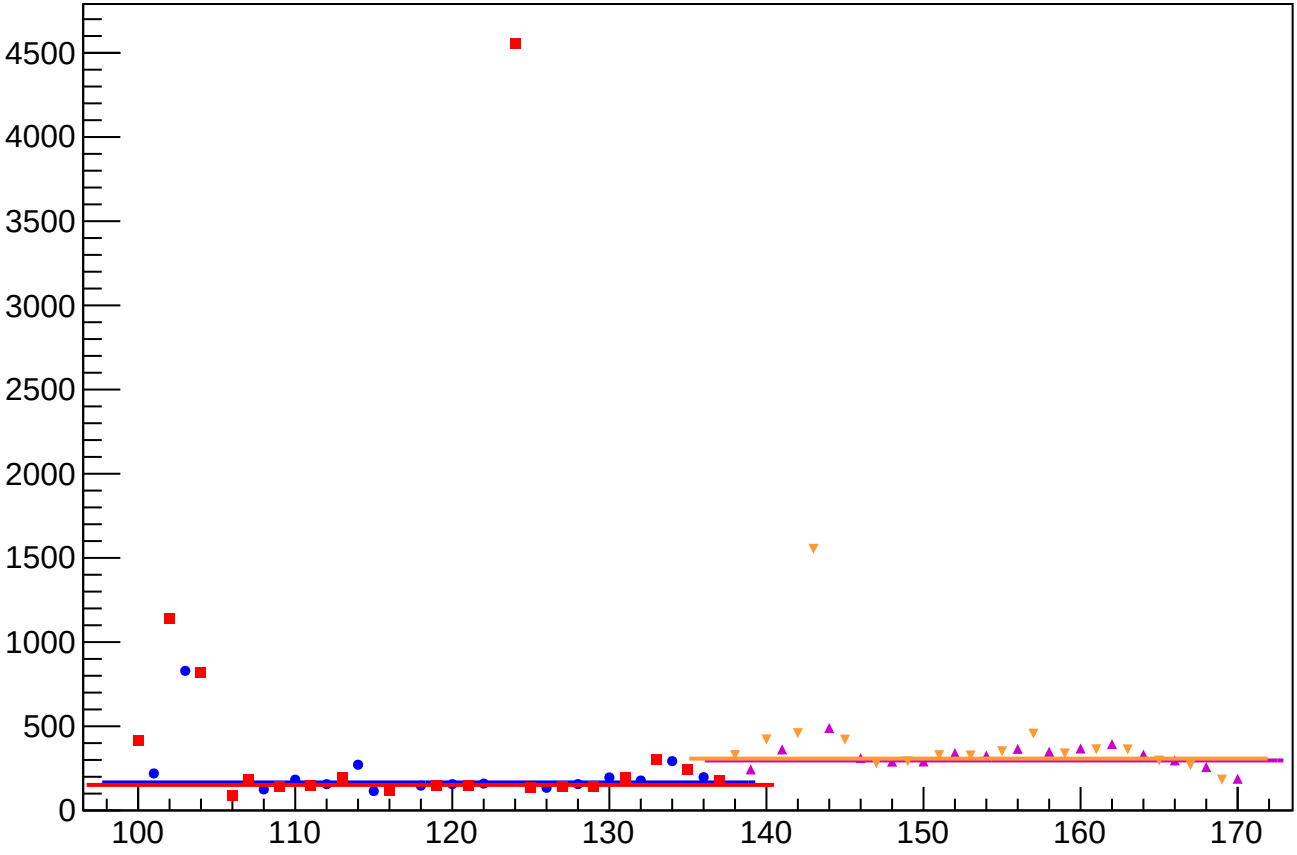
Left In: 0.071+/-0.085 $\chi^2$/NDF:24.1/15

+ sign -0.033+/-0.053 $\chi^2$/NDF: 38.3/32

All: -0.012+/-0.037 $\chi^2$/NDF: 91.2/67

- sign 0.007+/-0.051 $\chi^2$/NDF: 52.6/34

# asym_atl_avg_atr_avg_avg_dit_vs_cor_diff_rms vs Slug




Right In: 166.360+/-0.047 $\chi^2$/NDF: 1282728.5/15

Left Out: 307.894+/-0.063 $\chi^2$/NDF:2465840.3/16

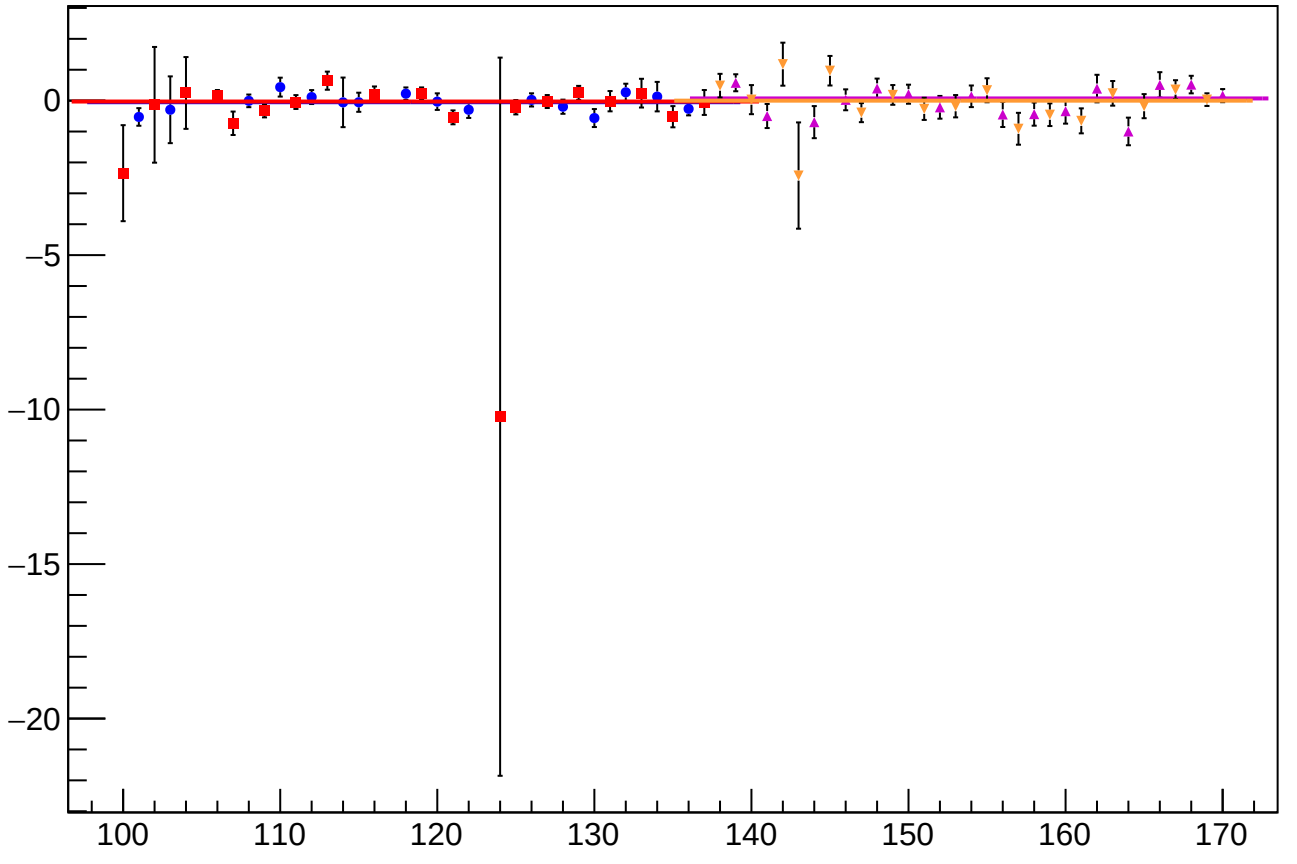
Right Out: 151.791+/-0.045 $\chi^2$/NDF: 2315638.8/18

Left In: 297.047+/-0.060 $\chi^2$/NDF:1278508.3/15

+ sign 217.026+/-0.038 $\chi^2$/NDF: 6969607.2/32

All: 210.356+/-0.026 $\chi^2$/NDF: 14341172.7/67

- sign 204.246+/-0.036 $\chi^2$/NDF: 7311923.2/34




Right In: -0.051+/-0.067 $\chi^2$/NDF: 14.9/15

Left Out: -0.001+/-0.089 $\chi^2$/NDF:23.3/16

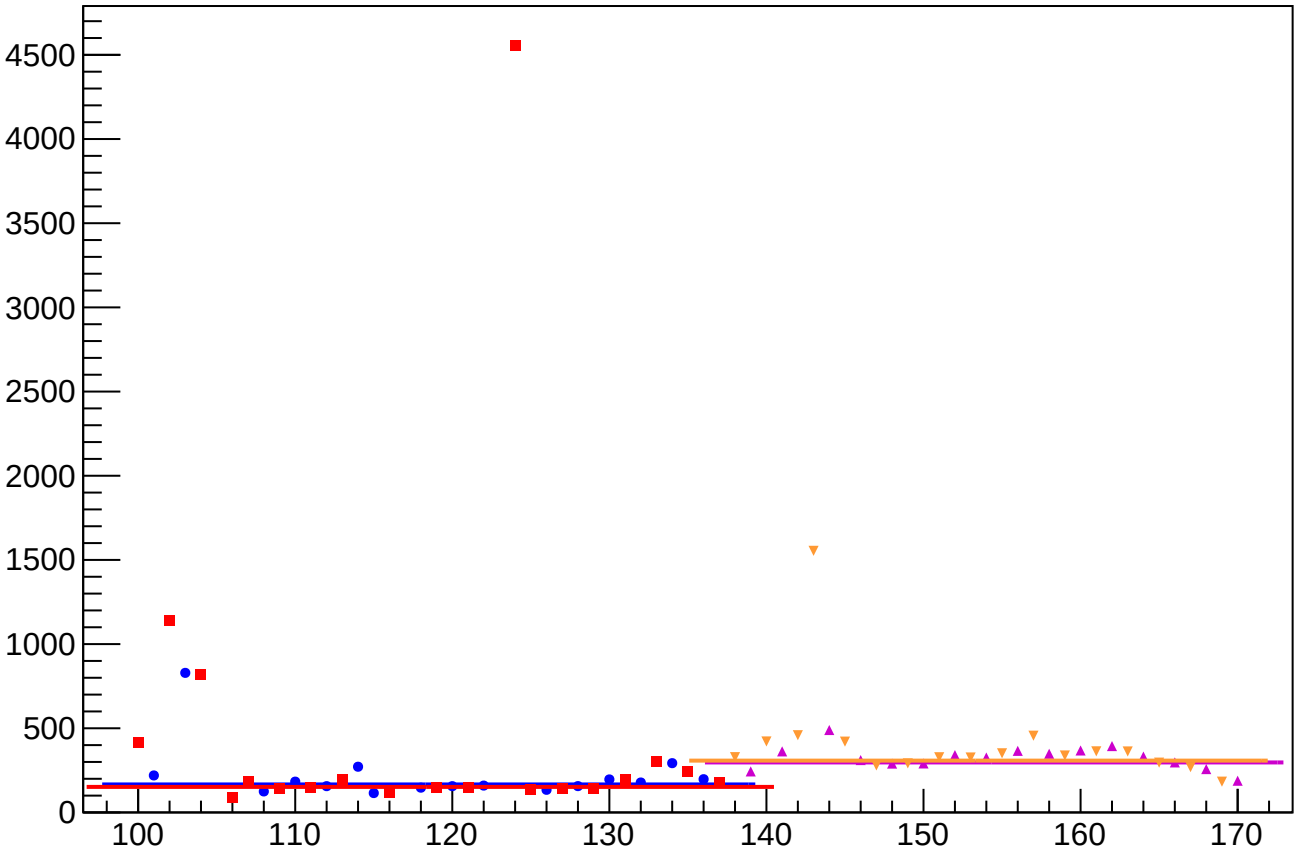
Right Out: -0.029+/-0.064 $\chi^2$/NDF: 27.5/18

Left In: 0.071+/-0.085 $\chi^2$/NDF:24.1/15

+ sign -0.033+/-0.053 $\chi^2$/NDF: 38.3/32

All: -0.012+/-0.037 $\chi^2$/NDF: 91.2/67

- sign 0.007+/-0.051 $\chi^2$/NDF: 52.6/34




Right In: 166.360+/-0.047 $\chi^2$/NDF: 1282728.5/15

Left Out: 307.894+/-0.063 $\chi^2$/NDF:2465840.3/16

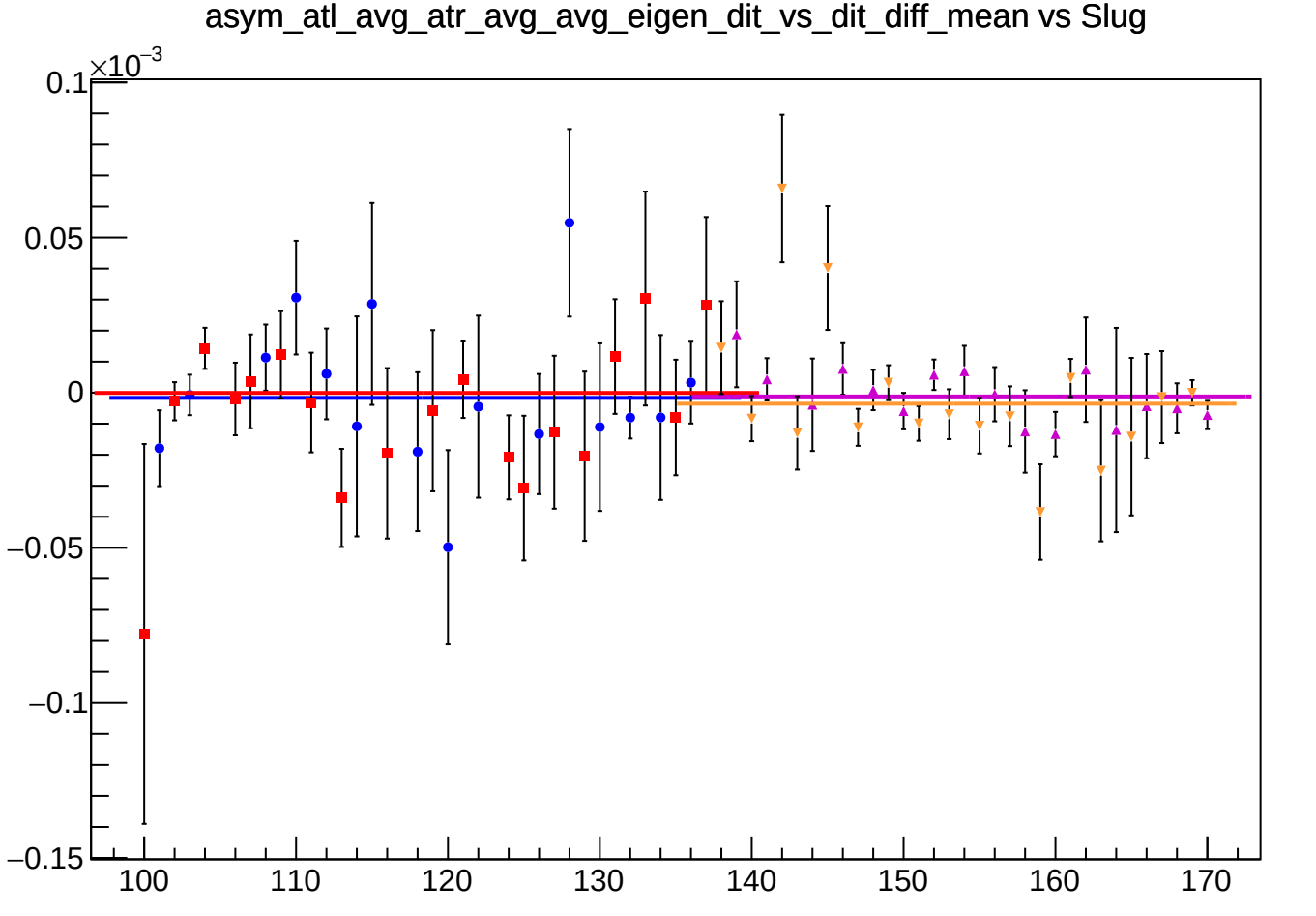
Right Out: 151.791+/-0.045 $\chi^2$/NDF: 2315638.8/18

Left In: 297.047+/-0.060 $\chi^2$/NDF:1278508.3/15

+ sign 217.026+/-0.038 $\chi^2$/NDF: 6969607.2/32

All: 210.356+/-0.026 $\chi^2$/NDF: 14341172.7/67

- sign 204.246+/-0.036 $\chi^2$/NDF: 7311923.2/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.5/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:30.0/16

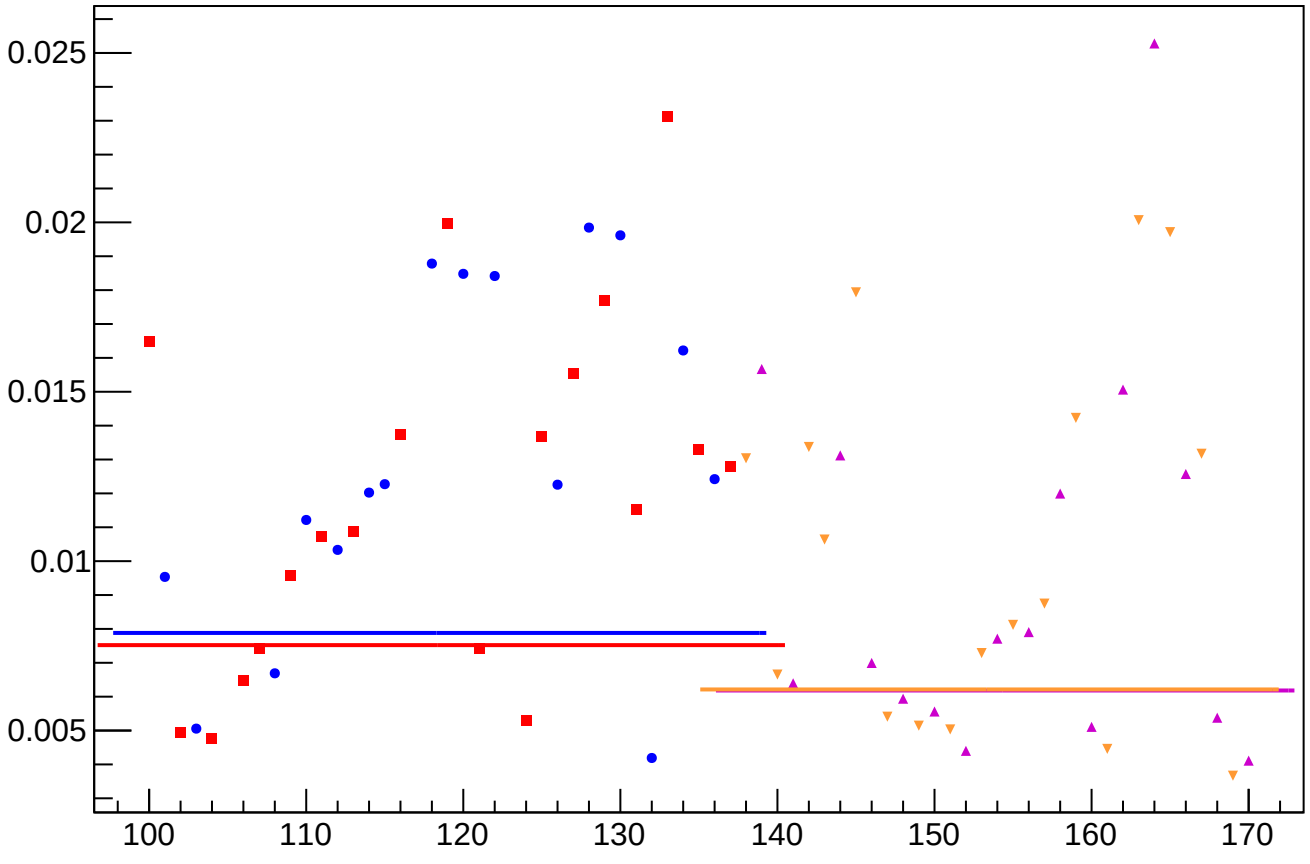
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 19.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:12.9/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 45.8/32

All: -0.000+/-0.000 $\chi^2$/NDF: 79.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 32.9/34




Right In: 0.008+/-0.000 $\chi^2$/NDF: 3301734.3/15

Left Out: 0.006+/-0.000 $\chi^2$/NDF:5270250.8/16

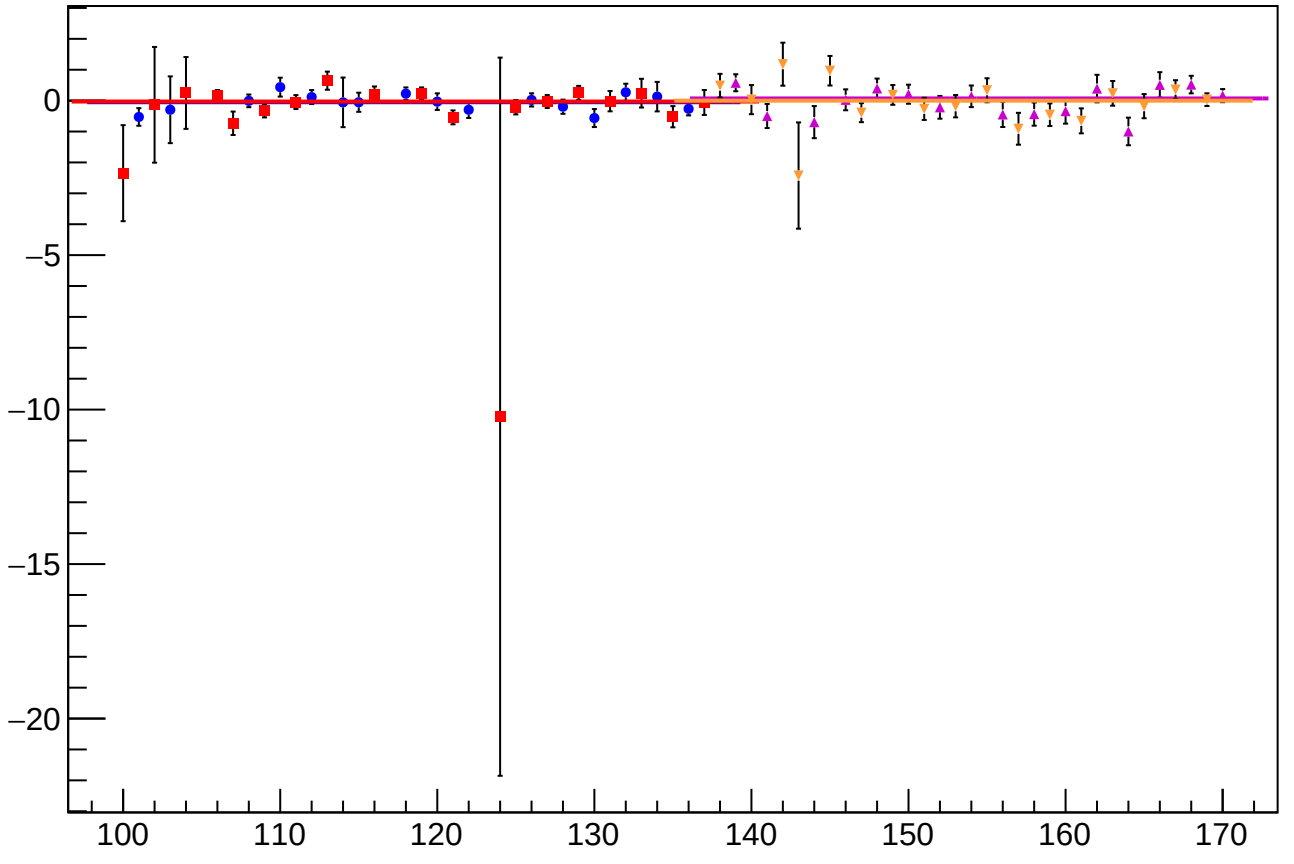
Right Out: 0.008+/-0.000 $\chi^2$/NDF: 2975331.6/18

Left In: 0.006+/-0.000 $\chi^2$/NDF:3887828.6/15

+ sign 0.007+/-0.000 $\chi^2$/NDF: 8934792.0/32

All: 0.007+/-0.000 $\chi^2$/NDF: 16062335.0/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 7125897.9/34




Right In: -0.051+/-0.067 $\chi^2$/NDF: 14.9/15

Left Out: -0.001+/-0.089 $\chi^2$/NDF:23.3/16

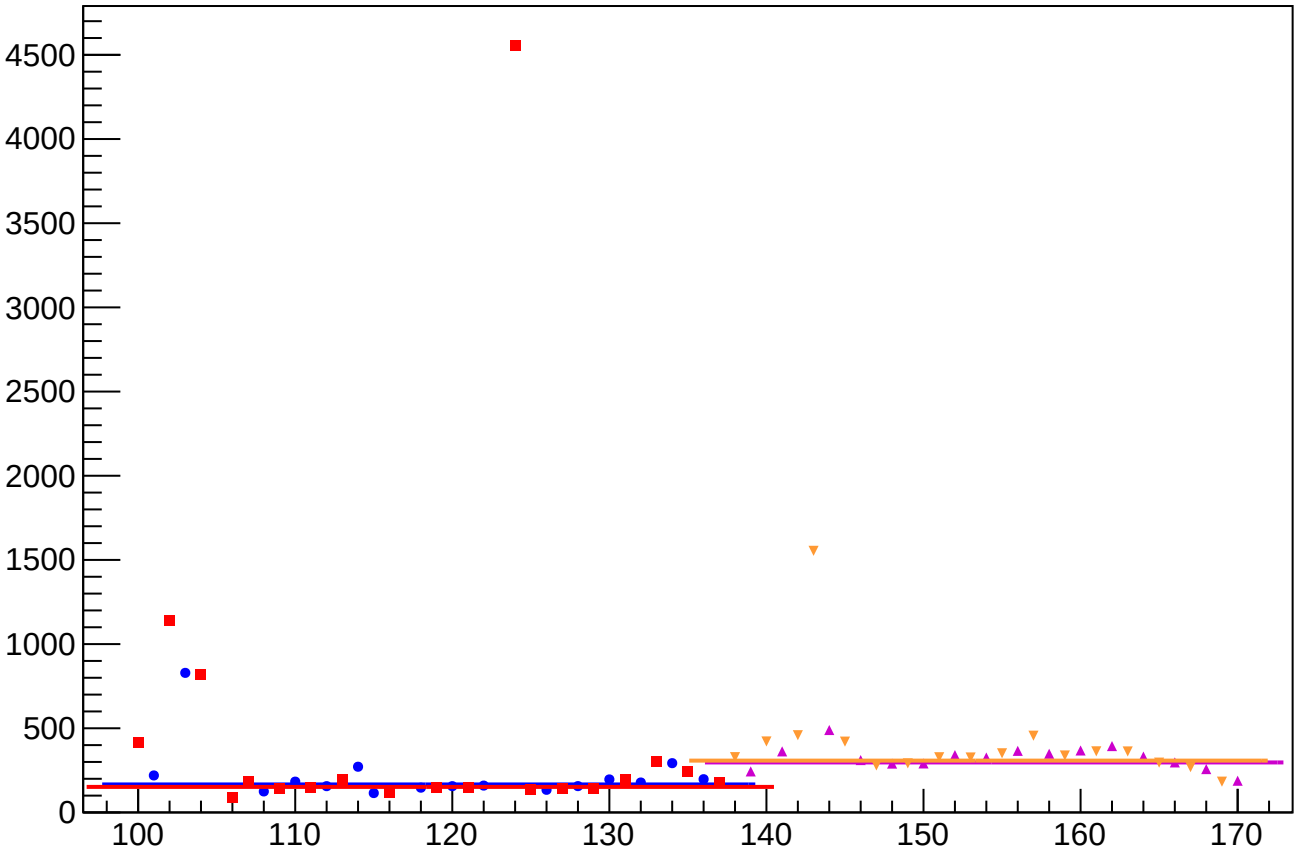
Right Out: -0.029+/-0.064 $\chi^2$/NDF: 27.5/18

Left In: 0.071+/-0.085 $\chi^2$/NDF:24.1/15

+ sign -0.033+/-0.053 $\chi^2$/NDF: 38.4/32

All: -0.012+/-0.037 $\chi^2$/NDF: 91.2/67

- sign 0.007+/-0.051 $\chi^2$/NDF: 52.6/34




Right In: 166.359+/-0.047 $\chi^2$/NDF: 1282724.2/15

Left Out: 307.897+/-0.063 $\chi^2$/NDF:2465900.8/16

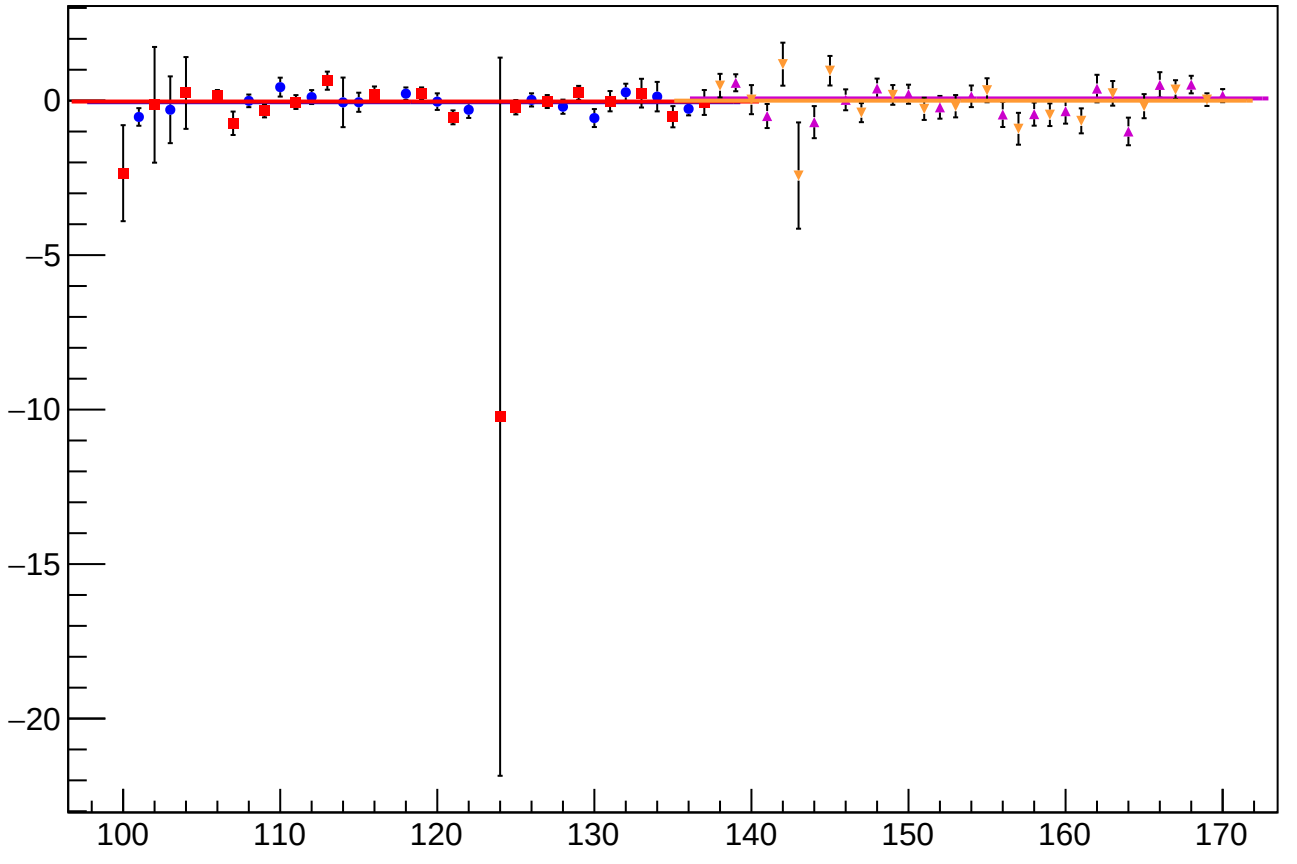
Right Out: 151.790+/-0.045 $\chi^2$/NDF: 2315641.8/18

Left In: 297.050+/-0.060 $\chi^2$/NDF:1278542.0/15

+ sign 217.026+/-0.038 $\chi^2$/NDF: 6969807.9/32

All: 210.356+/-0.026 $\chi^2$/NDF: 14341630.3/67

- sign 204.245+/-0.036 $\chi^2$/NDF: 7312174.8/34




Right In: -0.051+/-0.067 $\chi^2$/NDF: 14.9/15

Left Out: -0.001+/-0.089 $\chi^2$/NDF:23.3/16

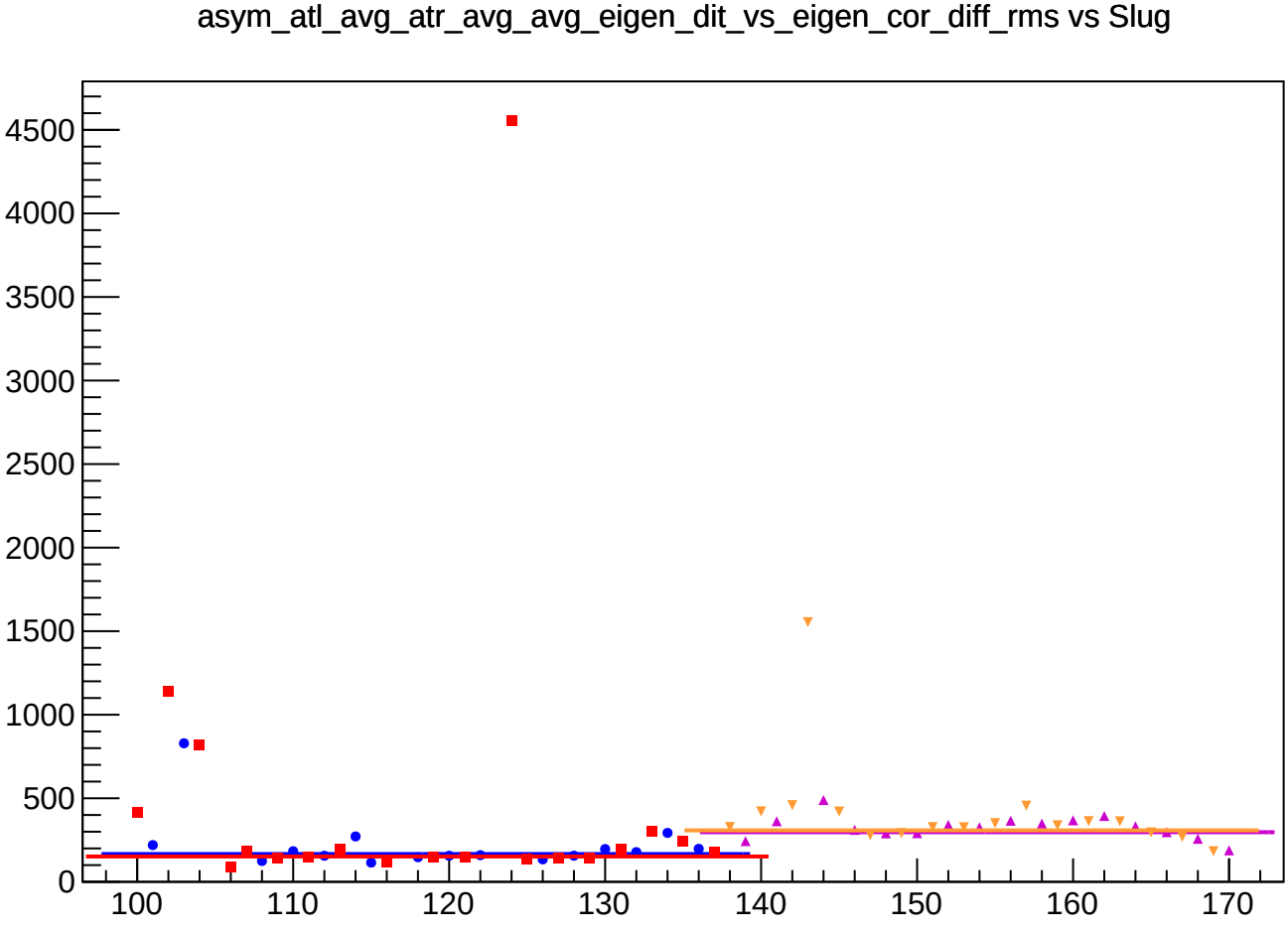
Right Out: -0.029+/-0.064 $\chi^2$/NDF: 27.5/18

Left In: 0.071+/-0.085 $\chi^2$/NDF:24.1/15

+ sign -0.033+/-0.053 $\chi^2$/NDF: 38.4/32

All: -0.012+/-0.037 $\chi^2$/NDF: 91.2/67

- sign 0.007+/-0.051 $\chi^2$/NDF: 52.6/34




Right In: 166.359+/-0.047 $\chi^2$/NDF: 1282724.2/15

Left Out: 307.897+/-0.063 $\chi^2$/NDF:2465900.8/16

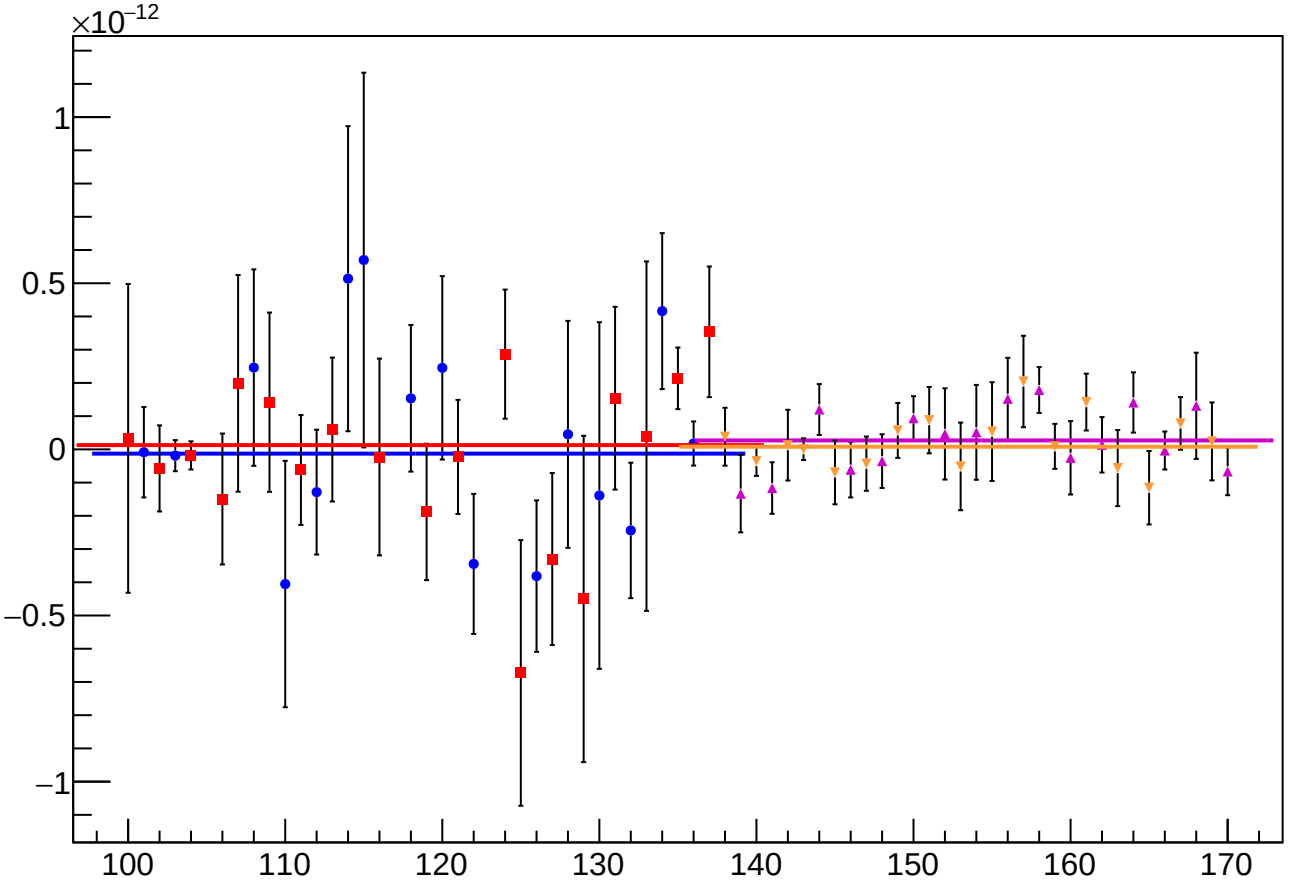
Right Out: 151.790+/-0.045 $\chi^2$/NDF: 2315641.8/18

Left In: 297.050+/-0.060 $\chi^2$/NDF:1278542.0/15

+ sign 217.026+/-0.038 $\chi^2$/NDF: 6969807.9/32

All: 210.356+/-0.026 $\chi^2$/NDF: 14341630.3/67

- sign 204.245+/-0.036 $\chi^2$/NDF: 7312174.8/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:10.3/16

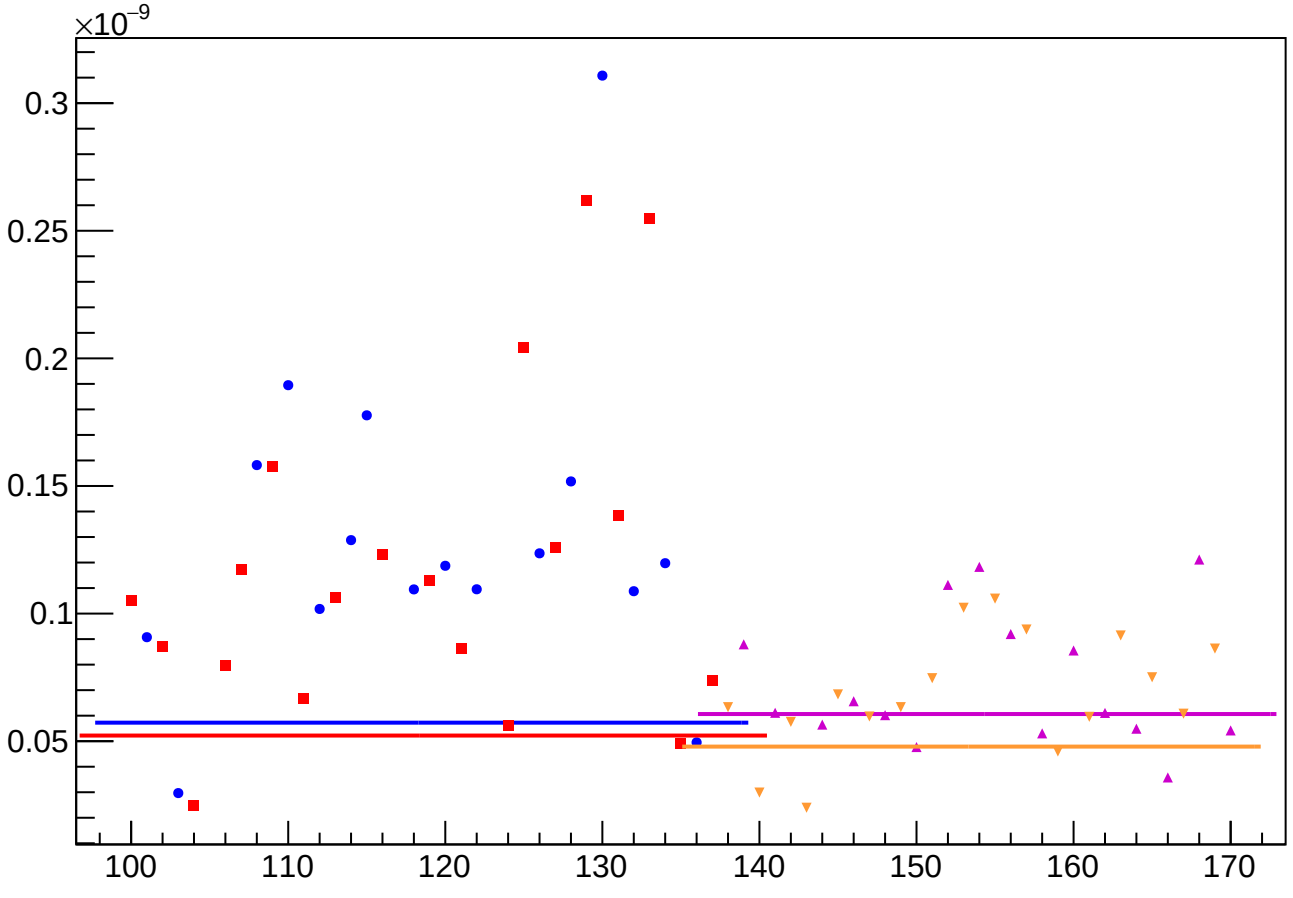
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.9/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:19.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 26.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 66.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 38.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2983121.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:3415109.6/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3287828.4/18

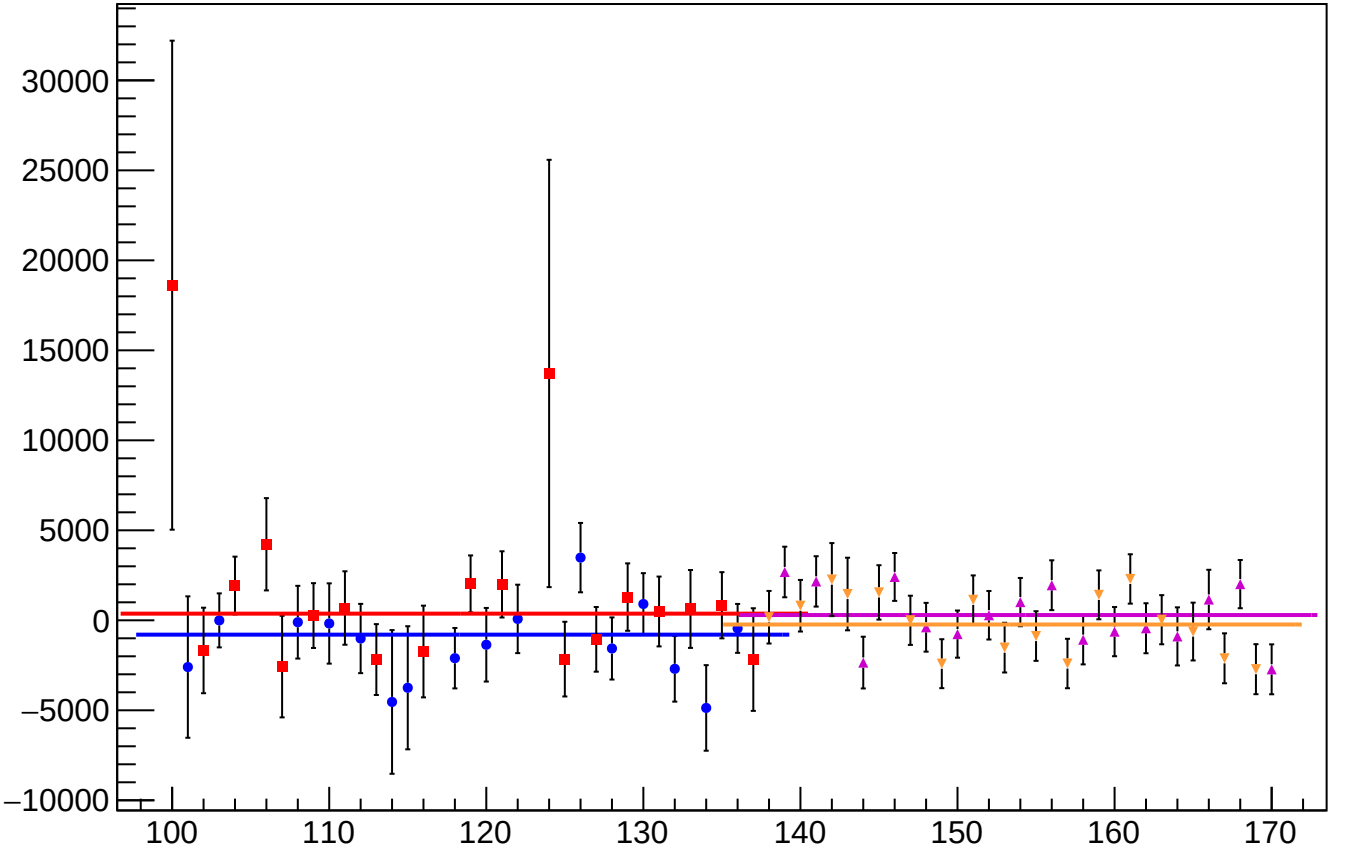
Left In: 0.000+/-0.000 $\chi^2$/NDF:1741040.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 6522980.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 11874688.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5127143.1/34

# reg_asym_atl_avg_atr_avg_dd_mean vs Slug




Right In: -797.285+/-487.453 $\chi^2$/NDF: 13.4/15

Left Out: -233.732+/-351.019 $\chi^2$/NDF:21.4/16

Right Out: 370.010+/-485.826 $\chi^2$/NDF: 15.6/18

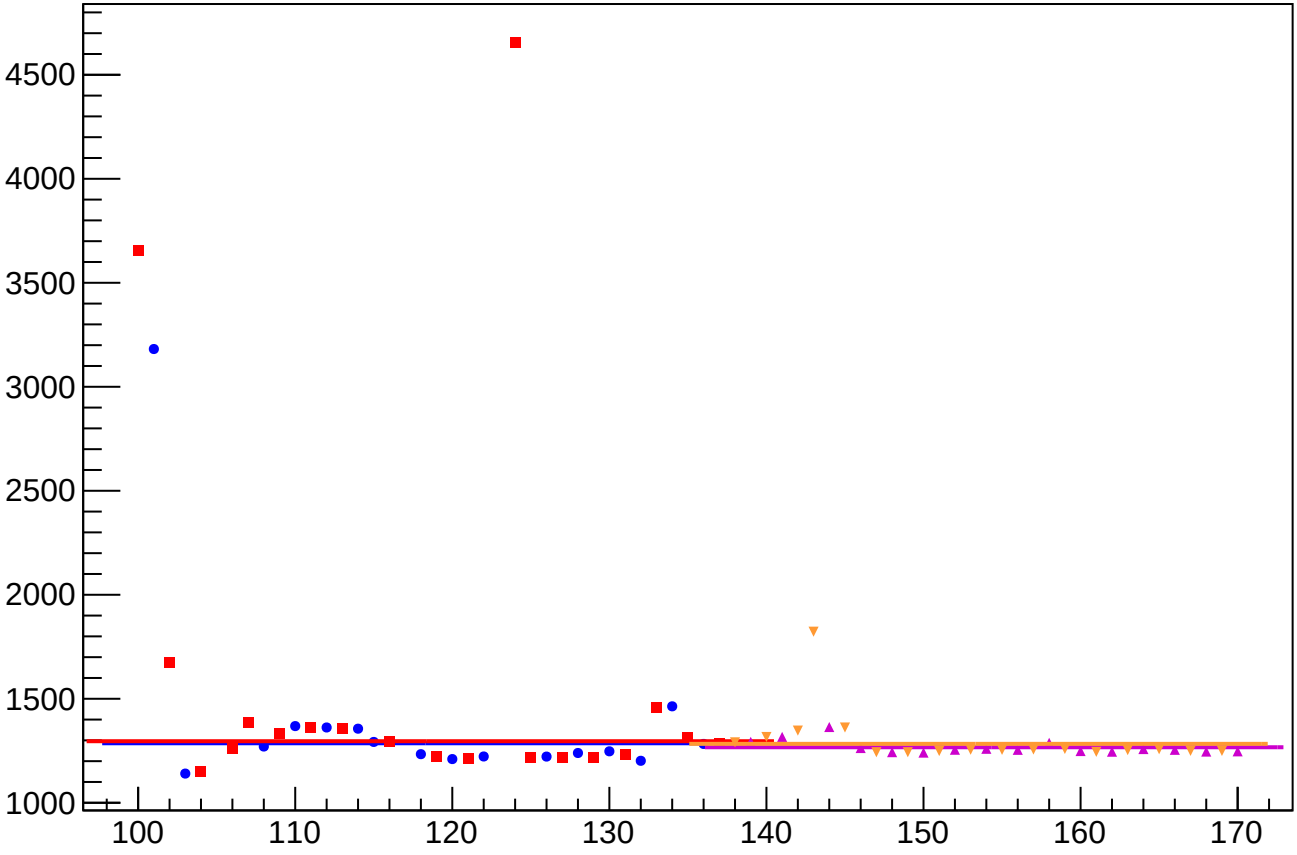
Left In: 292.459+/-348.528 $\chi^2$/NDF:22.1/15

+ sign -426.174+/-284.849 $\chi^2$/NDF: 35.7/32

All: -51.509+/-200.830 $\chi^2$/NDF: 76.9/67

- sign 318.810+/-283.192 $\chi^2$/NDF: 37.8/34

# reg_asym_atl_avg_atr_avg_dd_rms vs Slug




Right In: 1286.097+/-0.345 $\chi^2$/NDF: 518126.9/15

Left Out: 1283.255+/-0.248 $\chi^2$/NDF:164800.9/16

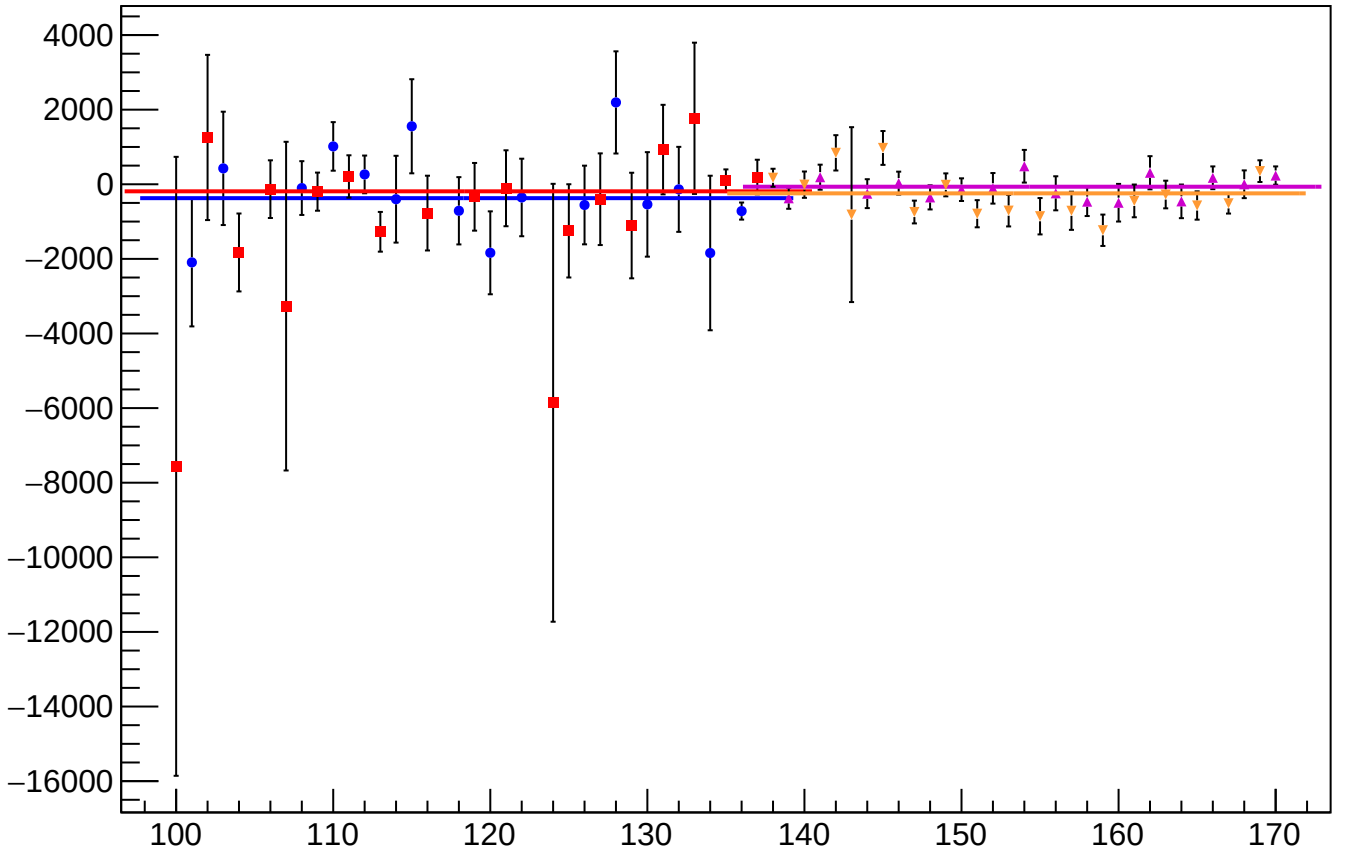
Right Out: 1295.943+/-0.344 $\chi^2$/NDF: 328069.9/18

Left In: 1266.902+/-0.246 $\chi^2$/NDF:16511.4/15

+ sign 1284.225+/-0.201 $\chi^2$/NDF: 682972.7/32

All: 1280.476+/-0.142 $\chi^2$/NDF: 1032961.3/67

- sign 1276.770+/-0.200 $\chi^2$/NDF: 349299.5/34




Right In: -372.325+/-168.204 $\chi^2$/NDF: 18.2/15

Left Out: -243.696+/-88.603 $\chi^2$/NDF:36.7/16

Right Out: -188.945+/-169.575 $\chi^2$/NDF: 14.6/18

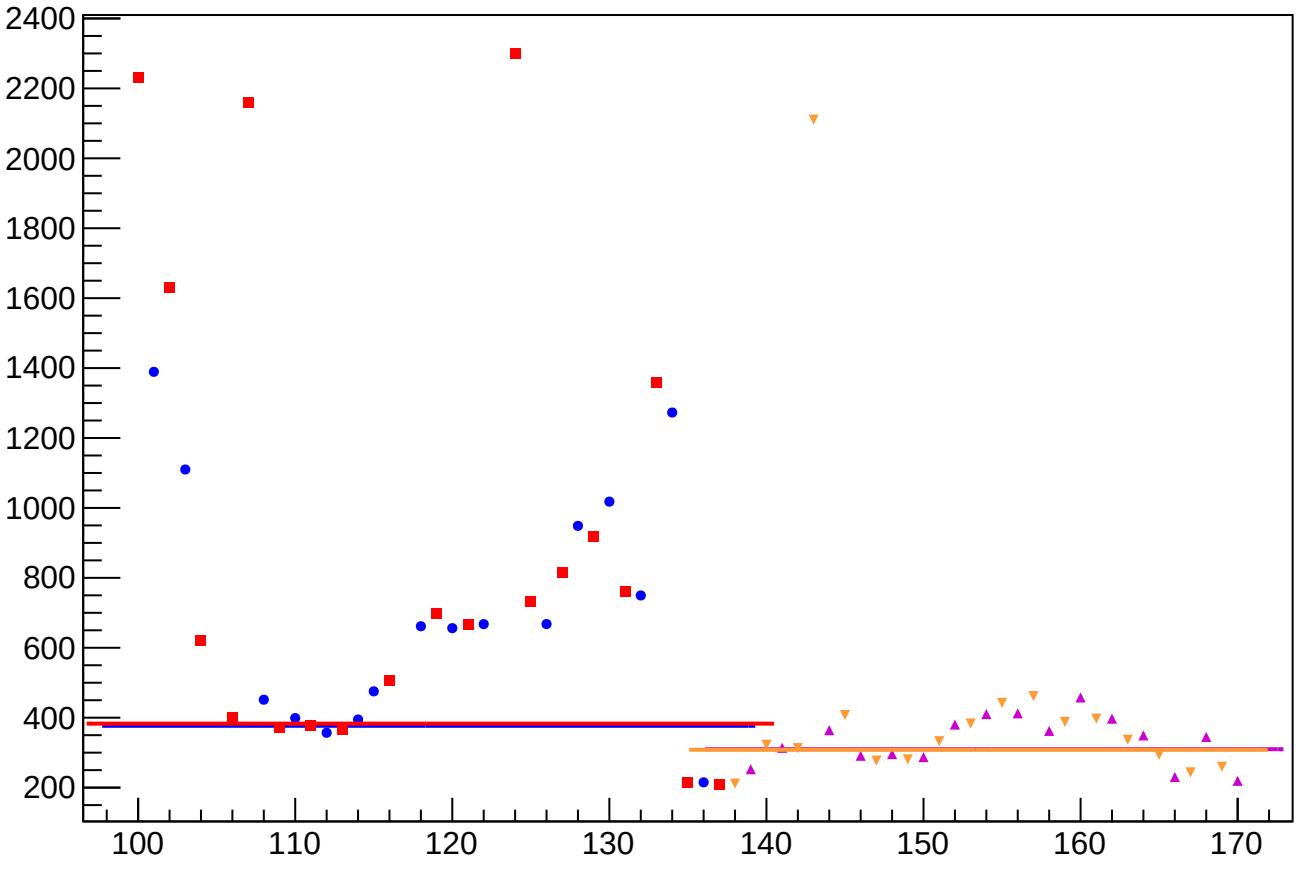
Left In: -65.682+/-87.584 $\chi^2$/NDF:10.1/15

+ sign -271.635+/-78.392 $\chi^2$/NDF: 55.3/32

All: -180.976+/-55.227 $\chi^2$/NDF: 83.1/67

- sign -91.639+/-77.818 $\chi^2$/NDF: 25.2/34

# asym_atl_avg_atr_avg_dd_reg_correction_rms vs Slug




Right In: 376.893+/-0.119 $\chi^2$/NDF: 4190194.7/15

Left Out: 308.292+/-0.063 $\chi^2$/NDF:2378878.5/16

Right Out: 383.074+/-0.120 $\chi^2$/NDF: 4054121.5/18

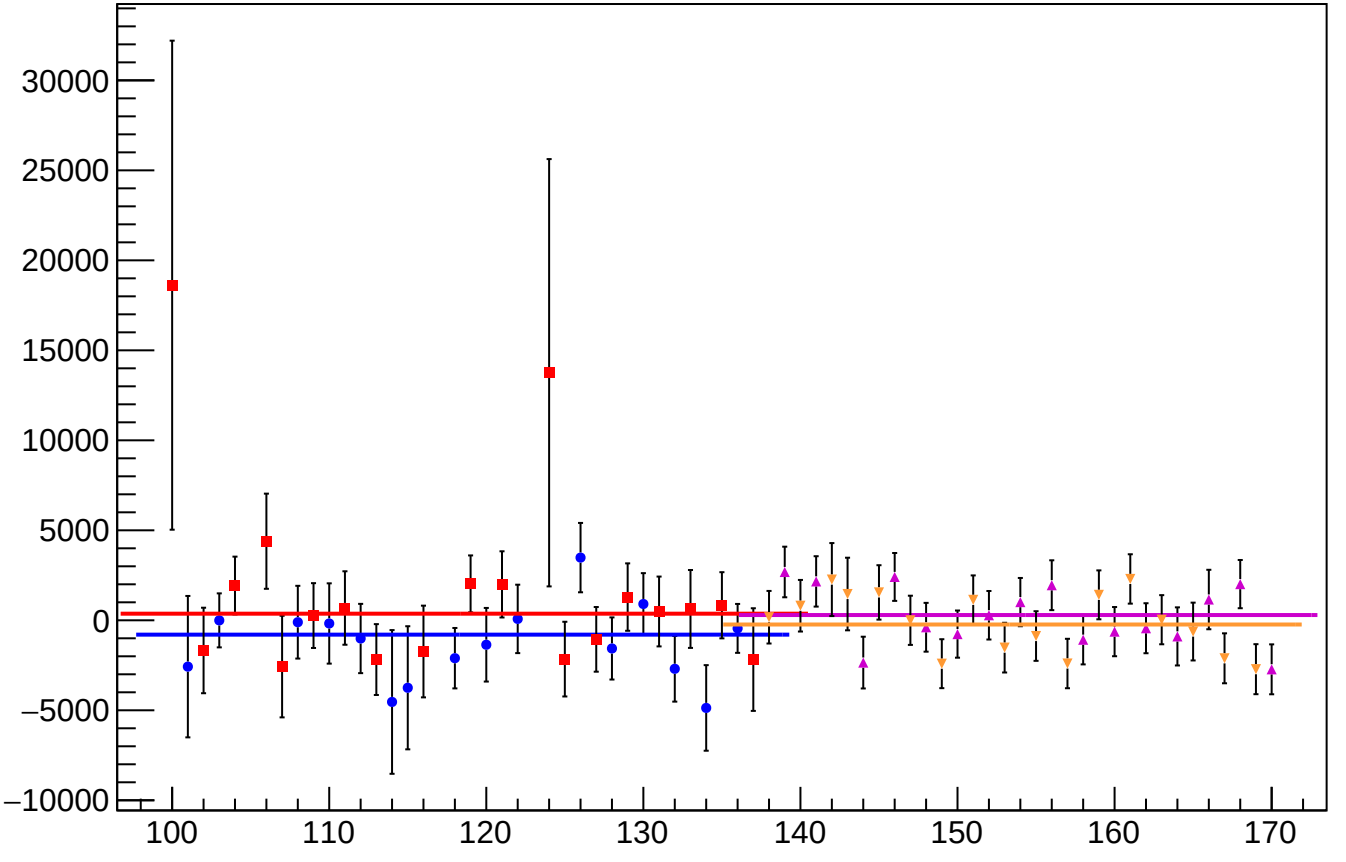
Left In: 309.914+/-0.062 $\chi^2$/NDF:1138157.2/15

+ sign 323.192+/-0.055 $\chi^2$/NDF: 6829486.2/32

All: 324.264+/-0.039 $\chi^2$/NDF: 12316379.3/67

- sign 325.320+/-0.055 $\chi^2$/NDF: 5486150.9/34

# cor_asym_atl_avg_atr_avg_dd_mean vs Slug




Right In: -796.883+/-487.454 $\chi^2$/NDF: 13.4/15

Left Out: -233.682+/-351.019 $\chi^2$/NDF:21.4/16

Right Out: 367.476+/-486.348 $\chi^2$/NDF: 15.7/18

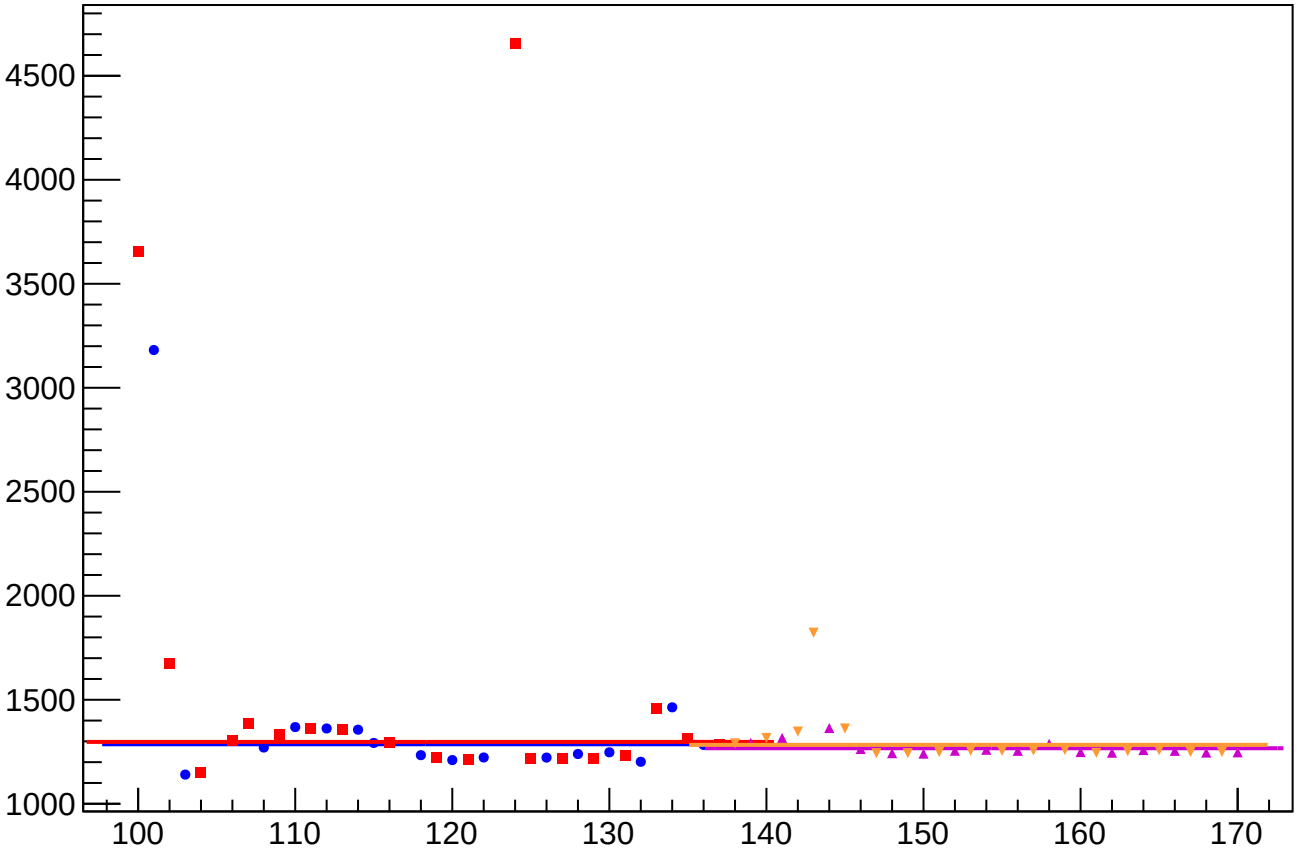
Left In: 292.412+/-348.528 $\chi^2$/NDF:22.1/15

+ sign -426.003+/-284.849 $\chi^2$/NDF: 35.7/32

All: -52.027+/-200.867 $\chi^2$/NDF: 76.9/67

- sign 317.881+/-283.295 $\chi^2$/NDF: 37.8/34

# cor_asym_atl_avg_atr_avg_dd_rms vs Slug




Right In: 1286.097+/-0.345 $\chi^2$/NDF: 518128.4/15

Left Out: 1283.255+/-0.248 $\chi^2$/NDF:164800.9/16

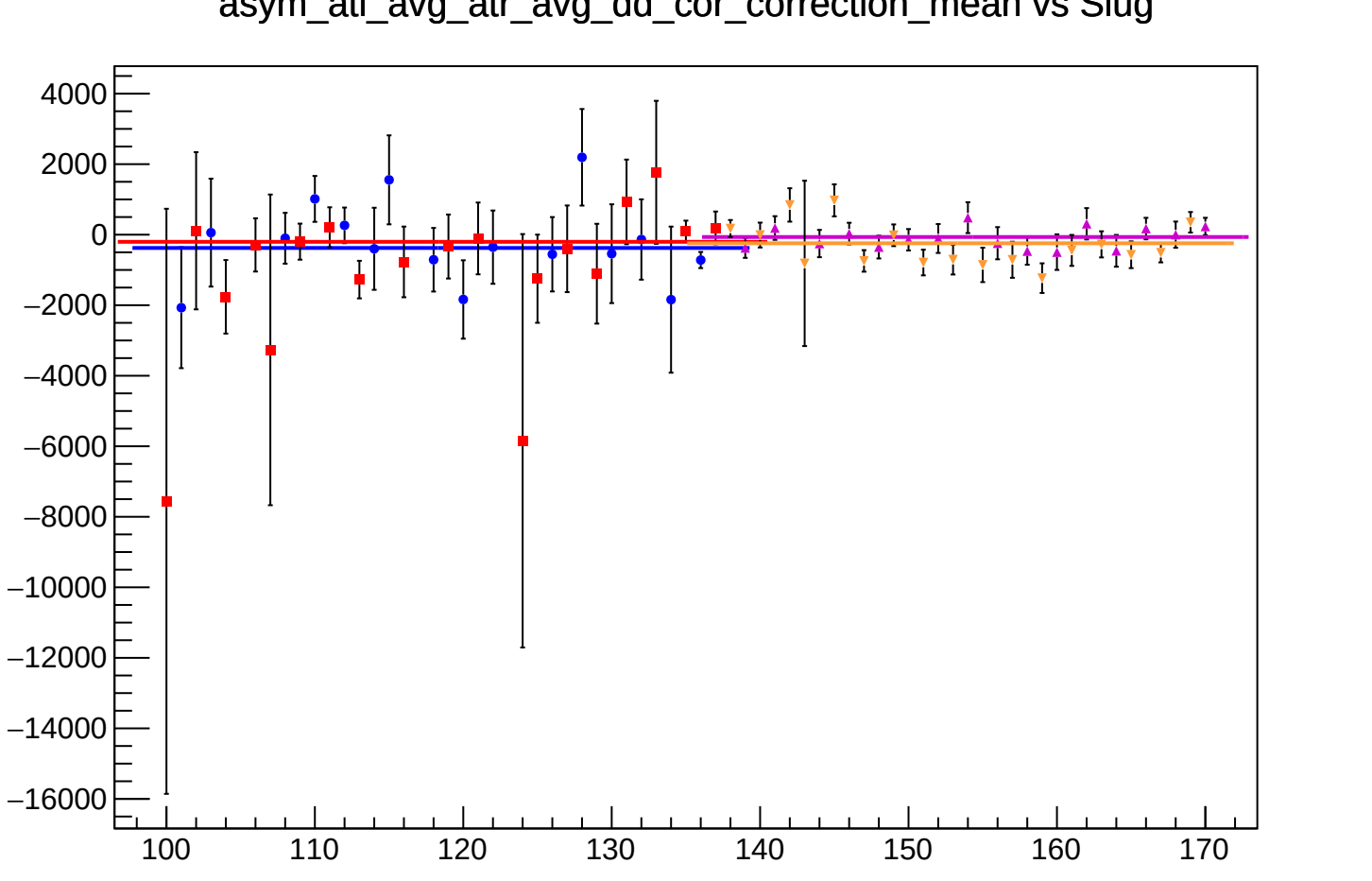
Right Out: 1297.394+/-0.344 $\chi^2$/NDF: 327741.7/18

Left In: 1266.902+/-0.246 $\chi^2$/NDF:16511.4/15

+ sign 1284.225+/-0.201 $\chi^2$/NDF: 682974.1/32

All: 1280.718+/-0.142 $\chi^2$/NDF: 1033024.5/67

- sign 1277.248+/-0.200 $\chi^2$/NDF: 349447.2/34




Right In: -376.771+/-168.223 $\chi^2$/NDF: 17.9/15

Left Out: -243.704+/-88.605 $\chi^2$/NDF:36.7/16

Right Out: -202.144+/-169.377 $\chi^2$/NDF: 14.0/18

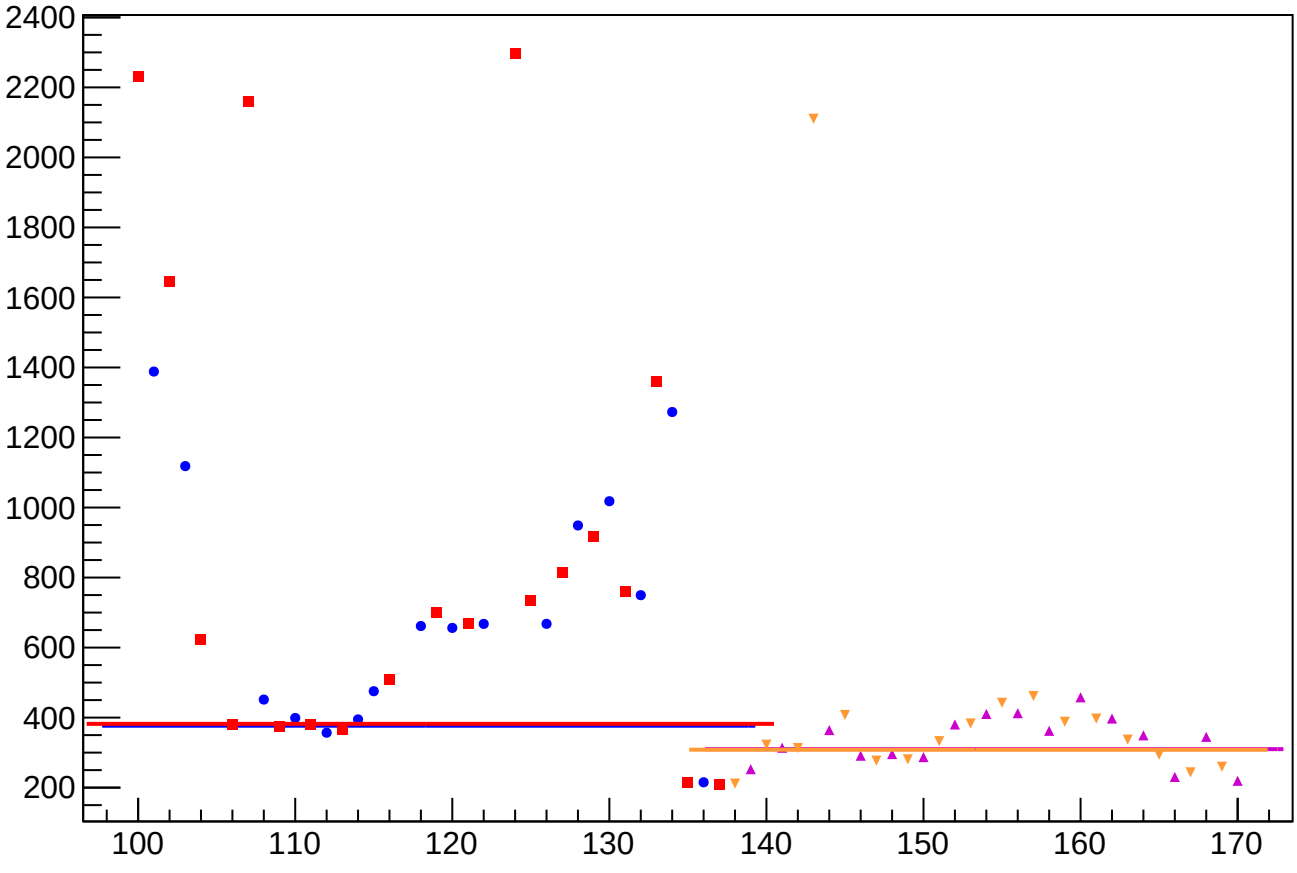
Left In: -65.696+/-87.584 $\chi^2$/NDF:10.1/15

+ sign -272.602+/-78.395 $\chi^2$/NDF: 55.1/32

All: -182.862+/-55.222 $\chi^2$/NDF: 82.4/67

- sign -94.483+/-77.799 $\chi^2$/NDF: 24.7/34

# asym_atl_avg_atr_avg_dd_cor_correction_rms vs Slug




Right In: 376.884+/-0.119 $\chi^2$/NDF: 4193328.0/15

Left Out: 308.301+/-0.063 $\chi^2$/NDF:2378708.2/16

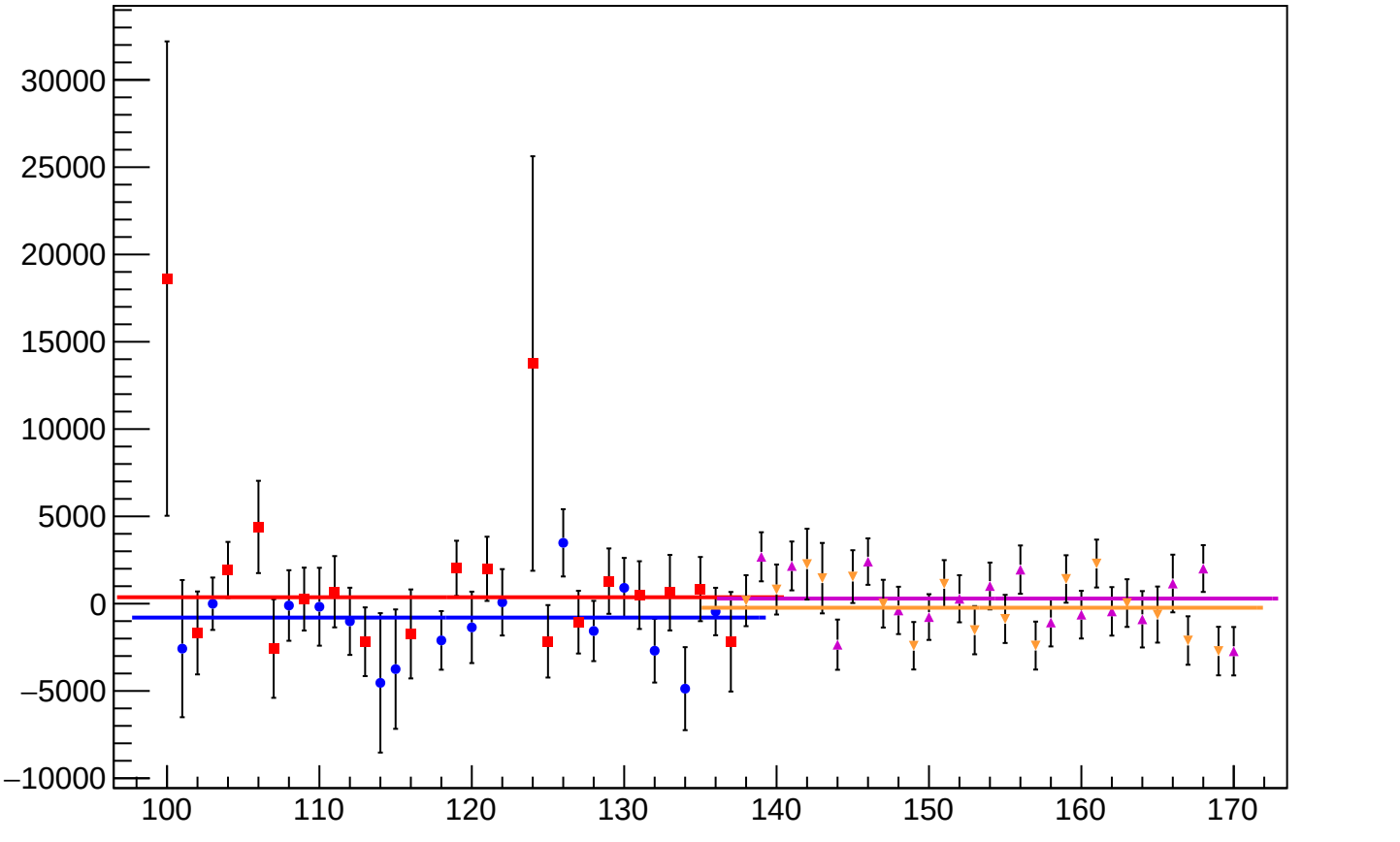
Right Out: 382.136+/-0.120 $\chi^2$/NDF: 4059600.2/18

Left In: 309.914+/-0.062 $\chi^2$/NDF:1138288.9/15

+ sign 323.196+/-0.055 $\chi^2$/NDF: 6832262.2/32

All: 324.181+/-0.039 $\chi^2$/NDF: 12317693.4/67

- sign 325.151+/-0.055 $\chi^2$/NDF: 5484804.6/34




Right In: -796.883+/-487.454 $\chi^2$/NDF: 13.4/15

Left Out: -233.682+/-351.019 $\chi^2$/NDF:21.4/16

Right Out: 367.476+/-486.348 $\chi^2$/NDF: 15.7/18

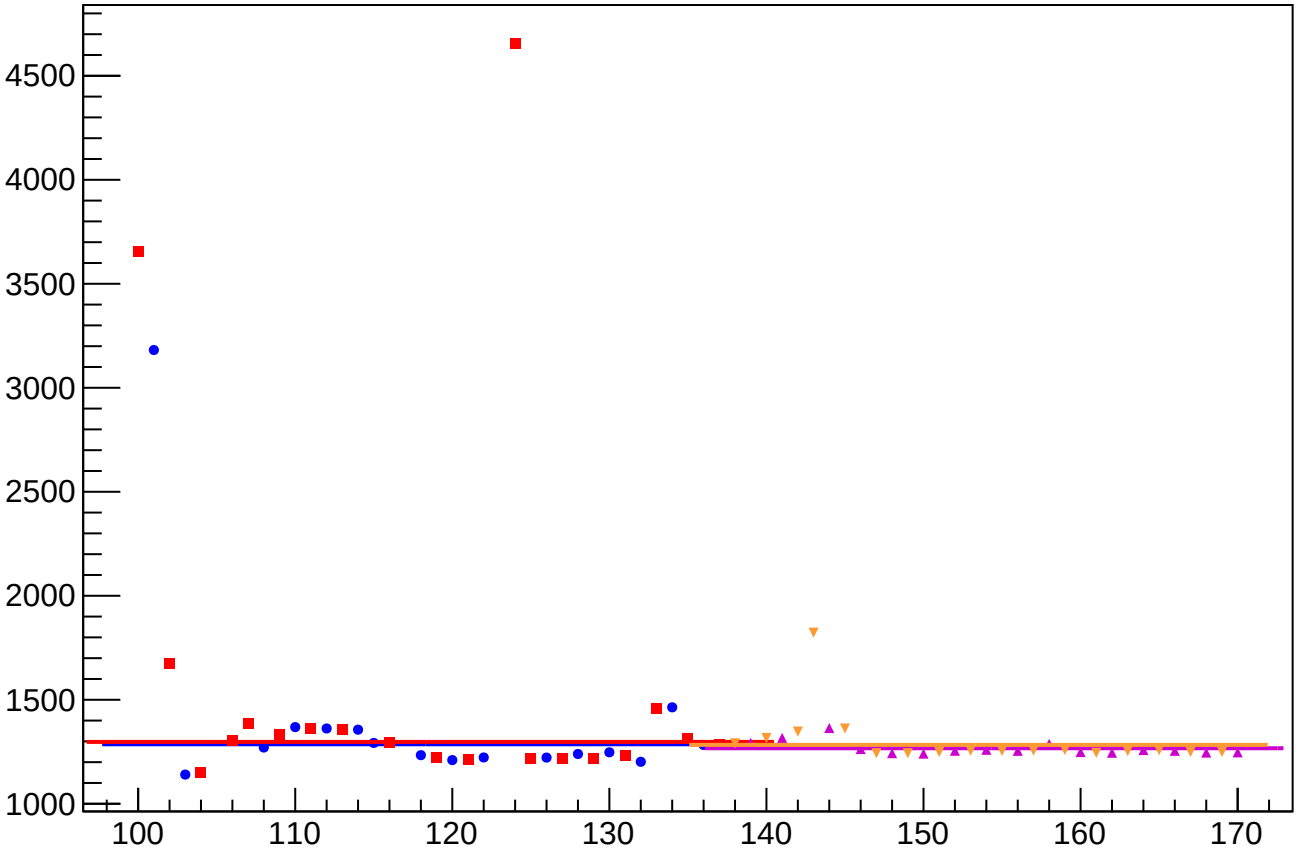
Left In: 292.412+/-348.528 $\chi^2$/NDF:22.1/15

\+ sign -426.003+/-284.849 $\chi^2$/NDF: 35.7/32

All: -52.027+/-200.867 $\chi^2$/NDF: 76.9/67

\- sign 317.881+/-283.295 $\chi^2$/NDF: 37.8/34

# eigen_cor_asym_atl_avg_atr_avg_dd_rms vs Slug




Right In: 1286.097+/-0.345 $\chi^2$/NDF: 518128.4/15

Left Out: 1283.255+/-0.248 $\chi^2$/NDF:164800.9/16

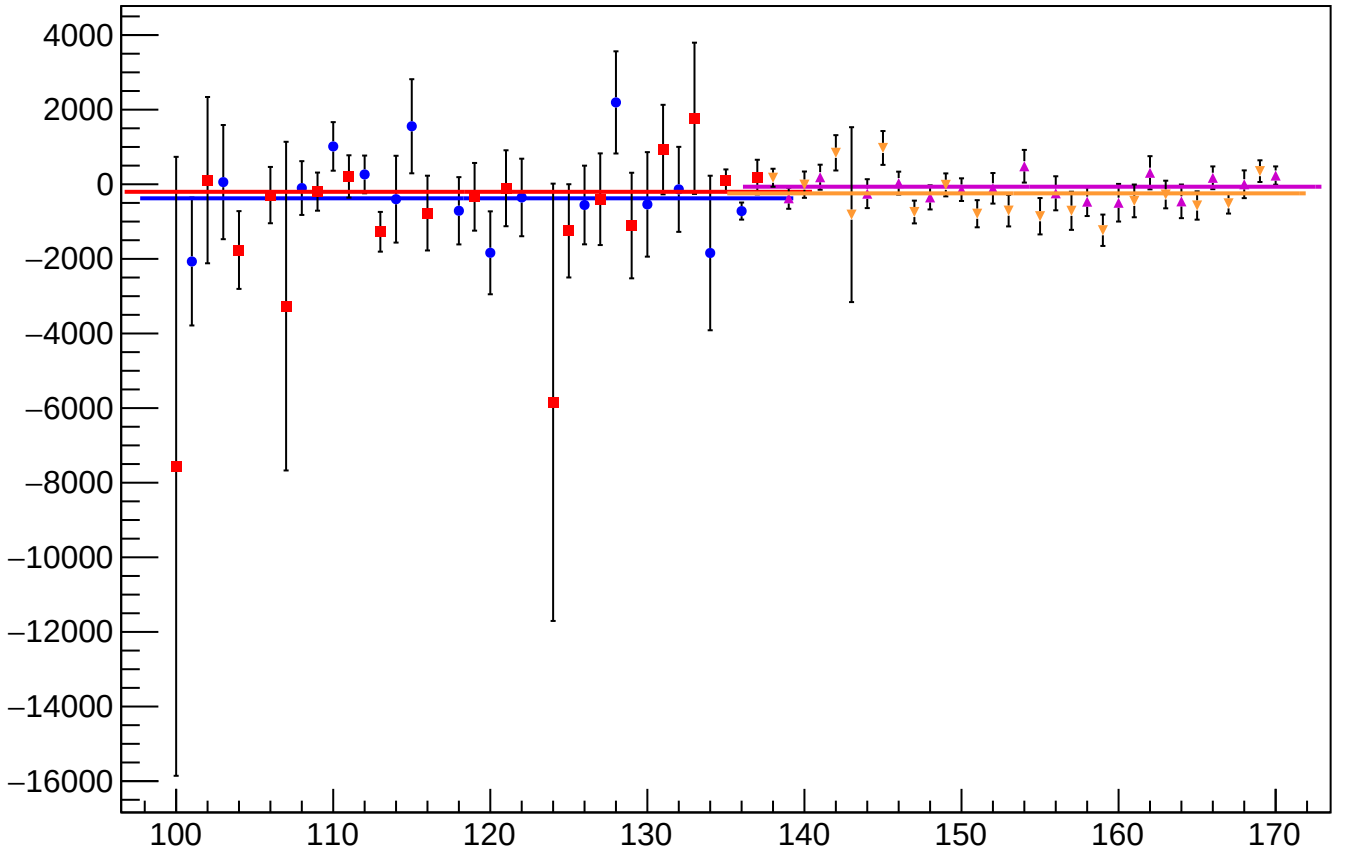
Right Out: 1297.394+/-0.344 $\chi^2$/NDF: 327741.7/18

Left In: 1266.902+/-0.246 $\chi^2$/NDF:16511.4/15

+ sign 1284.225+/-0.201 $\chi^2$/NDF: 682974.1/32

All: 1280.718+/-0.142 $\chi^2$/NDF: 1033024.5/67

- sign 1277.248+/-0.200 $\chi^2$/NDF: 349447.2/34




Right In: -376.771+/-168.223 $\chi^2$/NDF: 17.9/15

Left Out: -243.704+/-88.605 $\chi^2$/NDF:36.7/16

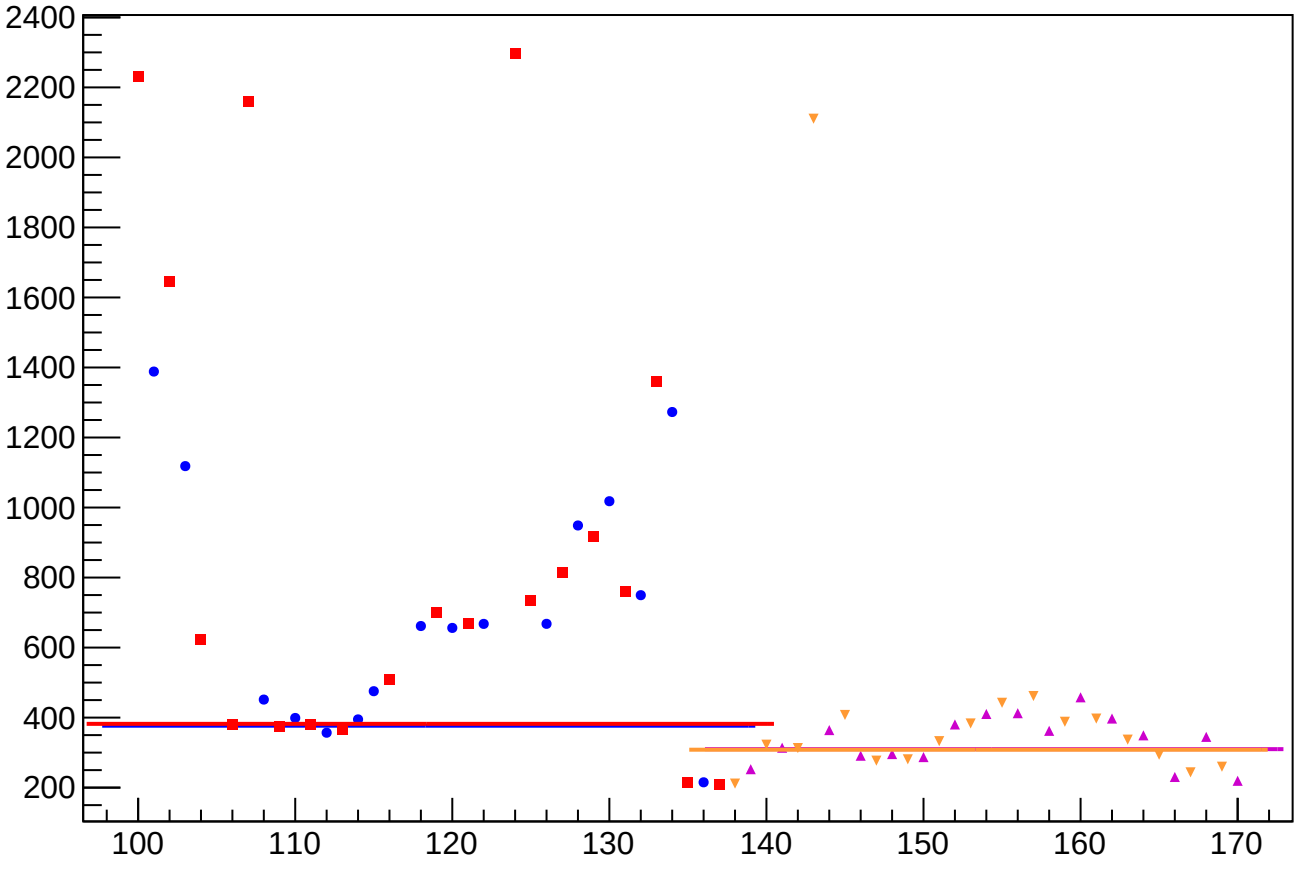
Right Out: -202.144+/-169.377 $\chi^2$/NDF: 14.0/18

Left In: -65.696+/-87.584 $\chi^2$/NDF:10.1/15

+ sign -272.602+/-78.395 $\chi^2$/NDF: 55.1/32

All: -182.862+/-55.222 $\chi^2$/NDF: 82.4/67

- sign -94.483+/-77.799 $\chi^2$/NDF: 24.7/34




Right In: 376.884+/-0.119 $\chi^2$/NDF: 4193328.0/15

Left Out: 308.301+/-0.063 $\chi^2$/NDF:2378708.2/16

Right Out: 382.136+/-0.120 $\chi^2$/NDF: 4059600.2/18

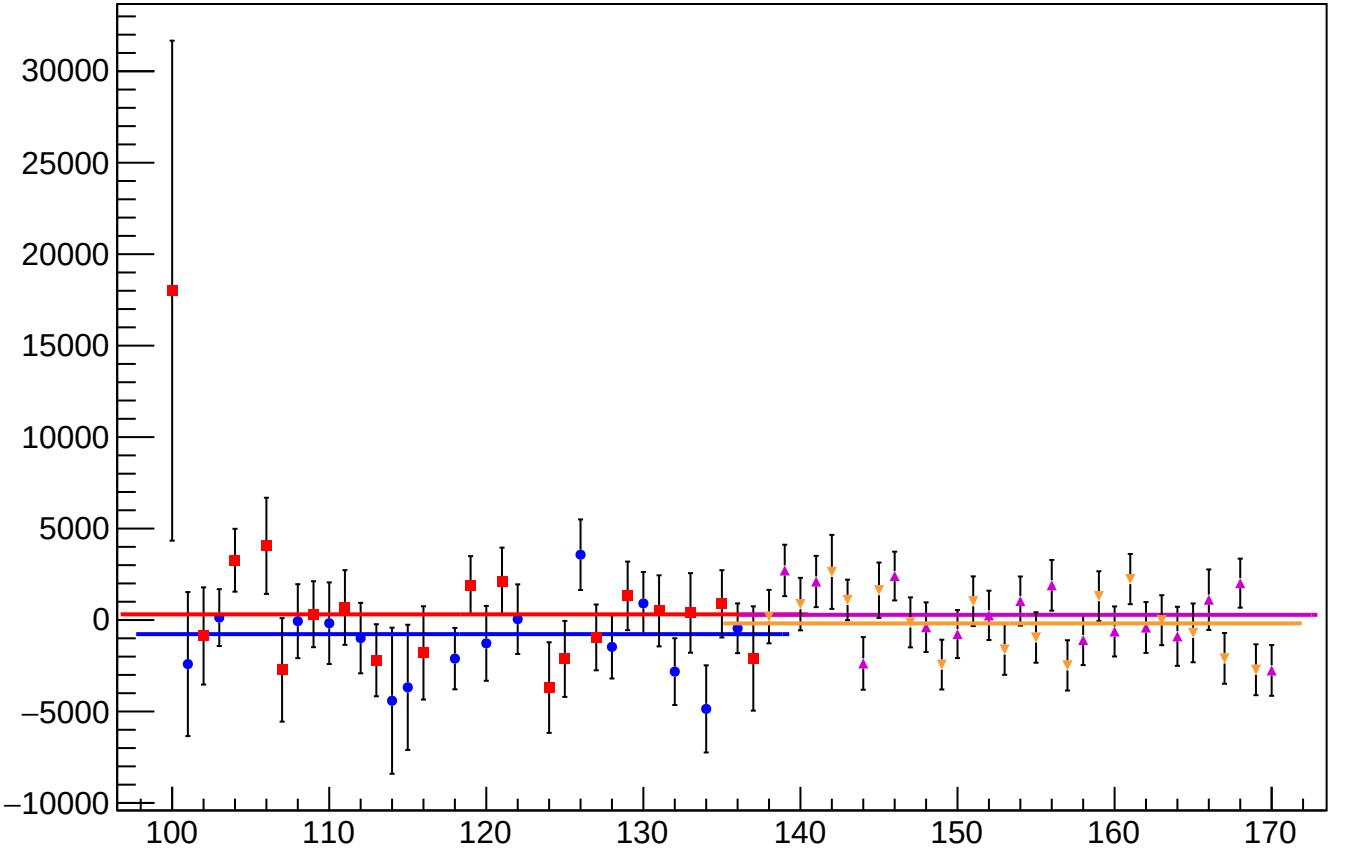
Left In: 309.914+/-0.062 $\chi^2$/NDF:1138288.9/15

+ sign 323.196+/-0.055 $\chi^2$/NDF: 6832262.2/32

All: 324.181+/-0.039 $\chi^2$/NDF: 12317693.4/67

- sign 325.151+/-0.055 $\chi^2$/NDF: 5484804.6/34

# dit_asym_atl_avg_atr_avg_dd_mean vs Slug




Right In: -771.499+/-489.602 $\chi^2$/NDF: 13.6/15

Left Out: -184.203+/-339.481 $\chi^2$/NDF:22.7/16

Right Out: 311.418+/-482.642 $\chi^2$/NDF: 17.9/18

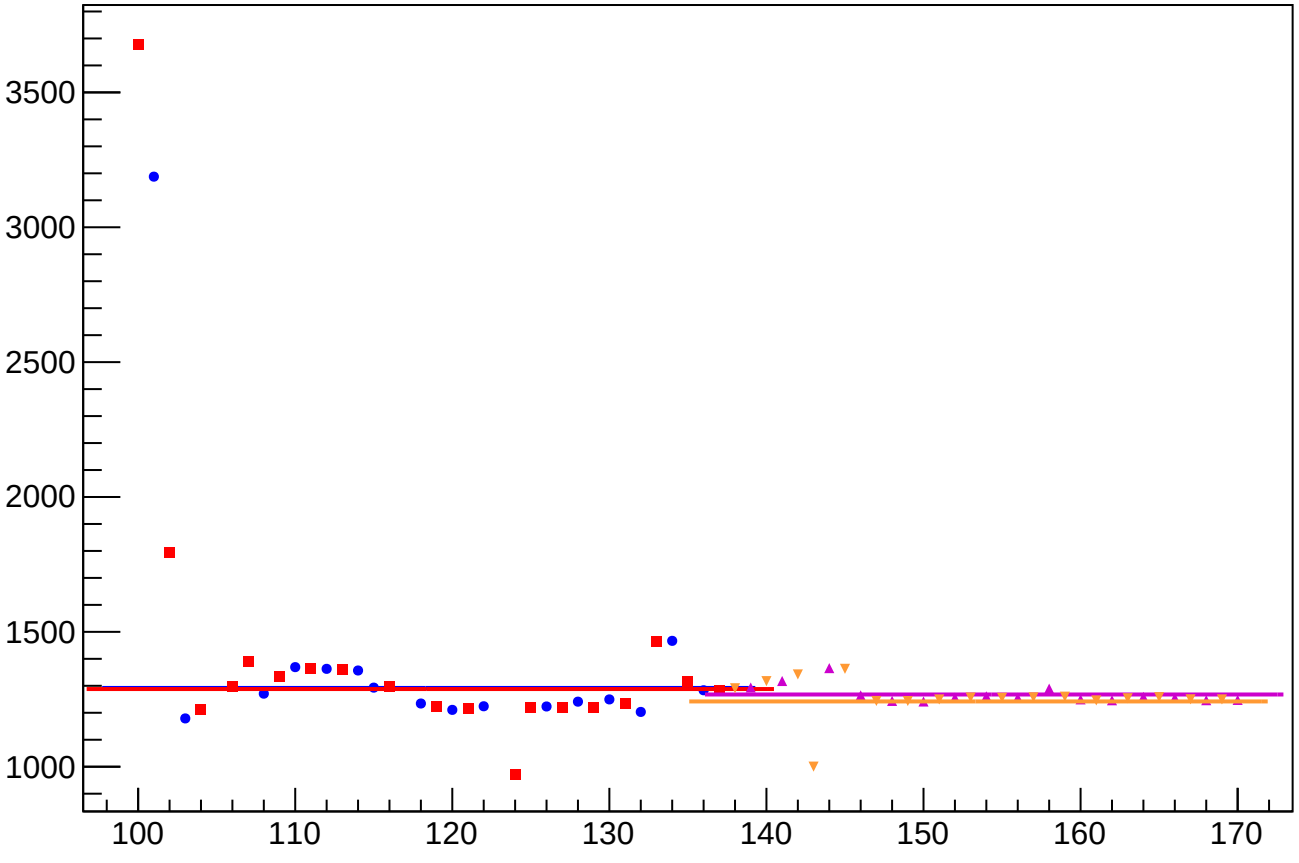
Left In: 283.367+/-348.774 $\chi^2$/NDF:22.1/15

+ sign -374.886+/-278.978 $\chi^2$/NDF: 37.3/32

All: -45.359+/-198.566 $\chi^2$/NDF: 80.1/67

- sign 292.990+/-282.689 $\chi^2$/NDF: 40.1/34

# dit_asym_atl_avg_atr_avg_dd_rms vs Slug




Right In: 1292.038+/-0.346 $\chi^2$/NDF: 509406.3/15

Left Out: 1242.037+/-0.240 $\chi^2$/NDF:122291.2/16

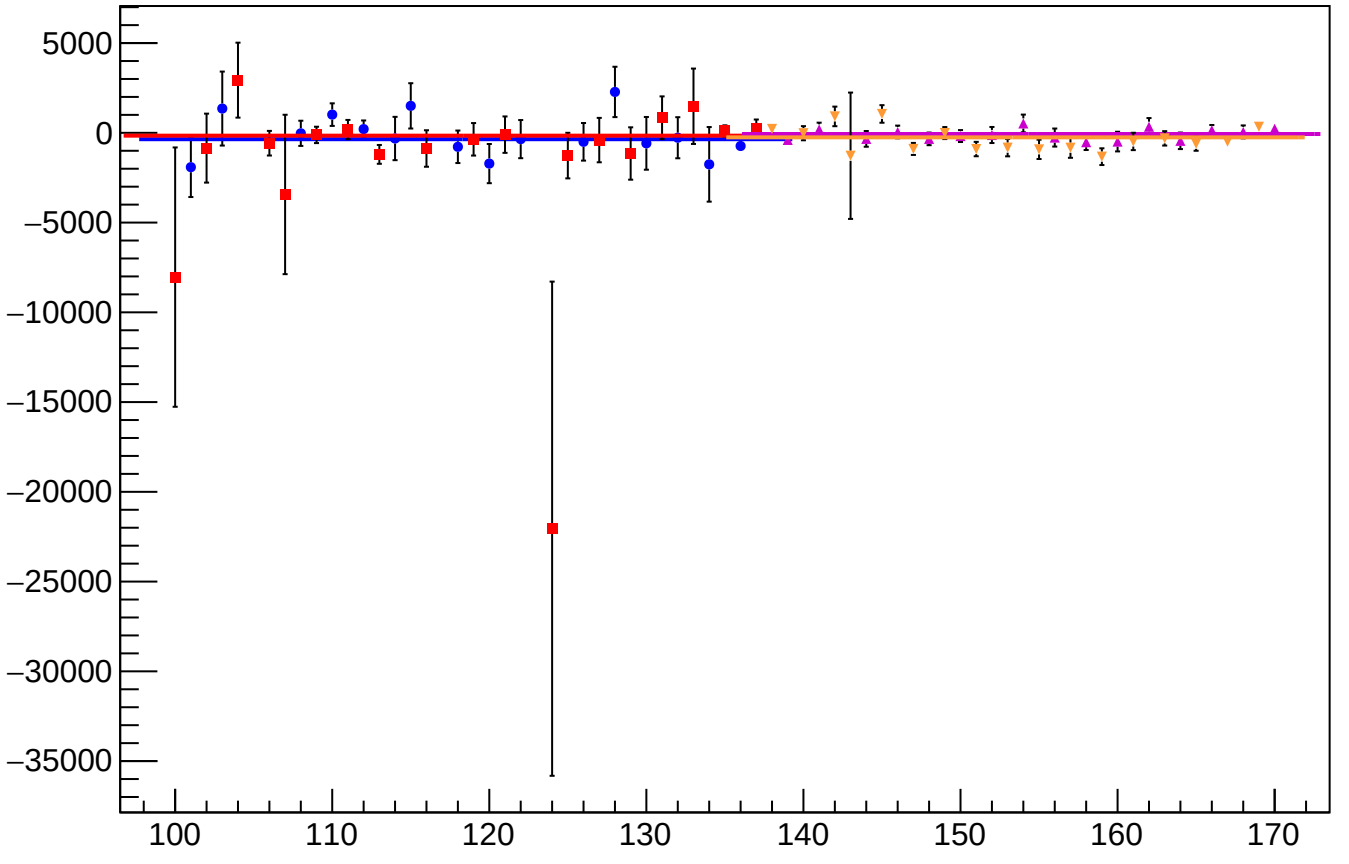
Right Out: 1287.988+/-0.341 $\chi^2$/NDF: 209208.8/18

Left In: 1267.792+/-0.247 $\chi^2$/NDF:16654.1/15

+ sign 1258.271+/-0.197 $\chi^2$/NDF: 645784.2/32

All: 1266.387+/-0.140 $\chi^2$/NDF: 877378.5/67

- sign 1274.720+/-0.200 $\chi^2$/NDF: 228163.6/34




Right In: -355.226+/-169.971 $\chi^2$/NDF: 18.4/15

Left Out: -252.283+/-93.160 $\chi^2$/NDF:38.5/16

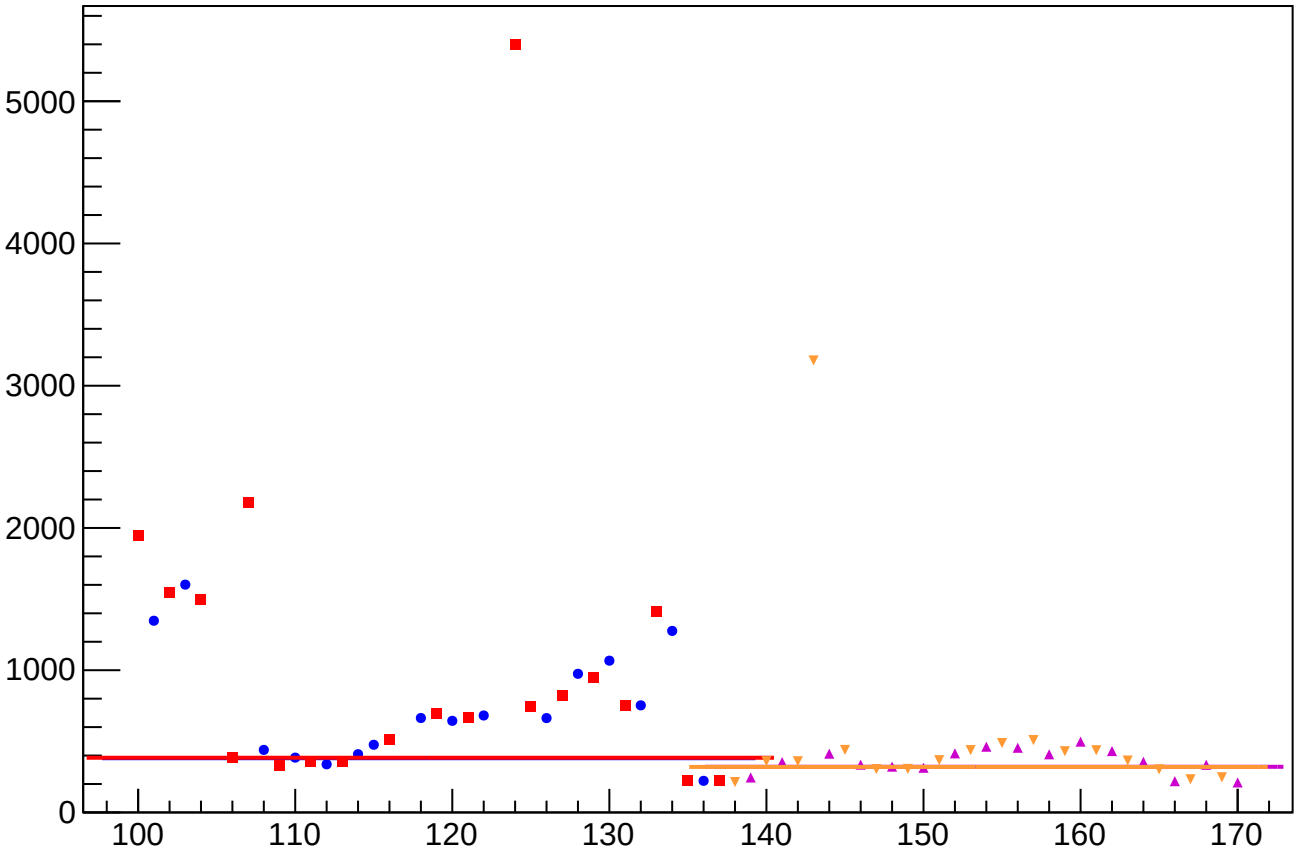
Right Out: -157.924+/-169.665 $\chi^2$/NDF: 15.8/18

Left In: -66.045+/-91.826 $\chi^2$/NDF:9.9/15

+ sign -276.064+/-81.694 $\chi^2$/NDF: 57.2/32

All: -180.371+/-57.432 $\chi^2$/NDF: 85.9/67

- sign -86.861+/-80.757 $\chi^2$/NDF: 26.0/34




Right In: 381.349+/-0.120 $\chi^2$/NDF: 4317922.6/15

Left Out: 320.045+/-0.066 $\chi^2$/NDF:3043071.6/16

Right Out: 384.651+/-0.120 $\chi^2$/NDF: 4560208.6/18

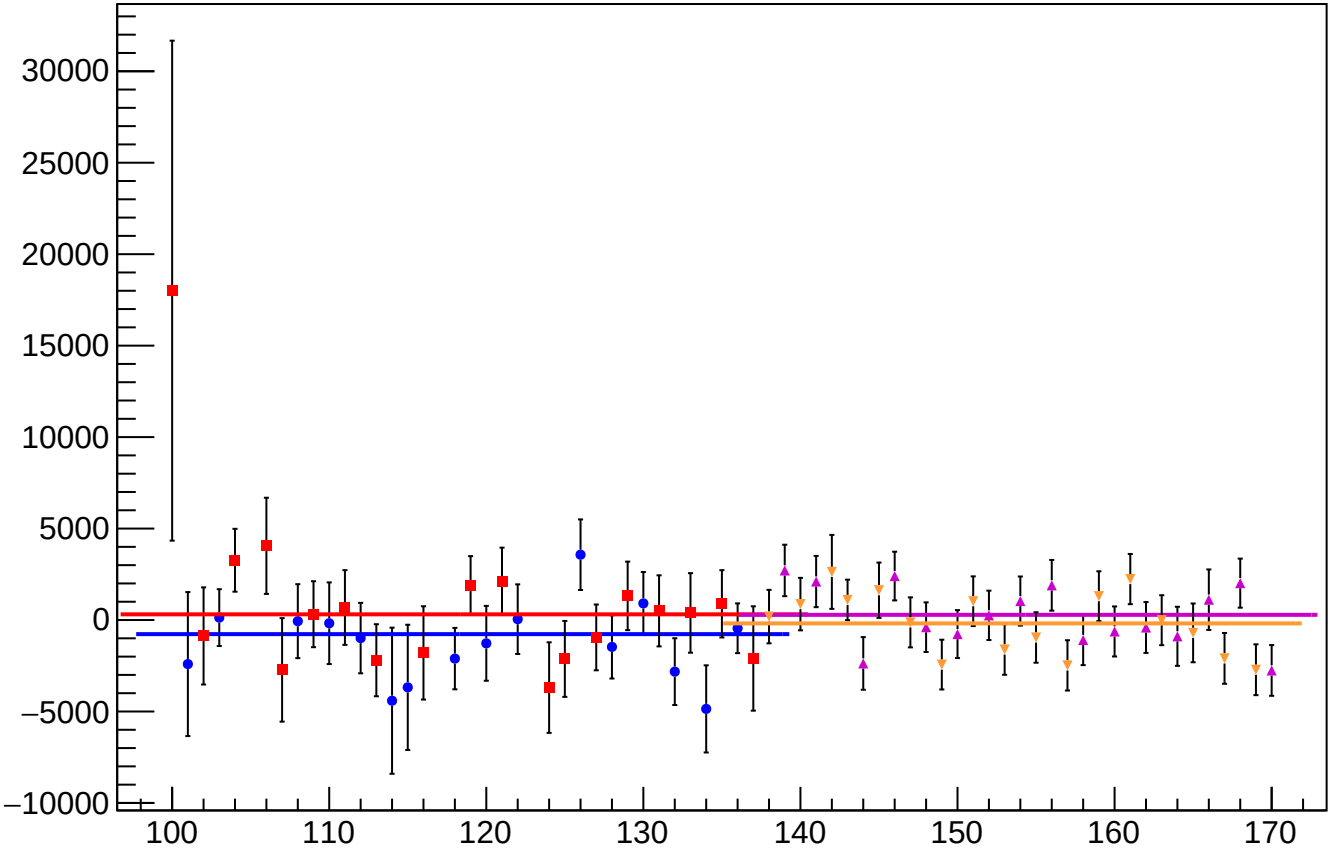
Left In: 321.050+/-0.065 $\chi^2$/NDF:1739700.2/15

+ sign 334.207+/-0.058 $\chi^2$/NDF: 7561060.9/32

All: 334.841+/-0.041 $\chi^2$/NDF: 14078573.4/67

- sign 335.460+/-0.057 $\chi^2$/NDF: 6517274.8/34

# eigen_dit_asym_atl_avg_atr_avg_dd_mean vs Slug




Right In: -771.501+/-489.602 $\chi^2$/NDF: 13.6/15

Left Out: -184.202+/-339.481 $\chi^2$/NDF:22.7/16

Right Out: 311.419+/-482.642 $\chi^2$/NDF: 17.9/18

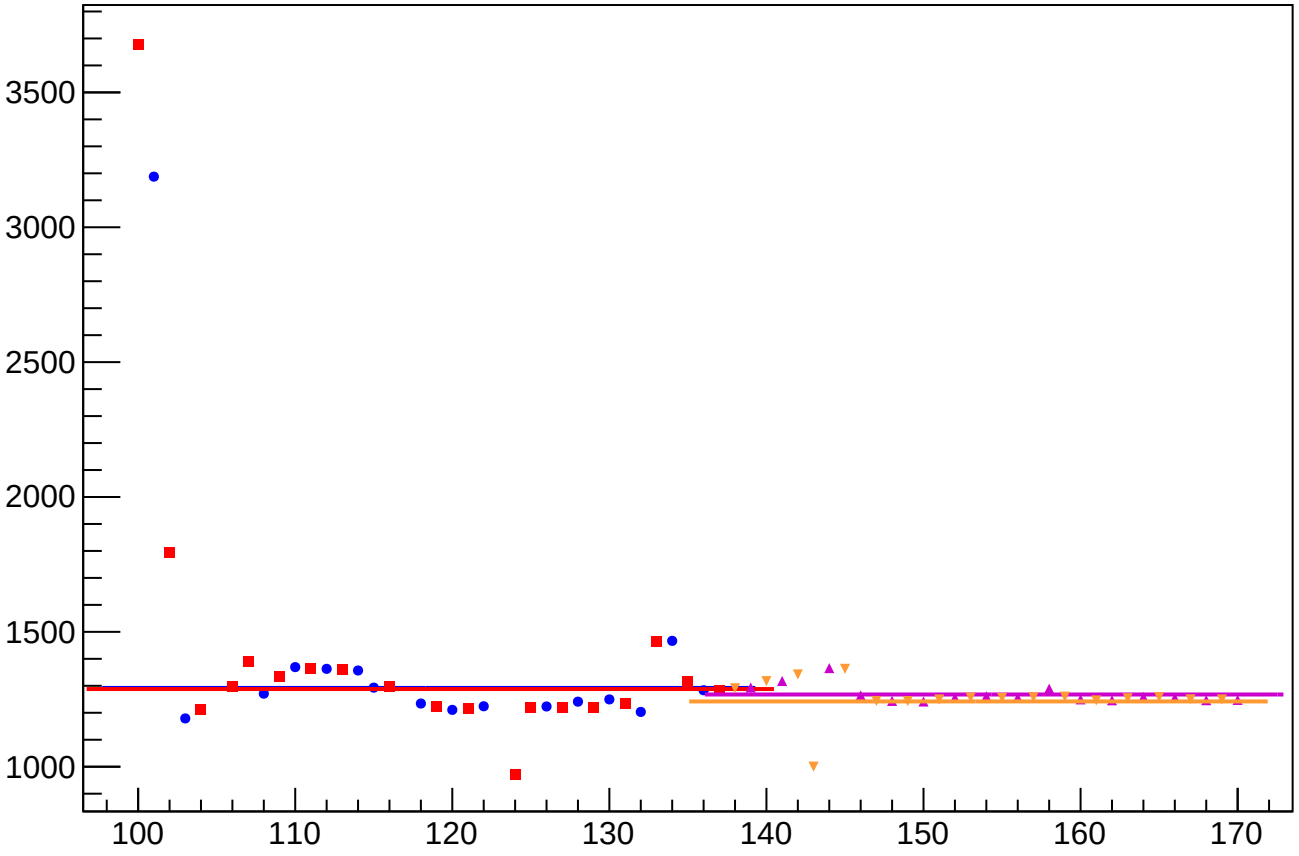
Left In: 283.368+/-348.774 $\chi^2$/NDF:22.1/15

+ sign -374.886+/-278.978 $\chi^2$/NDF: 37.3/32

All: -45.359+/-198.566 $\chi^2$/NDF: 80.1/67

- sign 292.991+/-282.689 $\chi^2$/NDF: 40.1/34

# eigen_dit_asym_atl_avg_atr_avg_dd_rms vs Slug




Right In: 1292.038+/-0.346 $\chi^2$/NDF: 509406.2/15

Left Out: 1242.037+/-0.240 $\chi^2$/NDF:122290.4/16

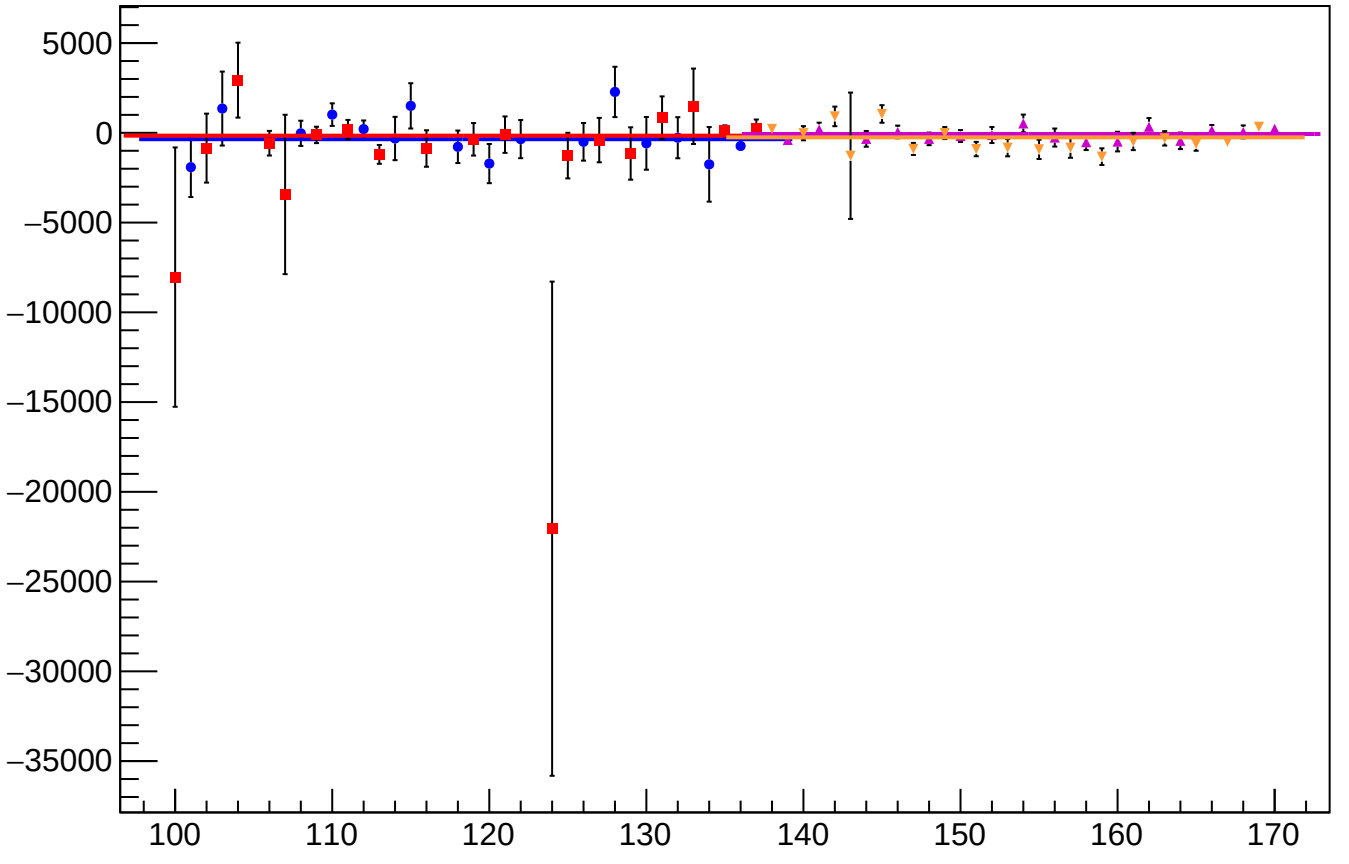
Right Out: 1287.988+/-0.341 $\chi^2$/NDF: 209209.1/18

Left In: 1267.792+/-0.247 $\chi^2$/NDF:16654.1/15

+ sign 1258.271+/-0.197 $\chi^2$/NDF: 645783.3/32

All: 1266.387+/-0.140 $\chi^2$/NDF: 877377.8/67

- sign 1274.720+/-0.200 $\chi^2$/NDF: 228163.9/34




Right In: -355.226+/-169.973 $\chi^2$/NDF: 18.4/15

Left Out: -252.292+/-93.161 $\chi^2$/NDF:38.5/16

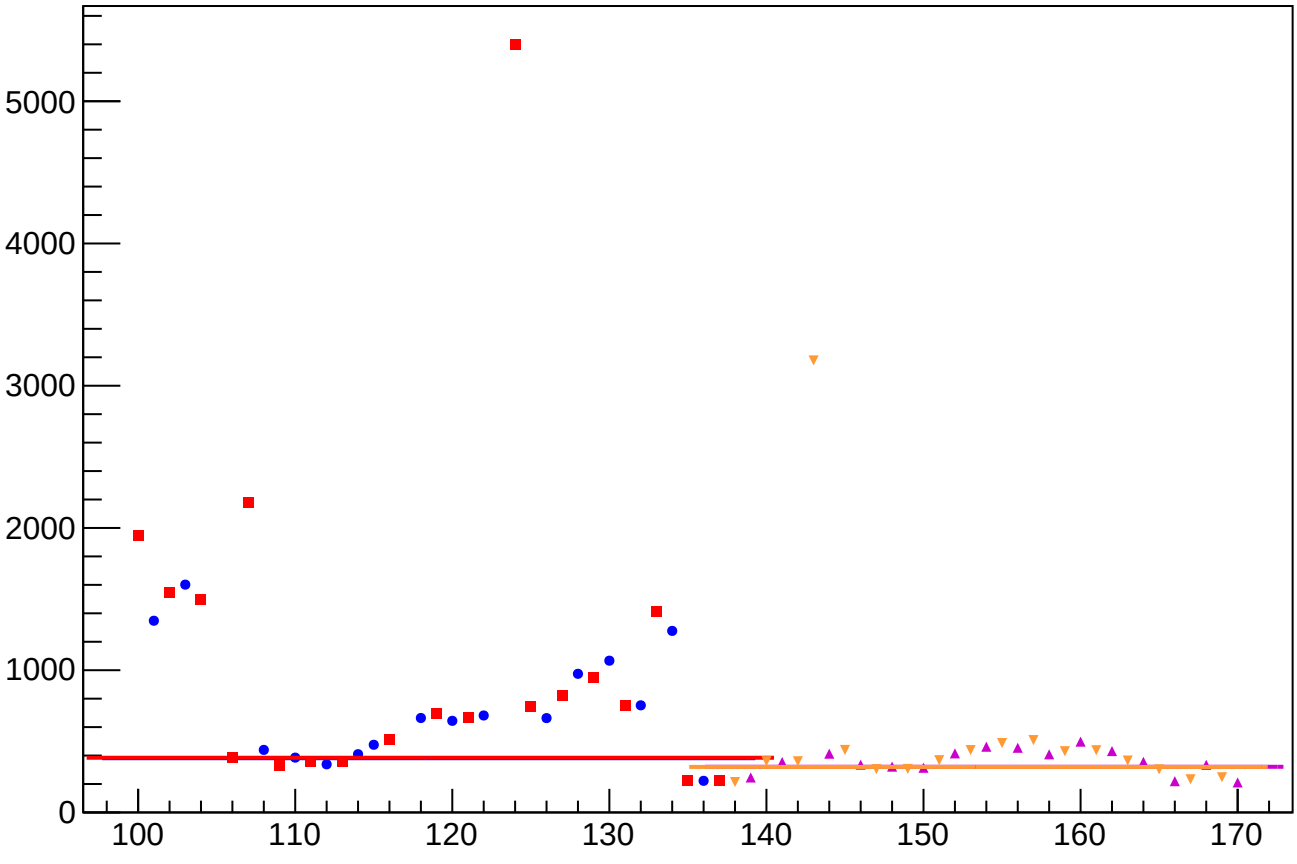
Right Out: -157.929+/-169.667 $\chi^2$/NDF: 15.8/18

Left In: -66.042+/-91.827 $\chi^2$/NDF:9.9/15

+ sign -276.070+/-81.695 $\chi^2$/NDF: 57.2/32

All: -180.373+/-57.433 $\chi^2$/NDF: 85.9/67

- sign -86.860+/-80.758 $\chi^2$/NDF: 26.0/34




Right In: 381.359+/-0.120 $\chi^2$/NDF: 4317737.3/15

Left Out: 320.049+/-0.066 $\chi^2$/NDF:3042948.6/16

Right Out: 384.658+/-0.120 $\chi^2$/NDF: 4560068.3/18

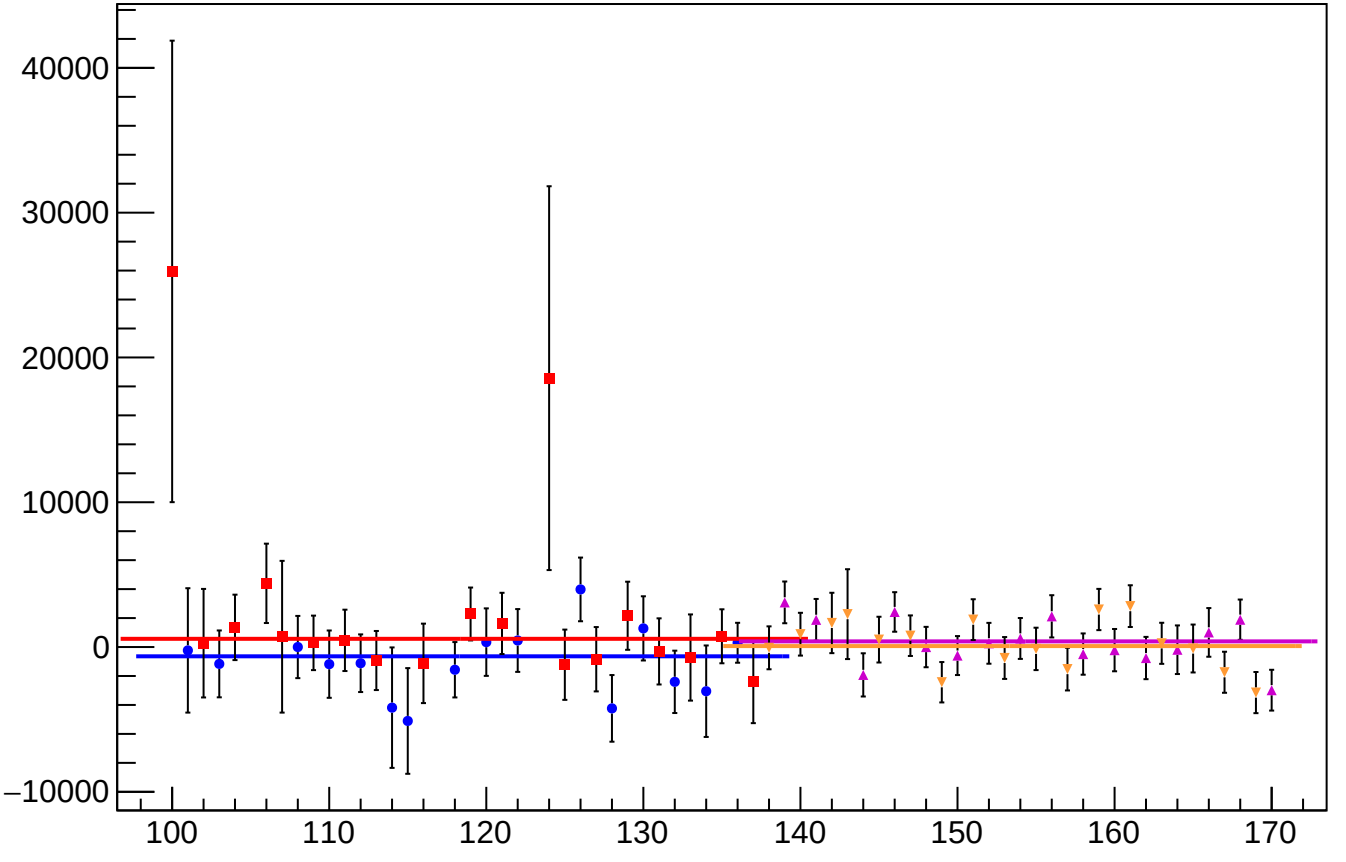
Left In: 321.052+/-0.065 $\chi^2$/NDF:1739642.4/15

+ sign 334.212+/-0.058 $\chi^2$/NDF: 7560791.9/32

All: 334.844+/-0.041 $\chi^2$/NDF: 14078142.2/67

- sign 335.463+/-0.057 $\chi^2$/NDF: 6517113.3/34

# asym_atl_avg_atr_avg_dd_mean vs Slug




Right In: -640.824+/-564.366 $\chi^2$/NDF: 12.5/15

Left Out: 65.816+/-367.345 $\chi^2$/NDF:21.7/16

Right Out: 567.254+/-566.774 $\chi^2$/NDF: 11.3/18

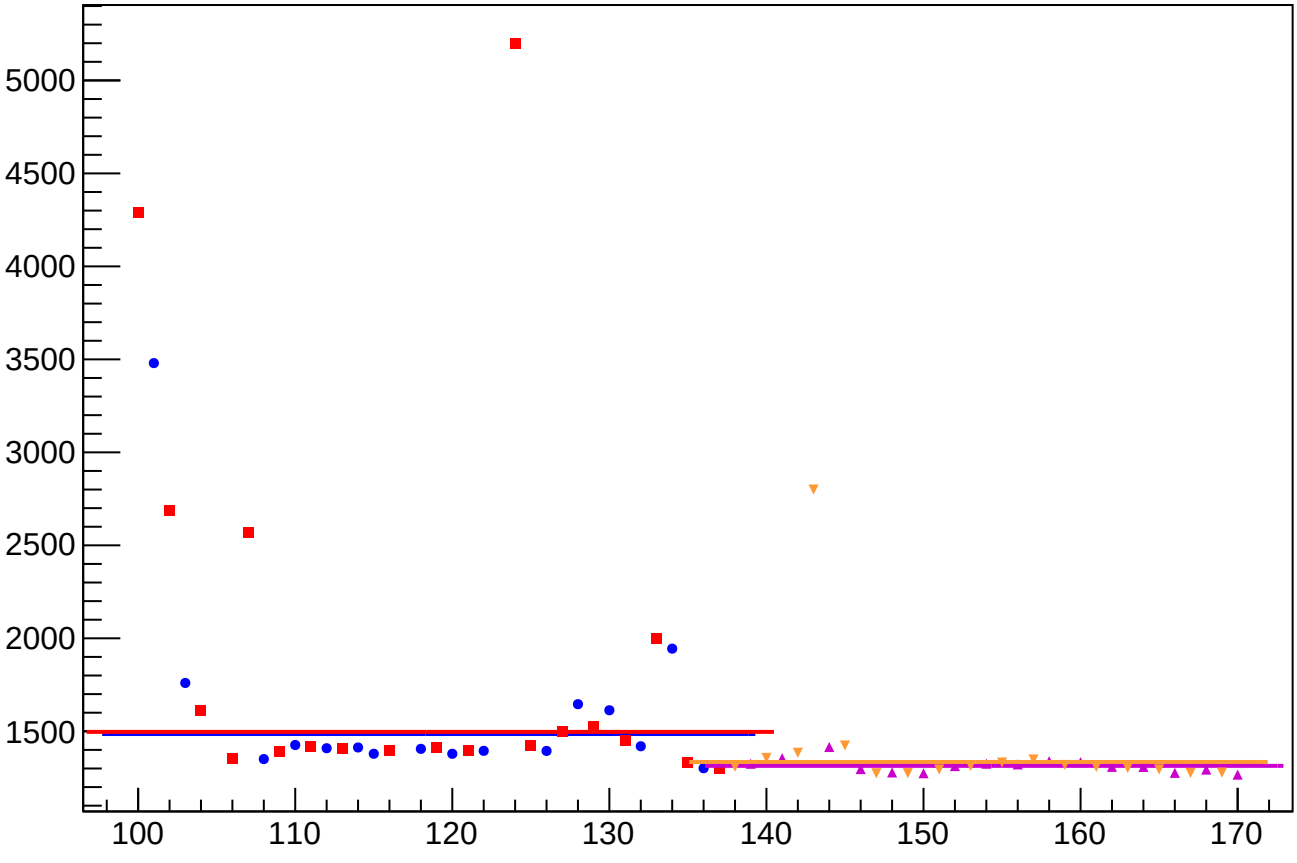
Left In: 391.099+/-361.590 $\chi^2$/NDF:19.5/15

+ sign -144.473+/-307.871 $\chi^2$/NDF: 35.3/32

All: 151.697+/-216.617 $\chi^2$/NDF: 68.0/67

- sign 442.056+/-304.836 $\chi^2$/NDF: 30.9/34

# asym_atl_avg_atr_avg_dd_rms vs Slug




Right In: 1485.370+/-0.399 $\chi^2$/NDF: 584470.1/15

Left Out: 1335.043+/-0.260 $\chi^2$/NDF:473907.4/16

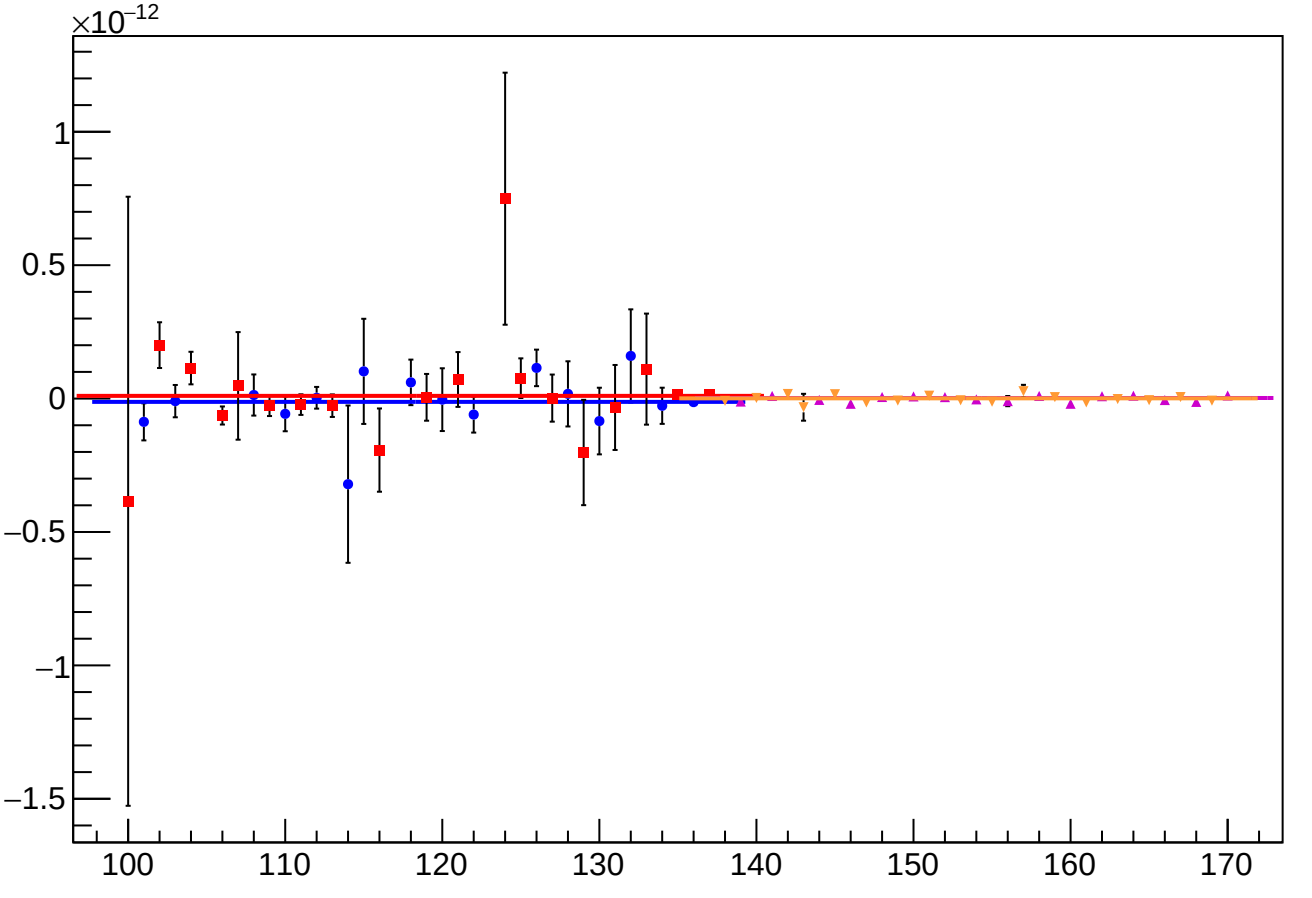
Right Out: 1496.865+/-0.401 $\chi^2$/NDF: 623292.7/18

Left In: 1314.277+/-0.256 $\chi^2$/NDF:19225.9/15

+ sign 1379.779+/-0.218 $\chi^2$/NDF: 1158050.5/32

All: 1373.374+/-0.153 $\chi^2$/NDF: 1949806.3/67

- sign 1367.096+/-0.216 $\chi^2$/NDF: 790041.9/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 9.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:15.5/16

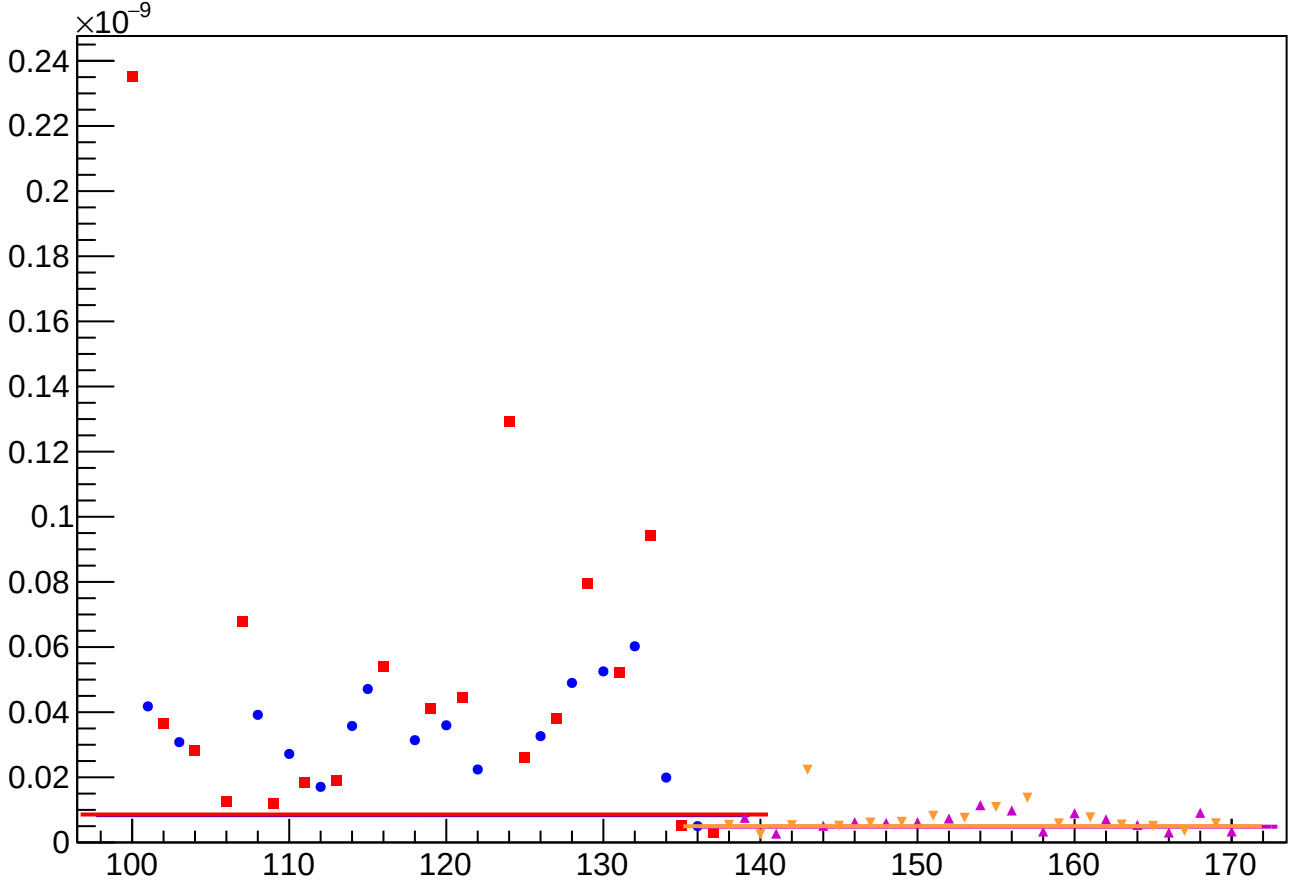
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 22.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:17.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 27.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 69.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 41.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3059657.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1774661.6/16

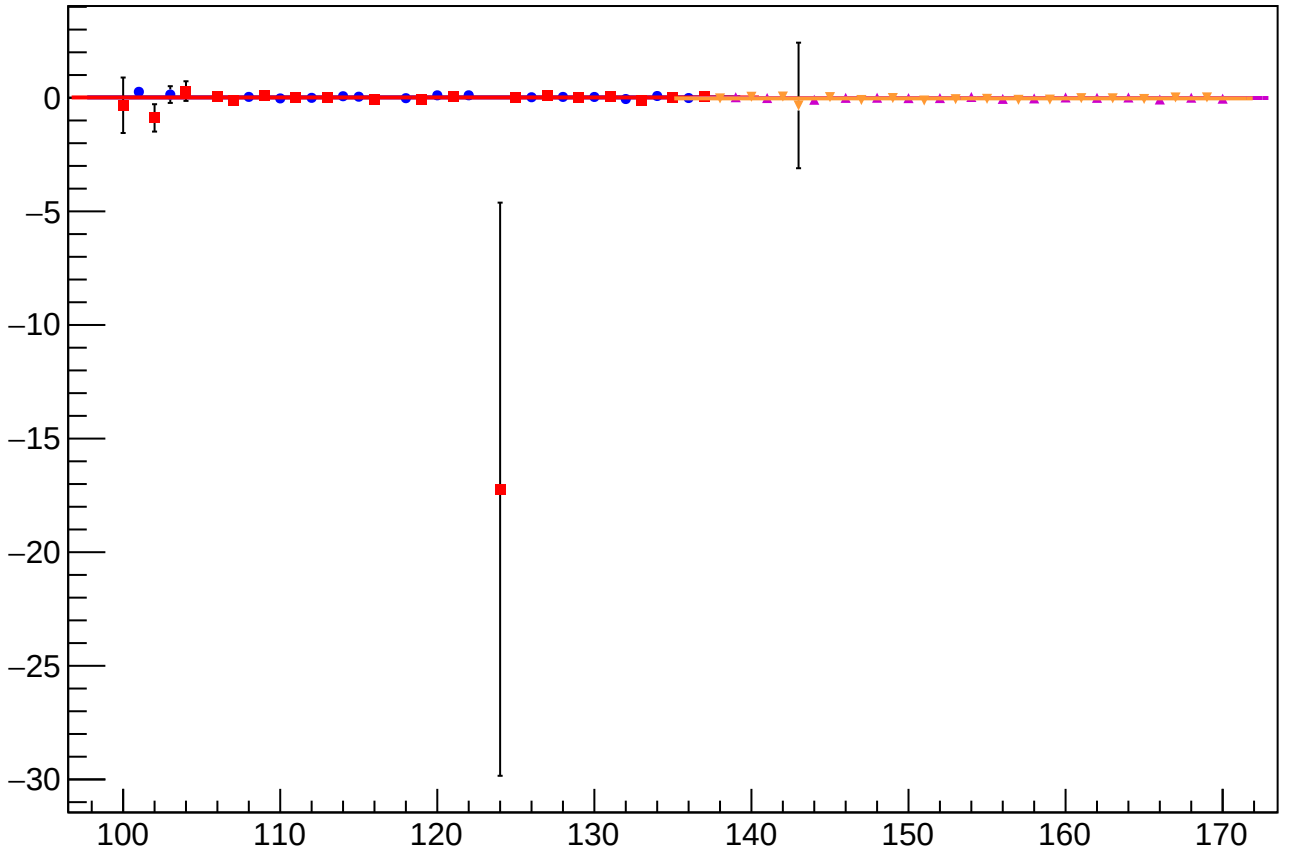
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3348571.5/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:1687671.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5211228.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10653246.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5436461.6/34




Right In: 0.017+/-0.015 $\chi^2$/NDF: 11.5/15

Left Out: -0.027+/-0.010 $\chi^2$/NDF:23.4/16

Right Out: 0.014+/-0.016 $\chi^2$/NDF: 16.0/18

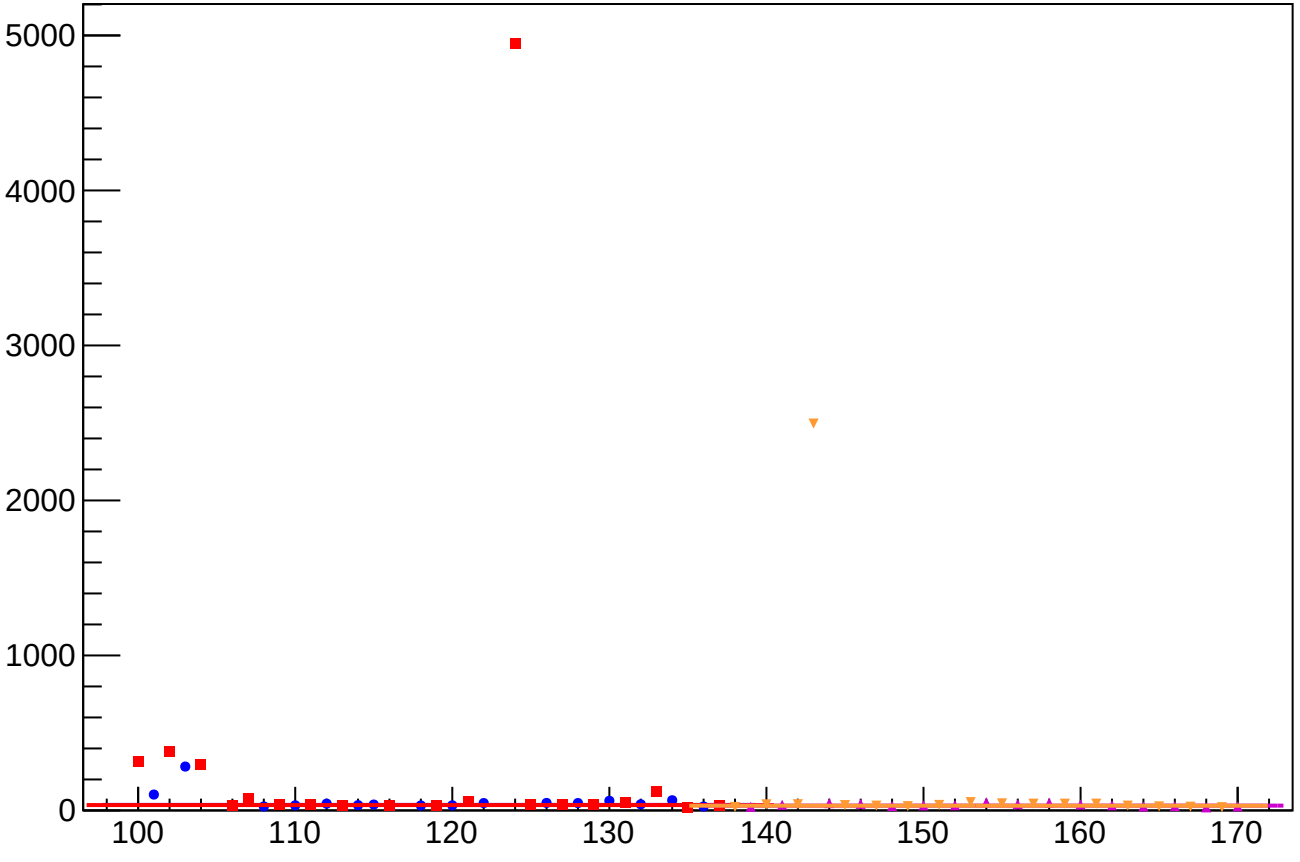
Left In: -0.011+/-0.010 $\chi^2$/NDF:9.8/15

+ sign -0.015+/-0.008 $\chi^2$/NDF: 40.7/32

All: -0.010+/-0.006 $\chi^2$/NDF: 69.2/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 27.6/34

# asym_atl_avg_atr_avg_dd_dit_vs_cor_diff_rms vs Slug




Right In: 35.742+/-0.011 $\chi^2$/NDF: 2264790.8/15

Left Out: 30.761+/-0.007 $\chi^2$/NDF:3203512.0/16

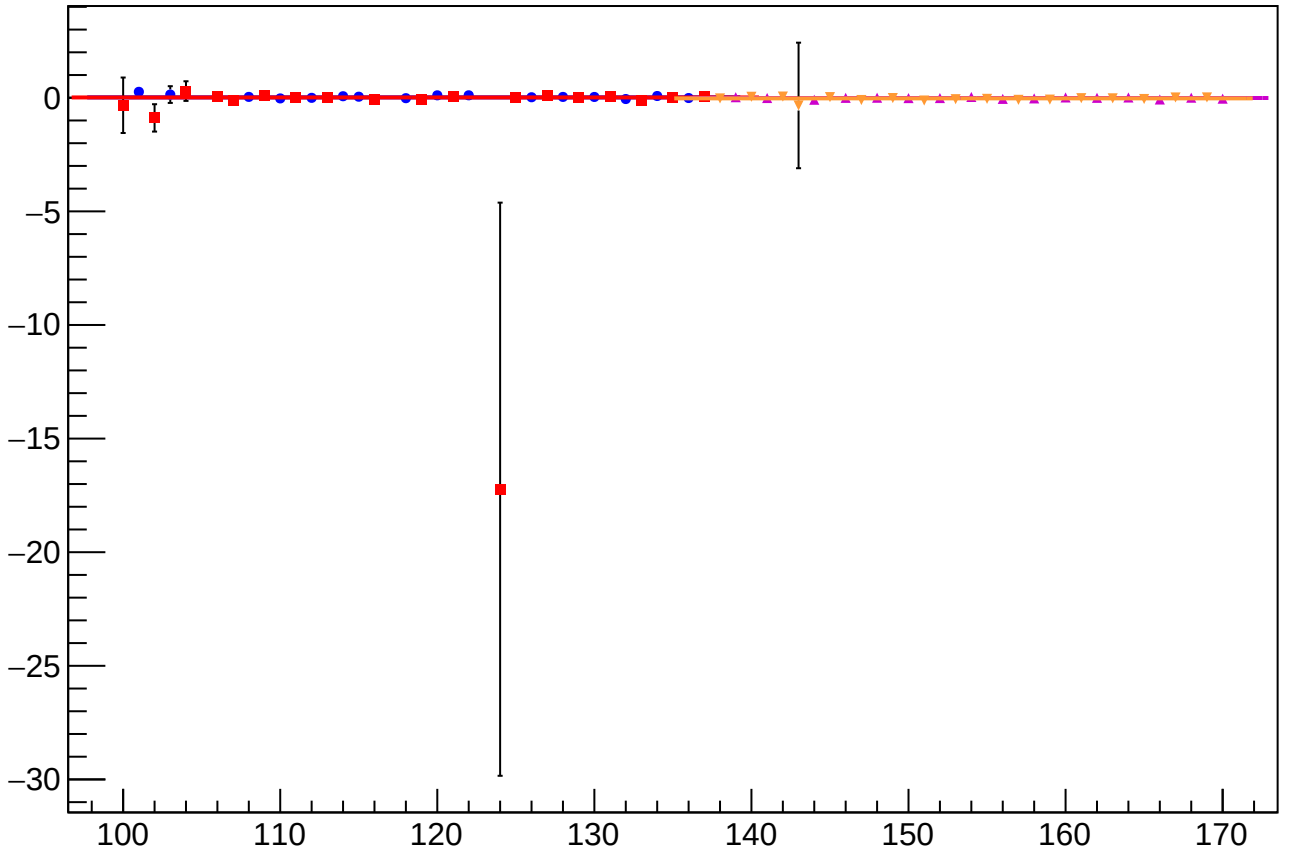
Right Out: 34.797+/-0.011 $\chi^2$/NDF: 2914137.1/18

Left In: 31.158+/-0.007 $\chi^2$/NDF:1662854.0/15

\+ sign 32.149+/-0.006 $\chi^2$/NDF: 5618324.5/32

All: 32.148+/-0.004 $\chi^2$/NDF: 10274342.7/67

\- sign 32.147+/-0.006 $\chi^2$/NDF: 4656018.1/34




Right In: 0.017+/-0.015 $\chi^2$/NDF: 11.5/15

Left Out: -0.027+/-0.010 $\chi^2$/NDF:23.4/16

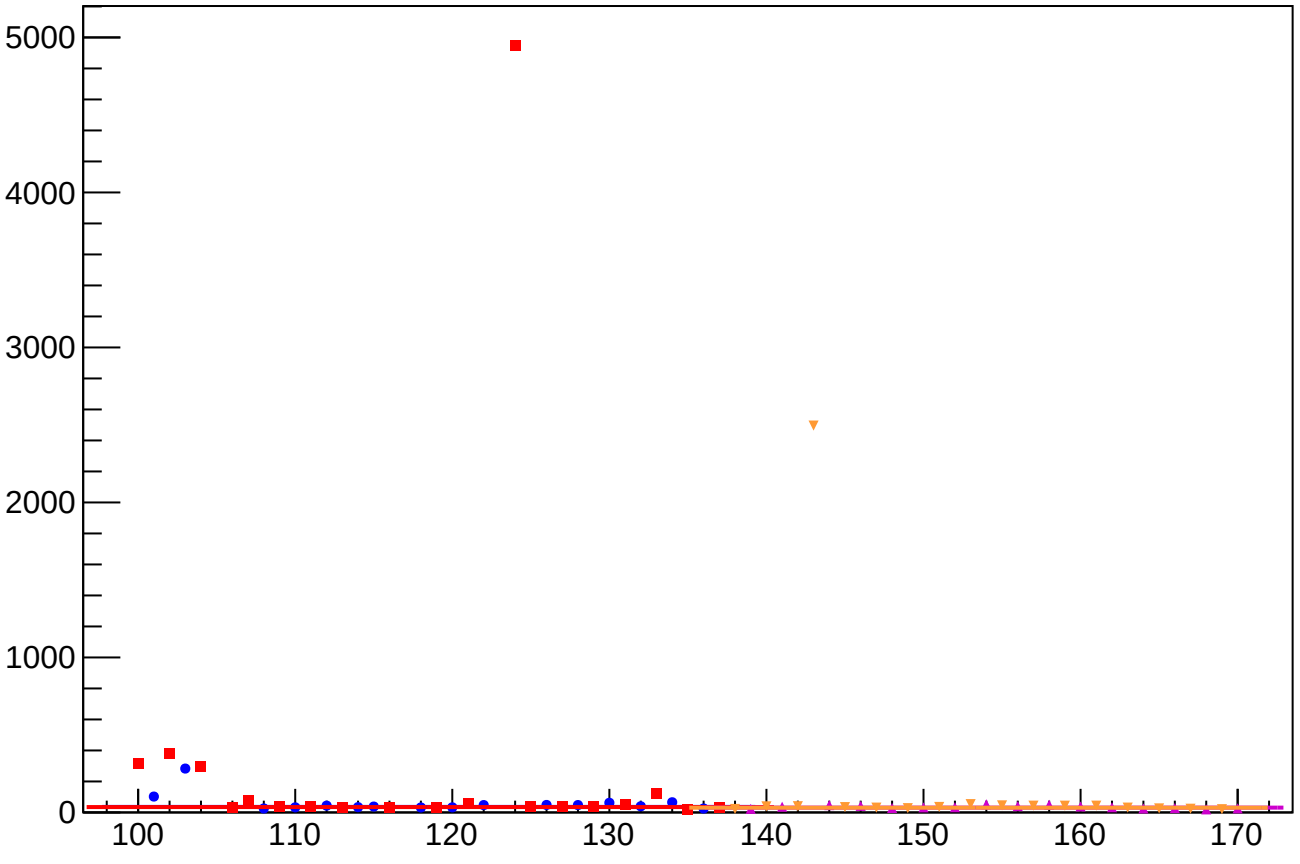
Right Out: 0.014+/-0.016 $\chi^2$/NDF: 16.0/18

Left In: -0.011+/-0.010 $\chi^2$/NDF:9.8/15

+ sign -0.015+/-0.008 $\chi^2$/NDF: 40.7/32

All: -0.010+/-0.006 $\chi^2$/NDF: 69.2/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 27.6/34




Right In: 35.742+/-0.011 $\chi^2$/NDF: 2264790.8/15

Left Out: 30.761+/-0.007 $\chi^2$/NDF:3203512.0/16

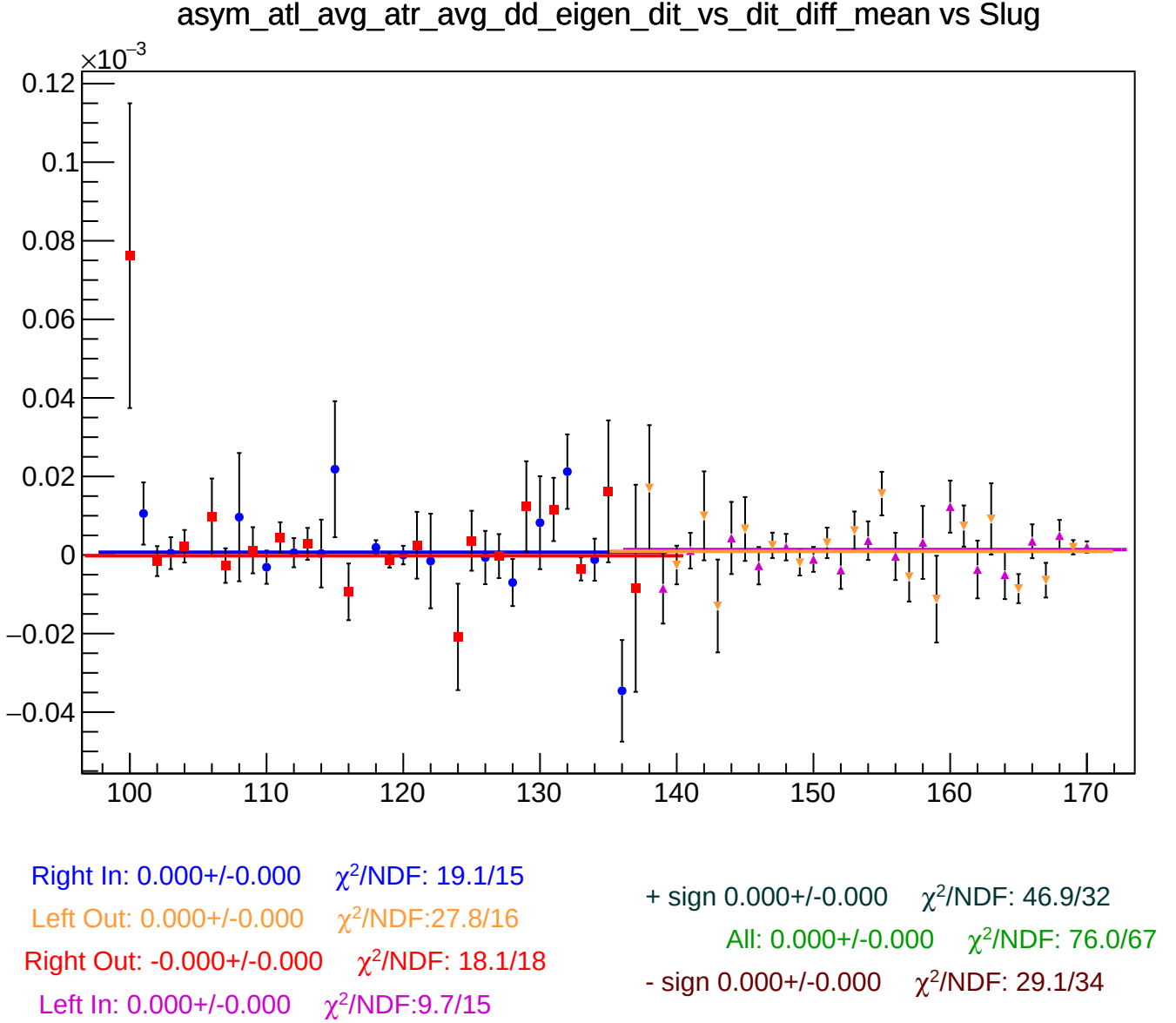
Right Out: 34.797+/-0.011 $\chi^2$/NDF: 2914137.1/18

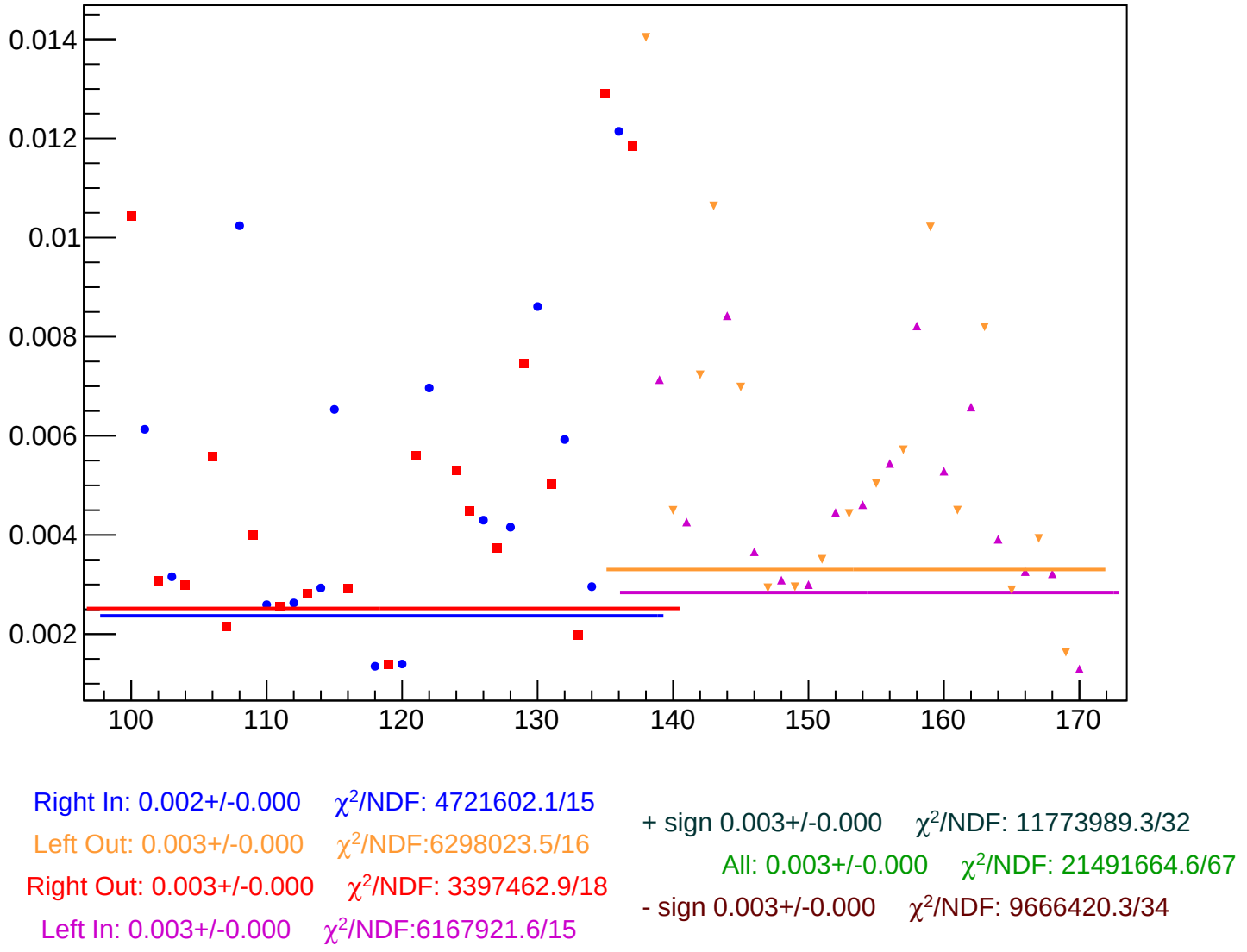
Left In: 31.158+/-0.007 $\chi^2$/NDF:1662854.0/15

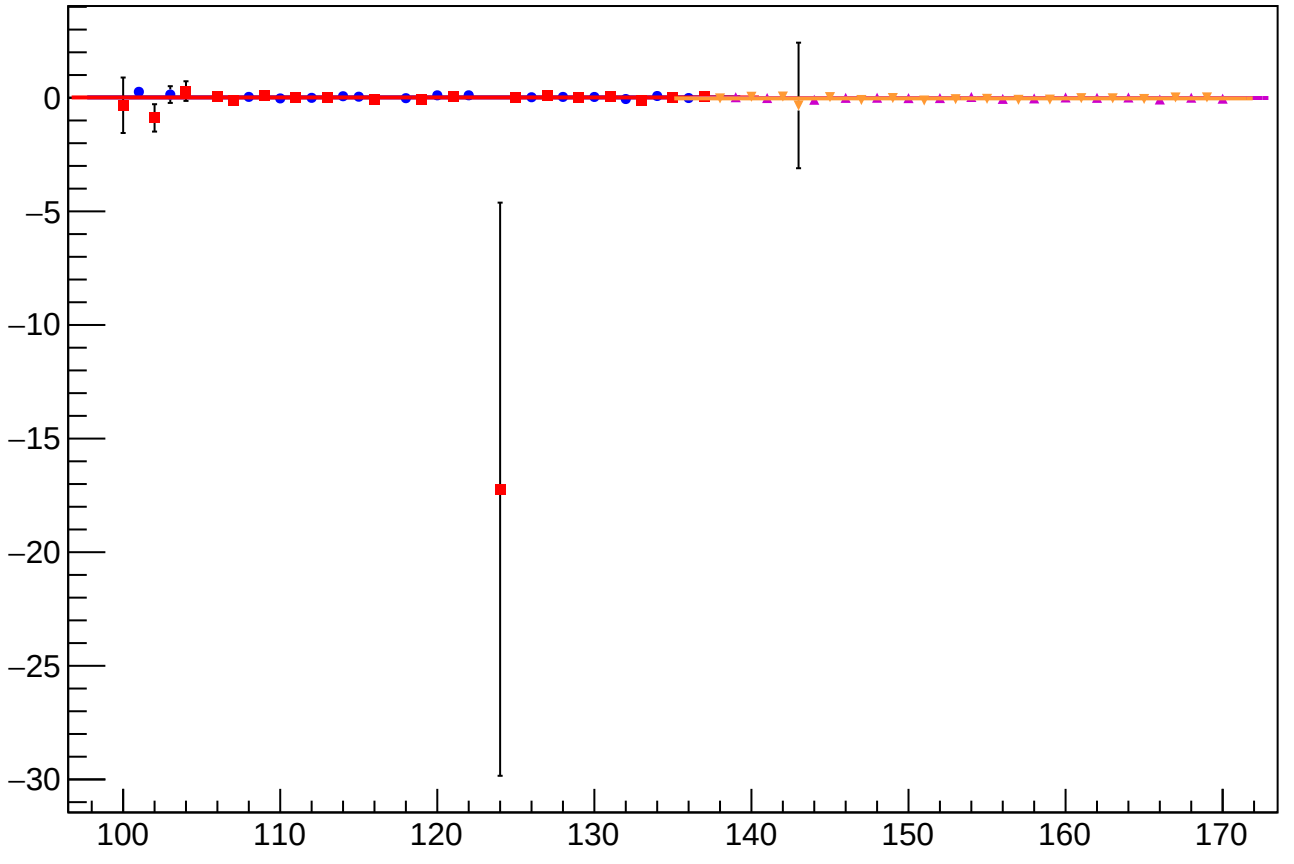
+ sign 32.149+/-0.006 $\chi^2$/NDF: 5618324.5/32

All: 32.148+/-0.004 $\chi^2$/NDF: 10274342.7/67

- sign 32.147+/-0.006 $\chi^2$/NDF: 4656018.1/34


asym_atl_avg_atr_avg_dd_eigen_dit_vs_dit_diff_mean vs Slug
×10⁻³
0.12
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 19.1/15
Left Out: 0.000+/-0.000 χ²/NDF:27.8/16
Right Out: -0.000+/-0.000 χ²/NDF: 18.1/18
Left In: 0.000+/-0.000 χ²/NDF:9.7/15
+ sign 0.000+/-0.000 χ²/NDF: 46.9/32
All: 0.000+/-0.000 χ²/NDF: 76.0/67
- sign 0.000+/-0.000 χ²/NDF: 29.1/34


asym_atl_avg_atr_avg_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.014
0.012
0.01
0.008
0.006
0.004
0.002
100
110
120
130
140
150
160
170
Right In: 0.002+/-0.000 χ²/NDF: 4721602.1/15
Left Out: 0.003+/-0.000 χ²/NDF:6298023.5/16
Right Out: 0.003+/-0.000 χ²/NDF: 3397462.9/18
Left In: 0.003+/-0.000 χ²/NDF:6167921.6/15
+ sign 0.003+/-0.000 χ²/NDF: 11773989.3/32
All: 0.003+/-0.000 χ²/NDF: 21491664.6/67
- sign 0.003+/-0.000 χ²/NDF: 9666420.3/34




Right In: 0.017+/-0.015 $\chi^2$/NDF: 11.5/15

Left Out: -0.027+/-0.010 $\chi^2$/NDF:23.4/16

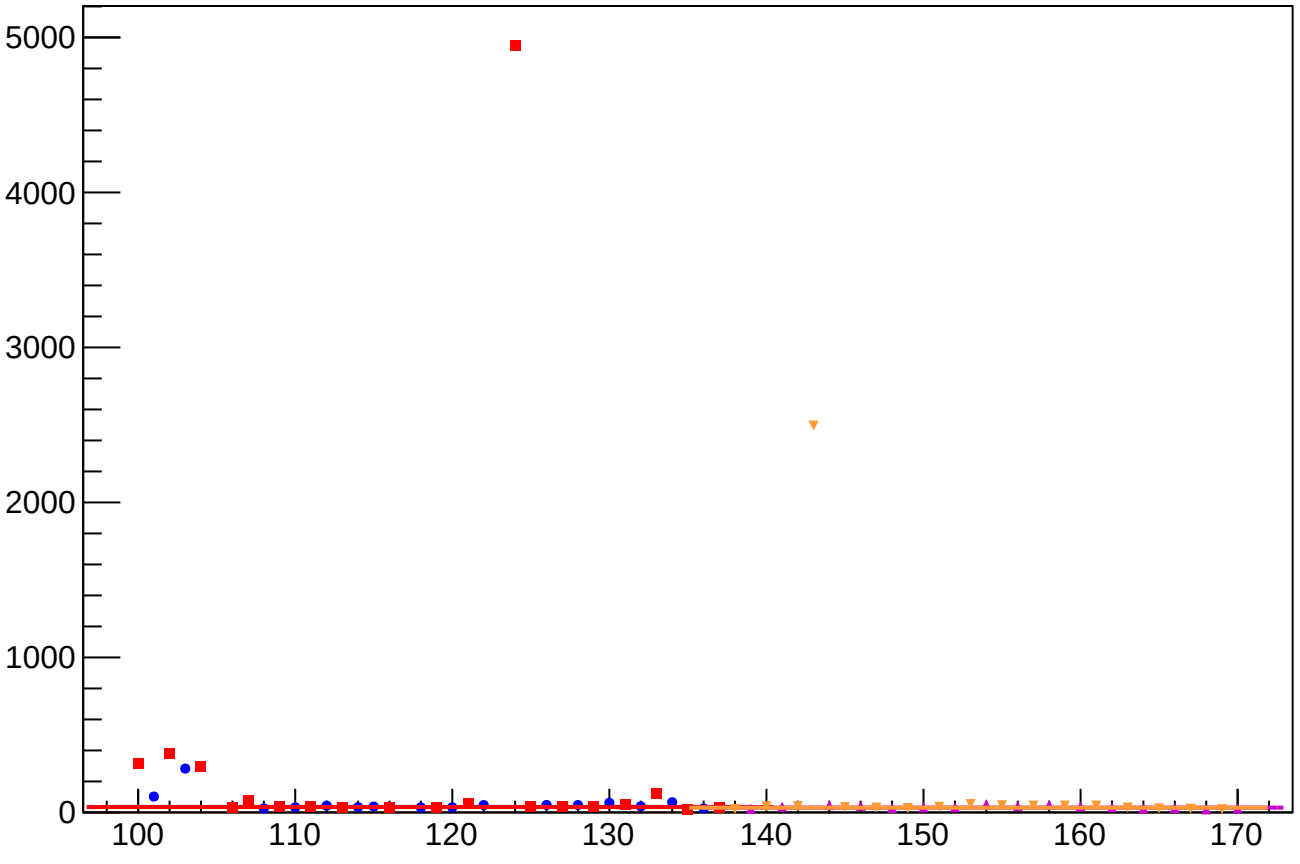
Right Out: 0.014+/-0.016 $\chi^2$/NDF: 16.0/18

Left In: -0.011+/-0.010 $\chi^2$/NDF:9.8/15

+ sign -0.015+/-0.008 $\chi^2$/NDF: 40.7/32

All: -0.010+/-0.006 $\chi^2$/NDF: 69.2/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 27.6/34




Right In: 35.743+/-0.011 $\chi^2$/NDF: 2264513.9/15

Left Out: 30.761+/-0.007 $\chi^2$/NDF:3203776.3/16

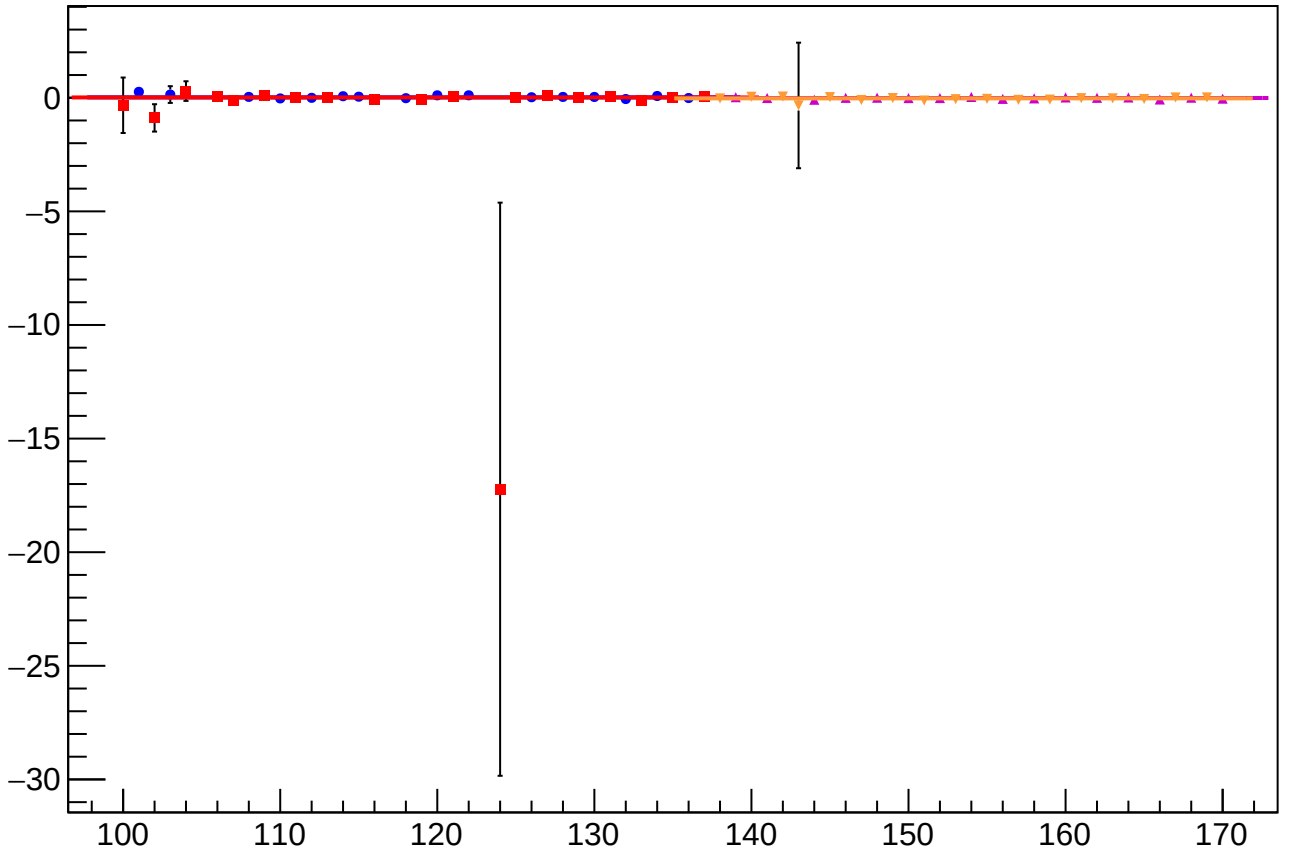
Right Out: 34.798+/-0.011 $\chi^2$/NDF: 2913962.5/18

Left In: 31.157+/-0.007 $\chi^2$/NDF:1663416.5/15

\+ sign 32.149+/-0.006 $\chi^2$/NDF: 5618410.6/32

All: 32.148+/-0.004 $\chi^2$/NDF: 10274911.2/67

\- sign 32.146+/-0.006 $\chi^2$/NDF: 4656500.5/34




Right In: 0.017+/-0.015 $\chi^2$/NDF: 11.5/15

Left Out: -0.027+/-0.010 $\chi^2$/NDF:23.4/16

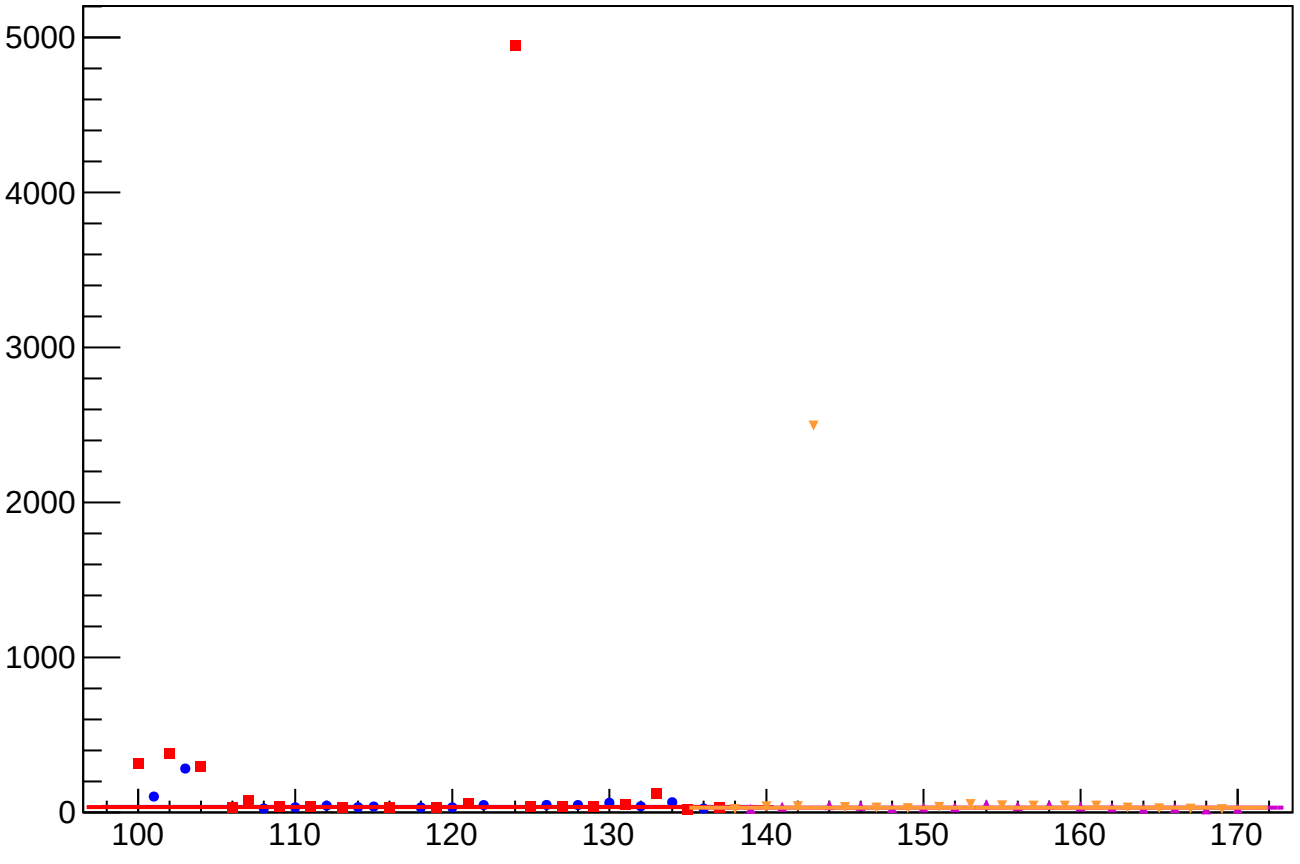
Right Out: 0.014+/-0.016 $\chi^2$/NDF: 16.0/18

Left In: -0.011+/-0.010 $\chi^2$/NDF:9.8/15

+ sign -0.015+/-0.008 $\chi^2$/NDF: 40.7/32

All: -0.010+/-0.006 $\chi^2$/NDF: 69.2/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 27.6/34




Right In: 35.743+/-0.011 $\chi^2$/NDF: 2264513.9/15

Left Out: 30.761+/-0.007 $\chi^2$/NDF:3203776.3/16

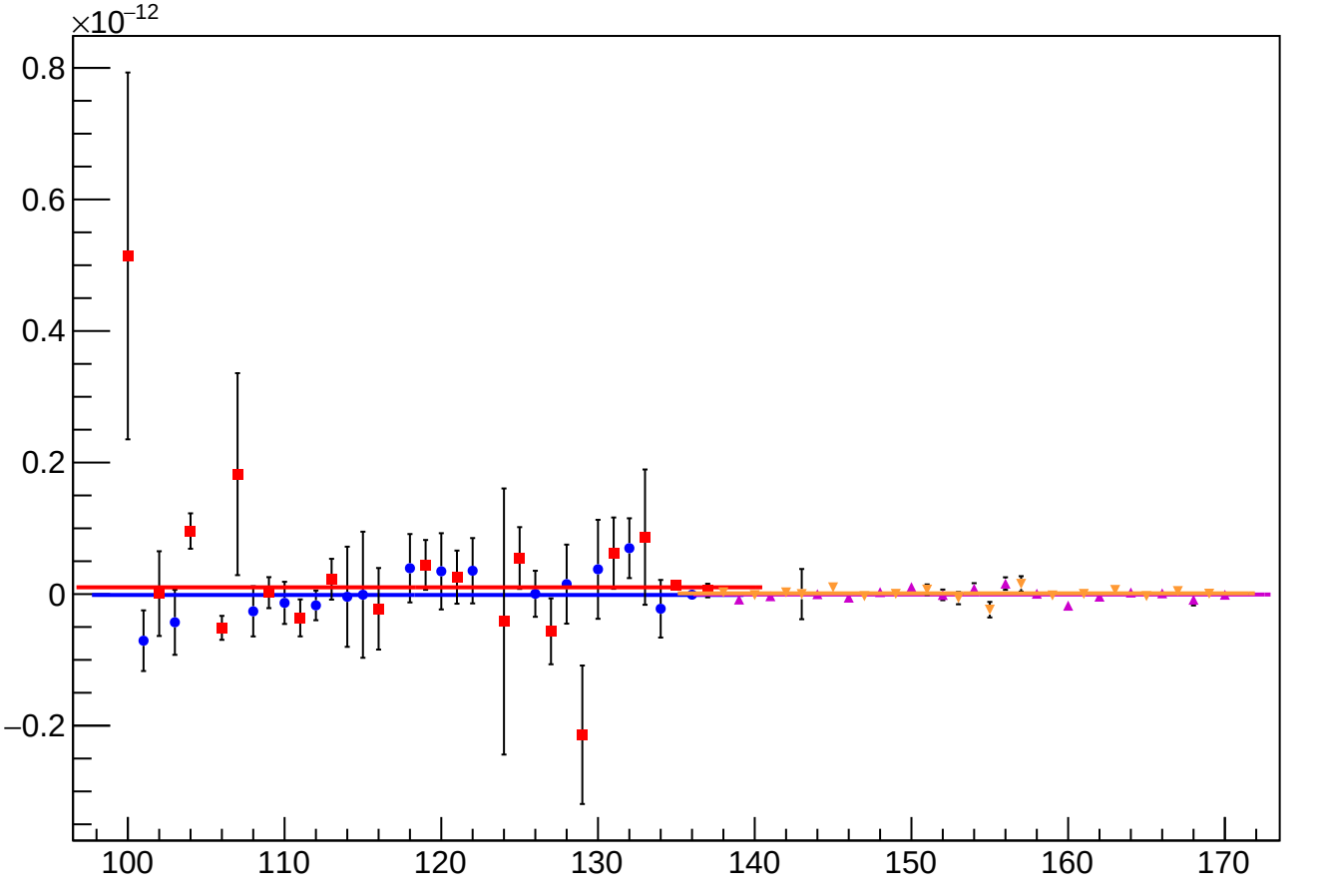
Right Out: 34.798+/-0.011 $\chi^2$/NDF: 2913962.5/18

Left In: 31.157+/-0.007 $\chi^2$/NDF:1663416.5/15

\+ sign 32.149+/-0.006 $\chi^2$/NDF: 5618410.6/32

All: 32.148+/-0.004 $\chi^2$/NDF: 10274911.2/67

\- sign 32.146+/-0.006 $\chi^2$/NDF: 4656500.5/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 8.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.7/16

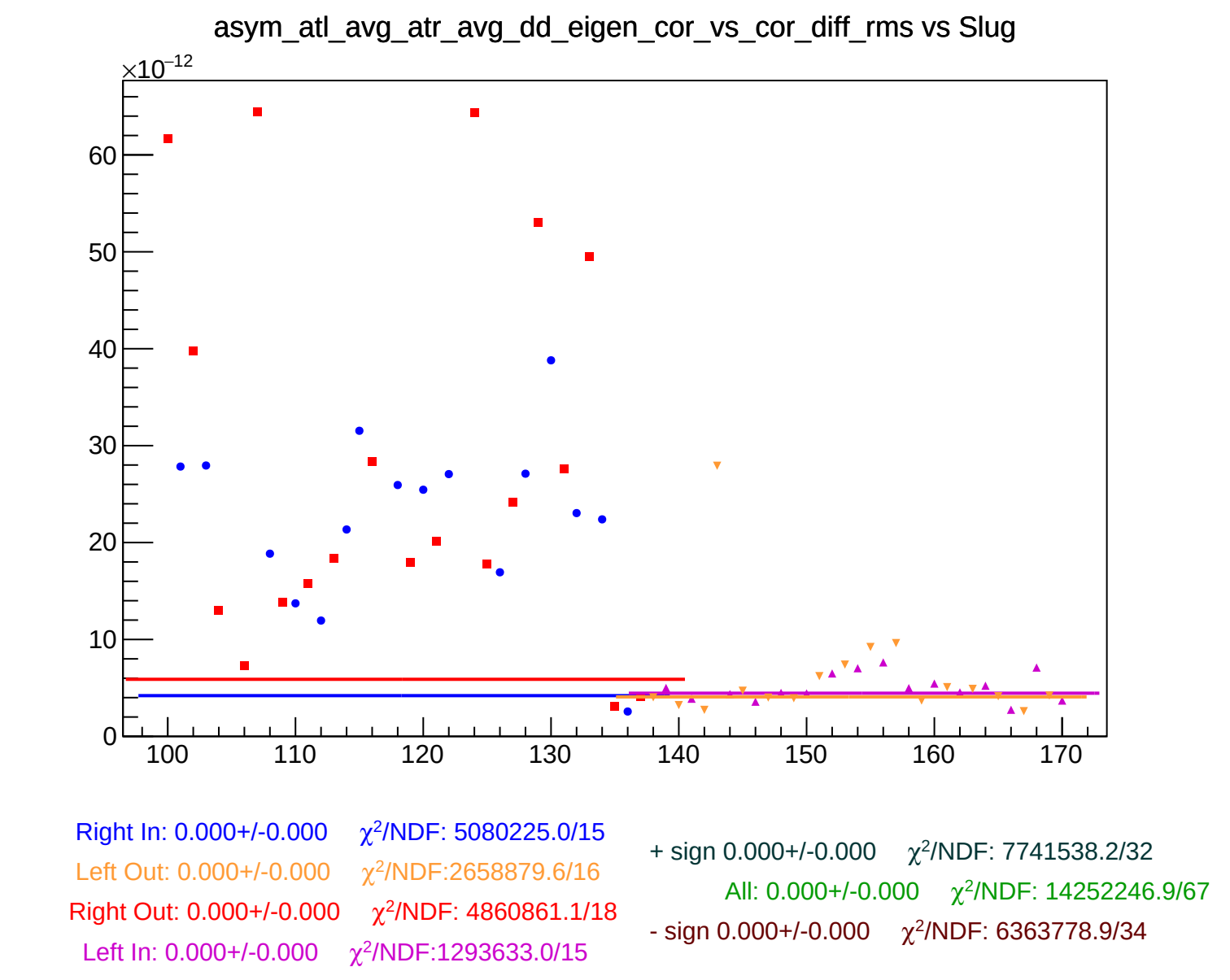
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 39.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:18.3/15

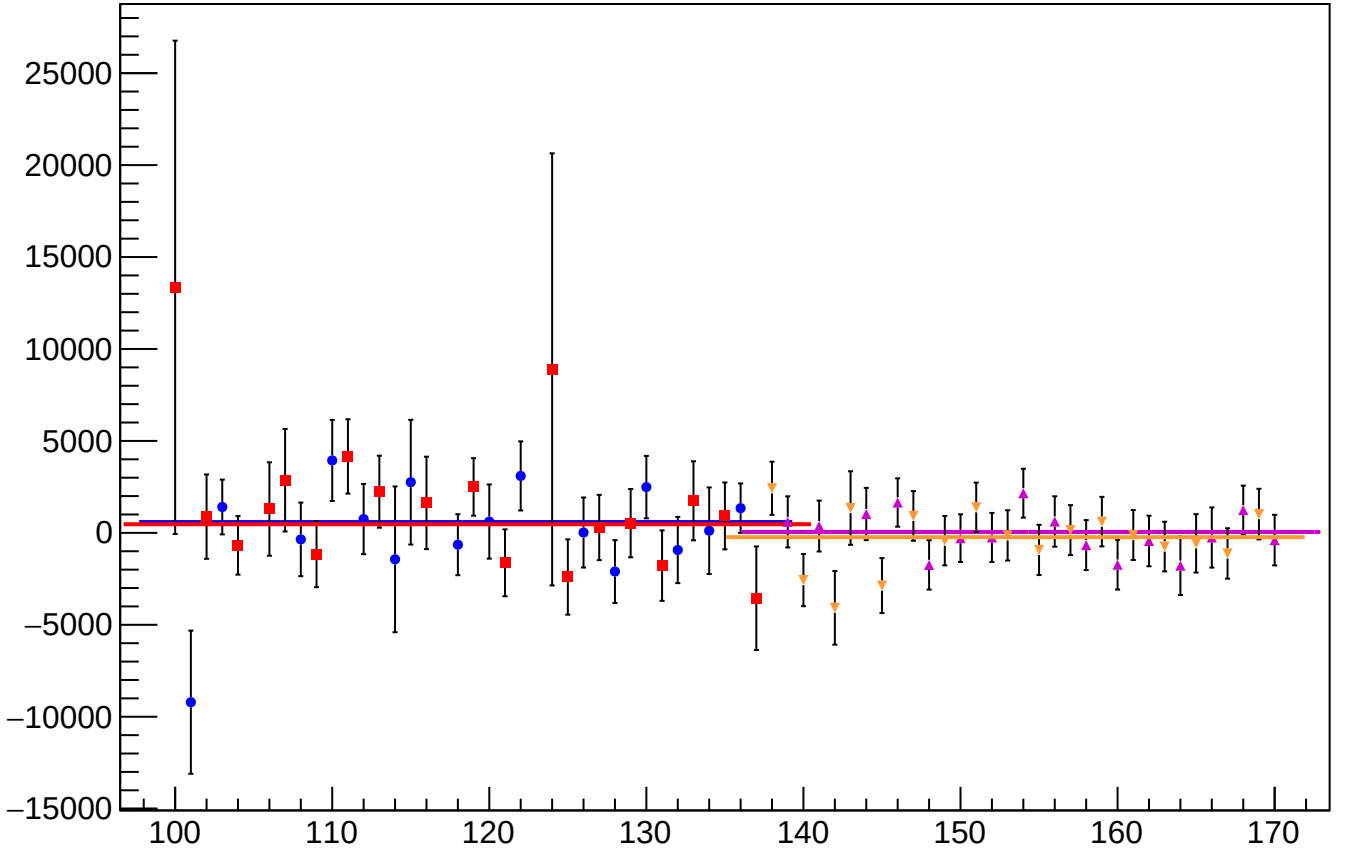
+ sign 0.000+/-0.000 $\chi^2$/NDF: 21.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 86.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 64.3/34


asym_atl_avg_atr_avg_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 5080225.0/15
Left Out: 0.000+/-0.000 χ²/NDF:2658879.6/16
Right Out: 0.000+/-0.000 χ²/NDF: 4860861.1/18
Left In: 0.000+/-0.000 χ²/NDF:1293633.0/15
+ sign 0.000+/-0.000 χ²/NDF: 7741538.2/32
All: 0.000+/-0.000 χ²/NDF: 14252246.9/67
- sign 0.000+/-0.000 χ²/NDF: 6363778.9/34

# reg_asym_atl_dd_atr_dd_dd_mean vs Slug




Right In: 586.935+/-482.434 $\chi^2$/NDF: 17.1/15

Left Out: -234.092+/-347.367 $\chi^2$/NDF:17.9/16

Right Out: 469.012+/-480.516 $\chi^2$/NDF: 16.9/18

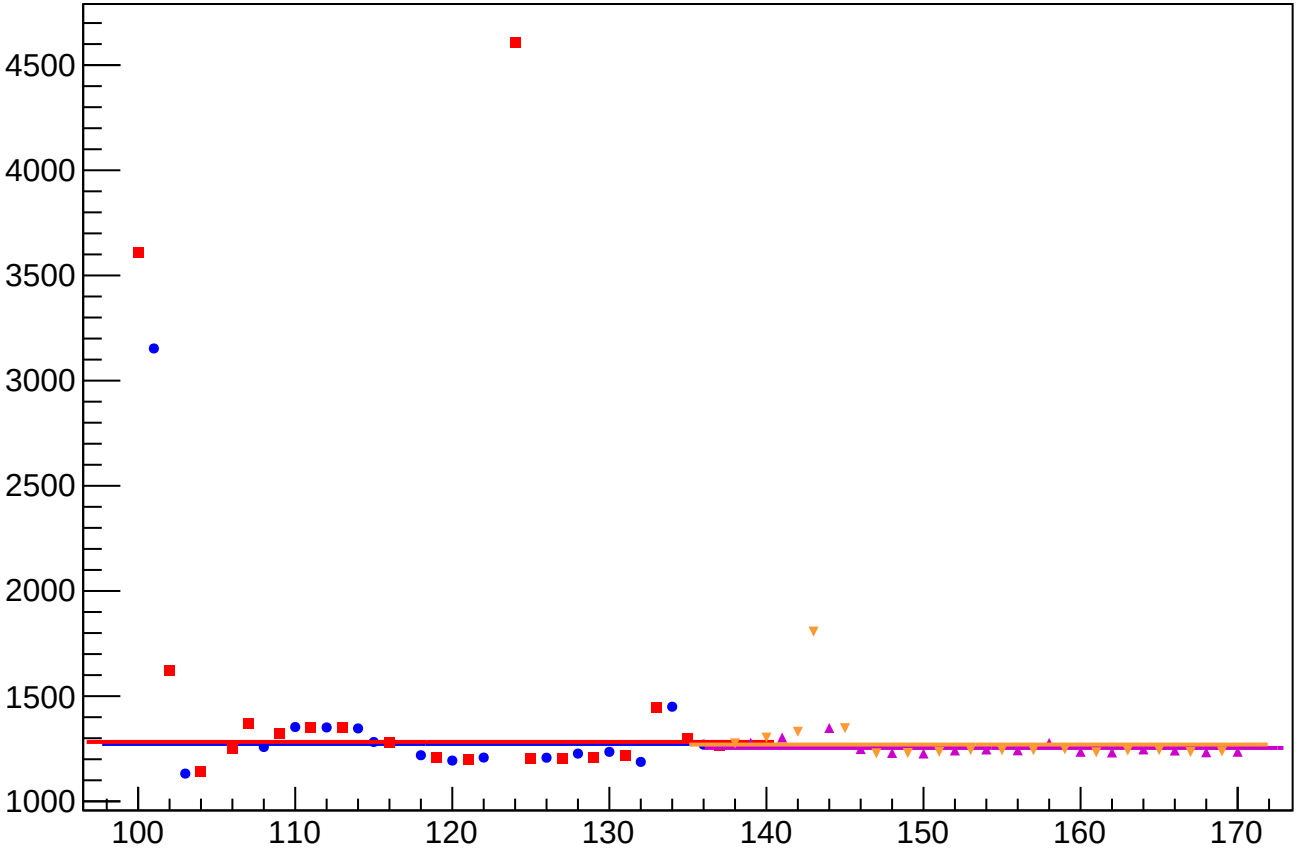
Left In: 48.296+/-344.934 $\chi^2$/NDF:11.2/15

+ sign 46.232+/-281.896 $\chi^2$/NDF: 36.9/32

All: 119.234+/-198.733 $\chi^2$/NDF: 65.5/67

- sign 191.367+/-280.213 $\chi^2$/NDF: 28.5/34

# reg_asym_atl_dd_atr_dd_dd_rms vs Slug




Right In: 1272.804+/-0.341 $\chi^2$/NDF: 519298.2/15

Left Out: 1269.880+/-0.246 $\chi^2$/NDF:165900.6/16

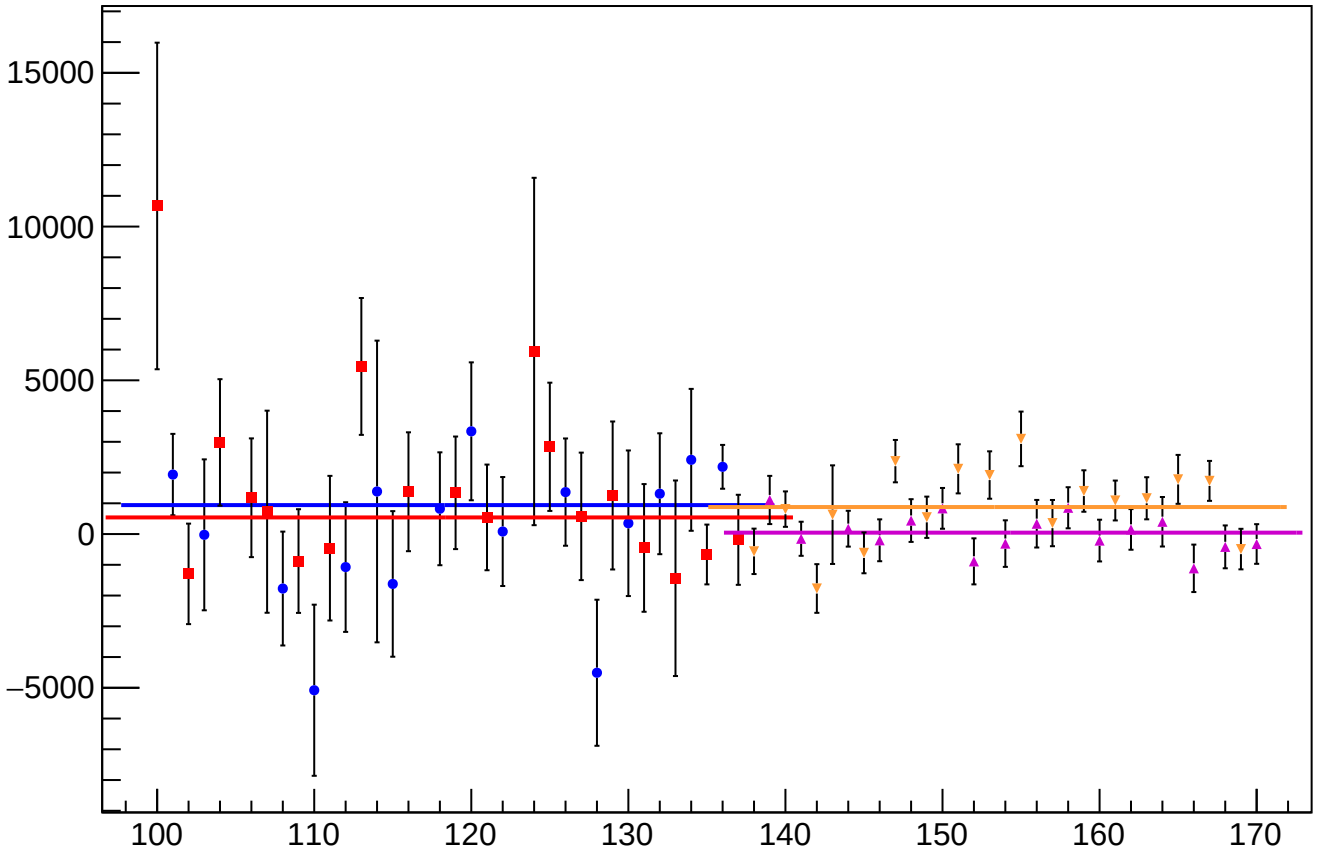
Right Out: 1282.365+/-0.340 $\chi^2$/NDF: 322078.6/18

Left In: 1253.860+/-0.244 $\chi^2$/NDF:16342.5/15

+ sign 1270.878+/-0.199 $\chi^2$/NDF: 685247.1/32

All: 1267.194+/-0.141 $\chi^2$/NDF: 1028992.3/67

- sign 1263.553+/-0.198 $\chi^2$/NDF: 343065.9/34




Right In: 941.759+/-425.837 $\chi^2$/NDF: 19.9/15

Left Out: 878.484+/-174.941 $\chi^2$/NDF:44.2/16

Right Out: 540.622+/-439.905 $\chi^2$/NDF: 17.2/18

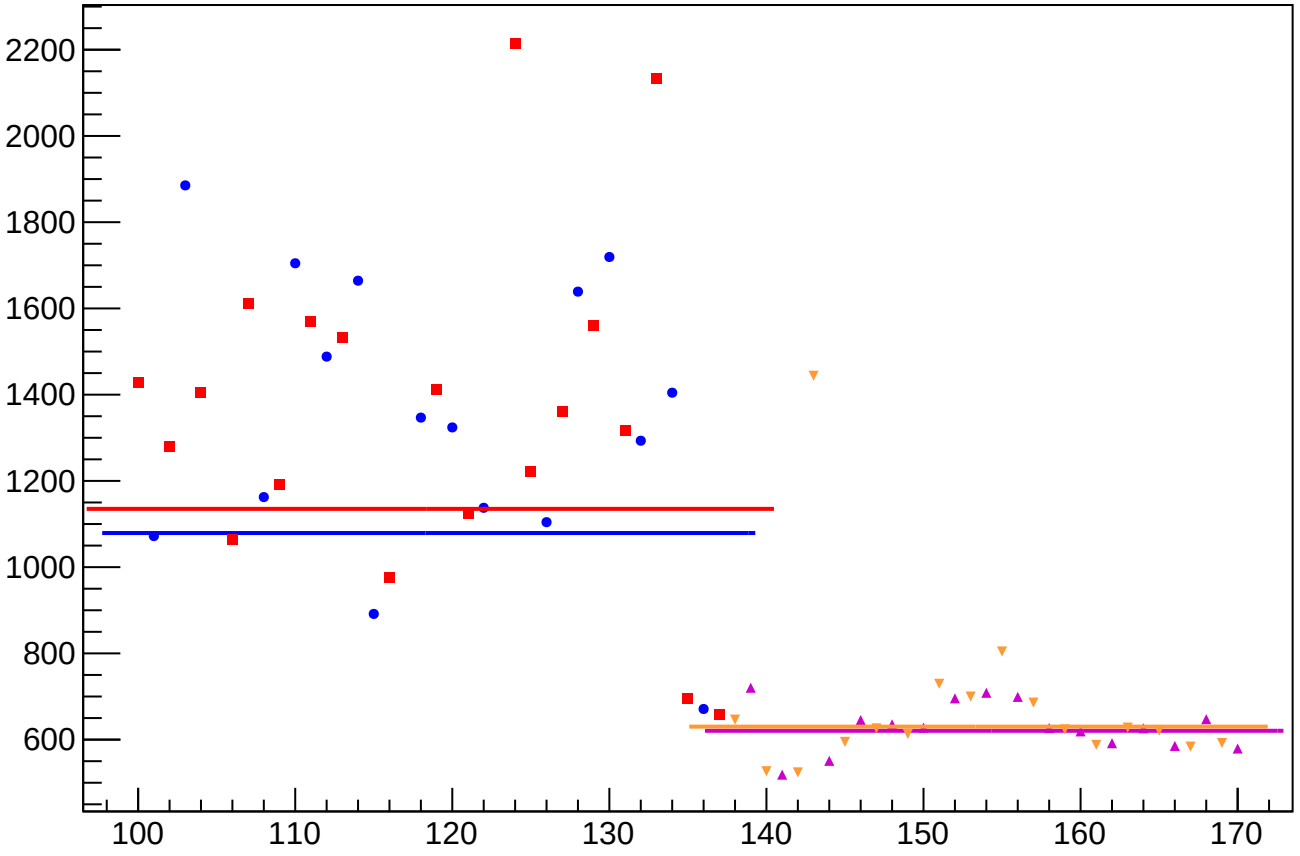
Left In: 45.247+/-171.719 $\chi^2$/NDF:10.7/15

+ sign 887.621+/-161.818 $\chi^2$/NDF: 64.1/32

All: 494.708+/-113.762 $\chi^2$/NDF: 104.7/67

- sign 110.750+/-159.964 $\chi^2$/NDF: 28.9/34

# asym_atl_dd_atr_dd_dd_reg_correction_rms vs Slug




Right In: 1079.120+/-0.301 $\chi^2$/NDF: 1482232.0/15

Left Out: 630.159+/-0.124 $\chi^2$/NDF:784478.4/16

Right Out: 1135.161+/-0.311 $\chi^2$/NDF: 1293082.2/18

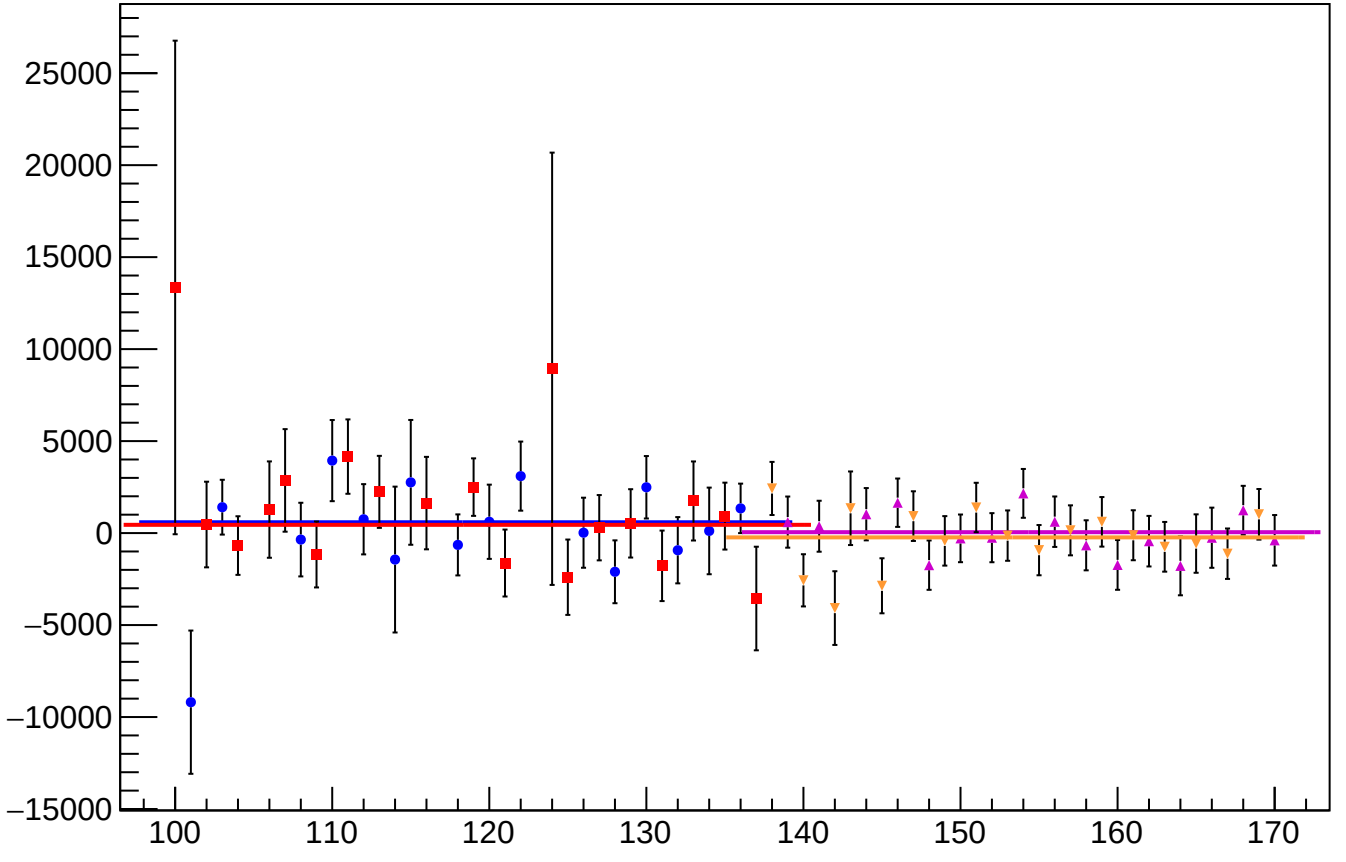
Left In: 620.511+/-0.121 $\chi^2$/NDF:219548.1/15

\+ sign 694.990+/-0.114 $\chi^2$/NDF: 4168795.9/32

All: 691.739+/-0.080 $\chi^2$/NDF: 8058447.1/67

\- sign 688.562+/-0.113 $\chi^2$/NDF: 3888055.6/34

# cor_asym_atl_dd_atr_dd_dd_mean vs Slug




Right In: 587.254+/-482.434 $\chi^2$/NDF: 17.1/15

Left Out: -234.182+/-347.367 $\chi^2$/NDF:17.9/16

Right Out: 448.412+/-481.333 $\chi^2$/NDF: 16.8/18

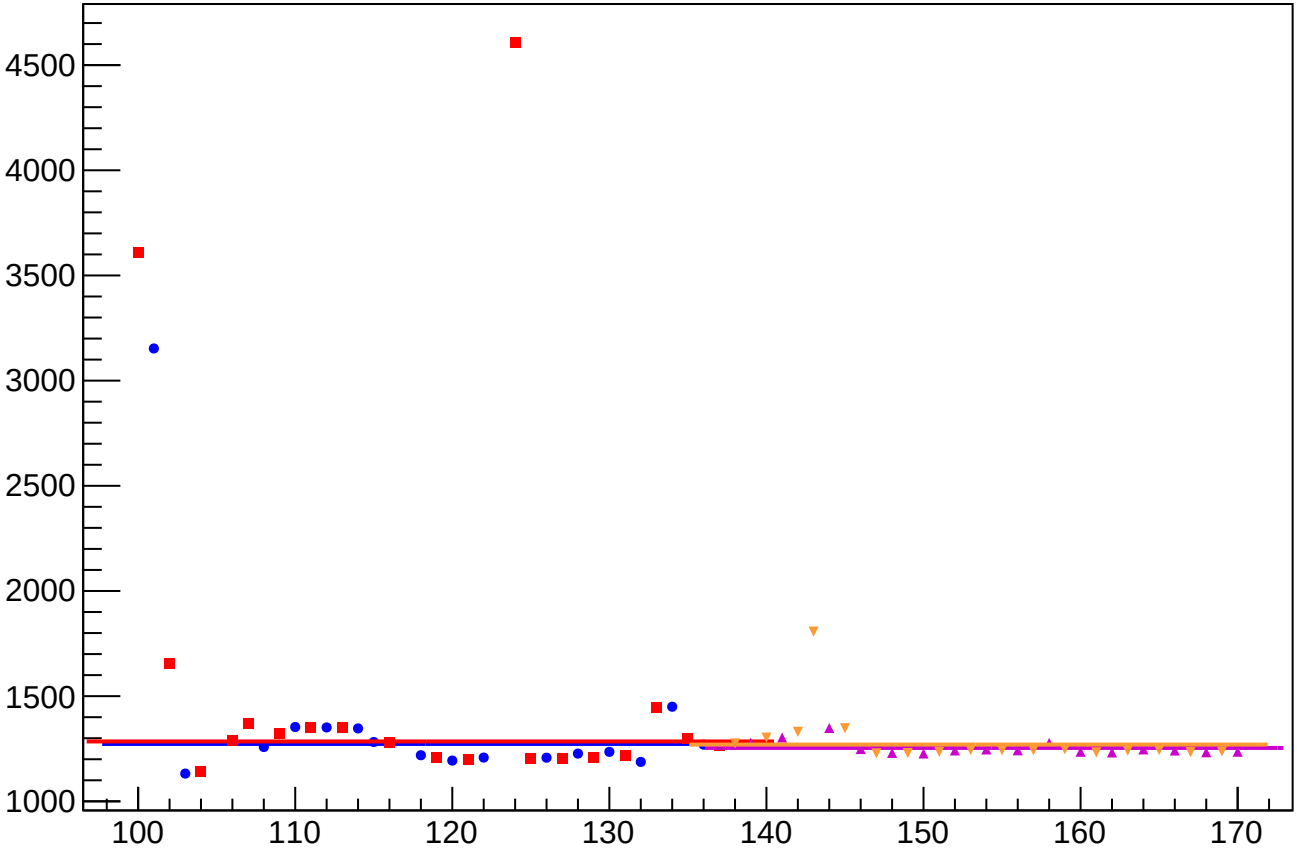
Left In: 48.349+/-344.934 $\chi^2$/NDF:11.2/15

+ sign 46.282+/-281.896 $\chi^2$/NDF: 36.9/32

All: 115.559+/-198.790 $\chi^2$/NDF: 65.4/67

- sign 184.091+/-280.374 $\chi^2$/NDF: 28.4/34

# cor_asym_atl_dd_atr_dd_dd_rms vs Slug




Right In: 1272.804+/-0.341 $\chi^2$/NDF: 519299.6/15

Left Out: 1269.880+/-0.246 $\chi^2$/NDF:165900.6/16

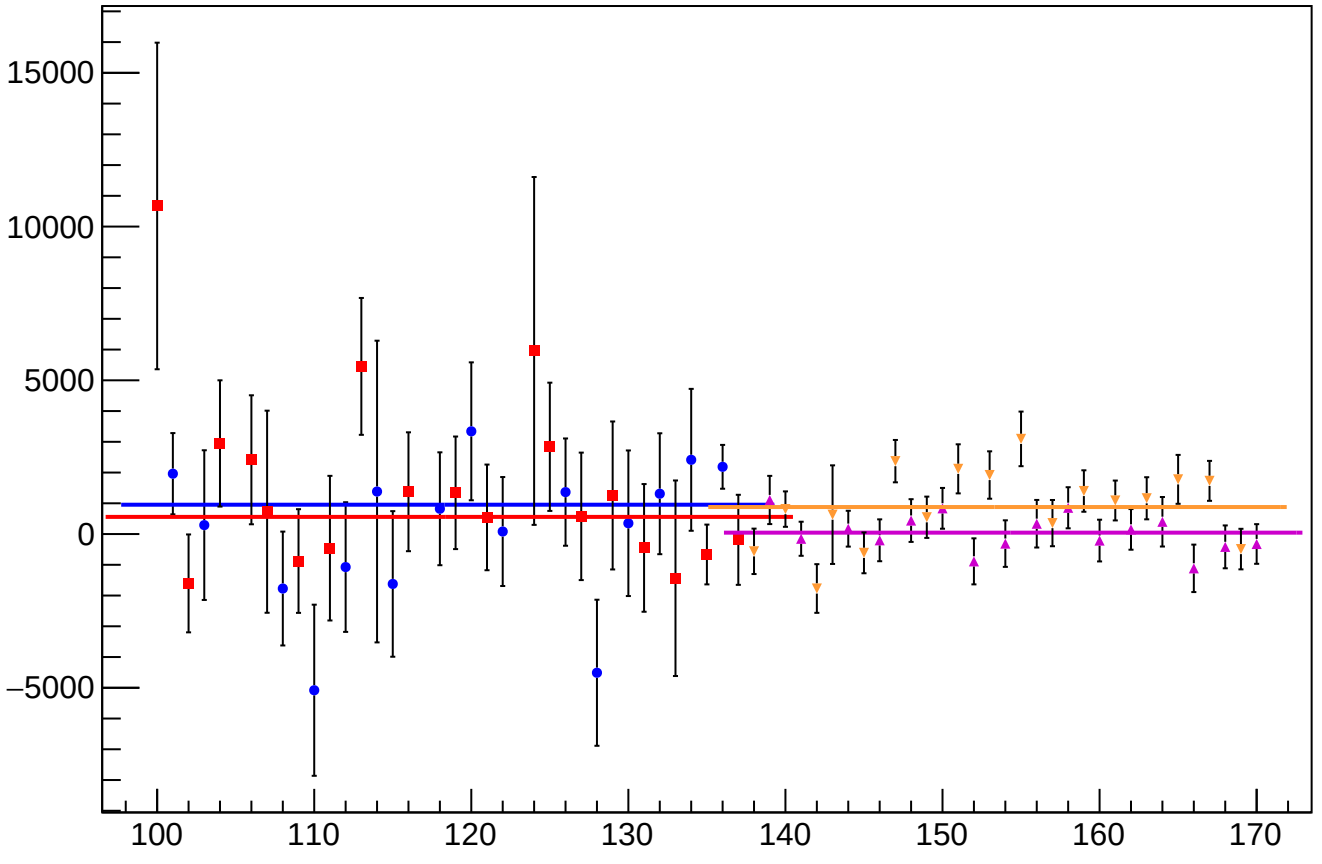
Right Out: 1284.654+/-0.340 $\chi^2$/NDF: 328734.9/18

Left In: 1253.860+/-0.244 $\chi^2$/NDF:16342.5/15

+ sign 1270.878+/-0.199 $\chi^2$/NDF: 685248.5/32

All: 1267.576+/-0.141 $\chi^2$/NDF: 1036280.8/67

- sign 1264.309+/-0.198 $\chi^2$/NDF: 350486.1/34




Right In: 954.146+/-425.660 $\chi^2$/NDF: 19.9/15

Left Out: 878.469+/-174.943 $\chi^2$/NDF:44.2/16

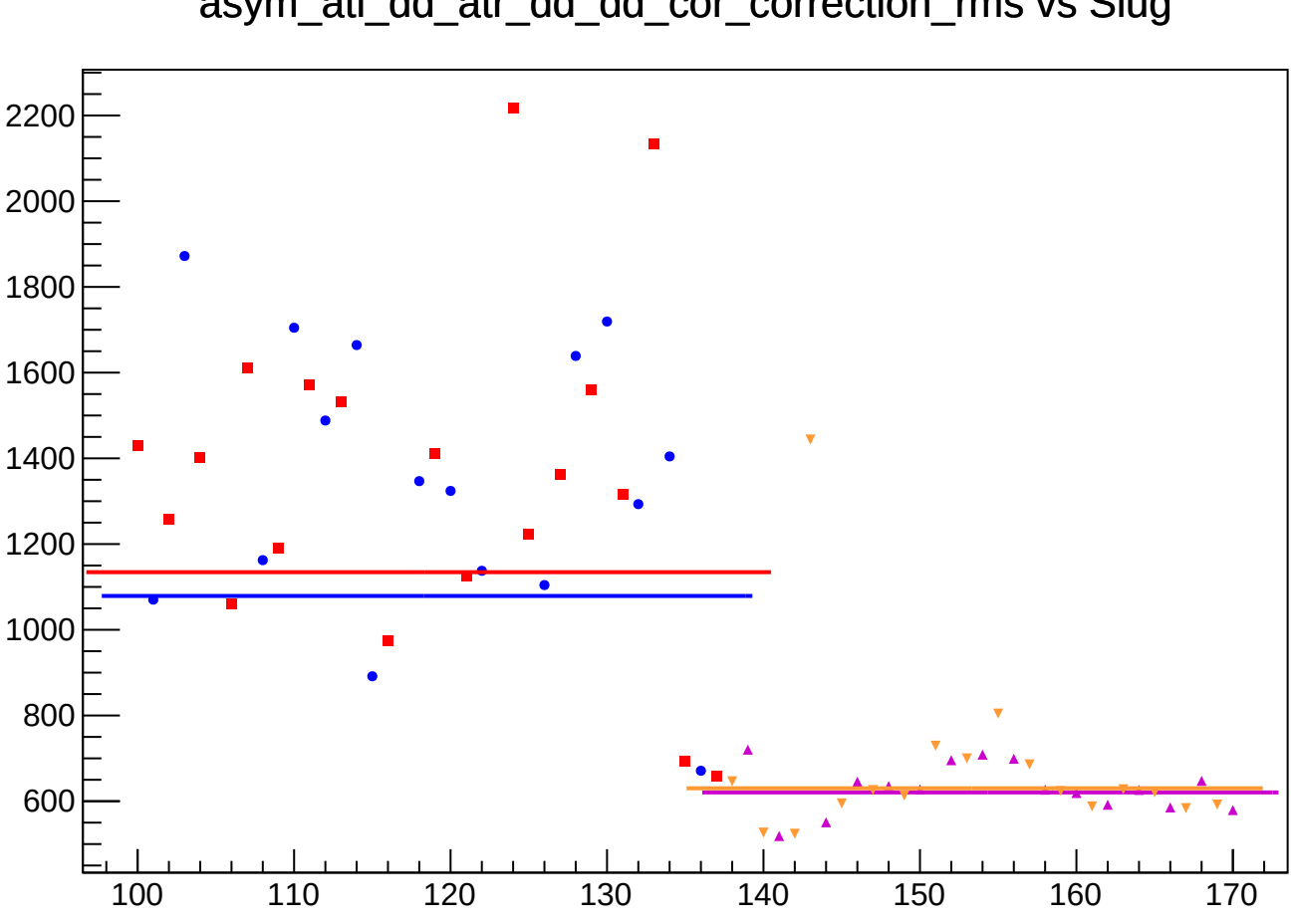
Right Out: 557.935+/-440.758 $\chi^2$/NDF: 18.4/18

Left In: 45.226+/-171.718 $\chi^2$/NDF:10.7/15

+ sign 889.405+/-161.810 $\chi^2$/NDF: 64.1/32

All: 496.741+/-113.773 $\chi^2$/NDF: 105.9/67

- sign 112.792+/-160.004 $\chi^2$/NDF: 30.2/34




Right In: 1078.932+/-0.301 $\chi^2$/NDF: 1478719.9/15

Left Out: 630.165+/-0.124 $\chi^2$/NDF:784386.8/16

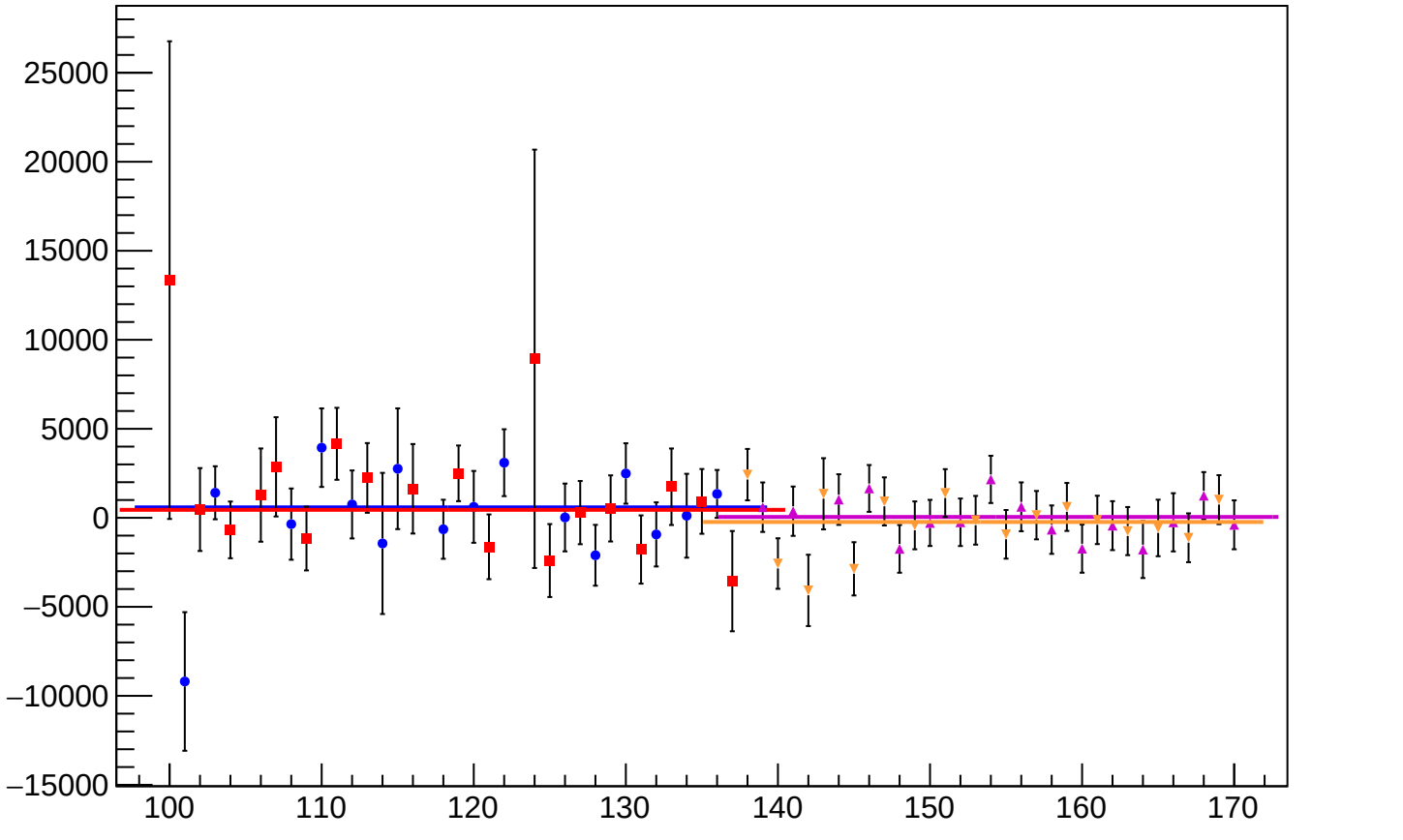
Right Out: 1134.428+/-0.312 $\chi^2$/NDF: 1288899.2/18

Left In: 620.506+/-0.121 $\chi^2$/NDF:219582.8/15

+ sign 695.014+/-0.114 $\chi^2$/NDF: 4164897.6/32

All: 691.585+/-0.080 $\chi^2$/NDF: 8035912.8/67

- sign 688.233+/-0.113 $\chi^2$/NDF: 3869239.1/34




Right In: 587.254+/-482.434 $\chi^2$/NDF: 17.1/15

Left Out: -234.182+/-347.367 $\chi^2$/NDF:17.9/16

Right Out: 448.412+/-481.333 $\chi^2$/NDF: 16.8/18

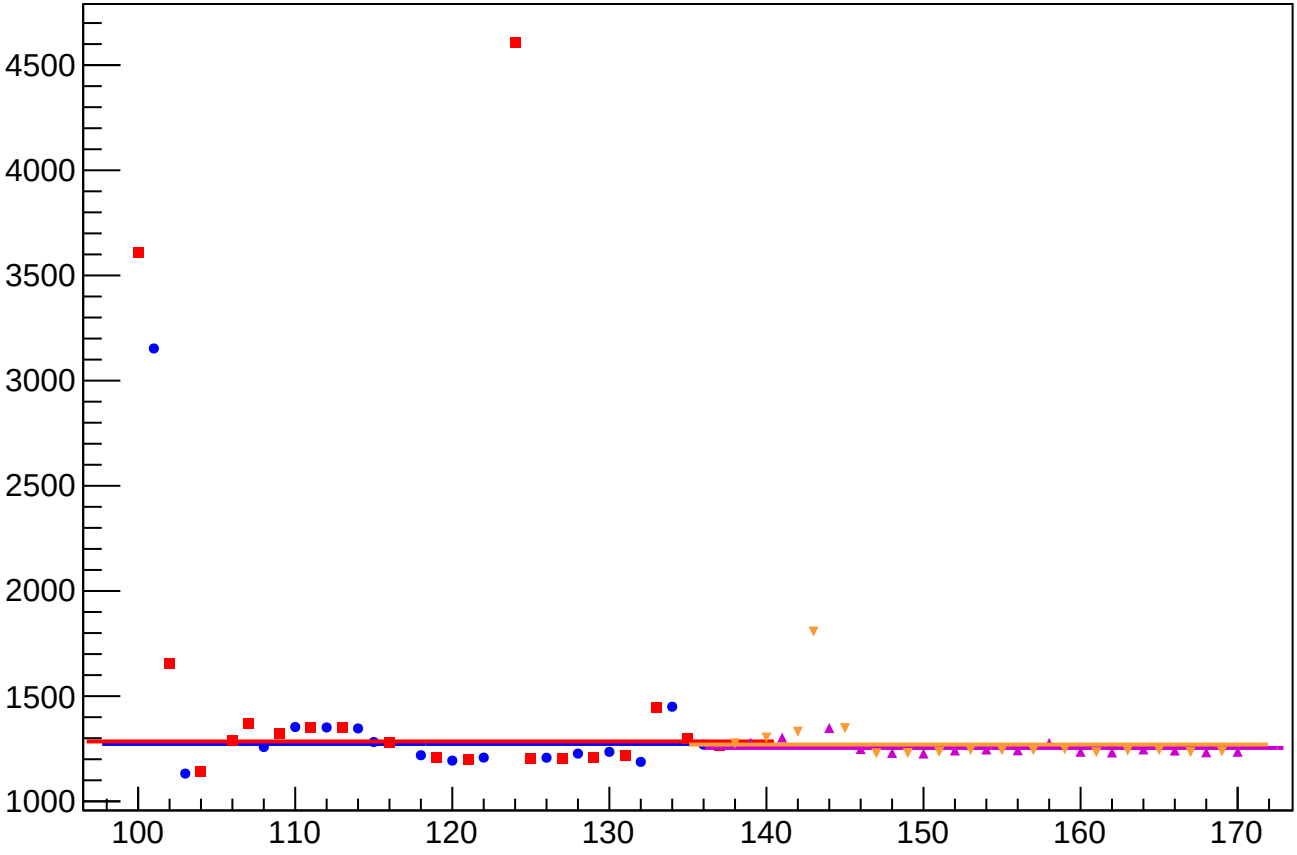
Left In: 48.349+/-344.934 $\chi^2$/NDF:11.2/15

+ sign 46.282+/-281.896 $\chi^2$/NDF: 36.9/32

All: 115.559+/-198.790 $\chi^2$/NDF: 65.4/67

- sign 184.091+/-280.374 $\chi^2$/NDF: 28.4/34

# eigen_cor_asym_atl_dd_atr_dd_dd_rms vs Slug




Right In: 1272.804+/-0.341 $\chi^2$/NDF: 519299.6/15

Left Out: 1269.880+/-0.246 $\chi^2$/NDF:165900.6/16

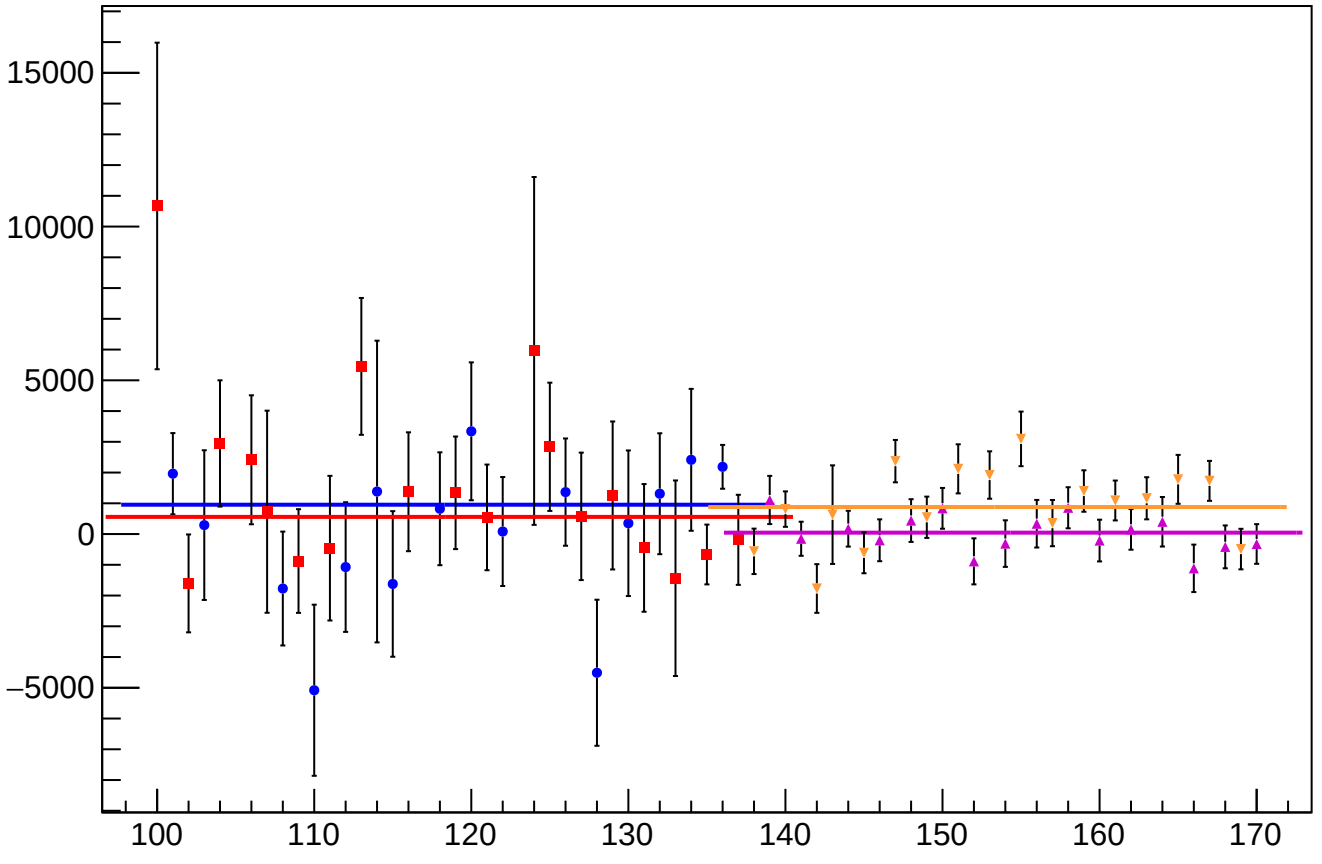
Right Out: 1284.654+/-0.340 $\chi^2$/NDF: 328734.9/18

Left In: 1253.860+/-0.244 $\chi^2$/NDF:16342.5/15

+ sign 1270.878+/-0.199 $\chi^2$/NDF: 685248.5/32

All: 1267.576+/-0.141 $\chi^2$/NDF: 1036280.8/67

- sign 1264.309+/-0.198 $\chi^2$/NDF: 350486.1/34




Right In: 954.146+/-425.660 $\chi^2$/NDF: 19.9/15

Left Out: 878.469+/-174.943 $\chi^2$/NDF:44.2/16

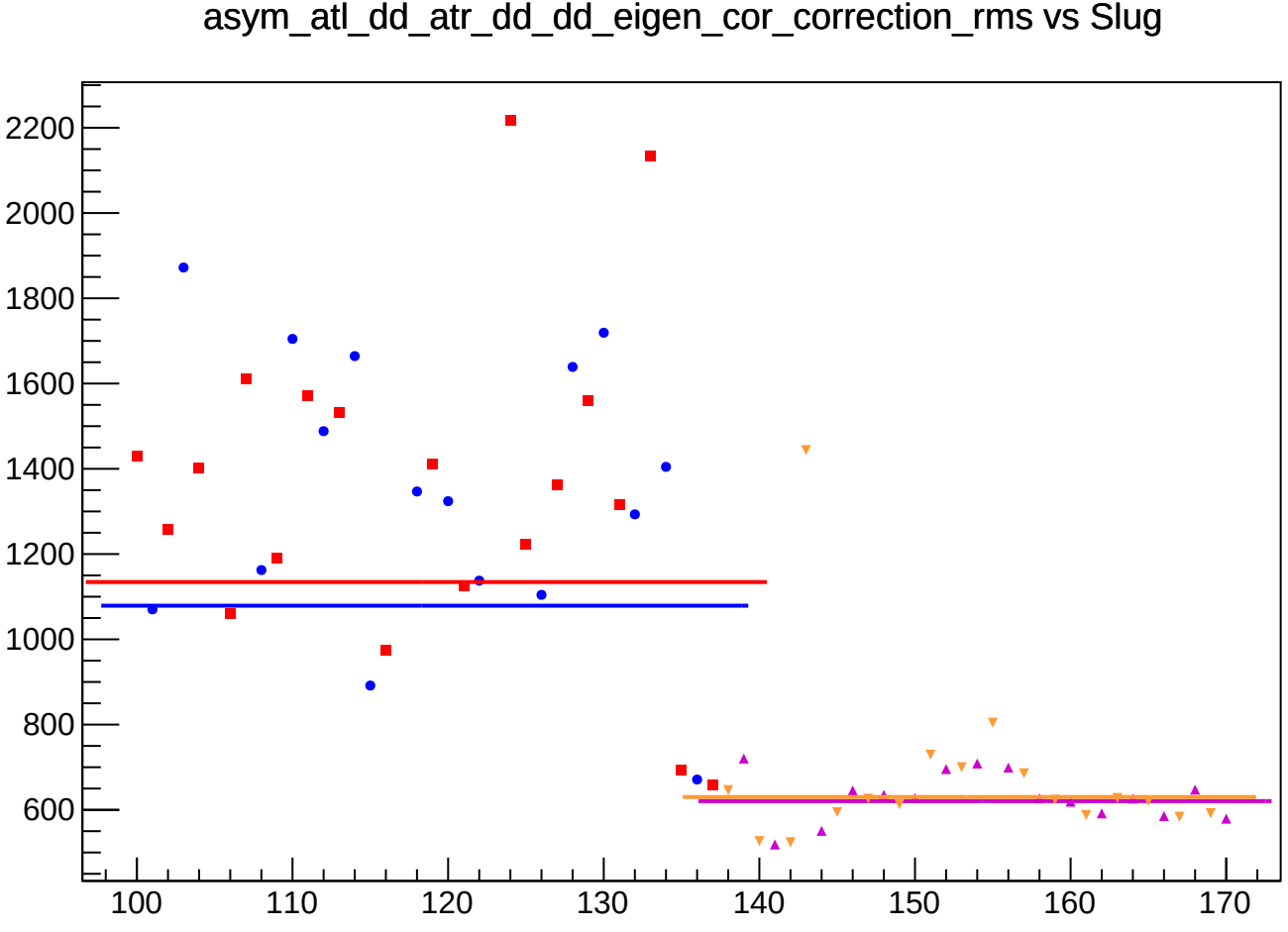
Right Out: 557.935+/-440.758 $\chi^2$/NDF: 18.4/18

Left In: 45.226+/-171.718 $\chi^2$/NDF:10.7/15

+ sign 889.405+/-161.810 $\chi^2$/NDF: 64.1/32

All: 496.741+/-113.773 $\chi^2$/NDF: 105.9/67

- sign 112.792+/-160.004 $\chi^2$/NDF: 30.2/34




Right In: 1078.932+/-0.301 $\chi^2$/NDF: 1478719.9/15

Left Out: 630.165+/-0.124 $\chi^2$/NDF:784386.8/16

Right Out: 1134.428+/-0.312 $\chi^2$/NDF: 1288899.2/18

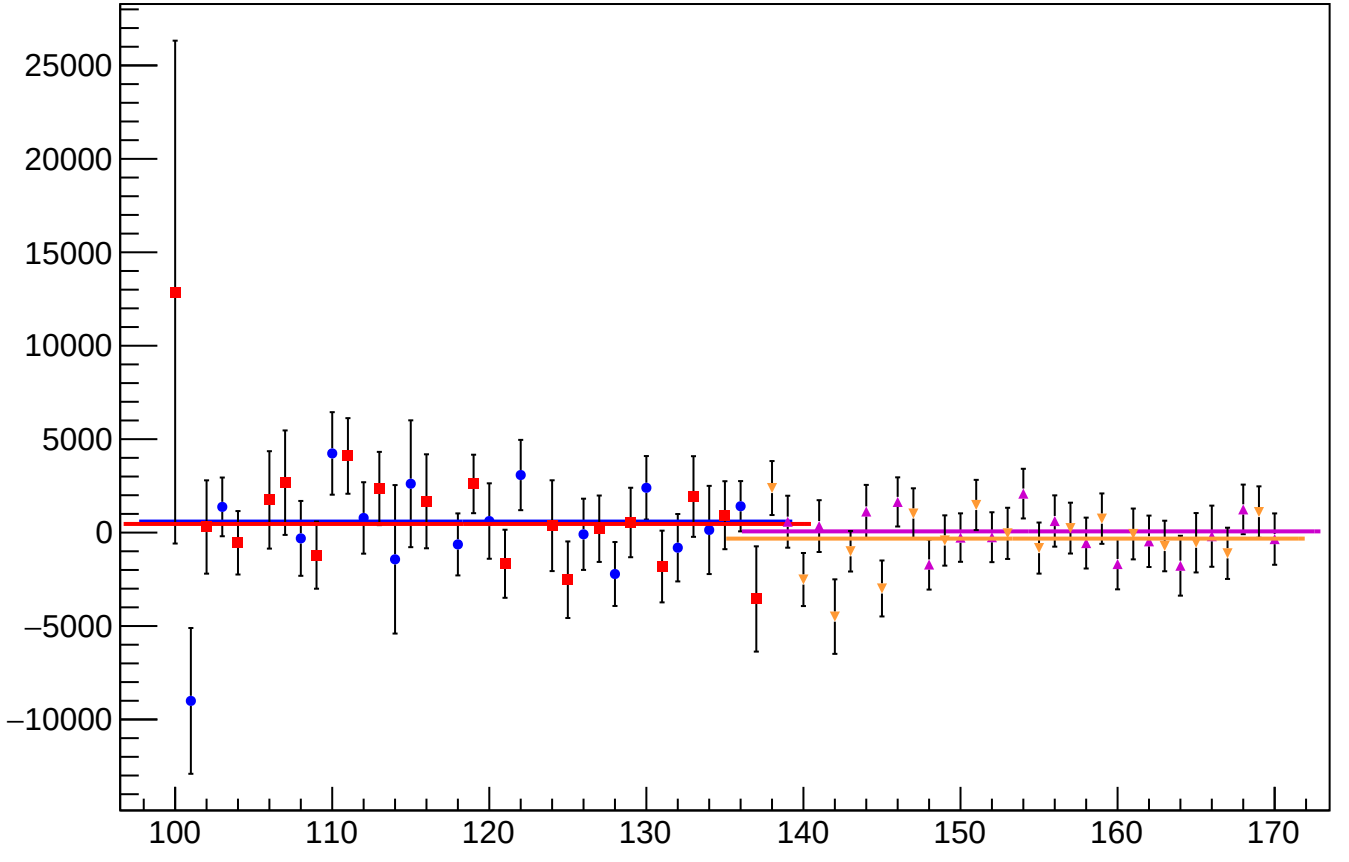
Left In: 620.506+/-0.121 $\chi^2$/NDF:219582.8/15

\+ sign 695.014+/-0.114 $\chi^2$/NDF: 4164897.6/32

All: 691.585+/-0.080 $\chi^2$/NDF: 8035912.8/67

\- sign 688.233+/-0.113 $\chi^2$/NDF: 3869239.1/34

# dit_asym_atl_dd_atr_dd_dd_mean vs Slug




Right In: 590.322+/-485.483 $\chi^2$/NDF: 17.1/15

Left Out: -321.749+/-335.608 $\chi^2$/NDF:19.1/16

Right Out: 462.606+/-476.795 $\chi^2$/NDF: 16.7/18

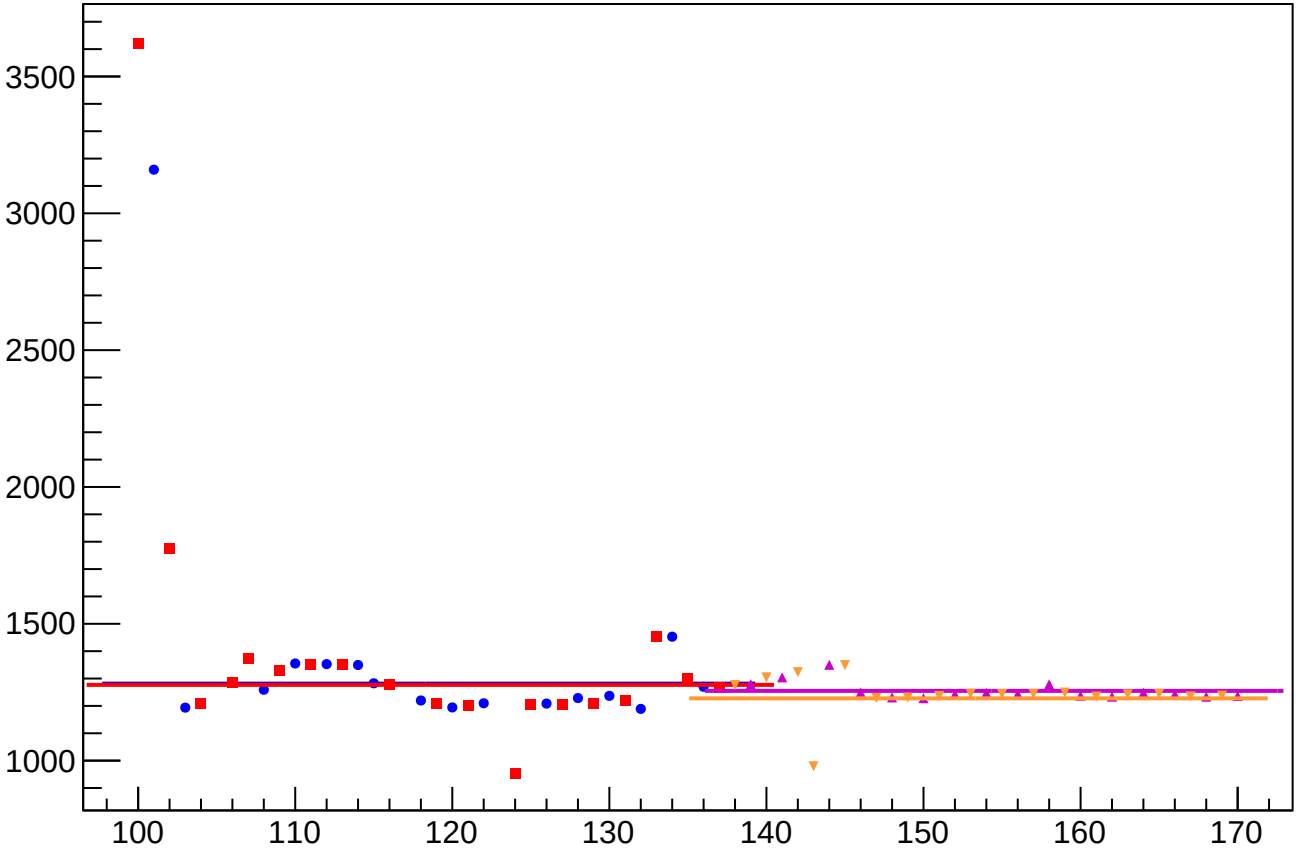
Left In: 65.098+/-345.215 $\chi^2$/NDF:10.8/15

+ sign -26.828+/-276.066 $\chi^2$/NDF: 38.6/32

All: 86.031+/-196.452 $\chi^2$/NDF: 66.9/67

- sign 201.812+/-279.618 $\chi^2$/NDF: 27.9/34

# dit_asym_atl_dd_atr_dd_dd_rms vs Slug




Right In: 1281.369+/-0.343 $\chi^2$/NDF: 507078.4/15

Left Out: 1227.608+/-0.237 $\chi^2$/NDF:132896.8/16

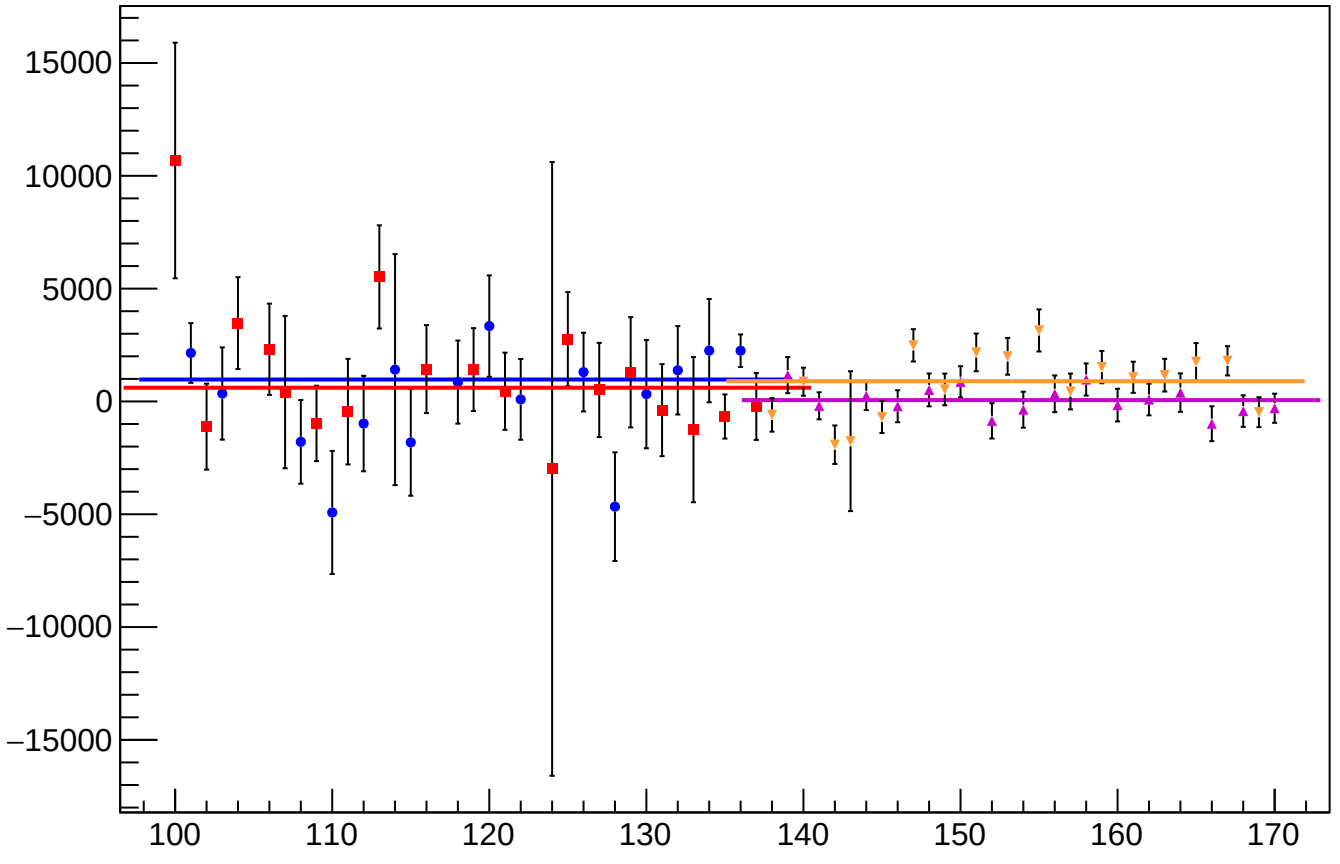
Right Out: 1276.860+/-0.337 $\chi^2$/NDF: 220513.6/18

Left In: 1254.877+/-0.244 $\chi^2$/NDF:16485.0/15

+ sign 1244.992+/-0.195 $\chi^2$/NDF: 656570.1/32

All: 1253.603+/-0.139 $\chi^2$/NDF: 900300.5/67

- sign 1262.438+/-0.198 $\chi^2$/NDF: 239788.0/34




Right In: 972.287+/-425.219 $\chi^2$/NDF: 20.4/15

Left Out: 899.021+/-183.884 $\chi^2$/NDF:44.4/16

Right Out: 608.431+/-447.734 $\chi^2$/NDF: 17.1/18

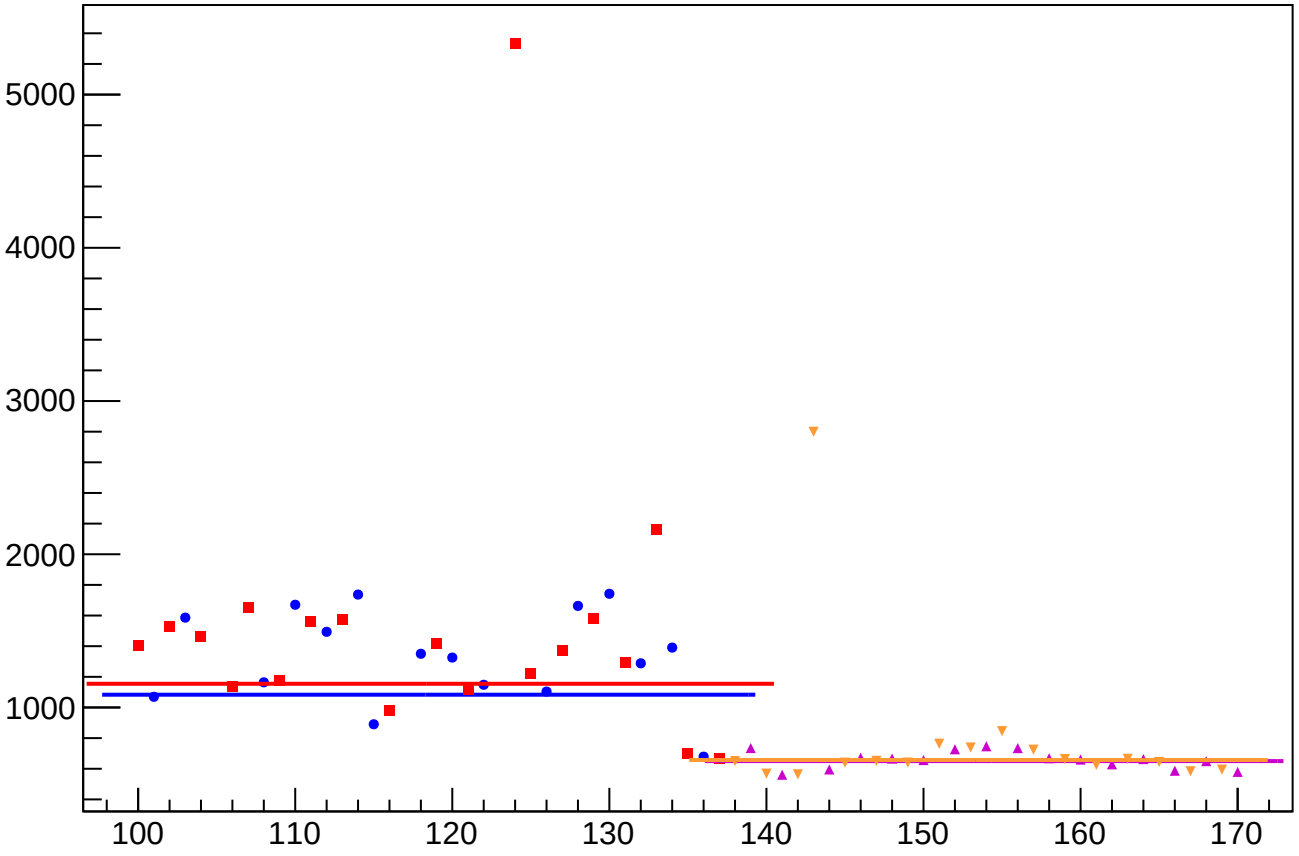
Left In: 59.943+/-179.784 $\chi^2$/NDF:10.4/15

+ sign 910.564+/-168.778 $\chi^2$/NDF: 64.9/32

All: 518.850+/-118.652 $\chi^2$/NDF: 104.3/67

- sign 136.099+/-166.836 $\chi^2$/NDF: 28.8/34

# asym_atl_dd_atr_dd_dd_dit_correction_rms vs Slug




Right In: 1083.335+/-0.301 $\chi^2$/NDF: 1360153.3/15

Left Out: 657.104+/-0.130 $\chi^2$/NDF:1220119.3/16

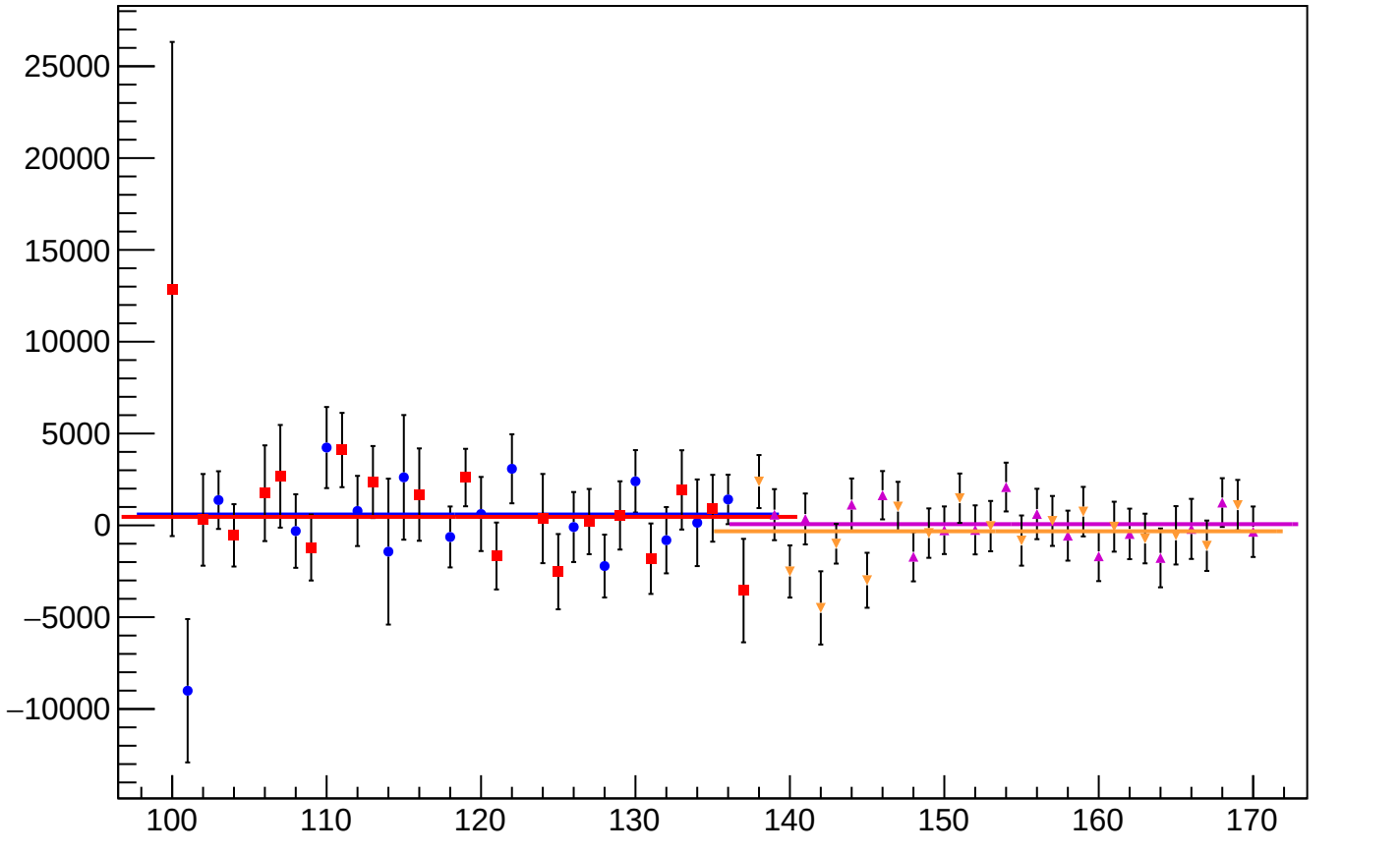
Right Out: 1154.724+/-0.317 $\chi^2$/NDF: 1488304.5/18

Left In: 650.105+/-0.127 $\chi^2$/NDF:196459.3/15

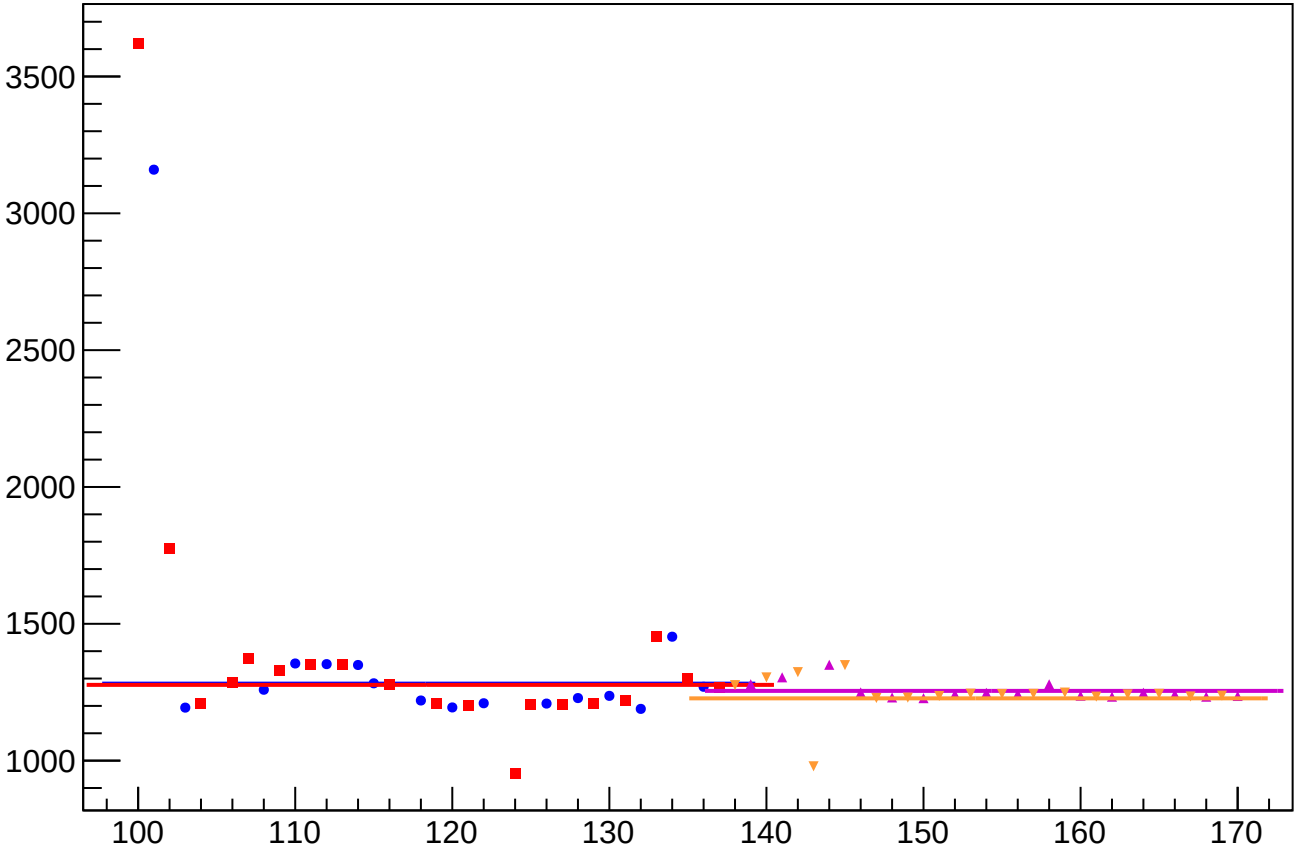
+ sign 724.255+/-0.119 $\chi^2$/NDF: 4273209.0/32

All: 722.189+/-0.084 $\chi^2$/NDF: 8146313.2/67

- sign 720.170+/-0.118 $\chi^2$/NDF: 3872511.8/34


eigen_dit_asym_atl_dd_atr_dd_dd_mean vs Slug
25000
20000
15000
10000
5000
0
−5000
−10000
100
110
120
130
140
150
160
170
Right In: 590.323+/-485.483 χ²/NDF: 17.1/15
Left Out: -321.751+/-335.608 χ²/NDF:19.1/16
Right Out: 462.605+/-476.795 χ²/NDF: 16.7/18
Left In: 65.097+/-345.215 χ²/NDF:10.8/15
+ sign -26.828+/-276.066 χ²/NDF: 38.6/32
All: 86.030+/-196.452 χ²/NDF: 66.9/67
- sign 201.811+/-279.618 χ²/NDF: 27.9/34

# eigen_dit_asym_atl_dd_atr_dd_dd_rms vs Slug




Right In: 1281.369+/-0.343 $\chi^2$/NDF: 507078.6/15

Left Out: 1227.608+/-0.237 $\chi^2$/NDF:132896.0/16

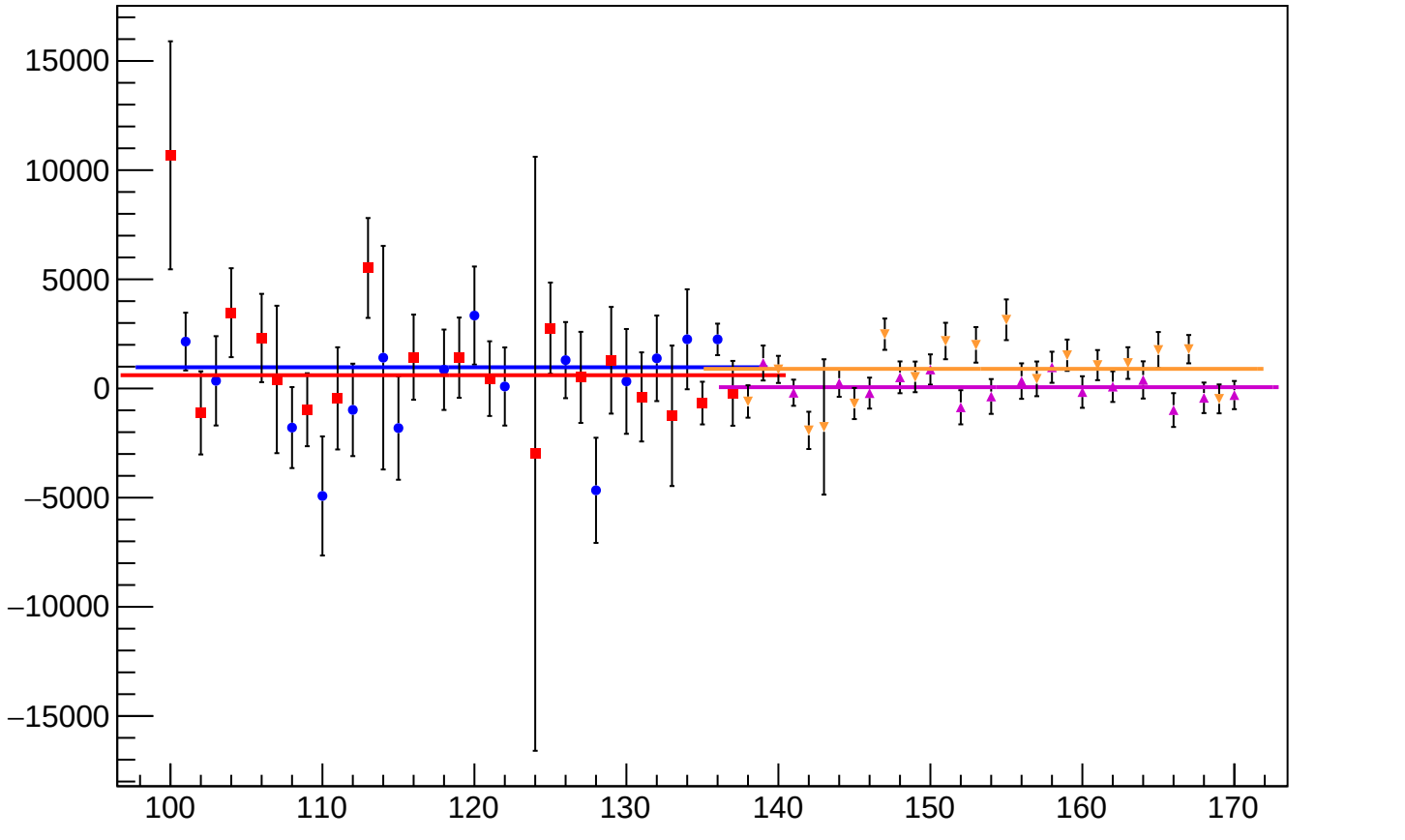
Right Out: 1276.860+/-0.337 $\chi^2$/NDF: 220513.5/18

Left In: 1254.877+/-0.244 $\chi^2$/NDF:16485.0/15

+ sign 1244.992+/-0.195 $\chi^2$/NDF: 656569.4/32

All: 1253.603+/-0.139 $\chi^2$/NDF: 900299.7/67

- sign 1262.438+/-0.198 $\chi^2$/NDF: 239787.9/34




Right In: 972.281+/-425.220 $\chi^2$/NDF: 20.4/15

Left Out: 899.023+/-183.884 $\chi^2$/NDF:44.4/16

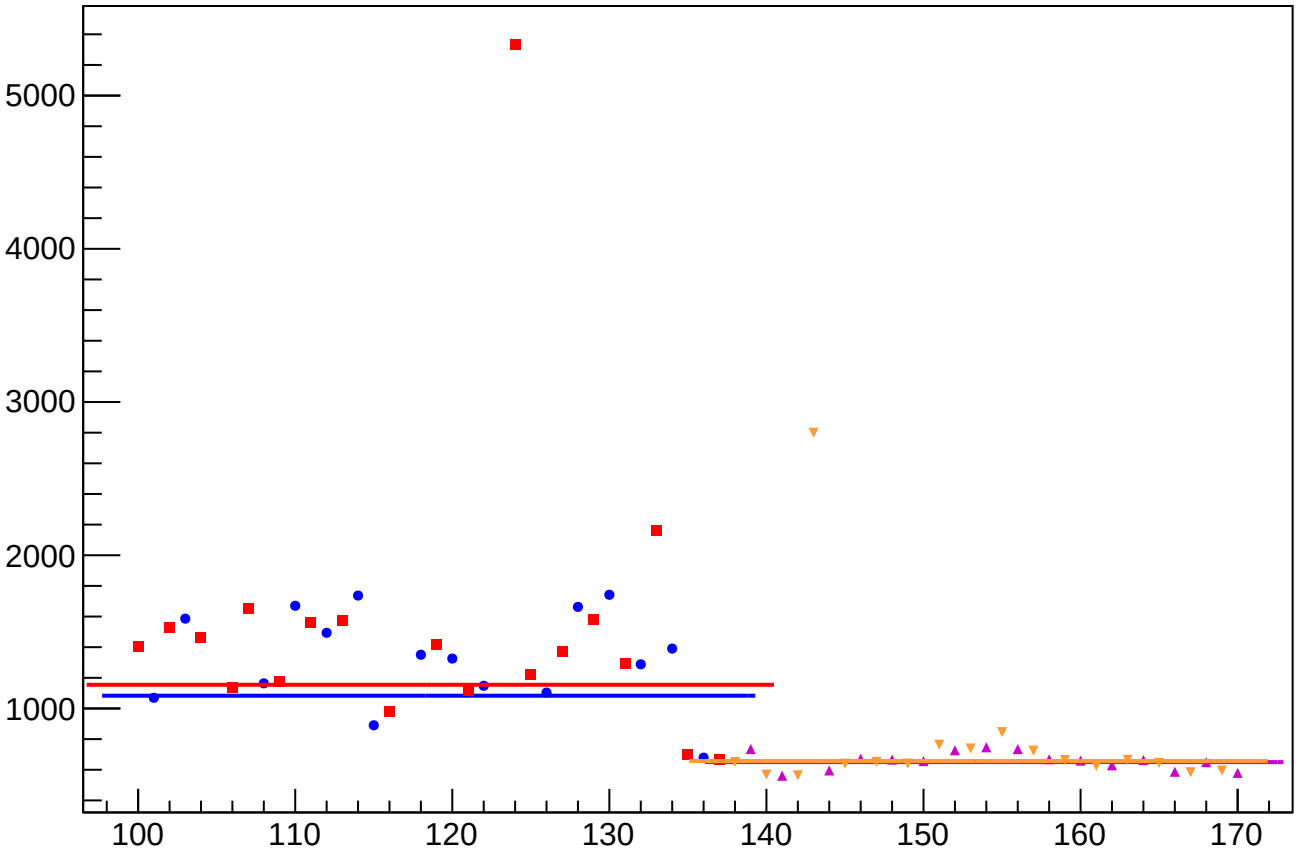
Right Out: 608.441+/-447.736 $\chi^2$/NDF: 17.1/18

Left In: 59.941+/-179.784 $\chi^2$/NDF:10.4/15

+ sign 910.564+/-168.778 $\chi^2$/NDF: 64.9/32

All: 518.850+/-118.652 $\chi^2$/NDF: 104.3/67

- sign 136.098+/-166.836 $\chi^2$/NDF: 28.8/34




Right In: 1083.341+/-0.301 $\chi^2$/NDF: 1360095.7/15

Left Out: 657.104+/-0.130 $\chi^2$/NDF:1220114.8/16

Right Out: 1154.732+/-0.317 $\chi^2$/NDF: 1488251.4/18

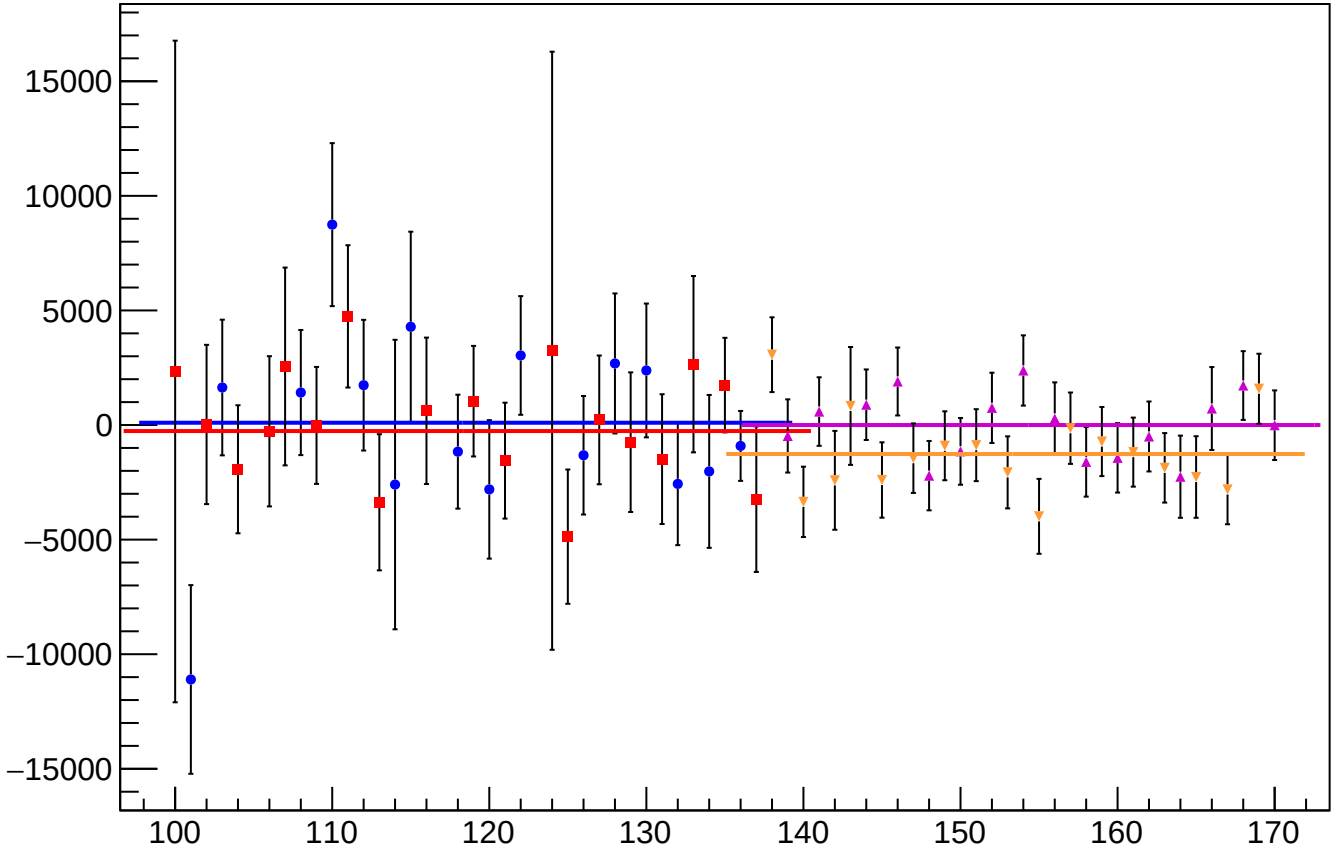
Left In: 650.104+/-0.127 $\chi^2$/NDF:196462.8/15

+ sign 724.256+/-0.119 $\chi^2$/NDF: 4273184.4/32

All: 722.190+/-0.084 $\chi^2$/NDF: 8146291.8/67

- sign 720.170+/-0.118 $\chi^2$/NDF: 3872514.7/34

# asym_atl_dd_atr_dd_dd_mean vs Slug




Right In: 100.451+/-698.983 $\chi^2$/NDF: 21.3/15

Left Out: -1264.590+/-392.127 $\chi^2$/NDF:19.1/16

Right Out: -262.731+/-699.724 $\chi^2$/NDF: 10.3/18

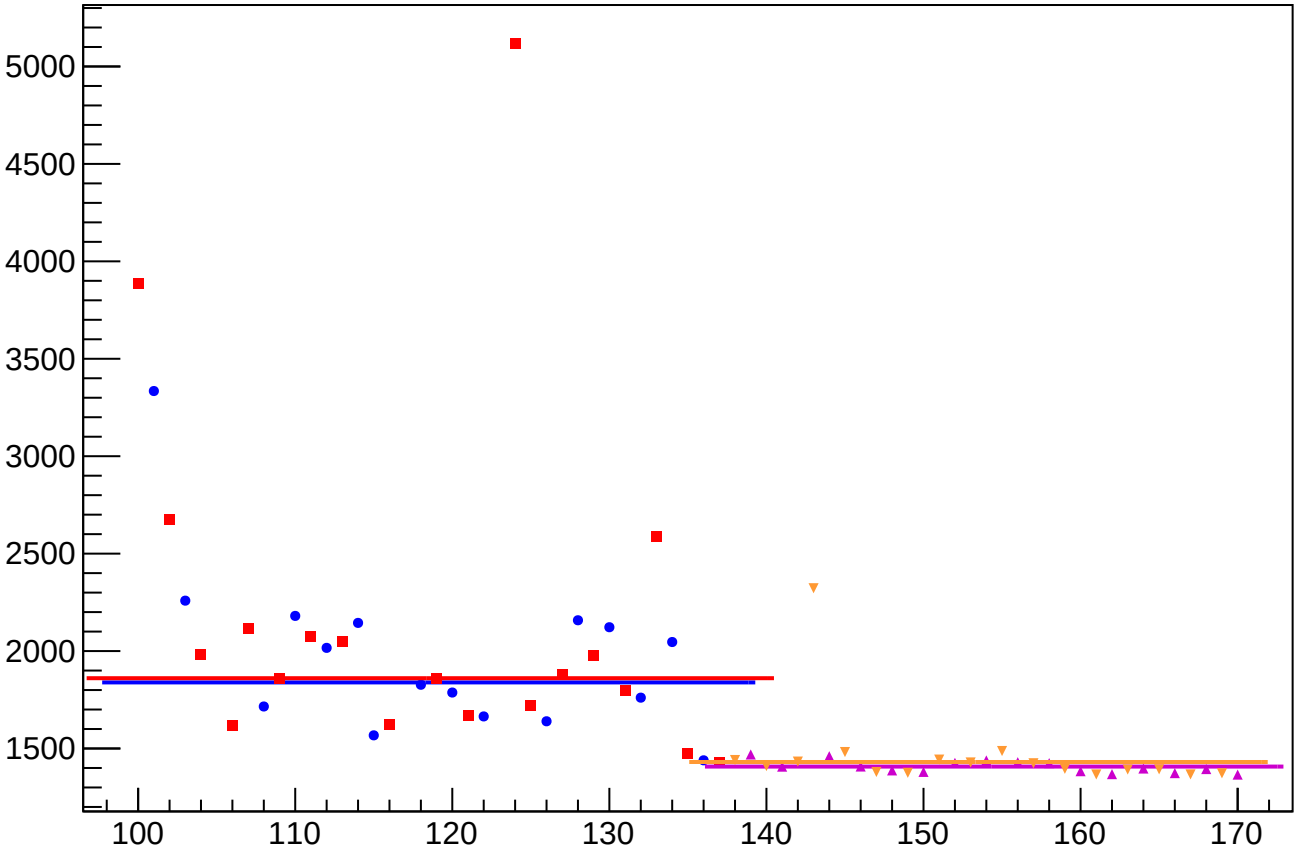
Left In: -0.002+/-387.127 $\chi^2$/NDF:12.8/15

+ sign -937.827+/-341.988 $\chi^2$/NDF: 43.3/32

All: -495.520+/-240.665 $\chi^2$/NDF: 69.9/67

- sign -61.574+/-338.740 $\chi^2$/NDF: 23.3/34

# asym_atl_dd_atr_dd_dd_rms vs Slug




Right In: 1839.113+/-0.494 $\chi^2$/NDF: 556725.4/15

Left Out: 1430.716+/-0.277 $\chi^2$/NDF:263571.5/16

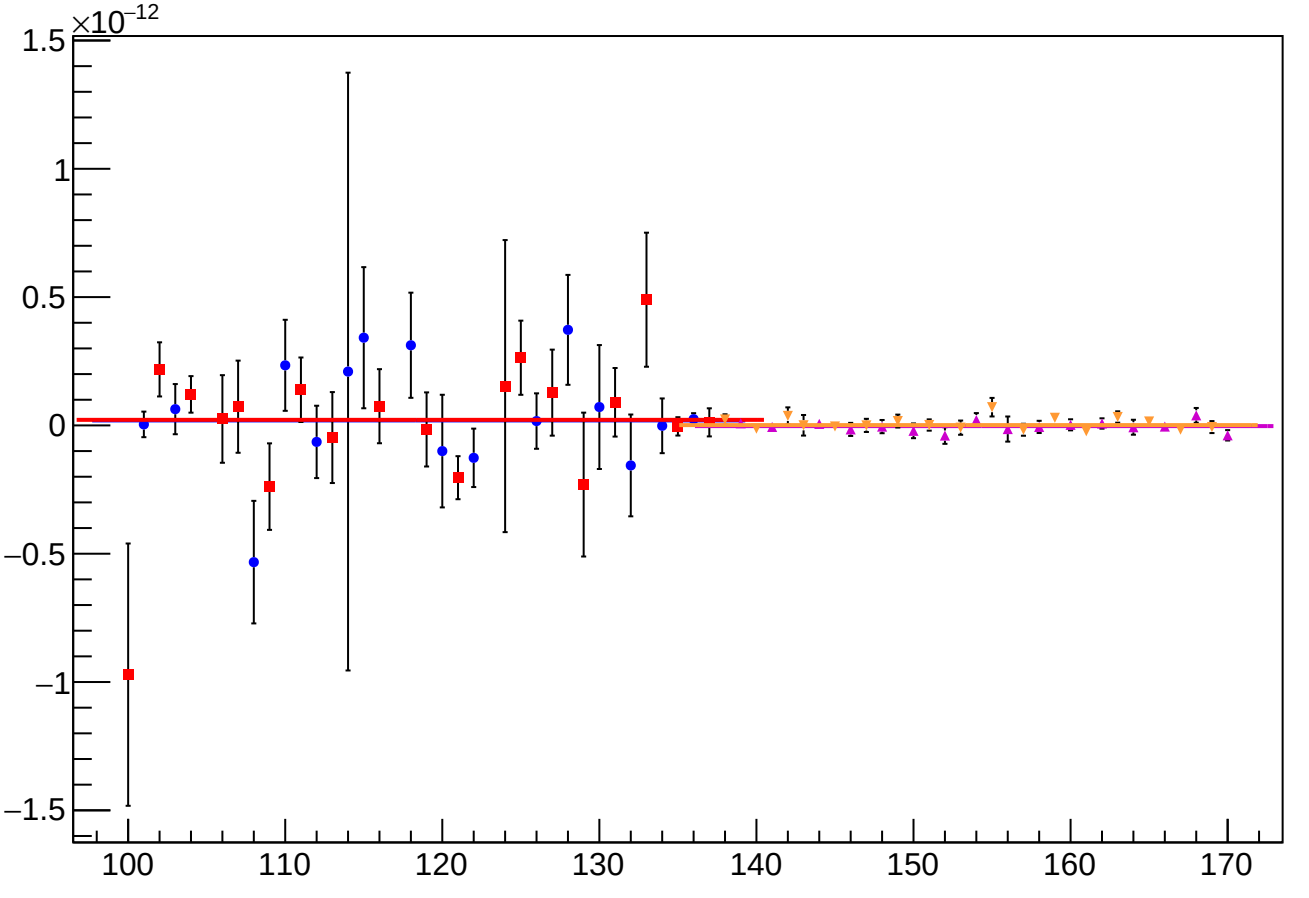
Right Out: 1860.754+/-0.495 $\chi^2$/NDF: 522114.2/18

Left In: 1407.223+/-0.274 $\chi^2$/NDF:12431.6/15

+ sign 1528.478+/-0.242 $\chi^2$/NDF: 1339613.0/32

All: 1520.924+/-0.170 $\chi^2$/NDF: 2519405.4/67

- sign 1513.514+/-0.240 $\chi^2$/NDF: 1177859.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 16.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:17.2/16

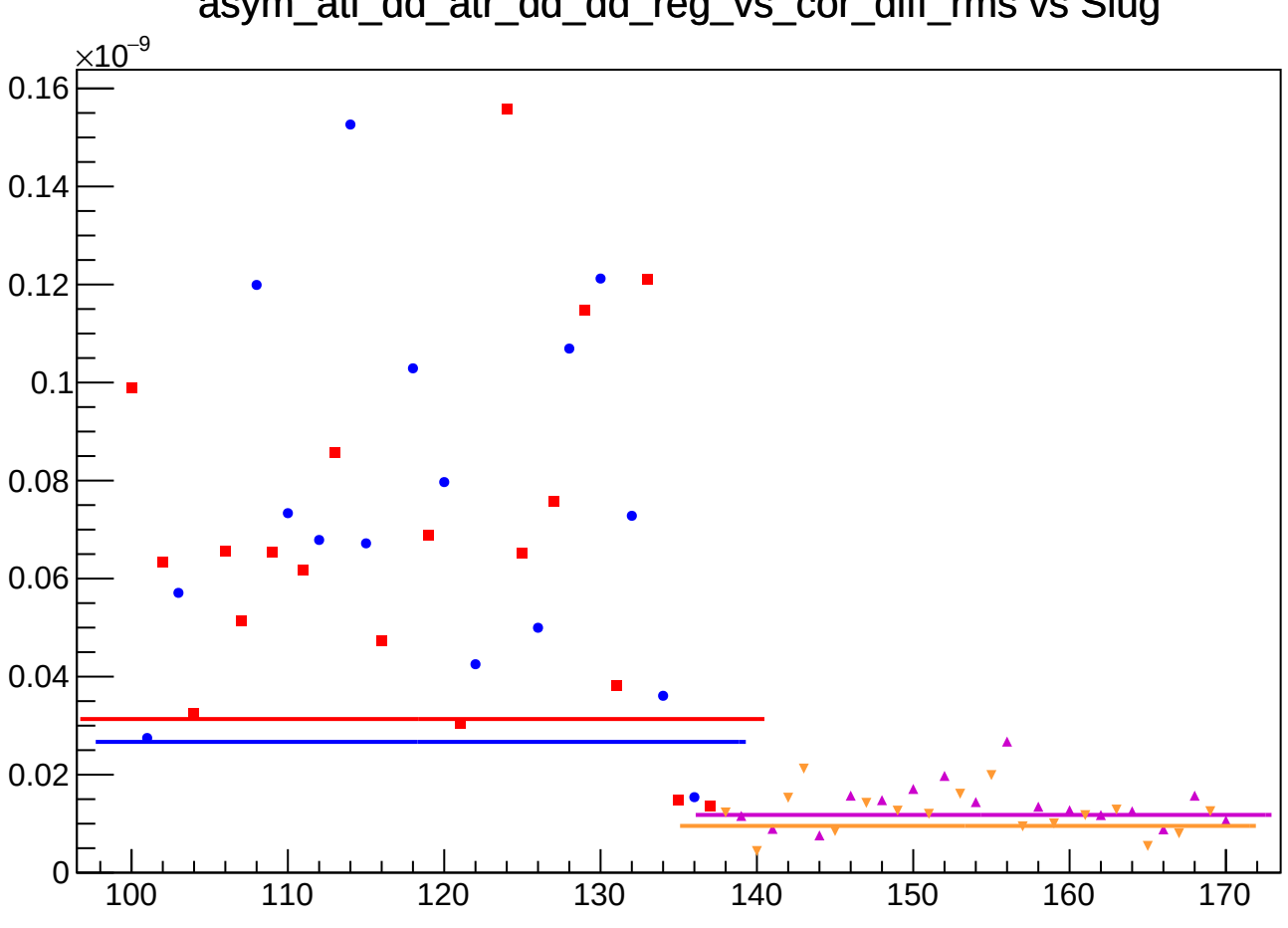
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 28.2/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:9.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 34.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 73.3/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 38.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2580672.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1390760.6/16

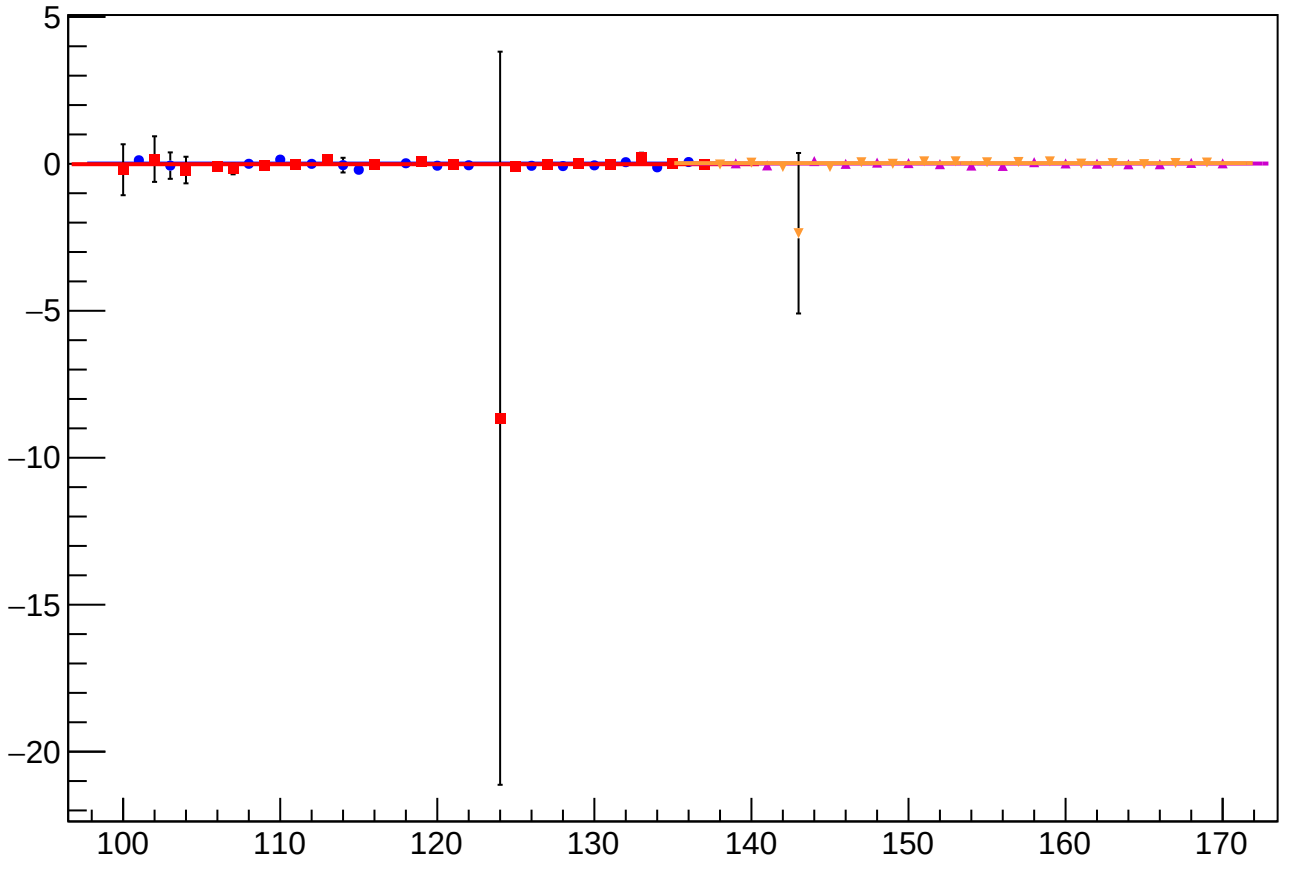
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2275167.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:831726.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5532287.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10307534.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4558212.3/34




Right In: 0.008+/-0.016 $\chi^2$/NDF: 19.3/15

Left Out: 0.024+/-0.010 $\chi^2$/NDF:17.7/16

Right Out: -0.012+/-0.017 $\chi^2$/NDF: 12.6/18

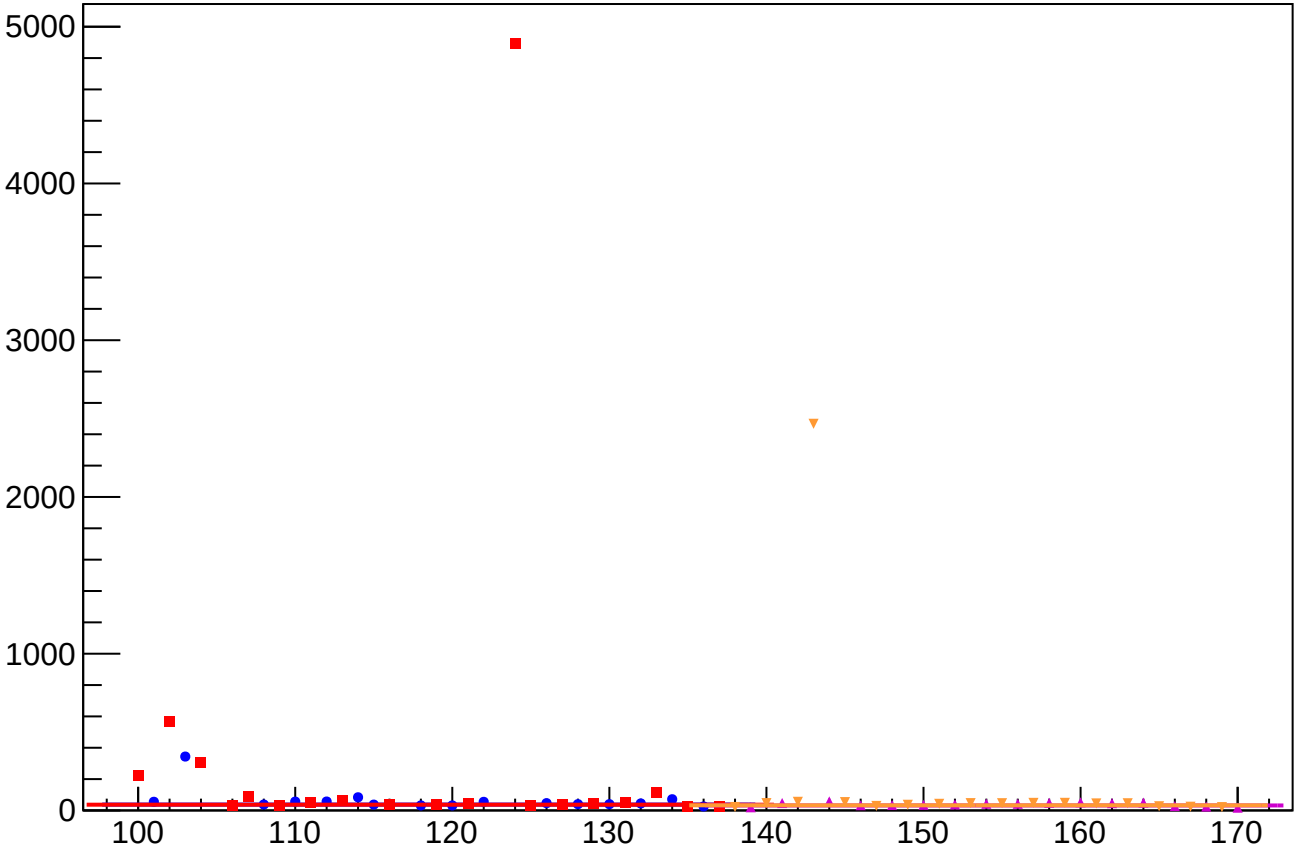
Left In: 0.010+/-0.010 $\chi^2$/NDF:10.8/15

+ sign 0.019+/-0.009 $\chi^2$/NDF: 37.6/32

All: 0.012+/-0.006 $\chi^2$/NDF: 63.9/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 24.8/34

# asym_atl_dd_atr_dd_dd_dit_vs_cor_diff_rms vs Slug




Right In: 37.494+/-0.011 $\chi^2$/NDF: 1983275.6/15

Left Out: 32.846+/-0.007 $\chi^2$/NDF:3960562.7/16

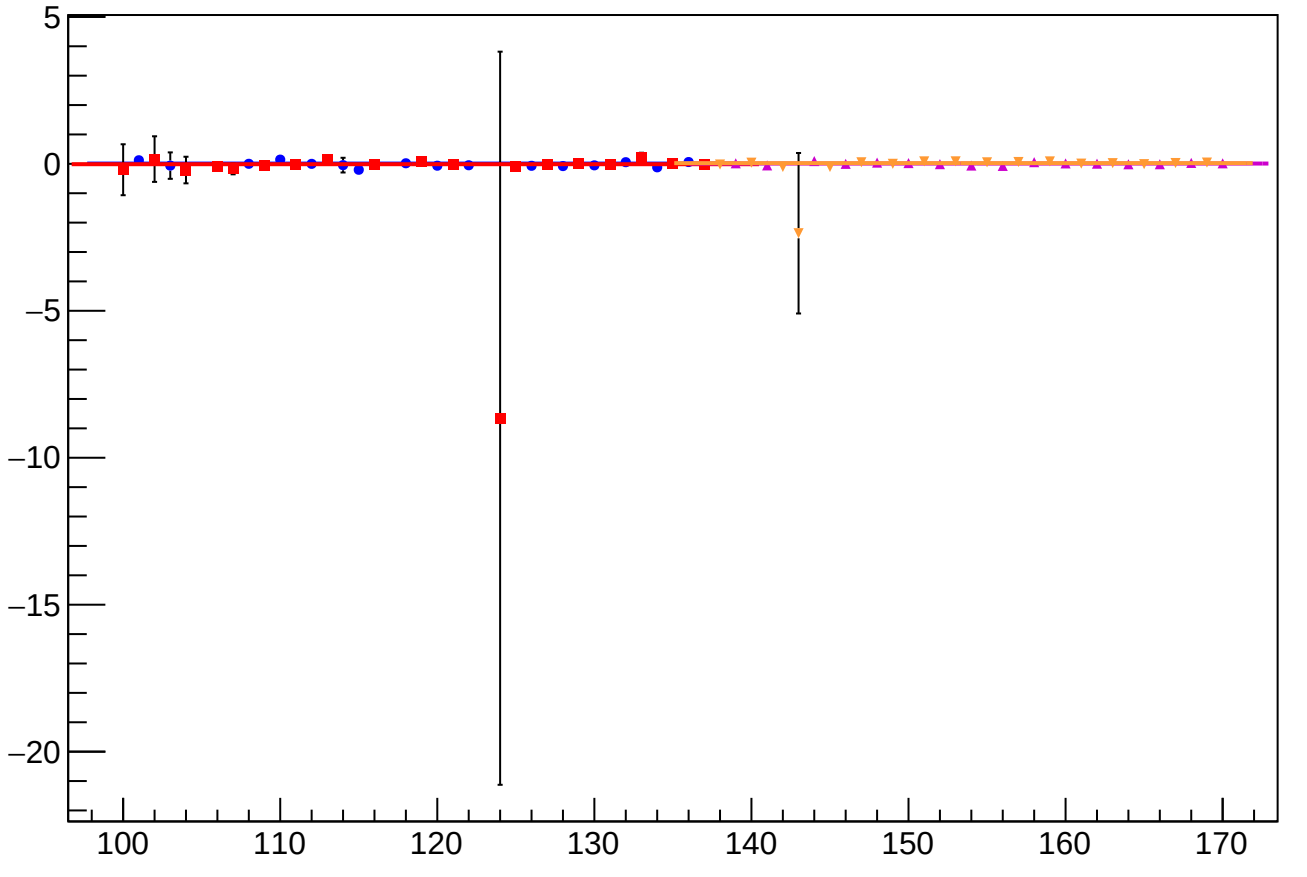
Right Out: 36.767+/-0.012 $\chi^2$/NDF: 3190700.2/18

Left In: 31.888+/-0.007 $\chi^2$/NDF:2712775.8/15

+ sign 34.209+/-0.006 $\chi^2$/NDF: 6061982.7/32

All: 33.687+/-0.004 $\chi^2$/NDF: 12106283.1/67

- sign 33.182+/-0.006 $\chi^2$/NDF: 6030156.7/34




Right In: 0.008+/-0.016 $\chi^2$/NDF: 19.3/15

Left Out: 0.024+/-0.010 $\chi^2$/NDF:17.7/16

Right Out: -0.012+/-0.017 $\chi^2$/NDF: 12.6/18

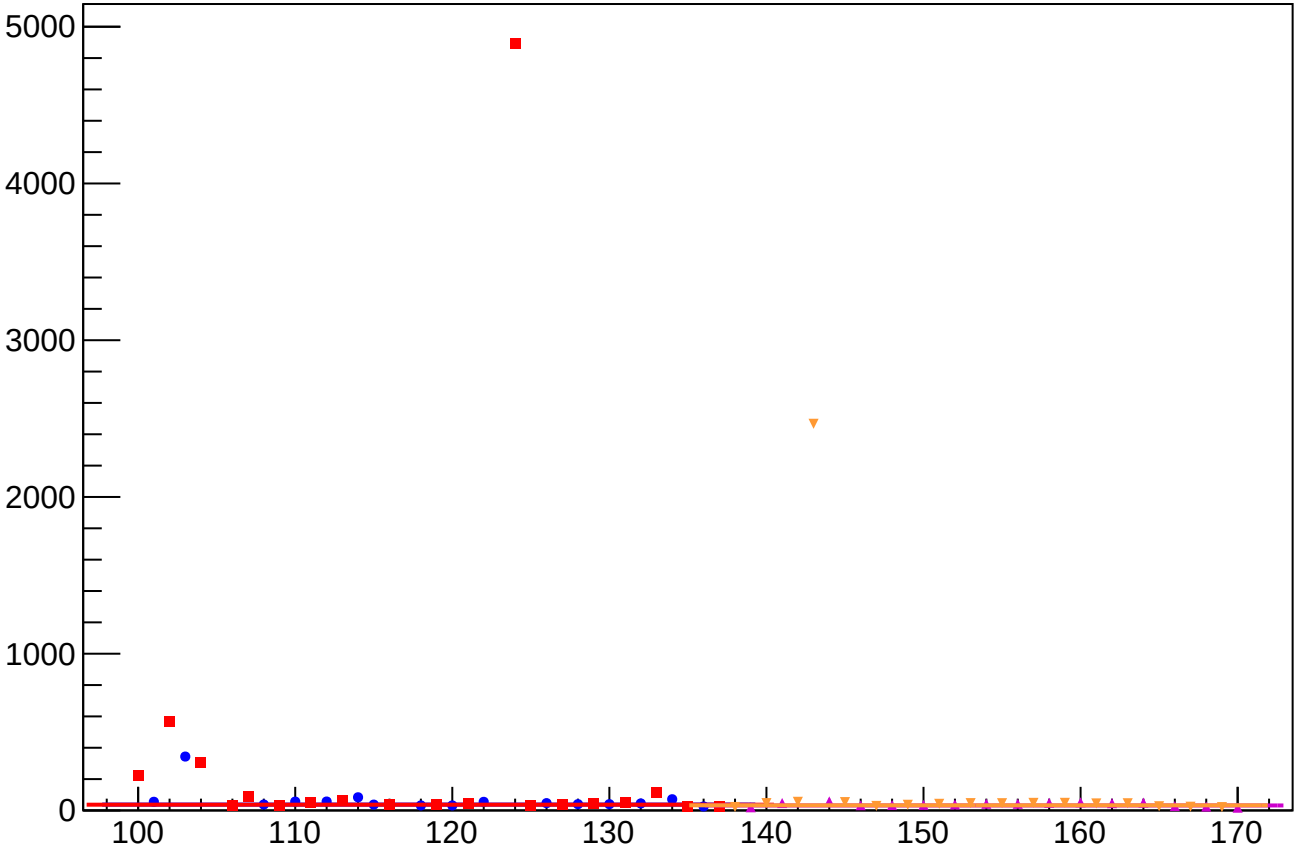
Left In: 0.010+/-0.010 $\chi^2$/NDF:10.8/15

+ sign 0.019+/-0.009 $\chi^2$/NDF: 37.6/32

All: 0.012+/-0.006 $\chi^2$/NDF: 63.9/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 24.8/34

# asym_atl_dd_atr_dd_dd_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 37.494+/-0.011 $\chi^2$/NDF: 1983275.6/15

Left Out: 32.846+/-0.007 $\chi^2$/NDF:3960562.7/16

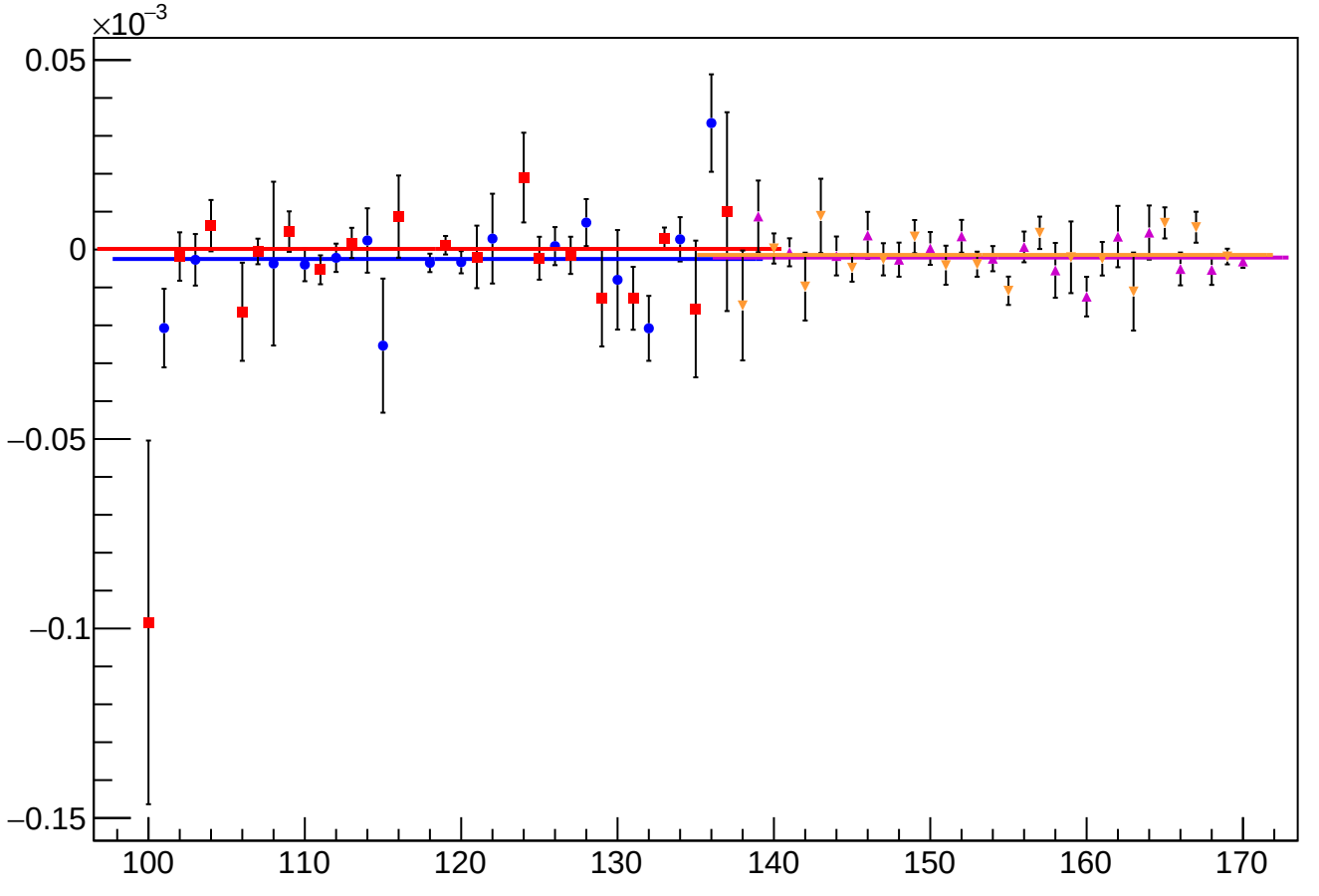
Right Out: 36.767+/-0.012 $\chi^2$/NDF: 3190700.2/18

Left In: 31.888+/-0.007 $\chi^2$/NDF:2712775.8/15

+ sign 34.209+/-0.006 $\chi^2$/NDF: 6061982.7/32

All: 33.687+/-0.004 $\chi^2$/NDF: 12106283.1/67

- sign 33.182+/-0.006 $\chi^2$/NDF: 6030156.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 21.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:22.7/16

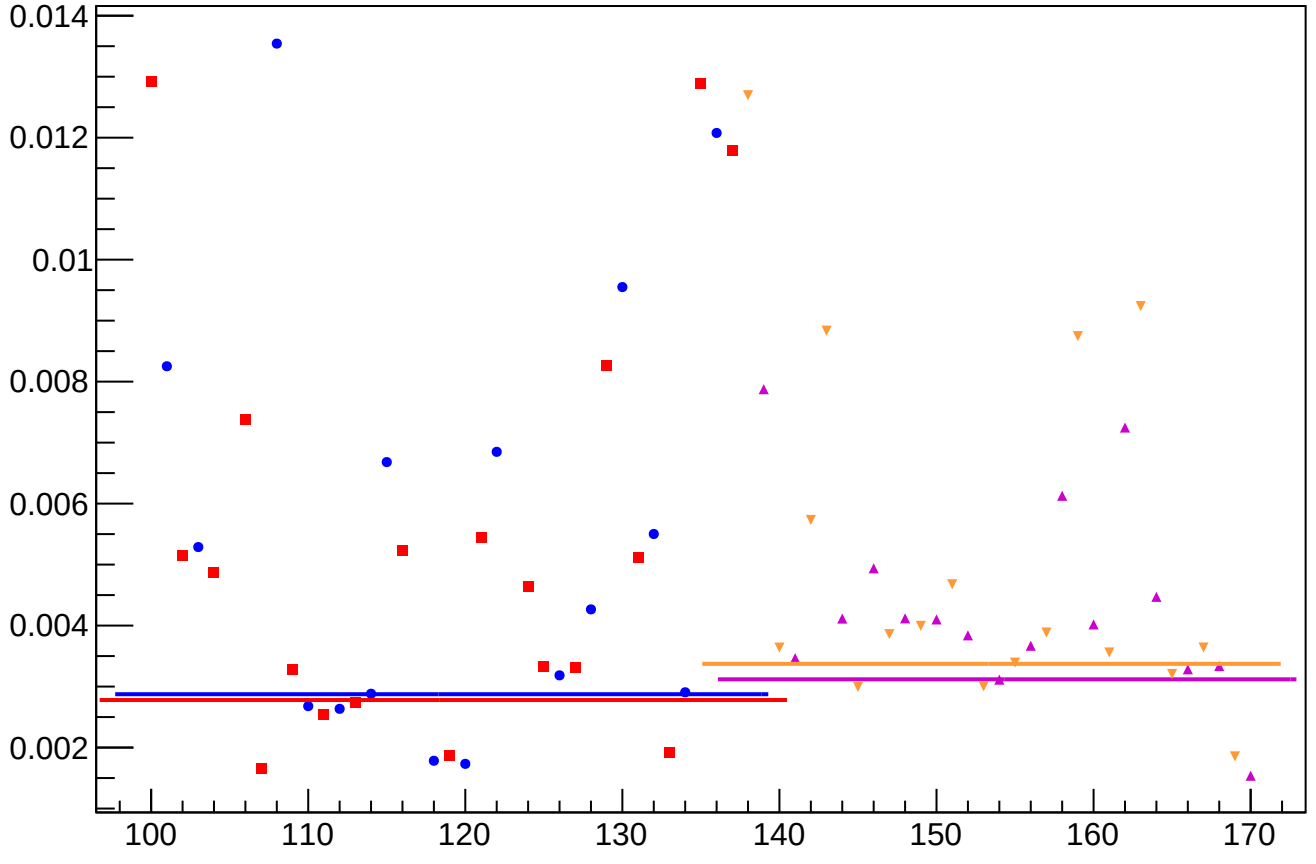
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:11.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 44.9/32

All: -0.000+/-0.000 $\chi^2$/NDF: 78.1/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 32.8/34




Right In: 0.003+/-0.000 $\chi^2$/NDF: 4152056.9/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:4251729.7/16

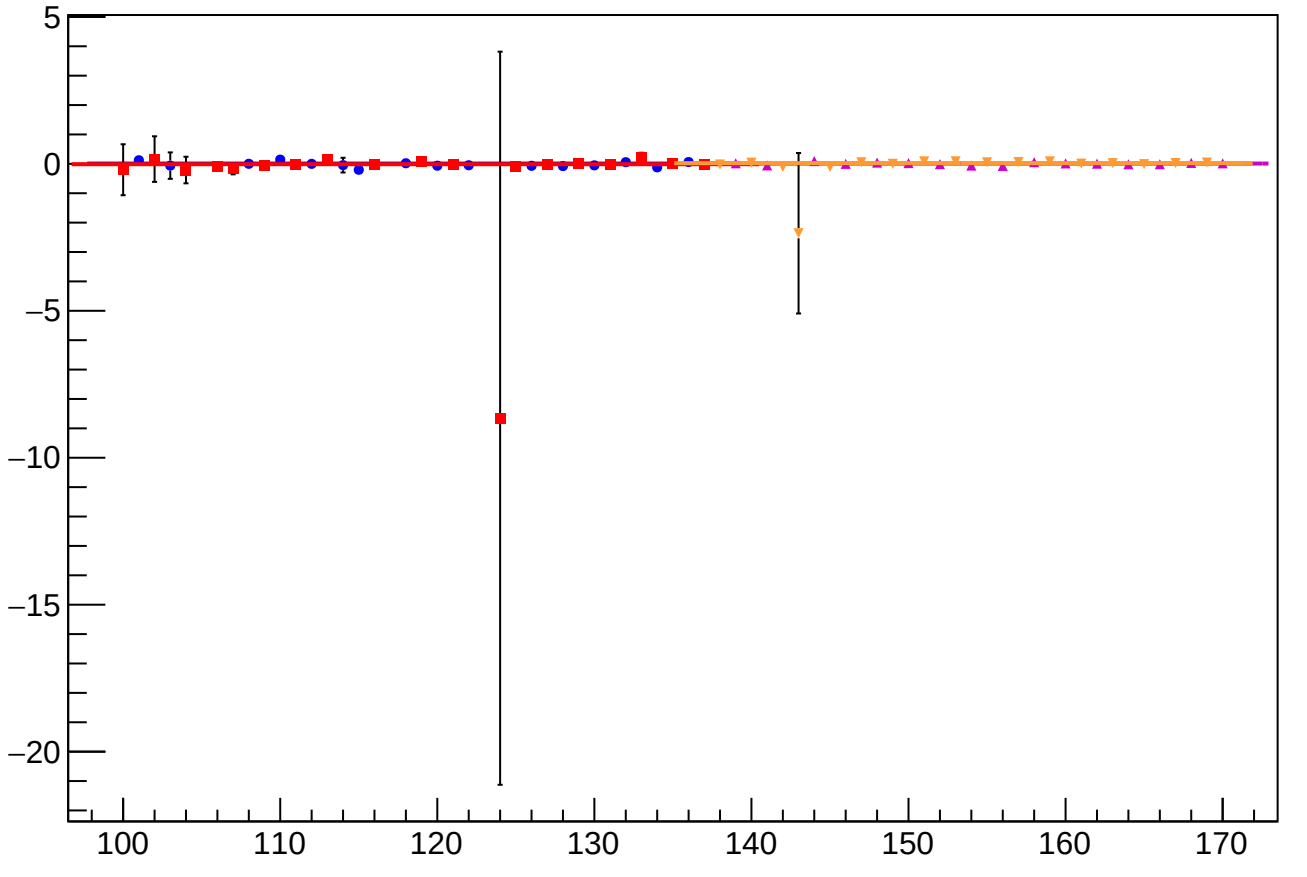
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 3311178.7/18

Left In: 0.003+/-0.000 $\chi^2$/NDF:3774445.4/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 8584022.2/32

All: 0.003+/-0.000 $\chi^2$/NDF: 15836126.6/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 7182835.0/34




Right In: 0.008+/-0.016 $\chi^2$/NDF: 19.3/15

Left Out: 0.024+/-0.010 $\chi^2$/NDF:17.7/16

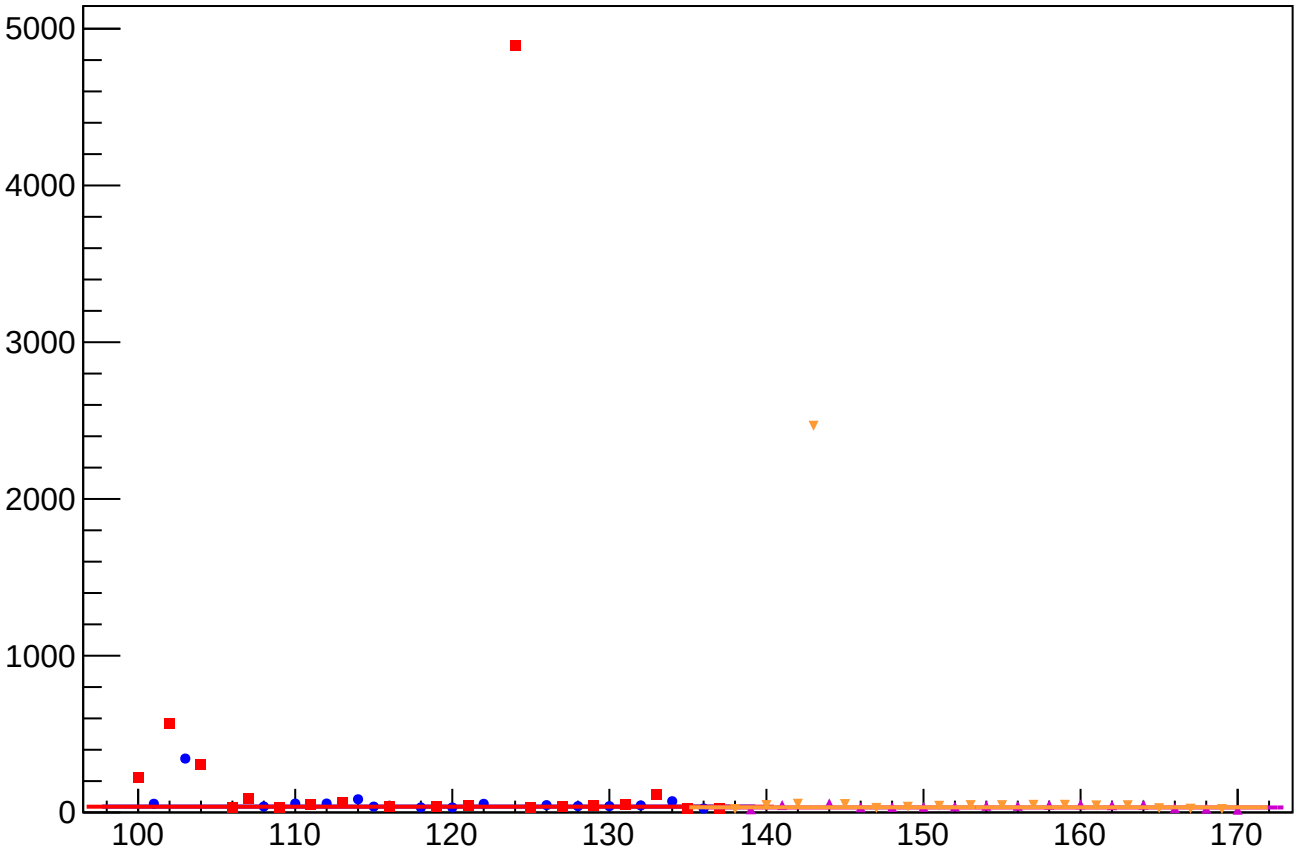
Right Out: -0.013+/-0.017 $\chi^2$/NDF: 12.6/18

Left In: 0.010+/-0.010 $\chi^2$/NDF:10.8/15

+ sign 0.019+/-0.009 $\chi^2$/NDF: 37.6/32

All: 0.012+/-0.006 $\chi^2$/NDF: 63.9/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 24.8/34




Right In: 37.495+/-0.011 $\chi^2$/NDF: 1983206.3/15

Left Out: 32.845+/-0.007 $\chi^2$/NDF:3960620.8/16

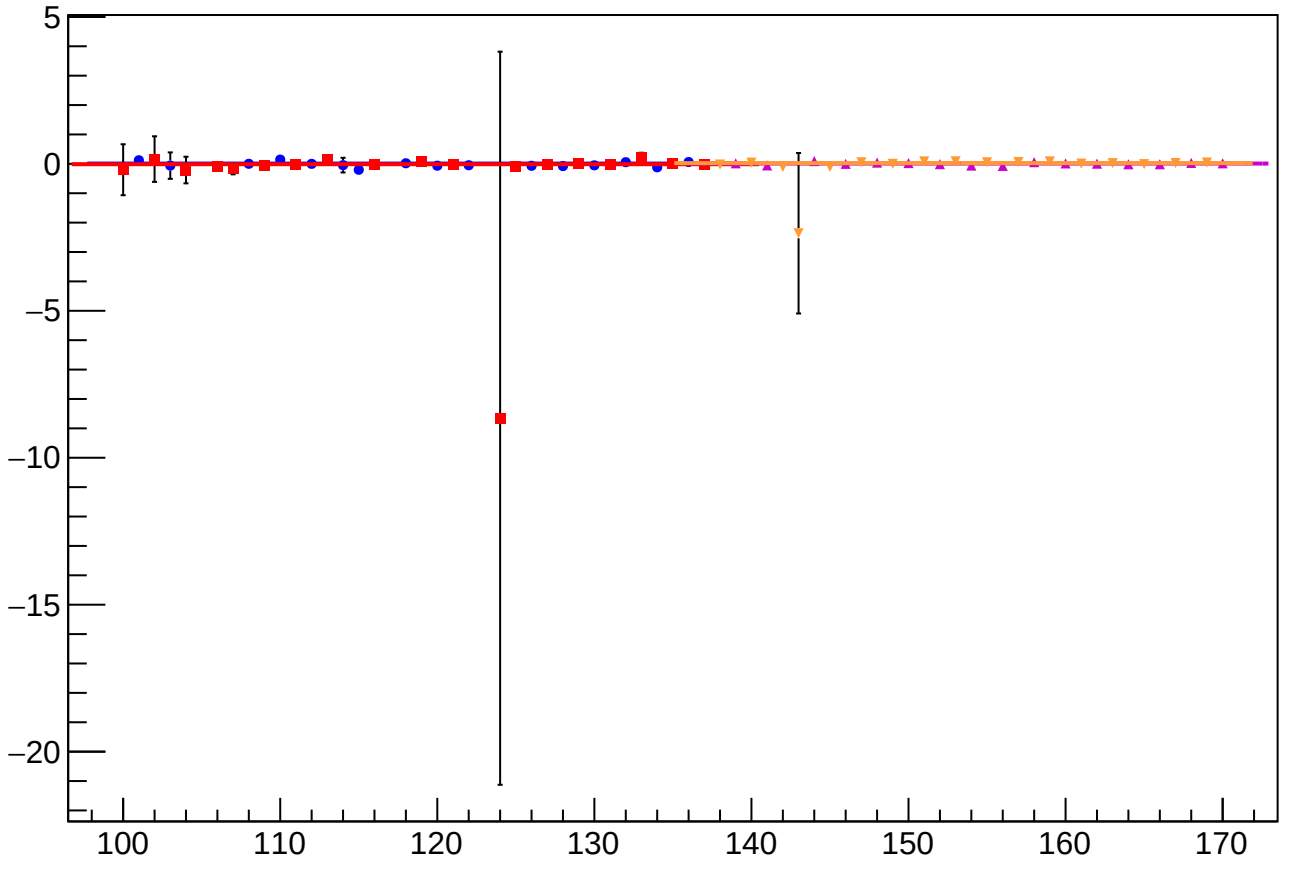
Right Out: 36.769+/-0.012 $\chi^2$/NDF: 3190400.7/18

Left In: 31.890+/-0.007 $\chi^2$/NDF:2711665.5/15

+ sign 34.208+/-0.006 $\chi^2$/NDF: 6062045.8/32

All: 33.688+/-0.004 $\chi^2$/NDF: 12104830.8/67

- sign 33.184+/-0.006 $\chi^2$/NDF: 6028713.7/34




Right In: 0.008+/-0.016 $\chi^2$/NDF: 19.3/15

Left Out: 0.024+/-0.010 $\chi^2$/NDF:17.7/16

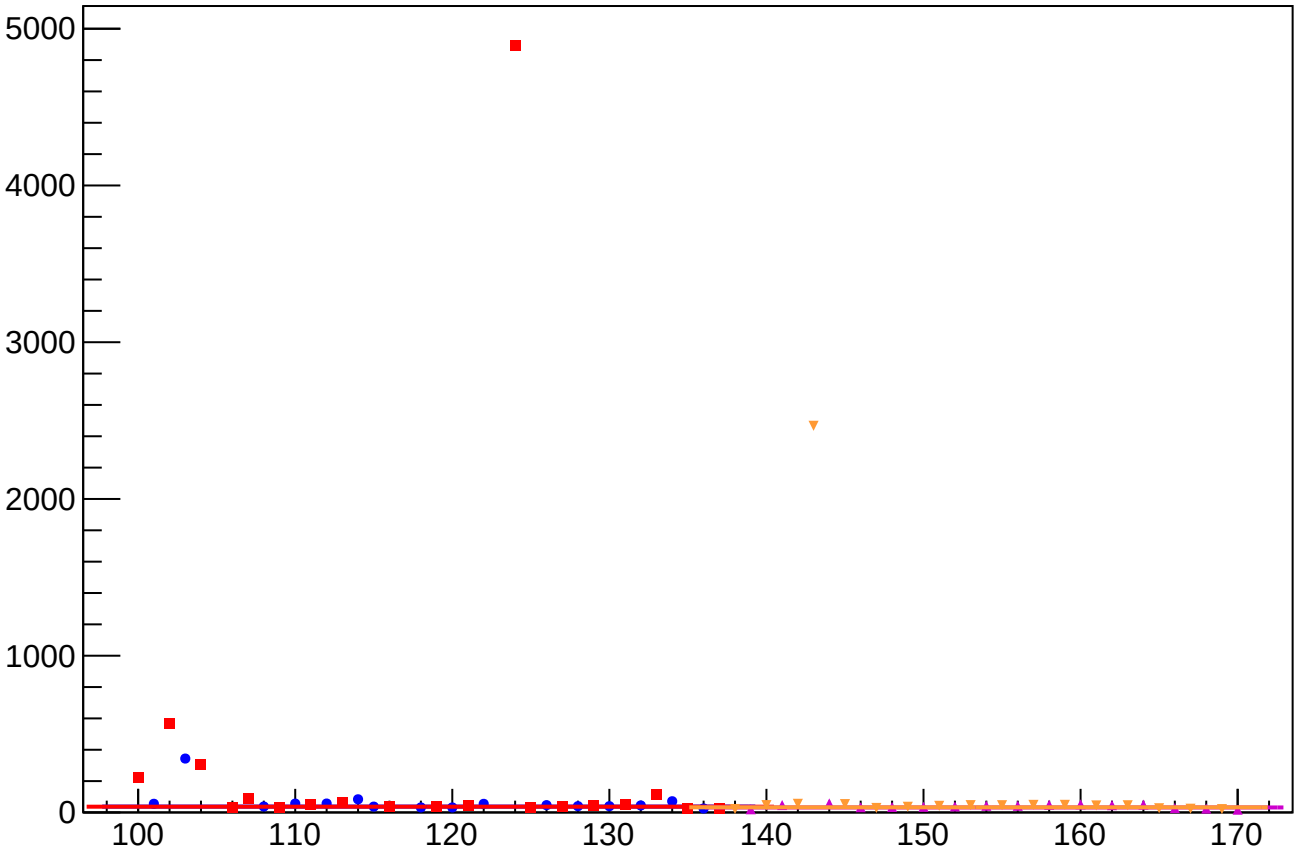
Right Out: -0.013+/-0.017 $\chi^2$/NDF: 12.6/18

Left In: 0.010+/-0.010 $\chi^2$/NDF:10.8/15

+ sign 0.019+/-0.009 $\chi^2$/NDF: 37.6/32

All: 0.012+/-0.006 $\chi^2$/NDF: 63.9/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 24.8/34




Right In: 37.495+/-0.011 $\chi^2$/NDF: 1983206.3/15

Left Out: 32.845+/-0.007 $\chi^2$/NDF:3960620.8/16

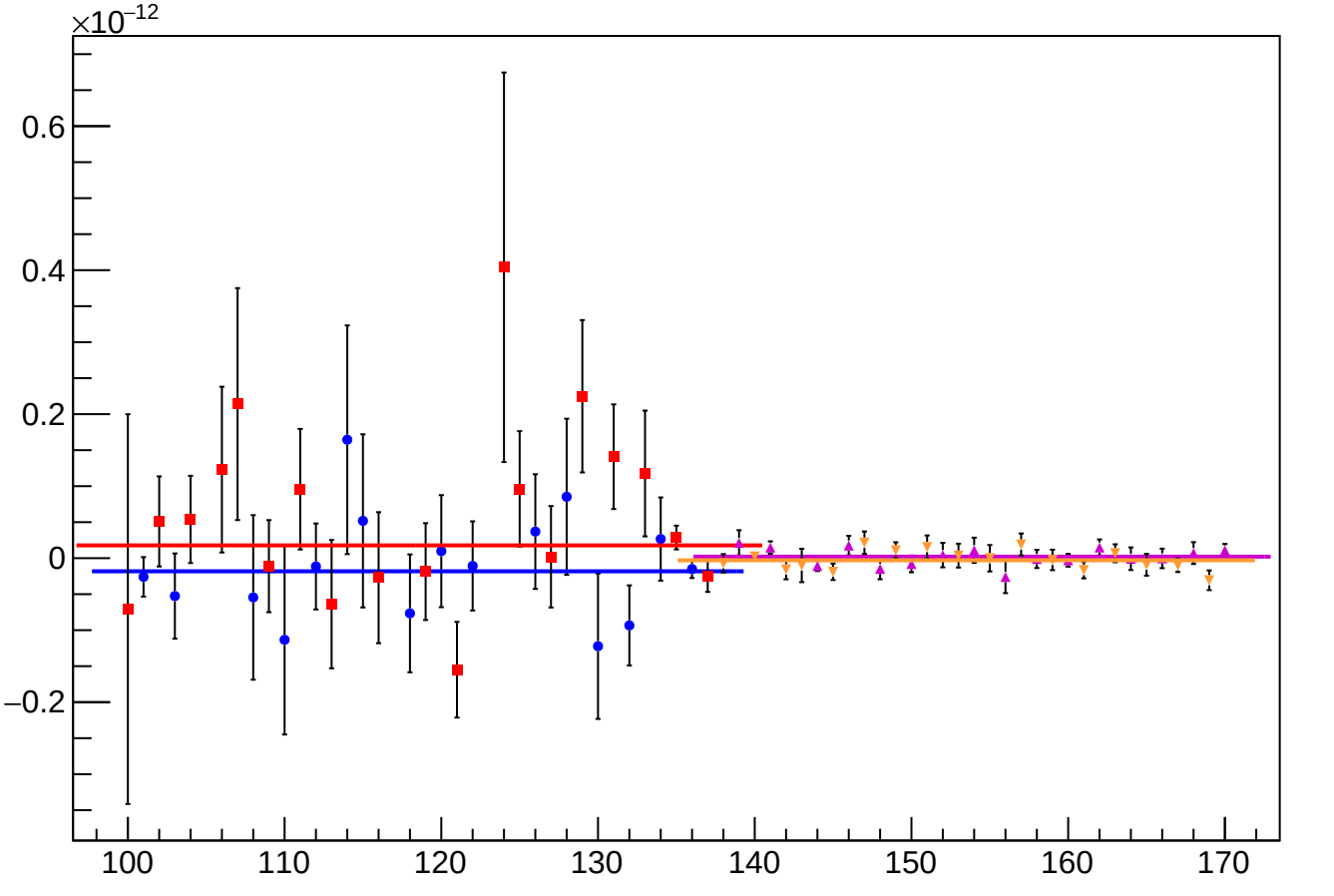
Right Out: 36.769+/-0.012 $\chi^2$/NDF: 3190400.7/18

Left In: 31.890+/-0.007 $\chi^2$/NDF:2711665.5/15

+ sign 34.208+/-0.006 $\chi^2$/NDF: 6062045.8/32

All: 33.688+/-0.004 $\chi^2$/NDF: 12104830.8/67

- sign 33.184+/-0.006 $\chi^2$/NDF: 6028713.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 8.3/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:18.0/16

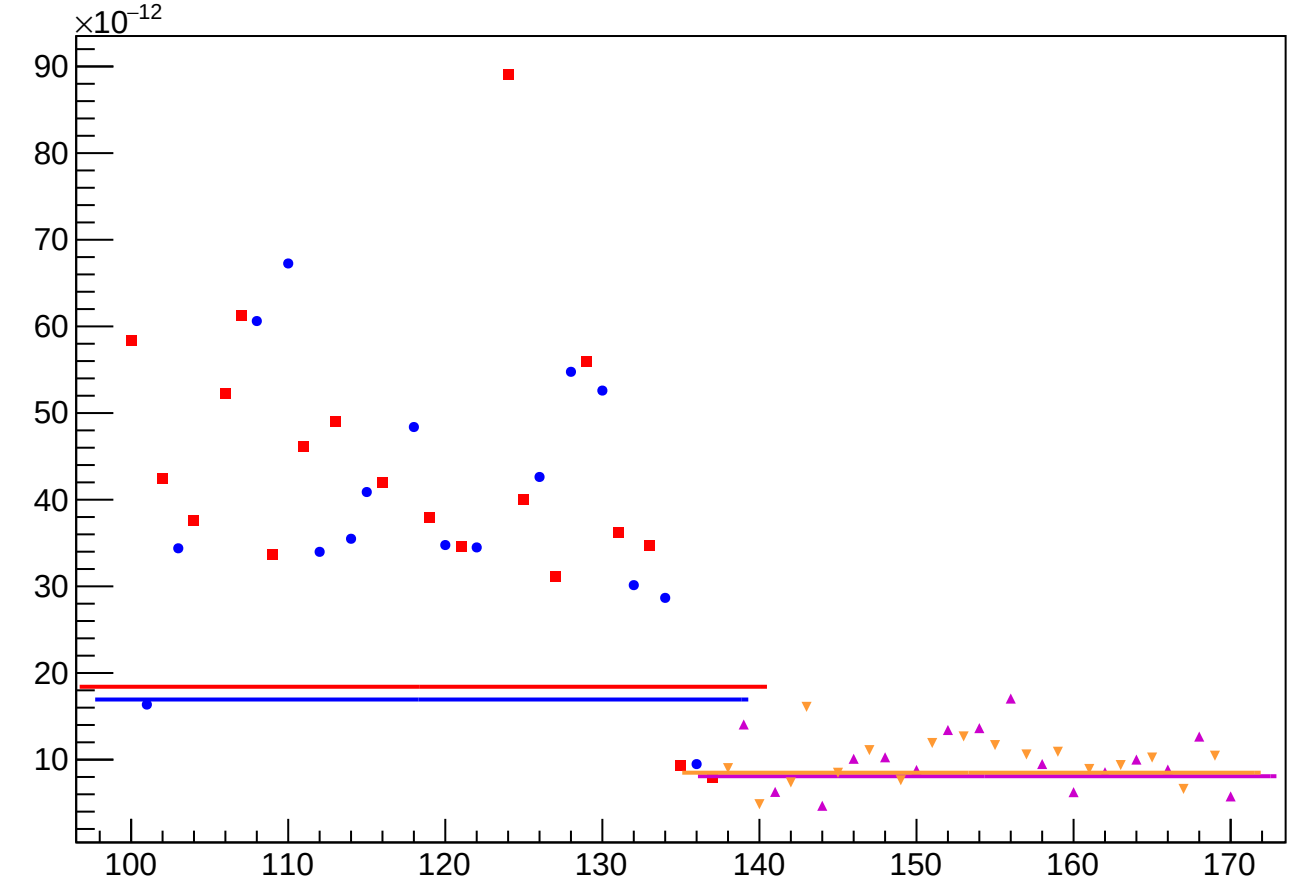
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 27.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:14.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 28.4/32

All: -0.000+/-0.000 $\chi^2$/NDF: 75.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 44.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3207856.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1413001.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3674861.8/18

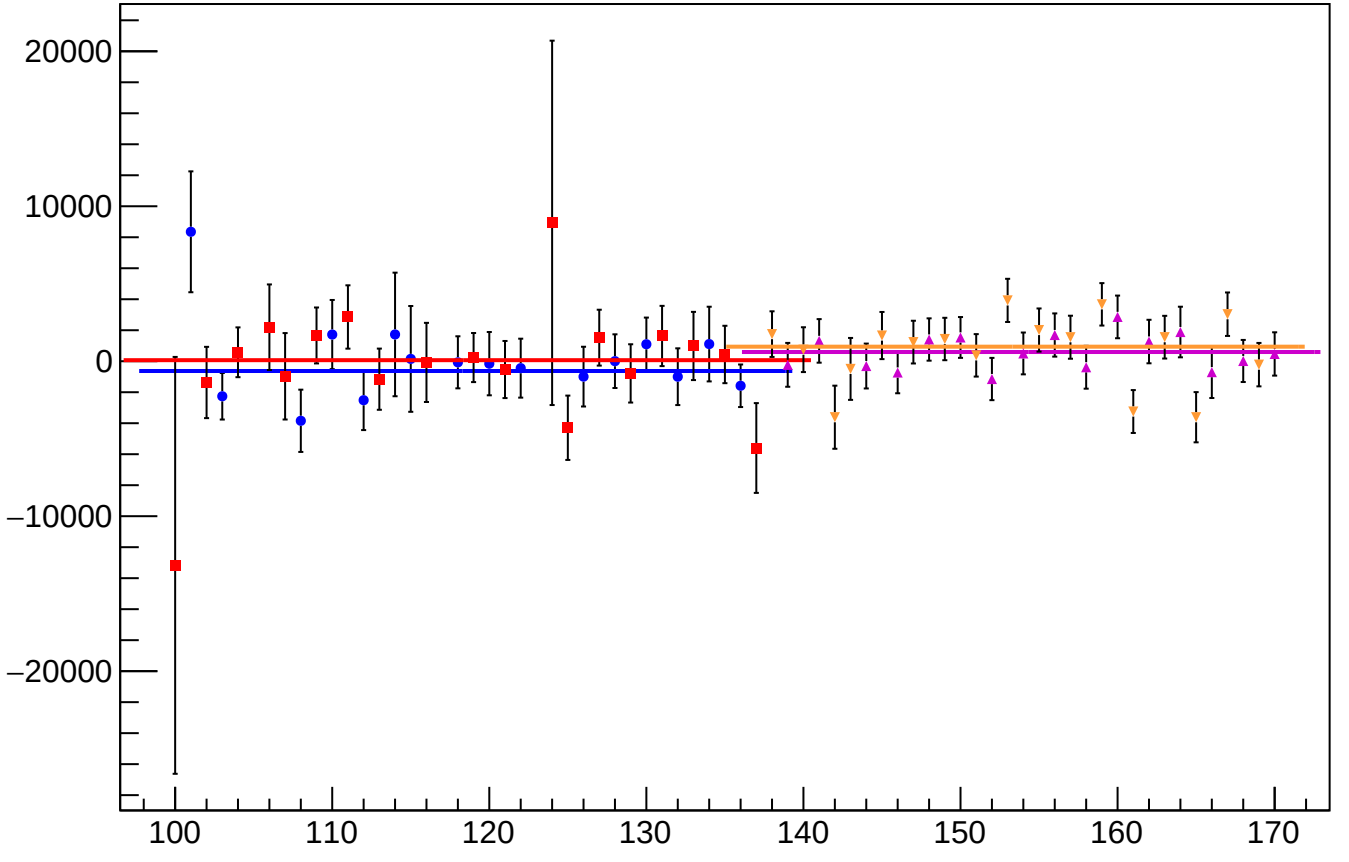
Left In: 0.000+/-0.000 $\chi^2$/NDF:2073753.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5948816.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 13351801.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 7378834.2/34

# reg_asym_at1_avg_at2_avg_dd_mean vs Slug




Right In: -631.041+/-488.663 $\chi^2$/NDF: 13.9/15

Left Out: 939.060+/-353.814 $\chi^2$/NDF:35.9/16

Right Out: 67.642+/-487.761 $\chi^2$/NDF: 15.9/18

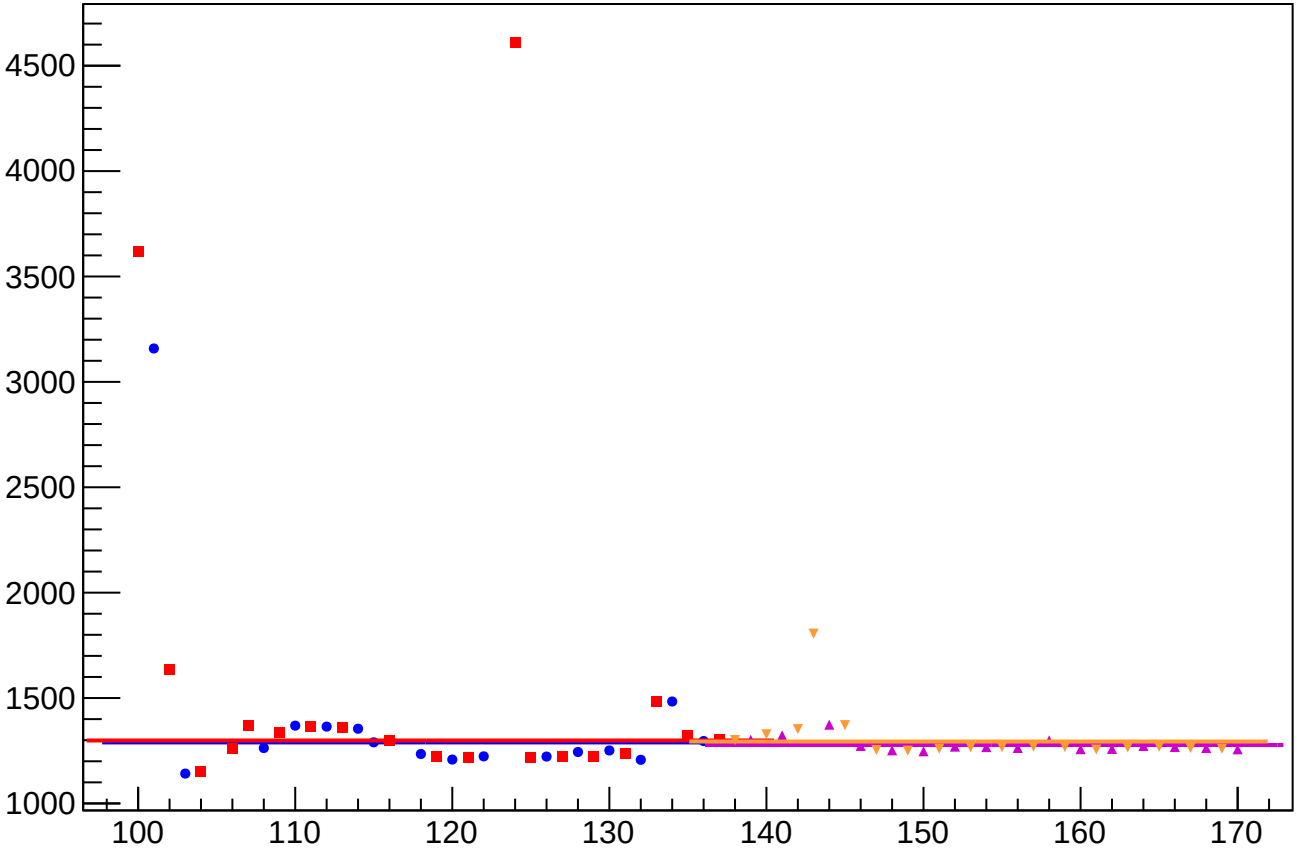
Left In: 594.475+/-351.364 $\chi^2$/NDF:9.9/15

+ sign 399.046+/-286.582 $\chi^2$/NDF: 56.6/32

All: 406.807+/-202.116 $\chi^2$/NDF: 83.2/67

- sign 414.489+/-285.095 $\chi^2$/NDF: 26.6/34

# reg_asym_at1_avg_at2_avg_dd_rms vs Slug




Right In: 1289.466+/-0.346 $\chi^2$/NDF: 514675.0/15

Left Out: 1293.789+/-0.250 $\chi^2$/NDF:151885.4/16

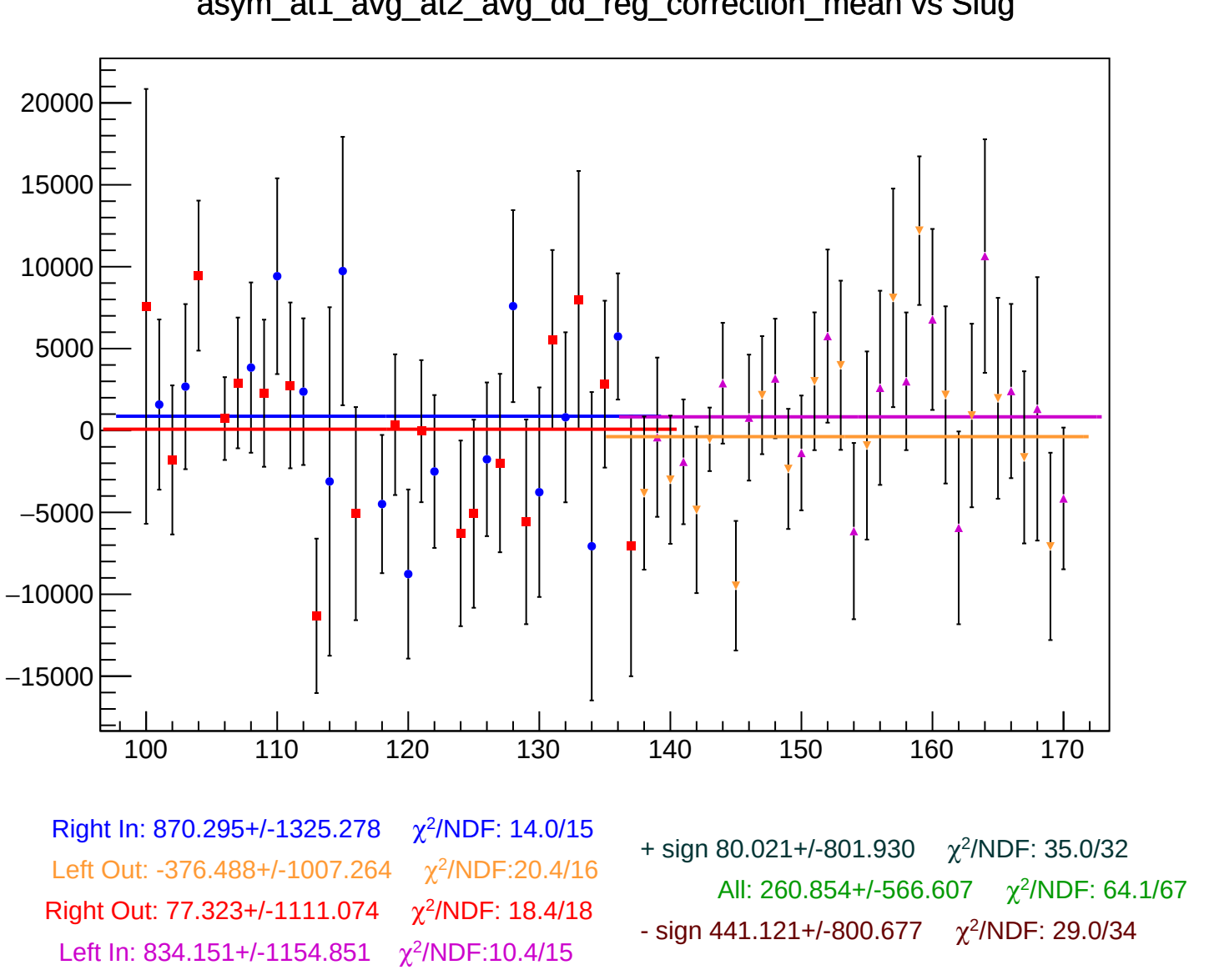
Right Out: 1298.656+/-0.344 $\chi^2$/NDF: 319374.9/18

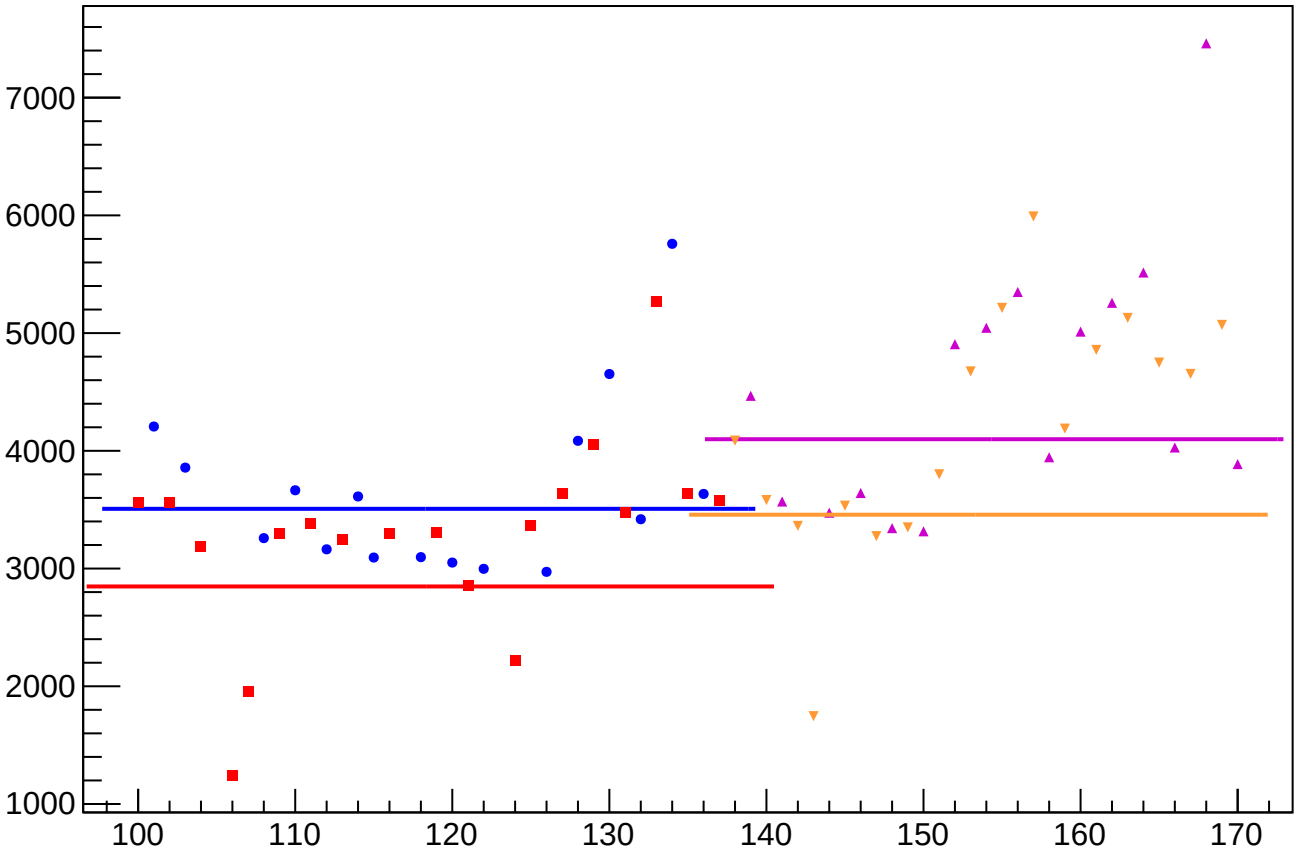
Left In: 1277.240+/-0.248 $\chi^2$/NDF:15662.6/15

+ sign 1292.302+/-0.203 $\chi^2$/NDF: 666663.1/32

All: 1288.418+/-0.143 $\chi^2$/NDF: 1004977.8/67

- sign 1284.582+/-0.201 $\chi^2$/NDF: 337584.5/34


asym_at1_avg_at2_avg_dd_reg_correction_mean vs Slug
20000
15000
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: 870.295+/-1325.278 χ²/NDF: 14.0/15
Left Out: -376.488+/-1007.264 χ²/NDF:20.4/16
Right Out: 77.323+/-1111.074 χ²/NDF: 18.4/18
Left In: 834.151+/-1154.851 χ²/NDF:10.4/15
+ sign 80.021+/-801.930 χ²/NDF: 35.0/32
All: 260.854+/-566.607 χ²/NDF: 64.1/67
- sign 441.121+/-800.677 χ²/NDF: 29.0/34




Right In: 3507.397+/-0.937 $\chi^2$/NDF: 353979.1/15

Left Out: 3457.353+/-0.712 $\chi^2$/NDF:2918517.7/16

Right Out: 2847.833+/-0.786 $\chi^2$/NDF: 1499373.6/18

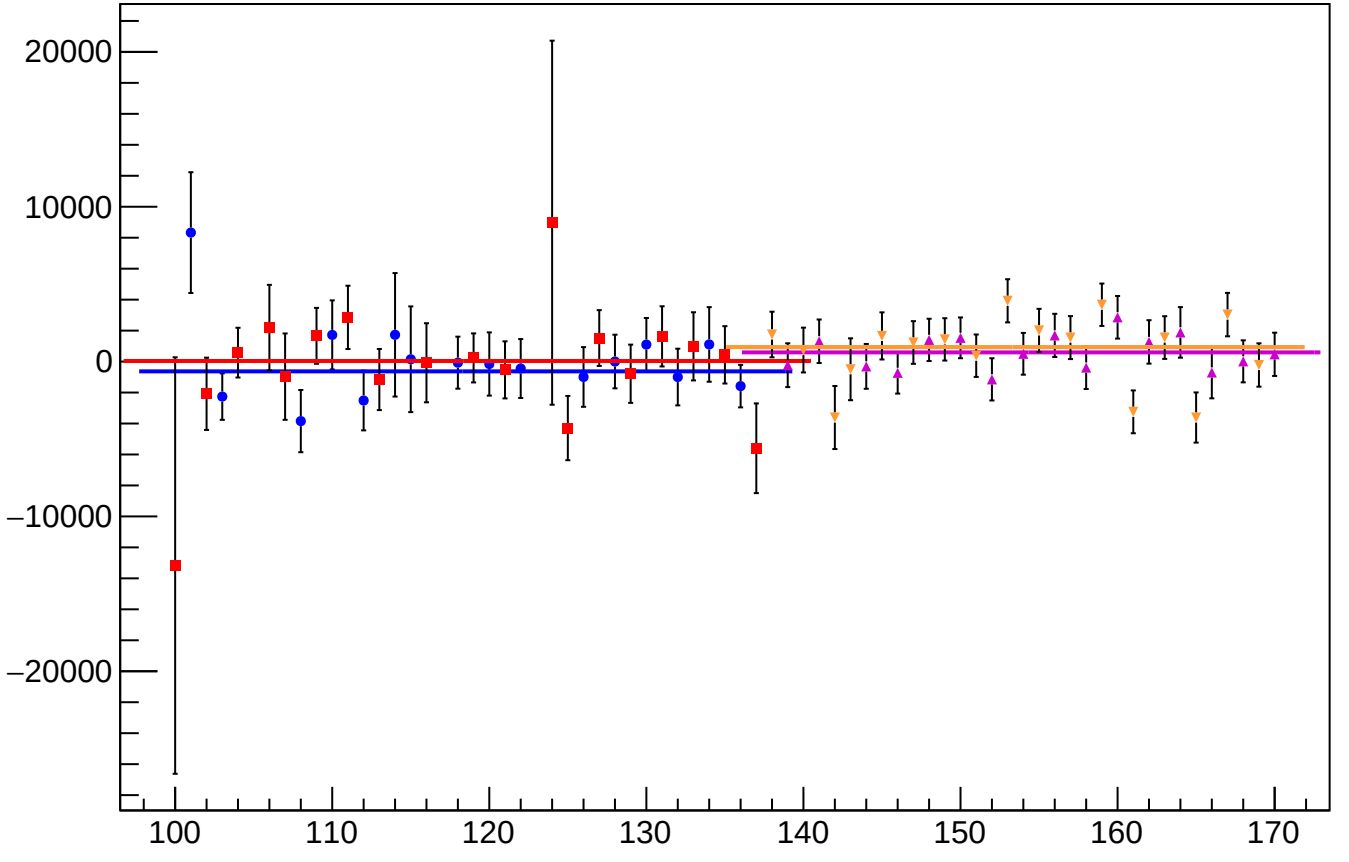
Left In: 4098.636+/-0.817 $\chi^2$/NDF:1087016.1/15

+ sign 3475.676+/-0.567 $\chi^2$/NDF: 3274304.4/32

All: 3462.357+/-0.401 $\chi^2$/NDF: 7080182.5/67

- sign 3449.079+/-0.566 $\chi^2$/NDF: 3804776.3/34

# cor_asym_at1_avg_at2_avg_dd_mean vs Slug




Right In: -631.427+/-488.663 $\chi^2$/NDF: 13.9/15

Left Out: 939.089+/-353.814 $\chi^2$/NDF:35.9/16

Right Out: 38.623+/-488.084 $\chi^2$/NDF: 16.3/18

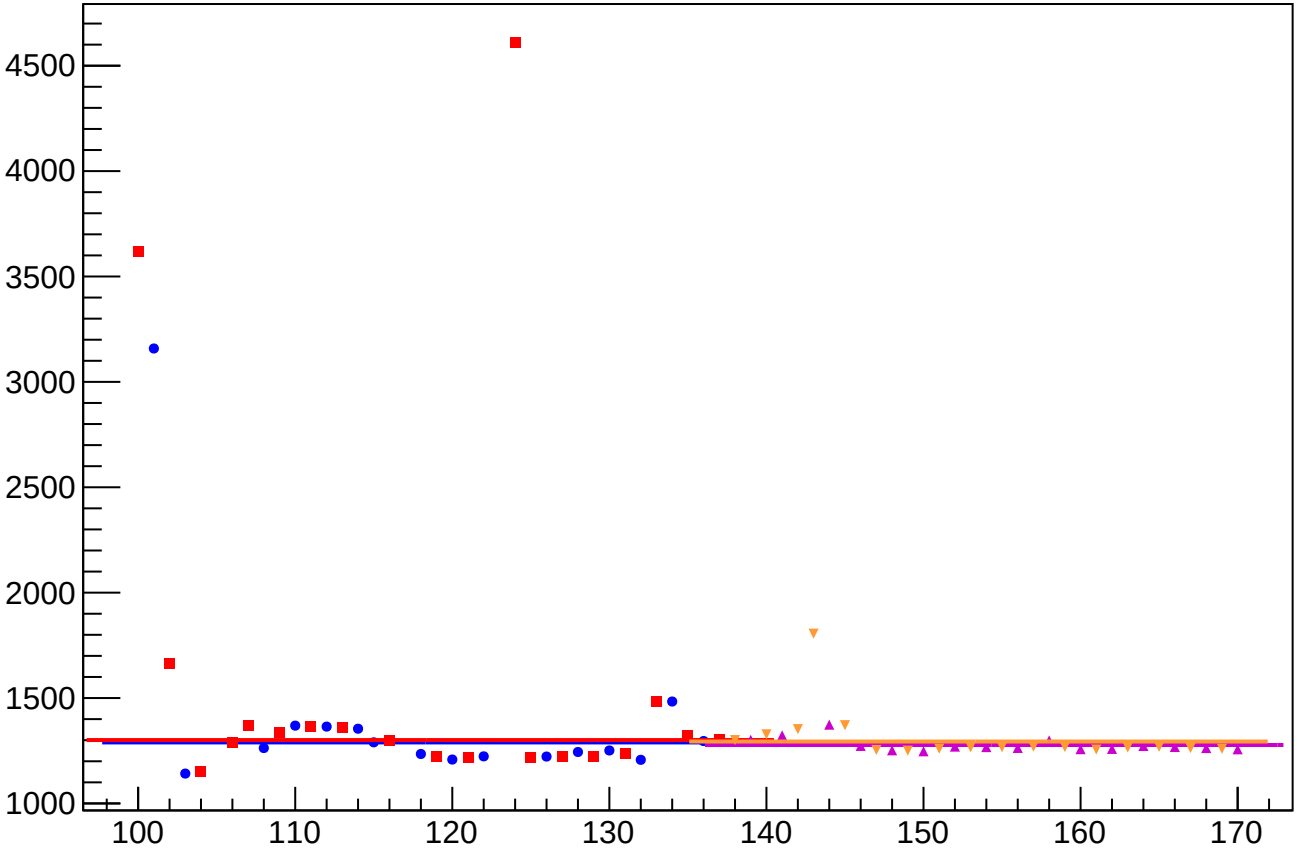
Left In: 594.460+/-351.364 $\chi^2$/NDF:9.9/15

+ sign 398.932+/-286.582 $\chi^2$/NDF: 56.6/32

All: 401.846+/-202.139 $\chi^2$/NDF: 83.7/67

- sign 404.731+/-285.160 $\chi^2$/NDF: 27.1/34

# cor_asym_at1_avg_at2_avg_dd_rms vs Slug




Right In: 1289.466+/-0.346 $\chi^2$/NDF: 514676.5/15

Left Out: 1293.789+/-0.250 $\chi^2$/NDF:151885.4/16

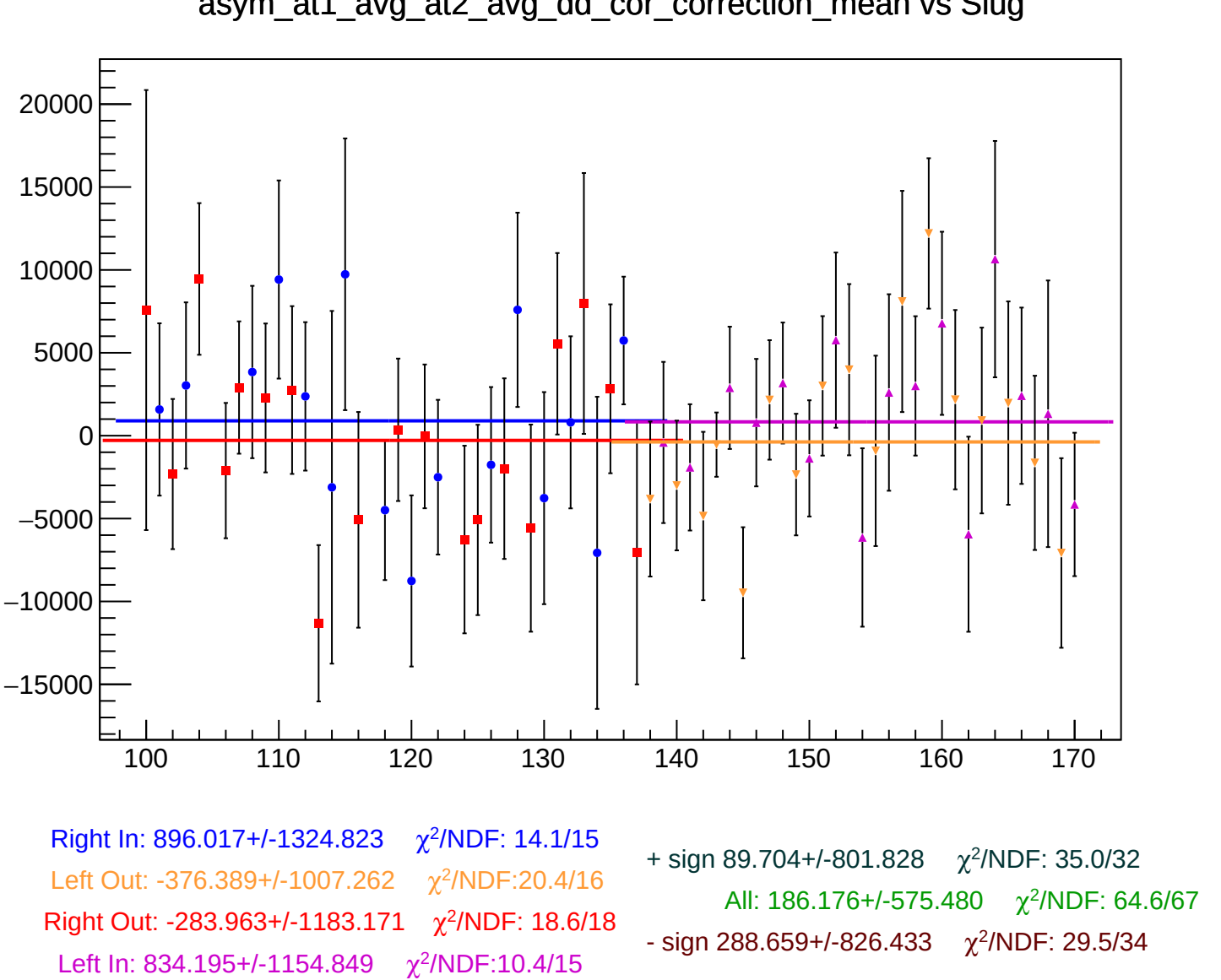
Right Out: 1300.684+/-0.344 $\chi^2$/NDF: 325907.6/18

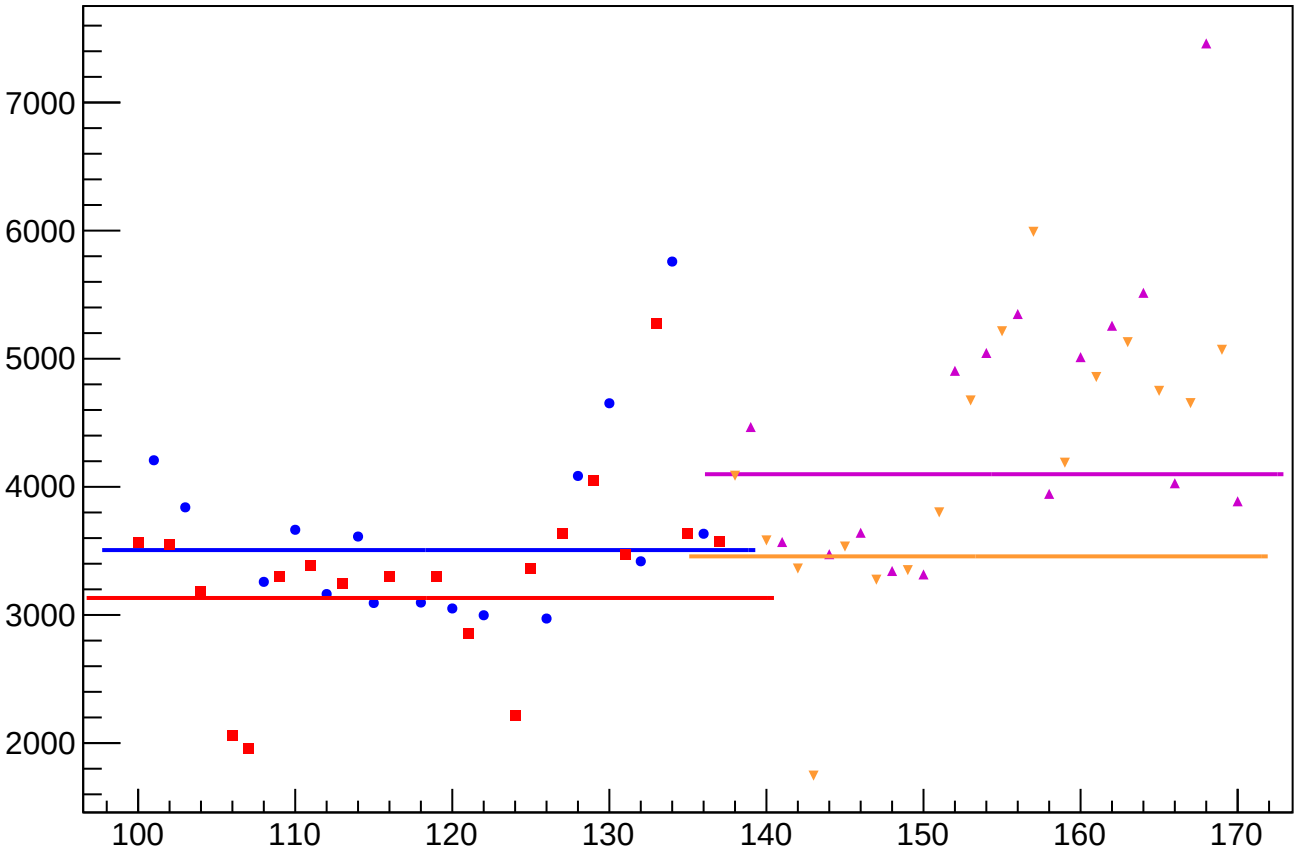
Left In: 1277.240+/-0.248 $\chi^2$/NDF:15662.6/15

+ sign 1292.302+/-0.203 $\chi^2$/NDF: 666664.6/32

All: 1288.762+/-0.143 $\chi^2$/NDF: 1011888.4/67

- sign 1285.262+/-0.202 $\chi^2$/NDF: 344616.9/34


asym_at1_avg_at2_avg_dd_cor_correction_mean vs Slug
20000
15000
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: 896.017+/-1324.823 χ²/NDF: 14.1/15
Left Out: -376.389+/-1007.262 χ²/NDF:20.4/16
Right Out: -283.963+/-1183.171 χ²/NDF: 18.6/18
Left In: 834.195+/-1154.849 χ²/NDF:10.4/15
+ sign 89.704+/-801.828 χ²/NDF: 35.0/32
All: 186.176+/-575.480 χ²/NDF: 64.6/67
- sign 288.659+/-826.433 χ²/NDF: 29.5/34




Right In: 3506.484+/-0.937 $\chi^2$/NDF: 353237.7/15

Left Out: 3457.343+/-0.712 $\chi^2$/NDF:2918548.6/16

Right Out: 3132.586+/-0.837 $\chi^2$/NDF: 649611.1/18

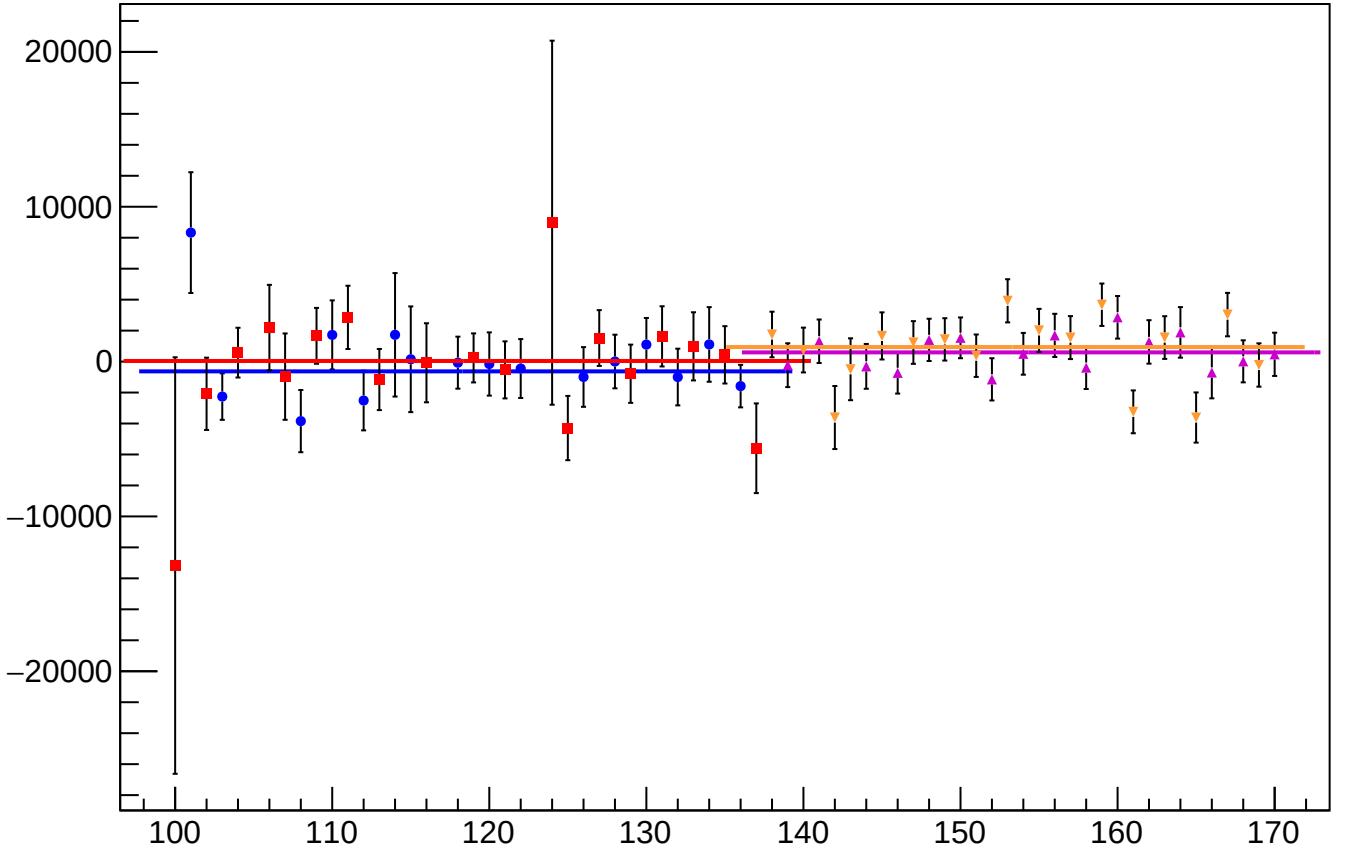
Left In: 4098.631+/-0.817 $\chi^2$/NDF:1087017.8/15

+ sign 3475.344+/-0.567 $\chi^2$/NDF: 3273530.0/32

All: 3549.031+/-0.407 $\chi^2$/NDF: 5727793.9/67

- sign 3627.310+/-0.584 $\chi^2$/NDF: 2419429.9/34

# eigen_cor_asym_at1_avg_at2_avg_dd_mean vs Slug




Right In: -631.427+/-488.663 $\chi^2$/NDF: 13.9/15

Left Out: 939.089+/-353.814 $\chi^2$/NDF:35.9/16

Right Out: 38.623+/-488.084 $\chi^2$/NDF: 16.3/18

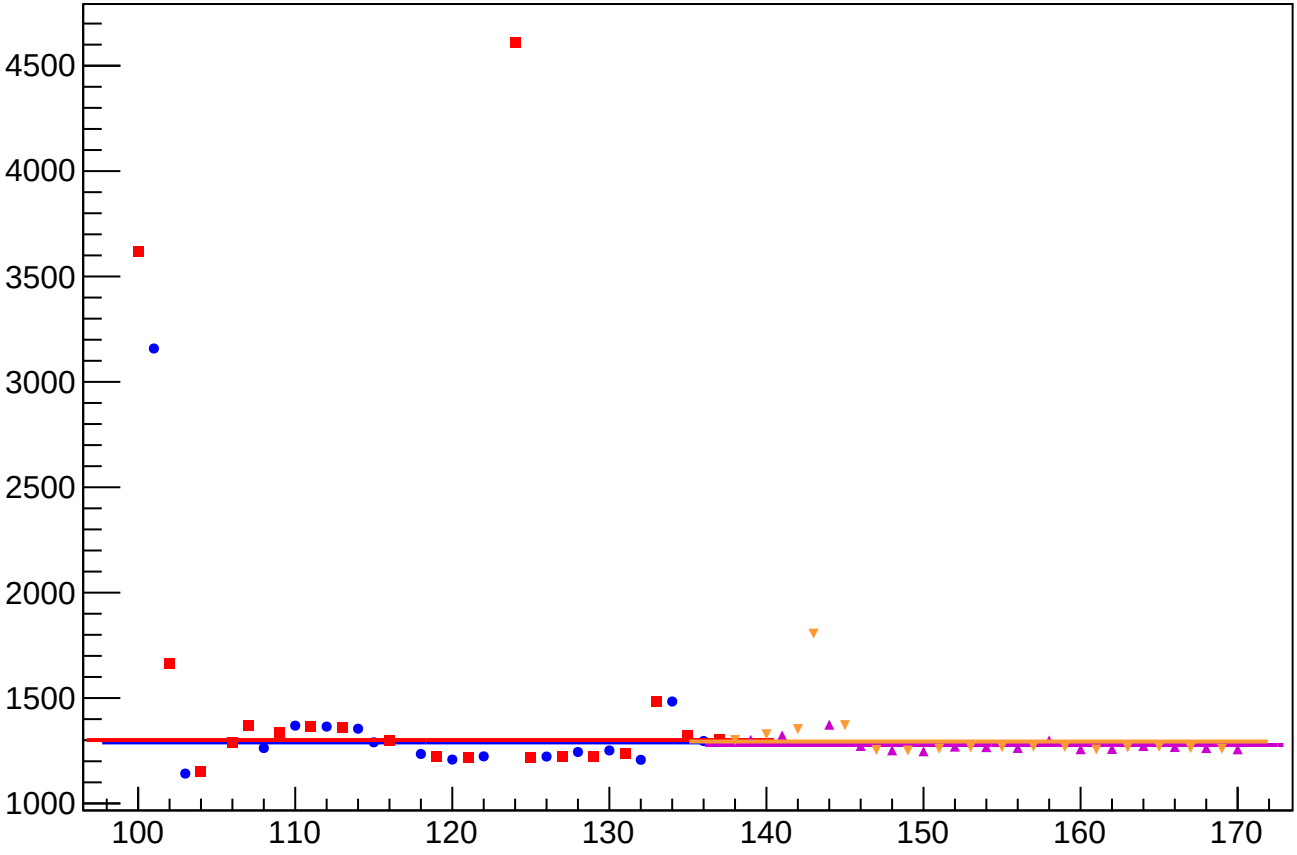
Left In: 594.460+/-351.364 $\chi^2$/NDF:9.9/15

+ sign 398.932+/-286.582 $\chi^2$/NDF: 56.6/32

All: 401.846+/-202.139 $\chi^2$/NDF: 83.7/67

- sign 404.731+/-285.160 $\chi^2$/NDF: 27.1/34

# eigen_cor_asym_at1_avg_at2_avg_dd_rms vs Slug




Right In: 1289.466+/-0.346 $\chi^2$/NDF: 514676.5/15

Left Out: 1293.789+/-0.250 $\chi^2$/NDF:151885.4/16

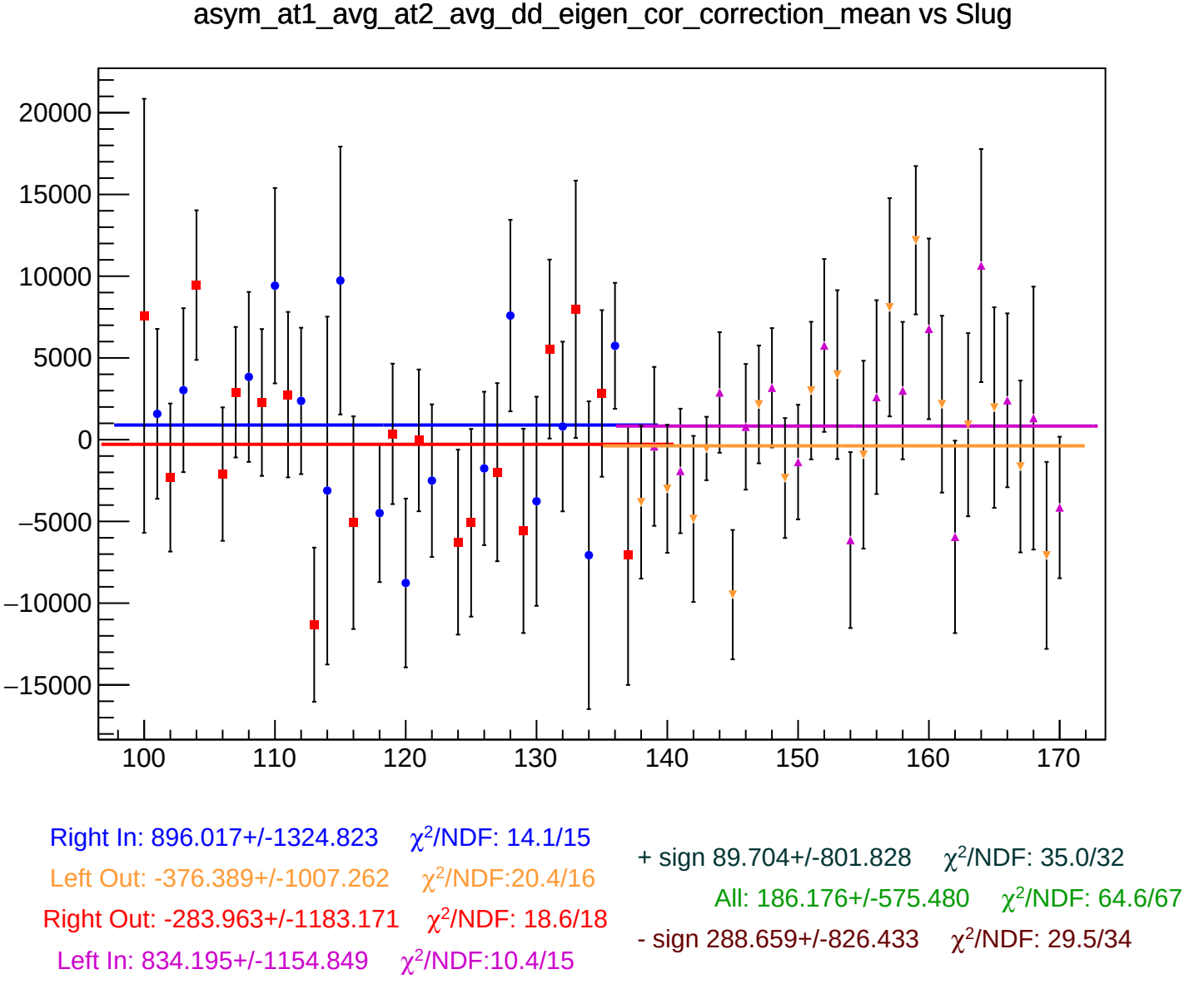
Right Out: 1300.684+/-0.344 $\chi^2$/NDF: 325907.6/18

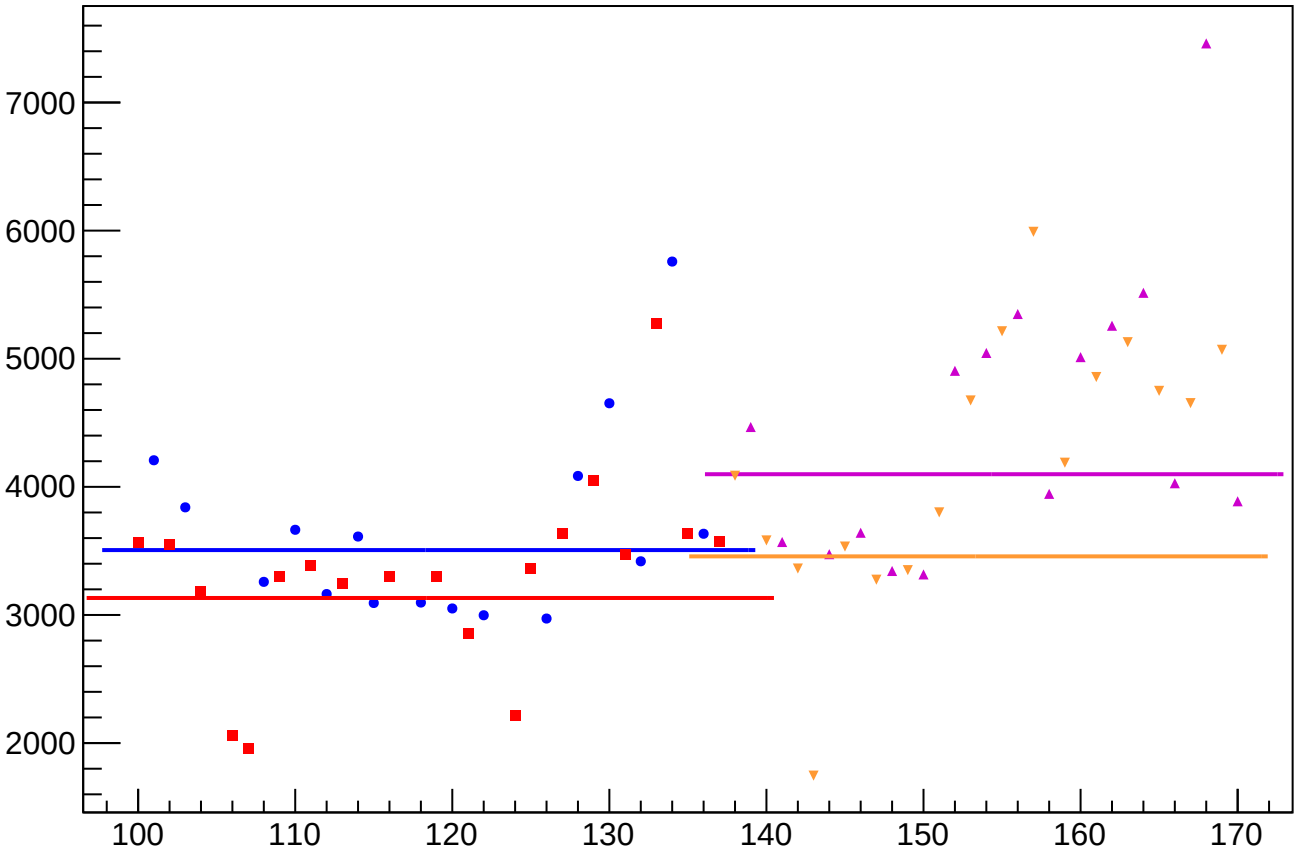
Left In: 1277.240+/-0.248 $\chi^2$/NDF:15662.6/15

+ sign 1292.302+/-0.203 $\chi^2$/NDF: 666664.6/32

All: 1288.762+/-0.143 $\chi^2$/NDF: 1011888.4/67

- sign 1285.262+/-0.202 $\chi^2$/NDF: 344616.9/34


asym_at1_avg_at2_avg_dd_eigen_cor_correction_mean vs Slug
20000
15000
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: 896.017+/-1324.823 χ²/NDF: 14.1/15
Left Out: -376.389+/-1007.262 χ²/NDF:20.4/16
Right Out: -283.963+/-1183.171 χ²/NDF: 18.6/18
Left In: 834.195+/-1154.849 χ²/NDF:10.4/15
+ sign 89.704+/-801.828 χ²/NDF: 35.0/32
All: 186.176+/-575.480 χ²/NDF: 64.6/67
- sign 288.659+/-826.433 χ²/NDF: 29.5/34




Right In: 3506.484+/-0.937 $\chi^2$/NDF: 353237.7/15

Left Out: 3457.343+/-0.712 $\chi^2$/NDF:2918548.6/16

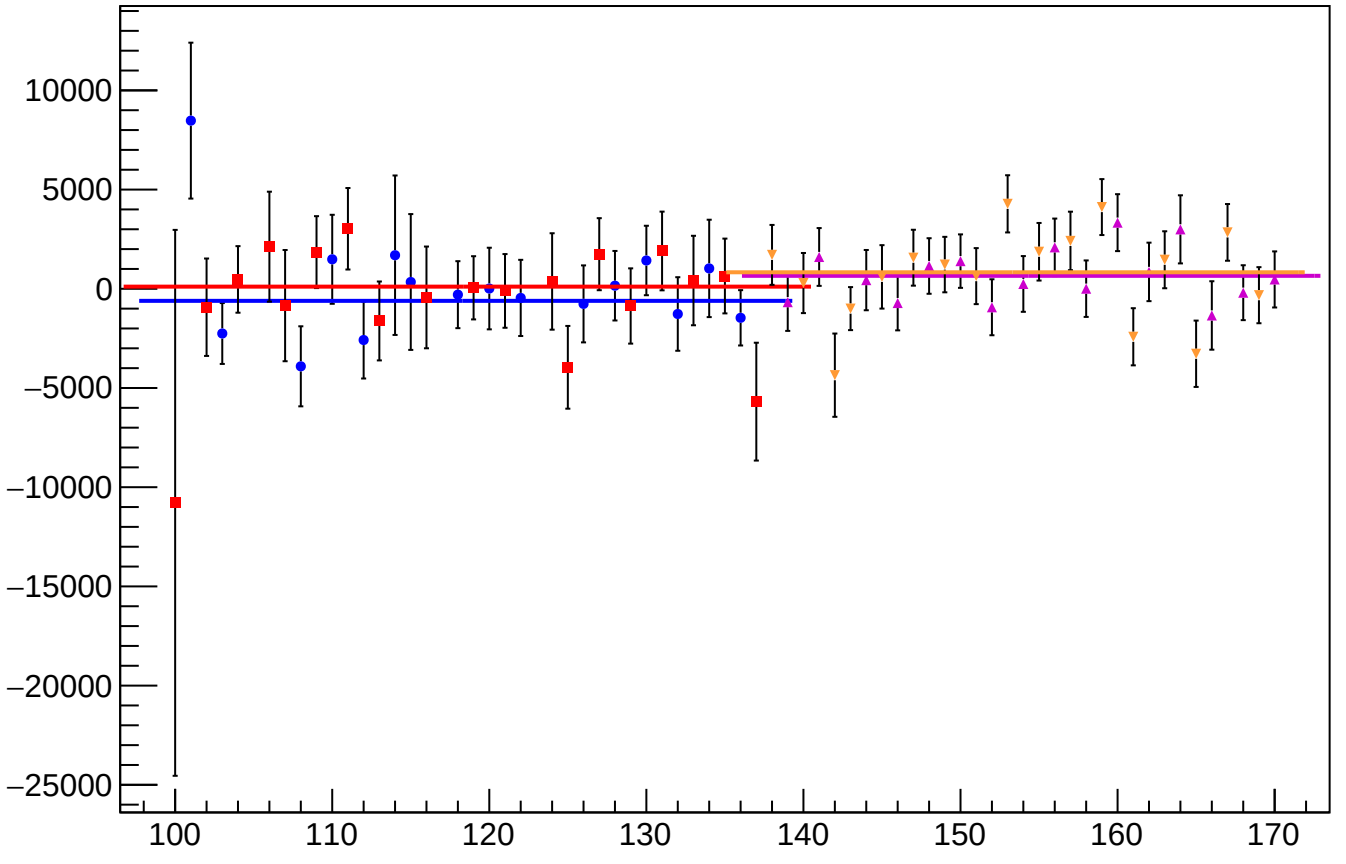
Right Out: 3132.586+/-0.837 $\chi^2$/NDF: 649611.1/18

Left In: 4098.631+/-0.817 $\chi^2$/NDF:1087017.8/15

+ sign 3475.344+/-0.567 $\chi^2$/NDF: 3273530.0/32

All: 3549.031+/-0.407 $\chi^2$/NDF: 5727793.9/67

- sign 3627.310+/-0.584 $\chi^2$/NDF: 2419429.9/34




Right In: -607.831+/-494.182 $\chi^2$/NDF: 14.1/15

Left Out: 832.149+/-351.448 $\chi^2$/NDF:36.6/16

Right Out: 108.614+/-485.552 $\chi^2$/NDF: 14.9/18

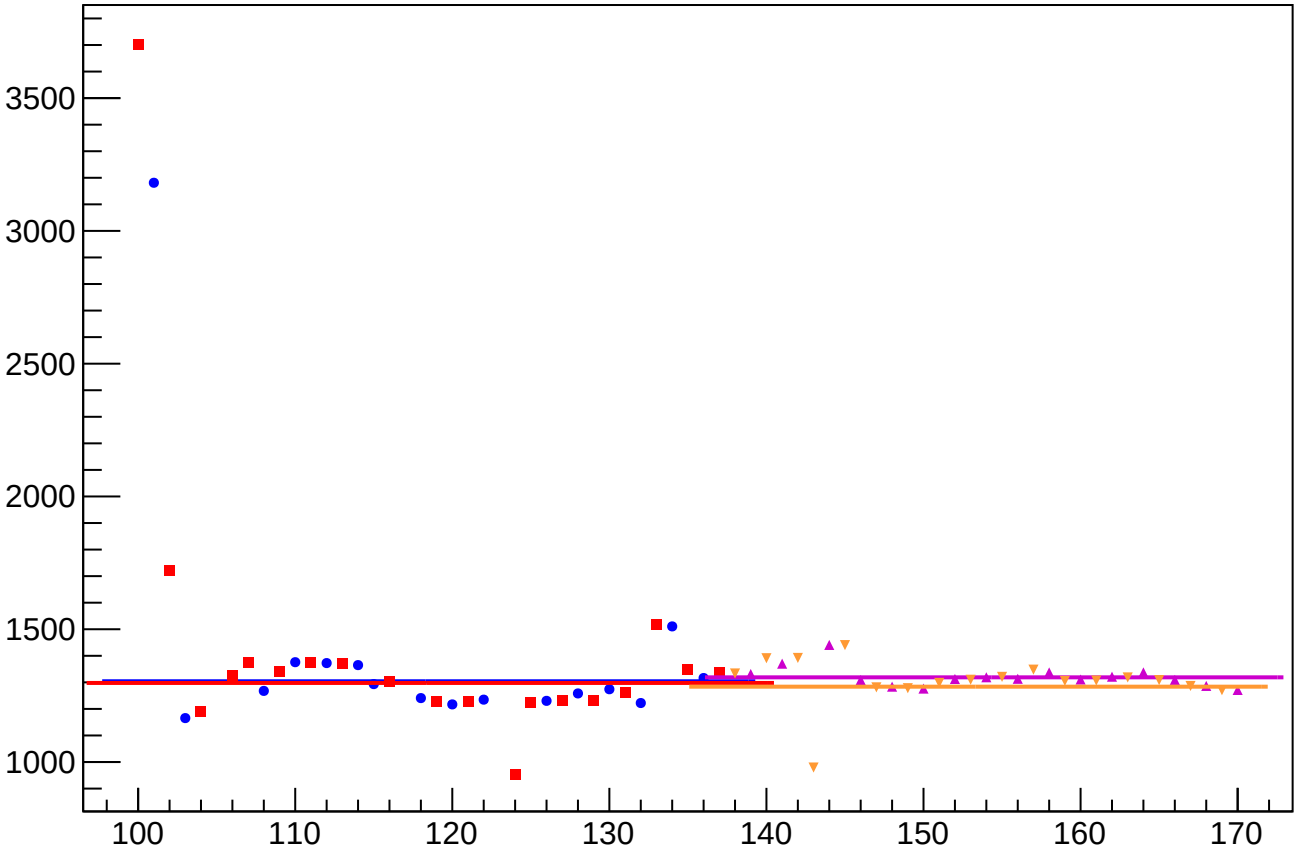
Left In: 653.590+/-362.908 $\chi^2$/NDF:12.3/15

\+ sign 348.481+/-286.406 $\chi^2$/NDF: 56.4/32

All: 402.559+/-204.016 $\chi^2$/NDF: 84.4/67

\- sign 458.266+/-290.687 $\chi^2$/NDF: 28.0/34

# dit_asym_at1_avg_at2_avg_dd_rms vs Slug




Right In: 1304.102+/-0.349 $\chi^2$/NDF: 510589.4/15

Left Out: 1283.747+/-0.249 $\chi^2$/NDF:203238.3/16

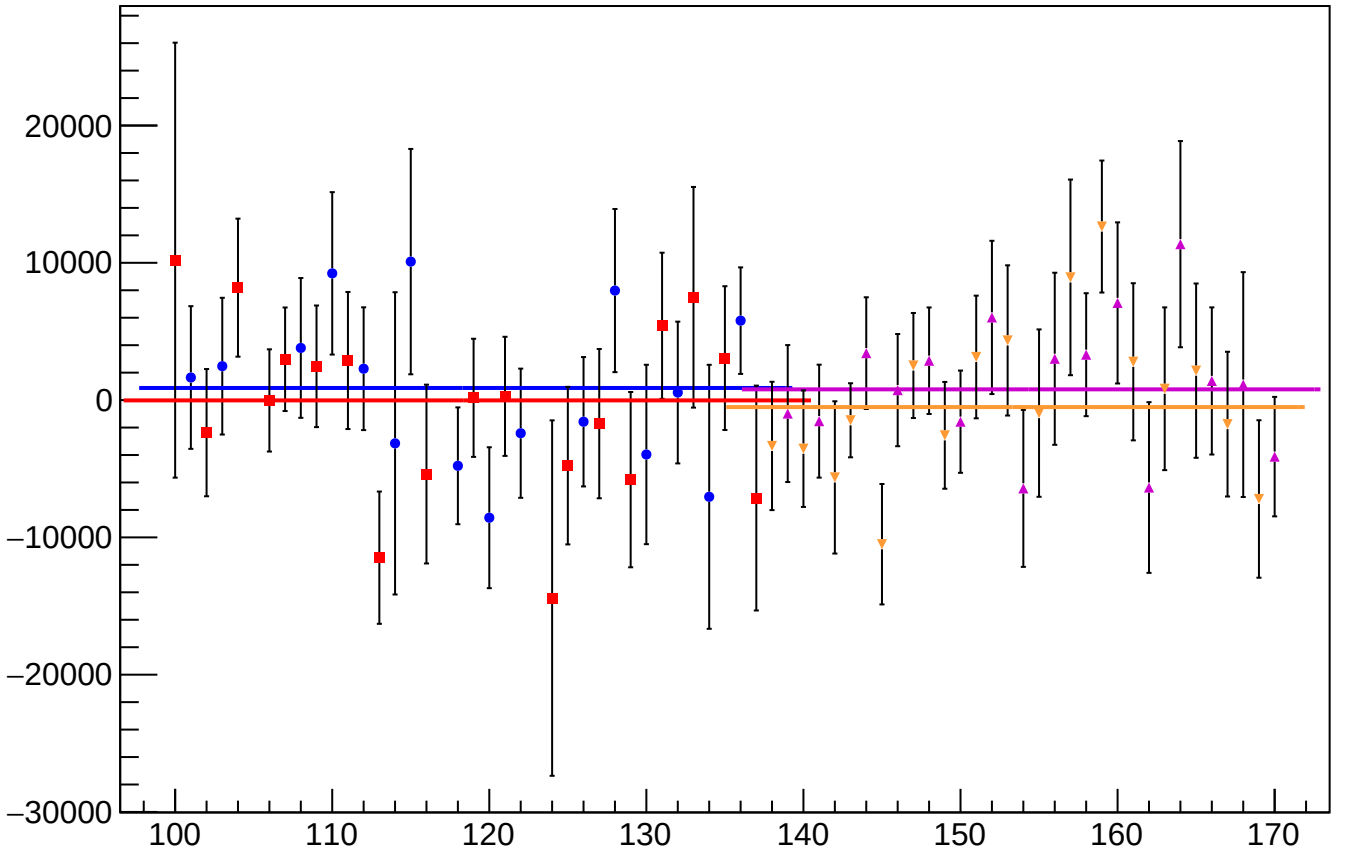
Right Out: 1297.796+/-0.343 $\chi^2$/NDF: 213096.9/18

Left In: 1318.907+/-0.257 $\chi^2$/NDF:23031.0/15

+ sign 1290.584+/-0.203 $\chi^2$/NDF: 716081.3/32

All: 1300.807+/-0.144 $\chi^2$/NDF: 959809.3/67

- sign 1311.333+/-0.205 $\chi^2$/NDF: 238555.8/34




Right In: 884.058+/-1327.399 $\chi^2$/NDF: 14.1/15

Left Out: -508.088+/-1131.417 $\chi^2$/NDF:20.6/16

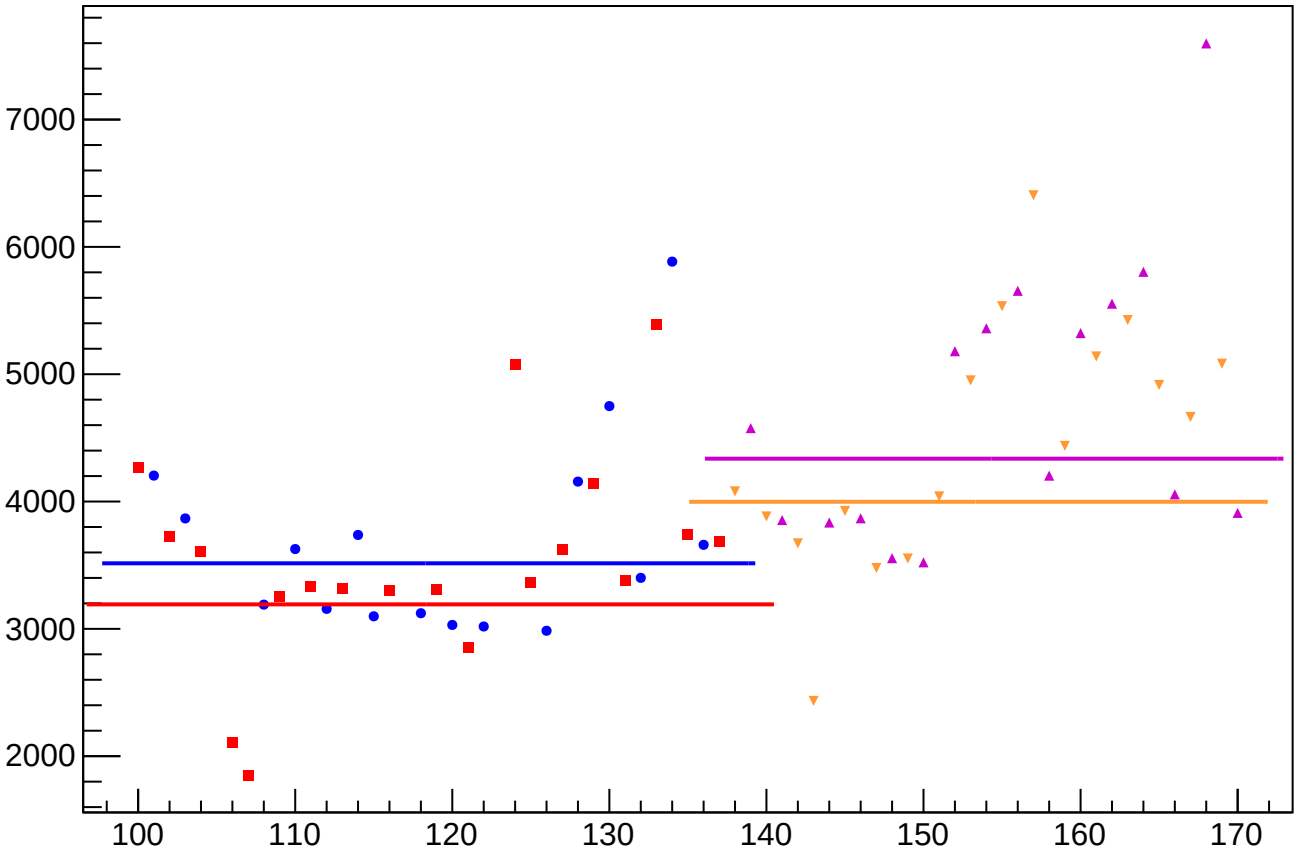
Right Out: -20.681+/-1200.015 $\chi^2$/NDF: 16.8/18

Left In: 782.966+/-1220.471 $\chi^2$/NDF:10.2/15

\+ sign 77.723+/-861.069 $\chi^2$/NDF: 35.4/32

All: 226.968+/-606.953 $\chi^2$/NDF: 62.7/67

\- sign 374.351+/-855.679 $\chi^2$/NDF: 27.3/34




Right In: 3514.746+/-0.939 $\chi^2$/NDF: 375078.6/15

Left Out: 3997.981+/-0.800 $\chi^2$/NDF:1518888.0/16

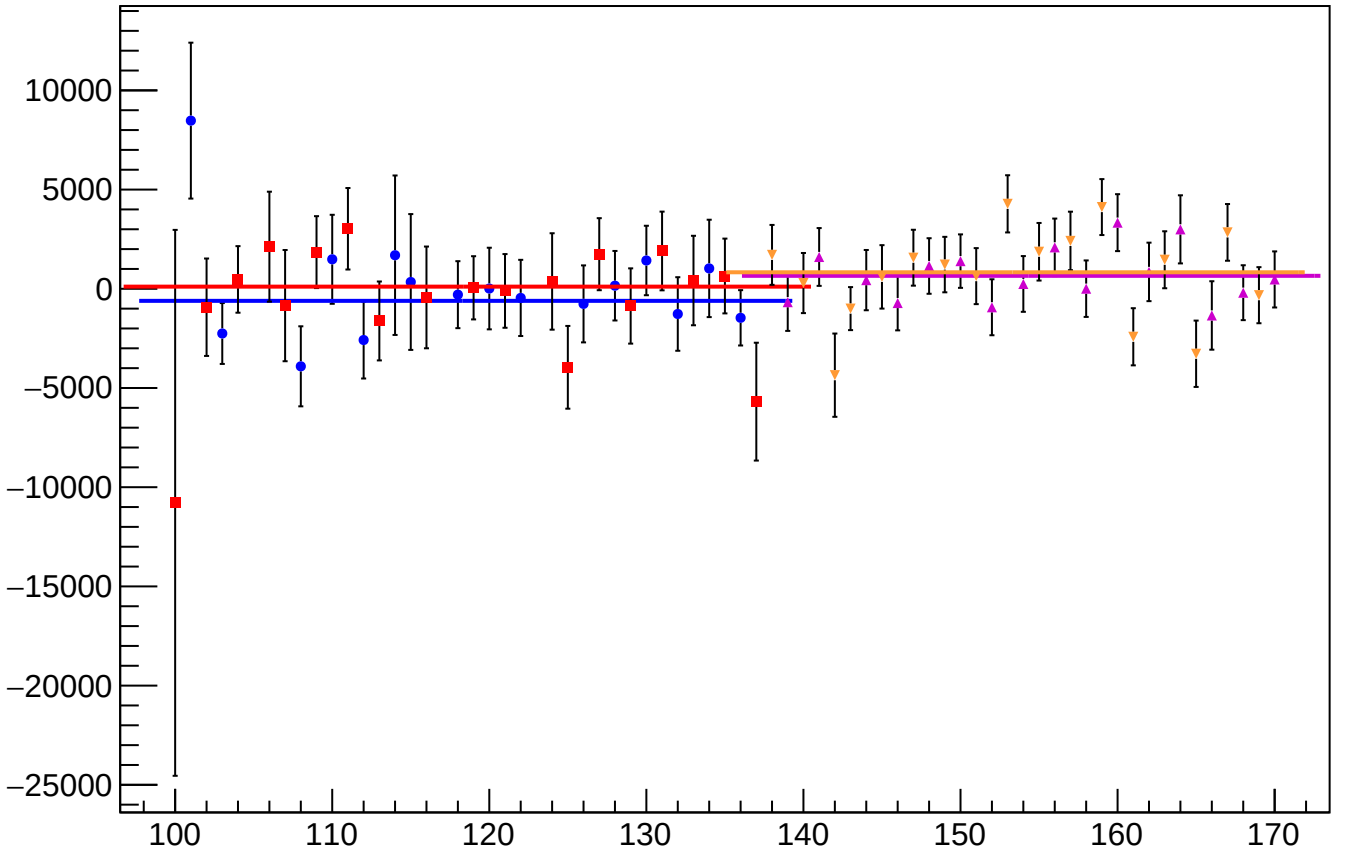
Right Out: 3192.203+/-0.849 $\chi^2$/NDF: 772495.7/18

Left In: 4336.689+/-0.863 $\chi^2$/NDF:1017162.9/15

+ sign 3794.637+/-0.609 $\chi^2$/NDF: 2047490.0/32

All: 3774.580+/-0.429 $\chi^2$/NDF: 4733525.4/67

- sign 3754.775+/-0.605 $\chi^2$/NDF: 2683878.8/34




Right In: -607.834+/-494.182 $\chi^2$/NDF: 14.1/15

Left Out: 832.154+/-351.448 $\chi^2$/NDF:36.6/16

Right Out: 108.619+/-485.553 $\chi^2$/NDF: 14.9/18

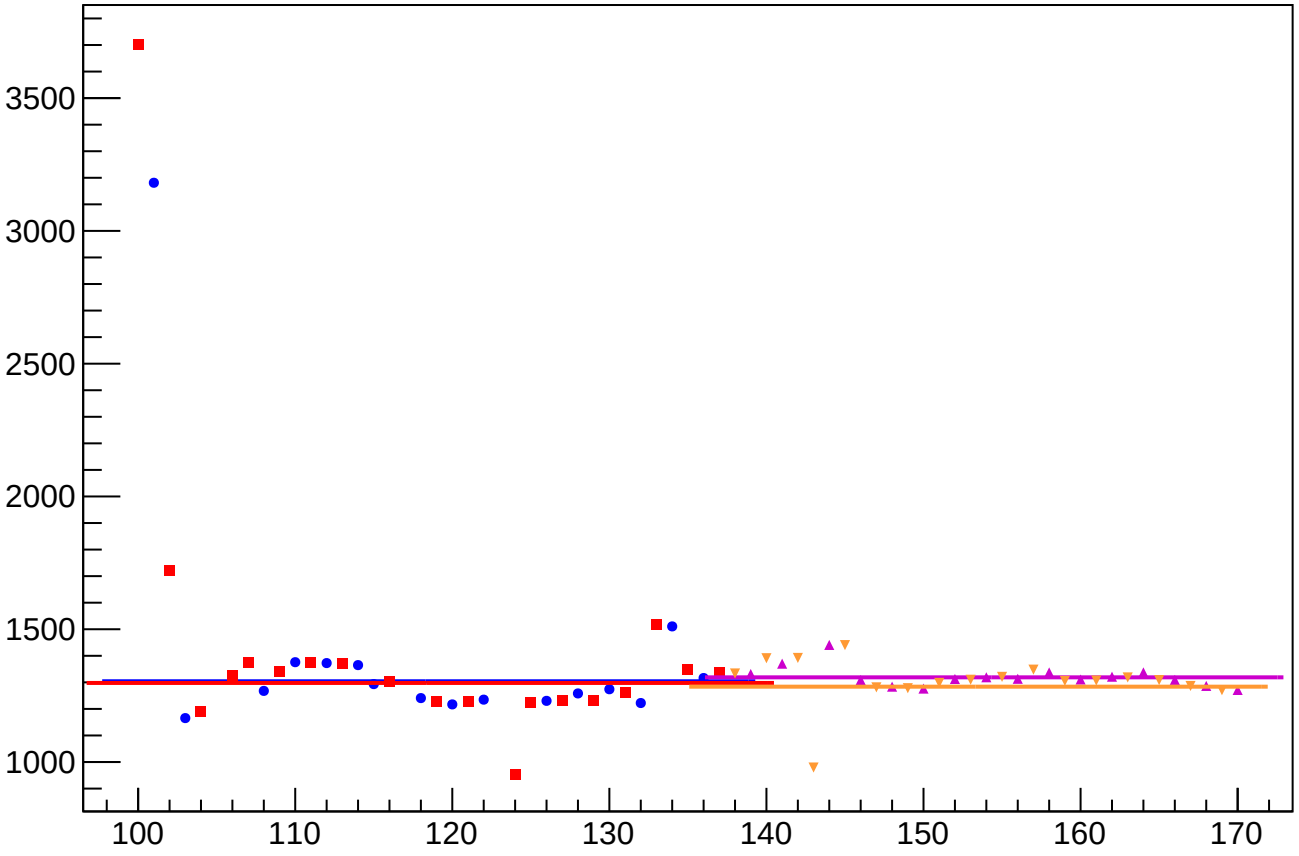
Left In: 653.591+/-362.908 $\chi^2$/NDF:12.3/15

\+ sign 348.483+/-286.406 $\chi^2$/NDF: 56.4/32

All: 402.561+/-204.016 $\chi^2$/NDF: 84.4/67

\- sign 458.268+/-290.687 $\chi^2$/NDF: 28.0/34

# eigen_dit_asym_at1_avg_at2_avg_dd_rms vs Slug




Right In: 1304.102+/-0.349 $\chi^2$/NDF: 510589.6/15

Left Out: 1283.748+/-0.249 $\chi^2$/NDF:203239.1/16

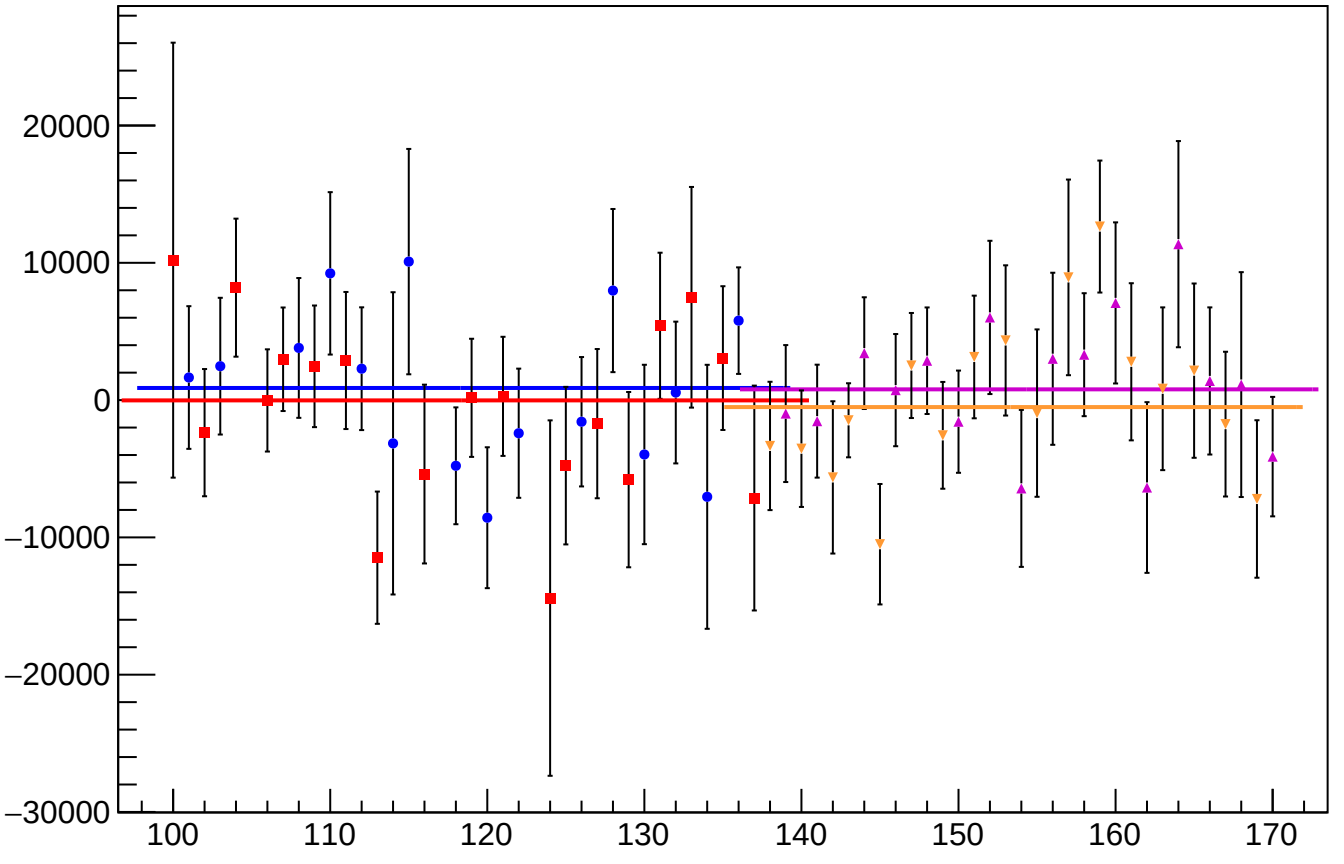
Right Out: 1297.796+/-0.343 $\chi^2$/NDF: 213097.0/18

Left In: 1318.908+/-0.257 $\chi^2$/NDF:23031.2/15

+ sign 1290.585+/-0.203 $\chi^2$/NDF: 716082.0/32

All: 1300.808+/-0.144 $\chi^2$/NDF: 959810.5/67

- sign 1311.334+/-0.205 $\chi^2$/NDF: 238556.4/34




Right In: 884.047+/-1327.396 $\chi^2$/NDF: 14.1/15

Left Out: -508.085+/-1131.418 $\chi^2$/NDF:20.6/16

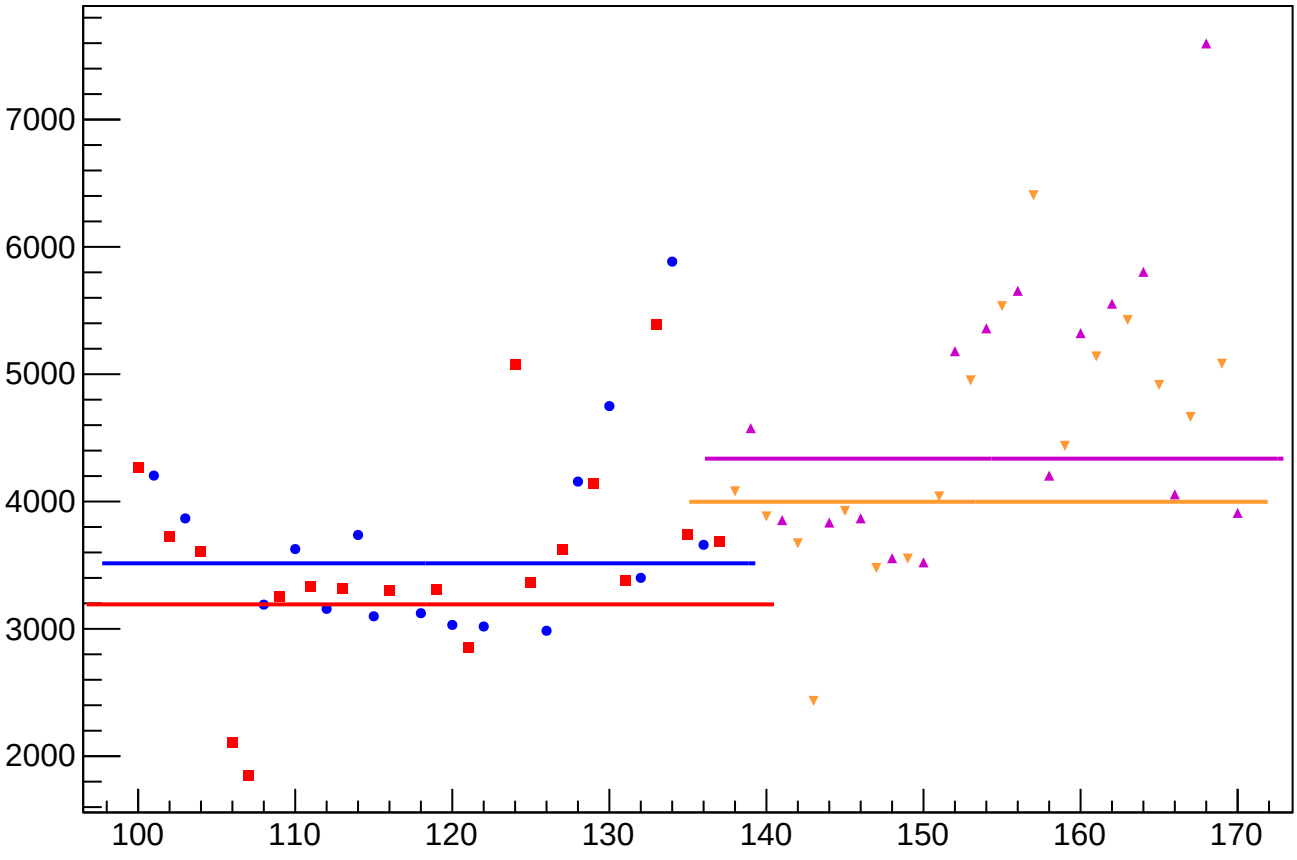
Right Out: -20.677+/-1200.012 $\chi^2$/NDF: 16.8/18

Left In: 782.965+/-1220.473 $\chi^2$/NDF:10.2/15

\+ sign 77.723+/-861.069 $\chi^2$/NDF: 35.4/32

All: 226.968+/-606.953 $\chi^2$/NDF: 62.7/67

\- sign 374.351+/-855.679 $\chi^2$/NDF: 27.3/34




Right In: 3514.737+/-0.939 $\chi^2$/NDF: 375082.8/15

Left Out: 3997.986+/-0.800 $\chi^2$/NDF:1518889.2/16

Right Out: 3192.196+/-0.849 $\chi^2$/NDF: 772497.9/18

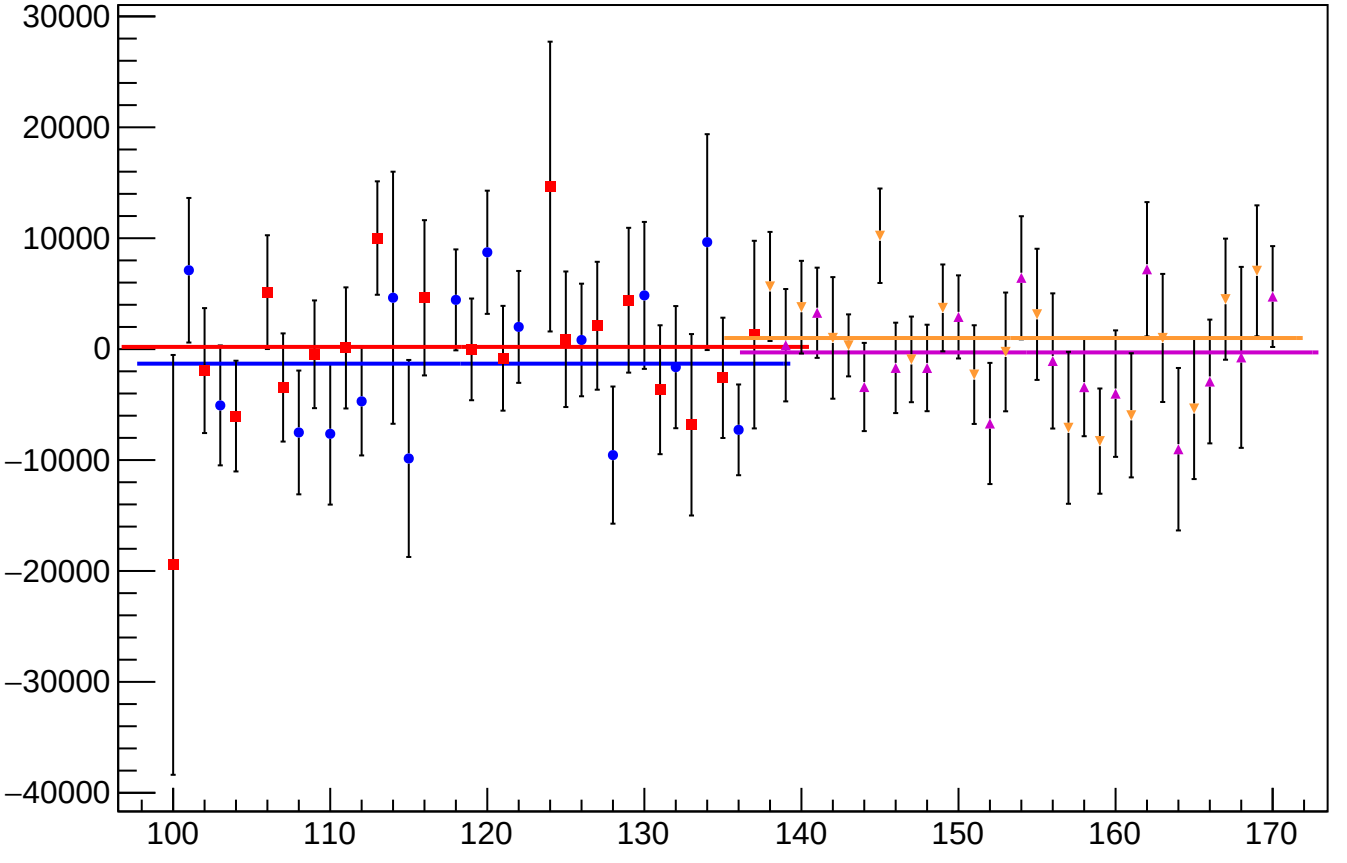
Left In: 4336.695+/-0.863 $\chi^2$/NDF:1017165.3/15

+ sign 3794.635+/-0.609 $\chi^2$/NDF: 2047505.0/32

All: 3774.578+/-0.429 $\chi^2$/NDF: 4733567.2/67

- sign 3754.771+/-0.605 $\chi^2$/NDF: 2683905.5/34

# asym_at1_avg_at2_avg_dd_mean vs Slug




Right In: -1309.349+/-1431.624 $\chi^2$/NDF: 17.6/15

Left Out: 1002.840+/-1135.187 $\chi^2$/NDF:16.8/16

Right Out: 201.593+/-1336.062 $\chi^2$/NDF: 11.6/18

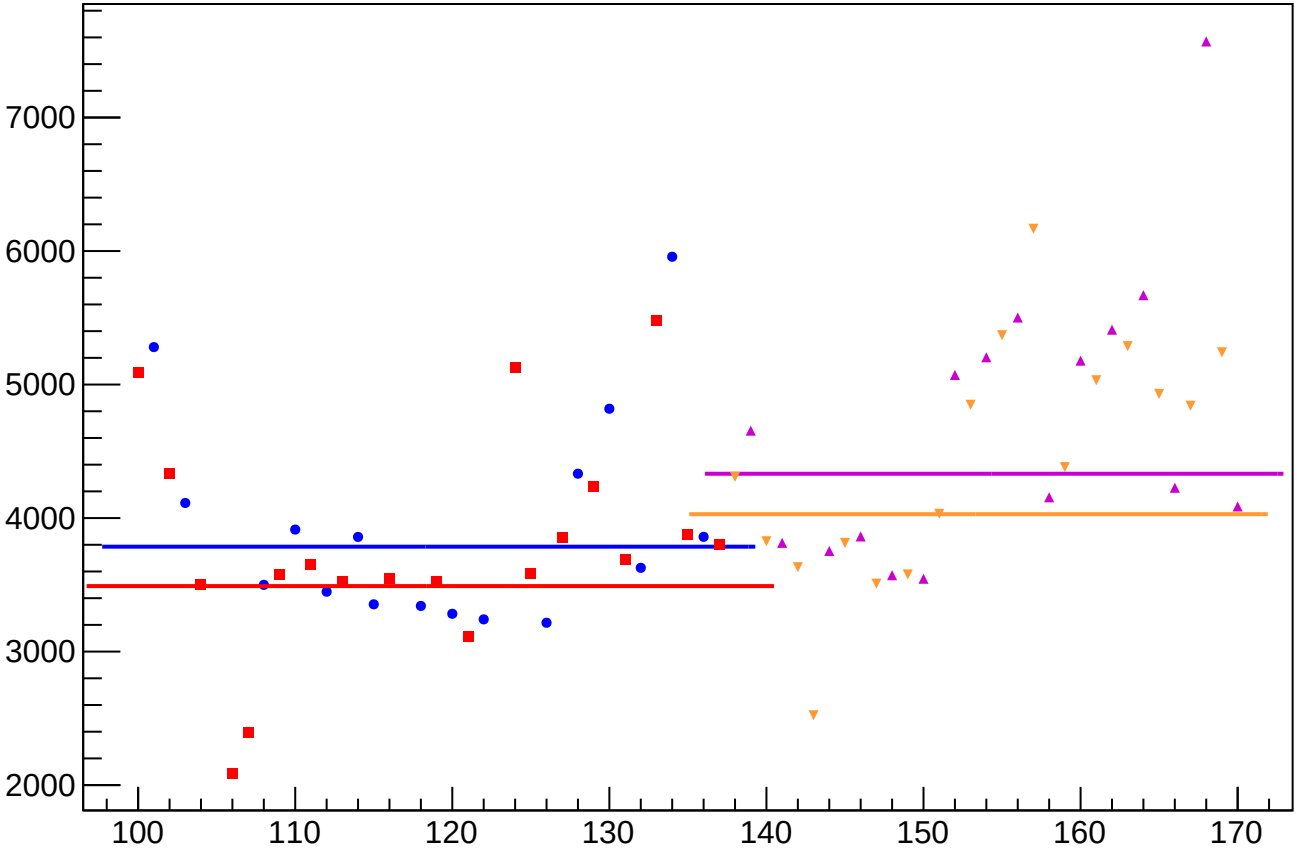
Left In: -295.262+/-1216.245 $\chi^2$/NDF:10.6/15

+ sign 110.262+/-889.488 $\chi^2$/NDF: 36.0/32

All: 21.076+/-632.438 $\chi^2$/NDF: 58.3/67

- sign -70.108+/-899.398 $\chi^2$/NDF: 22.3/34

# asym_at1_avg_at2_avg_dd_rms vs Slug




Right In: 3785.774+/-1.012 $\chi^2$/NDF: 382992.9/15

Left Out: 4029.140+/-0.803 $\chi^2$/NDF:1353686.2/16

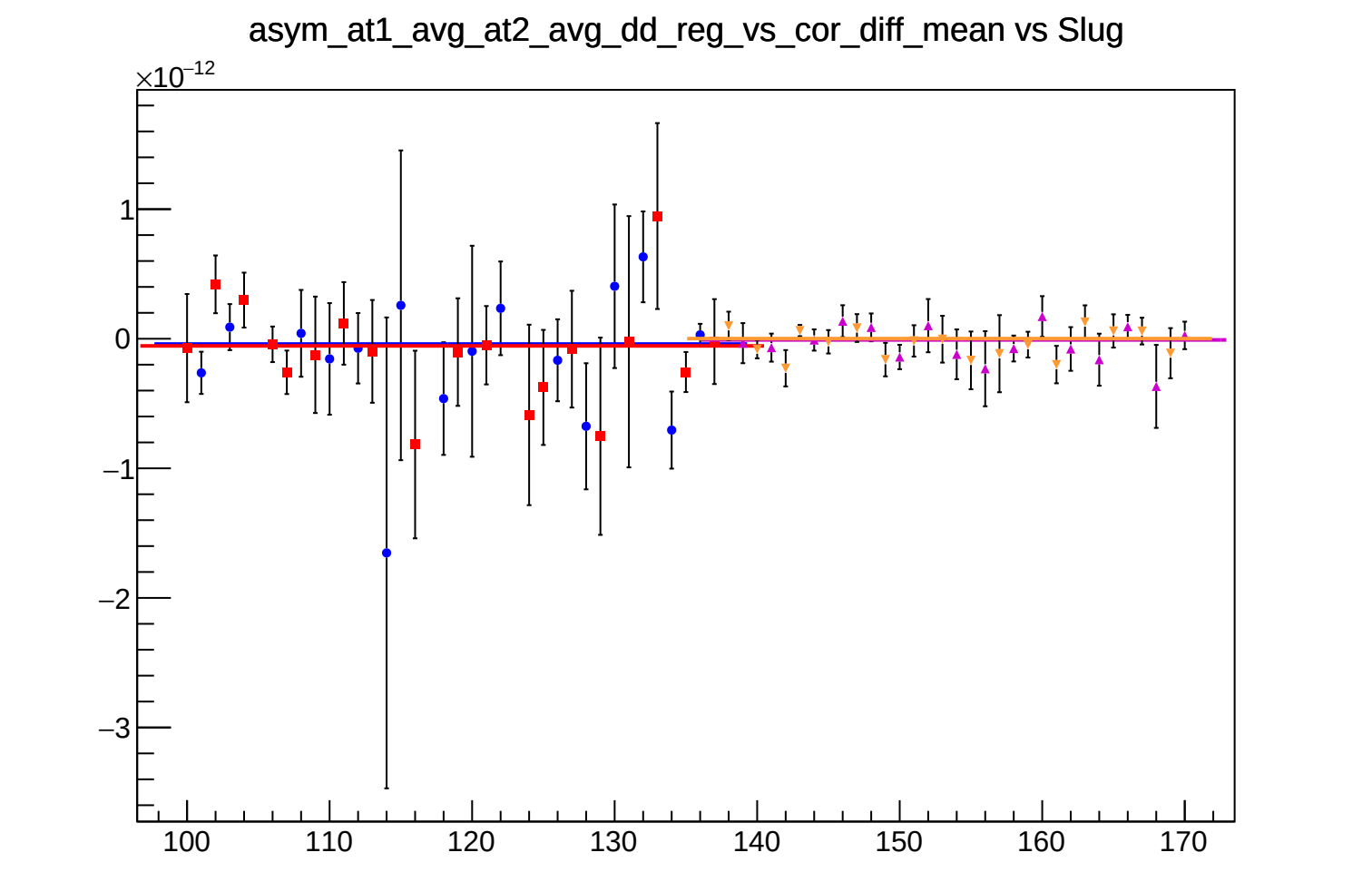
Right Out: 3490.614+/-0.932 $\chi^2$/NDF: 586715.1/18

Left In: 4332.000+/-0.860 $\chi^2$/NDF:932259.8/15

\+ sign 3935.192+/-0.629 $\chi^2$/NDF: 1772163.8/32

All: 3940.066+/-0.446 $\chi^2$/NDF: 3731518.9/67

\- sign 3944.988+/-0.632 $\chi^2$/NDF: 1959234.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13.7/16

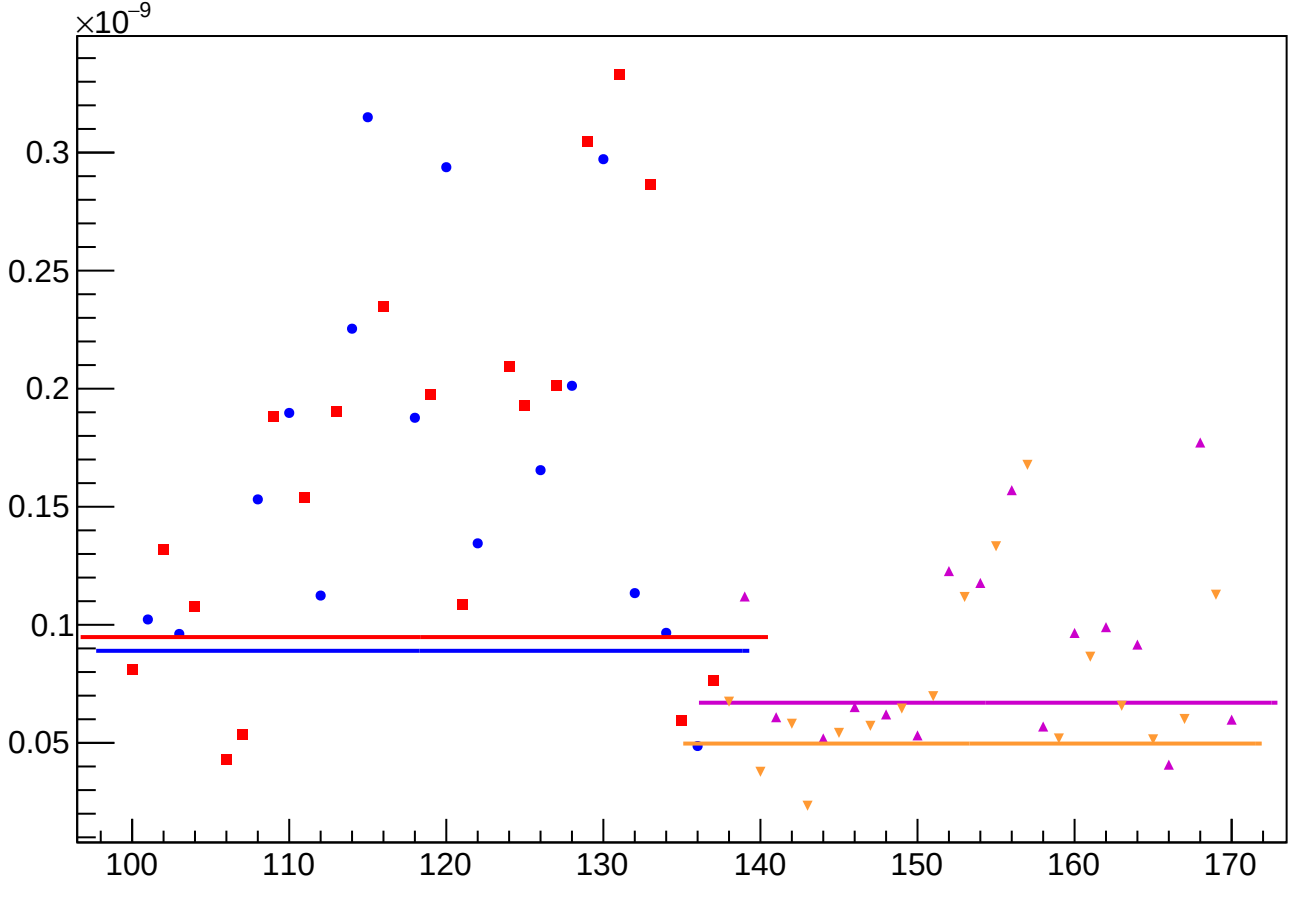
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:10.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 30.8/32

All: -0.000+/-0.000 $\chi^2$/NDF: 58.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.1/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1460718.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2157329.3/16

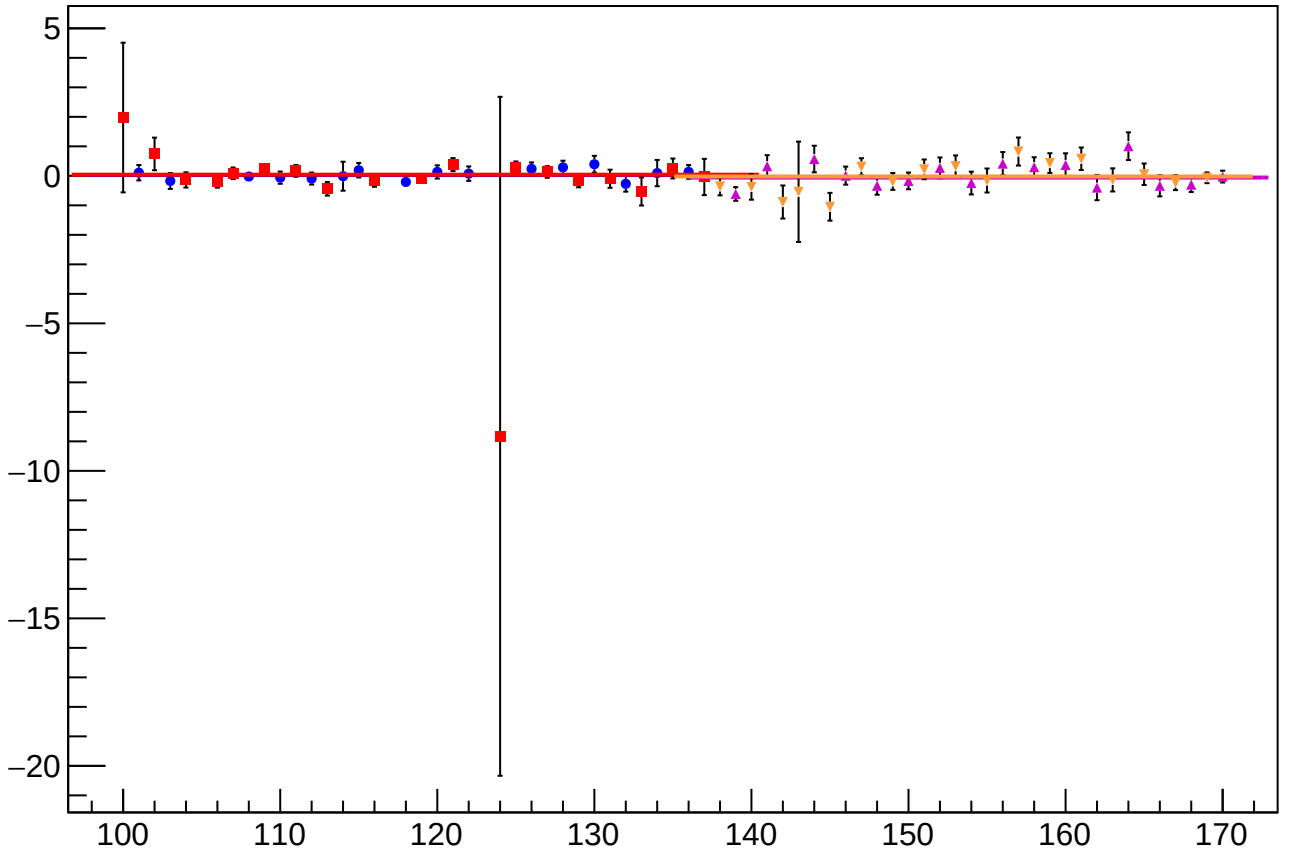
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1734601.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:1374533.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4372554.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 8218768.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3414108.5/34




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

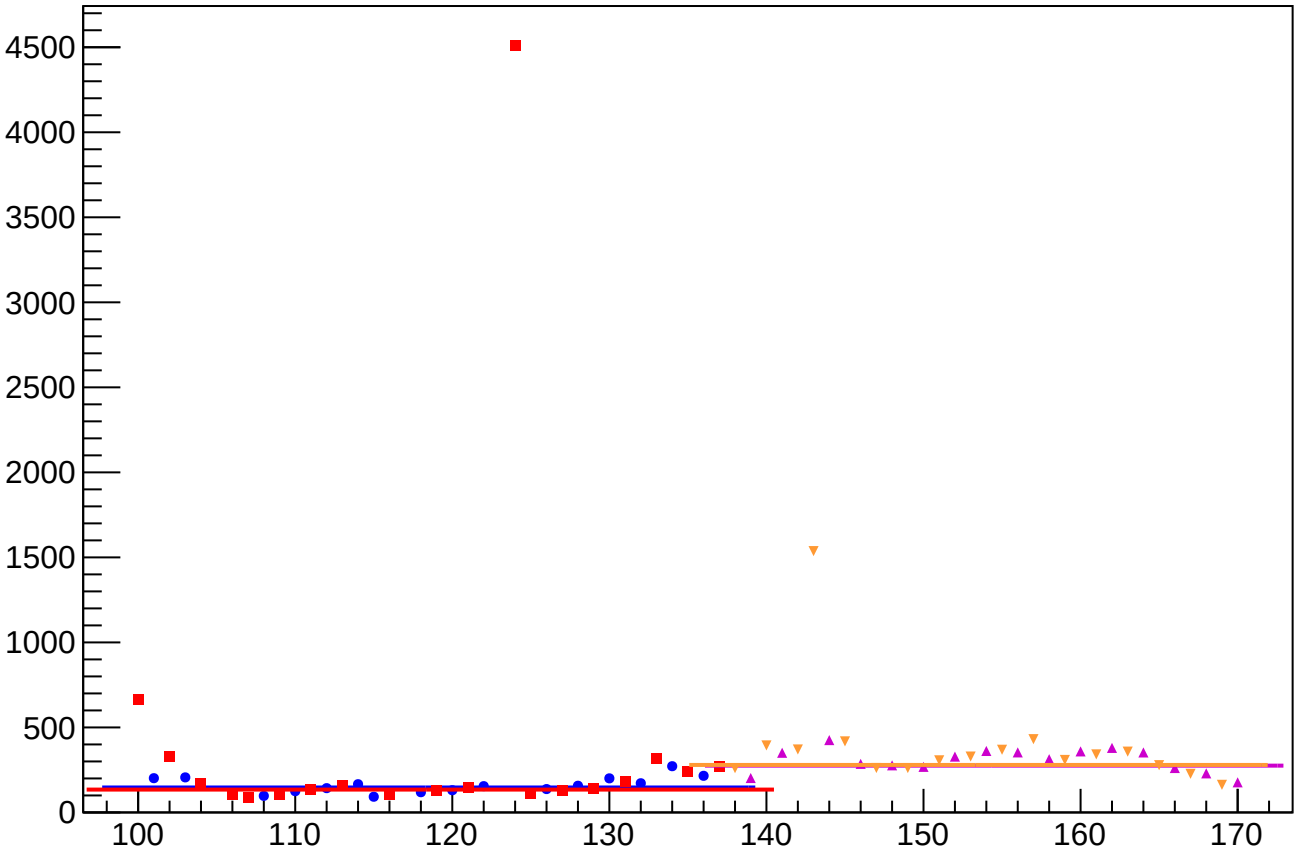
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998704.7/15

Left Out: 279.404+/-0.058 $\chi^2$/NDF:2889224.6/16

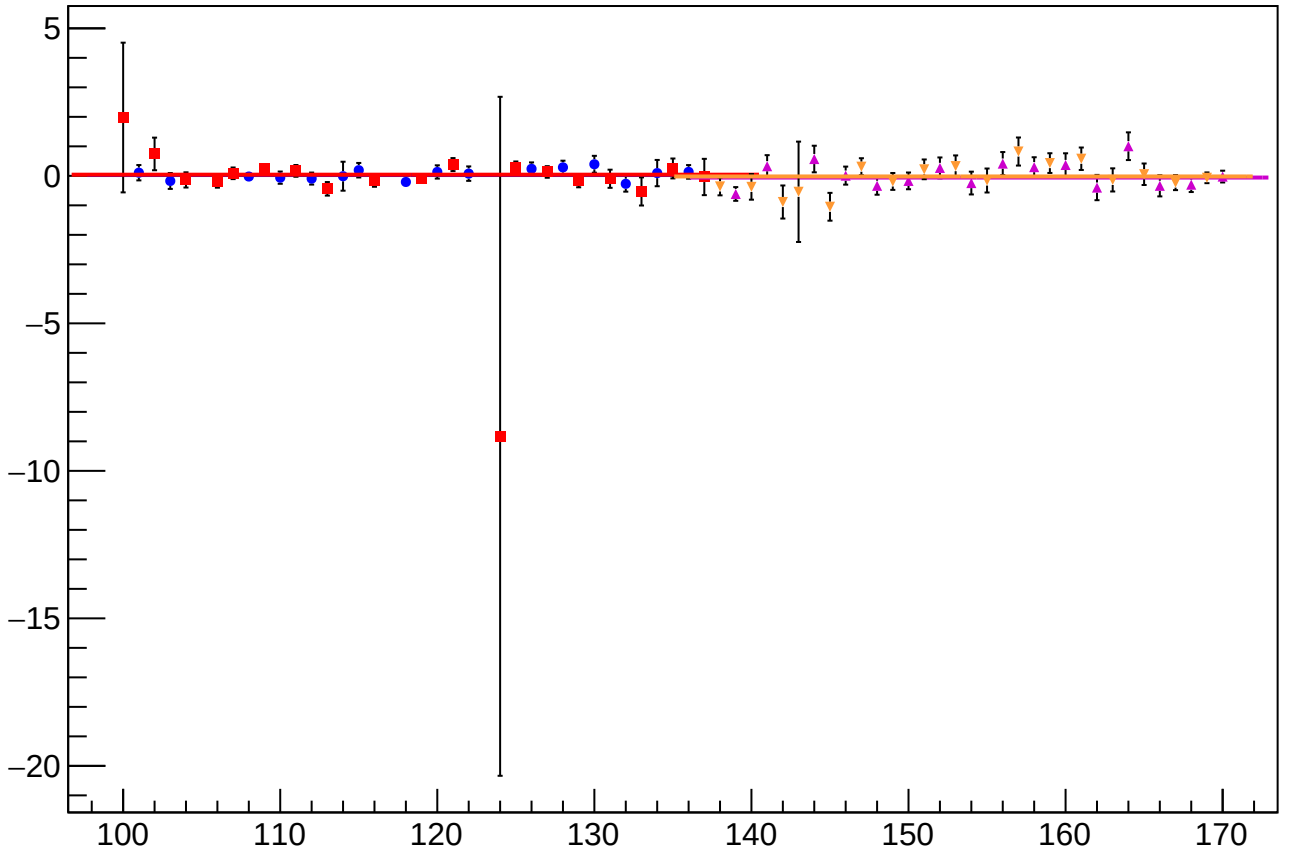
Right Out: 134.505+/-0.039 $\chi^2$/NDF: 1606383.2/18

Left In: 275.313+/-0.056 $\chi^2$/NDF:1567652.8/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417880.7/32

All: 185.396+/-0.023 $\chi^2$/NDF: 14930641.4/67

- sign 180.124+/-0.032 $\chi^2$/NDF: 7455426.0/34




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

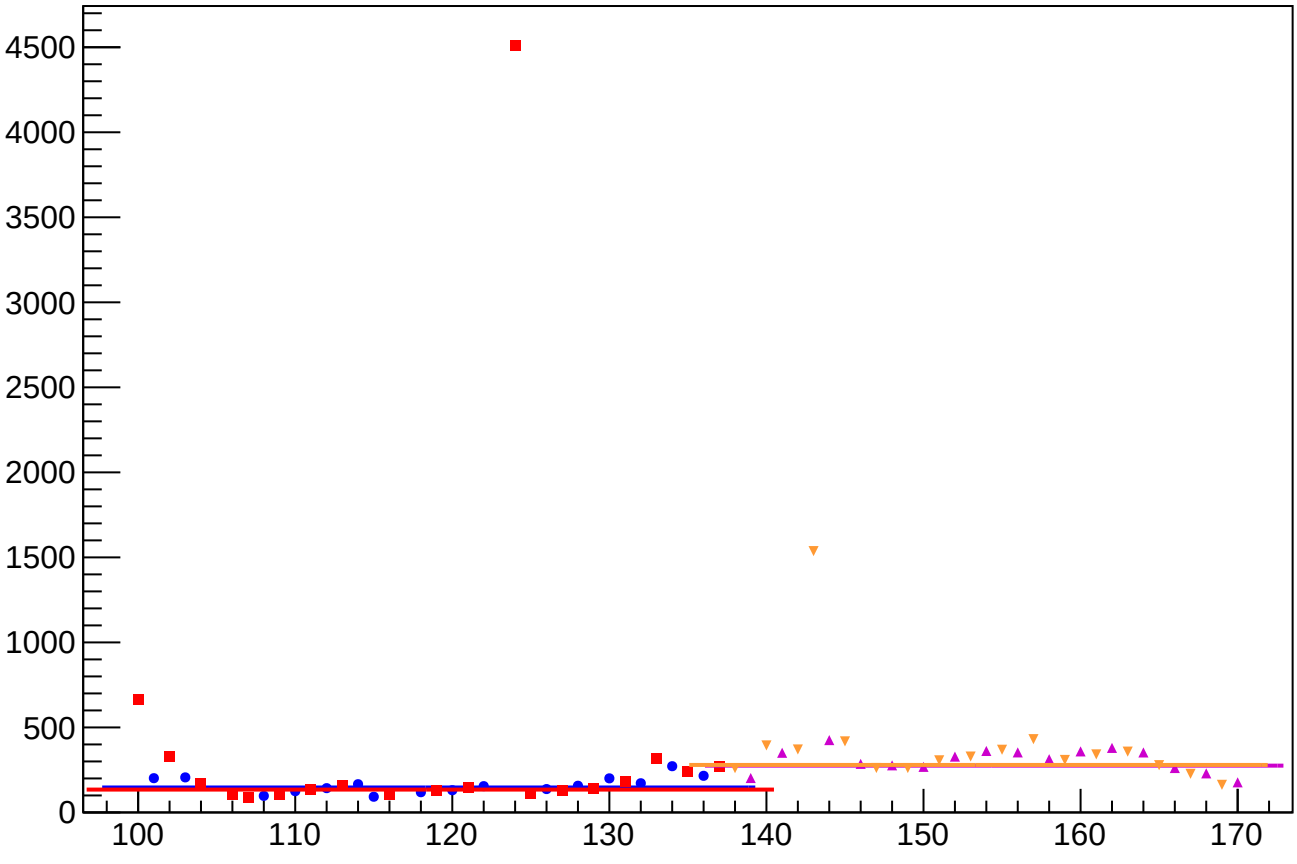
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998704.7/15

Left Out: 279.404+/-0.058 $\chi^2$/NDF:2889224.6/16

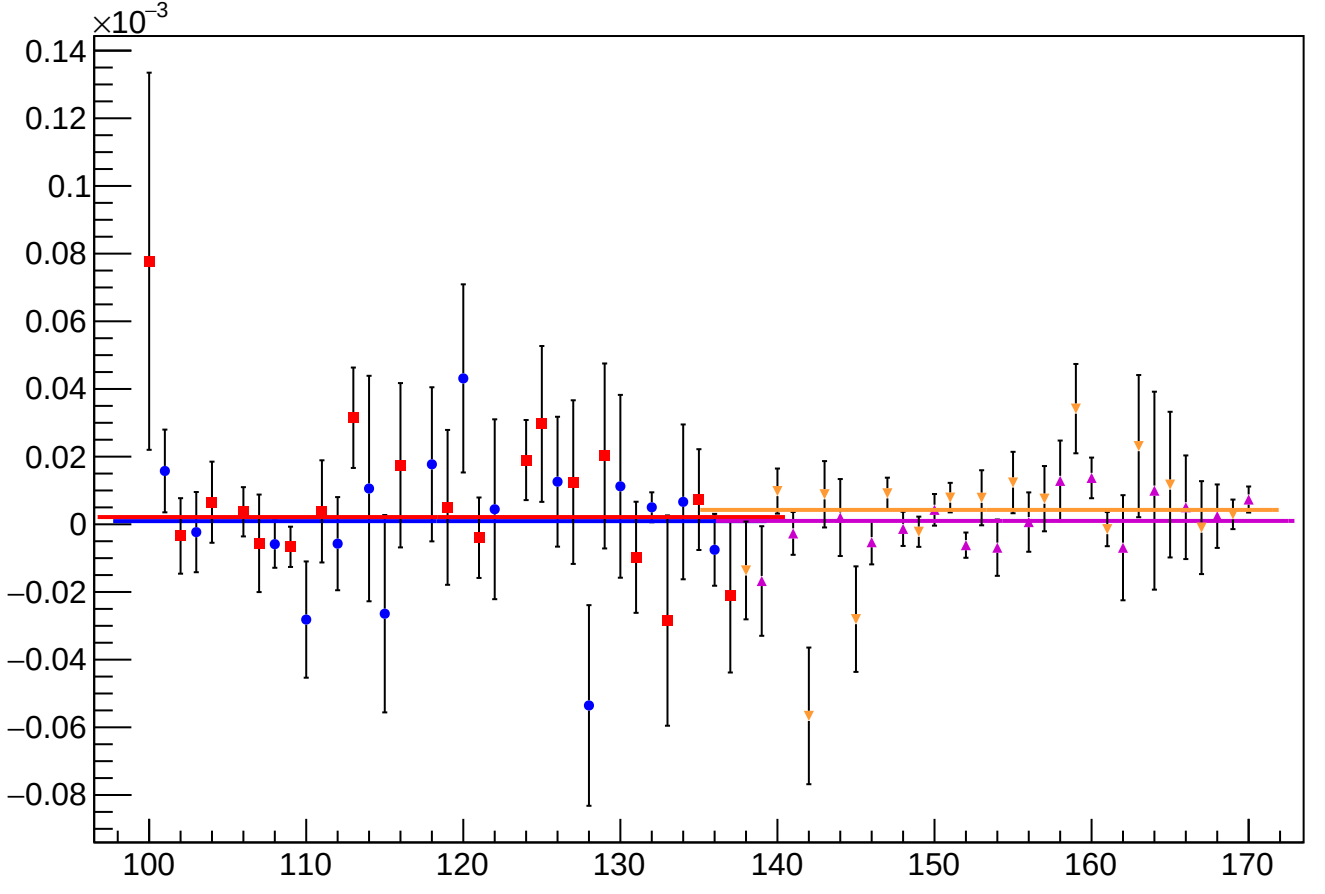
Right Out: 134.505+/-0.039 $\chi^2$/NDF: 1606383.2/18

Left In: 275.313+/-0.056 $\chi^2$/NDF:1567652.8/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417880.7/32

All: 185.396+/-0.023 $\chi^2$/NDF: 14930641.4/67

- sign 180.124+/-0.032 $\chi^2$/NDF: 7455426.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:28.4/16

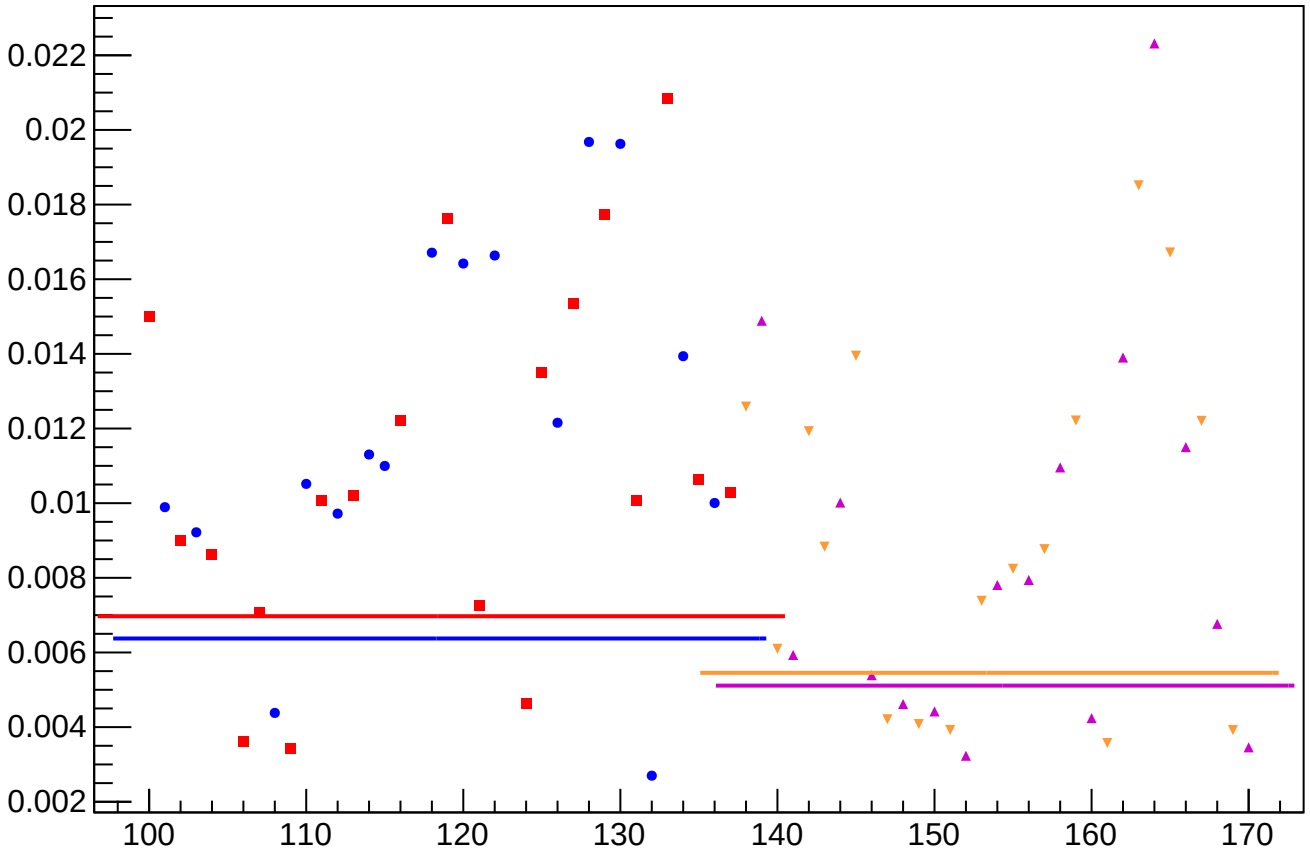
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 16.0/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:16.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 77.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 32.5/34




Right In: 0.006+/-0.000 $\chi^2$/NDF: 4639775.7/15

Left Out: 0.005+/-0.000 $\chi^2$/NDF:5512404.9/16

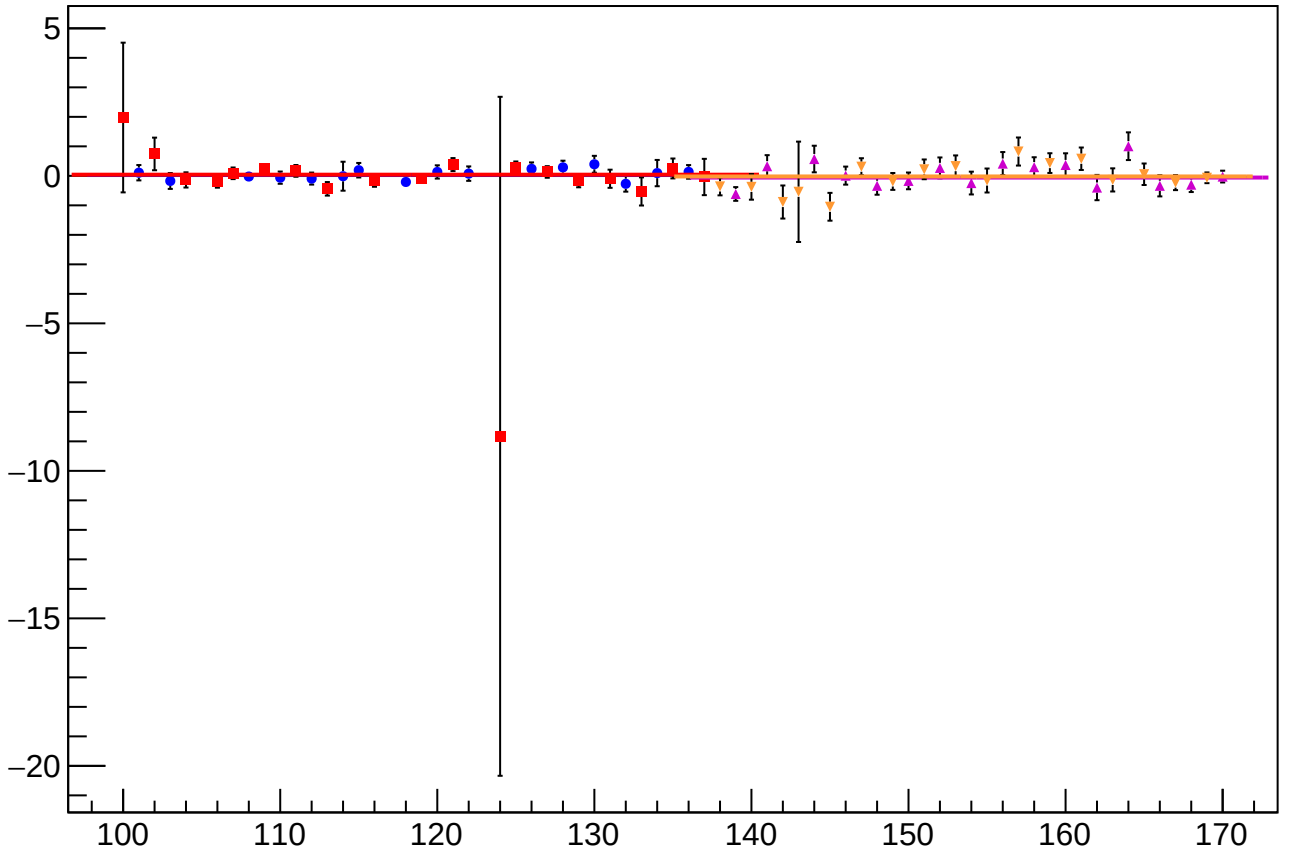
Right Out: 0.007+/-0.000 $\chi^2$/NDF: 3409939.3/18

Left In: 0.005+/-0.000 $\chi^2$/NDF:4760884.8/15

+ sign 0.006+/-0.000 $\chi^2$/NDF: 10299064.2/32

All: 0.006+/-0.000 $\chi^2$/NDF: 19066016.3/67

- sign 0.006+/-0.000 $\chi^2$/NDF: 8756586.9/34




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

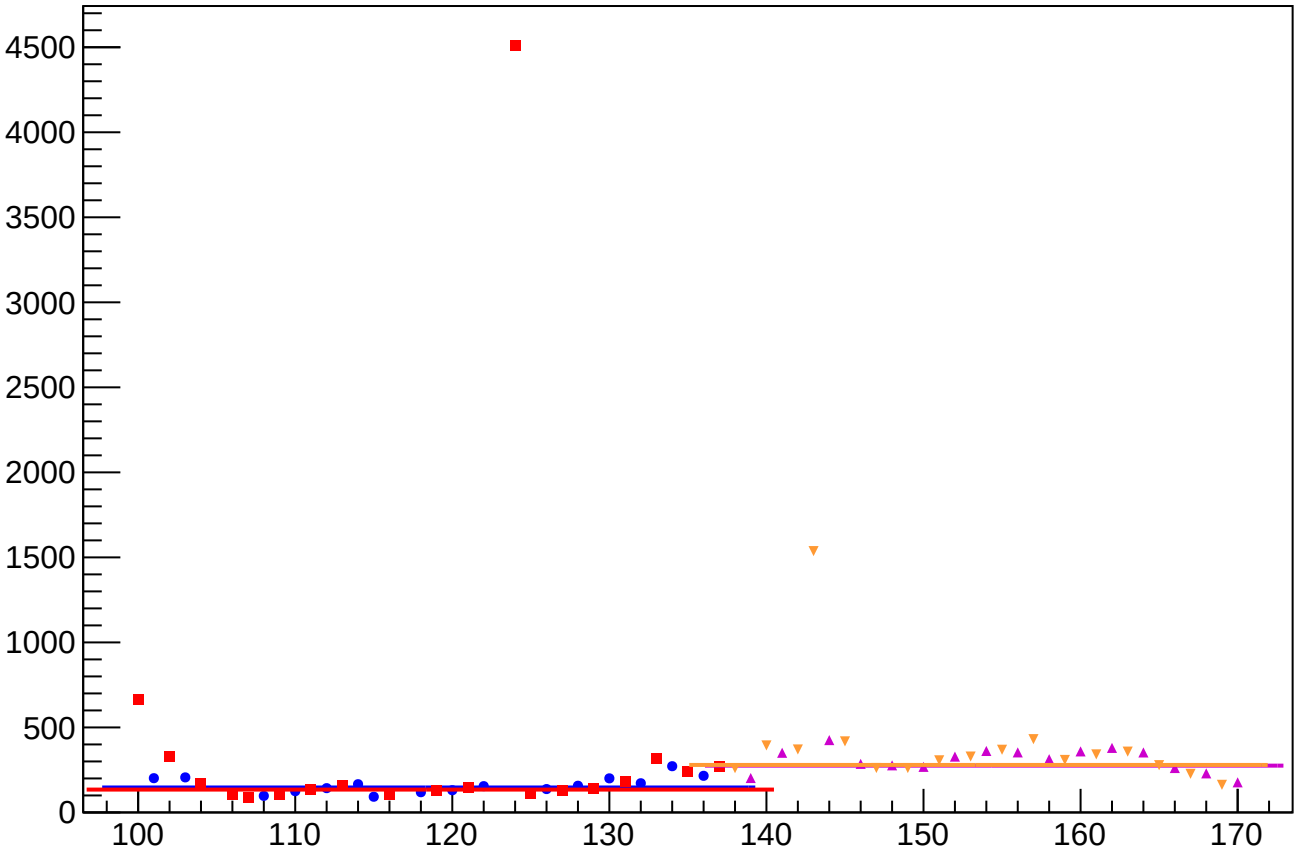
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998646.8/15

Left Out: 279.406+/-0.058 $\chi^2$/NDF:2889306.4/16

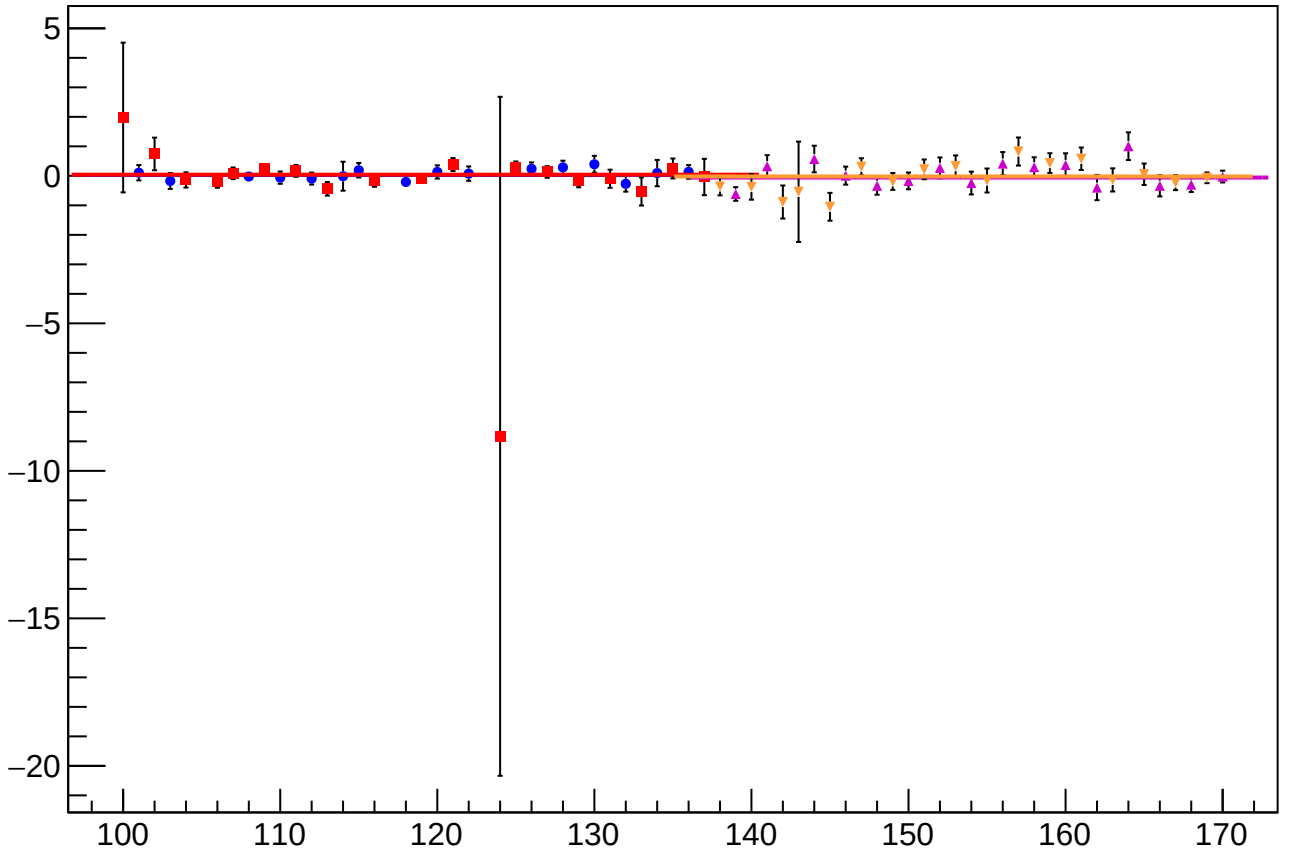
Right Out: 134.506+/-0.039 $\chi^2$/NDF: 1606310.4/18

Left In: 275.317+/-0.056 $\chi^2$/NDF:1567670.2/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417992.1/32

All: 185.397+/-0.023 $\chi^2$/NDF: 14930726.9/67

- sign 180.126+/-0.032 $\chi^2$/NDF: 7455416.9/34




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

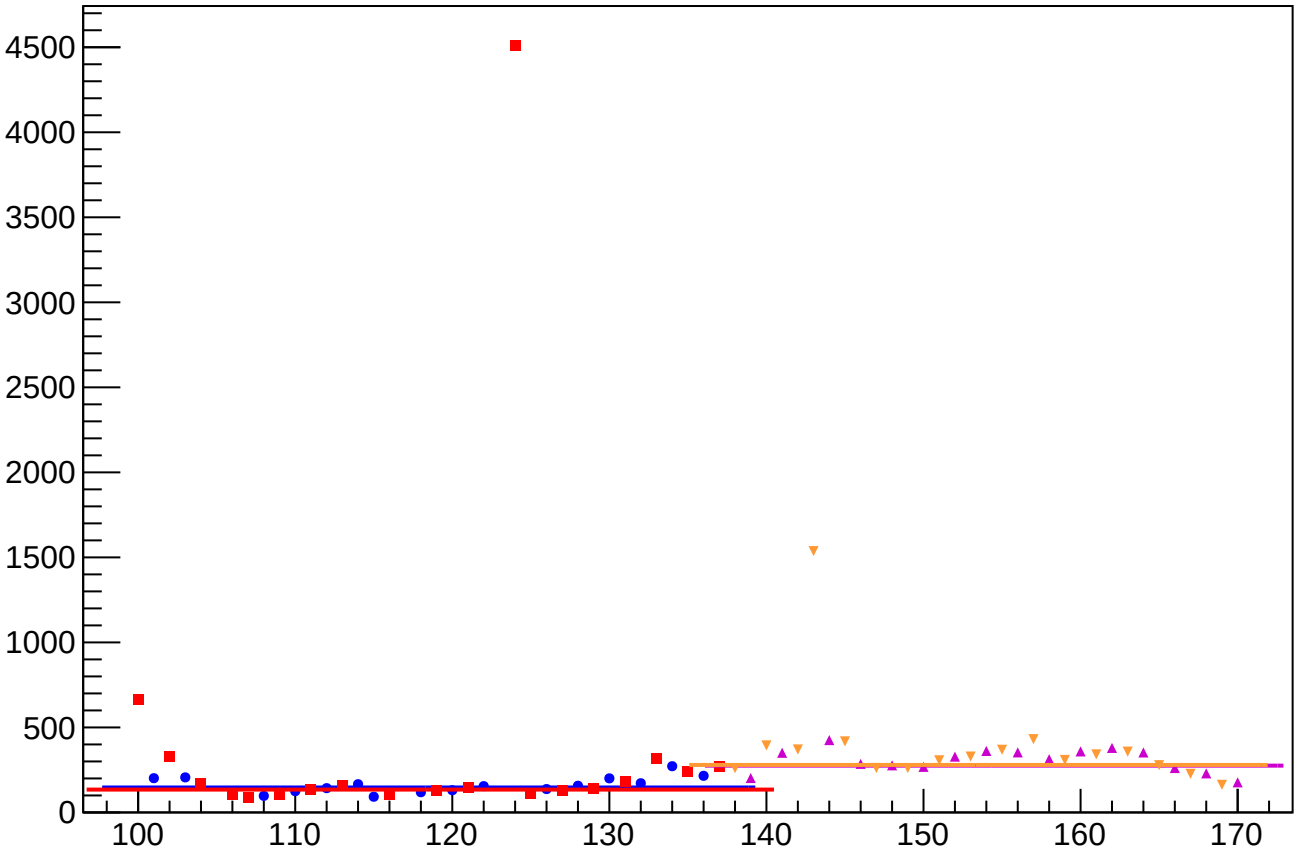
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998646.8/15

Left Out: 279.406+/-0.058 $\chi^2$/NDF:2889306.4/16

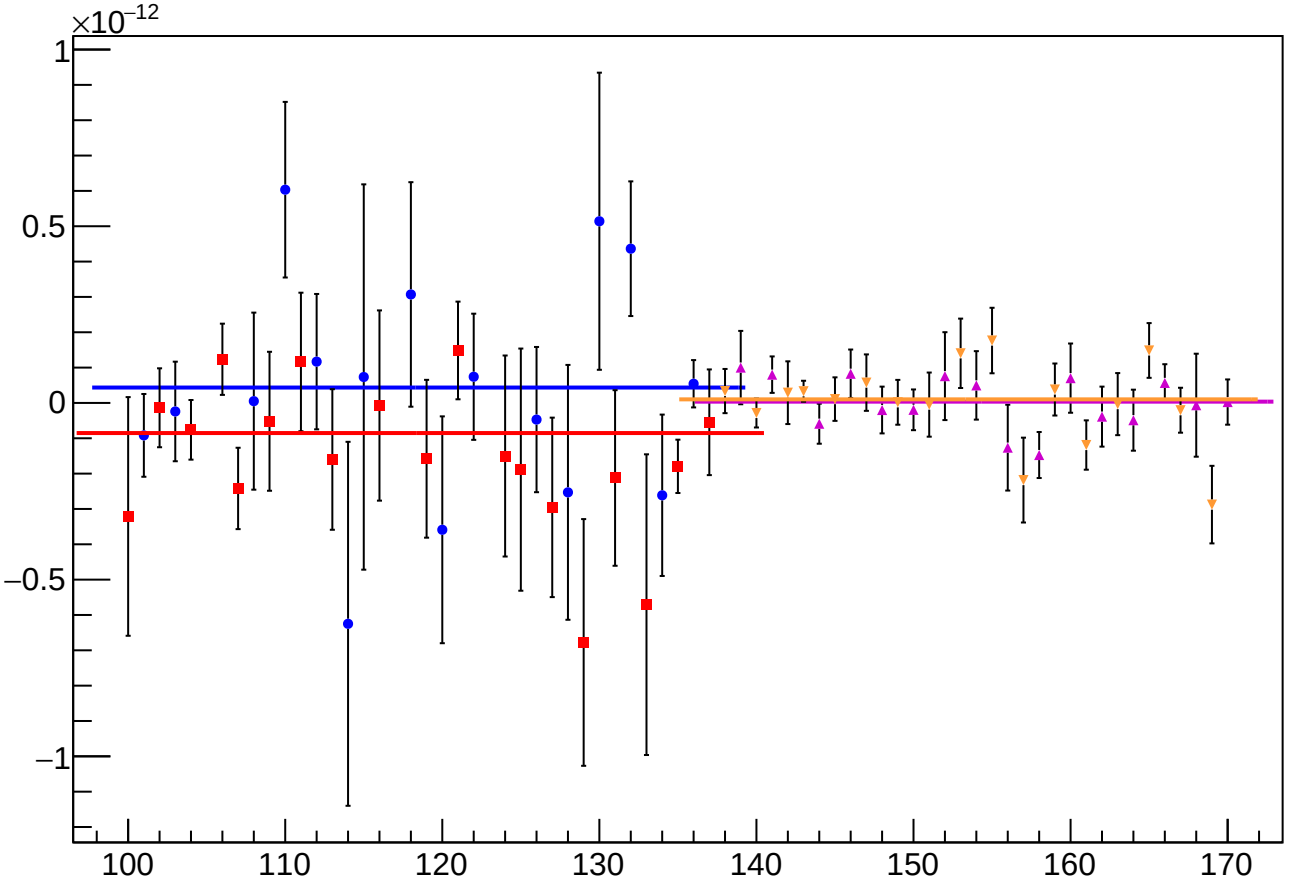
Right Out: 134.506+/-0.039 $\chi^2$/NDF: 1606310.4/18

Left In: 275.317+/-0.056 $\chi^2$/NDF:1567670.2/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417992.1/32

All: 185.397+/-0.023 $\chi^2$/NDF: 14930726.9/67

- sign 180.126+/-0.032 $\chi^2$/NDF: 7455416.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 19.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:25.1/16

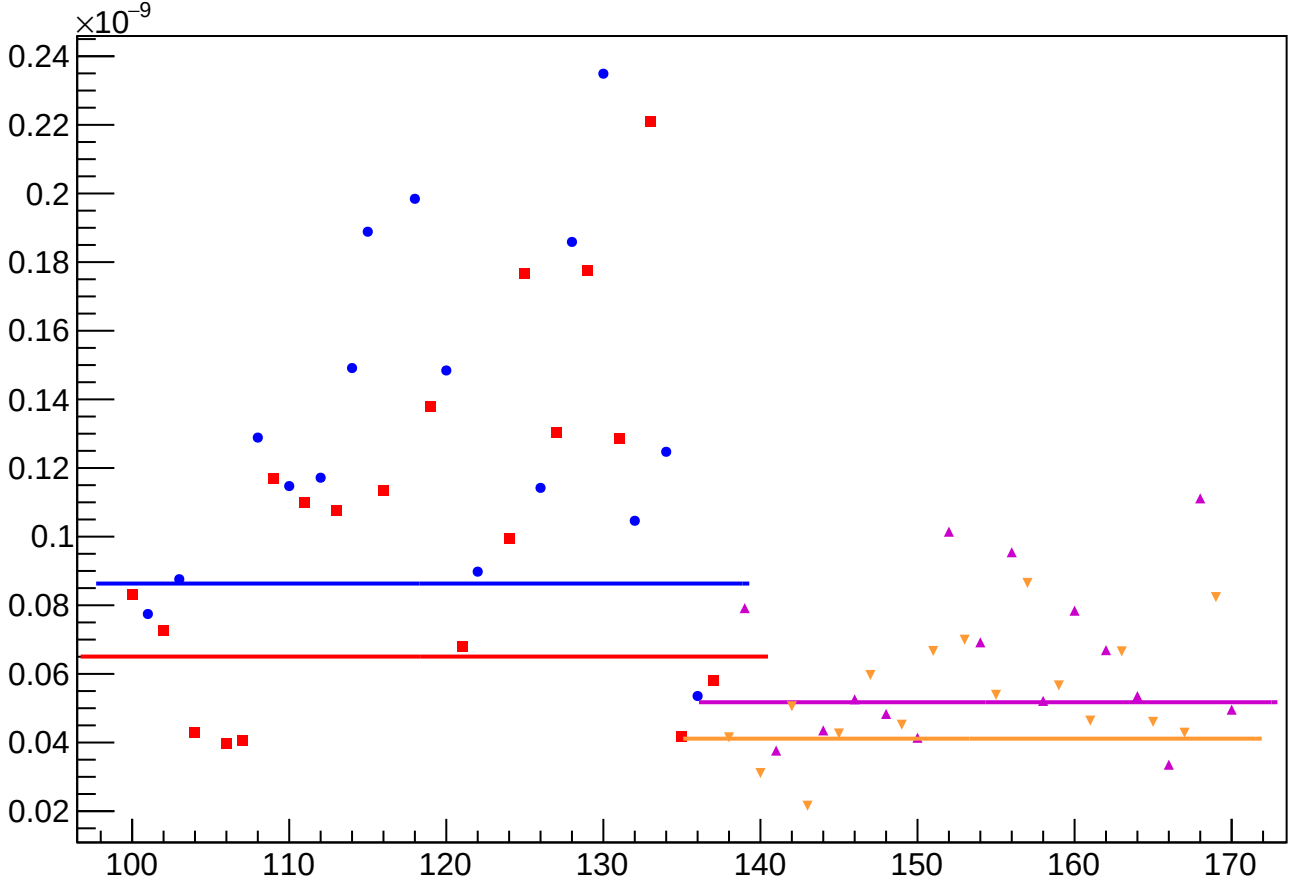
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:15.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 85.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 38.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1565662.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2344358.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2158861.4/18

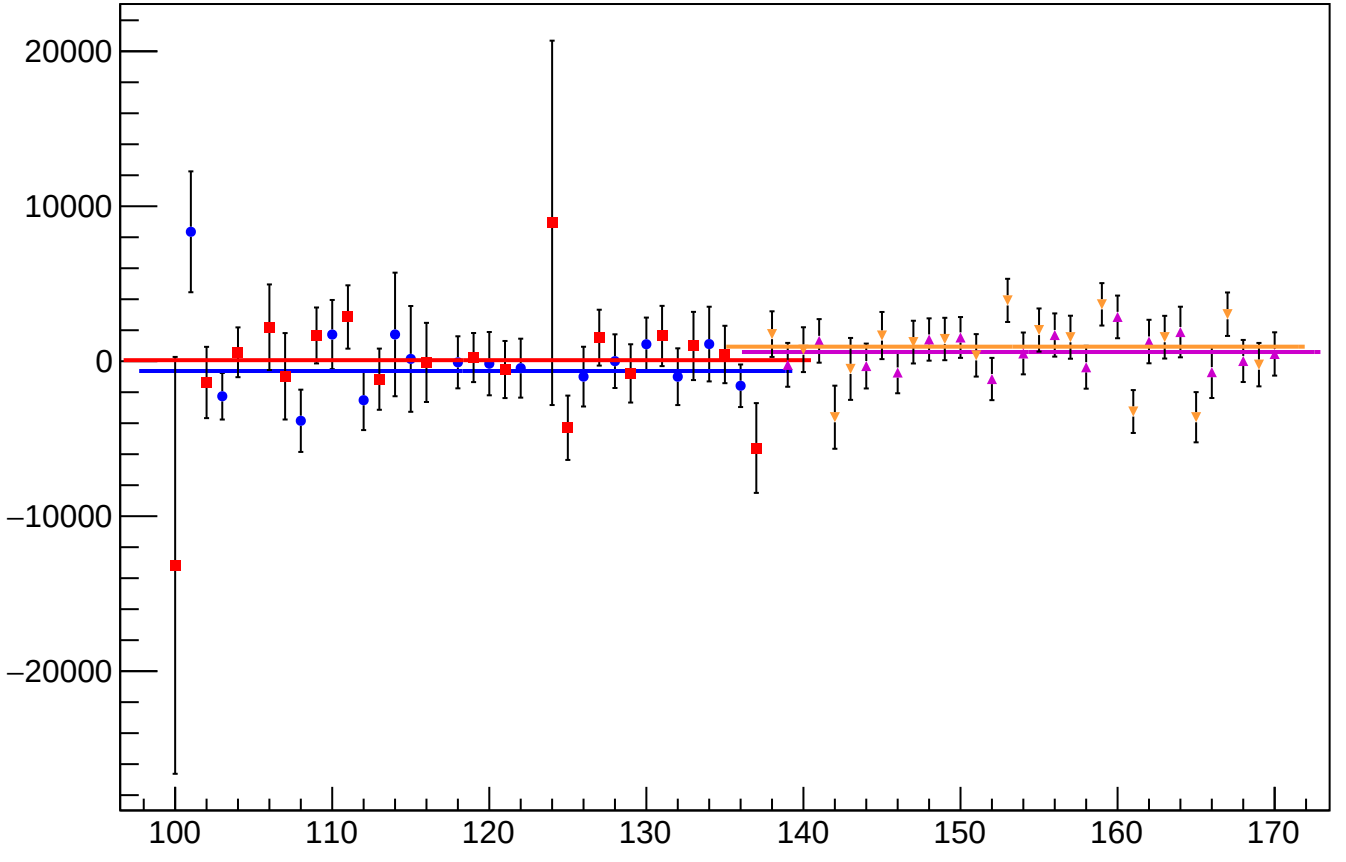
Left In: 0.000+/-0.000 $\chi^2$/NDF:1829490.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5889730.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10411356.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4224126.8/34

# reg_asym_atl1r2_dd_atl2r1_dd_dd_mean vs Slug




Right In: -631.041+/-488.663 $\chi^2$/NDF: 13.9/15

Left Out: 939.060+/-353.814 $\chi^2$/NDF:35.9/16

Right Out: 67.642+/-487.761 $\chi^2$/NDF: 15.9/18

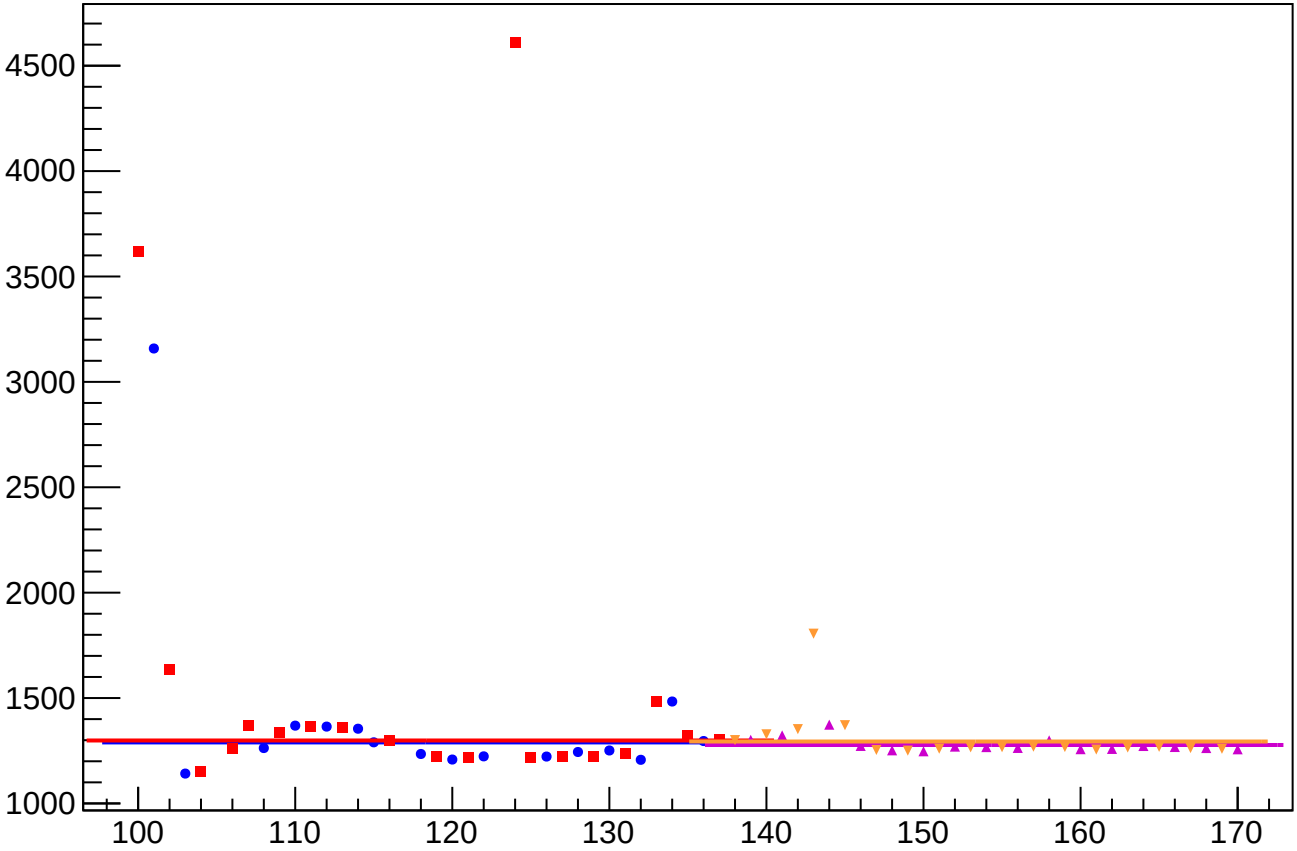
Left In: 594.475+/-351.364 $\chi^2$/NDF:9.9/15

+ sign 399.046+/-286.582 $\chi^2$/NDF: 56.6/32

All: 406.807+/-202.116 $\chi^2$/NDF: 83.2/67

- sign 414.489+/-285.095 $\chi^2$/NDF: 26.6/34

# reg_asym_atl1r2_dd_atl2r1_dd_dd_rms vs Slug




Right In: 1289.466+/-0.346 $\chi^2$/NDF: 514675.0/15

Left Out: 1293.789+/-0.250 $\chi^2$/NDF:151885.4/16

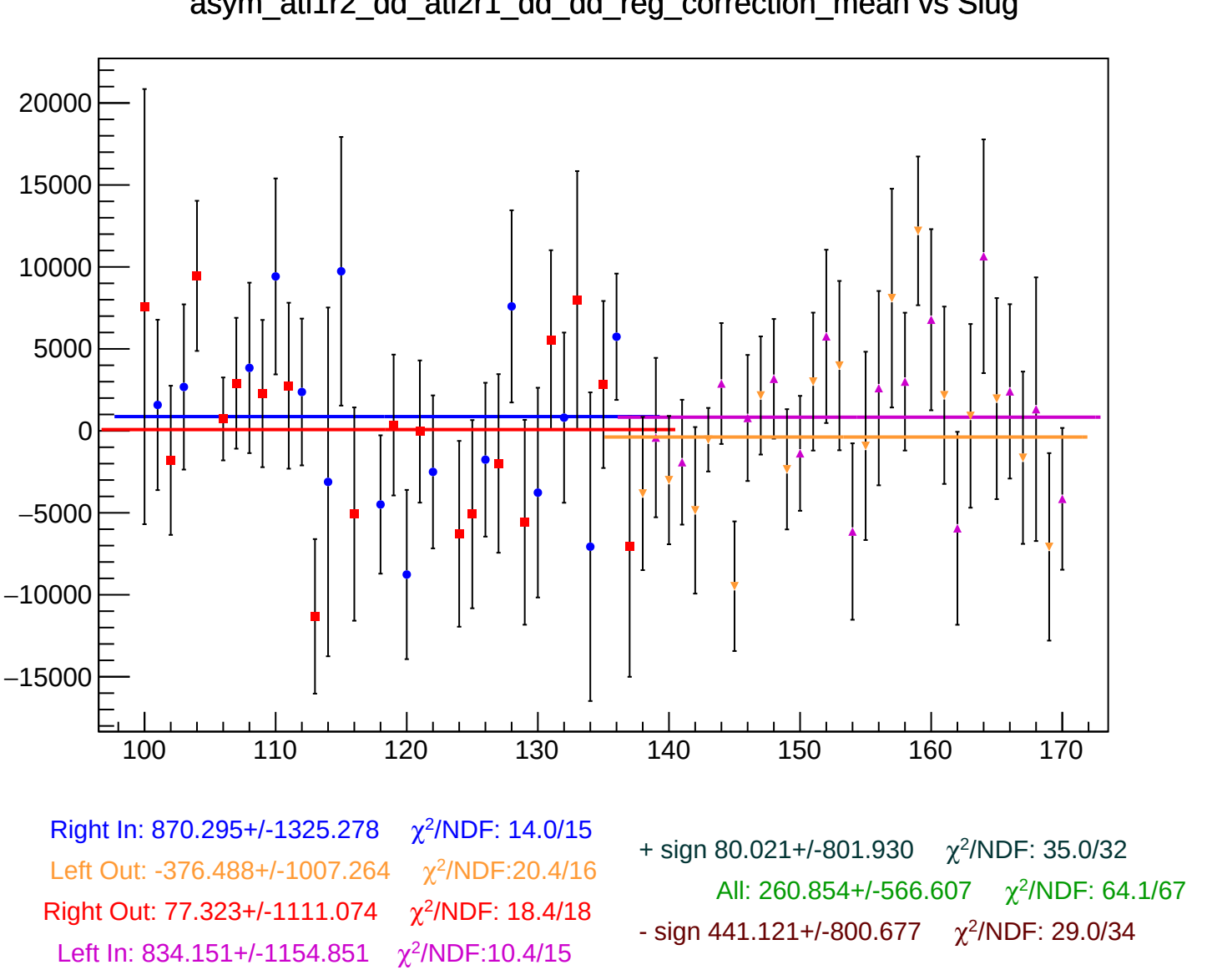
Right Out: 1298.656+/-0.344 $\chi^2$/NDF: 319374.9/18

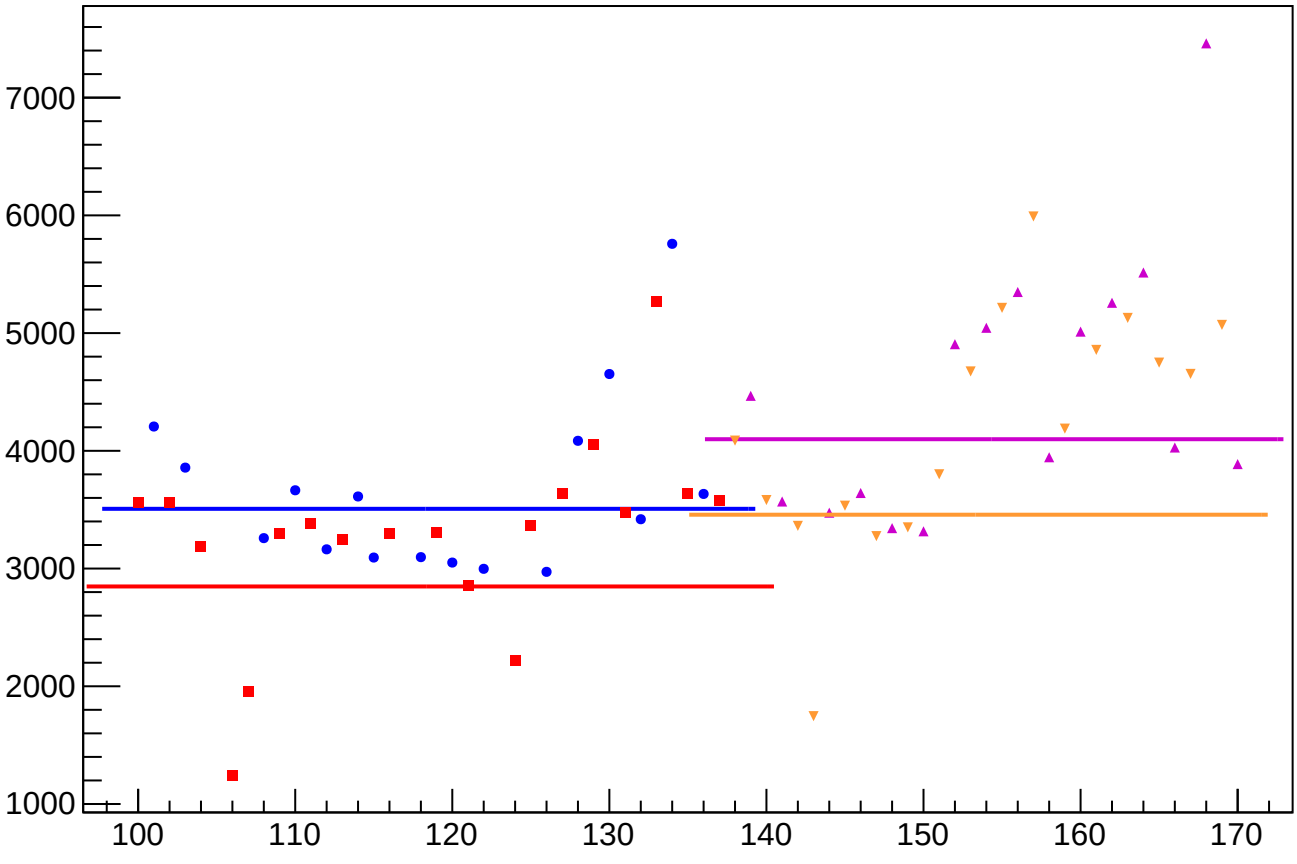
Left In: 1277.240+/-0.248 $\chi^2$/NDF:15662.6/15

+ sign 1292.302+/-0.203 $\chi^2$/NDF: 666663.1/32

All: 1288.418+/-0.143 $\chi^2$/NDF: 1004977.8/67

- sign 1284.582+/-0.201 $\chi^2$/NDF: 337584.5/34


asym_atl1r2_dd_atl2r1_dd_dd_reg_correction_mean vs Slug
20000
15000
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: 870.295+/-1325.278 χ²/NDF: 14.0/15
Left Out: -376.488+/-1007.264 χ²/NDF:20.4/16
Right Out: 77.323+/-1111.074 χ²/NDF: 18.4/18
Left In: 834.151+/-1154.851 χ²/NDF:10.4/15
+ sign 80.021+/-801.930 χ²/NDF: 35.0/32
All: 260.854+/-566.607 χ²/NDF: 64.1/67
- sign 441.121+/-800.677 χ²/NDF: 29.0/34




Right In: 3507.397+/-0.937 $\chi^2$/NDF: 353979.1/15

Left Out: 3457.353+/-0.712 $\chi^2$/NDF:2918517.7/16

Right Out: 2847.833+/-0.786 $\chi^2$/NDF: 1499373.6/18

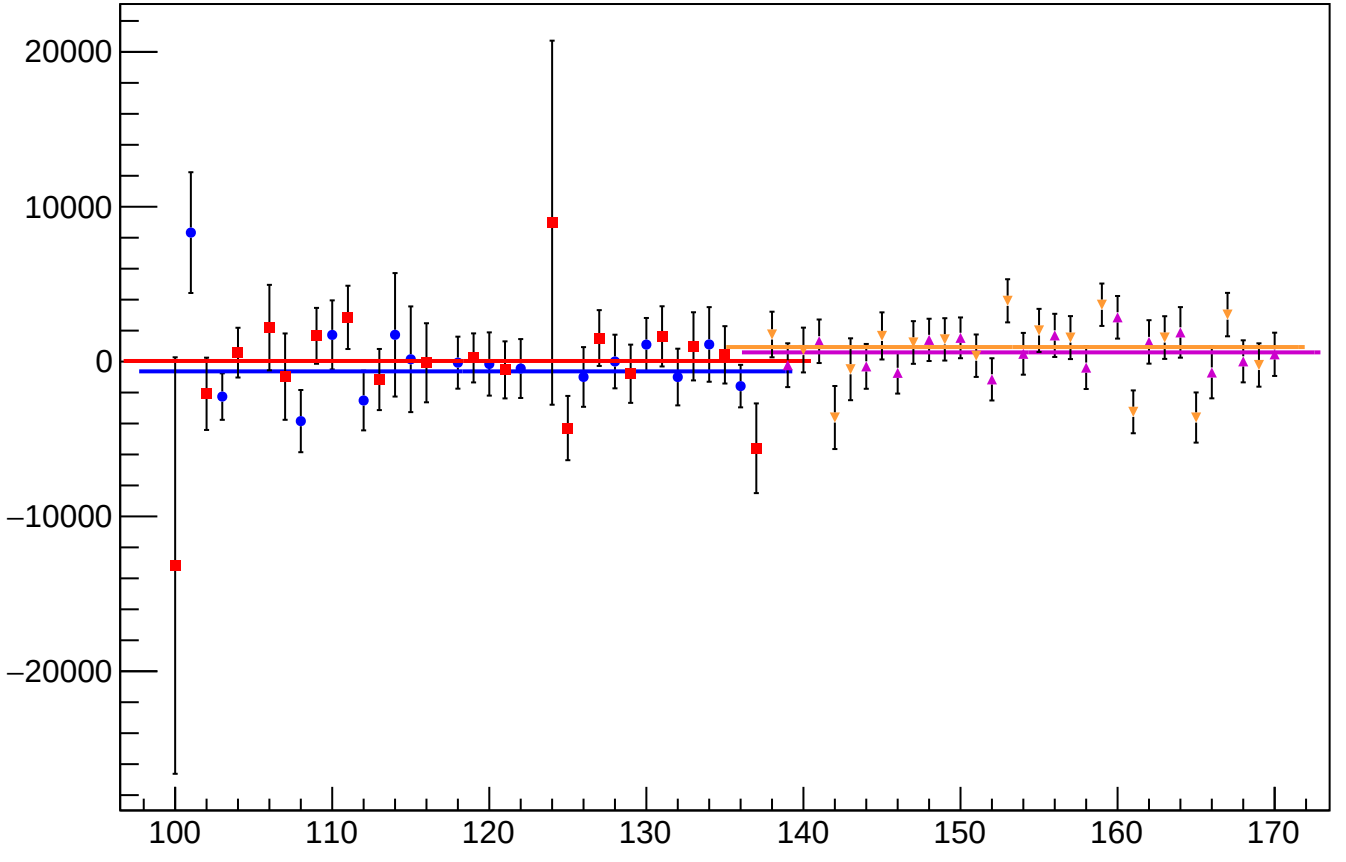
Left In: 4098.636+/-0.817 $\chi^2$/NDF:1087016.1/15

+ sign 3475.676+/-0.567 $\chi^2$/NDF: 3274304.4/32

All: 3462.357+/-0.401 $\chi^2$/NDF: 7080182.5/67

- sign 3449.079+/-0.566 $\chi^2$/NDF: 3804776.3/34

# cor_asym_atl1r2_dd_atl2r1_dd_dd_mean vs Slug




Right In: -631.427+/-488.663 $\chi^2$/NDF: 13.9/15

Left Out: 939.089+/-353.814 $\chi^2$/NDF:35.9/16

Right Out: 38.623+/-488.084 $\chi^2$/NDF: 16.3/18

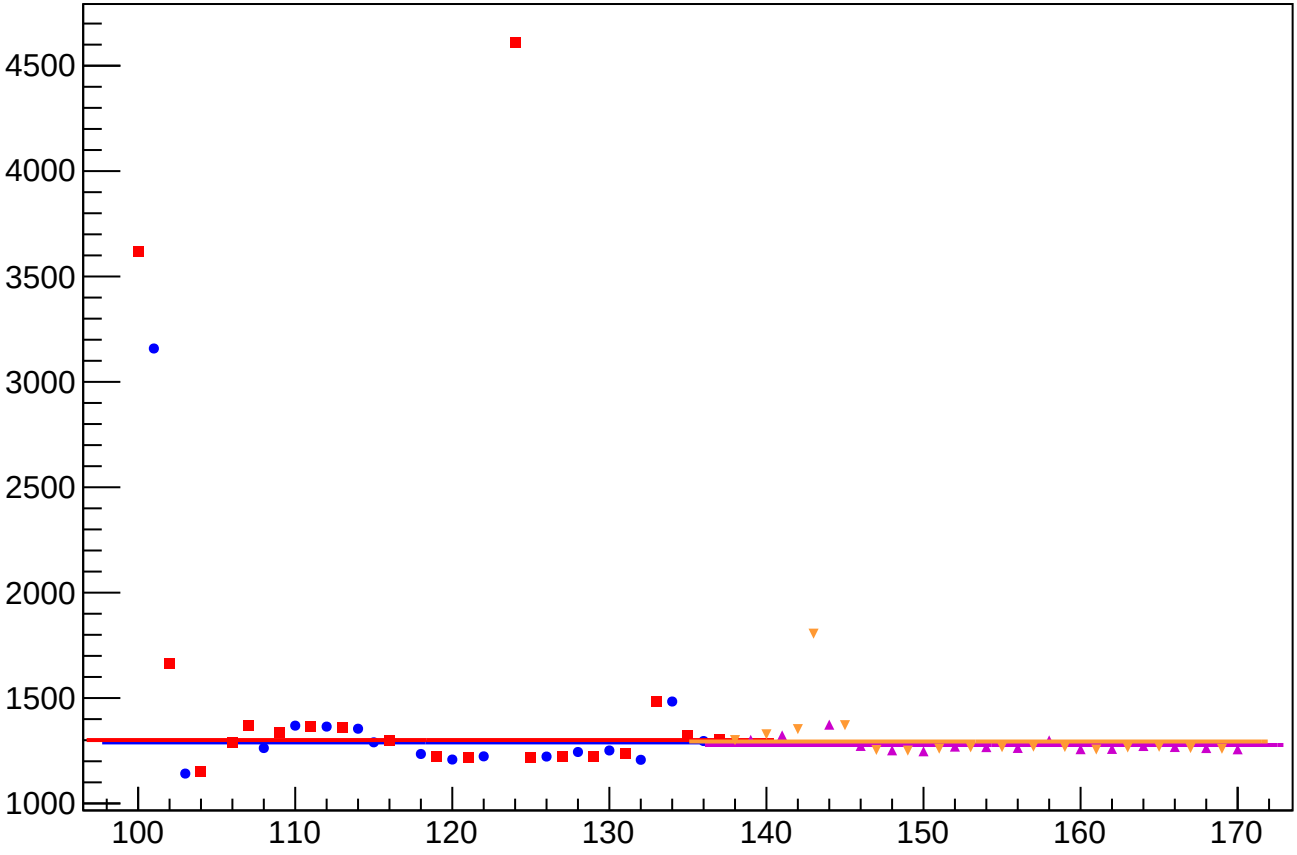
Left In: 594.460+/-351.364 $\chi^2$/NDF:9.9/15

+ sign 398.932+/-286.582 $\chi^2$/NDF: 56.6/32

All: 401.846+/-202.139 $\chi^2$/NDF: 83.7/67

- sign 404.731+/-285.160 $\chi^2$/NDF: 27.1/34

# cor_asym_atl1r2_dd_atl2r1_dd_dd_rms vs Slug




Right In: 1289.466+/-0.346 $\chi^2$/NDF: 514676.5/15

Left Out: 1293.789+/-0.250 $\chi^2$/NDF:151885.4/16

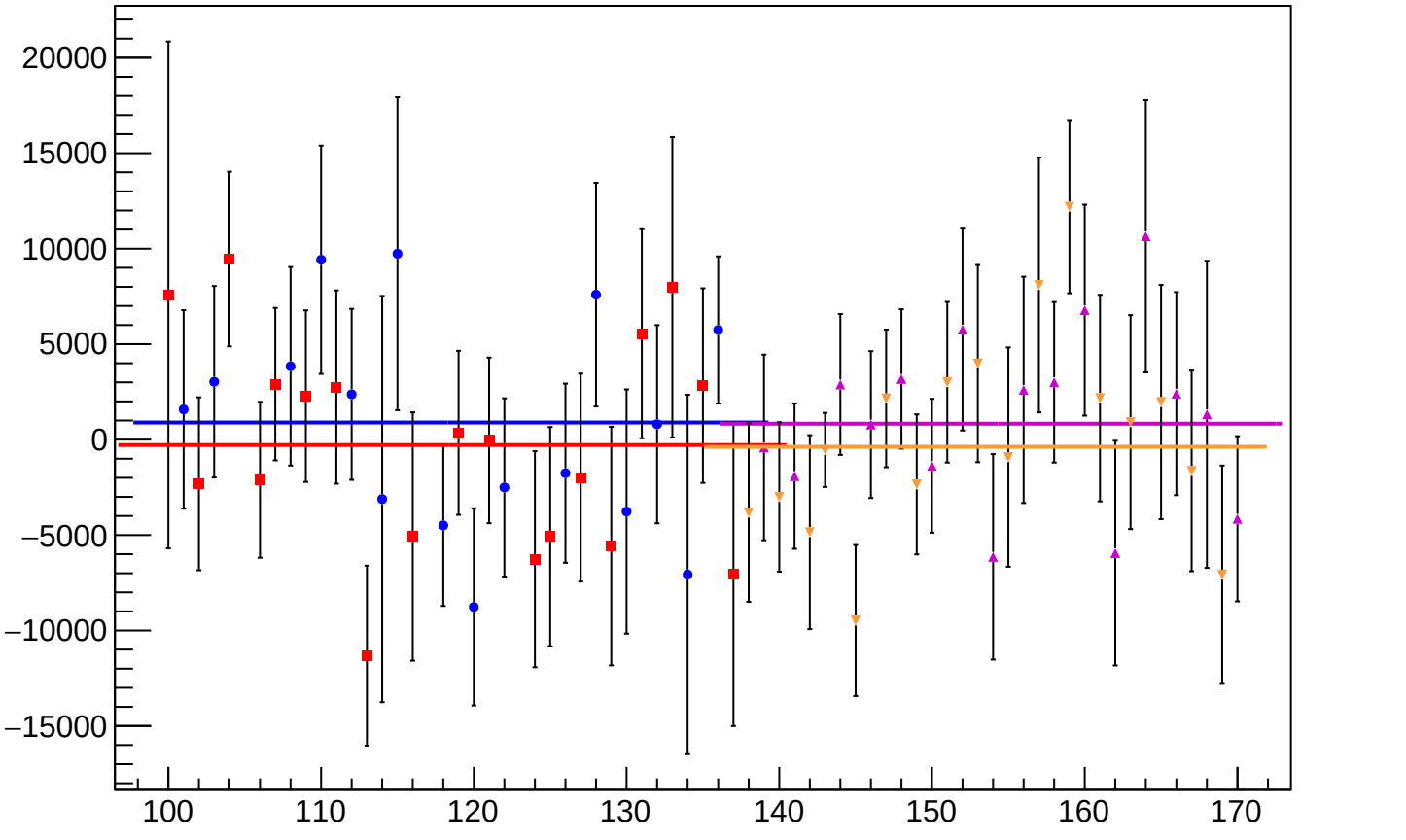
Right Out: 1300.684+/-0.344 $\chi^2$/NDF: 325907.6/18

Left In: 1277.240+/-0.248 $\chi^2$/NDF:15662.6/15

+ sign 1292.302+/-0.203 $\chi^2$/NDF: 666664.6/32

All: 1288.762+/-0.143 $\chi^2$/NDF: 1011888.4/67

- sign 1285.262+/-0.202 $\chi^2$/NDF: 344616.9/34




Right In: 896.017+/-1324.823 $\chi^2$/NDF: 14.1/15

Left Out: -376.389+/-1007.262 $\chi^2$/NDF:20.4/16

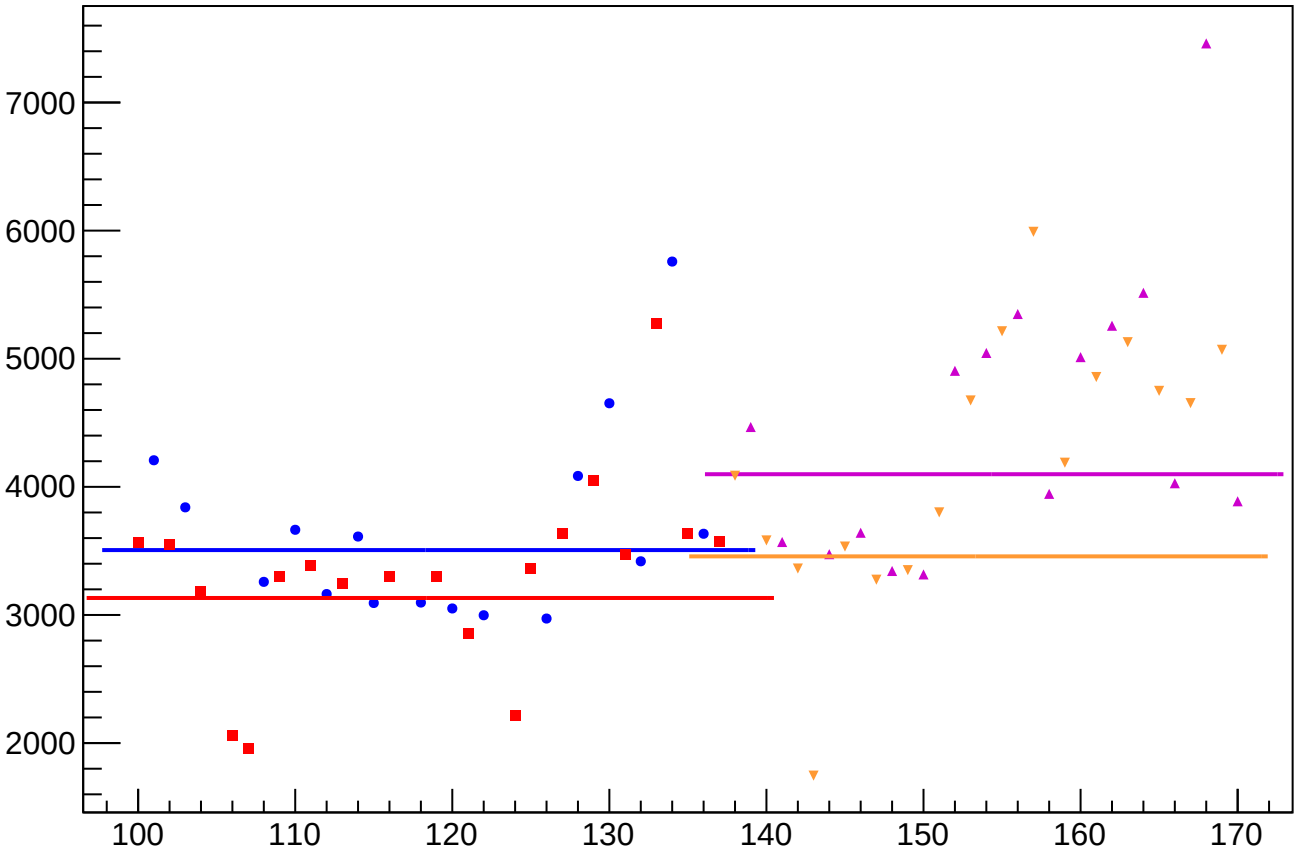
Right Out: -283.963+/-1183.171 $\chi^2$/NDF: 18.6/18

Left In: 834.195+/-1154.849 $\chi^2$/NDF:10.4/15

+ sign 89.704+/-801.828 $\chi^2$/NDF: 35.0/32

All: 186.176+/-575.480 $\chi^2$/NDF: 64.6/67

- sign 288.659+/-826.433 $\chi^2$/NDF: 29.5/34




Right In: 3506.484+/-0.937 $\chi^2$/NDF: 353237.7/15

Left Out: 3457.343+/-0.712 $\chi^2$/NDF:2918548.6/16

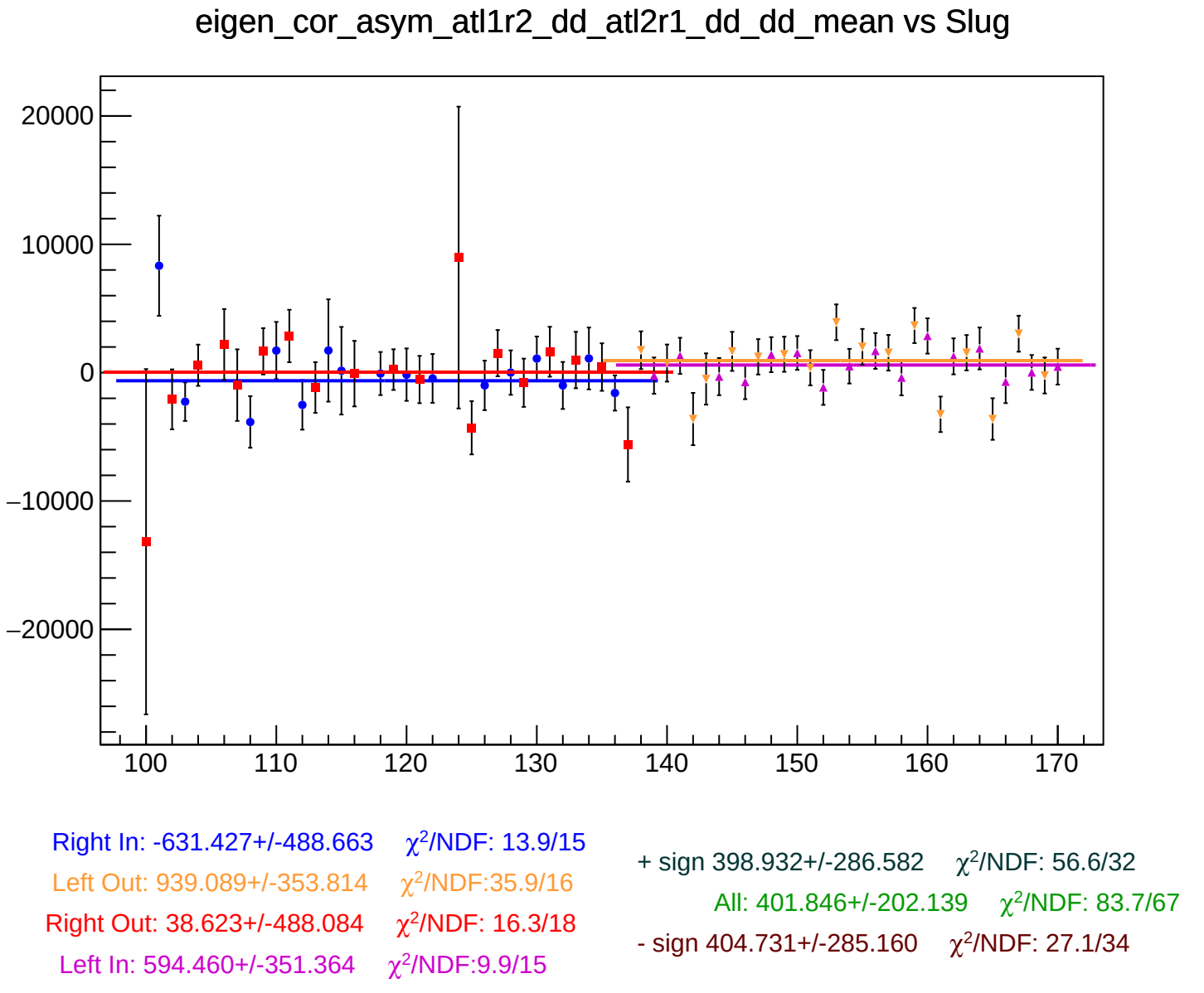
Right Out: 3132.586+/-0.837 $\chi^2$/NDF: 649611.1/18

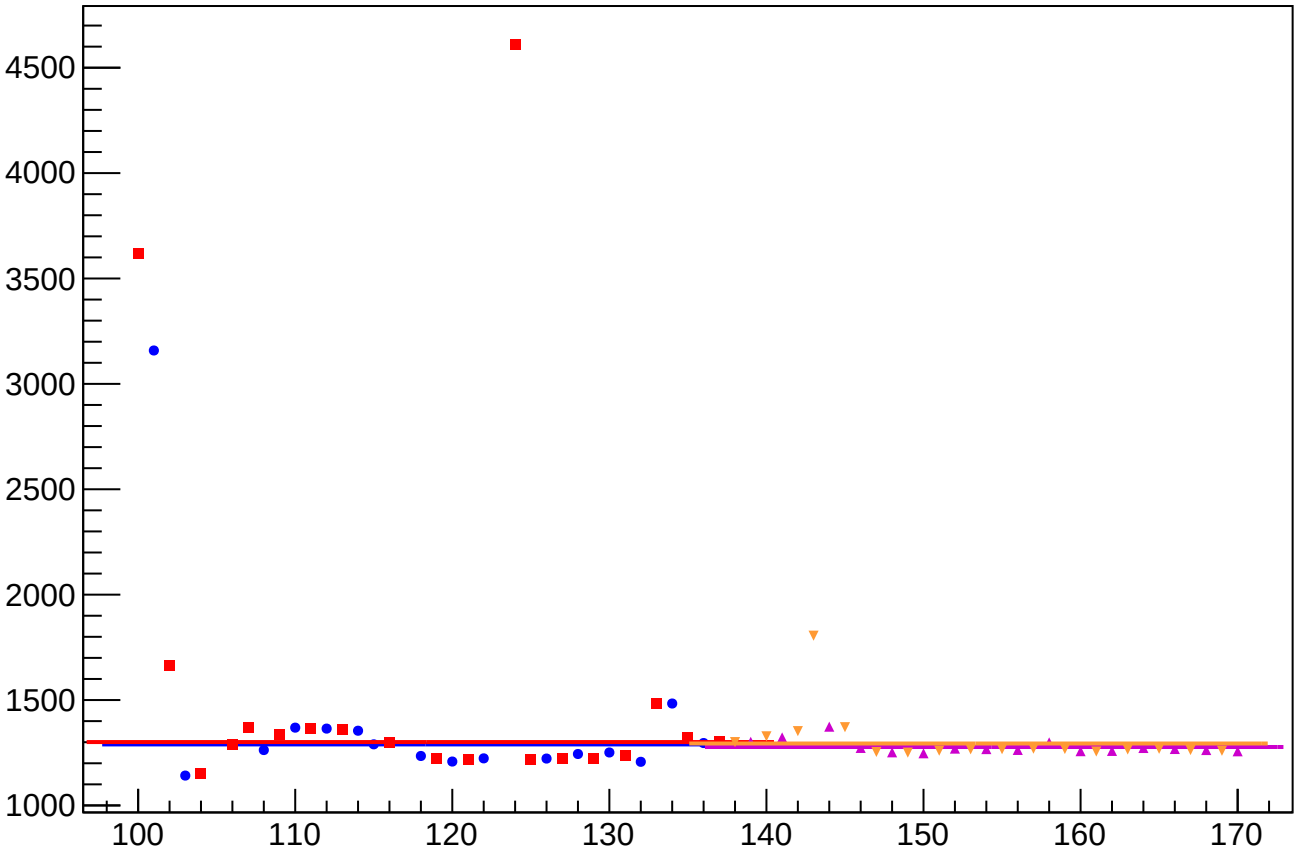
Left In: 4098.631+/-0.817 $\chi^2$/NDF:1087017.8/15

+ sign 3475.344+/-0.567 $\chi^2$/NDF: 3273530.0/32

All: 3549.031+/-0.407 $\chi^2$/NDF: 5727793.9/67

- sign 3627.310+/-0.584 $\chi^2$/NDF: 2419429.9/34


eigen_cor_asym_atl1r2_dd_atl2r1_dd_dd_mean vs Slug
20000
10000
0
−10000
−20000
100
110
120
130
140
150
160
170
Right In: -631.427+/-488.663 χ²/NDF: 13.9/15
Left Out: 939.089+/-353.814 χ²/NDF:35.9/16
Right Out: 38.623+/-488.084 χ²/NDF: 16.3/18
Left In: 594.460+/-351.364 χ²/NDF:9.9/15
+ sign 398.932+/-286.582 χ²/NDF: 56.6/32
All: 401.846+/-202.139 χ²/NDF: 83.7/67
- sign 404.731+/-285.160 χ²/NDF: 27.1/34




Right In: 1289.466+/-0.346 $\chi^2$/NDF: 514676.5/15

Left Out: 1293.789+/-0.250 $\chi^2$/NDF:151885.4/16

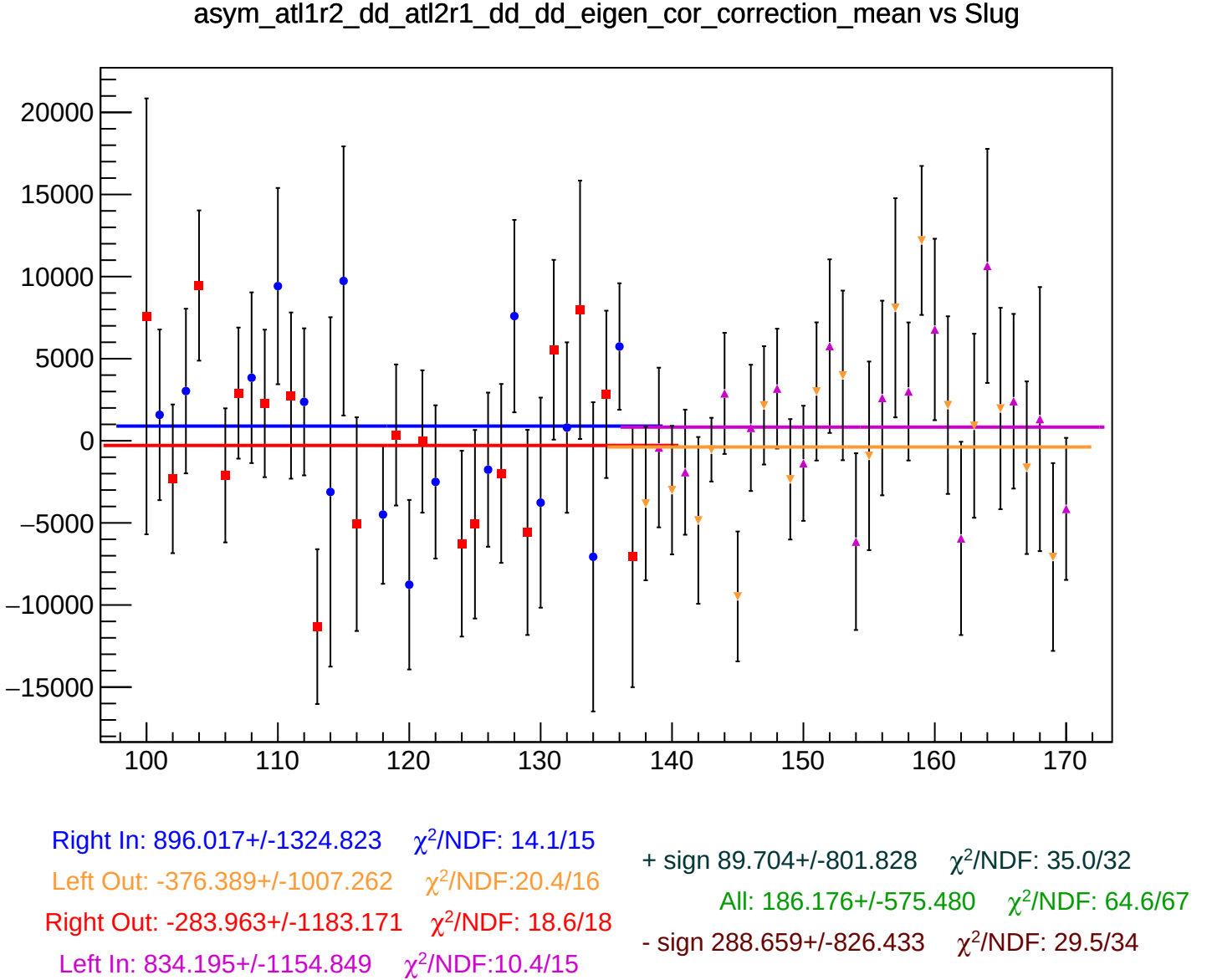
Right Out: 1300.684+/-0.344 $\chi^2$/NDF: 325907.6/18

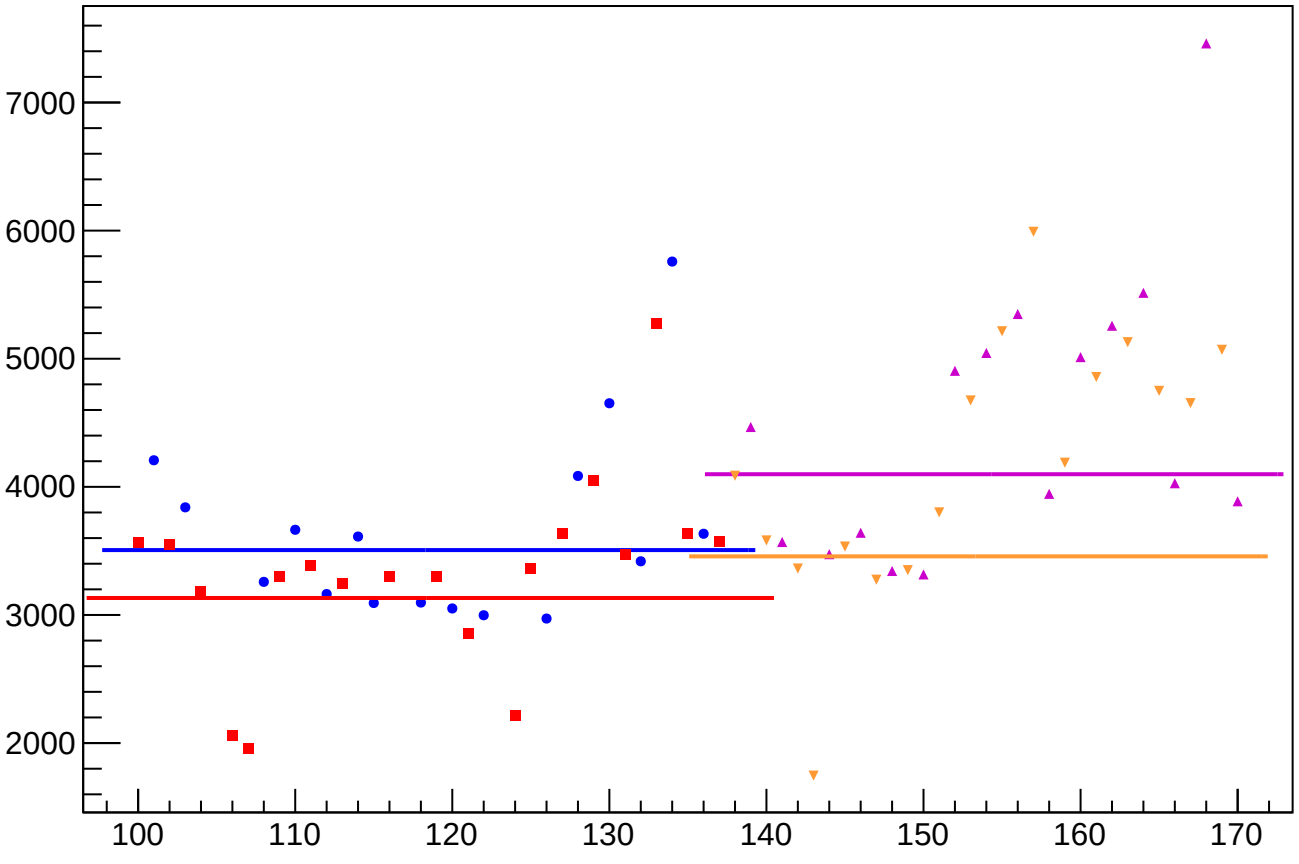
Left In: 1277.240+/-0.248 $\chi^2$/NDF:15662.6/15

+ sign 1292.302+/-0.203 $\chi^2$/NDF: 666664.6/32

All: 1288.762+/-0.143 $\chi^2$/NDF: 1011888.4/67

- sign 1285.262+/-0.202 $\chi^2$/NDF: 344616.9/34


asym_atl1r2_dd_atl2r1_dd_dd_eigen_cor_correction_mean vs Slug
20000
15000
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: 896.017+/-1324.823 χ²/NDF: 14.1/15
Left Out: -376.389+/-1007.262 χ²/NDF:20.4/16
Right Out: -283.963+/-1183.171 χ²/NDF: 18.6/18
Left In: 834.195+/-1154.849 χ²/NDF:10.4/15
+ sign 89.704+/-801.828 χ²/NDF: 35.0/32
All: 186.176+/-575.480 χ²/NDF: 64.6/67
- sign 288.659+/-826.433 χ²/NDF: 29.5/34




Right In: 3506.484+/-0.937 $\chi^2$/NDF: 353237.7/15

Left Out: 3457.343+/-0.712 $\chi^2$/NDF:2918548.6/16

Right Out: 3132.586+/-0.837 $\chi^2$/NDF: 649611.1/18

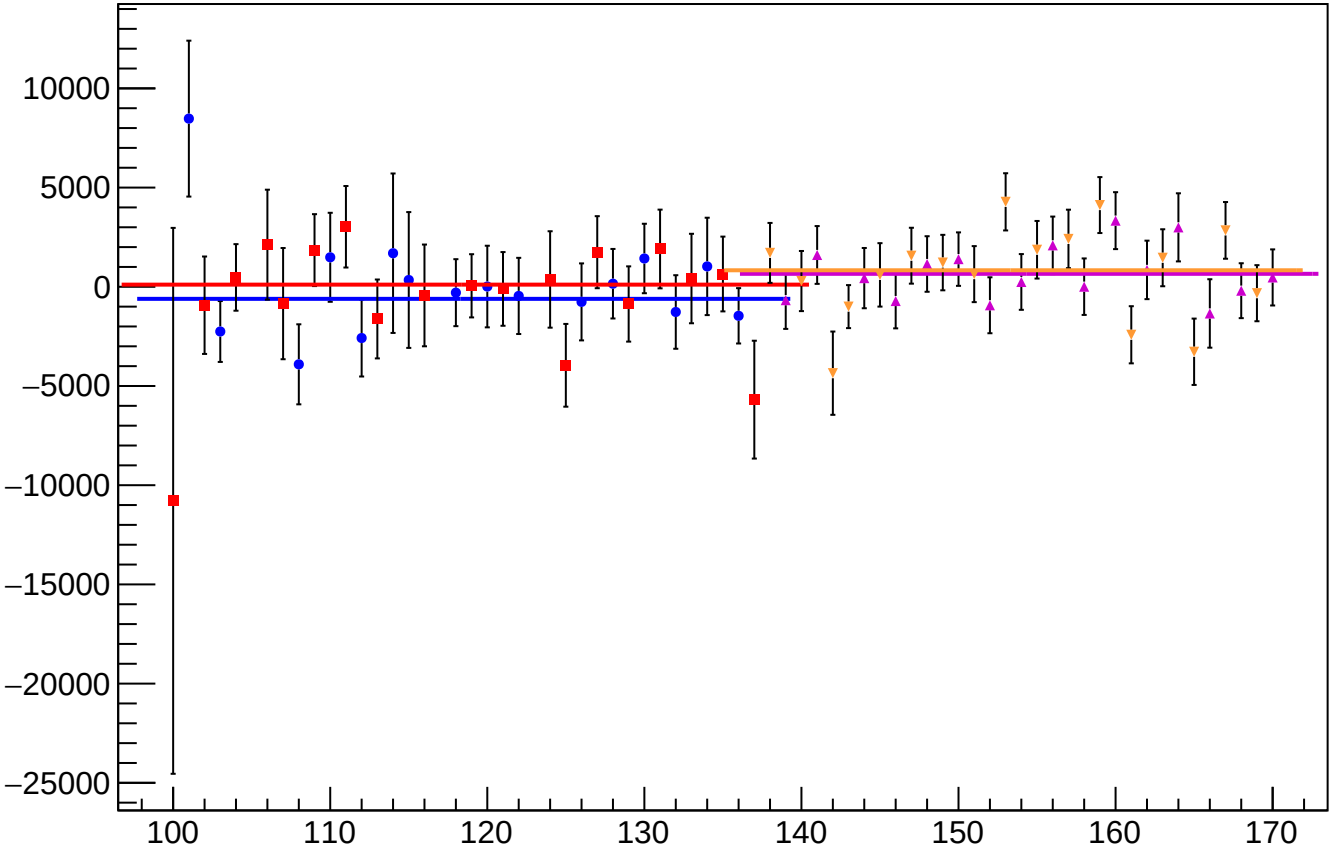
Left In: 4098.631+/-0.817 $\chi^2$/NDF:1087017.8/15

+ sign 3475.344+/-0.567 $\chi^2$/NDF: 3273530.0/32

All: 3549.031+/-0.407 $\chi^2$/NDF: 5727793.9/67

- sign 3627.310+/-0.584 $\chi^2$/NDF: 2419429.9/34

# dit_asym_atl1r2_dd_atl2r1_dd_dd_mean vs Slug




Right In: -607.831+/-494.182 $\chi^2$/NDF: 14.1/15

Left Out: 832.149+/-351.448 $\chi^2$/NDF:36.6/16

Right Out: 108.614+/-485.552 $\chi^2$/NDF: 14.9/18

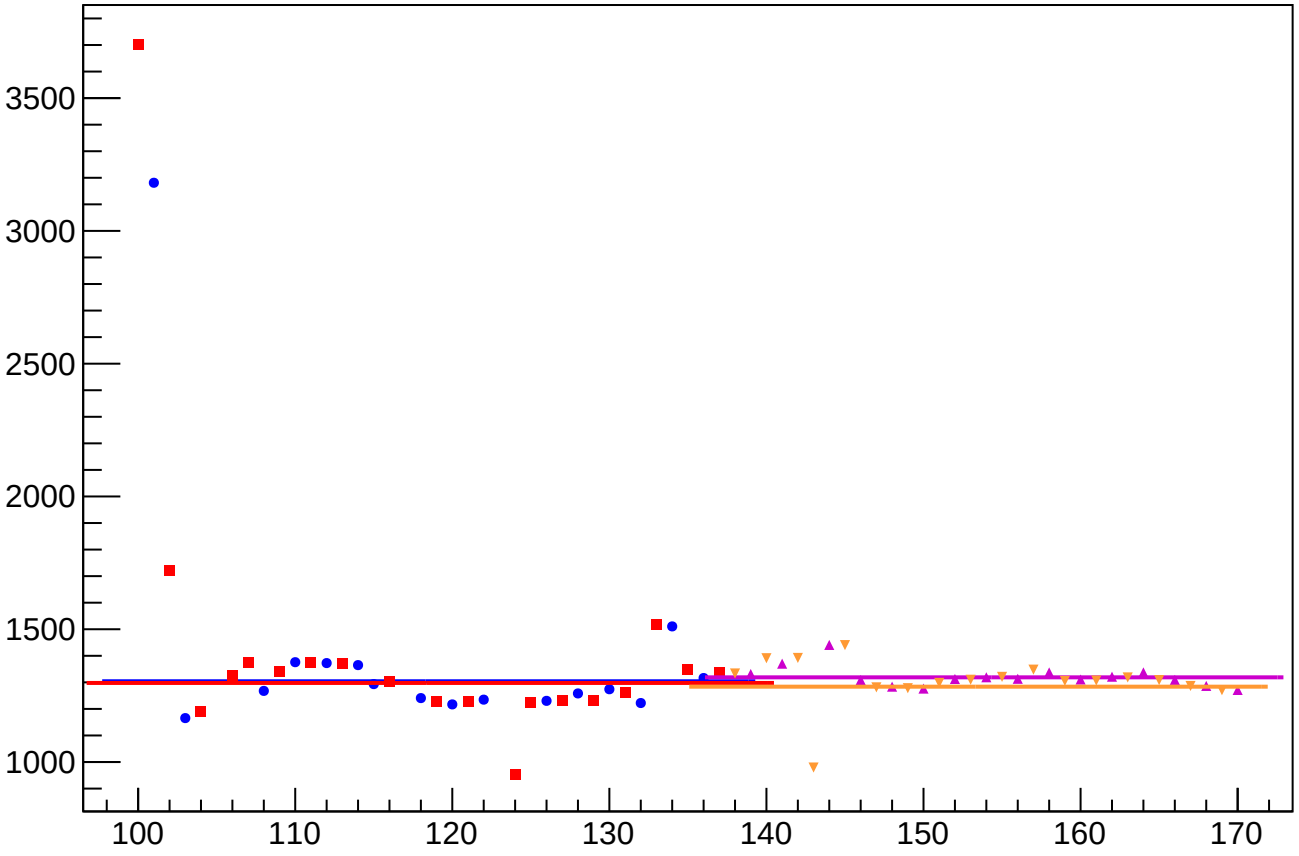
Left In: 653.590+/-362.908 $\chi^2$/NDF:12.3/15

+ sign 348.481+/-286.406 $\chi^2$/NDF: 56.4/32

All: 402.559+/-204.016 $\chi^2$/NDF: 84.4/67

- sign 458.266+/-290.687 $\chi^2$/NDF: 28.0/34

# dit_asym_atl1r2_dd_atl2r1_dd_dd_rms vs Slug




Right In: 1304.102+/-0.349 $\chi^2$/NDF: 510589.4/15

Left Out: 1283.747+/-0.249 $\chi^2$/NDF:203238.3/16

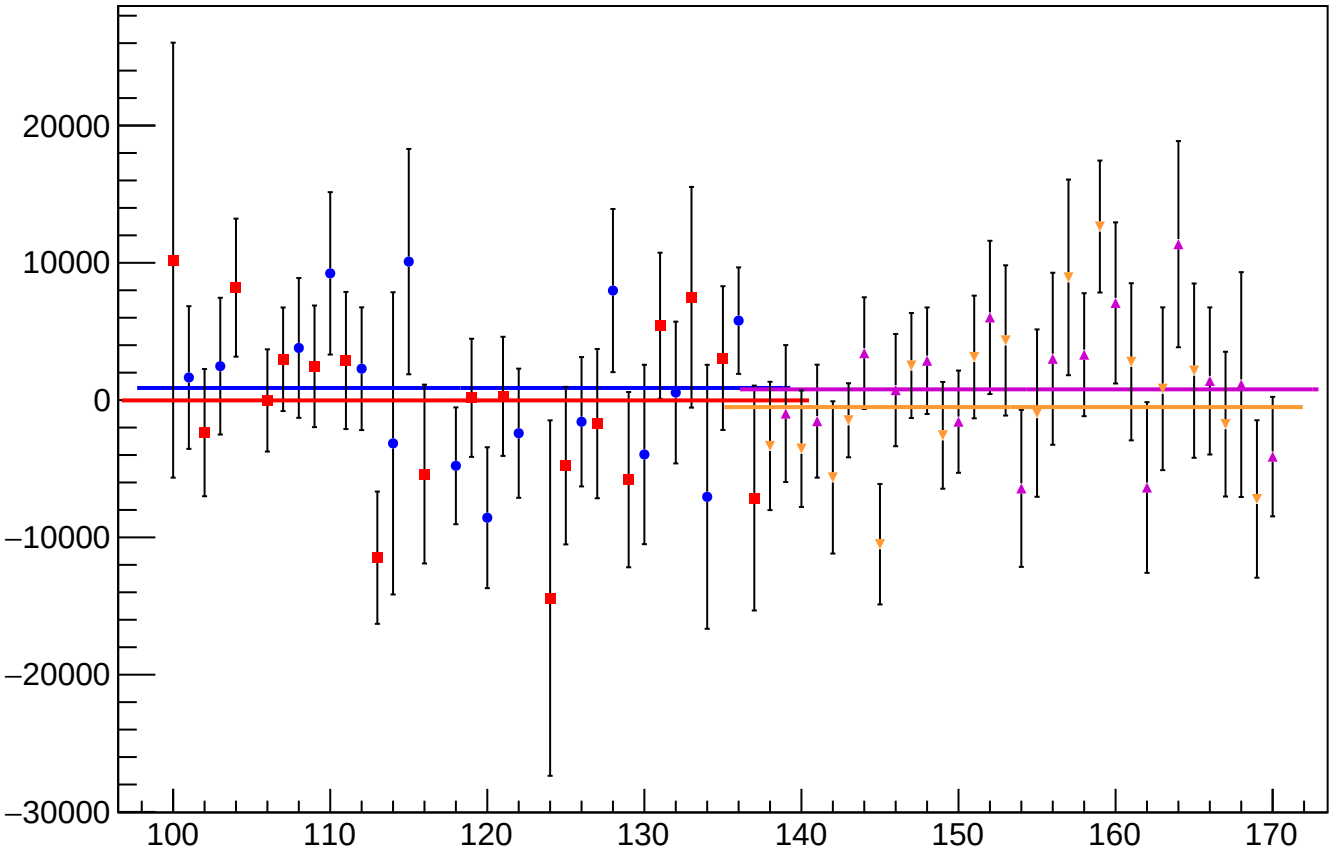
Right Out: 1297.796+/-0.343 $\chi^2$/NDF: 213096.9/18

Left In: 1318.907+/-0.257 $\chi^2$/NDF:23031.0/15

+ sign 1290.584+/-0.203 $\chi^2$/NDF: 716081.3/32

All: 1300.807+/-0.144 $\chi^2$/NDF: 959809.3/67

- sign 1311.333+/-0.205 $\chi^2$/NDF: 238555.8/34




Right In: 884.058+/-1327.399 $\chi^2$/NDF: 14.1/15

Left Out: -508.088+/-1131.417 $\chi^2$/NDF:20.6/16

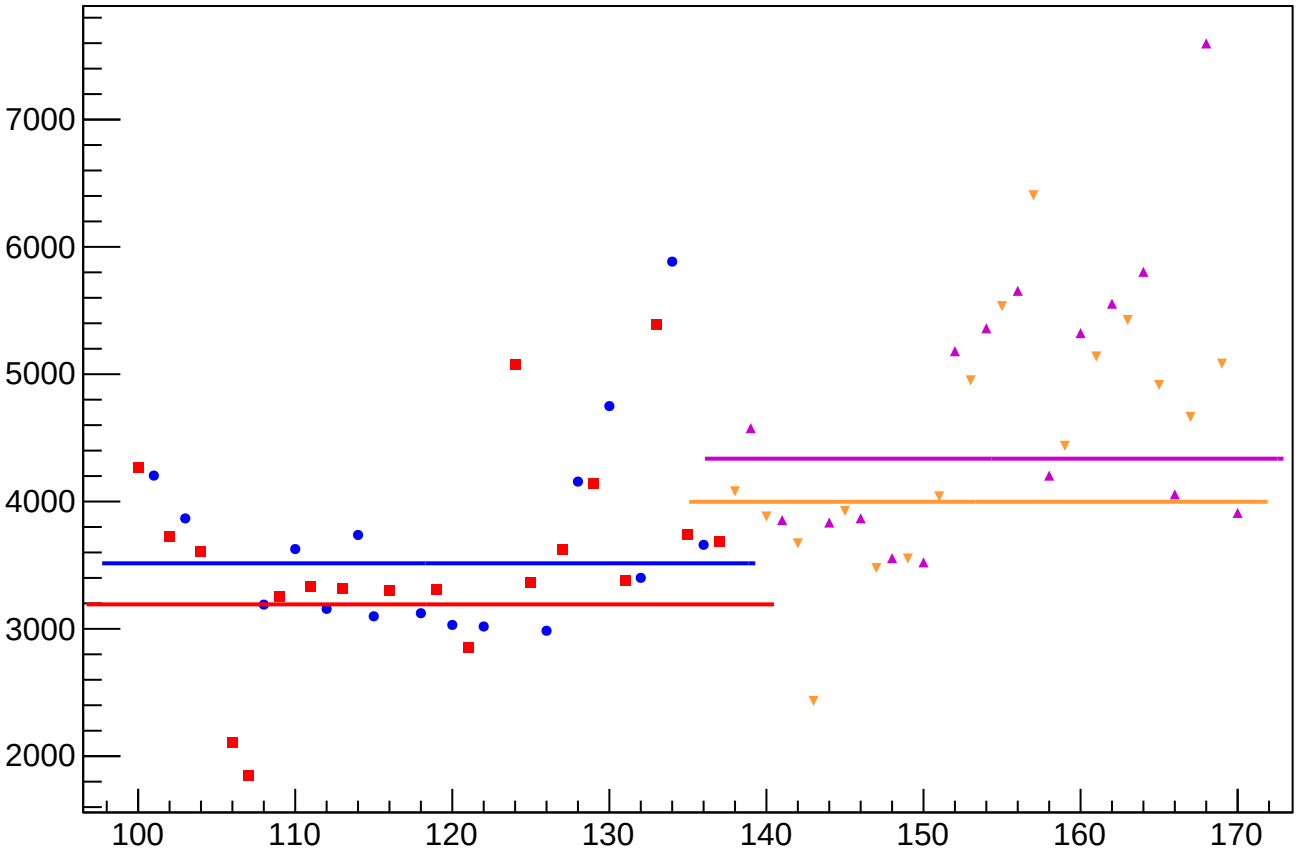
Right Out: -20.681+/-1200.015 $\chi^2$/NDF: 16.8/18

Left In: 782.966+/-1220.471 $\chi^2$/NDF:10.2/15

+ sign 77.723+/-861.069 $\chi^2$/NDF: 35.4/32

All: 226.968+/-606.953 $\chi^2$/NDF: 62.7/67

- sign 374.351+/-855.679 $\chi^2$/NDF: 27.3/34




Right In: 3514.746+/-0.939 $\chi^2$/NDF: 375078.6/15

Left Out: 3997.981+/-0.800 $\chi^2$/NDF:1518888.0/16

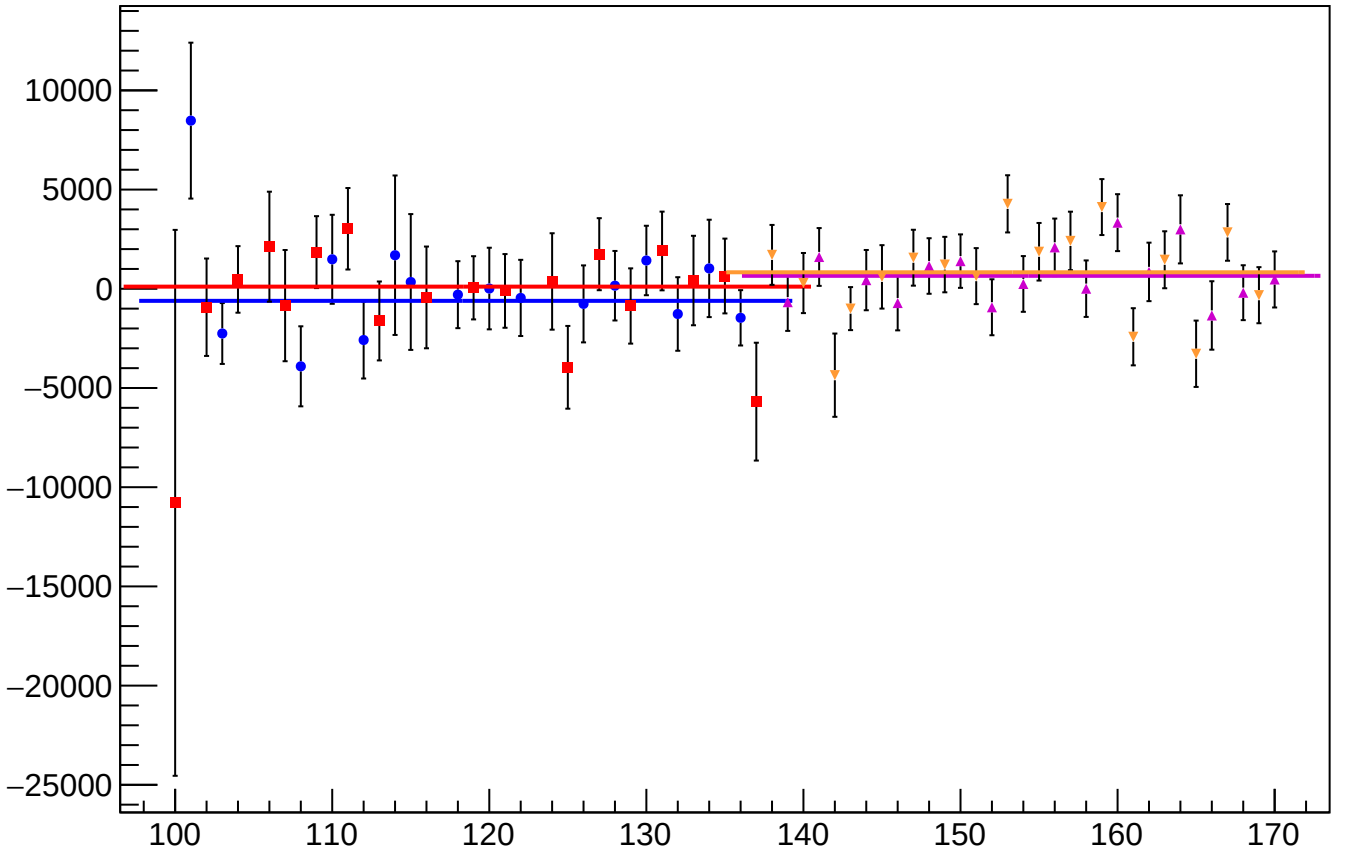
Right Out: 3192.203+/-0.849 $\chi^2$/NDF: 772495.7/18

Left In: 4336.689+/-0.863 $\chi^2$/NDF:1017162.9/15

+ sign 3794.637+/-0.609 $\chi^2$/NDF: 2047490.0/32

All: 3774.580+/-0.429 $\chi^2$/NDF: 4733525.4/67

- sign 3754.775+/-0.605 $\chi^2$/NDF: 2683878.8/34




Right In: -607.834+/-494.182 $\chi^2$/NDF: 14.1/15

Left Out: 832.154+/-351.448 $\chi^2$/NDF:36.6/16

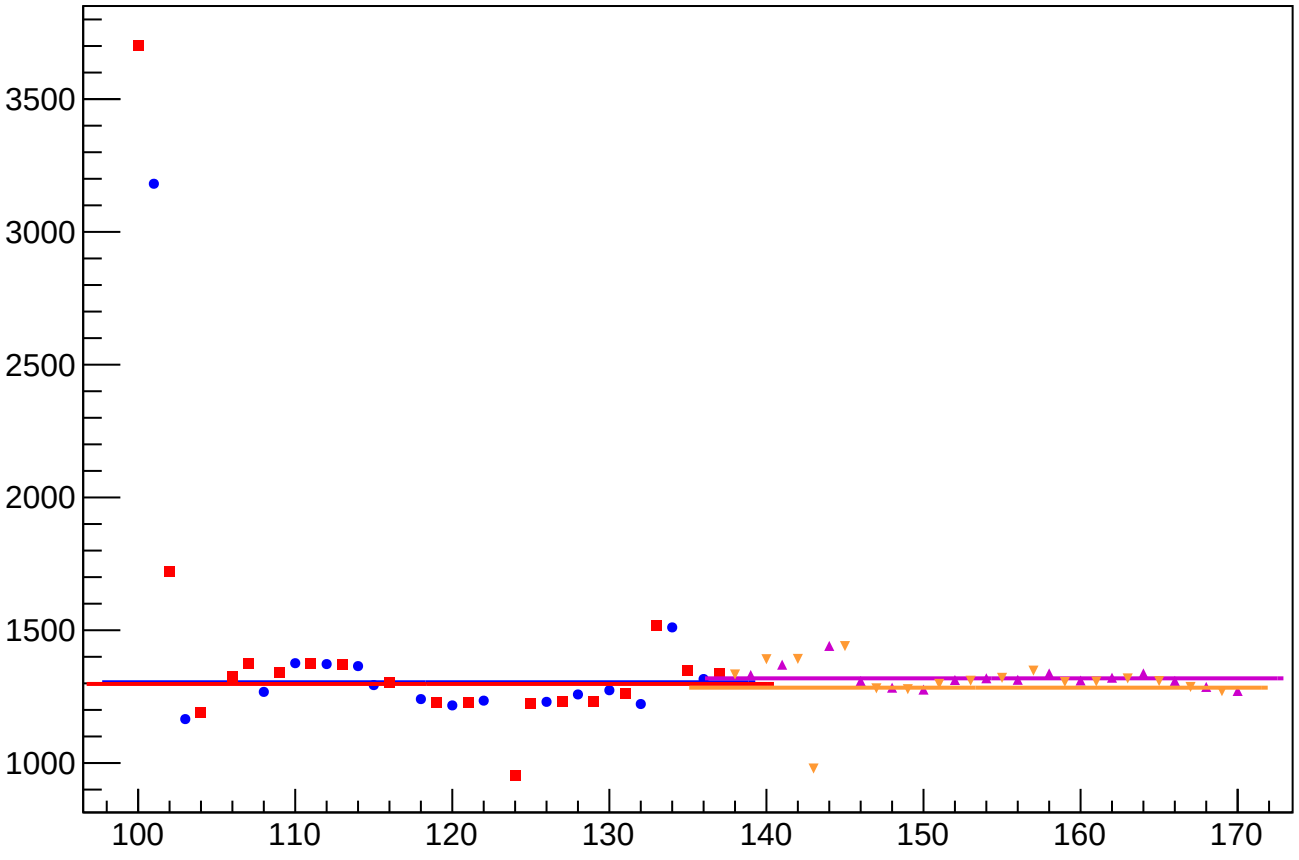
Right Out: 108.619+/-485.553 $\chi^2$/NDF: 14.9/18

Left In: 653.591+/-362.908 $\chi^2$/NDF:12.3/15

+ sign 348.483+/-286.406 $\chi^2$/NDF: 56.4/32

All: 402.561+/-204.016 $\chi^2$/NDF: 84.4/67

- sign 458.268+/-290.687 $\chi^2$/NDF: 28.0/34




Right In: 1304.102+/-0.349 $\chi^2$/NDF: 510589.6/15

Left Out: 1283.748+/-0.249 $\chi^2$/NDF:203239.1/16

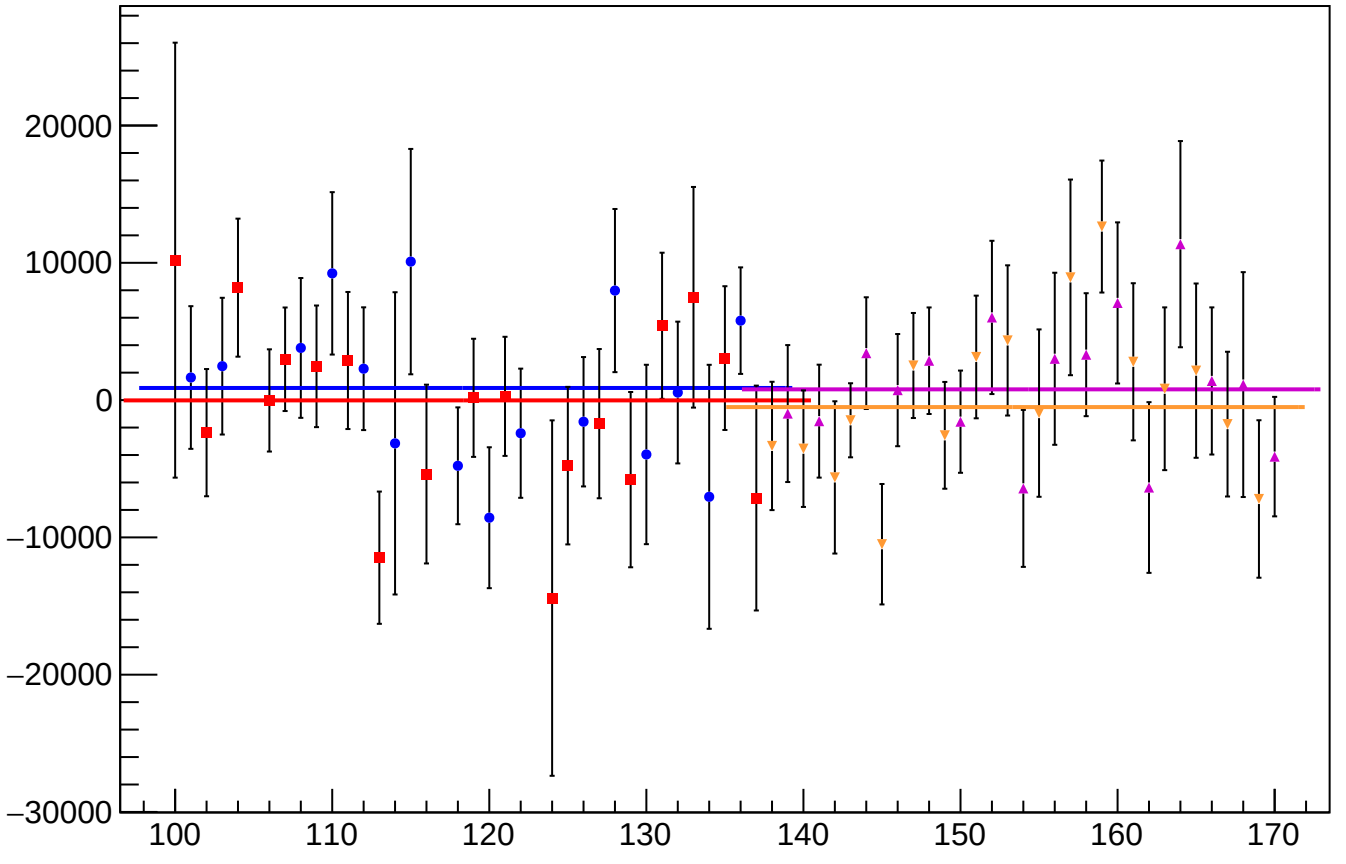
Right Out: 1297.796+/-0.343 $\chi^2$/NDF: 213097.0/18

Left In: 1318.908+/-0.257 $\chi^2$/NDF:23031.2/15

+ sign 1290.585+/-0.203 $\chi^2$/NDF: 716082.0/32

All: 1300.808+/-0.144 $\chi^2$/NDF: 959810.5/67

- sign 1311.334+/-0.205 $\chi^2$/NDF: 238556.4/34




Right In: 884.047+/-1327.396 $\chi^2$/NDF: 14.1/15

Left Out: -508.085+/-1131.418 $\chi^2$/NDF:20.6/16

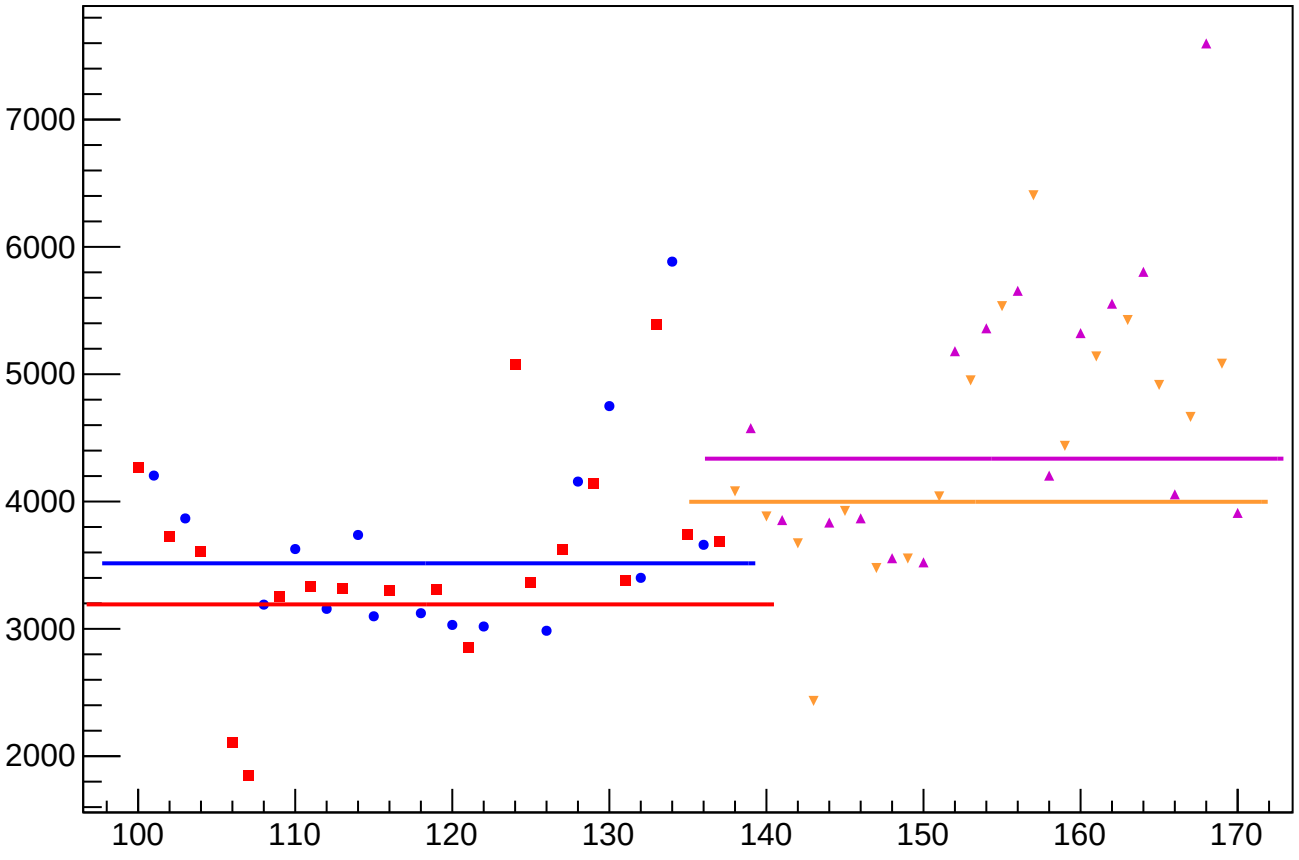
Right Out: -20.677+/-1200.012 $\chi^2$/NDF: 16.8/18

Left In: 782.965+/-1220.473 $\chi^2$/NDF:10.2/15

\+ sign 77.723+/-861.069 $\chi^2$/NDF: 35.4/32

All: 226.968+/-606.953 $\chi^2$/NDF: 62.7/67

\- sign 374.351+/-855.679 $\chi^2$/NDF: 27.3/34




Right In: 3514.737+/-0.939 $\chi^2$/NDF: 375082.8/15

Left Out: 3997.986+/-0.800 $\chi^2$/NDF:1518889.2/16

Right Out: 3192.196+/-0.849 $\chi^2$/NDF: 772497.9/18

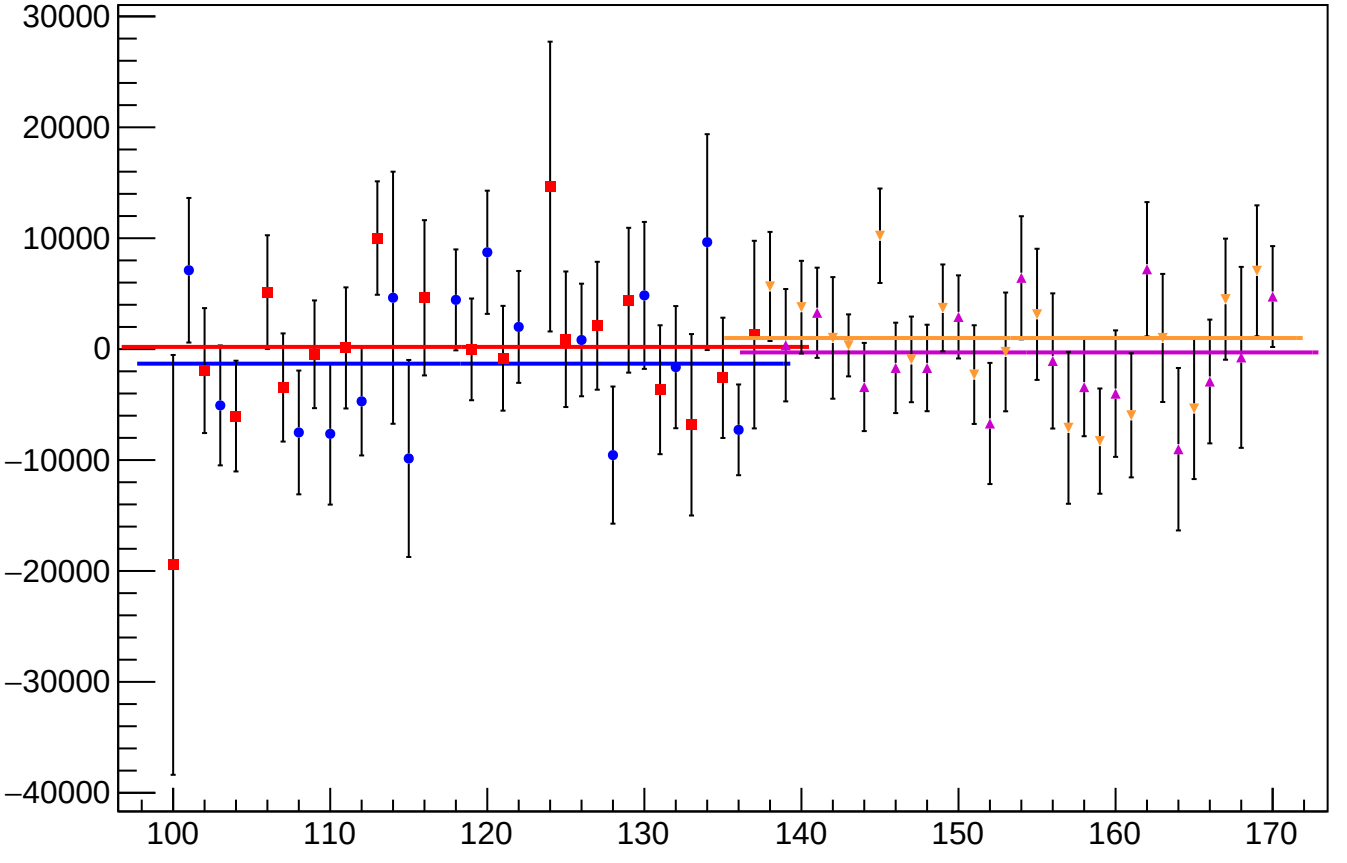
Left In: 4336.695+/-0.863 $\chi^2$/NDF:1017165.3/15

+ sign 3794.635+/-0.609 $\chi^2$/NDF: 2047505.0/32

All: 3774.578+/-0.429 $\chi^2$/NDF: 4733567.2/67

- sign 3754.771+/-0.605 $\chi^2$/NDF: 2683905.5/34

# asym_atl1r2_dd_atl2r1_dd_dd_mean vs Slug




Right In: -1309.349+/-1431.624 $\chi^2$/NDF: 17.6/15

Left Out: 1002.840+/-1135.187 $\chi^2$/NDF:16.8/16

Right Out: 201.593+/-1336.062 $\chi^2$/NDF: 11.6/18

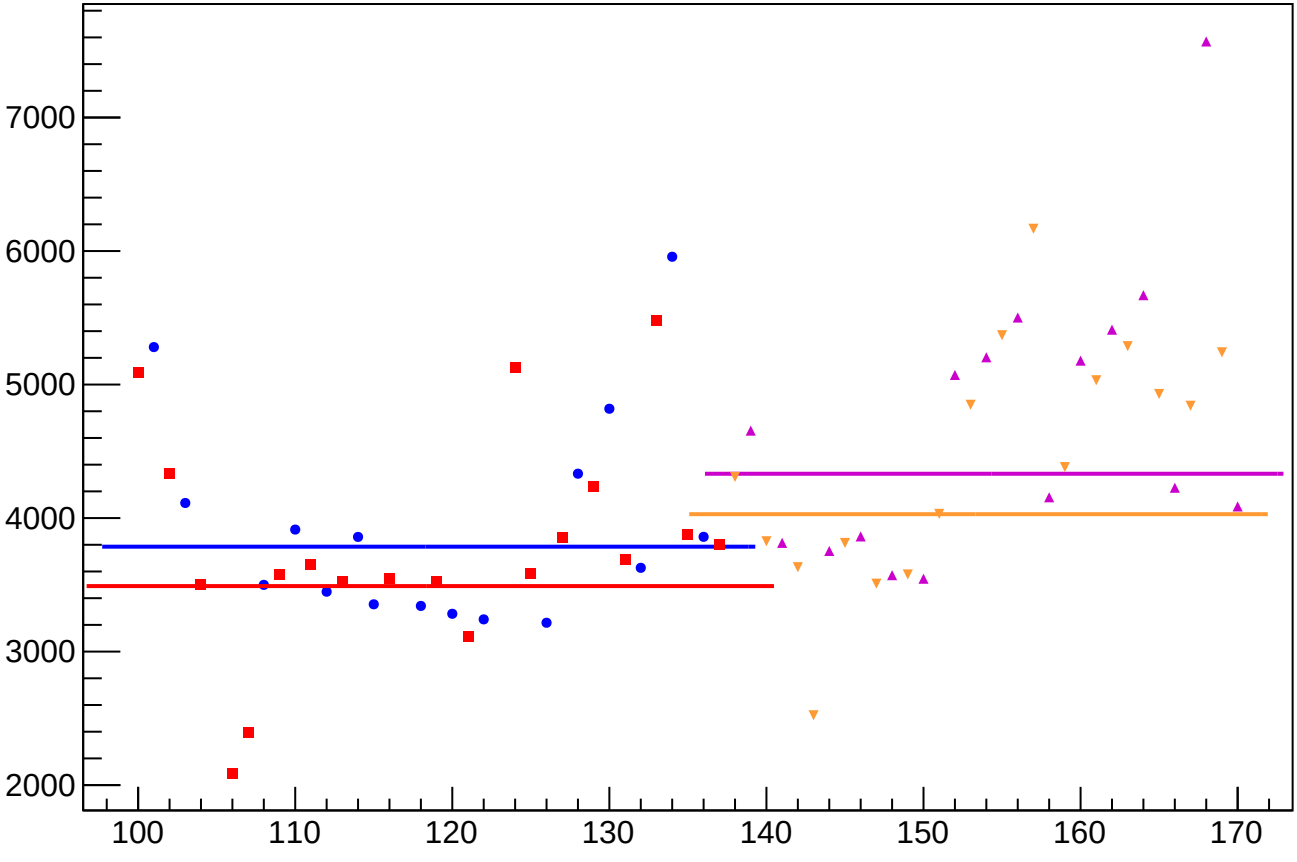
Left In: -295.262+/-1216.245 $\chi^2$/NDF:10.6/15

+ sign 110.262+/-889.488 $\chi^2$/NDF: 36.0/32

All: 21.076+/-632.438 $\chi^2$/NDF: 58.3/67

- sign -70.108+/-899.398 $\chi^2$/NDF: 22.3/34

# asym_atl1r2_dd_atl2r1_dd_dd_rms vs Slug




Right In: 3785.774+/-1.012 $\chi^2$/NDF: 382992.9/15

Left Out: 4029.140+/-0.803 $\chi^2$/NDF:1353686.2/16

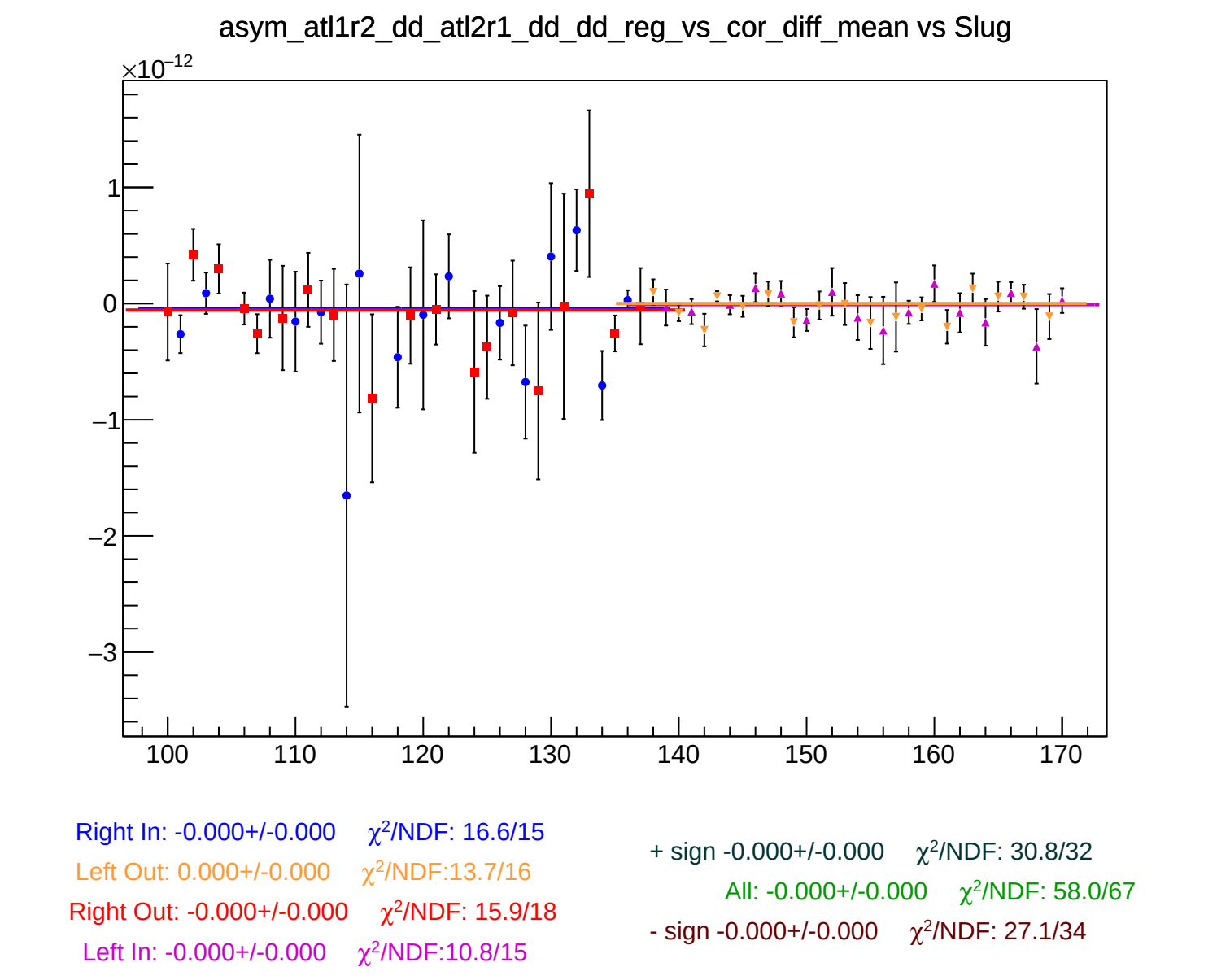
Right Out: 3490.614+/-0.932 $\chi^2$/NDF: 586715.1/18

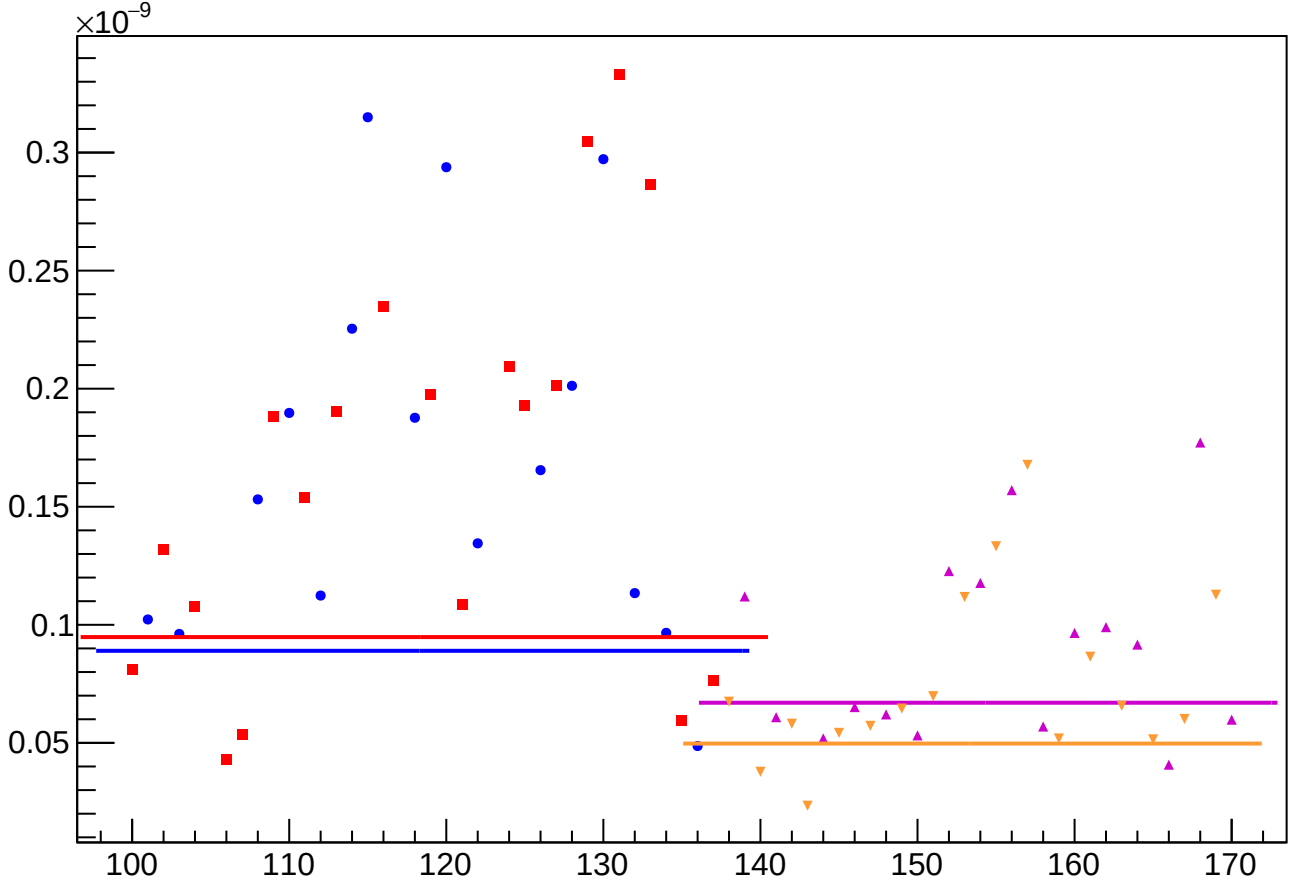
Left In: 4332.000+/-0.860 $\chi^2$/NDF:932259.8/15

+ sign 3935.192+/-0.629 $\chi^2$/NDF: 1772163.8/32

All: 3940.066+/-0.446 $\chi^2$/NDF: 3731518.9/67

- sign 3944.988+/-0.632 $\chi^2$/NDF: 1959234.4/34


asym_atl1r2_dd_atl2r1_dd_dd_reg_vs_cor_diff_mean vs Slug
×10^−12
1
0
−1
−2
−3
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 16.6/15
Left Out: 0.000+/-0.000 χ²/NDF:13.7/16
Right Out: -0.000+/-0.000 χ²/NDF: 15.9/18
Left In: -0.000+/-0.000 χ²/NDF:10.8/15
+ sign -0.000+/-0.000 χ²/NDF: 30.8/32
All: -0.000+/-0.000 χ²/NDF: 58.0/67
- sign -0.000+/-0.000 χ²/NDF: 27.1/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1460718.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2157329.3/16

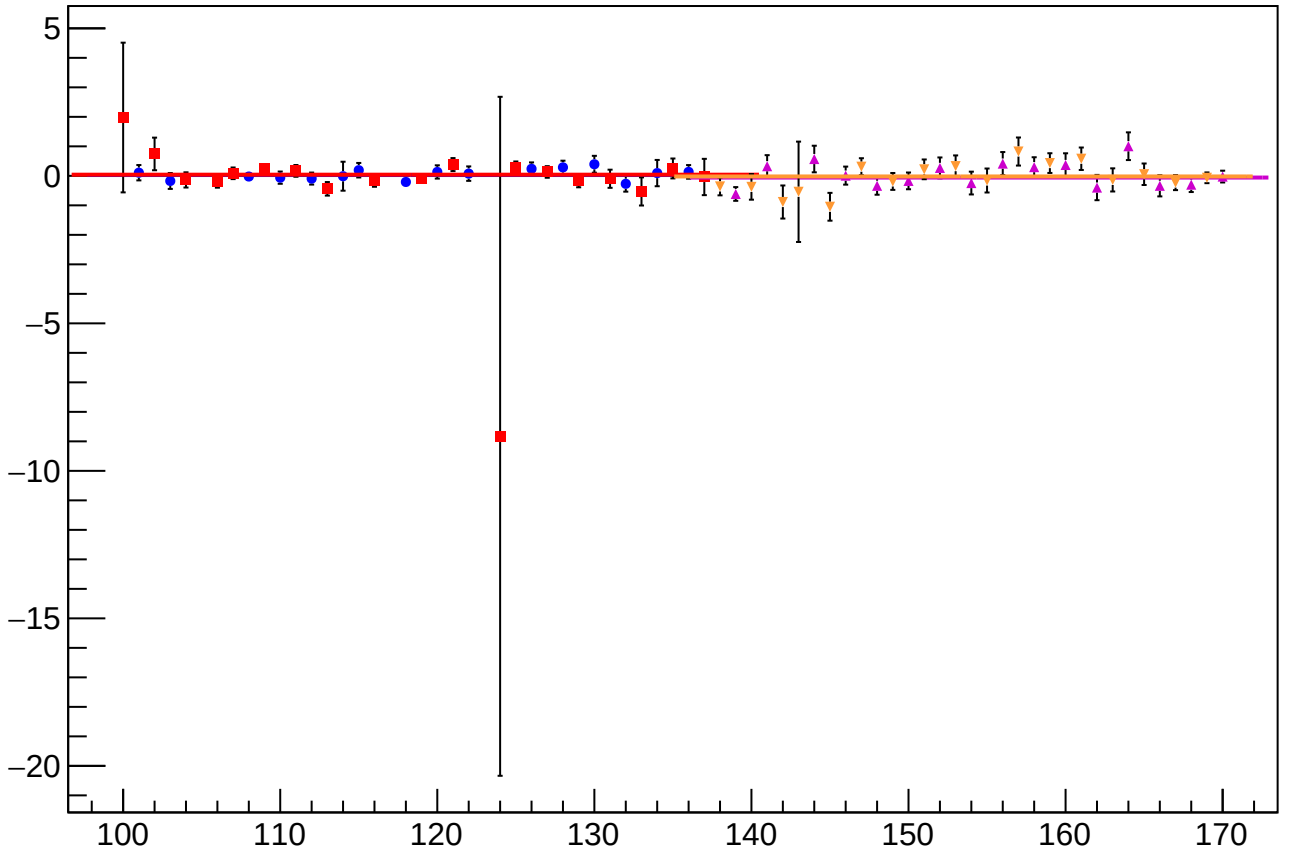
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1734601.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:1374533.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4372554.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 8218768.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3414108.5/34




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

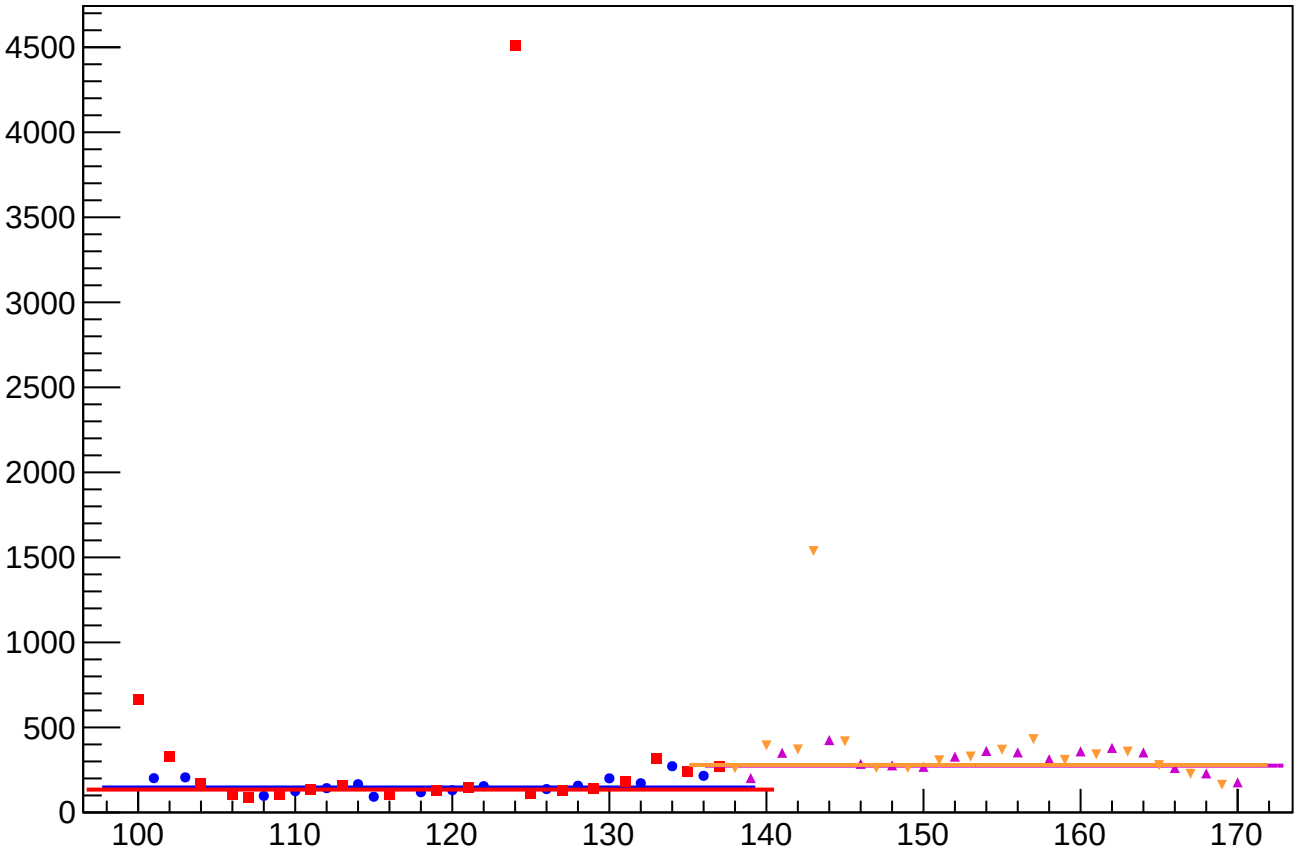
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998704.7/15

Left Out: 279.404+/-0.058 $\chi^2$/NDF:2889224.6/16

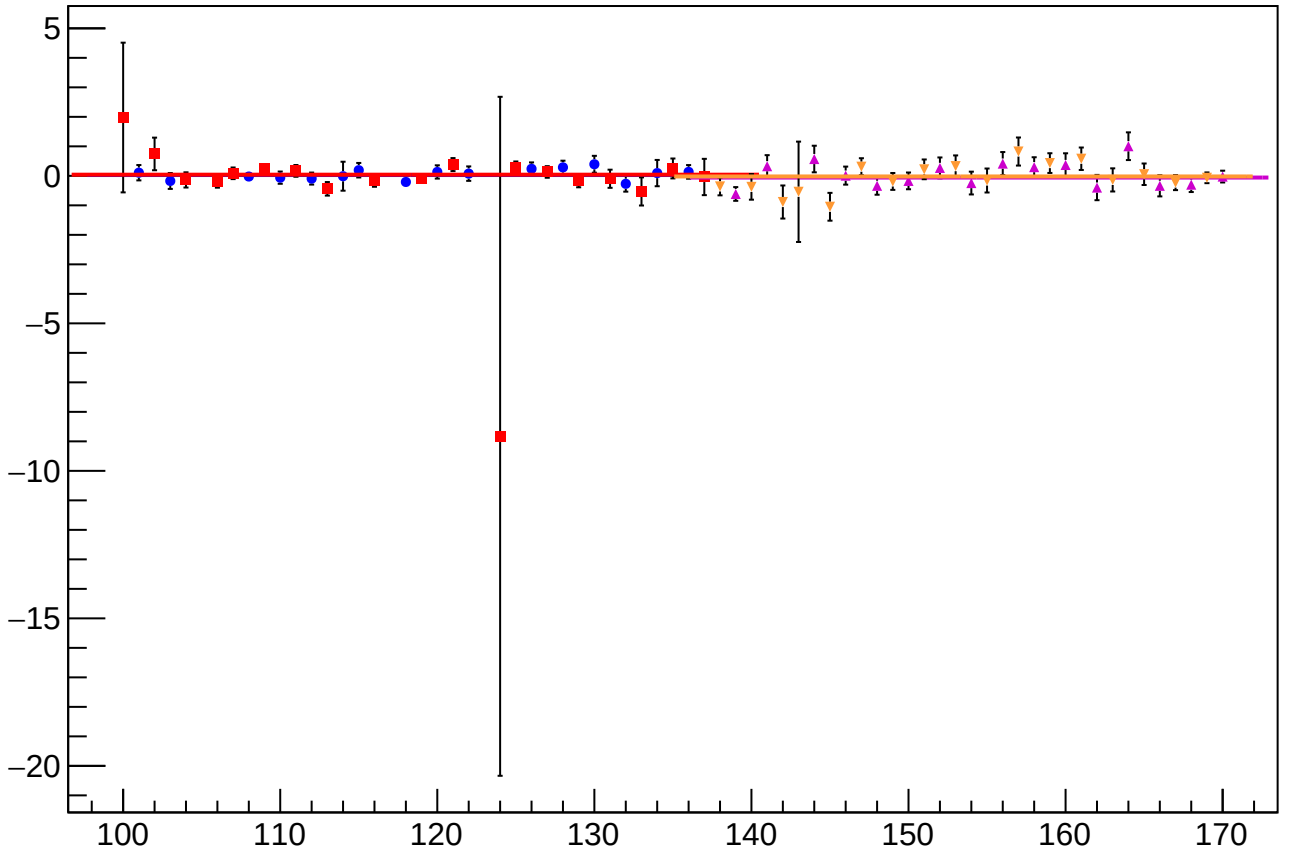
Right Out: 134.505+/-0.039 $\chi^2$/NDF: 1606383.2/18

Left In: 275.313+/-0.056 $\chi^2$/NDF:1567652.8/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417880.7/32

All: 185.396+/-0.023 $\chi^2$/NDF: 14930641.4/67

- sign 180.124+/-0.032 $\chi^2$/NDF: 7455426.0/34




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

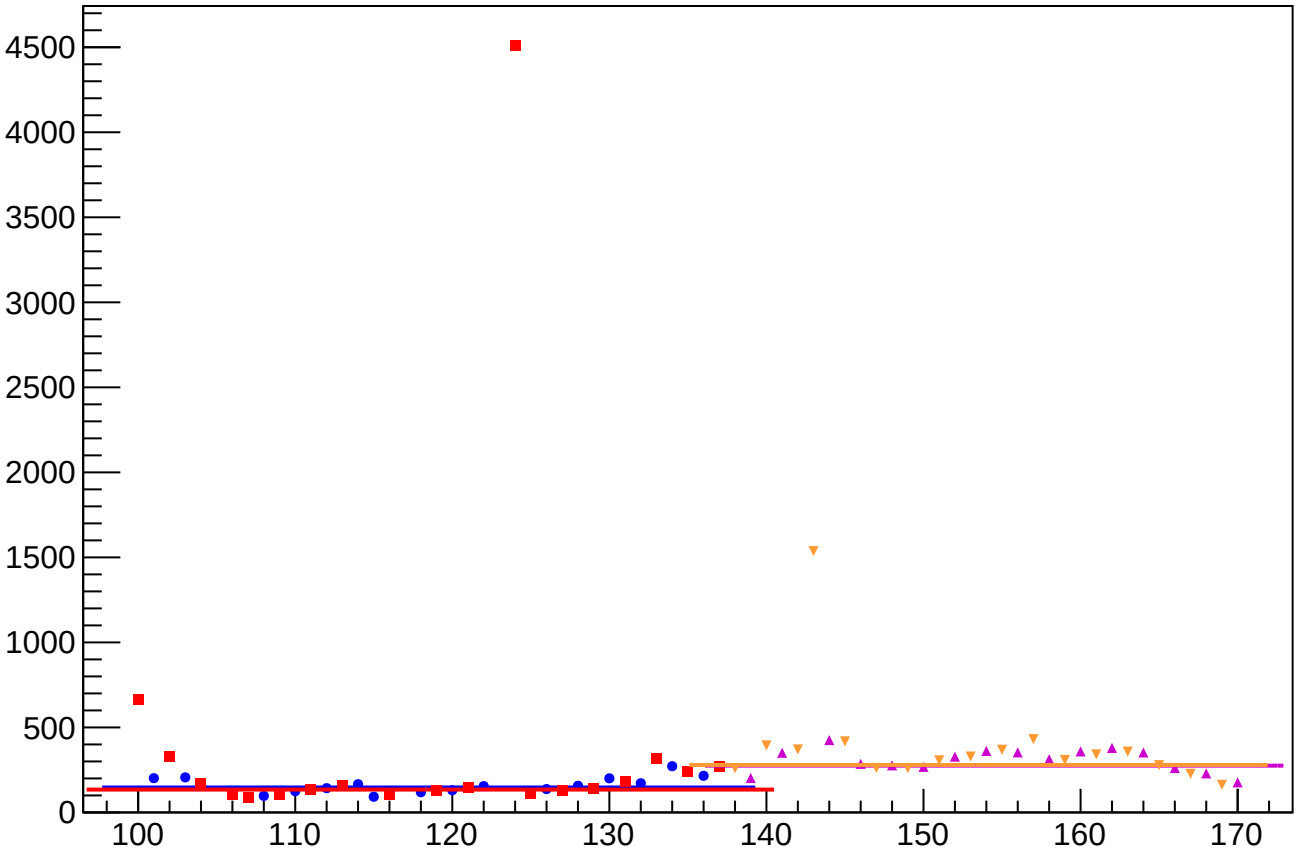
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998704.7/15

Left Out: 279.404+/-0.058 $\chi^2$/NDF:2889224.6/16

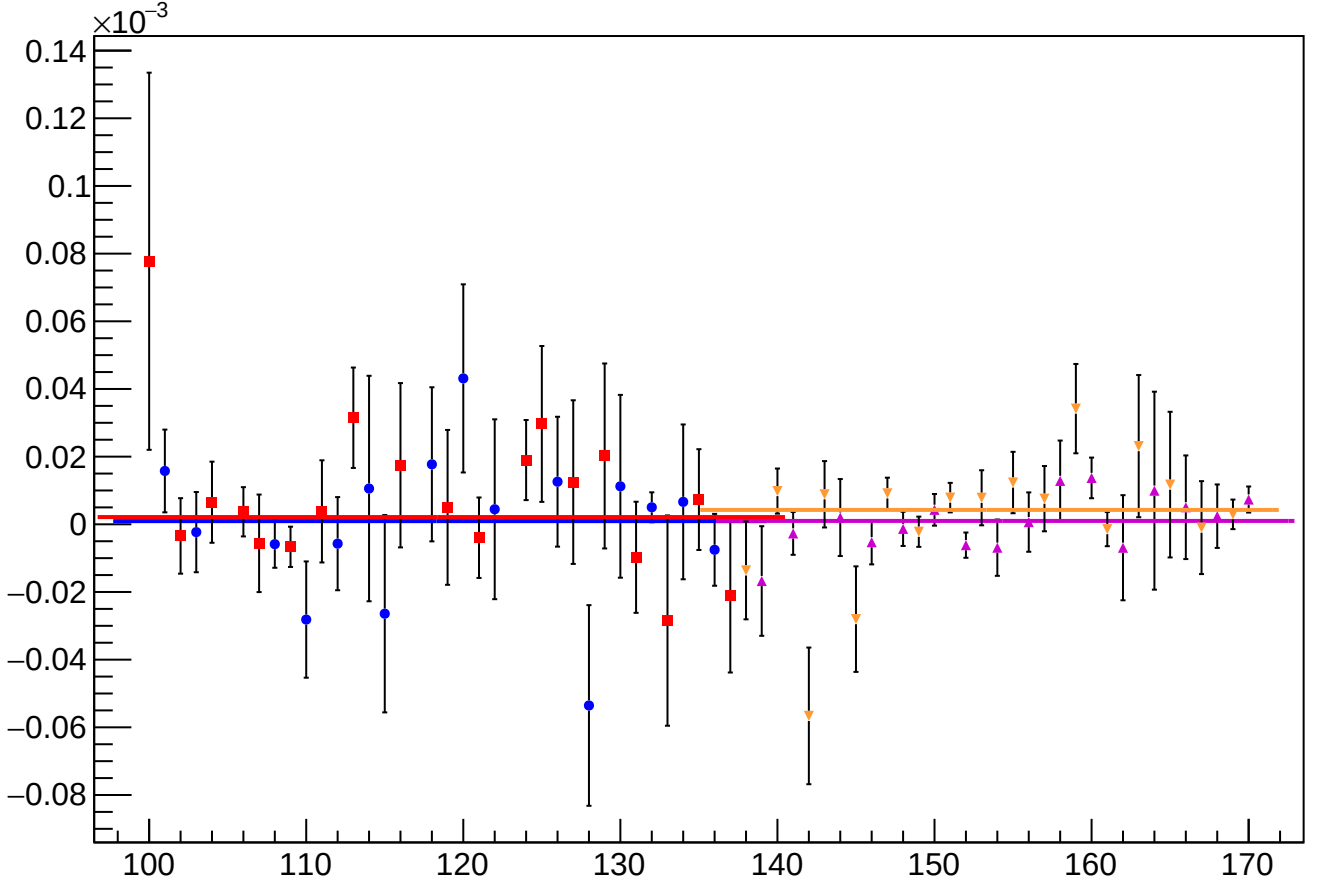
Right Out: 134.505+/-0.039 $\chi^2$/NDF: 1606383.2/18

Left In: 275.313+/-0.056 $\chi^2$/NDF:1567652.8/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417880.7/32

All: 185.396+/-0.023 $\chi^2$/NDF: 14930641.4/67

- sign 180.124+/-0.032 $\chi^2$/NDF: 7455426.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:28.4/16

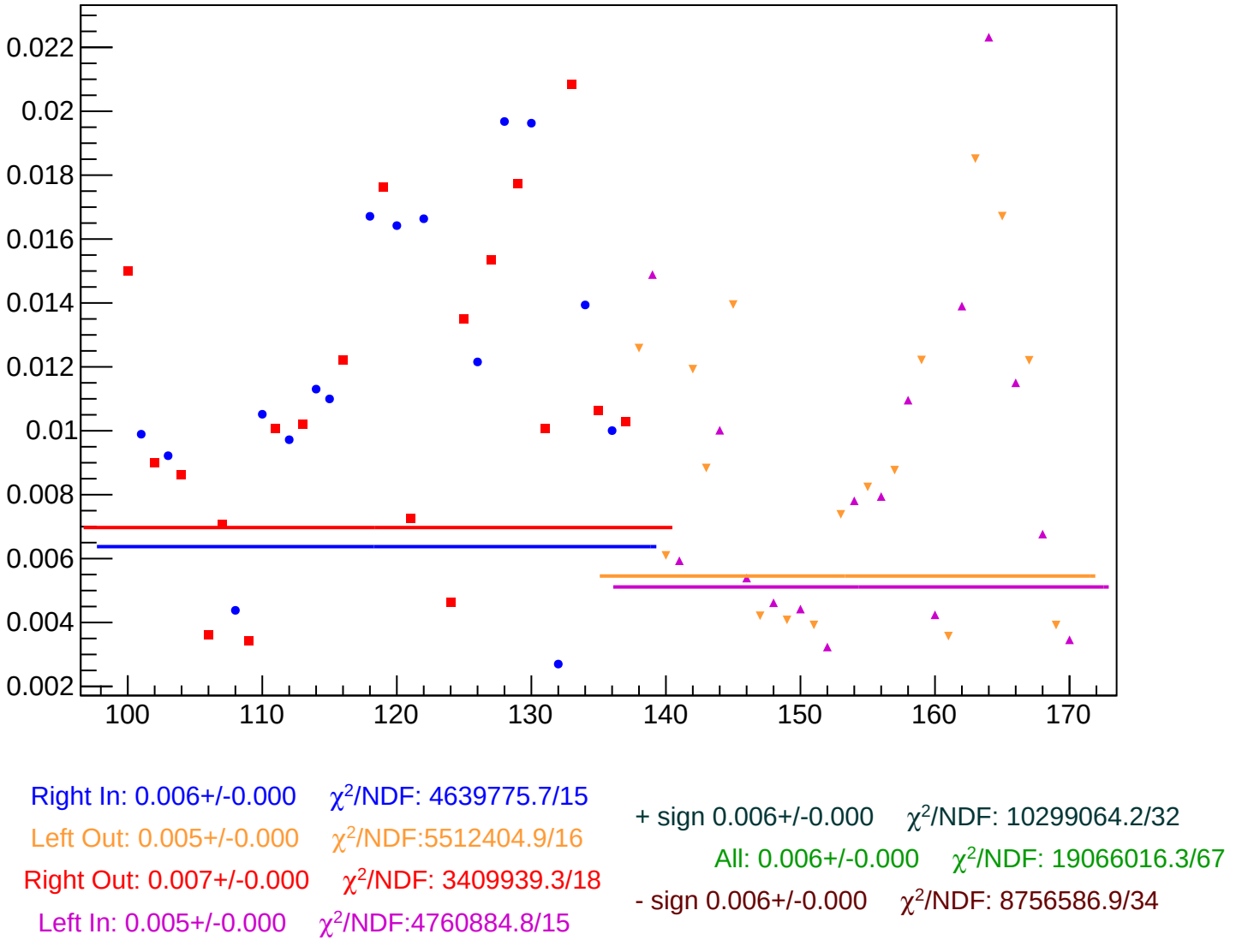
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 16.0/18

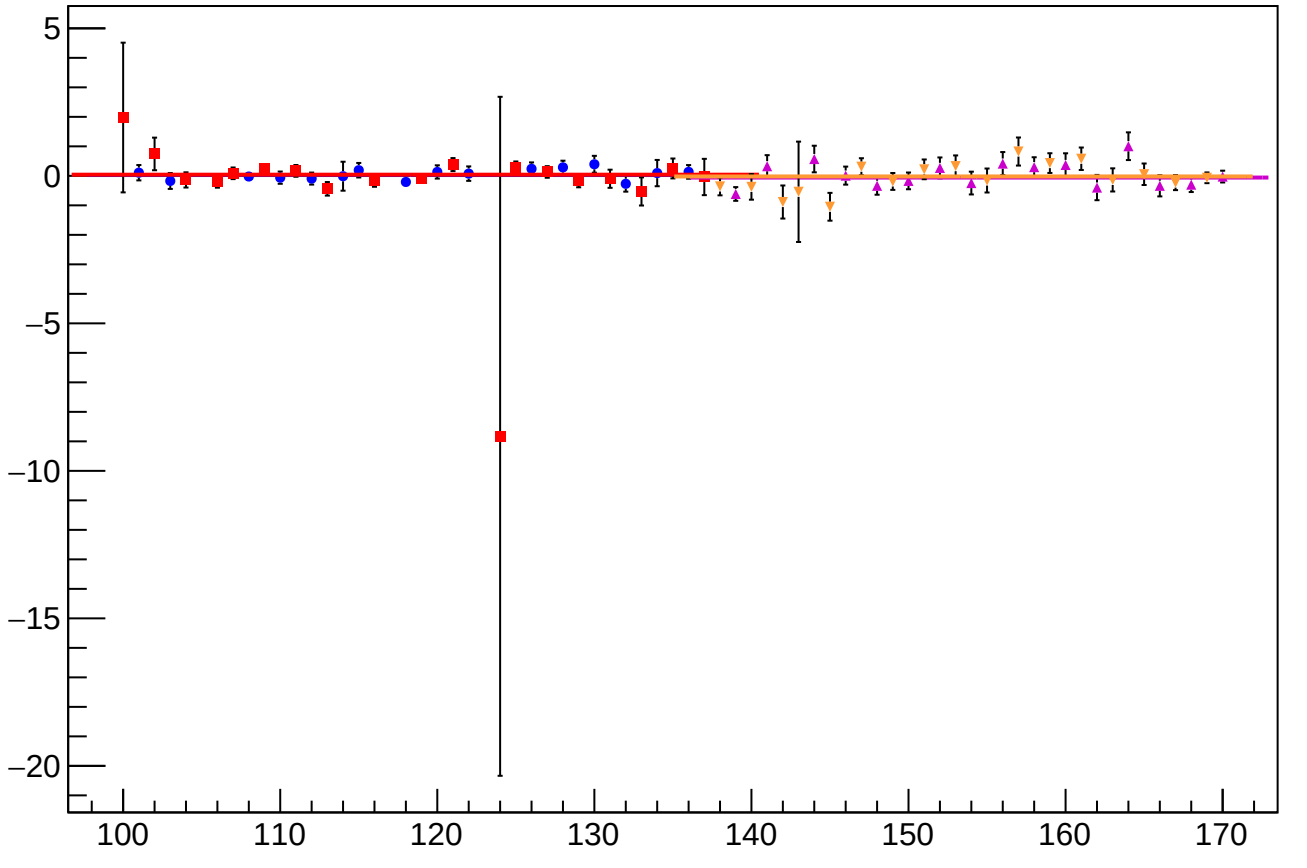
Left In: 0.000+/-0.000 $\chi^2$/NDF:16.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 77.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 32.5/34


asym_atl1r2_dd_atl2r1_dd_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
100
110
120
130
140
150
160
170
Right In: 0.006+/-0.000 χ²/NDF: 4639775.7/15
Left Out: 0.005+/-0.000 χ²/NDF:5512404.9/16
Right Out: 0.007+/-0.000 χ²/NDF: 3409939.3/18
Left In: 0.005+/-0.000 χ²/NDF:4760884.8/15
+ sign 0.006+/-0.000 χ²/NDF: 10299064.2/32
All: 0.006+/-0.000 χ²/NDF: 19066016.3/67
- sign 0.006+/-0.000 χ²/NDF: 8756586.9/34




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

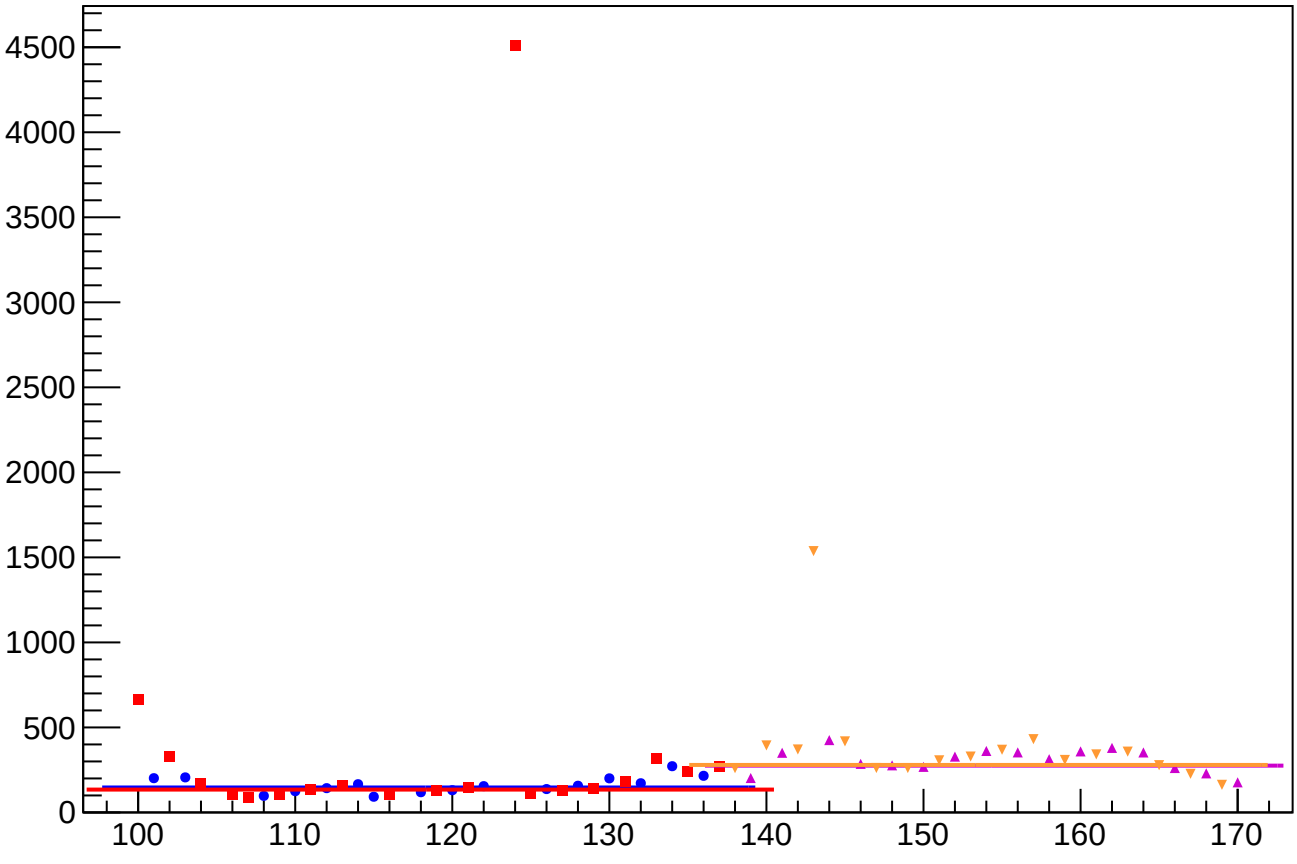
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998646.8/15

Left Out: 279.406+/-0.058 $\chi^2$/NDF:2889306.4/16

Right Out: 134.506+/-0.039 $\chi^2$/NDF: 1606310.4/18

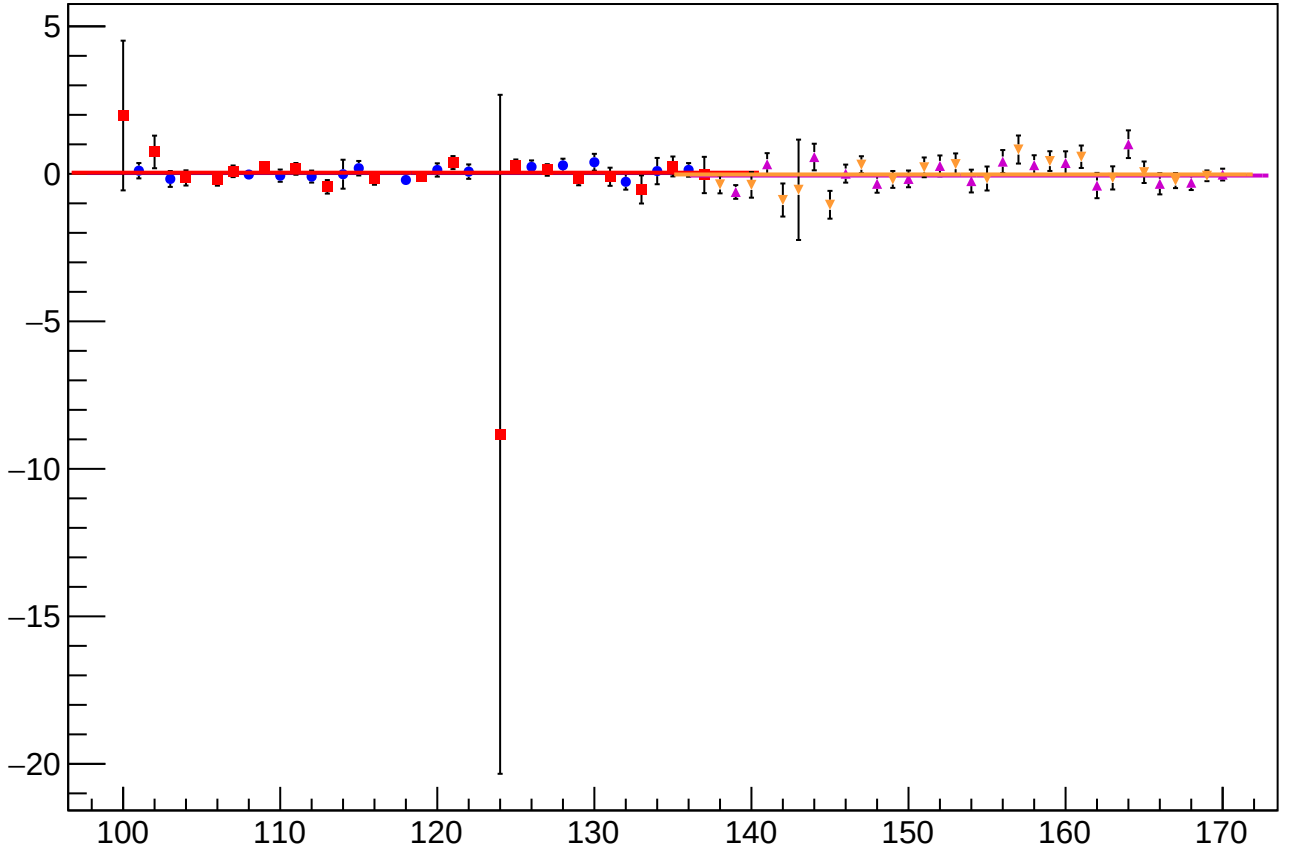
Left In: 275.317+/-0.056 $\chi^2$/NDF:1567670.2/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417992.1/32

All: 185.397+/-0.023 $\chi^2$/NDF: 14930726.9/67

- sign 180.126+/-0.032 $\chi^2$/NDF: 7455416.9/34

asym_atl1r2_dd_atl2r1_dd_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.028+/-0.058 $\chi^2$/NDF: 9.4/15

Left Out: -0.021+/-0.081 $\chi^2$/NDF:20.7/16

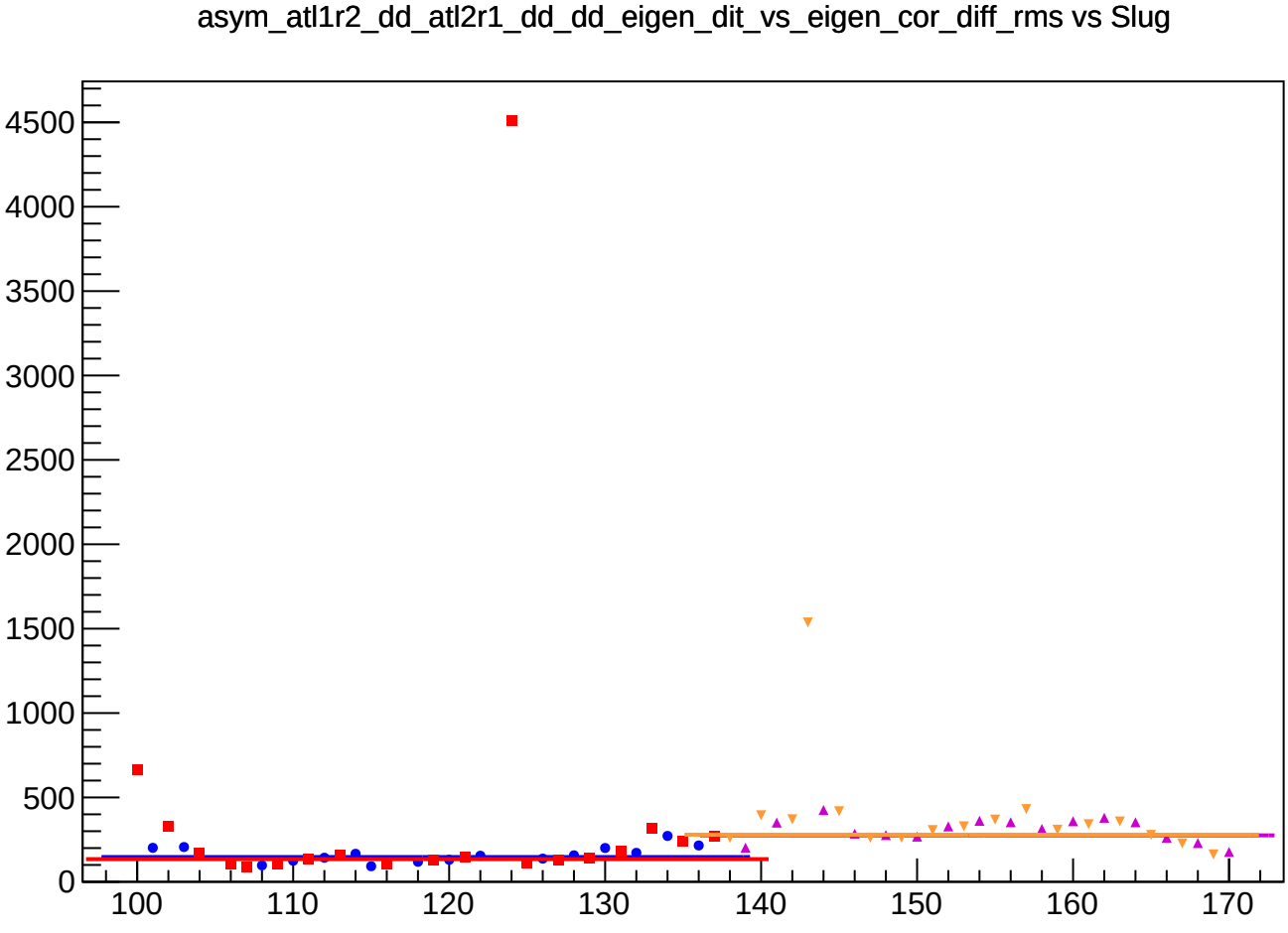
Right Out: 0.039+/-0.055 $\chi^2$/NDF: 20.0/18

Left In: -0.058+/-0.079 $\chi^2$/NDF:21.9/15

+ sign 0.012+/-0.047 $\chi^2$/NDF: 30.4/32

All: 0.010+/-0.033 $\chi^2$/NDF: 73.3/67

- sign 0.008+/-0.045 $\chi^2$/NDF: 42.9/34




Right In: 146.829+/-0.041 $\chi^2$/NDF: 998646.8/15

Left Out: 279.406+/-0.058 $\chi^2$/NDF:2889306.4/16

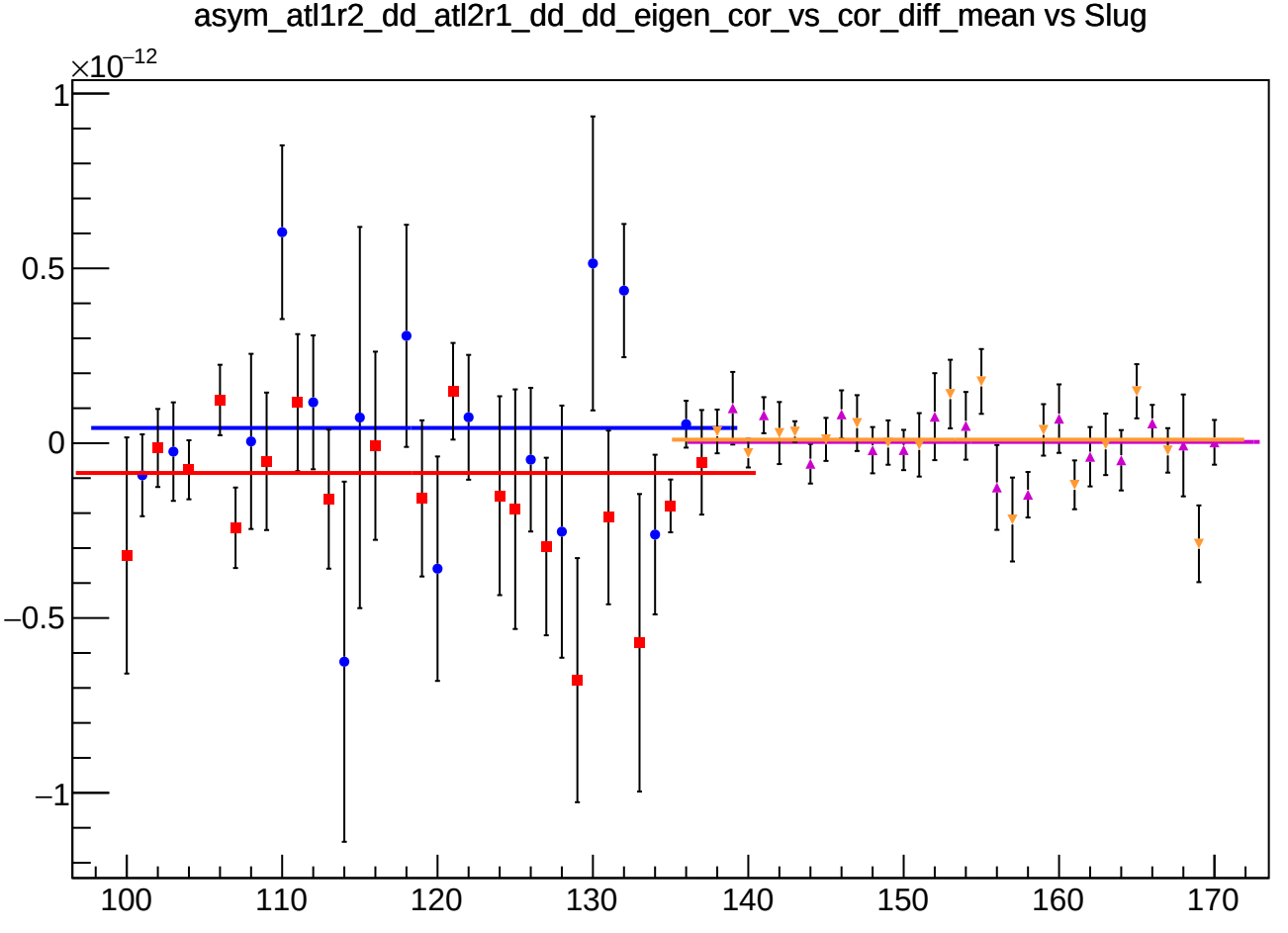
Right Out: 134.506+/-0.039 $\chi^2$/NDF: 1606310.4/18

Left In: 275.317+/-0.056 $\chi^2$/NDF:1567670.2/15

+ sign 191.156+/-0.033 $\chi^2$/NDF: 7417992.1/32

All: 185.397+/-0.023 $\chi^2$/NDF: 14930726.9/67

- sign 180.126+/-0.032 $\chi^2$/NDF: 7455416.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 19.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:25.1/16

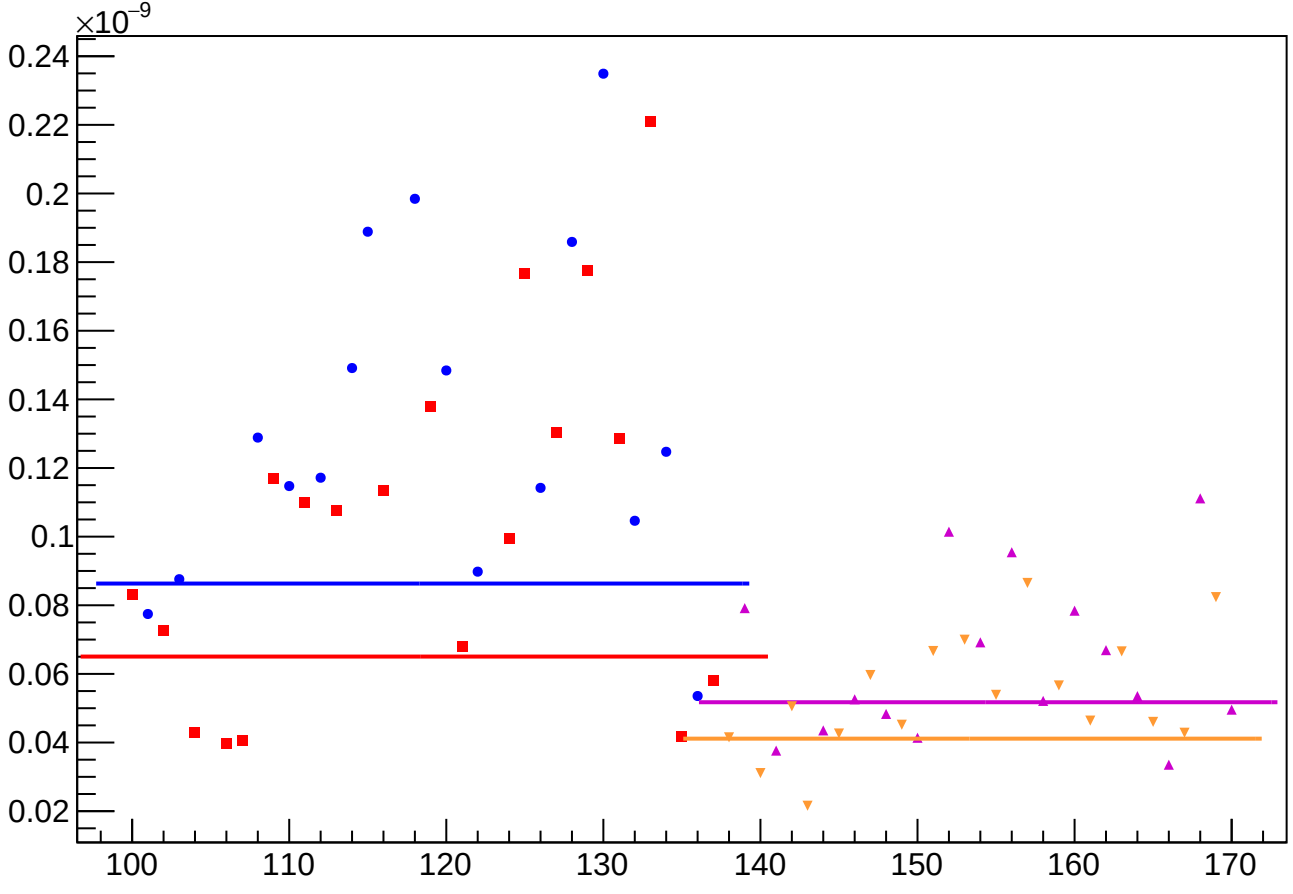
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:15.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 85.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 38.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1565662.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2344358.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2158861.4/18

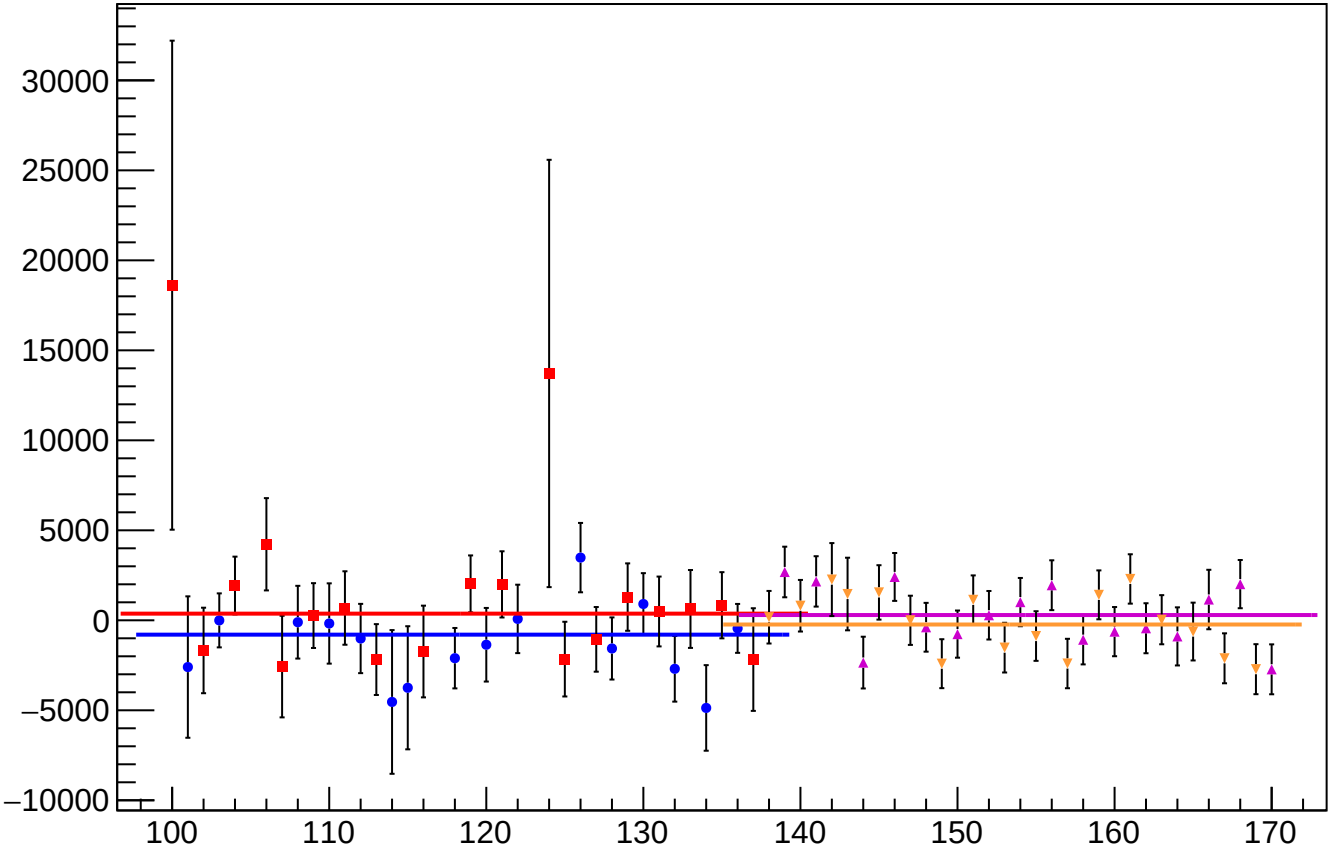
Left In: 0.000+/-0.000 $\chi^2$/NDF:1829490.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5889730.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10411356.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4224126.8/34

# reg_asym_atl1r2_dd_atl2r1_dd_avg_mean vs Slug




Right In: -797.285+/-487.453 $\chi^2$/NDF: 13.4/15

Left Out: -233.732+/-351.019 $\chi^2$/NDF:21.4/16

Right Out: 370.010+/-485.826 $\chi^2$/NDF: 15.6/18

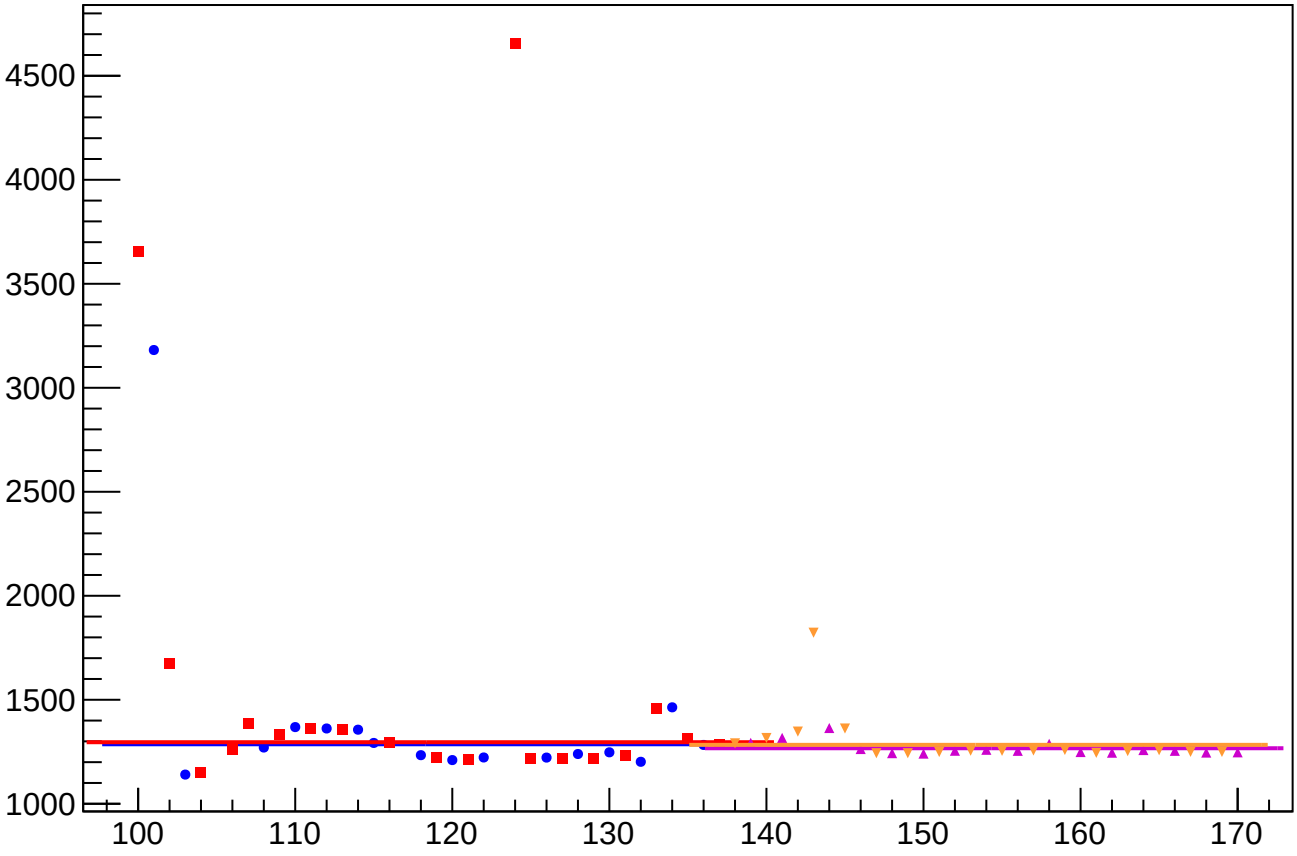
Left In: 292.459+/-348.528 $\chi^2$/NDF:22.1/15

+ sign -426.174+/-284.849 $\chi^2$/NDF: 35.7/32

All: -51.509+/-200.830 $\chi^2$/NDF: 76.9/67

- sign 318.810+/-283.192 $\chi^2$/NDF: 37.8/34

# reg_asym_atl1r2_dd_atl2r1_dd_avg_rms vs Slug




Right In: 1286.097+/-0.345 $\chi^2$/NDF: 518126.9/15

Left Out: 1283.255+/-0.248 $\chi^2$/NDF:164800.9/16

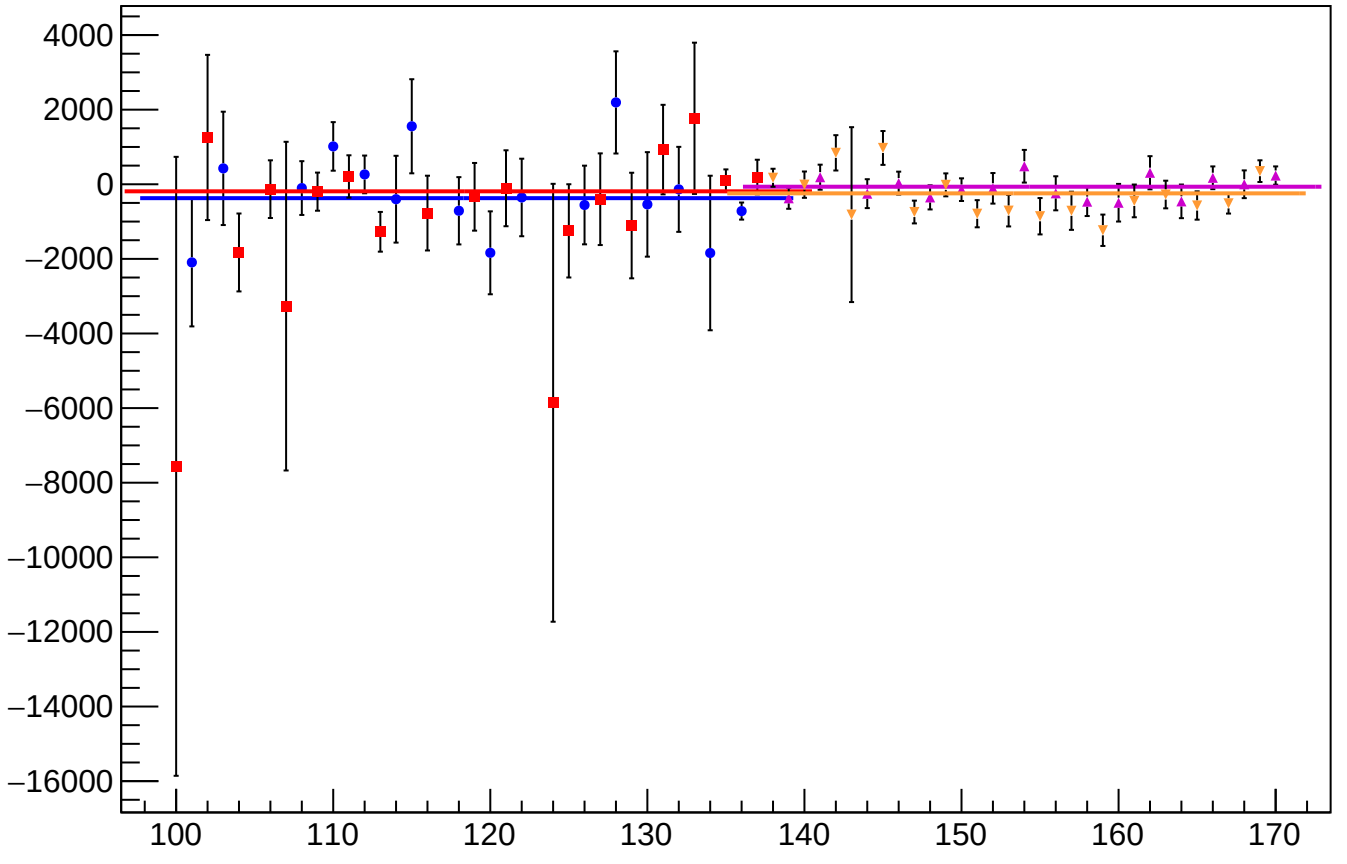
Right Out: 1295.943+/-0.344 $\chi^2$/NDF: 328069.9/18

Left In: 1266.902+/-0.246 $\chi^2$/NDF:16511.4/15

+ sign 1284.225+/-0.201 $\chi^2$/NDF: 682972.7/32

All: 1280.476+/-0.142 $\chi^2$/NDF: 1032961.3/67

- sign 1276.770+/-0.200 $\chi^2$/NDF: 349299.5/34




Right In: -372.325+/-168.204 $\chi^2$/NDF: 18.2/15

Left Out: -243.696+/-88.603 $\chi^2$/NDF:36.7/16

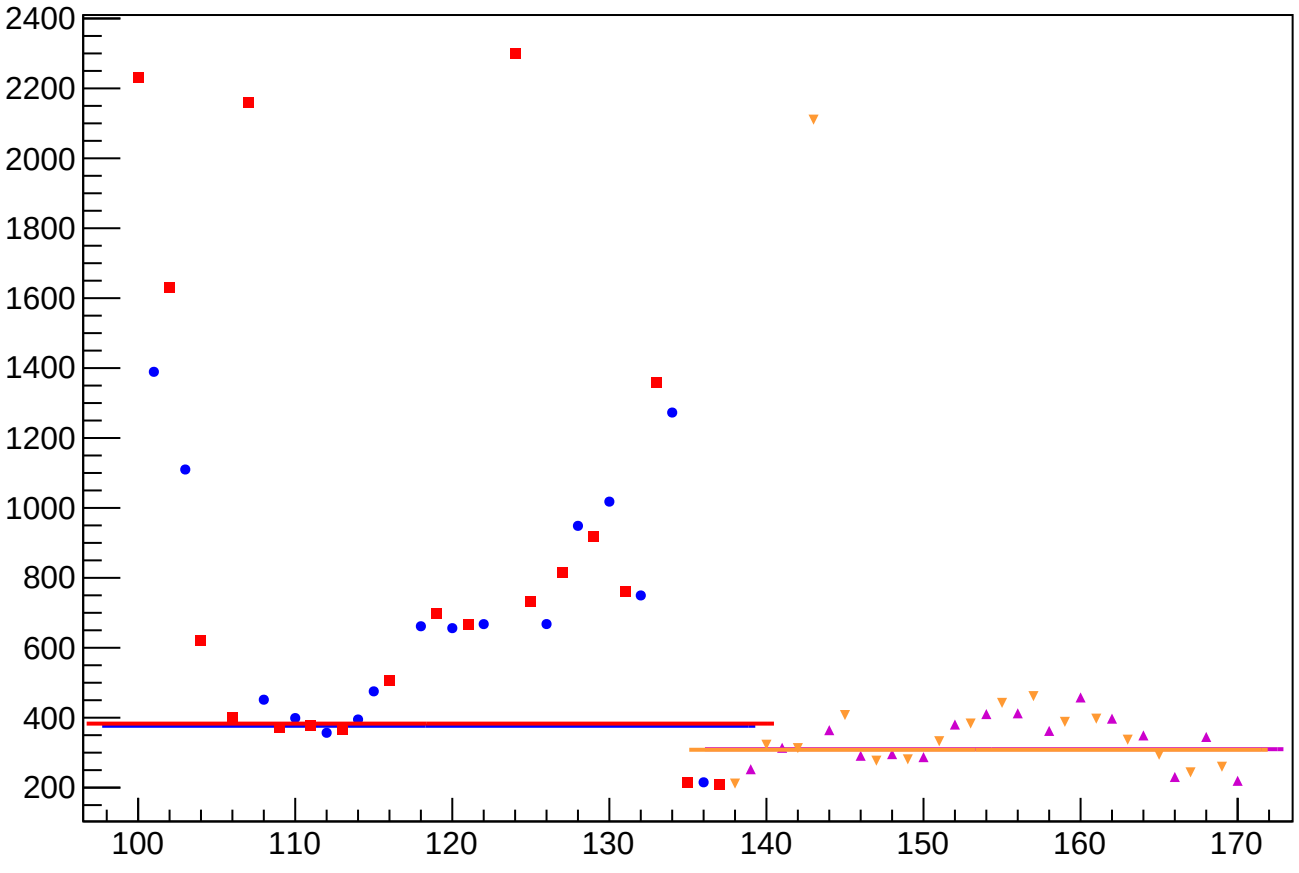
Right Out: -188.945+/-169.575 $\chi^2$/NDF: 14.6/18

Left In: -65.682+/-87.584 $\chi^2$/NDF:10.1/15

+ sign -271.635+/-78.392 $\chi^2$/NDF: 55.3/32

All: -180.976+/-55.227 $\chi^2$/NDF: 83.1/67

- sign -91.639+/-77.818 $\chi^2$/NDF: 25.2/34




Right In: 376.893+/-0.119 $\chi^2$/NDF: 4190194.7/15

Left Out: 308.292+/-0.063 $\chi^2$/NDF:2378878.5/16

Right Out: 383.074+/-0.120 $\chi^2$/NDF: 4054121.5/18

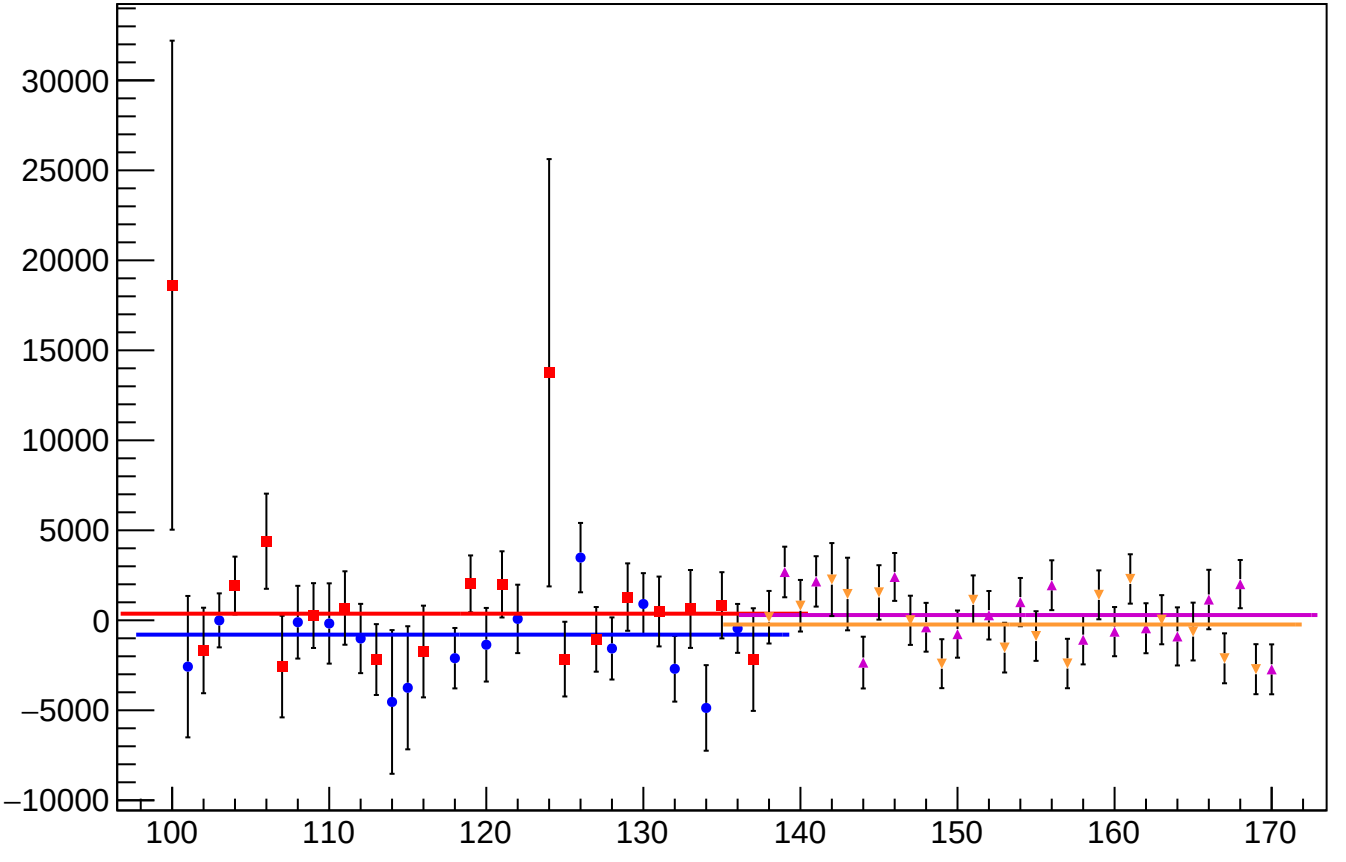
Left In: 309.914+/-0.062 $\chi^2$/NDF:1138157.2/15

+ sign 323.192+/-0.055 $\chi^2$/NDF: 6829486.2/32

All: 324.264+/-0.039 $\chi^2$/NDF: 12316379.3/67

- sign 325.320+/-0.055 $\chi^2$/NDF: 5486150.9/34

# cor_asym_atl1r2_dd_atl2r1_dd_avg_mean vs Slug




Right In: -796.883+/-487.454 $\chi^2$/NDF: 13.4/15

Left Out: -233.682+/-351.019 $\chi^2$/NDF:21.4/16

Right Out: 367.476+/-486.348 $\chi^2$/NDF: 15.7/18

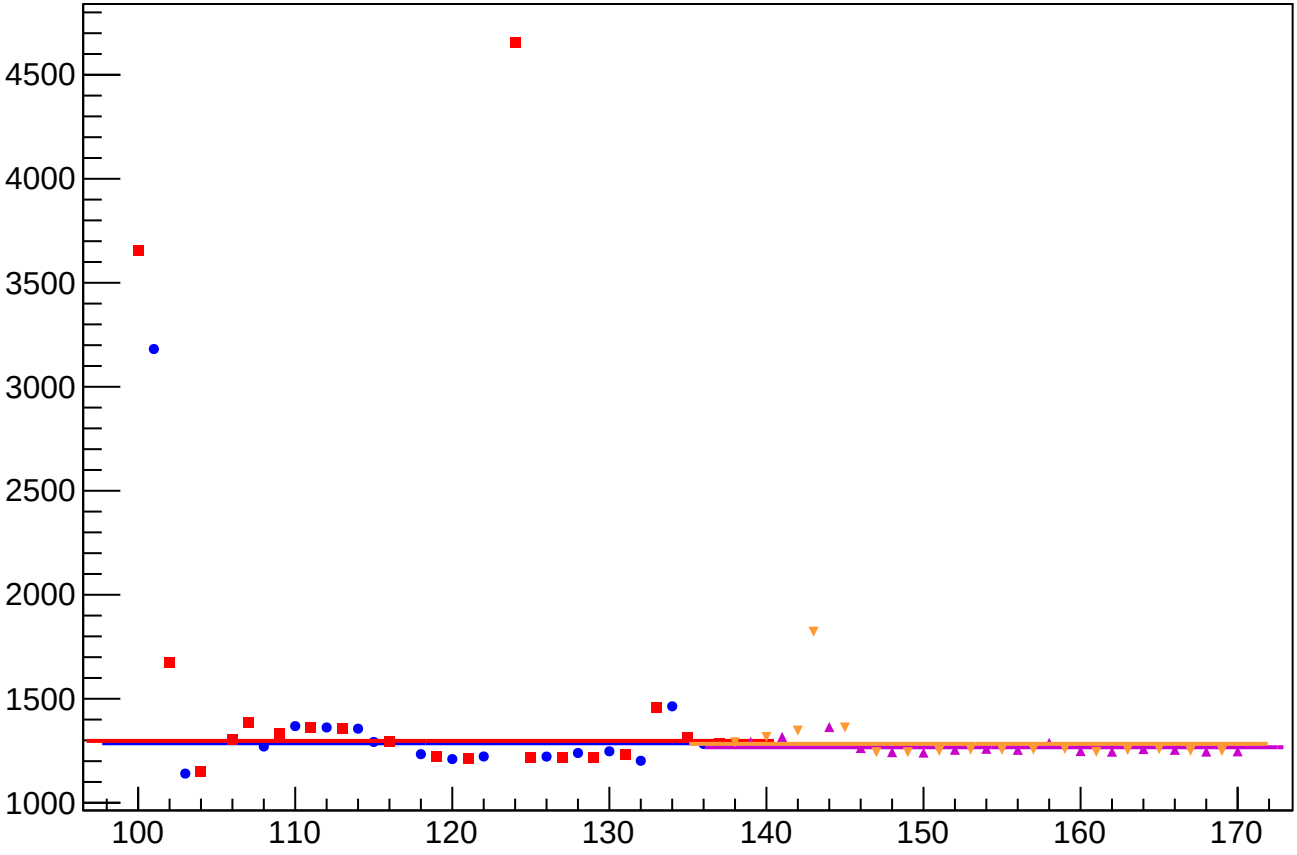
Left In: 292.412+/-348.528 $\chi^2$/NDF:22.1/15

+ sign -426.003+/-284.849 $\chi^2$/NDF: 35.7/32

All: -52.027+/-200.867 $\chi^2$/NDF: 76.9/67

- sign 317.881+/-283.295 $\chi^2$/NDF: 37.8/34

# cor_asym_atl1r2_dd_atl2r1_dd_avg_rms vs Slug




Right In: 1286.097+/-0.345 $\chi^2$/NDF: 518128.4/15

Left Out: 1283.255+/-0.248 $\chi^2$/NDF:164800.9/16

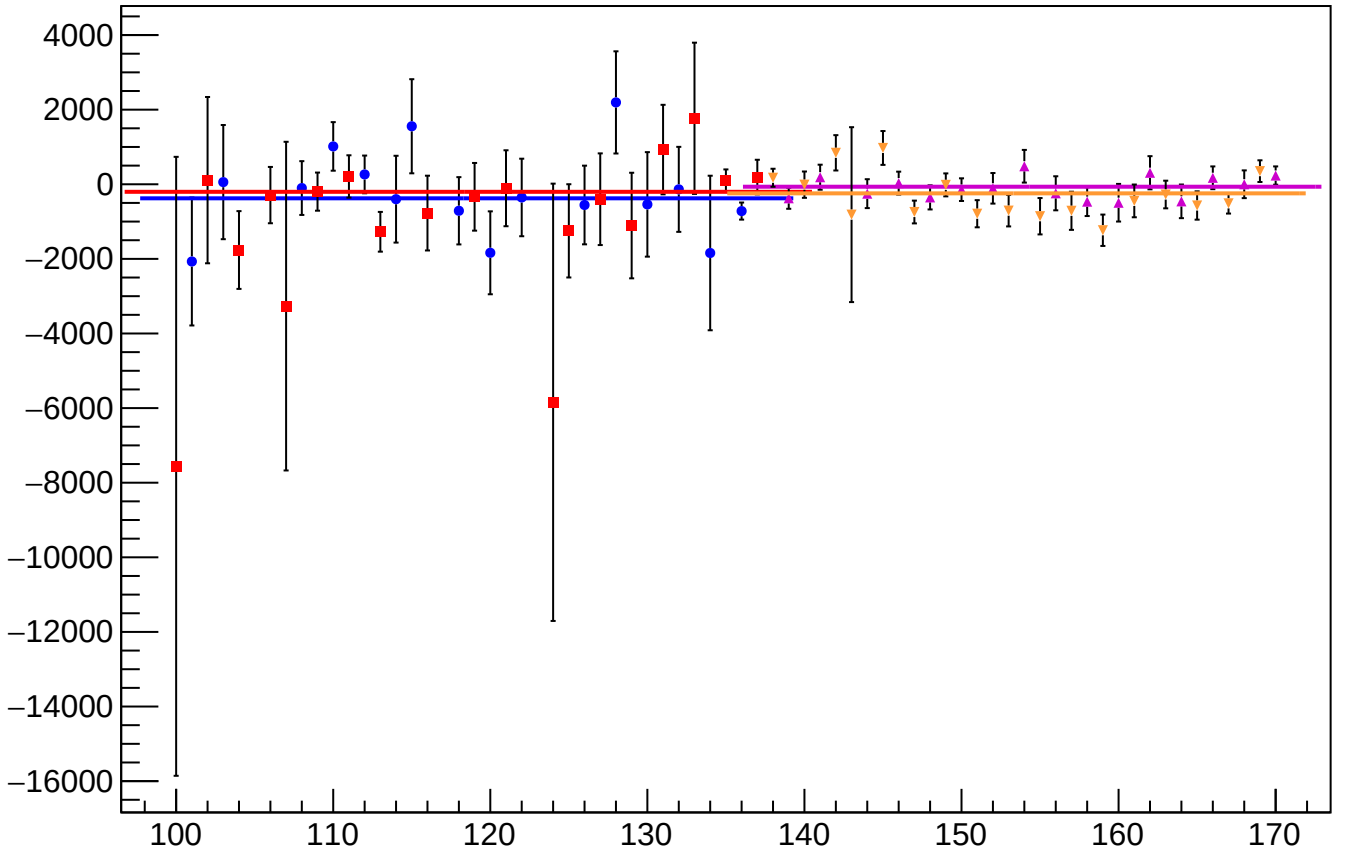
Right Out: 1297.394+/-0.344 $\chi^2$/NDF: 327741.7/18

Left In: 1266.902+/-0.246 $\chi^2$/NDF:16511.4/15

+ sign 1284.225+/-0.201 $\chi^2$/NDF: 682974.1/32

All: 1280.718+/-0.142 $\chi^2$/NDF: 1033024.5/67

- sign 1277.248+/-0.200 $\chi^2$/NDF: 349447.2/34




Right In: -376.771+/-168.223 $\chi^2$/NDF: 17.9/15

Left Out: -243.704+/-88.605 $\chi^2$/NDF:36.7/16

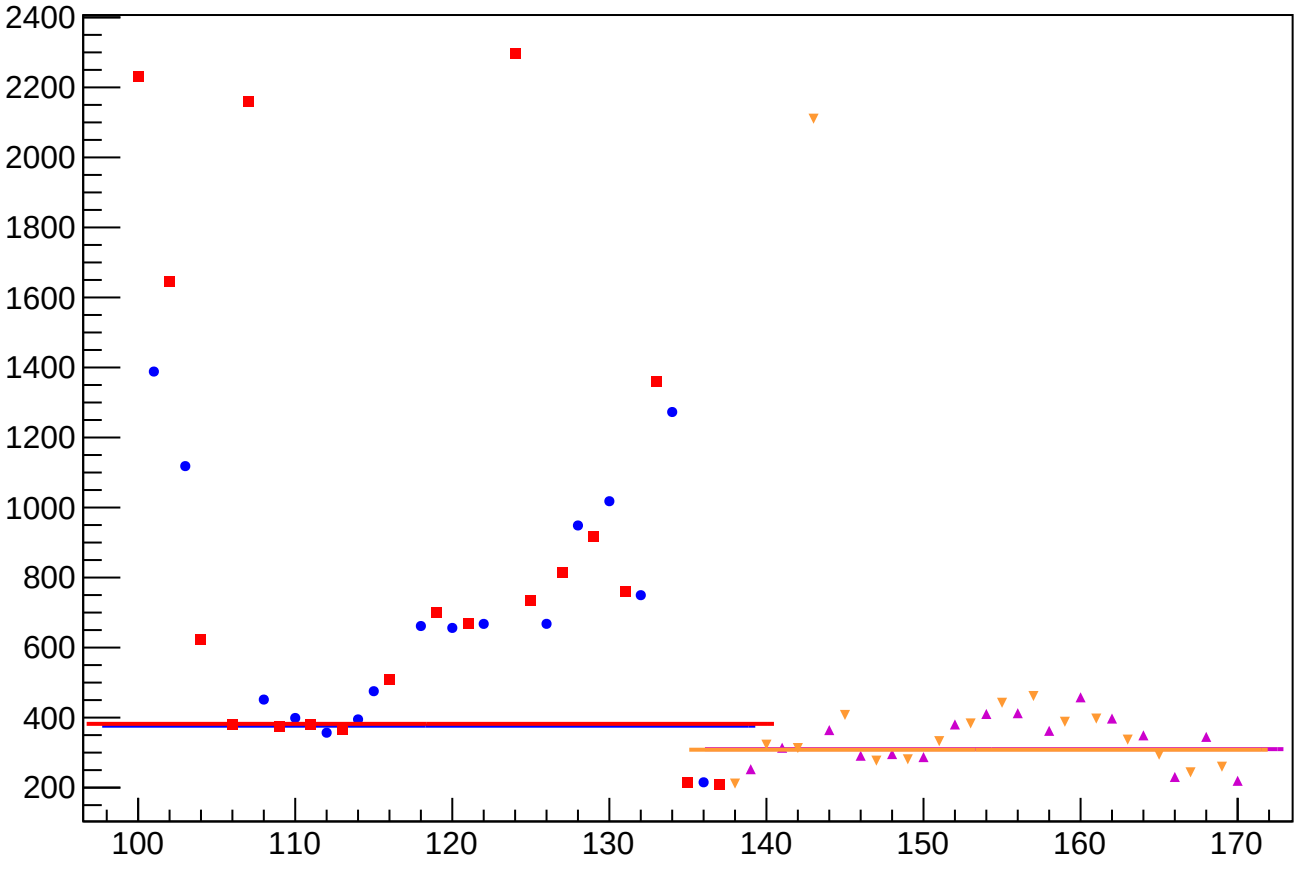
Right Out: -202.144+/-169.377 $\chi^2$/NDF: 14.0/18

Left In: -65.696+/-87.584 $\chi^2$/NDF:10.1/15

+ sign -272.602+/-78.395 $\chi^2$/NDF: 55.1/32

All: -182.862+/-55.222 $\chi^2$/NDF: 82.4/67

- sign -94.483+/-77.799 $\chi^2$/NDF: 24.7/34




Right In: 376.884+/-0.119 $\chi^2$/NDF: 4193328.0/15

Left Out: 308.301+/-0.063 $\chi^2$/NDF:2378708.2/16

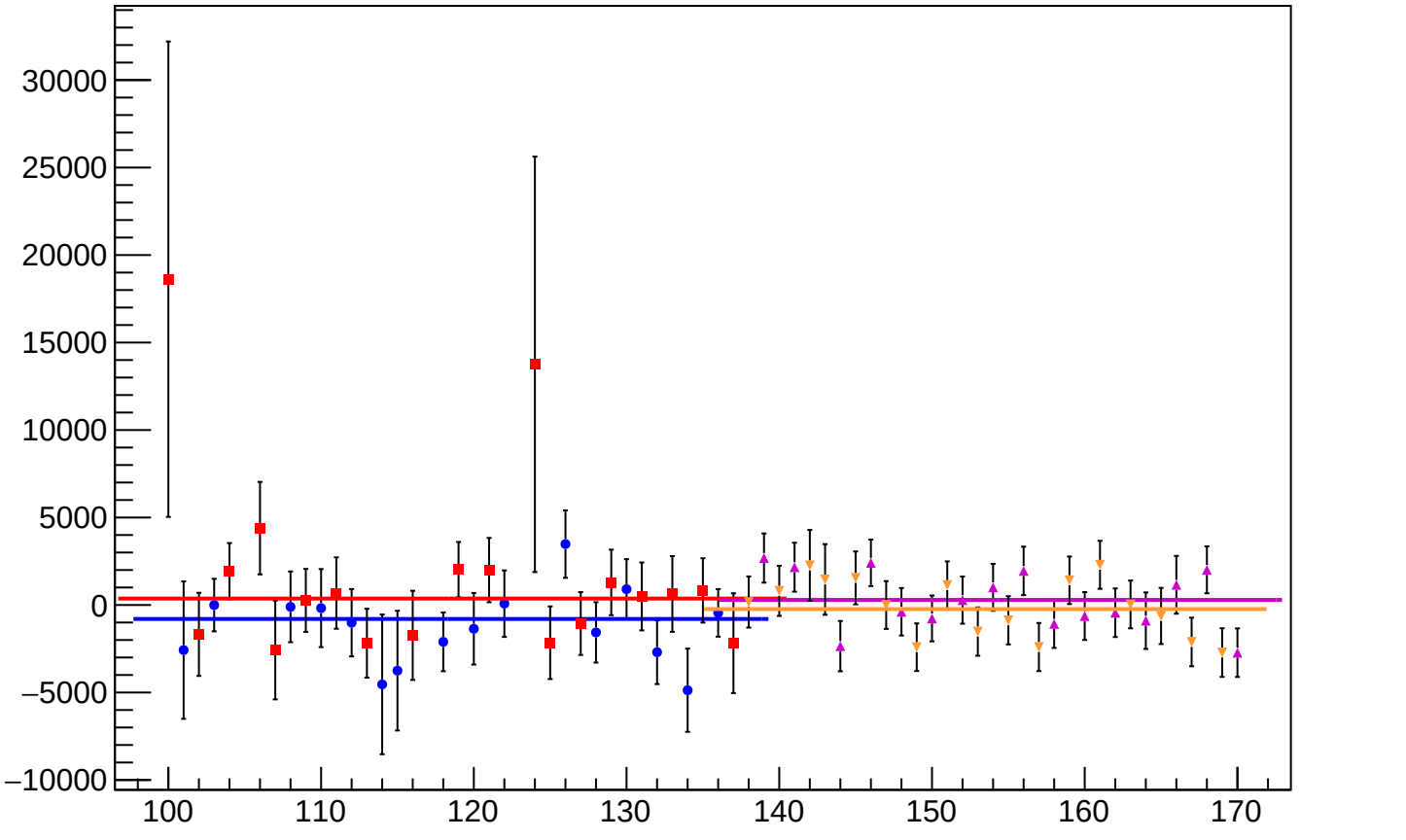
Right Out: 382.136+/-0.120 $\chi^2$/NDF: 4059600.2/18

Left In: 309.914+/-0.062 $\chi^2$/NDF:1138288.9/15

+ sign 323.196+/-0.055 $\chi^2$/NDF: 6832262.2/32

All: 324.181+/-0.039 $\chi^2$/NDF: 12317693.4/67

- sign 325.151+/-0.055 $\chi^2$/NDF: 5484804.6/34




Right In: -796.883+/-487.454 $\chi^2$/NDF: 13.4/15

Left Out: -233.682+/-351.019 $\chi^2$/NDF:21.4/16

Right Out: 367.476+/-486.348 $\chi^2$/NDF: 15.7/18

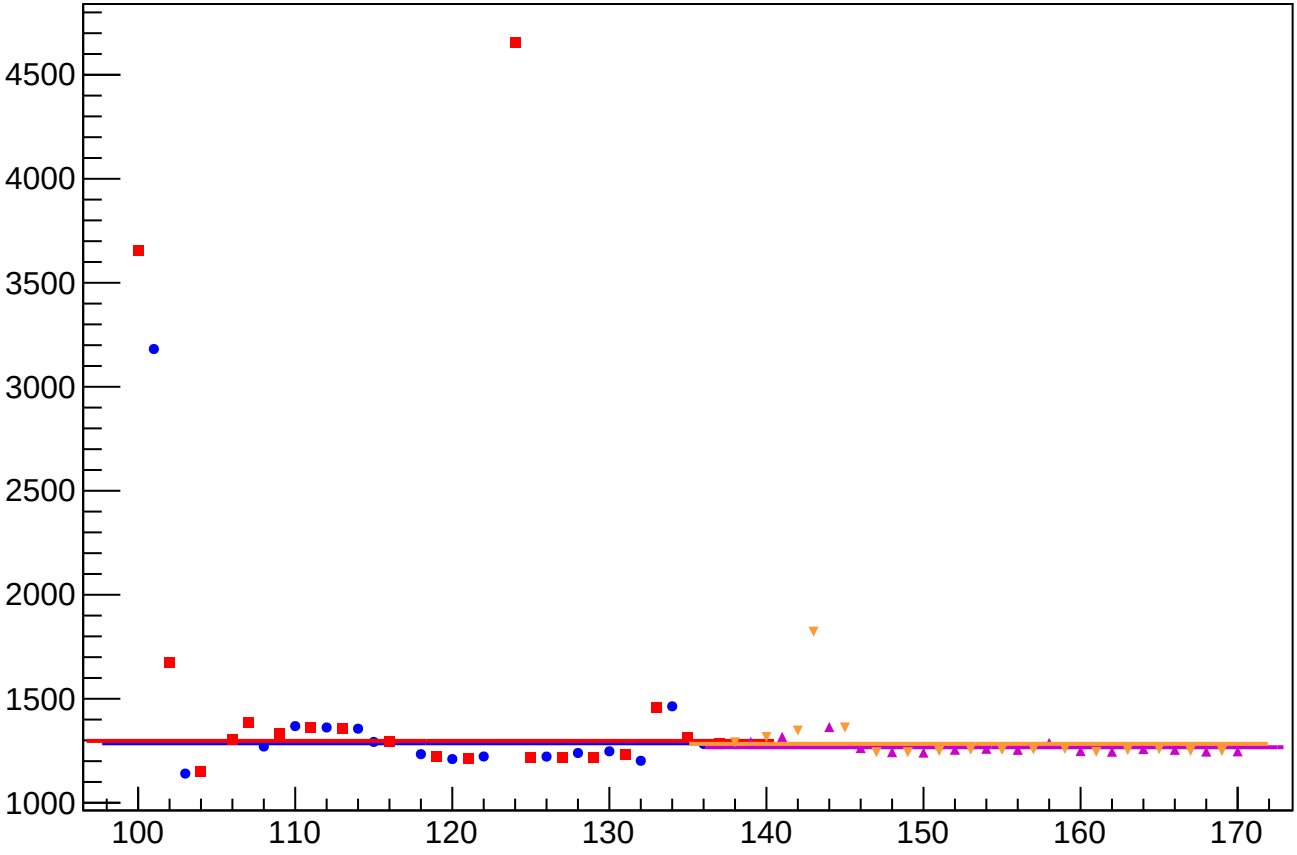
Left In: 292.412+/-348.528 $\chi^2$/NDF:22.1/15

+ sign -426.003+/-284.849 $\chi^2$/NDF: 35.7/32

All: -52.027+/-200.867 $\chi^2$/NDF: 76.9/67

- sign 317.881+/-283.295 $\chi^2$/NDF: 37.8/34

# eigen_cor_asym_atl1r2_dd_atl2r1_dd_avg_rms vs Slug




Right In: 1286.097+/-0.345 $\chi^2$/NDF: 518128.4/15

Left Out: 1283.255+/-0.248 $\chi^2$/NDF:164800.9/16

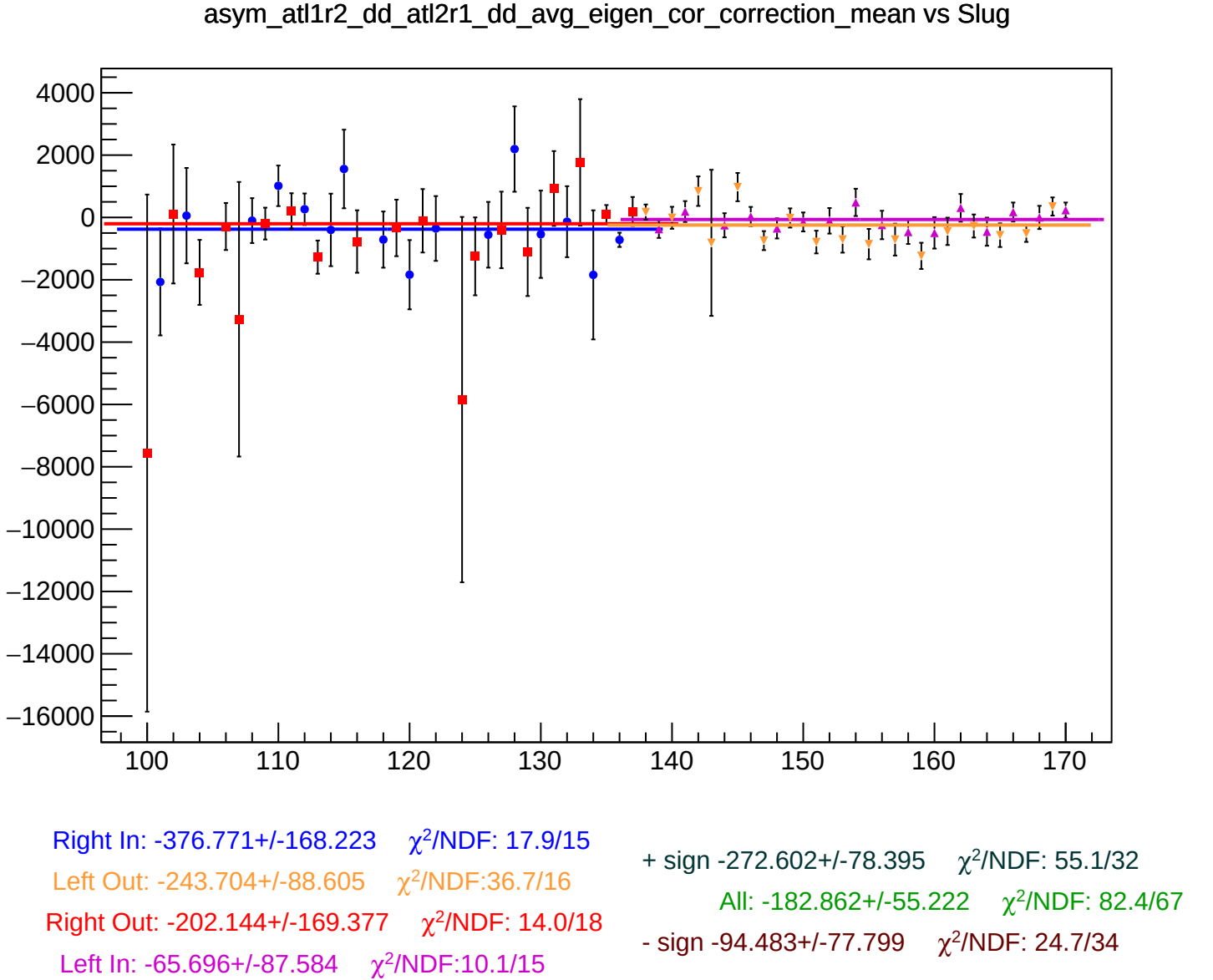
Right Out: 1297.394+/-0.344 $\chi^2$/NDF: 327741.7/18

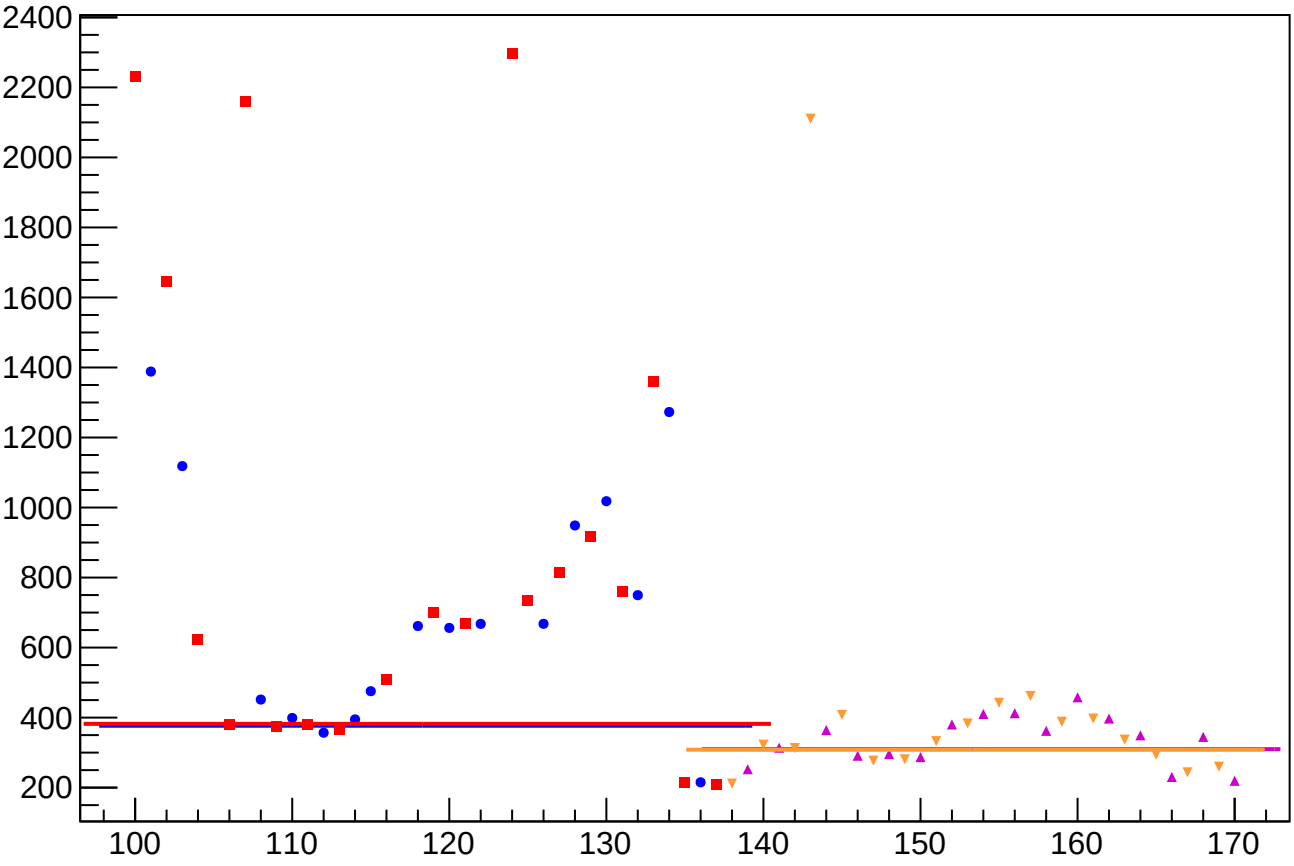
Left In: 1266.902+/-0.246 $\chi^2$/NDF:16511.4/15

+ sign 1284.225+/-0.201 $\chi^2$/NDF: 682974.1/32

All: 1280.718+/-0.142 $\chi^2$/NDF: 1033024.5/67

- sign 1277.248+/-0.200 $\chi^2$/NDF: 349447.2/34


asym_atl1r2_dd_atl2r1_dd_avg_eigen_cor_correction_mean vs Slug
4000
2000
0
−2000
−4000
−6000
−8000
−10000
−12000
−14000
−16000
100
110
120
130
140
150
160
170
Right In: -376.771+/-168.223 χ²/NDF: 17.9/15
Left Out: -243.704+/-88.605 χ²/NDF:36.7/16
Right Out: -202.144+/-169.377 χ²/NDF: 14.0/18
Left In: -65.696+/-87.584 χ²/NDF:10.1/15
+ sign -272.602+/-78.395 χ²/NDF: 55.1/32
All: -182.862+/-55.222 χ²/NDF: 82.4/67
- sign -94.483+/-77.799 χ²/NDF: 24.7/34




Right In: 376.884+/-0.119 $\chi^2$/NDF: 4193328.0/15

Left Out: 308.301+/-0.063 $\chi^2$/NDF:2378708.2/16

Right Out: 382.136+/-0.120 $\chi^2$/NDF: 4059600.2/18

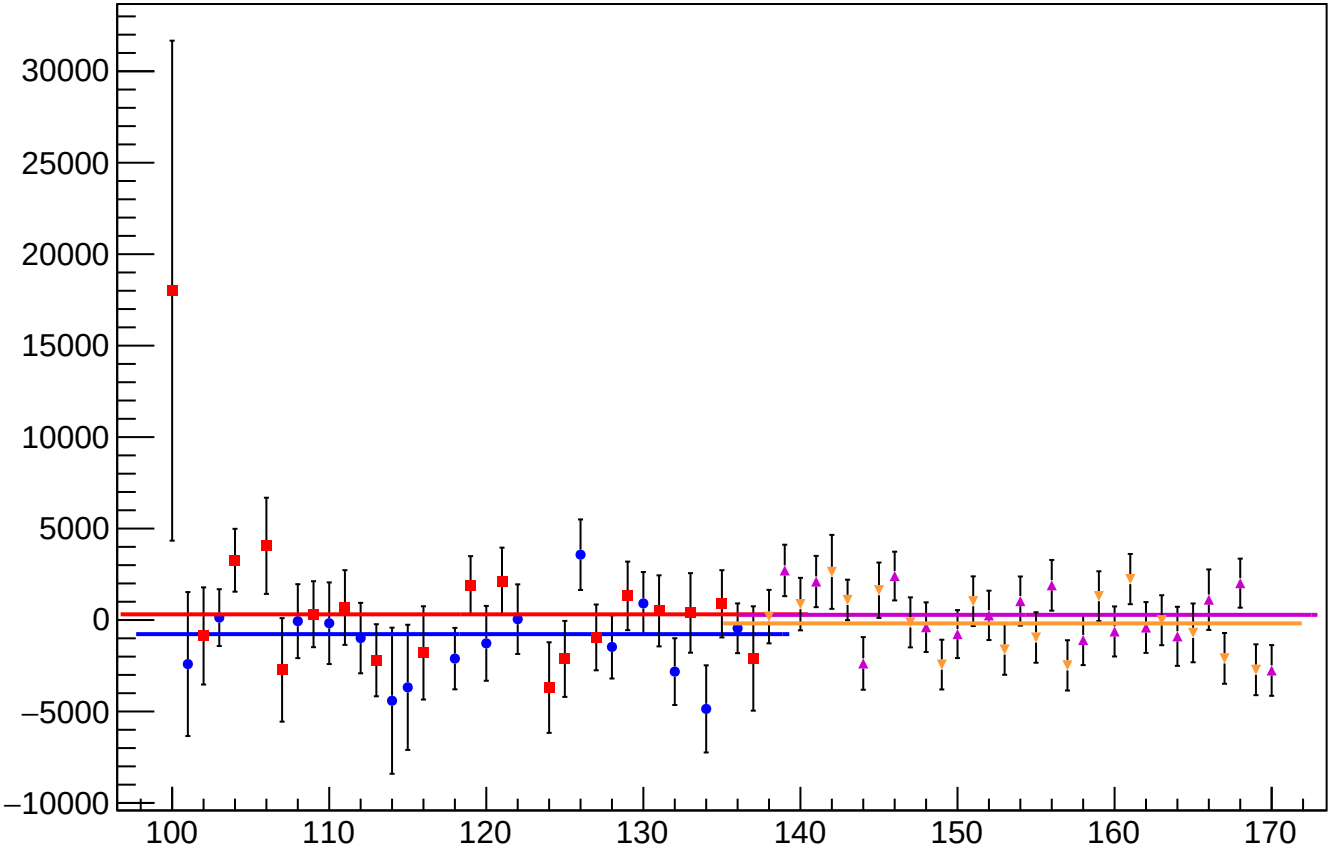
Left In: 309.914+/-0.062 $\chi^2$/NDF:1138288.9/15

+ sign 323.196+/-0.055 $\chi^2$/NDF: 6832262.2/32

All: 324.181+/-0.039 $\chi^2$/NDF: 12317693.4/67

- sign 325.151+/-0.055 $\chi^2$/NDF: 5484804.6/34

# dit_asym_atl1r2_dd_atl2r1_dd_avg_mean vs Slug




Right In: -771.499+/-489.602 $\chi^2$/NDF: 13.6/15

Left Out: -184.203+/-339.481 $\chi^2$/NDF:22.7/16

Right Out: 311.418+/-482.642 $\chi^2$/NDF: 17.9/18

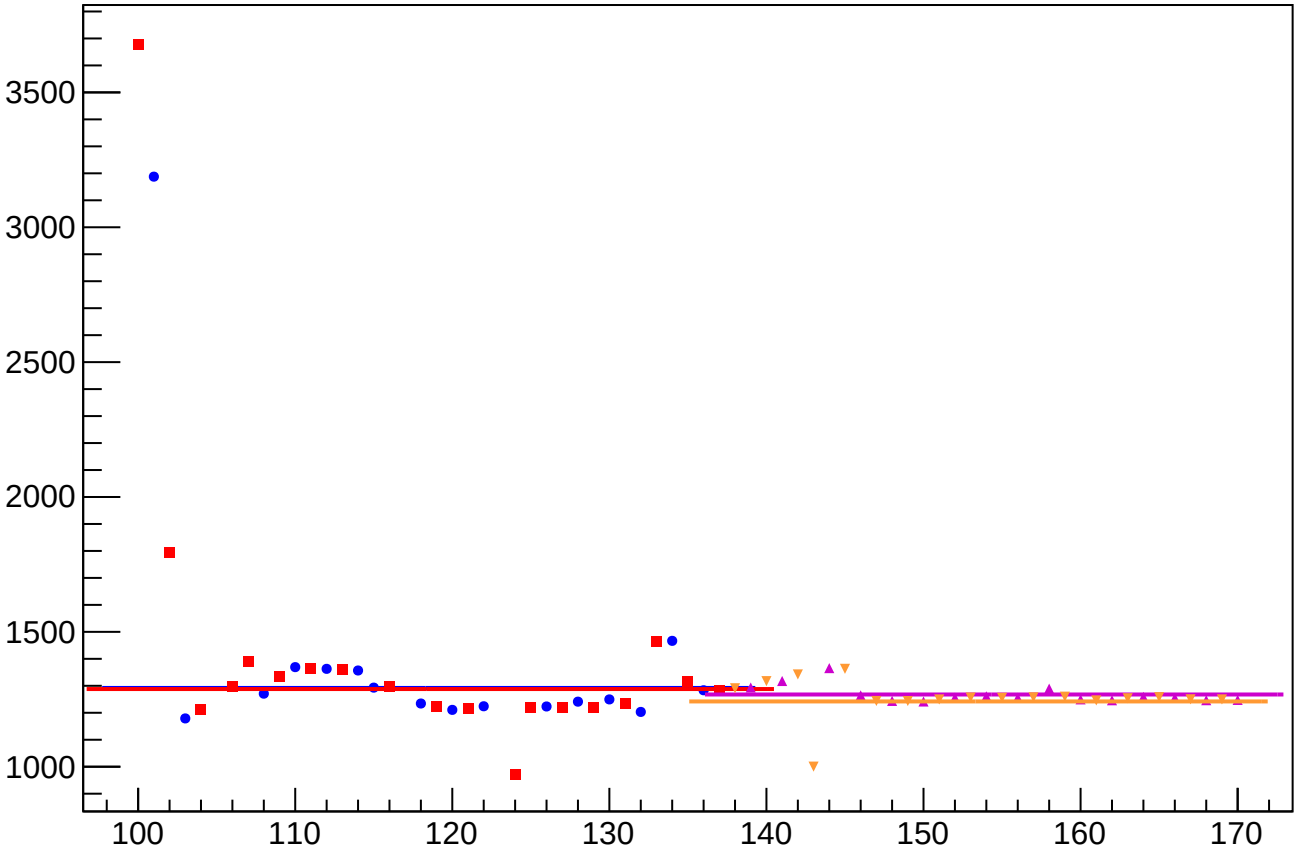
Left In: 283.367+/-348.774 $\chi^2$/NDF:22.1/15

+ sign -374.886+/-278.978 $\chi^2$/NDF: 37.3/32

All: -45.359+/-198.566 $\chi^2$/NDF: 80.1/67

- sign 292.990+/-282.689 $\chi^2$/NDF: 40.1/34

# dit_asym_atl1r2_dd_atl2r1_dd_avg_rms vs Slug




Right In: 1292.038+/-0.346 $\chi^2$/NDF: 509406.3/15

Left Out: 1242.037+/-0.240 $\chi^2$/NDF:122291.2/16

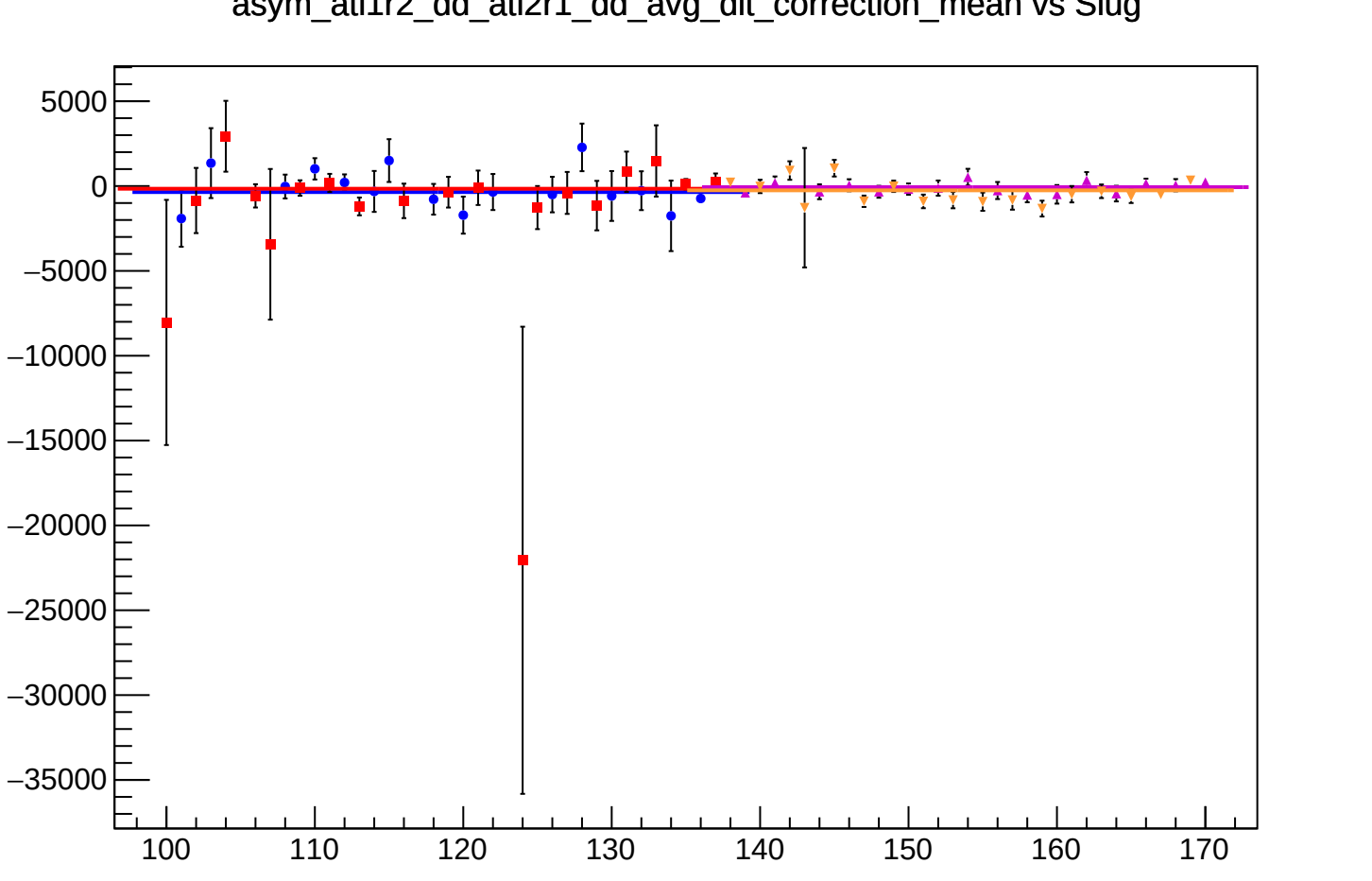
Right Out: 1287.988+/-0.341 $\chi^2$/NDF: 209208.8/18

Left In: 1267.792+/-0.247 $\chi^2$/NDF:16654.1/15

+ sign 1258.271+/-0.197 $\chi^2$/NDF: 645784.2/32

All: 1266.387+/-0.140 $\chi^2$/NDF: 877378.5/67

- sign 1274.720+/-0.200 $\chi^2$/NDF: 228163.6/34




Right In: -355.226+/-169.971 $\chi^2$/NDF: 18.4/15

Left Out: -252.283+/-93.160 $\chi^2$/NDF:38.5/16

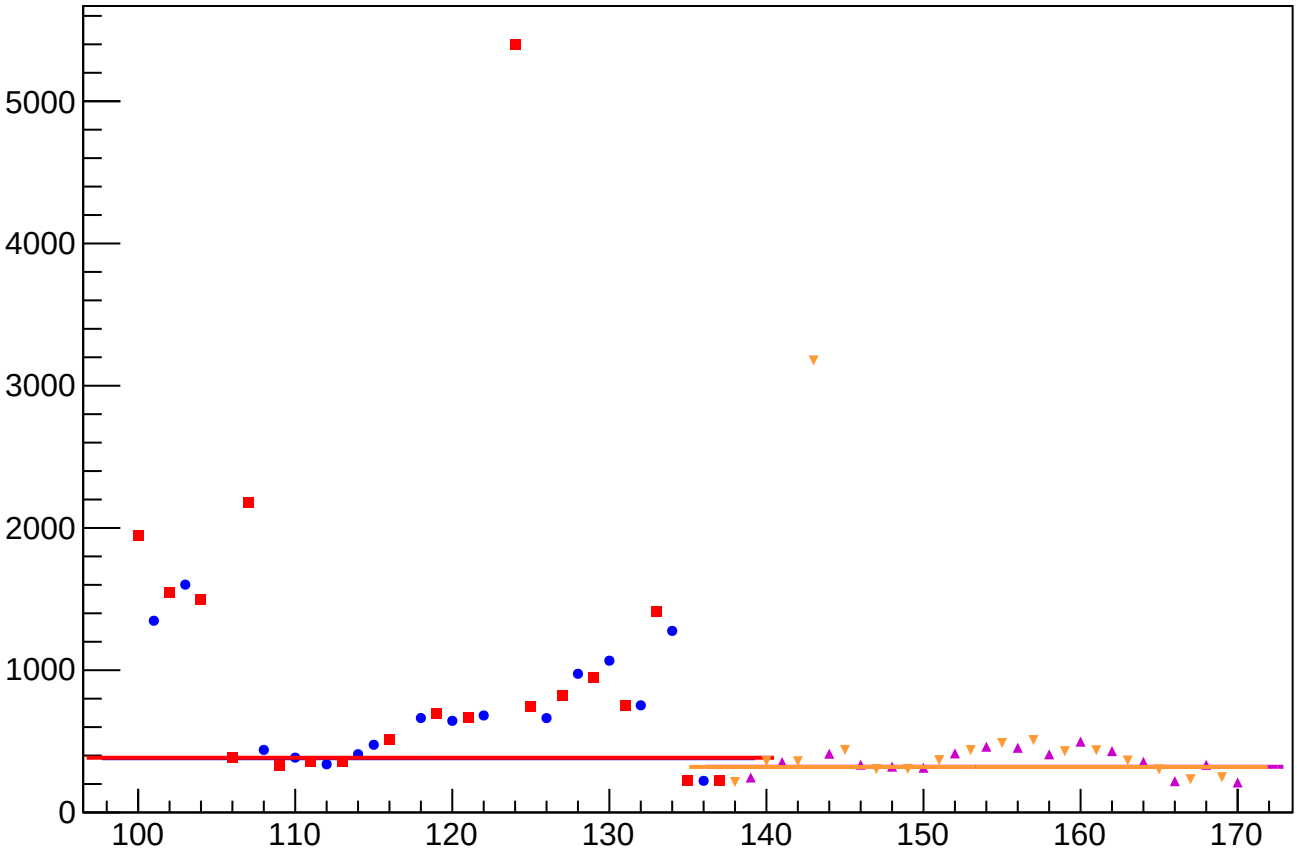
Right Out: -157.924+/-169.665 $\chi^2$/NDF: 15.8/18

Left In: -66.045+/-91.826 $\chi^2$/NDF:9.9/15

+ sign -276.064+/-81.694 $\chi^2$/NDF: 57.2/32

All: -180.371+/-57.432 $\chi^2$/NDF: 85.9/67

- sign -86.861+/-80.757 $\chi^2$/NDF: 26.0/34




Right In: 381.349+/-0.120 $\chi^2$/NDF: 4317922.6/15

Left Out: 320.045+/-0.066 $\chi^2$/NDF:3043071.6/16

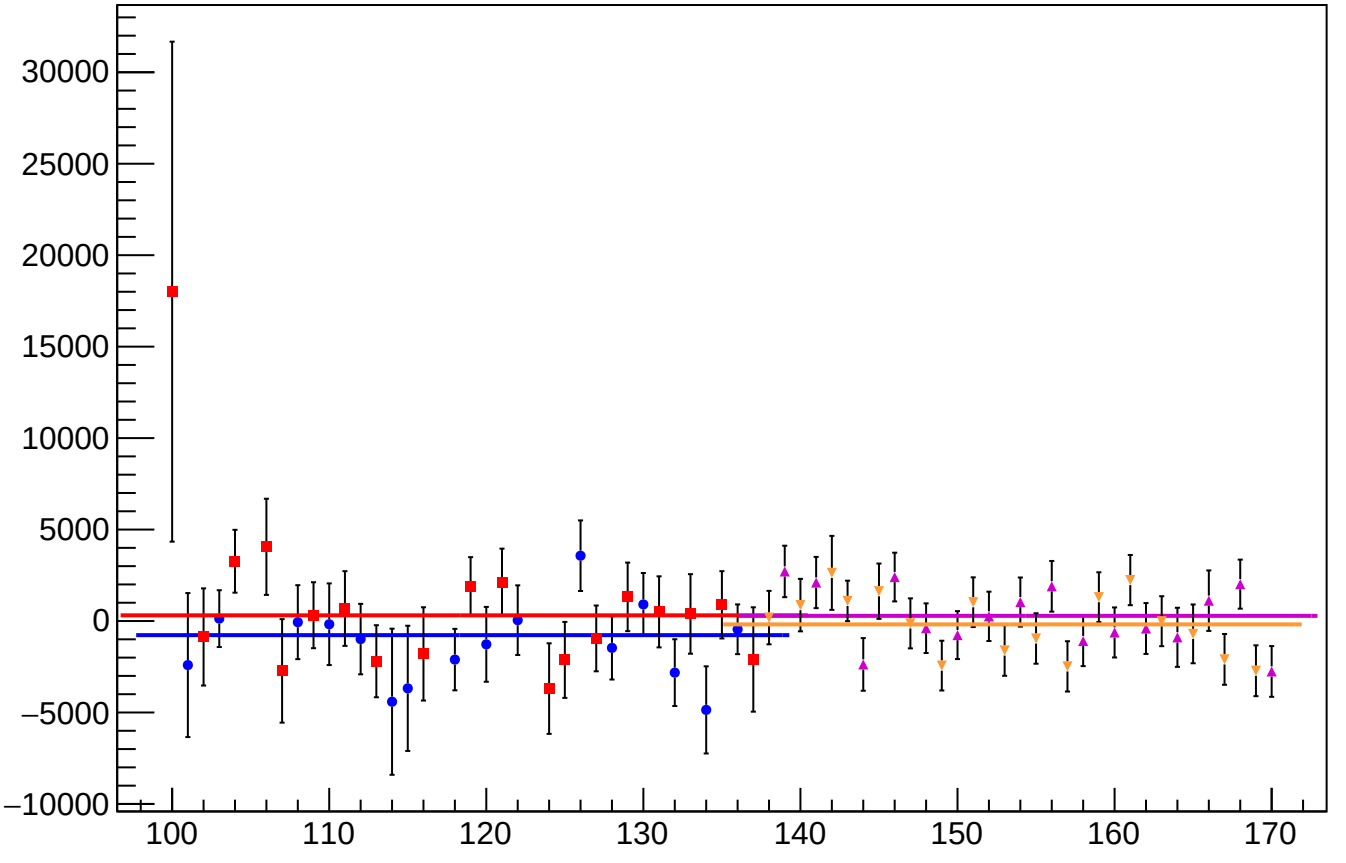
Right Out: 384.651+/-0.120 $\chi^2$/NDF: 4560208.6/18

Left In: 321.050+/-0.065 $\chi^2$/NDF:1739700.2/15

+ sign 334.207+/-0.058 $\chi^2$/NDF: 7561060.9/32

All: 334.841+/-0.041 $\chi^2$/NDF: 14078573.4/67

- sign 335.460+/-0.057 $\chi^2$/NDF: 6517274.8/34




Right In: -771.501+/-489.602 $\chi^2$/NDF: 13.6/15

Left Out: -184.202+/-339.481 $\chi^2$/NDF:22.7/16

Right Out: 311.419+/-482.642 $\chi^2$/NDF: 17.9/18

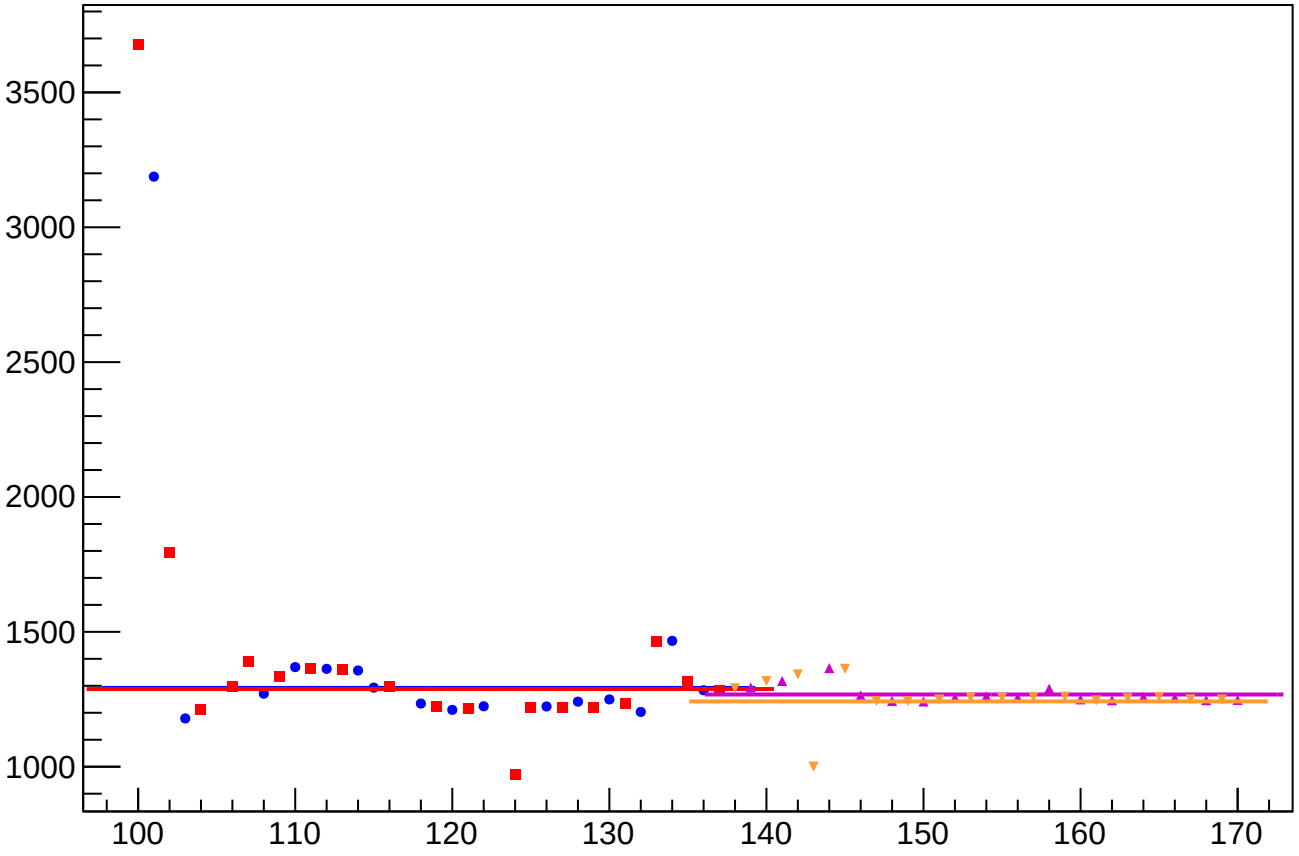
Left In: 283.368+/-348.774 $\chi^2$/NDF:22.1/15

\+ sign -374.886+/-278.978 $\chi^2$/NDF: 37.3/32

All: -45.359+/-198.566 $\chi^2$/NDF: 80.1/67

\- sign 292.991+/-282.689 $\chi^2$/NDF: 40.1/34

# eigen_dit_asym_atl1r2_dd_atl2r1_dd_avg_rms vs Slug




Right In: 1292.038+/-0.346 $\chi^2$/NDF: 509406.2/15

Left Out: 1242.037+/-0.240 $\chi^2$/NDF:122290.4/16

Right Out: 1287.988+/-0.341 $\chi^2$/NDF: 209209.1/18

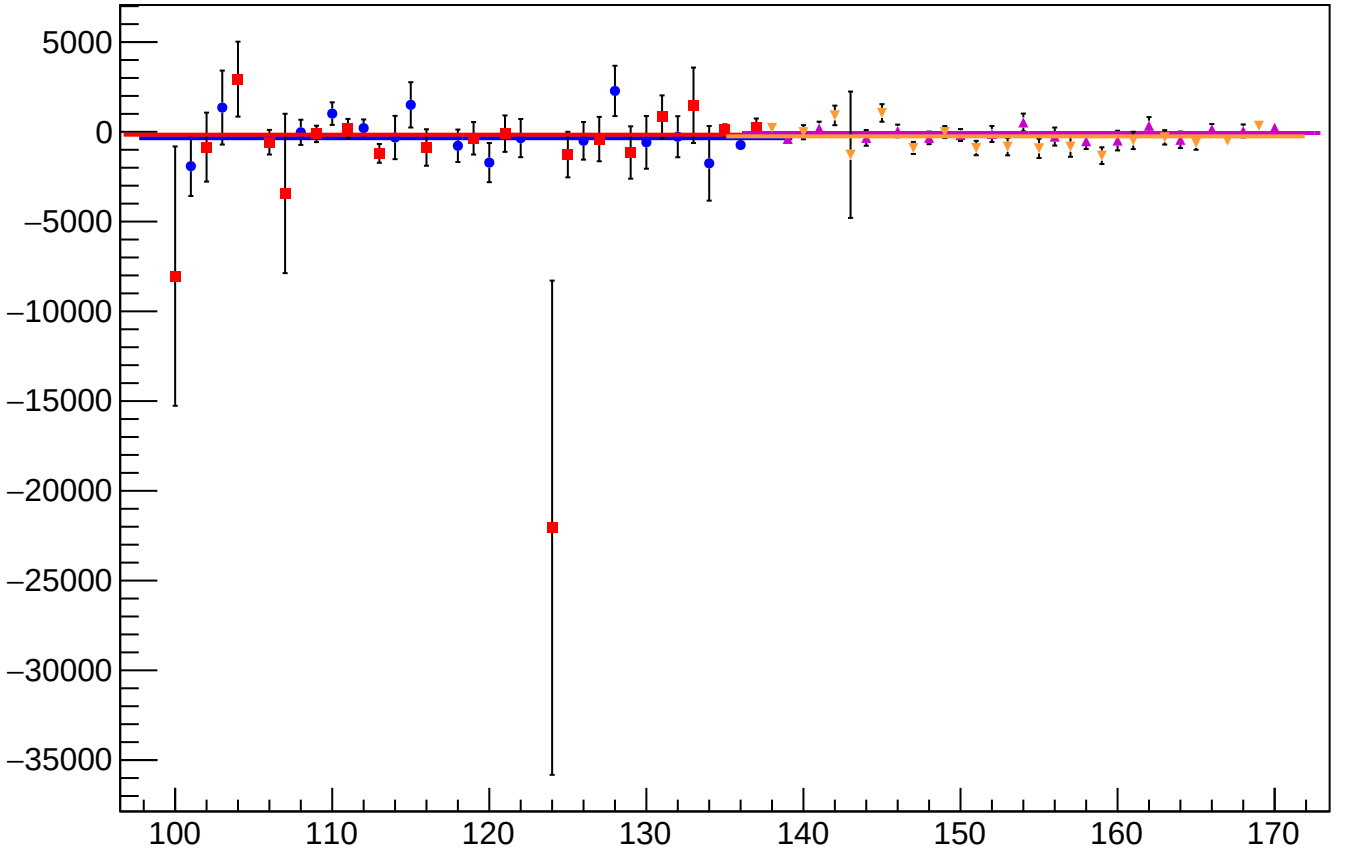
Left In: 1267.792+/-0.247 $\chi^2$/NDF:16654.1/15

+ sign 1258.271+/-0.197 $\chi^2$/NDF: 645783.3/32

All: 1266.387+/-0.140 $\chi^2$/NDF: 877377.8/67

- sign 1274.720+/-0.200 $\chi^2$/NDF: 228163.9/34

asym_atl1r2_dd_atl2r1_dd_avg_eigen_dit_correction_mean vs Slug




Right In: -355.226+/-169.973 $\chi^2$/NDF: 18.4/15

Left Out: -252.292+/-93.161 $\chi^2$/NDF:38.5/16

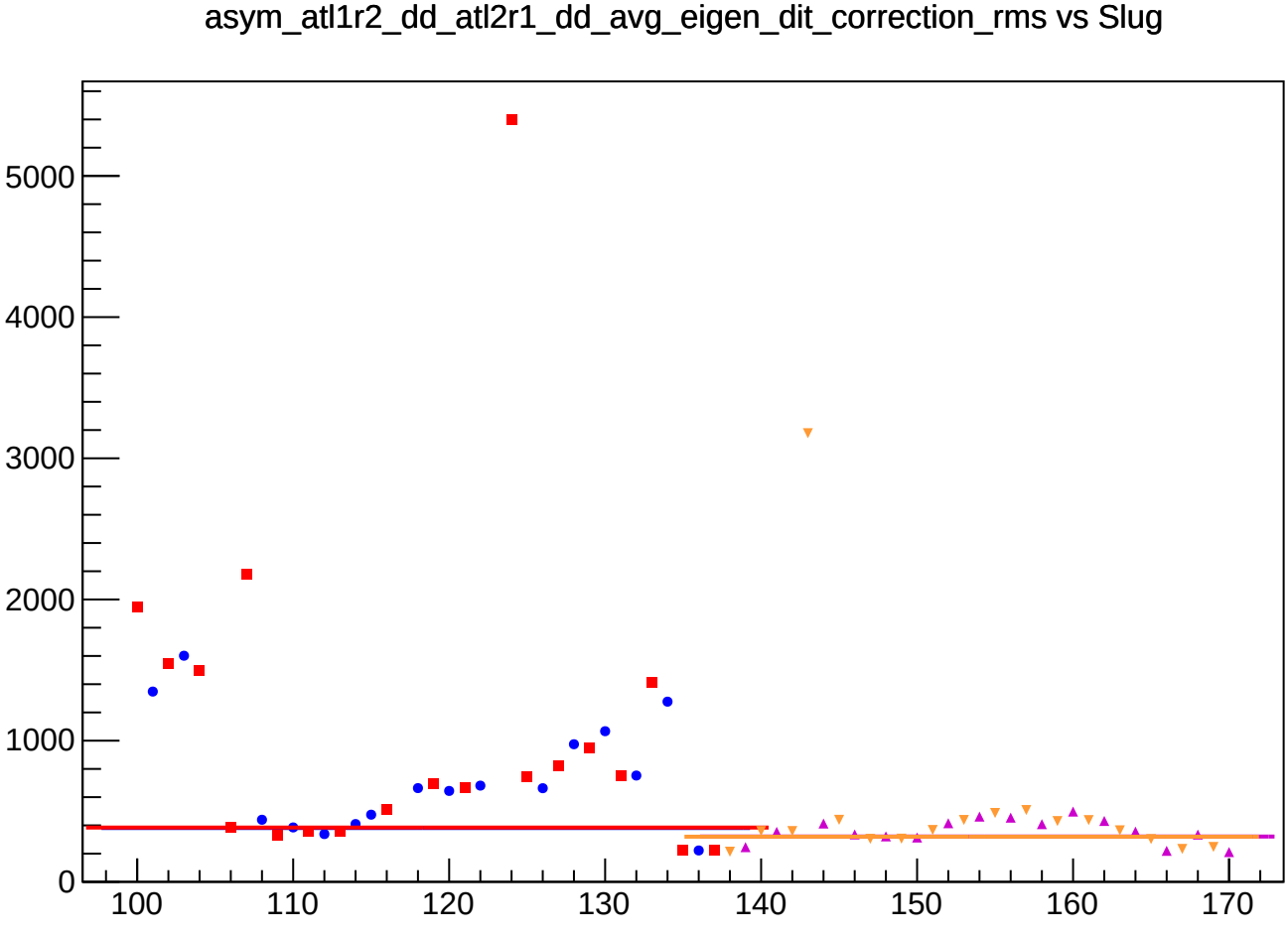
Right Out: -157.929+/-169.667 $\chi^2$/NDF: 15.8/18

Left In: -66.042+/-91.827 $\chi^2$/NDF:9.9/15

+ sign -276.070+/-81.695 $\chi^2$/NDF: 57.2/32

All: -180.373+/-57.433 $\chi^2$/NDF: 85.9/67

- sign -86.860+/-80.758 $\chi^2$/NDF: 26.0/34




Right In: 381.359+/-0.120 $\chi^2$/NDF: 4317737.3/15

Left Out: 320.049+/-0.066 $\chi^2$/NDF:3042948.6/16

Right Out: 384.658+/-0.120 $\chi^2$/NDF: 4560068.3/18

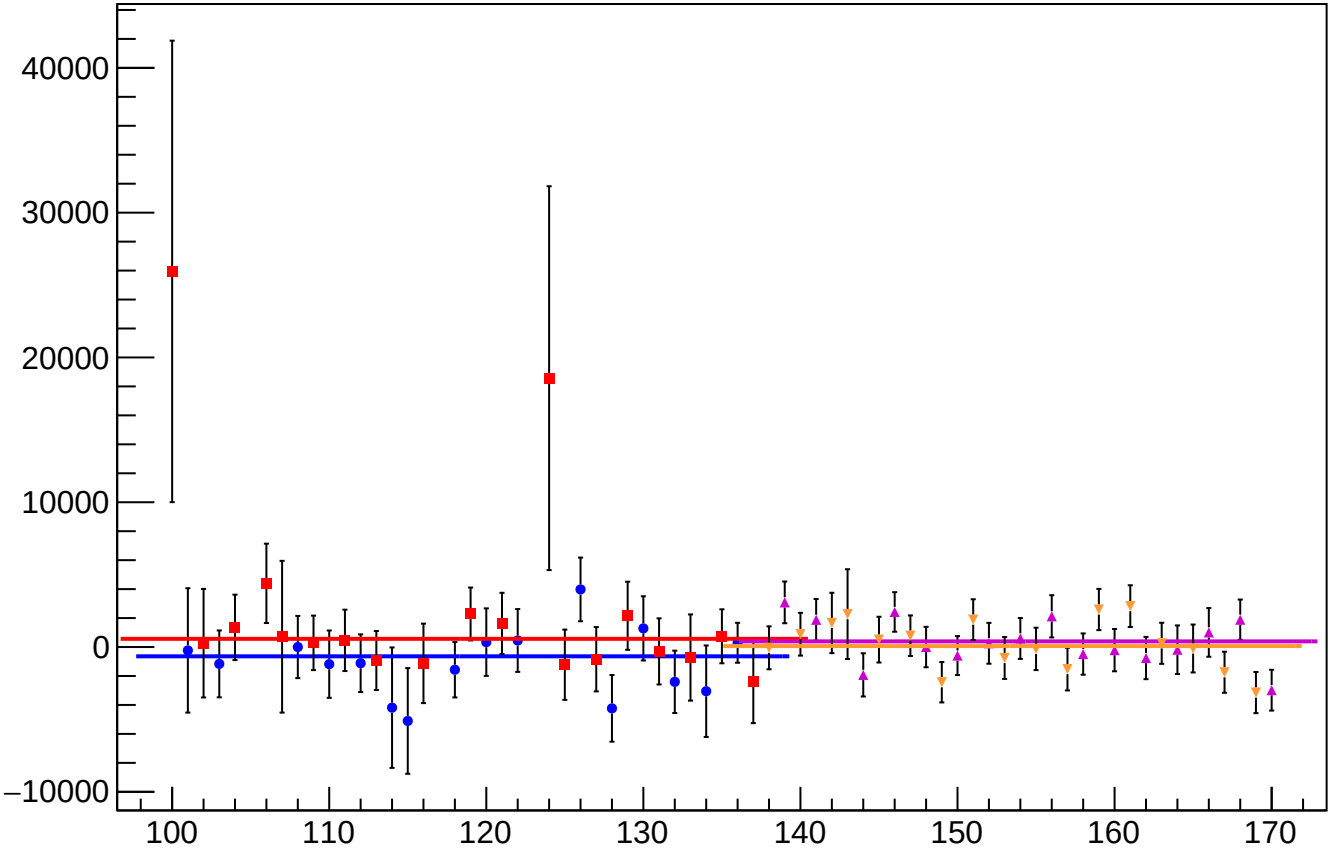
Left In: 321.052+/-0.065 $\chi^2$/NDF:1739642.4/15

+ sign 334.212+/-0.058 $\chi^2$/NDF: 7560791.9/32

All: 334.844+/-0.041 $\chi^2$/NDF: 14078142.2/67

- sign 335.463+/-0.057 $\chi^2$/NDF: 6517113.3/34

# asym_atl1r2_dd_atl2r1_dd_avg_mean vs Slug




Right In: -640.824+/-564.366 $\chi^2$/NDF: 12.5/15

Left Out: 65.816+/-367.345 $\chi^2$/NDF:21.7/16

Right Out: 567.254+/-566.774 $\chi^2$/NDF: 11.3/18

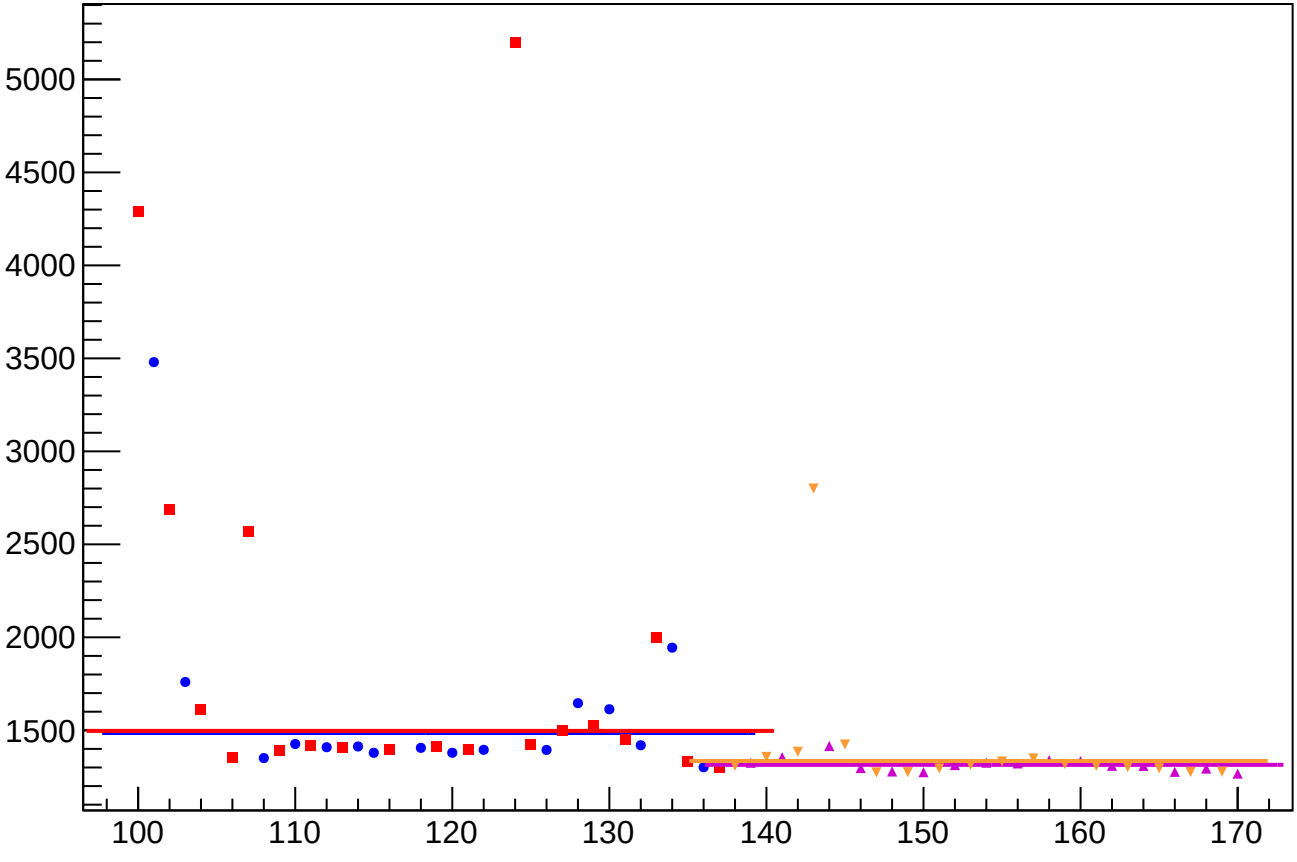
Left In: 391.099+/-361.590 $\chi^2$/NDF:19.5/15

+ sign -144.473+/-307.871 $\chi^2$/NDF: 35.3/32

All: 151.697+/-216.617 $\chi^2$/NDF: 68.0/67

- sign 442.056+/-304.836 $\chi^2$/NDF: 30.9/34

# asym_atl1r2_dd_atl2r1_dd_avg_rms vs Slug




Right In: 1485.370+/-0.399 $\chi^2$/NDF: 584470.1/15

Left Out: 1335.043+/-0.260 $\chi^2$/NDF:473907.4/16

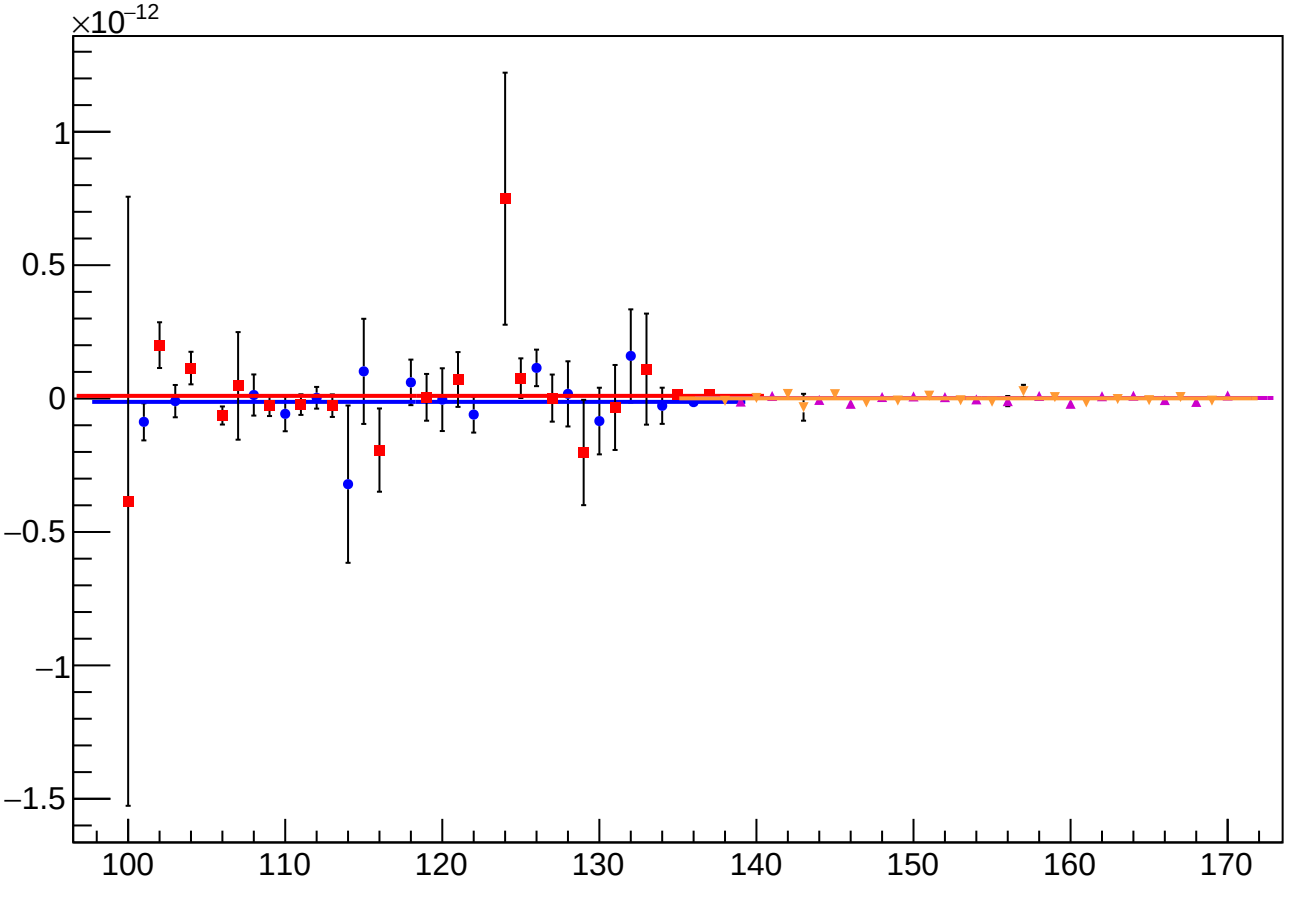
Right Out: 1496.865+/-0.401 $\chi^2$/NDF: 623292.7/18

Left In: 1314.277+/-0.256 $\chi^2$/NDF:19225.9/15

+ sign 1379.779+/-0.218 $\chi^2$/NDF: 1158050.5/32

All: 1373.374+/-0.153 $\chi^2$/NDF: 1949806.3/67

- sign 1367.096+/-0.216 $\chi^2$/NDF: 790041.9/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 9.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:15.5/16

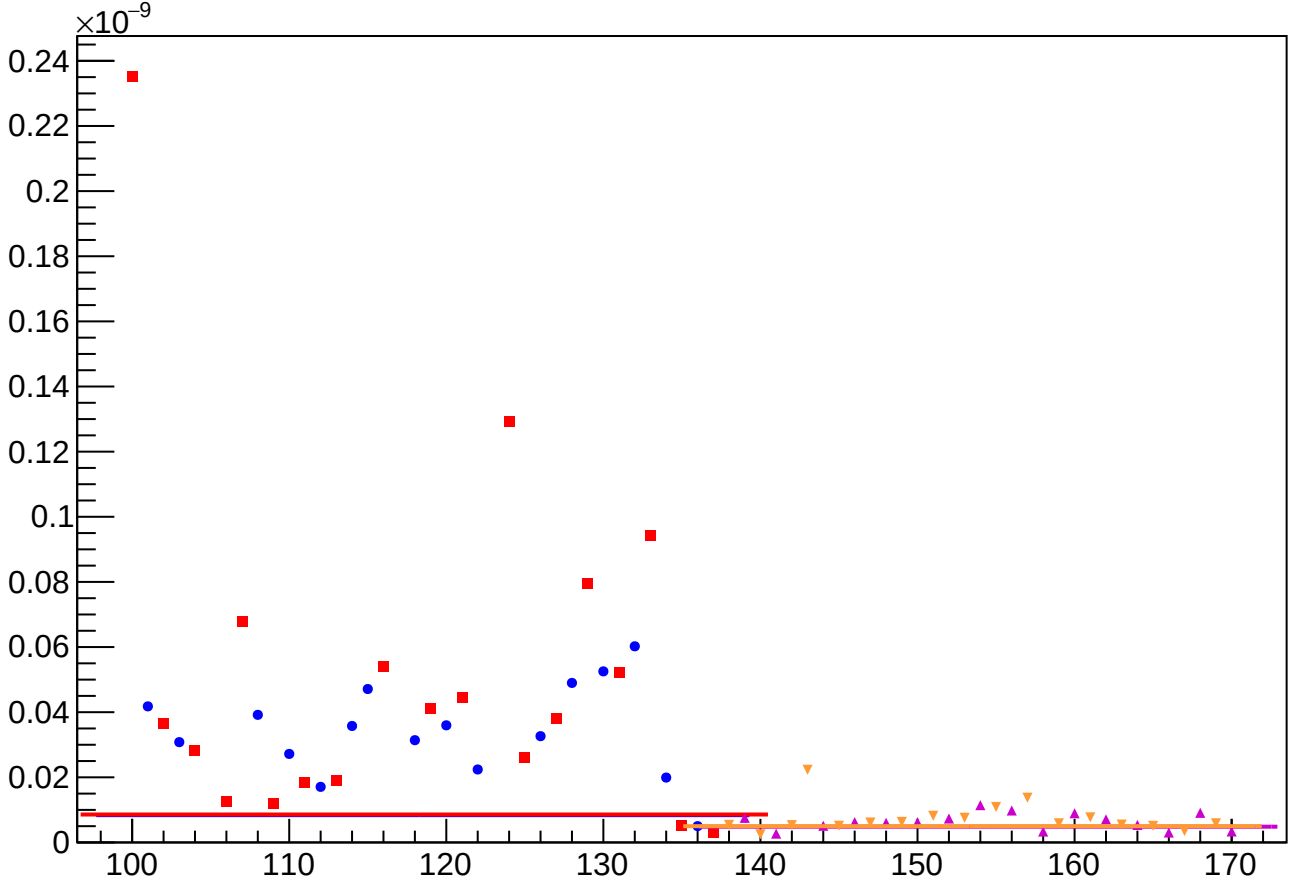
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 22.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:17.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 27.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 69.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 41.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3059657.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1774661.6/16

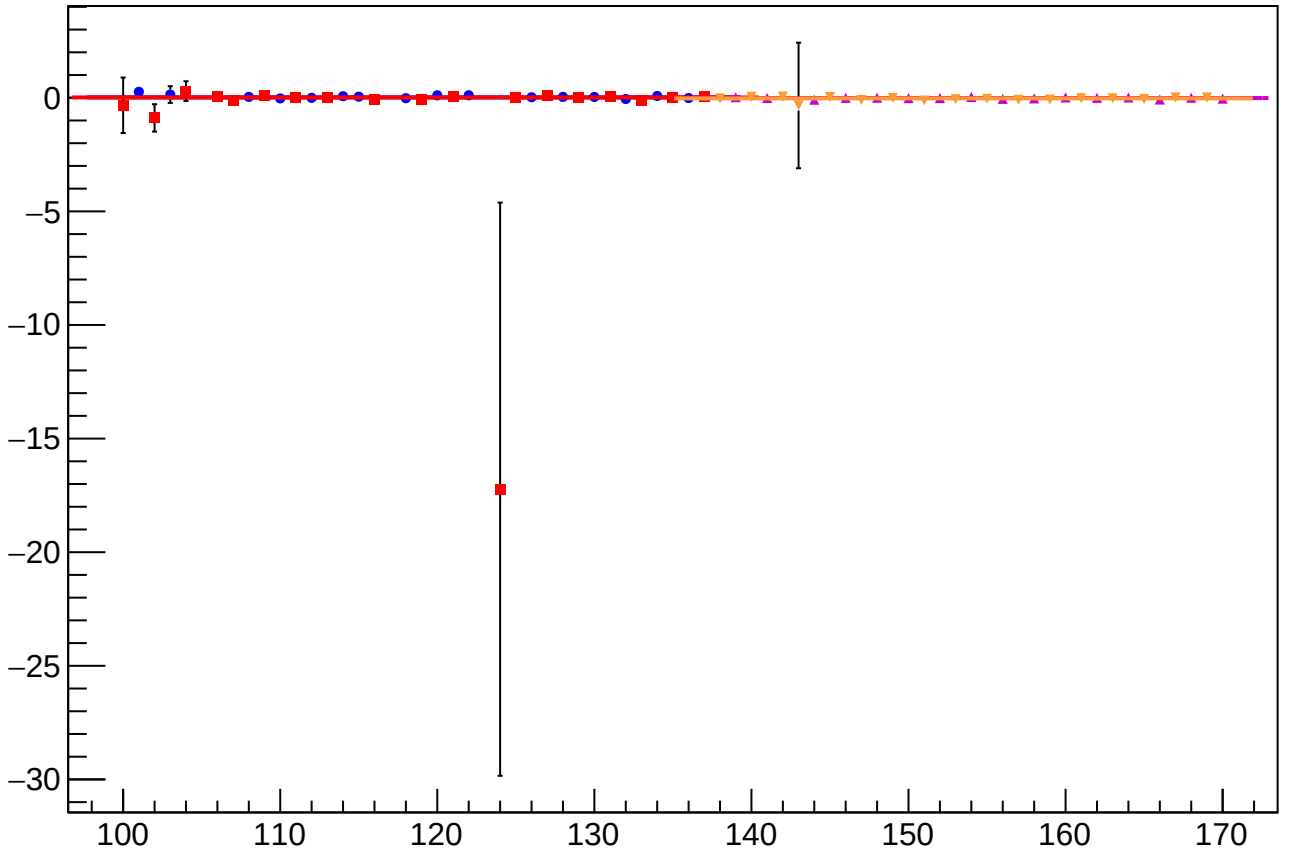
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3348571.5/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:1687671.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5211228.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10653246.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5436461.6/34




Right In: 0.017+/-0.015 $\chi^2$/NDF: 11.5/15

Left Out: -0.027+/-0.010 $\chi^2$/NDF:23.4/16

Right Out: 0.014+/-0.016 $\chi^2$/NDF: 16.0/18

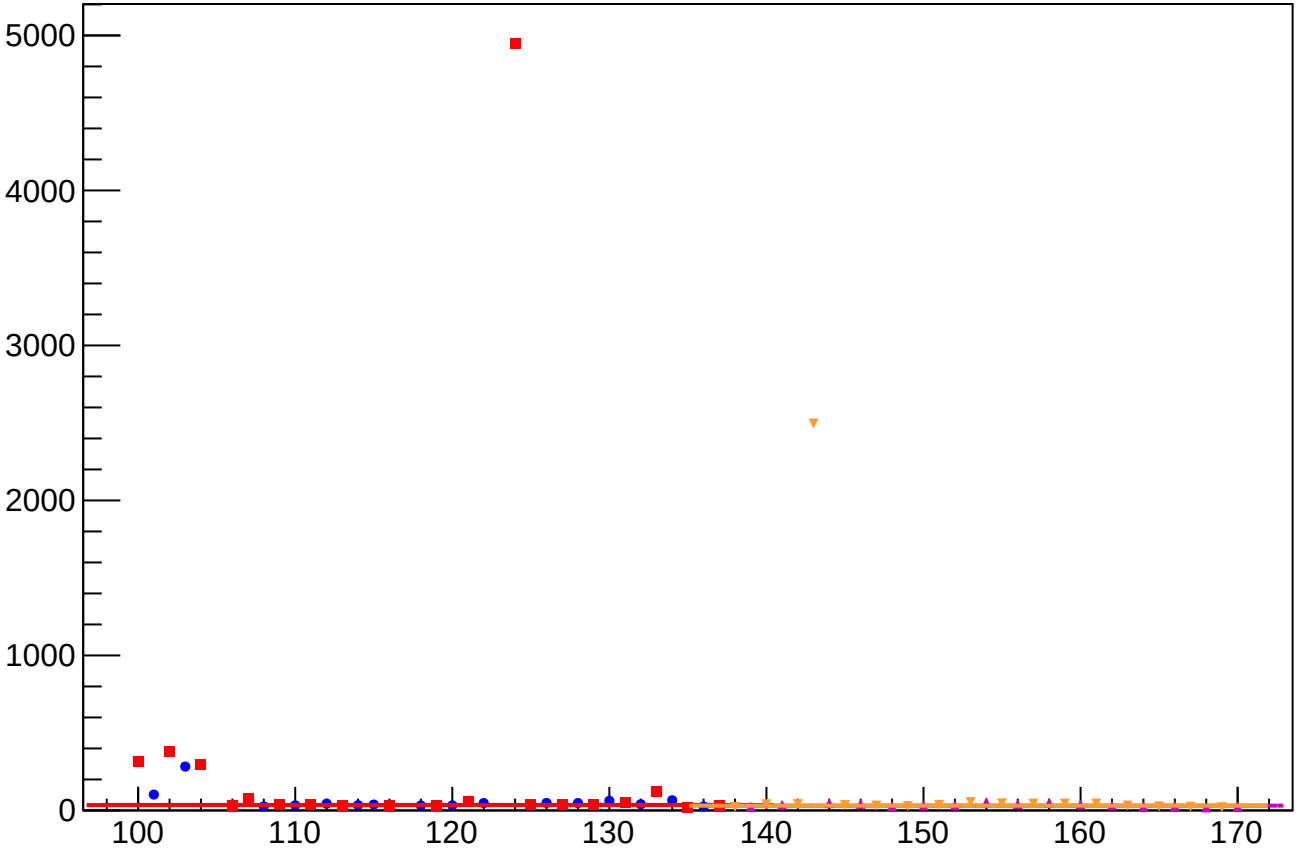
Left In: -0.011+/-0.010 $\chi^2$/NDF:9.8/15

+ sign -0.015+/-0.008 $\chi^2$/NDF: 40.7/32

All: -0.010+/-0.006 $\chi^2$/NDF: 69.2/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 27.6/34

# asym_atl1r2_dd_atl2r1_dd_avg_dit_vs_cor_diff_rms vs Slug




Right In: 35.742+/-0.011 $\chi^2$/NDF: 2264790.8/15

Left Out: 30.761+/-0.007 $\chi^2$/NDF:3203512.0/16

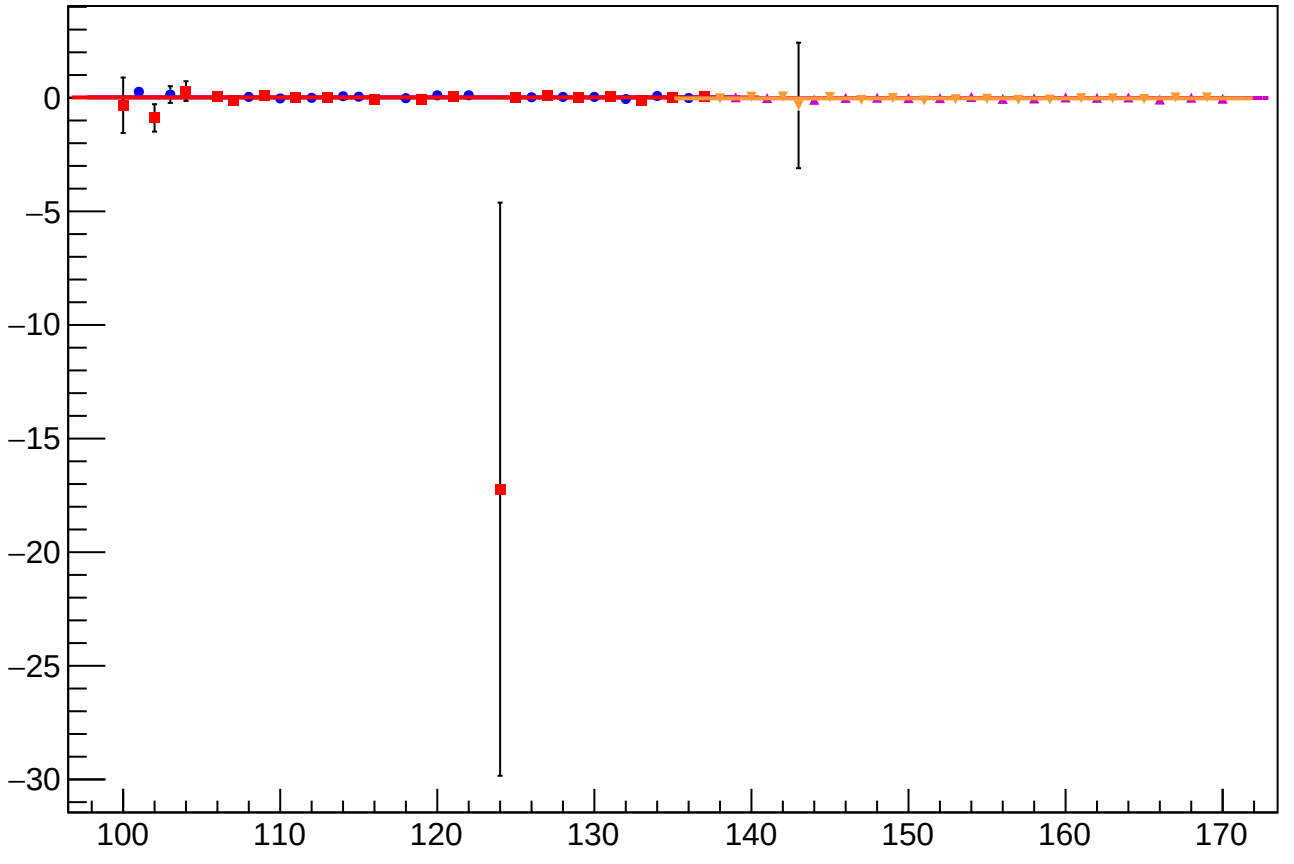
Right Out: 34.797+/-0.011 $\chi^2$/NDF: 2914137.1/18

Left In: 31.158+/-0.007 $\chi^2$/NDF:1662854.0/15

\+ sign 32.149+/-0.006 $\chi^2$/NDF: 5618324.5/32

All: 32.148+/-0.004 $\chi^2$/NDF: 10274342.7/67

\- sign 32.147+/-0.006 $\chi^2$/NDF: 4656018.1/34




Right In: 0.017+/-0.015 $\chi^2$/NDF: 11.5/15

Left Out: -0.027+/-0.010 $\chi^2$/NDF:23.4/16

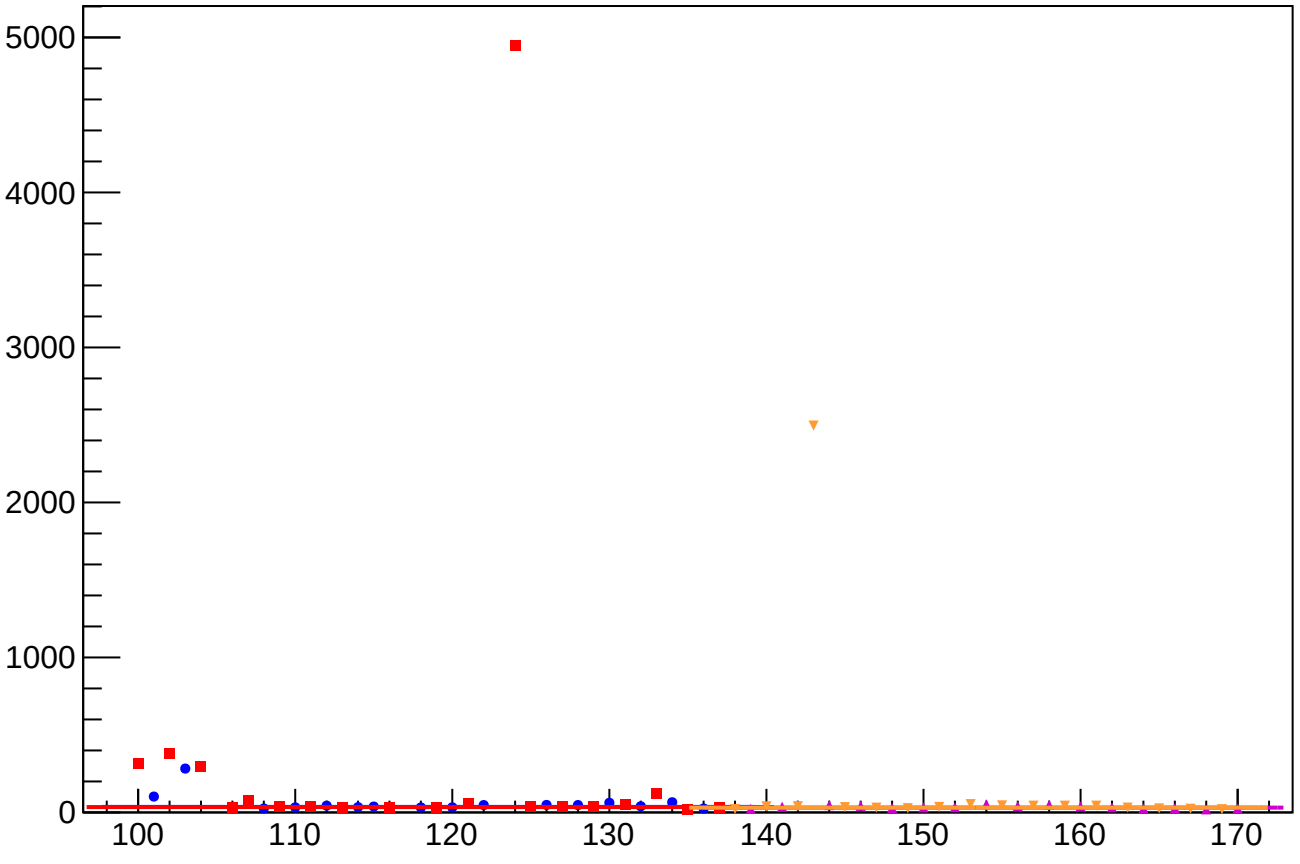
Right Out: 0.014+/-0.016 $\chi^2$/NDF: 16.0/18

Left In: -0.011+/-0.010 $\chi^2$/NDF:9.8/15

+ sign -0.015+/-0.008 $\chi^2$/NDF: 40.7/32

All: -0.010+/-0.006 $\chi^2$/NDF: 69.2/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 27.6/34




Right In: 35.742+/-0.011 $\chi^2$/NDF: 2264790.8/15

Left Out: 30.761+/-0.007 $\chi^2$/NDF:3203512.0/16

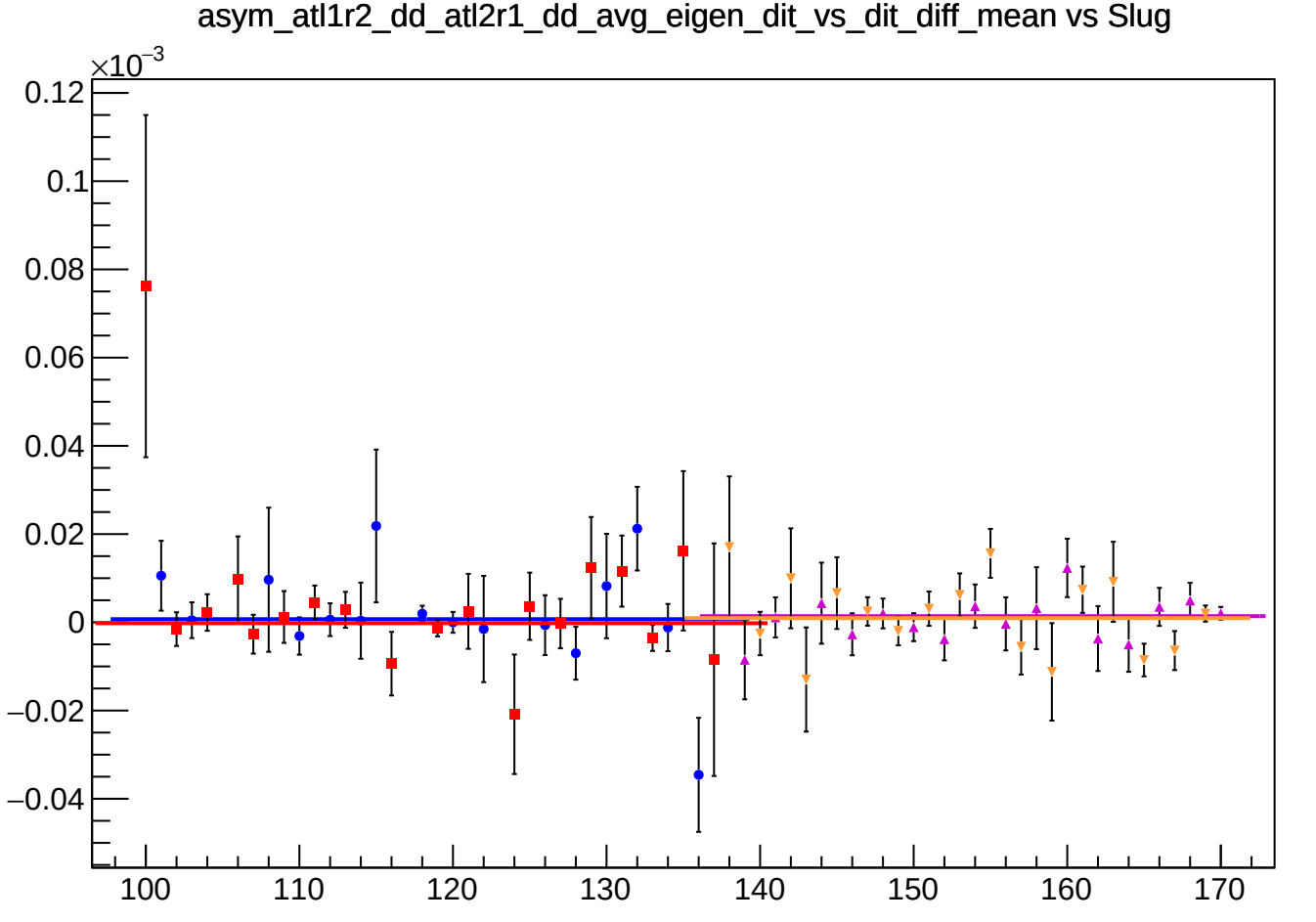
Right Out: 34.797+/-0.011 $\chi^2$/NDF: 2914137.1/18

Left In: 31.158+/-0.007 $\chi^2$/NDF:1662854.0/15

+ sign 32.149+/-0.006 $\chi^2$/NDF: 5618324.5/32

All: 32.148+/-0.004 $\chi^2$/NDF: 10274342.7/67

- sign 32.147+/-0.006 $\chi^2$/NDF: 4656018.1/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 19.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:27.8/16

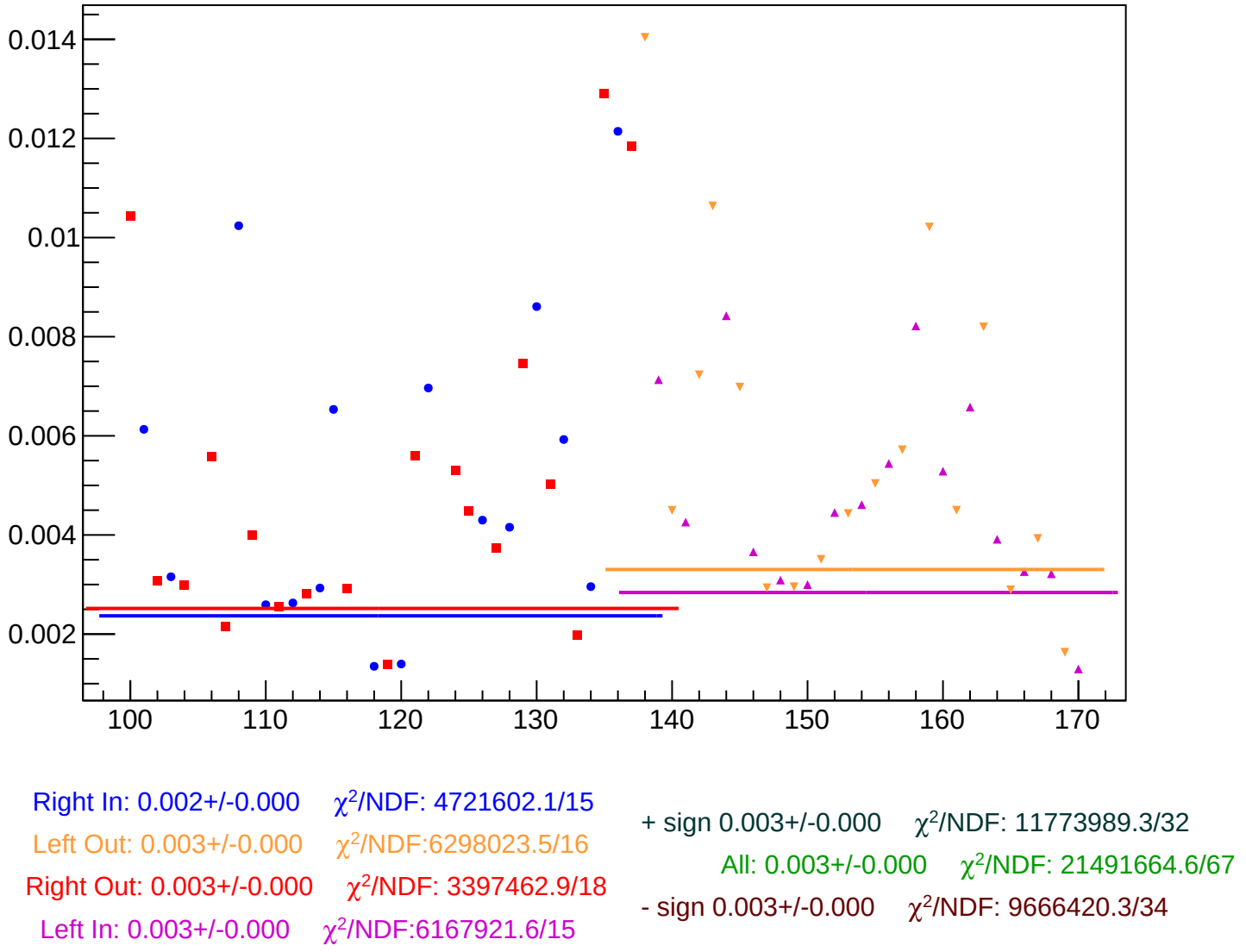
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.1/18

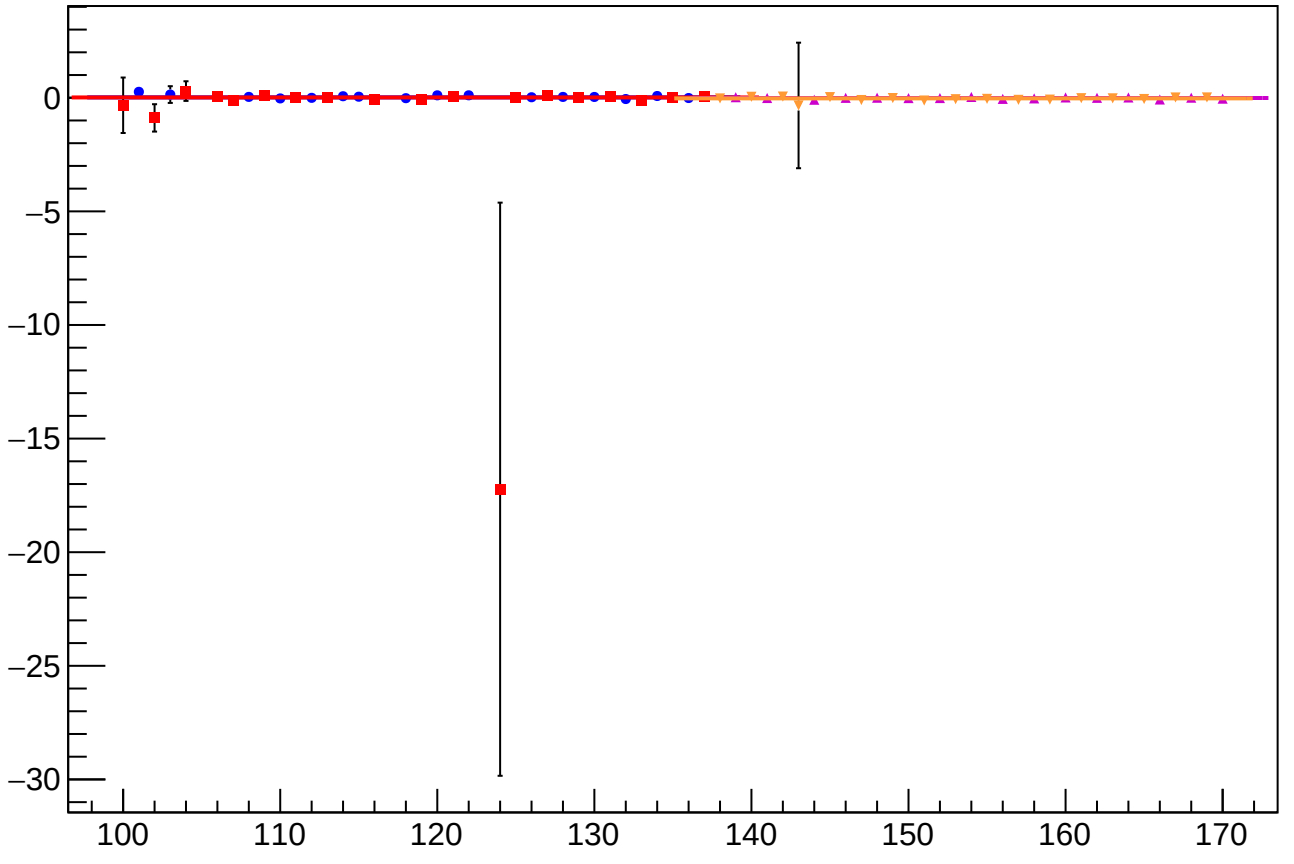
Left In: 0.000+/-0.000 $\chi^2$/NDF:9.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 46.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 76.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 29.1/34


asym_atl1r2_dd_atl2r1_dd_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.014
0.012
0.01
0.008
0.006
0.004
0.002
100
110
120
130
140
150
160
170
Right In: 0.002+/-0.000 χ²/NDF: 4721602.1/15
Left Out: 0.003+/-0.000 χ²/NDF:6298023.5/16
Right Out: 0.003+/-0.000 χ²/NDF: 3397462.9/18
Left In: 0.003+/-0.000 χ²/NDF:6167921.6/15
+ sign 0.003+/-0.000 χ²/NDF: 11773989.3/32
All: 0.003+/-0.000 χ²/NDF: 21491664.6/67
- sign 0.003+/-0.000 χ²/NDF: 9666420.3/34




Right In: 0.017+/-0.015 $\chi^2$/NDF: 11.5/15

Left Out: -0.027+/-0.010 $\chi^2$/NDF:23.4/16

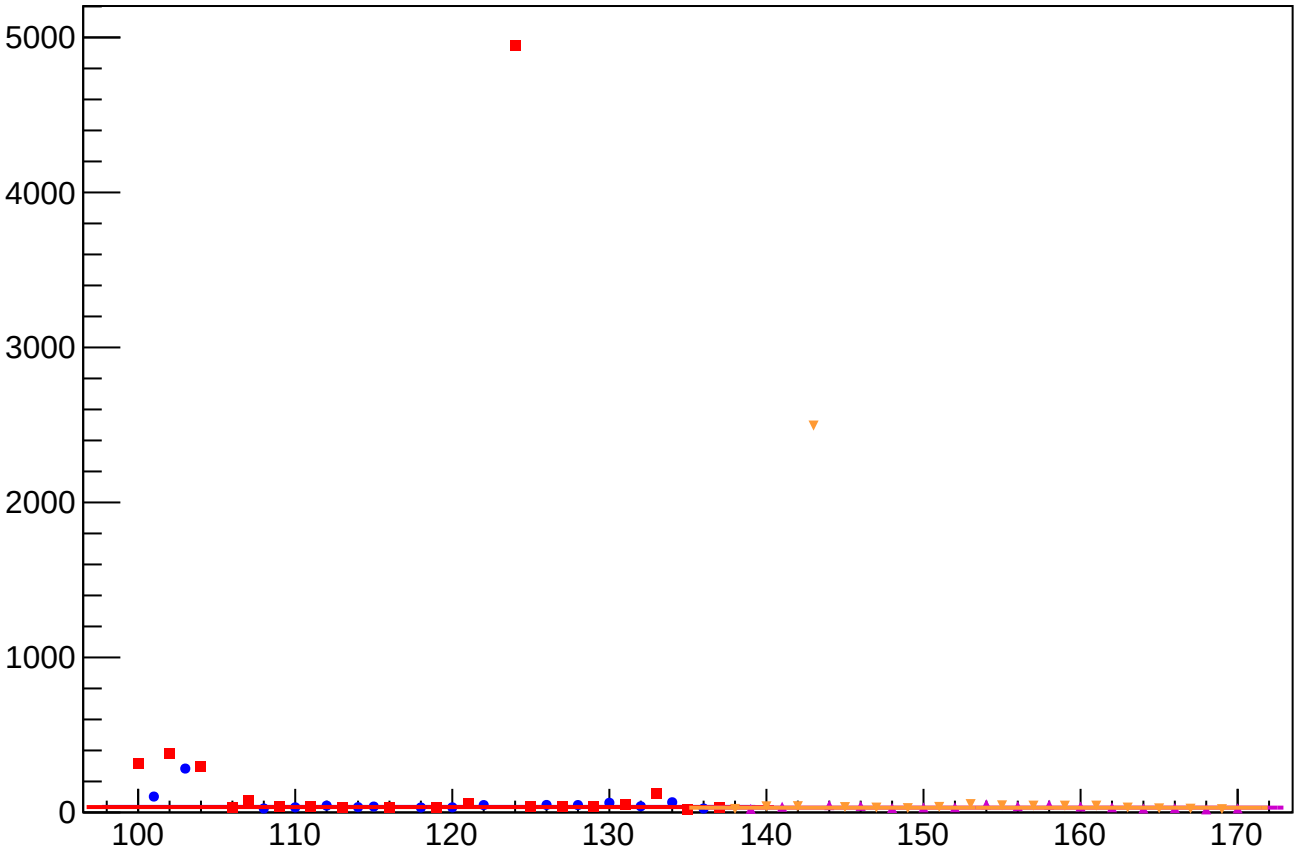
Right Out: 0.014+/-0.016 $\chi^2$/NDF: 16.0/18

Left In: -0.011+/-0.010 $\chi^2$/NDF:9.8/15

+ sign -0.015+/-0.008 $\chi^2$/NDF: 40.7/32

All: -0.010+/-0.006 $\chi^2$/NDF: 69.2/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 27.6/34




Right In: 35.743+/-0.011 $\chi^2$/NDF: 2264513.9/15

Left Out: 30.761+/-0.007 $\chi^2$/NDF:3203776.3/16

Right Out: 34.798+/-0.011 $\chi^2$/NDF: 2913962.5/18

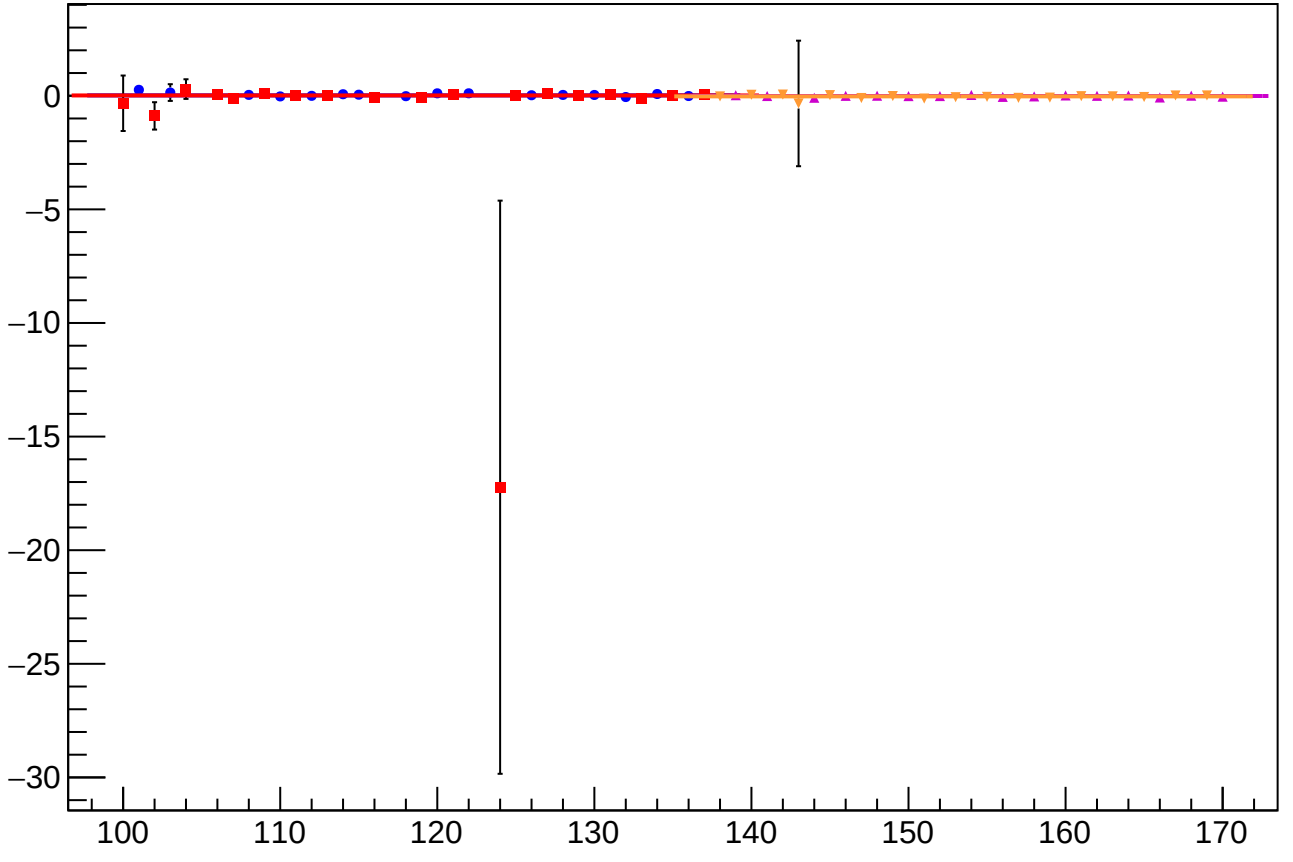
Left In: 31.157+/-0.007 $\chi^2$/NDF:1663416.5/15

\+ sign 32.149+/-0.006 $\chi^2$/NDF: 5618410.6/32

All: 32.148+/-0.004 $\chi^2$/NDF: 10274911.2/67

\- sign 32.146+/-0.006 $\chi^2$/NDF: 4656500.5/34

asym_atl1r2_dd_atl2r1_dd_avg_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.017+/-0.015 $\chi^2$/NDF: 11.5/15

Left Out: -0.027+/-0.010 $\chi^2$/NDF:23.4/16

Right Out: 0.014+/-0.016 $\chi^2$/NDF: 16.0/18

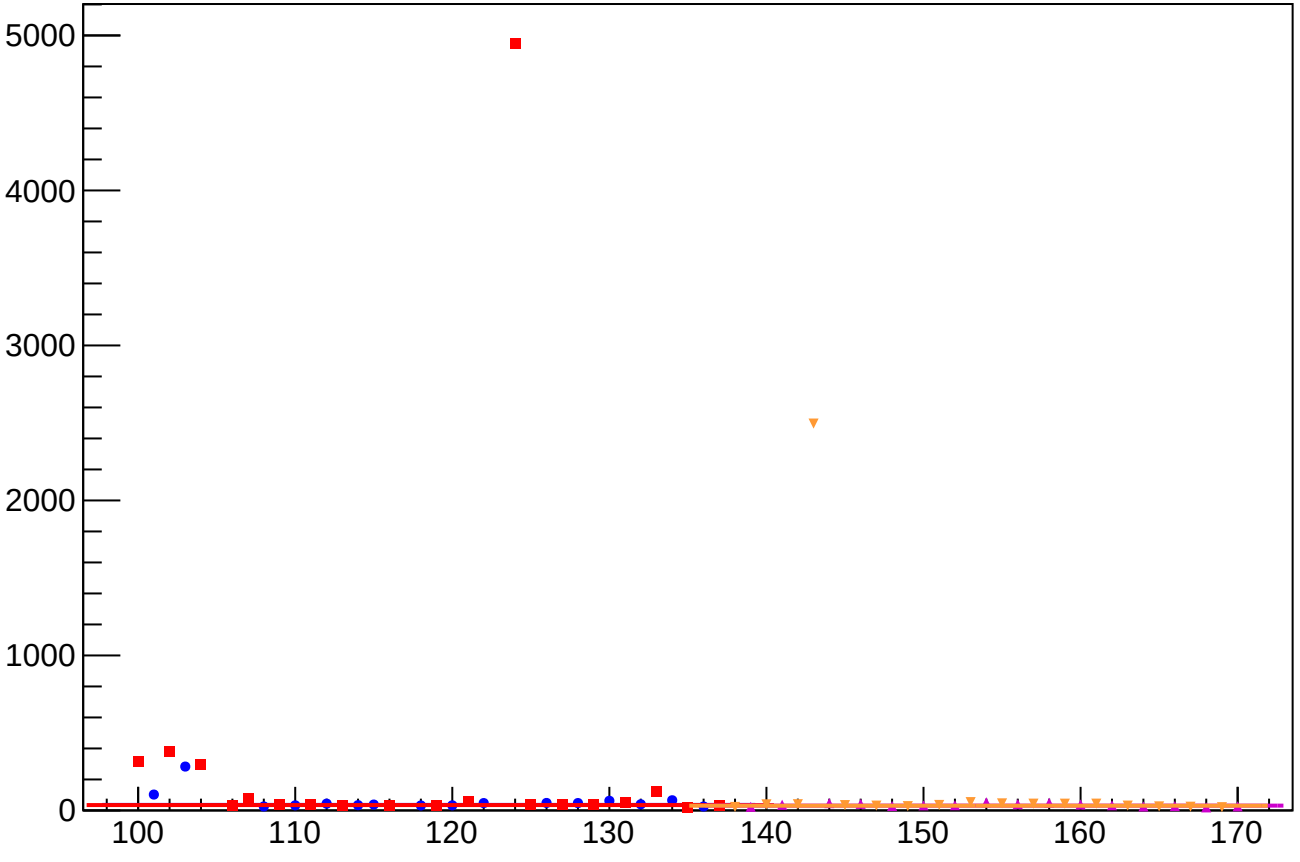
Left In: -0.011+/-0.010 $\chi^2$/NDF:9.8/15

+ sign -0.015+/-0.008 $\chi^2$/NDF: 40.7/32

All: -0.010+/-0.006 $\chi^2$/NDF: 69.2/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 27.6/34

asym_atl1r2_dd_atl2r1_dd_avg_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 35.743+/-0.011 $\chi^2$/NDF: 2264513.9/15

Left Out: 30.761+/-0.007 $\chi^2$/NDF:3203776.3/16

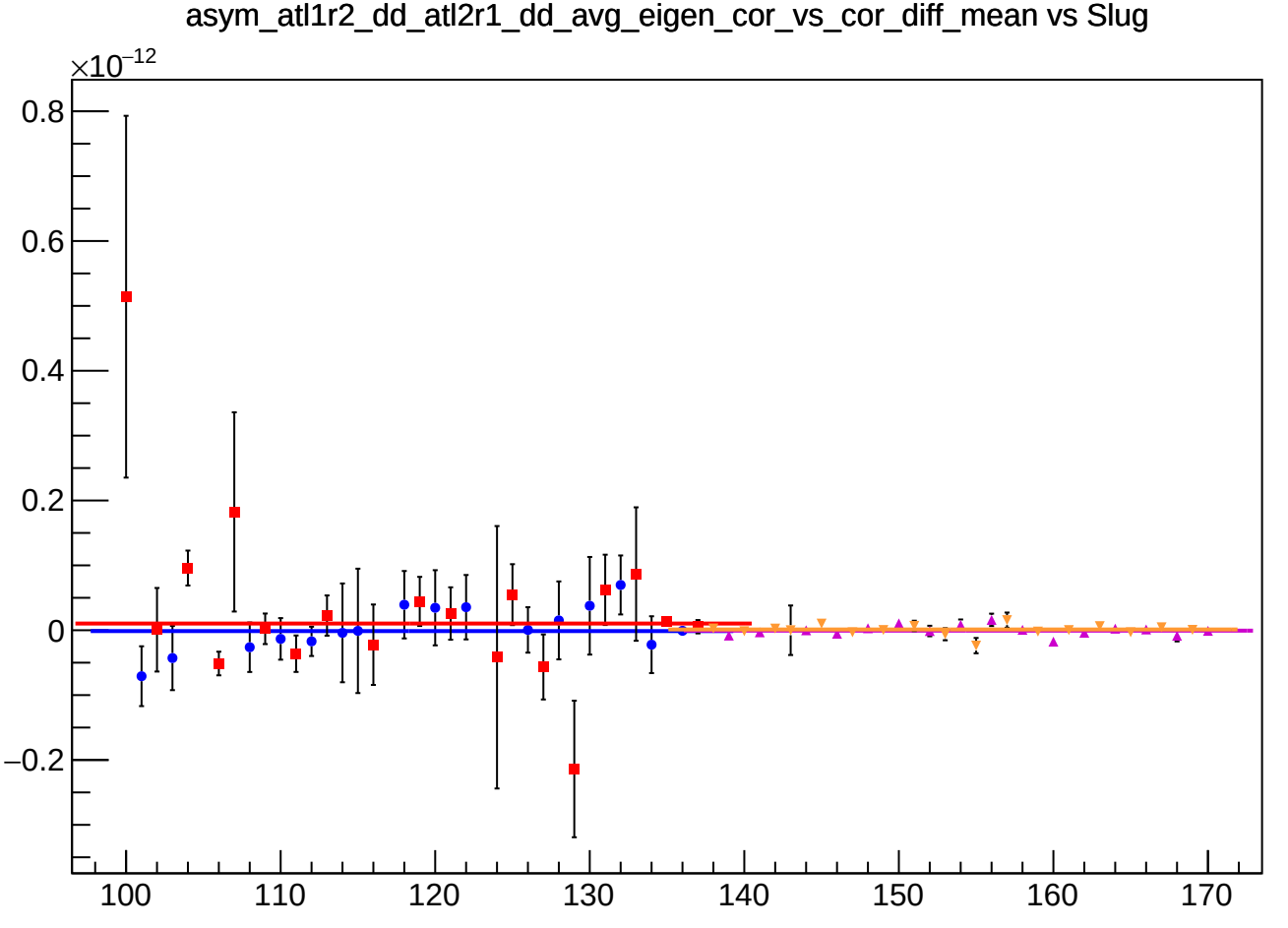
Right Out: 34.798+/-0.011 $\chi^2$/NDF: 2913962.5/18

Left In: 31.157+/-0.007 $\chi^2$/NDF:1663416.5/15

+ sign 32.149+/-0.006 $\chi^2$/NDF: 5618410.6/32

All: 32.148+/-0.004 $\chi^2$/NDF: 10274911.2/67

- sign 32.146+/-0.006 $\chi^2$/NDF: 4656500.5/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 8.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.7/16

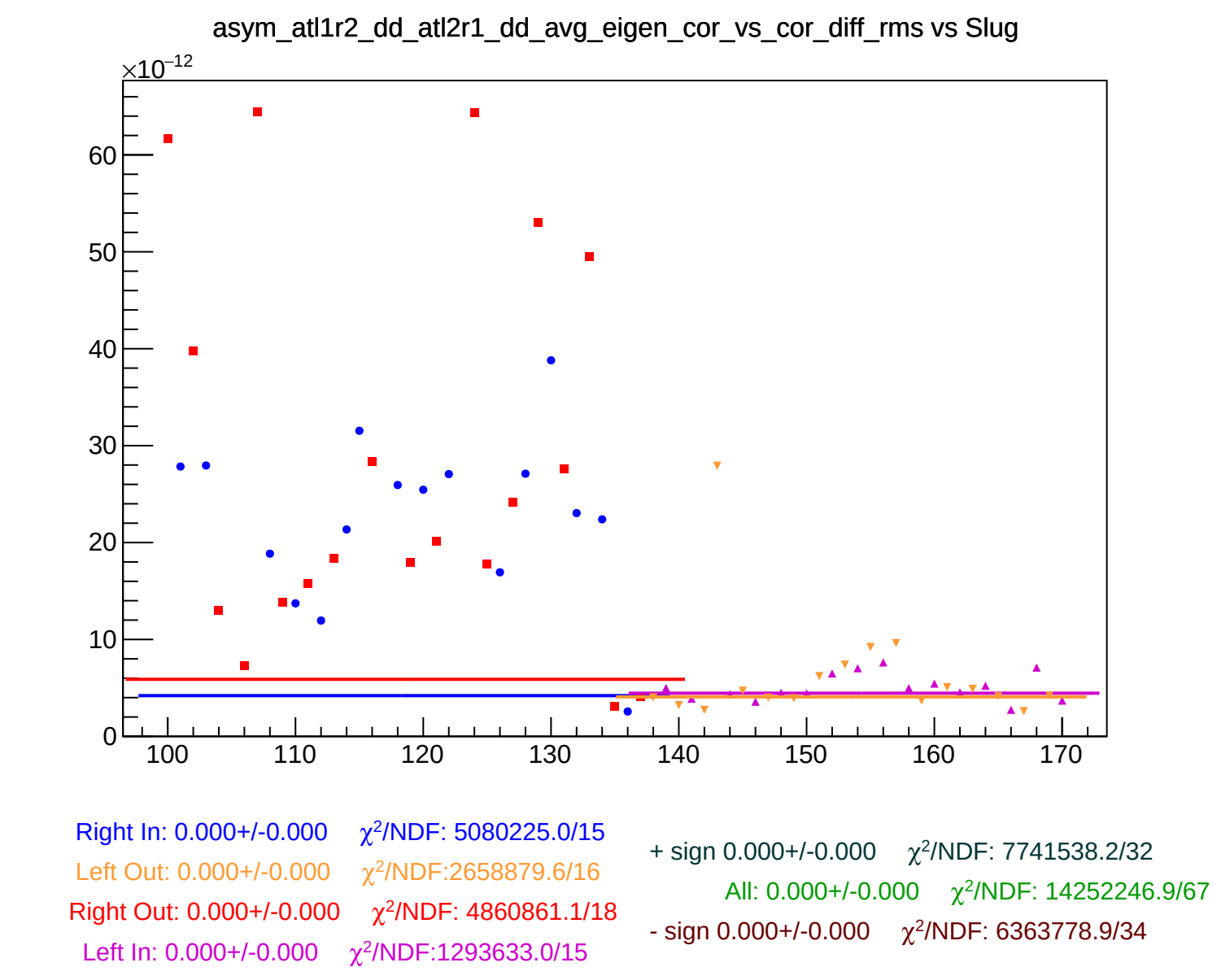
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 39.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:18.3/15

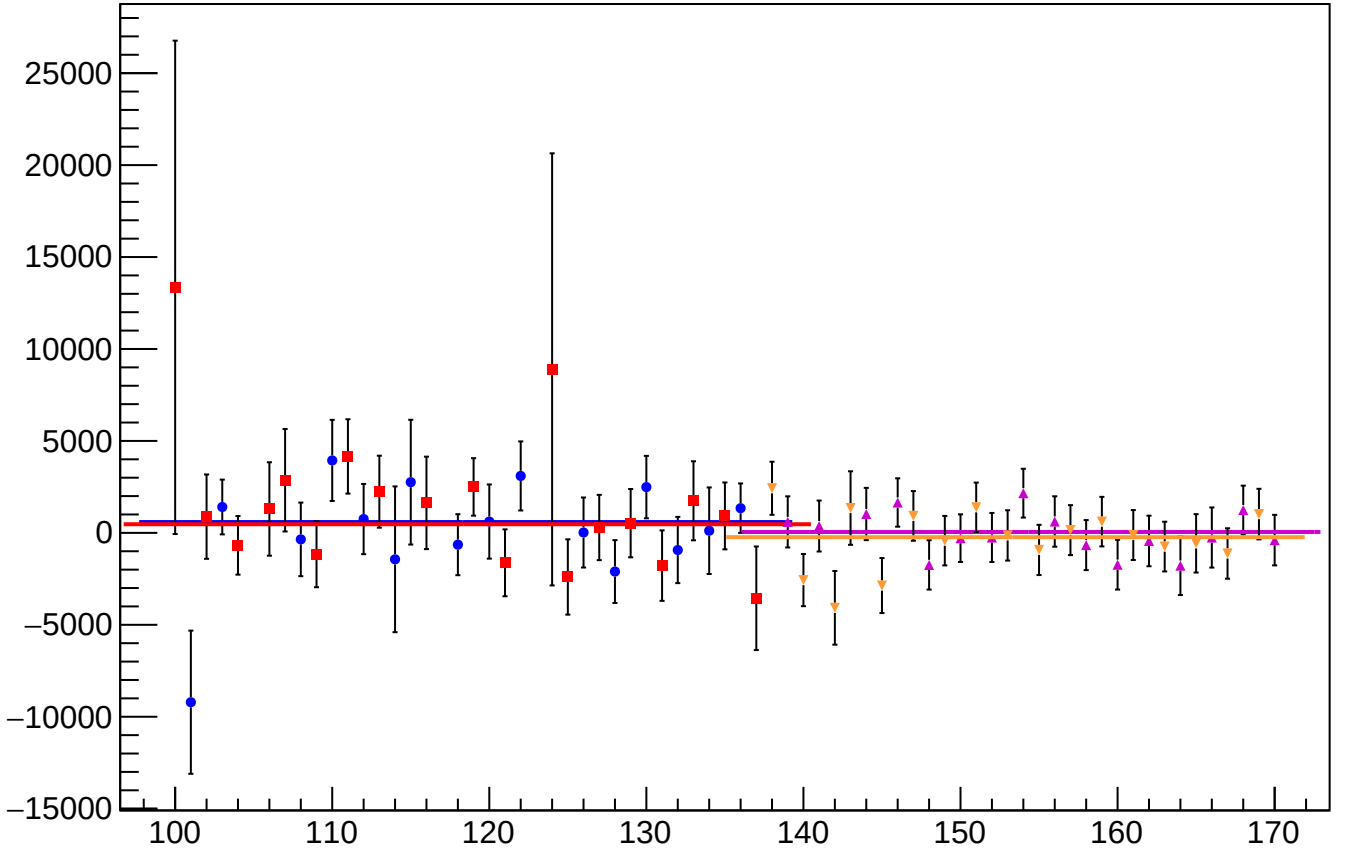
+ sign 0.000+/-0.000 $\chi^2$/NDF: 21.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 86.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 64.3/34


asym_atl1r2_dd_atl2r1_dd_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 5080225.0/15
Left Out: 0.000+/-0.000 χ²/NDF:2658879.6/16
Right Out: 0.000+/-0.000 χ²/NDF: 4860861.1/18
Left In: 0.000+/-0.000 χ²/NDF:1293633.0/15
+ sign 0.000+/-0.000 χ²/NDF: 7741538.2/32
All: 0.000+/-0.000 χ²/NDF: 14252246.9/67
- sign 0.000+/-0.000 χ²/NDF: 6363778.9/34

# reg_asym_at1_dd_at2_dd_avg_mean vs Slug




Right In: 586.935+/-482.434 $\chi^2$/NDF: 17.1/15

Left Out: -234.092+/-347.367 $\chi^2$/NDF:17.9/16

Right Out: 469.012+/-480.516 $\chi^2$/NDF: 16.9/18

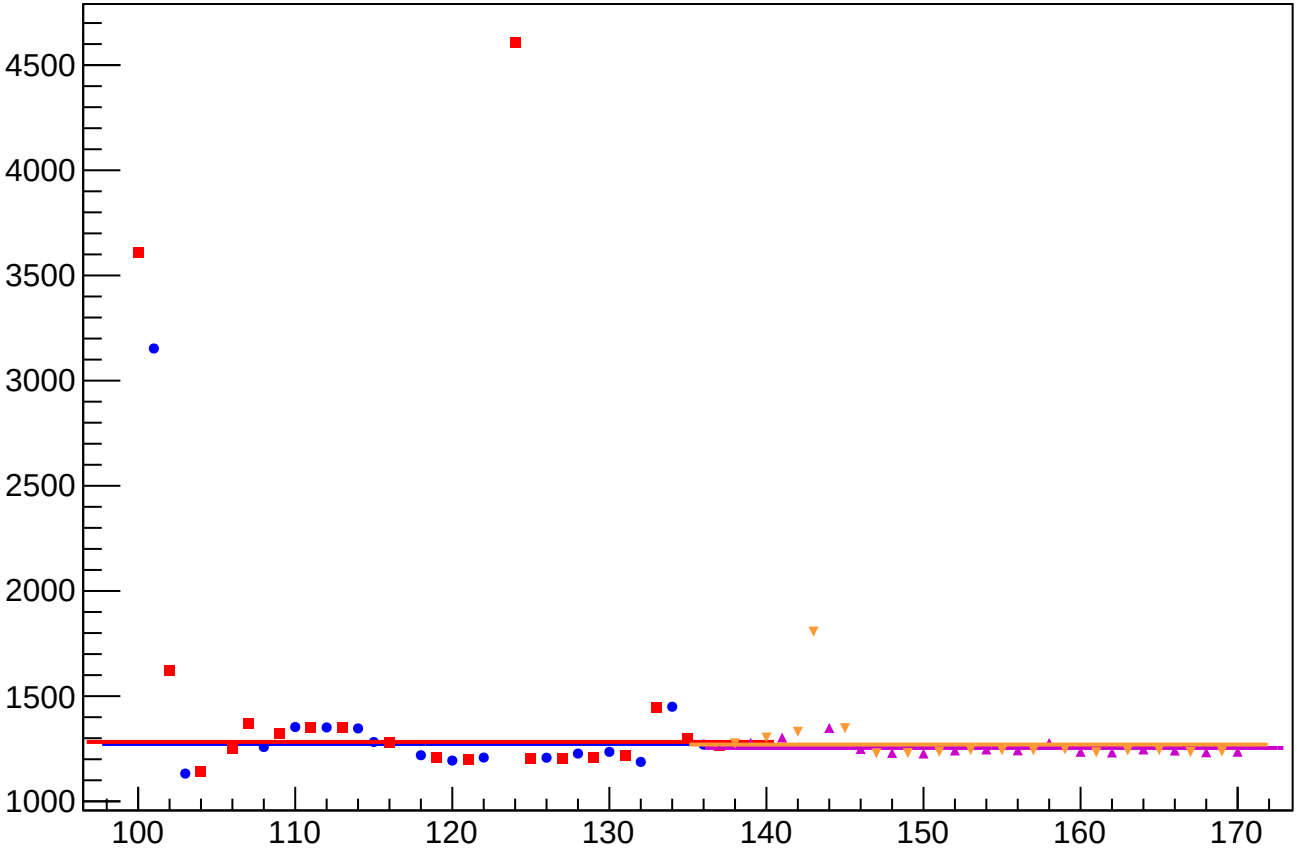
Left In: 48.296+/-344.934 $\chi^2$/NDF:11.2/15

+ sign 46.232+/-281.896 $\chi^2$/NDF: 36.9/32

All: 119.234+/-198.733 $\chi^2$/NDF: 65.5/67

- sign 191.367+/-280.213 $\chi^2$/NDF: 28.5/34

# reg_asym_at1_dd_at2_dd_avg_rms vs Slug




Right In: 1272.804+/-0.341 $\chi^2$/NDF: 519298.2/15

Left Out: 1269.880+/-0.246 $\chi^2$/NDF:165900.6/16

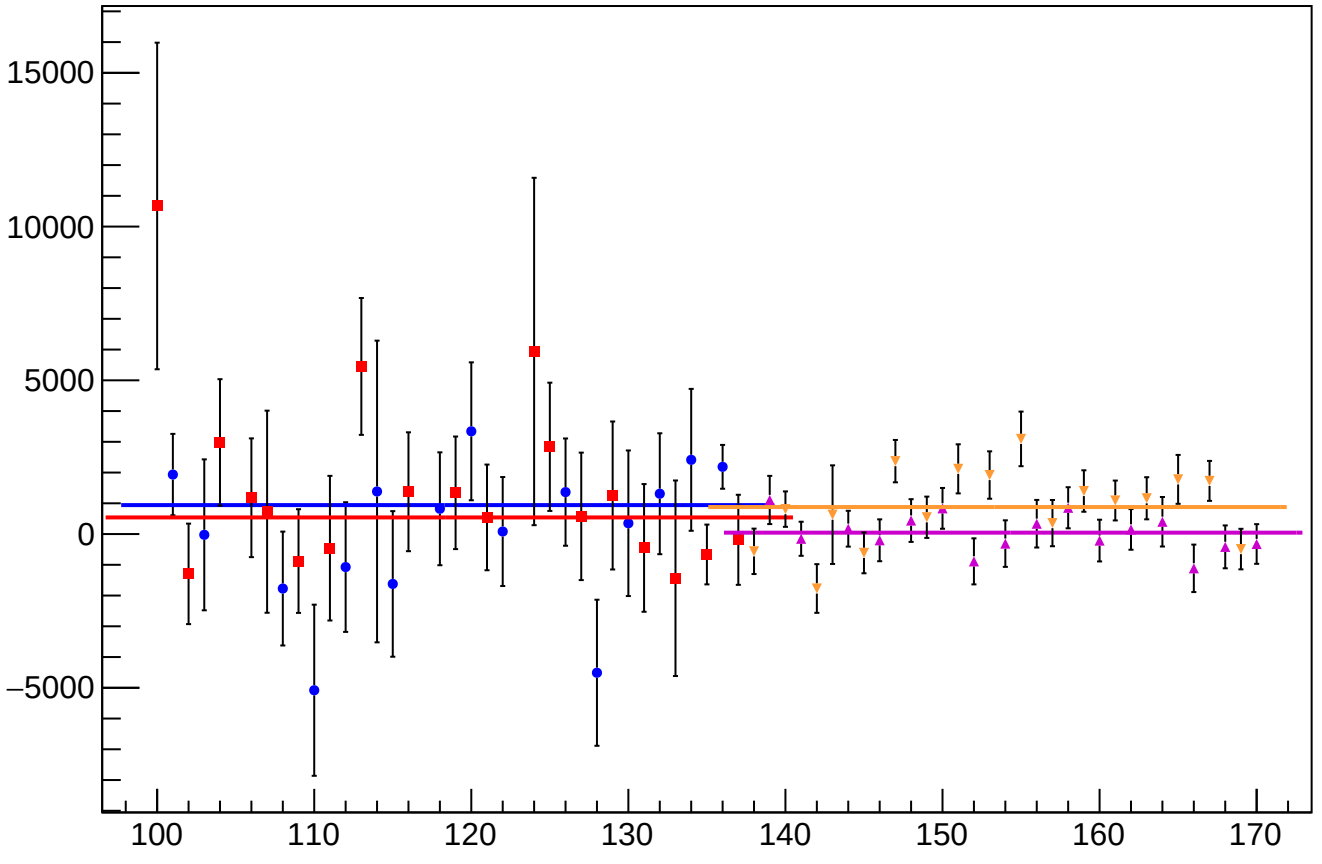
Right Out: 1282.365+/-0.340 $\chi^2$/NDF: 322078.6/18

Left In: 1253.860+/-0.244 $\chi^2$/NDF:16342.5/15

+ sign 1270.878+/-0.199 $\chi^2$/NDF: 685247.1/32

All: 1267.194+/-0.141 $\chi^2$/NDF: 1028992.3/67

- sign 1263.553+/-0.198 $\chi^2$/NDF: 343065.9/34




Right In: 941.759+/-425.837 $\chi^2$/NDF: 19.9/15

Left Out: 878.484+/-174.941 $\chi^2$/NDF:44.2/16

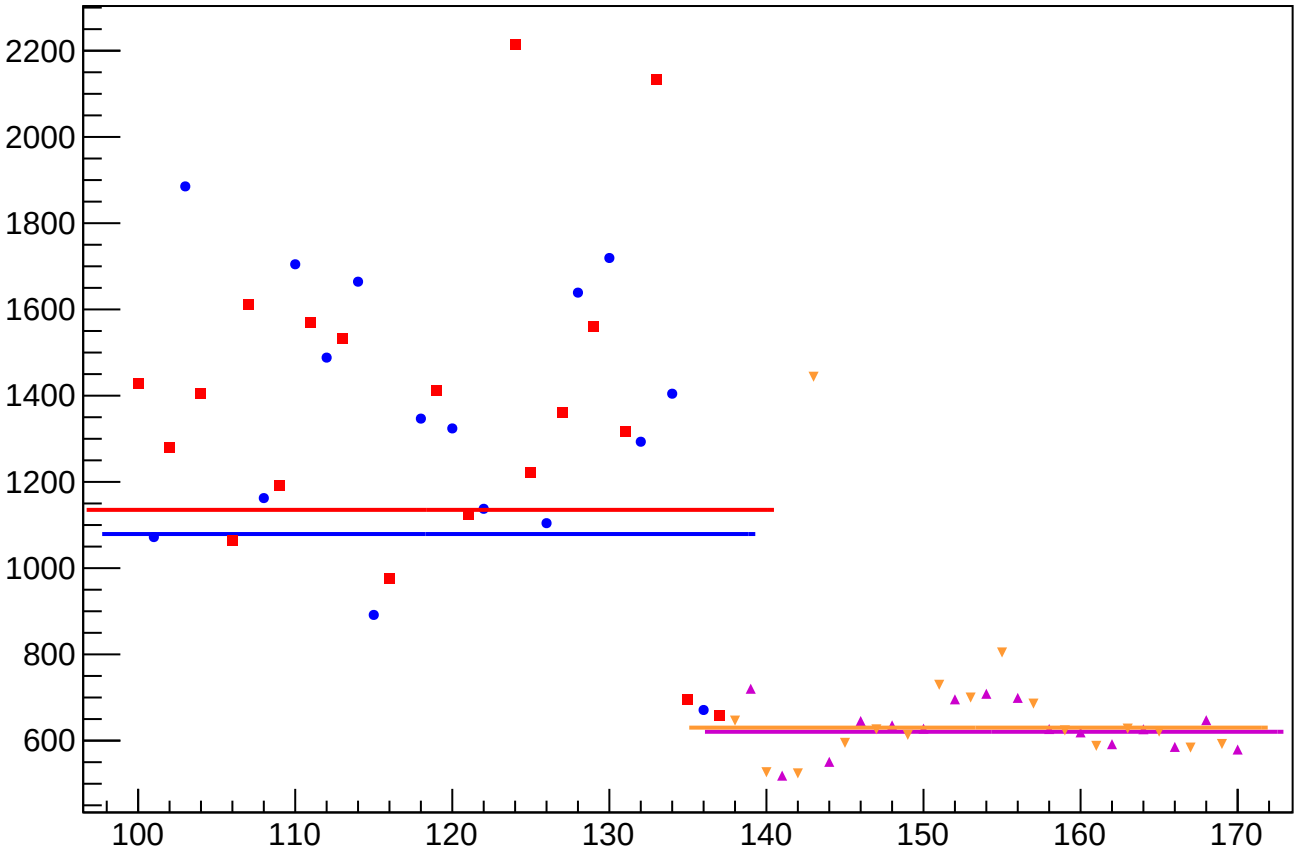
Right Out: 540.622+/-439.905 $\chi^2$/NDF: 17.2/18

Left In: 45.247+/-171.719 $\chi^2$/NDF:10.7/15

+ sign 887.621+/-161.818 $\chi^2$/NDF: 64.1/32

All: 494.708+/-113.762 $\chi^2$/NDF: 104.7/67

- sign 110.750+/-159.964 $\chi^2$/NDF: 28.9/34




Right In: 1079.120+/-0.301 $\chi^2$/NDF: 1482232.0/15

Left Out: 630.159+/-0.124 $\chi^2$/NDF:784478.4/16

Right Out: 1135.161+/-0.311 $\chi^2$/NDF: 1293082.2/18

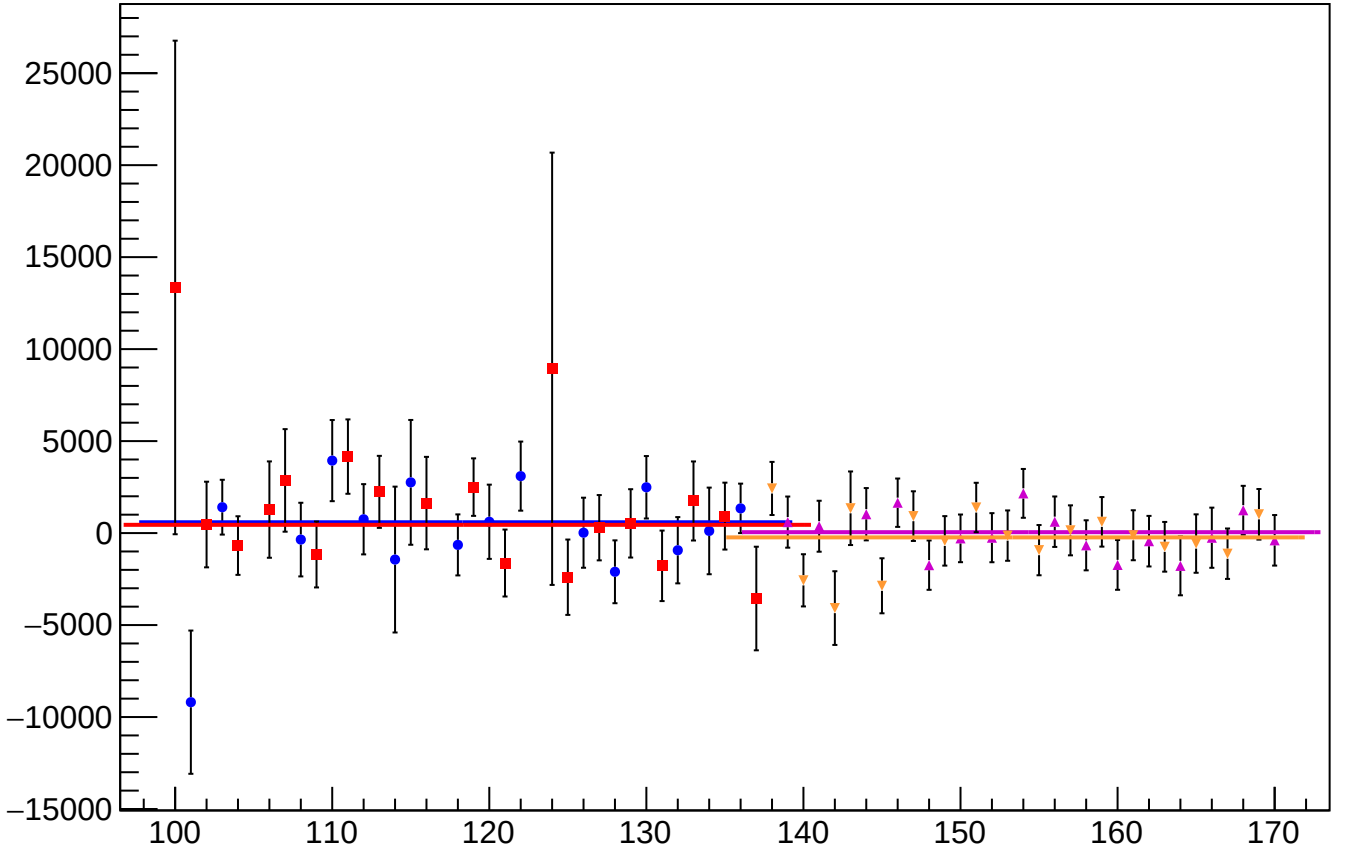
Left In: 620.511+/-0.121 $\chi^2$/NDF:219548.1/15

+ sign 694.990+/-0.114 $\chi^2$/NDF: 4168795.9/32

All: 691.739+/-0.080 $\chi^2$/NDF: 8058447.1/67

- sign 688.562+/-0.113 $\chi^2$/NDF: 3888055.6/34

# cor_asym_at1_dd_at2_dd_avg_mean vs Slug




Right In: 587.254+/-482.434 $\chi^2$/NDF: 17.1/15

Left Out: -234.182+/-347.367 $\chi^2$/NDF:17.9/16

Right Out: 448.412+/-481.333 $\chi^2$/NDF: 16.8/18

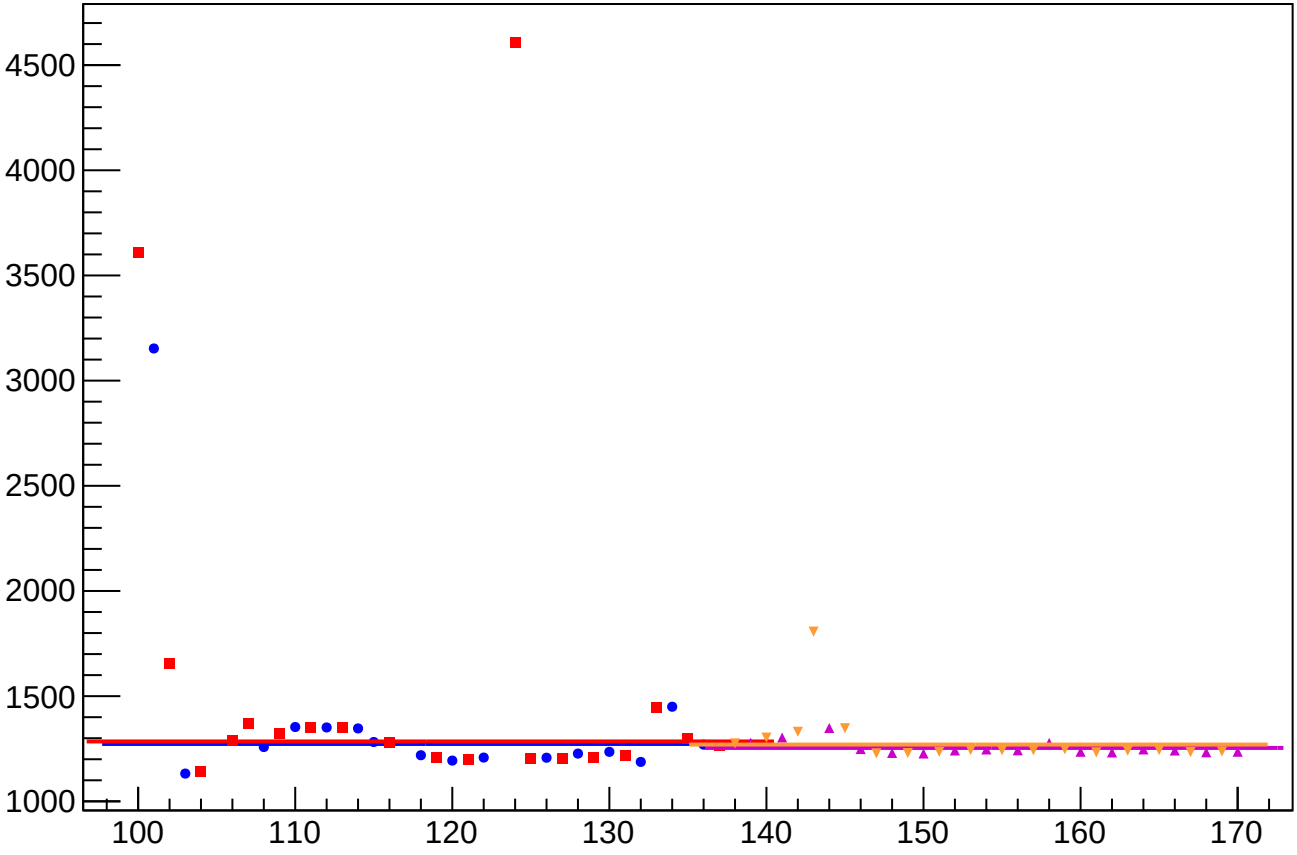
Left In: 48.349+/-344.934 $\chi^2$/NDF:11.2/15

+ sign 46.282+/-281.896 $\chi^2$/NDF: 36.9/32

All: 115.559+/-198.790 $\chi^2$/NDF: 65.4/67

- sign 184.091+/-280.374 $\chi^2$/NDF: 28.4/34

# cor_asym_at1_dd_at2_dd_avg_rms vs Slug




Right In: 1272.804+/-0.341 $\chi^2$/NDF: 519299.6/15

Left Out: 1269.880+/-0.246 $\chi^2$/NDF:165900.6/16

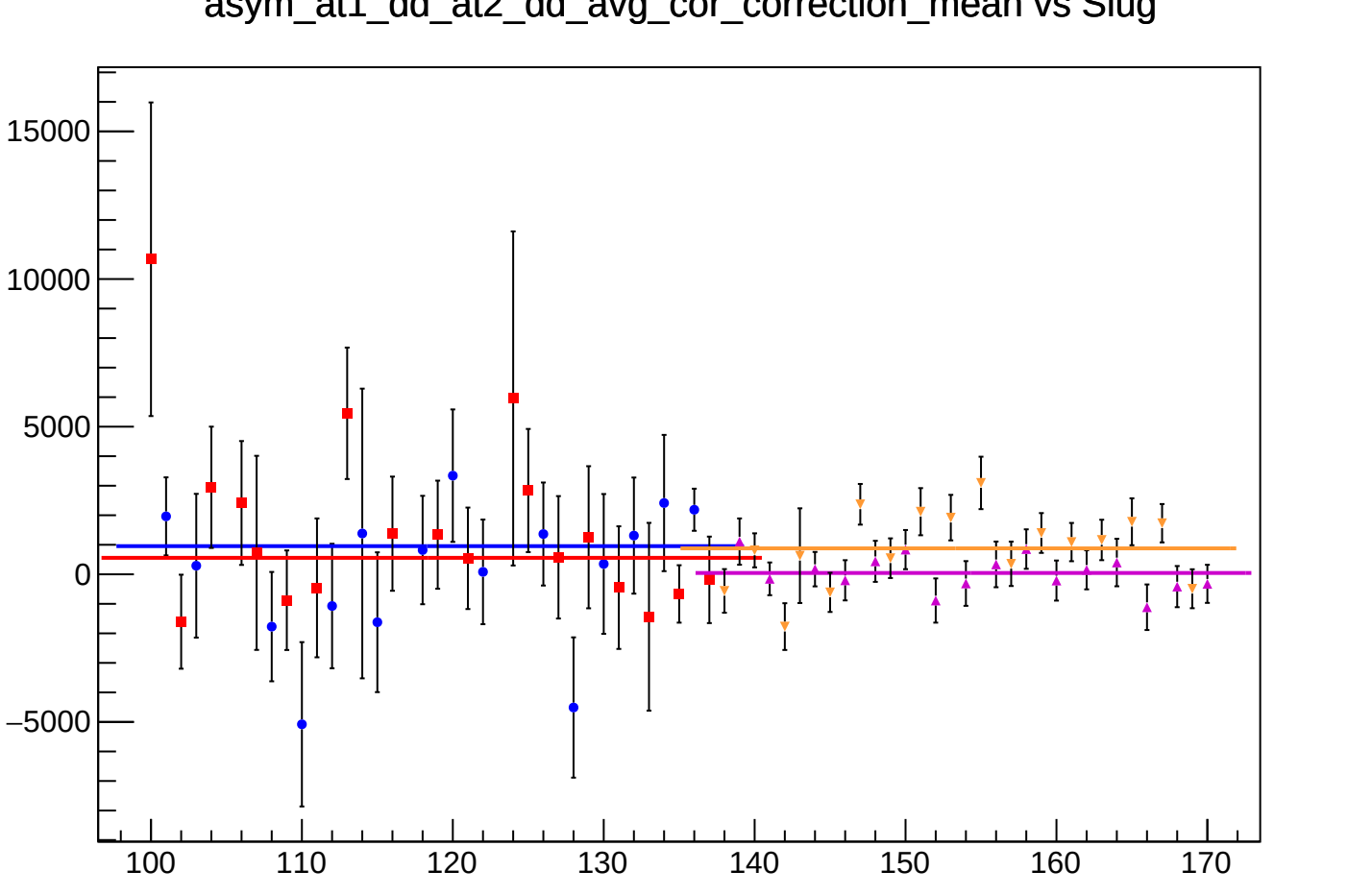
Right Out: 1284.654+/-0.340 $\chi^2$/NDF: 328734.9/18

Left In: 1253.860+/-0.244 $\chi^2$/NDF:16342.5/15

+ sign 1270.878+/-0.199 $\chi^2$/NDF: 685248.5/32

All: 1267.576+/-0.141 $\chi^2$/NDF: 1036280.8/67

- sign 1264.309+/-0.198 $\chi^2$/NDF: 350486.1/34




Right In: 954.146+/-425.660 $\chi^2$/NDF: 19.9/15

Left Out: 878.469+/-174.943 $\chi^2$/NDF:44.2/16

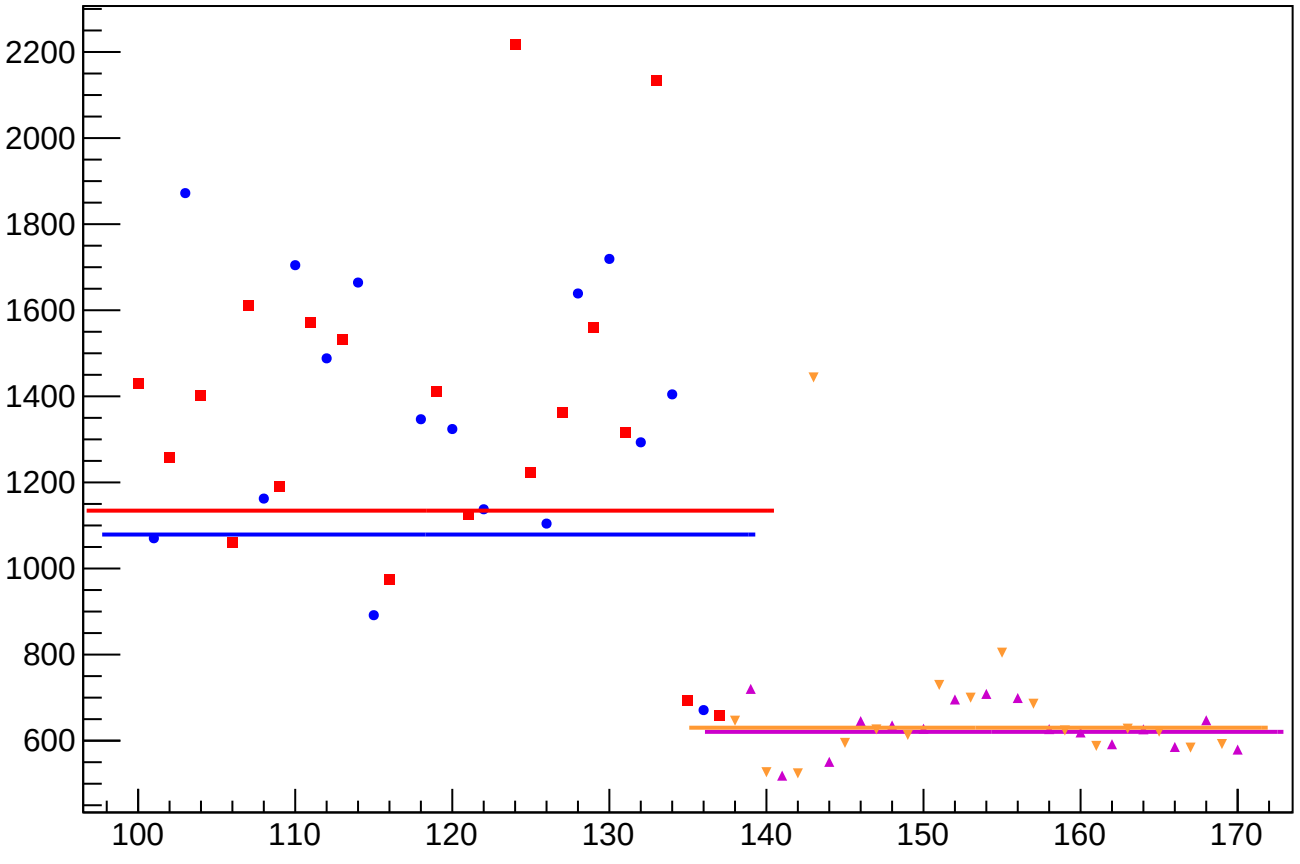
Right Out: 557.935+/-440.758 $\chi^2$/NDF: 18.4/18

Left In: 45.226+/-171.718 $\chi^2$/NDF:10.7/15

+ sign 889.405+/-161.810 $\chi^2$/NDF: 64.1/32

All: 496.741+/-113.773 $\chi^2$/NDF: 105.9/67

- sign 112.792+/-160.004 $\chi^2$/NDF: 30.2/34




Right In: 1078.932+/-0.301 $\chi^2$/NDF: 1478719.9/15

Left Out: 630.165+/-0.124 $\chi^2$/NDF:784386.8/16

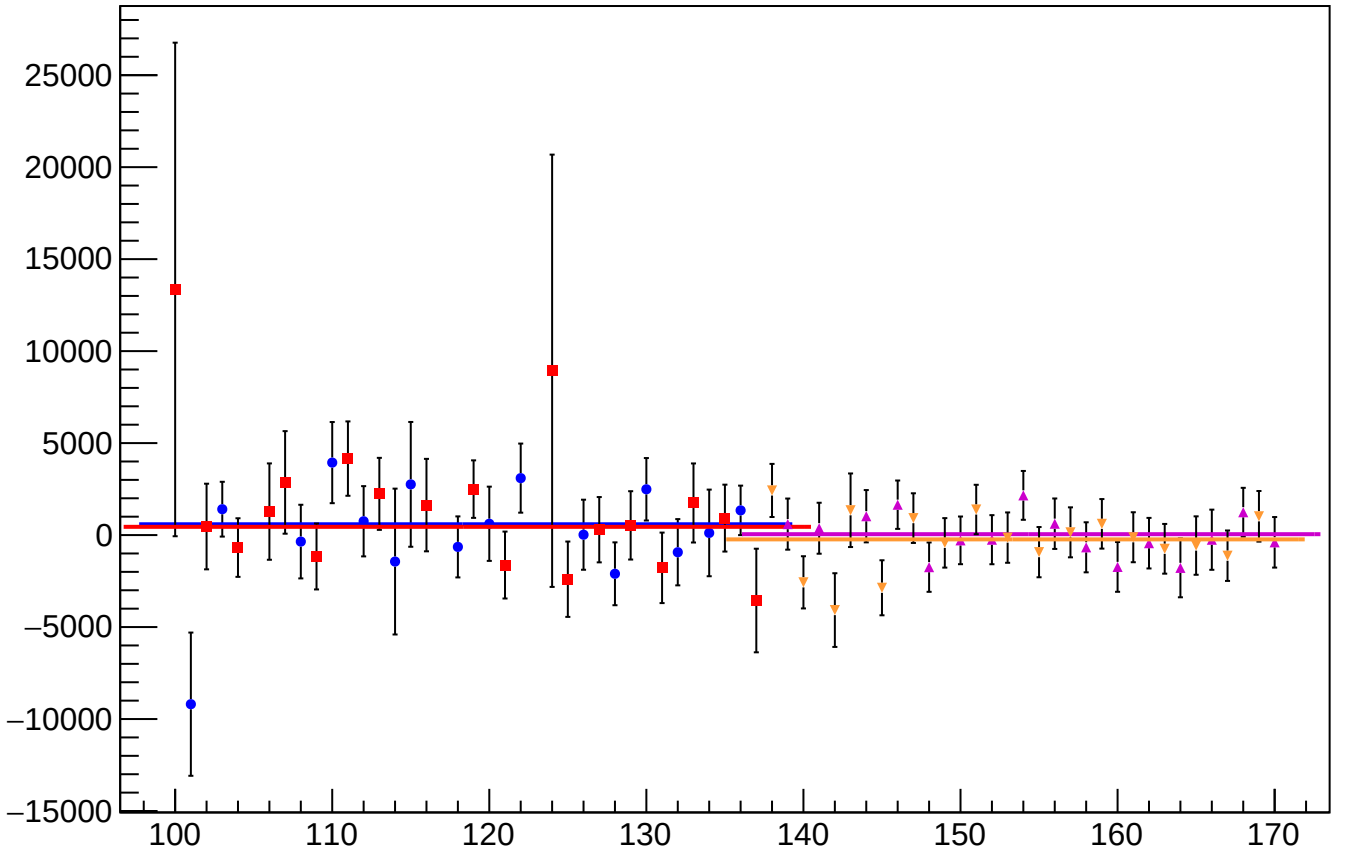
Right Out: 1134.428+/-0.312 $\chi^2$/NDF: 1288899.2/18

Left In: 620.506+/-0.121 $\chi^2$/NDF:219582.8/15

+ sign 695.014+/-0.114 $\chi^2$/NDF: 4164897.6/32

All: 691.585+/-0.080 $\chi^2$/NDF: 8035912.8/67

- sign 688.233+/-0.113 $\chi^2$/NDF: 3869239.1/34




Right In: 587.254+/-482.434 $\chi^2$/NDF: 17.1/15

Left Out: -234.182+/-347.367 $\chi^2$/NDF:17.9/16

Right Out: 448.412+/-481.333 $\chi^2$/NDF: 16.8/18

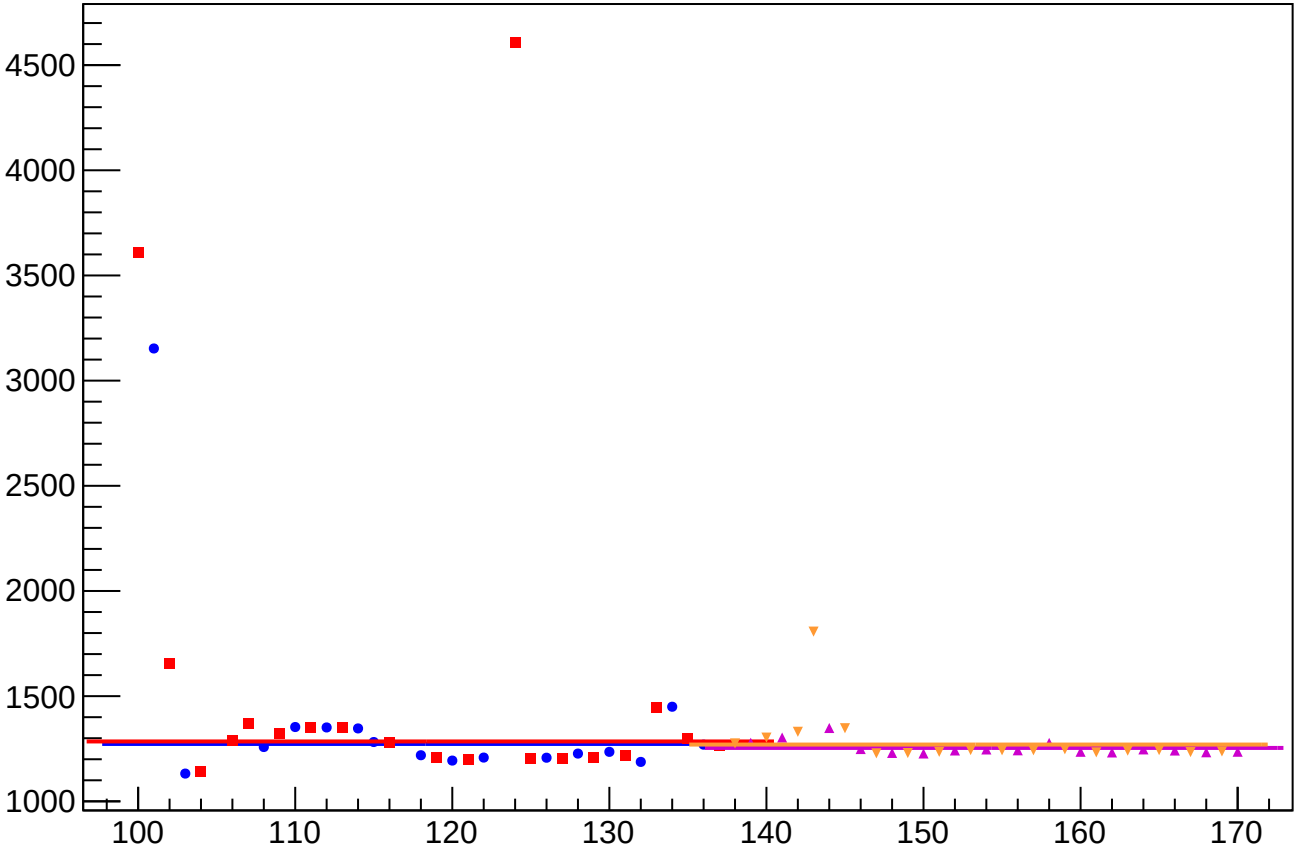
Left In: 48.349+/-344.934 $\chi^2$/NDF:11.2/15

+ sign 46.282+/-281.896 $\chi^2$/NDF: 36.9/32

All: 115.559+/-198.790 $\chi^2$/NDF: 65.4/67

- sign 184.091+/-280.374 $\chi^2$/NDF: 28.4/34

# eigen_cor_asym_at1_dd_at2_dd_avg_rms vs Slug




Right In: 1272.804+/-0.341 $\chi^2$/NDF: 519299.6/15

Left Out: 1269.880+/-0.246 $\chi^2$/NDF:165900.6/16

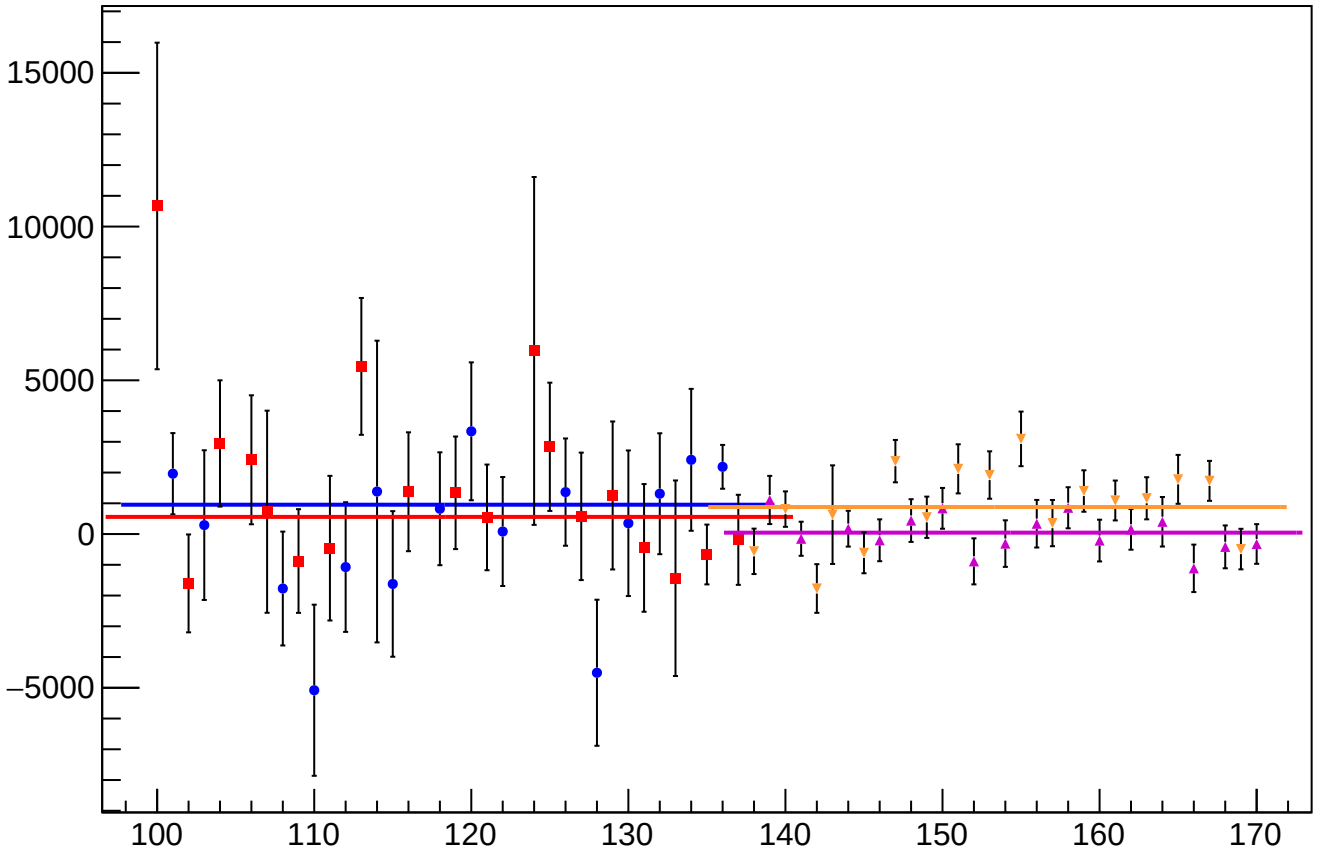
Right Out: 1284.654+/-0.340 $\chi^2$/NDF: 328734.9/18

Left In: 1253.860+/-0.244 $\chi^2$/NDF:16342.5/15

+ sign 1270.878+/-0.199 $\chi^2$/NDF: 685248.5/32

All: 1267.576+/-0.141 $\chi^2$/NDF: 1036280.8/67

- sign 1264.309+/-0.198 $\chi^2$/NDF: 350486.1/34




Right In: 954.146+/-425.660 $\chi^2$/NDF: 19.9/15

Left Out: 878.469+/-174.943 $\chi^2$/NDF:44.2/16

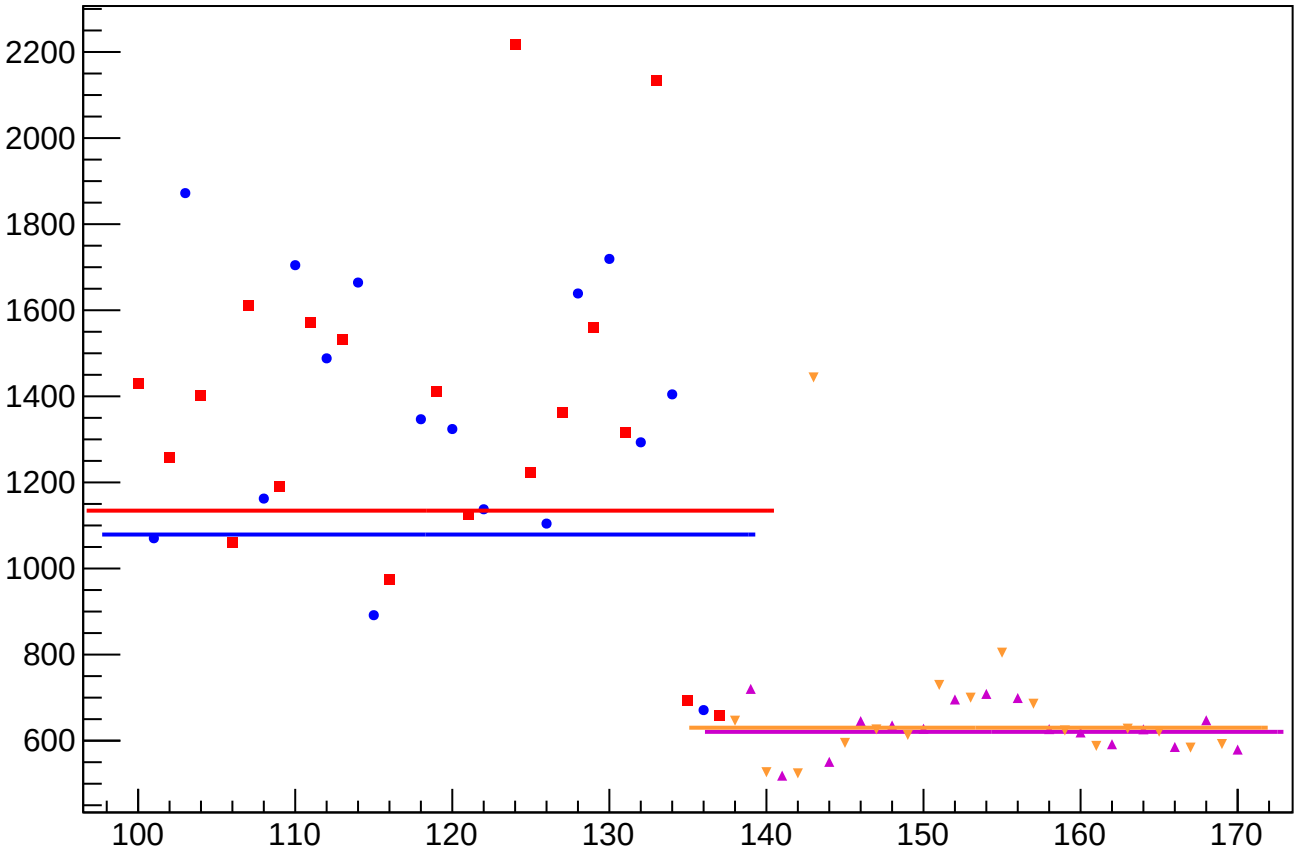
Right Out: 557.935+/-440.758 $\chi^2$/NDF: 18.4/18

Left In: 45.226+/-171.718 $\chi^2$/NDF:10.7/15

+ sign 889.405+/-161.810 $\chi^2$/NDF: 64.1/32

All: 496.741+/-113.773 $\chi^2$/NDF: 105.9/67

- sign 112.792+/-160.004 $\chi^2$/NDF: 30.2/34




Right In: 1078.932+/-0.301 $\chi^2$/NDF: 1478719.9/15

Left Out: 630.165+/-0.124 $\chi^2$/NDF:784386.8/16

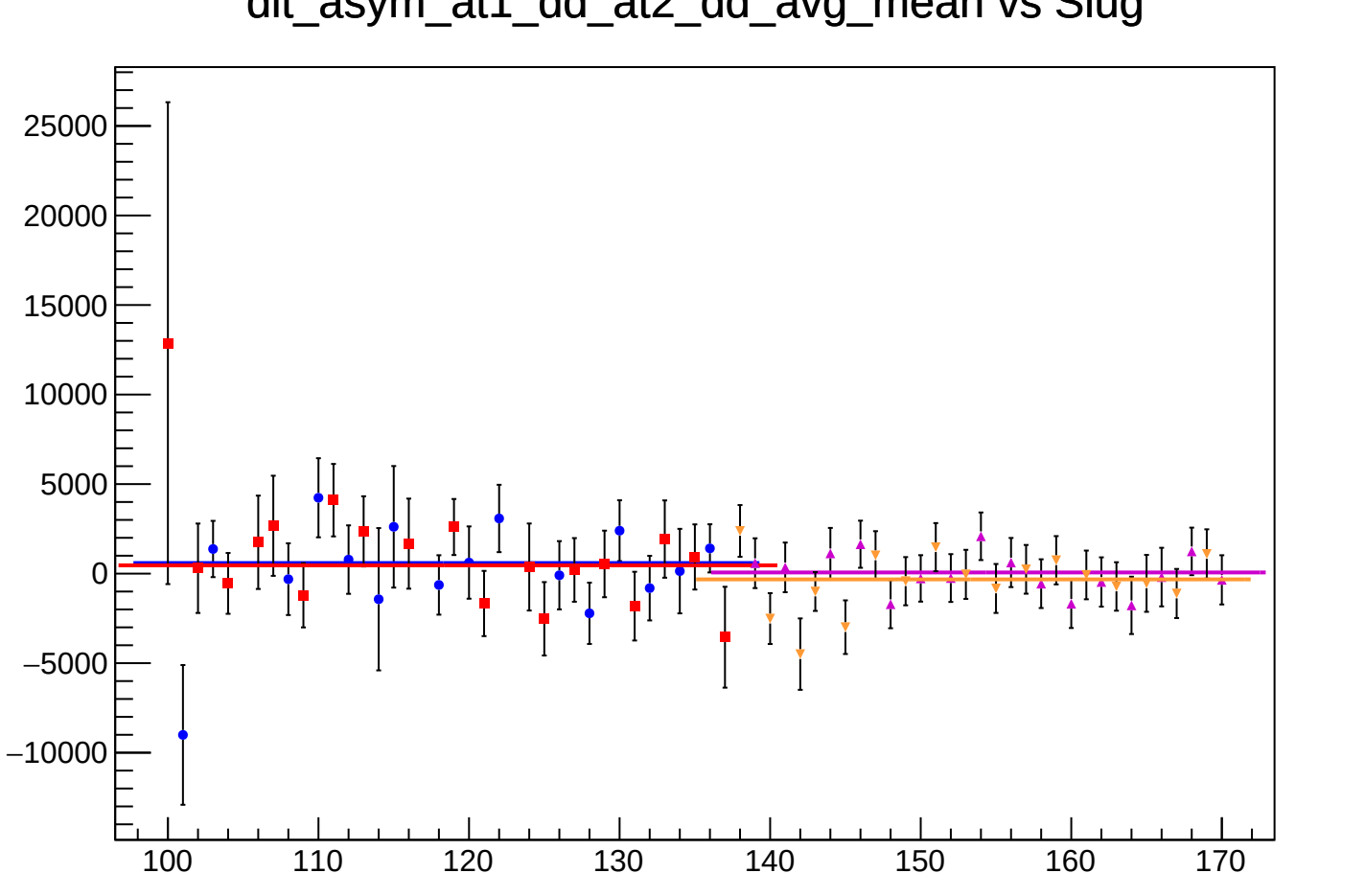
Right Out: 1134.428+/-0.312 $\chi^2$/NDF: 1288899.2/18

Left In: 620.506+/-0.121 $\chi^2$/NDF:219582.8/15

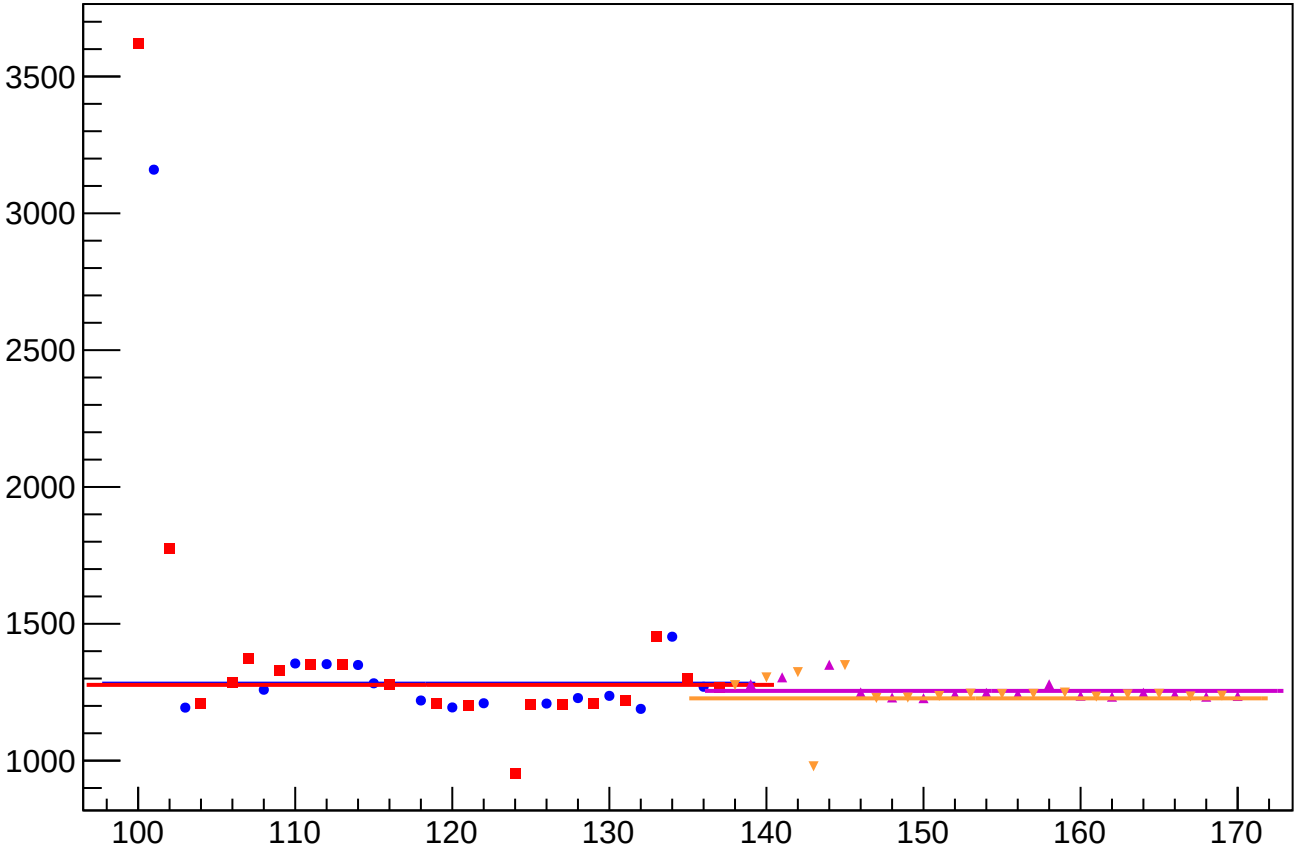
+ sign 695.014+/-0.114 $\chi^2$/NDF: 4164897.6/32

All: 691.585+/-0.080 $\chi^2$/NDF: 8035912.8/67

- sign 688.233+/-0.113 $\chi^2$/NDF: 3869239.1/34


dit_asym_at1_dd_at2_dd_avg_mean vs Slug
25000
20000
15000
10000
5000
0
−5000
−10000
100
110
120
130
140
150
160
170
Right In: 590.322+/-485.483 χ²/NDF: 17.1/15
Left Out: -321.749+/-335.608 χ²/NDF:19.1/16
Right Out: 462.606+/-476.795 χ²/NDF: 16.7/18
Left In: 65.098+/-345.215 χ²/NDF:10.8/15
+ sign -26.828+/-276.066 χ²/NDF: 38.6/32
All: 86.031+/-196.452 χ²/NDF: 66.9/67
- sign 201.812+/-279.618 χ²/NDF: 27.9/34

# dit_asym_at1_dd_at2_dd_avg_rms vs Slug




Right In: 1281.369+/-0.343 $\chi^2$/NDF: 507078.4/15

Left Out: 1227.608+/-0.237 $\chi^2$/NDF:132896.8/16

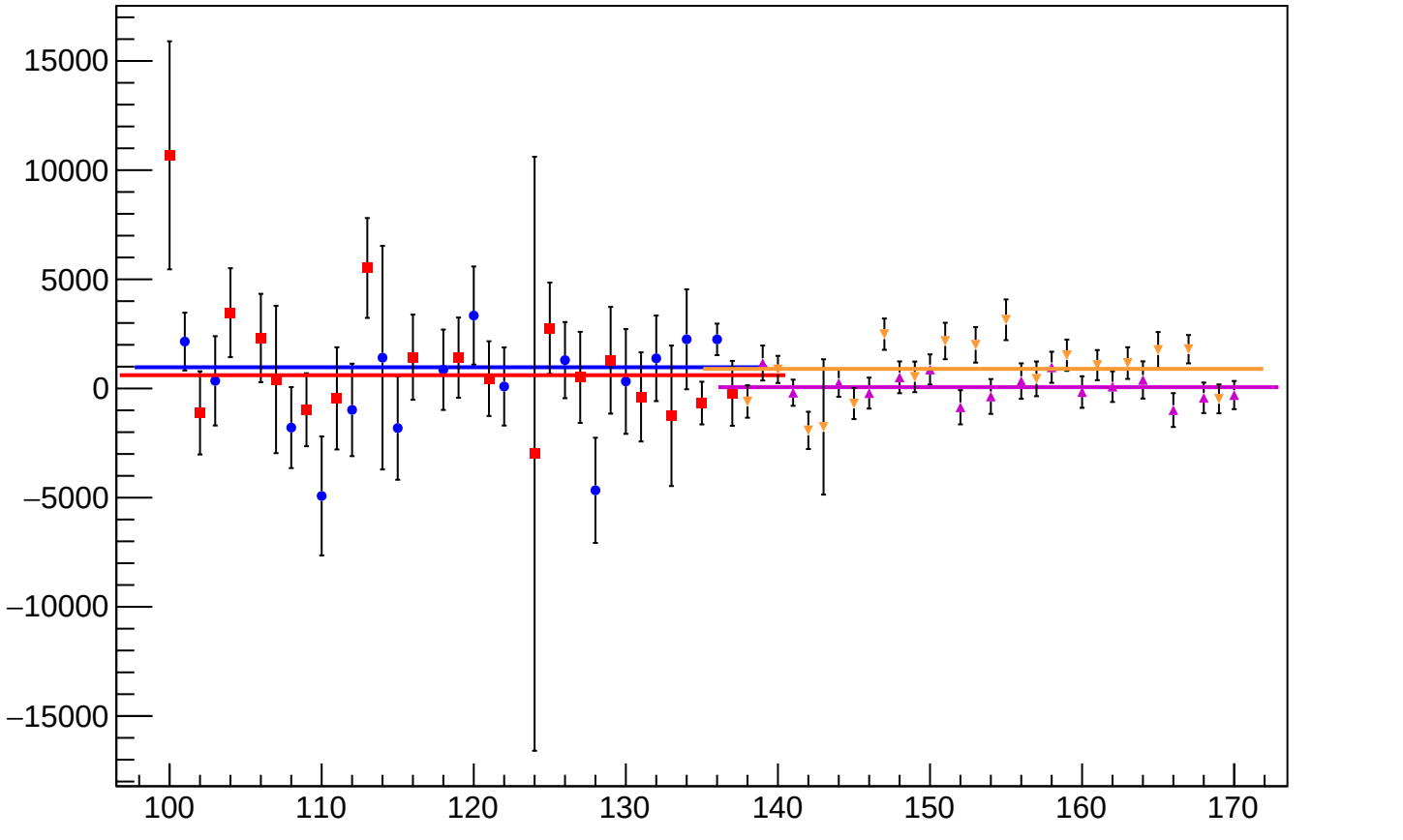
Right Out: 1276.860+/-0.337 $\chi^2$/NDF: 220513.6/18

Left In: 1254.877+/-0.244 $\chi^2$/NDF:16485.0/15

+ sign 1244.992+/-0.195 $\chi^2$/NDF: 656570.1/32

All: 1253.603+/-0.139 $\chi^2$/NDF: 900300.5/67

- sign 1262.438+/-0.198 $\chi^2$/NDF: 239788.0/34




Right In: 972.287+/-425.219 $\chi^2$/NDF: 20.4/15

Left Out: 899.021+/-183.884 $\chi^2$/NDF:44.4/16

Right Out: 608.431+/-447.734 $\chi^2$/NDF: 17.1/18

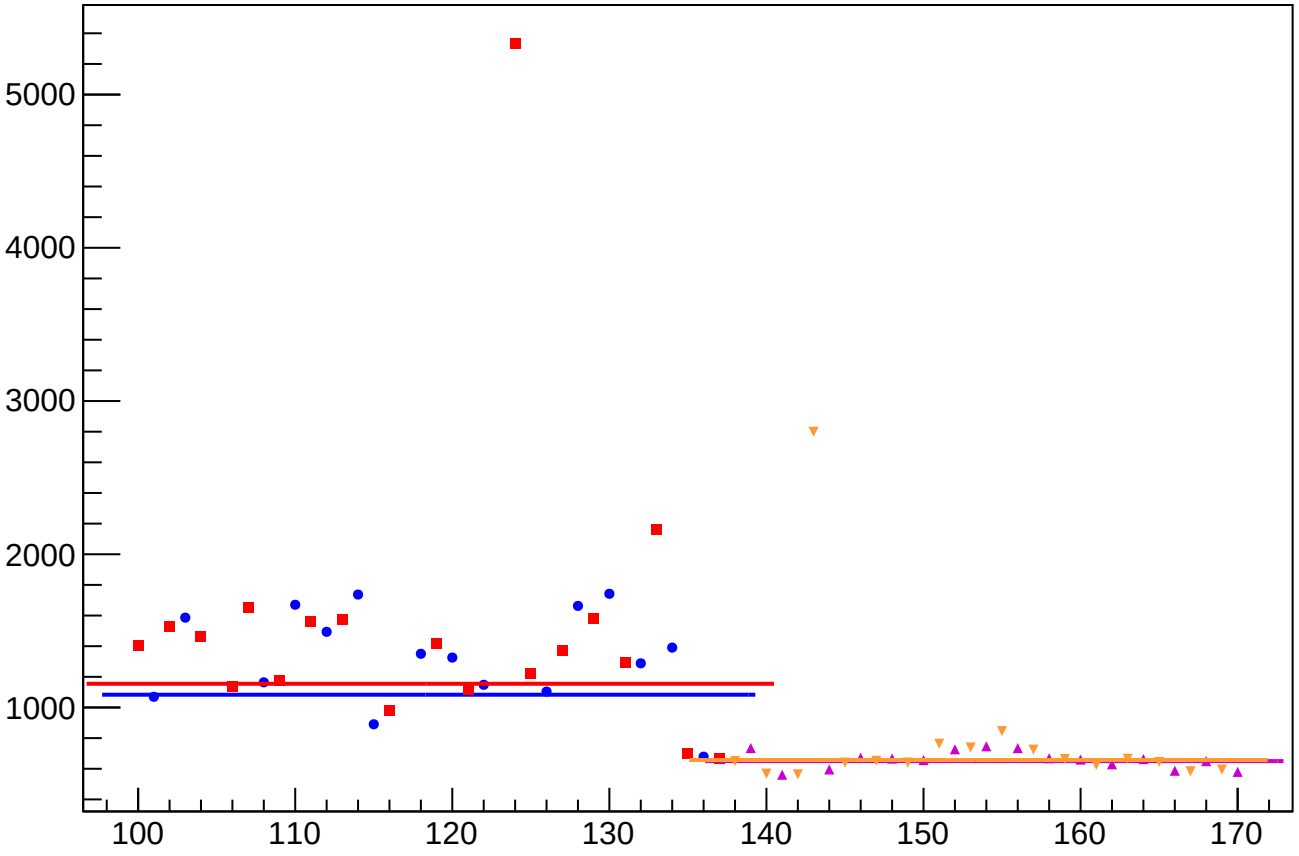
Left In: 59.943+/-179.784 $\chi^2$/NDF:10.4/15

+ sign 910.564+/-168.778 $\chi^2$/NDF: 64.9/32

All: 518.850+/-118.652 $\chi^2$/NDF: 104.3/67

- sign 136.099+/-166.836 $\chi^2$/NDF: 28.8/34

# asym_at1_dd_at2_dd_avg_dit_correction_rms vs Slug




Right In: 1083.335+/-0.301 $\chi^2$/NDF: 1360153.3/15

Left Out: 657.104+/-0.130 $\chi^2$/NDF:1220119.3/16

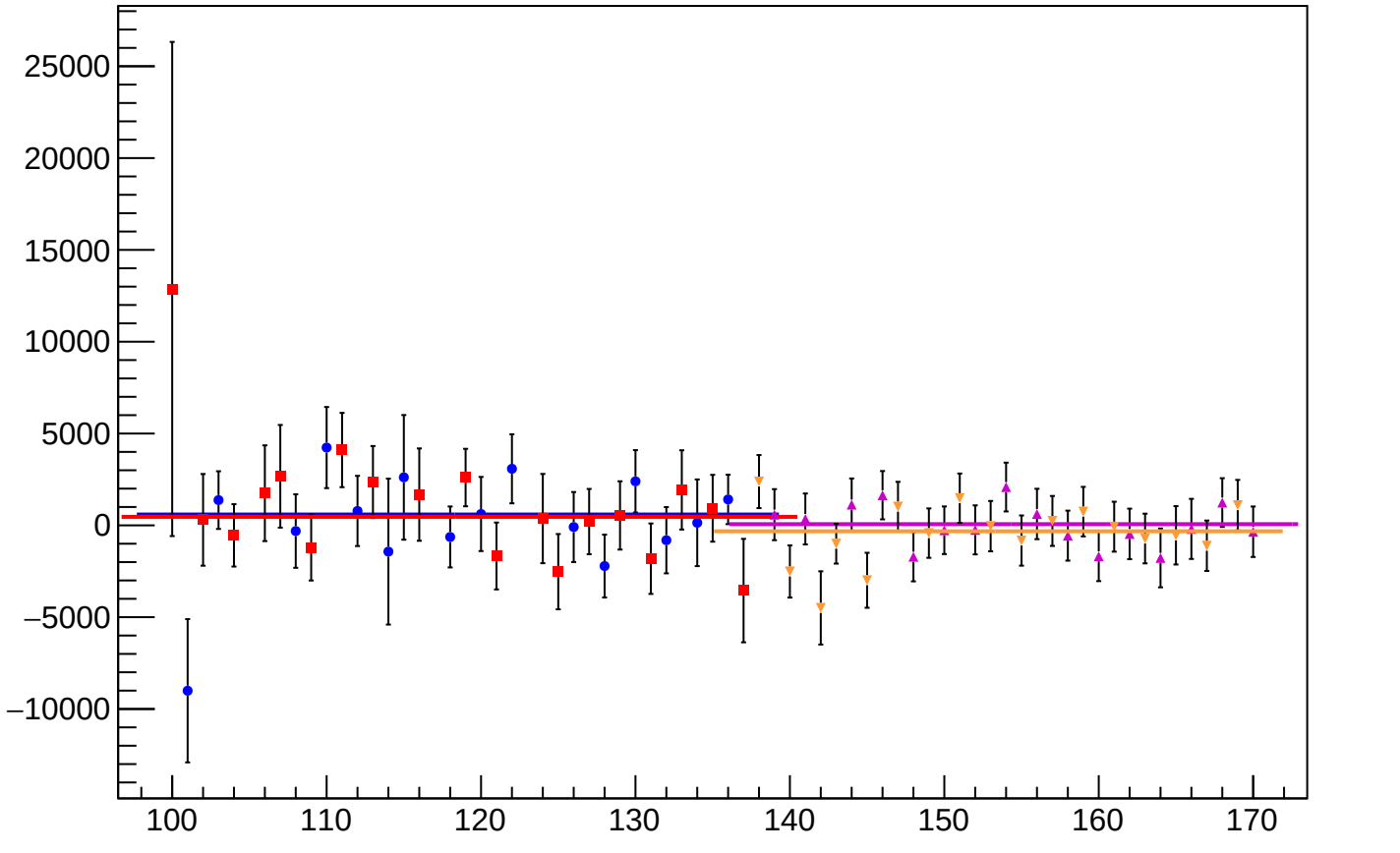
Right Out: 1154.724+/-0.317 $\chi^2$/NDF: 1488304.5/18

Left In: 650.105+/-0.127 $\chi^2$/NDF:196459.3/15

+ sign 724.255+/-0.119 $\chi^2$/NDF: 4273209.0/32

All: 722.189+/-0.084 $\chi^2$/NDF: 8146313.2/67

- sign 720.170+/-0.118 $\chi^2$/NDF: 3872511.8/34




Right In: 590.323+/-485.483 $\chi^2$/NDF: 17.1/15

Left Out: -321.751+/-335.608 $\chi^2$/NDF:19.1/16

Right Out: 462.605+/-476.795 $\chi^2$/NDF: 16.7/18

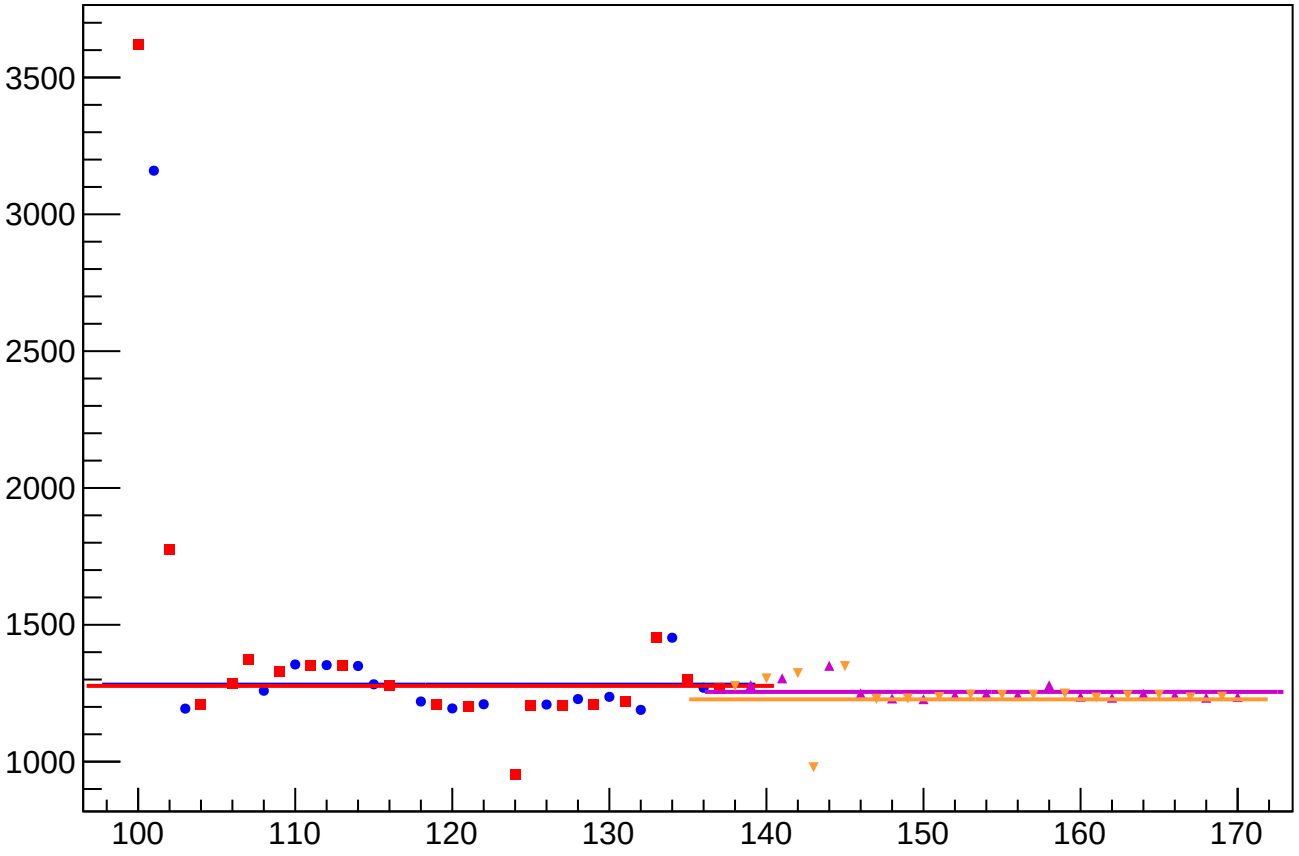
Left In: 65.097+/-345.215 $\chi^2$/NDF:10.8/15

+ sign -26.828+/-276.066 $\chi^2$/NDF: 38.6/32

All: 86.030+/-196.452 $\chi^2$/NDF: 66.9/67

- sign 201.811+/-279.618 $\chi^2$/NDF: 27.9/34

# eigen_dit_asym_at1_dd_at2_dd_avg_rms vs Slug




Right In: 1281.369+/-0.343 $\chi^2$/NDF: 507078.6/15

Left Out: 1227.608+/-0.237 $\chi^2$/NDF:132896.0/16

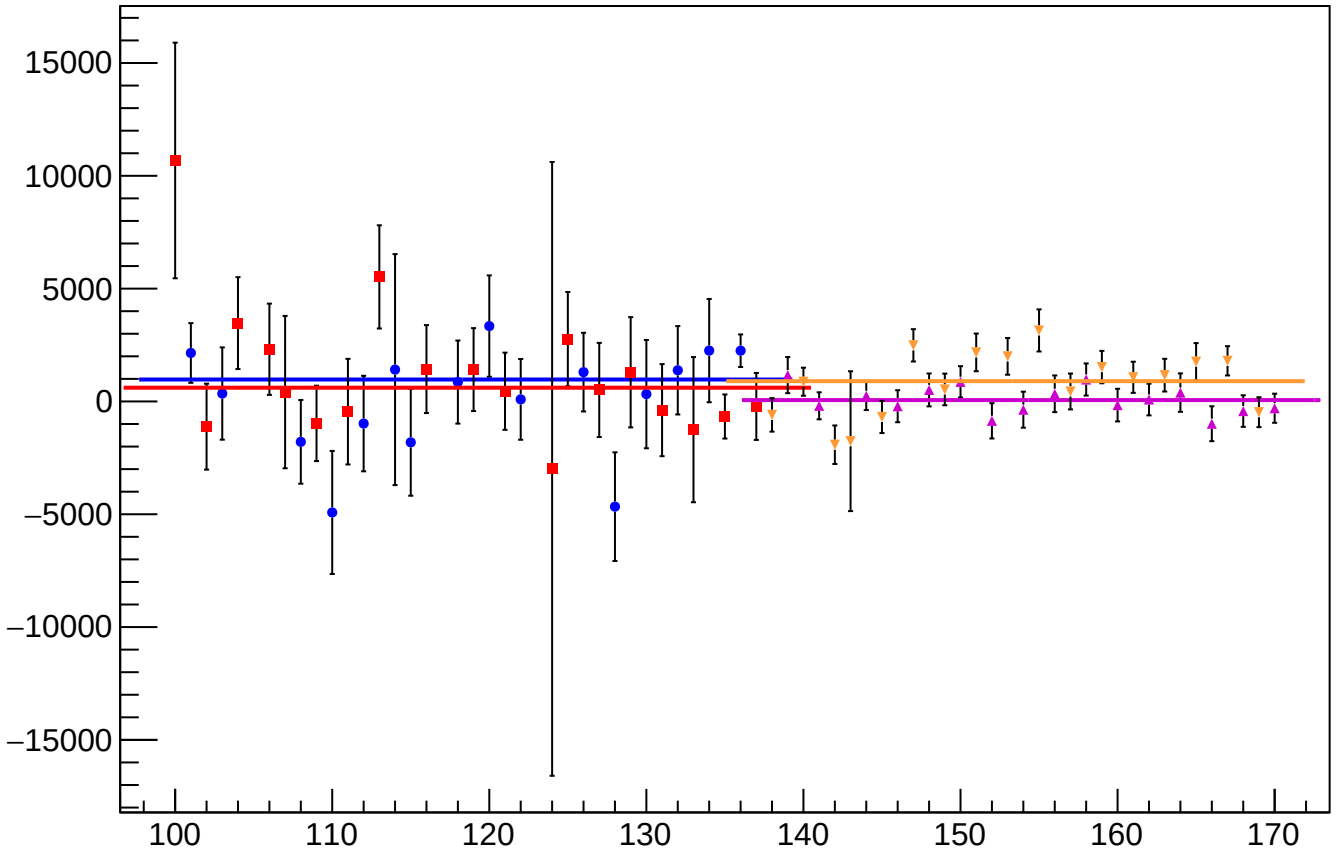
Right Out: 1276.860+/-0.337 $\chi^2$/NDF: 220513.5/18

Left In: 1254.877+/-0.244 $\chi^2$/NDF:16485.0/15

+ sign 1244.992+/-0.195 $\chi^2$/NDF: 656569.4/32

All: 1253.603+/-0.139 $\chi^2$/NDF: 900299.7/67

- sign 1262.438+/-0.198 $\chi^2$/NDF: 239787.9/34




Right In: 972.281+/-425.220 $\chi^2$/NDF: 20.4/15

Left Out: 899.023+/-183.884 $\chi^2$/NDF:44.4/16

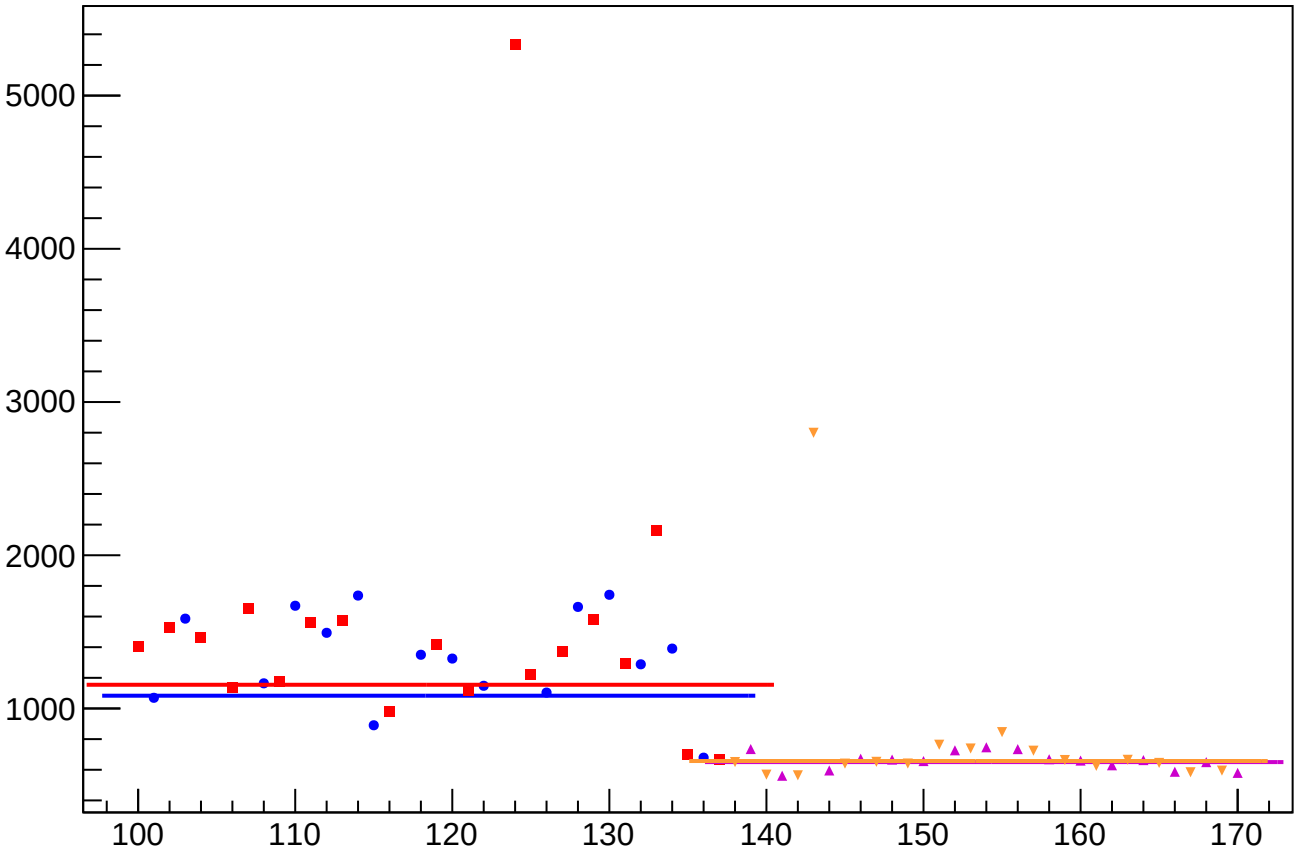
Right Out: 608.441+/-447.736 $\chi^2$/NDF: 17.1/18

Left In: 59.941+/-179.784 $\chi^2$/NDF:10.4/15

+ sign 910.564+/-168.778 $\chi^2$/NDF: 64.9/32

All: 518.850+/-118.652 $\chi^2$/NDF: 104.3/67

- sign 136.098+/-166.836 $\chi^2$/NDF: 28.8/34




Right In: 1083.341+/-0.301 $\chi^2$/NDF: 1360095.7/15

Left Out: 657.104+/-0.130 $\chi^2$/NDF:1220114.8/16

Right Out: 1154.732+/-0.317 $\chi^2$/NDF: 1488251.4/18

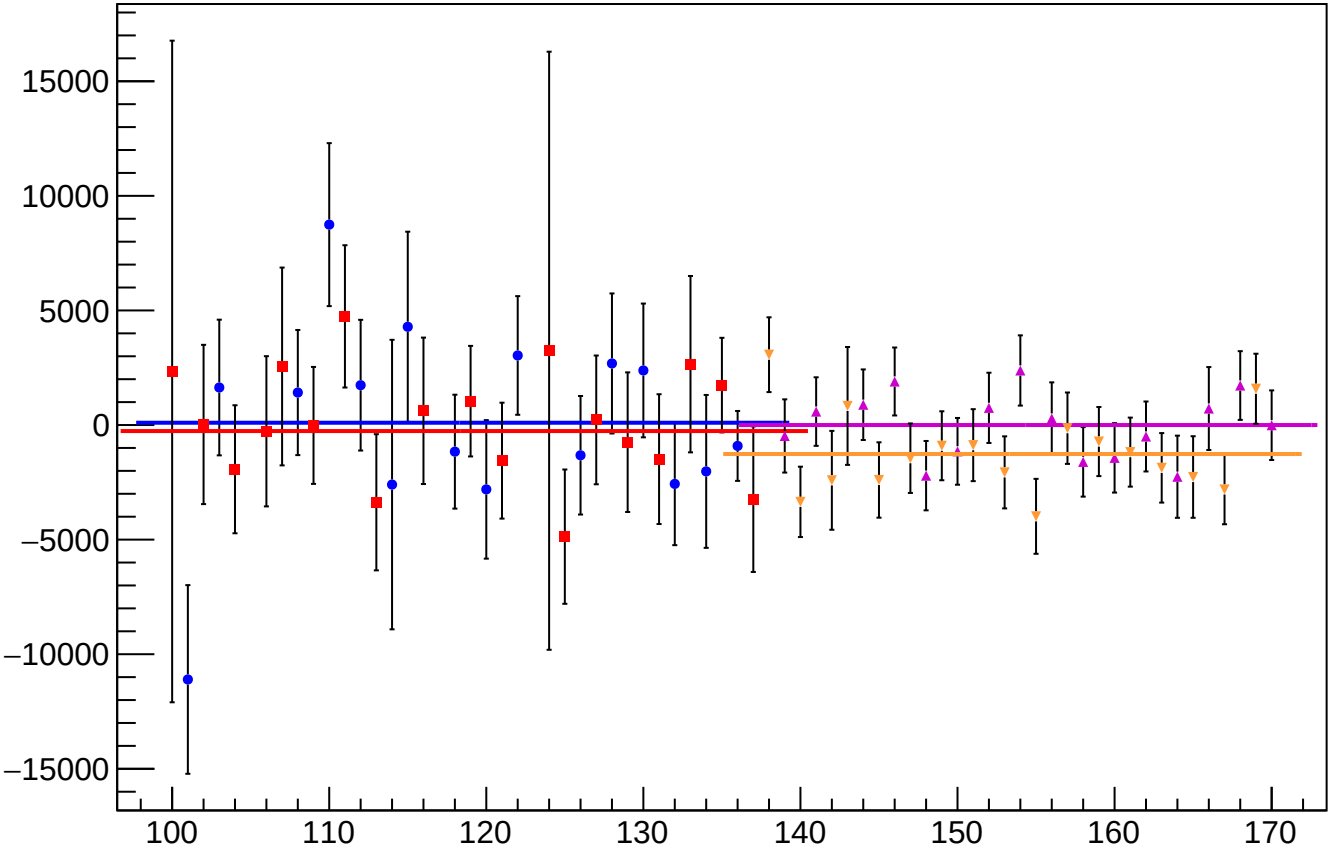
Left In: 650.104+/-0.127 $\chi^2$/NDF:196462.8/15

+ sign 724.256+/-0.119 $\chi^2$/NDF: 4273184.4/32

All: 722.190+/-0.084 $\chi^2$/NDF: 8146291.8/67

- sign 720.170+/-0.118 $\chi^2$/NDF: 3872514.7/34

# asym_at1_dd_at2_dd_avg_mean vs Slug




Right In: 100.451+/-698.983 $\chi^2$/NDF: 21.3/15

Left Out: -1264.590+/-392.127 $\chi^2$/NDF:19.1/16

Right Out: -262.731+/-699.724 $\chi^2$/NDF: 10.3/18

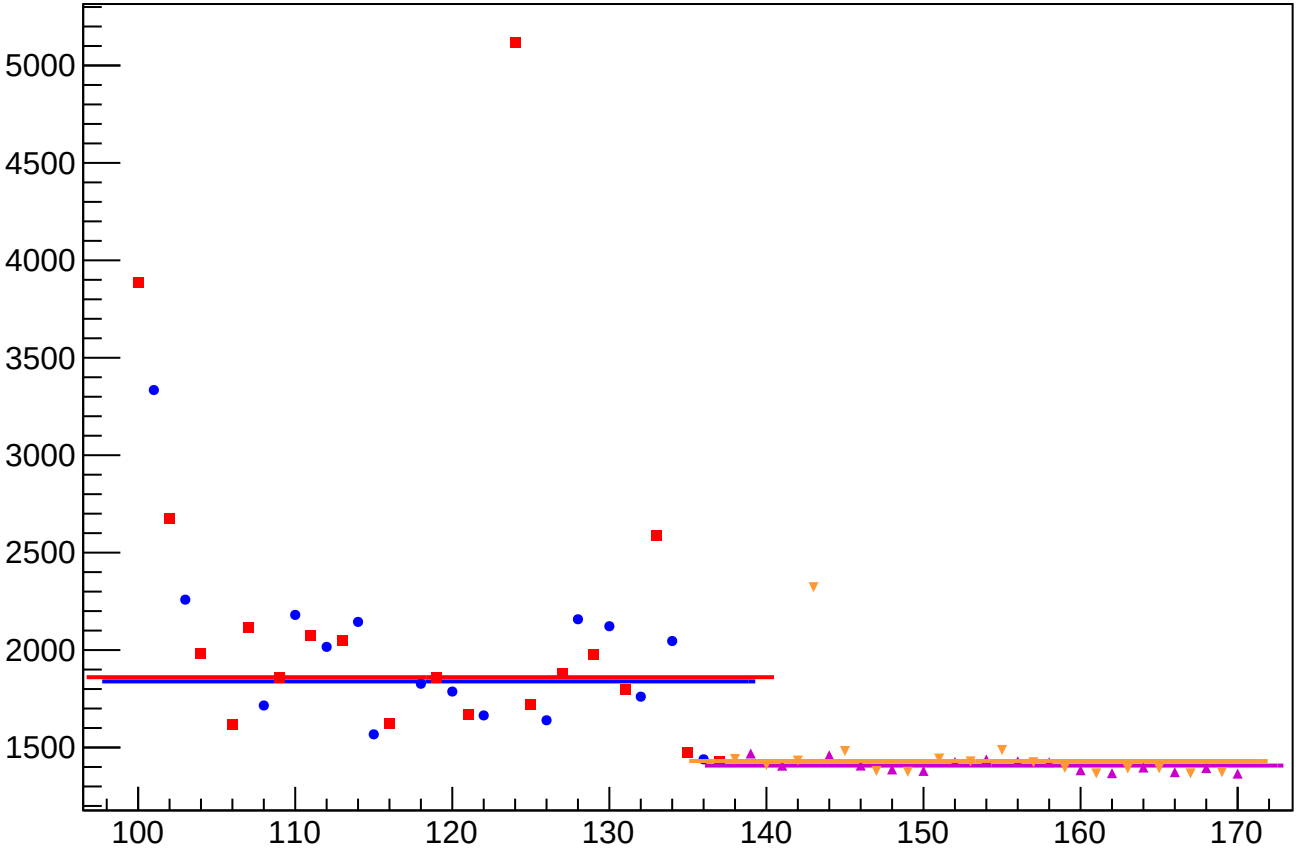
Left In: -0.002+/-387.127 $\chi^2$/NDF:12.8/15

+ sign -937.827+/-341.988 $\chi^2$/NDF: 43.3/32

All: -495.520+/-240.665 $\chi^2$/NDF: 69.9/67

- sign -61.574+/-338.740 $\chi^2$/NDF: 23.3/34

# asym_at1_dd_at2_dd_avg_rms vs Slug




Right In: 1839.113+/-0.494 $\chi^2$/NDF: 556725.4/15

Left Out: 1430.716+/-0.277 $\chi^2$/NDF:263571.5/16

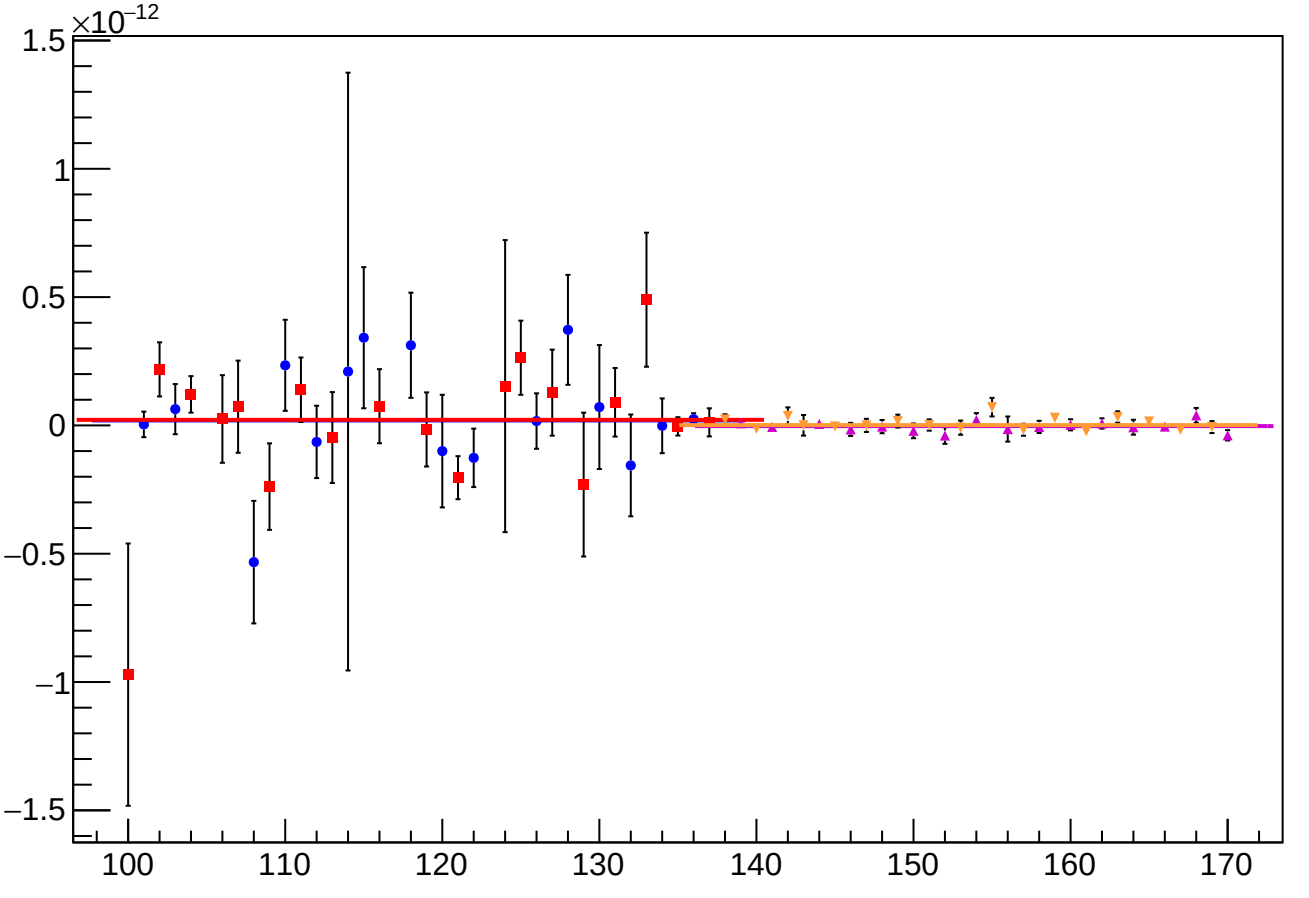
Right Out: 1860.754+/-0.495 $\chi^2$/NDF: 522114.2/18

Left In: 1407.223+/-0.274 $\chi^2$/NDF:12431.6/15

+ sign 1528.478+/-0.242 $\chi^2$/NDF: 1339613.0/32

All: 1520.924+/-0.170 $\chi^2$/NDF: 2519405.4/67

- sign 1513.514+/-0.240 $\chi^2$/NDF: 1177859.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 16.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:17.2/16

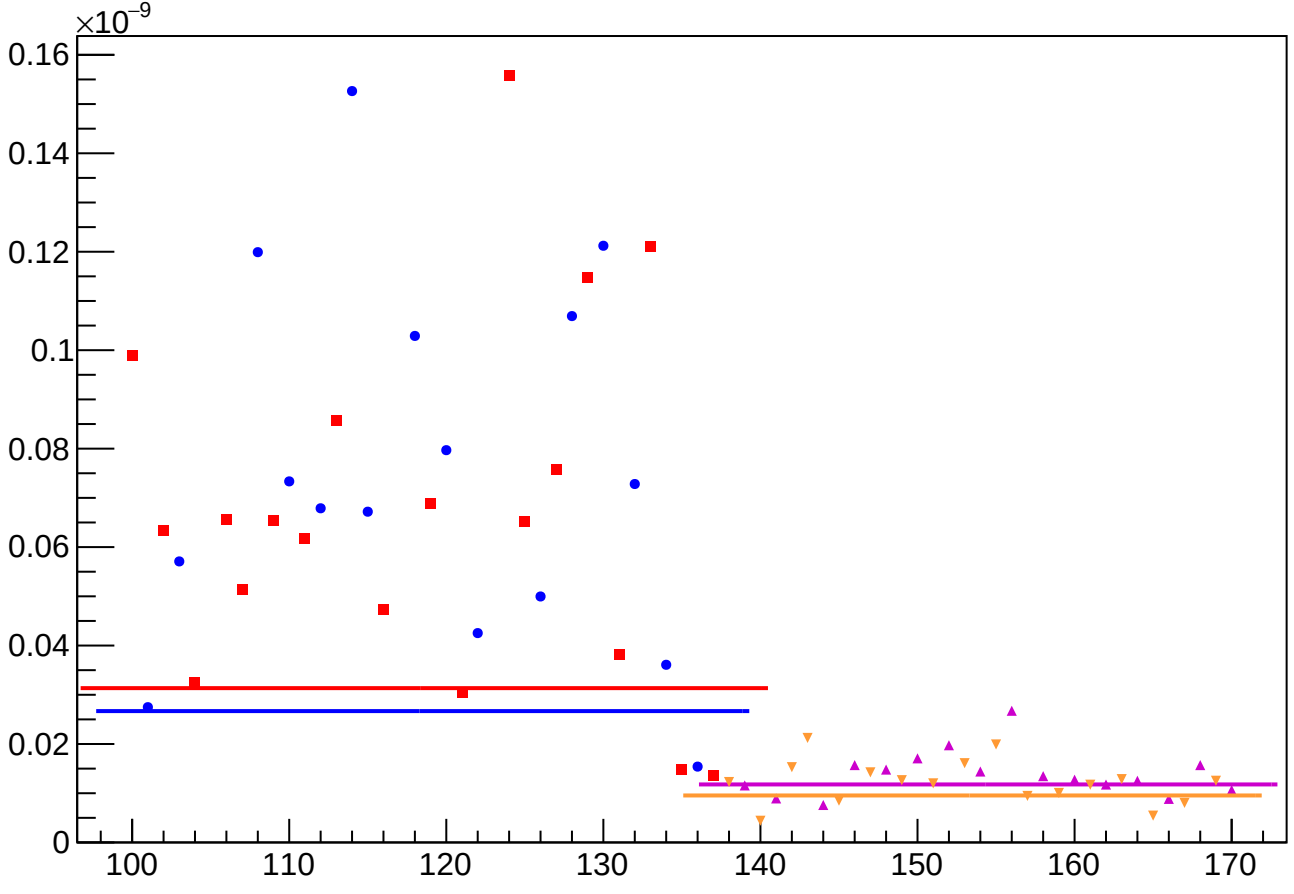
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 28.2/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:9.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 34.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 73.3/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 38.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2580672.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1390760.6/16

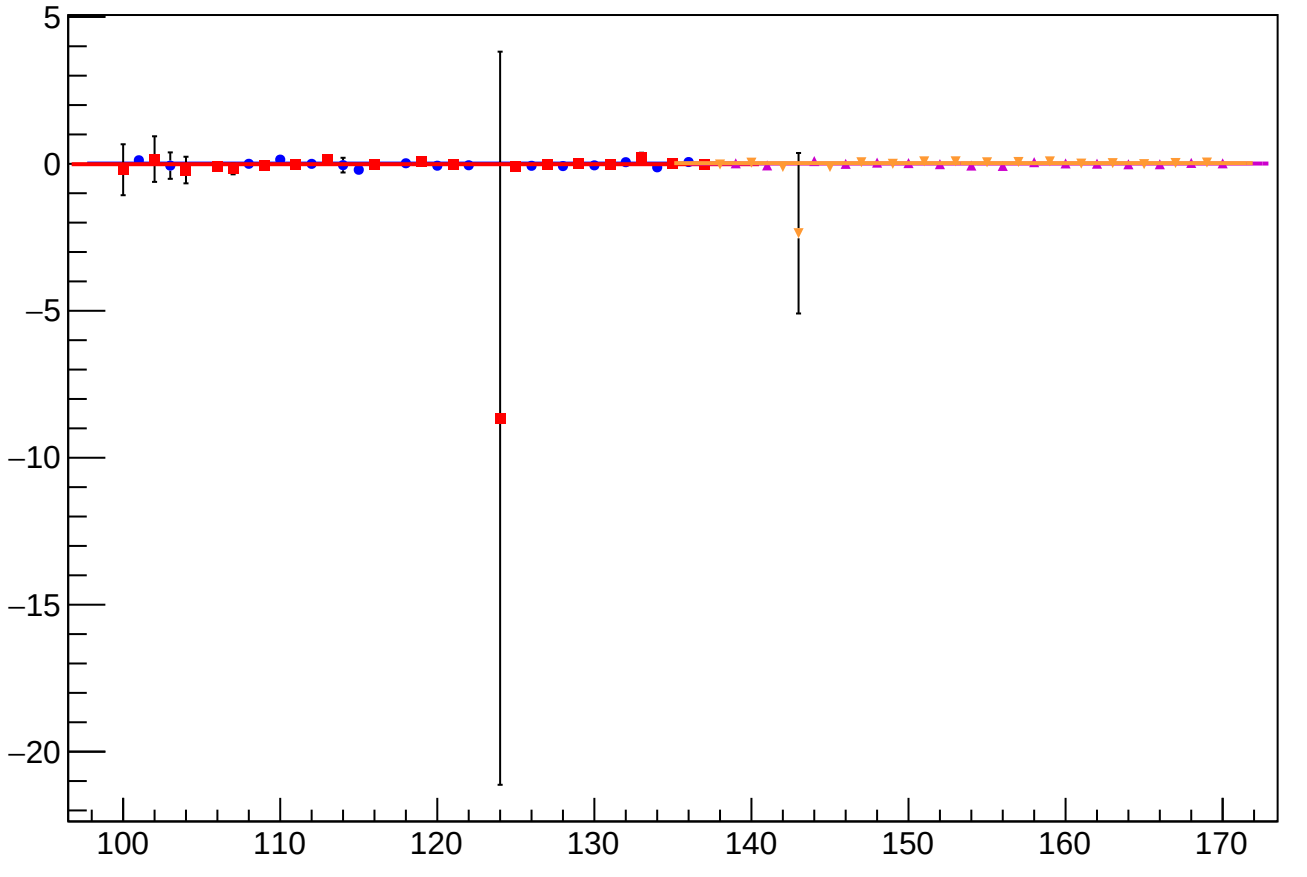
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2275167.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:831726.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5532287.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10307534.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4558212.3/34




Right In: 0.008+/-0.016 $\chi^2$/NDF: 19.3/15

Left Out: 0.024+/-0.010 $\chi^2$/NDF:17.7/16

Right Out: -0.012+/-0.017 $\chi^2$/NDF: 12.6/18

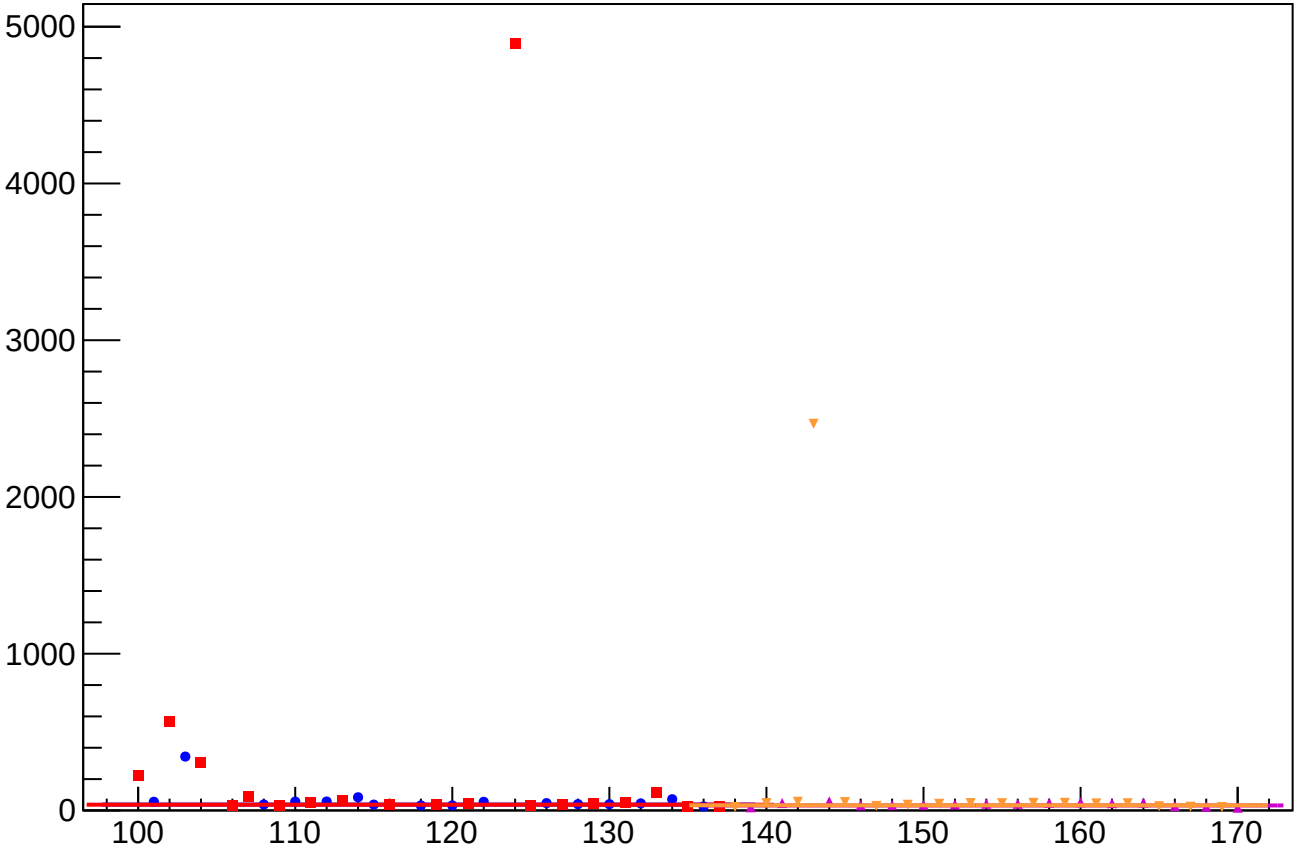
Left In: 0.010+/-0.010 $\chi^2$/NDF:10.8/15

+ sign 0.019+/-0.009 $\chi^2$/NDF: 37.6/32

All: 0.012+/-0.006 $\chi^2$/NDF: 63.9/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 24.8/34

# asym_at1_dd_at2_dd_avg_dit_vs_cor_diff_rms vs Slug




Right In: 37.494+/-0.011 $\chi^2$/NDF: 1983275.6/15

Left Out: 32.846+/-0.007 $\chi^2$/NDF:3960562.7/16

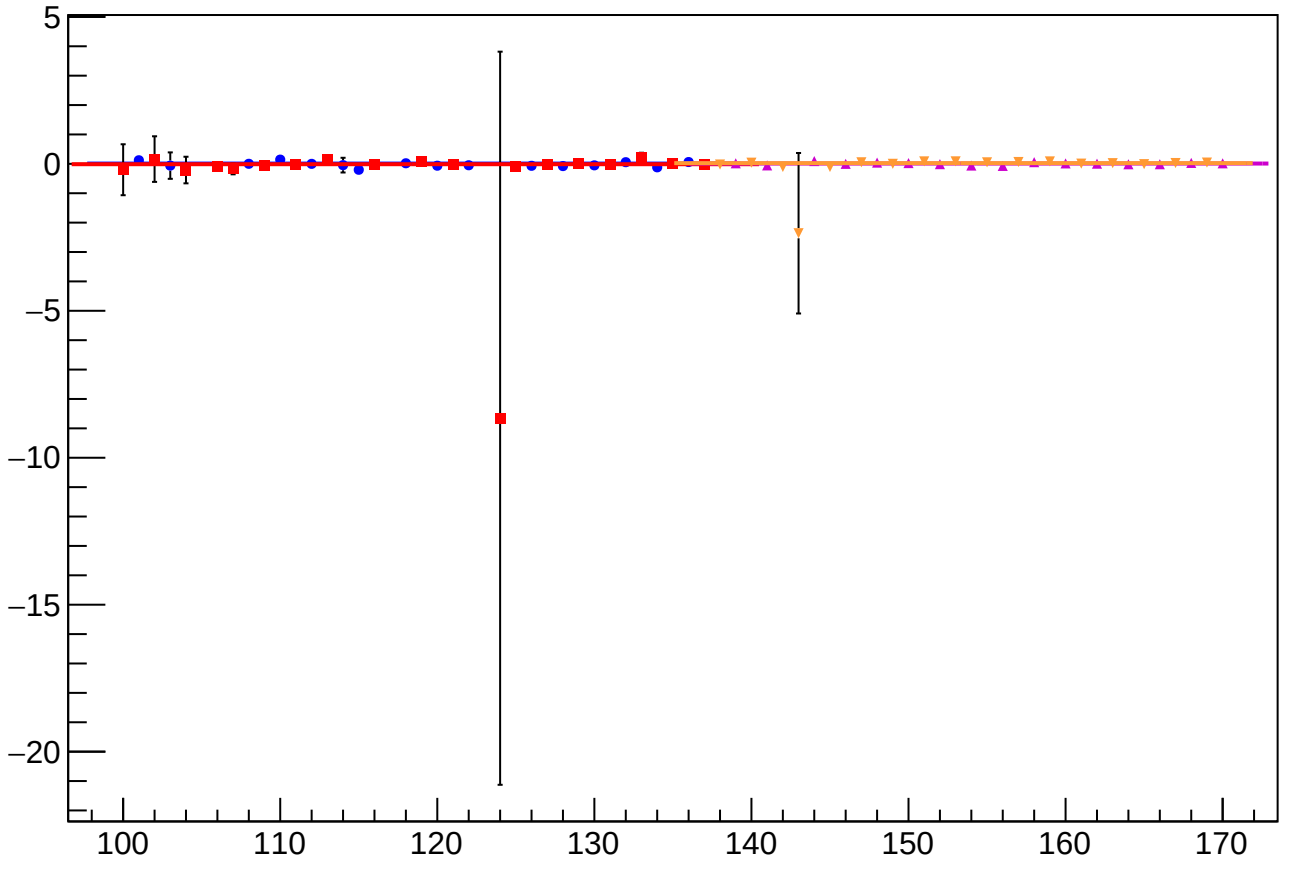
Right Out: 36.767+/-0.012 $\chi^2$/NDF: 3190700.2/18

Left In: 31.888+/-0.007 $\chi^2$/NDF:2712775.8/15

+ sign 34.209+/-0.006 $\chi^2$/NDF: 6061982.7/32

All: 33.687+/-0.004 $\chi^2$/NDF: 12106283.1/67

- sign 33.182+/-0.006 $\chi^2$/NDF: 6030156.7/34




Right In: 0.008+/-0.016 $\chi^2$/NDF: 19.3/15

Left Out: 0.024+/-0.010 $\chi^2$/NDF:17.7/16

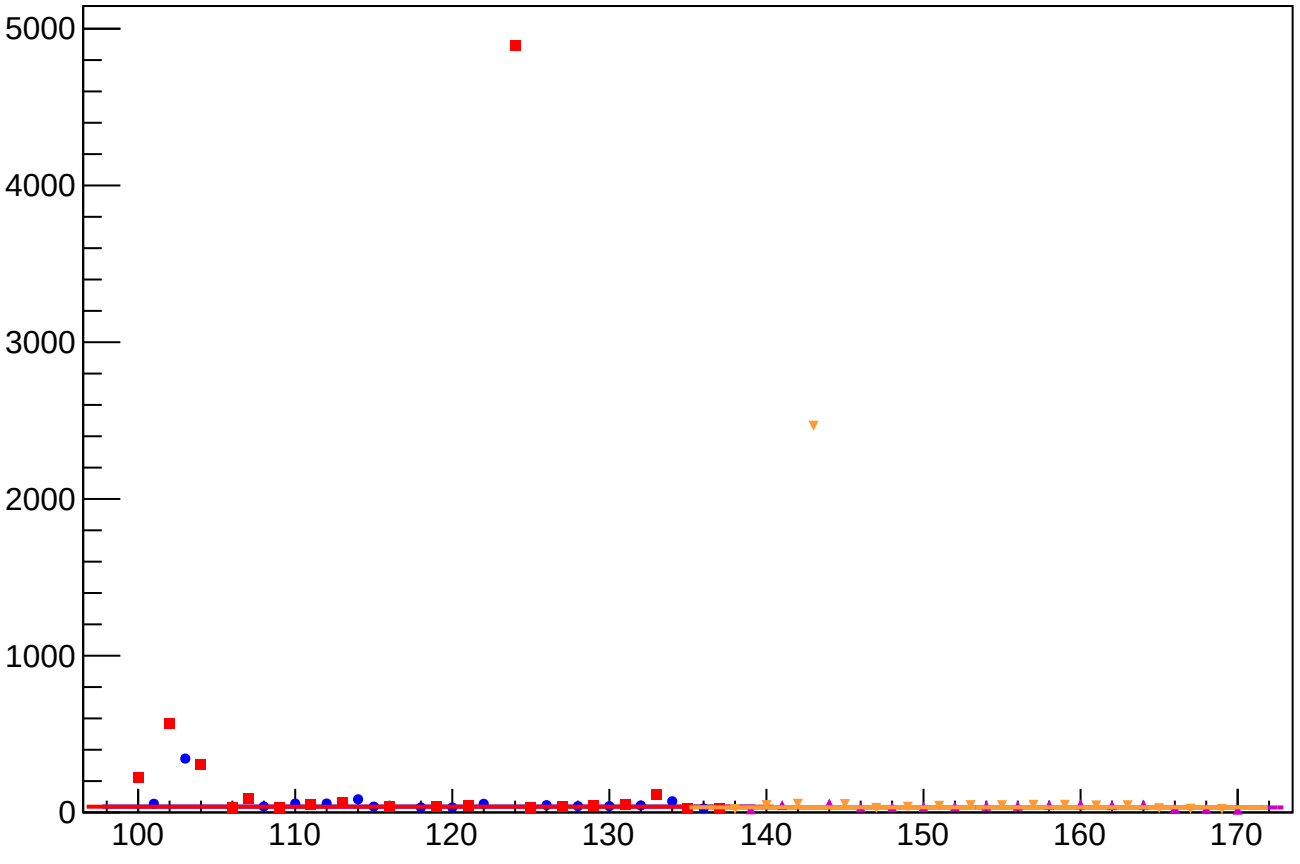
Right Out: -0.012+/-0.017 $\chi^2$/NDF: 12.6/18

Left In: 0.010+/-0.010 $\chi^2$/NDF:10.8/15

+ sign 0.019+/-0.009 $\chi^2$/NDF: 37.6/32

All: 0.012+/-0.006 $\chi^2$/NDF: 63.9/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 24.8/34




Right In: 37.494+/-0.011 $\chi^2$/NDF: 1983275.6/15

Left Out: 32.846+/-0.007 $\chi^2$/NDF:3960562.7/16

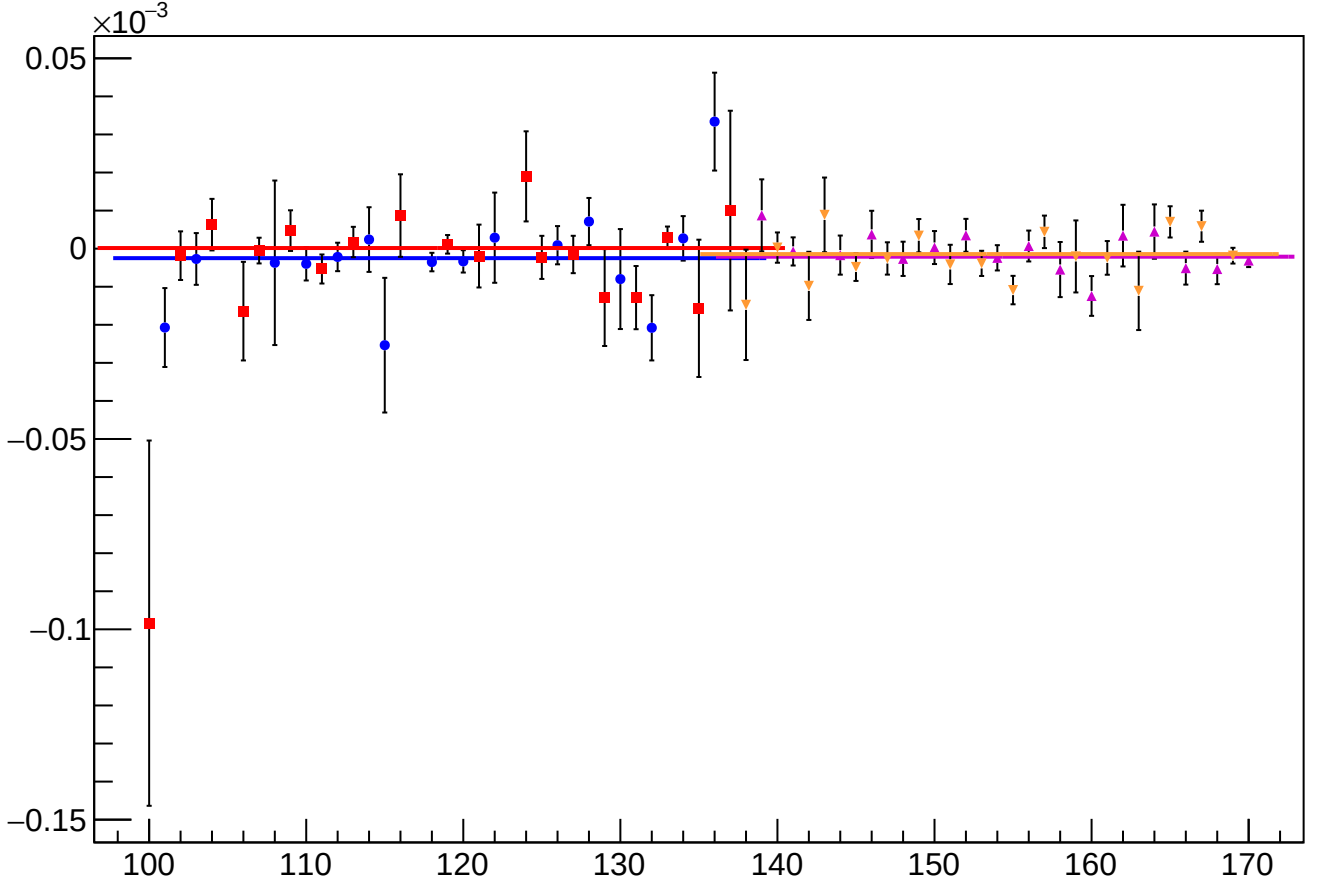
Right Out: 36.767+/-0.012 $\chi^2$/NDF: 3190700.2/18

Left In: 31.888+/-0.007 $\chi^2$/NDF:2712775.8/15

+ sign 34.209+/-0.006 $\chi^2$/NDF: 6061982.7/32

All: 33.687+/-0.004 $\chi^2$/NDF: 12106283.1/67

- sign 33.182+/-0.006 $\chi^2$/NDF: 6030156.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 21.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:22.7/16

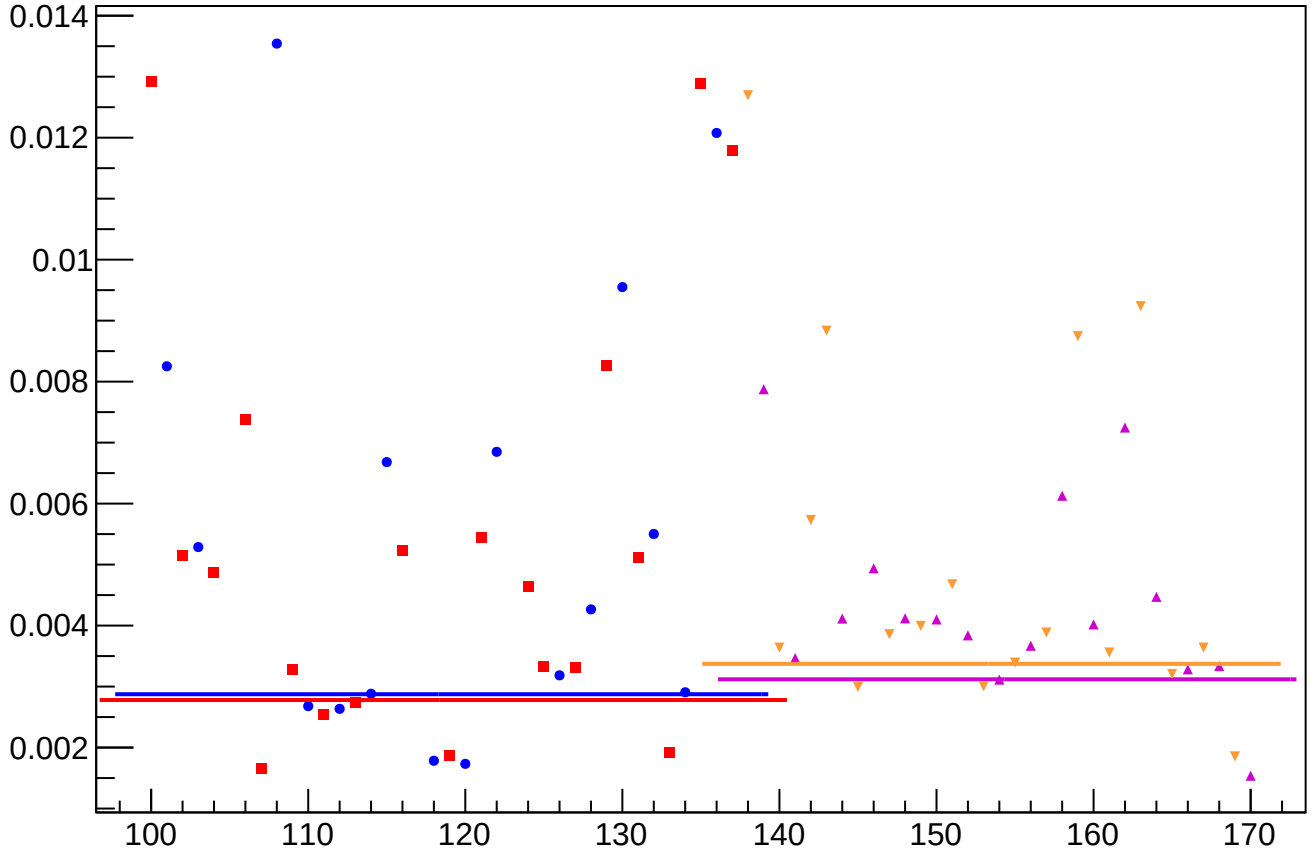
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:11.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 44.9/32

All: -0.000+/-0.000 $\chi^2$/NDF: 78.1/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 32.8/34




Right In: 0.003+/-0.000 $\chi^2$/NDF: 4152056.9/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:4251729.7/16

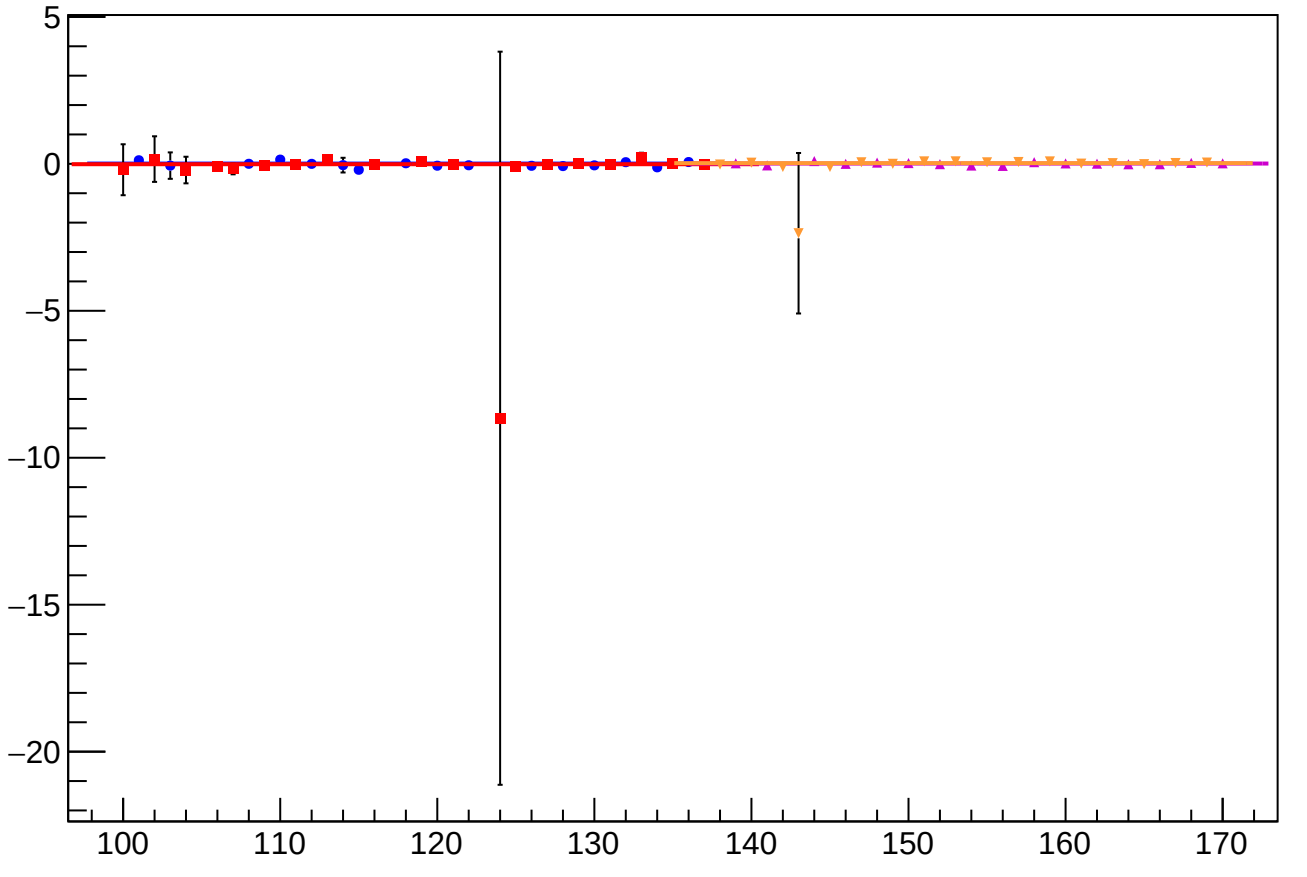
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 3311178.7/18

Left In: 0.003+/-0.000 $\chi^2$/NDF:3774445.4/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 8584022.2/32

All: 0.003+/-0.000 $\chi^2$/NDF: 15836126.6/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 7182835.0/34




Right In: 0.008+/-0.016 $\chi^2$/NDF: 19.3/15

Left Out: 0.024+/-0.010 $\chi^2$/NDF:17.7/16

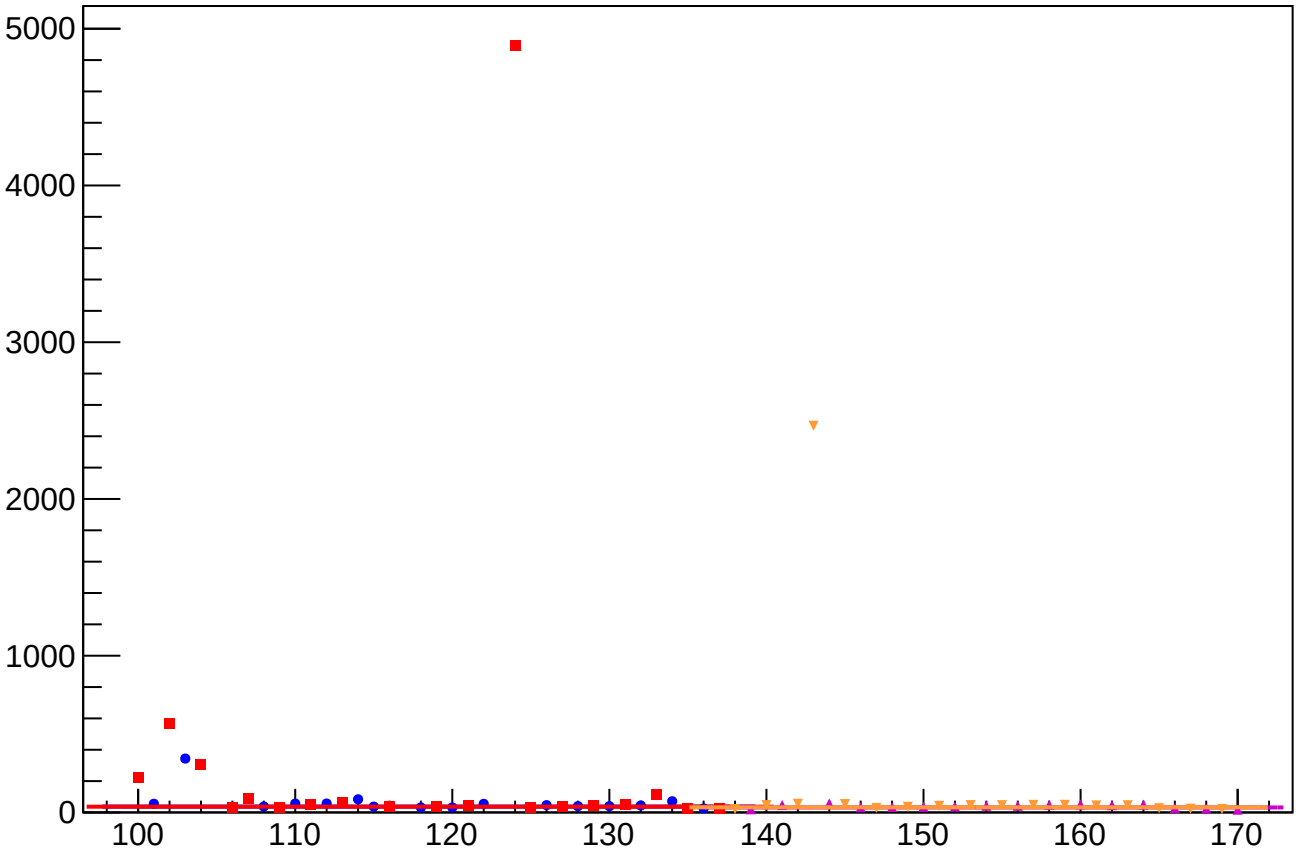
Right Out: -0.013+/-0.017 $\chi^2$/NDF: 12.6/18

Left In: 0.010+/-0.010 $\chi^2$/NDF:10.8/15

+ sign 0.019+/-0.009 $\chi^2$/NDF: 37.6/32

All: 0.012+/-0.006 $\chi^2$/NDF: 63.9/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 24.8/34




Right In: 37.495+/-0.011 $\chi^2$/NDF: 1983206.3/15

Left Out: 32.845+/-0.007 $\chi^2$/NDF:3960620.8/16

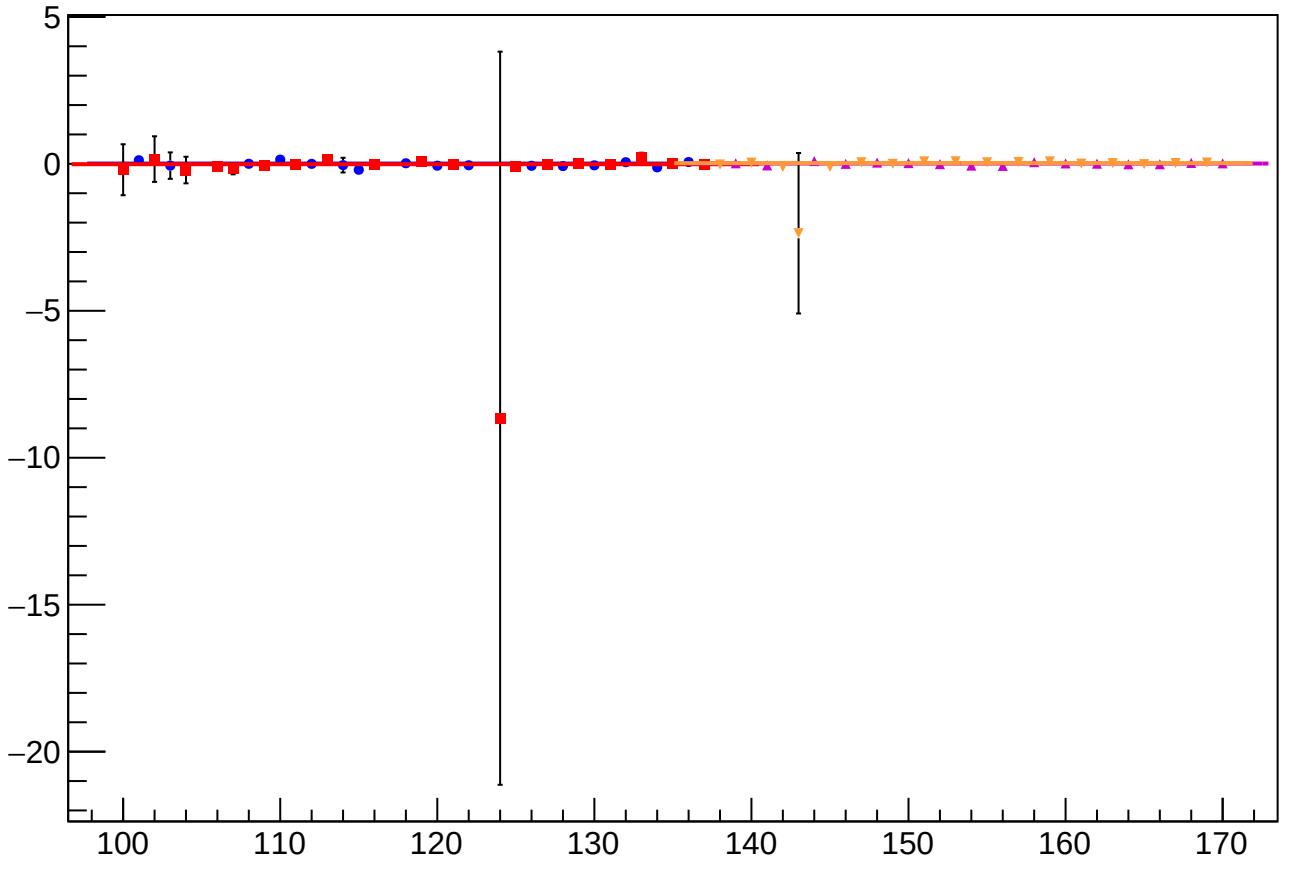
Right Out: 36.769+/-0.012 $\chi^2$/NDF: 3190400.7/18

Left In: 31.890+/-0.007 $\chi^2$/NDF:2711665.5/15

+ sign 34.208+/-0.006 $\chi^2$/NDF: 6062045.8/32

All: 33.688+/-0.004 $\chi^2$/NDF: 12104830.8/67

- sign 33.184+/-0.006 $\chi^2$/NDF: 6028713.7/34




Right In: 0.008+/-0.016 $\chi^2$/NDF: 19.3/15

Left Out: 0.024+/-0.010 $\chi^2$/NDF:17.7/16

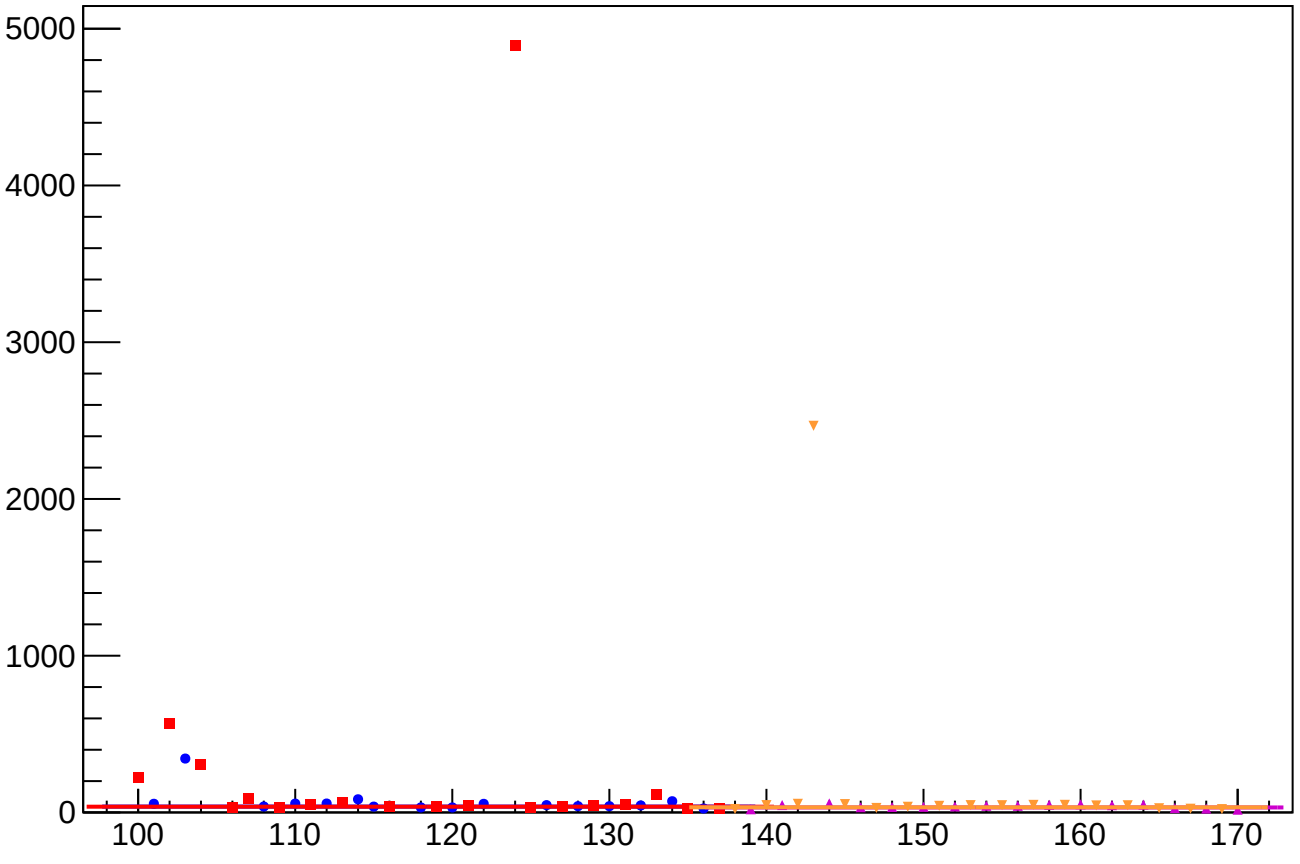
Right Out: -0.013+/-0.017 $\chi^2$/NDF: 12.6/18

Left In: 0.010+/-0.010 $\chi^2$/NDF:10.8/15

+ sign 0.019+/-0.009 $\chi^2$/NDF: 37.6/32

All: 0.012+/-0.006 $\chi^2$/NDF: 63.9/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 24.8/34




Right In: 37.495+/-0.011 $\chi^2$/NDF: 1983206.3/15

Left Out: 32.845+/-0.007 $\chi^2$/NDF:3960620.8/16

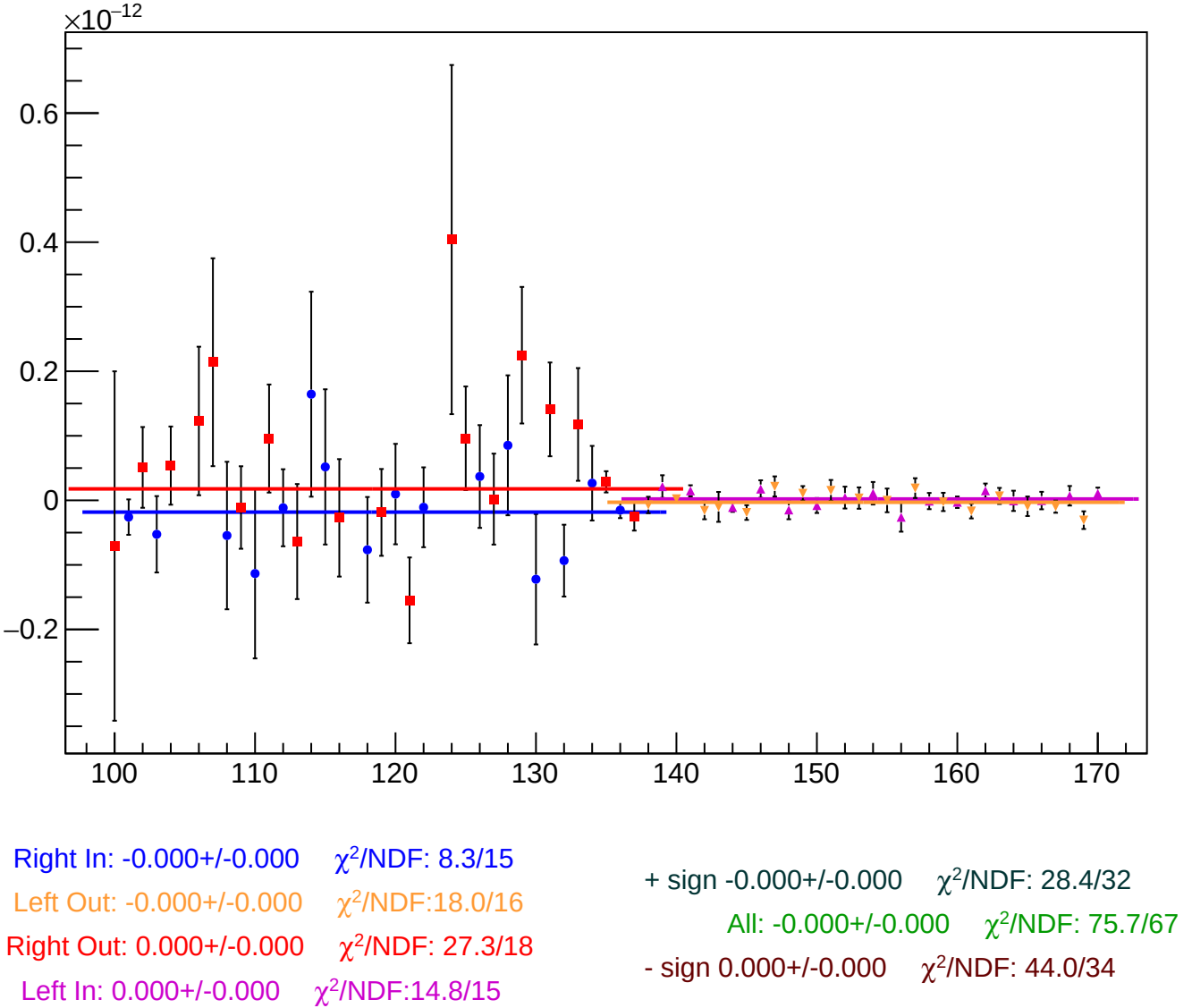
Right Out: 36.769+/-0.012 $\chi^2$/NDF: 3190400.7/18

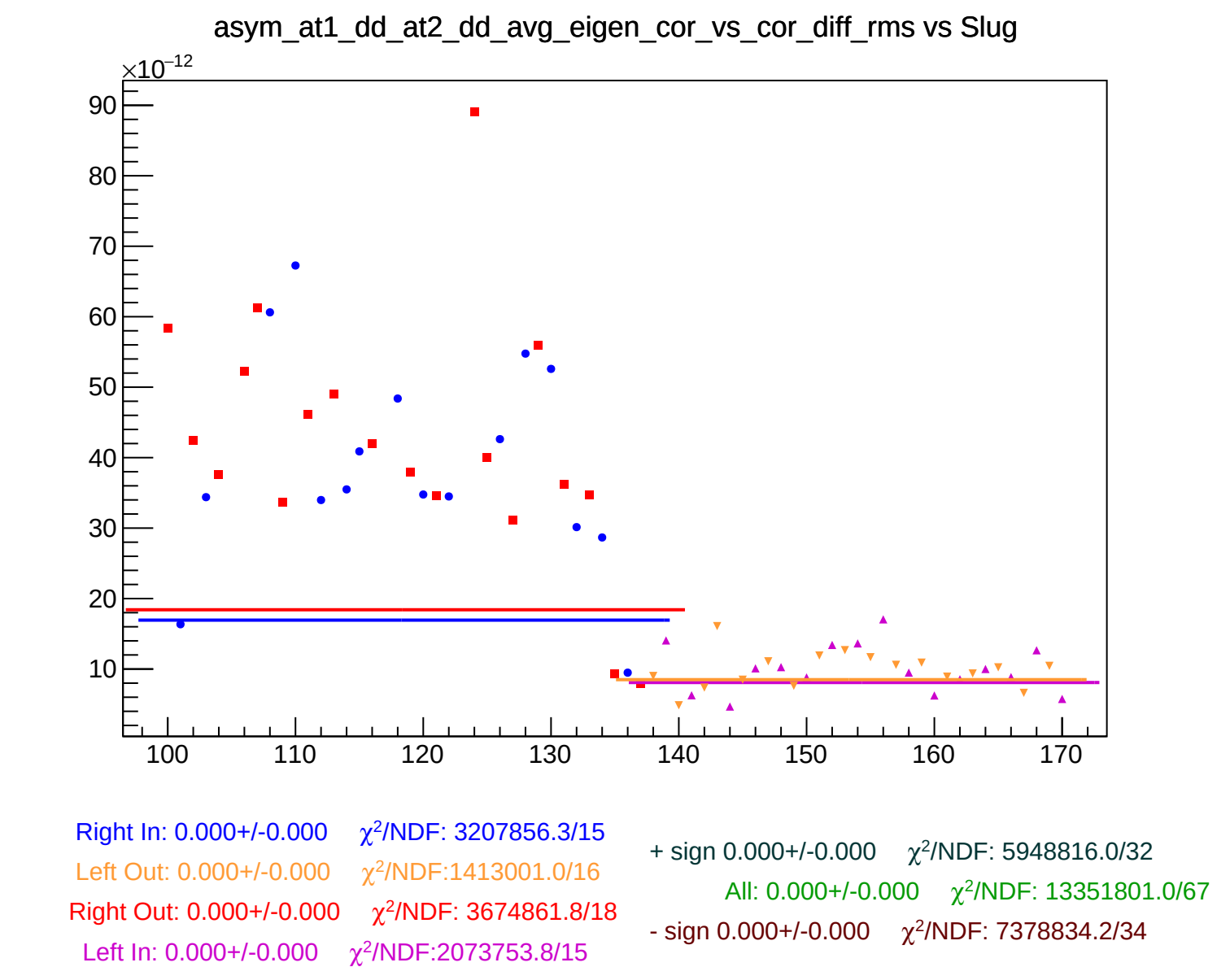
Left In: 31.890+/-0.007 $\chi^2$/NDF:2711665.5/15

+ sign 34.208+/-0.006 $\chi^2$/NDF: 6062045.8/32

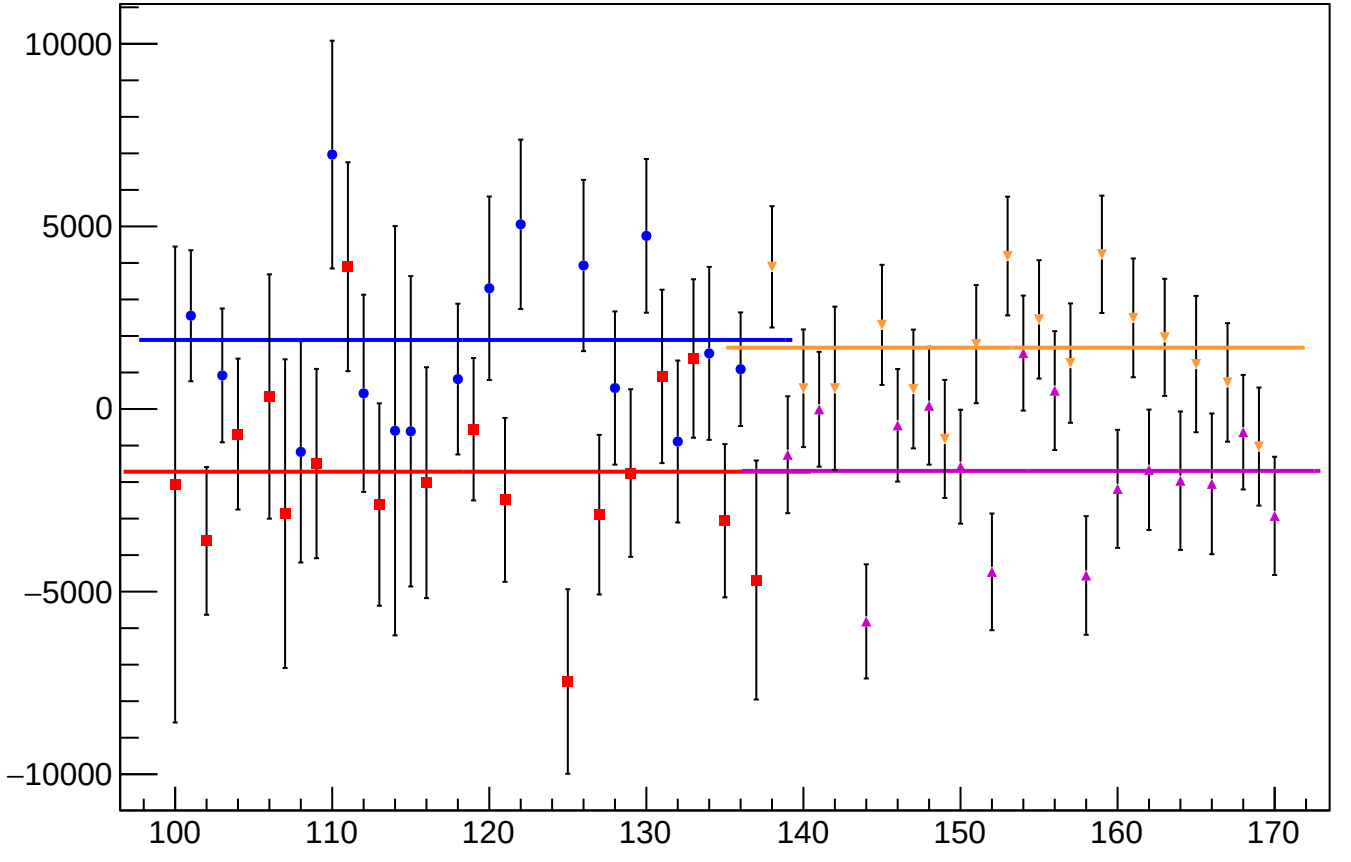
All: 33.688+/-0.004 $\chi^2$/NDF: 12104830.8/67

- sign 33.184+/-0.006 $\chi^2$/NDF: 6028713.7/34


asym_at1_dd_at2_dd_avg_eigen_cor_vs_cor_diff_mean vs Slug
×10^−12
0.6
0.4
0.2
0
−0.2
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 8.3/15
Left Out: -0.000+/-0.000 χ²/NDF:18.0/16
Right Out: 0.000+/-0.000 χ²/NDF: 27.3/18
Left In: 0.000+/-0.000 χ²/NDF:14.8/15
+ sign -0.000+/-0.000 χ²/NDF: 28.4/32
All: -0.000+/-0.000 χ²/NDF: 75.7/67
- sign 0.000+/-0.000 χ²/NDF: 44.0/34


asym_at1_dd_at2_dd_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
90
80
70
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3207856.3/15
Left Out: 0.000+/-0.000 χ²/NDF:1413001.0/16
Right Out: 0.000+/-0.000 χ²/NDF: 3674861.8/18
Left In: 0.000+/-0.000 χ²/NDF:2073753.8/15
+ sign 0.000+/-0.000 χ²/NDF: 5948816.0/32
All: 0.000+/-0.000 χ²/NDF: 13351801.0/67
- sign 0.000+/-0.000 χ²/NDF: 7378834.2/34

# reg_asym_usl_atl1_avg_mean vs Slug




Right In: 1891.457+/-572.244 $\chi^2$/NDF: 12.2/15

Left Out: 1680.194+/-415.280 $\chi^2$/NDF:14.2/15

Right Out: -1715.909+/-589.518 $\chi^2$/NDF: 16.0/17

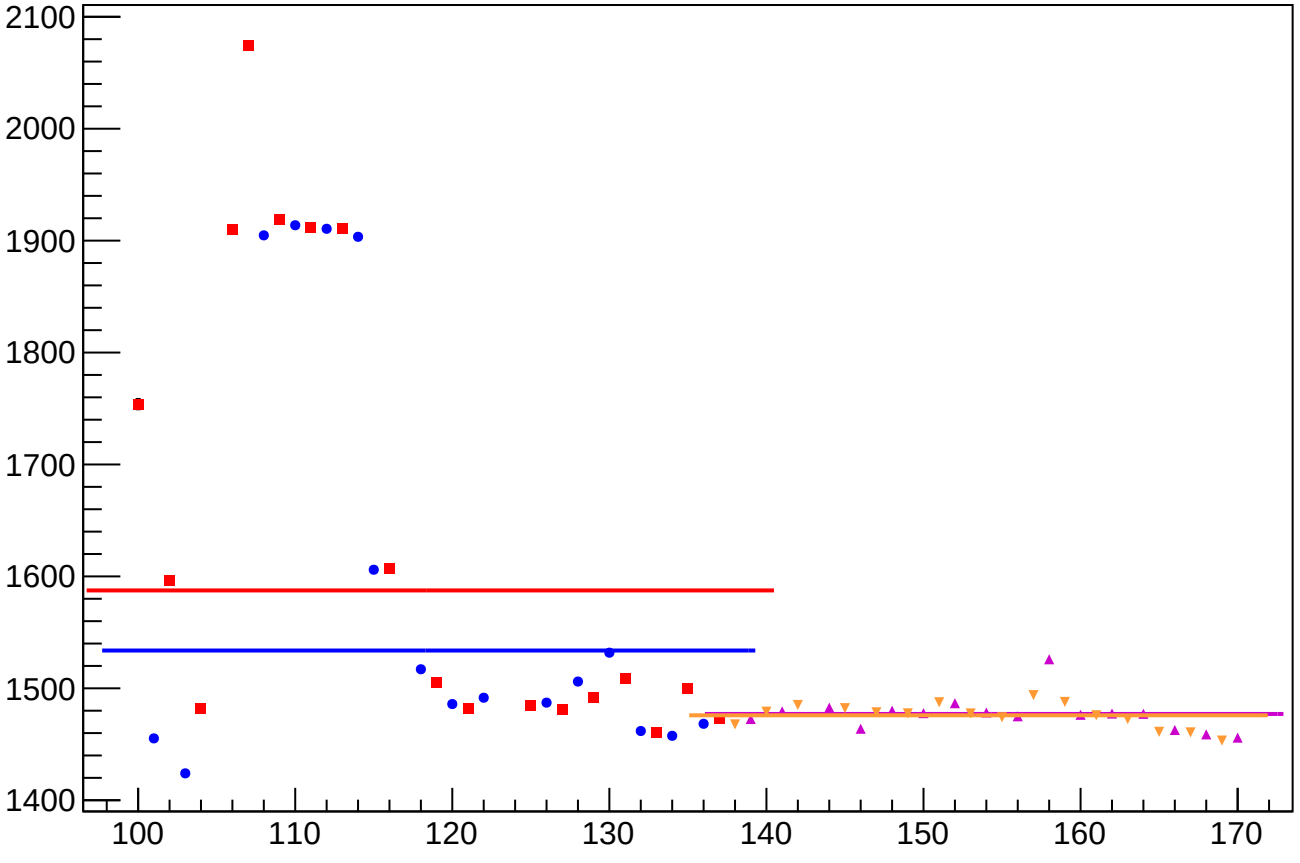
Left In: -1693.930+/-406.238 $\chi^2$/NDF:23.4/15

+ sign 1753.073+/-336.103 $\chi^2$/NDF: 26.5/31

All: 17.815+/-237.094 $\chi^2$/NDF: 118.9/65

- sign -1701.007+/-334.507 $\chi^2$/NDF: 39.3/33

# reg_asym_usl_atl1_avg_rms vs Slug




Right In: 1533.771+/-0.405 $\chi^2$/NDF: 129271.6/15

Left Out: 1475.886+/-0.294 $\chi^2$/NDF:1290.7/15

Right Out: 1587.461+/-0.417 $\chi^2$/NDF: 171988.2/17

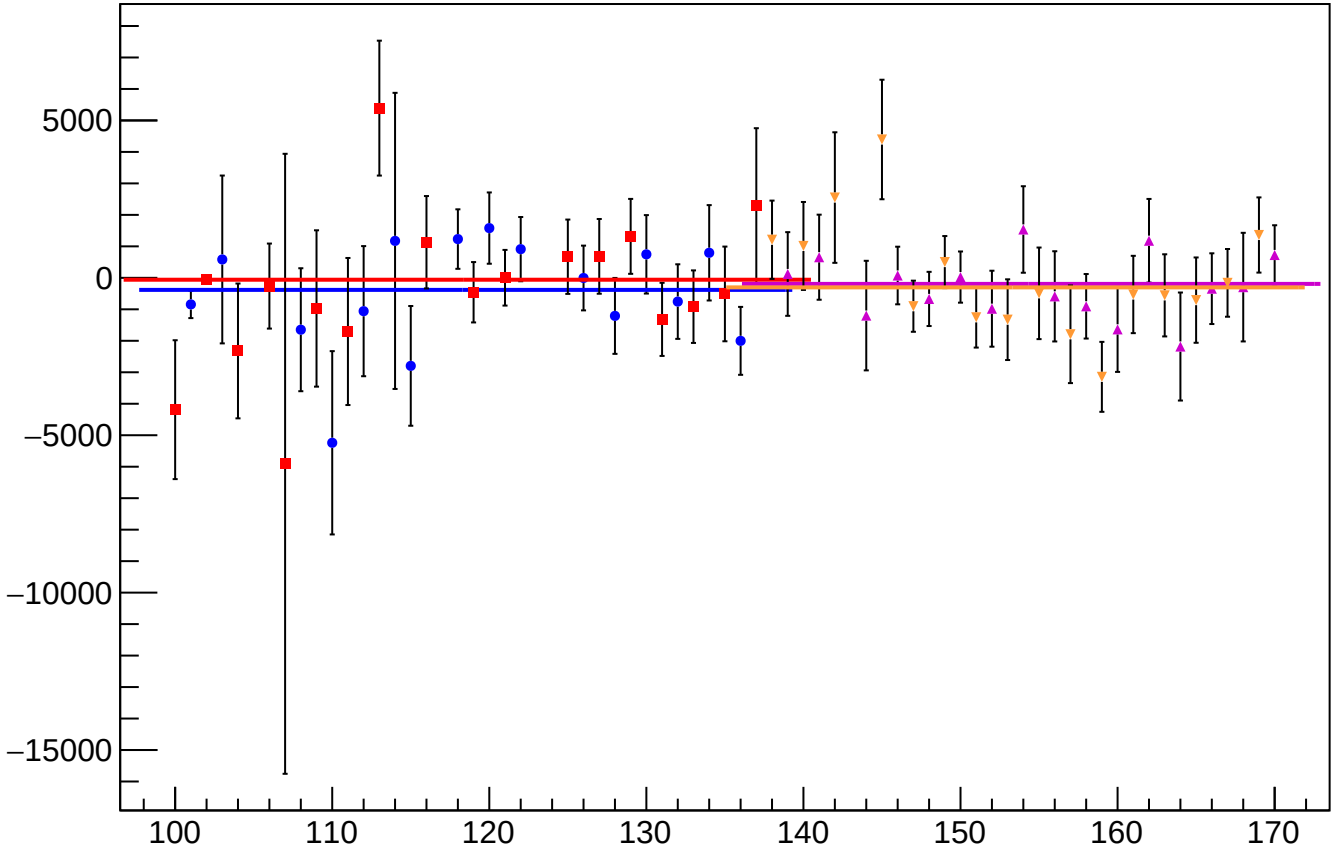
Left In: 1477.088+/-0.287 $\chi^2$/NDF:2809.9/15

+ sign 1495.855+/-0.238 $\chi^2$/NDF: 143966.9/31

All: 1504.280+/-0.168 $\chi^2$/NDF: 368801.4/65

- sign 1512.625+/-0.237 $\chi^2$/NDF: 222333.0/33

# asym_usl_atl1_avg_reg_correction_mean vs Slug




Right In: -382.787+/-272.209 $\chi^2$/NDF: 18.2/15

Left Out: -303.521+/-296.203 $\chi^2$/NDF:23.1/15

Right Out: -59.970+/-127.700 $\chi^2$/NDF: 17.8/17

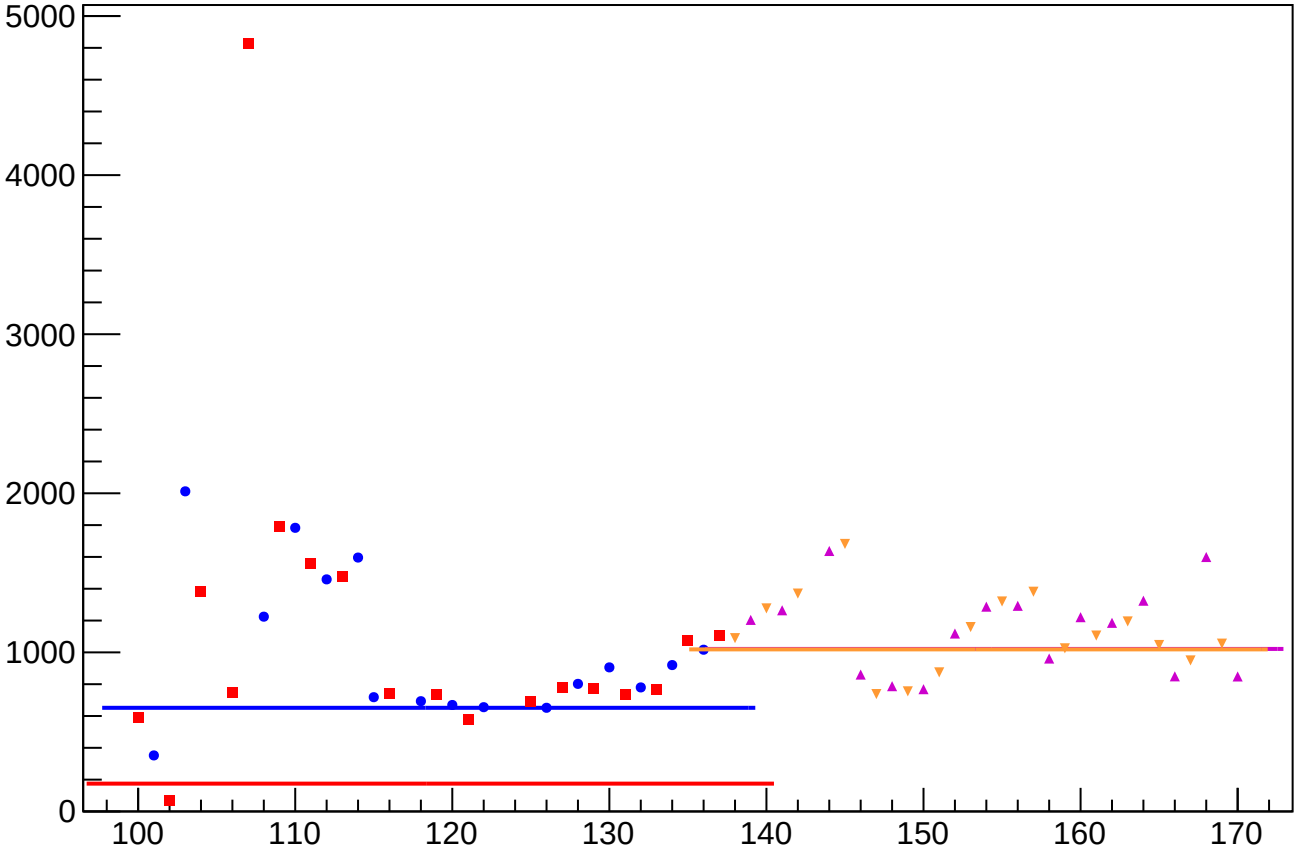
Left In: -192.448+/-290.385 $\chi^2$/NDF:8.3/15

+ sign -346.494+/-200.427 $\chi^2$/NDF: 41.3/31

All: -148.716+/-100.977 $\chi^2$/NDF: 68.9/65

- sign -81.439+/-116.896 $\chi^2$/NDF: 26.3/33

# asym_usl_atl1_avg_reg_correction_rms vs Slug




Right In: 651.523+/-0.192 $\chi^2$/NDF: 2762656.2/15

Left Out: 1018.788+/-0.209 $\chi^2$/NDF:1139917.7/15

Right Out: 174.898+/-0.090 $\chi^2$/NDF: 9761228.2/17

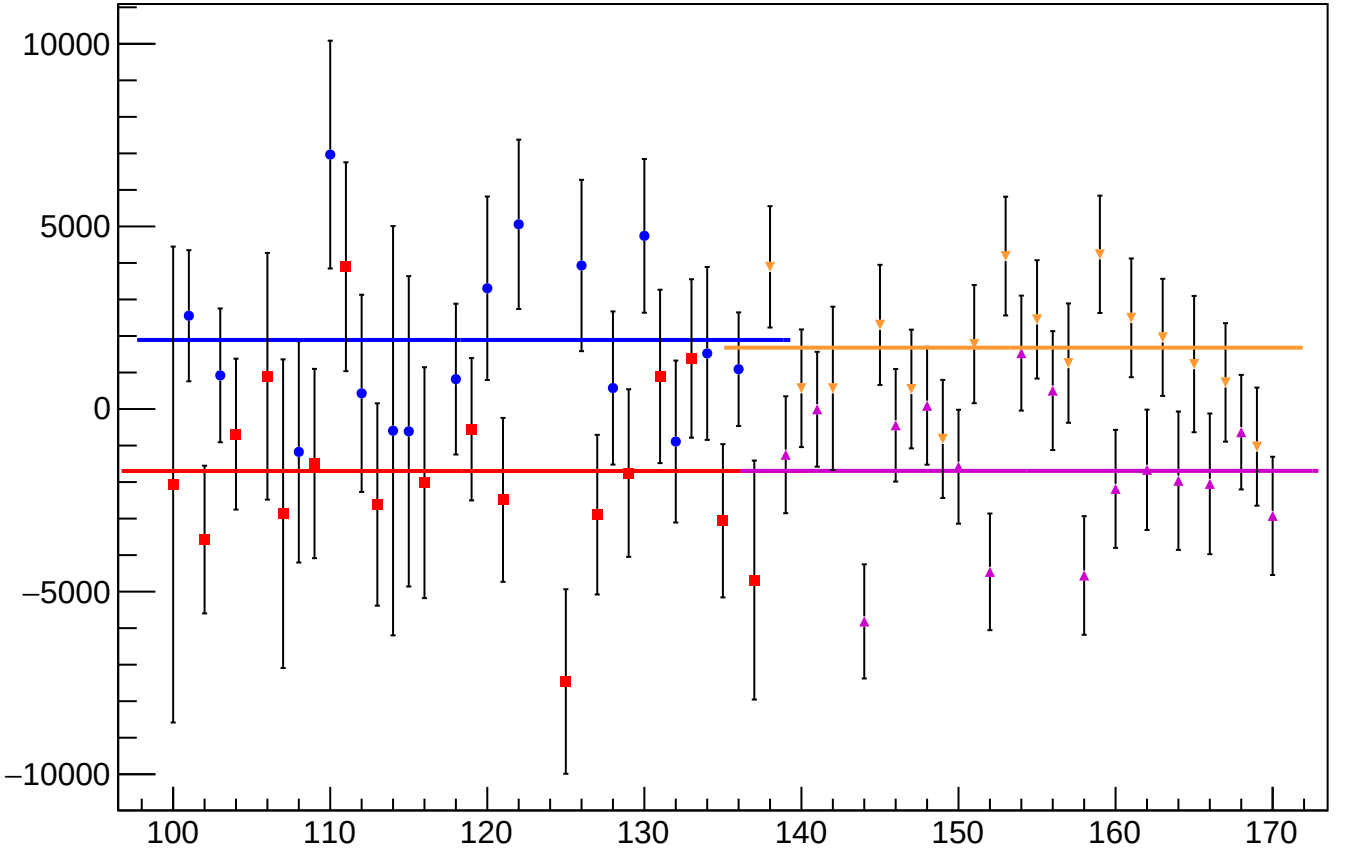
Left In: 1021.630+/-0.205 $\chi^2$/NDF:1397710.8/15

+ sign 819.680+/-0.142 $\chi^2$/NDF: 5569509.2/31

All: 440.945+/-0.071 $\chi^2$/NDF: 40548364.0/65

- sign 312.113+/-0.083 $\chi^2$/NDF: 25408129.4/33

# cor_asym_usl_atl1_avg_mean vs Slug




Right In: 1891.562+/-572.244 $\chi^2$/NDF: 12.2/15

Left Out: 1680.148+/-415.280 $\chi^2$/NDF:14.2/15

Right Out: -1696.987+/-589.699 $\chi^2$/NDF: 16.2/17

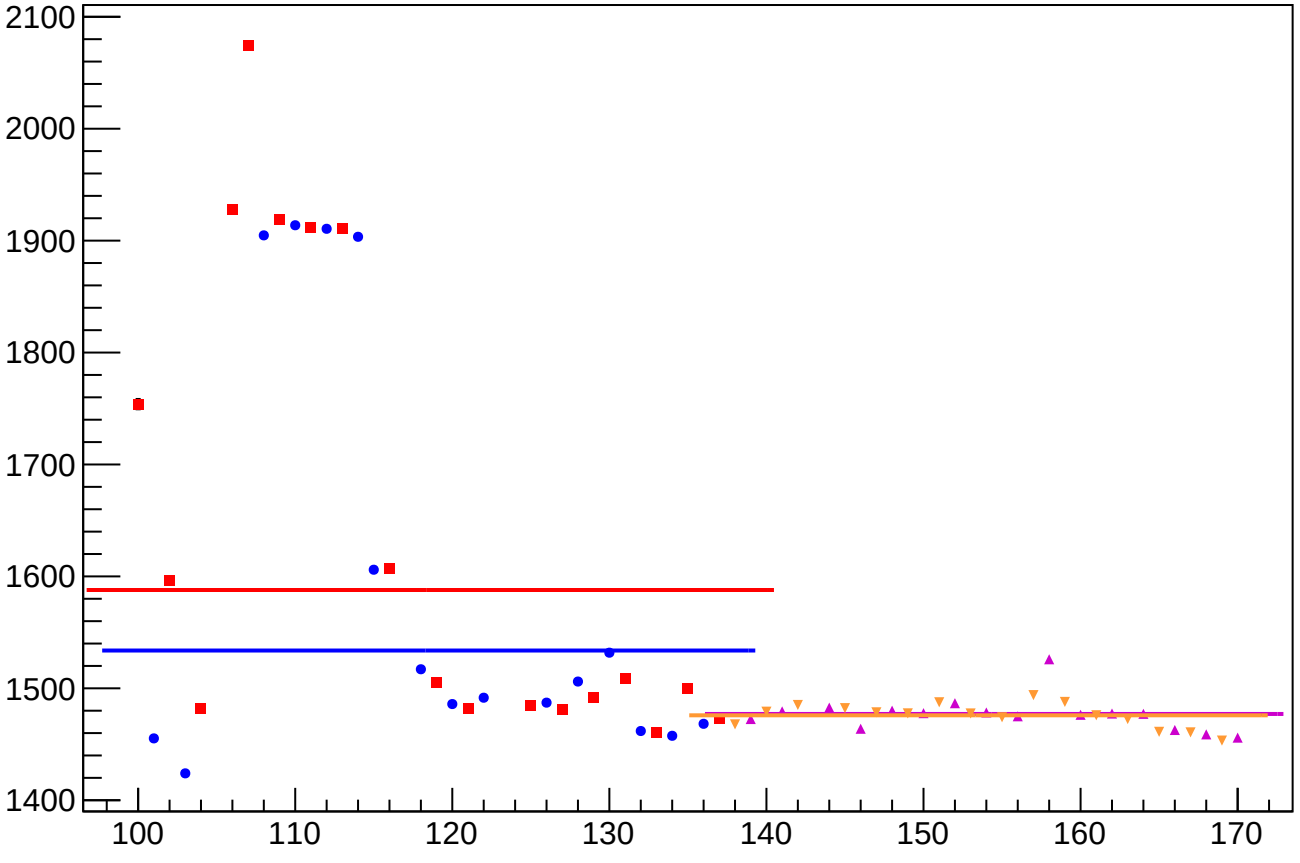
Left In: -1694.005+/-406.238 $\chi^2$/NDF:23.4/15

+ sign 1753.079+/-336.103 $\chi^2$/NDF: 26.5/31

All: 21.024+/-237.106 $\chi^2$/NDF: 118.9/65

- sign -1694.965+/-334.540 $\chi^2$/NDF: 39.5/33

# cor_asym_usl_atl1_avg_rms vs Slug




Right In: 1533.771+/-0.405 $\chi^2$/NDF: 129271.5/15

Left Out: 1475.886+/-0.294 $\chi^2$/NDF:1290.7/15

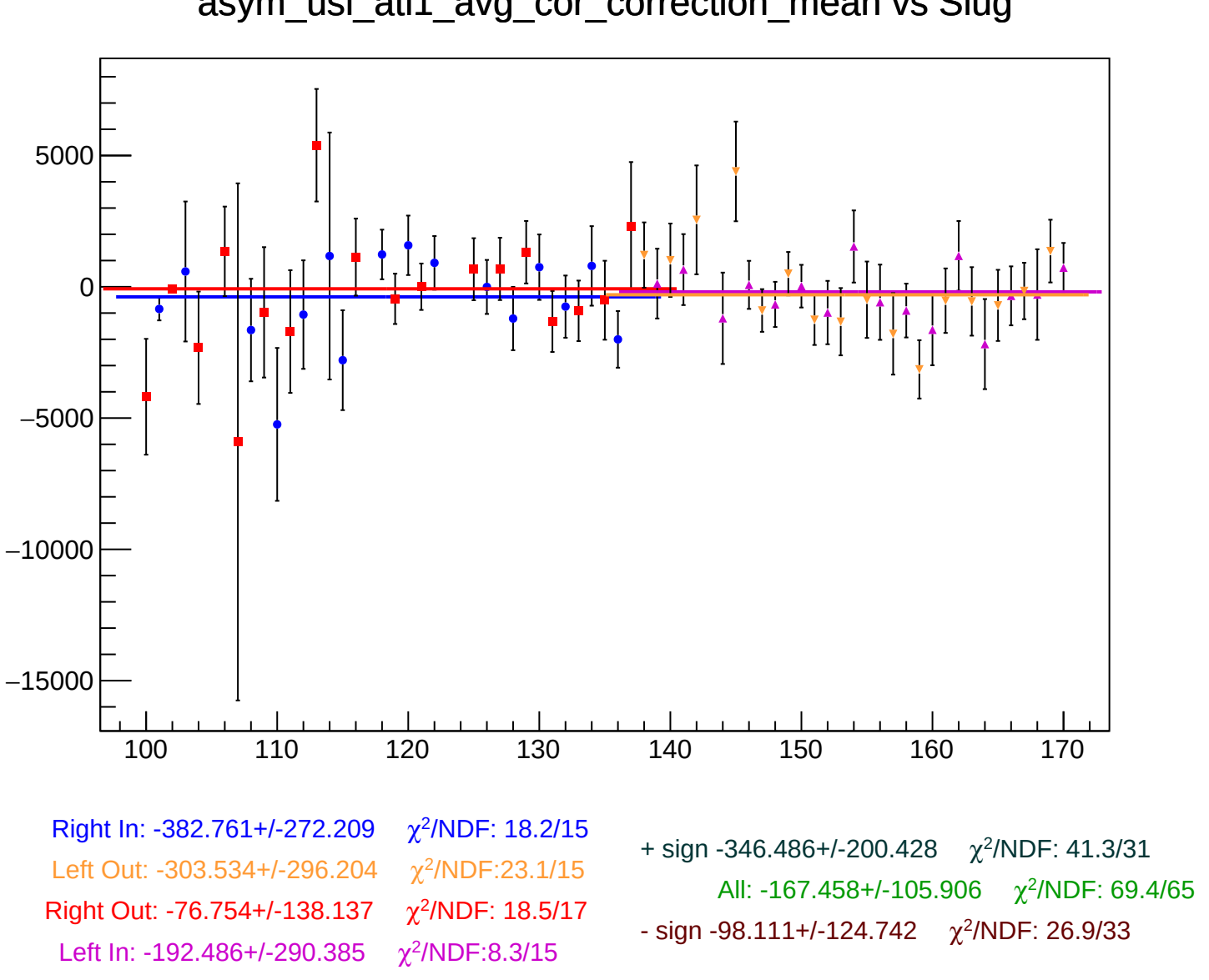
Right Out: 1587.846+/-0.417 $\chi^2$/NDF: 173766.9/17

Left In: 1477.088+/-0.287 $\chi^2$/NDF:2809.9/15

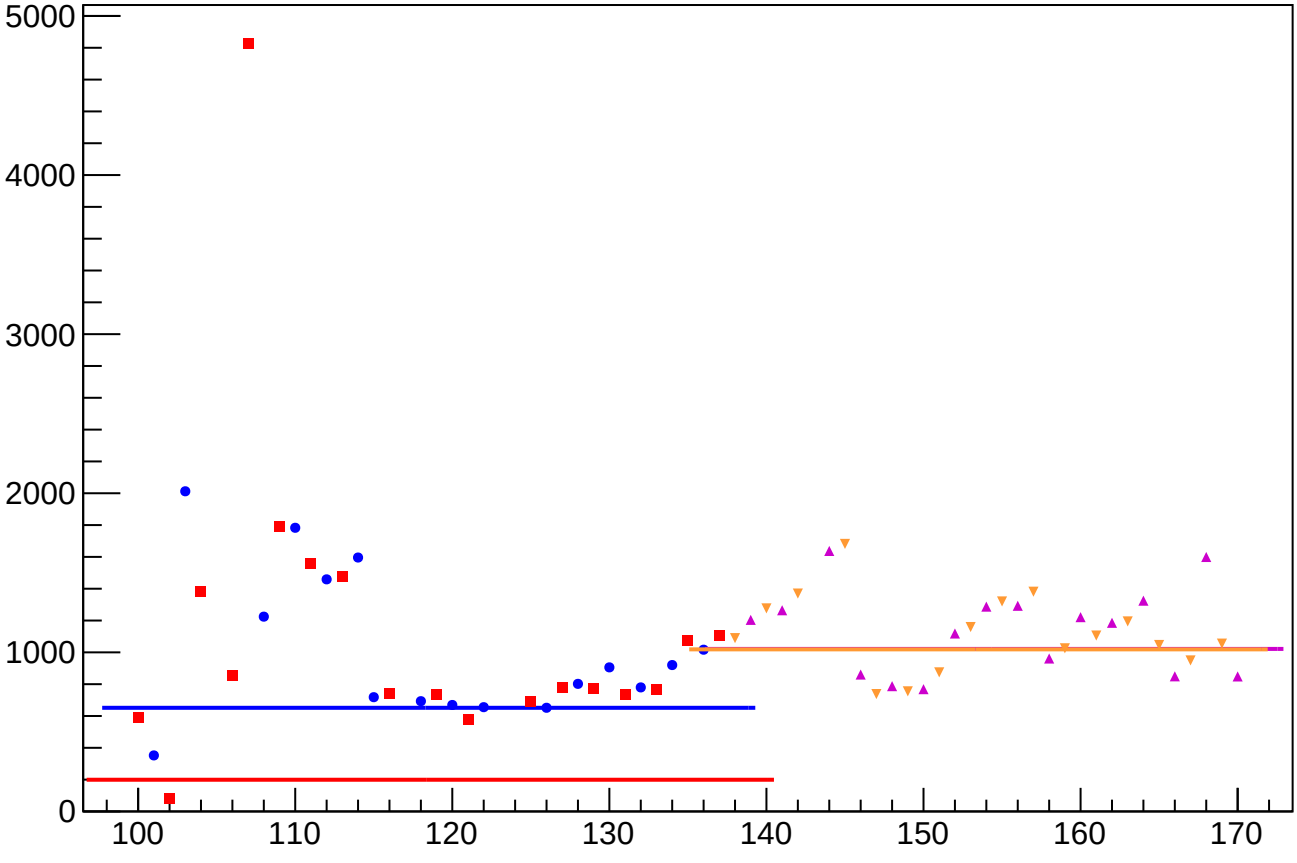
+ sign 1495.855+/-0.238 $\chi^2$/NDF: 143966.9/31

All: 1504.334+/-0.168 $\chi^2$/NDF: 370924.6/65

- sign 1512.734+/-0.237 $\chi^2$/NDF: 224423.8/33


asym_usl_atl1_avg_cor_correction_mean vs Slug
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: -382.761+/-272.209 χ²/NDF: 18.2/15
Left Out: -303.534+/-296.204 χ²/NDF:23.1/15
Right Out: -76.754+/-138.137 χ²/NDF: 18.5/17
Left In: -192.486+/-290.385 χ²/NDF:8.3/15
+ sign -346.486+/-200.428 χ²/NDF: 41.3/31
All: -167.458+/-105.906 χ²/NDF: 69.4/65
- sign -98.111+/-124.742 χ²/NDF: 26.9/33

# asym_usl_atl1_avg_cor_correction_rms vs Slug




Right In: 651.521+/-0.192 $\chi^2$/NDF: 2762681.5/15

Left Out: 1018.790+/-0.209 $\chi^2$/NDF:1139928.9/15

Right Out: 199.344+/-0.098 $\chi^2$/NDF: 9284792.6/17

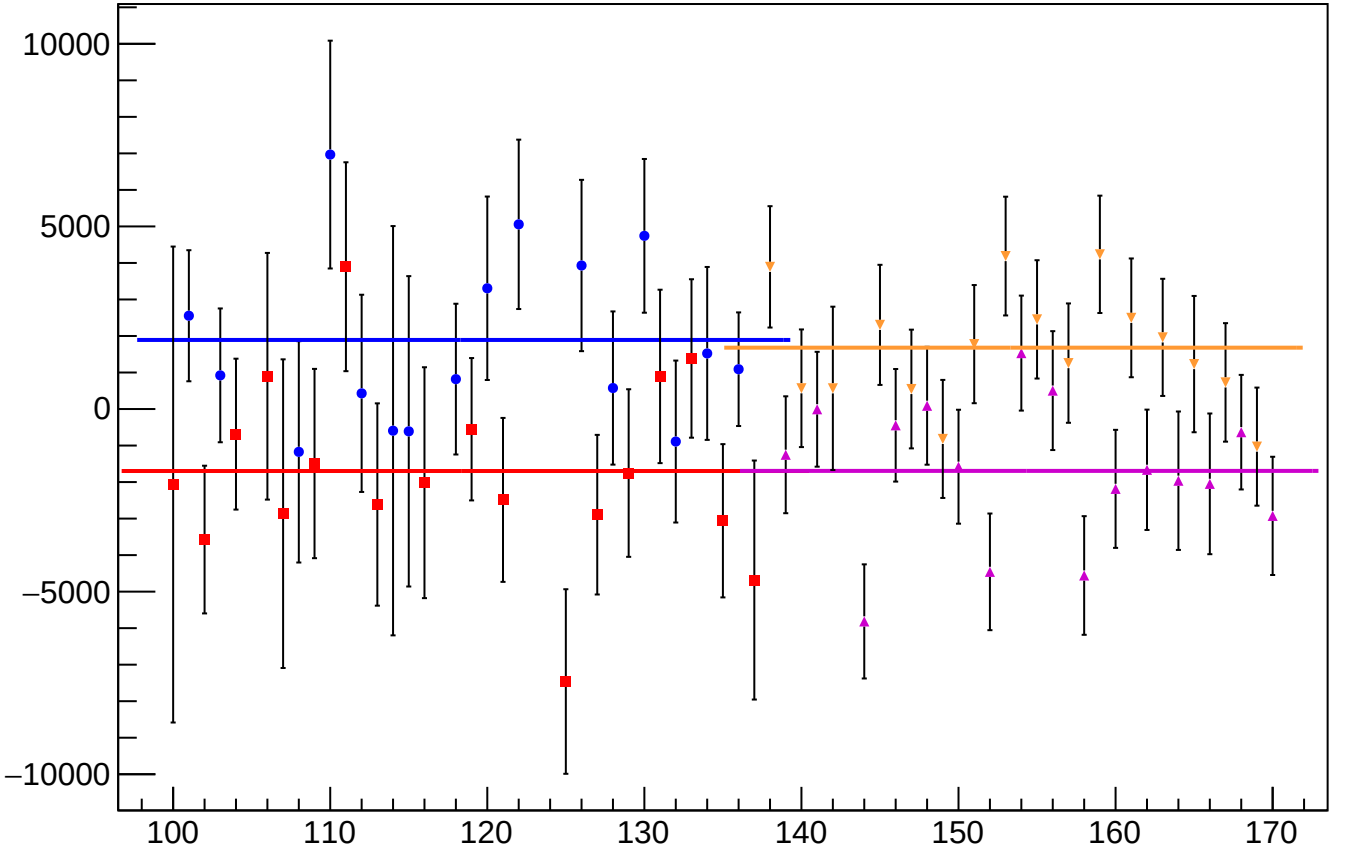
Left In: 1021.629+/-0.205 $\chi^2$/NDF:1397804.2/15

+ sign 819.679+/-0.142 $\chi^2$/NDF: 5569578.5/31

All: 481.918+/-0.075 $\chi^2$/NDF: 37209843.8/65

- sign 351.084+/-0.088 $\chi^2$/NDF: 23760313.0/33

# eigen_cor_asym_usl_atl1_avg_mean vs Slug




Right In: 1891.562+/-572.244 $\chi^2$/NDF: 12.2/15

Left Out: 1680.148+/-415.280 $\chi^2$/NDF:14.2/15

Right Out: -1696.987+/-589.699 $\chi^2$/NDF: 16.2/17

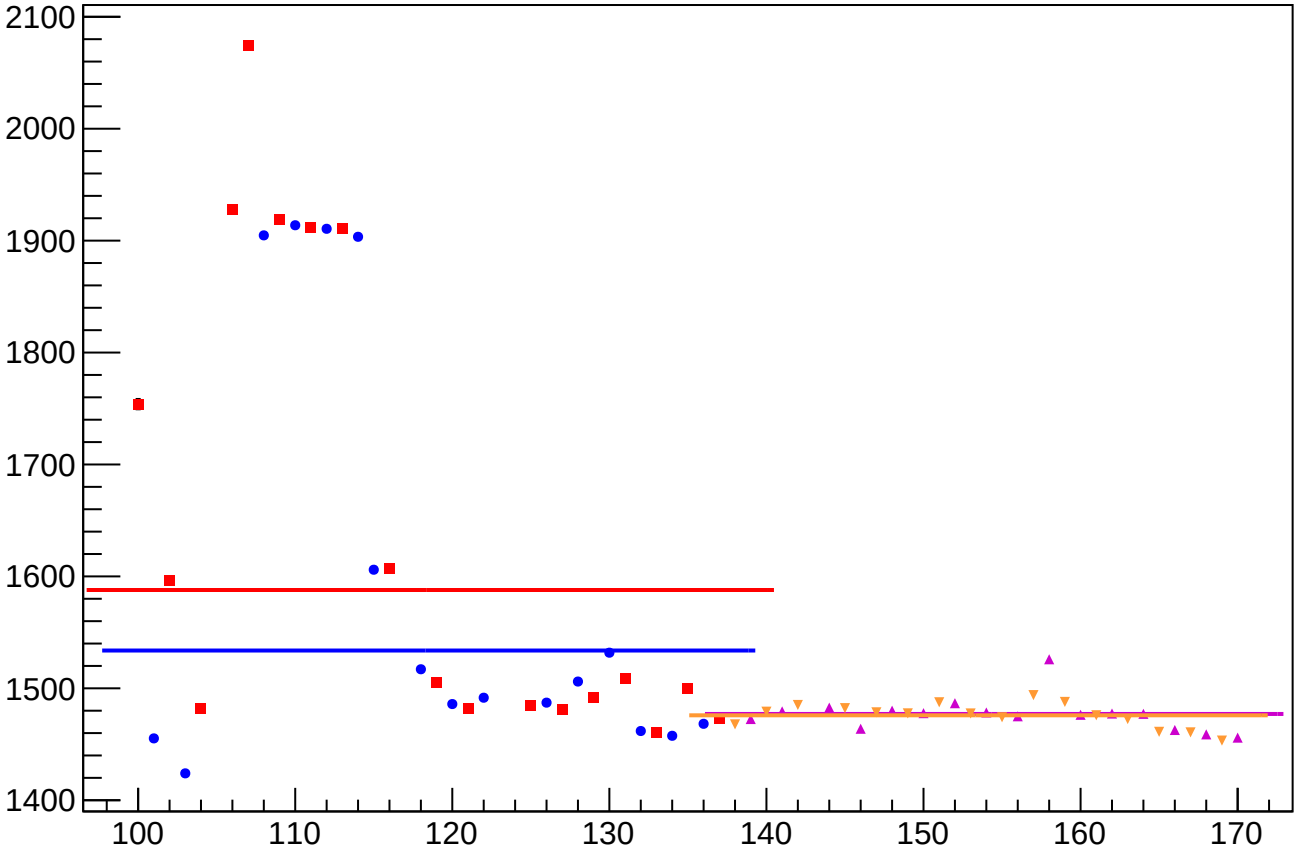
Left In: -1694.005+/-406.238 $\chi^2$/NDF:23.4/15

+ sign 1753.079+/-336.103 $\chi^2$/NDF: 26.5/31

All: 21.024+/-237.106 $\chi^2$/NDF: 118.9/65

- sign -1694.965+/-334.540 $\chi^2$/NDF: 39.5/33

# eigen_cor_asym_usl_atl1_avg_rms vs Slug




Right In: 1533.771+/-0.405 $\chi^2$/NDF: 129271.5/15

Left Out: 1475.886+/-0.294 $\chi^2$/NDF:1290.7/15

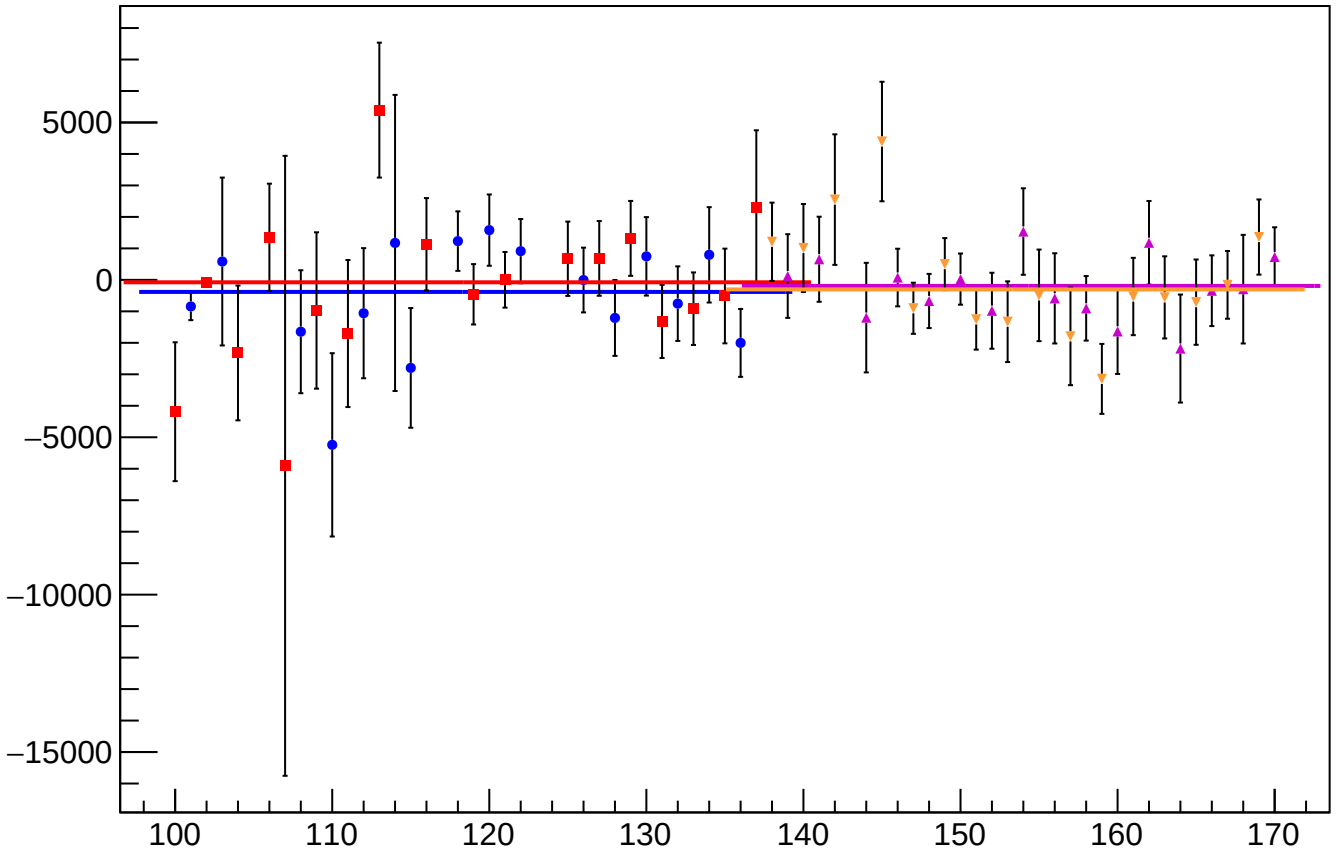
Right Out: 1587.846+/-0.417 $\chi^2$/NDF: 173766.9/17

Left In: 1477.088+/-0.287 $\chi^2$/NDF:2809.9/15

+ sign 1495.855+/-0.238 $\chi^2$/NDF: 143966.9/31

All: 1504.334+/-0.168 $\chi^2$/NDF: 370924.6/65

- sign 1512.734+/-0.237 $\chi^2$/NDF: 224423.8/33




Right In: -382.761+/-272.209 $\chi^2$/NDF: 18.2/15

Left Out: -303.534+/-296.204 $\chi^2$/NDF:23.1/15

Right Out: -76.754+/-138.137 $\chi^2$/NDF: 18.5/17

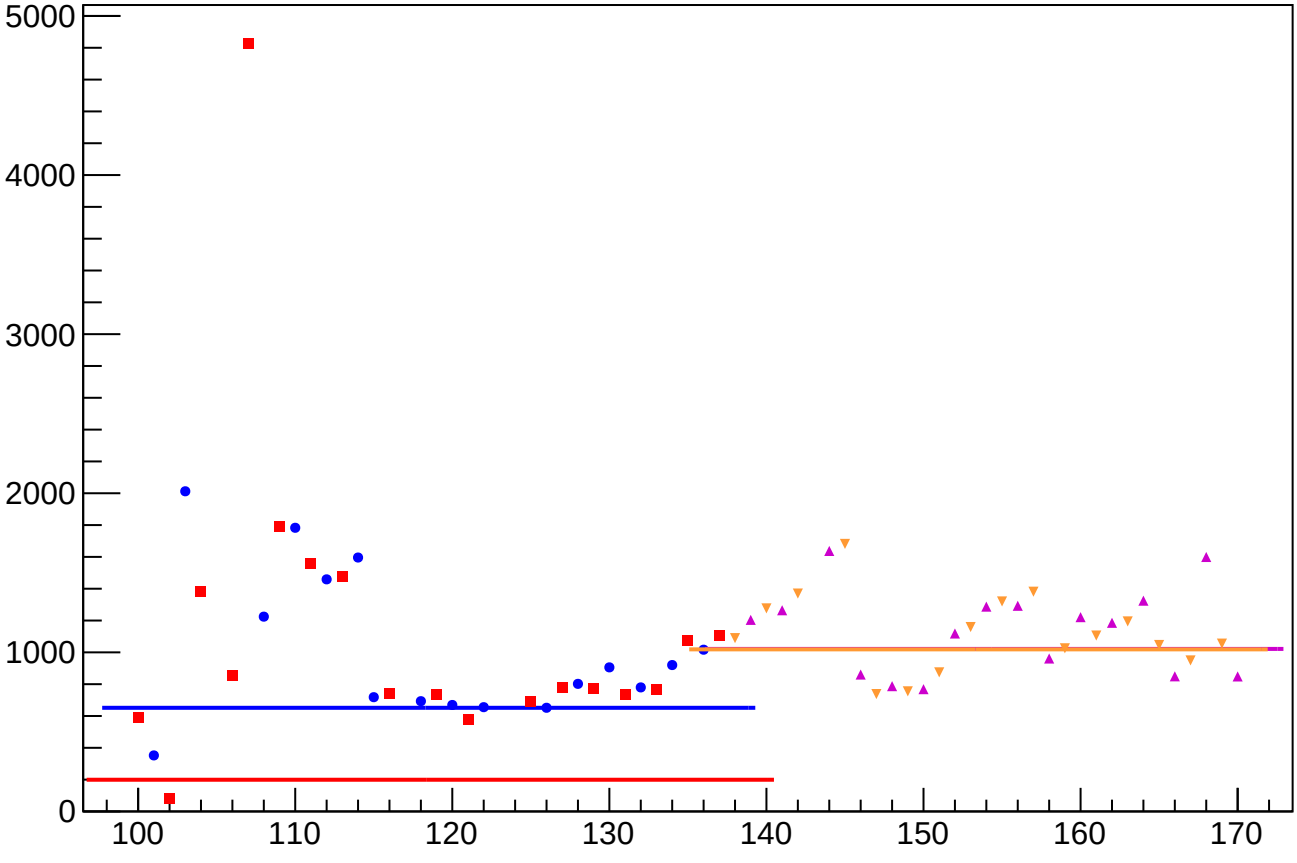
Left In: -192.486+/-290.385 $\chi^2$/NDF:8.3/15

+ sign -346.486+/-200.428 $\chi^2$/NDF: 41.3/31

All: -167.458+/-105.906 $\chi^2$/NDF: 69.4/65

- sign -98.111+/-124.742 $\chi^2$/NDF: 26.9/33

# asym_usl_atl1_avg_eigen_cor_correction_rms vs Slug




Right In: 651.521+/-0.192 $\chi^2$/NDF: 2762681.5/15

Left Out: 1018.790+/-0.209 $\chi^2$/NDF:1139928.9/15

Right Out: 199.344+/-0.098 $\chi^2$/NDF: 9284792.6/17

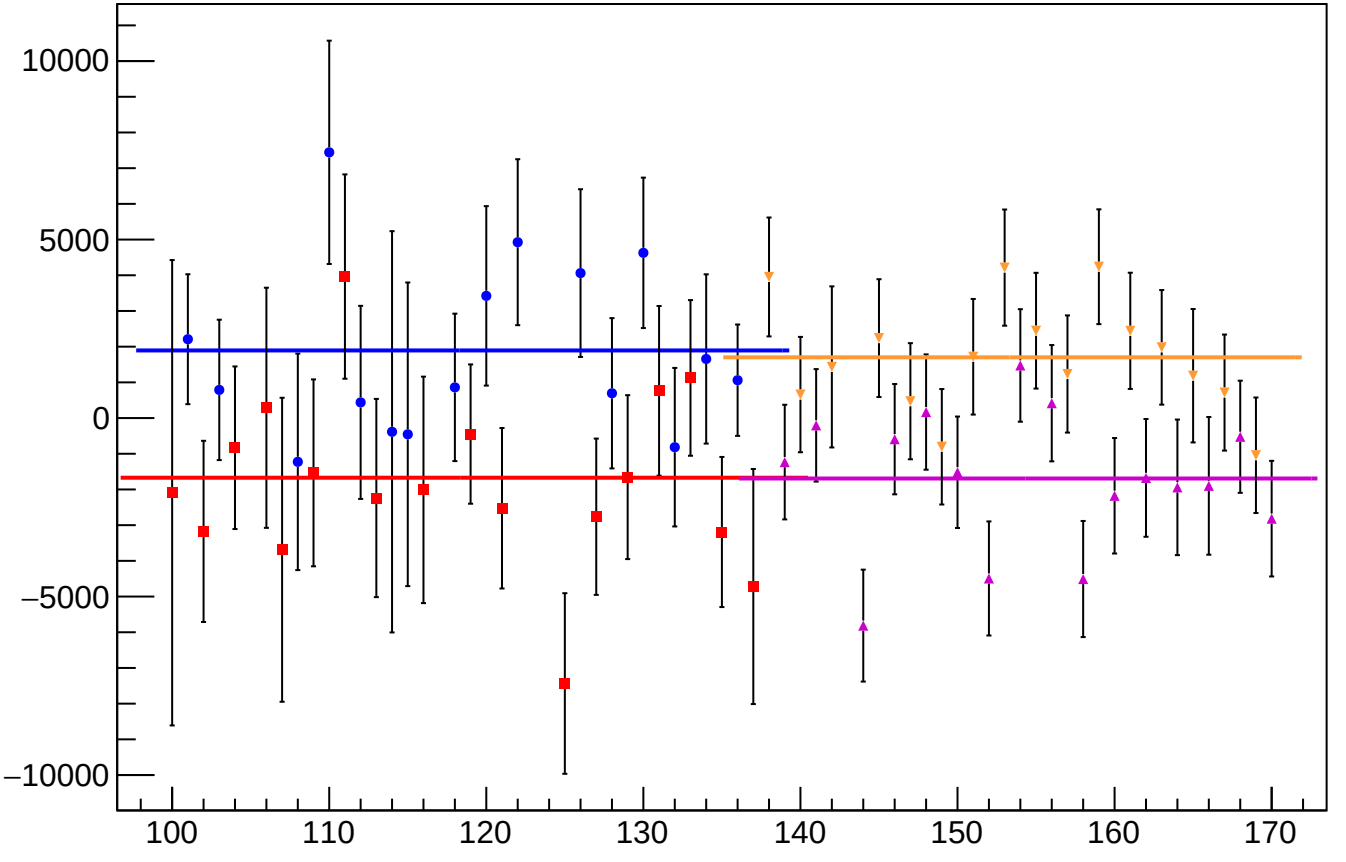
Left In: 1021.629+/-0.205 $\chi^2$/NDF:1397804.2/15

+ sign 819.679+/-0.142 $\chi^2$/NDF: 5569578.5/31

All: 481.918+/-0.075 $\chi^2$/NDF: 37209843.8/65

- sign 351.084+/-0.088 $\chi^2$/NDF: 23760313.0/33

# dit_asym_usl_atl1_avg_mean vs Slug




Right In: 1894.171+/-577.631 $\chi^2$/NDF: 12.3/15

Left Out: 1701.541+/-416.024 $\chi^2$/NDF:14.1/15

Right Out: -1670.933+/-604.838 $\chi^2$/NDF: 15.0/17

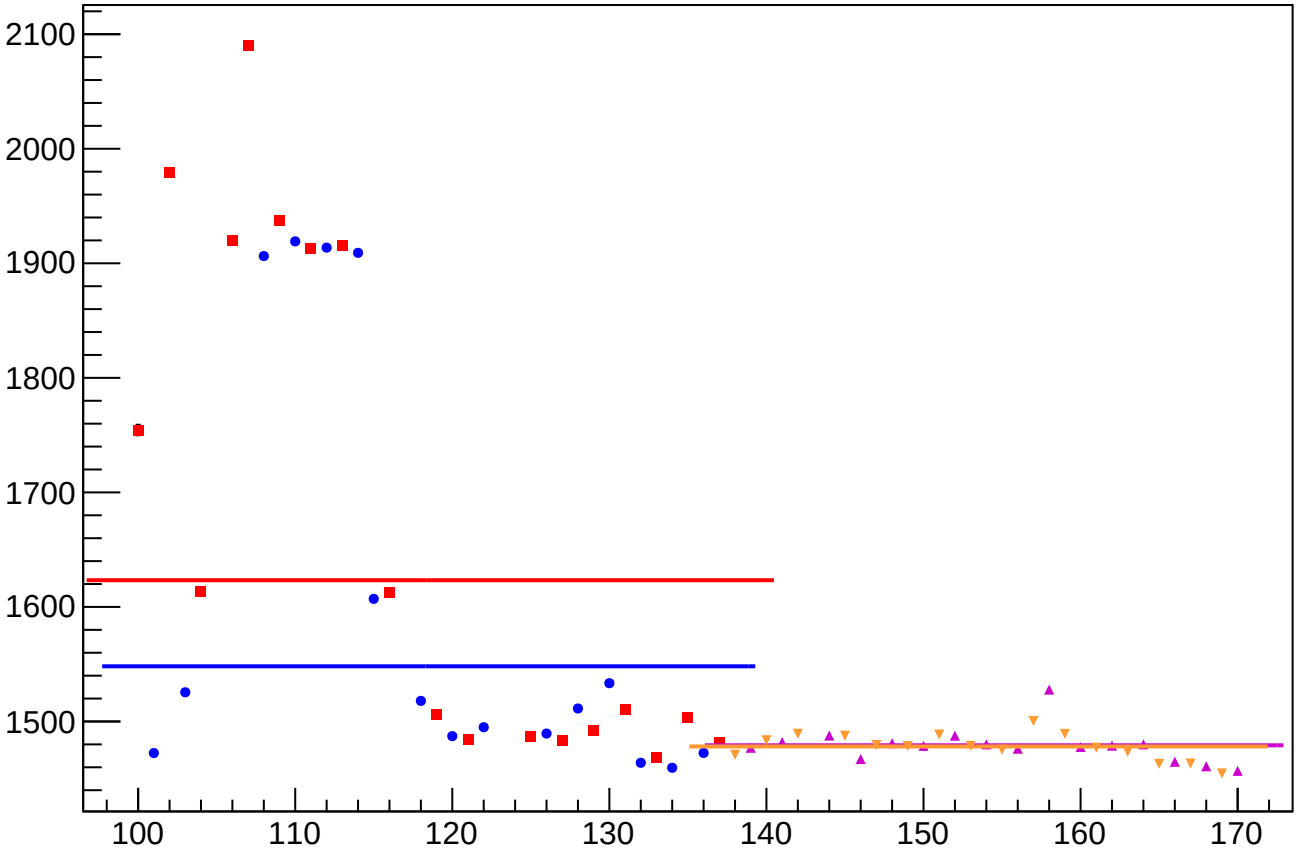
Left In: -1693.053+/-406.826 $\chi^2$/NDF:22.7/15

+ sign 1767.334+/-337.582 $\chi^2$/NDF: 26.4/31

All: 40.522+/-238.702 $\chi^2$/NDF: 116.5/65

- sign -1686.163+/-337.569 $\chi^2$/NDF: 37.7/33

# dit_asym_usl_atl1_avg_rms vs Slug




Right In: 1548.174+/-0.408 $\chi^2$/NDF: 119905.3/15

Left Out: 1478.192+/-0.294 $\chi^2$/NDF:1463.0/15

Right Out: 1623.331+/-0.428 $\chi^2$/NDF: 211534.0/17

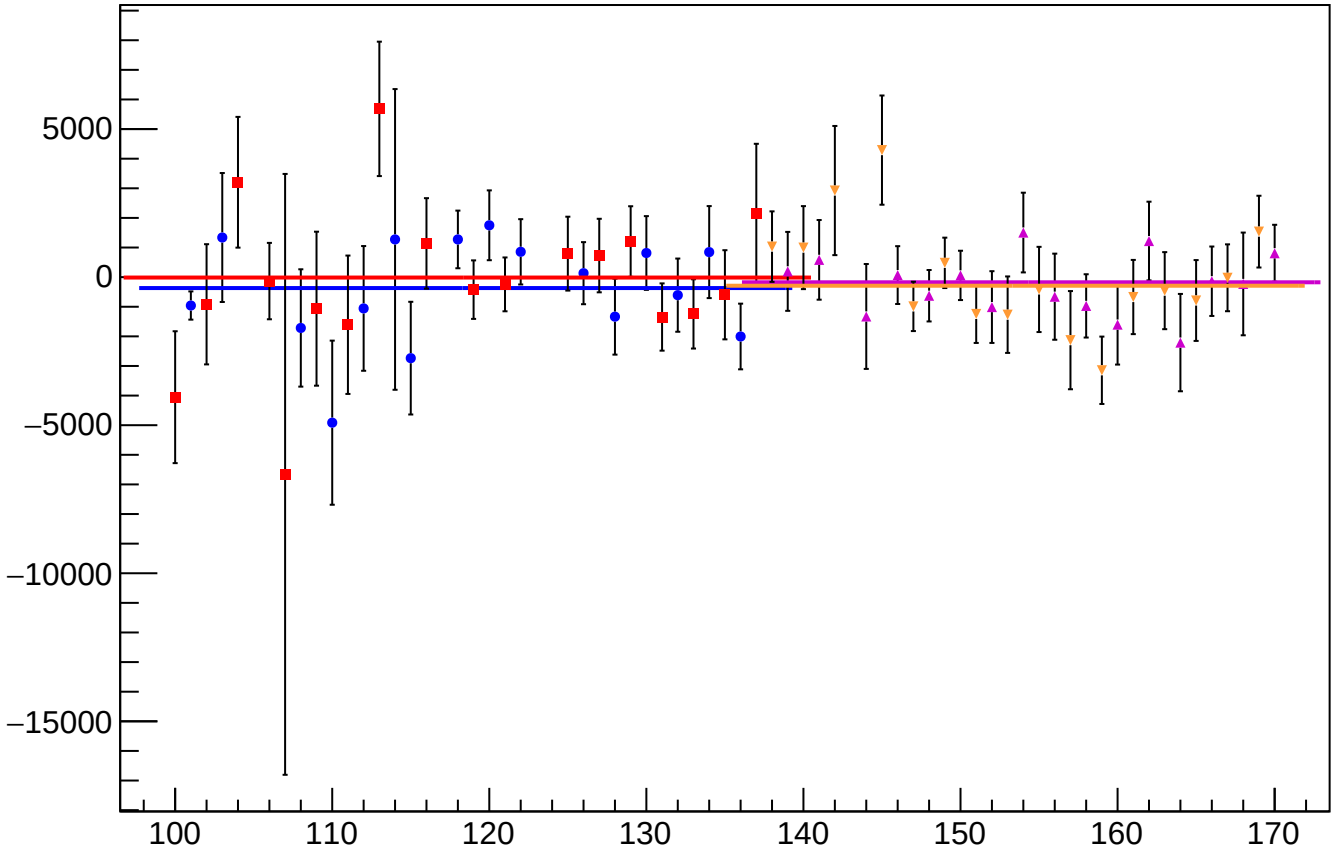
Left In: 1479.205+/-0.288 $\chi^2$/NDF:2807.2/15

+ sign 1502.094+/-0.239 $\chi^2$/NDF: 140698.1/31

All: 1513.097+/-0.169 $\chi^2$/NDF: 437477.1/65

- sign 1524.099+/-0.239 $\chi^2$/NDF: 292530.0/33

# asym_usl_atl1_avg_dit_correction_mean vs Slug




Right In: -368.708+/-286.577 $\chi^2$/NDF: 18.9/15

Left Out: -290.160+/-301.063 $\chi^2$/NDF:23.6/15

Right Out: -13.729+/-341.569 $\chi^2$/NDF: 19.1/17

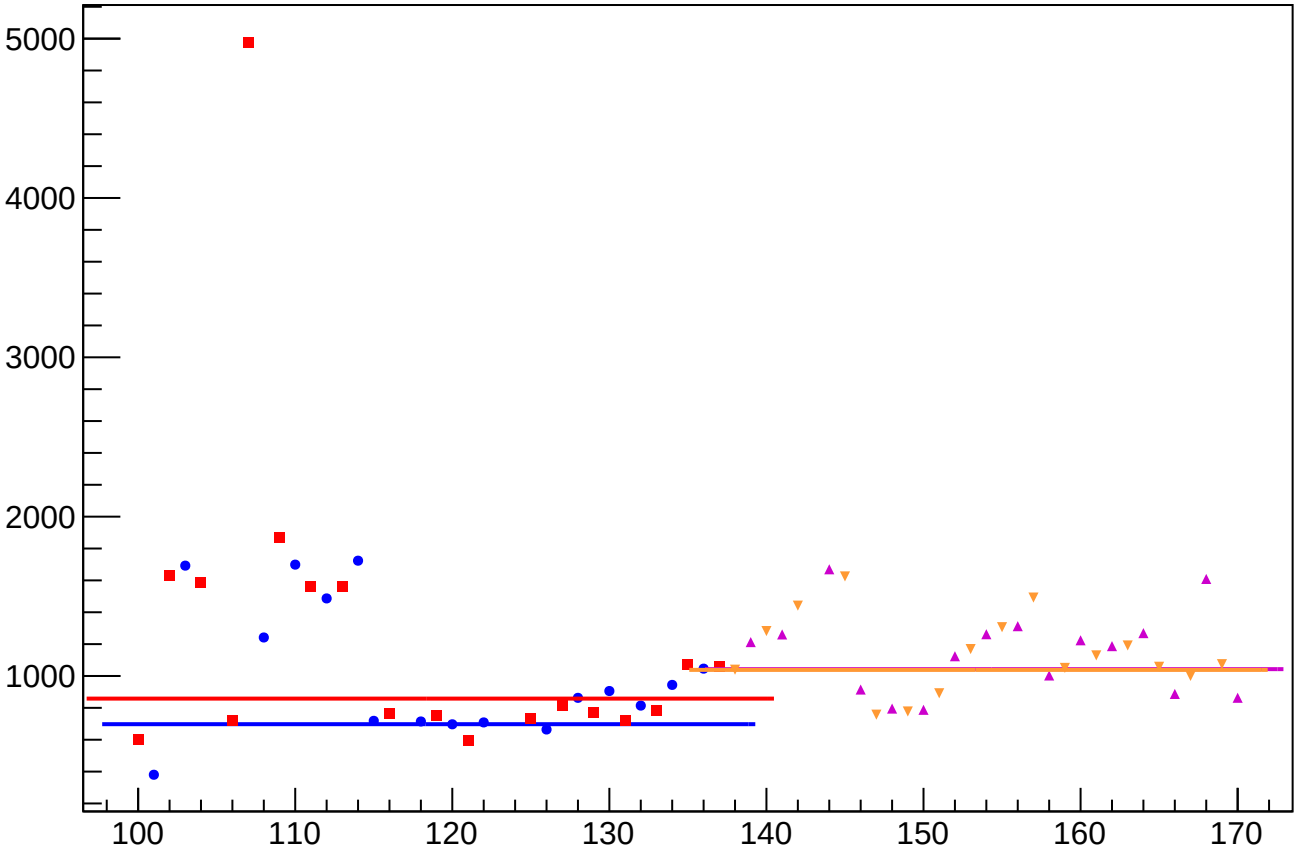
Left In: -174.077+/-295.382 $\chi^2$/NDF:8.7/15

+ sign -331.369+/-207.573 $\chi^2$/NDF: 42.5/31

All: -226.717+/-152.072 $\chi^2$/NDF: 71.0/65

- sign -105.469+/-223.425 $\chi^2$/NDF: 27.9/33

# asym_usl_atl1_avg_dit_correction_rms vs Slug




Right In: 697.517+/-0.203 $\chi^2$/NDF: 2435601.0/15

Left Out: 1038.289+/-0.213 $\chi^2$/NDF:1074524.4/15

Right Out: 858.095+/-0.242 $\chi^2$/NDF: 1882164.5/17

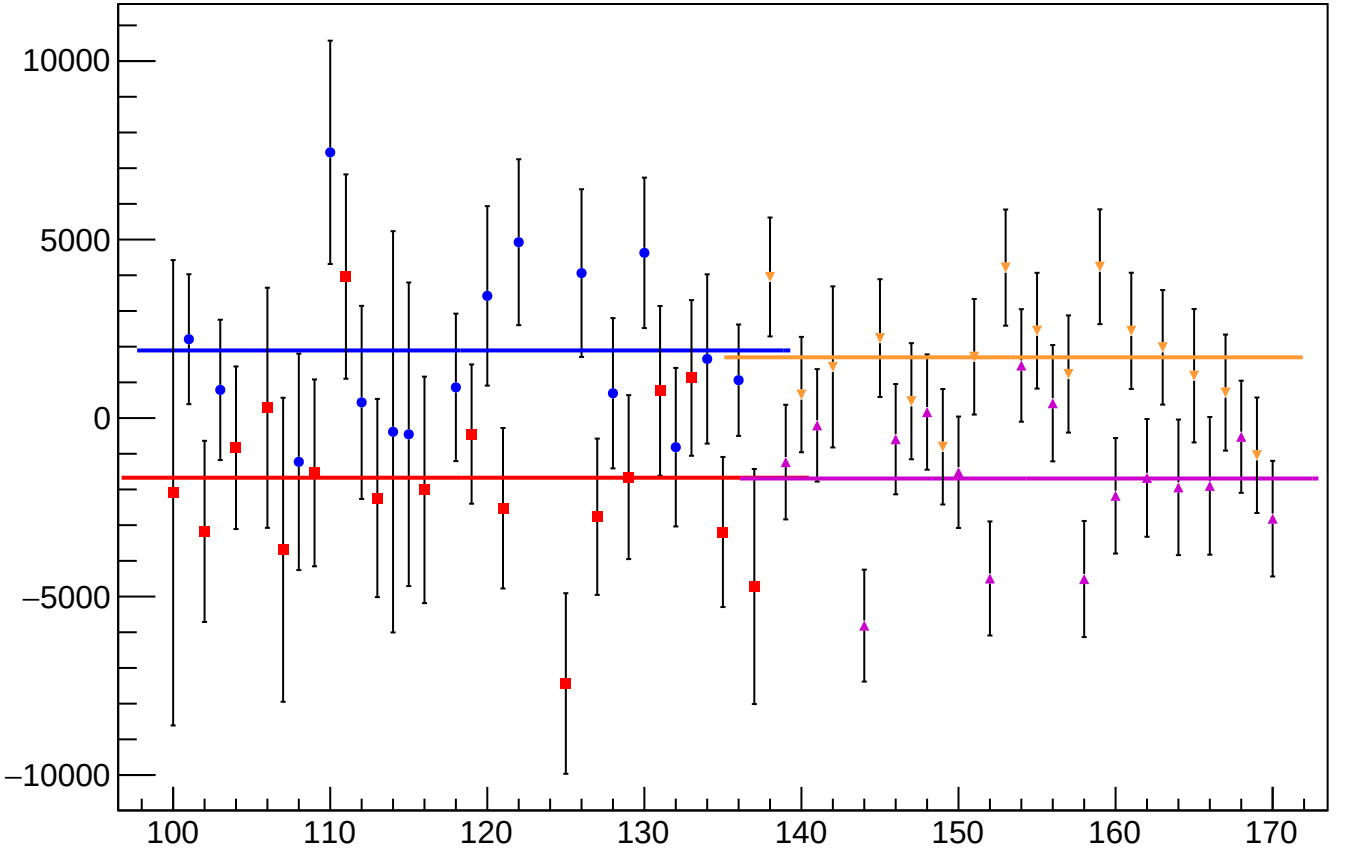
Left In: 1042.966+/-0.209 $\chi^2$/NDF:1268845.9/15

+ sign 859.507+/-0.147 $\chi^2$/NDF: 4854448.2/31

All: 907.853+/-0.108 $\chi^2$/NDF: 8574857.4/65

- sign 963.866+/-0.158 $\chi^2$/NDF: 3486212.5/33

# eigen_dit_asym_usl_atl1_avg_mean vs Slug




Right In: 1894.169+/-577.630 $\chi^2$/NDF: 12.3/15

Left Out: 1701.539+/-416.024 $\chi^2$/NDF:14.1/15

Right Out: -1670.931+/-604.838 $\chi^2$/NDF: 15.0/17

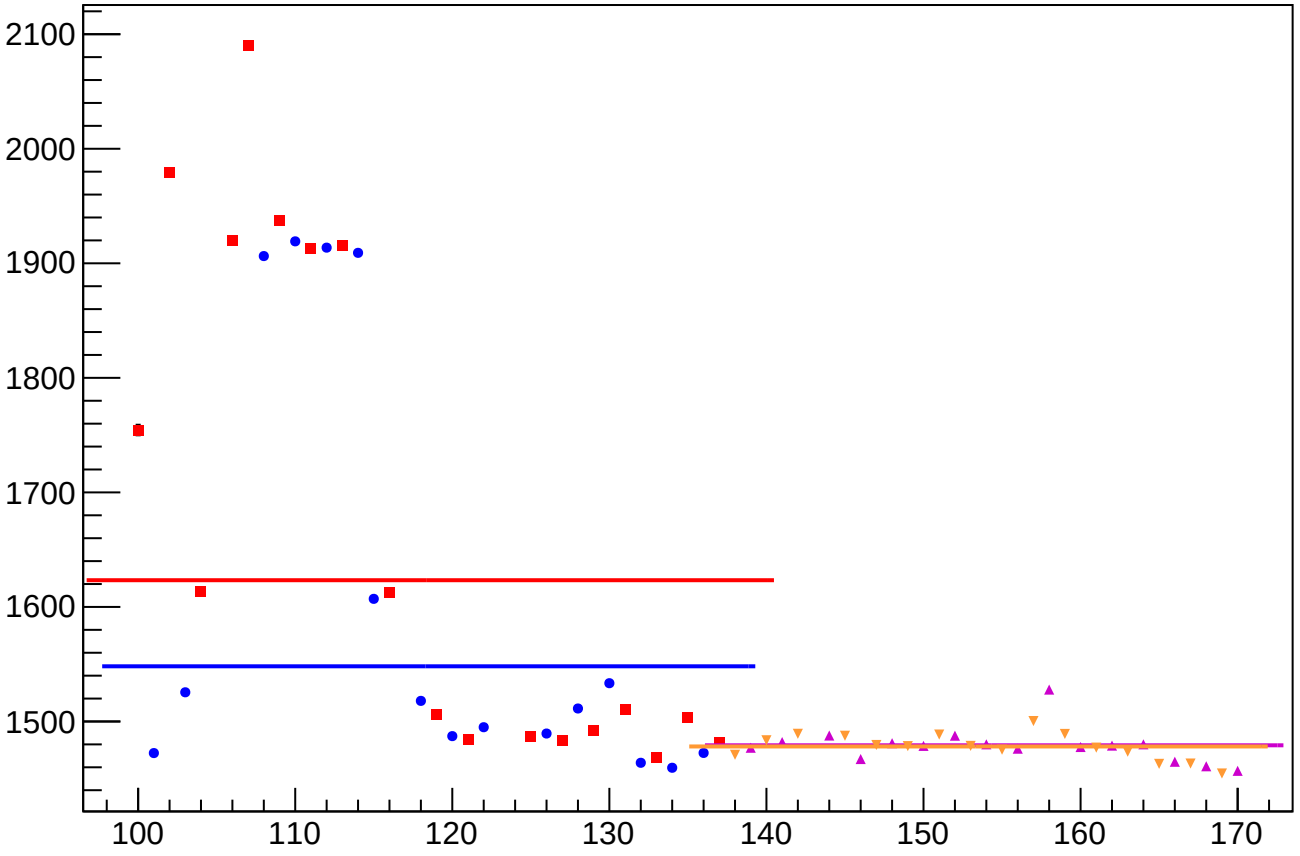
Left In: -1693.054+/-406.826 $\chi^2$/NDF:22.7/15

+ sign 1767.332+/-337.582 $\chi^2$/NDF: 26.4/31

All: 40.521+/-238.702 $\chi^2$/NDF: 116.5/65

- sign -1686.163+/-337.569 $\chi^2$/NDF: 37.7/33

# eigen_dit_asym_usl_atl1_avg_rms vs Slug




Right In: 1548.174+/-0.408 $\chi^2$/NDF: 119905.4/15

Left Out: 1478.192+/-0.294 $\chi^2$/NDF:1463.0/15

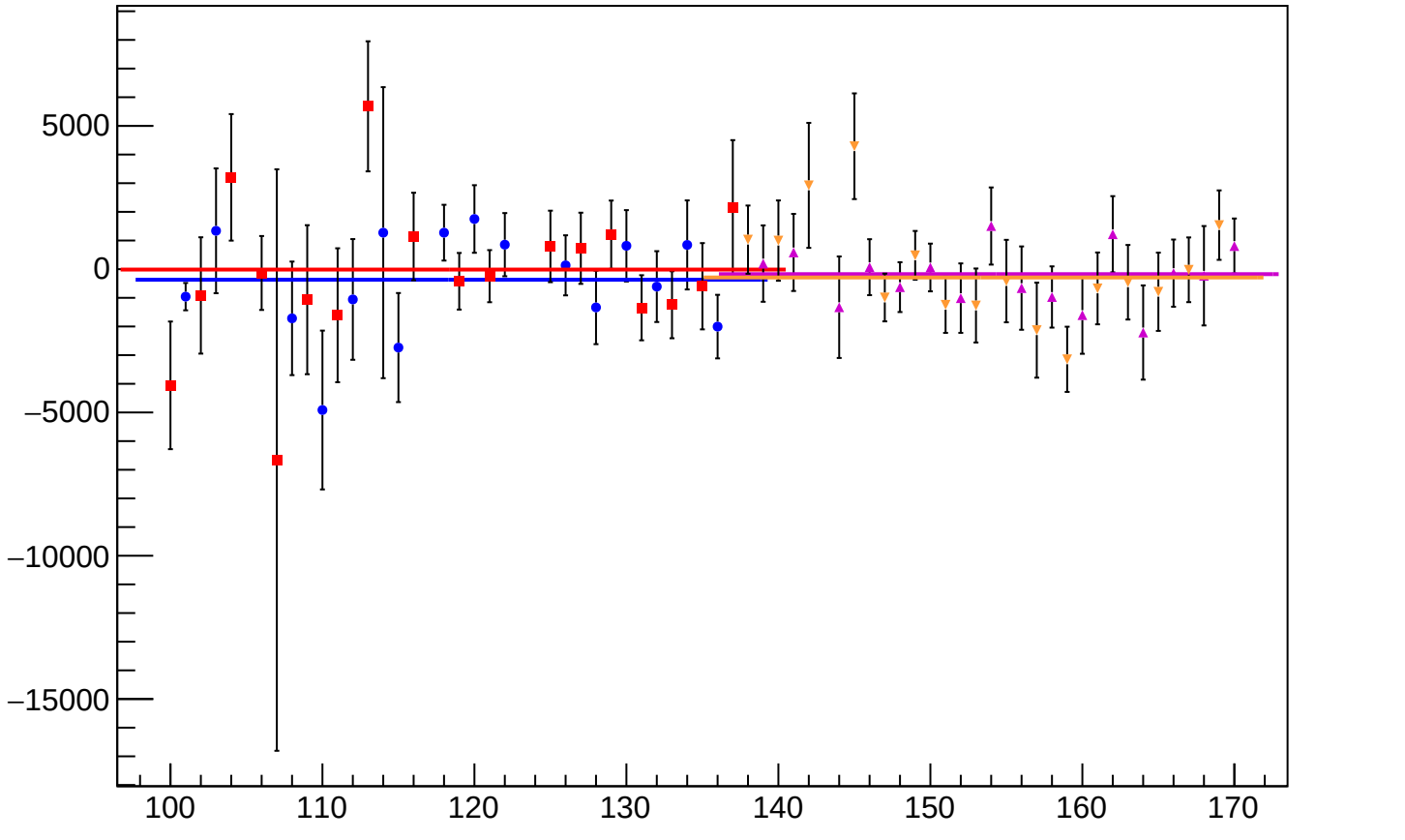
Right Out: 1623.330+/-0.428 $\chi^2$/NDF: 211533.9/17

Left In: 1479.205+/-0.288 $\chi^2$/NDF:2807.2/15

+ sign 1502.094+/-0.239 $\chi^2$/NDF: 140698.1/31

All: 1513.097+/-0.169 $\chi^2$/NDF: 437476.6/65

- sign 1524.099+/-0.239 $\chi^2$/NDF: 292529.6/33




Right In: -368.707+/-286.576 $\chi^2$/NDF: 18.9/15

Left Out: -290.163+/-301.064 $\chi^2$/NDF:23.6/15

Right Out: -13.730+/-341.568 $\chi^2$/NDF: 19.1/17

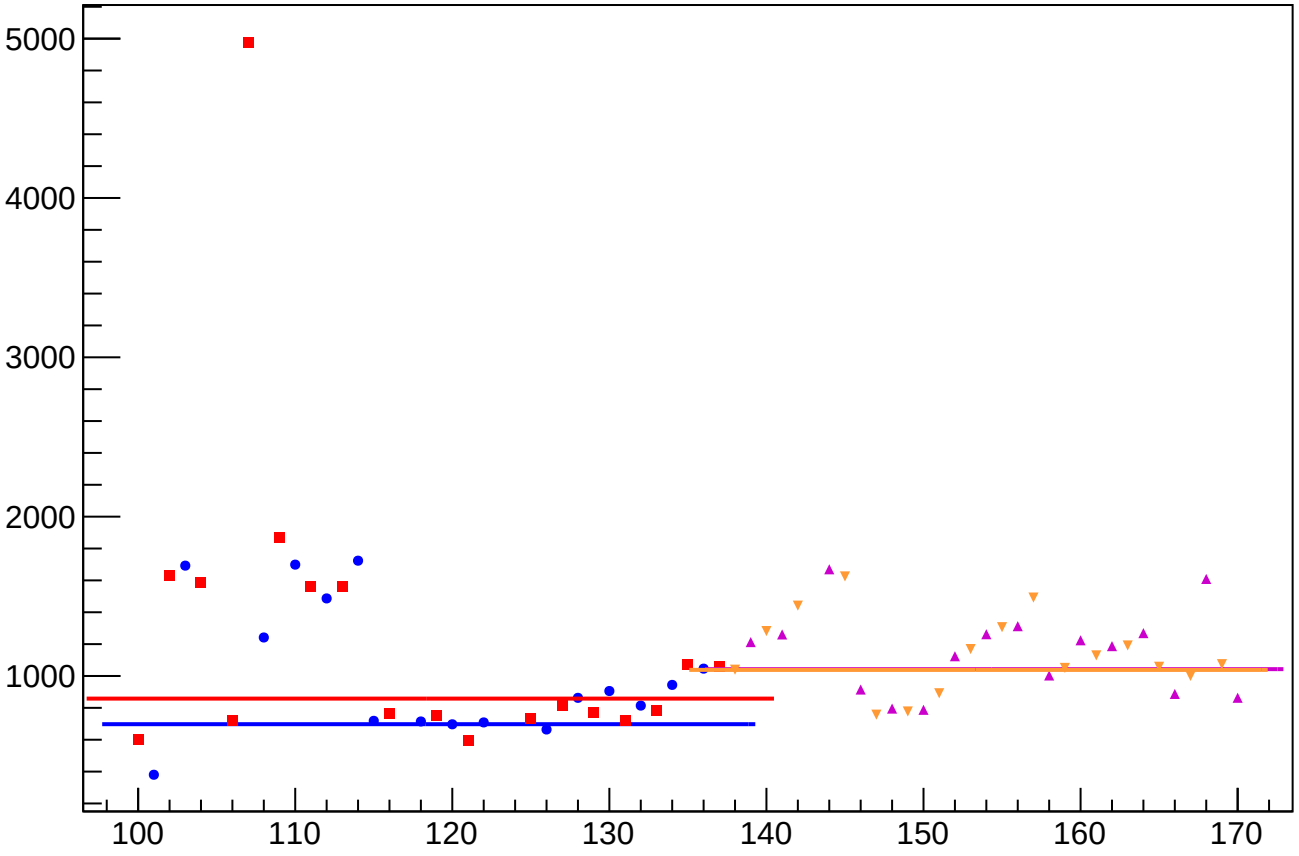
Left In: -174.077+/-295.382 $\chi^2$/NDF:8.7/15

+ sign -331.370+/-207.573 $\chi^2$/NDF: 42.5/31

All: -226.717+/-152.072 $\chi^2$/NDF: 71.0/65

- sign -105.470+/-223.425 $\chi^2$/NDF: 27.9/33

# asym_usl_atl1_avg_eigen_dit_correction_rms vs Slug




Right In: 697.517+/-0.203 $\chi^2$/NDF: 2435593.9/15

Left Out: 1038.291+/-0.213 $\chi^2$/NDF:1074522.0/15

Right Out: 858.094+/-0.242 $\chi^2$/NDF: 1882174.1/17

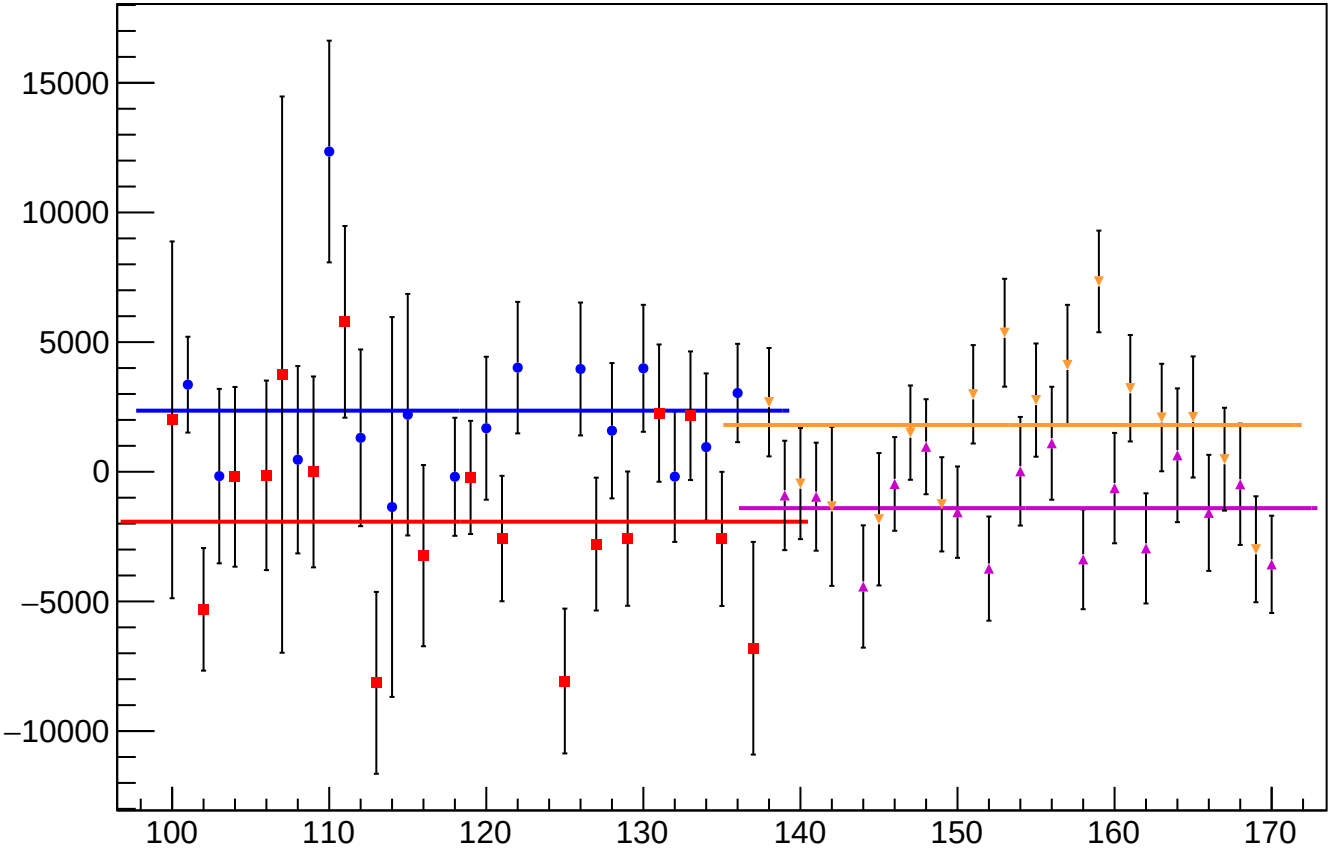
Left In: 1042.968+/-0.209 $\chi^2$/NDF:1268842.5/15

+ sign 859.508+/-0.147 $\chi^2$/NDF: 4854449.4/31

All: 907.854+/-0.108 $\chi^2$/NDF: 8574873.8/65

- sign 963.866+/-0.158 $\chi^2$/NDF: 3486230.5/33

# asym_usl_atl1_avg_mean vs Slug




Right In: 2356.998+/-678.944 $\chi^2$/NDF: 11.0/15

Left Out: 1804.952+/-525.304 $\chi^2$/NDF:26.2/15

Right Out: -1924.824+/-706.809 $\chi^2$/NDF: 23.4/17

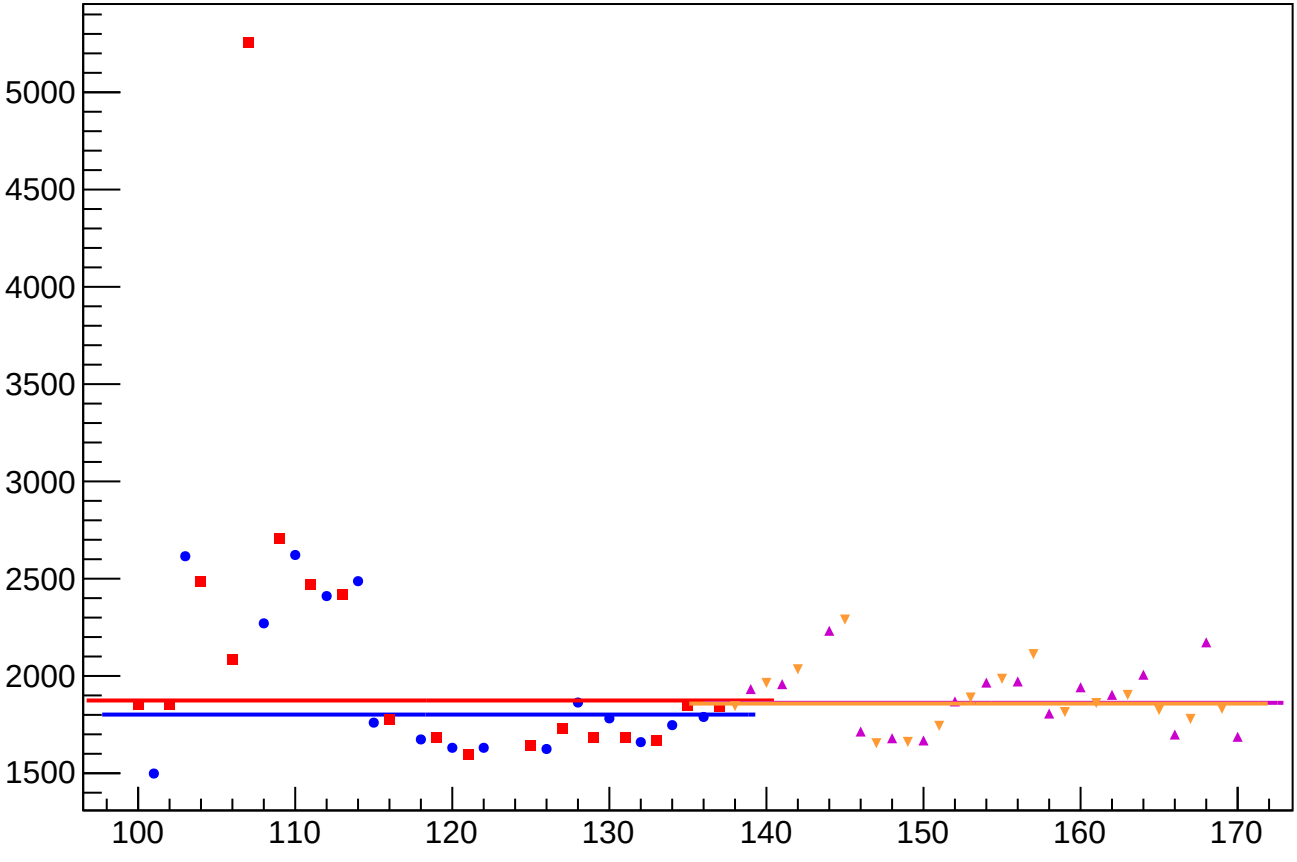
Left In: -1402.841+/-514.528 $\chi^2$/NDF:10.7/15

+ sign 2011.672+/-415.468 $\chi^2$/NDF: 37.6/31

All: 216.236+/-293.962 $\chi^2$/NDF: 109.5/65

- sign -1583.642+/-415.982 $\chi^2$/NDF: 34.5/33

# asym_usl_atl1_avg_rms vs Slug




Right In: 1801.529+/-0.480 $\chi^2$/NDF: 400702.5/15

Left Out: 1858.145+/-0.371 $\chi^2$/NDF:161775.9/15

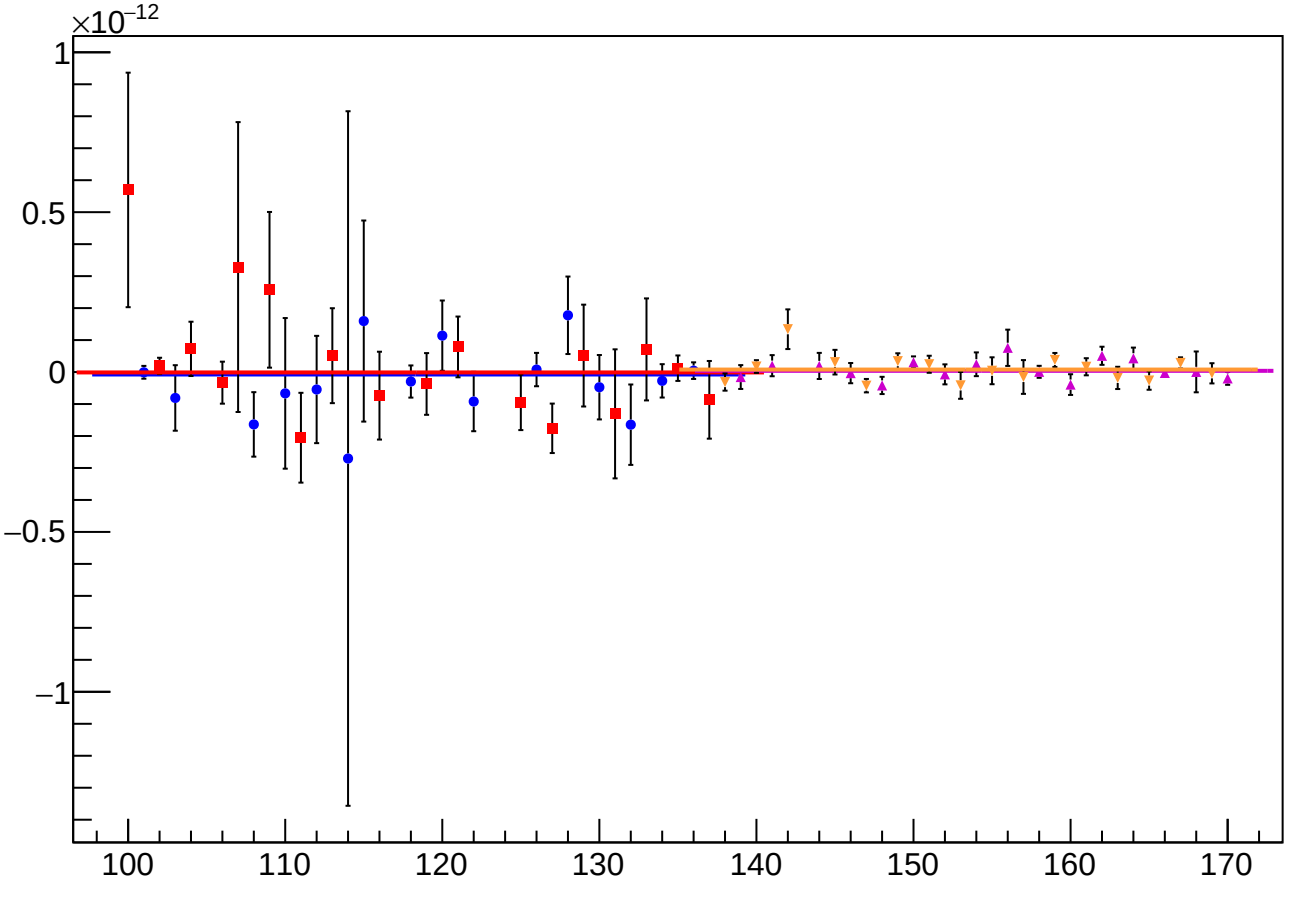
Right Out: 1873.976+/-0.500 $\chi^2$/NDF: 569909.0/17

Left In: 1861.977+/-0.364 $\chi^2$/NDF:197804.5/15

+ sign 1836.945+/-0.294 $\chi^2$/NDF: 571178.1/31

All: 1851.521+/-0.208 $\chi^2$/NDF: 1344198.1/65

- sign 1866.134+/-0.294 $\chi^2$/NDF: 768090.2/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 10.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:21.2/15

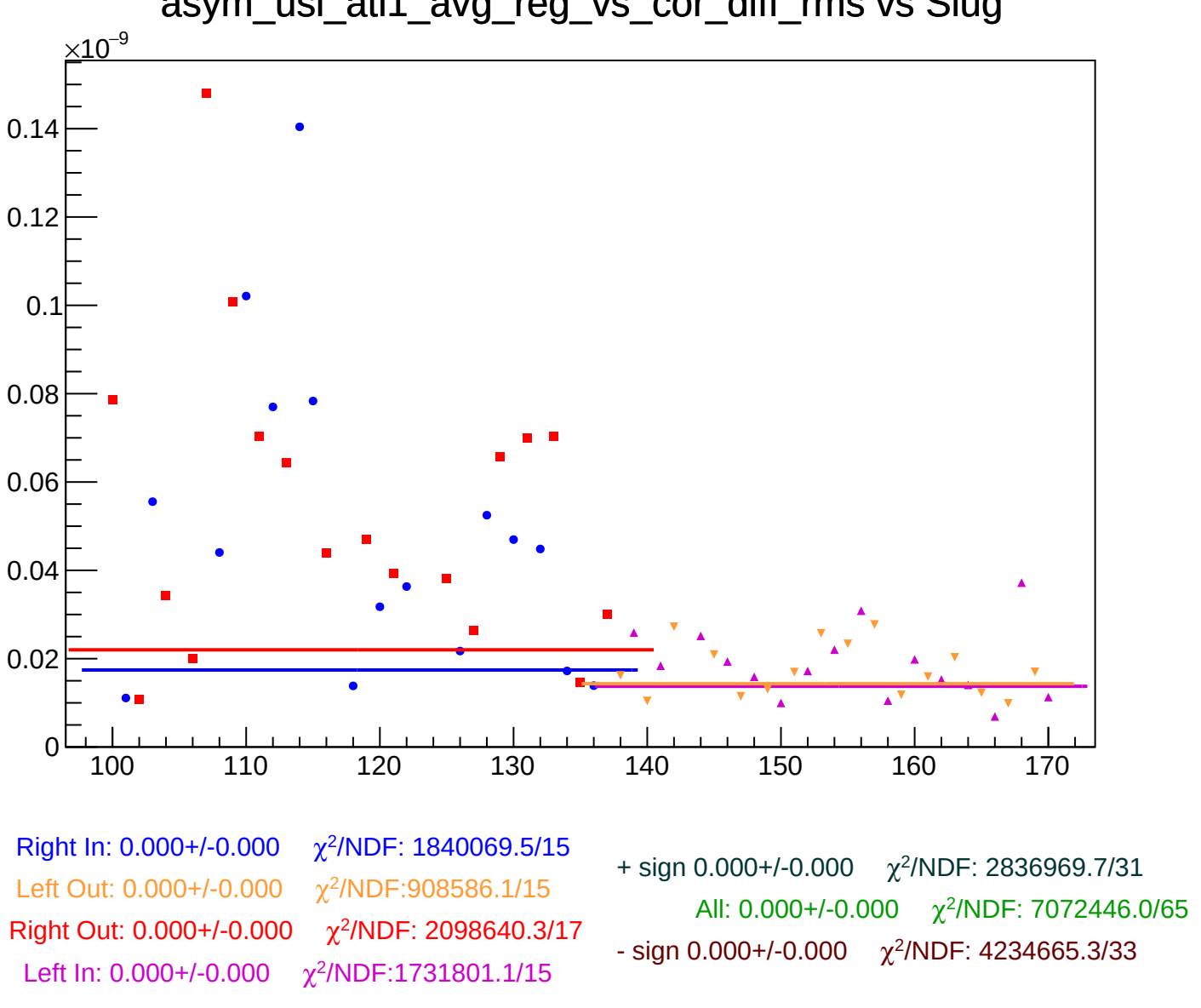
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 16.7/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:15.3/15

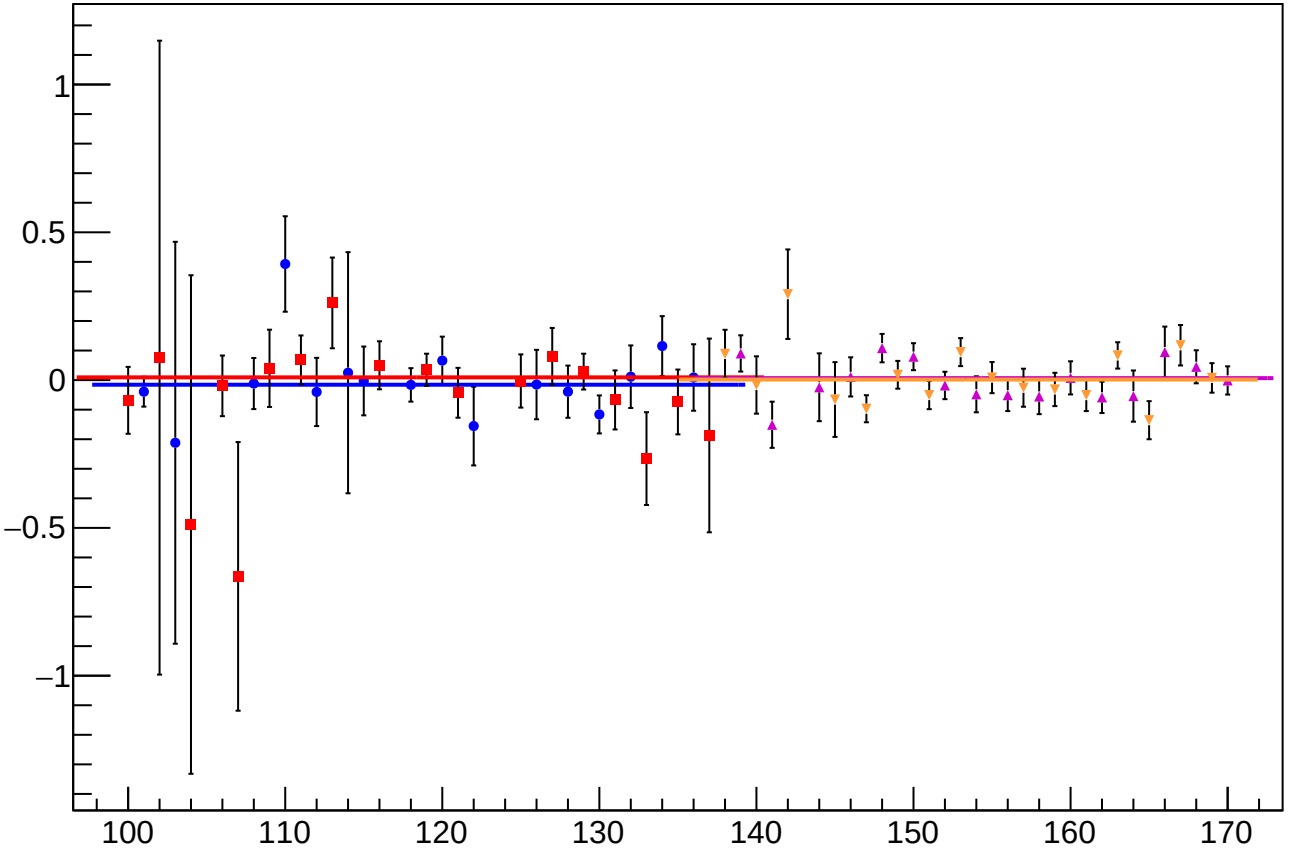
+ sign 0.000+/-0.000 $\chi^2$/NDF: 32.6/31

All: 0.000+/-0.000 $\chi^2$/NDF: 64.6/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 32.0/33


asym_usl_atl1_avg_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1840069.5/15
Left Out: 0.000+/-0.000 χ²/NDF:908586.1/15
Right Out: 0.000+/-0.000 χ²/NDF: 2098640.3/17
Left In: 0.000+/-0.000 χ²/NDF:1731801.1/15
+ sign 0.000+/-0.000 χ²/NDF: 2836969.7/31
All: 0.000+/-0.000 χ²/NDF: 7072446.0/65
- sign 0.000+/-0.000 χ²/NDF: 4234665.3/33

# asym_usl_atl1_avg_dit_vs_cor_diff_mean vs Slug




Right In: -0.016+/-0.023 $\chi^2$/NDF: 13.2/15

Left Out: 0.002+/-0.014 $\chi^2$/NDF:27.2/15

Right Out: 0.009+/-0.024 $\chi^2$/NDF: 12.5/17

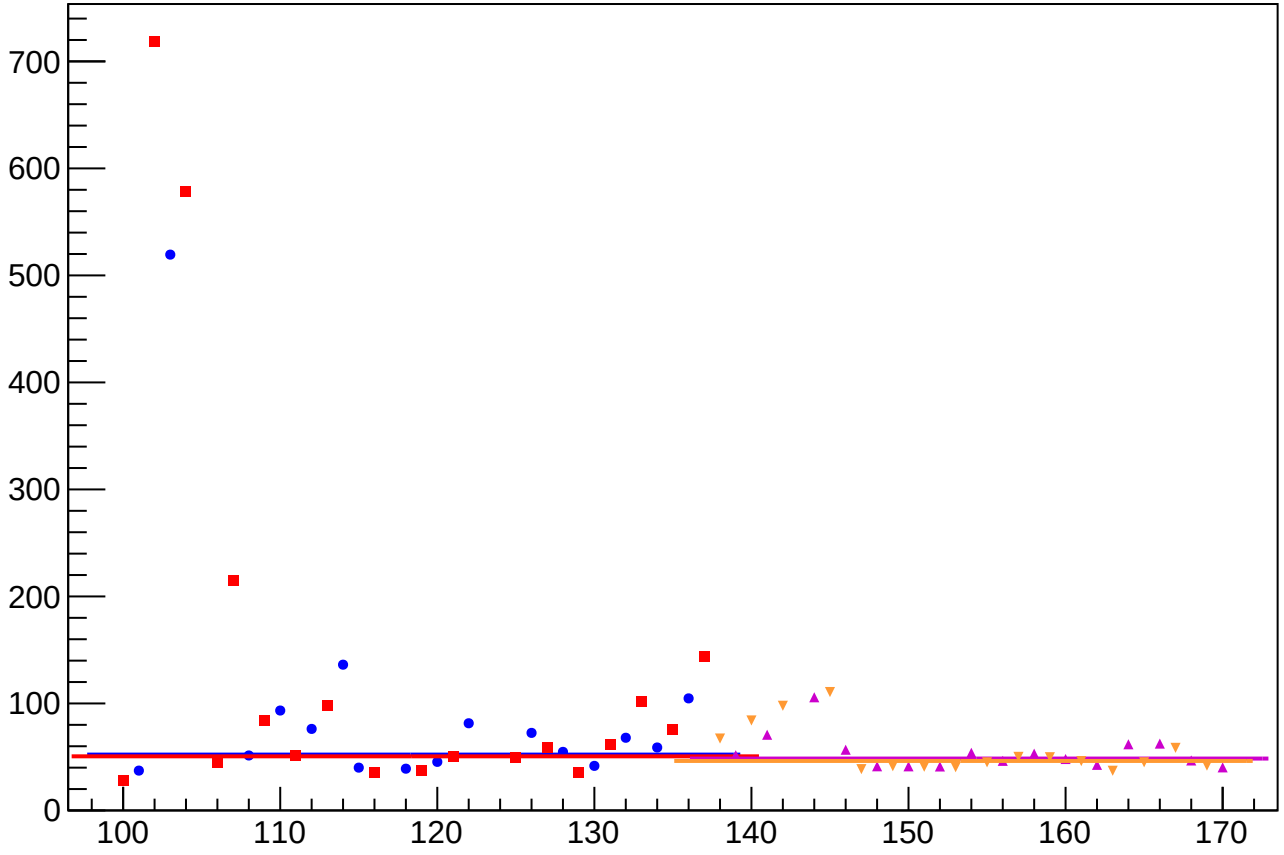
Left In: 0.007+/-0.015 $\chi^2$/NDF:19.9/15

+ sign -0.003+/-0.012 $\chi^2$/NDF: 40.8/31

All: 0.002+/-0.009 $\chi^2$/NDF: 73.5/65

- sign 0.007+/-0.012 $\chi^2$/NDF: 32.4/33

# asym_usl_atl1_avg_dit_vs_cor_diff_rms vs Slug




Right In: 52.191+/-0.016 $\chi^2$/NDF: 2266928.1/15

Left Out: 46.266+/-0.010 $\chi^2$/NDF:1502251.0/15

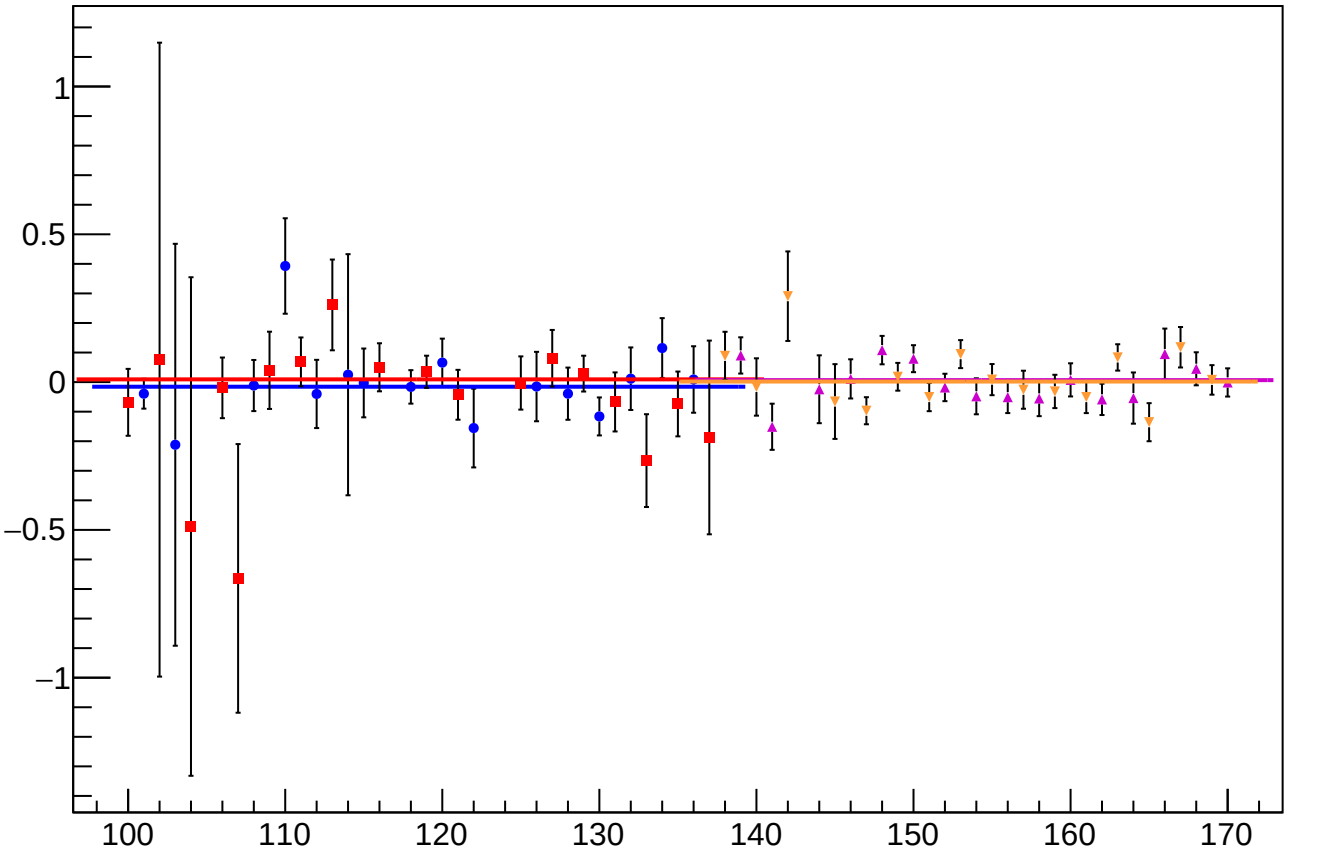
Right Out: 50.582+/-0.017 $\chi^2$/NDF: 3051379.6/17

Left In: 48.491+/-0.010 $\chi^2$/NDF:1060157.2/15

+ sign 47.980+/-0.009 $\chi^2$/NDF: 3866491.7/31

All: 48.514+/-0.006 $\chi^2$/NDF: 7997245.3/65

- sign 49.069+/-0.009 $\chi^2$/NDF: 4122902.8/33




Right In: -0.016+/-0.023 $\chi^2$/NDF: 13.2/15

Left Out: 0.002+/-0.014 $\chi^2$/NDF:27.2/15

Right Out: 0.009+/-0.024 $\chi^2$/NDF: 12.5/17

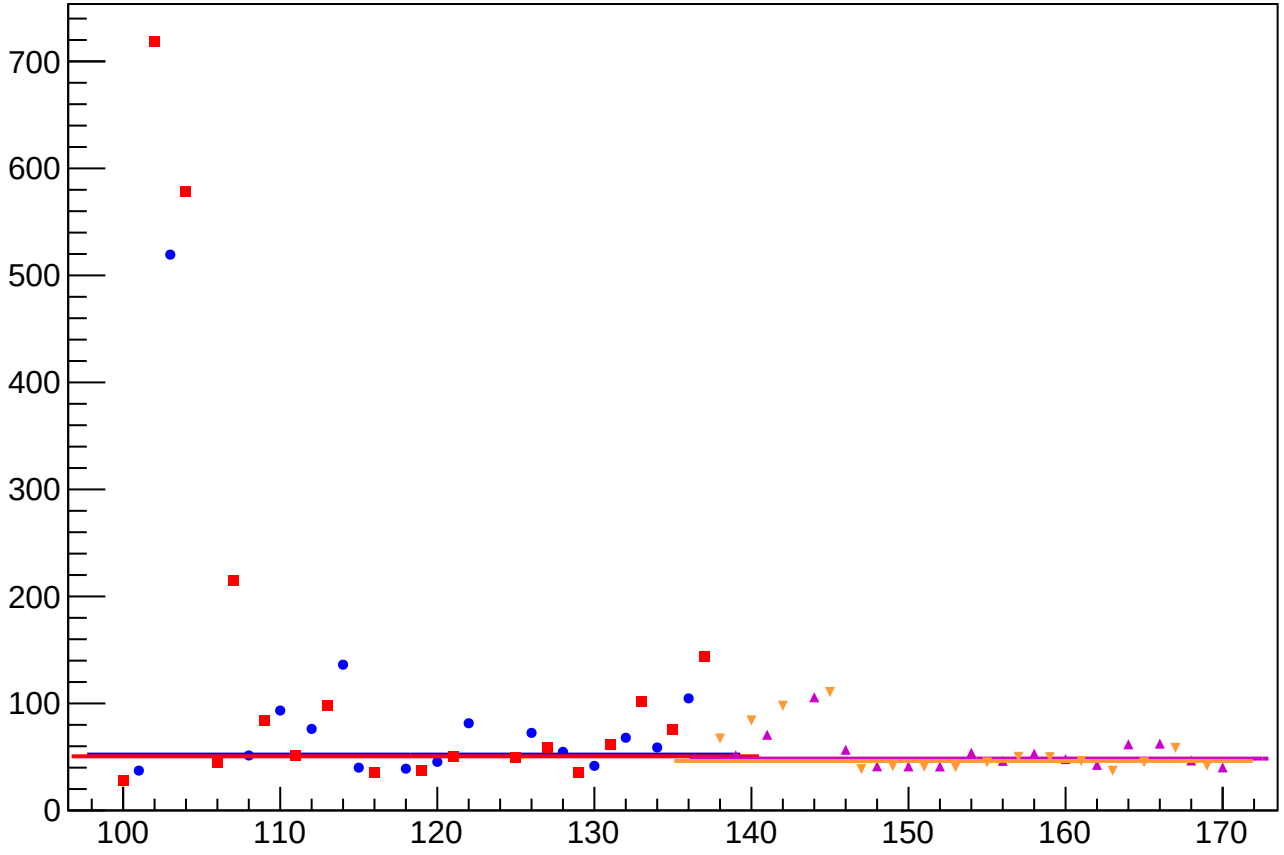
Left In: 0.007+/-0.015 $\chi^2$/NDF:19.9/15

+ sign -0.003+/-0.012 $\chi^2$/NDF: 40.8/31

All: 0.002+/-0.009 $\chi^2$/NDF: 73.5/65

- sign 0.007+/-0.012 $\chi^2$/NDF: 32.4/33

# asym_usl_atl1_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 52.191+/-0.016 $\chi^2$/NDF: 2266928.1/15

Left Out: 46.266+/-0.010 $\chi^2$/NDF:1502251.0/15

Right Out: 50.582+/-0.017 $\chi^2$/NDF: 3051379.6/17

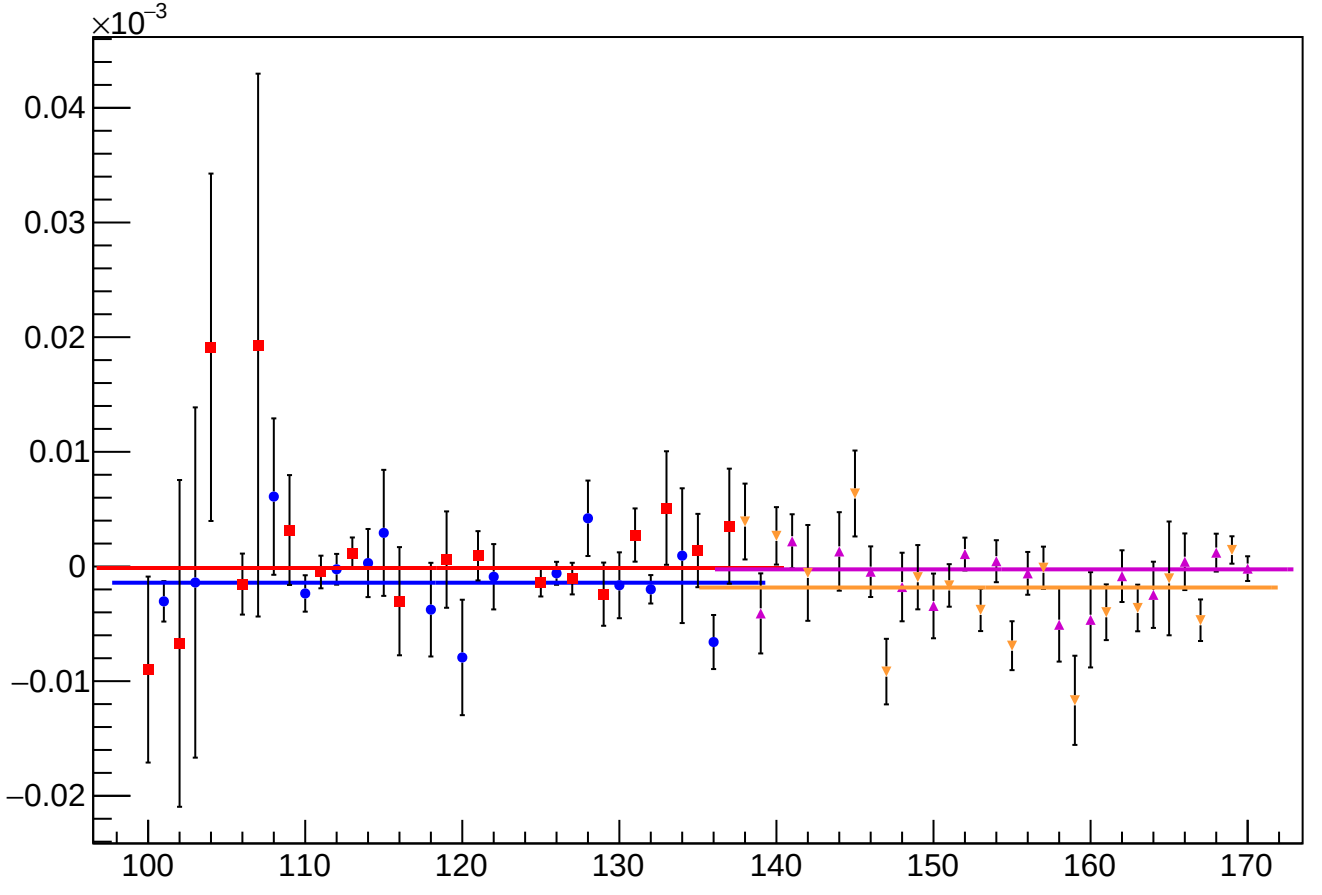
Left In: 48.491+/-0.010 $\chi^2$/NDF:1060157.2/15

+ sign 47.980+/-0.009 $\chi^2$/NDF: 3866491.7/31

All: 48.514+/-0.006 $\chi^2$/NDF: 7997245.3/65

- sign 49.069+/-0.009 $\chi^2$/NDF: 4122902.8/33

# asym_usl_atl1_avg_eigen_dit_vs_dit_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:43.5/15

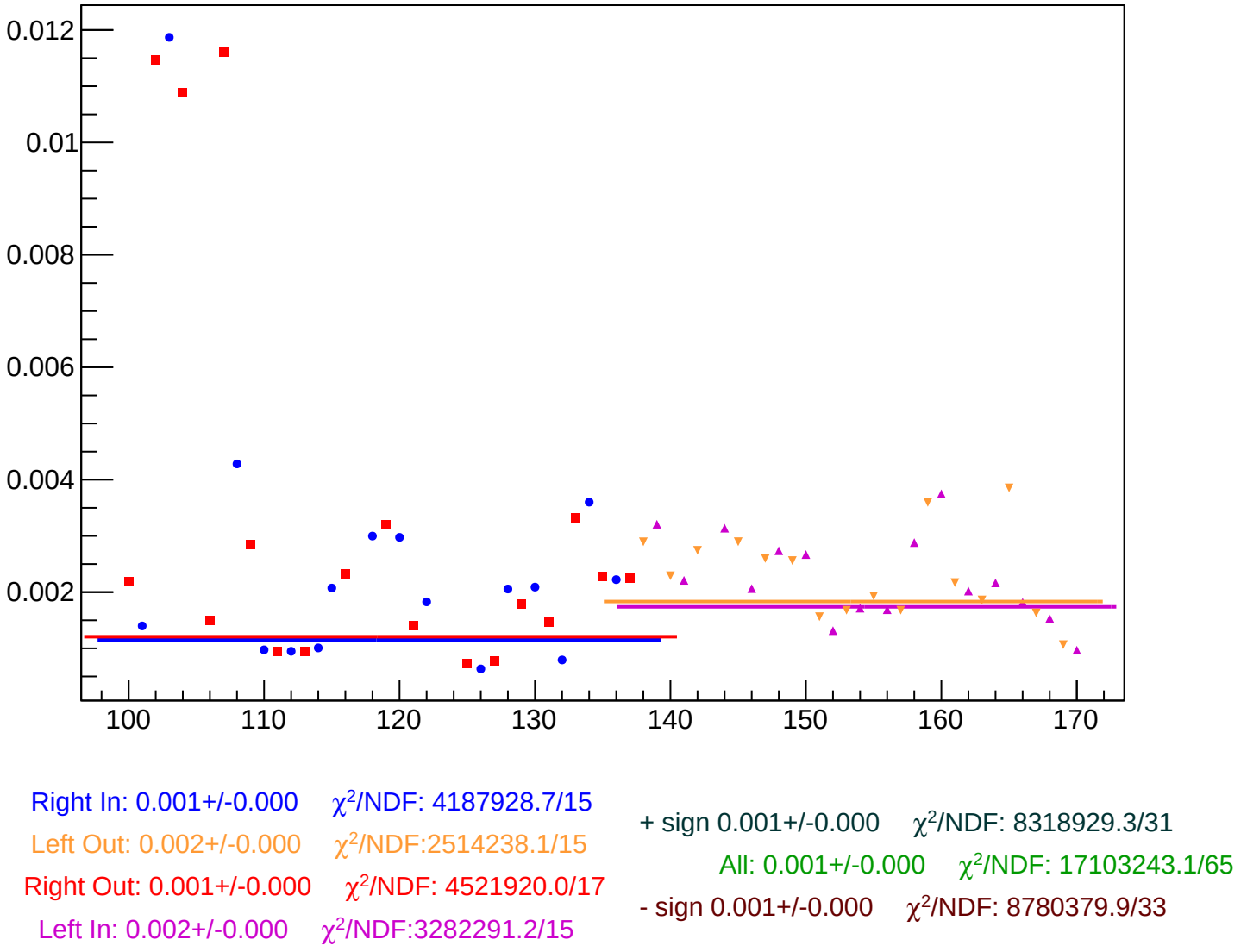
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 11.6/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:10.0/15

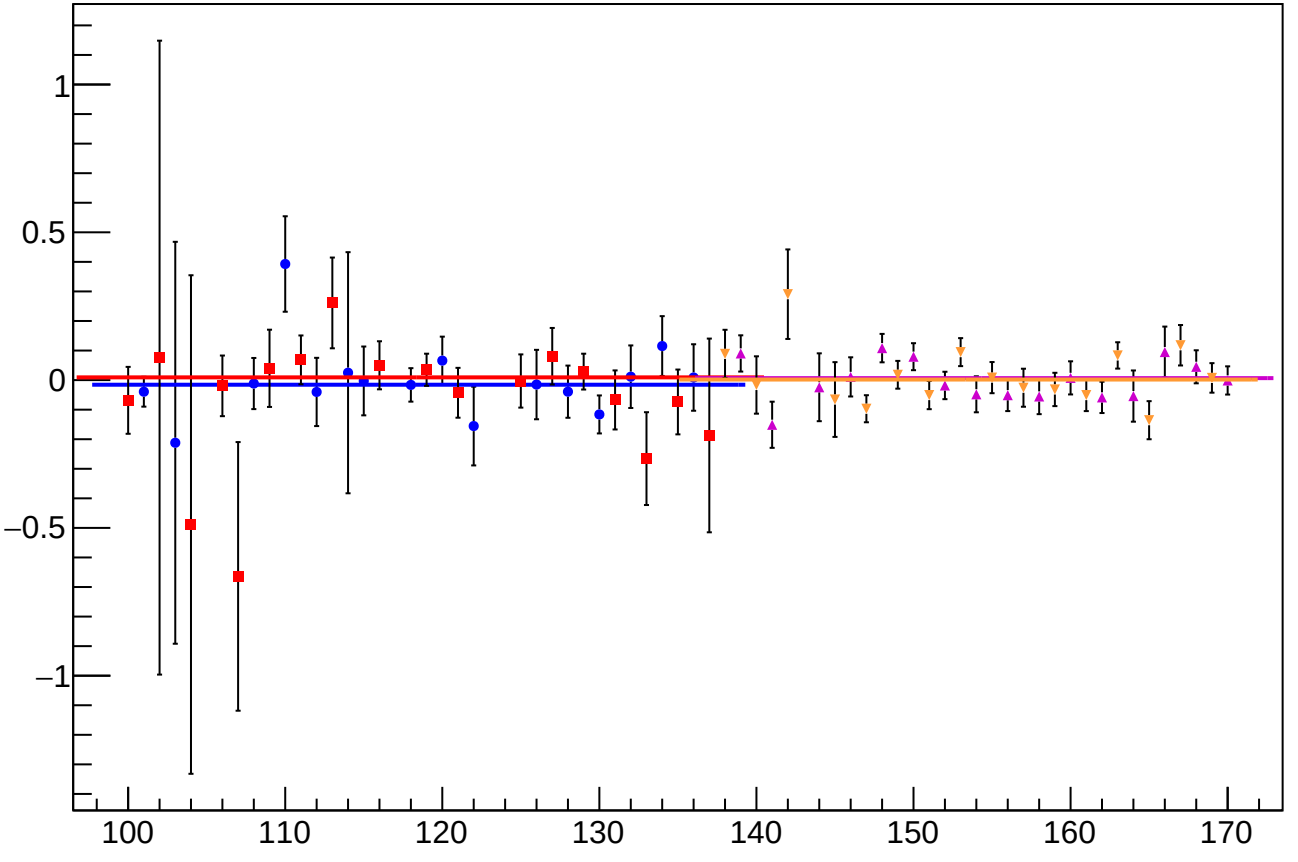
+ sign -0.000+/-0.000 $\chi^2$/NDF: 58.7/31

All: -0.000+/-0.000 $\chi^2$/NDF: 87.3/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 21.6/33


asym_usl_atl1_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.012
0.01
0.008
0.006
0.004
0.002
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 4187928.7/15
Left Out: 0.002+/-0.000 χ²/NDF:2514238.1/15
Right Out: 0.001+/-0.000 χ²/NDF: 4521920.0/17
Left In: 0.002+/-0.000 χ²/NDF:3282291.2/15
+ sign 0.001+/-0.000 χ²/NDF: 8318929.3/31
All: 0.001+/-0.000 χ²/NDF: 17103243.1/65
- sign 0.001+/-0.000 χ²/NDF: 8780379.9/33

# asym_usl_atl1_avg_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.016+/-0.023 $\chi^2$/NDF: 13.2/15

Left Out: 0.002+/-0.014 $\chi^2$/NDF:27.2/15

Right Out: 0.009+/-0.024 $\chi^2$/NDF: 12.5/17

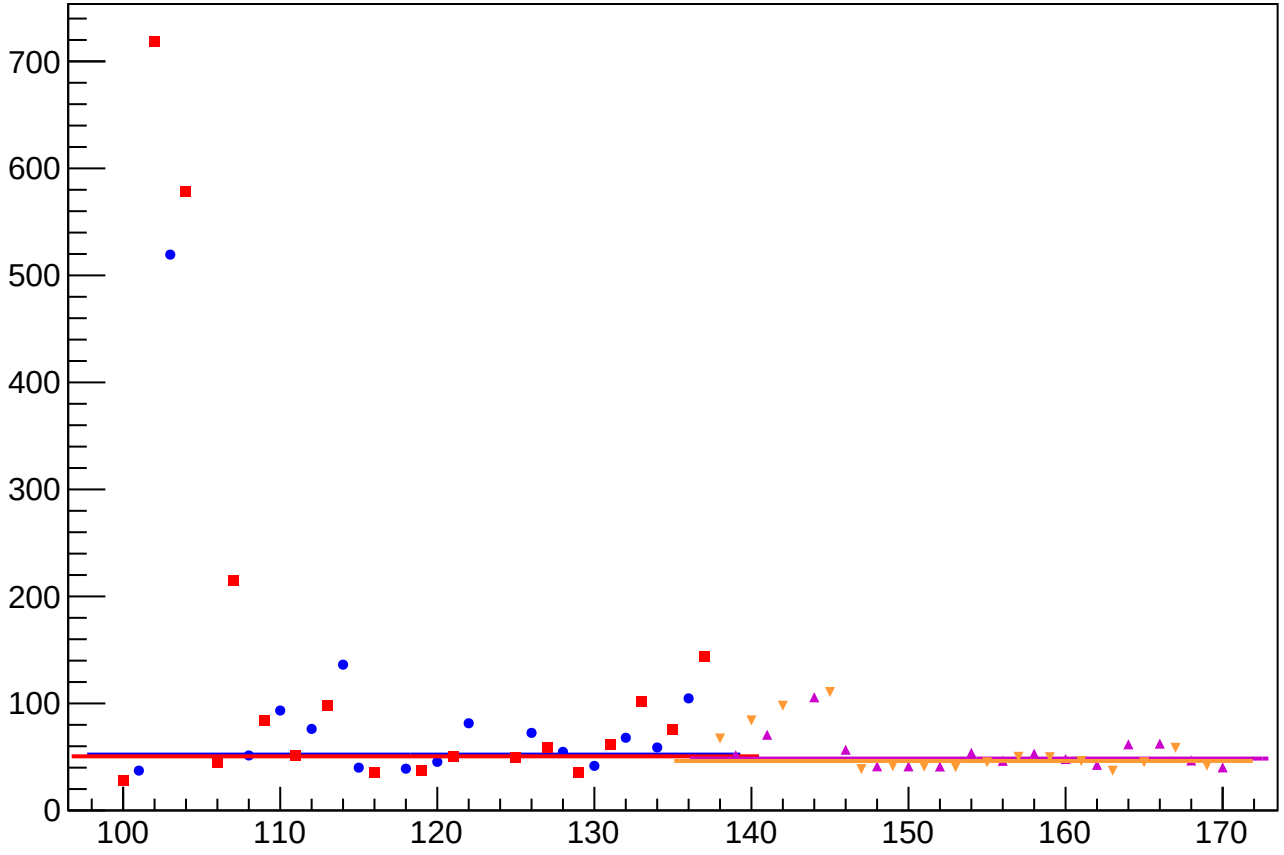
Left In: 0.007+/-0.015 $\chi^2$/NDF:19.9/15

+ sign -0.003+/-0.012 $\chi^2$/NDF: 40.8/31

All: 0.002+/-0.009 $\chi^2$/NDF: 73.5/65

- sign 0.007+/-0.012 $\chi^2$/NDF: 32.4/33

# asym_usl_atl1_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 52.191+/-0.016 $\chi^2$/NDF: 2266922.0/15

Left Out: 46.267+/-0.010 $\chi^2$/NDF:1502236.1/15

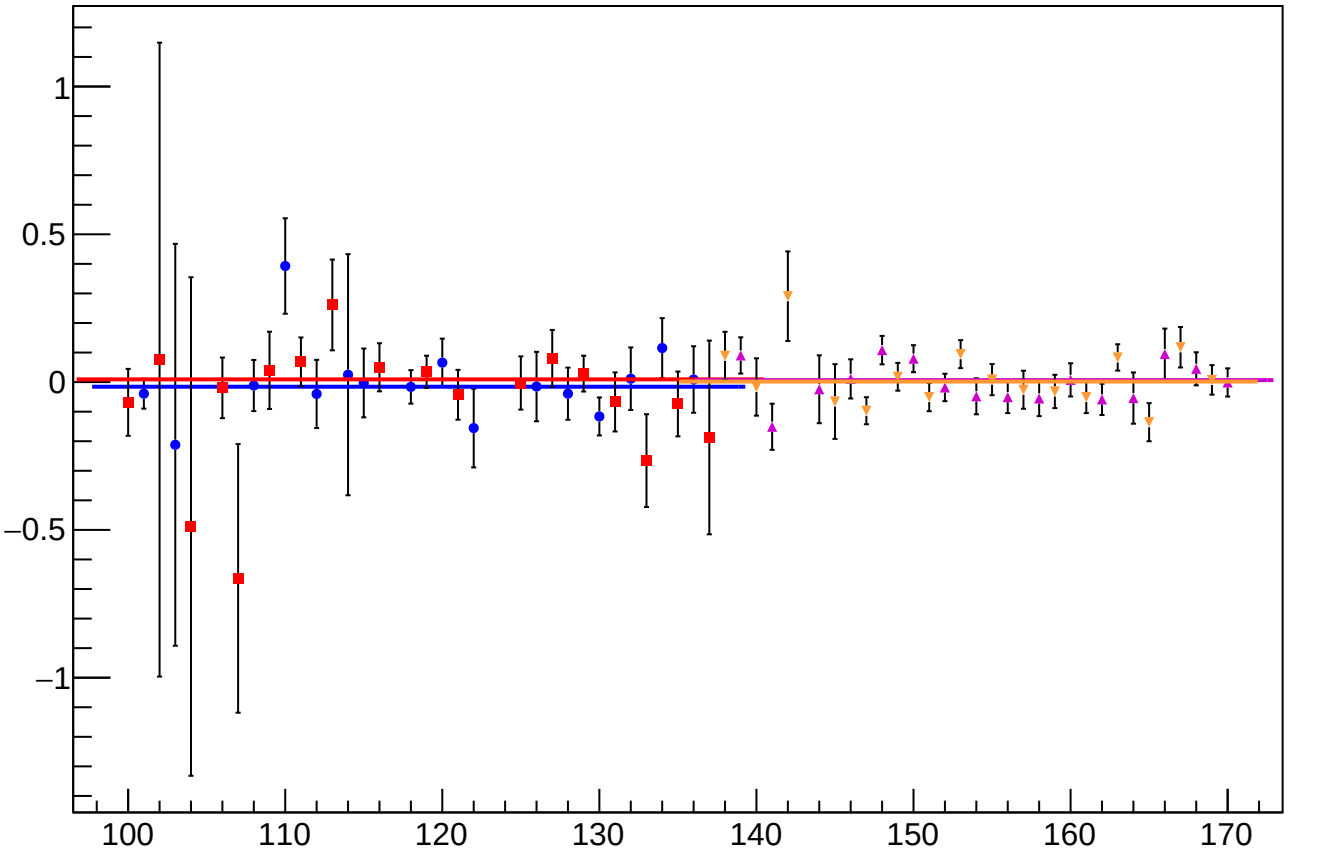
Right Out: 50.582+/-0.017 $\chi^2$/NDF: 3051364.2/17

Left In: 48.491+/-0.010 $\chi^2$/NDF:1060165.7/15

+ sign 47.980+/-0.009 $\chi^2$/NDF: 3866460.0/31

All: 48.514+/-0.006 $\chi^2$/NDF: 7997201.3/65

- sign 49.069+/-0.009 $\chi^2$/NDF: 4122893.3/33




Right In: -0.016+/-0.023 $\chi^2$/NDF: 13.2/15

Left Out: 0.002+/-0.014 $\chi^2$/NDF:27.2/15

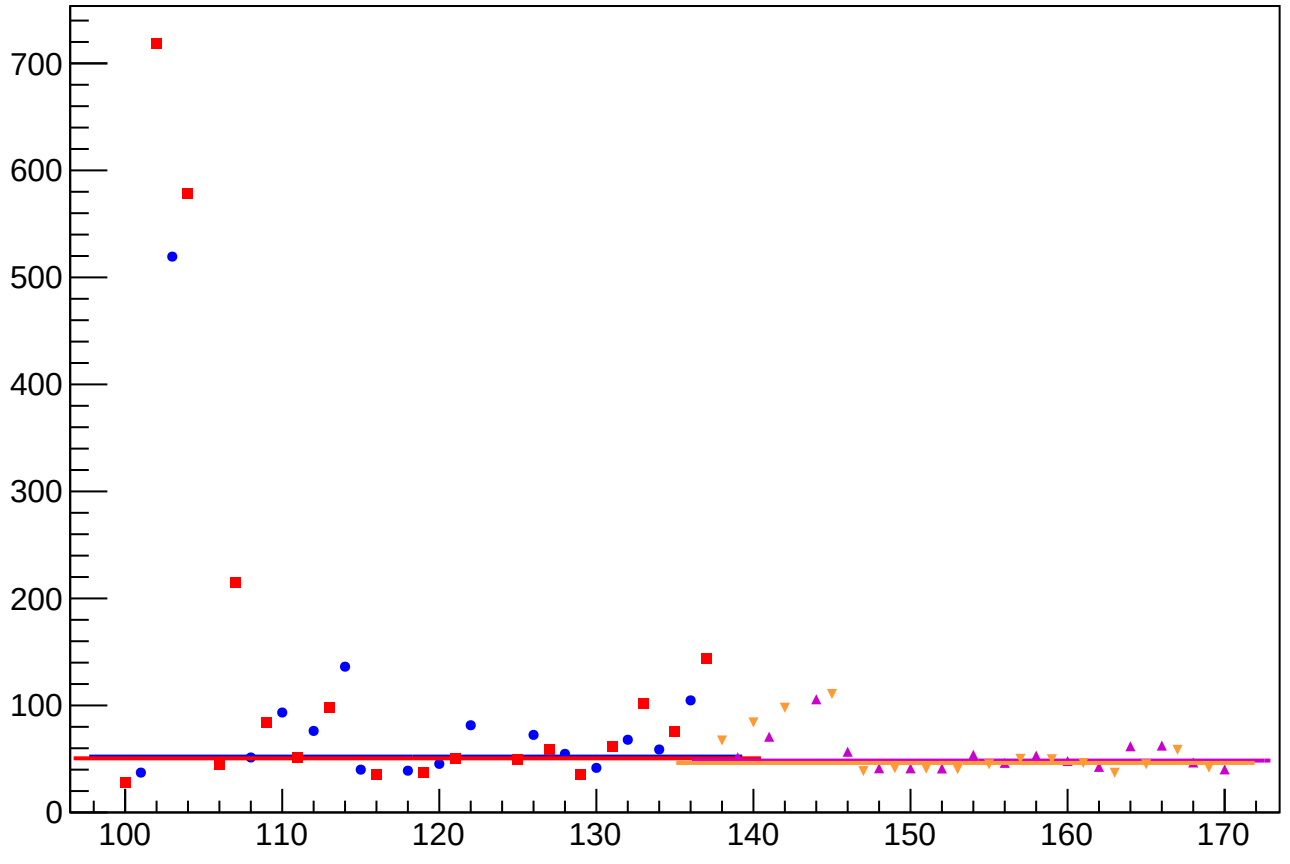
Right Out: 0.009+/-0.024 $\chi^2$/NDF: 12.5/17

Left In: 0.007+/-0.015 $\chi^2$/NDF:19.9/15

+ sign -0.003+/-0.012 $\chi^2$/NDF: 40.8/31

All: 0.002+/-0.009 $\chi^2$/NDF: 73.5/65

- sign 0.007+/-0.012 $\chi^2$/NDF: 32.4/33




Right In: 52.191+/-0.016 $\chi^2$/NDF: 2266922.0/15

Left Out: 46.267+/-0.010 $\chi^2$/NDF:1502236.1/15

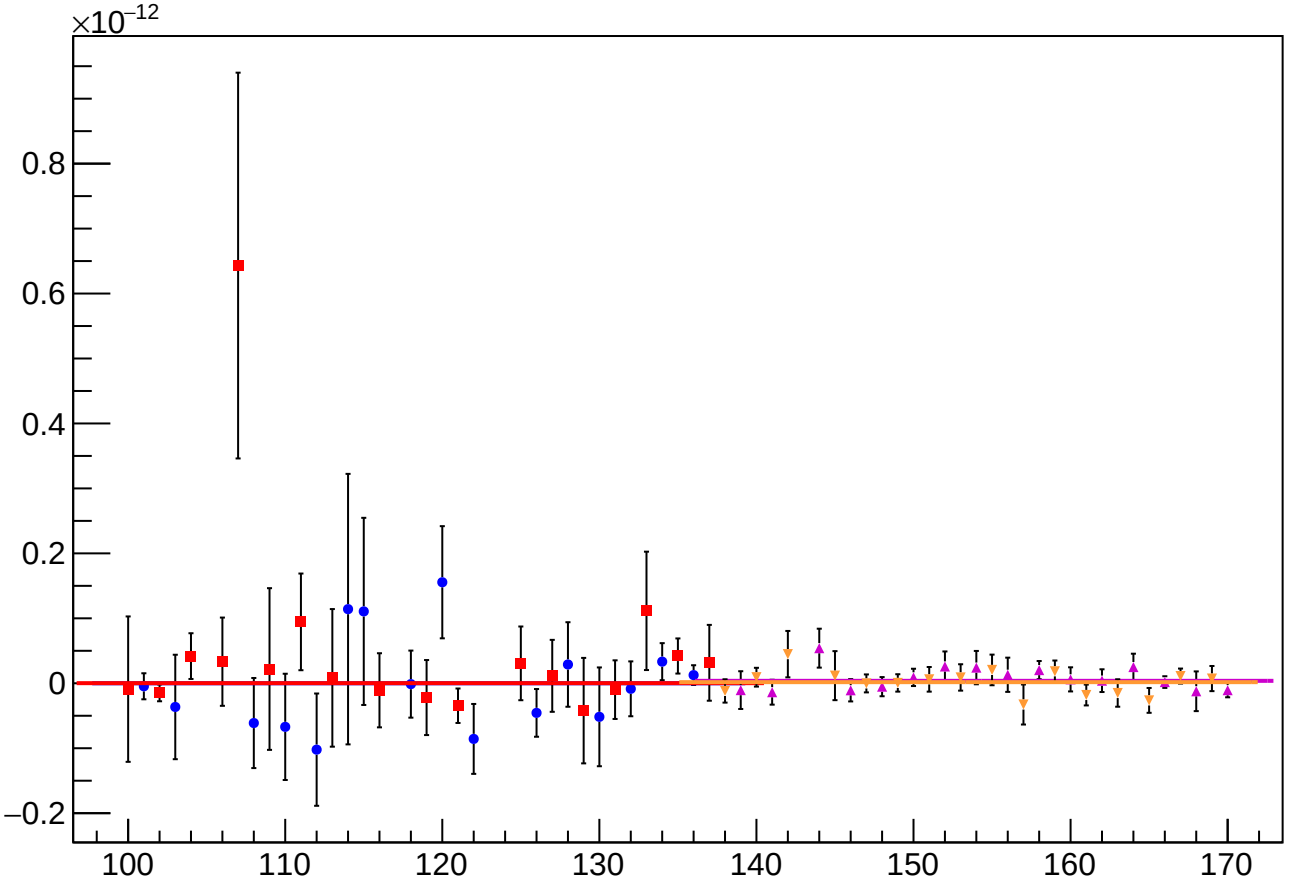
Right Out: 50.582+/-0.017 $\chi^2$/NDF: 3051364.2/17

Left In: 48.491+/-0.010 $\chi^2$/NDF:1060165.7/15

+ sign 47.980+/-0.009 $\chi^2$/NDF: 3866460.0/31

All: 48.514+/-0.006 $\chi^2$/NDF: 7997201.3/65

- sign 49.069+/-0.009 $\chi^2$/NDF: 4122893.3/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:10.5/15

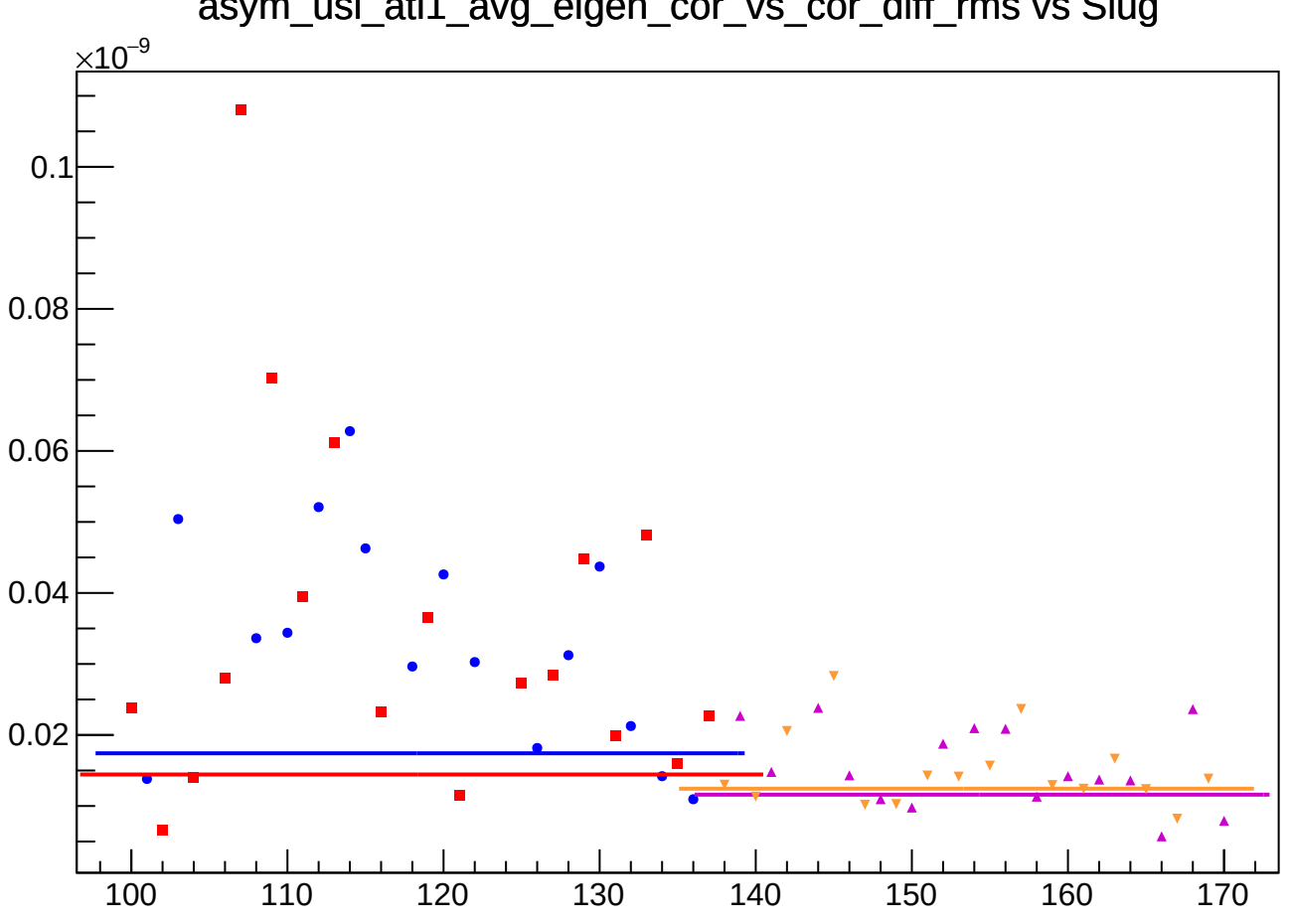
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 16.0/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:11.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 24.6/31

All: 0.000+/-0.000 $\chi^2$/NDF: 52.2/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 27.5/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2224531.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1273420.7/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3261103.3/17

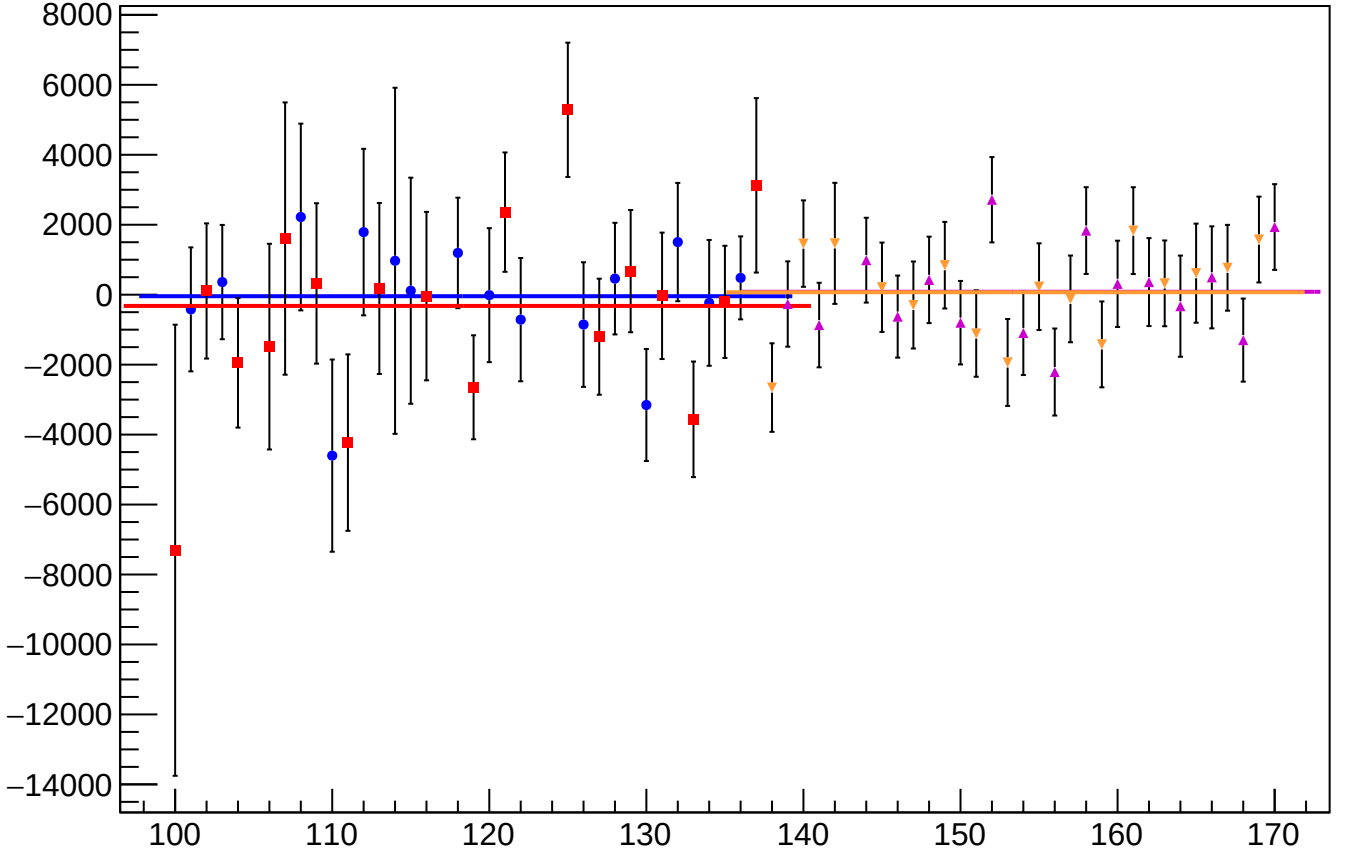
Left In: 0.000+/-0.000 $\chi^2$/NDF:2957507.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3958502.0/31

All: 0.000+/-0.000 $\chi^2$/NDF: 10447575.1/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 6384727.8/33

# reg_asym_usl_atl1_dd_mean vs Slug




Right In: -43.681+/-459.222 $\chi^2$/NDF: 10.1/15

Left Out: 70.075+/-317.251 $\chi^2$/NDF:16.1/15

Right Out: -321.266+/-474.939 $\chi^2$/NDF: 24.8/17

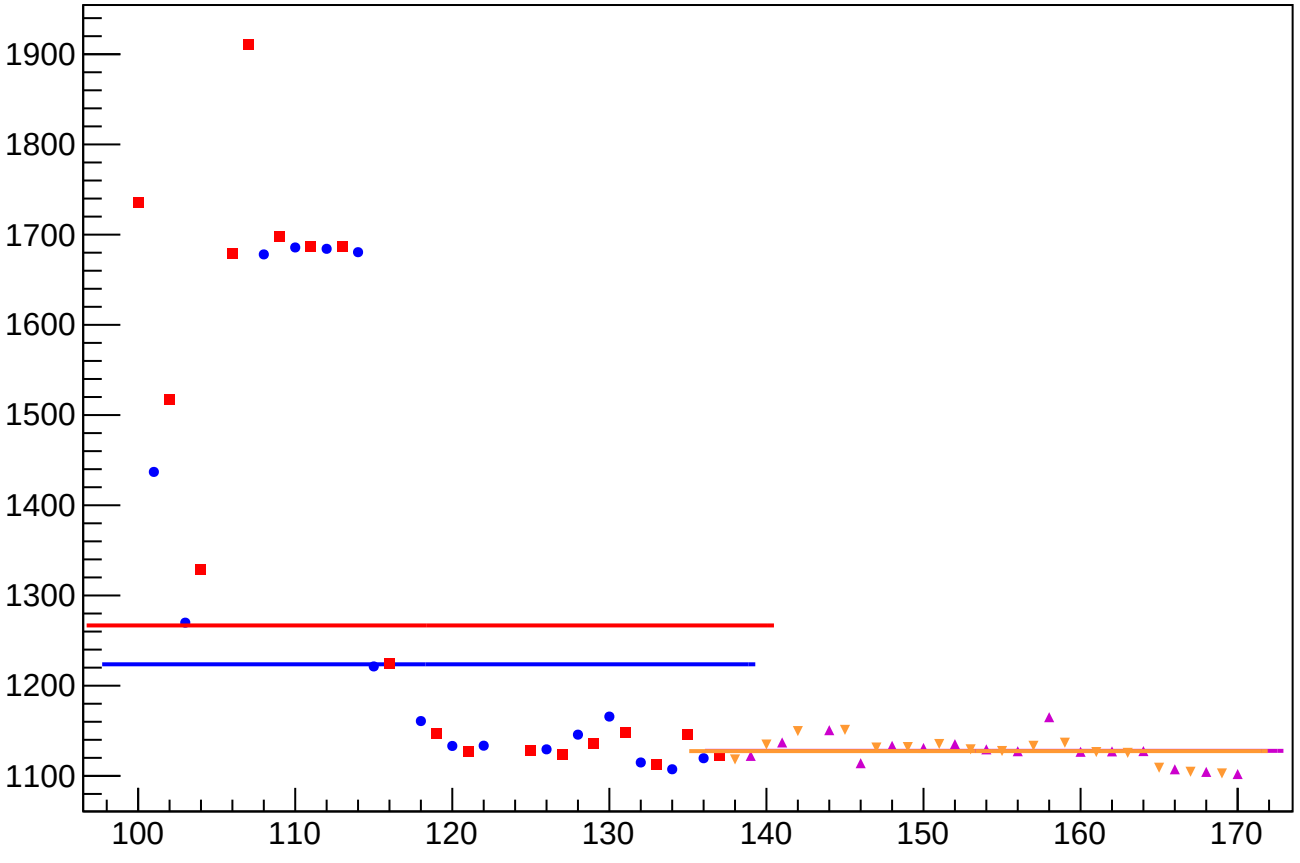
Left In: 83.315+/-310.177 $\chi^2$/NDF:17.1/15

+ sign 33.323+/-261.020 $\chi^2$/NDF: 26.3/31

All: -2.345+/-184.100 $\chi^2$/NDF: 68.7/65

- sign -37.653+/-259.699 $\chi^2$/NDF: 42.4/33

# reg_asym_usl_atl1_dd_rms vs Slug




Right In: 1223.705+/-0.325 $\chi^2$/NDF: 294966.1/15

Left Out: 1127.470+/-0.224 $\chi^2$/NDF:3331.4/15

Right Out: 1266.780+/-0.336 $\chi^2$/NDF: 432845.4/17

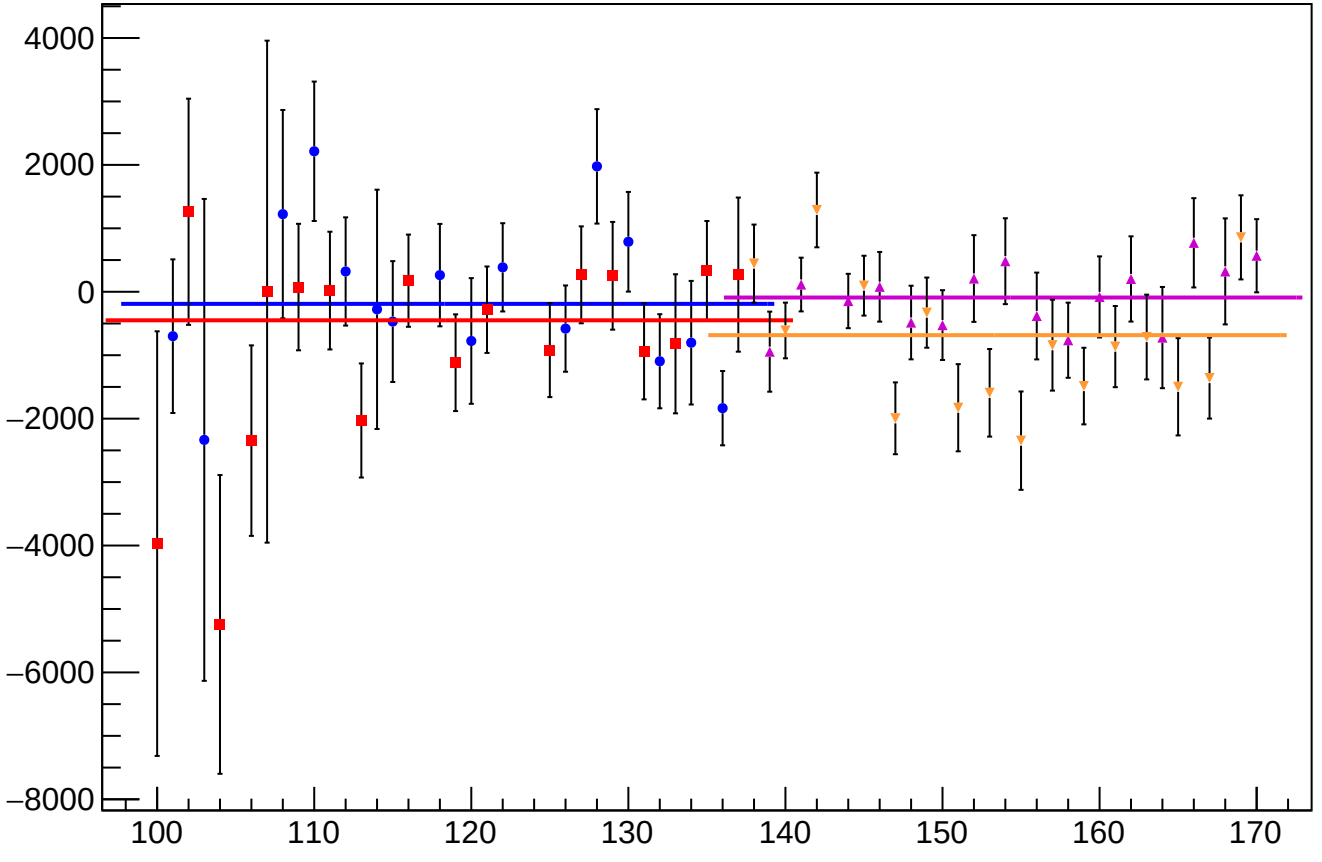
Left In: 1127.762+/-0.219 $\chi^2$/NDF:5136.4/15

+ sign 1158.561+/-0.185 $\chi^2$/NDF: 357752.6/31

All: 1163.972+/-0.130 $\chi^2$/NDF: 917563.6/65

- sign 1169.328+/-0.184 $\chi^2$/NDF: 558101.0/33

# asym_usl_atl1_dd_reg_correction_mean vs Slug




Right In: -190.634+/-222.869 $\chi^2$/NDF: 25.2/15

Left Out: -683.912+/-151.991 $\chi^2$/NDF:41.8/15

Right Out: -449.847+/-223.203 $\chi^2$/NDF: 16.8/17

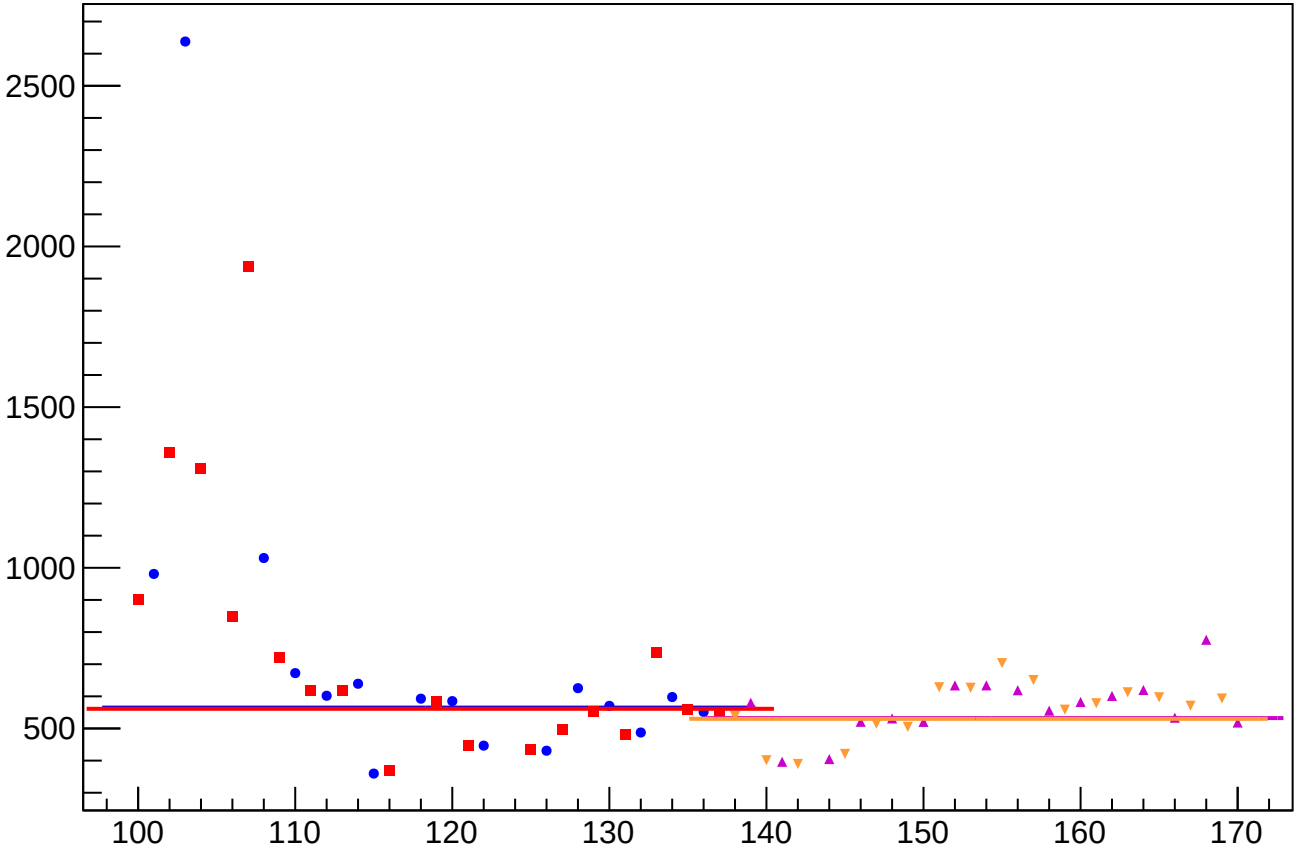
Left In: -90.820+/-148.849 $\chi^2$/NDF:9.5/15

+ sign -527.322+/-125.570 $\chi^2$/NDF: 70.4/31

All: -362.066+/-88.172 $\chi^2$/NDF: 101.9/65

- sign -201.338+/-123.838 $\chi^2$/NDF: 28.1/33

# asym_usl_atl1_dd_reg_correction_rms vs Slug




Right In: 564.959+/-0.158 $\chi^2$/NDF: 1284478.9/15

Left Out: 530.066+/-0.107 $\chi^2$/NDF:724217.6/15

Right Out: 561.243+/-0.158 $\chi^2$/NDF: 1352239.3/17

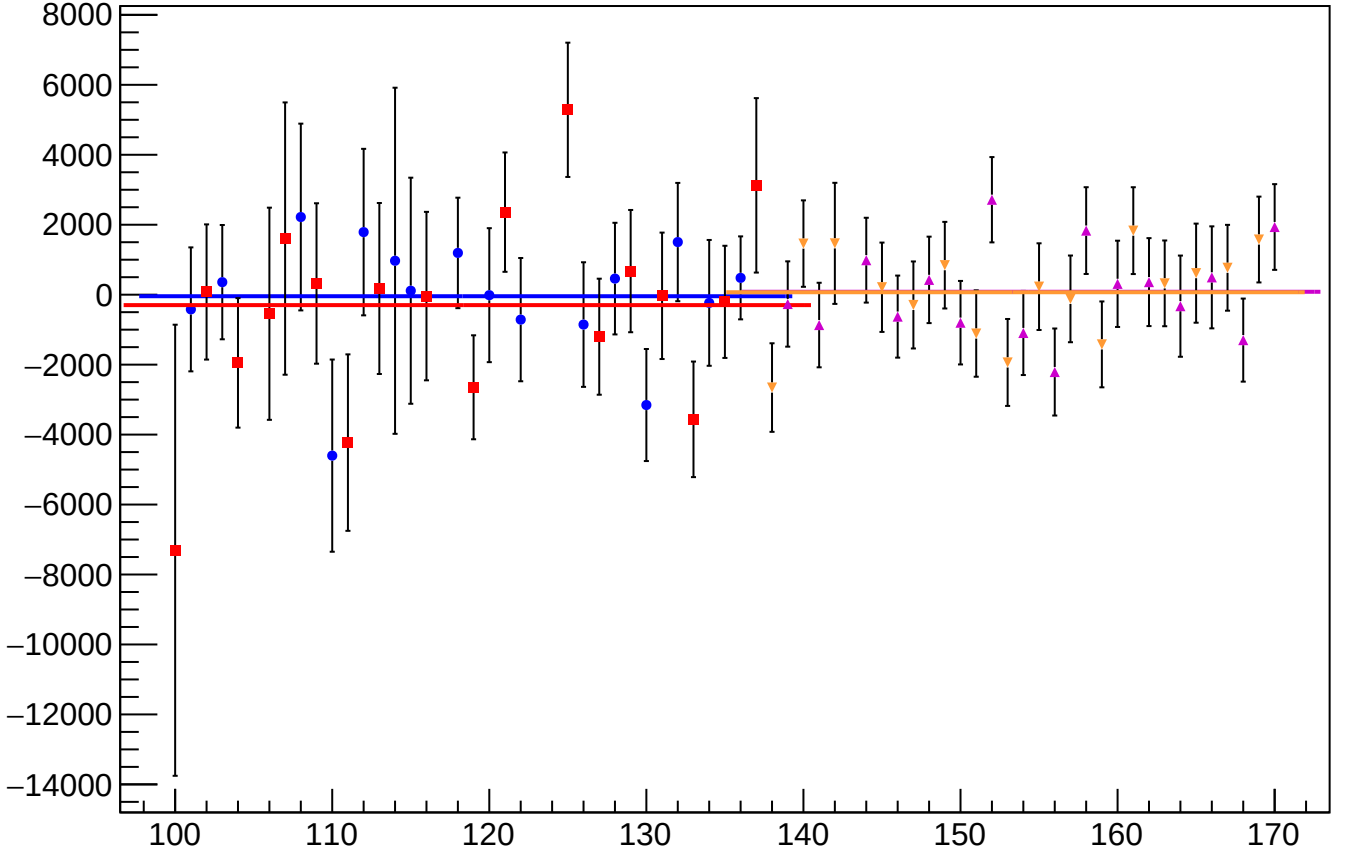
Left In: 532.349+/-0.105 $\chi^2$/NDF:750119.0/15

+ sign 541.143+/-0.089 $\chi^2$/NDF: 2042156.8/31

All: 541.194+/-0.062 $\chi^2$/NDF: 4167714.3/65

- sign 541.244+/-0.088 $\chi^2$/NDF: 2125556.9/33

# cor_asym_usl_atl1_dd_mean vs Slug




Right In: -43.923+/-459.222 $\chi^2$/NDF: 10.1/15

Left Out: 70.129+/-317.251 $\chi^2$/NDF:16.1/15

Right Out: -298.207+/-475.315 $\chi^2$/NDF: 24.6/17

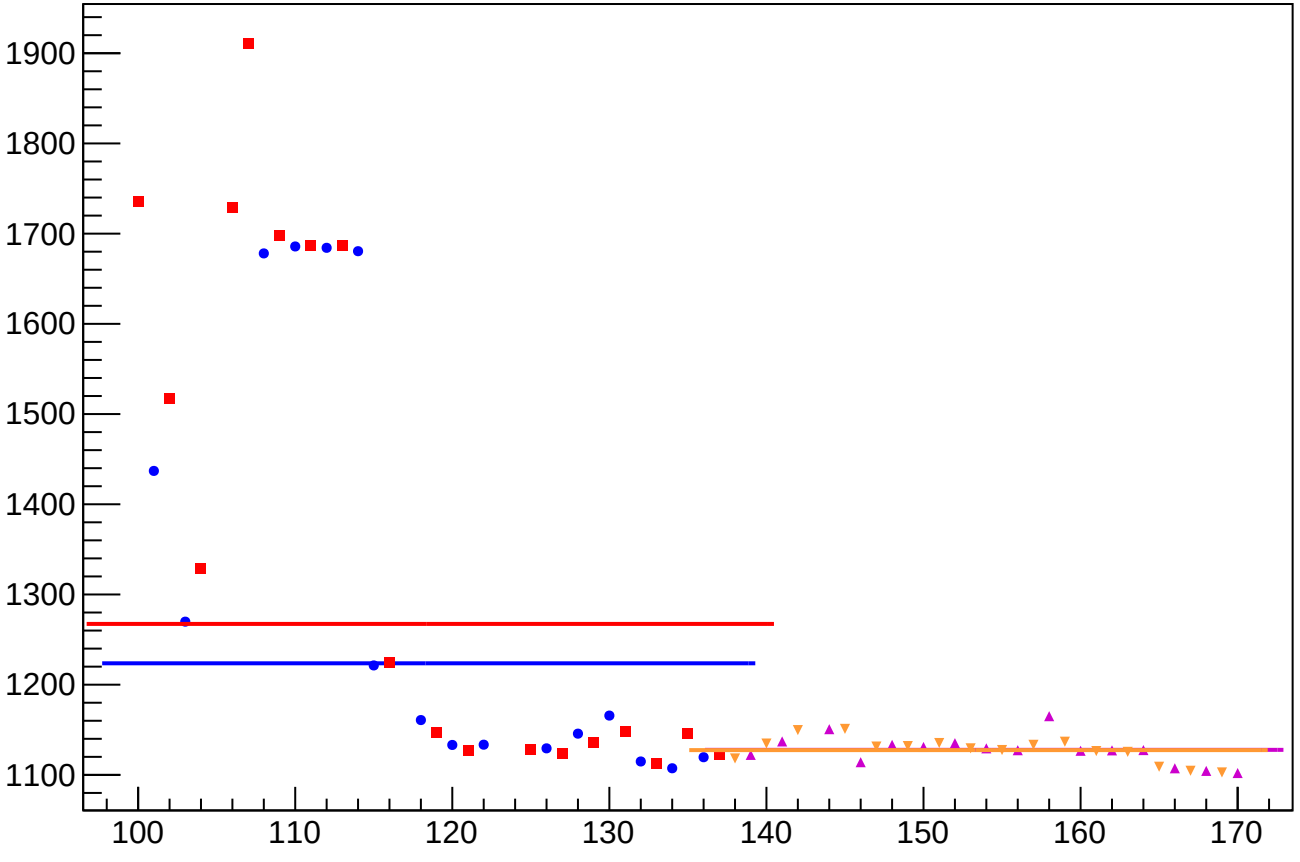
Left In: 83.280+/-310.177 $\chi^2$/NDF:17.1/15

+ sign 33.282+/-261.020 $\chi^2$/NDF: 26.3/31

All: 1.158+/-184.122 $\chi^2$/NDF: 68.5/65

- sign -30.657+/-259.760 $\chi^2$/NDF: 42.2/33

# cor_asym_usl_atl1_dd_rms vs Slug




Right In: 1223.705+/-0.325 $\chi^2$/NDF: 294966.1/15

Left Out: 1127.470+/-0.224 $\chi^2$/NDF:3331.4/15

Right Out: 1267.363+/-0.336 $\chi^2$/NDF: 439982.4/17

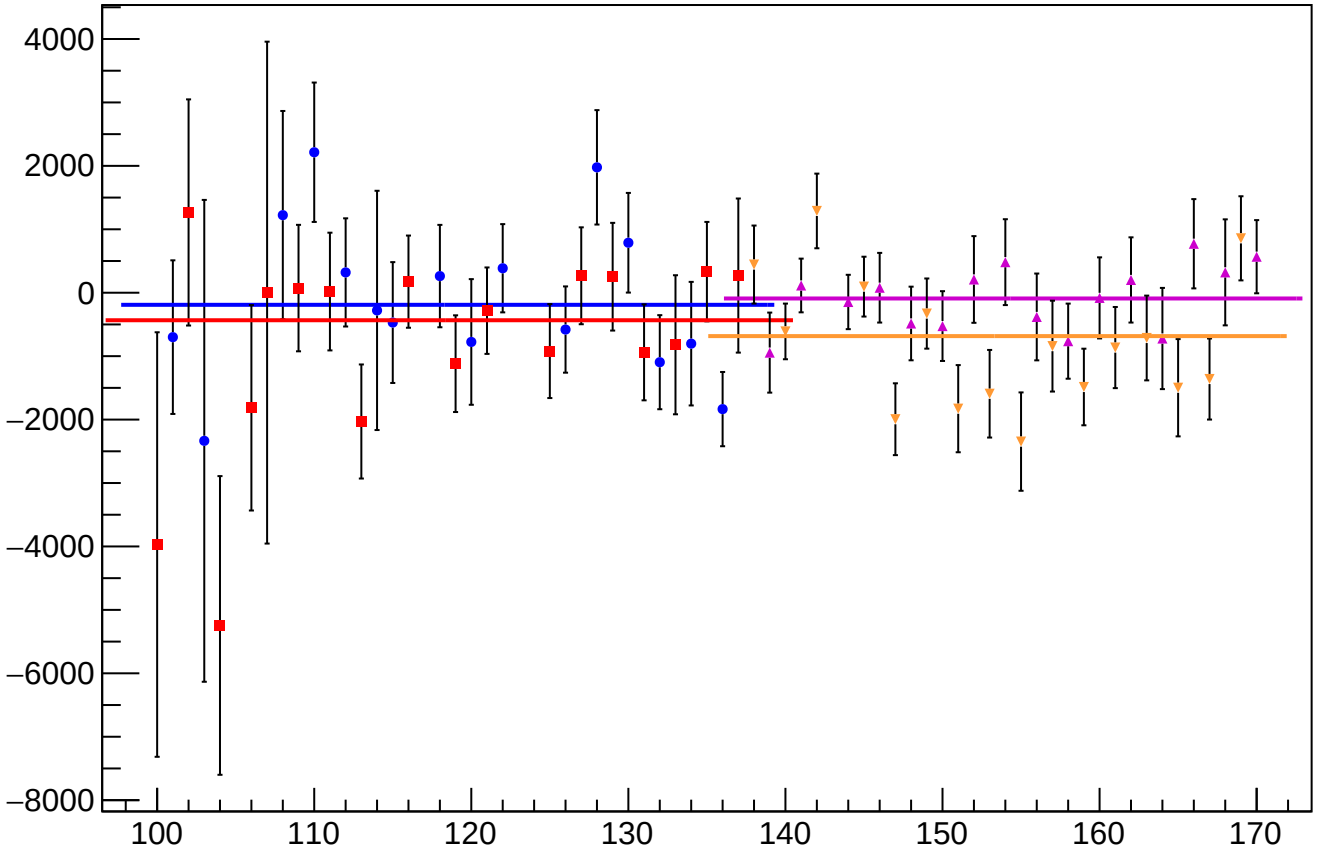
Left In: 1127.762+/-0.219 $\chi^2$/NDF:5136.4/15

+ sign 1158.561+/-0.185 $\chi^2$/NDF: 357752.7/31

All: 1164.035+/-0.130 $\chi^2$/NDF: 925617.4/65

- sign 1169.456+/-0.184 $\chi^2$/NDF: 566114.2/33

# asym_usl_atl1_dd_cor_correction_mean vs Slug




Right In: -190.645+/-222.867 $\chi^2$/NDF: 25.3/15

Left Out: -683.933+/-151.990 $\chi^2$/NDF:41.8/15

Right Out: -433.877+/-223.547 $\chi^2$/NDF: 15.9/17

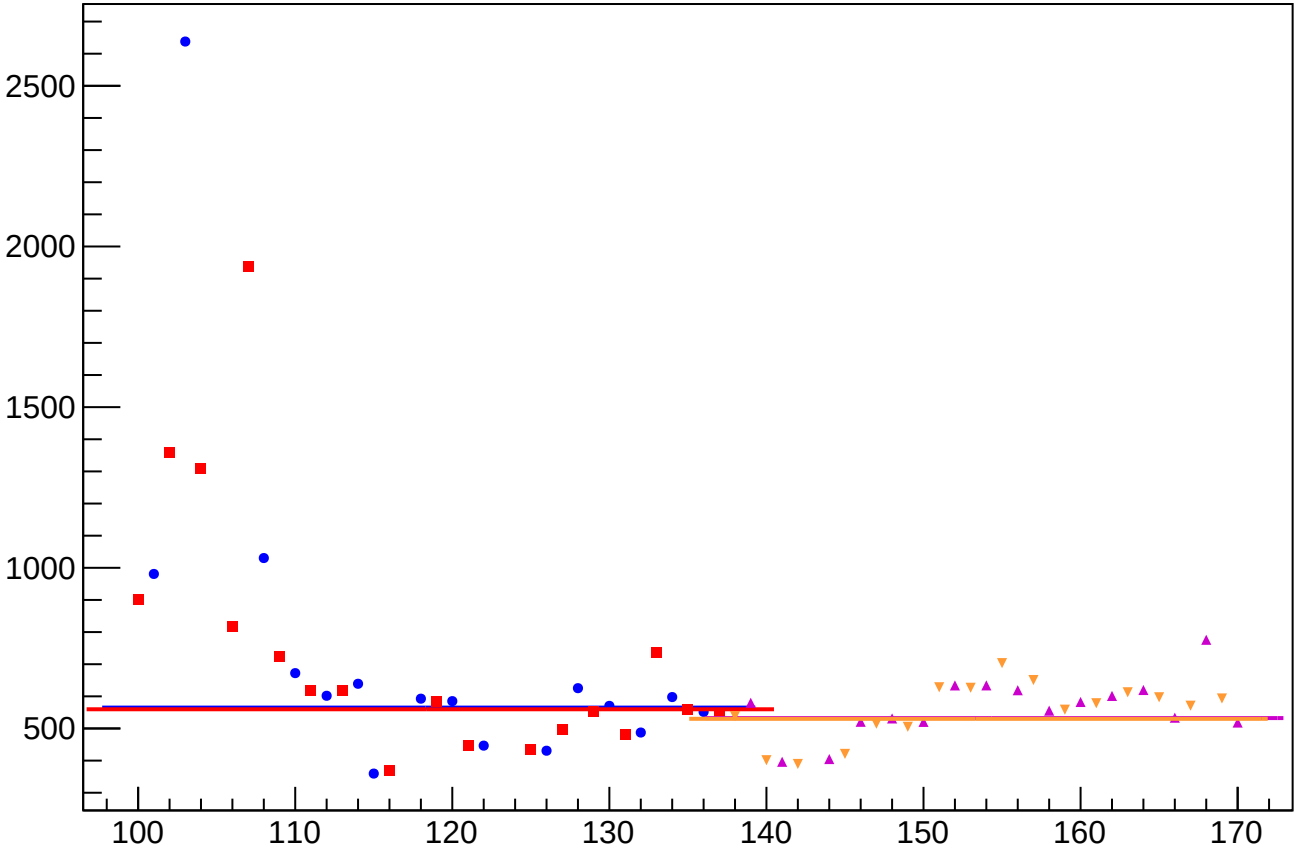
Left In: -90.815+/-148.848 $\chi^2$/NDF:9.5/15

+ sign -527.339+/-125.569 $\chi^2$/NDF: 70.4/31

All: -359.545+/-88.193 $\chi^2$/NDF: 101.0/65

- sign -196.193+/-123.896 $\chi^2$/NDF: 27.1/33

# asym_usl_atl1_dd_cor_correction_rms vs Slug




Right In: 564.954+/-0.158 $\chi^2$/NDF: 1284455.7/15

Left Out: 530.065+/-0.107 $\chi^2$/NDF:724203.2/15

Right Out: 559.758+/-0.158 $\chi^2$/NDF: 1329357.2/17

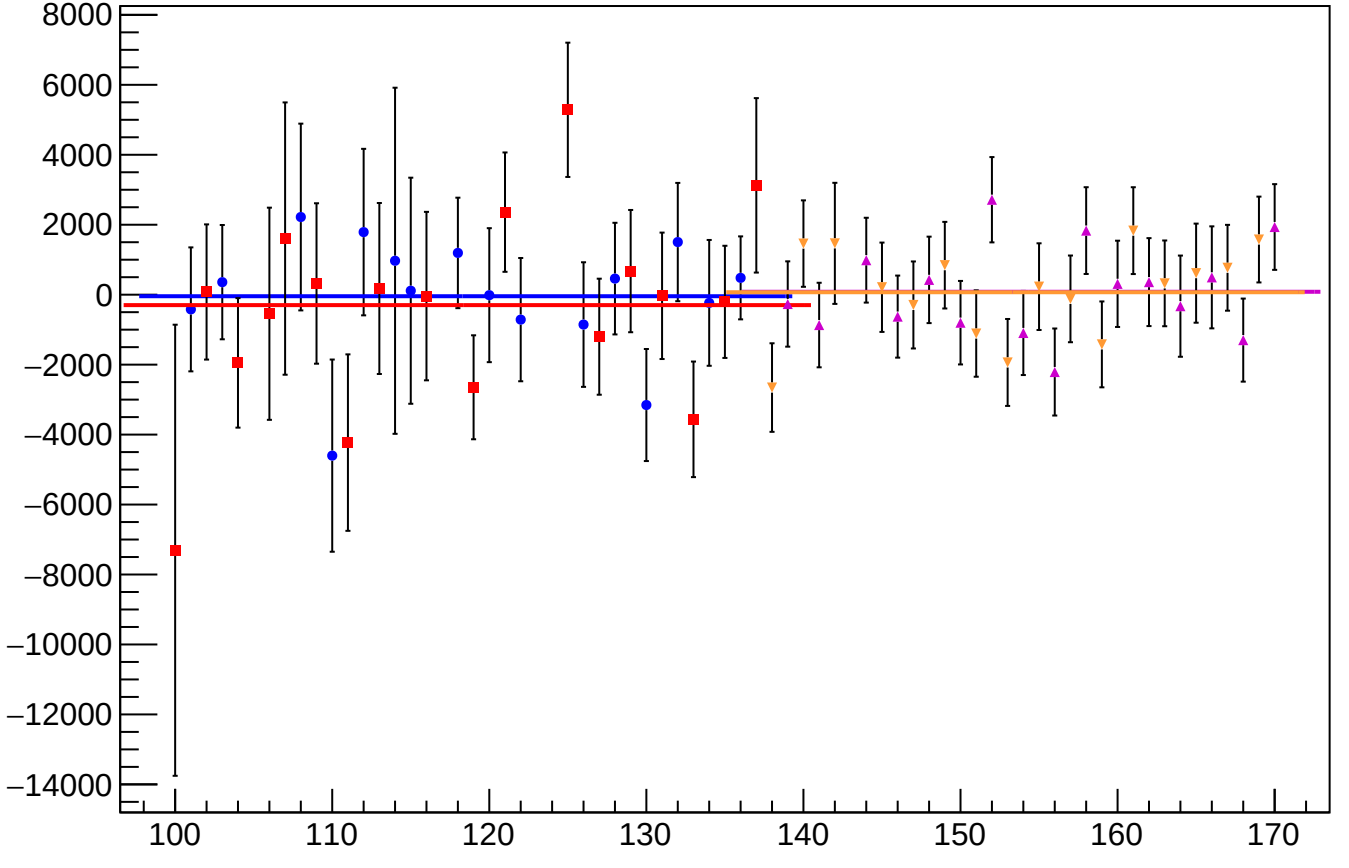
Left In: 532.348+/-0.105 $\chi^2$/NDF:750075.6/15

+ sign 541.141+/-0.089 $\chi^2$/NDF: 2042112.7/31

All: 540.952+/-0.062 $\chi^2$/NDF: 4142385.5/65

- sign 540.768+/-0.088 $\chi^2$/NDF: 2100263.9/33

# eigen_cor_asym_usl_atl1_dd_mean vs Slug




Right In: -43.923+/-459.222 $\chi^2$/NDF: 10.1/15

Left Out: 70.129+/-317.251 $\chi^2$/NDF:16.1/15

Right Out: -298.207+/-475.315 $\chi^2$/NDF: 24.6/17

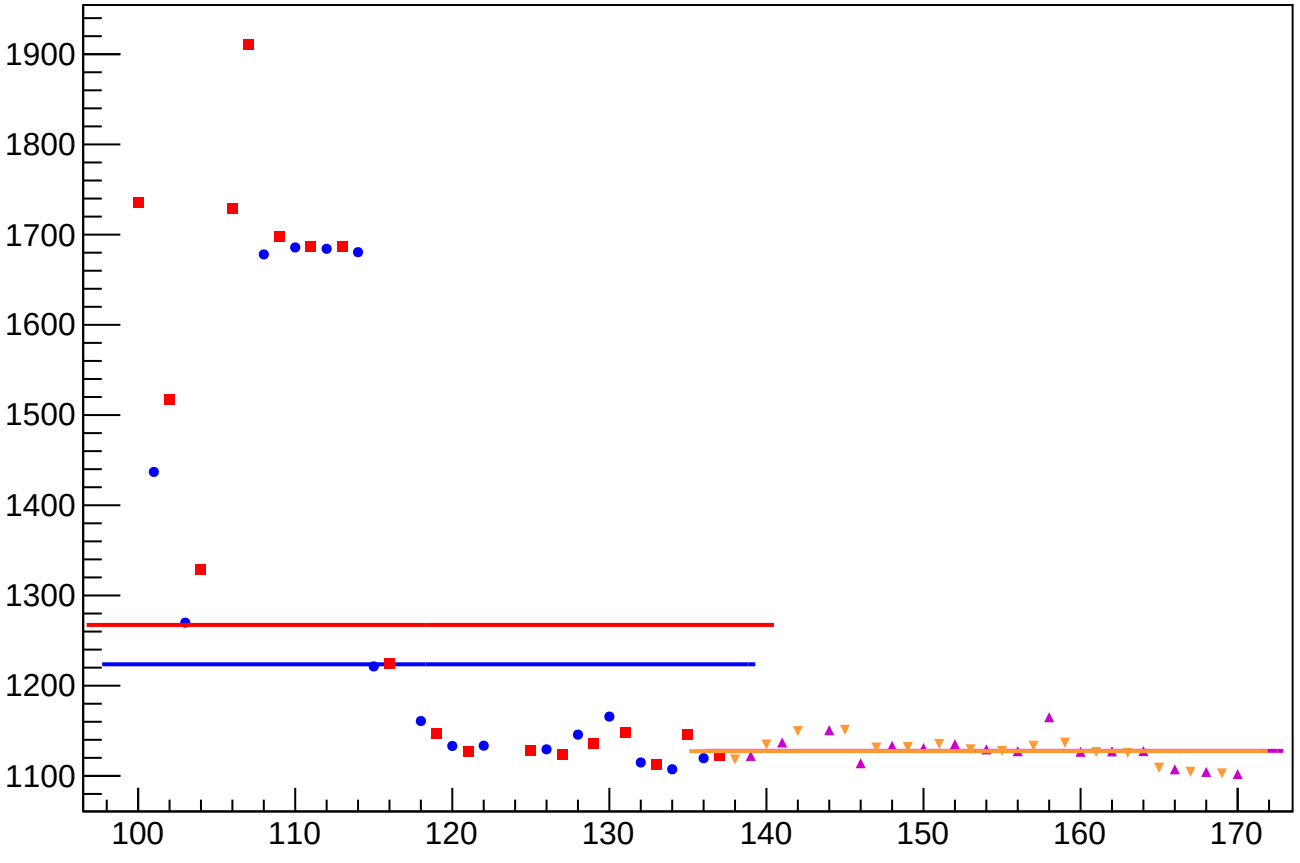
Left In: 83.280+/-310.177 $\chi^2$/NDF:17.1/15

+ sign 33.282+/-261.020 $\chi^2$/NDF: 26.3/31

All: 1.158+/-184.122 $\chi^2$/NDF: 68.5/65

- sign -30.657+/-259.760 $\chi^2$/NDF: 42.2/33

# eigen_cor_asym_usl_atl1_dd_rms vs Slug




Right In: 1223.705+/-0.325 $\chi^2$/NDF: 294966.1/15

Left Out: 1127.470+/-0.224 $\chi^2$/NDF:3331.4/15

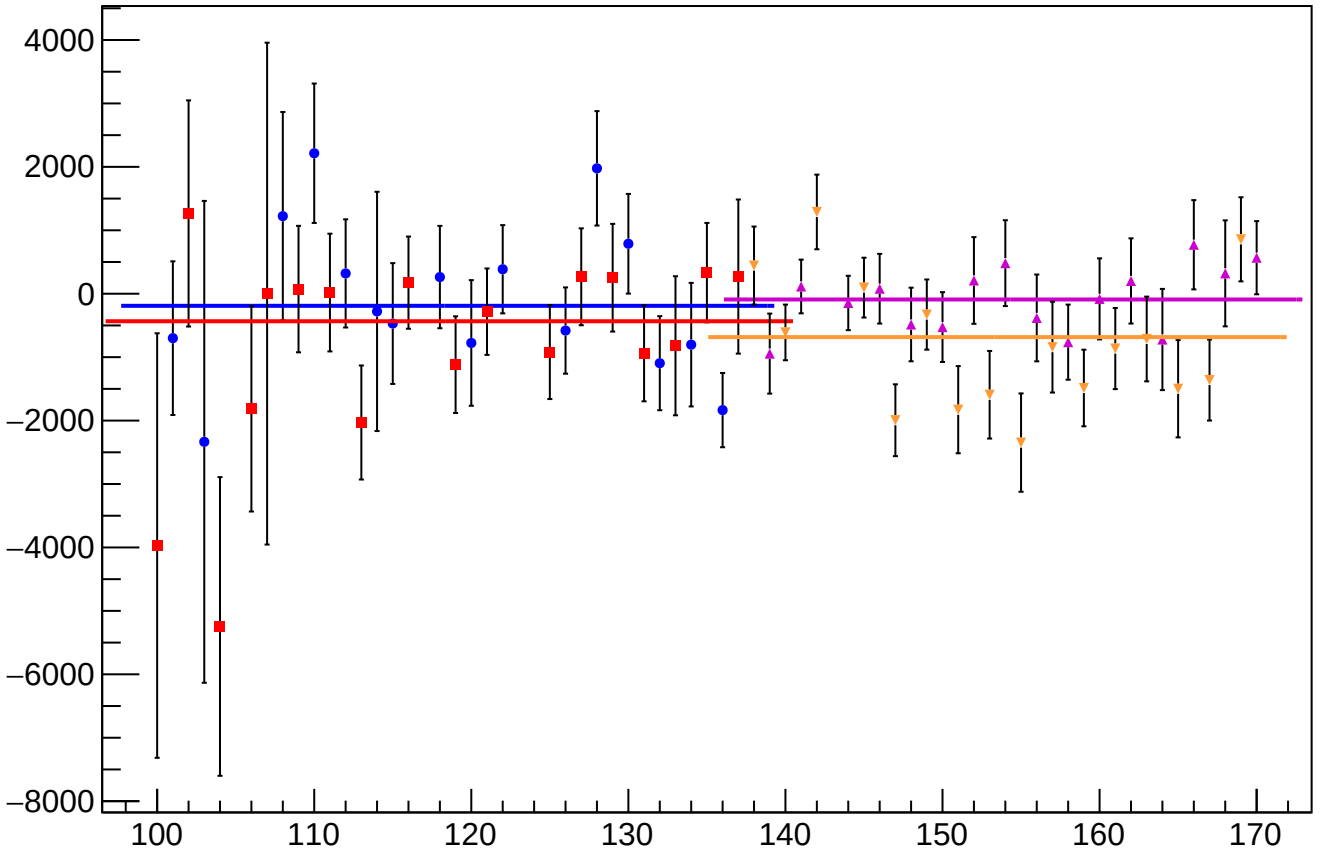
Right Out: 1267.363+/-0.336 $\chi^2$/NDF: 439982.4/17

Left In: 1127.762+/-0.219 $\chi^2$/NDF:5136.4/15

+ sign 1158.561+/-0.185 $\chi^2$/NDF: 357752.7/31

All: 1164.035+/-0.130 $\chi^2$/NDF: 925617.4/65

- sign 1169.456+/-0.184 $\chi^2$/NDF: 566114.2/33




Right In: -190.645+/-222.867 $\chi^2$/NDF: 25.3/15

Left Out: -683.933+/-151.990 $\chi^2$/NDF:41.8/15

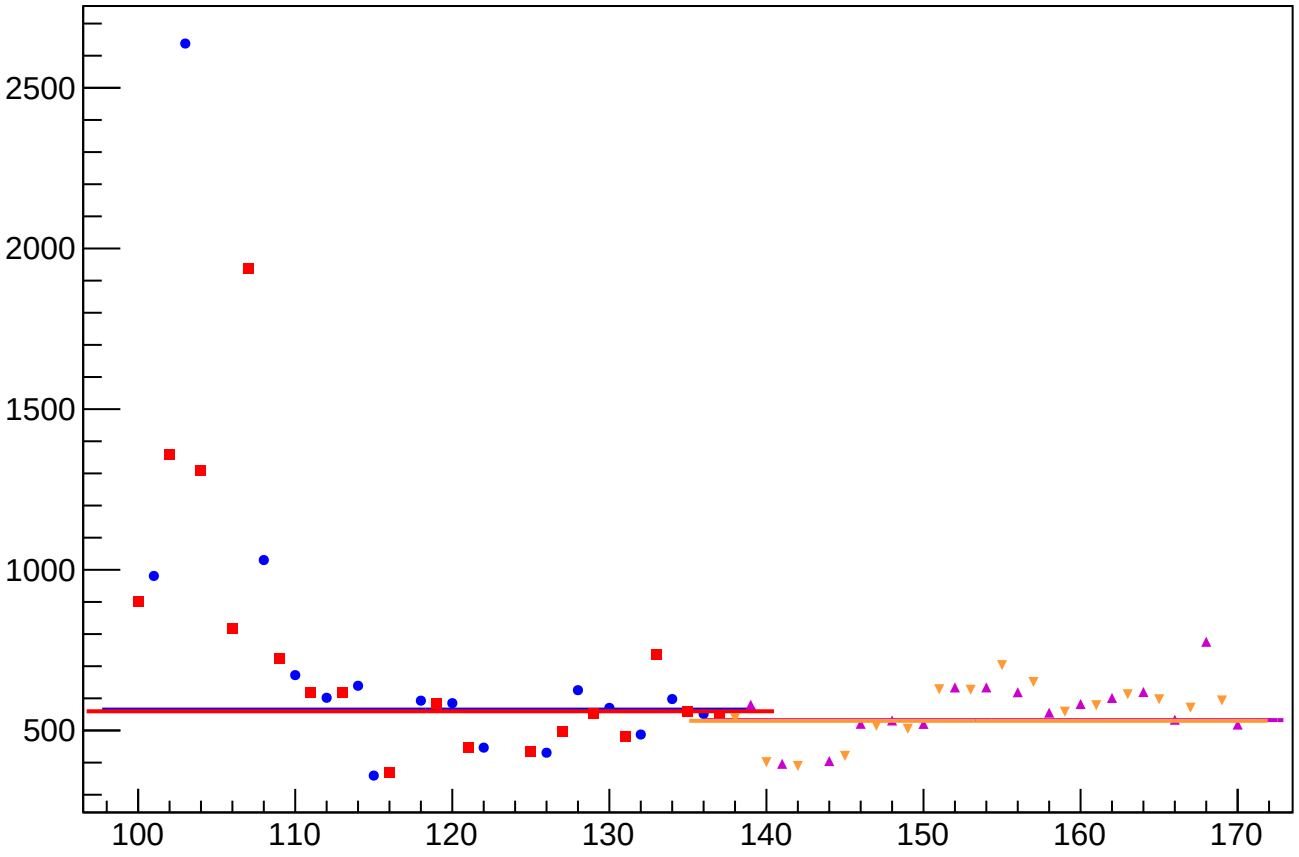
Right Out: -433.877+/-223.547 $\chi^2$/NDF: 15.9/17

Left In: -90.815+/-148.848 $\chi^2$/NDF:9.5/15

+ sign -527.339+/-125.569 $\chi^2$/NDF: 70.4/31

All: -359.545+/-88.193 $\chi^2$/NDF: 101.0/65

- sign -196.193+/-123.896 $\chi^2$/NDF: 27.1/33




Right In: 564.954+/-0.158 $\chi^2$/NDF: 1284455.7/15

Left Out: 530.065+/-0.107 $\chi^2$/NDF:724203.2/15

Right Out: 559.758+/-0.158 $\chi^2$/NDF: 1329357.2/17

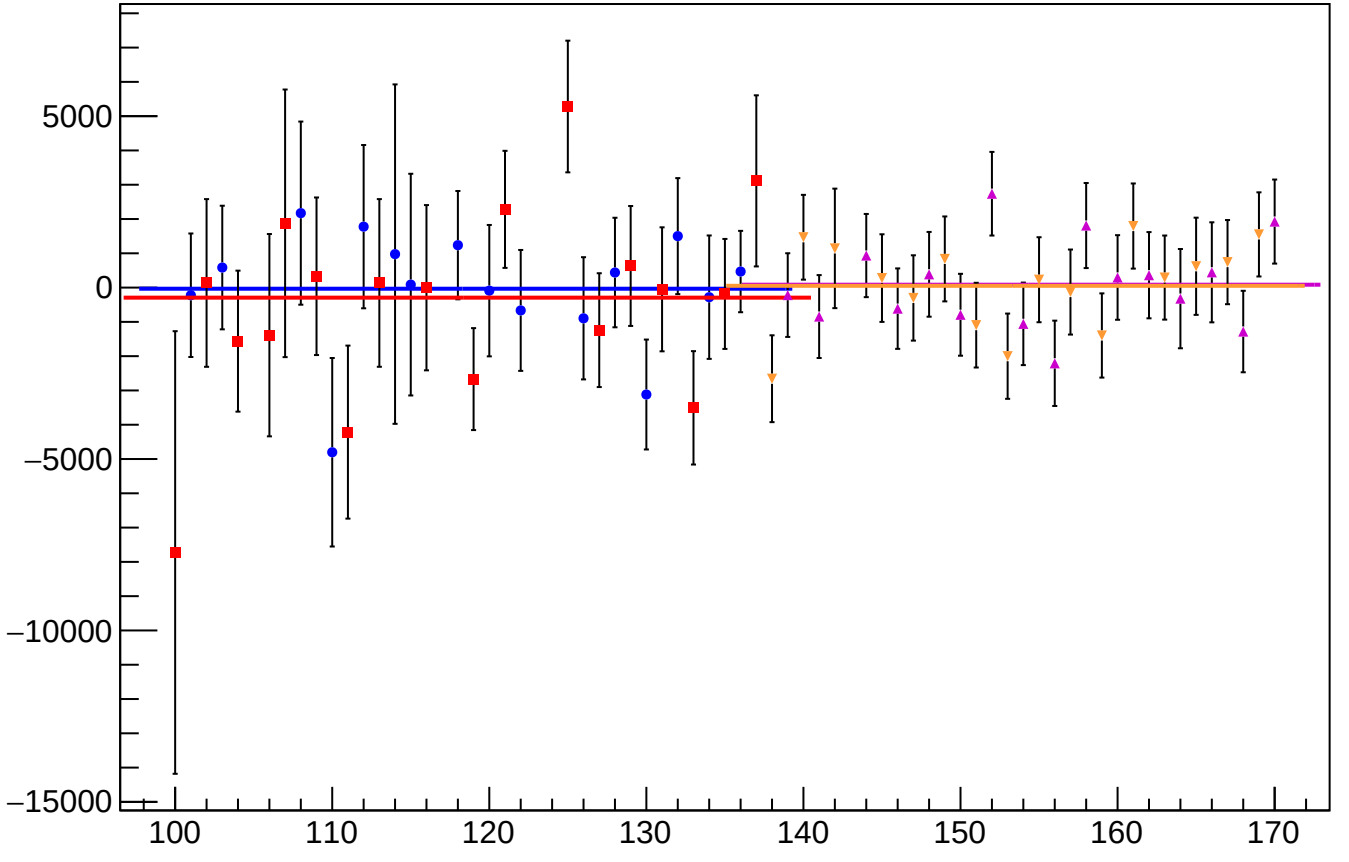
Left In: 532.348+/-0.105 $\chi^2$/NDF:750075.6/15

+ sign 541.141+/-0.089 $\chi^2$/NDF: 2042112.7/31

All: 540.952+/-0.062 $\chi^2$/NDF: 4142385.5/65

- sign 540.768+/-0.088 $\chi^2$/NDF: 2100263.9/33

# dit_asym_usl_atl1_dd_mean vs Slug




Right In: -33.062+/-463.216 $\chi^2$/NDF: 10.3/15

Left Out: 52.049+/-317.450 $\chi^2$/NDF:15.8/15

Right Out: -293.384+/-483.838 $\chi^2$/NDF: 24.2/17

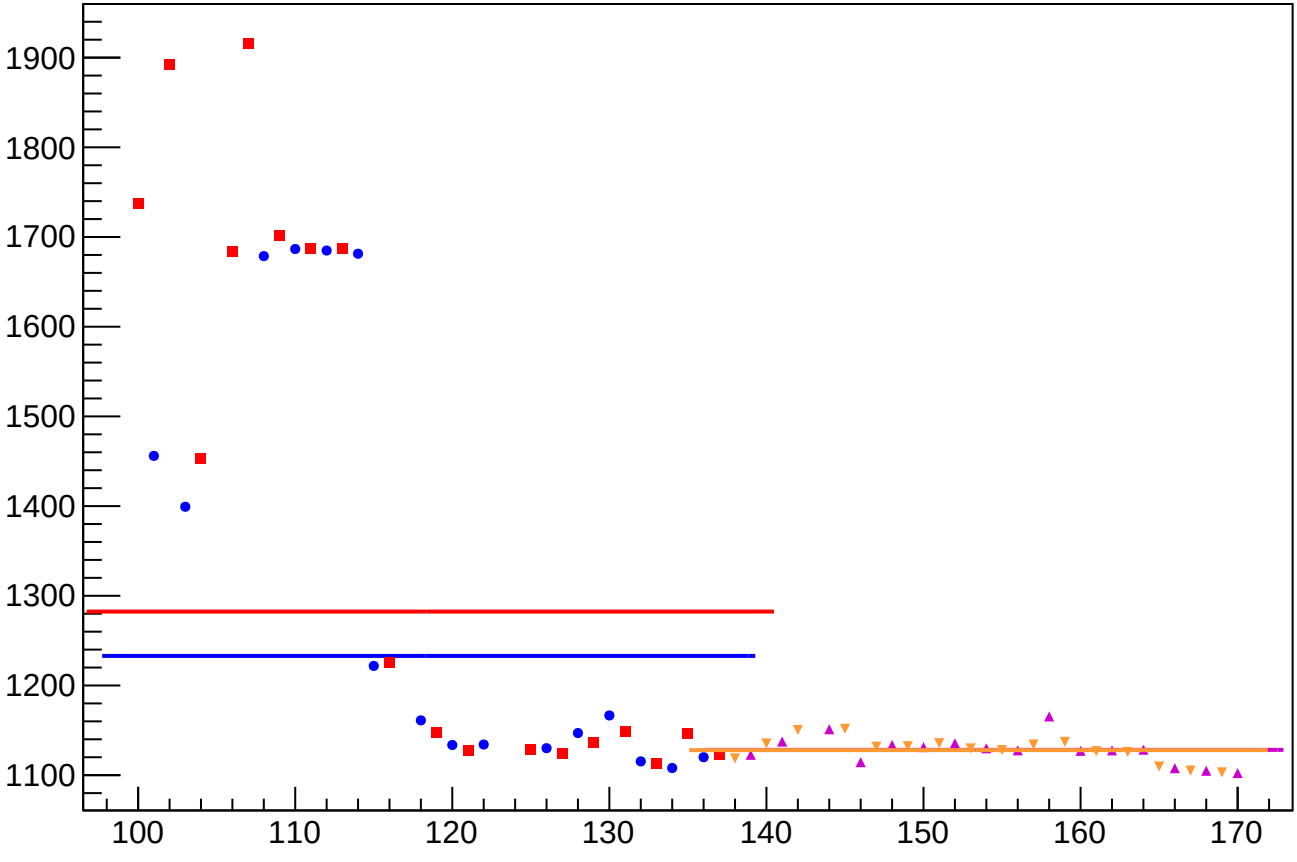
Left In: 84.036+/-310.300 $\chi^2$/NDF:16.9/15

+ sign 24.850+/-261.859 $\chi^2$/NDF: 26.1/31

All: -0.618+/-184.928 $\chi^2$/NDF: 67.6/65

- sign -25.958+/-261.199 $\chi^2$/NDF: 41.5/33

# dit_asym_usl_atl1_dd_rms vs Slug




Right In: 1232.965+/-0.328 $\chi^2$/NDF: 315470.6/15

Left Out: 1127.930+/-0.224 $\chi^2$/NDF:3338.6/15

Right Out: 1282.407+/-0.342 $\chi^2$/NDF: 543403.8/17

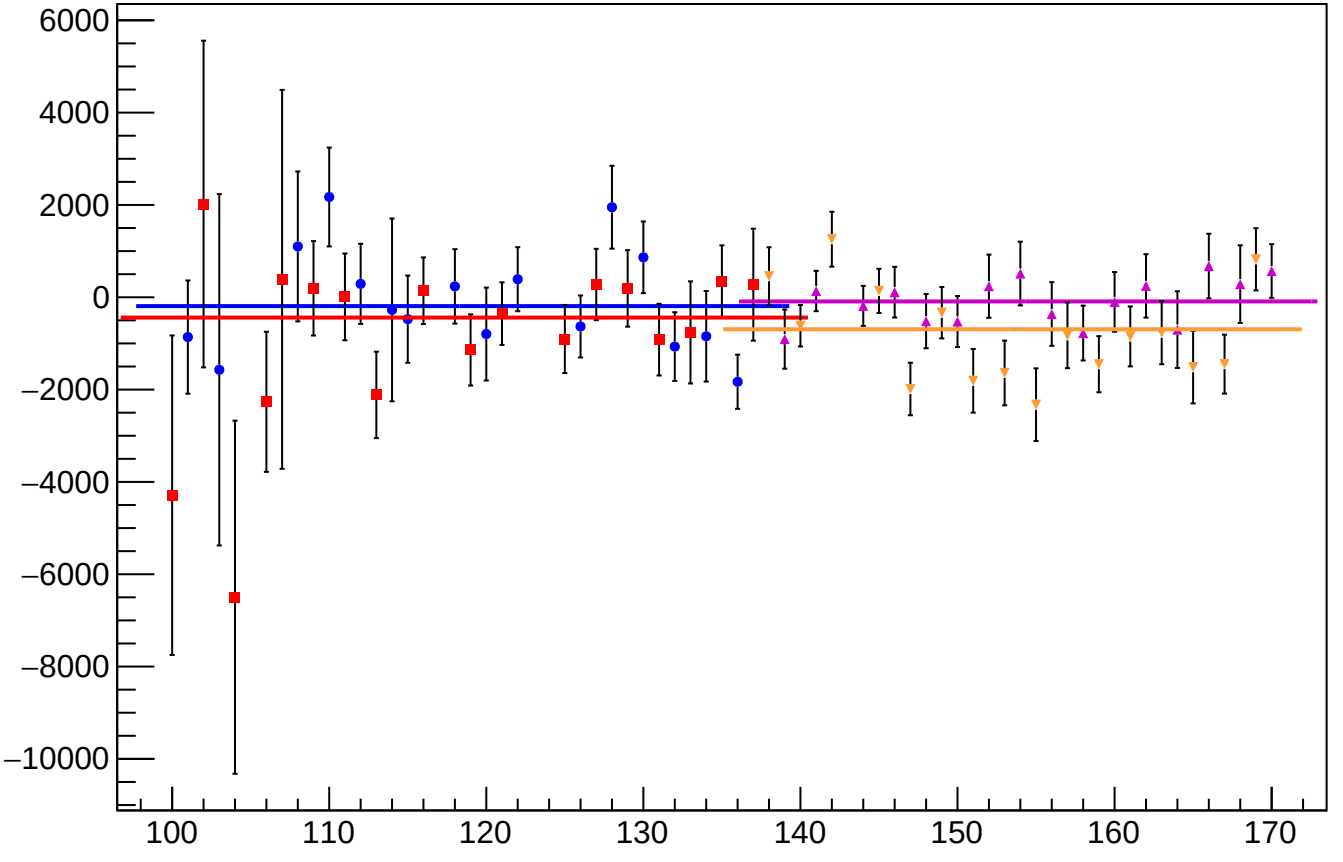
Left In: 1128.208+/-0.219 $\chi^2$/NDF:5133.8/15

+ sign 1161.496+/-0.185 $\chi^2$/NDF: 388779.2/31

All: 1167.336+/-0.131 $\chi^2$/NDF: 1083238.1/65

- sign 1173.147+/-0.185 $\chi^2$/NDF: 692474.3/33

# asym_usl_atl1_dd_dit_correction_mean vs Slug




Right In: -191.528+/-222.764 $\chi^2$/NDF: 25.3/15

Left Out: -692.664+/-153.861 $\chi^2$/NDF:40.7/15

Right Out: -439.610+/-226.600 $\chi^2$/NDF: 14.6/17

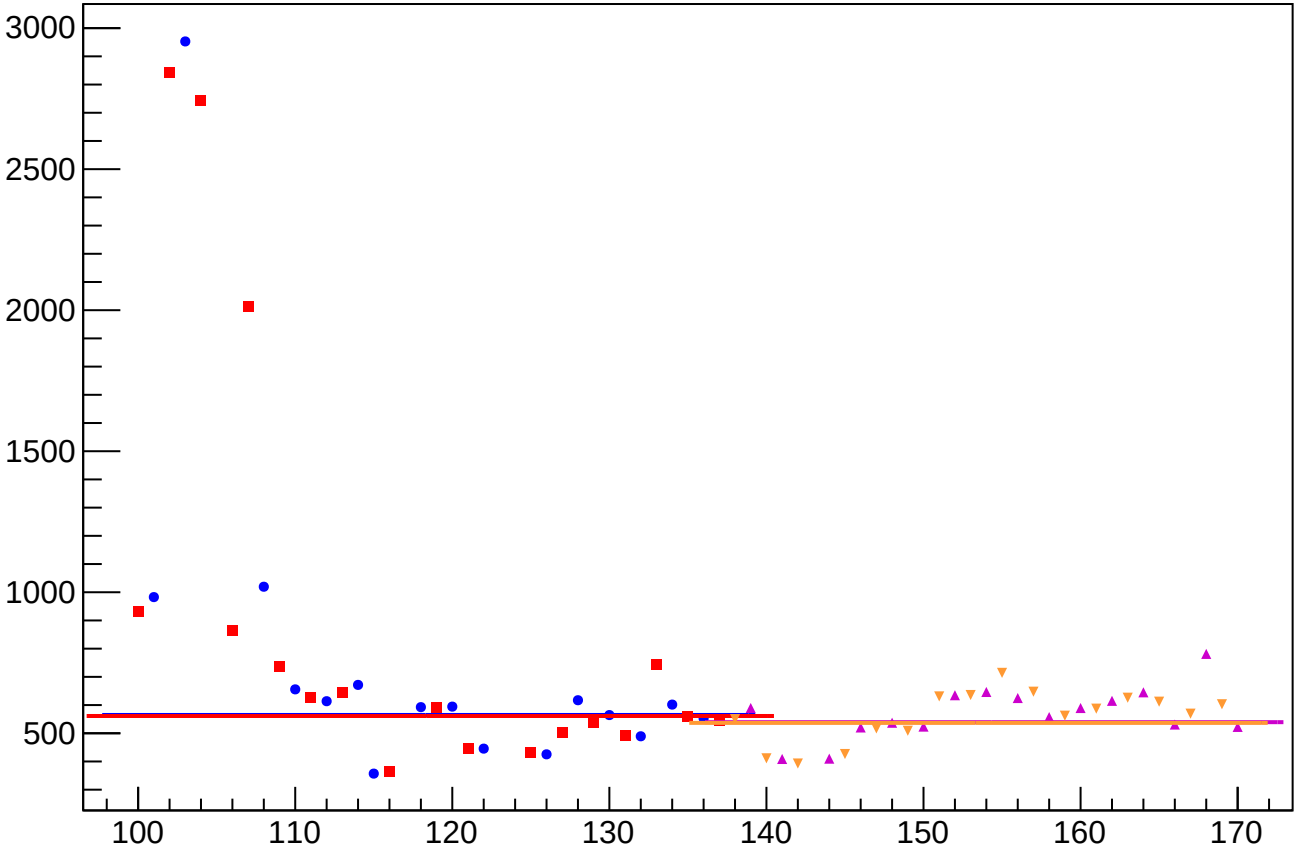
Left In: -90.046+/-150.699 $\chi^2$/NDF:9.2/15

+ sign -530.809+/-126.599 $\chi^2$/NDF: 69.4/31

All: -362.549+/-89.122 $\chi^2$/NDF: 98.4/65

- sign -197.242+/-125.483 $\chi^2$/NDF: 25.5/33

# asym_usl_atl1_dd_dit_correction_rms vs Slug




Right In: 564.871+/-0.158 $\chi^2$/NDF: 1480375.5/15

Left Out: 536.883+/-0.109 $\chi^2$/NDF:707645.2/15

Right Out: 561.273+/-0.160 $\chi^2$/NDF: 2273371.7/17

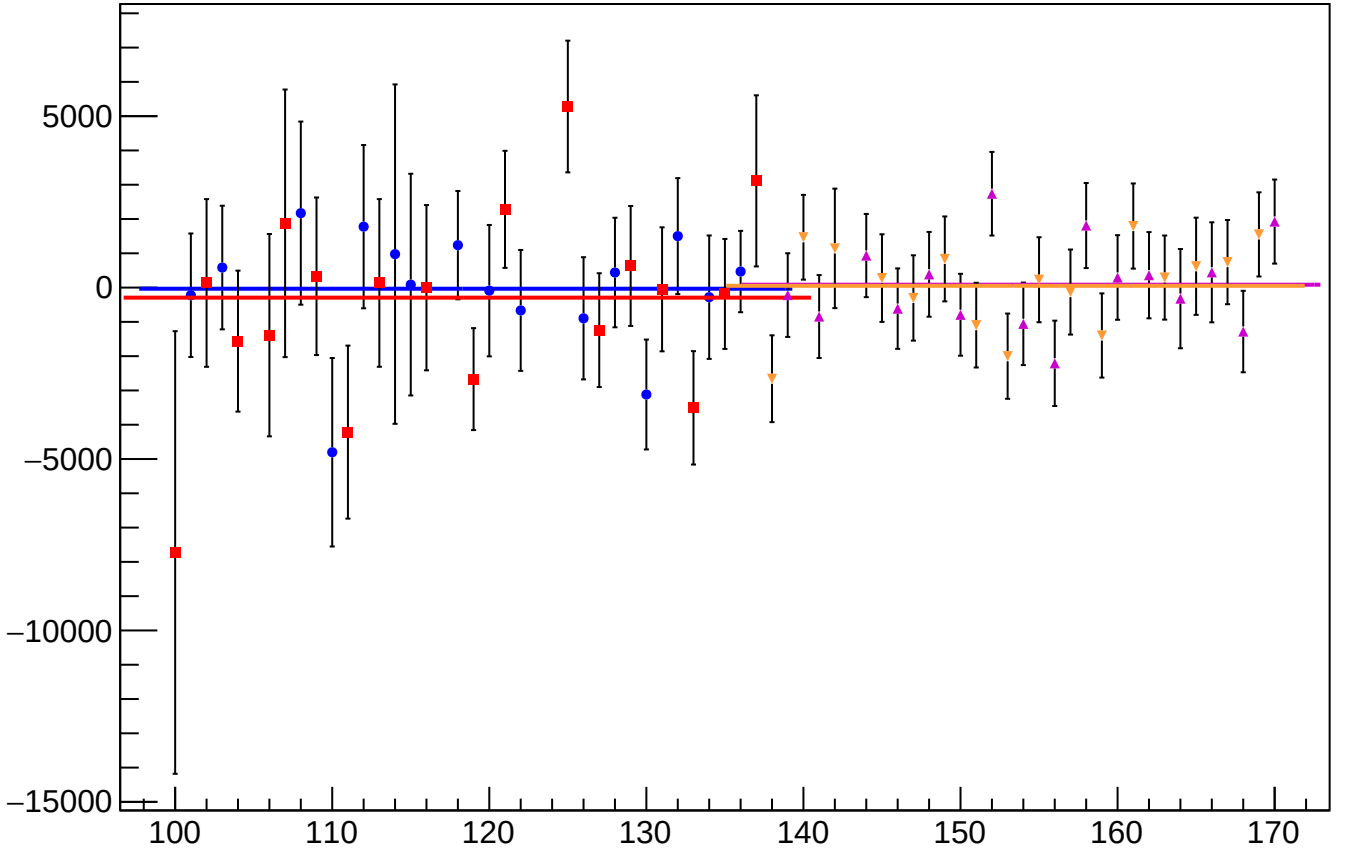
Left In: 539.362+/-0.107 $\chi^2$/NDF:729135.7/15

+ sign 545.922+/-0.090 $\chi^2$/NDF: 2209394.6/31

All: 546.003+/-0.063 $\chi^2$/NDF: 5224868.8/65

- sign 546.081+/-0.089 $\chi^2$/NDF: 3015472.6/33

# eigen_dit_asym_usl_atl1_dd_mean vs Slug




Right In: -33.061+/-463.216 $\chi^2$/NDF: 10.3/15

Left Out: 52.047+/-317.450 $\chi^2$/NDF:15.8/15

Right Out: -293.384+/-483.838 $\chi^2$/NDF: 24.2/17

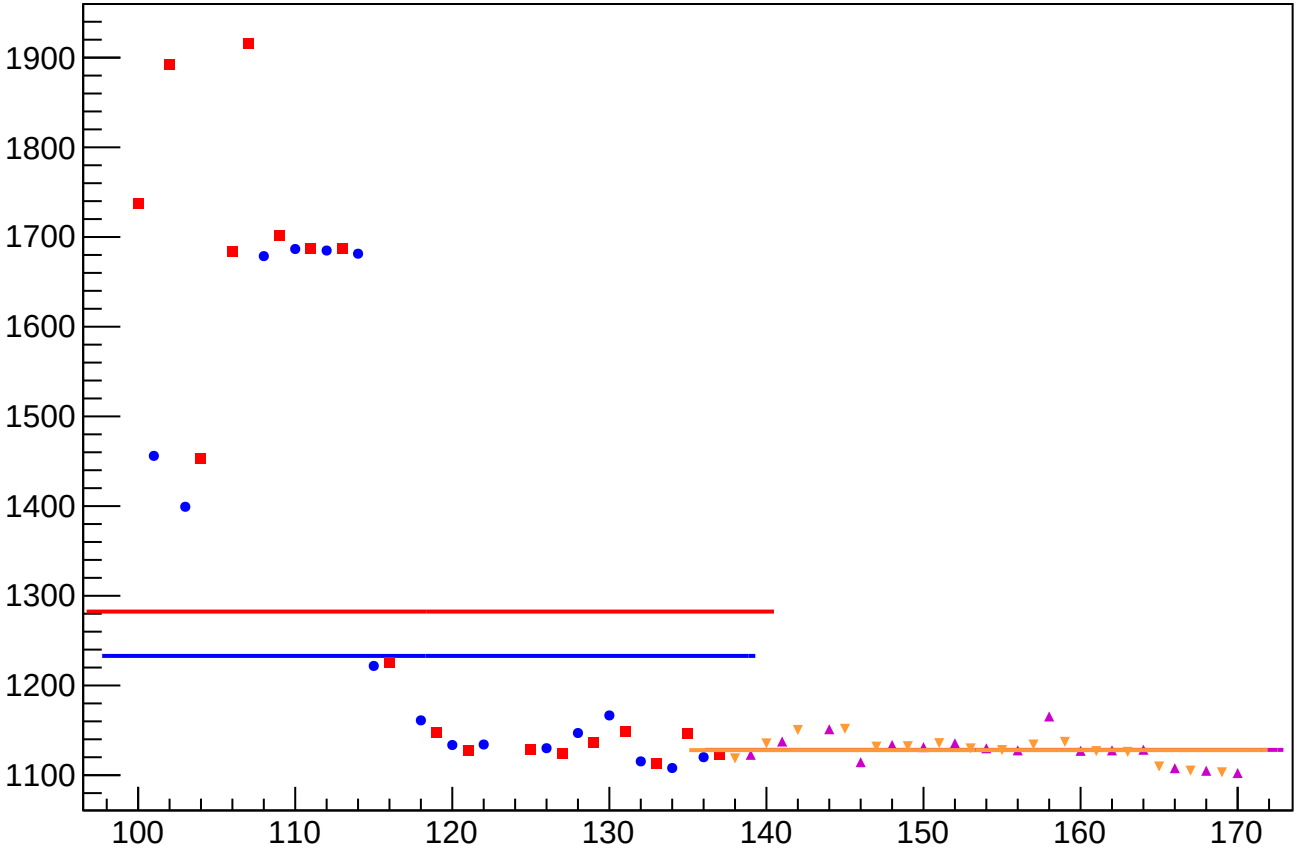
Left In: 84.035+/-310.300 $\chi^2$/NDF:16.9/15

+ sign 24.849+/-261.859 $\chi^2$/NDF: 26.1/31

All: -0.619+/-184.928 $\chi^2$/NDF: 67.6/65

- sign -25.958+/-261.199 $\chi^2$/NDF: 41.5/33

# eigen_dit_asym_usl_atl1_dd_rms vs Slug




Right In: 1232.965+/-0.328 $\chi^2$/NDF: 315470.2/15

Left Out: 1127.930+/-0.224 $\chi^2$/NDF:3338.6/15

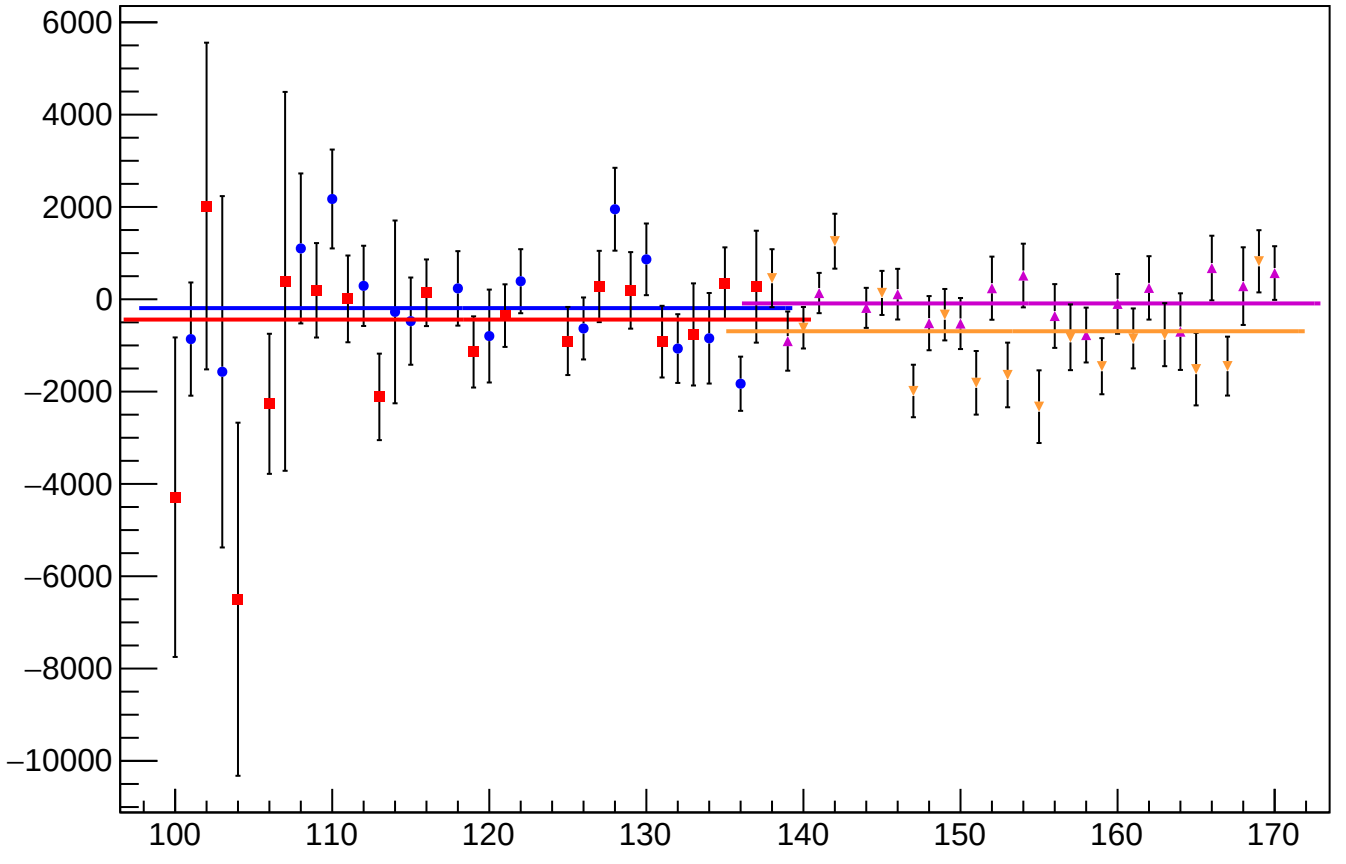
Right Out: 1282.407+/-0.342 $\chi^2$/NDF: 543403.2/17

Left In: 1128.208+/-0.219 $\chi^2$/NDF:5133.8/15

+ sign 1161.496+/-0.185 $\chi^2$/NDF: 388778.7/31

All: 1167.336+/-0.131 $\chi^2$/NDF: 1083236.9/65

- sign 1173.147+/-0.185 $\chi^2$/NDF: 692473.6/33




Right In: -191.527+/-222.763 $\chi^2$/NDF: 25.3/15

Left Out: -692.662+/-153.860 $\chi^2$/NDF:40.7/15

Right Out: -439.611+/-226.600 $\chi^2$/NDF: 14.6/17

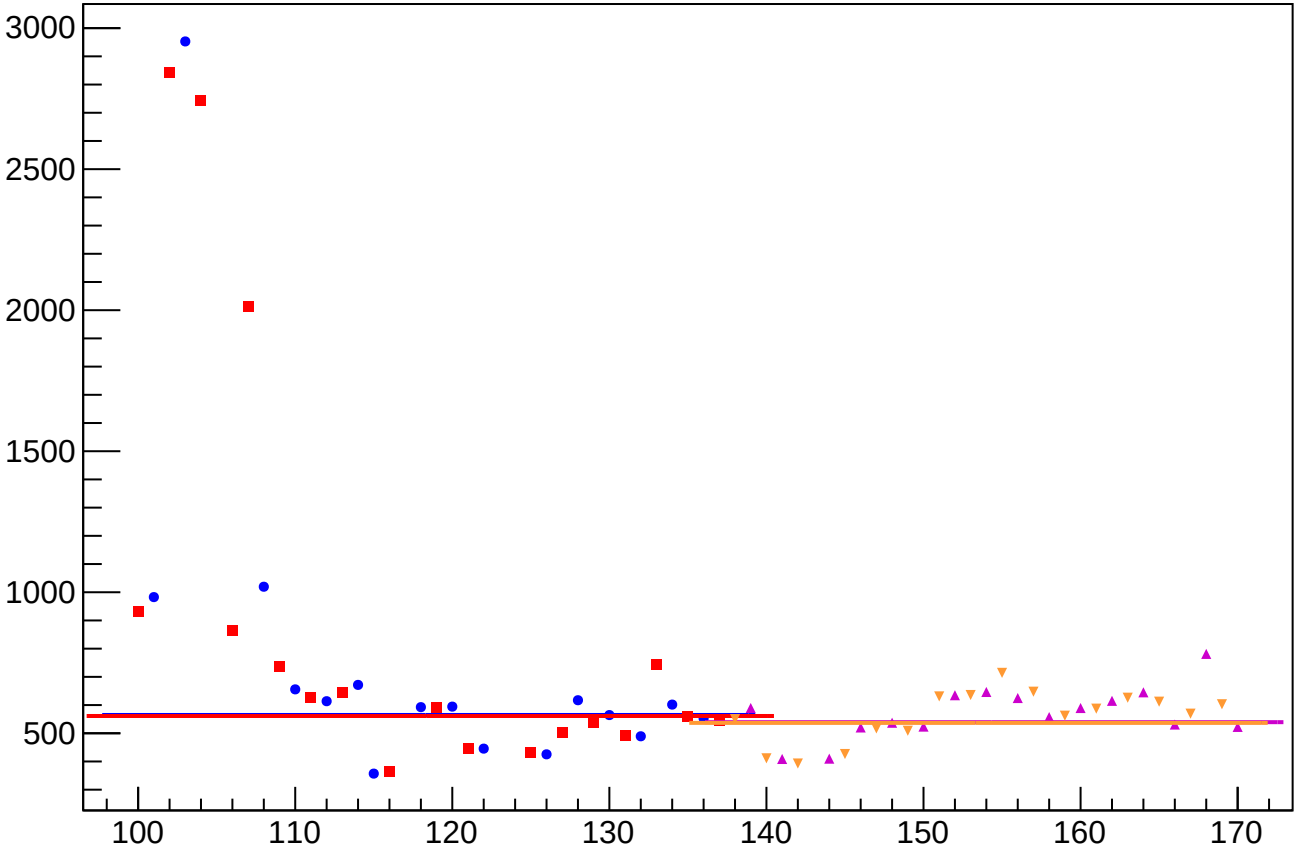
Left In: -90.046+/-150.699 $\chi^2$/NDF:9.2/15

+ sign -530.808+/-126.599 $\chi^2$/NDF: 69.4/31

All: -362.549+/-89.122 $\chi^2$/NDF: 98.4/65

- sign -197.242+/-125.483 $\chi^2$/NDF: 25.5/33

# asym_usl_atl1_dd_eigen_dit_correction_rms vs Slug




Right In: 564.871+/-0.158 $\chi^2$/NDF: 1480372.9/15

Left Out: 536.882+/-0.109 $\chi^2$/NDF:707663.8/15

Right Out: 561.273+/-0.160 $\chi^2$/NDF: 2273372.4/17

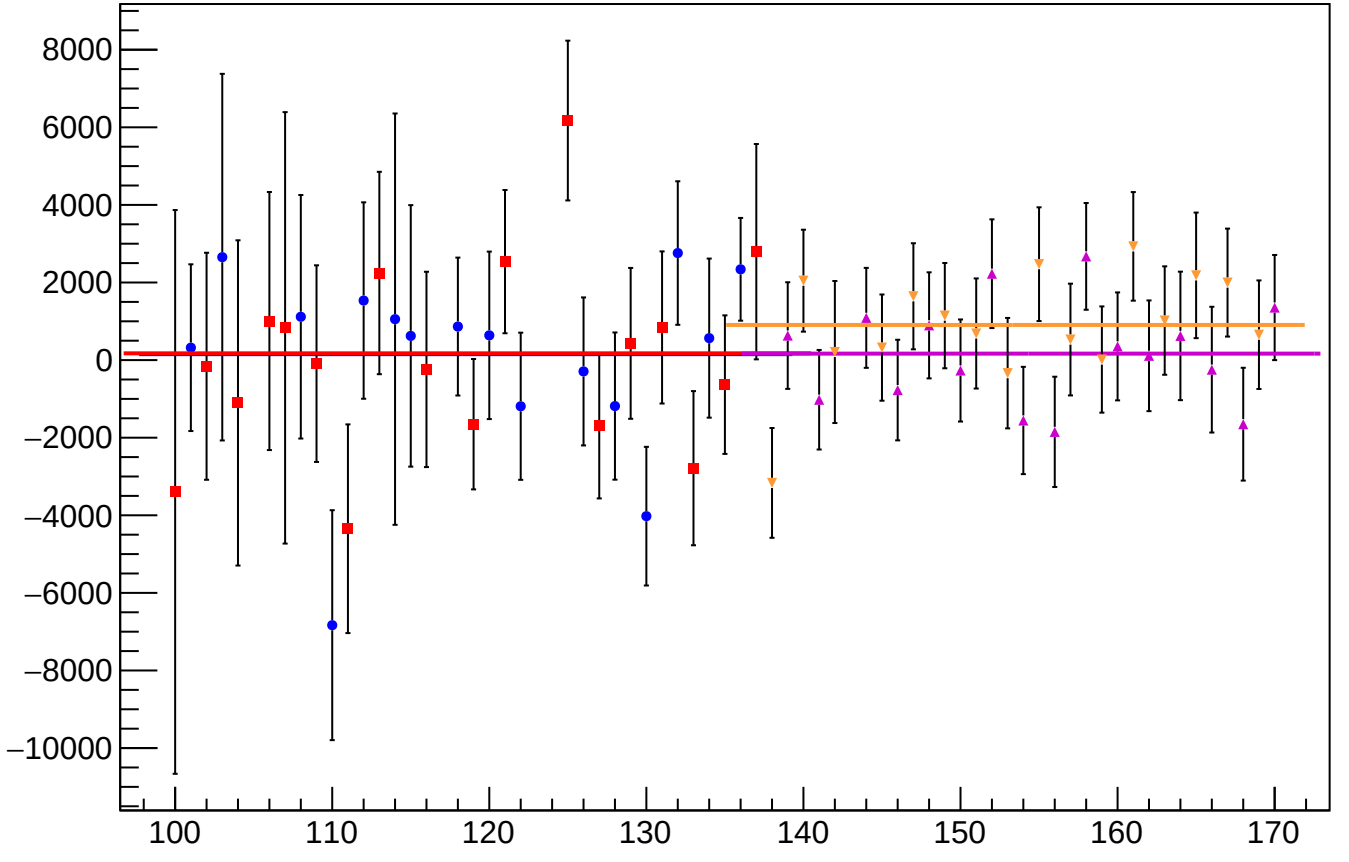
Left In: 539.362+/-0.107 $\chi^2$/NDF:729148.1/15

+ sign 545.922+/-0.090 $\chi^2$/NDF: 2209411.8/31

All: 546.002+/-0.063 $\chi^2$/NDF: 5224899.6/65

- sign 546.081+/-0.089 $\chi^2$/NDF: 3015486.3/33

# asym_usl_atl1_dd_mean vs Slug




Right In: 153.375+/-532.096 $\chi^2$/NDF: 17.8/15

Left Out: 905.883+/-355.946 $\chi^2$/NDF:15.5/15

Right Out: 174.319+/-550.153 $\chi^2$/NDF: 19.7/17

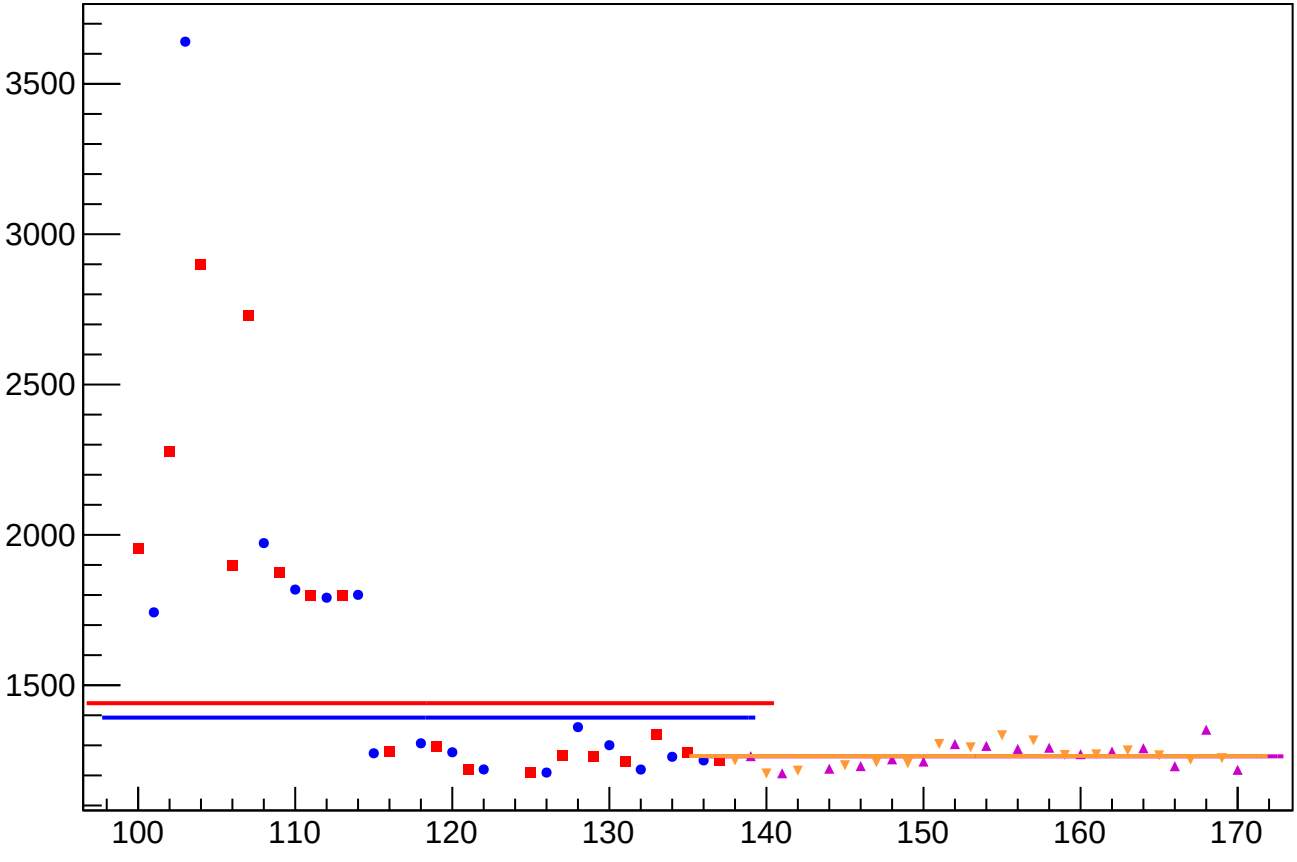
Left In: 166.735+/-347.645 $\chi^2$/NDF:13.9/15

+ sign 673.244+/-295.853 $\chi^2$/NDF: 34.6/31

All: 419.390+/-208.501 $\chi^2$/NDF: 69.7/65

- sign 168.899+/-293.887 $\chi^2$/NDF: 33.6/33

# asym_usl_atl1_dd_rms vs Slug




Right In: 1392.299+/-0.376 $\chi^2$/NDF: 779240.9/15

Left Out: 1264.429+/-0.252 $\chi^2$/NDF:17657.1/15

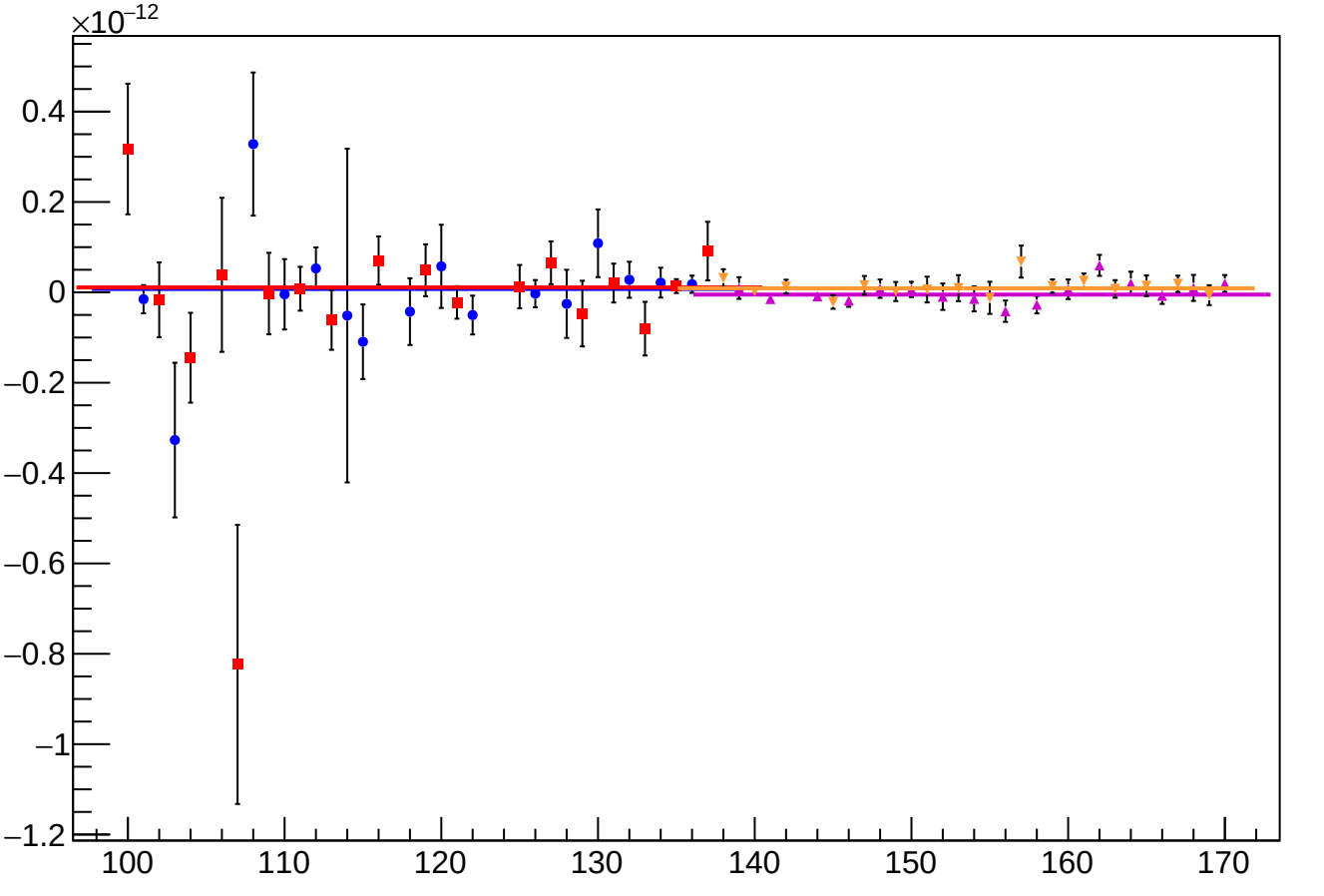
Right Out: 1440.222+/-0.389 $\chi^2$/NDF: 854885.8/17

Left In: 1263.464+/-0.246 $\chi^2$/NDF:23286.2/15

+ sign 1303.960+/-0.209 $\chi^2$/NDF: 876691.2/31

All: 1308.965+/-0.147 $\chi^2$/NDF: 1903540.7/65

- sign 1313.903+/-0.208 $\chi^2$/NDF: 1025712.4/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 16.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11.2/15

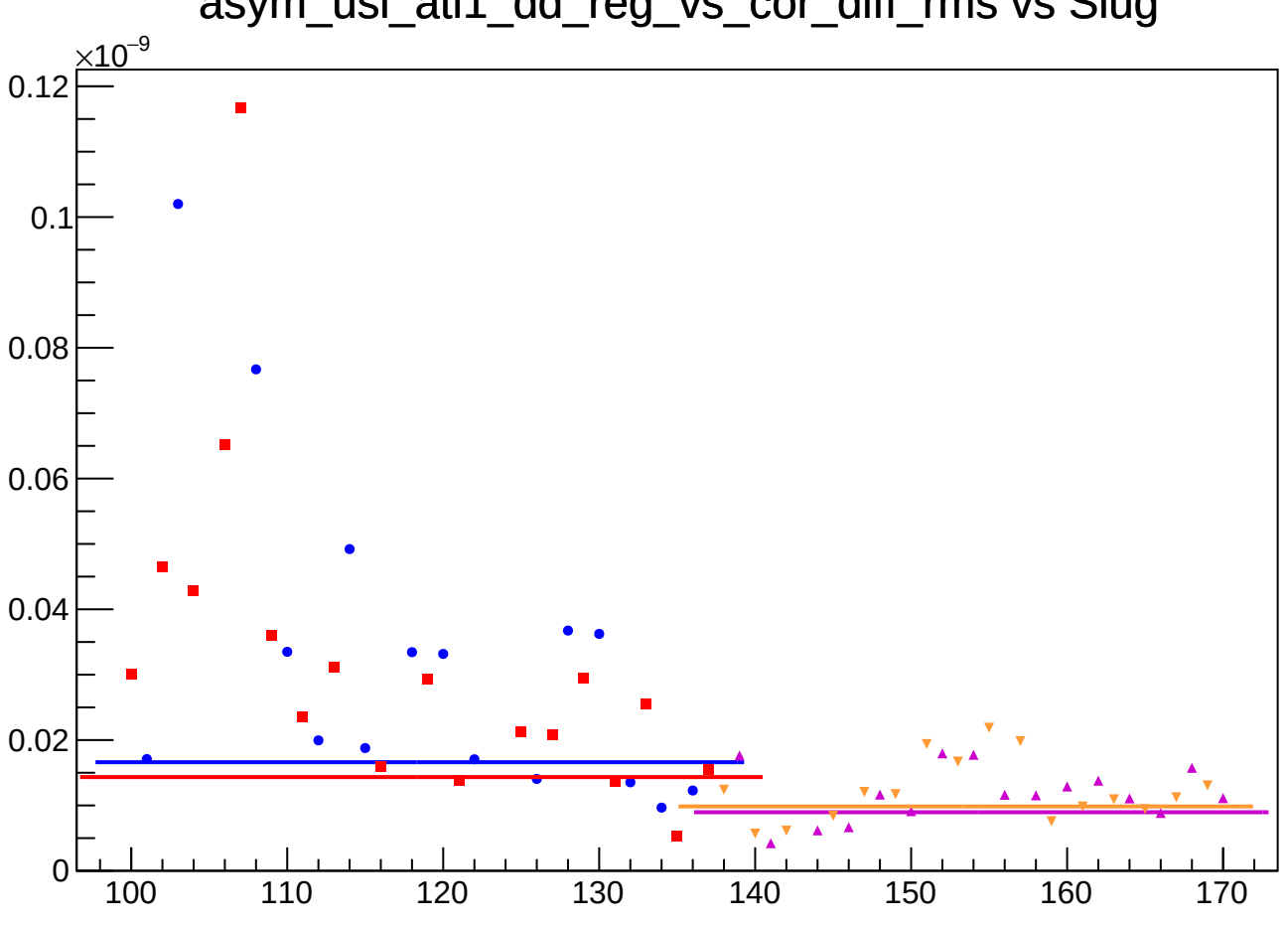
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 24.0/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:18.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 28.1/31

All: 0.000+/-0.000 $\chi^2$/NDF: 76.0/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 44.2/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1573068.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1323320.5/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2258014.9/17

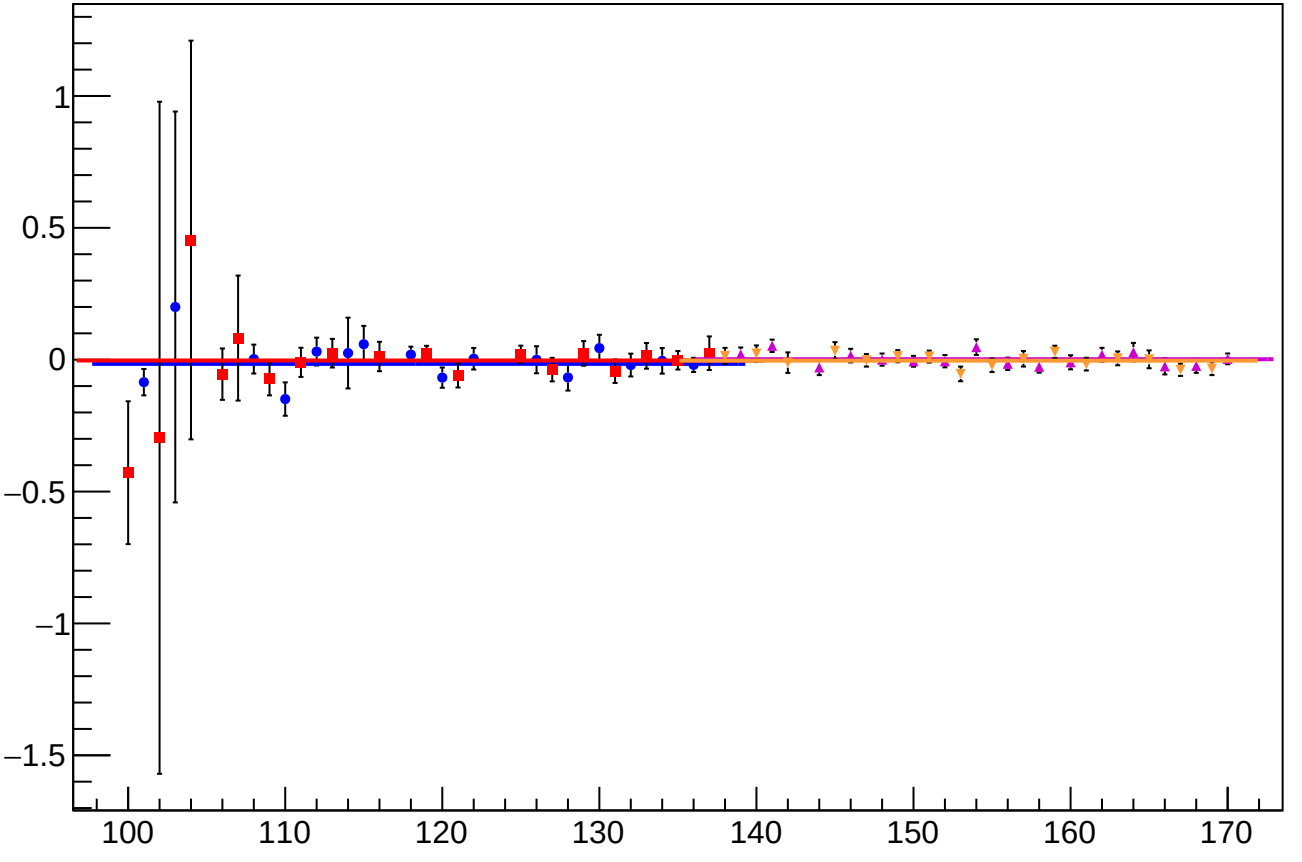
Left In: 0.000+/-0.000 $\chi^2$/NDF:1754600.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3550884.8/31

All: 0.000+/-0.000 $\chi^2$/NDF: 8081435.8/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 4452708.6/33

# asym_usl_atl1_dd_dit_vs_cor_diff_mean vs Slug




Right In: -0.016+/-0.012 $\chi^2$/NDF: 14.6/15

Left Out: -0.004+/-0.007 $\chi^2$/NDF:13.5/15

Right Out: -0.003+/-0.012 $\chi^2$/NDF: 9.9/17

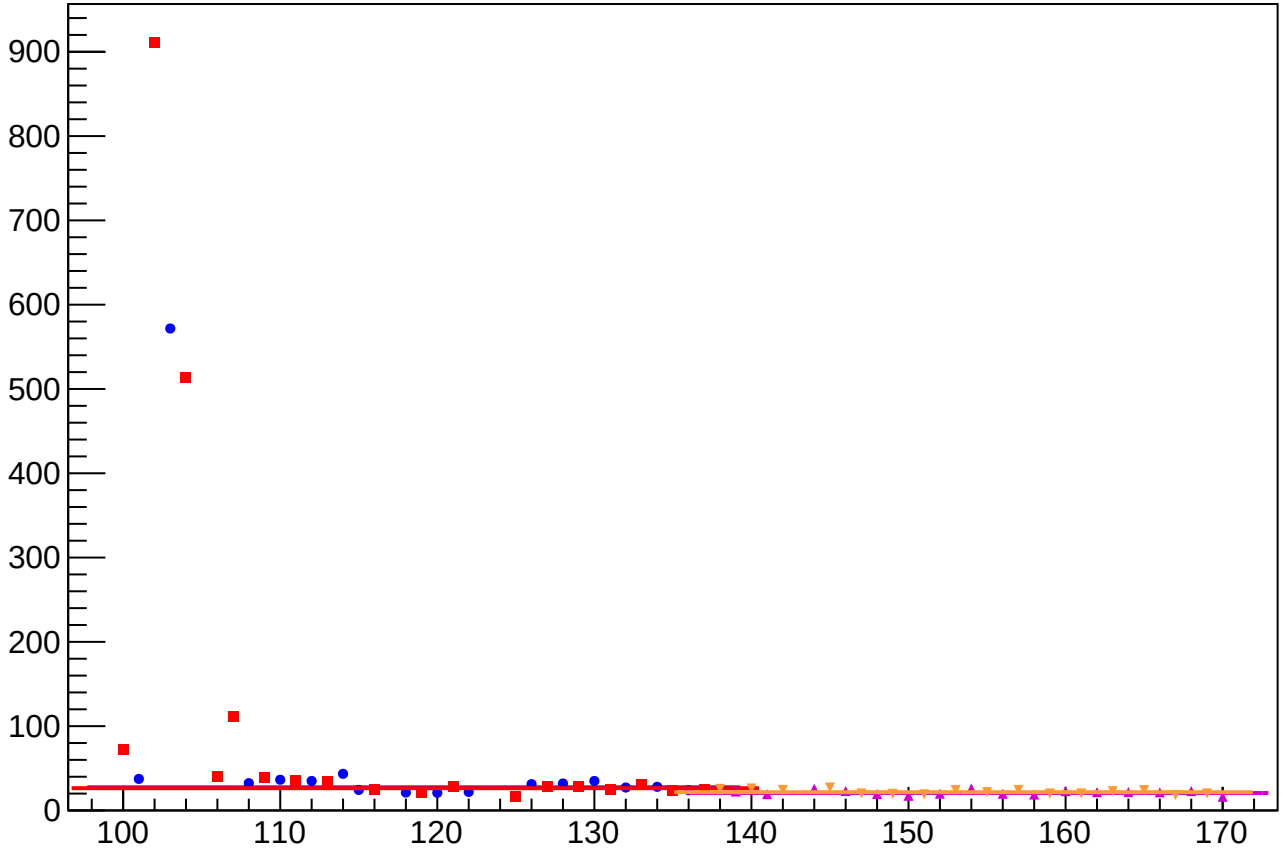
Left In: 0.002+/-0.006 $\chi^2$/NDF:14.2/15

+ sign -0.007+/-0.006 $\chi^2$/NDF: 28.9/31

All: -0.003+/-0.004 $\chi^2$/NDF: 54.0/65

- sign 0.001+/-0.006 $\chi^2$/NDF: 24.2/33

# asym_usl_atl1_dd_dit_vs_cor_diff_rms vs Slug




Right In: 27.305+/-0.008 $\chi^2$/NDF: 1568329.0/15

Left Out: 21.682+/-0.005 $\chi^2$/NDF:300064.6/15

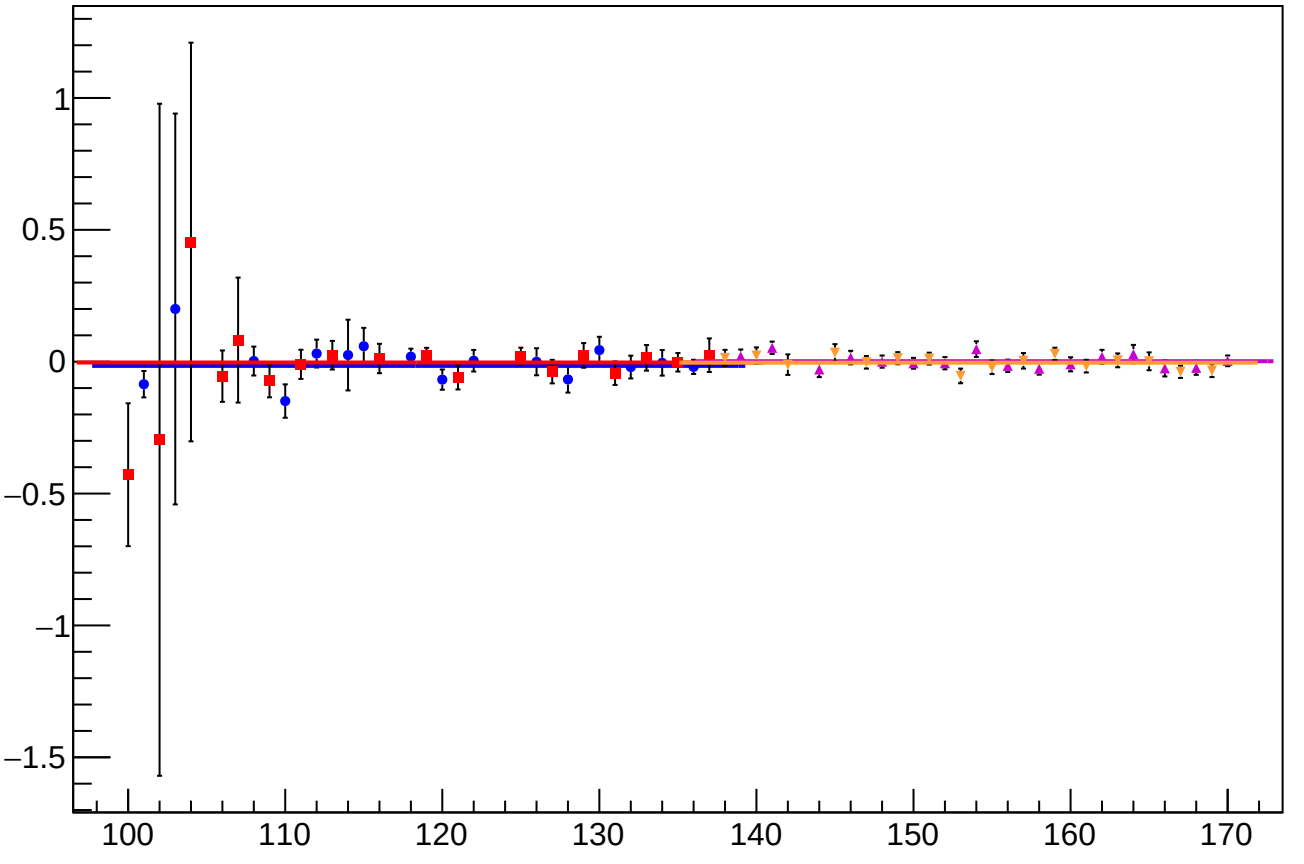
Right Out: 26.400+/-0.009 $\chi^2$/NDF: 2614691.8/17

Left In: 20.649+/-0.004 $\chi^2$/NDF:363515.9/15

+ sign 23.078+/-0.004 $\chi^2$/NDF: 2224166.5/31

All: 22.457+/-0.003 $\chi^2$/NDF: 5607180.9/65

- sign 21.878+/-0.004 $\chi^2$/NDF: 3338067.3/33




Right In: -0.016+/-0.012 $\chi^2$/NDF: 14.6/15

Left Out: -0.004+/-0.007 $\chi^2$/NDF:13.5/15

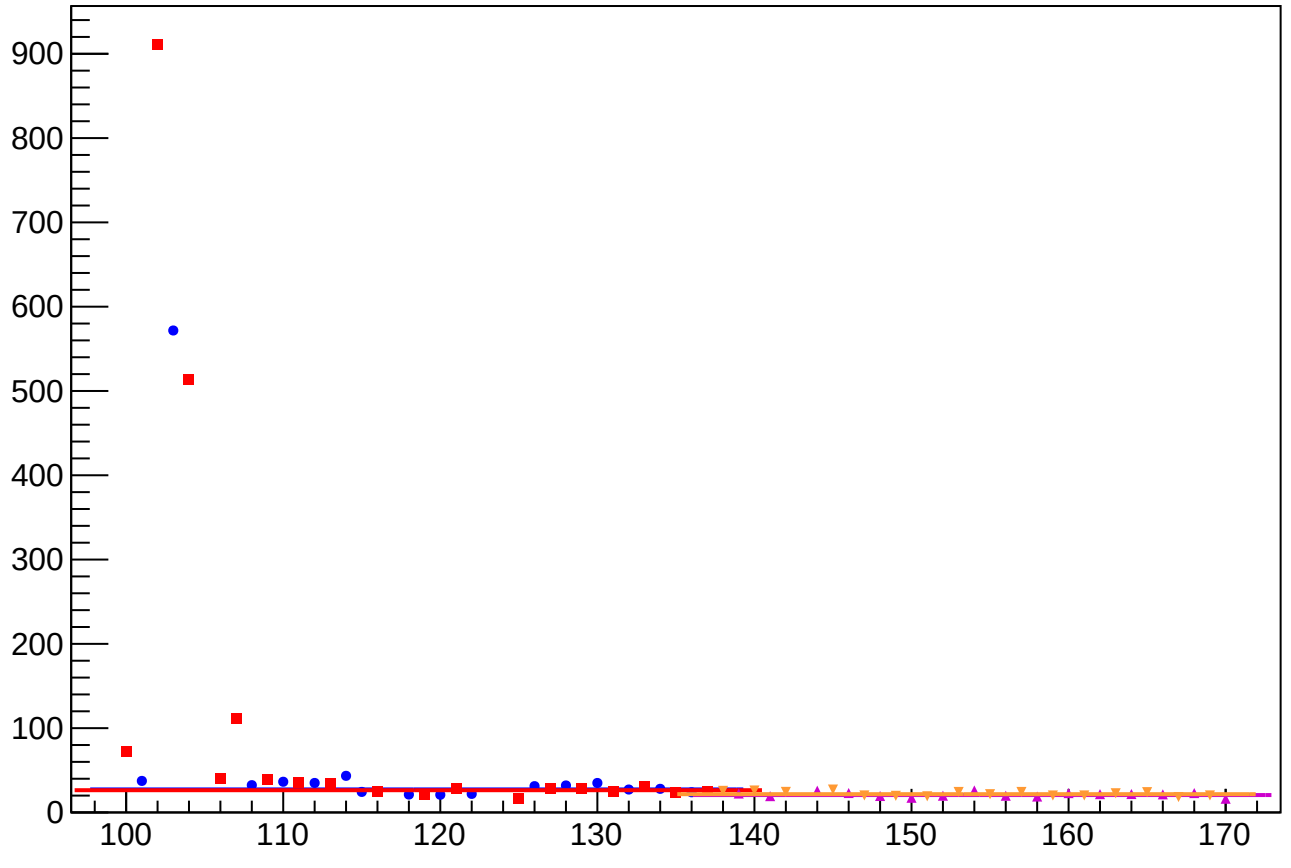
Right Out: -0.003+/-0.012 $\chi^2$/NDF: 9.9/17

Left In: 0.002+/-0.006 $\chi^2$/NDF:14.2/15

+ sign -0.007+/-0.006 $\chi^2$/NDF: 28.9/31

All: -0.003+/-0.004 $\chi^2$/NDF: 54.0/65

- sign 0.001+/-0.006 $\chi^2$/NDF: 24.2/33




Right In: 27.305+/-0.008 $\chi^2$/NDF: 1568329.0/15

Left Out: 21.682+/-0.005 $\chi^2$/NDF:300064.6/15

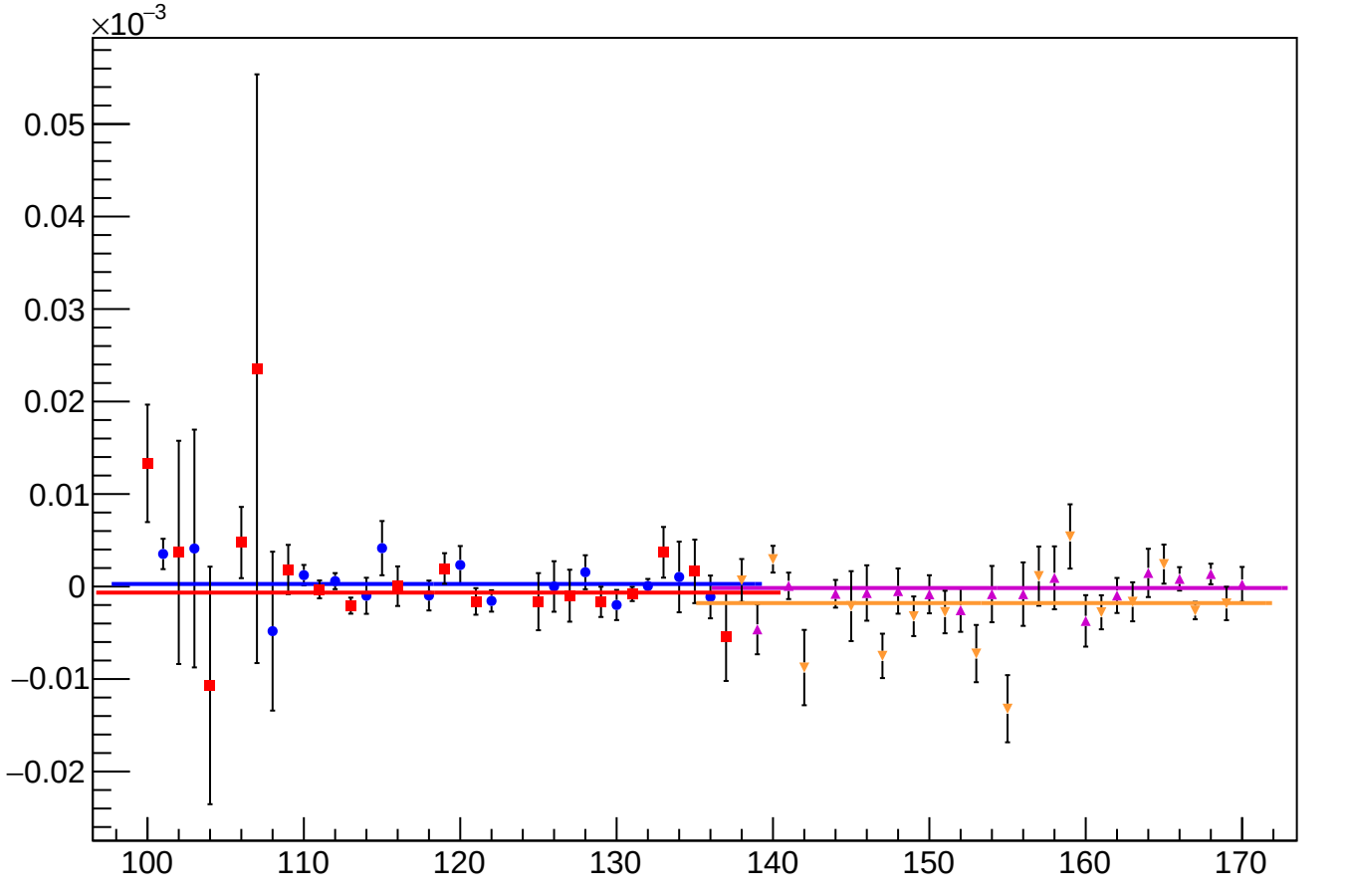
Right Out: 26.400+/-0.009 $\chi^2$/NDF: 2614691.8/17

Left In: 20.649+/-0.004 $\chi^2$/NDF:363515.9/15

+ sign 23.078+/-0.004 $\chi^2$/NDF: 2224166.5/31

All: 22.457+/-0.003 $\chi^2$/NDF: 5607180.9/65

- sign 21.878+/-0.004 $\chi^2$/NDF: 3338067.3/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.4/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:44.2/15

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 19.3/17

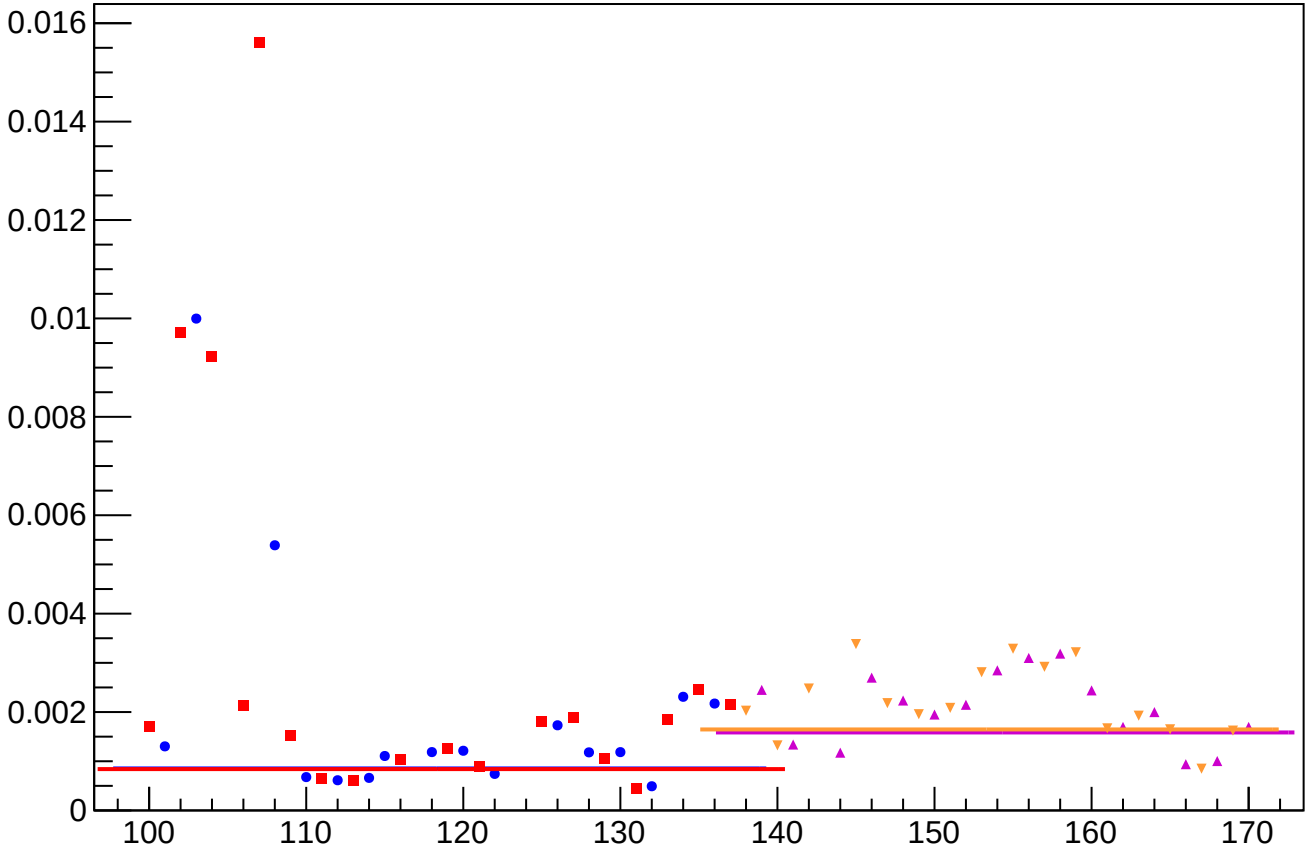
Left In: -0.000+/-0.000 $\chi^2$/NDF:9.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 69.4/31

All: -0.000+/-0.000 $\chi^2$/NDF: 98.4/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 29.0/33

# asym_usl_atl1_dd_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.001+/-0.000 $\chi^2$/NDF: 3863719.0/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:3750518.8/15

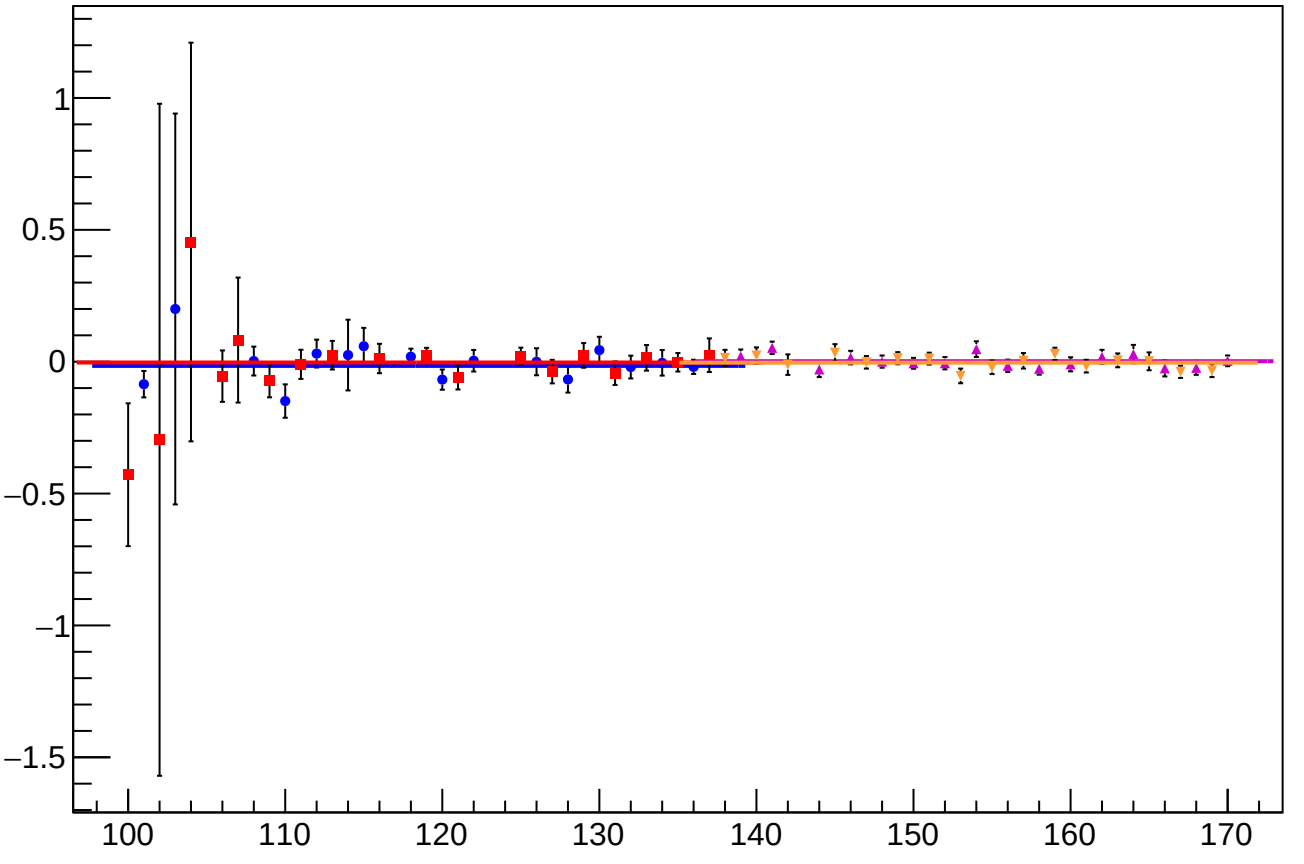
Right Out: 0.001+/-0.000 $\chi^2$/NDF: 5039455.2/17

Left In: 0.002+/-0.000 $\chi^2$/NDF:3510070.0/15

+ sign 0.001+/-0.000 $\chi^2$/NDF: 10778356.3/31

All: 0.001+/-0.000 $\chi^2$/NDF: 22167818.6/65

- sign 0.001+/-0.000 $\chi^2$/NDF: 11388716.0/33




Right In: -0.016+/-0.012 $\chi^2$/NDF: 14.6/15

Left Out: -0.004+/-0.007 $\chi^2$/NDF:13.5/15

Right Out: -0.003+/-0.012 $\chi^2$/NDF: 9.9/17

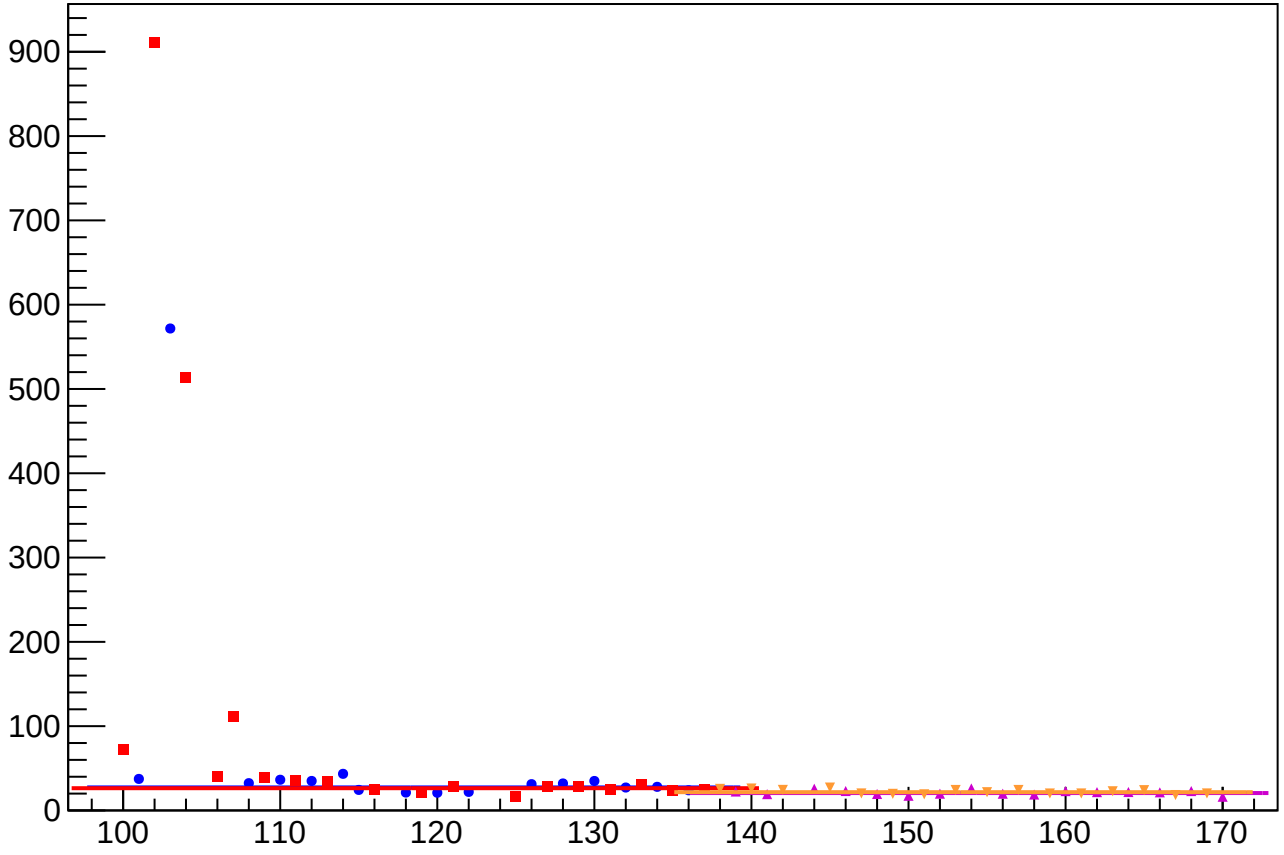
Left In: 0.002+/-0.006 $\chi^2$/NDF:14.2/15

+ sign -0.007+/-0.006 $\chi^2$/NDF: 28.9/31

All: -0.003+/-0.004 $\chi^2$/NDF: 54.0/65

- sign 0.001+/-0.006 $\chi^2$/NDF: 24.2/33

# asym_usl_atl1_dd_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 27.305+/-0.008 $\chi^2$/NDF: 1568325.9/15

Left Out: 21.682+/-0.005 $\chi^2$/NDF:300045.9/15

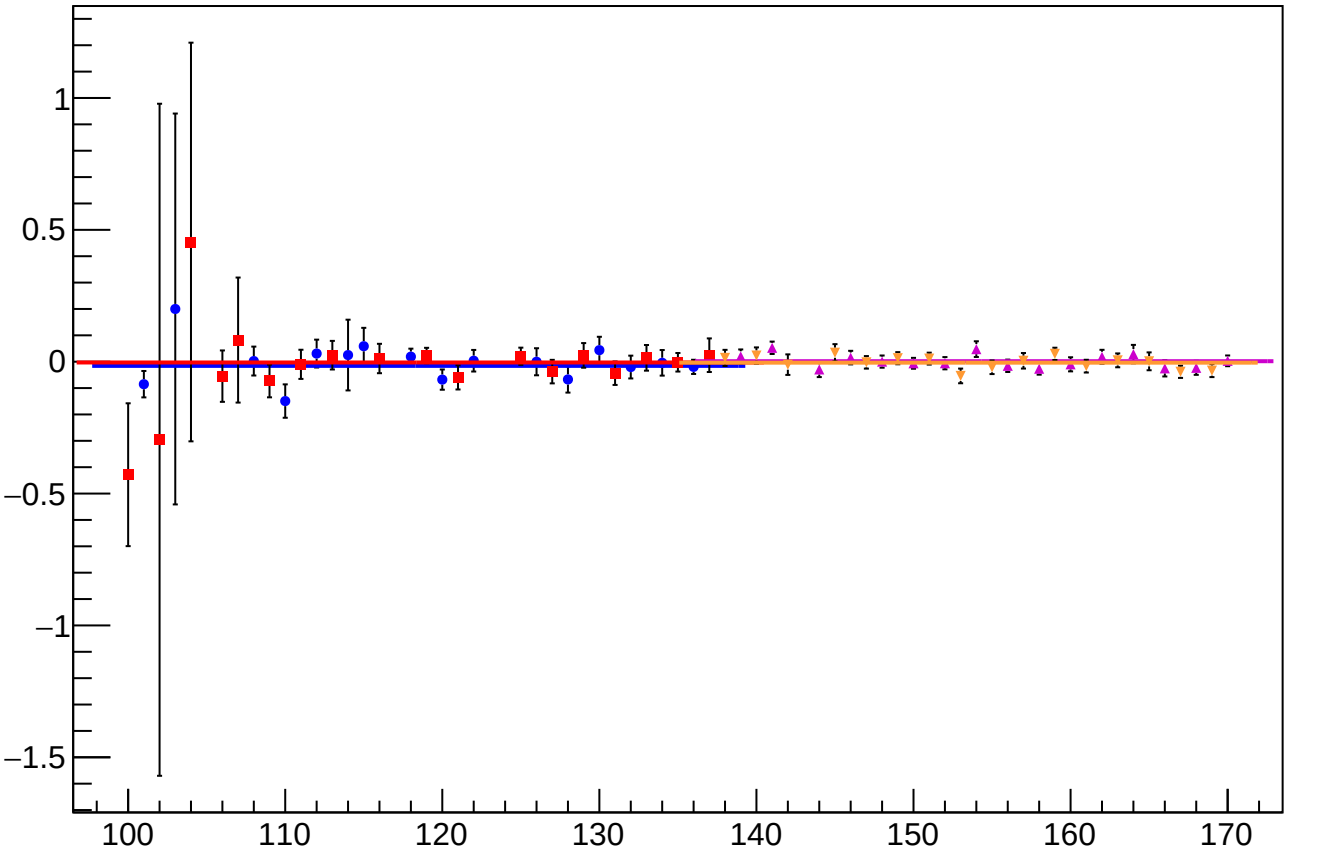
Right Out: 26.400+/-0.009 $\chi^2$/NDF: 2614710.8/17

Left In: 20.649+/-0.004 $\chi^2$/NDF:363536.7/15

+ sign 23.078+/-0.004 $\chi^2$/NDF: 2224156.7/31

All: 22.457+/-0.003 $\chi^2$/NDF: 5607207.2/65

- sign 21.878+/-0.004 $\chi^2$/NDF: 3338108.4/33




Right In: -0.016+/-0.012 $\chi^2$/NDF: 14.6/15

Left Out: -0.004+/-0.007 $\chi^2$/NDF:13.5/15

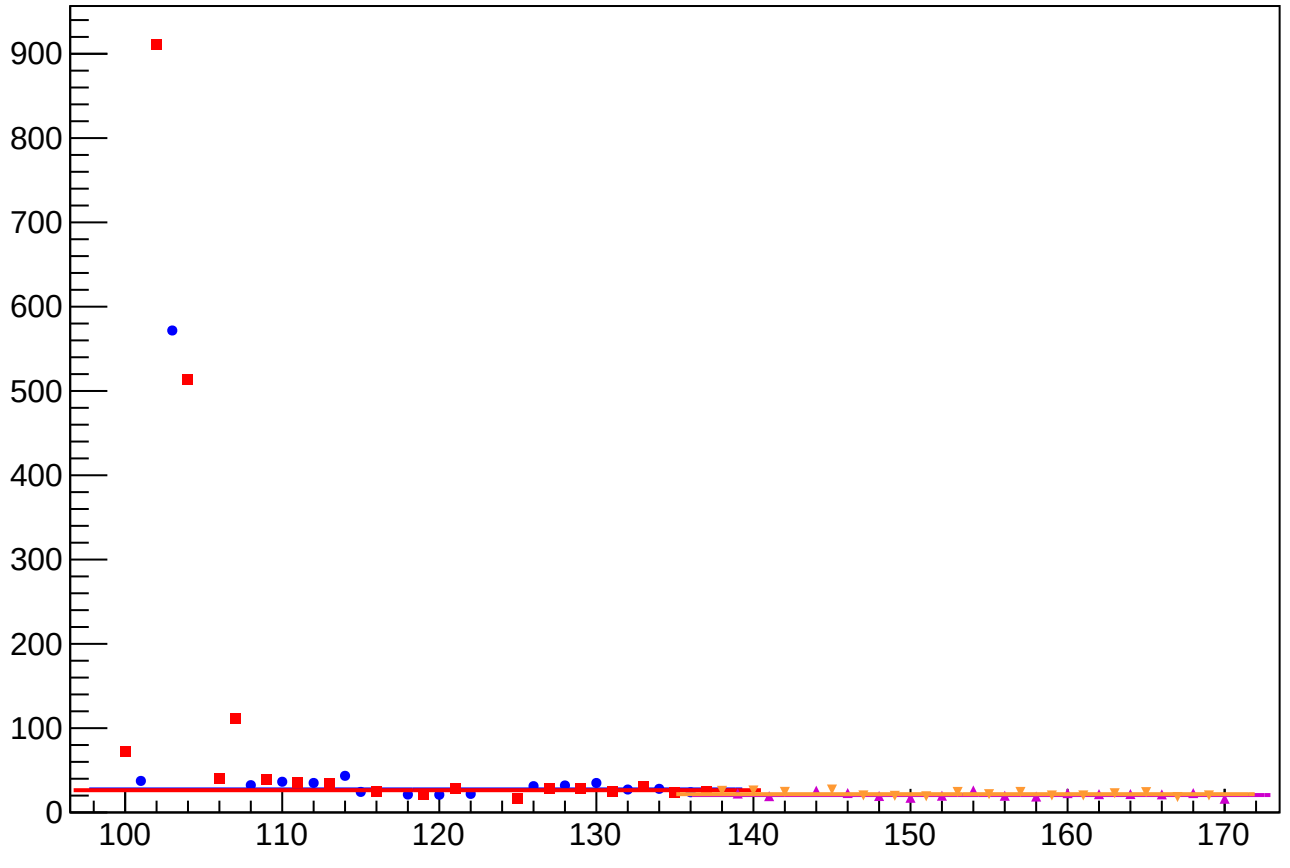
Right Out: -0.003+/-0.012 $\chi^2$/NDF: 9.9/17

Left In: 0.002+/-0.006 $\chi^2$/NDF:14.2/15

+ sign -0.007+/-0.006 $\chi^2$/NDF: 28.9/31

All: -0.003+/-0.004 $\chi^2$/NDF: 54.0/65

- sign 0.001+/-0.006 $\chi^2$/NDF: 24.2/33




Right In: 27.305+/-0.008 $\chi^2$/NDF: 1568325.9/15

Left Out: 21.682+/-0.005 $\chi^2$/NDF:300045.9/15

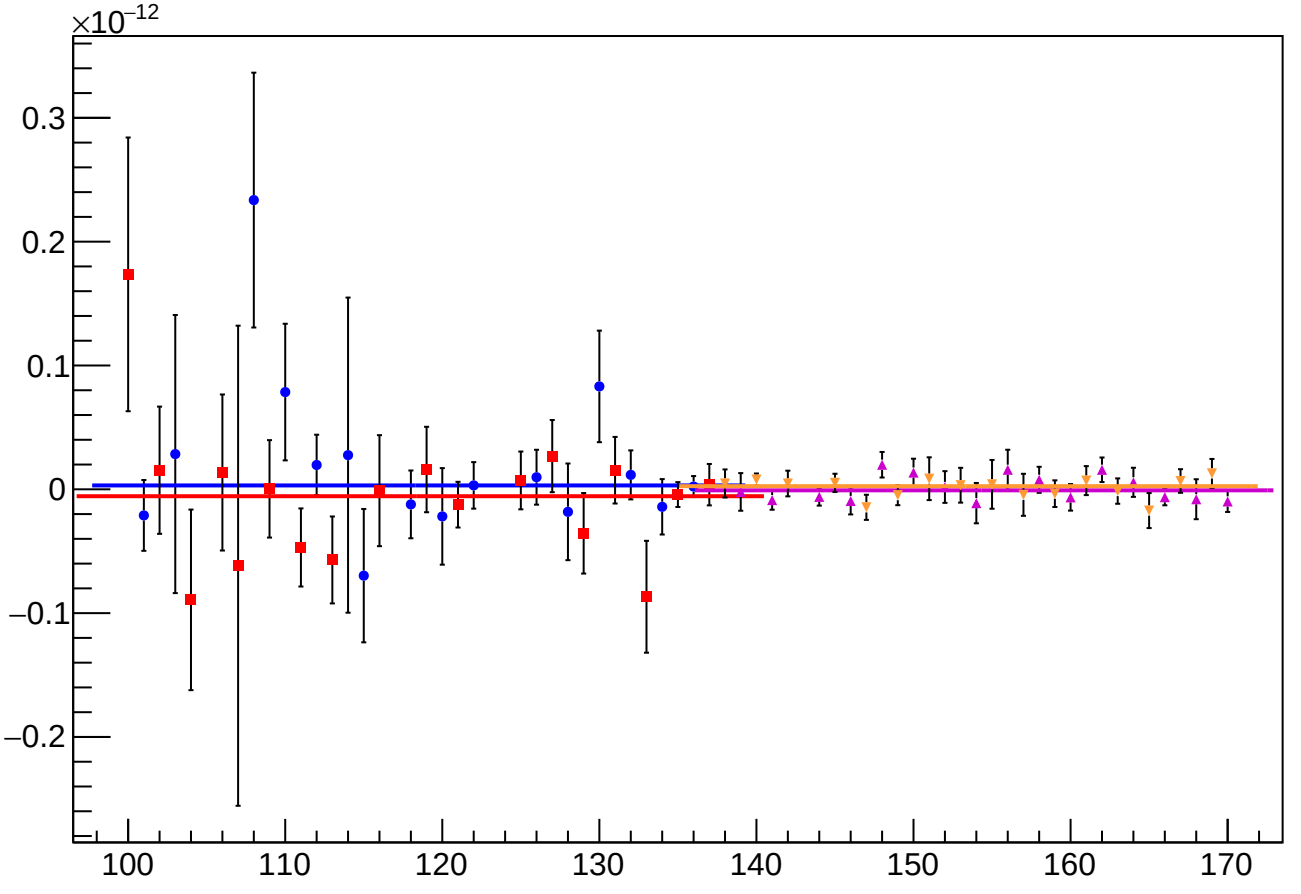
Right Out: 26.400+/-0.009 $\chi^2$/NDF: 2614710.8/17

Left In: 20.649+/-0.004 $\chi^2$/NDF:363536.7/15

+ sign 23.078+/-0.004 $\chi^2$/NDF: 2224156.7/31

All: 22.457+/-0.003 $\chi^2$/NDF: 5607207.2/65

- sign 21.878+/-0.004 $\chi^2$/NDF: 3338108.4/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 15.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:8.9/15

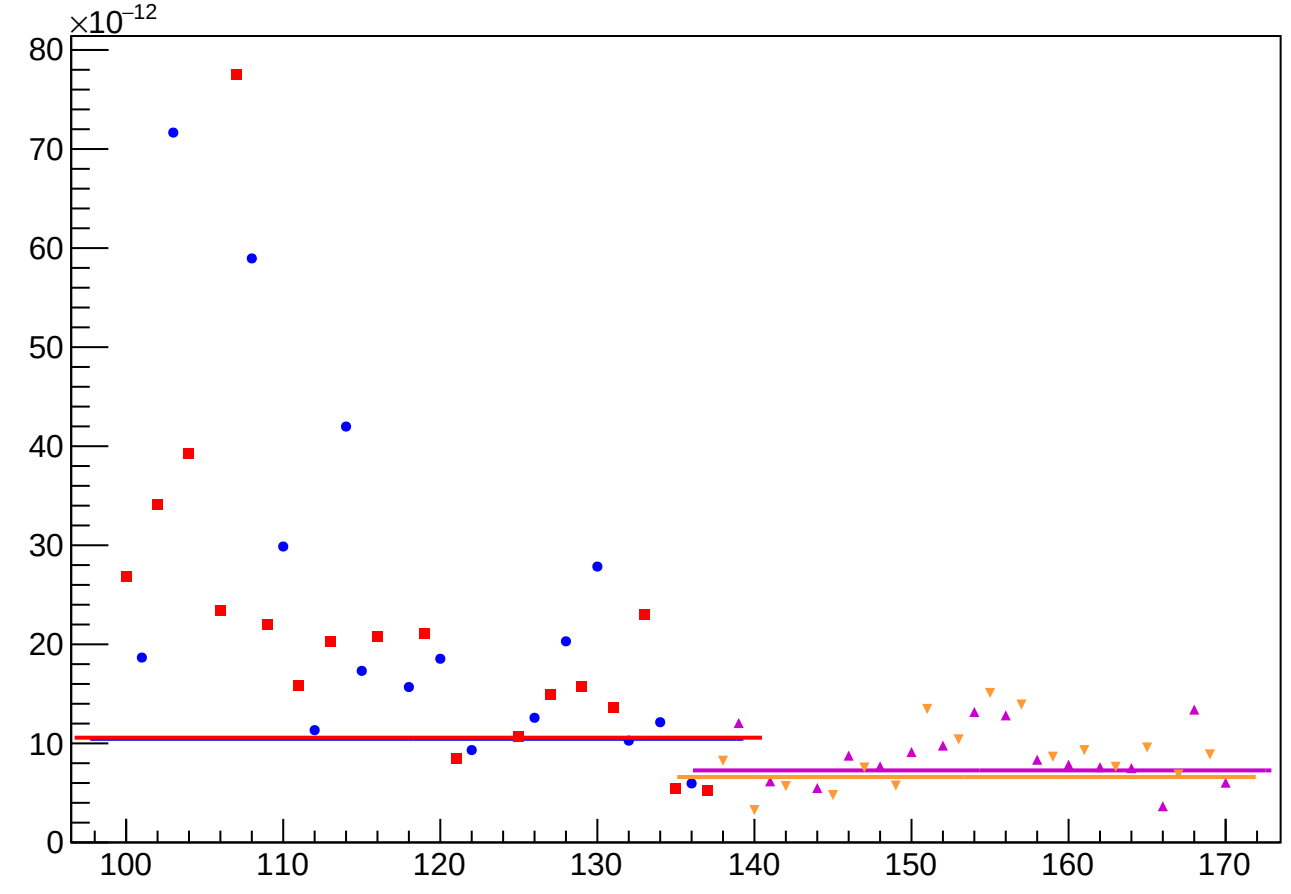
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.3/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:15.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 23.9/31

All: 0.000+/-0.000 $\chi^2$/NDF: 56.7/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 31.2/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2794895.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2714742.4/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2771384.1/17

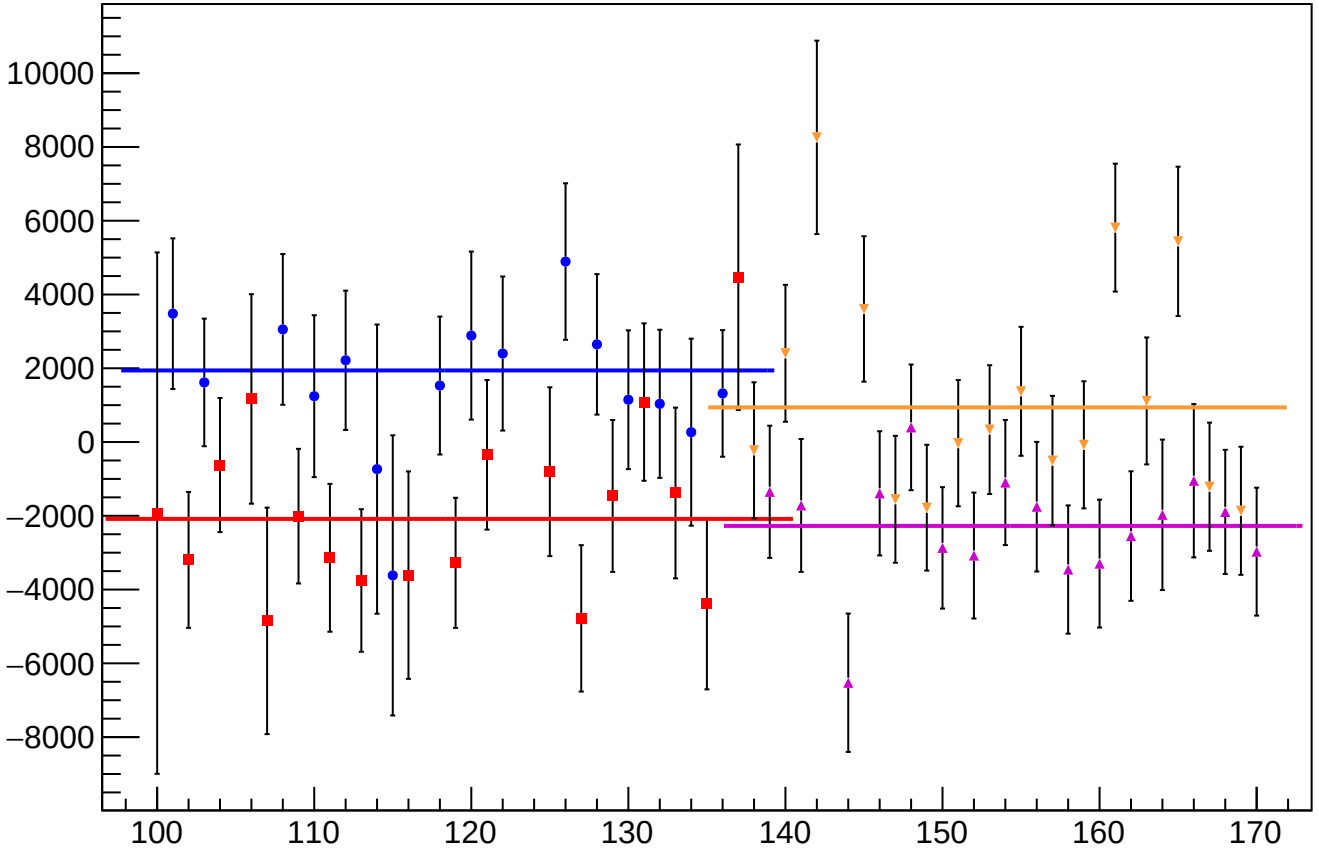
Left In: 0.000+/-0.000 $\chi^2$/NDF:2001746.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 6273158.4/31

All: 0.000+/-0.000 $\chi^2$/NDF: 11607270.2/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 5275674.7/33

# reg_asym_usl_atl2_avg_mean vs Slug




Right In: 1940.976+/-522.174 $\chi^2$/NDF: 6.9/15

Left Out: 939.342+/-451.647 $\chi^2$/NDF:33.8/15

Right Out: -2083.952+/-519.583 $\chi^2$/NDF: 14.5/17

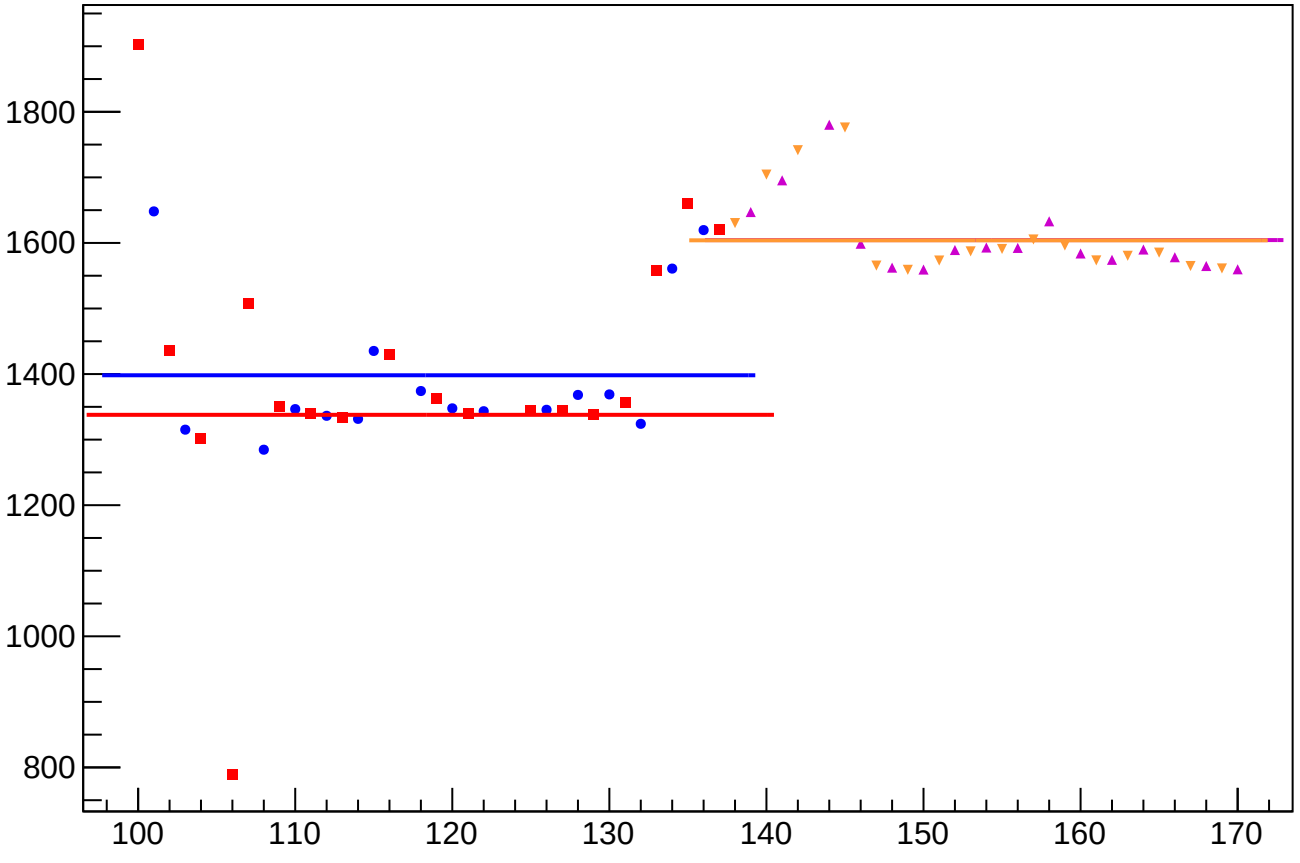
Left In: -2273.528+/-441.519 $\chi^2$/NDF:10.6/15

+ sign 1367.996+/-341.597 $\chi^2$/NDF: 42.8/31

All: -440.052+/-239.706 $\chi^2$/NDF: 123.1/65

- sign -2194.037+/-336.451 $\chi^2$/NDF: 25.1/33

# reg_asym_usl_atl2_avg_rms vs Slug




Right In: 1398.161+/-0.369 $\chi^2$/NDF: 93923.6/15

Left Out: 1604.003+/-0.319 $\chi^2$/NDF:33771.6/15

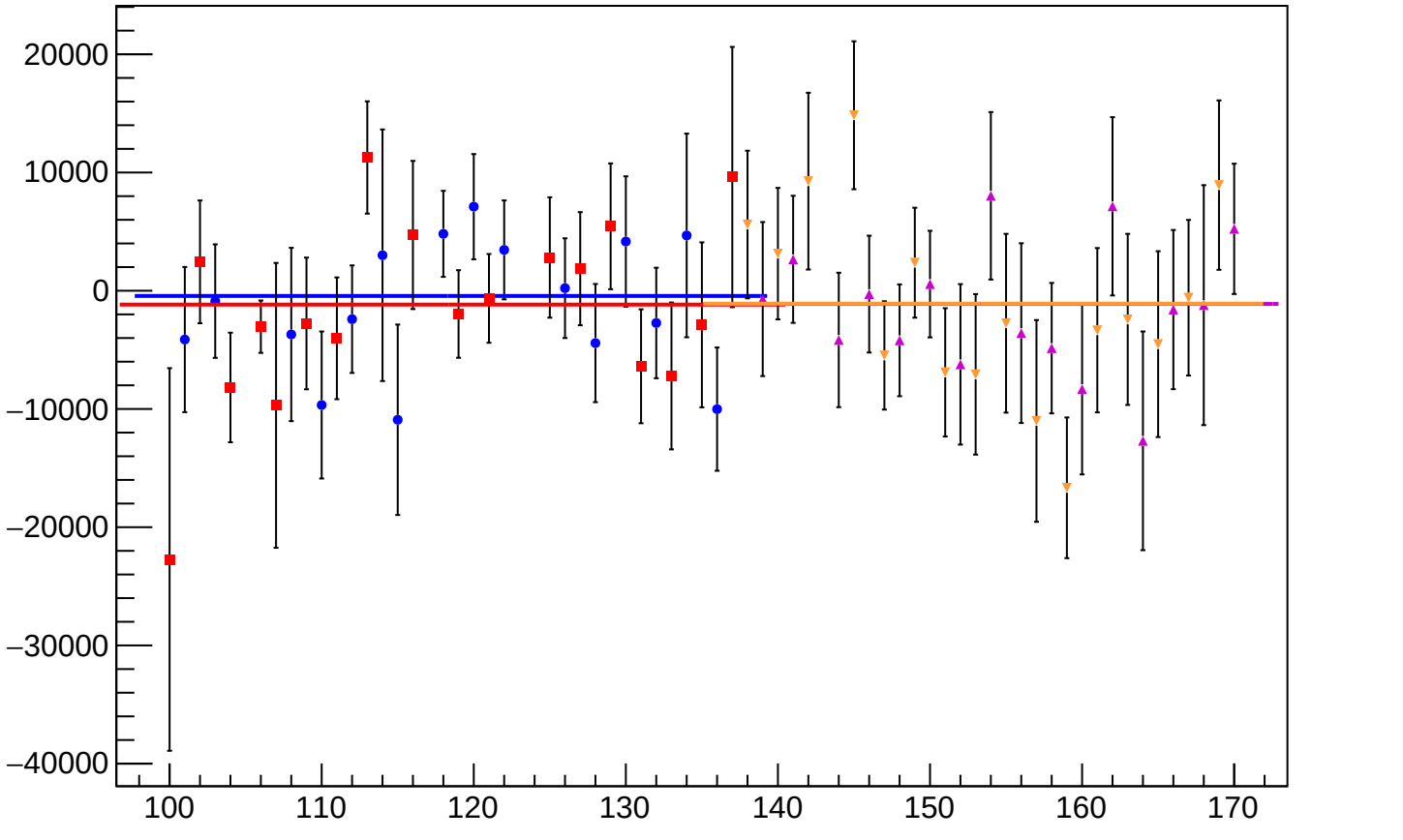
Right Out: 1337.819+/-0.356 $\chi^2$/NDF: 317763.3/17

Left In: 1604.364+/-0.312 $\chi^2$/NDF:31154.0/15

+ sign 1515.912+/-0.242 $\chi^2$/NDF: 305482.0/31

All: 1501.788+/-0.168 $\chi^2$/NDF: 978020.4/65

- sign 1488.454+/-0.235 $\chi^2$/NDF: 665891.6/33




Right In: -441.138+/-1295.916 $\chi^2$/NDF: 15.9/15

Left Out: -1092.522+/-1563.598 $\chi^2$/NDF:24.1/15

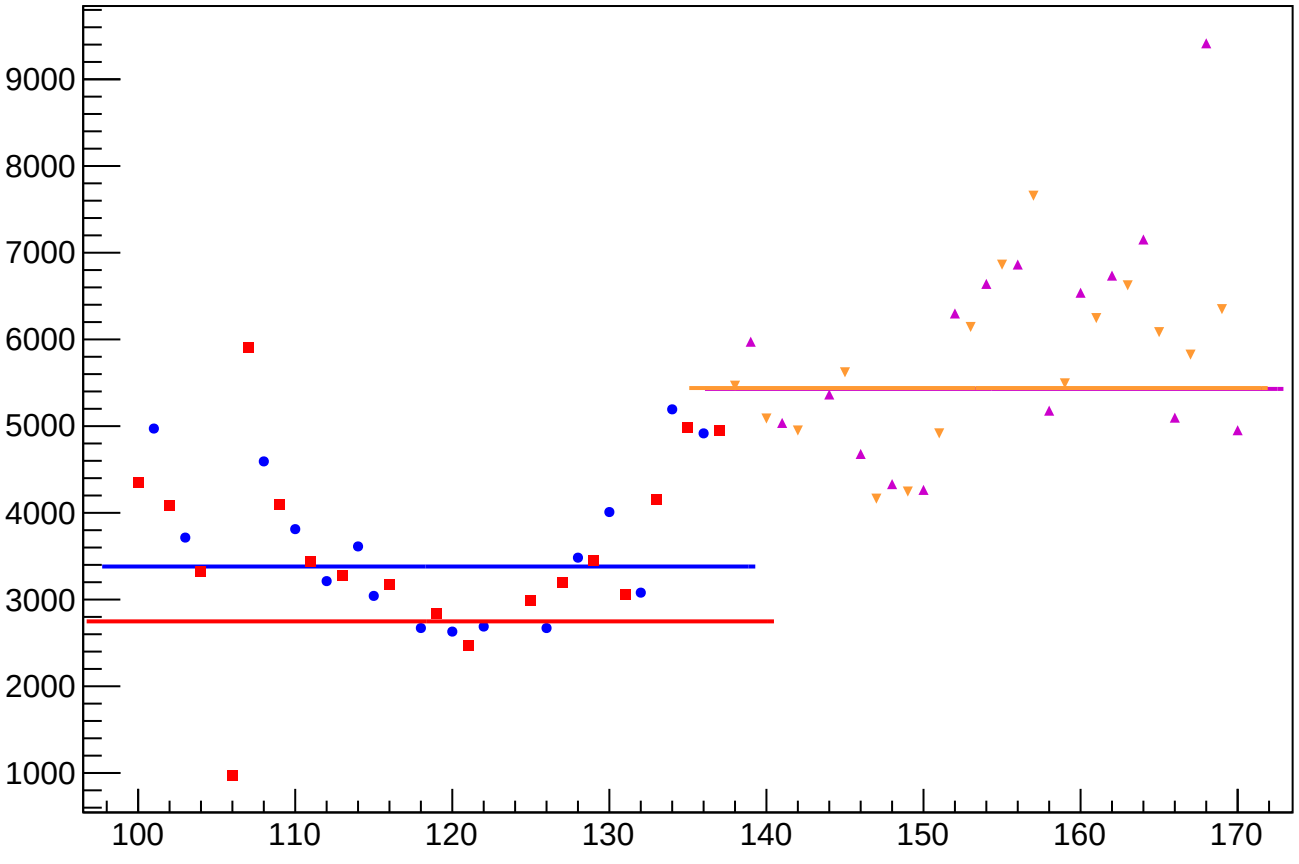
Right Out: -1171.548+/-1119.890 $\chi^2$/NDF: 19.7/17

Left In: -1116.601+/-1526.811 $\chi^2$/NDF:9.3/15

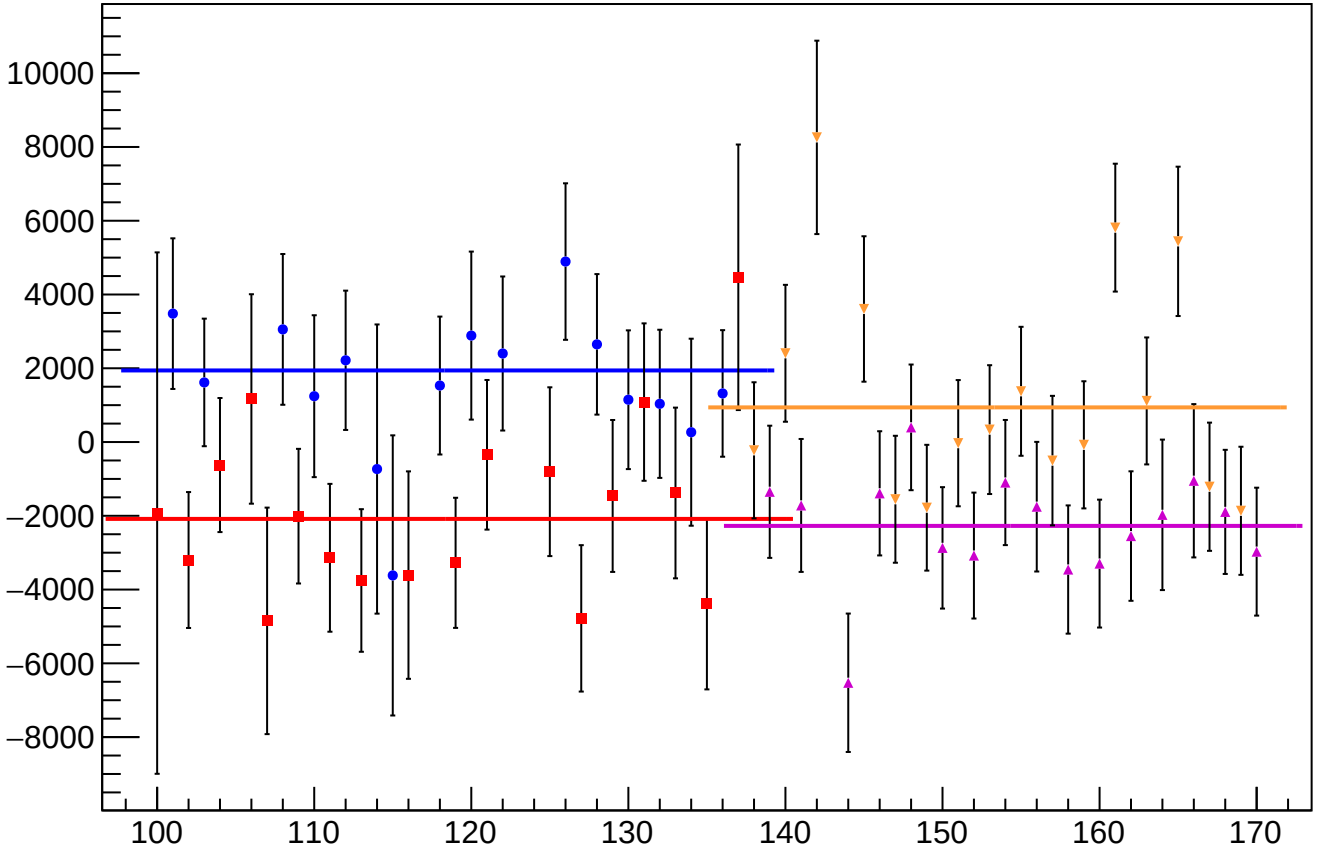
+ sign -706.383+/-997.770 $\chi^2$/NDF: 40.1/31

All: -951.529+/-669.529 $\chi^2$/NDF: 69.1/65

- sign -1152.327+/-903.020 $\chi^2$/NDF: 28.9/33


asym_usl_atl2_avg_reg_correction_rms vs Slug
9000
8000
7000
6000
5000
4000
3000
2000
1000
100
110
120
130
140
150
160
170
Right In: 3381.117+/-0.916 χ²/NDF: 757146.6/15
Left Out: 5439.310+/-1.106 χ²/NDF:684567.8/15
Right Out: 2748.372+/-0.792 χ²/NDF: 2264563.8/17
Left In: 5429.317+/-1.080 χ²/NDF:983971.7/15
+ sign 4219.218+/-0.706 χ²/NDF: 3495989.0/31
All: 3926.192+/-0.473 χ²/NDF: 11067716.6/6
- sign 3686.177+/-0.639 χ²/NDF: 7257940.2/33

# cor_asym_usl_atl2_avg_mean vs Slug




Right In: 1941.031+/-522.174 $\chi^2$/NDF: 6.9/15

Left Out: 939.356+/-451.647 $\chi^2$/NDF:33.8/15

Right Out: -2084.166+/-519.587 $\chi^2$/NDF: 14.5/17

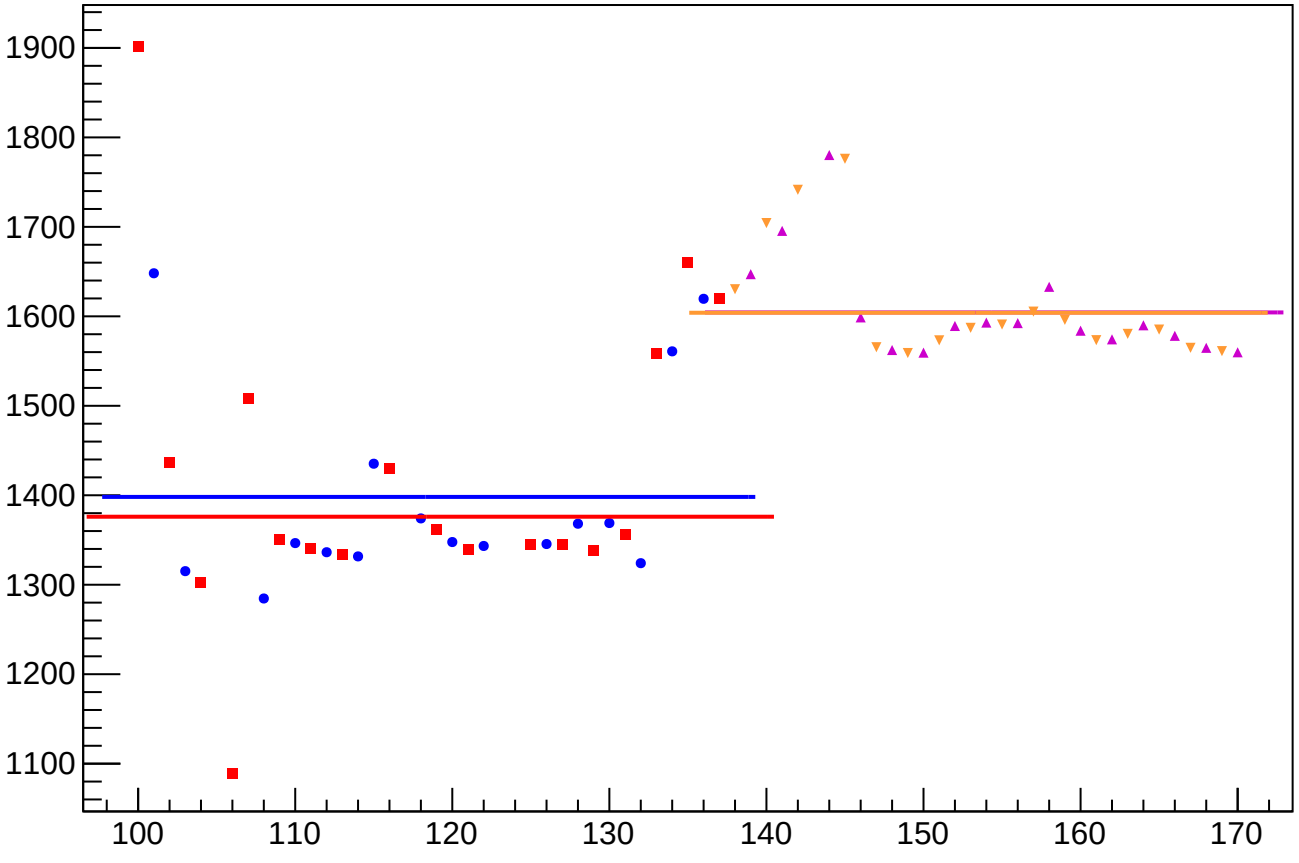
Left In: -2273.641+/-441.519 $\chi^2$/NDF:10.6/15

+ sign 1368.027+/-341.597 $\chi^2$/NDF: 42.8/31

All: -440.111+/-239.706 $\chi^2$/NDF: 123.2/65

- sign -2194.193+/-336.452 $\chi^2$/NDF: 25.1/33

# cor_asym_usl_atl2_avg_rms vs Slug




Right In: 1398.161+/-0.369 $\chi^2$/NDF: 93923.6/15

Left Out: 1604.003+/-0.319 $\chi^2$/NDF:33771.6/15

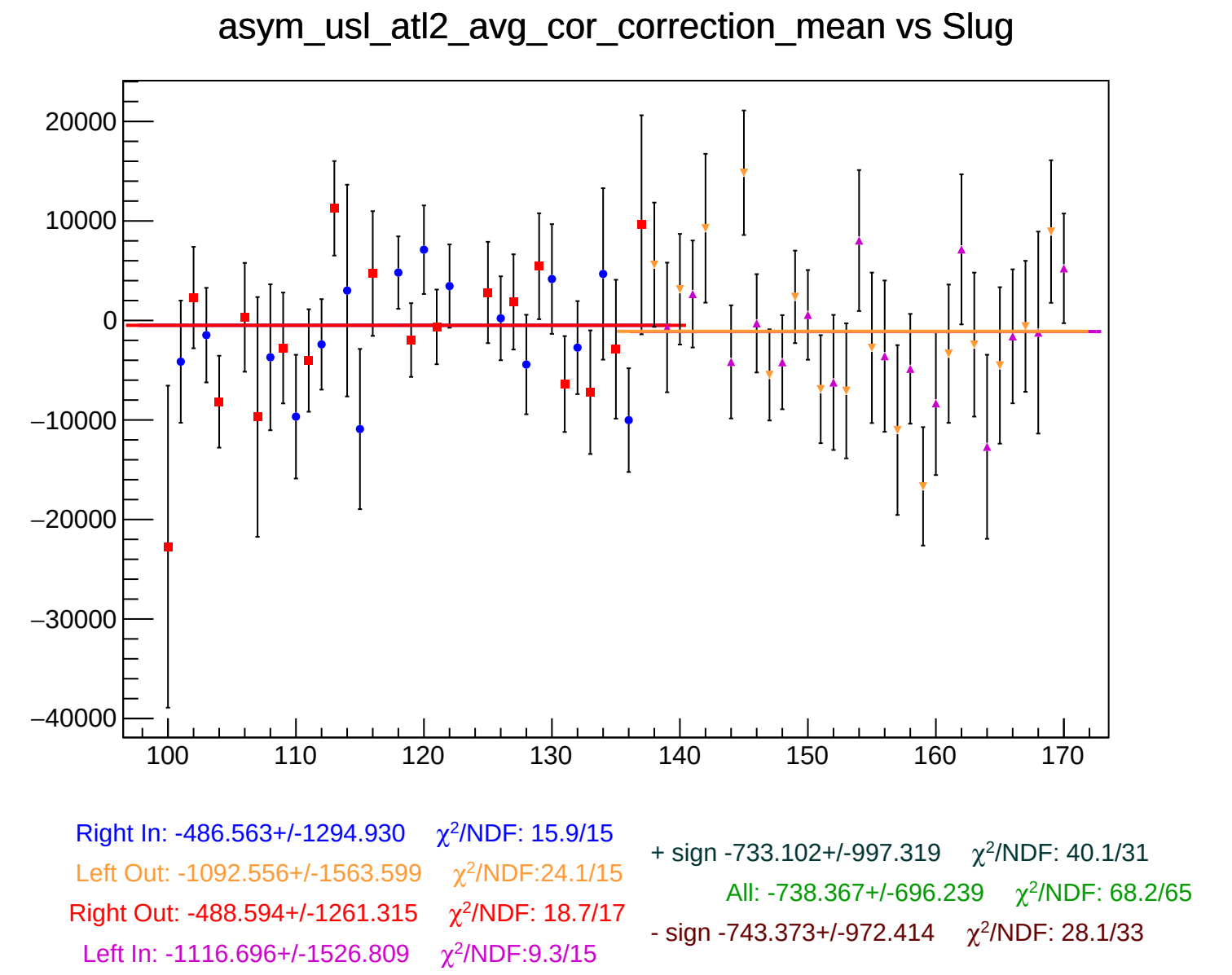
Right Out: 1376.021+/-0.363 $\chi^2$/NDF: 114033.6/17

Left In: 1604.364+/-0.312 $\chi^2$/NDF:31154.0/15

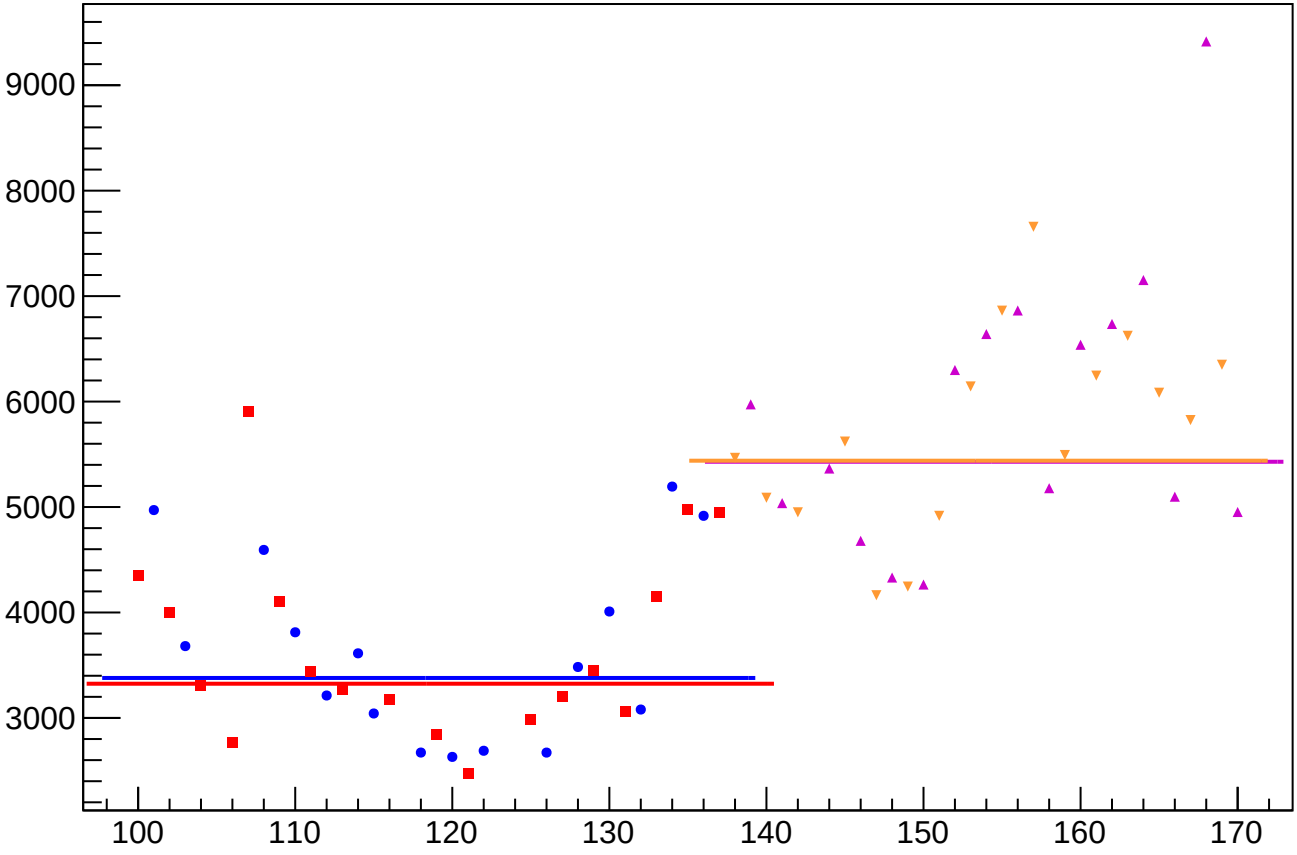
+ sign 1515.912+/-0.242 $\chi^2$/NDF: 305482.2/31

All: 1511.428+/-0.169 $\chi^2$/NDF: 679142.2/65

- sign 1507.128+/-0.237 $\chi^2$/NDF: 372985.0/33


asym_usl_atl2_avg_cor_correction_mean vs Slug
20000
10000
0
−10000
−20000
−30000
−40000
100
110
120
130
140
150
160
170
Right In: -486.563+/-1294.930 χ²/NDF: 15.9/15
Left Out: -1092.556+/-1563.599 χ²/NDF:24.1/15
Right Out: -488.594+/-1261.315 χ²/NDF: 18.7/17
Left In: -1116.696+/-1526.809 χ²/NDF:9.3/15
+ sign -733.102+/-997.319 χ²/NDF: 40.1/31
All: -738.367+/-696.239 χ²/NDF: 68.2/65
- sign -743.373+/-972.414 χ²/NDF: 28.1/33

# asym_usl_atl2_avg_cor_correction_rms vs Slug




Right In: 3379.110+/-0.916 $\chi^2$/NDF: 755339.9/15

Left Out: 5439.312+/-1.106 $\chi^2$/NDF:684564.6/15

Right Out: 3324.449+/-0.892 $\chi^2$/NDF: 543813.3/17

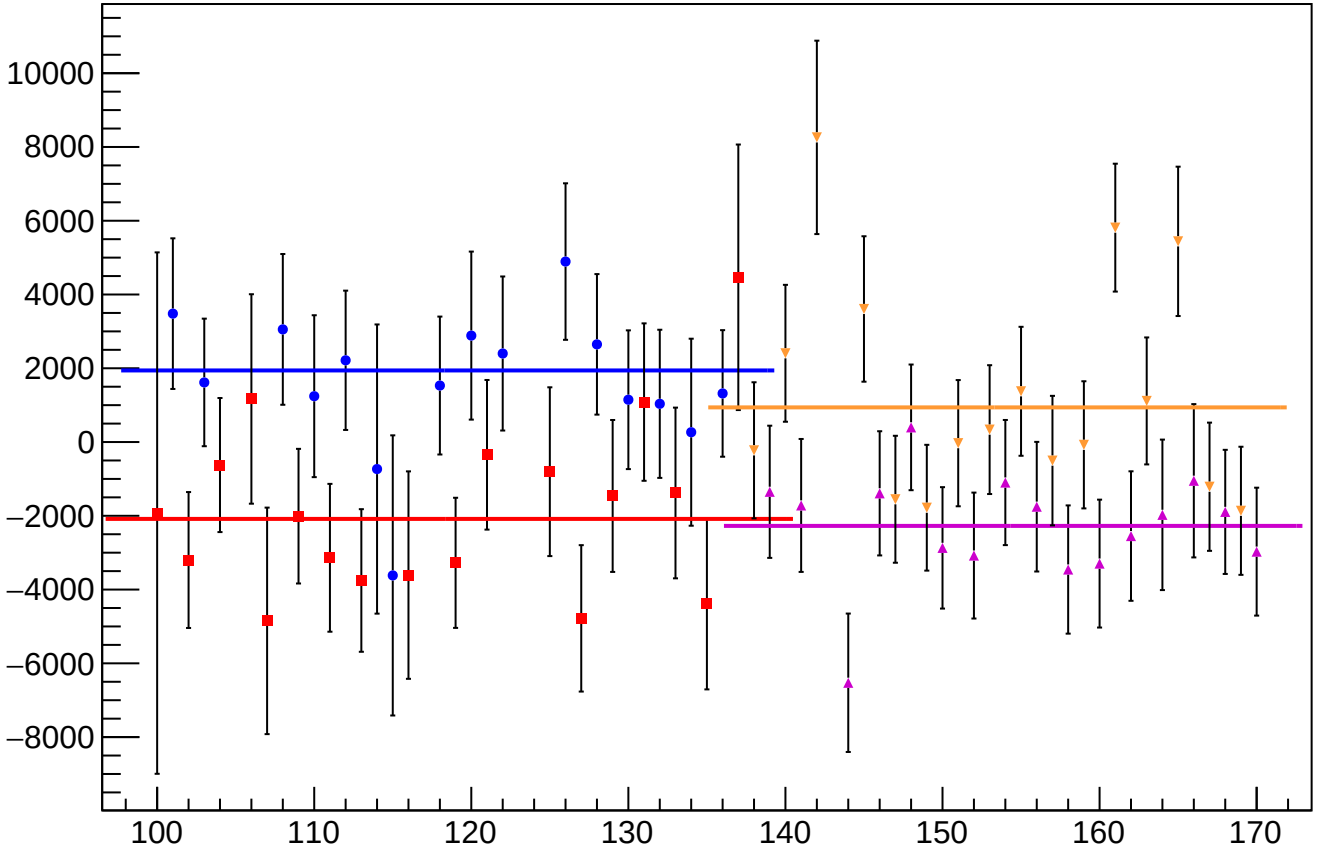
Left In: 5429.311+/-1.080 $\chi^2$/NDF:983982.1/15

+ sign 4217.272+/-0.705 $\chi^2$/NDF: 3499465.3/31

All: 4197.267+/-0.492 $\chi^2$/NDF: 7288072.0/65

- sign 4178.250+/-0.688 $\chi^2$/NDF: 3787037.1/33

# eigen_cor_asym_usl_atl2_avg_mean vs Slug




Right In: 1941.031+/-522.174 $\chi^2$/NDF: 6.9/15

Left Out: 939.356+/-451.647 $\chi^2$/NDF:33.8/15

Right Out: -2084.166+/-519.587 $\chi^2$/NDF: 14.5/17

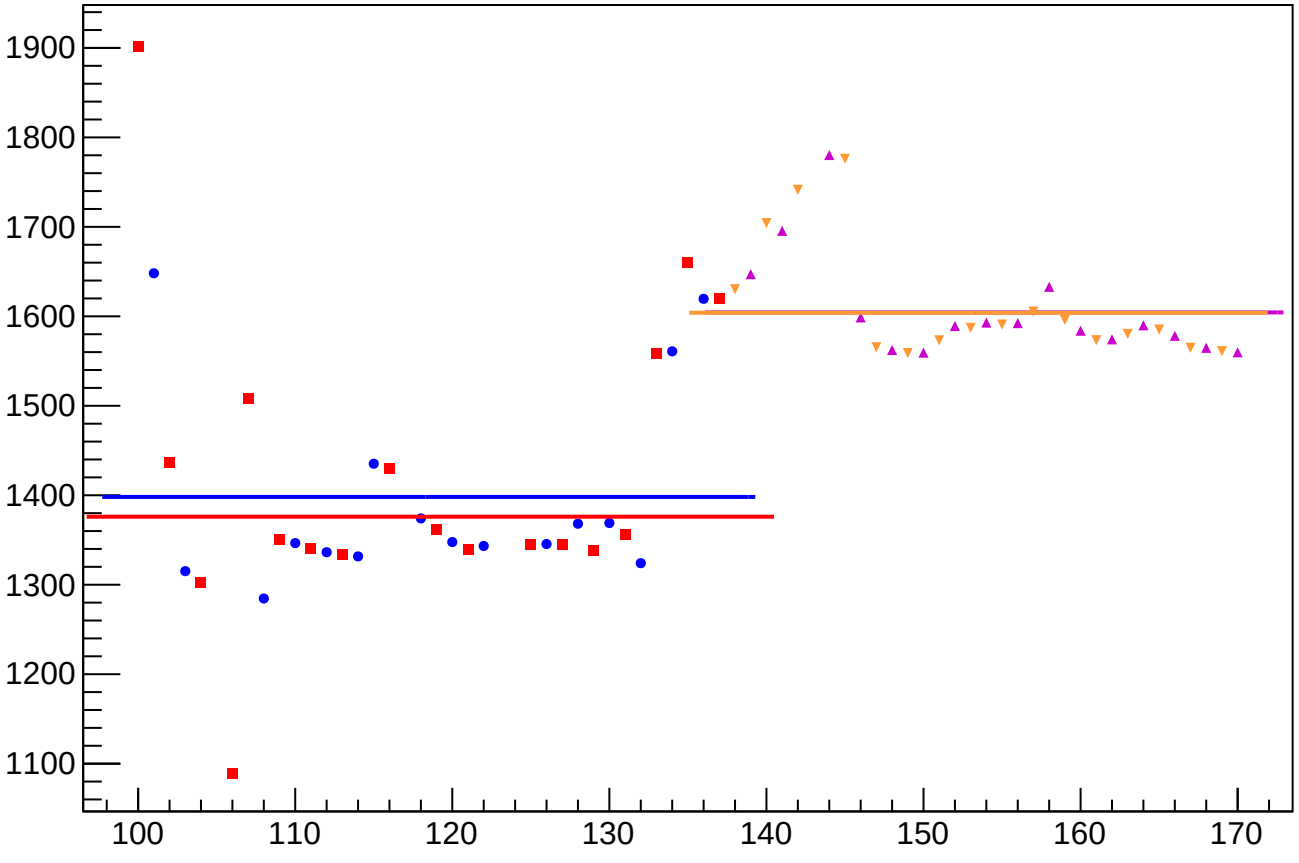
Left In: -2273.641+/-441.519 $\chi^2$/NDF:10.6/15

+ sign 1368.027+/-341.597 $\chi^2$/NDF: 42.8/31

All: -440.111+/-239.706 $\chi^2$/NDF: 123.2/65

- sign -2194.193+/-336.452 $\chi^2$/NDF: 25.1/33

# eigen_cor_asym_usl_atl2_avg_rms vs Slug




Right In: 1398.161+/-0.369 $\chi^2$/NDF: 93923.6/15

Left Out: 1604.003+/-0.319 $\chi^2$/NDF:33771.6/15

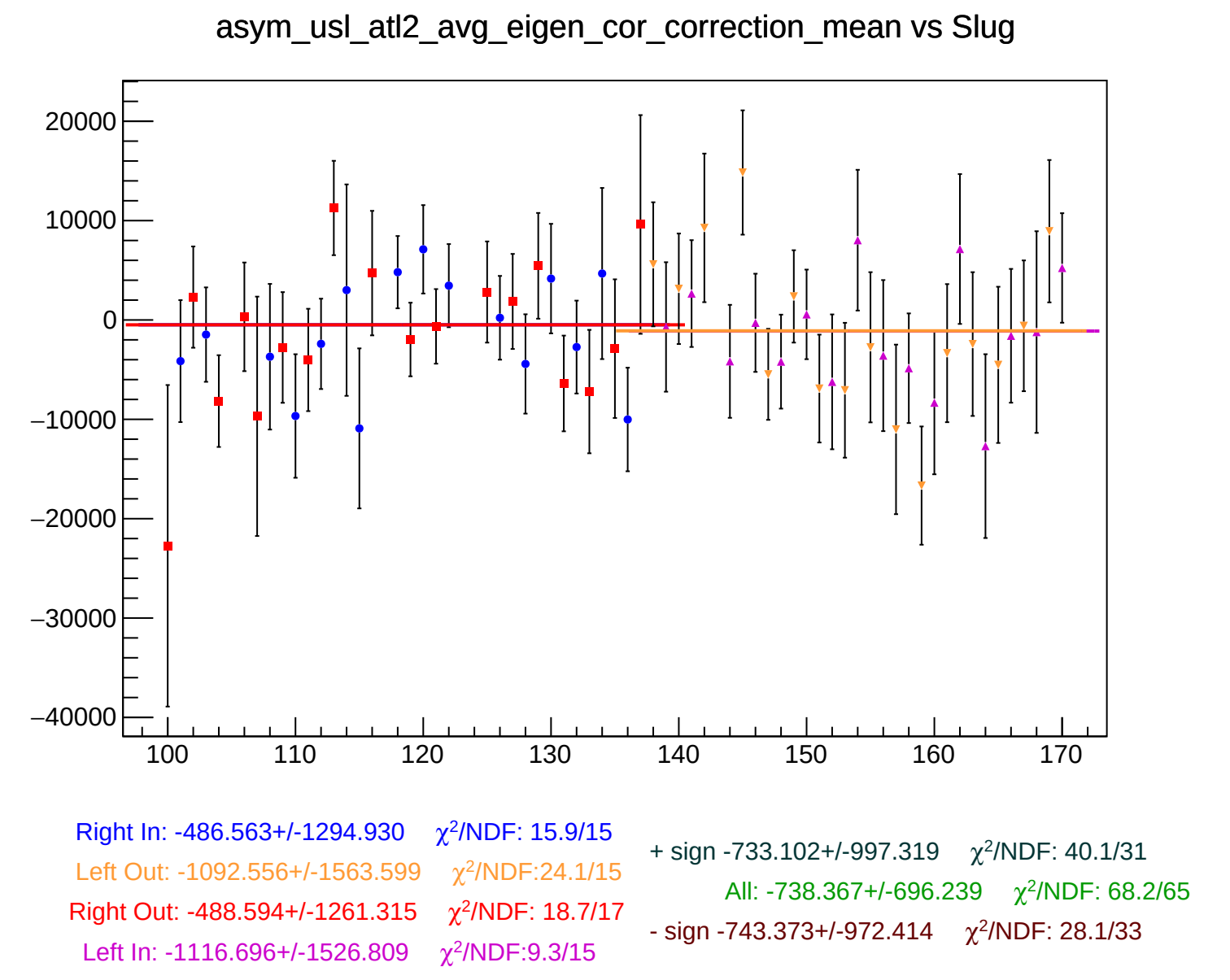
Right Out: 1376.021+/-0.363 $\chi^2$/NDF: 114033.6/17

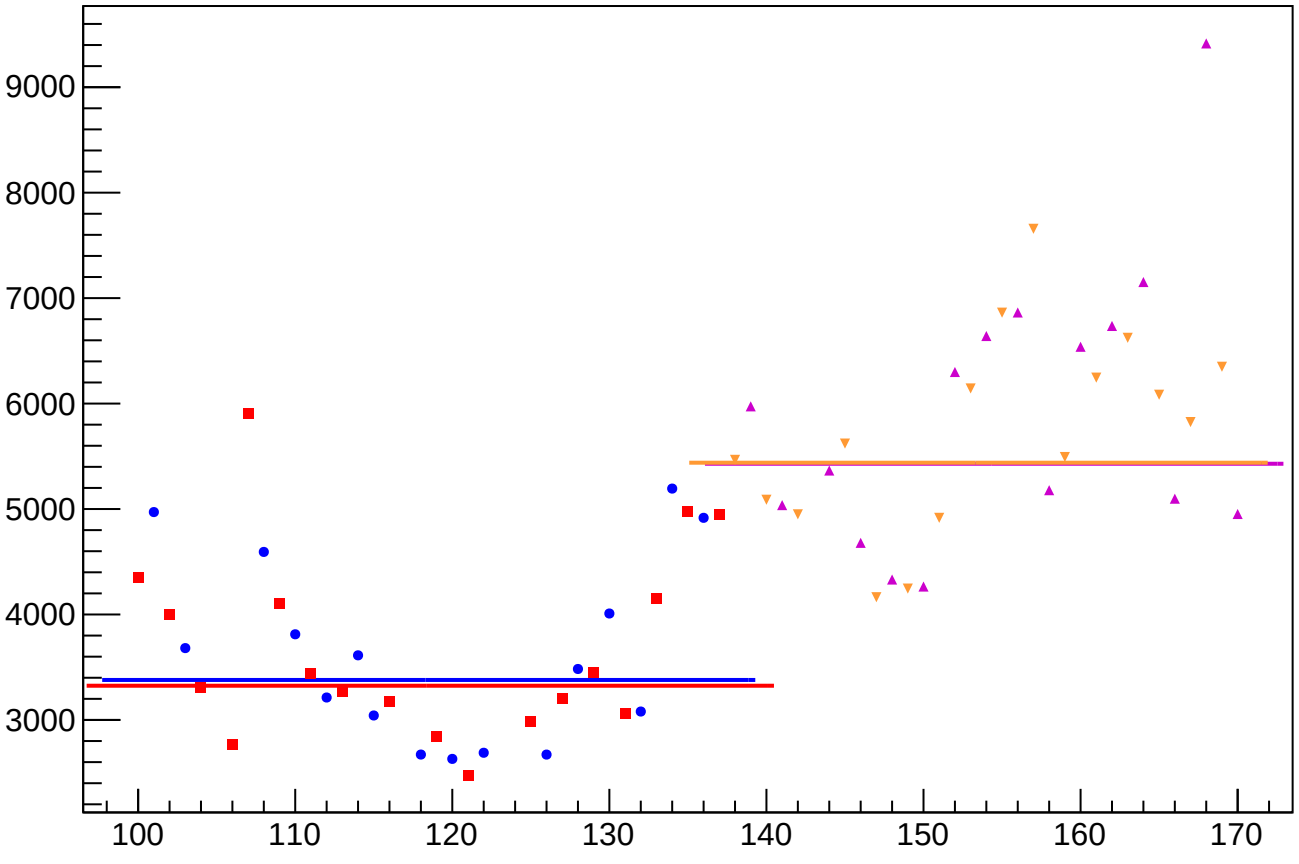
Left In: 1604.364+/-0.312 $\chi^2$/NDF:31154.0/15

+ sign 1515.912+/-0.242 $\chi^2$/NDF: 305482.2/31

All: 1511.428+/-0.169 $\chi^2$/NDF: 679142.2/65

- sign 1507.128+/-0.237 $\chi^2$/NDF: 372985.0/33


asym_usl_atl2_avg_eigen_cor_correction_mean vs Slug
20000
10000
0
−10000
−20000
−30000
−40000
100
110
120
130
140
150
160
170
Right In: -486.563+/-1294.930 χ²/NDF: 15.9/15
Left Out: -1092.556+/-1563.599 χ²/NDF:24.1/15
Right Out: -488.594+/-1261.315 χ²/NDF: 18.7/17
Left In: -1116.696+/-1526.809 χ²/NDF:9.3/15
+ sign -733.102+/-997.319 χ²/NDF: 40.1/31
All: -738.367+/-696.239 χ²/NDF: 68.2/65
- sign -743.373+/-972.414 χ²/NDF: 28.1/33




Right In: 3379.110+/-0.916 $\chi^2$/NDF: 755339.9/15

Left Out: 5439.312+/-1.106 $\chi^2$/NDF:684564.6/15

Right Out: 3324.449+/-0.892 $\chi^2$/NDF: 543813.3/17

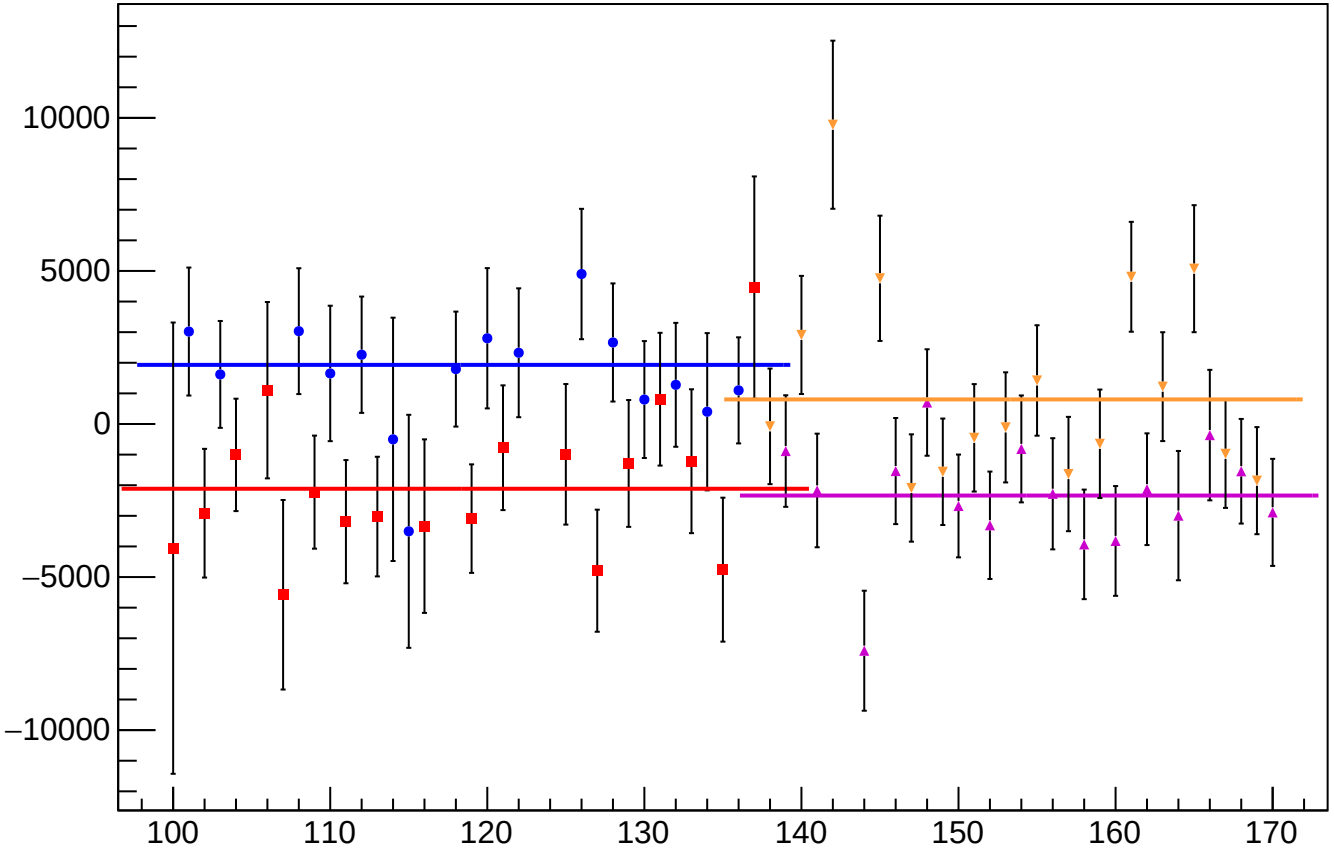
Left In: 5429.311+/-1.080 $\chi^2$/NDF:983982.1/15

+ sign 4217.272+/-0.705 $\chi^2$/NDF: 3499465.3/31

All: 4197.267+/-0.492 $\chi^2$/NDF: 7288072.0/65

- sign 4178.250+/-0.688 $\chi^2$/NDF: 3787037.1/33

# dit_asym_usl_atl2_avg_mean vs Slug




Right In: 1931.537+/-527.135 $\chi^2$/NDF: 6.4/15

Left Out: 803.112+/-464.778 $\chi^2$/NDF:36.2/15

Right Out: -2115.195+/-528.802 $\chi^2$/NDF: 13.2/17

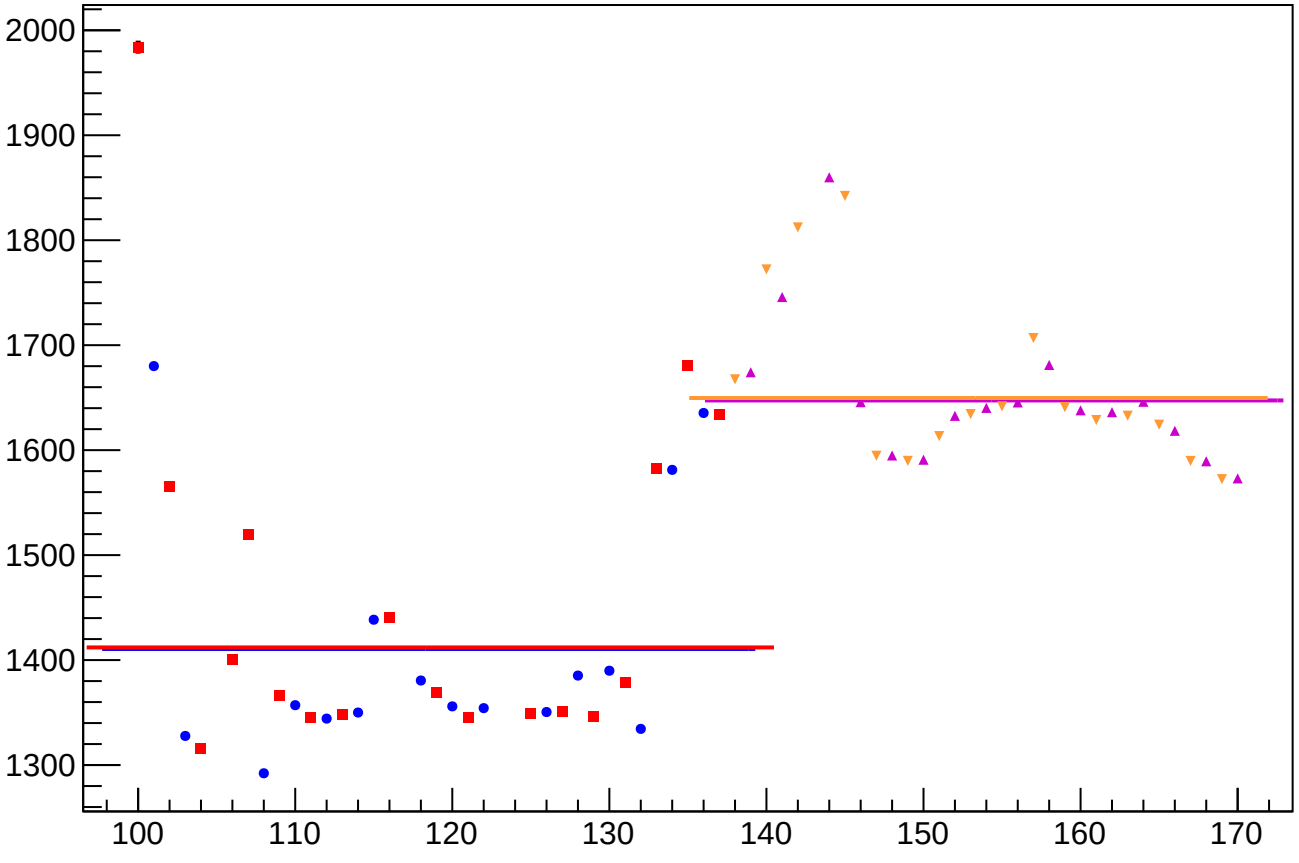
Left In: -2337.139+/-453.463 $\chi^2$/NDF:14.5/15

+ sign 1296.665+/-348.620 $\chi^2$/NDF: 45.2/31

All: -495.646+/-244.945 $\chi^2$/NDF: 125.2/65

- sign -2243.090+/-344.229 $\chi^2$/NDF: 27.8/33

# dit_asym_usl_atl2_avg_rms vs Slug




Right In: 1410.595+/-0.373 $\chi^2$/NDF: 99150.0/15

Left Out: 1649.693+/-0.329 $\chi^2$/NDF:47217.8/15

Right Out: 1412.048+/-0.373 $\chi^2$/NDF: 89704.5/17

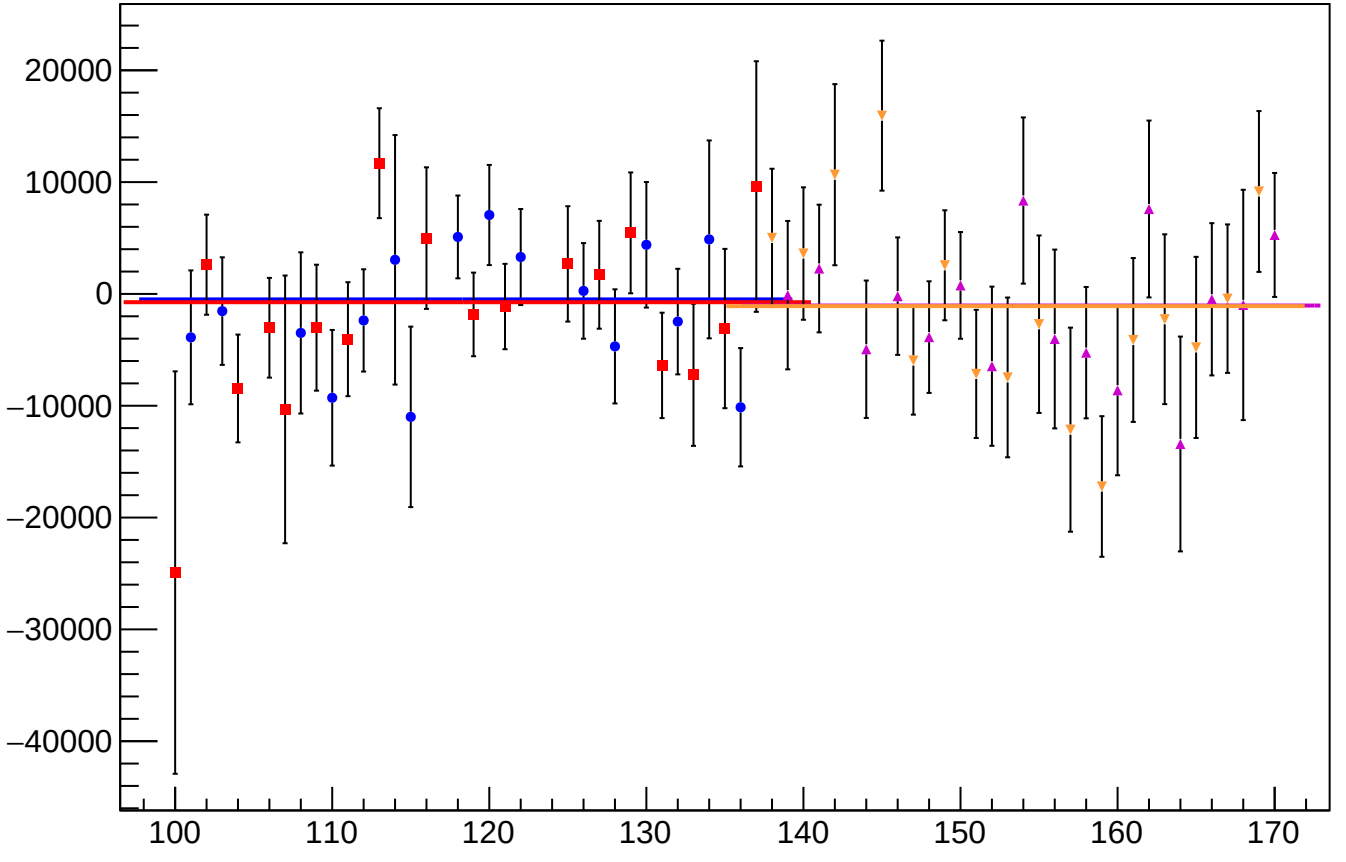
Left In: 1647.355+/-0.321 $\chi^2$/NDF:40959.6/15

+ sign 1545.116+/-0.247 $\chi^2$/NDF: 377866.8/31

All: 1546.242+/-0.173 $\chi^2$/NDF: 737480.0/65

- sign 1547.337+/-0.243 $\chi^2$/NDF: 359572.0/33

# asym_usl_atl2_avg_dit_correction_mean vs Slug




Right In: -489.402+/-1308.692 $\chi^2$/NDF: 15.8/15

Left Out: -1092.428+/-1638.268 $\chi^2$/NDF:24.2/15

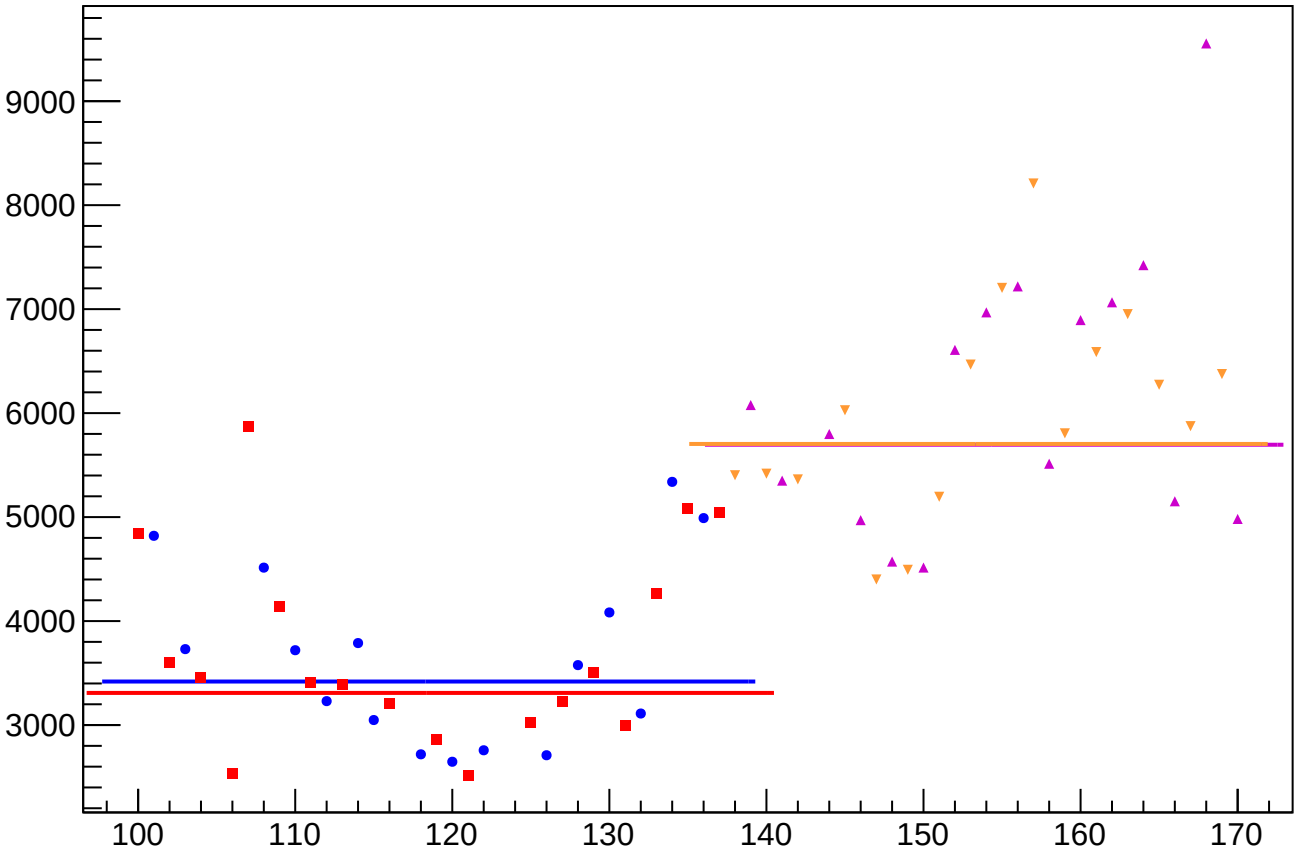
Right Out: -740.592+/-1247.947 $\chi^2$/NDF: 19.2/17

Left In: -1038.036+/-1600.653 $\chi^2$/NDF:9.2/15

+ sign -724.308+/-1022.502 $\chi^2$/NDF: 40.1/31

All: -791.132+/-709.080 $\chi^2$/NDF: 68.5/65

- sign -853.041+/-984.177 $\chi^2$/NDF: 28.4/33




Right In: 3418.701+/-0.925 $\chi^2$/NDF: 721215.3/15

Left Out: 5703.467+/-1.158 $\chi^2$/NDF:656809.4/15

Right Out: 3309.112+/-0.882 $\chi^2$/NDF: 571940.6/17

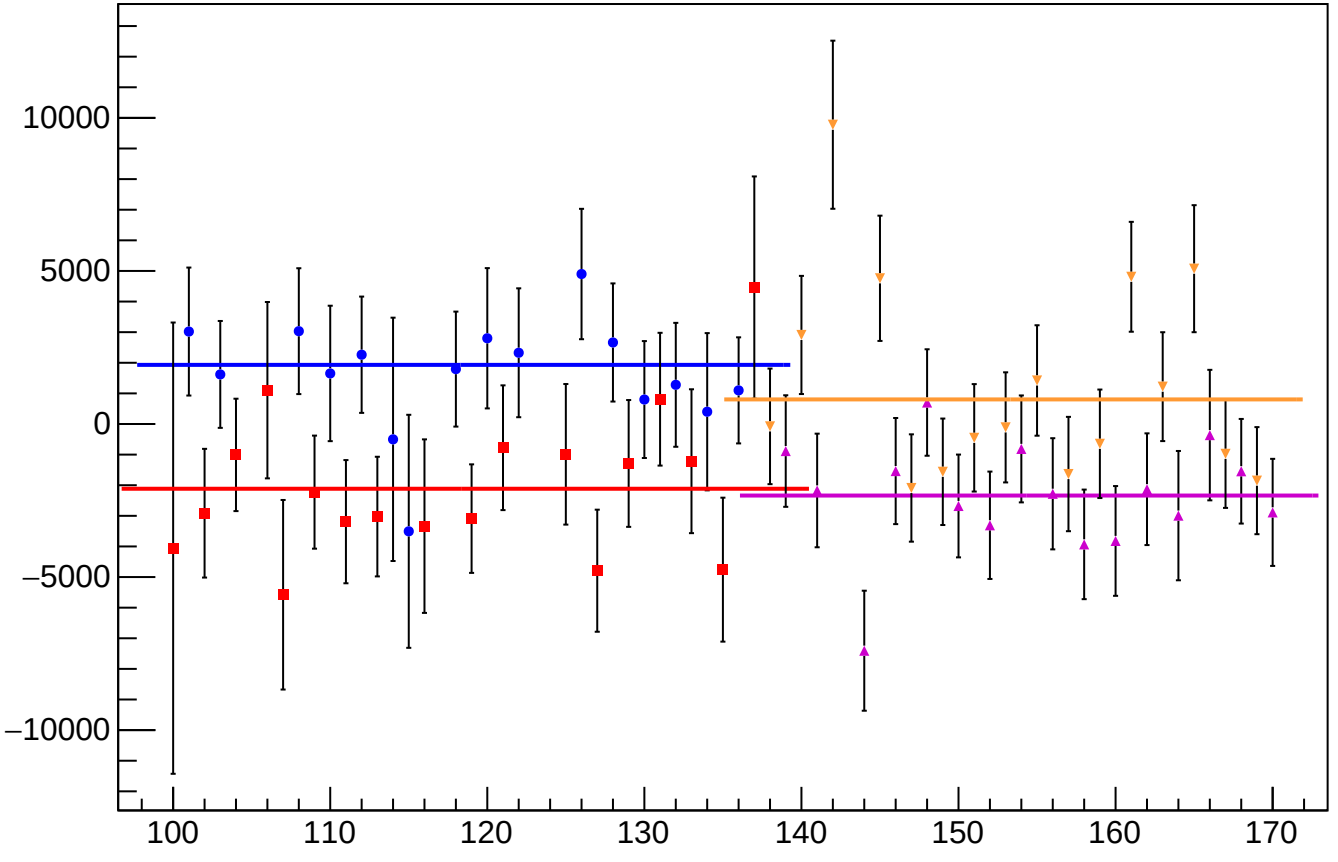
Left In: 5695.871+/-1.132 $\chi^2$/NDF:943696.5/15

+ sign 4308.721+/-0.723 $\chi^2$/NDF: 3752660.8/31

All: 4258.219+/-0.501 $\chi^2$/NDF: 8043405.6/65

- sign 4211.432+/-0.696 $\chi^2$/NDF: 4281345.9/33

# eigen_dit_asym_usl_atl2_avg_mean vs Slug




Right In: 1931.538+/-527.135 $\chi^2$/NDF: 6.4/15

Left Out: 803.105+/-464.779 $\chi^2$/NDF:36.2/15

Right Out: -2115.195+/-528.802 $\chi^2$/NDF: 13.2/17

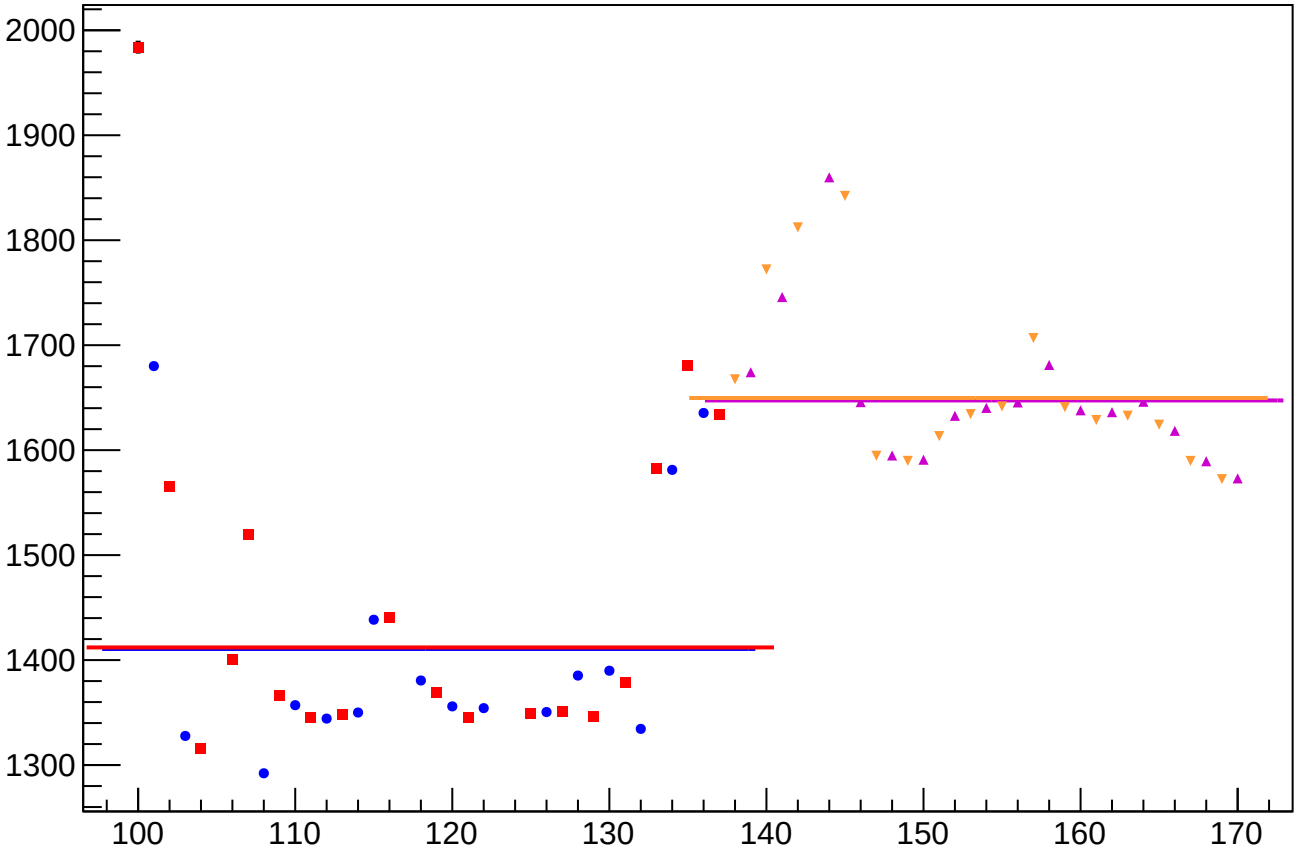
Left In: -2337.141+/-453.463 $\chi^2$/NDF:14.5/15

+ sign 1296.661+/-348.620 $\chi^2$/NDF: 45.2/31

All: -495.648+/-244.945 $\chi^2$/NDF: 125.2/65

- sign -2243.091+/-344.229 $\chi^2$/NDF: 27.8/33

# eigen_dit_asym_usl_atl2_avg_rms vs Slug




Right In: 1410.595+/-0.373 $\chi^2$/NDF: 99150.0/15

Left Out: 1649.694+/-0.329 $\chi^2$/NDF:47218.7/15

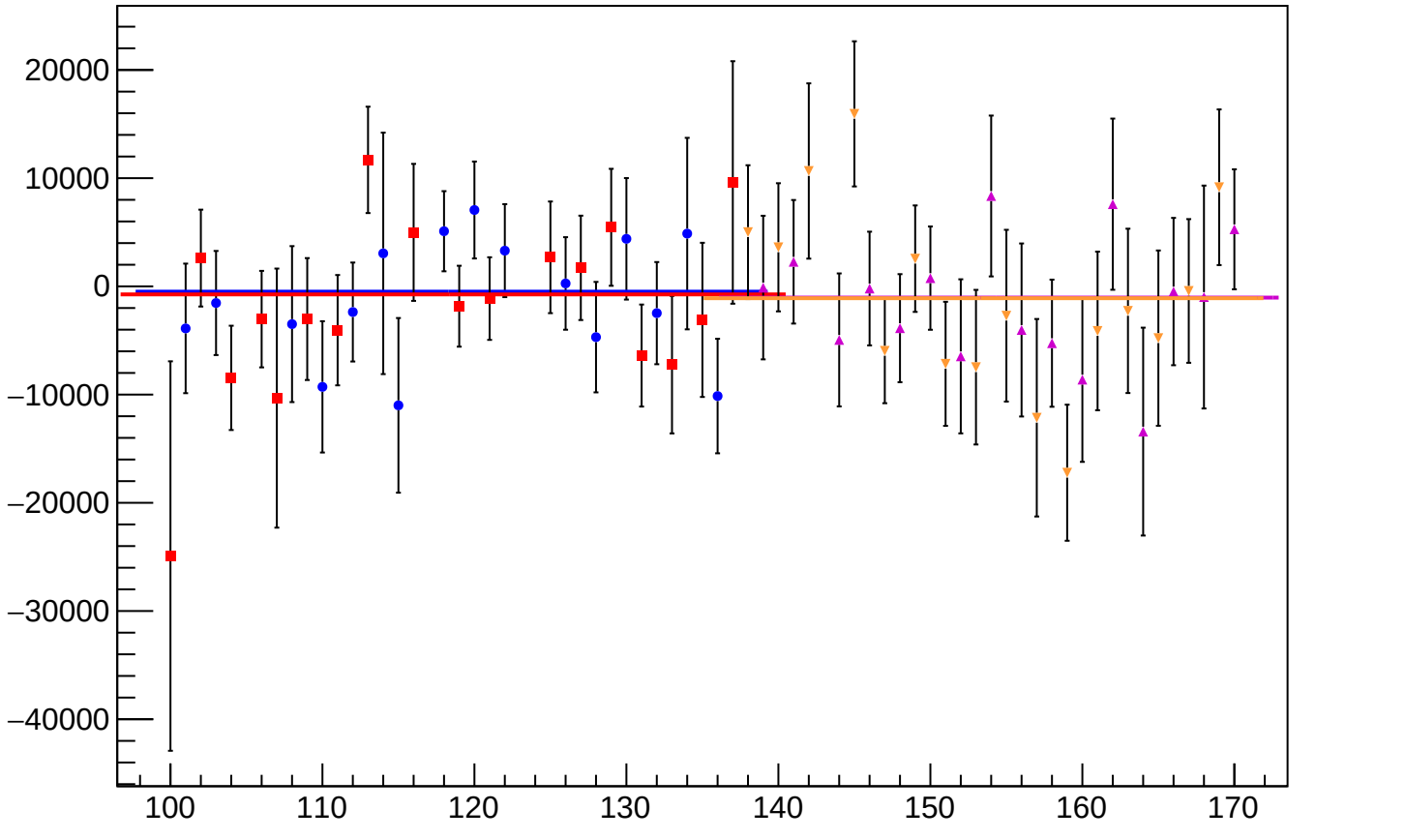
Right Out: 1412.048+/-0.373 $\chi^2$/NDF: 89704.6/17

Left In: 1647.356+/-0.321 $\chi^2$/NDF:40960.2/15

+ sign 1545.117+/-0.247 $\chi^2$/NDF: 377869.9/31

All: 1546.242+/-0.173 $\chi^2$/NDF: 737486.4/65

- sign 1547.337+/-0.243 $\chi^2$/NDF: 359575.3/33




Right In: -489.395+/-1308.688 $\chi^2$/NDF: 15.8/15

Left Out: -1092.435+/-1638.270 $\chi^2$/NDF:24.2/15

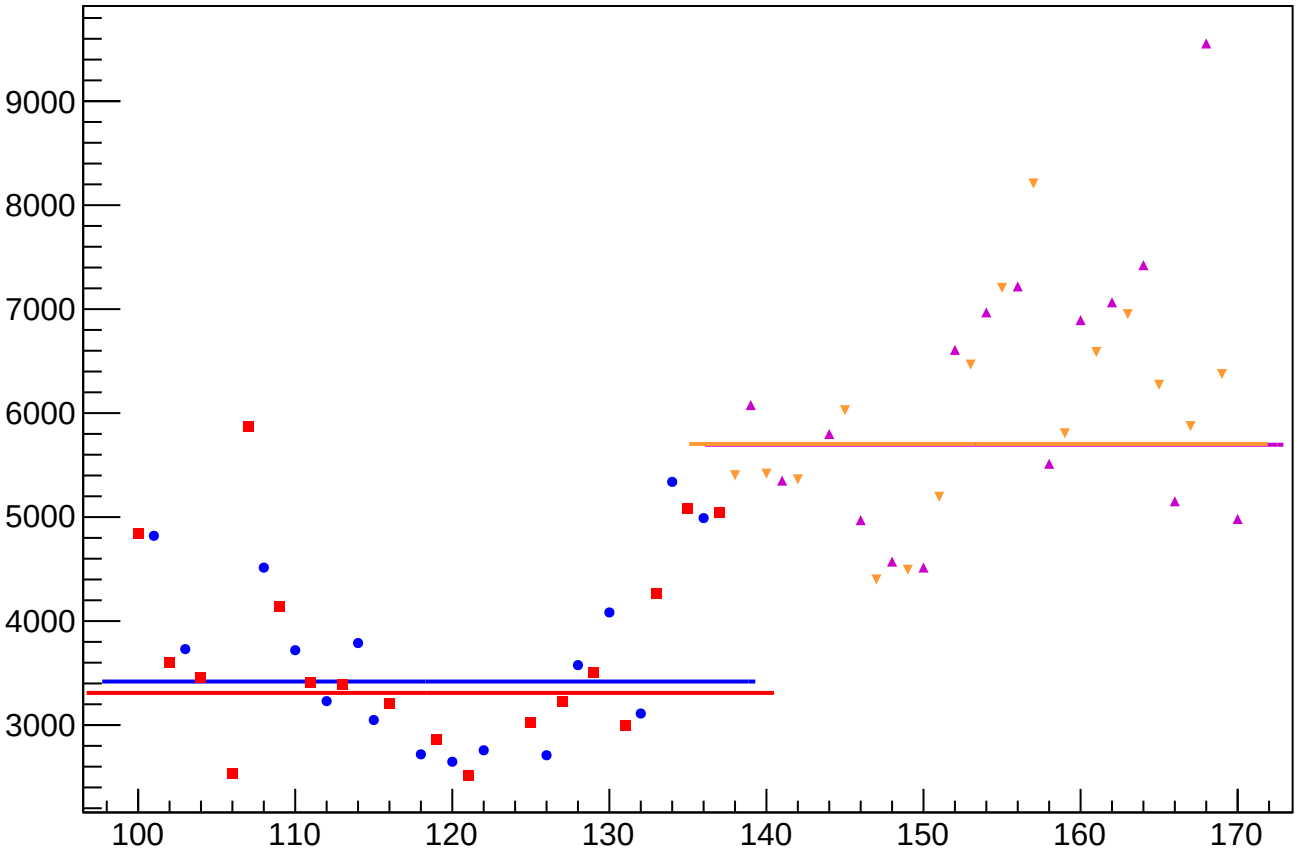
Right Out: -740.594+/-1247.944 $\chi^2$/NDF: 19.2/17

Left In: -1038.036+/-1600.655 $\chi^2$/NDF:9.2/15

+ sign -724.305+/-1022.500 $\chi^2$/NDF: 40.1/31

All: -791.132+/-709.079 $\chi^2$/NDF: 68.5/65

- sign -853.042+/-984.176 $\chi^2$/NDF: 28.4/33




Right In: 3418.690+/-0.925 $\chi^2$/NDF: 721223.9/15

Left Out: 5703.474+/-1.158 $\chi^2$/NDF:656812.0/15

Right Out: 3309.102+/-0.882 $\chi^2$/NDF: 571944.5/17

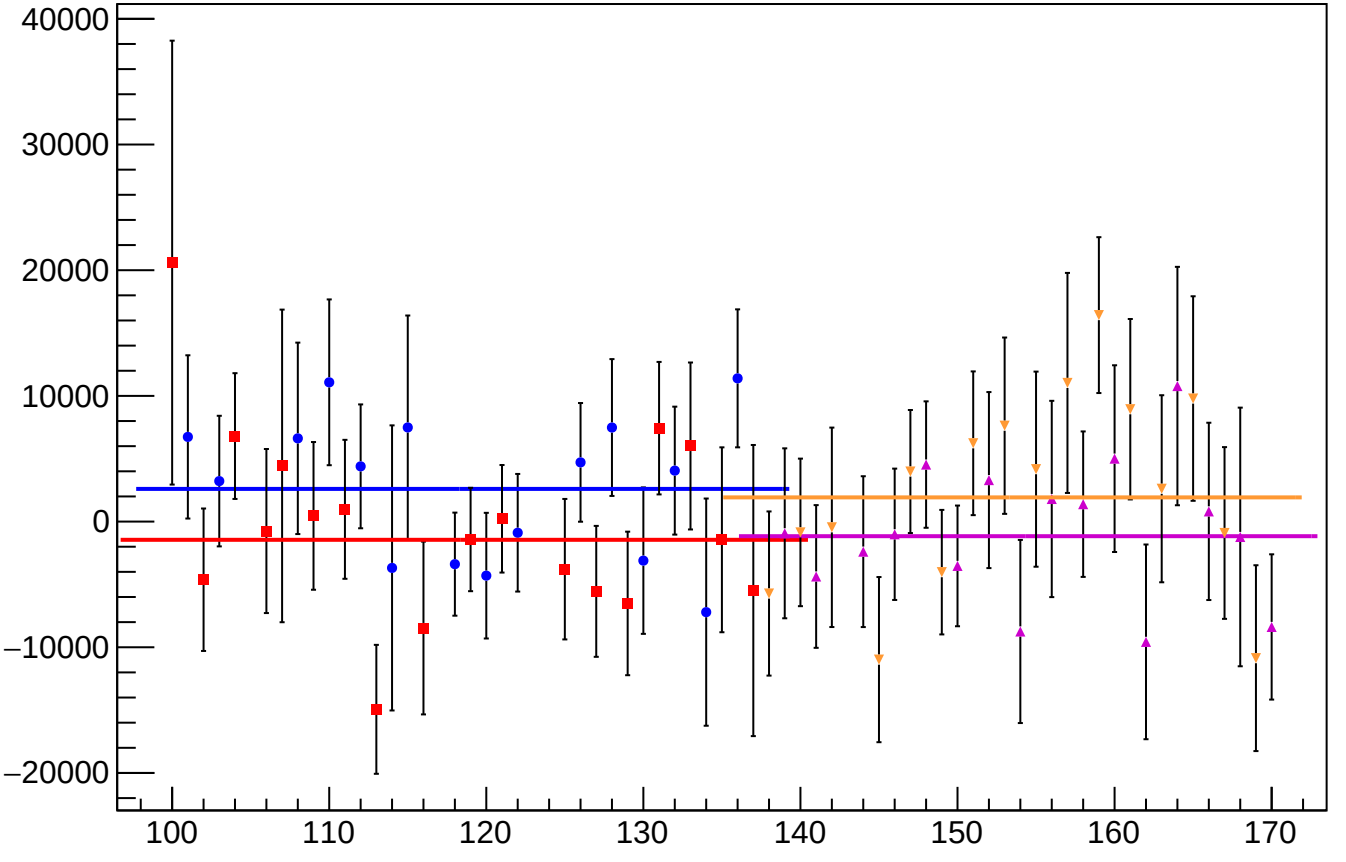
Left In: 5695.878+/-1.132 $\chi^2$/NDF:943699.5/15

+ sign 4308.712+/-0.723 $\chi^2$/NDF: 3752711.9/31

All: 4258.211+/-0.501 $\chi^2$/NDF: 8043503.6/65

- sign 4211.424+/-0.696 $\chi^2$/NDF: 4281392.9/33

# asym_usl_atl2_avg_mean vs Slug




Right In: 2599.622+/-1414.499 $\chi^2$/NDF: 13.5/15

Left Out: 1924.628+/-1637.667 $\chi^2$/NDF:20.1/15

Right Out: -1450.418+/-1382.818 $\chi^2$/NDF: 19.0/17

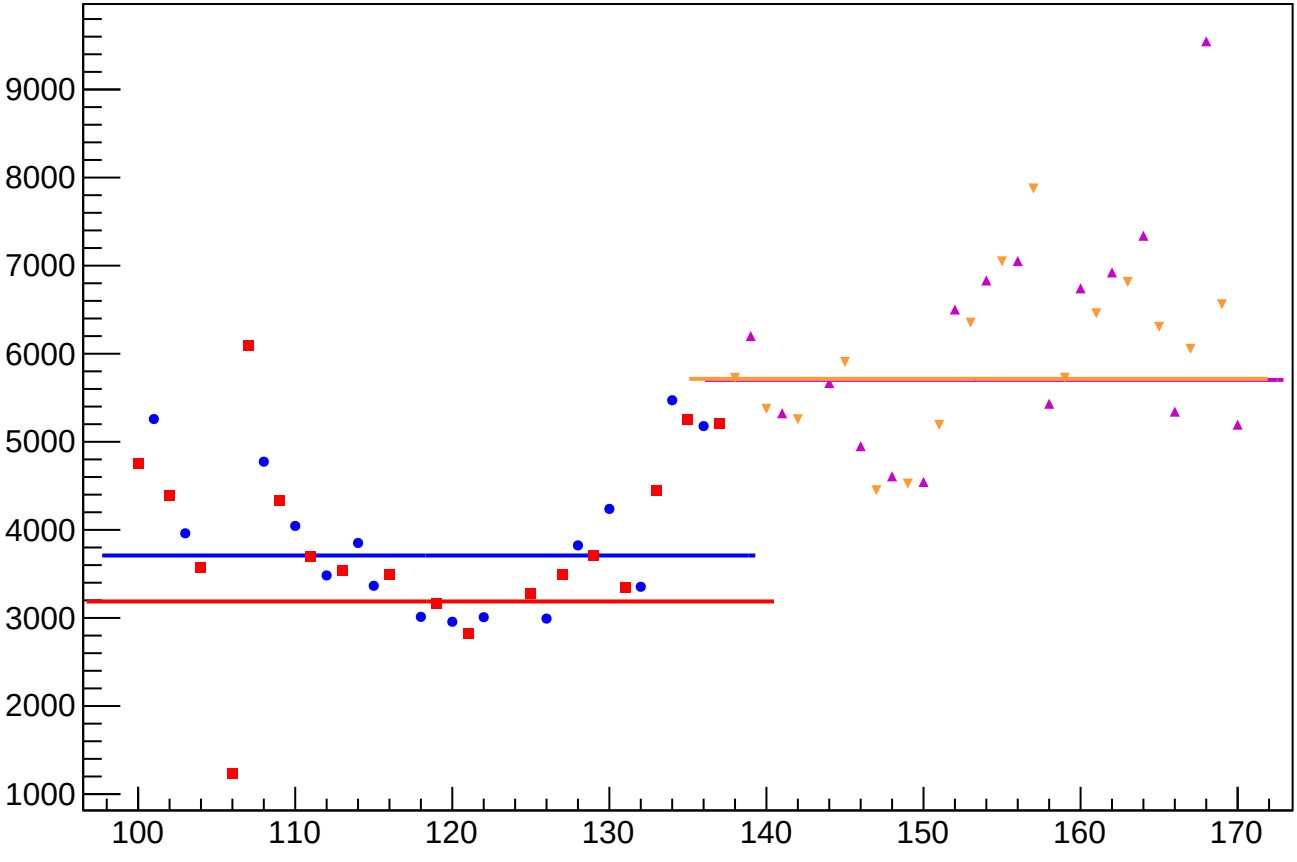
Left In: -1162.461+/-1599.037 $\chi^2$/NDF:8.8/15

+ sign 2311.216+/-1070.477 $\chi^2$/NDF: 33.7/31

All: 449.854+/-748.121 $\chi^2$/NDF: 67.4/65

- sign -1327.211+/-1045.956 $\chi^2$/NDF: 27.9/33

# asym_usl_atl2_avg_rms vs Slug




Right In: 3709.155+/-1.000 $\chi^2$/NDF: 610637.3/15

Left Out: 5714.416+/-1.158 $\chi^2$/NDF:585088.3/15

Right Out: 3187.191+/-0.896 $\chi^2$/NDF: 1610818.1/17

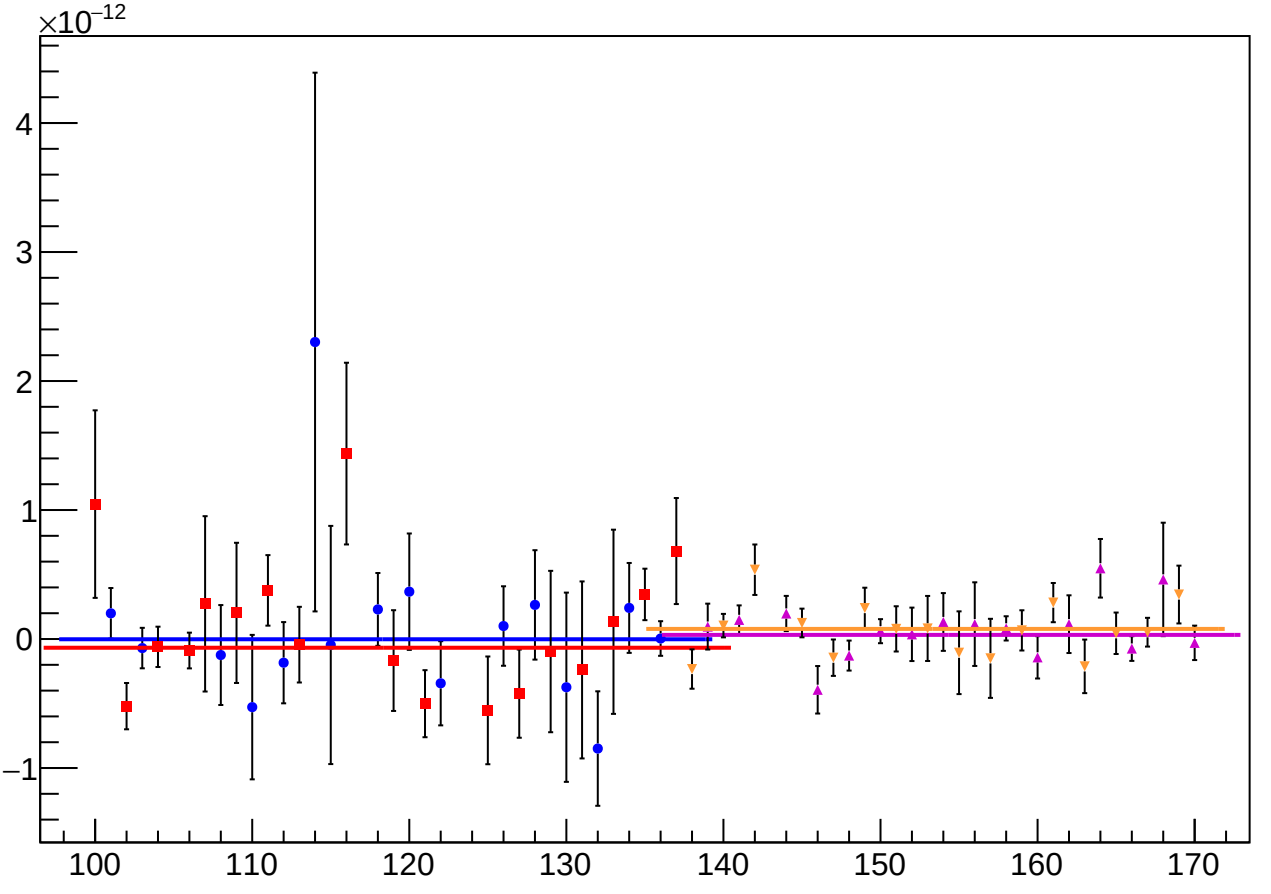
Left In: 5702.727+/-1.131 $\chi^2$/NDF:858985.0/15

+ sign 4565.942+/-0.757 $\chi^2$/NDF: 2913124.3/31

All: 4346.070+/-0.515 $\chi^2$/NDF: 8581422.4/65

- sign 4156.939+/-0.702 $\chi^2$/NDF: 5511343.3/33

# asym_usl_atl2_avg_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 11.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:19.6/15

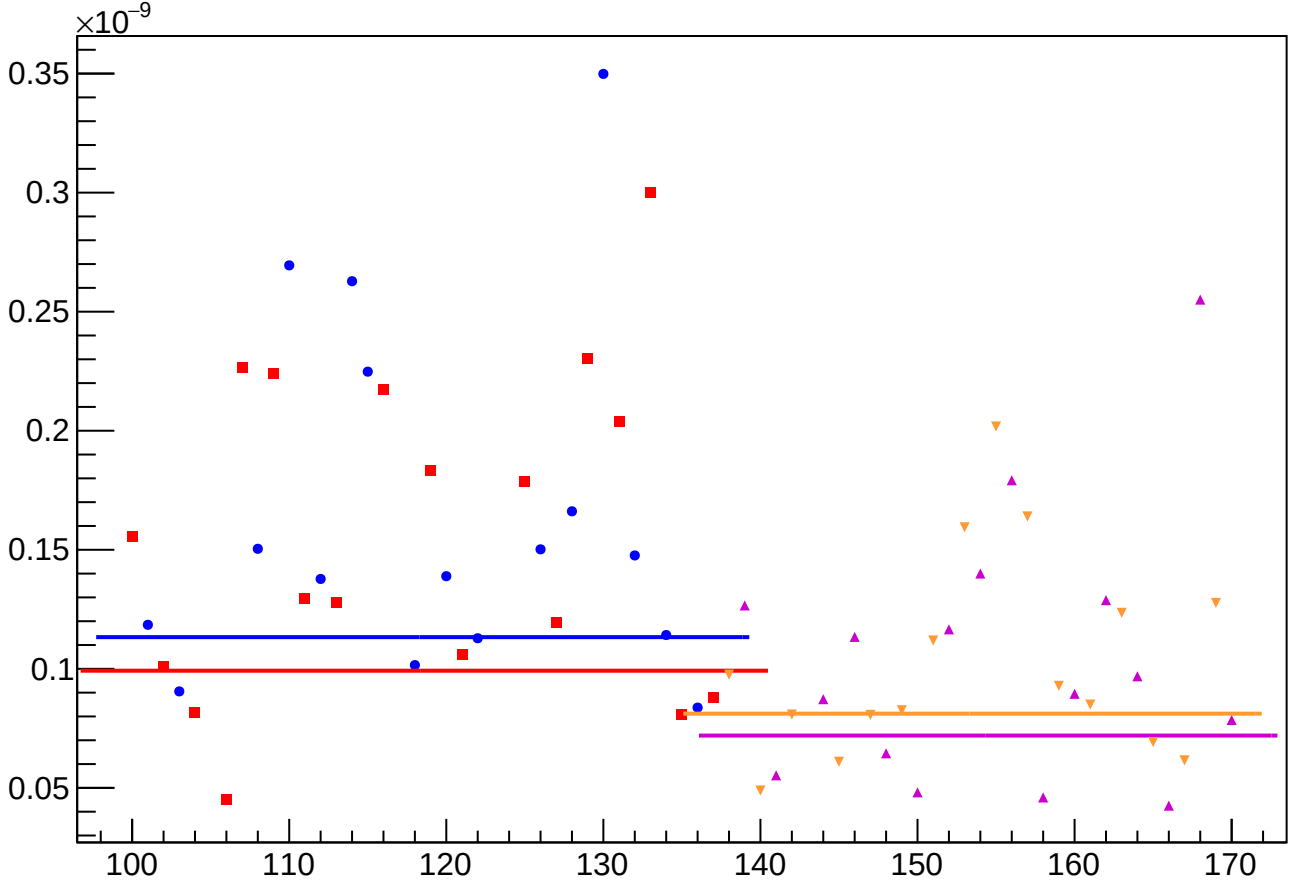
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 29.5/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:19.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 31.7/31

All: 0.000+/-0.000 $\chi^2$/NDF: 83.6/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 50.7/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 655766.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1278880.8/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1100854.2/17

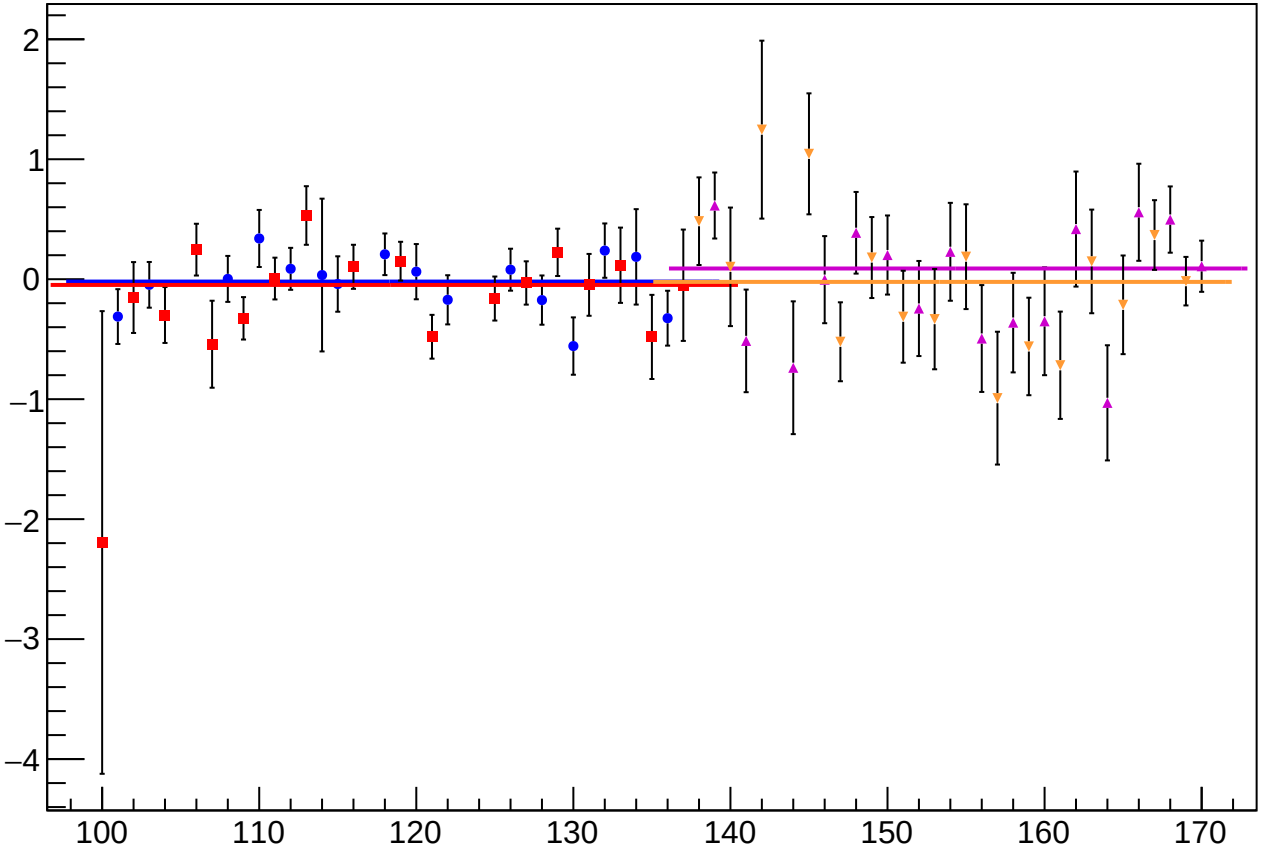
Left In: 0.000+/-0.000 $\chi^2$/NDF:1864810.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2255455.4/31

All: 0.000+/-0.000 $\chi^2$/NDF: 5590830.1/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 3232237.7/33

# asym_usl_atl2_avg_dit_vs_cor_diff_mean vs Slug




Right In: -0.020+/-0.054 $\chi^2$/NDF: 16.0/15

Left Out: -0.022+/-0.093 $\chi^2$/NDF:22.8/15

Right Out: -0.048+/-0.052 $\chi^2$/NDF: 26.3/17

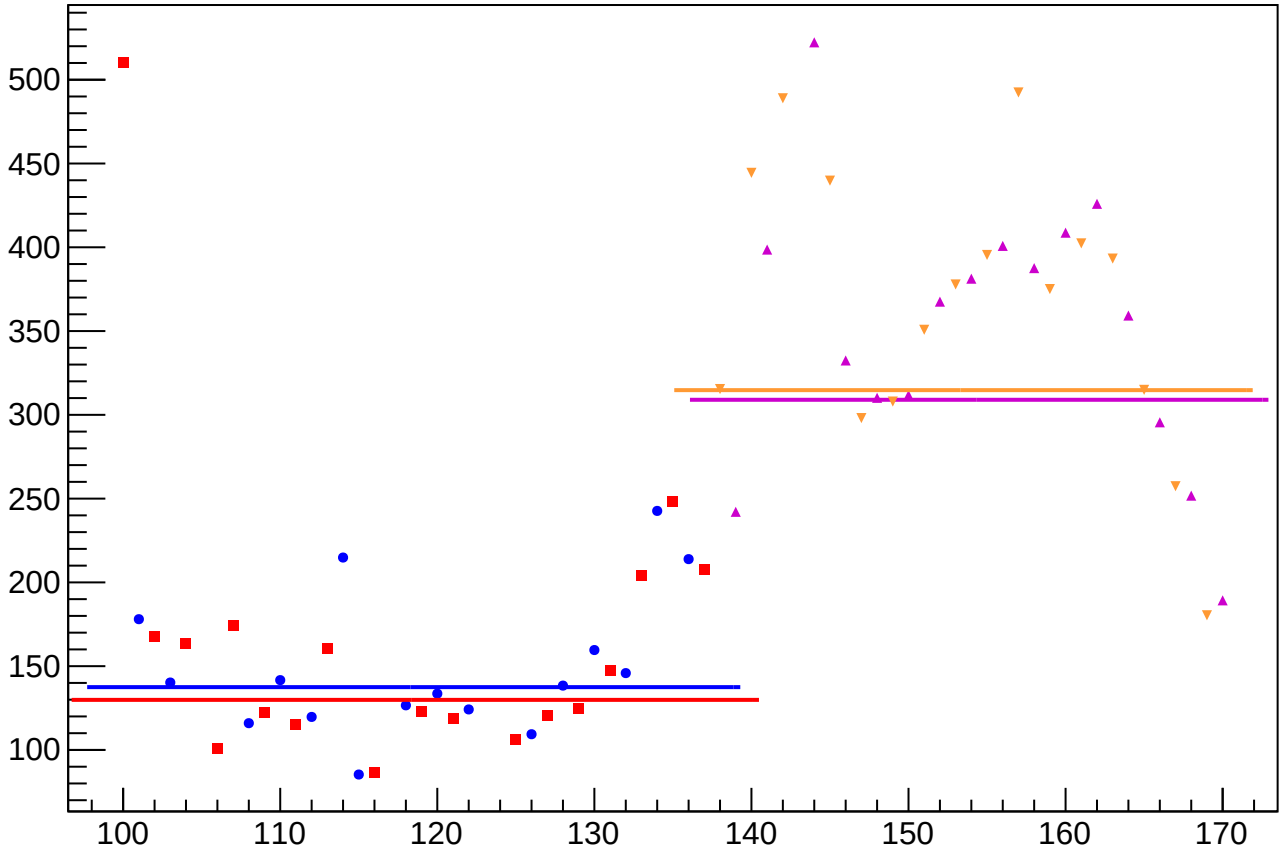
Left In: 0.089+/-0.089 $\chi^2$/NDF:22.9/15

+ sign -0.020+/-0.047 $\chi^2$/NDF: 38.8/31

All: -0.016+/-0.033 $\chi^2$/NDF: 89.8/65

- sign -0.013+/-0.045 $\chi^2$/NDF: 51.0/33

# asym_usl_atl2_avg_dit_vs_cor_diff_rms vs Slug




Right In: 137.492+/-0.038 $\chi^2$/NDF: 692947.9/15

Left Out: 314.742+/-0.066 $\chi^2$/NDF:1862101.2/15

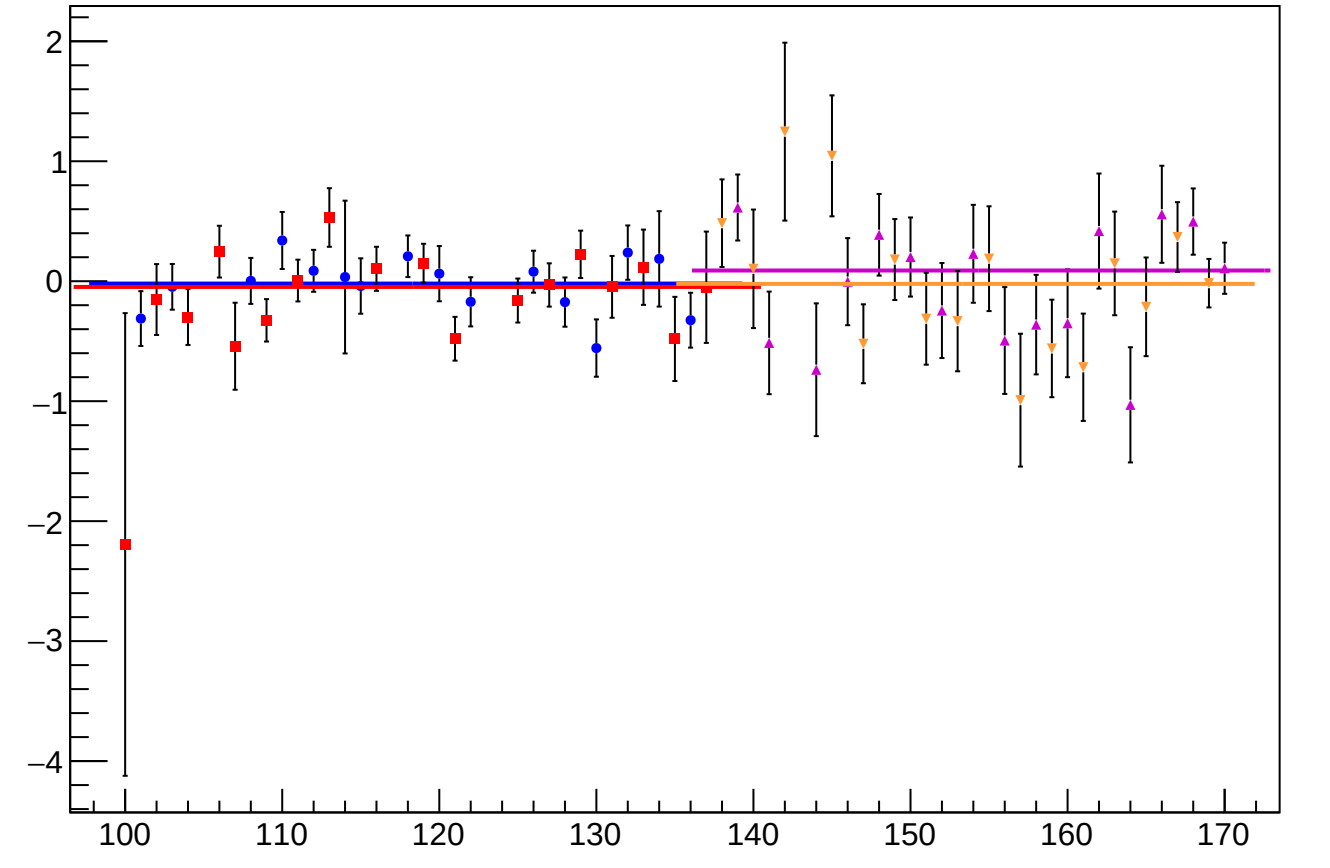
Right Out: 129.887+/-0.037 $\chi^2$/NDF: 833983.9/17

Left In: 308.986+/-0.063 $\chi^2$/NDF:1732611.5/15

+ sign 182.268+/-0.033 $\chi^2$/NDF: 7957170.1/31

All: 178.969+/-0.023 $\chi^2$/NDF: 16522919.7/65

- sign 175.892+/-0.032 $\chi^2$/NDF: 8546591.2/33




Right In: -0.020+/-0.054 $\chi^2$/NDF: 16.0/15

Left Out: -0.022+/-0.093 $\chi^2$/NDF:22.8/15

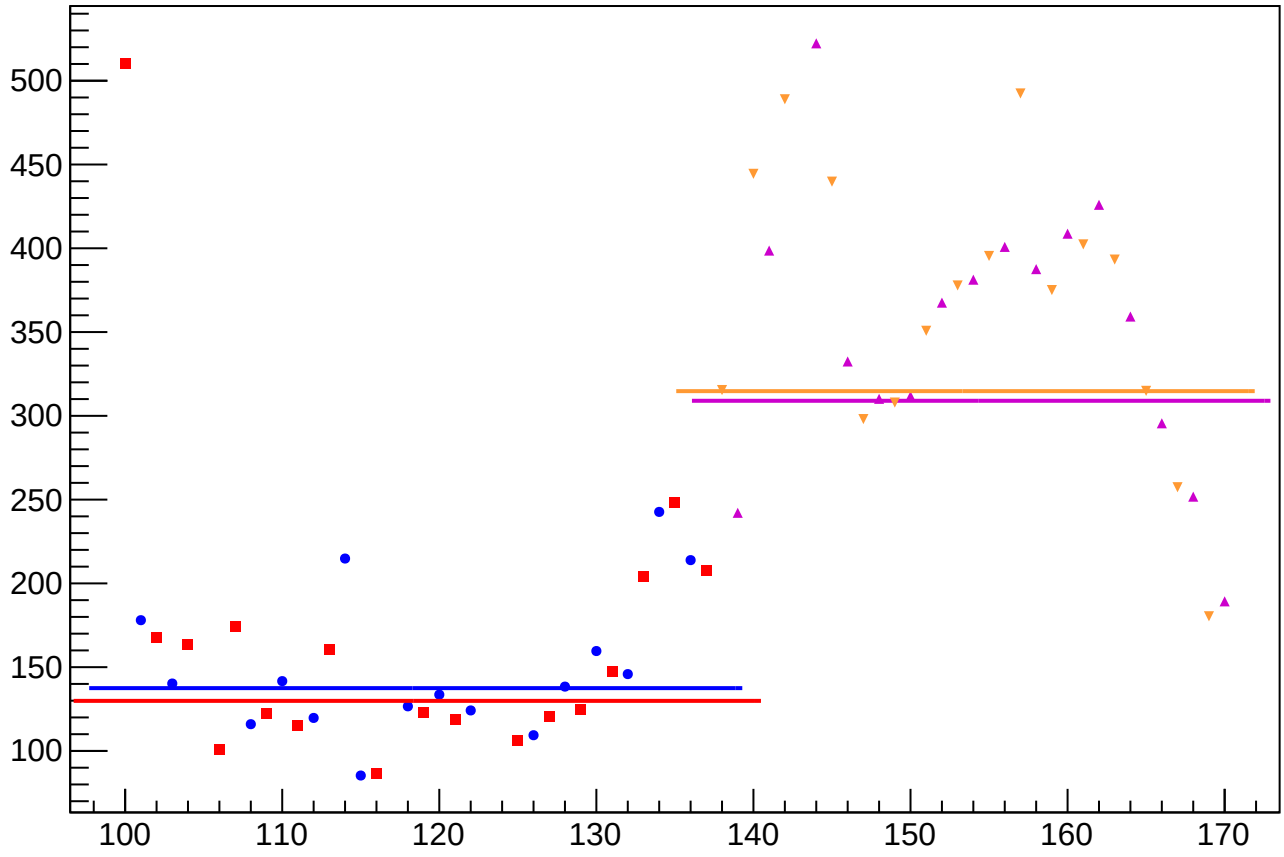
Right Out: -0.048+/-0.052 $\chi^2$/NDF: 26.3/17

Left In: 0.089+/-0.089 $\chi^2$/NDF:22.9/15

+ sign -0.020+/-0.047 $\chi^2$/NDF: 38.8/31

All: -0.016+/-0.033 $\chi^2$/NDF: 89.8/65

- sign -0.013+/-0.045 $\chi^2$/NDF: 51.0/33




Right In: 137.492+/-0.038 $\chi^2$/NDF: 692947.9/15

Left Out: 314.742+/-0.066 $\chi^2$/NDF:1862101.2/15

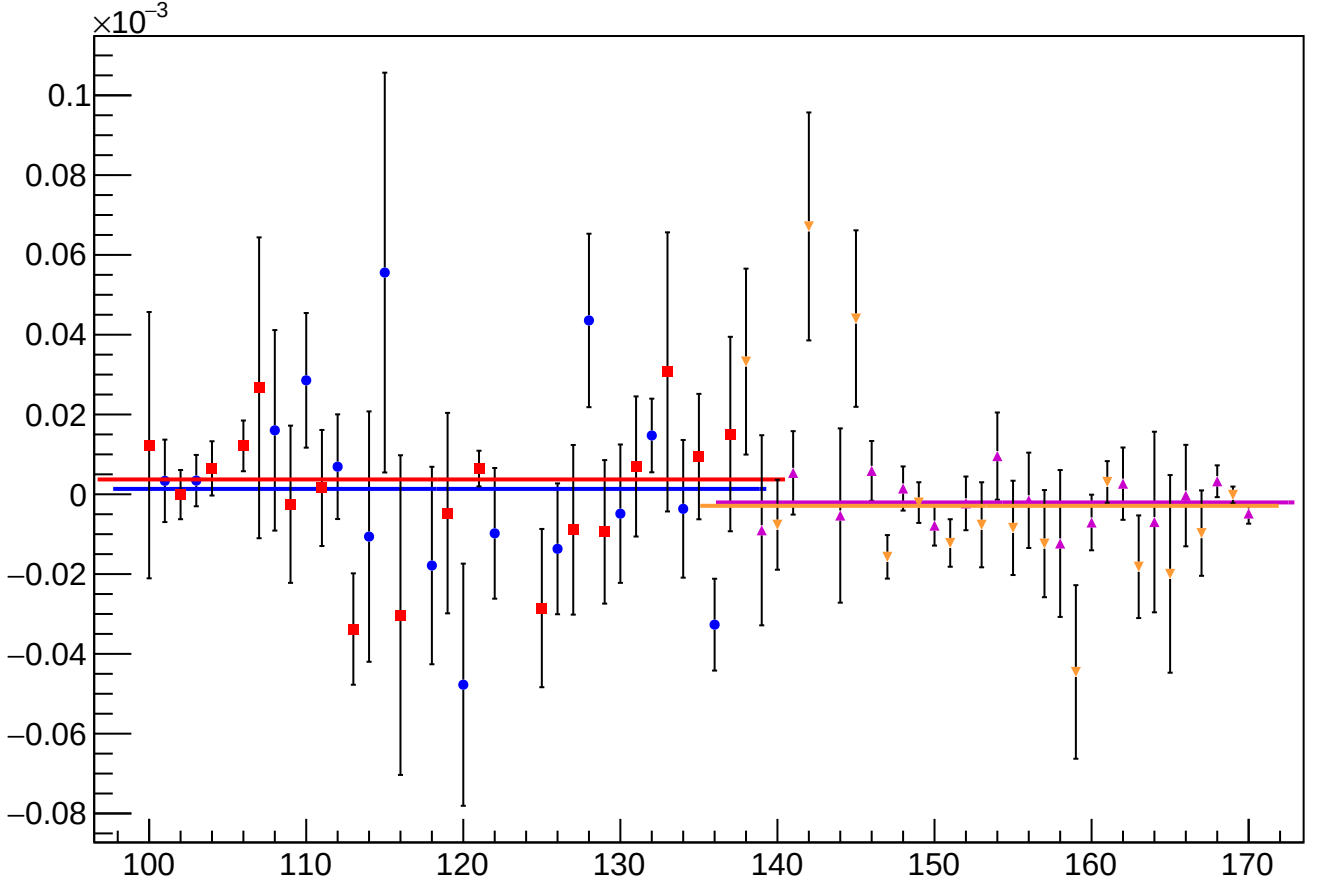
Right Out: 129.887+/-0.037 $\chi^2$/NDF: 833983.9/17

Left In: 308.986+/-0.063 $\chi^2$/NDF:1732611.5/15

+ sign 182.268+/-0.033 $\chi^2$/NDF: 7957170.1/31

All: 178.969+/-0.023 $\chi^2$/NDF: 16522919.7/65

- sign 175.892+/-0.032 $\chi^2$/NDF: 8546591.2/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 23.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:31.0/15

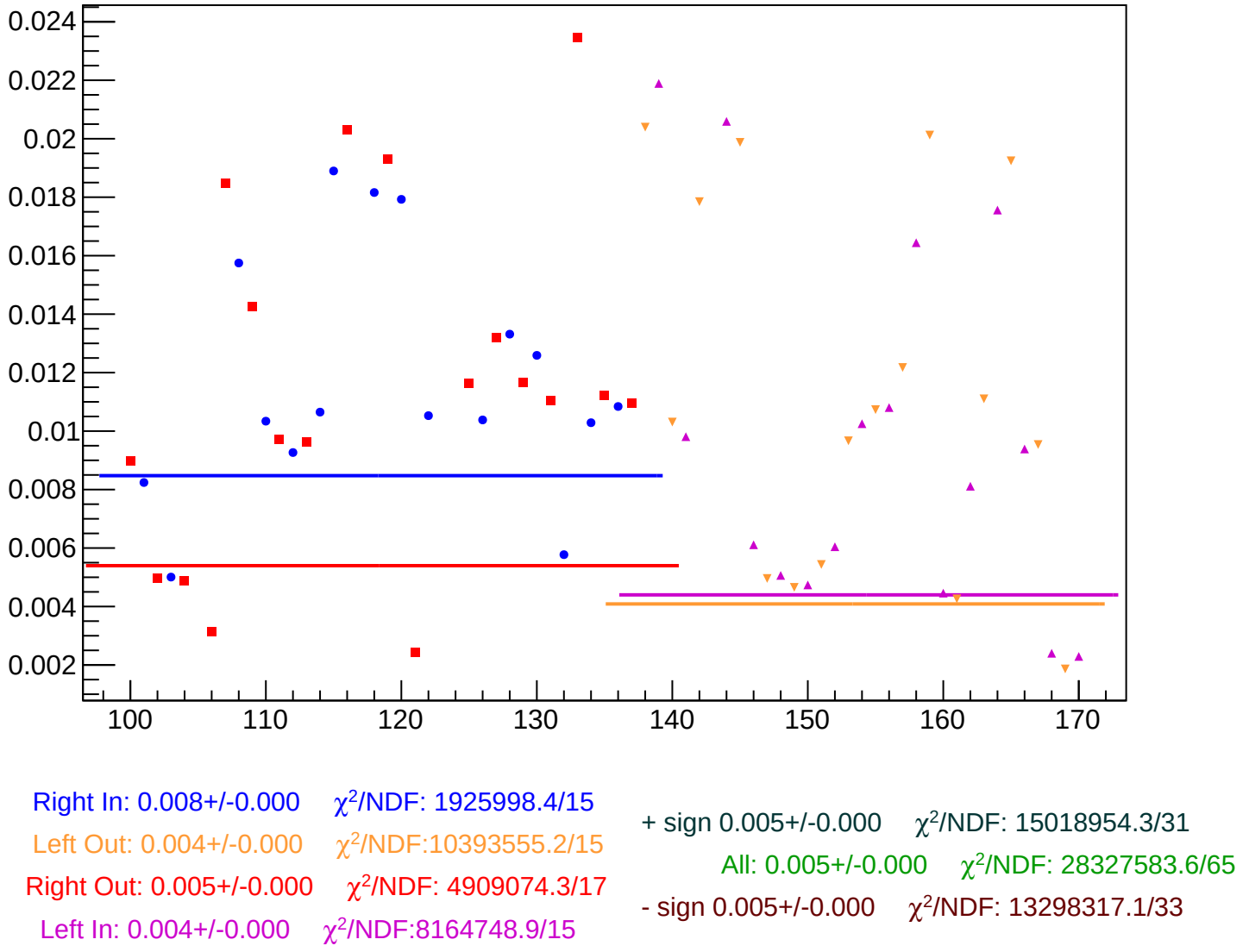
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.8/17

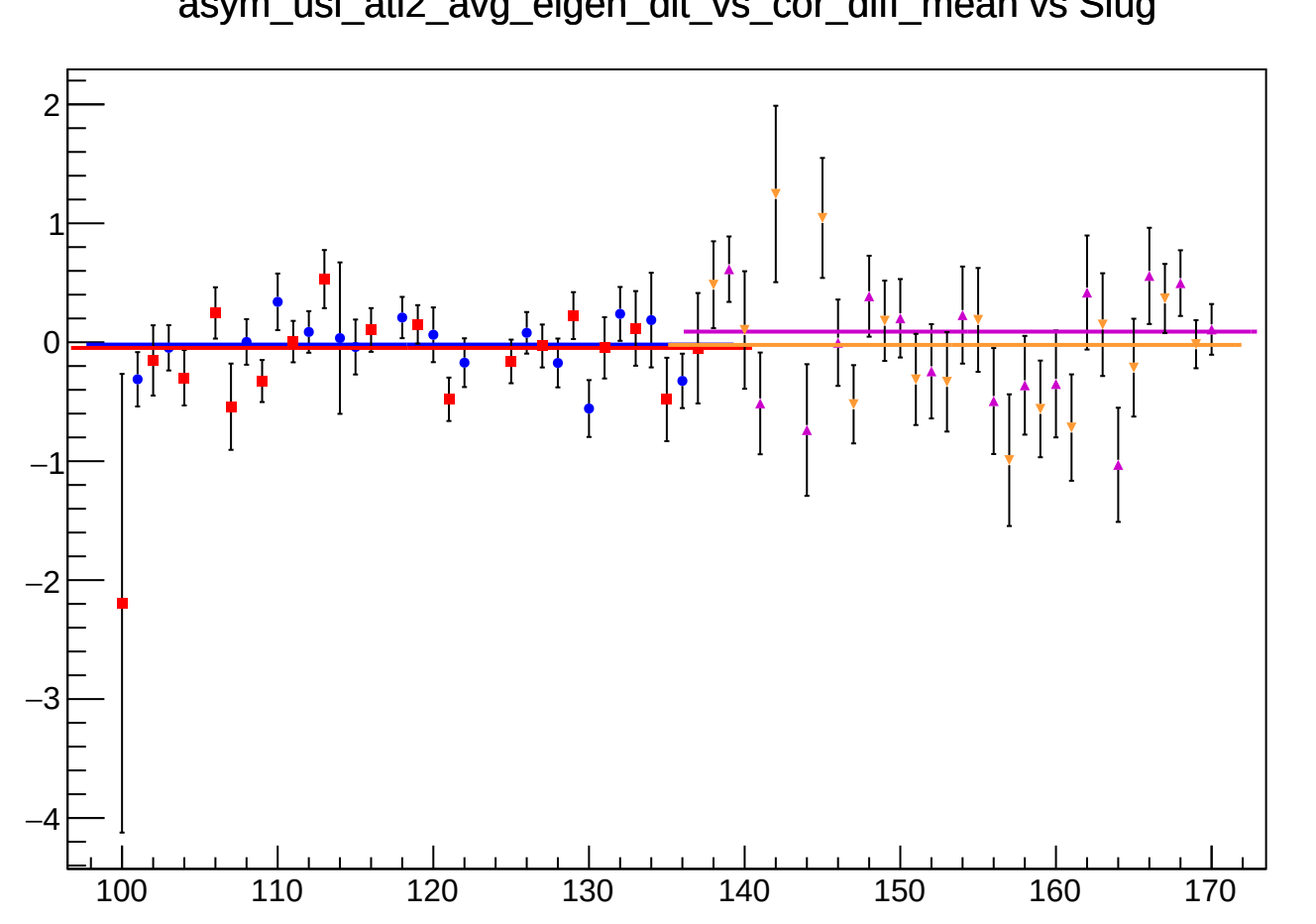
Left In: -0.000+/-0.000 $\chi^2$/NDF:8.7/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 56.2/31

All: -0.000+/-0.000 $\chi^2$/NDF: 85.2/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 28.2/33


asym_usl_atl2_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
100
110
120
130
140
150
160
170
Right In: 0.008+/-0.000 χ²/NDF: 1925998.4/15
Left Out: 0.004+/-0.000 χ²/NDF:10393555.2/15
Right Out: 0.005+/-0.000 χ²/NDF: 4909074.3/17
Left In: 0.004+/-0.000 χ²/NDF:8164748.9/15
+ sign 0.005+/-0.000 χ²/NDF: 15018954.3/31
All: 0.005+/-0.000 χ²/NDF: 28327583.6/65
- sign 0.005+/-0.000 χ²/NDF: 13298317.1/33




Right In: -0.020+/-0.054 $\chi^2$/NDF: 16.0/15

Left Out: -0.022+/-0.093 $\chi^2$/NDF:22.8/15

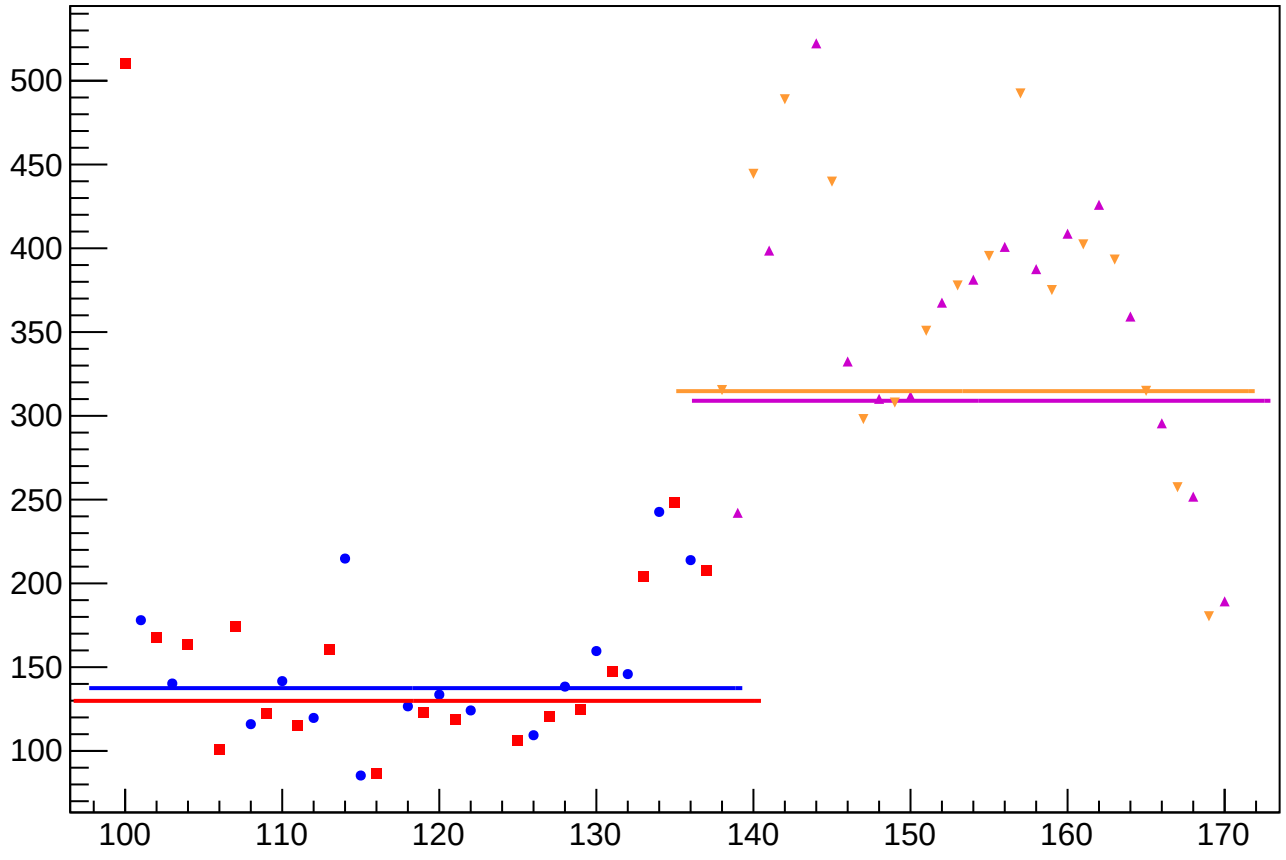
Right Out: -0.048+/-0.052 $\chi^2$/NDF: 26.3/17

Left In: 0.089+/-0.089 $\chi^2$/NDF:22.9/15

+ sign -0.020+/-0.047 $\chi^2$/NDF: 38.9/31

All: -0.016+/-0.033 $\chi^2$/NDF: 89.8/65

- sign -0.013+/-0.045 $\chi^2$/NDF: 51.0/33




Right In: 137.492+/-0.038 $\chi^2$/NDF: 692923.1/15

Left Out: 314.745+/-0.066 $\chi^2$/NDF:1862183.6/15

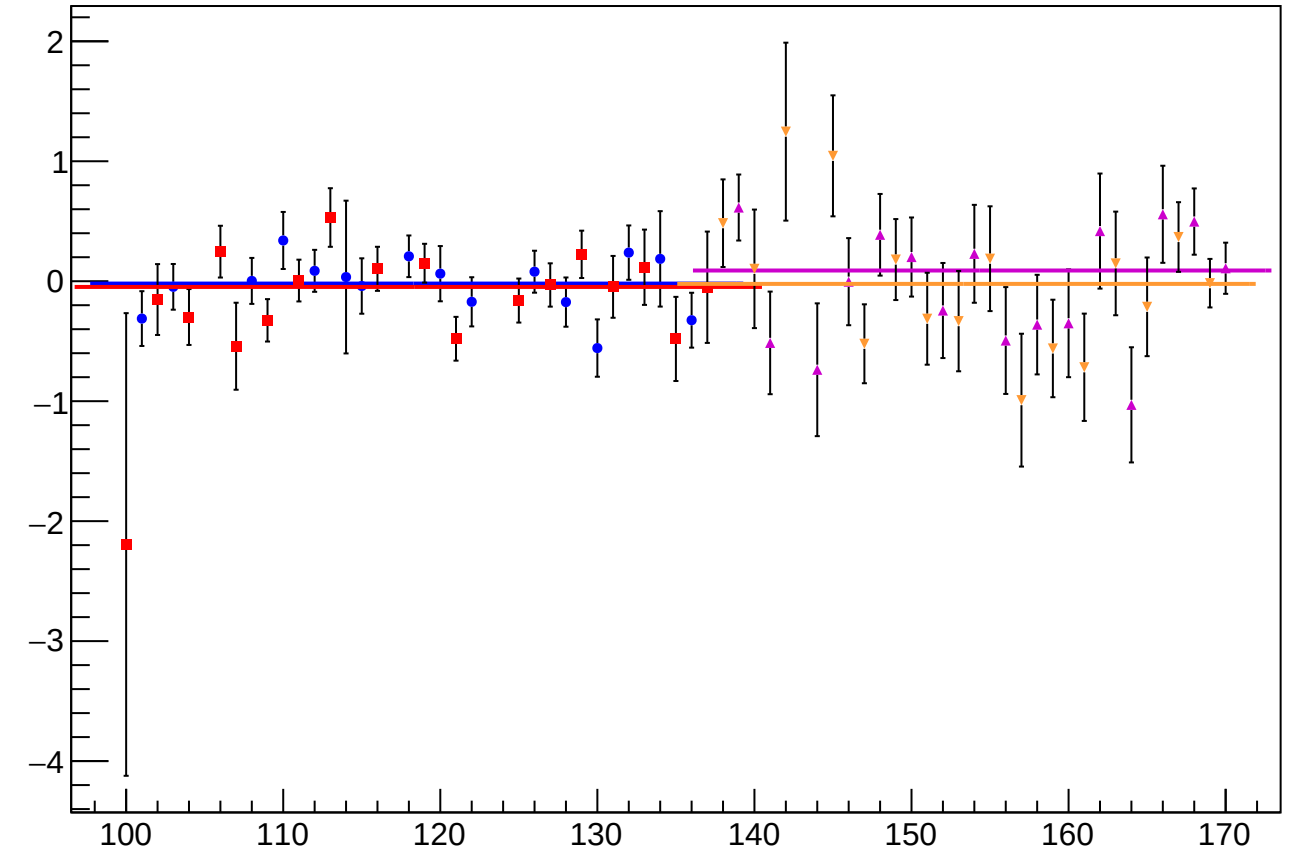
Right Out: 129.887+/-0.037 $\chi^2$/NDF: 833937.8/17

Left In: 308.990+/-0.063 $\chi^2$/NDF:1732641.4/15

+ sign 182.268+/-0.033 $\chi^2$/NDF: 7957331.2/31

All: 178.969+/-0.023 $\chi^2$/NDF: 16523206.1/65

- sign 175.892+/-0.032 $\chi^2$/NDF: 8546717.4/33




Right In: -0.020+/-0.054 $\chi^2$/NDF: 16.0/15

Left Out: -0.022+/-0.093 $\chi^2$/NDF:22.8/15

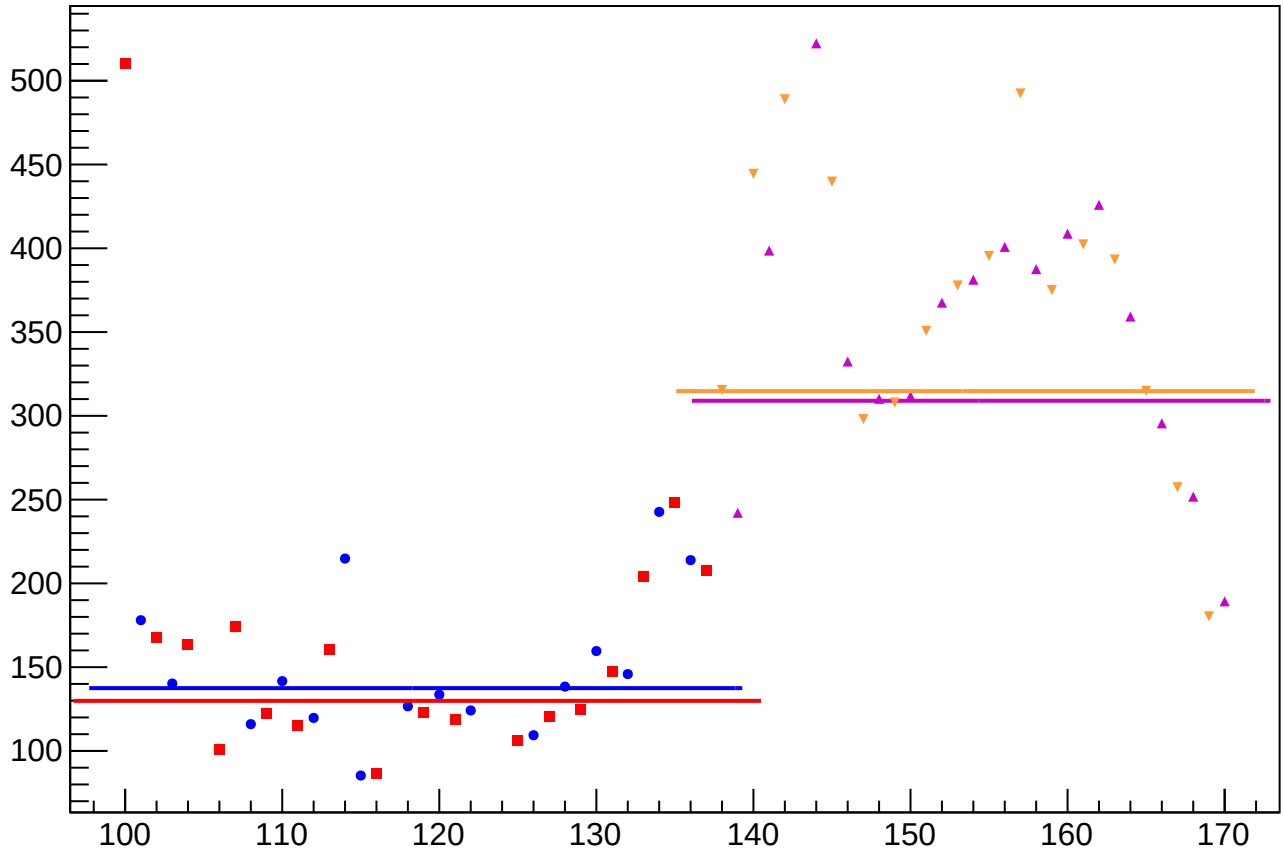
Right Out: -0.048+/-0.052 $\chi^2$/NDF: 26.3/17

Left In: 0.089+/-0.089 $\chi^2$/NDF:22.9/15

+ sign -0.020+/-0.047 $\chi^2$/NDF: 38.9/31

All: -0.016+/-0.033 $\chi^2$/NDF: 89.8/65

- sign -0.013+/-0.045 $\chi^2$/NDF: 51.0/33




Right In: 137.492+/-0.038 $\chi^2$/NDF: 692923.1/15

Left Out: 314.745+/-0.066 $\chi^2$/NDF:1862183.6/15

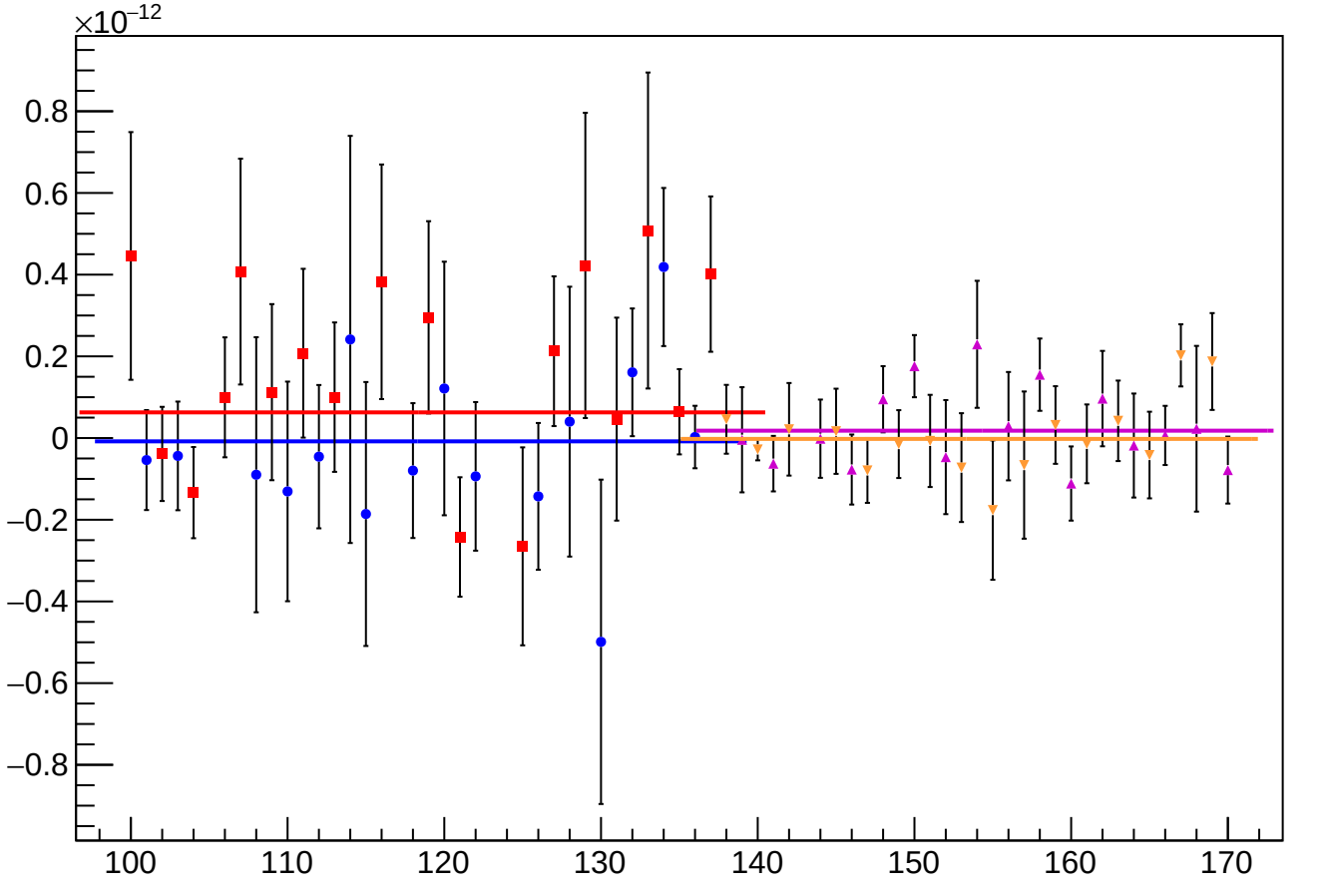
Right Out: 129.887+/-0.037 $\chi^2$/NDF: 833937.8/17

Left In: 308.990+/-0.063 $\chi^2$/NDF:1732641.4/15

+ sign 182.268+/-0.033 $\chi^2$/NDF: 7957331.2/31

All: 178.969+/-0.023 $\chi^2$/NDF: 16523206.1/65

- sign 175.892+/-0.032 $\chi^2$/NDF: 8546717.4/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 9.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:14.0/15

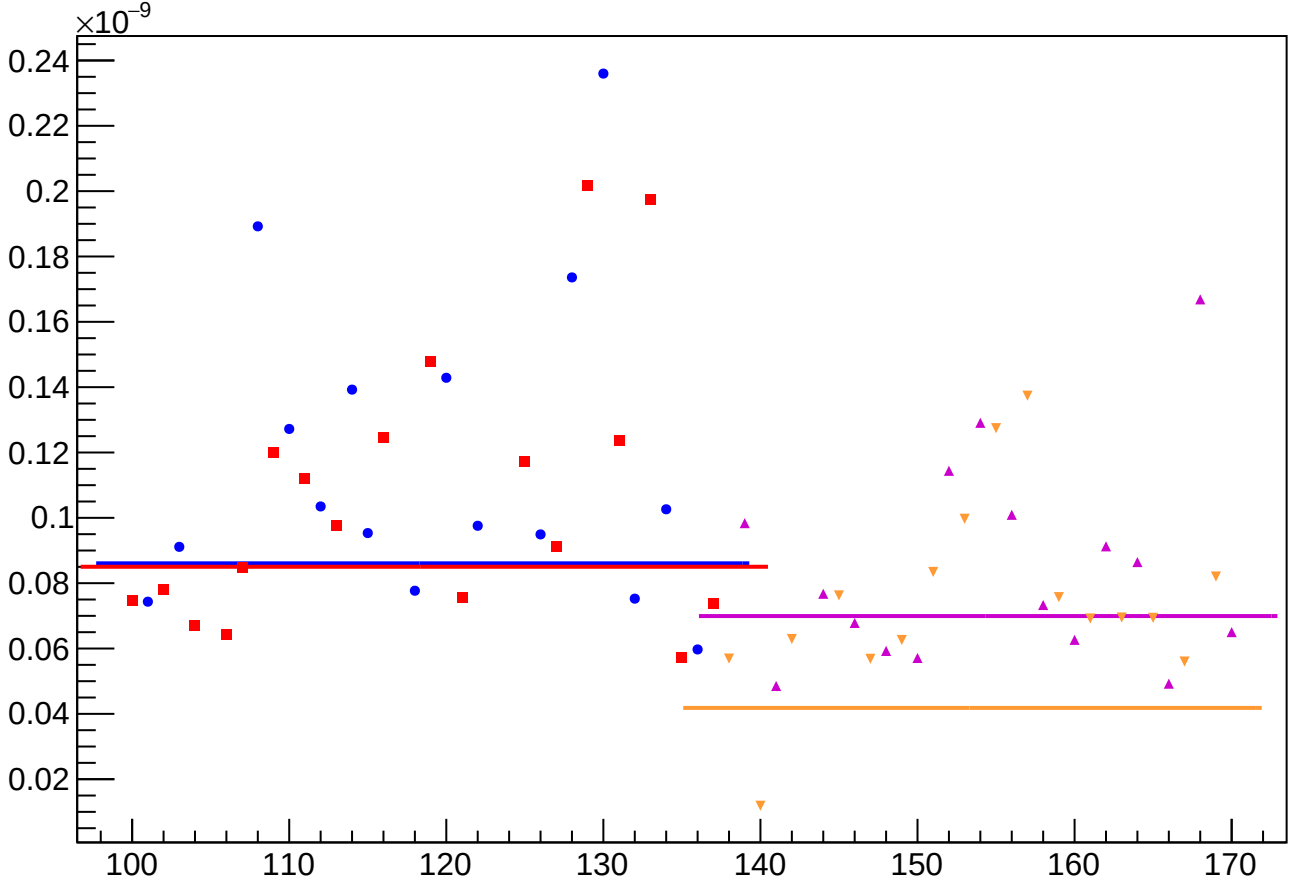
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 22.2/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:16.4/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 23.9/31

All: 0.000+/-0.000 $\chi^2$/NDF: 64.7/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 39.4/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1072075.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:5793582.8/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 983211.4/17

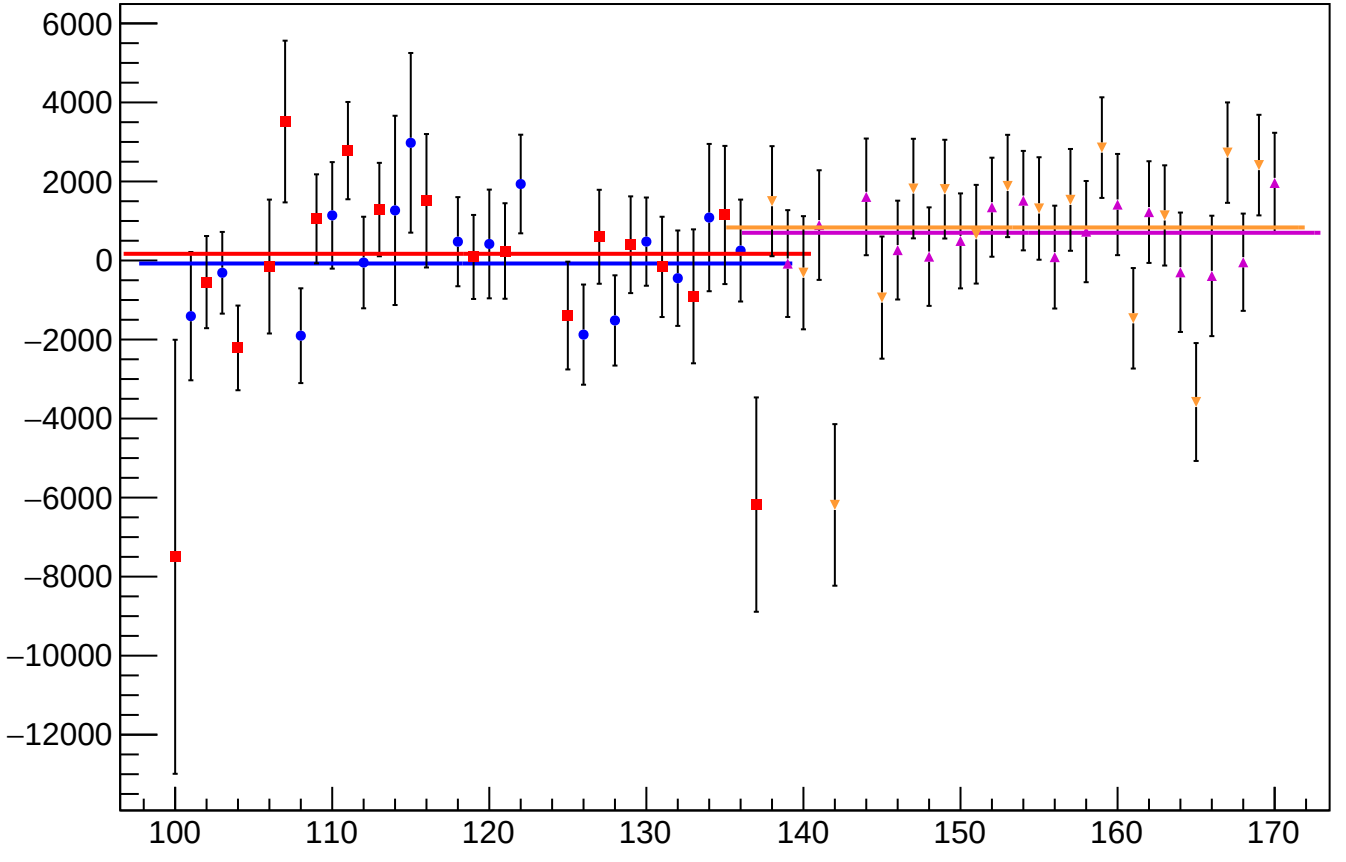
Left In: 0.000+/-0.000 $\chi^2$/NDF:1744016.5/15

\+ sign 0.000+/-0.000 $\chi^2$/NDF: 8685604.7/31

All: 0.000+/-0.000 $\chi^2$/NDF: 13296269.6/65

\- sign 0.000+/-0.000 $\chi^2$/NDF: 2923854.7/33

# reg_asym_usl_atl2_dd_mean vs Slug




Right In: -75.944+/-326.226 $\chi^2$/NDF: 13.4/15

Left Out: 836.273+/-335.023 $\chi^2$/NDF:34.7/15

Right Out: 169.345+/-321.827 $\chi^2$/NDF: 24.4/17

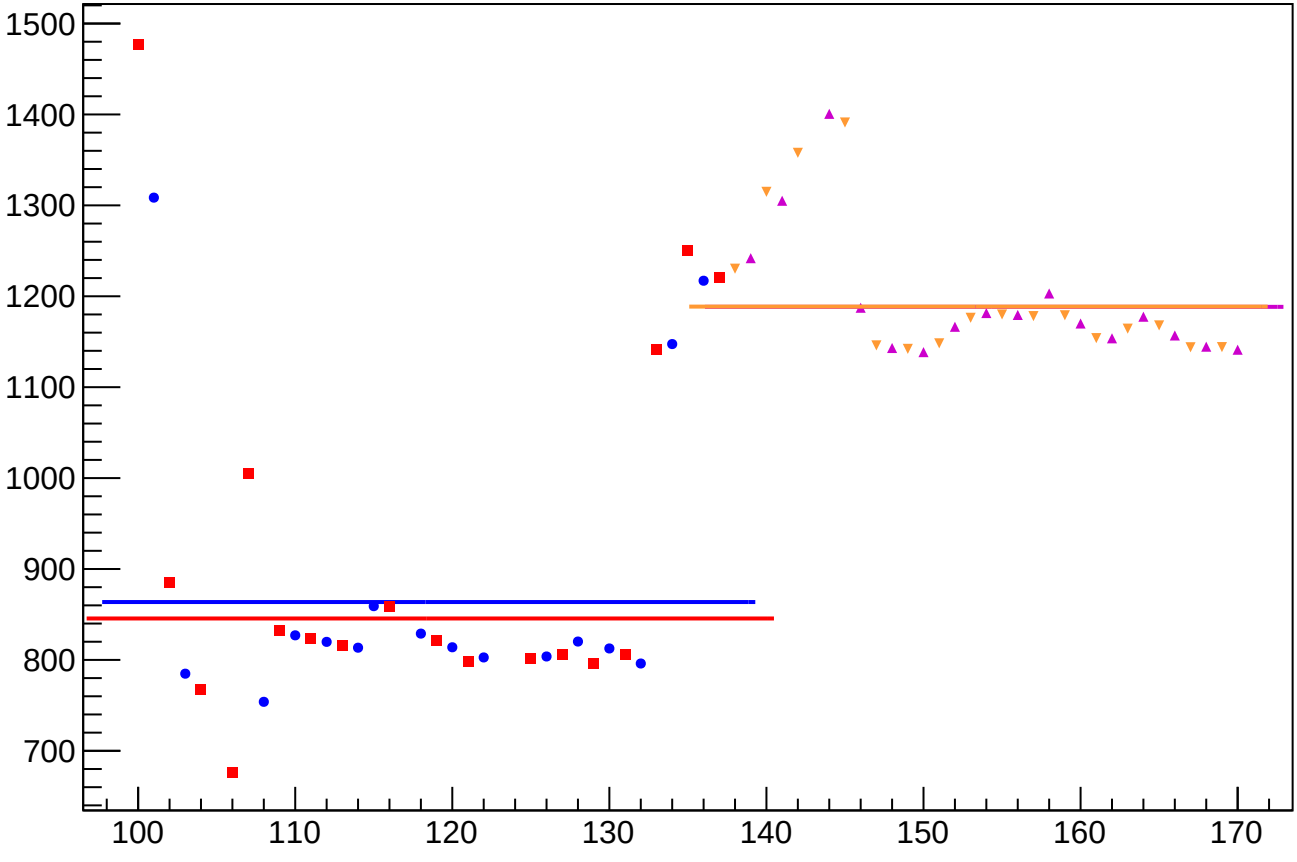
Left In: 701.186+/-327.327 $\chi^2$/NDF:4.8/15

+ sign 368.031+/-233.725 $\chi^2$/NDF: 51.8/31

All: 399.970+/-163.749 $\chi^2$/NDF: 82.4/65

- sign 430.760+/-229.486 $\chi^2$/NDF: 30.5/33

# reg_asym_usl_atl2_dd_rms vs Slug




Right In: 863.661+/-0.231 $\chi^2$/NDF: 407498.8/15

Left Out: 1188.641+/-0.237 $\chi^2$/NDF:80556.1/15

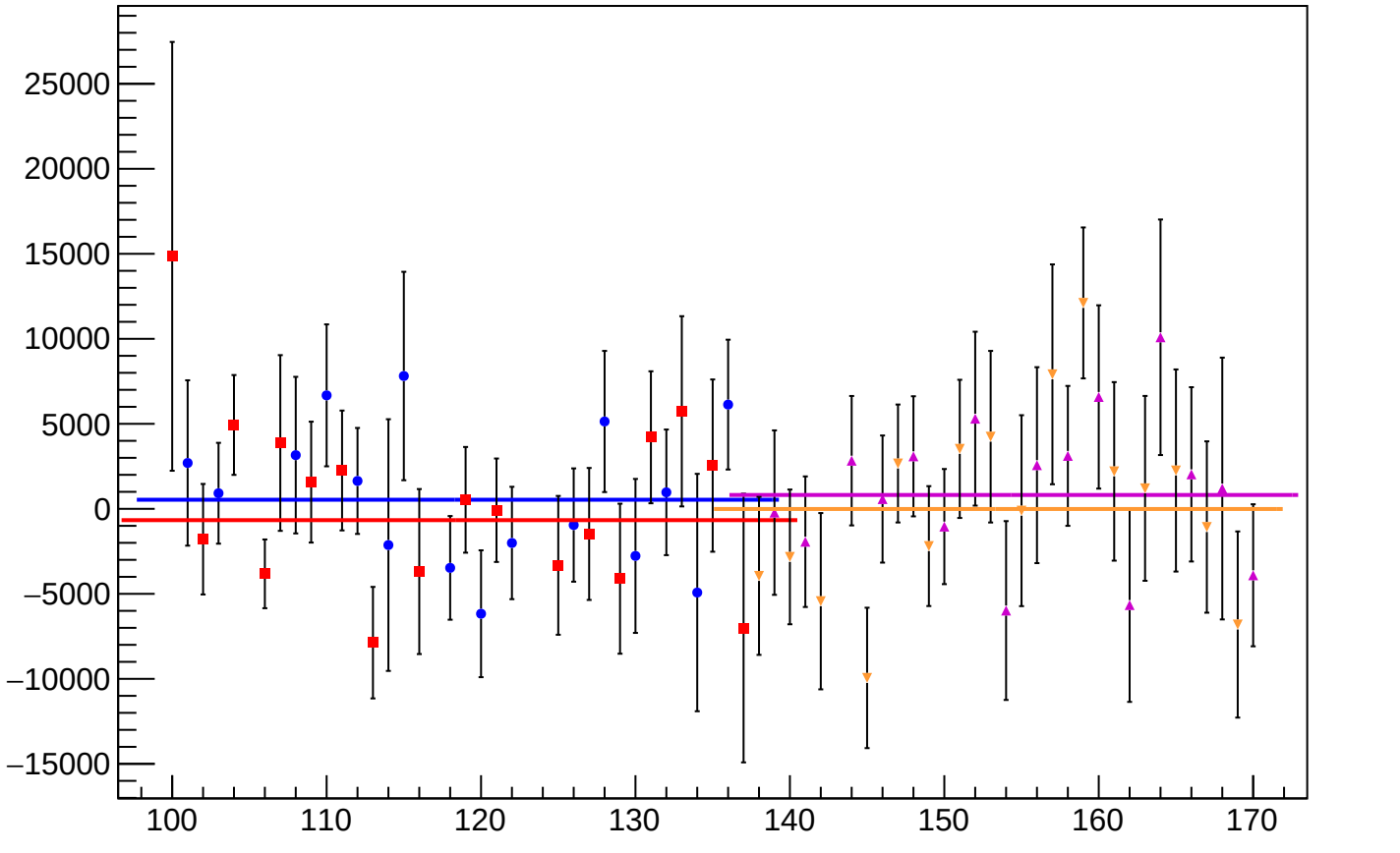
Right Out: 845.579+/-0.225 $\chi^2$/NDF: 307774.6/17

Left In: 1188.372+/-0.231 $\chi^2$/NDF:73860.0/15

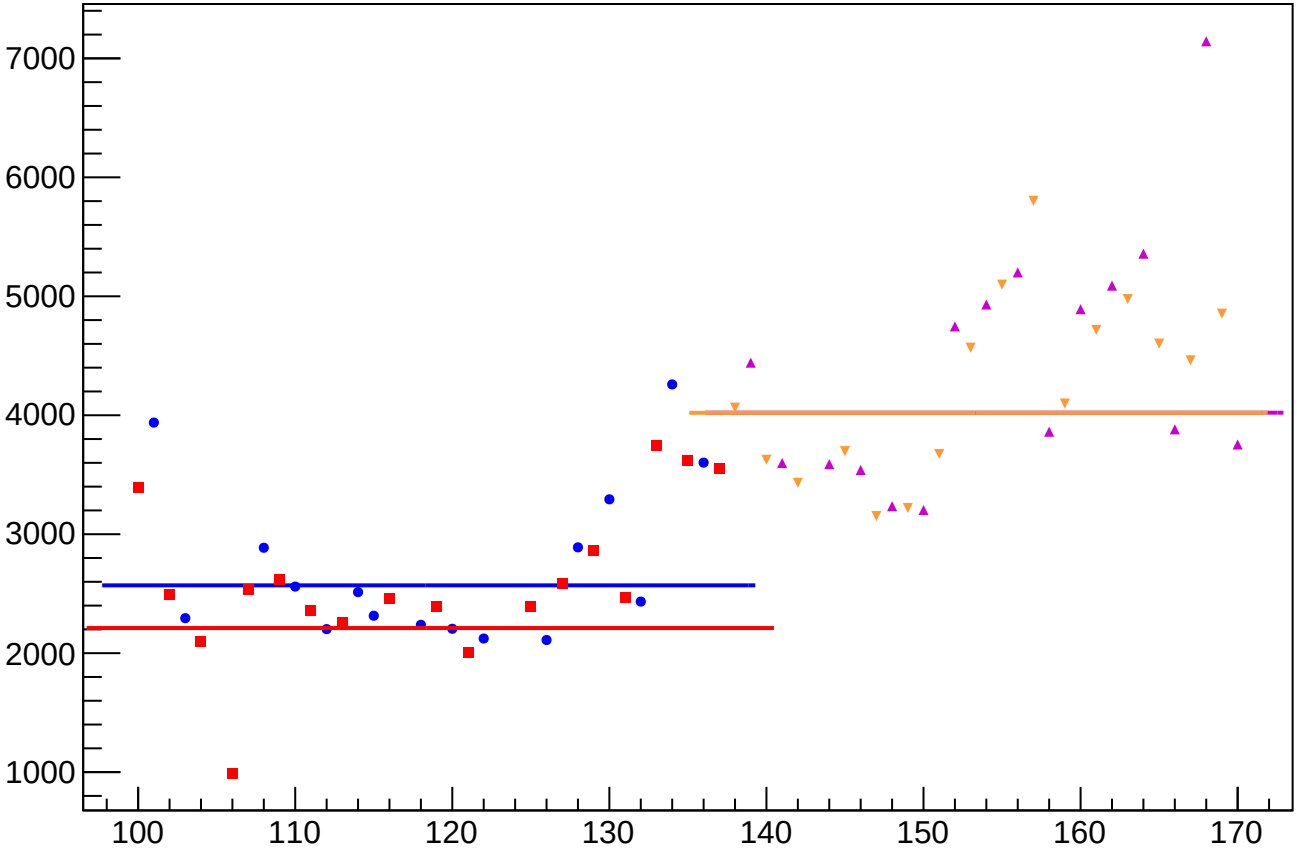
+ sign 1021.829+/-0.165 $\chi^2$/NDF: 1454025.5/31

All: 1016.763+/-0.115 $\chi^2$/NDF: 2966440.8/65

- sign 1011.941+/-0.161 $\chi^2$/NDF: 1510581.7/33


asym_usl_atl2_dd_reg_correction_mean vs Slug
25000
20000
15000
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: 534.507+/-981.290 χ²/NDF: 14.7/15
Left Out: -9.703+/-1157.156 χ²/NDF:21.5/15
Right Out: -665.878+/-864.970 χ²/NDF: 20.0/17
Left In: 814.893+/-1131.978 χ²/NDF:10.0/15
+ sign 306.857+/-748.415 χ²/NDF: 36.2/31
All: 75.285+/-506.219 χ²/NDF: 67.4/65
- sign -120.006+/-687.289 χ²/NDF: 31.0/33

# asym_usl_atl2_dd_reg_correction_rms vs Slug




Right In: 2570.135+/-0.694 $\chi^2$/NDF: 662477.9/15

Left Out: 4020.509+/-0.818 $\chi^2$/NDF:728415.7/15

Right Out: 2211.269+/-0.612 $\chi^2$/NDF: 1264087.9/17

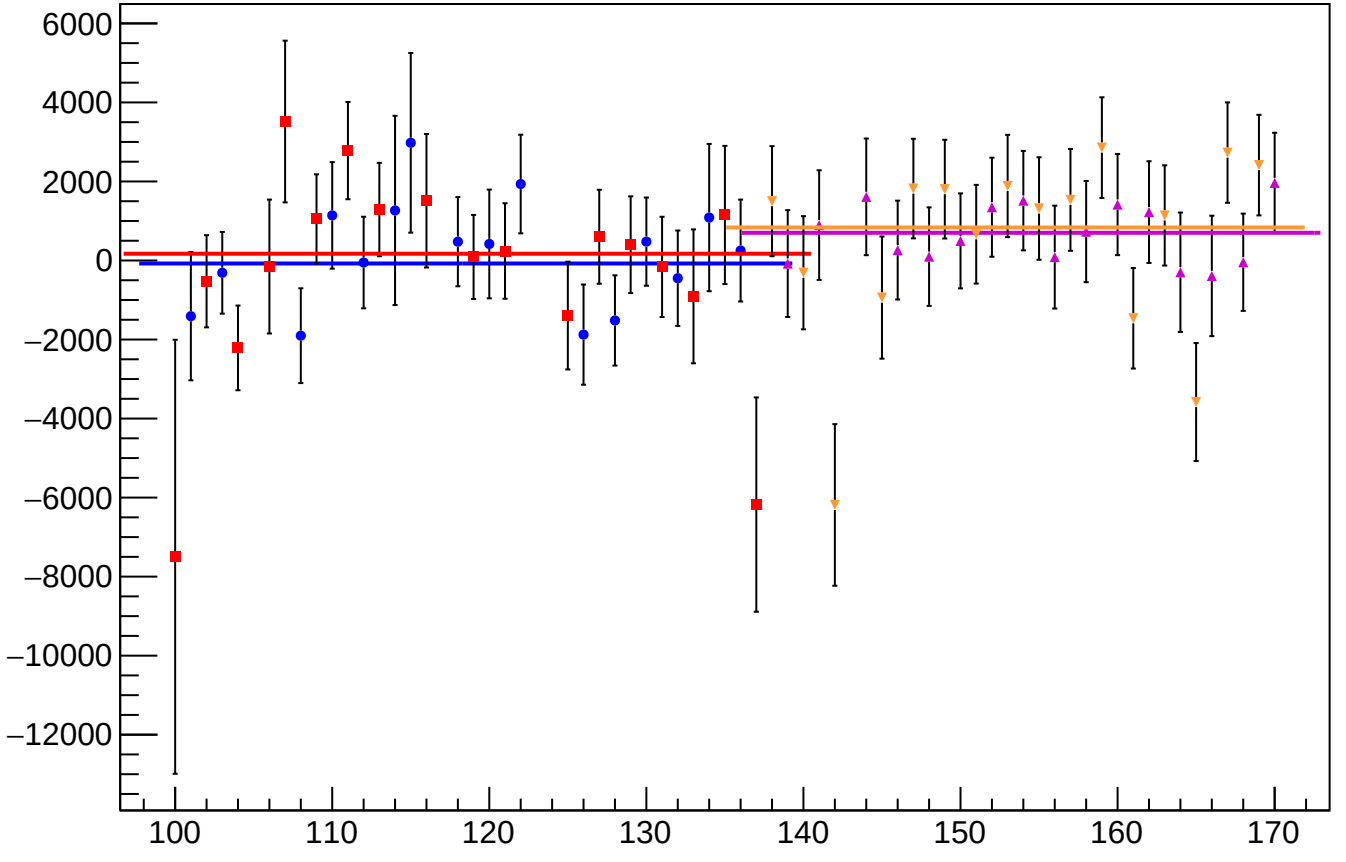
Left In: 4021.641+/-0.800 $\chi^2$/NDF:1036387.2/15

+ sign 3176.845+/-0.529 $\chi^2$/NDF: 3218557.4/31

All: 3015.072+/-0.358 $\chi^2$/NDF: 8921012.1/65

- sign 2878.646+/-0.486 $\chi^2$/NDF: 5530205.7/33

# cor_asym_usl_atl2_dd_mean vs Slug




Right In: -76.022+/-326.226 $\chi^2$/NDF: 13.3/15

Left Out: 836.264+/-335.023 $\chi^2$/NDF:34.7/15

Right Out: 170.982+/-321.832 $\chi^2$/NDF: 24.4/17

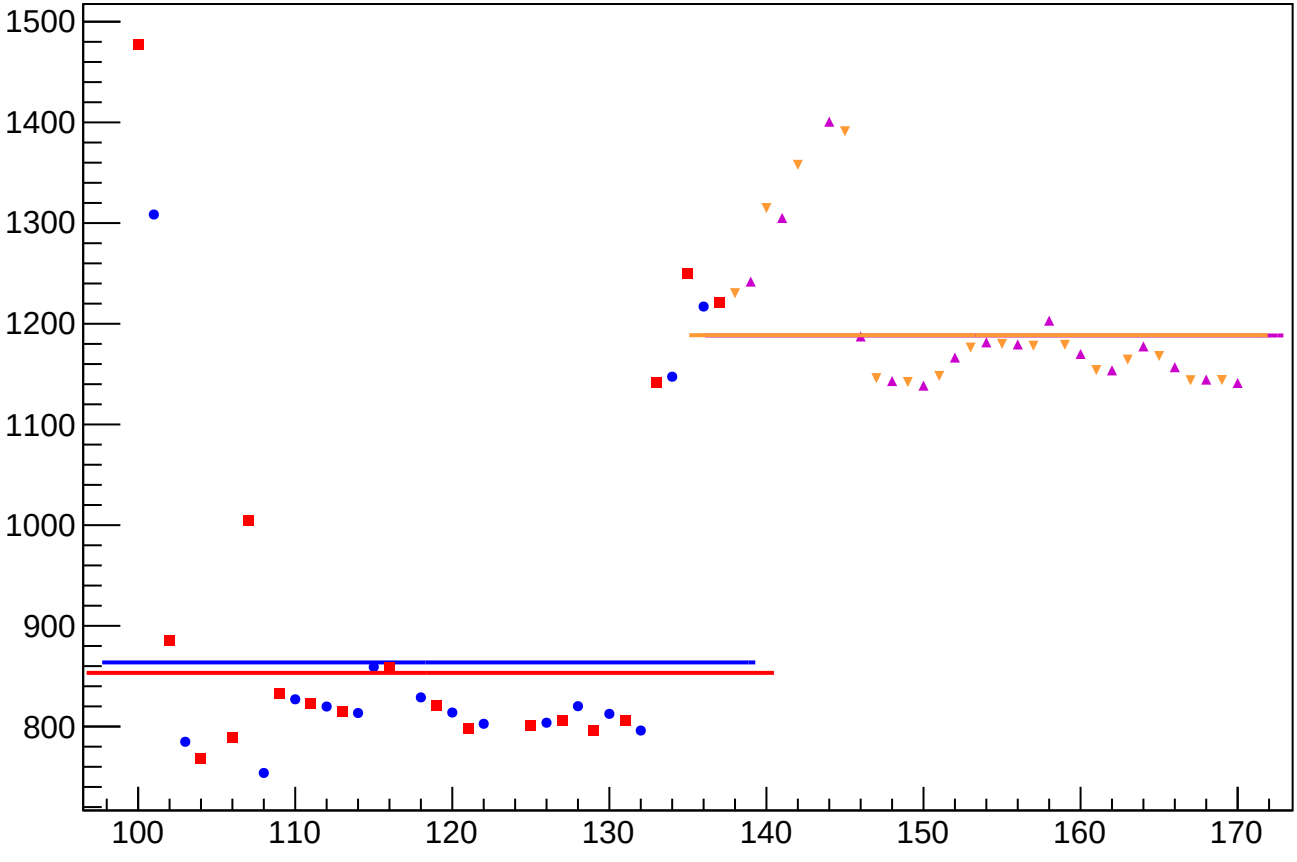
Left In: 701.185+/-327.327 $\chi^2$/NDF:4.8/15

+ sign 367.987+/-233.725 $\chi^2$/NDF: 51.8/31

All: 400.374+/-163.750 $\chi^2$/NDF: 82.4/65

- sign 431.596+/-229.488 $\chi^2$/NDF: 30.5/33

# cor_asym_usl_atl2_dd_rms vs Slug




Right In: 863.661+/-0.231 $\chi^2$/NDF: 407498.5/15

Left Out: 1188.641+/-0.237 $\chi^2$/NDF:80556.1/15

Right Out: 853.289+/-0.226 $\chi^2$/NDF: 275357.1/17

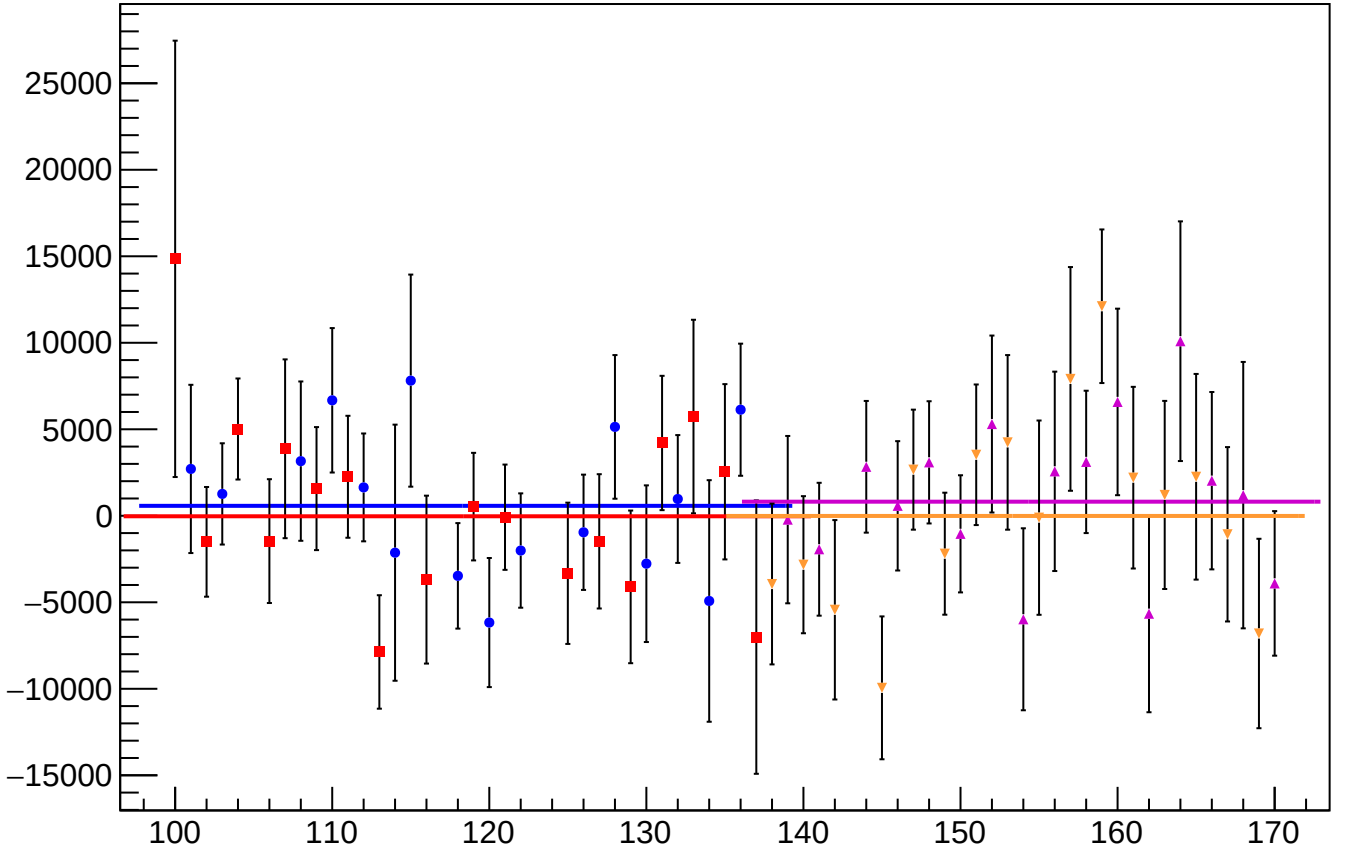
Left In: 1188.372+/-0.231 $\chi^2$/NDF:73860.0/15

+ sign 1021.829+/-0.165 $\chi^2$/NDF: 1454025.7/31

All: 1019.429+/-0.116 $\chi^2$/NDF: 2874768.7/65

- sign 1017.128+/-0.162 $\chi^2$/NDF: 1420330.1/33

# asym_usl_atl2_dd_cor_correction_mean vs Slug




Right In: 574.964+/-979.856 $\chi^2$/NDF: 14.7/15

Left Out: -9.687+/-1157.156 $\chi^2$/NDF:21.5/15

Right Out: -28.604+/-922.115 $\chi^2$/NDF: 17.2/17

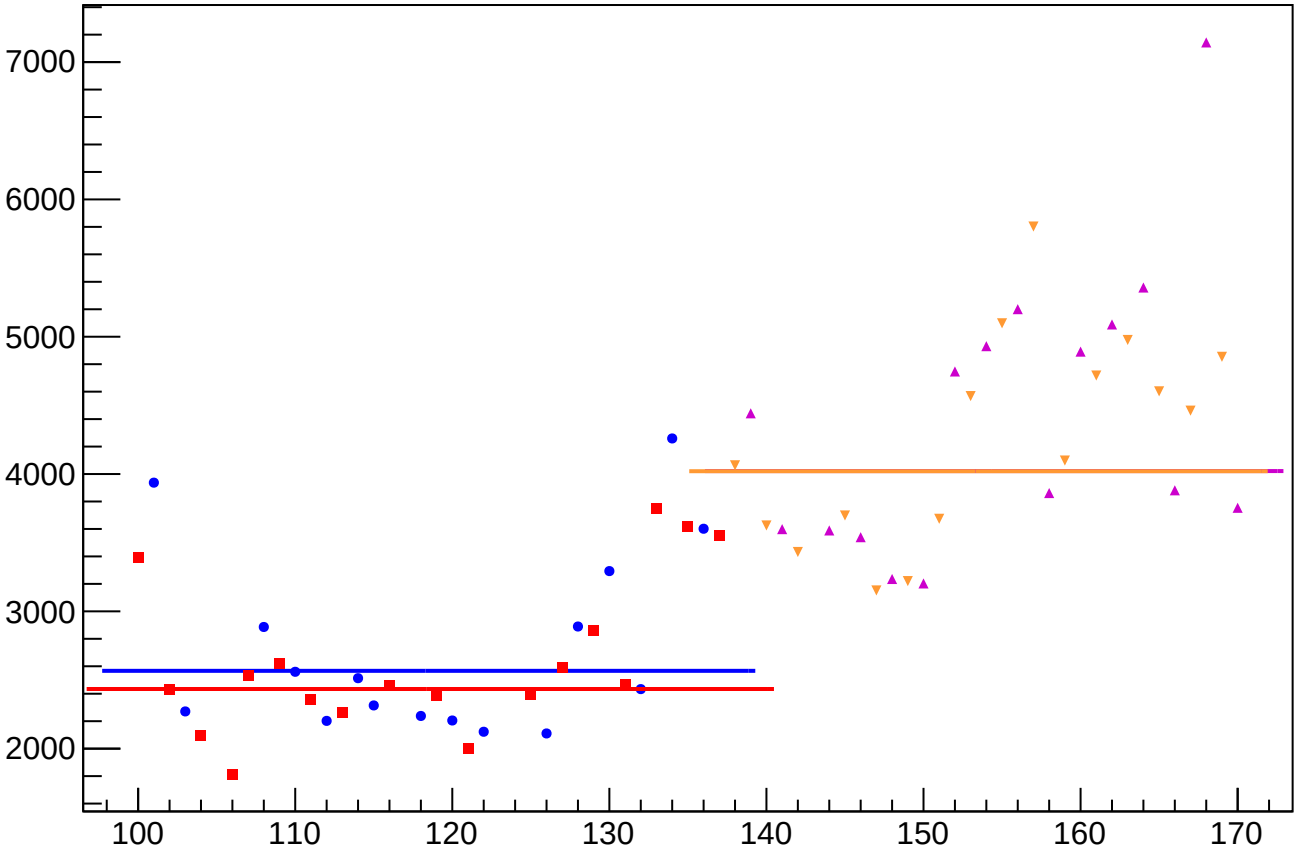
Left In: 814.934+/-1131.976 $\chi^2$/NDF:10.0/15

+ sign 330.813+/-747.778 $\chi^2$/NDF: 36.3/31

All: 318.828+/-516.754 $\chi^2$/NDF: 63.8/65

- sign 307.873+/-714.929 $\chi^2$/NDF: 27.5/33

# asym_usl_atl2_dd_cor_correction_rms vs Slug




Right In: 2566.732+/-0.693 $\chi^2$/NDF: 665871.6/15

Left Out: 4020.510+/-0.818 $\chi^2$/NDF:728415.9/15

Right Out: 2434.430+/-0.652 $\chi^2$/NDF: 434078.9/17

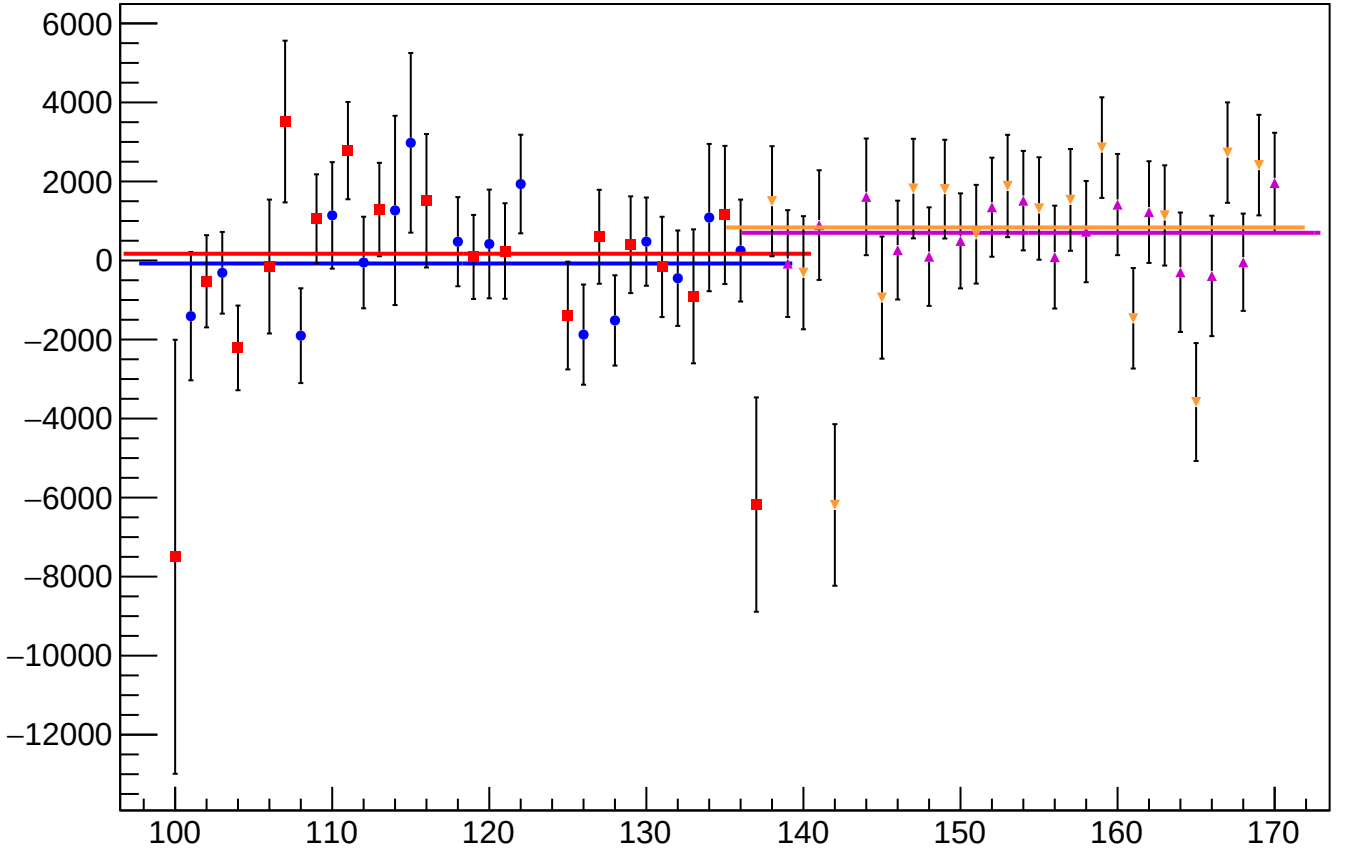
Left In: 4021.636+/-0.800 $\chi^2$/NDF:1036390.8/15

\+ sign 3173.831+/-0.529 $\chi^2$/NDF: 3232784.2/31

All: 3118.303+/-0.365 $\chi^2$/NDF: 7087979.2/65

\- sign 3067.547+/-0.506 $\chi^2$/NDF: 3834086.3/33

# eigen_cor_asym_usl_atl2_dd_mean vs Slug




Right In: -76.022+/-326.226 $\chi^2$/NDF: 13.3/15

Left Out: 836.264+/-335.023 $\chi^2$/NDF:34.7/15

Right Out: 170.982+/-321.832 $\chi^2$/NDF: 24.4/17

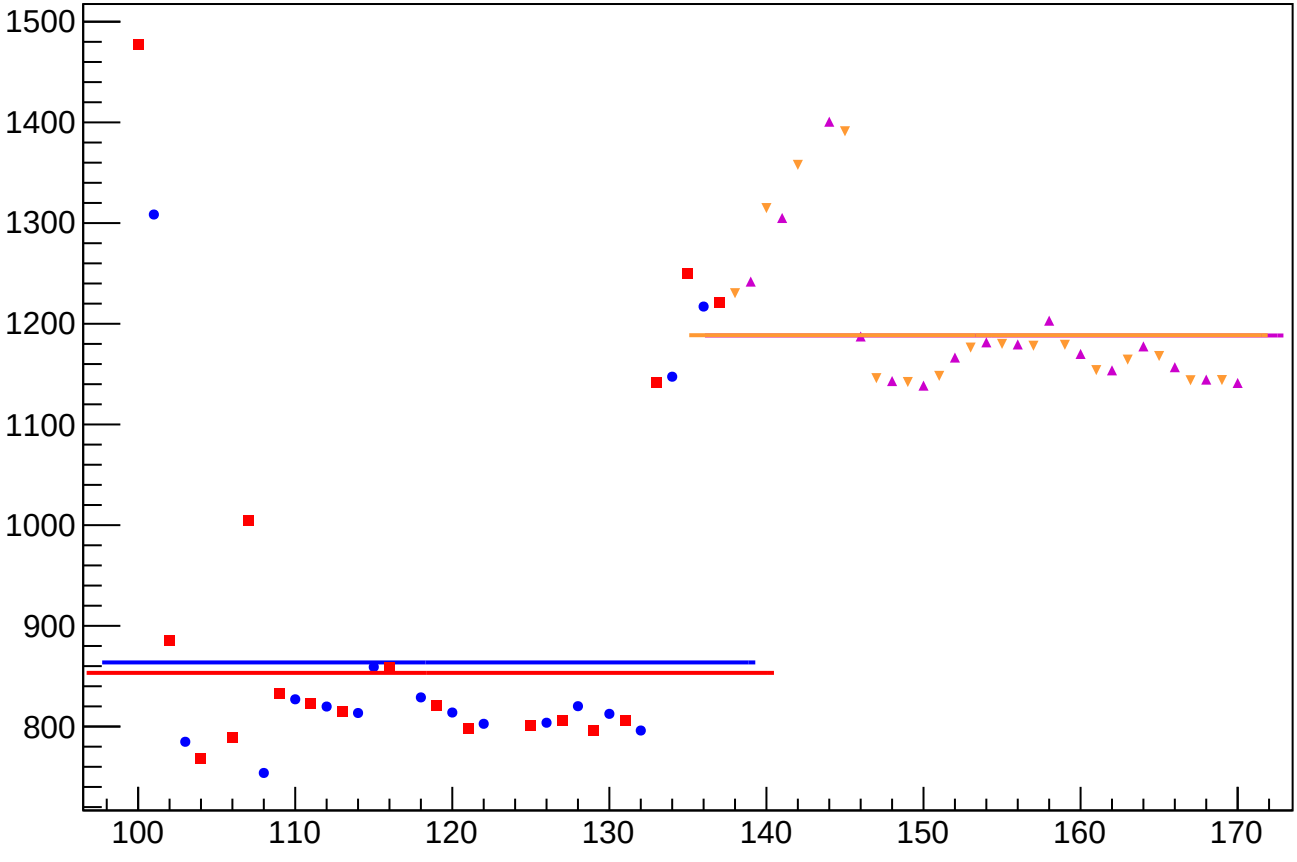
Left In: 701.185+/-327.327 $\chi^2$/NDF:4.8/15

+ sign 367.987+/-233.725 $\chi^2$/NDF: 51.8/31

All: 400.374+/-163.750 $\chi^2$/NDF: 82.4/65

- sign 431.596+/-229.488 $\chi^2$/NDF: 30.5/33

# eigen_cor_asym_usl_atl2_dd_rms vs Slug




Right In: 863.661+/-0.231 $\chi^2$/NDF: 407498.5/15

Left Out: 1188.641+/-0.237 $\chi^2$/NDF:80556.1/15

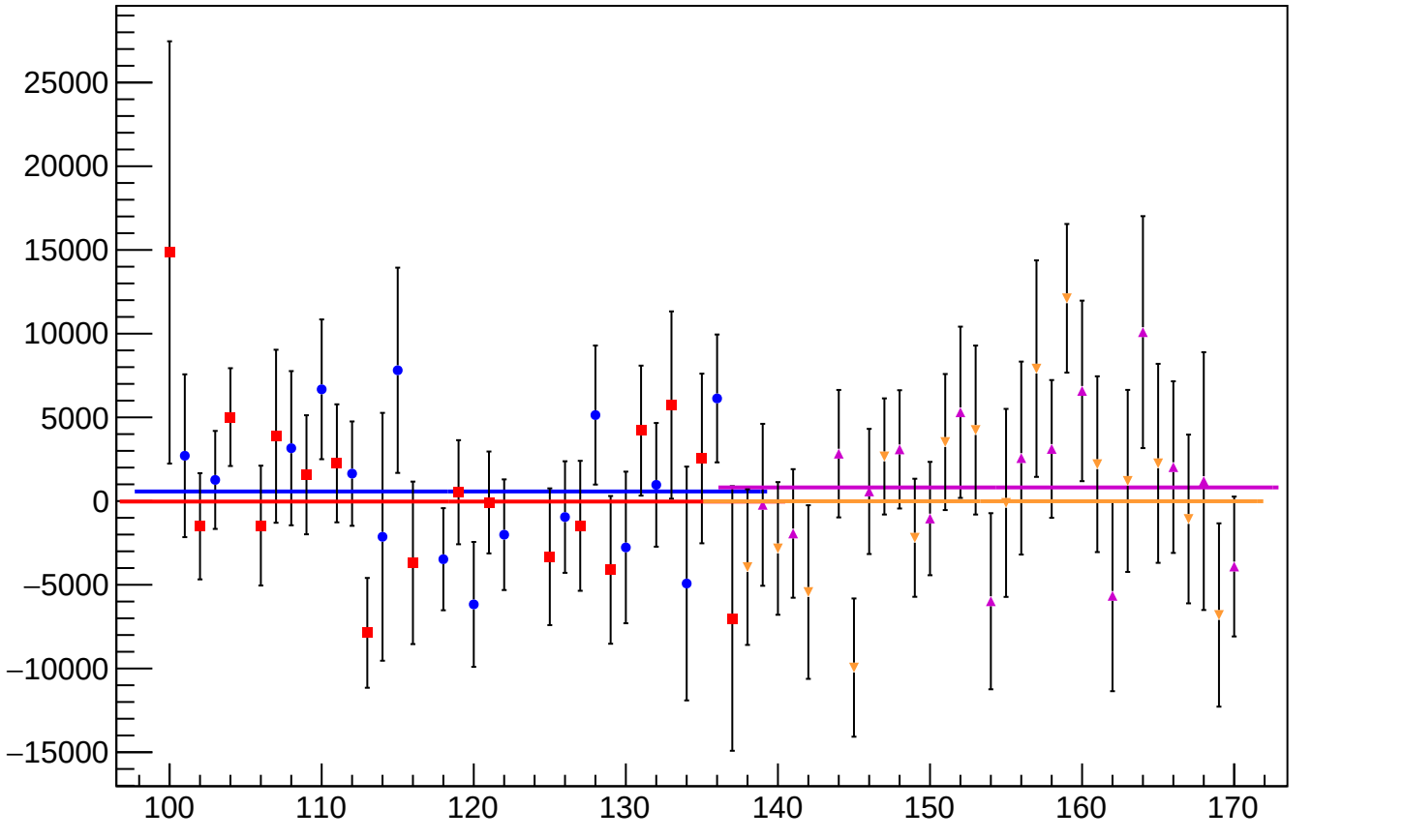
Right Out: 853.289+/-0.226 $\chi^2$/NDF: 275357.1/17

Left In: 1188.372+/-0.231 $\chi^2$/NDF:73860.0/15

+ sign 1021.829+/-0.165 $\chi^2$/NDF: 1454025.7/31

All: 1019.429+/-0.116 $\chi^2$/NDF: 2874768.7/65

- sign 1017.128+/-0.162 $\chi^2$/NDF: 1420330.1/33




Right In: 574.964+/-979.856 $\chi^2$/NDF: 14.7/15

Left Out: -9.687+/-1157.156 $\chi^2$/NDF:21.5/15

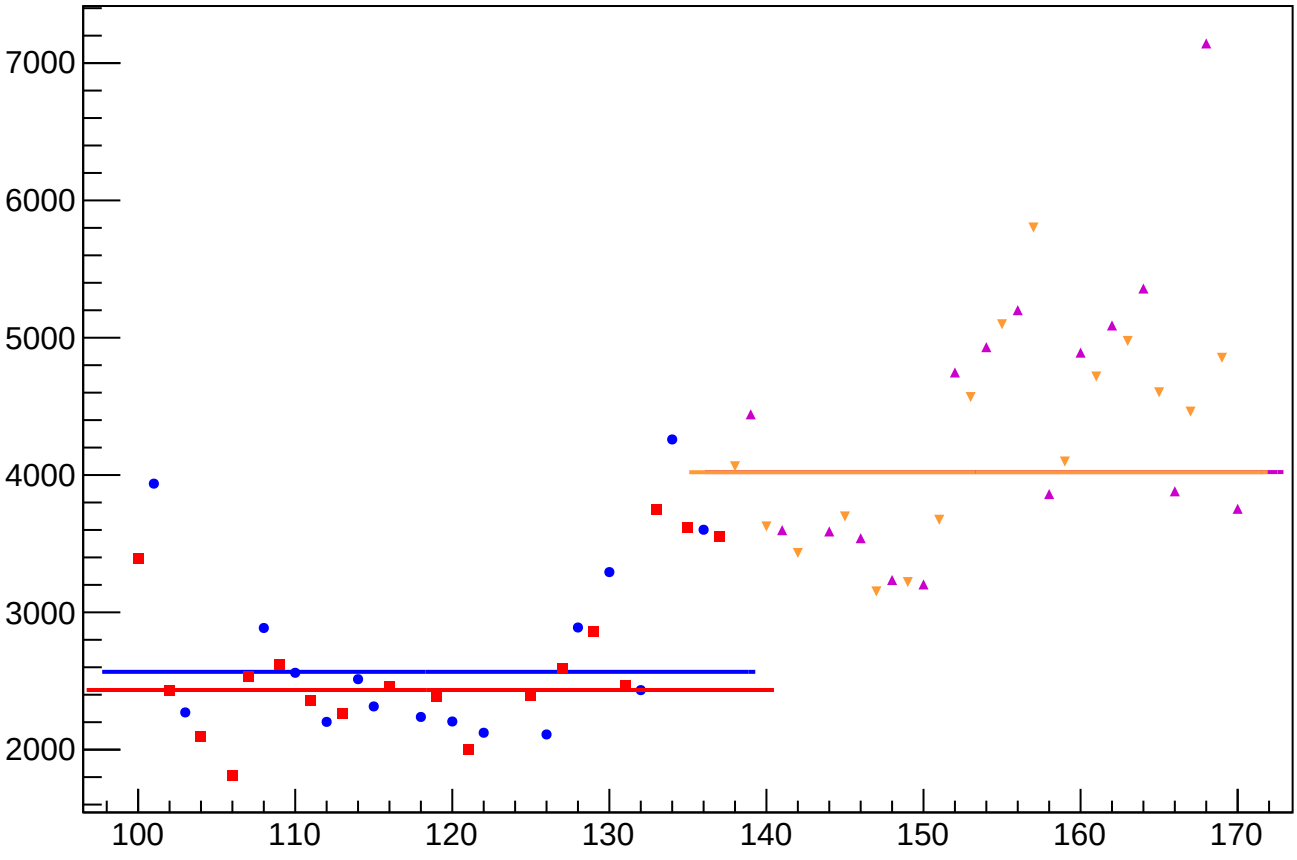
Right Out: -28.604+/-922.115 $\chi^2$/NDF: 17.2/17

Left In: 814.934+/-1131.976 $\chi^2$/NDF:10.0/15

+ sign 330.813+/-747.778 $\chi^2$/NDF: 36.3/31

All: 318.828+/-516.754 $\chi^2$/NDF: 63.8/65

- sign 307.873+/-714.929 $\chi^2$/NDF: 27.5/33




Right In: 2566.732+/-0.693 $\chi^2$/NDF: 665871.6/15

Left Out: 4020.510+/-0.818 $\chi^2$/NDF:728415.9/15

Right Out: 2434.430+/-0.652 $\chi^2$/NDF: 434078.9/17

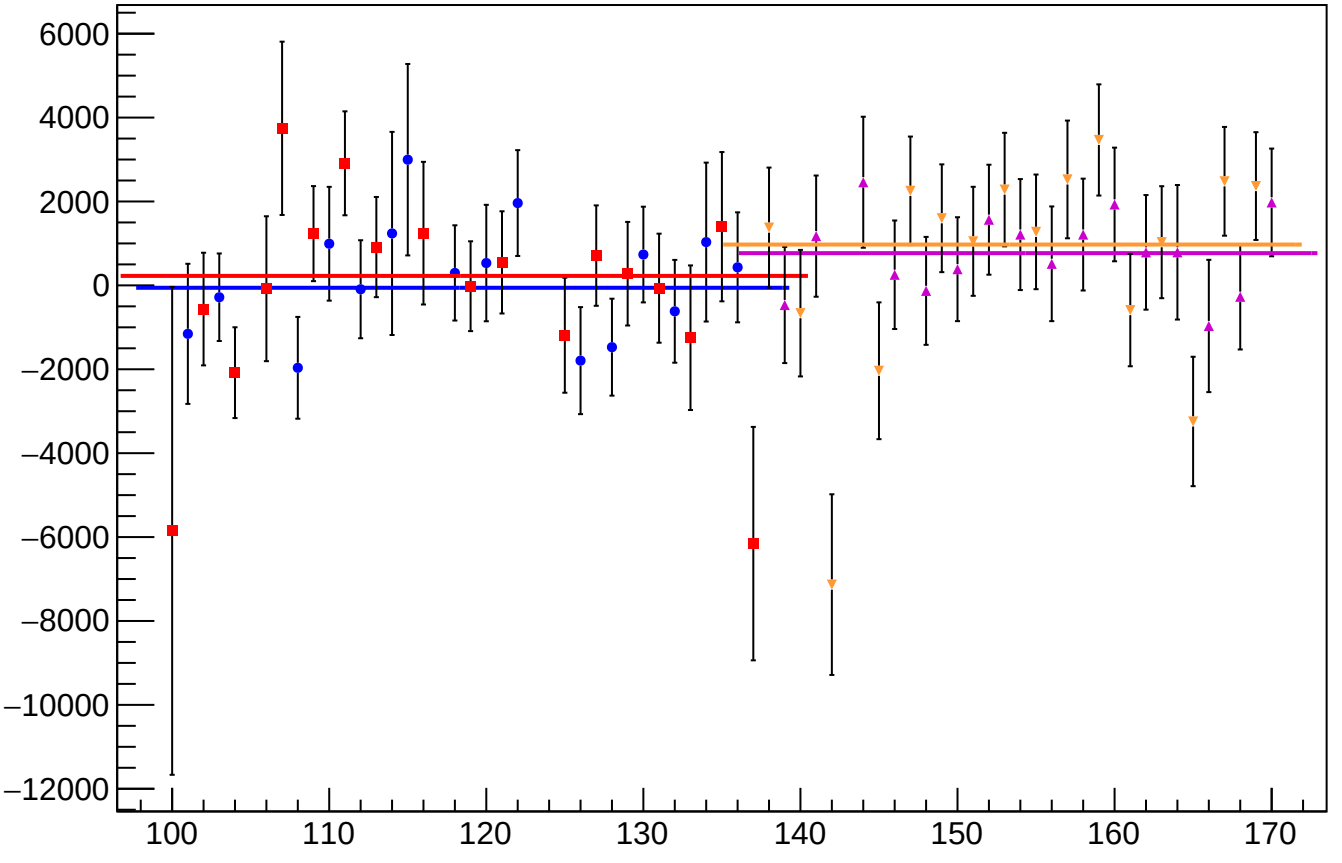
Left In: 4021.636+/-0.800 $\chi^2$/NDF:1036390.8/15

+ sign 3173.831+/-0.529 $\chi^2$/NDF: 3232784.2/31

All: 3118.303+/-0.365 $\chi^2$/NDF: 7087979.2/65

- sign 3067.547+/-0.506 $\chi^2$/NDF: 3834086.3/33

# dit_asym_usl_atl2_dd_mean vs Slug




Right In: -57.208+/-330.088 $\chi^2$/NDF: 13.0/15

Left Out: 973.445+/-348.911 $\chi^2$/NDF:37.2/15

Right Out: 226.075+/-328.069 $\chi^2$/NDF: 22.9/17

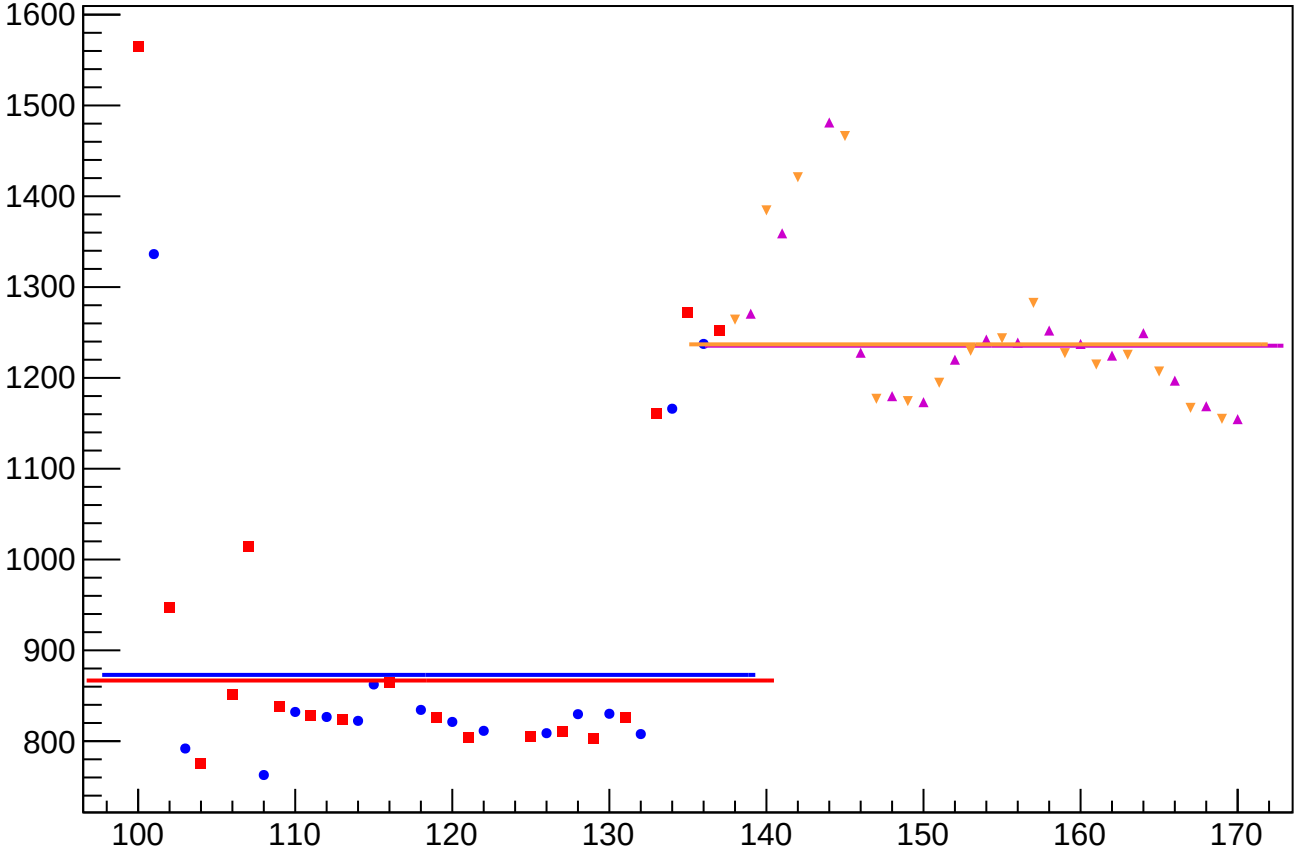
Left In: 768.427+/-340.444 $\chi^2$/NDF:6.9/15

+ sign 429.569+/-239.786 $\chi^2$/NDF: 54.8/31

All: 458.822+/-168.284 $\chi^2$/NDF: 86.0/65

- sign 487.214+/-236.233 $\chi^2$/NDF: 31.2/33

# dit_asym_usl_atl2_dd_rms vs Slug




Right In: 872.971+/-0.233 $\chi^2$/NDF: 417099.2/15

Left Out: 1236.942+/-0.247 $\chi^2$/NDF:102952.9/15

Right Out: 866.772+/-0.232 $\chi^2$/NDF: 290386.4/17

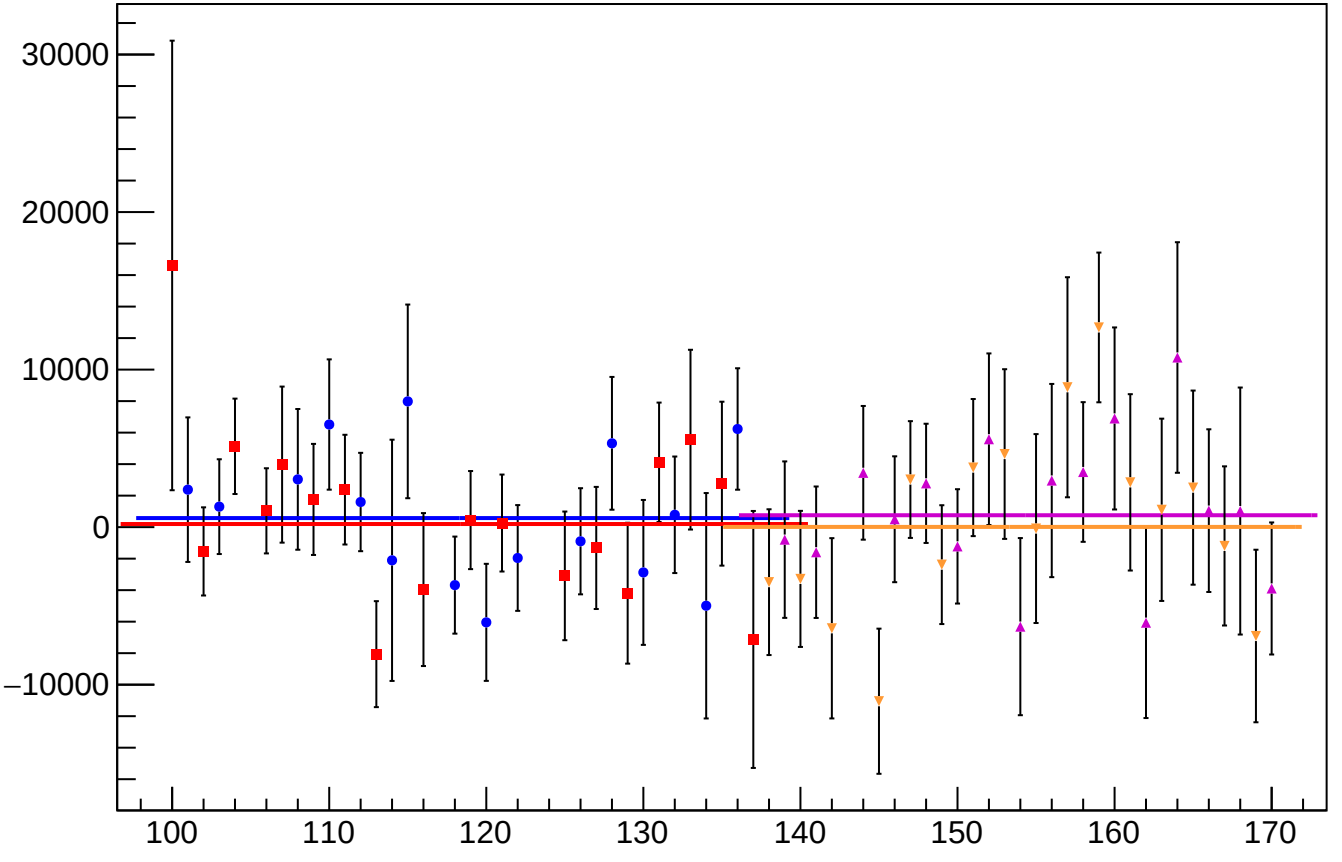
Left In: 1235.443+/-0.241 $\chi^2$/NDF:90058.5/15

+ sign 1044.874+/-0.170 $\chi^2$/NDF: 1668524.4/31

All: 1044.483+/-0.119 $\chi^2$/NDF: 3266241.7/65

- sign 1044.103+/-0.167 $\chi^2$/NDF: 1597706.7/33

# asym_usl_atl2_dd_dit_correction_mean vs Slug




Right In: 575.271+/-984.888 $\chi^2$/NDF: 14.7/15

Left Out: 14.614+/-1229.367 $\chi^2$/NDF:21.6/15

Right Out: 197.953+/-894.121 $\chi^2$/NDF: 17.2/17

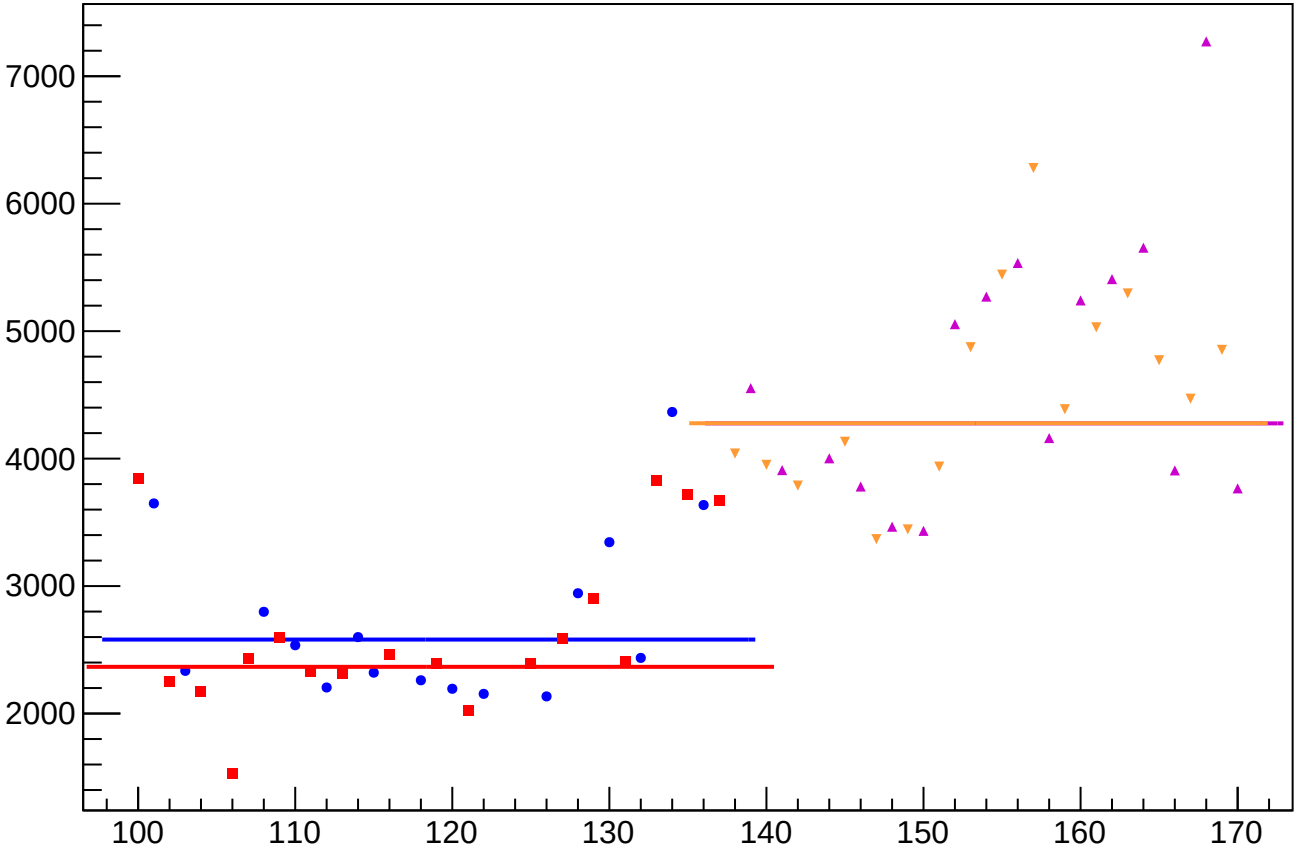
Left In: 755.481+/-1202.627 $\chi^2$/NDF:9.8/15

+ sign 356.100+/-768.643 $\chi^2$/NDF: 36.4/31

All: 377.647+/-524.513 $\chi^2$/NDF: 63.5/65

- sign 396.423+/-717.539 $\chi^2$/NDF: 27.1/33

# asym_usl_atl2_dd_dit_correction_rms vs Slug




Right In: 2580.377+/-0.696 $\chi^2$/NDF: 617156.1/15

Left Out: 4277.468+/-0.869 $\chi^2$/NDF:665041.7/15

Right Out: 2366.412+/-0.632 $\chi^2$/NDF: 611695.1/17

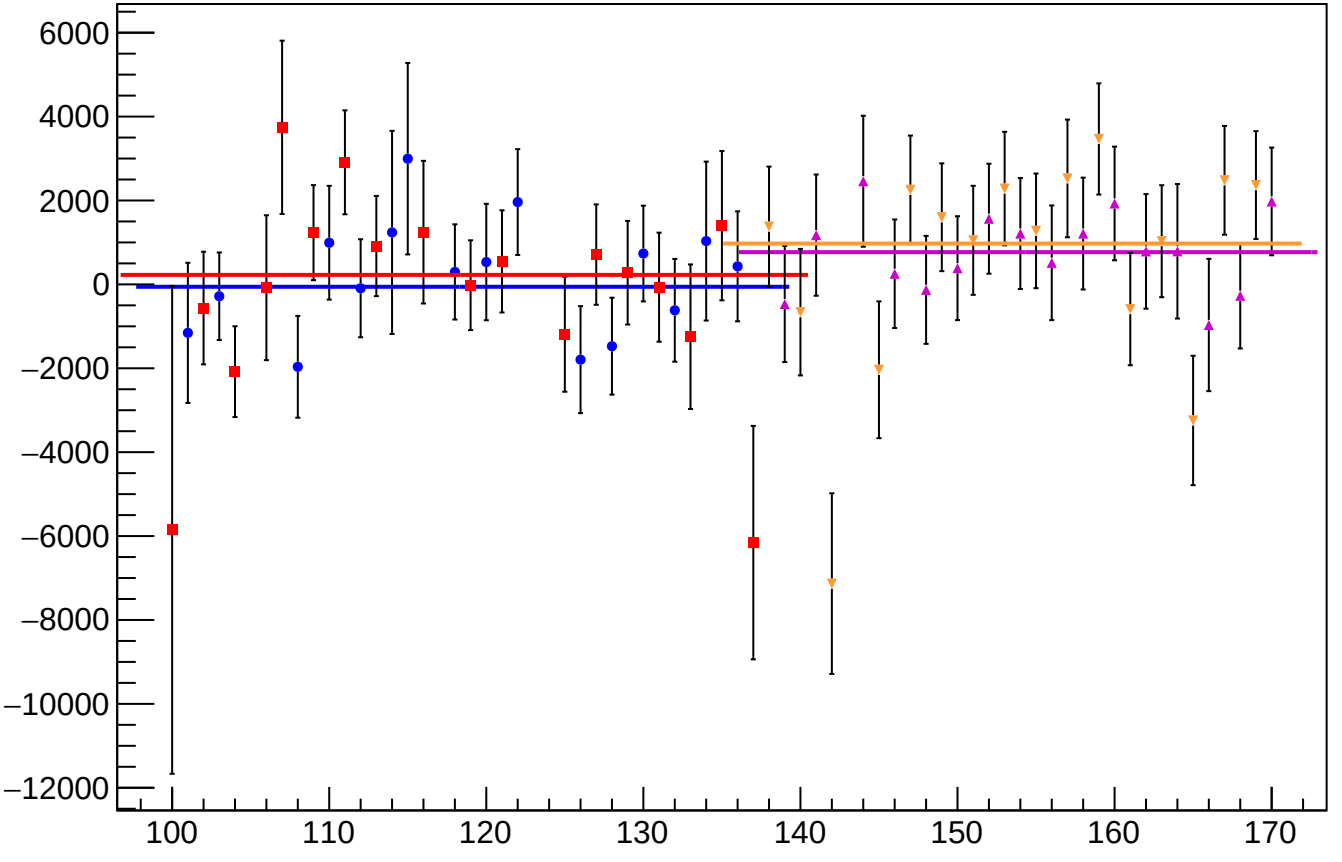
Left In: 4276.509+/-0.850 $\chi^2$/NDF:978202.2/15

+ sign 3243.801+/-0.544 $\chi^2$/NDF: 3603612.9/31

All: 3138.306+/-0.371 $\chi^2$/NDF: 8513216.4/65

- sign 3046.373+/-0.507 $\chi^2$/NDF: 4839098.4/33

# eigen_dit_asym_usl_atl2_dd_mean vs Slug




Right In: -57.211+/-330.088 $\chi^2$/NDF: 13.0/15

Left Out: 973.447+/-348.911 $\chi^2$/NDF:37.2/15

Right Out: 226.078+/-328.069 $\chi^2$/NDF: 22.9/17

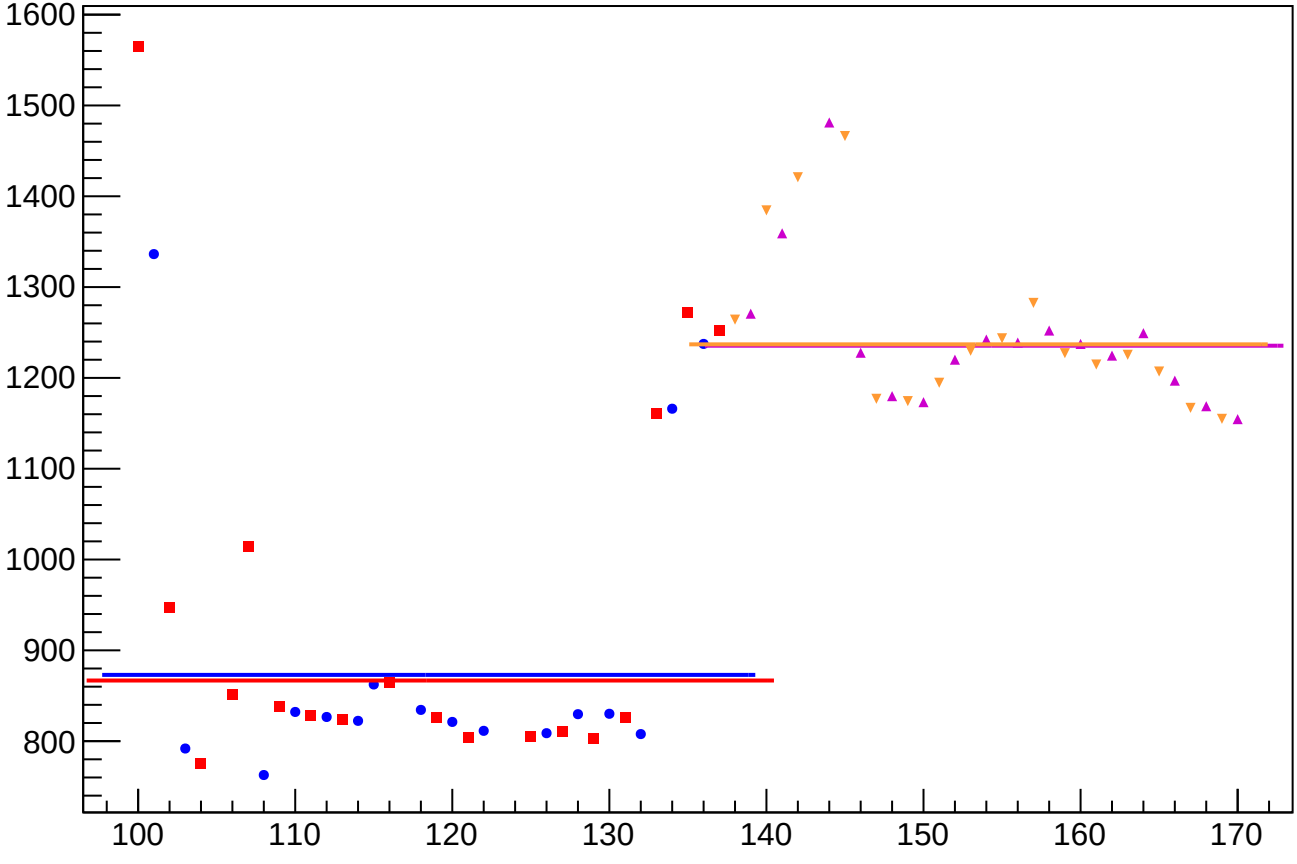
Left In: 768.427+/-340.444 $\chi^2$/NDF:6.9/15

+ sign 429.568+/-239.786 $\chi^2$/NDF: 54.8/31

All: 458.822+/-168.284 $\chi^2$/NDF: 86.0/65

- sign 487.216+/-236.233 $\chi^2$/NDF: 31.2/33

# eigen_dit_asym_usl_atl2_dd_rms vs Slug




Right In: 872.972+/-0.233 $\chi^2$/NDF: 417098.9/15

Left Out: 1236.943+/-0.247 $\chi^2$/NDF:102954.7/15

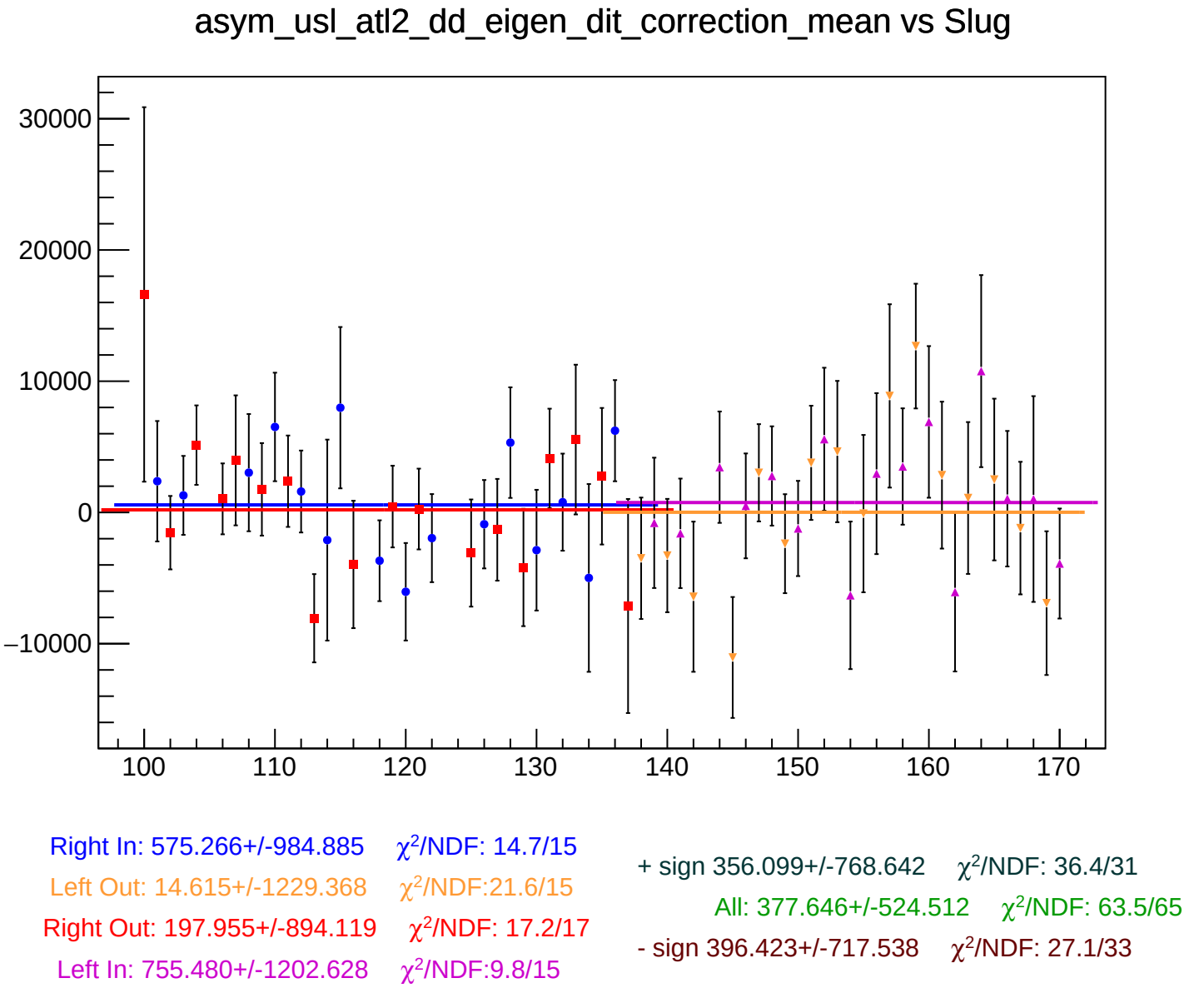
Right Out: 866.772+/-0.232 $\chi^2$/NDF: 290386.6/17

Left In: 1235.444+/-0.241 $\chi^2$/NDF:90059.5/15

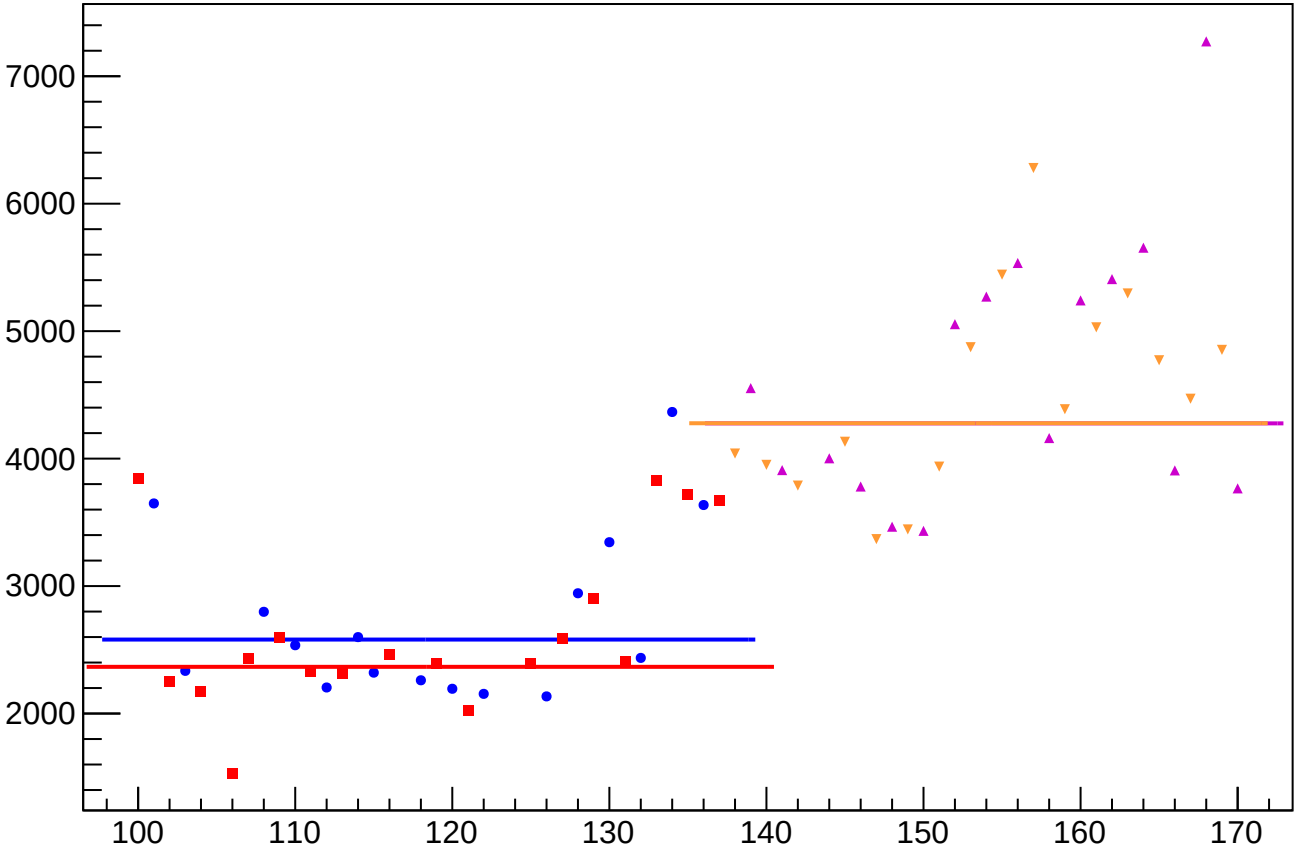
+ sign 1044.875+/-0.170 $\chi^2$/NDF: 1668532.1/31

All: 1044.483+/-0.119 $\chi^2$/NDF: 3266257.3/65

- sign 1044.104+/-0.167 $\chi^2$/NDF: 1597714.6/33


asym_usl_atl2_dd_eigen_dit_correction_mean vs Slug
30000
20000
10000
0
−10000
100
110
120
130
140
150
160
170
Right In: 575.266+/-984.885 χ²/NDF: 14.7/15
Left Out: 14.615+/-1229.368 χ²/NDF:21.6/15
Right Out: 197.955+/-894.119 χ²/NDF: 17.2/17
Left In: 755.480+/-1202.628 χ²/NDF:9.8/15
+ sign 356.099+/-768.642 χ²/NDF: 36.4/31
All: 377.646+/-524.512 χ²/NDF: 63.5/65
- sign 396.423+/-717.538 χ²/NDF: 27.1/33

# asym_usl_atl2_dd_eigen_dit_correction_rms vs Slug




Right In: 2580.368+/-0.696 $\chi^2$/NDF: 617163.3/15

Left Out: 4277.474+/-0.869 $\chi^2$/NDF:665044.5/15

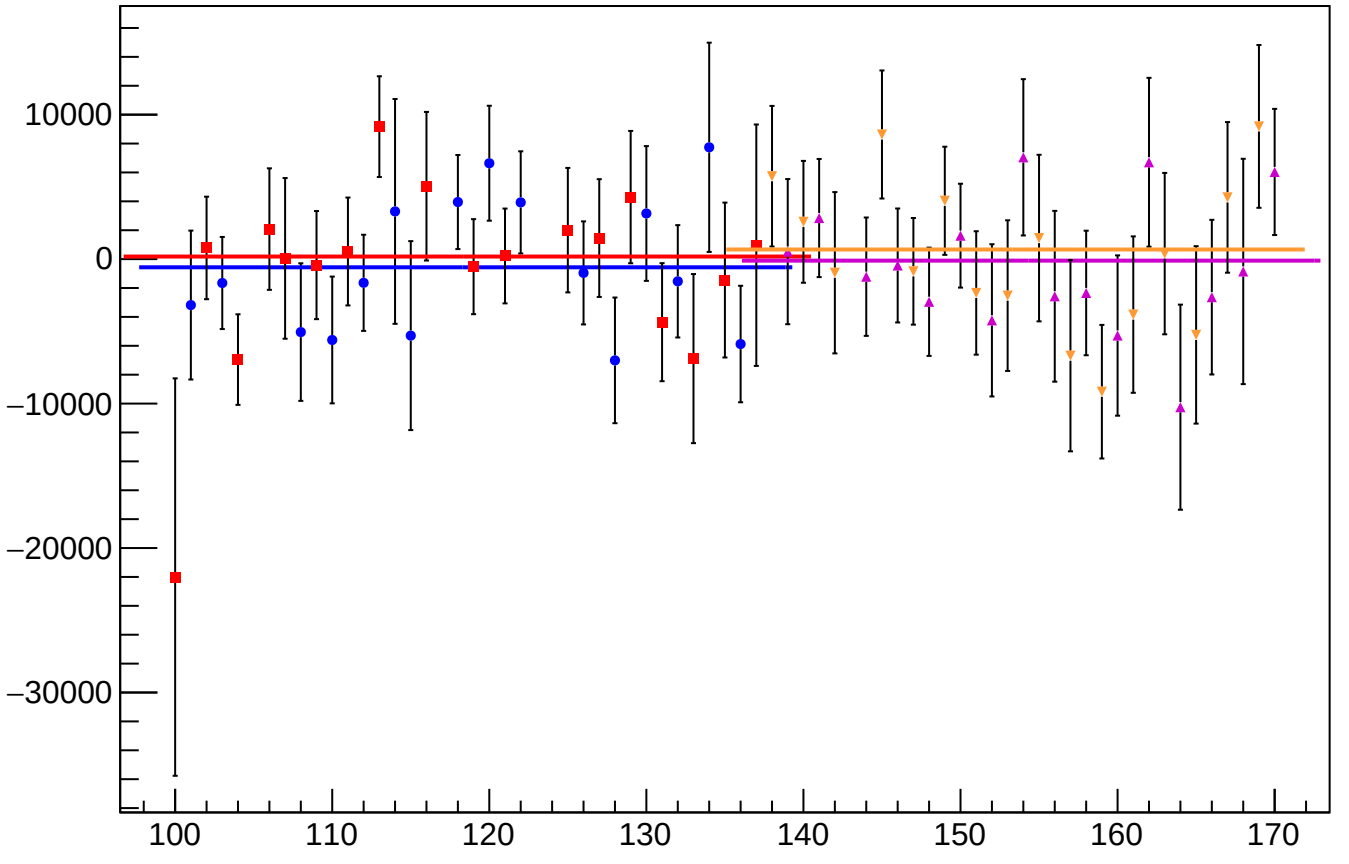
Right Out: 2366.405+/-0.632 $\chi^2$/NDF: 611698.8/17

Left In: 4276.514+/-0.850 $\chi^2$/NDF:978206.6/15

+ sign 3243.795+/-0.544 $\chi^2$/NDF: 3603663.5/31

All: 3138.300+/-0.371 $\chi^2$/NDF: 8513316.7/65

- sign 3046.367+/-0.507 $\chi^2$/NDF: 4839148.2/33




Right In: -566.096+/-1040.314 $\chi^2$/NDF: 16.2/15

Left Out: 666.670+/-1214.082 $\chi^2$/NDF:16.6/15

Right Out: 178.586+/-988.392 $\chi^2$/NDF: 19.5/17

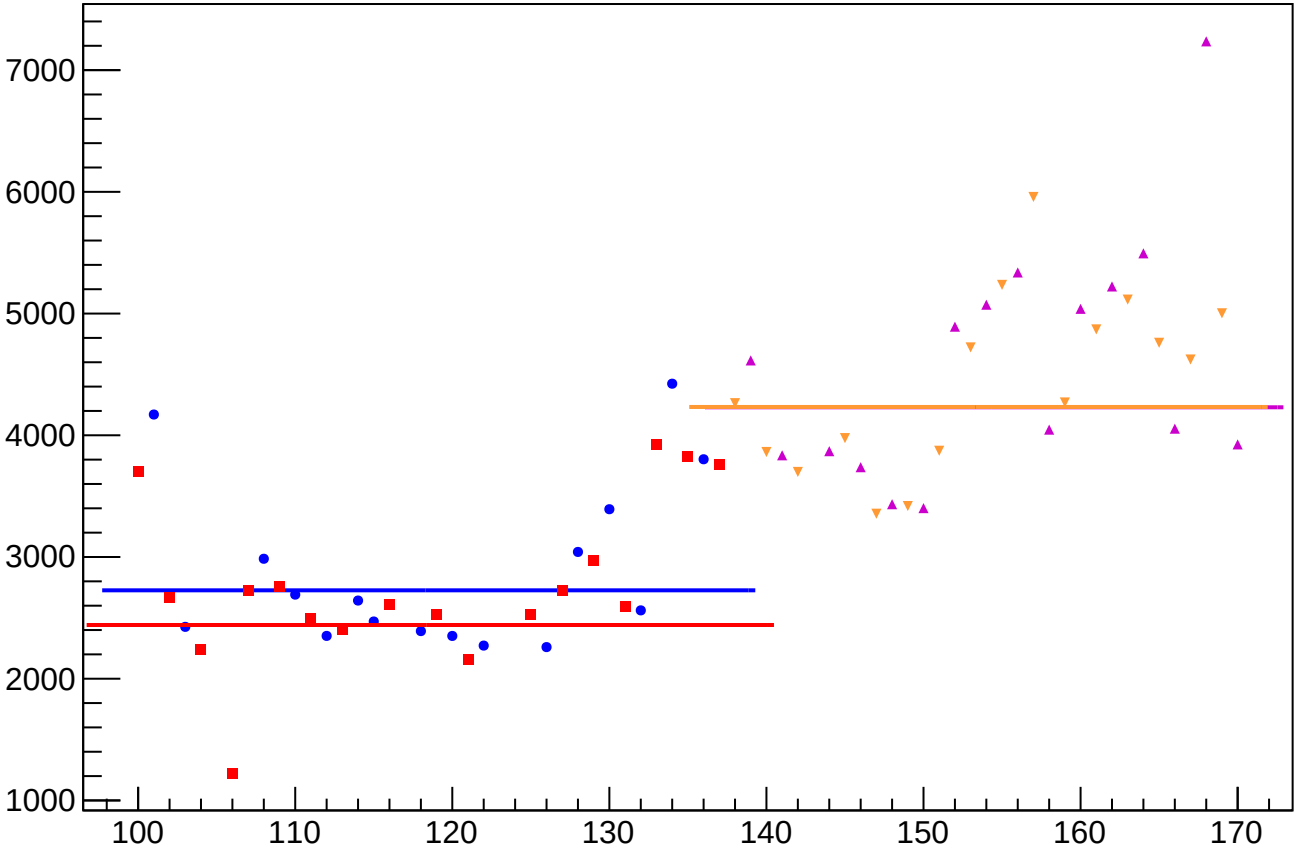
Left In: -105.133+/-1186.888 $\chi^2$/NDF:10.7/15

+ sign -44.173+/-789.970 $\chi^2$/NDF: 33.4/31

All: 11.208+/-547.510 $\chi^2$/NDF: 63.7/65

- sign 62.402+/-759.518 $\chi^2$/NDF: 30.3/33

# asym_usl_atl2_dd_rms vs Slug




Right In: 2726.231+/-0.736 $\chi^2$/NDF: 623079.8/15

Left Out: 4232.593+/-0.858 $\chi^2$/NDF:616950.6/15

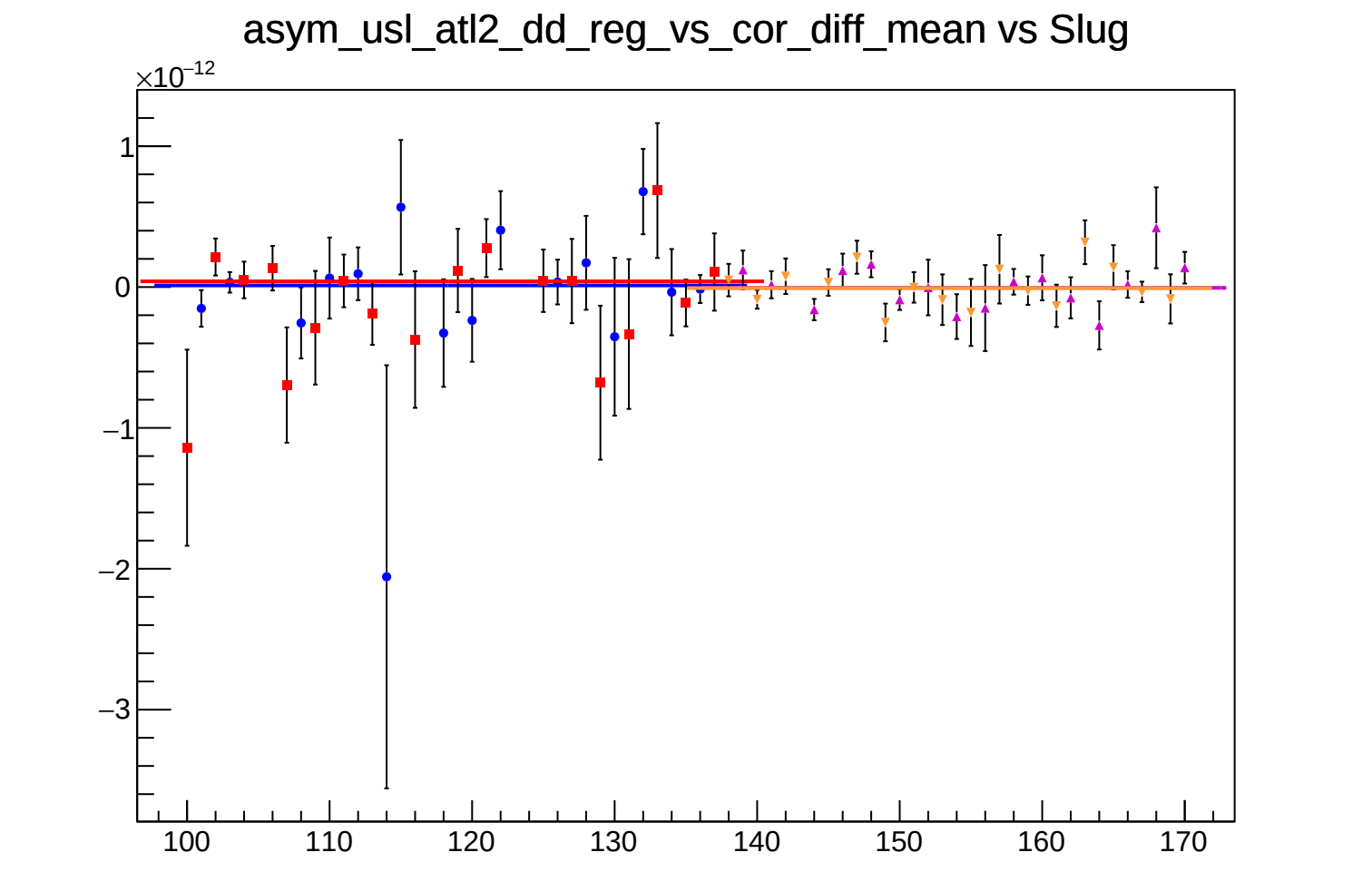
Right Out: 2441.363+/-0.667 $\chi^2$/NDF: 891132.7/17

Left In: 4230.009+/-0.839 $\chi^2$/NDF:900338.4/15

+ sign 3363.987+/-0.559 $\chi^2$/NDF: 3015390.2/31

All: 3241.087+/-0.381 $\chi^2$/NDF: 7681556.0/65

- sign 3133.701+/-0.522 $\chi^2$/NDF: 4575460.6/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 15.4/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:16.5/15

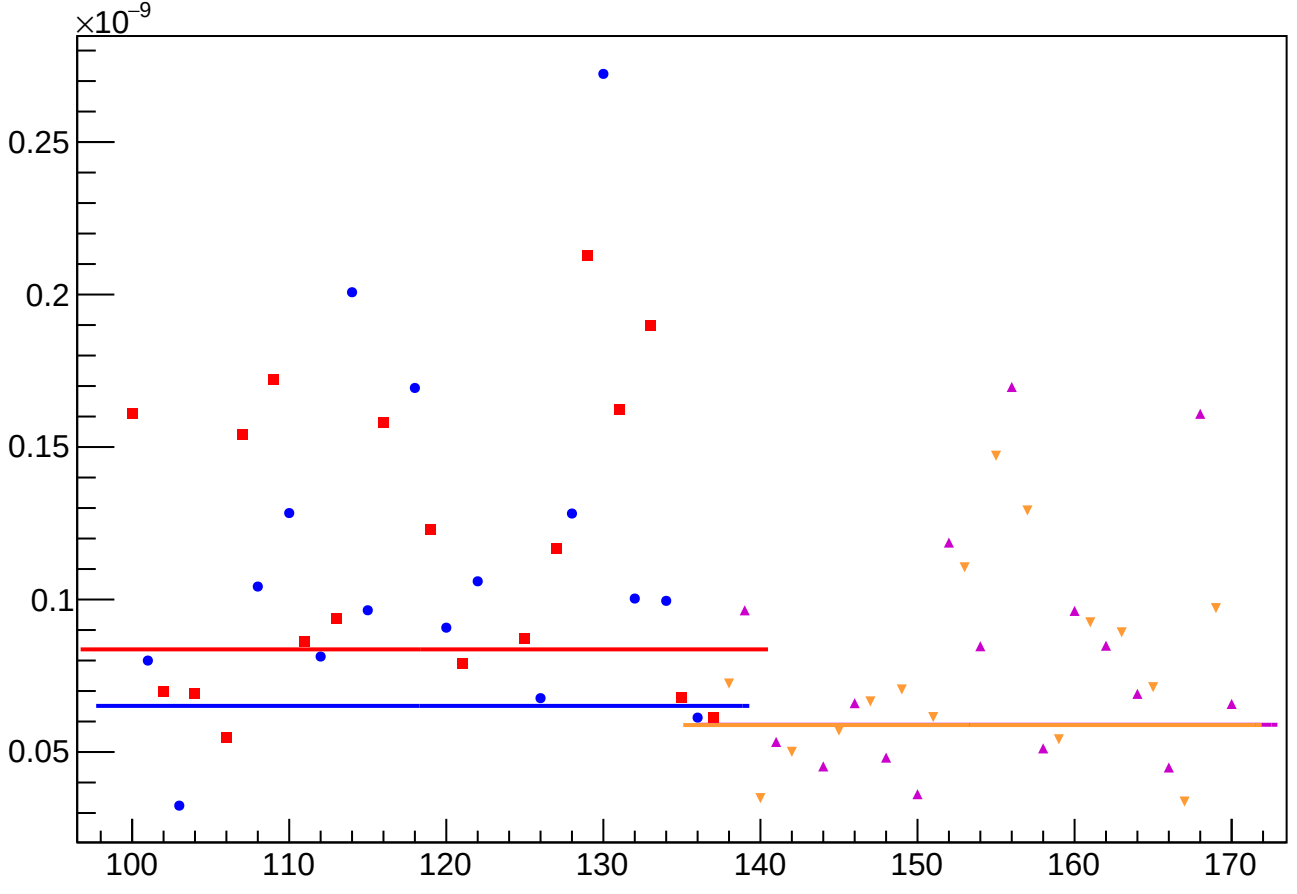
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.0/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:19.6/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 32.0/31

All: 0.000+/-0.000 $\chi^2$/NDF: 69.2/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 37.2/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1222613.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1457220.3/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 691494.7/17

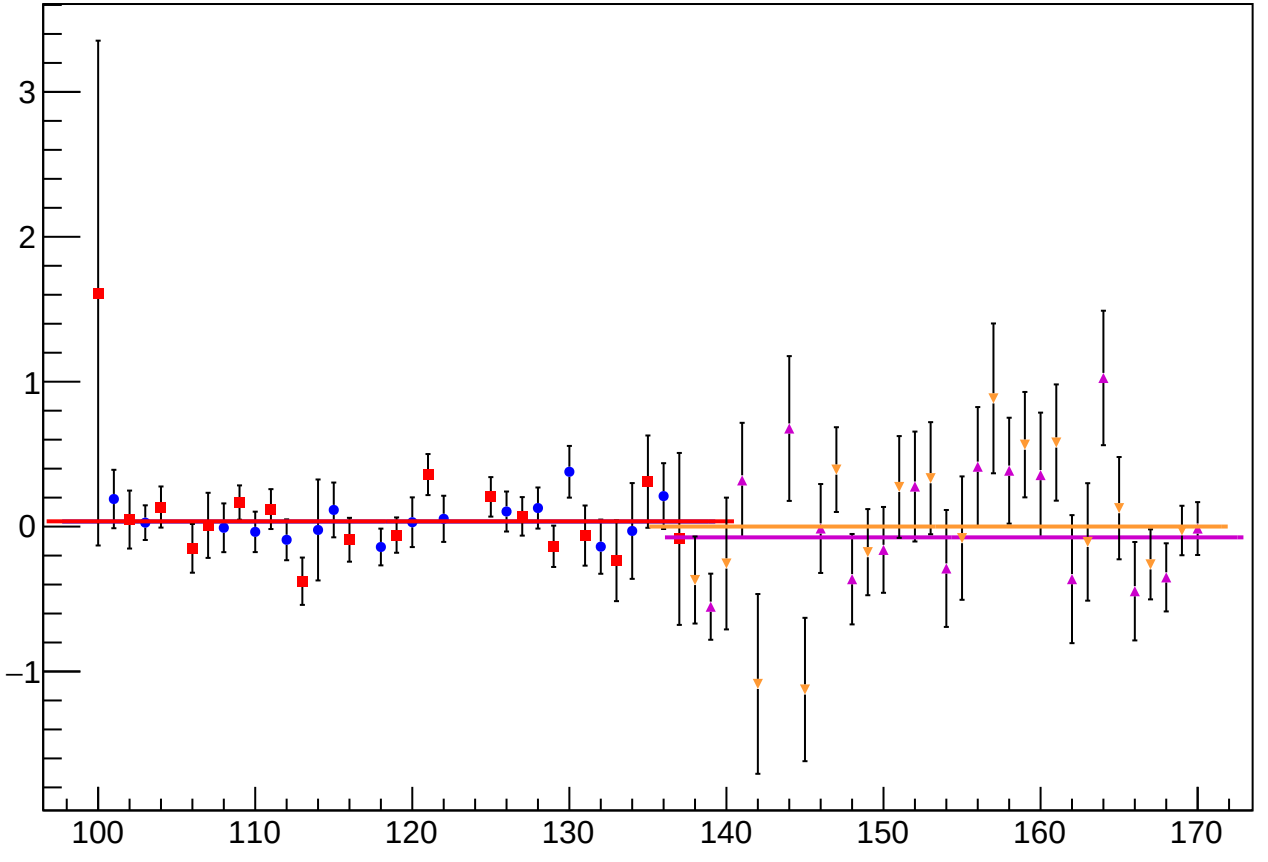
Left In: 0.000+/-0.000 $\chi^2$/NDF:1445165.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2708271.7/31

All: 0.000+/-0.000 $\chi^2$/NDF: 5201557.1/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 2470681.5/33

# asym_usl_atl2_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.035+/-0.041 $\chi^2$/NDF: 9.8/15

Left Out: 0.000+/-0.082 $\chi^2$/NDF:22.4/15

Right Out: 0.036+/-0.039 $\chi^2$/NDF: 22.0/17

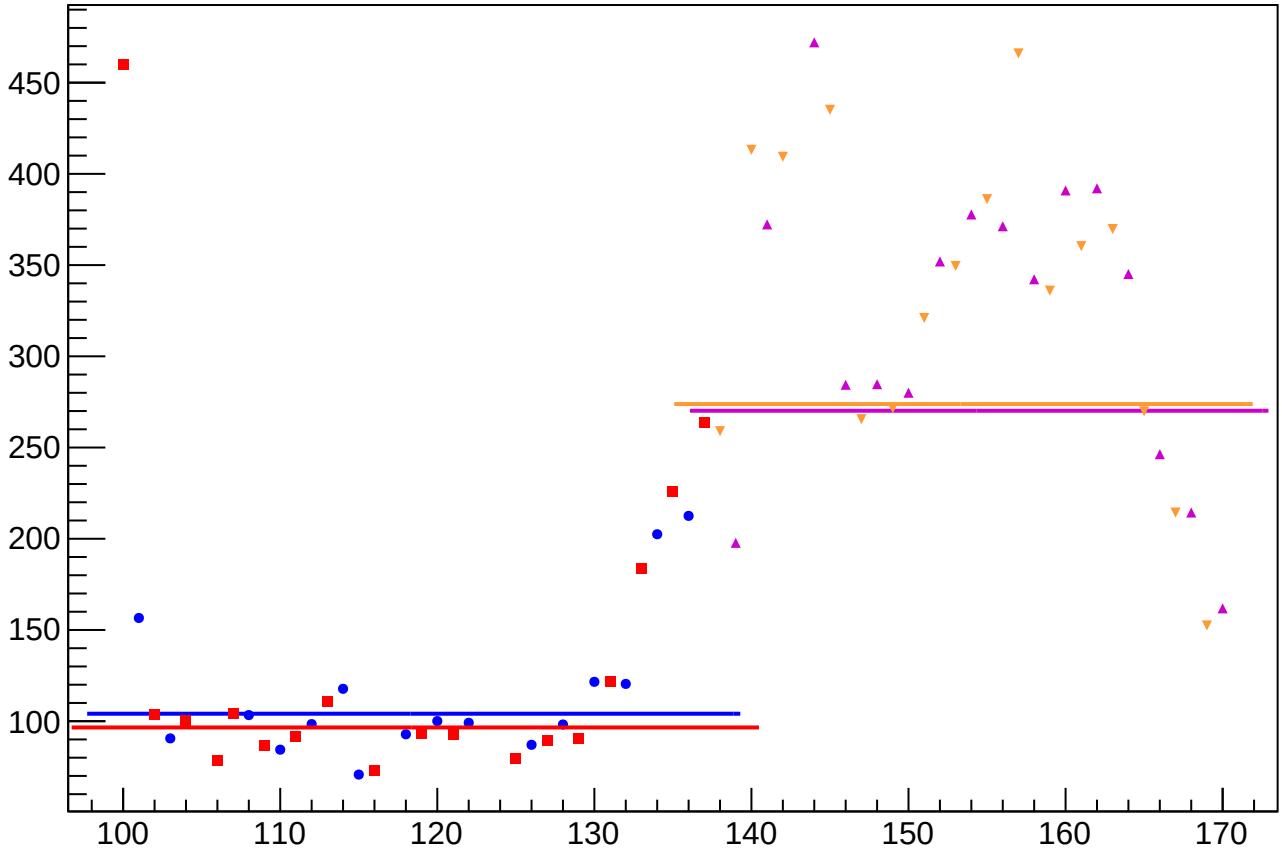
Left In: -0.074+/-0.079 $\chi^2$/NDF:22.5/15

+ sign 0.028+/-0.037 $\chi^2$/NDF: 32.3/31

All: 0.021+/-0.025 $\chi^2$/NDF: 78.5/65

- sign 0.015+/-0.035 $\chi^2$/NDF: 46.1/33

# asym_usl_atl2_dd_dit_vs_cor_diff_rms vs Slug




Right In: 104.099+/-0.029 $\chi^2$/NDF: 989856.1/15

Left Out: 273.831+/-0.058 $\chi^2$/NDF:2425826.0/15

Right Out: 96.569+/-0.028 $\chi^2$/NDF: 955547.2/17

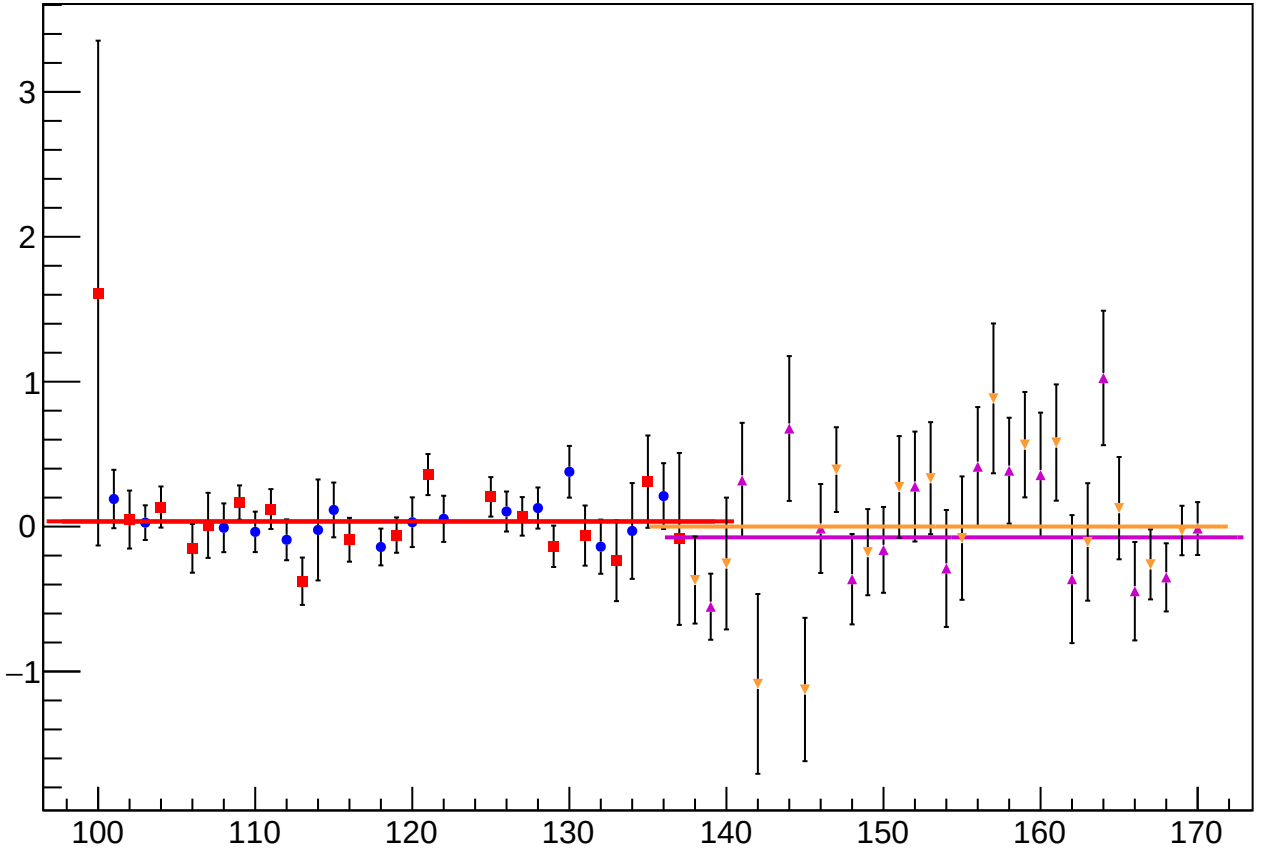
Left In: 270.171+/-0.056 $\chi^2$/NDF:2293304.8/15

+ sign 138.132+/-0.026 $\chi^2$/NDF: 10277954.4/31

All: 134.099+/-0.018 $\chi^2$/NDF: 21346963.6/65

- sign 130.451+/-0.025 $\chi^2$/NDF: 11022985.1/33

# asym_usl_atl2_dd_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.035+/-0.041 $\chi^2$/NDF: 9.8/15

Left Out: 0.000+/-0.082 $\chi^2$/NDF:22.4/15

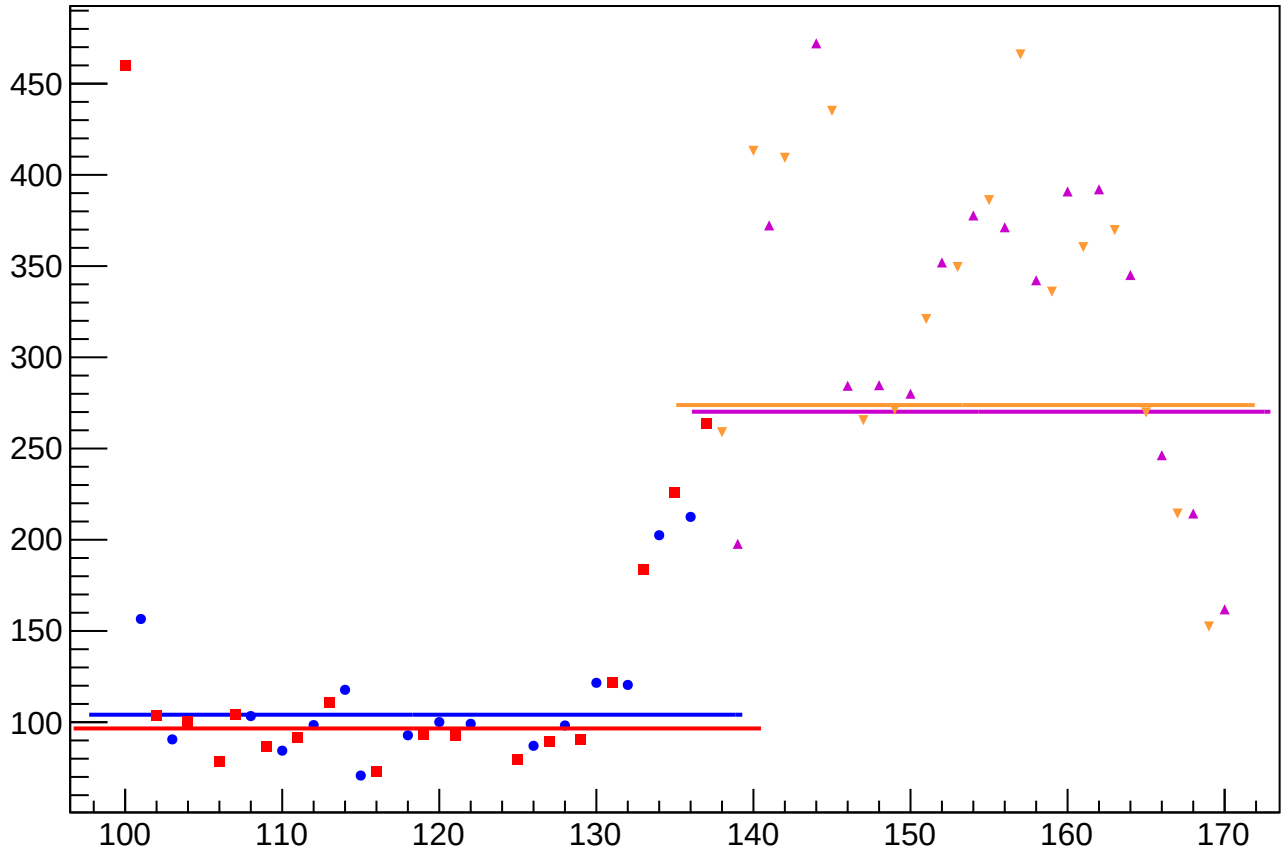
Right Out: 0.036+/-0.039 $\chi^2$/NDF: 22.0/17

Left In: -0.074+/-0.079 $\chi^2$/NDF:22.5/15

+ sign 0.028+/-0.037 $\chi^2$/NDF: 32.3/31

All: 0.021+/-0.025 $\chi^2$/NDF: 78.5/65

- sign 0.015+/-0.035 $\chi^2$/NDF: 46.1/33




Right In: 104.099+/-0.029 $\chi^2$/NDF: 989856.1/15

Left Out: 273.831+/-0.058 $\chi^2$/NDF:2425826.0/15

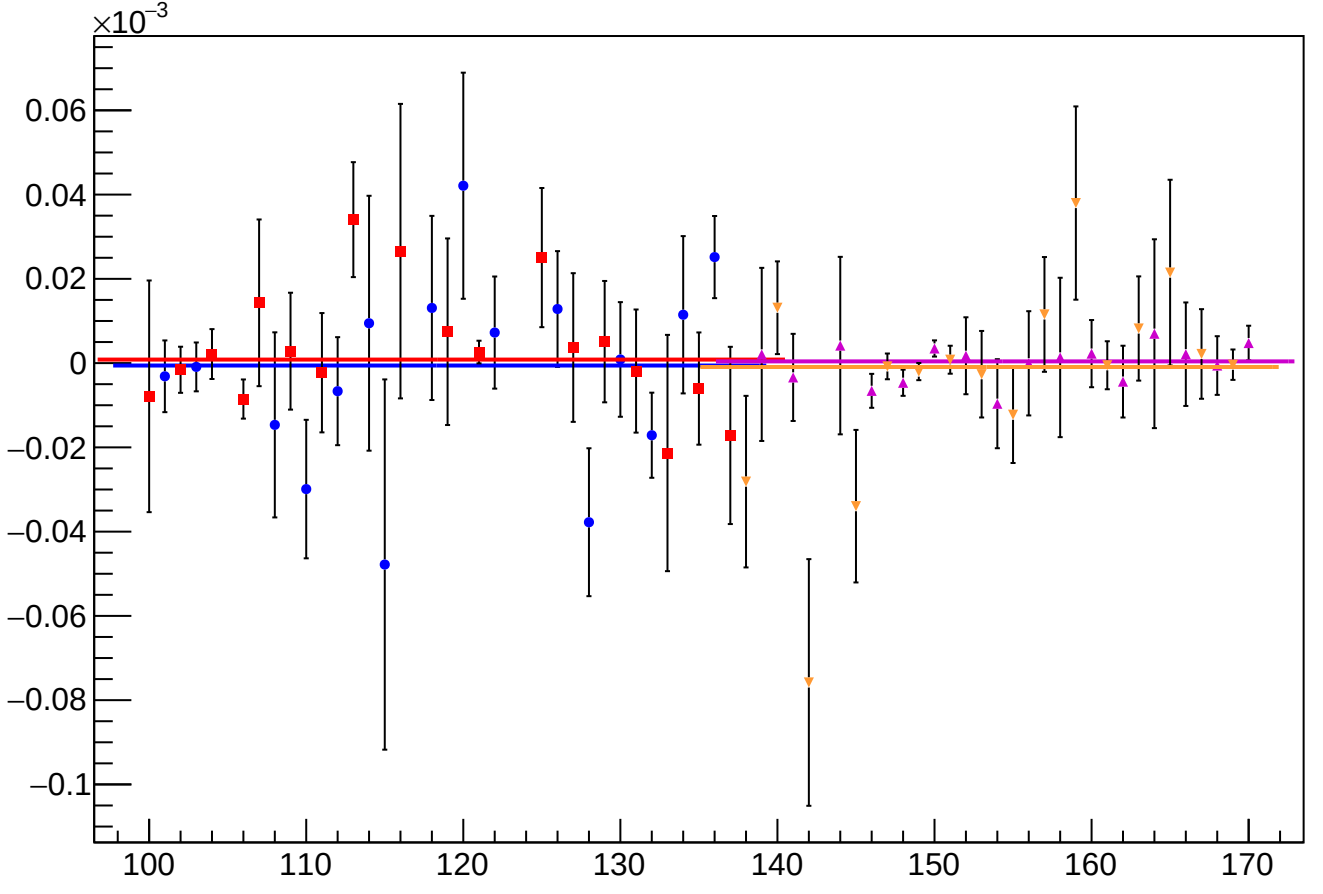
Right Out: 96.569+/-0.028 $\chi^2$/NDF: 955547.2/17

Left In: 270.171+/-0.056 $\chi^2$/NDF:2293304.8/15

+ sign 138.132+/-0.026 $\chi^2$/NDF: 10277954.4/31

All: 134.099+/-0.018 $\chi^2$/NDF: 21346963.6/65

- sign 130.451+/-0.025 $\chi^2$/NDF: 11022985.1/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 24.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:20.3/15

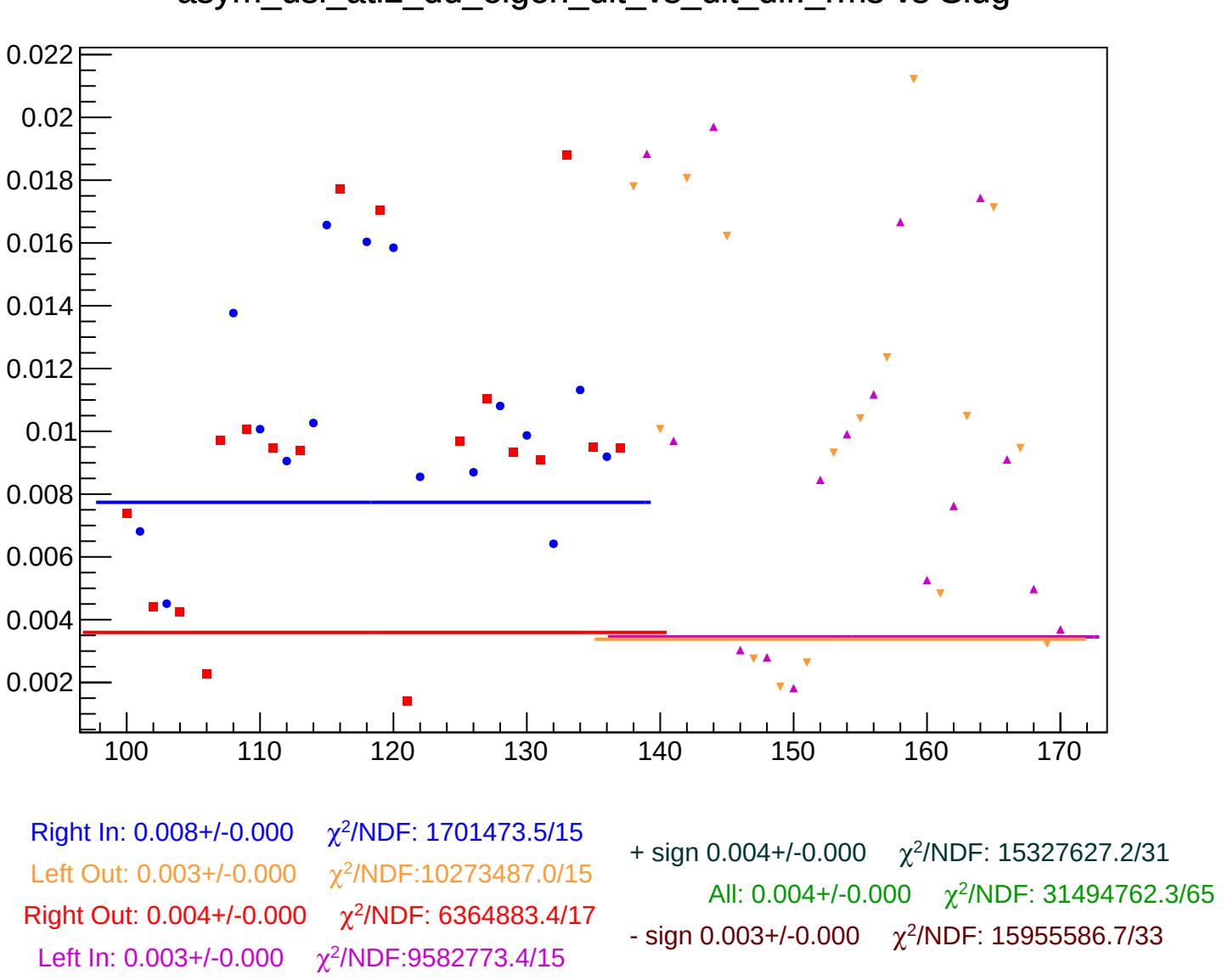
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.9/17

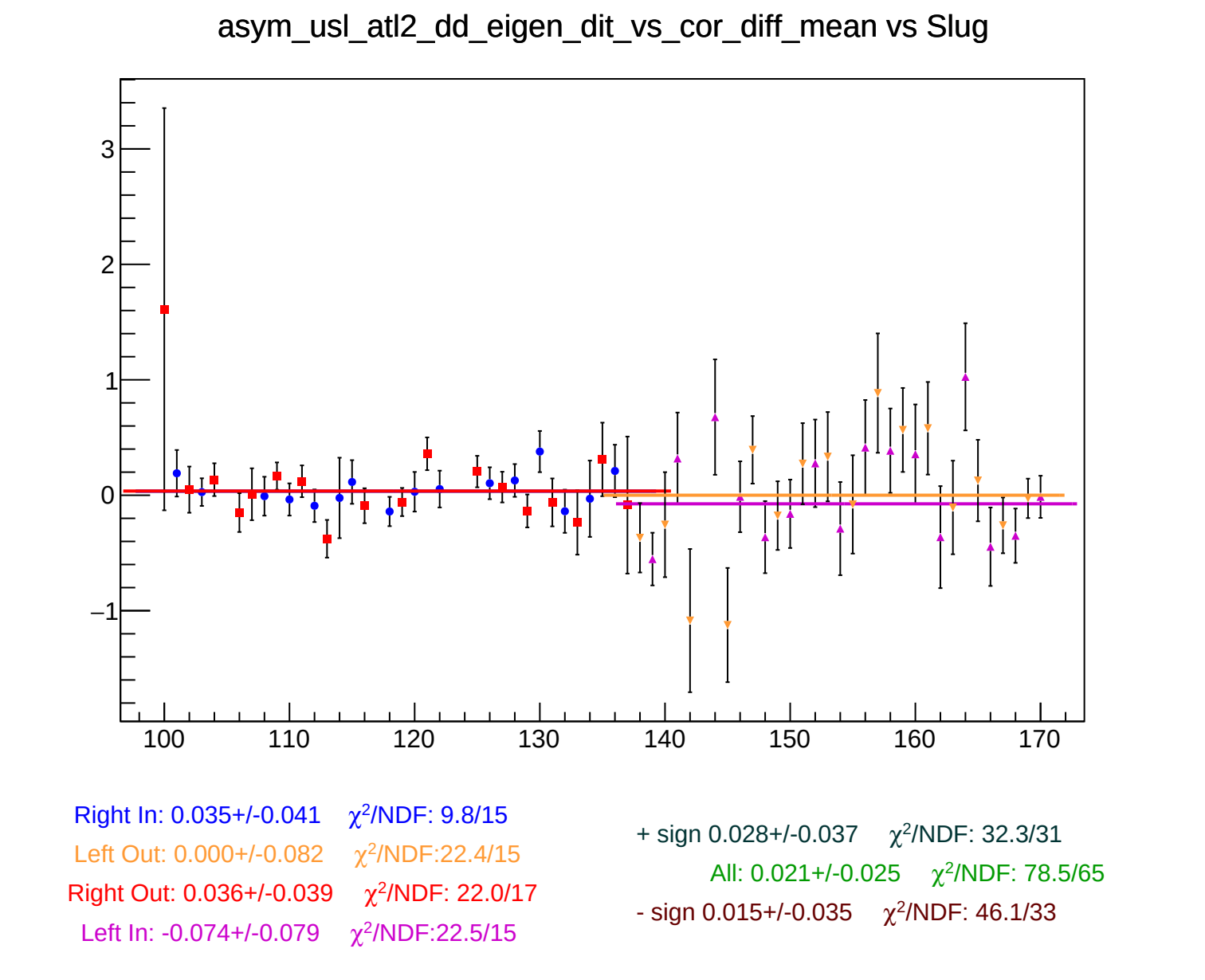
Left In: 0.000+/-0.000 $\chi^2$/NDF:10.9/15

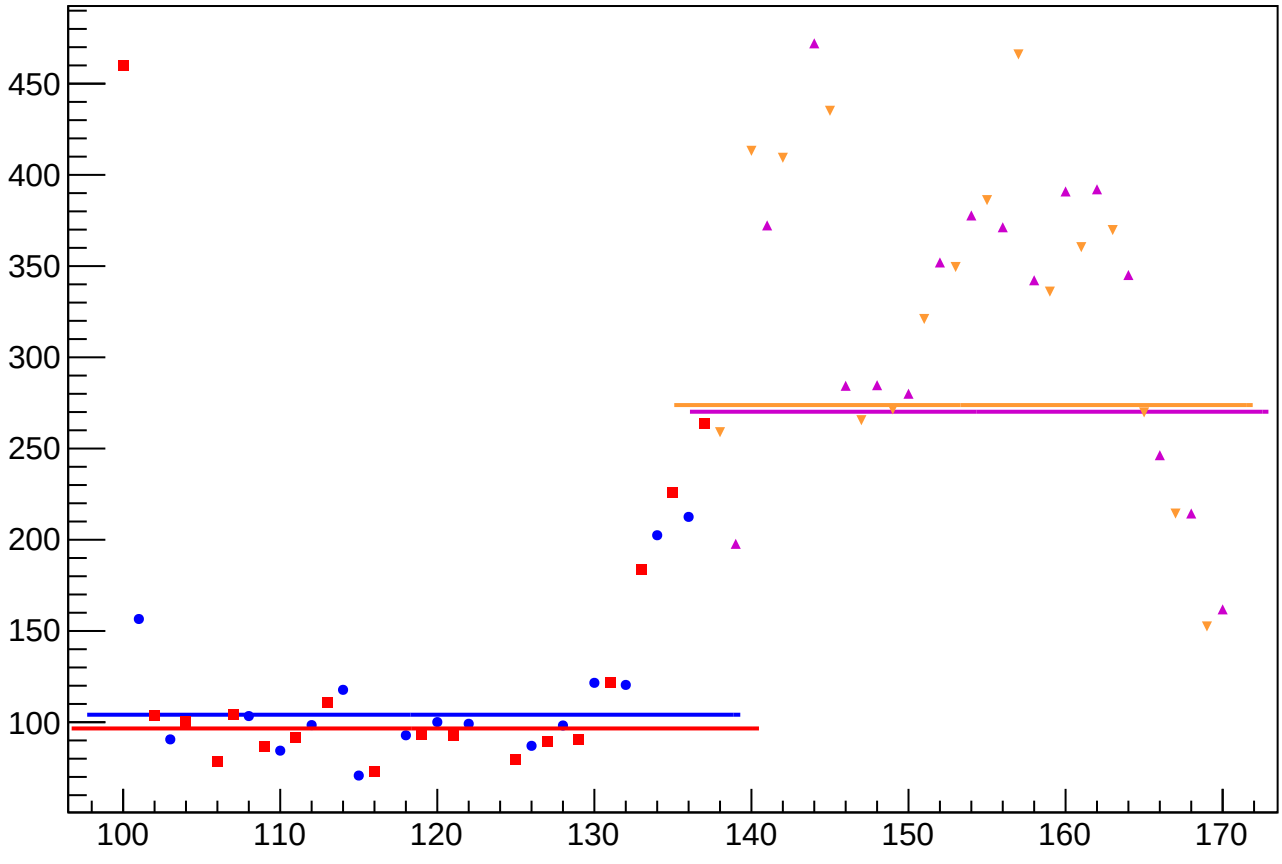
+ sign -0.000+/-0.000 $\chi^2$/NDF: 44.2/31

All: -0.000+/-0.000 $\chi^2$/NDF: 71.9/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 26.8/33


asym_usl_atl2_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
100
110
120
130
140
150
160
170
Right In: 0.008+/-0.000 χ²/NDF: 1701473.5/15
Left Out: 0.003+/-0.000 χ²/NDF:10273487.0/15
Right Out: 0.004+/-0.000 χ²/NDF: 6364883.4/17
Left In: 0.003+/-0.000 χ²/NDF:9582773.4/15
+ sign 0.004+/-0.000 χ²/NDF: 15327627.2/31
All: 0.004+/-0.000 χ²/NDF: 31494762.3/65
- sign 0.003+/-0.000 χ²/NDF: 15955586.7/33


asym_usl_atl2_dd_eigen_dit_vs_cor_diff_mean vs Slug
3
2
1
0
−1
100
110
120
130
140
150
160
170
Right In: 0.035+/-0.041 χ²/NDF: 9.8/15
Left Out: 0.000+/-0.082 χ²/NDF:22.4/15
Right Out: 0.036+/-0.039 χ²/NDF: 22.0/17
Left In: -0.074+/-0.079 χ²/NDF:22.5/15
+ sign 0.028+/-0.037 χ²/NDF: 32.3/31
All: 0.021+/-0.025 χ²/NDF: 78.5/65
- sign 0.015+/-0.035 χ²/NDF: 46.1/33




Right In: 104.100+/-0.029 $\chi^2$/NDF: 989809.0/15

Left Out: 273.833+/-0.058 $\chi^2$/NDF:2425913.7/15

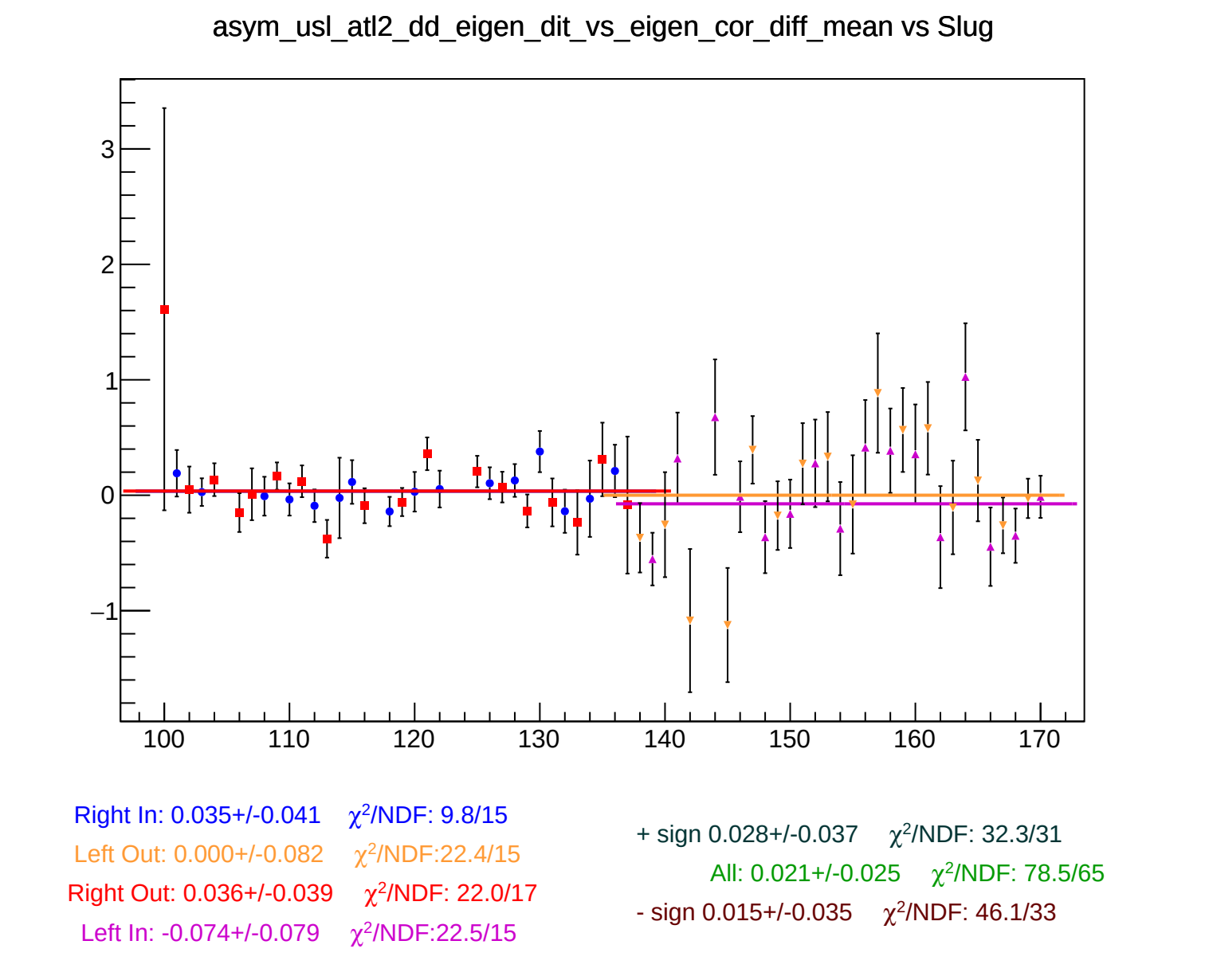
Right Out: 96.570+/-0.028 $\chi^2$/NDF: 955477.2/17

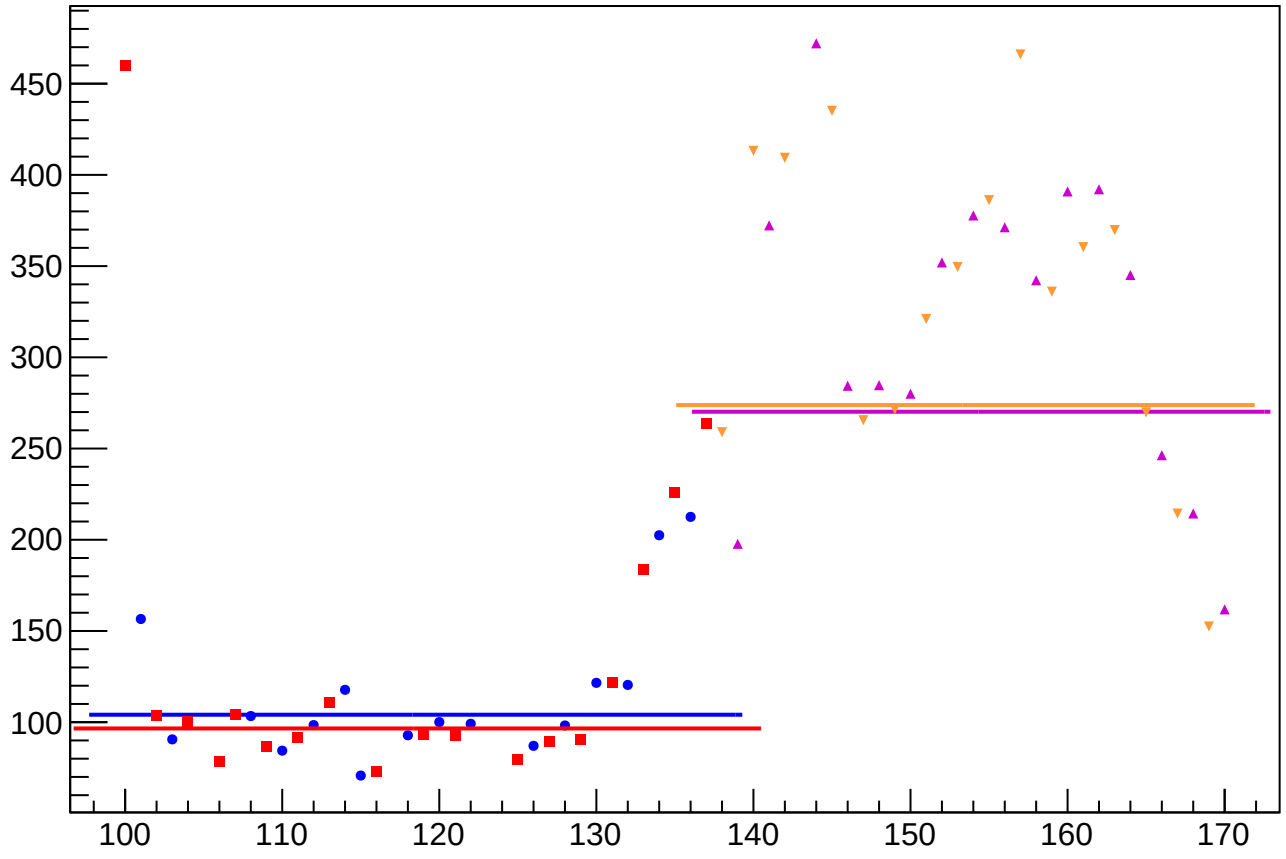
Left In: 270.174+/-0.056 $\chi^2$/NDF:2293315.0/15

+ sign 138.133+/-0.026 $\chi^2$/NDF: 10277979.9/31

All: 134.100+/-0.018 $\chi^2$/NDF: 21346935.2/65

- sign 130.452+/-0.025 $\chi^2$/NDF: 11022939.0/33


asym_usl_atl2_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug
3
2
1
0
−1
100
110
120
130
140
150
160
170
Right In: 0.035+/-0.041 χ²/NDF: 9.8/15
Left Out: 0.000+/-0.082 χ²/NDF:22.4/15
Right Out: 0.036+/-0.039 χ²/NDF: 22.0/17
Left In: -0.074+/-0.079 χ²/NDF:22.5/15
+ sign 0.028+/-0.037 χ²/NDF: 32.3/31
All: 0.021+/-0.025 χ²/NDF: 78.5/65
- sign 0.015+/-0.035 χ²/NDF: 46.1/33




Right In: 104.100+/-0.029 $\chi^2$/NDF: 989809.0/15

Left Out: 273.833+/-0.058 $\chi^2$/NDF:2425913.7/15

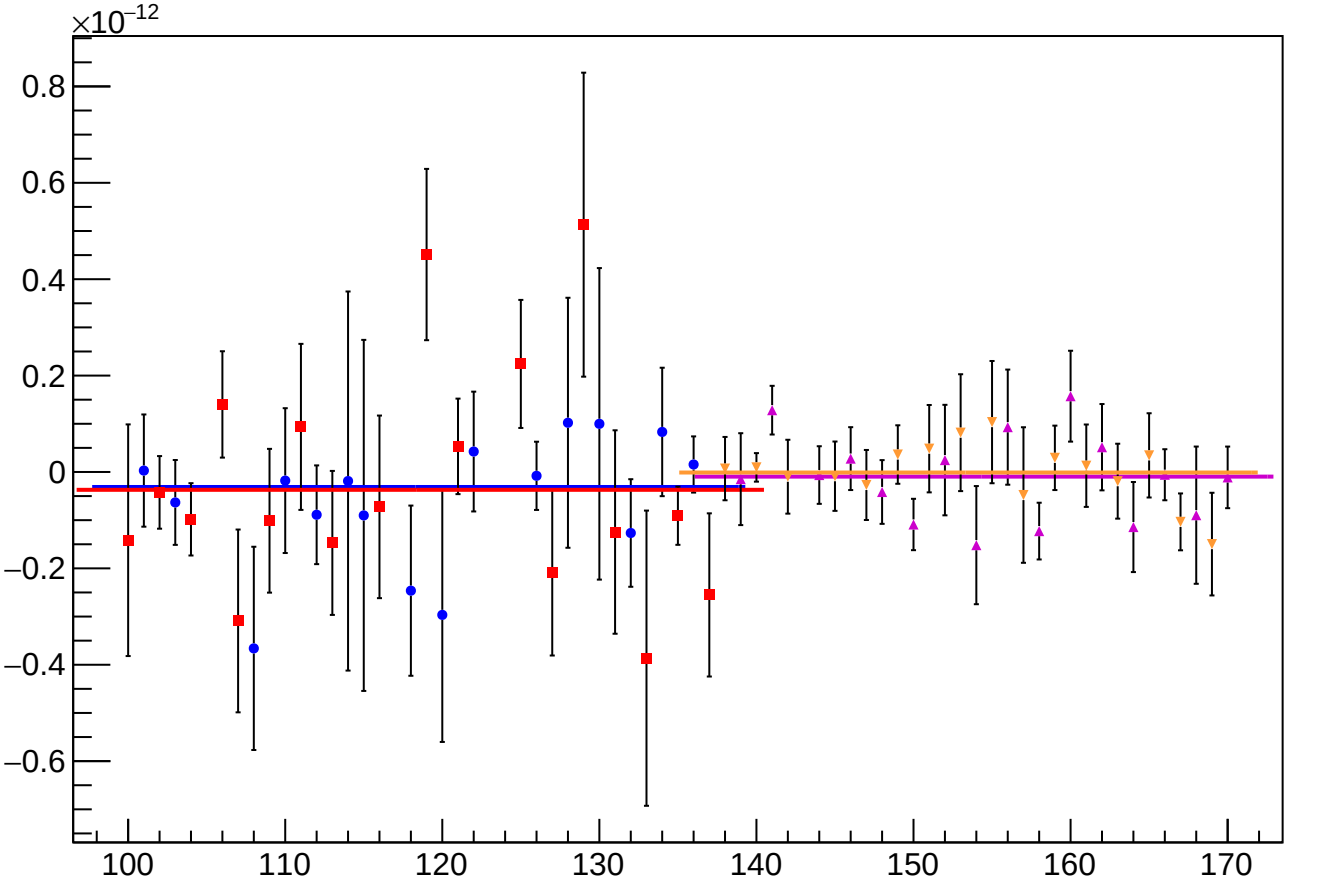
Right Out: 96.570+/-0.028 $\chi^2$/NDF: 955477.2/17

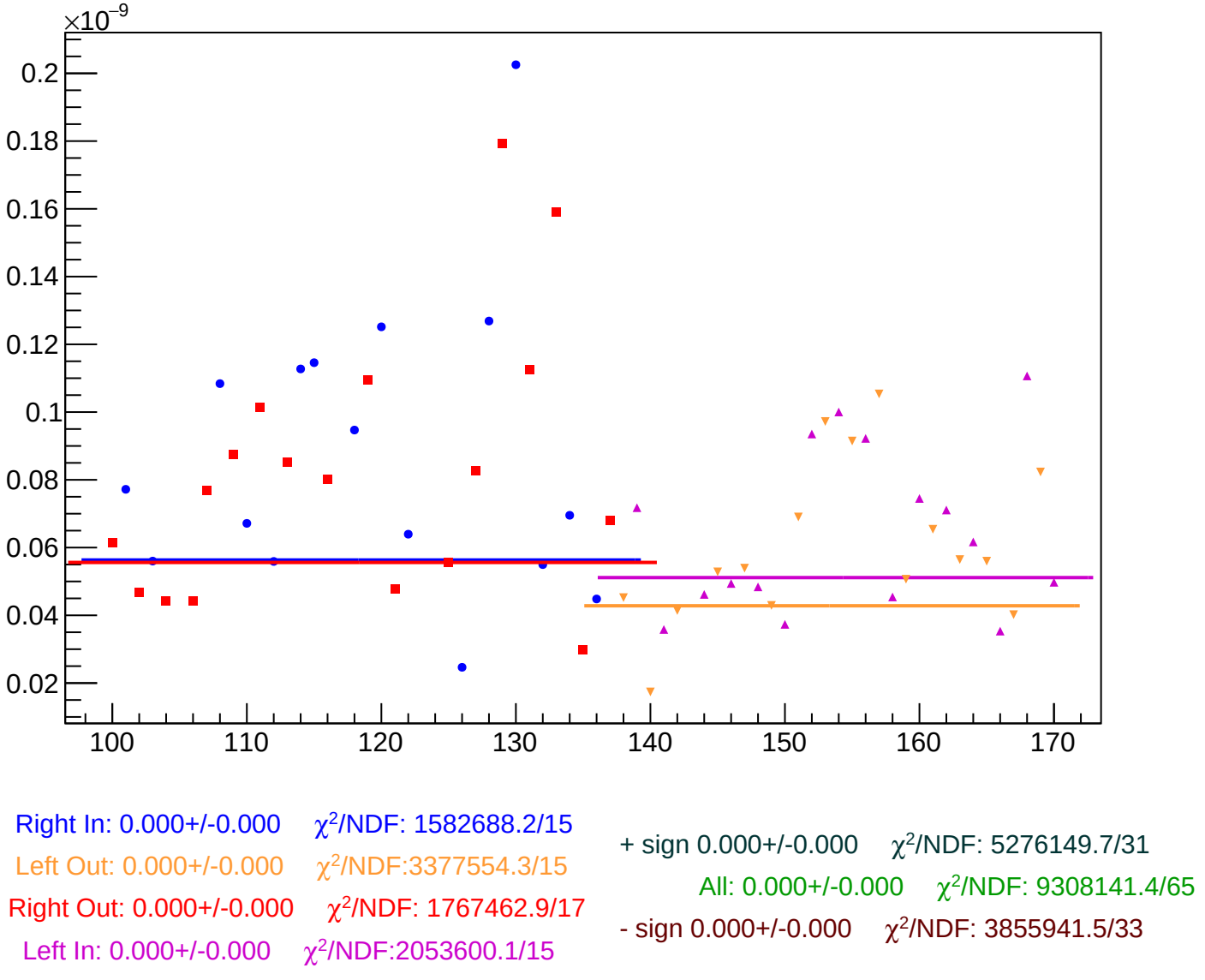
Left In: 270.174+/-0.056 $\chi^2$/NDF:2293315.0/15

+ sign 138.133+/-0.026 $\chi^2$/NDF: 10277979.9/31

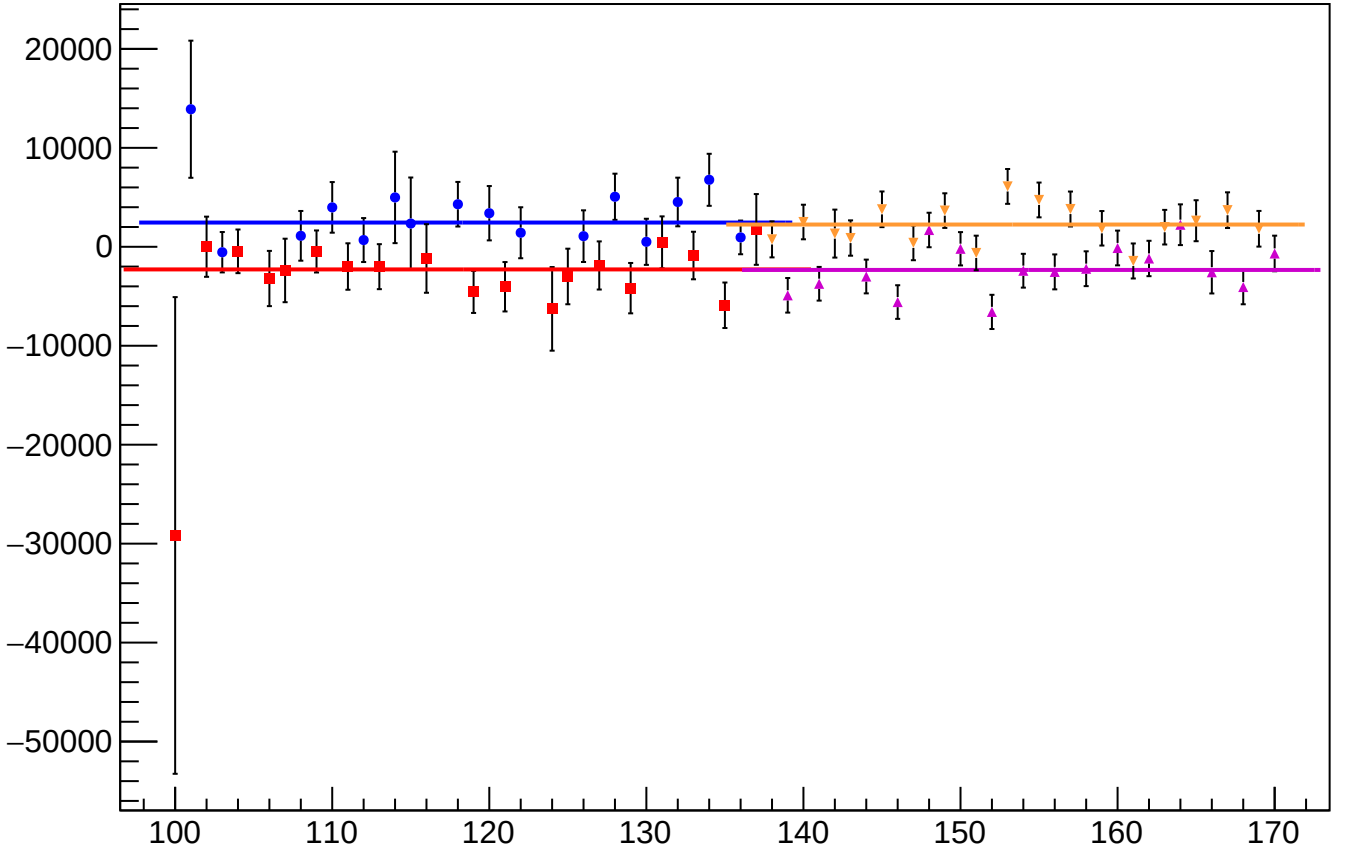
All: 134.100+/-0.018 $\chi^2$/NDF: 21346935.2/65

- sign 130.452+/-0.025 $\chi^2$/NDF: 11022939.0/33


asym_usl_atl2_dd_eigen_cor_vs_cor_diff_mean vs Slug
×10^−12
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 8.6/15
Left Out: -0.000+/-0.000 χ²/NDF:7.6/15
Right Out: -0.000+/-0.000 χ²/NDF: 27.0/17
Left In: -0.000+/-0.000 χ²/NDF:22.5/15
+ sign -0.000+/-0.000 χ²/NDF: 17.0/31
All: -0.000+/-0.000 χ²/NDF: 67.4/65
- sign -0.000+/-0.000 χ²/NDF: 50.2/33


asym_usl_atl2_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^-9
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1582688.2/15
Left Out: 0.000+/-0.000 χ²/NDF:3377554.3/15
Right Out: 0.000+/-0.000 χ²/NDF: 1767462.9/17
Left In: 0.000+/-0.000 χ²/NDF:2053600.1/15
+ sign 0.000+/-0.000 χ²/NDF: 5276149.7/31
All: 0.000+/-0.000 χ²/NDF: 9308141.4/65
- sign 0.000+/-0.000 χ²/NDF: 3855941.5/33

# reg_asym_usr_atr1_avg_mean vs Slug




Right In: 2449.957+/-630.235 $\chi^2$/NDF: 13.8/15

Left Out: 2249.985+/-438.911 $\chi^2$/NDF:19.3/16

Right Out: -2286.573+/-609.157 $\chi^2$/NDF: 11.8/18

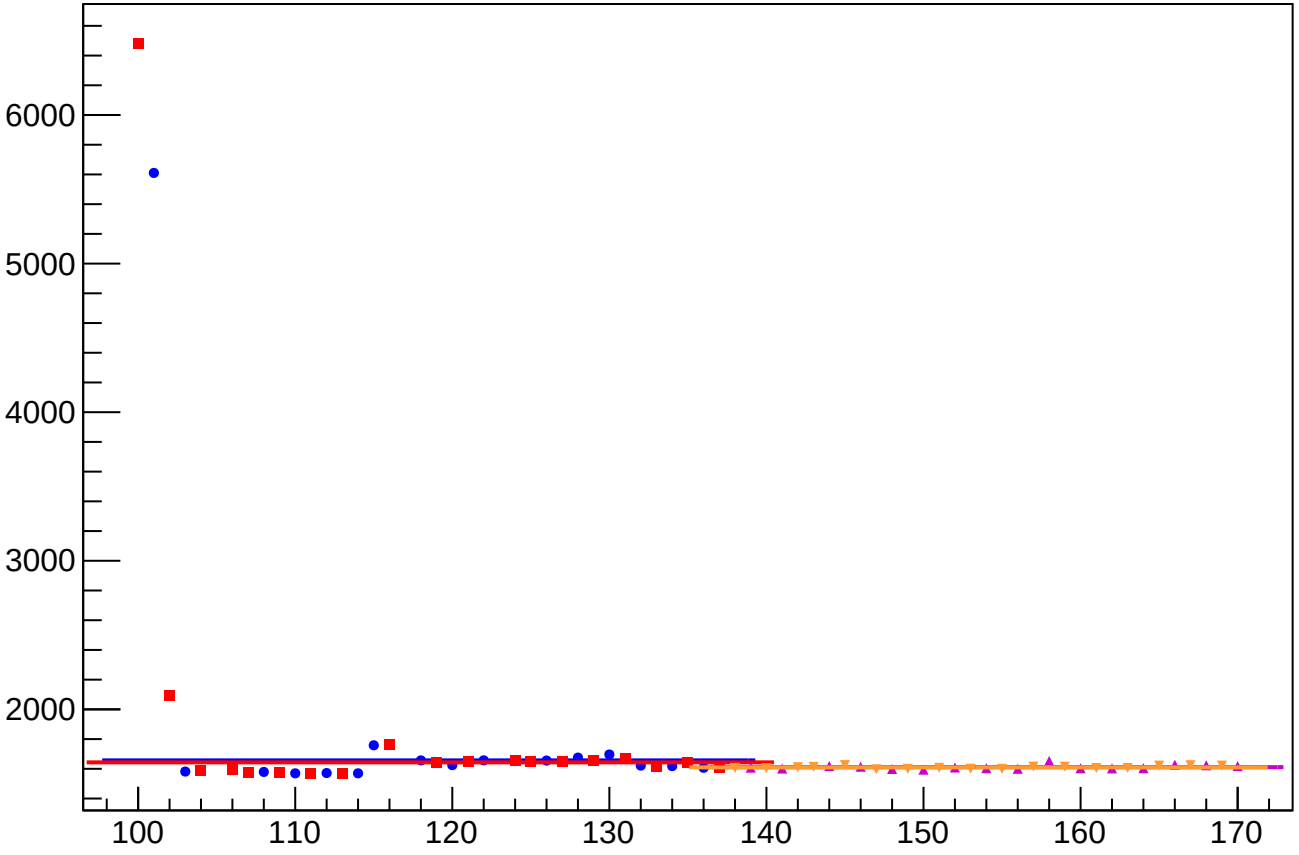
Left In: -2339.045+/-443.105 $\chi^2$/NDF:28.4/15

+ sign 2315.296+/-360.174 $\chi^2$/NDF: 33.2/32

All: -14.679+/-254.028 $\chi^2$/NDF: 156.8/67

- sign -2320.888+/-358.332 $\chi^2$/NDF: 40.3/34

# reg_asym_usr_atr1_avg_rms vs Slug




Right In: 1656.683+/-0.446 $\chi^2$/NDF: 666226.2/15

Left Out: 1609.523+/-0.310 $\chi^2$/NDF:797.8/16

Right Out: 1643.430+/-0.431 $\chi^2$/NDF: 136997.9/18

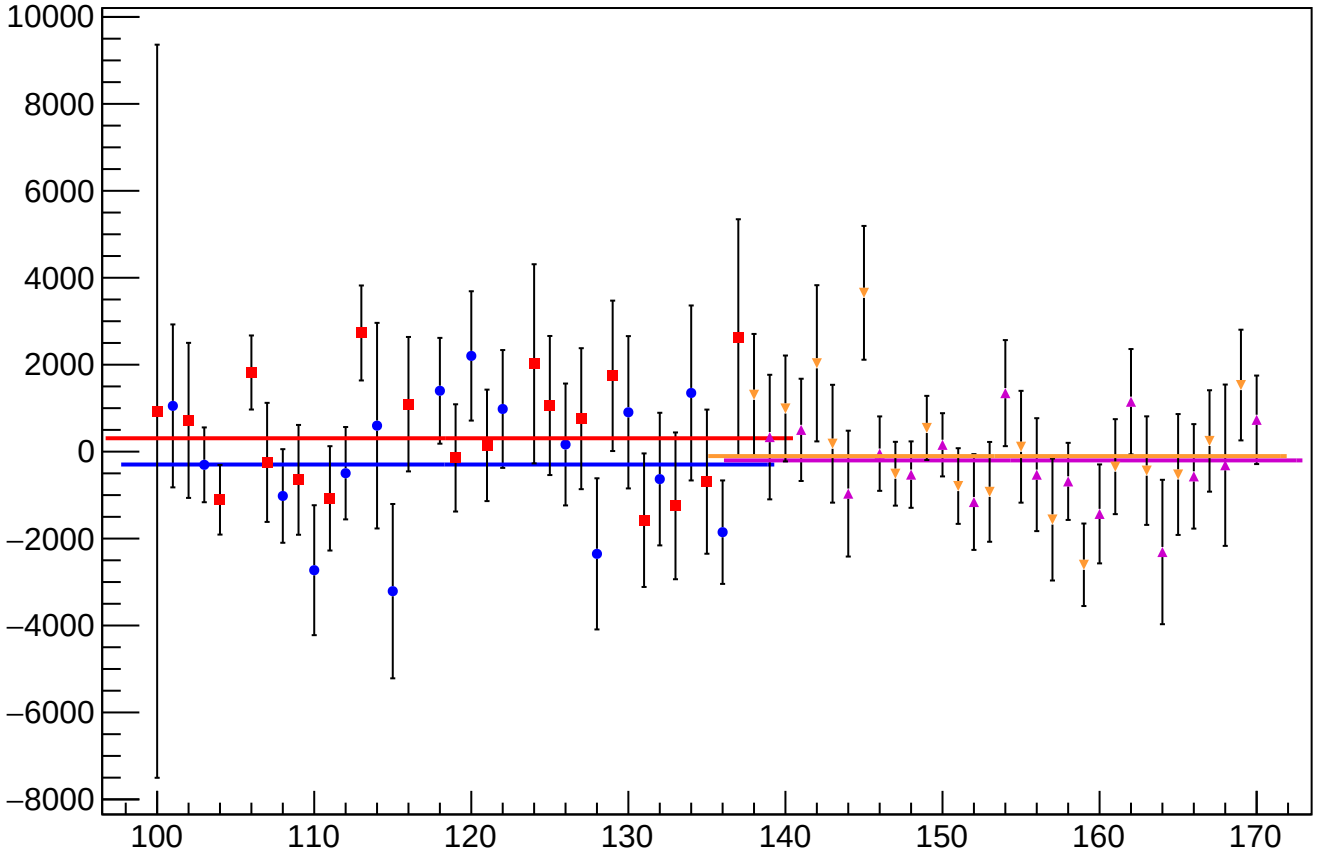
Left In: 1611.171+/-0.313 $\chi^2$/NDF:1988.9/15

+ sign 1624.925+/-0.255 $\chi^2$/NDF: 674565.5/32

All: 1623.623+/-0.180 $\chi^2$/NDF: 817272.2/67

- sign 1622.334+/-0.253 $\chi^2$/NDF: 142654.7/34

# asym_usr_atr1_avg_reg_correction_mean vs Slug




Right In: -296.450+/-343.436 $\chi^2$/NDF: 16.0/15

Left Out: -102.610+/-269.175 $\chi^2$/NDF:21.5/16

Right Out: 307.671+/-312.976 $\chi^2$/NDF: 18.7/18

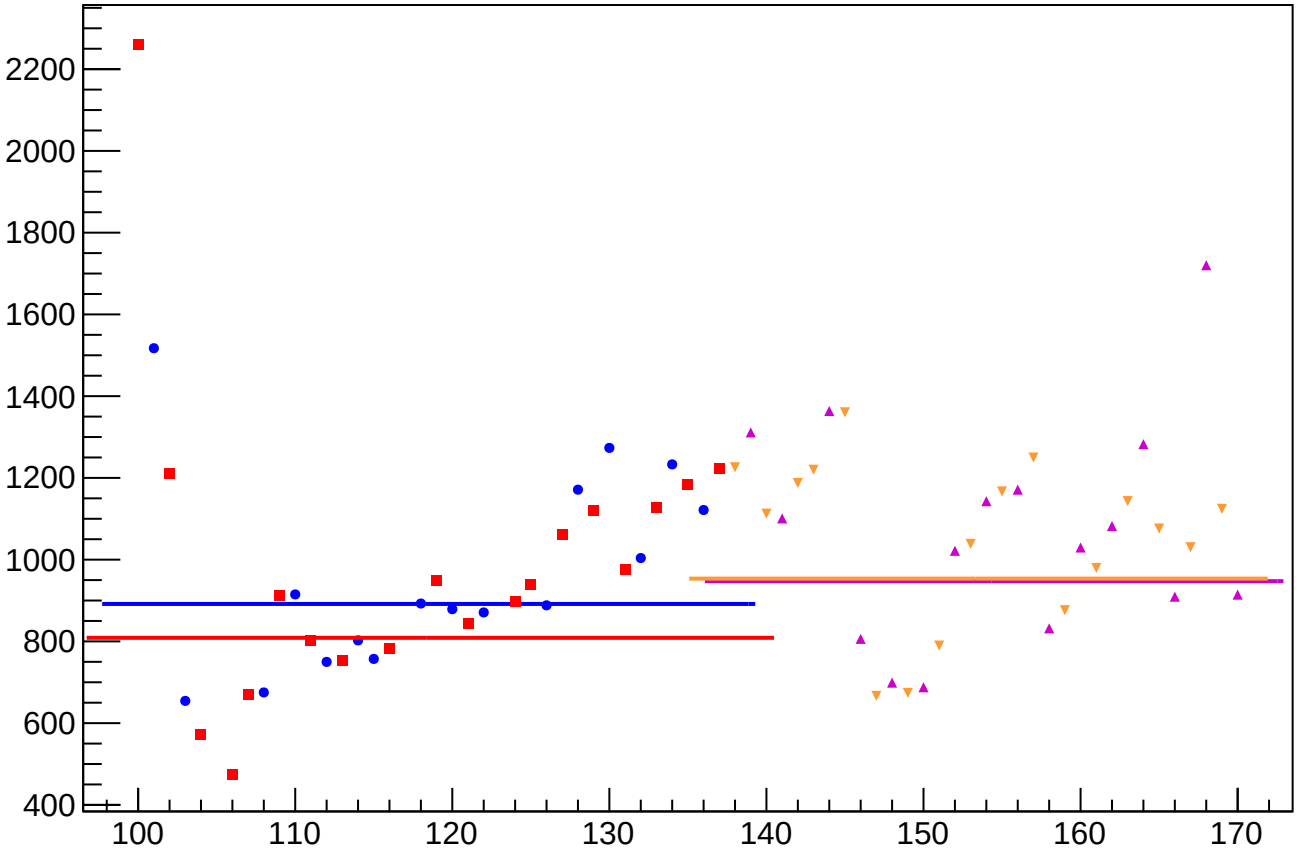
Left In: -201.825+/-269.408 $\chi^2$/NDF:8.9/15

+ sign -176.373+/-211.857 $\chi^2$/NDF: 37.6/32

All: -77.147+/-147.017 $\chi^2$/NDF: 67.2/67

- sign 15.019+/-204.181 $\chi^2$/NDF: 29.1/34

# asym_usr_atr1_avg_reg_correction_rms vs Slug




Right In: 891.633+/-0.243 $\chi^2$/NDF: 793897.2/15

Left Out: 953.598+/-0.190 $\chi^2$/NDF:1299576.6/16

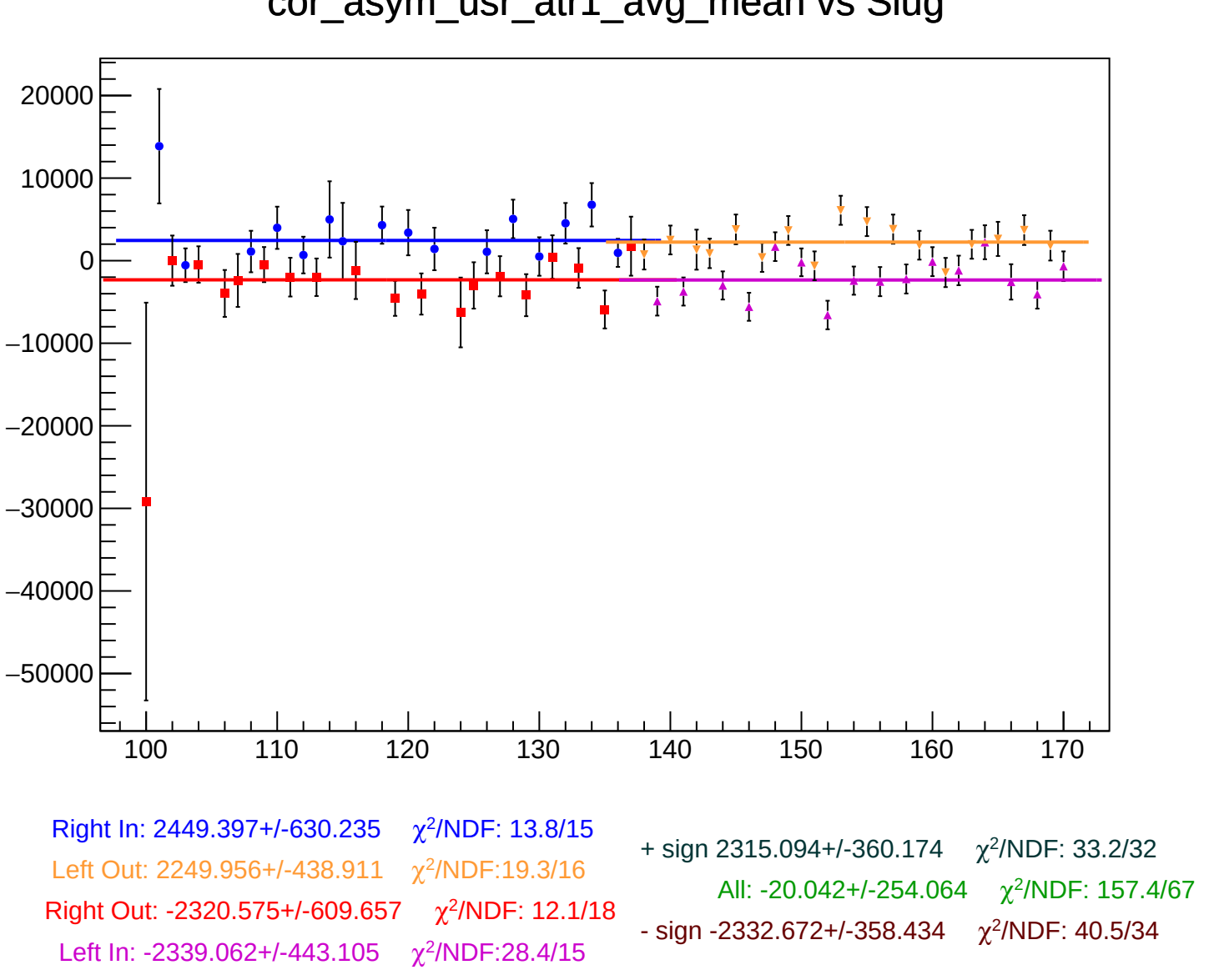
Right Out: 808.809+/-0.221 $\chi^2$/NDF: 1083841.8/18

Left In: 947.403+/-0.191 $\chi^2$/NDF:1470292.2/15

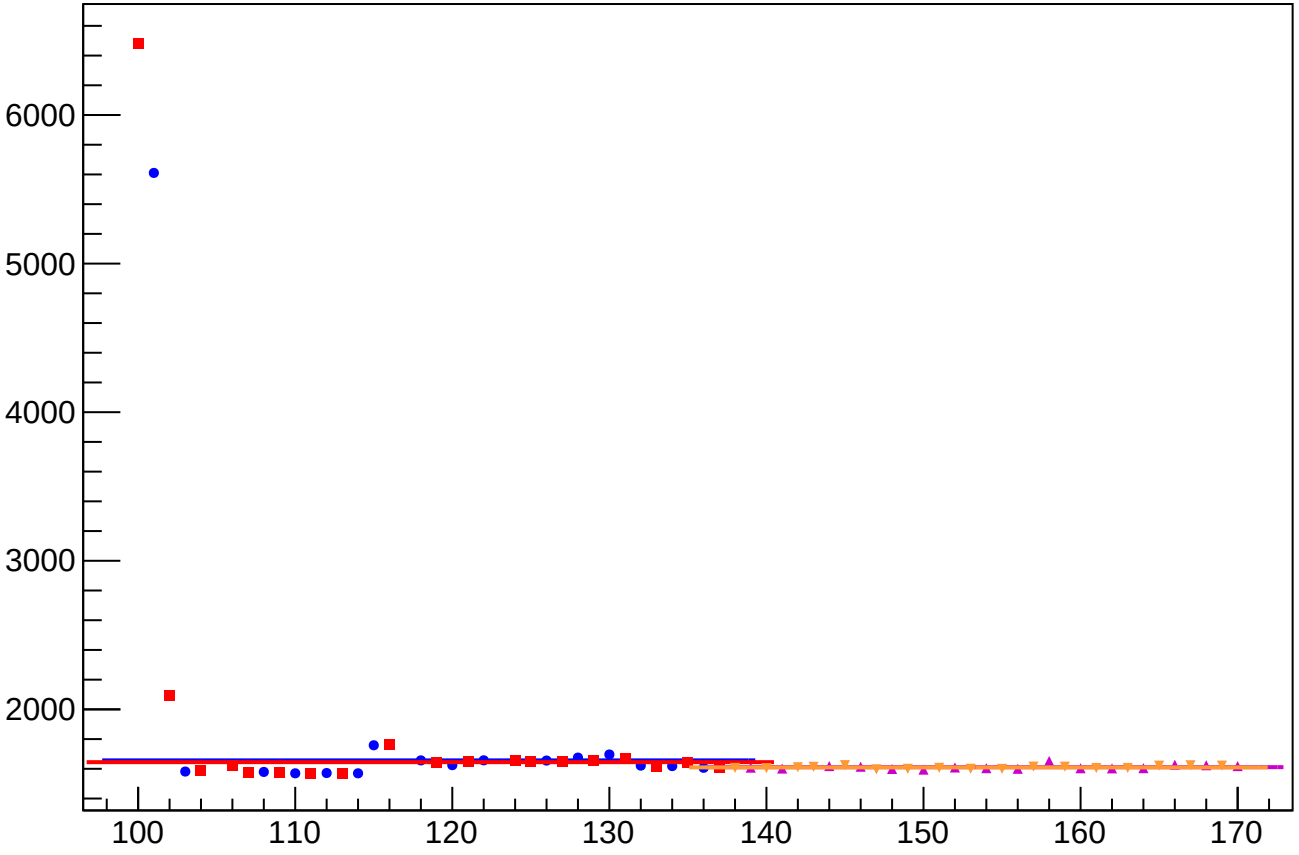
+ sign 930.018+/-0.150 $\chi^2$/NDF: 2133805.0/32

All: 908.450+/-0.104 $\chi^2$/NDF: 4953190.7/67

- sign 888.417+/-0.144 $\chi^2$/NDF: 2779404.3/34


cor_asym_usr_atr1_avg_mean vs Slug
20000
10000
0
−10000
−20000
−30000
−40000
−50000
100
110
120
130
140
150
160
170
Right In: 2449.397+/-630.235 χ²/NDF: 13.8/15
Left Out: 2249.956+/-438.911 χ²/NDF:19.3/16
Right Out: -2320.575+/-609.657 χ²/NDF: 12.1/18
Left In: -2339.062+/-443.105 χ²/NDF:28.4/15
+ sign 2315.094+/-360.174 χ²/NDF: 33.2/32
All: -20.042+/-254.064 χ²/NDF: 157.4/67
- sign -2332.672+/-358.434 χ²/NDF: 40.5/34

# cor_asym_usr_atr1_avg_rms vs Slug




Right In: 1656.683+/-0.446 $\chi^2$/NDF: 666225.7/15

Left Out: 1609.523+/-0.310 $\chi^2$/NDF:797.8/16

Right Out: 1644.733+/-0.431 $\chi^2$/NDF: 136483.1/18

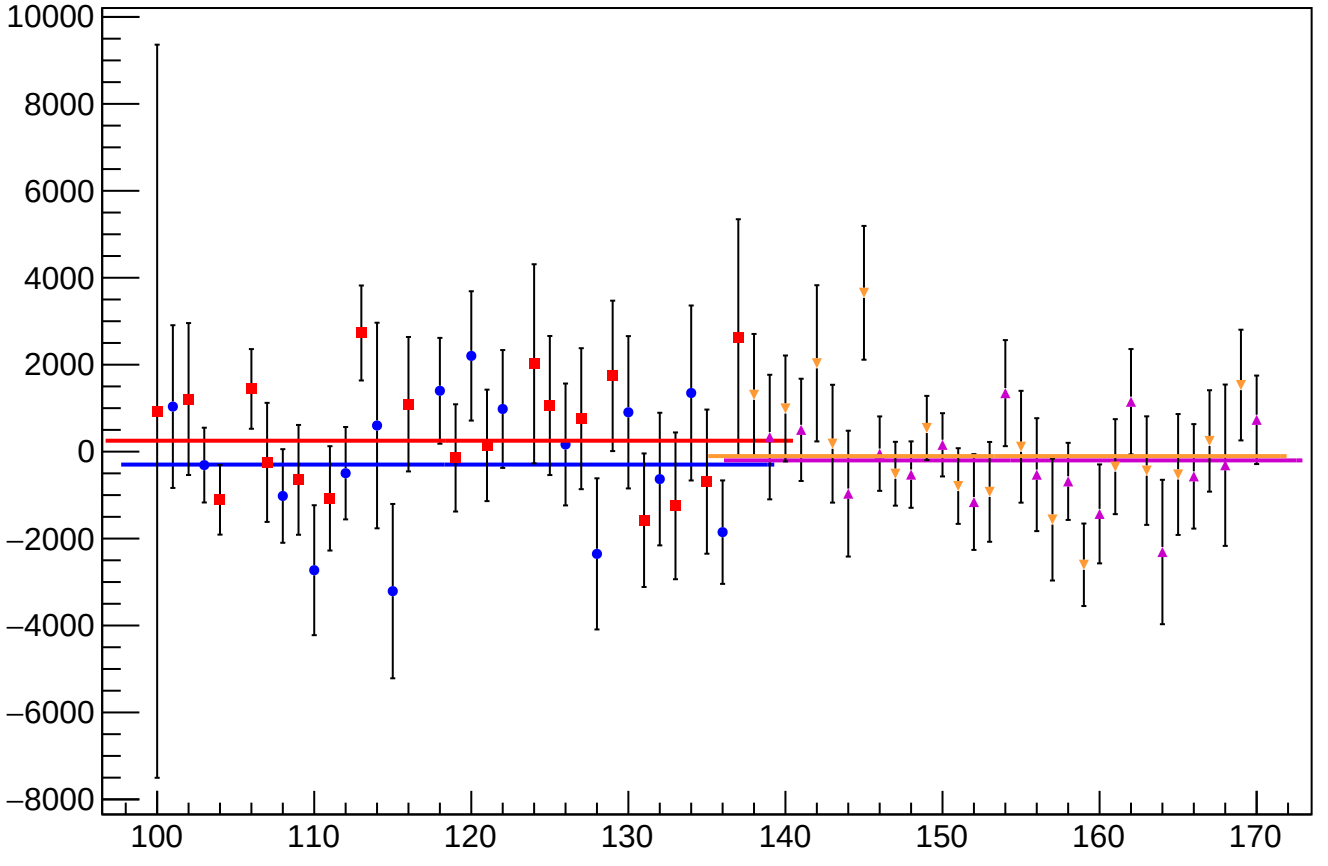
Left In: 1611.171+/-0.313 $\chi^2$/NDF:1988.9/15

+ sign 1624.925+/-0.255 $\chi^2$/NDF: 674565.0/32

All: 1623.843+/-0.180 $\chi^2$/NDF: 817038.8/67

- sign 1622.772+/-0.253 $\chi^2$/NDF: 142437.9/34

# asym_usr_atr1_avg_cor_correction_mean vs Slug




Right In: -297.794+/-343.391 $\chi^2$/NDF: 15.9/15

Left Out: -102.667+/-269.172 $\chi^2$/NDF:21.5/16

Right Out: 251.230+/-315.749 $\chi^2$/NDF: 17.3/18

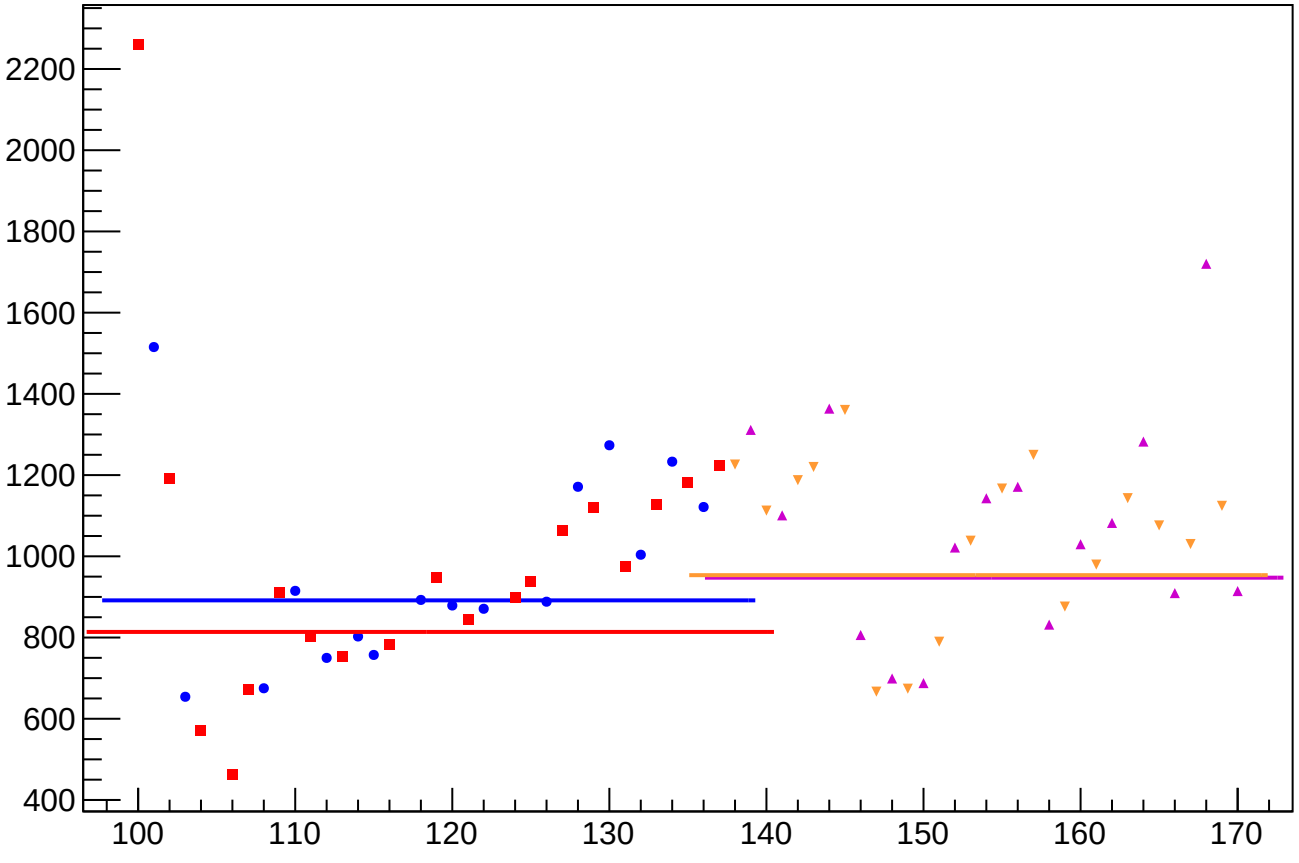
Left In: -201.857+/-269.409 $\chi^2$/NDF:8.9/15

+ sign -176.931+/-211.845 $\chi^2$/NDF: 37.6/32

All: -91.205+/-147.297 $\chi^2$/NDF: 65.3/67

- sign -10.971+/-204.945 $\chi^2$/NDF: 27.4/34

# asym_usr_atr1_avg_cor_correction_rms vs Slug




Right In: 891.533+/-0.243 $\chi^2$/NDF: 793657.2/15

Left Out: 953.587+/-0.190 $\chi^2$/NDF:1299659.7/16

Right Out: 813.807+/-0.223 $\chi^2$/NDF: 1052991.6/18

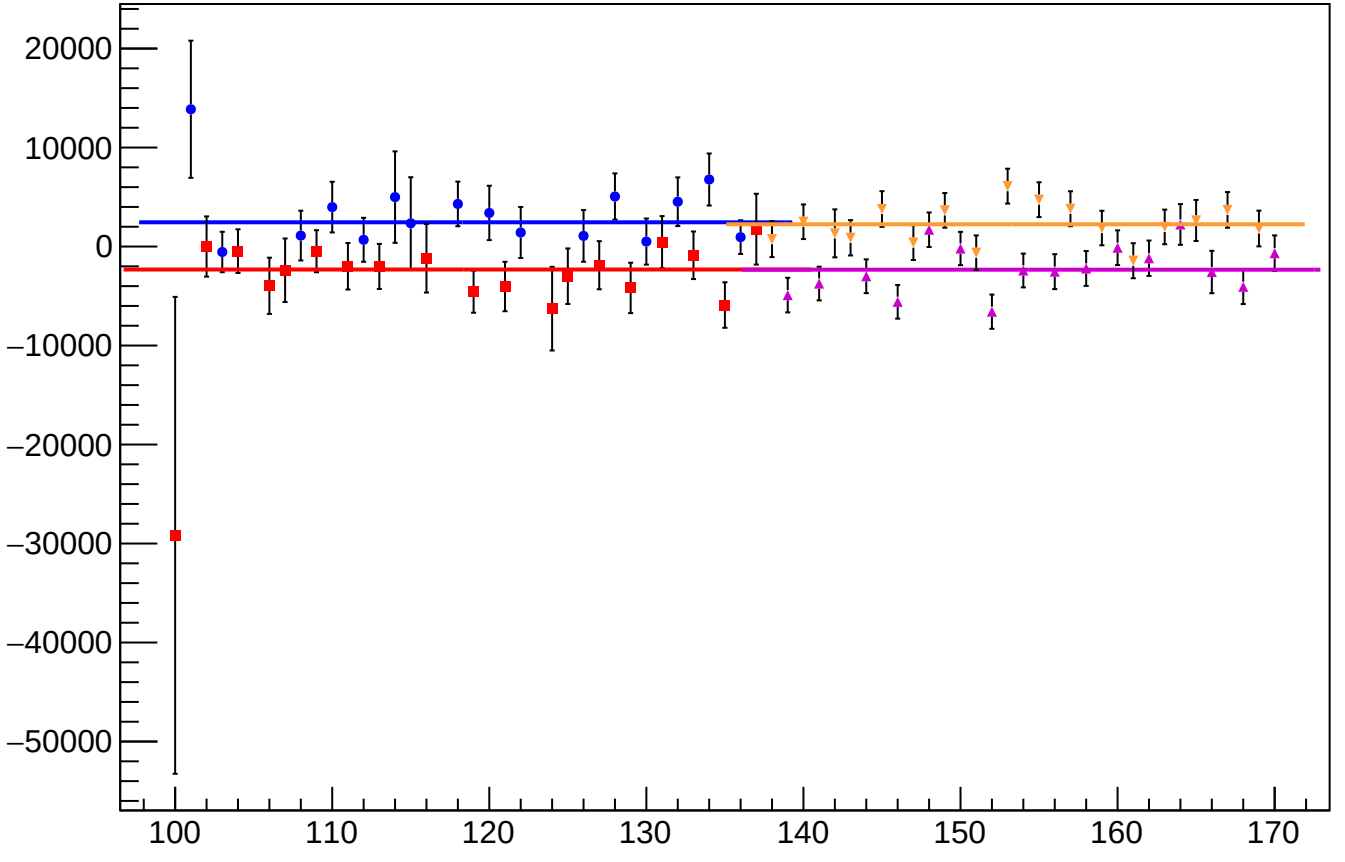
Left In: 947.407+/-0.191 $\chi^2$/NDF:1470242.1/15

+ sign 929.969+/-0.150 $\chi^2$/NDF: 2133771.1/32

All: 909.902+/-0.104 $\chi^2$/NDF: 4898955.6/67

- sign 891.121+/-0.145 $\chi^2$/NDF: 2730443.0/34

# eigen_cor_asym_usr_atr1_avg_mean vs Slug




Right In: 2449.397+/-630.235 $\chi^2$/NDF: 13.8/15

Left Out: 2249.956+/-438.911 $\chi^2$/NDF:19.3/16

Right Out: -2320.575+/-609.657 $\chi^2$/NDF: 12.1/18

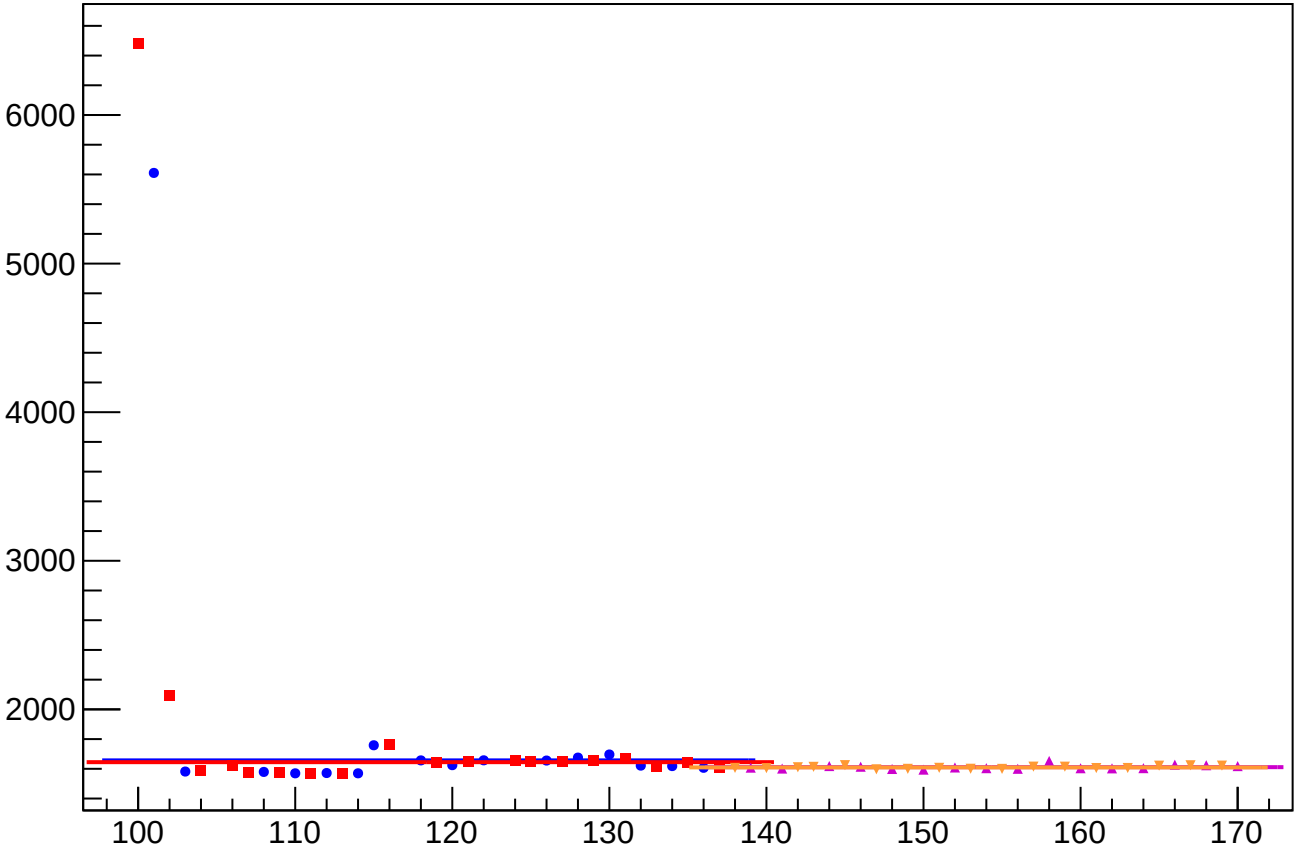
Left In: -2339.062+/-443.105 $\chi^2$/NDF:28.4/15

+ sign 2315.094+/-360.174 $\chi^2$/NDF: 33.2/32

All: -20.042+/-254.064 $\chi^2$/NDF: 157.4/67

- sign -2332.672+/-358.434 $\chi^2$/NDF: 40.5/34

# eigen_cor_asym_usr_atr1_avg_rms vs Slug




Right In: 1656.683+/-0.446 $\chi^2$/NDF: 666225.7/15

Left Out: 1609.523+/-0.310 $\chi^2$/NDF:797.8/16

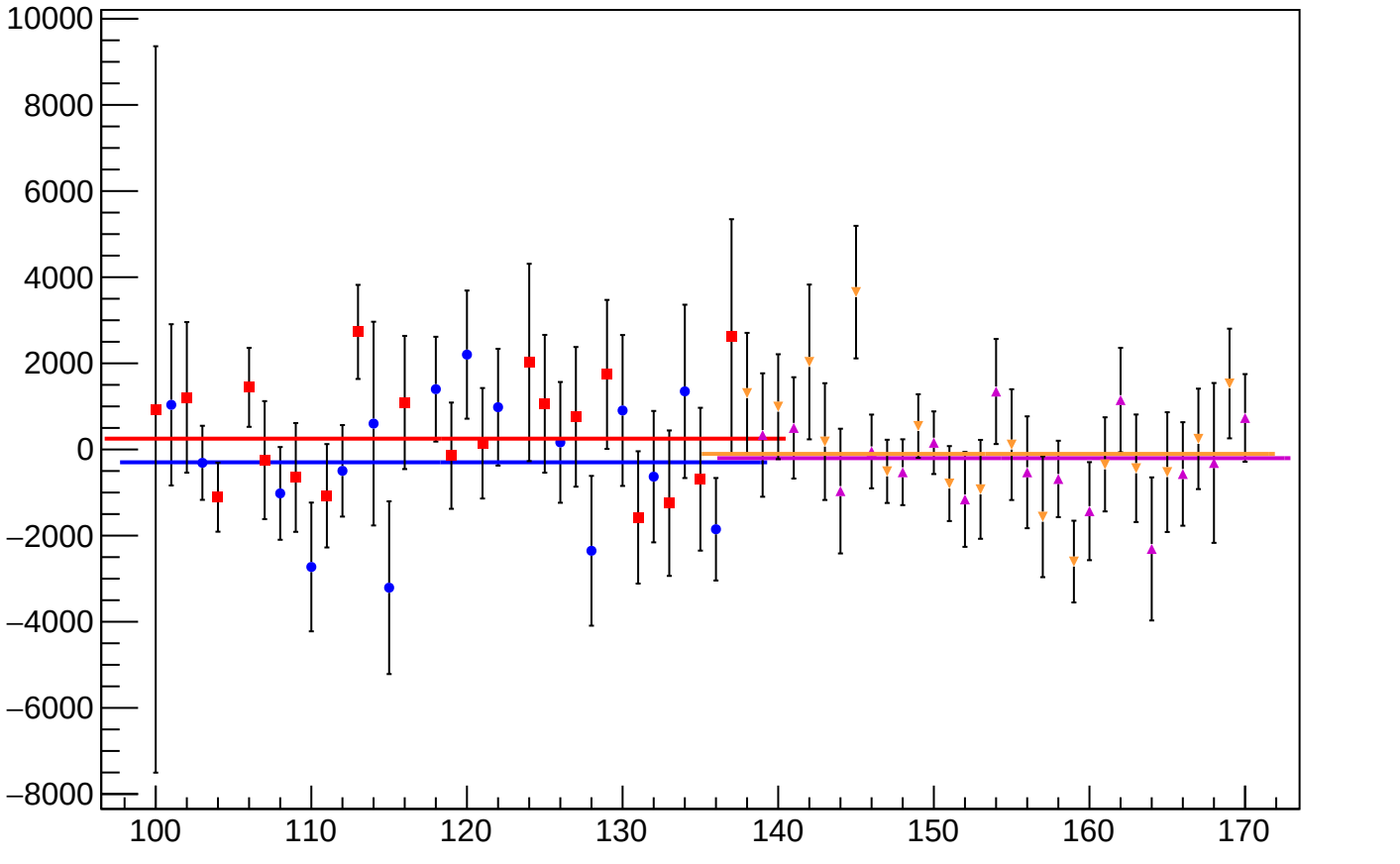
Right Out: 1644.733+/-0.431 $\chi^2$/NDF: 136483.1/18

Left In: 1611.171+/-0.313 $\chi^2$/NDF:1988.9/15

+ sign 1624.925+/-0.255 $\chi^2$/NDF: 674565.0/32

All: 1623.843+/-0.180 $\chi^2$/NDF: 817038.8/67

- sign 1622.772+/-0.253 $\chi^2$/NDF: 142437.9/34




Right In: -297.794+/-343.391 $\chi^2$/NDF: 15.9/15

Left Out: -102.667+/-269.172 $\chi^2$/NDF:21.5/16

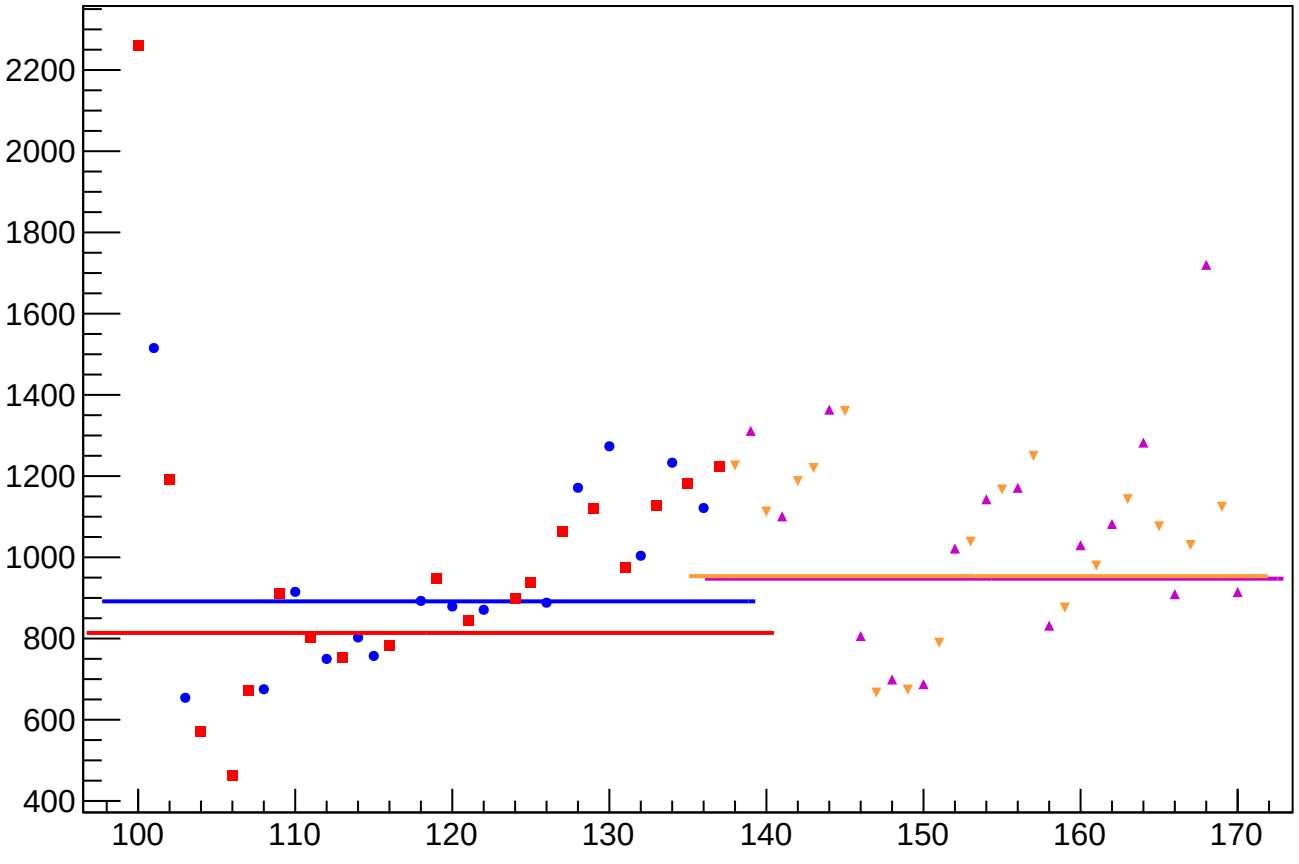
Right Out: 251.230+/-315.749 $\chi^2$/NDF: 17.3/18

Left In: -201.857+/-269.409 $\chi^2$/NDF:8.9/15

+ sign -176.931+/-211.845 $\chi^2$/NDF: 37.6/32

All: -91.205+/-147.297 $\chi^2$/NDF: 65.3/67

- sign -10.971+/-204.945 $\chi^2$/NDF: 27.4/34




Right In: 891.533+/-0.243 $\chi^2$/NDF: 793657.2/15

Left Out: 953.587+/-0.190 $\chi^2$/NDF:1299659.7/16

Right Out: 813.807+/-0.223 $\chi^2$/NDF: 1052991.6/18

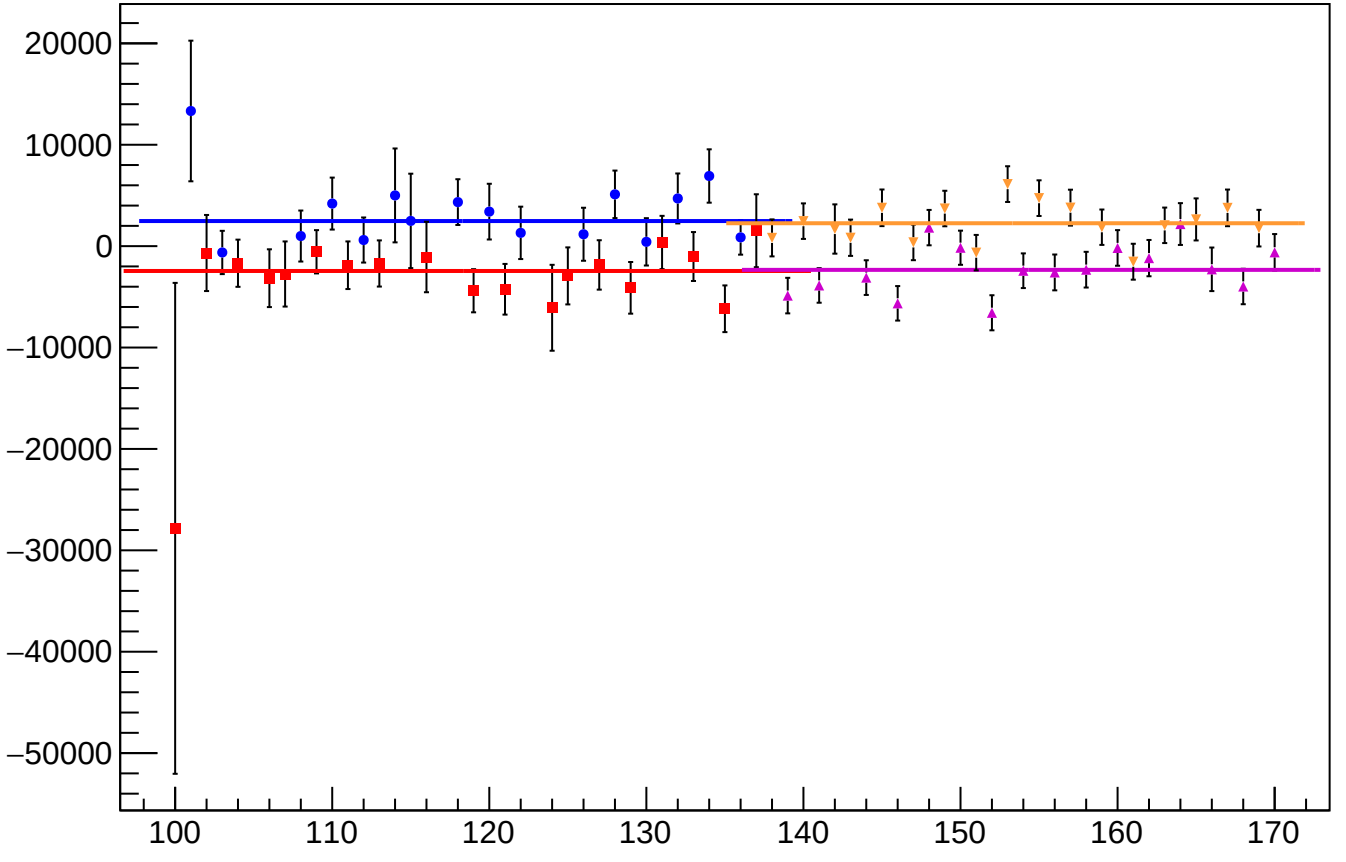
Left In: 947.407+/-0.191 $\chi^2$/NDF:1470242.1/15

+ sign 929.969+/-0.150 $\chi^2$/NDF: 2133771.1/32

All: 909.902+/-0.104 $\chi^2$/NDF: 4898955.6/67

- sign 891.121+/-0.145 $\chi^2$/NDF: 2730443.0/34

# dit_asym_usr_atr1_avg_mean vs Slug




Right In: 2475.229+/-633.866 $\chi^2$/NDF: 14.2/15

Left Out: 2258.882+/-439.583 $\chi^2$/NDF:19.6/16

Right Out: -2449.053+/-617.532 $\chi^2$/NDF: 10.6/18

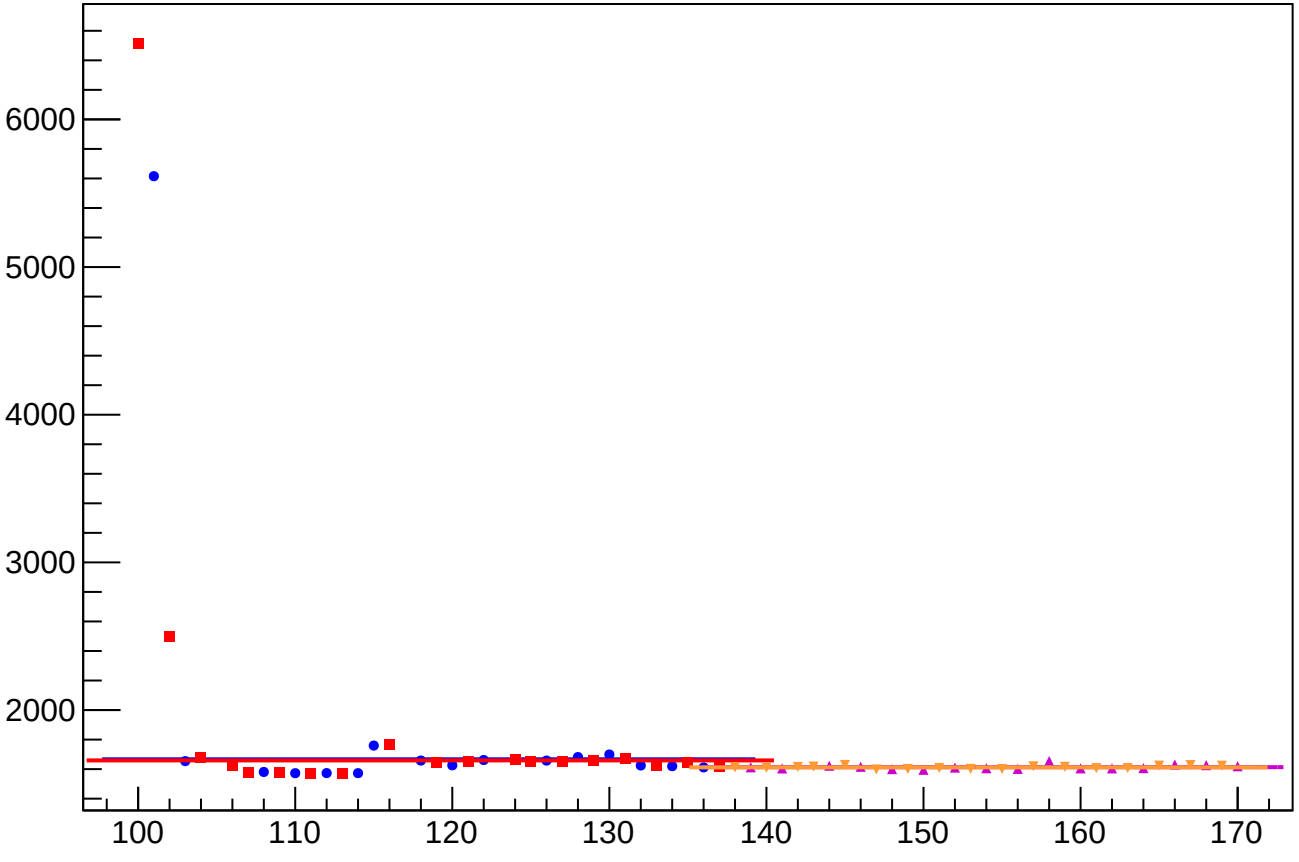
Left In: -2339.281+/-443.678 $\chi^2$/NDF:28.8/15

+ sign 2329.141+/-361.221 $\chi^2$/NDF: 33.9/32

All: -29.622+/-255.103 $\chi^2$/NDF: 158.4/67

- sign -2376.654+/-360.321 $\chi^2$/NDF: 39.4/34

# dit_asym_usr_atr1_avg_rms vs Slug




Right In: 1666.400+/-0.448 $\chi^2$/NDF: 662914.5/15

Left Out: 1611.978+/-0.311 $\chi^2$/NDF:914.8/16

Right Out: 1659.005+/-0.437 $\chi^2$/NDF: 193223.7/18

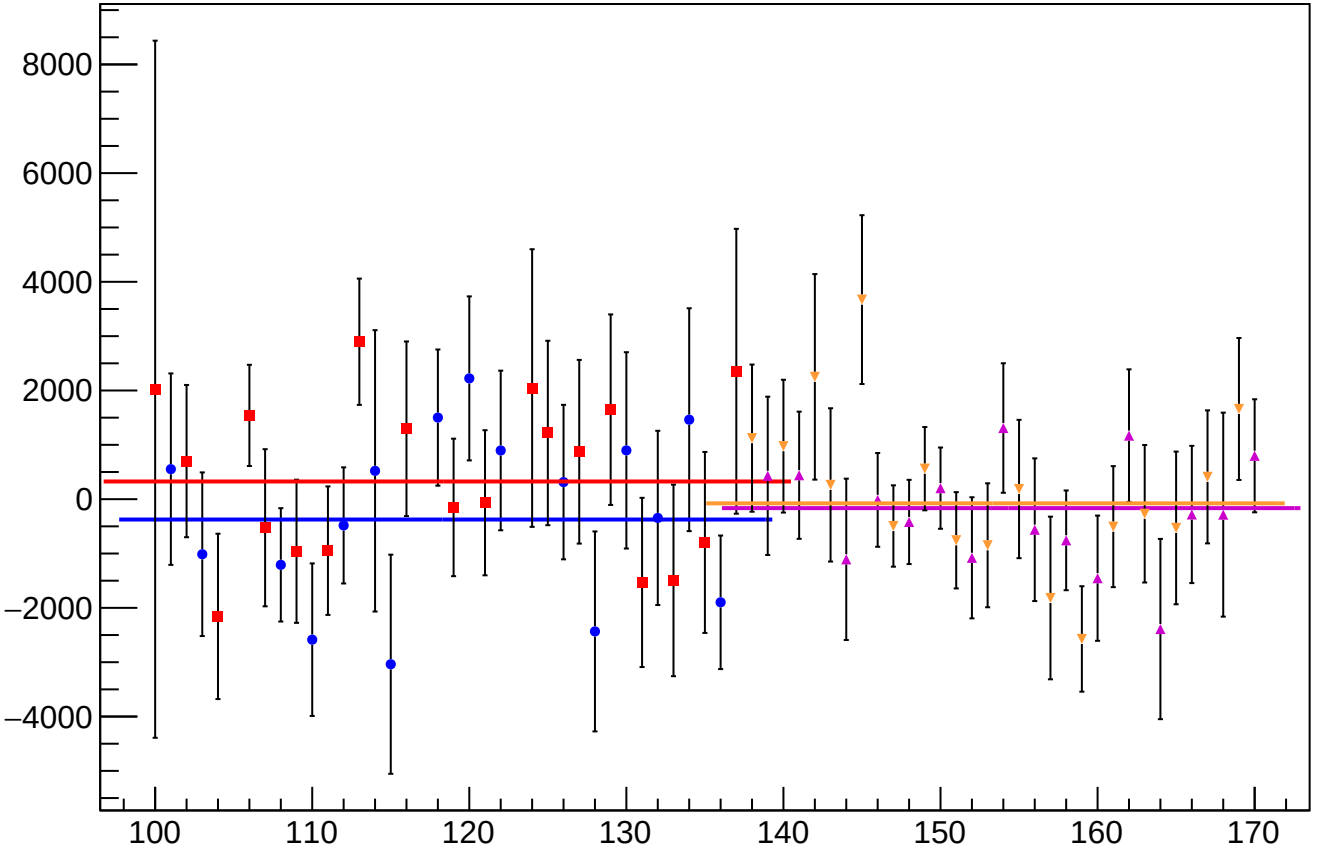
Left In: 1613.244+/-0.314 $\chi^2$/NDF:2063.1/15

+ sign 1629.652+/-0.255 $\chi^2$/NDF: 673784.4/32

All: 1629.236+/-0.180 $\chi^2$/NDF: 876319.9/67

- sign 1628.823+/-0.255 $\chi^2$/NDF: 202530.3/34

# asym_usr_atr1_avg_dit_correction_mean vs Slug




Right In: -374.592+/-367.944 $\chi^2$/NDF: 15.7/15

Left Out: -76.651+/-274.640 $\chi^2$/NDF:21.2/16

Right Out: 325.671+/-340.620 $\chi^2$/NDF: 17.4/18

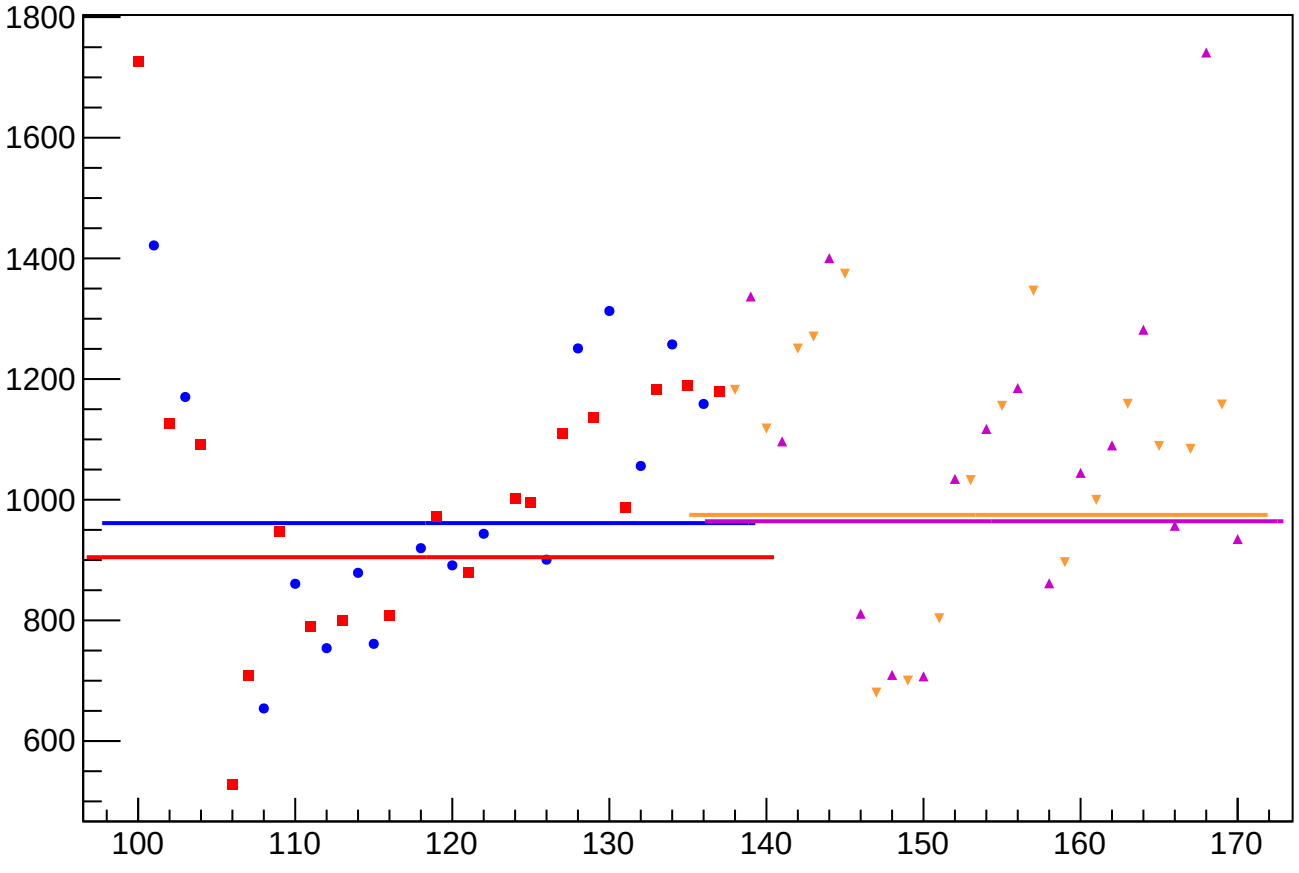
Left In: -164.704+/-273.658 $\chi^2$/NDF:9.0/15

+ sign -183.253+/-220.090 $\chi^2$/NDF: 37.3/32

All: -74.513+/-153.183 $\chi^2$/NDF: 65.5/67

- sign 27.656+/-213.336 $\chi^2$/NDF: 27.7/34

# asym_usr_atr1_avg_dit_correction_rms vs Slug




Right In: 961.243+/-0.260 $\chi^2$/NDF: 691875.4/15

Left Out: 974.859+/-0.194 $\chi^2$/NDF:1271890.0/16

Right Out: 904.736+/-0.241 $\chi^2$/NDF: 736484.7/18

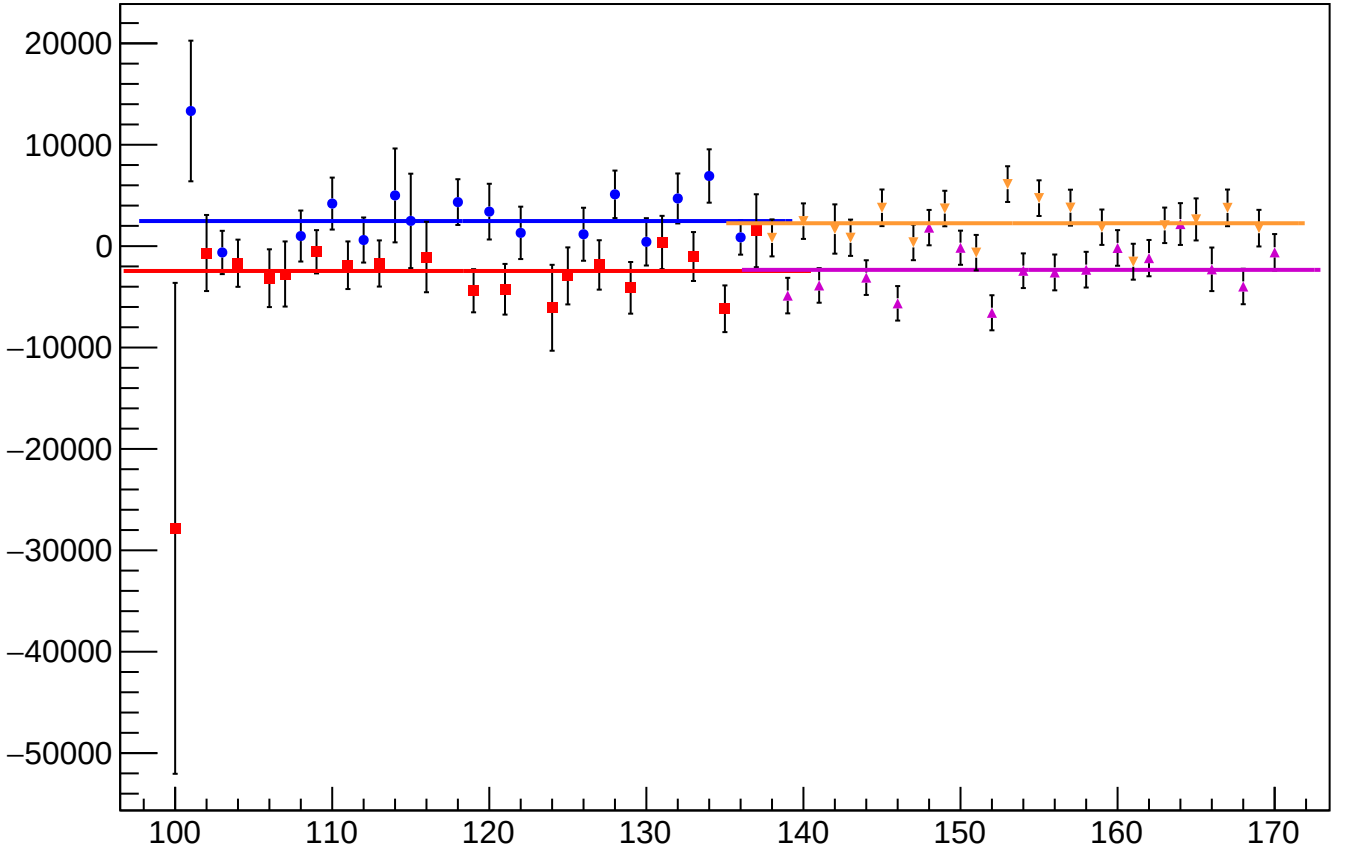
Left In: 964.298+/-0.194 $\chi^2$/NDF:1415807.9/15

\+ sign 969.987+/-0.156 $\chi^2$/NDF: 1965524.5/32

All: 955.008+/-0.108 $\chi^2$/NDF: 4172951.3/67

\- sign 940.934+/-0.151 $\chi^2$/NDF: 2189457.6/34

# eigen_dit_asym_usr_atr1_avg_mean vs Slug




Right In: 2475.228+/-633.866 $\chi^2$/NDF: 14.2/15

Left Out: 2258.881+/-439.583 $\chi^2$/NDF:19.6/16

Right Out: -2449.053+/-617.532 $\chi^2$/NDF: 10.6/18

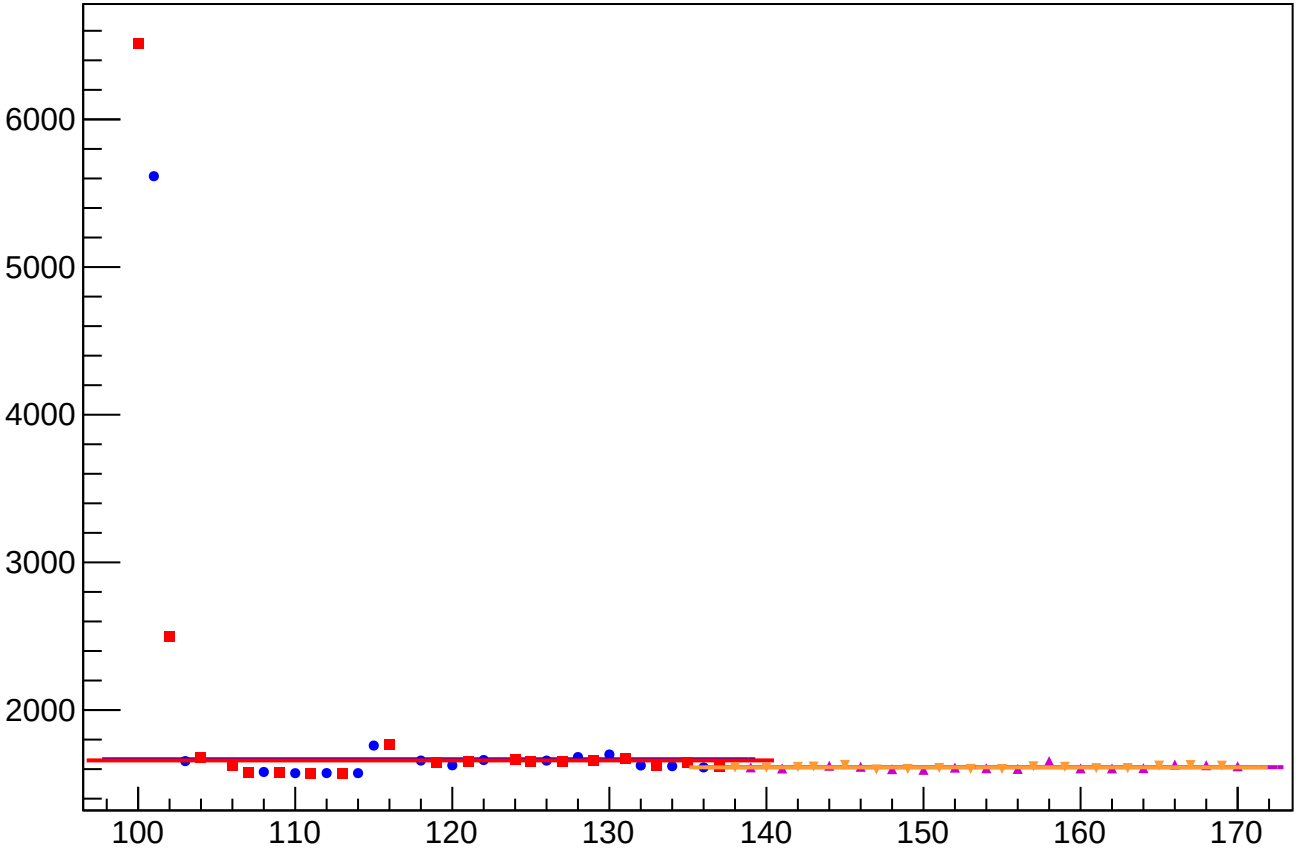
Left In: -2339.282+/-443.678 $\chi^2$/NDF:28.8/15

+ sign 2329.140+/-361.221 $\chi^2$/NDF: 33.9/32

All: -29.623+/-255.103 $\chi^2$/NDF: 158.4/67

- sign -2376.654+/-360.321 $\chi^2$/NDF: 39.4/34

# eigen_dit_asym_usr_atr1_avg_rms vs Slug




Right In: 1666.400+/-0.448 $\chi^2$/NDF: 662914.5/15

Left Out: 1611.978+/-0.311 $\chi^2$/NDF:914.8/16

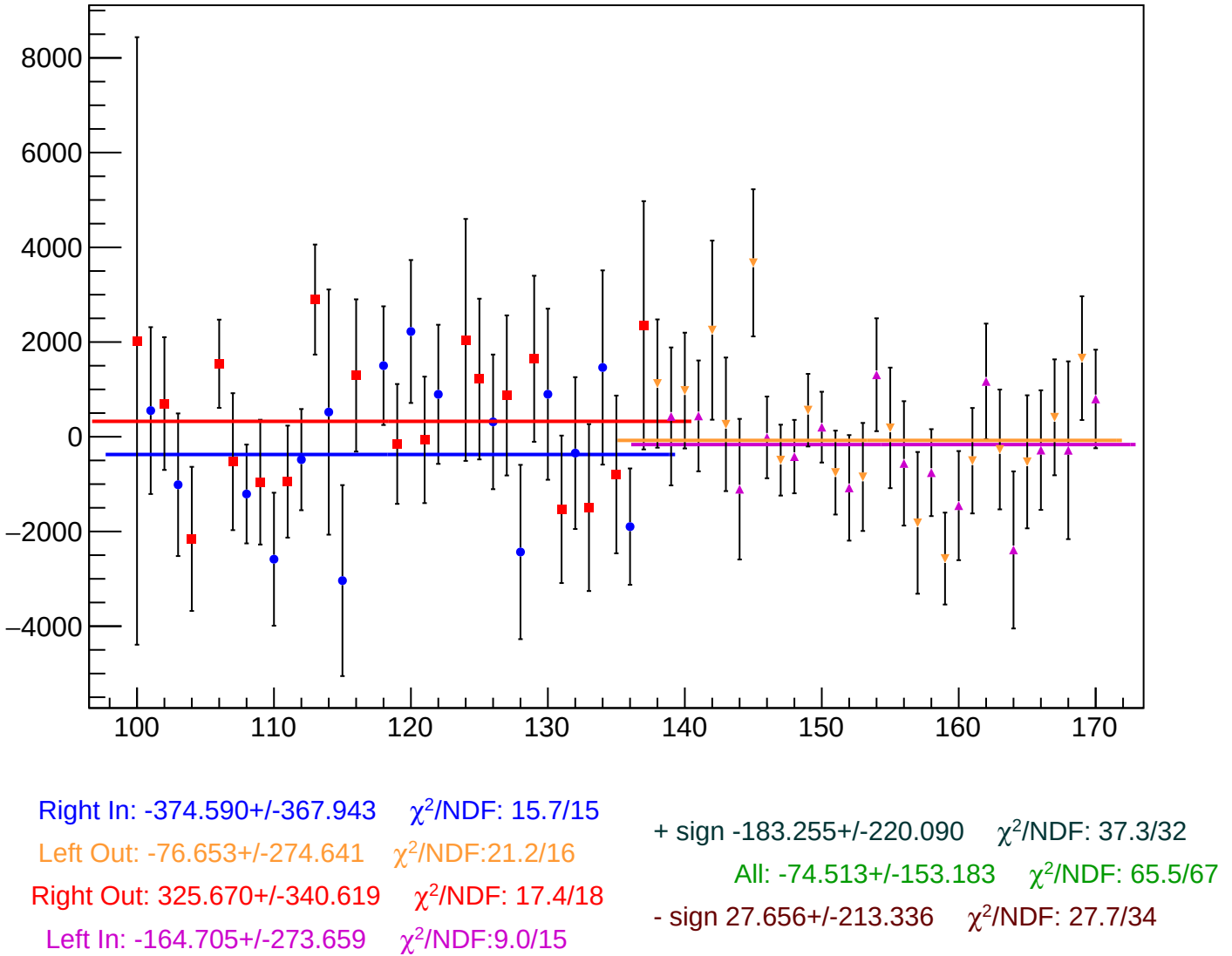
Right Out: 1659.004+/-0.437 $\chi^2$/NDF: 193223.5/18

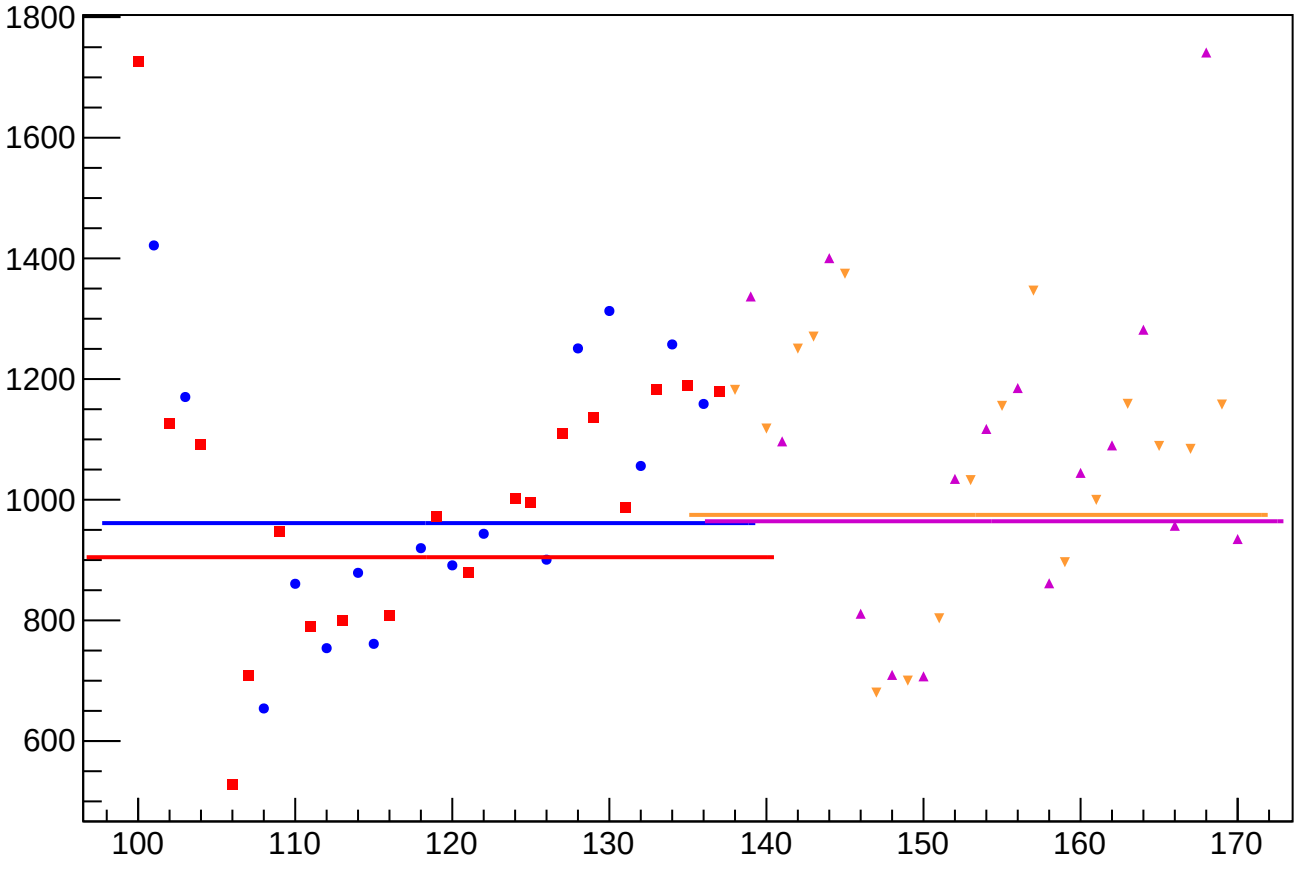
Left In: 1613.244+/-0.314 $\chi^2$/NDF:2063.1/15

+ sign 1629.652+/-0.255 $\chi^2$/NDF: 673784.3/32

All: 1629.236+/-0.180 $\chi^2$/NDF: 876319.7/67

- sign 1628.823+/-0.255 $\chi^2$/NDF: 202530.0/34


asym_usr_atr1_avg_eigen_dit_correction_mean vs Slug
8000
6000
4000
2000
0
−2000
−4000
100
110
120
130
140
150
160
170
Right In: -374.590+/-367.943 χ²/NDF: 15.7/15
Left Out: -76.653+/-274.641 χ²/NDF:21.2/16
Right Out: 325.670+/-340.619 χ²/NDF: 17.4/18
Left In: -164.705+/-273.659 χ²/NDF:9.0/15
+ sign -183.255+/-220.090 χ²/NDF: 37.3/32
All: -74.513+/-153.183 χ²/NDF: 65.5/67
- sign 27.656+/-213.336 χ²/NDF: 27.7/34




Right In: 961.239+/-0.260 $\chi^2$/NDF: 691883.4/15

Left Out: 974.861+/-0.194 $\chi^2$/NDF:1271893.2/16

Right Out: 904.734+/-0.241 $\chi^2$/NDF: 736482.2/18

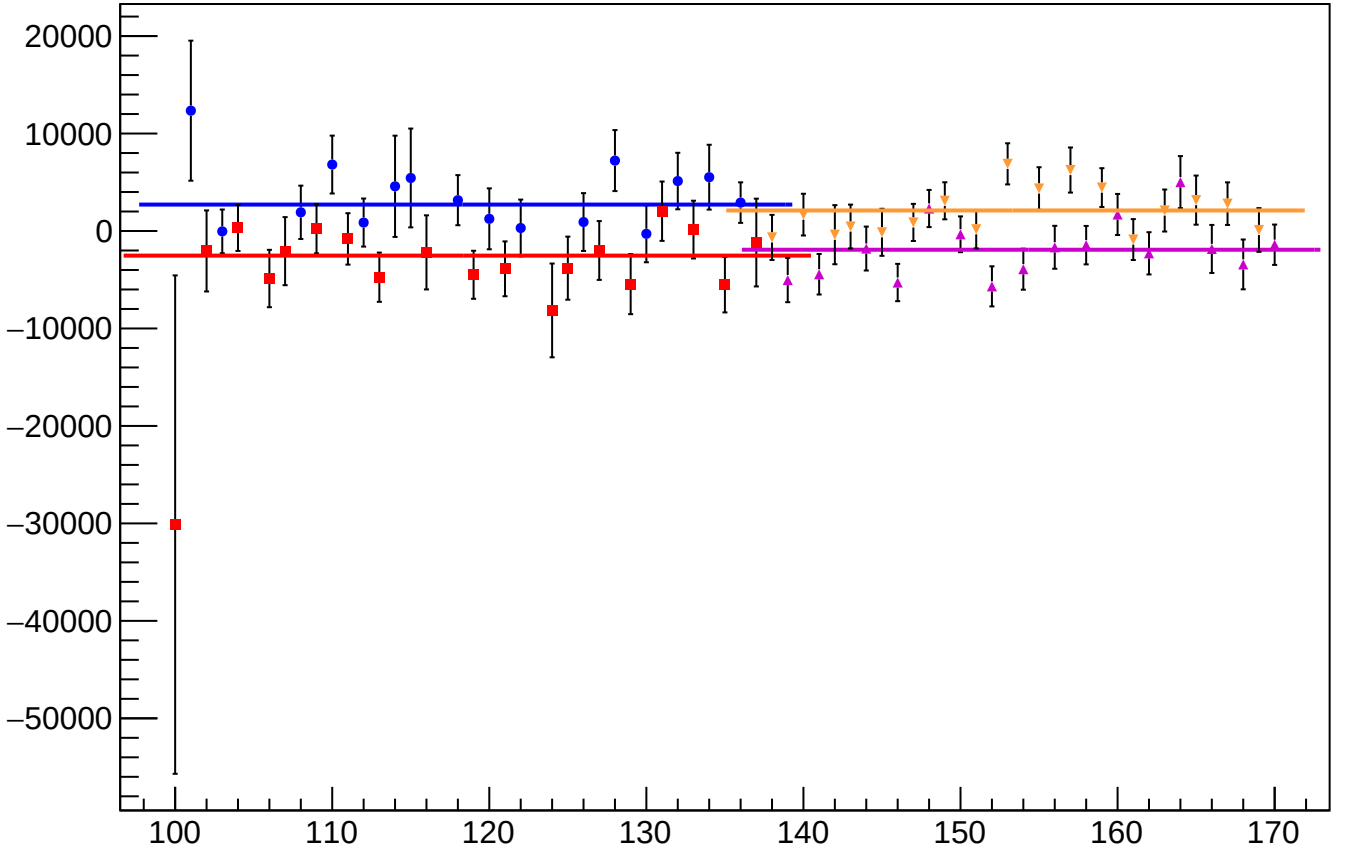
Left In: 964.300+/-0.194 $\chi^2$/NDF:1415811.3/15

+ sign 969.987+/-0.156 $\chi^2$/NDF: 1965537.2/32

All: 955.008+/-0.108 $\chi^2$/NDF: 4172970.2/67

- sign 940.934+/-0.151 $\chi^2$/NDF: 2189464.1/34

# asym_usr_atr1_avg_mean vs Slug




Right In: 2711.394+/-735.088 $\chi^2$/NDF: 12.1/15

Left Out: 2106.462+/-528.837 $\chi^2$/NDF:19.1/16

Right Out: -2525.536+/-706.449 $\chi^2$/NDF: 13.2/18

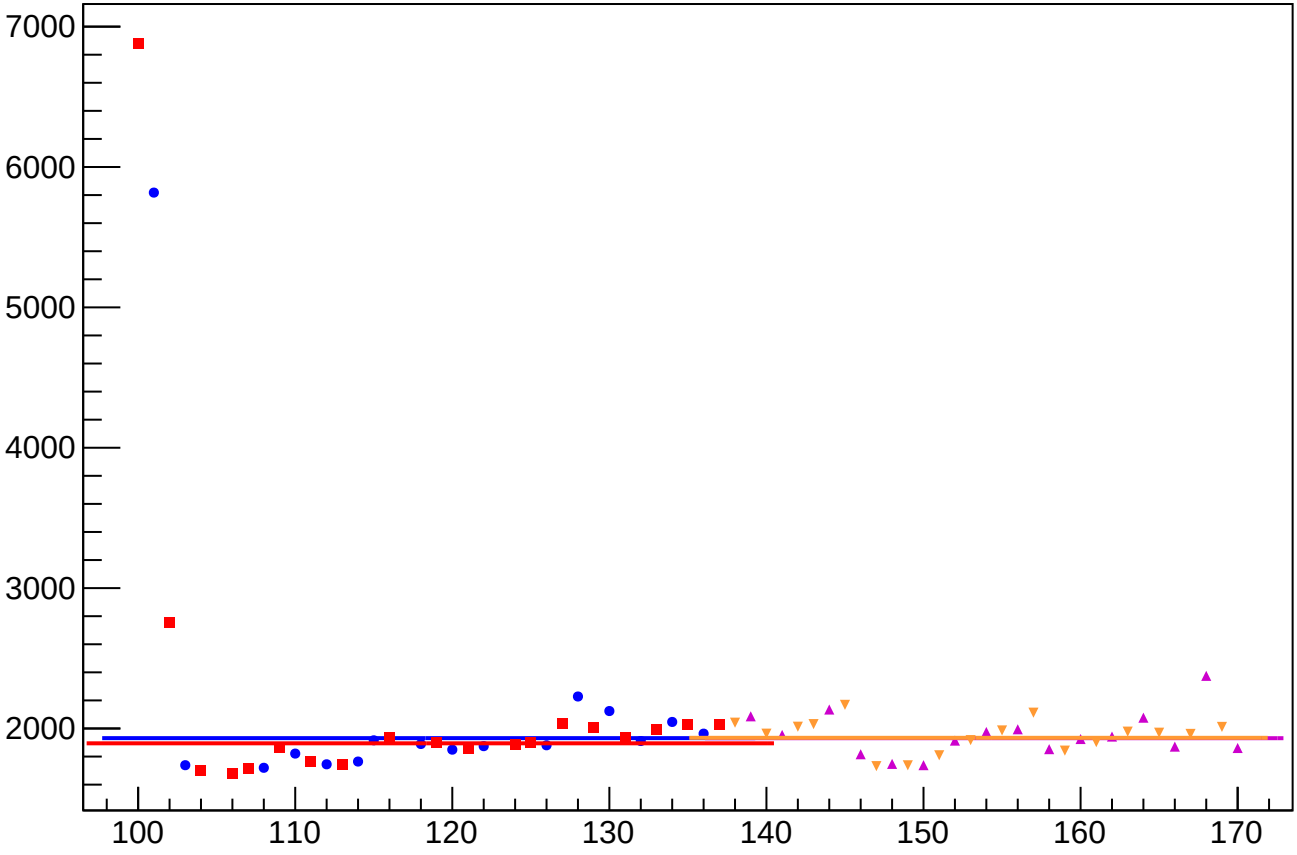
Left In: -1922.616+/-532.790 $\chi^2$/NDF:26.5/15

+ sign 2312.774+/-429.288 $\chi^2$/NDF: 31.7/32

All: 65.400+/-302.160 $\chi^2$/NDF: 126.2/67

- sign -2141.214+/-425.377 $\chi^2$/NDF: 40.3/34

# asym_usr_atr1_avg_rms vs Slug




Right In: 1931.250+/-0.520 $\chi^2$/NDF: 661227.1/15

Left Out: 1933.530+/-0.374 $\chi^2$/NDF:102370.1/16

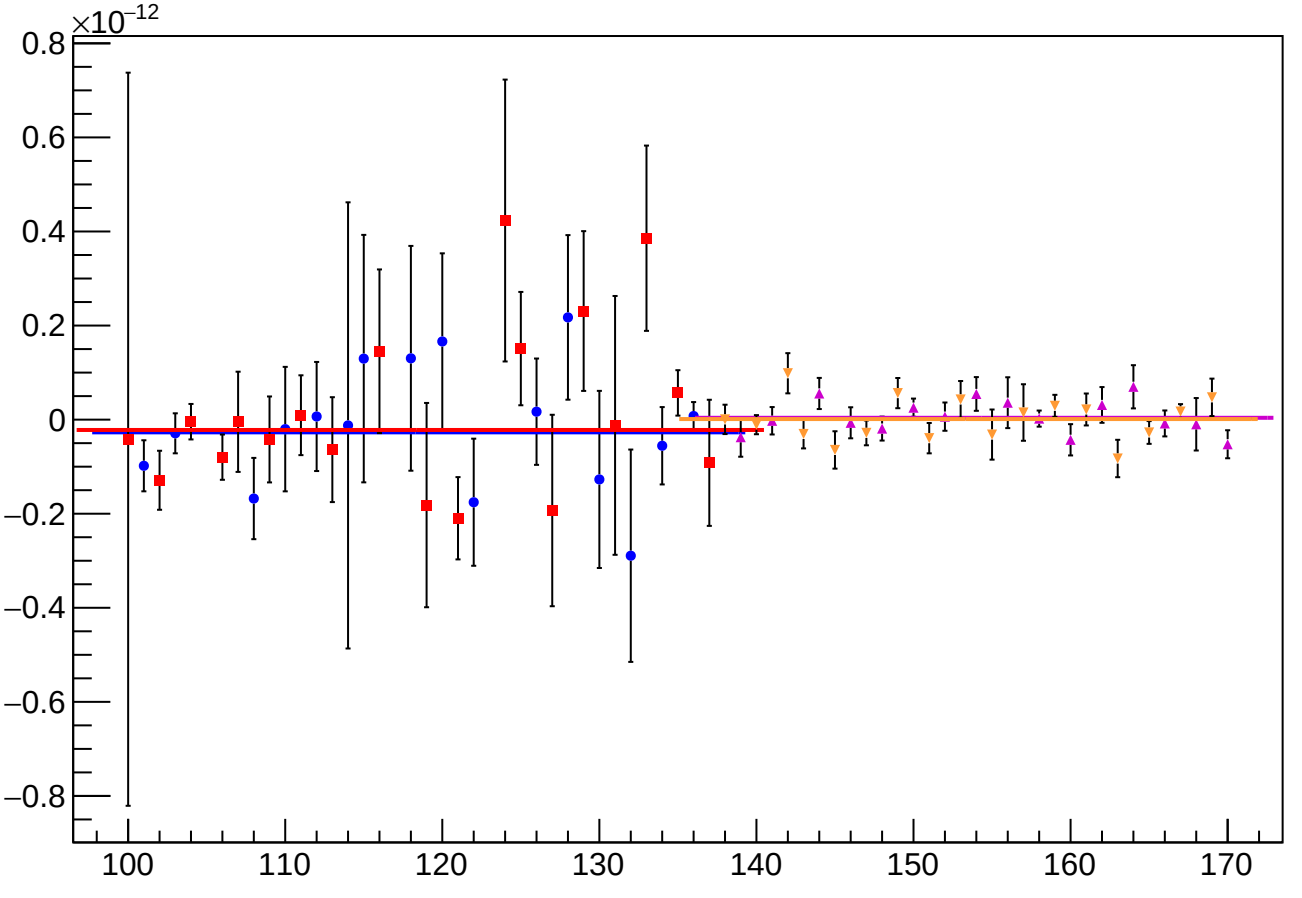
Right Out: 1894.349+/-0.500 $\chi^2$/NDF: 220541.1/18

Left In: 1930.813+/-0.377 $\chi^2$/NDF:149337.9/15

+ sign 1932.752+/-0.304 $\chi^2$/NDF: 763609.8/32

All: 1925.103+/-0.214 $\chi^2$/NDF: 1138143.9/67

- sign 1917.592+/-0.301 $\chi^2$/NDF: 373275.6/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 12.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:26.7/16

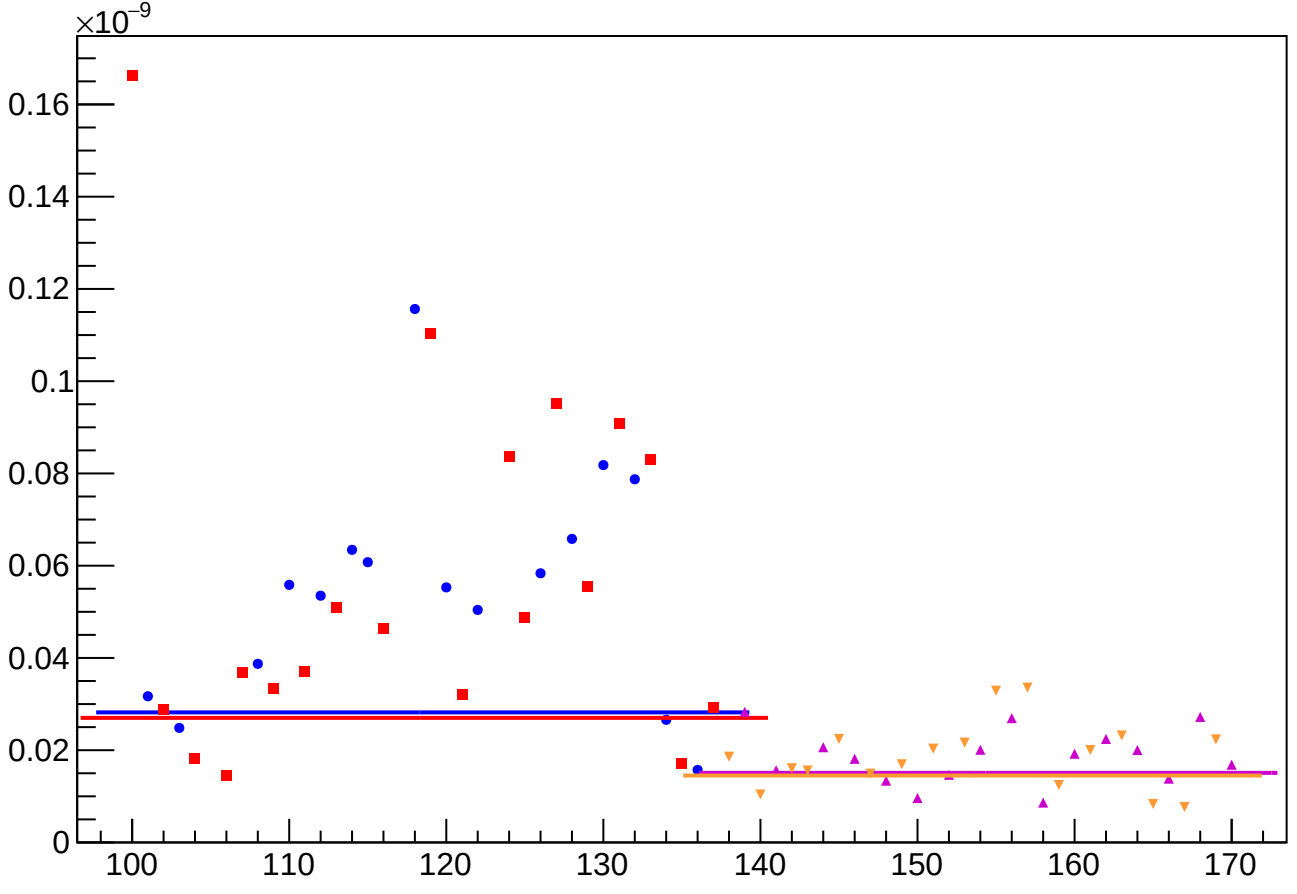
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 25.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:16.4/15

\+ sign -0.000+/-0.000 $\chi^2$/NDF: 41.3/32

All: -0.000+/-0.000 $\chi^2$/NDF: 84.8/67

\- sign 0.000+/-0.000 $\chi^2$/NDF: 43.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1490571.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1525100.6/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1556165.9/18

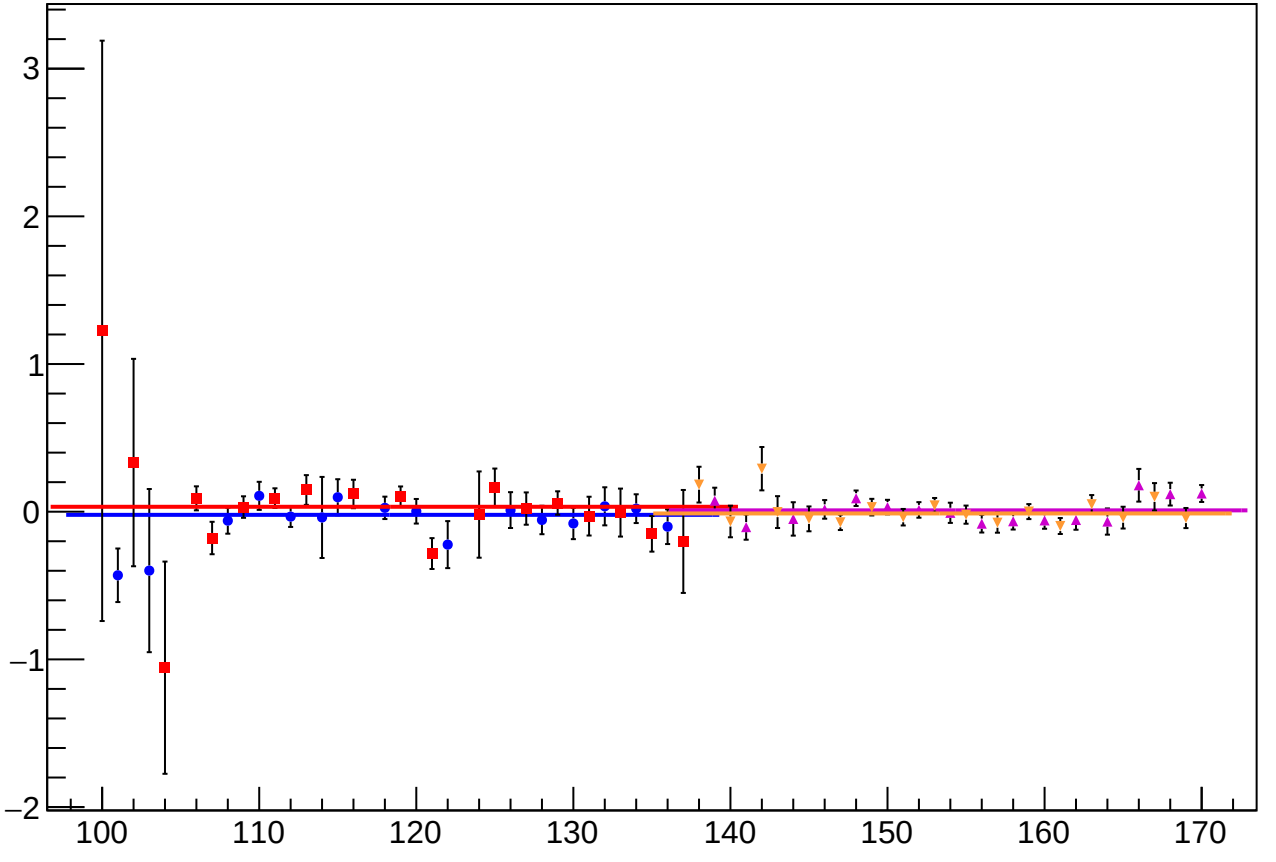
Left In: 0.000+/-0.000 $\chi^2$/NDF:1098507.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3913736.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 7233880.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3315585.6/34

# asym_usr_atr1_avg_dit_vs_cor_diff_mean vs Slug




Right In: -0.021+/-0.027 $\chi^2$/NDF: 12.0/15

Left Out: -0.012+/-0.016 $\chi^2$/NDF:16.8/16

Right Out: 0.033+/-0.025 $\chi^2$/NDF: 24.4/18

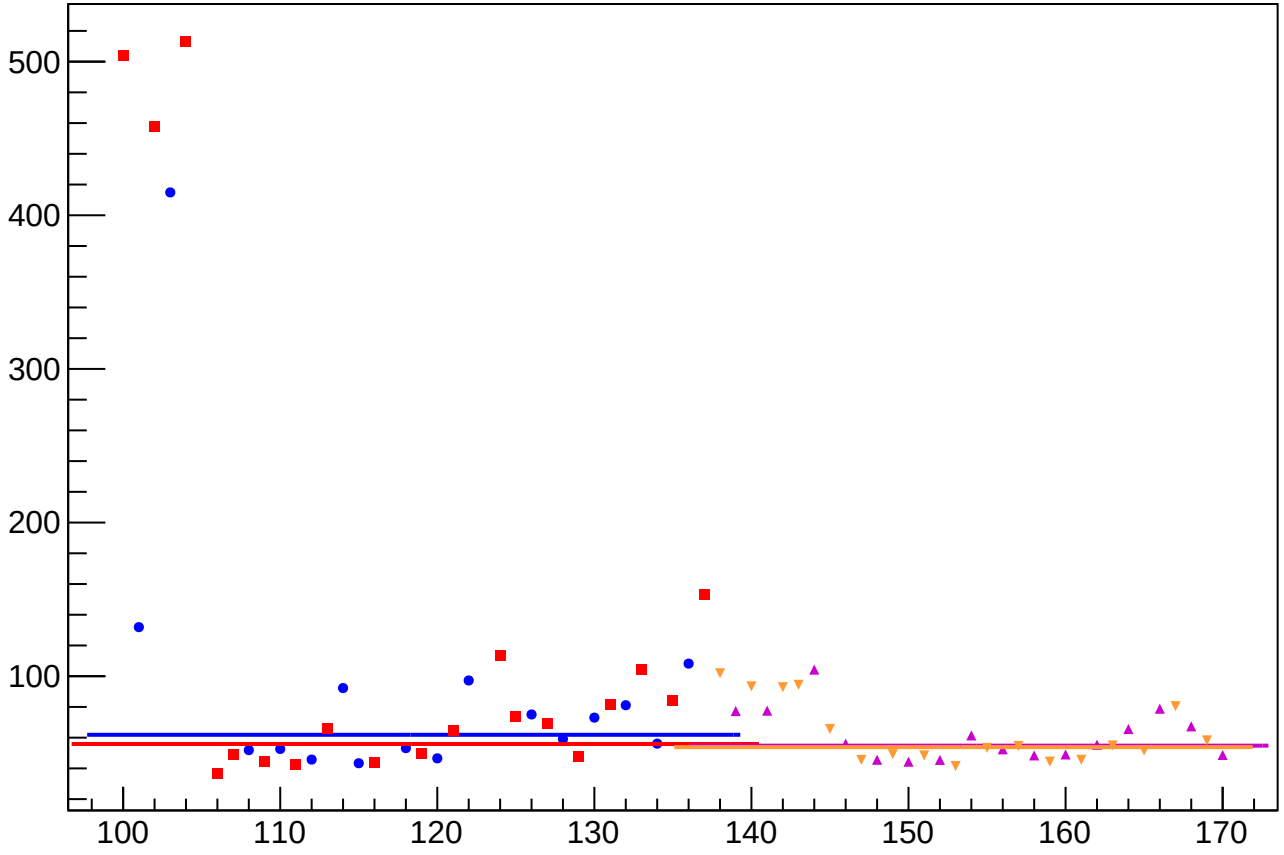
Left In: 0.009+/-0.016 $\chi^2$/NDF:20.8/15

+ sign -0.014+/-0.014 $\chi^2$/NDF: 28.9/32

All: 0.001+/-0.010 $\chi^2$/NDF: 77.3/67

- sign 0.016+/-0.014 $\chi^2$/NDF: 45.8/34

# asym_usr_atr1_avg_dit_vs_cor_diff_rms vs Slug




Right In: 61.876+/-0.019 $\chi^2$/NDF: 1937953.9/15

Left Out: 53.842+/-0.011 $\chi^2$/NDF:1545902.7/16

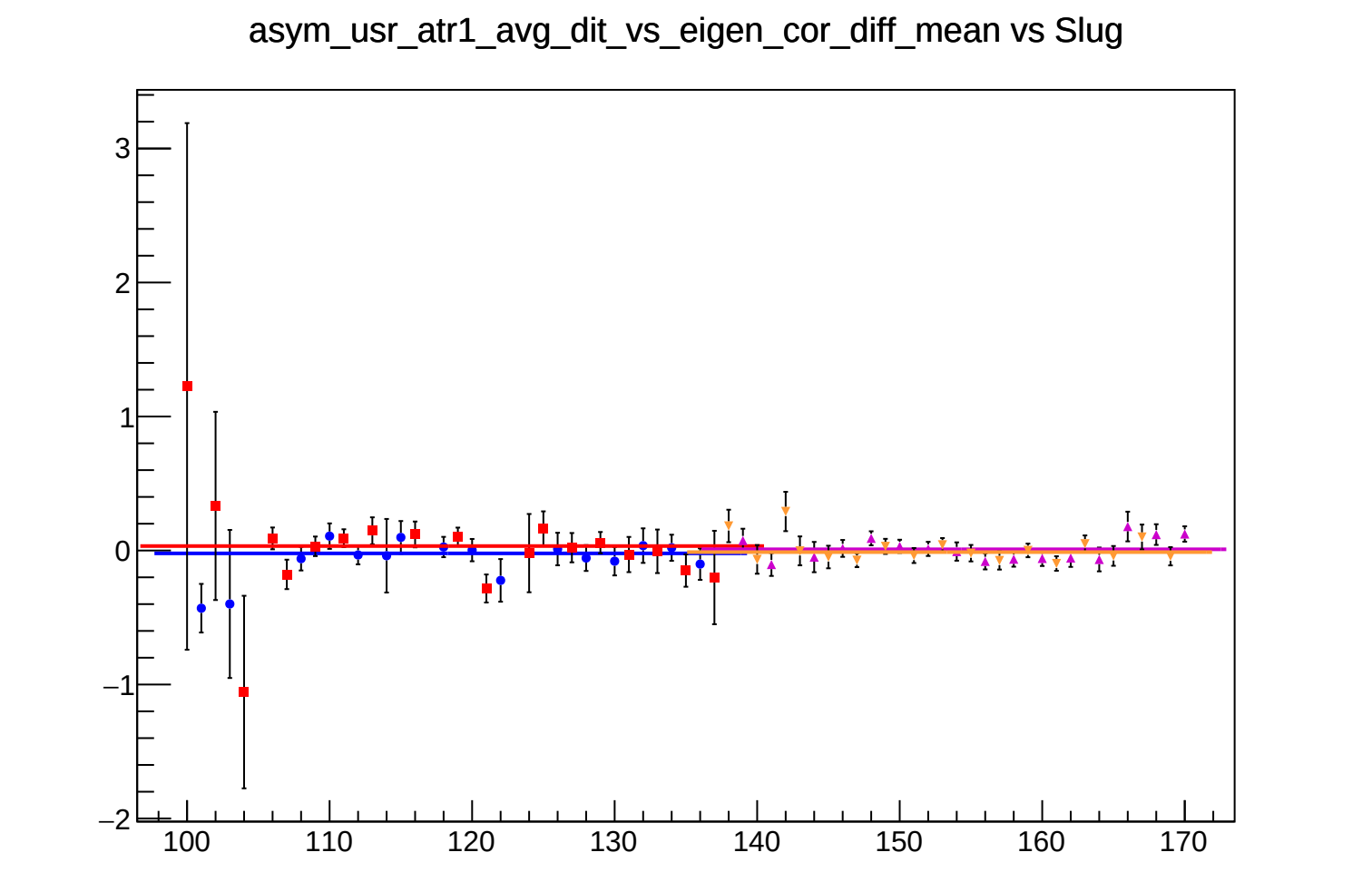
Right Out: 55.887+/-0.017 $\chi^2$/NDF: 2591275.8/18

Left In: 54.801+/-0.012 $\chi^2$/NDF:1139552.7/15

+ sign 56.021+/-0.010 $\chi^2$/NDF: 3617269.2/32

All: 55.569+/-0.007 $\chi^2$/NDF: 7355000.8/67

- sign 55.133+/-0.010 $\chi^2$/NDF: 3733538.8/34




Right In: -0.021+/-0.027 $\chi^2$/NDF: 12.0/15

Left Out: -0.012+/-0.016 $\chi^2$/NDF:16.8/16

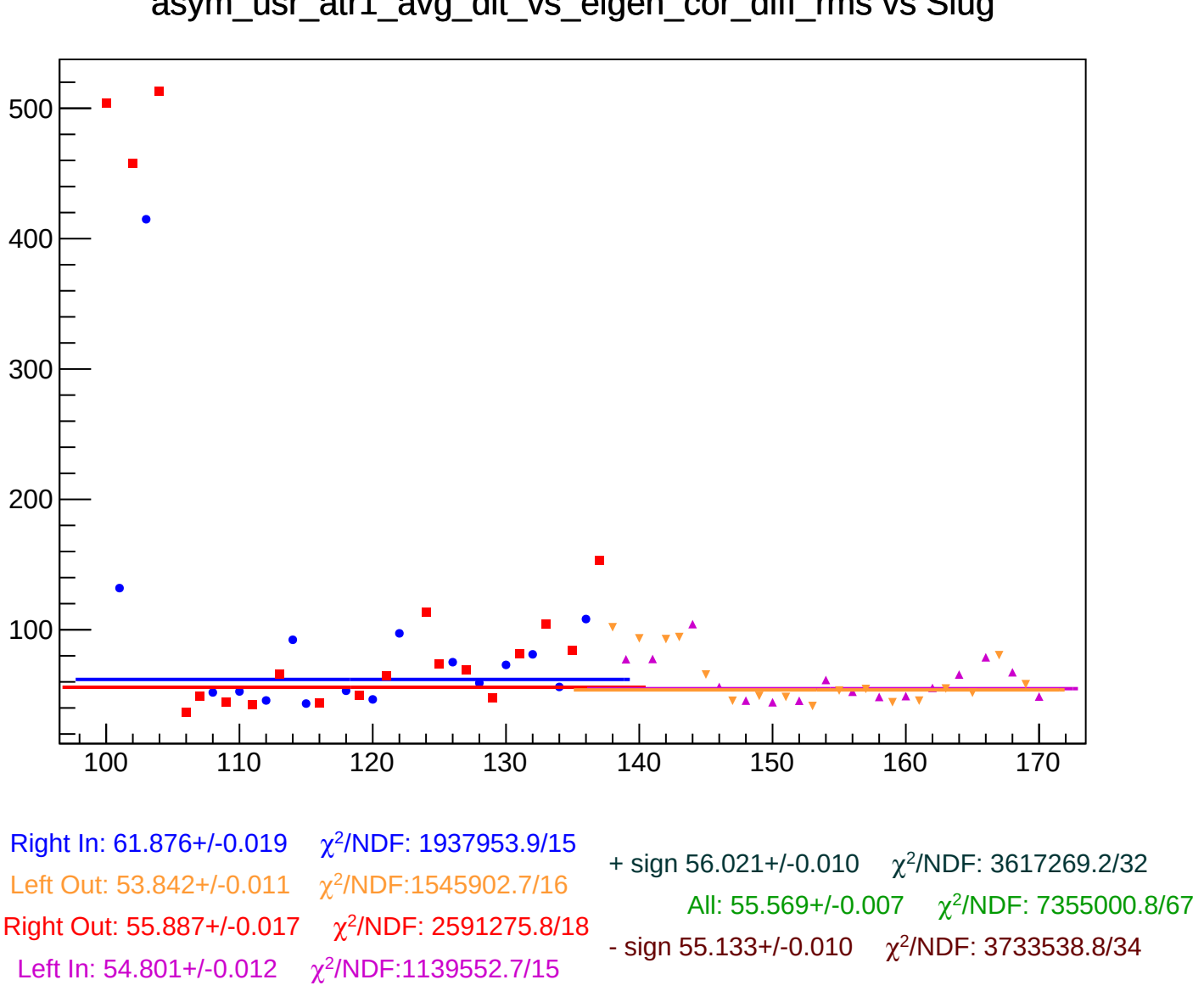
Right Out: 0.033+/-0.025 $\chi^2$/NDF: 24.4/18

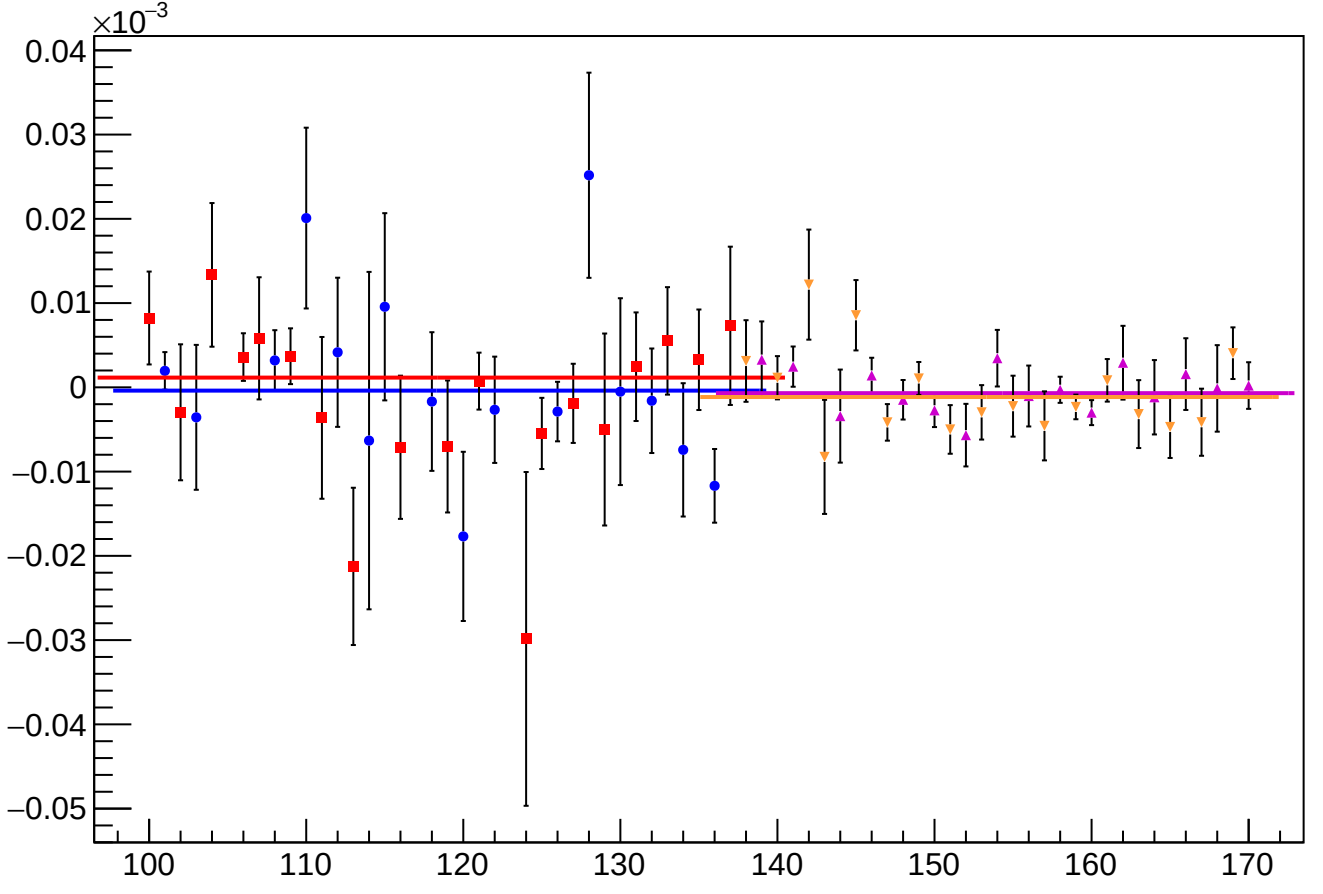
Left In: 0.009+/-0.016 $\chi^2$/NDF:20.8/15

+ sign -0.014+/-0.014 $\chi^2$/NDF: 28.9/32

All: 0.001+/-0.010 $\chi^2$/NDF: 77.3/67

- sign 0.016+/-0.014 $\chi^2$/NDF: 45.8/34


asym_usr_atr1_avg_dit_vs_eigen_cor_diff_rms vs Slug
500
400
300
200
100
100
110
120
130
140
150
160
170
Right In: 61.876+/-0.019 χ²/NDF: 1937953.9/15
Left Out: 53.842+/-0.011 χ²/NDF:1545902.7/16
Right Out: 55.887+/-0.017 χ²/NDF: 2591275.8/18
Left In: 54.801+/-0.012 χ²/NDF:1139552.7/15
+ sign 56.021+/-0.010 χ²/NDF: 3617269.2/32
All: 55.569+/-0.007 χ²/NDF: 7355000.8/67
- sign 55.133+/-0.010 χ²/NDF: 3733538.8/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 22.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:24.2/16

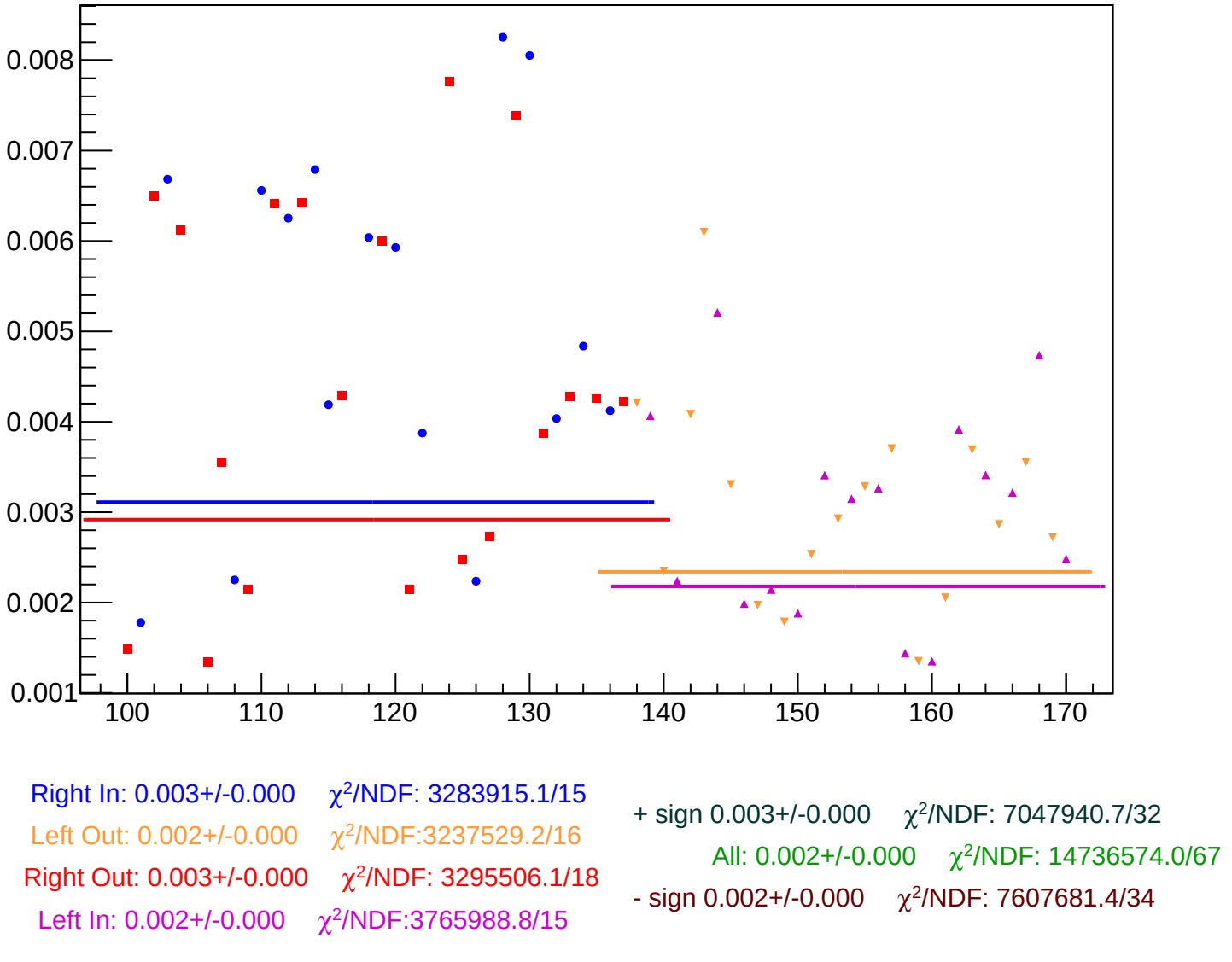
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 20.4/18

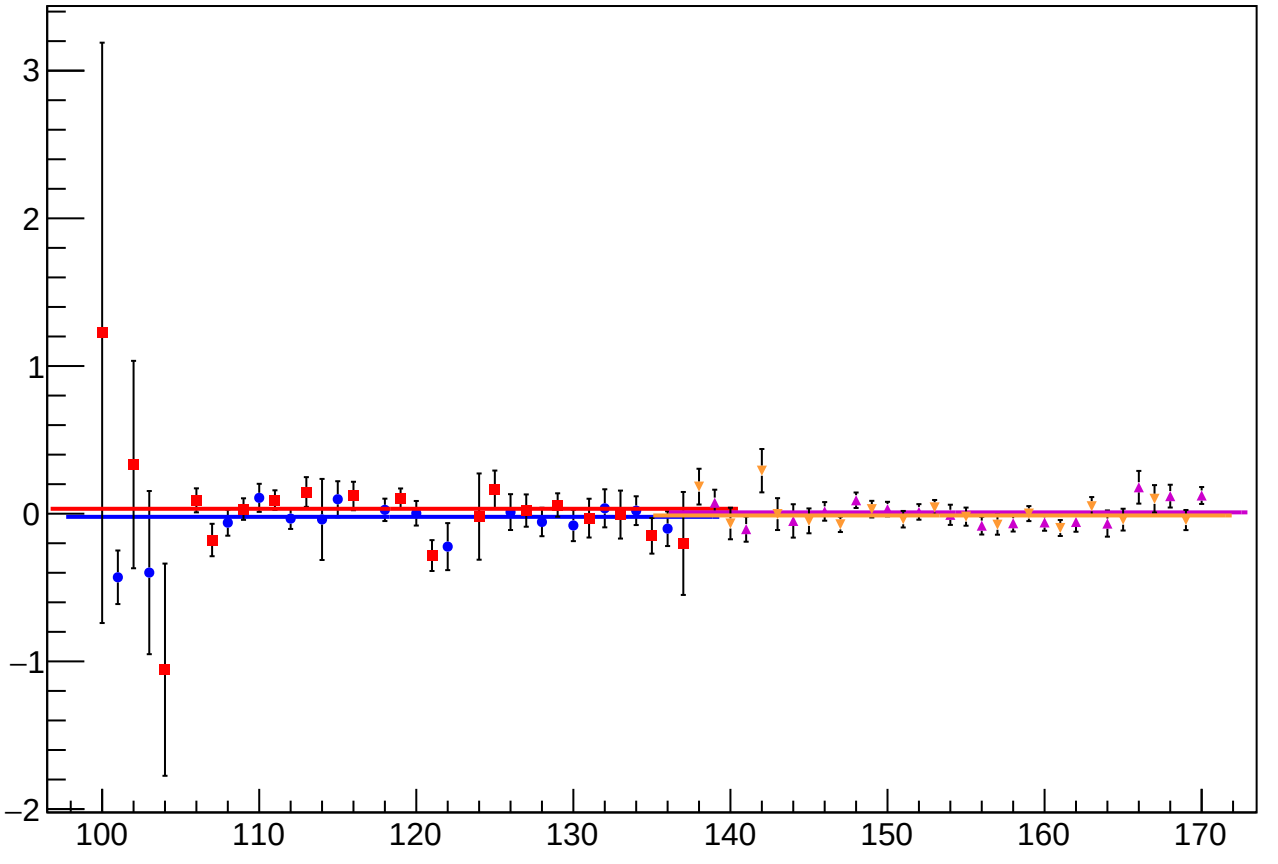
Left In: -0.000+/-0.000 $\chi^2$/NDF:11.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 47.1/32

All: -0.000+/-0.000 $\chi^2$/NDF: 81.7/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 34.0/34


asym_usr_atr1_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
100
110
120
130
140
150
160
170
Right In: 0.003+/-0.000 χ²/NDF: 3283915.1/15
Left Out: 0.002+/-0.000 χ²/NDF:3237529.2/16
Right Out: 0.003+/-0.000 χ²/NDF: 3295506.1/18
Left In: 0.002+/-0.000 χ²/NDF:3765988.8/15
+ sign 0.003+/-0.000 χ²/NDF: 7047940.7/32
All: 0.002+/-0.000 χ²/NDF: 14736574.0/67
- sign 0.002+/-0.000 χ²/NDF: 7607681.4/34




Right In: -0.021+/-0.027 $\chi^2$/NDF: 12.0/15

Left Out: -0.012+/-0.016 $\chi^2$/NDF:16.8/16

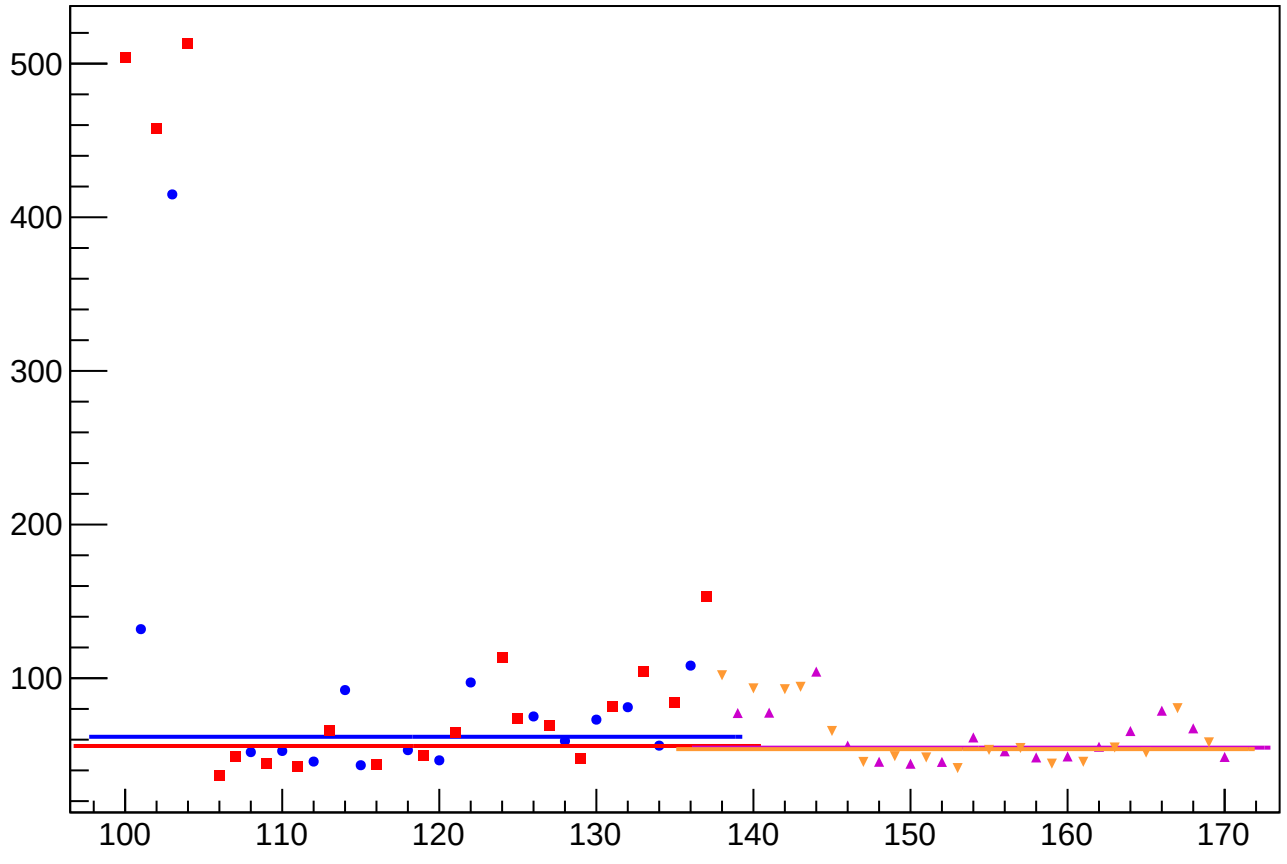
Right Out: 0.033+/-0.025 $\chi^2$/NDF: 24.4/18

Left In: 0.009+/-0.016 $\chi^2$/NDF:20.8/15

\+ sign -0.014+/-0.014 $\chi^2$/NDF: 28.9/32

All: 0.001+/-0.010 $\chi^2$/NDF: 77.3/67

\- sign 0.016+/-0.014 $\chi^2$/NDF: 45.8/34




Right In: 61.875+/-0.019 $\chi^2$/NDF: 1937904.4/15

Left Out: 53.842+/-0.011 $\chi^2$/NDF:1545950.1/16

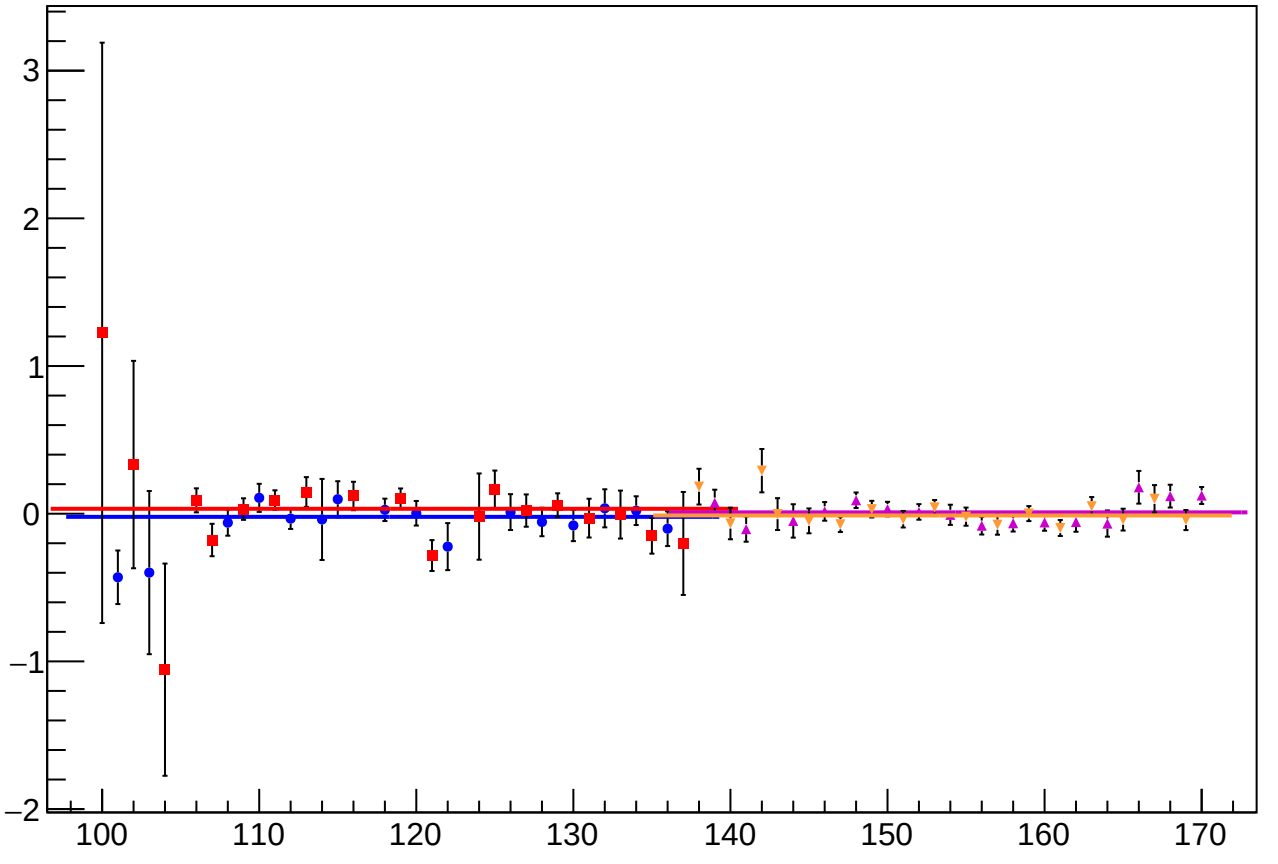
Right Out: 55.886+/-0.017 $\chi^2$/NDF: 2591233.7/18

Left In: 54.801+/-0.012 $\chi^2$/NDF:1139546.5/15

+ sign 56.020+/-0.010 $\chi^2$/NDF: 3617248.8/32

All: 55.569+/-0.007 $\chi^2$/NDF: 7354927.1/67

- sign 55.133+/-0.010 $\chi^2$/NDF: 3733485.9/34




Right In: -0.021+/-0.027 $\chi^2$/NDF: 12.0/15

Left Out: -0.012+/-0.016 $\chi^2$/NDF:16.8/16

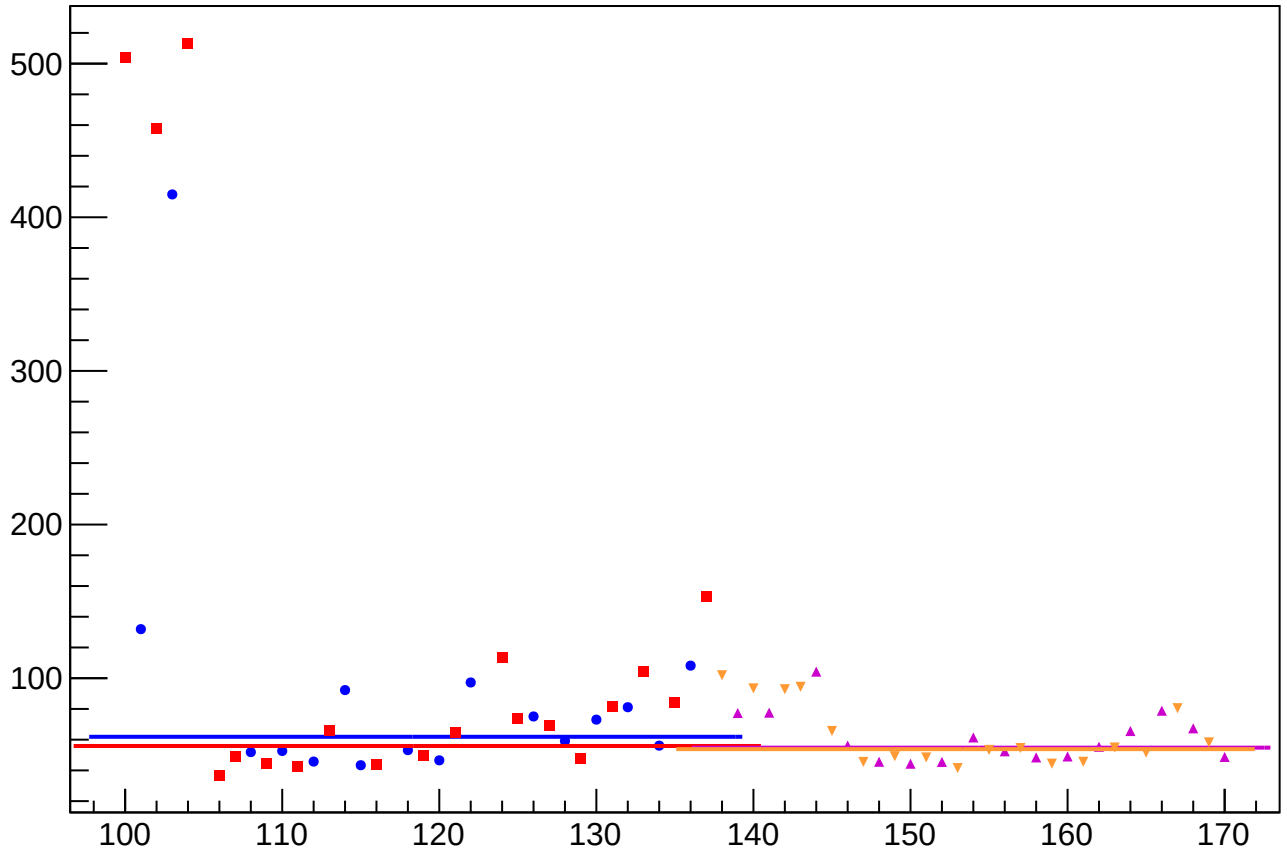
Right Out: 0.033+/-0.025 $\chi^2$/NDF: 24.4/18

Left In: 0.009+/-0.016 $\chi^2$/NDF:20.8/15

\+ sign -0.014+/-0.014 $\chi^2$/NDF: 28.9/32

All: 0.001+/-0.010 $\chi^2$/NDF: 77.3/67

\- sign 0.016+/-0.014 $\chi^2$/NDF: 45.8/34




Right In: 61.875+/-0.019 $\chi^2$/NDF: 1937904.4/15

Left Out: 53.842+/-0.011 $\chi^2$/NDF:1545950.1/16

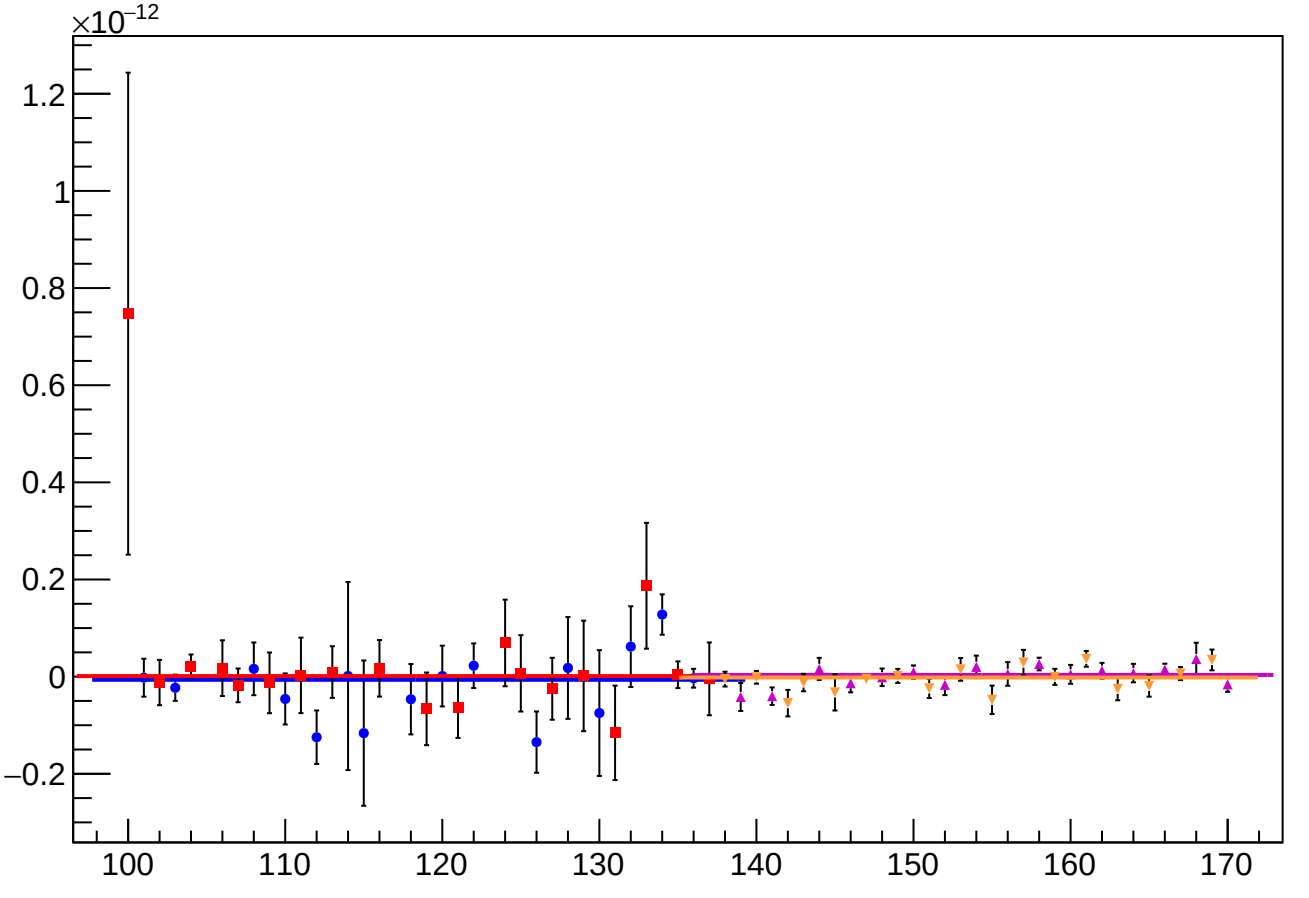
Right Out: 55.886+/-0.017 $\chi^2$/NDF: 2591233.7/18

Left In: 54.801+/-0.012 $\chi^2$/NDF:1139546.5/15

+ sign 56.020+/-0.010 $\chi^2$/NDF: 3617248.8/32

All: 55.569+/-0.007 $\chi^2$/NDF: 7354927.1/67

- sign 55.133+/-0.010 $\chi^2$/NDF: 3733485.9/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 22.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:21.0/16

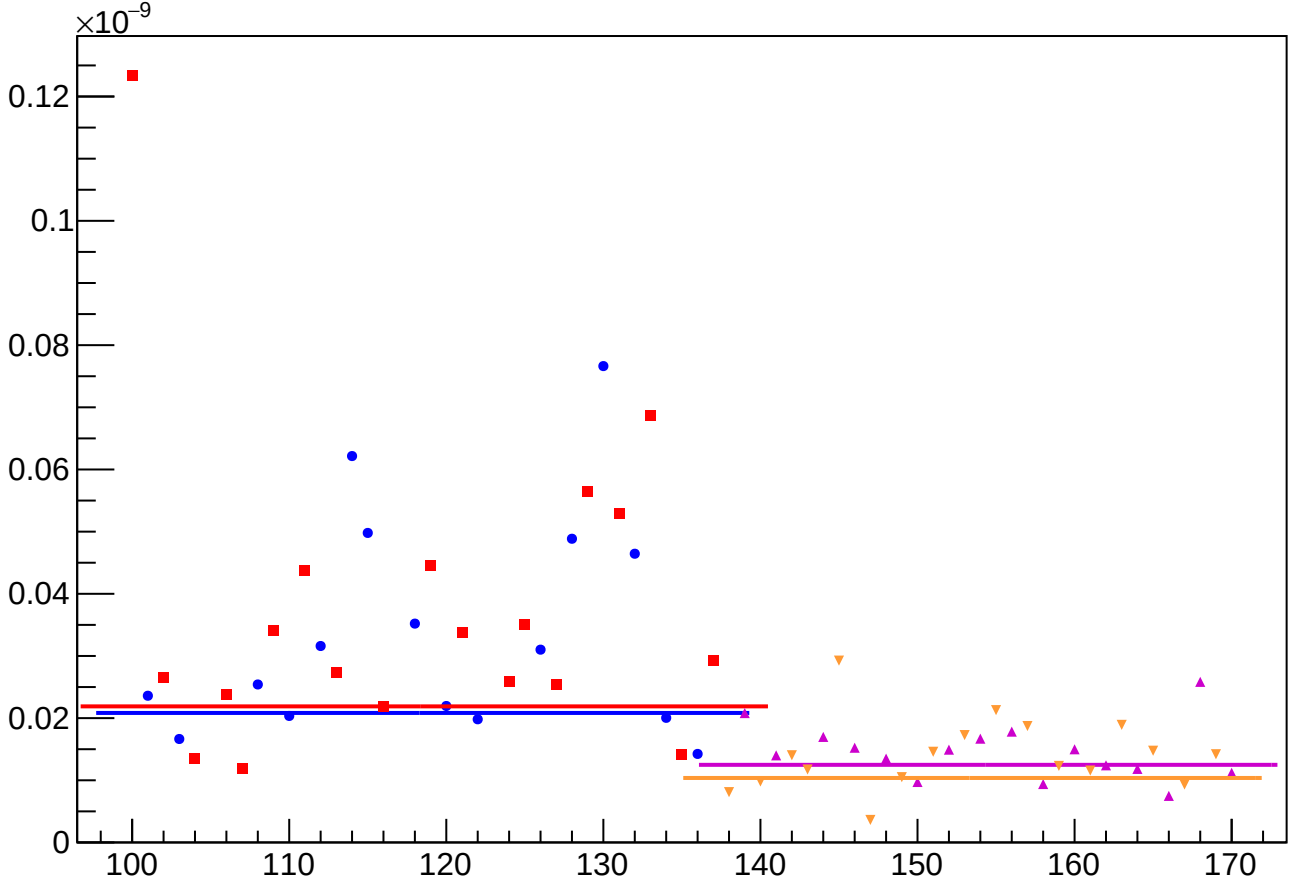
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 9.7/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:17.9/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 43.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 72.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 27.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1384606.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:3123484.6/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1906656.1/18

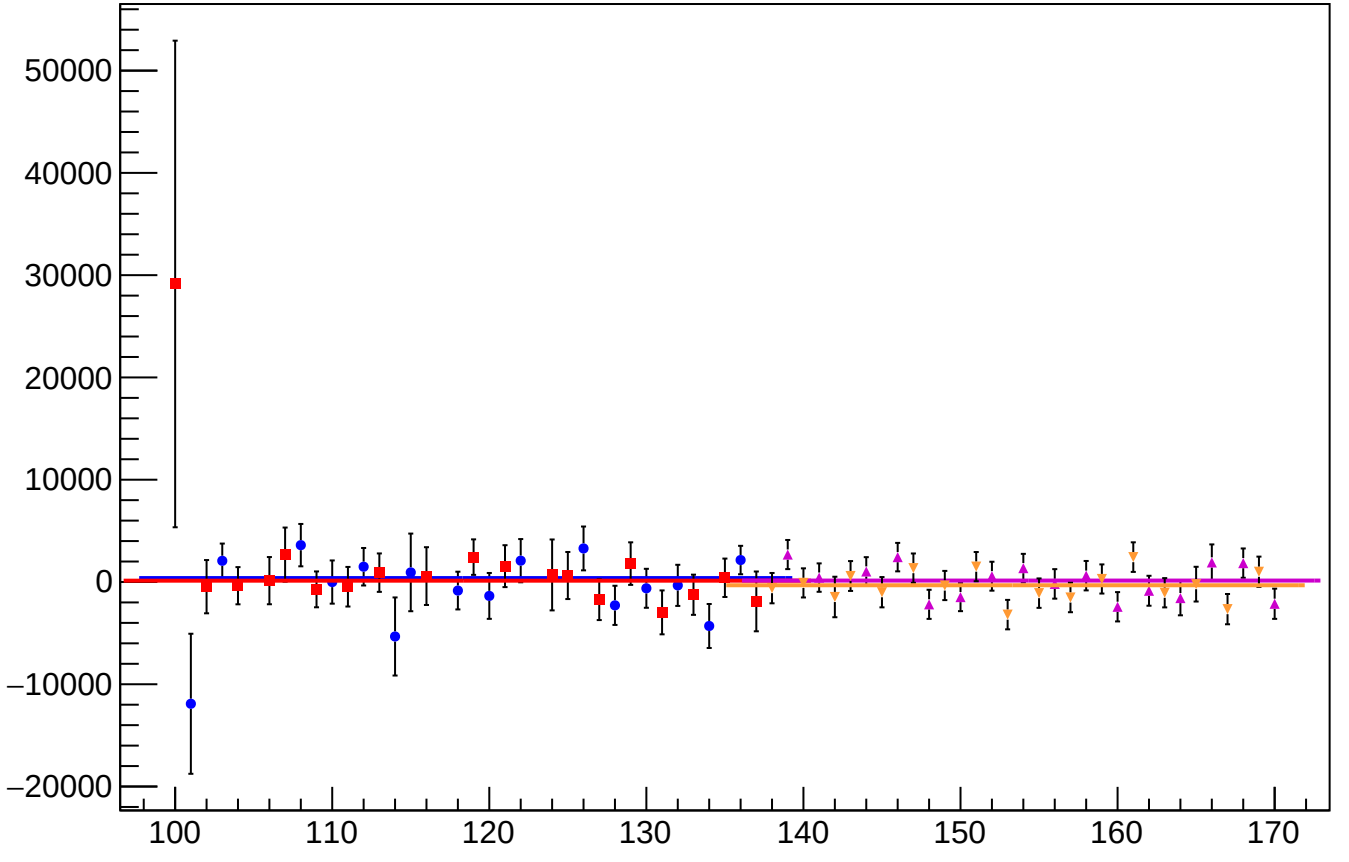
Left In: 0.000+/-0.000 $\chi^2$/NDF:1406495.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 6028284.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 10703027.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4408764.6/34

# reg_asym_usr_atr1_dd_mean vs Slug




Right In: 381.403+/-517.789 $\chi^2$/NDF: 21.5/15

Left Out: -320.480+/-358.933 $\chi^2$/NDF:16.3/16

Right Out: 127.929+/-500.988 $\chi^2$/NDF: 10.0/18

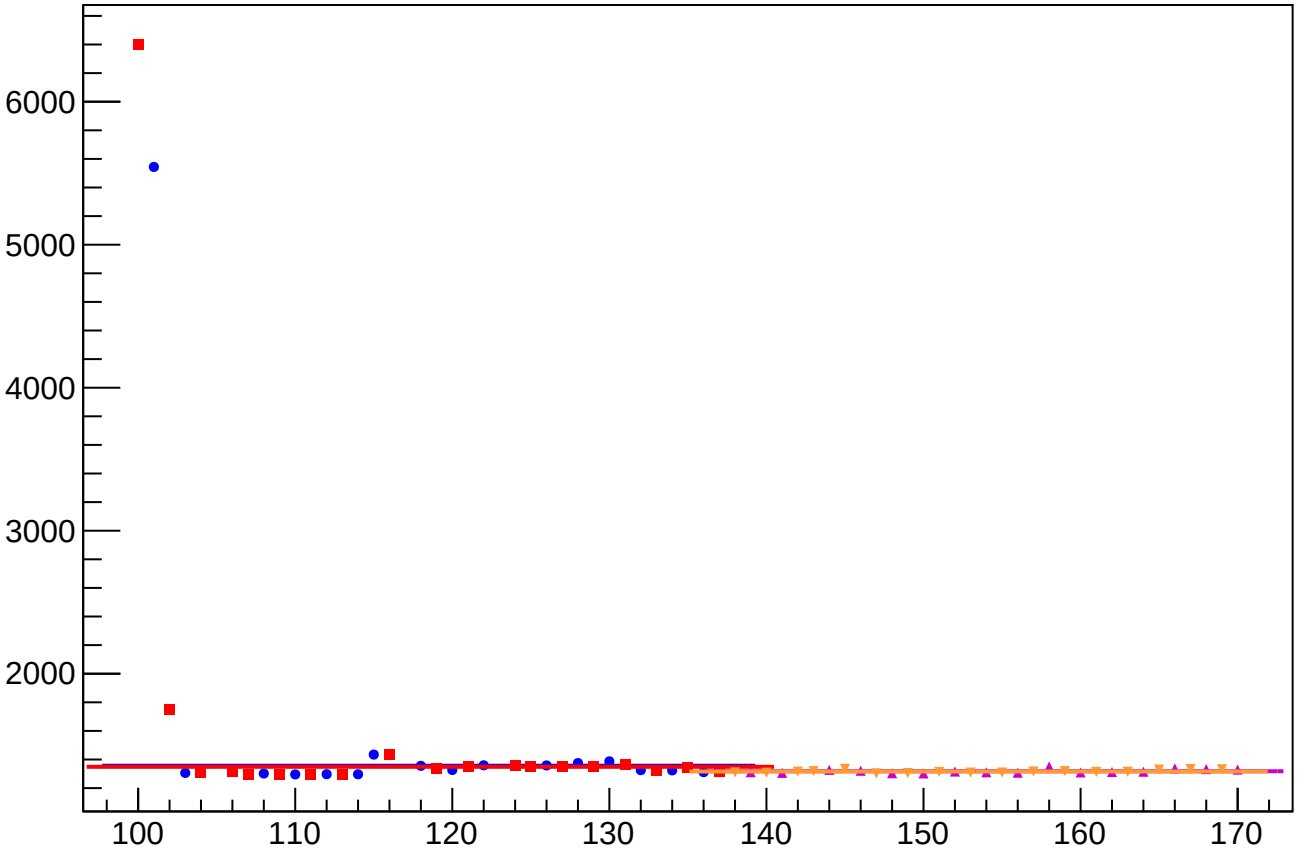
Left In: 138.279+/-362.494 $\chi^2$/NDF:20.9/15

+ sign -92.672+/-294.988 $\chi^2$/NDF: 39.0/32

All: 21.530+/-208.124 $\chi^2$/NDF: 70.2/67

- sign 134.723+/-293.680 $\chi^2$/NDF: 30.9/34

# reg_asym_usr_atr1_dd_rms vs Slug




Right In: 1356.397+/-0.366 $\chi^2$/NDF: 760266.3/15

Left Out: 1316.233+/-0.254 $\chi^2$/NDF:1443.7/16

Right Out: 1348.975+/-0.354 $\chi^2$/NDF: 147265.6/18

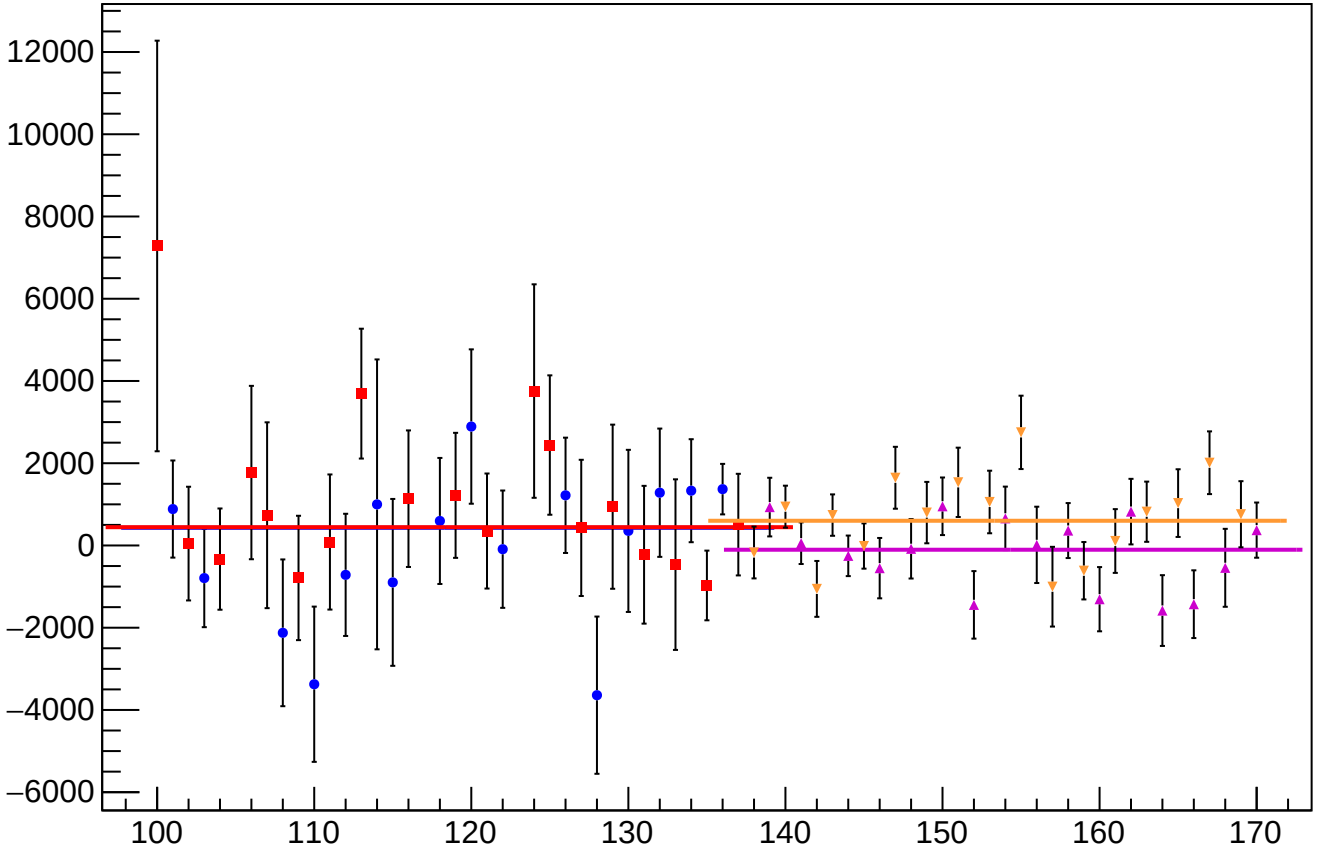
Left In: 1318.050+/-0.256 $\chi^2$/NDF:2646.1/15

+ sign 1329.269+/-0.209 $\chi^2$/NDF: 769838.2/32

All: 1328.971+/-0.147 $\chi^2$/NDF: 924755.9/67

- sign 1328.677+/-0.208 $\chi^2$/NDF: 154913.6/34

# asym_usr_atr1_dd_reg_correction_mean vs Slug




Right In: 430.363+/-338.459 $\chi^2$/NDF: 18.2/15

Left Out: 600.795+/-168.747 $\chi^2$/NDF:28.6/16

Right Out: 444.555+/-355.594 $\chi^2$/NDF: 14.4/18

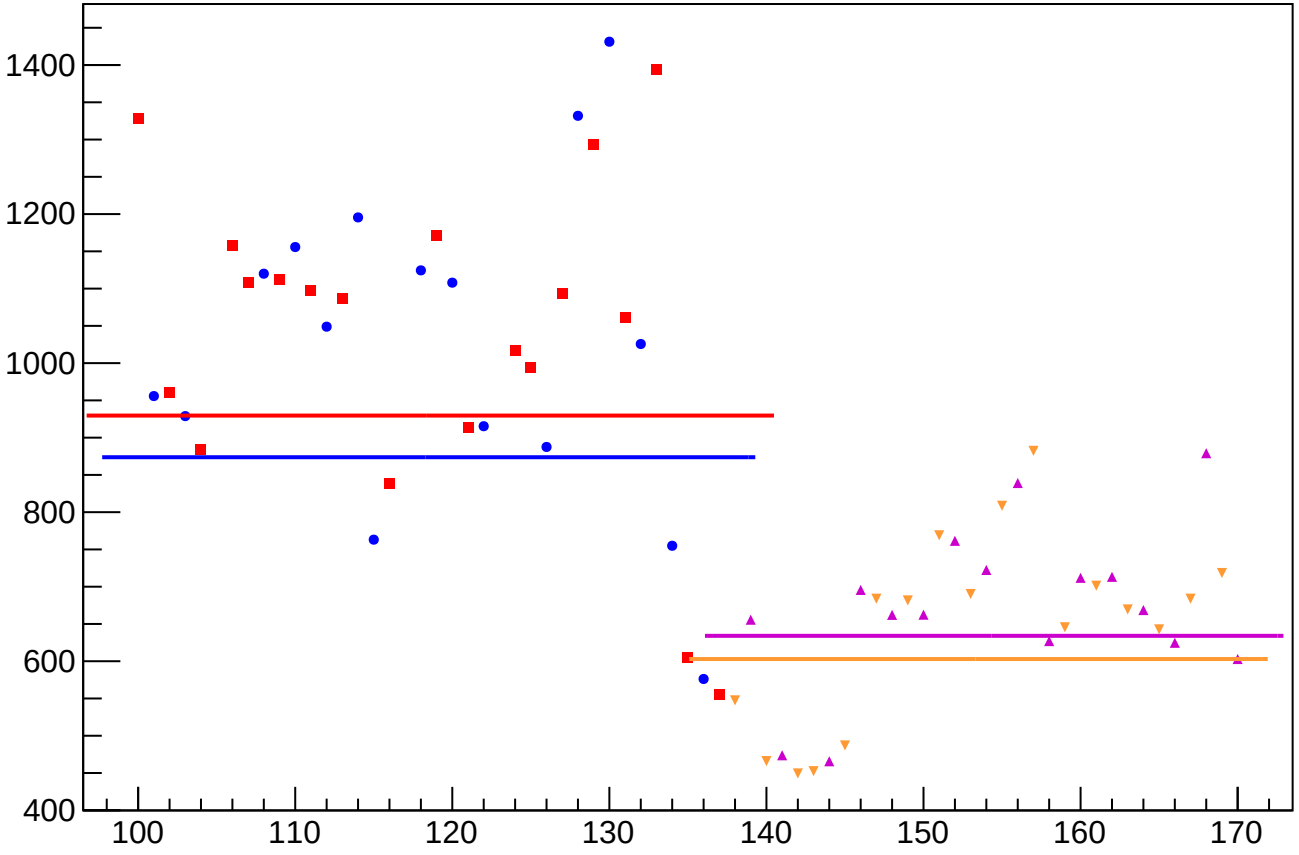
Left In: -103.801+/-177.545 $\chi^2$/NDF:19.1/15

+ sign 566.864+/-151.018 $\chi^2$/NDF: 47.0/32

All: 300.412+/-109.449 $\chi^2$/NDF: 89.0/67

- sign 5.621+/-158.846 $\chi^2$/NDF: 35.4/34

# asym_usr_atr1_dd_reg_correction_rms vs Slug




Right In: 873.733+/-0.239 $\chi^2$/NDF: 1014860.8/15

Left Out: 602.941+/-0.119 $\chi^2$/NDF:1075528.1/16

Right Out: 929.637+/-0.251 $\chi^2$/NDF: 859936.0/18

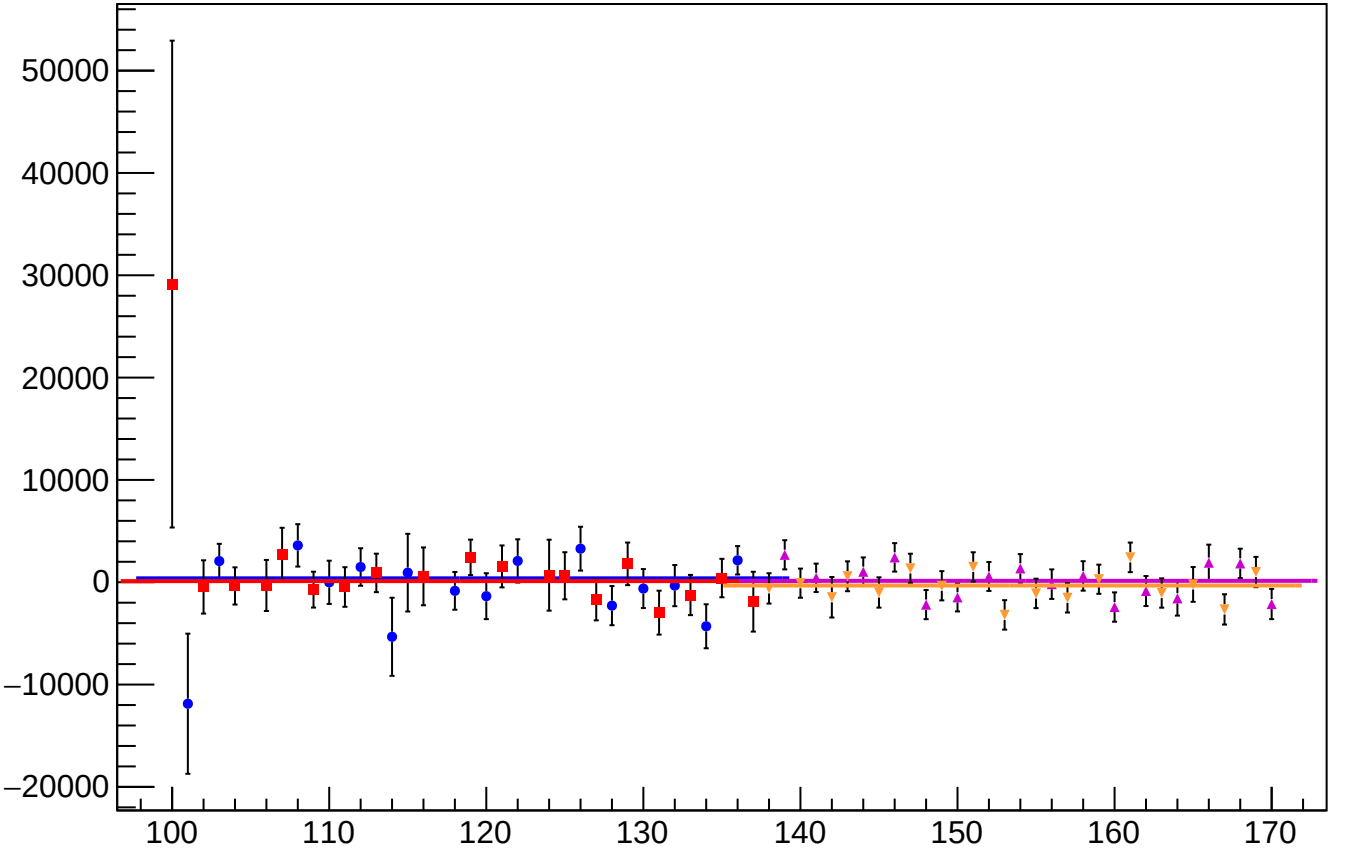
Left In: 634.073+/-0.126 $\chi^2$/NDF:809294.5/15

+ sign 656.852+/-0.107 $\chi^2$/NDF: 3115742.1/32

All: 674.038+/-0.077 $\chi^2$/NDF: 5945540.7/67

- sign 693.051+/-0.112 $\chi^2$/NDF: 2775242.9/34

# cor_asym_usr_atr1_dd_mean vs Slug




Right In: 381.712+/-517.789 $\chi^2$/NDF: 21.5/15

Left Out: -320.519+/-358.933 $\chi^2$/NDF:16.3/16

Right Out: 110.280+/-502.698 $\chi^2$/NDF: 10.0/18

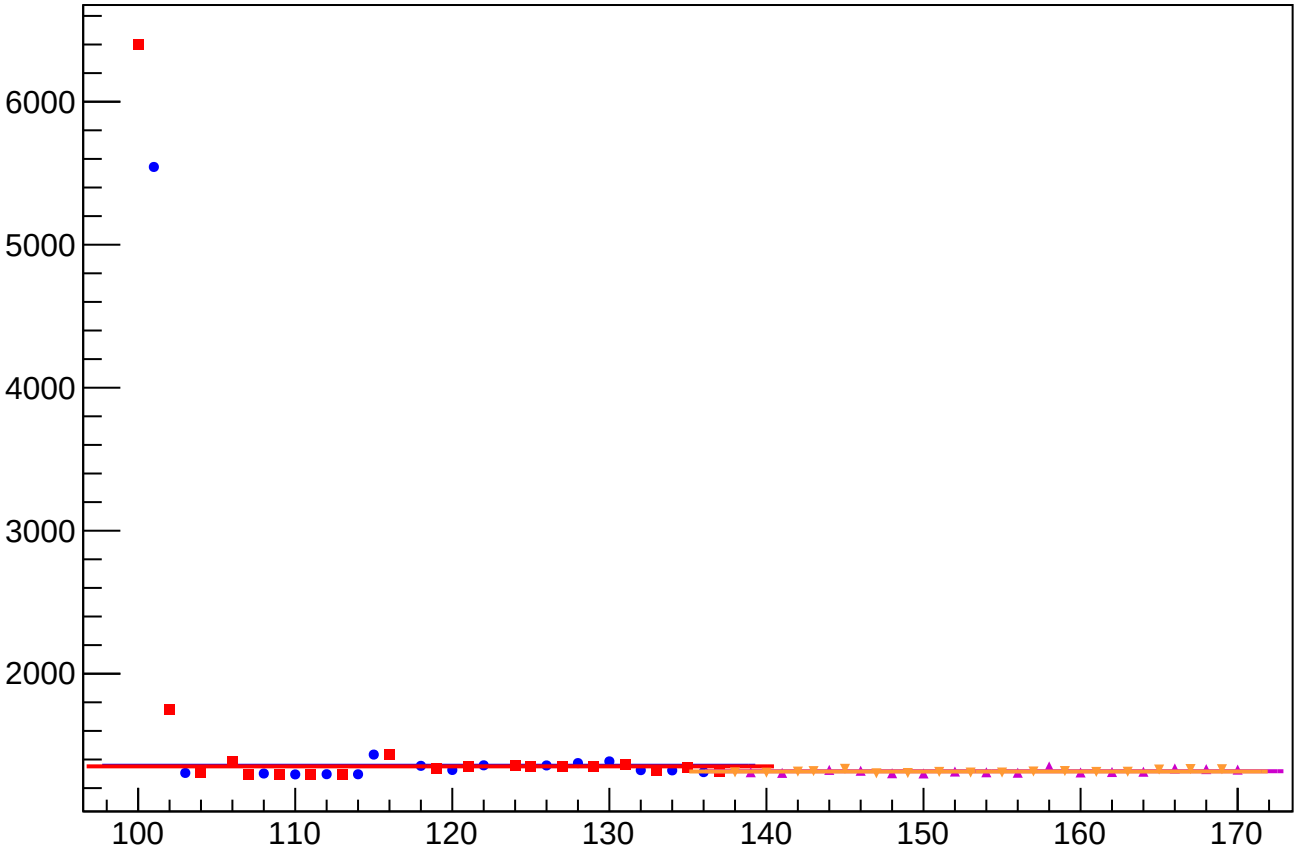
Left In: 138.317+/-362.494 $\chi^2$/NDF:20.9/15

+ sign -92.599+/-294.988 $\chi^2$/NDF: 39.0/32

All: 18.426+/-208.246 $\chi^2$/NDF: 70.2/67

- sign 128.726+/-294.023 $\chi^2$/NDF: 30.9/34

# cor_asym_usr_atr1_dd_rms vs Slug




Right In: 1356.397+/-0.366 $\chi^2$/NDF: 760265.4/15

Left Out: 1316.233+/-0.254 $\chi^2$/NDF:1443.7/16

Right Out: 1352.083+/-0.355 $\chi^2$/NDF: 147326.5/18

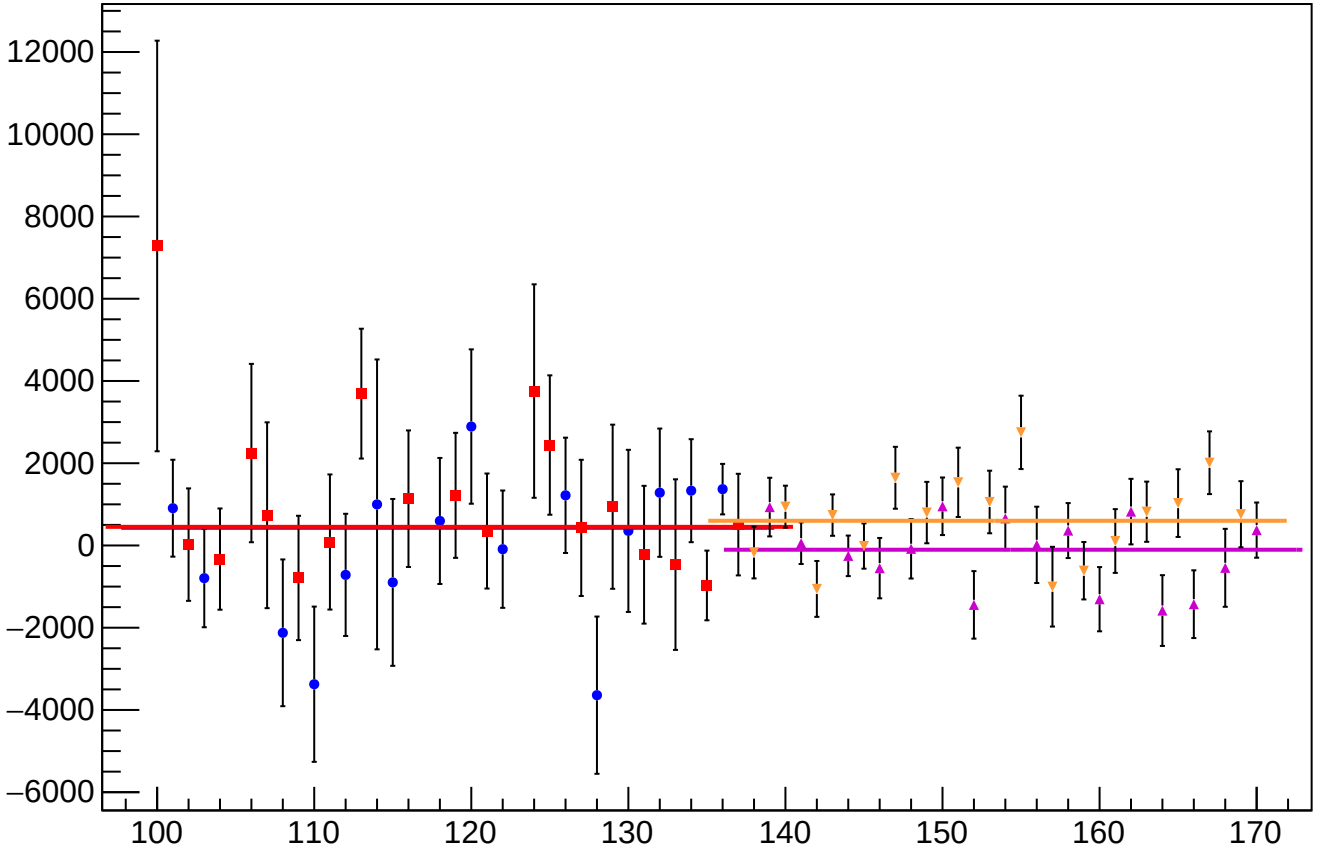
Left In: 1318.050+/-0.256 $\chi^2$/NDF:2646.1/15

+ sign 1329.269+/-0.209 $\chi^2$/NDF: 769837.2/32

All: 1329.481+/-0.147 $\chi^2$/NDF: 925843.0/67

- sign 1329.693+/-0.208 $\chi^2$/NDF: 156003.7/34

# asym_usr_atr1_dd_cor_correction_mean vs Slug




Right In: 432.135+/-338.403 $\chi^2$/NDF: 18.2/15

Left Out: 600.752+/-168.747 $\chi^2$/NDF:28.6/16

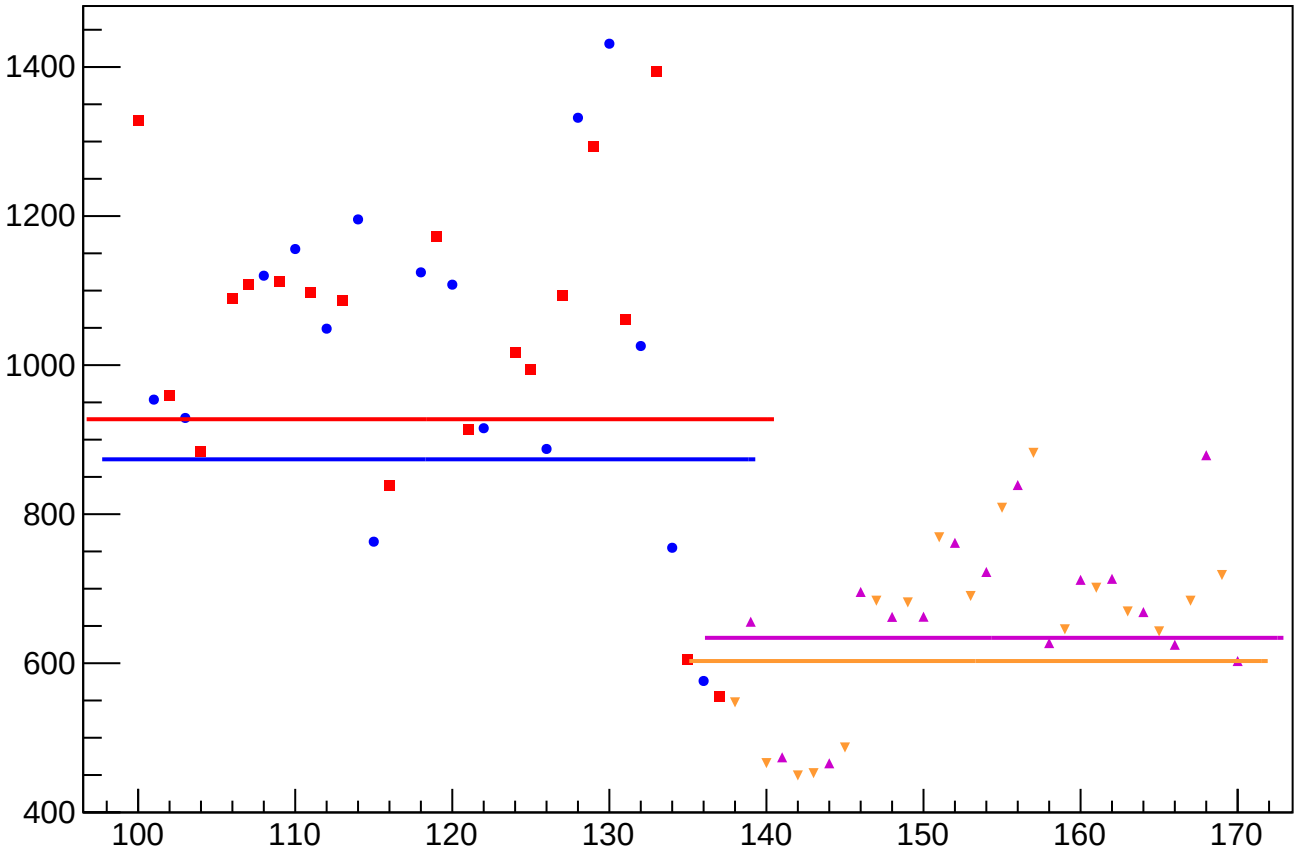
Right Out: 453.039+/-355.599 $\chi^2$/NDF: 14.7/18

Left In: -103.803+/-177.543 $\chi^2$/NDF:19.1/15

+ sign 567.173+/-151.013 $\chi^2$/NDF: 47.1/32

All: 301.384+/-109.446 $\chi^2$/NDF: 89.3/67

- sign 7.308+/-158.845 $\chi^2$/NDF: 35.7/34




Right In: 873.606+/-0.239 $\chi^2$/NDF: 1014405.7/15

Left Out: 602.942+/-0.119 $\chi^2$/NDF:1075458.2/16

Right Out: 927.407+/-0.251 $\chi^2$/NDF: 847382.0/18

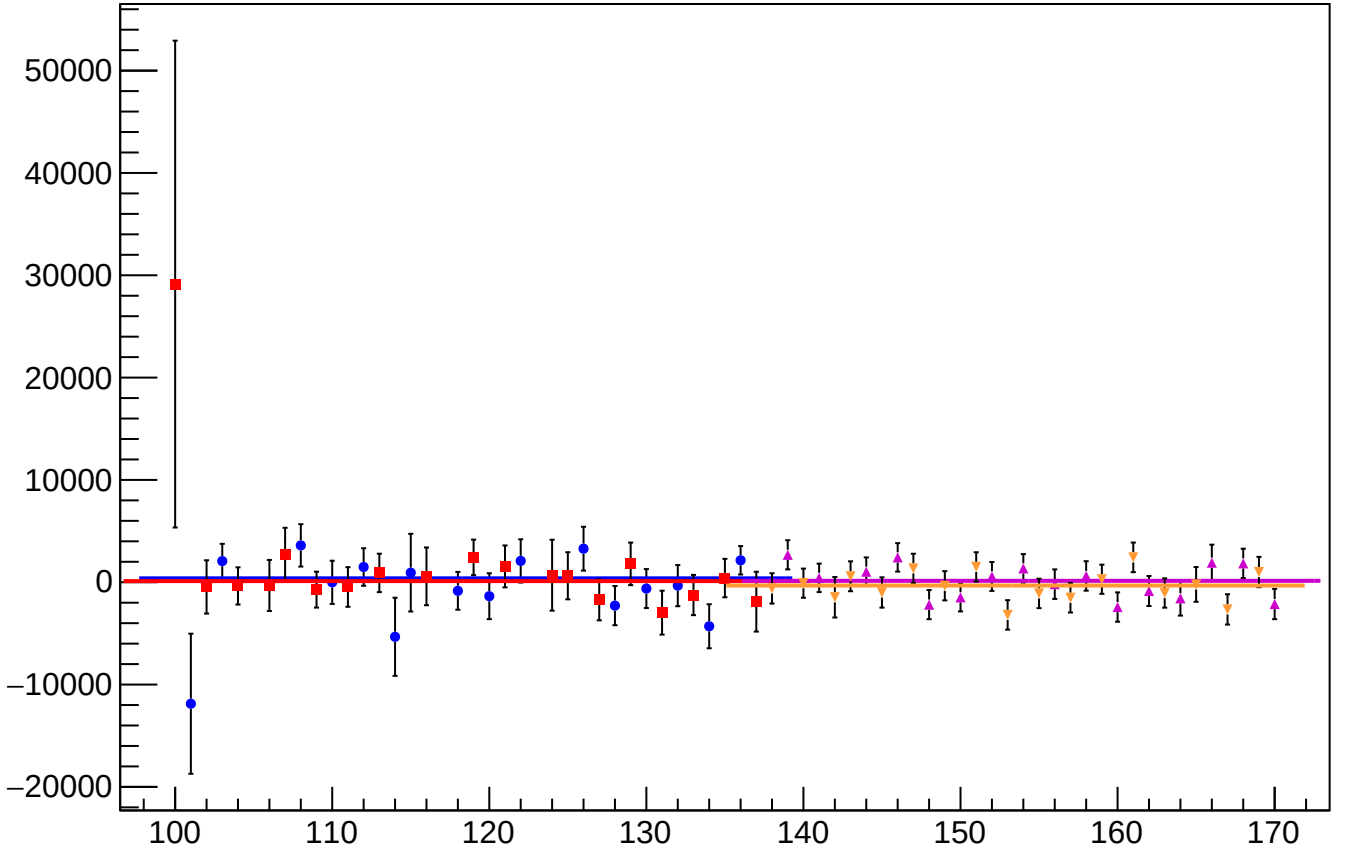
Left In: 634.067+/-0.126 $\chi^2$/NDF:809358.5/15

+ sign 656.842+/-0.107 $\chi^2$/NDF: 3114528.1/32

All: 673.818+/-0.077 $\chi^2$/NDF: 5913912.9/67

- sign 692.600+/-0.112 $\chi^2$/NDF: 2746148.7/34

# eigen_cor_asym_usr_atr1_dd_mean vs Slug




Right In: 381.712+/-517.789 $\chi^2$/NDF: 21.5/15

Left Out: -320.519+/-358.933 $\chi^2$/NDF:16.3/16

Right Out: 110.280+/-502.698 $\chi^2$/NDF: 10.0/18

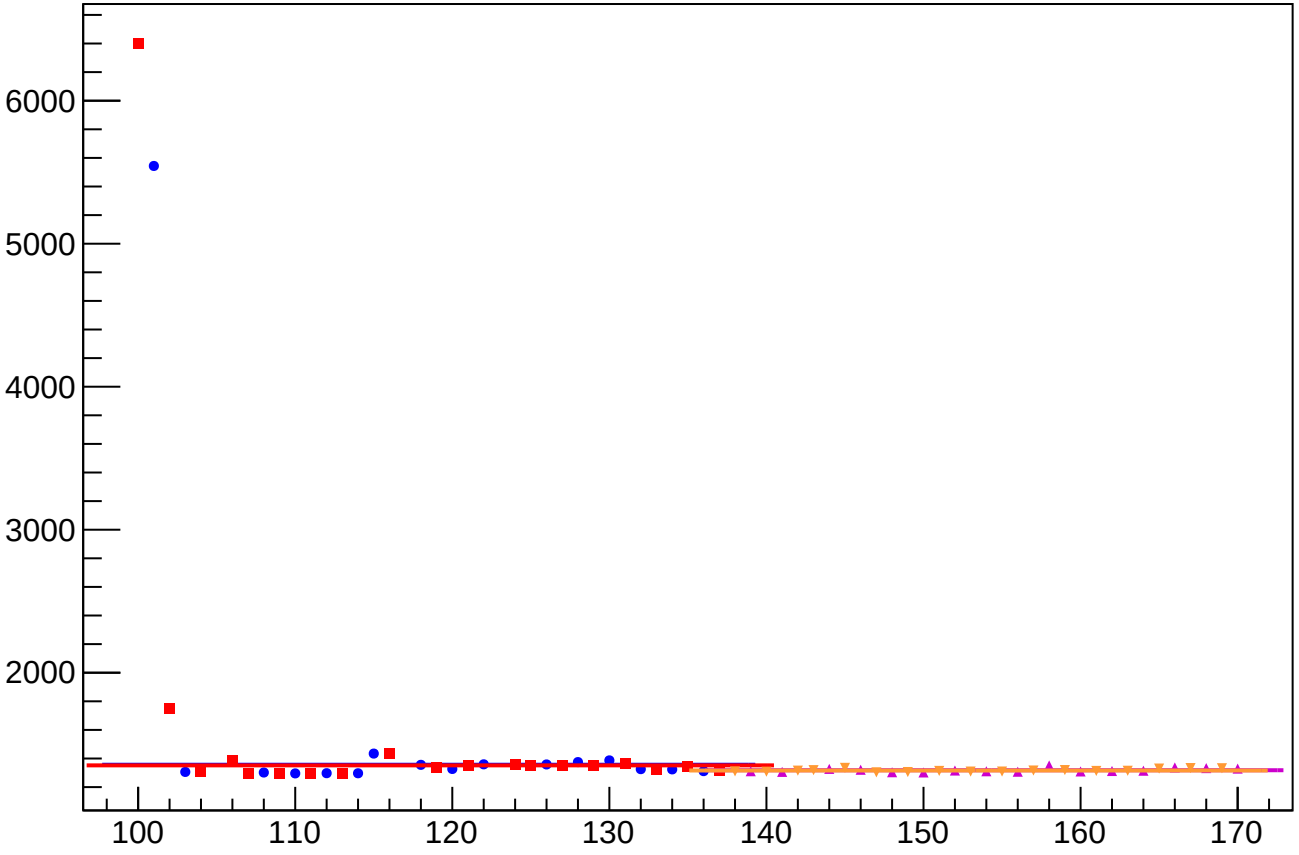
Left In: 138.317+/-362.494 $\chi^2$/NDF:20.9/15

\+ sign -92.599+/-294.988 $\chi^2$/NDF: 39.0/32

All: 18.426+/-208.246 $\chi^2$/NDF: 70.2/67

\- sign 128.726+/-294.023 $\chi^2$/NDF: 30.9/34

# eigen_cor_asym_usr_atr1_dd_rms vs Slug




Right In: 1356.397+/-0.366 $\chi^2$/NDF: 760265.4/15

Left Out: 1316.233+/-0.254 $\chi^2$/NDF:1443.7/16

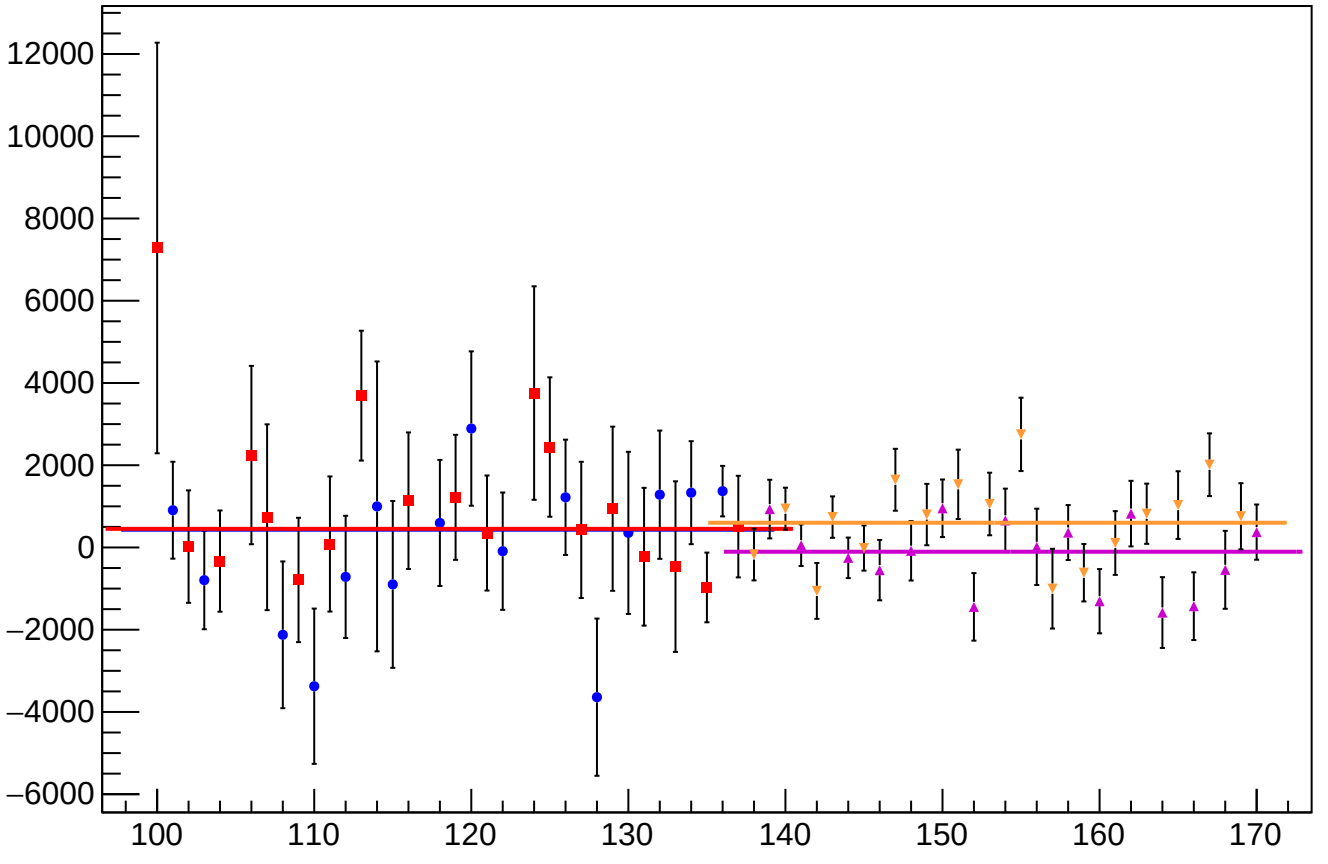
Right Out: 1352.083+/-0.355 $\chi^2$/NDF: 147326.5/18

Left In: 1318.050+/-0.256 $\chi^2$/NDF:2646.1/15

+ sign 1329.269+/-0.209 $\chi^2$/NDF: 769837.2/32

All: 1329.481+/-0.147 $\chi^2$/NDF: 925843.0/67

- sign 1329.693+/-0.208 $\chi^2$/NDF: 156003.7/34




Right In: 432.135+/-338.403 $\chi^2$/NDF: 18.2/15

Left Out: 600.752+/-168.747 $\chi^2$/NDF:28.6/16

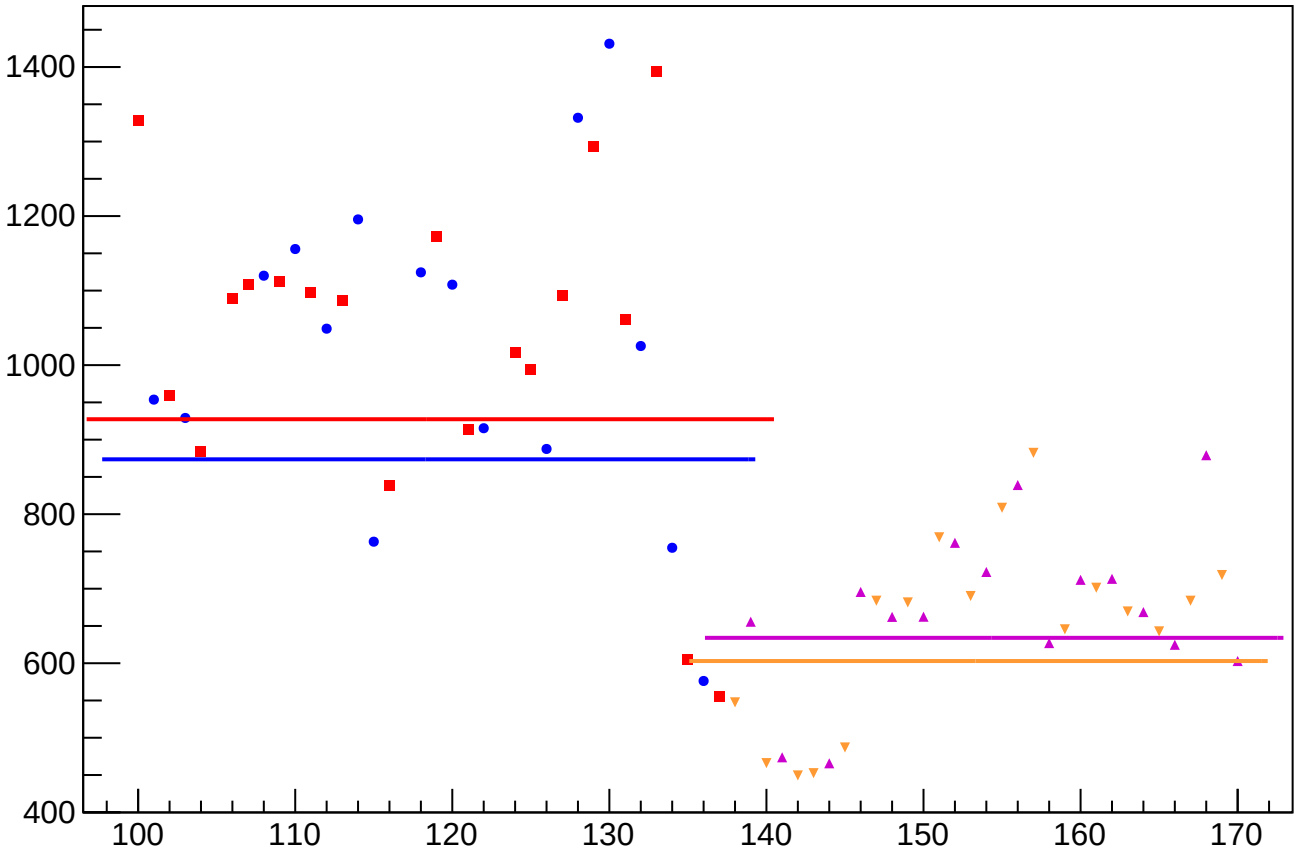
Right Out: 453.039+/-355.599 $\chi^2$/NDF: 14.7/18

Left In: -103.803+/-177.543 $\chi^2$/NDF:19.1/15

+ sign 567.173+/-151.013 $\chi^2$/NDF: 47.1/32

All: 301.384+/-109.446 $\chi^2$/NDF: 89.3/67

- sign 7.308+/-158.845 $\chi^2$/NDF: 35.7/34




Right In: 873.606+/-0.239 $\chi^2$/NDF: 1014405.7/15

Left Out: 602.942+/-0.119 $\chi^2$/NDF:1075458.2/16

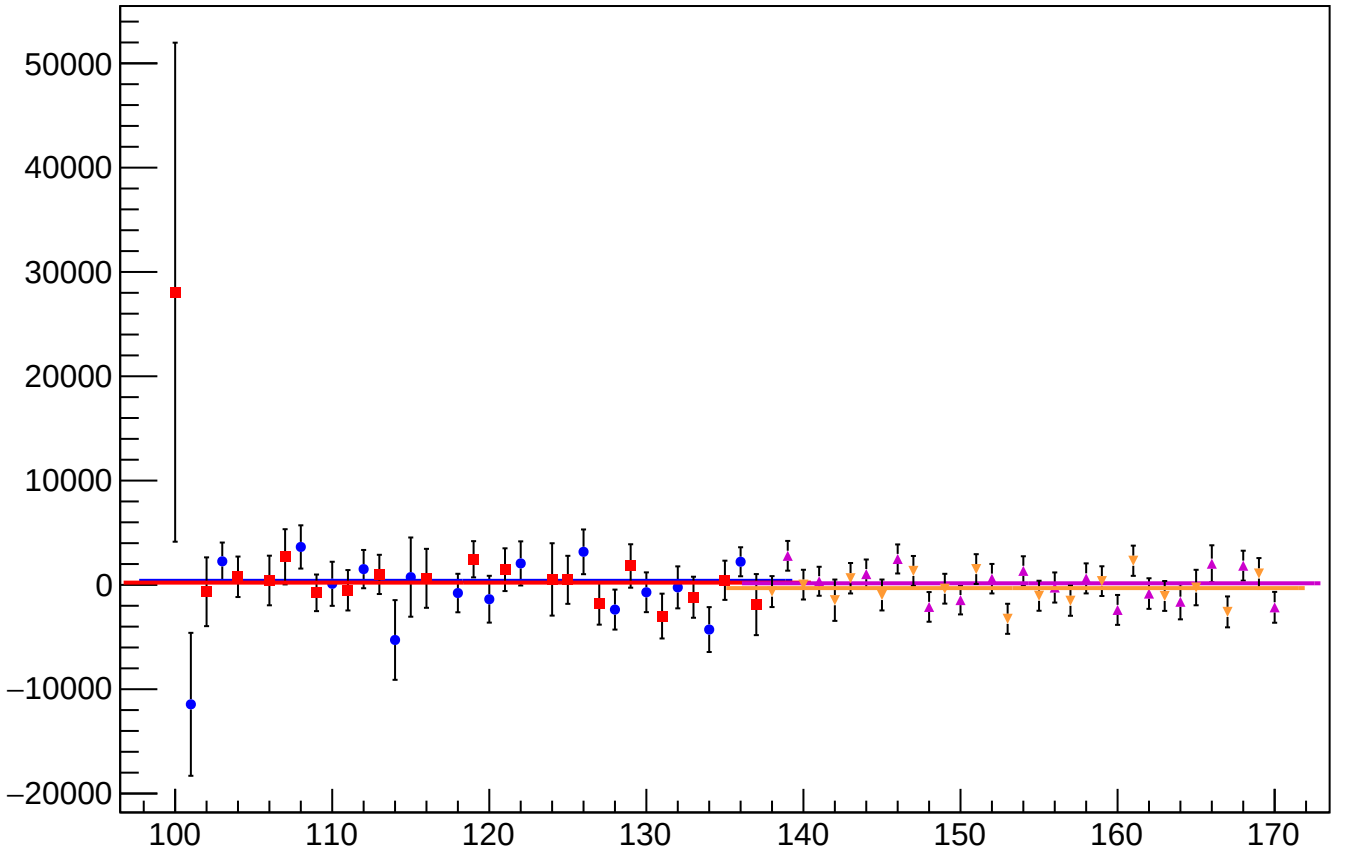
Right Out: 927.407+/-0.251 $\chi^2$/NDF: 847382.0/18

Left In: 634.067+/-0.126 $\chi^2$/NDF:809358.5/15

+ sign 656.842+/-0.107 $\chi^2$/NDF: 3114528.1/32

All: 673.818+/-0.077 $\chi^2$/NDF: 5913912.9/67

- sign 692.600+/-0.112 $\chi^2$/NDF: 2746148.7/34




Right In: 389.949+/-521.159 $\chi^2$/NDF: 21.4/15

Left Out: -307.362+/-359.216 $\chi^2$/NDF:16.2/16

Right Out: 218.184+/-507.927 $\chi^2$/NDF: 10.0/18

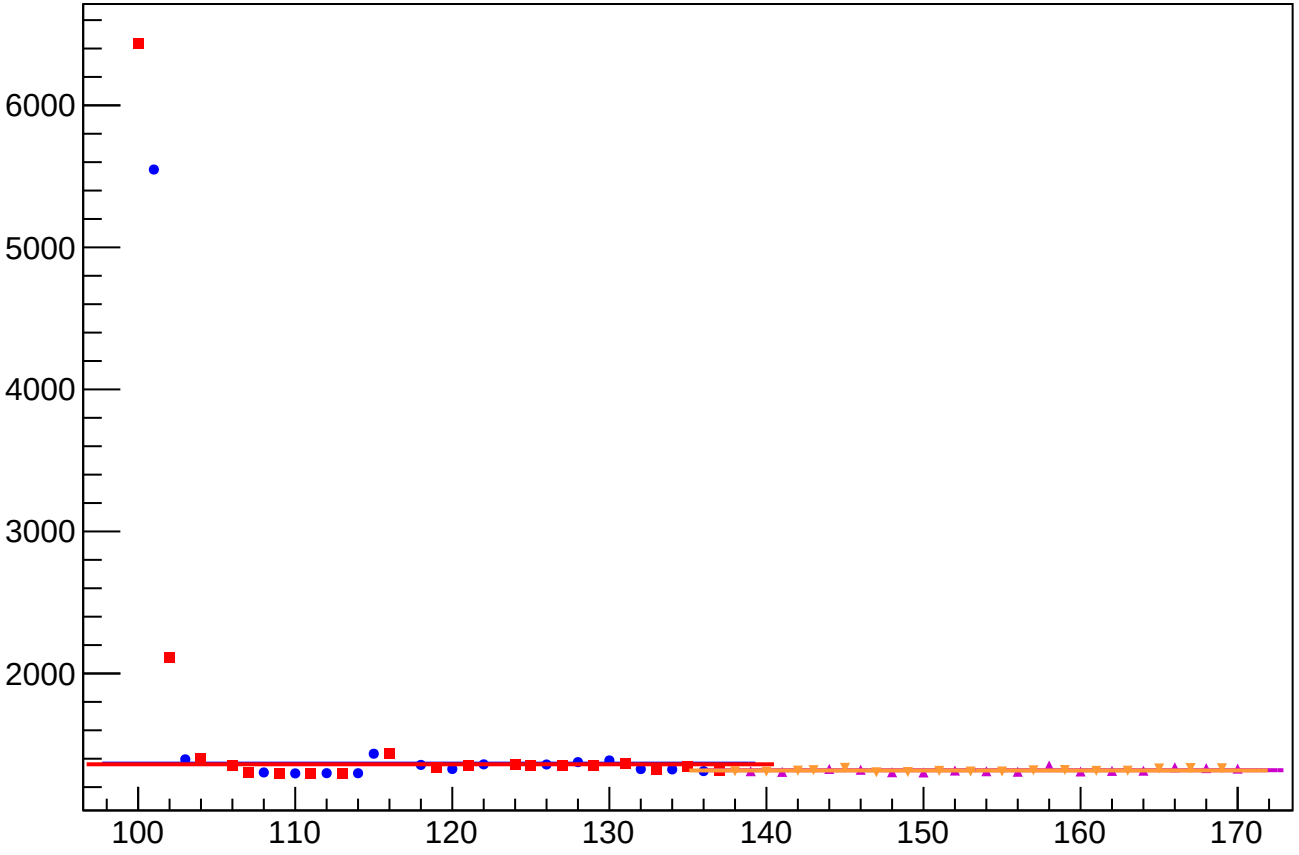
Left In: 154.416+/-362.769 $\chi^2$/NDF:21.2/15

\+ sign -82.777+/-295.765 $\chi^2$/NDF: 38.8/32

All: 46.834+/-208.940 $\chi^2$/NDF: 70.4/67

\- sign 175.956+/-295.207 $\chi^2$/NDF: 31.2/34

# dit_asym_usr_atr1_dd_rms vs Slug




Right In: 1365.302+/-0.369 $\chi^2$/NDF: 758944.7/15

Left Out: 1317.268+/-0.254 $\chi^2$/NDF:1451.1/16

Right Out: 1360.771+/-0.359 $\chi^2$/NDF: 205315.3/18

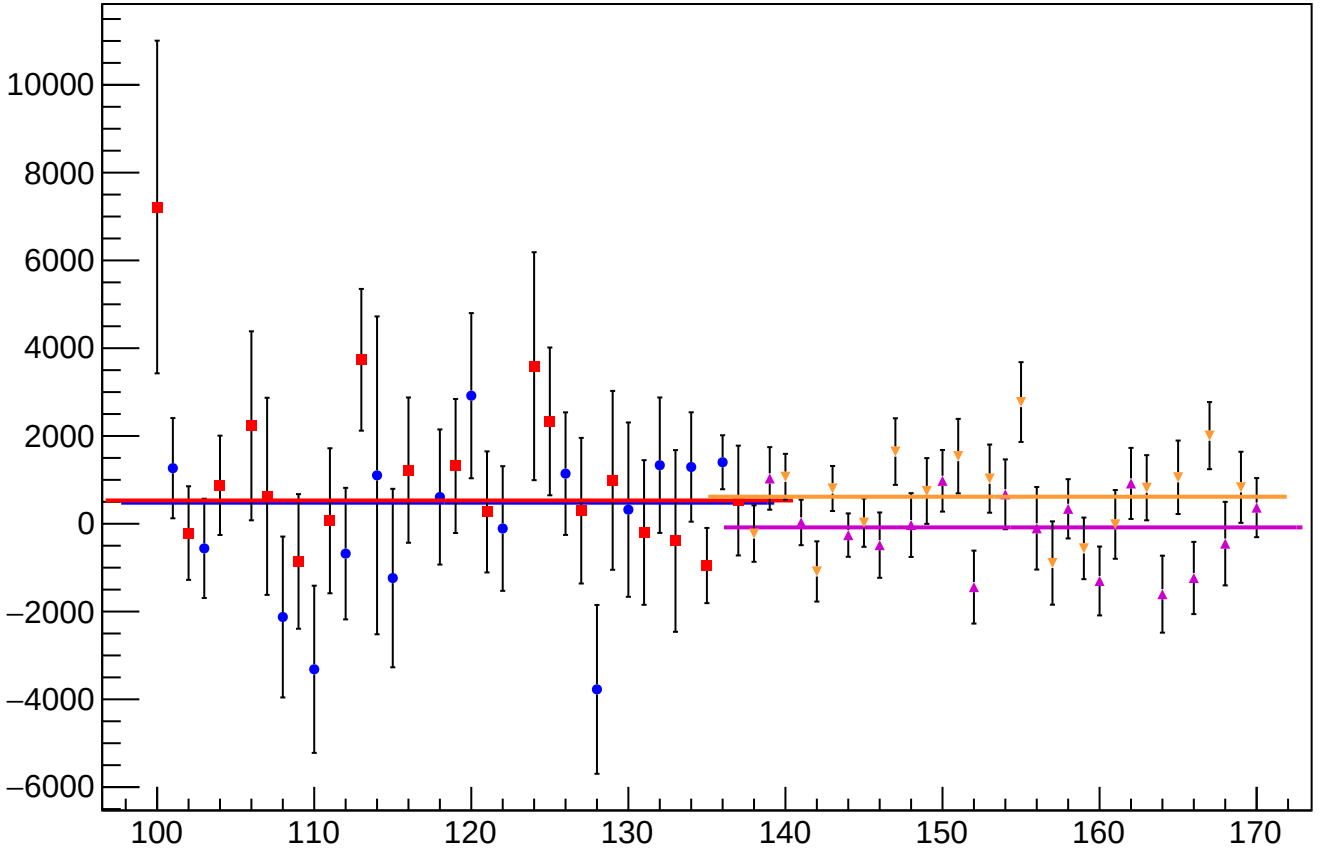
Left In: 1319.048+/-0.257 $\chi^2$/NDF:2673.1/15

+ sign 1332.739+/-0.209 $\chi^2$/NDF: 771913.4/32

All: 1332.940+/-0.148 $\chi^2$/NDF: 988840.2/67

- sign 1333.141+/-0.209 $\chi^2$/NDF: 216924.9/34

# asym_usr_atr1_dd_dit_correction_mean vs Slug




Right In: 480.403+/-336.520 $\chi^2$/NDF: 18.6/15

Left Out: 616.180+/-170.683 $\chi^2$/NDF:28.6/16

Right Out: 530.532+/-346.105 $\chi^2$/NDF: 15.6/18

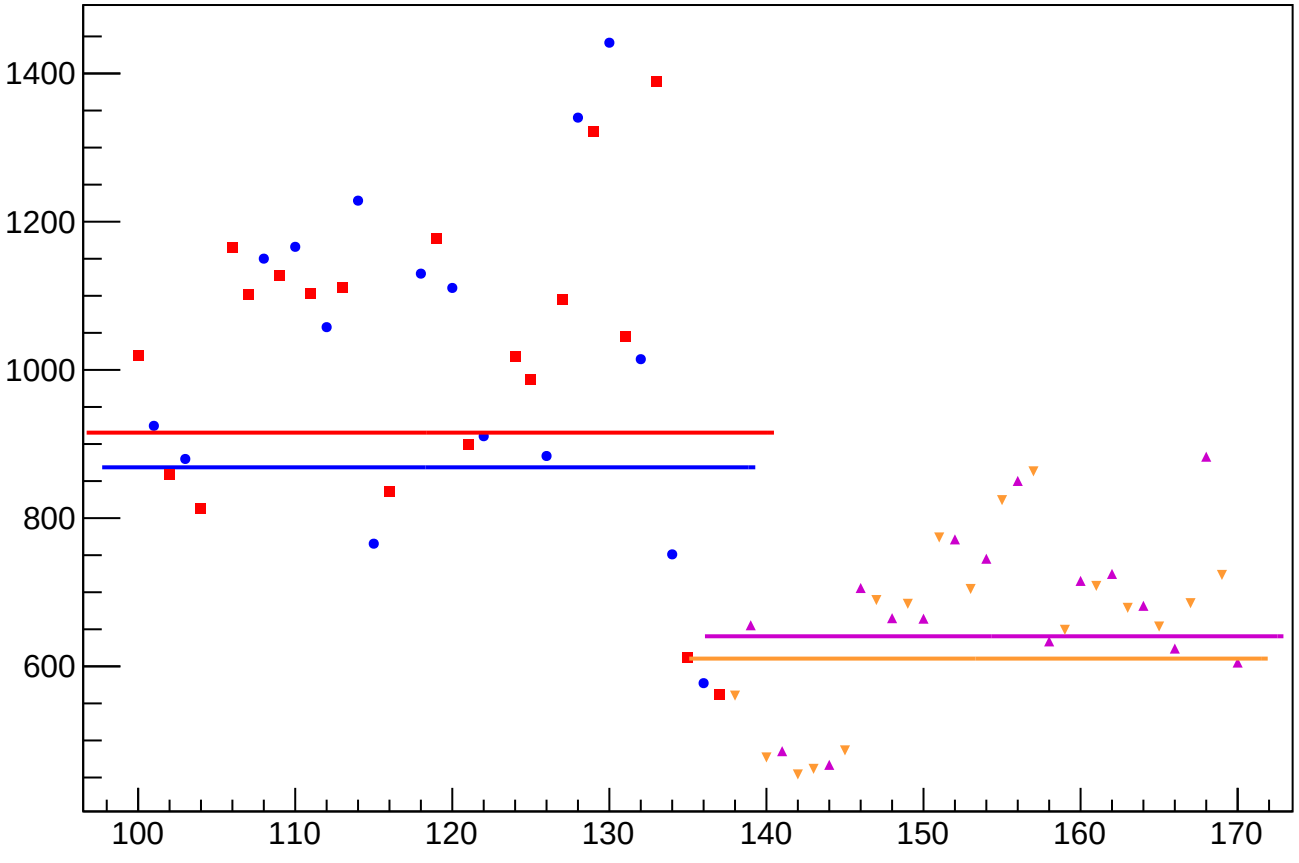
Left In: -82.721+/-179.317 $\chi^2$/NDF:18.7/15

+ sign 588.398+/-152.223 $\chi^2$/NDF: 47.3/32

All: 329.878+/-110.027 $\chi^2$/NDF: 90.2/67

- sign 47.057+/-159.216 $\chi^2$/NDF: 36.8/34

# asym_usr_atr1_dd_dit_correction_rms vs Slug




Right In: 868.572+/-0.238 $\chi^2$/NDF: 1021338.5/15

Left Out: 610.466+/-0.121 $\chi^2$/NDF:1030360.0/16

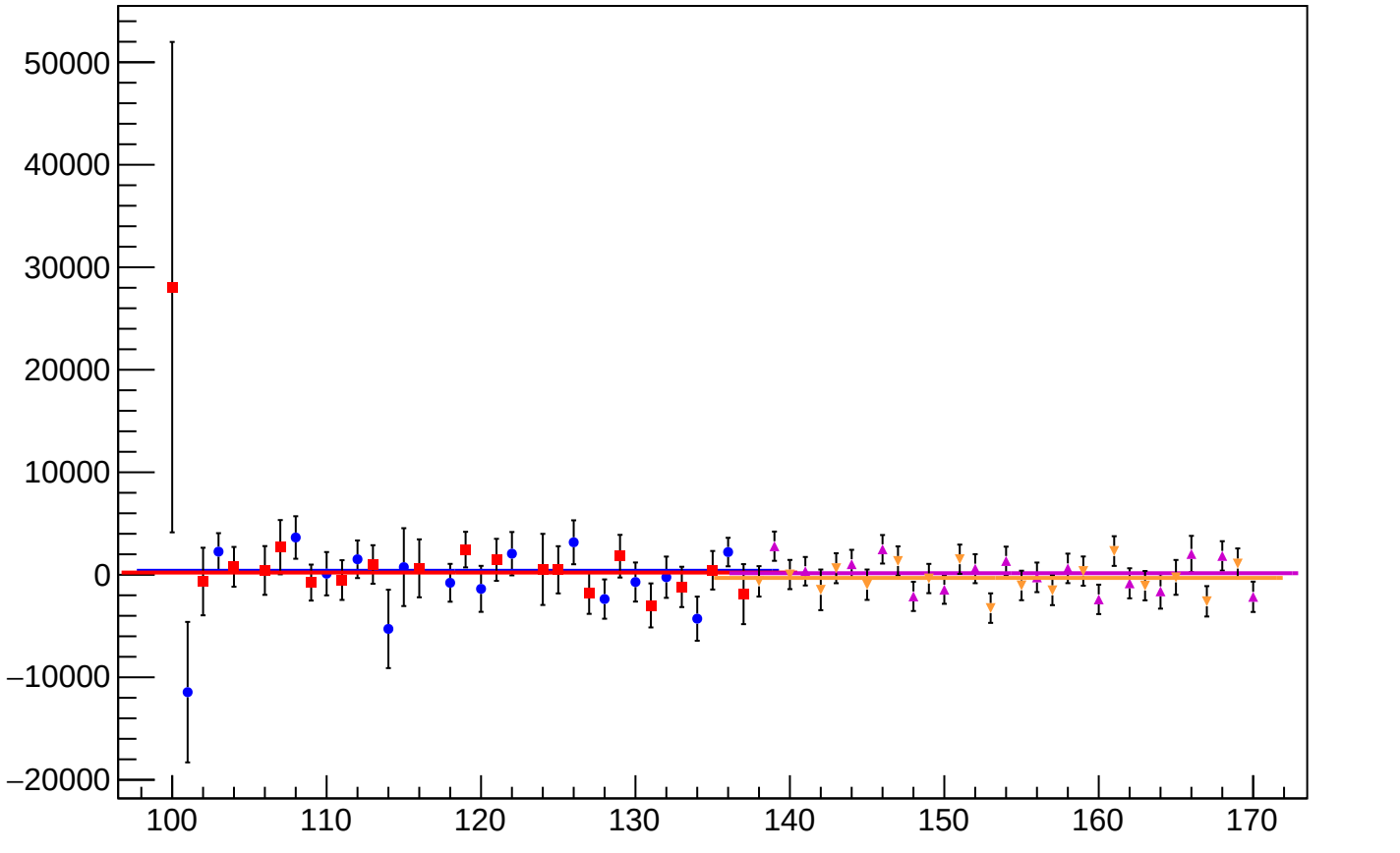
Right Out: 915.360+/-0.245 $\chi^2$/NDF: 858906.6/18

Left In: 640.578+/-0.127 $\chi^2$/NDF:809682.9/15

+ sign 663.278+/-0.108 $\chi^2$/NDF: 2987493.6/32

All: 680.207+/-0.078 $\chi^2$/NDF: 5701741.4/67

- sign 698.728+/-0.113 $\chi^2$/NDF: 2662448.0/34




Right In: 389.949+/-521.159 $\chi^2$/NDF: 21.4/15

Left Out: -307.363+/-359.216 $\chi^2$/NDF:16.2/16

Right Out: 218.182+/-507.927 $\chi^2$/NDF: 10.0/18

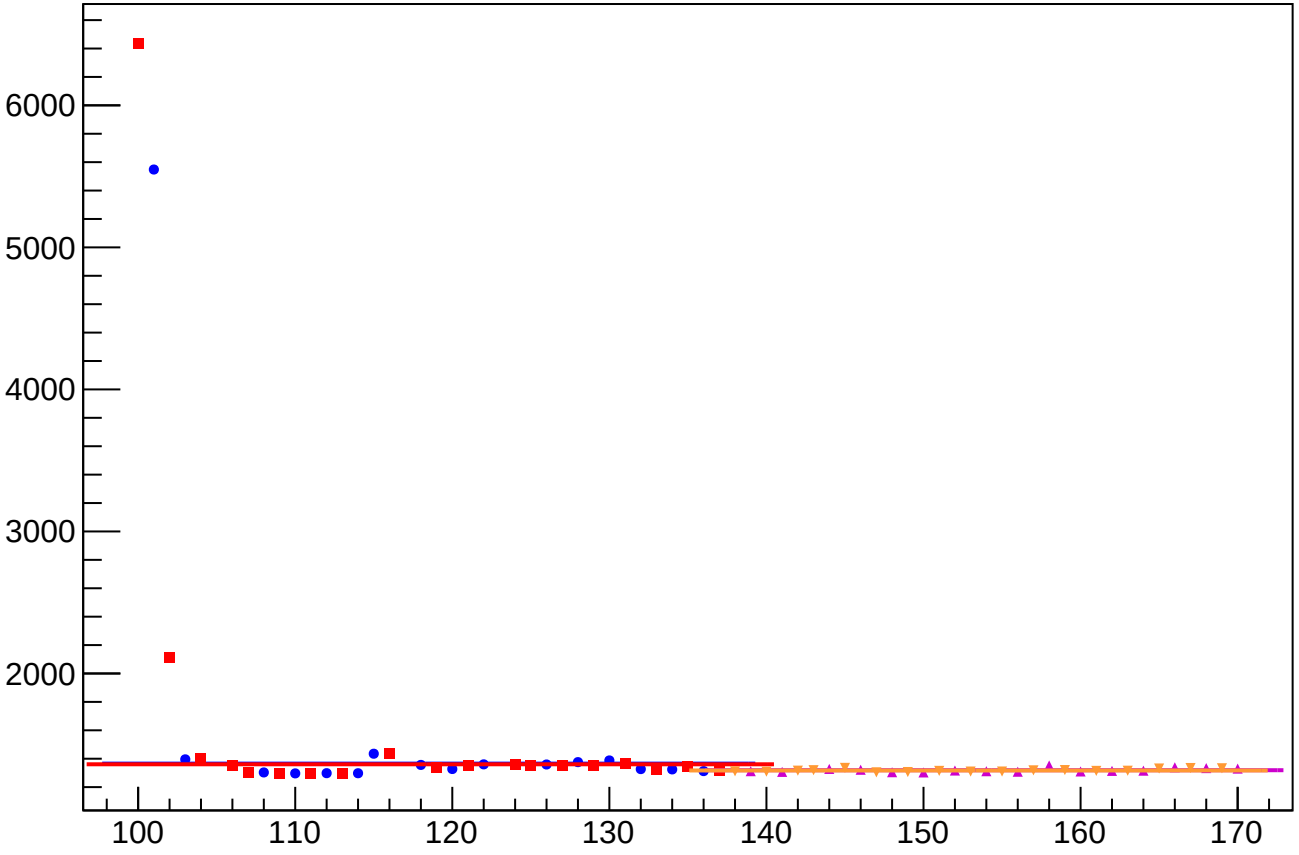
Left In: 154.415+/-362.769 $\chi^2$/NDF:21.2/15

\+ sign -82.778+/-295.765 $\chi^2$/NDF: 38.8/32

All: 46.833+/-208.940 $\chi^2$/NDF: 70.4/67

\- sign 175.955+/-295.207 $\chi^2$/NDF: 31.2/34

# eigen_dit_asym_usr_atr1_dd_rms vs Slug




Right In: 1365.302+/-0.369 $\chi^2$/NDF: 758944.7/15

Left Out: 1317.268+/-0.254 $\chi^2$/NDF:1451.1/16

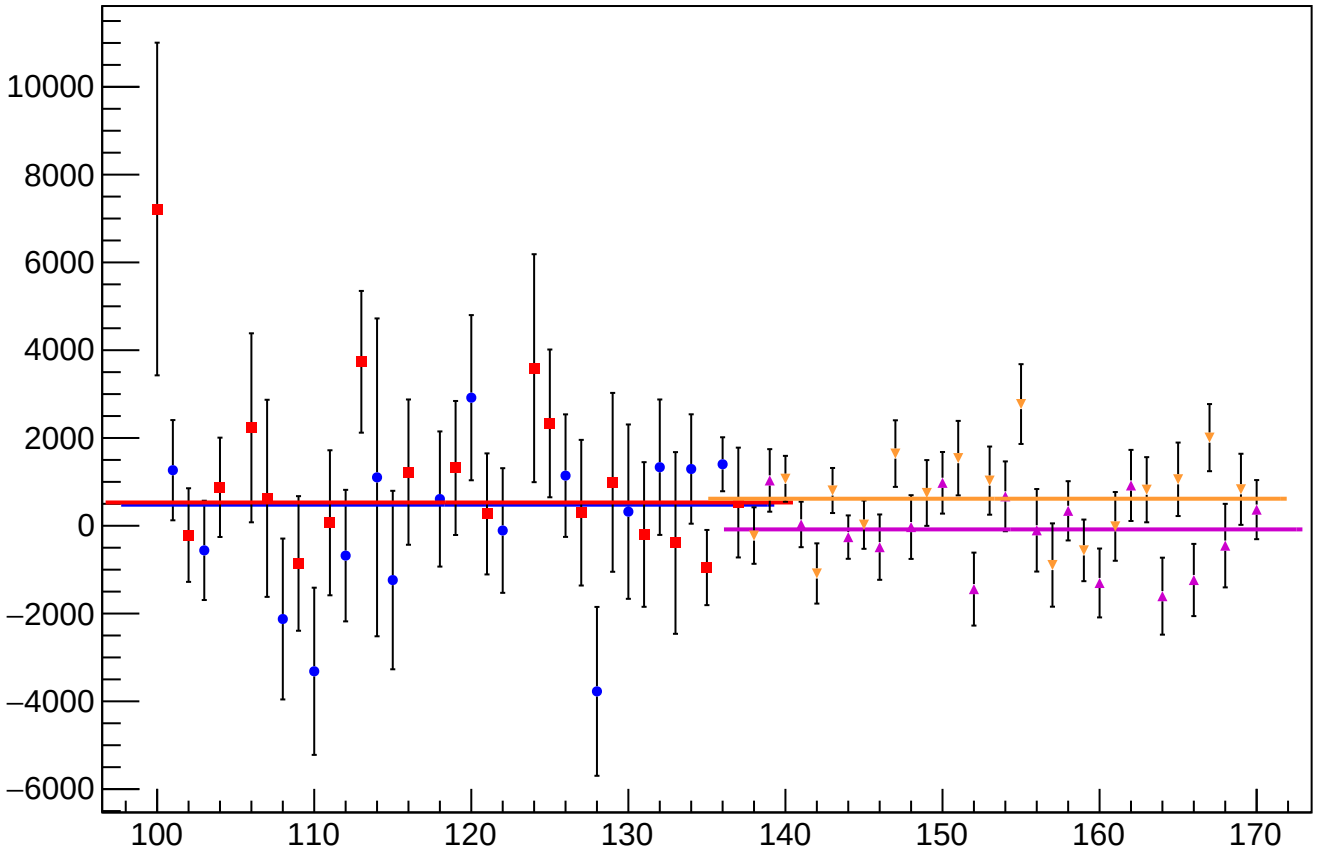
Right Out: 1360.770+/-0.359 $\chi^2$/NDF: 205315.2/18

Left In: 1319.048+/-0.257 $\chi^2$/NDF:2673.1/15

+ sign 1332.739+/-0.209 $\chi^2$/NDF: 771913.4/32

All: 1332.940+/-0.148 $\chi^2$/NDF: 988840.1/67

- sign 1333.141+/-0.209 $\chi^2$/NDF: 216924.8/34




Right In: 480.400+/-336.519 $\chi^2$/NDF: 18.6/15

Left Out: 616.181+/-170.683 $\chi^2$/NDF:28.6/16

Right Out: 530.531+/-346.104 $\chi^2$/NDF: 15.6/18

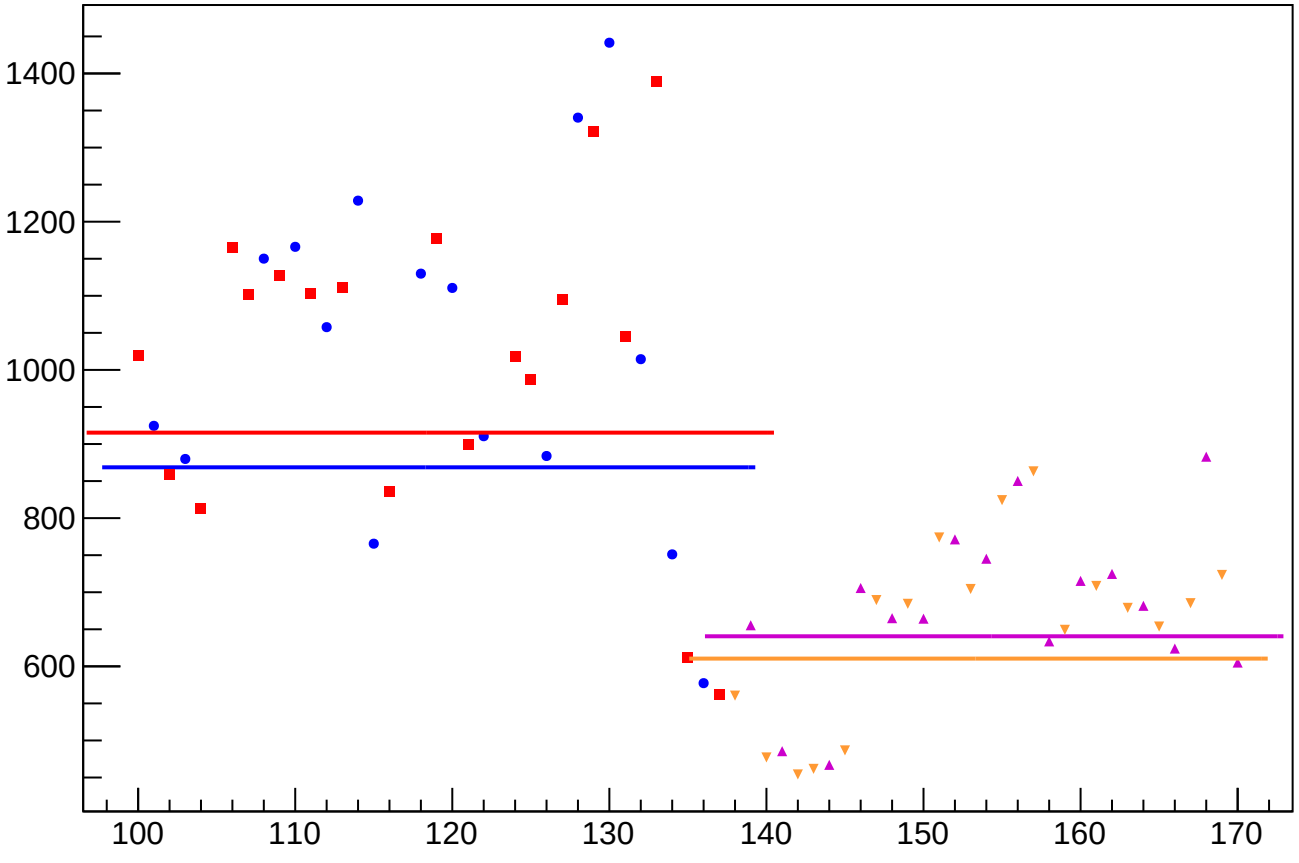
Left In: -82.722+/-179.317 $\chi^2$/NDF:18.7/15

+ sign 588.398+/-152.223 $\chi^2$/NDF: 47.3/32

All: 329.878+/-110.027 $\chi^2$/NDF: 90.2/67

- sign 47.057+/-159.217 $\chi^2$/NDF: 36.8/34

# asym_usr_atr1_dd_eigen_dit_correction_rms vs Slug




Right In: 868.570+/-0.238 $\chi^2$/NDF: 1021337.1/15

Left Out: 610.466+/-0.121 $\chi^2$/NDF:1030375.0/16

Right Out: 915.358+/-0.245 $\chi^2$/NDF: 858906.3/18

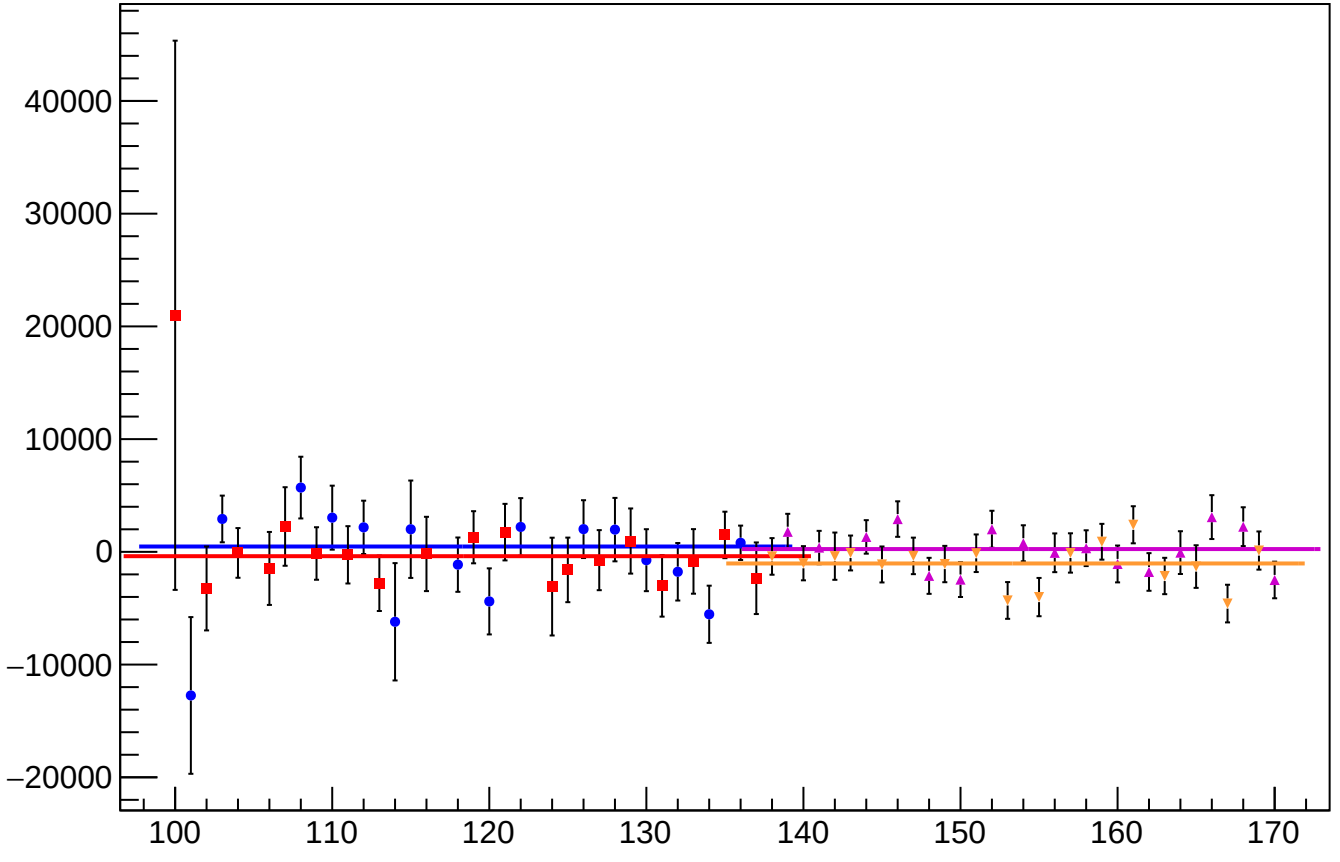
Left In: 640.579+/-0.127 $\chi^2$/NDF:809690.3/15

+ sign 663.278+/-0.108 $\chi^2$/NDF: 2987492.5/32

All: 680.208+/-0.078 $\chi^2$/NDF: 5701731.8/67

- sign 698.729+/-0.113 $\chi^2$/NDF: 2662437.1/34

# asym_usr_atr1_dd_mean vs Slug




Right In: 473.494+/-649.243 $\chi^2$/NDF: 22.7/15

Left Out: -1030.387+/-402.691 $\chi^2$/NDF:19.8/16

Right Out: -384.785+/-641.994 $\chi^2$/NDF: 7.3/18

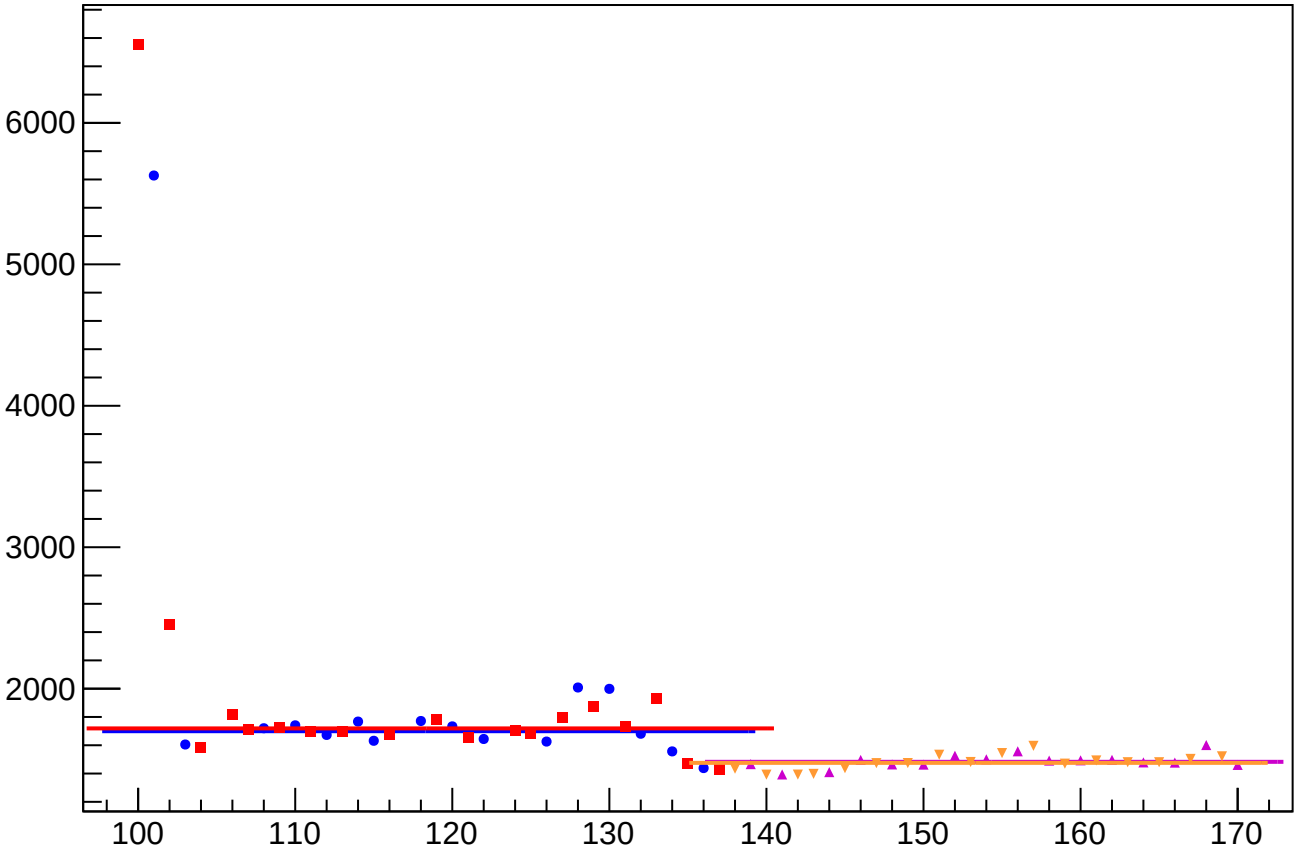
Left In: 247.389+/-408.062 $\chi^2$/NDF:19.4/15

+ sign -612.571+/-342.210 $\chi^2$/NDF: 46.4/32

All: -275.692+/-242.744 $\chi^2$/NDF: 75.6/67

- sign 65.479+/-344.383 $\chi^2$/NDF: 27.3/34

# asym_usr_atr1_dd_rms vs Slug




Right In: 1699.330+/-0.459 $\chi^2$/NDF: 762097.7/15

Left Out: 1475.546+/-0.285 $\chi^2$/NDF:34157.2/16

Right Out: 1719.103+/-0.454 $\chi^2$/NDF: 233751.6/18

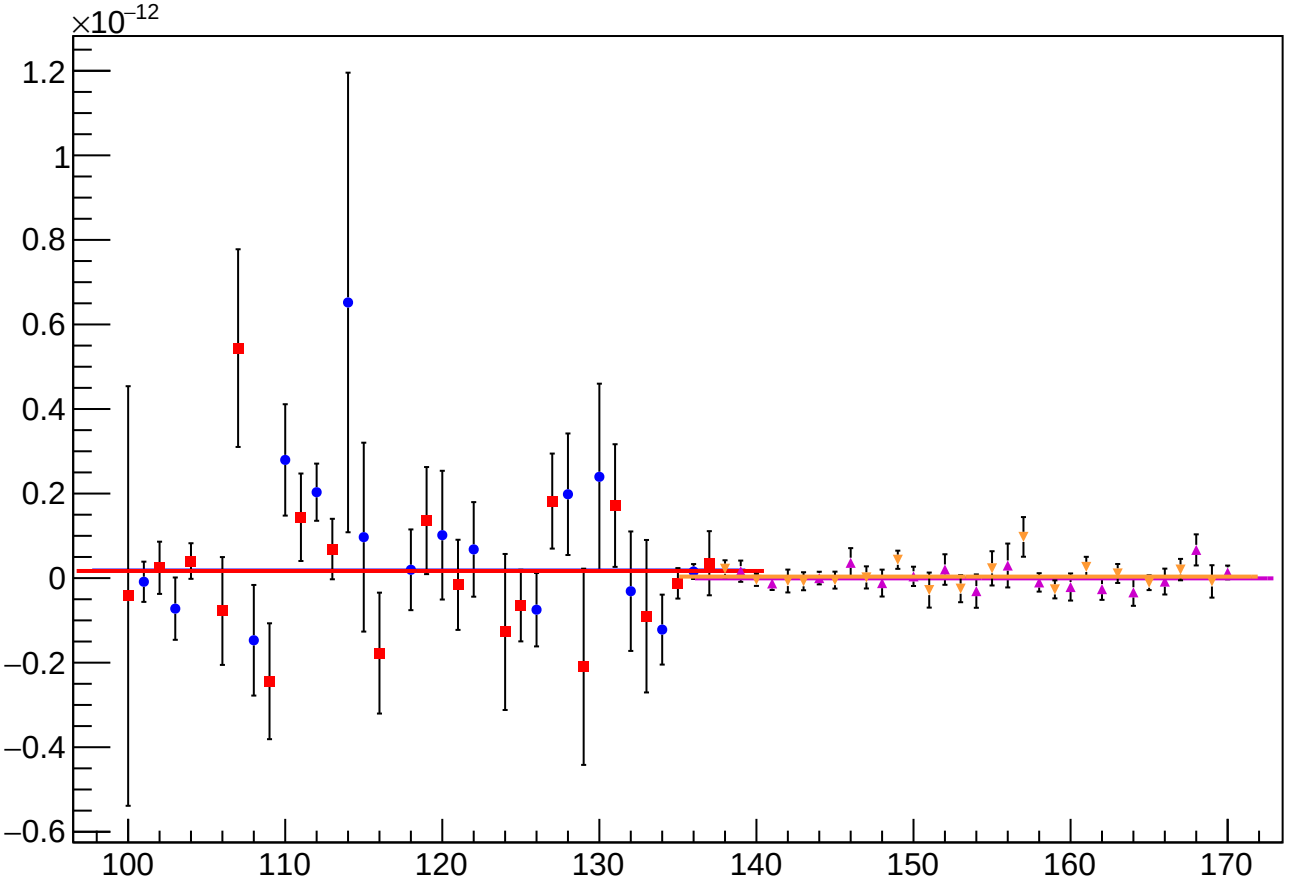
Left In: 1482.857+/-0.289 $\chi^2$/NDF:28509.0/15

+ sign 1537.718+/-0.242 $\chi^2$/NDF: 967854.5/32

All: 1544.237+/-0.172 $\chi^2$/NDF: 1424473.0/67

- sign 1550.838+/-0.244 $\chi^2$/NDF: 455158.0/34

# asym_usr_atr1_dd_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 23.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:15.0/16

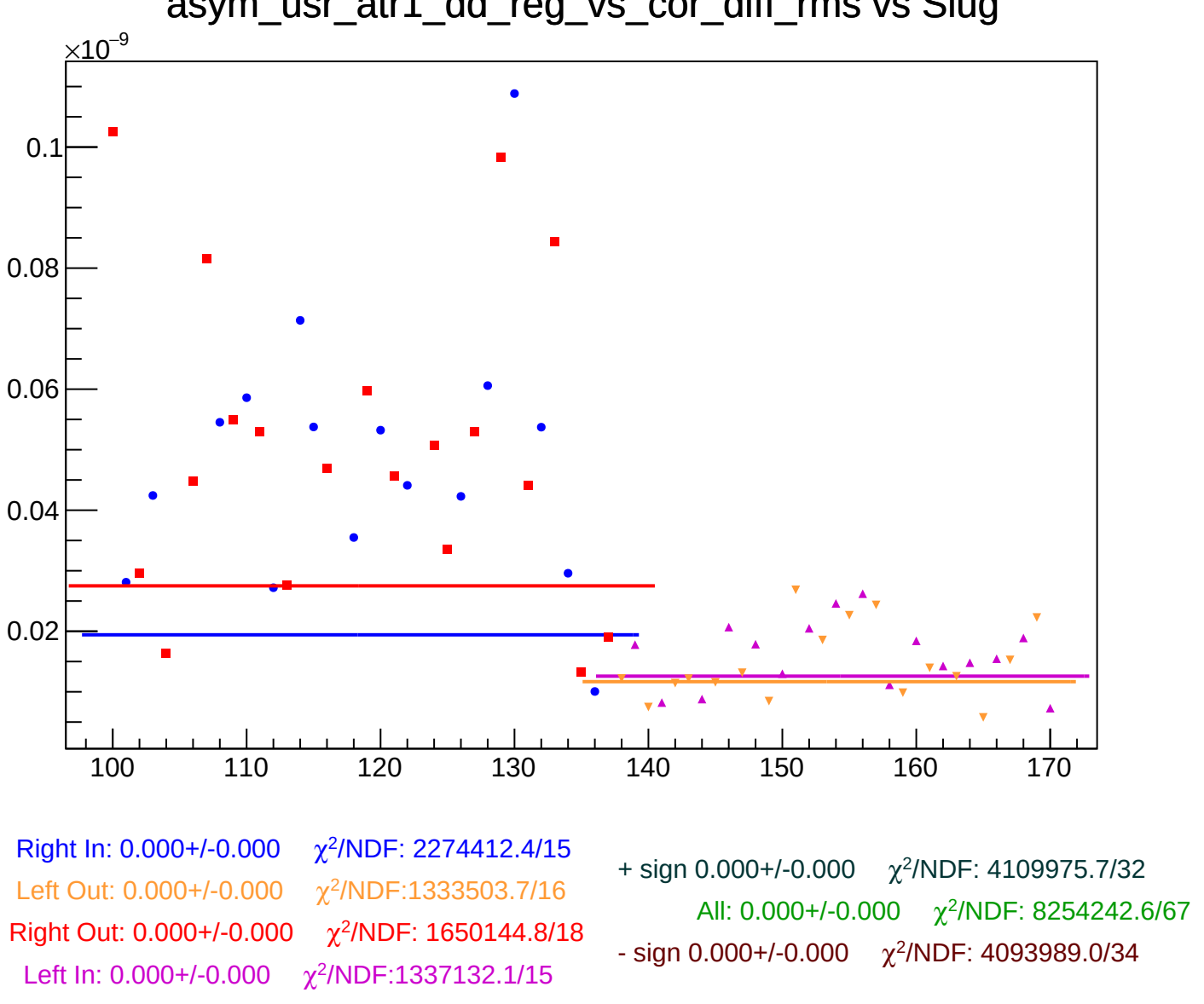
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.3/18

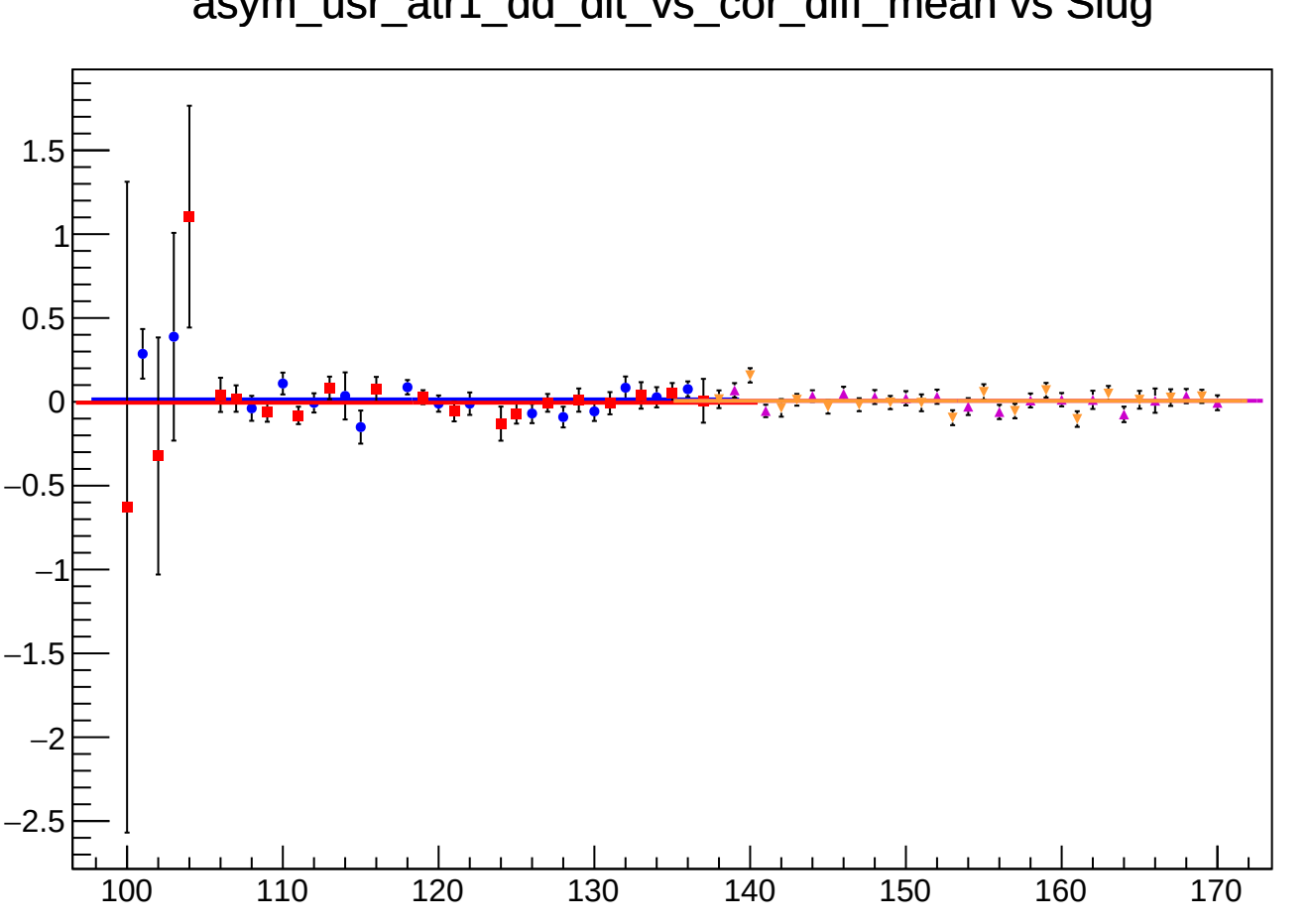
Left In: -0.000+/-0.000 $\chi^2$/NDF:10.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 39.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 72.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 32.5/34


asym_usr_atr1_dd_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.1
0.08
0.06
0.04
0.02
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2274412.4/15
Left Out: 0.000+/-0.000 χ²/NDF:1333503.7/16
Right Out: 0.000+/-0.000 χ²/NDF: 1650144.8/18
Left In: 0.000+/-0.000 χ²/NDF:1337132.1/15
+ sign 0.000+/-0.000 χ²/NDF: 4109975.7/32
All: 0.000+/-0.000 χ²/NDF: 8254242.6/67
- sign 0.000+/-0.000 χ²/NDF: 4093989.0/34




Right In: 0.014+/-0.016 $\chi^2$/NDF: 22.0/15

Left Out: 0.006+/-0.011 $\chi^2$/NDF:31.8/16

Right Out: -0.005+/-0.016 $\chi^2$/NDF: 14.9/18

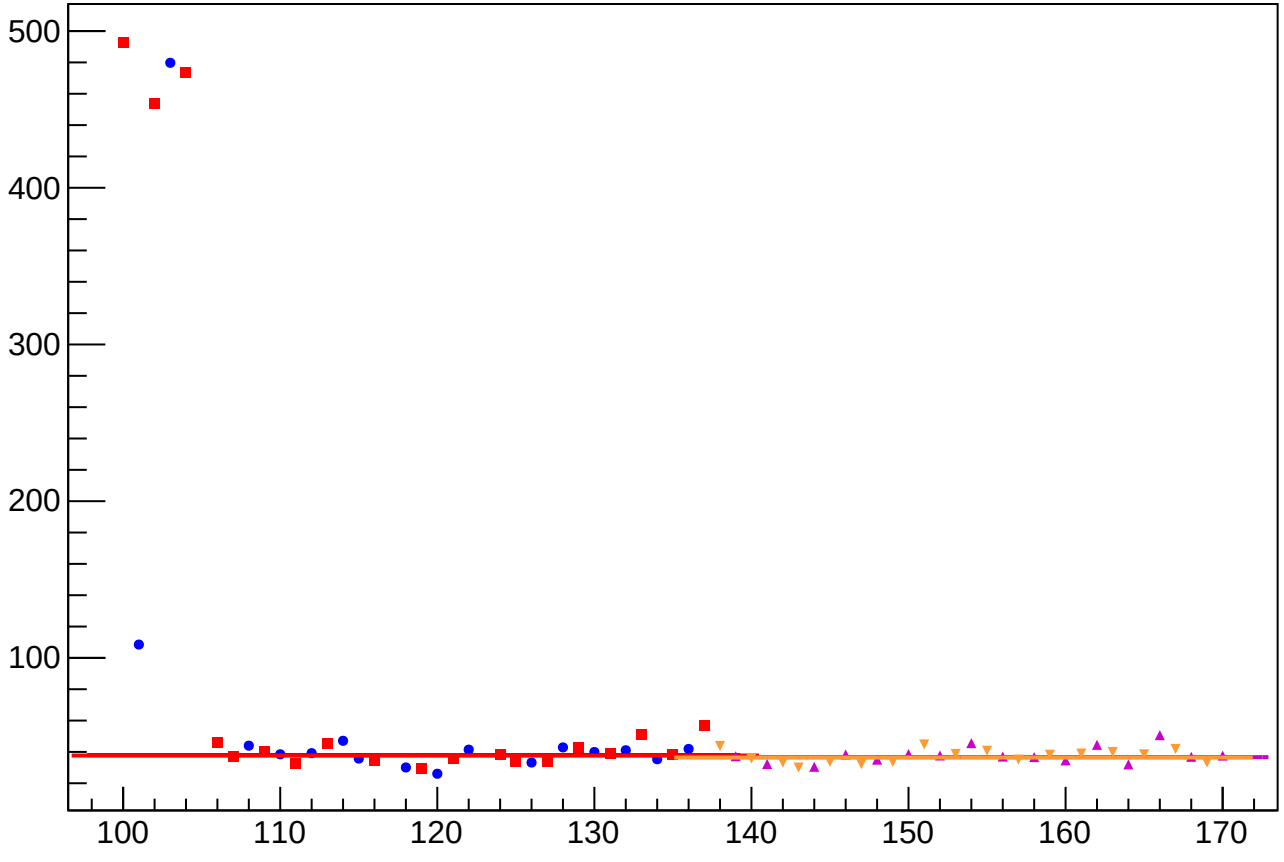
Left In: 0.006+/-0.011 $\chi^2$/NDF:13.7/15

+ sign 0.009+/-0.009 $\chi^2$/NDF: 54.0/32

All: 0.006+/-0.006 $\chi^2$/NDF: 83.1/67

- sign 0.003+/-0.009 $\chi^2$/NDF: 28.9/34

# asym_usr_atr1_dd_dit_vs_cor_diff_rms vs Slug




Right In: 37.942+/-0.011 $\chi^2$/NDF: 1739669.4/15

Left Out: 36.412+/-0.008 $\chi^2$/NDF:297480.6/16

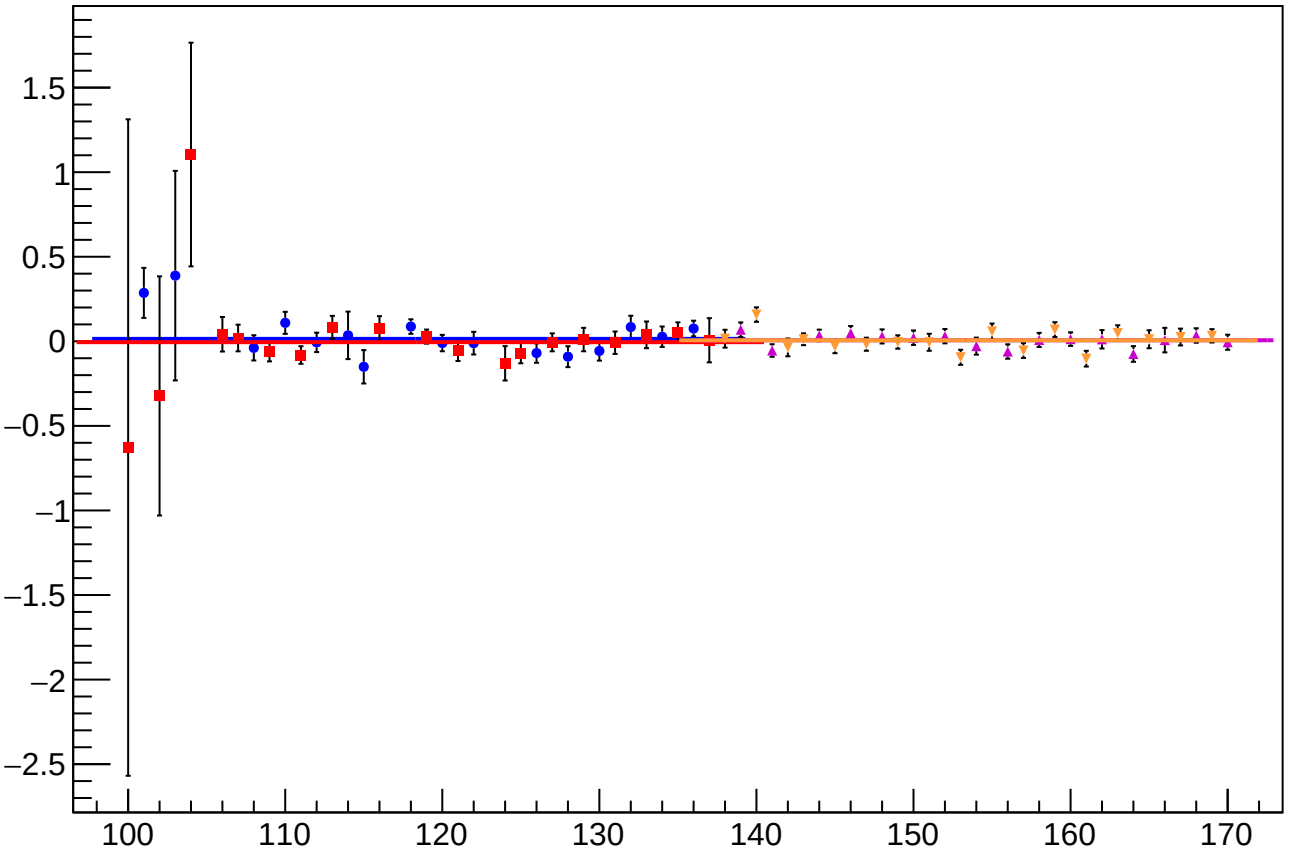
Right Out: 37.696+/-0.011 $\chi^2$/NDF: 1944881.8/18

Left In: 36.670+/-0.008 $\chi^2$/NDF:309208.4/15

+ sign 36.887+/-0.006 $\chi^2$/NDF: 2049874.4/32

All: 36.939+/-0.004 $\chi^2$/NDF: 4309712.6/67

- sign 36.991+/-0.006 $\chi^2$/NDF: 2259703.1/34




Right In: 0.014+/-0.016 $\chi^2$/NDF: 22.0/15

Left Out: 0.006+/-0.011 $\chi^2$/NDF:31.8/16

Right Out: -0.005+/-0.016 $\chi^2$/NDF: 14.9/18

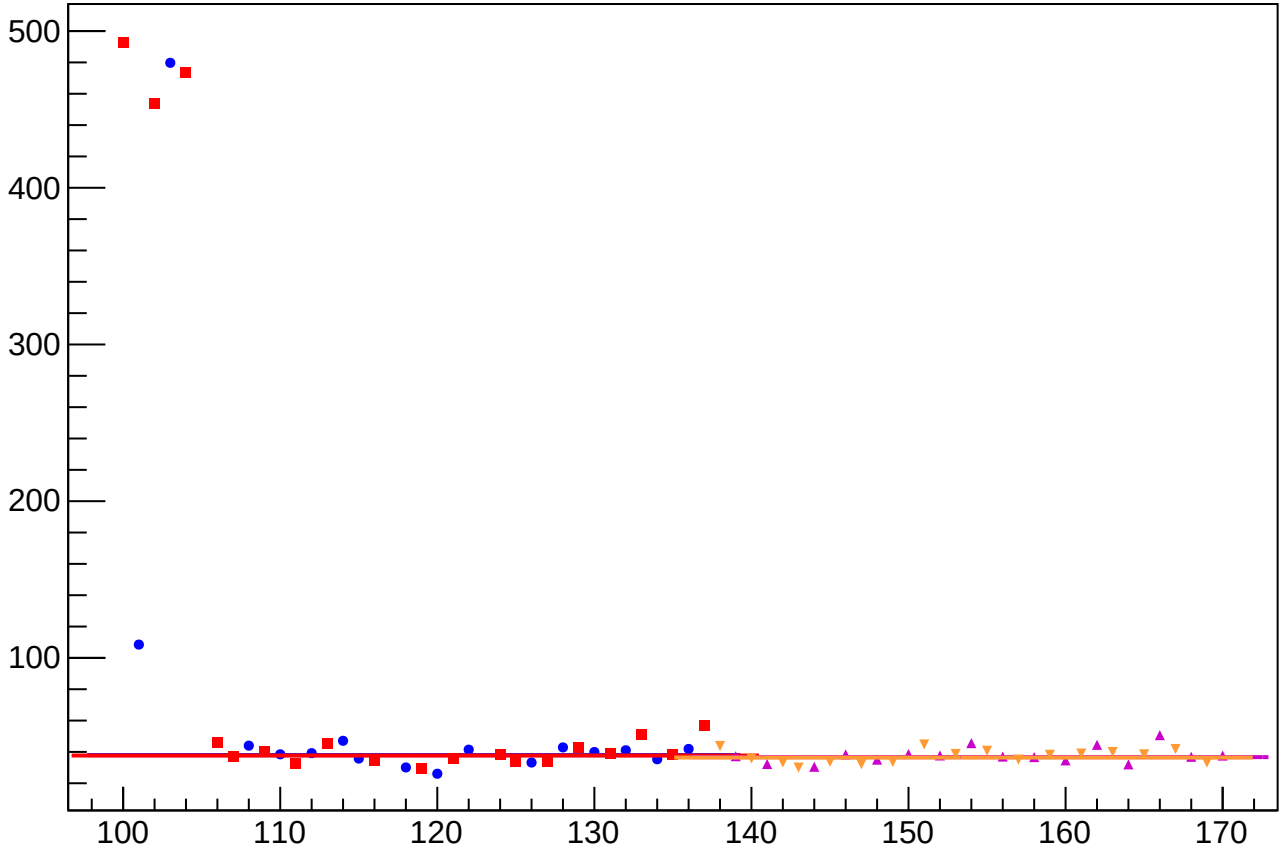
Left In: 0.006+/-0.011 $\chi^2$/NDF:13.7/15

+ sign 0.009+/-0.009 $\chi^2$/NDF: 54.0/32

All: 0.006+/-0.006 $\chi^2$/NDF: 83.1/67

- sign 0.003+/-0.009 $\chi^2$/NDF: 28.9/34

# asym_usr_atr1_dd_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 37.942+/-0.011 $\chi^2$/NDF: 1739669.4/15

Left Out: 36.412+/-0.008 $\chi^2$/NDF:297480.6/16

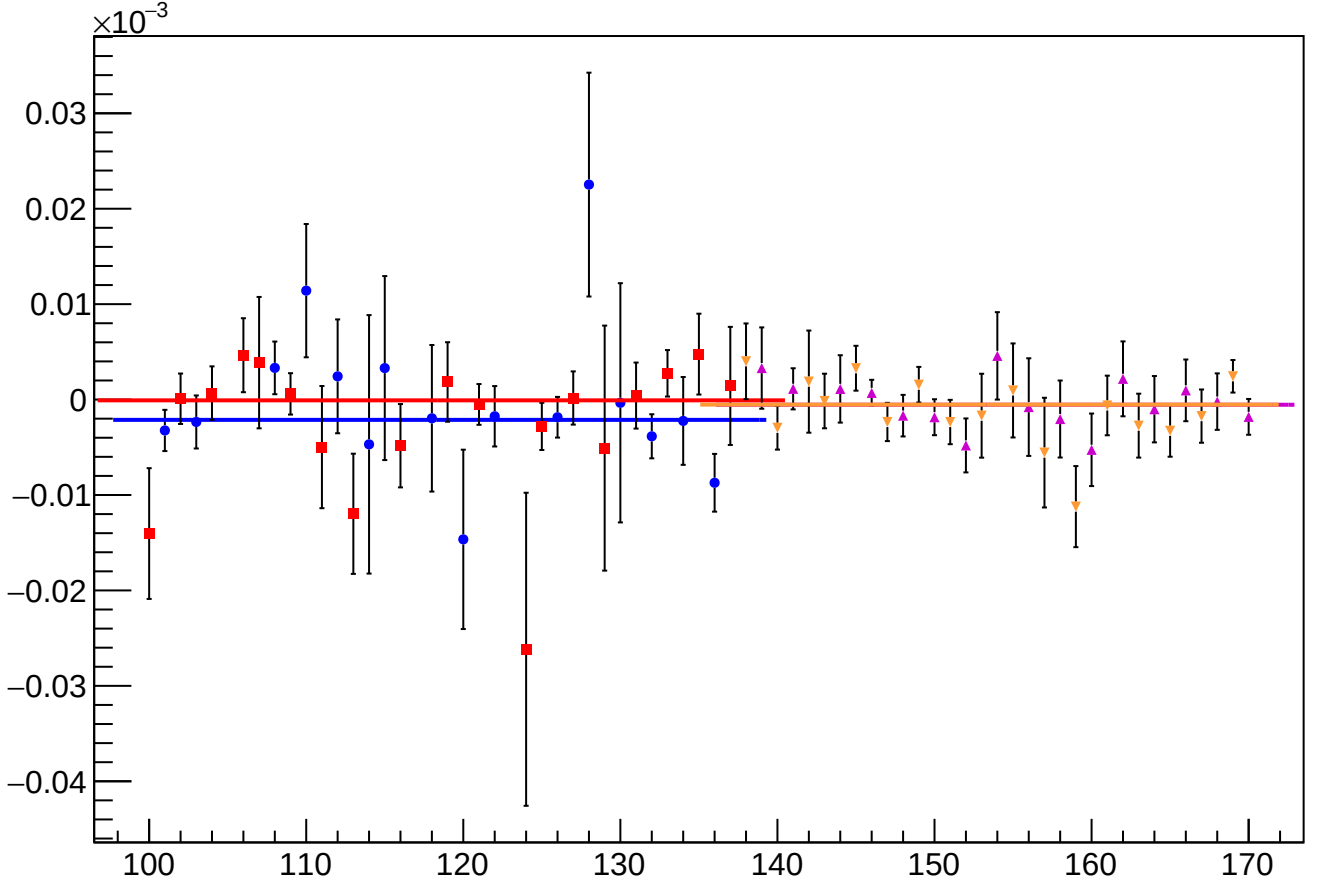
Right Out: 37.696+/-0.011 $\chi^2$/NDF: 1944881.8/18

Left In: 36.670+/-0.008 $\chi^2$/NDF:309208.4/15

+ sign 36.887+/-0.006 $\chi^2$/NDF: 2049874.4/32

All: 36.939+/-0.004 $\chi^2$/NDF: 4309712.6/67

- sign 36.991+/-0.006 $\chi^2$/NDF: 2259703.1/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 20.4/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:19.9/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.4/18

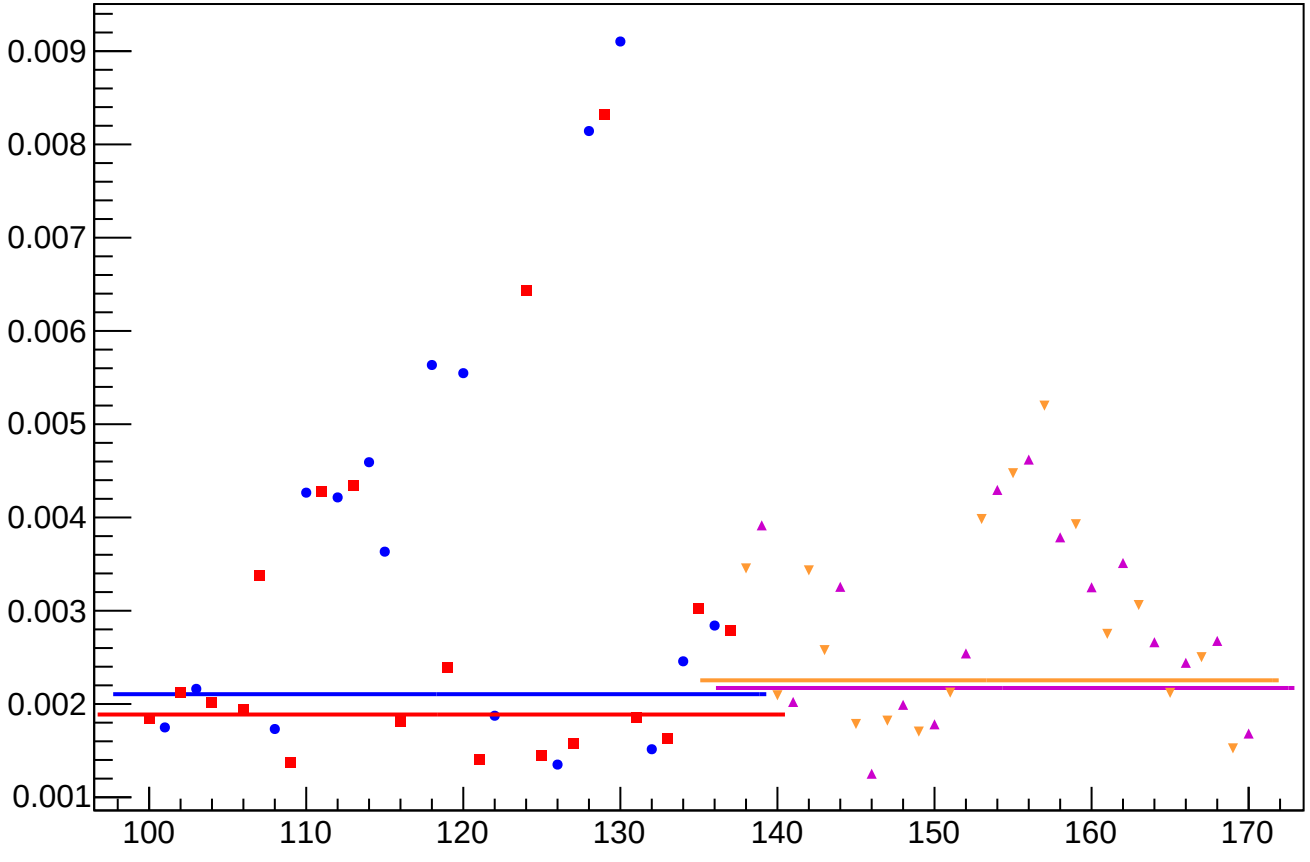
Left In: -0.000+/-0.000 $\chi^2$/NDF:9.6/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 42.4/32

All: -0.000+/-0.000 $\chi^2$/NDF: 71.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 28.2/34

# asym_usr_atr1_dd_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 3017568.9/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:2773071.7/16

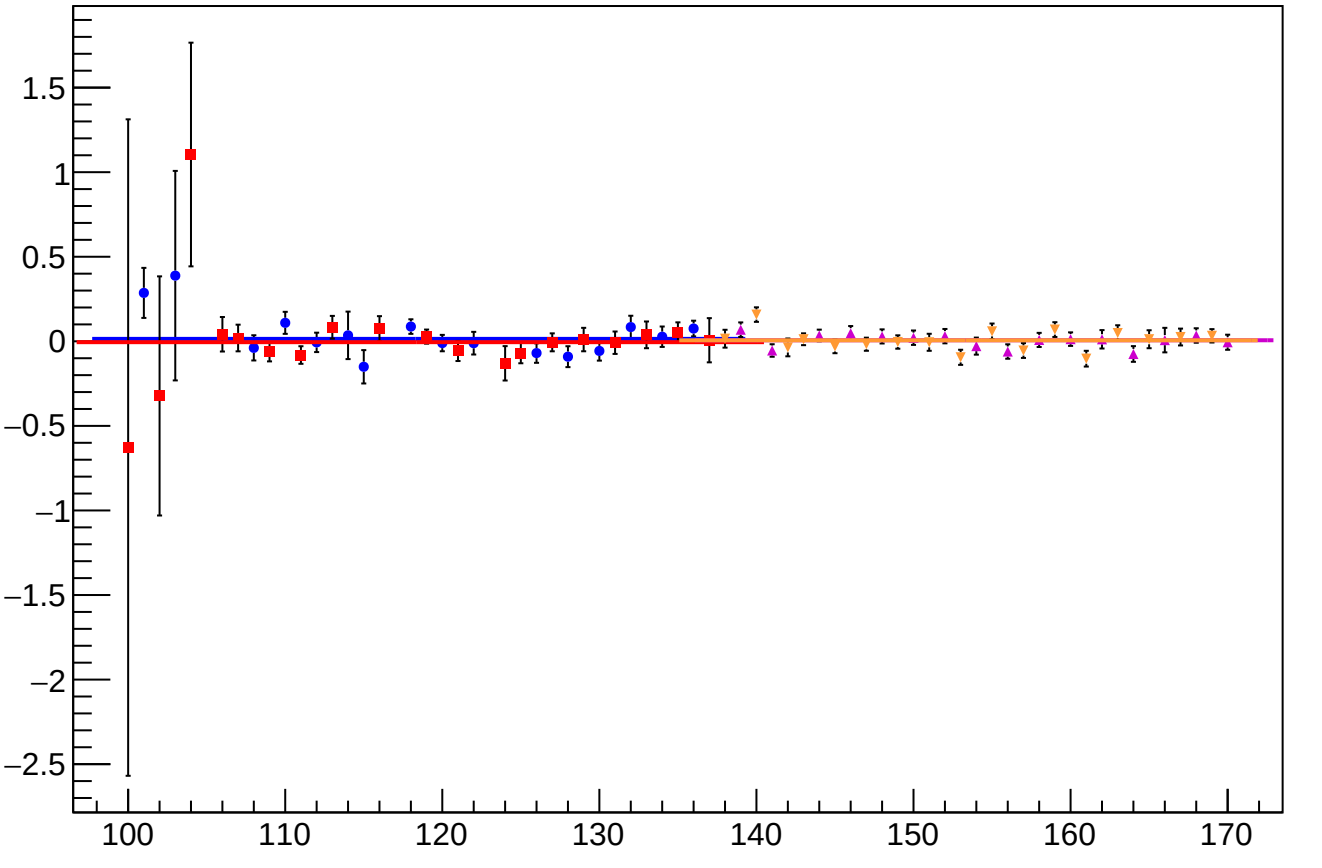
Right Out: 0.002+/-0.000 $\chi^2$/NDF: 1892000.0/18

Left In: 0.002+/-0.000 $\chi^2$/NDF:3420307.3/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 5826292.7/32

All: 0.002+/-0.000 $\chi^2$/NDF: 11371997.9/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 5466977.4/34




Right In: 0.014+/-0.016 $\chi^2$/NDF: 22.0/15

Left Out: 0.006+/-0.011 $\chi^2$/NDF:31.8/16

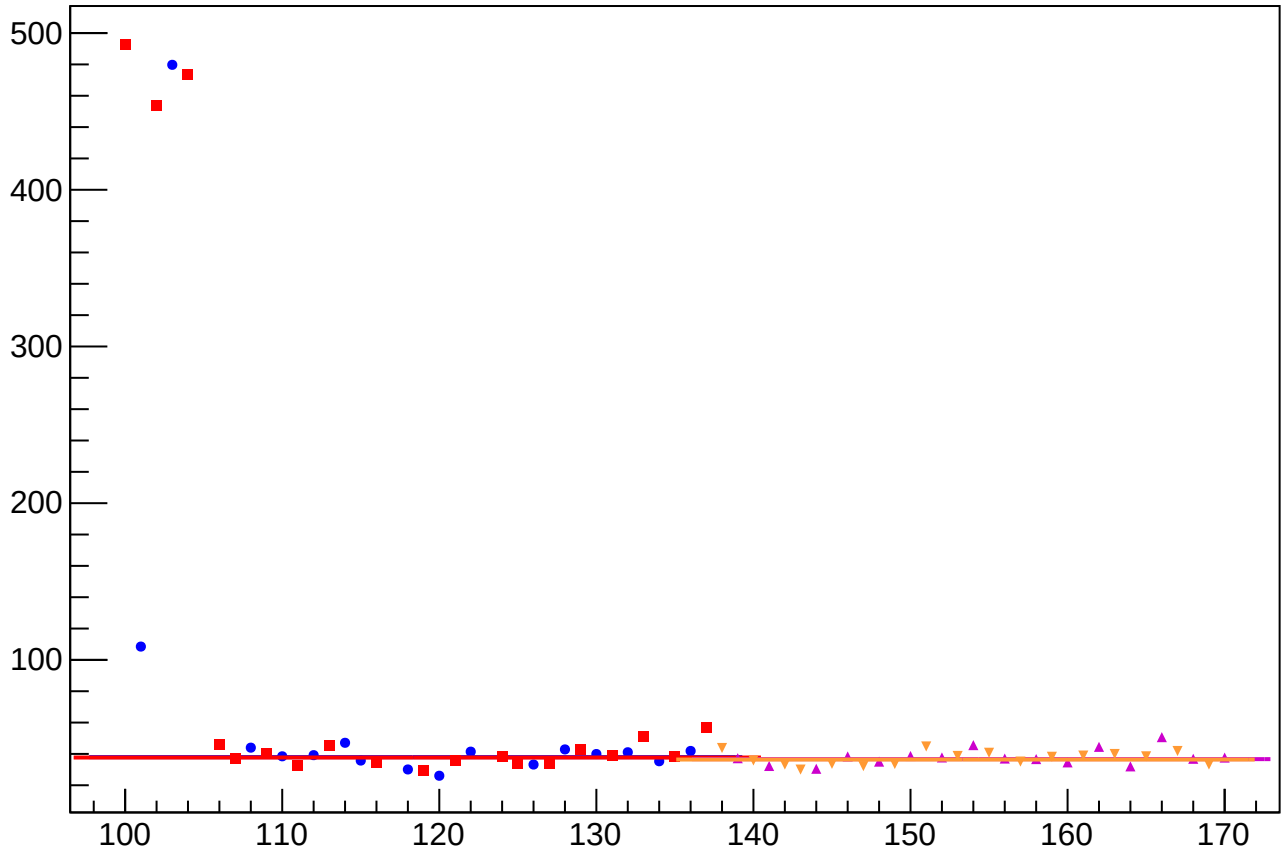
Right Out: -0.005+/-0.016 $\chi^2$/NDF: 14.9/18

Left In: 0.006+/-0.011 $\chi^2$/NDF:13.7/15

+ sign 0.009+/-0.009 $\chi^2$/NDF: 54.0/32

All: 0.006+/-0.006 $\chi^2$/NDF: 83.1/67

- sign 0.003+/-0.009 $\chi^2$/NDF: 28.9/34




Right In: 37.942+/-0.011 $\chi^2$/NDF: 1739681.1/15

Left Out: 36.412+/-0.008 $\chi^2$/NDF:297532.4/16

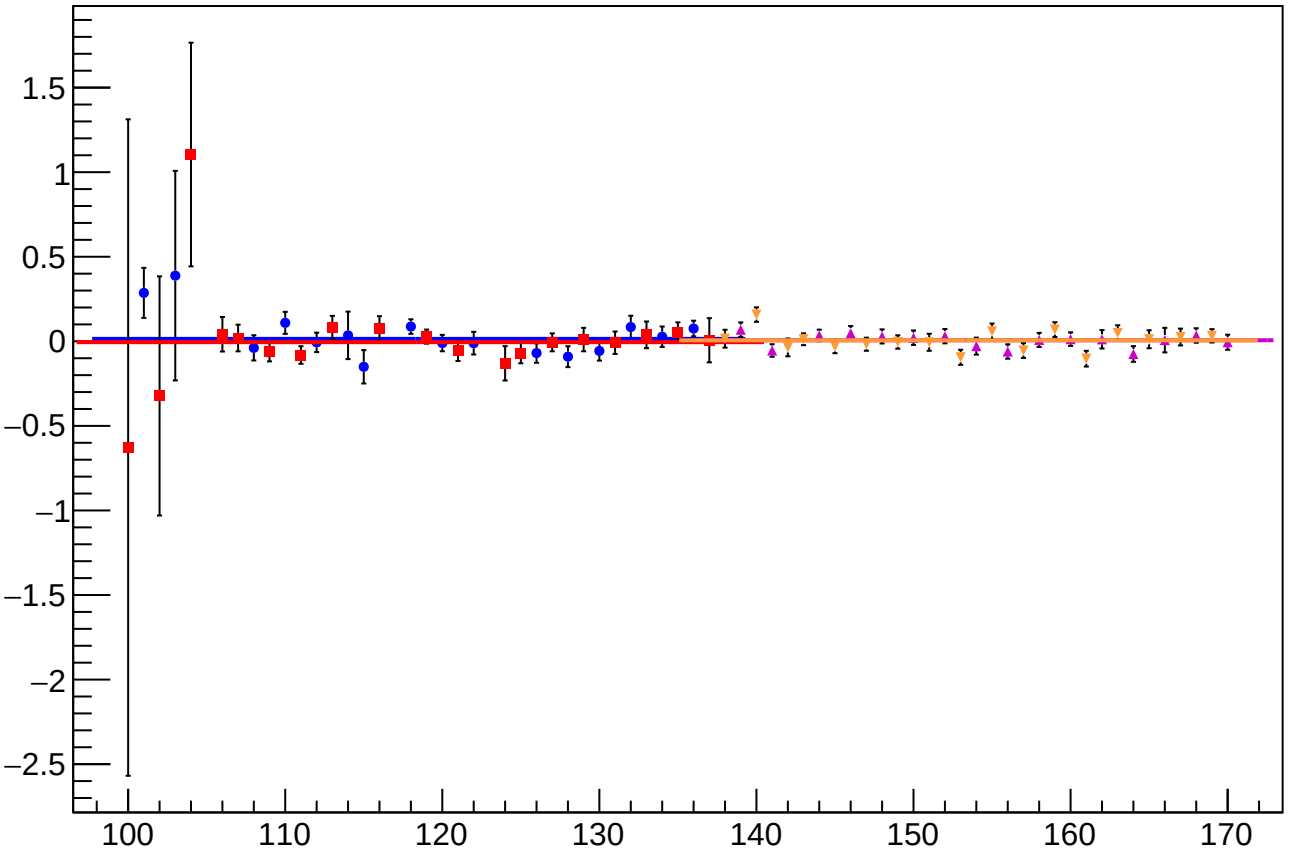
Right Out: 37.695+/-0.011 $\chi^2$/NDF: 1944959.2/18

Left In: 36.670+/-0.008 $\chi^2$/NDF:309244.4/15

+ sign 36.887+/-0.006 $\chi^2$/NDF: 2049931.7/32

All: 36.938+/-0.004 $\chi^2$/NDF: 4309873.1/67

- sign 36.990+/-0.006 $\chi^2$/NDF: 2259807.2/34




Right In: 0.014+/-0.016 $\chi^2$/NDF: 22.0/15

Left Out: 0.006+/-0.011 $\chi^2$/NDF:31.8/16

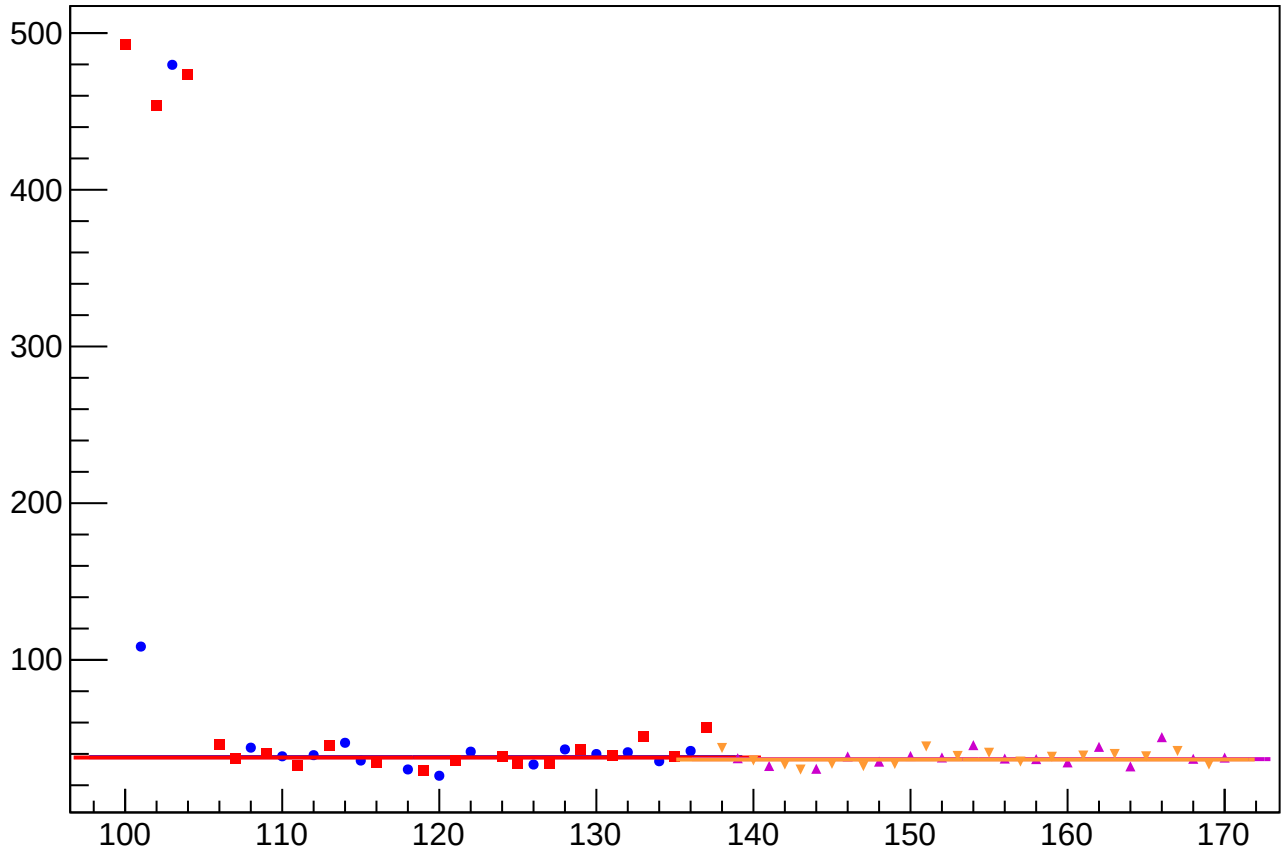
Right Out: -0.005+/-0.016 $\chi^2$/NDF: 14.9/18

Left In: 0.006+/-0.011 $\chi^2$/NDF:13.7/15

+ sign 0.009+/-0.009 $\chi^2$/NDF: 54.0/32

All: 0.006+/-0.006 $\chi^2$/NDF: 83.1/67

- sign 0.003+/-0.009 $\chi^2$/NDF: 28.9/34




Right In: 37.942+/-0.011 $\chi^2$/NDF: 1739681.1/15

Left Out: 36.412+/-0.008 $\chi^2$/NDF:297532.4/16

Right Out: 37.695+/-0.011 $\chi^2$/NDF: 1944959.2/18

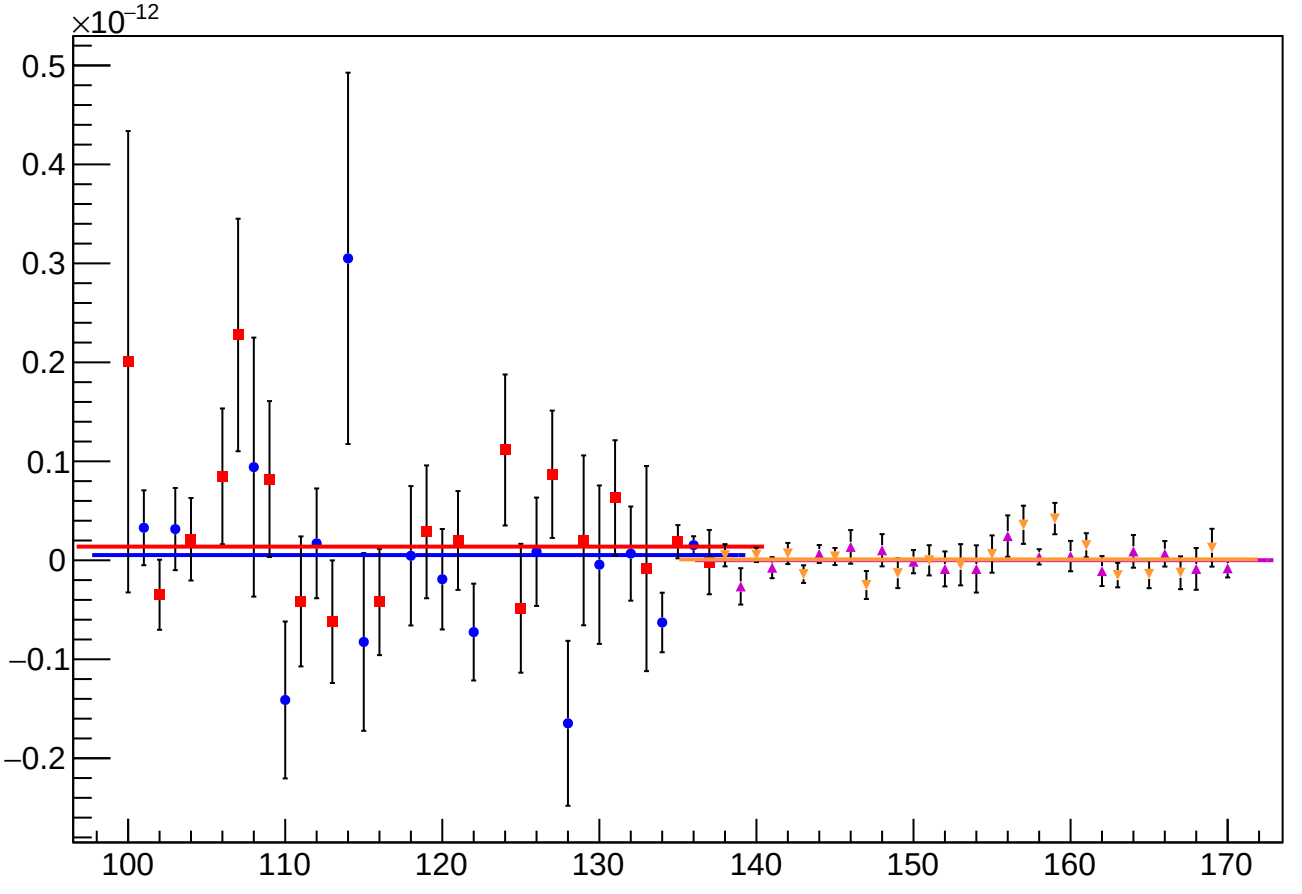
Left In: 36.670+/-0.008 $\chi^2$/NDF:309244.4/15

+ sign 36.887+/-0.006 $\chi^2$/NDF: 2049931.7/32

All: 36.938+/-0.004 $\chi^2$/NDF: 4309873.1/67

- sign 36.990+/-0.006 $\chi^2$/NDF: 2259807.2/34

# asym_usr_atr1_dd_eigen_cor_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 21.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:23.3/16

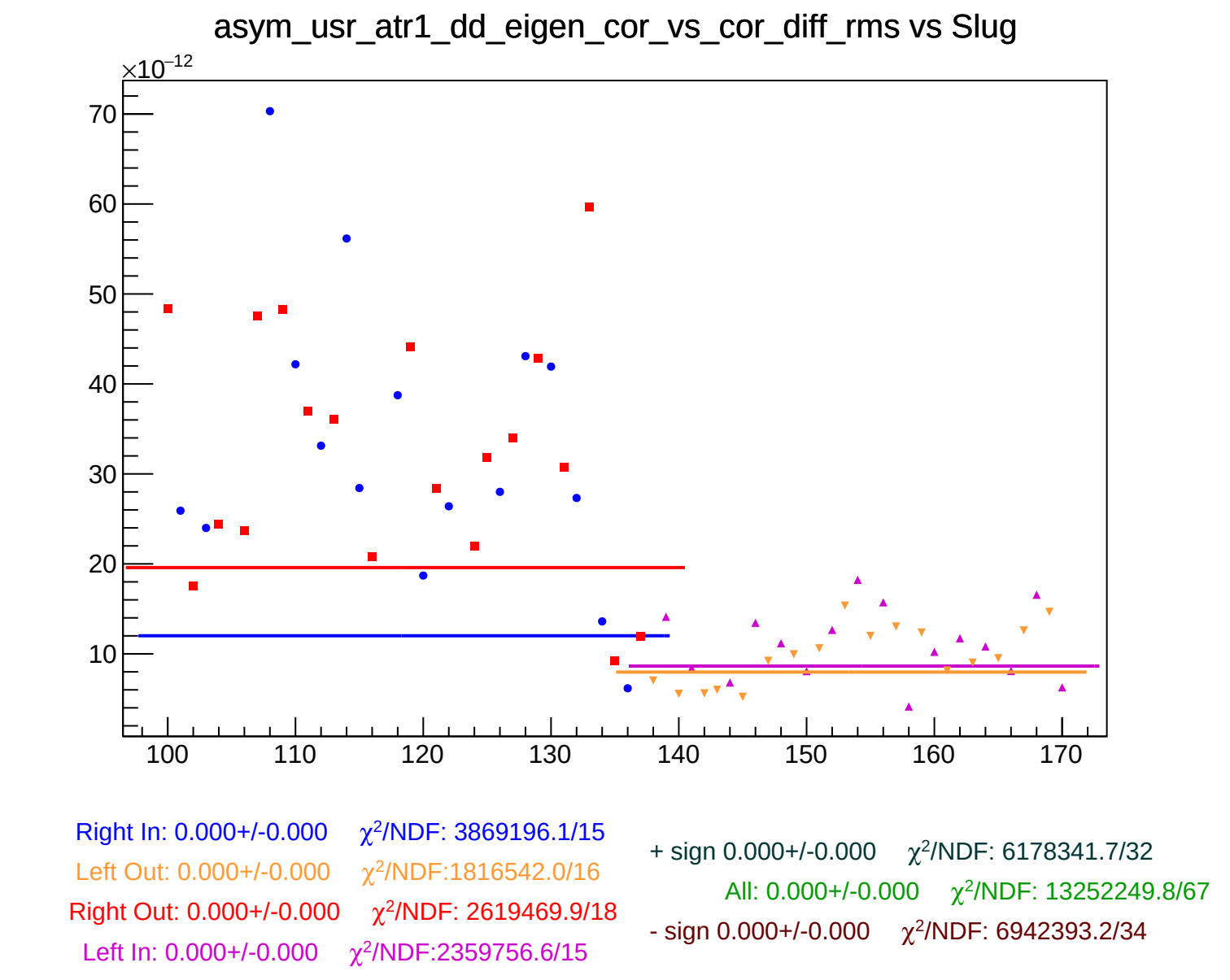
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 16.0/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:8.1/15

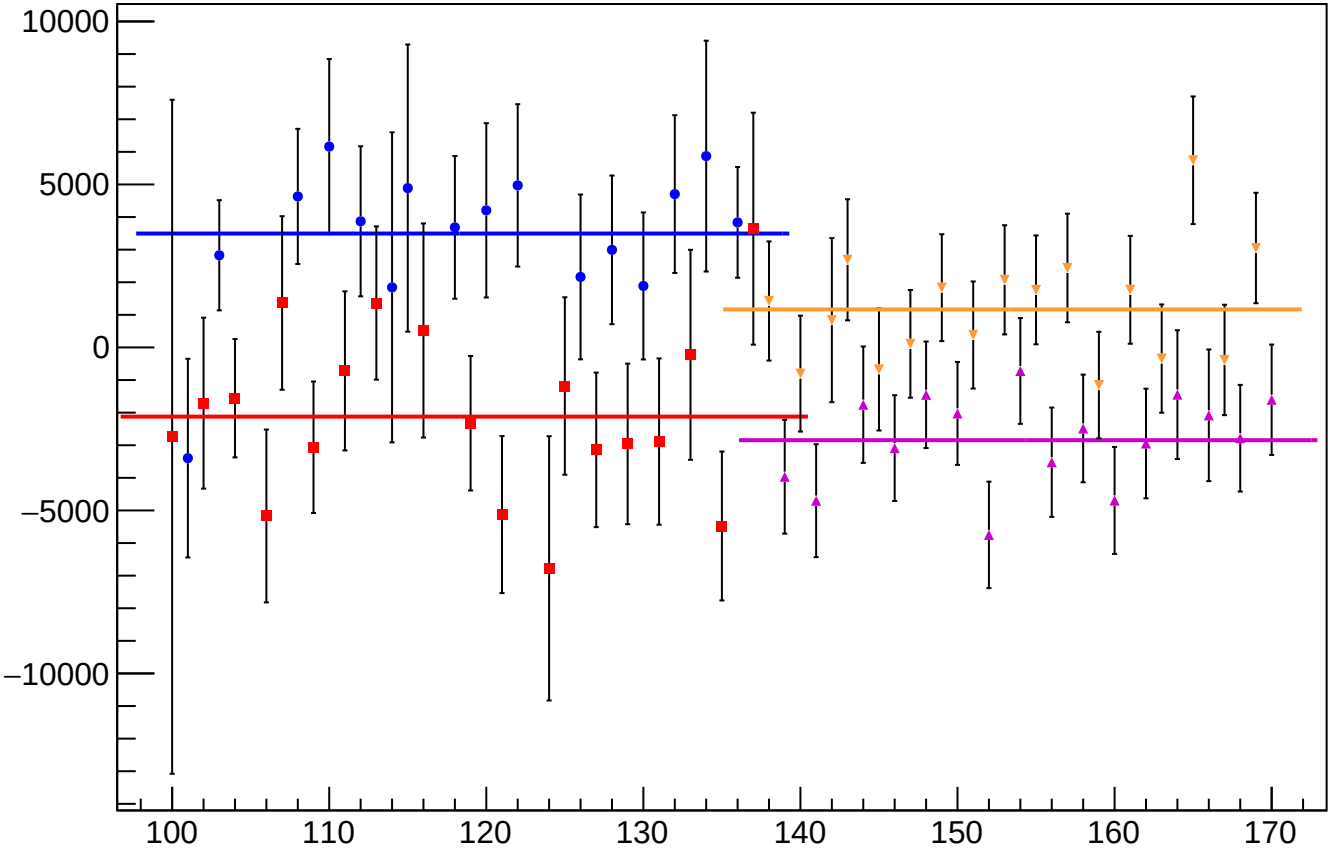
+ sign 0.000+/-0.000 $\chi^2$/NDF: 45.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 70.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 25.6/34


asym_usr_atr1_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
70
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3869196.1/15
Left Out: 0.000+/-0.000 χ²/NDF:1816542.0/16
Right Out: 0.000+/-0.000 χ²/NDF: 2619469.9/18
Left In: 0.000+/-0.000 χ²/NDF:2359756.6/15
+ sign 0.000+/-0.000 χ²/NDF: 6178341.7/32
All: 0.000+/-0.000 χ²/NDF: 13252249.8/67
- sign 0.000+/-0.000 χ²/NDF: 6942393.2/34

# reg_asym_usr_atr2_avg_mean vs Slug




Right In: 3494.380+/-601.185 $\chi^2$/NDF: 8.8/15

Left Out: 1166.214+/-422.772 $\chi^2$/NDF:15.2/16

Right Out: -2121.717+/-587.617 $\chi^2$/NDF: 15.1/18

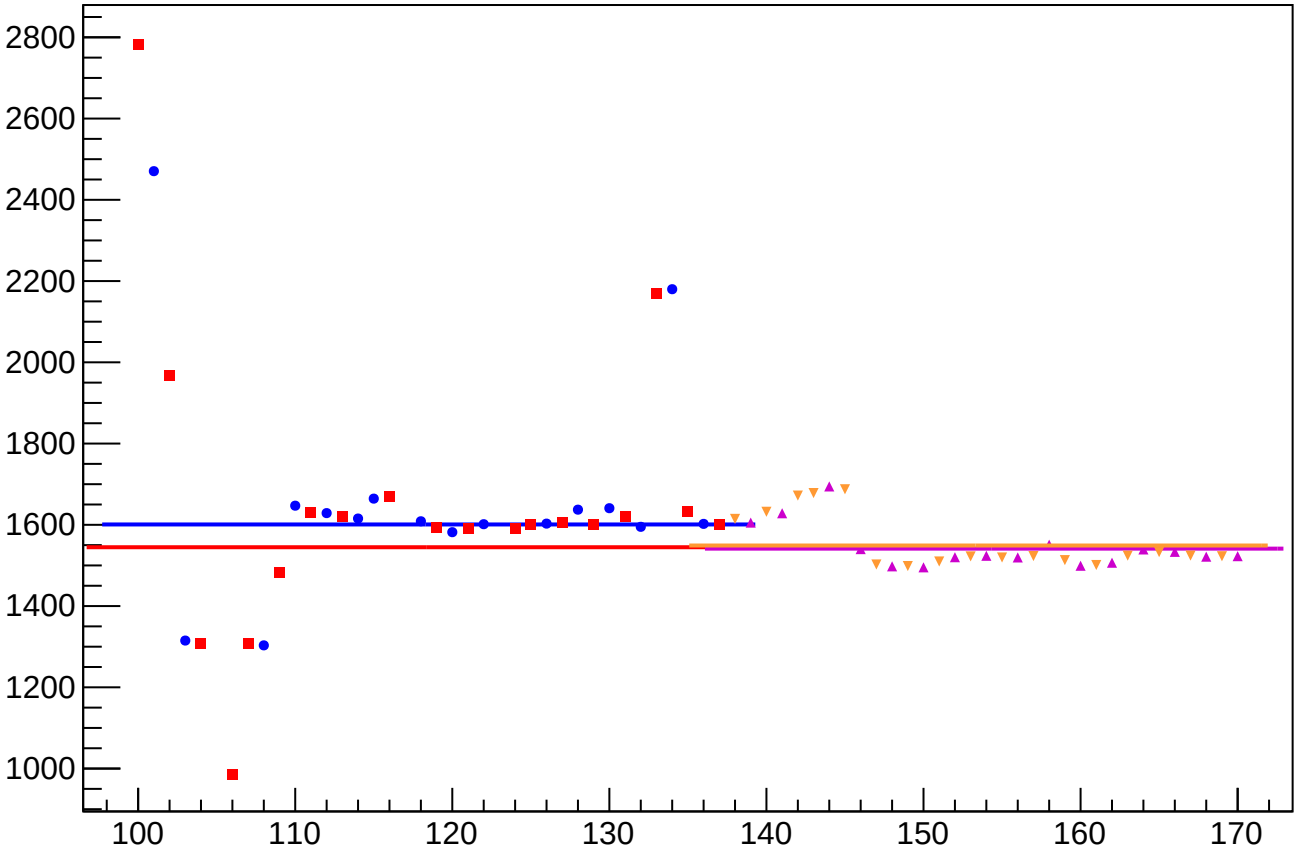
Left In: -2844.828+/-424.136 $\chi^2$/NDF:10.5/15

+ sign 1936.594+/-345.823 $\chi^2$/NDF: 34.1/32

All: -342.857+/-243.854 $\chi^2$/NDF: 147.1/67

- sign -2597.142+/-343.908 $\chi^2$/NDF: 26.6/34

# reg_asym_usr_atr2_avg_rms vs Slug




Right In: 1600.880+/-0.425 $\chi^2$/NDF: 317414.0/15

Left Out: 1549.057+/-0.299 $\chi^2$/NDF:42713.1/16

Right Out: 1544.809+/-0.409 $\chi^2$/NDF: 376127.4/18

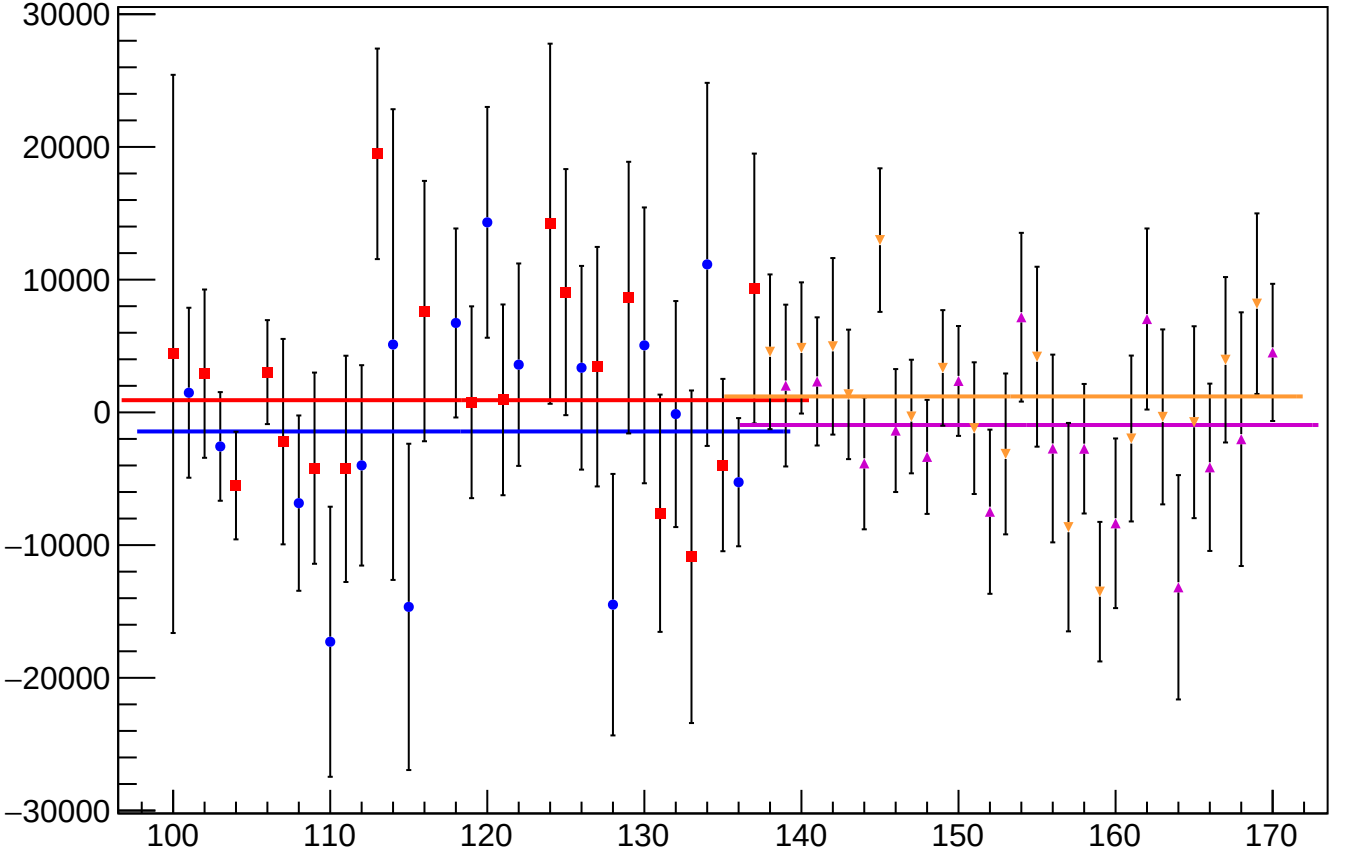
Left In: 1541.368+/-0.300 $\chi^2$/NDF:29291.4/15

+ sign 1566.205+/-0.245 $\chi^2$/NDF: 370070.8/32

All: 1554.254+/-0.172 $\chi^2$/NDF: 780258.7/67

- sign 1542.573+/-0.242 $\chi^2$/NDF: 405465.0/34

# asym_usr_atr2_avg_reg_correction_mean vs Slug




Right In: -1437.118+/-1848.287 $\chi^2$/NDF: 13.9/15

Left Out: 1201.504+/-1368.872 $\chi^2$/NDF:18.3/16

Right Out: 918.485+/-1669.278 $\chi^2$/NDF: 15.3/18

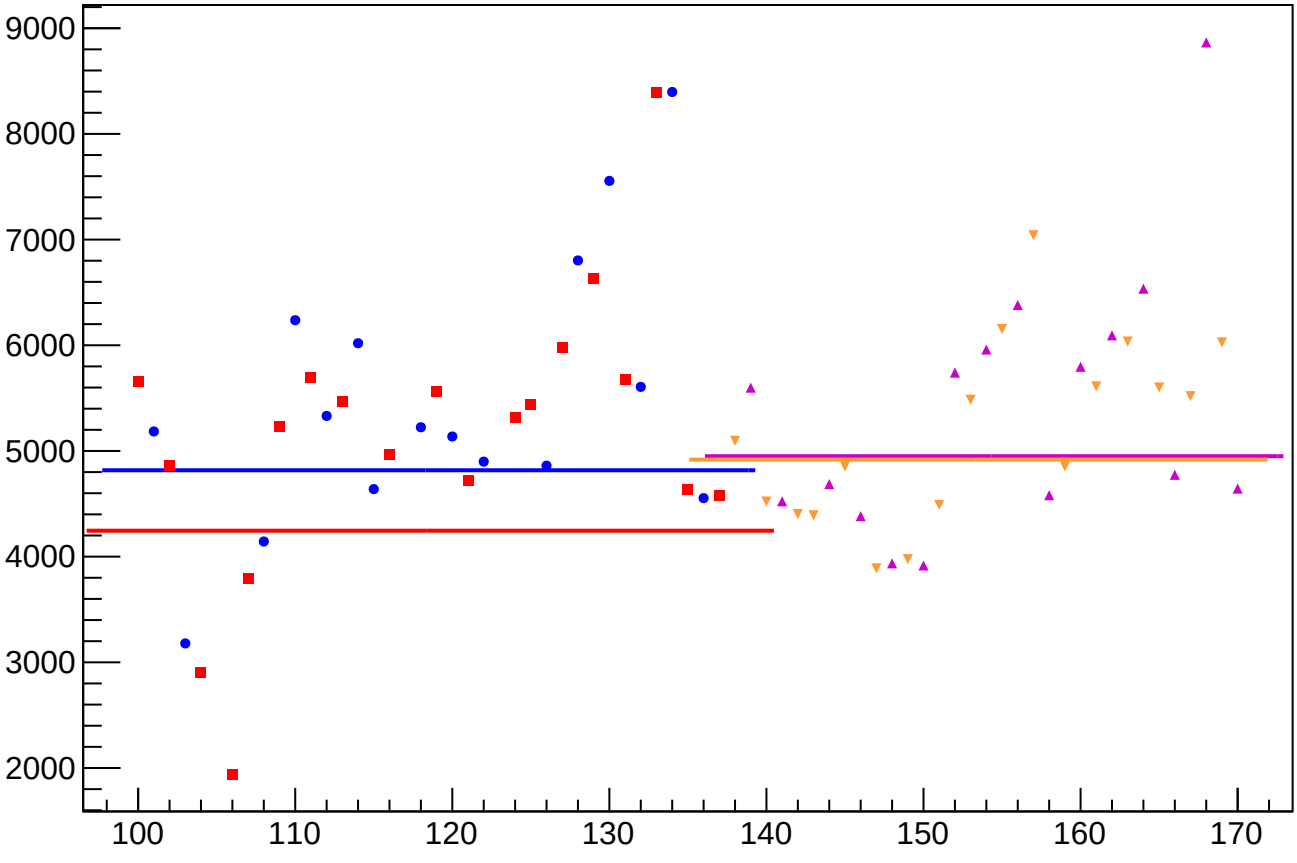
Left In: -951.327+/-1392.388 $\chi^2$/NDF:11.1/15

+ sign 266.854+/-1100.032 $\chi^2$/NDF: 33.5/32

All: 34.952+/-766.724 $\chi^2$/NDF: 60.8/67

- sign -184.150+/-1069.245 $\chi^2$/NDF: 27.2/34

# asym_usr_atr2_avg_reg_correction_rms vs Slug




Right In: 4817.344+/-1.307 $\chi^2$/NDF: 795431.1/15

Left Out: 4918.103+/-0.968 $\chi^2$/NDF:676658.4/16

Right Out: 4245.533+/-1.180 $\chi^2$/NDF: 1683159.2/18

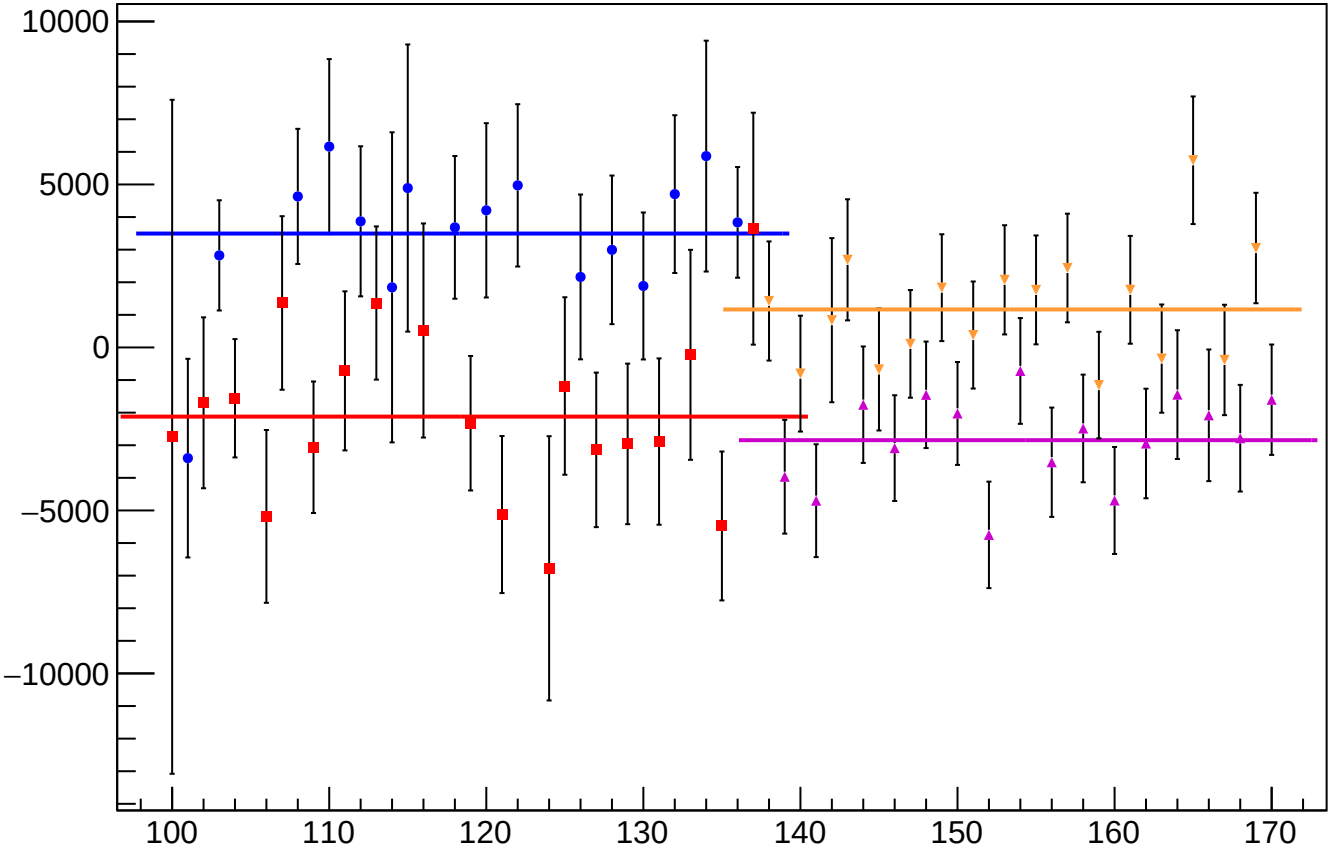
Left In: 4950.276+/-0.985 $\chi^2$/NDF:992526.3/15

+ sign 4882.412+/-0.778 $\chi^2$/NDF: 1475927.8/32

All: 4768.627+/-0.542 $\chi^2$/NDF: 4403446.6/67

- sign 4661.123+/-0.756 $\chi^2$/NDF: 2885902.5/34

# cor_asym_usr_atr2_avg_mean vs Slug




Right In: 3494.046+/-601.185 $\chi^2$/NDF: 8.8/15

Left Out: 1166.053+/-422.772 $\chi^2$/NDF:15.2/16

Right Out: -2121.708+/-587.619 $\chi^2$/NDF: 15.1/18

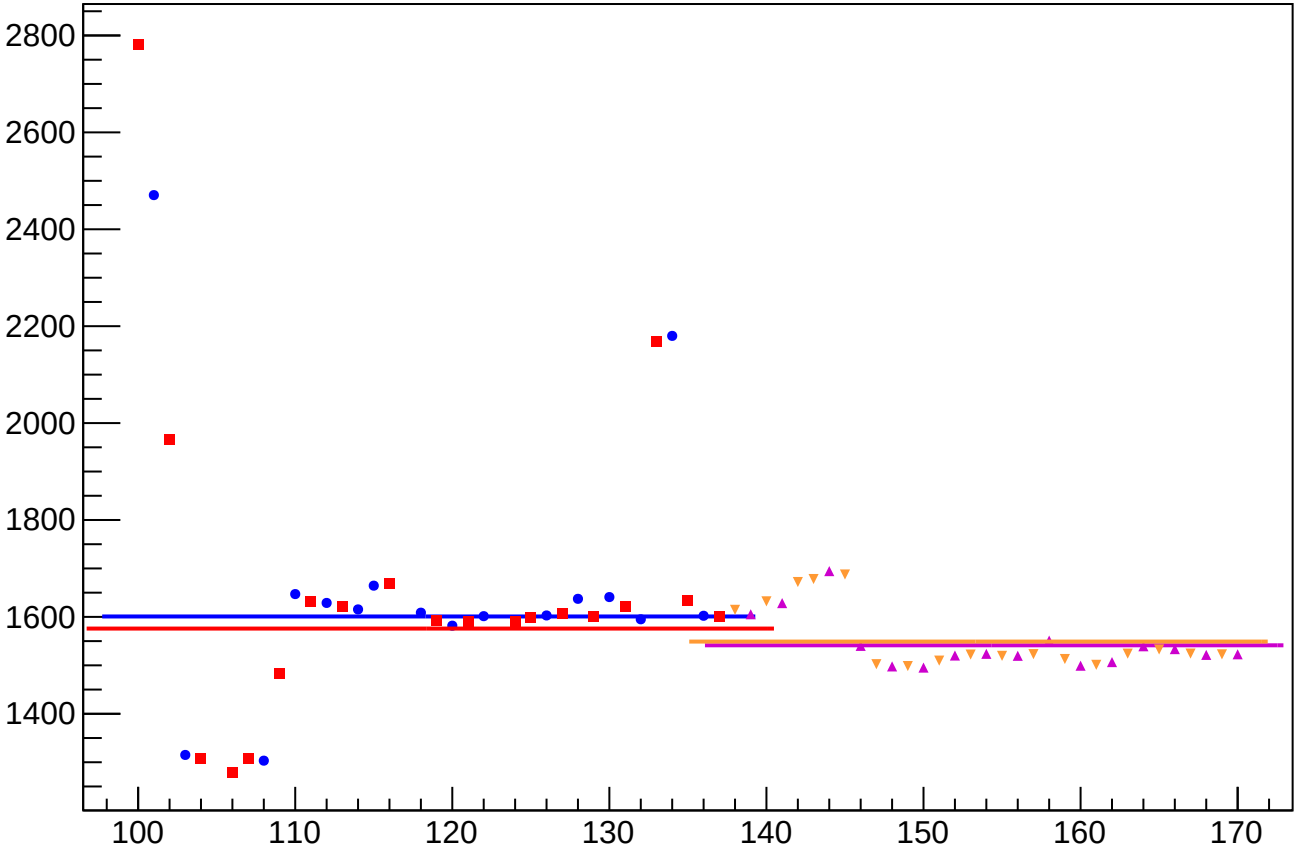
Left In: -2844.773+/-424.136 $\chi^2$/NDF:10.5/15

+ sign 1936.376+/-345.823 $\chi^2$/NDF: 34.1/32

All: -342.943+/-243.854 $\chi^2$/NDF: 147.1/67

- sign -2597.104+/-343.909 $\chi^2$/NDF: 26.6/34

# cor_asym_usr_atr2_avg_rms vs Slug




Right In: 1600.880+/-0.425 $\chi^2$/NDF: 317413.1/15

Left Out: 1549.057+/-0.299 $\chi^2$/NDF:42713.1/16

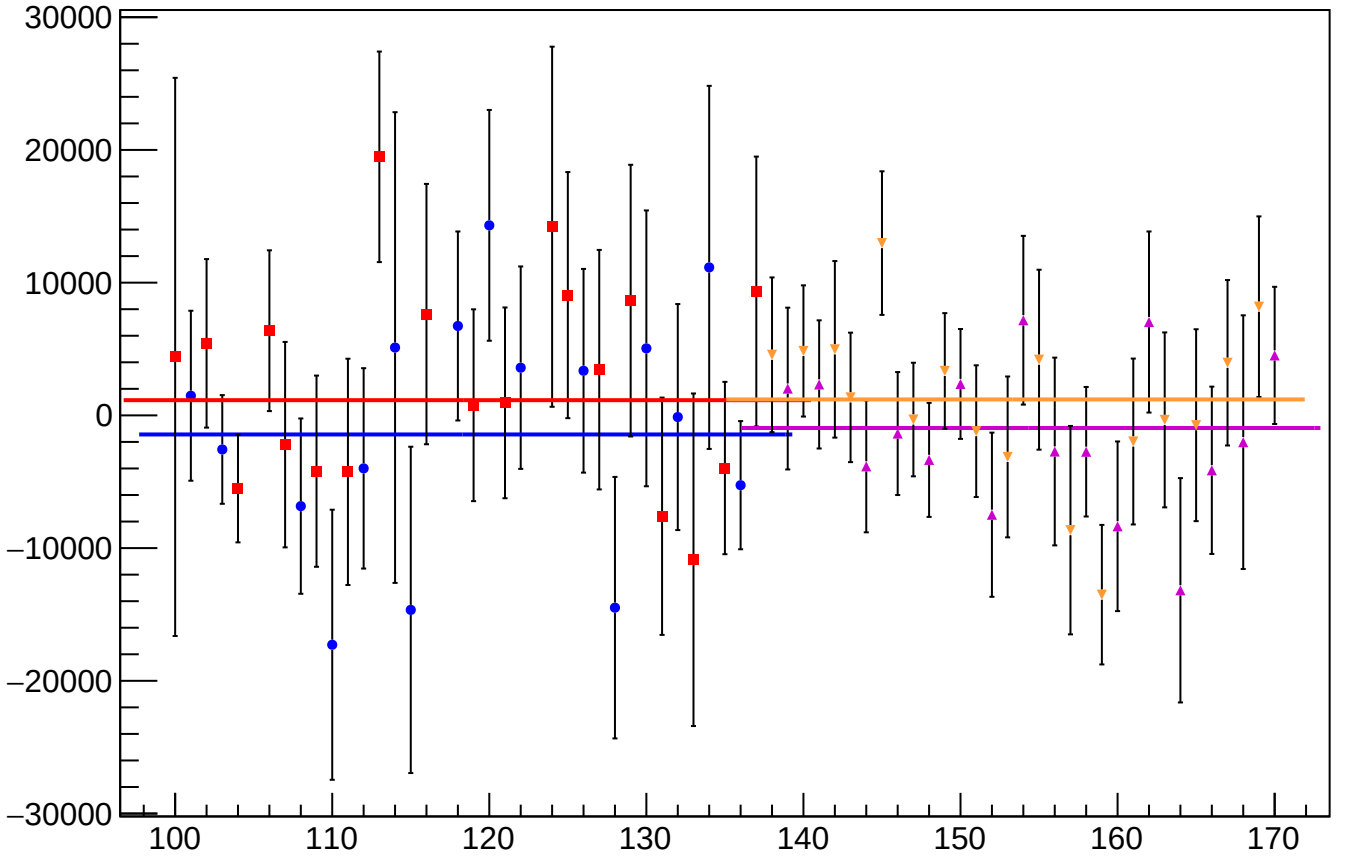
Right Out: 1575.900+/-0.414 $\chi^2$/NDF: 243332.0/18

Left In: 1541.368+/-0.300 $\chi^2$/NDF:29291.4/15

+ sign 1566.205+/-0.245 $\chi^2$/NDF: 370070.1/32

All: 1559.687+/-0.172 $\chi^2$/NDF: 648669.7/67

- sign 1553.258+/-0.243 $\chi^2$/NDF: 277188.2/34




Right In: -1437.362+/-1848.324 $\chi^2$/NDF: 13.9/15

Left Out: 1201.461+/-1368.869 $\chi^2$/NDF:18.3/16

Right Out: 1146.174+/-1765.384 $\chi^2$/NDF: 16.3/18

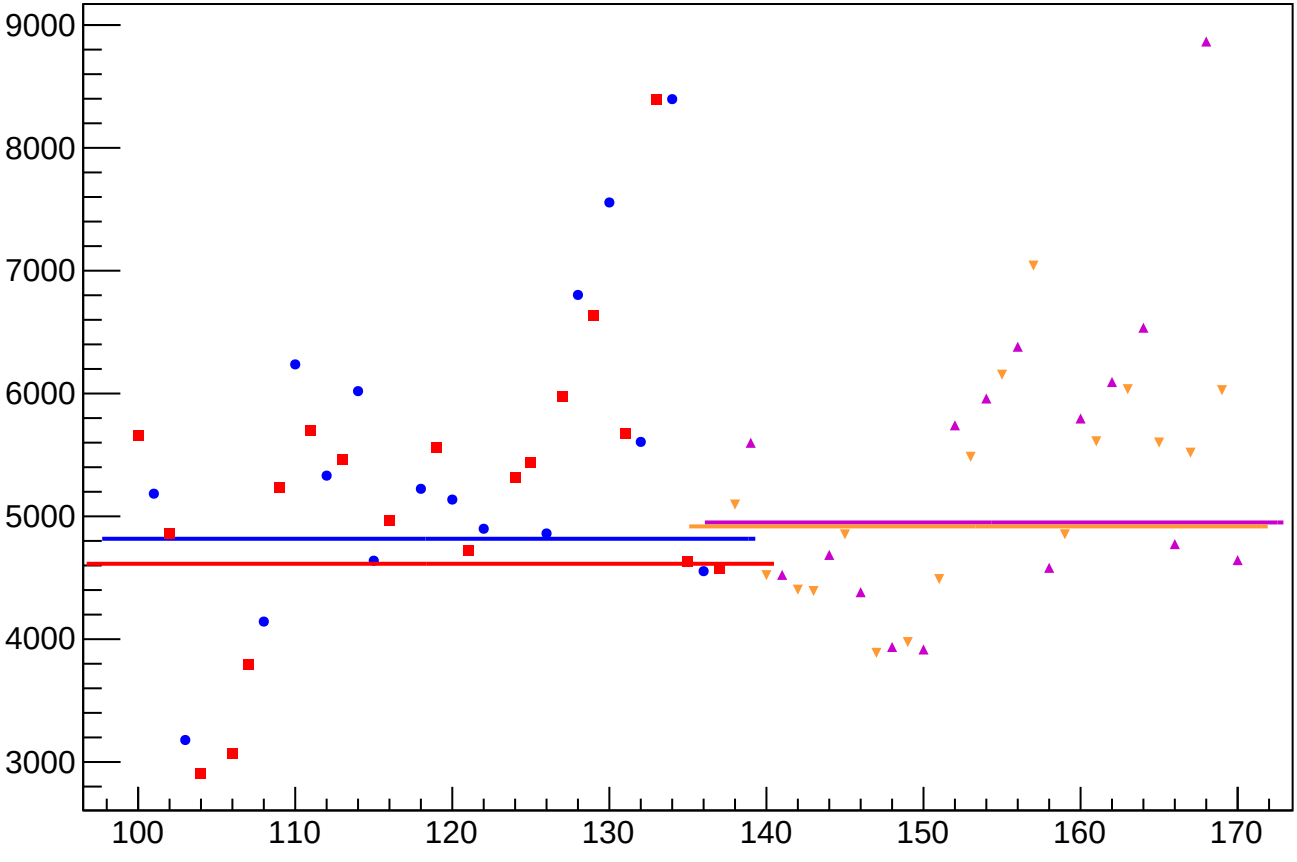
Left In: -951.389+/-1392.388 $\chi^2$/NDF:11.1/15

+ sign 266.766+/-1100.039 $\chi^2$/NDF: 33.5/32

All: 58.624+/-775.438 $\chi^2$/NDF: 61.8/67

- sign -146.962+/-1093.263 $\chi^2$/NDF: 28.3/34

# asym_usr_atr2_avg_cor_correction_rms vs Slug




Right In: 4817.480+/-1.307 $\chi^2$/NDF: 795233.3/15

Left Out: 4918.092+/-0.968 $\chi^2$/NDF:676664.2/16

Right Out: 4613.851+/-1.248 $\chi^2$/NDF: 977958.2/18

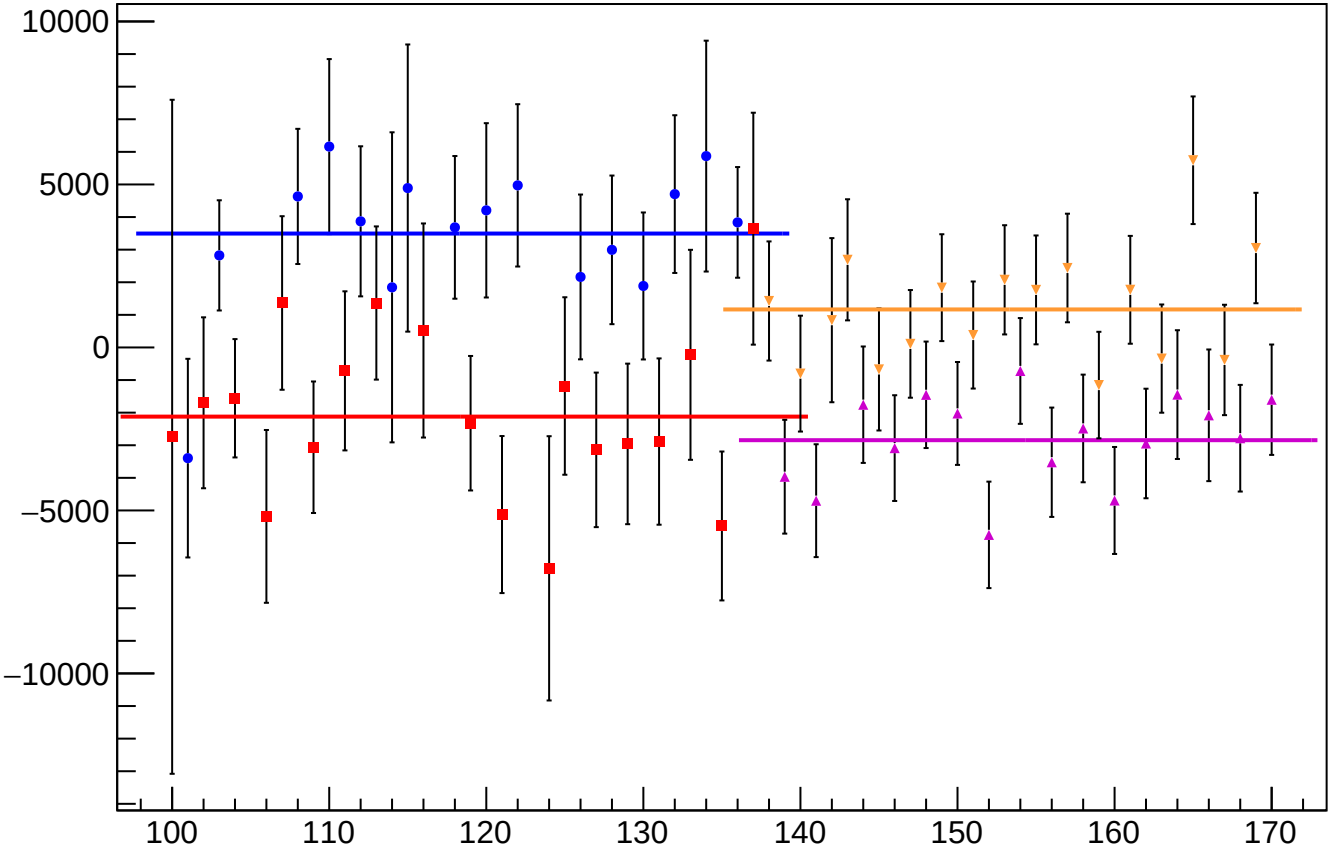
Left In: 4950.274+/-0.985 $\chi^2$/NDF:992528.1/15

+ sign 4882.454+/-0.778 $\chi^2$/NDF: 1475724.6/32

All: 4851.665+/-0.548 $\chi^2$/NDF: 3494101.9/67

- sign 4821.254+/-0.773 $\chi^2$/NDF: 2015263.0/34

# eigen_cor_asym_usr_atr2_avg_mean vs Slug




Right In: 3494.046+/-601.185 $\chi^2$/NDF: 8.8/15

Left Out: 1166.053+/-422.772 $\chi^2$/NDF:15.2/16

Right Out: -2121.708+/-587.619 $\chi^2$/NDF: 15.1/18

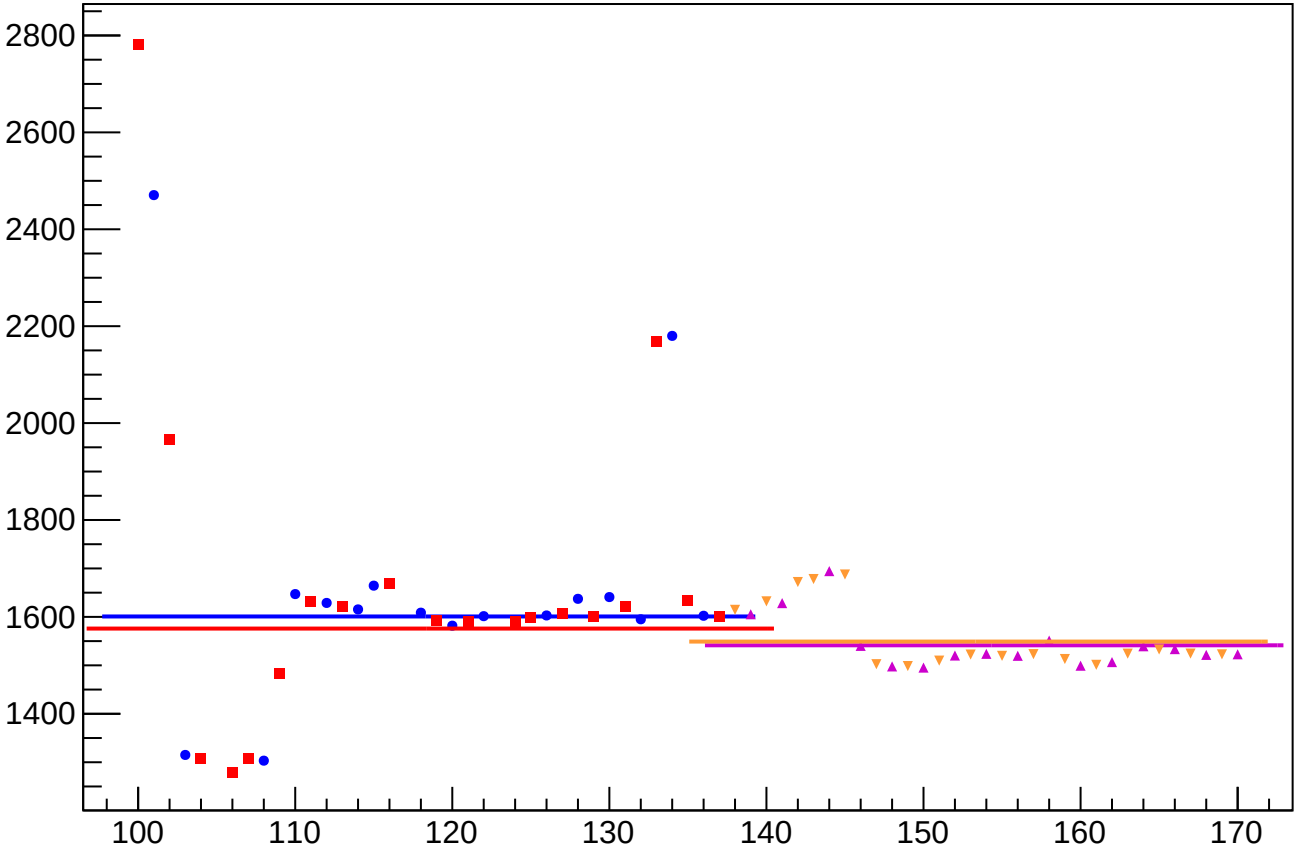
Left In: -2844.773+/-424.136 $\chi^2$/NDF:10.5/15

+ sign 1936.376+/-345.823 $\chi^2$/NDF: 34.1/32

All: -342.943+/-243.854 $\chi^2$/NDF: 147.1/67

- sign -2597.104+/-343.909 $\chi^2$/NDF: 26.6/34

# eigen_cor_asym_usr_atr2_avg_rms vs Slug




Right In: 1600.880+/-0.425 $\chi^2$/NDF: 317413.1/15

Left Out: 1549.057+/-0.299 $\chi^2$/NDF:42713.1/16

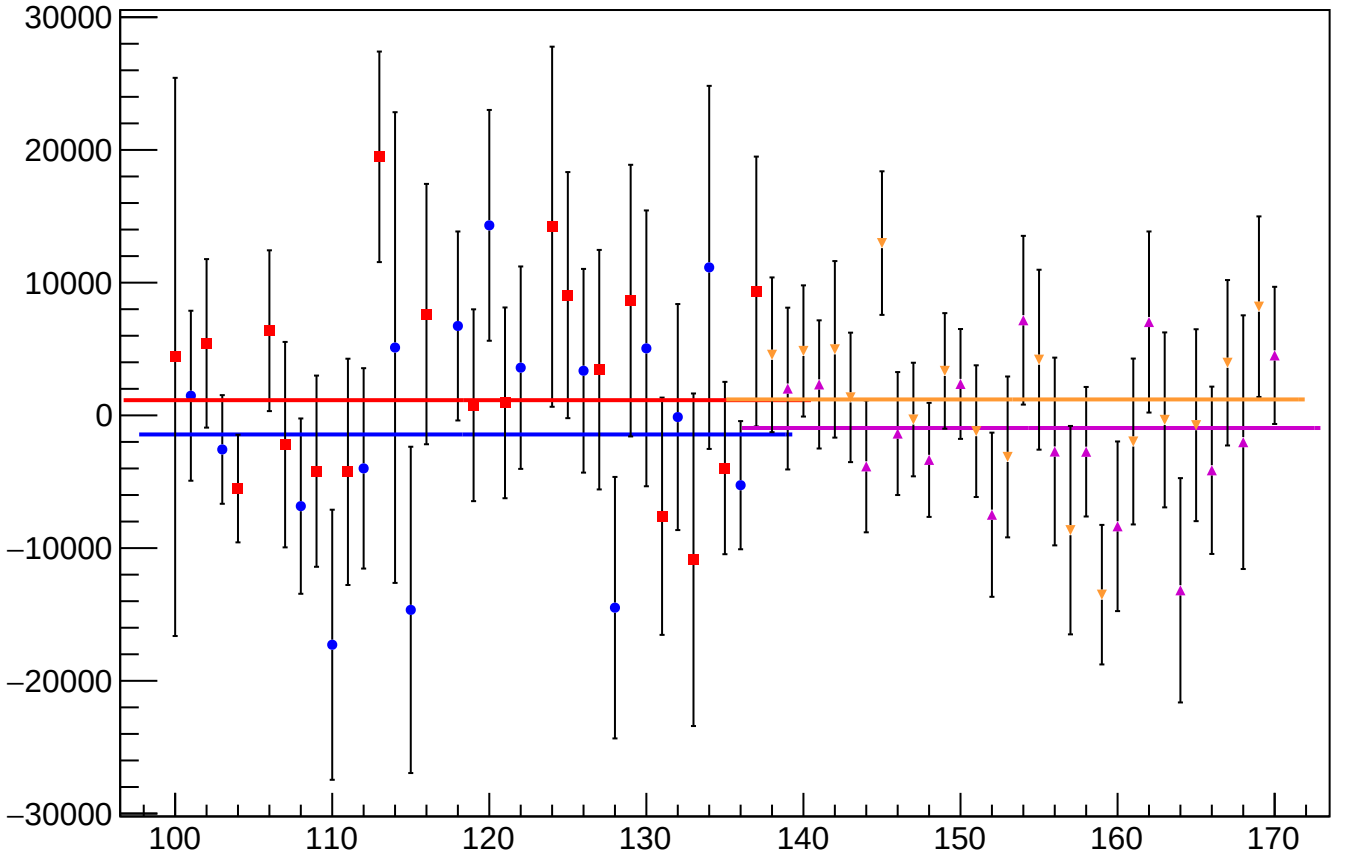
Right Out: 1575.900+/-0.414 $\chi^2$/NDF: 243332.0/18

Left In: 1541.368+/-0.300 $\chi^2$/NDF:29291.4/15

+ sign 1566.205+/-0.245 $\chi^2$/NDF: 370070.1/32

All: 1559.687+/-0.172 $\chi^2$/NDF: 648669.7/67

- sign 1553.258+/-0.243 $\chi^2$/NDF: 277188.2/34




Right In: -1437.362+/-1848.324 $\chi^2$/NDF: 13.9/15

Left Out: 1201.461+/-1368.869 $\chi^2$/NDF:18.3/16

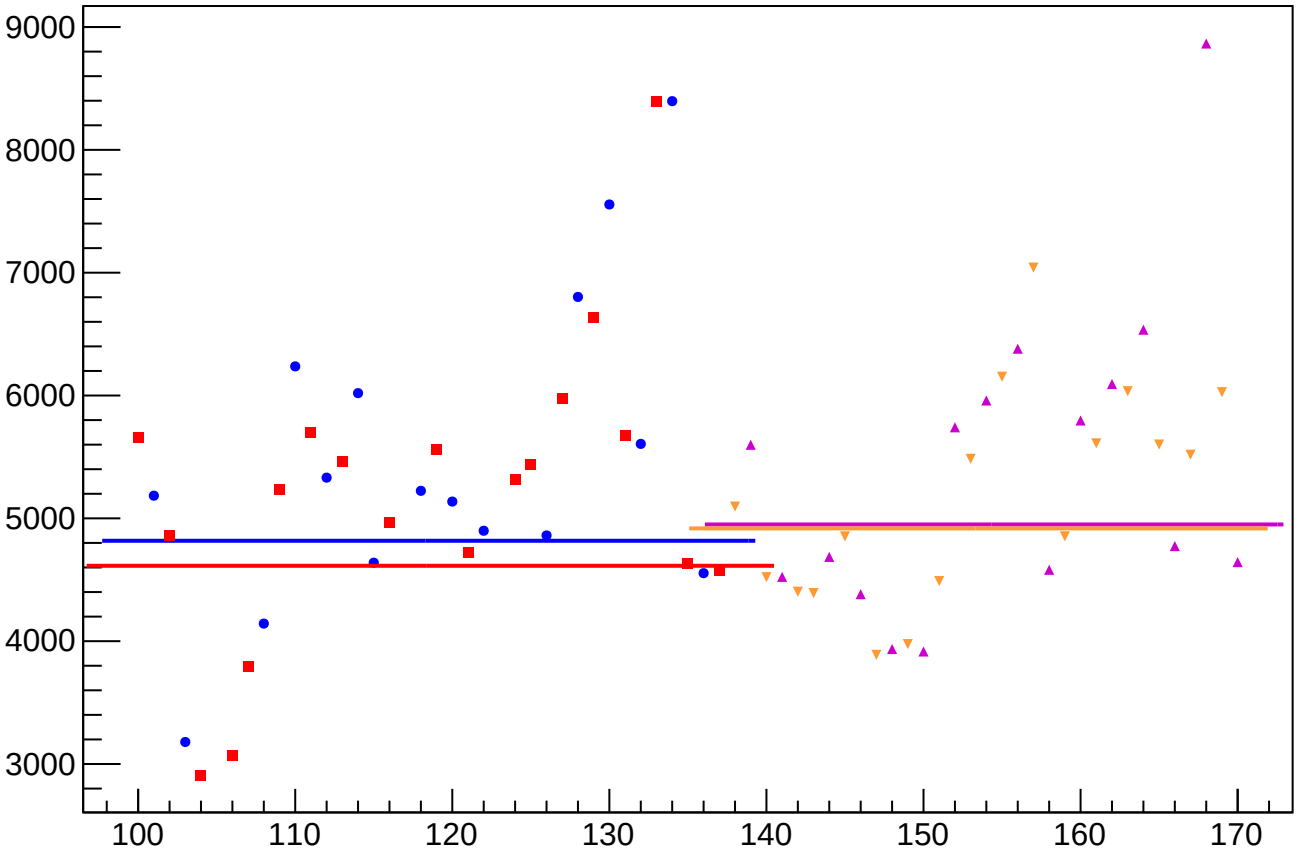
Right Out: 1146.174+/-1765.384 $\chi^2$/NDF: 16.3/18

Left In: -951.389+/-1392.388 $\chi^2$/NDF:11.1/15

+ sign 266.766+/-1100.039 $\chi^2$/NDF: 33.5/32

All: 58.624+/-775.438 $\chi^2$/NDF: 61.8/67

- sign -146.962+/-1093.263 $\chi^2$/NDF: 28.3/34




Right In: 4817.480+/-1.307 $\chi^2$/NDF: 795233.3/15

Left Out: 4918.092+/-0.968 $\chi^2$/NDF:676664.2/16

Right Out: 4613.851+/-1.248 $\chi^2$/NDF: 977958.2/18

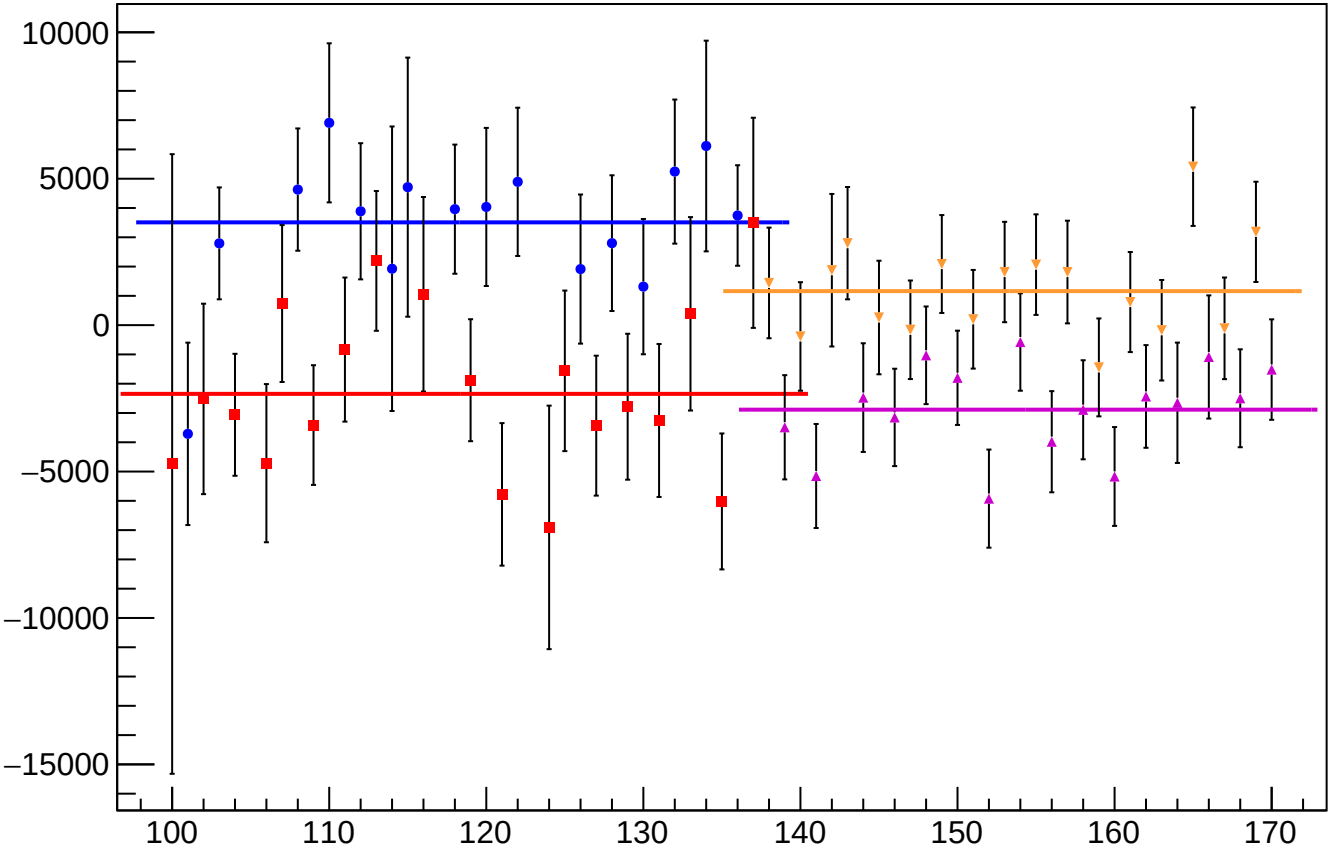
Left In: 4950.274+/-0.985 $\chi^2$/NDF:992528.1/15

+ sign 4882.454+/-0.778 $\chi^2$/NDF: 1475724.6/32

All: 4851.665+/-0.548 $\chi^2$/NDF: 3494101.9/67

- sign 4821.254+/-0.773 $\chi^2$/NDF: 2015263.0/34

# dit_asym_usr_atr2_avg_mean vs Slug




Right In: 3509.507+/-616.724 $\chi^2$/NDF: 10.4/15

Left Out: 1161.440+/-435.096 $\chi^2$/NDF:13.0/16

Right Out: -2346.859+/-607.502 $\chi^2$/NDF: 17.1/18

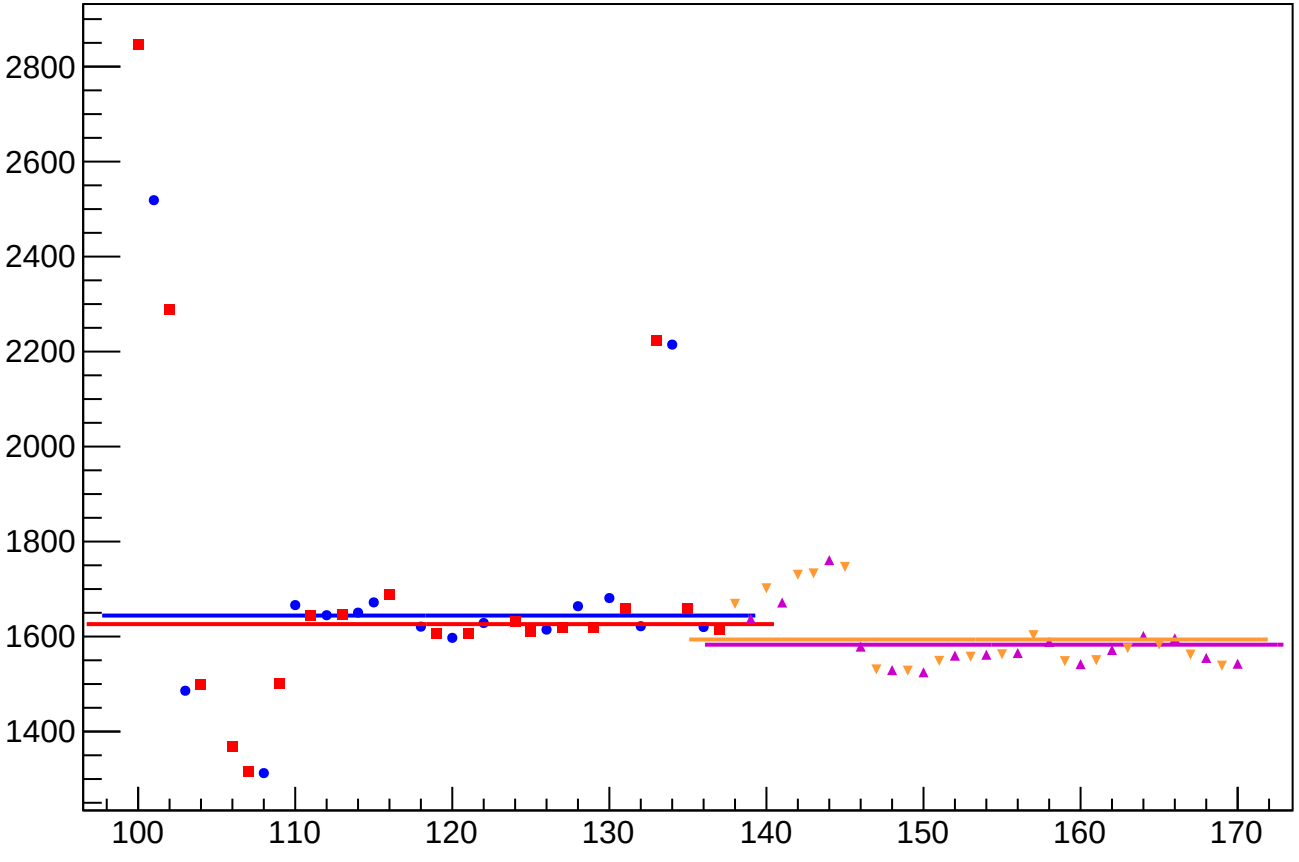
Left In: -2886.244+/-435.630 $\chi^2$/NDF:12.5/15

+ sign 1941.749+/-355.524 $\chi^2$/NDF: 33.0/32

All: -390.525+/-250.859 $\chi^2$/NDF: 148.8/67

- sign -2703.074+/-354.018 $\chi^2$/NDF: 30.1/34

# dit_asym_usr_atr2_avg_rms vs Slug




Right In: 1644.198+/-0.436 $\chi^2$/NDF: 274817.9/15

Left Out: 1593.784+/-0.308 $\chi^2$/NDF:53060.4/16

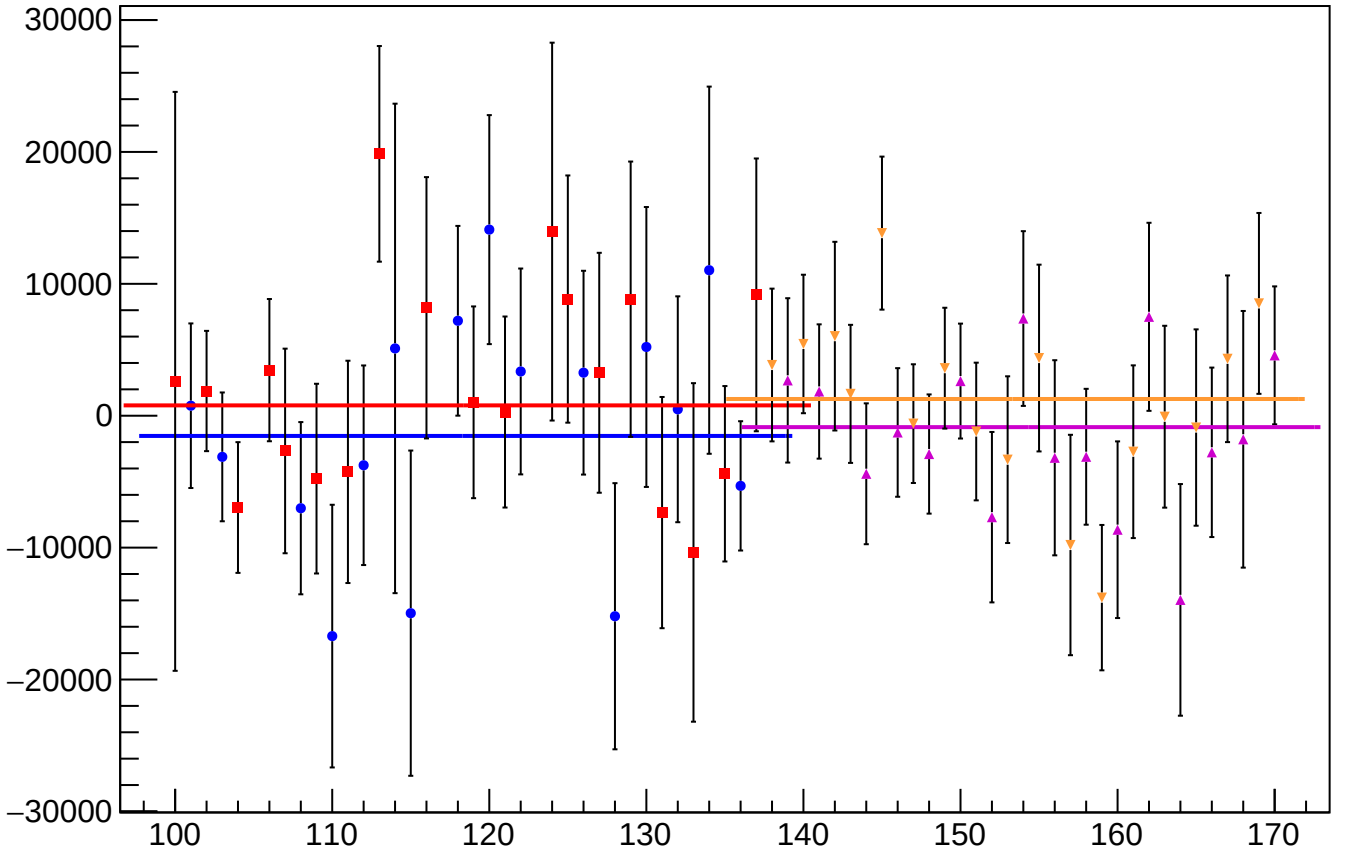
Right Out: 1626.174+/-0.429 $\chi^2$/NDF: 237639.1/18

Left In: 1582.874+/-0.308 $\chi^2$/NDF:34000.0/15

+ sign 1610.538+/-0.251 $\chi^2$/NDF: 336801.4/32

All: 1604.037+/-0.177 $\chi^2$/NDF: 616489.8/67

- sign 1597.595+/-0.250 $\chi^2$/NDF: 278357.1/34




Right In: -1532.110+/-1913.799 $\chi^2$/NDF: 13.9/15

Left Out: 1268.805+/-1433.563 $\chi^2$/NDF:18.4/16

Right Out: 784.235+/-1748.566 $\chi^2$/NDF: 15.0/18

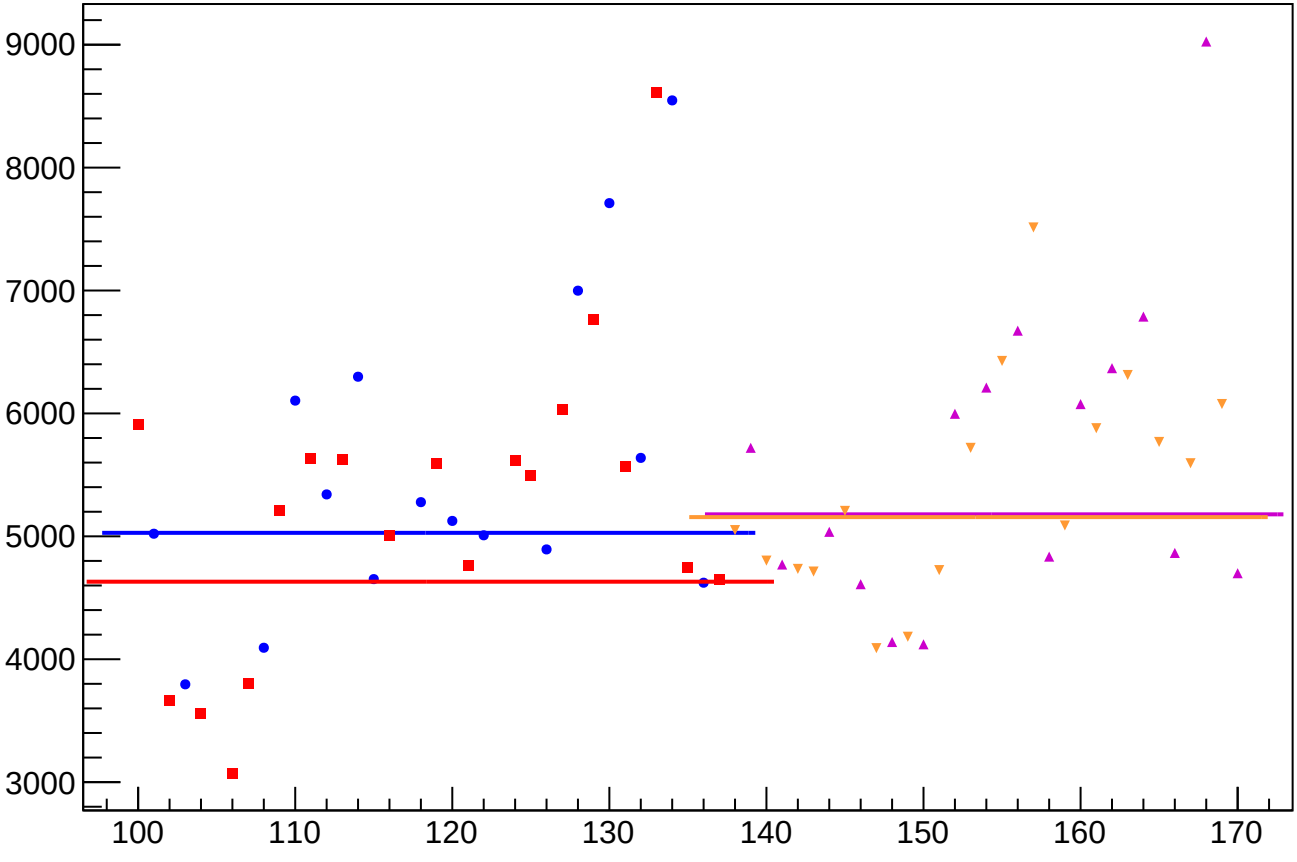
Left In: -864.992+/-1455.346 $\chi^2$/NDF:11.0/15

\+ sign 262.082+/-1147.364 $\chi^2$/NDF: 33.7/32

All: 30.270+/-800.943 $\chi^2$/NDF: 60.3/67

\- sign -190.061+/-1118.592 $\chi^2$/NDF: 26.5/34

# asym_usr_atr2_avg_dit_correction_rms vs Slug




Right In: 5028.449+/-1.353 $\chi^2$/NDF: 565469.4/15

Left Out: 5156.401+/-1.014 $\chi^2$/NDF:626930.5/16

Right Out: 4630.901+/-1.236 $\chi^2$/NDF: 863515.0/18

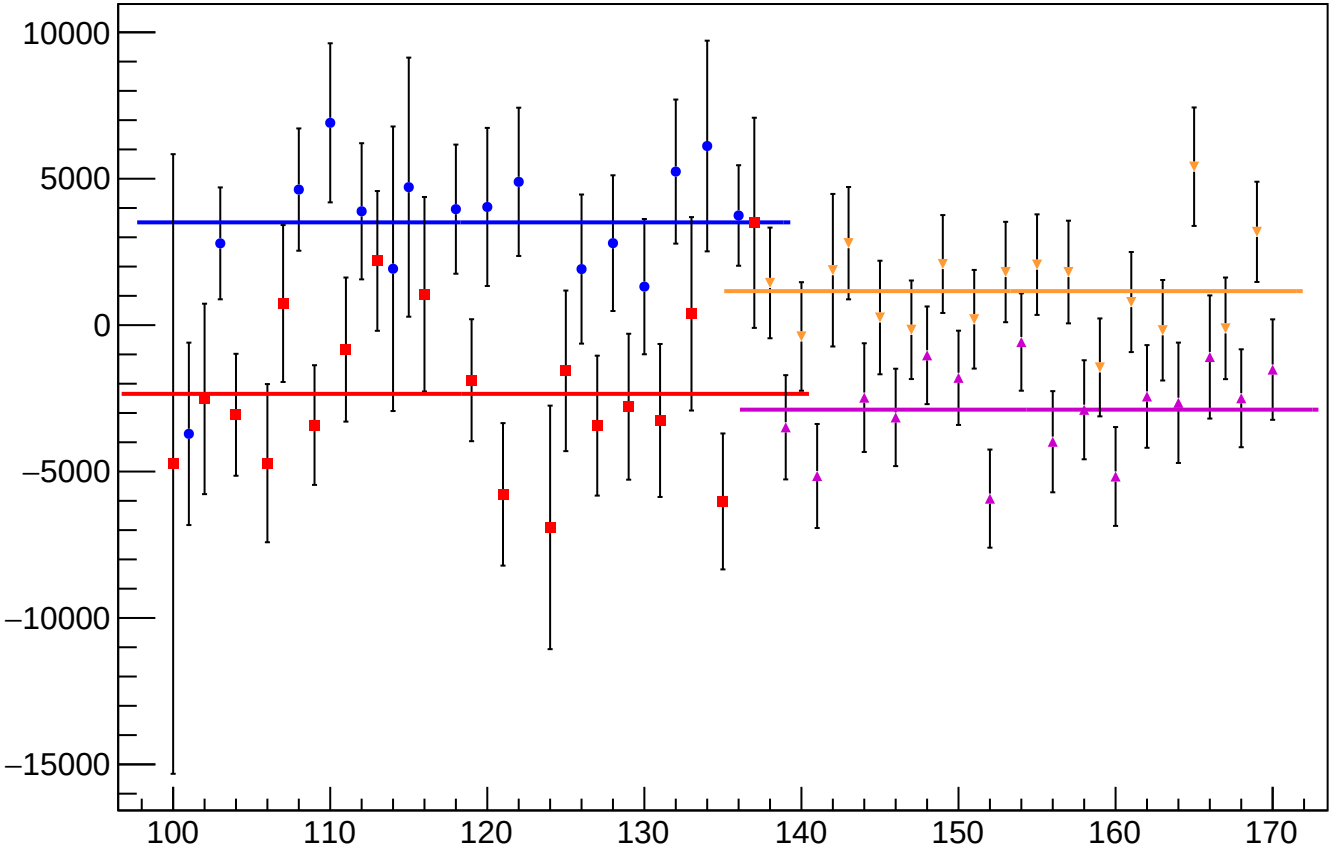
Left In: 5178.923+/-1.029 $\chi^2$/NDF:944058.2/15

+ sign 5110.412+/-0.811 $\chi^2$/NDF: 1198126.5/32

All: 5030.553+/-0.566 $\chi^2$/NDF: 3140654.6/67

- sign 4954.650+/-0.791 $\chi^2$/NDF: 1923630.5/34

# eigen_dit_asym_usr_atr2_avg_mean vs Slug




Right In: 3509.509+/-616.724 $\chi^2$/NDF: 10.4/15

Left Out: 1161.430+/-435.096 $\chi^2$/NDF:13.0/16

Right Out: -2346.865+/-607.502 $\chi^2$/NDF: 17.1/18

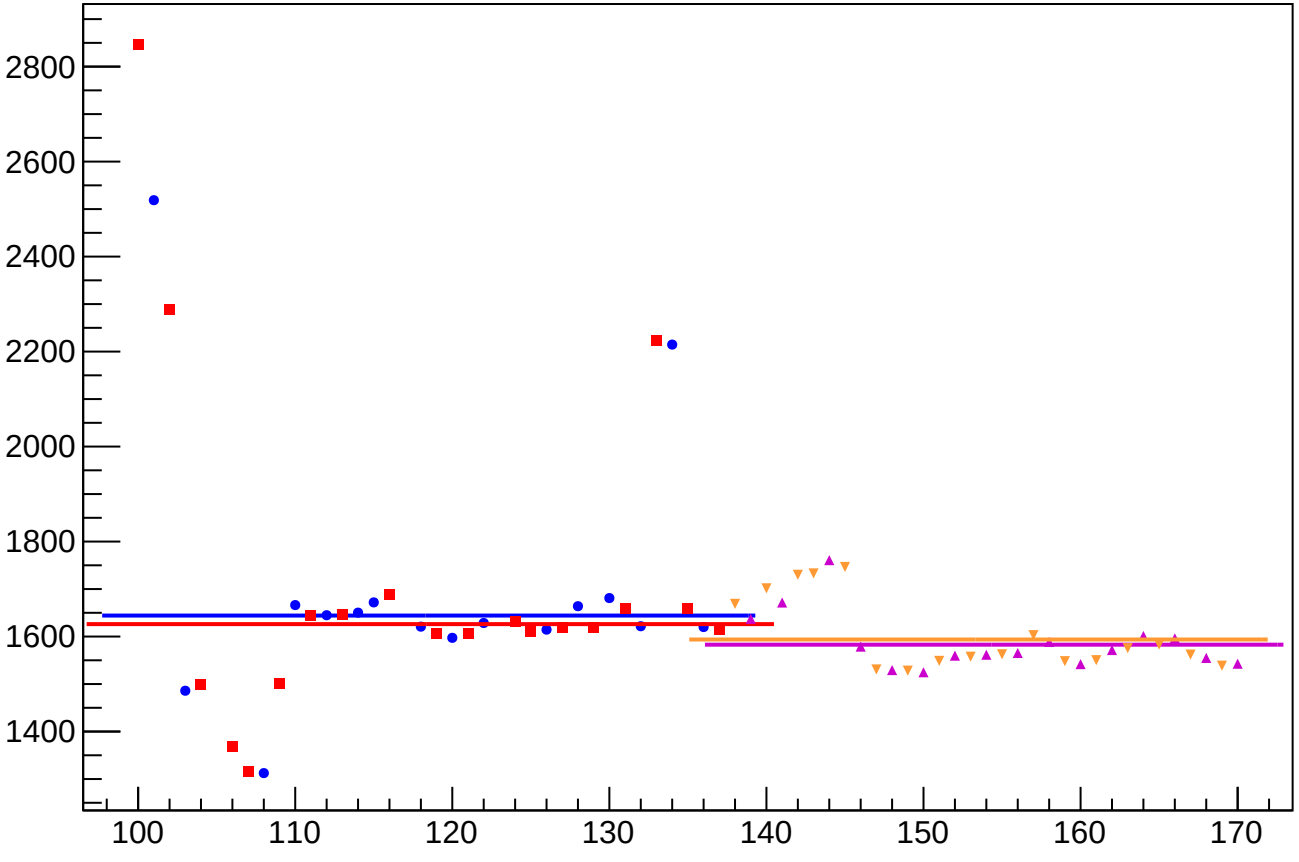
Left In: -2886.248+/-435.631 $\chi^2$/NDF:12.5/15

+ sign 1941.745+/-355.524 $\chi^2$/NDF: 33.0/32

All: -390.529+/-250.859 $\chi^2$/NDF: 148.8/67

- sign -2703.079+/-354.018 $\chi^2$/NDF: 30.1/34

# eigen_dit_asym_usr_atr2_avg_rms vs Slug




Right In: 1644.198+/-0.436 $\chi^2$/NDF: 274818.1/15

Left Out: 1593.786+/-0.308 $\chi^2$/NDF:53060.4/16

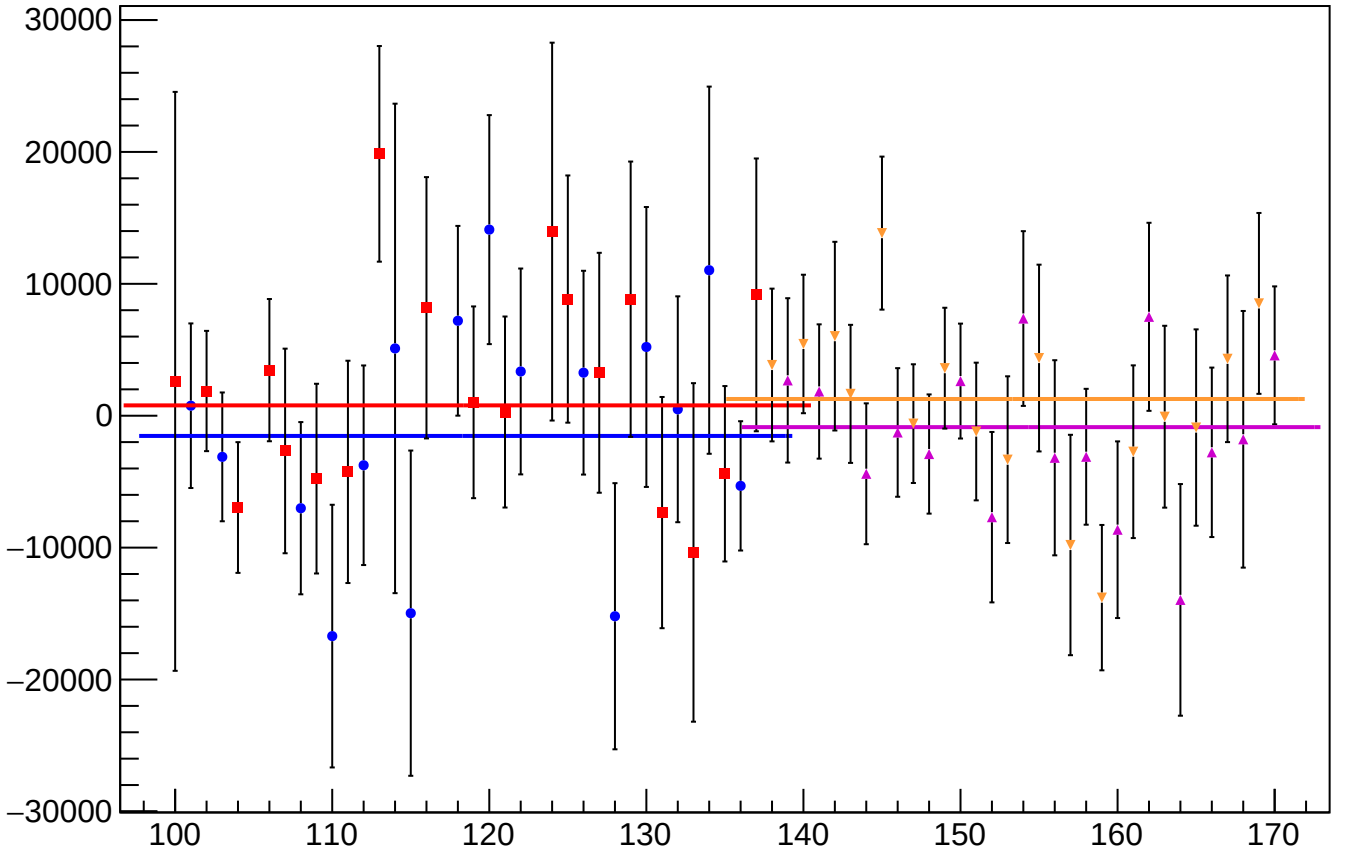
Right Out: 1626.174+/-0.429 $\chi^2$/NDF: 237638.8/18

Left In: 1582.875+/-0.308 $\chi^2$/NDF:33999.9/15

+ sign 1610.539+/-0.251 $\chi^2$/NDF: 336801.0/32

All: 1604.038+/-0.177 $\chi^2$/NDF: 616488.4/67

- sign 1597.596+/-0.250 $\chi^2$/NDF: 278356.1/34




Right In: -1532.095+/-1913.796 $\chi^2$/NDF: 13.9/15

Left Out: 1268.801+/-1433.565 $\chi^2$/NDF:18.4/16

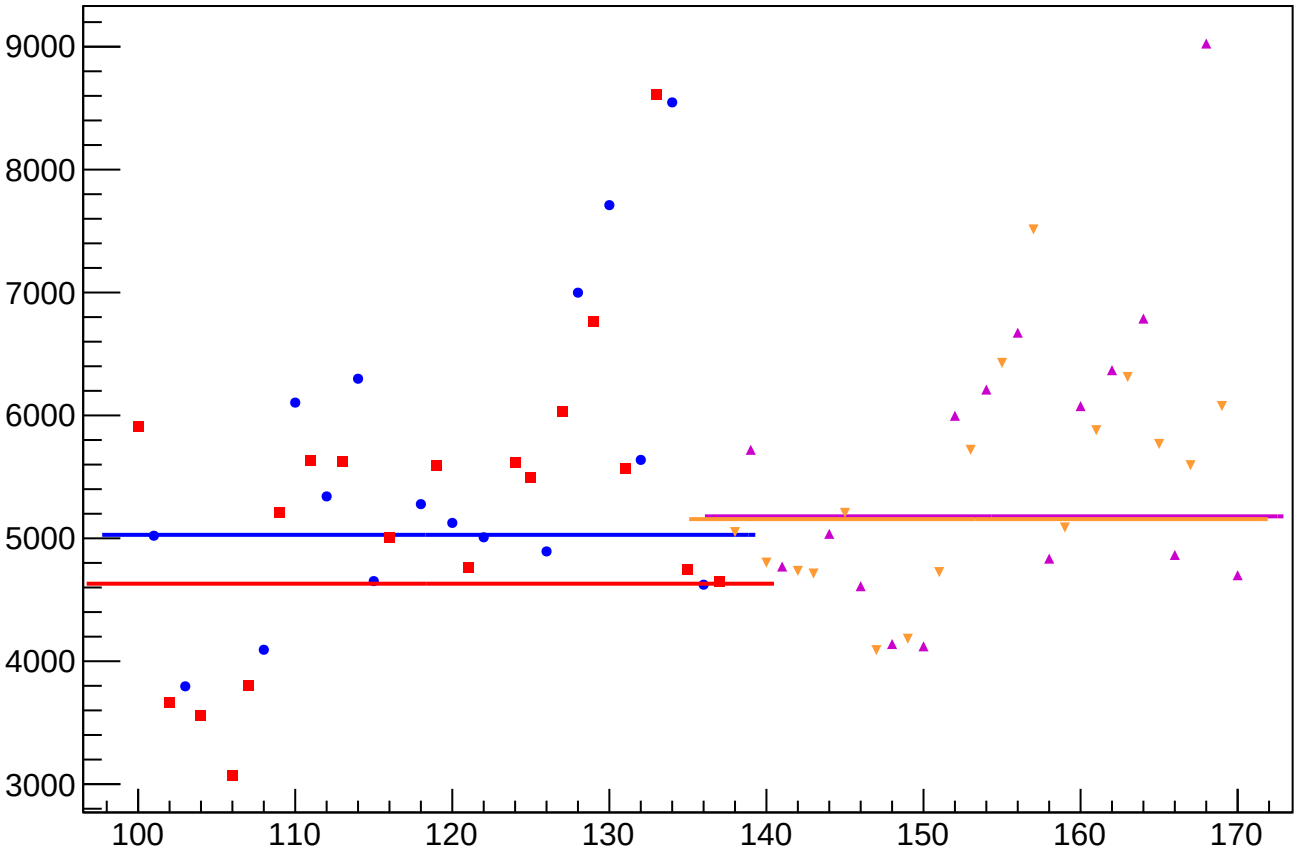
Right Out: 784.236+/-1748.563 $\chi^2$/NDF: 15.0/18

Left In: -864.991+/-1455.349 $\chi^2$/NDF:11.0/15

\+ sign 262.081+/-1147.365 $\chi^2$/NDF: 33.7/32

All: 30.272+/-800.943 $\chi^2$/NDF: 60.3/67

\- sign -190.057+/-1118.592 $\chi^2$/NDF: 26.5/34




Right In: 5028.443+/-1.353 $\chi^2$/NDF: 565463.1/15

Left Out: 5156.409+/-1.014 $\chi^2$/NDF:626931.3/16

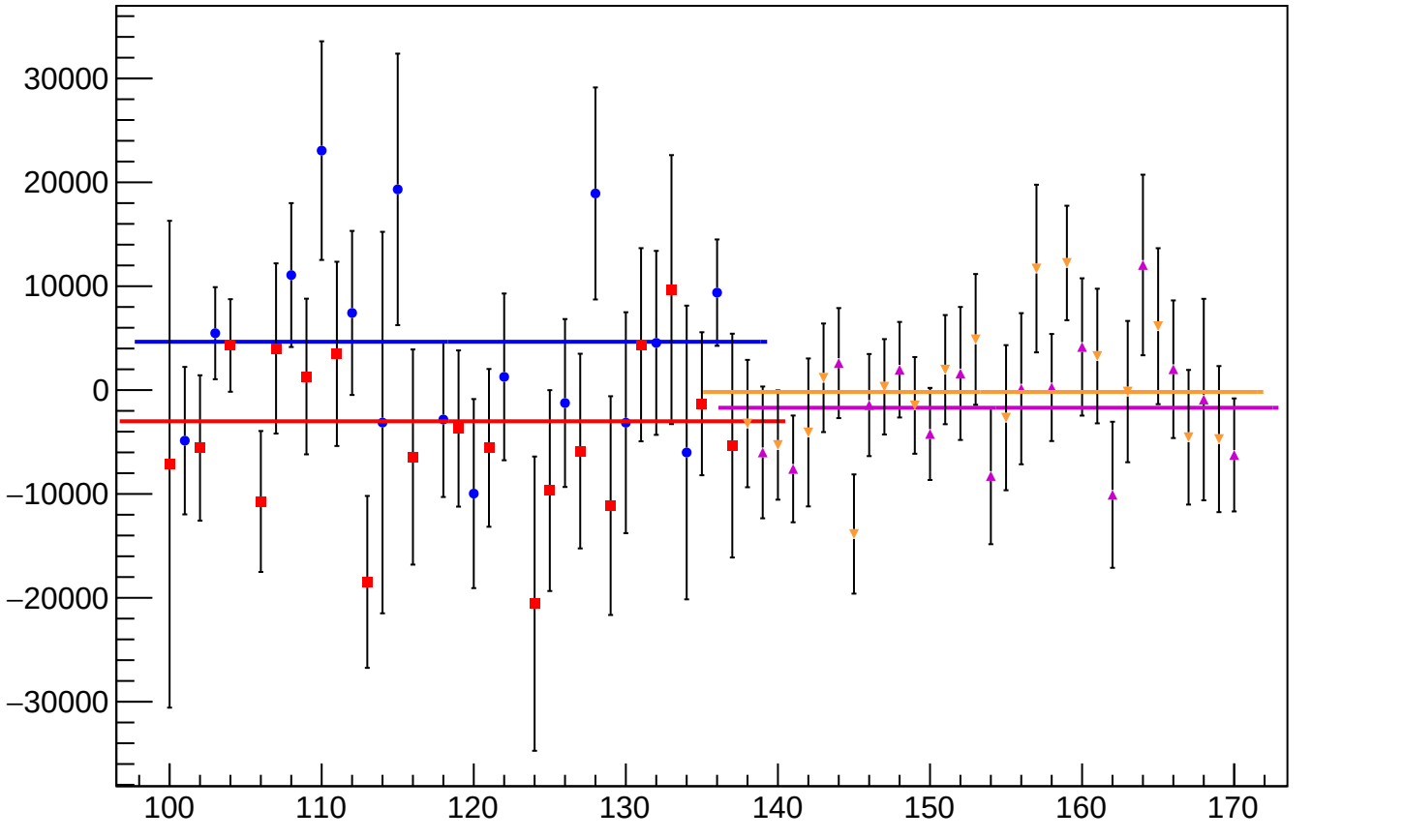
Right Out: 4630.895+/-1.236 $\chi^2$/NDF: 863509.0/18

Left In: 5178.931+/-1.029 $\chi^2$/NDF:944059.9/15

+ sign 5110.415+/-0.811 $\chi^2$/NDF: 1198122.4/32

All: 5030.556+/-0.566 $\chi^2$/NDF: 3140652.9/67

- sign 4954.651+/-0.791 $\chi^2$/NDF: 1923632.4/34




Right In: 4653.137+/-1958.496 $\chi^2$/NDF: 15.5/15

Left Out: -176.410+/-1442.652 $\chi^2$/NDF:17.4/16

Right Out: -3000.980+/-1882.821 $\chi^2$/NDF: 13.9/18

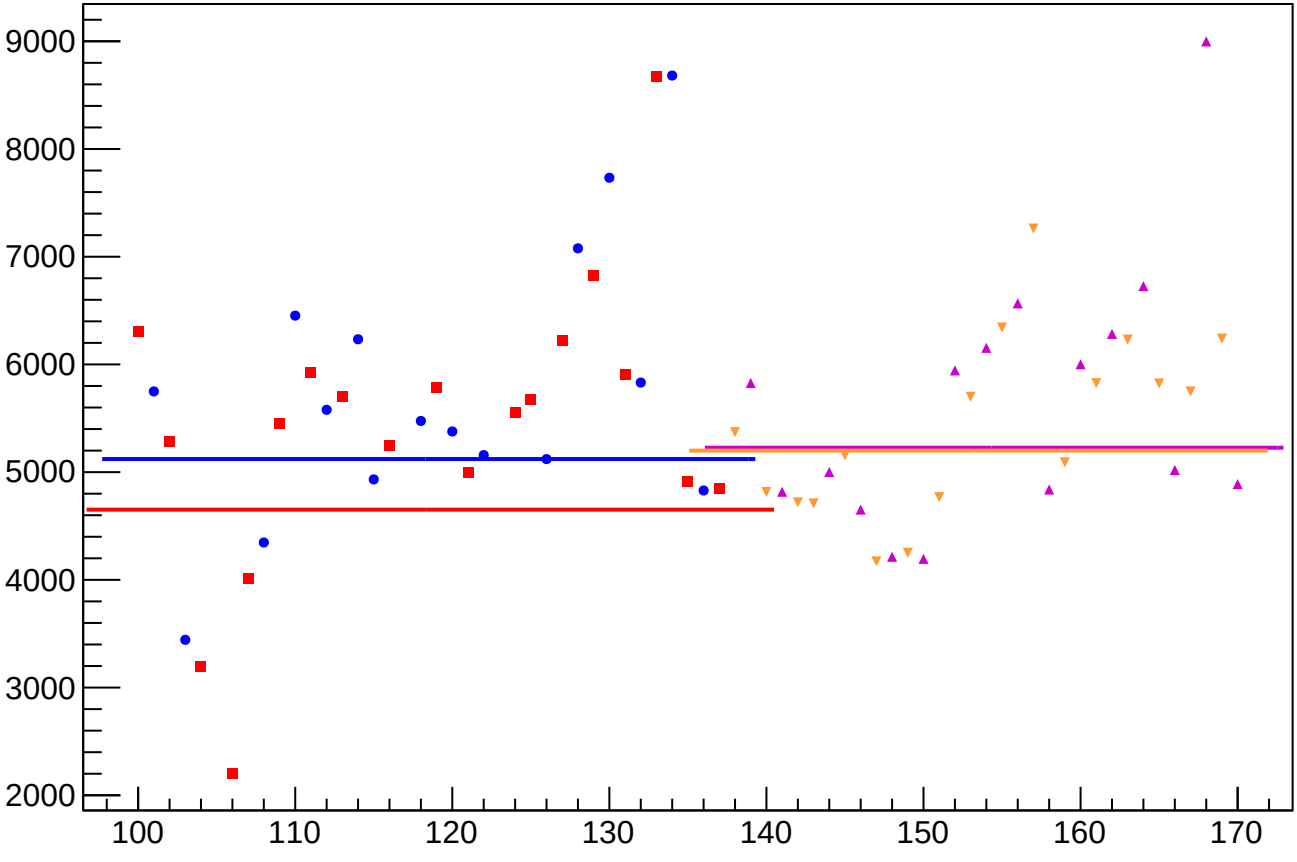
Left In: -1700.116+/-1465.421 $\chi^2$/NDF:10.6/15

+ sign 1522.349+/-1161.543 $\chi^2$/NDF: 36.8/32

All: -342.440+/-819.523 $\chi^2$/NDF: 66.7/67

- sign -2190.861+/-1156.434 $\chi^2$/NDF: 24.7/34

# asym_usr_atr2_avg_rms vs Slug




Right In: 5121.644+/-1.385 $\chi^2$/NDF: 720370.1/15

Left Out: 5199.882+/-1.020 $\chi^2$/NDF:569848.2/16

Right Out: 4651.727+/-1.280 $\chi^2$/NDF: 1344868.0/18

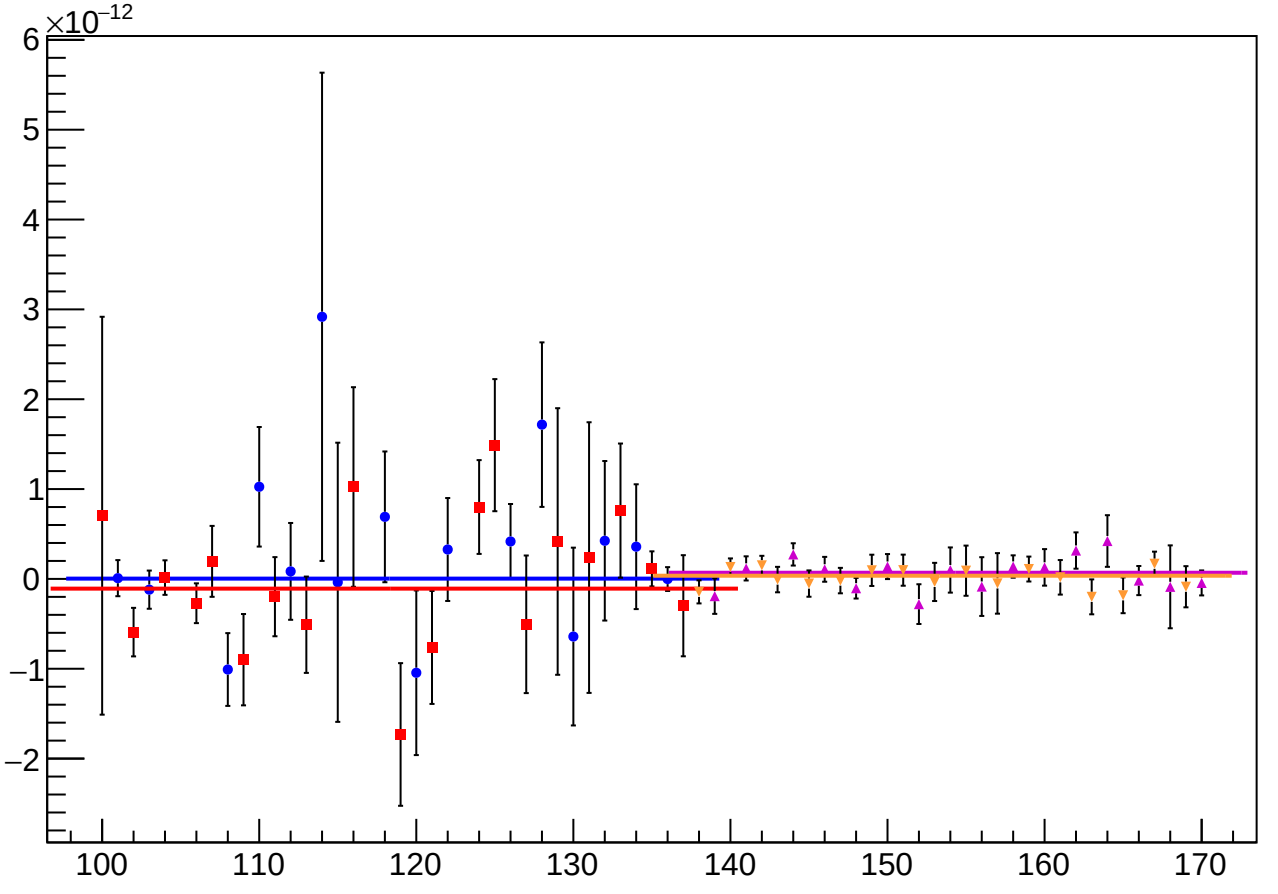
Left In: 5226.735+/-1.036 $\chi^2$/NDF:855520.6/15

+ sign 5172.362+/-0.821 $\chi^2$/NDF: 1292287.3/32

All: 5084.075+/-0.575 $\chi^2$/NDF: 3637211.8/67

- sign 4999.166+/-0.805 $\chi^2$/NDF: 2322257.5/34

# asym_usr_atr2_avg_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 18.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:9.4/16

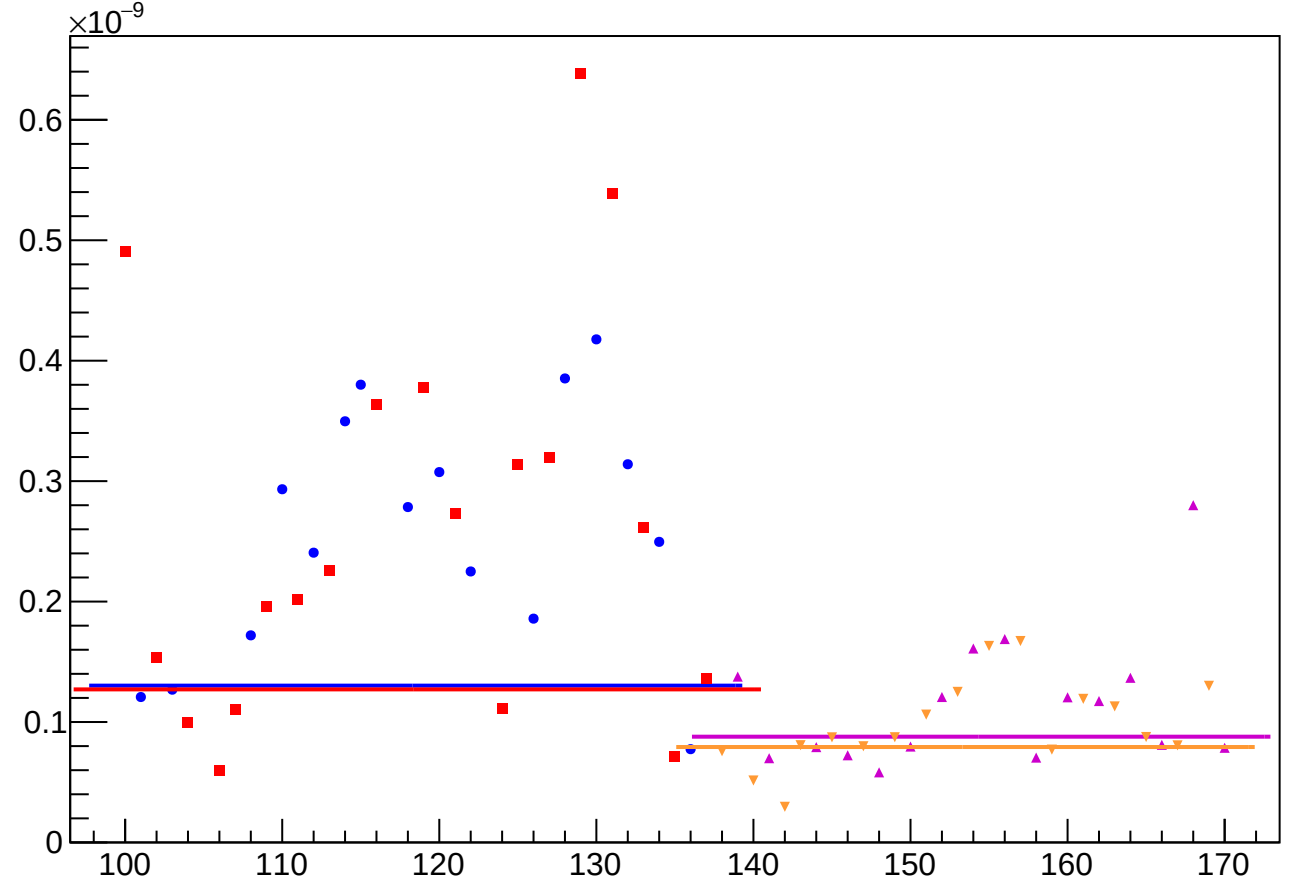
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 25.1/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:14.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 27.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 70.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 42.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1329229.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1323859.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1734331.2/18

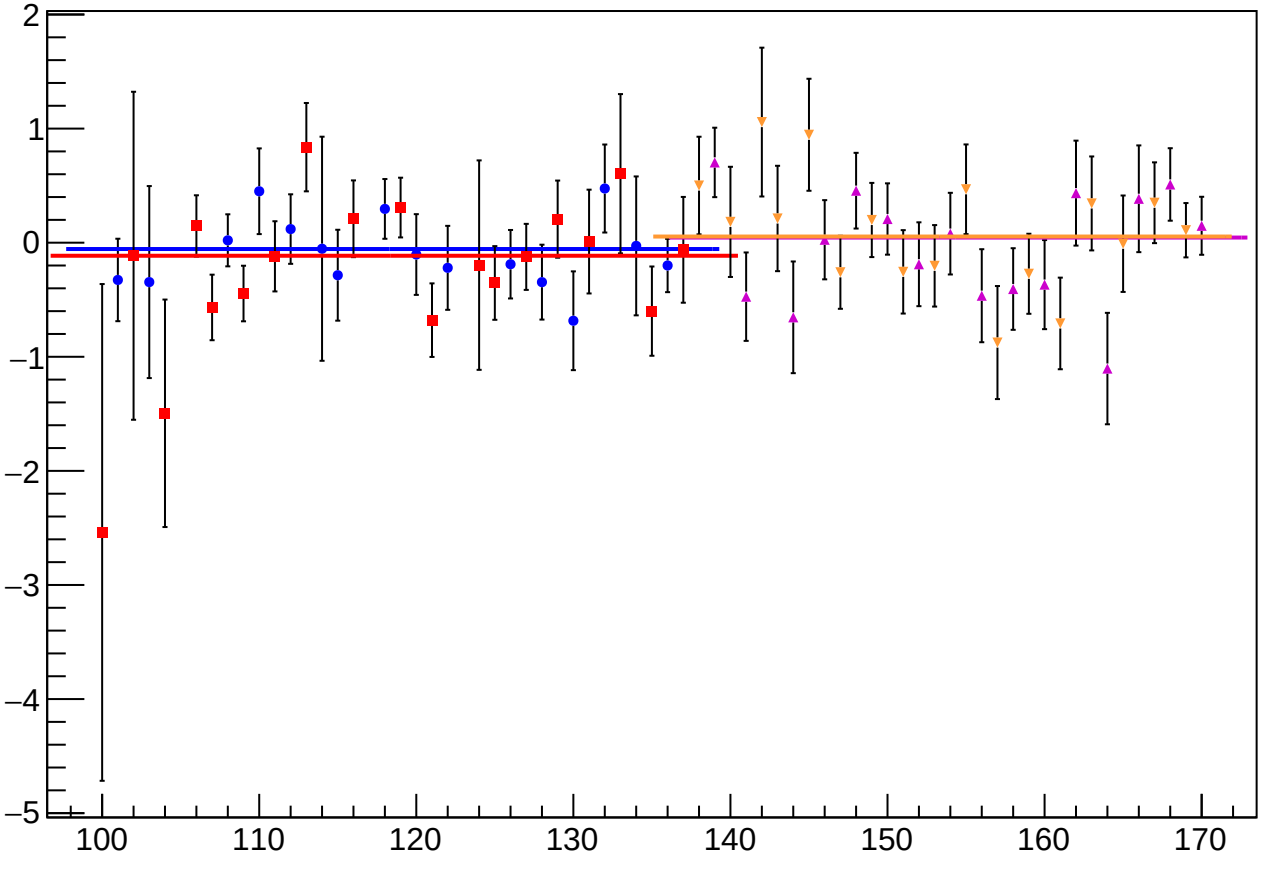
Left In: 0.000+/-0.000 $\chi^2$/NDF:1225318.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3238690.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 6558623.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3276955.8/34

# asym_usr_atr2_avg_dit_vs_cor_diff_mean vs Slug




Right In: -0.055+/-0.085 $\chi^2$/NDF: 10.7/15

Left Out: 0.054+/-0.092 $\chi^2$/NDF:19.7/16

Right Out: -0.114+/-0.083 $\chi^2$/NDF: 25.2/18

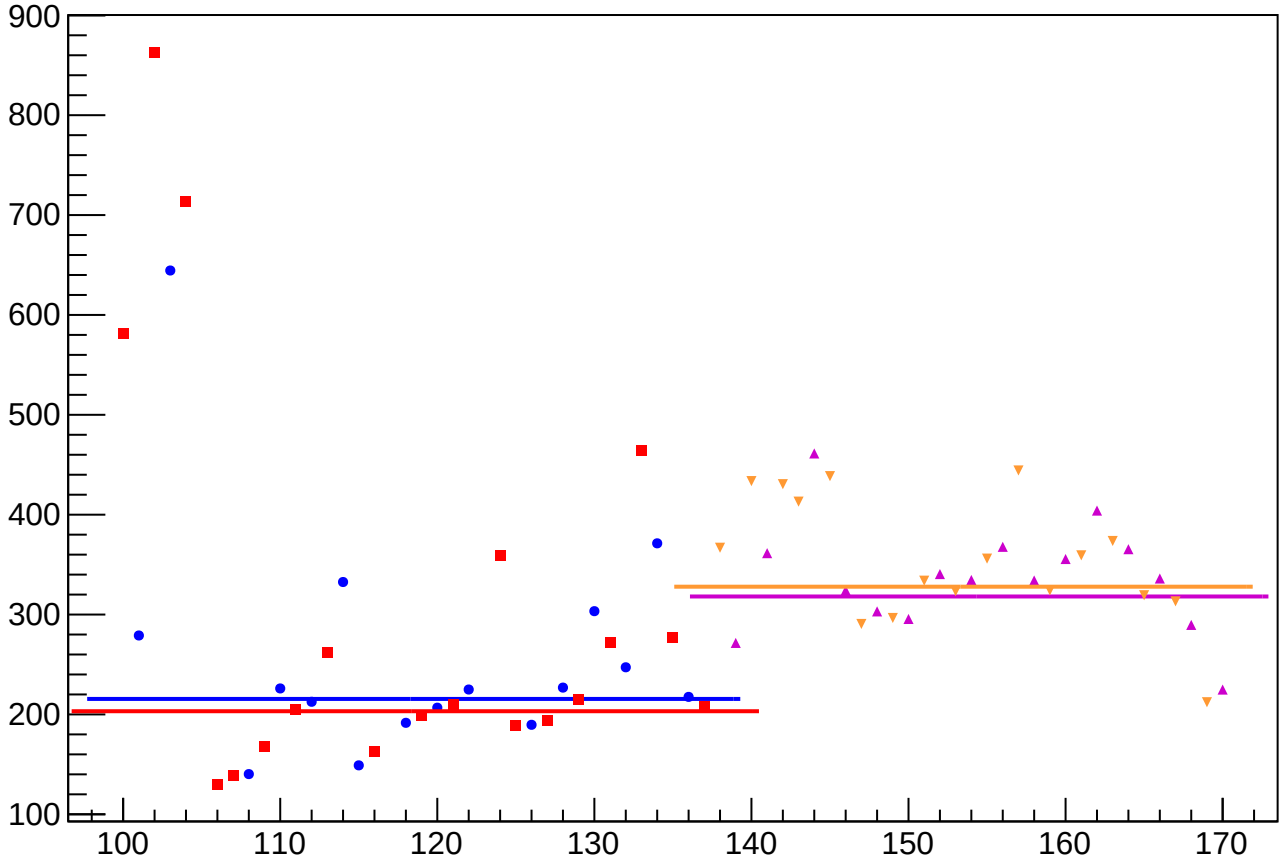
Left In: 0.045+/-0.090 $\chi^2$/NDF:24.1/15

+ sign -0.005+/-0.063 $\chi^2$/NDF: 31.1/32

All: -0.023+/-0.044 $\chi^2$/NDF: 82.3/67

- sign -0.041+/-0.061 $\chi^2$/NDF: 51.0/34

# asym_usr_atr2_avg_dit_vs_cor_diff_rms vs Slug




Right In: 215.519+/-0.060 $\chi^2$/NDF: 1148727.3/15

Left Out: 327.900+/-0.065 $\chi^2$/NDF:1012596.4/16

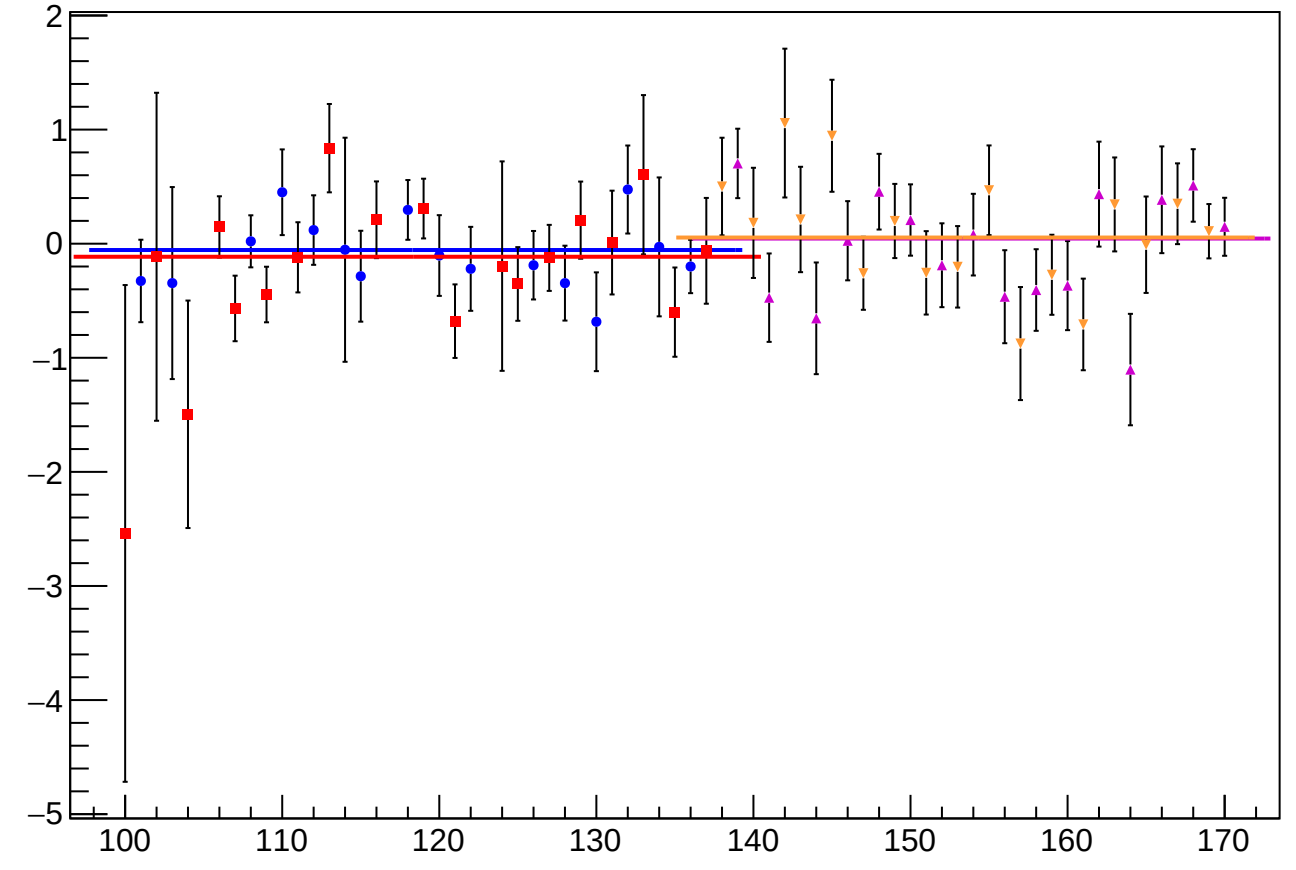
Right Out: 203.207+/-0.059 $\chi^2$/NDF: 1835552.6/18

Left In: 318.094+/-0.064 $\chi^2$/NDF:698631.3/15

+ sign 267.425+/-0.044 $\chi^2$/NDF: 3758357.0/32

All: 261.677+/-0.031 $\chi^2$/NDF: 8084410.7/67

- sign 256.223+/-0.043 $\chi^2$/NDF: 4293292.9/34




Right In: -0.055+/-0.085 $\chi^2$/NDF: 10.7/15

Left Out: 0.054+/-0.092 $\chi^2$/NDF:19.7/16

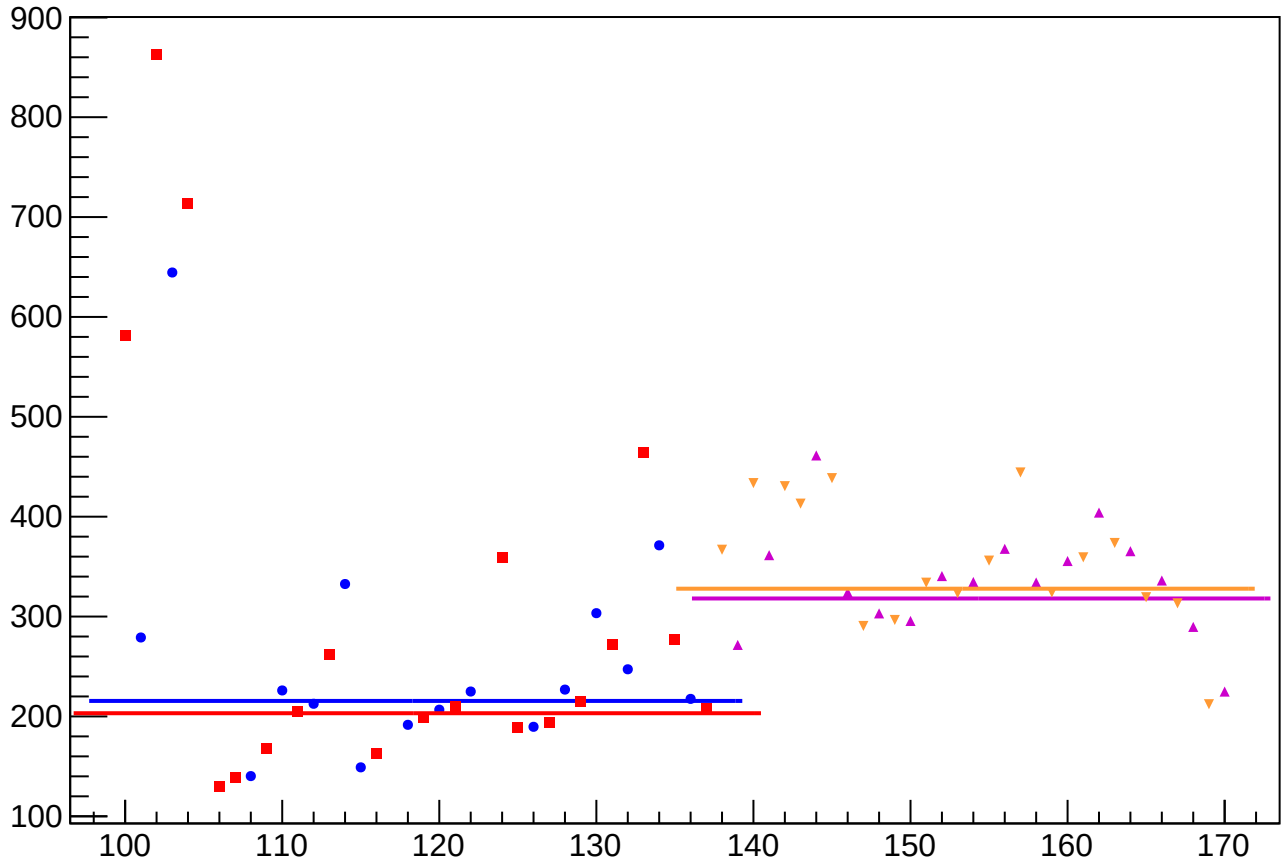
Right Out: -0.114+/-0.083 $\chi^2$/NDF: 25.2/18

Left In: 0.045+/-0.090 $\chi^2$/NDF:24.1/15

+ sign -0.005+/-0.063 $\chi^2$/NDF: 31.1/32

All: -0.023+/-0.044 $\chi^2$/NDF: 82.3/67

- sign -0.041+/-0.061 $\chi^2$/NDF: 51.0/34




Right In: 215.519+/-0.060 $\chi^2$/NDF: 1148727.3/15

Left Out: 327.900+/-0.065 $\chi^2$/NDF:1012596.4/16

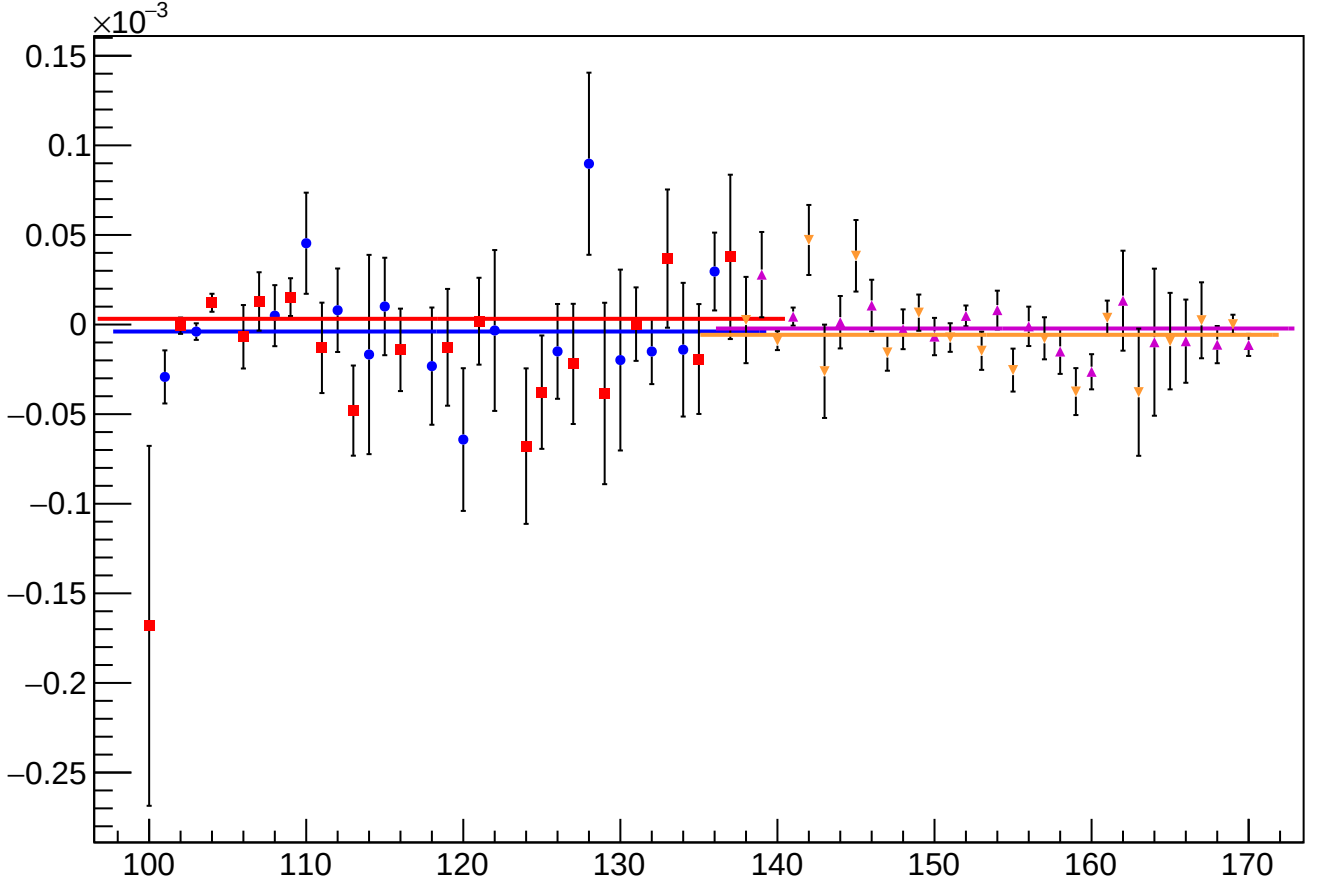
Right Out: 203.207+/-0.059 $\chi^2$/NDF: 1835552.6/18

Left In: 318.094+/-0.064 $\chi^2$/NDF:698631.3/15

+ sign 267.425+/-0.044 $\chi^2$/NDF: 3758357.0/32

All: 261.677+/-0.031 $\chi^2$/NDF: 8084410.7/67

- sign 256.223+/-0.043 $\chi^2$/NDF: 4293292.9/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:28.2/16

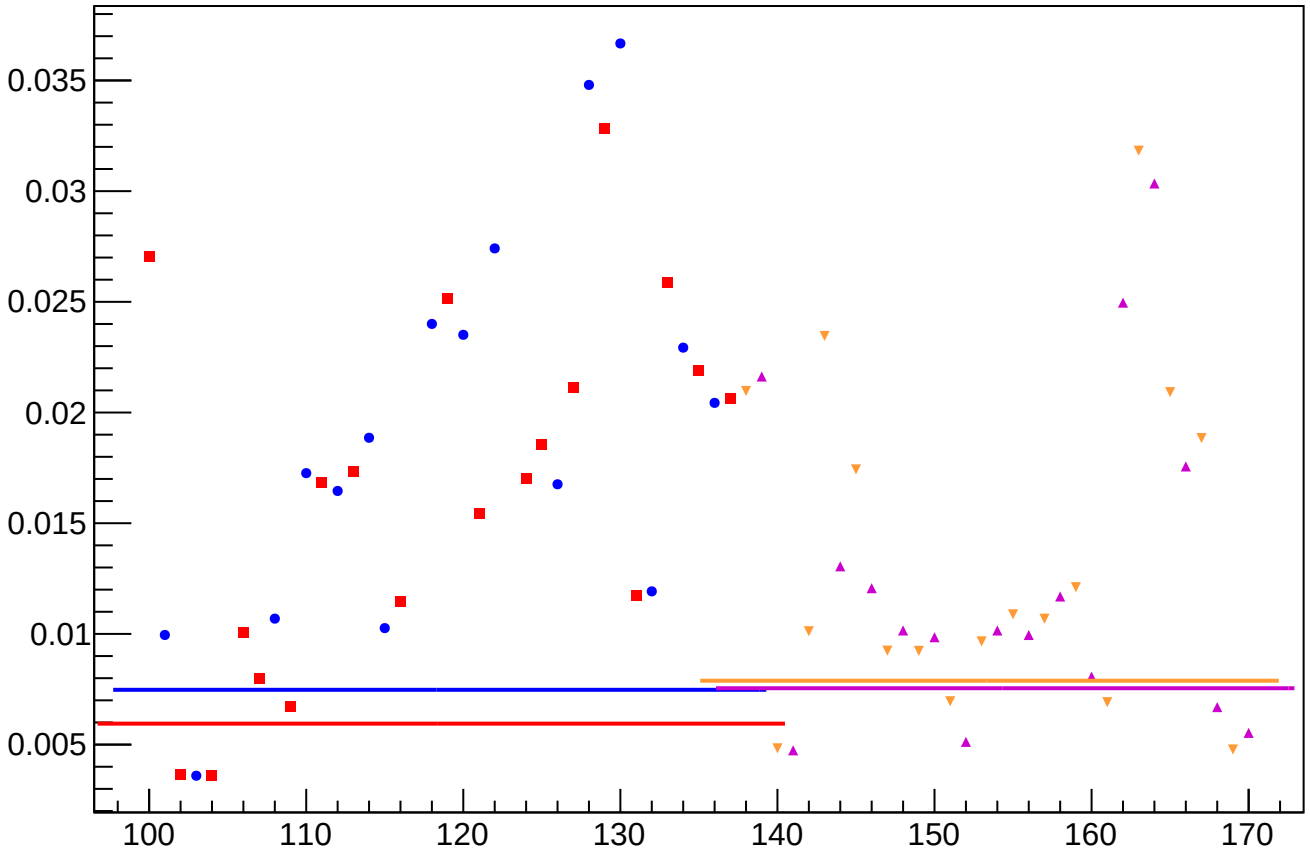
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.6/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:17.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 44.4/32

All: -0.000+/-0.000 $\chi^2$/NDF: 88.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 41.0/34




Right In: 0.007+/-0.000 $\chi^2$/NDF: 6076199.5/15

Left Out: 0.008+/-0.000 $\chi^2$/NDF:5675245.9/16

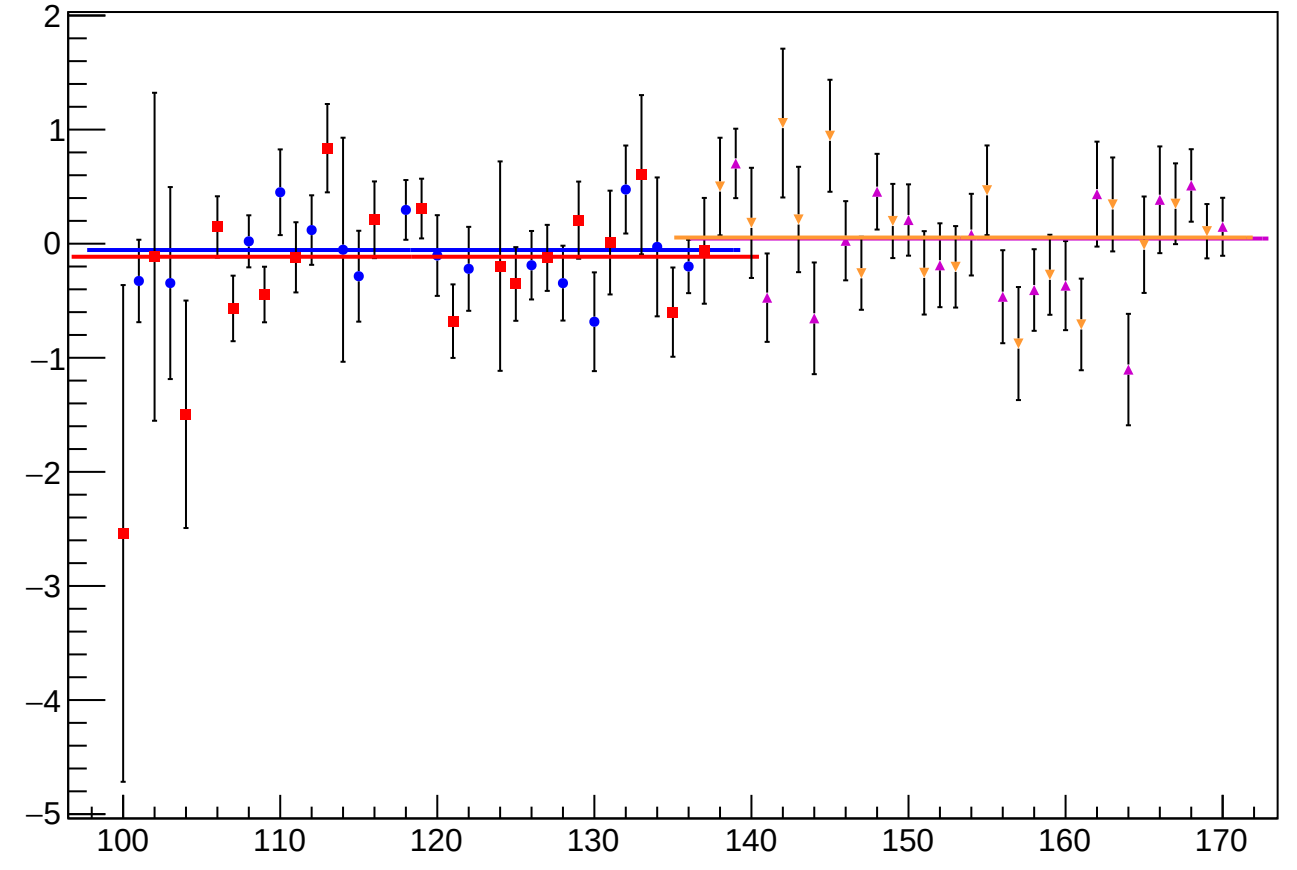
Right Out: 0.006+/-0.000 $\chi^2$/NDF: 5934015.2/18

Left In: 0.008+/-0.000 $\chi^2$/NDF:4793113.0/15

+ sign 0.008+/-0.000 $\chi^2$/NDF: 11767802.0/32

All: 0.007+/-0.000 $\chi^2$/NDF: 23048389.3/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 11086117.1/34




Right In: -0.055+/-0.085 $\chi^2$/NDF: 10.7/15

Left Out: 0.054+/-0.092 $\chi^2$/NDF:19.7/16

Right Out: -0.114+/-0.083 $\chi^2$/NDF: 25.2/18

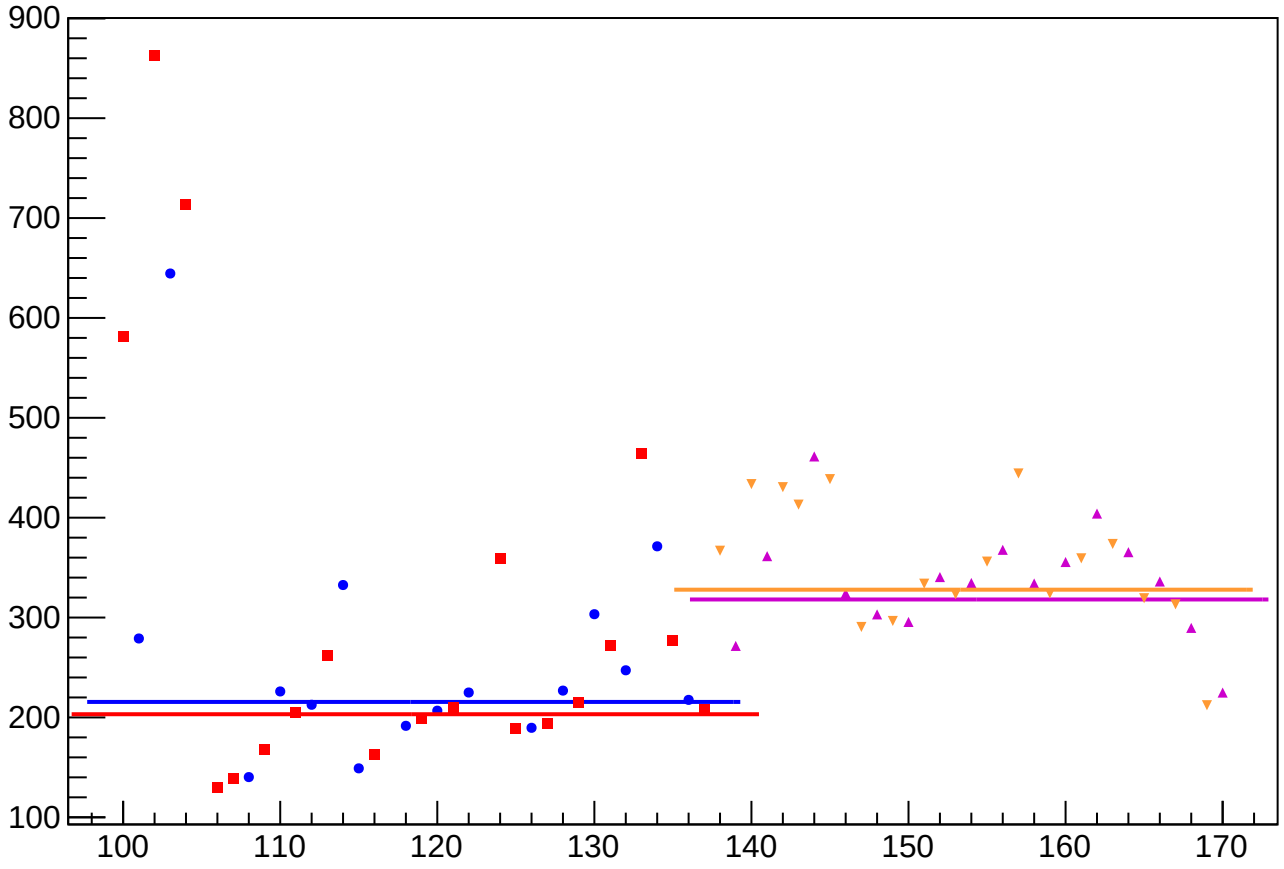
Left In: 0.045+/-0.090 $\chi^2$/NDF:24.1/15

+ sign -0.005+/-0.063 $\chi^2$/NDF: 31.1/32

All: -0.023+/-0.044 $\chi^2$/NDF: 82.3/67

- sign -0.041+/-0.061 $\chi^2$/NDF: 51.0/34

# asym_usr_atr2_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 215.518+/-0.060 $\chi^2$/NDF: 1148700.9/15

Left Out: 327.904+/-0.065 $\chi^2$/NDF:1012650.1/16

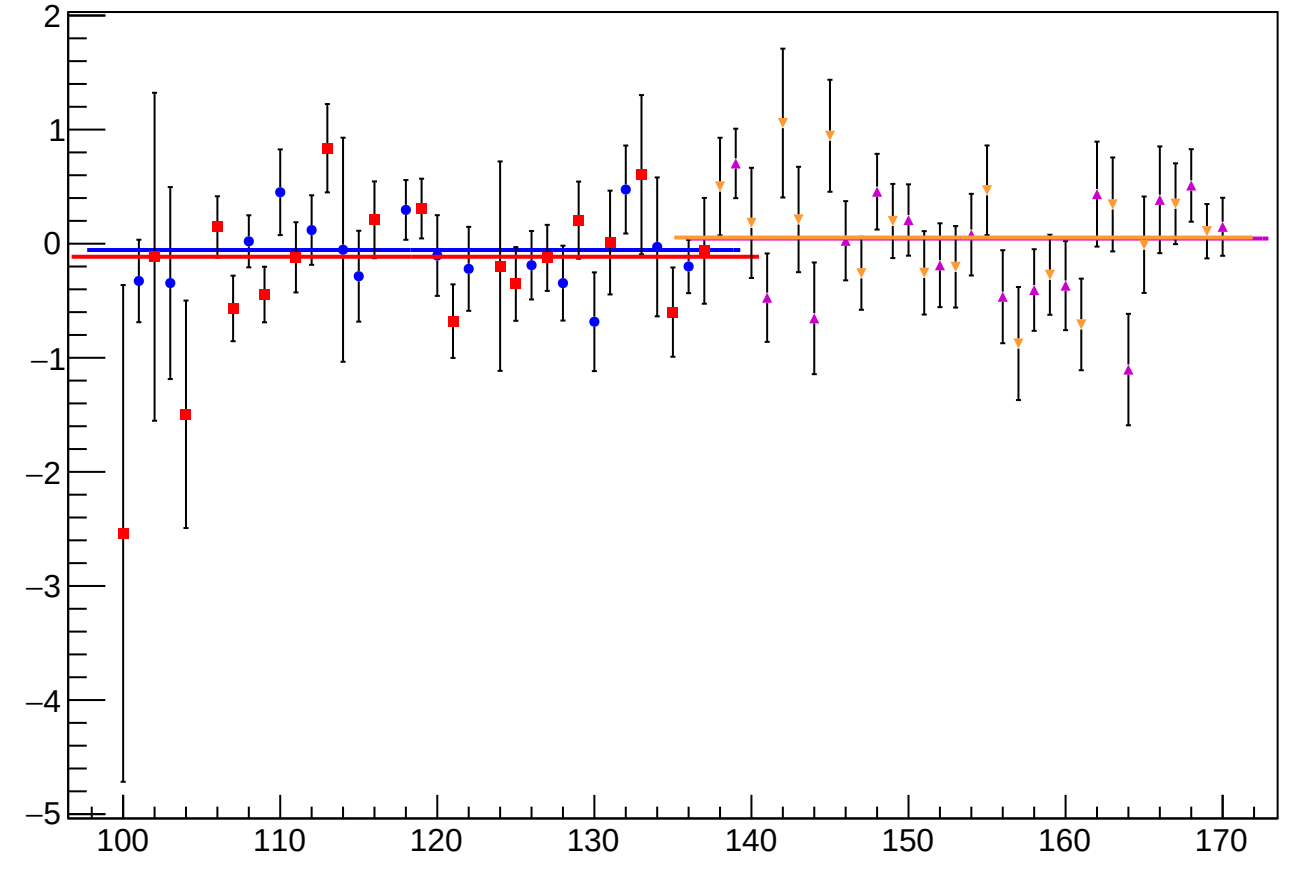
Right Out: 203.205+/-0.059 $\chi^2$/NDF: 1835535.5/18

Left In: 318.099+/-0.064 $\chi^2$/NDF:698658.4/15

\+ sign 267.425+/-0.044 $\chi^2$/NDF: 3758525.5/32

All: 261.677+/-0.031 $\chi^2$/NDF: 8084762.5/67

\- sign 256.223+/-0.043 $\chi^2$/NDF: 4293475.6/34




Right In: -0.055+/-0.085 $\chi^2$/NDF: 10.7/15

Left Out: 0.054+/-0.092 $\chi^2$/NDF:19.7/16

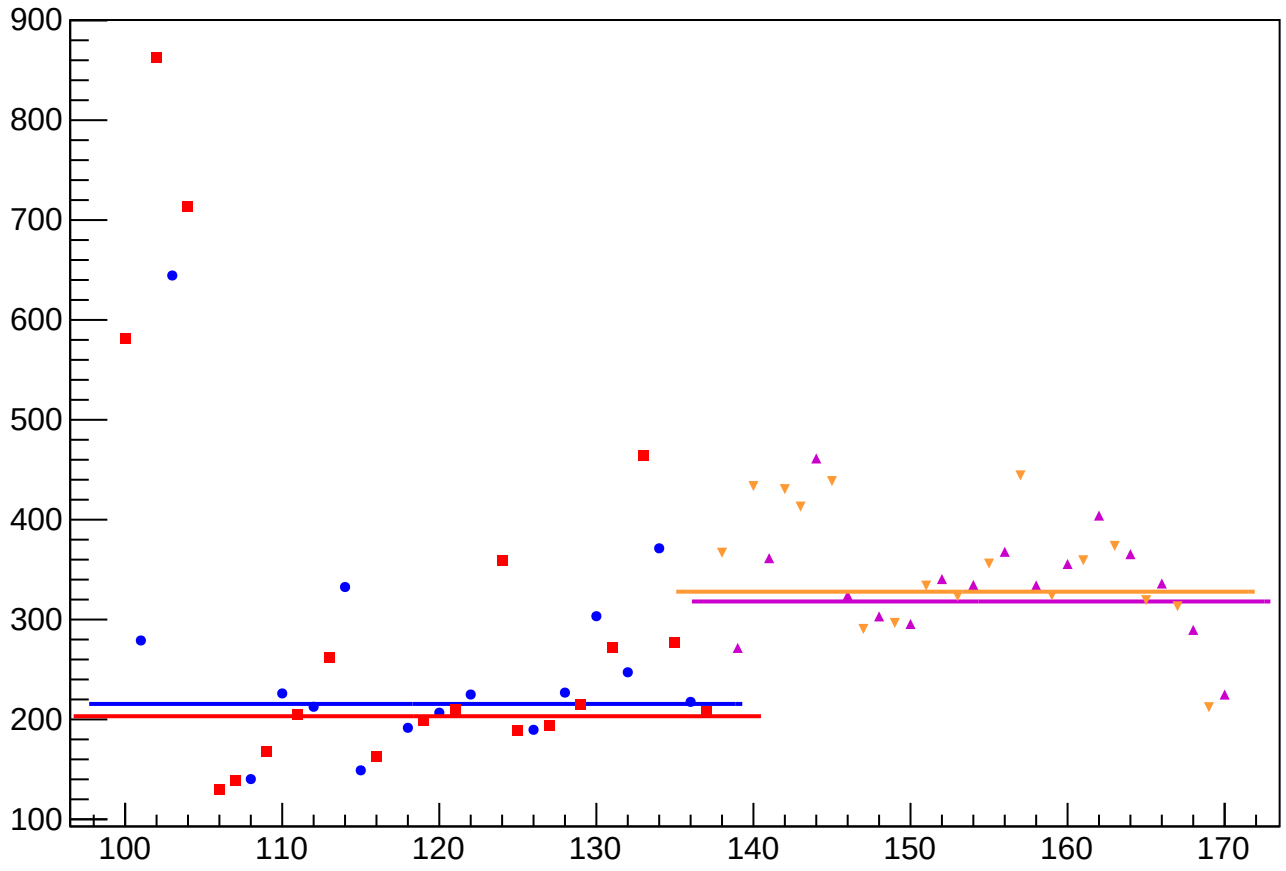
Right Out: -0.114+/-0.083 $\chi^2$/NDF: 25.2/18

Left In: 0.045+/-0.090 $\chi^2$/NDF:24.1/15

+ sign -0.005+/-0.063 $\chi^2$/NDF: 31.1/32

All: -0.023+/-0.044 $\chi^2$/NDF: 82.3/67

- sign -0.041+/-0.061 $\chi^2$/NDF: 51.0/34




Right In: 215.518+/-0.060 $\chi^2$/NDF: 1148700.9/15

Left Out: 327.904+/-0.065 $\chi^2$/NDF:1012650.1/16

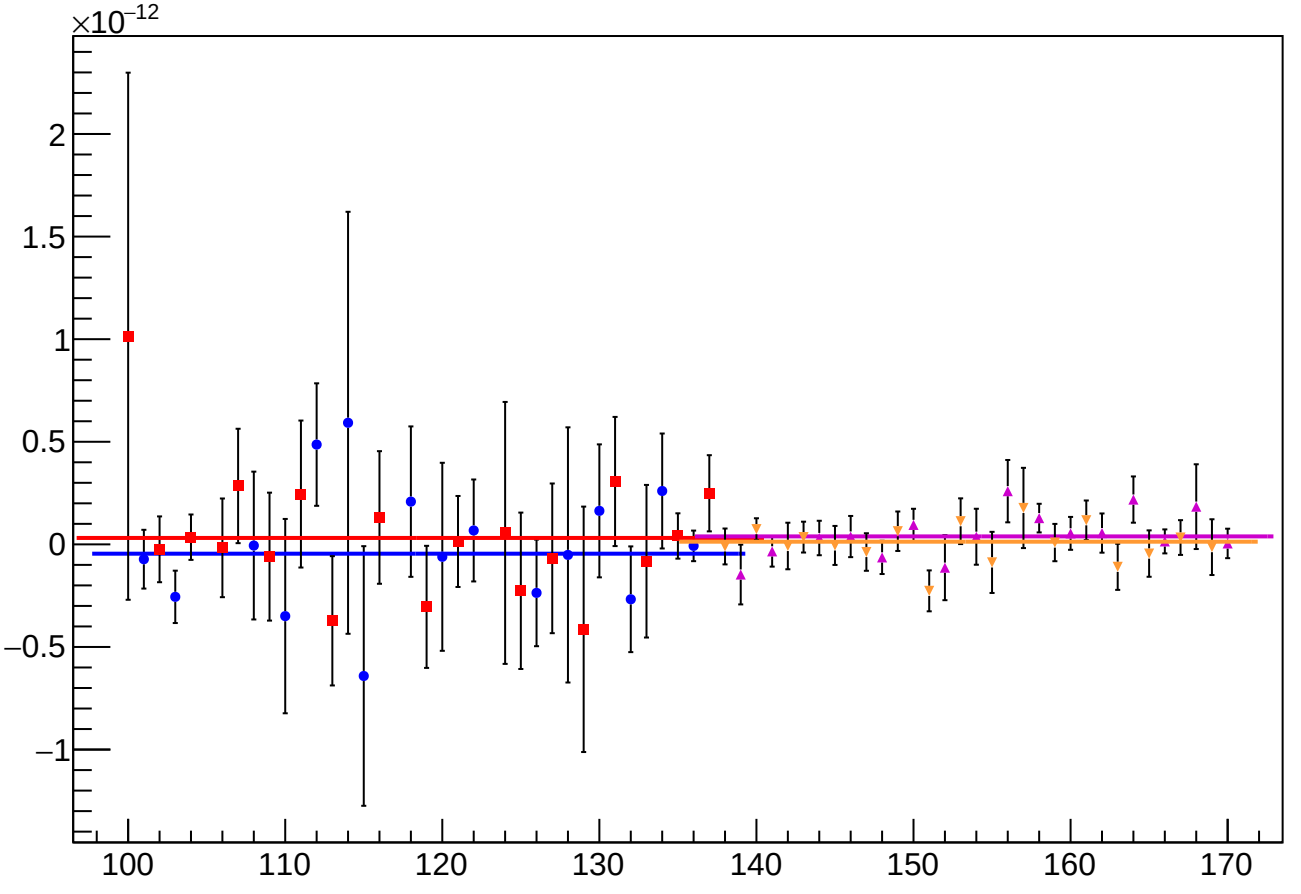
Right Out: 203.205+/-0.059 $\chi^2$/NDF: 1835535.5/18

Left In: 318.099+/-0.064 $\chi^2$/NDF:698658.4/15

+ sign 267.425+/-0.044 $\chi^2$/NDF: 3758525.5/32

All: 261.677+/-0.031 $\chi^2$/NDF: 8084762.5/67

- sign 256.223+/-0.043 $\chi^2$/NDF: 4293475.6/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 11.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.6/16

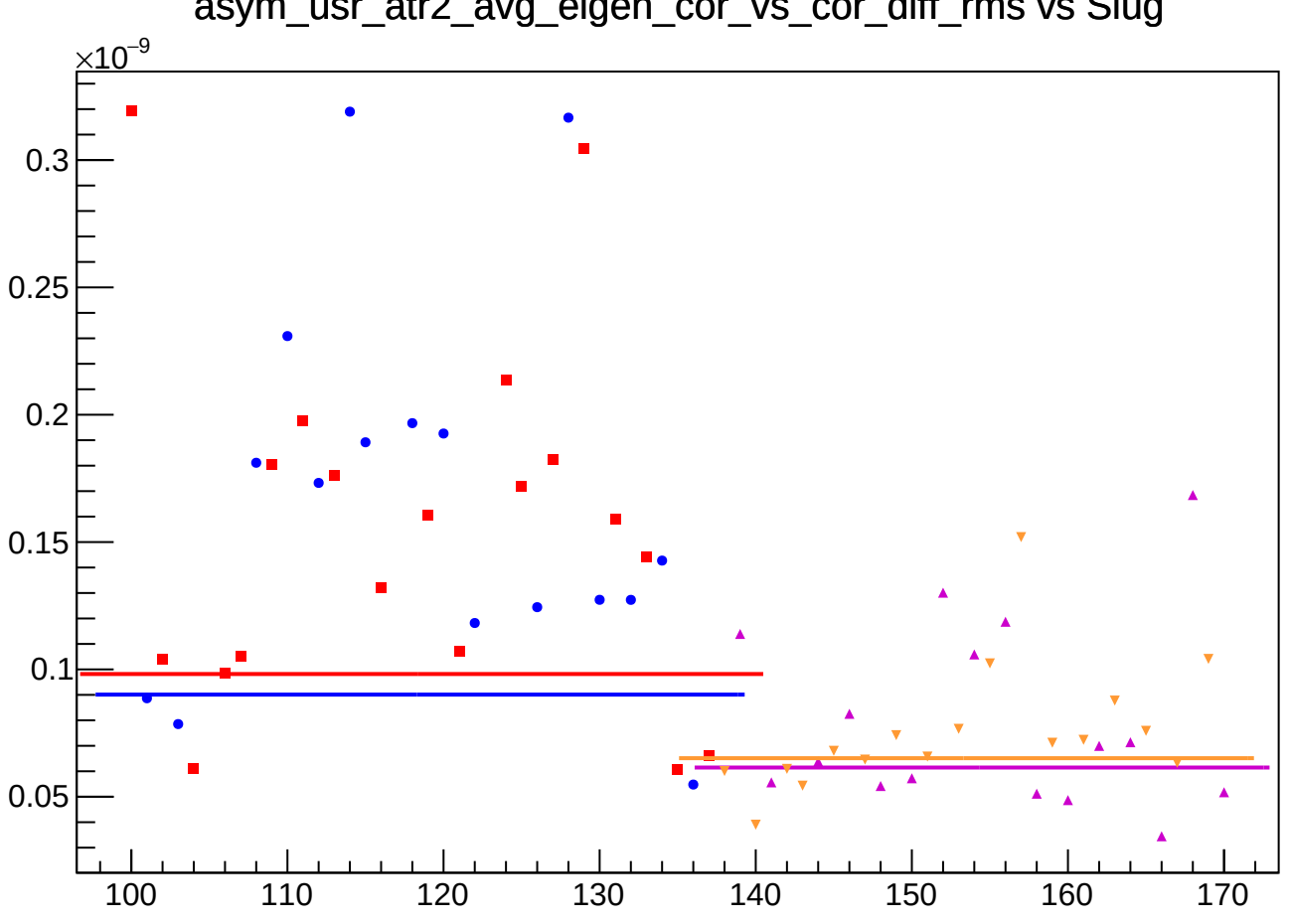
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 8.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:12.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 25.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 47.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 21.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1808066.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1379841.7/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1694726.3/18

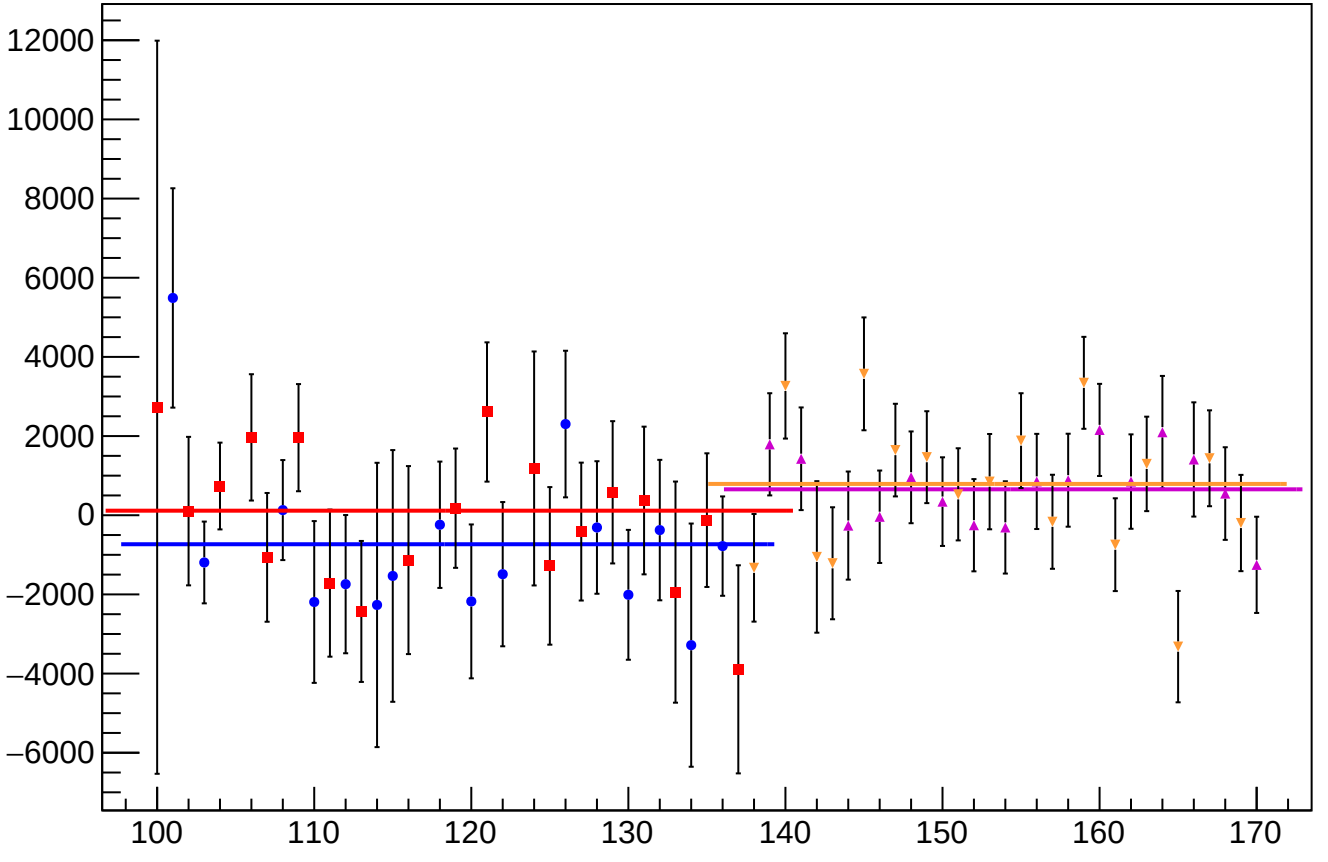
Left In: 0.000+/-0.000 $\chi^2$/NDF:2380017.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3600401.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 8524848.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4912892.0/34

# reg_asym_usr_atr2_dd_mean vs Slug




Right In: -732.747+/-427.384 $\chi^2$/NDF: 11.7/15

Left Out: 791.025+/-305.547 $\chi^2$/NDF:31.3/16

Right Out: 115.040+/-411.437 $\chi^2$/NDF: 13.1/18

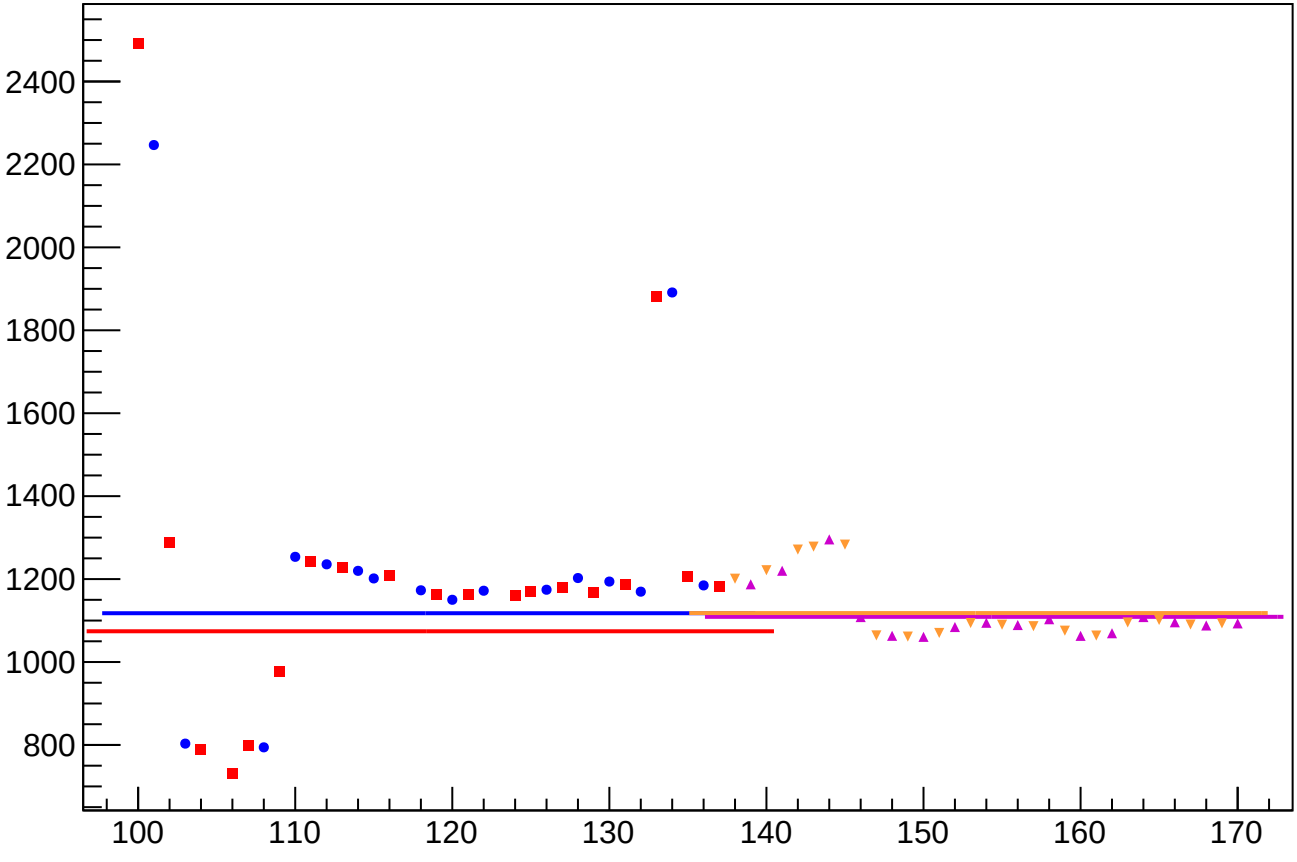
Left In: 654.644+/-305.424 $\chi^2$/NDF:8.9/15

+ sign 275.629+/-248.559 $\chi^2$/NDF: 51.4/32

All: 370.541+/-174.572 $\chi^2$/NDF: 74.8/67

- sign 462.934+/-245.239 $\chi^2$/NDF: 23.1/34

# reg_asym_usr_atr2_dd_rms vs Slug




Right In: 1117.684+/-0.302 $\chi^2$/NDF: 819835.1/15

Left Out: 1118.050+/-0.216 $\chi^2$/NDF:110286.9/16

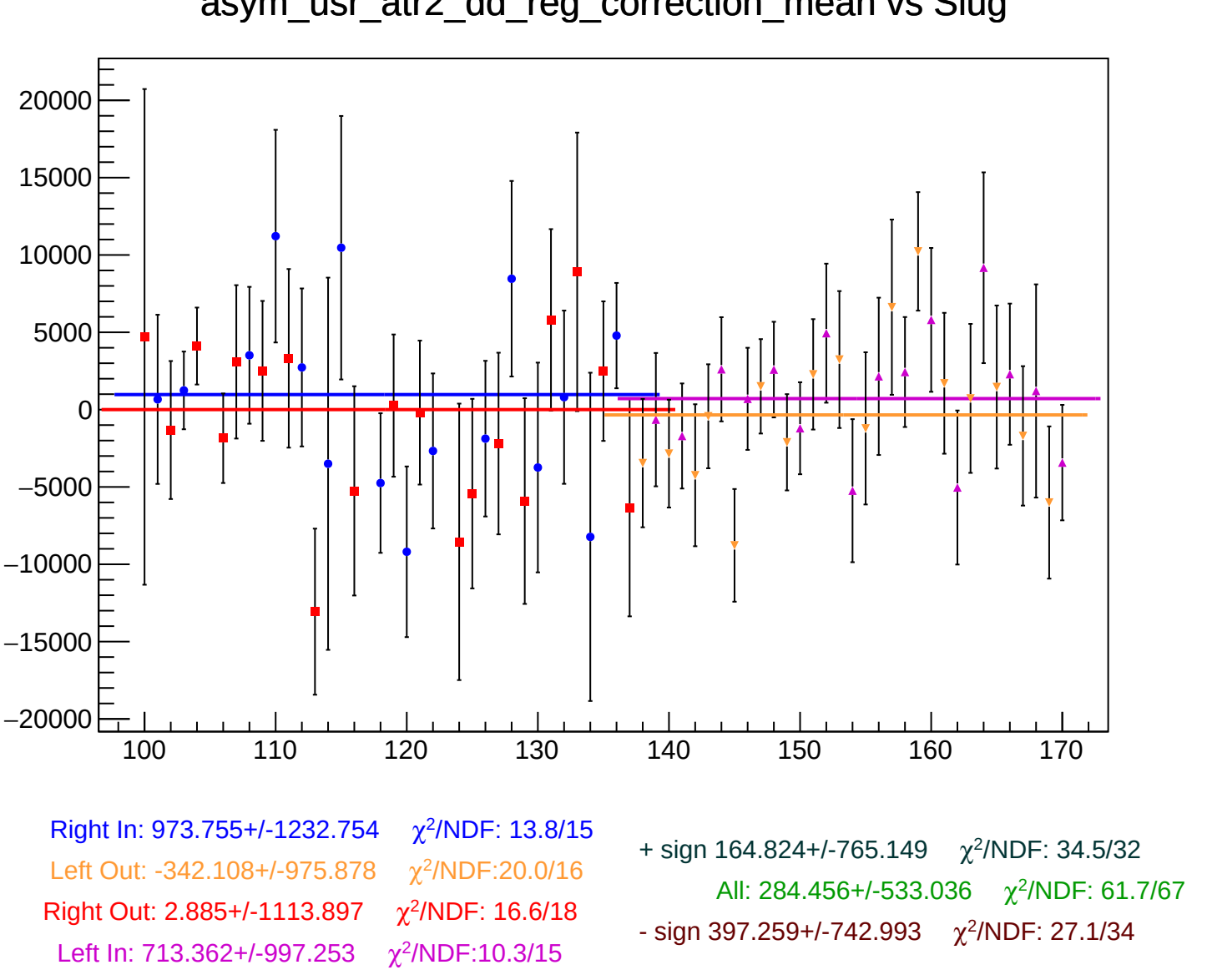
Right Out: 1074.148+/-0.289 $\chi^2$/NDF: 649508.4/18

Left In: 1108.967+/-0.216 $\chi^2$/NDF:74531.7/15

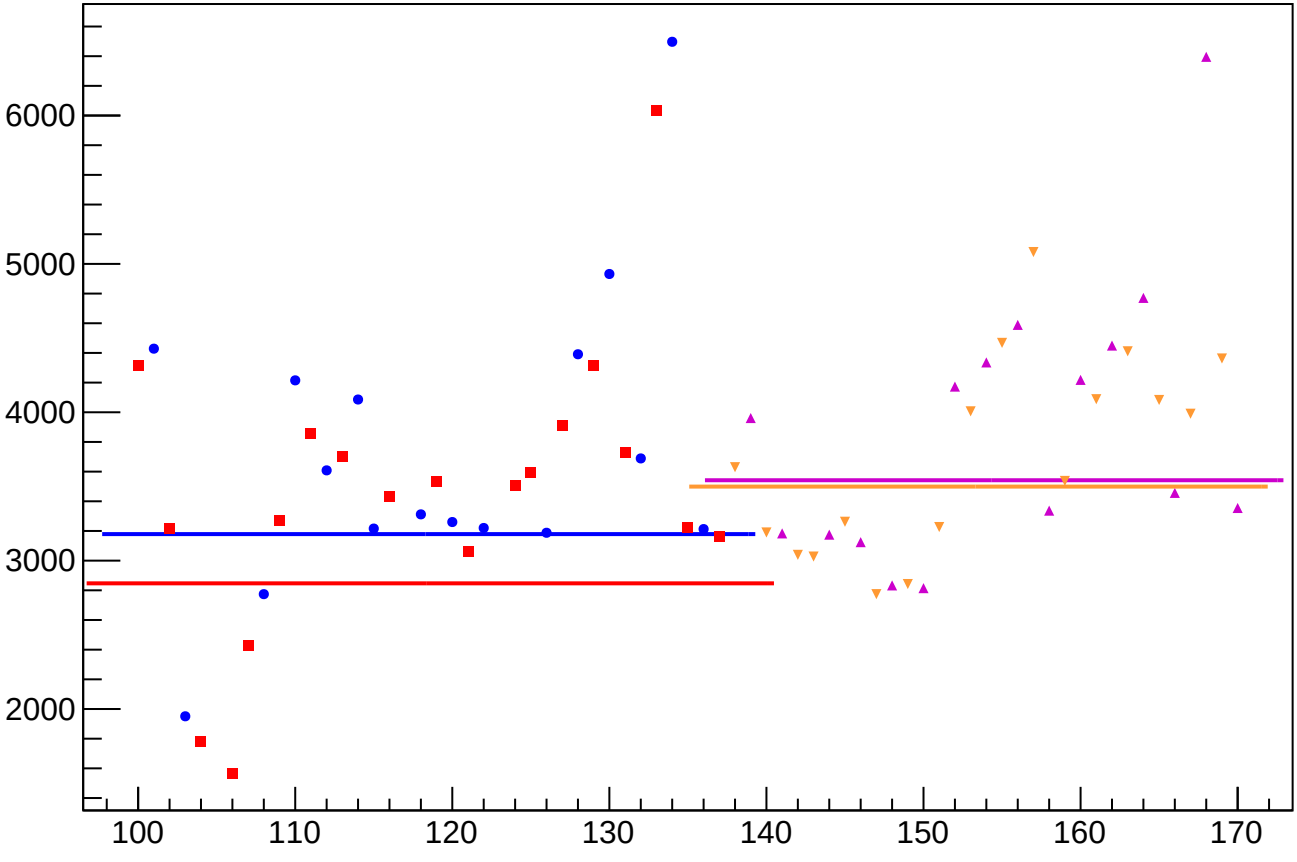
+ sign 1117.926+/-0.176 $\chi^2$/NDF: 930123.0/32

All: 1107.019+/-0.123 $\chi^2$/NDF: 1671075.5/67

- sign 1096.464+/-0.173 $\chi^2$/NDF: 733374.3/34


asym_usr_atr2_dd_reg_correction_mean vs Slug
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
100
110
120
130
140
150
160
170
Right In: 973.755+/-1232.754 χ²/NDF: 13.8/15
Left Out: -342.108+/-975.878 χ²/NDF:20.0/16
Right Out: 2.885+/-1113.897 χ²/NDF: 16.6/18
Left In: 713.362+/-997.253 χ²/NDF:10.3/15
+ sign 164.824+/-765.149 χ²/NDF: 34.5/32
All: 284.456+/-533.036 χ²/NDF: 61.7/67
- sign 397.259+/-742.993 χ²/NDF: 27.1/34

# asym_usr_atr2_dd_reg_correction_rms vs Slug




Right In: 3178.870+/-0.872 $\chi^2$/NDF: 1091676.8/15

Left Out: 3499.071+/-0.690 $\chi^2$/NDF:773795.1/16

Right Out: 2847.016+/-0.788 $\chi^2$/NDF: 1511160.9/18

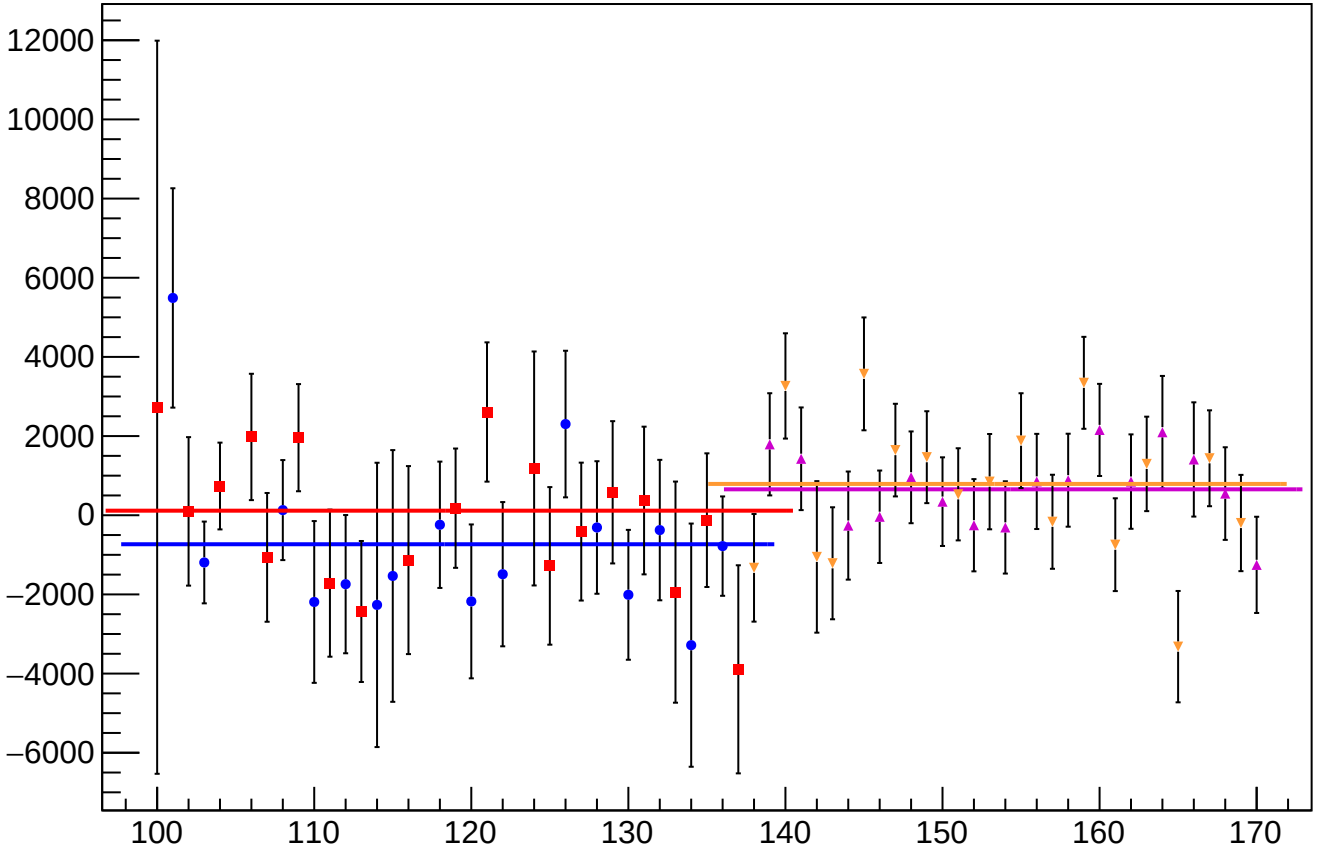
Left In: 3541.904+/-0.705 $\chi^2$/NDF:1047906.4/15

+ sign 3375.714+/-0.541 $\chi^2$/NDF: 1948423.2/32

All: 3302.125+/-0.377 $\chi^2$/NDF: 4975477.7/67

- sign 3232.737+/-0.525 $\chi^2$/NDF: 2991111.1/34

# cor_asym_usr_atr2_dd_mean vs Slug




Right In: -732.682+/-427.385 $\chi^2$/NDF: 11.7/15

Left Out: 791.116+/-305.547 $\chi^2$/NDF:31.3/16

Right Out: 115.308+/-411.441 $\chi^2$/NDF: 13.1/18

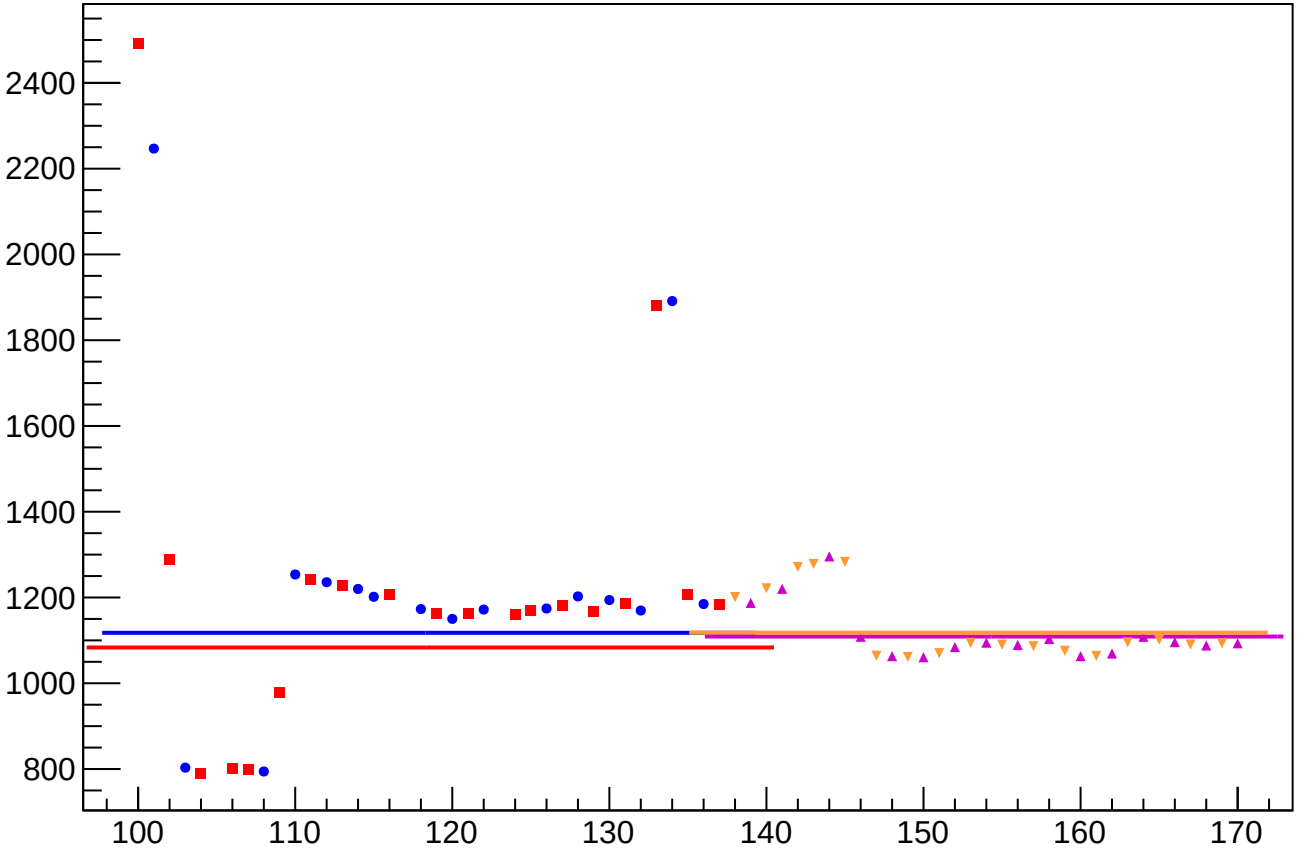
Left In: 654.611+/-305.424 $\chi^2$/NDF:8.9/15

+ sign 275.712+/-248.559 $\chi^2$/NDF: 51.4/32

All: 370.620+/-174.572 $\chi^2$/NDF: 74.8/67

- sign 463.010+/-245.239 $\chi^2$/NDF: 23.1/34

# cor_asym_usr_atr2_dd_rms vs Slug




Right In: 1117.684+/-0.302 $\chi^2$/NDF: 819831.7/15

Left Out: 1118.050+/-0.216 $\chi^2$/NDF:110286.9/16

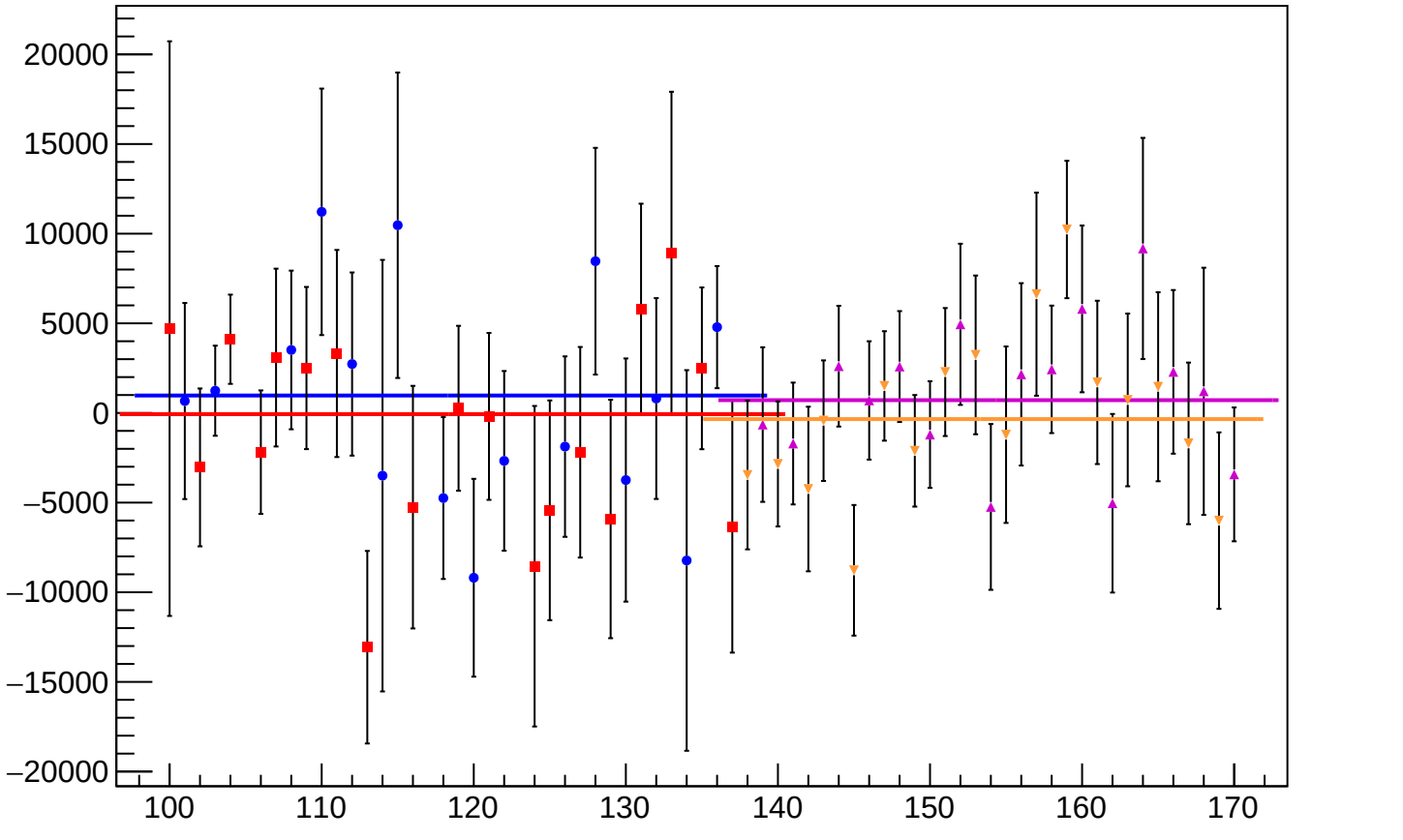
Right Out: 1083.421+/-0.290 $\chi^2$/NDF: 595016.7/18

Left In: 1108.967+/-0.216 $\chi^2$/NDF:74531.7/15

+ sign 1117.926+/-0.176 $\chi^2$/NDF: 930119.6/32

All: 1108.770+/-0.123 $\chi^2$/NDF: 1610003.6/67

- sign 1099.869+/-0.173 $\chi^2$/NDF: 674531.7/34




Right In: 973.256+/-1232.803 $\chi^2$/NDF: 13.8/15

Left Out: -342.107+/-975.877 $\chi^2$/NDF:20.0/16

Right Out: -67.113+/-1137.892 $\chi^2$/NDF: 16.9/18

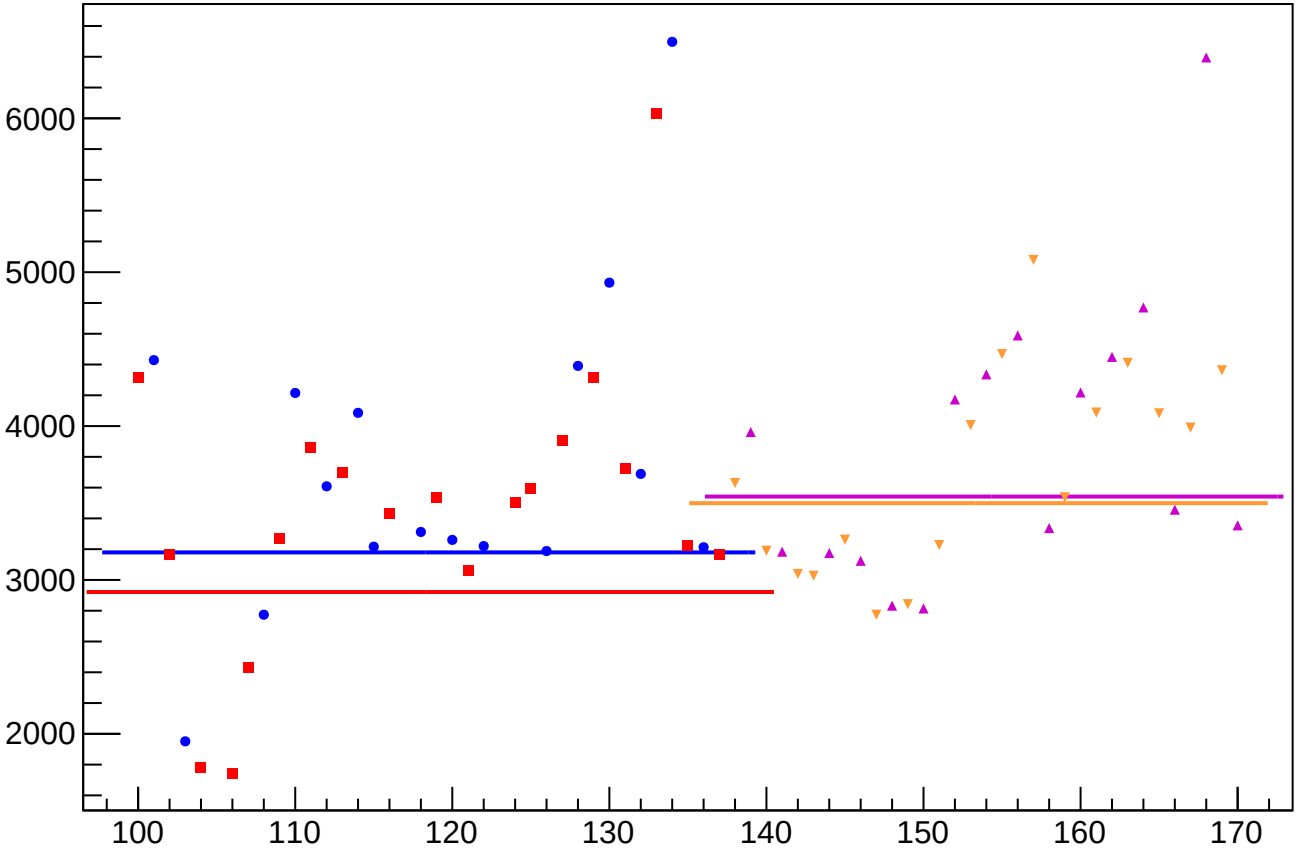
Left In: 713.370+/-997.253 $\chi^2$/NDF:10.3/15

+ sign 164.607+/-765.160 $\chi^2$/NDF: 34.5/32

All: 271.561+/-535.605 $\chi^2$/NDF: 62.1/67

- sign 374.316+/-749.987 $\chi^2$/NDF: 27.5/34

# asym_usr_atr2_dd_cor_correction_rms vs Slug




Right In: 3179.054+/-0.872 $\chi^2$/NDF: 1091236.5/15

Left Out: 3499.067+/-0.690 $\chi^2$/NDF:773798.8/16

Right Out: 2921.641+/-0.805 $\chi^2$/NDF: 1312890.1/18

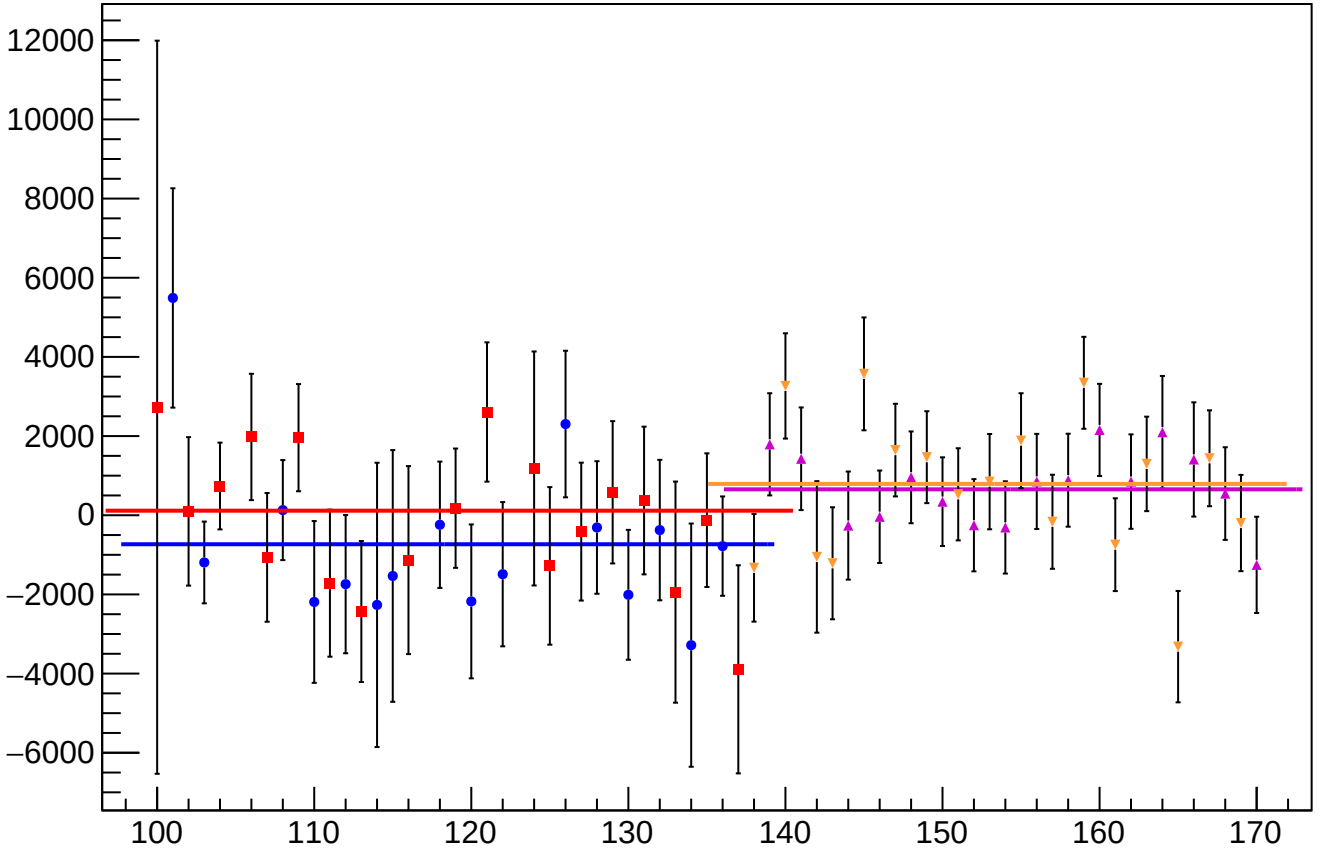
Left In: 3541.901+/-0.705 $\chi^2$/NDF:1047910.3/15

+ sign 3375.789+/-0.541 $\chi^2$/NDF: 1947885.2/32

All: 3323.085+/-0.379 $\chi^2$/NDF: 4663394.6/67

- sign 3272.450+/-0.530 $\chi^2$/NDF: 2696904.3/34

# eigen_cor_asym_usr_atr2_dd_mean vs Slug




Right In: -732.682+/-427.385 $\chi^2$/NDF: 11.7/15

Left Out: 791.116+/-305.547 $\chi^2$/NDF:31.3/16

Right Out: 115.308+/-411.441 $\chi^2$/NDF: 13.1/18

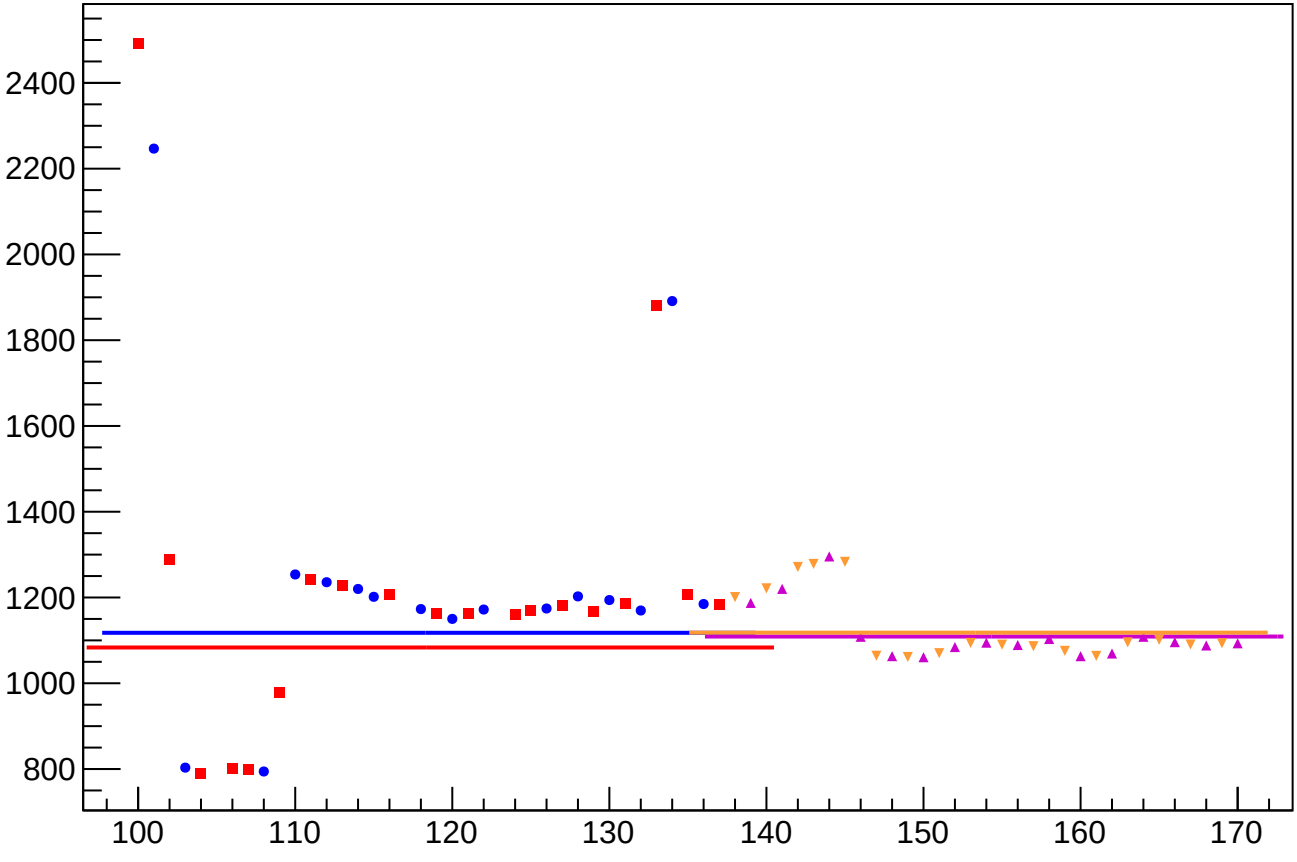
Left In: 654.611+/-305.424 $\chi^2$/NDF:8.9/15

+ sign 275.712+/-248.559 $\chi^2$/NDF: 51.4/32

All: 370.620+/-174.572 $\chi^2$/NDF: 74.8/67

- sign 463.010+/-245.239 $\chi^2$/NDF: 23.1/34

# eigen_cor_asym_usr_atr2_dd_rms vs Slug




Right In: 1117.684+/-0.302 $\chi^2$/NDF: 819831.7/15

Left Out: 1118.050+/-0.216 $\chi^2$/NDF:110286.9/16

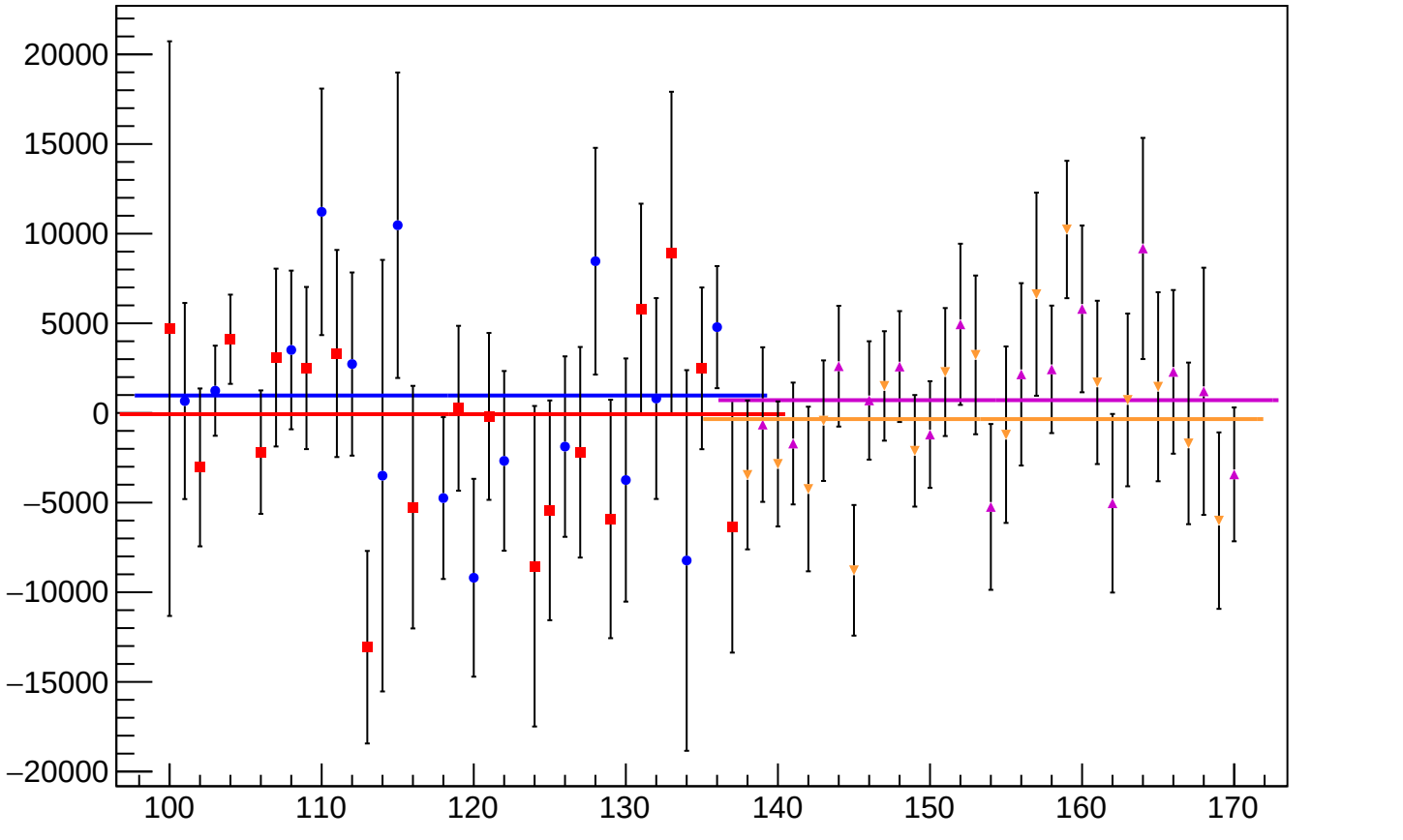
Right Out: 1083.421+/-0.290 $\chi^2$/NDF: 595016.7/18

Left In: 1108.967+/-0.216 $\chi^2$/NDF:74531.7/15

+ sign 1117.926+/-0.176 $\chi^2$/NDF: 930119.6/32

All: 1108.770+/-0.123 $\chi^2$/NDF: 1610003.6/67

- sign 1099.869+/-0.173 $\chi^2$/NDF: 674531.7/34




Right In: 973.256+/-1232.803 $\chi^2$/NDF: 13.8/15

Left Out: -342.107+/-975.877 $\chi^2$/NDF:20.0/16

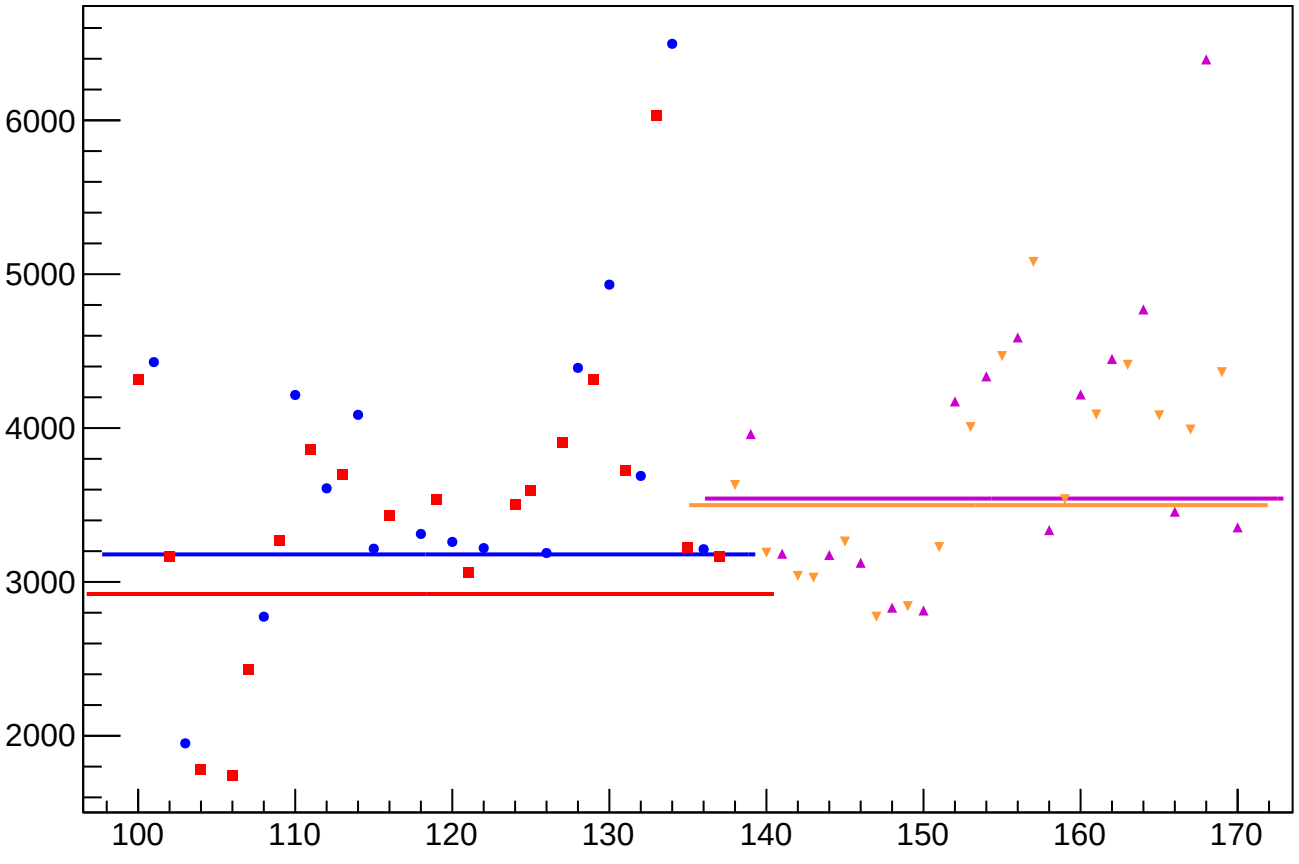
Right Out: -67.113+/-1137.892 $\chi^2$/NDF: 16.9/18

Left In: 713.370+/-997.253 $\chi^2$/NDF:10.3/15

+ sign 164.607+/-765.160 $\chi^2$/NDF: 34.5/32

All: 271.561+/-535.605 $\chi^2$/NDF: 62.1/67

- sign 374.316+/-749.987 $\chi^2$/NDF: 27.5/34




Right In: 3179.054+/-0.872 $\chi^2$/NDF: 1091236.5/15

Left Out: 3499.067+/-0.690 $\chi^2$/NDF:773798.8/16

Right Out: 2921.641+/-0.805 $\chi^2$/NDF: 1312890.1/18

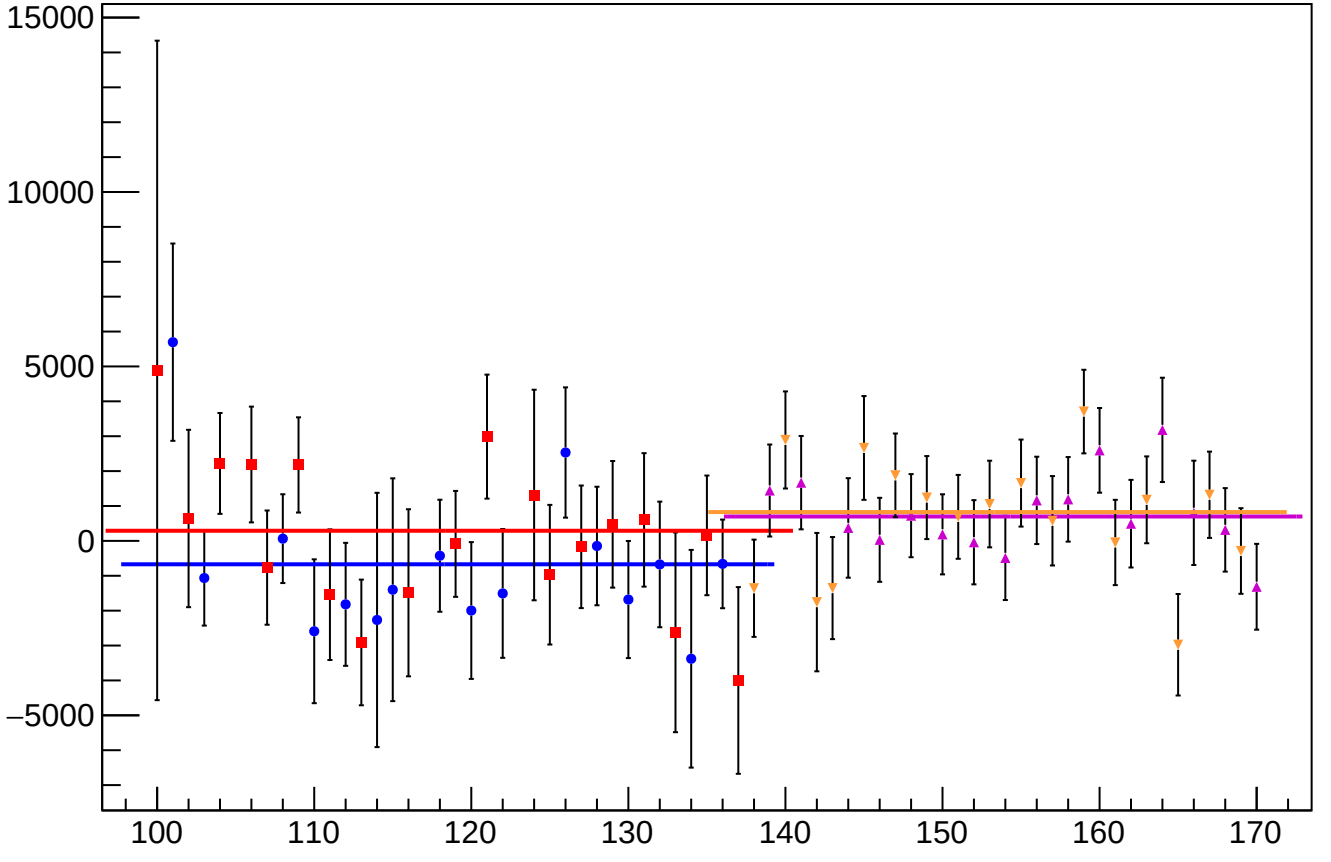
Left In: 3541.901+/-0.705 $\chi^2$/NDF:1047910.3/15

+ sign 3375.789+/-0.541 $\chi^2$/NDF: 1947885.2/32

All: 3323.085+/-0.379 $\chi^2$/NDF: 4663394.6/67

- sign 3272.450+/-0.530 $\chi^2$/NDF: 2696904.3/34

# dit_asym_usr_atr2_dd_mean vs Slug




Right In: -670.819+/-448.500 $\chi^2$/NDF: 11.9/15

Left Out: 825.750+/-316.191 $\chi^2$/NDF:25.7/16

Right Out: 290.311+/-434.425 $\chi^2$/NDF: 16.9/18

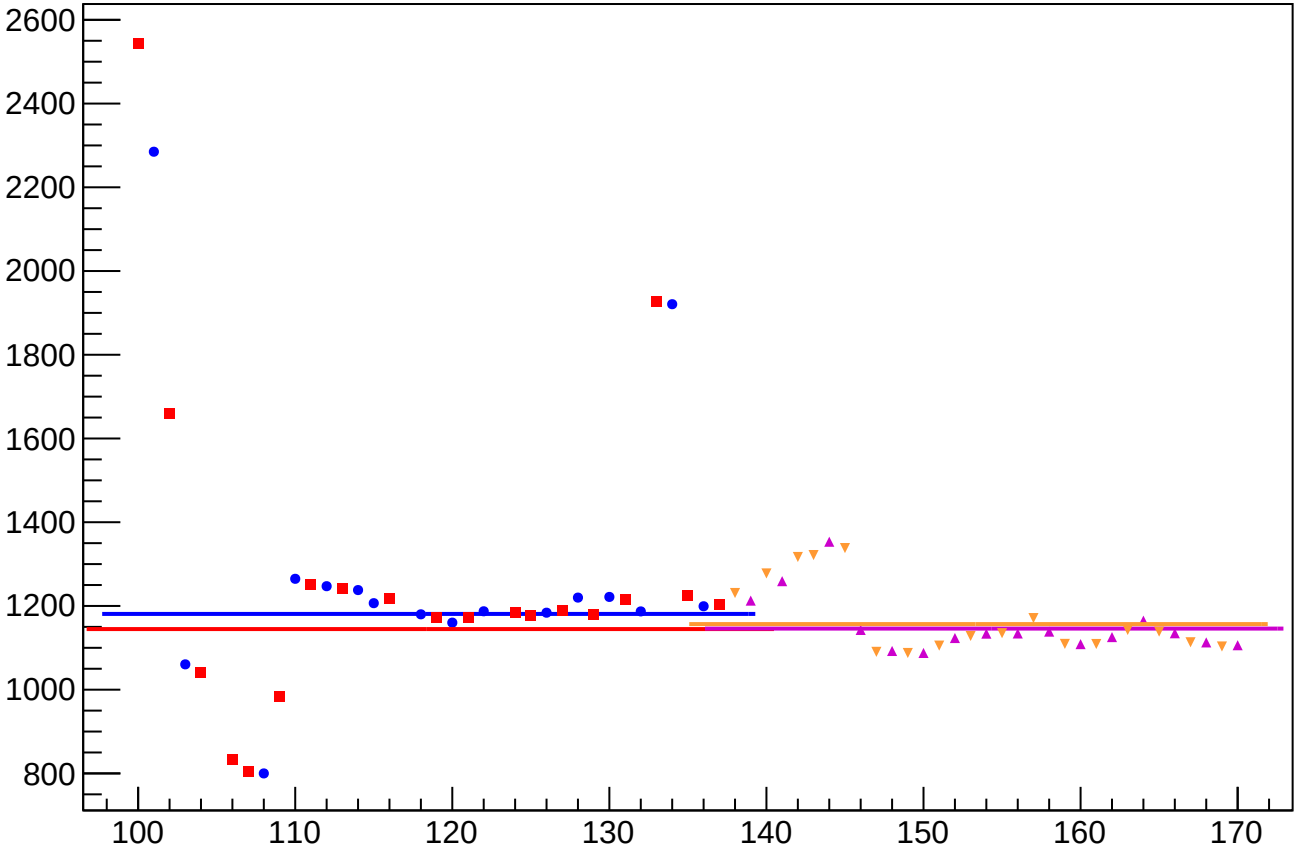
Left In: 698.914+/-315.647 $\chi^2$/NDF:11.1/15

+ sign 328.879+/-258.426 $\chi^2$/NDF: 45.0/32

All: 444.673+/-181.641 $\chi^2$/NDF: 74.0/67

- sign 557.734+/-255.359 $\chi^2$/NDF: 28.6/34

# dit_asym_usr_atr2_dd_rms vs Slug




Right In: 1180.955+/-0.317 $\chi^2$/NDF: 621878.6/15

Left Out: 1156.689+/-0.224 $\chi^2$/NDF:120479.7/16

Right Out: 1144.777+/-0.307 $\chi^2$/NDF: 497730.6/18

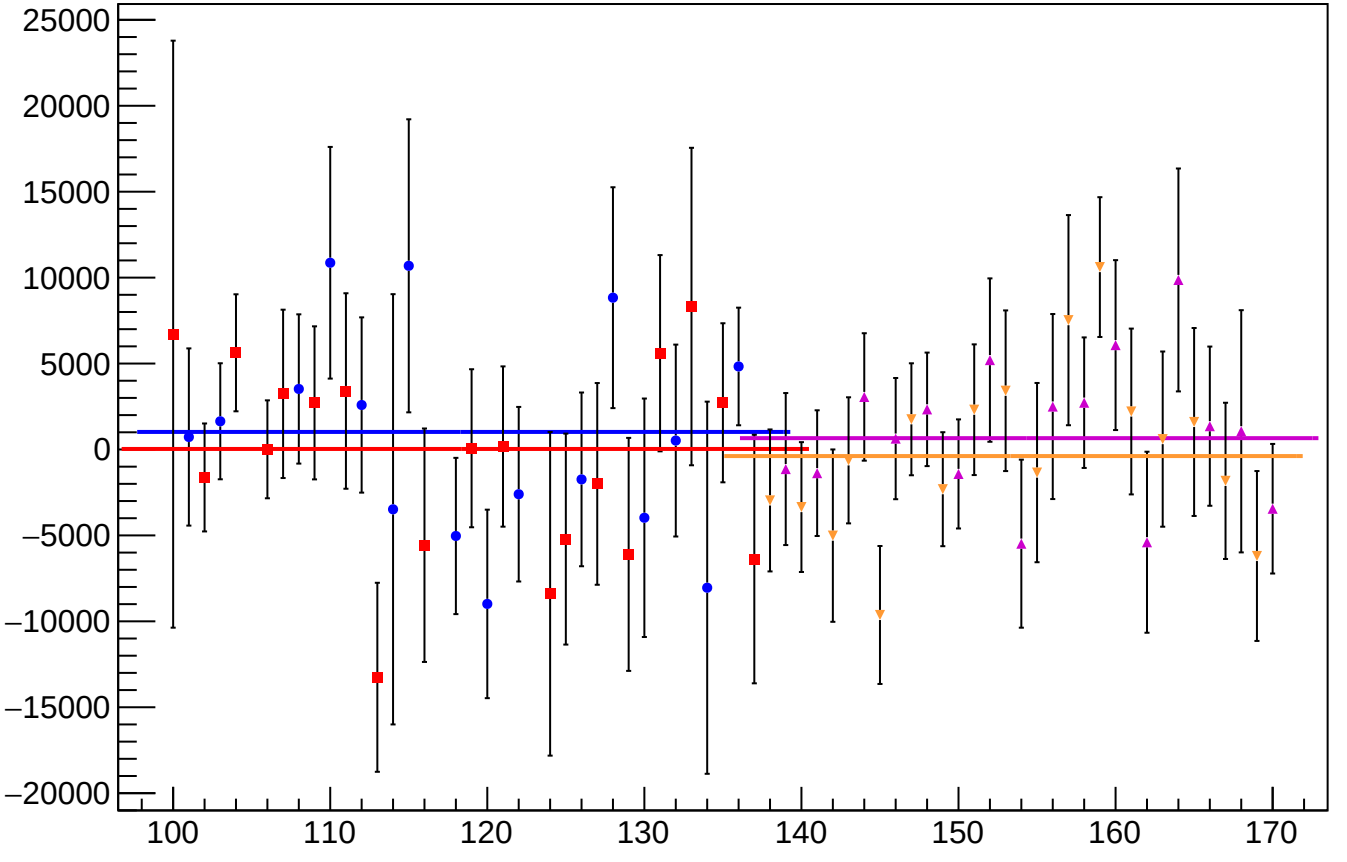
Left In: 1145.912+/-0.223 $\chi^2$/NDF:78529.6/15

+ sign 1164.746+/-0.183 $\chi^2$/NDF: 746269.3/32

All: 1155.016+/-0.128 $\chi^2$/NDF: 1328140.5/67

- sign 1145.519+/-0.181 $\chi^2$/NDF: 576269.1/34

# asym_usr_atr2_dd_dit_correction_mean vs Slug




Right In: 1021.047+/-1302.431 $\chi^2$/NDF: 13.9/15

Left Out: -383.763+/-1035.232 $\chi^2$/NDF:20.1/16

Right Out: 30.135+/-1130.743 $\chi^2$/NDF: 16.1/18

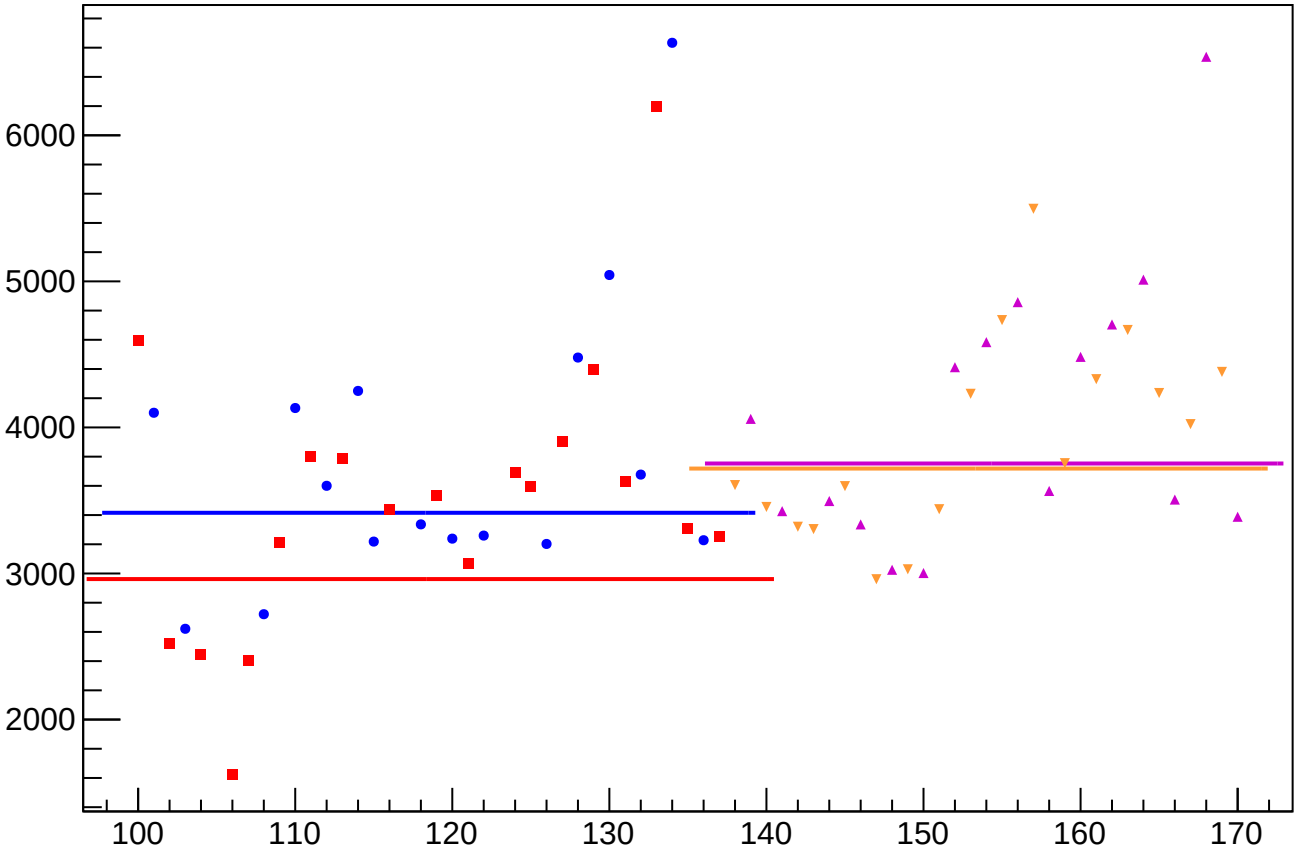
Left In: 658.599+/-1055.434 $\chi^2$/NDF:10.2/15

+ sign 160.140+/-810.414 $\chi^2$/NDF: 34.6/32

All: 268.119+/-558.805 $\chi^2$/NDF: 61.2/67

- sign 365.991+/-771.555 $\chi^2$/NDF: 26.5/34

# asym_usr_atr2_dd_dit_correction_rms vs Slug




Right In: 3415.595+/-0.921 $\chi^2$/NDF: 592344.0/15

Left Out: 3718.387+/-0.732 $\chi^2$/NDF:690032.9/16

Right Out: 2961.798+/-0.800 $\chi^2$/NDF: 1169257.4/18

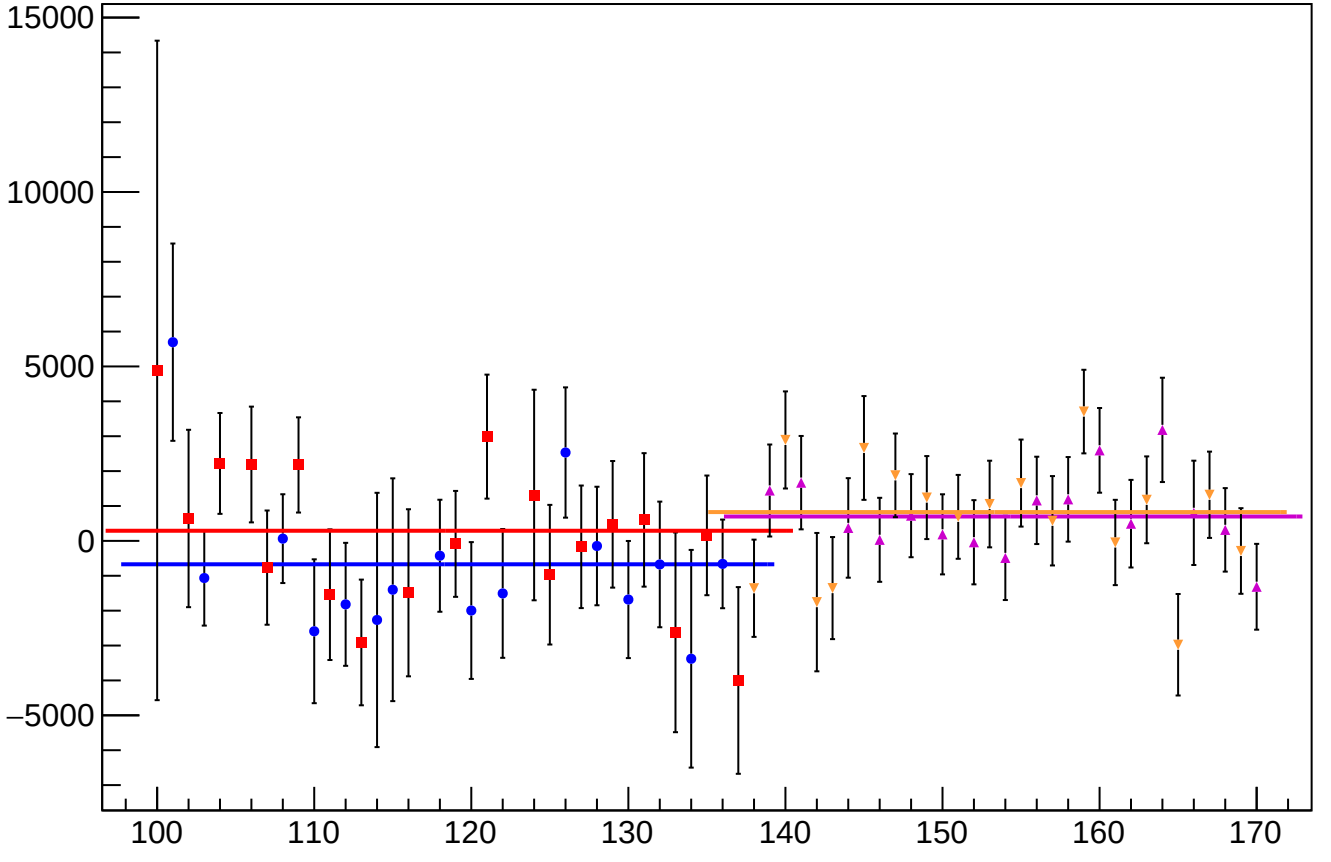
Left In: 3753.037+/-0.746 $\chi^2$/NDF:978037.9/15

+ sign 3601.154+/-0.573 $\chi^2$/NDF: 1348621.3/32

All: 3487.583+/-0.395 $\chi^2$/NDF: 4094144.3/67

- sign 3384.642+/-0.546 $\chi^2$/NDF: 2670642.5/34

# eigen_dit_asym_usr_atr2_dd_mean vs Slug




Right In: -670.824+/-448.500 $\chi^2$/NDF: 11.9/15

Left Out: 825.758+/-316.191 $\chi^2$/NDF:25.7/16

Right Out: 290.316+/-434.425 $\chi^2$/NDF: 16.9/18

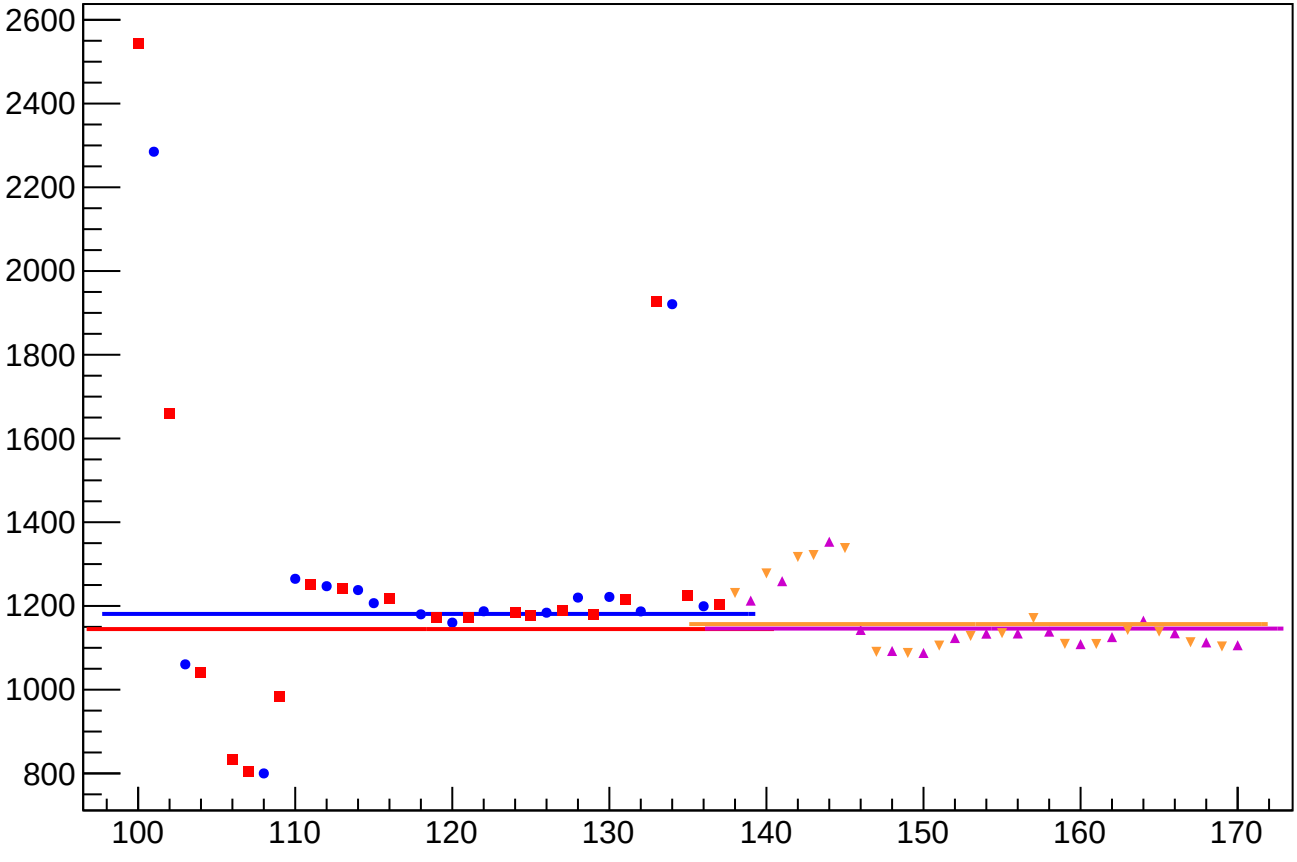
Left In: 698.915+/-315.648 $\chi^2$/NDF:11.1/15

+ sign 328.882+/-258.426 $\chi^2$/NDF: 45.0/32

All: 444.676+/-181.641 $\chi^2$/NDF: 74.0/67

- sign 557.737+/-255.359 $\chi^2$/NDF: 28.6/34

# eigen_dit_asym_usr_atr2_dd_rms vs Slug




Right In: 1180.955+/-0.317 $\chi^2$/NDF: 621878.9/15

Left Out: 1156.690+/-0.224 $\chi^2$/NDF:120479.5/16

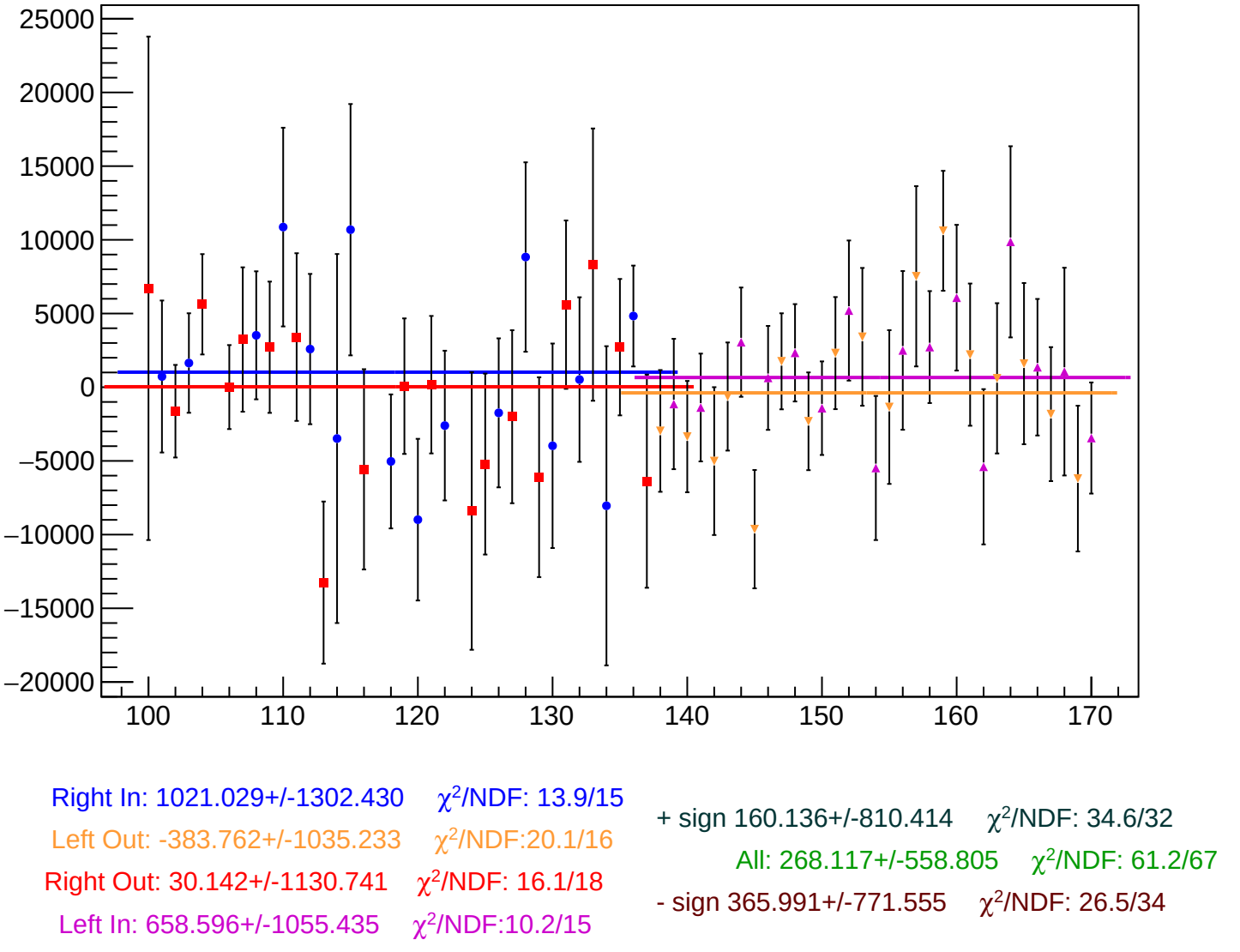
Right Out: 1144.777+/-0.307 $\chi^2$/NDF: 497730.2/18

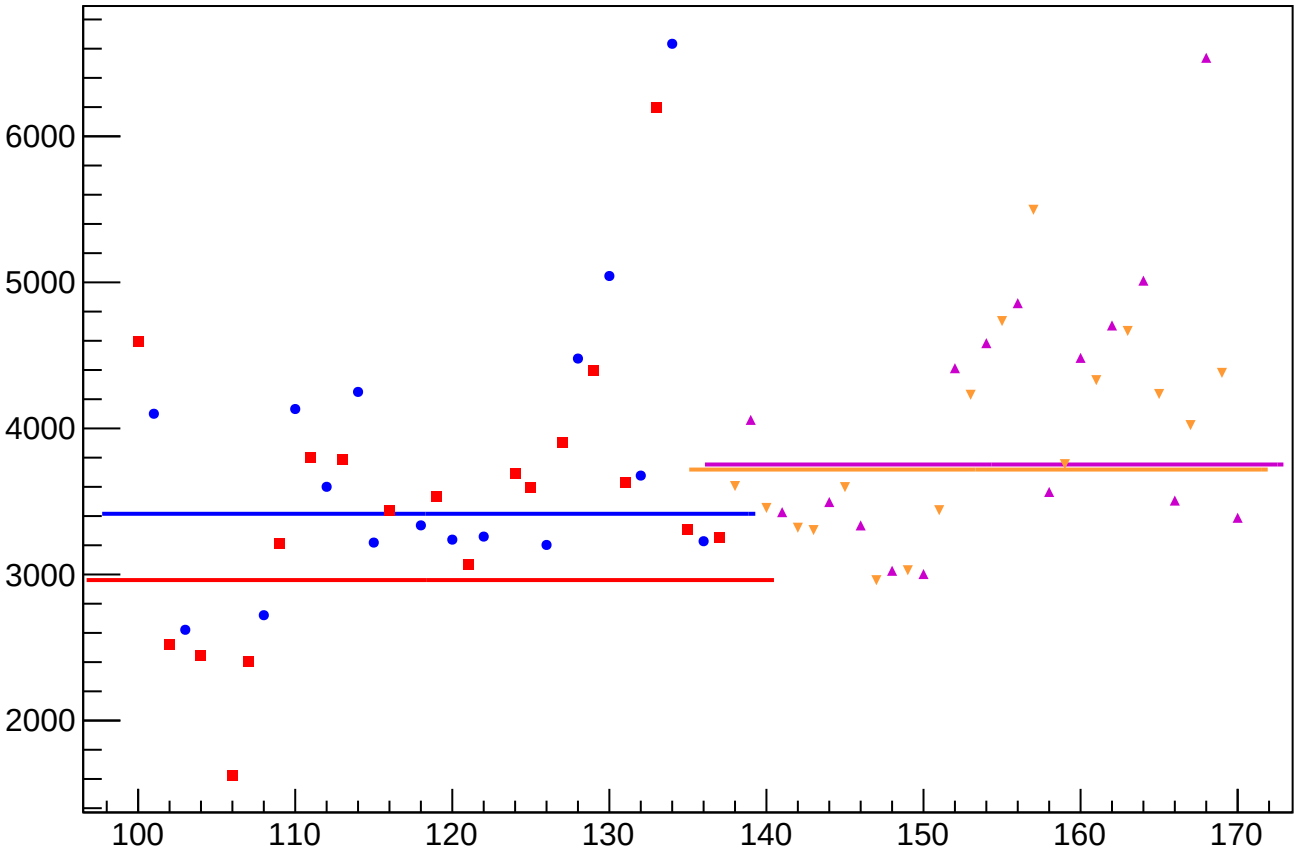
Left In: 1145.913+/-0.223 $\chi^2$/NDF:78529.1/15

+ sign 1164.746+/-0.183 $\chi^2$/NDF: 746269.1/32

All: 1155.017+/-0.128 $\chi^2$/NDF: 1328139.3/67

- sign 1145.520+/-0.181 $\chi^2$/NDF: 576268.3/34


asym_usr_atr2_dd_eigen_dit_correction_mean vs Slug
25000
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
100
110
120
130
140
150
160
170
Right In: 1021.029+/-1302.430 χ²/NDF: 13.9/15
Left Out: -383.762+/-1035.233 χ²/NDF:20.1/16
Right Out: 30.142+/-1130.741 χ²/NDF: 16.1/18
Left In: 658.596+/-1055.435 χ²/NDF:10.2/15
+ sign 160.136+/-810.414 χ²/NDF: 34.6/32
All: 268.117+/-558.805 χ²/NDF: 61.2/67
- sign 365.991+/-771.555 χ²/NDF: 26.5/34




Right In: 3415.591+/-0.921 $\chi^2$/NDF: 592339.1/15

Left Out: 3718.392+/-0.732 $\chi^2$/NDF:690032.3/16

Right Out: 2961.793+/-0.800 $\chi^2$/NDF: 1169257.0/18

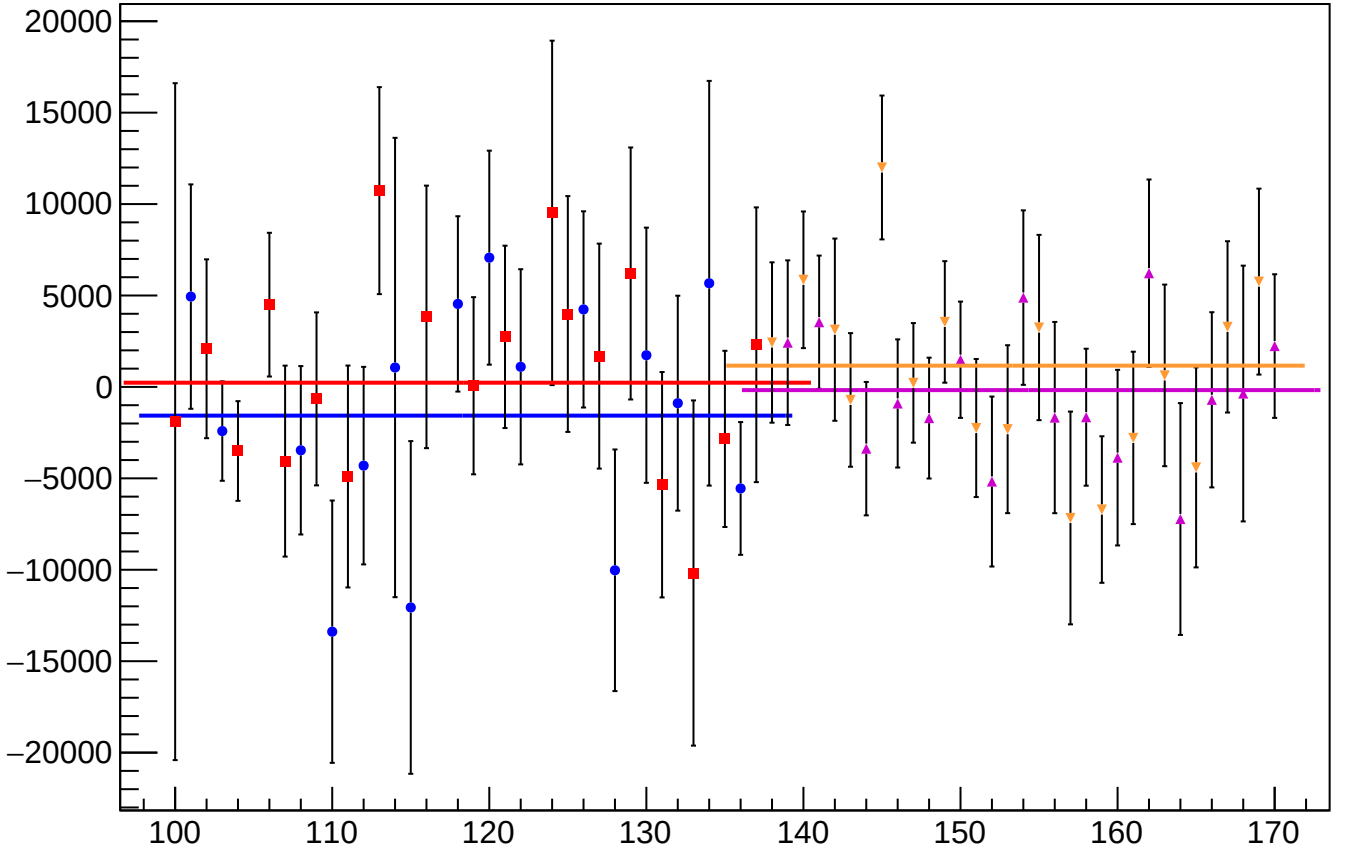
Left In: 3753.042+/-0.746 $\chi^2$/NDF:978038.3/15

+ sign 3601.156+/-0.573 $\chi^2$/NDF: 1348619.6/32

All: 3487.583+/-0.395 $\chi^2$/NDF: 4094157.4/67

- sign 3384.641+/-0.546 $\chi^2$/NDF: 2670655.7/34

# asym_usr_atr2_dd_mean vs Slug




Right In: -1569.809+/-1312.937 $\chi^2$/NDF: 14.5/15

Left Out: 1163.021+/-1031.955 $\chi^2$/NDF:20.5/16

Right Out: 231.125+/-1224.318 $\chi^2$/NDF: 13.2/18

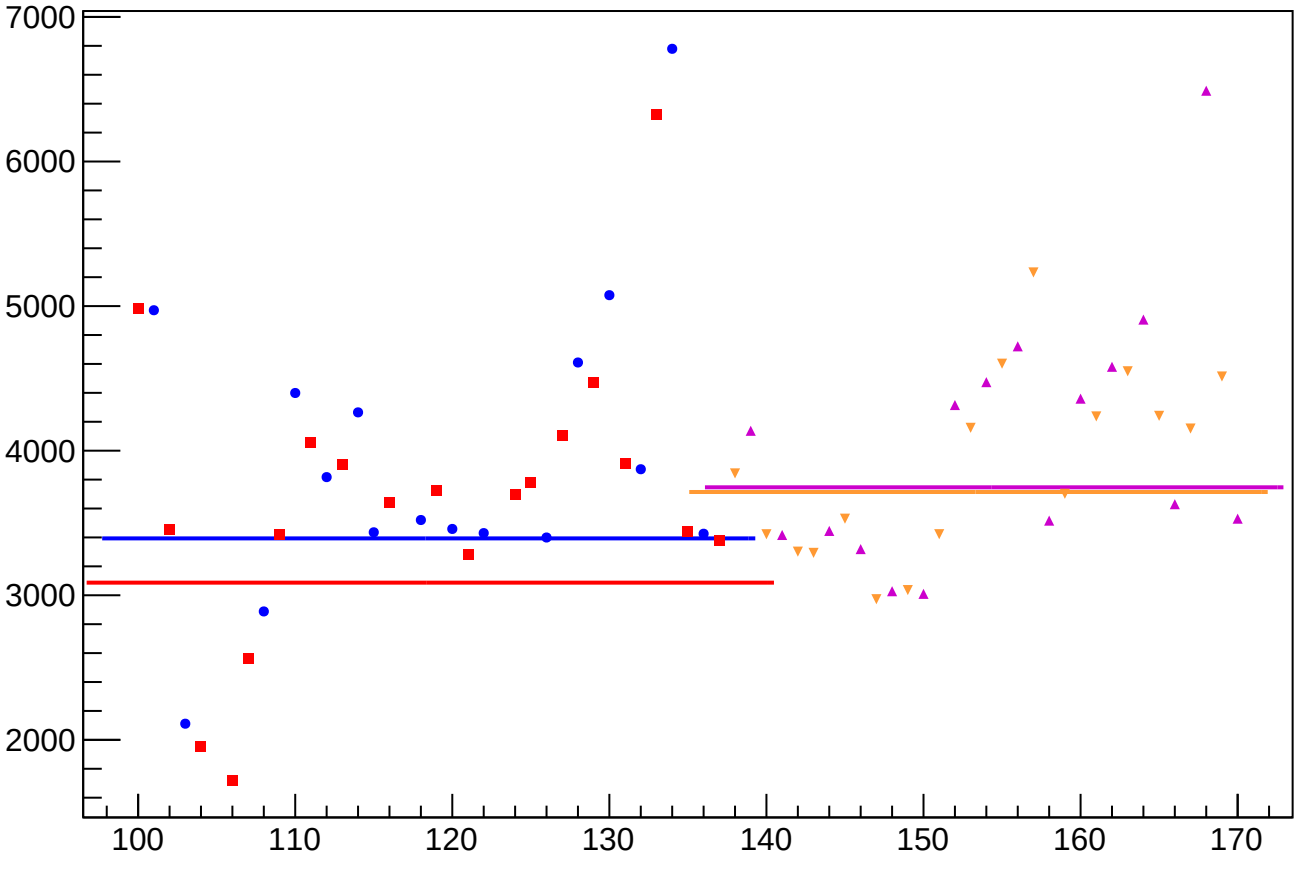
Left In: -175.482+/-1051.238 $\chi^2$/NDF:9.0/15

+ sign 119.439+/-811.337 $\chi^2$/NDF: 37.7/32

All: 57.209+/-568.773 $\chi^2$/NDF: 59.9/67

- sign -2.927+/-797.573 $\chi^2$/NDF: 22.3/34

# asym_usr_atr2_dd_rms vs Slug




Right In: 3393.365+/-0.928 $\chi^2$/NDF: 1048707.6/15

Left Out: 3714.267+/-0.730 $\chi^2$/NDF:639678.2/16

Right Out: 3087.307+/-0.851 $\chi^2$/NDF: 1328355.8/18

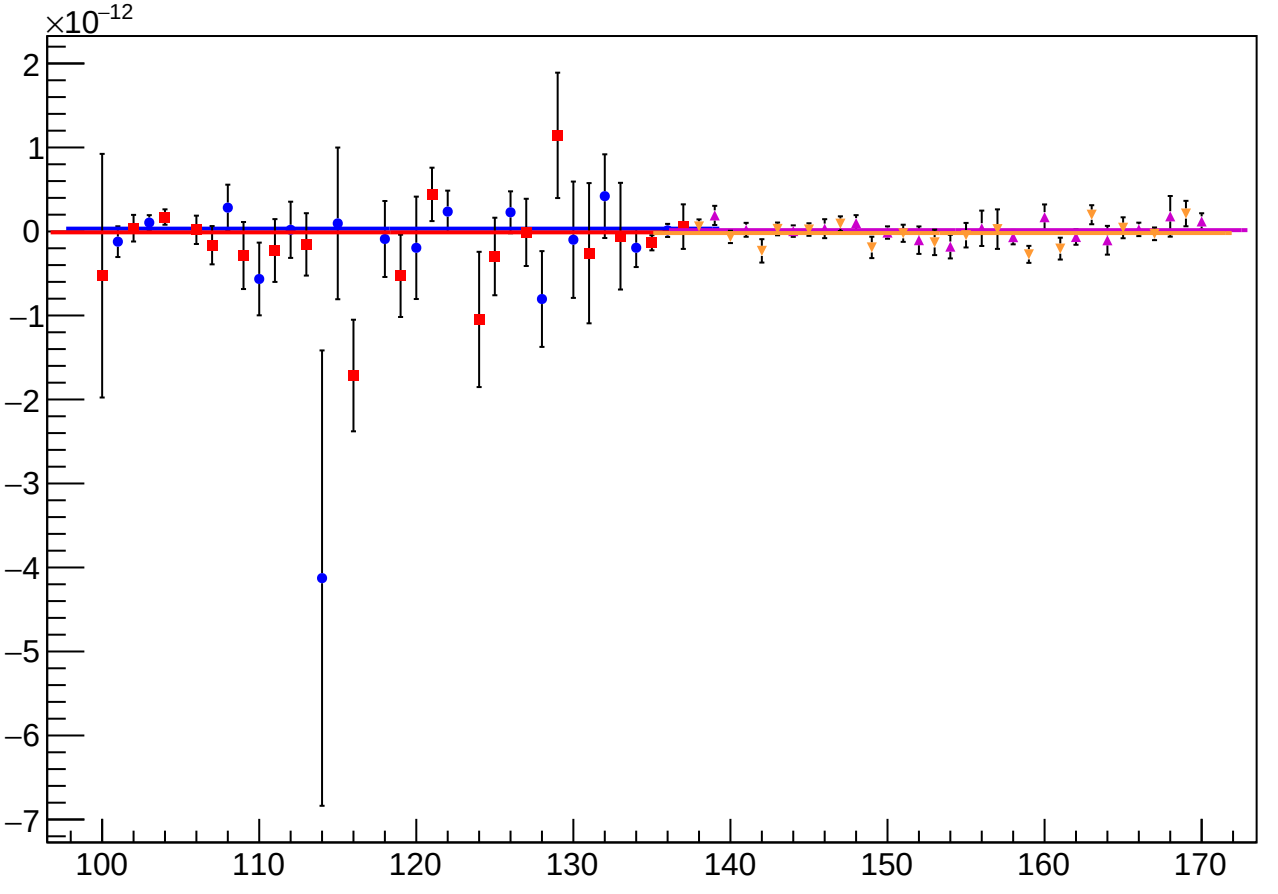
Left In: 3746.702+/-0.743 $\chi^2$/NDF:897801.6/15

+ sign 3591.725+/-0.574 $\chi^2$/NDF: 1762238.8/32

All: 3524.984+/-0.401 $\chi^2$/NDF: 4355272.0/67

- sign 3461.415+/-0.560 $\chi^2$/NDF: 2566609.2/34

# asym_usr_atr2_dd_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 11.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:23.0/16

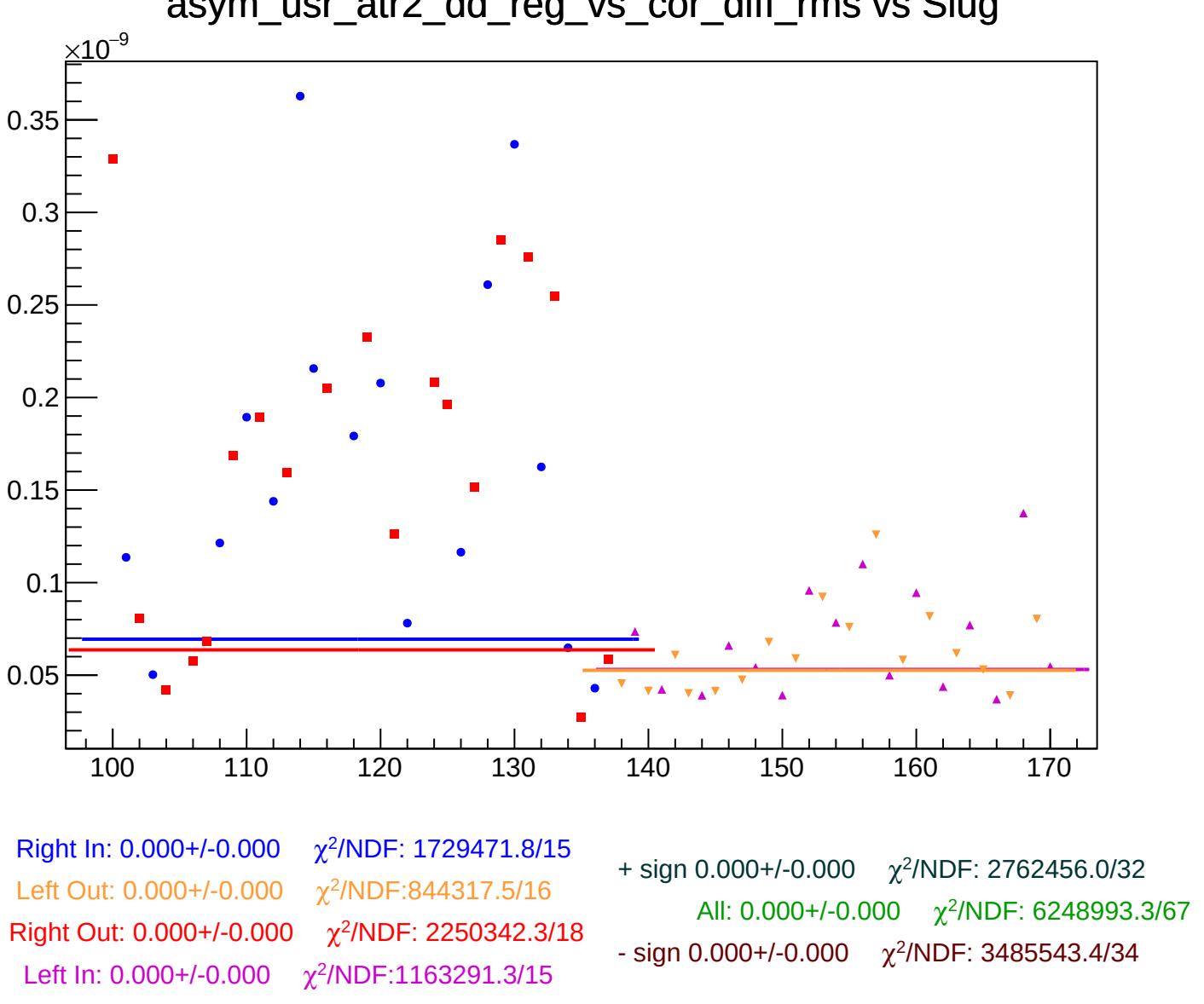
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 21.9/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:10.7/15

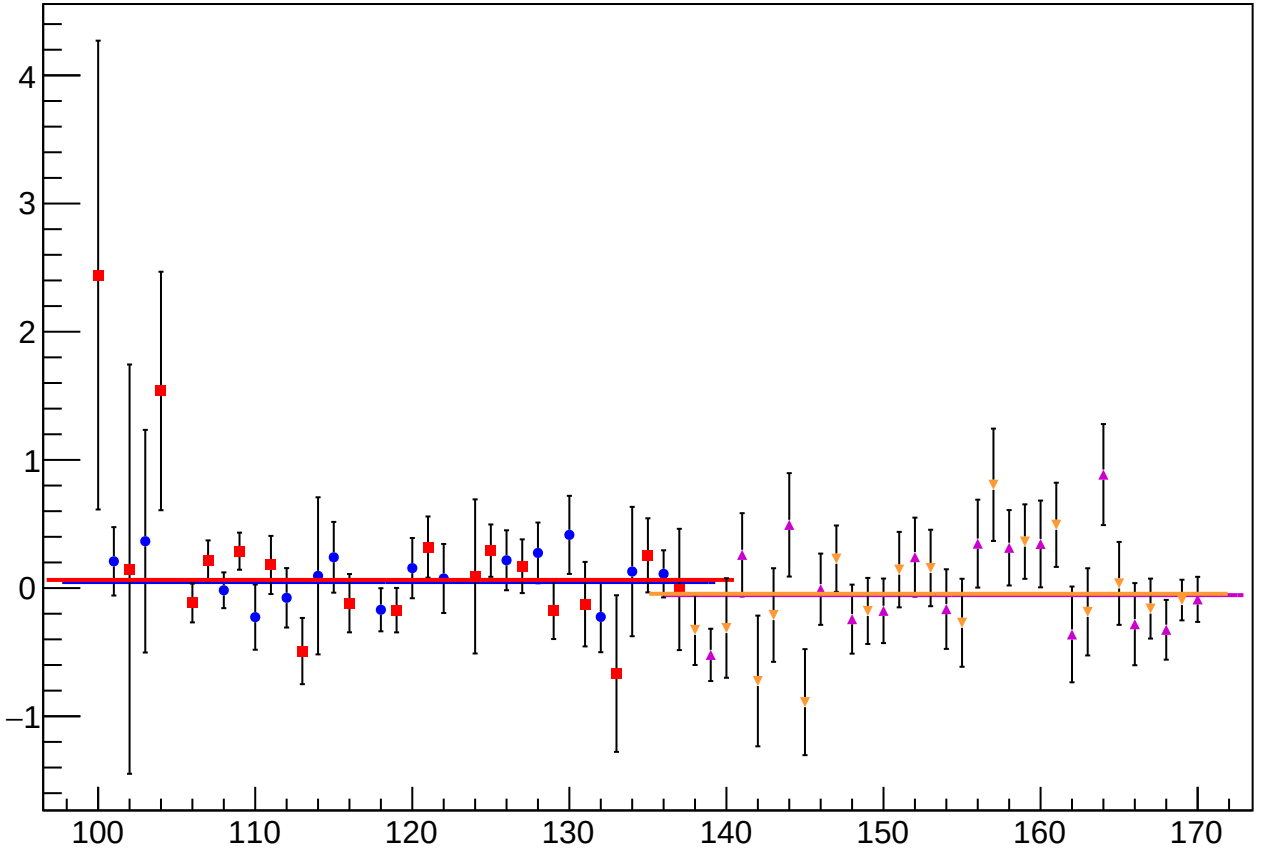
+ sign -0.000+/-0.000 $\chi^2$/NDF: 35.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 68.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 32.8/34


asym_usr_atr2_dd_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.35
0.3
0.25
0.2
0.15
0.1
0.05
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1729471.8/15
Left Out: 0.000+/-0.000 χ²/NDF:844317.5/16
Right Out: 0.000+/-0.000 χ²/NDF: 2250342.3/18
Left In: 0.000+/-0.000 χ²/NDF:1163291.3/15
+ sign 0.000+/-0.000 χ²/NDF: 2762456.0/32
All: 0.000+/-0.000 χ²/NDF: 6248993.3/67
- sign 0.000+/-0.000 χ²/NDF: 3485543.4/34

# asym_usr_atr2_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.047+/-0.060 $\chi^2$/NDF: 8.6/15

Left Out: -0.044+/-0.071 $\chi^2$/NDF:19.4/16

Right Out: 0.064+/-0.055 $\chi^2$/NDF: 22.2/18

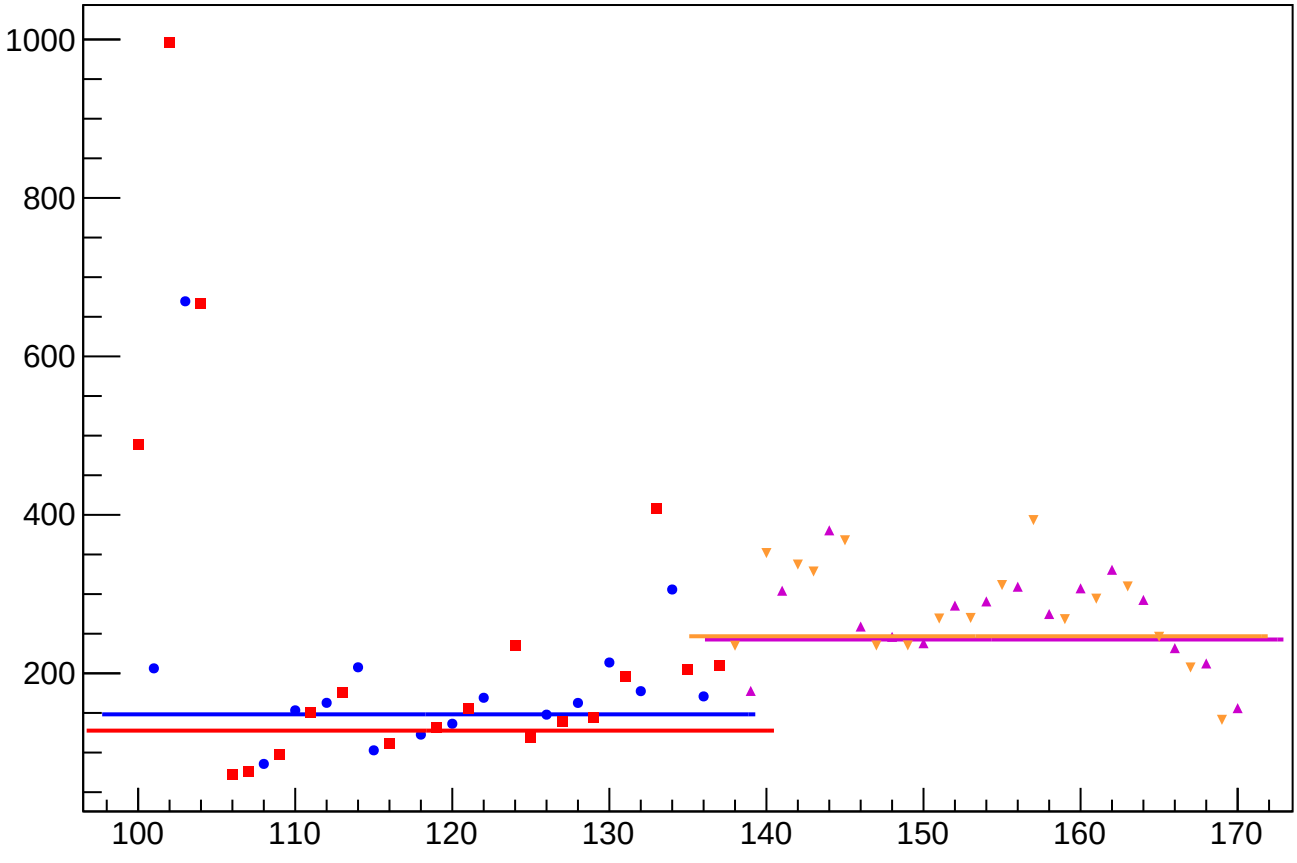
Left In: -0.055+/-0.070 $\chi^2$/NDF:22.4/15

+ sign 0.009+/-0.046 $\chi^2$/NDF: 28.9/32

All: 0.014+/-0.031 $\chi^2$/NDF: 75.4/67

- sign 0.018+/-0.043 $\chi^2$/NDF: 46.4/34

# asym_usr_atr2_dd_dit_vs_cor_diff_rms vs Slug




Right In: 148.240+/-0.042 $\chi^2$/NDF: 1710035.6/15

Left Out: 246.780+/-0.050 $\chi^2$/NDF:1874910.8/16

Right Out: 127.685+/-0.039 $\chi^2$/NDF: 2841780.7/18

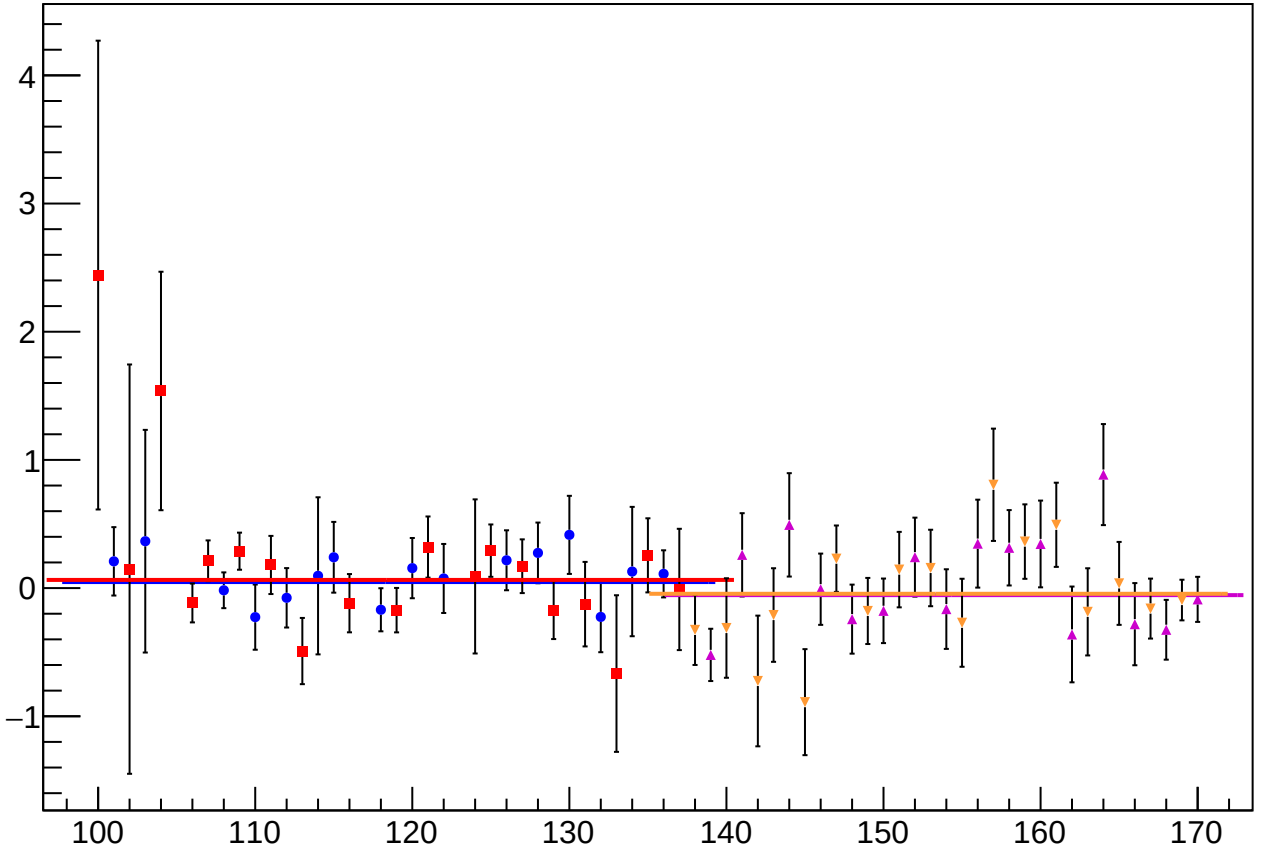
Left In: 242.683+/-0.049 $\chi^2$/NDF:1438948.6/15

+ sign 189.637+/-0.032 $\chi^2$/NDF: 5848999.7/32

All: 180.014+/-0.022 $\chi^2$/NDF: 13668400.6/67

- sign 171.494+/-0.030 $\chi^2$/NDF: 7652288.2/34

# asym_usr_atr2_dd_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.047+/-0.060 $\chi^2$/NDF: 8.6/15

Left Out: -0.044+/-0.071 $\chi^2$/NDF:19.4/16

Right Out: 0.064+/-0.055 $\chi^2$/NDF: 22.2/18

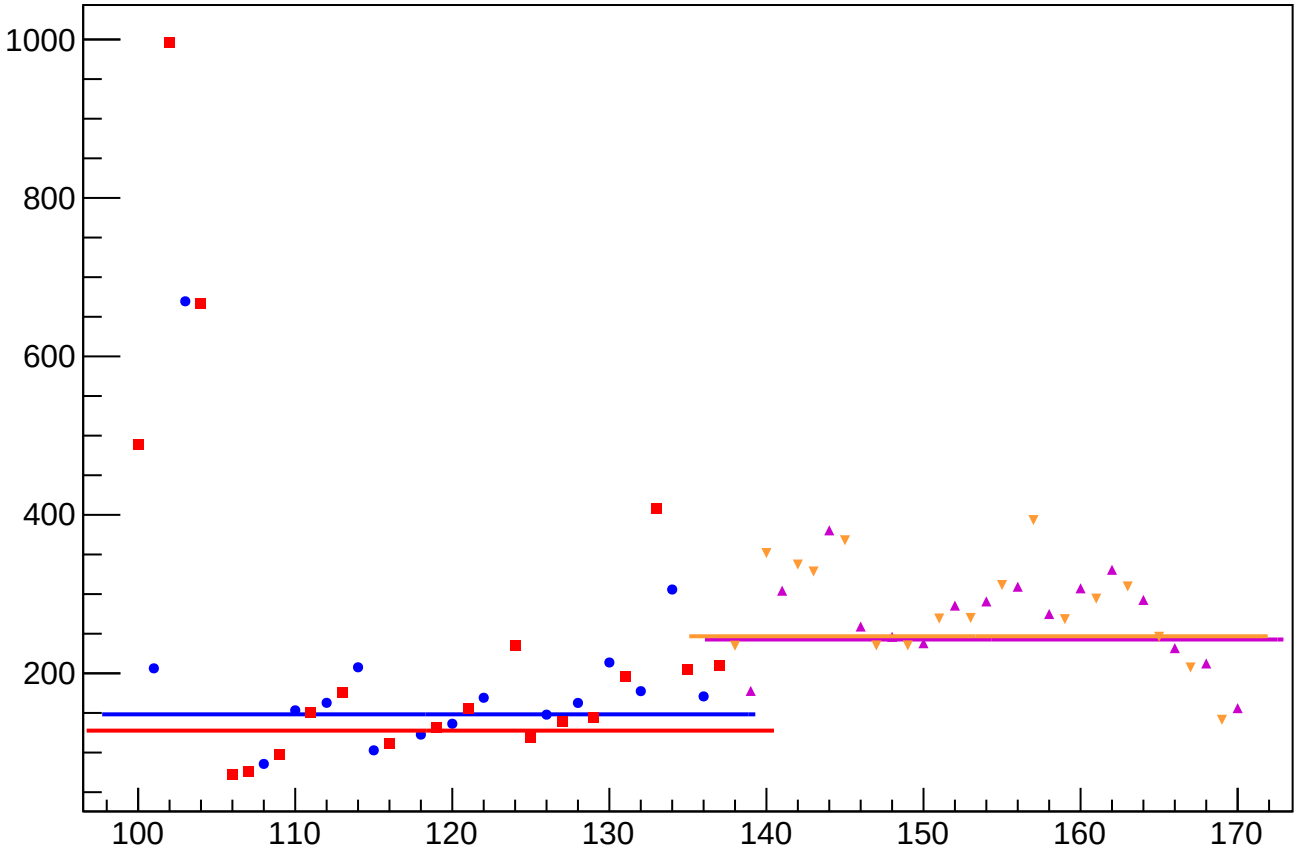
Left In: -0.055+/-0.070 $\chi^2$/NDF:22.4/15

+ sign 0.009+/-0.046 $\chi^2$/NDF: 28.9/32

All: 0.014+/-0.031 $\chi^2$/NDF: 75.4/67

- sign 0.018+/-0.043 $\chi^2$/NDF: 46.4/34

# asym_usr_atr2_dd_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 148.240+/-0.042 $\chi^2$/NDF: 1710035.6/15

Left Out: 246.780+/-0.050 $\chi^2$/NDF:1874910.8/16

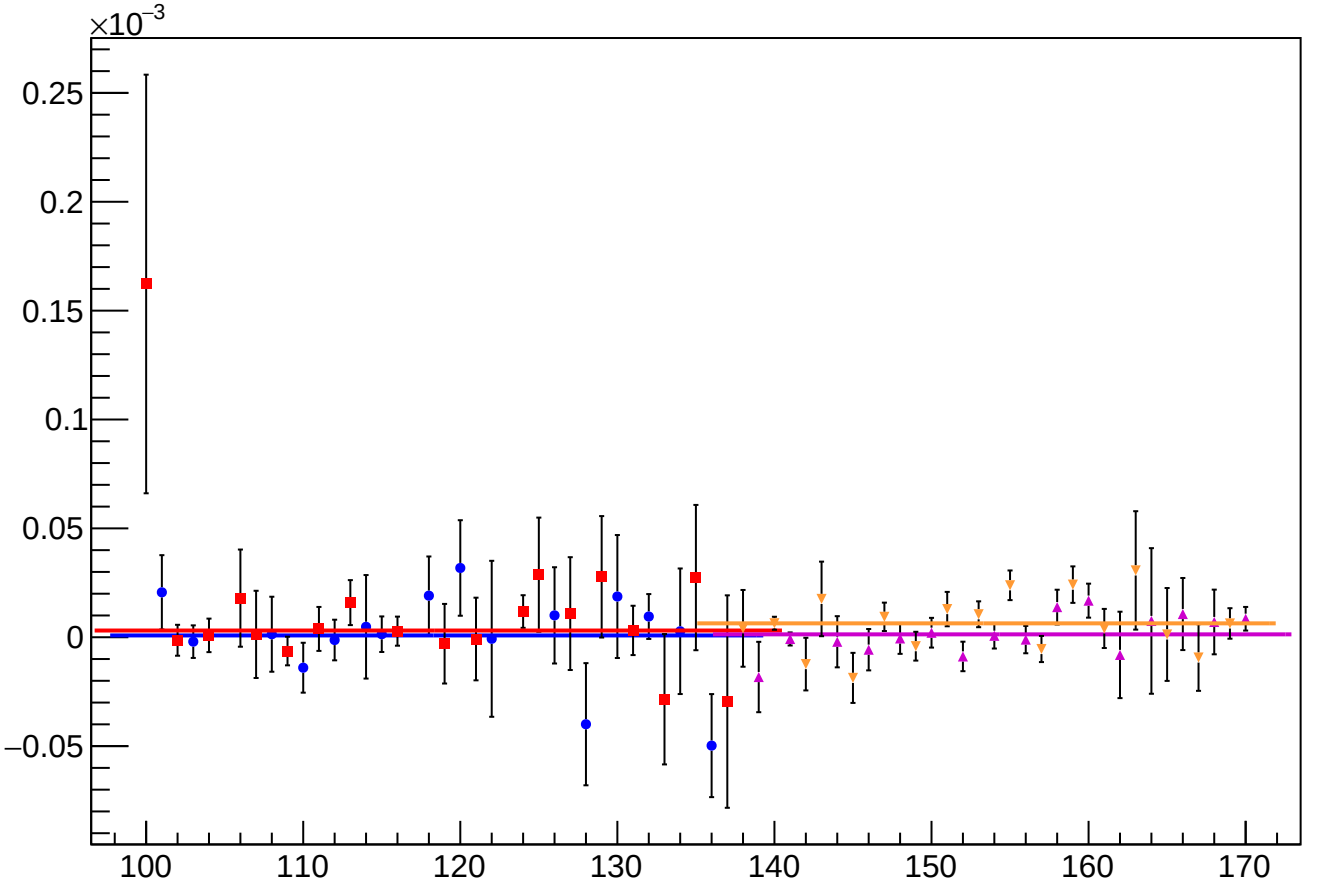
Right Out: 127.685+/-0.039 $\chi^2$/NDF: 2841780.7/18

Left In: 242.683+/-0.049 $\chi^2$/NDF:1438948.6/15

+ sign 189.637+/-0.032 $\chi^2$/NDF: 5848999.7/32

All: 180.014+/-0.022 $\chi^2$/NDF: 13668400.6/67

- sign 171.494+/-0.030 $\chi^2$/NDF: 7652288.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:28.4/16

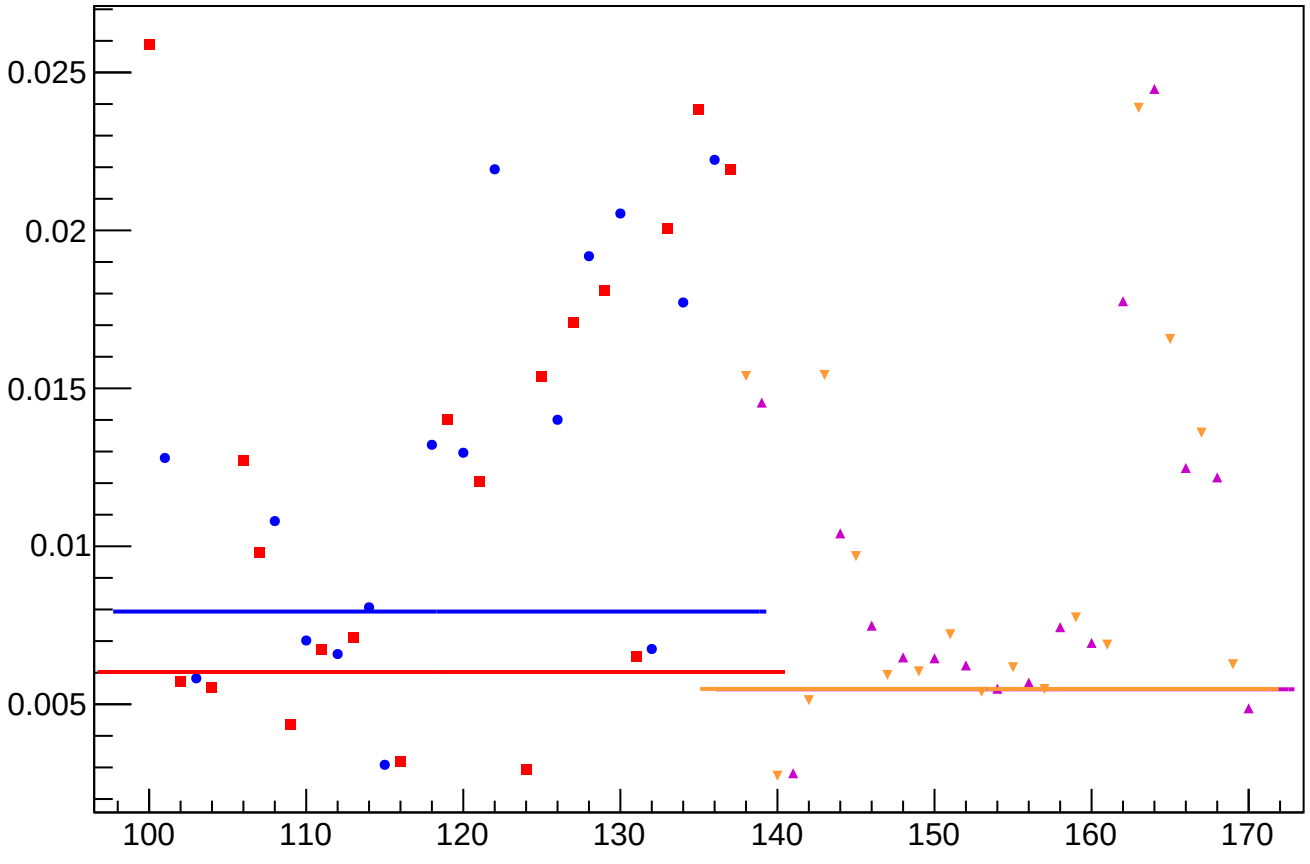
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 12.7/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:13.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 74.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 27.0/34




Right In: 0.008+/-0.000 $\chi^2$/NDF: 3577687.8/15

Left Out: 0.005+/-0.000 $\chi^2$/NDF:5640794.2/16

Right Out: 0.006+/-0.000 $\chi^2$/NDF: 4009592.0/18

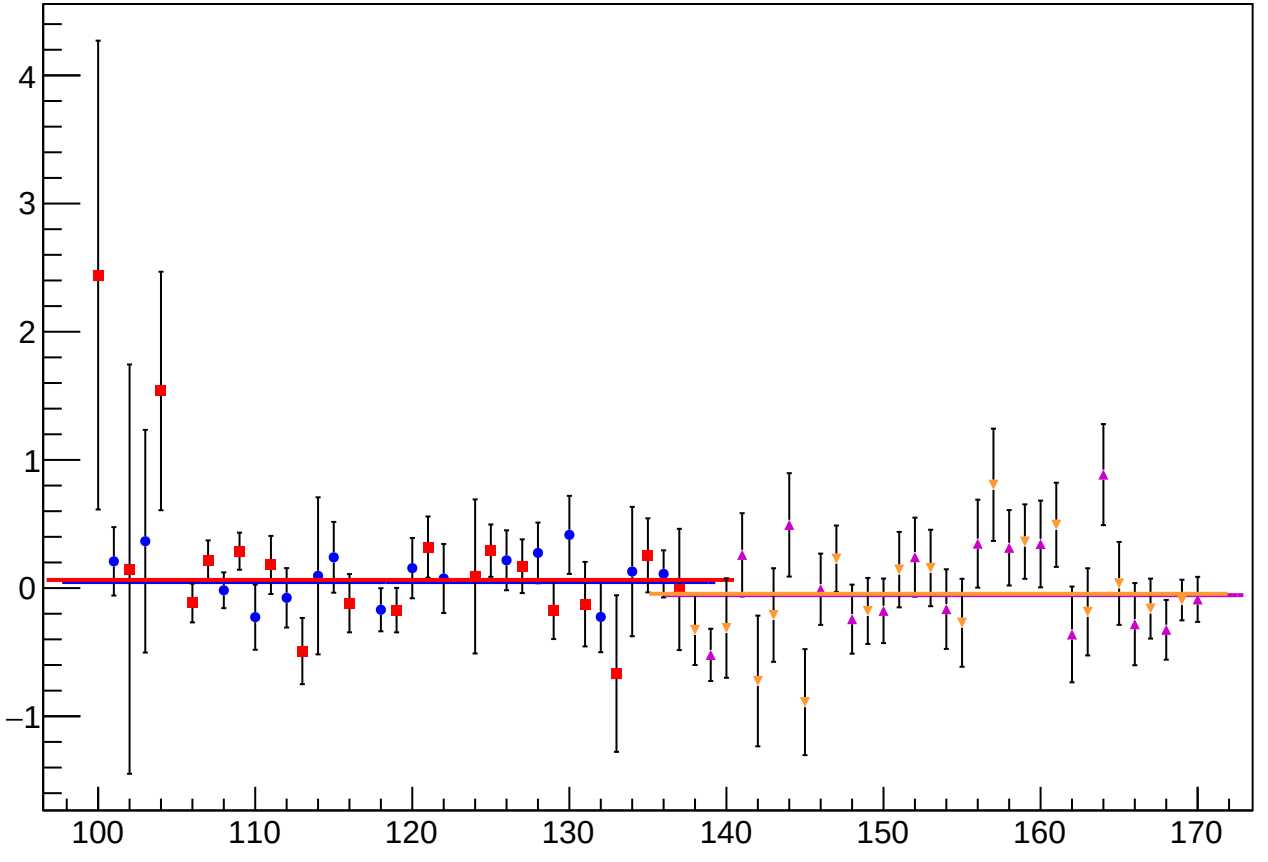
Left In: 0.005+/-0.000 $\chi^2$/NDF:5147122.6/15

+ sign 0.006+/-0.000 $\chi^2$/NDF: 10016808.7/32

All: 0.006+/-0.000 $\chi^2$/NDF: 19284821.1/67

- sign 0.006+/-0.000 $\chi^2$/NDF: 9216891.8/34

# asym_usr_atr2_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.047+/-0.060 $\chi^2$/NDF: 8.6/15

Left Out: -0.044+/-0.071 $\chi^2$/NDF:19.4/16

Right Out: 0.064+/-0.055 $\chi^2$/NDF: 22.2/18

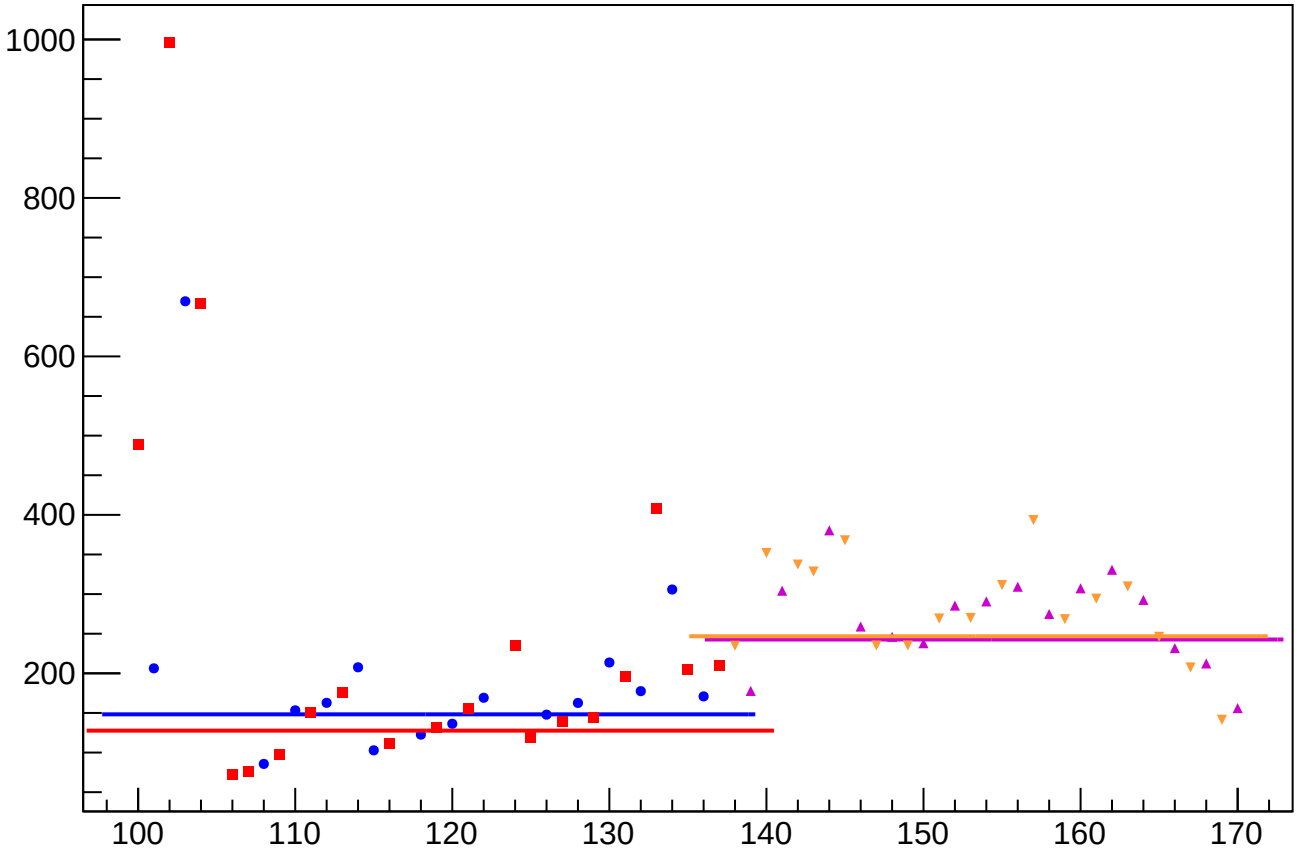
Left In: -0.055+/-0.070 $\chi^2$/NDF:22.4/15

+ sign 0.009+/-0.046 $\chi^2$/NDF: 28.9/32

All: 0.014+/-0.031 $\chi^2$/NDF: 75.4/67

- sign 0.018+/-0.043 $\chi^2$/NDF: 46.4/34

# asym_usr_atr2_dd_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 148.238+/-0.042 $\chi^2$/NDF: 1710114.4/15

Left Out: 246.782+/-0.050 $\chi^2$/NDF:1874995.5/16

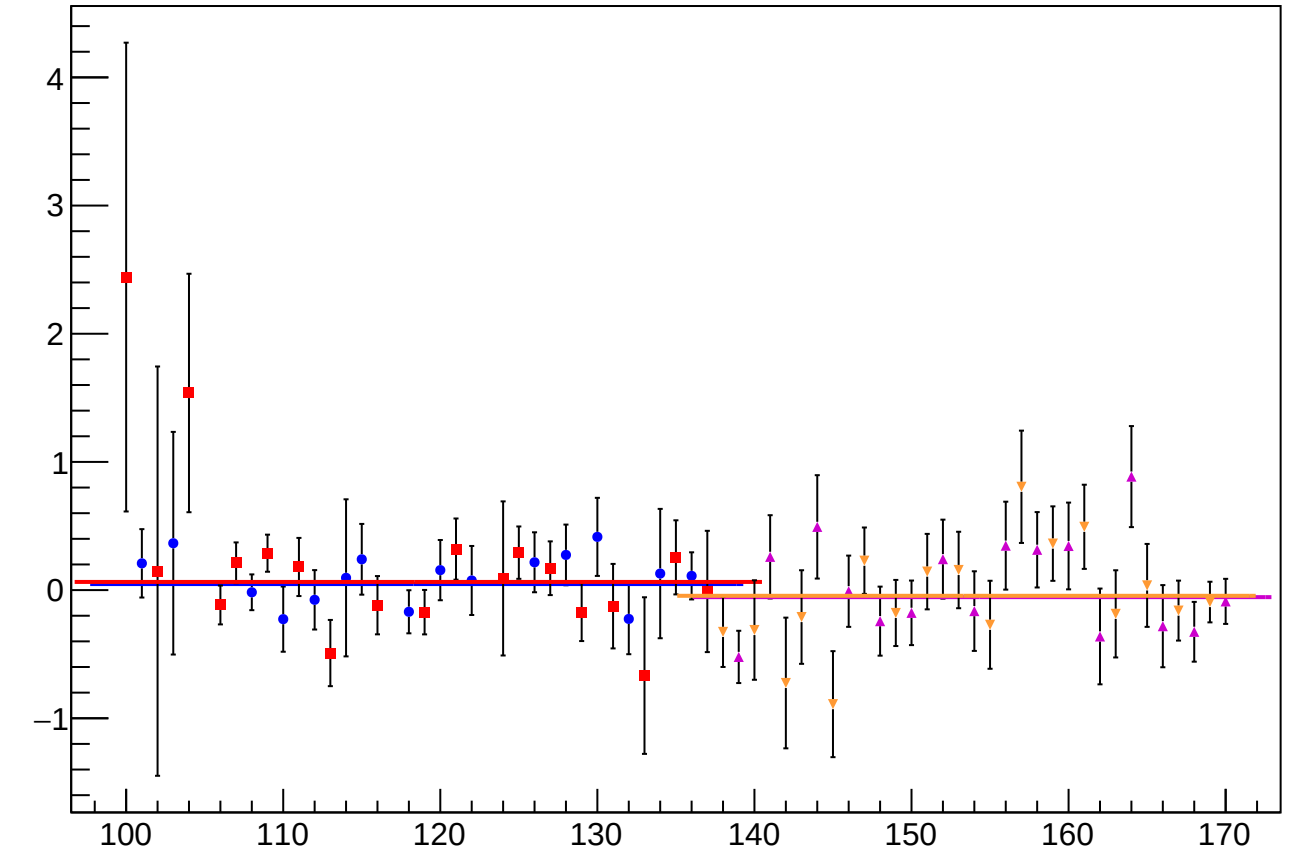
Right Out: 127.685+/-0.039 $\chi^2$/NDF: 2841772.5/18

Left In: 242.686+/-0.049 $\chi^2$/NDF:1438961.2/15

+ sign 189.635+/-0.032 $\chi^2$/NDF: 5849359.4/32

All: 180.013+/-0.022 $\chi^2$/NDF: 13668827.1/67

- sign 171.494+/-0.030 $\chi^2$/NDF: 7652394.4/34




Right In: 0.047+/-0.060 $\chi^2$/NDF: 8.6/15

Left Out: -0.044+/-0.071 $\chi^2$/NDF:19.4/16

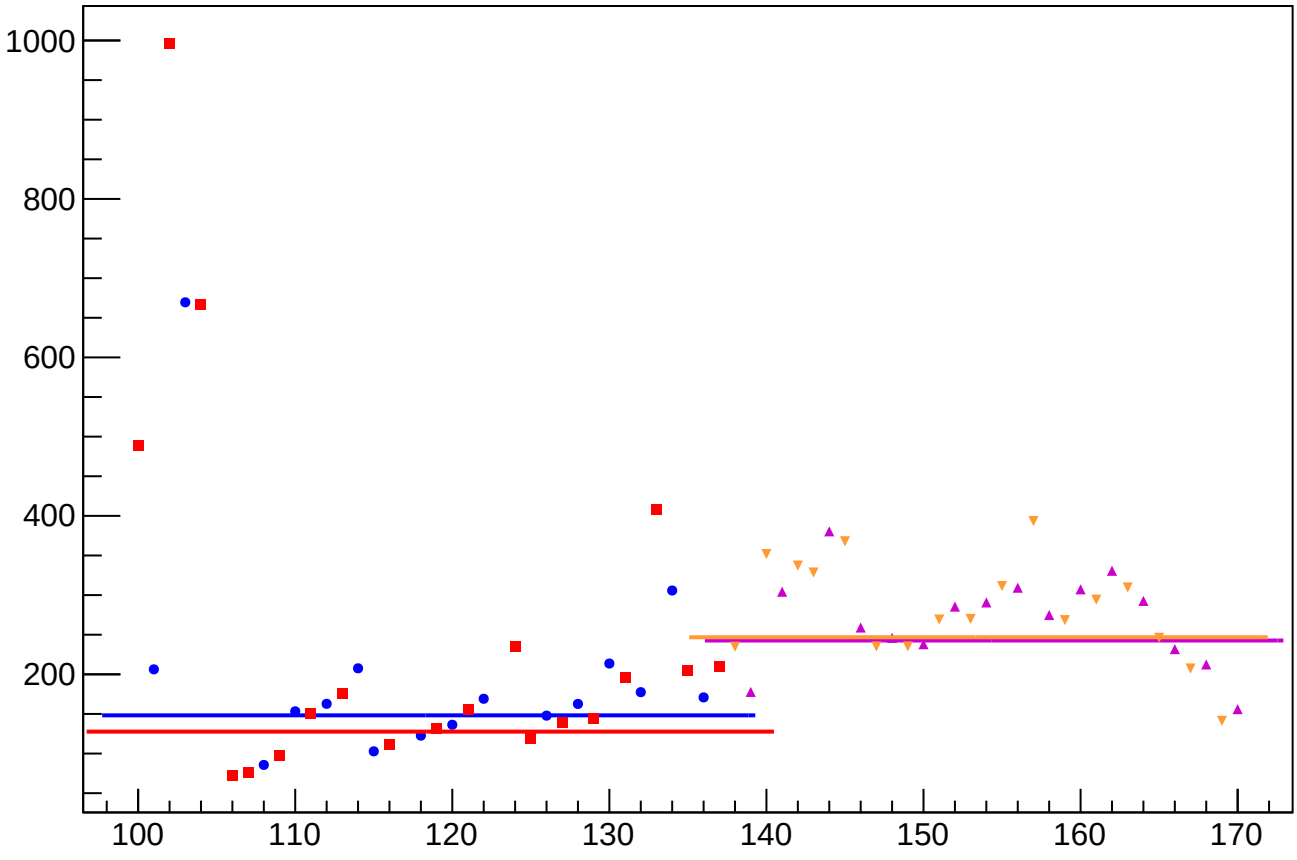
Right Out: 0.064+/-0.055 $\chi^2$/NDF: 22.2/18

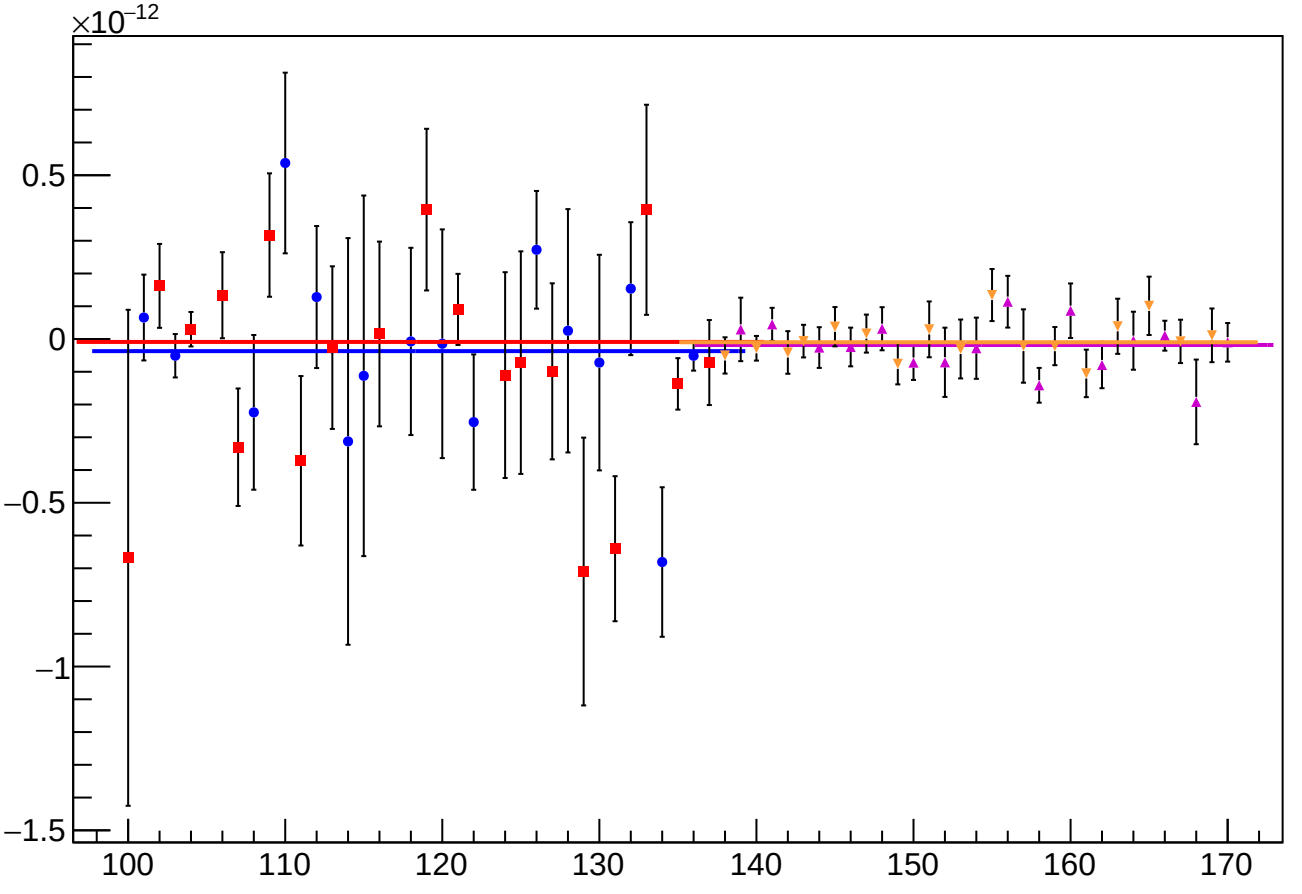
Left In: -0.055+/-0.070 $\chi^2$/NDF:22.4/15

+ sign 0.009+/-0.046 $\chi^2$/NDF: 28.9/32

All: 0.014+/-0.031 $\chi^2$/NDF: 75.4/67

- sign 0.018+/-0.043 $\chi^2$/NDF: 46.4/34


asym_usr_atr2_dd_eigen_dit_vs_eigen_cor_diff_rms vs Slug
1000
800
600
400
200
100
110
120
130
140
150
160
170
Right In: 148.238+/-0.042 χ²/NDF: 1710114.4/15
Left Out: 246.782+/-0.050 χ²/NDF:1874995.5/16
Right Out: 127.685+/-0.039 χ²/NDF: 2841772.5/18
Left In: 242.686+/-0.049 χ²/NDF:1438961.2/15
+ sign 189.635+/-0.032 χ²/NDF: 5849359.4/32
All: 180.013+/-0.022 χ²/NDF: 13668827.1/67
- sign 171.494+/-0.030 χ²/NDF: 7652394.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 19.5/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:10.2/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 31.8/18

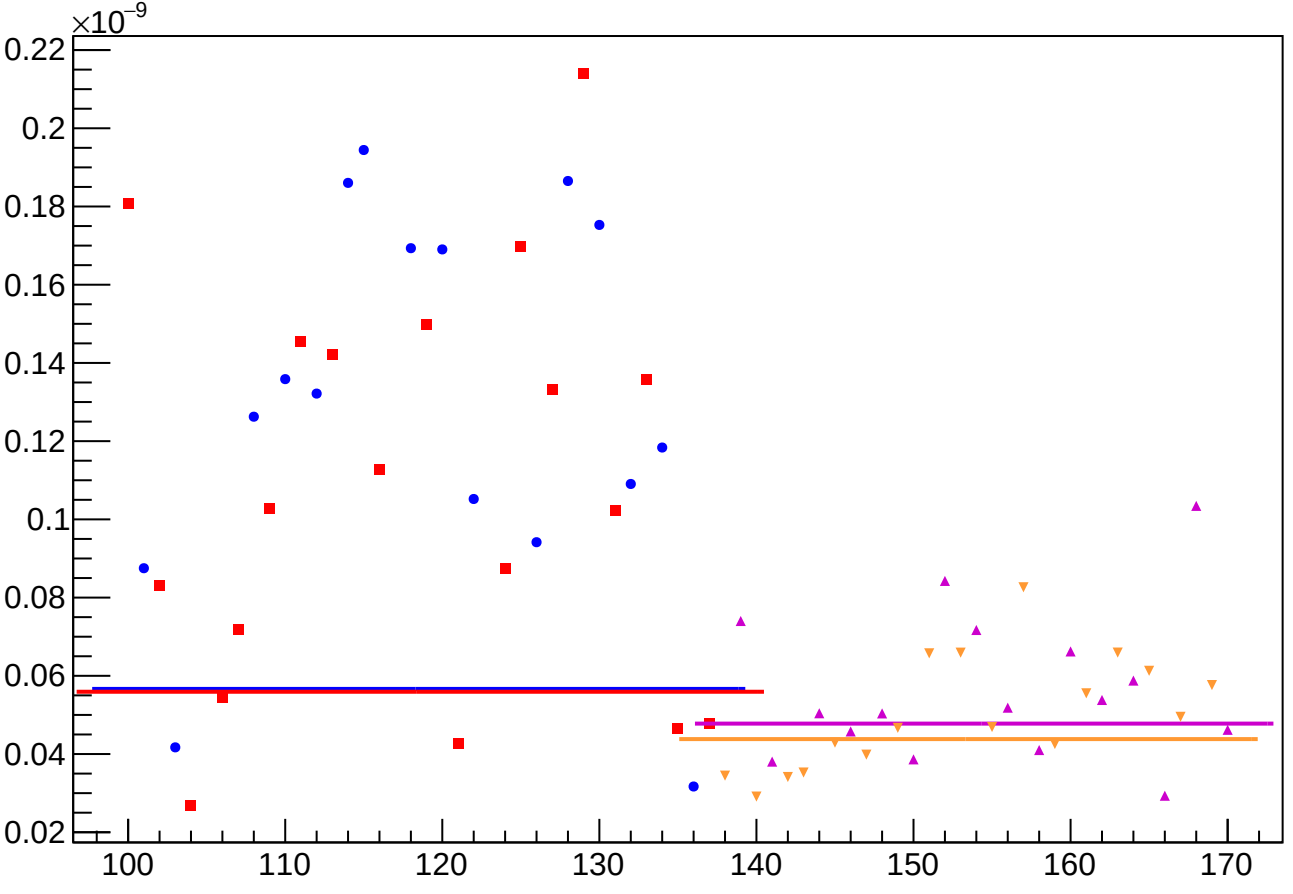
Left In: -0.000+/-0.000 $\chi^2$/NDF:16.4/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 30.3/32

All: -0.000+/-0.000 $\chi^2$/NDF: 78.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 48.2/34

# asym_usr_atr2_dd_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3113213.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1315746.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2732977.9/18

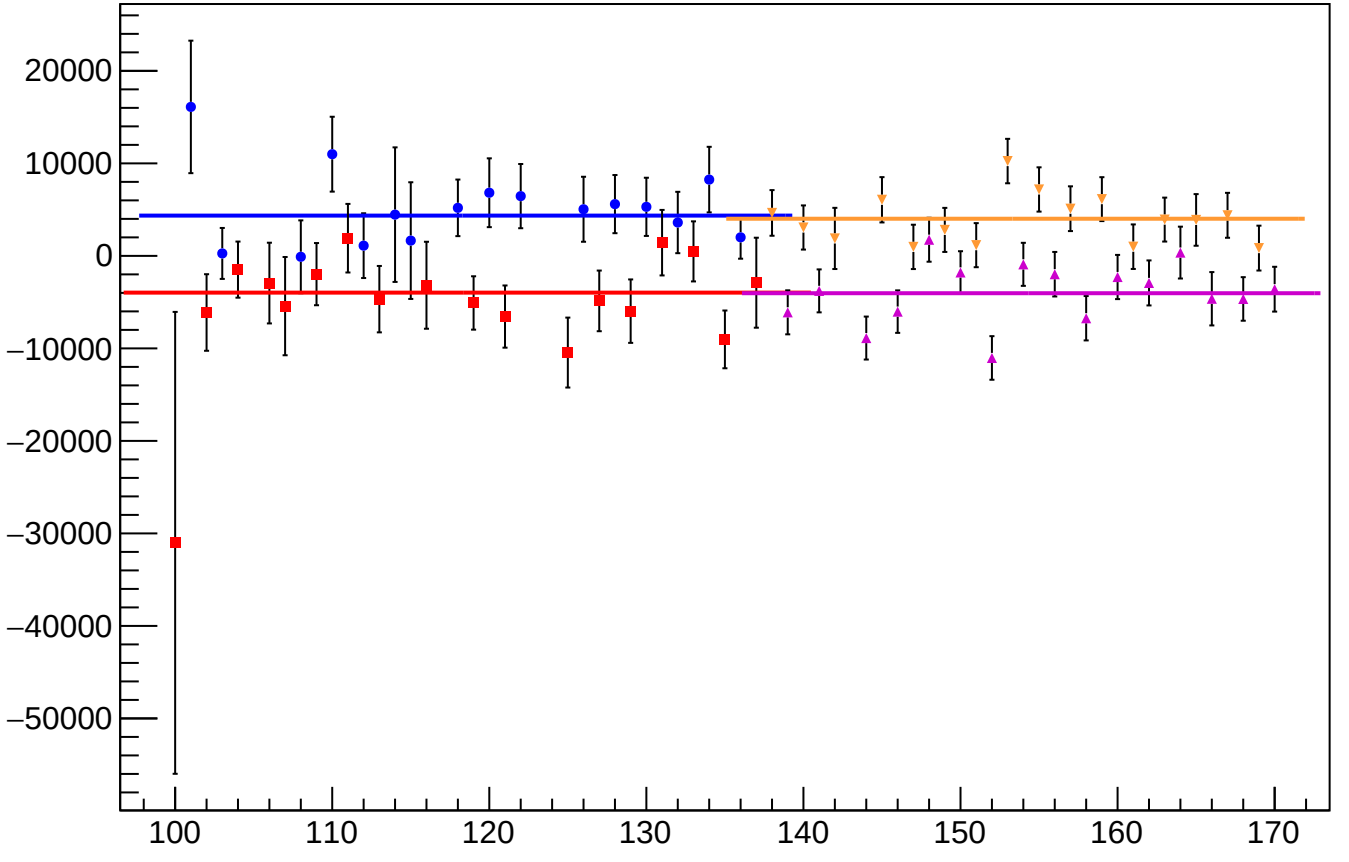
Left In: 0.000+/-0.000 $\chi^2$/NDF:1539729.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4686979.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 9112905.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4374898.8/34

# reg_asym_us_avg_at1lr_avg_avg_mean vs Slug




Right In: 4354.350+/-875.155 $\chi^2$/NDF: 13.4/15

Left Out: 4015.929+/-615.574 $\chi^2$/NDF:17.4/15

Right Out: -3971.679+/-871.305 $\chi^2$/NDF: 16.2/17

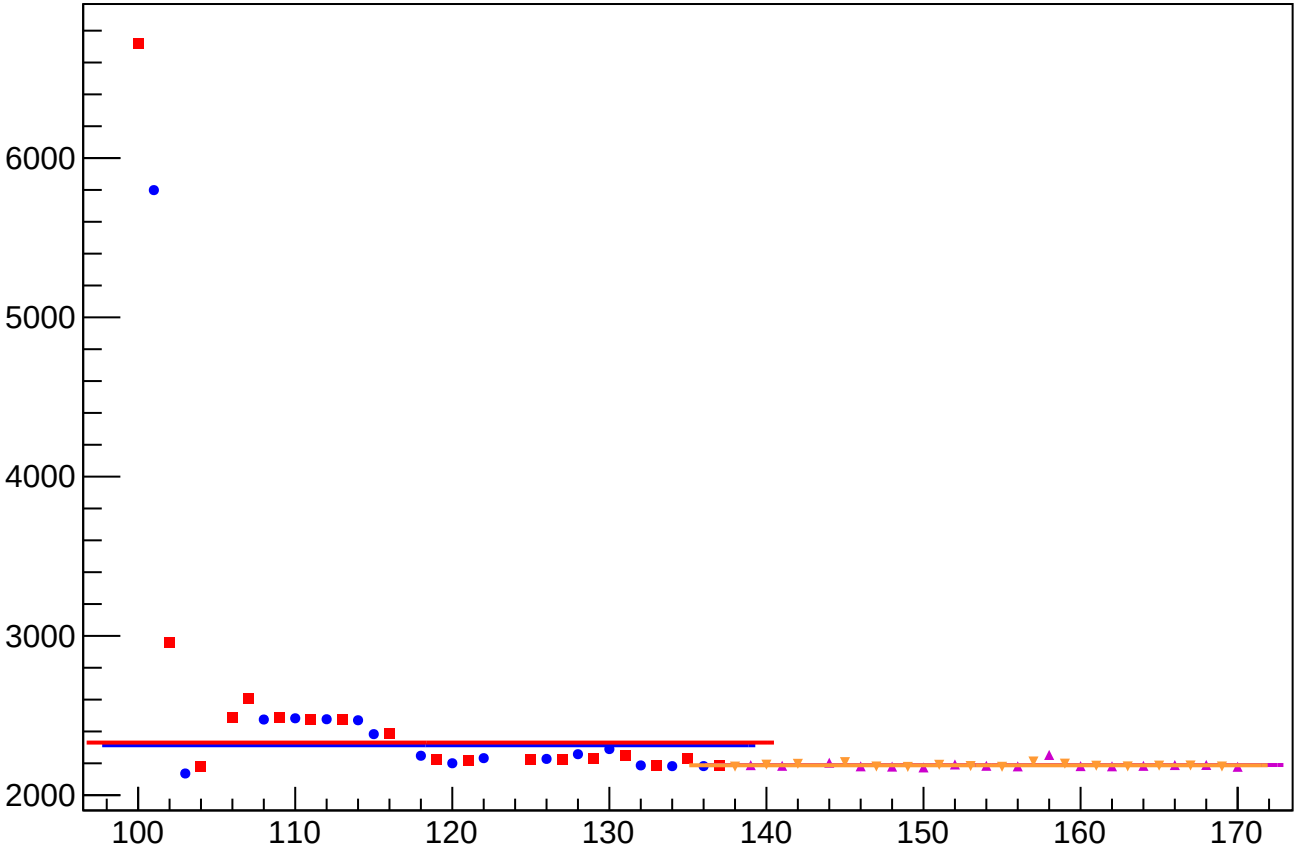
Left In: -4035.349+/-602.124 $\chi^2$/NDF:28.7/15

+ sign 4127.944+/-503.495 $\chi^2$/NDF: 30.9/31

All: -9.801+/-353.110 $\chi^2$/NDF: 208.7/65

- sign -4014.770+/-495.351 $\chi^2$/NDF: 44.9/33

# reg_asym_us_avg_at1lr_avg_avg_rms vs Slug




Right In: 2313.413+/-0.619 $\chi^2$/NDF: 512371.8/15

Left Out: 2187.704+/-0.435 $\chi^2$/NDF:545.3/15

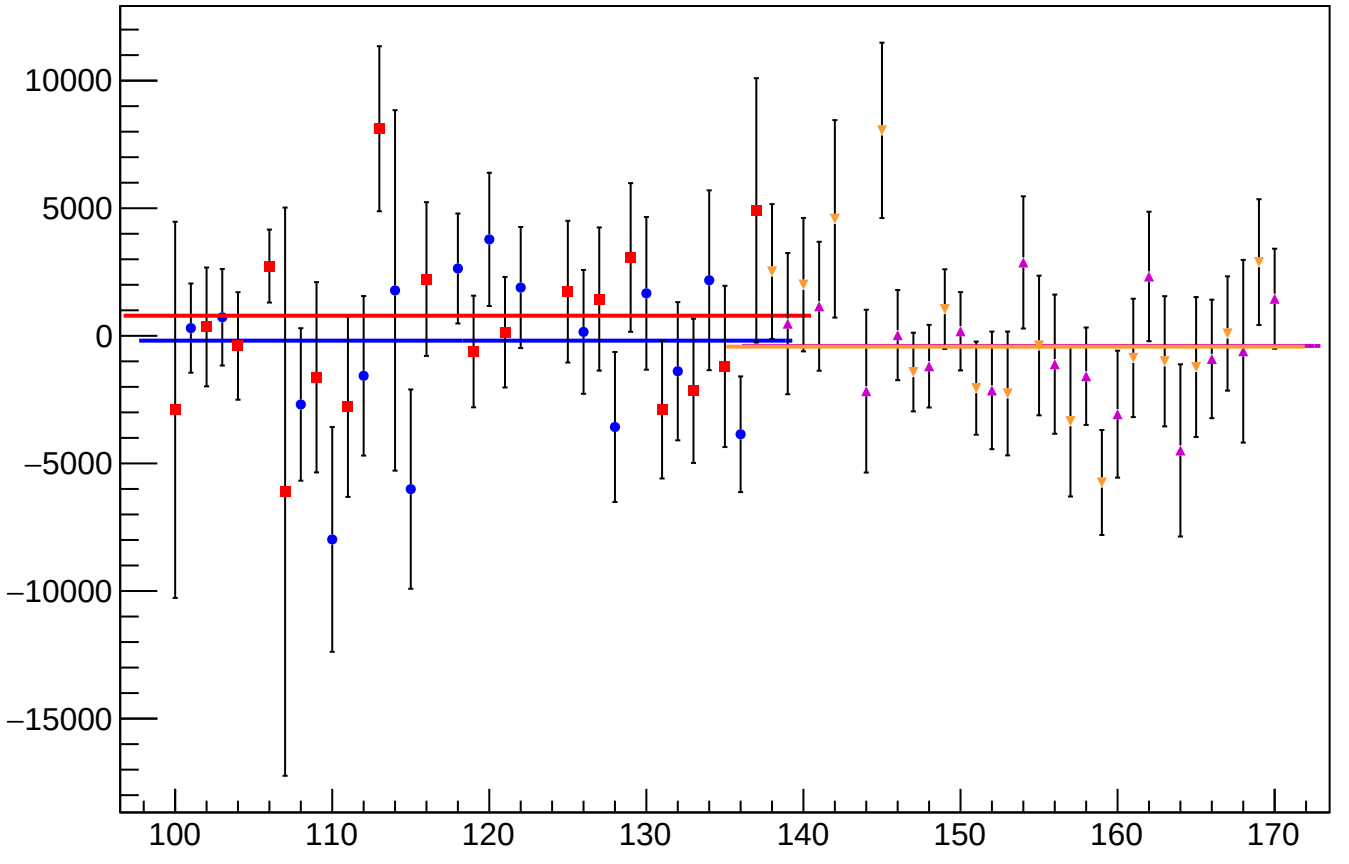
Right Out: 2330.200+/-0.616 $\chi^2$/NDF: 151210.5/17

Left In: 2189.355+/-0.426 $\chi^2$/NDF:1745.5/15

+ sign 2229.313+/-0.356 $\chi^2$/NDF: 540524.5/31

All: 2232.141+/-0.250 $\chi^2$/NDF: 728974.1/65

- sign 2234.878+/-0.350 $\chi^2$/NDF: 188325.4/33




Right In: -188.660+/-658.334 $\chi^2$/NDF: 16.4/15

Left Out: -424.315+/-571.243 $\chi^2$/NDF:22.2/15

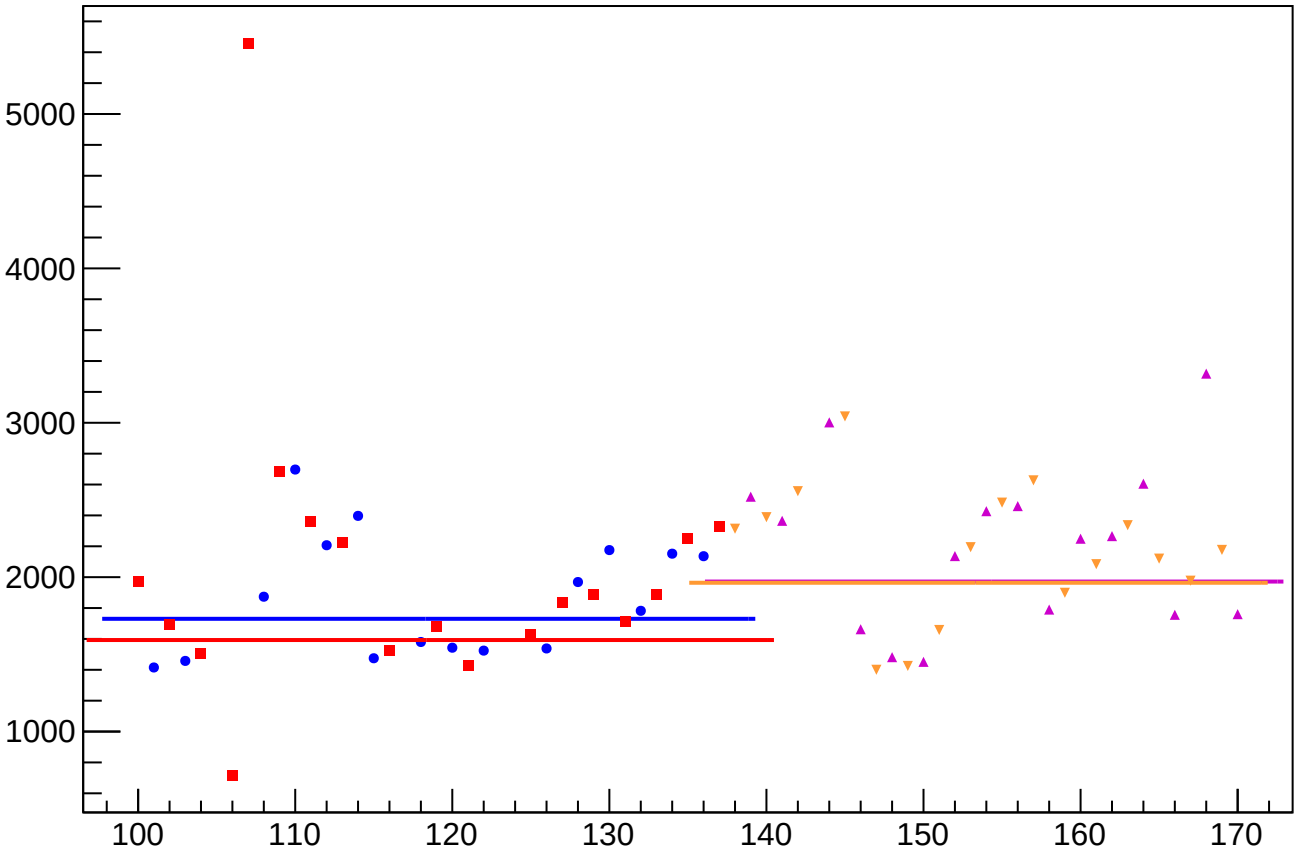
Right Out: 789.317+/-634.900 $\chi^2$/NDF: 14.9/17

Left In: -395.639+/-560.189 $\chi^2$/NDF:8.6/15

+ sign -323.096+/-431.459 $\chi^2$/NDF: 38.8/31

All: -94.049+/-300.975 $\chi^2$/NDF: 64.7/65

- sign 123.050+/-420.057 $\chi^2$/NDF: 25.4/33




Right In: 1730.288+/-0.466 $\chi^2$/NDF: 478932.0/15

Left Out: 1963.832+/-0.404 $\chi^2$/NDF:1156367.9/15

Right Out: 1592.824+/-0.449 $\chi^2$/NDF: 1556204.8/17

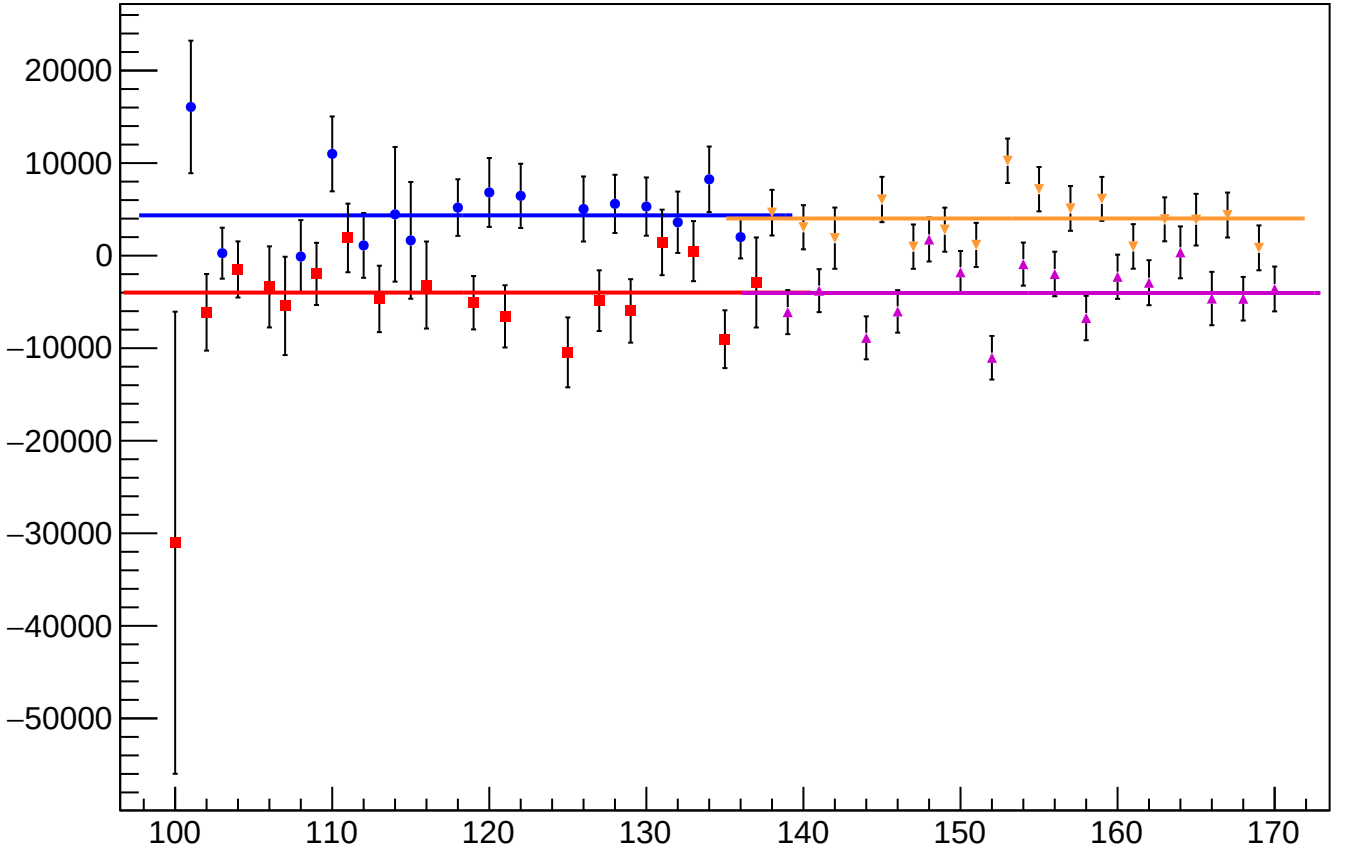
Left In: 1971.551+/-0.396 $\chi^2$/NDF:1410384.2/15

+ sign 1863.519+/-0.305 $\chi^2$/NDF: 1778886.0/31

All: 1833.872+/-0.213 $\chi^2$/NDF: 5164014.3/65

- sign 1805.772+/-0.297 $\chi^2$/NDF: 3366735.0/33

# cor_asym_us_avg_at1lr_avg_avg_mean vs Slug




Right In: 4353.670+/-875.155 $\chi^2$/NDF: 13.4/15

Left Out: 4015.824+/-615.574 $\chi^2$/NDF:17.4/15

Right Out: -3989.884+/-871.455 $\chi^2$/NDF: 16.1/17

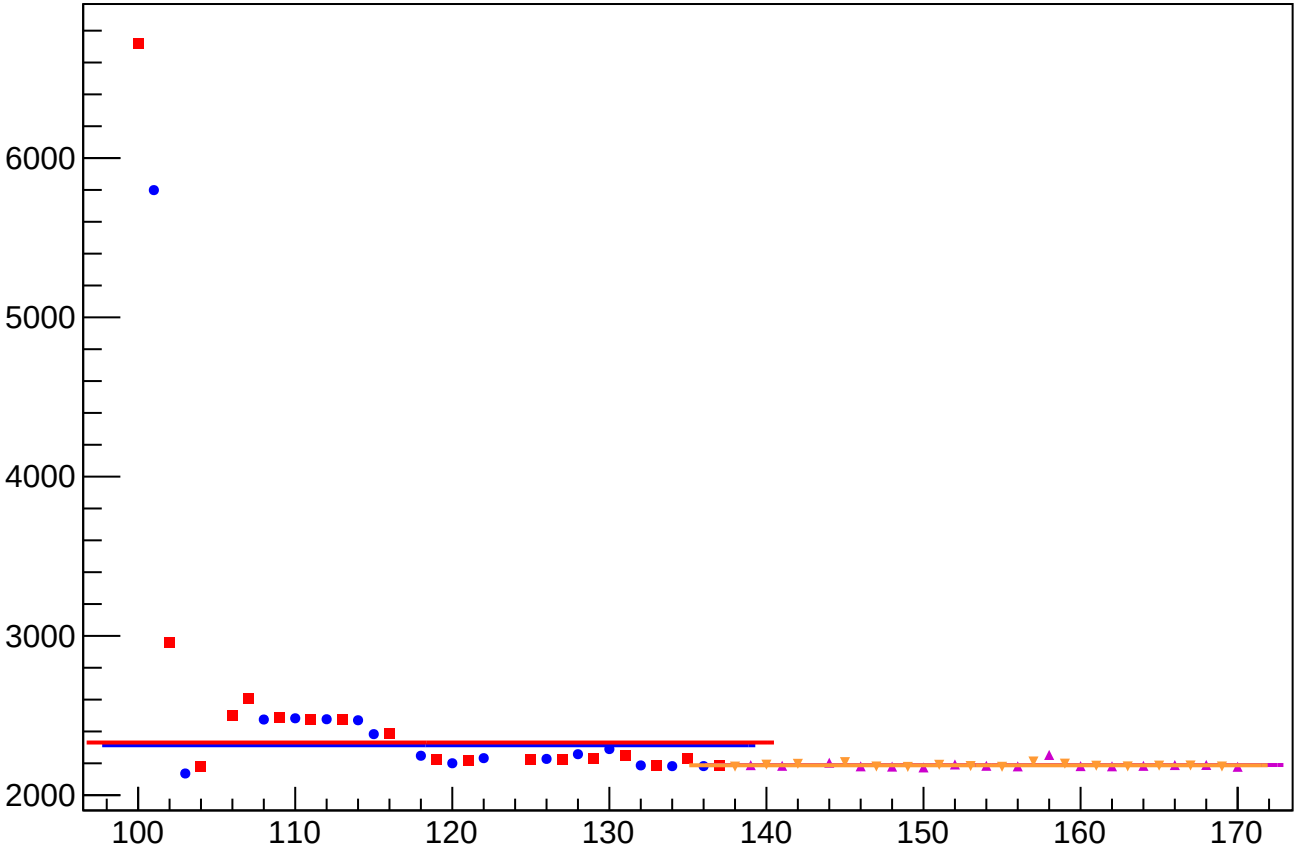
Left In: -4035.441+/-602.124 $\chi^2$/NDF:28.7/15

+ sign 4127.649+/-503.495 $\chi^2$/NDF: 30.9/31

All: -12.743+/-353.120 $\chi^2$/NDF: 208.8/65

- sign -4020.720+/-495.379 $\chi^2$/NDF: 44.9/33

# cor_asym_us_avg_at1lr_avg_avg_rms vs Slug




Right In: 2313.413+/-0.619 $\chi^2$/NDF: 512372.3/15

Left Out: 2187.704+/-0.435 $\chi^2$/NDF:545.3/15

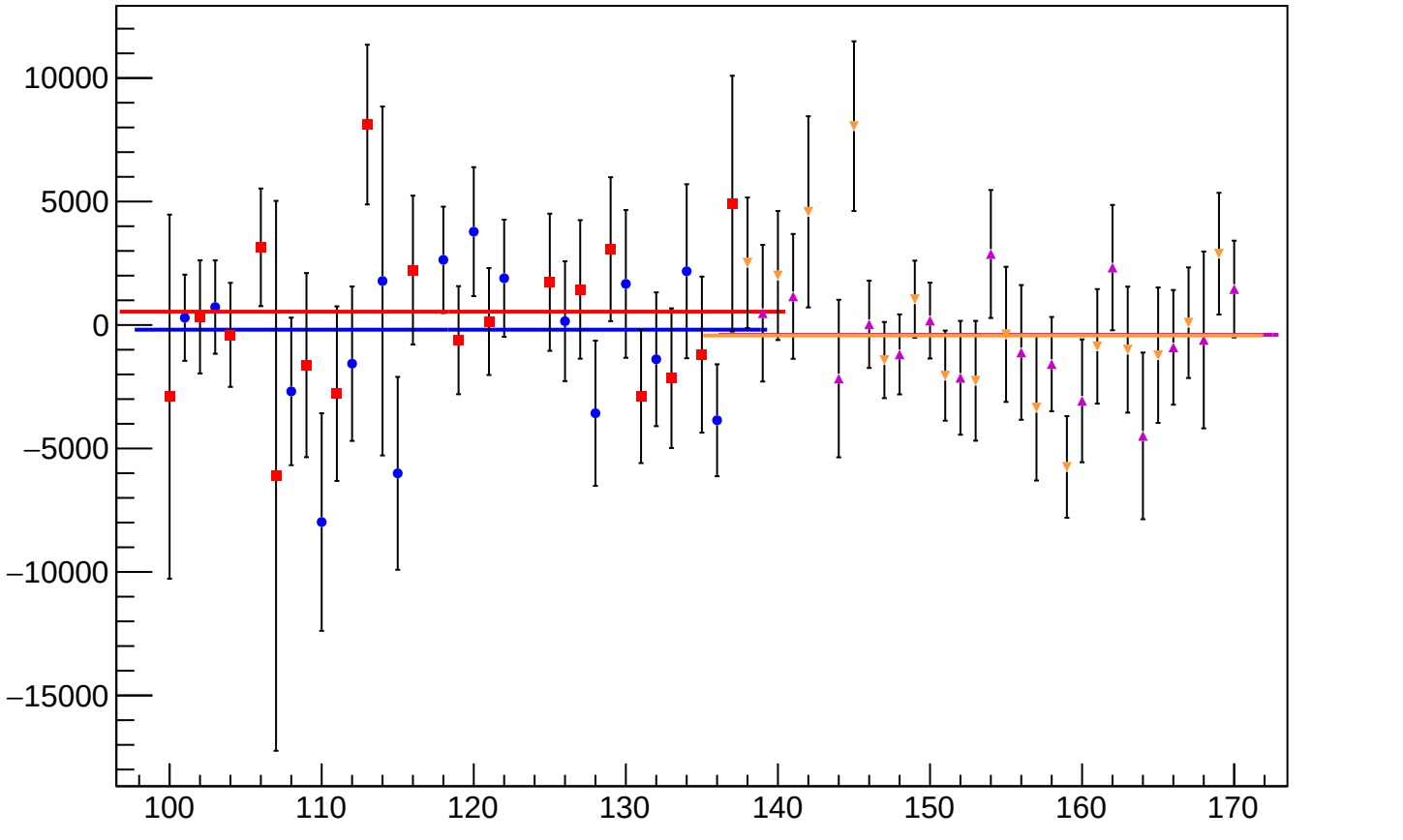
Right Out: 2330.570+/-0.616 $\chi^2$/NDF: 151556.6/17

Left In: 2189.355+/-0.426 $\chi^2$/NDF:1745.5/15

+ sign 2229.313+/-0.356 $\chi^2$/NDF: 540524.9/31

All: 2232.196+/-0.250 $\chi^2$/NDF: 729502.9/65

- sign 2234.987+/-0.350 $\chi^2$/NDF: 188848.9/33




Right In: -189.762+/-658.205 $\chi^2$/NDF: 16.4/15

Left Out: -424.420+/-571.242 $\chi^2$/NDF:22.2/15

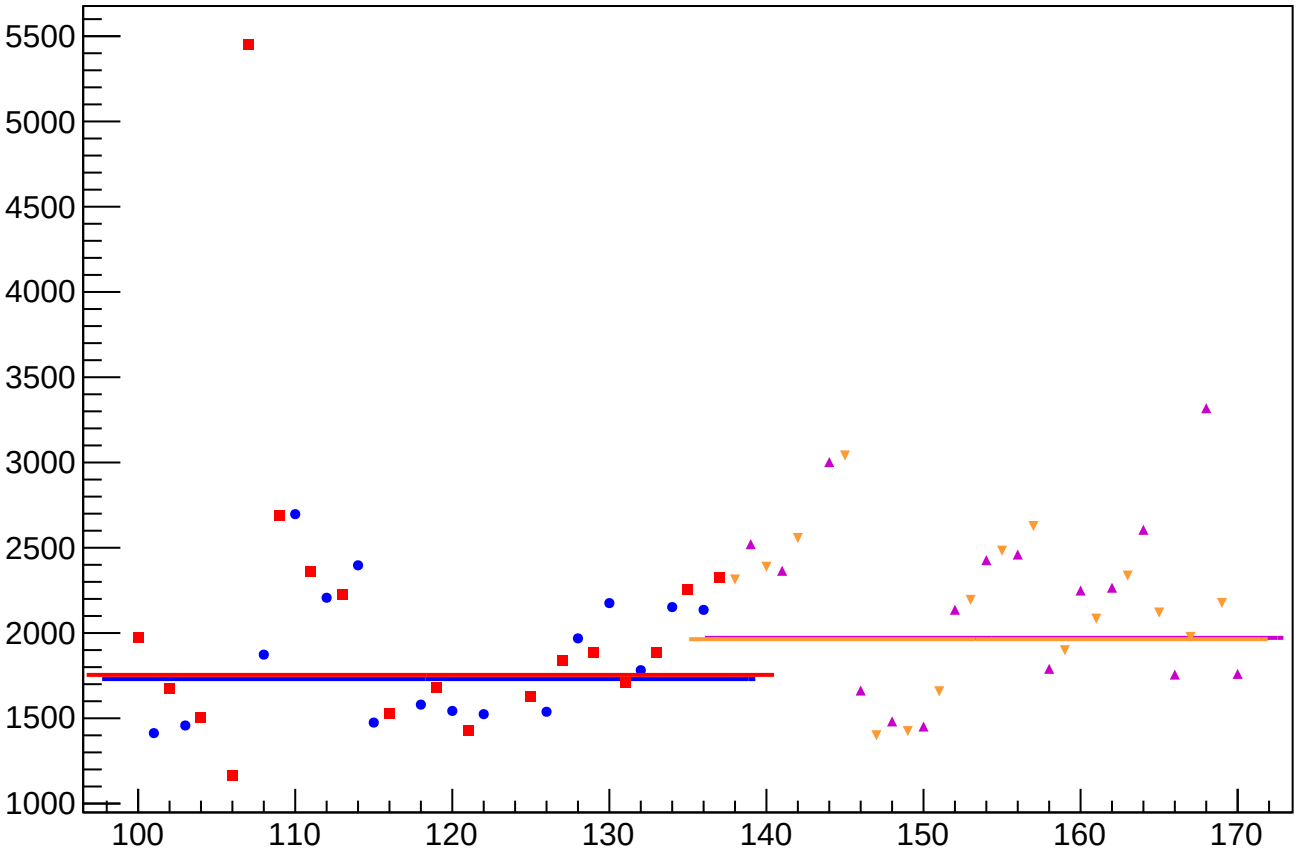
Right Out: 539.517+/-678.214 $\chi^2$/NDF: 13.9/17

Left In: -395.715+/-560.190 $\chi^2$/NDF:8.6/15

+ sign -323.607+/-431.422 $\chi^2$/NDF: 38.7/31

All: -170.190+/-305.233 $\chi^2$/NDF: 62.6/65

- sign -16.428+/-431.908 $\chi^2$/NDF: 23.6/33




Right In: 1729.898+/-0.465 $\chi^2$/NDF: 479898.2/15

Left Out: 1963.824+/-0.404 $\chi^2$/NDF:1156403.4/15

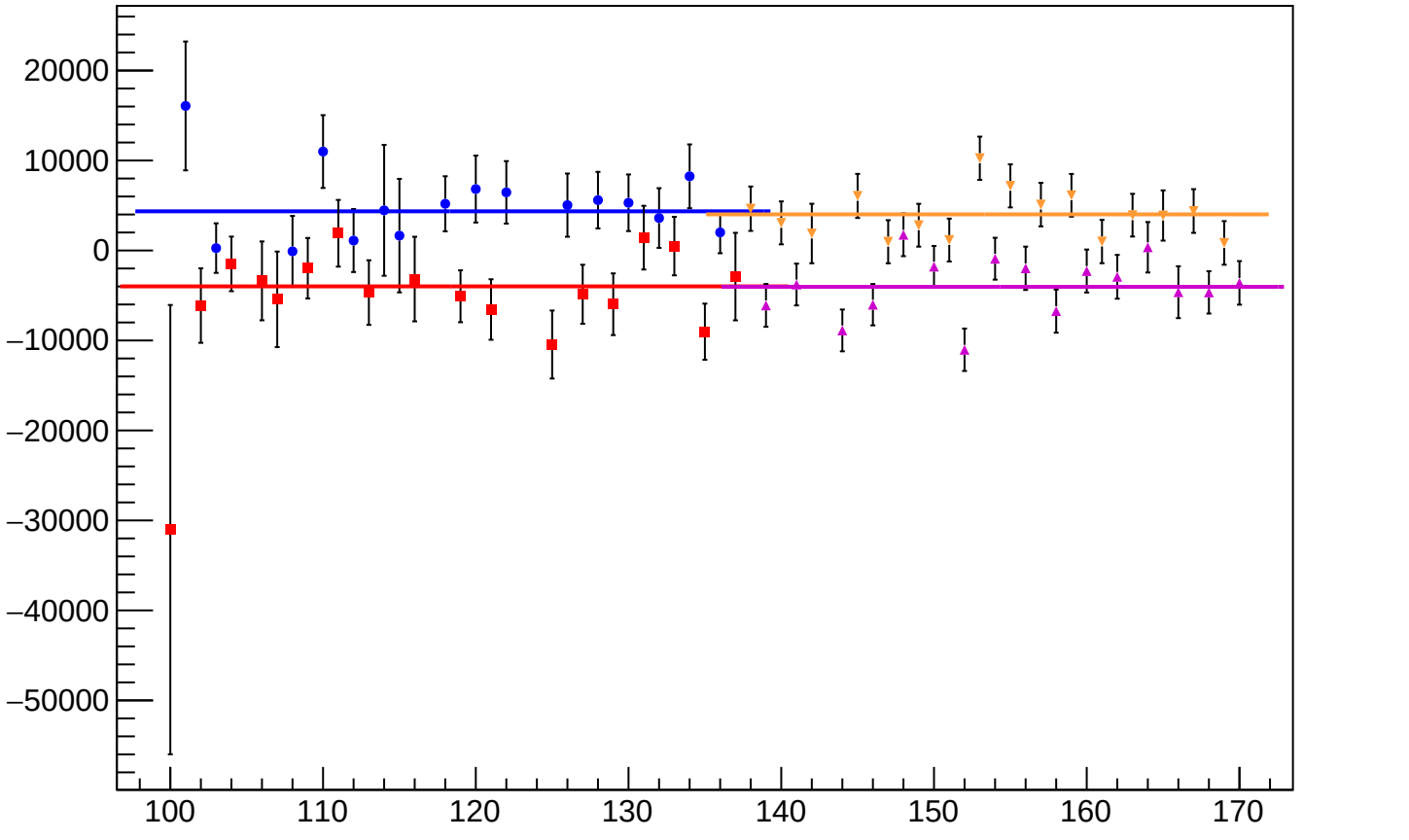
Right Out: 1754.526+/-0.480 $\chi^2$/NDF: 751010.0/17

Left In: 1971.554+/-0.396 $\chi^2$/NDF:1410408.4/15

+ sign 1863.325+/-0.305 $\chi^2$/NDF: 1780390.5/31

All: 1873.420+/-0.216 $\chi^2$/NDF: 4065742.9/65

- sign 1883.538+/-0.305 $\chi^2$/NDF: 2283159.9/33




Right In: 4353.670+/-875.155 $\chi^2$/NDF: 13.4/15

Left Out: 4015.824+/-615.574 $\chi^2$/NDF:17.4/15

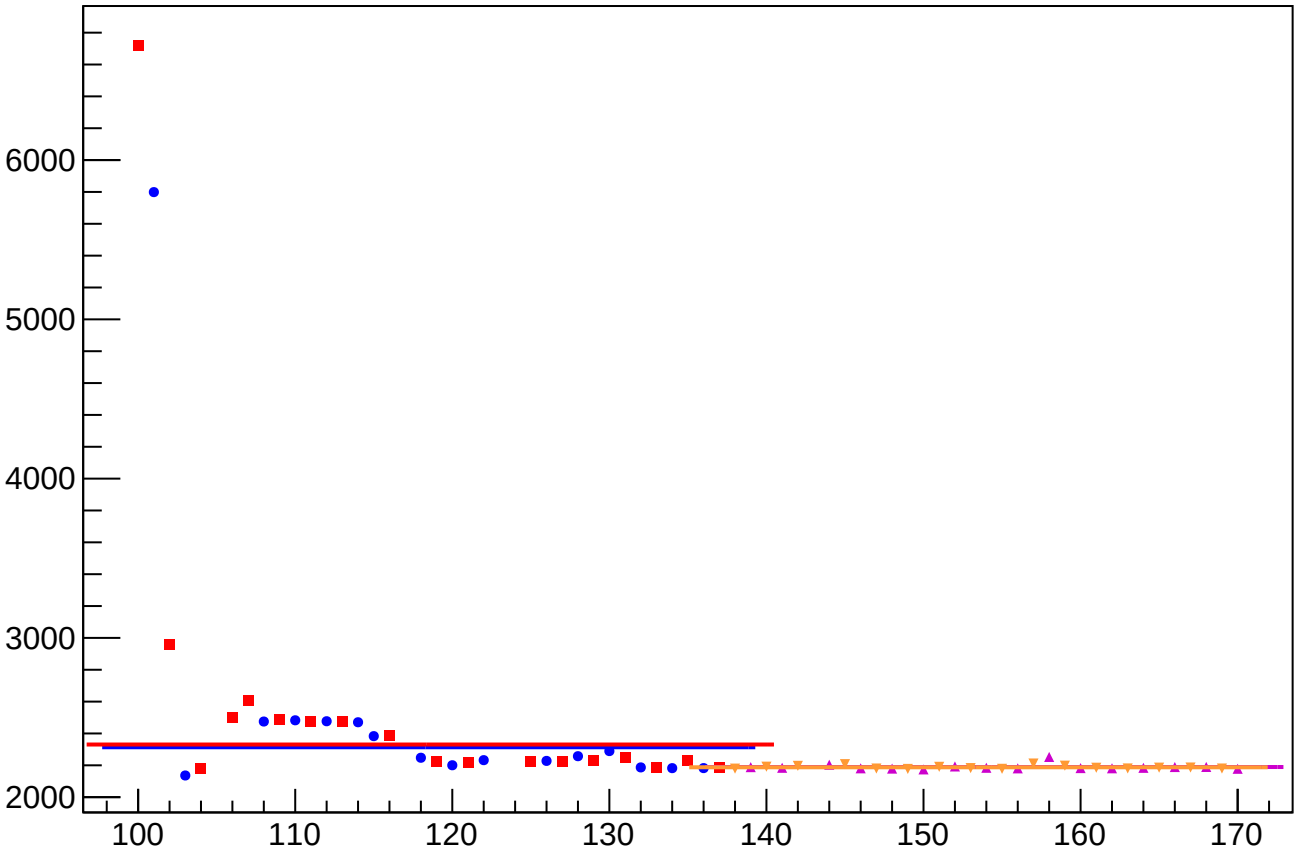
Right Out: -3989.884+/-871.455 $\chi^2$/NDF: 16.1/17

Left In: -4035.441+/-602.124 $\chi^2$/NDF:28.7/15

+ sign 4127.649+/-503.495 $\chi^2$/NDF: 30.9/31

All: -12.743+/-353.120 $\chi^2$/NDF: 208.8/65

- sign -4020.720+/-495.379 $\chi^2$/NDF: 44.9/33




Right In: 2313.413+/-0.619 $\chi^2$/NDF: 512372.3/15

Left Out: 2187.704+/-0.435 $\chi^2$/NDF:545.3/15

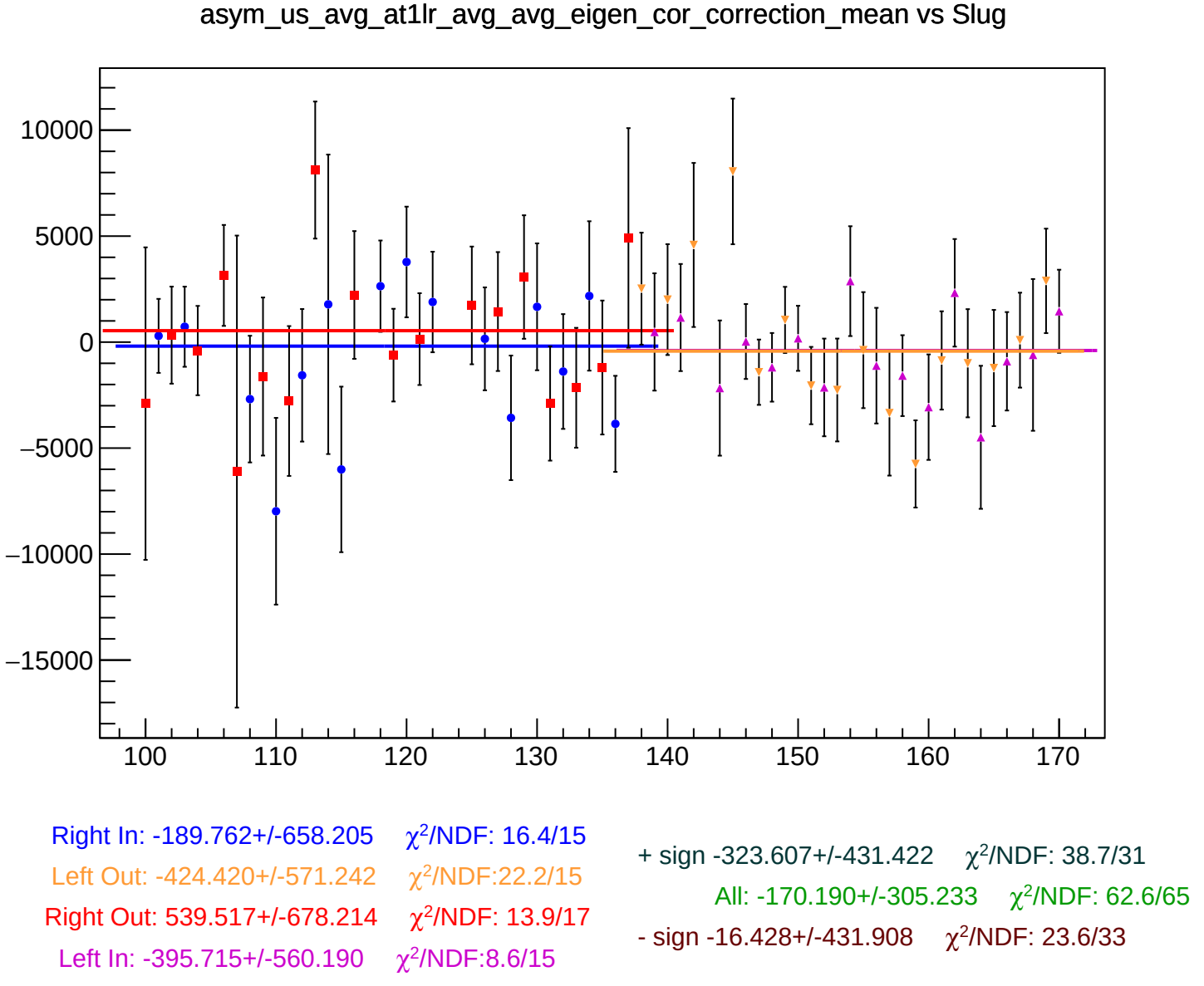
Right Out: 2330.570+/-0.616 $\chi^2$/NDF: 151556.6/17

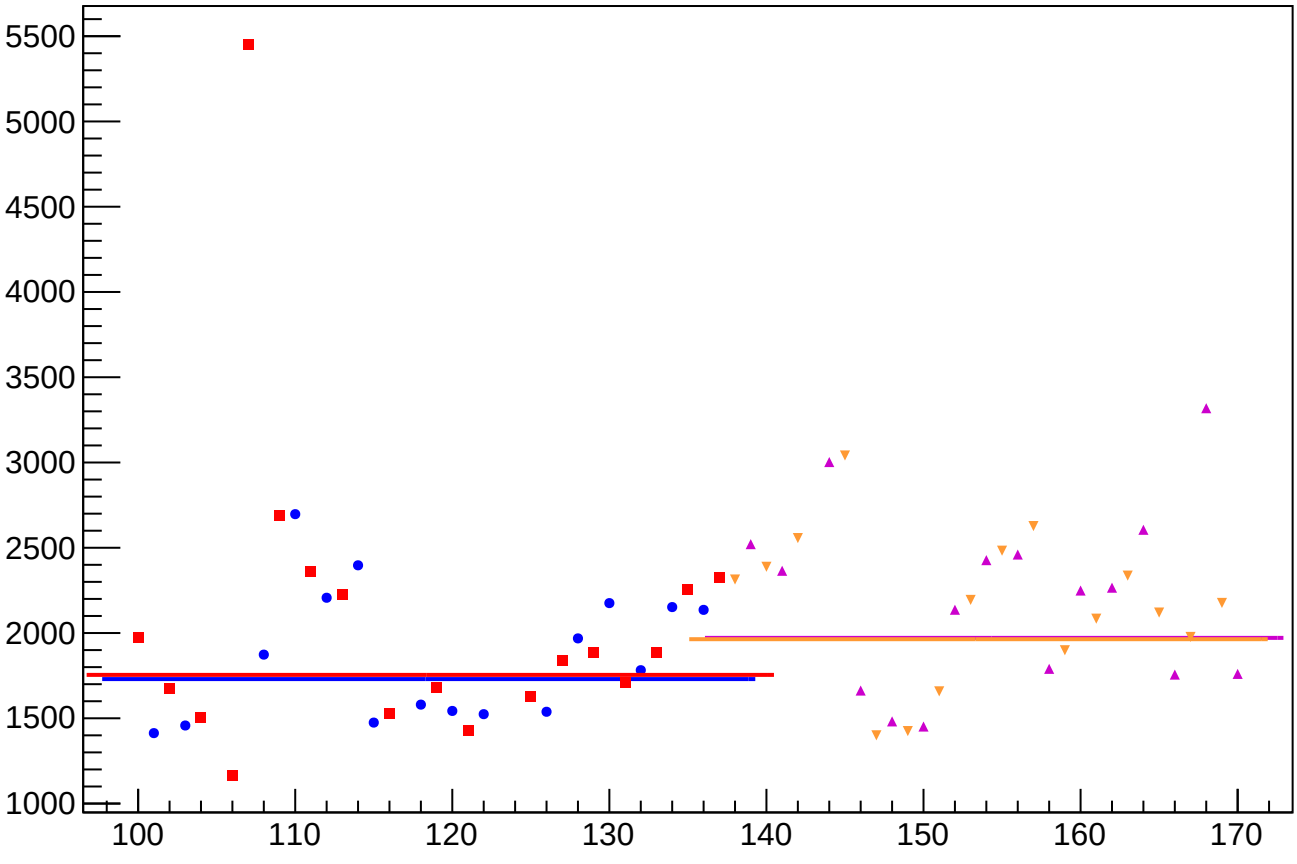
Left In: 2189.355+/-0.426 $\chi^2$/NDF:1745.5/15

+ sign 2229.313+/-0.356 $\chi^2$/NDF: 540524.9/31

All: 2232.196+/-0.250 $\chi^2$/NDF: 729502.9/65

- sign 2234.987+/-0.350 $\chi^2$/NDF: 188848.9/33


asym_us_avg_at1lr_avg_avg_eigen_cor_correction_mean vs Slug
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: -189.762+/-658.205 χ²/NDF: 16.4/15
Left Out: -424.420+/-571.242 χ²/NDF:22.2/15
Right Out: 539.517+/-678.214 χ²/NDF: 13.9/17
Left In: -395.715+/-560.190 χ²/NDF:8.6/15
+ sign -323.607+/-431.422 χ²/NDF: 38.7/31
All: -170.190+/-305.233 χ²/NDF: 62.6/65
- sign -16.428+/-431.908 χ²/NDF: 23.6/33




Right In: 1729.898+/-0.465 $\chi^2$/NDF: 479898.2/15

Left Out: 1963.824+/-0.404 $\chi^2$/NDF:1156403.4/15

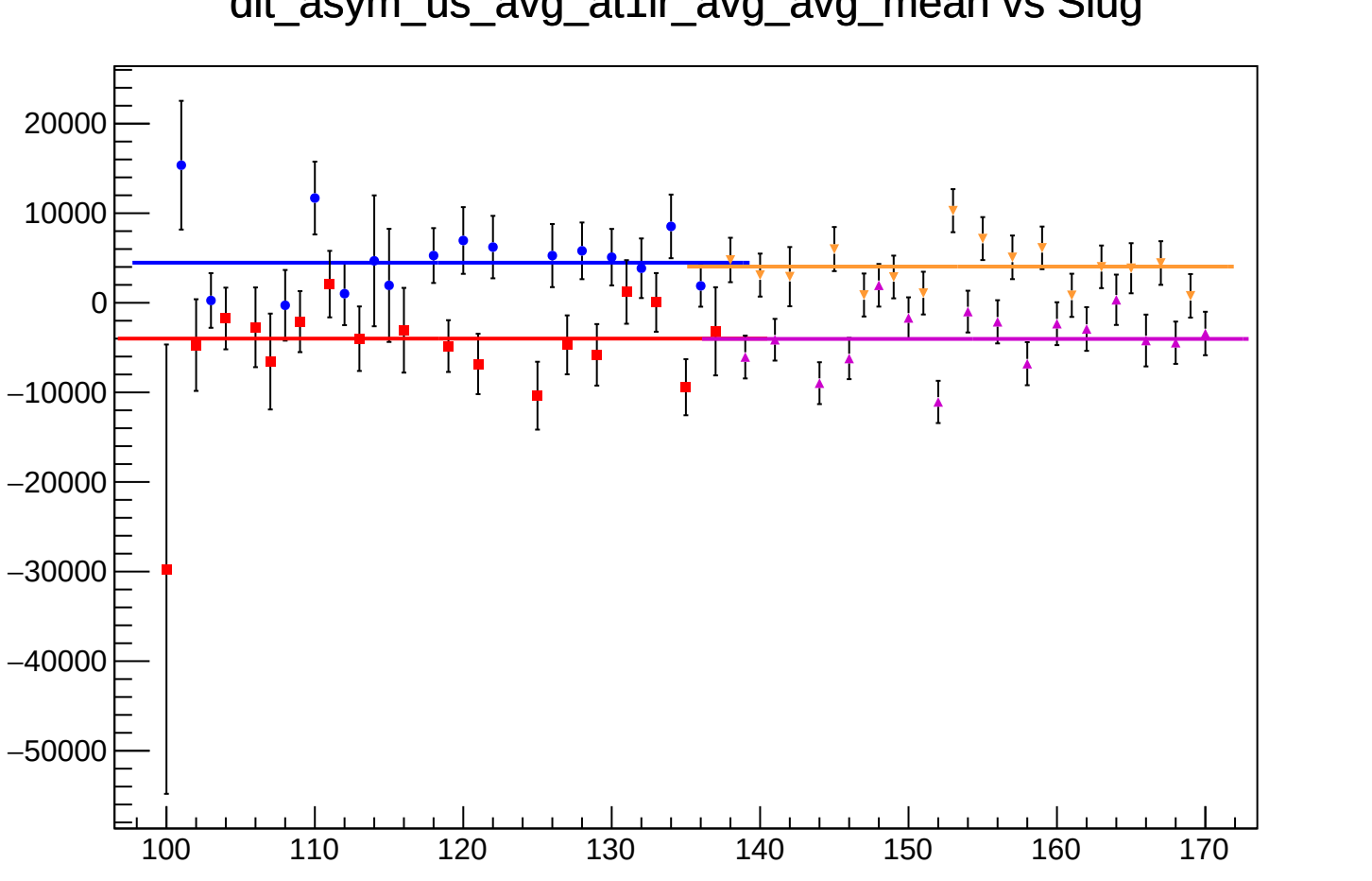
Right Out: 1754.526+/-0.480 $\chi^2$/NDF: 751010.0/17

Left In: 1971.554+/-0.396 $\chi^2$/NDF:1410408.4/15

+ sign 1863.325+/-0.305 $\chi^2$/NDF: 1780390.5/31

All: 1873.420+/-0.216 $\chi^2$/NDF: 4065742.9/65

- sign 1883.538+/-0.305 $\chi^2$/NDF: 2283159.9/33




Right In: 4476.431+/-886.087 $\chi^2$/NDF: 13.5/15

Left Out: 4042.459+/-617.090 $\chi^2$/NDF:17.5/15

Right Out: -3995.807+/-890.441 $\chi^2$/NDF: 15.5/17

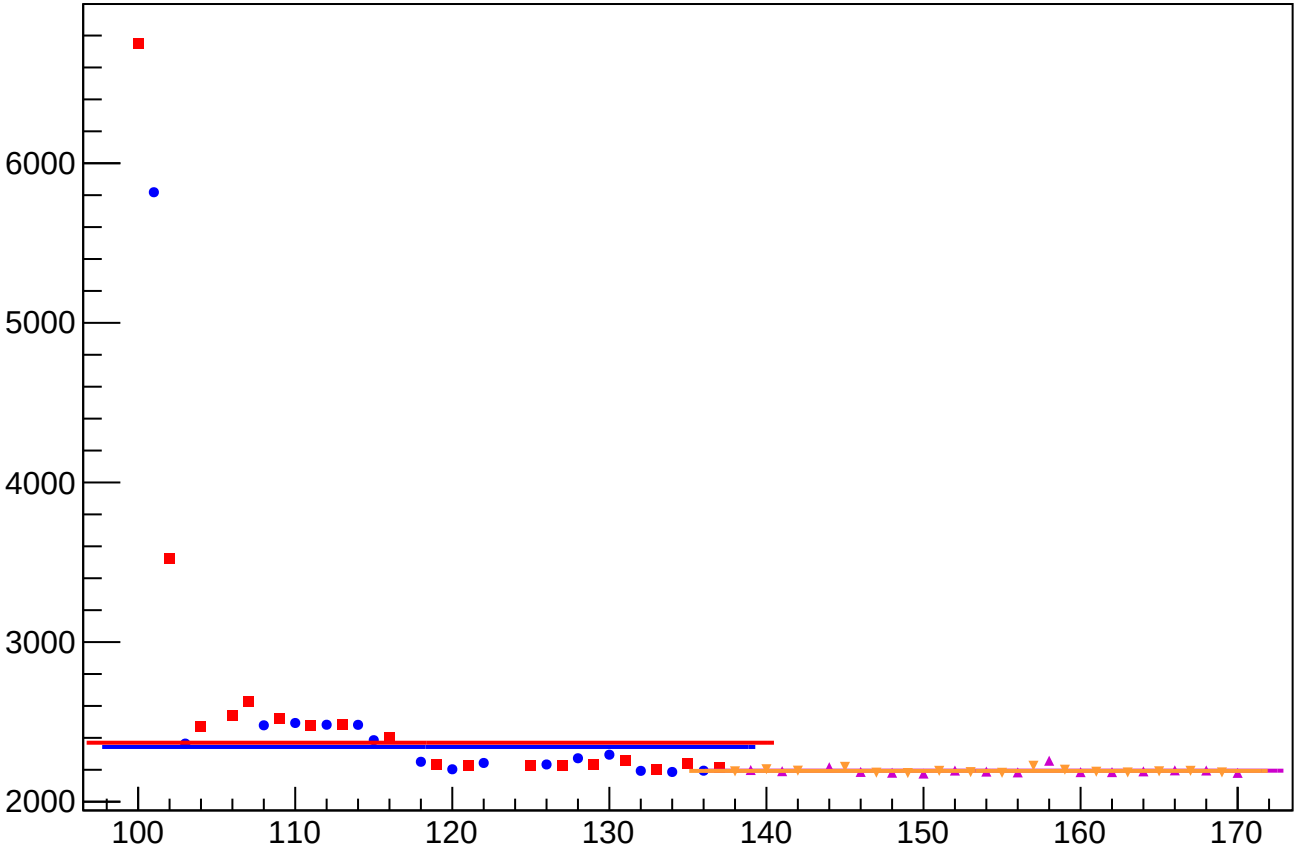
Left In: -4031.023+/-603.519 $\chi^2$/NDF:29.3/15

+ sign 4184.194+/-506.389 $\chi^2$/NDF: 31.2/31

All: 26.616+/-355.640 $\chi^2$/NDF: 209.0/65

- sign -4019.937+/-499.582 $\chi^2$/NDF: 44.7/33

# dit_asym_us_avg_at1lr_avg_avg_rms vs Slug




Right In: 2342.914+/-0.627 $\chi^2$/NDF: 502866.3/15

Left Out: 2192.986+/-0.436 $\chi^2$/NDF:872.3/15

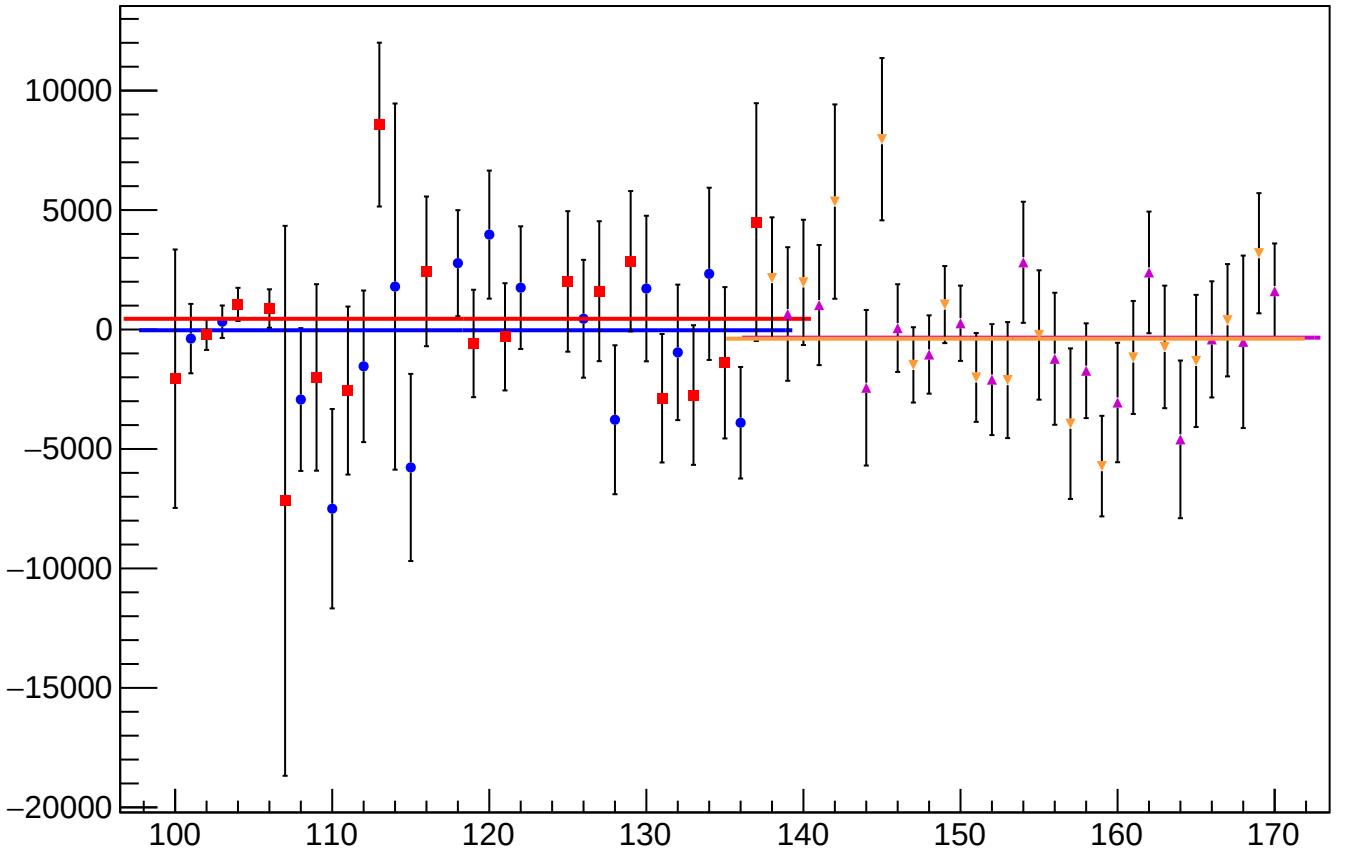
Right Out: 2369.572+/-0.630 $\chi^2$/NDF: 210147.5/17

Left In: 2194.366+/-0.427 $\chi^2$/NDF:1906.7/15

+ sign 2241.953+/-0.358 $\chi^2$/NDF: 542296.6/31

All: 2245.786+/-0.251 $\chi^2$/NDF: 807635.4/65

- sign 2249.517+/-0.353 $\chi^2$/NDF: 265112.6/33




Right In: -31.393+/-485.329 $\chi^2$/NDF: 16.3/15

Left Out: -383.944+/-581.582 $\chi^2$/NDF:22.4/15

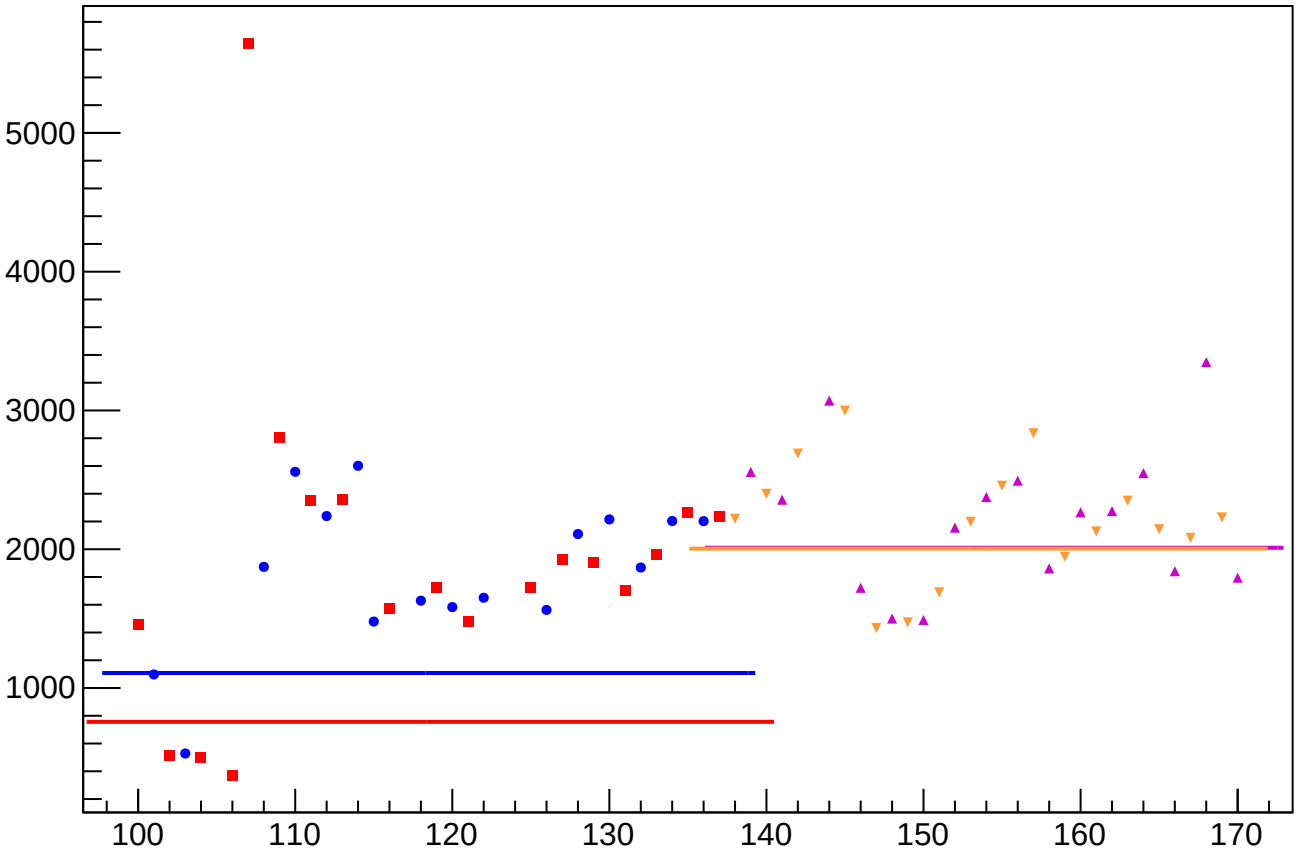
Right Out: 448.261+/-362.570 $\chi^2$/NDF: 15.1/17

Left In: -340.792+/-569.679 $\chi^2$/NDF:8.9/15

+ sign -176.119+/-372.626 $\chi^2$/NDF: 39.0/31

All: 61.007+/-236.423 $\chi^2$/NDF: 65.0/65

- sign 220.786+/-305.875 $\chi^2$/NDF: 25.3/33




Right In: 1108.139+/-0.343 $\chi^2$/NDF: 3746477.0/15

Left Out: 2004.388+/-0.411 $\chi^2$/NDF:1099583.8/15

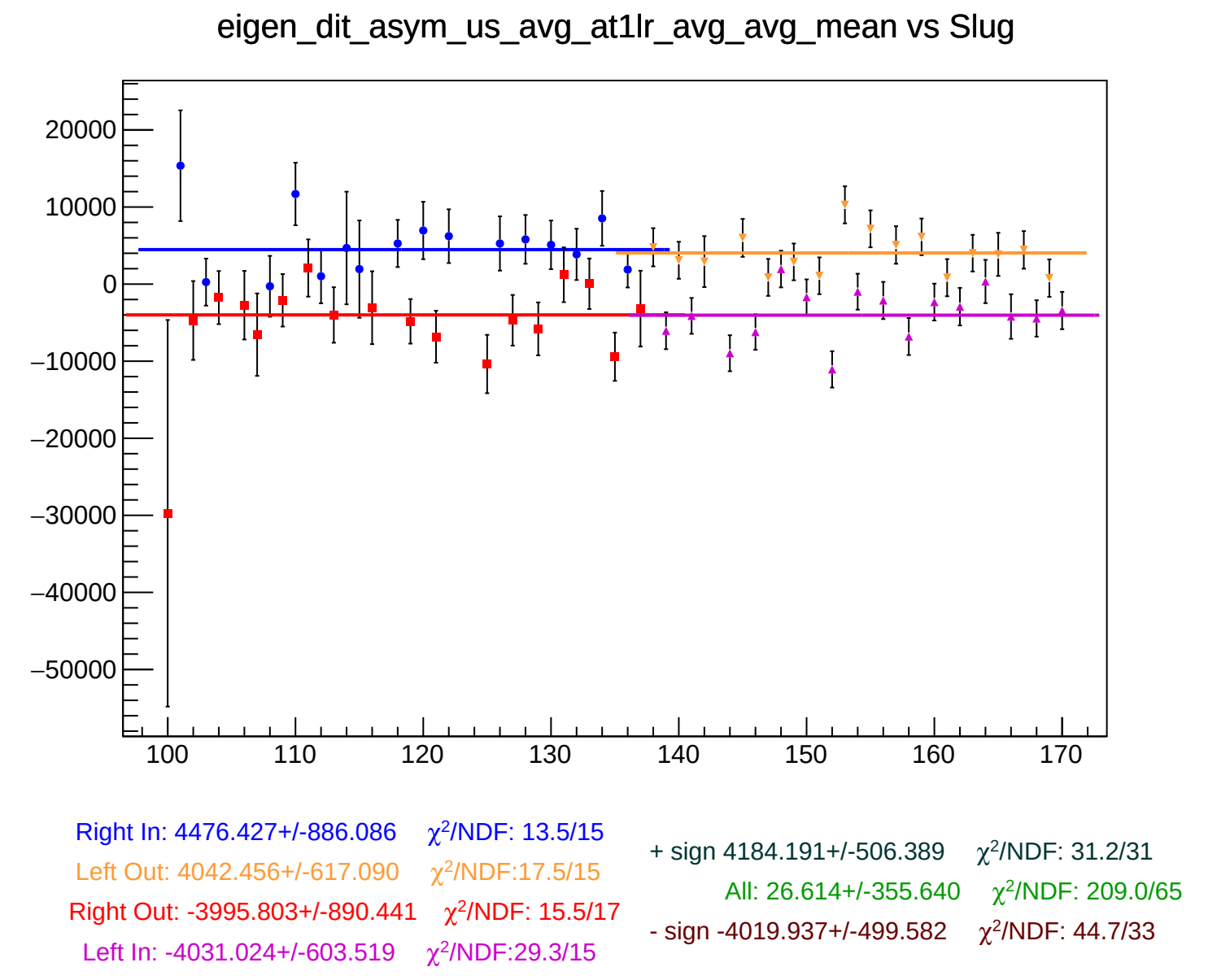
Right Out: 756.419+/-0.256 $\chi^2$/NDF: 5603215.5/17

Left In: 2010.747+/-0.403 $\chi^2$/NDF:1312699.4/15

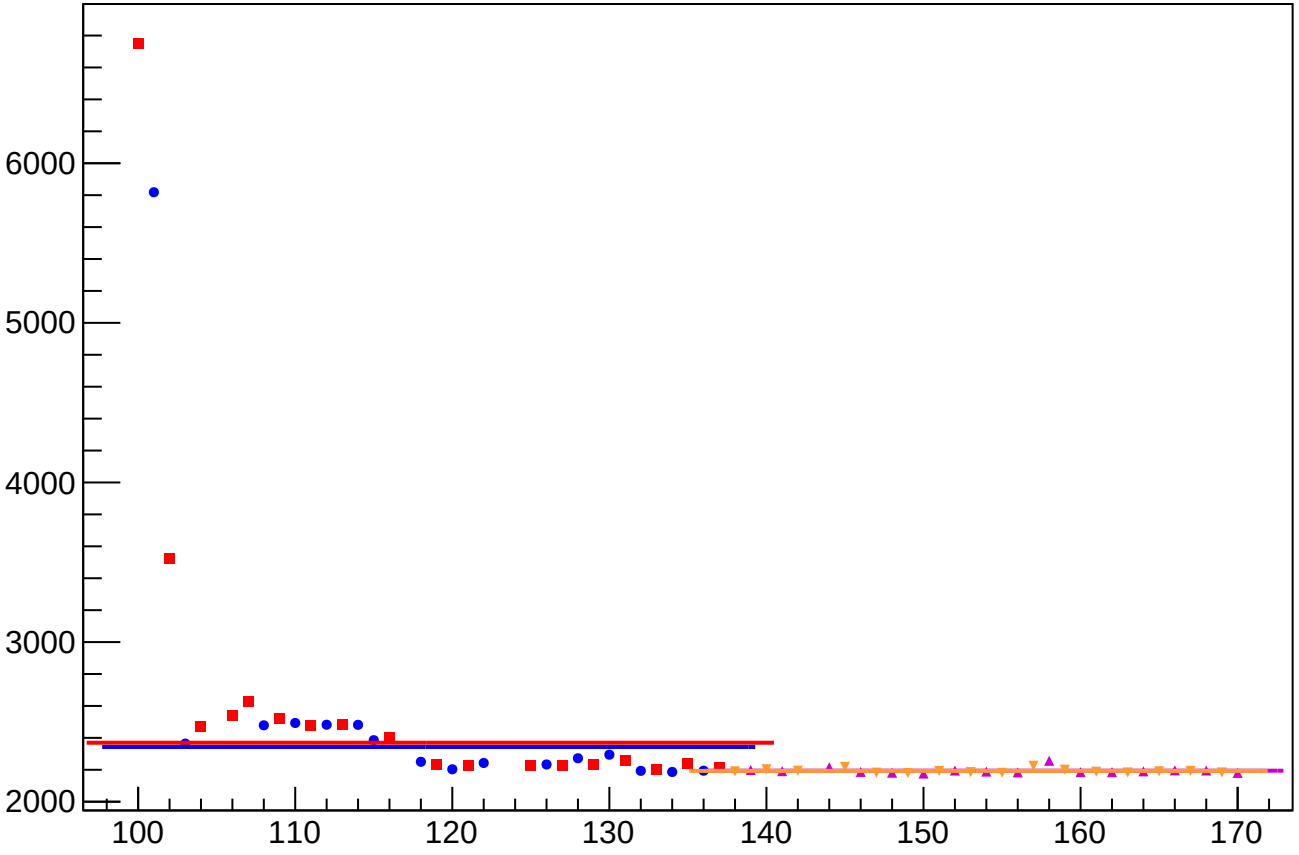
+ sign 1476.059+/-0.263 $\chi^2$/NDF: 7645947.2/31

All: 1262.158+/-0.167 $\chi^2$/NDF: 22565712.8/6

- sign 1118.028+/-0.216 $\chi^2$/NDF: 13816656.0/33


eigen_dit_asym_us_avg_at1lr_avg_avg_mean vs Slug
20000
10000
0
−10000
−20000
−30000
−40000
−50000
100
110
120
130
140
150
160
170
Right In: 4476.427+/-886.086 χ²/NDF: 13.5/15
Left Out: 4042.456+/-617.090 χ²/NDF:17.5/15
Right Out: -3995.803+/-890.441 χ²/NDF: 15.5/17
Left In: -4031.024+/-603.519 χ²/NDF:29.3/15
+ sign 4184.191+/-506.389 χ²/NDF: 31.2/31
All: 26.614+/-355.640 χ²/NDF: 209.0/65
- sign -4019.937+/-499.582 χ²/NDF: 44.7/33

# eigen_dit_asym_us_avg_at1lr_avg_avg_rms vs Slug




Right In: 2342.913+/-0.627 $\chi^2$/NDF: 502866.3/15

Left Out: 2192.986+/-0.436 $\chi^2$/NDF:872.3/15

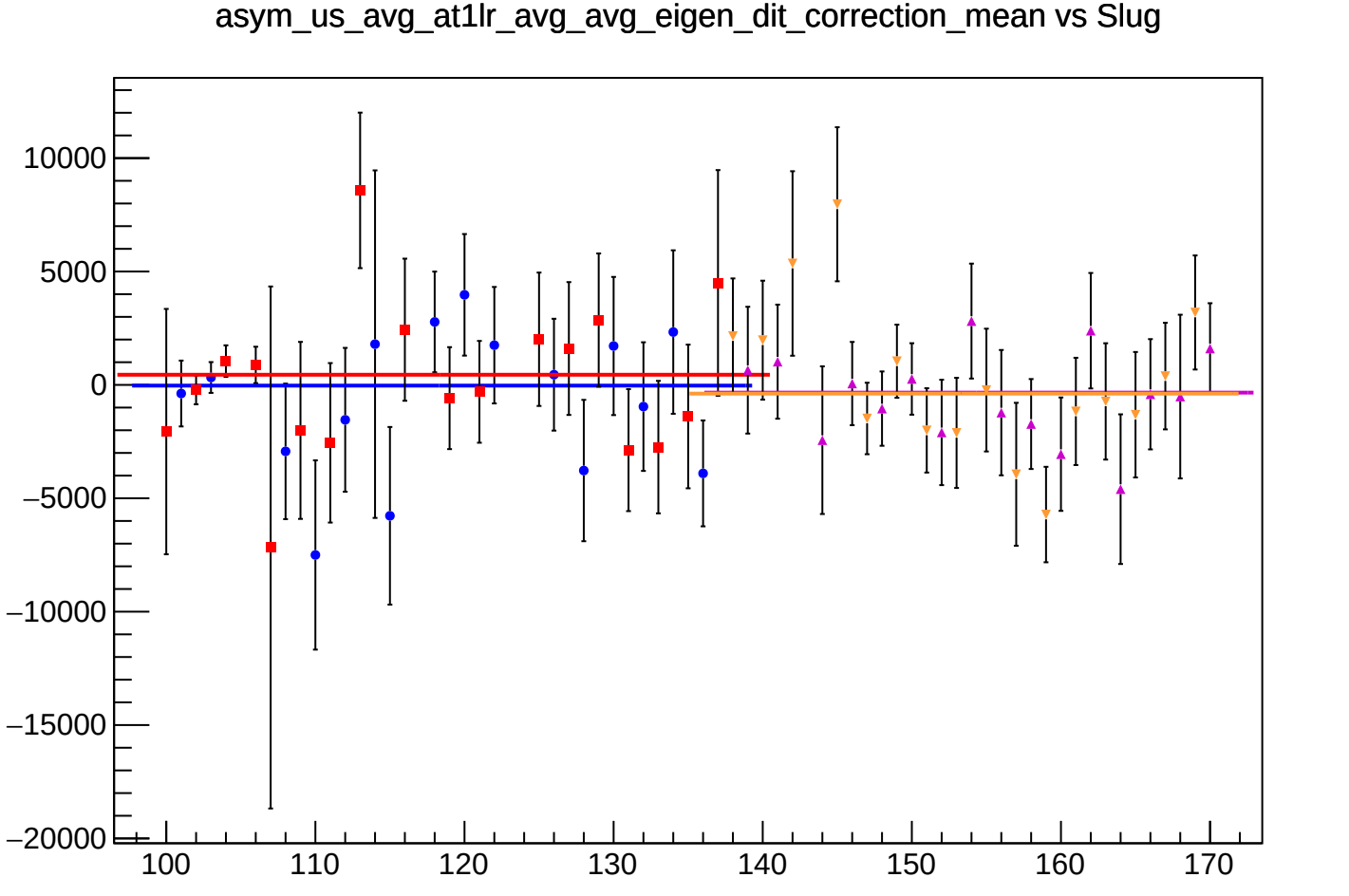
Right Out: 2369.572+/-0.630 $\chi^2$/NDF: 210146.5/17

Left In: 2194.366+/-0.427 $\chi^2$/NDF:1906.7/15

+ sign 2241.953+/-0.358 $\chi^2$/NDF: 542296.4/31

All: 2245.786+/-0.251 $\chi^2$/NDF: 807633.7/65

- sign 2249.517+/-0.353 $\chi^2$/NDF: 265111.2/33




Right In: -31.400+/-485.331 $\chi^2$/NDF: 16.3/15

Left Out: -383.948+/-581.583 $\chi^2$/NDF:22.4/15

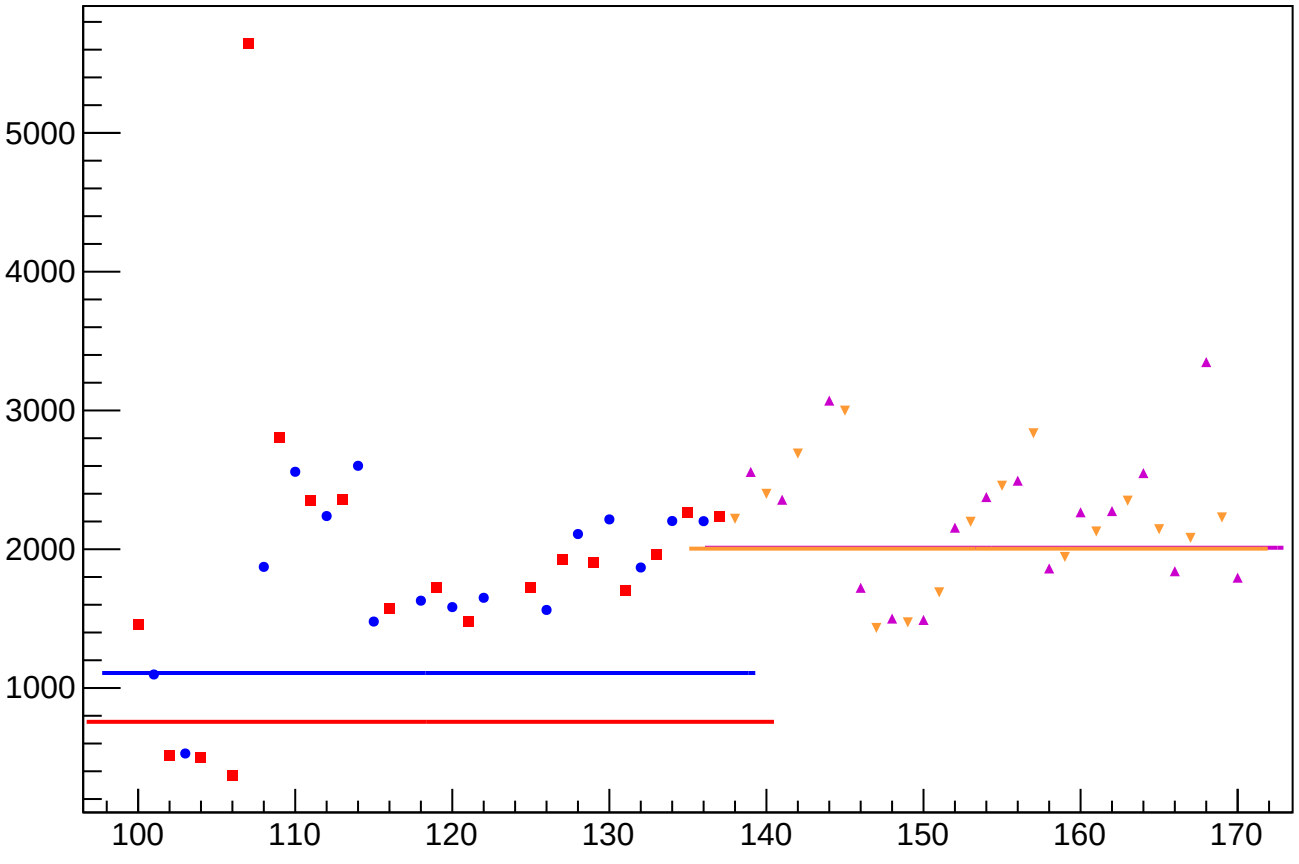
Right Out: 448.265+/-362.575 $\chi^2$/NDF: 15.1/17

Left In: -340.793+/-569.680 $\chi^2$/NDF:8.9/15

+ sign -176.125+/-372.628 $\chi^2$/NDF: 39.0/31

All: 61.002+/-236.425 $\chi^2$/NDF: 65.0/65

- sign 220.784+/-305.878 $\chi^2$/NDF: 25.3/33




Right In: 1108.149+/-0.343 $\chi^2$/NDF: 3746402.0/15

Left Out: 2004.392+/-0.411 $\chi^2$/NDF:1099583.7/15

Right Out: 756.434+/-0.256 $\chi^2$/NDF: 5603097.5/17

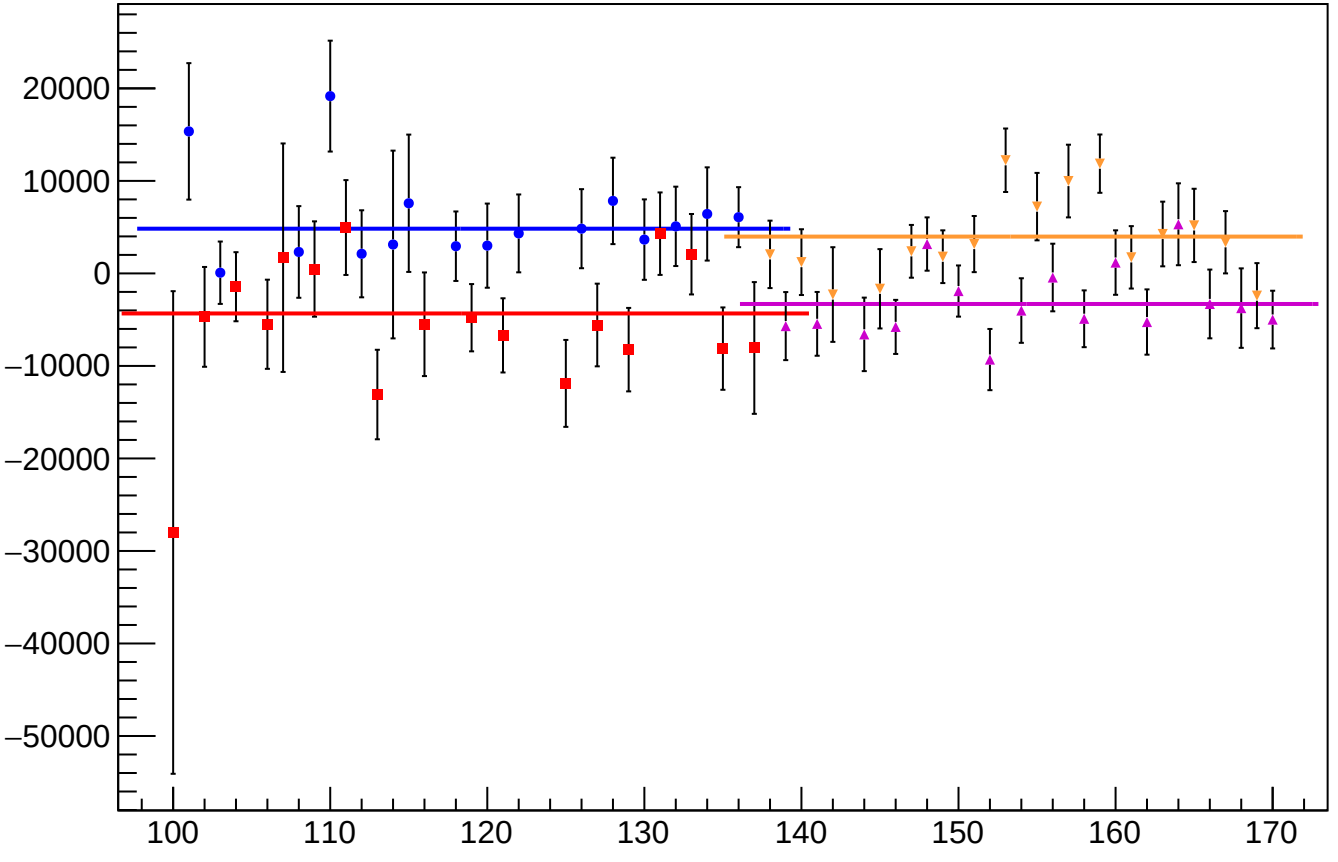
Left In: 2010.751+/-0.403 $\chi^2$/NDF:1312698.5/15

+ sign 1476.068+/-0.263 $\chi^2$/NDF: 7645815.2/31

All: 1262.173+/-0.167 $\chi^2$/NDF: 22565198.1/6

- sign 1118.045+/-0.216 $\chi^2$/NDF: 13816341.4/33

# asym_us_avg_at1lr_avg_avg_mean vs Slug




Right In: 4833.806+/-1142.535 $\chi^2$/NDF: 11.7/15

Left Out: 3979.653+/-867.125 $\chi^2$/NDF:24.1/15

Right Out: -4328.601+/-1144.541 $\chi^2$/NDF: 19.9/17

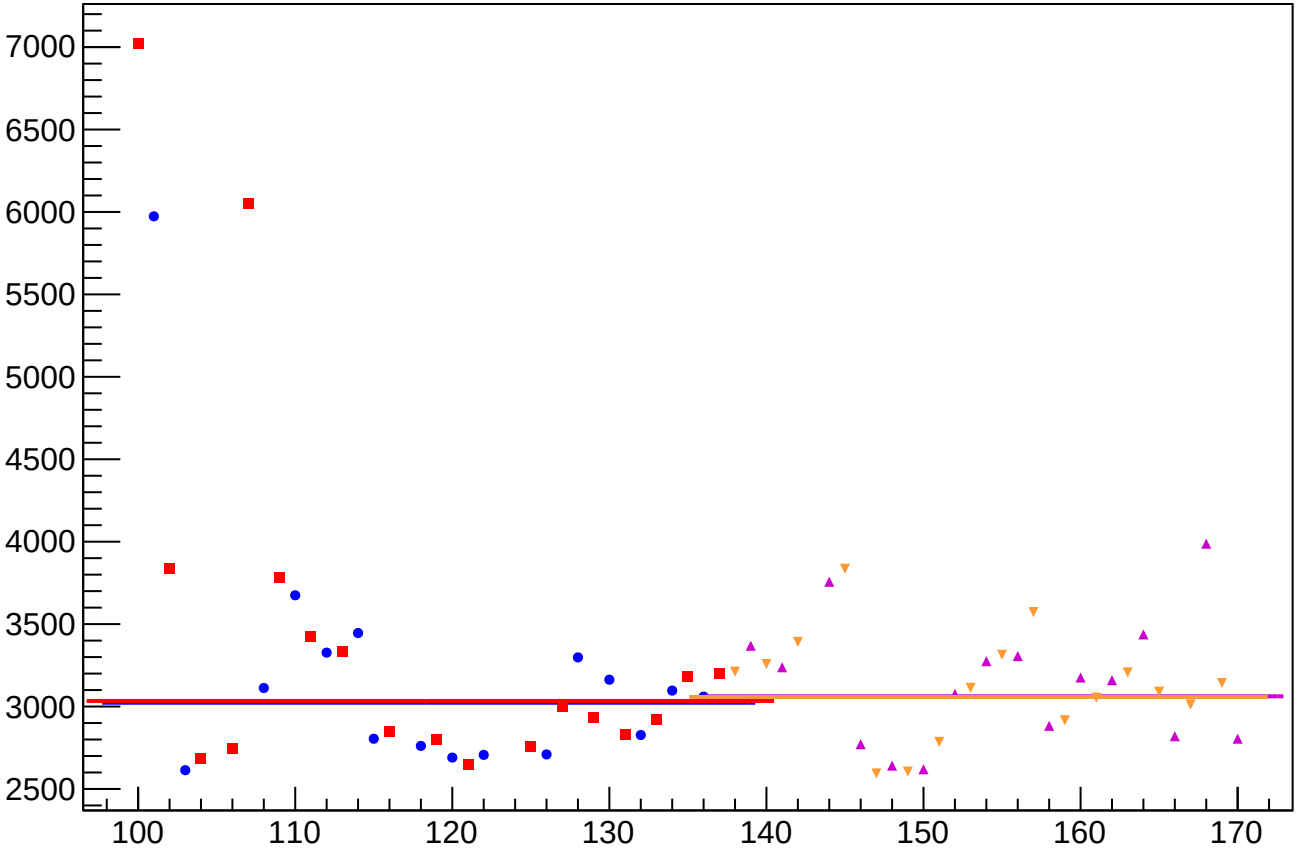
Left In: -3304.674+/-849.001 $\chi^2$/NDF:17.8/15

+ sign 4291.832+/-690.722 $\chi^2$/NDF: 36.1/31

All: 260.594+/-485.258 $\chi^2$/NDF: 141.6/65

- sign -3668.106+/-681.881 $\chi^2$/NDF: 38.2/33

# asym_us_avg_at1lr_avg_avg_rms vs Slug




Right In: 3023.068+/-0.808 $\chi^2$/NDF: 443705.8/15

Left Out: 3057.858+/-0.613 $\chi^2$/NDF:257771.2/15

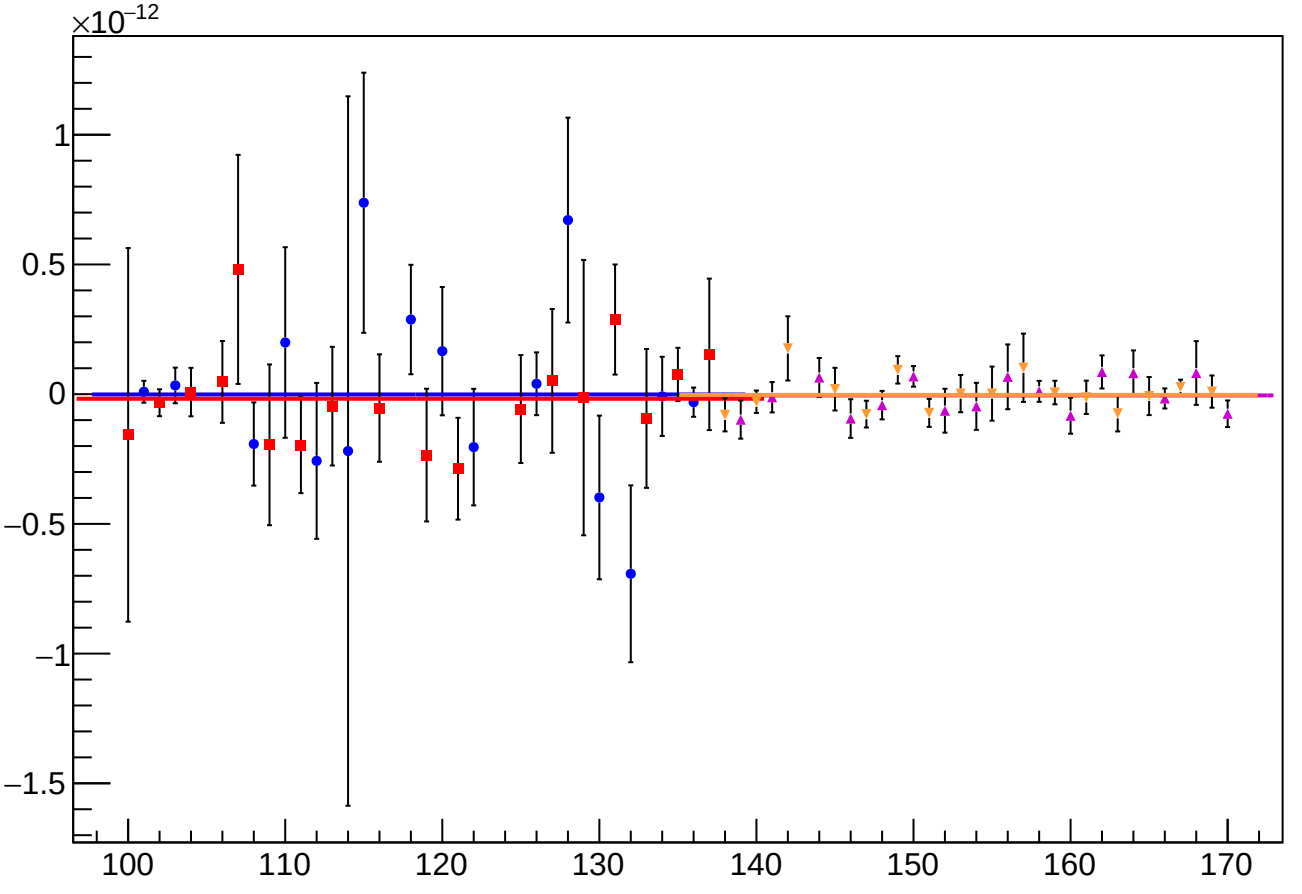
Right Out: 3033.869+/-0.809 $\chi^2$/NDF: 342674.7/17

Left In: 3062.042+/-0.600 $\chi^2$/NDF:350230.3/15

+ sign 3045.143+/-0.488 $\chi^2$/NDF: 702653.6/31

All: 3048.637+/-0.343 $\chi^2$/NDF: 1396441.3/65

- sign 3052.042+/-0.482 $\chi^2$/NDF: 693686.6/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 17.1/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:14.0/15

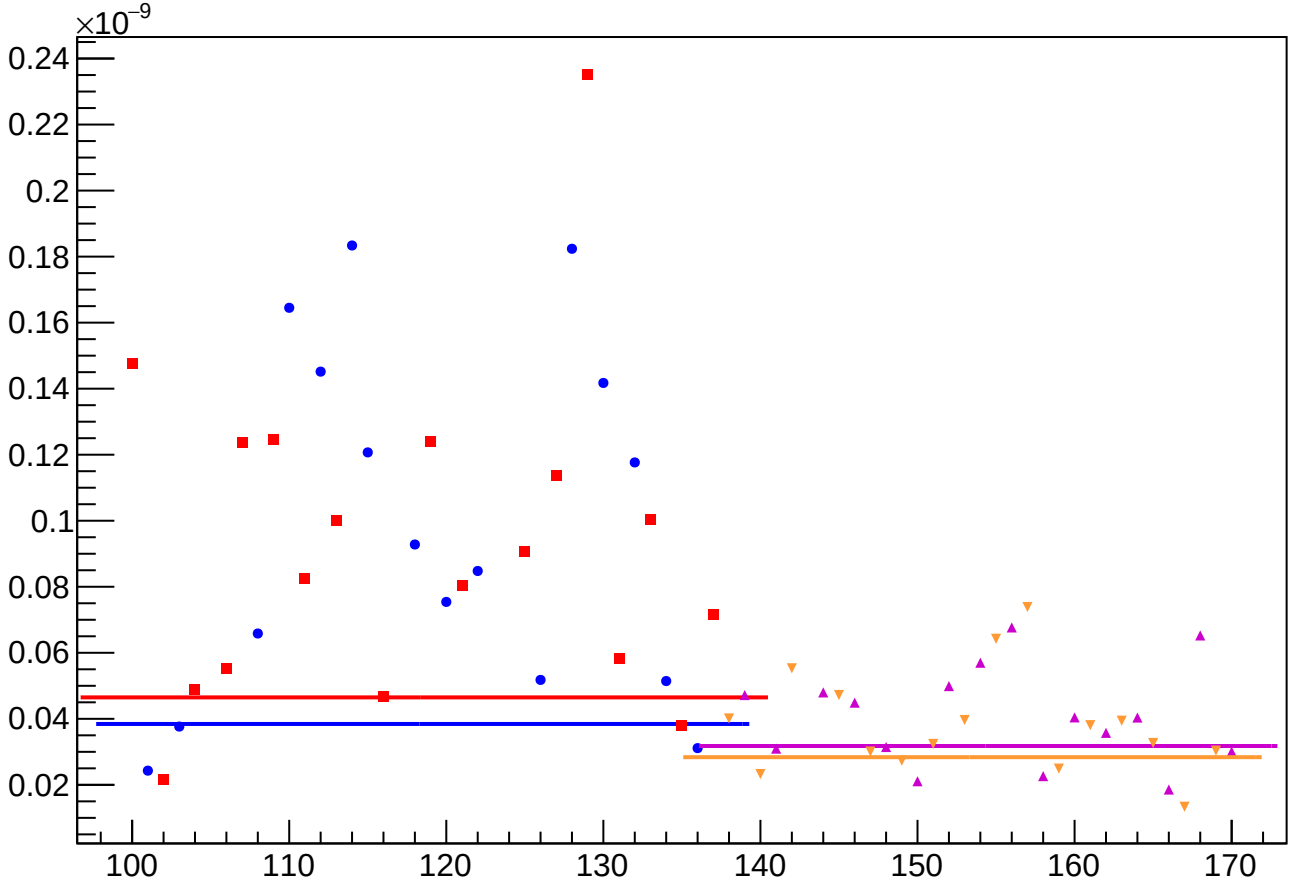
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 9.0/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:15.7/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 31.1/31

All: -0.000+/-0.000 $\chi^2$/NDF: 55.9/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 24.8/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1771405.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1510213.6/15

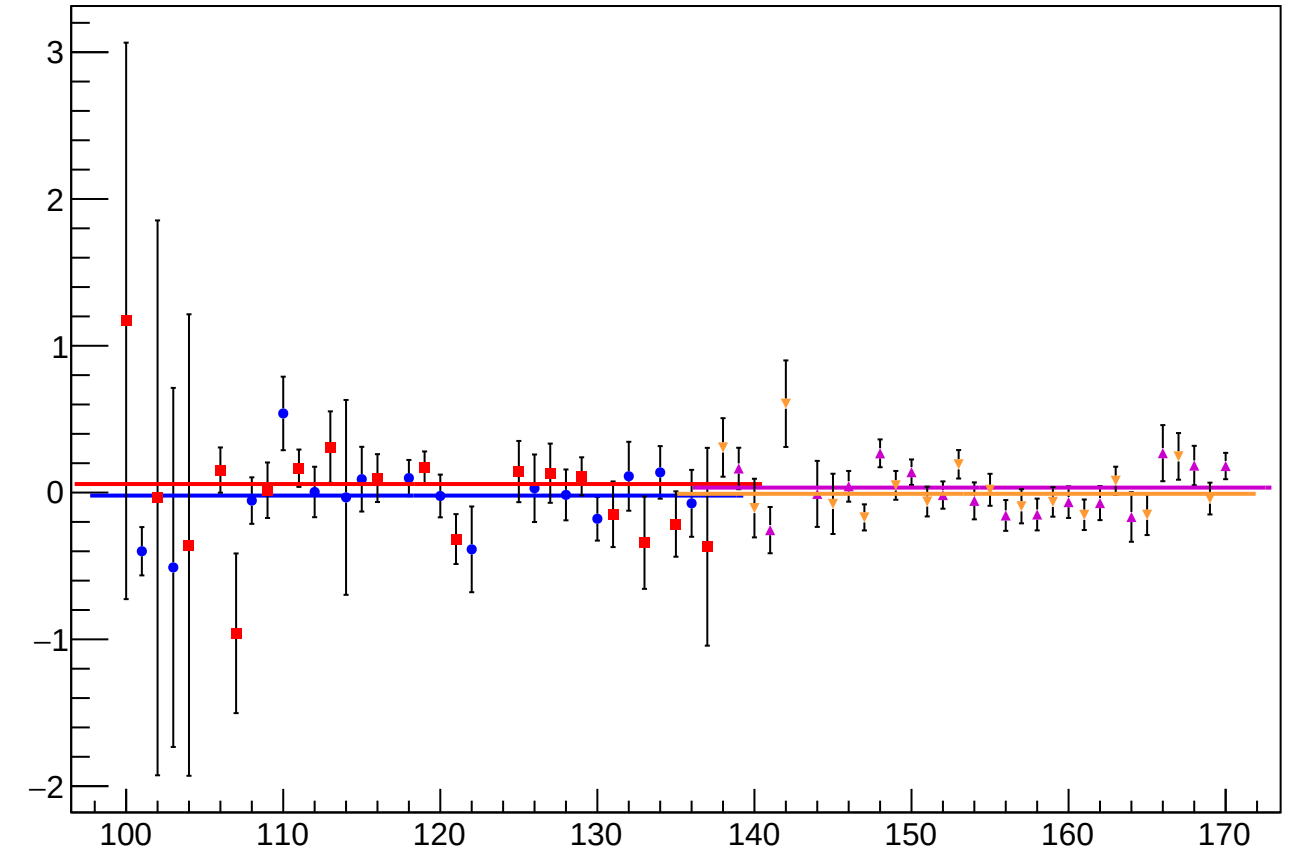
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1697135.5/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1344775.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3496951.8/31

All: 0.000+/-0.000 $\chi^2$/NDF: 6920209.5/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 3347992.4/33




Right In: -0.021+/-0.048 $\chi^2$/NDF: 15.6/15

Left Out: -0.009+/-0.029 $\chi^2$/NDF:22.7/15

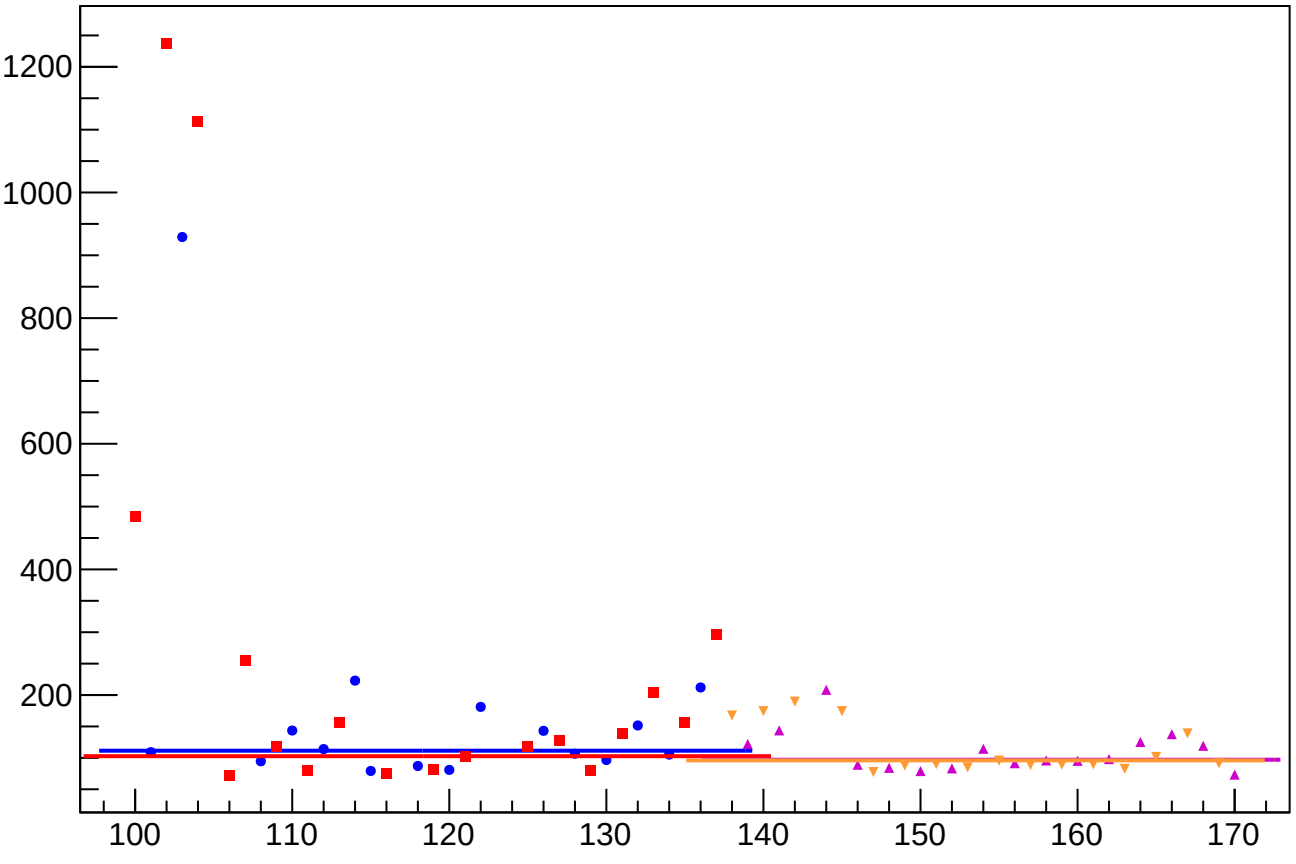
Right Out: 0.058+/-0.046 $\chi^2$/NDF: 16.8/17

Left In: 0.034+/-0.029 $\chi^2$/NDF:27.3/15

+ sign -0.012+/-0.025 $\chi^2$/NDF: 38.4/31

All: 0.015+/-0.018 $\chi^2$/NDF: 85.0/65

- sign 0.041+/-0.024 $\chi^2$/NDF: 44.3/33




Right In: 111.407+/-0.034 $\chi^2$/NDF: 1839361.2/15

Left Out: 96.013+/-0.021 $\chi^2$/NDF:1409087.9/15

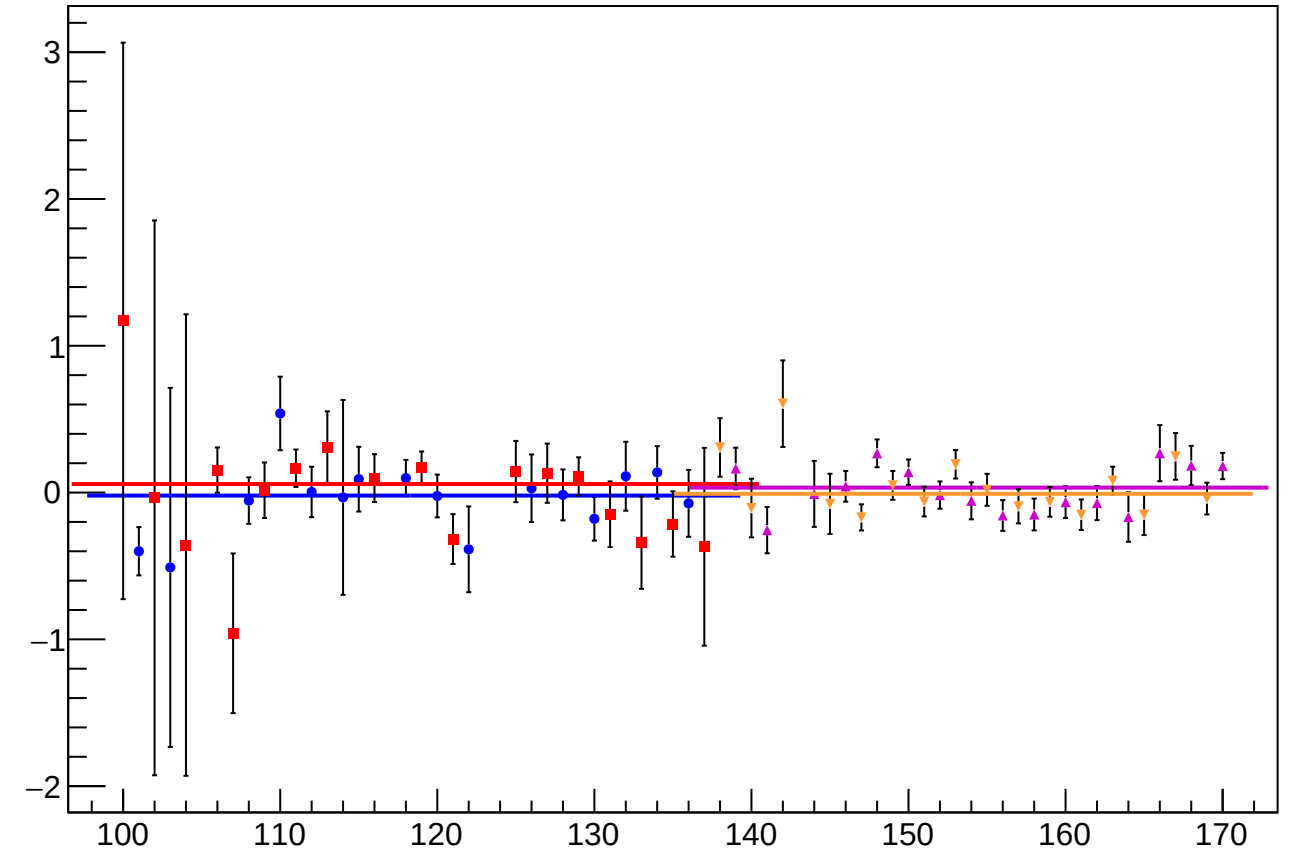
Right Out: 102.673+/-0.033 $\chi^2$/NDF: 2826852.7/17

Left In: 97.050+/-0.020 $\chi^2$/NDF:1291688.9/15

+ sign 100.265+/-0.018 $\chi^2$/NDF: 3399660.2/31

All: 99.423+/-0.012 $\chi^2$/NDF: 7543822.3/65

- sign 98.616+/-0.017 $\chi^2$/NDF: 4139727.6/33




Right In: -0.021+/-0.048 $\chi^2$/NDF: 15.6/15

Left Out: -0.009+/-0.029 $\chi^2$/NDF:22.7/15

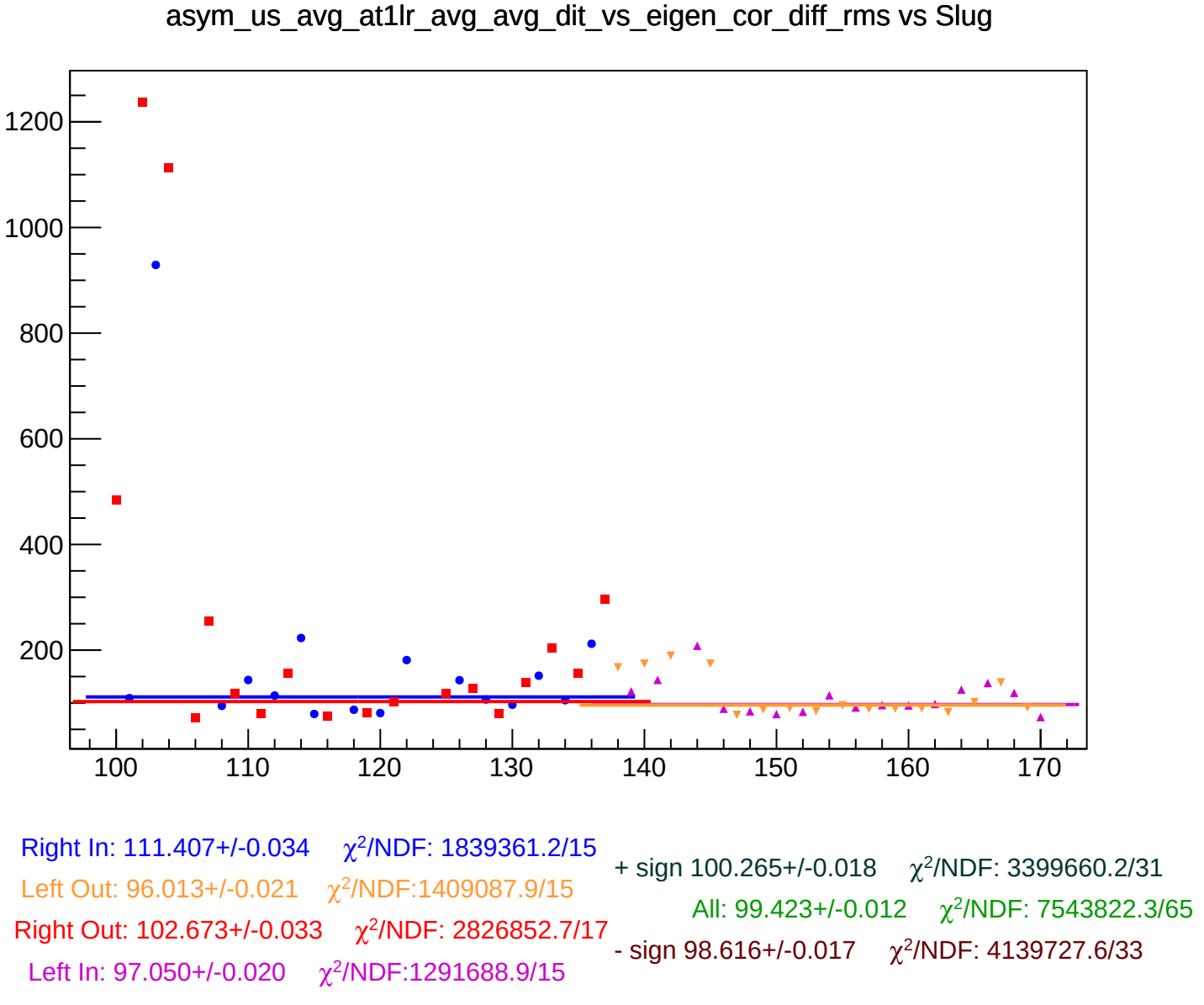
Right Out: 0.058+/-0.046 $\chi^2$/NDF: 16.8/17

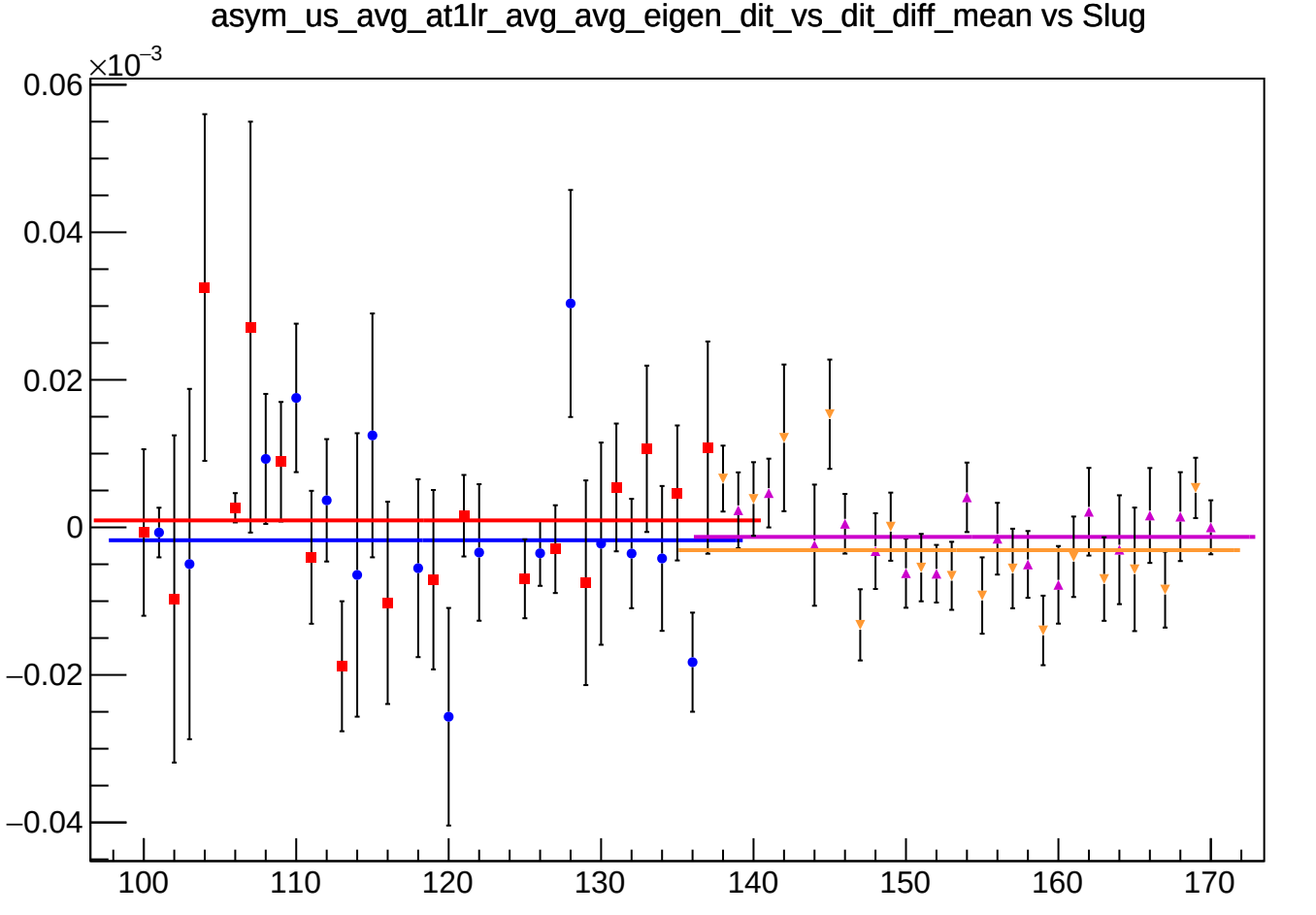
Left In: 0.034+/-0.029 $\chi^2$/NDF:27.3/15

+ sign -0.012+/-0.025 $\chi^2$/NDF: 38.4/31

All: 0.015+/-0.018 $\chi^2$/NDF: 85.0/65

- sign 0.041+/-0.024 $\chi^2$/NDF: 44.3/33


asym_us_avg_at1lr_avg_avg_dit_vs_eigen_cor_diff_rms vs Slug
1200
1000
800
600
400
200
100
110
120
130
140
150
160
170
Right In: 111.407+/-0.034 χ²/NDF: 1839361.2/15
Left Out: 96.013+/-0.021 χ²/NDF:1409087.9/15
Right Out: 102.673+/-0.033 χ²/NDF: 2826852.7/17
Left In: 97.050+/-0.020 χ²/NDF:1291688.9/15
+ sign 100.265+/-0.018 χ²/NDF: 3399660.2/31
All: 99.423+/-0.012 χ²/NDF: 7543822.3/65
- sign 98.616+/-0.017 χ²/NDF: 4139727.6/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 20.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:33.8/15

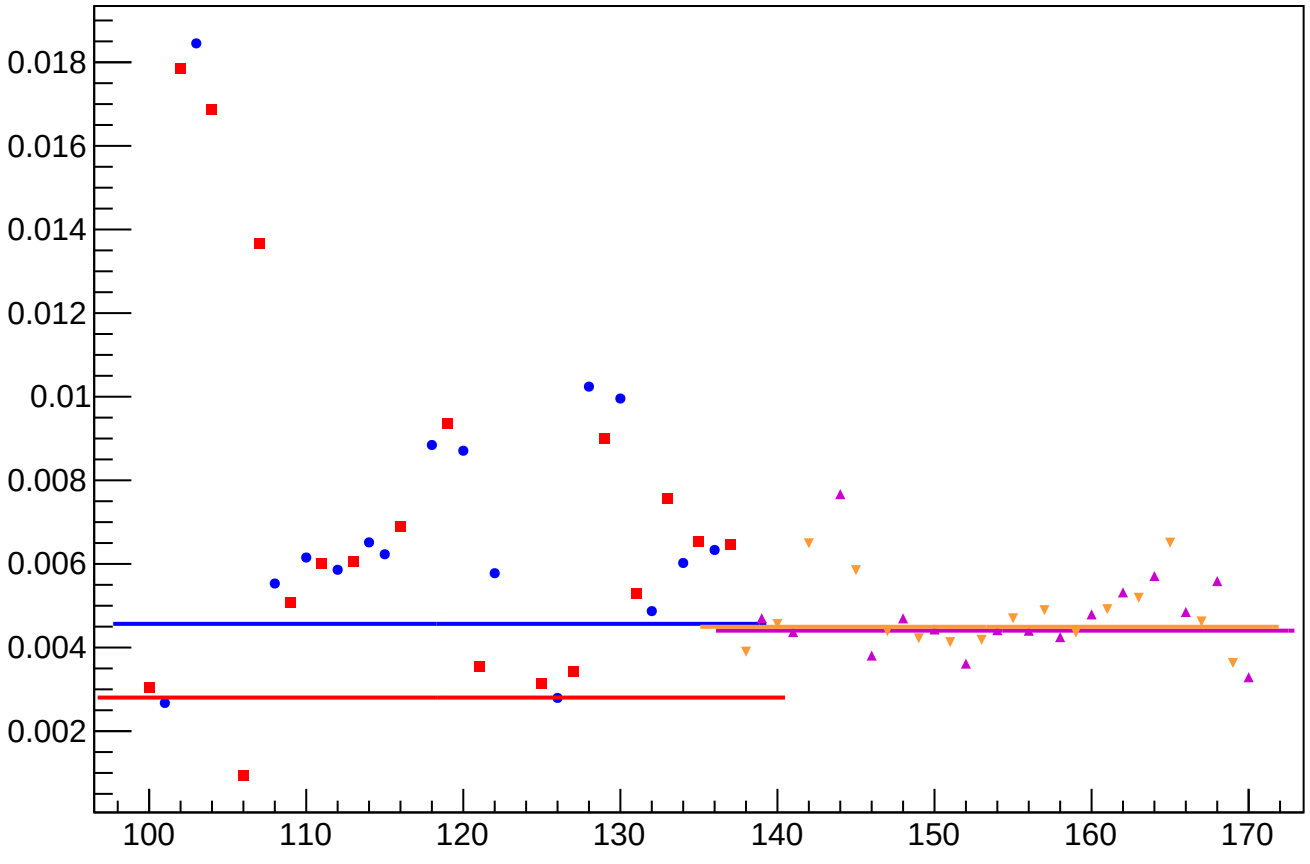
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.7/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:9.6/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 54.2/31

All: -0.000+/-0.000 $\chi^2$/NDF: 83.4/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 26.7/33




Right In: 0.005+/-0.000 $\chi^2$/NDF: 3012257.6/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:477436.9/15

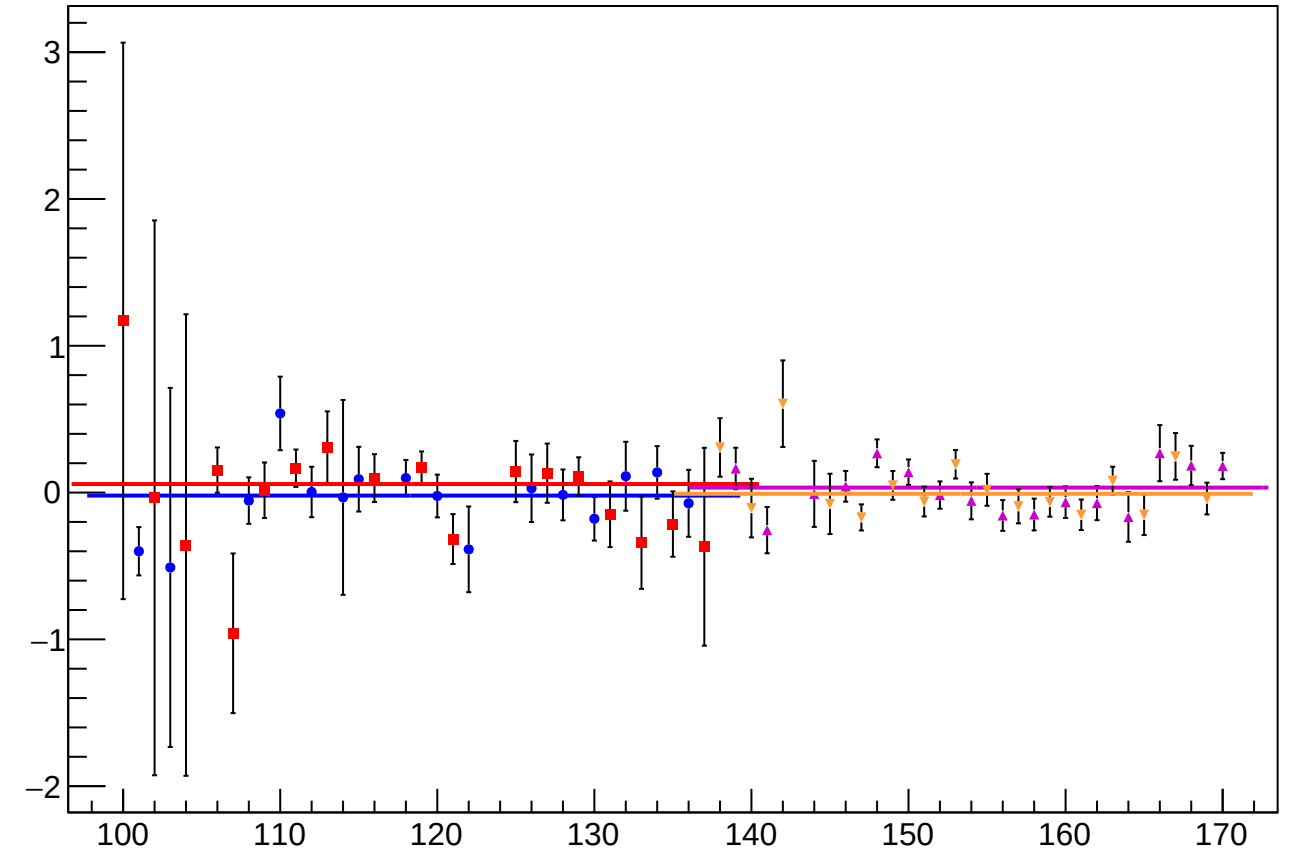
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 6610011.8/17

Left In: 0.004+/-0.000 $\chi^2$/NDF:850620.7/15

+ sign 0.005+/-0.000 $\chi^2$/NDF: 3491513.8/31

All: 0.004+/-0.000 $\chi^2$/NDF: 12913925.8/65

- sign 0.004+/-0.000 $\chi^2$/NDF: 8840339.3/33




Right In: -0.021+/-0.048 $\chi^2$/NDF: 15.6/15

Left Out: -0.009+/-0.029 $\chi^2$/NDF:22.7/15

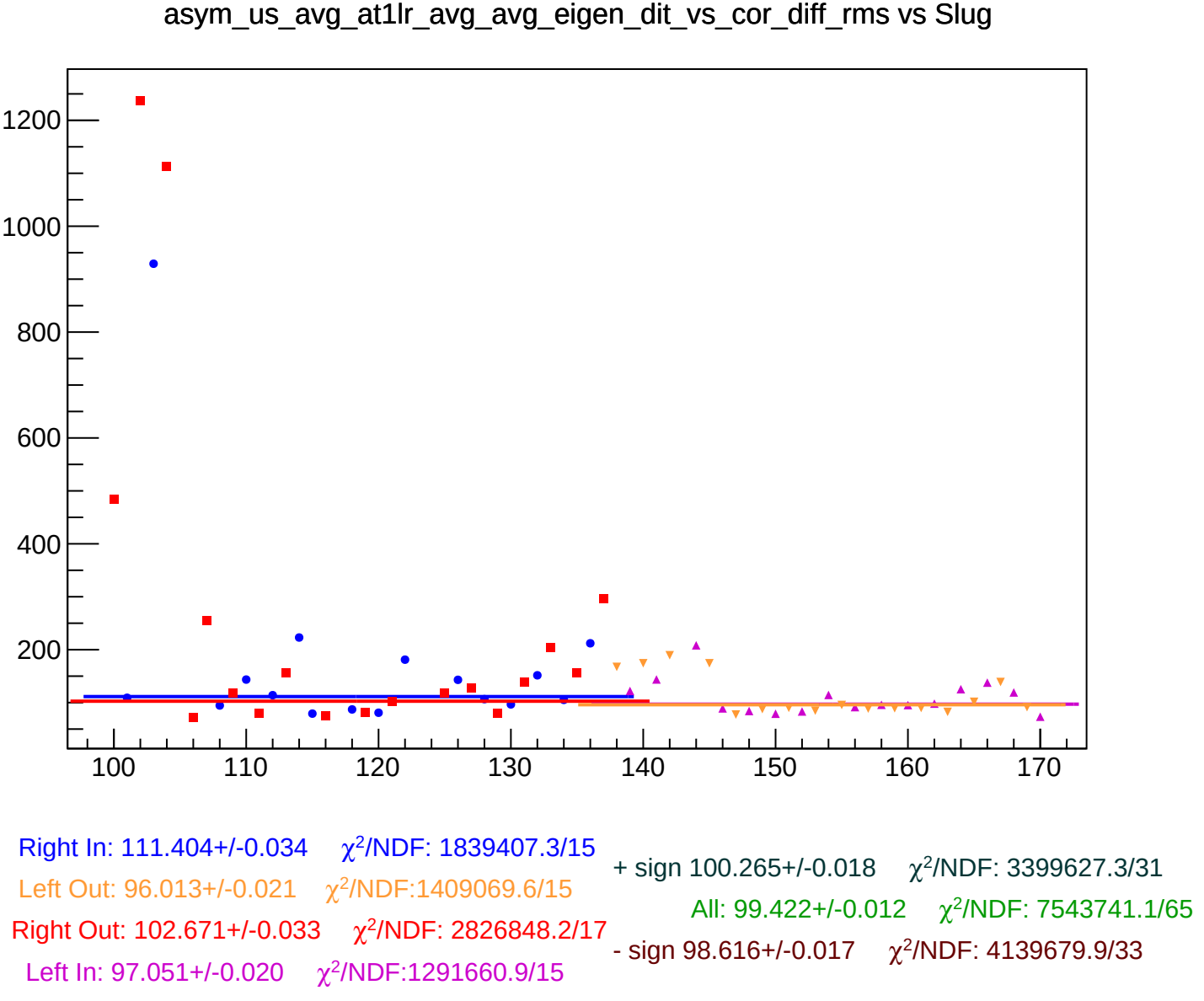
Right Out: 0.058+/-0.046 $\chi^2$/NDF: 16.8/17

Left In: 0.034+/-0.029 $\chi^2$/NDF:27.3/15

+ sign -0.012+/-0.025 $\chi^2$/NDF: 38.4/31

All: 0.015+/-0.018 $\chi^2$/NDF: 85.0/65

- sign 0.041+/-0.024 $\chi^2$/NDF: 44.3/33


asym_us_avg_at1lr_avg_avg_eigen_dit_vs_cor_diff_rms vs Slug
1200
1000
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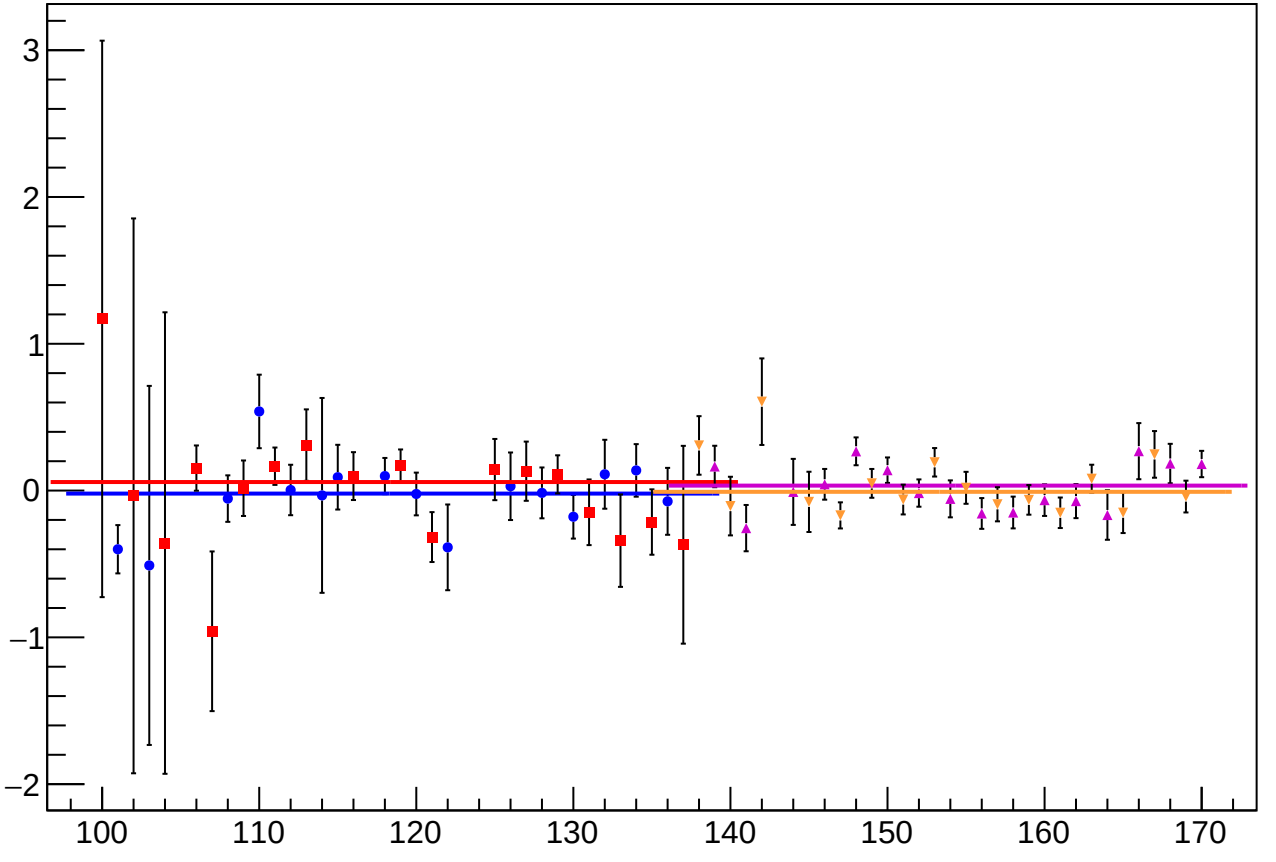
120
130
140
150
160
170
Right In: 111.404+/-0.034 χ²/NDF: 1839407.3/15
Left Out: 96.013+/-0.021 χ²/NDF:1409069.6/15
Right Out: 102.671+/-0.033 χ²/NDF: 2826848.2/17
Left In: 97.051+/-0.020 χ²/NDF:1291660.9/15
+ sign 100.265+/-0.018 χ²/NDF: 3399627.3/31
All: 99.422+/-0.012 χ²/NDF: 7543741.1/65
- sign 98.616+/-0.017 χ²/NDF: 4139679.9/33

asym_us_avg_at1lr_avg_avg_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.021+/-0.048 $\chi^2$/NDF: 15.6/15

Left Out: -0.009+/-0.029 $\chi^2$/NDF:22.7/15

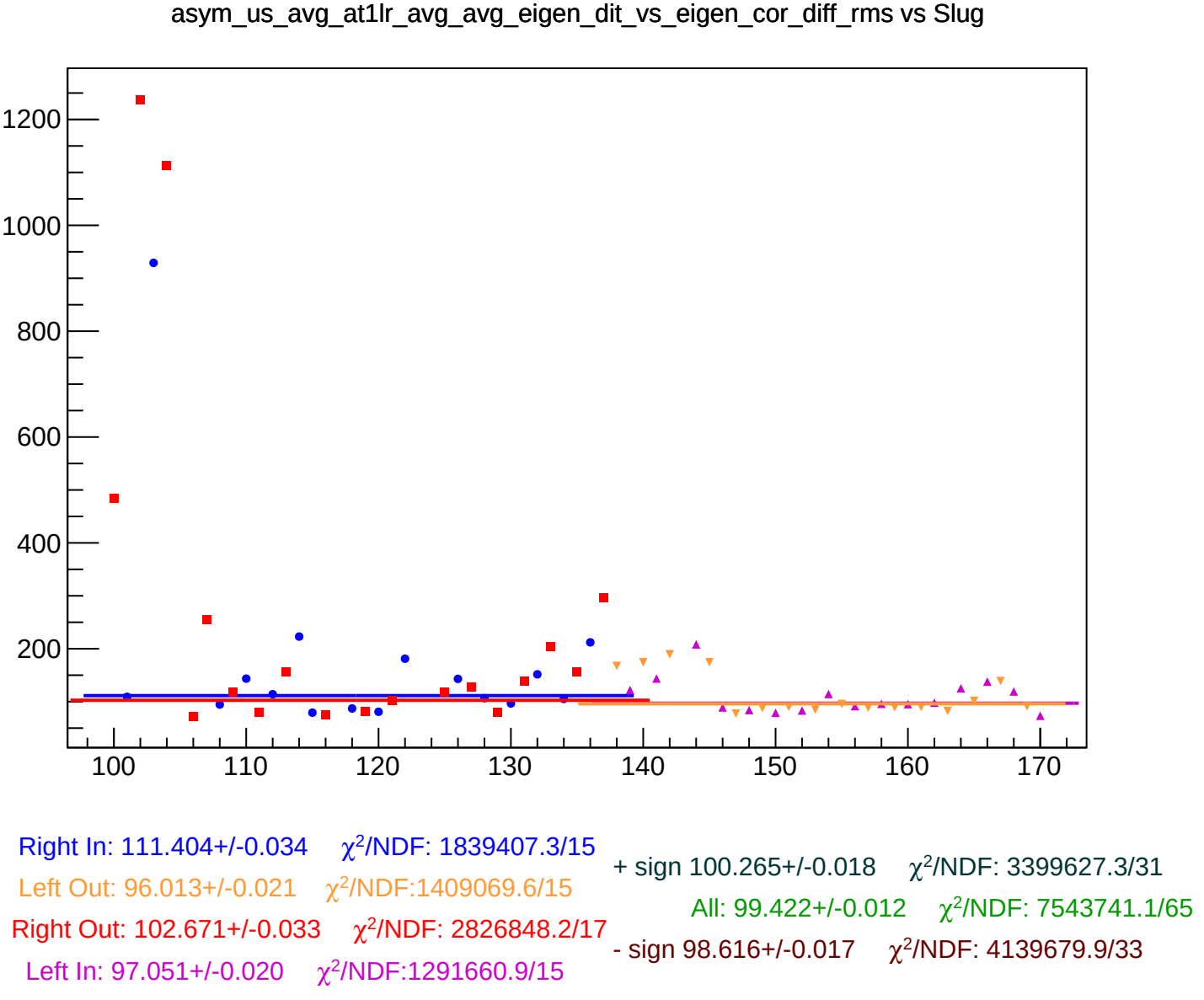
Right Out: 0.058+/-0.046 $\chi^2$/NDF: 16.8/17

Left In: 0.034+/-0.029 $\chi^2$/NDF:27.3/15

+ sign -0.012+/-0.025 $\chi^2$/NDF: 38.4/31

All: 0.015+/-0.018 $\chi^2$/NDF: 85.0/65

- sign 0.041+/-0.024 $\chi^2$/NDF: 44.3/33


asym_us_avg_at1lr_avg_avg_eigen_dit_vs_eigen_cor_diff_rms vs Slug
1200
1000
800
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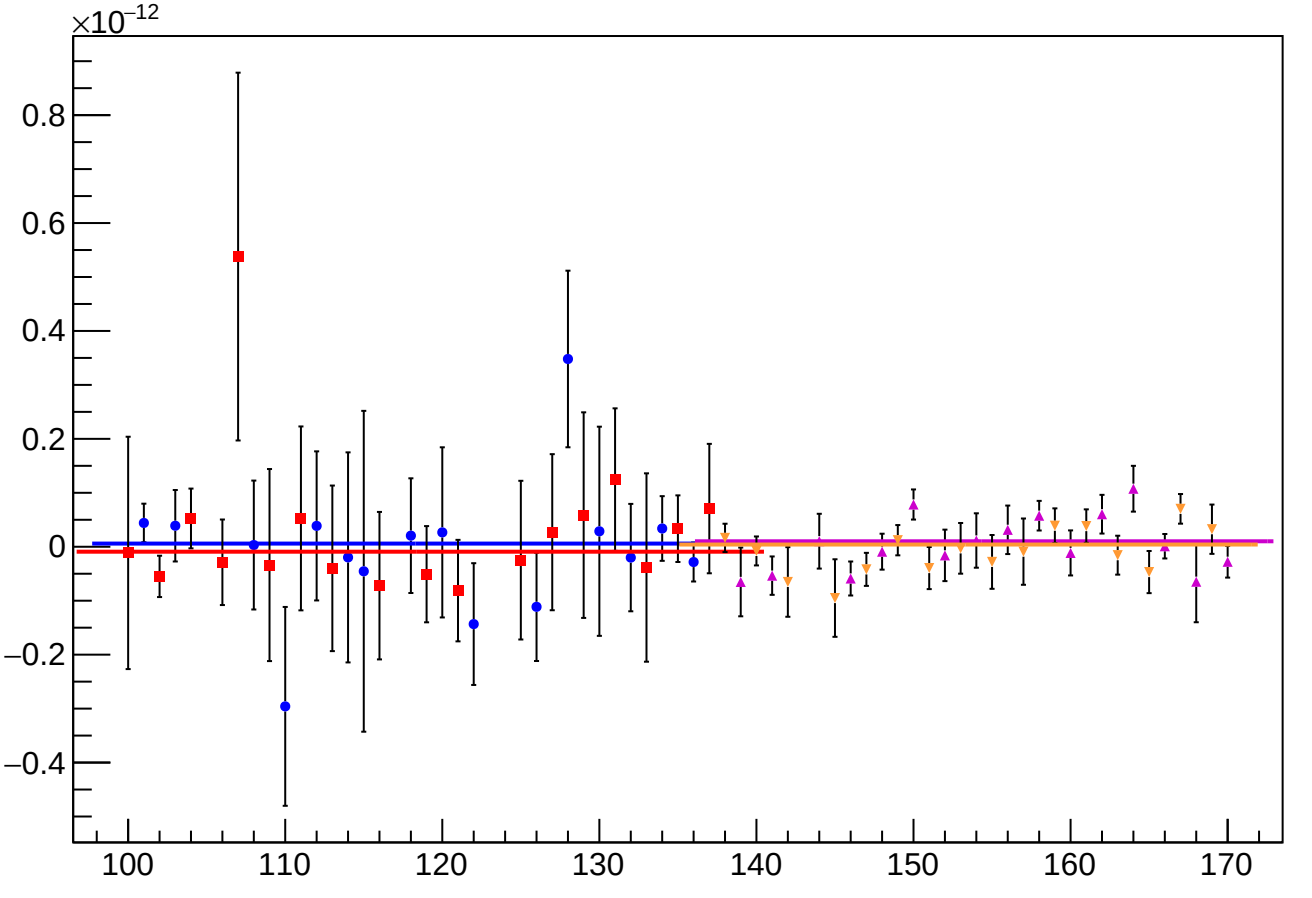
110
120
130
140
150
160
170
Right In: 111.404+/-0.034 χ²/NDF: 1839407.3/15
Left Out: 96.013+/-0.021 χ²/NDF:1409069.6/15
Right Out: 102.671+/-0.033 χ²/NDF: 2826848.2/17
Left In: 97.051+/-0.020 χ²/NDF:1291660.9/15
+ sign 100.265+/-0.018 χ²/NDF: 3399627.3/31
All: 99.422+/-0.012 χ²/NDF: 7543741.1/65
- sign 98.616+/-0.017 χ²/NDF: 4139679.9/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 12.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:18.1/15

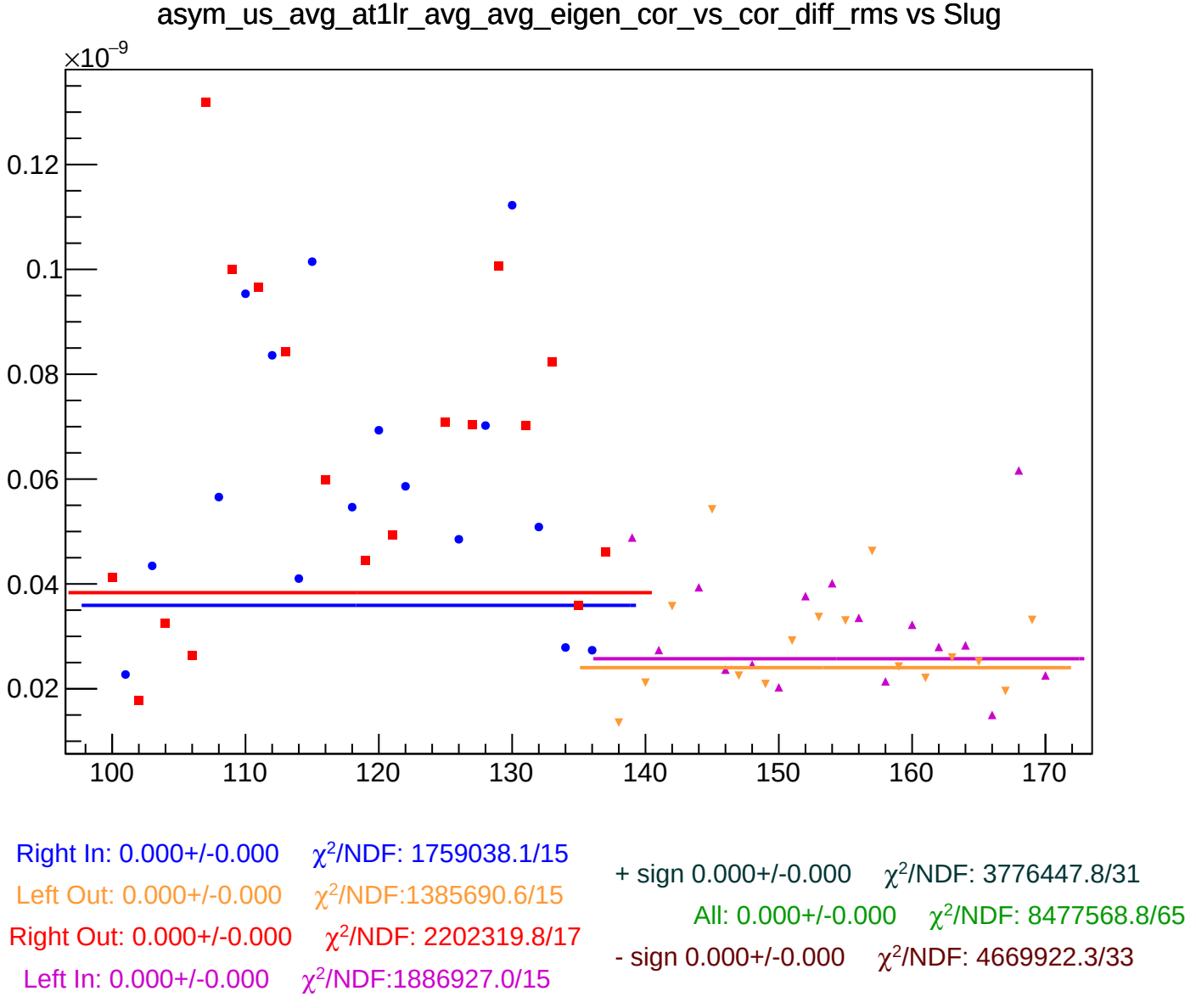
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 8.7/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:29.5/15

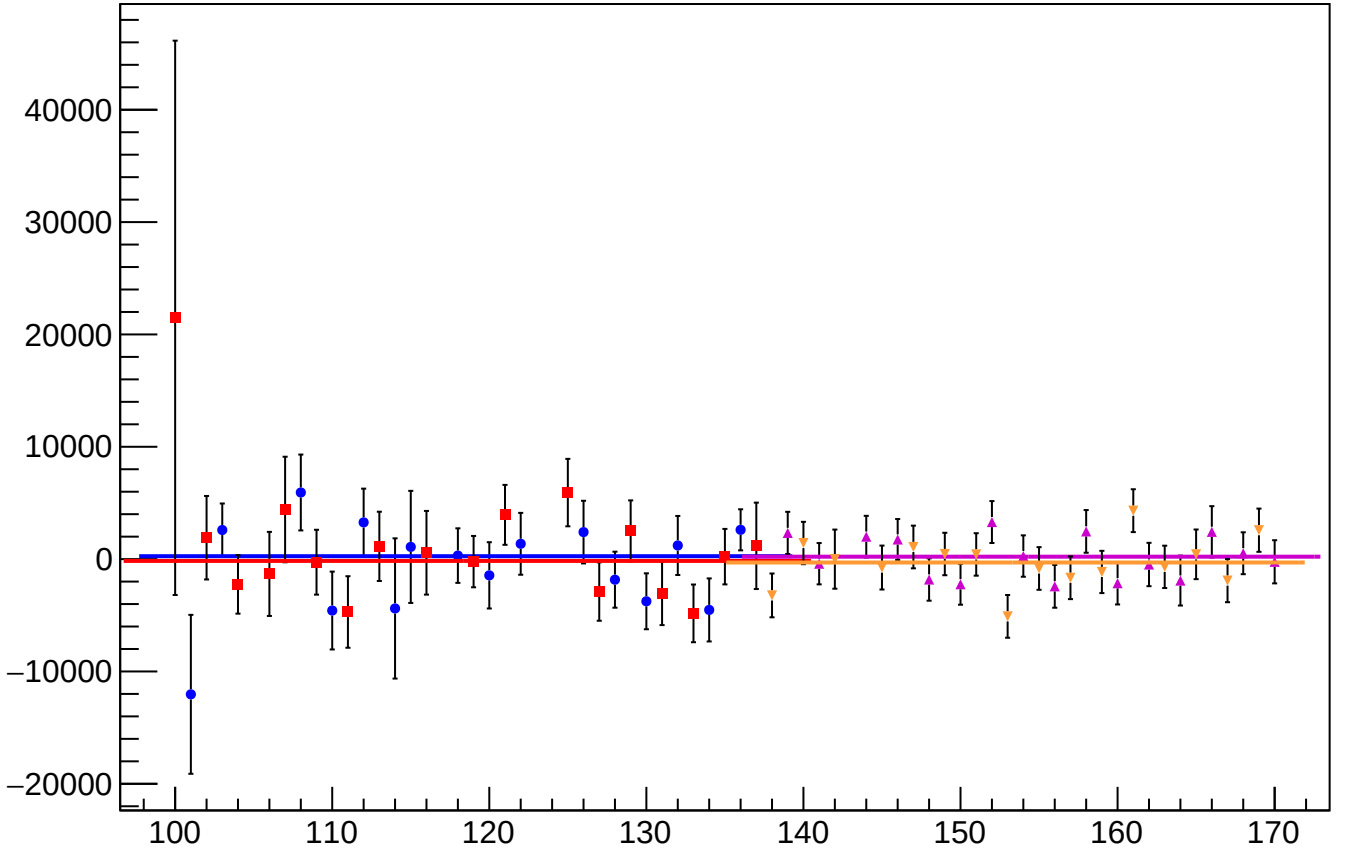
+ sign 0.000+/-0.000 $\chi^2$/NDF: 31.0/31

All: 0.000+/-0.000 $\chi^2$/NDF: 70.0/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 38.9/33


asym_us_avg_at1lr_avg_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10⁻⁹
0.12
0.1
0.08
0.06
0.04
0.02
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1759038.1/15
Left Out: 0.000+/-0.000 χ²/NDF:1385690.6/15
Right Out: 0.000+/-0.000 χ²/NDF: 2202319.8/17
Left In: 0.000+/-0.000 χ²/NDF:1886927.0/15
+ sign 0.000+/-0.000 χ²/NDF: 3776447.8/31
All: 0.000+/-0.000 χ²/NDF: 8477568.8/65
- sign 0.000+/-0.000 χ²/NDF: 4669922.3/33

# reg_asym_us_avg_at1lr_avg_dd_mean vs Slug




Right In: 259.502+/-709.700 $\chi^2$/NDF: 19.4/15

Left Out: -300.978+/-487.830 $\chi^2$/NDF:20.1/15

Right Out: -159.330+/-712.314 $\chi^2$/NDF: 18.1/17

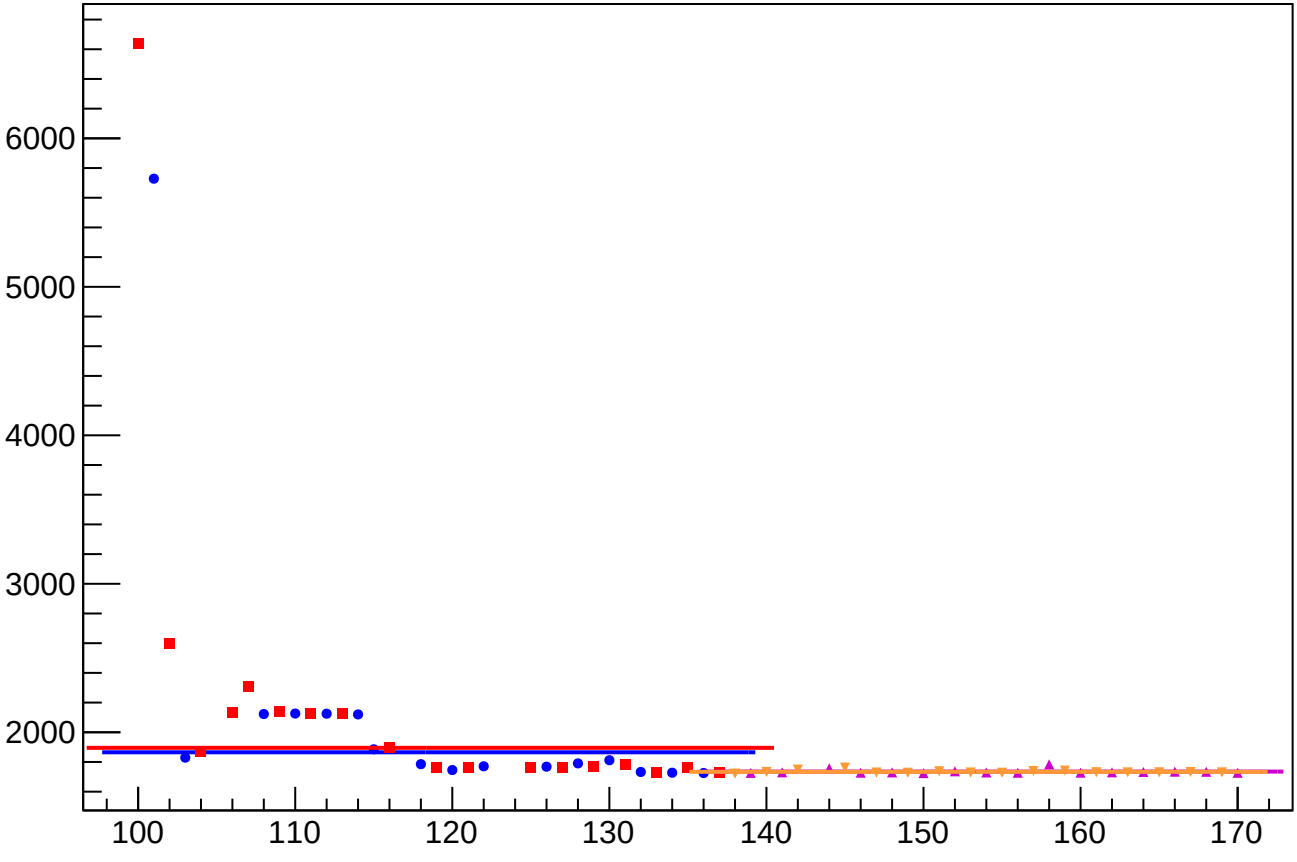
Left In: 216.559+/-477.242 $\chi^2$/NDF:15.7/15

+ sign -121.134+/-402.016 $\chi^2$/NDF: 39.9/31

All: -8.982+/-282.291 $\chi^2$/NDF: 74.0/65

- sign 100.104+/-396.481 $\chi^2$/NDF: 34.0/33

# reg_asym_us_avg_at1lr_avg_dd_rms vs Slug




Right In: 1865.170+/-0.502 $\chi^2$/NDF: 672724.7/15

Left Out: 1733.783+/-0.345 $\chi^2$/NDF:706.3/15

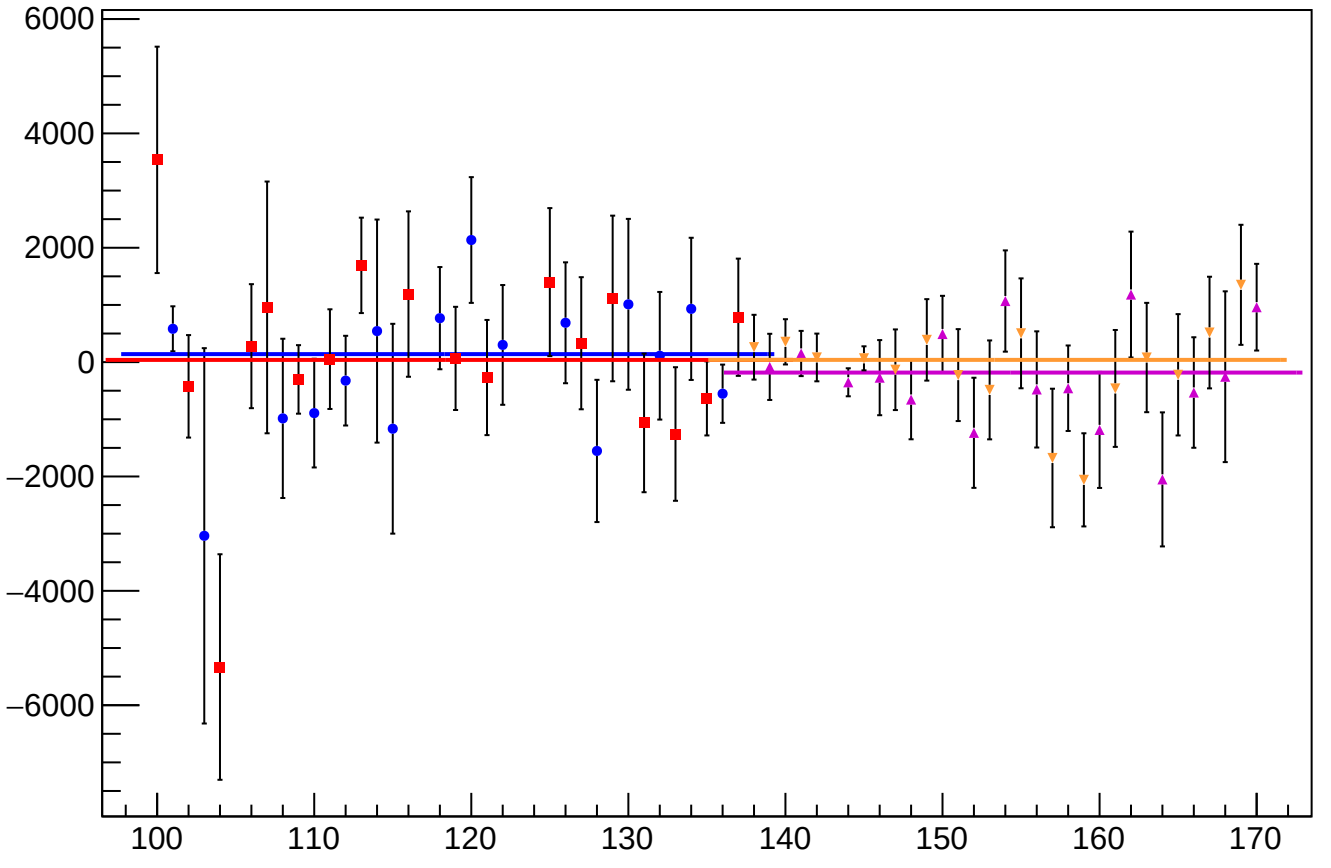
Right Out: 1895.250+/-0.504 $\chi^2$/NDF: 250806.5/17

Left In: 1735.305+/-0.337 $\chi^2$/NDF:1923.2/15

+ sign 1775.942+/-0.284 $\chi^2$/NDF: 719982.5/31

All: 1780.462+/-0.200 $\chi^2$/NDF: 1042808.7/65

- sign 1784.858+/-0.280 $\chi^2$/NDF: 322327.5/33




Right In: 139.799+/-220.100 $\chi^2$/NDF: 13.5/15

Left Out: 39.181+/-137.391 $\chi^2$/NDF:12.6/15

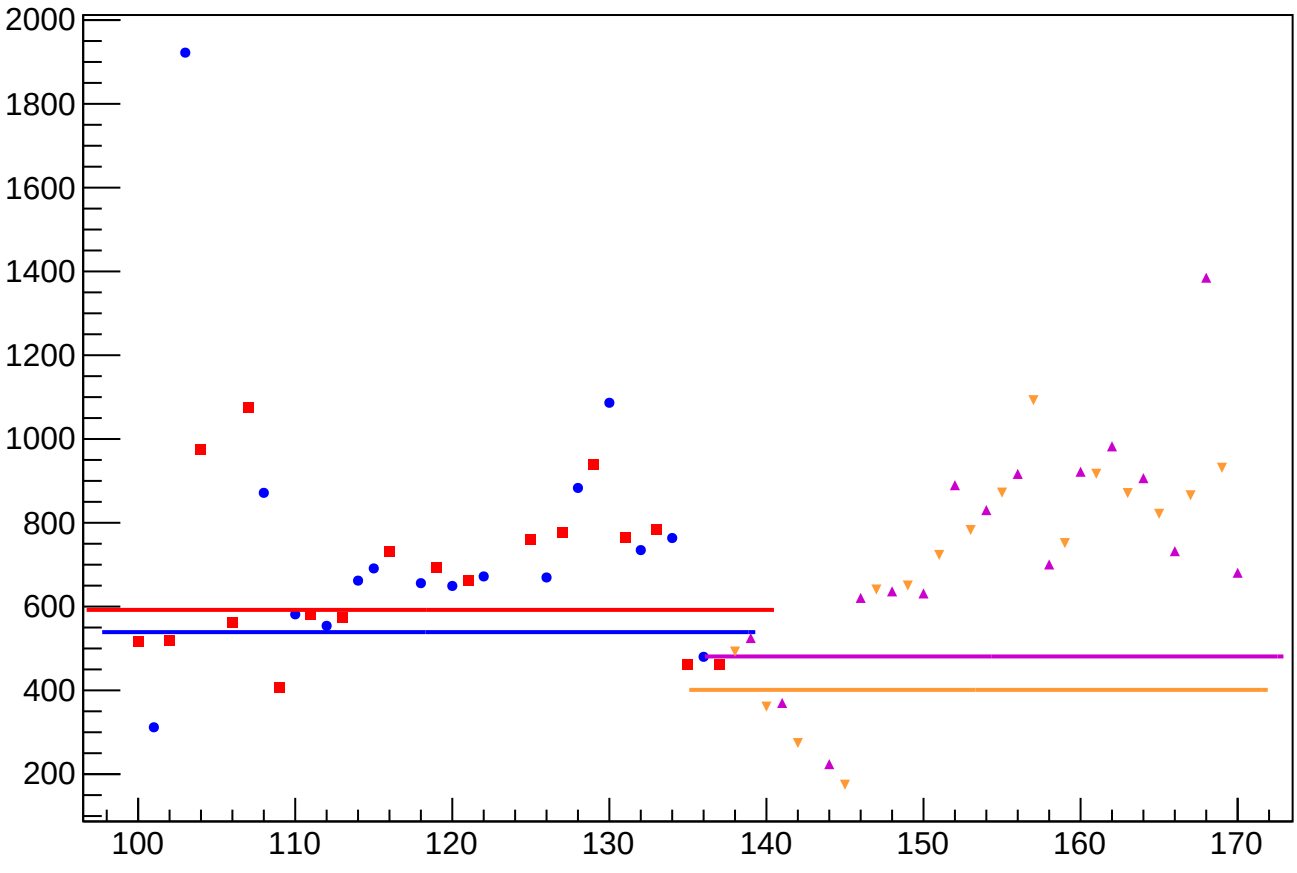
Right Out: 38.629+/-238.253 $\chi^2$/NDF: 21.4/17

Left In: -182.990+/-151.503 $\chi^2$/NDF:13.6/15

+ sign 67.394+/-116.548 $\chi^2$/NDF: 26.2/31

All: -17.287+/-86.129 $\chi^2$/NDF: 63.0/65

- sign -119.179+/-127.845 $\chi^2$/NDF: 35.6/33




Right In: 539.016+/-0.156 $\chi^2$/NDF: 1854576.5/15

Left Out: 401.193+/-0.097 $\chi^2$/NDF:7539988.5/15

Right Out: 592.101+/-0.168 $\chi^2$/NDF: 843066.1/17

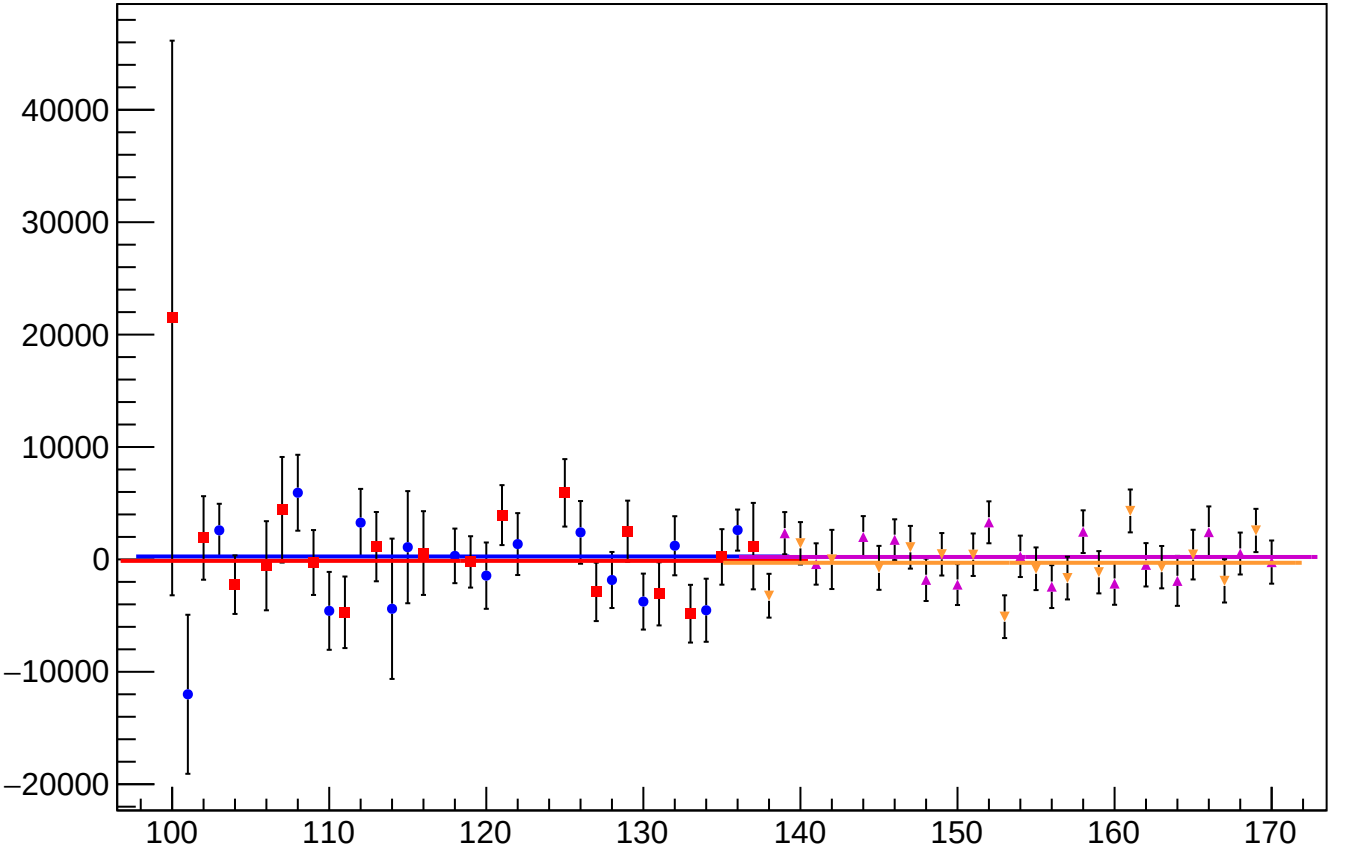
Left In: 480.937+/-0.107 $\chi^2$/NDF:5938233.2/15

+ sign 439.838+/-0.082 $\chi^2$/NDF: 9958887.7/31

All: 473.019+/-0.061 $\chi^2$/NDF: 17407383.3/65

- sign 512.944+/-0.090 $\chi^2$/NDF: 7091329.6/33

# cor_asym_us_avg_at1lr_avg_dd_mean vs Slug




Right In: 259.689+/-709.700 $\chi^2$/NDF: 19.4/15

Left Out: -300.941+/-487.830 $\chi^2$/NDF:20.1/15

Right Out: -130.049+/-713.724 $\chi^2$/NDF: 18.0/17

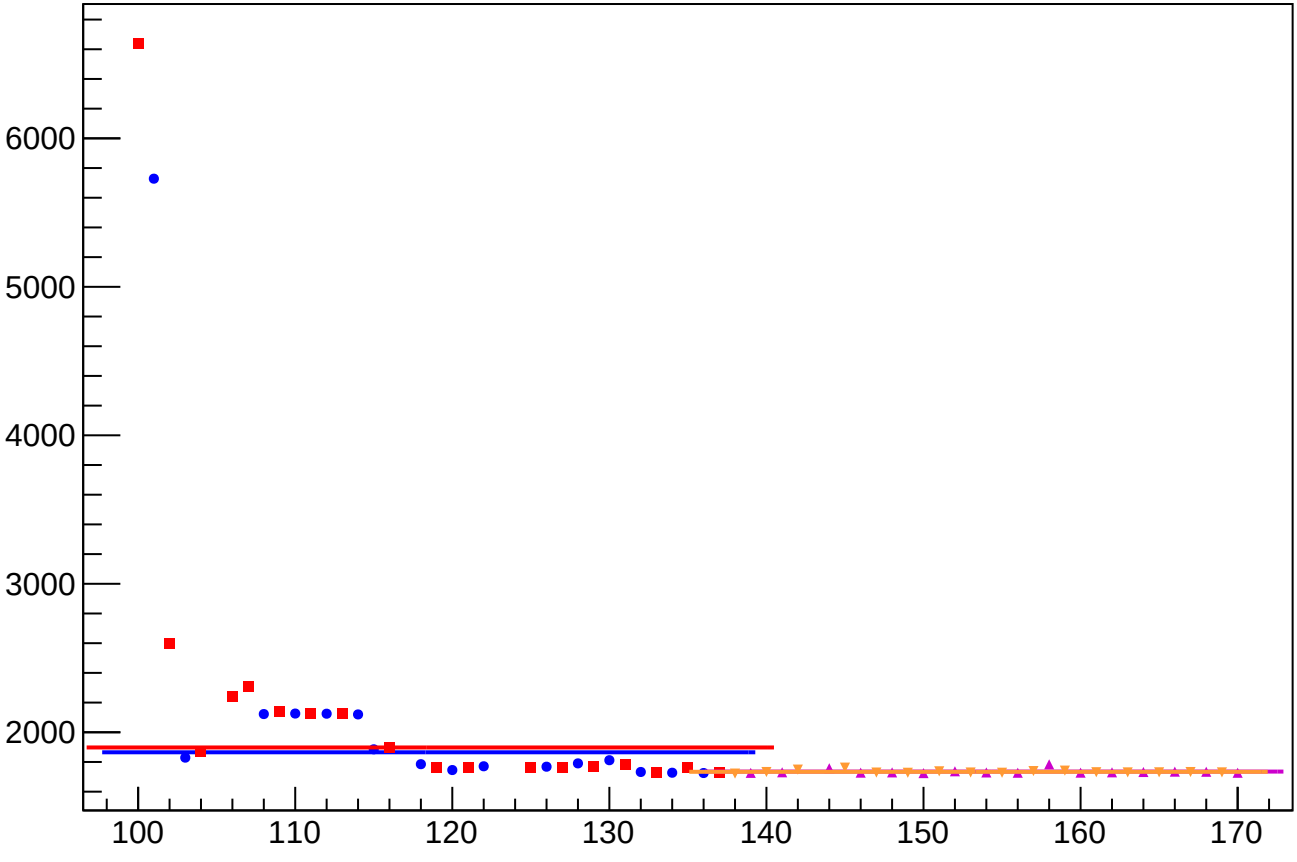
Left In: 216.564+/-477.242 $\chi^2$/NDF:15.7/15

+ sign -121.049+/-402.016 $\chi^2$/NDF: 39.9/31

All: -4.261+/-282.378 $\chi^2$/NDF: 73.9/65

- sign 109.471+/-396.723 $\chi^2$/NDF: 33.8/33

# cor_asym_us_avg_at1lr_avg_dd_rms vs Slug




Right In: 1865.170+/-0.502 $\chi^2$/NDF: 672724.7/15

Left Out: 1733.783+/-0.345 $\chi^2$/NDF:706.3/15

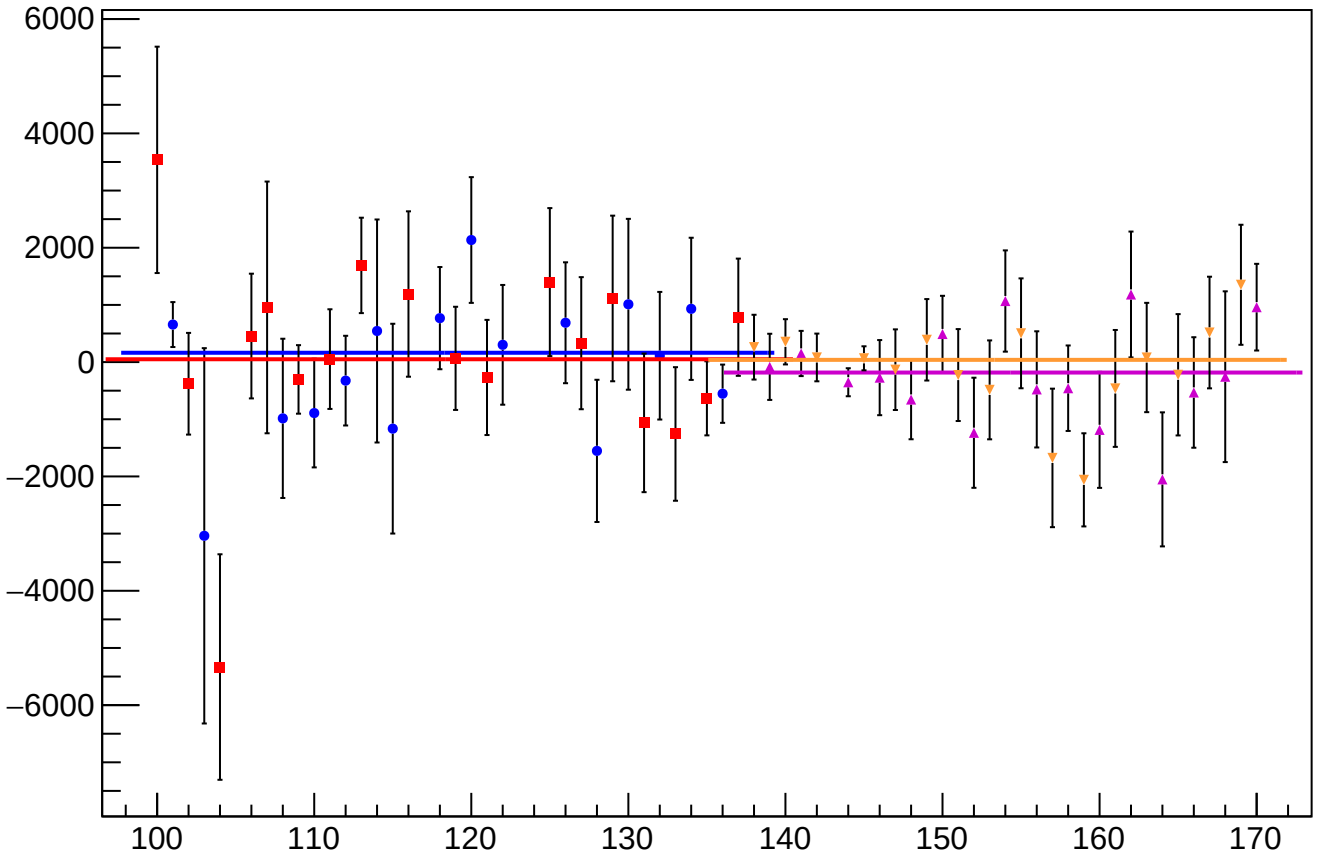
Right Out: 1897.700+/-0.505 $\chi^2$/NDF: 257735.0/17

Left In: 1735.305+/-0.337 $\chi^2$/NDF:1923.2/15

+ sign 1775.942+/-0.284 $\chi^2$/NDF: 719982.4/31

All: 1780.774+/-0.200 $\chi^2$/NDF: 1051762.0/65

- sign 1785.480+/-0.281 $\chi^2$/NDF: 331209.3/33




Right In: 163.149+/-220.024 $\chi^2$/NDF: 13.9/15

Left Out: 39.039+/-137.393 $\chi^2$/NDF:12.6/15

Right Out: 49.618+/-238.198 $\chi^2$/NDF: 21.4/17

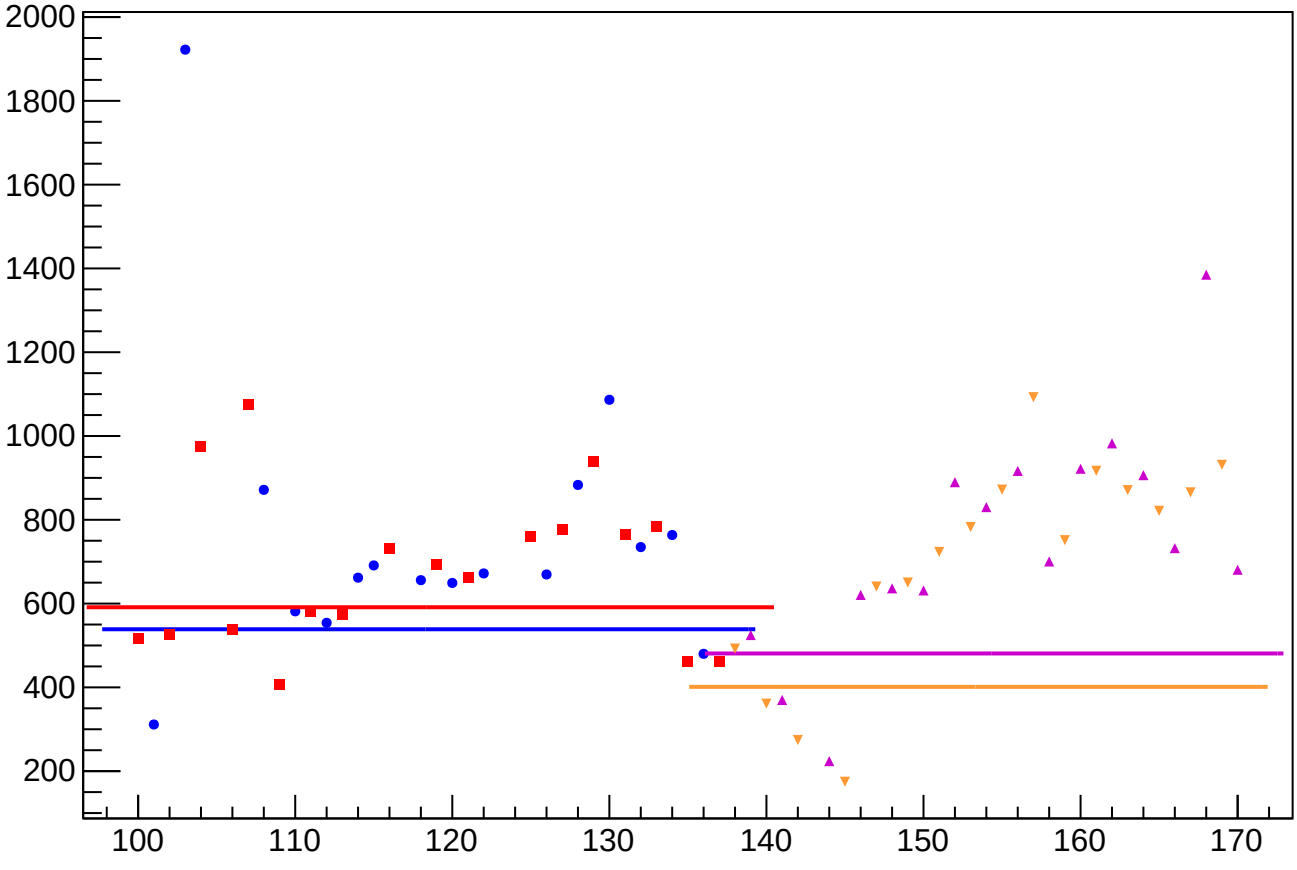
Left In: -182.991+/-151.504 $\chi^2$/NDF:13.6/15

+ sign 73.857+/-116.538 $\chi^2$/NDF: 26.7/31

All: -12.309+/-86.123 $\chi^2$/NDF: 63.6/65

- sign -115.993+/-127.837 $\chi^2$/NDF: 35.7/33

# asym_us_avg_at1lr_avg_dd_cor_correction_rms vs Slug




Right In: 538.703+/-0.156 $\chi^2$/NDF: 1858892.9/15

Left Out: 401.203+/-0.097 $\chi^2$/NDF:7539709.1/15

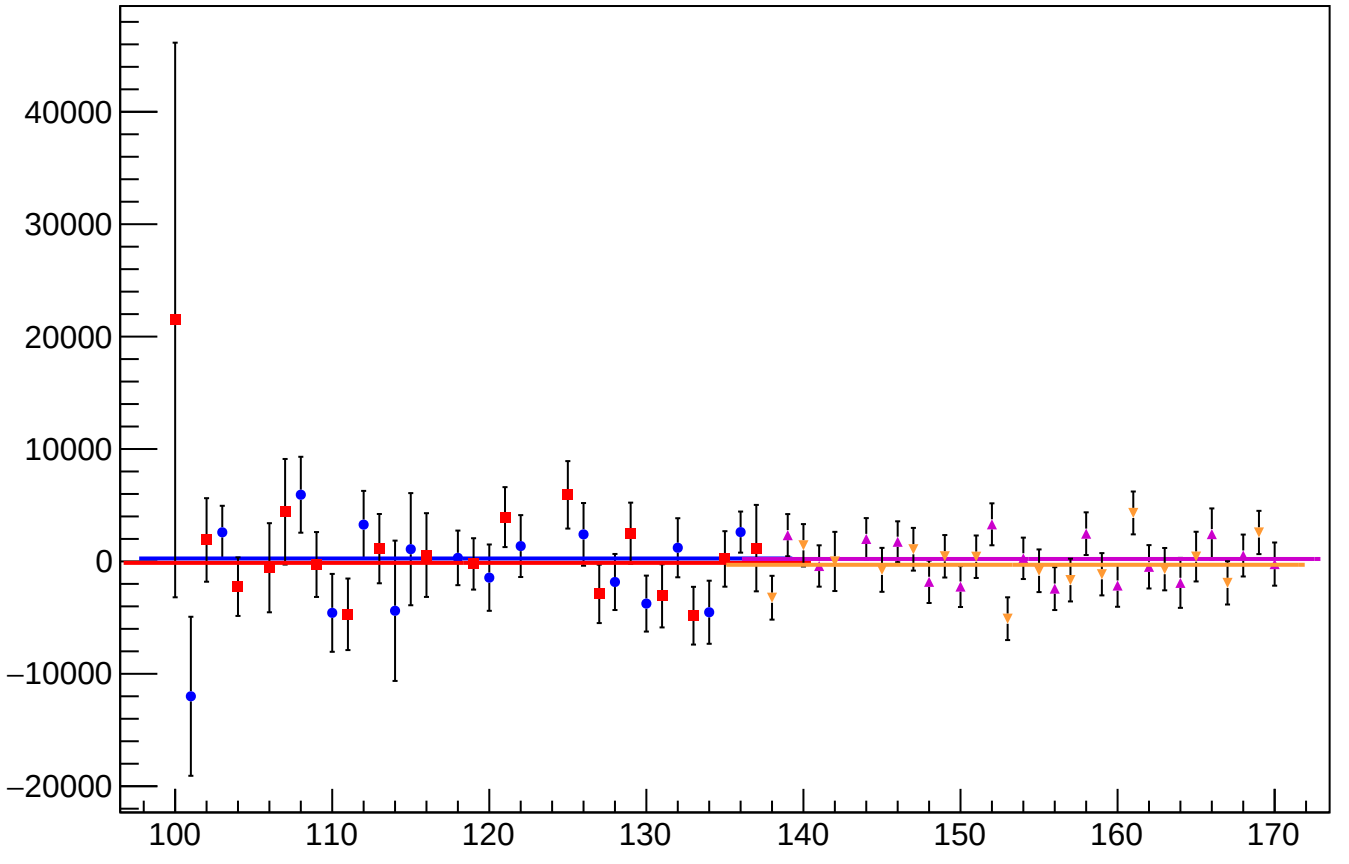
Right Out: 591.241+/-0.168 $\chi^2$/NDF: 844536.8/17

Left In: 480.945+/-0.107 $\chi^2$/NDF:5937857.9/15

+ sign 439.777+/-0.082 $\chi^2$/NDF: 9960562.8/31

All: 472.880+/-0.061 $\chi^2$/NDF: 17403824.8/65

- sign 512.713+/-0.090 $\chi^2$/NDF: 7087704.4/33




Right In: 259.689+/-709.700 $\chi^2$/NDF: 19.4/15

Left Out: -300.941+/-487.830 $\chi^2$/NDF:20.1/15

Right Out: -130.049+/-713.724 $\chi^2$/NDF: 18.0/17

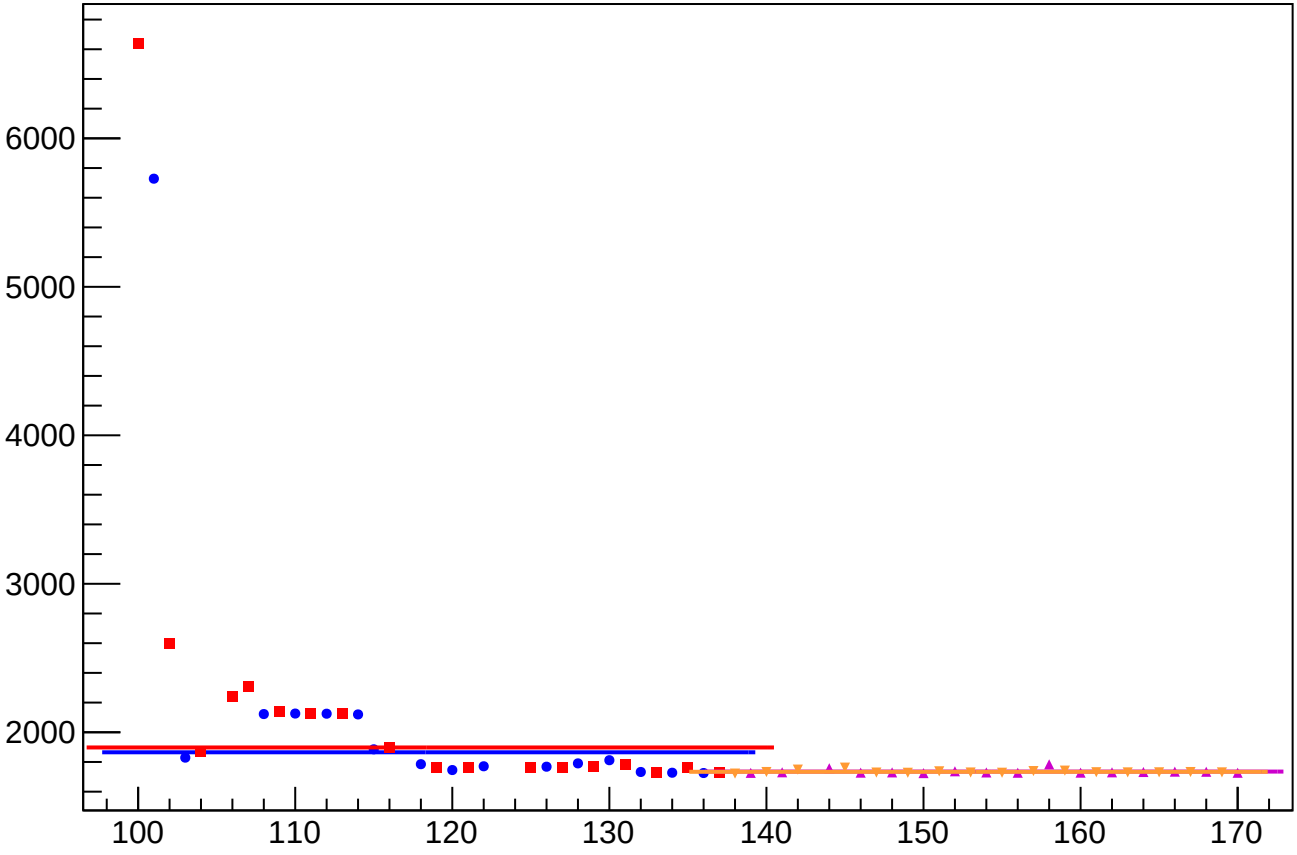
Left In: 216.564+/-477.242 $\chi^2$/NDF:15.7/15

+ sign -121.049+/-402.016 $\chi^2$/NDF: 39.9/31

All: -4.261+/-282.378 $\chi^2$/NDF: 73.9/65

- sign 109.471+/-396.723 $\chi^2$/NDF: 33.8/33

# eigen_cor_asym_us_avg_at1lr_avg_dd_rms vs Slug




Right In: 1865.170+/-0.502 $\chi^2$/NDF: 672724.7/15

Left Out: 1733.783+/-0.345 $\chi^2$/NDF:706.3/15

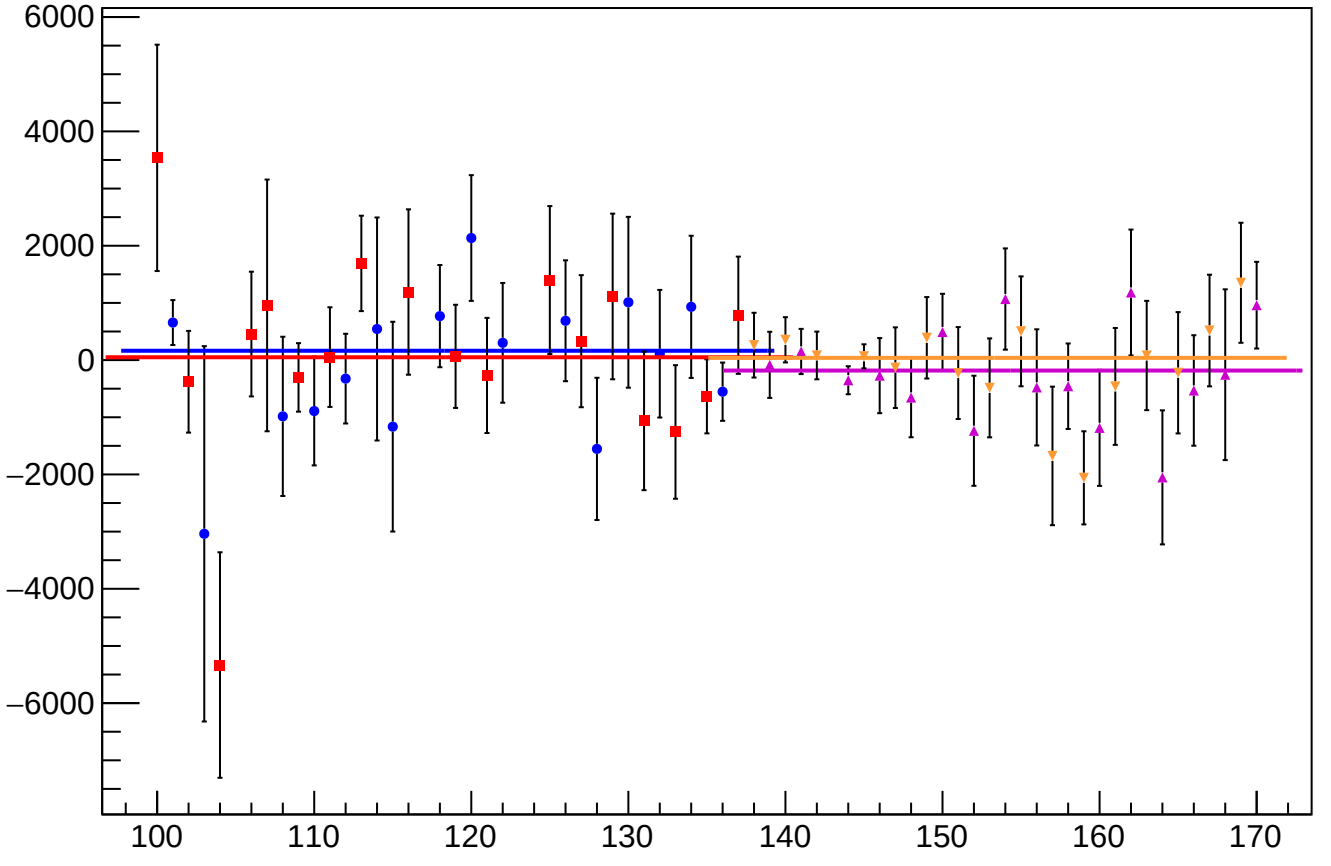
Right Out: 1897.700+/-0.505 $\chi^2$/NDF: 257735.0/17

Left In: 1735.305+/-0.337 $\chi^2$/NDF:1923.2/15

+ sign 1775.942+/-0.284 $\chi^2$/NDF: 719982.4/31

All: 1780.774+/-0.200 $\chi^2$/NDF: 1051762.0/65

- sign 1785.480+/-0.281 $\chi^2$/NDF: 331209.3/33




Right In: 163.149+/-220.024 $\chi^2$/NDF: 13.9/15

Left Out: 39.039+/-137.393 $\chi^2$/NDF:12.6/15

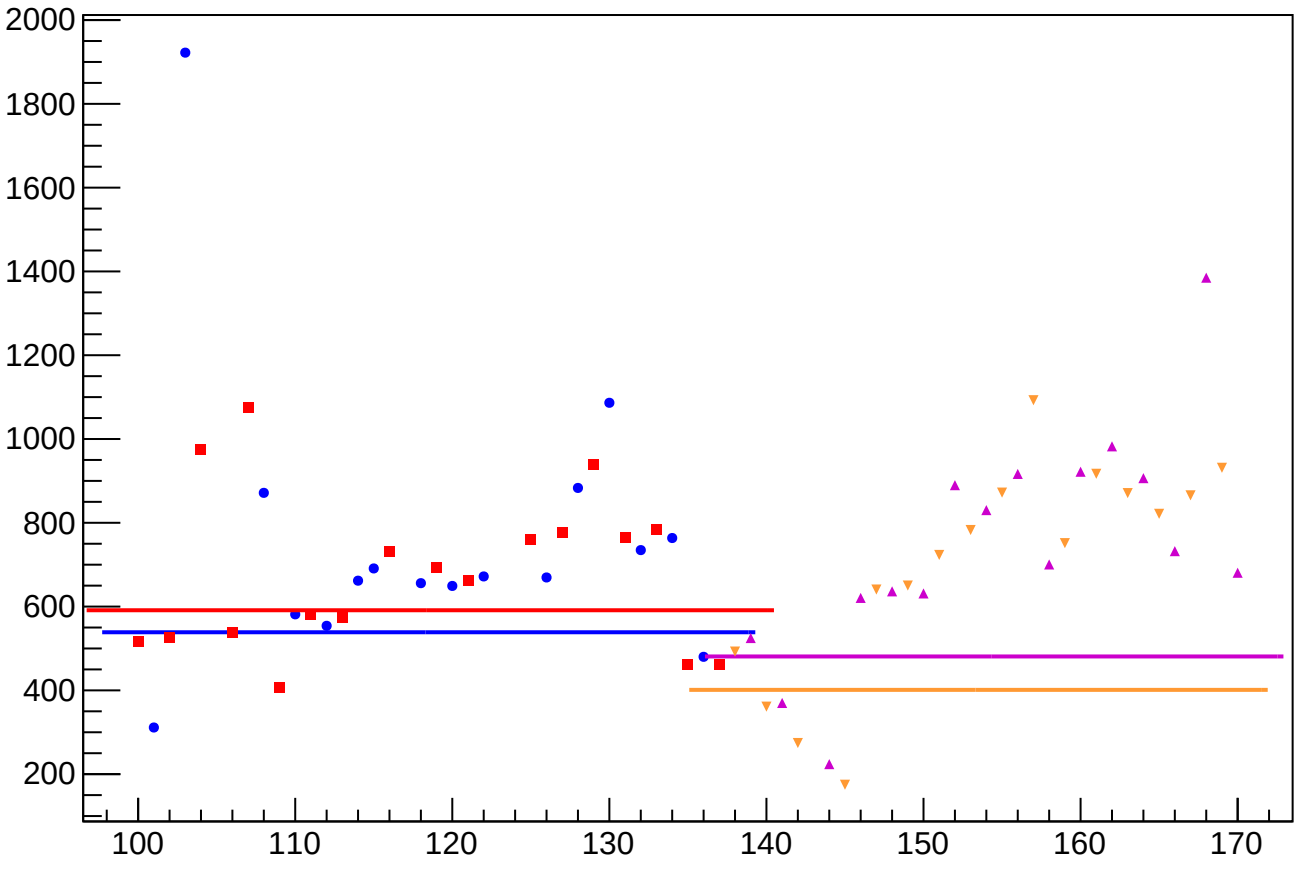
Right Out: 49.618+/-238.198 $\chi^2$/NDF: 21.4/17

Left In: -182.991+/-151.504 $\chi^2$/NDF:13.6/15

+ sign 73.857+/-116.538 $\chi^2$/NDF: 26.7/31

All: -12.309+/-86.123 $\chi^2$/NDF: 63.6/65

- sign -115.993+/-127.837 $\chi^2$/NDF: 35.7/33




Right In: 538.703+/-0.156 $\chi^2$/NDF: 1858892.9/15

Left Out: 401.203+/-0.097 $\chi^2$/NDF:7539709.1/15

Right Out: 591.241+/-0.168 $\chi^2$/NDF: 844536.8/17

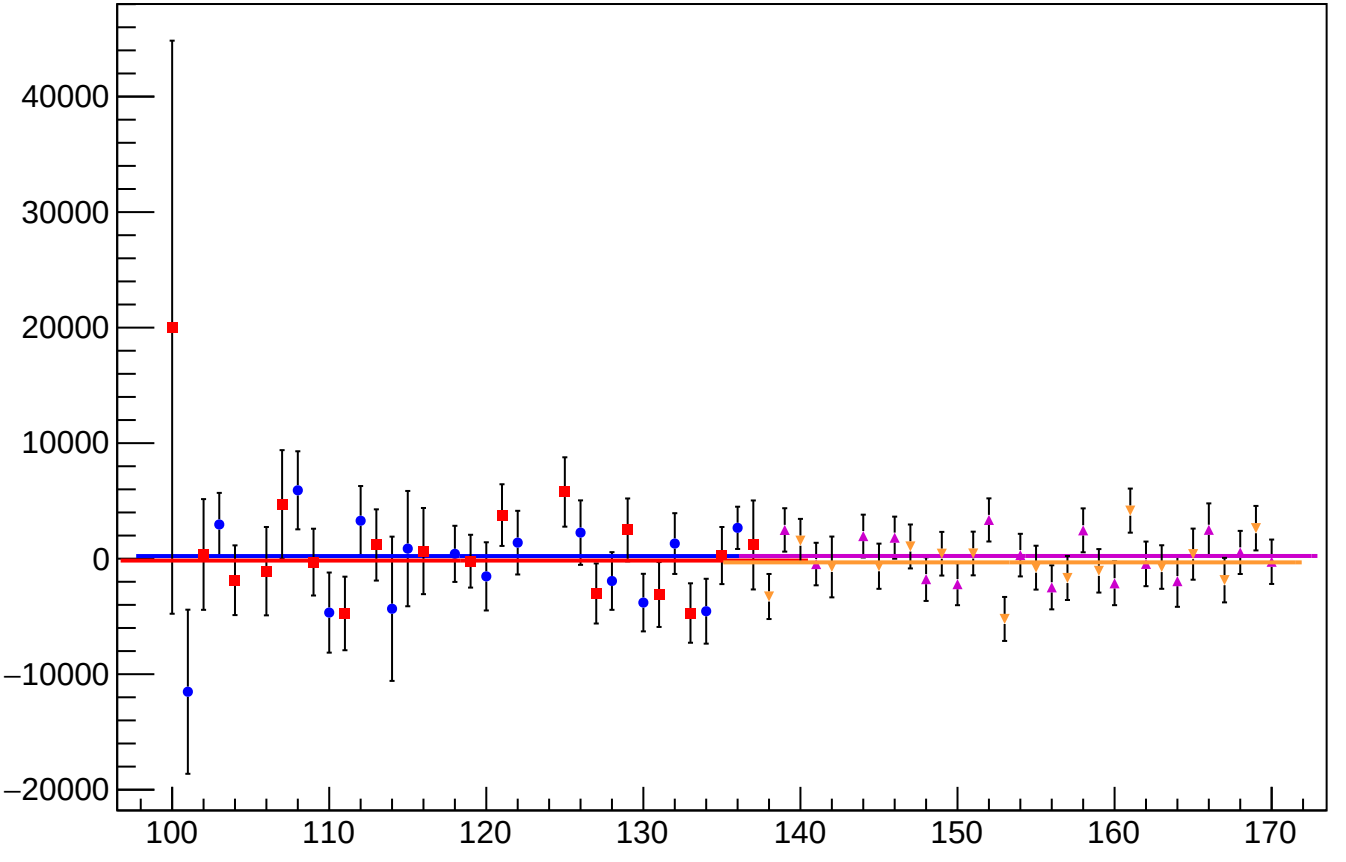
Left In: 480.945+/-0.107 $\chi^2$/NDF:5937857.9/15

+ sign 439.777+/-0.082 $\chi^2$/NDF: 9960562.8/31

All: 472.880+/-0.061 $\chi^2$/NDF: 17403824.8/65

- sign 512.713+/-0.090 $\chi^2$/NDF: 7087704.4/33

# dit_asym_us_avg_at1lr_avg_dd_mean vs Slug




Right In: 226.227+/-718.556 $\chi^2$/NDF: 19.4/15

Left Out: -320.703+/-488.163 $\chi^2$/NDF:20.2/15

Right Out: -163.711+/-725.798 $\chi^2$/NDF: 17.0/17

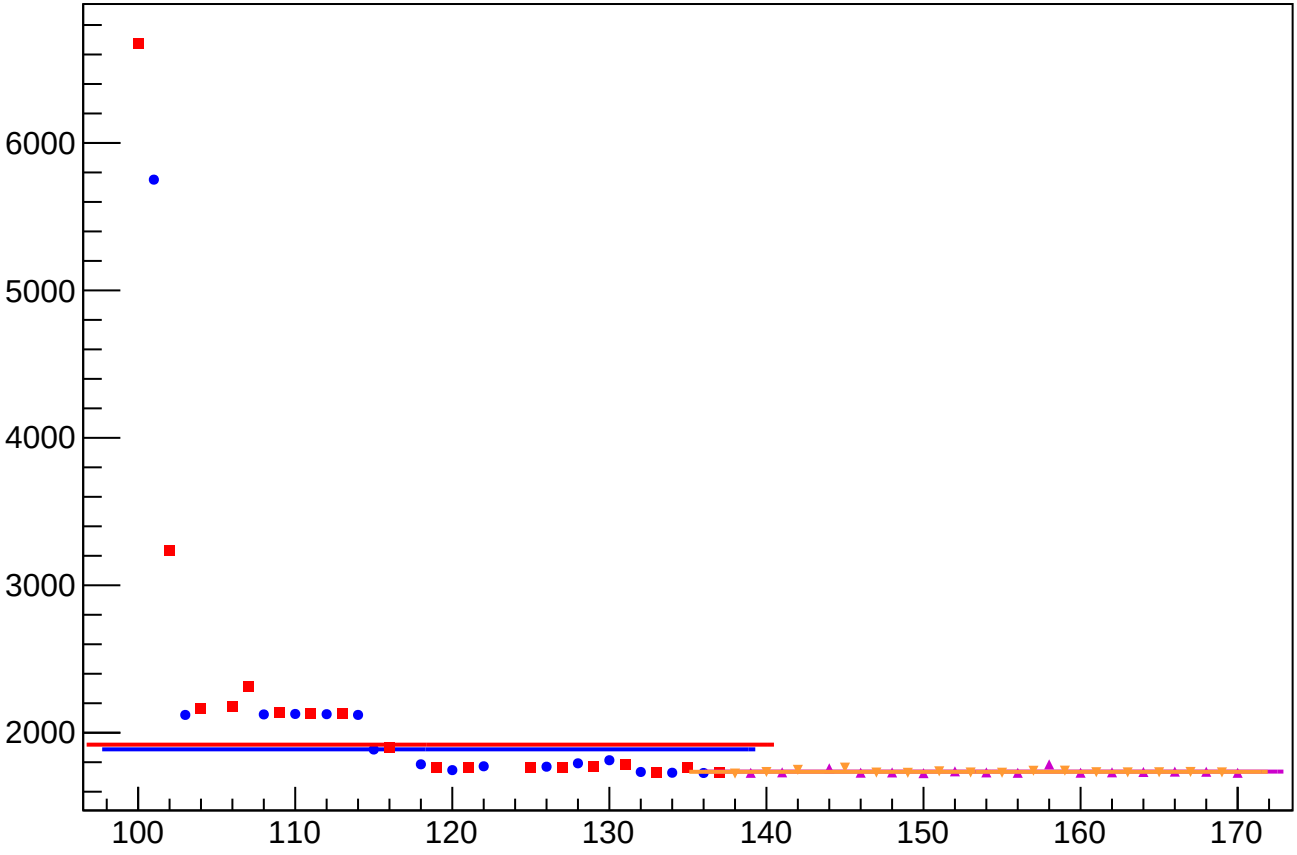
Left In: 233.515+/-477.552 $\chi^2$/NDF:16.0/15

+ sign -147.988+/-403.794 $\chi^2$/NDF: 40.0/31

All: -15.662+/-283.794 $\chi^2$/NDF: 73.5/65

- sign 113.503+/-398.942 $\chi^2$/NDF: 33.3/33

# dit_asym_us_avg_at1lr_avg_dd_rms vs Slug




Right In: 1887.310+/-0.508 $\chi^2$/NDF: 689442.6/15

Left Out: 1734.965+/-0.345 $\chi^2$/NDF:711.6/15

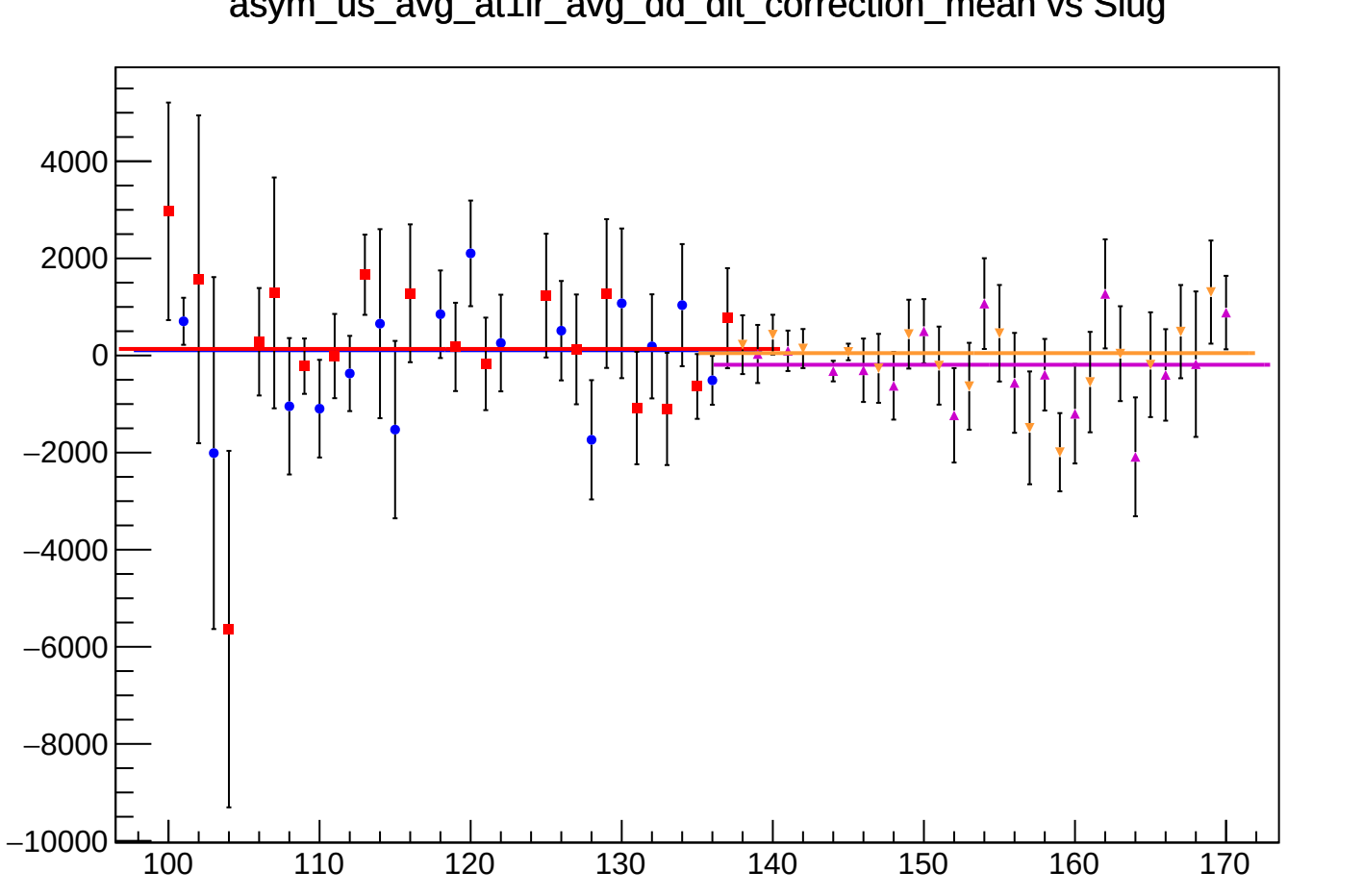
Right Out: 1919.164+/-0.513 $\chi^2$/NDF: 352567.1/17

Left In: 1736.428+/-0.338 $\chi^2$/NDF:1922.7/15

+ sign 1783.074+/-0.286 $\chi^2$/NDF: 751665.5/31

All: 1787.408+/-0.201 $\chi^2$/NDF: 1195086.2/65

- sign 1791.638+/-0.282 $\chi^2$/NDF: 442965.5/33




Right In: 108.131+/-231.711 $\chi^2$/NDF: 14.2/15

Left Out: 48.922+/-124.820 $\chi^2$/NDF:12.5/15

Right Out: 135.358+/-245.933 $\chi^2$/NDF: 14.4/17

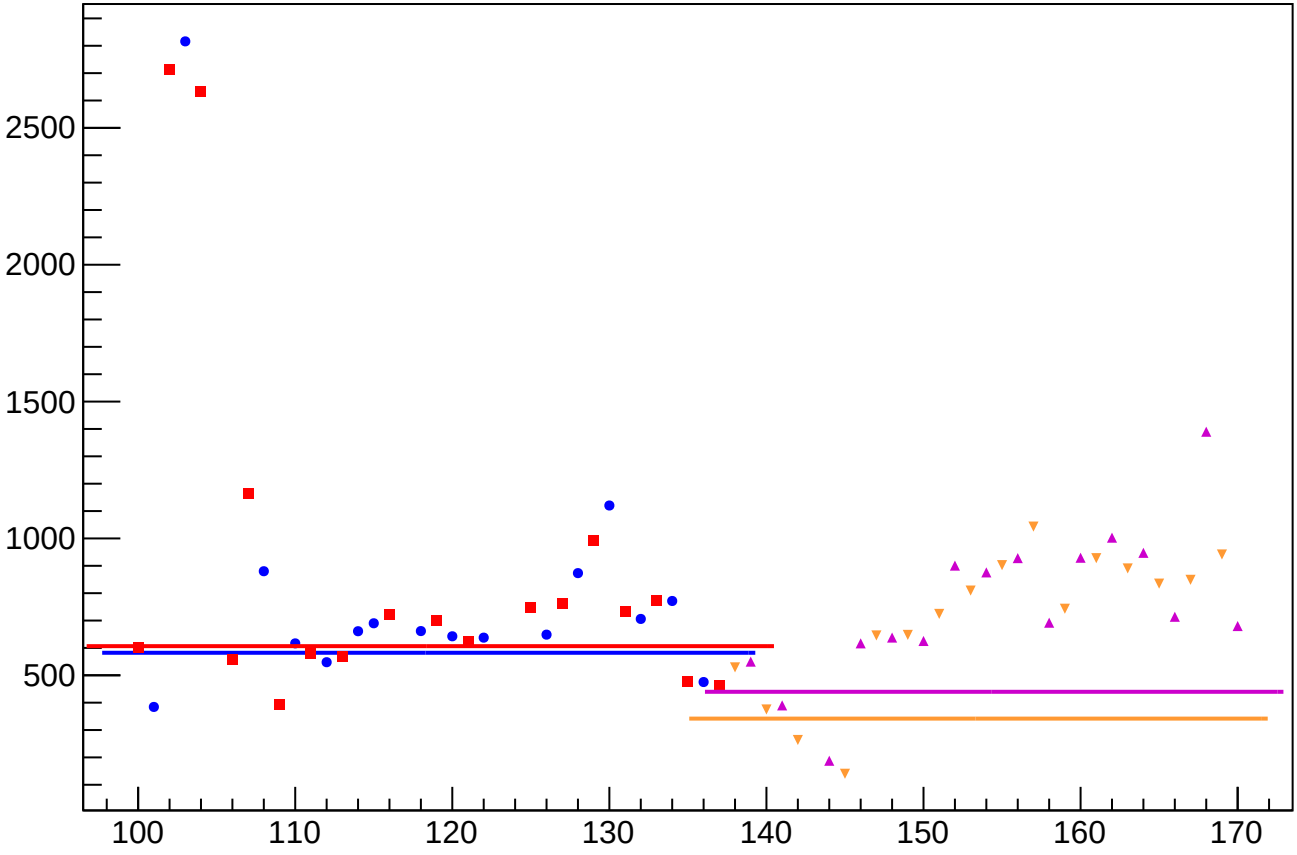
Left In: -190.890+/-144.086 $\chi^2$/NDF:12.8/15

+ sign 62.239+/-109.890 $\chi^2$/NDF: 26.7/31

All: -12.221+/-82.336 $\chi^2$/NDF: 56.3/65

- sign -107.522+/-124.321 $\chi^2$/NDF: 28.5/33

# asym_us_avg_at1lr_avg_dd_dit_correction_rms vs Slug




Right In: 582.270+/-0.164 $\chi^2$/NDF: 1754301.3/15

Left Out: 341.742+/-0.088 $\chi^2$/NDF:9565351.4/15

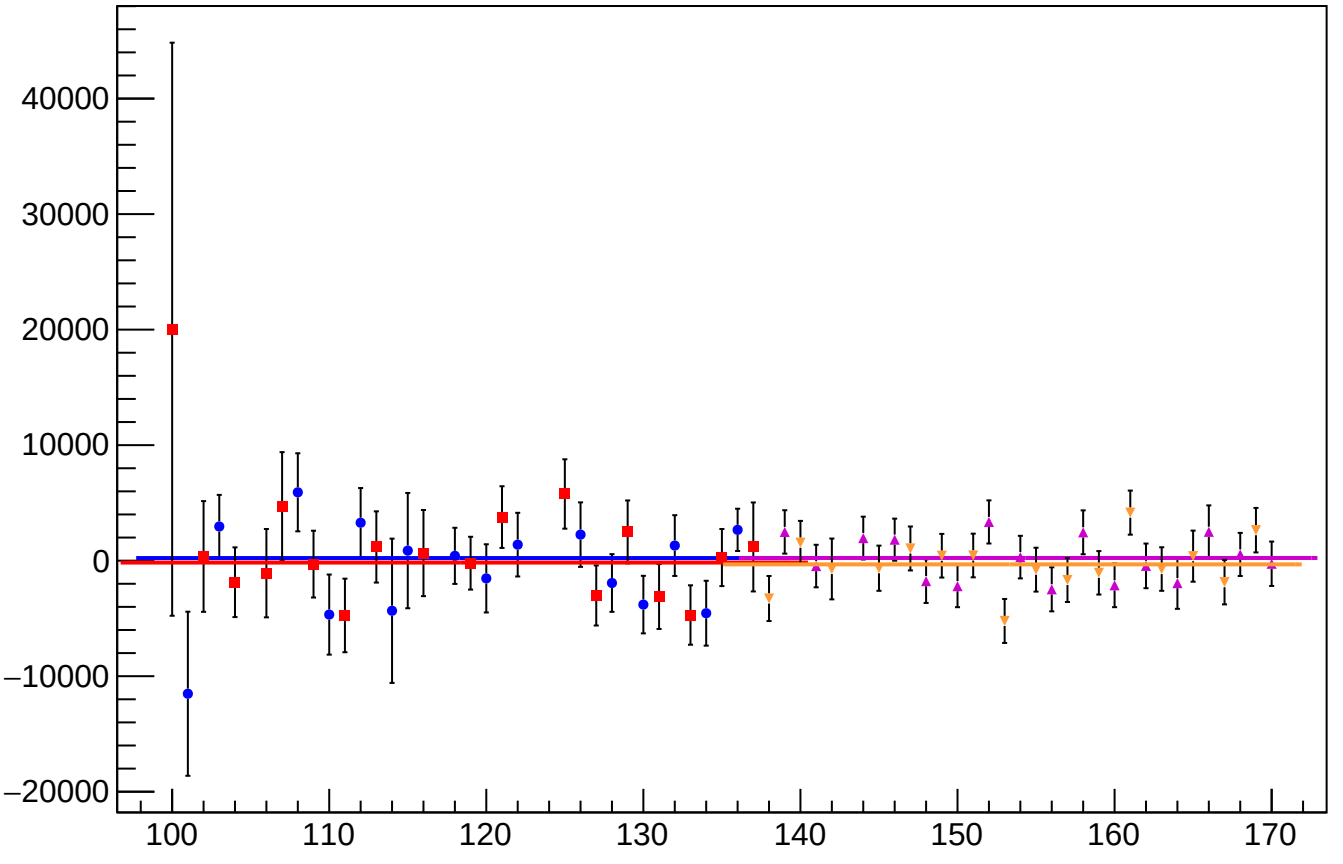
Right Out: 606.451+/-0.174 $\chi^2$/NDF: 2198399.5/17

Left In: 439.677+/-0.102 $\chi^2$/NDF:7430284.5/15

+ sign 395.841+/-0.078 $\chi^2$/NDF: 12990033.6/31

All: 433.761+/-0.058 $\chi^2$/NDF: 23846352.3/65

- sign 482.294+/-0.088 $\chi^2$/NDF: 10313374.8/33




Right In: 226.227+/-718.556 $\chi^2$/NDF: 19.4/15

Left Out: -320.707+/-488.163 $\chi^2$/NDF:20.2/15

Right Out: -163.711+/-725.798 $\chi^2$/NDF: 17.0/17

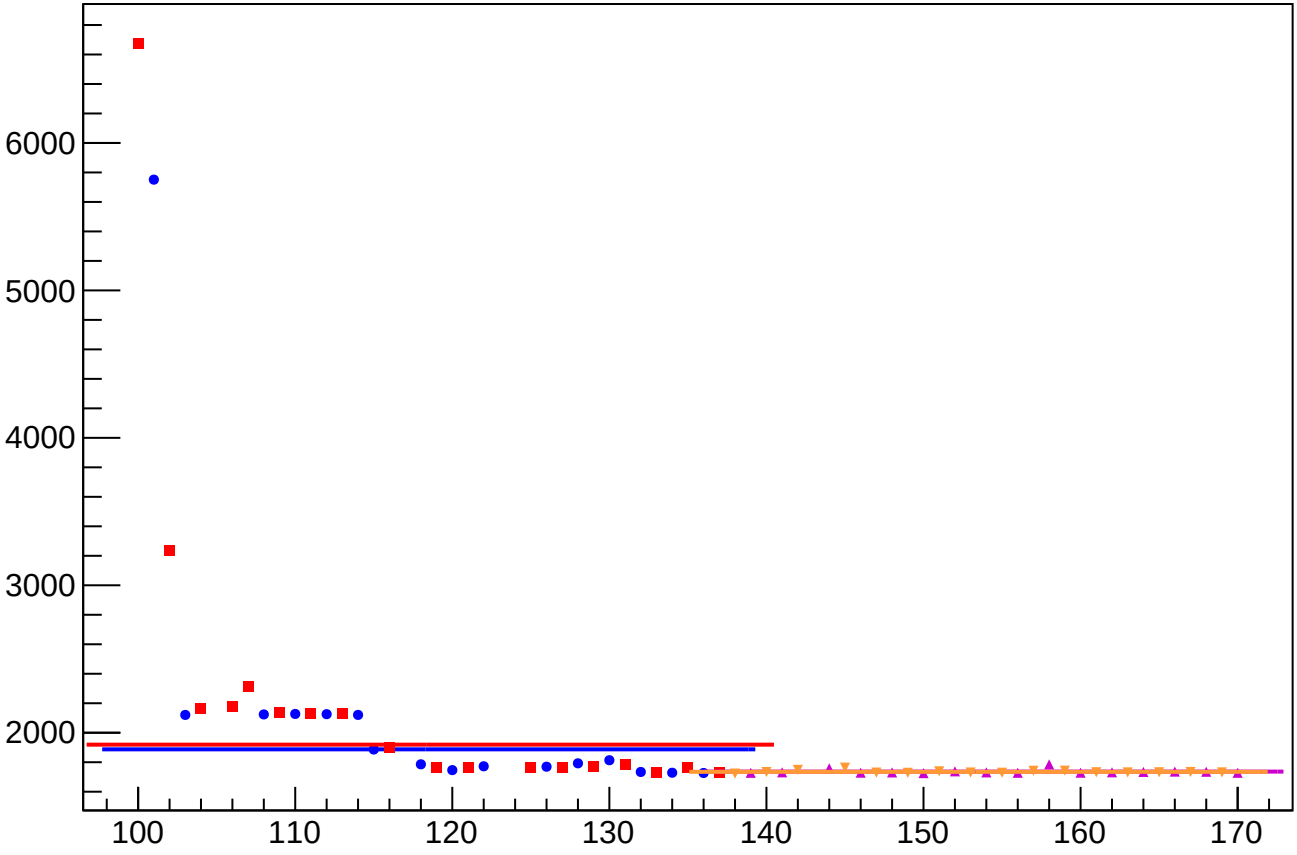
Left In: 233.513+/-477.552 $\chi^2$/NDF:16.0/15

+ sign -147.991+/-403.794 $\chi^2$/NDF: 40.0/31

All: -15.664+/-283.794 $\chi^2$/NDF: 73.5/65

- sign 113.502+/-398.942 $\chi^2$/NDF: 33.3/33

# eigen_dit_asym_us_avg_at1lr_avg_dd_rms vs Slug




Right In: 1887.310+/-0.508 $\chi^2$/NDF: 689442.4/15

Left Out: 1734.965+/-0.345 $\chi^2$/NDF:711.6/15

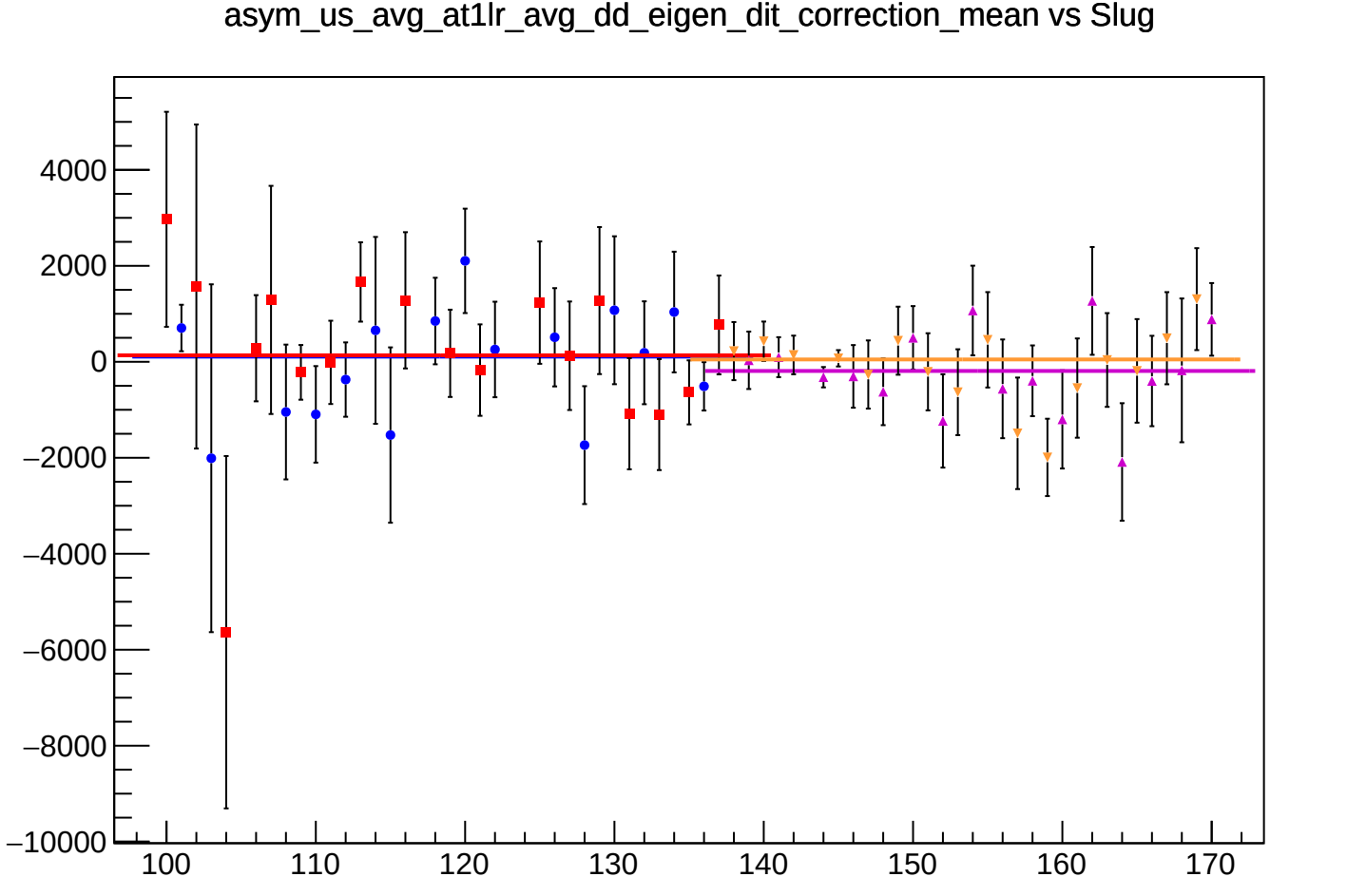
Right Out: 1919.164+/-0.513 $\chi^2$/NDF: 352566.4/17

Left In: 1736.428+/-0.338 $\chi^2$/NDF:1922.7/15

+ sign 1783.074+/-0.286 $\chi^2$/NDF: 751665.1/31

All: 1787.408+/-0.201 $\chi^2$/NDF: 1195085.0/65

- sign 1791.637+/-0.282 $\chi^2$/NDF: 442964.7/33




Right In: 108.128+/-231.710 $\chi^2$/NDF: 14.2/15

Left Out: 48.920+/-124.820 $\chi^2$/NDF:12.5/15

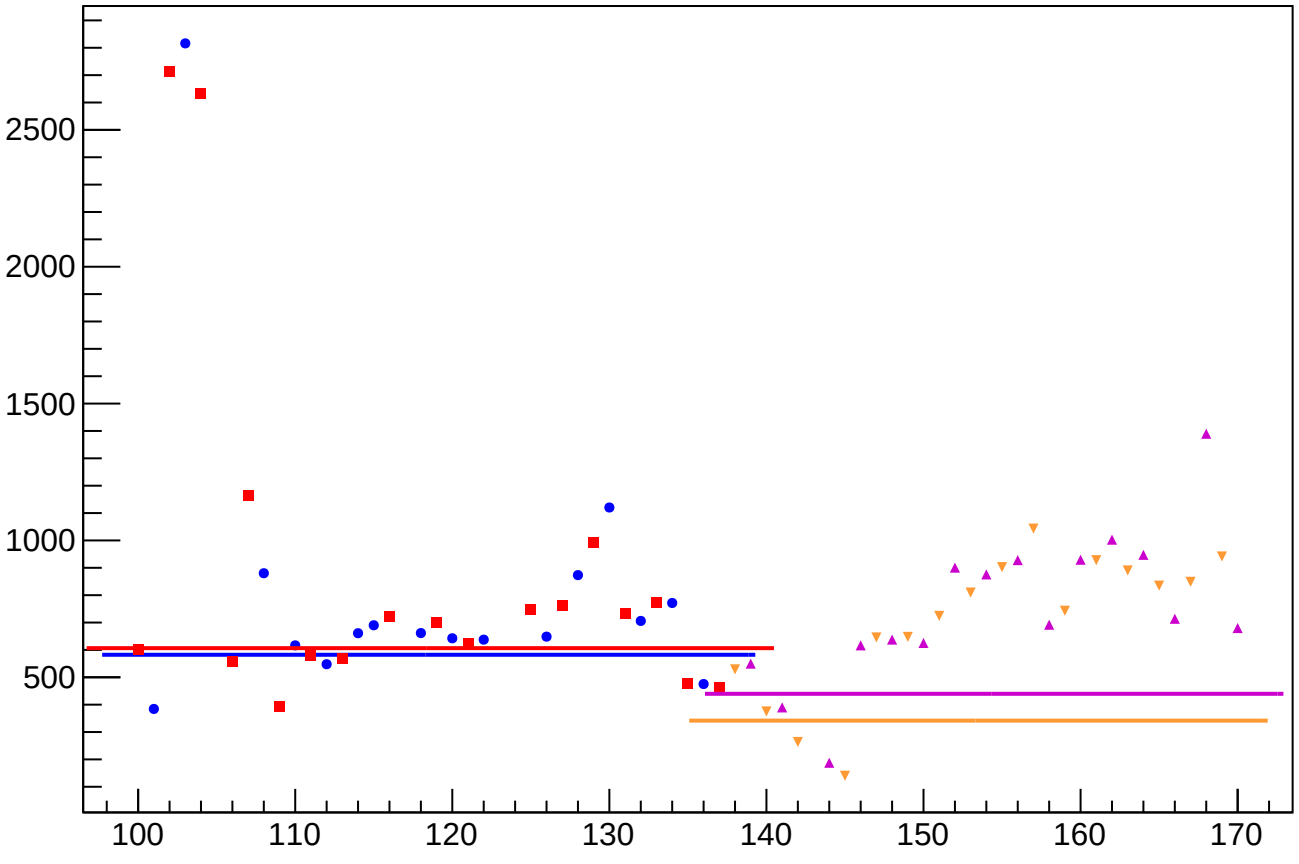
Right Out: 135.356+/-245.932 $\chi^2$/NDF: 14.4/17

Left In: -190.890+/-144.087 $\chi^2$/NDF:12.8/15

+ sign 62.237+/-109.890 $\chi^2$/NDF: 26.7/31

All: -12.222+/-82.336 $\chi^2$/NDF: 56.3/65

- sign -107.521+/-124.321 $\chi^2$/NDF: 28.5/33




Right In: 582.268+/-0.164 $\chi^2$/NDF: 1754289.3/15

Left Out: 341.742+/-0.088 $\chi^2$/NDF:9565383.8/15

Right Out: 606.447+/-0.174 $\chi^2$/NDF: 2198414.3/17

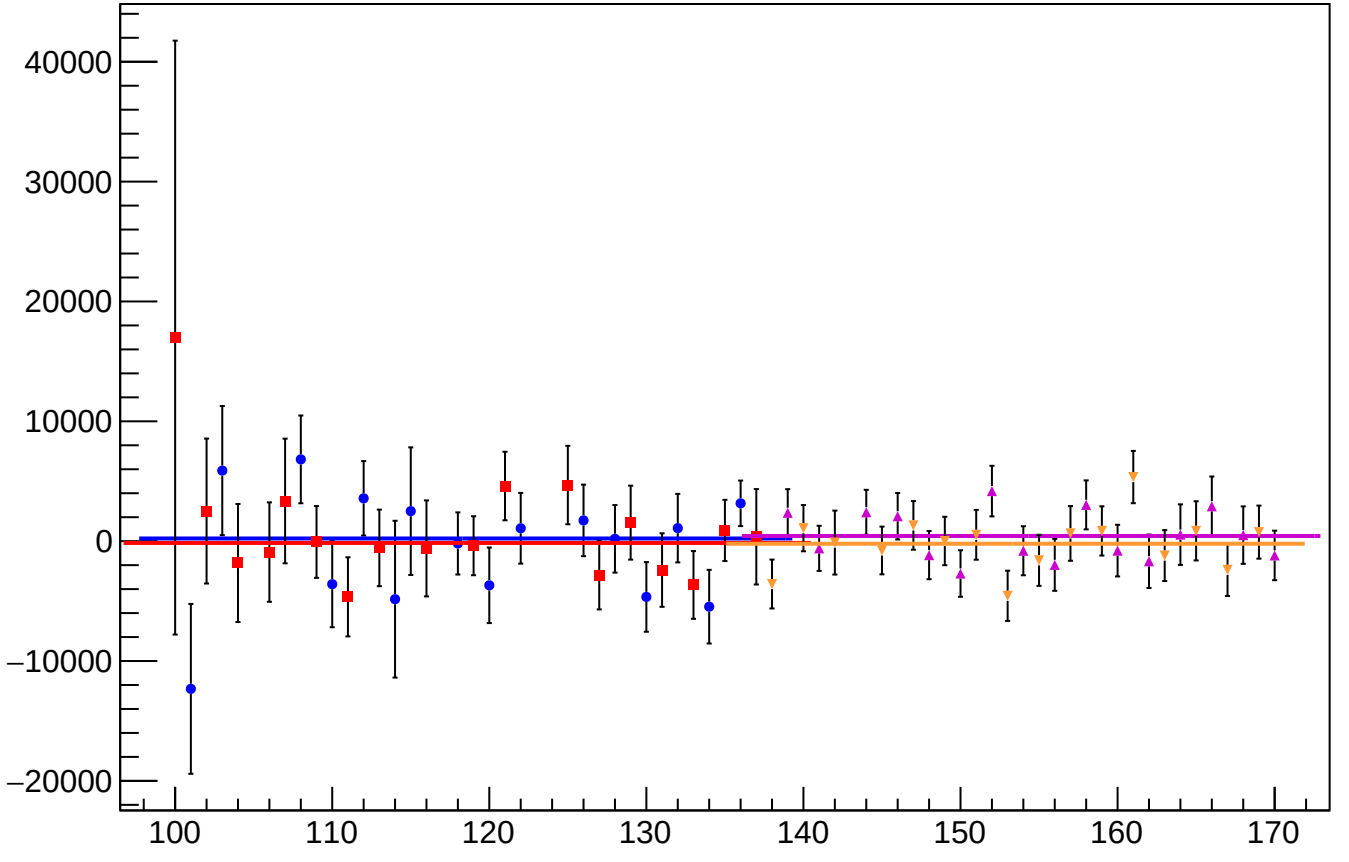
Left In: 439.677+/-0.102 $\chi^2$/NDF:7430303.2/15

+ sign 395.841+/-0.078 $\chi^2$/NDF: 12990038.3/31

All: 433.761+/-0.058 $\chi^2$/NDF: 23846360.3/65

- sign 482.294+/-0.088 $\chi^2$/NDF: 10313378.3/33

# asym_us_avg_at1lr_avg_dd_mean vs Slug




Right In: 224.521+/-791.678 $\chi^2$/NDF: 21.2/15

Left Out: -212.922+/-533.887 $\chi^2$/NDF:17.2/15

Right Out: -147.974+/-794.180 $\chi^2$/NDF: 11.6/17

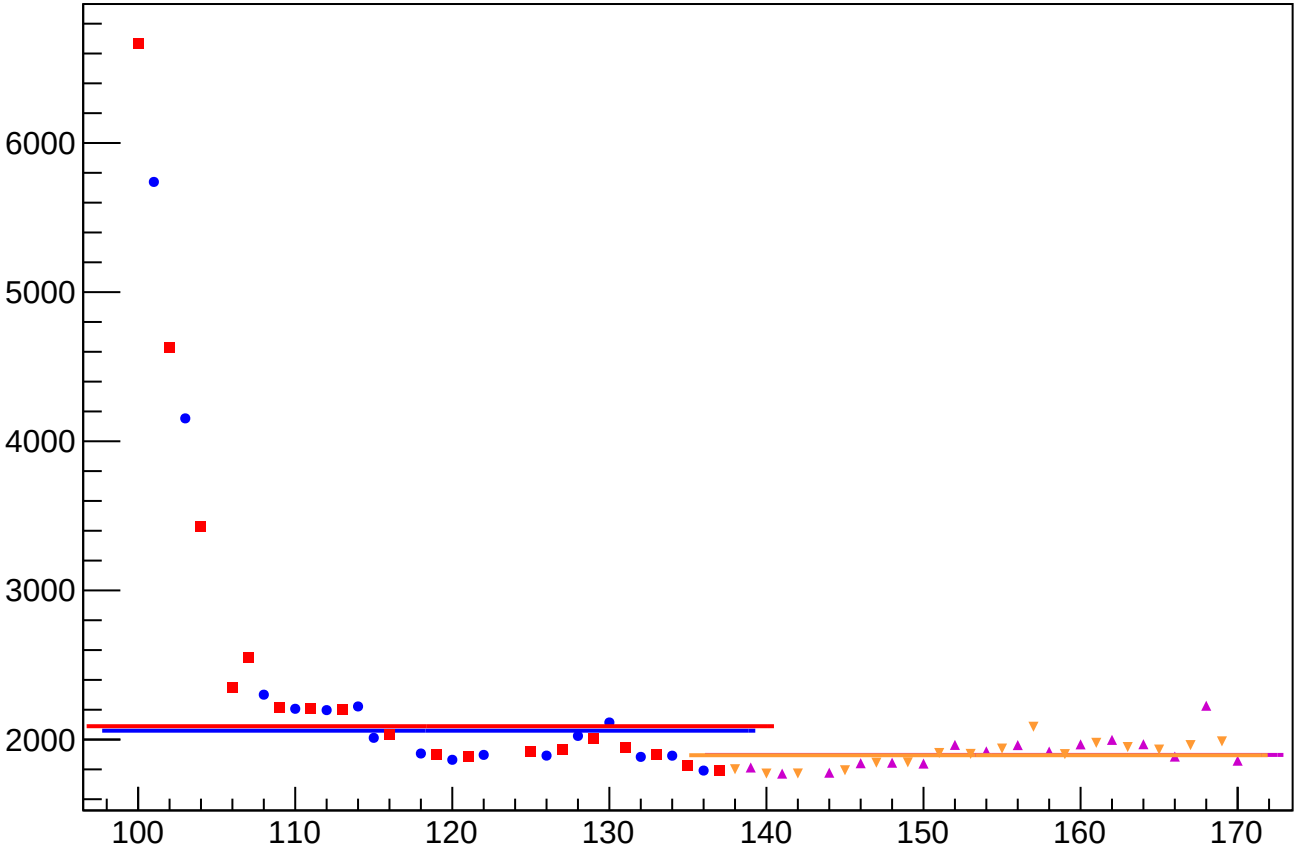
Left In: 434.059+/-522.510 $\chi^2$/NDF:15.5/15

+ sign -76.173+/-442.640 $\chi^2$/NDF: 38.6/31

All: 93.360+/-310.803 $\chi^2$/NDF: 66.3/65

- sign 258.228+/-436.508 $\chi^2$/NDF: 27.5/33

# asym_us_avg_at1lr_avg_dd_rms vs Slug




Right In: 2059.496+/-0.560 $\chi^2$/NDF: 939873.6/15

Left Out: 1894.995+/-0.378 $\chi^2$/NDF:49236.2/15

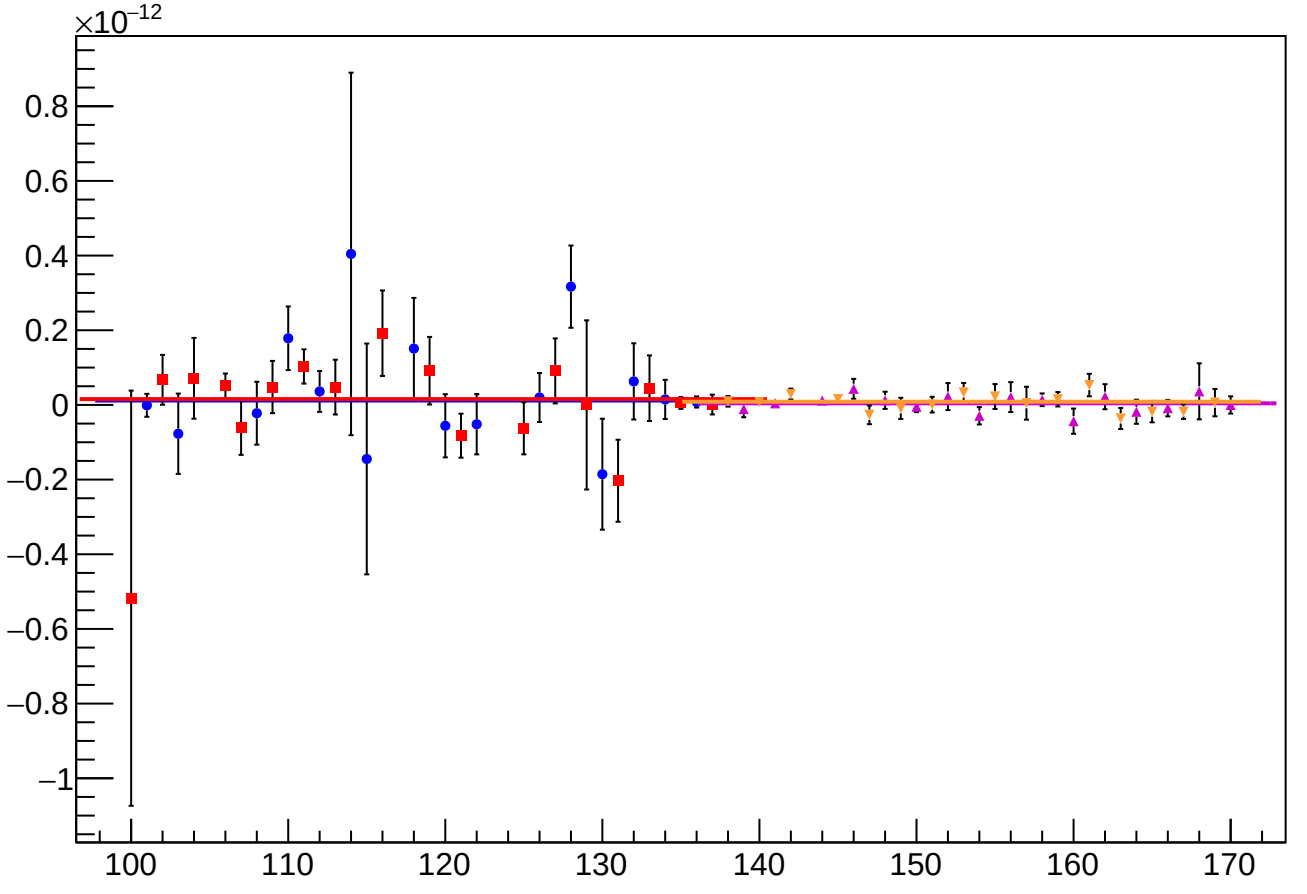
Right Out: 2089.476+/-0.562 $\chi^2$/NDF: 681465.8/17

Left In: 1896.977+/-0.369 $\chi^2$/NDF:76326.6/15

+ sign 1946.420+/-0.313 $\chi^2$/NDF: 1048467.0/31

All: 1950.836+/-0.220 $\chi^2$/NDF: 1888658.4/65

- sign 1955.131+/-0.309 $\chi^2$/NDF: 839798.7/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 18.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13.5/15

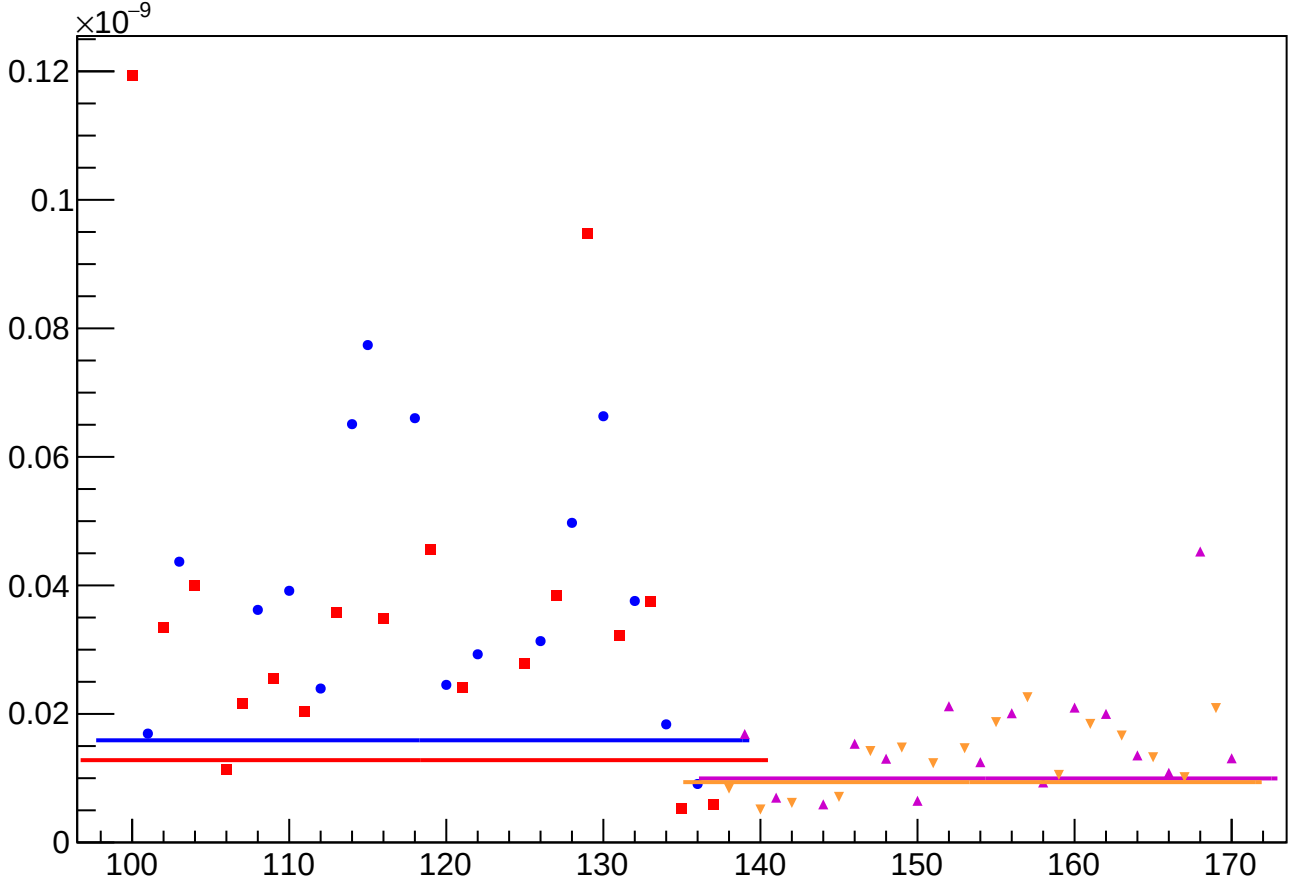
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 20.7/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:9.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 31.6/31

All: 0.000+/-0.000 $\chi^2$/NDF: 63.3/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 31.5/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1935582.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1735321.4/15

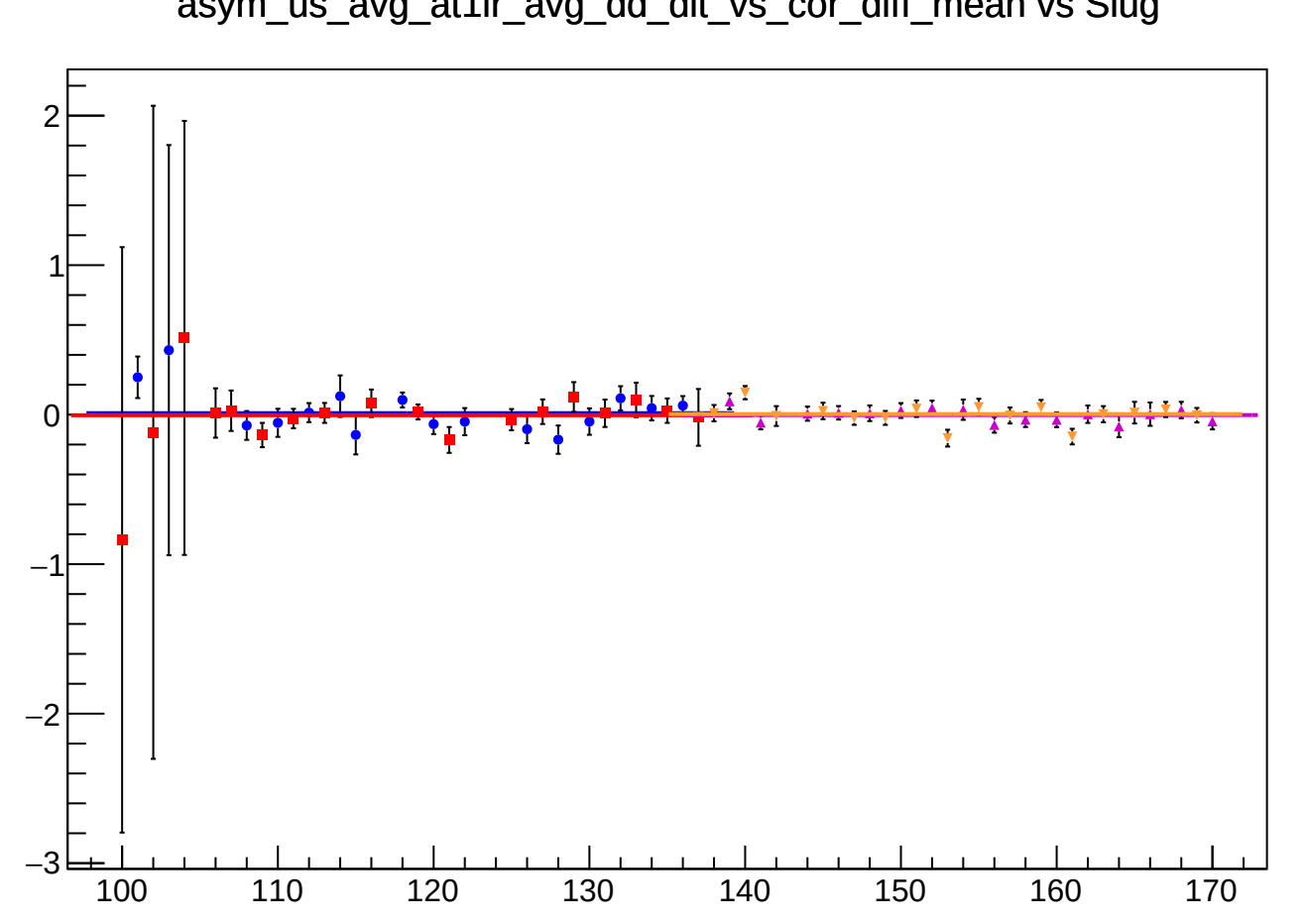
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2486058.2/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:2164057.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4213109.0/31

All: 0.000+/-0.000 $\chi^2$/NDF: 8981439.7/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 4767271.0/33




Right In: 0.010+/-0.021 $\chi^2$/NDF: 18.4/15

Left Out: 0.004+/-0.013 $\chi^2$/NDF:30.0/15

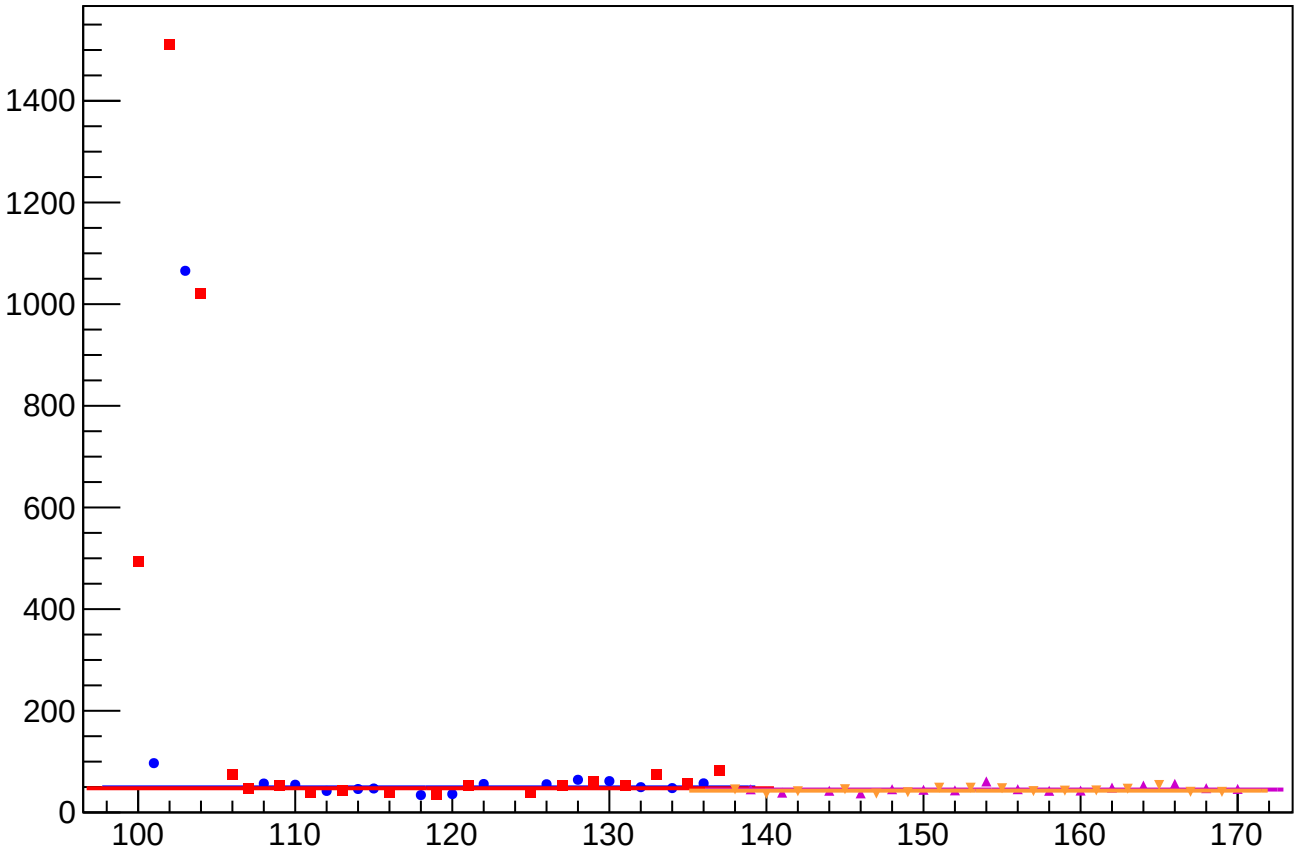
Right Out: -0.004+/-0.021 $\chi^2$/NDF: 10.5/17

Left In: -0.003+/-0.013 $\chi^2$/NDF:10.4/15

+ sign 0.006+/-0.011 $\chi^2$/NDF: 48.5/31

All: 0.001+/-0.008 $\chi^2$/NDF: 69.8/65

- sign -0.003+/-0.011 $\chi^2$/NDF: 20.9/33




Right In: 49.333+/-0.015 $\chi^2$/NDF: 1776998.3/15

Left Out: 42.924+/-0.009 $\chi^2$/NDF:217734.2/15

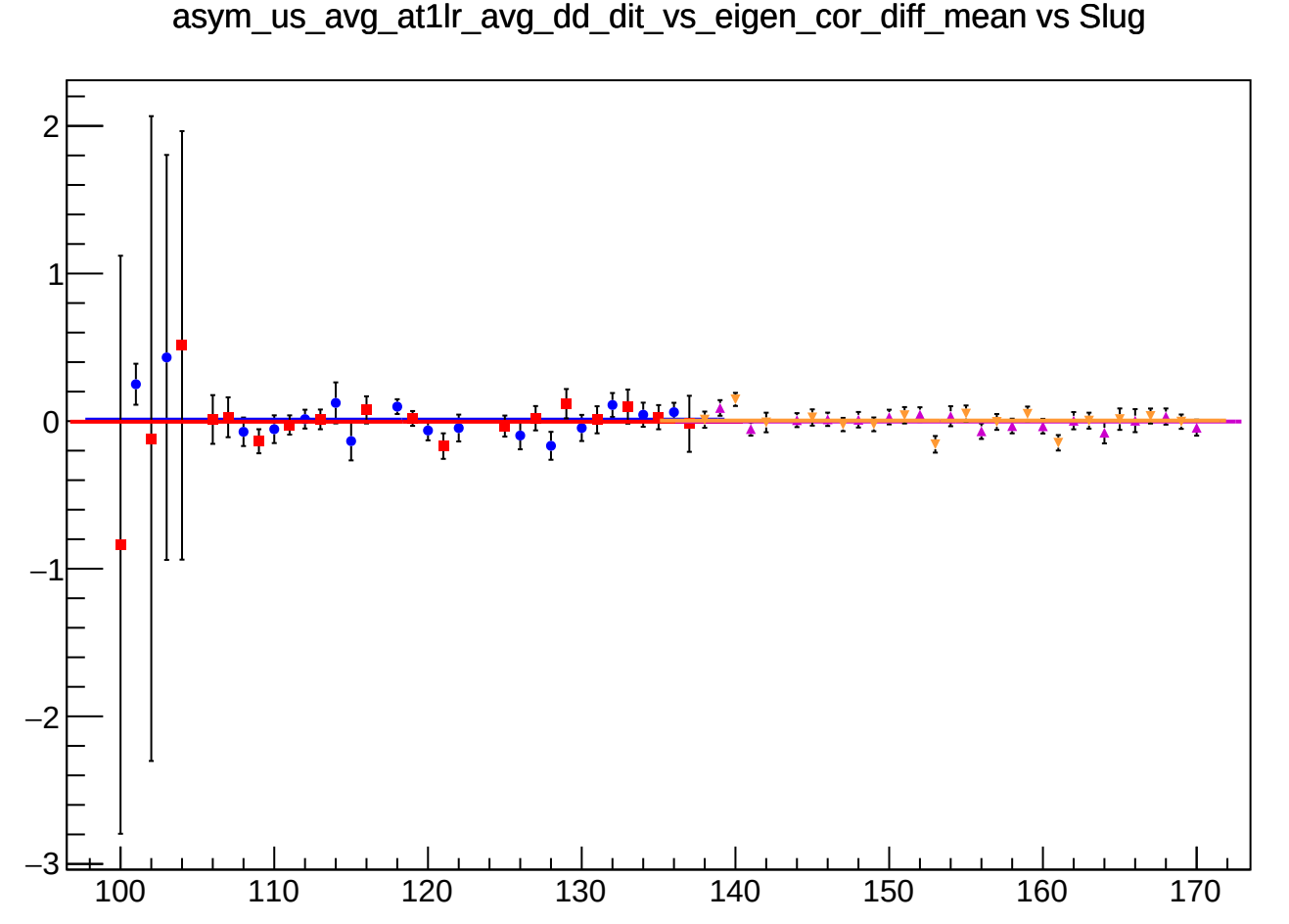
Right Out: 47.599+/-0.015 $\chi^2$/NDF: 2418219.3/17

Left In: 45.045+/-0.009 $\chi^2$/NDF:295985.2/15

+ sign 44.738+/-0.008 $\chi^2$/NDF: 2128830.2/31

All: 45.238+/-0.006 $\chi^2$/NDF: 4871622.0/65

- sign 45.751+/-0.008 $\chi^2$/NDF: 2734640.3/33




Right In: 0.010+/-0.021 $\chi^2$/NDF: 18.4/15

Left Out: 0.004+/-0.013 $\chi^2$/NDF:30.0/15

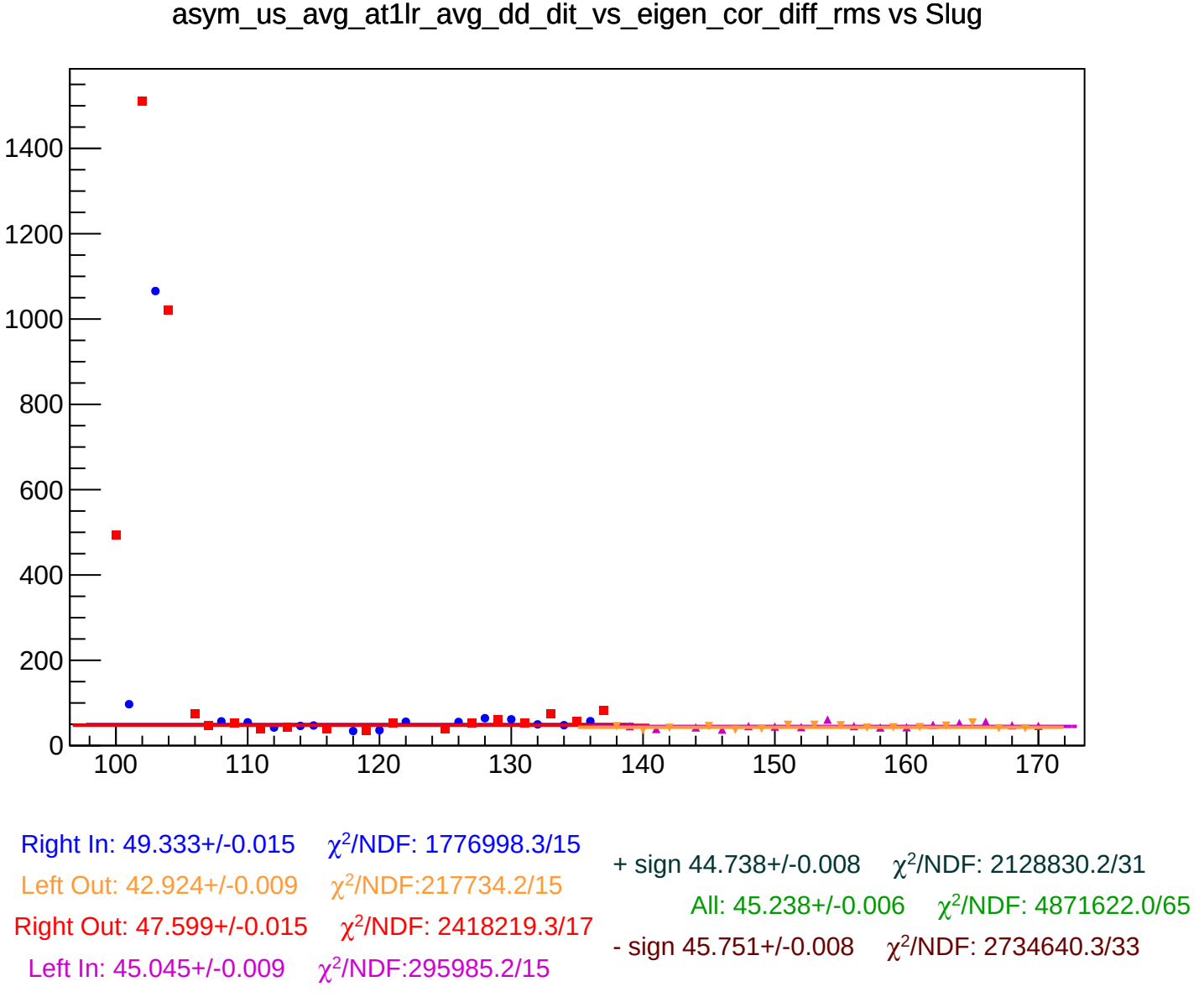
Right Out: -0.004+/-0.021 $\chi^2$/NDF: 10.5/17

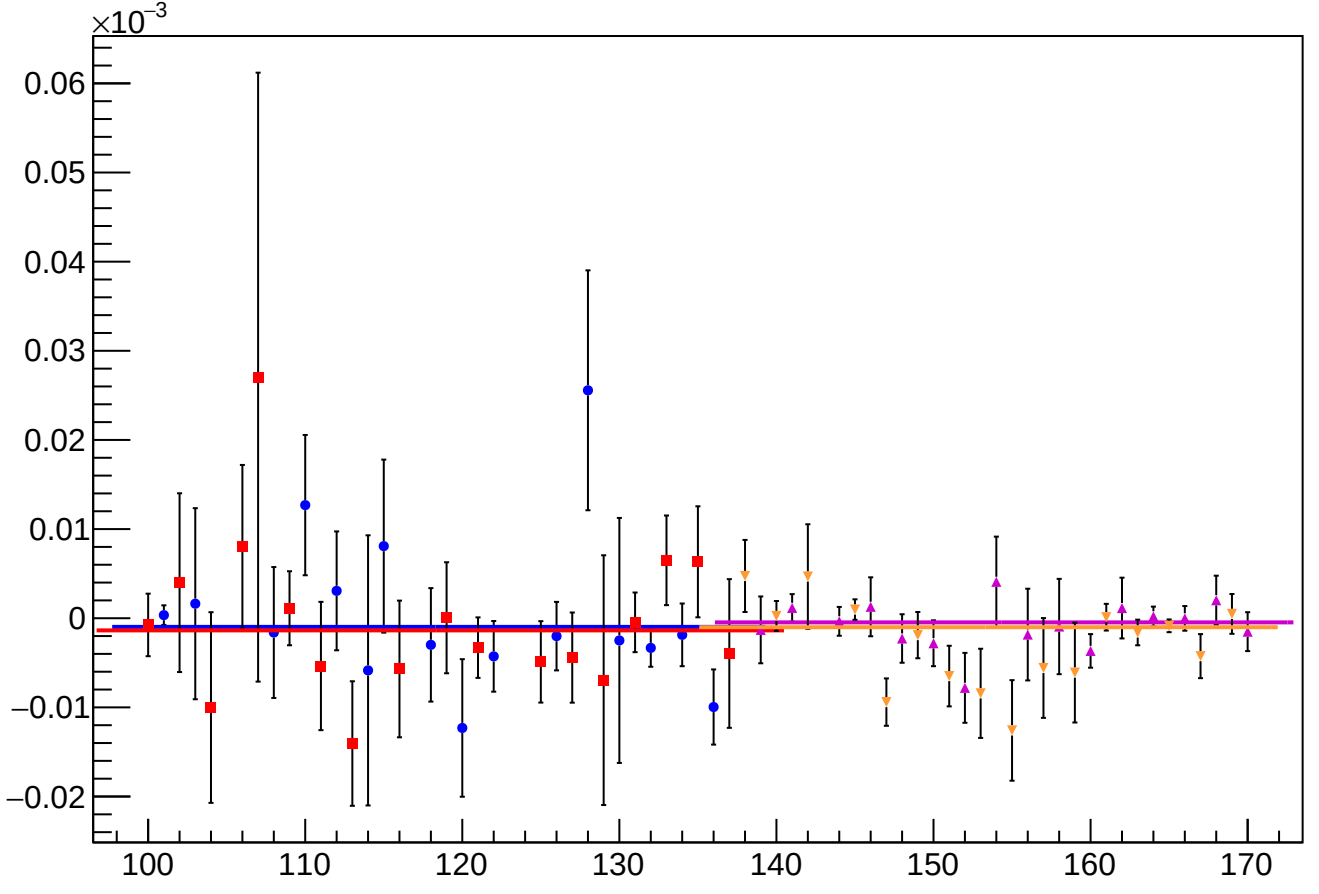
Left In: -0.003+/-0.013 $\chi^2$/NDF:10.4/15

+ sign 0.006+/-0.011 $\chi^2$/NDF: 48.5/31

All: 0.001+/-0.008 $\chi^2$/NDF: 69.8/65

- sign -0.003+/-0.011 $\chi^2$/NDF: 20.9/33


asym_us_avg_at1lr_avg_dd_dit_vs_eigen_cor_diff_rms vs Slug
1400
1200
1000
800
600
400
200
0
100
110
120
130
140
150
160
170
Right In: 49.333+/-0.015 χ²/NDF: 1776998.3/15
Left Out: 42.924+/-0.009 χ²/NDF:217734.2/15
Right Out: 47.599+/-0.015 χ²/NDF: 2418219.3/17
Left In: 45.045+/-0.009 χ²/NDF:295985.2/15
+ sign 44.738+/-0.008 χ²/NDF: 2128830.2/31
All: 45.238+/-0.006 χ²/NDF: 4871622.0/65
- sign 45.751+/-0.008 χ²/NDF: 2734640.3/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 18.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:30.1/15

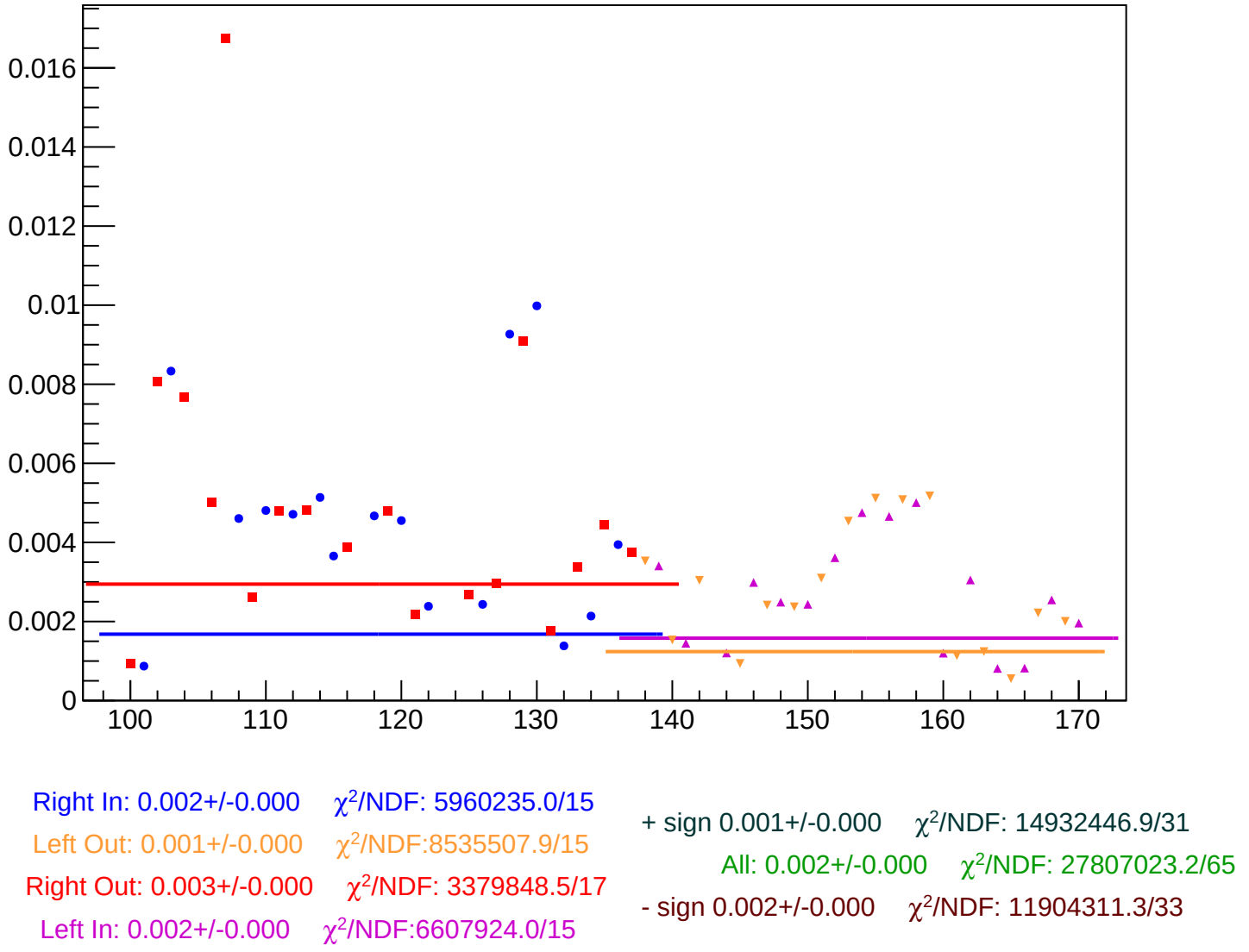
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 12.6/17

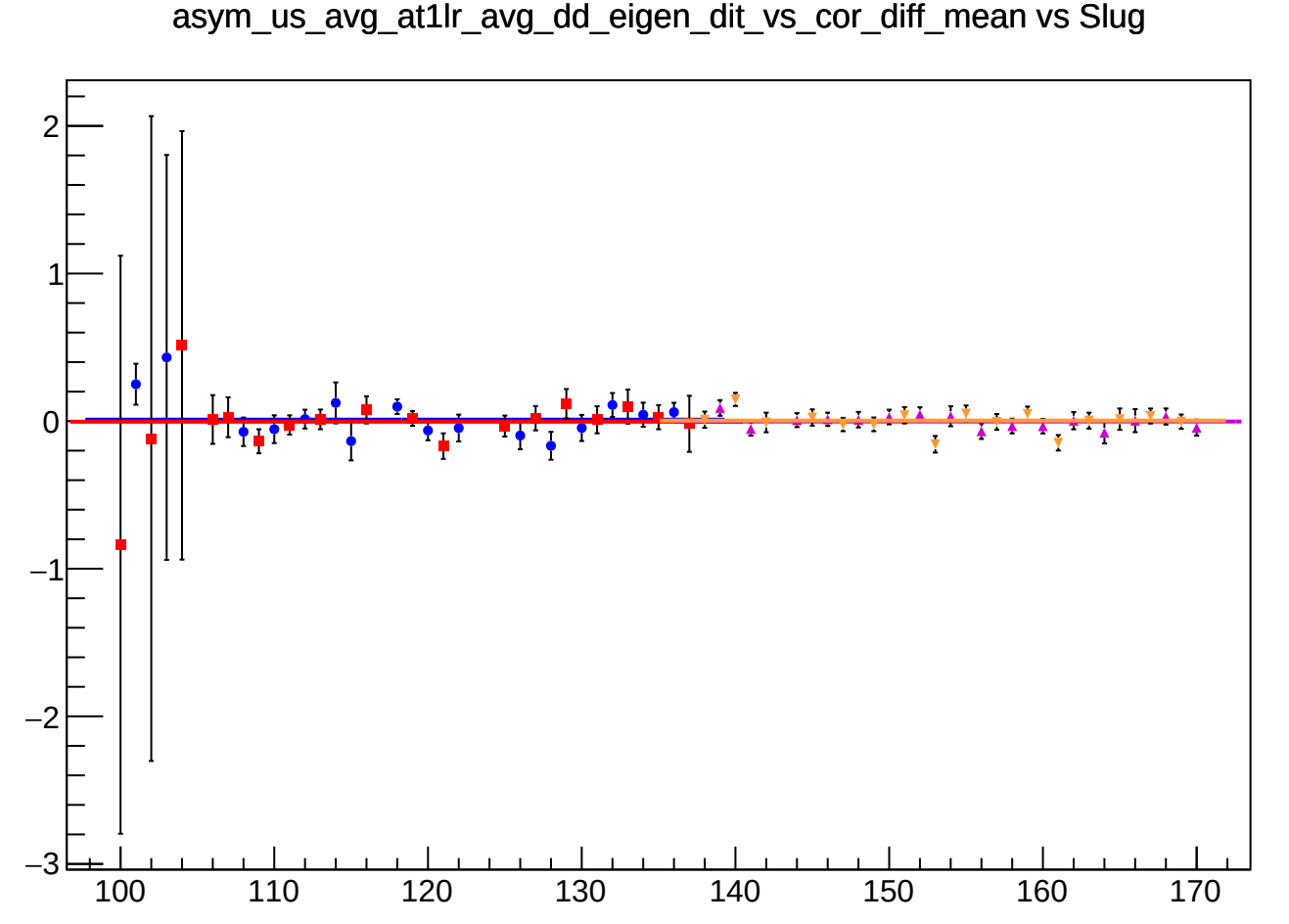
Left In: -0.000+/-0.000 $\chi^2$/NDF:11.7/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 48.8/31

All: -0.000+/-0.000 $\chi^2$/NDF: 73.9/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 24.8/33


asym_us_avg_at1lr_avg_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
100
110
120
130
140
150
160
170
Right In: 0.002+/-0.000 χ²/NDF: 5960235.0/15
Left Out: 0.001+/-0.000 χ²/NDF:8535507.9/15
Right Out: 0.003+/-0.000 χ²/NDF: 3379848.5/17
Left In: 0.002+/-0.000 χ²/NDF:6607924.0/15
+ sign 0.001+/-0.000 χ²/NDF: 14932446.9/31
All: 0.002+/-0.000 χ²/NDF: 27807023.2/65
- sign 0.002+/-0.000 χ²/NDF: 11904311.3/33




Right In: 0.010+/-0.021 $\chi^2$/NDF: 18.4/15

Left Out: 0.004+/-0.013 $\chi^2$/NDF:30.0/15

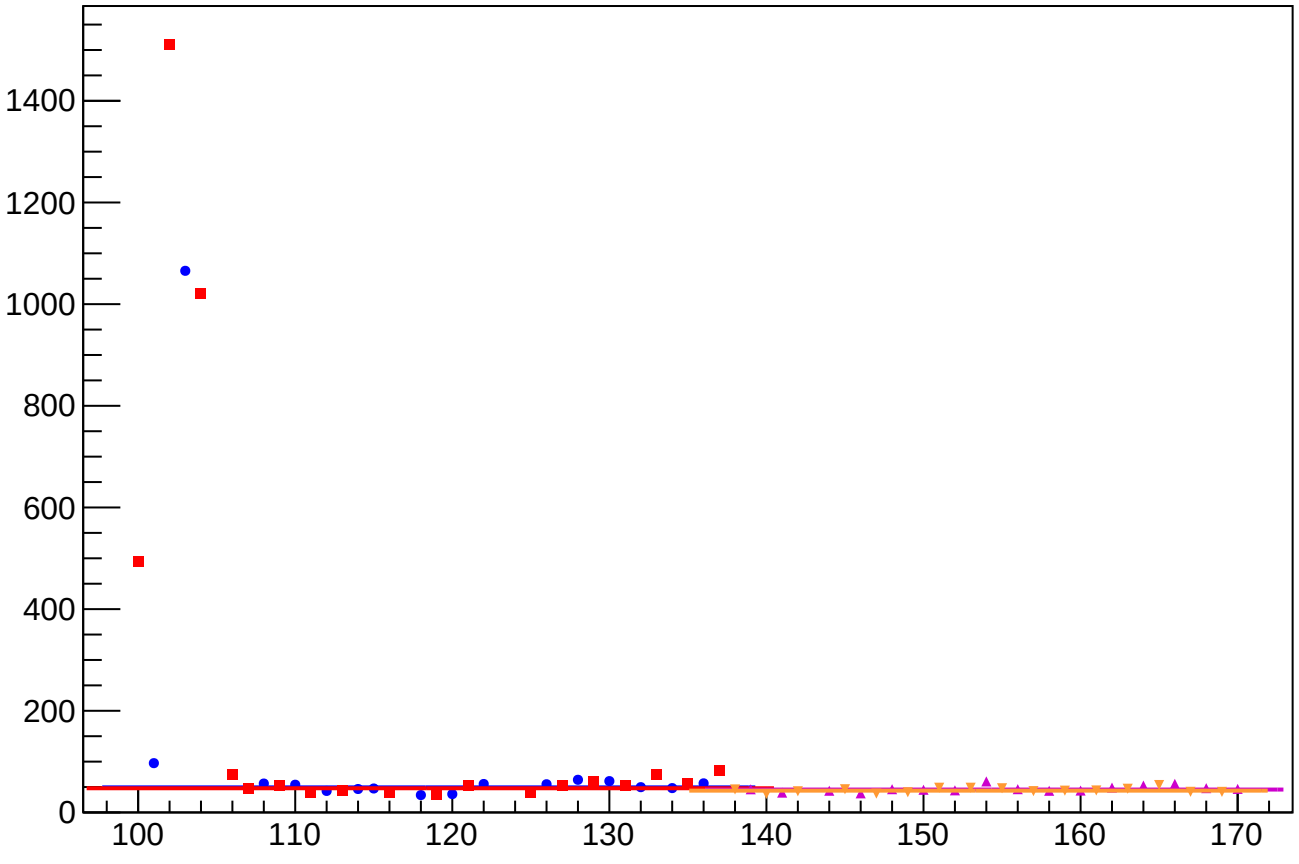
Right Out: -0.004+/-0.021 $\chi^2$/NDF: 10.5/17

Left In: -0.003+/-0.013 $\chi^2$/NDF:10.4/15

+ sign 0.006+/-0.011 $\chi^2$/NDF: 48.5/31

All: 0.001+/-0.008 $\chi^2$/NDF: 69.8/65

- sign -0.003+/-0.011 $\chi^2$/NDF: 20.9/33




Right In: 49.333+/-0.015 $\chi^2$/NDF: 1776926.6/15

Left Out: 42.925+/-0.009 $\chi^2$/NDF:217752.3/15

Right Out: 47.598+/-0.015 $\chi^2$/NDF: 2418253.9/17

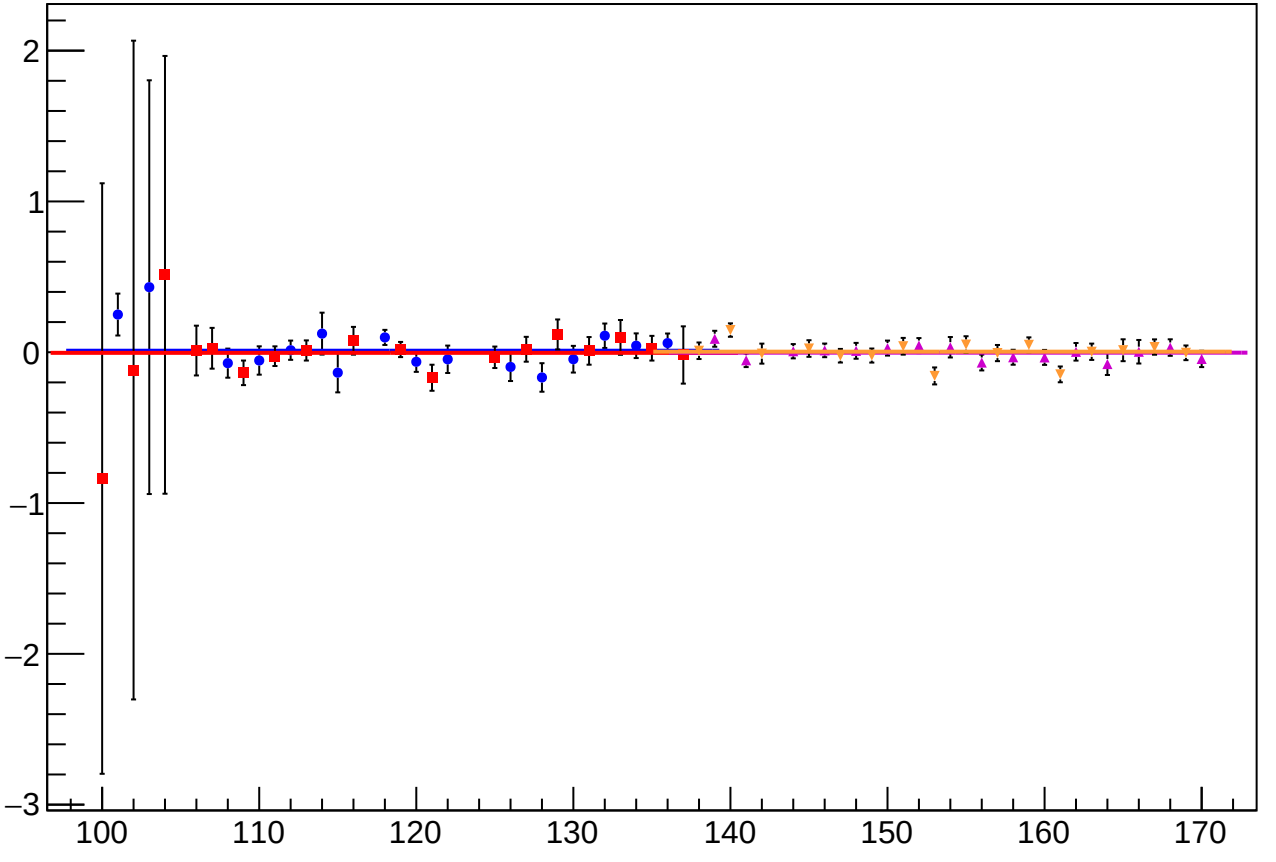
Left In: 45.045+/-0.009 $\chi^2$/NDF:296046.5/15

+ sign 44.738+/-0.008 $\chi^2$/NDF: 2128782.7/31

All: 45.238+/-0.006 $\chi^2$/NDF: 4871650.6/65

- sign 45.751+/-0.008 $\chi^2$/NDF: 2734727.6/33

asym_us_avg_at1lr_avg_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.010+/-0.021 $\chi^2$/NDF: 18.4/15

Left Out: 0.004+/-0.013 $\chi^2$/NDF:30.0/15

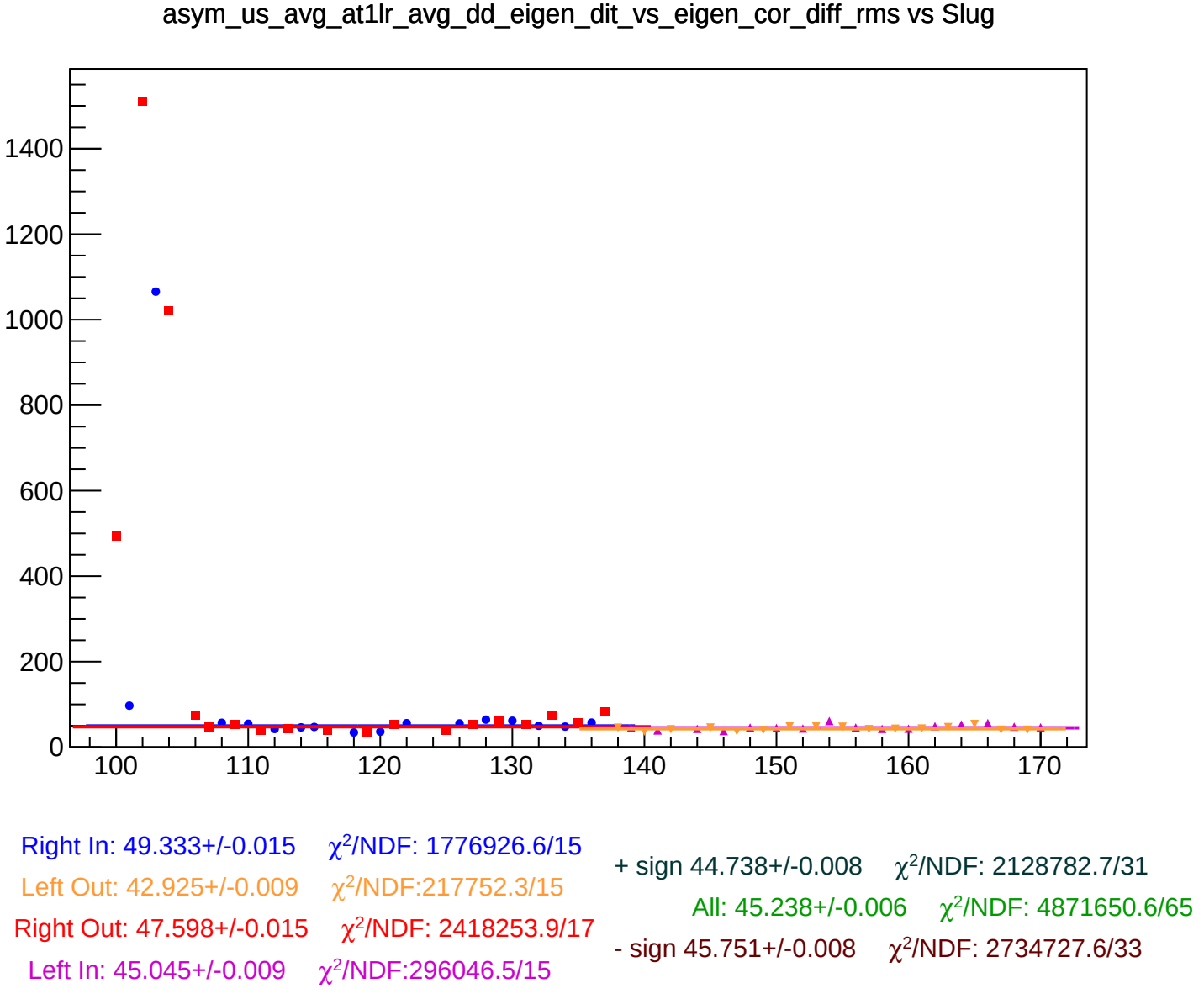
Right Out: -0.004+/-0.021 $\chi^2$/NDF: 10.5/17

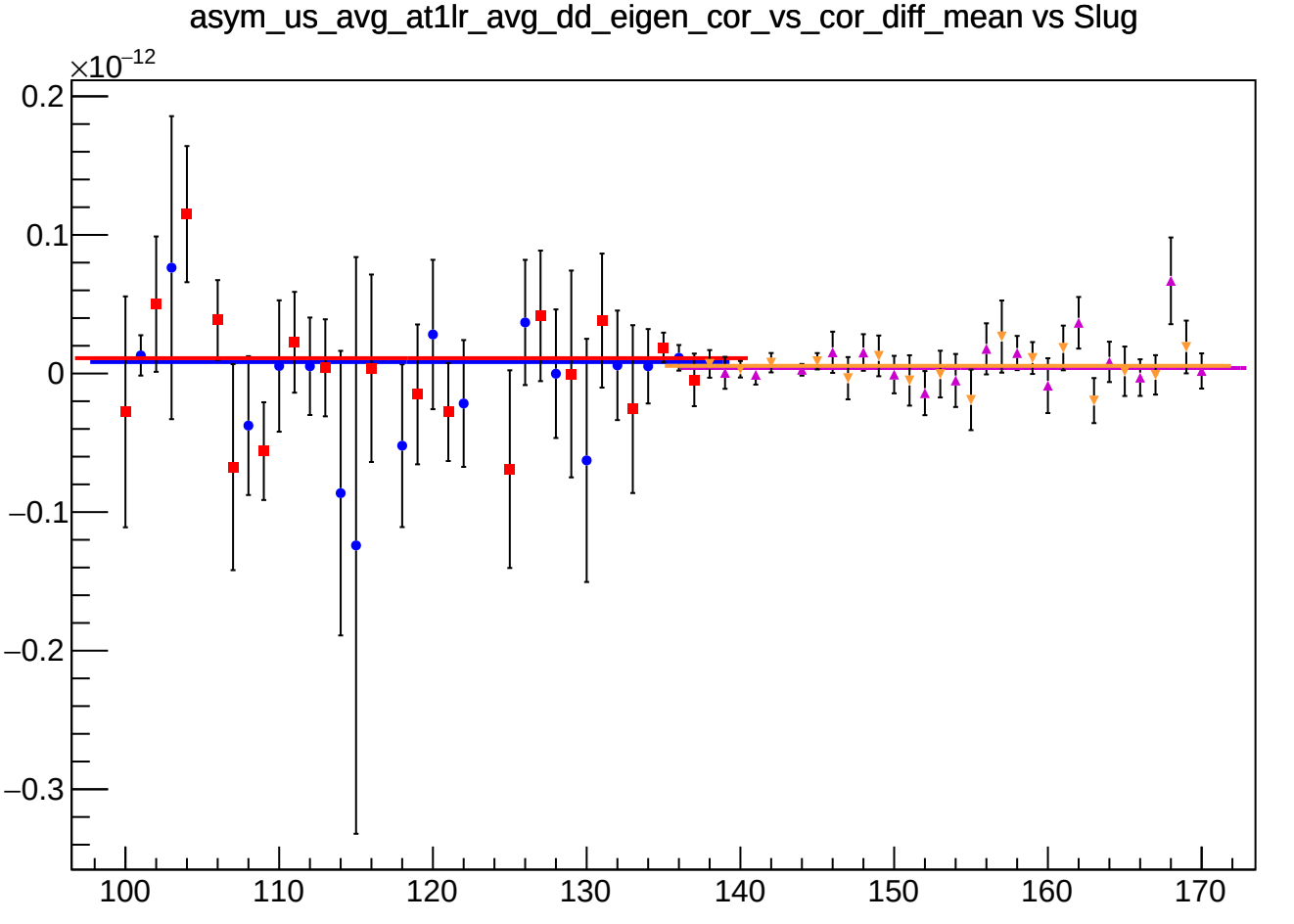
Left In: -0.003+/-0.013 $\chi^2$/NDF:10.4/15

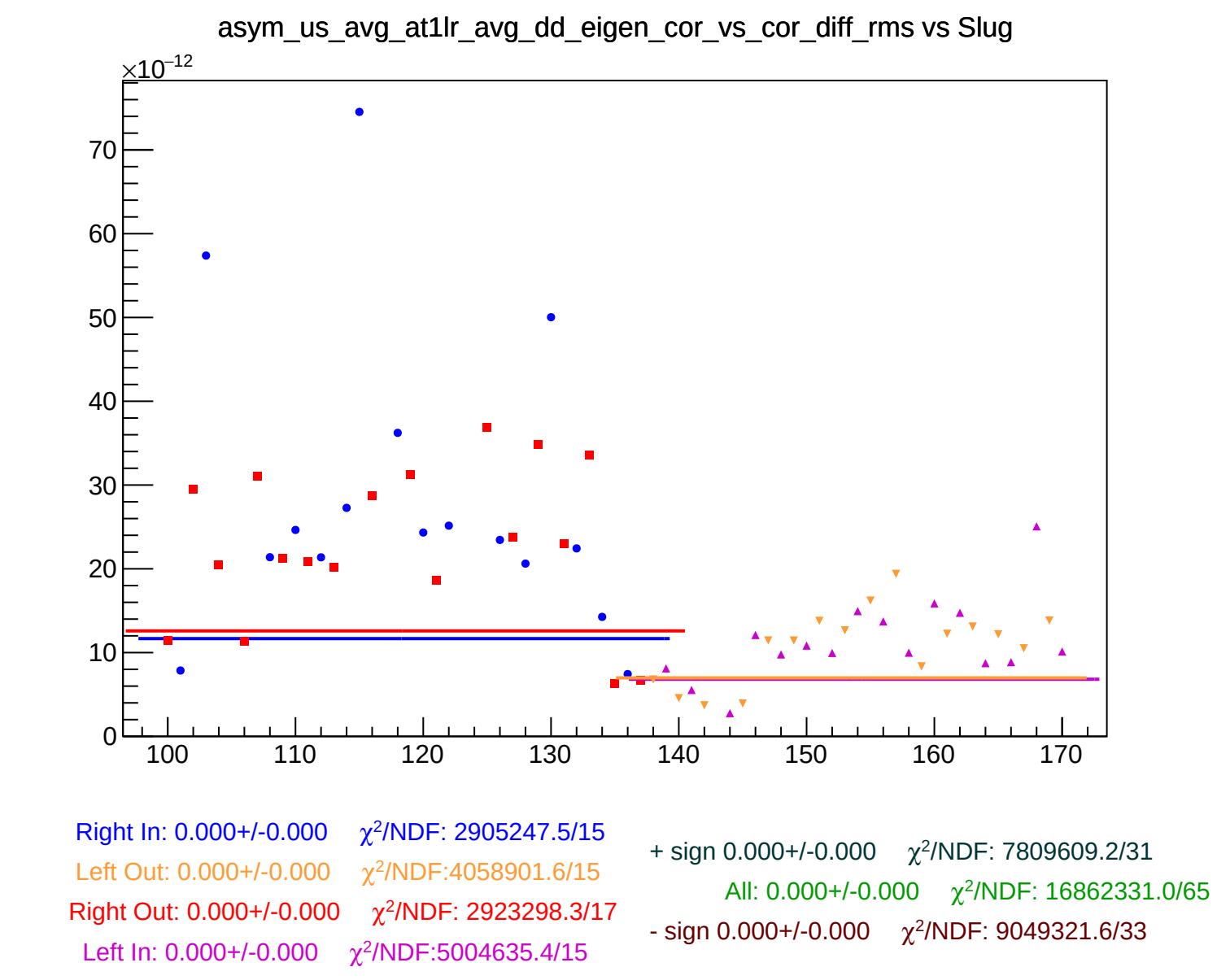
+ sign 0.006+/-0.011 $\chi^2$/NDF: 48.5/31

All: 0.001+/-0.008 $\chi^2$/NDF: 69.8/65

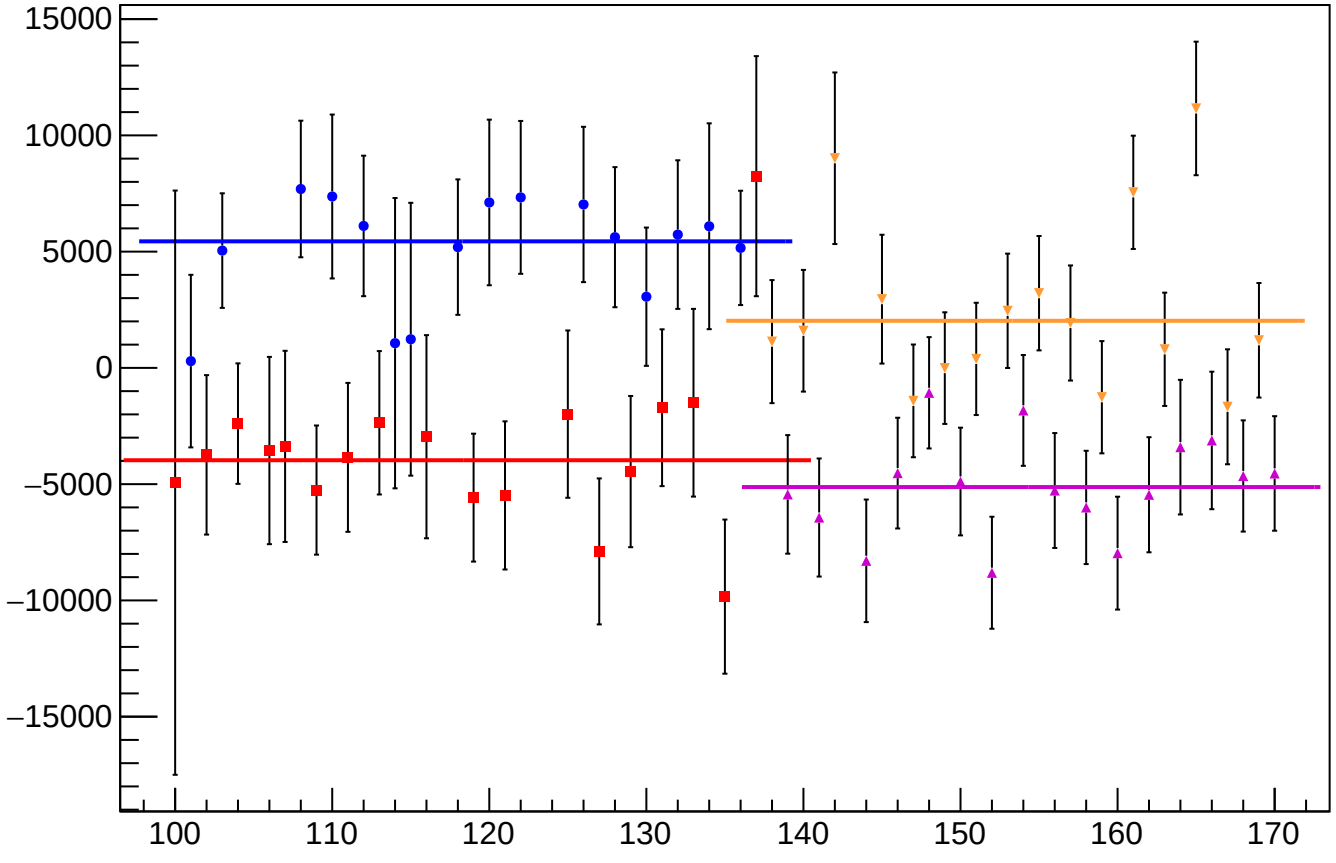
- sign -0.003+/-0.011 $\chi^2$/NDF: 20.9/33


asym_us_avg_at1lr_avg_dd_eigen_dit_vs_eigen_cor_diff_rms vs Slug
1400
1200
1000
800
600
400
200
0
100
110
120
130
140
150
160
170
Right In: 49.333+/-0.015 χ²/NDF: 1776926.6/15
Left Out: 42.925+/-0.009 χ²/NDF:217752.3/15
Right Out: 47.598+/-0.015 χ²/NDF: 2418253.9/17
Left In: 45.045+/-0.009 χ²/NDF:296046.5/15
+ sign 44.738+/-0.008 χ²/NDF: 2128782.7/31
All: 45.238+/-0.006 χ²/NDF: 4871650.6/65
- sign 45.751+/-0.008 χ²/NDF: 2734727.6/33


asym_us_avg_at1lr_avg_dd_eigen_cor_vs_cor_diff_mean vs Slug
×10^−12
0.2
0.1
0
−0.1
−0.2
−0.3
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 5.4/15
Left Out: 0.000+/-0.000 χ²/NDF:7.6/15
Right Out: 0.000+/-0.000 χ²/NDF: 16.2/17
Left In: 0.000+/-0.000 χ²/NDF:12.9/15
+ sign 0.000+/-0.000 χ²/NDF: 13.2/31
All: 0.000+/-0.000 χ²/NDF: 43.2/65
- sign 0.000+/-0.000 χ²/NDF: 29.9/33


asym_us_avg_at1lr_avg_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
0
10
20
30
40
50
60
70
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2905247.5/15
Left Out: 0.000+/-0.000 χ²/NDF:4058901.6/15
Right Out: 0.000+/-0.000 χ²/NDF: 2923298.3/17
Left In: 0.000+/-0.000 χ²/NDF:5004635.4/15
+ sign 0.000+/-0.000 χ²/NDF: 7809609.2/31
All: 0.000+/-0.000 χ²/NDF: 16862331.0/65
- sign 0.000+/-0.000 χ²/NDF: 9049321.6/33

# reg_asym_us_avg_at2lr_avg_avg_mean vs Slug




Right In: 5442.336+/-812.534 $\chi^2$/NDF: 5.4/15

Left Out: 2025.328+/-637.528 $\chi^2$/NDF:27.0/15

Right Out: -3971.728+/-809.023 $\chi^2$/NDF: 13.0/17

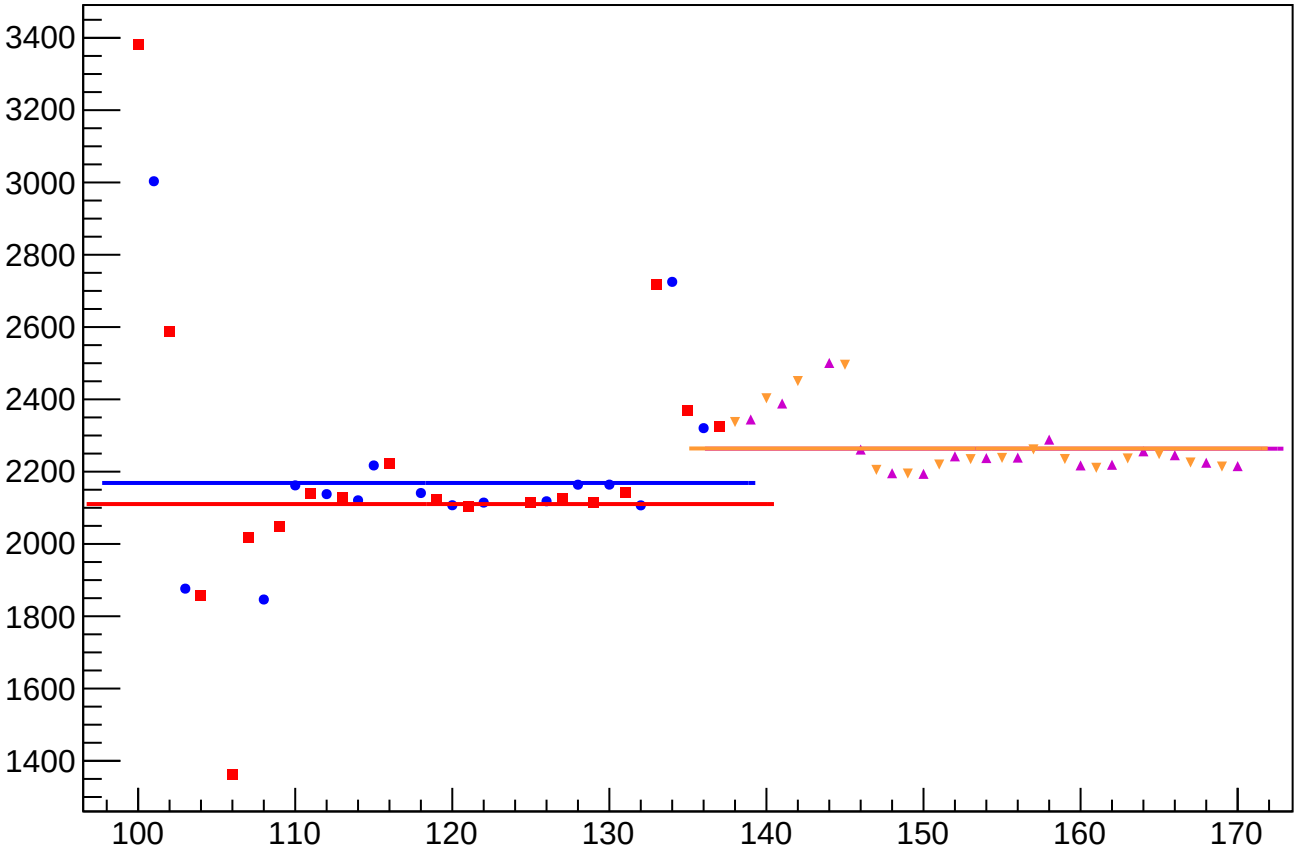
Left In: -5125.160+/-622.899 $\chi^2$/NDF:11.4/15

+ sign 3327.359+/-501.567 $\chi^2$/NDF: 43.3/31

All: -748.849+/-351.795 $\chi^2$/NDF: 198.9/65

- sign -4695.879+/-493.556 $\chi^2$/NDF: 25.6/33

# reg_asym_us_avg_at2lr_avg_avg_rms vs Slug




Right In: 2168.715+/-0.575 $\chi^2$/NDF: 195659.5/15

Left Out: 2264.140+/-0.451 $\chi^2$/NDF:33201.1/15

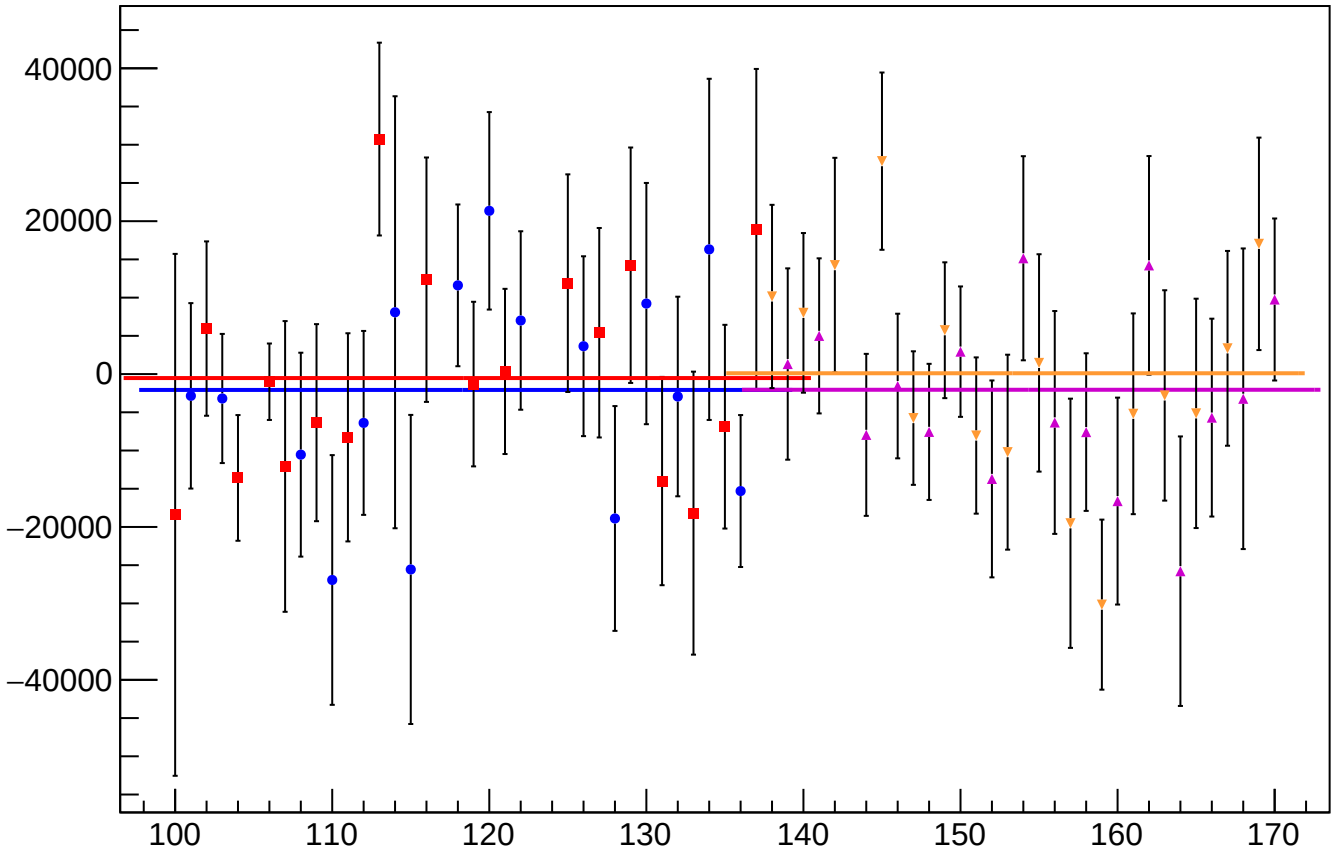
Right Out: 2110.365+/-0.563 $\chi^2$/NDF: 267413.4/17

Left In: 2263.538+/-0.440 $\chi^2$/NDF:30020.6/15

+ sign 2227.779+/-0.355 $\chi^2$/NDF: 245934.2/31

All: 2216.331+/-0.248 $\chi^2$/NDF: 591325.1/65

- sign 2205.379+/-0.347 $\chi^2$/NDF: 343352.4/33




Right In: -2074.843+/-3212.093 $\chi^2$/NDF: 14.4/15

Left Out: 107.027+/-2964.391 $\chi^2$/NDF:20.9/15

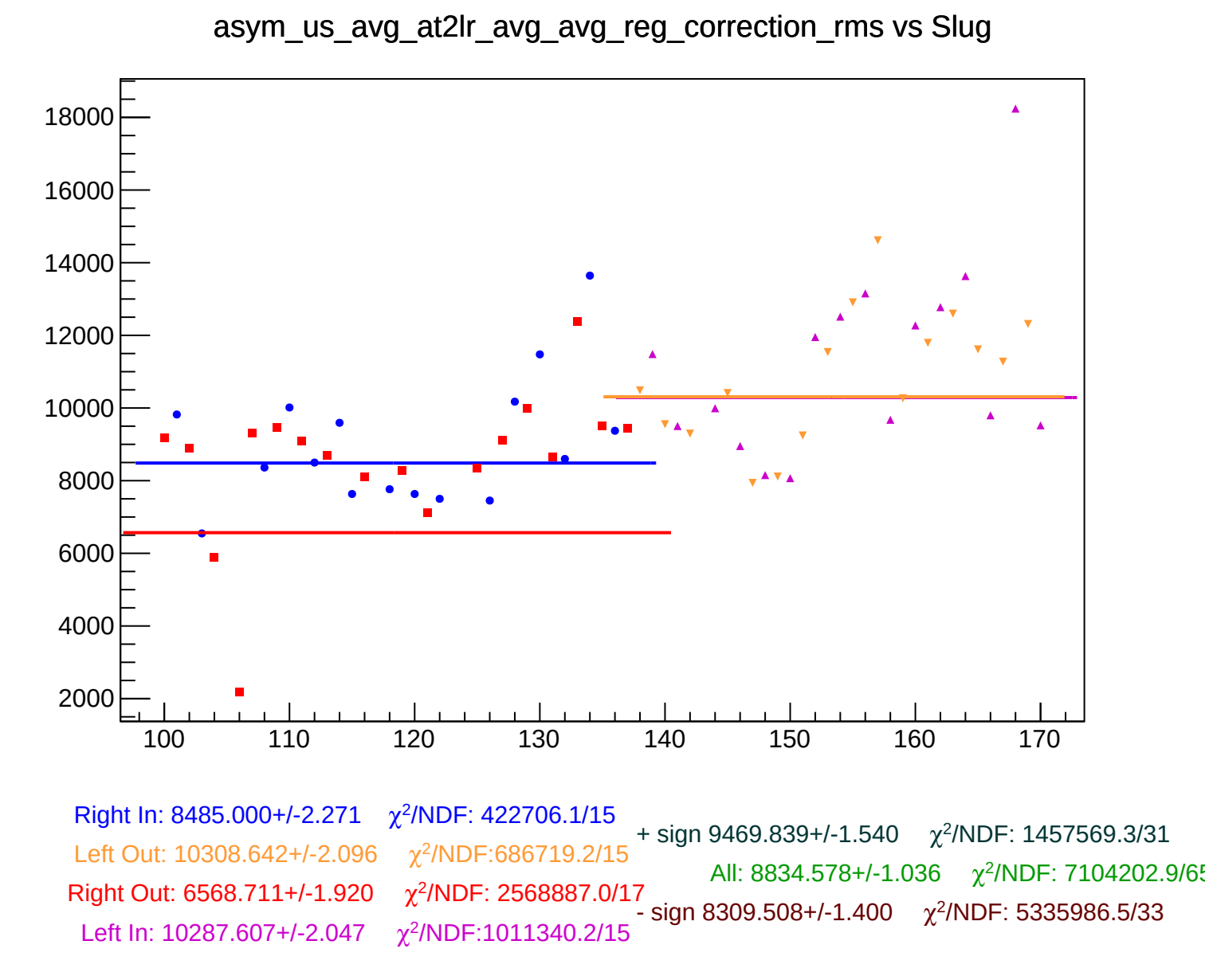
Right Out: -521.454+/-2715.587 $\chi^2$/NDF: 15.7/17

Left In: -2052.486+/-2894.766 $\chi^2$/NDF:10.0/15

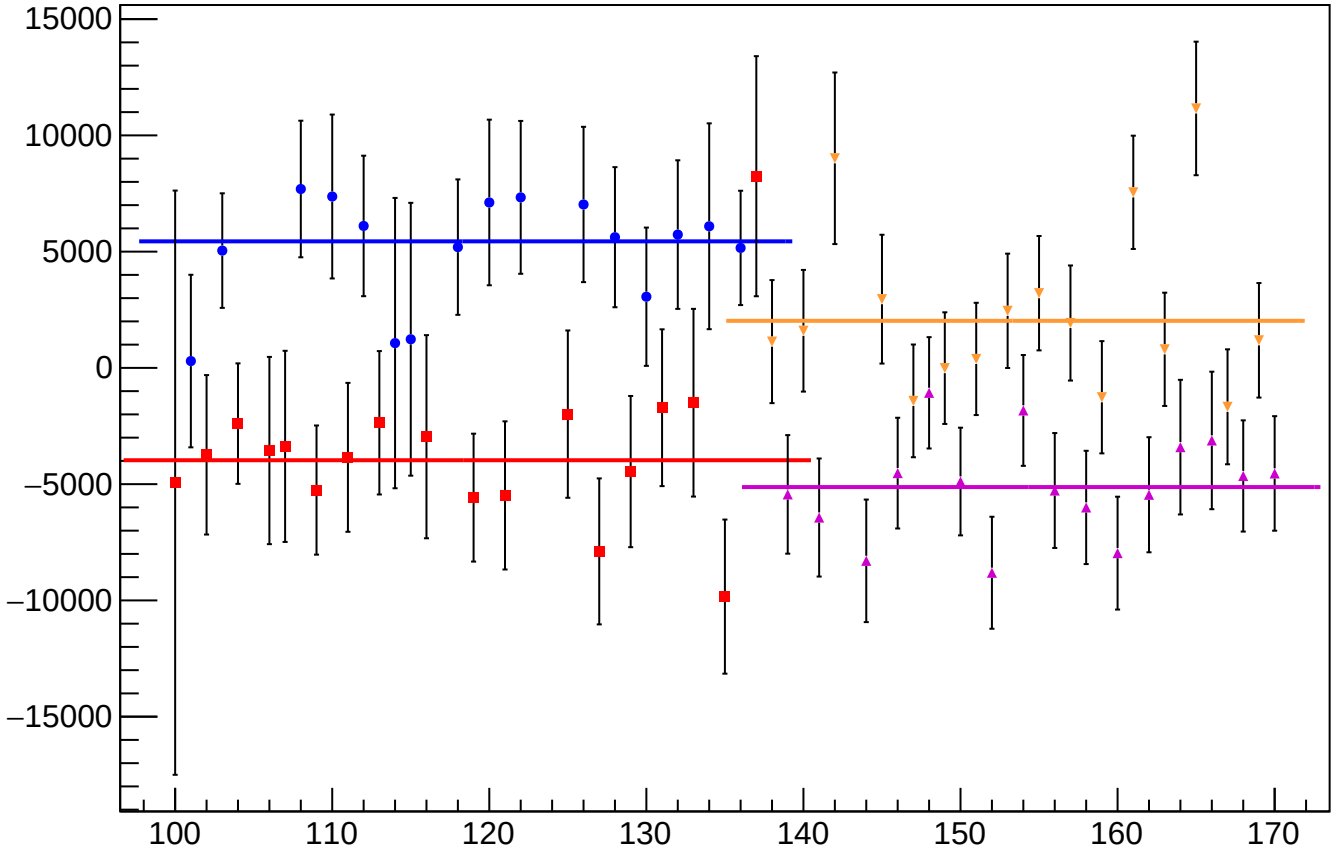
\+ sign -896.547+/-2178.454 $\chi^2$/NDF: 35.6/31

All: -1083.554+/-1465.433 $\chi^2$/NDF: 61.5/65

\- sign -1238.123+/-1980.526 $\chi^2$/NDF: 25.9/33


asym_us_avg_at2lr_avg_avg_reg_correction_rms vs Slug
18000
16000
14000
12000
10000
8000
6000
4000
2000
100
110
120
130
140
150
160
170
Right In: 8485.000+/-2.271 χ²/NDF: 422706.1/15
Left Out: 10308.642+/-2.096 χ²/NDF:686719.2/15
Right Out: 6568.711+/-1.920 χ²/NDF: 2568887.0/17
Left In: 10287.607+/-2.047 χ²/NDF:1011340.2/15
+ sign 9469.839+/-1.540 χ²/NDF: 1457569.3/31
All: 8834.578+/-1.036 χ²/NDF: 7104202.9/65
- sign 8309.508+/-1.400 χ²/NDF: 5335986.5/33

# cor_asym_us_avg_at2lr_avg_avg_mean vs Slug




Right In: 5442.478+/-812.534 $\chi^2$/NDF: 5.4/15

Left Out: 2025.171+/-637.528 $\chi^2$/NDF:27.0/15

Right Out: -3971.470+/-809.023 $\chi^2$/NDF: 13.0/17

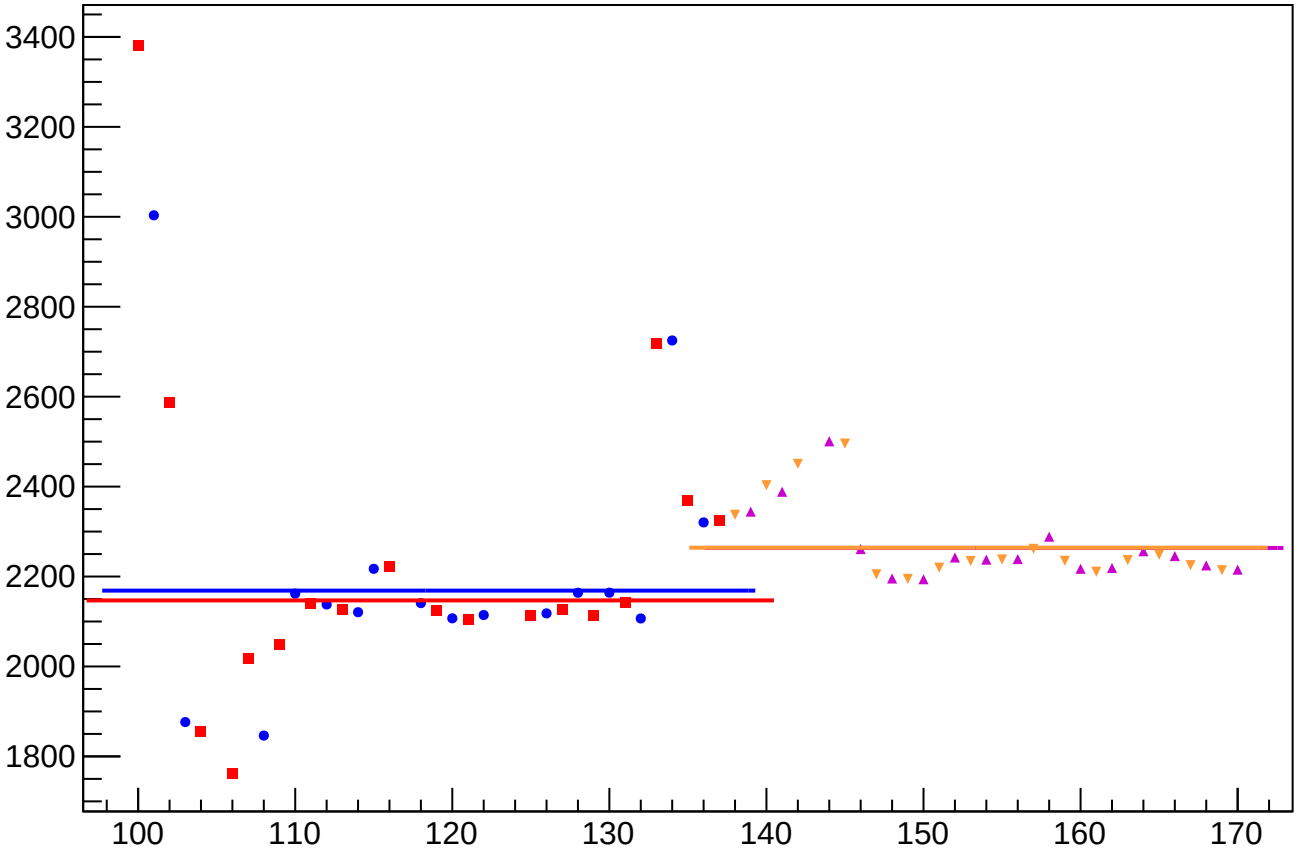
Left In: -5125.219+/-622.899 $\chi^2$/NDF:11.4/15

+ sign 3327.316+/-501.567 $\chi^2$/NDF: 43.3/31

All: -748.840+/-351.795 $\chi^2$/NDF: 198.9/65

- sign -4695.820+/-493.556 $\chi^2$/NDF: 25.6/33

# cor_asym_us_avg_at2lr_avg_avg_rms vs Slug




Right In: 2168.715+/-0.575 $\chi^2$/NDF: 195659.8/15

Left Out: 2264.140+/-0.451 $\chi^2$/NDF:33201.1/15

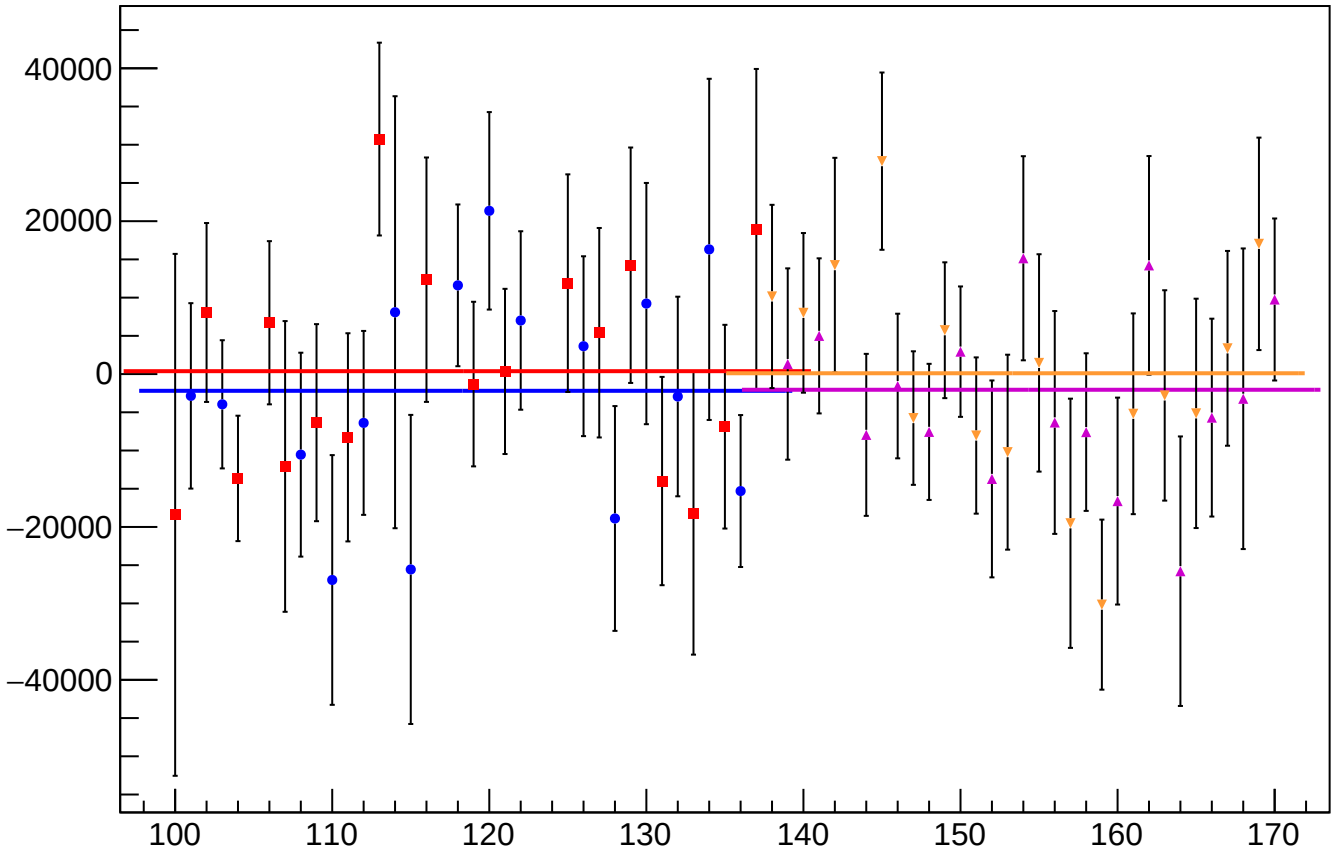
Right Out: 2146.888+/-0.569 $\chi^2$/NDF: 157750.7/17

Left In: 2263.538+/-0.440 $\chi^2$/NDF:30020.6/15

+ sign 2227.779+/-0.355 $\chi^2$/NDF: 245934.6/31

All: 2223.744+/-0.249 $\chi^2$/NDF: 460227.9/65

- sign 2219.852+/-0.348 $\chi^2$/NDF: 214039.0/33




Right In: -2189.256+/-3208.524 $\chi^2$/NDF: 14.5/15

Left Out: 106.973+/-2964.389 $\chi^2$/NDF:20.9/15

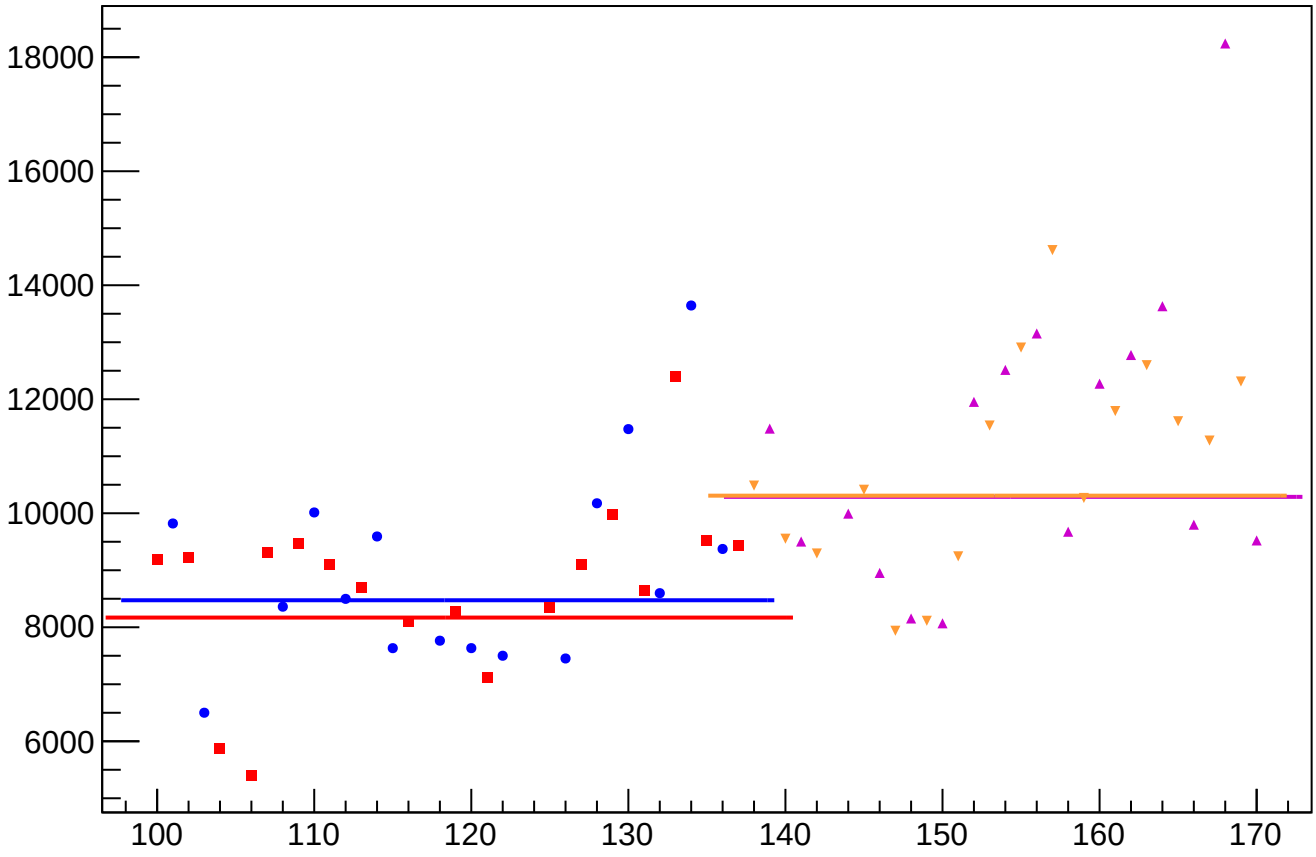
Right Out: 379.236+/-3099.953 $\chi^2$/NDF: 16.3/17

Left In: -2052.652+/-2894.764 $\chi^2$/NDF:10.0/15

\+ sign -950.469+/-2177.338 $\chi^2$/NDF: 35.6/31

All: -934.720+/-1517.360 $\chi^2$/NDF: 62.3/65

\- sign -919.850+/-2115.731 $\chi^2$/NDF: 26.7/33




Right In: 8473.743+/-2.269 $\chi^2$/NDF: 429547.3/15

Left Out: 10308.633+/-2.096 $\chi^2$/NDF:686720.5/15

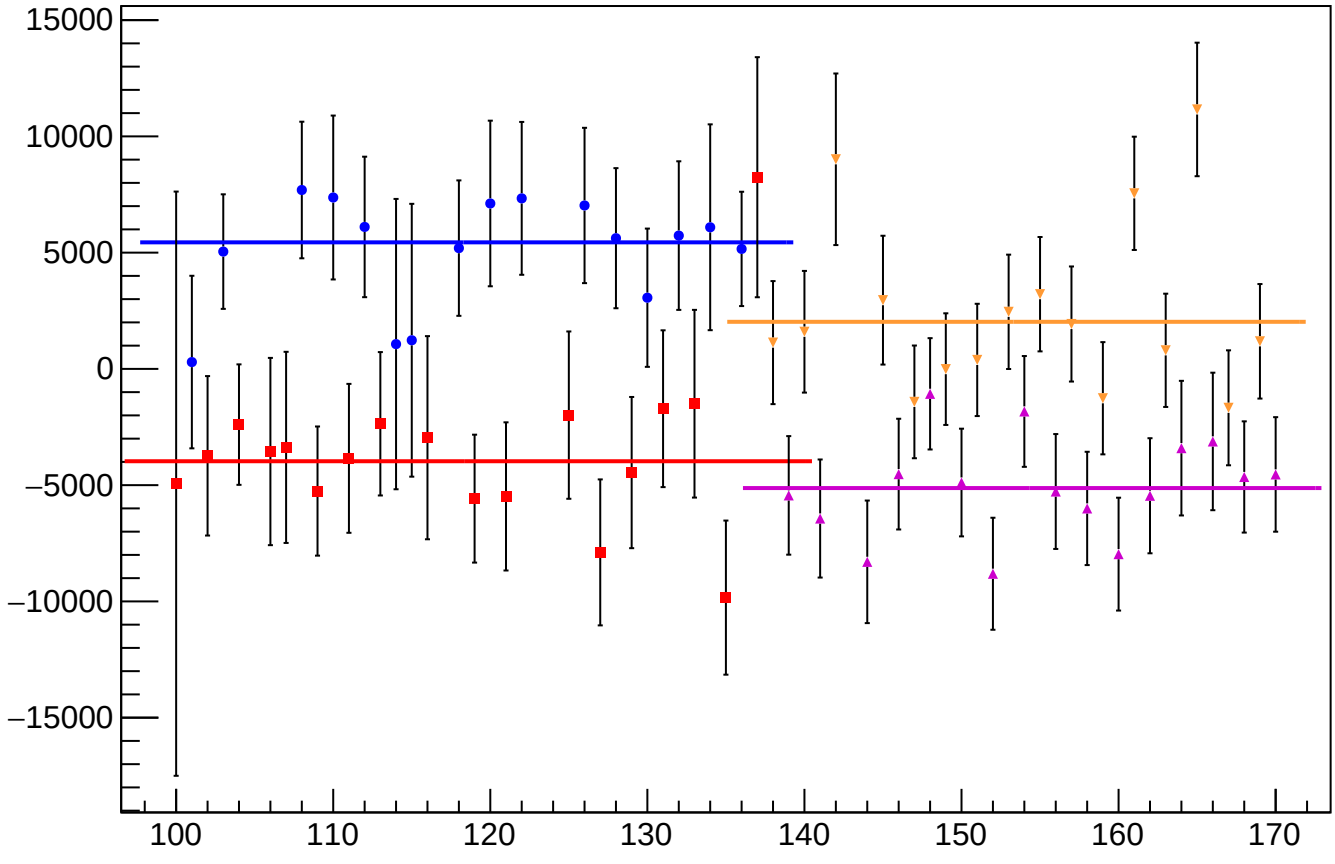
Right Out: 8170.027+/-2.192 $\chi^2$/NDF: 539925.8/17

Left In: 10287.600+/-2.047 $\chi^2$/NDF:1011346.0/15

+ sign 9463.643+/-1.540 $\chi^2$/NDF: 1469142.8/31

All: 9380.096+/-1.073 $\chi^2$/NDF: 3524668.9/65

- sign 9301.209+/-1.496 $\chi^2$/NDF: 2049800.9/33




Right In: 5442.478+/-812.534 $\chi^2$/NDF: 5.4/15

Left Out: 2025.171+/-637.528 $\chi^2$/NDF:27.0/15

Right Out: -3971.470+/-809.023 $\chi^2$/NDF: 13.0/17

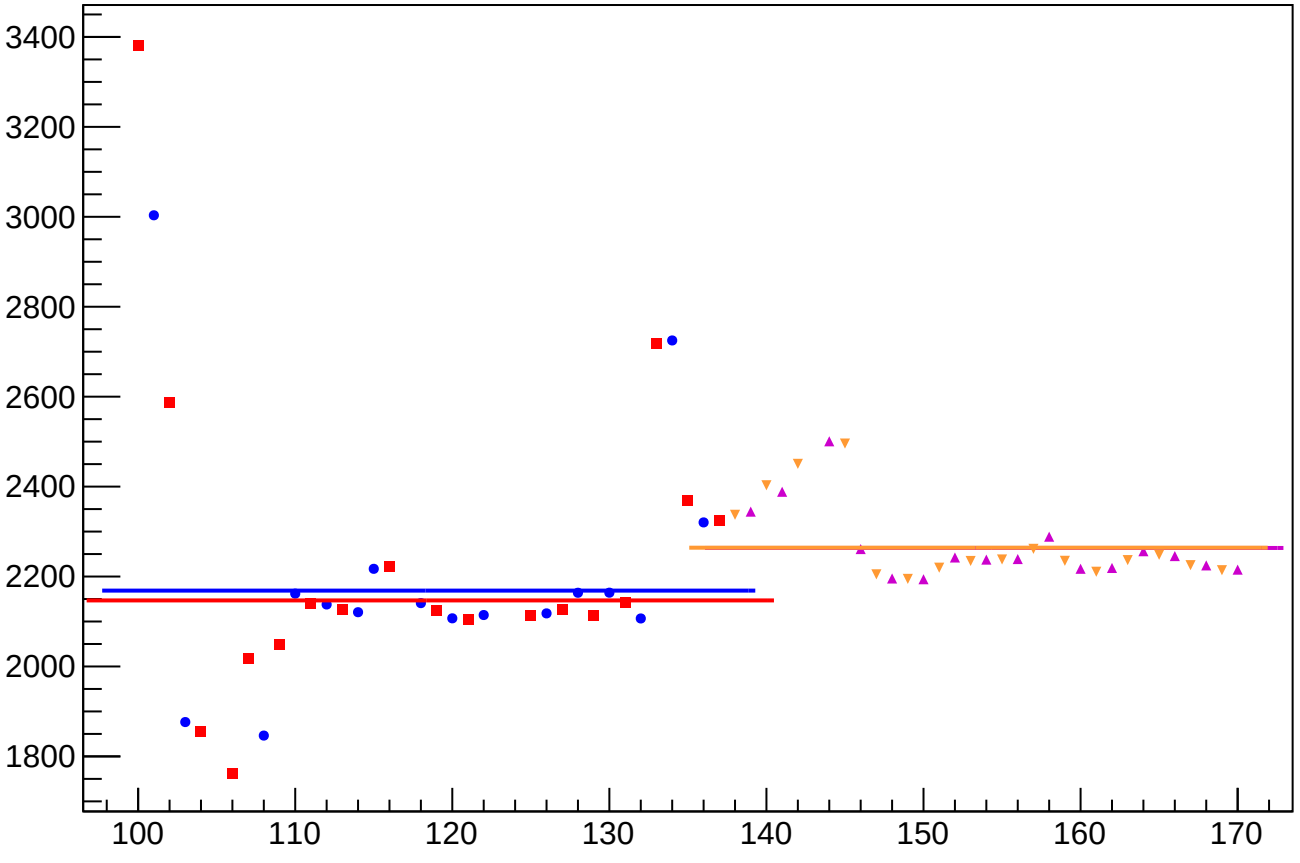
Left In: -5125.219+/-622.899 $\chi^2$/NDF:11.4/15

+ sign 3327.316+/-501.567 $\chi^2$/NDF: 43.3/31

All: -748.840+/-351.795 $\chi^2$/NDF: 198.9/65

- sign -4695.820+/-493.556 $\chi^2$/NDF: 25.6/33

# eigen_cor_asym_us_avg_at2lr_avg_avg_rms vs Slug




Right In: 2168.715+/-0.575 $\chi^2$/NDF: 195659.8/15

Left Out: 2264.140+/-0.451 $\chi^2$/NDF:33201.1/15

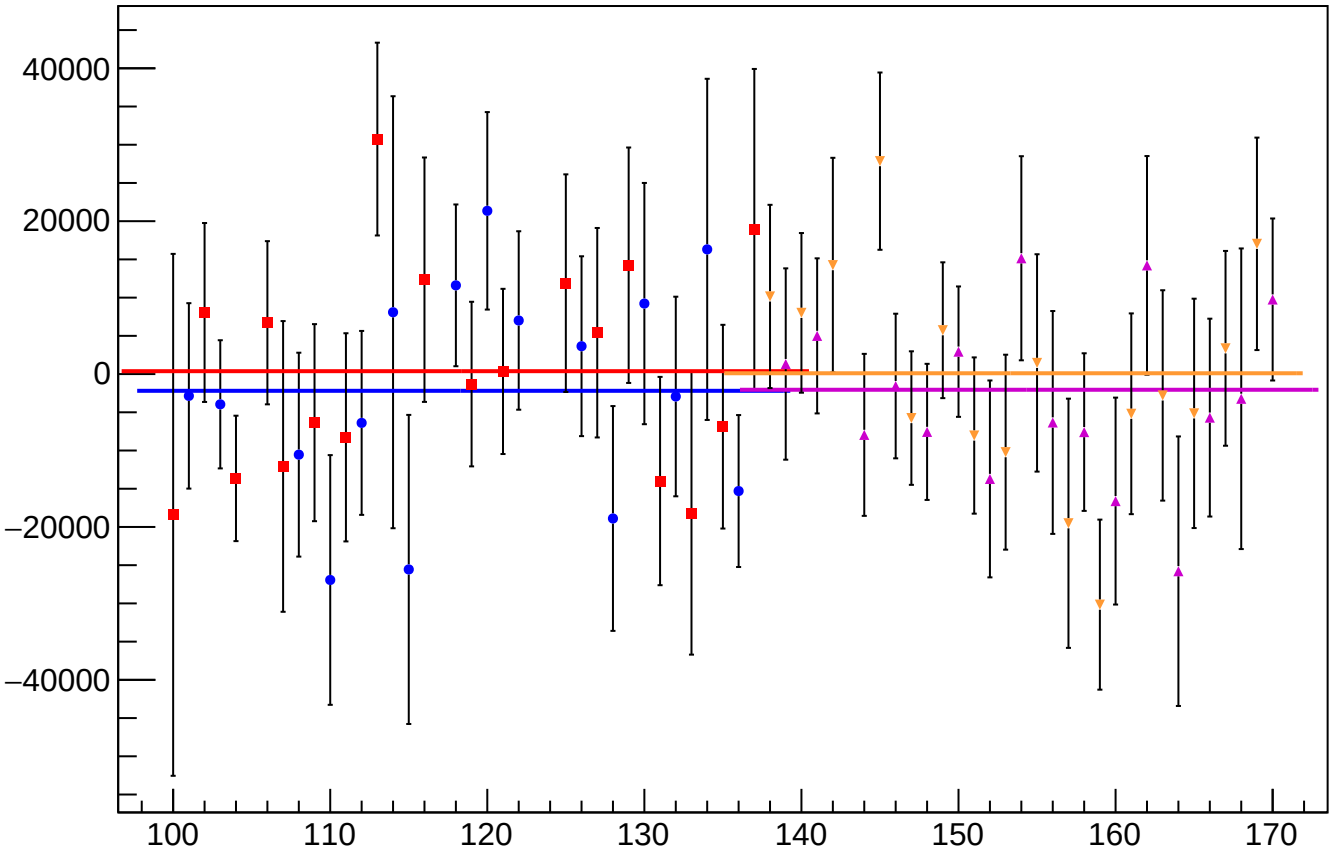
Right Out: 2146.888+/-0.569 $\chi^2$/NDF: 157750.7/17

Left In: 2263.538+/-0.440 $\chi^2$/NDF:30020.6/15

\+ sign 2227.779+/-0.355 $\chi^2$/NDF: 245934.6/31

All: 2223.744+/-0.249 $\chi^2$/NDF: 460227.9/65

\- sign 2219.852+/-0.348 $\chi^2$/NDF: 214039.0/33




Right In: -2189.256+/-3208.524 $\chi^2$/NDF: 14.5/15

Left Out: 106.973+/-2964.389 $\chi^2$/NDF:20.9/15

Right Out: 379.236+/-3099.953 $\chi^2$/NDF: 16.3/17

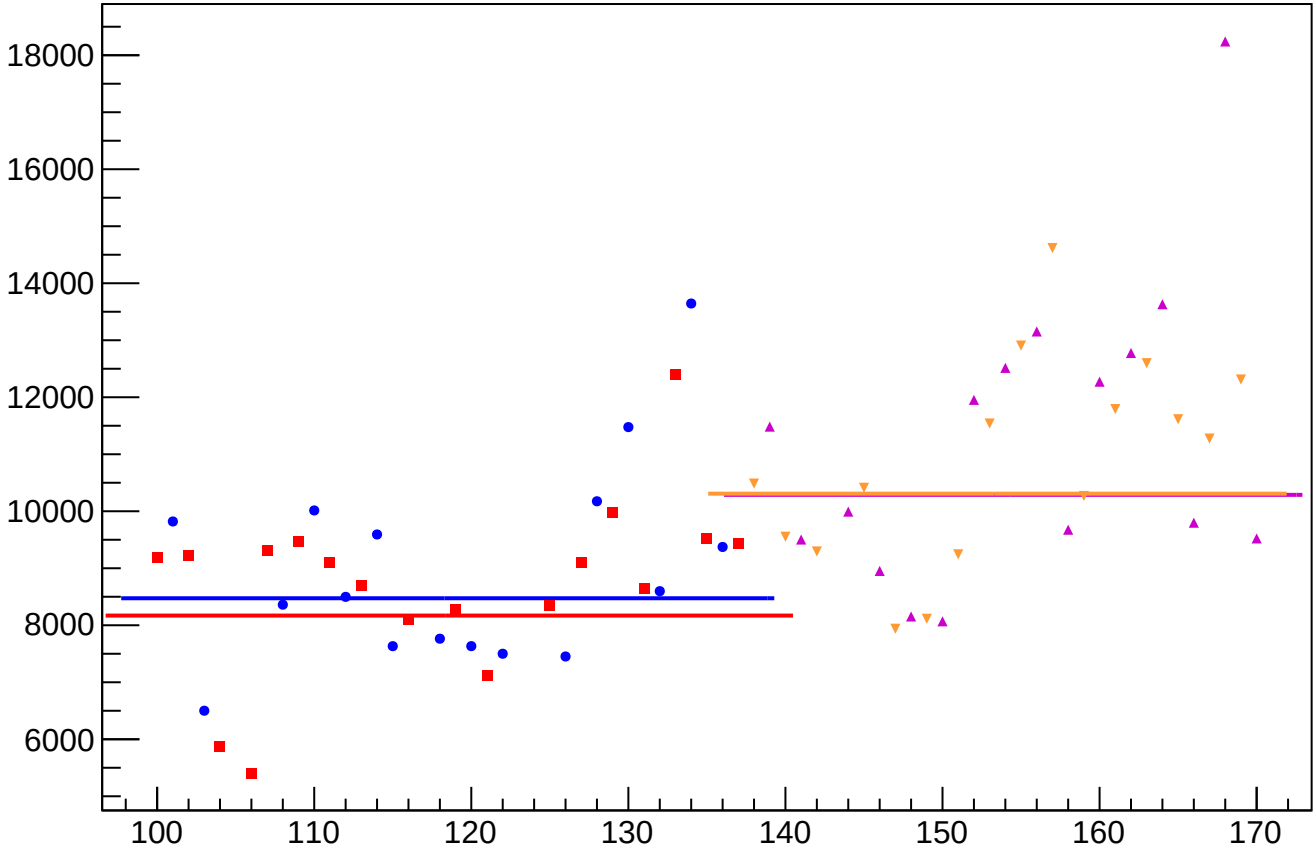
Left In: -2052.652+/-2894.764 $\chi^2$/NDF:10.0/15

+ sign -950.469+/-2177.338 $\chi^2$/NDF: 35.6/31

All: -934.720+/-1517.360 $\chi^2$/NDF: 62.3/65

- sign -919.850+/-2115.731 $\chi^2$/NDF: 26.7/33

asym_us_avg_at2lr_avg_avg_eigen_cor_correction_rms vs Slug




Right In: 8473.743+/-2.269 $\chi^2$/NDF: 429547.3/15

Left Out: 10308.633+/-2.096 $\chi^2$/NDF:686720.5/15

Right Out: 8170.027+/-2.192 $\chi^2$/NDF: 539925.8/17

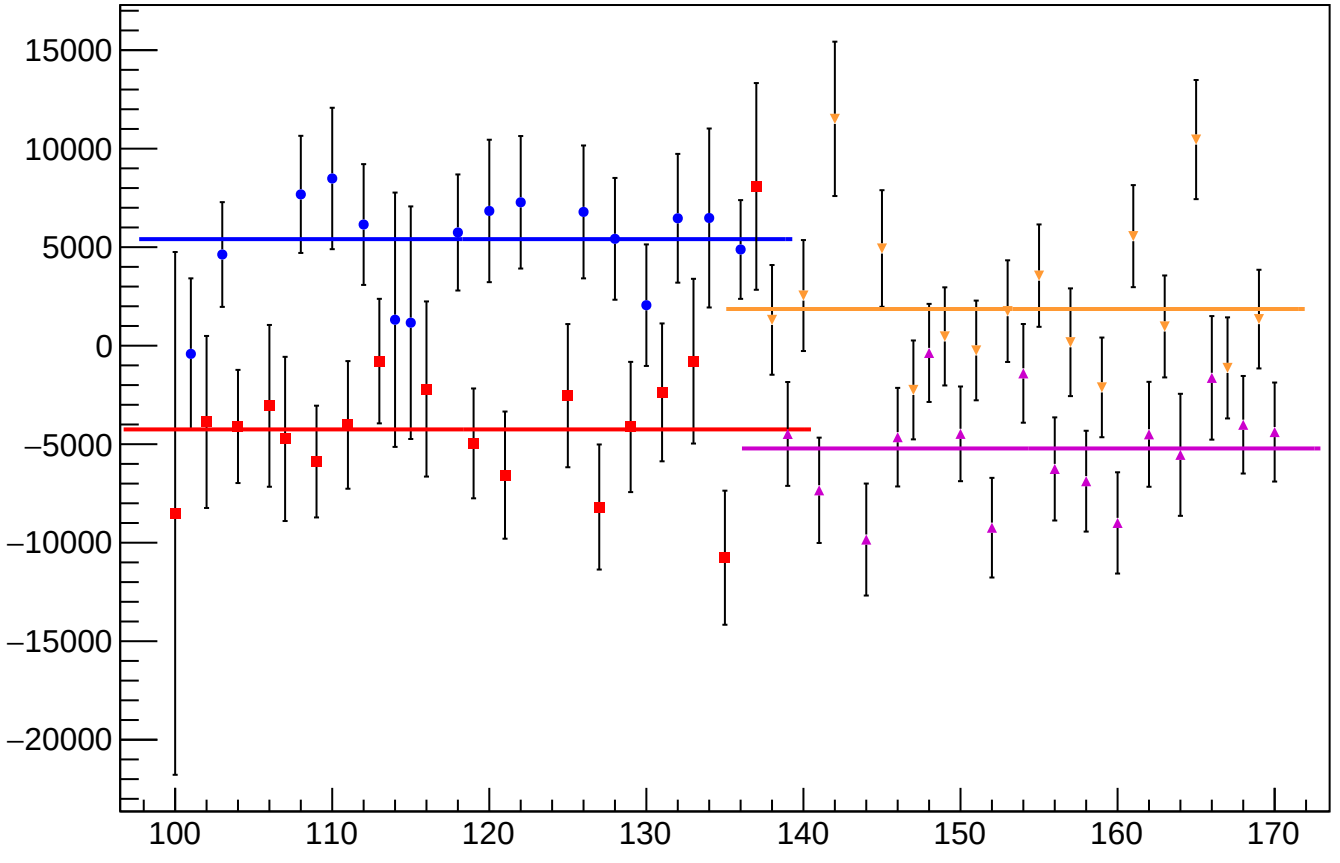
Left In: 10287.600+/-2.047 $\chi^2$/NDF:1011346.0/15

+ sign 9463.643+/-1.540 $\chi^2$/NDF: 1469142.8/31

All: 9380.096+/-1.073 $\chi^2$/NDF: 3524668.9/65

- sign 9301.209+/-1.496 $\chi^2$/NDF: 2049800.9/33

# dit_asym_us_avg_at2lr_avg_avg_mean vs Slug




Right In: 5407.867+/-833.689 $\chi^2$/NDF: 6.7/15

Left Out: 1861.676+/-671.427 $\chi^2$/NDF:25.9/15

Right Out: -4249.899+/-839.336 $\chi^2$/NDF: 14.5/17

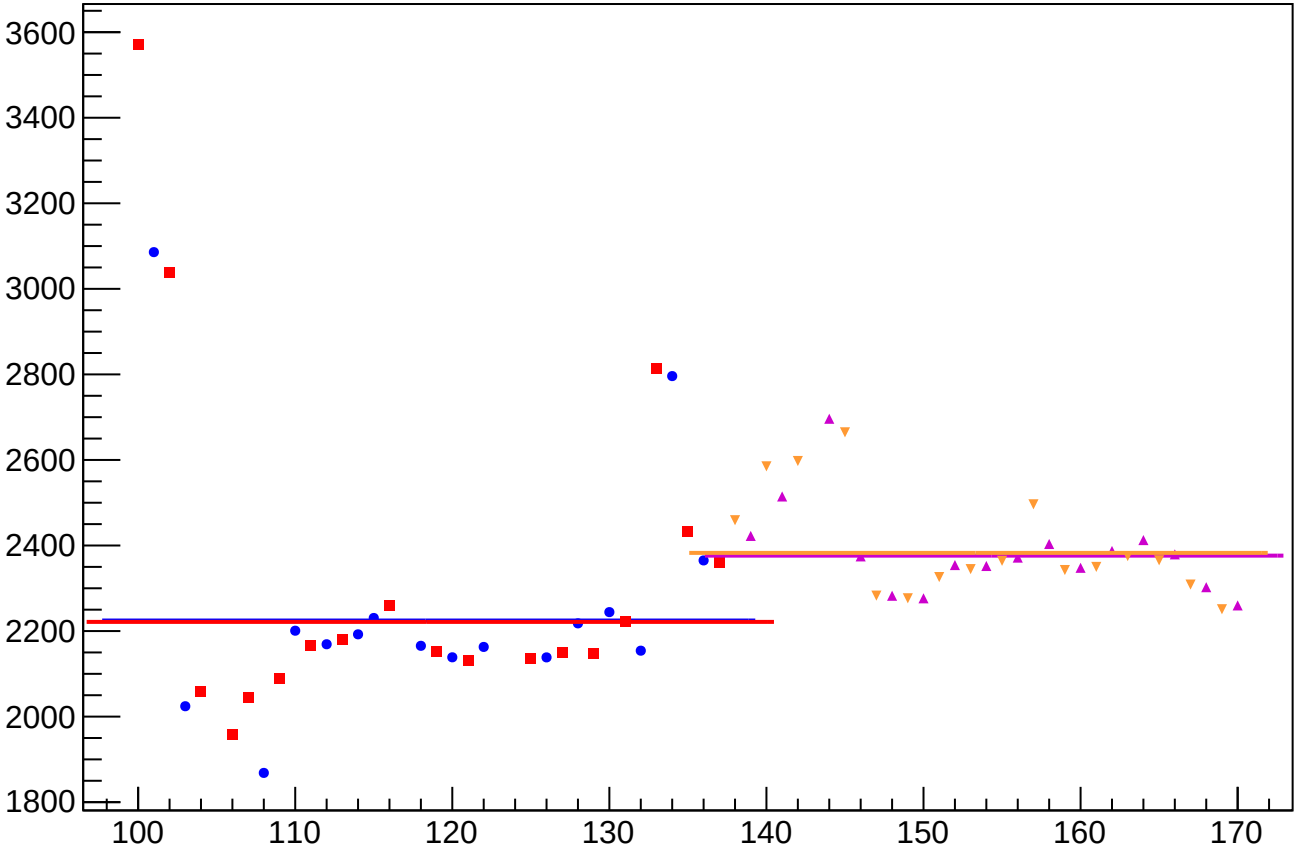
Left In: -5216.510+/-654.247 $\chi^2$/NDF:16.6/15

+ sign 3256.861+/-522.924 $\chi^2$/NDF: 43.6/31

All: -851.158+/-367.292 $\chi^2$/NDF: 197.3/65

- sign -4851.178+/-516.005 $\chi^2$/NDF: 31.9/33

# dit_asym_us_avg_at2lr_avg_avg_rms vs Slug




Right In: 2224.614+/-0.590 $\chi^2$/NDF: 184679.8/15

Left Out: 2382.753+/-0.475 $\chi^2$/NDF:55868.9/15

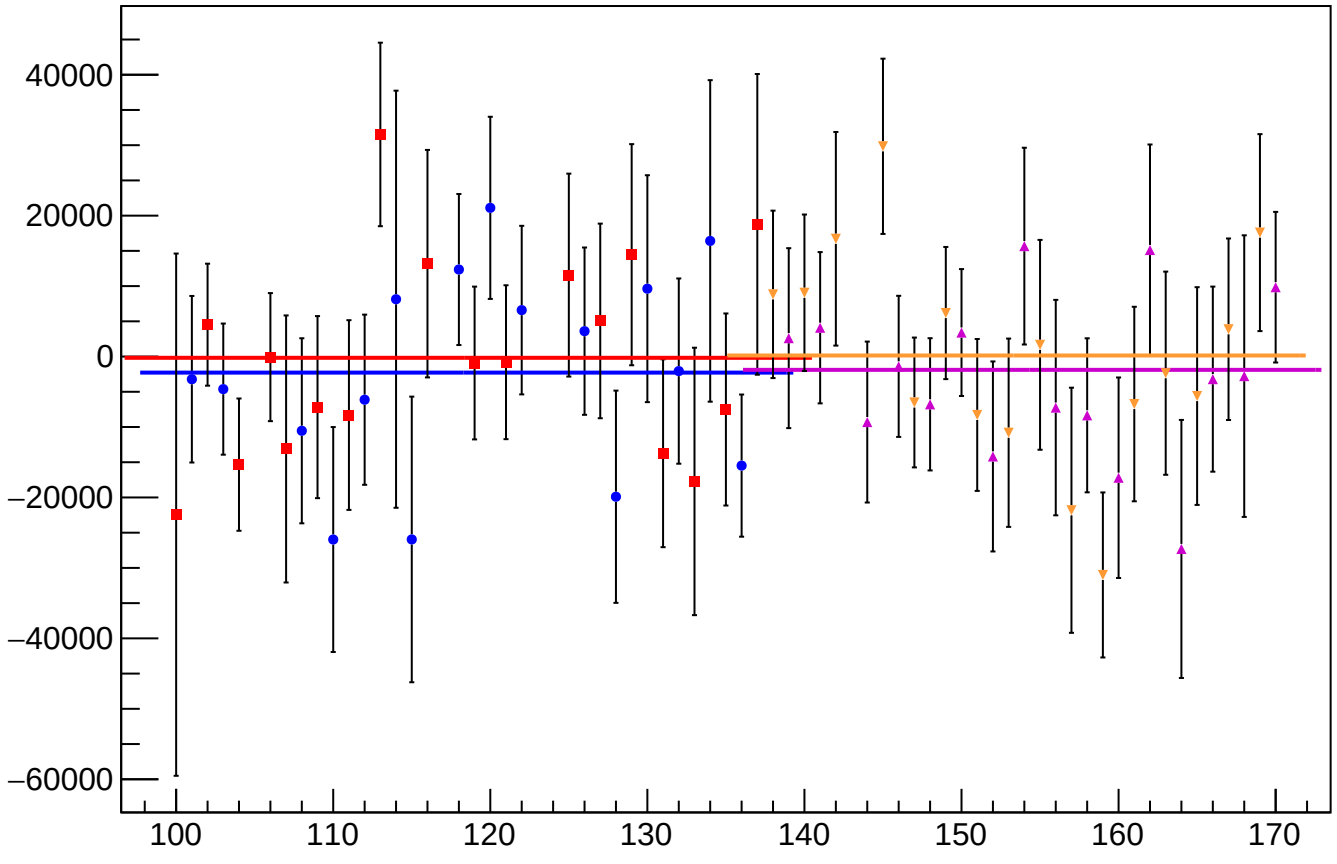
Right Out: 2221.425+/-0.593 $\chi^2$/NDF: 169944.3/17

Left In: 2376.325+/-0.463 $\chi^2$/NDF:44802.0/15

+ sign 2320.536+/-0.370 $\chi^2$/NDF: 284198.5/31

All: 2319.117+/-0.260 $\chi^2$/NDF: 541378.7/65

- sign 2317.735+/-0.365 $\chi^2$/NDF: 257151.1/33




Right In: -2278.440+/-3271.750 $\chi^2$/NDF: 14.5/15

Left Out: 150.720+/-3103.201 $\chi^2$/NDF:21.0/15

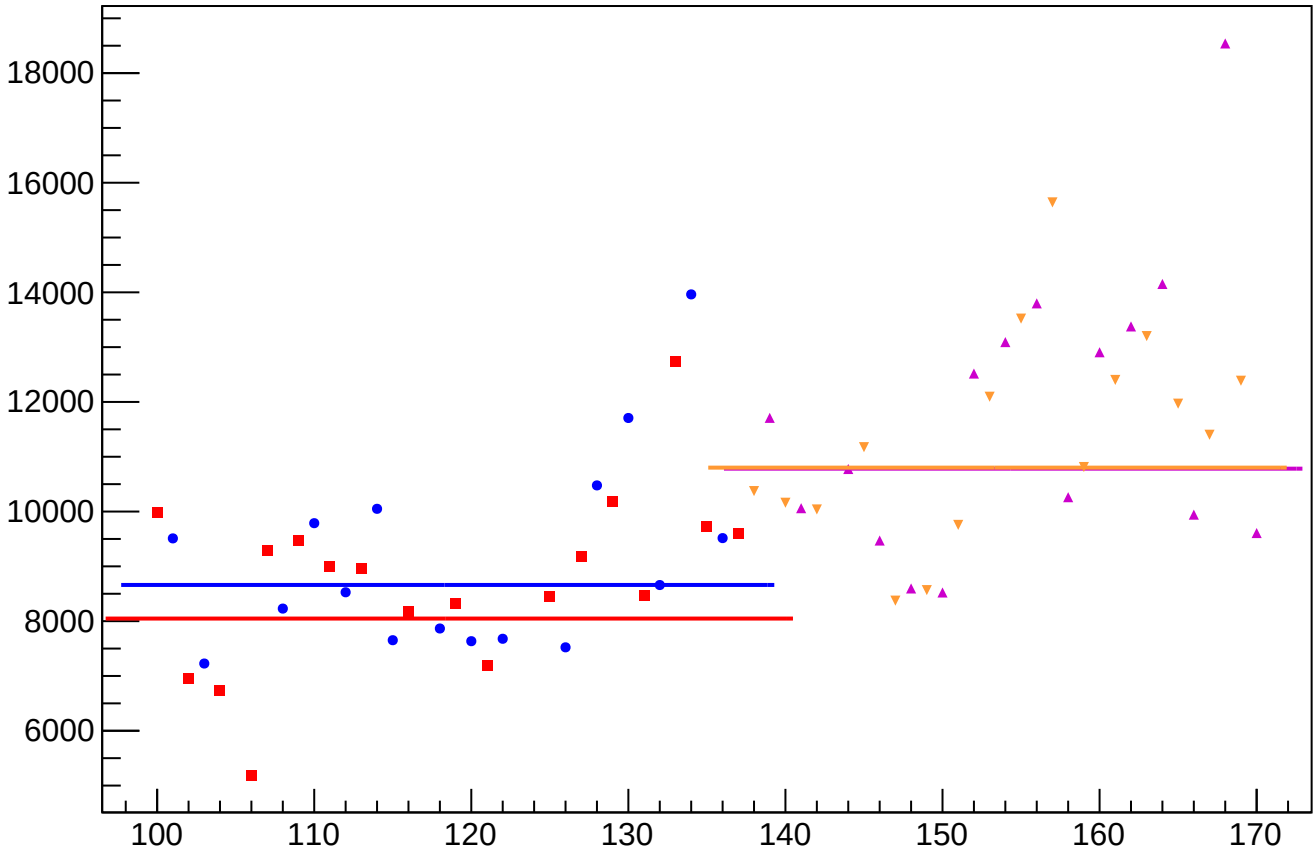
Right Out: -177.024+/-3035.355 $\chi^2$/NDF: 15.6/17

Left In: -1886.437+/-3031.419 $\chi^2$/NDF:10.0/15

+ sign -999.680+/-2251.523 $\chi^2$/NDF: 35.8/31

All: -1017.063+/-1553.010 $\chi^2$/NDF: 61.6/65

- sign -1032.839+/-2144.927 $\chi^2$/NDF: 25.8/33




Right In: 8660.733+/-2.313 $\chi^2$/NDF: 357961.9/15

Left Out: 10801.428+/-2.194 $\chi^2$/NDF:651242.6/15

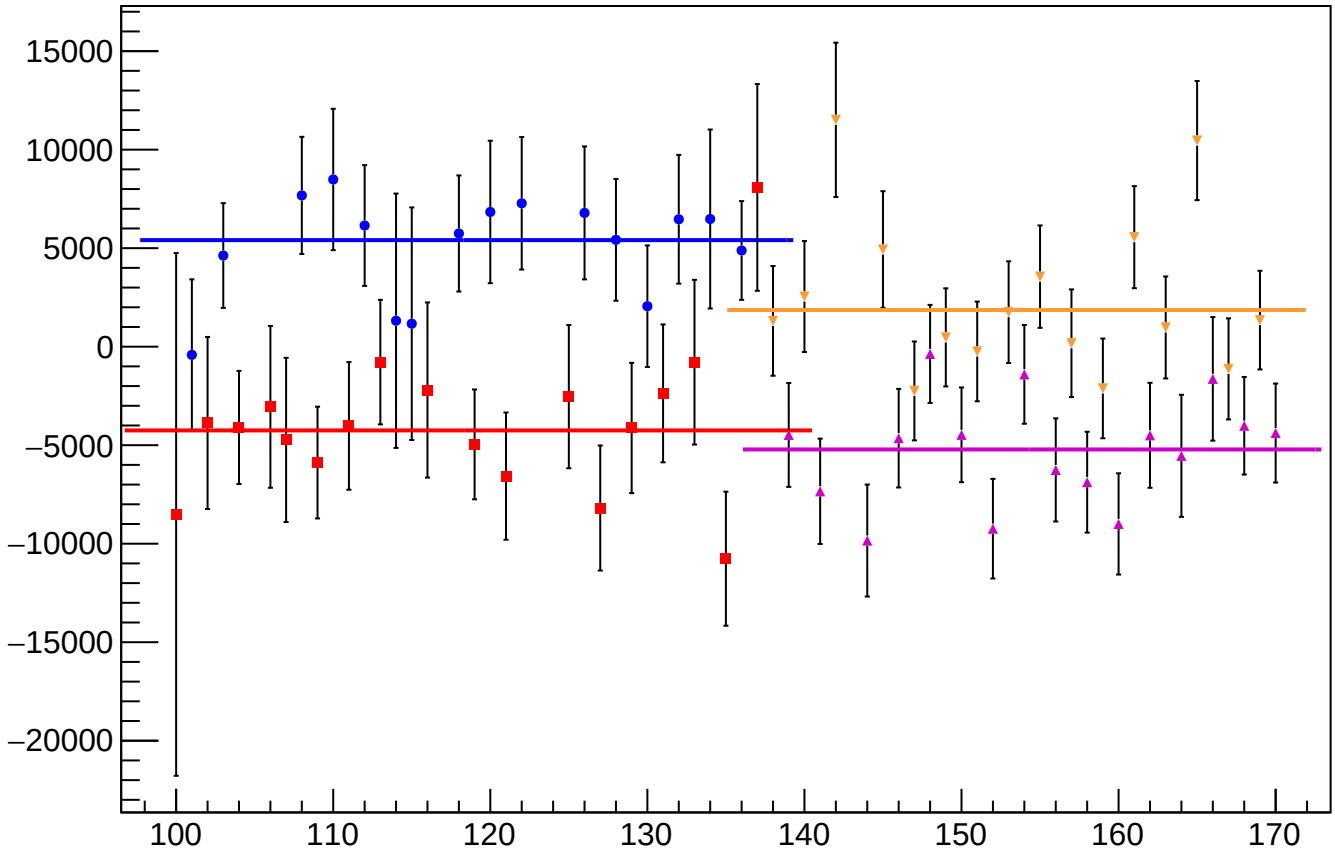
Right Out: 8047.460+/-2.146 $\chi^2$/NDF: 558559.6/17

Left In: 10782.537+/-2.144 $\chi^2$/NDF:964437.0/15

+ sign 9787.639+/-1.592 $\chi^2$/NDF: 1459930.4/31

All: 9593.219+/-1.098 $\chi^2$/NDF: 3824360.1/65

- sign 9416.773+/-1.517 $\chi^2$/NDF: 2335982.8/33




Right In: 5407.869+/-833.688 $\chi^2$/NDF: 6.7/15

Left Out: 1861.658+/-671.428 $\chi^2$/NDF:25.9/15

Right Out: -4249.903+/-839.335 $\chi^2$/NDF: 14.5/17

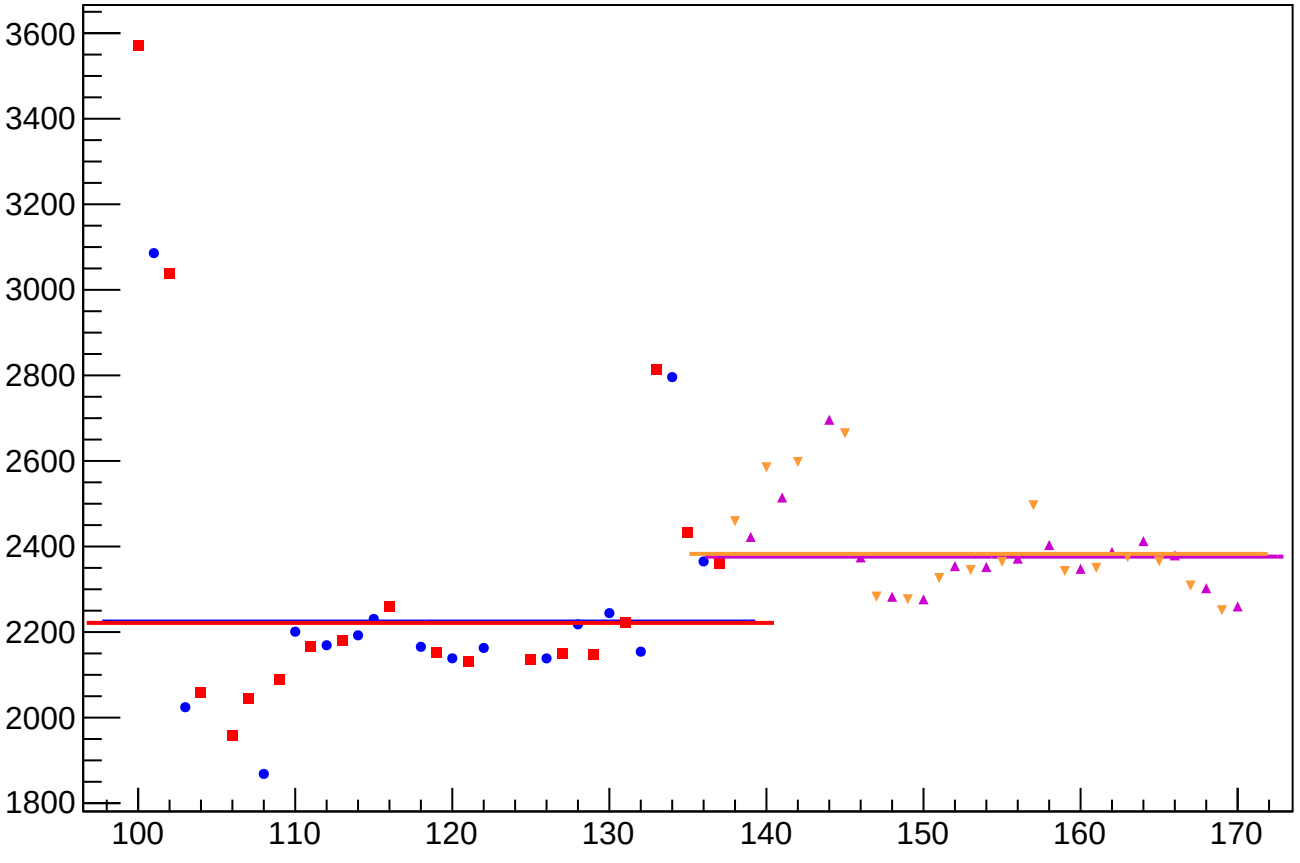
Left In: -5216.514+/-654.248 $\chi^2$/NDF:16.6/15

+ sign 3256.853+/-522.925 $\chi^2$/NDF: 43.6/31

All: -851.163+/-367.293 $\chi^2$/NDF: 197.3/65

- sign -4851.181+/-516.005 $\chi^2$/NDF: 31.9/33

# eigen_dit_asym_us_avg_at2lr_avg_avg_rms vs Slug




Right In: 2224.613+/-0.590 $\chi^2$/NDF: 184680.1/15

Left Out: 2382.757+/-0.475 $\chi^2$/NDF:55869.9/15

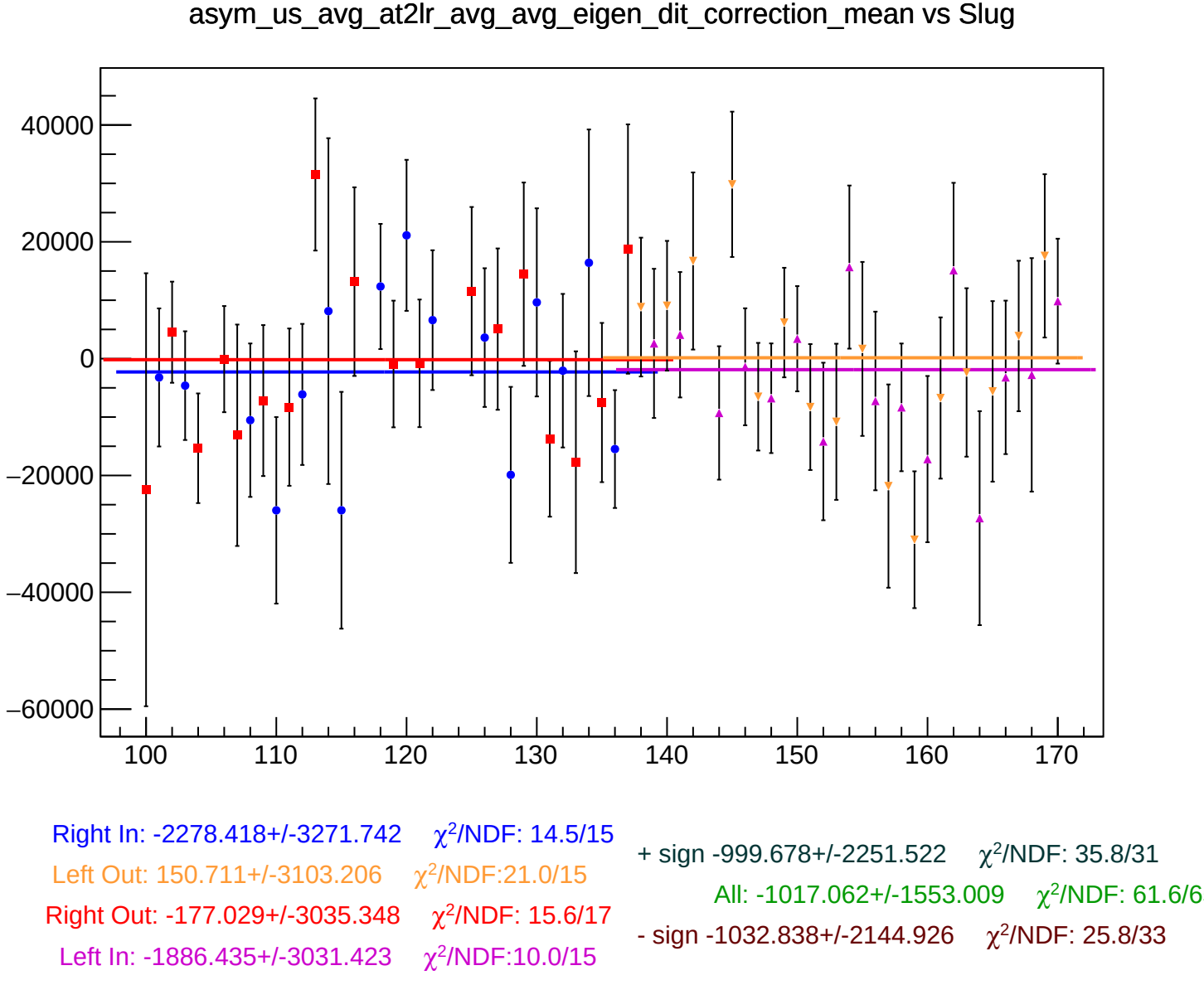
Right Out: 2221.425+/-0.593 $\chi^2$/NDF: 169944.3/17

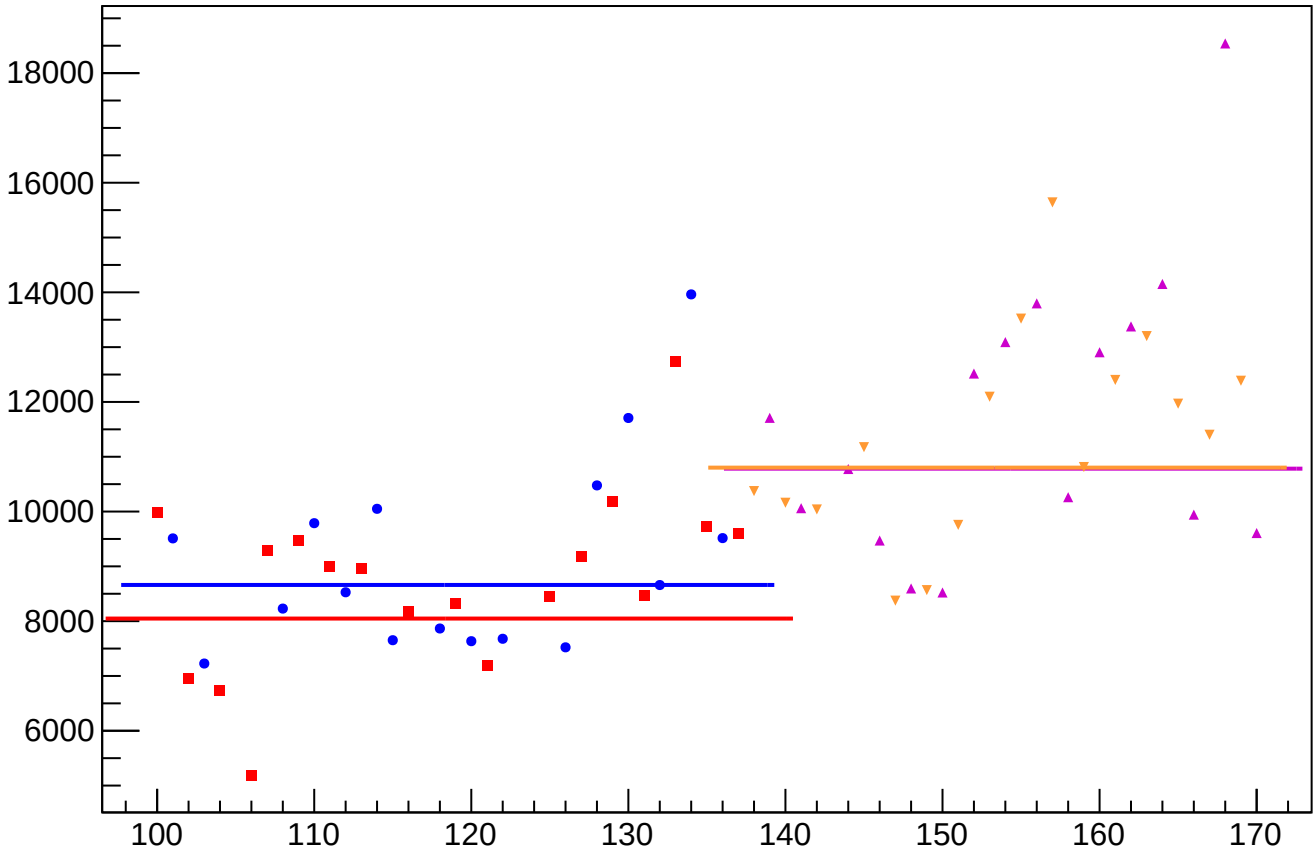
Left In: 2376.328+/-0.463 $\chi^2$/NDF:44802.5/15

+ sign 2320.538+/-0.370 $\chi^2$/NDF: 284201.9/31

All: 2319.118+/-0.260 $\chi^2$/NDF: 541384.9/65

- sign 2317.737+/-0.365 $\chi^2$/NDF: 257153.9/33


asym_us_avg_at2lr_avg_avg_eigen_dit_correction_mean vs Slug
40000
20000
0
−20000
−40000
−60000
100
110
120
130
140
150
160
170
Right In: -2278.418+/-3271.742 χ²/NDF: 14.5/15
Left Out: 150.711+/-3103.206 χ²/NDF:21.0/15
Right Out: -177.029+/-3035.348 χ²/NDF: 15.6/17
Left In: -1886.435+/-3031.423 χ²/NDF:10.0/15
+ sign -999.678+/-2251.522 χ²/NDF: 35.8/31
All: -1017.062+/-1553.009 χ²/NDF: 61.6/65
- sign -1032.838+/-2144.926 χ²/NDF: 25.8/33




Right In: 8660.711+/-2.313 $\chi^2$/NDF: 357964.1/15

Left Out: 10801.443+/-2.194 $\chi^2$/NDF:651244.4/15

Right Out: 8047.442+/-2.146 $\chi^2$/NDF: 558557.8/17

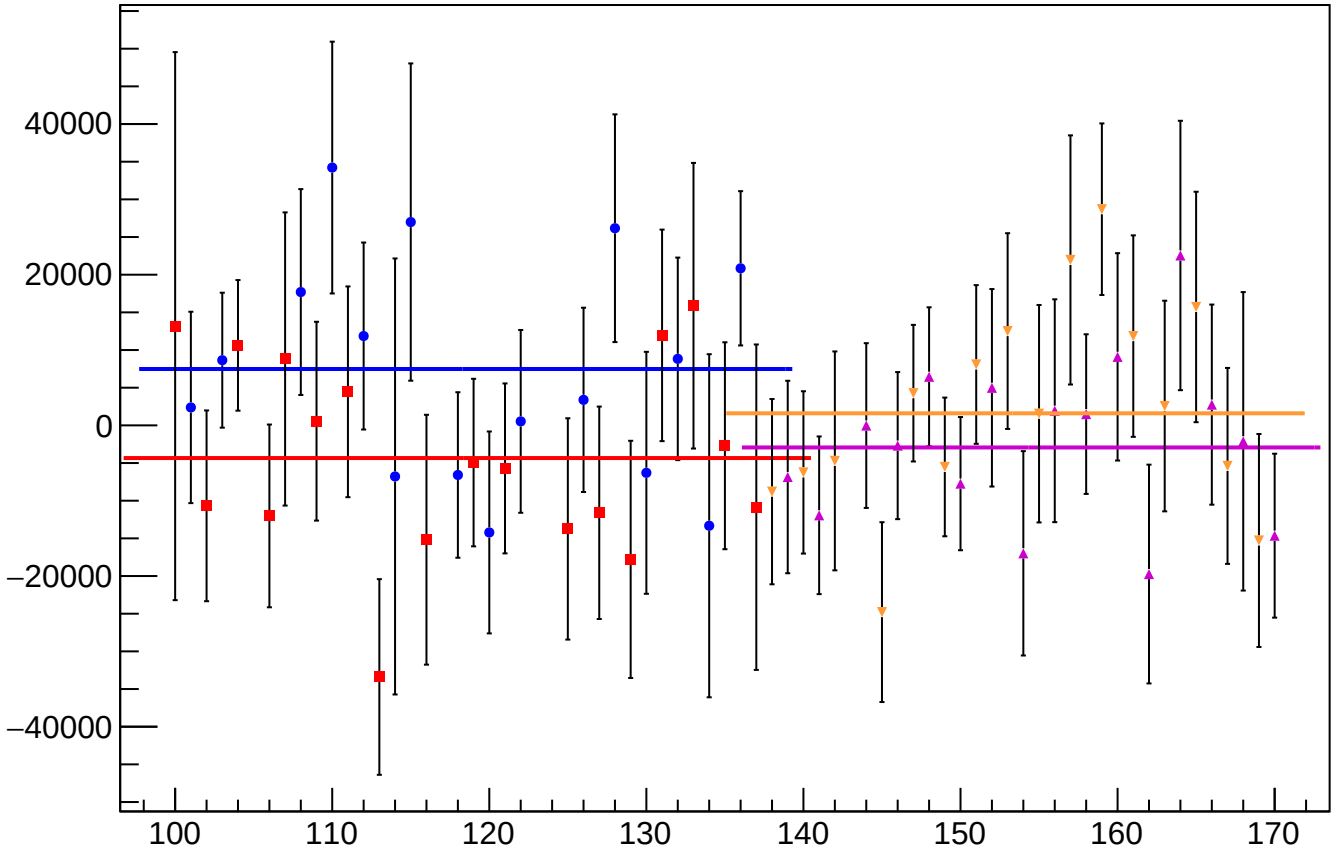
Left In: 10782.552+/-2.144 $\chi^2$/NDF:964439.1/15

+ sign 9787.633+/-1.592 $\chi^2$/NDF: 1459950.4/31

All: 9593.213+/-1.098 $\chi^2$/NDF: 3824400.9/65

- sign 9416.766+/-1.517 $\chi^2$/NDF: 2336003.4/33

# asym_us_avg_at2lr_avg_avg_mean vs Slug




Right In: 7481.770+/-3330.915 $\chi^2$/NDF: 14.0/15

Left Out: 1600.441+/-3043.513 $\chi^2$/NDF:18.4/15

Right Out: -4338.165+/-3242.620 $\chi^2$/NDF: 14.3/17

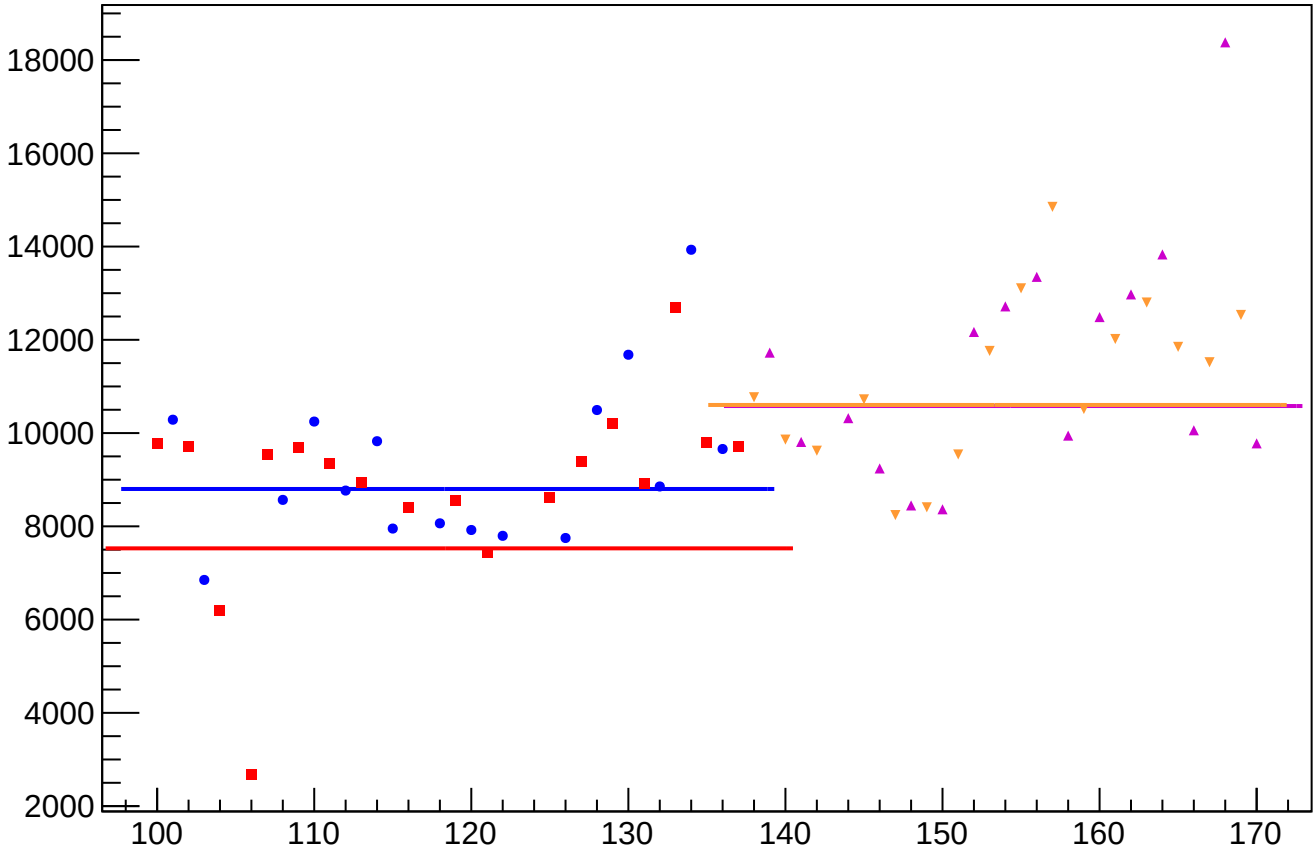
Left In: -2933.377+/-2971.920 $\chi^2$/NDF:9.4/15

+ sign 4276.473+/-2246.837 $\chi^2$/NDF: 34.2/31

All: 251.987+/-1568.612 $\chi^2$/NDF: 64.3/65

- sign -3574.695+/-2190.925 $\chi^2$/NDF: 23.8/33

# asym_us_avg_at2lr_avg_avg_rms vs Slug




Right In: 8801.075+/-2.355 $\chi^2$/NDF: 394575.1/15

Left Out: 10602.828+/-2.152 $\chi^2$/NDF:629271.8/15

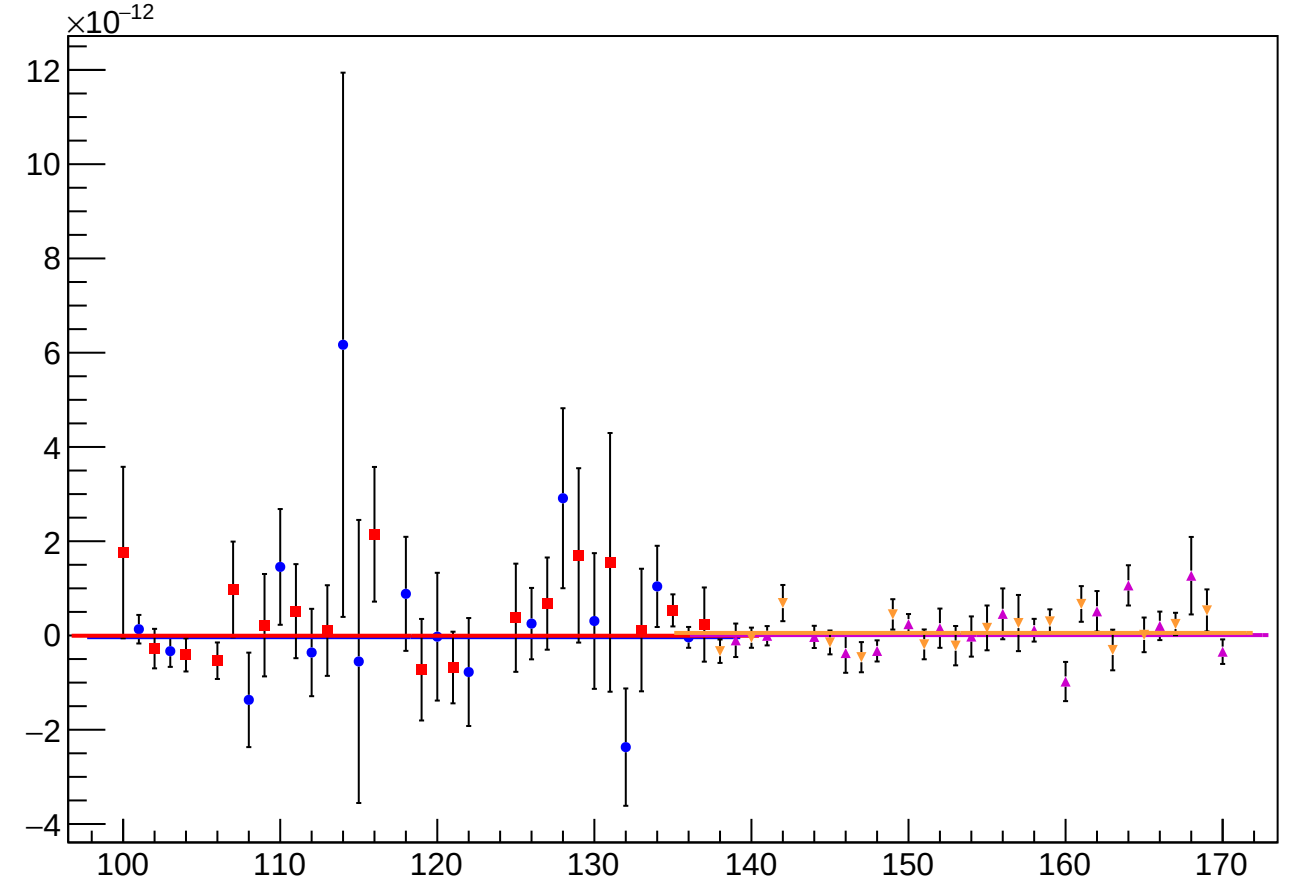
Right Out: 7527.803+/-2.128 $\chi^2$/NDF: 1657299.8/17

Left In: 10580.145+/-2.101 $\chi^2$/NDF:937161.3/15

+ sign 9783.011+/-1.589 $\chi^2$/NDF: 1342774.4/31

All: 9406.716+/-1.089 $\chi^2$/NDF: 5084488.8/65

- sign 9073.355+/-1.495 $\chi^2$/NDF: 3635918.7/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:17.3/15

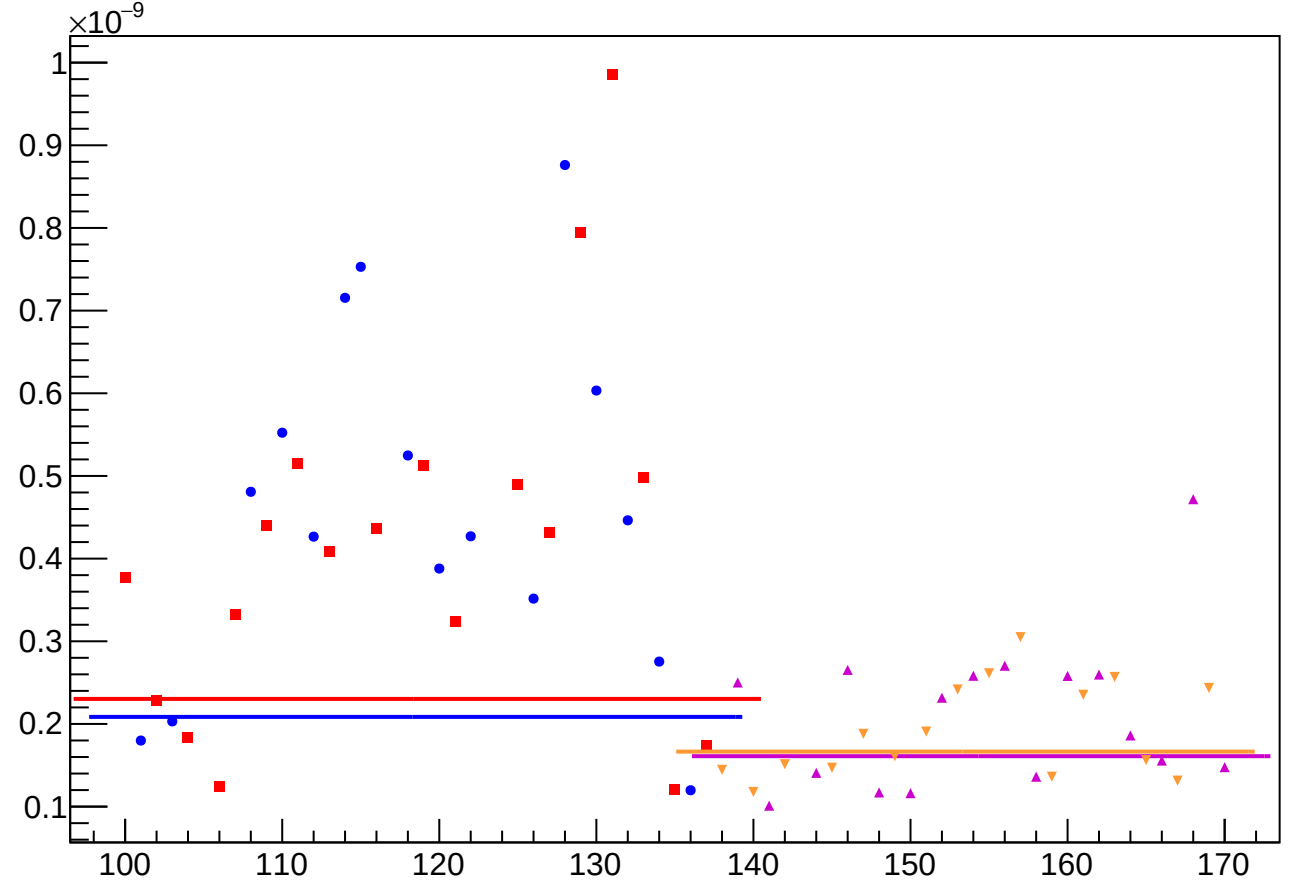
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 13.7/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:23.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 31.9/31

All: 0.000+/-0.000 $\chi^2$/NDF: 68.8/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 36.8/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1632322.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:695176.5/15

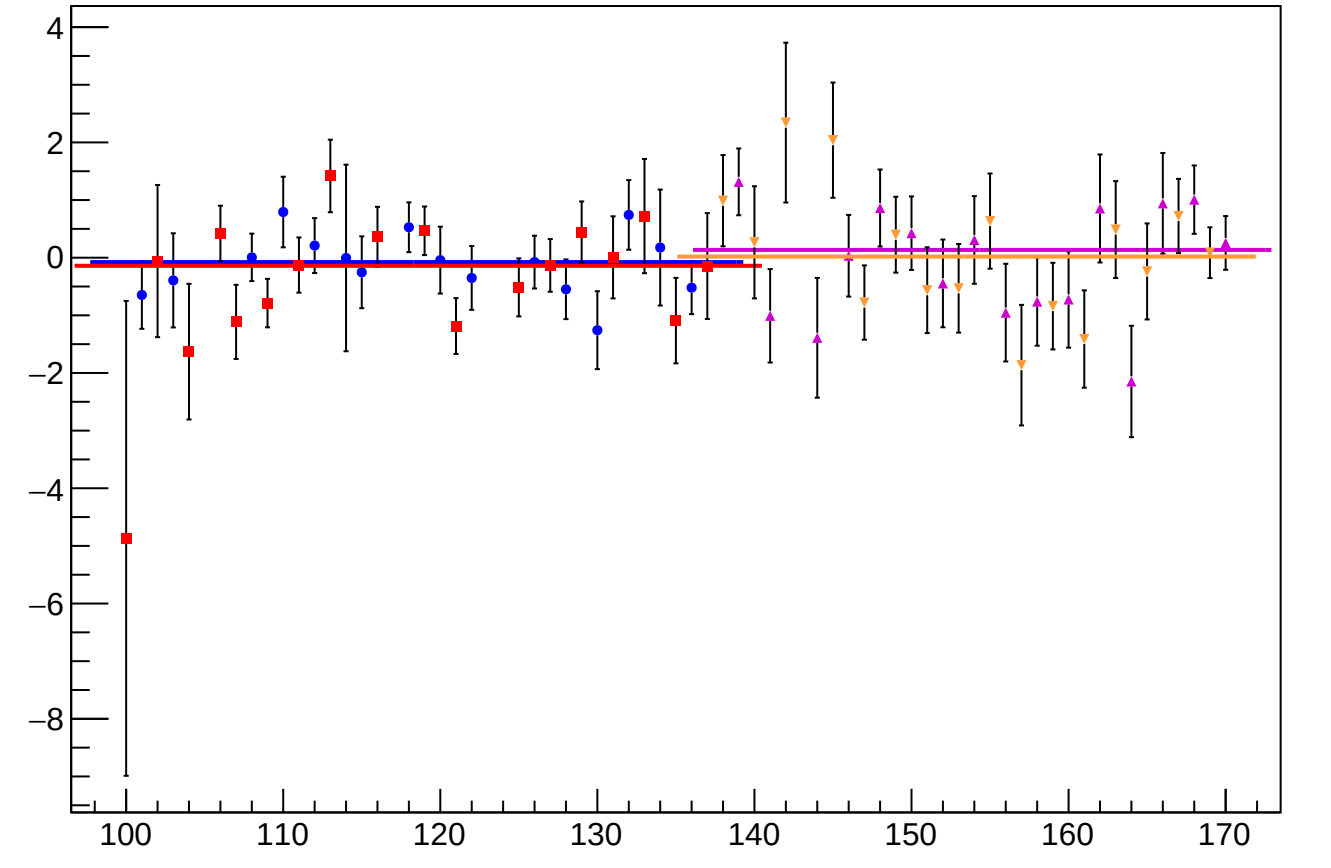
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1561654.8/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1376835.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2461434.8/31

All: 0.000+/-0.000 $\chi^2$/NDF: 5718010.6/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 3255507.7/33




Right In: -0.076+/-0.140 $\chi^2$/NDF: 12.5/15

Left Out: 0.019+/-0.188 $\chi^2$/NDF:21.0/15

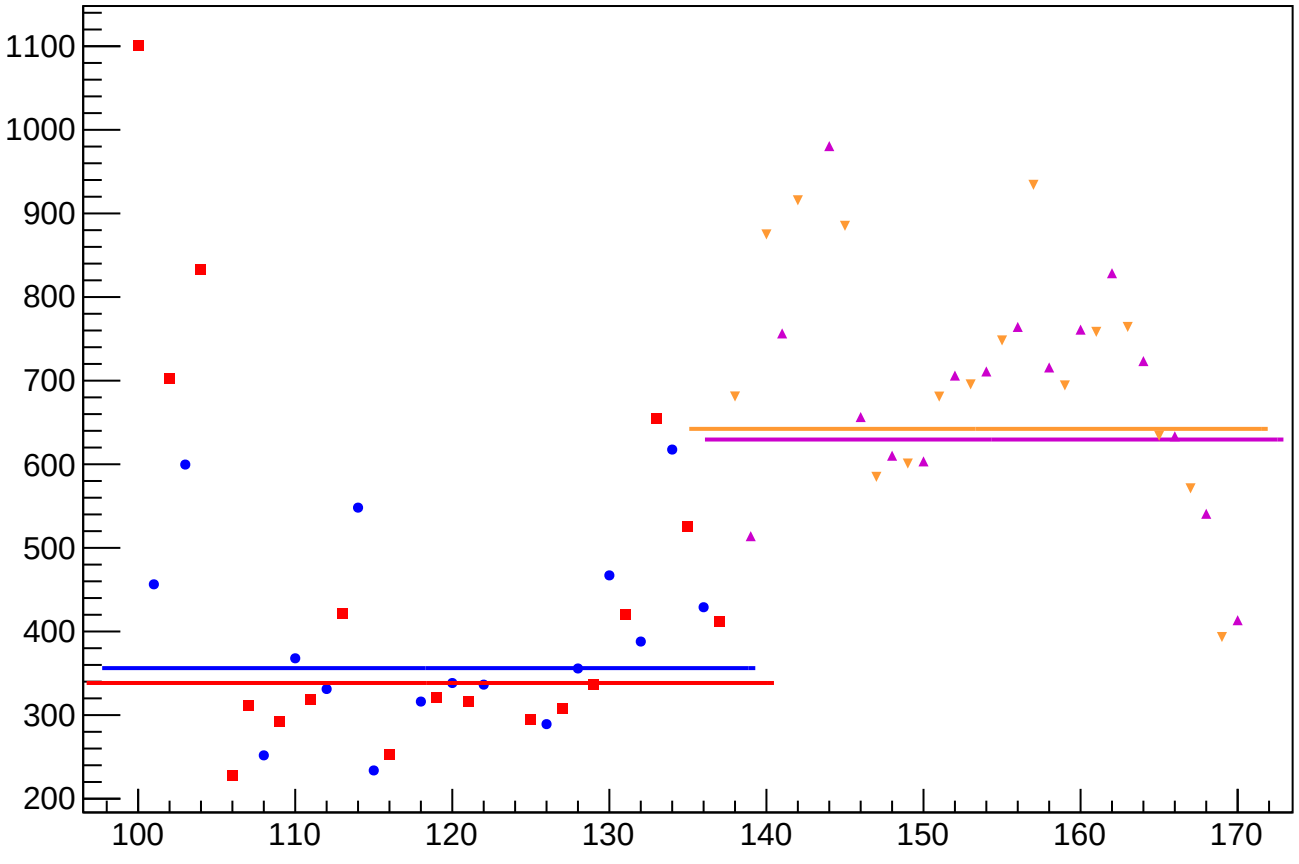
Right Out: -0.140+/-0.138 $\chi^2$/NDF: 27.0/17

Left In: 0.135+/-0.179 $\chi^2$/NDF:23.7/15

+ sign -0.042+/-0.112 $\chi^2$/NDF: 33.7/31

All: -0.040+/-0.078 $\chi^2$/NDF: 85.9/65

- sign -0.038+/-0.109 $\chi^2$/NDF: 52.1/33




Right In: 356.190+/-0.099 $\chi^2$/NDF: 785107.3/15

Left Out: 642.343+/-0.133 $\chi^2$/NDF:1295913.8/15

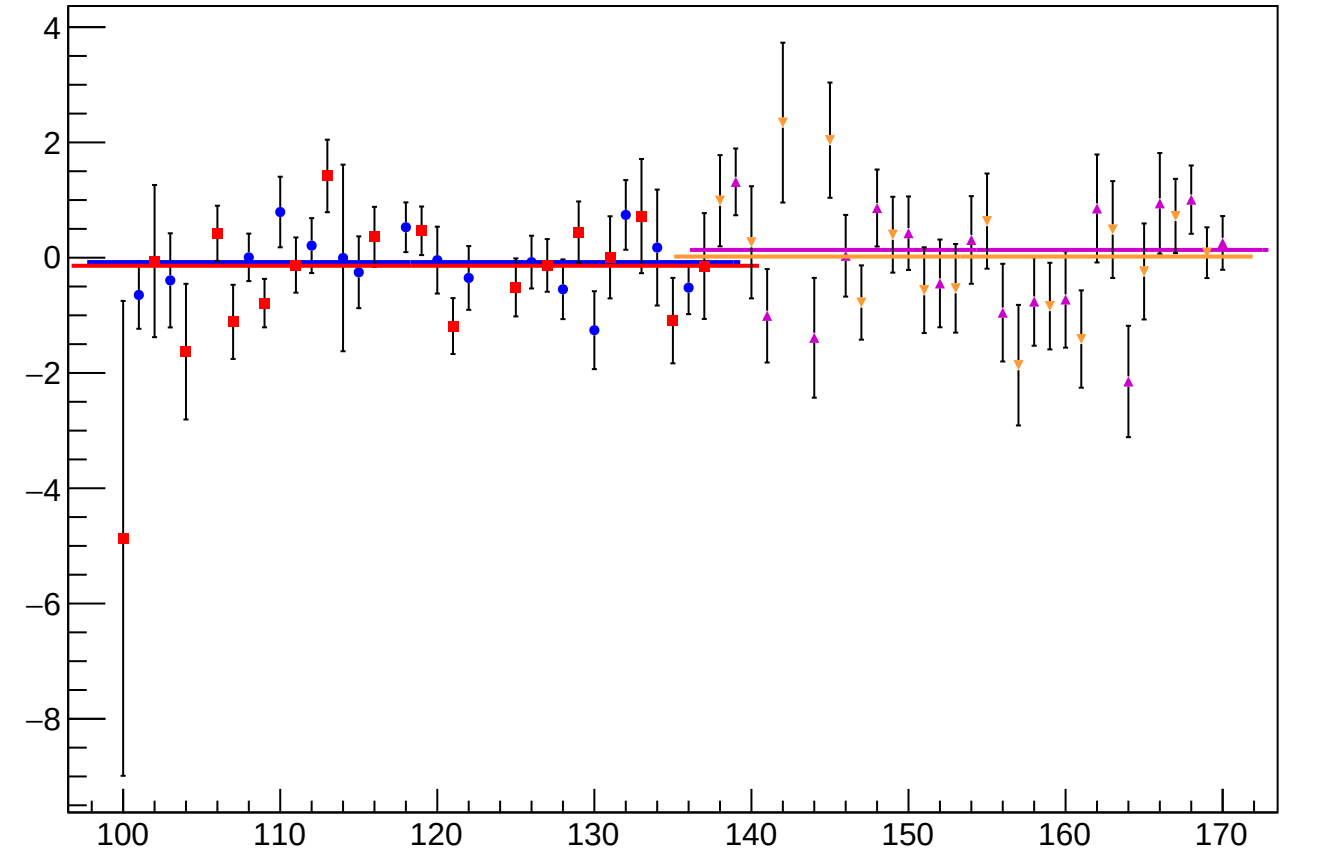
Right Out: 338.410+/-0.098 $\chi^2$/NDF: 1203282.0/17

Left In: 629.592+/-0.127 $\chi^2$/NDF:1117129.3/15

+ sign 458.356+/-0.079 $\chi^2$/NDF: 5068424.1/31

All: 452.346+/-0.055 $\chi^2$/NDF: 10710890.0/65

- sign 446.635+/-0.077 $\chi^2$/NDF: 5631272.1/33




Right In: -0.076+/-0.140 $\chi^2$/NDF: 12.5/15

Left Out: 0.019+/-0.188 $\chi^2$/NDF:21.0/15

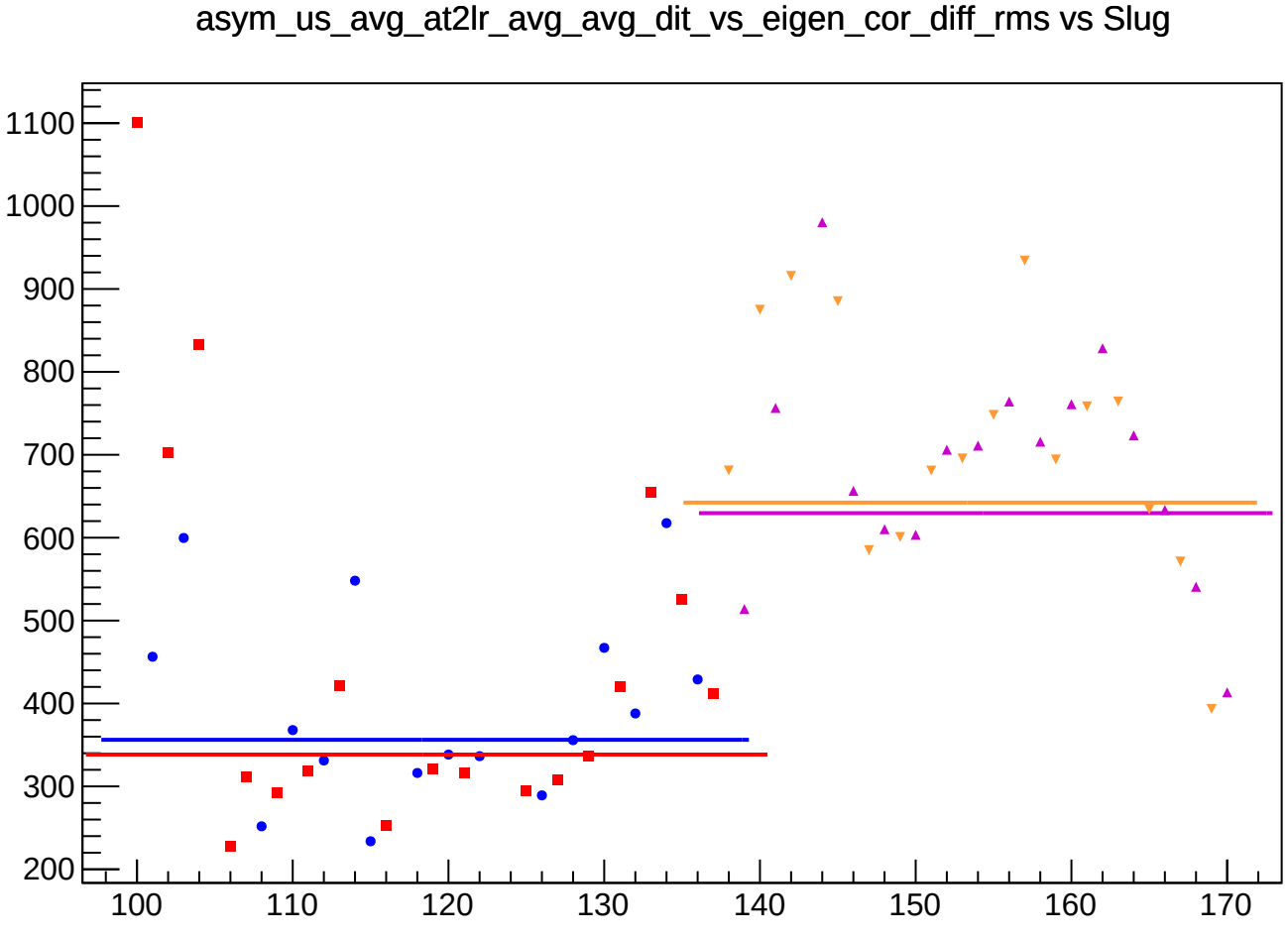
Right Out: -0.140+/-0.138 $\chi^2$/NDF: 27.0/17

Left In: 0.135+/-0.179 $\chi^2$/NDF:23.7/15

+ sign -0.042+/-0.112 $\chi^2$/NDF: 33.7/31

All: -0.040+/-0.078 $\chi^2$/NDF: 85.9/65

- sign -0.038+/-0.109 $\chi^2$/NDF: 52.1/33




Right In: 356.190+/-0.099 $\chi^2$/NDF: 785107.3/15

Left Out: 642.343+/-0.133 $\chi^2$/NDF:1295913.8/15

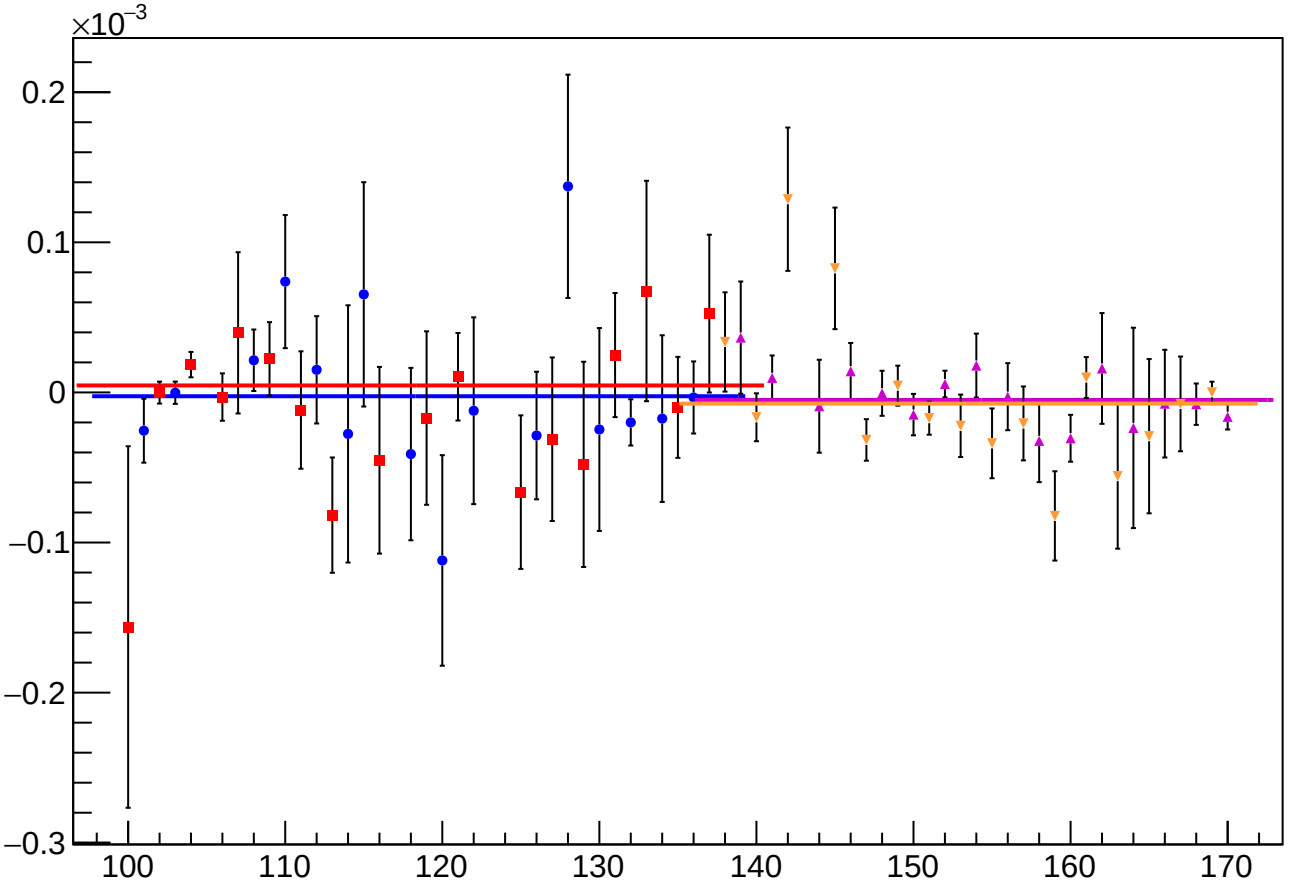
Right Out: 338.410+/-0.098 $\chi^2$/NDF: 1203282.0/17

Left In: 629.592+/-0.127 $\chi^2$/NDF:1117129.3/15

+ sign 458.356+/-0.079 $\chi^2$/NDF: 5068424.1/31

All: 452.346+/-0.055 $\chi^2$/NDF: 10710890.0/65

- sign 446.635+/-0.077 $\chi^2$/NDF: 5631272.1/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:31.9/15

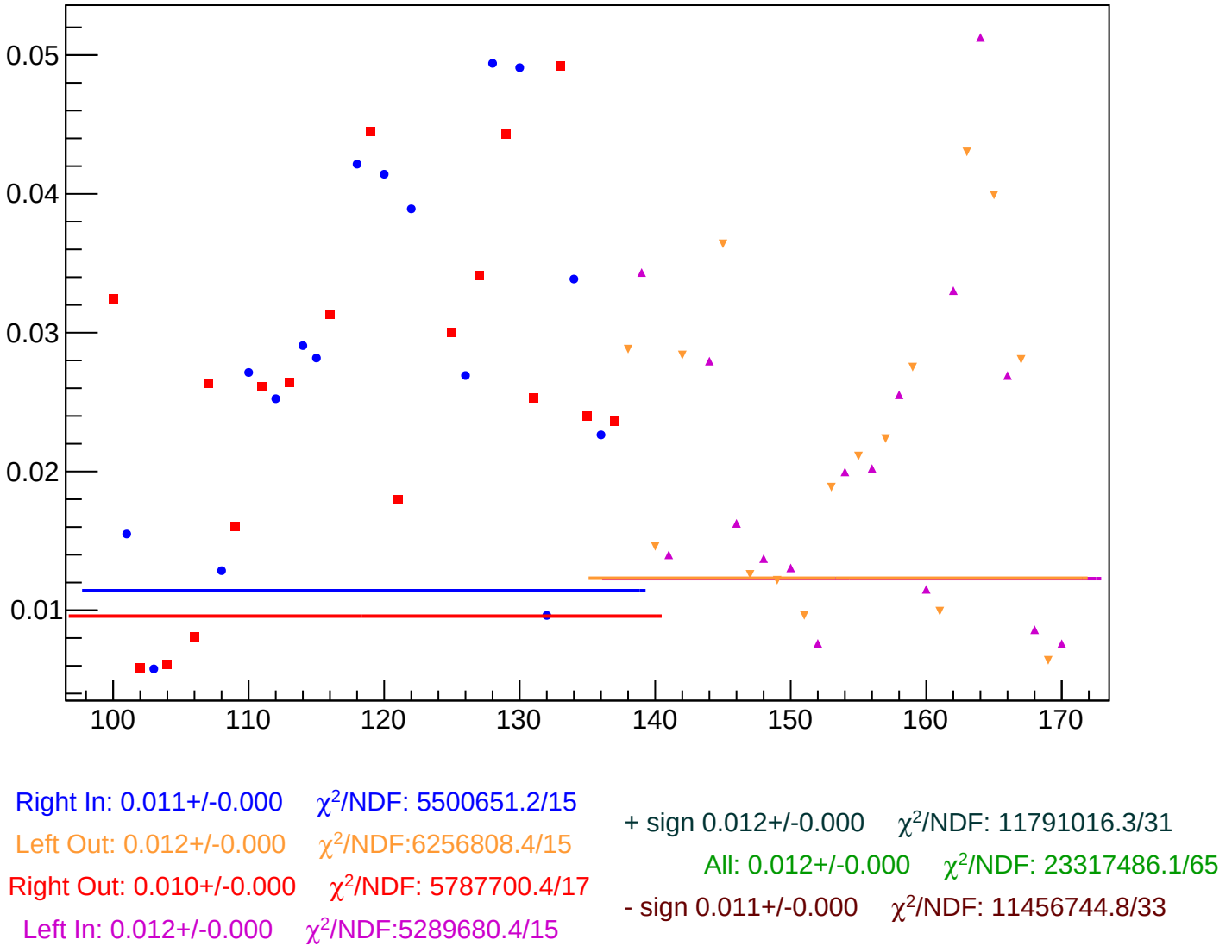
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.1/17

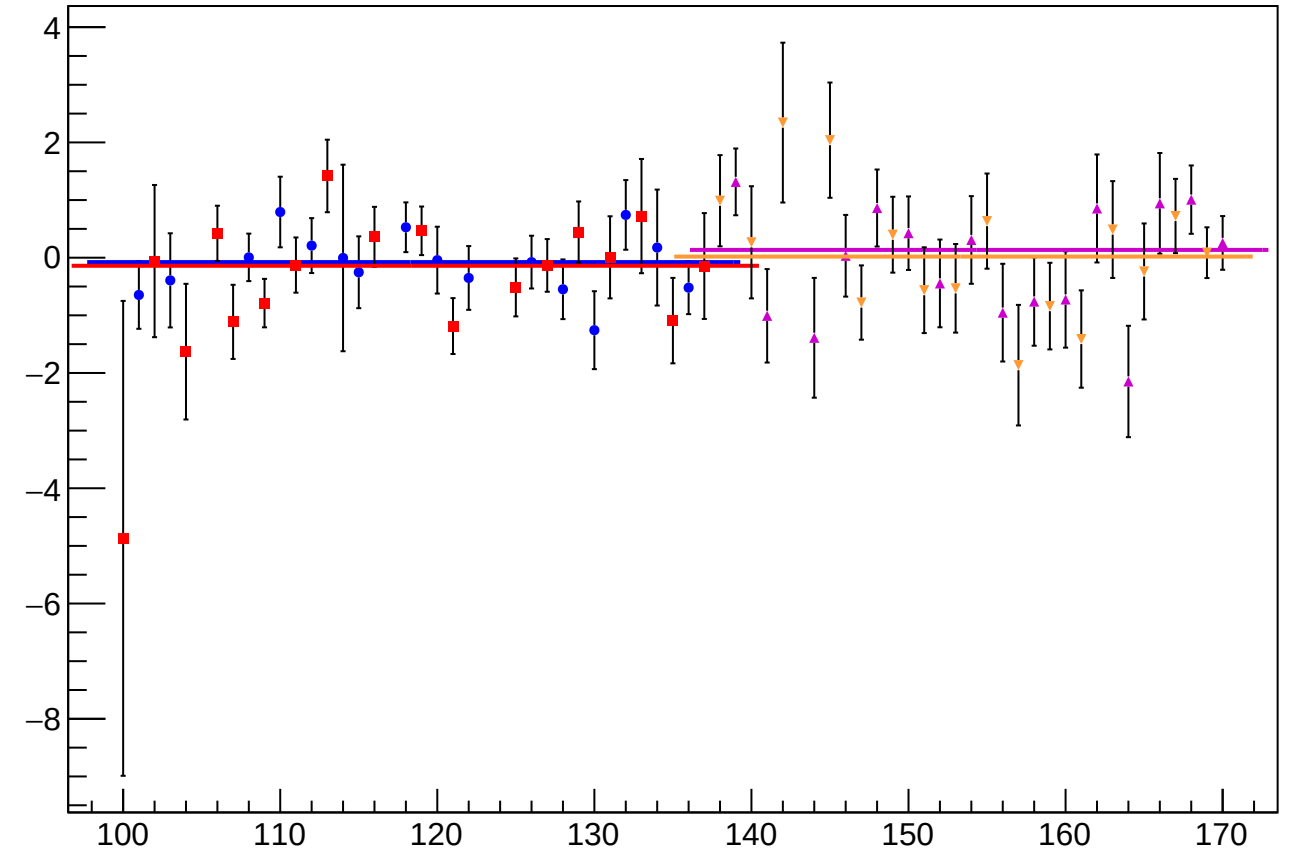
Left In: -0.000+/-0.000 $\chi^2$/NDF:12.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 47.4/31

All: -0.000+/-0.000 $\chi^2$/NDF: 80.4/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 31.8/33


asym_us_avg_at2lr_avg_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.05
0.04
0.03
0.02
0.01
100
110
120
130
140
150
160
170
Right In: 0.011+/-0.000 χ²/NDF: 5500651.2/15
Left Out: 0.012+/-0.000 χ²/NDF:6256808.4/15
Right Out: 0.010+/-0.000 χ²/NDF: 5787700.4/17
Left In: 0.012+/-0.000 χ²/NDF:5289680.4/15
+ sign 0.012+/-0.000 χ²/NDF: 11791016.3/31
All: 0.012+/-0.000 χ²/NDF: 23317486.1/65
- sign 0.011+/-0.000 χ²/NDF: 11456744.8/33




Right In: -0.076+/-0.140 $\chi^2$/NDF: 12.5/15

Left Out: 0.019+/-0.188 $\chi^2$/NDF:21.0/15

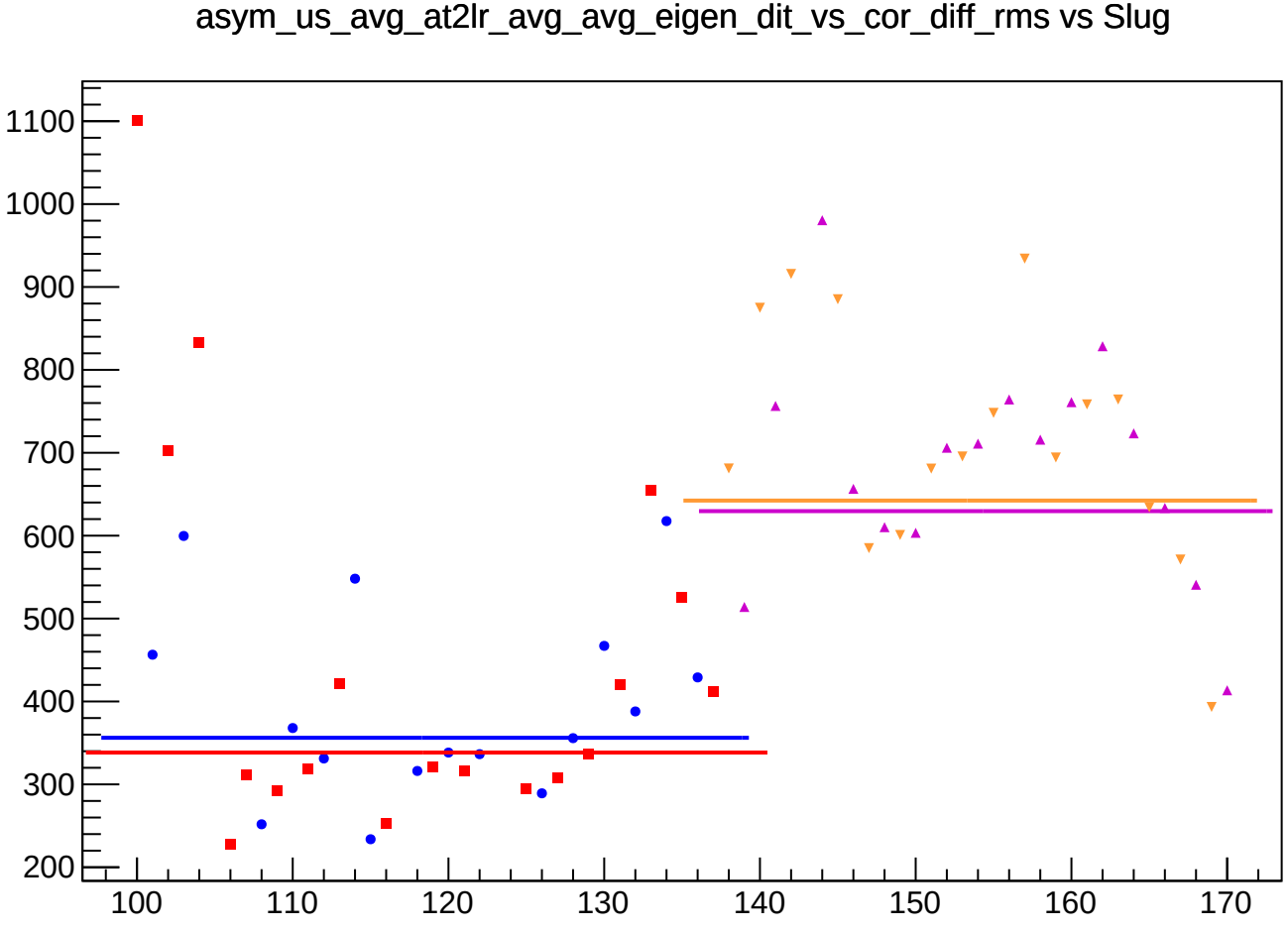
Right Out: -0.140+/-0.138 $\chi^2$/NDF: 27.0/17

Left In: 0.135+/-0.179 $\chi^2$/NDF:23.7/15

\+ sign -0.042+/-0.112 $\chi^2$/NDF: 33.7/31

All: -0.040+/-0.078 $\chi^2$/NDF: 85.9/65

\- sign -0.038+/-0.109 $\chi^2$/NDF: 52.1/33




Right In: 356.188+/-0.099 $\chi^2$/NDF: 785072.9/15

Left Out: 642.350+/-0.133 $\chi^2$/NDF:1295983.1/15

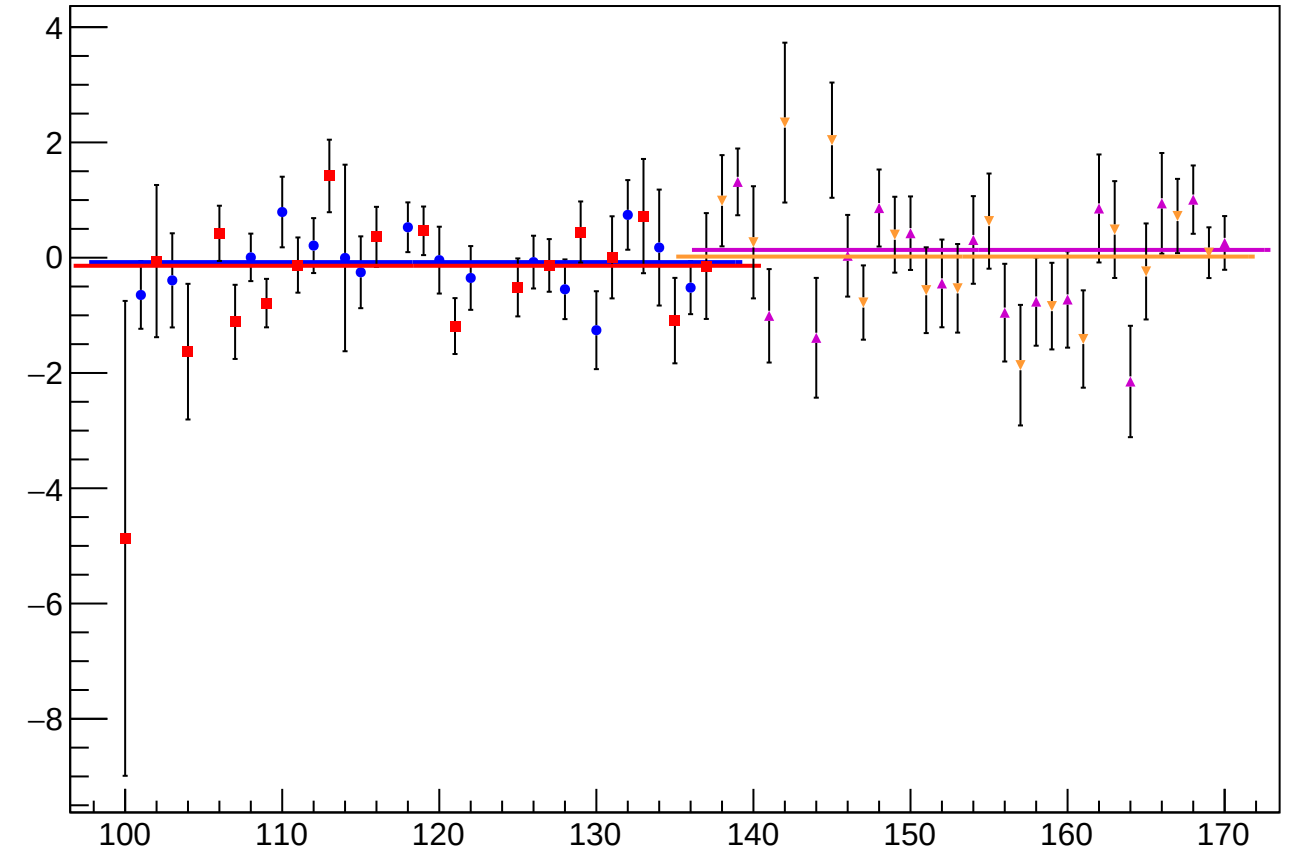
Right Out: 338.408+/-0.098 $\chi^2$/NDF: 1203260.7/17

Left In: 629.601+/-0.127 $\chi^2$/NDF:1117160.8/15

+ sign 458.355+/-0.079 $\chi^2$/NDF: 5068601.3/31

All: 452.346+/-0.055 $\chi^2$/NDF: 10711278.0/65

- sign 446.634+/-0.077 $\chi^2$/NDF: 5631482.3/33




Right In: -0.076+/-0.140 $\chi^2$/NDF: 12.5/15

Left Out: 0.019+/-0.188 $\chi^2$/NDF:21.0/15

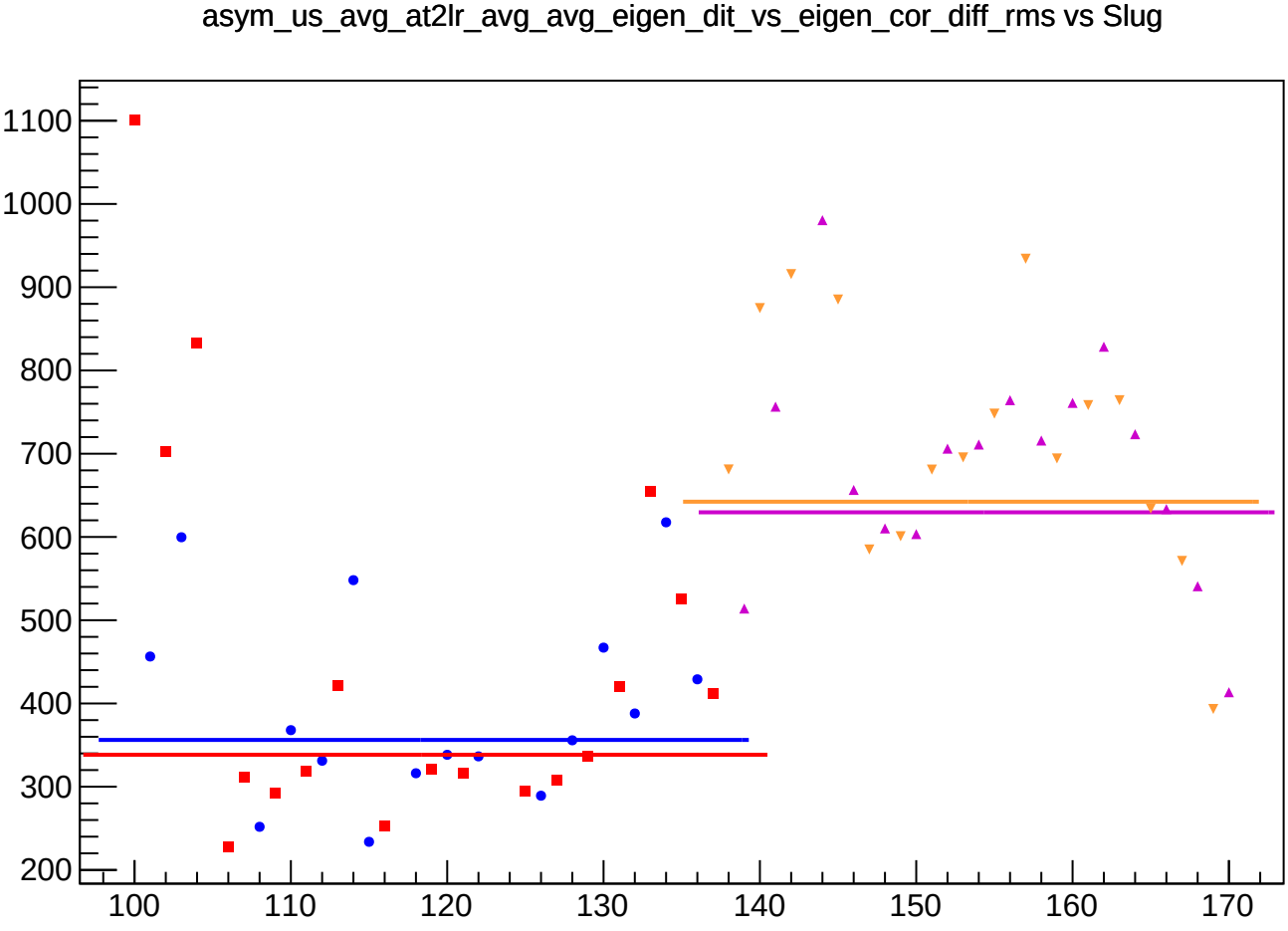
Right Out: -0.140+/-0.138 $\chi^2$/NDF: 27.0/17

Left In: 0.135+/-0.179 $\chi^2$/NDF:23.7/15

+ sign -0.042+/-0.112 $\chi^2$/NDF: 33.7/31

All: -0.040+/-0.078 $\chi^2$/NDF: 85.9/65

- sign -0.038+/-0.109 $\chi^2$/NDF: 52.1/33




Right In: 356.188+/-0.099 $\chi^2$/NDF: 785072.9/15

Left Out: 642.350+/-0.133 $\chi^2$/NDF:1295983.1/15

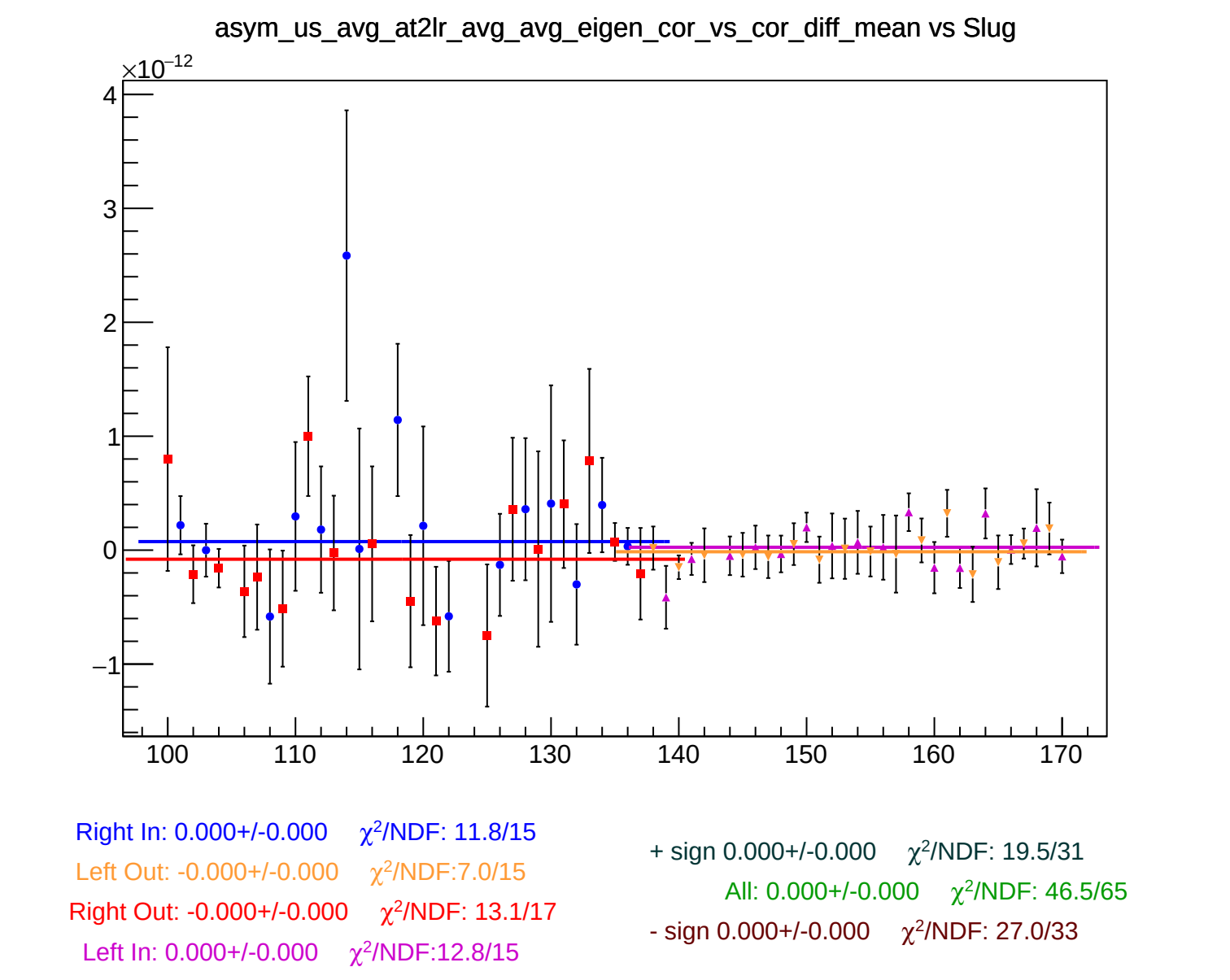
Right Out: 338.408+/-0.098 $\chi^2$/NDF: 1203260.7/17

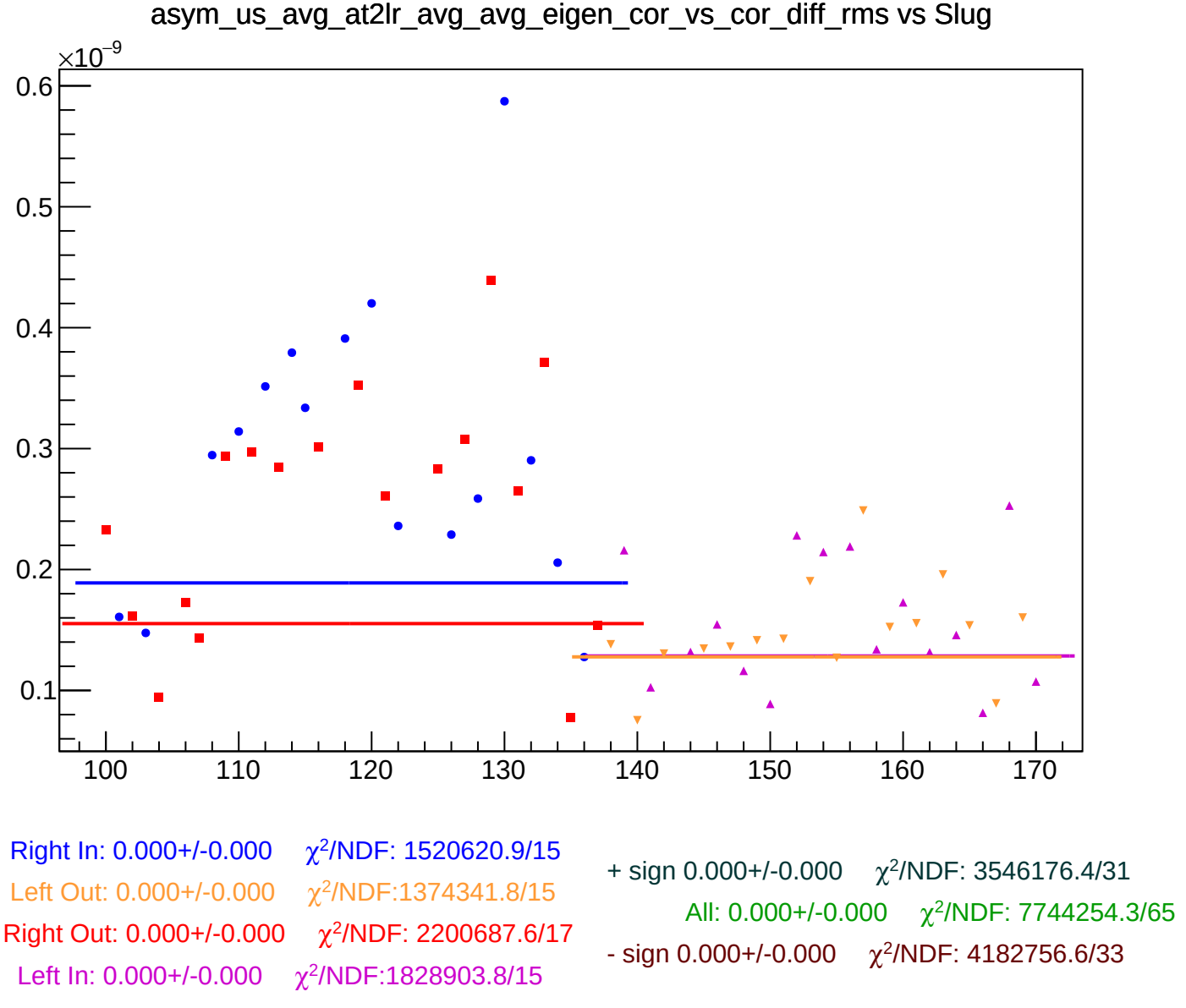
Left In: 629.601+/-0.127 $\chi^2$/NDF:1117160.8/15

+ sign 458.355+/-0.079 $\chi^2$/NDF: 5068601.3/31

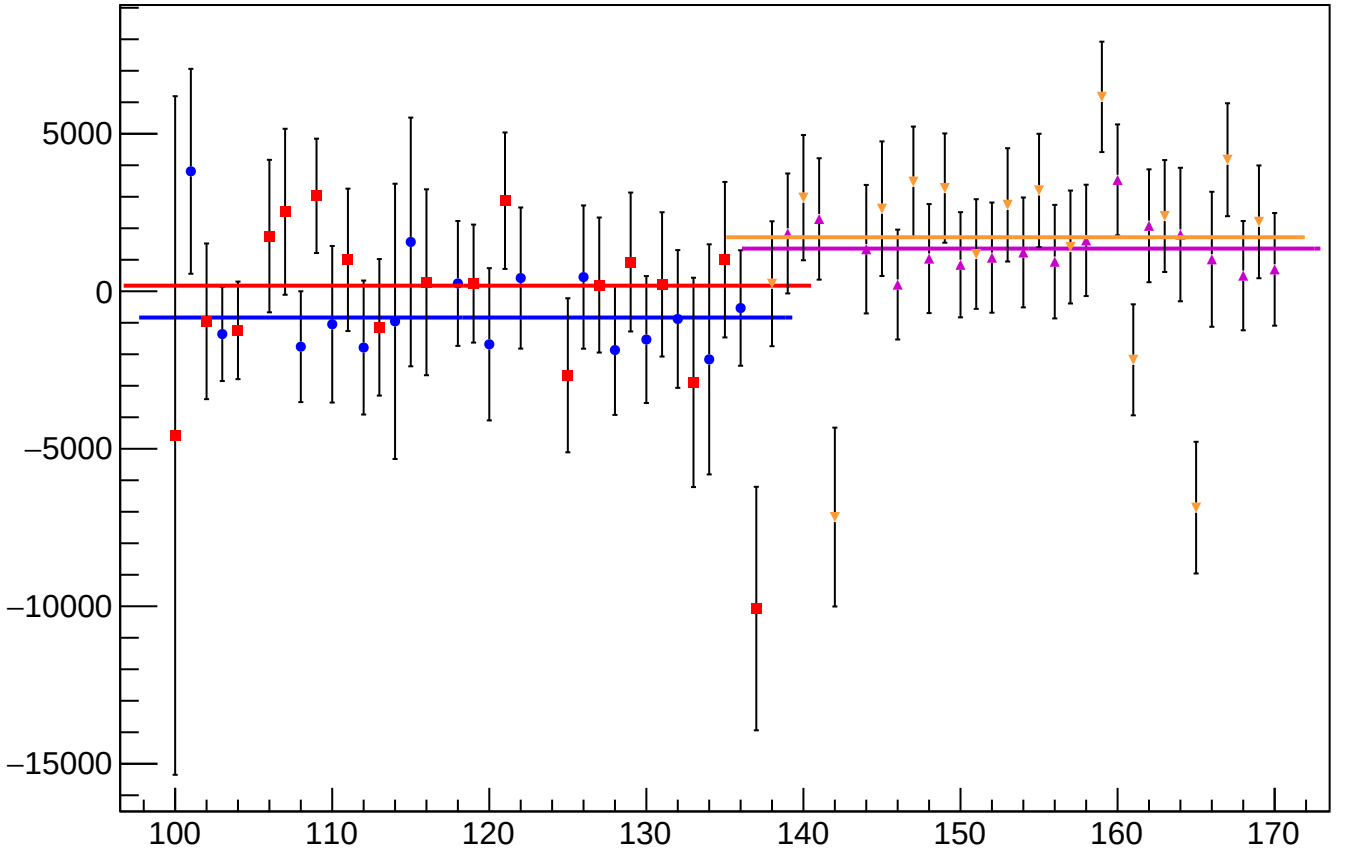
All: 452.346+/-0.055 $\chi^2$/NDF: 10711278.0/65

- sign 446.634+/-0.077 $\chi^2$/NDF: 5631482.3/33


asym_us_avg_at2lr_avg_avg_eigen_cor_vs_cor_diff_mean vs Slug
×10^−12
4
3
2
1
0
−1
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 11.8/15
Left Out: -0.000+/-0.000 χ²/NDF:7.0/15
Right Out: -0.000+/-0.000 χ²/NDF: 13.1/17
Left In: 0.000+/-0.000 χ²/NDF:12.8/15
+ sign 0.000+/-0.000 χ²/NDF: 19.5/31
All: 0.000+/-0.000 χ²/NDF: 46.5/65
- sign 0.000+/-0.000 χ²/NDF: 27.0/33


asym_us_avg_at2lr_avg_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10⁻⁹
0.6
0.5
0.4
0.3
0.2
0.1
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1520620.9/15
Left Out: 0.000+/-0.000 χ²/NDF:1374341.8/15
Right Out: 0.000+/-0.000 χ²/NDF: 2200687.6/17
Left In: 0.000+/-0.000 χ²/NDF:1828903.8/15
+ sign 0.000+/-0.000 χ²/NDF: 3546176.4/31
All: 0.000+/-0.000 χ²/NDF: 7744254.3/65
- sign 0.000+/-0.000 χ²/NDF: 4182756.6/33

# reg_asym_us_avg_at2lr_avg_dd_mean vs Slug




Right In: -833.479+/-554.833 $\chi^2$/NDF: 4.6/15

Left Out: 1715.478+/-467.023 $\chi^2$/NDF:44.2/15

Right Out: 178.292+/-547.824 $\chi^2$/NDF: 16.5/17

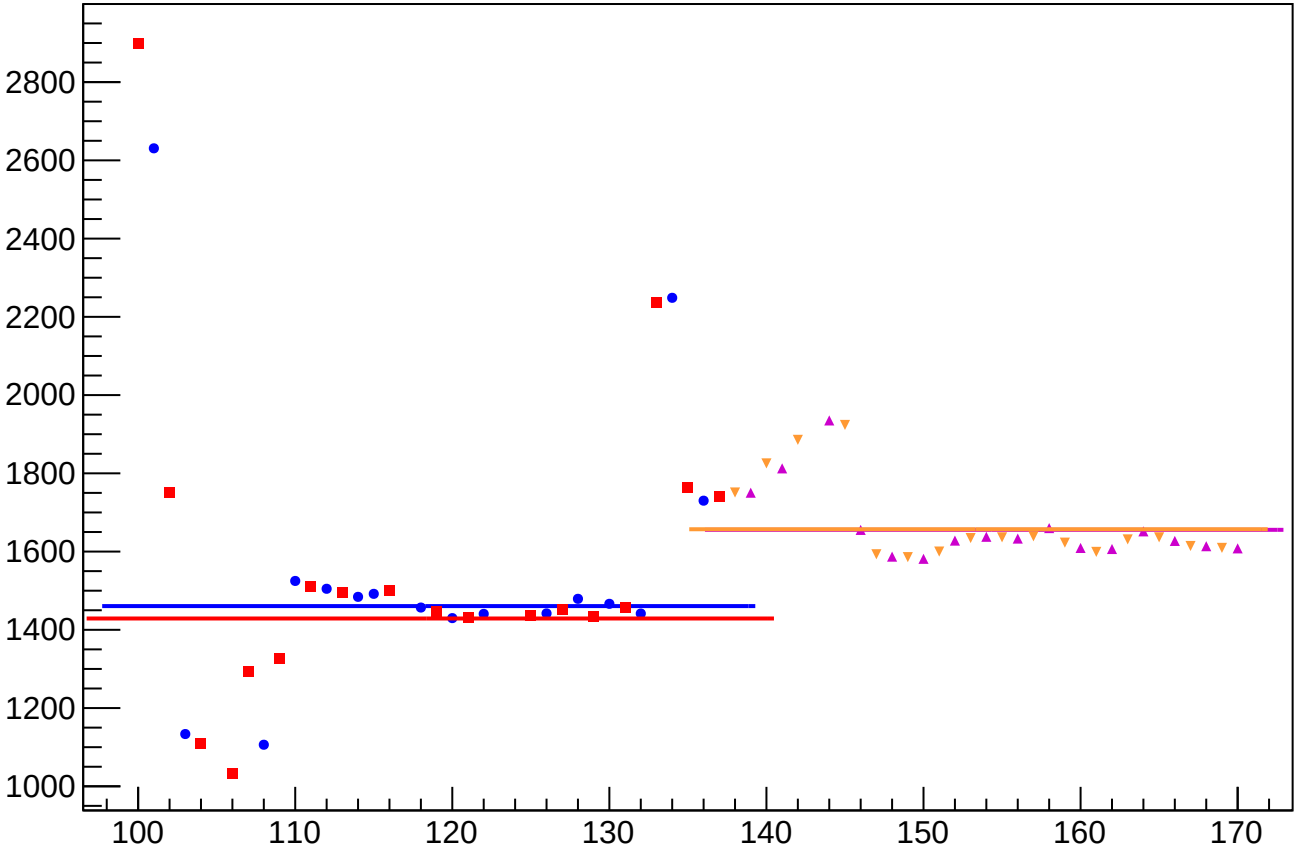
Left In: 1355.155+/-455.958 $\chi^2$/NDF:3.1/15

+ sign 658.431+/-357.296 $\chi^2$/NDF: 61.1/31

All: 768.062+/-250.192 $\chi^2$/NDF: 83.6/65

- sign 873.535+/-350.453 $\chi^2$/NDF: 22.3/33

# reg_asym_us_avg_at2lr_avg_dd_rms vs Slug




Right In: 1460.653+/-0.392 $\chi^2$/NDF: 575736.1/15

Left Out: 1657.066+/-0.330 $\chi^2$/NDF:77989.5/15

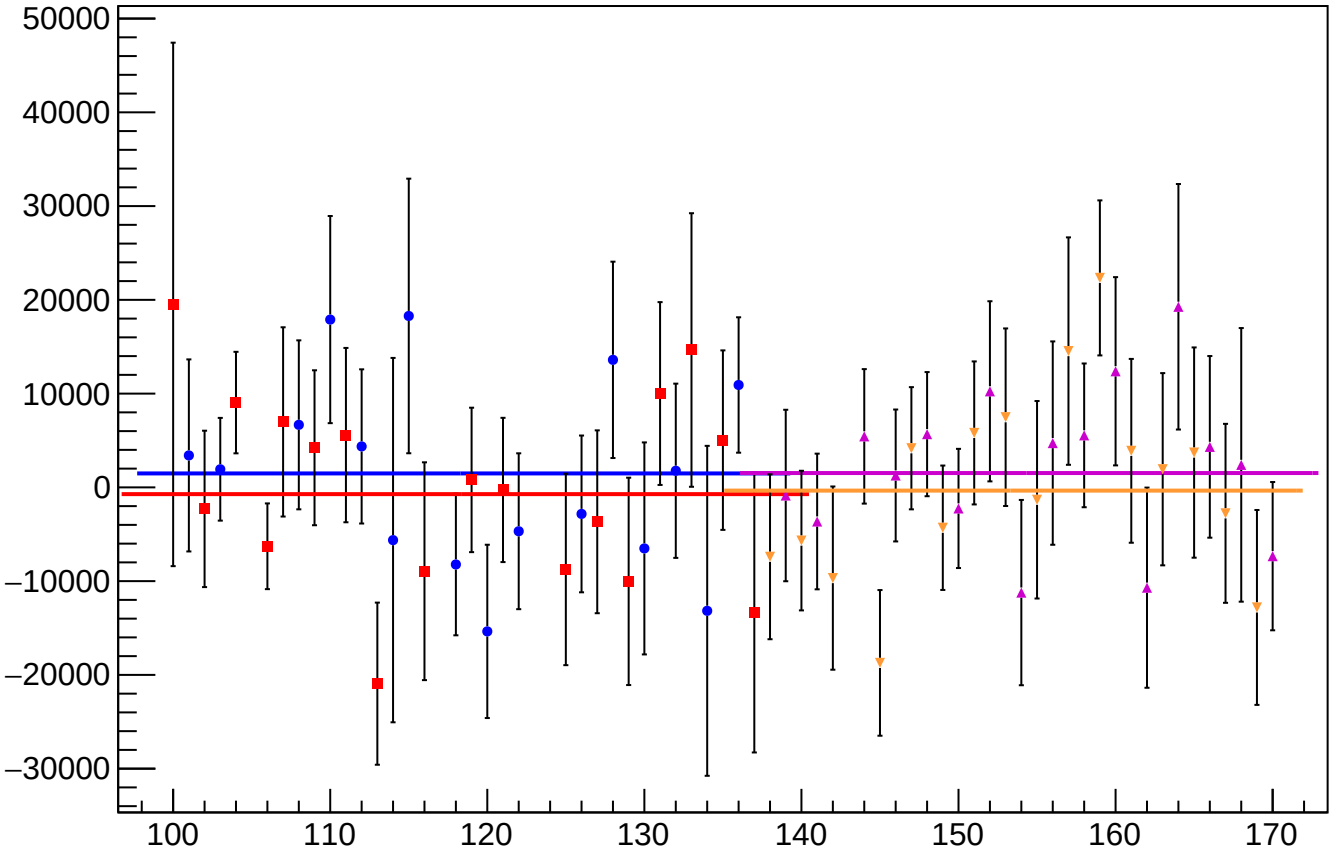
Right Out: 1428.940+/-0.385 $\chi^2$/NDF: 411275.6/17

Left In: 1655.592+/-0.322 $\chi^2$/NDF:69748.0/15

+ sign 1575.614+/-0.253 $\chi^2$/NDF: 800423.6/31

All: 1568.667+/-0.177 $\chi^2$/NDF: 1486944.2/65

- sign 1562.024+/-0.247 $\chi^2$/NDF: 685041.5/33




Right In: 1487.438+/-2268.028 $\chi^2$/NDF: 14.2/15

Left Out: -344.080+/-2175.992 $\chi^2$/NDF:20.7/15

Right Out: -720.166+/-2011.559 $\chi^2$/NDF: 17.5/17

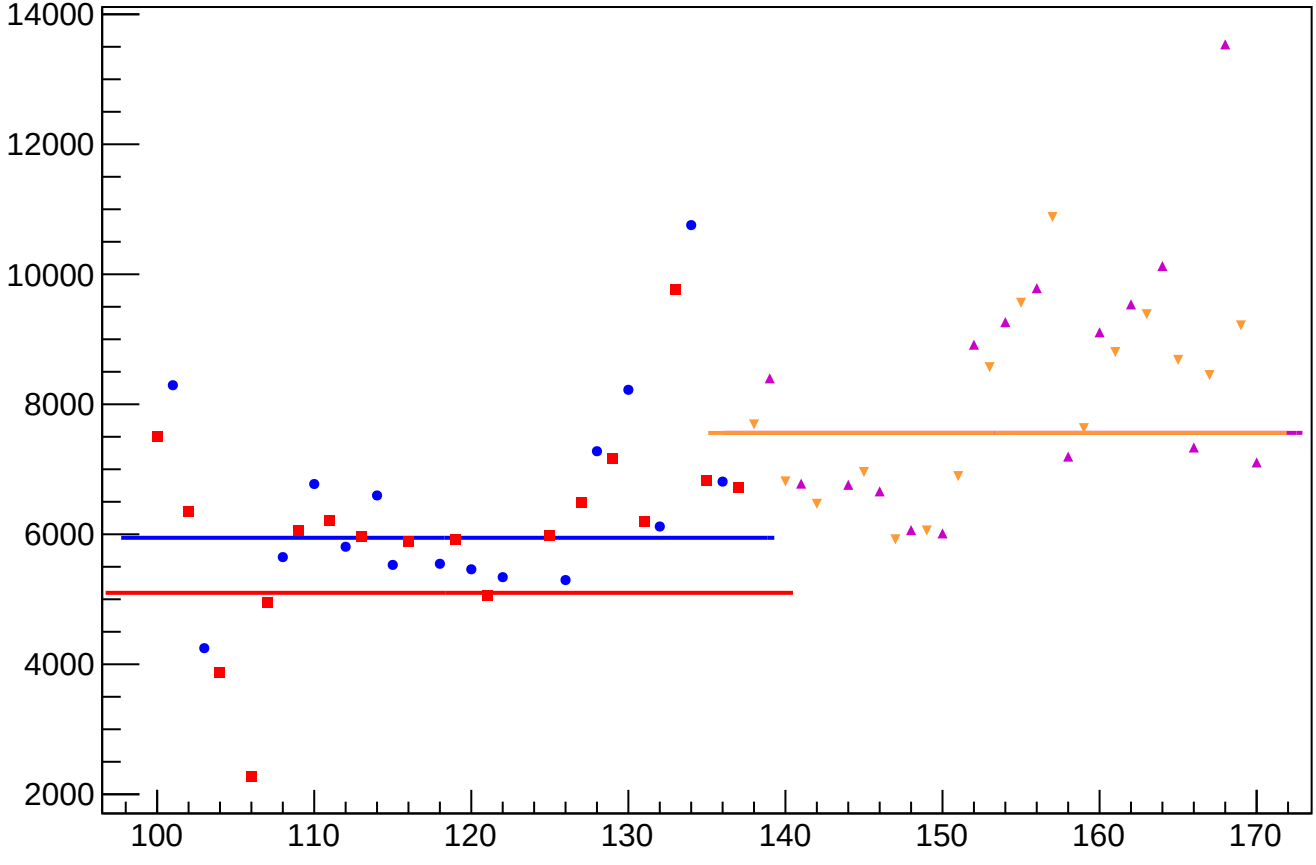
Left In: 1528.382+/-2128.338 $\chi^2$/NDF:10.1/15

+ sign 533.764+/-1570.188 $\chi^2$/NDF: 35.3/31

All: 430.364+/-1069.967 $\chi^2$/NDF: 63.5/65

- sign 340.730+/-1461.928 $\chi^2$/NDF: 28.2/33

# asym_us_avg_at2lr_avg_dd_reg_correction_rms vs Slug




Right In: 5946.080+/-1.604 $\chi^2$/NDF: 641131.4/15

Left Out: 7559.540+/-1.539 $\chi^2$/NDF:730278.9/15

Right Out: 5099.375+/-1.422 $\chi^2$/NDF: 1480367.2/17

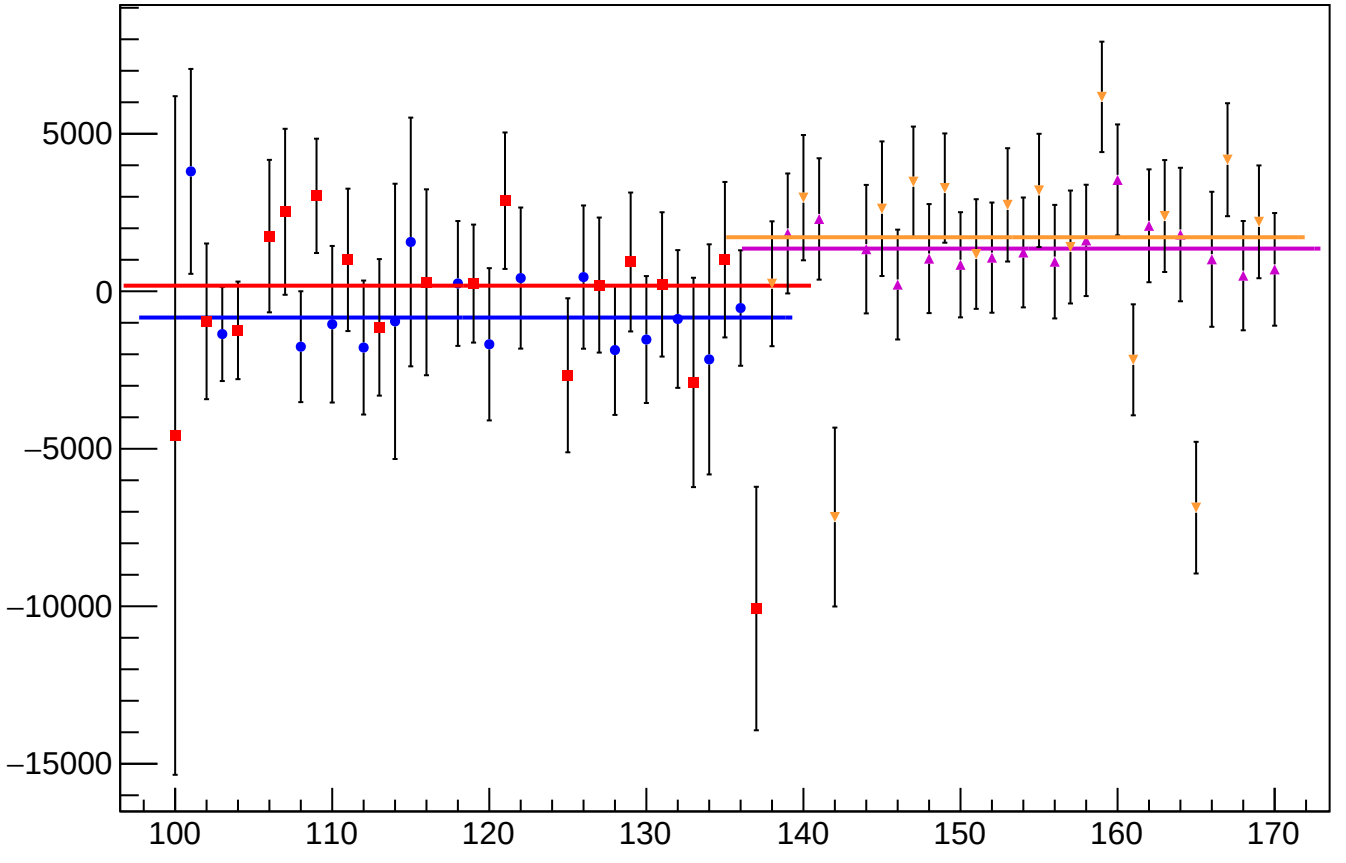
Left In: 7560.267+/-1.505 $\chi^2$/NDF:1042590.8/15

+ sign 6786.211+/-1.110 $\chi^2$/NDF: 1898444.1/31

All: 6504.587+/-0.757 $\chi^2$/NDF: 5953791.4/65

- sign 6260.458+/-1.034 $\chi^2$/NDF: 3935237.6/33

# cor_asym_us_avg_at2lr_avg_dd_mean vs Slug




Right In: -833.542+/-554.833 $\chi^2$/NDF: 4.6/15

Left Out: 1715.567+/-467.023 $\chi^2$/NDF:44.2/15

Right Out: 178.133+/-547.824 $\chi^2$/NDF: 16.5/17

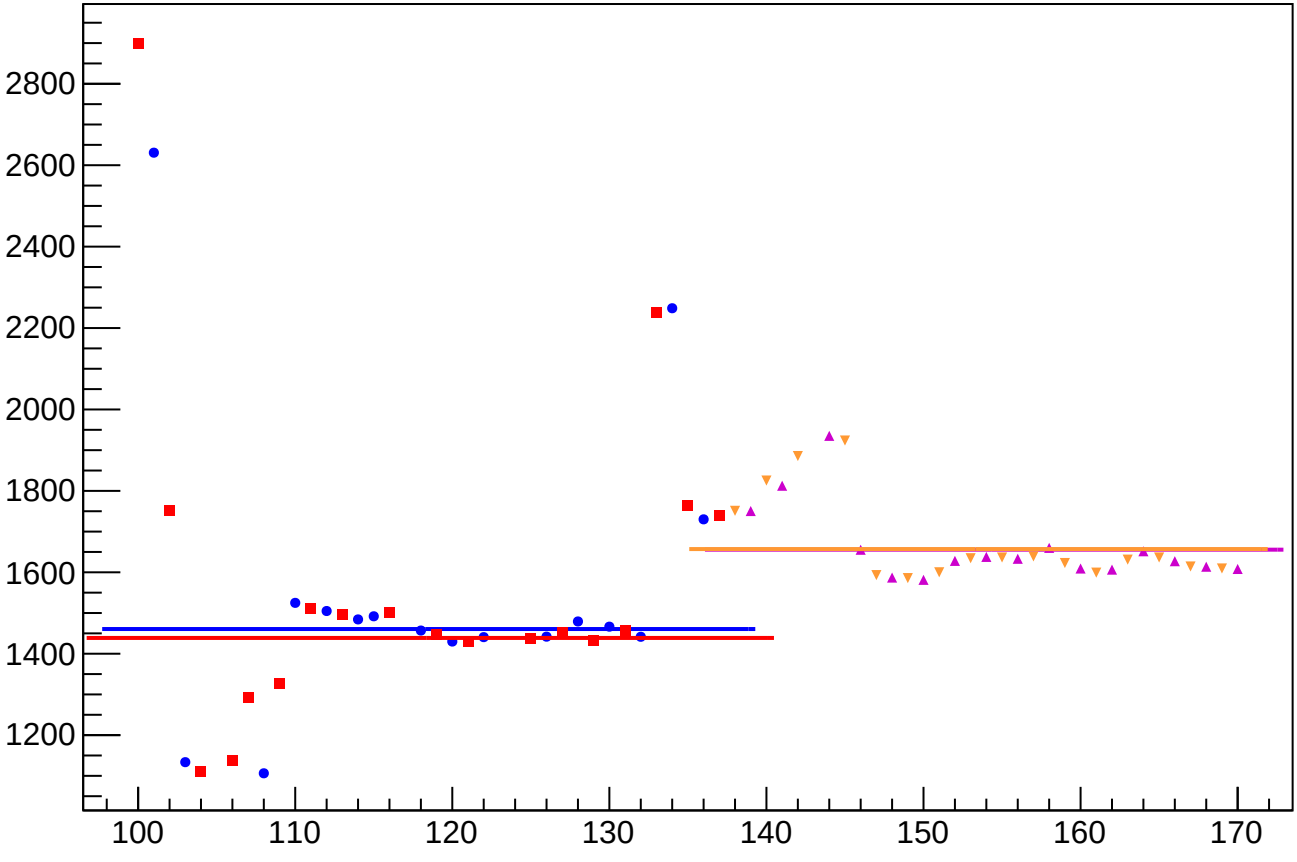
Left In: 1355.120+/-455.958 $\chi^2$/NDF:3.1/15

+ sign 658.457+/-357.296 $\chi^2$/NDF: 61.1/31

All: 768.031+/-250.192 $\chi^2$/NDF: 83.6/65

- sign 873.449+/-350.453 $\chi^2$/NDF: 22.3/33

# cor_asym_us_avg_at2lr_avg_dd_rms vs Slug




Right In: 1460.653+/-0.392 $\chi^2$/NDF: 575736.3/15

Left Out: 1657.066+/-0.330 $\chi^2$/NDF:77989.5/15

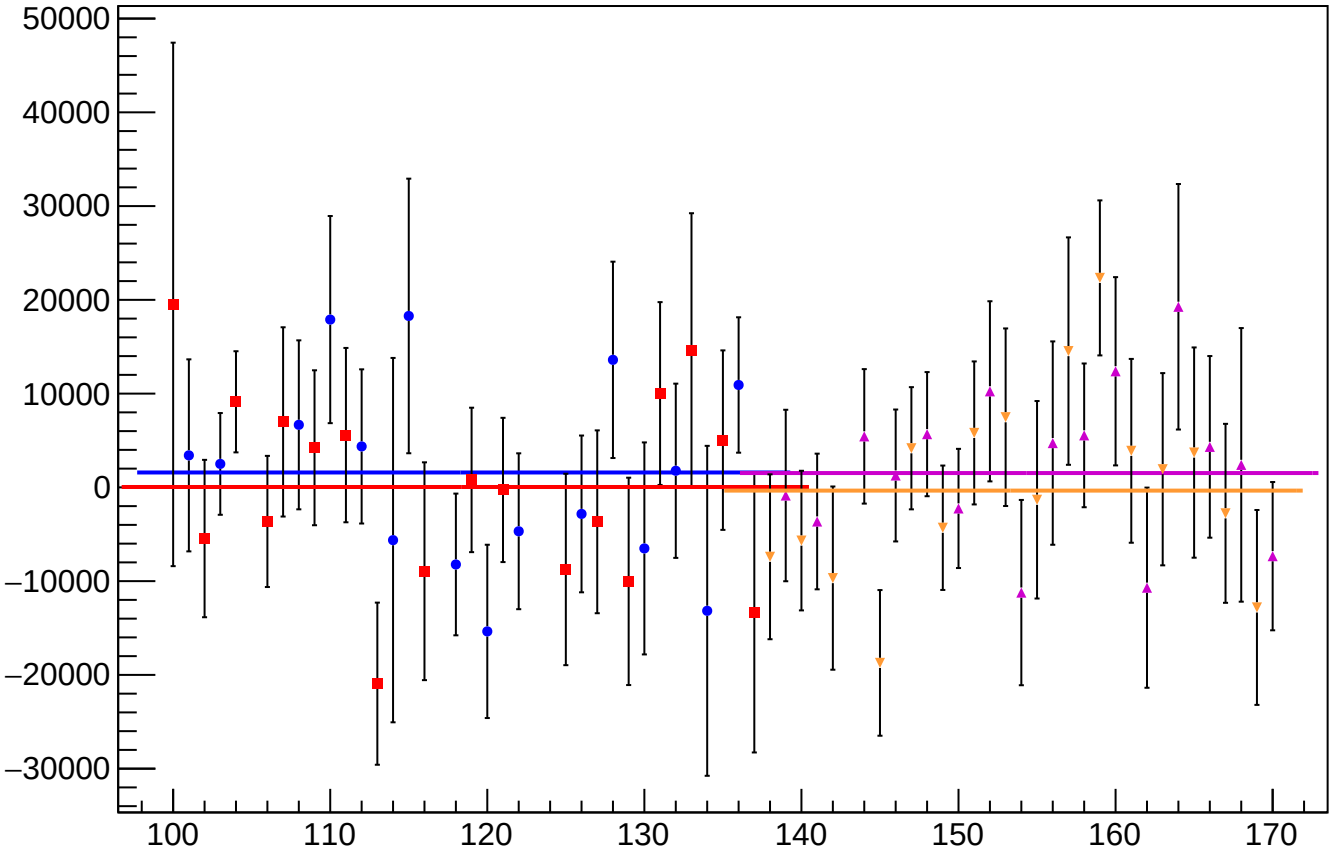
Right Out: 1438.764+/-0.386 $\chi^2$/NDF: 373375.6/17

Left In: 1655.592+/-0.322 $\chi^2$/NDF:69748.0/15

+ sign 1575.614+/-0.253 $\chi^2$/NDF: 800424.1/31

All: 1571.024+/-0.177 $\chi^2$/NDF: 1429788.6/65

- sign 1566.617+/-0.248 $\chi^2$/NDF: 628717.6/33




Right In: 1588.655+/-2264.260 $\chi^2$/NDF: 14.2/15

Left Out: -344.058+/-2175.991 $\chi^2$/NDF:20.7/15

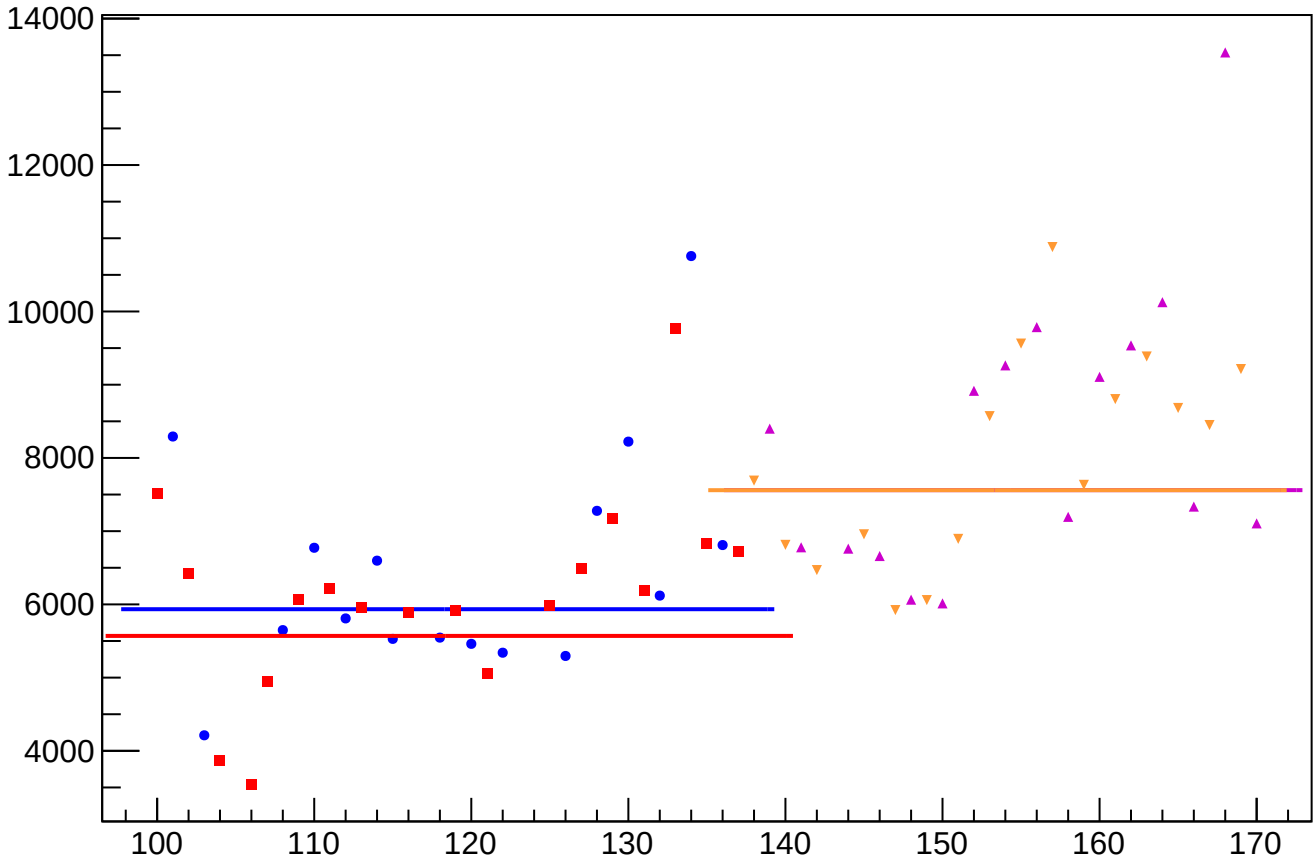
Right Out: 40.643+/-2133.039 $\chi^2$/NDF: 16.5/17

Left In: 1528.428+/-2128.336 $\chi^2$/NDF:10.1/15

+ sign 583.892+/-1568.935 $\chi^2$/NDF: 35.3/31

All: 689.132+/-1086.704 $\chi^2$/NDF: 62.2/65

- sign 786.177+/-1506.621 $\chi^2$/NDF: 26.8/33




Right In: 5934.209+/-1.601 $\chi^2$/NDF: 653082.9/15

Left Out: 7559.538+/-1.539 $\chi^2$/NDF:730280.0/15

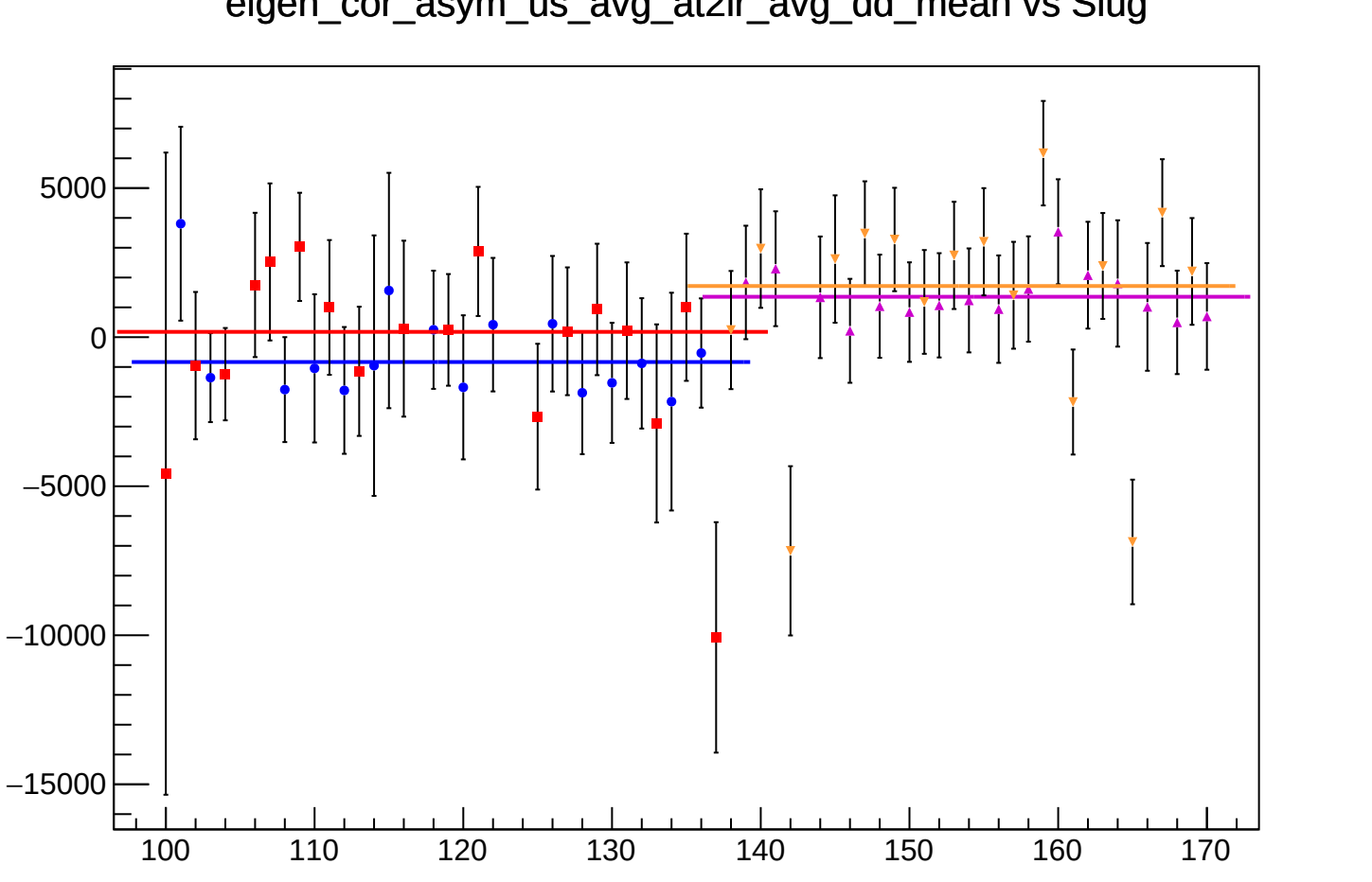
Right Out: 5569.606+/-1.508 $\chi^2$/NDF: 724048.8/17

Left In: 7560.259+/-1.505 $\chi^2$/NDF:1042594.4/15

+ sign 6779.171+/-1.109 $\chi^2$/NDF: 1919105.1/31

All: 6668.856+/-0.768 $\chi^2$/NDF: 4577626.7/65

- sign 6567.129+/-1.065 $\chi^2$/NDF: 2639516.2/33




Right In: -833.542+/-554.833 $\chi^2$/NDF: 4.6/15

Left Out: 1715.567+/-467.023 $\chi^2$/NDF:44.2/15

Right Out: 178.133+/-547.824 $\chi^2$/NDF: 16.5/17

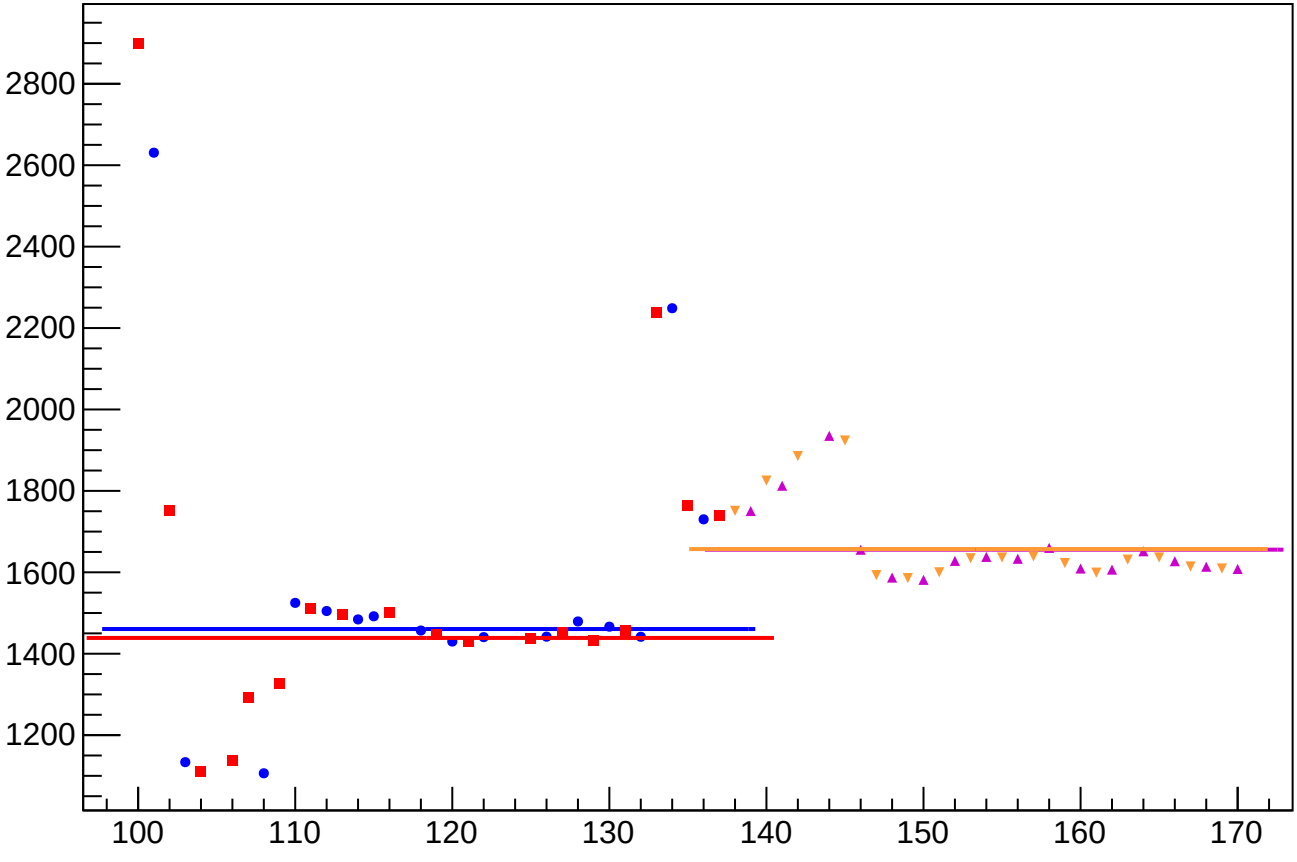
Left In: 1355.120+/-455.958 $\chi^2$/NDF:3.1/15

\+ sign 658.457+/-357.296 $\chi^2$/NDF: 61.1/31

All: 768.031+/-250.192 $\chi^2$/NDF: 83.6/65

\- sign 873.449+/-350.453 $\chi^2$/NDF: 22.3/33

# eigen_cor_asym_us_avg_at2lr_avg_dd_rms vs Slug




Right In: 1460.653+/-0.392 $\chi^2$/NDF: 575736.3/15

Left Out: 1657.066+/-0.330 $\chi^2$/NDF:77989.5/15

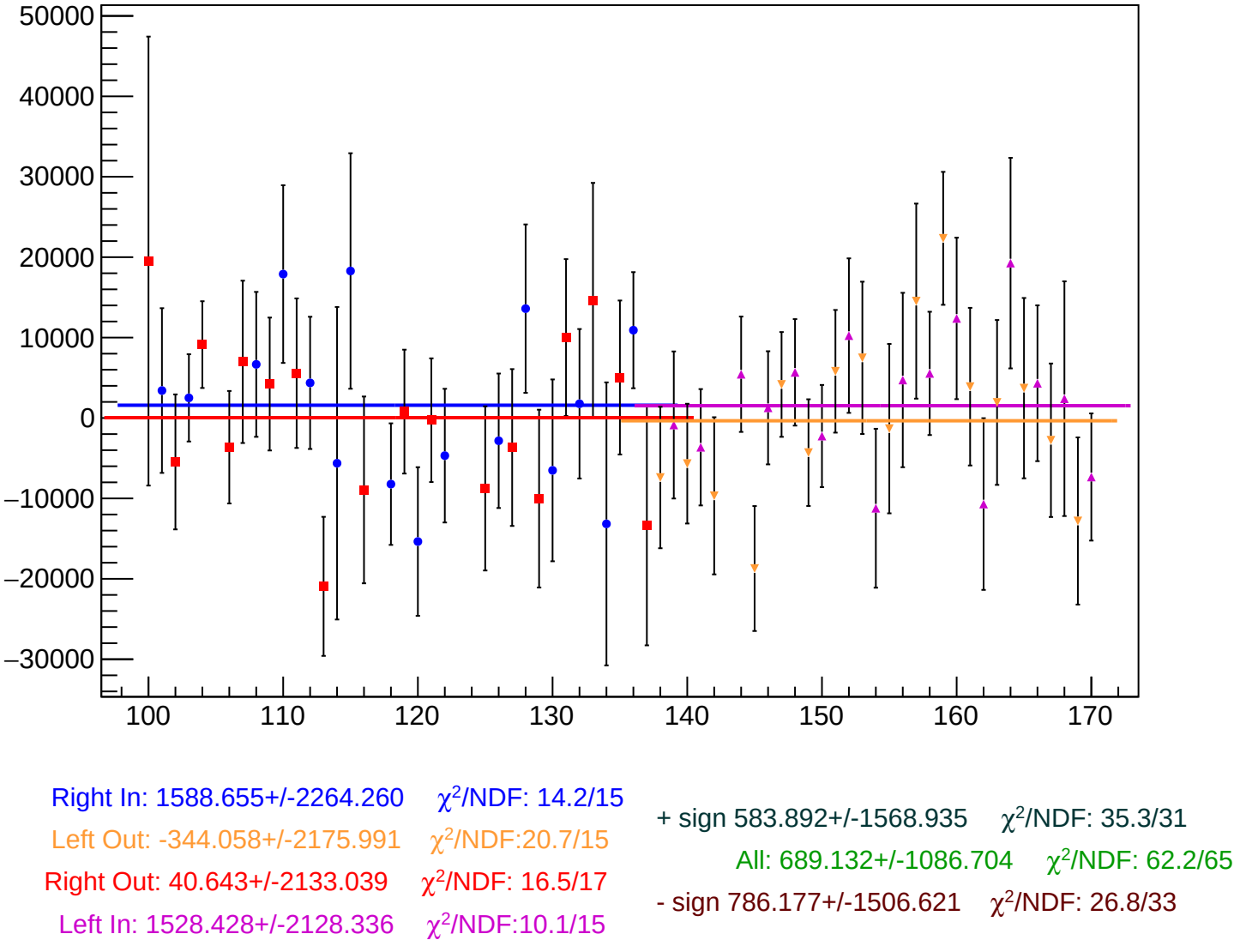
Right Out: 1438.764+/-0.386 $\chi^2$/NDF: 373375.6/17

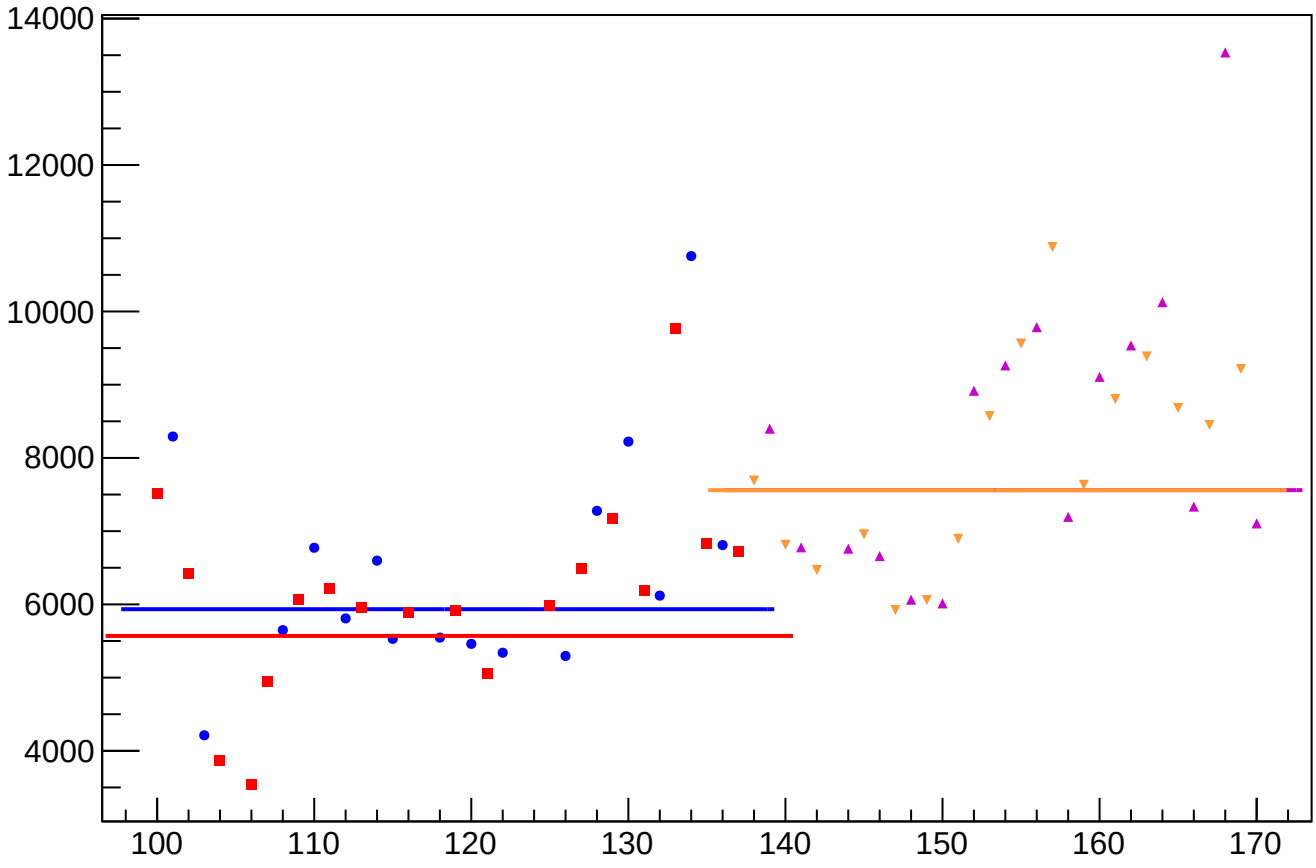
Left In: 1655.592+/-0.322 $\chi^2$/NDF:69748.0/15

+ sign 1575.614+/-0.253 $\chi^2$/NDF: 800424.1/31

All: 1571.024+/-0.177 $\chi^2$/NDF: 1429788.6/65

- sign 1566.617+/-0.248 $\chi^2$/NDF: 628717.6/33


asym_us_avg_at2lr_avg_dd_eigen_cor_correction_mean vs Slug
50000
40000
30000
20000
10000
0
−10000
−20000
−30000
100
110
120
130
140
150
160
170
Right In: 1588.655+/-2264.260 χ²/NDF: 14.2/15
Left Out: -344.058+/-2175.991 χ²/NDF:20.7/15
Right Out: 40.643+/-2133.039 χ²/NDF: 16.5/17
Left In: 1528.428+/-2128.336 χ²/NDF:10.1/15
+ sign 583.892+/-1568.935 χ²/NDF: 35.3/31
All: 689.132+/-1086.704 χ²/NDF: 62.2/65
- sign 786.177+/-1506.621 χ²/NDF: 26.8/33




Right In: 5934.209+/-1.601 $\chi^2$/NDF: 653082.9/15

Left Out: 7559.538+/-1.539 $\chi^2$/NDF:730280.0/15

Right Out: 5569.606+/-1.508 $\chi^2$/NDF: 724048.8/17

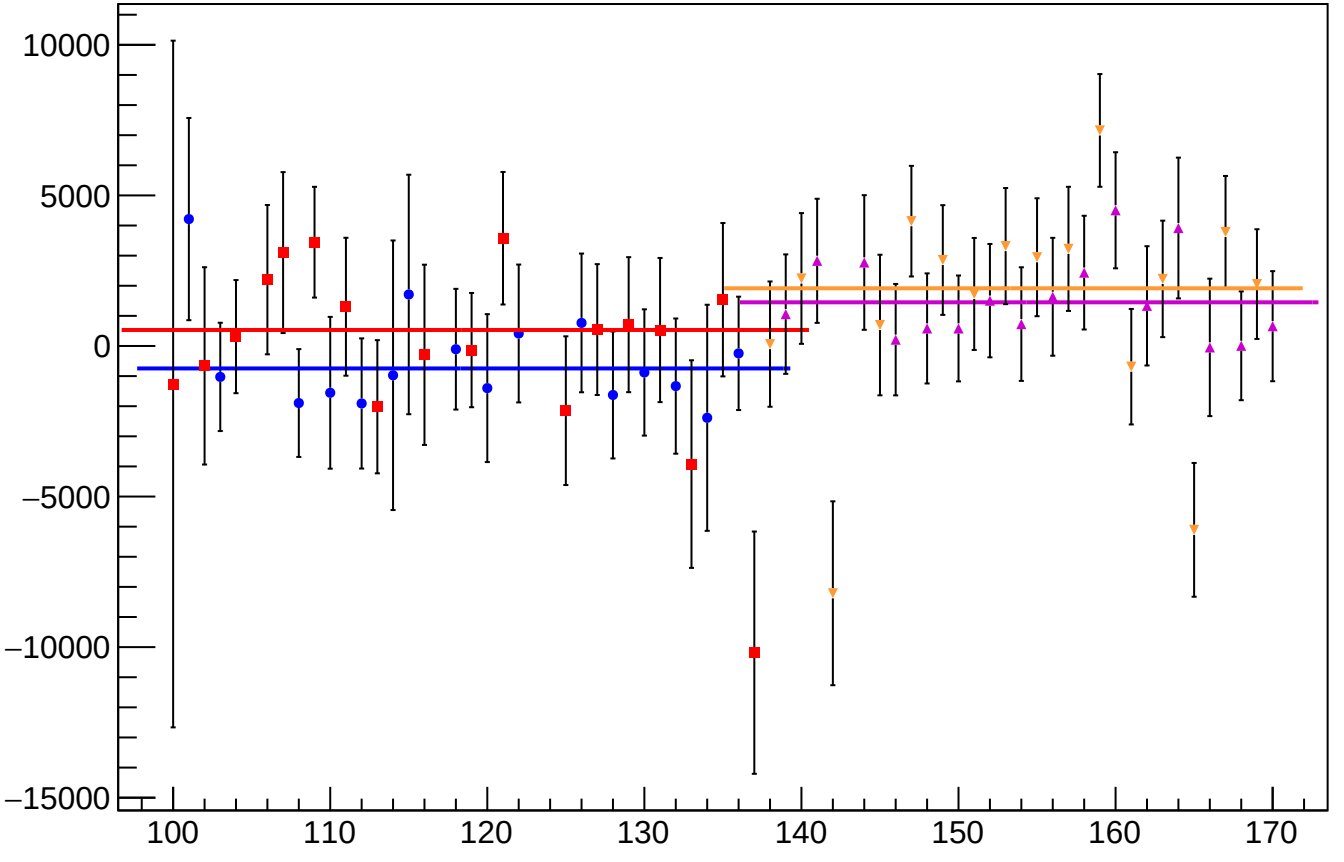
Left In: 7560.259+/-1.505 $\chi^2$/NDF:1042594.4/15

+ sign 6779.171+/-1.109 $\chi^2$/NDF: 1919105.1/31

All: 6668.856+/-0.768 $\chi^2$/NDF: 4577626.7/65

- sign 6567.129+/-1.065 $\chi^2$/NDF: 2639516.2/33

# dit_asym_us_avg_at2lr_avg_dd_mean vs Slug




Right In: -745.914+/-578.071 $\chi^2$/NDF: 4.8/15

Left Out: 1915.997+/-499.799 $\chi^2$/NDF:38.8/15

Right Out: 531.292+/-575.115 $\chi^2$/NDF: 17.7/17

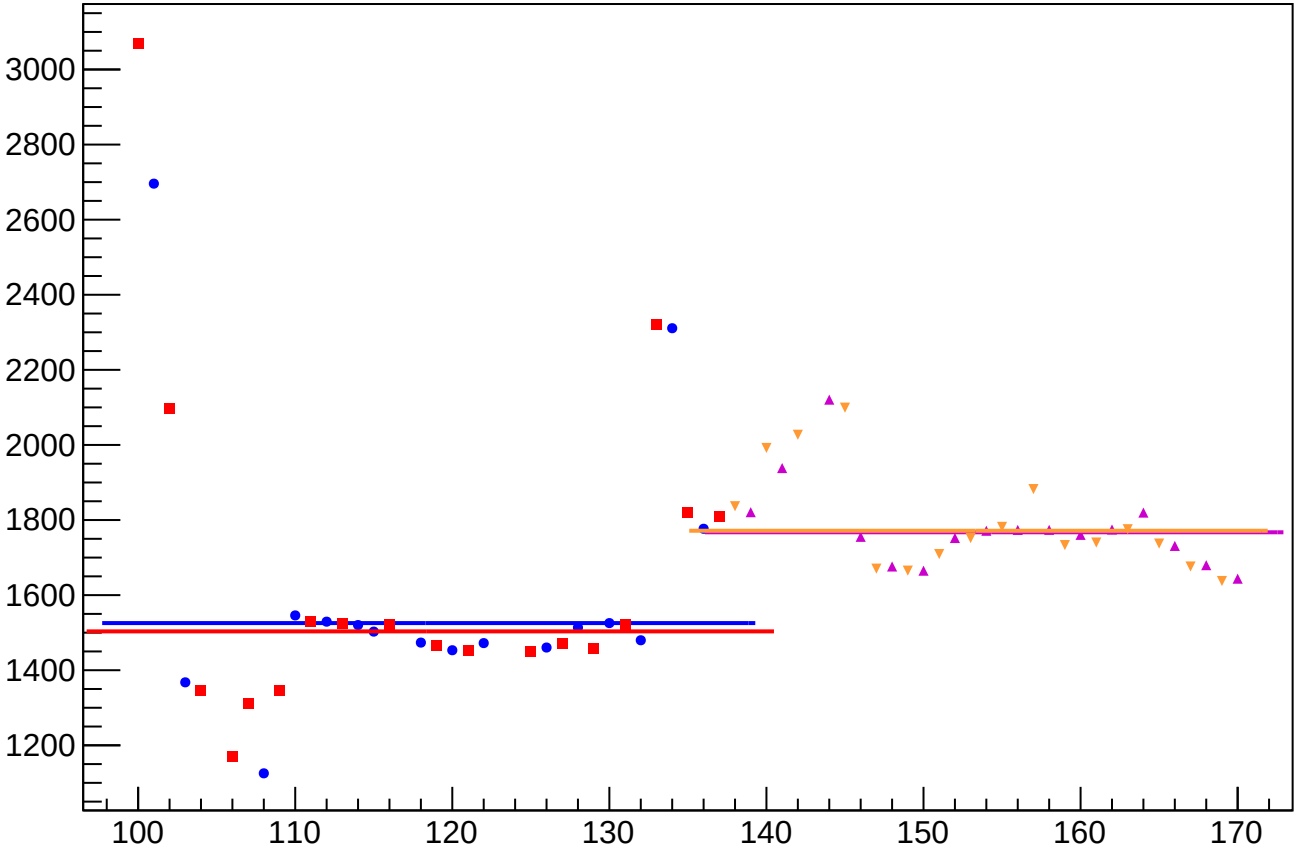
Left In: 1450.128+/-487.101 $\chi^2$/NDF:7.1/15

\+ sign 777.328+/-378.080 $\chi^2$/NDF: 55.7/31

All: 924.286+/-265.058 $\chi^2$/NDF: 82.3/65

\- sign 1066.325+/-371.698 $\chi^2$/NDF: 26.3/33

# dit_asym_us_avg_at2lr_avg_dd_rms vs Slug




Right In: 1525.536+/-0.409 $\chi^2$/NDF: 488328.2/15

Left Out: 1771.492+/-0.353 $\chi^2$/NDF:115091.4/15

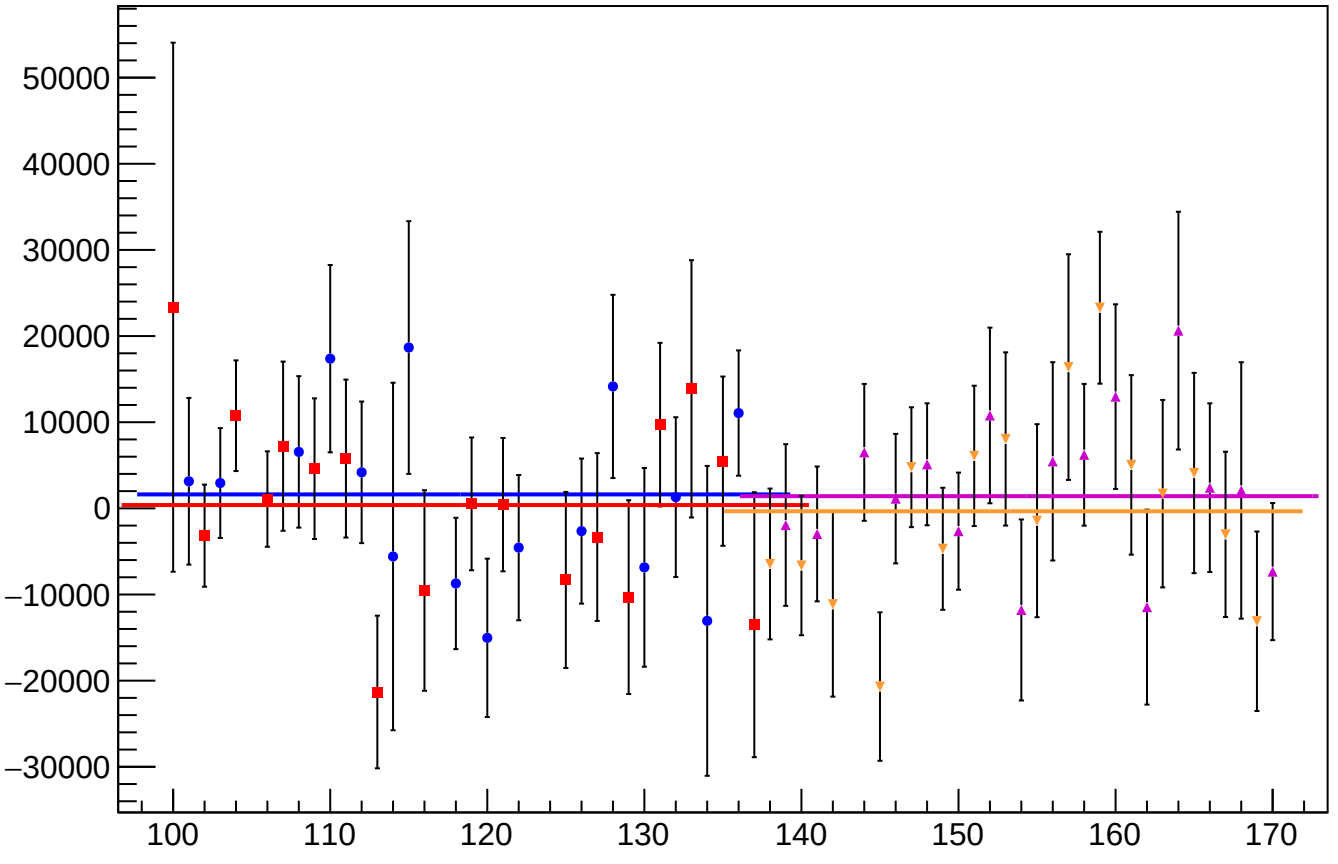
Right Out: 1503.434+/-0.407 $\chi^2$/NDF: 338507.3/17

Left In: 1767.362+/-0.344 $\chi^2$/NDF:92611.8/15

+ sign 1666.281+/-0.267 $\chi^2$/NDF: 810604.4/31

All: 1661.602+/-0.187 $\chi^2$/NDF: 1487672.6/65

- sign 1657.080+/-0.263 $\chi^2$/NDF: 676465.9/33




Right In: 1620.058+/-2320.032 $\chi^2$/NDF: 14.3/15

Left Out: -335.336+/-2307.198 $\chi^2$/NDF:20.8/15

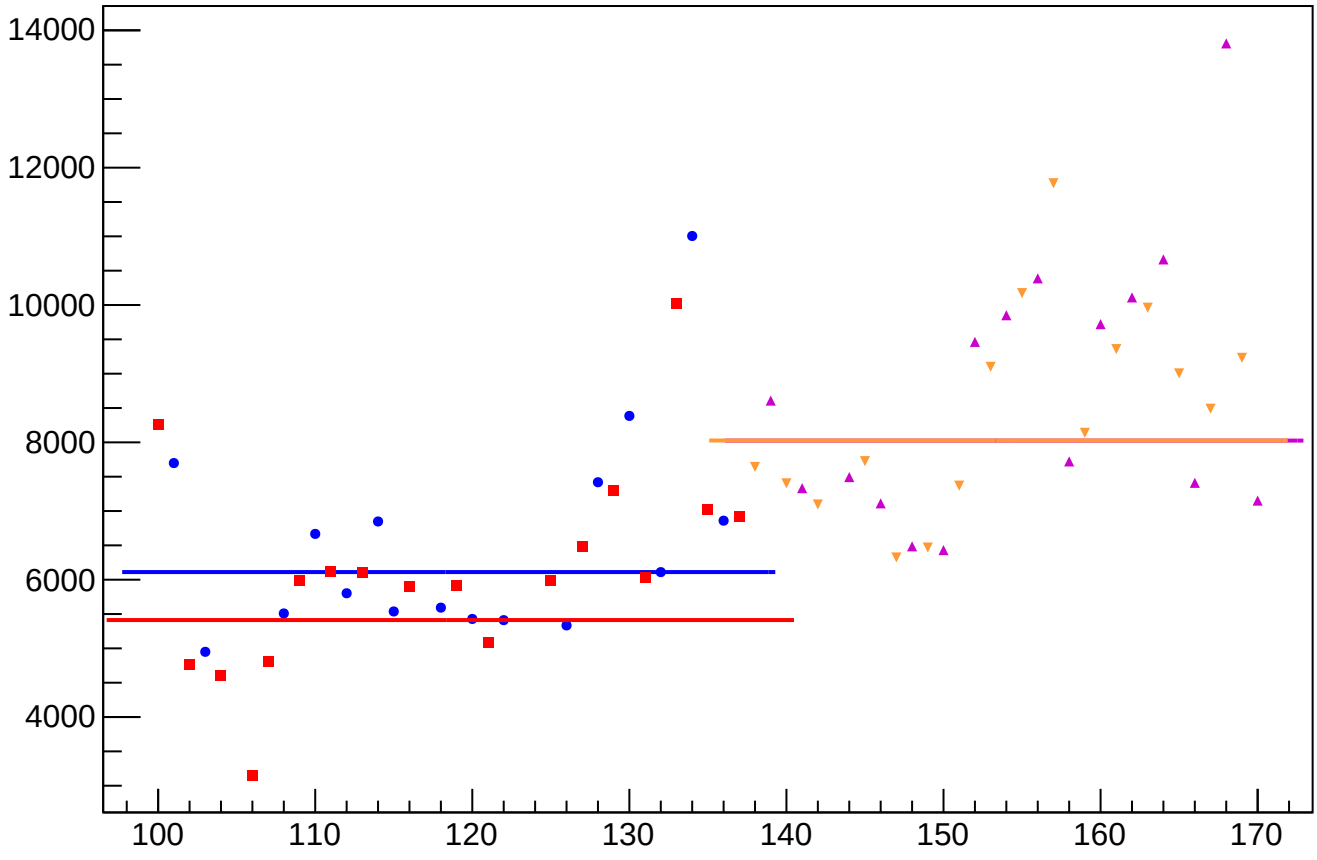
Right Out: 385.942+/-2060.867 $\chi^2$/NDF: 16.0/17

Left In: 1414.157+/-2257.009 $\chi^2$/NDF:10.0/15

+ sign 636.937+/-1635.954 $\chi^2$/NDF: 35.4/31

All: 752.999+/-1114.279 $\chi^2$/NDF: 61.5/65

- sign 853.439+/-1521.880 $\chi^2$/NDF: 26.1/33




Right In: 6111.037+/-1.641 $\chi^2$/NDF: 471661.4/15

Left Out: 8027.154+/-1.631 $\chi^2$/NDF:664497.6/15

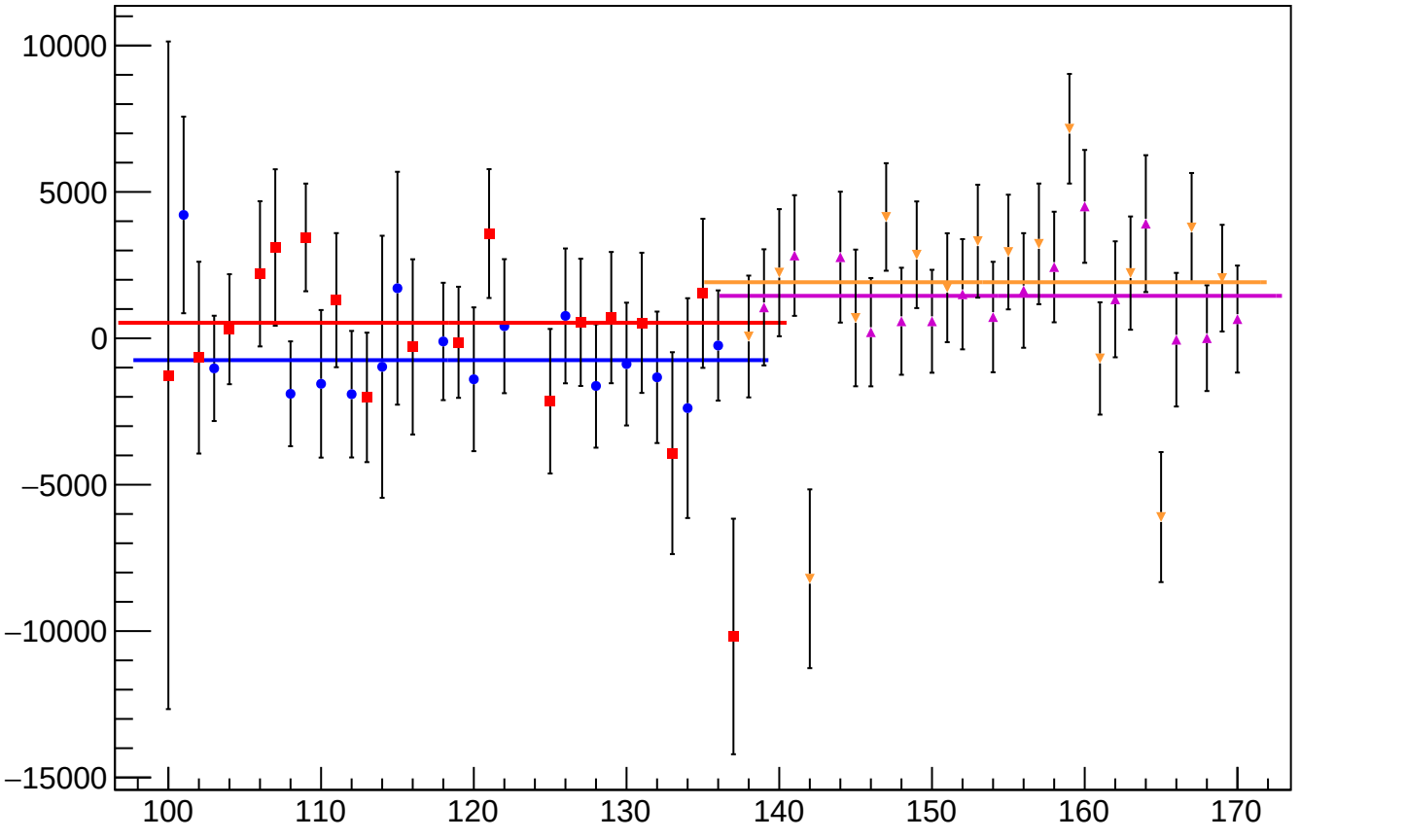
Right Out: 5412.276+/-1.457 $\chi^2$/NDF: 821530.3/17

Left In: 8025.728+/-1.596 $\chi^2$/NDF:978584.2/15

+ sign 7074.410+/-1.157 $\chi^2$/NDF: 1822055.3/31

All: 6820.373+/-0.788 $\chi^2$/NDF: 5174488.0/65

- sign 6600.529+/-1.076 $\chi^2$/NDF: 3262472.1/33




Right In: -745.918+/-578.071 $\chi^2$/NDF: 4.8/15

Left Out: 1916.007+/-499.800 $\chi^2$/NDF:38.8/15

Right Out: 531.302+/-575.115 $\chi^2$/NDF: 17.7/17

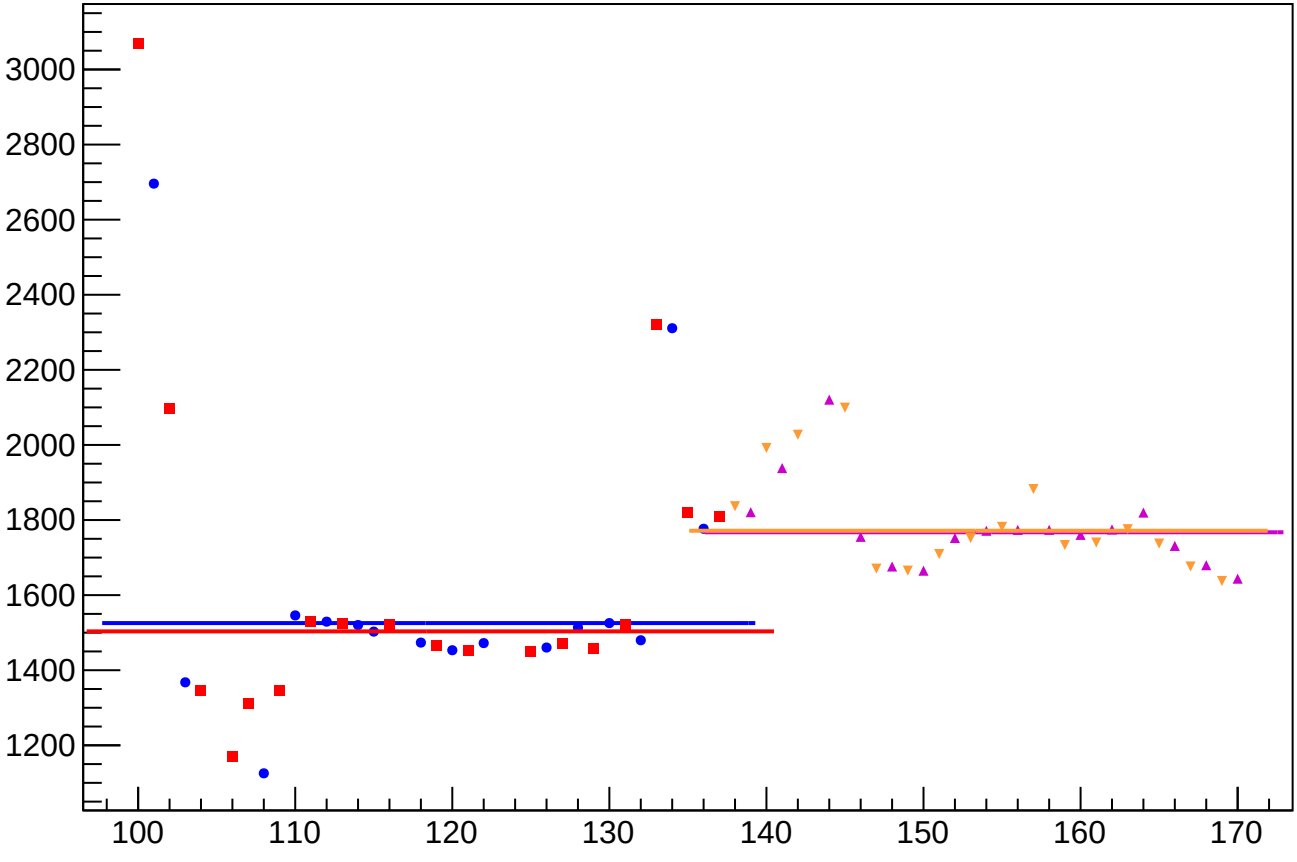
Left In: 1450.129+/-487.102 $\chi^2$/NDF:7.1/15

+ sign 777.329+/-378.080 $\chi^2$/NDF: 55.7/31

All: 924.288+/-265.058 $\chi^2$/NDF: 82.3/65

- sign 1066.328+/-371.698 $\chi^2$/NDF: 26.3/33

# eigen_dit_asym_us_avg_at2lr_avg_dd_rms vs Slug




Right In: 1525.536+/-0.409 $\chi^2$/NDF: 488327.8/15

Left Out: 1771.495+/-0.353 $\chi^2$/NDF:115092.8/15

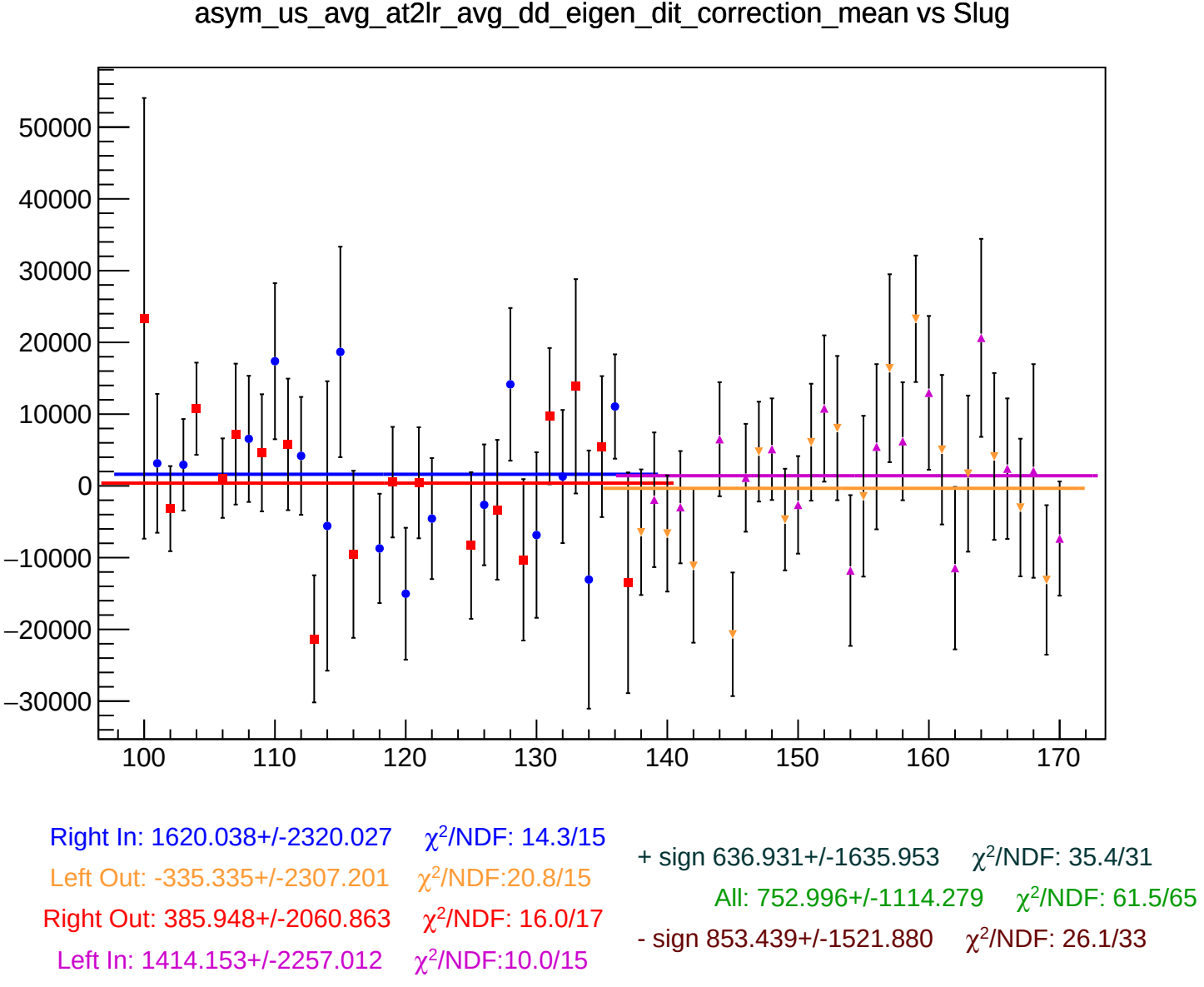
Right Out: 1503.435+/-0.407 $\chi^2$/NDF: 338507.7/17

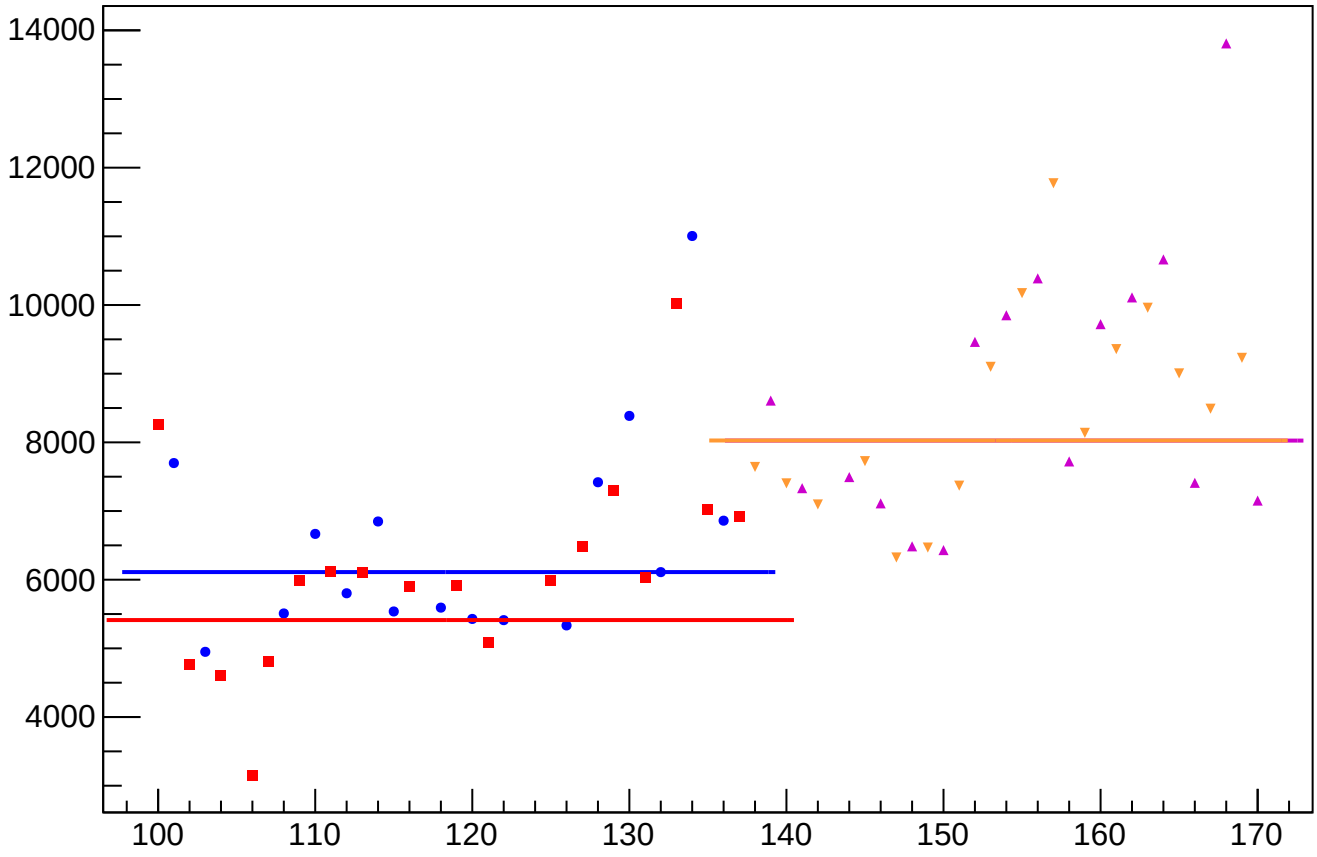
Left In: 1767.365+/-0.344 $\chi^2$/NDF:92612.6/15

+ sign 1666.282+/-0.267 $\chi^2$/NDF: 810609.8/31

All: 1661.603+/-0.187 $\chi^2$/NDF: 1487683.8/65

- sign 1657.082+/-0.263 $\chi^2$/NDF: 676471.7/33


asym_us_avg_at2lr_avg_dd_eigen_dit_correction_mean vs Slug
50000
40000
30000
20000
10000
0
−10000
−20000
−30000
100
110
120
130
140
150
160
170
Right In: 1620.038+/-2320.027 χ²/NDF: 14.3/15
Left Out: -335.335+/-2307.201 χ²/NDF:20.8/15
Right Out: 385.948+/-2060.863 χ²/NDF: 16.0/17
Left In: 1414.153+/-2257.012 χ²/NDF:10.0/15
+ sign 636.931+/-1635.953 χ²/NDF: 35.4/31
All: 752.996+/-1114.279 χ²/NDF: 61.5/65
- sign 853.439+/-1521.880 χ²/NDF: 26.1/33




Right In: 6111.023+/-1.641 $\chi^2$/NDF: 471663.6/15

Left Out: 8027.164+/-1.631 $\chi^2$/NDF:664499.1/15

Right Out: 5412.265+/-1.457 $\chi^2$/NDF: 821530.5/17

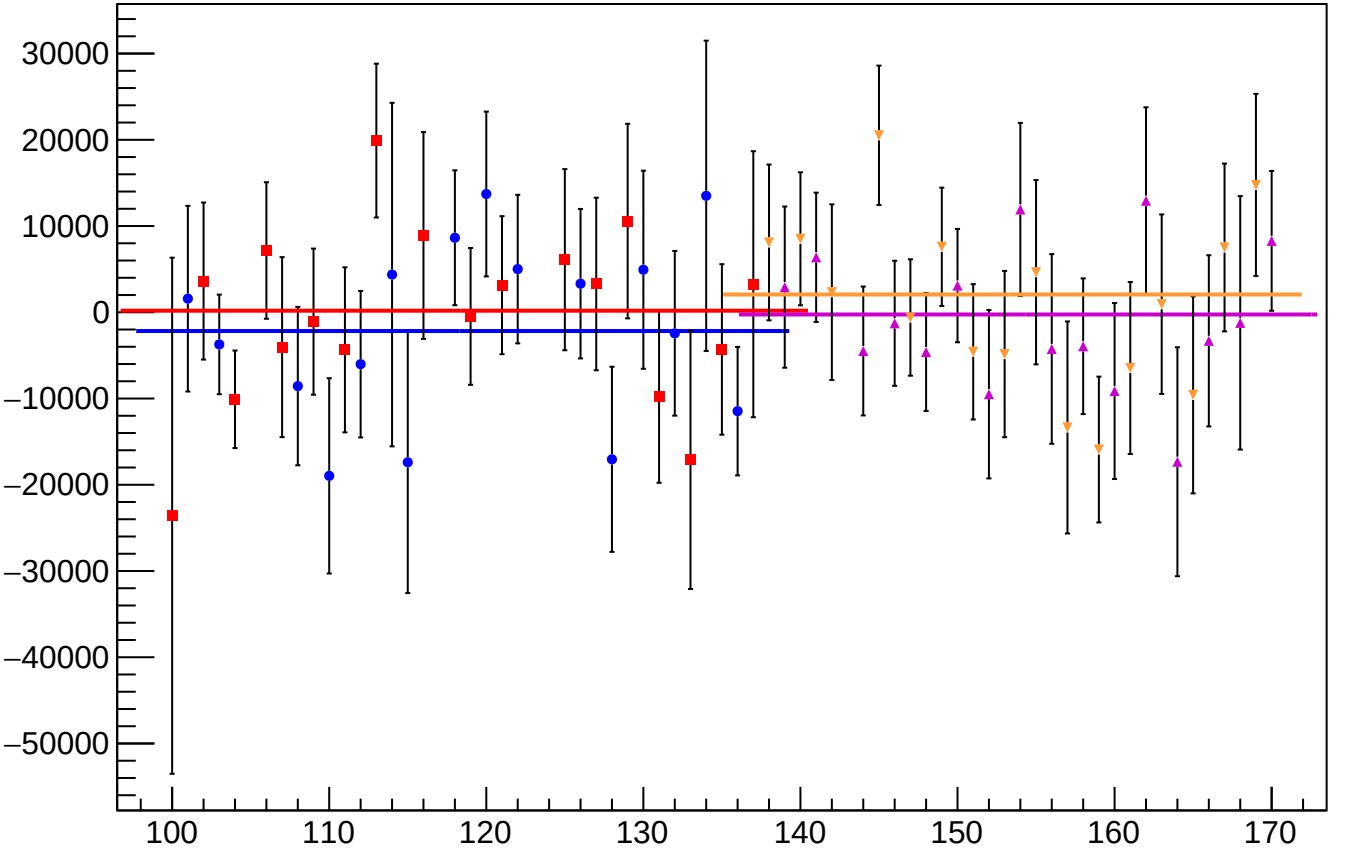
Left In: 8025.738+/-1.596 $\chi^2$/NDF:978586.8/15

+ sign 7074.405+/-1.157 $\chi^2$/NDF: 1822077.0/31

All: 6820.368+/-0.788 $\chi^2$/NDF: 5174537.3/65

- sign 6600.523+/-1.076 $\chi^2$/NDF: 3262499.3/33

# asym_us_avg_at2lr_avg_dd_mean vs Slug




Right In: -2174.048+/-2347.664 $\chi^2$/NDF: 14.6/15

Left Out: 2061.539+/-2235.597 $\chi^2$/NDF:18.1/15

Right Out: 183.559+/-2228.883 $\chi^2$/NDF: 14.7/17

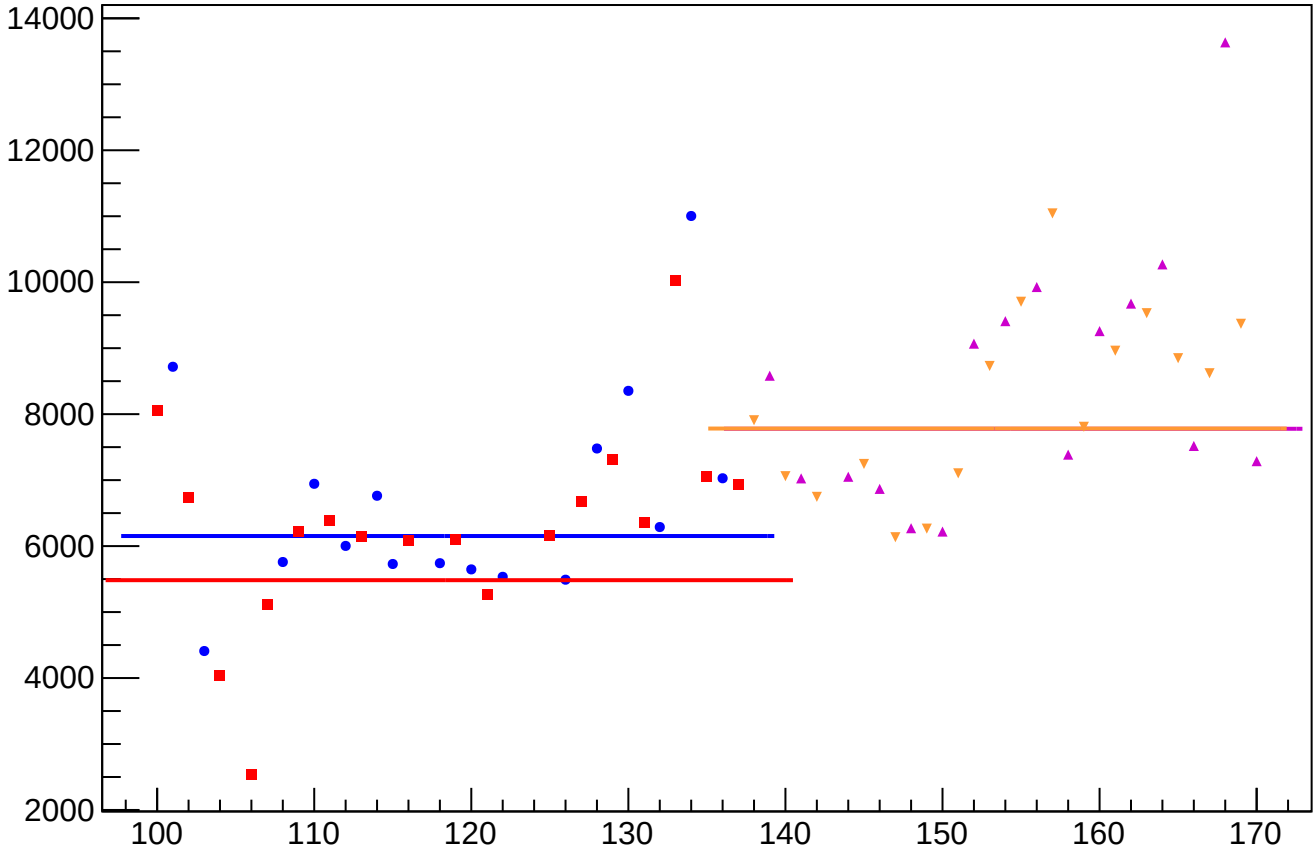
Left In: -255.732+/-2185.742 $\chi^2$/NDF:9.7/15

\+ sign 47.250+/-1618.975 $\chi^2$/NDF: 34.4/31

All: 1.827+/-1123.574 $\chi^2$/NDF: 58.8/65

\- sign -40.379+/-1560.582 $\chi^2$/NDF: 24.4/33

# asym_us_avg_at2lr_avg_dd_rms vs Slug




Right In: 6152.690+/-1.660 $\chi^2$/NDF: 624026.7/15

Left Out: 7781.813+/-1.581 $\chi^2$/NDF:666226.0/15

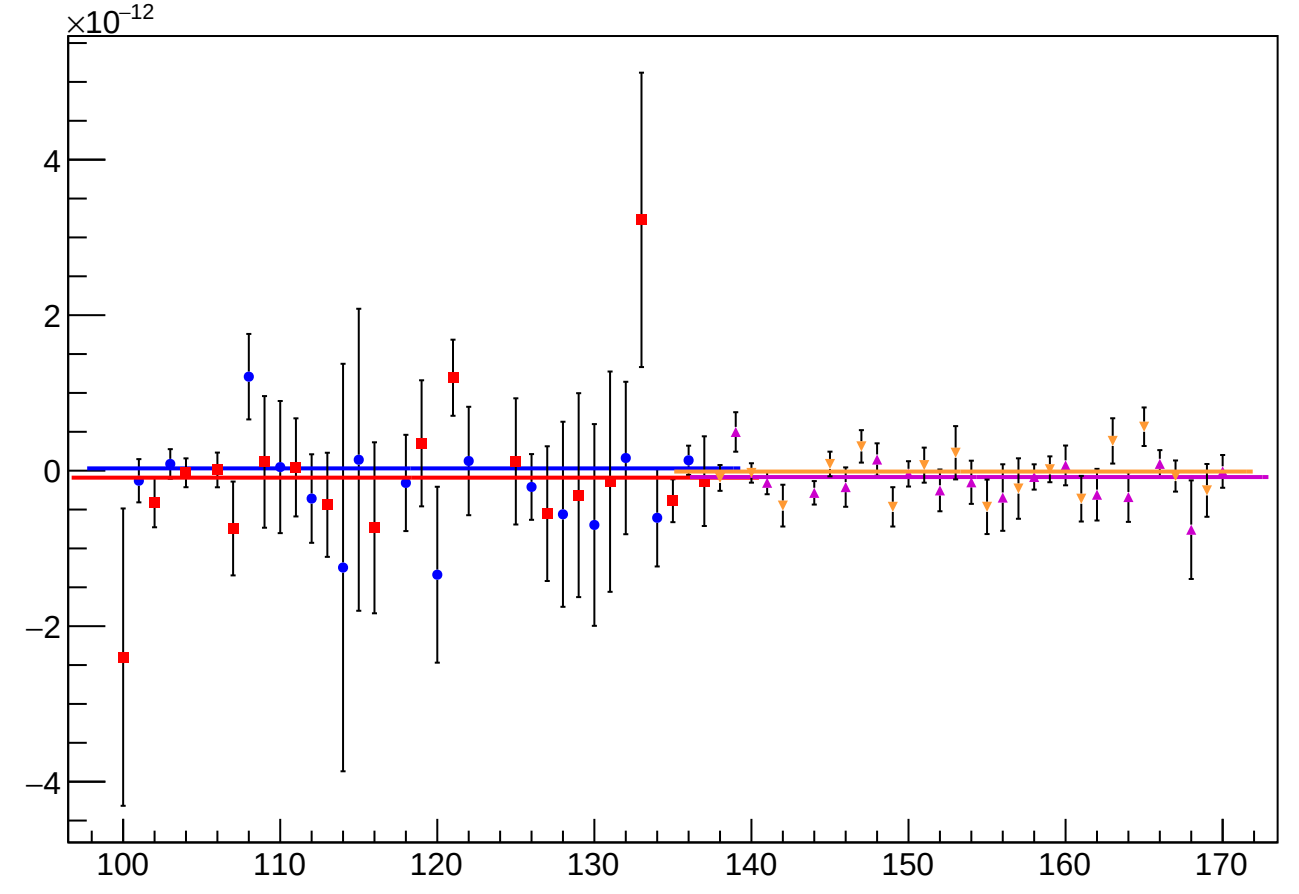
Right Out: 5483.337+/-1.519 $\chi^2$/NDF: 1148712.9/17

Left In: 7778.321+/-1.546 $\chi^2$/NDF:964289.2/15

+ sign 7007.057+/-1.145 $\chi^2$/NDF: 1795334.4/31

All: 6798.303+/-0.787 $\chi^2$/NDF: 5092603.6/65

- sign 6611.292+/-1.084 $\chi^2$/NDF: 3234228.0/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 9.5/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:20.8/15

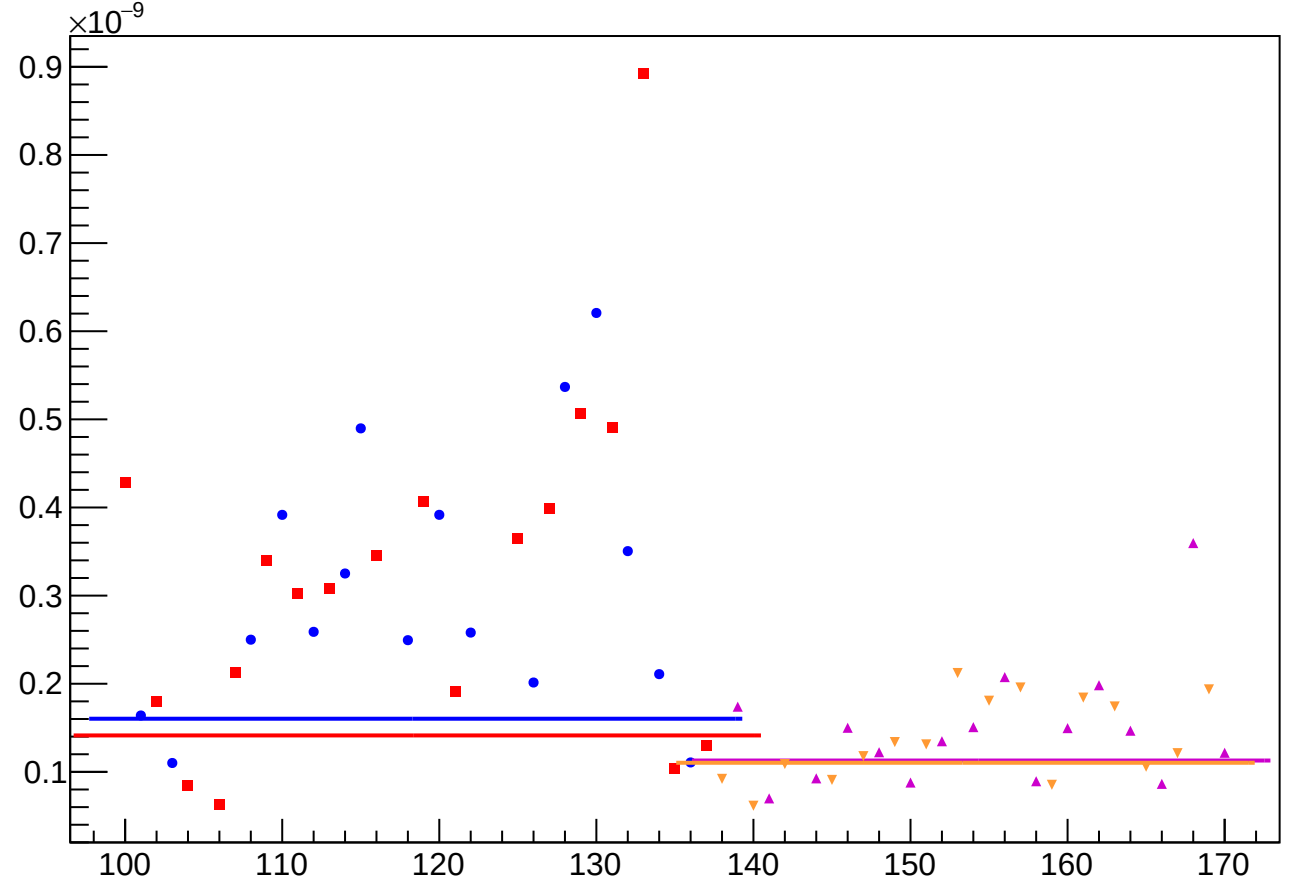
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 16.5/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:13.2/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 30.5/31

All: -0.000+/-0.000 $\chi^2$/NDF: 61.6/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 29.7/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1329606.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1145627.9/15

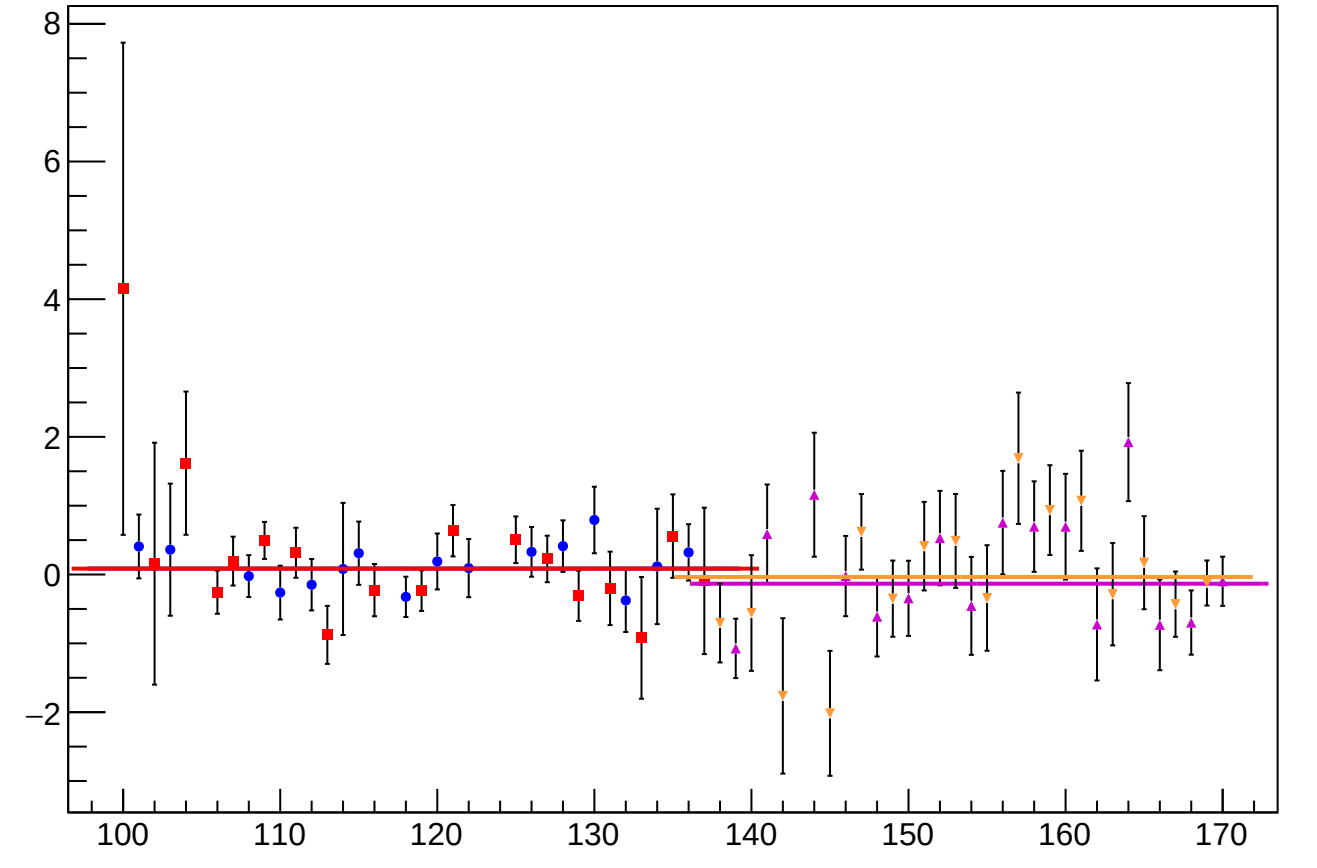
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2165946.2/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1152518.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2840991.9/31

All: 0.000+/-0.000 $\chi^2$/NDF: 6281709.5/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 3439158.5/33




Right In: 0.087+/-0.105 $\chi^2$/NDF: 8.8/15

Left Out: -0.036+/-0.154 $\chi^2$/NDF:20.6/15

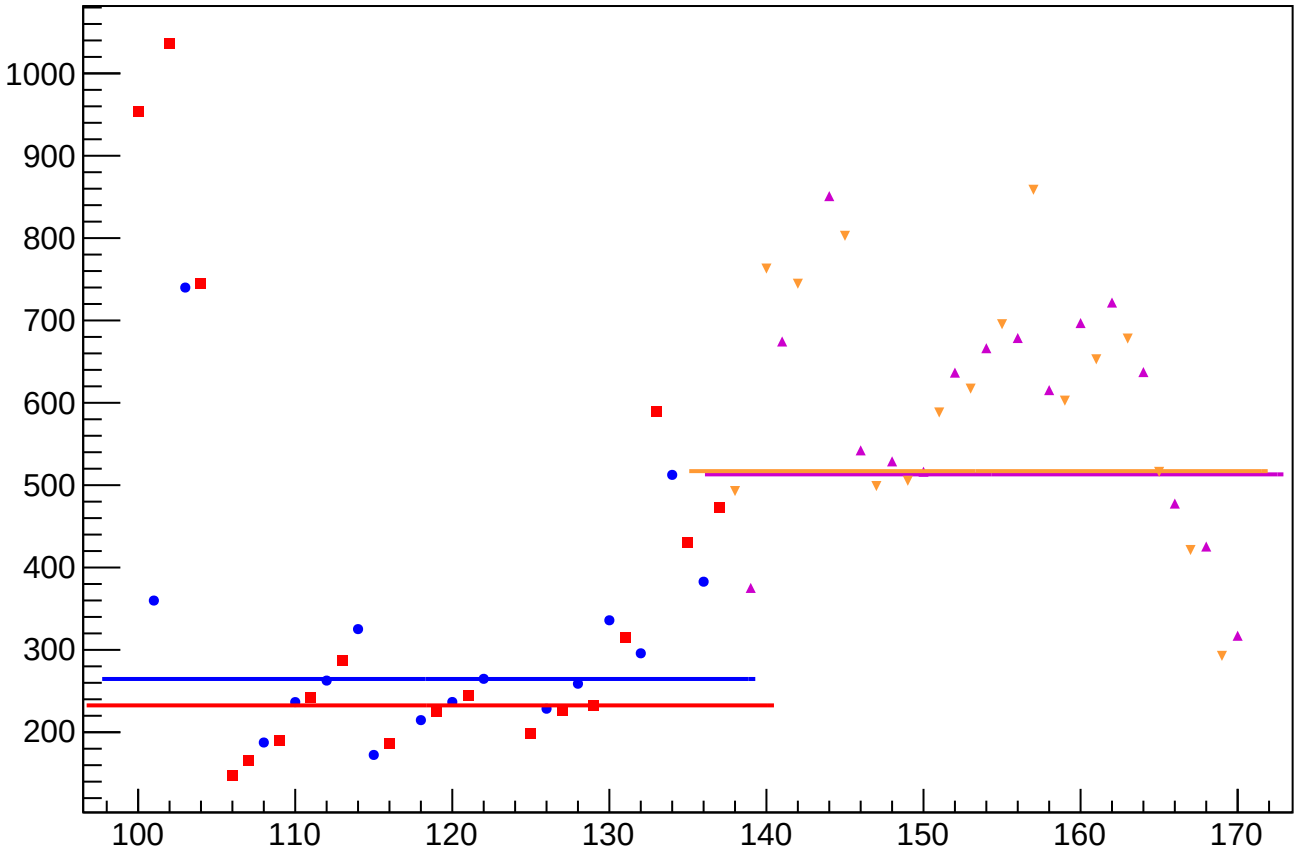
Right Out: 0.086+/-0.097 $\chi^2$/NDF: 21.8/17

Left In: -0.133+/-0.149 $\chi^2$/NDF:22.6/15

+ sign 0.048+/-0.087 $\chi^2$/NDF: 29.9/31

All: 0.033+/-0.059 $\chi^2$/NDF: 75.8/65

- sign 0.020+/-0.081 $\chi^2$/NDF: 45.9/33




Right In: 264.667+/-0.074 $\chi^2$/NDF: 1284007.6/15

Left Out: 517.039+/-0.109 $\chi^2$/NDF:2106547.2/15

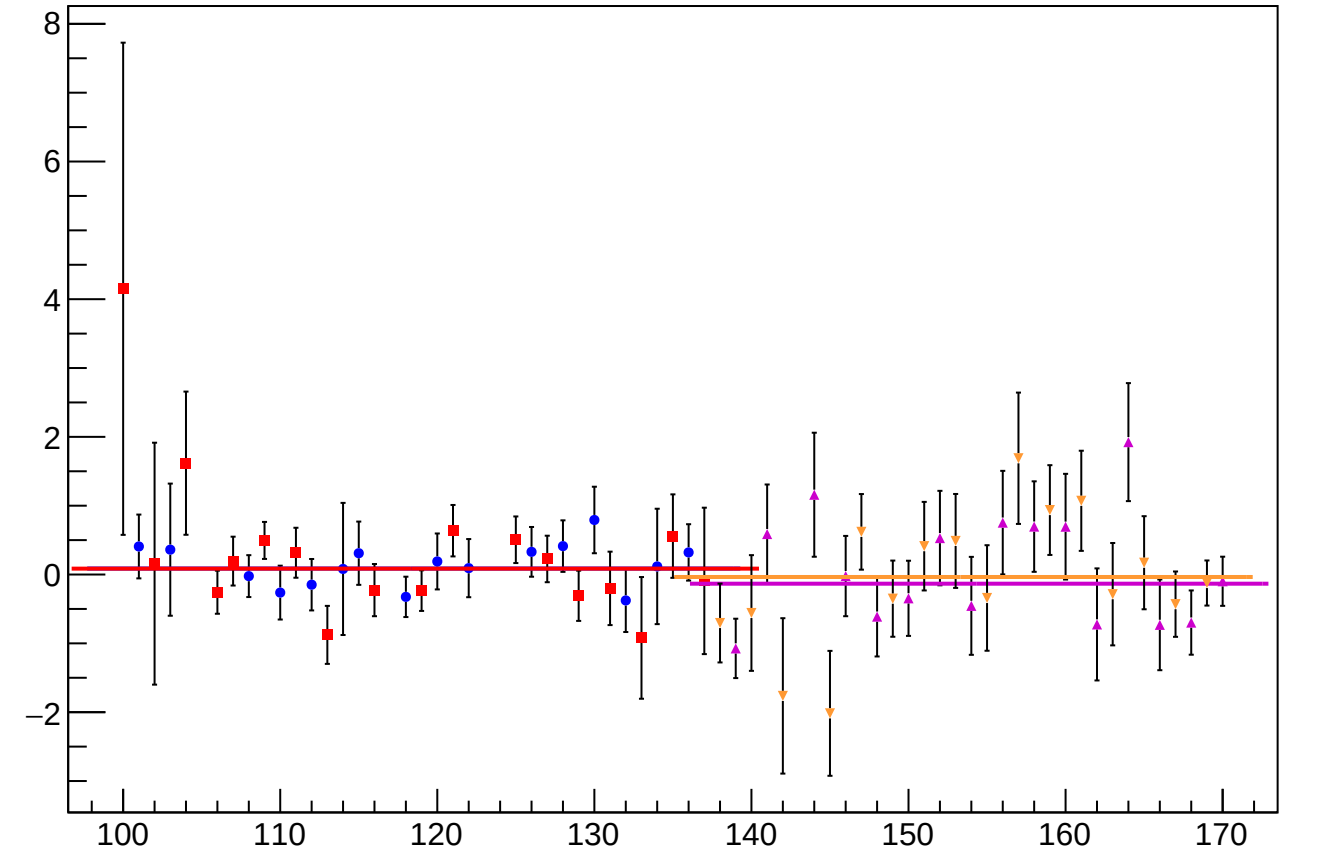
Right Out: 232.596+/-0.069 $\chi^2$/NDF: 2032662.7/17

Left In: 513.111+/-0.105 $\chi^2$/NDF:1862280.7/15

+ sign 345.138+/-0.061 $\chi^2$/NDF: 7069196.5/31

All: 330.096+/-0.042 $\chi^2$/NDF: 16065691.1/65

- sign 316.837+/-0.058 $\chi^2$/NDF: 8883285.2/33




Right In: 0.087+/-0.105 $\chi^2$/NDF: 8.8/15

Left Out: -0.036+/-0.154 $\chi^2$/NDF:20.6/15

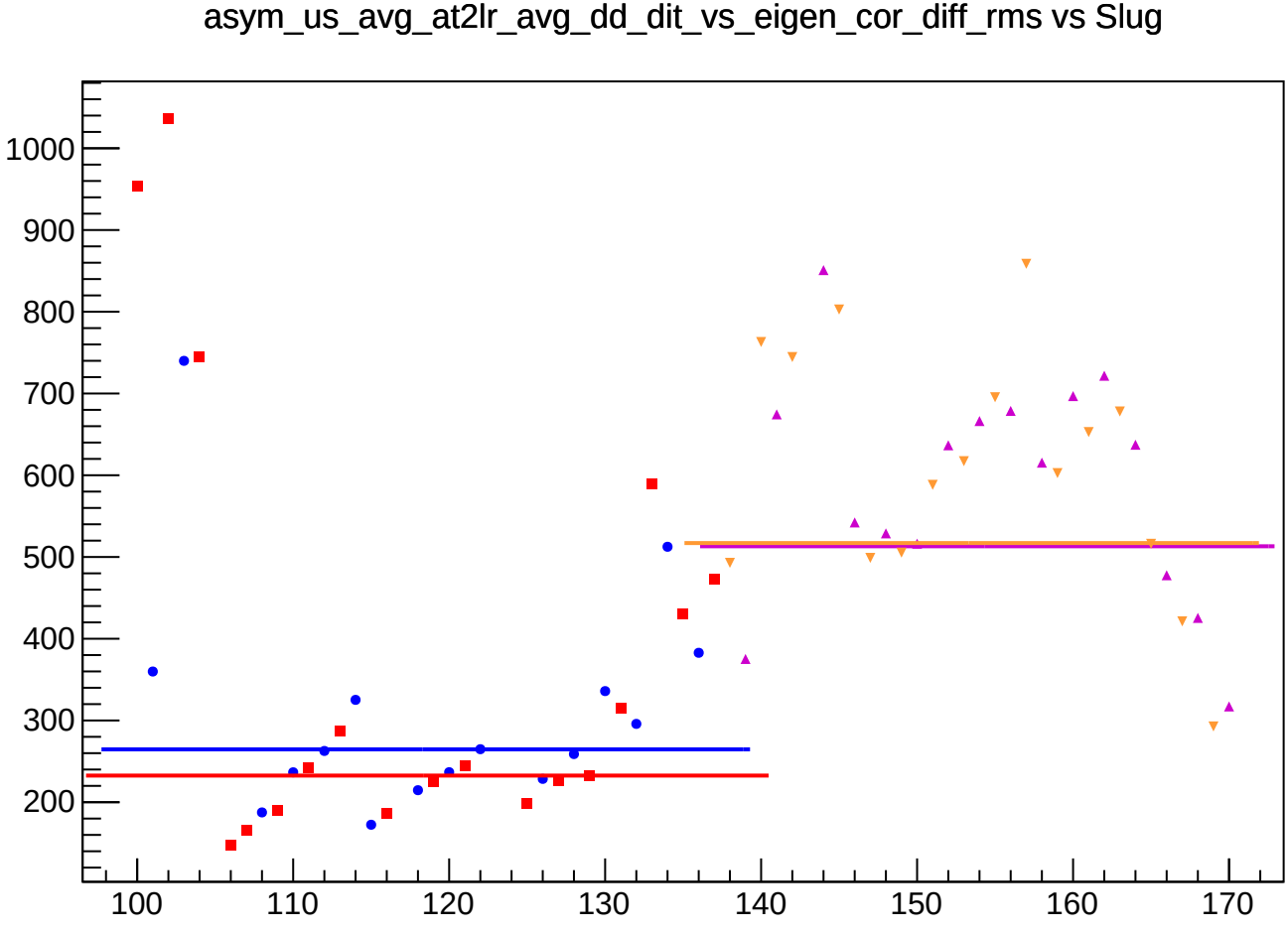
Right Out: 0.086+/-0.097 $\chi^2$/NDF: 21.8/17

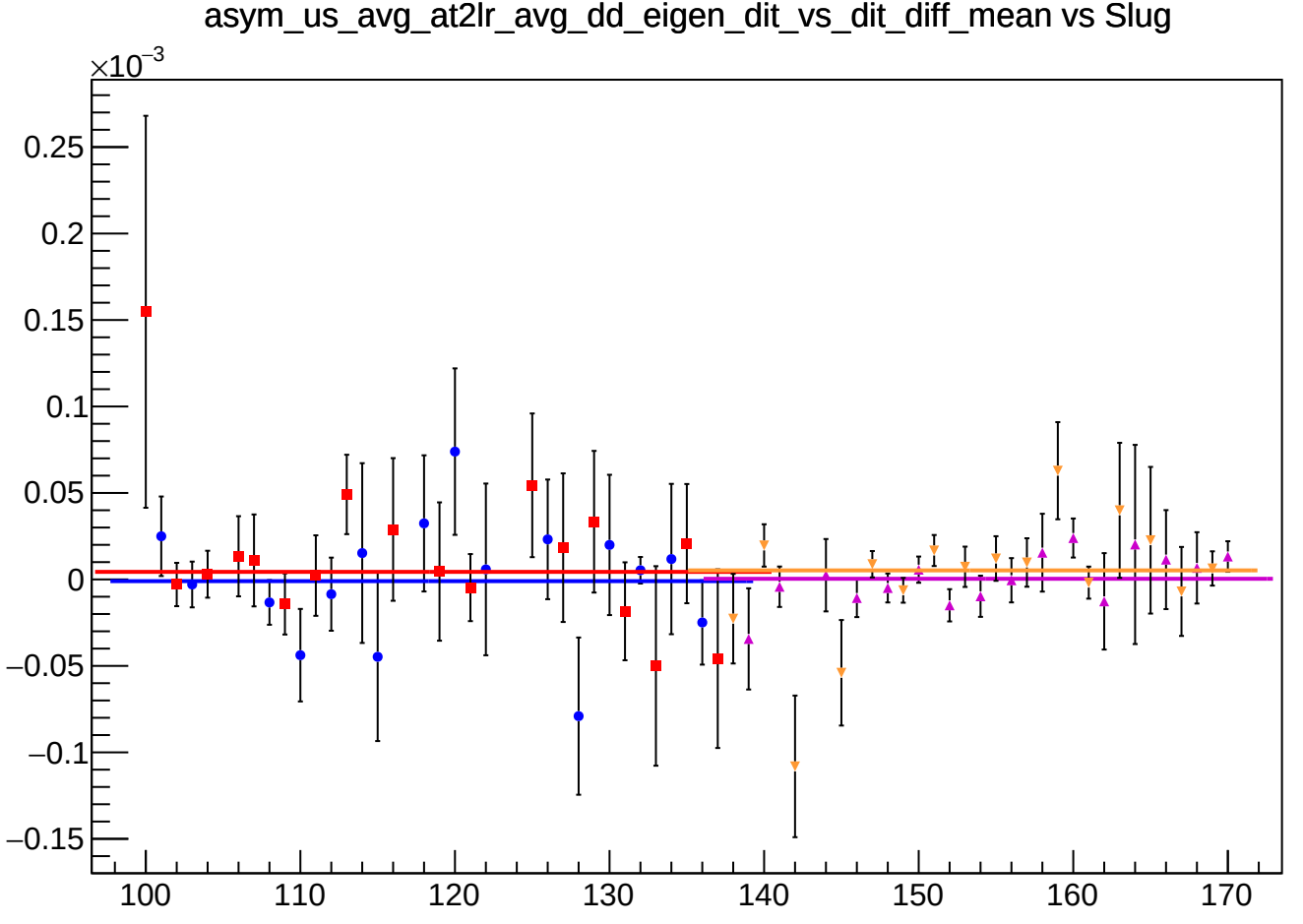
Left In: -0.133+/-0.149 $\chi^2$/NDF:22.6/15

+ sign 0.048+/-0.087 $\chi^2$/NDF: 29.9/31

All: 0.033+/-0.059 $\chi^2$/NDF: 75.8/65

- sign 0.020+/-0.081 $\chi^2$/NDF: 45.9/33


asym_us_avg_at2lr_avg_dd_dit_vs_eigen_cor_diff_rms vs Slug
1000
900
800
700
600
500
400
300
200
100
110
120
130
140
150
160
170
Right In: 264.667+/-0.074 χ²/NDF: 1284007.6/15
Left Out: 517.039+/-0.109 χ²/NDF:2106547.2/15
Right Out: 232.596+/-0.069 χ²/NDF: 2032662.7/17
Left In: 513.111+/-0.105 χ²/NDF:1862280.7/15
+ sign 345.138+/-0.061 χ²/NDF: 7069196.5/31
All: 330.096+/-0.042 χ²/NDF: 16065691.1/65
- sign 316.837+/-0.058 χ²/NDF: 8883285.2/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:24.8/15

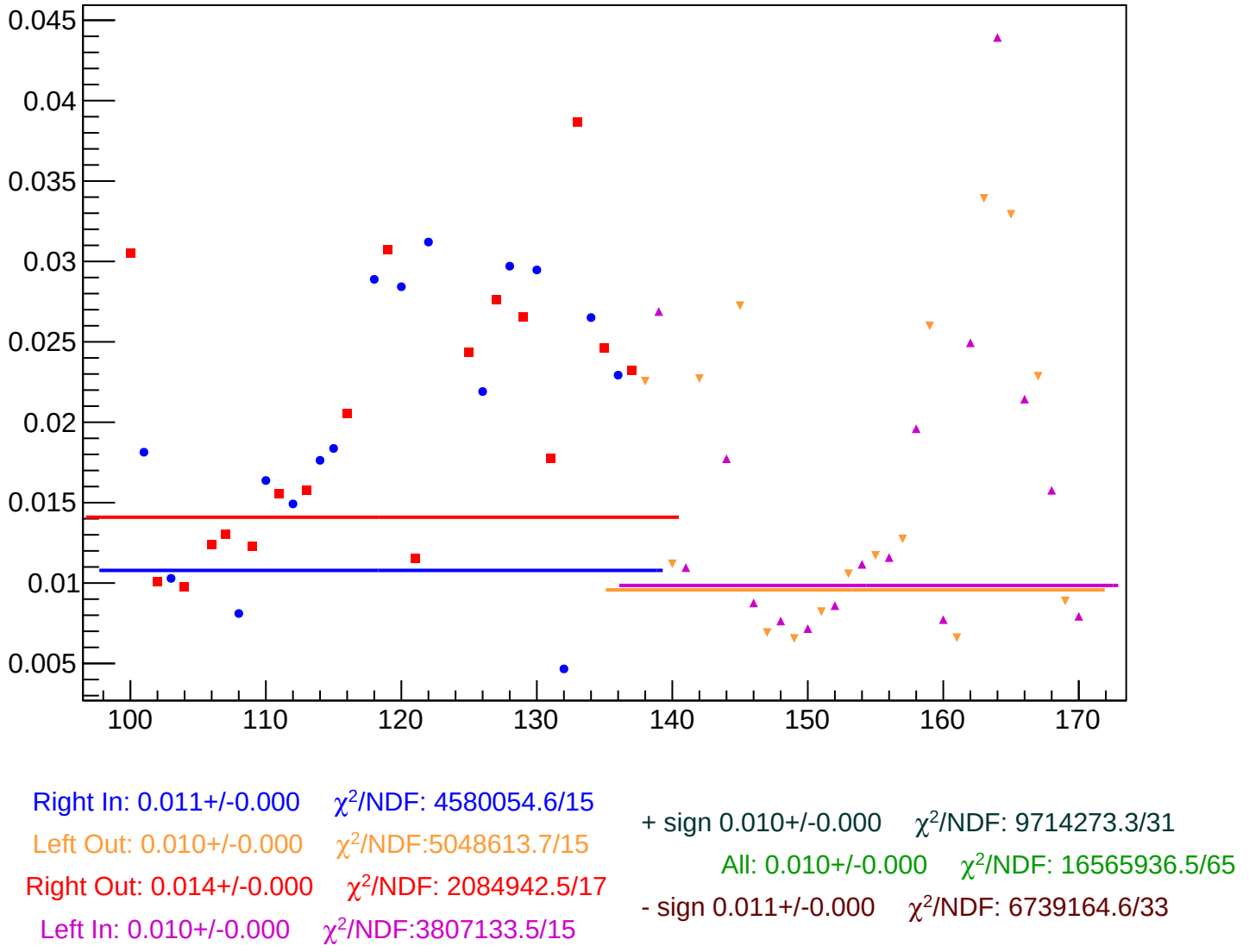
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 12.6/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:14.4/15

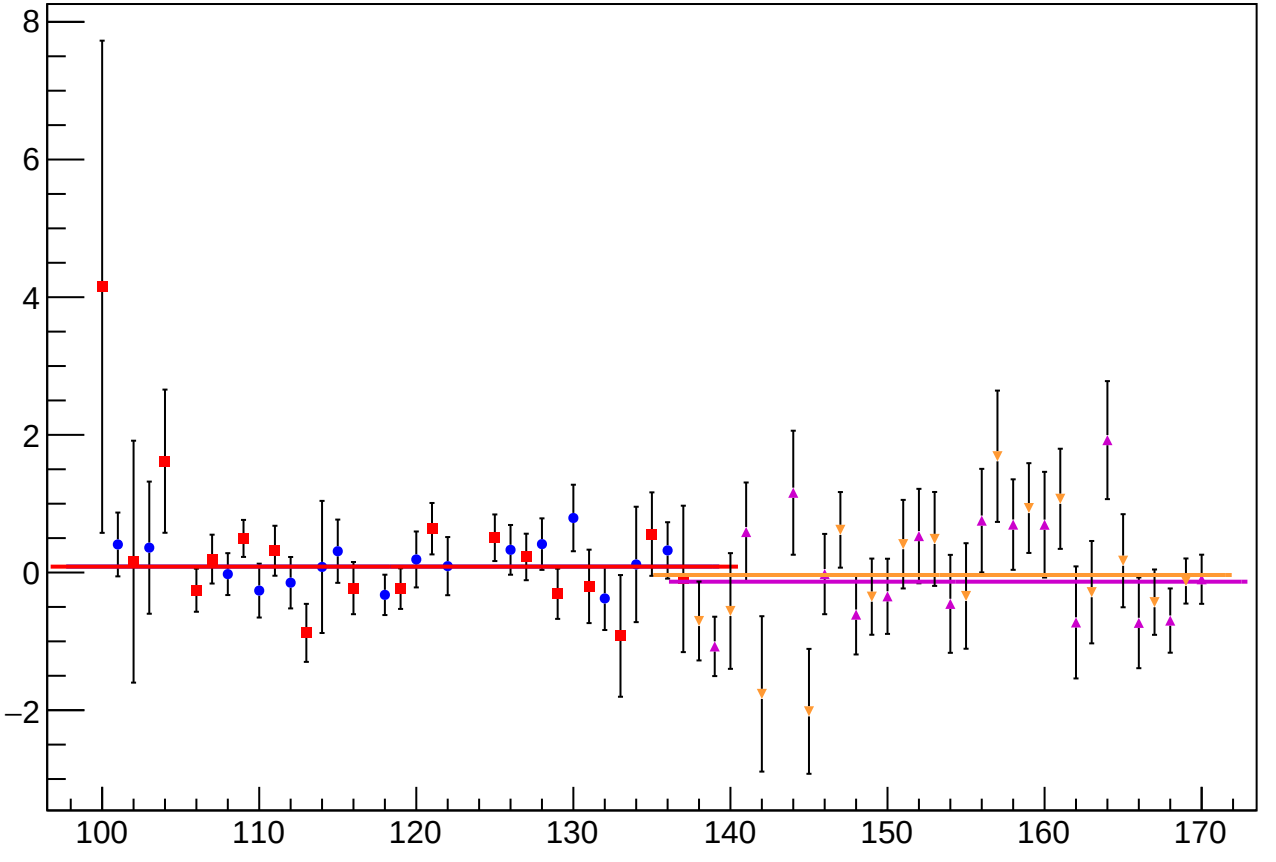
+ sign 0.000+/-0.000 $\chi^2$/NDF: 40.3/31

All: 0.000+/-0.000 $\chi^2$/NDF: 68.1/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 27.4/33


asym_us_avg_at2lr_avg_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
100
110
120
130
140
150
160
170
Right In: 0.011+/-0.000 χ²/NDF: 4580054.6/15
Left Out: 0.010+/-0.000 χ²/NDF:5048613.7/15
Right Out: 0.014+/-0.000 χ²/NDF: 2084942.5/17
Left In: 0.010+/-0.000 χ²/NDF:3807133.5/15
+ sign 0.010+/-0.000 χ²/NDF: 9714273.3/31
All: 0.010+/-0.000 χ²/NDF: 16565936.5/65
- sign 0.011+/-0.000 χ²/NDF: 6739164.6/33

asym_us_avg_at2lr_avg_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.087+/-0.105 $\chi^2$/NDF: 8.8/15

Left Out: -0.036+/-0.154 $\chi^2$/NDF:20.6/15

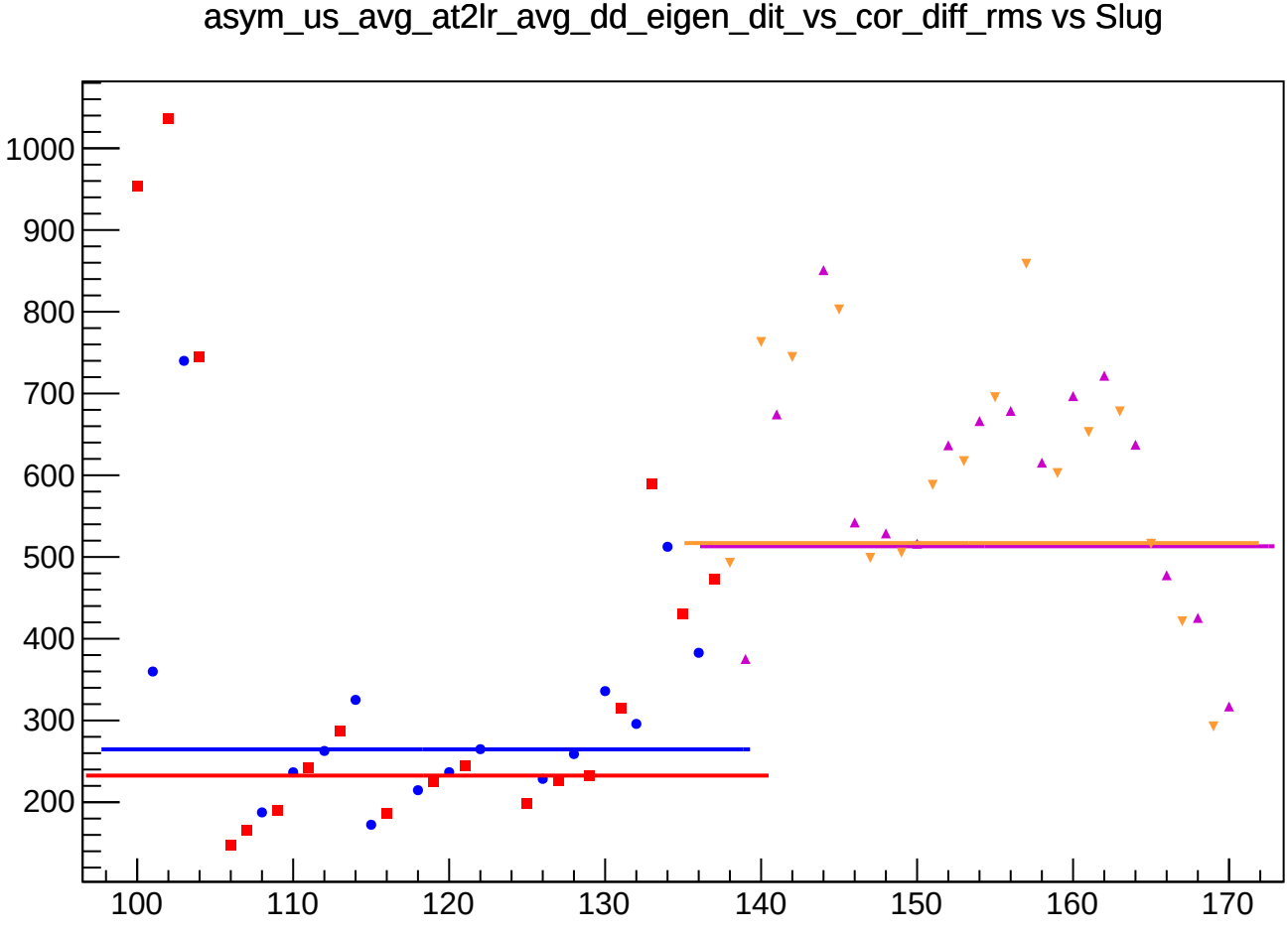
Right Out: 0.086+/-0.097 $\chi^2$/NDF: 21.8/17

Left In: -0.133+/-0.149 $\chi^2$/NDF:22.6/15

+ sign 0.048+/-0.087 $\chi^2$/NDF: 29.9/31

All: 0.033+/-0.059 $\chi^2$/NDF: 75.8/65

- sign 0.020+/-0.081 $\chi^2$/NDF: 45.9/33




Right In: 264.667+/-0.074 $\chi^2$/NDF: 1283977.8/15

Left Out: 517.043+/-0.109 $\chi^2$/NDF:2106631.1/15

Right Out: 232.596+/-0.069 $\chi^2$/NDF: 2032655.0/17

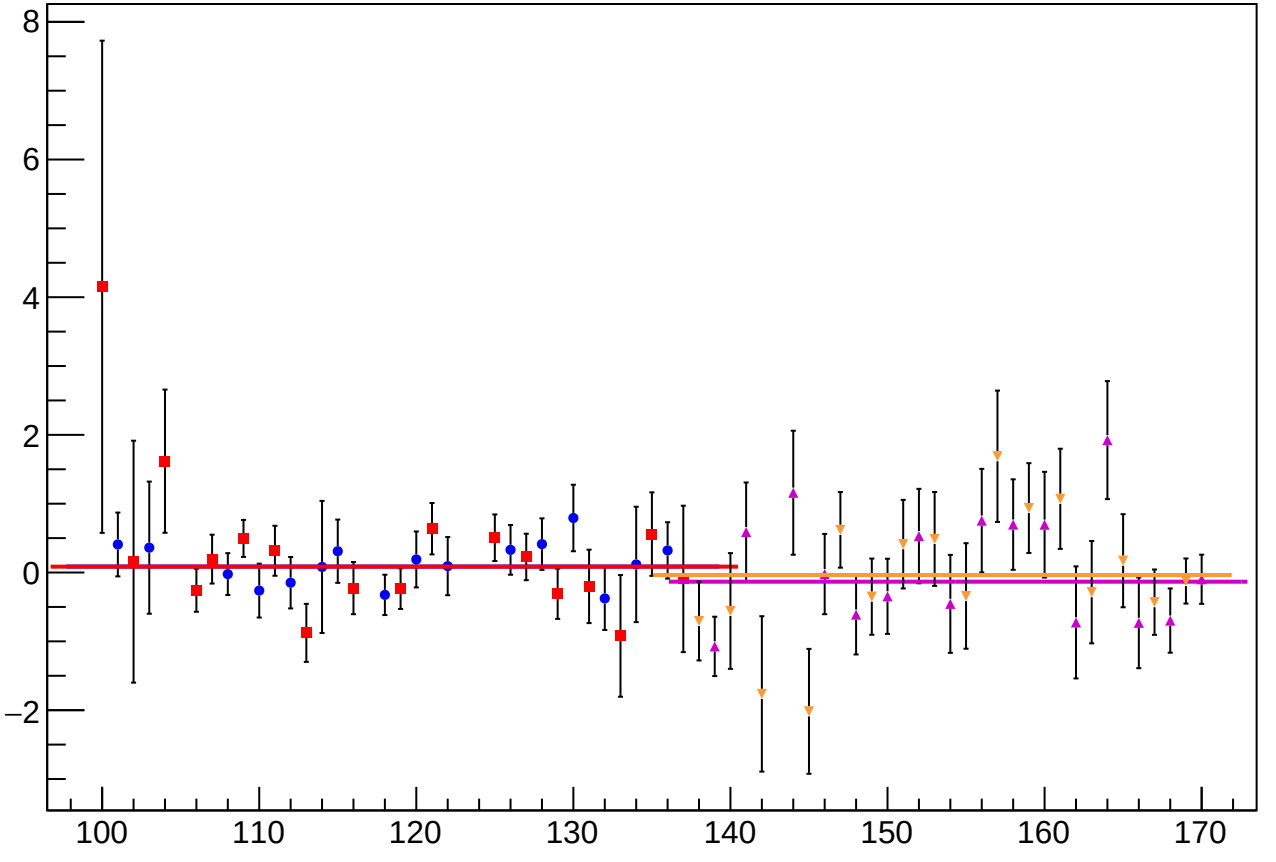
Left In: 513.117+/-0.105 $\chi^2$/NDF:1862292.1/15

+ sign 345.138+/-0.061 $\chi^2$/NDF: 7069334.4/31

All: 330.097+/-0.042 $\chi^2$/NDF: 16065937.7/65

- sign 316.838+/-0.058 $\chi^2$/NDF: 8883404.0/33

asym_us_avg_at2lr_avg_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.087+/-0.105 $\chi^2$/NDF: 8.8/15

Left Out: -0.036+/-0.154 $\chi^2$/NDF:20.6/15

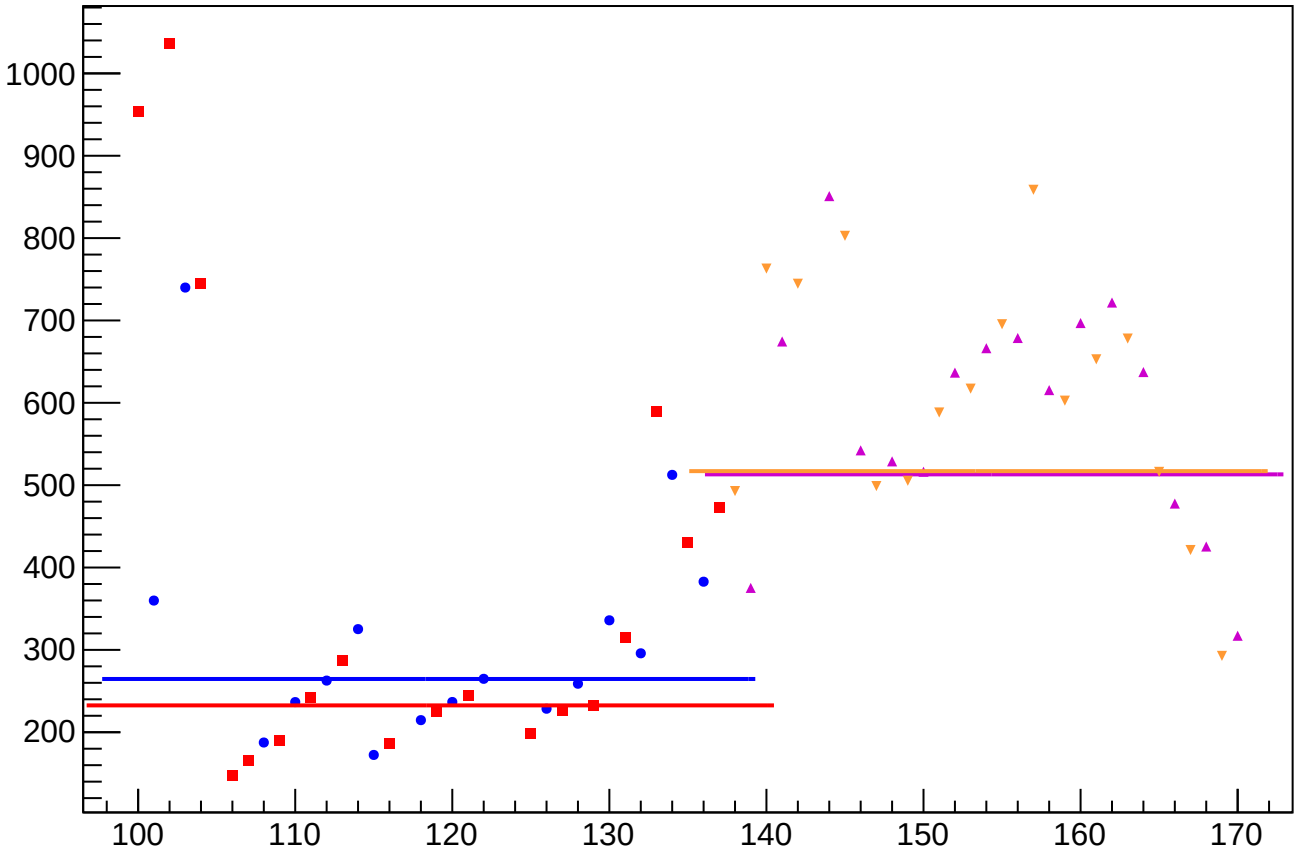
Right Out: 0.086+/-0.097 $\chi^2$/NDF: 21.8/17

Left In: -0.133+/-0.149 $\chi^2$/NDF:22.6/15

+ sign 0.048+/-0.087 $\chi^2$/NDF: 29.9/31

All: 0.033+/-0.059 $\chi^2$/NDF: 75.8/65

- sign 0.020+/-0.081 $\chi^2$/NDF: 45.9/33




Right In: 264.667+/-0.074 $\chi^2$/NDF: 1283977.8/15

Left Out: 517.043+/-0.109 $\chi^2$/NDF:2106631.1/15

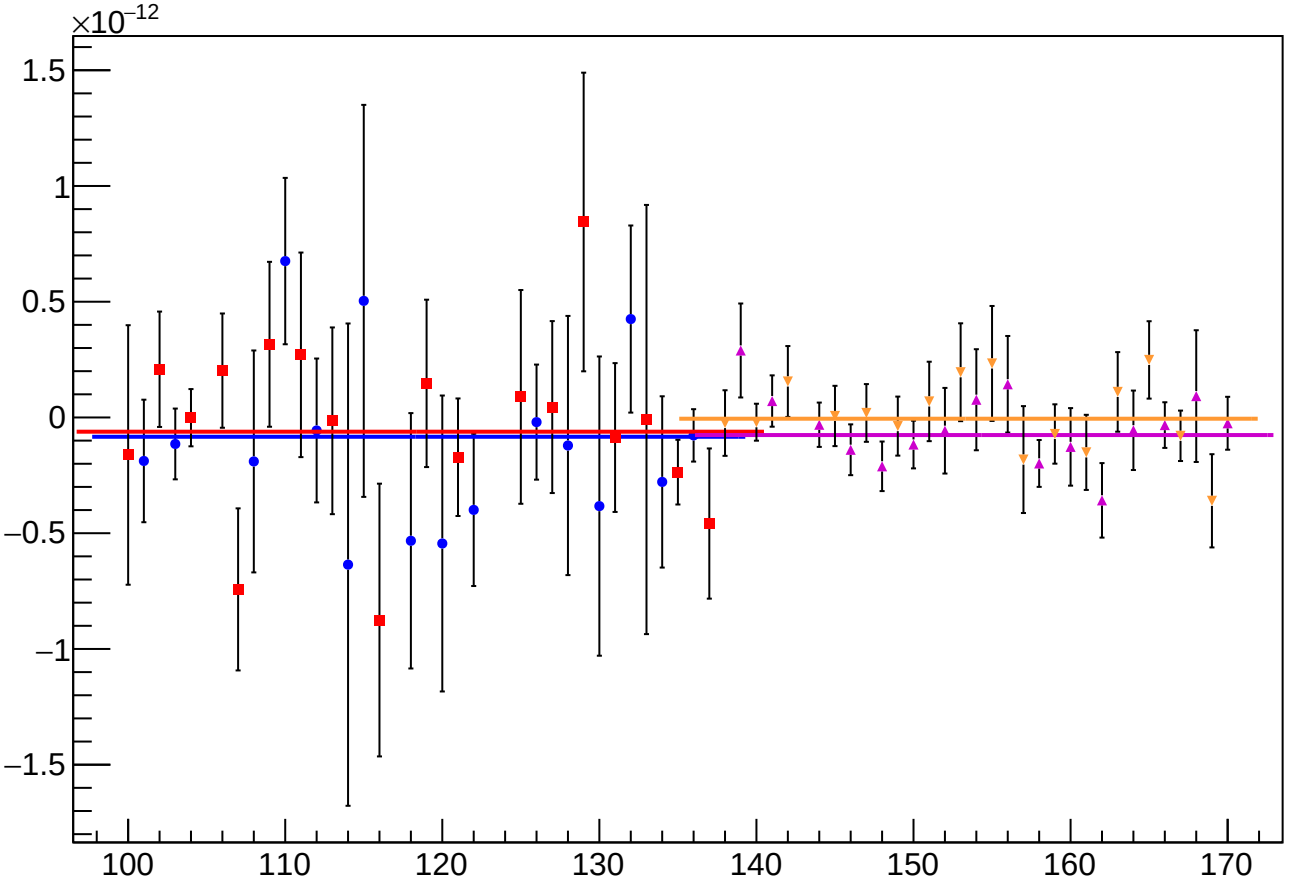
Right Out: 232.596+/-0.069 $\chi^2$/NDF: 2032655.0/17

Left In: 513.117+/-0.105 $\chi^2$/NDF:1862292.1/15

+ sign 345.138+/-0.061 $\chi^2$/NDF: 7069334.4/31

All: 330.097+/-0.042 $\chi^2$/NDF: 16065937.7/65

- sign 316.838+/-0.058 $\chi^2$/NDF: 8883404.0/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 9.7/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:11.3/15

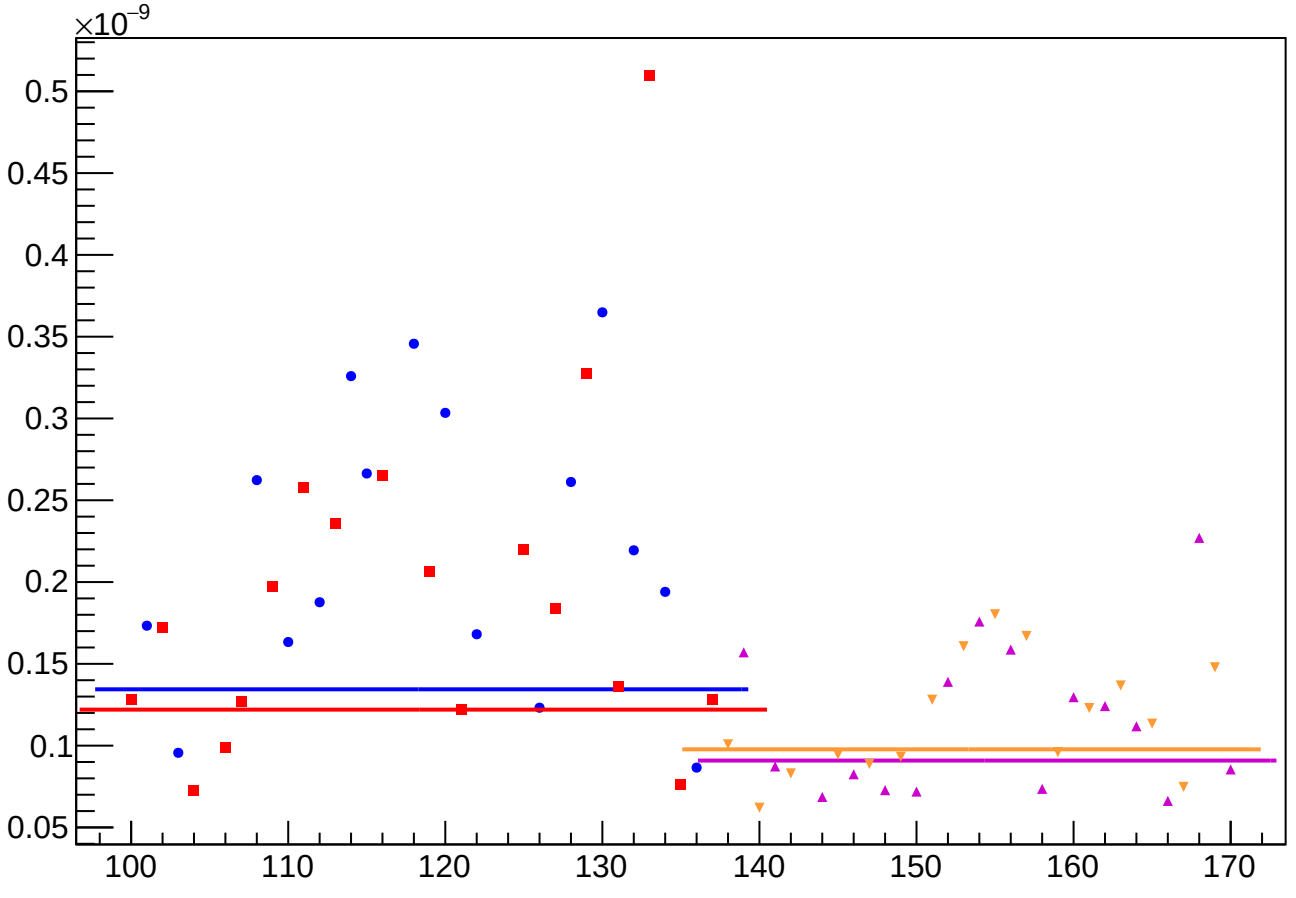
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.7/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:14.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 22.0/31

All: -0.000+/-0.000 $\chi^2$/NDF: 53.5/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 30.1/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1814968.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1457402.6/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2003381.5/17

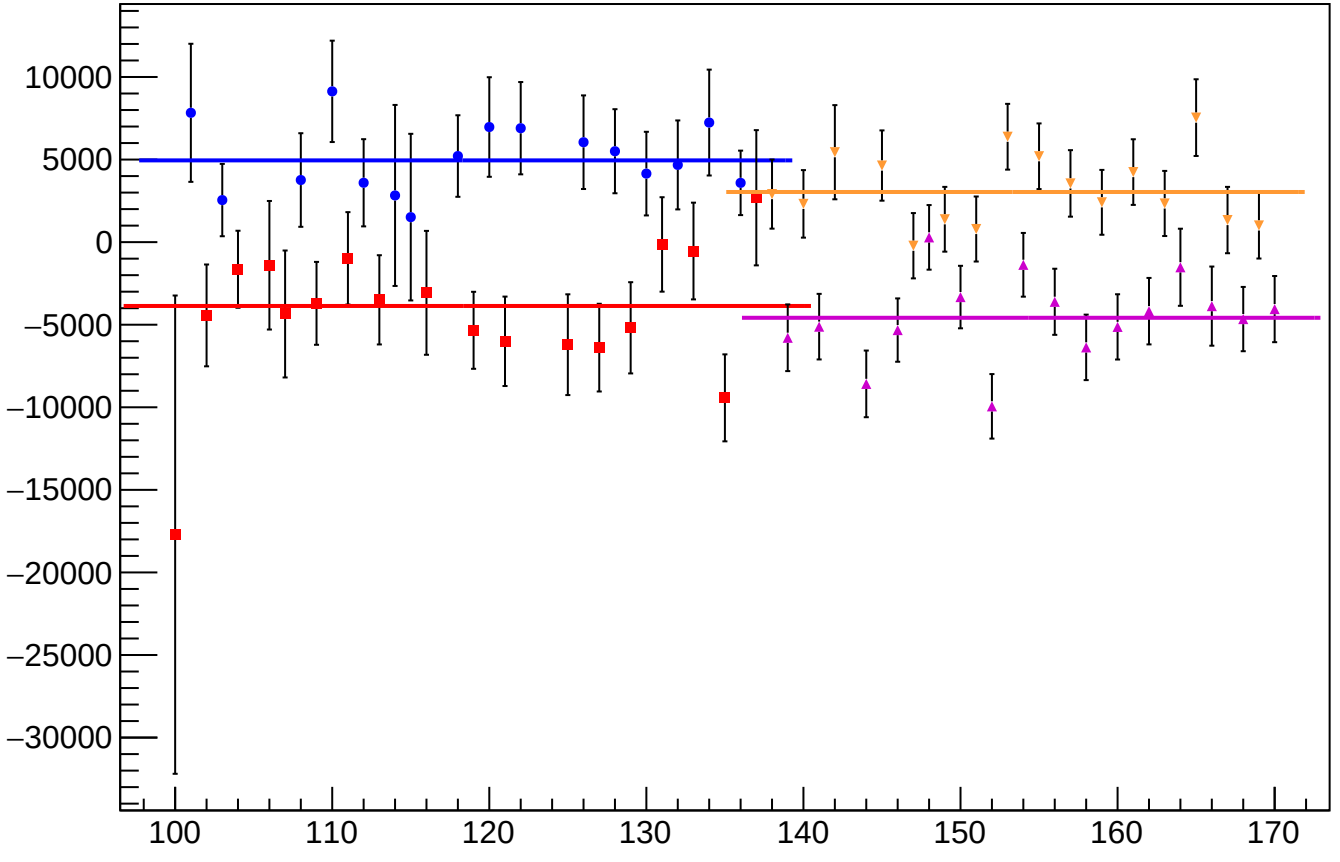
Left In: 0.000+/-0.000 $\chi^2$/NDF:1977552.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3720625.6/31

All: 0.000+/-0.000 $\chi^2$/NDF: 8146648.9/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 4352770.9/33

# reg_asym_us_avg_atlr_avg_avg_mean vs Slug




Right In: 4950.321+/-698.937 $\chi^2$/NDF: 6.8/15

Left Out: 3036.710+/-513.686 $\chi^2$/NDF:16.3/15

Right Out: -3865.145+/-695.781 $\chi^2$/NDF: 16.2/17

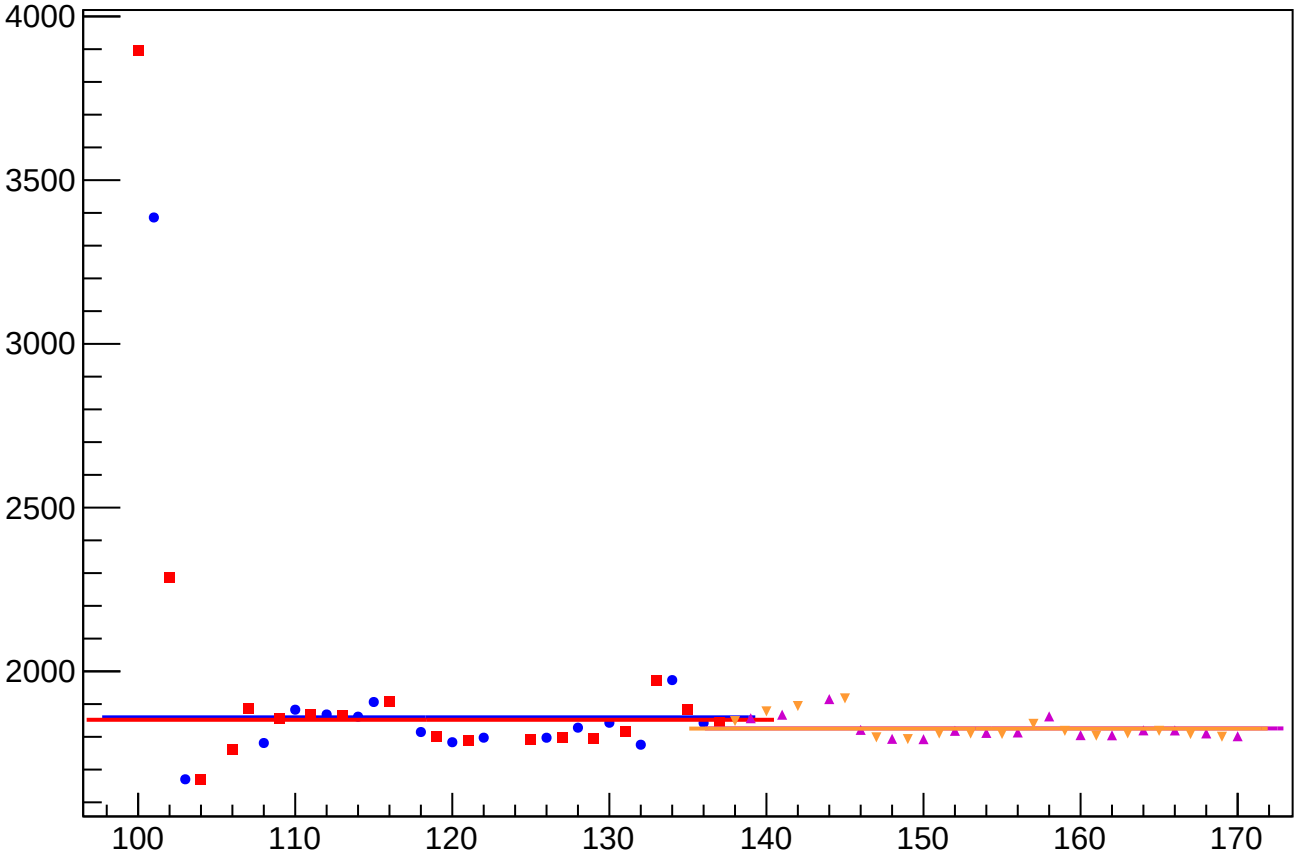
Left In: -4580.483+/-502.187 $\chi^2$/NDF:24.5/15

+ sign 3707.844+/-413.919 $\chi^2$/NDF: 28.0/31

All: -379.611+/-290.281 $\chi^2$/NDF: 261.2/65

- sign -4335.472+/-407.202 $\chi^2$/NDF: 41.4/33

# reg_asym_us_avg_atlr_avg_avg_rms vs Slug




Right In: 1859.509+/-0.494 $\chi^2$/NDF: 292334.6/15

Left Out: 1825.233+/-0.363 $\chi^2$/NDF:8709.4/15

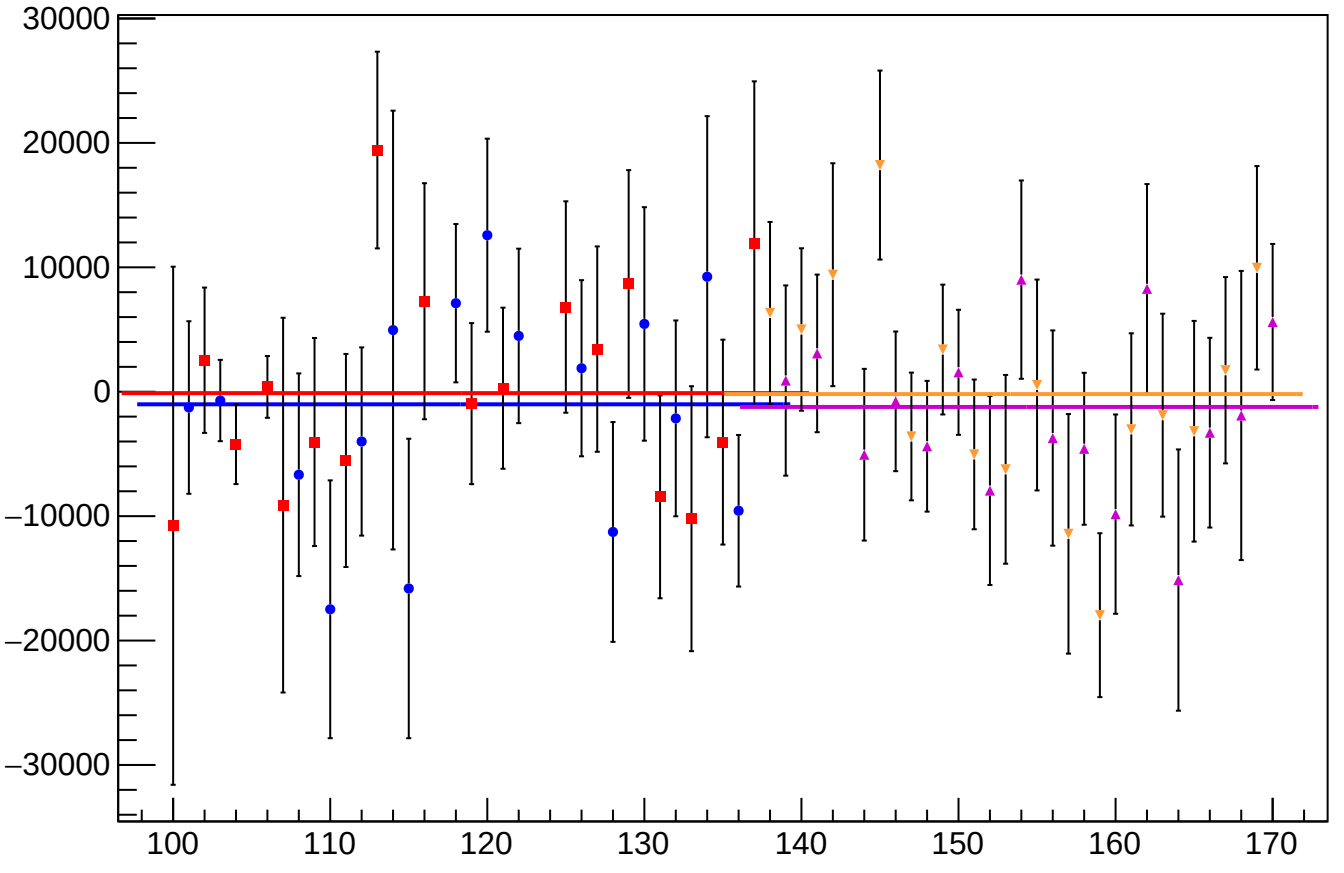
Right Out: 1852.065+/-0.490 $\chi^2$/NDF: 102212.5/17

Left In: 1825.677+/-0.355 $\chi^2$/NDF:8196.0/15

+ sign 1837.254+/-0.293 $\chi^2$/NDF: 304167.0/31

All: 1835.981+/-0.205 $\chi^2$/NDF: 416511.6/65

- sign 1834.752+/-0.288 $\chi^2$/NDF: 112307.5/33




Right In: -1010.288+/-1764.180 $\chi^2$/NDF: 14.7/15

Left Out: -189.130+/-1776.984 $\chi^2$/NDF:21.2/15

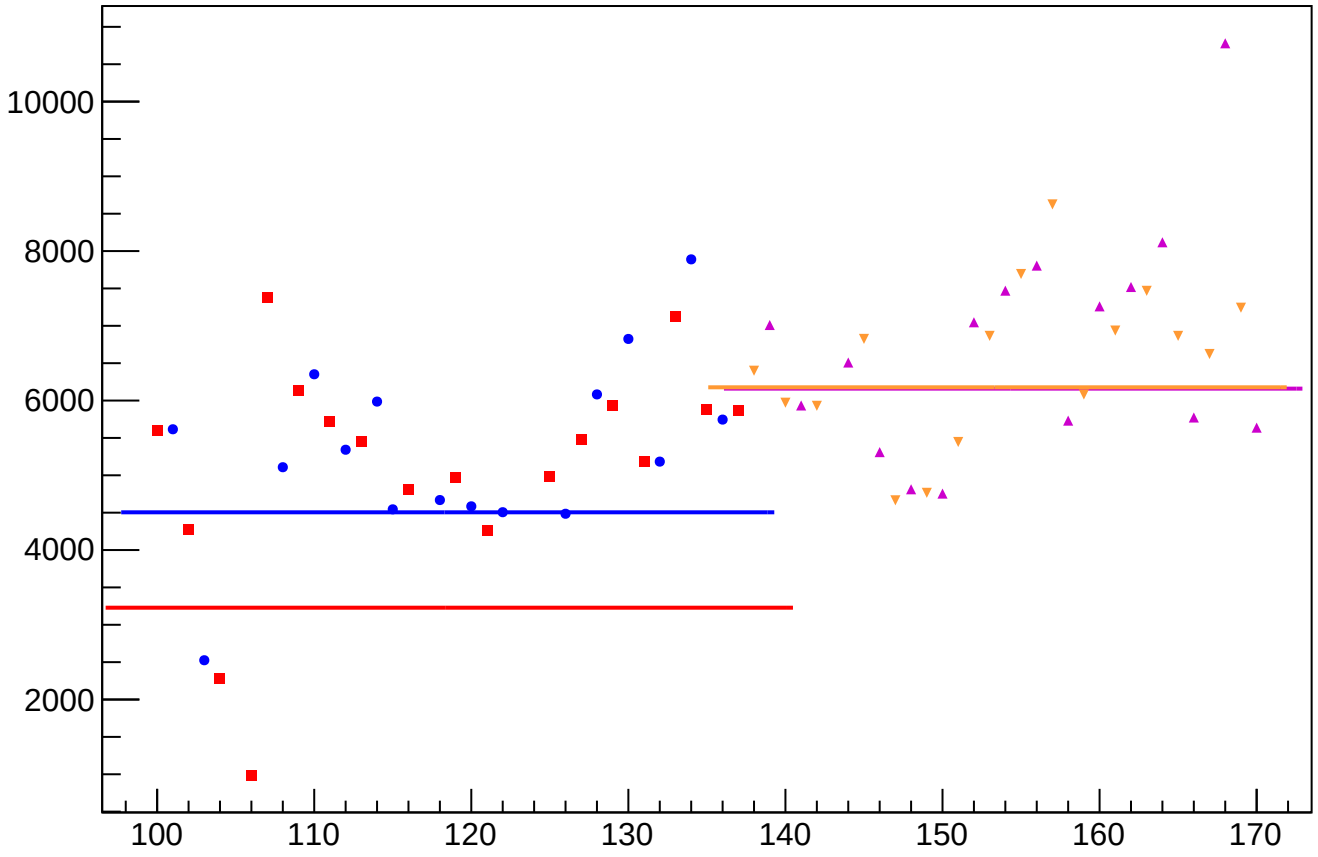
Right Out: -111.261+/-1438.515 $\chi^2$/NDF: 14.6/17

Left In: -1221.458+/-1733.957 $\chi^2$/NDF:9.8/15

+ sign -602.678+/-1251.966 $\chi^2$/NDF: 36.0/31

All: -580.894+/-829.357 $\chi^2$/NDF: 60.7/65

- sign -563.859+/-1107.120 $\chi^2$/NDF: 24.7/33




Right In: 4504.788+/-1.247 $\chi^2$/NDF: 1321104.9/15

Left Out: 6177.304+/-1.257 $\chi^2$/NDF:701996.2/15

Right Out: 3228.605+/-1.017 $\chi^2$/NDF: 3956397.6/17

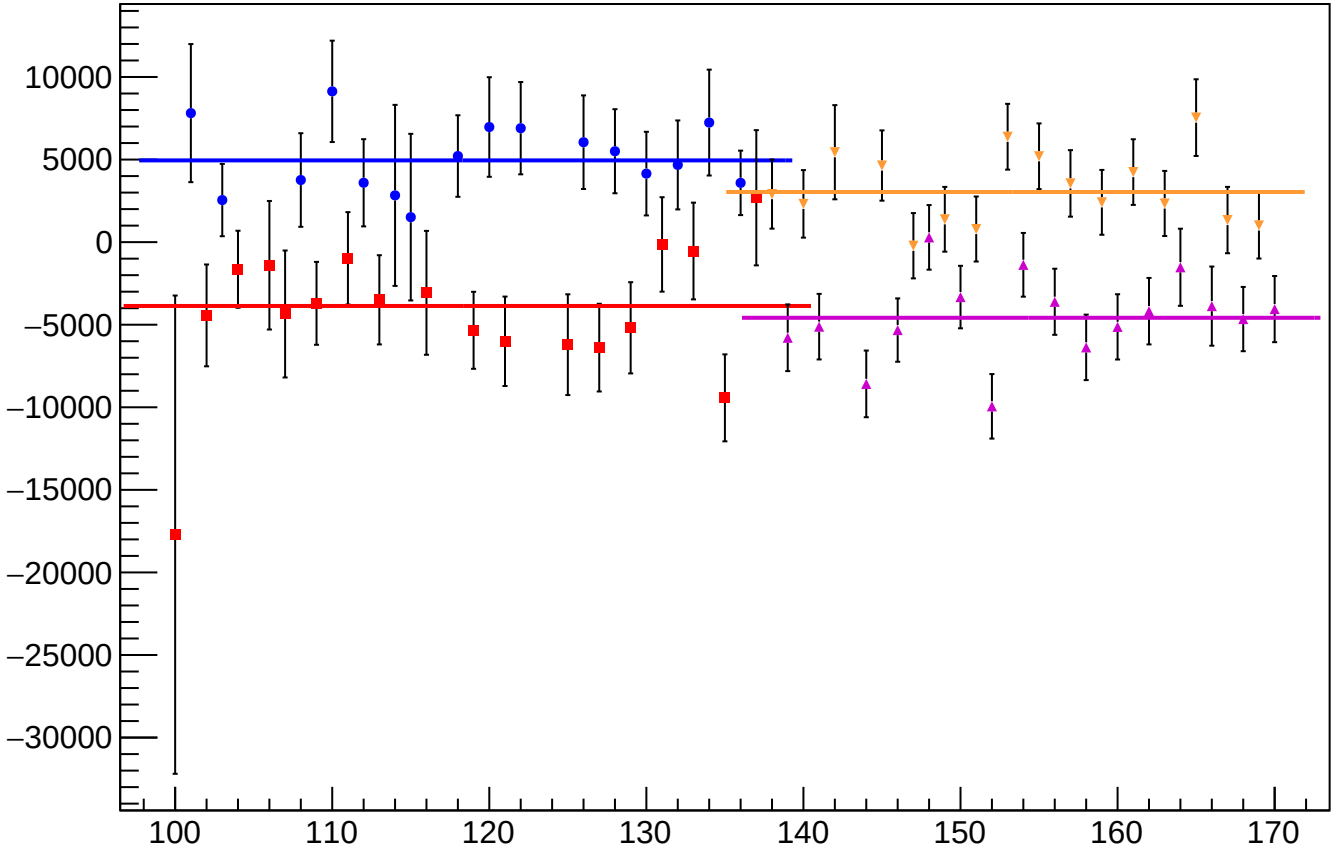
Left In: 6159.551+/-1.226 $\chi^2$/NDF:1024041.5/15

+ sign 5334.999+/-0.885 $\chi^2$/NDF: 2915384.7/31

All: 4823.480+/-0.586 $\chi^2$/NDF: 11875539.0/6

- sign 4423.475+/-0.783 $\chi^2$/NDF: 8365212.4/33

# cor_asym_us_avg_atlr_avg_avg_mean vs Slug




Right In: 4949.838+/-698.937 $\chi^2$/NDF: 6.8/15

Left Out: 3036.578+/-513.686 $\chi^2$/NDF:16.3/15

Right Out: -3864.930+/-695.781 $\chi^2$/NDF: 16.2/17

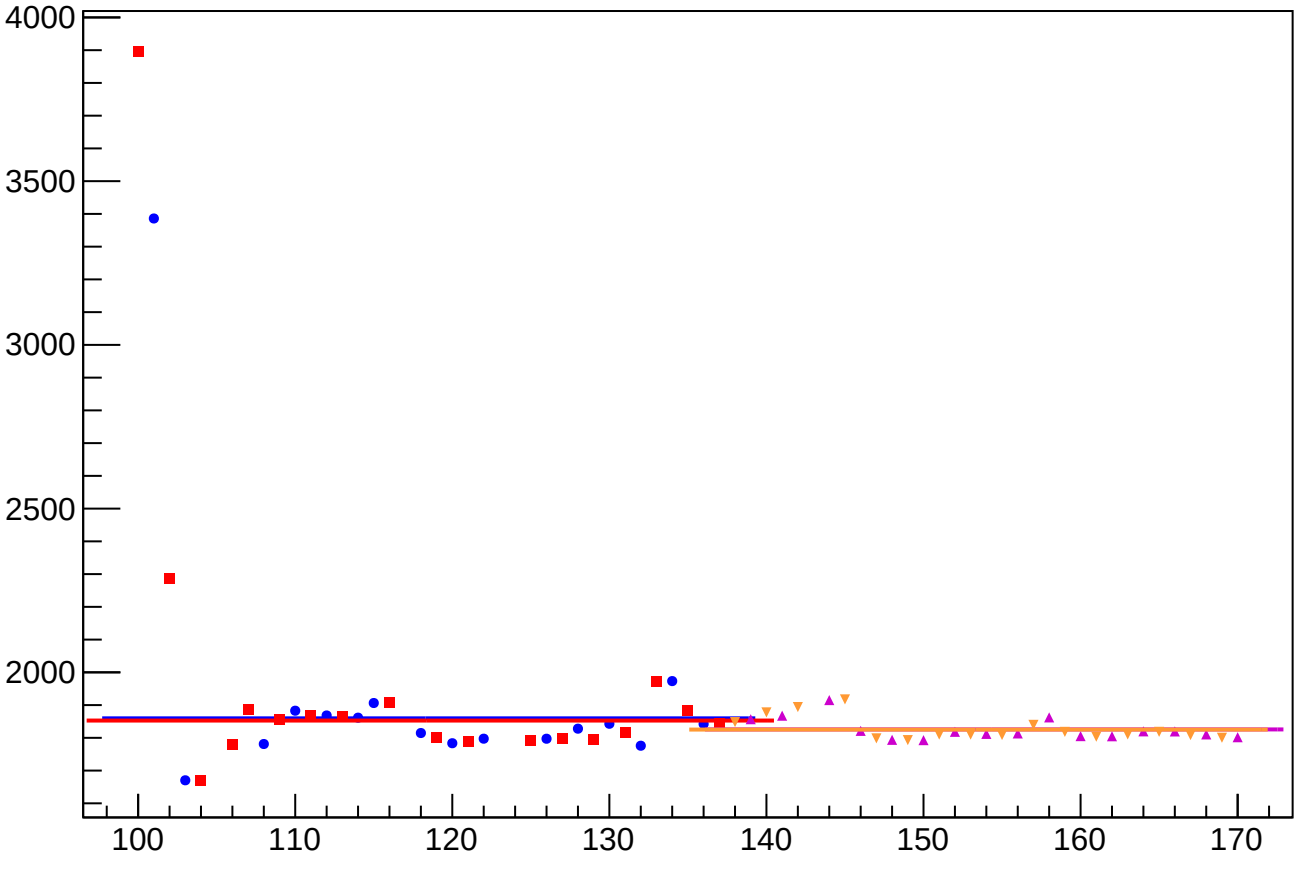
Left In: -4580.559+/-502.187 $\chi^2$/NDF:24.5/15

+ sign 3707.589+/-413.919 $\chi^2$/NDF: 28.0/31

All: -379.725+/-290.281 $\chi^2$/NDF: 261.2/65

- sign -4335.448+/-407.202 $\chi^2$/NDF: 41.4/33

# cor_asym_us_avg_atlr_avg_avg_rms vs Slug




Right In: 1859.509+/-0.494 $\chi^2$/NDF: 292336.5/15

Left Out: 1825.233+/-0.363 $\chi^2$/NDF:8709.4/15

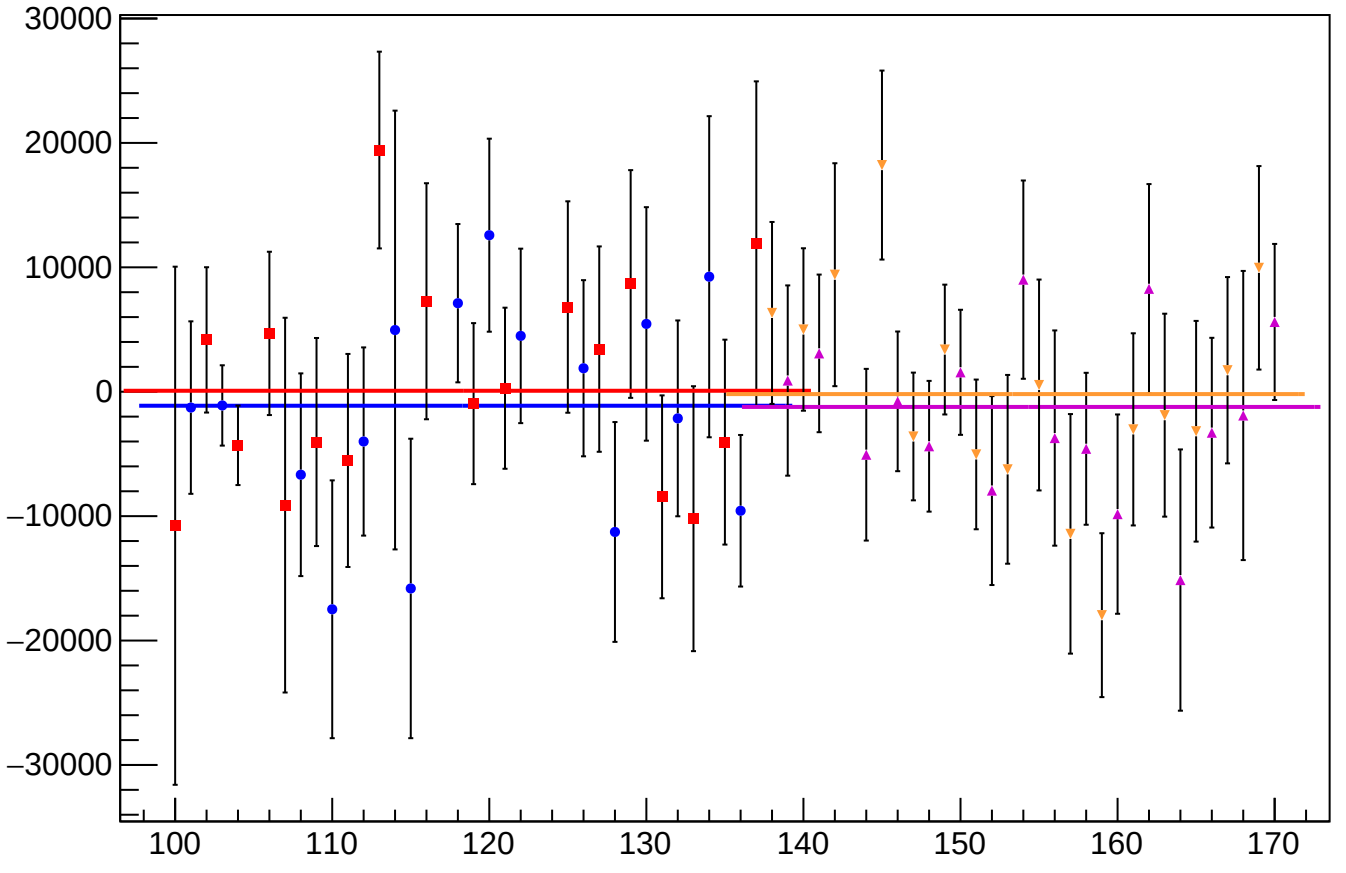
Right Out: 1852.770+/-0.491 $\chi^2$/NDF: 101750.5/17

Left In: 1825.677+/-0.355 $\chi^2$/NDF:8196.0/15

+ sign 1837.254+/-0.293 $\chi^2$/NDF: 304168.8/31

All: 1836.103+/-0.205 $\chi^2$/NDF: 416146.8/65

- sign 1834.990+/-0.288 $\chi^2$/NDF: 111947.5/33




Right In: -1125.567+/-1757.876 $\chi^2$/NDF: 14.7/15

Left Out: -189.201+/-1776.982 $\chi^2$/NDF:21.2/15

Right Out: 78.270+/-1702.444 $\chi^2$/NDF: 15.5/17

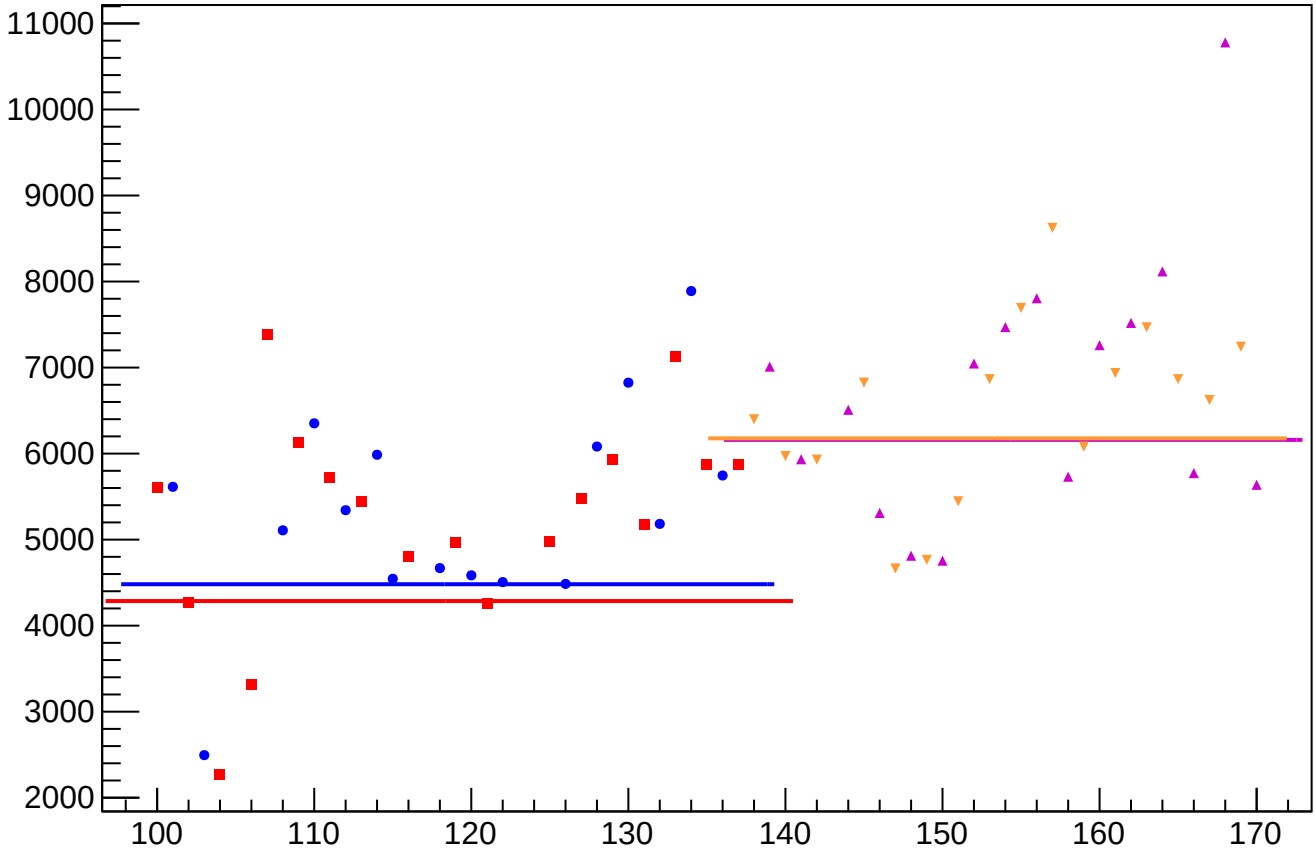
Left In: -1221.579+/-1733.957 $\chi^2$/NDF:9.8/15

+ sign -662.445+/-1249.706 $\chi^2$/NDF: 36.1/31

All: -609.635+/-871.072 $\chi^2$/NDF: 61.7/65

- sign -559.735+/-1214.798 $\chi^2$/NDF: 25.6/33

# asym_us_avg_atlr_avg_avg_cor_correction_rms vs Slug




Right In: 4481.518+/-1.243 $\chi^2$/NDF: 1362255.0/15

Left Out: 6177.297+/-1.257 $\chi^2$/NDF:702001.4/15

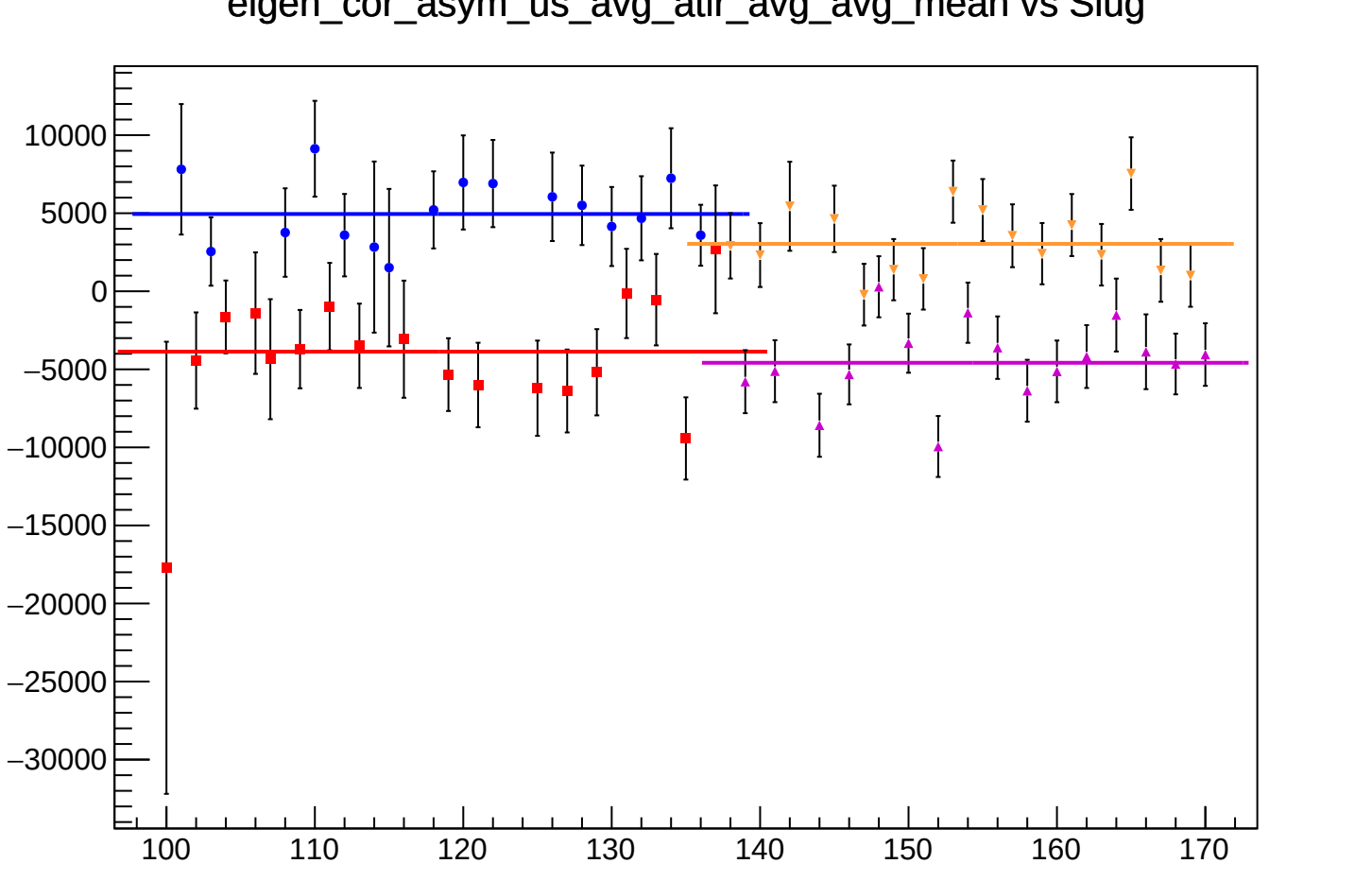
Right Out: 4286.125+/-1.204 $\chi^2$/NDF: 1549852.7/17

Left In: 6159.548+/-1.226 $\chi^2$/NDF:1024050.1/15

+ sign 5320.242+/-0.884 $\chi^2$/NDF: 2984794.2/31

All: 5261.327+/-0.616 $\chi^2$/NDF: 6756084.1/65

- sign 5205.658+/-0.859 $\chi^2$/NDF: 3762645.0/33




Right In: 4949.838+/-698.937 $\chi^2$/NDF: 6.8/15

Left Out: 3036.578+/-513.686 $\chi^2$/NDF:16.3/15

Right Out: -3864.930+/-695.781 $\chi^2$/NDF: 16.2/17

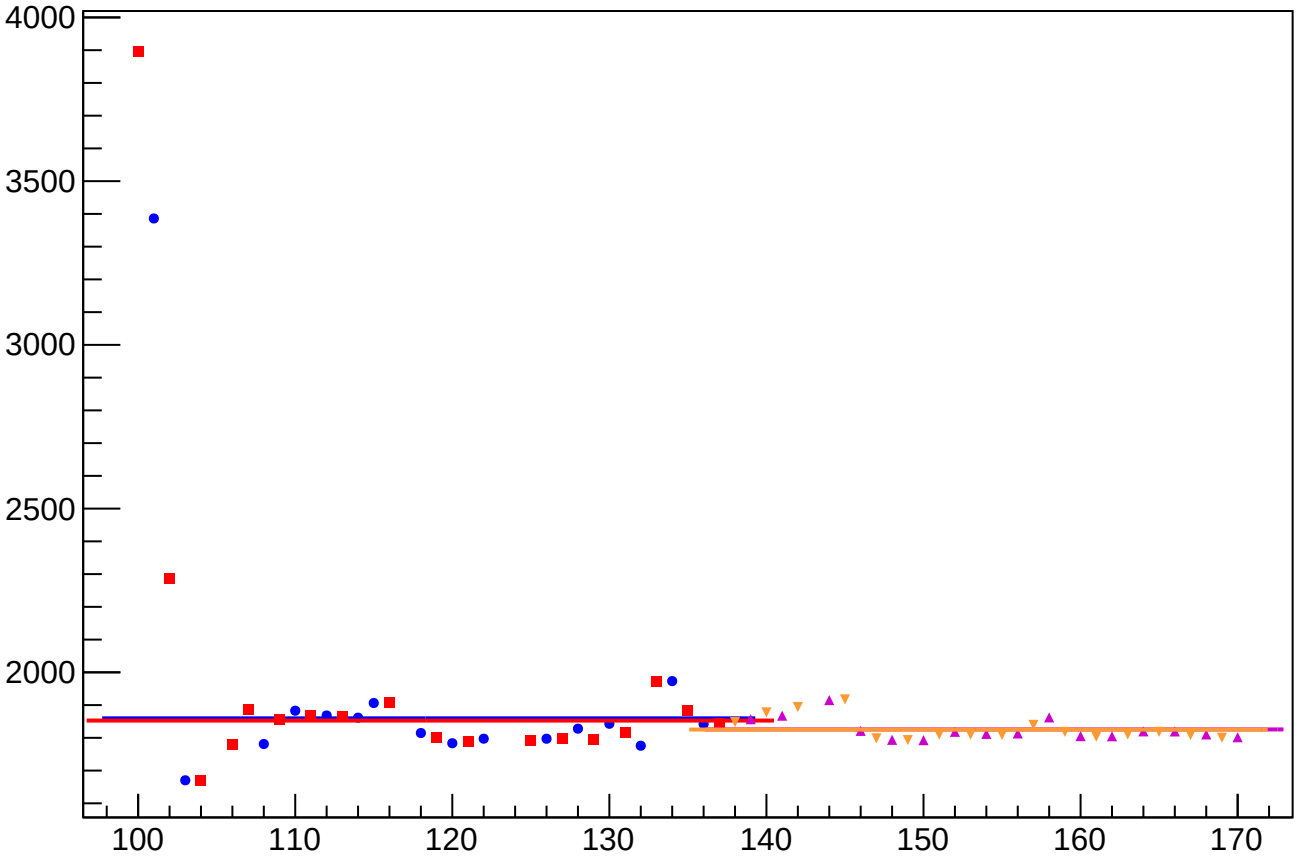
Left In: -4580.559+/-502.187 $\chi^2$/NDF:24.5/15

+ sign 3707.589+/-413.919 $\chi^2$/NDF: 28.0/31

All: -379.725+/-290.281 $\chi^2$/NDF: 261.2/65

- sign -4335.448+/-407.202 $\chi^2$/NDF: 41.4/33

# eigen_cor_asym_us_avg_atlr_avg_avg_rms vs Slug




Right In: 1859.509+/-0.494 $\chi^2$/NDF: 292336.5/15

Left Out: 1825.233+/-0.363 $\chi^2$/NDF:8709.4/15

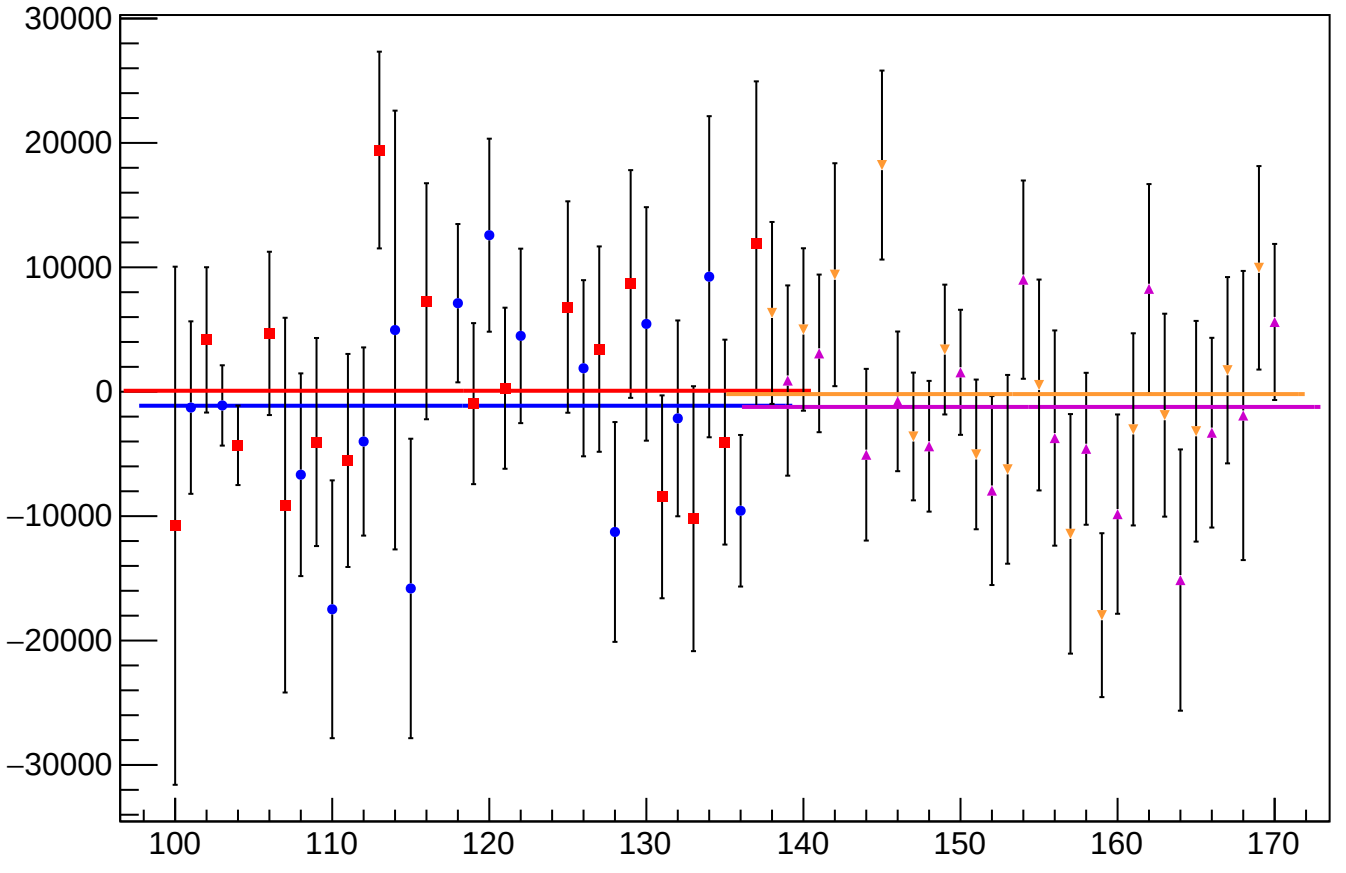
Right Out: 1852.770+/-0.491 $\chi^2$/NDF: 101750.5/17

Left In: 1825.677+/-0.355 $\chi^2$/NDF:8196.0/15

+ sign 1837.254+/-0.293 $\chi^2$/NDF: 304168.8/31

All: 1836.103+/-0.205 $\chi^2$/NDF: 416146.8/65

- sign 1834.990+/-0.288 $\chi^2$/NDF: 111947.5/33




Right In: -1125.567+/-1757.876 $\chi^2$/NDF: 14.7/15

Left Out: -189.201+/-1776.982 $\chi^2$/NDF:21.2/15

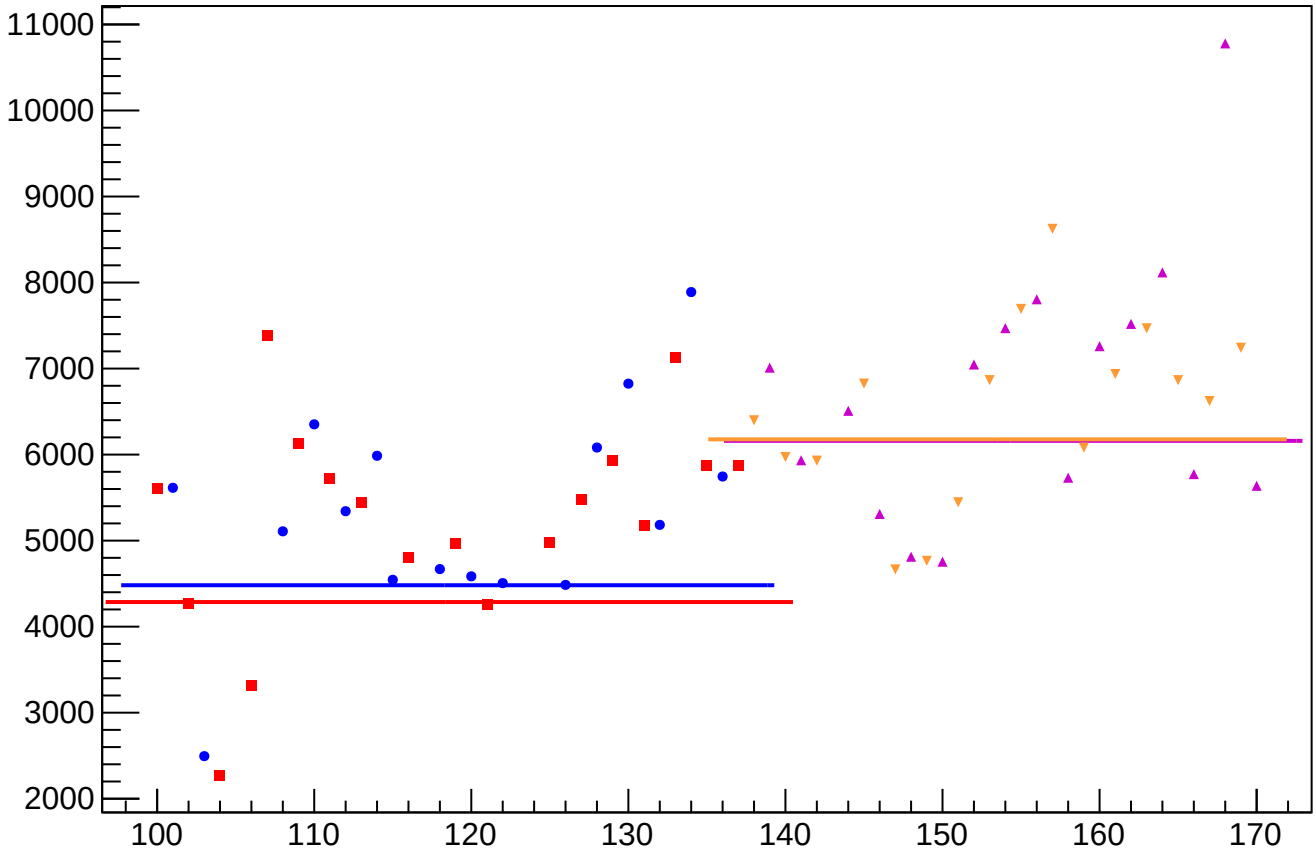
Right Out: 78.270+/-1702.444 $\chi^2$/NDF: 15.5/17

Left In: -1221.579+/-1733.957 $\chi^2$/NDF:9.8/15

+ sign -662.445+/-1249.706 $\chi^2$/NDF: 36.1/31

All: -609.635+/-871.072 $\chi^2$/NDF: 61.7/65

- sign -559.735+/-1214.798 $\chi^2$/NDF: 25.6/33




Right In: 4481.518+/-1.243 $\chi^2$/NDF: 1362255.0/15

Left Out: 6177.297+/-1.257 $\chi^2$/NDF:702001.4/15

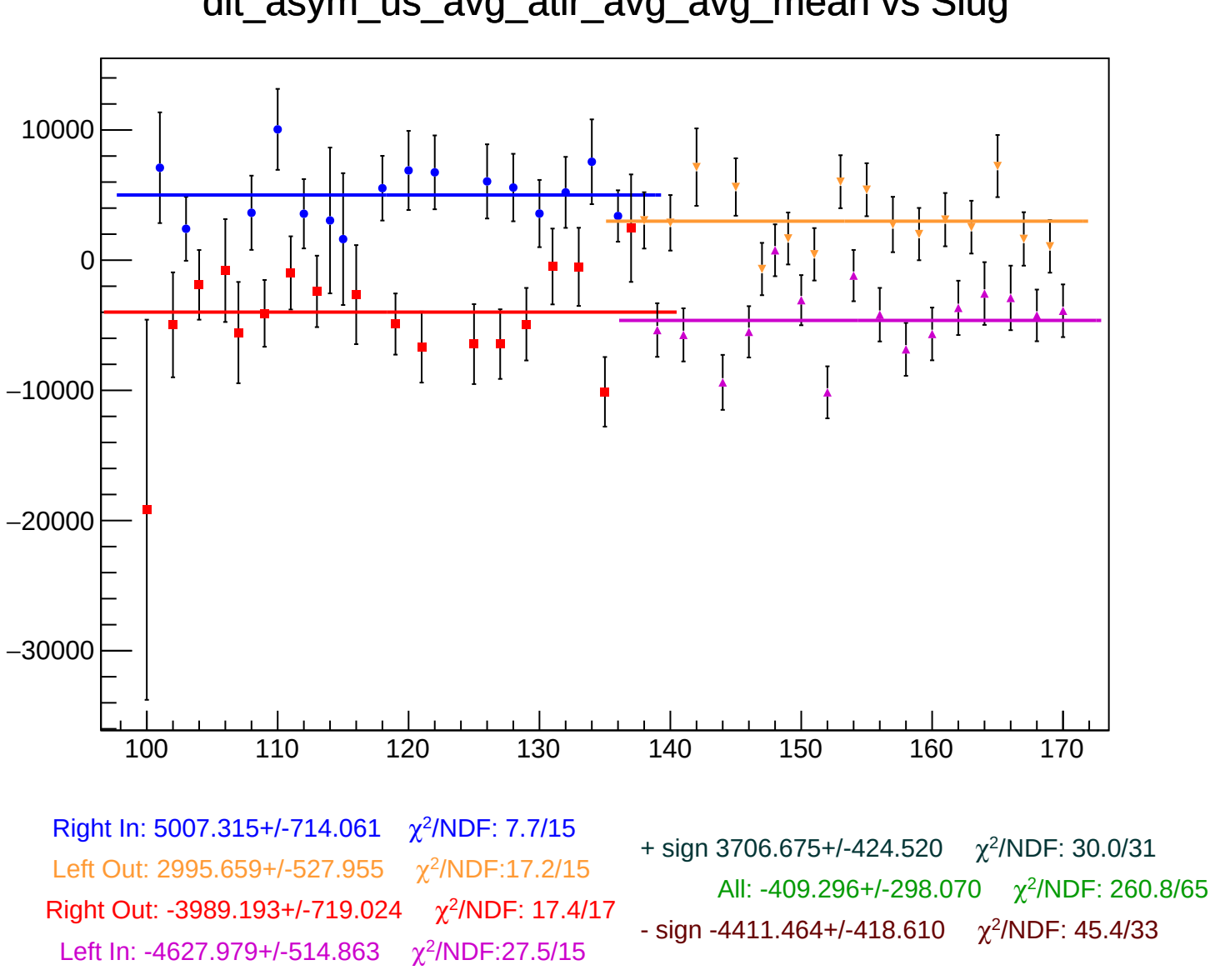
Right Out: 4286.125+/-1.204 $\chi^2$/NDF: 1549852.7/17

Left In: 6159.548+/-1.226 $\chi^2$/NDF:1024050.1/15

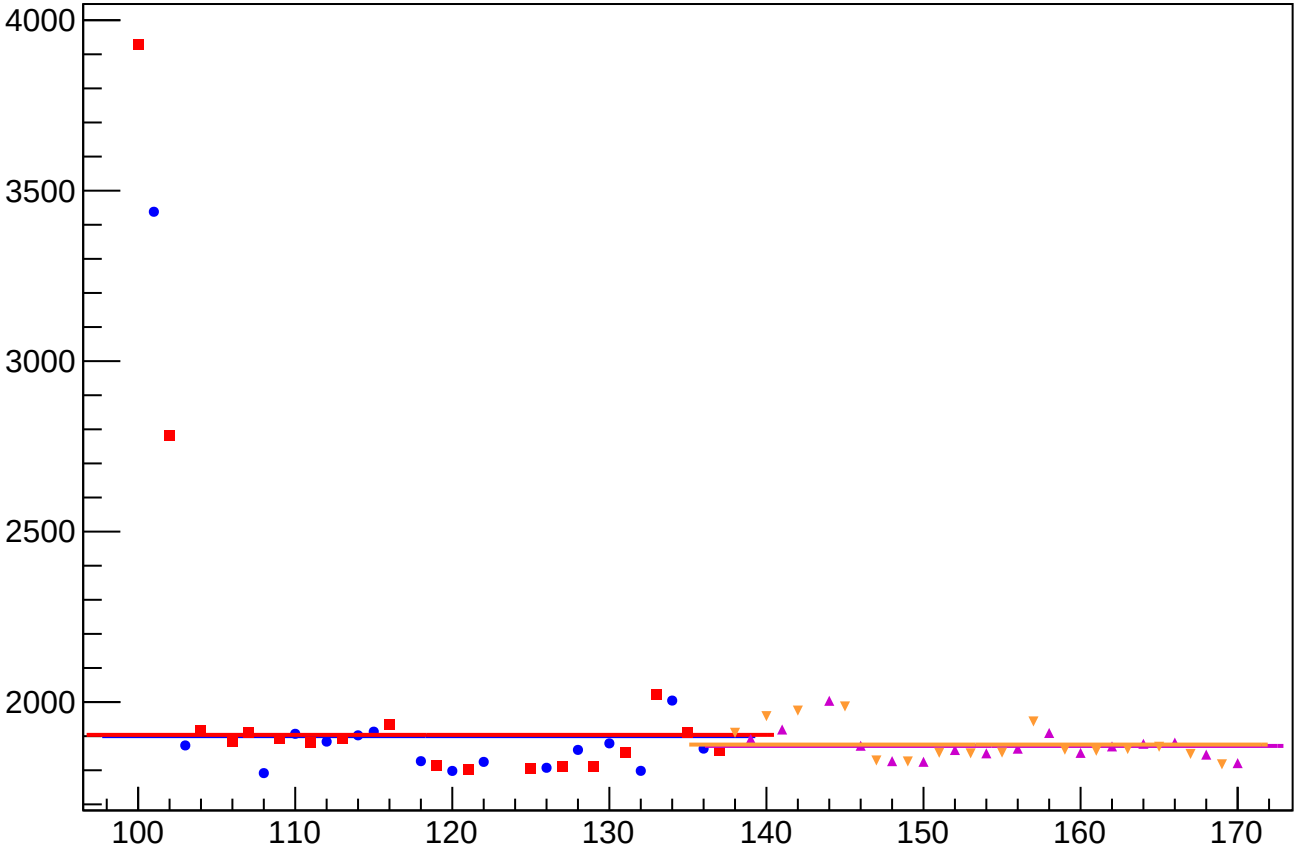
+ sign 5320.242+/-0.884 $\chi^2$/NDF: 2984794.2/31

All: 5261.327+/-0.616 $\chi^2$/NDF: 6756084.1/65

- sign 5205.658+/-0.859 $\chi^2$/NDF: 3762645.0/33


dit_asym_us_avg_atlr_avg_avg_mean vs Slug
10000
0
−10000
−20000
−30000
100
110
120
130
140
150
160
170
Right In: 5007.315+/-714.061 χ²/NDF: 7.7/15
Left Out: 2995.659+/-527.955 χ²/NDF:17.2/15
Right Out: -3989.193+/-719.024 χ²/NDF: 17.4/17
Left In: -4627.979+/-514.863 χ²/NDF:27.5/15
+ sign 3706.675+/-424.520 χ²/NDF: 30.0/31
All: -409.296+/-298.070 χ²/NDF: 260.8/65
- sign -4411.464+/-418.610 χ²/NDF: 45.4/33

# dit_asym_us_avg_atlr_avg_avg_rms vs Slug




Right In: 1900.111+/-0.505 $\chi^2$/NDF: 278448.2/15

Left Out: 1875.336+/-0.373 $\chi^2$/NDF:18531.1/15

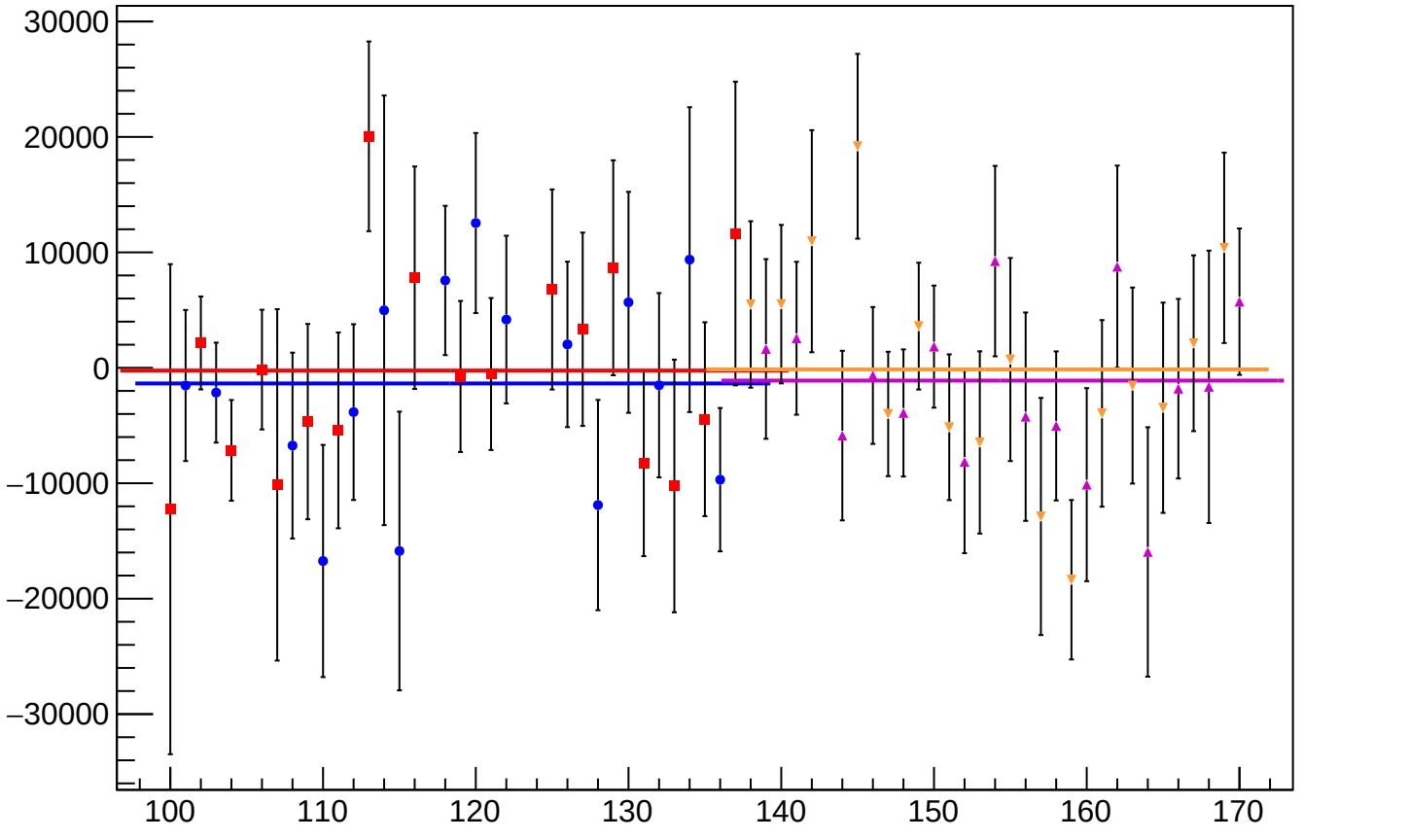
Right Out: 1903.827+/-0.508 $\chi^2$/NDF: 150115.8/17

Left In: 1871.381+/-0.364 $\chi^2$/NDF:14206.3/15

+ sign 1884.093+/-0.300 $\chi^2$/NDF: 298535.9/31

All: 1883.231+/-0.211 $\chi^2$/NDF: 465570.4/65

- sign 1882.394+/-0.296 $\chi^2$/NDF: 167018.3/33




Right In: -1356.615+/-1895.990 $\chi^2$/NDF: 14.7/15

Left Out: -142.870+/-1850.084 $\chi^2$/NDF:21.3/15

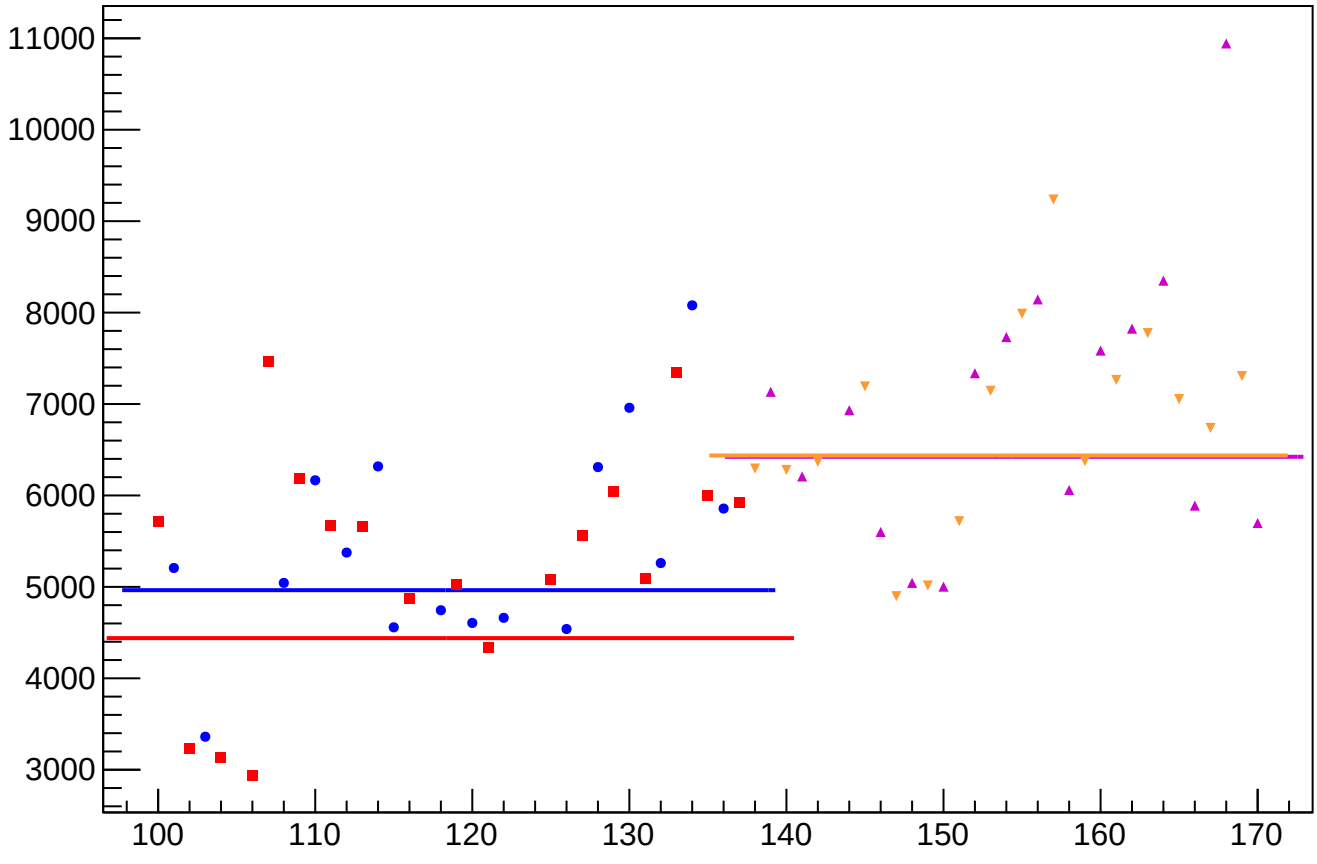
Right Out: -241.153+/-1712.681 $\chi^2$/NDF: 15.7/17

Left In: -1108.192+/-1806.235 $\chi^2$/NDF:9.8/15

+ sign -734.871+/-1324.139 $\chi^2$/NDF: 36.2/31

All: -690.620+/-906.186 $\chi^2$/NDF: 61.9/65

- sign -651.638+/-1242.806 $\chi^2$/NDF: 25.6/33




Right In: 4963.998+/-1.341 $\chi^2$/NDF: 627377.0/15

Left Out: 6437.248+/-1.308 $\chi^2$/NDF:674640.8/15

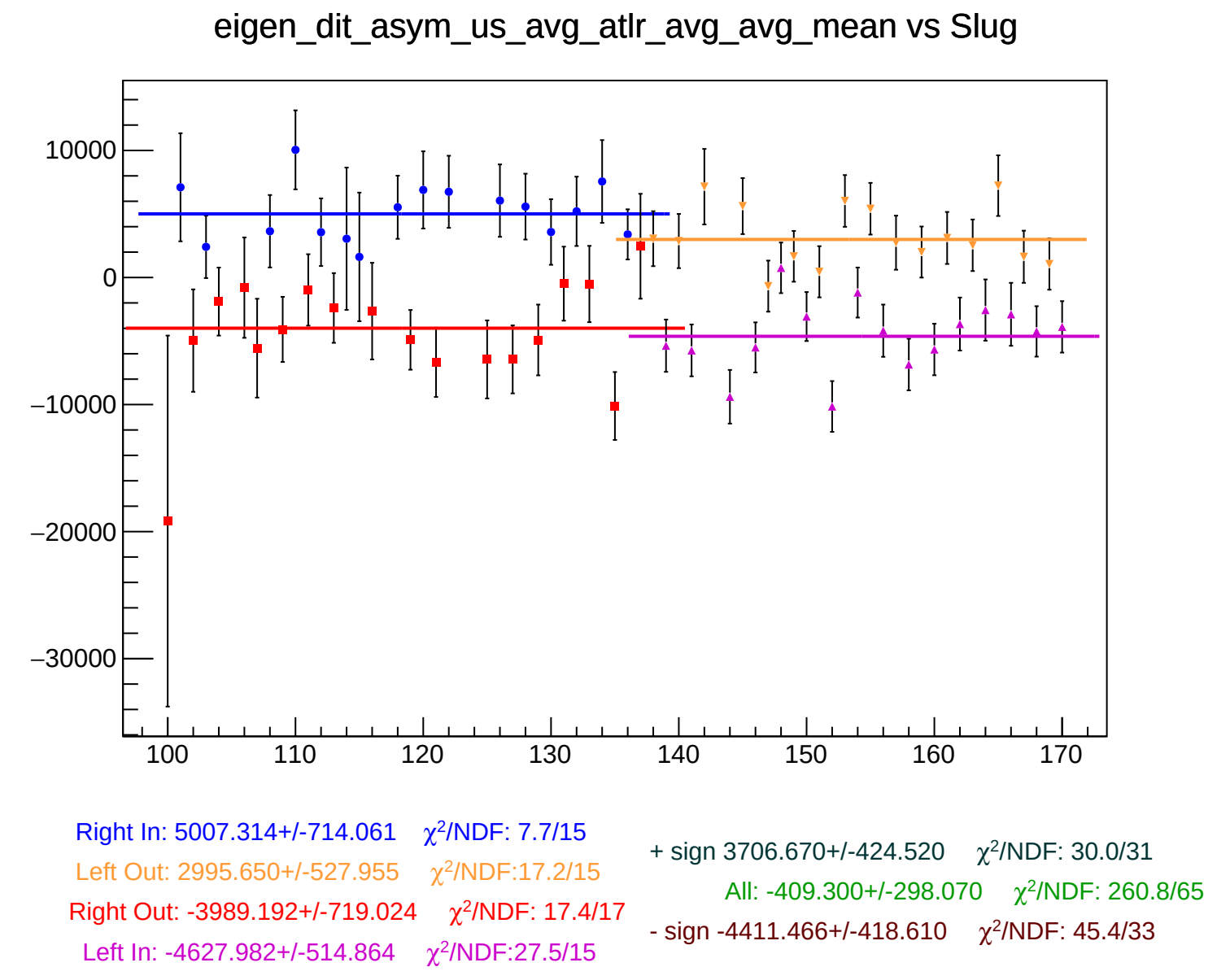
Right Out: 4439.675+/-1.211 $\chi^2$/NDF: 1158510.1/17

Left In: 6422.819+/-1.277 $\chi^2$/NDF:975562.4/15

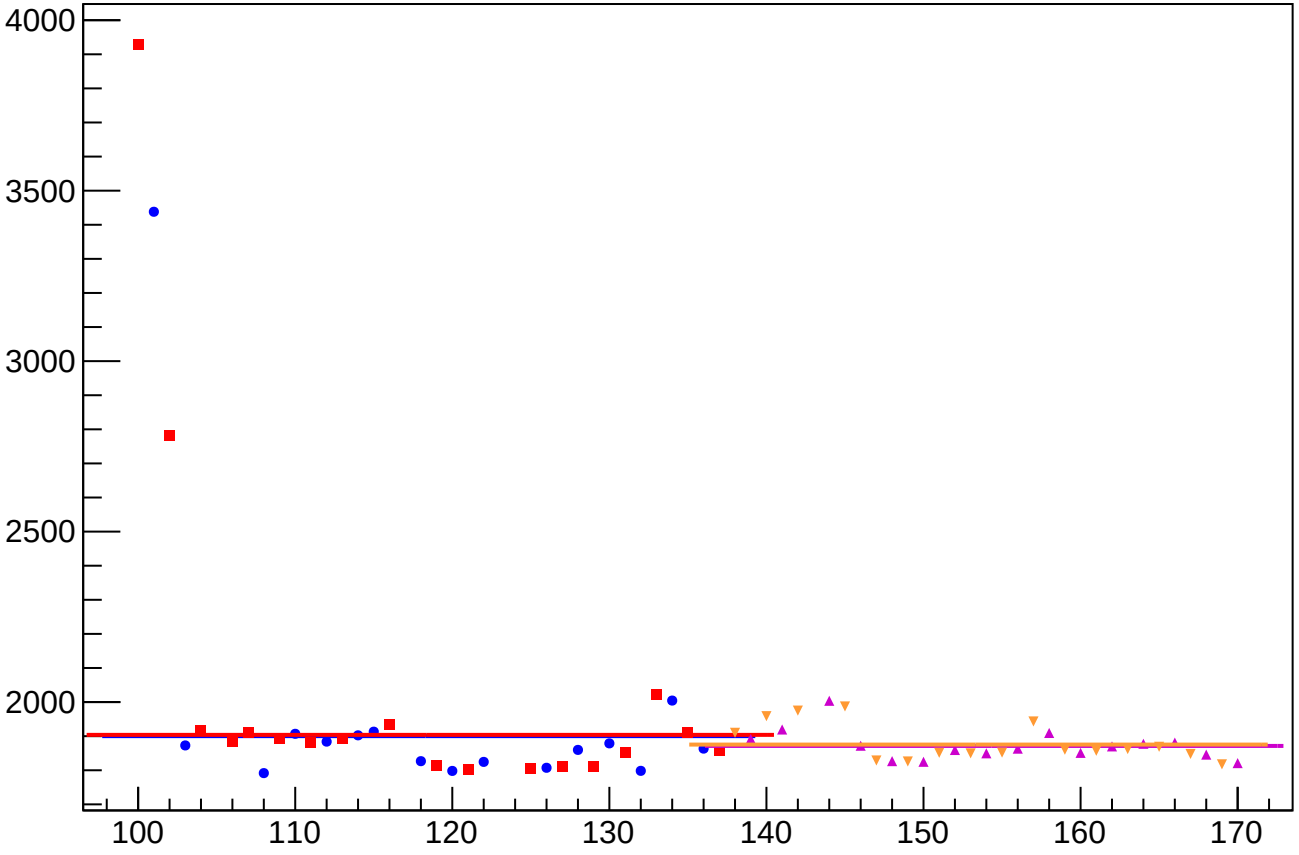
+ sign 5718.674+/-0.936 $\chi^2$/NDF: 1920596.5/31

All: 5537.852+/-0.641 $\chi^2$/NDF: 5394353.6/65

- sign 5378.560+/-0.879 $\chi^2$/NDF: 3403604.9/33


eigen_dit_asym_us_avg_atlr_avg_avg_mean vs Slug
10000
0
−10000
−20000
−30000
100
110
120
130
140
150
160
170
Right In: 5007.314+/-714.061 χ²/NDF: 7.7/15
Left Out: 2995.650+/-527.955 χ²/NDF:17.2/15
Right Out: -3989.192+/-719.024 χ²/NDF: 17.4/17
Left In: -4627.982+/-514.864 χ²/NDF:27.5/15
+ sign 3706.670+/-424.520 χ²/NDF: 30.0/31
All: -409.300+/-298.070 χ²/NDF: 260.8/65
- sign -4411.466+/-418.610 χ²/NDF: 45.4/33

# eigen_dit_asym_us_avg_atlr_avg_avg_rms vs Slug




Right In: 1900.111+/-0.505 $\chi^2$/NDF: 278448.5/15

Left Out: 1875.338+/-0.373 $\chi^2$/NDF:18531.4/15

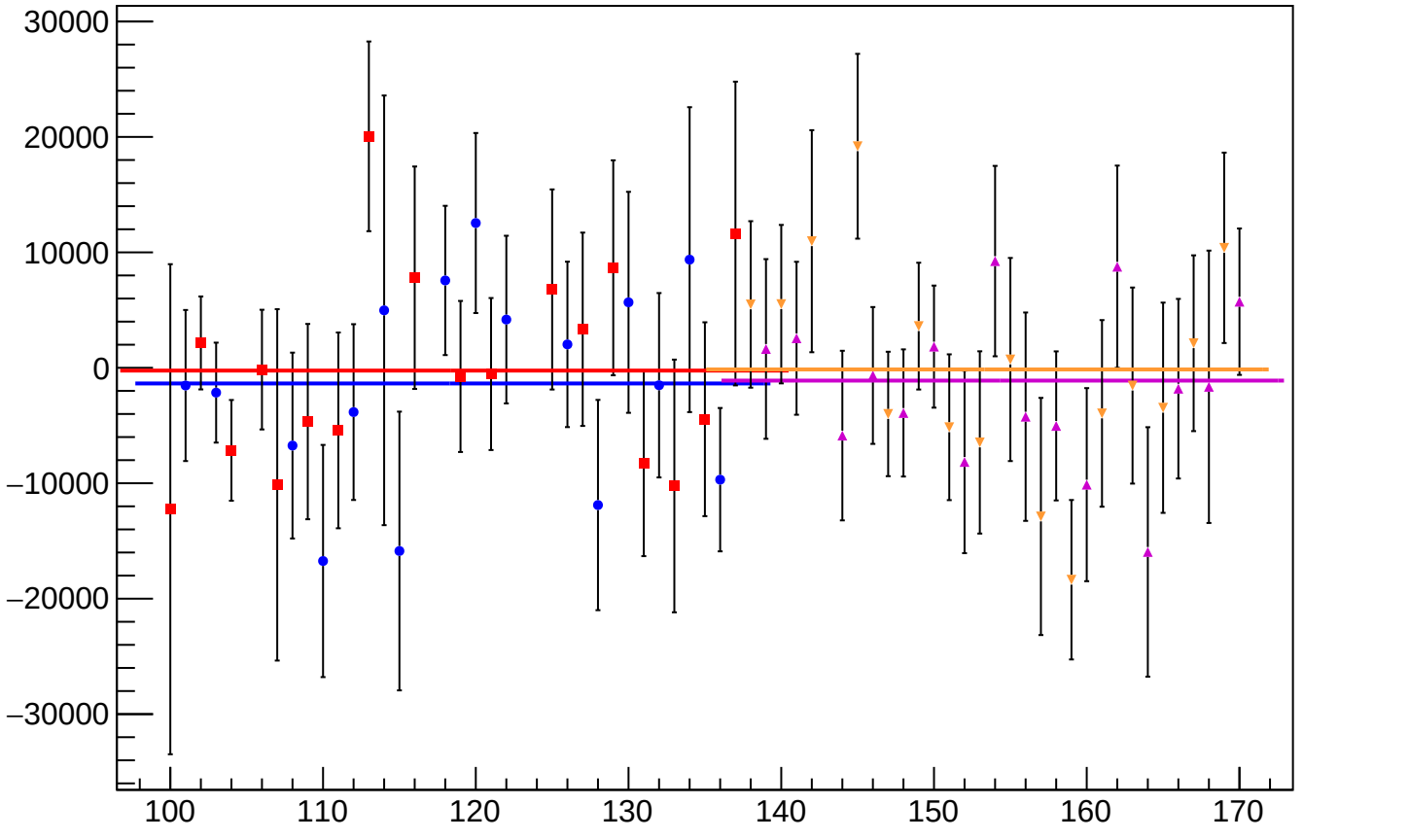
Right Out: 1903.826+/-0.508 $\chi^2$/NDF: 150115.1/17

Left In: 1871.382+/-0.364 $\chi^2$/NDF:14206.6/15

+ sign 1884.094+/-0.300 $\chi^2$/NDF: 298536.2/31

All: 1883.232+/-0.211 $\chi^2$/NDF: 465569.9/65

- sign 1882.395+/-0.296 $\chi^2$/NDF: 167017.4/33




Right In: -1356.604+/-1895.985 $\chi^2$/NDF: 14.7/15

Left Out: -142.877+/-1850.087 $\chi^2$/NDF:21.3/15

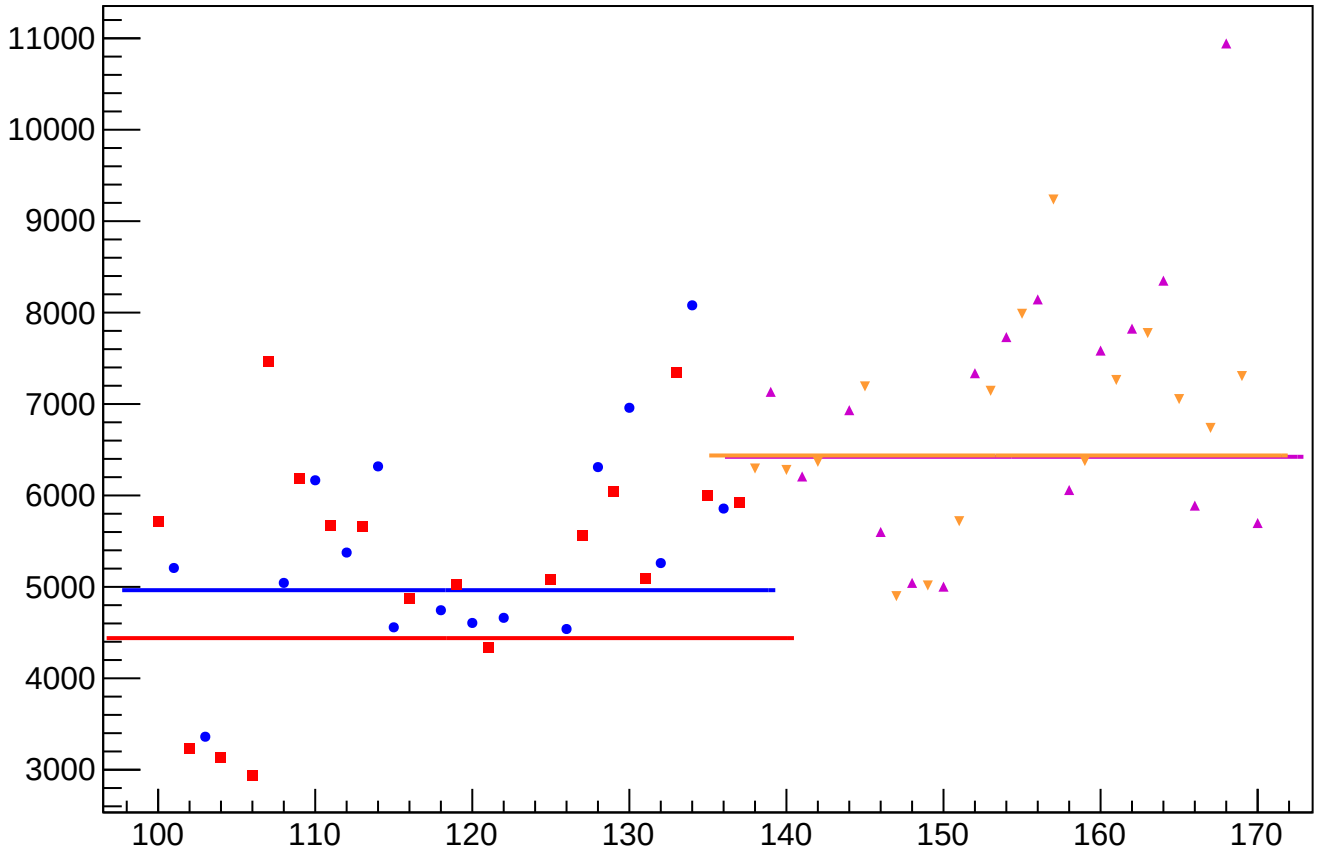
Right Out: -241.155+/-1712.677 $\chi^2$/NDF: 15.7/17

Left In: -1108.192+/-1806.238 $\chi^2$/NDF:9.8/15

+ sign -734.872+/-1324.138 $\chi^2$/NDF: 36.2/31

All: -690.620+/-906.186 $\chi^2$/NDF: 61.9/65

- sign -651.637+/-1242.805 $\chi^2$/NDF: 25.6/33




Right In: 4963.985+/-1.341 $\chi^2$/NDF: 627379.5/15

Left Out: 6437.258+/-1.308 $\chi^2$/NDF:674642.9/15

Right Out: 4439.663+/-1.211 $\chi^2$/NDF: 1158509.7/17

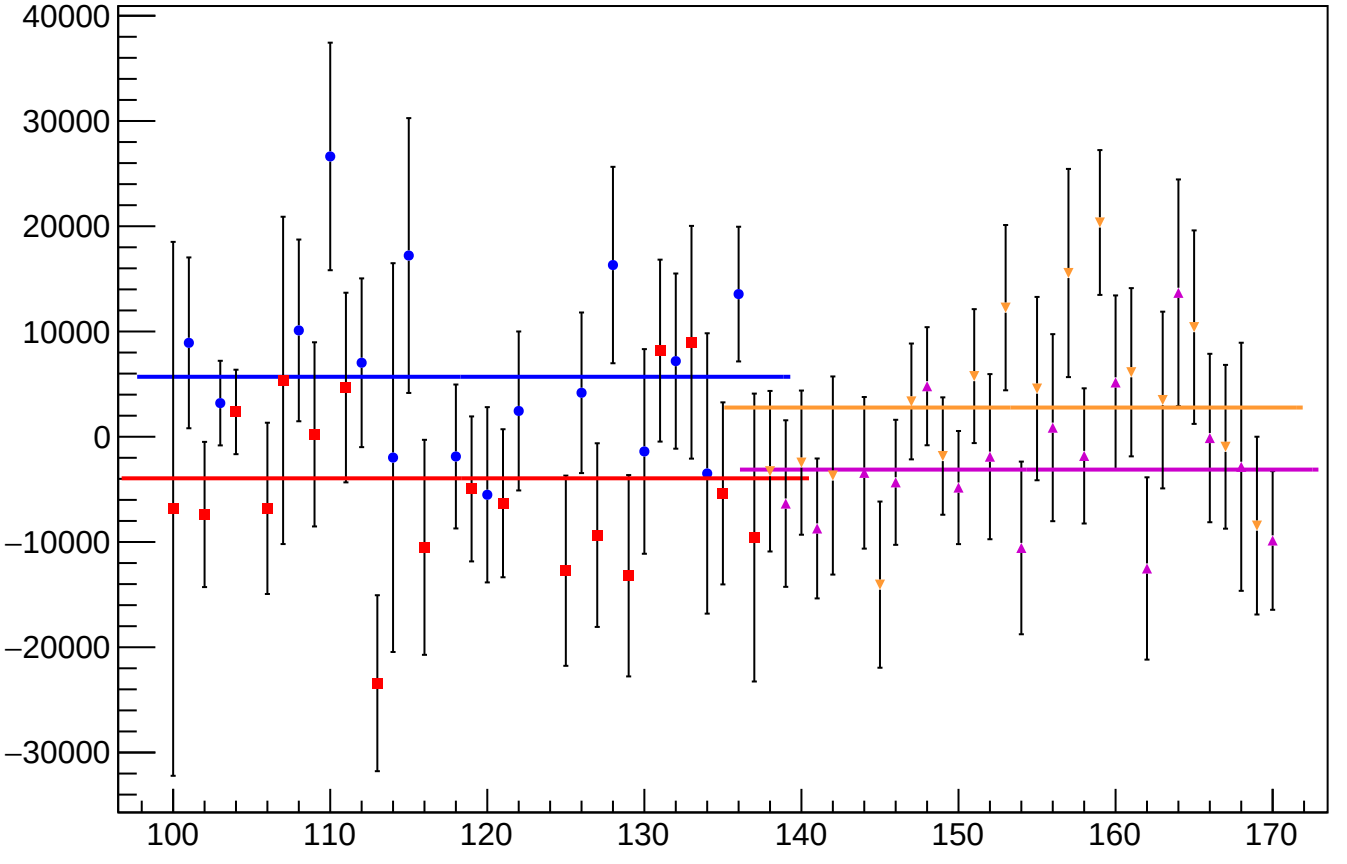
Left In: 6422.828+/-1.277 $\chi^2$/NDF:975564.3/15

+ sign 5718.670+/-0.936 $\chi^2$/NDF: 1920620.7/31

All: 5537.846+/-0.641 $\chi^2$/NDF: 5394407.4/65

- sign 5378.554+/-0.879 $\chi^2$/NDF: 3403633.9/33

# asym_us_avg_atlr_avg_avg_mean vs Slug




Right In: 5697.218+/-1959.214 $\chi^2$/NDF: 12.6/15

Left Out: 2774.974+/-1861.202 $\chi^2$/NDF:19.7/15

Right Out: -3949.394+/-1920.582 $\chi^2$/NDF: 16.1/17

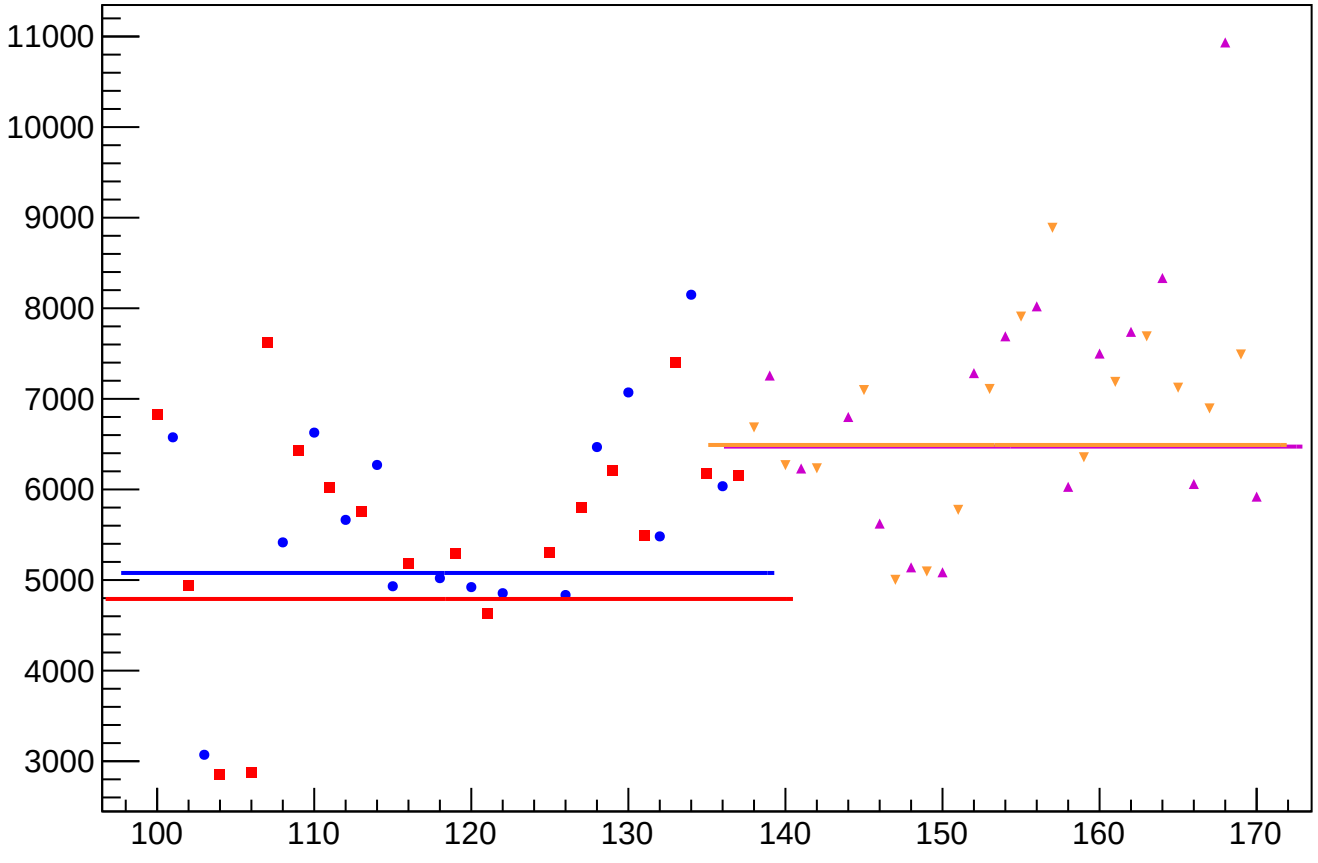
Left In: -3120.867+/-1816.443 $\chi^2$/NDF:9.9/15

+ sign 4161.175+/-1349.388 $\chi^2$/NDF: 33.5/31

All: 239.219+/-943.490 $\chi^2$/NDF: 76.2/65

- sign -3512.060+/-1319.700 $\chi^2$/NDF: 26.1/33

# asym_us_avg_atlr_avg_avg_rms vs Slug




Right In: 5078.157+/-1.385 $\chi^2$/NDF: 919209.4/15

Left Out: 6491.084+/-1.316 $\chi^2$/NDF:596164.9/15

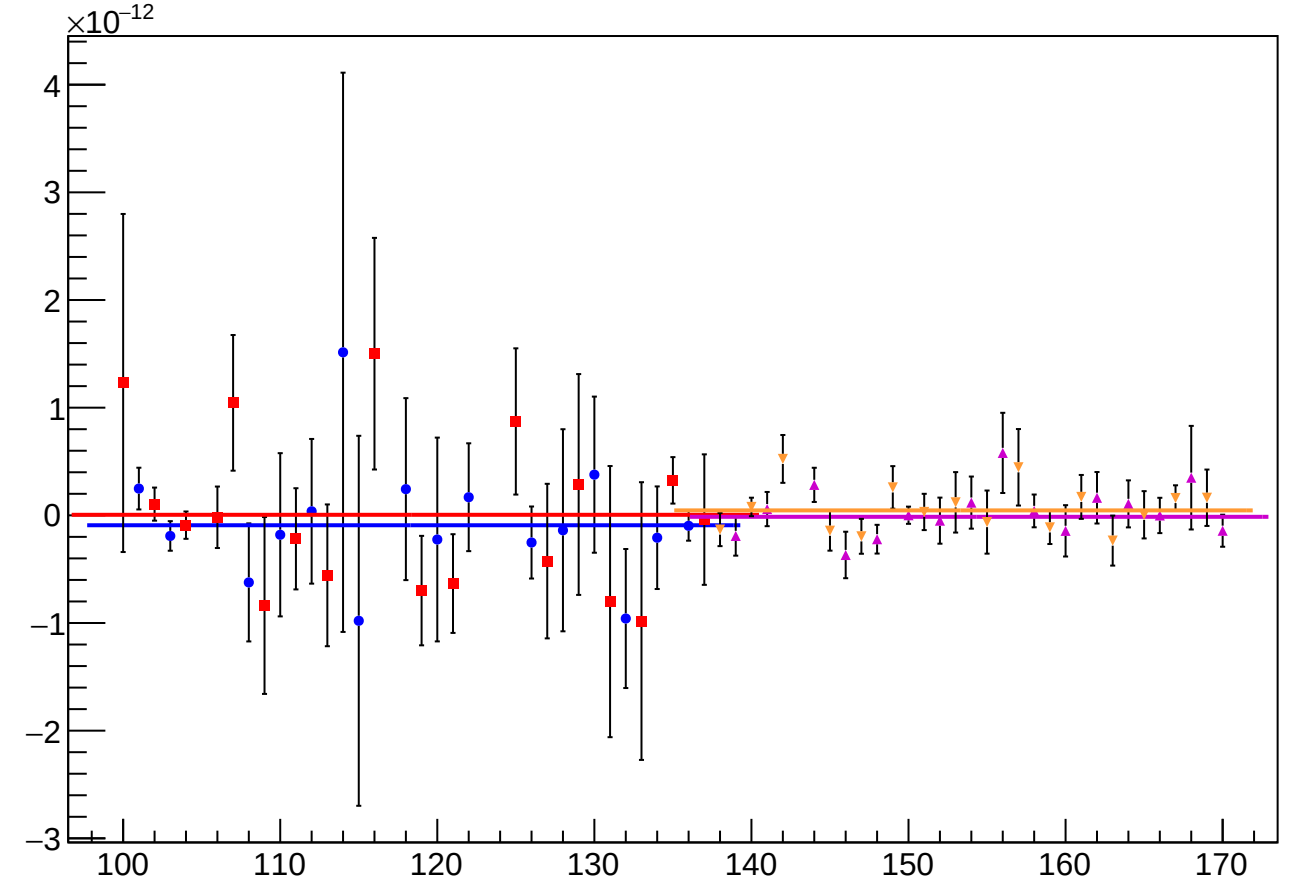
Right Out: 4791.154+/-1.331 $\chi^2$/NDF: 1162455.3/17

Left In: 6472.919+/-1.284 $\chi^2$/NDF:888555.3/15

+ sign 5820.833+/-0.954 $\chi^2$/NDF: 2062138.3/31

All: 5738.774+/-0.664 $\chi^2$/NDF: 4954359.7/65

- sign 5661.794+/-0.924 $\chi^2$/NDF: 2877886.5/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 8.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:16.1/15

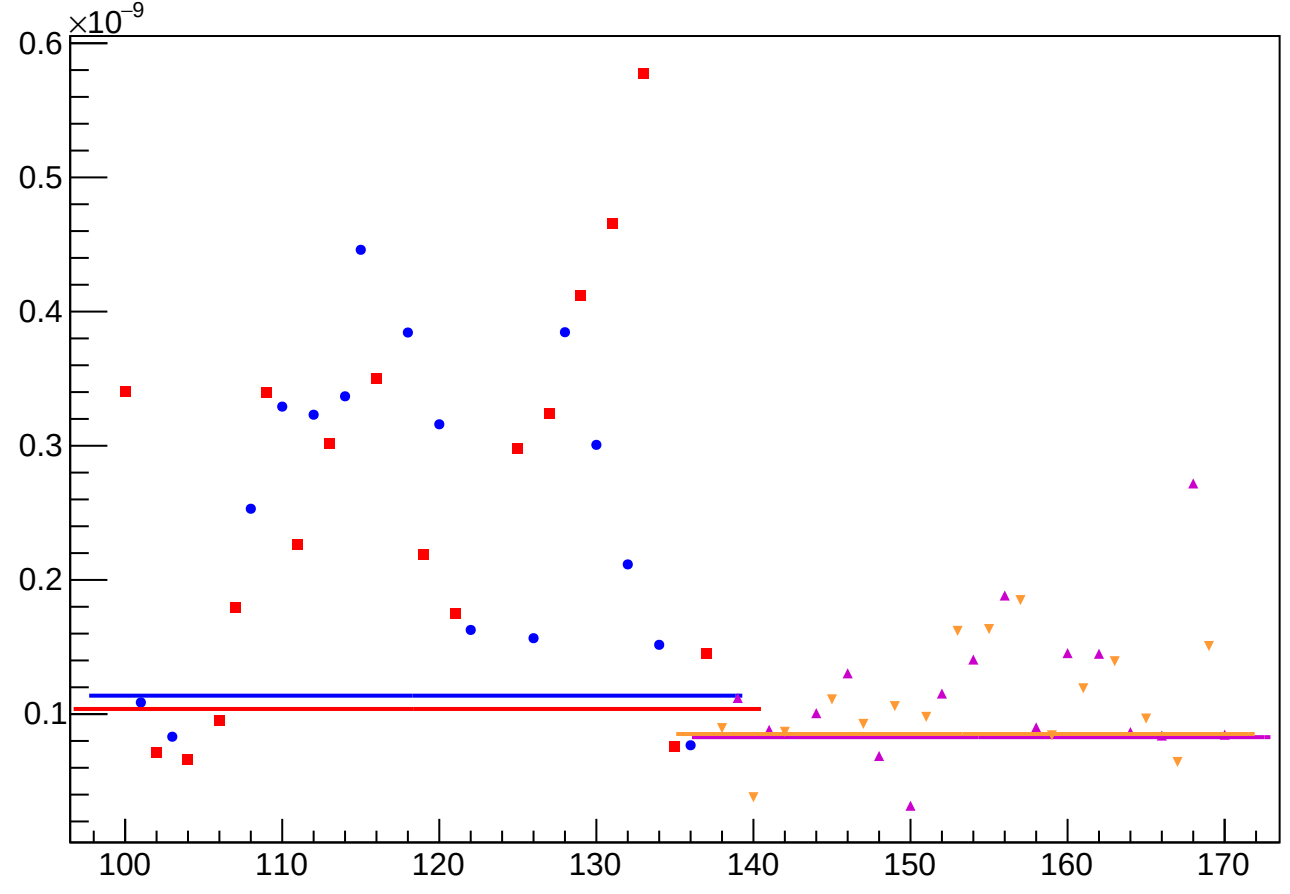
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.4/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:15.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 26.7/31

All: 0.000+/-0.000 $\chi^2$/NDF: 59.6/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 32.7/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1524807.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1490490.8/15

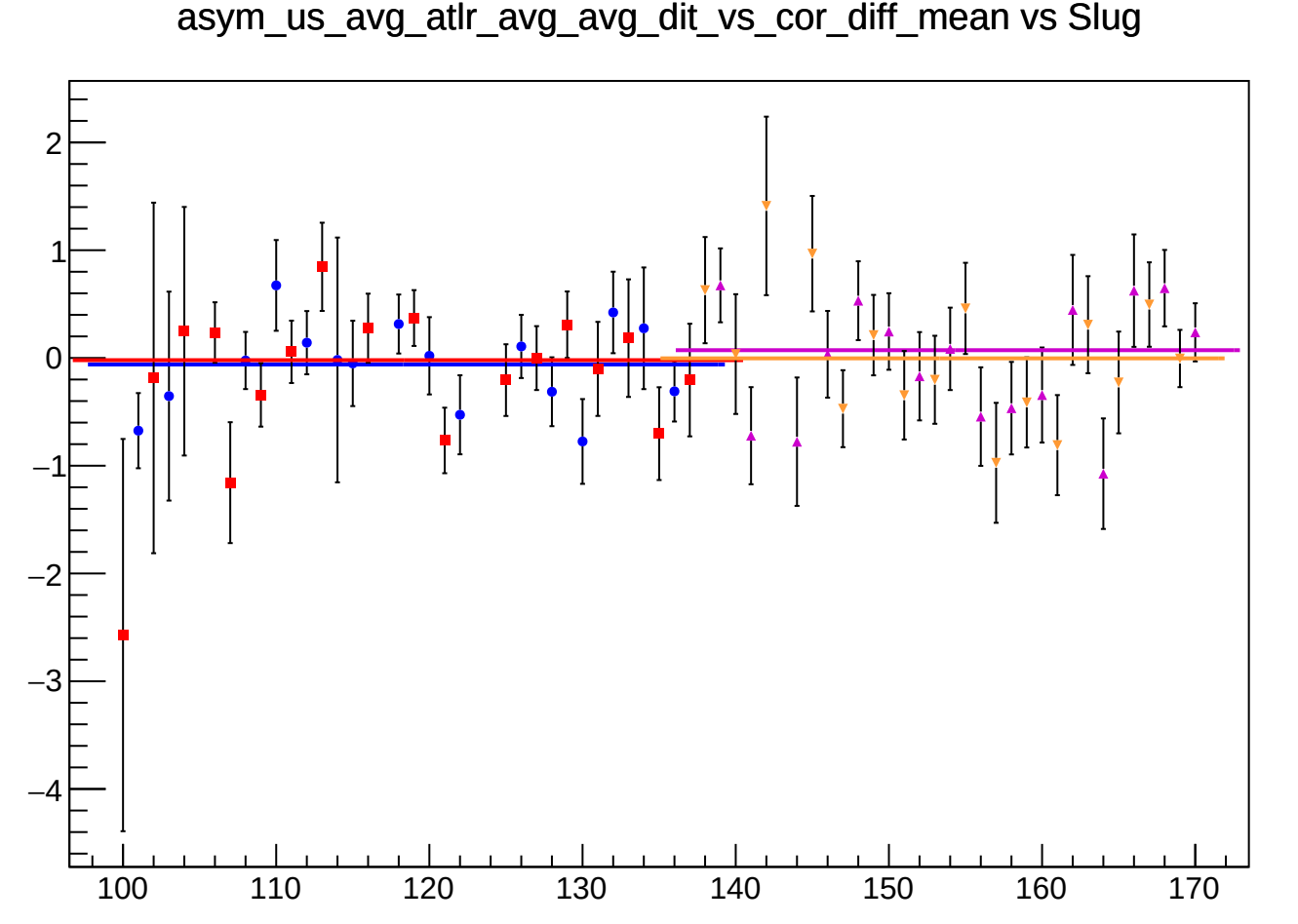
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2087534.7/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1925647.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3222974.3/31

All: 0.000+/-0.000 $\chi^2$/NDF: 7363656.7/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 4127936.2/33




Right In: -0.060+/-0.089 $\chi^2$/NDF: 17.3/15

Left Out: -0.004+/-0.106 $\chi^2$/NDF:21.4/15

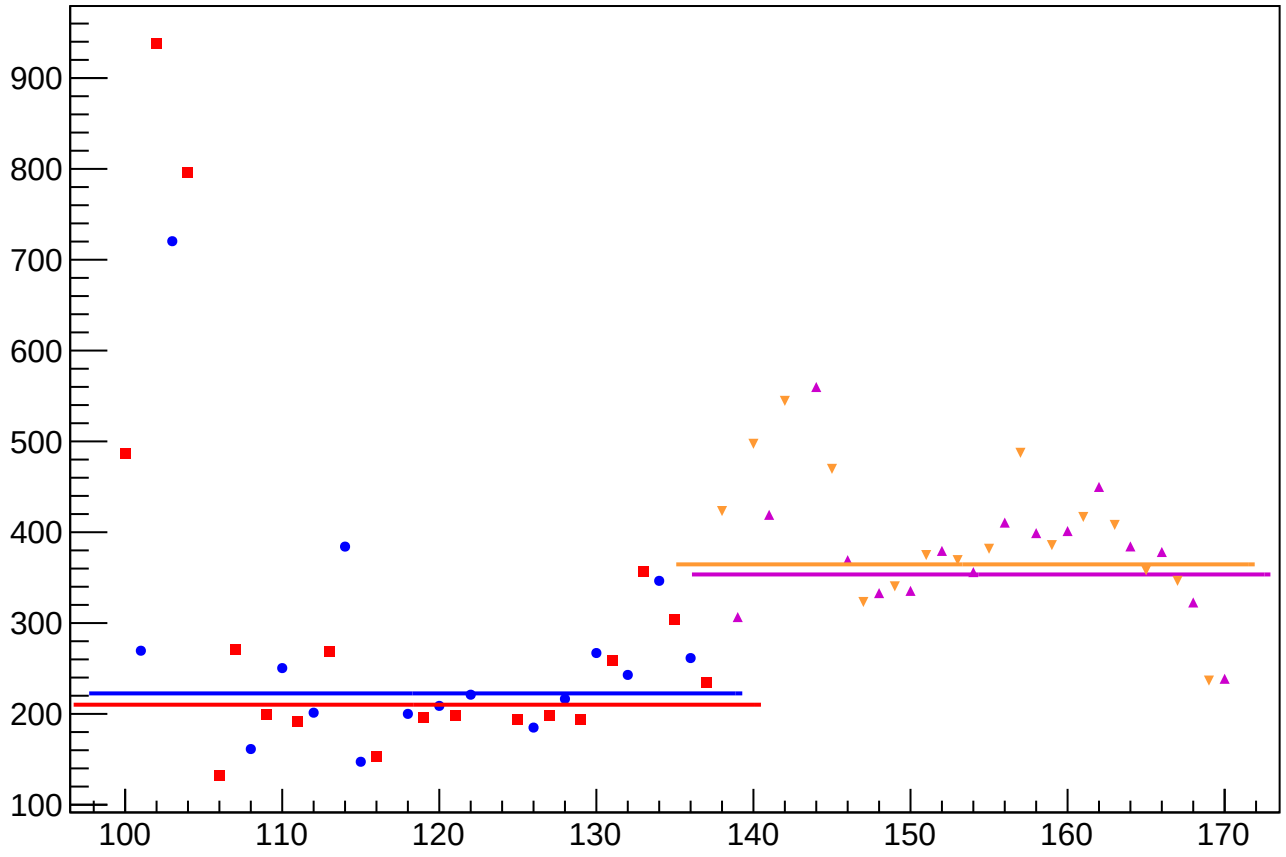
Right Out: -0.020+/-0.087 $\chi^2$/NDF: 26.1/17

Left In: 0.072+/-0.101 $\chi^2$/NDF:24.3/15

+ sign -0.037+/-0.068 $\chi^2$/NDF: 38.8/31

All: -0.008+/-0.047 $\chi^2$/NDF: 90.1/65

- sign 0.019+/-0.066 $\chi^2$/NDF: 50.9/33




Right In: 222.569+/-0.063 $\chi^2$/NDF: 1018774.9/15

Left Out: 364.623+/-0.075 $\chi^2$/NDF:968227.1/15

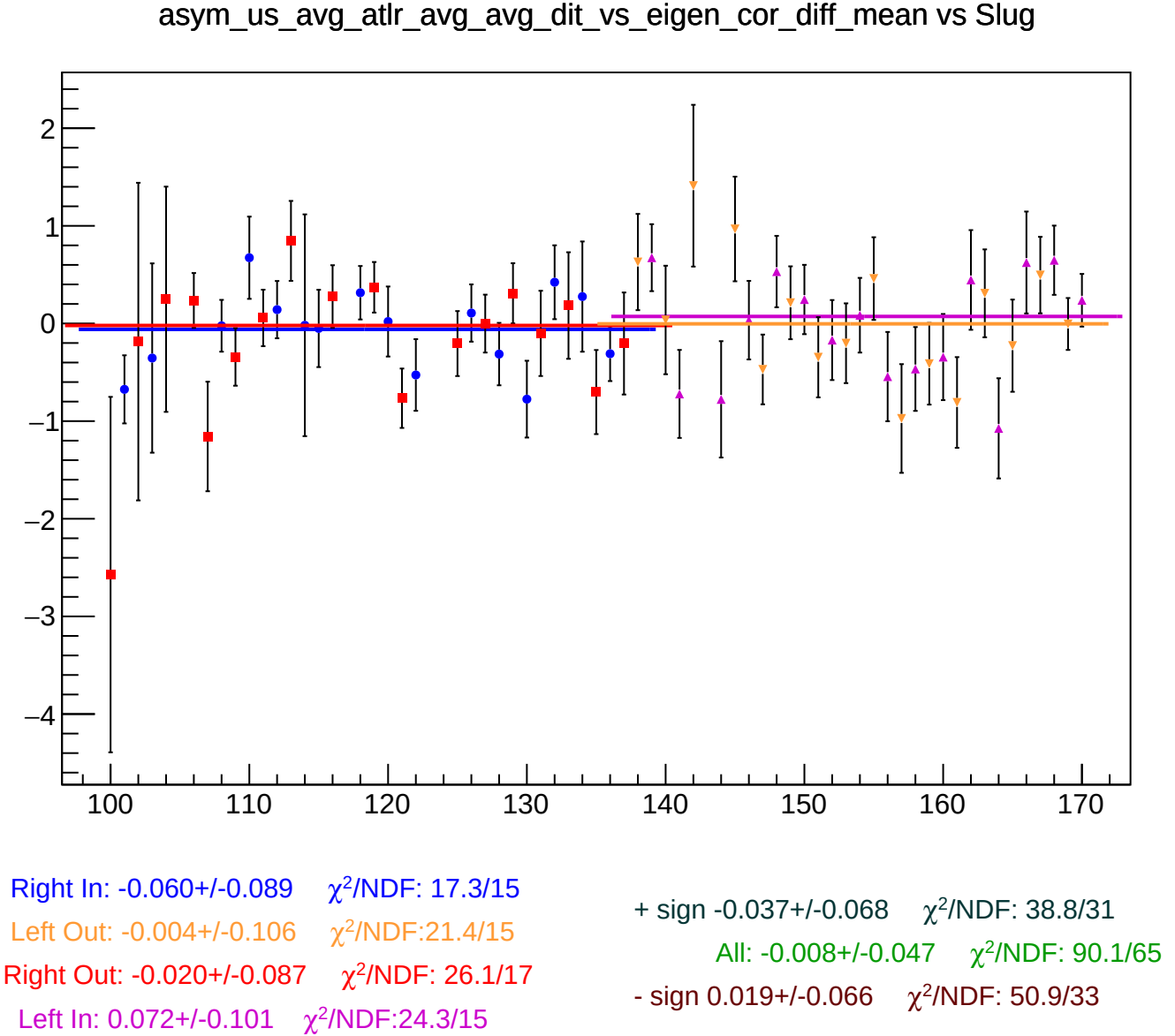
Right Out: 210.123+/-0.062 $\chi^2$/NDF: 1548526.4/17

Left In: 353.518+/-0.071 $\chi^2$/NDF:880095.4/15

+ sign 280.838+/-0.048 $\chi^2$/NDF: 4093140.0/31

All: 276.220+/-0.034 $\chi^2$/NDF: 8856899.8/65

- sign 271.887+/-0.047 $\chi^2$/NDF: 4745931.1/33


asym_us_avg_atlr_avg_avg_dit_vs_eigen_cor_diff_mean vs Slug
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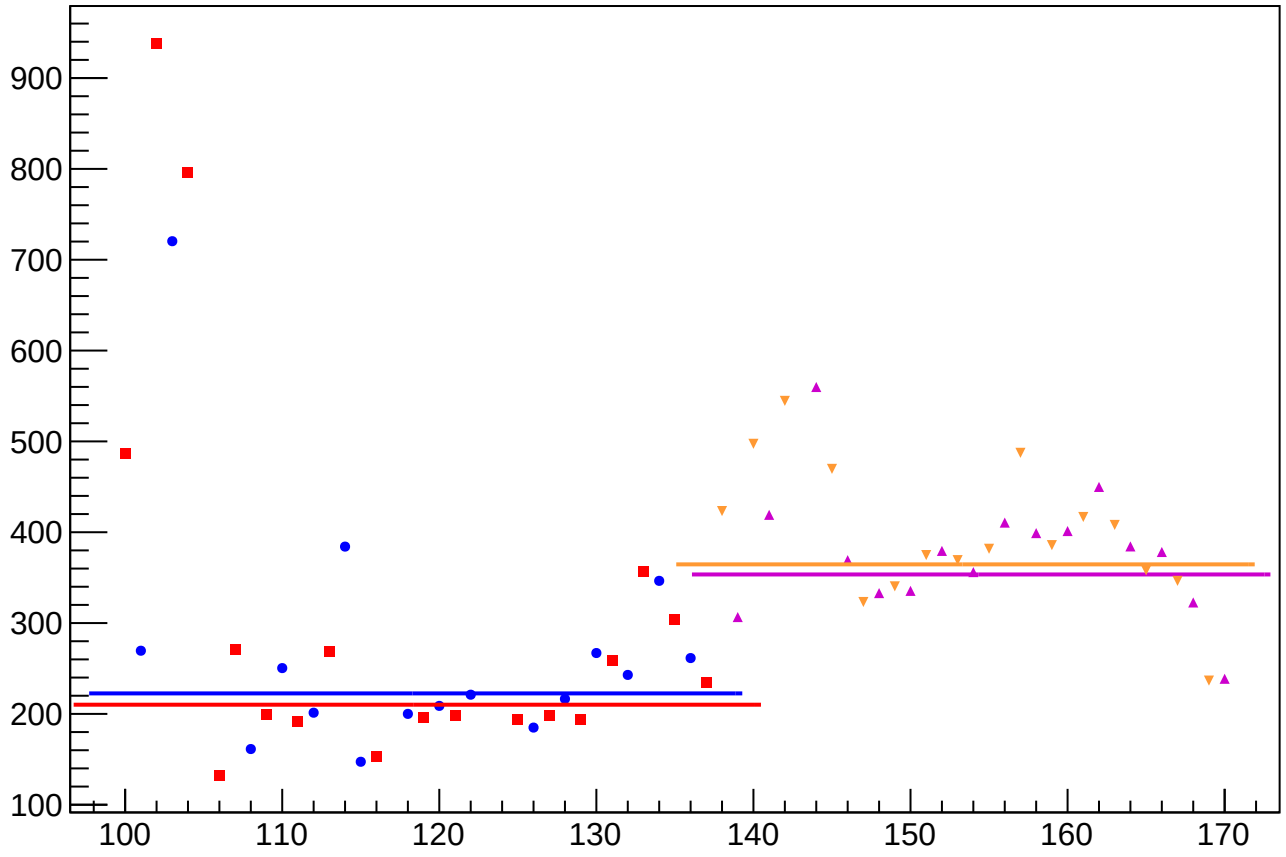
Right In: -0.060+/-0.089 χ²/NDF: 17.3/15
Left Out: -0.004+/-0.106 χ²/NDF:21.4/15
Right Out: -0.020+/-0.087 χ²/NDF: 26.1/17
Left In: 0.072+/-0.101 χ²/NDF:24.3/15
+ sign -0.037+/-0.068 χ²/NDF: 38.8/31
All: -0.008+/-0.047 χ²/NDF: 90.1/65
- sign 0.019+/-0.066 χ²/NDF: 50.9/33




Right In: 222.569+/-0.063 $\chi^2$/NDF: 1018774.9/15

Left Out: 364.623+/-0.075 $\chi^2$/NDF:968227.1/15

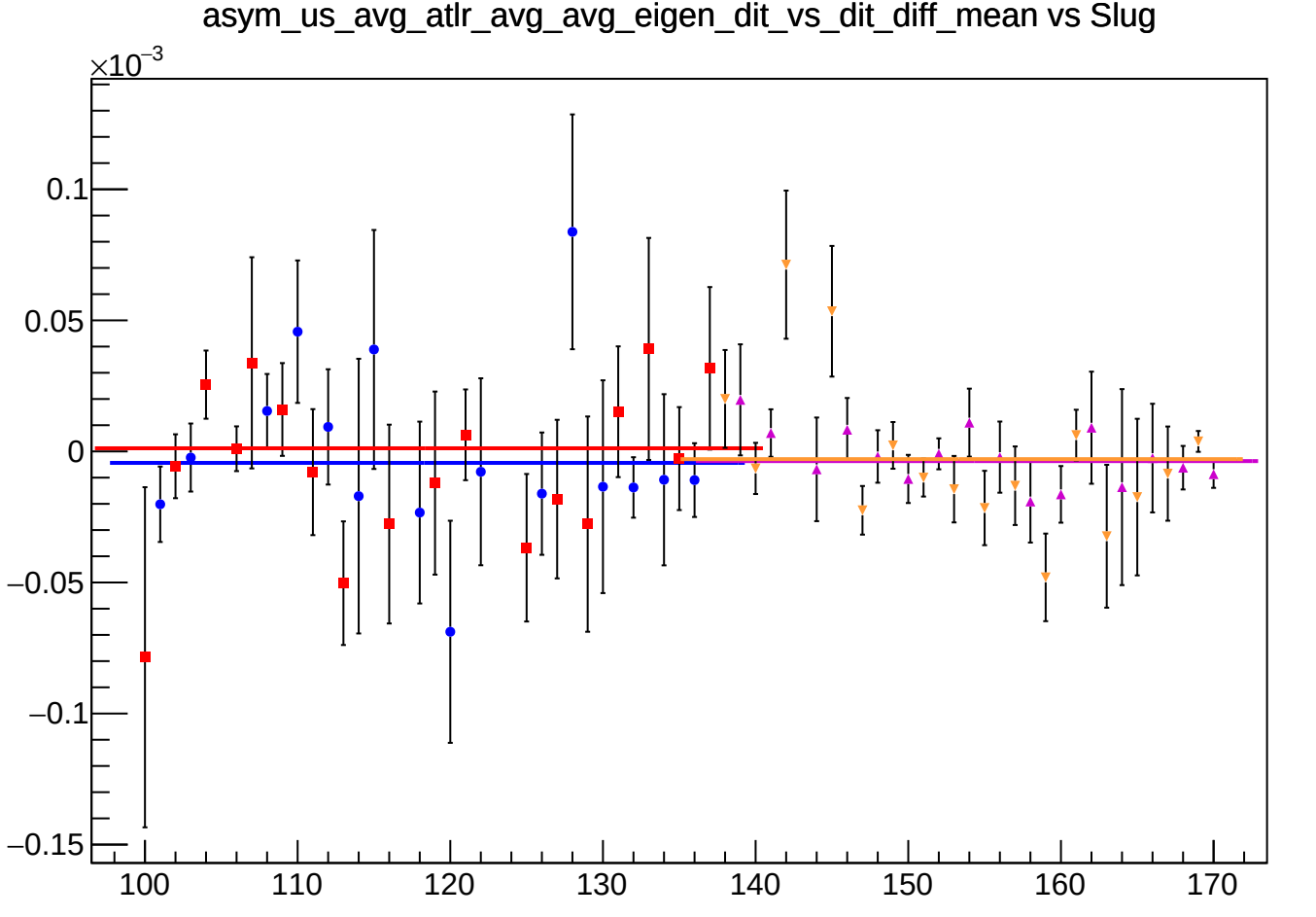
Right Out: 210.123+/-0.062 $\chi^2$/NDF: 1548526.4/17

Left In: 353.518+/-0.071 $\chi^2$/NDF:880095.4/15

+ sign 280.838+/-0.048 $\chi^2$/NDF: 4093140.0/31

All: 276.220+/-0.034 $\chi^2$/NDF: 8856899.8/65

- sign 271.887+/-0.047 $\chi^2$/NDF: 4745931.1/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:35.0/15

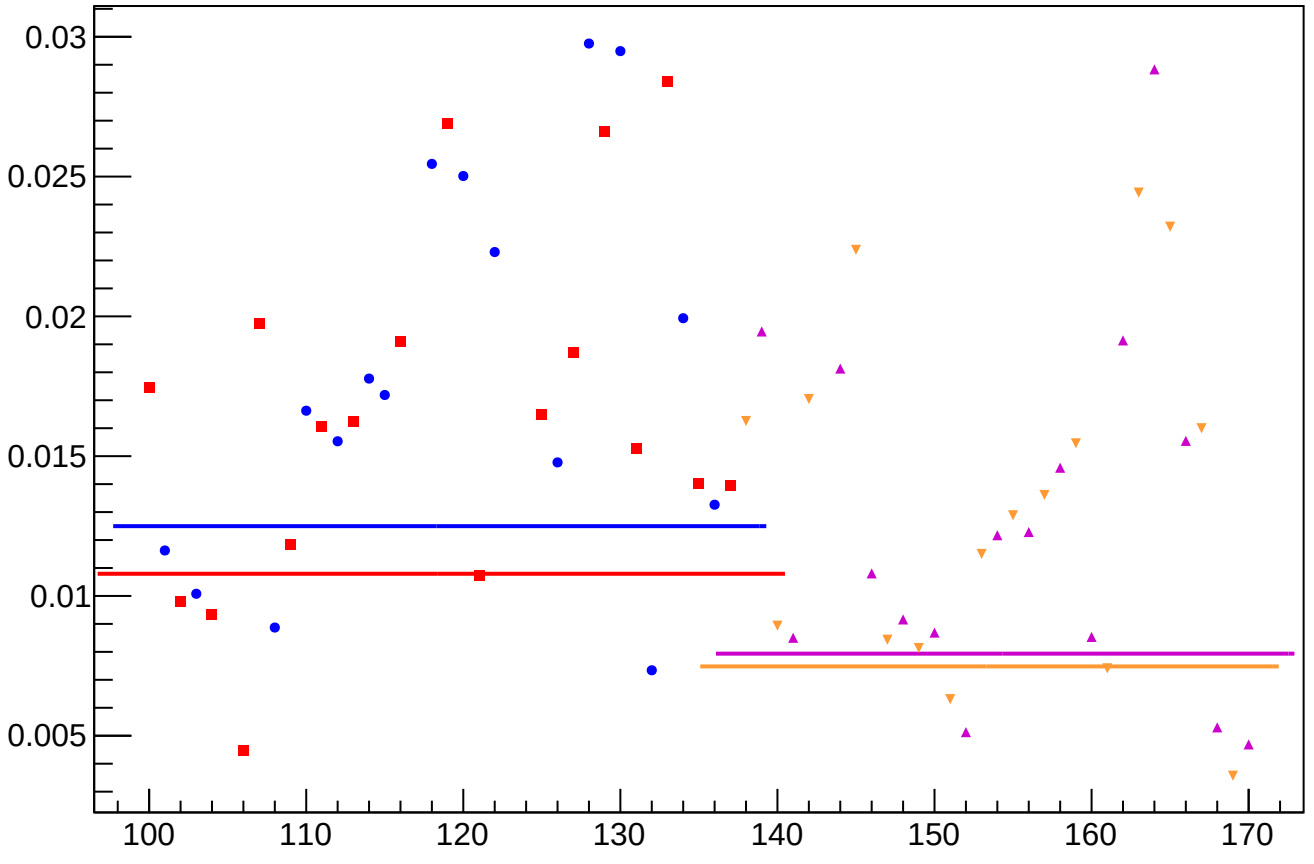
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.2/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:9.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 50.7/31

All: -0.000+/-0.000 $\chi^2$/NDF: 78.3/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.6/33




Right In: 0.012+/-0.000 $\chi^2$/NDF: 2114968.1/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:6509560.7/15

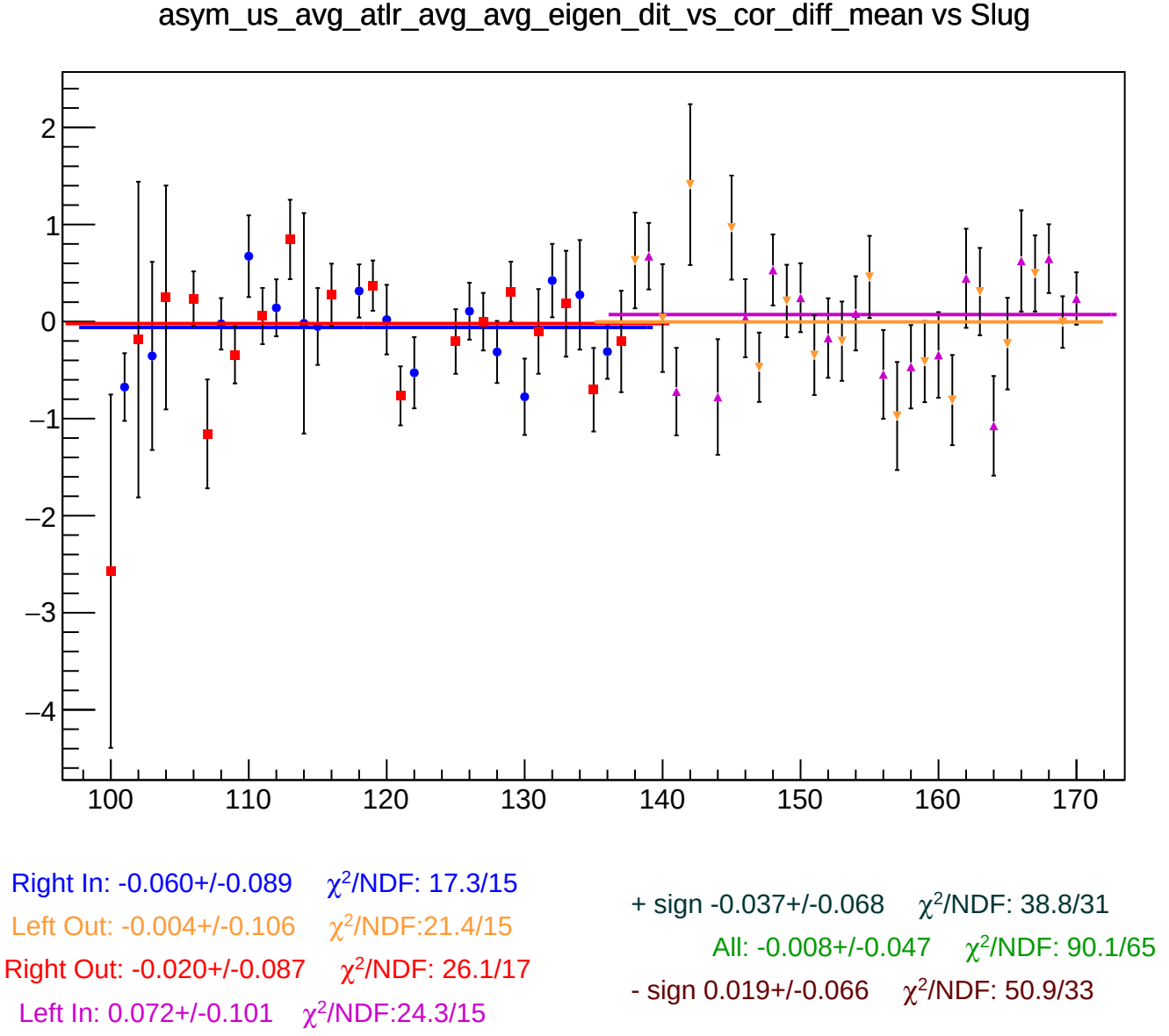
Right Out: 0.011+/-0.000 $\chi^2$/NDF: 2987826.3/17

Left In: 0.008+/-0.000 $\chi^2$/NDF:4941957.1/15

+ sign 0.008+/-0.000 $\chi^2$/NDF: 10188839.4/31

All: 0.009+/-0.000 $\chi^2$/NDF: 18716273.1/65

- sign 0.009+/-0.000 $\chi^2$/NDF: 8523286.9/33


asym_us_avg_atlr_avg_avg_eigen_dit_vs_cor_diff_mean vs Slug
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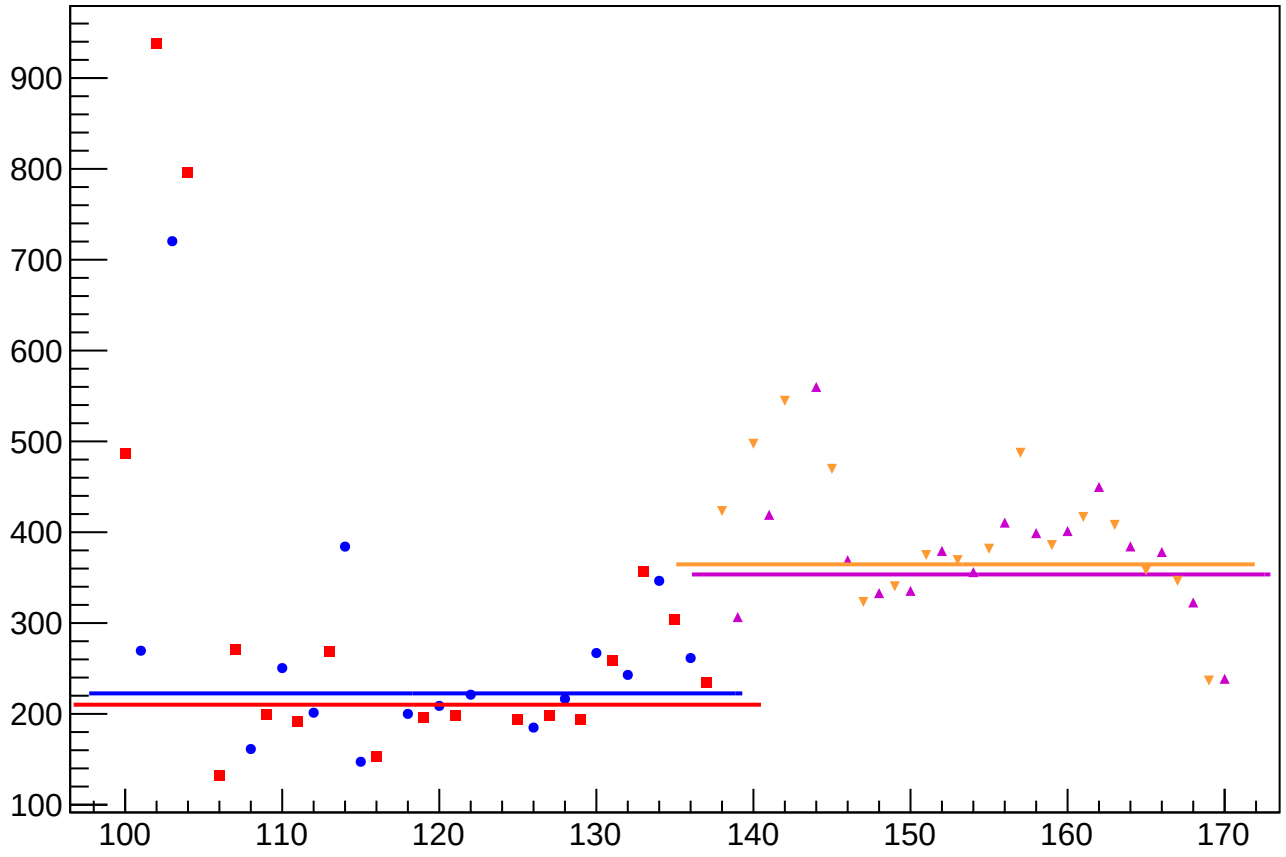
Right In: -0.060+/-0.089 χ²/NDF: 17.3/15
Left Out: -0.004+/-0.106 χ²/NDF:21.4/15
Right Out: -0.020+/-0.087 χ²/NDF: 26.1/17
Left In: 0.072+/-0.101 χ²/NDF:24.3/15
+ sign -0.037+/-0.068 χ²/NDF: 38.8/31
All: -0.008+/-0.047 χ²/NDF: 90.1/65
- sign 0.019+/-0.066 χ²/NDF: 50.9/33




Right In: 222.567+/-0.063 $\chi^2$/NDF: 1018760.3/15

Left Out: 364.628+/-0.075 $\chi^2$/NDF:968274.3/15

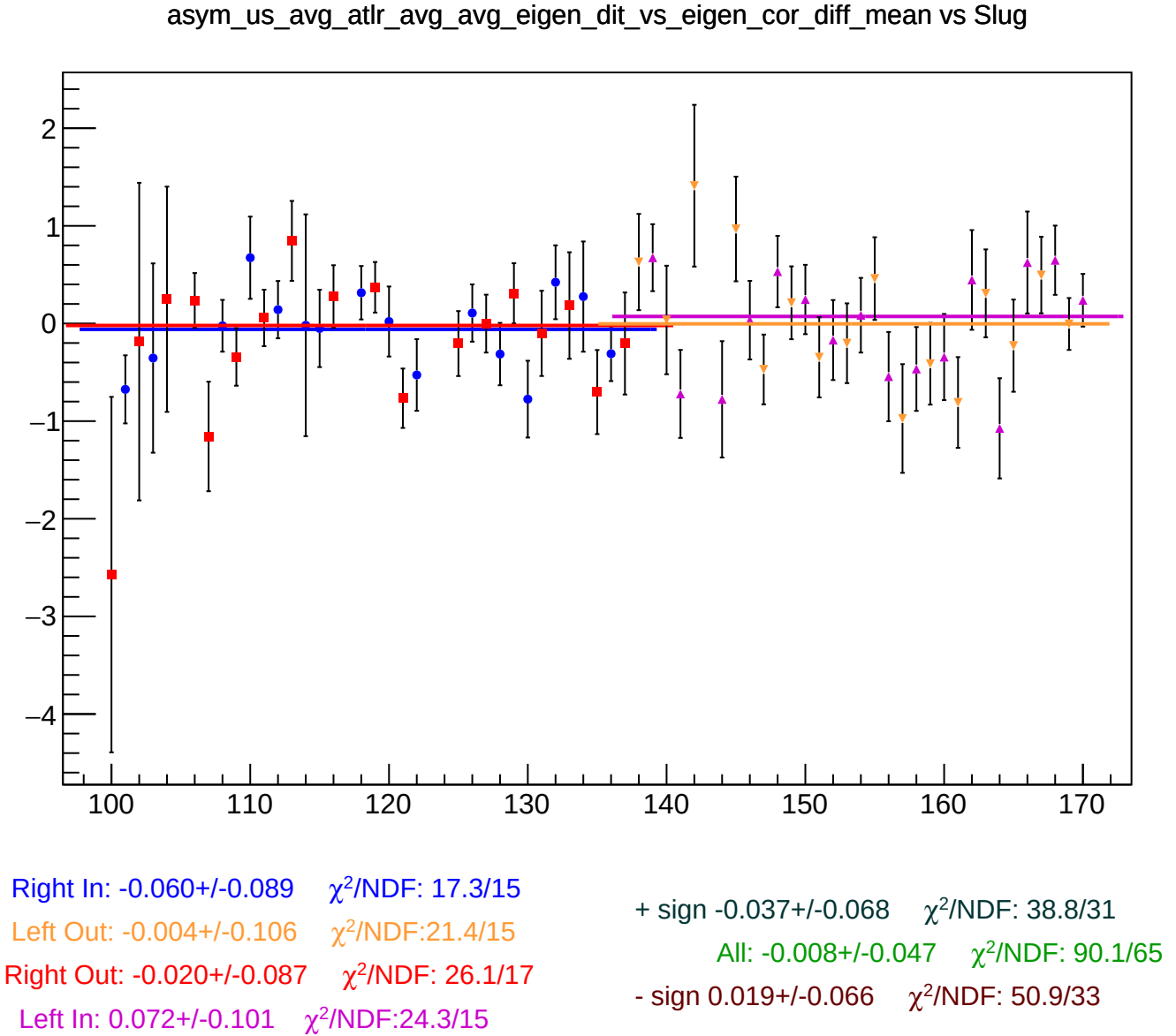
Right Out: 210.120+/-0.062 $\chi^2$/NDF: 1548507.5/17

Left In: 353.523+/-0.071 $\chi^2$/NDF:880128.6/15

+ sign 280.837+/-0.048 $\chi^2$/NDF: 4093341.4/31

All: 276.219+/-0.034 $\chi^2$/NDF: 8857343.6/65

- sign 271.885+/-0.047 $\chi^2$/NDF: 4746170.7/33


asym_us_avg_atlr_avg_avg_eigen_dit_vs_eigen_cor_diff_mean vs Slug
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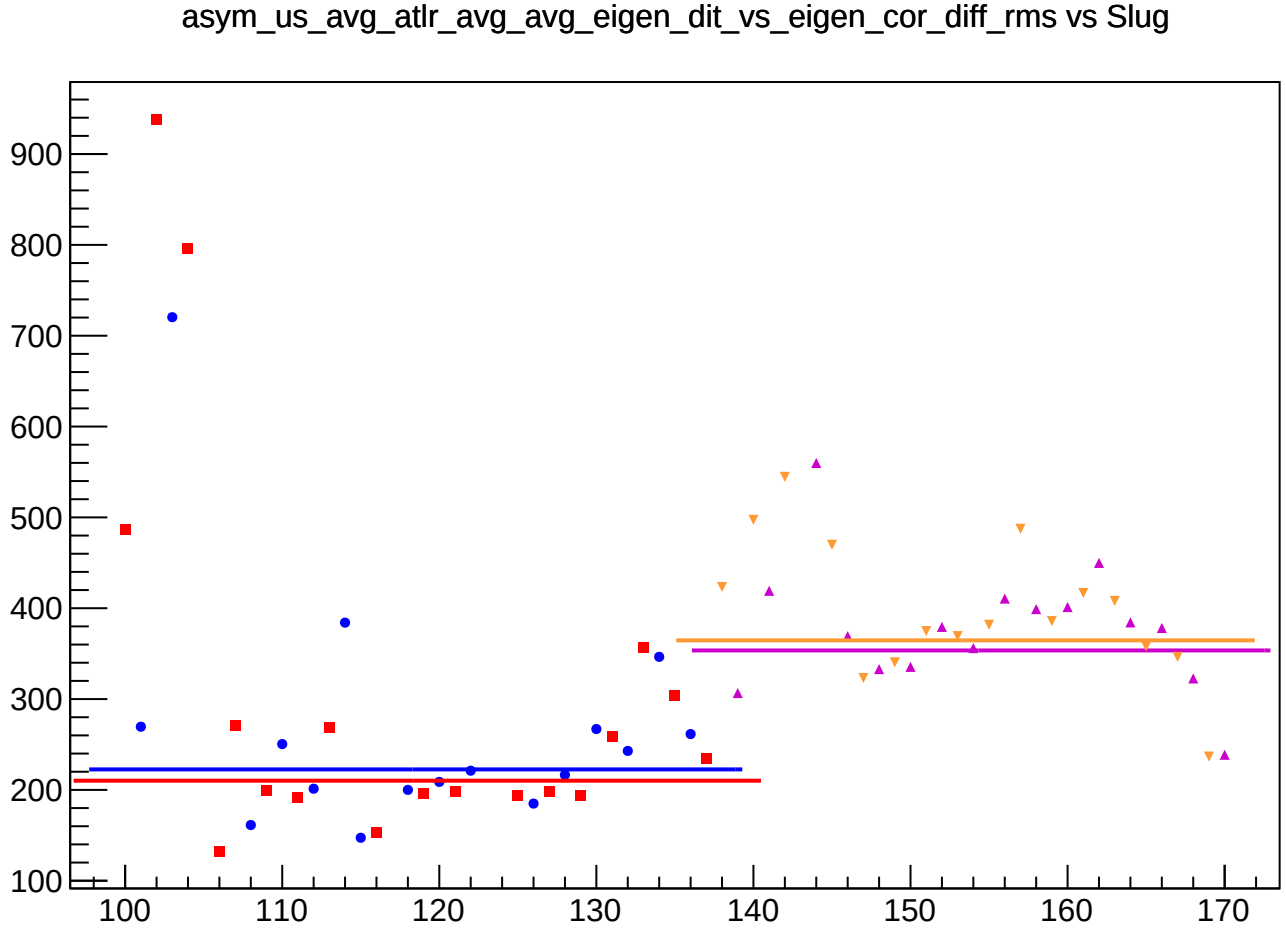
Right In: -0.060+/-0.089 χ²/NDF: 17.3/15
Left Out: -0.004+/-0.106 χ²/NDF:21.4/15
Right Out: -0.020+/-0.087 χ²/NDF: 26.1/17
Left In: 0.072+/-0.101 χ²/NDF:24.3/15
+ sign -0.037+/-0.068 χ²/NDF: 38.8/31
All: -0.008+/-0.047 χ²/NDF: 90.1/65
- sign 0.019+/-0.066 χ²/NDF: 50.9/33




Right In: 222.567+/-0.063 $\chi^2$/NDF: 1018760.3/15

Left Out: 364.628+/-0.075 $\chi^2$/NDF:968274.3/15

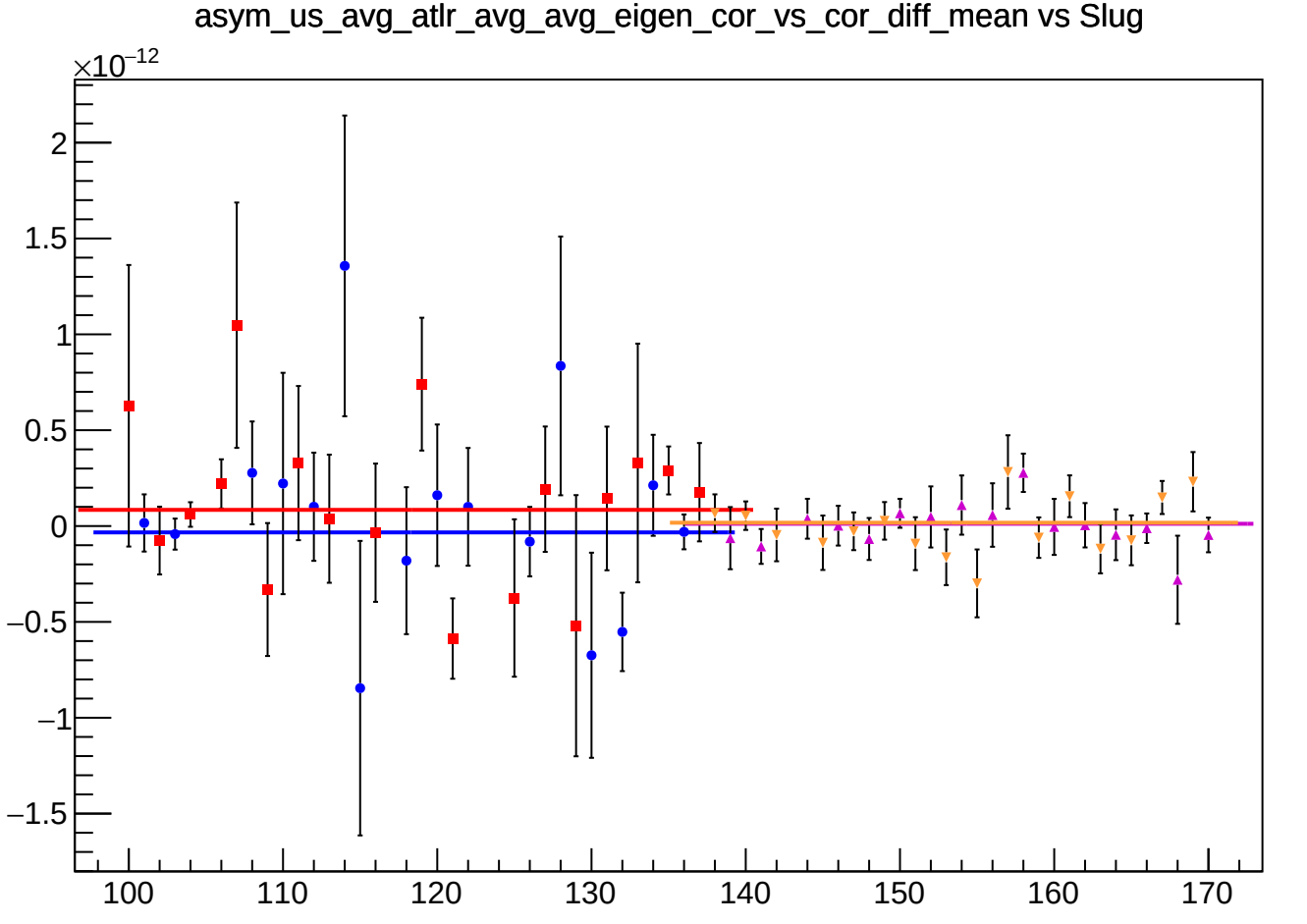
Right Out: 210.120+/-0.062 $\chi^2$/NDF: 1548507.5/17

Left In: 353.523+/-0.071 $\chi^2$/NDF:880128.6/15

+ sign 280.837+/-0.048 $\chi^2$/NDF: 4093341.4/31

All: 276.219+/-0.034 $\chi^2$/NDF: 8857343.6/65

- sign 271.885+/-0.047 $\chi^2$/NDF: 4746170.7/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 17.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:16.8/15

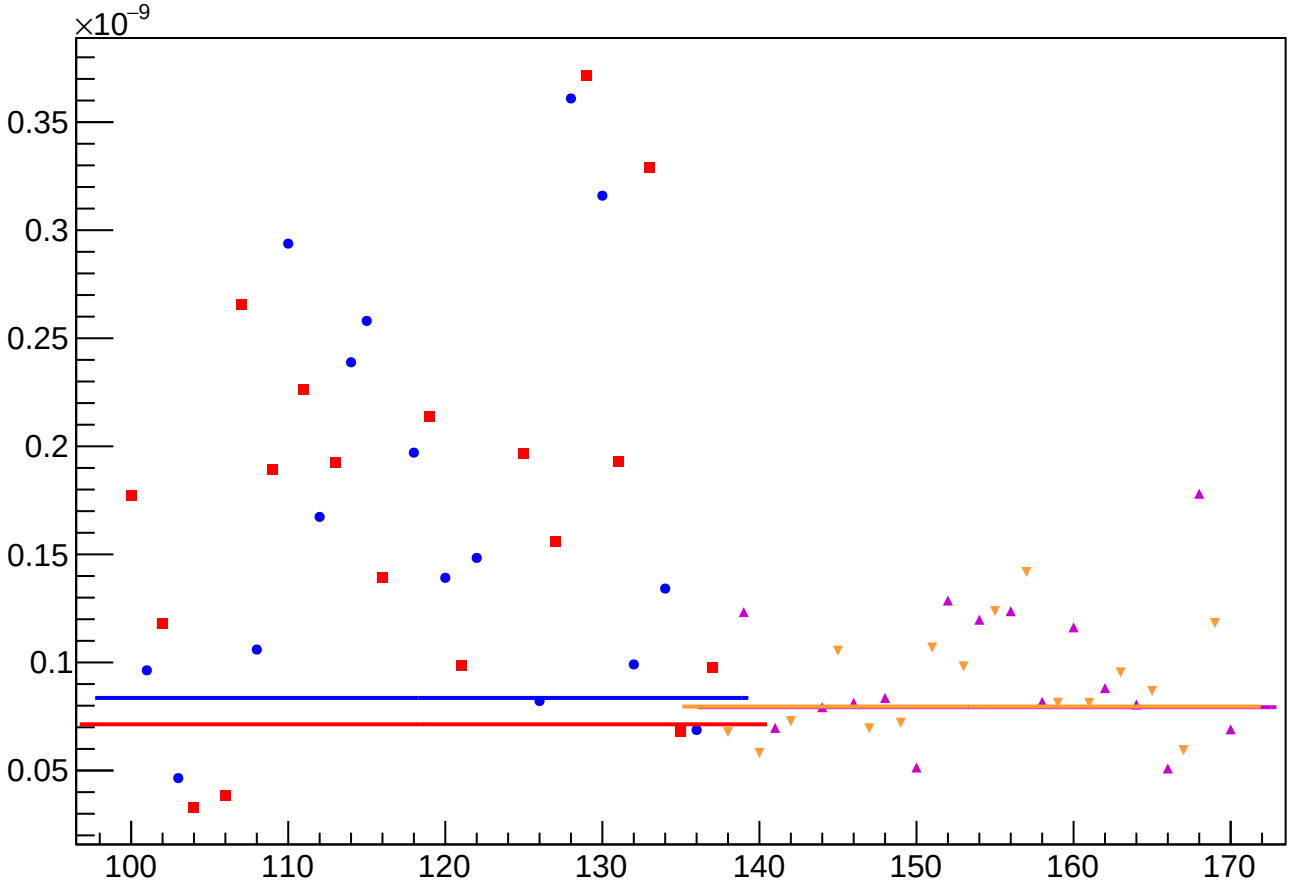
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 25.8/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:13.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 34.8/31

All: 0.000+/-0.000 $\chi^2$/NDF: 76.2/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 40.7/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2235431.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1017965.3/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3745180.4/17

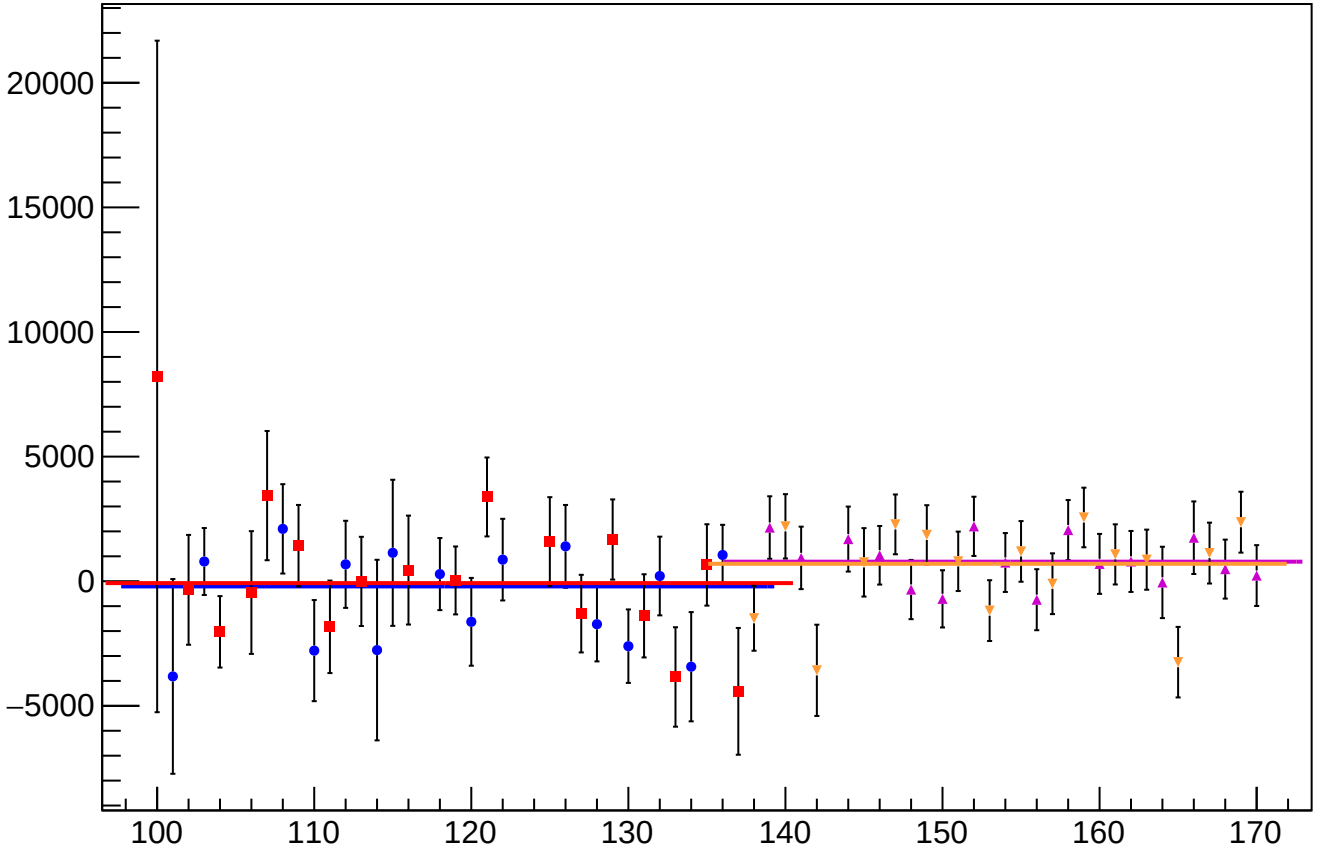
Left In: 0.000+/-0.000 $\chi^2$/NDF:1725728.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3263874.2/31

All: 0.000+/-0.000 $\chi^2$/NDF: 8803299.8/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 5516922.7/33

# reg_asym_us_avg_atlr_avg_dd_mean vs Slug




Right In: -208.338+/-429.155 $\chi^2$/NDF: 14.8/15

Left Out: 699.465+/-315.369 $\chi^2$/NDF:27.6/15

Right Out: -75.616+/-430.760 $\chi^2$/NDF: 20.7/17

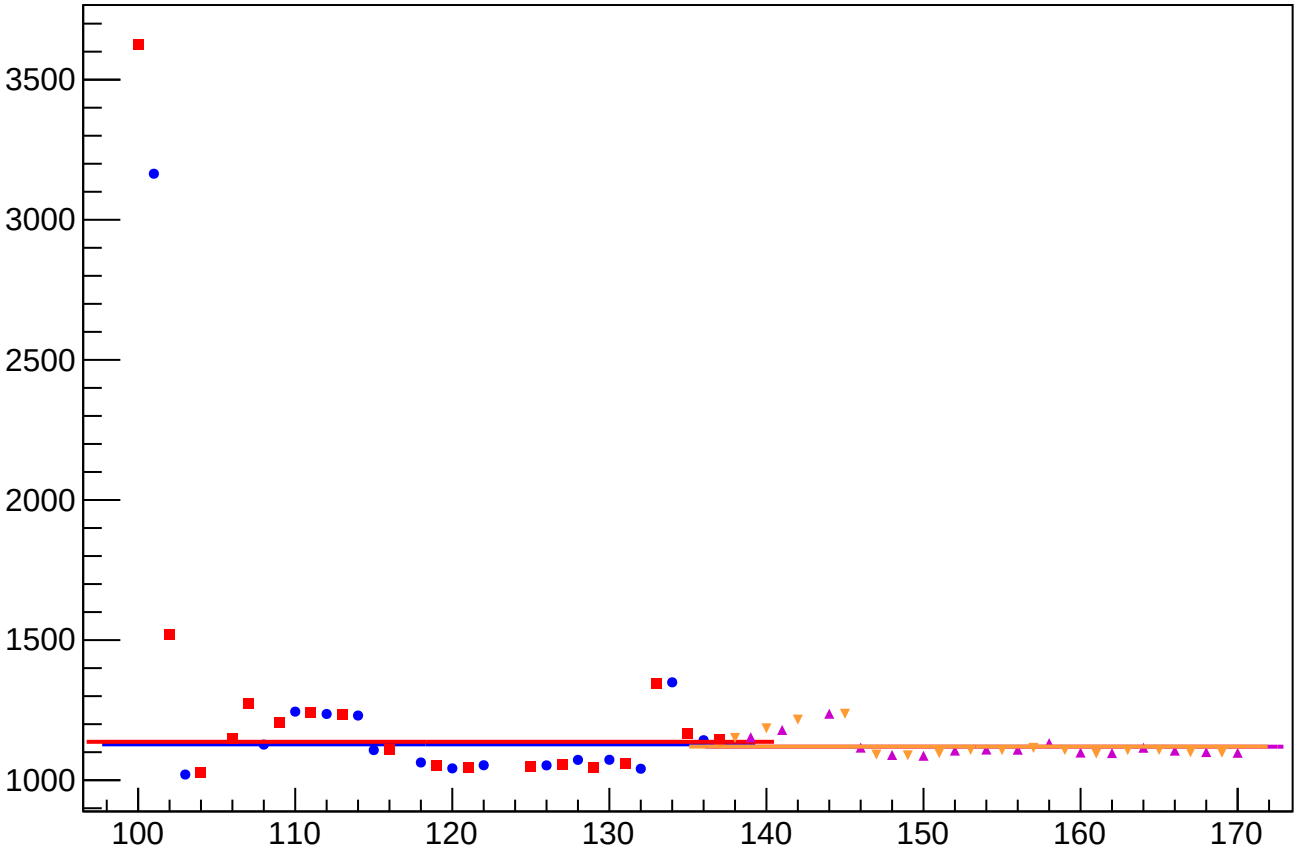
Left In: 784.697+/-308.085 $\chi^2$/NDF:9.5/15

\+ sign 381.136+/-254.130 $\chi^2$/NDF: 45.3/31

All: 438.132+/-178.432 $\chi^2$/NDF: 78.1/65

\- sign 493.552+/-250.589 $\chi^2$/NDF: 32.7/33

# reg_asym_us_avg_atlr_avg_dd_rms vs Slug




Right In: 1128.007+/-0.303 $\chi^2$/NDF: 621394.5/15

Left Out: 1120.056+/-0.223 $\chi^2$/NDF:32606.8/15

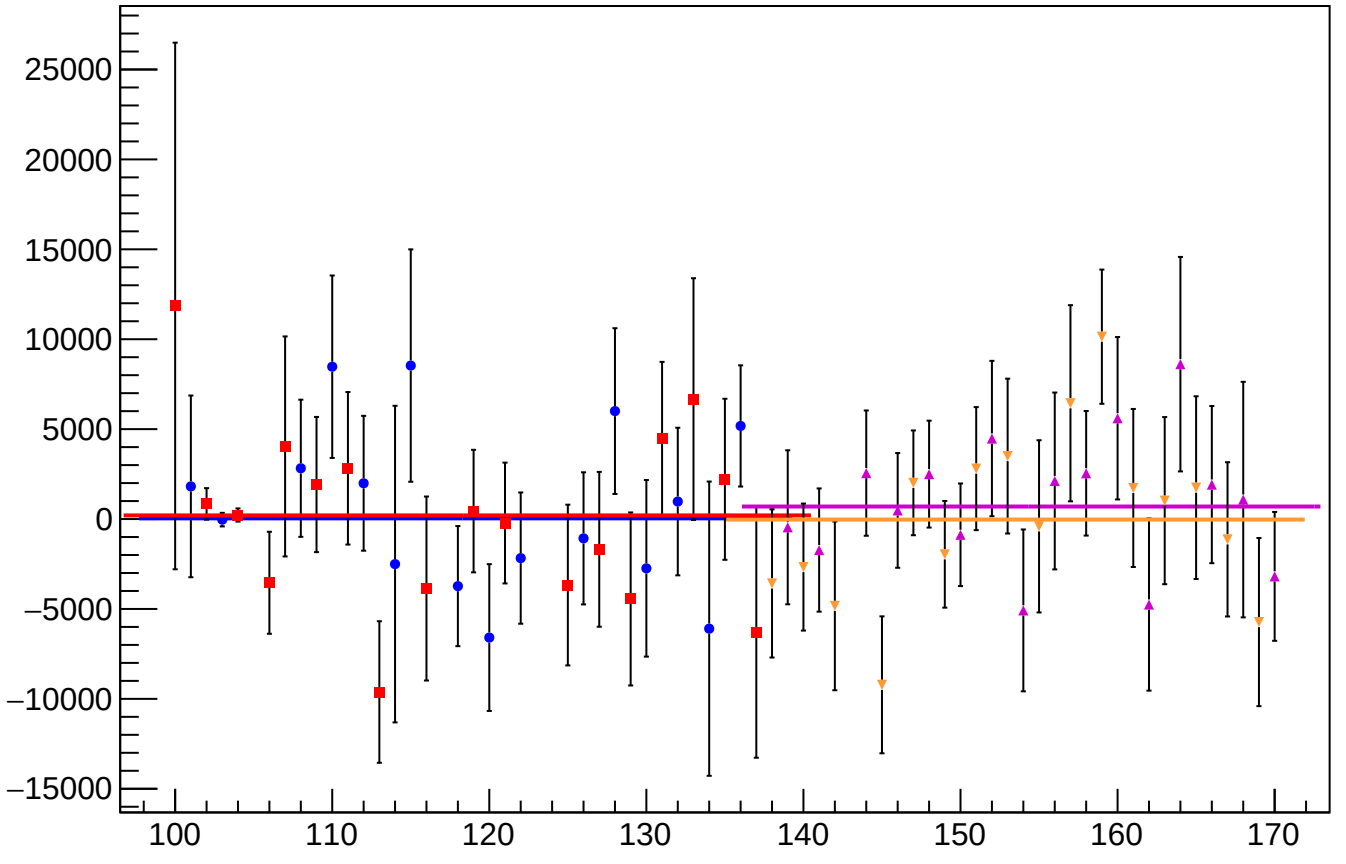
Right Out: 1137.041+/-0.304 $\chi^2$/NDF: 220086.1/17

Left In: 1119.596+/-0.218 $\chi^2$/NDF:28555.5/15

+ sign 1122.844+/-0.180 $\chi^2$/NDF: 654447.2/31

All: 1124.199+/-0.126 $\chi^2$/NDF: 905376.2/65

- sign 1125.514+/-0.177 $\chi^2$/NDF: 250817.0/33




Right In: 38.300+/-357.651 $\chi^2$/NDF: 14.8/15

Left Out: -29.137+/-994.957 $\chi^2$/NDF:21.2/15

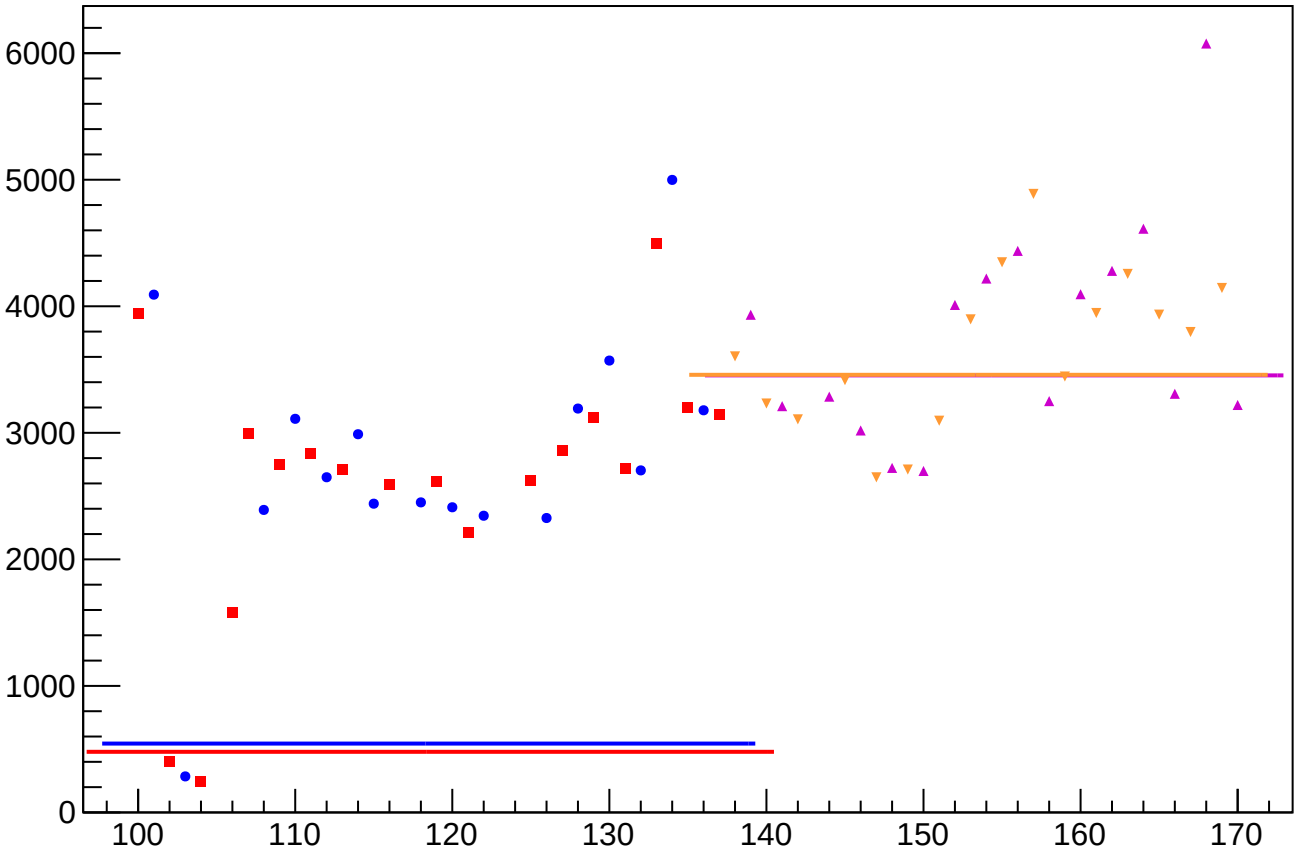
Right Out: 201.642+/-322.545 $\chi^2$/NDF: 15.6/17

Left In: 695.889+/-971.987 $\chi^2$/NDF:9.8/15

+ sign 30.583+/-336.567 $\chi^2$/NDF: 36.0/31

All: 151.026+/-226.464 $\chi^2$/NDF: 61.9/65

- sign 250.669+/-306.130 $\chi^2$/NDF: 25.7/33




Right In: 544.336+/-0.253 $\chi^2$/NDF: 9682967.9/15

Left Out: 3458.396+/-0.704 $\chi^2$/NDF:710331.9/15

Right Out: 479.253+/-0.228 $\chi^2$/NDF: 9187985.0/17

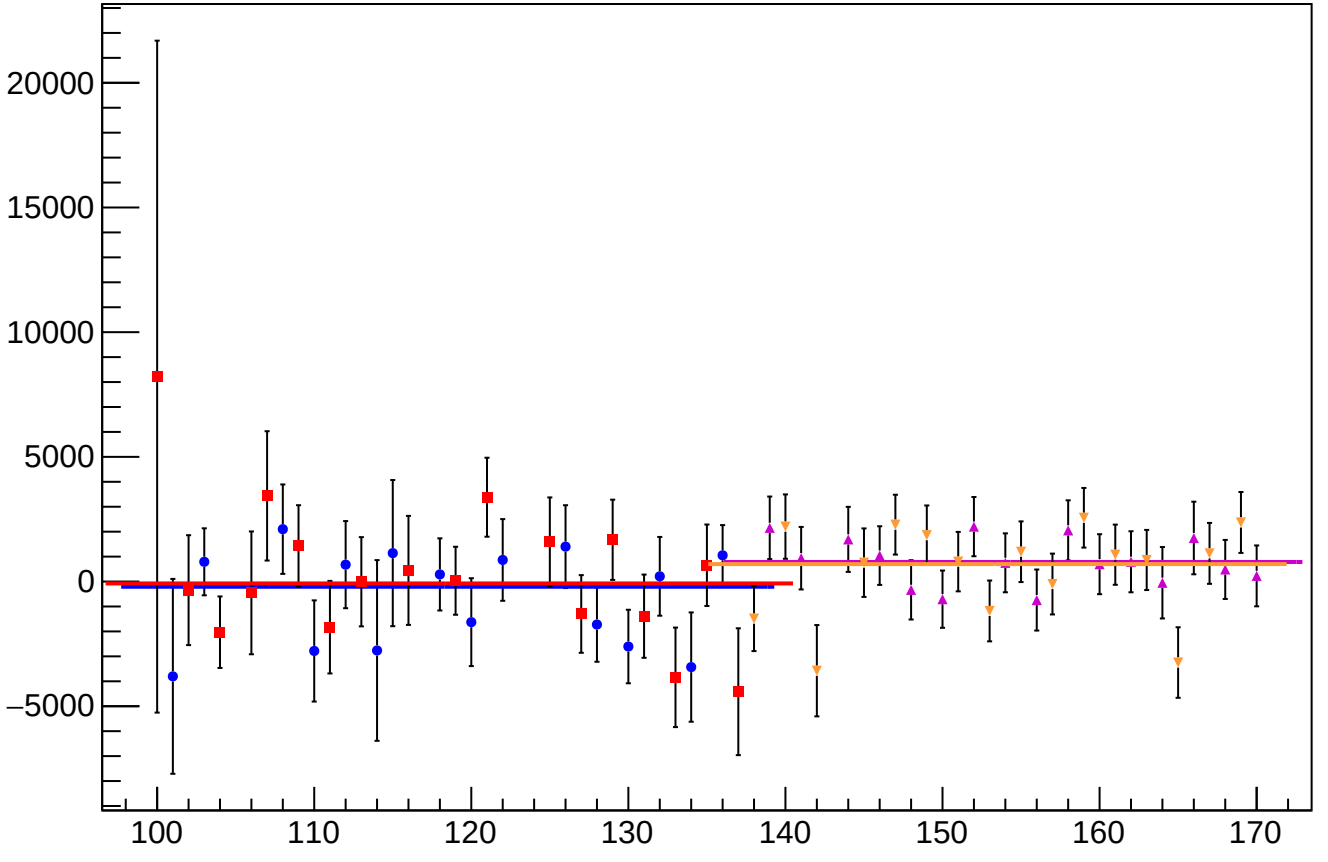
Left In: 3453.872+/-0.687 $\chi^2$/NDF:1022959.4/15

+ sign 877.788+/-0.238 $\chi^2$/NDF: 25586250.7/31

All: 821.165+/-0.160 $\chi^2$/NDF: 52774021.0/65

- sign 774.320+/-0.216 $\chi^2$/NDF: 27084331.4/33

# cor_asym_us_avg_atlr_avg_dd_mean vs Slug




Right In: -208.110+/-429.155 $\chi^2$/NDF: 14.8/15

Left Out: 699.531+/-315.369 $\chi^2$/NDF:27.6/15

Right Out: -75.761+/-430.760 $\chi^2$/NDF: 20.7/17

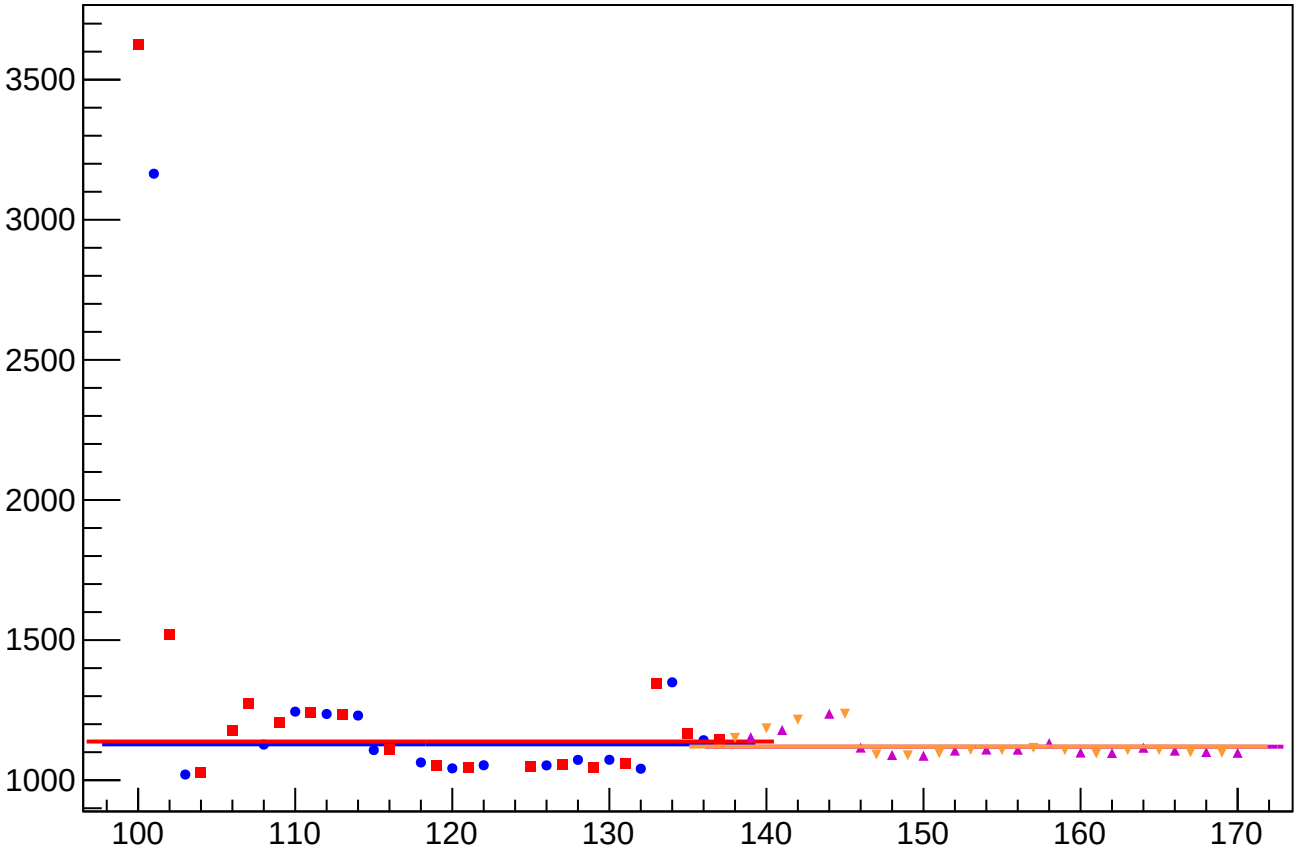
Left In: 784.683+/-308.085 $\chi^2$/NDF:9.5/15

+ sign 381.259+/-254.130 $\chi^2$/NDF: 45.3/31

All: 438.163+/-178.432 $\chi^2$/NDF: 78.1/65

- sign 493.493+/-250.589 $\chi^2$/NDF: 32.7/33

# cor_asym_us_avg_atlr_avg_dd_rms vs Slug




Right In: 1128.007+/-0.303 $\chi^2$/NDF: 621395.6/15

Left Out: 1120.056+/-0.223 $\chi^2$/NDF:32606.8/15

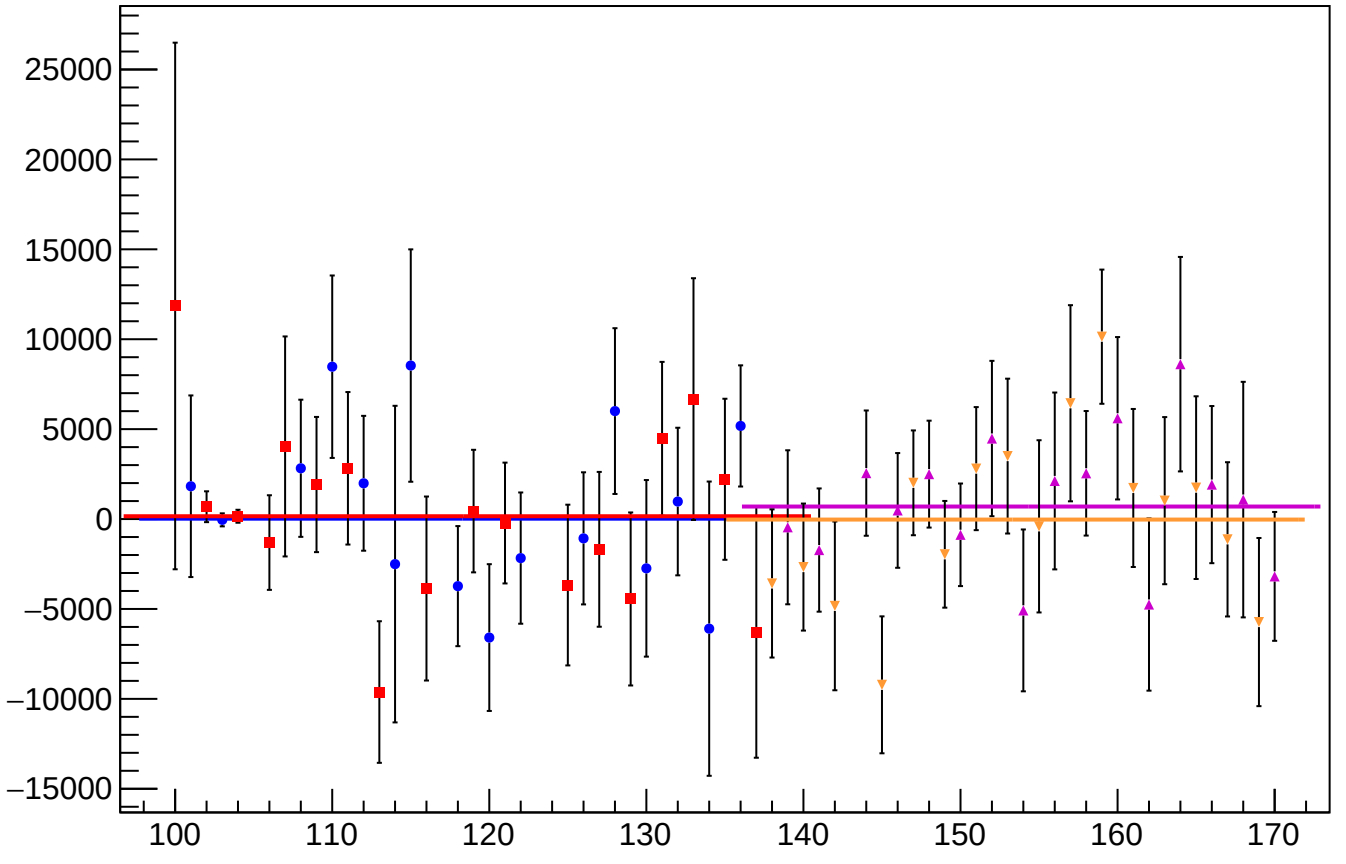
Right Out: 1138.000+/-0.304 $\chi^2$/NDF: 220624.5/17

Left In: 1119.596+/-0.218 $\chi^2$/NDF:28555.5/15

\+ sign 1122.844+/-0.180 $\chi^2$/NDF: 654448.3/31

All: 1124.358+/-0.126 $\chi^2$/NDF: 906185.1/65

\- sign 1125.829+/-0.177 $\chi^2$/NDF: 251596.9/33




Right In: 21.645+/-344.525 $\chi^2$/NDF: 14.9/15

Left Out: -29.101+/-994.957 $\chi^2$/NDF:21.2/15

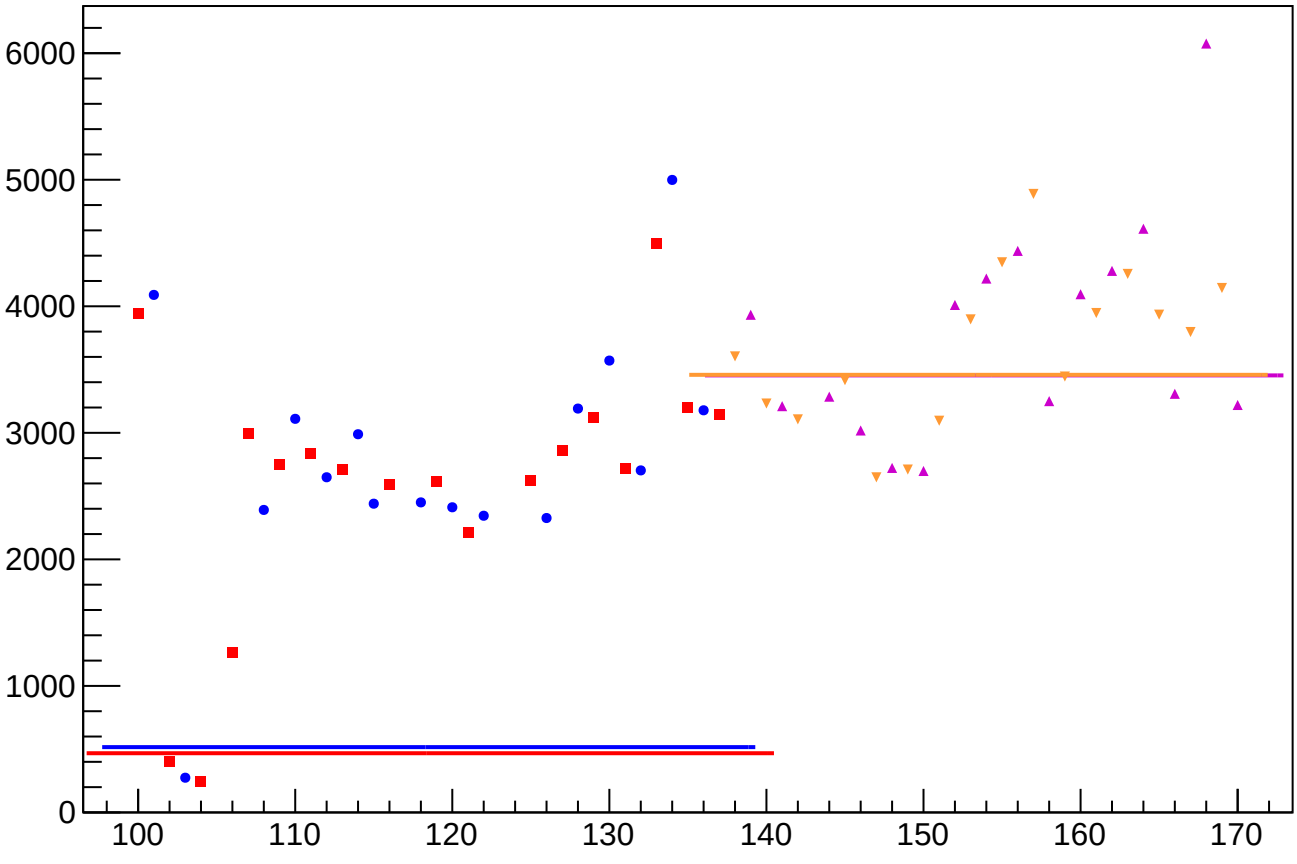
Right Out: 156.231+/-317.367 $\chi^2$/NDF: 14.0/17

Left In: 695.889+/-971.987 $\chi^2$/NDF:9.8/15

+ sign 16.212+/-325.560 $\chi^2$/NDF: 36.0/31

All: 119.512+/-221.286 $\chi^2$/NDF: 60.3/65

- sign 208.222+/-301.692 $\chi^2$/NDF: 24.1/33




Right In: 516.297+/-0.244 $\chi^2$/NDF: 9834669.6/15

Left Out: 3458.396+/-0.704 $\chi^2$/NDF:710338.9/15

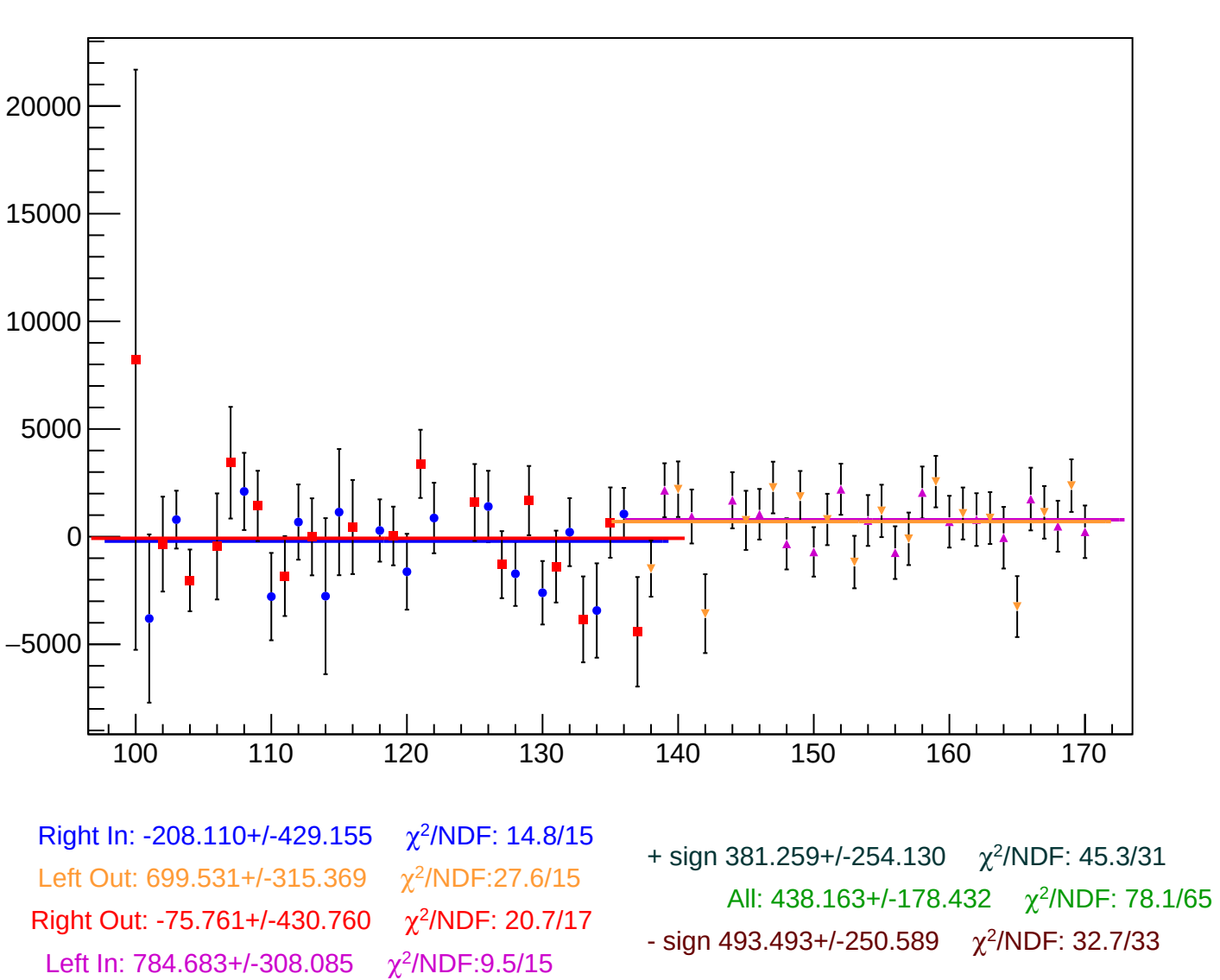
Right Out: 468.060+/-0.224 $\chi^2$/NDF: 9111222.0/17

Left In: 3453.869+/-0.687 $\chi^2$/NDF:1022965.4/15

+ sign 831.297+/-0.230 $\chi^2$/NDF: 26160487.9/31

All: 790.633+/-0.156 $\chi^2$/NDF: 53407146.5/65

- sign 755.714+/-0.213 $\chi^2$/NDF: 27188663.1/33


eigen_cor_asym_us_avg_atlr_avg_dd_mean vs Slug
20000
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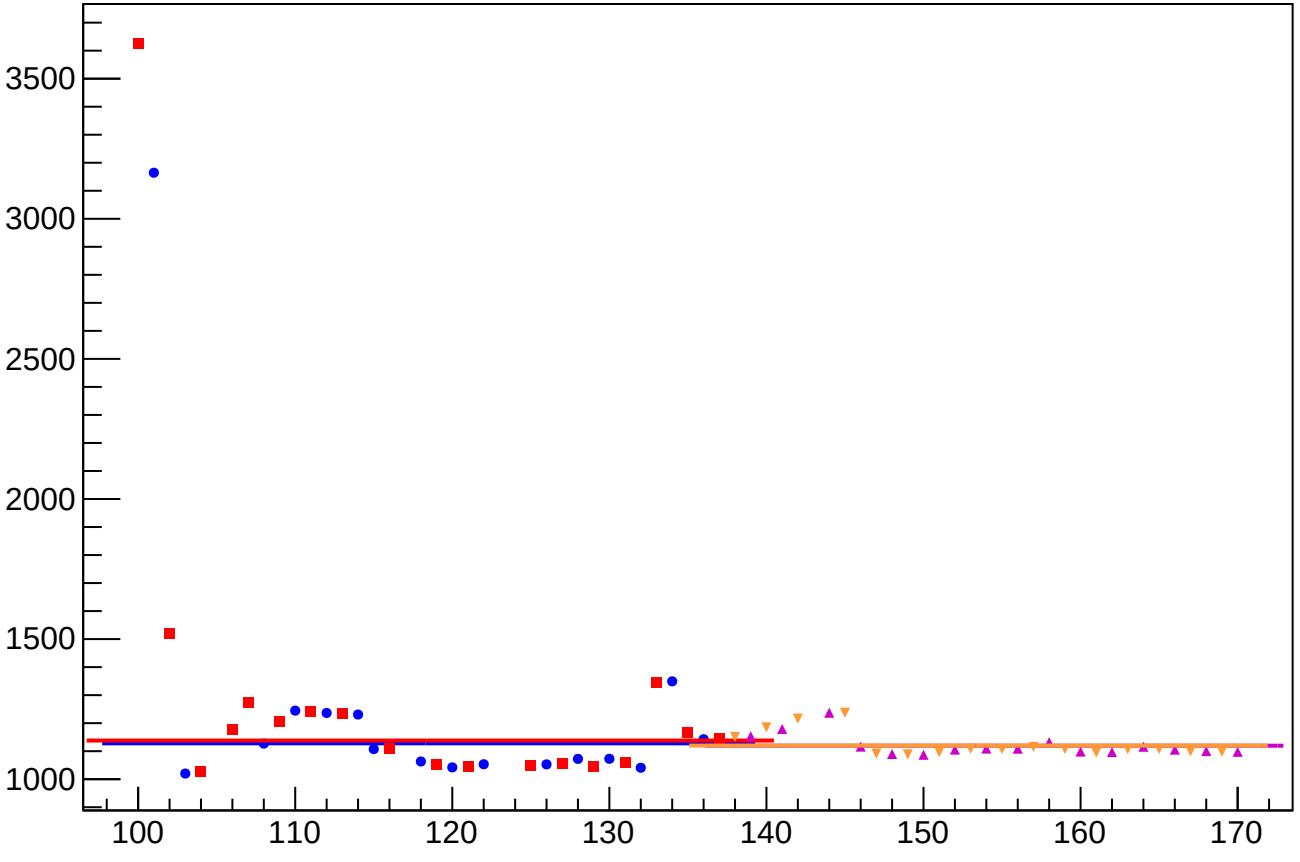
Right In: -208.110+/-429.155 χ²/NDF: 14.8/15
Left Out: 699.531+/-315.369 χ²/NDF:27.6/15
Right Out: -75.761+/-430.760 χ²/NDF: 20.7/17
Left In: 784.683+/-308.085 χ²/NDF:9.5/15
+ sign 381.259+/-254.130 χ²/NDF: 45.3/31
All: 438.163+/-178.432 χ²/NDF: 78.1/65
- sign 493.493+/-250.589 χ²/NDF: 32.7/33

# eigen_cor_asym_us_avg_atlr_avg_dd_rms vs Slug




Right In: 1128.007+/-0.303 $\chi^2$/NDF: 621395.6/15

Left Out: 1120.056+/-0.223 $\chi^2$/NDF:32606.8/15

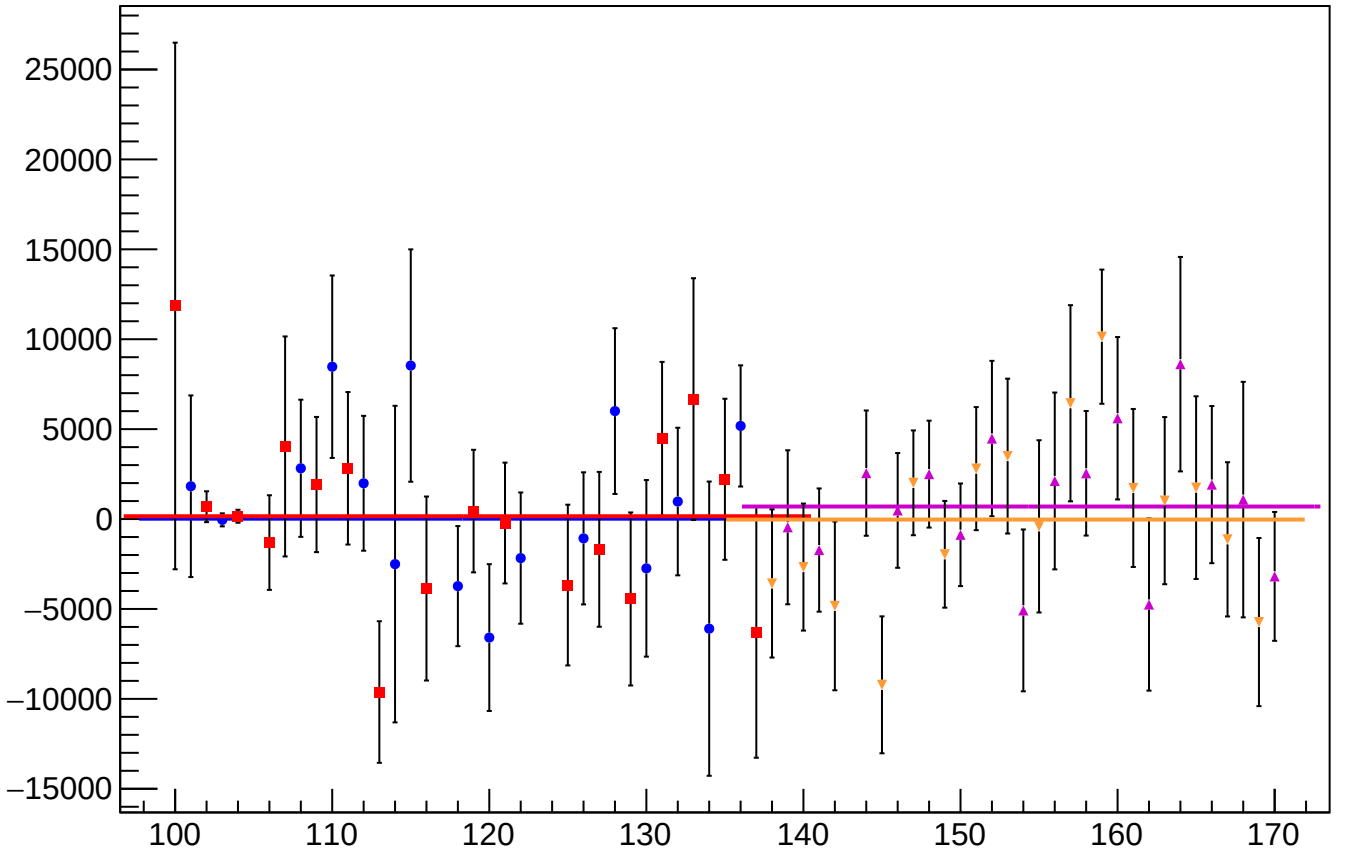
Right Out: 1138.000+/-0.304 $\chi^2$/NDF: 220624.5/17

Left In: 1119.596+/-0.218 $\chi^2$/NDF:28555.5/15

\+ sign 1122.844+/-0.180 $\chi^2$/NDF: 654448.3/31

All: 1124.358+/-0.126 $\chi^2$/NDF: 906185.1/65

\- sign 1125.829+/-0.177 $\chi^2$/NDF: 251596.9/33




Right In: 21.645+/-344.525 $\chi^2$/NDF: 14.9/15

Left Out: -29.101+/-994.957 $\chi^2$/NDF:21.2/15

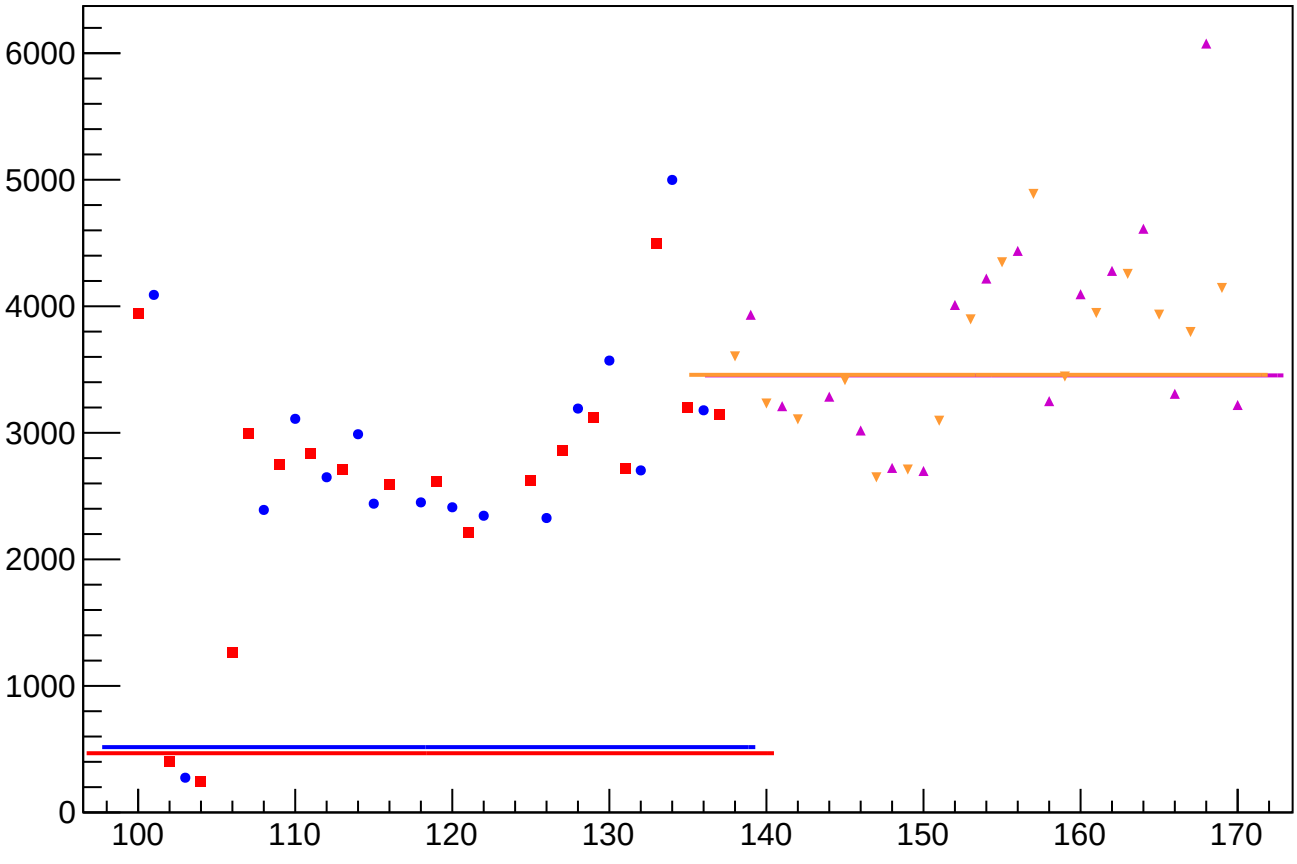
Right Out: 156.231+/-317.367 $\chi^2$/NDF: 14.0/17

Left In: 695.889+/-971.987 $\chi^2$/NDF:9.8/15

+ sign 16.212+/-325.560 $\chi^2$/NDF: 36.0/31

All: 119.512+/-221.286 $\chi^2$/NDF: 60.3/65

- sign 208.222+/-301.692 $\chi^2$/NDF: 24.1/33




Right In: 516.297+/-0.244 $\chi^2$/NDF: 9834669.6/15

Left Out: 3458.396+/-0.704 $\chi^2$/NDF:710338.9/15

Right Out: 468.060+/-0.224 $\chi^2$/NDF: 9111222.0/17

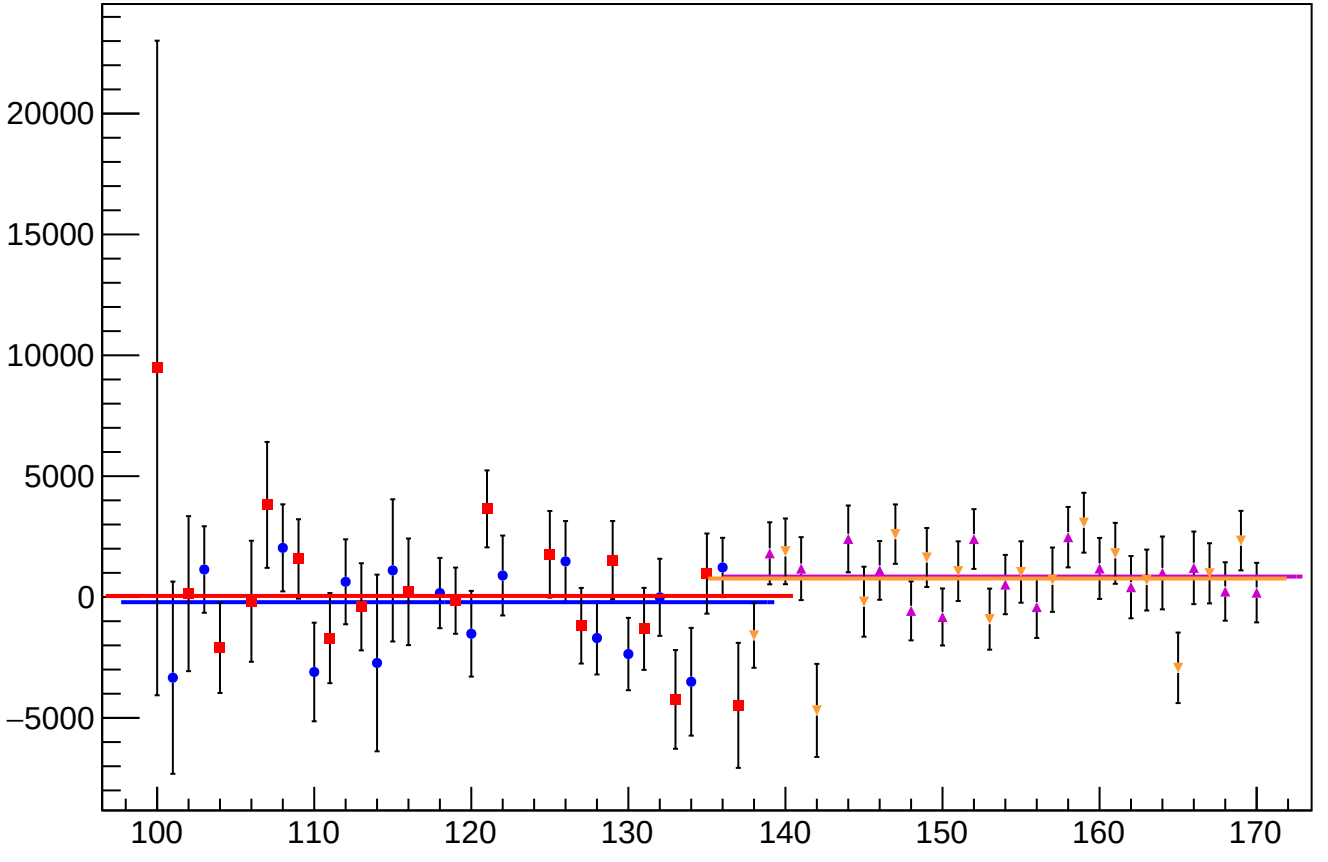
Left In: 3453.869+/-0.687 $\chi^2$/NDF:1022965.4/15

+ sign 831.297+/-0.230 $\chi^2$/NDF: 26160487.9/31

All: 790.633+/-0.156 $\chi^2$/NDF: 53407146.5/65

- sign 755.714+/-0.213 $\chi^2$/NDF: 27188663.1/33

# dit_asym_us_avg_atlr_avg_dd_mean vs Slug




Right In: -213.079+/-442.684 $\chi^2$/NDF: 14.3/15

Left Out: 766.371+/-327.315 $\chi^2$/NDF:29.1/15

Right Out: 45.535+/-447.221 $\chi^2$/NDF: 21.7/17

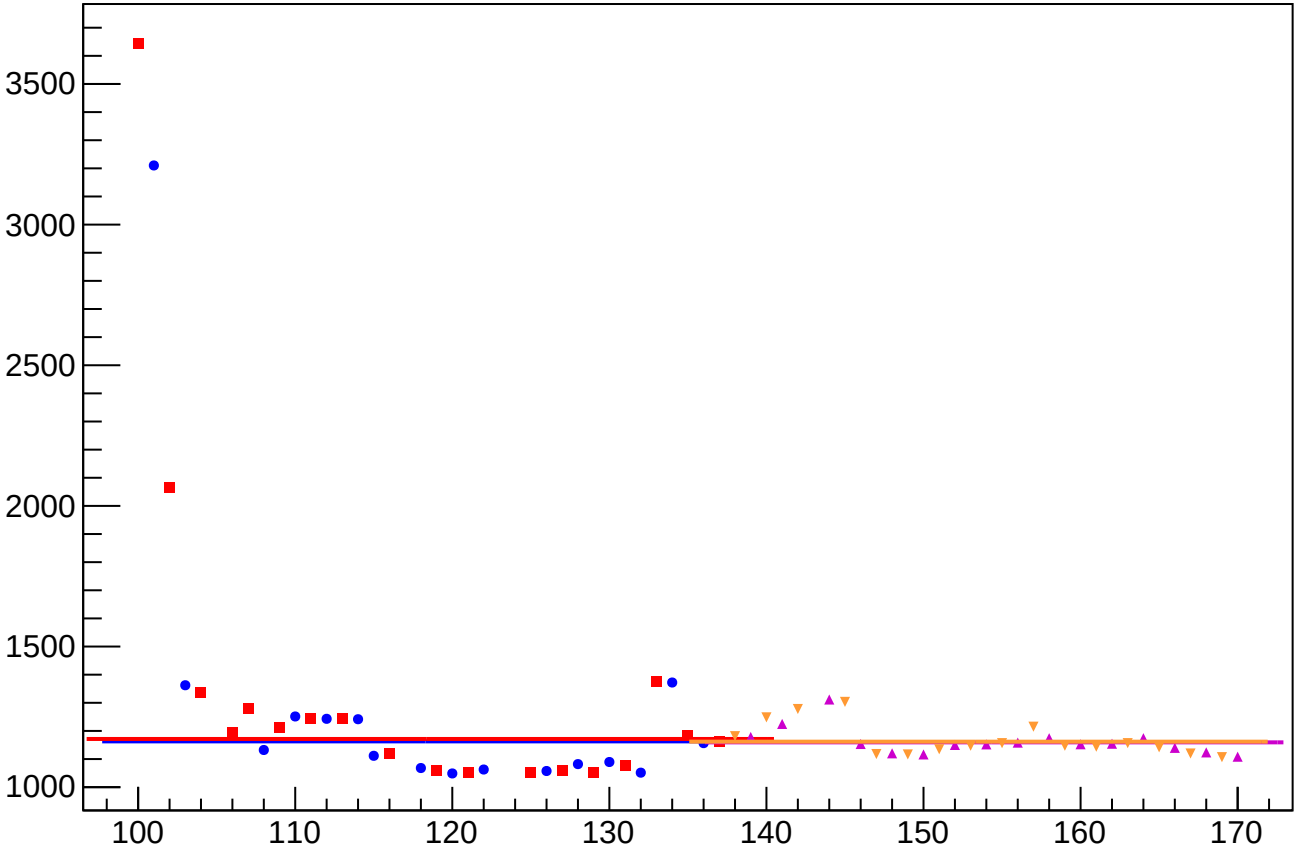
Left In: 846.418+/-319.145 $\chi^2$/NDF:10.4/15

+ sign 420.175+/-263.187 $\chi^2$/NDF: 46.6/31

All: 499.196+/-184.885 $\chi^2$/NDF: 81.0/65

- sign 576.185+/-259.781 $\chi^2$/NDF: 34.2/33

# dit_asym_us_avg_atlr_avg_dd_rms vs Slug




Right In: 1162.851+/-0.313 $\chi^2$/NDF: 635353.4/15

Left Out: 1161.828+/-0.231 $\chi^2$/NDF:52031.8/15

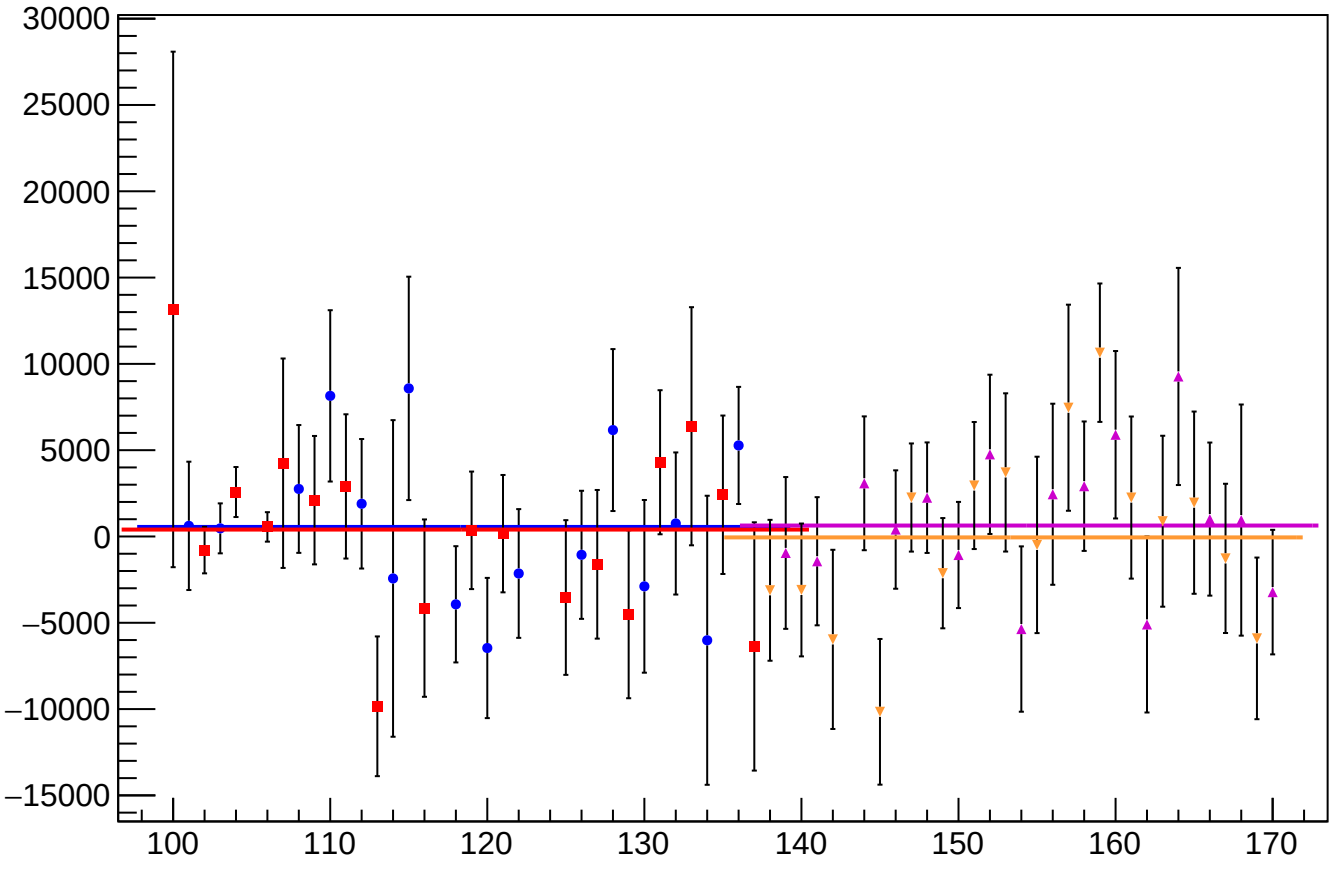
Right Out: 1171.420+/-0.316 $\chi^2$/NDF: 331640.8/17

Left In: 1159.388+/-0.226 $\chi^2$/NDF:40783.2/15

+ sign 1162.190+/-0.186 $\chi^2$/NDF: 687392.1/31

All: 1162.829+/-0.131 $\chi^2$/NDF: 1060799.2/65

- sign 1163.451+/-0.184 $\chi^2$/NDF: 373383.8/33




Right In: 552.517+/-874.128 $\chi^2$/NDF: 14.4/15

Left Out: -53.418+/-1058.917 $\chi^2$/NDF:21.3/15

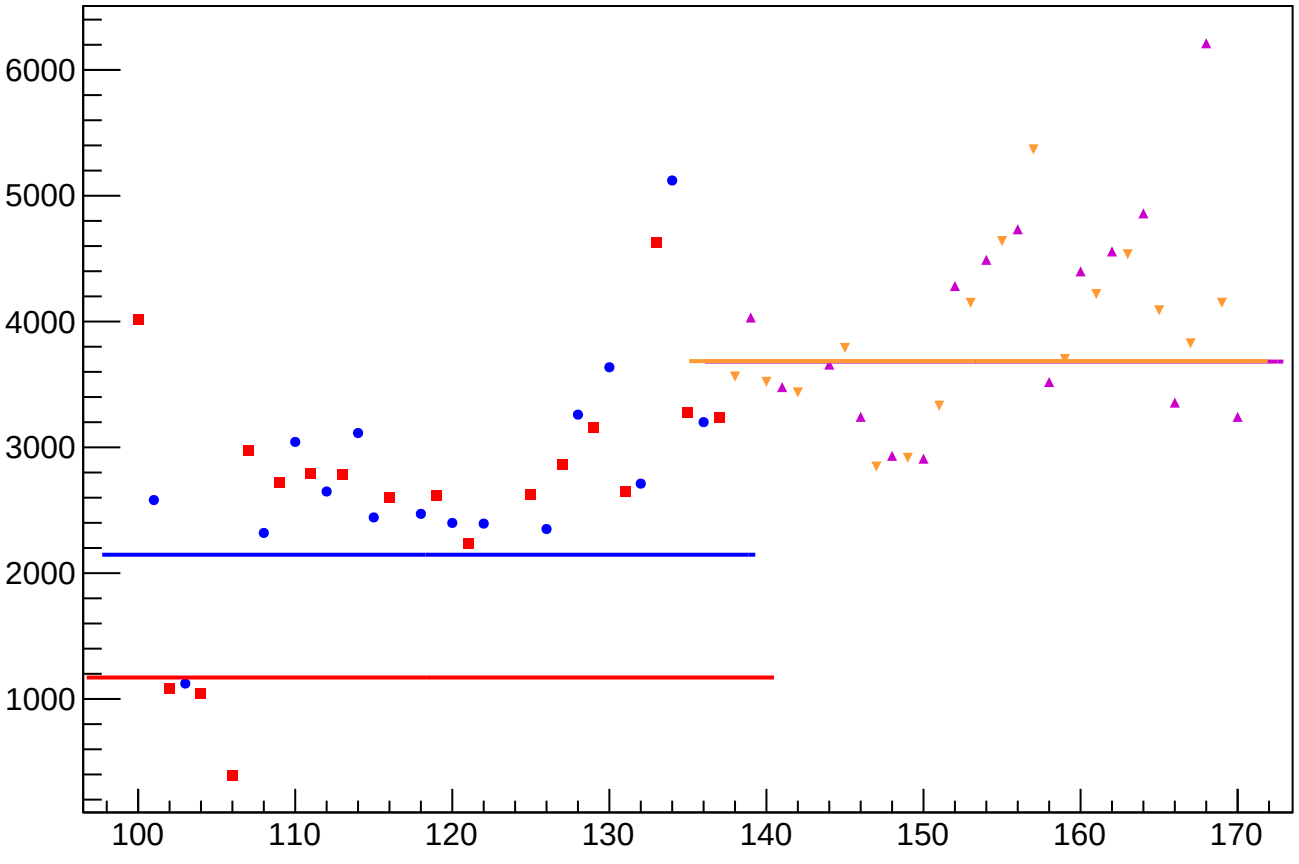
Right Out: 400.432+/-565.871 $\chi^2$/NDF: 16.7/17

Left In: 633.685+/-1035.139 $\chi^2$/NDF:9.7/15

\+ sign 306.949+/-674.116 $\chi^2$/NDF: 35.9/31

All: 402.346+/-399.784 $\chi^2$/NDF: 62.4/65

\- sign 454.099+/-496.523 $\chi^2$/NDF: 26.4/33




Right In: 2146.616+/-0.618 $\chi^2$/NDF: 1974723.6/15

Left Out: 3685.538+/-0.749 $\chi^2$/NDF:655928.4/15

Right Out: 1170.573+/-0.400 $\chi^2$/NDF: 5817478.8/17

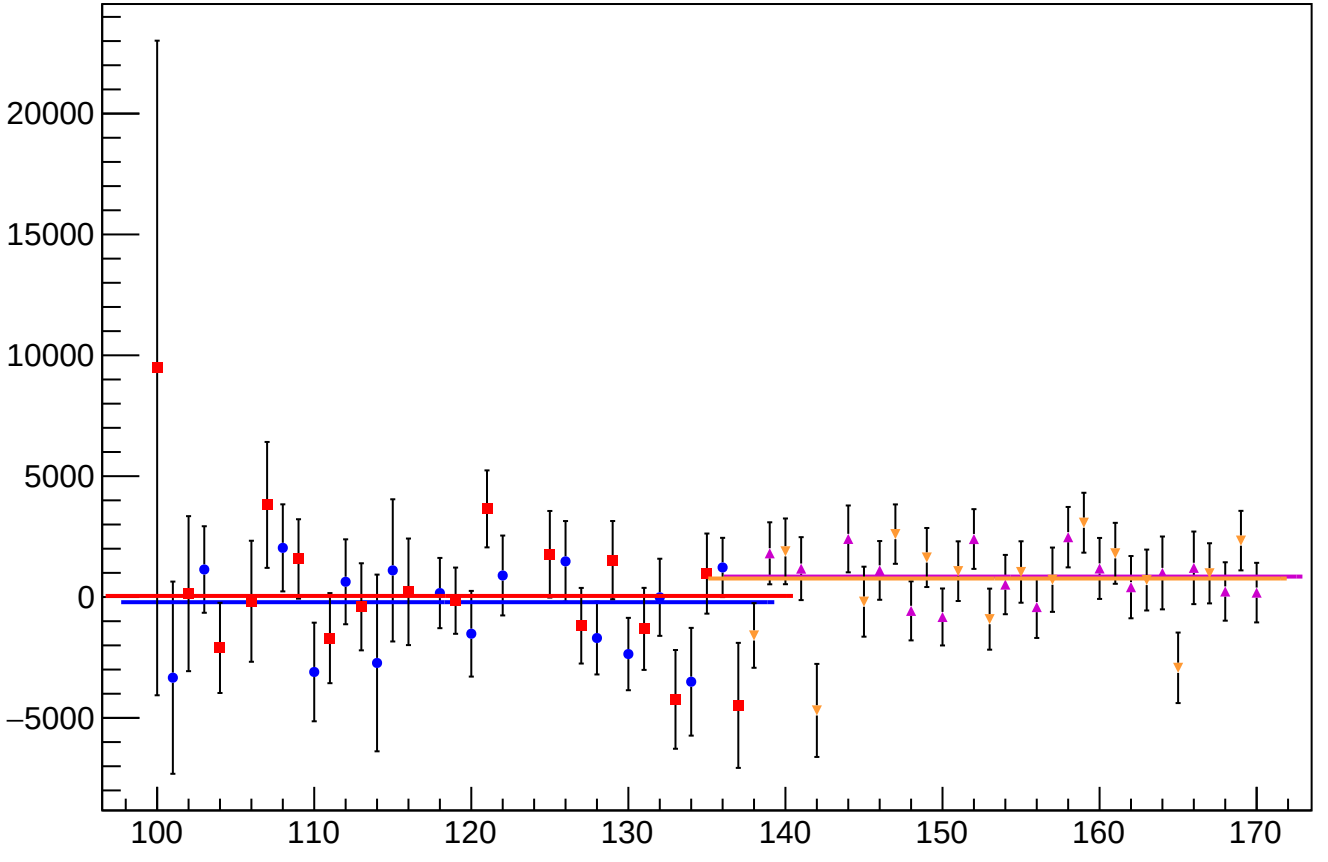
Left In: 3681.917+/-0.732 $\chi^2$/NDF:960909.2/15

+ sign 2770.296+/-0.477 $\chi^2$/NDF: 5142877.1/31

All: 2107.800+/-0.283 $\chi^2$/NDF: 23964227.7/6

- sign 1748.388+/-0.351 $\chi^2$/NDF: 15841762.8/33

# eigen_dit_asym_us_avg_atlr_avg_dd_mean vs Slug




Right In: -213.082+/-442.684 $\chi^2$/NDF: 14.3/15

Left Out: 766.374+/-327.316 $\chi^2$/NDF:29.1/15

Right Out: 45.539+/-447.221 $\chi^2$/NDF: 21.7/17

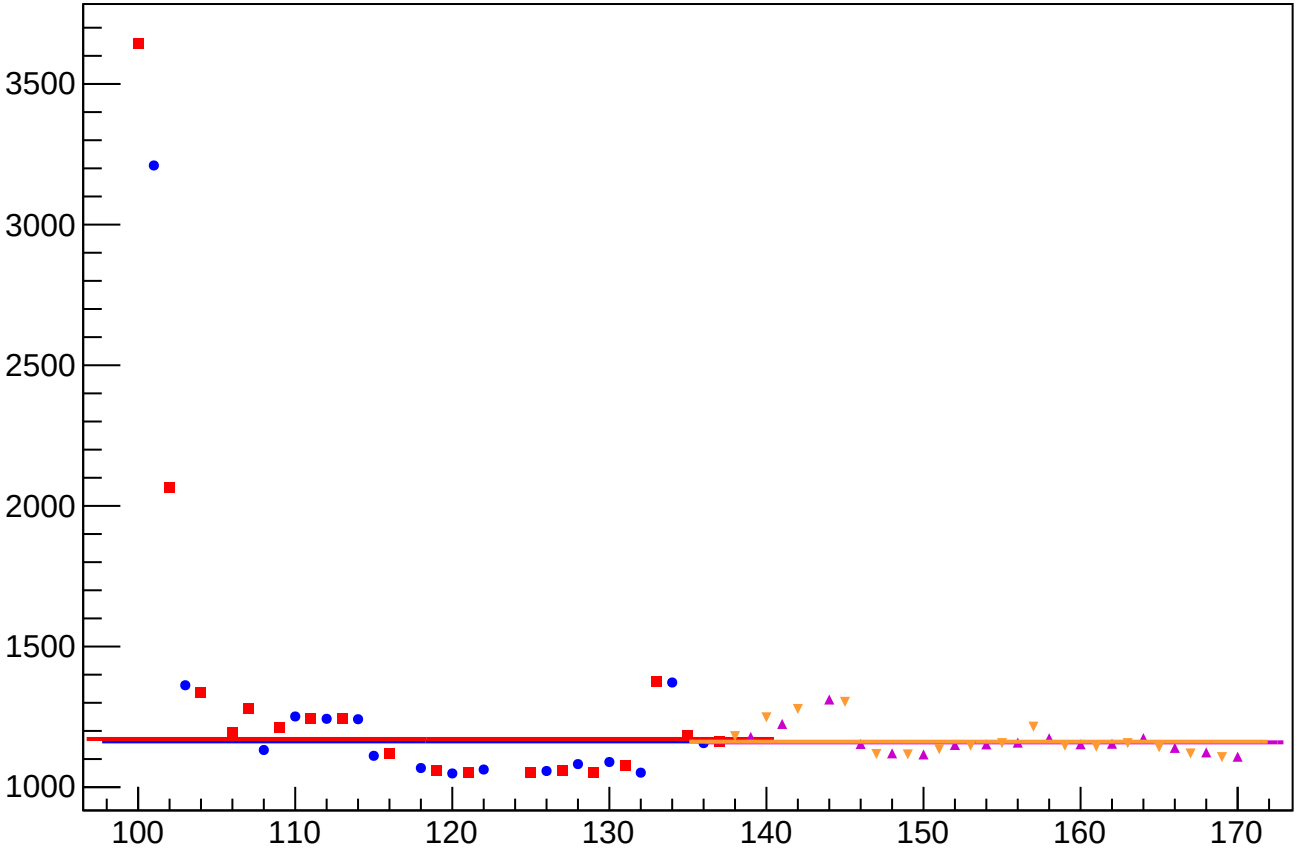
Left In: 846.419+/-319.145 $\chi^2$/NDF:10.4/15

+ sign 420.175+/-263.187 $\chi^2$/NDF: 46.6/31

All: 499.196+/-184.885 $\chi^2$/NDF: 81.0/65

- sign 576.186+/-259.781 $\chi^2$/NDF: 34.2/33

# eigen_dit_asym_us_avg_atlr_avg_dd_rms vs Slug




Right In: 1162.851+/-0.313 $\chi^2$/NDF: 635353.6/15

Left Out: 1161.829+/-0.231 $\chi^2$/NDF:52032.3/15

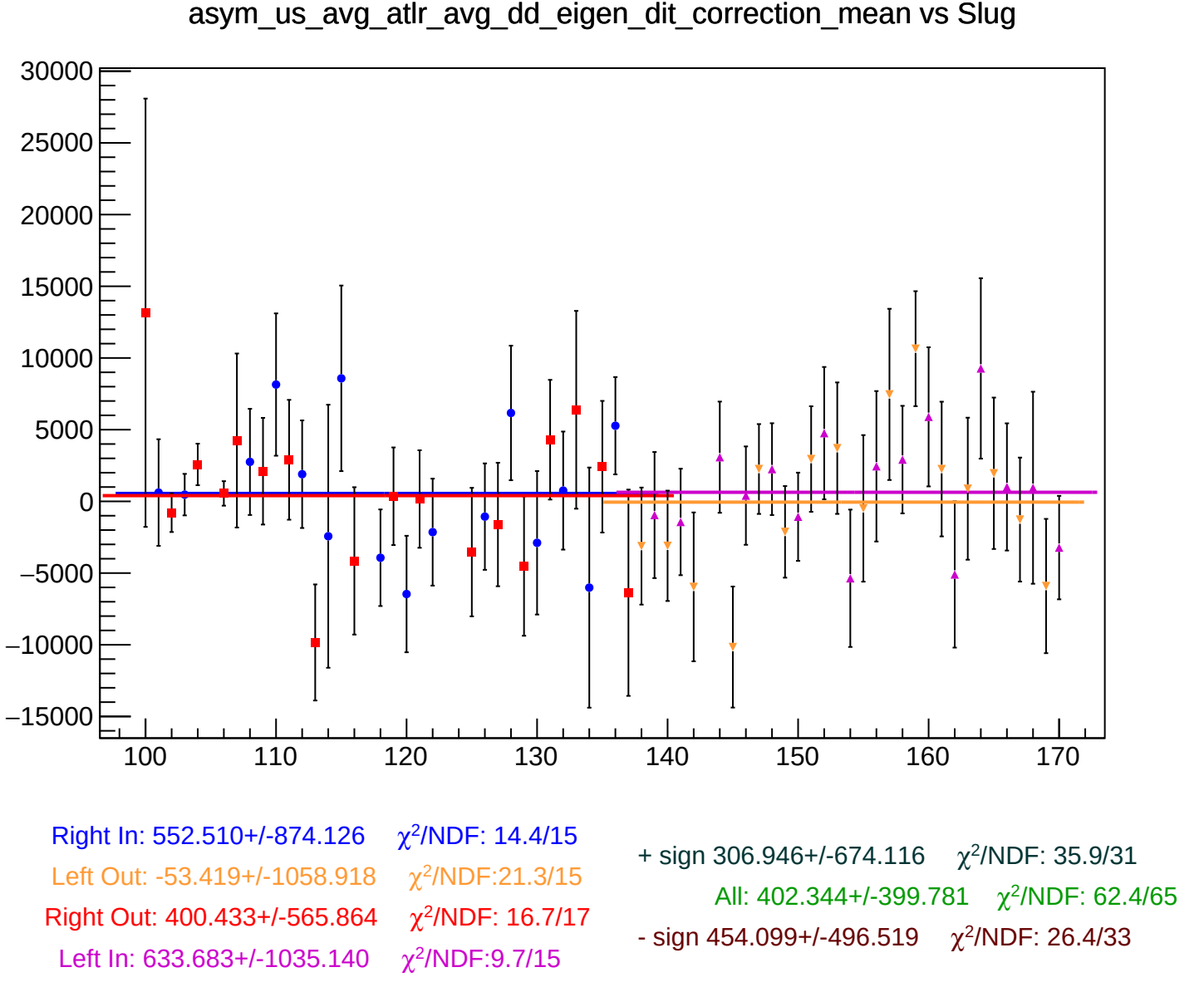
Right Out: 1171.420+/-0.316 $\chi^2$/NDF: 331640.4/17

Left In: 1159.389+/-0.226 $\chi^2$/NDF:40783.5/15

+ sign 1162.190+/-0.186 $\chi^2$/NDF: 687392.8/31

All: 1162.829+/-0.131 $\chi^2$/NDF: 1060799.6/65

- sign 1163.451+/-0.184 $\chi^2$/NDF: 373383.6/33


asym_us_avg_atlr_avg_dd_eigen_dit_correction_mean vs Slug
30000
25000
20000
15000
10000
5000
0
−5000
−10000
−15000
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110
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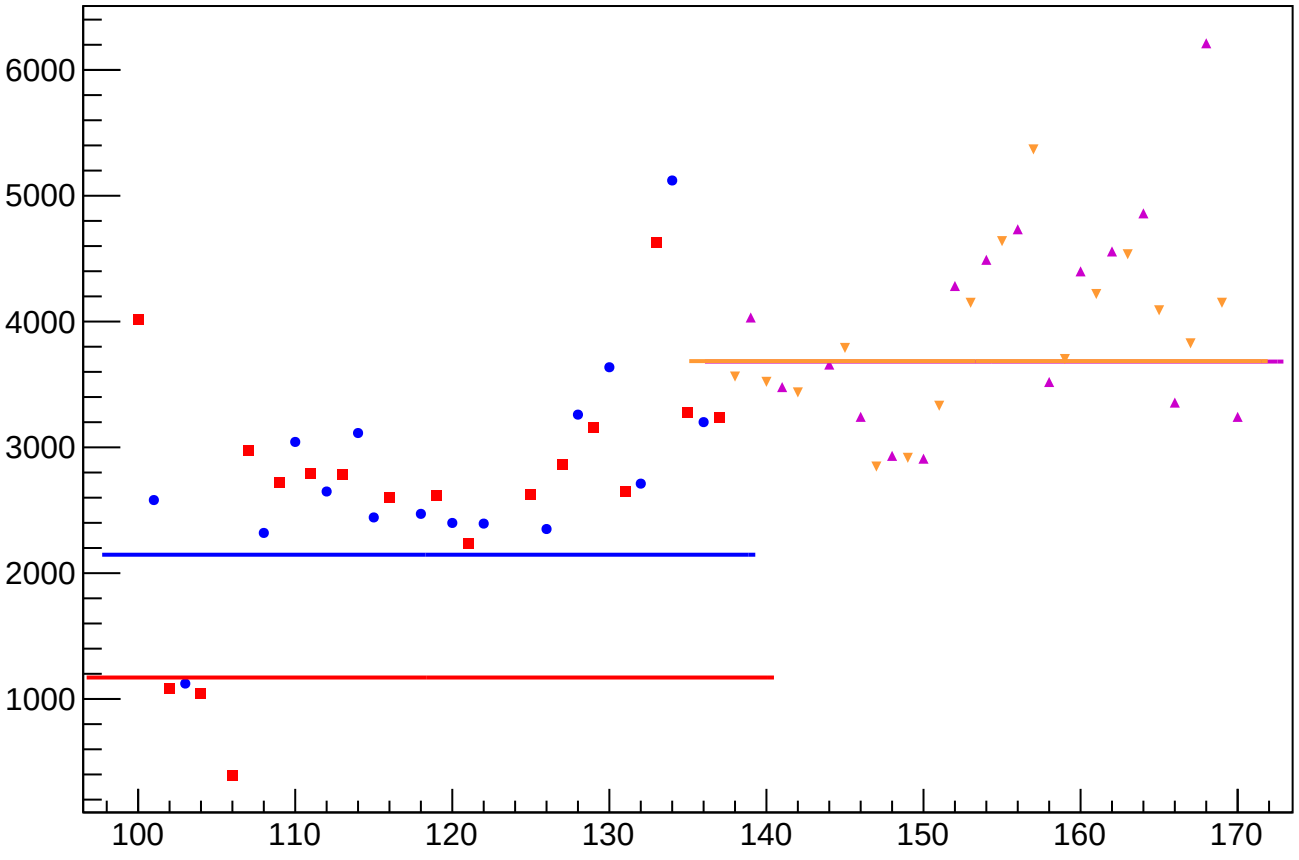
130
140
150
160
170
Right In: 552.510+/-874.126 χ²/NDF: 14.4/15
Left Out: -53.419+/-1058.918 χ²/NDF:21.3/15
Right Out: 400.433+/-565.864 χ²/NDF: 16.7/17
Left In: 633.683+/-1035.140 χ²/NDF:9.7/15
+ sign 306.946+/-674.116 χ²/NDF: 35.9/31
All: 402.344+/-399.781 χ²/NDF: 62.4/65
- sign 454.099+/-496.519 χ²/NDF: 26.4/33




Right In: 2146.613+/-0.618 $\chi^2$/NDF: 1974719.3/15

Left Out: 3685.542+/-0.749 $\chi^2$/NDF:655930.3/15

Right Out: 1170.550+/-0.400 $\chi^2$/NDF: 5817605.6/17

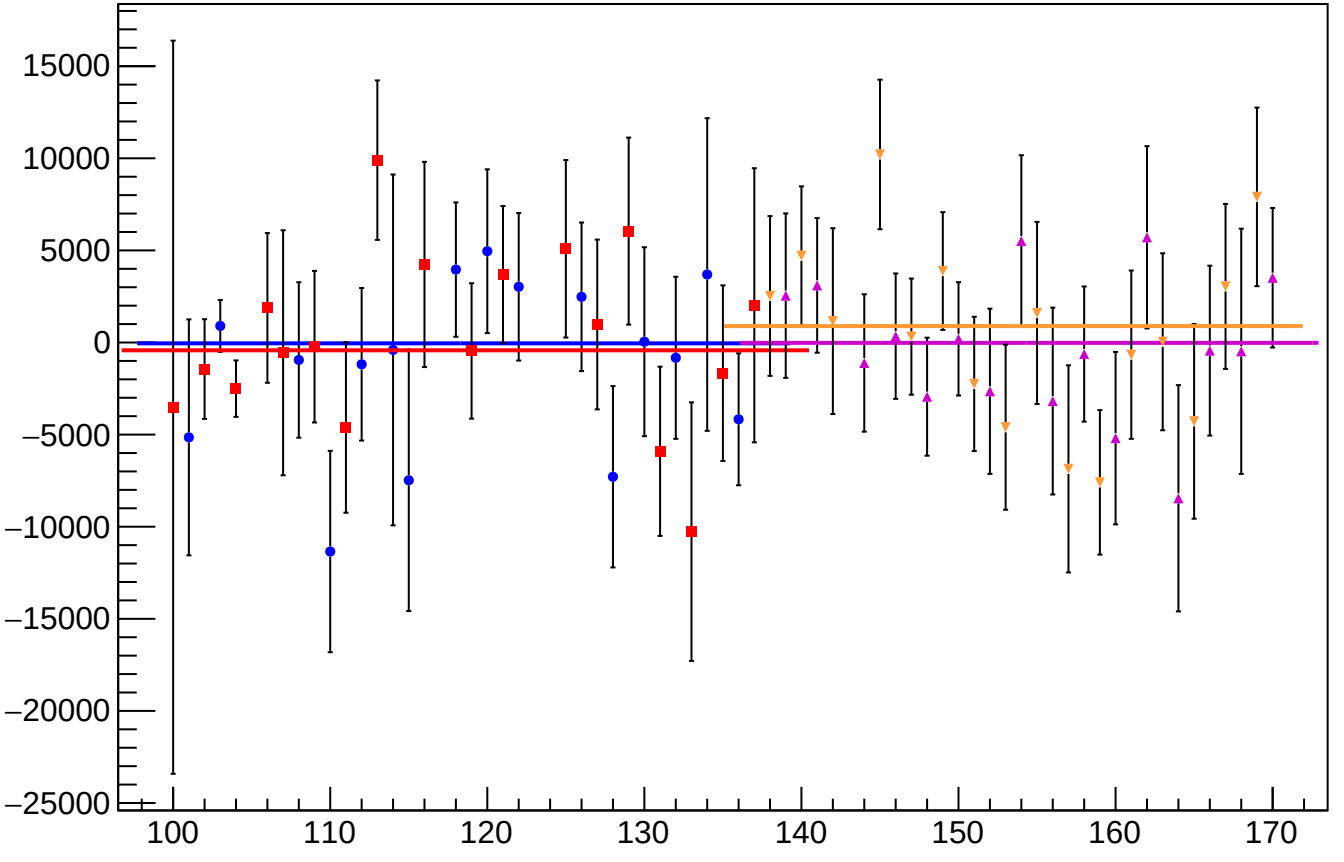
Left In: 3681.921+/-0.732 $\chi^2$/NDF:960911.8/15

+ sign 2770.294+/-0.477 $\chi^2$/NDF: 5142899.1/31

All: 2107.777+/-0.283 $\chi^2$/NDF: 23964784.4/6

- sign 1748.359+/-0.351 $\chi^2$/NDF: 15842122.4/33

# asym_us_avg_atlr_avg_dd_mean vs Slug




Right In: -44.874+/-920.736 $\chi^2$/NDF: 13.7/15

Left Out: 889.903+/-1051.717 $\chi^2$/NDF:19.6/15

Right Out: -423.476+/-896.736 $\chi^2$/NDF: 17.3/17

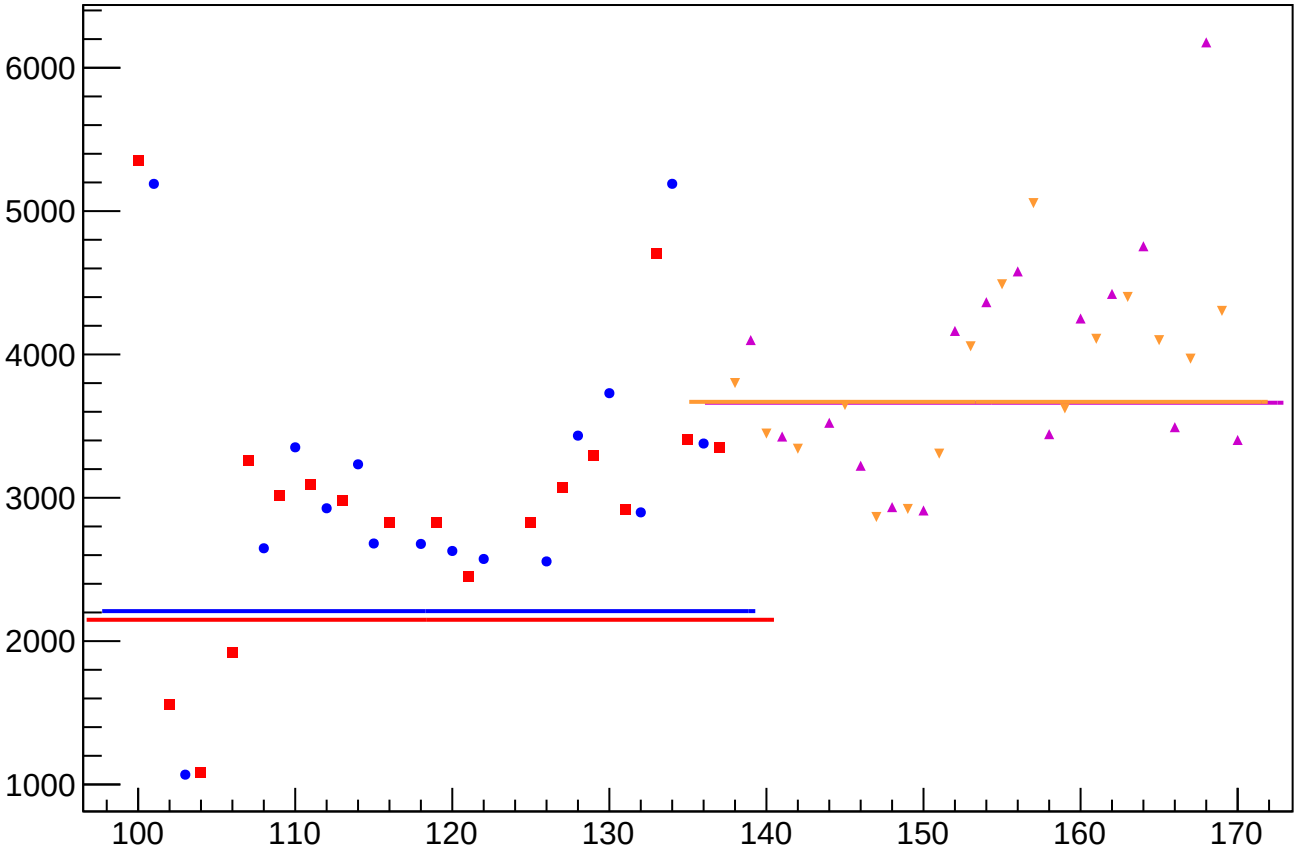
Left In: -18.380+/-1027.196 $\chi^2$/NDF:9.5/15

+ sign 360.713+/-692.767 $\chi^2$/NDF: 33.8/31

All: 48.552+/-483.652 $\chi^2$/NDF: 61.1/65

- sign -248.272+/-675.534 $\chi^2$/NDF: 26.9/33

# asym_us_avg_atlr_avg_dd_rms vs Slug




Right In: 2209.349+/-0.651 $\chi^2$/NDF: 2836875.7/15

Left Out: 3669.396+/-0.744 $\chi^2$/NDF:589212.5/15

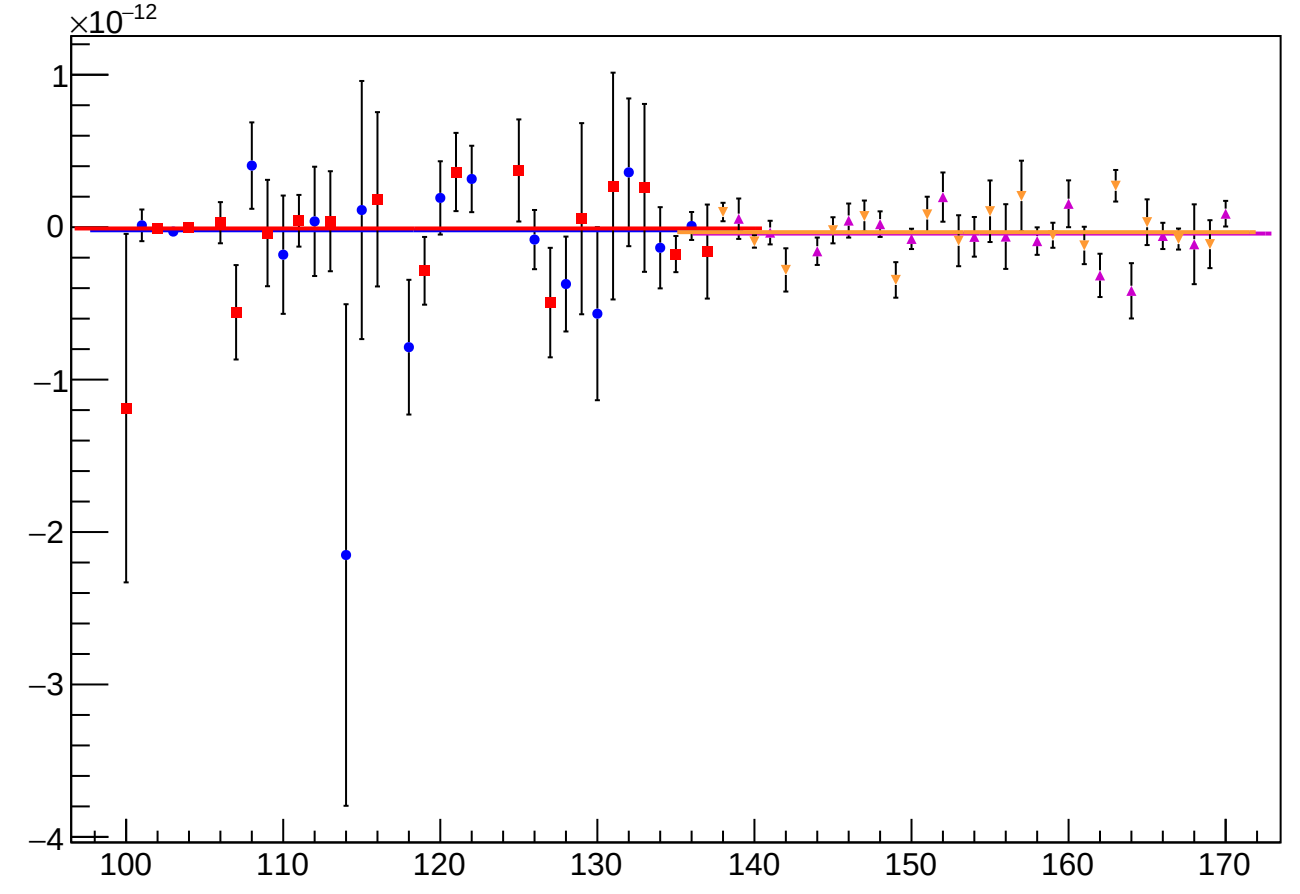
Right Out: 2148.948+/-0.633 $\chi^2$/NDF: 2269660.8/17

Left In: 3663.148+/-0.726 $\chi^2$/NDF:868370.3/15

+ sign 2842.842+/-0.490 $\chi^2$/NDF: 5608168.4/31

All: 2821.910+/-0.342 $\chi^2$/NDF: 11221214.9/6

- sign 2802.061+/-0.477 $\chi^2$/NDF: 5609489.4/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 13.7/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:31.0/15

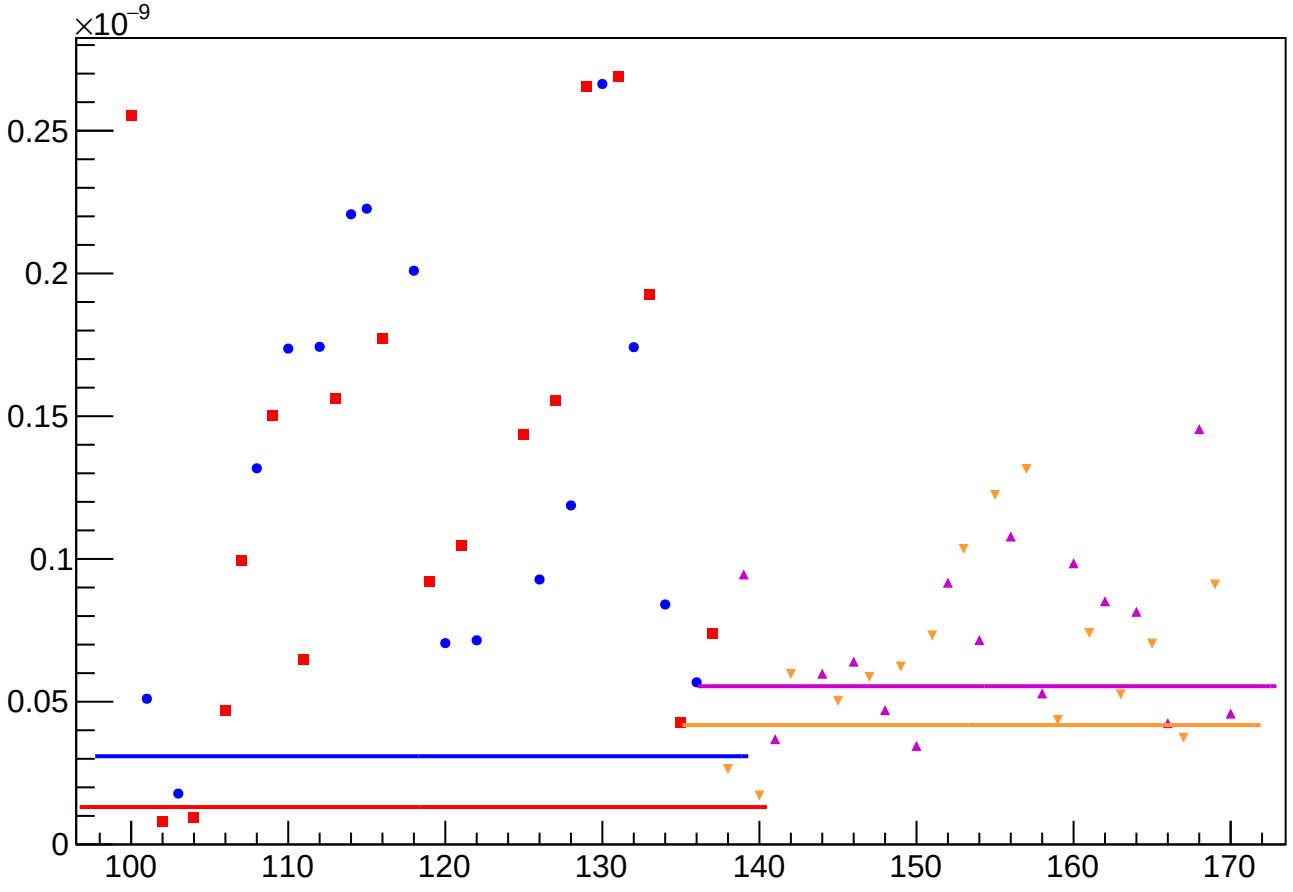
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 14.0/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:18.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 44.9/31

All: -0.000+/-0.000 $\chi^2$/NDF: 78.6/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 33.5/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2998577.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2501753.7/15

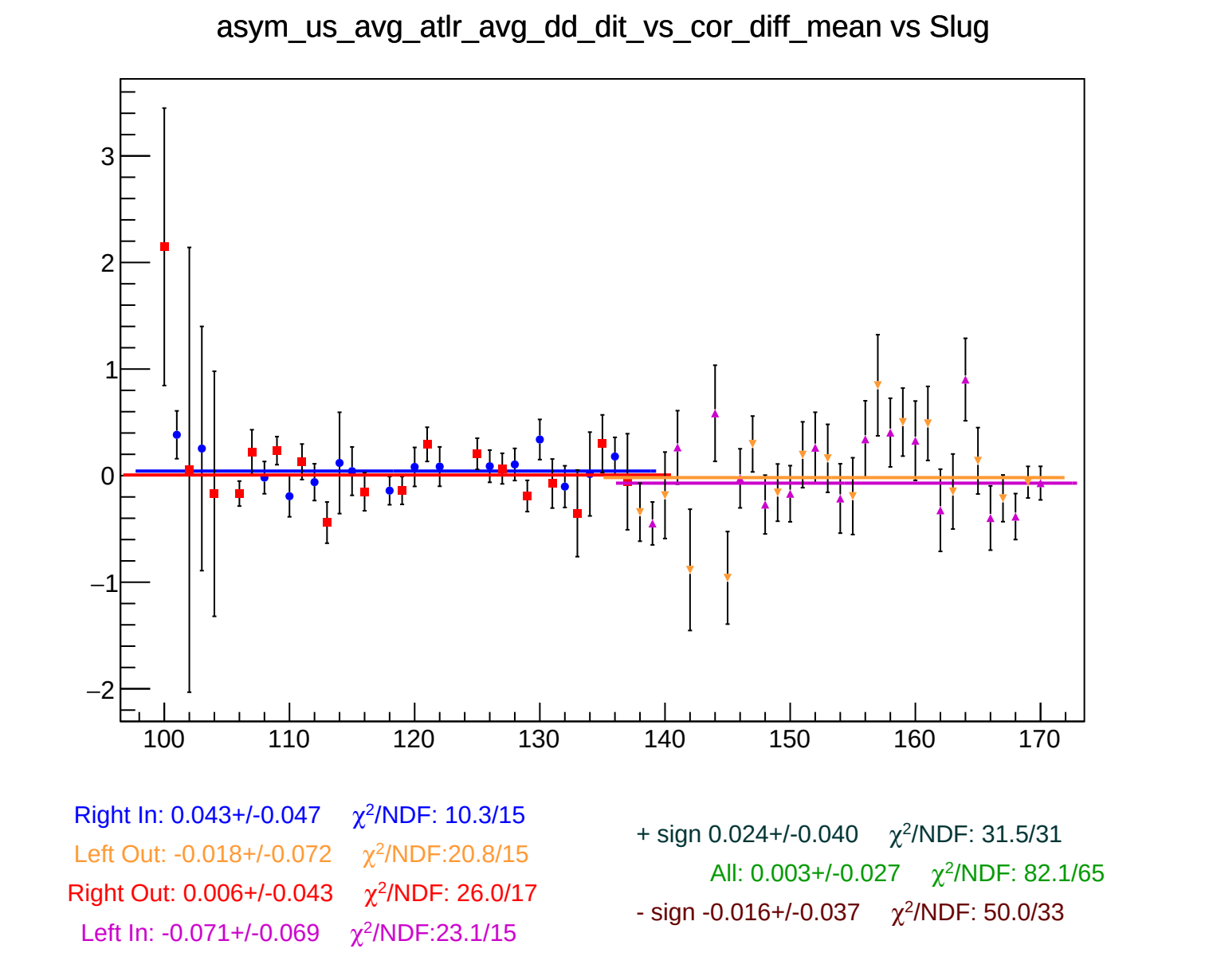
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3659260.7/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1371909.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5707567.8/31

All: 0.000+/-0.000 $\chi^2$/NDF: 15498227.5/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 8963701.2/33


asym_us_avg_atlr_avg_dd_dit_vs_cor_diff_mean vs Slug
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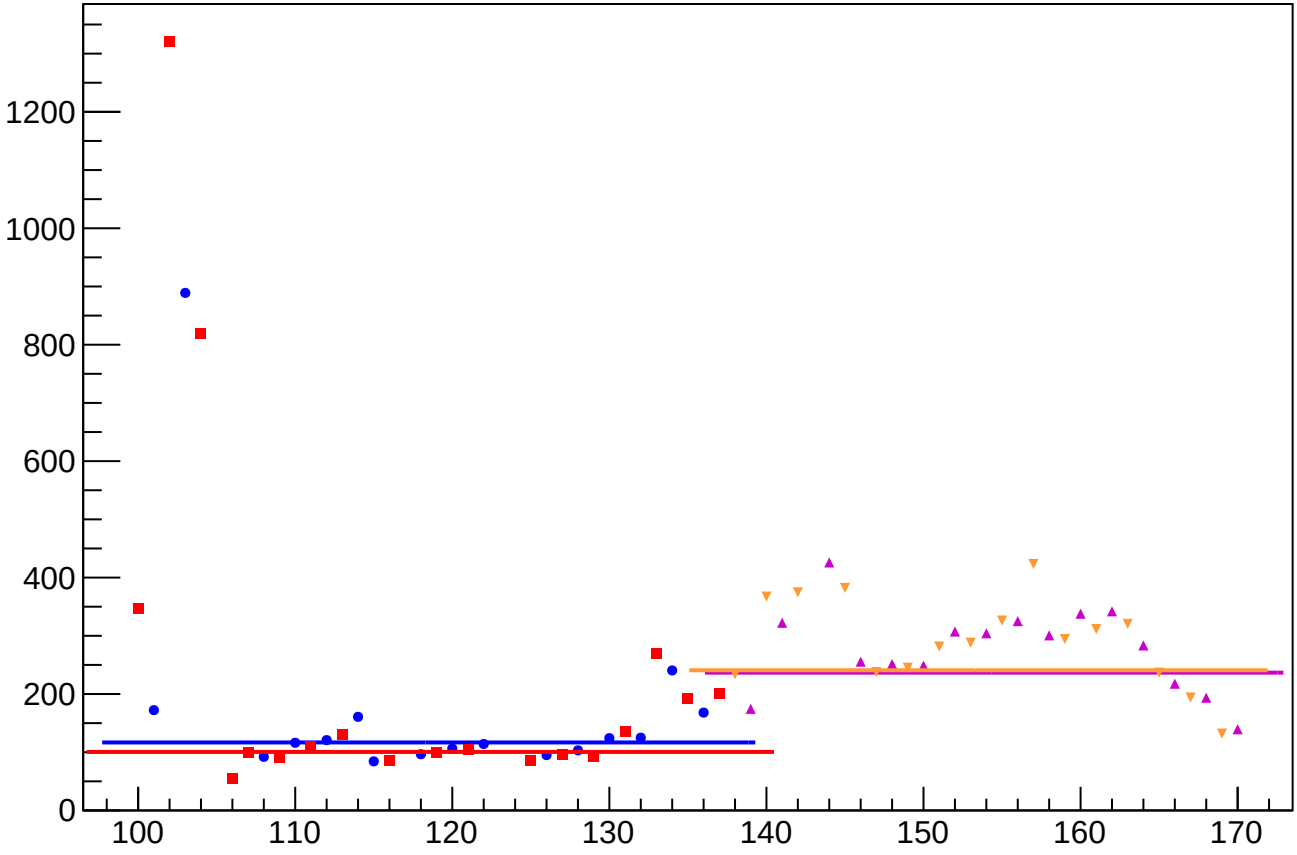
110
120
130
140
150
160
170
Right In: 0.043+/-0.047 χ²/NDF: 10.3/15
Left Out: -0.018+/-0.072 χ²/NDF:20.8/15
Right Out: 0.006+/-0.043 χ²/NDF: 26.0/17
Left In: -0.071+/-0.069 χ²/NDF:23.1/15
+ sign 0.024+/-0.040 χ²/NDF: 31.5/31
All: 0.003+/-0.027 χ²/NDF: 82.1/65
- sign -0.016+/-0.037 χ²/NDF: 50.0/33

# asym_us_avg_atlr_avg_dd_dit_vs_cor_diff_rms vs Slug




Right In: 116.841+/-0.034 $\chi^2$/NDF: 1620809.7/15

Left Out: 240.804+/-0.051 $\chi^2$/NDF:2418142.0/15

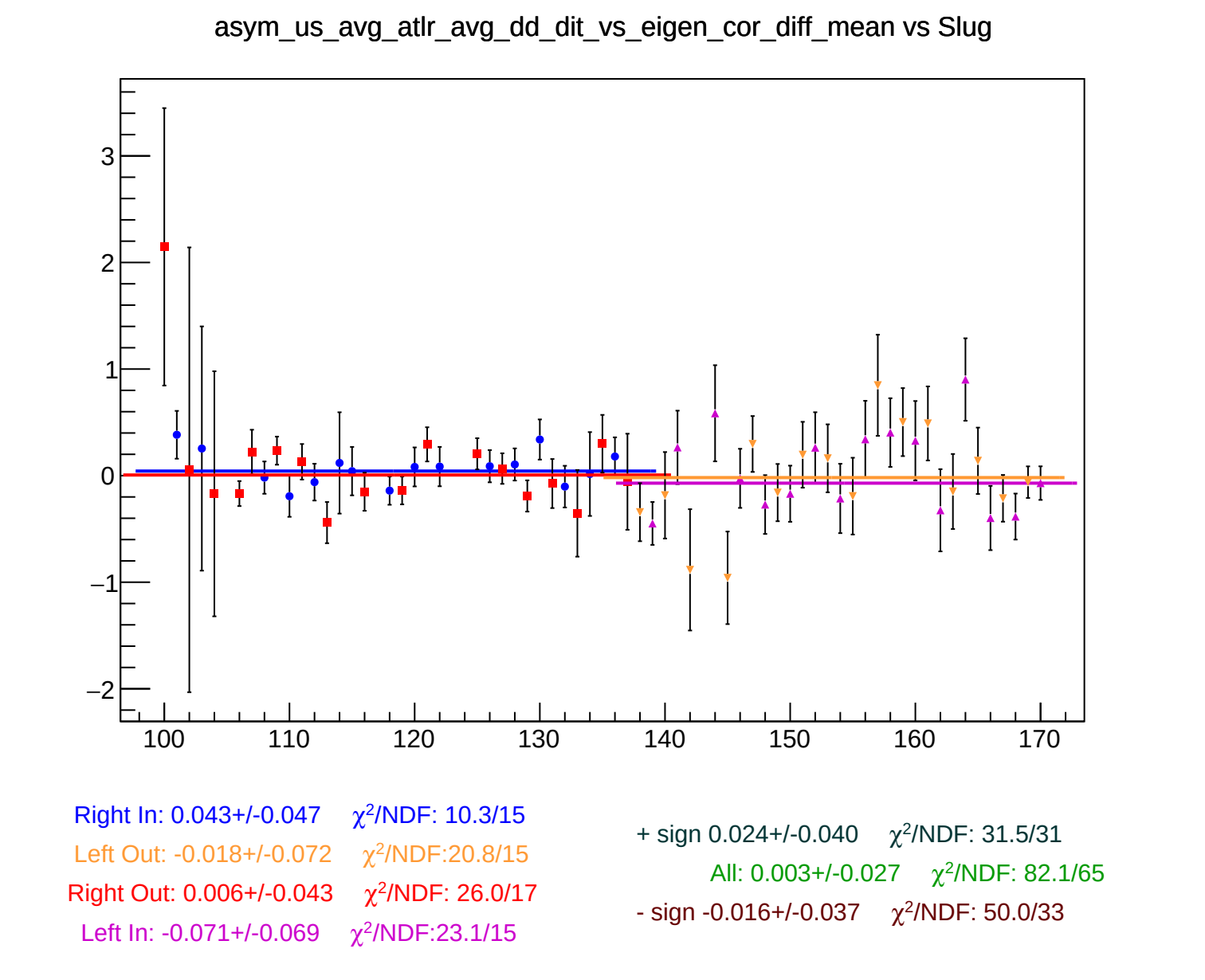
Right Out: 100.544+/-0.031 $\chi^2$/NDF: 2664151.6/17

Left In: 236.734+/-0.049 $\chi^2$/NDF:2237149.8/15

+ sign 154.227+/-0.028 $\chi^2$/NDF: 8153049.1/31

All: 145.948+/-0.019 $\chi^2$/NDF: 18757769.6/65

- sign 138.830+/-0.026 $\chi^2$/NDF: 10442694.6/33


asym_us_avg_atlr_avg_dd_dit_vs_eigen_cor_diff_mean vs Slug
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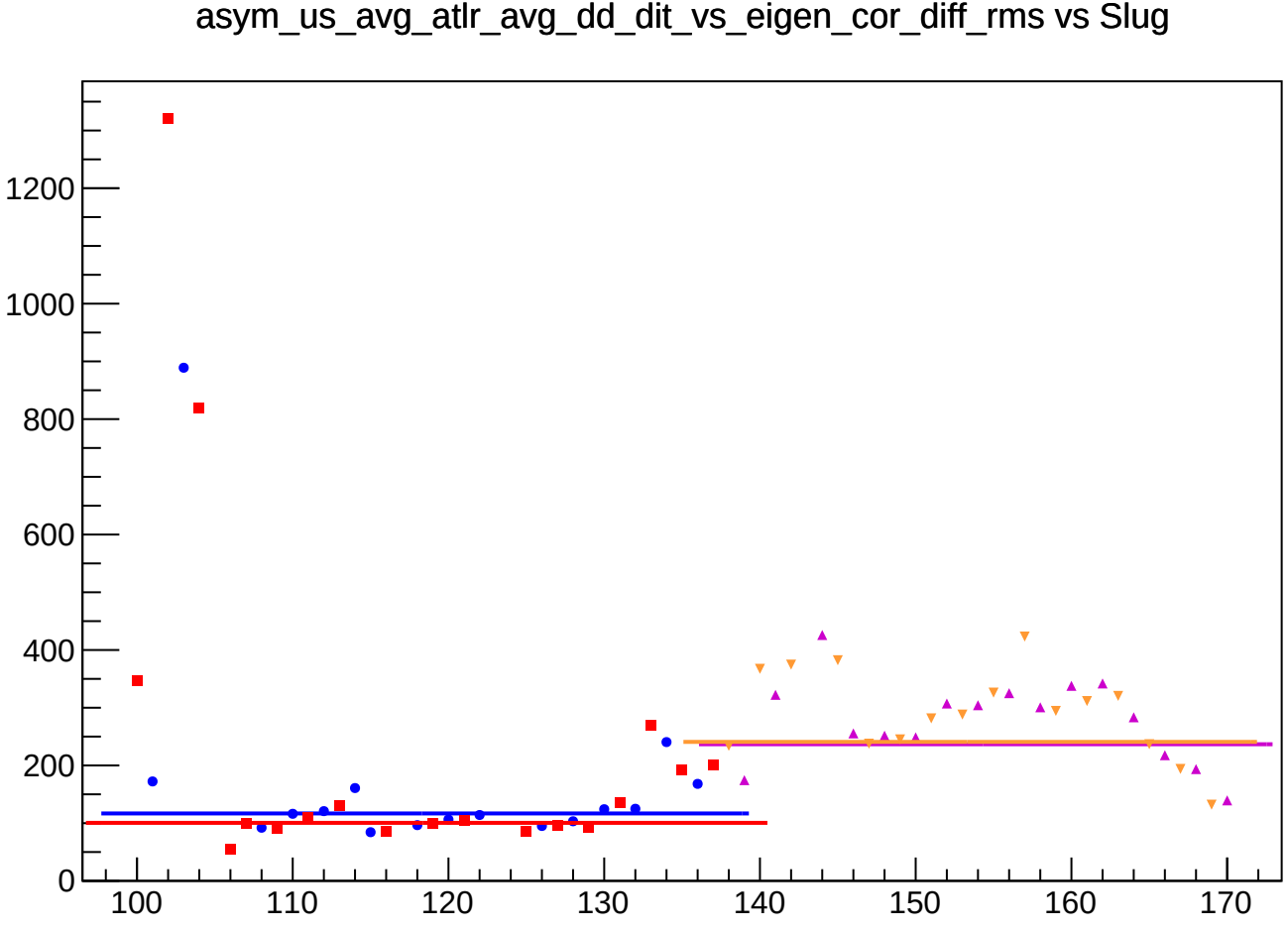
160
170
Right In: 0.043+/-0.047 χ²/NDF: 10.3/15
Left Out: -0.018+/-0.072 χ²/NDF:20.8/15
Right Out: 0.006+/-0.043 χ²/NDF: 26.0/17
Left In: -0.071+/-0.069 χ²/NDF:23.1/15
+ sign 0.024+/-0.040 χ²/NDF: 31.5/31
All: 0.003+/-0.027 χ²/NDF: 82.1/65
- sign -0.016+/-0.037 χ²/NDF: 50.0/33




Right In: 116.841+/-0.034 $\chi^2$/NDF: 1620809.7/15

Left Out: 240.804+/-0.051 $\chi^2$/NDF:2418142.0/15

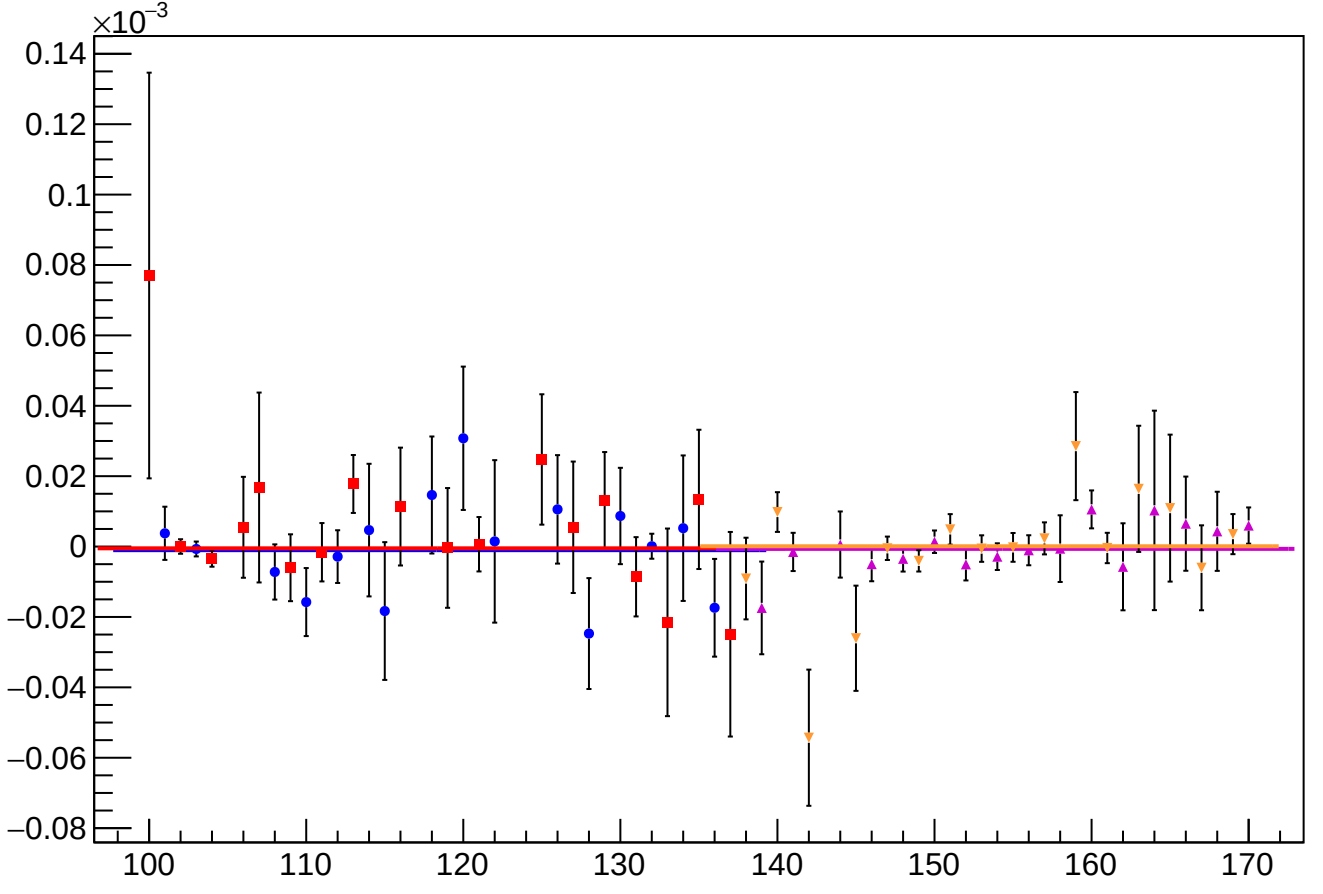
Right Out: 100.544+/-0.031 $\chi^2$/NDF: 2664151.6/17

Left In: 236.734+/-0.049 $\chi^2$/NDF:2237149.8/15

+ sign 154.227+/-0.028 $\chi^2$/NDF: 8153049.1/31

All: 145.948+/-0.019 $\chi^2$/NDF: 18757769.6/65

- sign 138.830+/-0.026 $\chi^2$/NDF: 10442694.6/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 12.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:23.1/15

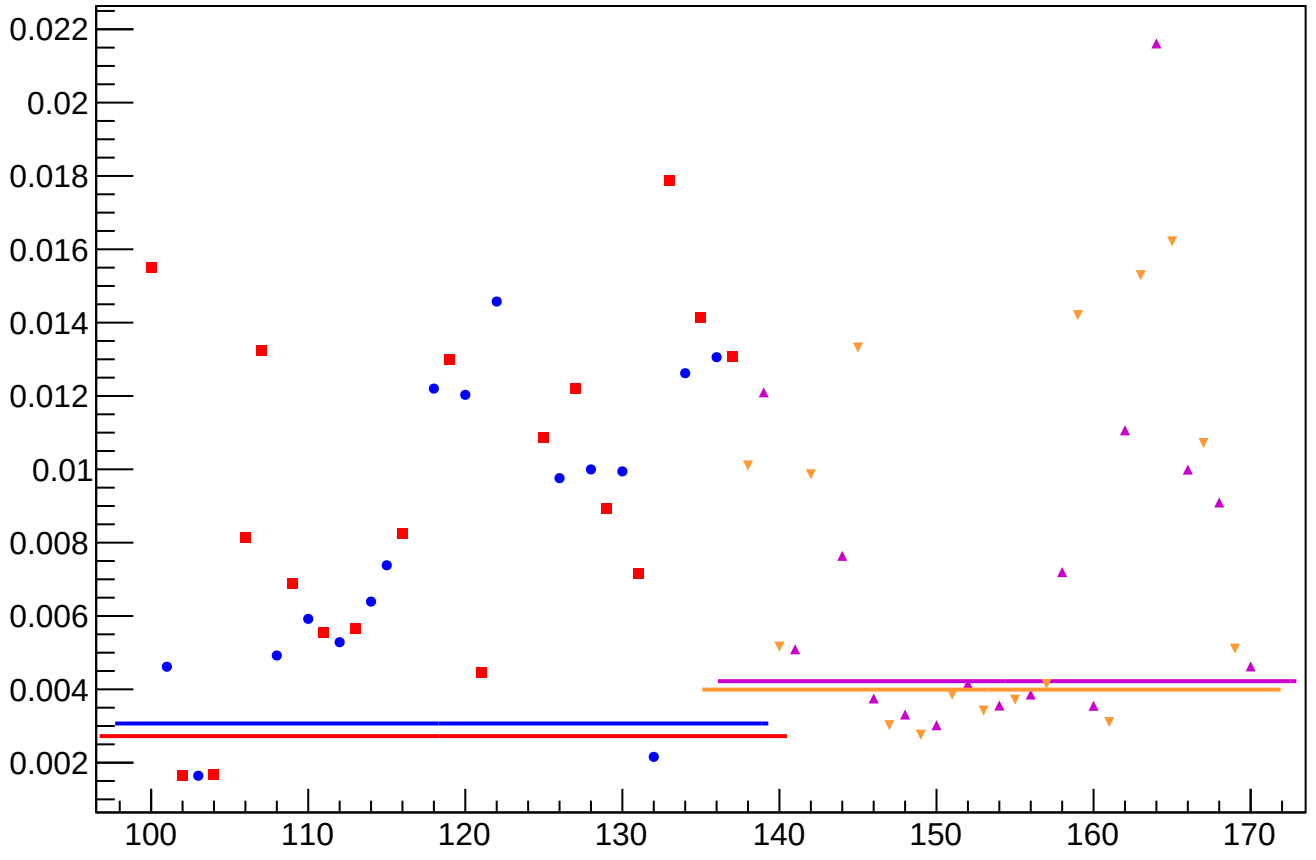
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.1/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:11.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 36.0/31

All: -0.000+/-0.000 $\chi^2$/NDF: 62.6/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 26.6/33




Right In: 0.003+/-0.000 $\chi^2$/NDF: 5964299.9/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:5315434.6/15

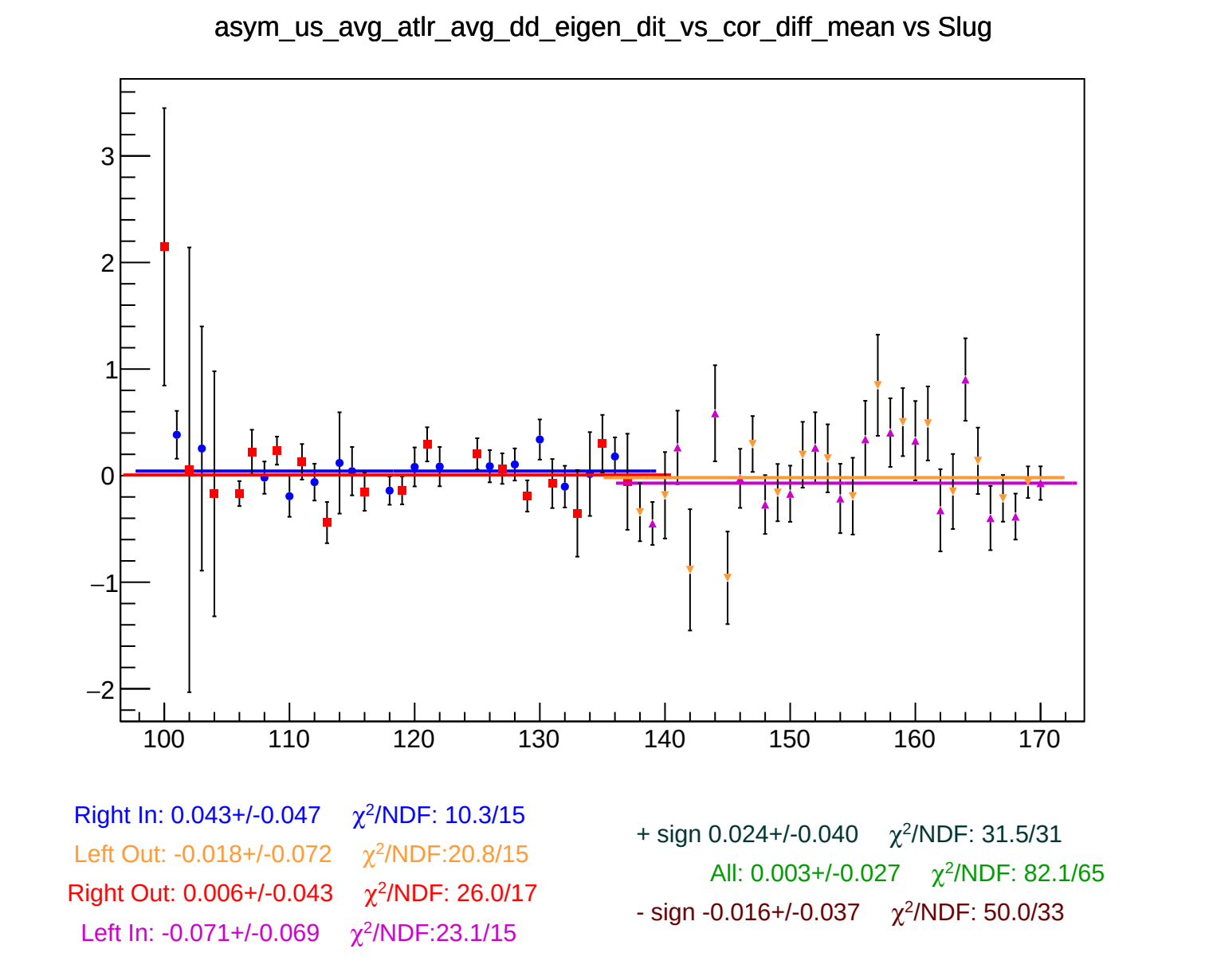
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 6713699.1/17

Left In: 0.004+/-0.000 $\chi^2$/NDF:3889831.6/15

+ sign 0.004+/-0.000 $\chi^2$/NDF: 11683075.9/31

All: 0.004+/-0.000 $\chi^2$/NDF: 23486532.0/65

- sign 0.003+/-0.000 $\chi^2$/NDF: 11789105.9/33


asym_us_avg_atlr_avg_dd_eigen_dit_vs_cor_diff_mean vs Slug
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150
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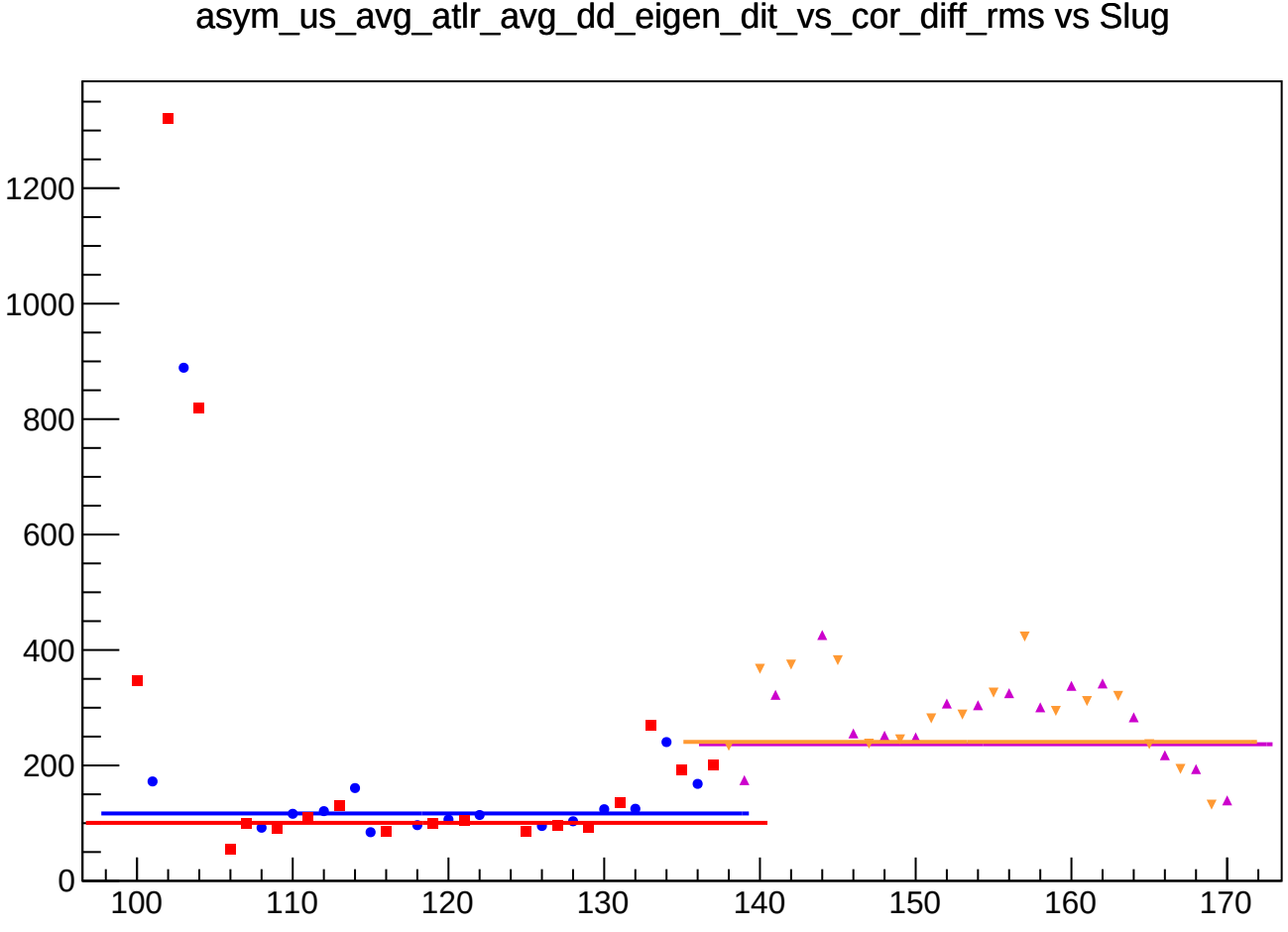
170
Right In: 0.043+/-0.047 χ²/NDF: 10.3/15
Left Out: -0.018+/-0.072 χ²/NDF:20.8/15
Right Out: 0.006+/-0.043 χ²/NDF: 26.0/17
Left In: -0.071+/-0.069 χ²/NDF:23.1/15
+ sign 0.024+/-0.040 χ²/NDF: 31.5/31
All: 0.003+/-0.027 χ²/NDF: 82.1/65
- sign -0.016+/-0.037 χ²/NDF: 50.0/33




Right In: 116.841+/-0.034 $\chi^2$/NDF: 1620812.6/15

Left Out: 240.806+/-0.051 $\chi^2$/NDF:2418217.4/15

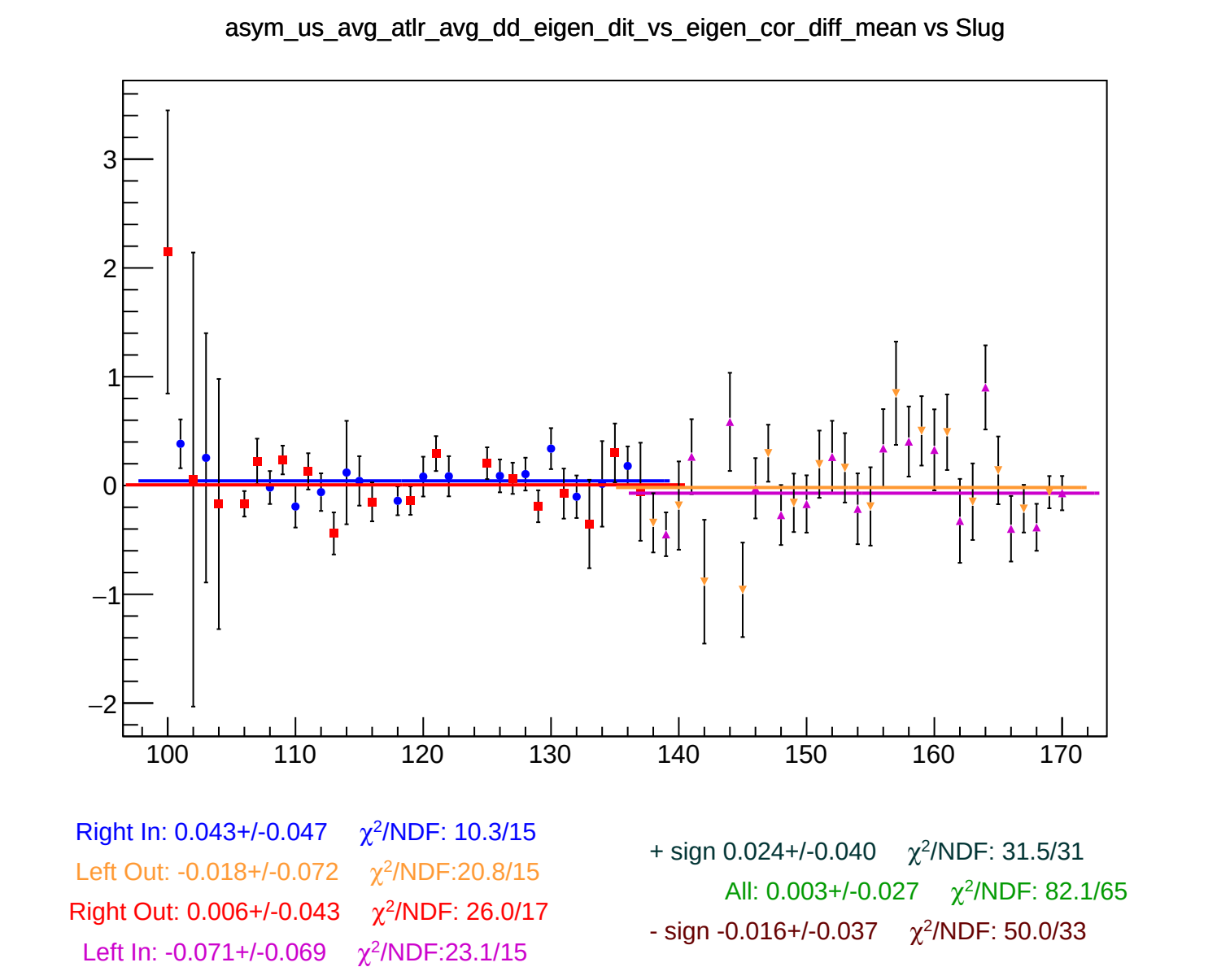
Right Out: 100.543+/-0.031 $\chi^2$/NDF: 2664231.9/17

Left In: 236.737+/-0.049 $\chi^2$/NDF:2237154.6/15

+ sign 154.227+/-0.028 $\chi^2$/NDF: 8153204.9/31

All: 145.948+/-0.019 $\chi^2$/NDF: 18758259.3/65

- sign 138.829+/-0.026 $\chi^2$/NDF: 10443010.5/33


asym_us_avg_atlr_avg_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug
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120
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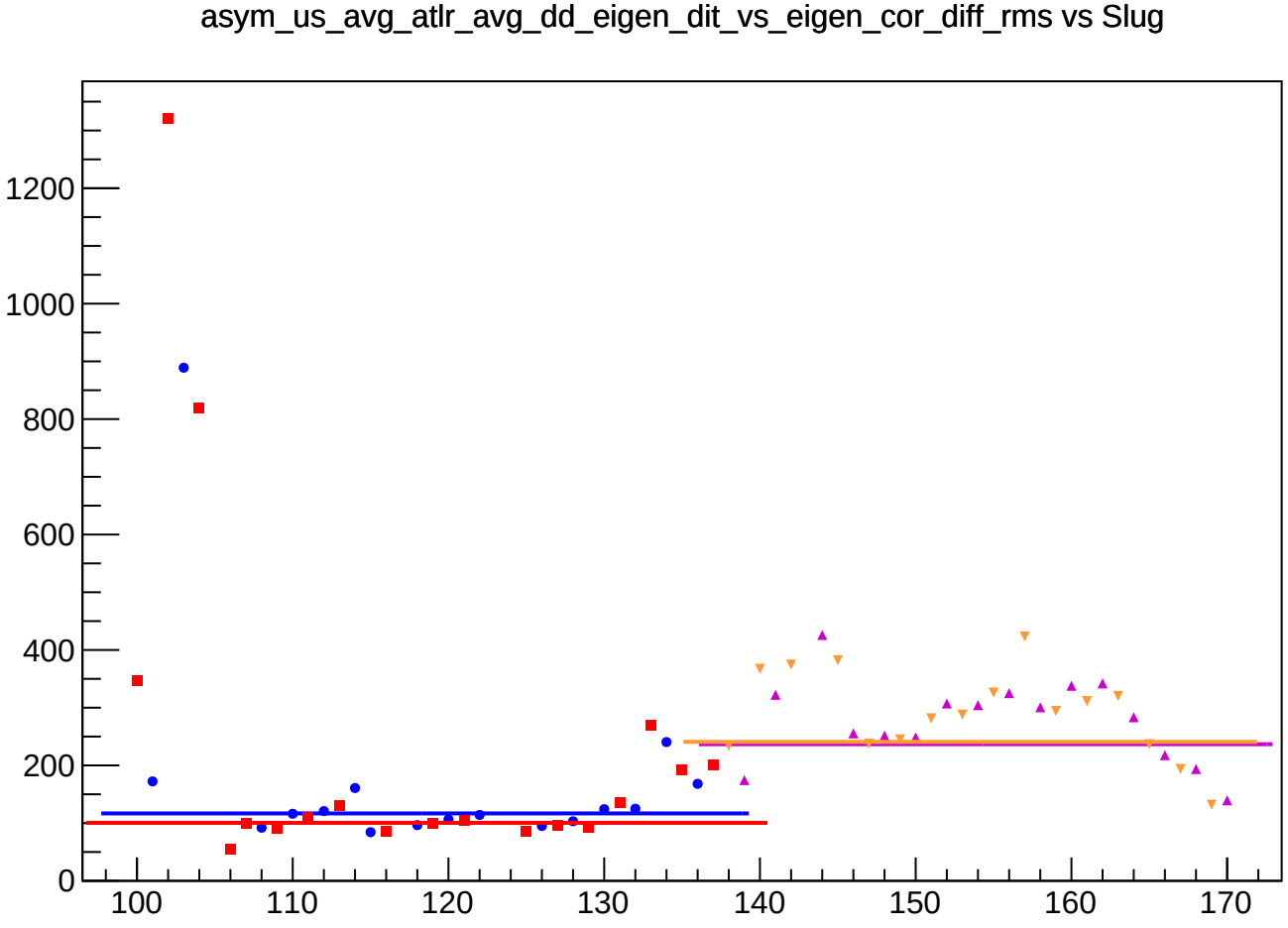
150
160
170
Right In: 0.043+/-0.047 χ²/NDF: 10.3/15
Left Out: -0.018+/-0.072 χ²/NDF:20.8/15
Right Out: 0.006+/-0.043 χ²/NDF: 26.0/17
Left In: -0.071+/-0.069 χ²/NDF:23.1/15
+ sign 0.024+/-0.040 χ²/NDF: 31.5/31
All: 0.003+/-0.027 χ²/NDF: 82.1/65
- sign -0.016+/-0.037 χ²/NDF: 50.0/33




Right In: 116.841+/-0.034 $\chi^2$/NDF: 1620812.6/15

Left Out: 240.806+/-0.051 $\chi^2$/NDF:2418217.4/15

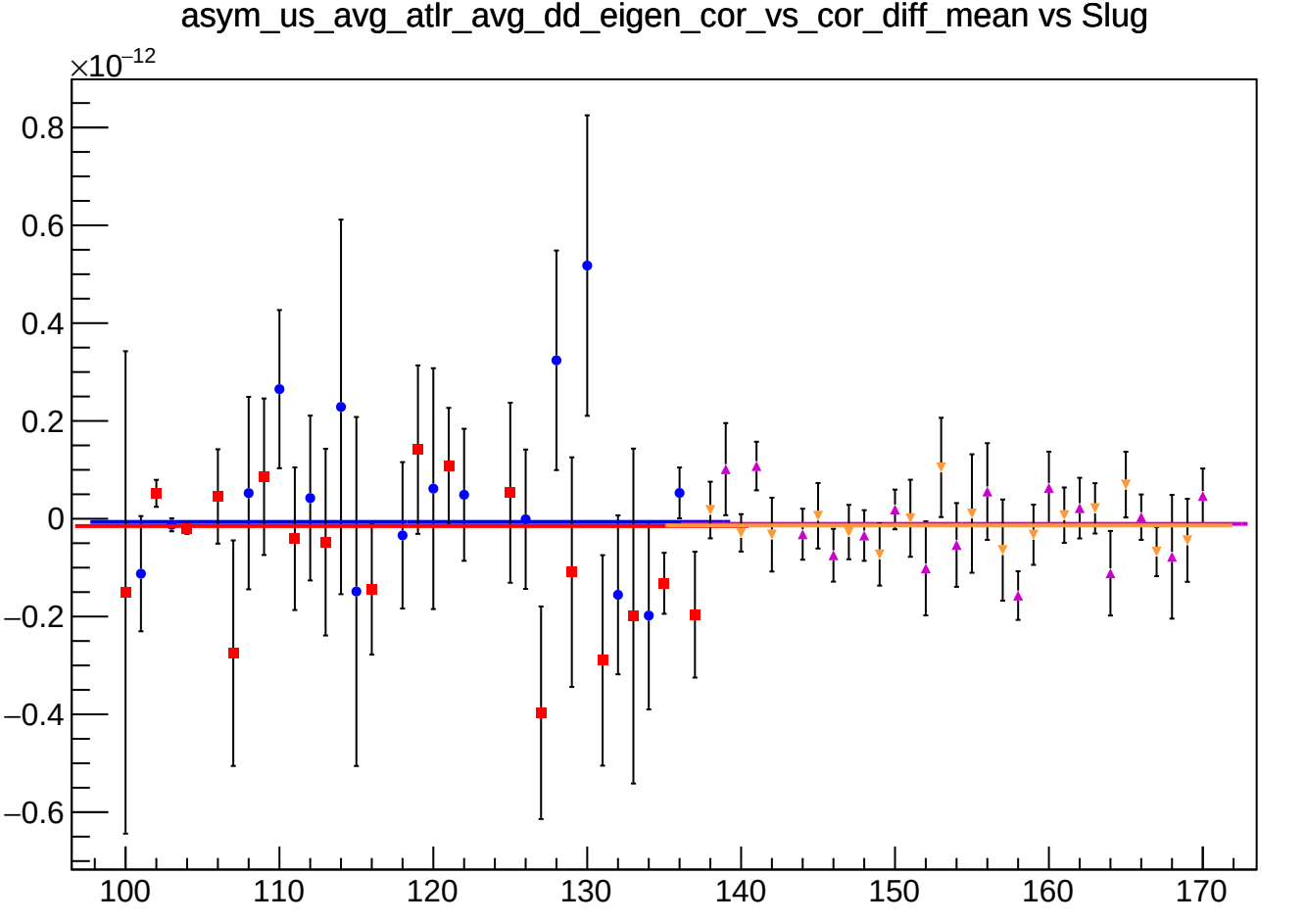
Right Out: 100.543+/-0.031 $\chi^2$/NDF: 2664231.9/17

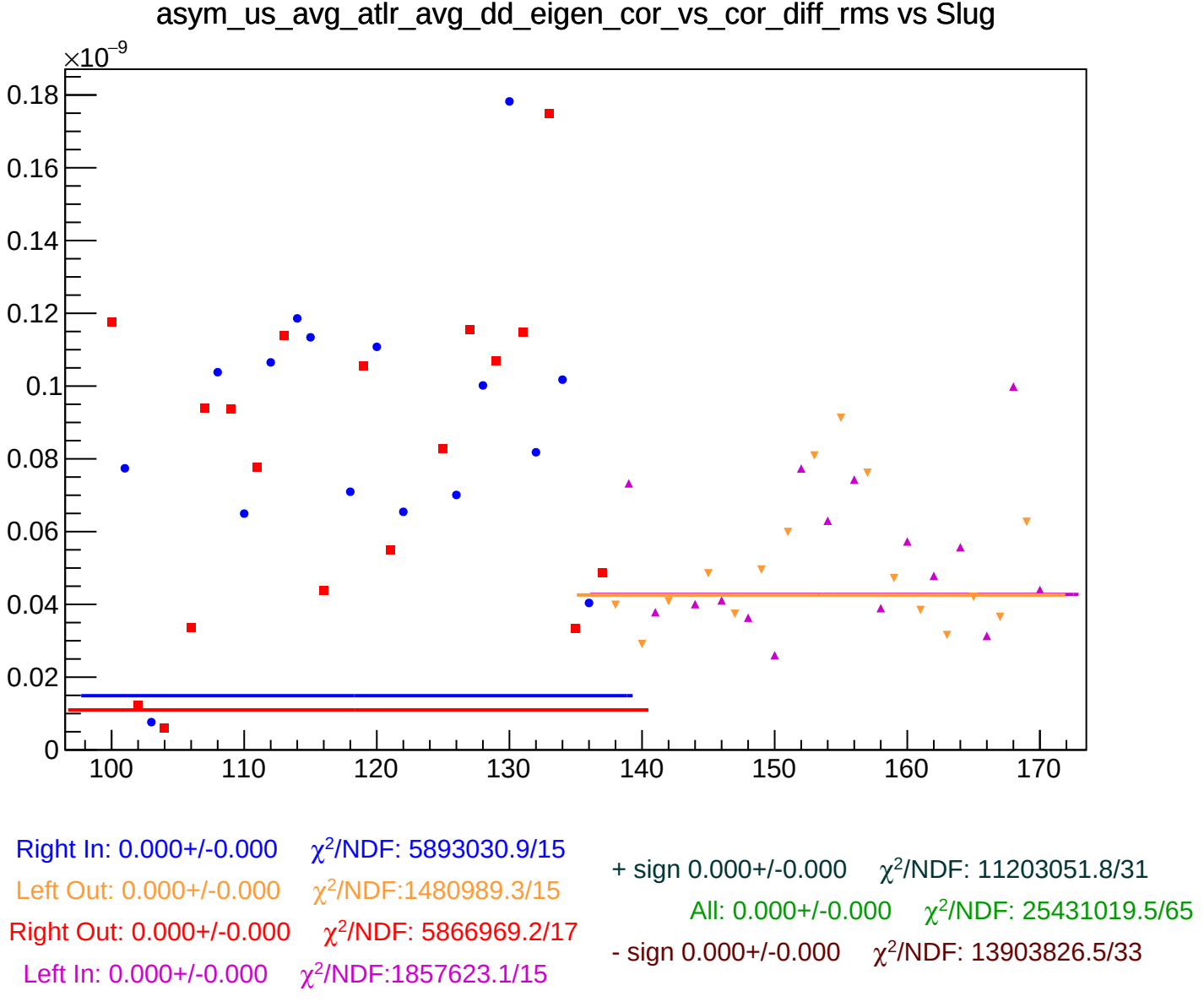
Left In: 236.737+/-0.049 $\chi^2$/NDF:2237154.6/15

+ sign 154.227+/-0.028 $\chi^2$/NDF: 8153204.9/31

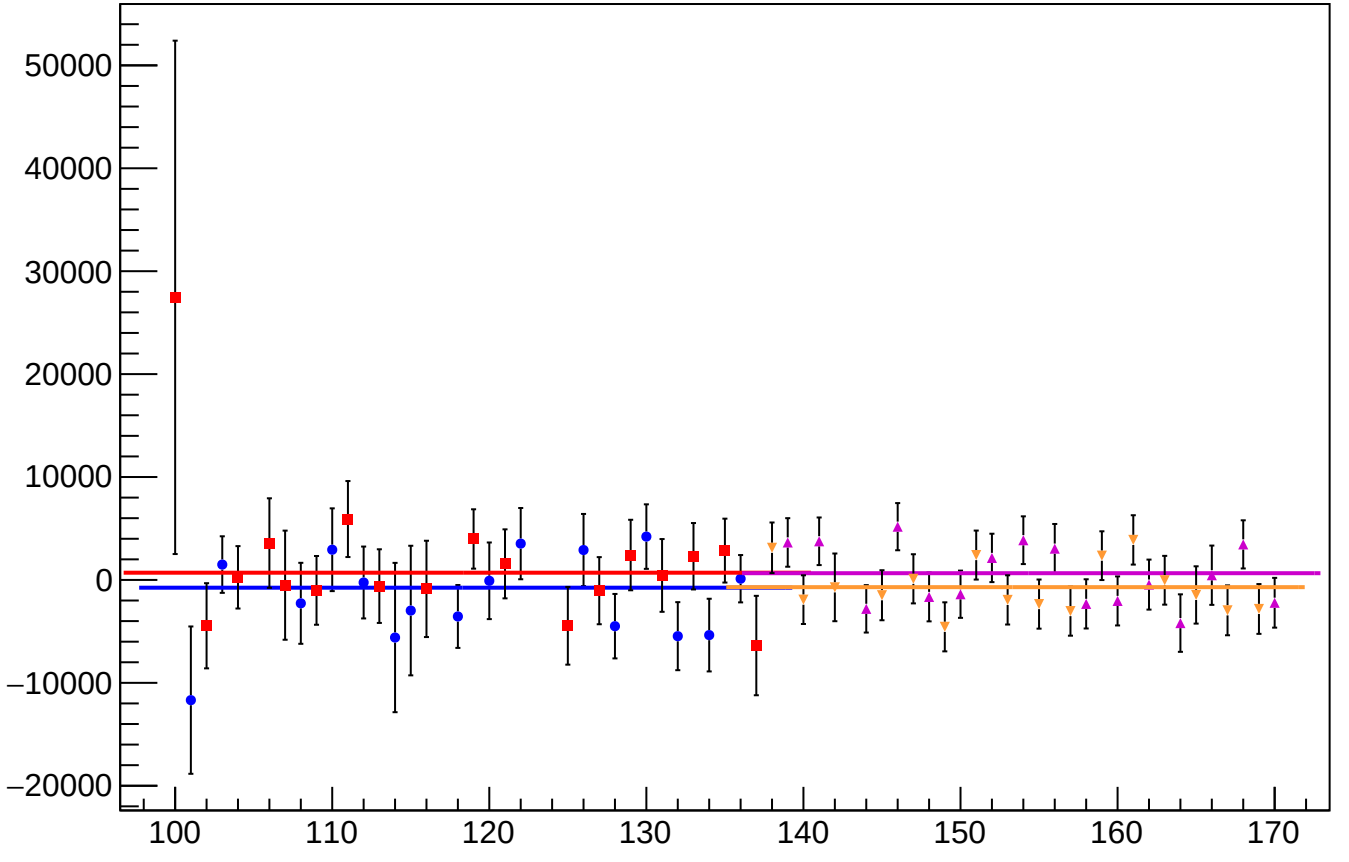
All: 145.948+/-0.019 $\chi^2$/NDF: 18758259.3/65

- sign 138.829+/-0.026 $\chi^2$/NDF: 10443010.5/33


asym_us_avg_atlr_avg_dd_eigen_cor_vs_cor_diff_mean vs Slug
×10^−12
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 13.0/15
Left Out: -0.000+/-0.000 χ²/NDF:6.7/15
Right Out: -0.000+/-0.000 χ²/NDF: 21.9/17
Left In: -0.000+/-0.000 χ²/NDF:23.7/15
+ sign -0.000+/-0.000 χ²/NDF: 19.9/31
All: -0.000+/-0.000 χ²/NDF: 65.6/65
- sign -0.000+/-0.000 χ²/NDF: 45.7/33


asym_us_avg_atlr_avg_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10⁻⁹
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 5893030.9/15
Left Out: 0.000+/-0.000 χ²/NDF:1480989.3/15
Right Out: 0.000+/-0.000 χ²/NDF: 5866969.2/17
Left In: 0.000+/-0.000 χ²/NDF:1857623.1/15
+ sign 0.000+/-0.000 χ²/NDF: 11203051.8/31
All: 0.000+/-0.000 χ²/NDF: 25431019.5/65
- sign 0.000+/-0.000 χ²/NDF: 13903826.5/33

# reg_asym_us_dd_at1lr_dd_avg_mean vs Slug




Right In: -754.291+/-872.652 $\chi^2$/NDF: 15.9/15

Left Out: -701.393+/-613.230 $\chi^2$/NDF:16.0/15

Right Out: 702.198+/-868.647 $\chi^2$/NDF: 12.4/17

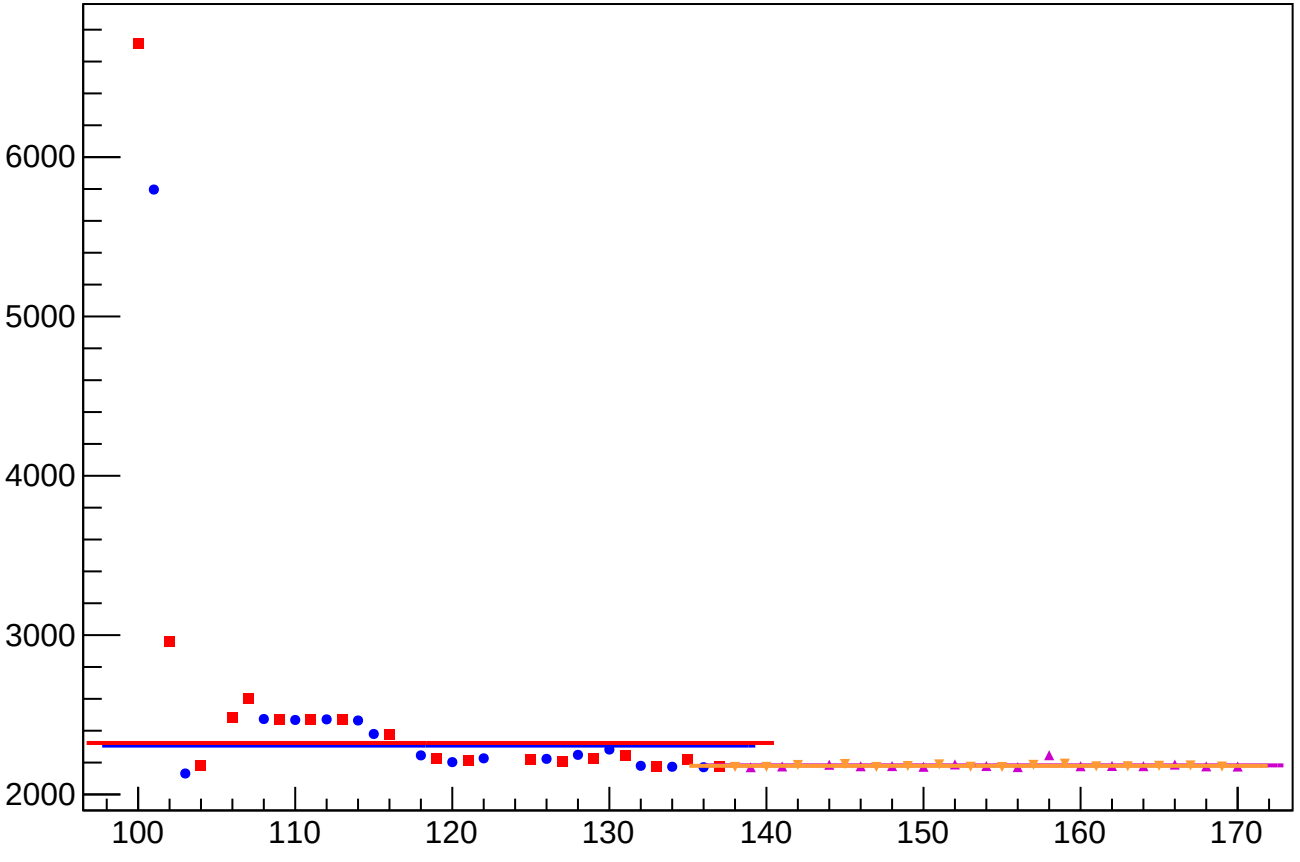
Left In: 654.464+/-600.200 $\chi^2$/NDF:23.5/15

+ sign -718.880+/-501.736 $\chi^2$/NDF: 31.9/31

All: -13.413+/-351.938 $\chi^2$/NDF: 71.7/65

- sign 669.889+/-493.791 $\chi^2$/NDF: 35.8/33

# reg_asym_us_dd_at1lr_dd_avg_rms vs Slug




Right In: 2306.643+/-0.617 $\chi^2$/NDF: 514150.3/15

Left Out: 2179.500+/-0.434 $\chi^2$/NDF:253.3/15

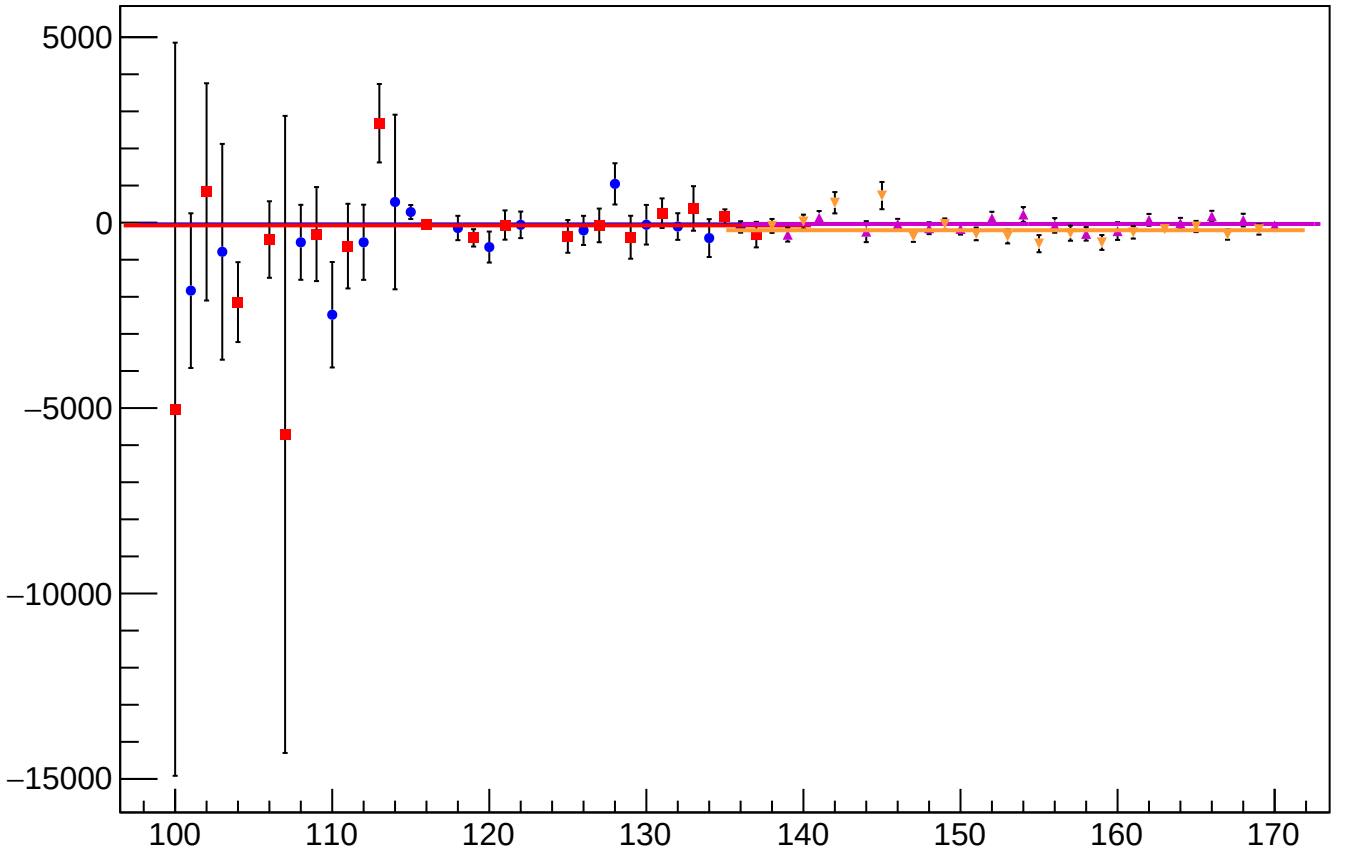
Right Out: 2323.010+/-0.614 $\chi^2$/NDF: 151787.1/17

Left In: 2182.408+/-0.424 $\chi^2$/NDF:1660.2/15

+ sign 2221.530+/-0.355 $\chi^2$/NDF: 542824.4/31

All: 2224.737+/-0.249 $\chi^2$/NDF: 731899.4/65

- sign 2227.844+/-0.349 $\chi^2$/NDF: 188914.2/33




Right In: -47.927+/-90.914 $\chi^2$/NDF: 14.4/15

Left Out: -205.404+/-43.174 $\chi^2$/NDF:25.3/15

Right Out: -74.200+/-82.384 $\chi^2$/NDF: 17.6/17

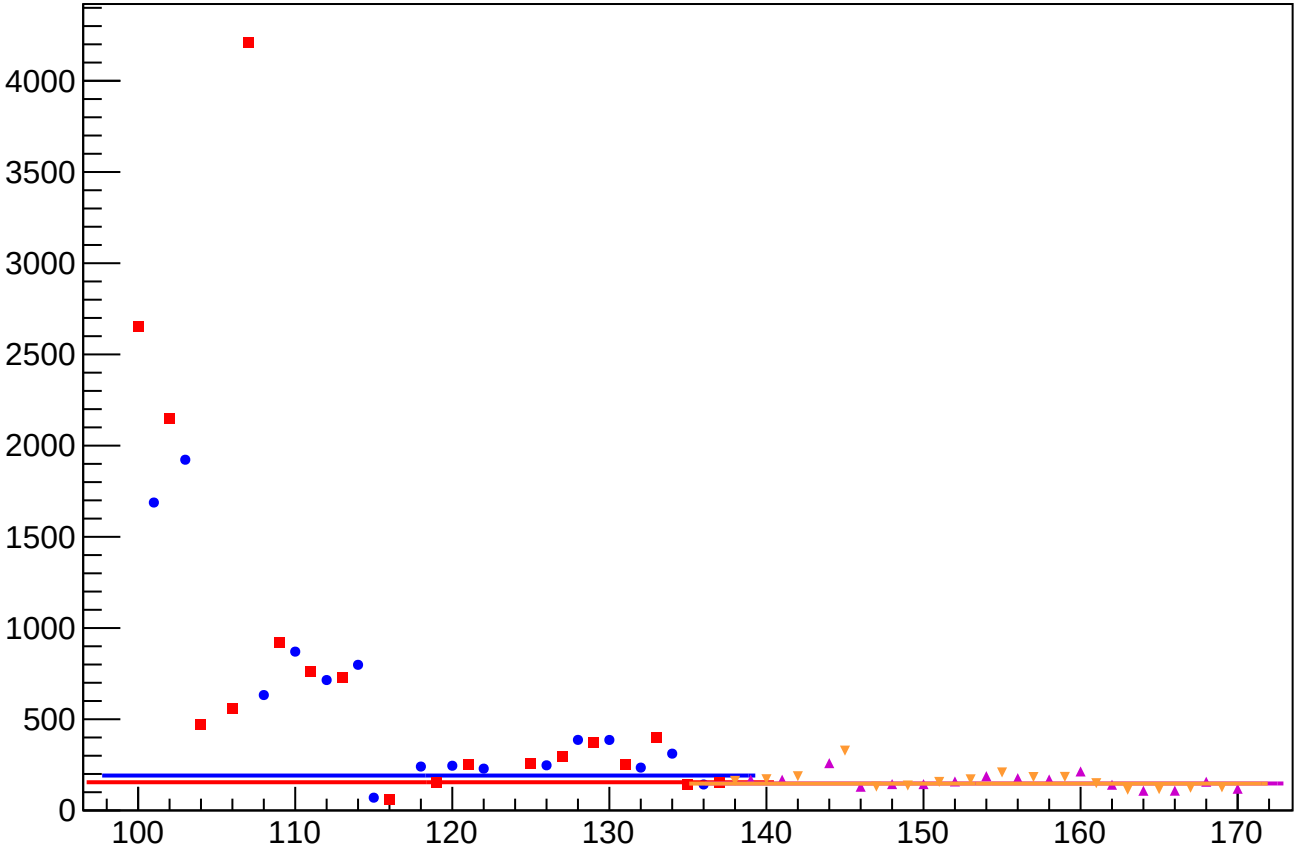
Left In: -36.241+/-42.251 $\chi^2$/NDF:13.3/15

+ sign -176.426+/-38.999 $\chi^2$/NDF: 42.1/31

All: -107.862+/-27.067 $\chi^2$/NDF: 79.2/65

- sign -44.146+/-37.595 $\chi^2$/NDF: 31.1/33

# asym_us_dd_at1lr_dd_avg_reg_correction_rms vs Slug




Right In: 191.381+/-0.064 $\chi^2$/NDF: 5064747.7/15

Left Out: 147.296+/-0.031 $\chi^2$/NDF:1223308.0/15

Right Out: 154.677+/-0.058 $\chi^2$/NDF: 6154285.9/17

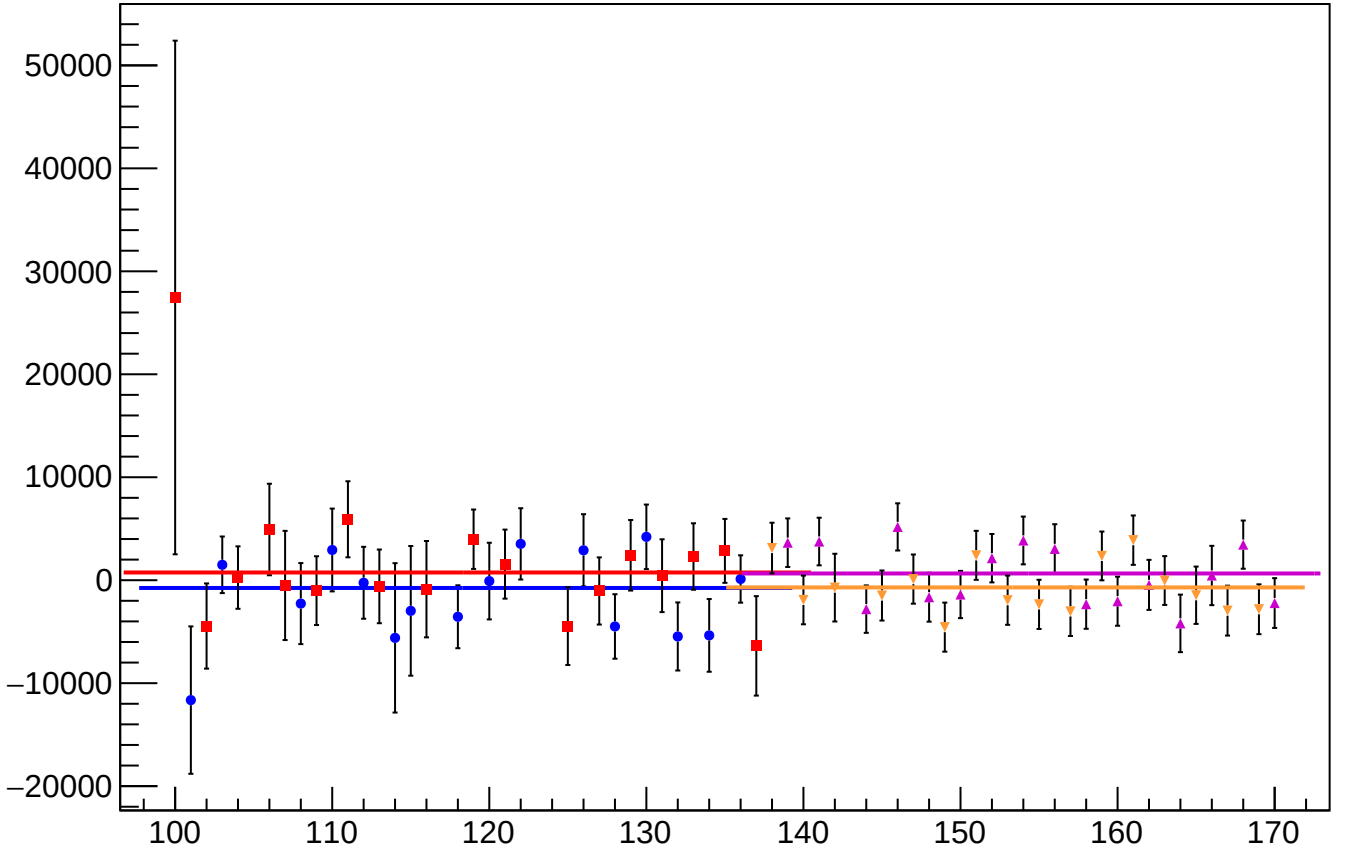
Left In: 147.912+/-0.030 $\chi^2$/NDF:1113688.1/15

+ sign 155.408+/-0.028 $\chi^2$/NDF: 6671783.8/31

All: 152.253+/-0.019 $\chi^2$/NDF: 13975690.8/65

- sign 149.321+/-0.027 $\chi^2$/NDF: 7278650.2/33

# cor_asym_us_dd_at1lr_dd_avg_mean vs Slug




Right In: -753.322+/-872.653 $\chi^2$/NDF: 15.9/15

Left Out: -701.387+/-613.230 $\chi^2$/NDF:16.0/15

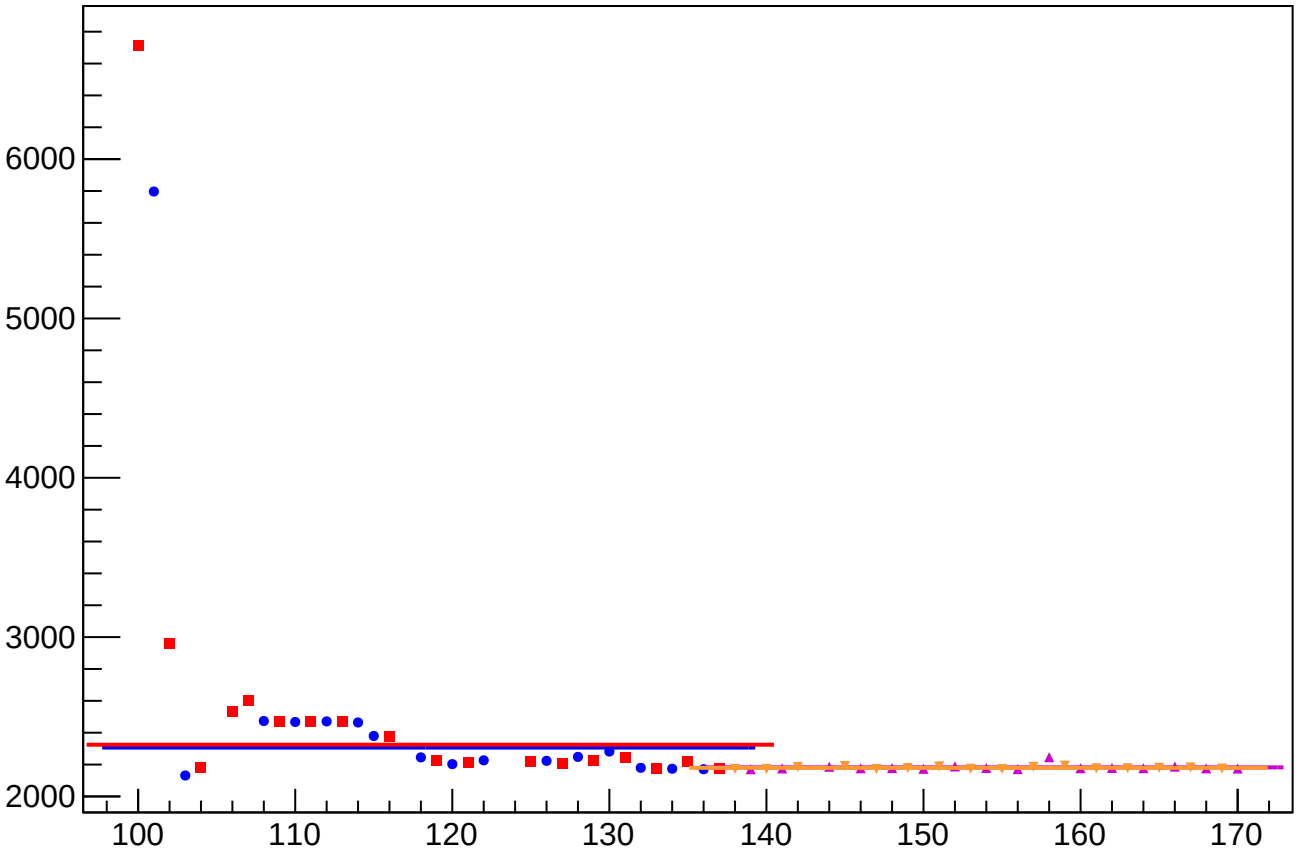
Right Out: 749.316+/-869.366 $\chi^2$/NDF: 12.8/17

Left In: 654.407+/-600.200 $\chi^2$/NDF:23.5/15

+ sign -718.555+/-501.736 $\chi^2$/NDF: 31.9/31

All: -5.743+/-351.986 $\chi^2$/NDF: 72.2/65

- sign 685.042+/-493.923 $\chi^2$/NDF: 36.3/33




Right In: 2306.643+/-0.617 $\chi^2$/NDF: 514150.6/15

Left Out: 2179.500+/-0.434 $\chi^2$/NDF:253.3/15

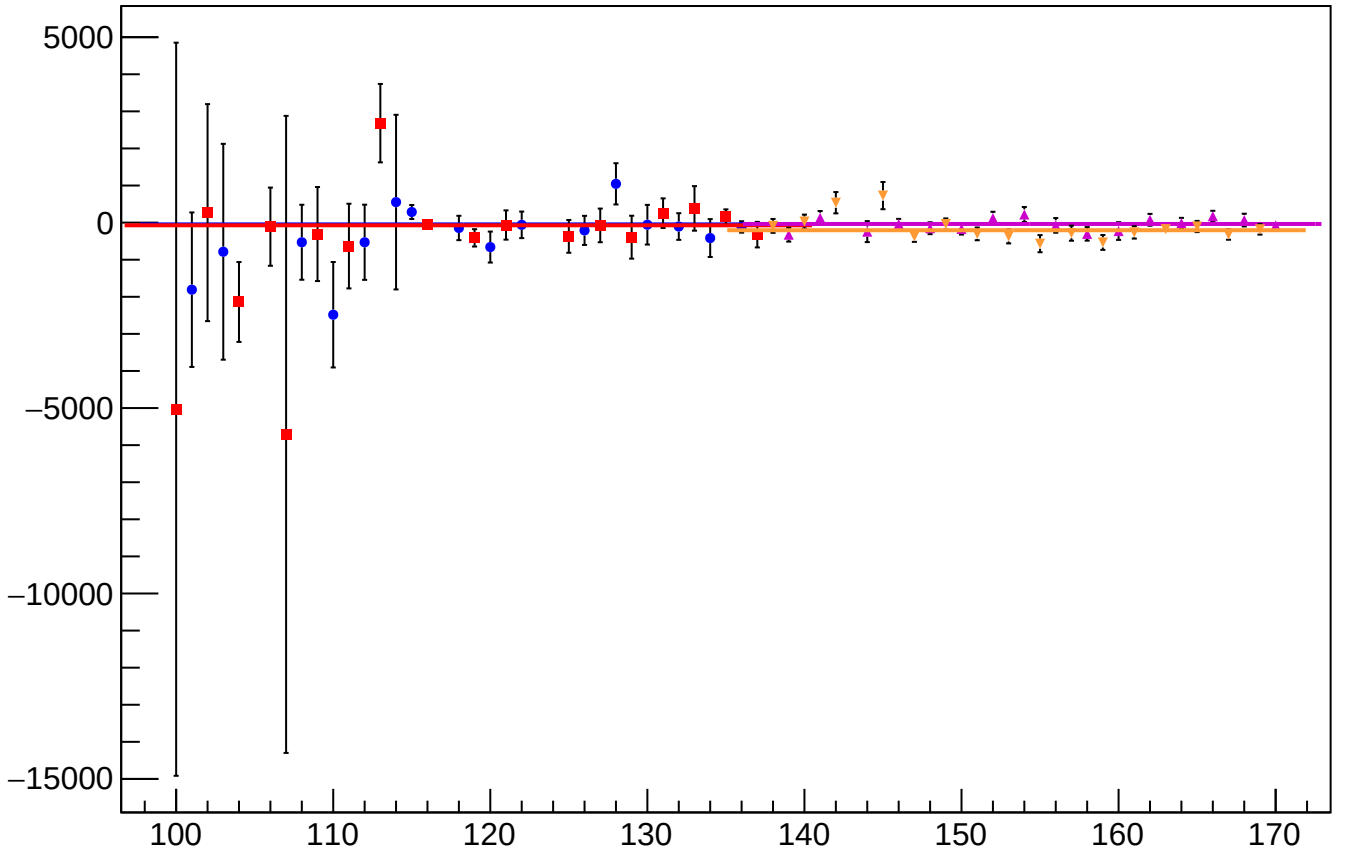
Right Out: 2324.685+/-0.615 $\chi^2$/NDF: 153578.5/17

Left In: 2182.408+/-0.424 $\chi^2$/NDF:1660.2/15

+ sign 2221.530+/-0.355 $\chi^2$/NDF: 542824.7/31

All: 2224.985+/-0.249 $\chi^2$/NDF: 734526.1/65

- sign 2228.333+/-0.349 $\chi^2$/NDF: 191514.6/33




Right In: -47.960+/-90.920 $\chi^2$/NDF: 14.4/15

Left Out: -205.455+/-43.174 $\chi^2$/NDF:25.3/15

Right Out: -72.198+/-82.322 $\chi^2$/NDF: 17.4/17

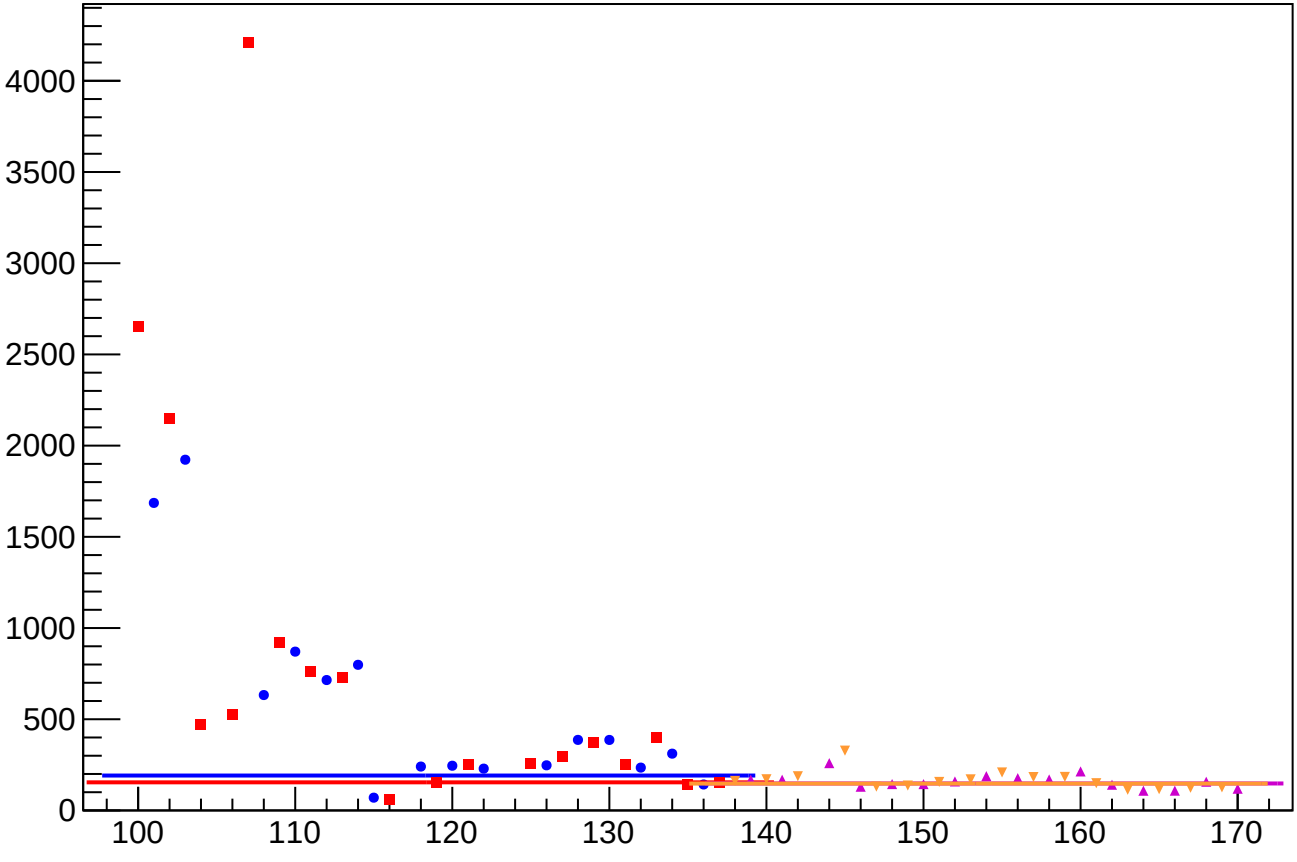
Left In: -36.178+/-42.254 $\chi^2$/NDF:13.3/15

+ sign -176.476+/-39.000 $\chi^2$/NDF: 42.1/31

All: -107.641+/-27.065 $\chi^2$/NDF: 78.9/65

- sign -43.688+/-37.591 $\chi^2$/NDF: 30.9/33

# asym_us_dd_at1lr_dd_avg_cor_correction_rms vs Slug




Right In: 191.405+/-0.064 $\chi^2$/NDF: 5063603.7/15

Left Out: 147.295+/-0.031 $\chi^2$/NDF:1223625.1/15

Right Out: 154.121+/-0.058 $\chi^2$/NDF: 6108665.0/17

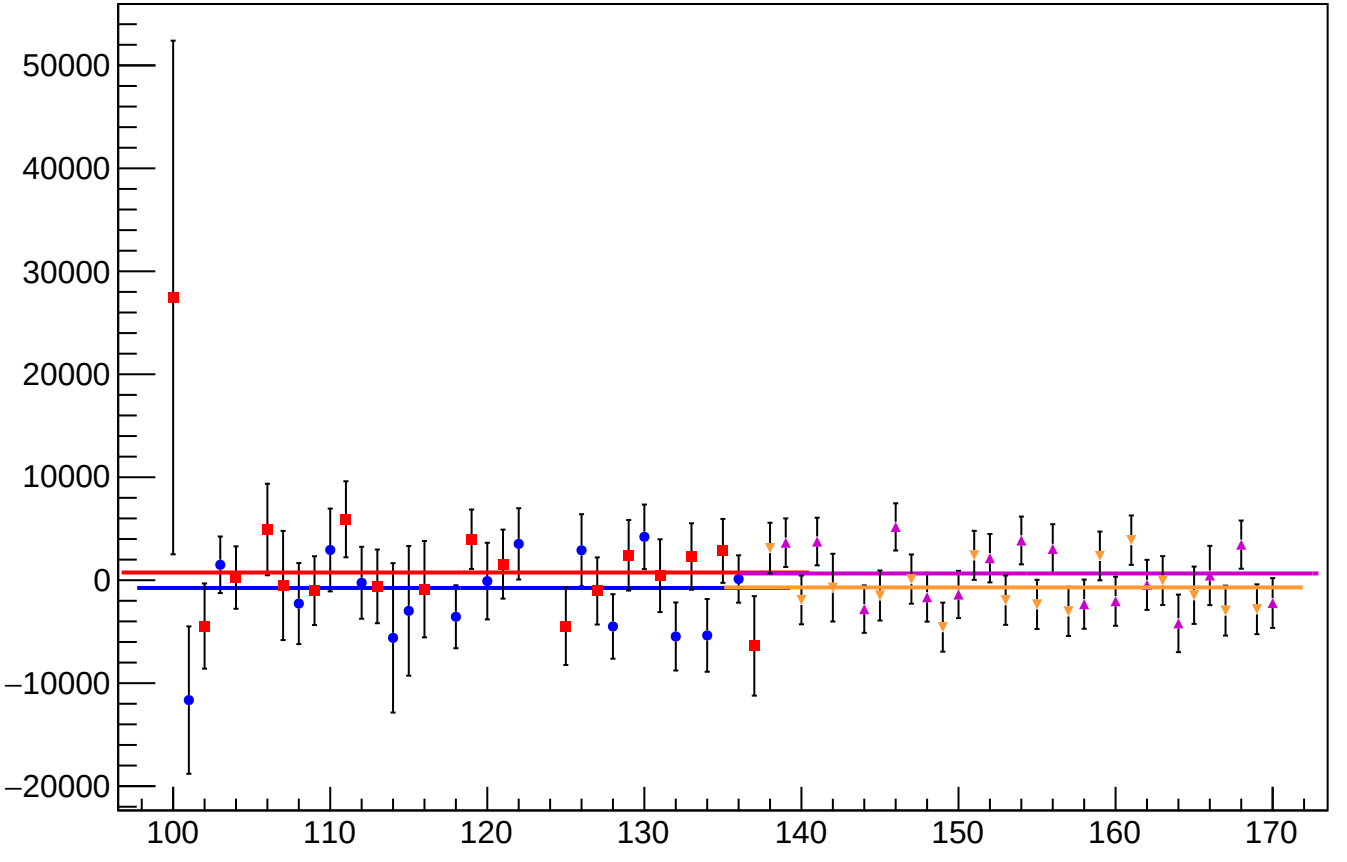
Left In: 147.921+/-0.030 $\chi^2$/NDF:1114026.8/15

+ sign 155.411+/-0.028 $\chi^2$/NDF: 6671365.3/31

All: 152.198+/-0.019 $\chi^2$/NDF: 13929215.3/65

- sign 149.214+/-0.027 $\chi^2$/NDF: 7231671.7/33

# eigen_cor_asym_us_dd_at1lr_dd_avg_mean vs Slug




Right In: -753.322+/-872.653 $\chi^2$/NDF: 15.9/15

Left Out: -701.387+/-613.230 $\chi^2$/NDF:16.0/15

Right Out: 749.316+/-869.366 $\chi^2$/NDF: 12.8/17

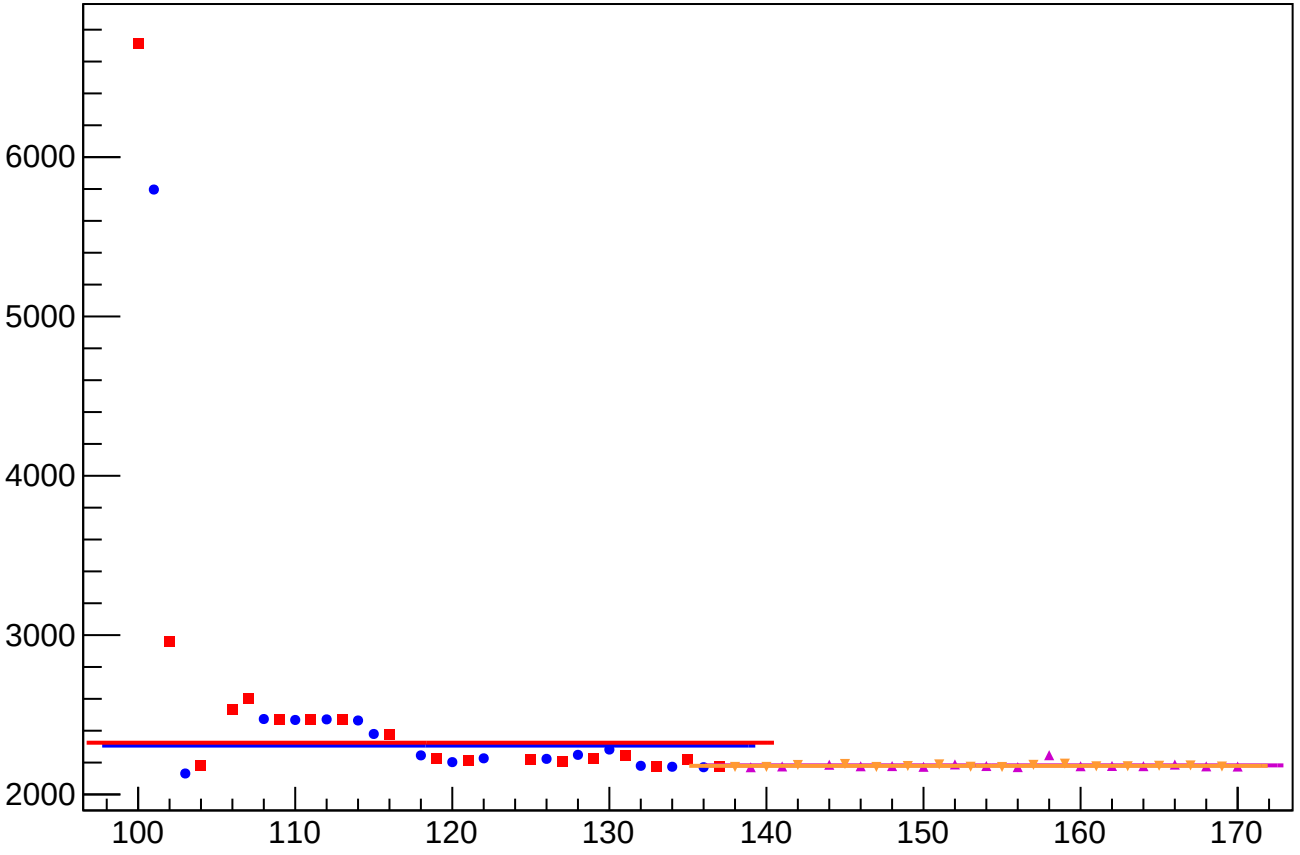
Left In: 654.407+/-600.200 $\chi^2$/NDF:23.5/15

+ sign -718.555+/-501.736 $\chi^2$/NDF: 31.9/31

All: -5.743+/-351.986 $\chi^2$/NDF: 72.2/65

- sign 685.042+/-493.923 $\chi^2$/NDF: 36.3/33

# eigen_cor_asym_us_dd_at1lr_dd_avg_rms vs Slug




Right In: 2306.643+/-0.617 $\chi^2$/NDF: 514150.6/15

Left Out: 2179.500+/-0.434 $\chi^2$/NDF:253.3/15

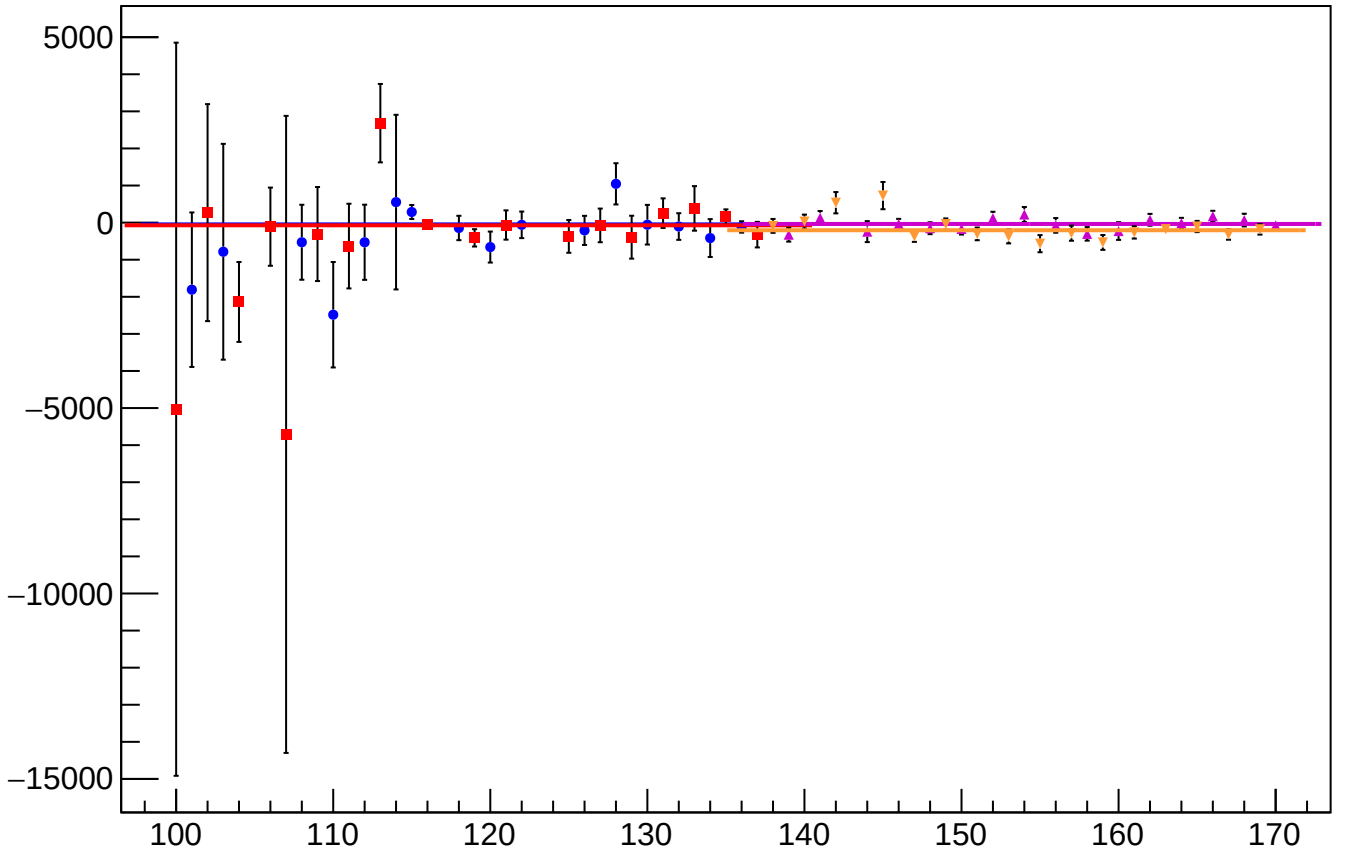
Right Out: 2324.685+/-0.615 $\chi^2$/NDF: 153578.5/17

Left In: 2182.408+/-0.424 $\chi^2$/NDF:1660.2/15

+ sign 2221.530+/-0.355 $\chi^2$/NDF: 542824.7/31

All: 2224.985+/-0.249 $\chi^2$/NDF: 734526.1/65

- sign 2228.333+/-0.349 $\chi^2$/NDF: 191514.6/33




Right In: -47.960+/-90.920 $\chi^2$/NDF: 14.4/15

Left Out: -205.455+/-43.174 $\chi^2$/NDF:25.3/15

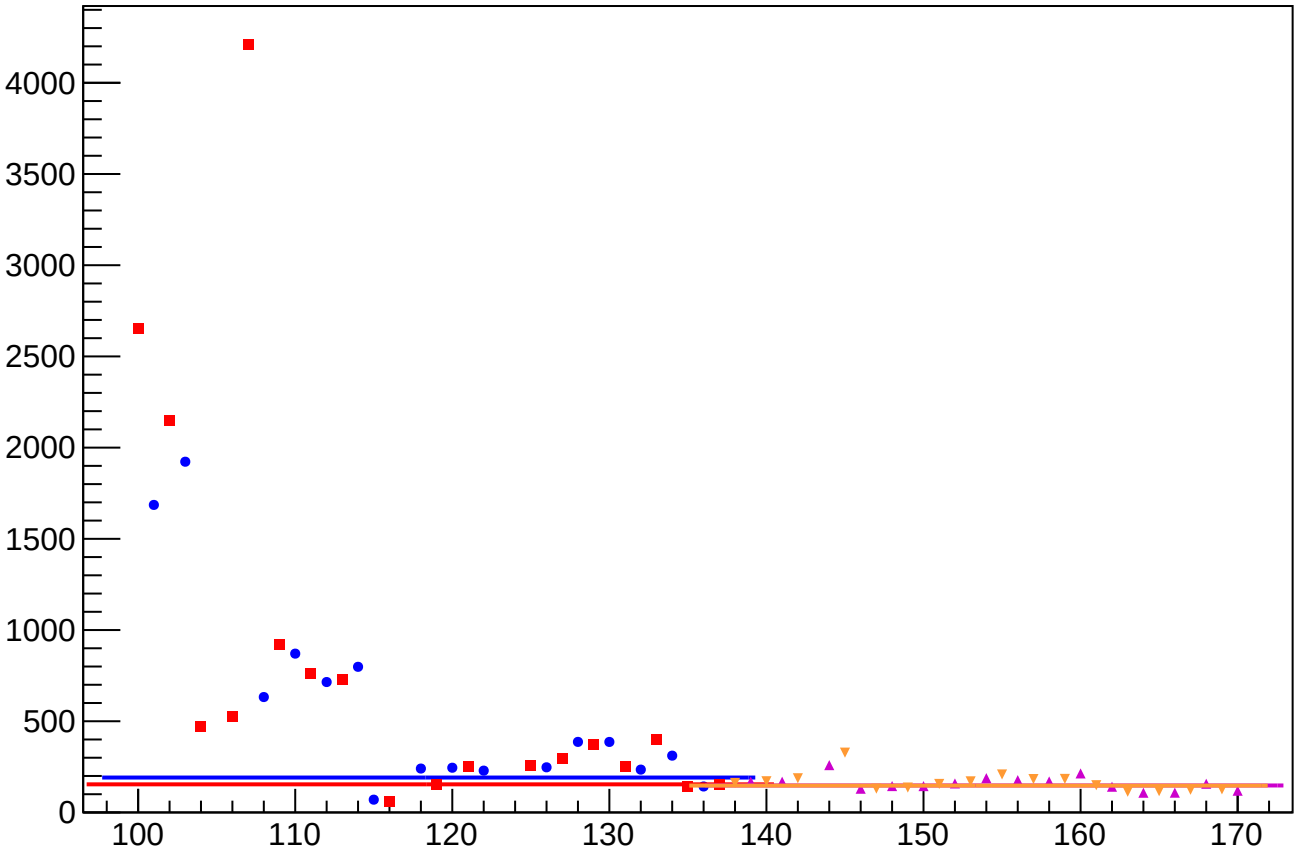
Right Out: -72.198+/-82.322 $\chi^2$/NDF: 17.4/17

Left In: -36.178+/-42.254 $\chi^2$/NDF:13.3/15

+ sign -176.476+/-39.000 $\chi^2$/NDF: 42.1/31

All: -107.641+/-27.065 $\chi^2$/NDF: 78.9/65

- sign -43.688+/-37.591 $\chi^2$/NDF: 30.9/33




Right In: 191.405+/-0.064 $\chi^2$/NDF: 5063603.7/15

Left Out: 147.295+/-0.031 $\chi^2$/NDF:1223625.1/15

Right Out: 154.121+/-0.058 $\chi^2$/NDF: 6108665.0/17

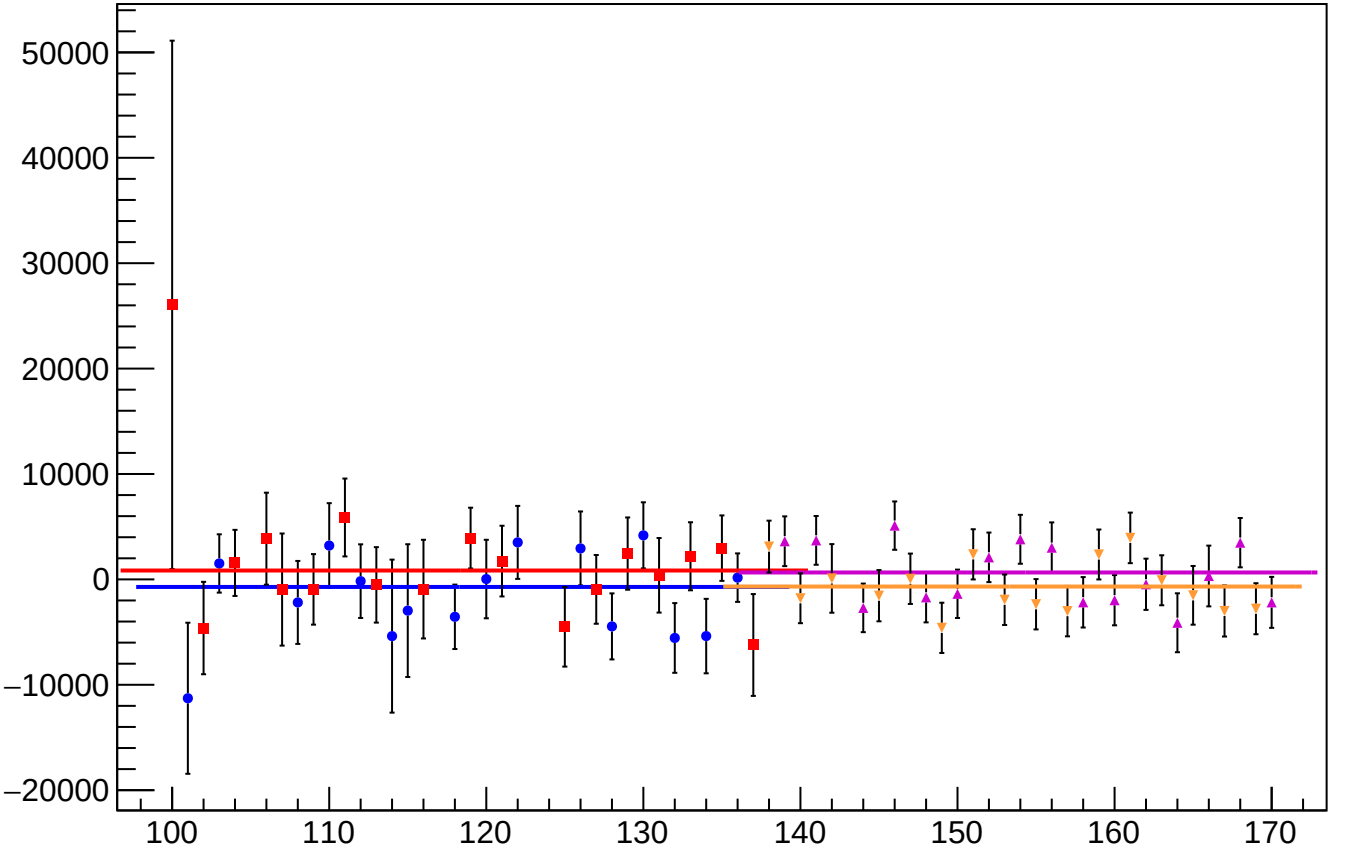
Left In: 147.921+/-0.030 $\chi^2$/NDF:1114026.8/15

+ sign 155.411+/-0.028 $\chi^2$/NDF: 6671365.3/31

All: 152.198+/-0.019 $\chi^2$/NDF: 13929215.3/65

- sign 149.214+/-0.027 $\chi^2$/NDF: 7231671.7/33

# dit_asym_us_dd_at1lr_dd_avg_mean vs Slug




Right In: -717.136+/-873.539 $\chi^2$/NDF: 15.8/15

Left Out: -679.260+/-613.205 $\chi^2$/NDF:16.1/15

Right Out: 842.157+/-873.586 $\chi^2$/NDF: 12.2/17

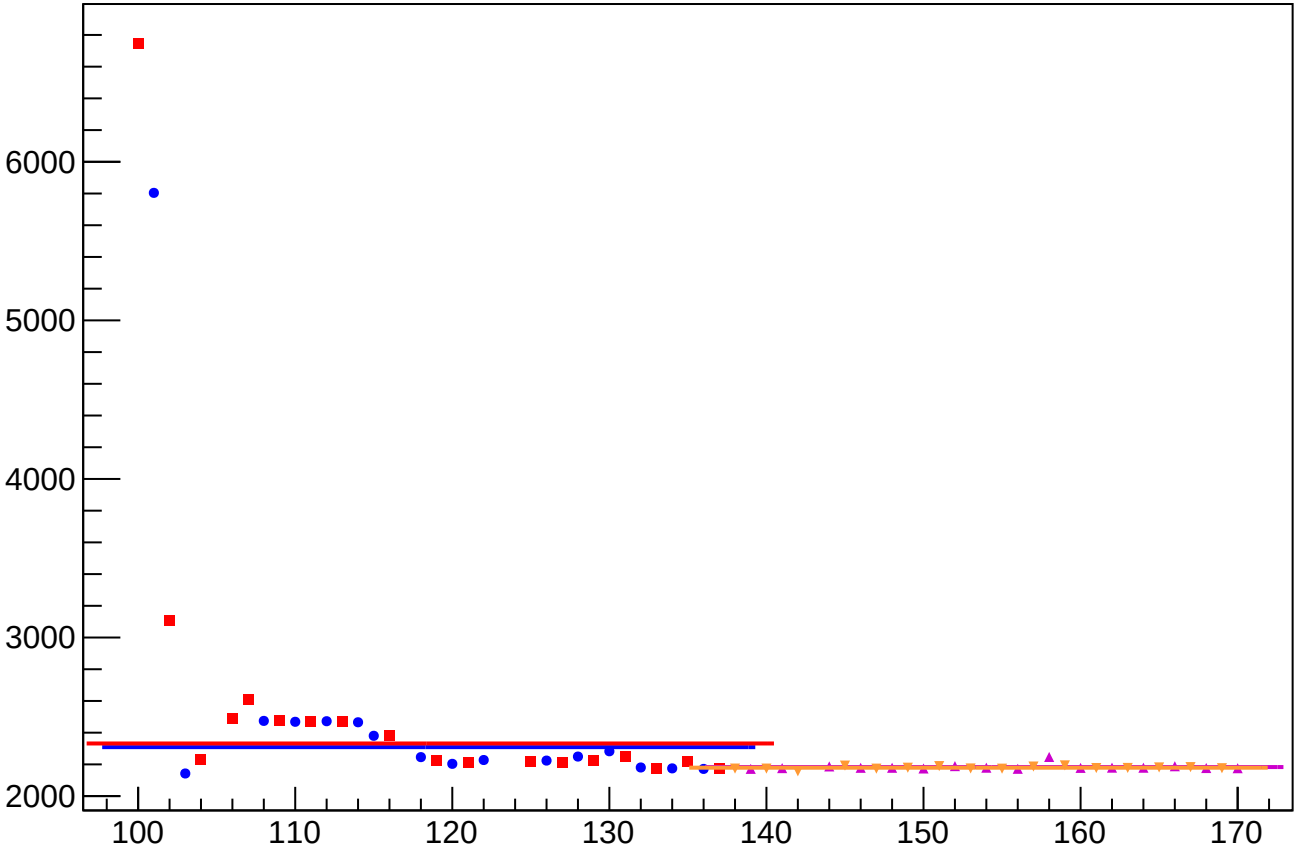
Left In: 655.889+/-600.415 $\chi^2$/NDF:22.7/15

+ sign -691.763+/-501.890 $\chi^2$/NDF: 32.0/31

All: 21.936+/-352.361 $\chi^2$/NDF: 70.9/65

- sign 715.649+/-494.813 $\chi^2$/NDF: 34.9/33

# dit_asym_us_dd_at1lr_dd_avg_rms vs Slug




Right In: 2308.739+/-0.618 $\chi^2$/NDF: 513742.2/15

Left Out: 2179.207+/-0.434 $\chi^2$/NDF:353.3/15

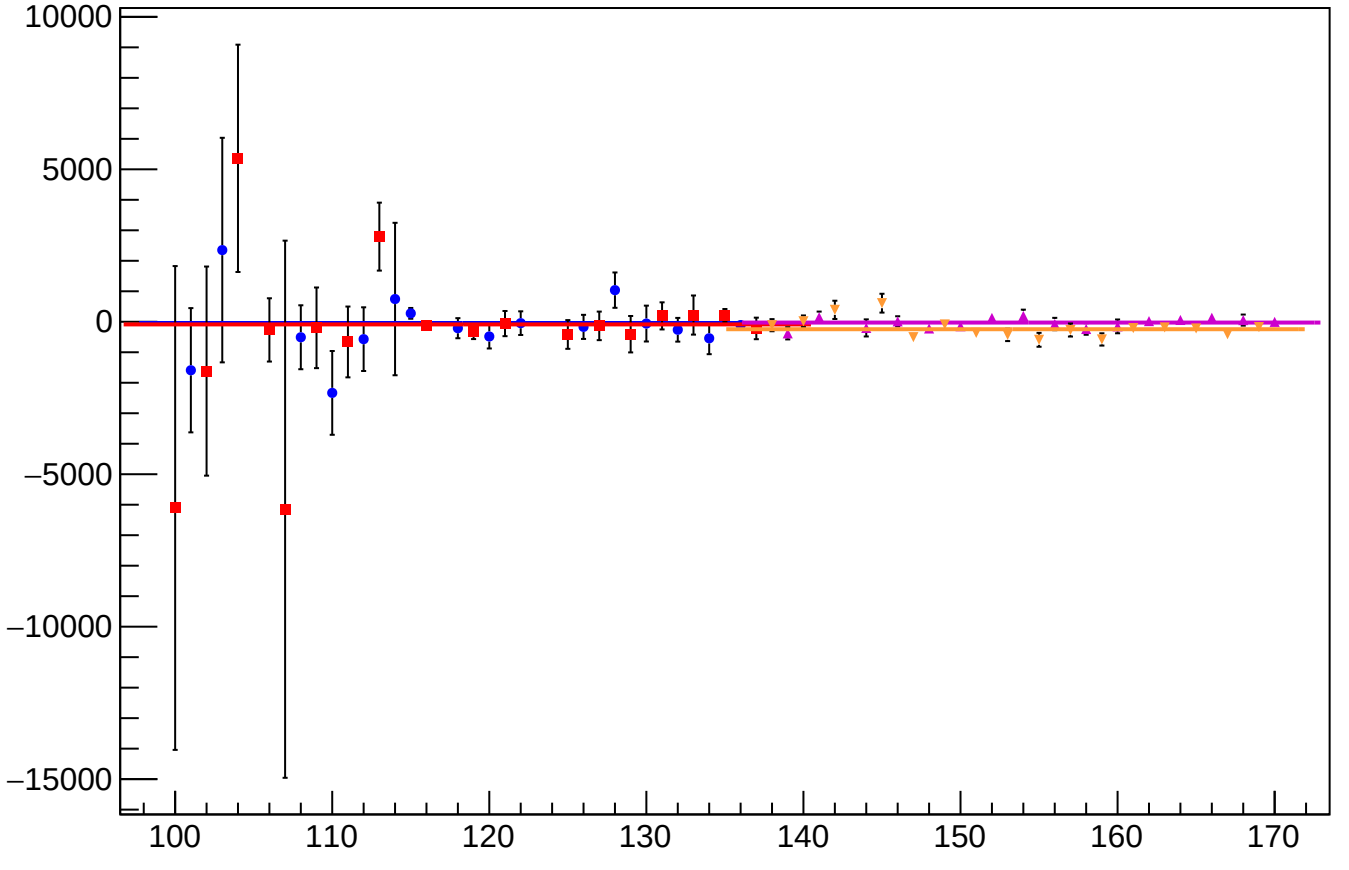
Right Out: 2331.849+/-0.618 $\chi^2$/NDF: 167321.7/17

Left In: 2183.190+/-0.425 $\chi^2$/NDF:1652.7/15

+ sign 2221.966+/-0.355 $\chi^2$/NDF: 543555.3/31

All: 2226.488+/-0.249 $\chi^2$/NDF: 752185.5/65

- sign 2230.884+/-0.350 $\chi^2$/NDF: 208309.9/33




Right In: -40.119+/-92.409 $\chi^2$/NDF: 14.1/15

Left Out: -244.303+/-43.423 $\chi^2$/NDF:26.7/15

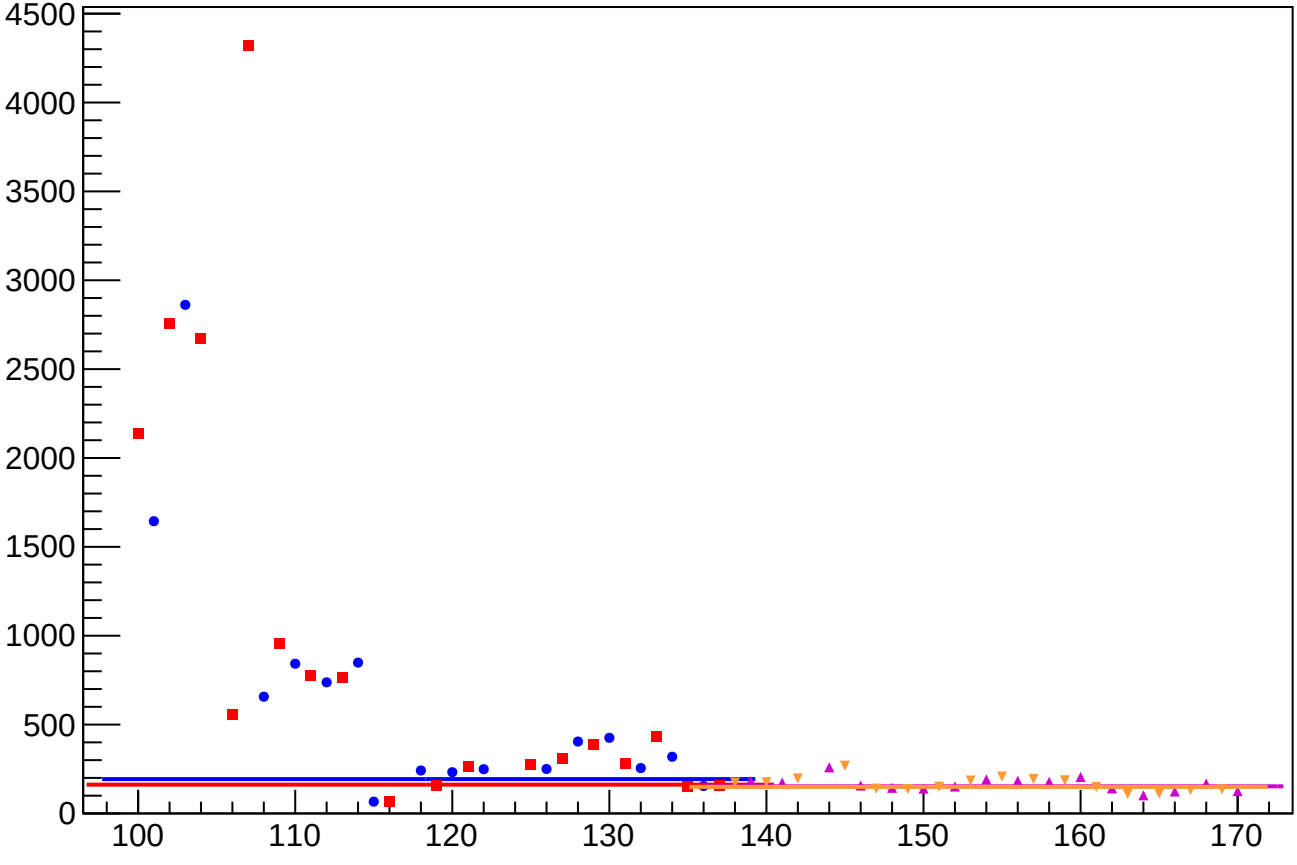
Right Out: -86.379+/-86.088 $\chi^2$/NDF: 15.0/17

Left In: -26.091+/-43.065 $\chi^2$/NDF:12.0/15

+ sign -207.372+/-39.301 $\chi^2$/NDF: 44.7/31

All: -121.057+/-27.508 $\chi^2$/NDF: 81.5/65

- sign -38.158+/-38.515 $\chi^2$/NDF: 27.3/33




Right In: 193.255+/-0.065 $\chi^2$/NDF: 5617847.0/15

Left Out: 149.648+/-0.031 $\chi^2$/NDF:1171988.9/15

Right Out: 162.114+/-0.061 $\chi^2$/NDF: 7070489.1/17

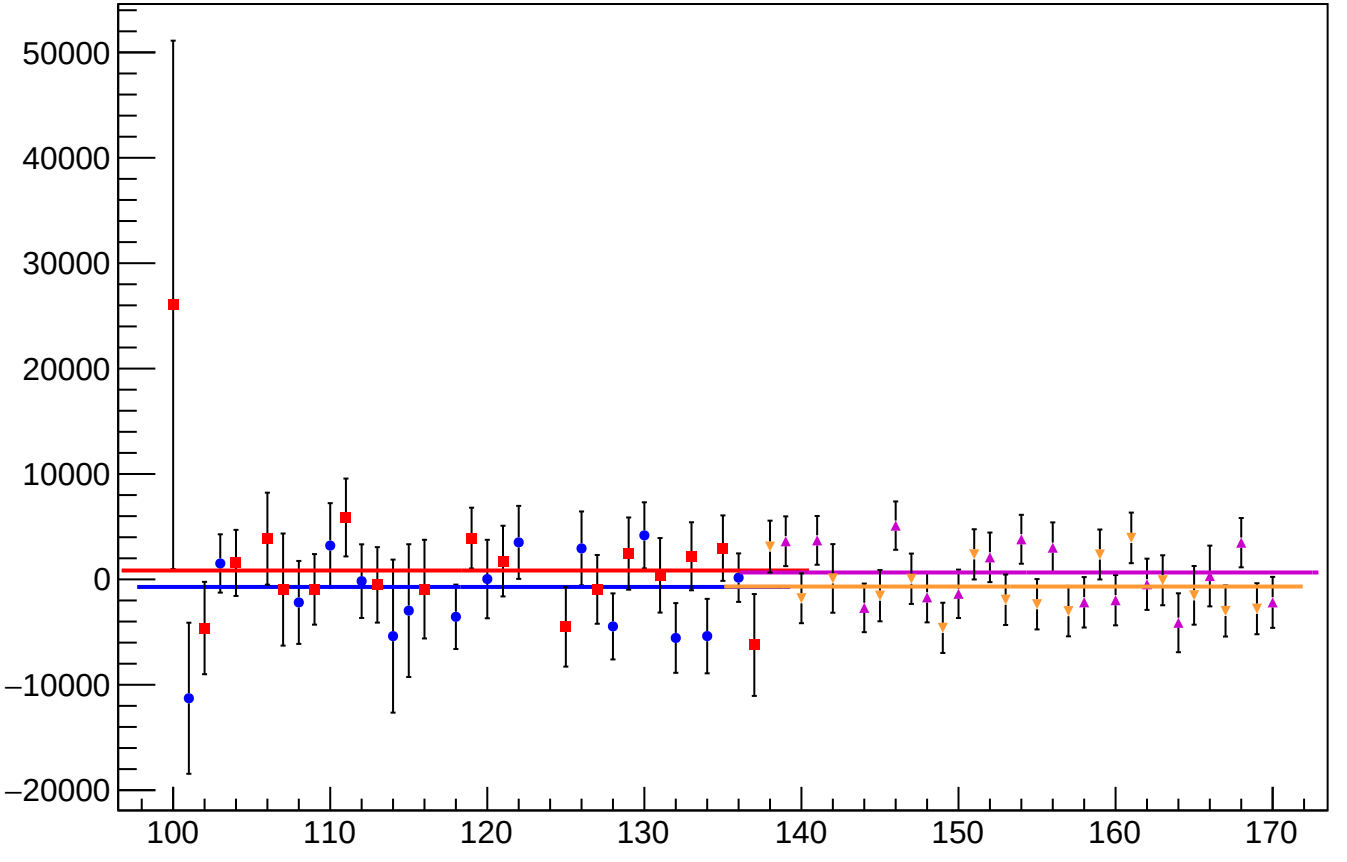
Left In: 152.613+/-0.030 $\chi^2$/NDF:1109517.5/15

+ sign 157.535+/-0.028 $\chi^2$/NDF: 7154644.1/31

All: 155.995+/-0.019 $\chi^2$/NDF: 15360164.0/65

- sign 154.515+/-0.027 $\chi^2$/NDF: 8199491.9/33

# eigen_dit_asym_us_dd_at1lr_dd_avg_mean vs Slug




Right In: -717.137+/-873.539 $\chi^2$/NDF: 15.8/15

Left Out: -679.262+/-613.205 $\chi^2$/NDF:16.1/15

Right Out: 842.159+/-873.586 $\chi^2$/NDF: 12.2/17

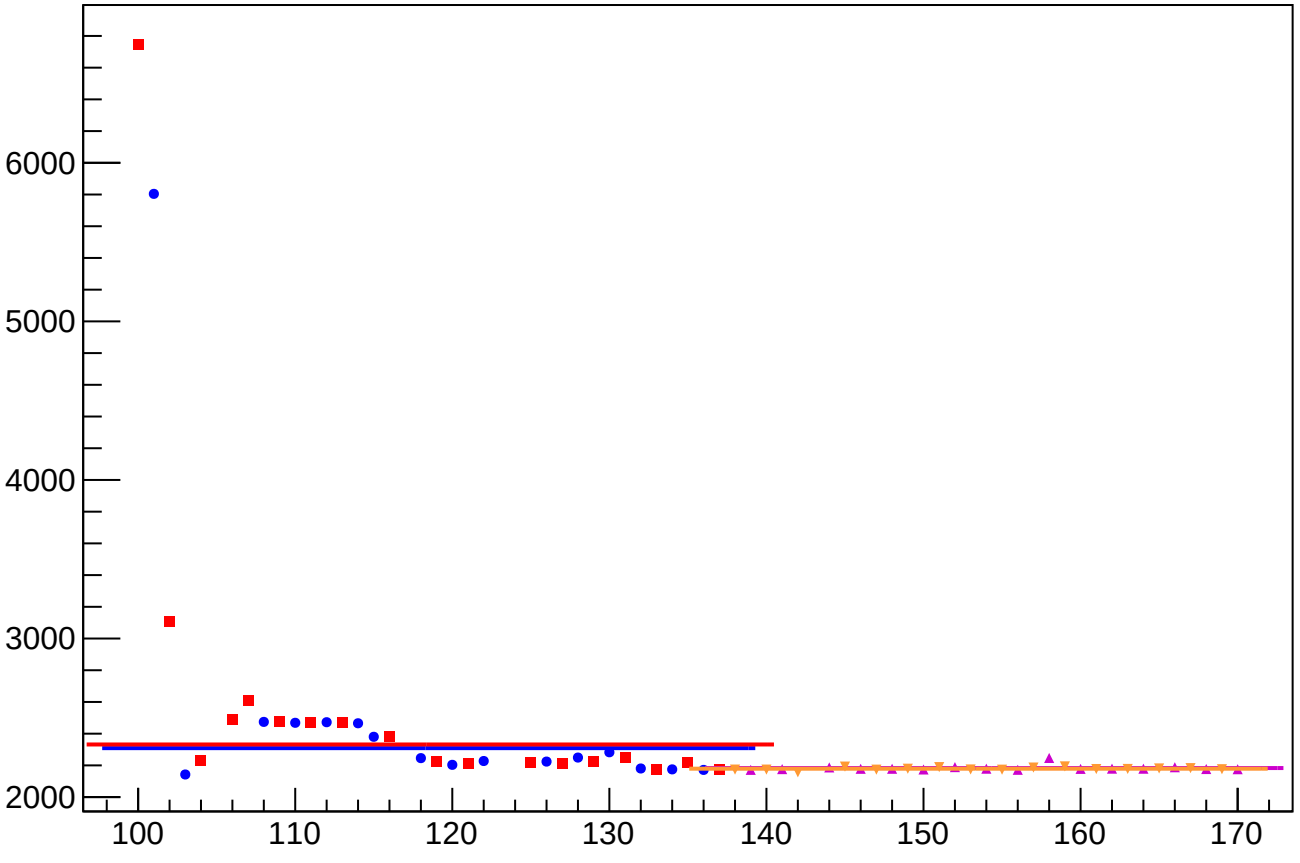
Left In: 655.888+/-600.415 $\chi^2$/NDF:22.7/15

+ sign -691.765+/-501.890 $\chi^2$/NDF: 32.0/31

All: 21.935+/-352.361 $\chi^2$/NDF: 70.9/65

- sign 715.649+/-494.813 $\chi^2$/NDF: 34.9/33

# eigen_dit_asym_us_dd_at1lr_dd_avg_rms vs Slug




Right In: 2308.739+/-0.618 $\chi^2$/NDF: 513742.2/15

Left Out: 2179.207+/-0.434 $\chi^2$/NDF:353.3/15

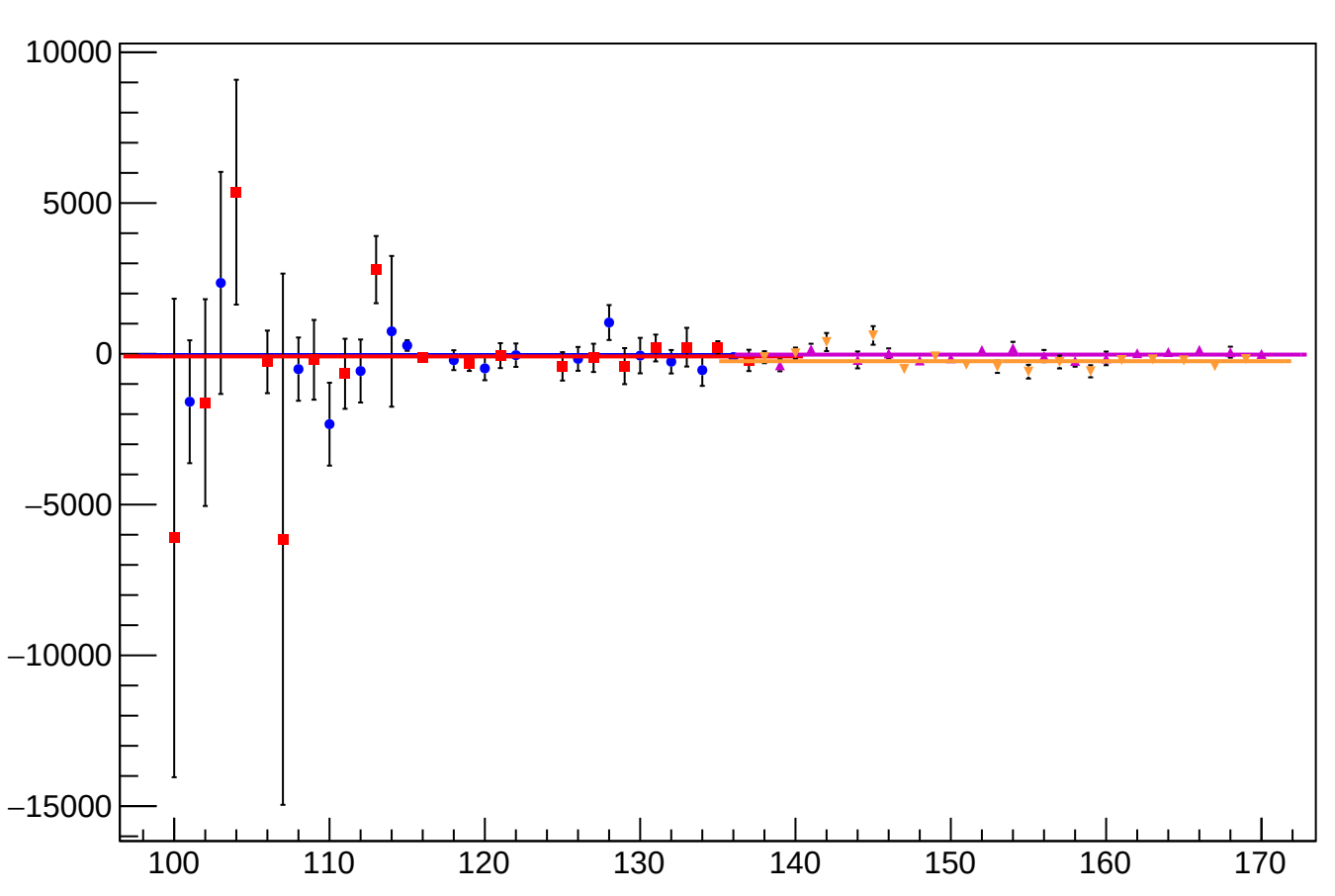
Right Out: 2331.849+/-0.618 $\chi^2$/NDF: 167321.6/17

Left In: 2183.190+/-0.425 $\chi^2$/NDF:1652.7/15

+ sign 2221.966+/-0.355 $\chi^2$/NDF: 543555.4/31

All: 2226.488+/-0.249 $\chi^2$/NDF: 752185.4/65

- sign 2230.884+/-0.350 $\chi^2$/NDF: 208309.8/33




Right In: -40.116+/-92.408 $\chi^2$/NDF: 14.1/15

Left Out: -244.304+/-43.423 $\chi^2$/NDF:26.7/15

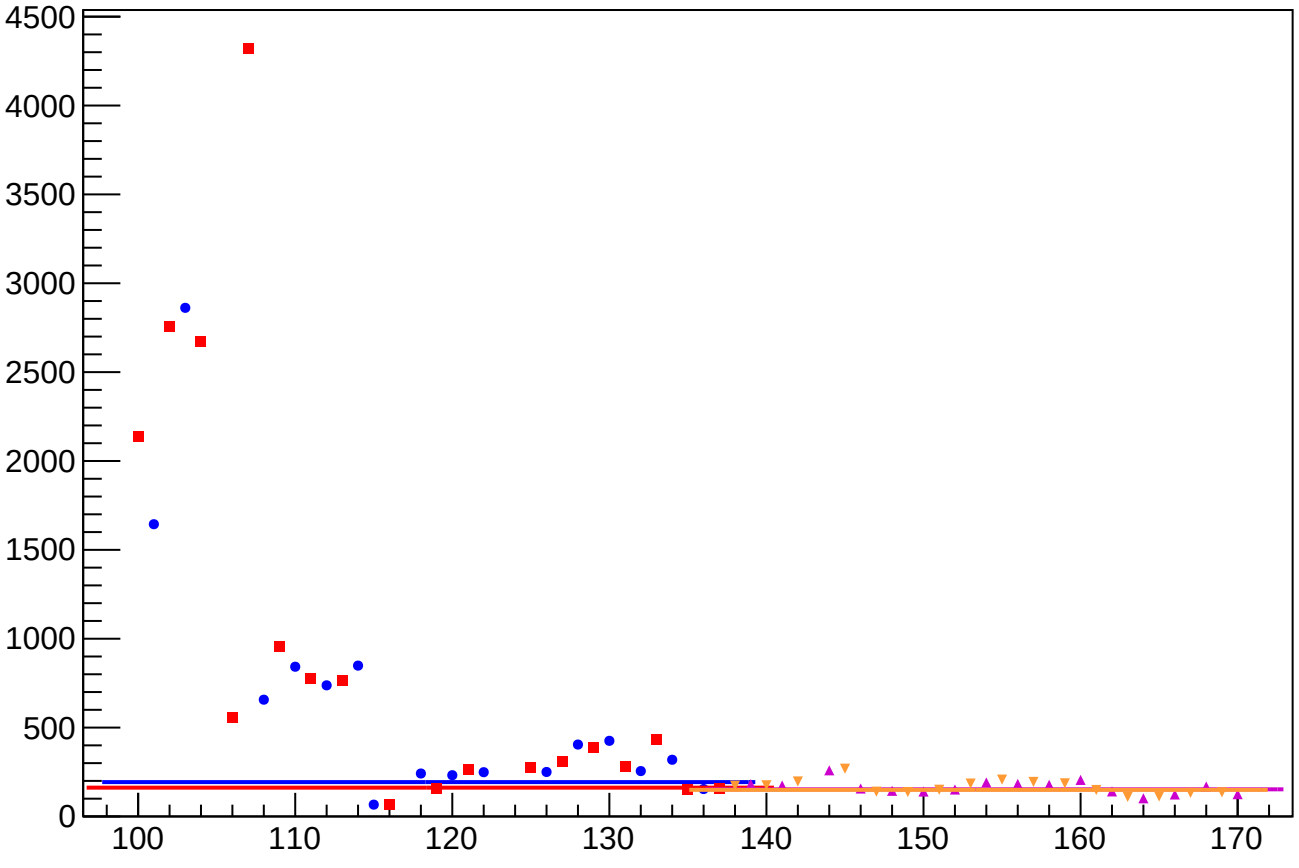
Right Out: -86.380+/-86.087 $\chi^2$/NDF: 15.0/17

Left In: -26.090+/-43.066 $\chi^2$/NDF:12.0/15

+ sign -207.372+/-39.300 $\chi^2$/NDF: 44.7/31

All: -121.057+/-27.508 $\chi^2$/NDF: 81.5/65

- sign -38.157+/-38.515 $\chi^2$/NDF: 27.3/33




Right In: 193.253+/-0.065 $\chi^2$/NDF: 5617884.1/15

Left Out: 149.648+/-0.031 $\chi^2$/NDF:1172024.1/15

Right Out: 162.112+/-0.061 $\chi^2$/NDF: 7070547.9/17

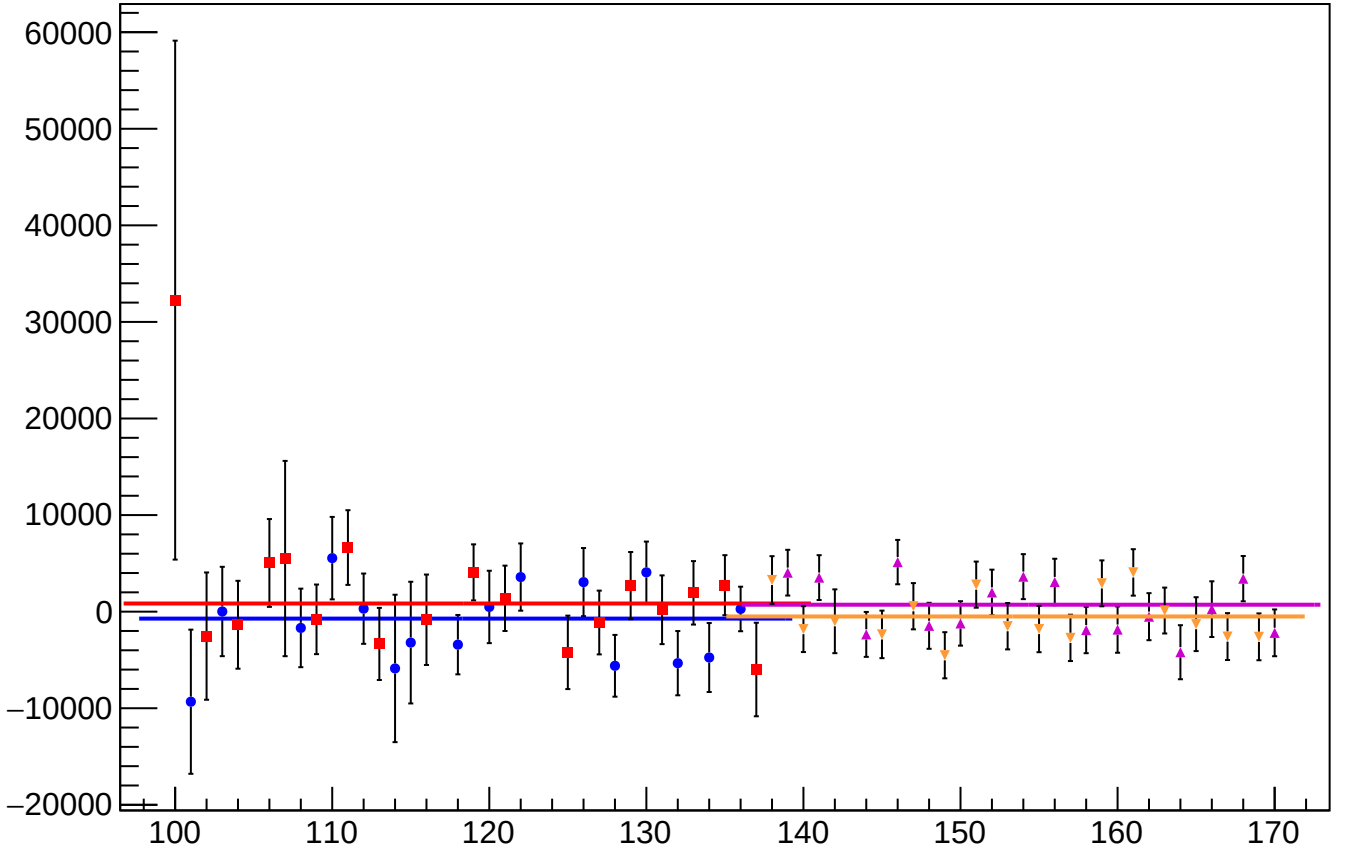
Left In: 152.613+/-0.030 $\chi^2$/NDF:1109561.0/15

+ sign 157.535+/-0.028 $\chi^2$/NDF: 7154686.5/31

All: 155.994+/-0.019 $\chi^2$/NDF: 15360298.8/65

- sign 154.514+/-0.027 $\chi^2$/NDF: 8199584.7/33

# asym_us_dd_at1lr_dd_avg_mean vs Slug




Right In: -719.565+/-916.228 $\chi^2$/NDF: 15.8/15

Left Out: -498.768+/-615.415 $\chi^2$/NDF:16.8/15

Right Out: 844.810+/-928.703 $\chi^2$/NDF: 12.9/17

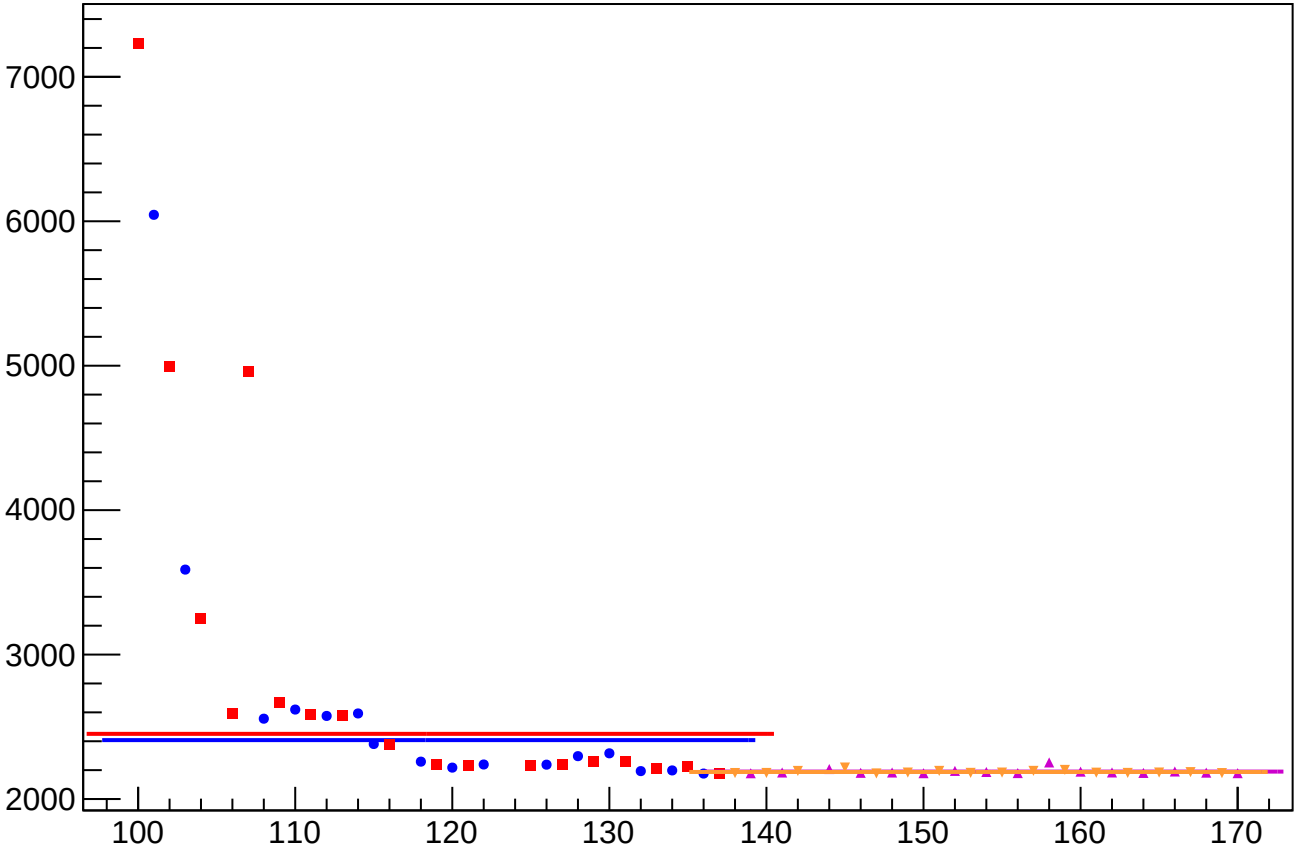
Left In: 718.194+/-602.255 $\chi^2$/NDF:21.7/15

+ sign -567.413+/-510.870 $\chi^2$/NDF: 32.6/31

All: 101.379+/-359.256 $\chi^2$/NDF: 70.7/65

- sign 755.678+/-505.305 $\chi^2$/NDF: 34.7/33

# asym_us_dd_at1lr_dd_avg_rms vs Slug




Right In: 2407.795+/-0.648 $\chi^2$/NDF: 676891.3/15

Left Out: 2187.254+/-0.435 $\chi^2$/NDF:574.7/15

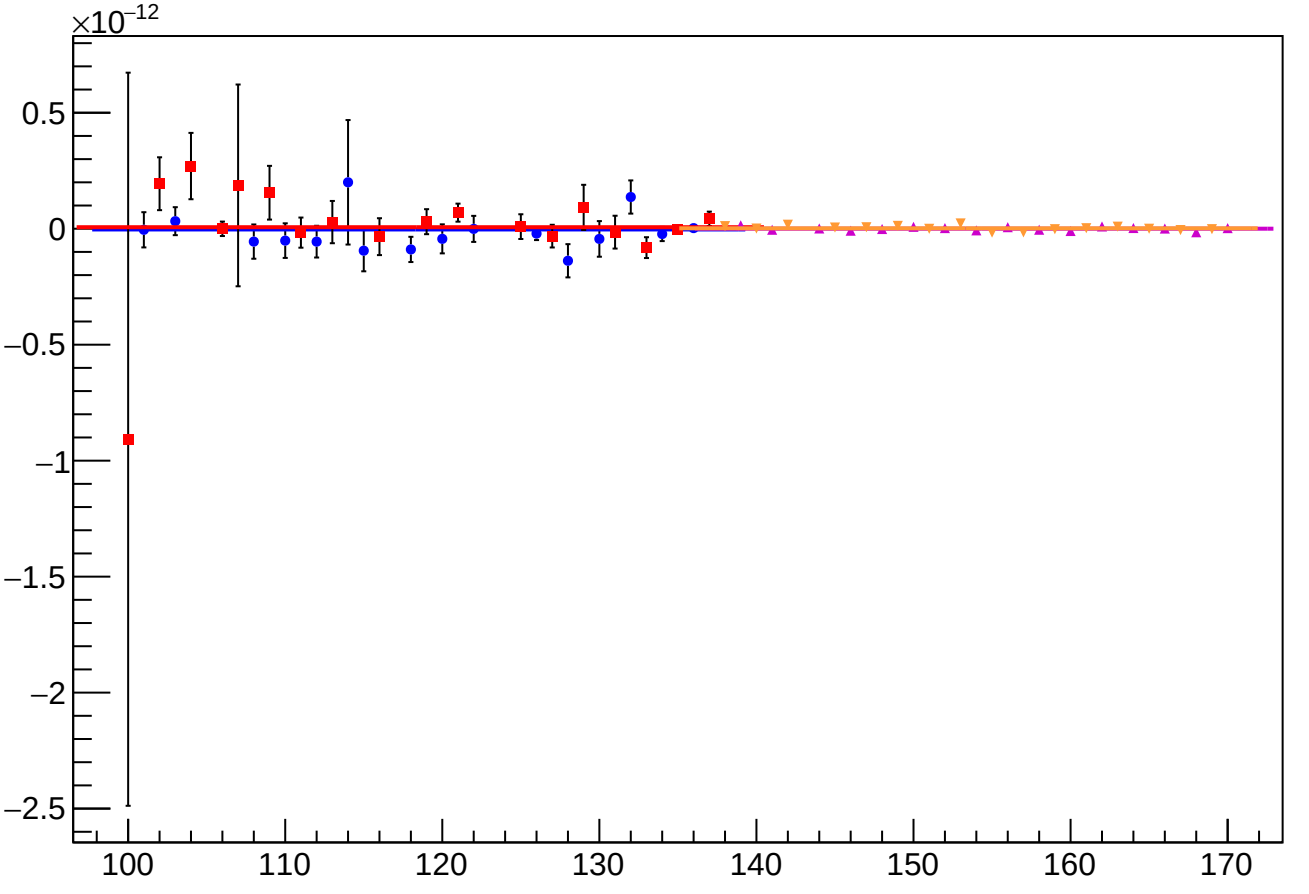
Right Out: 2451.189+/-0.657 $\chi^2$/NDF: 633600.1/17

Left In: 2189.873+/-0.426 $\chi^2$/NDF:1798.3/15

+ sign 2255.819+/-0.361 $\chi^2$/NDF: 757317.8/31

All: 2261.589+/-0.254 $\chi^2$/NDF: 1504690.2/65

- sign 2267.234+/-0.357 $\chi^2$/NDF: 746867.7/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:15.4/15

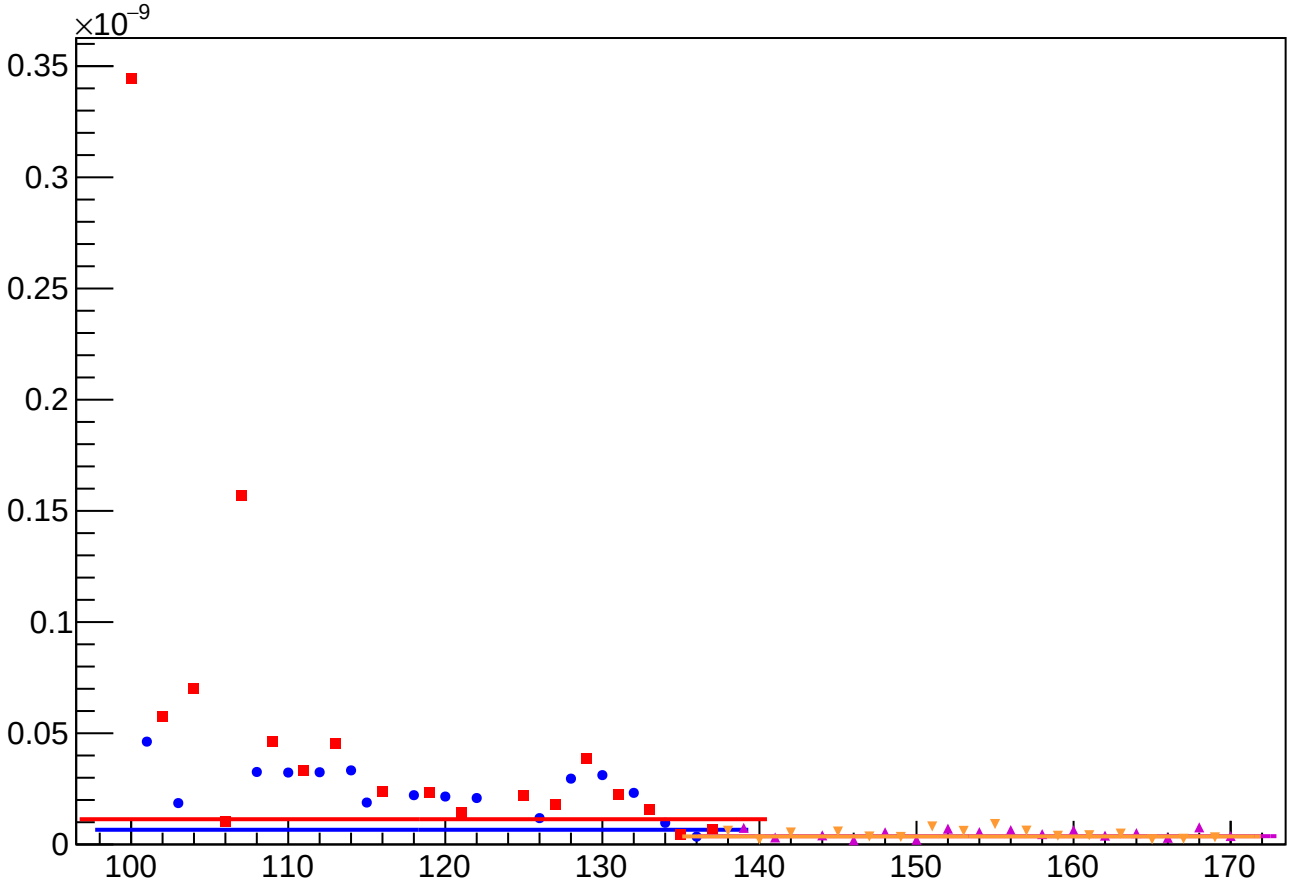
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.9/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:12.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 31.5/31

All: 0.000+/-0.000 $\chi^2$/NDF: 63.2/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 31.6/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2856979.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1420749.7/15

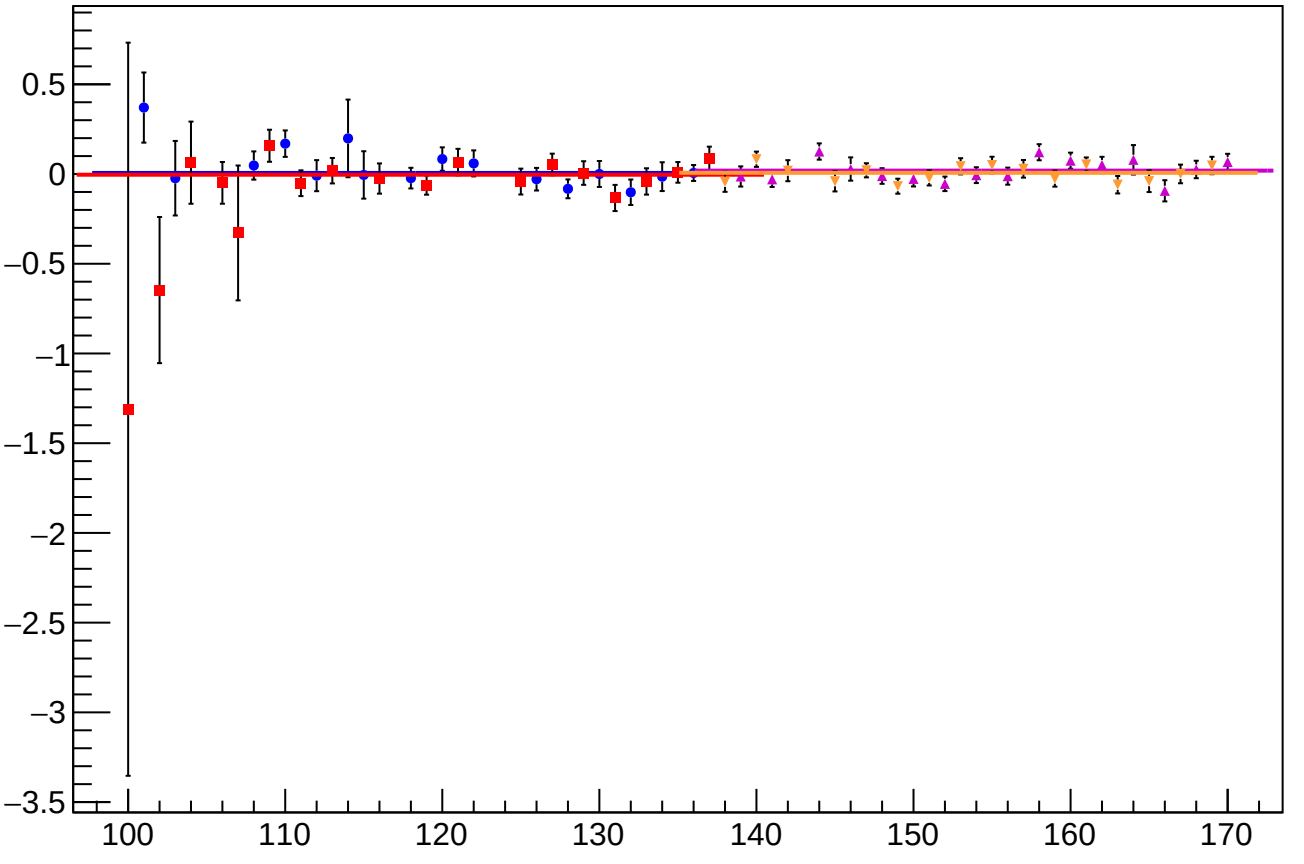
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2697712.1/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1355702.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4690566.9/31

All: 0.000+/-0.000 $\chi^2$/NDF: 9921880.7/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 5222855.9/33




Right In: 0.006+/-0.018 $\chi^2$/NDF: 17.2/15

Left Out: 0.007+/-0.012 $\chi^2$/NDF:15.3/15

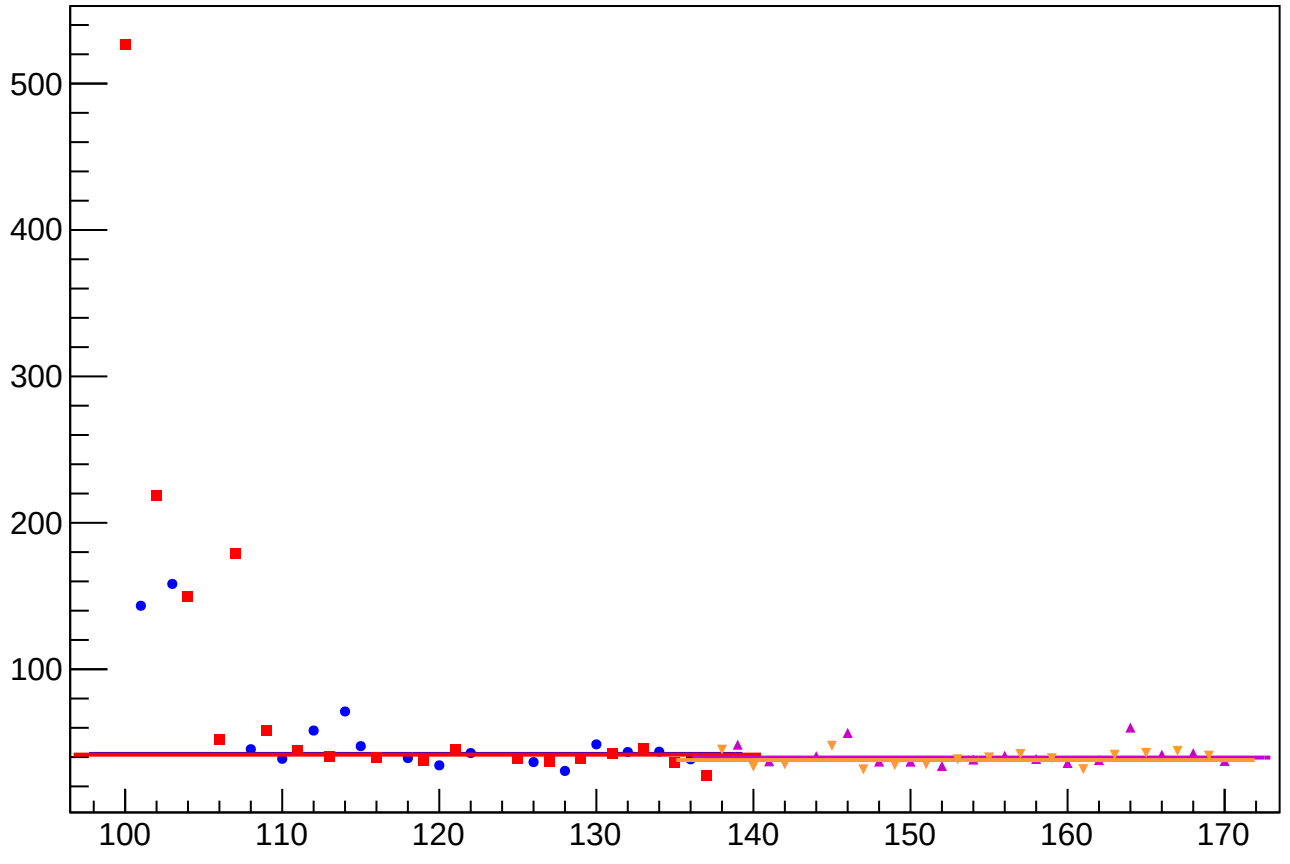
Right Out: -0.004+/-0.019 $\chi^2$/NDF: 16.3/17

Left In: 0.019+/-0.012 $\chi^2$/NDF:25.4/15

+ sign 0.007+/-0.010 $\chi^2$/NDF: 32.5/31

All: 0.009+/-0.007 $\chi^2$/NDF: 75.5/65

- sign 0.012+/-0.010 $\chi^2$/NDF: 42.8/33




Right In: 42.165+/-0.013 $\chi^2$/NDF: 1454378.8/15

Left Out: 37.968+/-0.008 $\chi^2$/NDF:323017.5/15

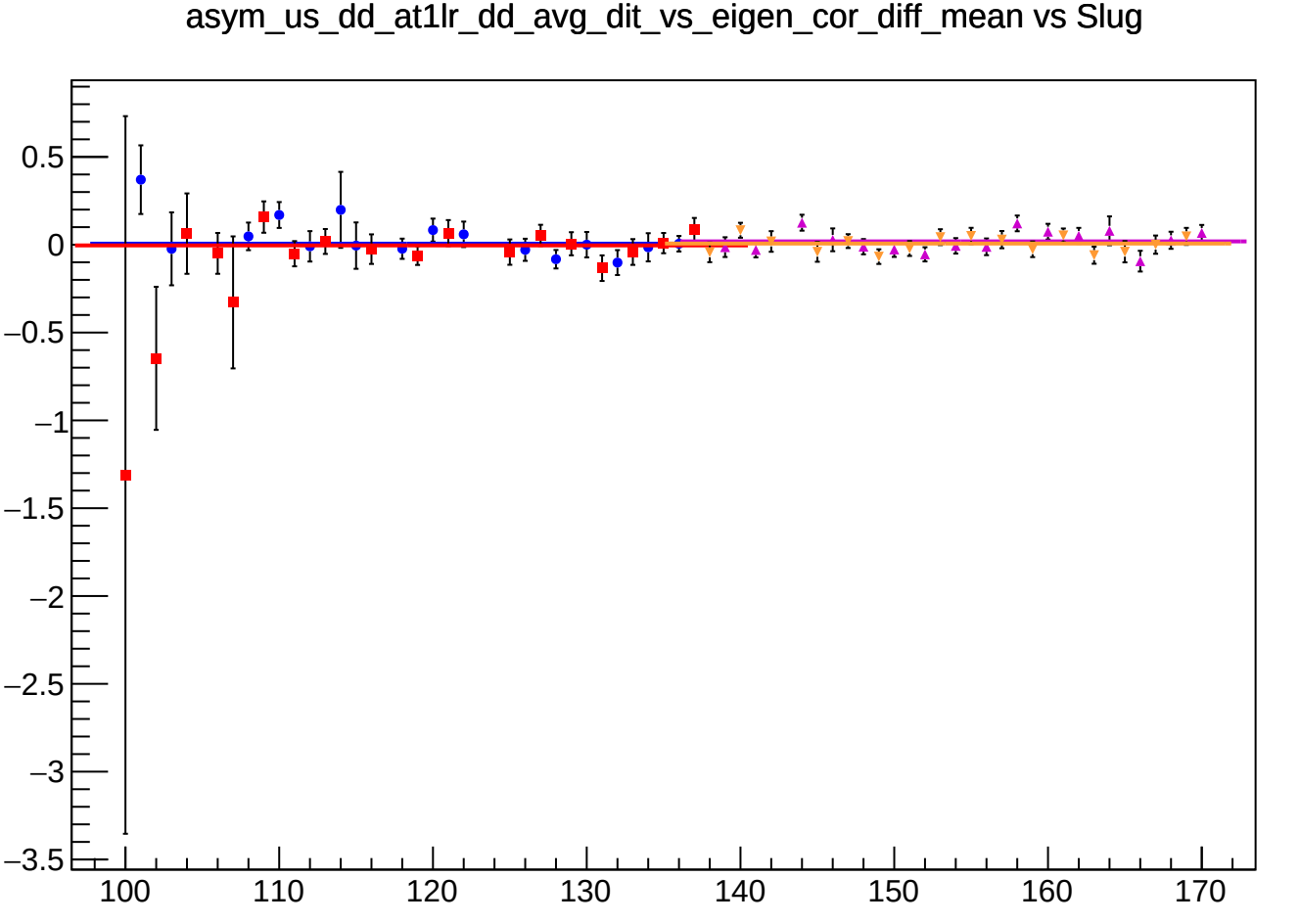
Right Out: 41.692+/-0.013 $\chi^2$/NDF: 1441204.7/17

Left In: 39.678+/-0.008 $\chi^2$/NDF:407546.7/15

+ sign 39.195+/-0.007 $\chi^2$/NDF: 1852195.2/31

All: 39.721+/-0.005 $\chi^2$/NDF: 3729145.5/65

- sign 40.263+/-0.007 $\chi^2$/NDF: 1865407.4/33




Right In: 0.006+/-0.018 $\chi^2$/NDF: 17.2/15

Left Out: 0.007+/-0.012 $\chi^2$/NDF:15.3/15

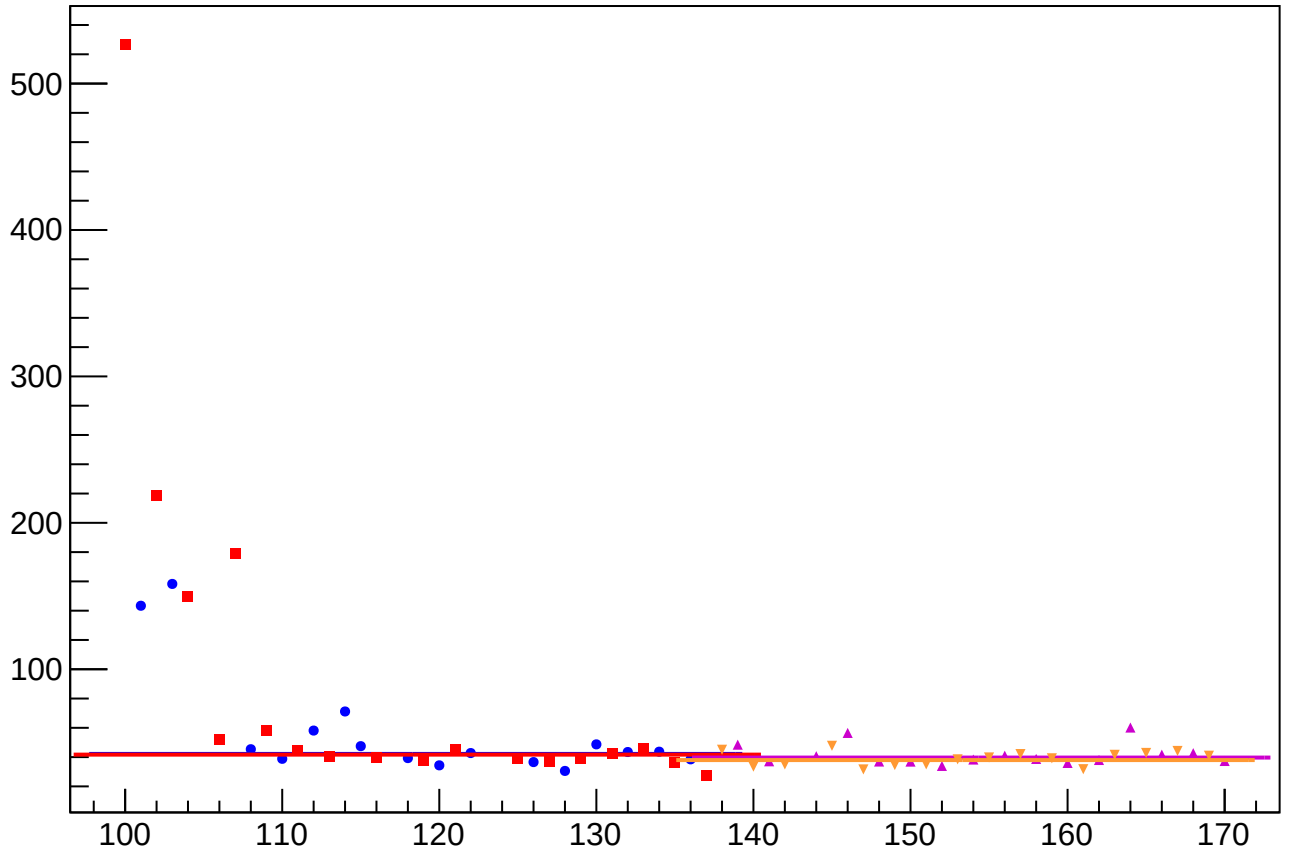
Right Out: -0.004+/-0.019 $\chi^2$/NDF: 16.3/17

Left In: 0.019+/-0.012 $\chi^2$/NDF:25.4/15

+ sign 0.007+/-0.010 $\chi^2$/NDF: 32.5/31

All: 0.009+/-0.007 $\chi^2$/NDF: 75.5/65

- sign 0.012+/-0.010 $\chi^2$/NDF: 42.8/33




Right In: 42.165+/-0.013 $\chi^2$/NDF: 1454378.8/15

Left Out: 37.968+/-0.008 $\chi^2$/NDF:323017.5/15

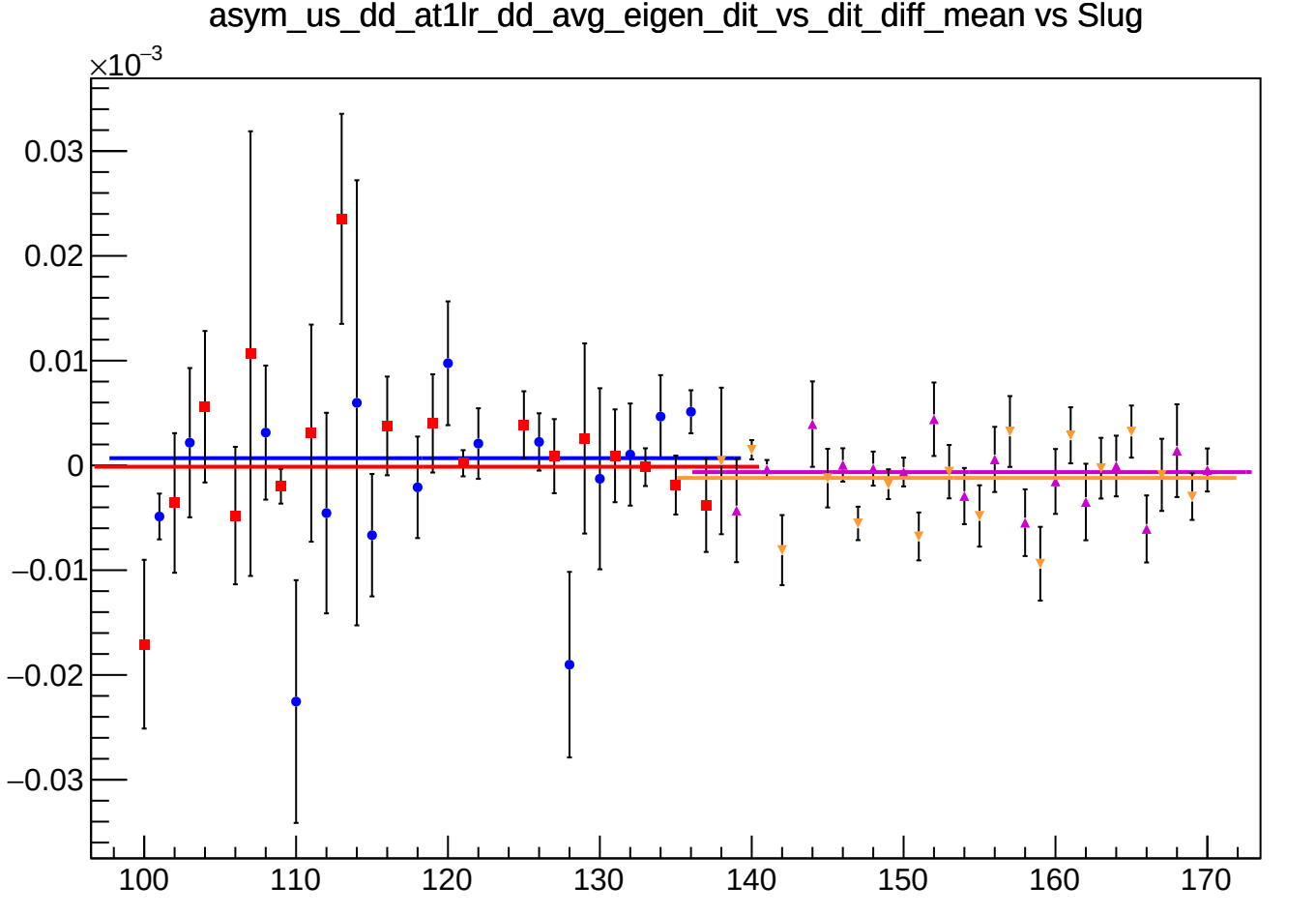
Right Out: 41.692+/-0.013 $\chi^2$/NDF: 1441204.7/17

Left In: 39.678+/-0.008 $\chi^2$/NDF:407546.7/15

+ sign 39.195+/-0.007 $\chi^2$/NDF: 1852195.2/31

All: 39.721+/-0.005 $\chi^2$/NDF: 3729145.5/65

- sign 40.263+/-0.007 $\chi^2$/NDF: 1865407.4/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 26.5/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:41.4/15

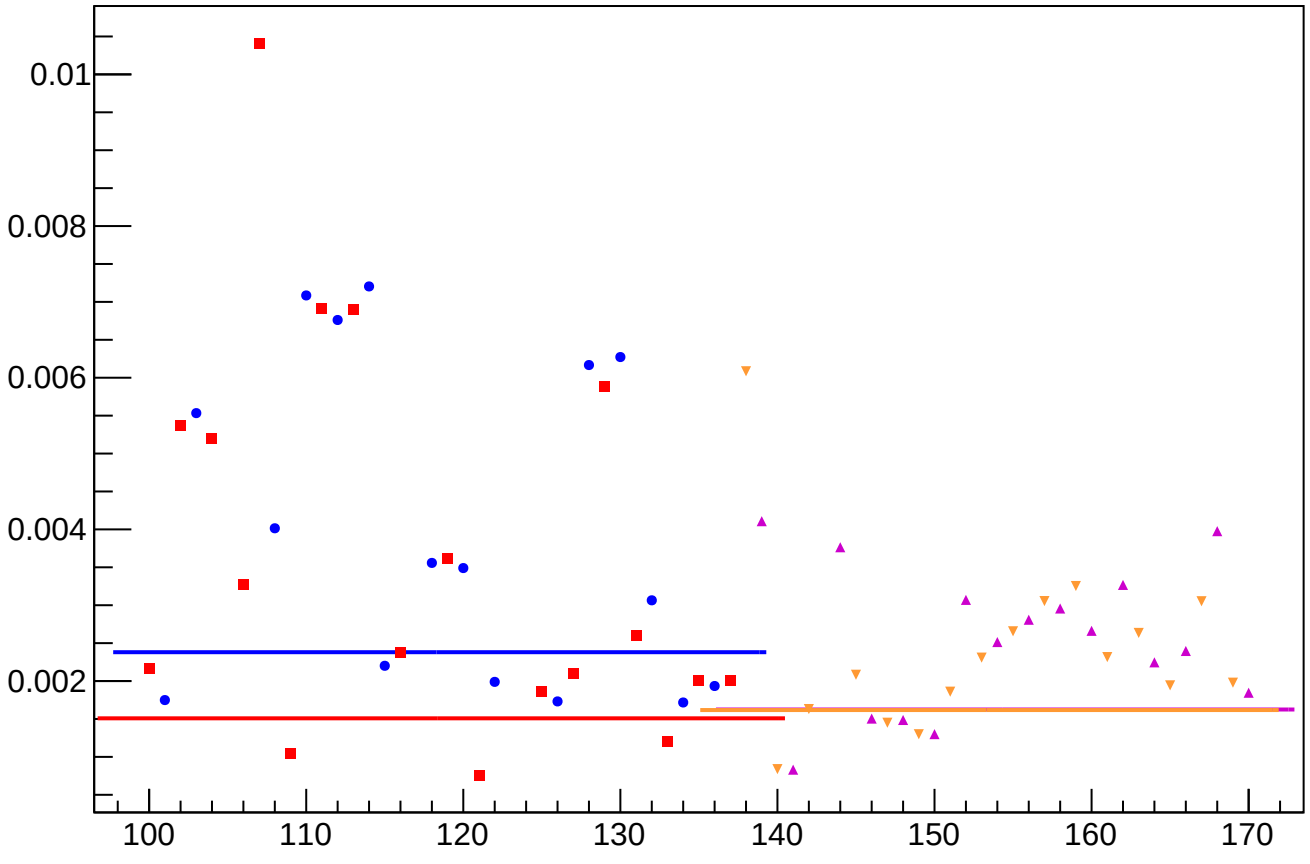
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 17.4/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:11.2/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 70.6/31

All: -0.000+/-0.000 $\chi^2$/NDF: 99.8/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 29.0/33




Right In: 0.002+/-0.000 $\chi^2$/NDF: 2832488.0/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:4468694.6/15

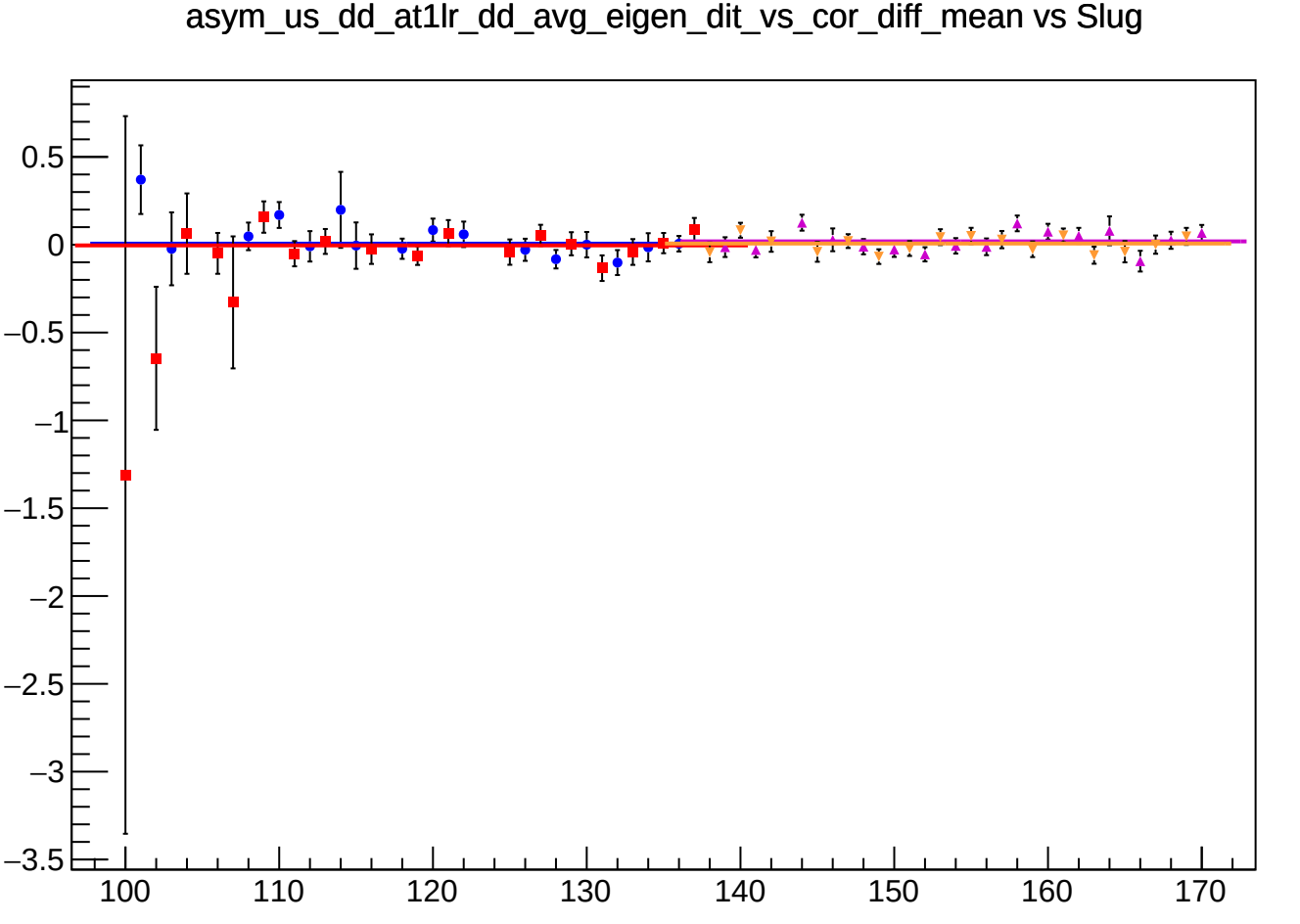
Right Out: 0.002+/-0.000 $\chi^2$/NDF: 5001667.0/17

Left In: 0.002+/-0.000 $\chi^2$/NDF:5416877.0/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 8190144.3/31

All: 0.002+/-0.000 $\chi^2$/NDF: 18830715.9/65

- sign 0.002+/-0.000 $\chi^2$/NDF: 10453029.9/33




Right In: 0.006+/-0.018 $\chi^2$/NDF: 17.2/15

Left Out: 0.007+/-0.012 $\chi^2$/NDF:15.3/15

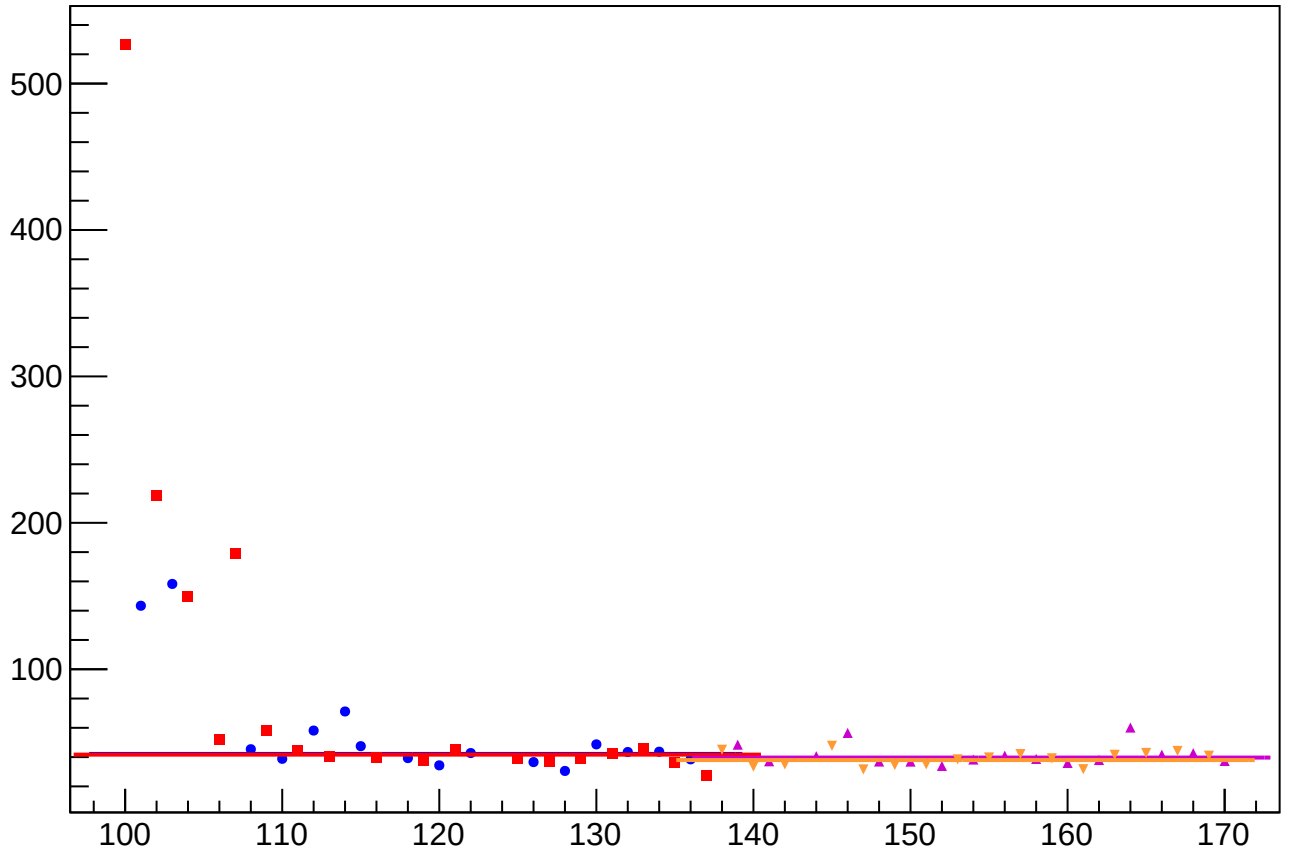
Right Out: -0.004+/-0.019 $\chi^2$/NDF: 16.3/17

Left In: 0.019+/-0.012 $\chi^2$/NDF:25.4/15

+ sign 0.007+/-0.010 $\chi^2$/NDF: 32.5/31

All: 0.009+/-0.007 $\chi^2$/NDF: 75.5/65

- sign 0.012+/-0.010 $\chi^2$/NDF: 42.8/33




Right In: 42.163+/-0.013 $\chi^2$/NDF: 1454592.8/15

Left Out: 37.968+/-0.008 $\chi^2$/NDF:323006.4/15

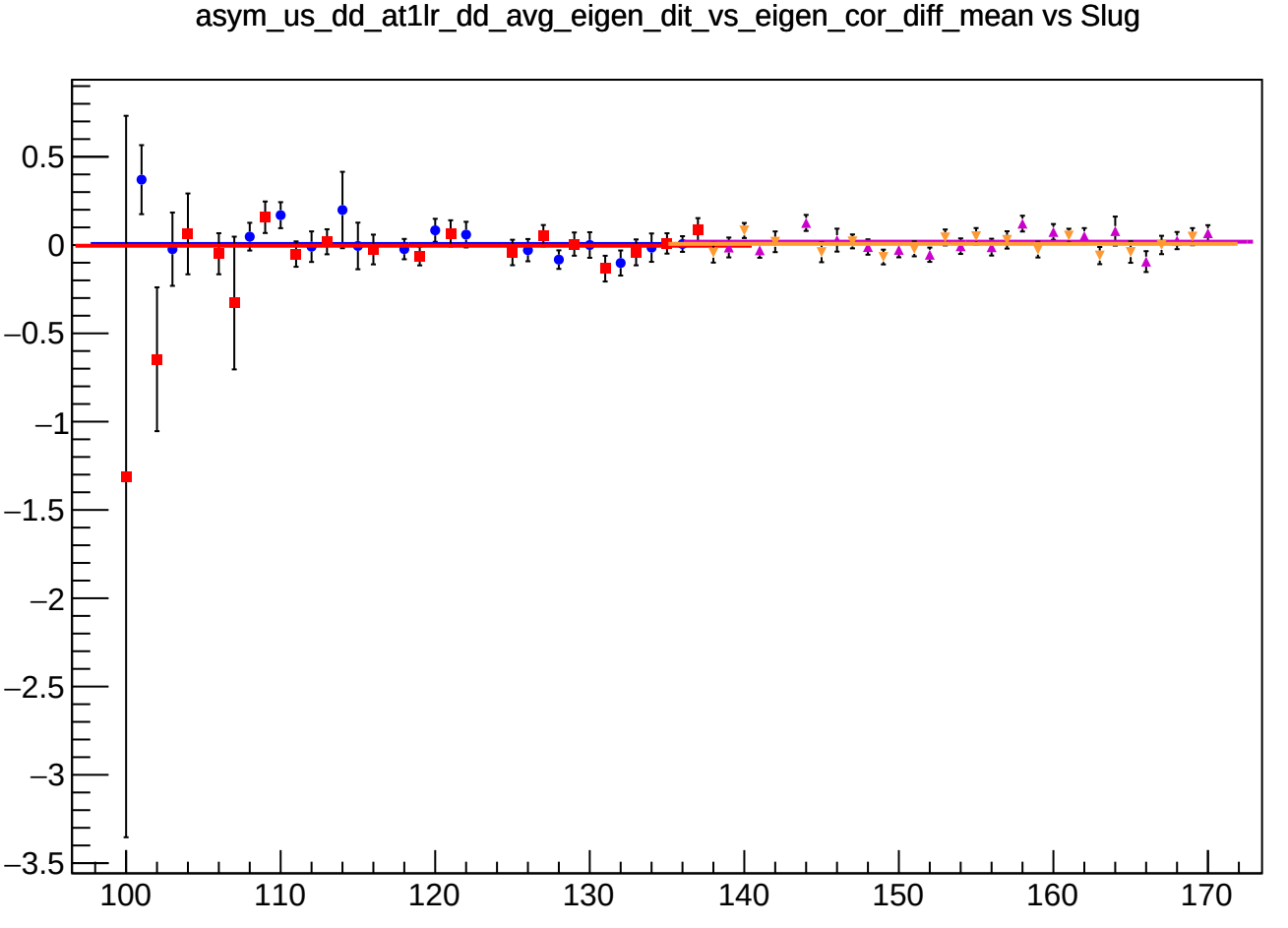
Right Out: 41.692+/-0.013 $\chi^2$/NDF: 1441185.4/17

Left In: 39.678+/-0.008 $\chi^2$/NDF:407582.8/15

+ sign 39.194+/-0.007 $\chi^2$/NDF: 1852309.4/31

All: 39.721+/-0.005 $\chi^2$/NDF: 3729298.5/65

- sign 40.263+/-0.007 $\chi^2$/NDF: 1865432.0/33




Right In: 0.006+/-0.018 $\chi^2$/NDF: 17.2/15

Left Out: 0.007+/-0.012 $\chi^2$/NDF:15.3/15

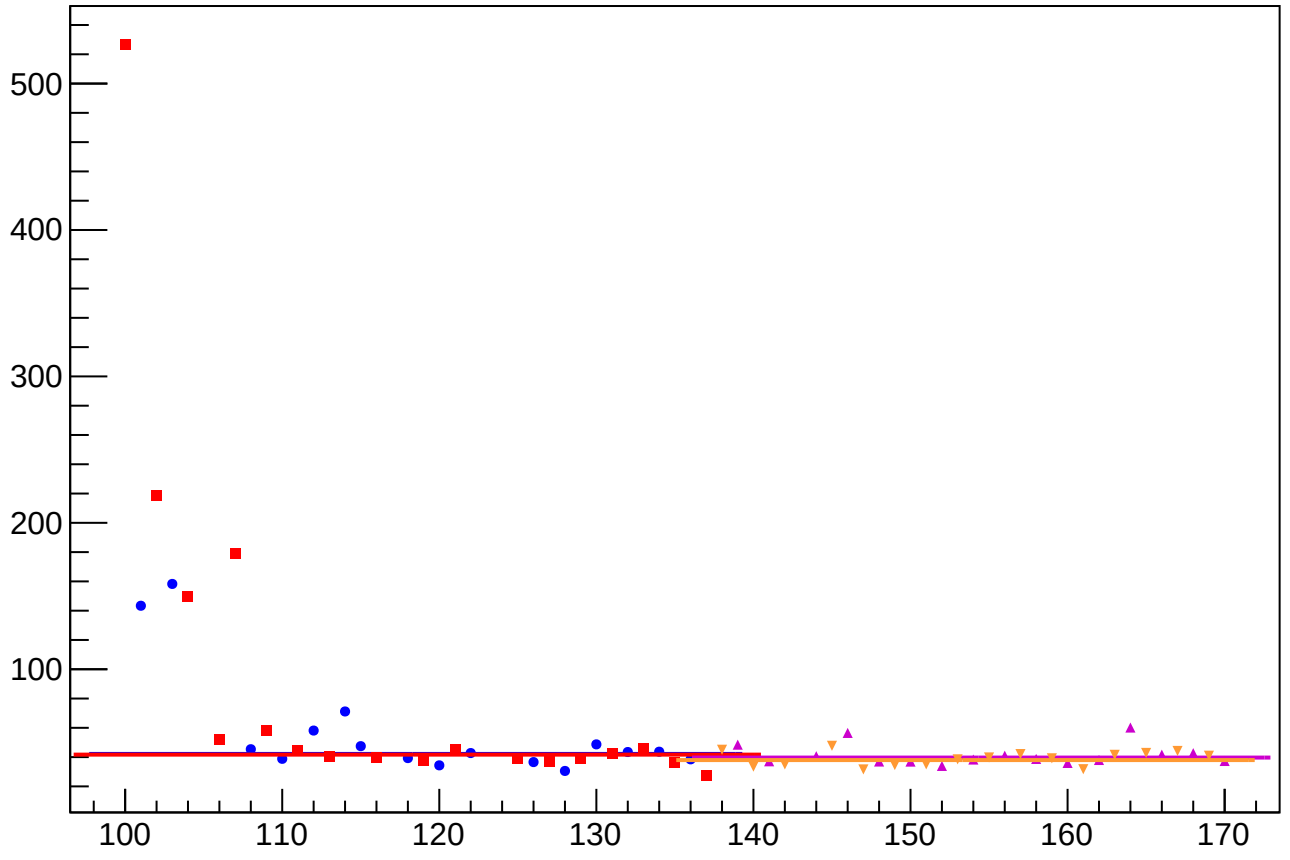
Right Out: -0.004+/-0.019 $\chi^2$/NDF: 16.3/17

Left In: 0.019+/-0.012 $\chi^2$/NDF:25.4/15

+ sign 0.007+/-0.010 $\chi^2$/NDF: 32.5/31

All: 0.009+/-0.007 $\chi^2$/NDF: 75.5/65

- sign 0.012+/-0.010 $\chi^2$/NDF: 42.8/33




Right In: 42.163+/-0.013 $\chi^2$/NDF: 1454592.8/15

Left Out: 37.968+/-0.008 $\chi^2$/NDF:323006.4/15

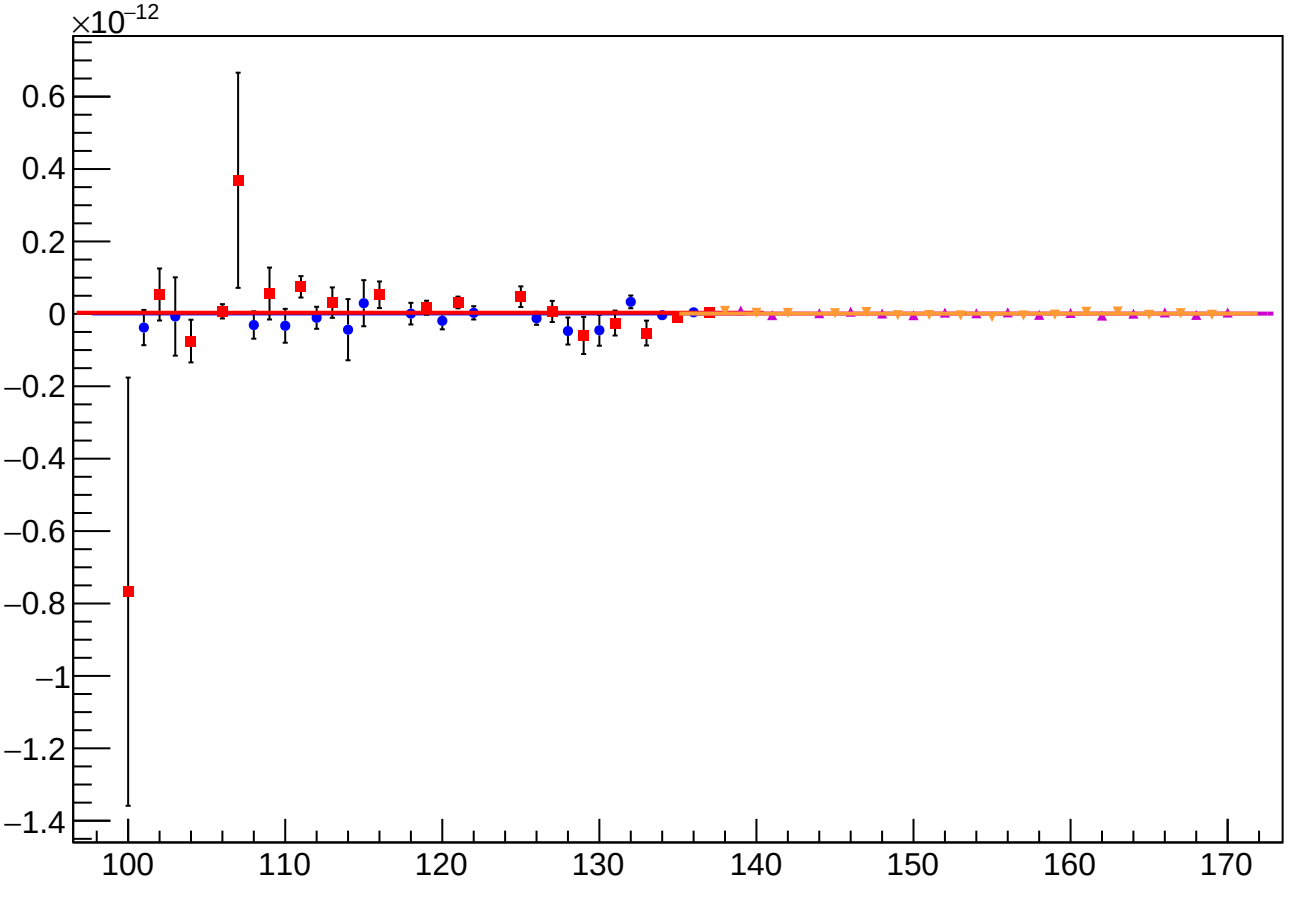
Right Out: 41.692+/-0.013 $\chi^2$/NDF: 1441185.4/17

Left In: 39.678+/-0.008 $\chi^2$/NDF:407582.8/15

+ sign 39.194+/-0.007 $\chi^2$/NDF: 1852309.4/31

All: 39.721+/-0.005 $\chi^2$/NDF: 3729298.5/65

- sign 40.263+/-0.007 $\chi^2$/NDF: 1865432.0/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 10.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.5/15

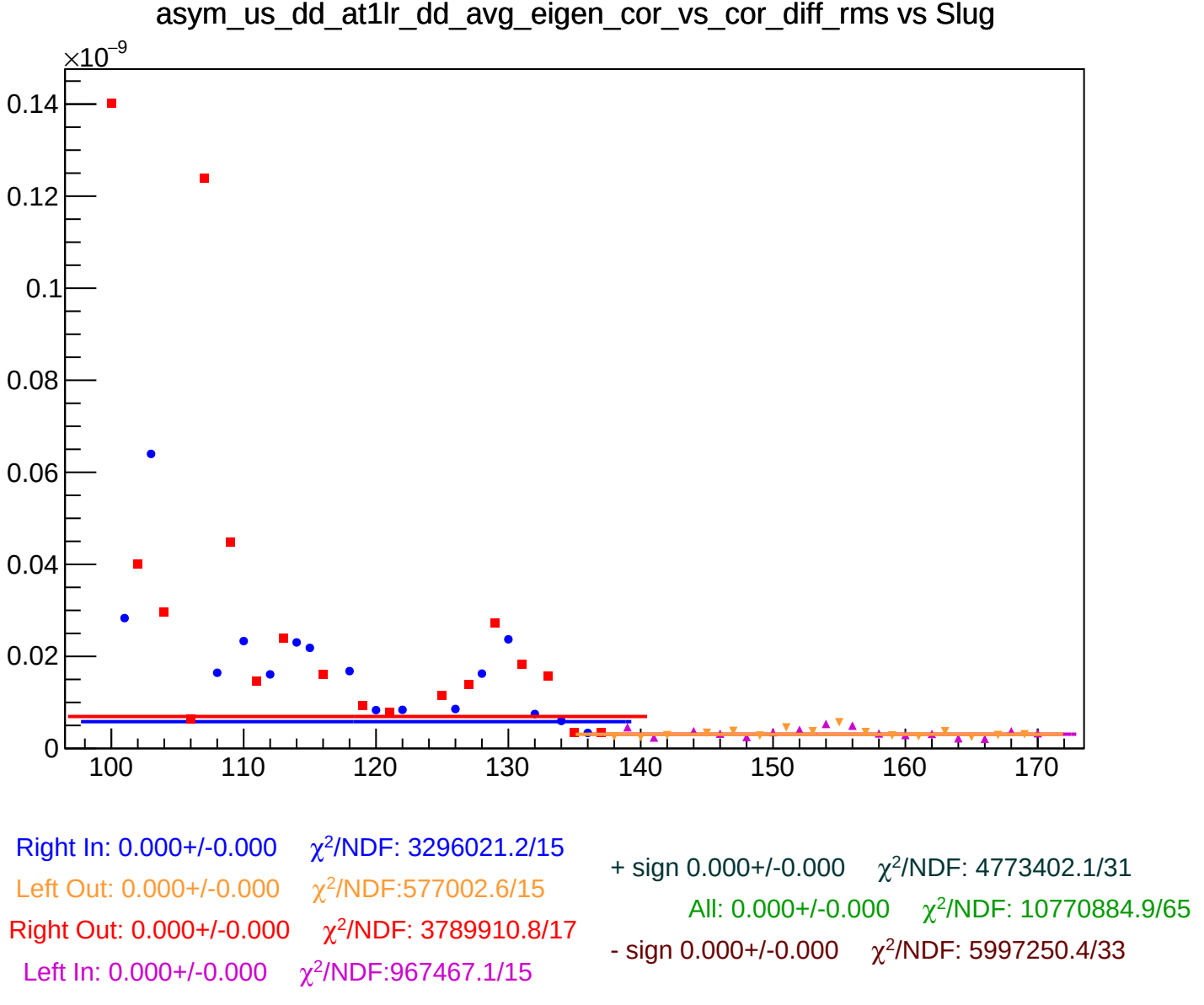
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 28.8/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:9.3/15

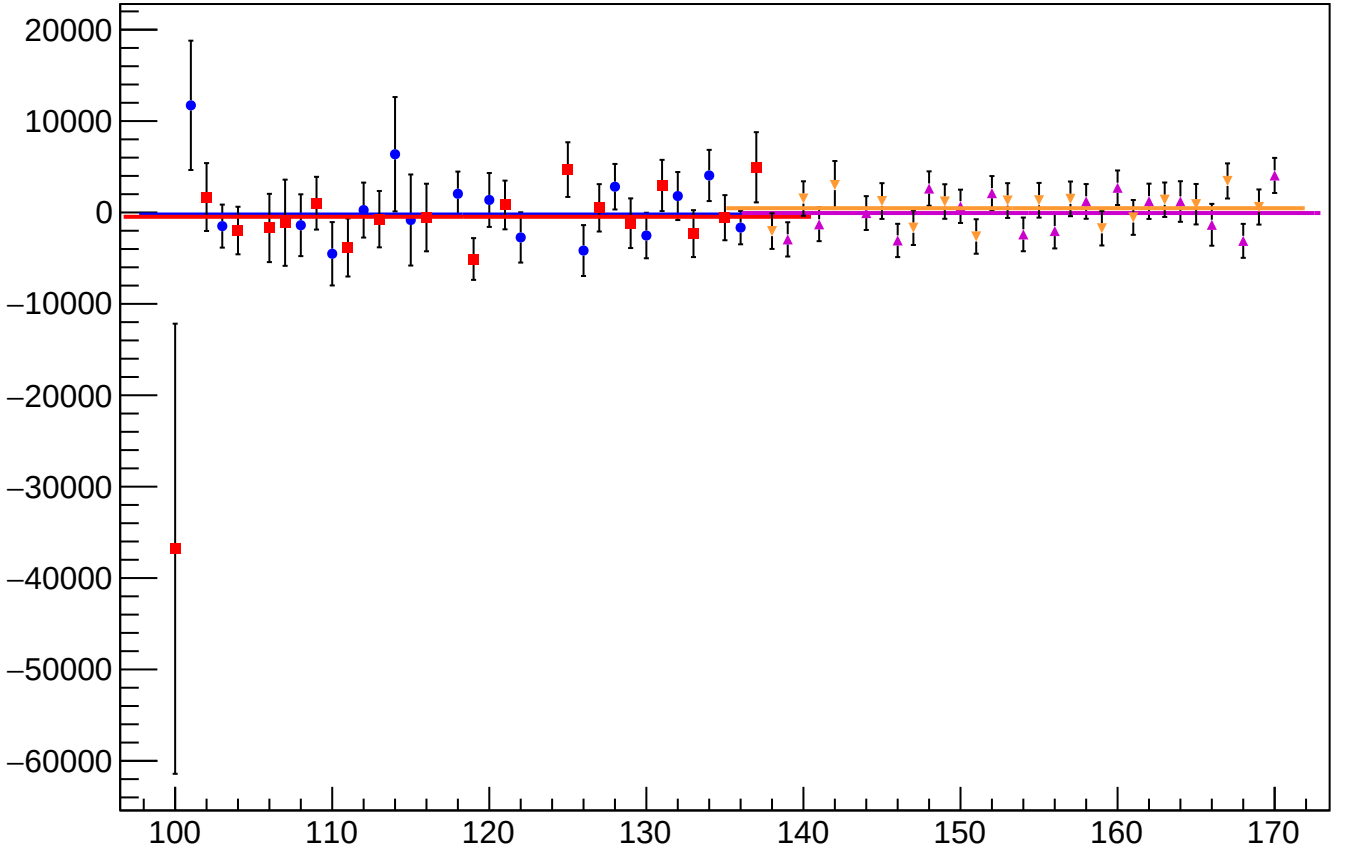
+ sign 0.000+/-0.000 $\chi^2$/NDF: 23.0/31

All: 0.000+/-0.000 $\chi^2$/NDF: 61.4/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 38.4/33


asym_us_dd_at1lr_dd_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10^−9
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3296021.2/15
Left Out: 0.000+/-0.000 χ²/NDF:577002.6/15
Right Out: 0.000+/-0.000 χ²/NDF: 3789910.8/17
Left In: 0.000+/-0.000 χ²/NDF:967467.1/15
+ sign 0.000+/-0.000 χ²/NDF: 4773402.1/31
All: 0.000+/-0.000 χ²/NDF: 10770884.9/65
- sign 0.000+/-0.000 χ²/NDF: 5997250.4/33

# reg_asym_us_dd_at1lr_dd_dd_mean vs Slug




Right In: -222.980+/-709.150 $\chi^2$/NDF: 15.8/15

Left Out: 467.109+/-487.534 $\chi^2$/NDF:12.2/15

Right Out: -472.410+/-711.475 $\chi^2$/NDF: 15.9/17

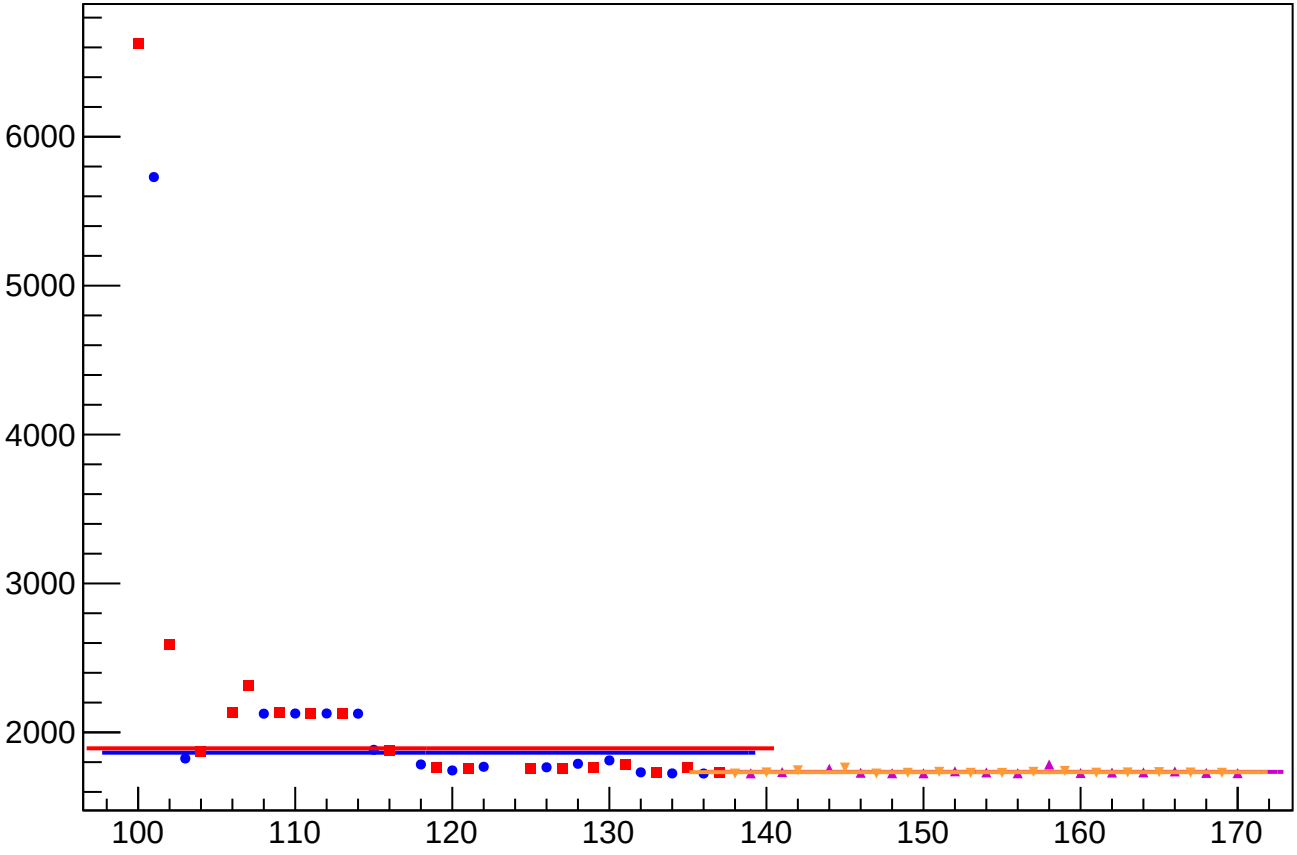
Left In: -62.568+/-477.072 $\chi^2$/NDF:22.7/15

+ sign 245.626+/-401.750 $\chi^2$/NDF: 28.7/31

All: 24.963+/-282.111 $\chi^2$/NDF: 68.1/65

- sign -189.687+/-396.238 $\chi^2$/NDF: 38.8/33

# reg_asym_us_dd_at1lr_dd_dd_rms vs Slug




Right In: 1863.581+/-0.501 $\chi^2$/NDF: 674665.6/15

Left Out: 1732.739+/-0.345 $\chi^2$/NDF:728.8/15

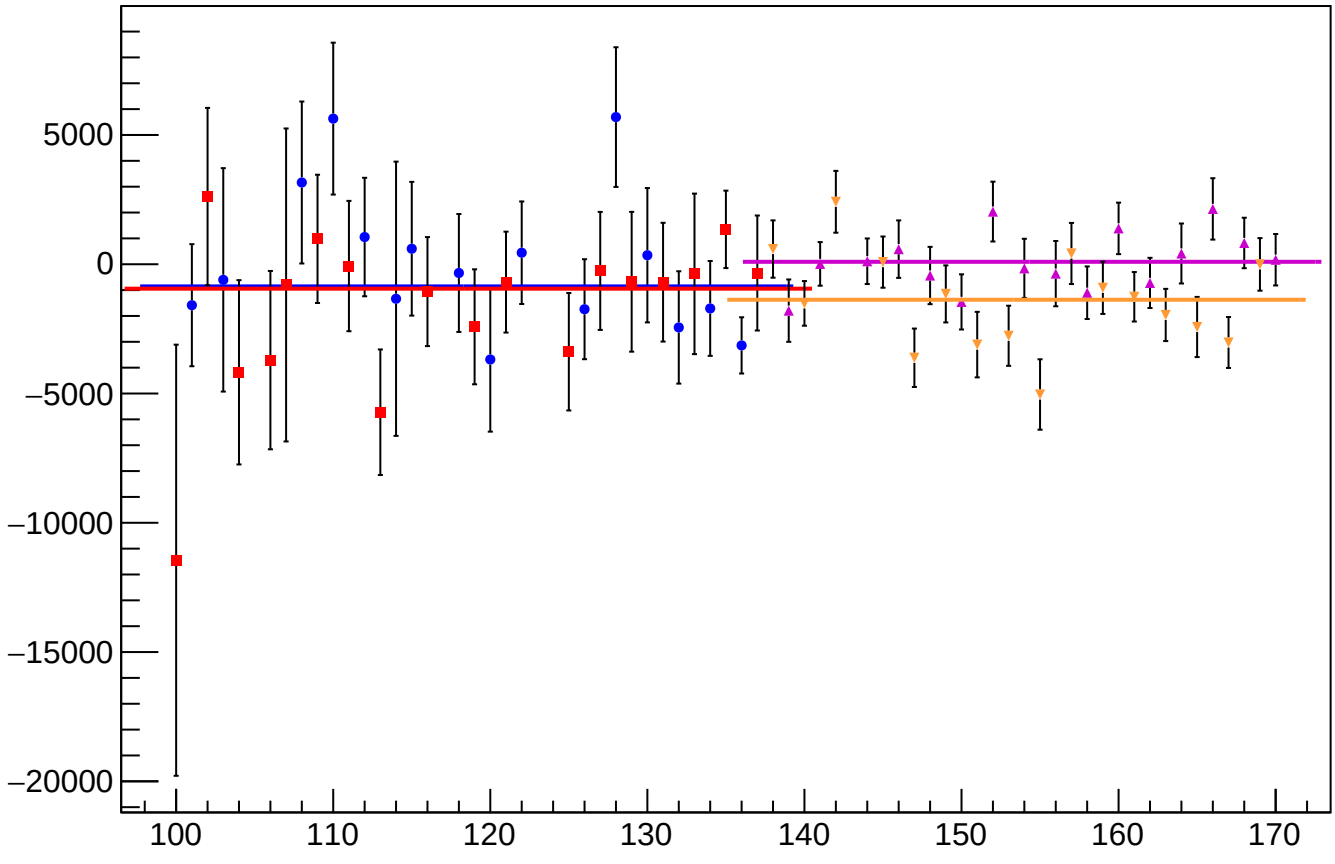
Right Out: 1892.866+/-0.503 $\chi^2$/NDF: 251512.9/17

Left In: 1734.690+/-0.337 $\chi^2$/NDF:1983.2/15

+ sign 1774.732+/-0.284 $\chi^2$/NDF: 721627.1/31

All: 1779.304+/-0.199 $\chi^2$/NDF: 1043826.2/65

- sign 1783.751+/-0.280 $\chi^2$/NDF: 321688.2/33




Right In: -857.294+/-549.791 $\chi^2$/NDF: 20.6/15

Left Out: -1372.875+/-268.388 $\chi^2$/NDF:38.2/15

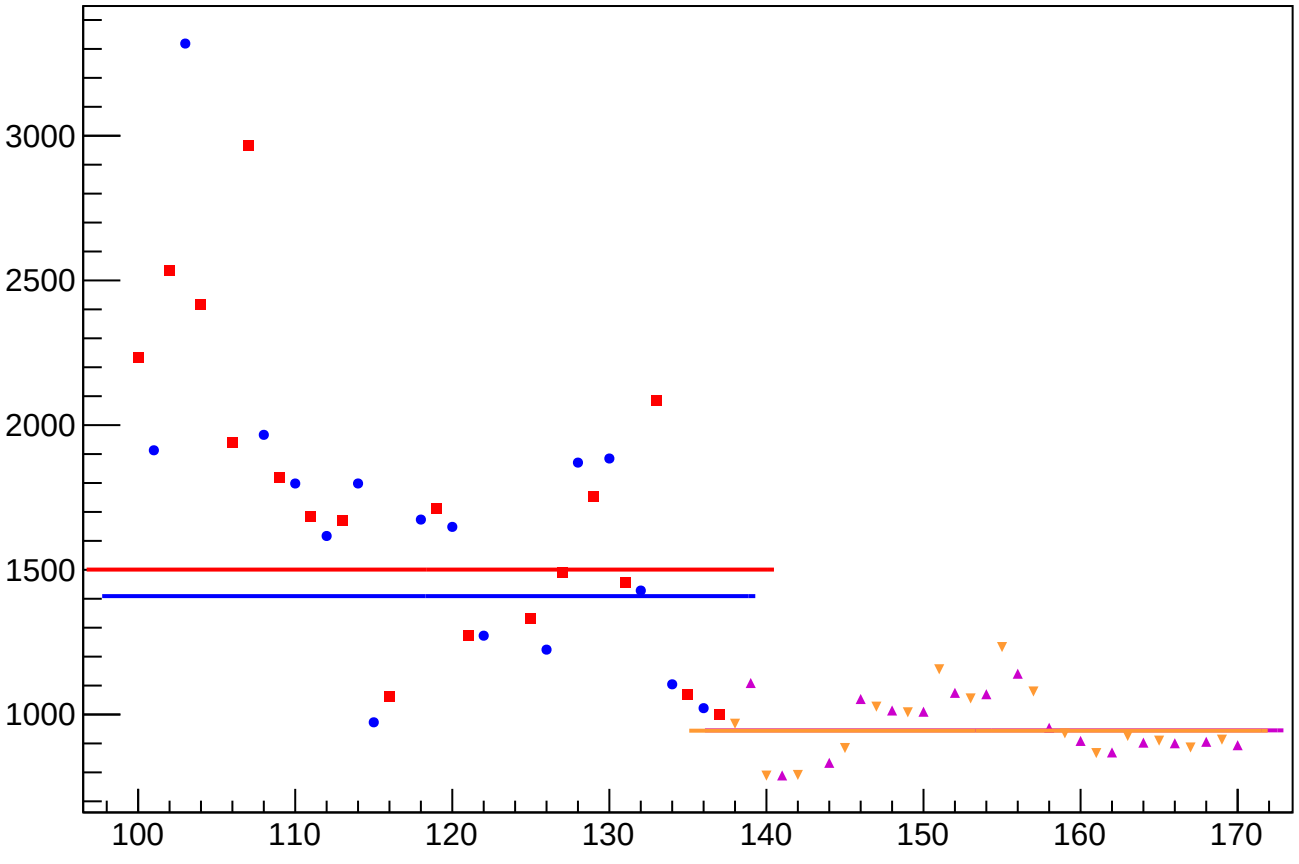
Right Out: -944.718+/-583.967 $\chi^2$/NDF: 12.9/17

Left In: 94.788+/-261.995 $\chi^2$/NDF:15.4/15

+ sign -1273.655+/-241.185 $\chi^2$/NDF: 59.5/31

All: -671.187+/-169.780 $\chi^2$/NDF: 102.8/65

- sign -79.389+/-239.040 $\chi^2$/NDF: 30.9/33




Right In: 1409.096+/-0.389 $\chi^2$/NDF: 1167706.6/15

Left Out: 944.103+/-0.190 $\chi^2$/NDF:338240.9/15

Right Out: 1500.801+/-0.413 $\chi^2$/NDF: 1030768.2/17

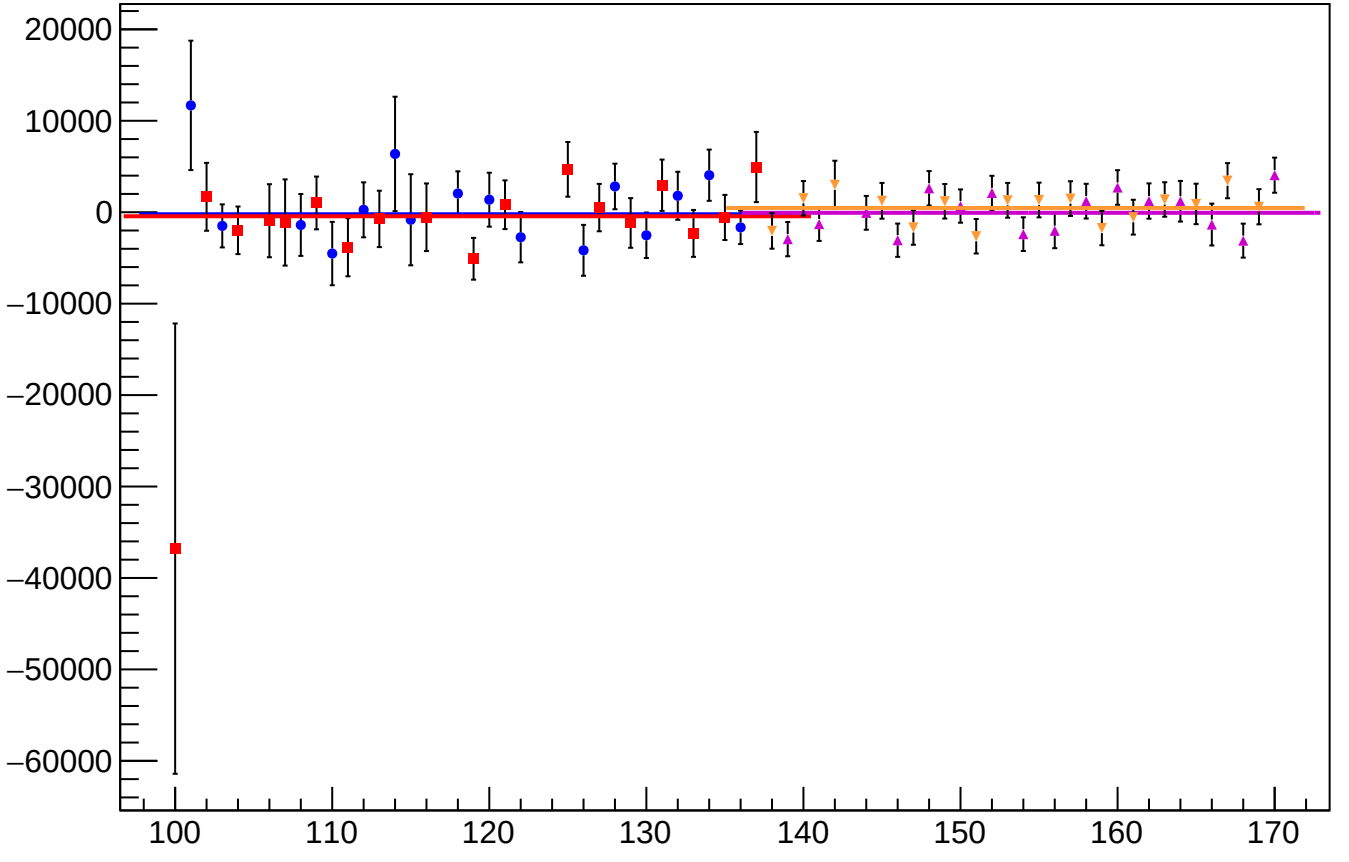
Left In: 945.194+/-0.185 $\chi^2$/NDF:297588.3/15

+ sign 1033.588+/-0.171 $\chi^2$/NDF: 2661260.2/31

All: 1035.960+/-0.120 $\chi^2$/NDF: 5497102.5/65

- sign 1038.290+/-0.169 $\chi^2$/NDF: 2835458.8/33

# cor_asym_us_dd_at1lr_dd_dd_mean vs Slug




Right In: -223.754+/-709.151 $\chi^2$/NDF: 15.8/15

Left Out: 467.182+/-487.534 $\chi^2$/NDF:12.2/15

Right Out: -443.022+/-713.098 $\chi^2$/NDF: 15.8/17

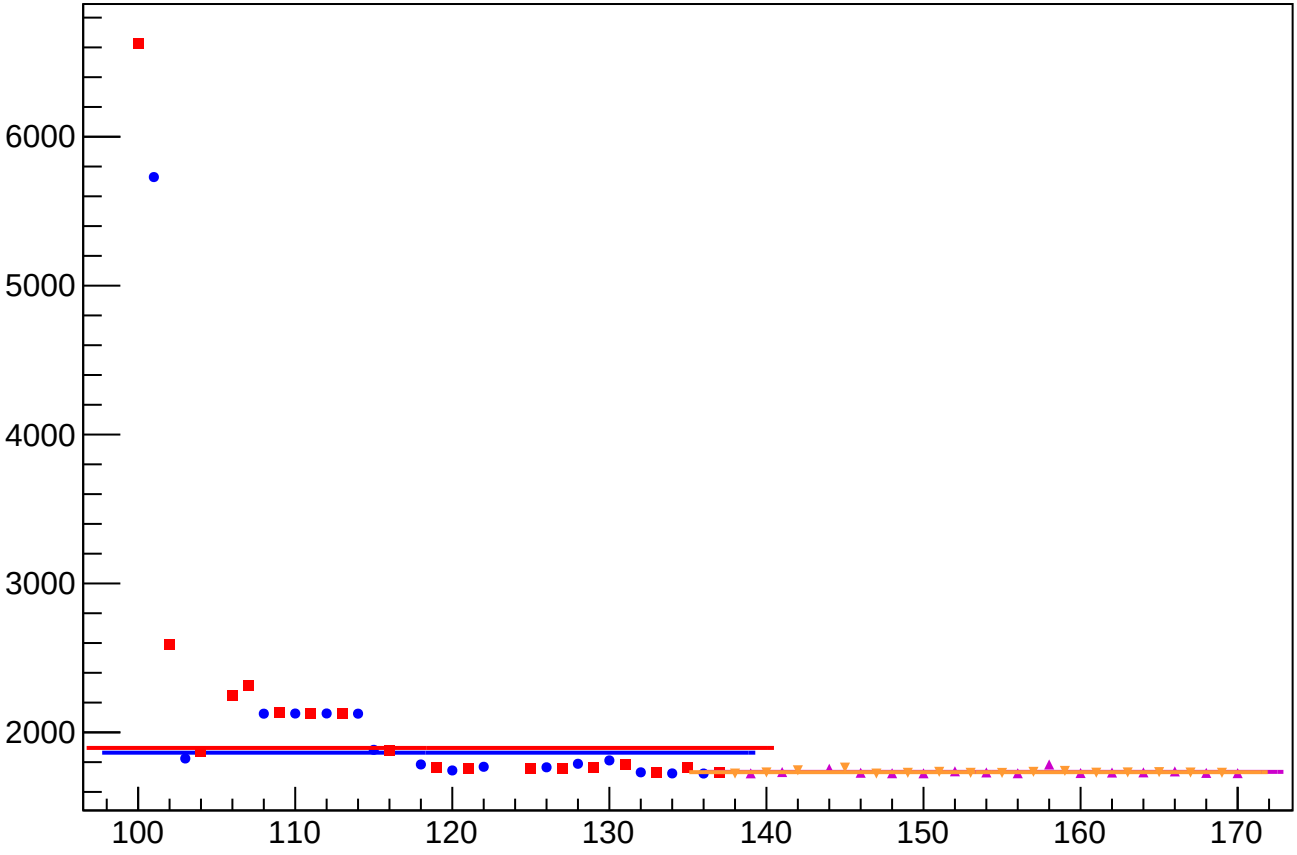
Left In: -62.639+/-477.072 $\chi^2$/NDF:22.7/15

+ sign 245.427+/-401.750 $\chi^2$/NDF: 28.7/31

All: 29.799+/-282.212 $\chi^2$/NDF: 67.9/65

- sign -180.250+/-396.518 $\chi^2$/NDF: 38.7/33

# cor_asym_us_dd_at1lr_dd_dd_rms vs Slug




Right In: 1863.581+/-0.501 $\chi^2$/NDF: 674665.4/15

Left Out: 1732.739+/-0.345 $\chi^2$/NDF:728.8/15

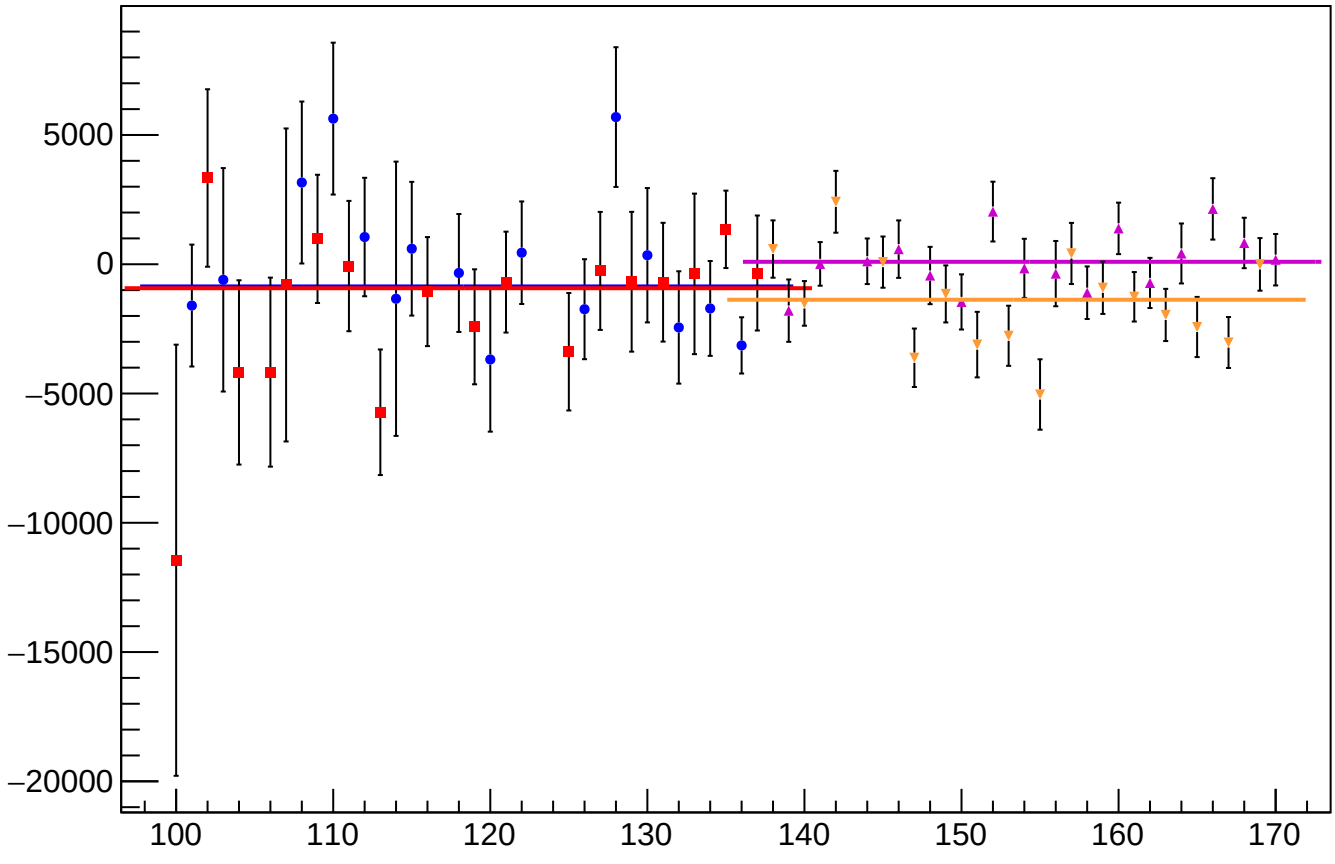
Right Out: 1895.491+/-0.504 $\chi^2$/NDF: 259171.7/17

Left In: 1734.690+/-0.337 $\chi^2$/NDF:1983.2/15

+ sign 1774.732+/-0.284 $\chi^2$/NDF: 721627.0/31

All: 1779.634+/-0.200 $\chi^2$/NDF: 1053623.0/65

- sign 1784.409+/-0.280 $\chi^2$/NDF: 331408.3/33




Right In: -858.115+/-549.748 $\chi^2$/NDF: 20.6/15

Left Out: -1372.857+/-268.388 $\chi^2$/NDF:38.2/15

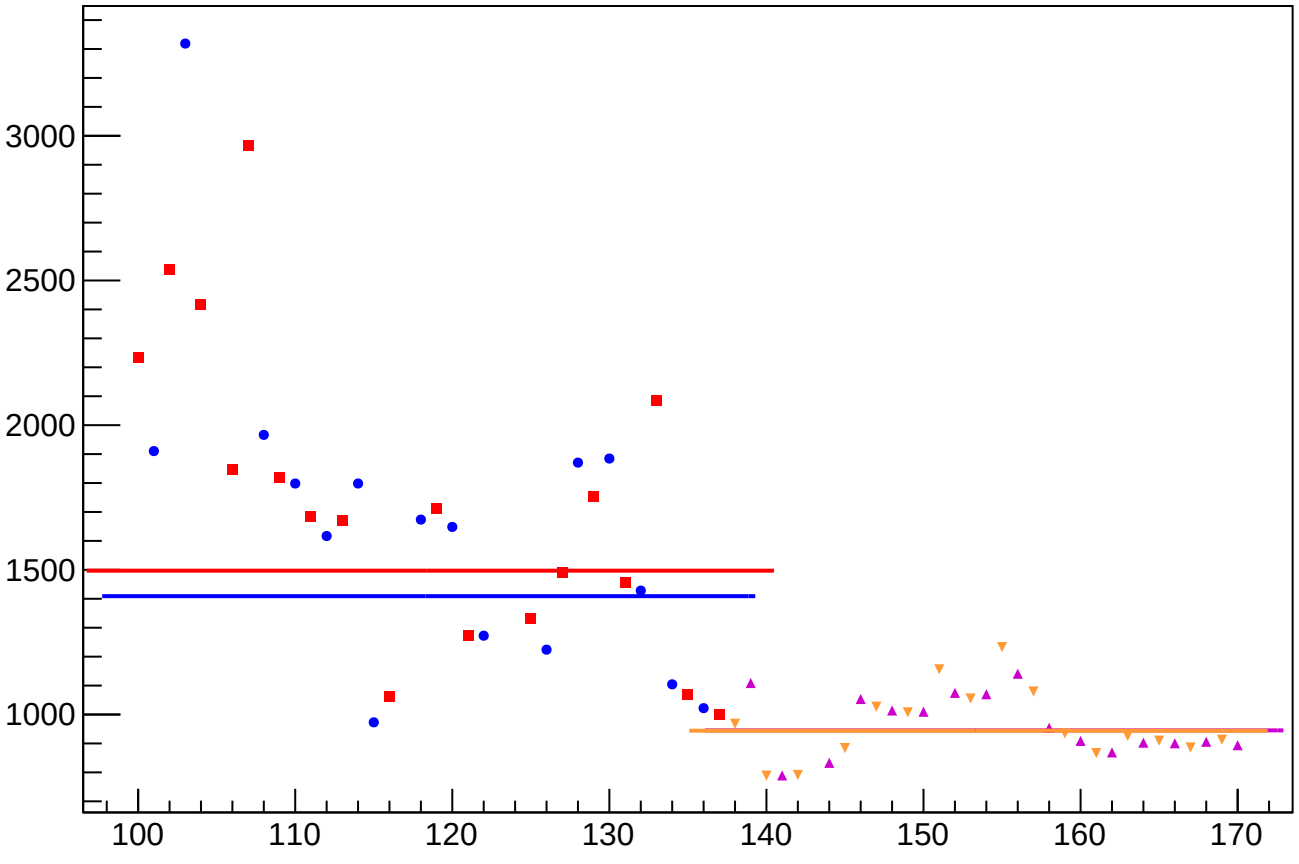
Right Out: -927.191+/-584.886 $\chi^2$/NDF: 13.5/17

Left In: 94.749+/-261.993 $\chi^2$/NDF:15.4/15

+ sign -1273.785+/-241.181 $\chi^2$/NDF: 59.5/31

All: -669.723+/-169.801 $\chi^2$/NDF: 103.4/65

- sign -76.035+/-239.101 $\chi^2$/NDF: 31.5/33




Right In: 1409.018+/-0.389 $\chi^2$/NDF: 1167065.5/15

Left Out: 944.104+/-0.190 $\chi^2$/NDF:338206.2/15

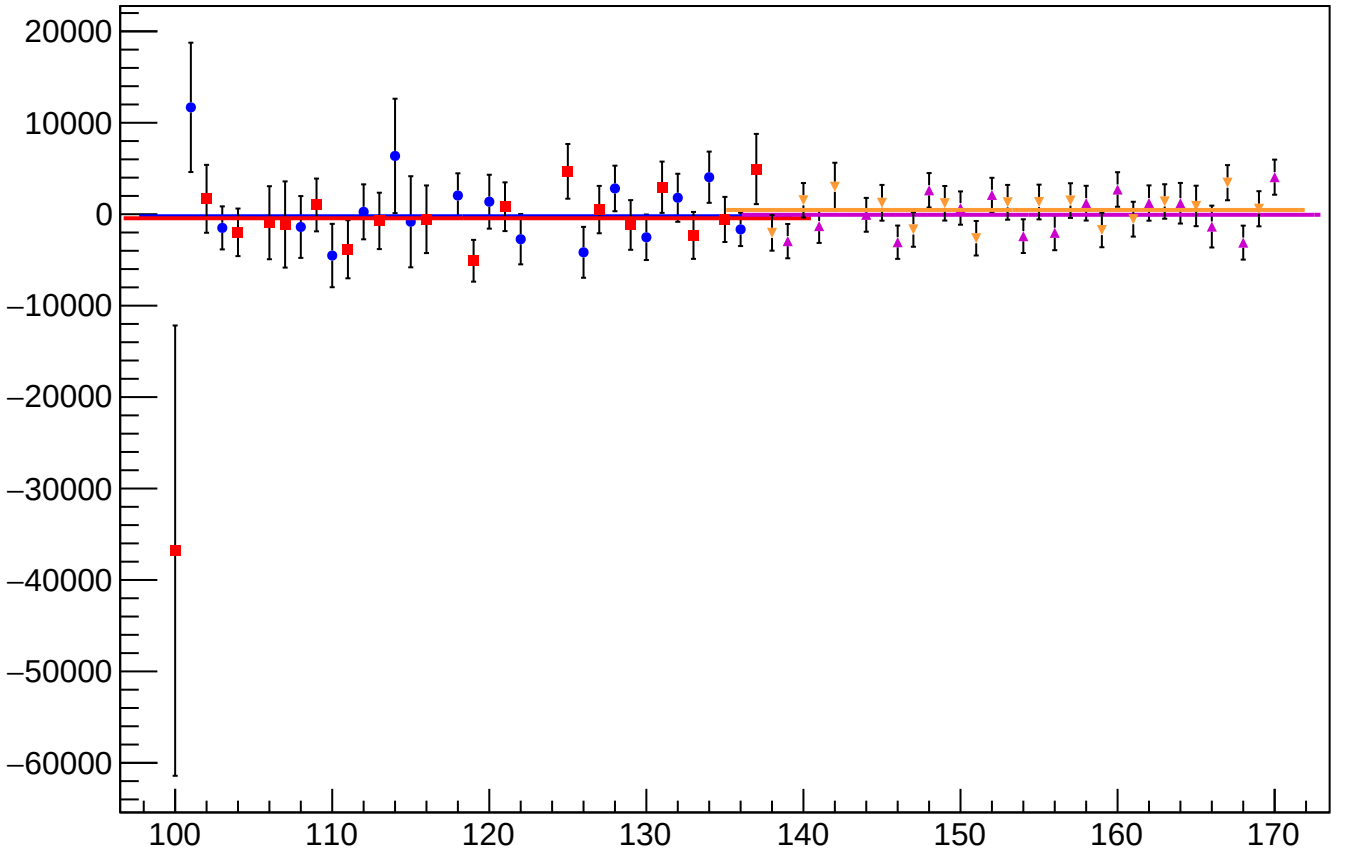
Right Out: 1497.149+/-0.414 $\chi^2$/NDF: 1018123.6/17

Left In: 945.188+/-0.185 $\chi^2$/NDF:297608.1/15

+ sign 1033.586+/-0.171 $\chi^2$/NDF: 2660337.3/31

All: 1035.524+/-0.120 $\chi^2$/NDF: 5459825.4/65

- sign 1037.430+/-0.169 $\chi^2$/NDF: 2799231.9/33




Right In: -223.754+/-709.151 $\chi^2$/NDF: 15.8/15

Left Out: 467.182+/-487.534 $\chi^2$/NDF:12.2/15

Right Out: -443.022+/-713.098 $\chi^2$/NDF: 15.8/17

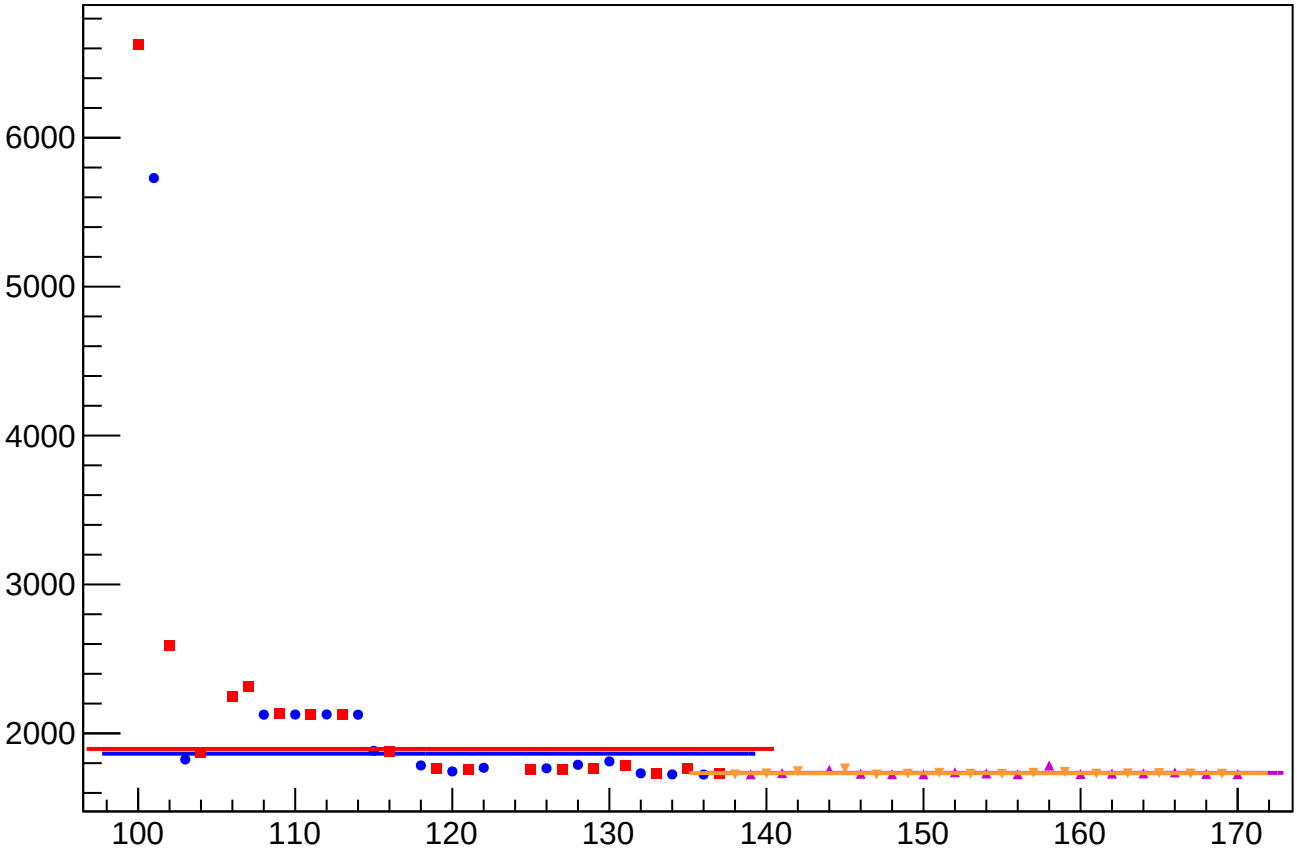
Left In: -62.639+/-477.072 $\chi^2$/NDF:22.7/15

+ sign 245.427+/-401.750 $\chi^2$/NDF: 28.7/31

All: 29.799+/-282.212 $\chi^2$/NDF: 67.9/65

- sign -180.250+/-396.518 $\chi^2$/NDF: 38.7/33

# eigen_cor_asym_us_dd_at1lr_dd_dd_rms vs Slug




Right In: 1863.581+/-0.501 $\chi^2$/NDF: 674665.4/15

Left Out: 1732.739+/-0.345 $\chi^2$/NDF:728.8/15

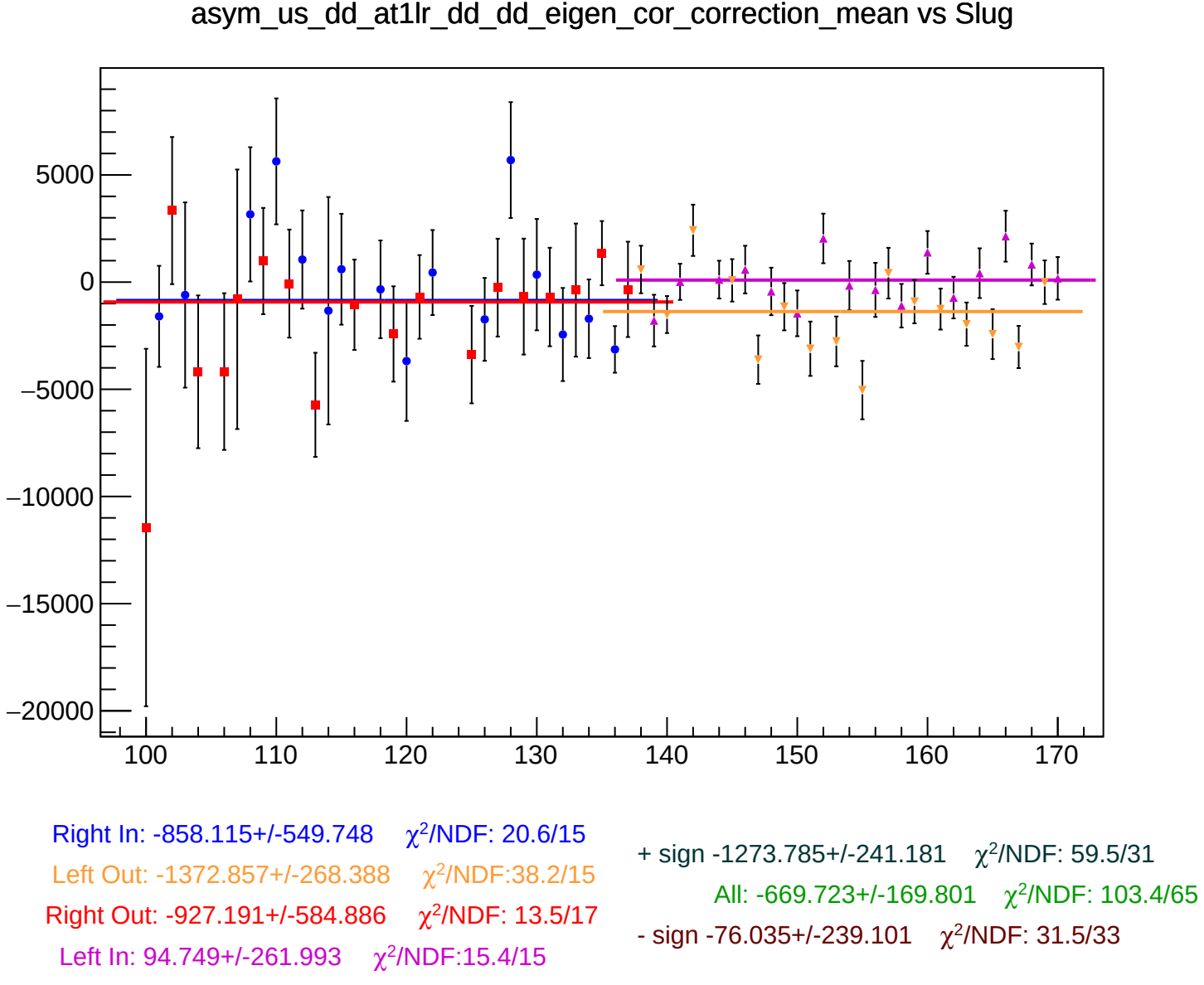
Right Out: 1895.491+/-0.504 $\chi^2$/NDF: 259171.7/17

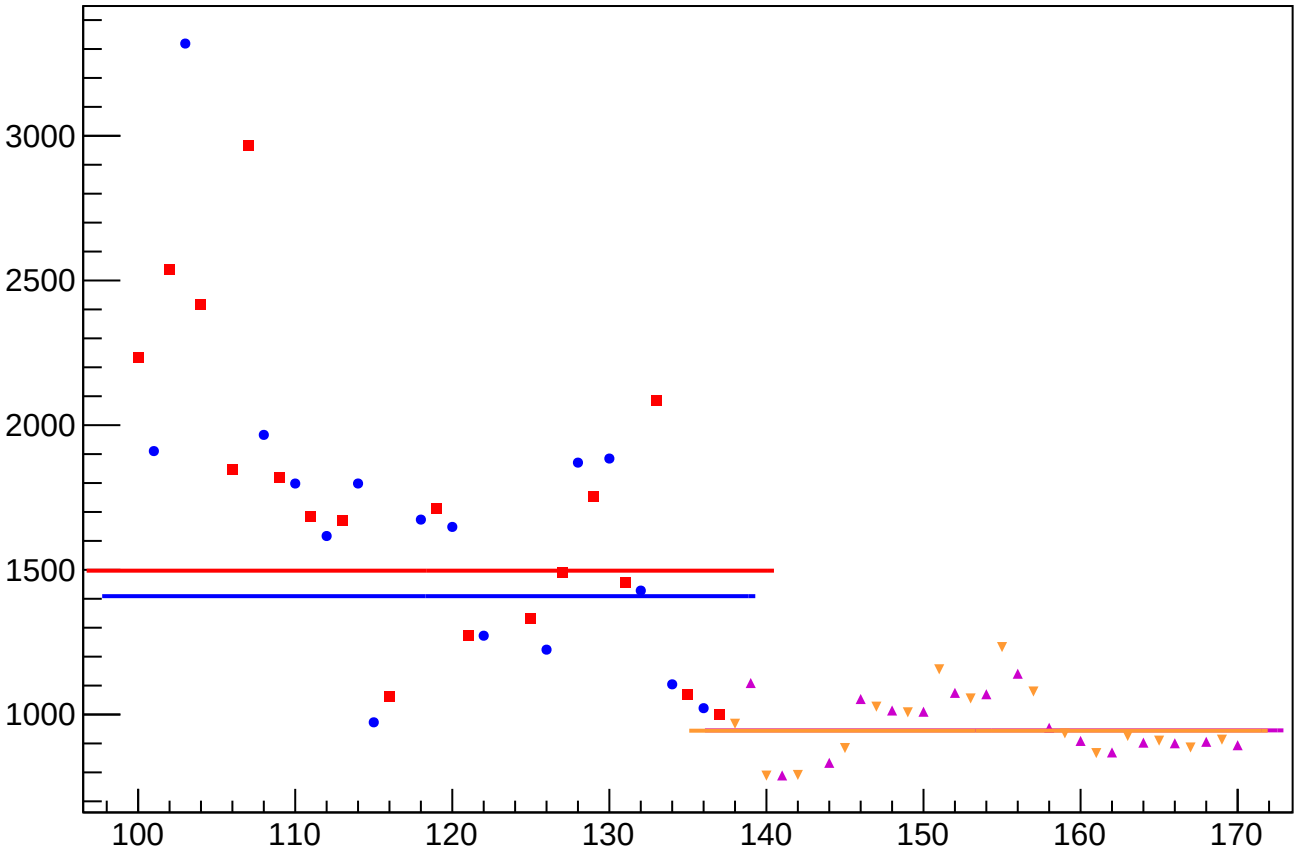
Left In: 1734.690+/-0.337 $\chi^2$/NDF:1983.2/15

+ sign 1774.732+/-0.284 $\chi^2$/NDF: 721627.0/31

All: 1779.634+/-0.200 $\chi^2$/NDF: 1053623.0/65

- sign 1784.409+/-0.280 $\chi^2$/NDF: 331408.3/33


asym_us_dd_at1lr_dd_dd_eigen_cor_correction_mean vs Slug
5000
0
−5000
−10000
−15000
−20000
100
110
120
130
140
150
160
170
Right In: -858.115+/-549.748 χ²/NDF: 20.6/15
Left Out: -1372.857+/-268.388 χ²/NDF:38.2/15
Right Out: -927.191+/-584.886 χ²/NDF: 13.5/17
Left In: 94.749+/-261.993 χ²/NDF:15.4/15
+ sign -1273.785+/-241.181 χ²/NDF: 59.5/31
All: -669.723+/-169.801 χ²/NDF: 103.4/65
- sign -76.035+/-239.101 χ²/NDF: 31.5/33




Right In: 1409.018+/-0.389 $\chi^2$/NDF: 1167065.5/15

Left Out: 944.104+/-0.190 $\chi^2$/NDF:338206.2/15

Right Out: 1497.149+/-0.414 $\chi^2$/NDF: 1018123.6/17

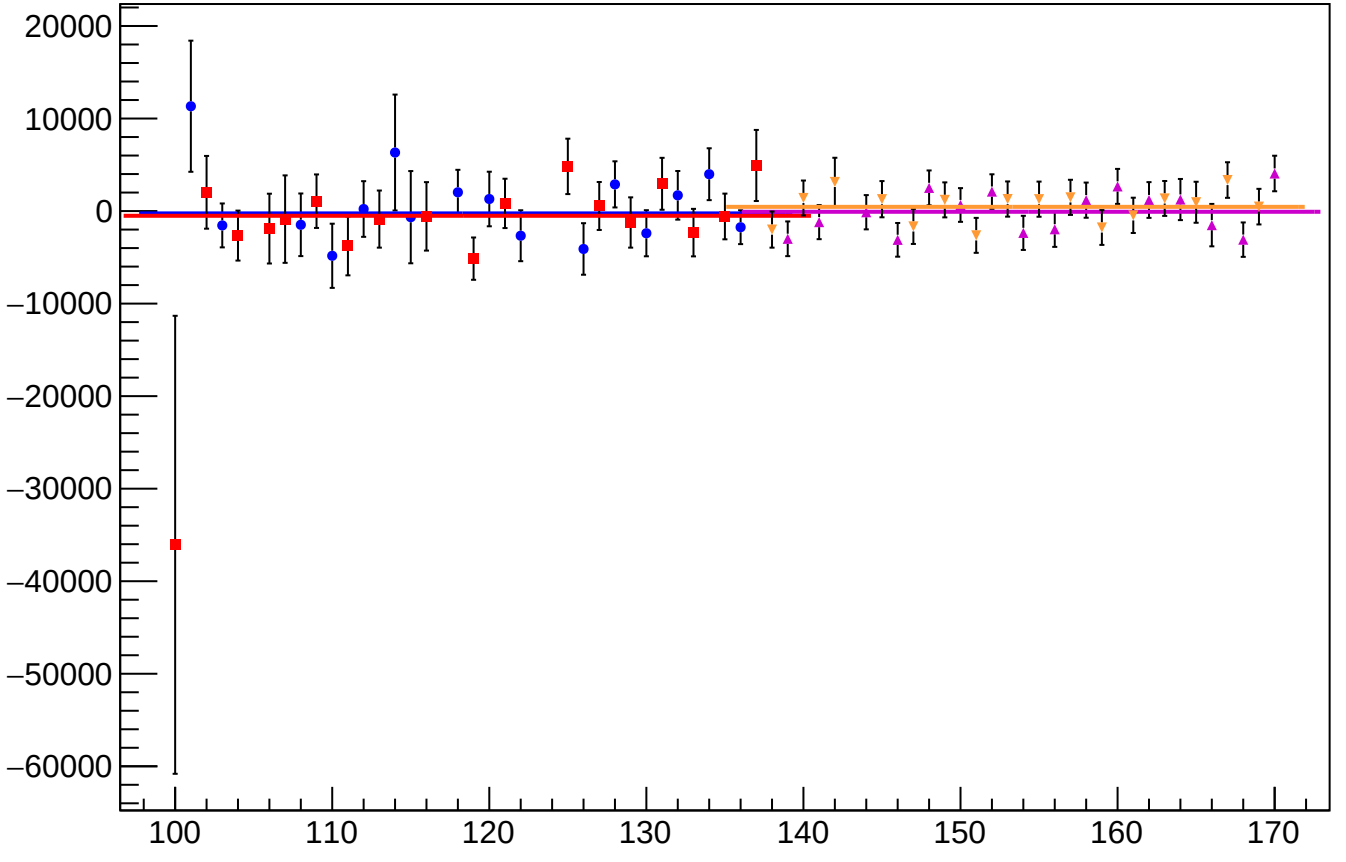
Left In: 945.188+/-0.185 $\chi^2$/NDF:297608.1/15

+ sign 1033.586+/-0.171 $\chi^2$/NDF: 2660337.3/31

All: 1035.524+/-0.120 $\chi^2$/NDF: 5459825.4/65

- sign 1037.430+/-0.169 $\chi^2$/NDF: 2799231.9/33

# dit_asym_us_dd_at1lr_dd_dd_mean vs Slug




Right In: -252.024+/-709.973 $\chi^2$/NDF: 15.6/15

Left Out: 456.057+/-487.734 $\chi^2$/NDF:12.0/15

Right Out: -510.117+/-715.442 $\chi^2$/NDF: 16.4/17

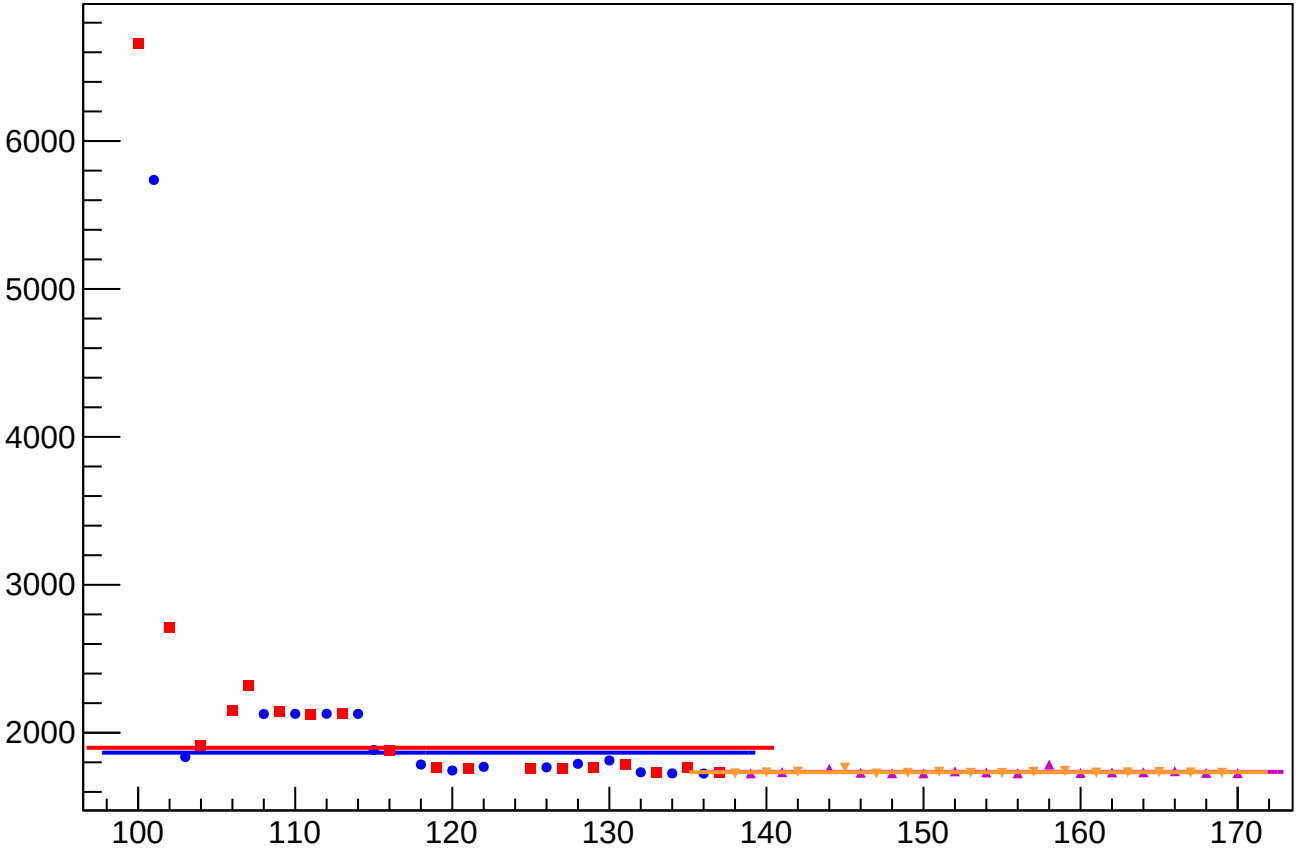
Left In: -77.581+/-477.341 $\chi^2$/NDF:22.5/15

+ sign 229.030+/-402.012 $\chi^2$/NDF: 28.3/31

All: 6.389+/-282.503 $\chi^2$/NDF: 68.1/65

- sign -210.816+/-397.074 $\chi^2$/NDF: 39.1/33

# dit_asym_us_dd_at1lr_dd_dd_rms vs Slug




Right In: 1865.440+/-0.502 $\chi^2$/NDF: 674989.6/15

Left Out: 1733.412+/-0.345 $\chi^2$/NDF:676.2/15

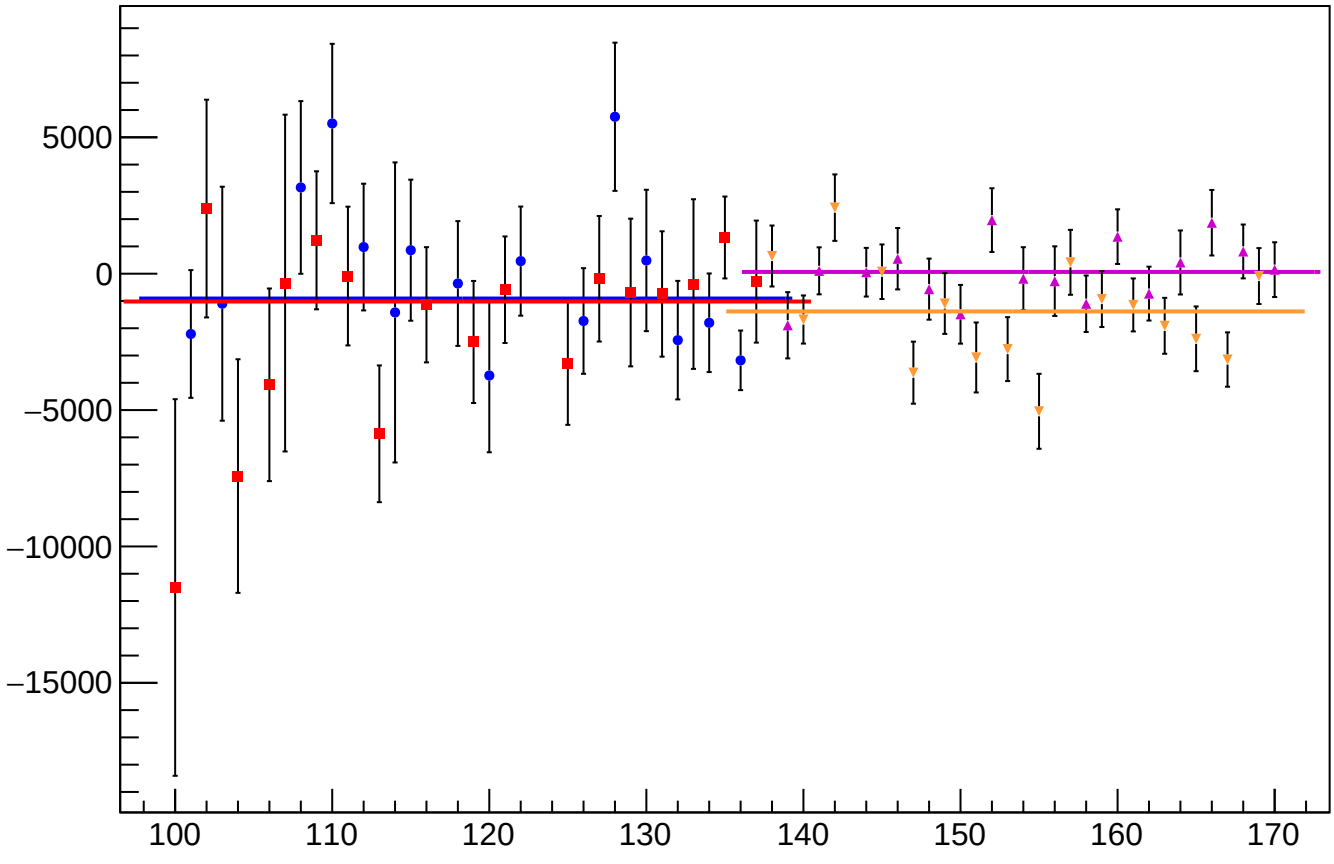
Right Out: 1898.603+/-0.506 $\chi^2$/NDF: 269110.1/17

Left In: 1735.667+/-0.338 $\chi^2$/NDF:1977.8/15

+ sign 1775.743+/-0.284 $\chi^2$/NDF: 722654.1/31

All: 1780.862+/-0.200 $\chi^2$/NDF: 1066162.5/65

- sign 1785.857+/-0.281 $\chi^2$/NDF: 342867.6/33




Right In: -910.955+/-550.836 $\chi^2$/NDF: 21.0/15

Left Out: -1383.882+/-271.732 $\chi^2$/NDF:37.7/15

Right Out: -1020.124+/-591.600 $\chi^2$/NDF: 14.9/17

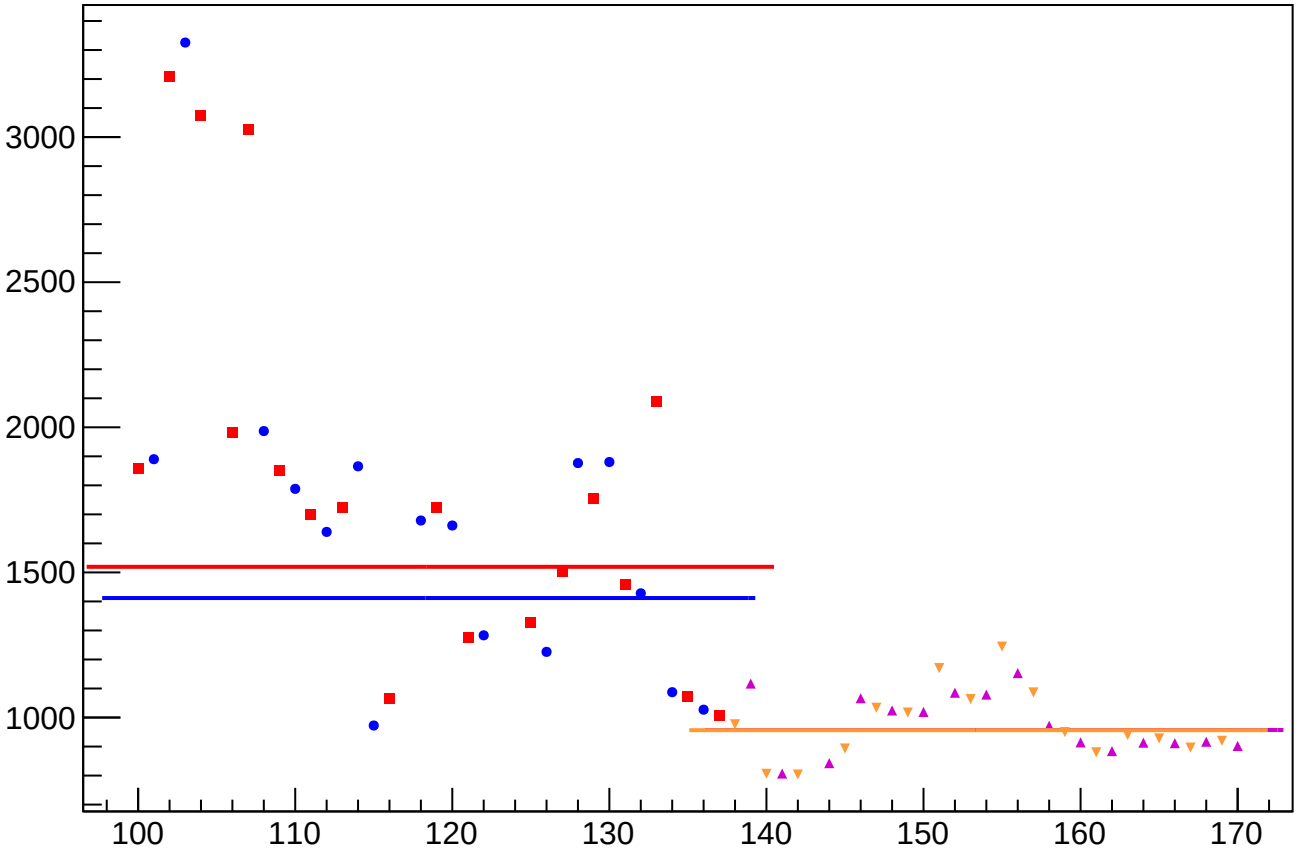
Left In: 64.323+/-265.153 $\chi^2$/NDF:14.4/15

+ sign -1291.319+/-243.693 $\chi^2$/NDF: 59.3/31

All: -700.015+/-171.702 $\chi^2$/NDF: 103.2/65

- sign -117.081+/-241.962 $\chi^2$/NDF: 32.2/33

# asym_us_dd_at1lr_dd_dd_dit_correction_rms vs Slug




Right In: 1411.748+/-0.389 $\chi^2$/NDF: 1177745.4/15

Left Out: 956.393+/-0.192 $\chi^2$/NDF:321501.6/15

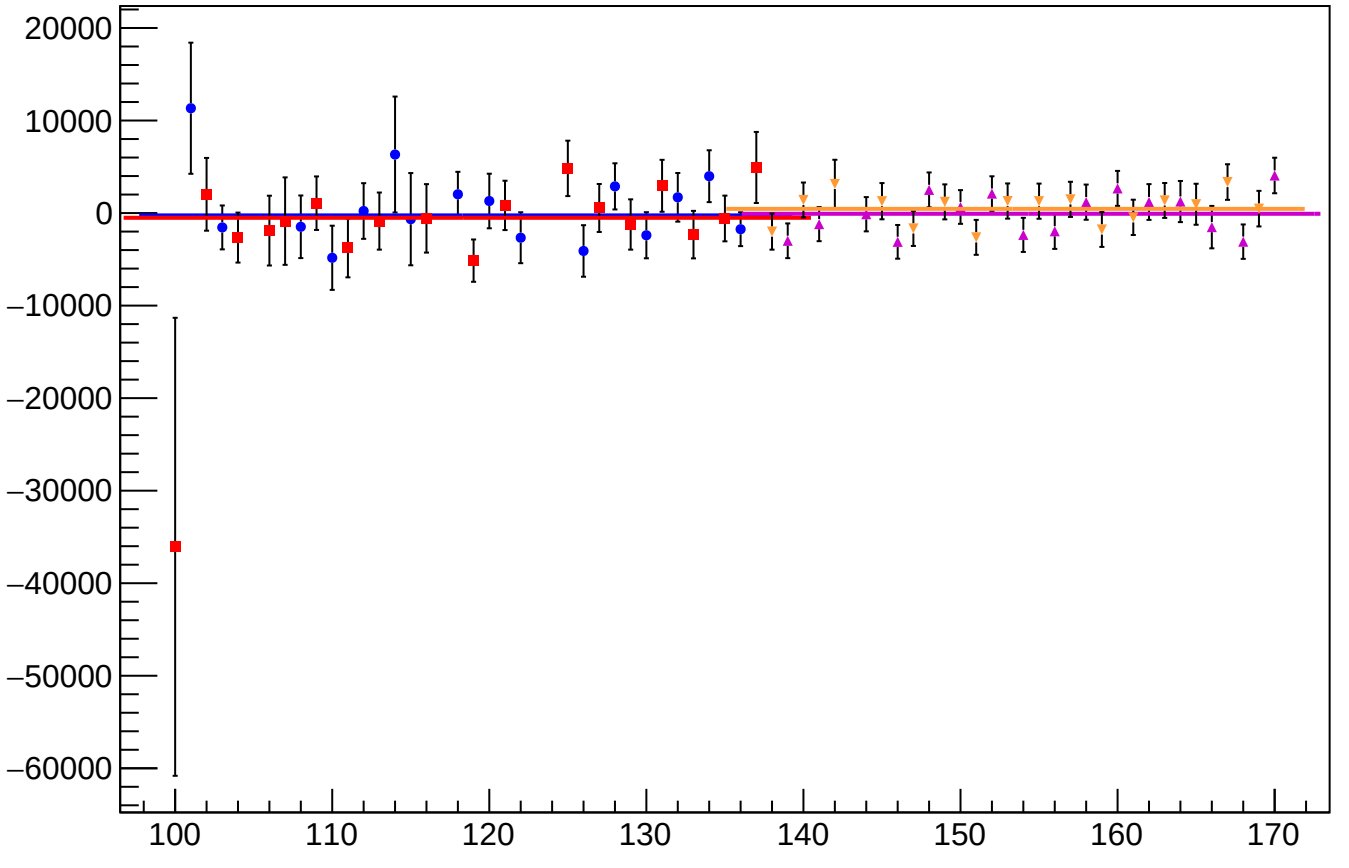
Right Out: 1519.305+/-0.418 $\chi^2$/NDF: 1360145.6/17

Left In: 957.051+/-0.187 $\chi^2$/NDF:284593.5/15

+ sign 1045.517+/-0.172 $\chi^2$/NDF: 2598483.1/31

All: 1048.330+/-0.121 $\chi^2$/NDF: 5748067.2/65

- sign 1051.104+/-0.171 $\chi^2$/NDF: 3149054.7/33




Right In: -252.023+/-709.973 $\chi^2$/NDF: 15.6/15

Left Out: 456.056+/-487.734 $\chi^2$/NDF:12.0/15

Right Out: -510.117+/-715.442 $\chi^2$/NDF: 16.4/17

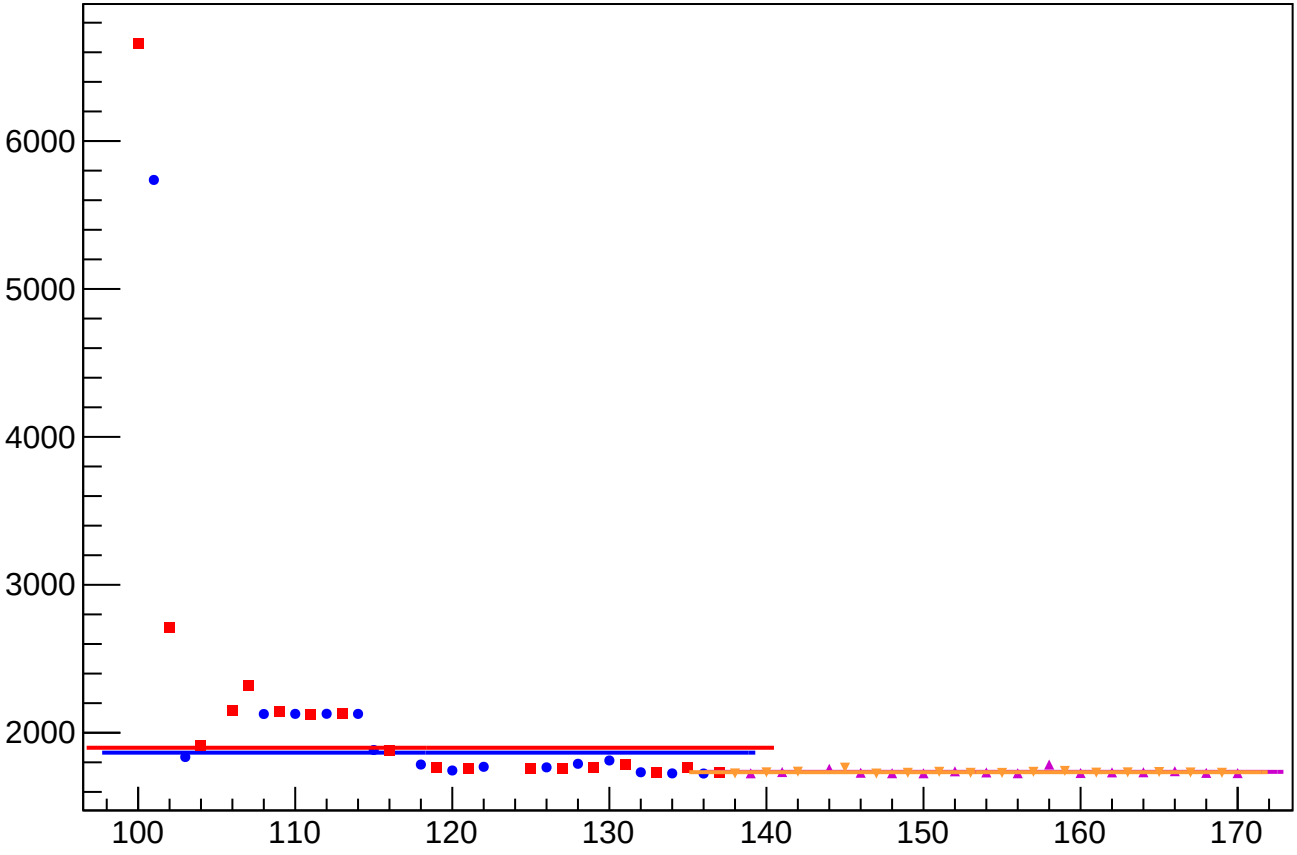
Left In: -77.581+/-477.341 $\chi^2$/NDF:22.5/15

+ sign 229.030+/-402.012 $\chi^2$/NDF: 28.3/31

All: 6.390+/-282.503 $\chi^2$/NDF: 68.1/65

- sign -210.816+/-397.074 $\chi^2$/NDF: 39.1/33

# eigen_dit_asym_us_dd_at1lr_dd_dd_rms vs Slug




Right In: 1865.440+/-0.502 $\chi^2$/NDF: 674989.6/15

Left Out: 1733.412+/-0.345 $\chi^2$/NDF:676.2/15

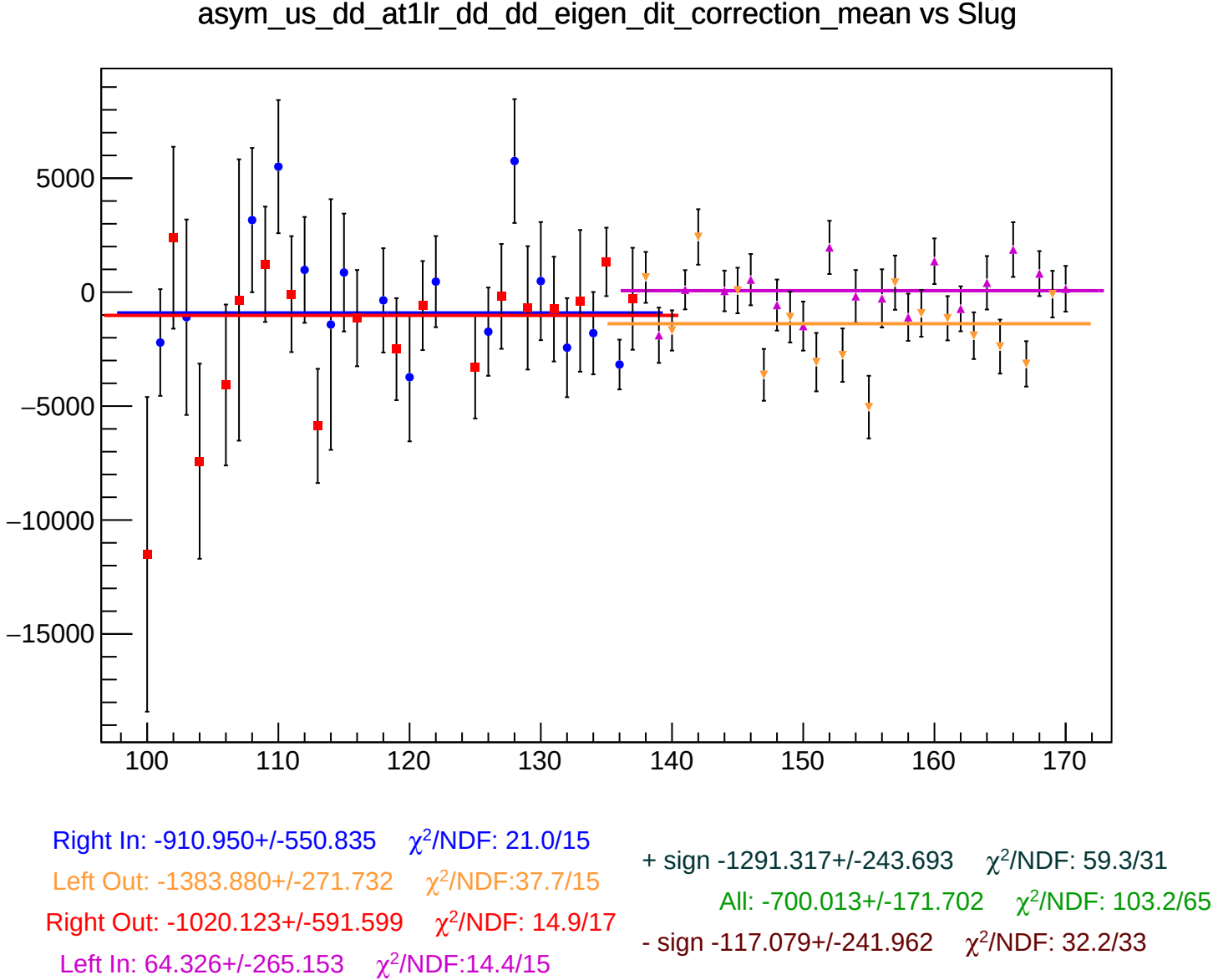
Right Out: 1898.603+/-0.506 $\chi^2$/NDF: 269109.9/17

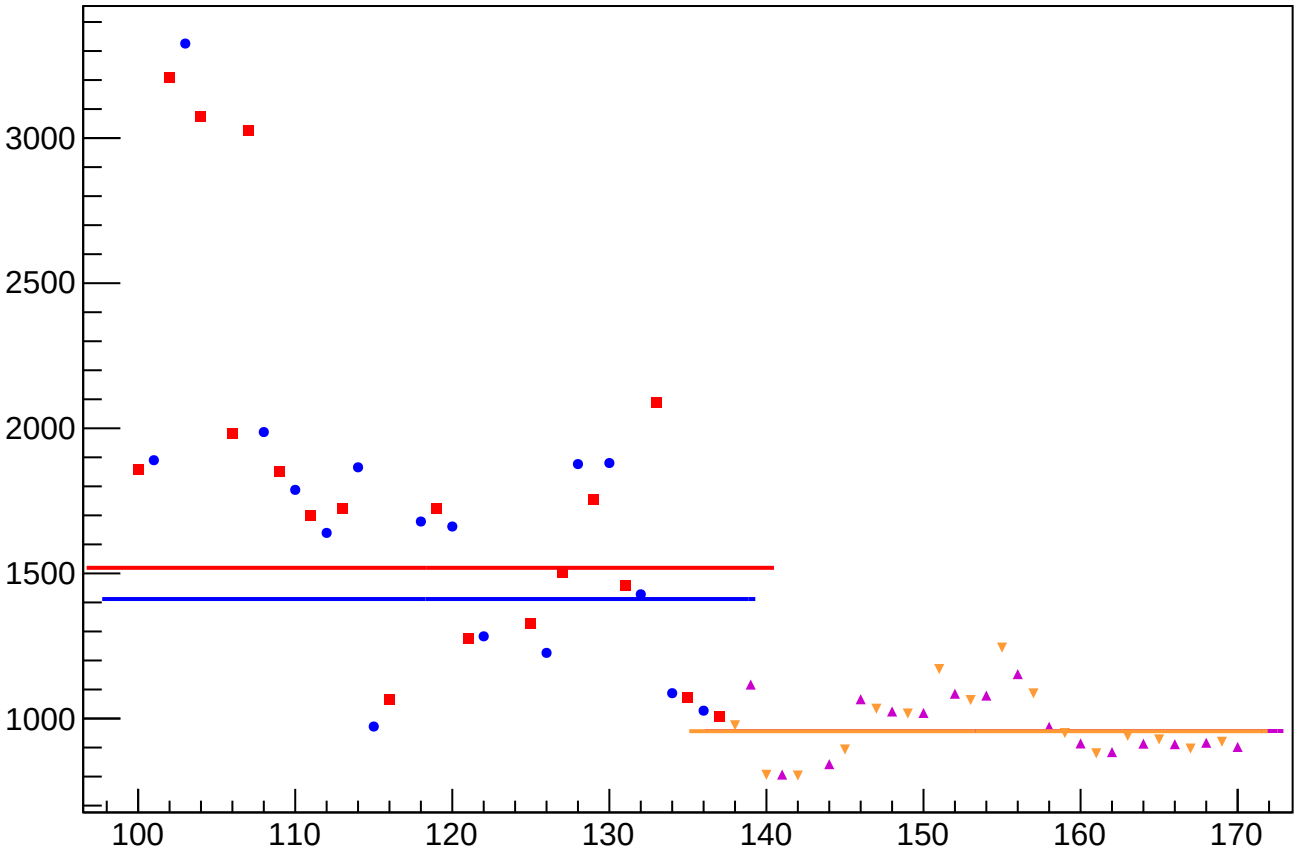
Left In: 1735.667+/-0.338 $\chi^2$/NDF:1977.8/15

+ sign 1775.743+/-0.284 $\chi^2$/NDF: 722654.1/31

All: 1780.862+/-0.200 $\chi^2$/NDF: 1066162.1/65

- sign 1785.857+/-0.281 $\chi^2$/NDF: 342867.3/33


asym_us_dd_at1lr_dd_dd_eigen_dit_correction_mean vs Slug
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: -910.950+/-550.835 χ²/NDF: 21.0/15
Left Out: -1383.880+/-271.732 χ²/NDF:37.7/15
Right Out: -1020.123+/-591.599 χ²/NDF: 14.9/17
Left In: 64.326+/-265.153 χ²/NDF:14.4/15
+ sign -1291.317+/-243.693 χ²/NDF: 59.3/31
All: -700.013+/-171.702 χ²/NDF: 103.2/65
- sign -117.079+/-241.962 χ²/NDF: 32.2/33




Right In: 1411.745+/-0.389 $\chi^2$/NDF: 1177746.1/15

Left Out: 956.393+/-0.192 $\chi^2$/NDF:321510.9/15

Right Out: 1519.302+/-0.418 $\chi^2$/NDF: 1360150.0/17

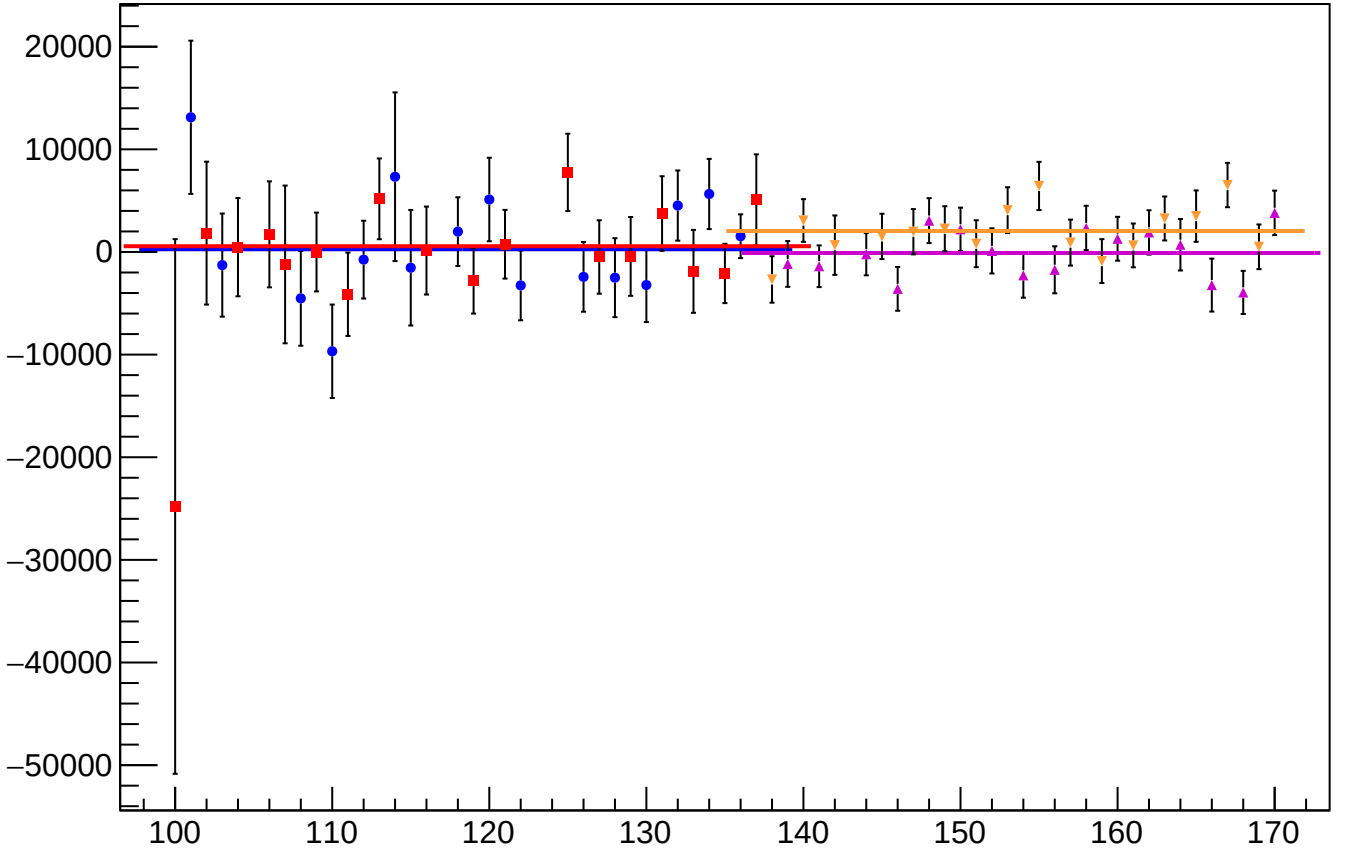
Left In: 957.051+/-0.187 $\chi^2$/NDF:284601.8/15

+ sign 1045.516+/-0.172 $\chi^2$/NDF: 2598483.6/31

All: 1048.329+/-0.121 $\chi^2$/NDF: 5748071.4/65

- sign 1051.103+/-0.171 $\chi^2$/NDF: 3149058.3/33

# asym_us_dd_at1lr_dd_dd_mean vs Slug




Right In: 264.383+/-941.979 $\chi^2$/NDF: 19.0/15

Left Out: 2042.622+/-560.900 $\chi^2$/NDF:17.5/15

Right Out: 560.962+/-962.943 $\chi^2$/NDF: 11.7/17

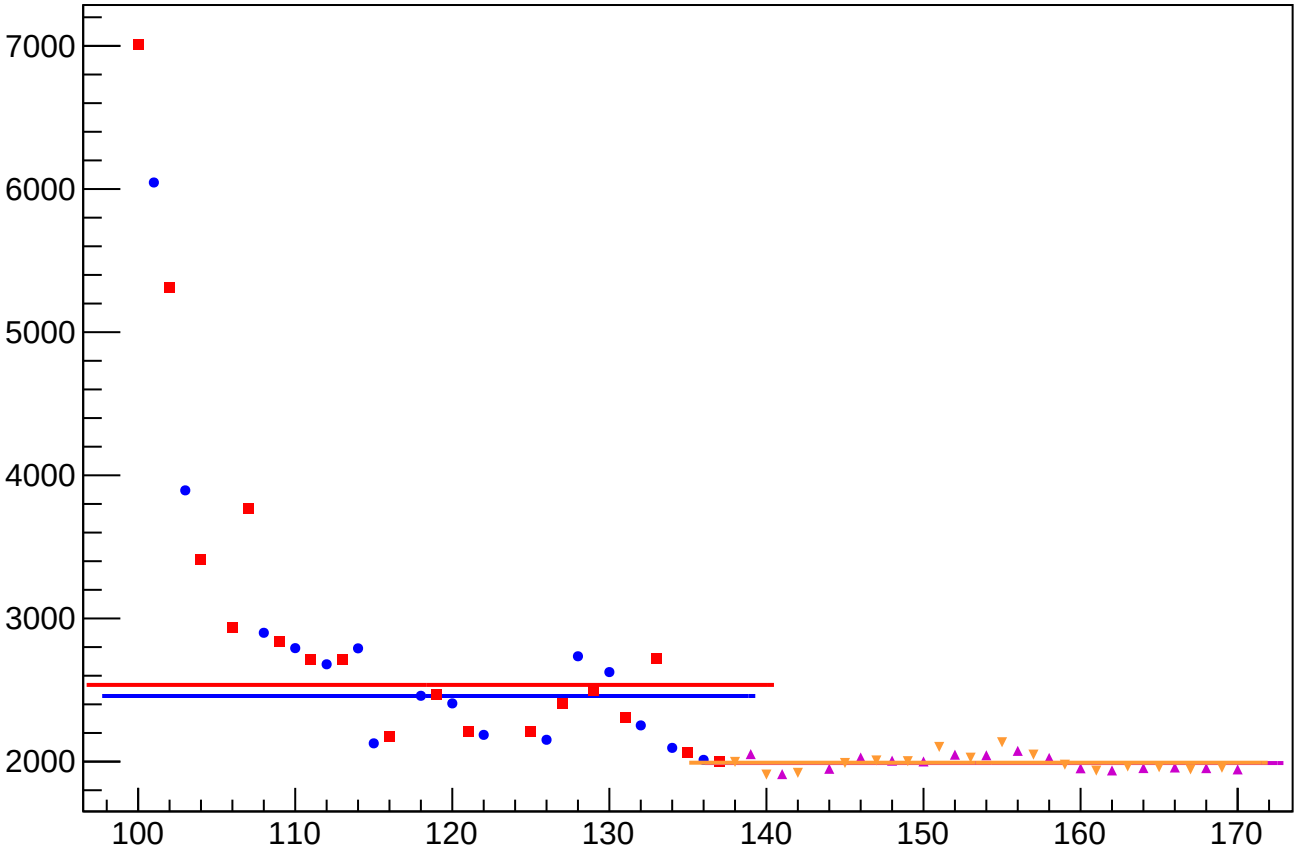
Left In: -97.864+/-547.469 $\chi^2$/NDF:18.8/15

+ sign 1577.163+/-481.933 $\chi^2$/NDF: 39.2/31

All: 810.625+/-338.635 $\chi^2$/NDF: 75.1/65

- sign 63.071+/-475.928 $\chi^2$/NDF: 30.9/33

# asym_us_dd_at1lr_dd_dd_rms vs Slug




Right In: 2458.332+/-0.666 $\chi^2$/NDF: 832888.7/15

Left Out: 1992.264+/-0.397 $\chi^2$/NDF:21850.5/15

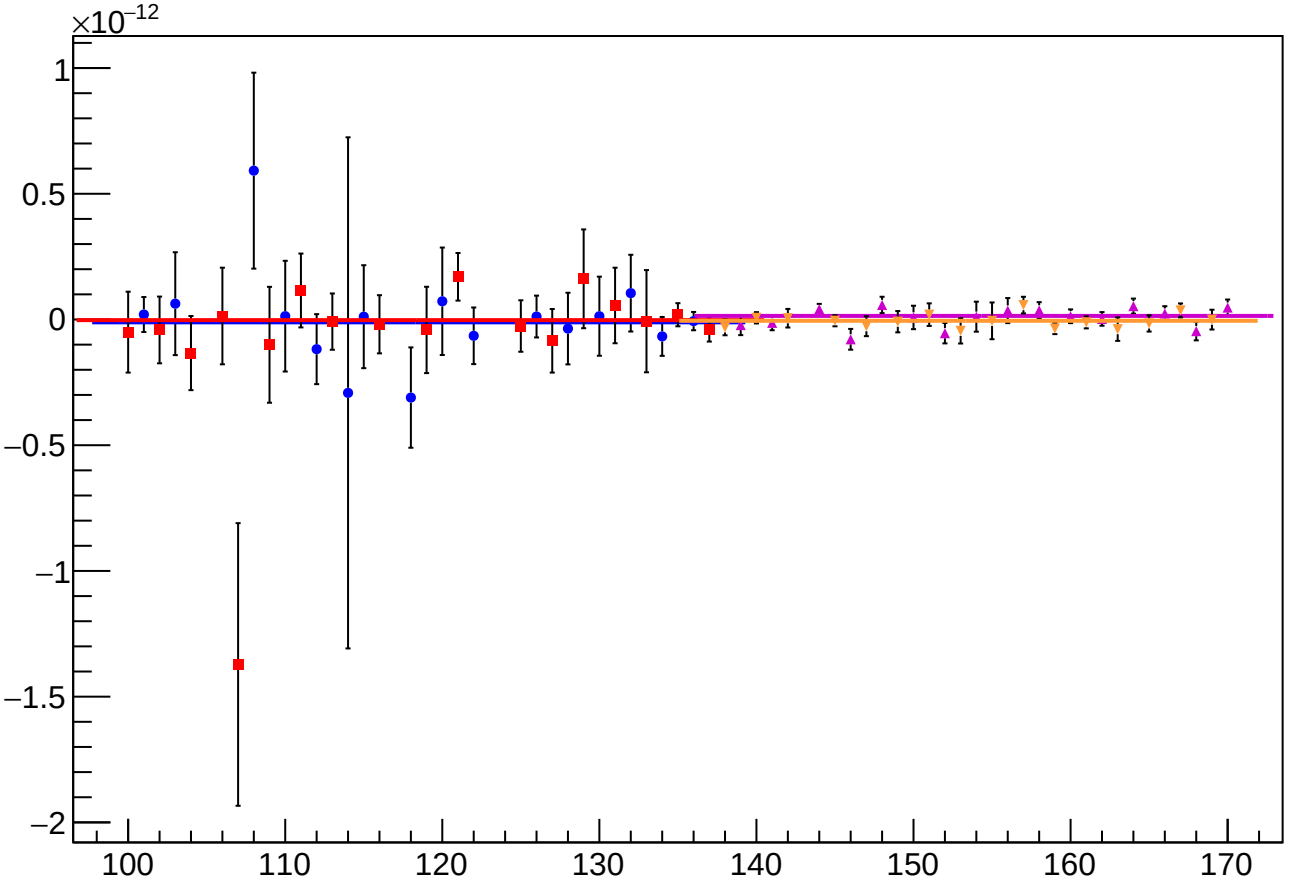
Right Out: 2535.782+/-0.681 $\chi^2$/NDF: 673337.1/17

Left In: 1989.885+/-0.387 $\chi^2$/NDF:15817.0/15

+ sign 2114.258+/-0.341 $\chi^2$/NDF: 1216189.0/31

All: 2118.803+/-0.239 $\chi^2$/NDF: 2391449.2/65

- sign 2123.235+/-0.337 $\chi^2$/NDF: 1174908.9/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 7.3/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:10.6/15

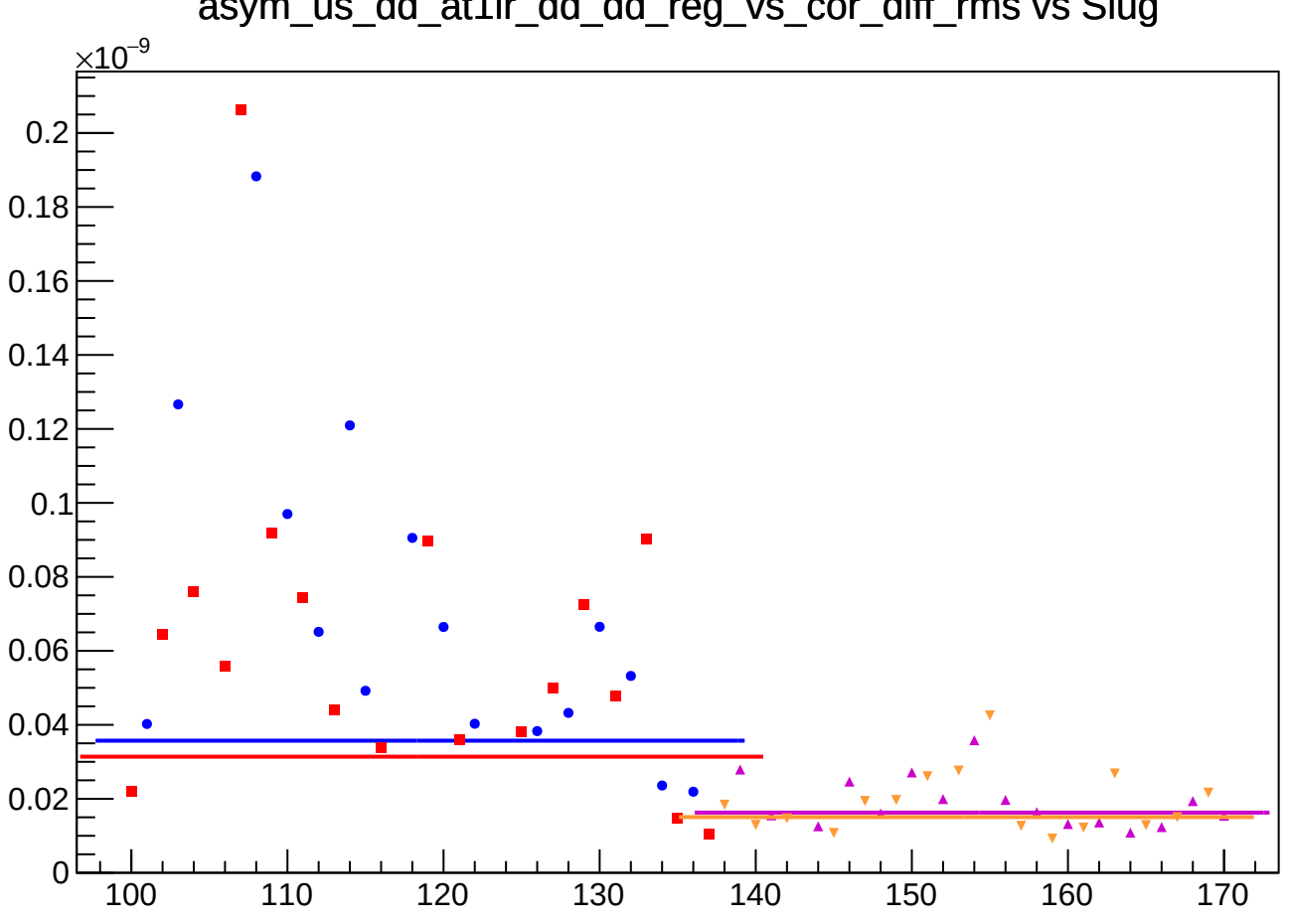
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 13.2/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:19.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 18.0/31

All: 0.000+/-0.000 $\chi^2$/NDF: 54.0/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 33.1/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1620217.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1059990.0/15

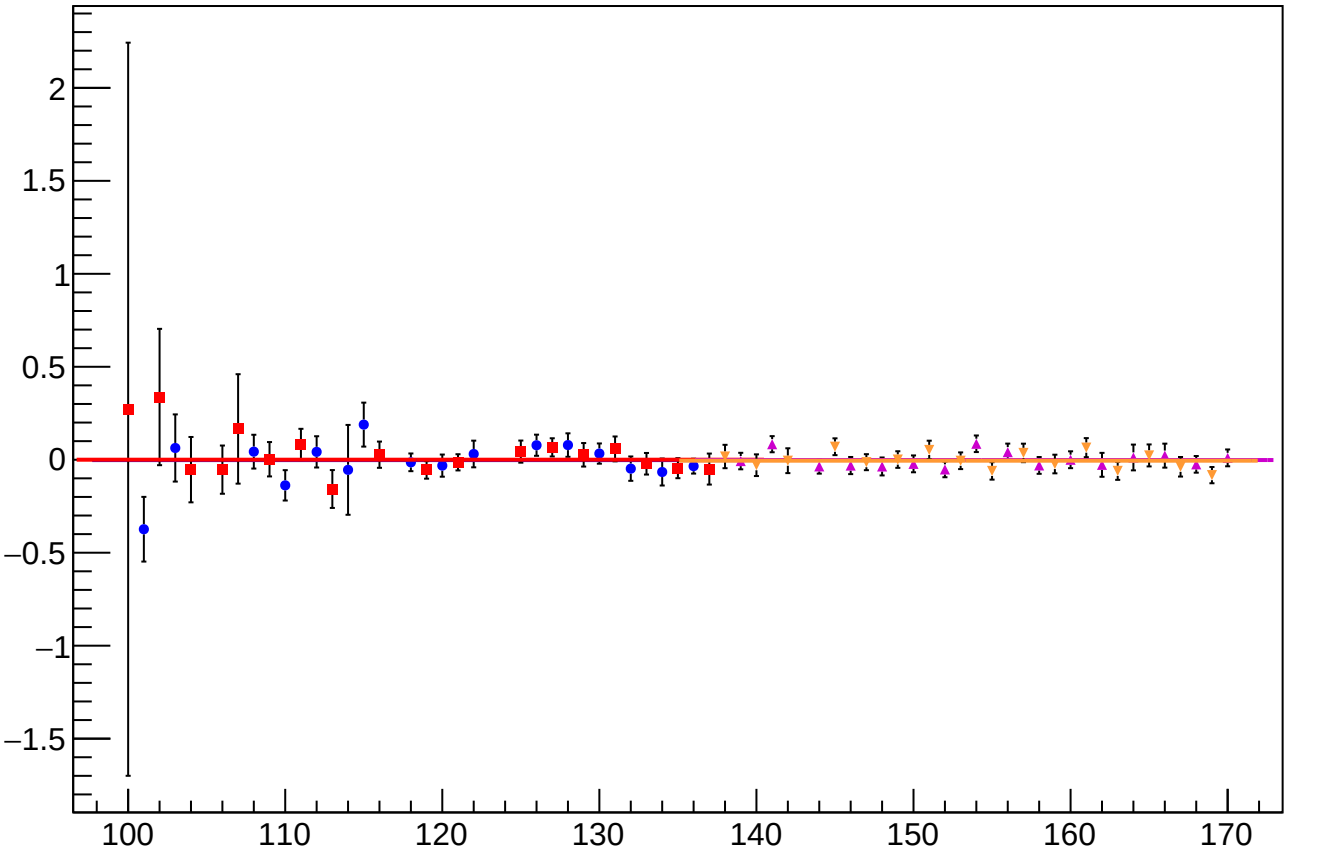
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2068272.1/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:826408.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3965461.6/31

All: 0.000+/-0.000 $\chi^2$/NDF: 7562975.4/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 3586003.9/33




Right In: -0.002+/-0.017 $\chi^2$/NDF: 17.1/15

Left Out: -0.005+/-0.012 $\chi^2$/NDF:13.6/15

Right Out: 0.000+/-0.017 $\chi^2$/NDF: 10.9/17

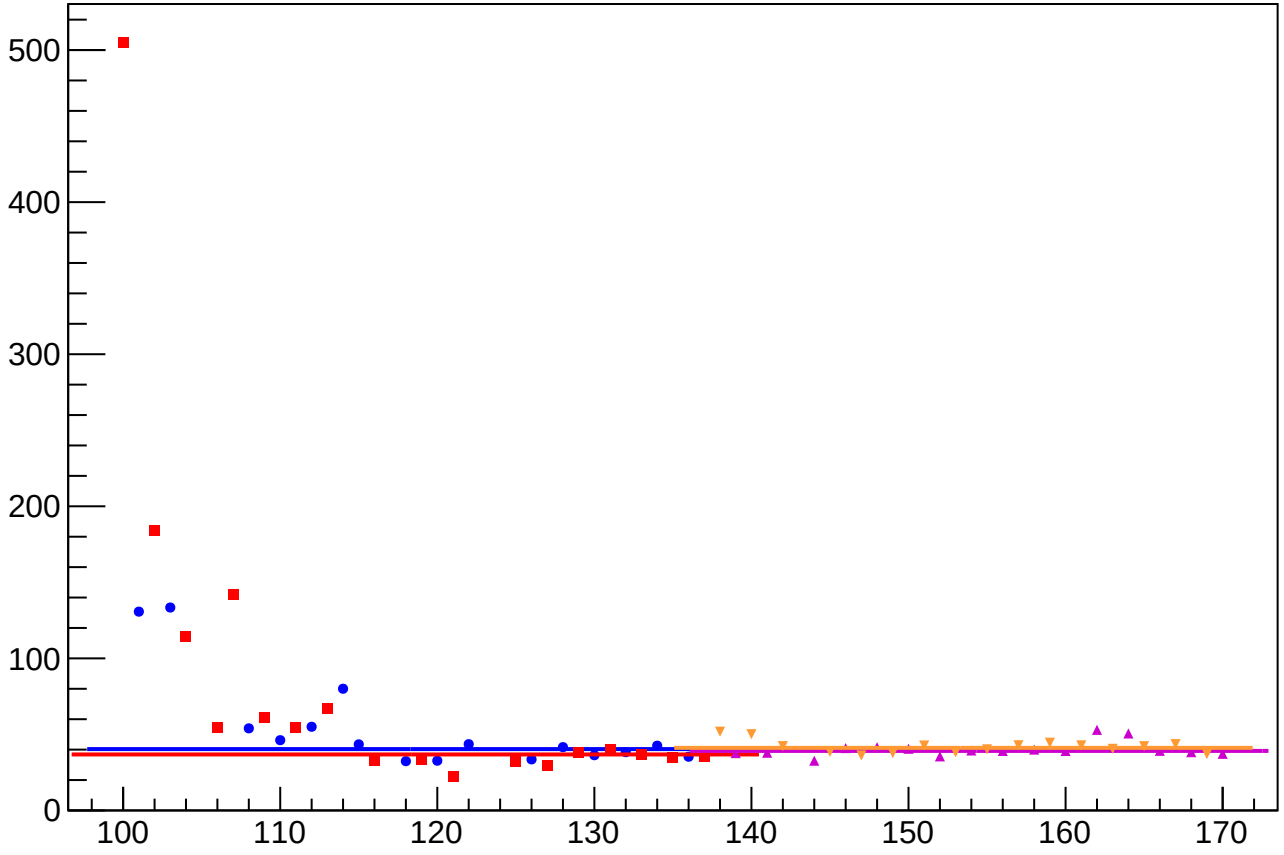
Left In: -0.002+/-0.012 $\chi^2$/NDF:13.0/15

+ sign -0.004+/-0.010 $\chi^2$/NDF: 30.7/31

All: -0.002+/-0.007 $\chi^2$/NDF: 54.7/65

- sign -0.001+/-0.010 $\chi^2$/NDF: 23.9/33

# asym_us_dd_at1lr_dd_dd_dit_vs_cor_diff_rms vs Slug




Right In: 40.352+/-0.012 $\chi^2$/NDF: 1410137.1/15

Left Out: 41.167+/-0.009 $\chi^2$/NDF:198258.0/15

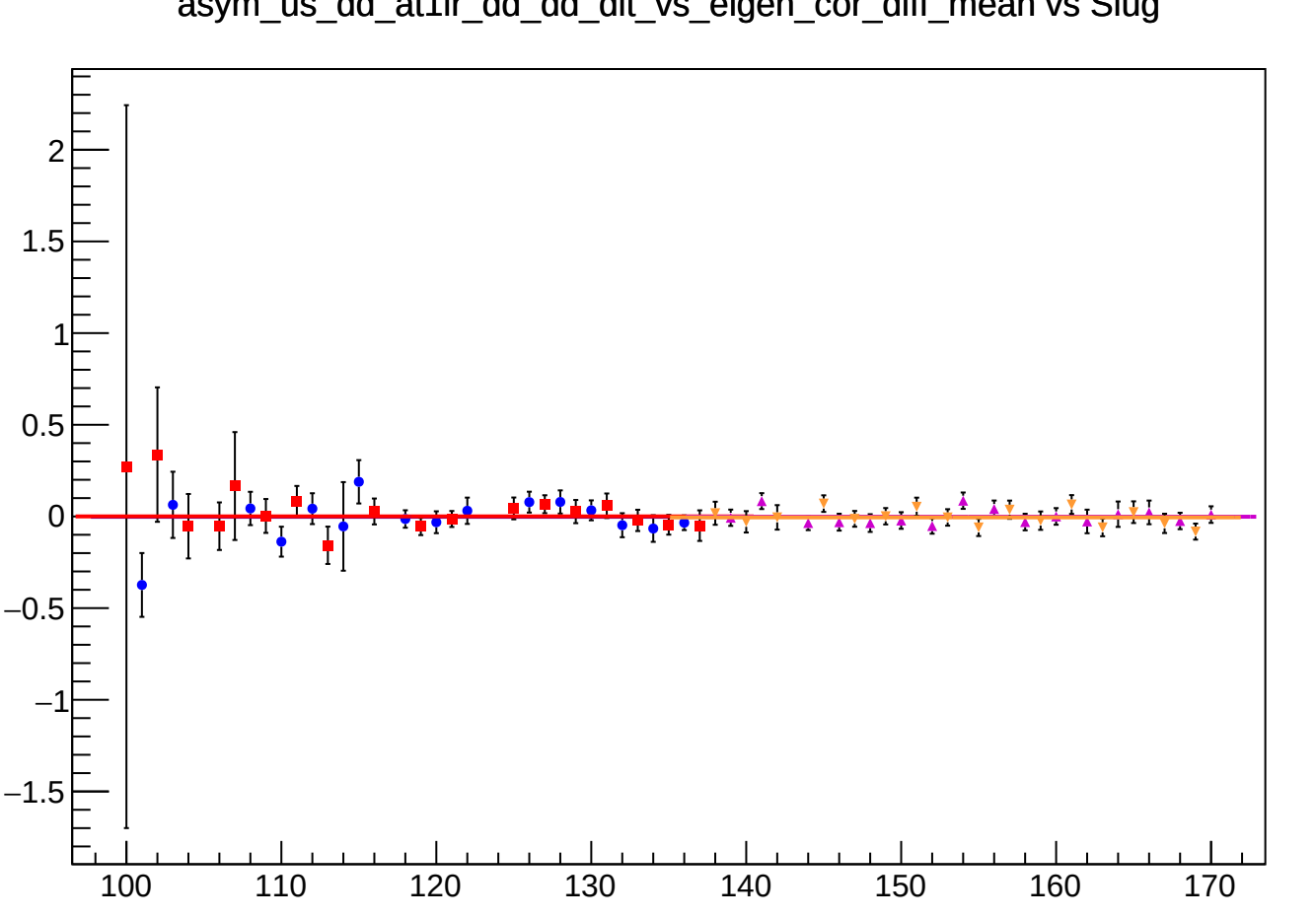
Right Out: 36.825+/-0.012 $\chi^2$/NDF: 1837124.6/17

Left In: 39.153+/-0.008 $\chi^2$/NDF:235987.4/15

+ sign 40.884+/-0.007 $\chi^2$/NDF: 1611366.4/31

All: 39.572+/-0.005 $\chi^2$/NDF: 3775320.9/65

- sign 38.383+/-0.007 $\chi^2$/NDF: 2099233.4/33




Right In: -0.002+/-0.017 $\chi^2$/NDF: 17.1/15

Left Out: -0.005+/-0.012 $\chi^2$/NDF:13.6/15

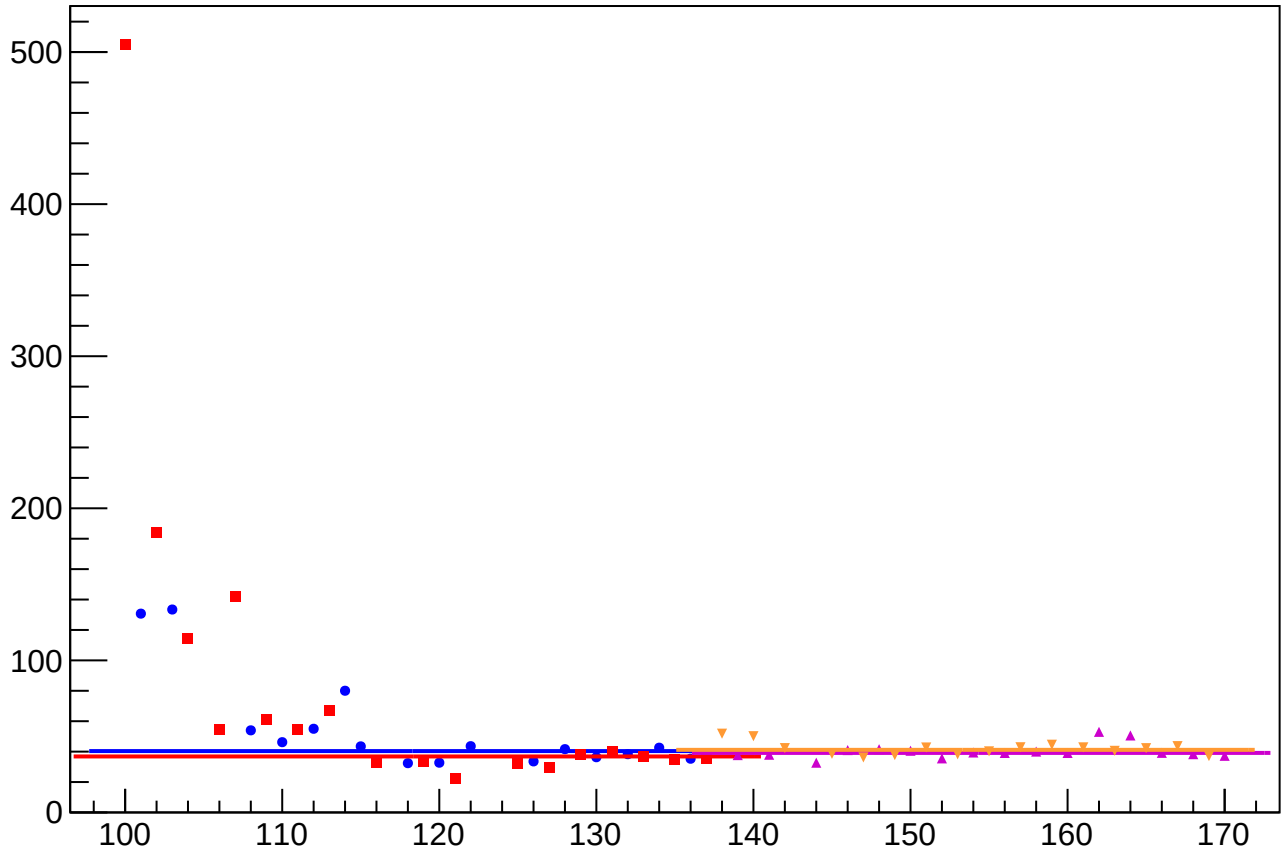
Right Out: 0.000+/-0.017 $\chi^2$/NDF: 10.9/17

Left In: -0.002+/-0.012 $\chi^2$/NDF:13.0/15

+ sign -0.004+/-0.010 $\chi^2$/NDF: 30.7/31

All: -0.002+/-0.007 $\chi^2$/NDF: 54.7/65

- sign -0.001+/-0.010 $\chi^2$/NDF: 23.9/33




Right In: 40.352+/-0.012 $\chi^2$/NDF: 1410137.1/15

Left Out: 41.167+/-0.009 $\chi^2$/NDF:198258.0/15

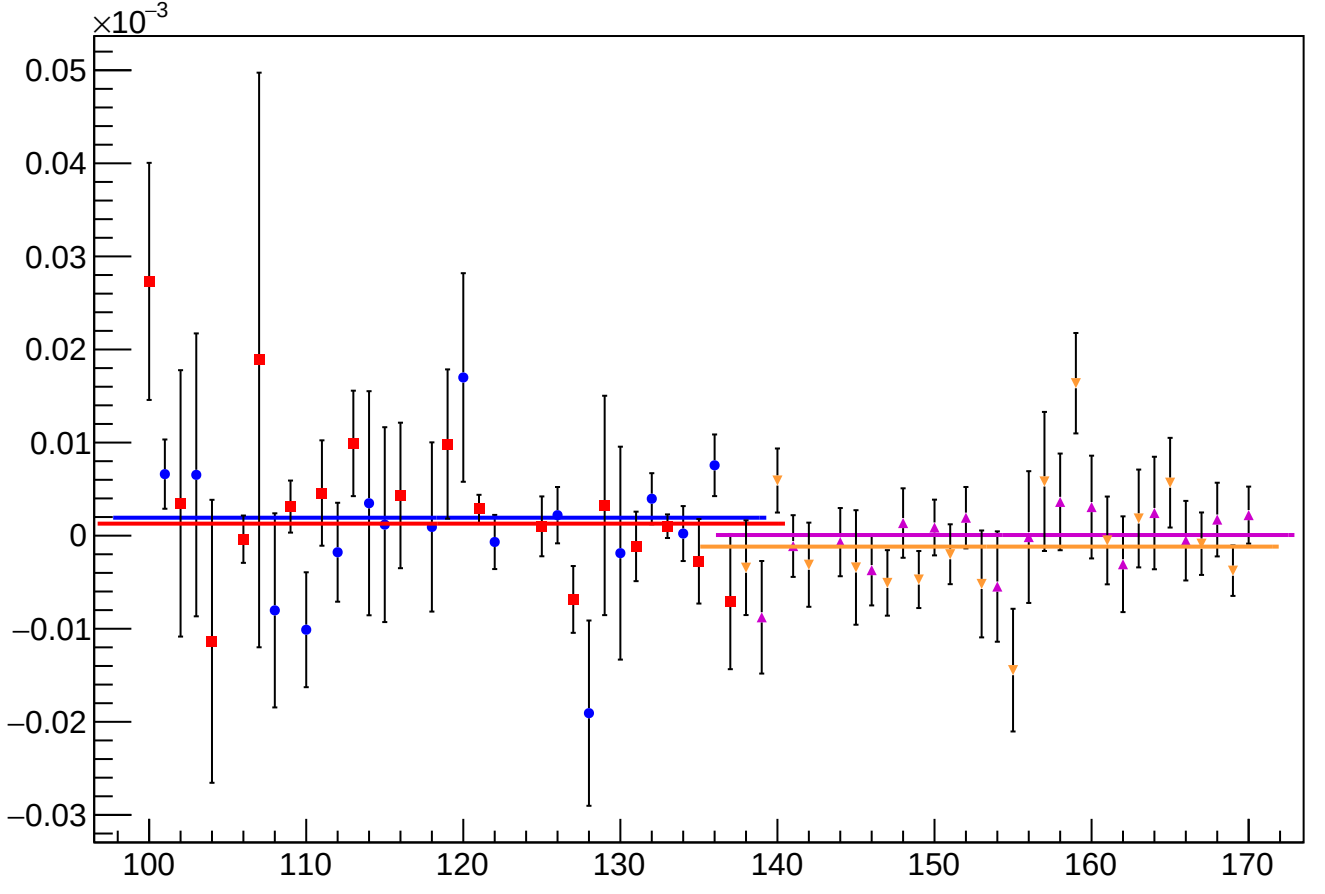
Right Out: 36.825+/-0.012 $\chi^2$/NDF: 1837124.6/17

Left In: 39.153+/-0.008 $\chi^2$/NDF:235987.4/15

+ sign 40.884+/-0.007 $\chi^2$/NDF: 1611366.4/31

All: 39.572+/-0.005 $\chi^2$/NDF: 3775320.9/65

- sign 38.383+/-0.007 $\chi^2$/NDF: 2099233.4/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 17.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:26.7/15

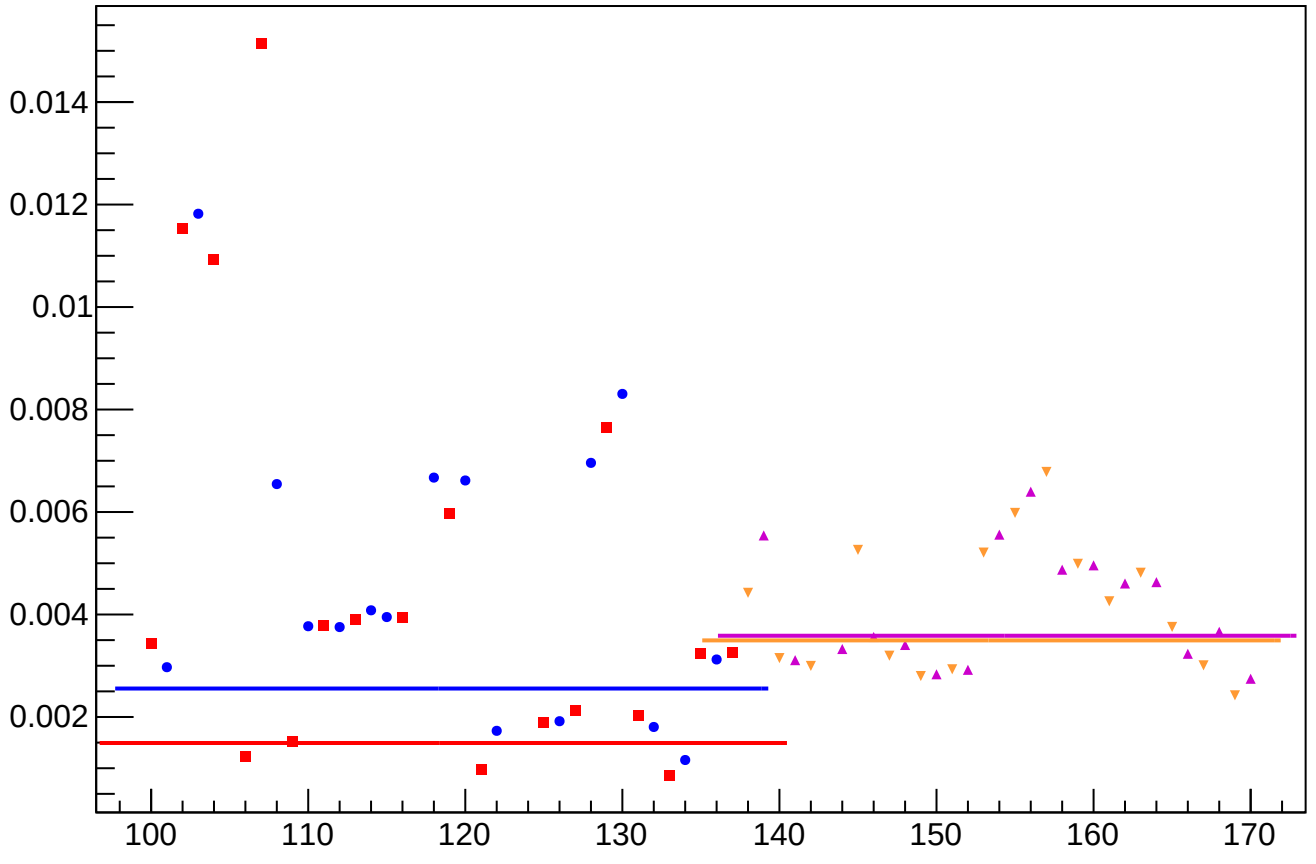
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.9/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:6.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 48.6/31

All: 0.000+/-0.000 $\chi^2$/NDF: 75.5/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 26.5/33




Right In: 0.003+/-0.000 $\chi^2$/NDF: 3782362.0/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:1998451.9/15

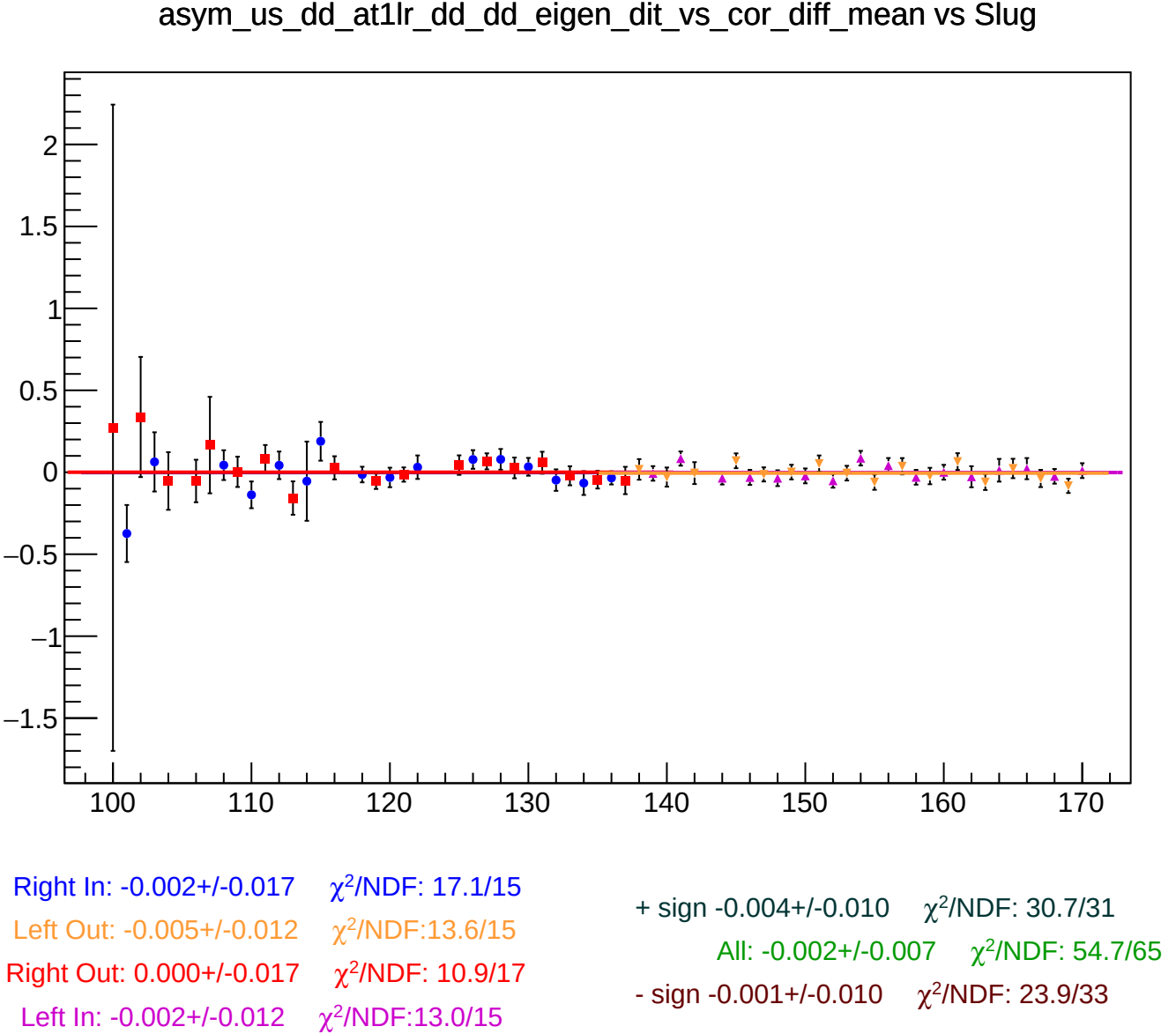
Right Out: 0.001+/-0.000 $\chi^2$/NDF: 5561830.1/17

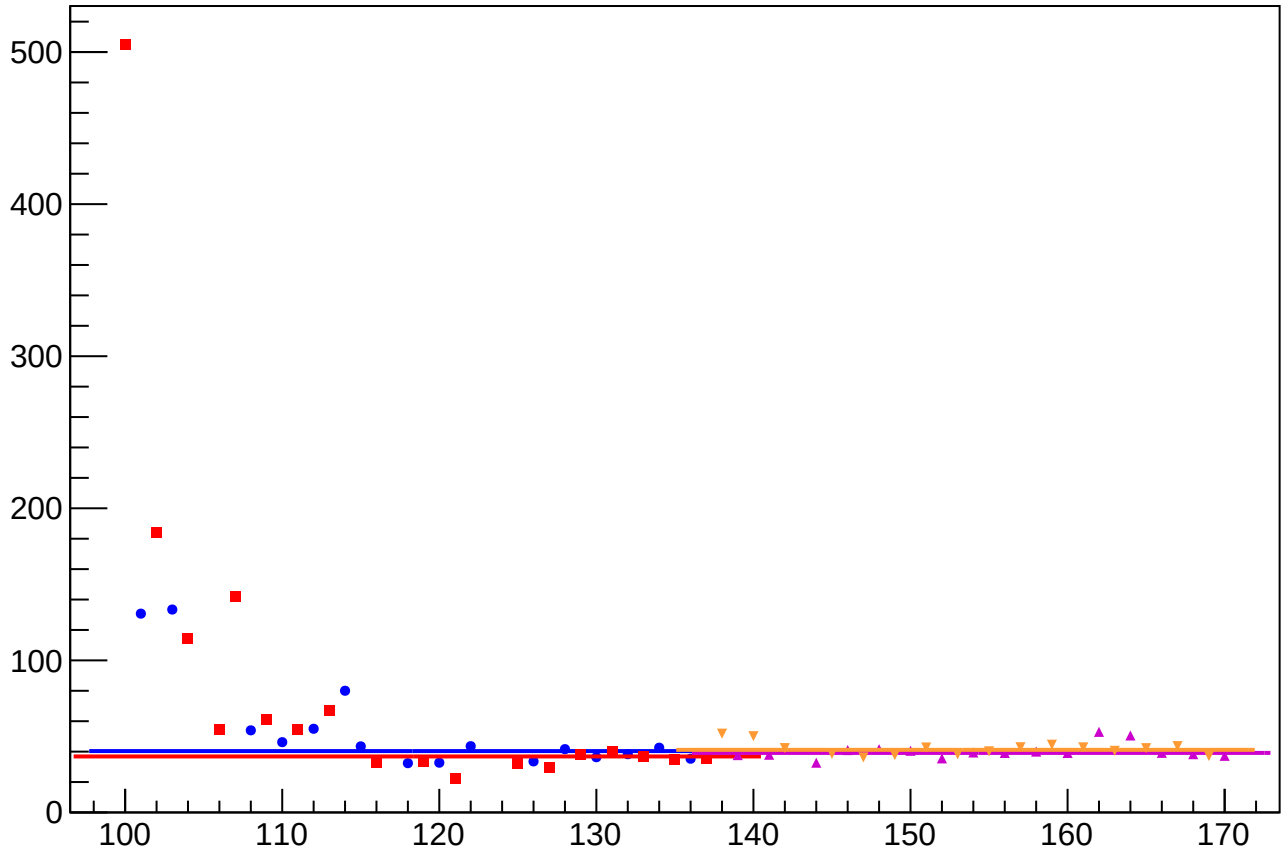
Left In: 0.004+/-0.000 $\chi^2$/NDF:1560088.2/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 6525397.9/31

All: 0.003+/-0.000 $\chi^2$/NDF: 20563179.4/65

- sign 0.002+/-0.000 $\chi^2$/NDF: 12524115.6/33


asym_us_dd_at1lr_dd_dd_eigen_dit_vs_cor_diff_mean vs Slug
2
1.5
1
0.5
0
−0.5
−1
−1.5
100
110
120
130
140
150
160
170
Right In: -0.002+/-0.017 χ²/NDF: 17.1/15
Left Out: -0.005+/-0.012 χ²/NDF:13.6/15
Right Out: 0.000+/-0.017 χ²/NDF: 10.9/17
Left In: -0.002+/-0.012 χ²/NDF:13.0/15
+ sign -0.004+/-0.010 χ²/NDF: 30.7/31
All: -0.002+/-0.007 χ²/NDF: 54.7/65
- sign -0.001+/-0.010 χ²/NDF: 23.9/33




Right In: 40.352+/-0.012 $\chi^2$/NDF: 1410036.7/15

Left Out: 41.166+/-0.009 $\chi^2$/NDF:198259.9/15

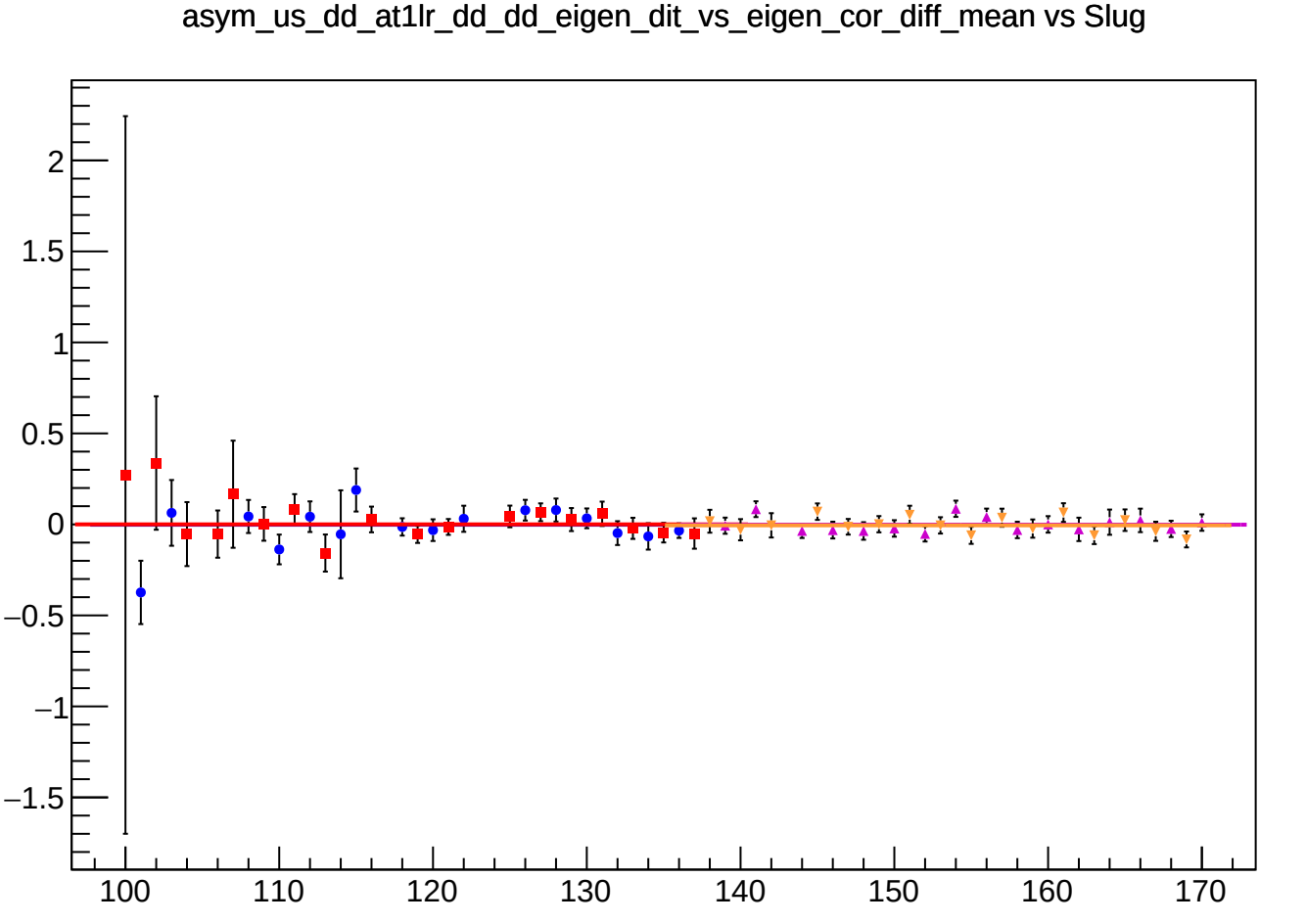
Right Out: 36.824+/-0.012 $\chi^2$/NDF: 1837118.8/17

Left In: 39.153+/-0.008 $\chi^2$/NDF:235960.3/15

+ sign 40.884+/-0.007 $\chi^2$/NDF: 1611263.1/31

All: 39.572+/-0.005 $\chi^2$/NDF: 3775228.8/65

- sign 38.382+/-0.007 $\chi^2$/NDF: 2099218.2/33




Right In: -0.002+/-0.017 $\chi^2$/NDF: 17.1/15

Left Out: -0.005+/-0.012 $\chi^2$/NDF:13.6/15

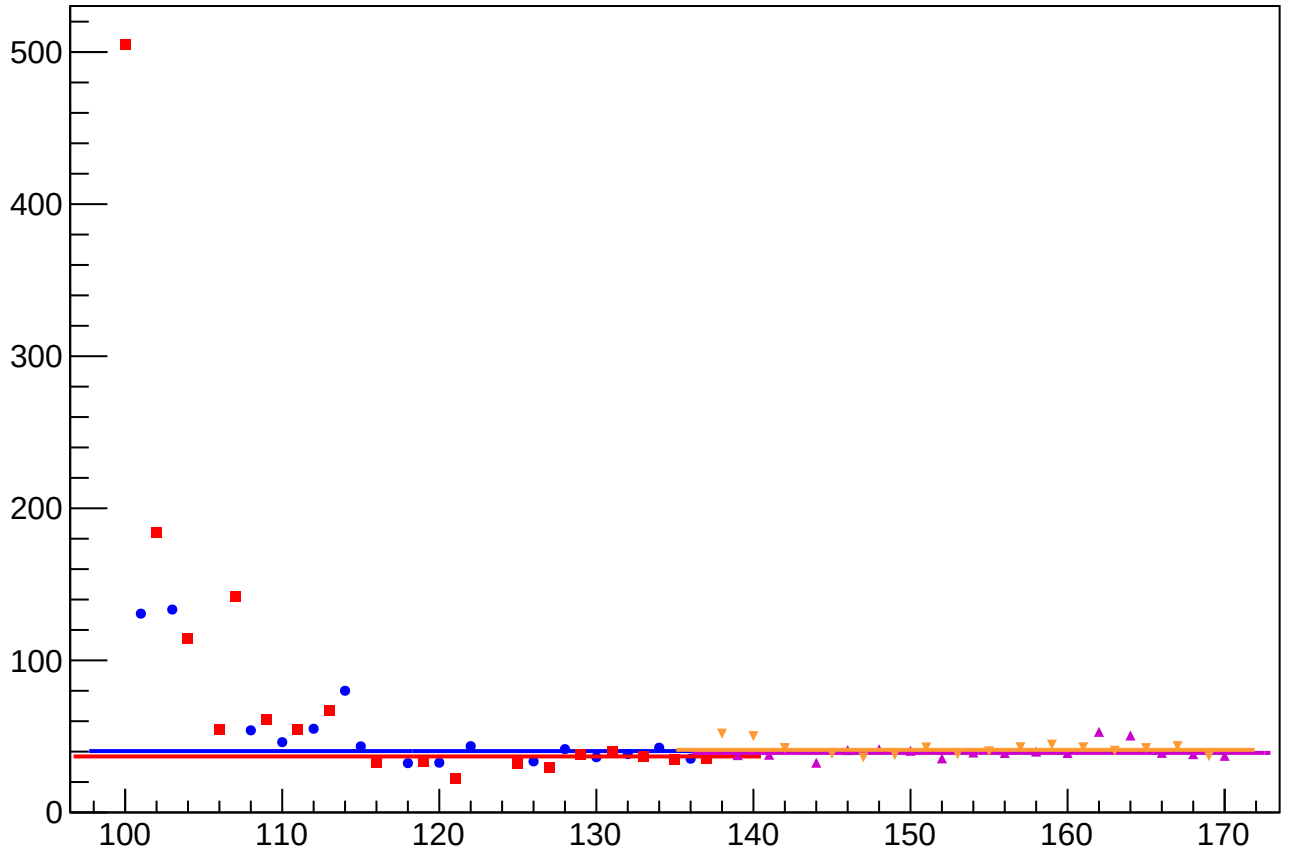
Right Out: 0.000+/-0.017 $\chi^2$/NDF: 10.9/17

Left In: -0.002+/-0.012 $\chi^2$/NDF:13.0/15

+ sign -0.004+/-0.010 $\chi^2$/NDF: 30.7/31

All: -0.002+/-0.007 $\chi^2$/NDF: 54.7/65

- sign -0.001+/-0.010 $\chi^2$/NDF: 23.9/33




Right In: 40.352+/-0.012 $\chi^2$/NDF: 1410036.7/15

Left Out: 41.166+/-0.009 $\chi^2$/NDF:198259.9/15

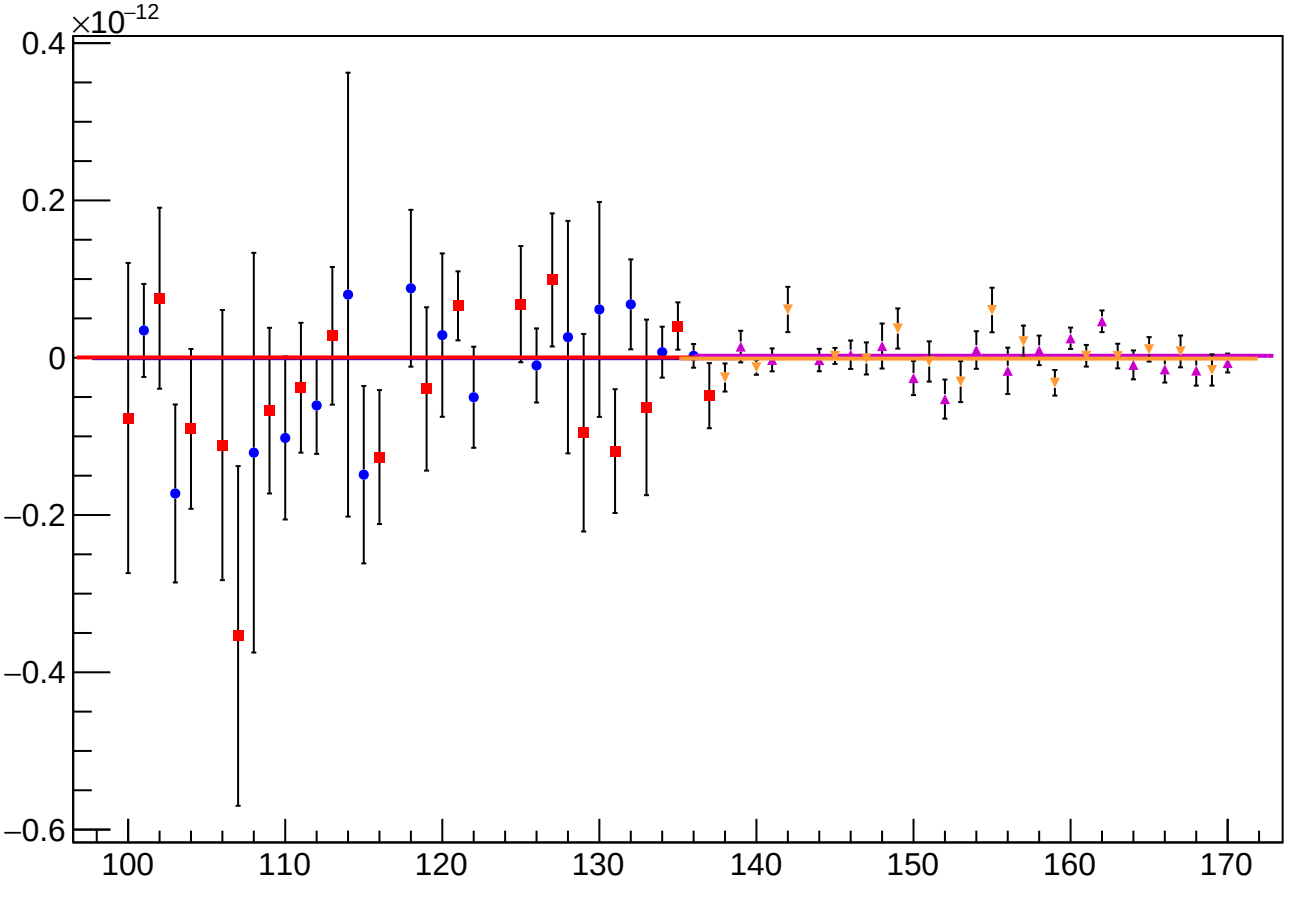
Right Out: 36.824+/-0.012 $\chi^2$/NDF: 1837118.8/17

Left In: 39.153+/-0.008 $\chi^2$/NDF:235960.3/15

+ sign 40.884+/-0.007 $\chi^2$/NDF: 1611263.1/31

All: 39.572+/-0.005 $\chi^2$/NDF: 3775228.8/65

- sign 38.382+/-0.007 $\chi^2$/NDF: 2099218.2/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 9.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:22.5/15

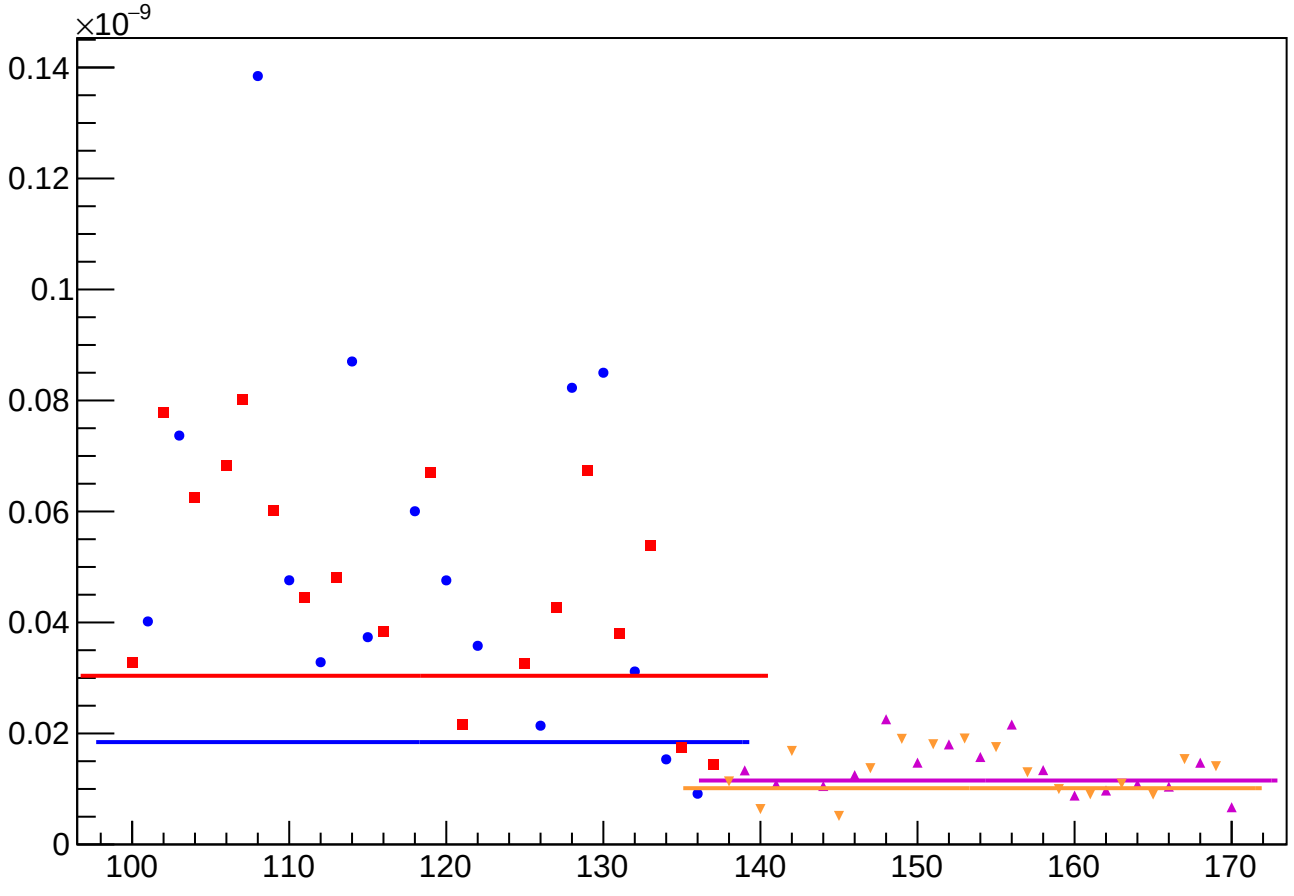
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.4/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:23.9/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 32.4/31

All: 0.000+/-0.000 $\chi^2$/NDF: 75.0/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 42.3/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 4022915.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2071251.5/15

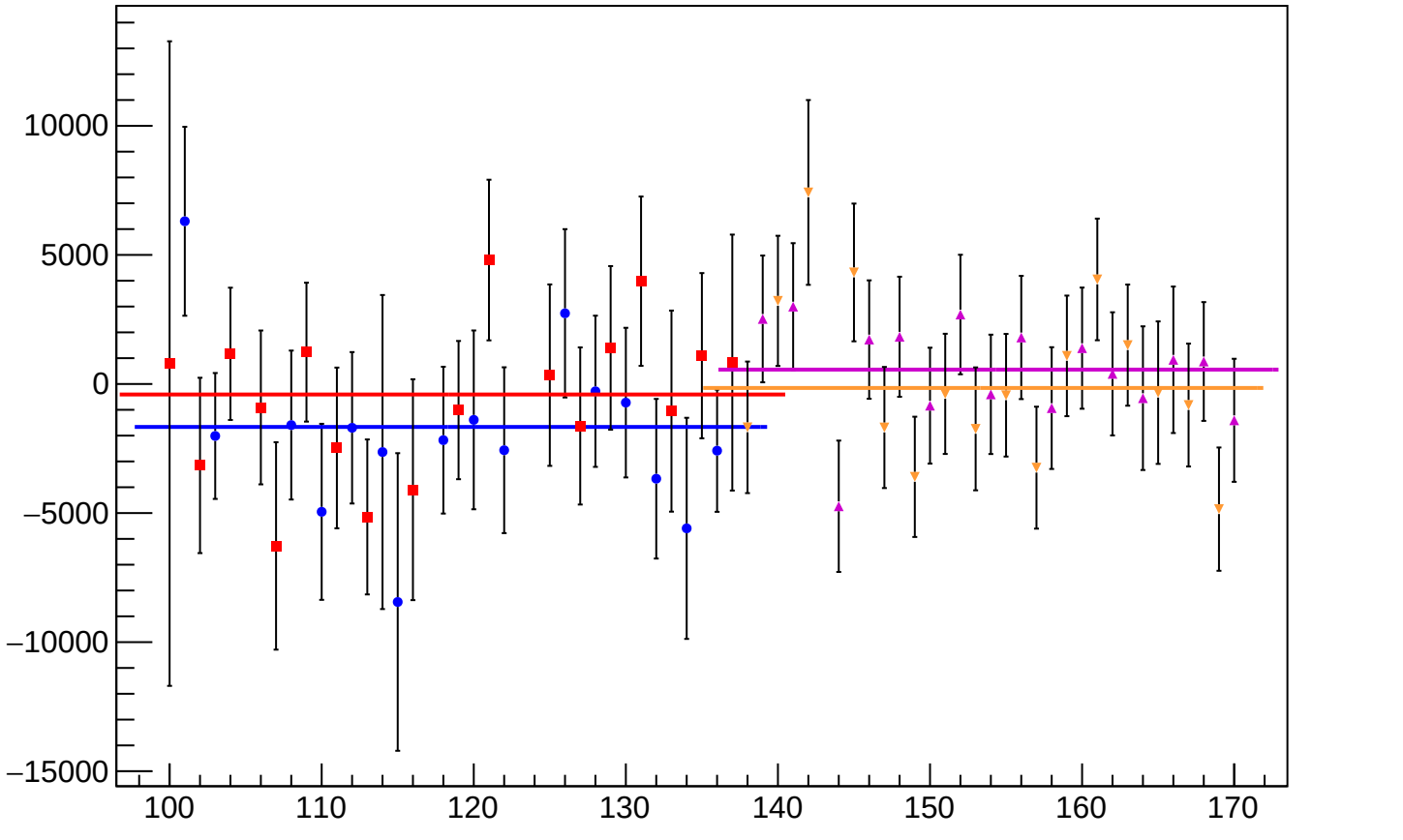
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2387224.9/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1335178.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 7009255.0/31

All: 0.000+/-0.000 $\chi^2$/NDF: 13357253.3/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 6178767.6/33




Right In: -1664.305+/-792.164 $\chi^2$/NDF: 10.8/15

Left Out: -153.796+/-615.255 $\chi^2$/NDF:22.1/15

Right Out: -406.847+/-777.158 $\chi^2$/NDF: 12.7/17

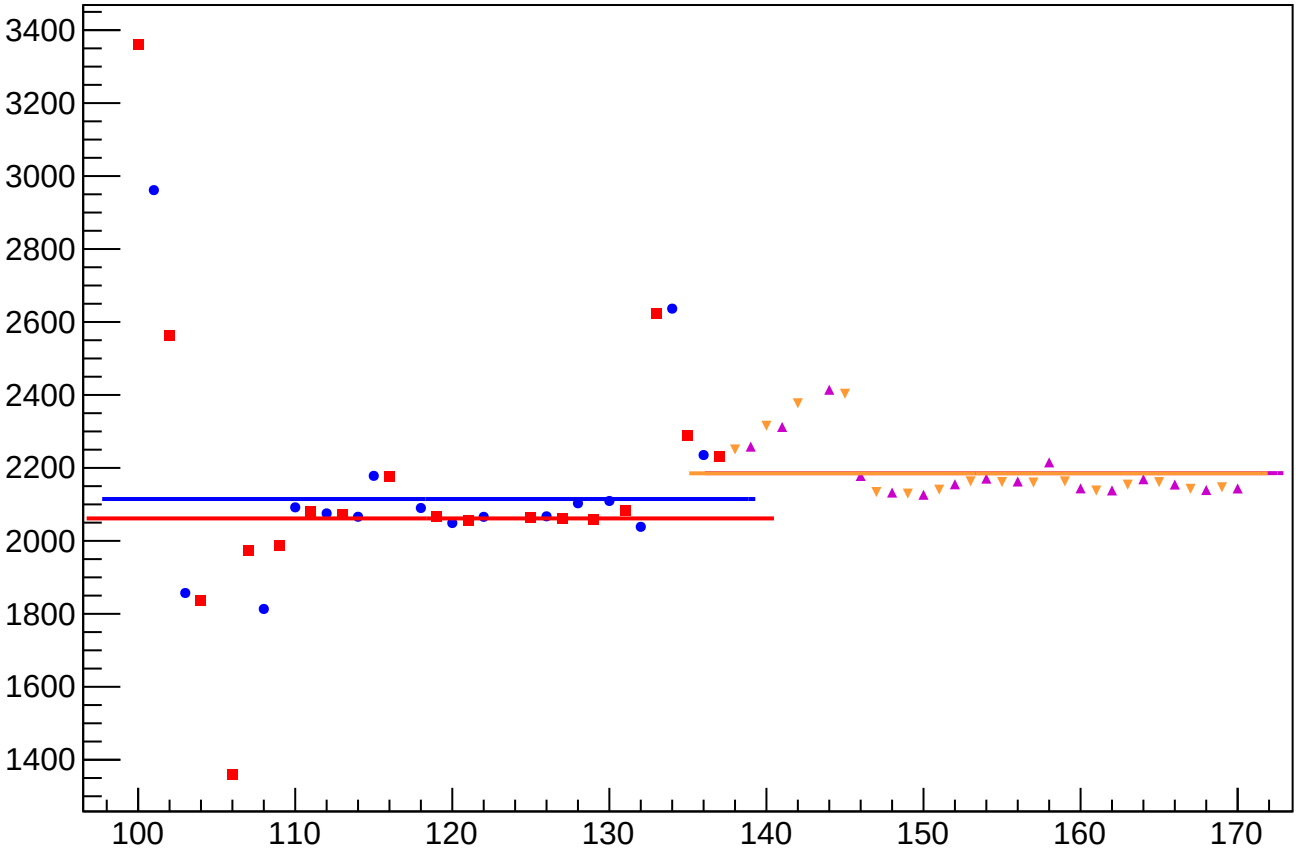
Left In: 557.321+/-601.454 $\chi^2$/NDF:9.6/15

+ sign -722.136+/-485.912 $\chi^2$/NDF: 35.2/31

All: -253.190+/-339.905 $\chi^2$/NDF: 60.3/65

- sign 196.156+/-475.648 $\chi^2$/NDF: 23.3/33

# reg_asym_us_dd_at2lr_dd_avg_rms vs Slug




Right In: 2114.755+/-0.560 $\chi^2$/NDF: 189920.6/15

Left Out: 2185.198+/-0.435 $\chi^2$/NDF:31856.1/15

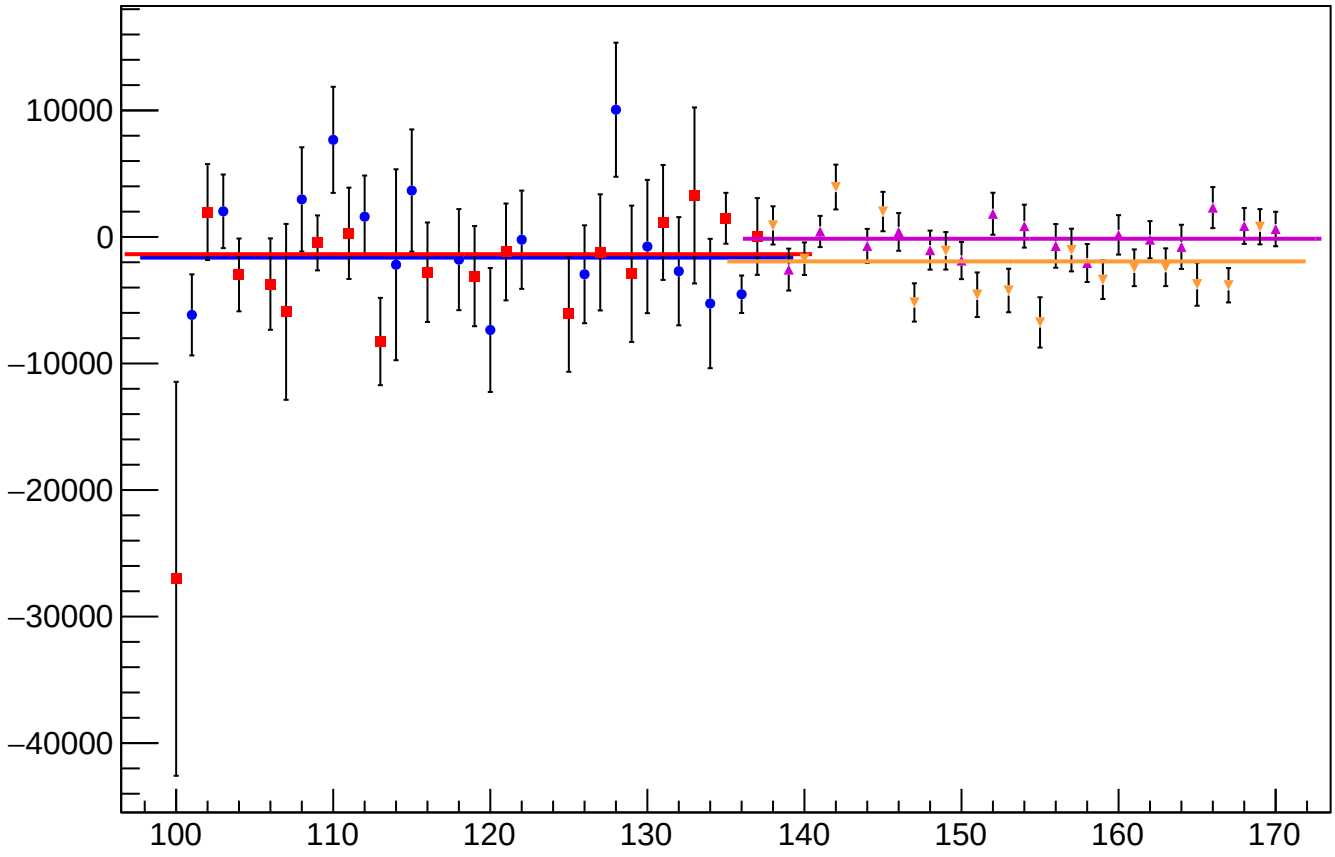
Right Out: 2061.560+/-0.550 $\chi^2$/NDF: 249186.6/17

Left In: 2185.722+/-0.425 $\chi^2$/NDF:29756.8/15

+ sign 2158.693+/-0.344 $\chi^2$/NDF: 231641.3/31

All: 2148.745+/-0.240 $\chi^2$/NDF: 544153.3/65

- sign 2139.212+/-0.336 $\chi^2$/NDF: 310870.3/33




Right In: -1630.474+/-862.417 $\chi^2$/NDF: 22.9/15

Left Out: -1930.719+/-386.641 $\chi^2$/NDF:44.2/15

Right Out: -1361.841+/-840.417 $\chi^2$/NDF: 13.5/17

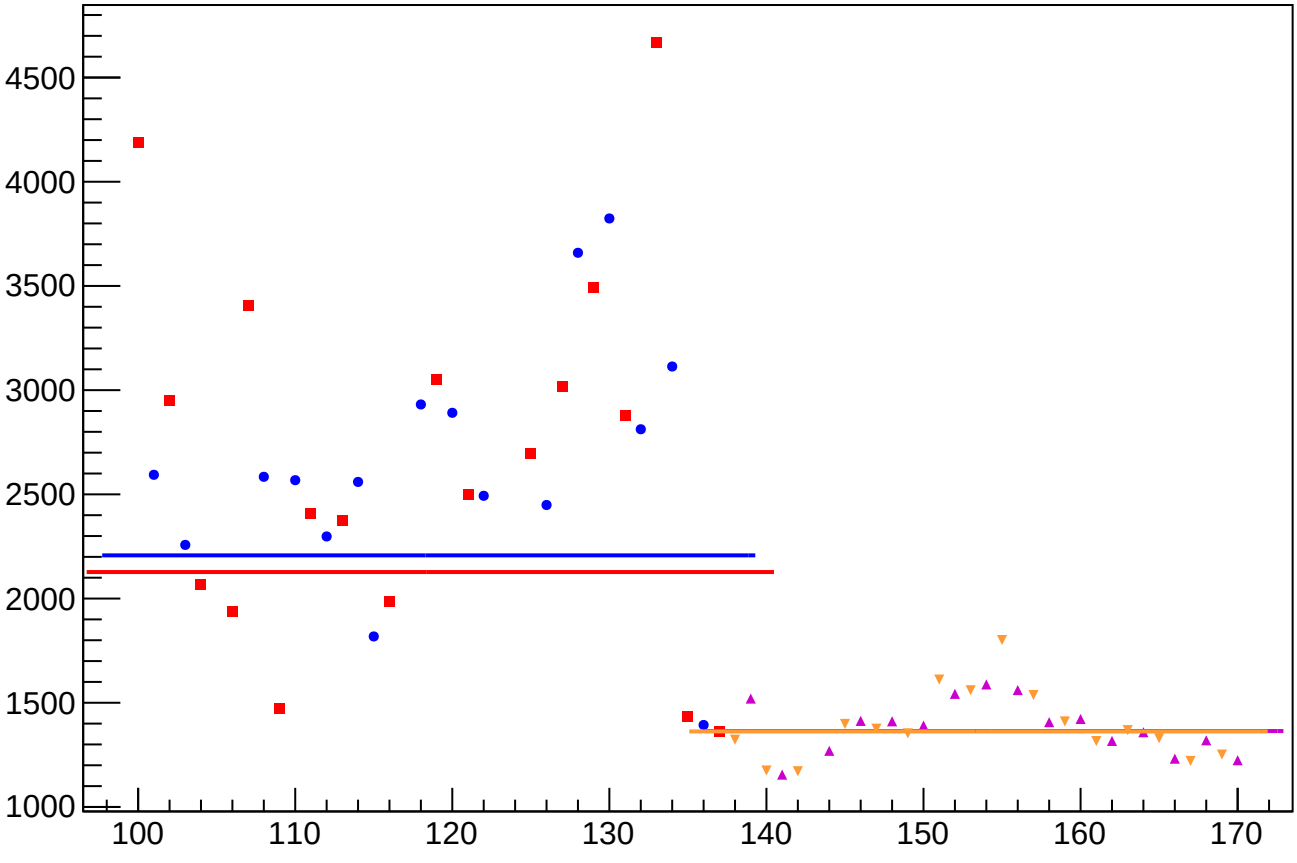
Left In: -142.215+/-377.528 $\chi^2$/NDF:11.2/15

+ sign -1880.471+/-352.807 $\chi^2$/NDF: 67.1/31

All: -1095.198+/-246.438 $\chi^2$/NDF: 103.2/65

- sign -347.004+/-344.377 $\chi^2$/NDF: 26.4/33

# asym_us_dd_at2lr_dd_avg_reg_correction_rms vs Slug




Right In: 2207.254+/-0.610 $\chi^2$/NDF: 1249266.5/15

Left Out: 1362.452+/-0.273 $\chi^2$/NDF:292829.4/15

Right Out: 2127.224+/-0.594 $\chi^2$/NDF: 1458046.9/17

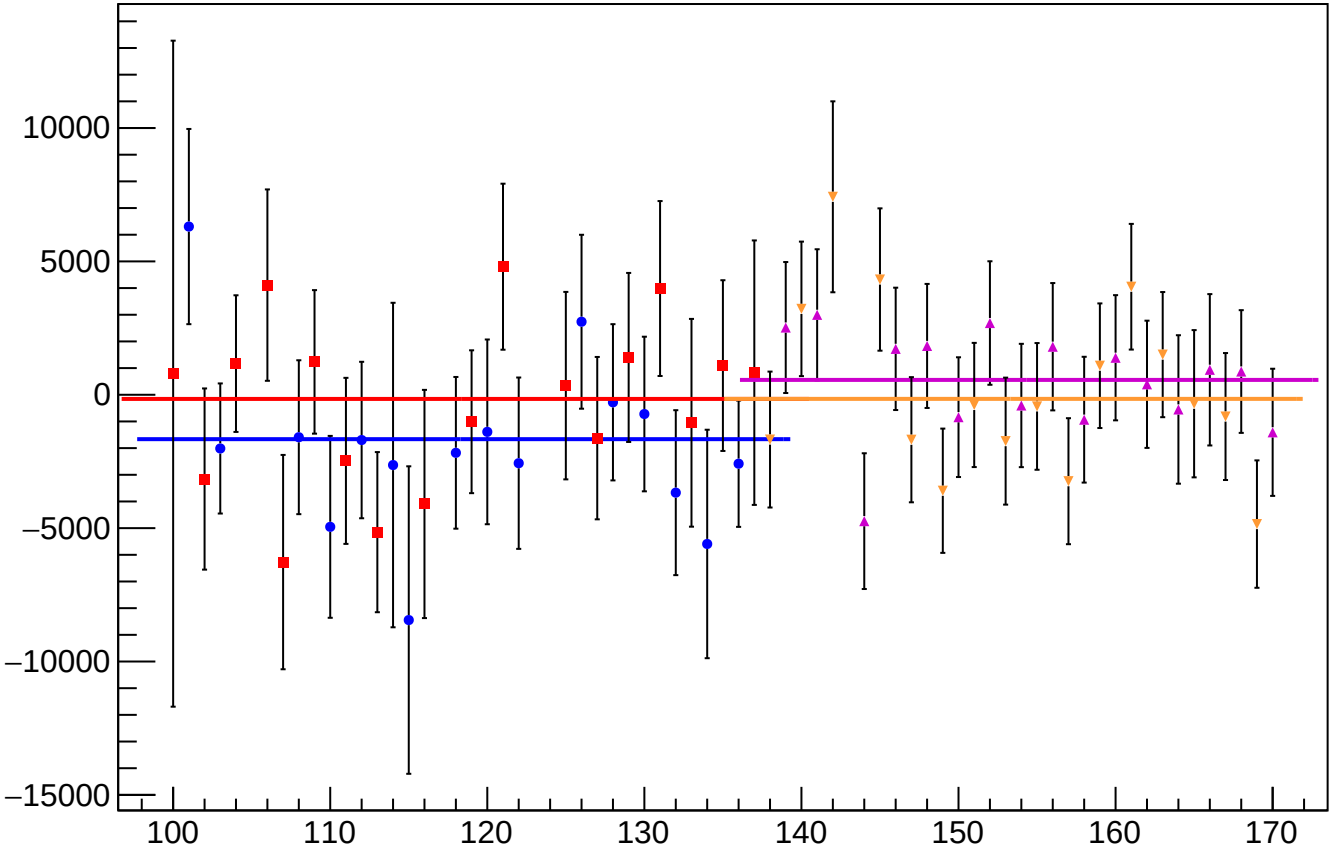
Left In: 1364.347+/-0.267 $\chi^2$/NDF:216462.5/15

+ sign 1503.835+/-0.249 $\chi^2$/NDF: 3140049.8/31

All: 1498.001+/-0.174 $\chi^2$/NDF: 6186883.8/65

- sign 1492.443+/-0.244 $\chi^2$/NDF: 3045766.1/33

# cor_asym_us_dd_at2lr_dd_avg_mean vs Slug




Right In: -1664.231+/-792.164 $\chi^2$/NDF: 10.8/15

Left Out: -153.612+/-615.255 $\chi^2$/NDF:22.1/15

Right Out: -155.775+/-785.481 $\chi^2$/NDF: 14.2/17

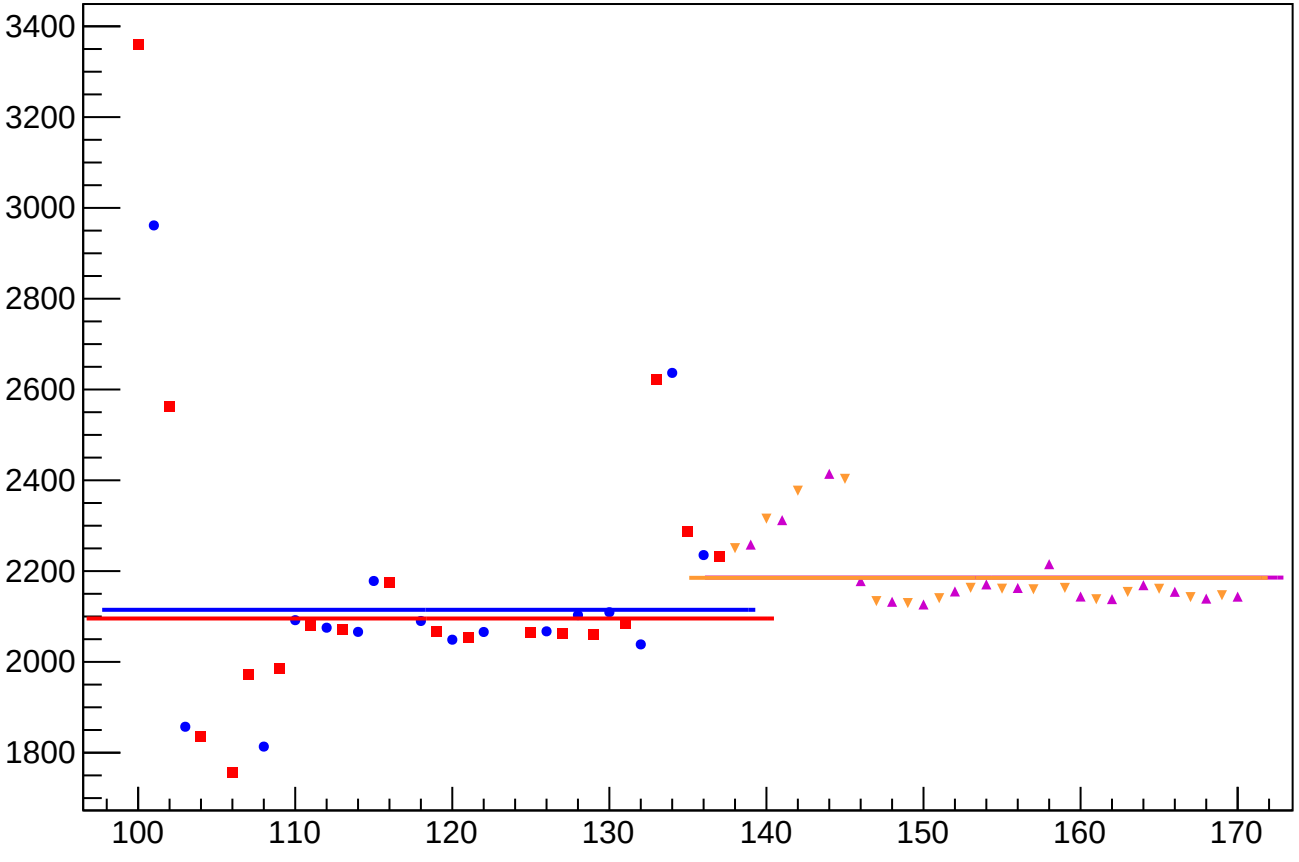
Left In: 557.151+/-601.454 $\chi^2$/NDF:9.6/15

+ sign -721.994+/-485.912 $\chi^2$/NDF: 35.2/31

All: -205.346+/-340.592 $\chi^2$/NDF: 61.7/65

- sign 293.647+/-477.537 $\chi^2$/NDF: 24.3/33

# cor_asym_us_dd_at2lr_dd_avg_rms vs Slug




Right In: 2114.755+/-0.560 $\chi^2$/NDF: 189920.9/15

Left Out: 2185.198+/-0.435 $\chi^2$/NDF:31856.1/15

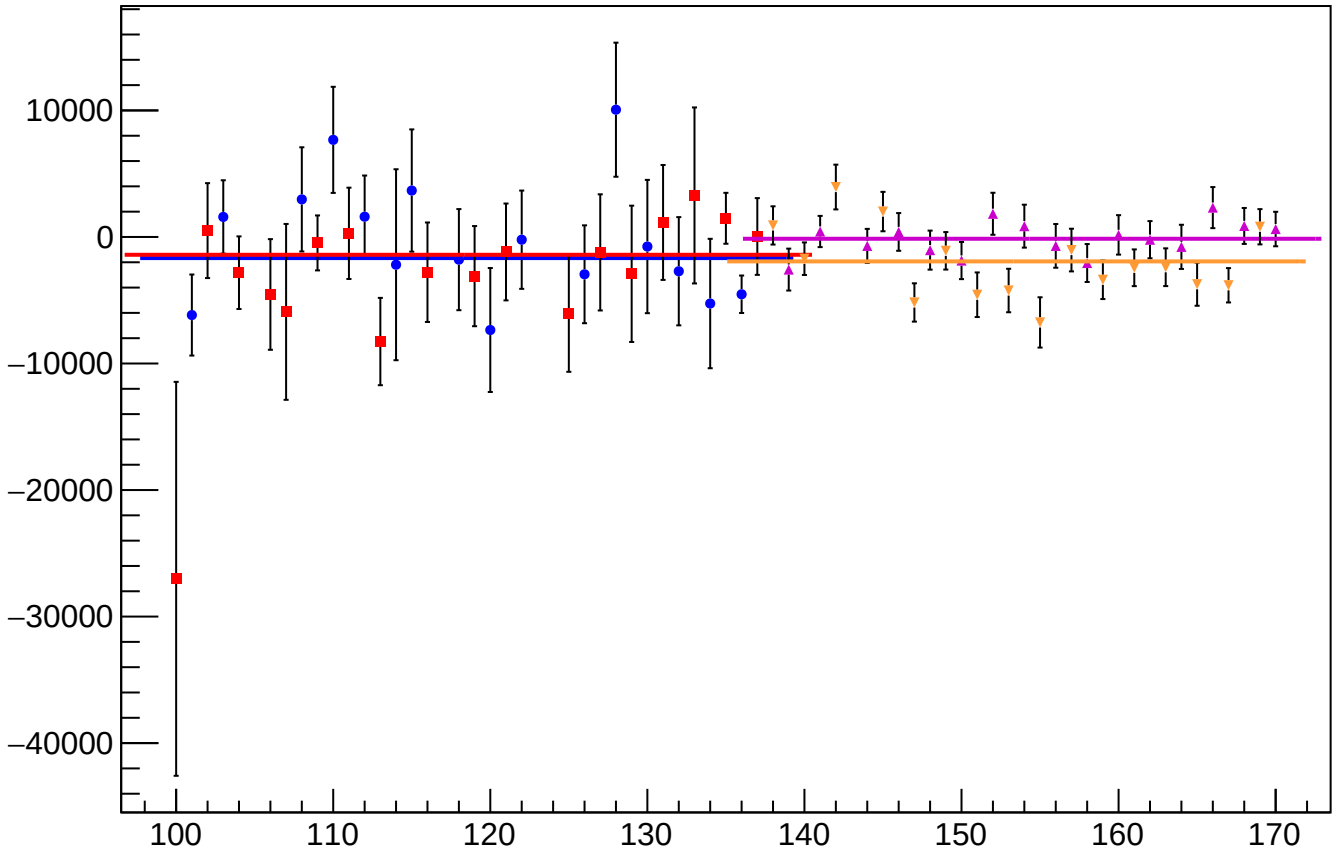
Right Out: 2095.597+/-0.555 $\chi^2$/NDF: 149360.5/17

Left In: 2185.722+/-0.425 $\chi^2$/NDF:29756.8/15

+ sign 2158.693+/-0.344 $\chi^2$/NDF: 231641.6/31

All: 2155.497+/-0.241 $\chi^2$/NDF: 427527.2/65

- sign 2152.411+/-0.338 $\chi^2$/NDF: 195715.5/33




Right In: -1668.482+/-862.126 $\chi^2$/NDF: 22.5/15

Left Out: -1930.740+/-386.643 $\chi^2$/NDF:44.2/15

Right Out: -1407.975+/-847.068 $\chi^2$/NDF: 13.0/17

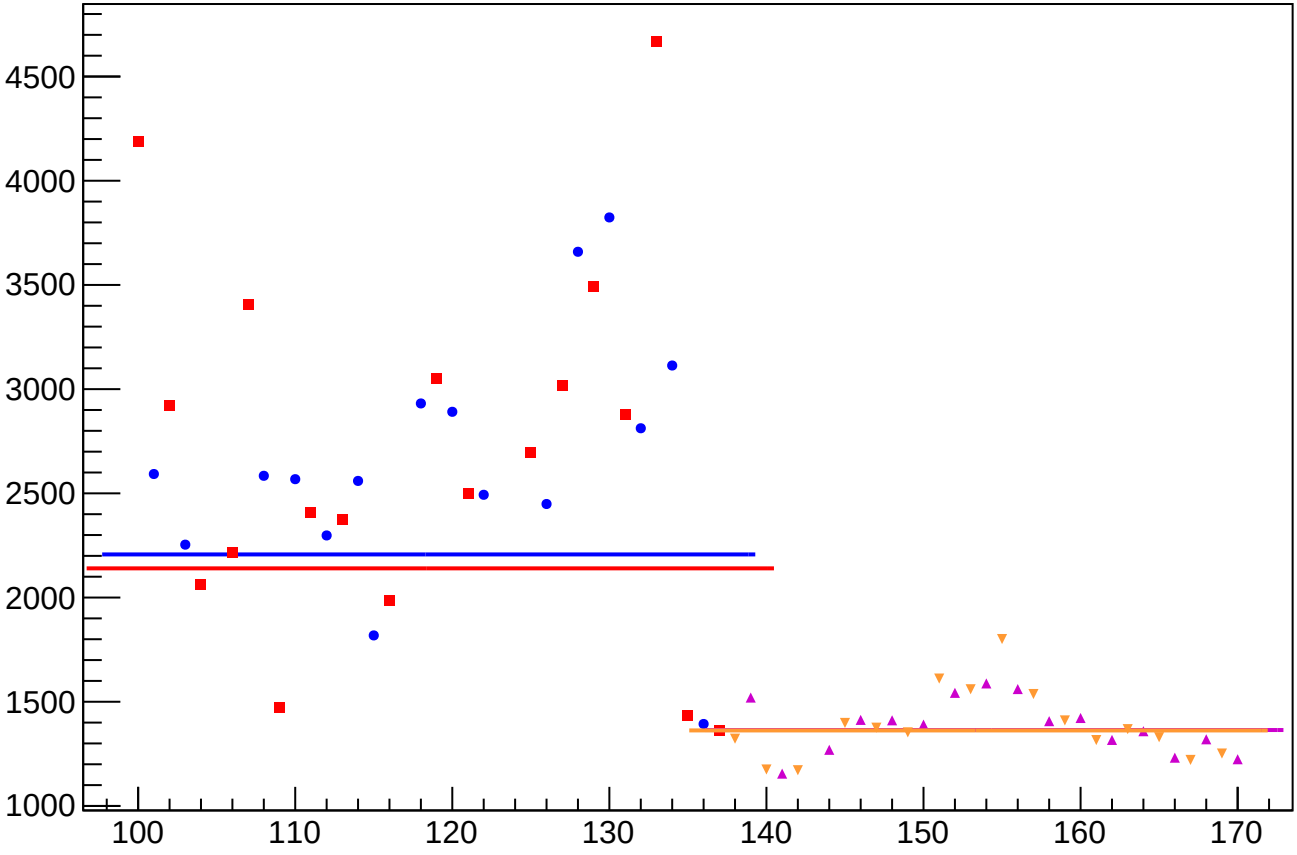
Left In: -142.104+/-377.527 $\chi^2$/NDF:11.2/15

+ sign -1886.824+/-352.789 $\chi^2$/NDF: 66.7/31

All: -1101.842+/-246.597 $\chi^2$/NDF: 102.5/65

- sign -351.883+/-344.830 $\chi^2$/NDF: 26.0/33

# asym_us_dd_at2lr_dd_avg_cor_correction_rms vs Slug




Right In: 2206.918+/-0.610 $\chi^2$/NDF: 1249024.4/15

Left Out: 1362.463+/-0.273 $\chi^2$/NDF:292772.8/15

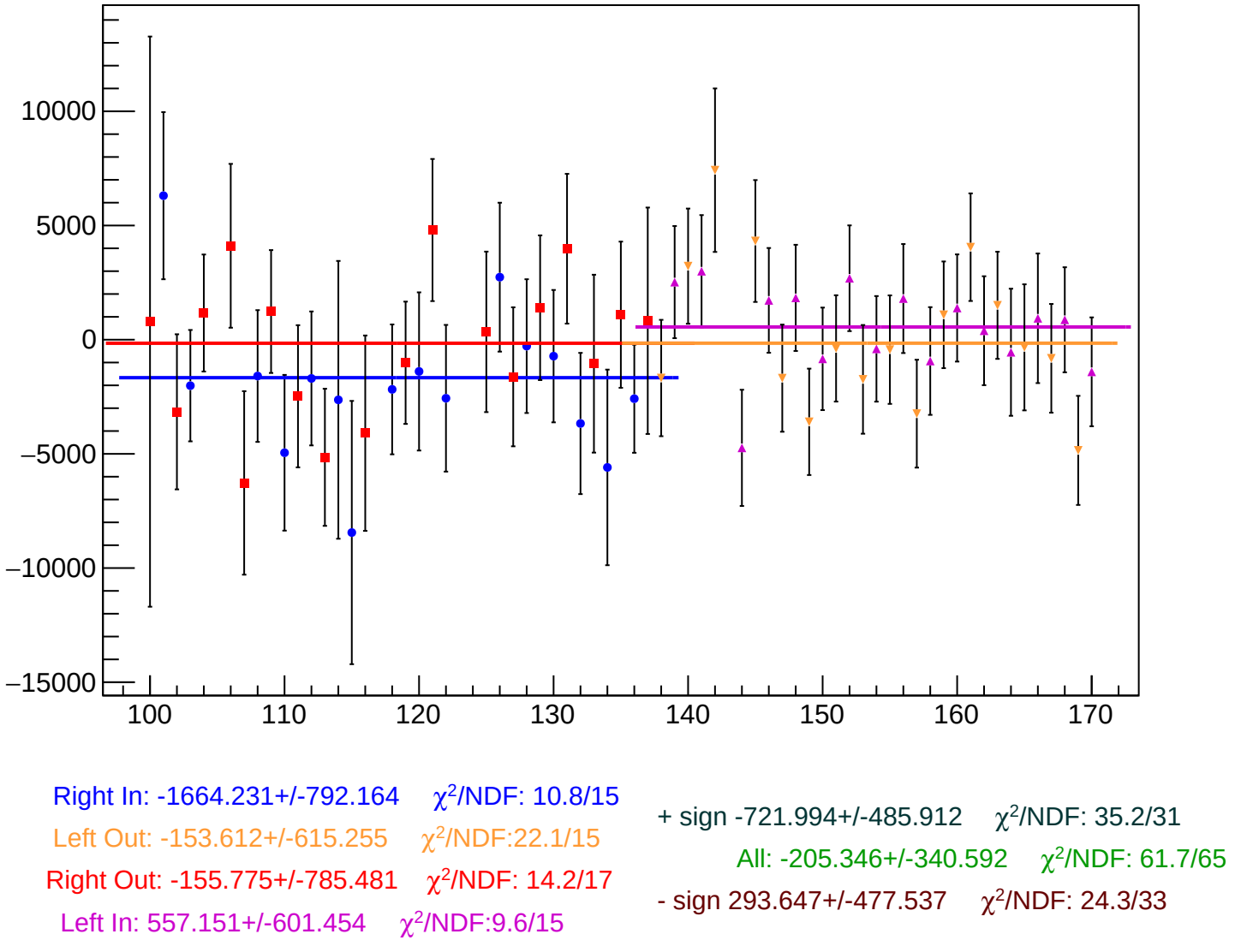
Right Out: 2140.060+/-0.599 $\chi^2$/NDF: 1448366.8/17

Left In: 1364.342+/-0.267 $\chi^2$/NDF:216521.5/15

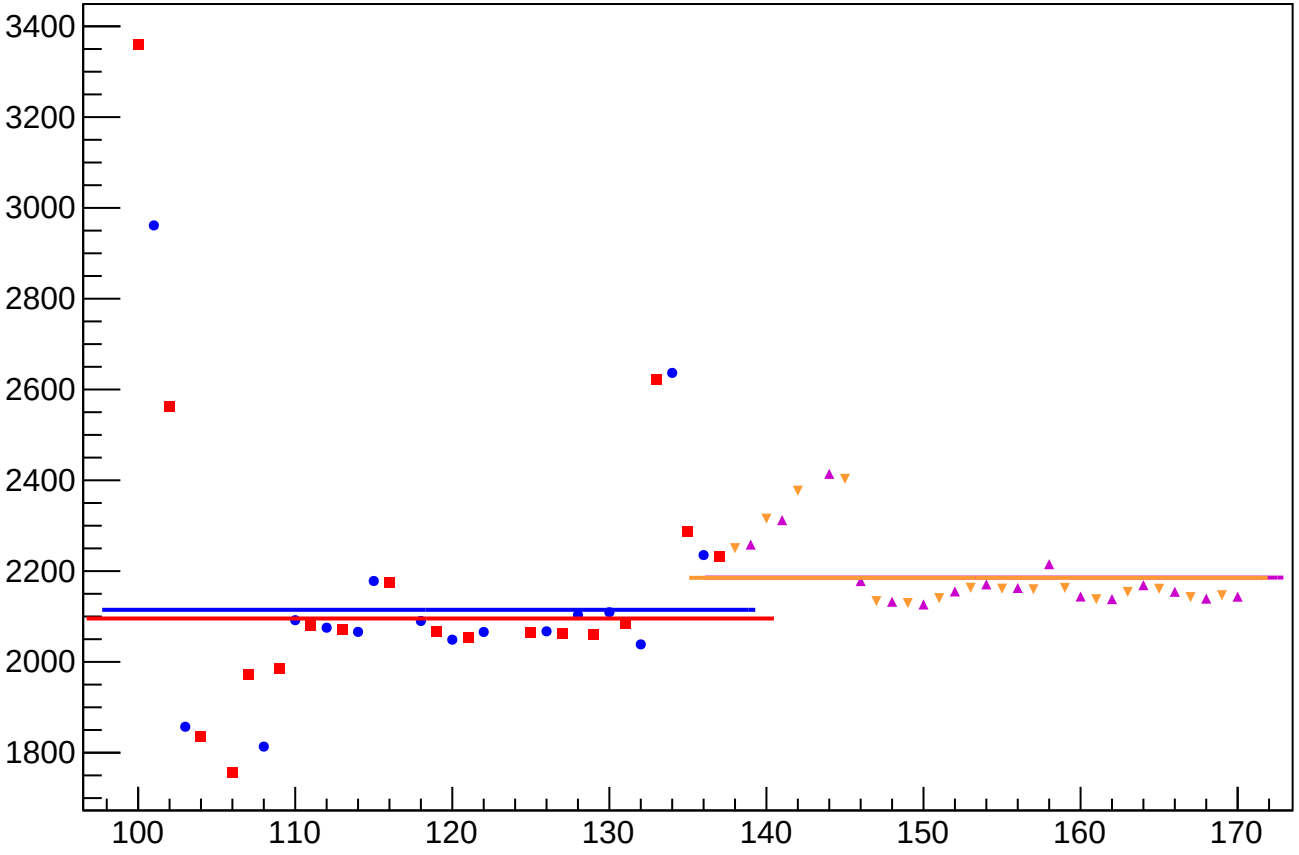
+ sign 1503.869+/-0.249 $\chi^2$/NDF: 3139333.1/31

All: 1498.256+/-0.174 $\chi^2$/NDF: 6204518.3/65

- sign 1492.893+/-0.244 $\chi^2$/NDF: 3064195.3/33


eigen_cor_asym_us_dd_at2lr_dd_avg_mean vs Slug
10000
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: -1664.231+/-792.164 χ²/NDF: 10.8/15
Left Out: -153.612+/-615.255 χ²/NDF:22.1/15
Right Out: -155.775+/-785.481 χ²/NDF: 14.2/17
Left In: 557.151+/-601.454 χ²/NDF:9.6/15
+ sign -721.994+/-485.912 χ²/NDF: 35.2/31
All: -205.346+/-340.592 χ²/NDF: 61.7/65
- sign 293.647+/-477.537 χ²/NDF: 24.3/33

# eigen_cor_asym_us_dd_at2lr_dd_avg_rms vs Slug




Right In: 2114.755+/-0.560 $\chi^2$/NDF: 189920.9/15

Left Out: 2185.198+/-0.435 $\chi^2$/NDF:31856.1/15

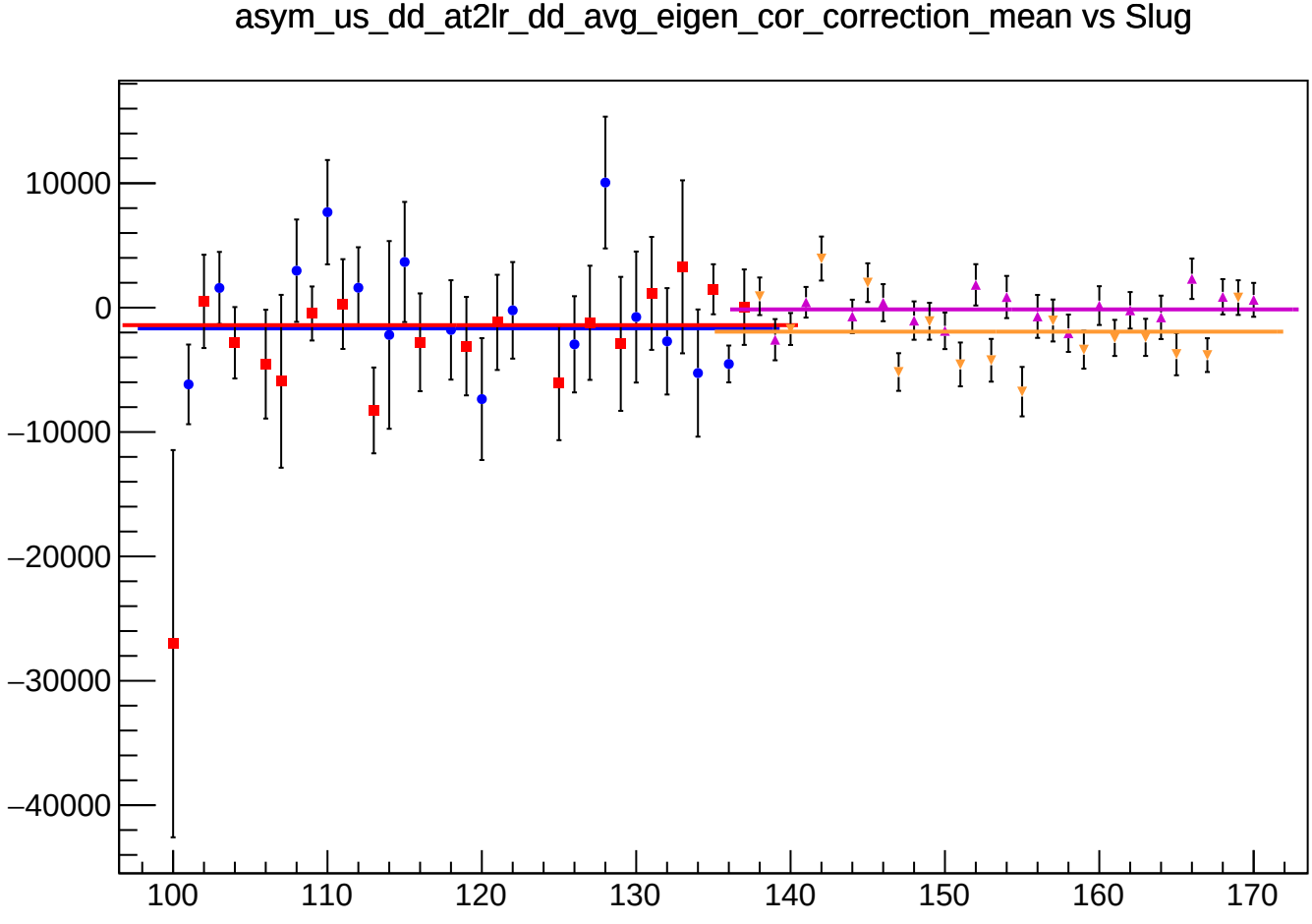
Right Out: 2095.597+/-0.555 $\chi^2$/NDF: 149360.5/17

Left In: 2185.722+/-0.425 $\chi^2$/NDF:29756.8/15

+ sign 2158.693+/-0.344 $\chi^2$/NDF: 231641.6/31

All: 2155.497+/-0.241 $\chi^2$/NDF: 427527.2/65

- sign 2152.411+/-0.338 $\chi^2$/NDF: 195715.5/33




Right In: -1668.482+/-862.126 $\chi^2$/NDF: 22.5/15

Left Out: -1930.740+/-386.643 $\chi^2$/NDF:44.2/15

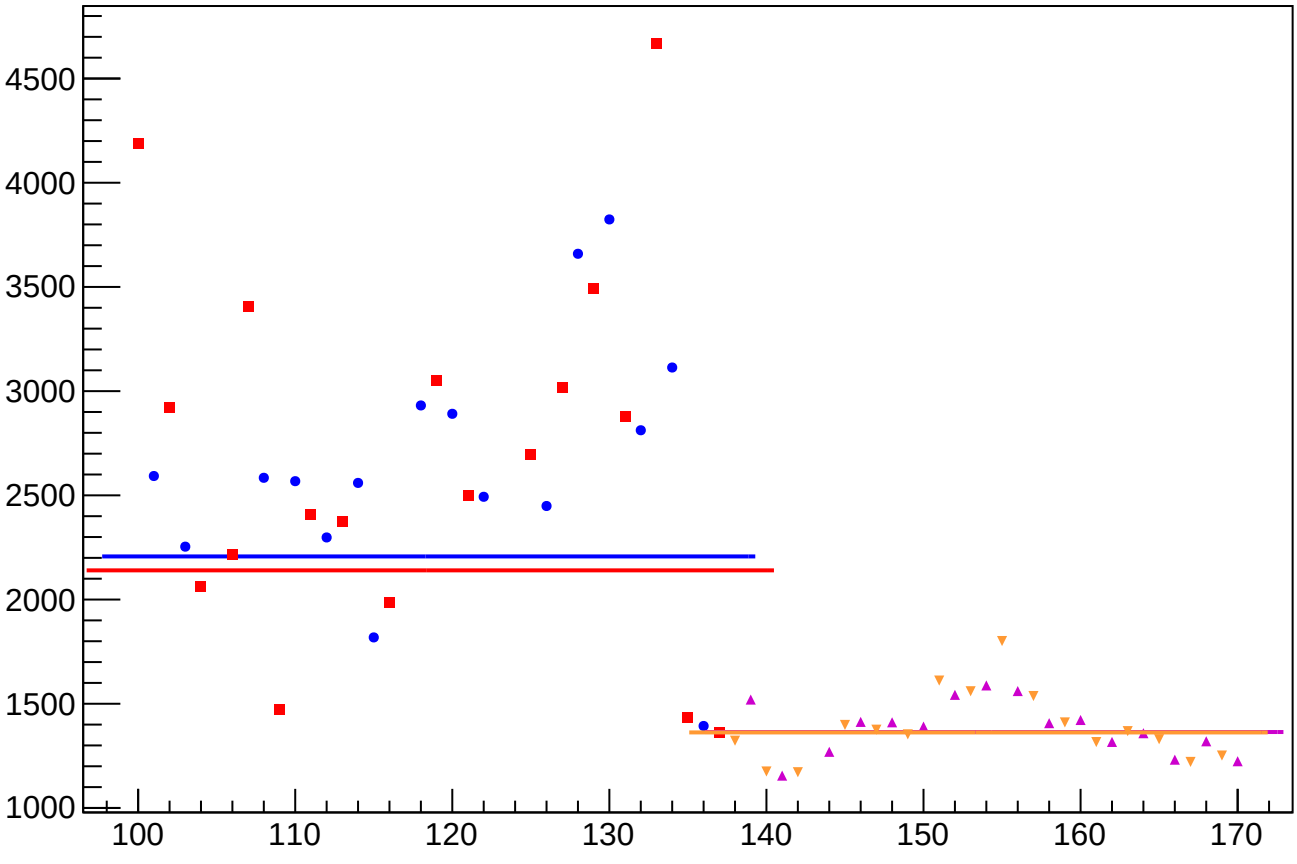
Right Out: -1407.975+/-847.068 $\chi^2$/NDF: 13.0/17

Left In: -142.104+/-377.527 $\chi^2$/NDF:11.2/15

+ sign -1886.824+/-352.789 $\chi^2$/NDF: 66.7/31

All: -1101.842+/-246.597 $\chi^2$/NDF: 102.5/65

- sign -351.883+/-344.830 $\chi^2$/NDF: 26.0/33




Right In: 2206.918+/-0.610 $\chi^2$/NDF: 1249024.4/15

Left Out: 1362.463+/-0.273 $\chi^2$/NDF:292772.8/15

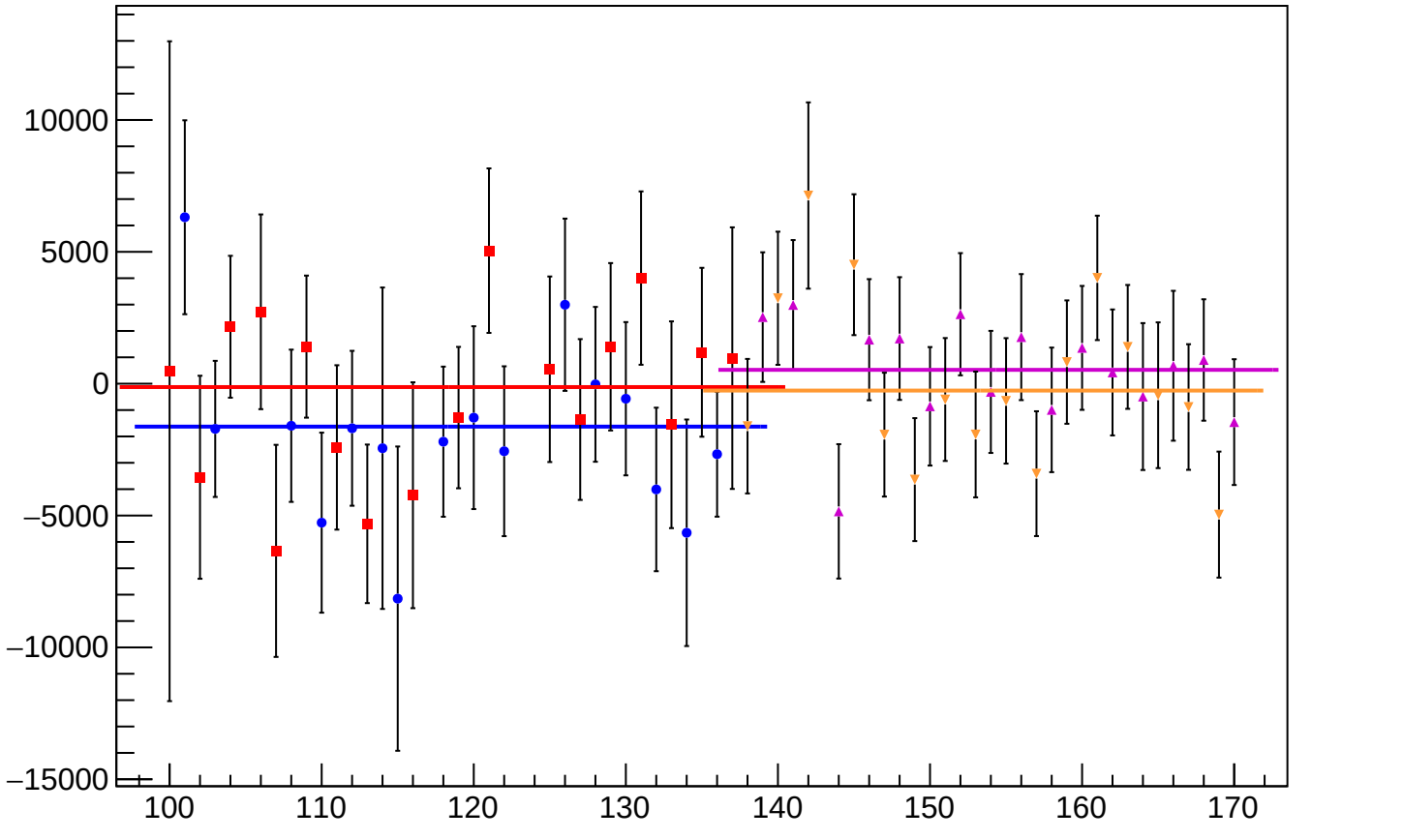
Right Out: 2140.060+/-0.599 $\chi^2$/NDF: 1448366.8/17

Left In: 1364.342+/-0.267 $\chi^2$/NDF:216521.5/15

+ sign 1503.869+/-0.249 $\chi^2$/NDF: 3139333.1/31

All: 1498.256+/-0.174 $\chi^2$/NDF: 6204518.3/65

- sign 1492.893+/-0.244 $\chi^2$/NDF: 3064195.3/33




Right In: -1627.635+/-797.966 $\chi^2$/NDF: 11.3/15

Left Out: -260.597+/-615.681 $\chi^2$/NDF:22.6/15

Right Out: -128.099+/-795.899 $\chi^2$/NDF: 14.6/17

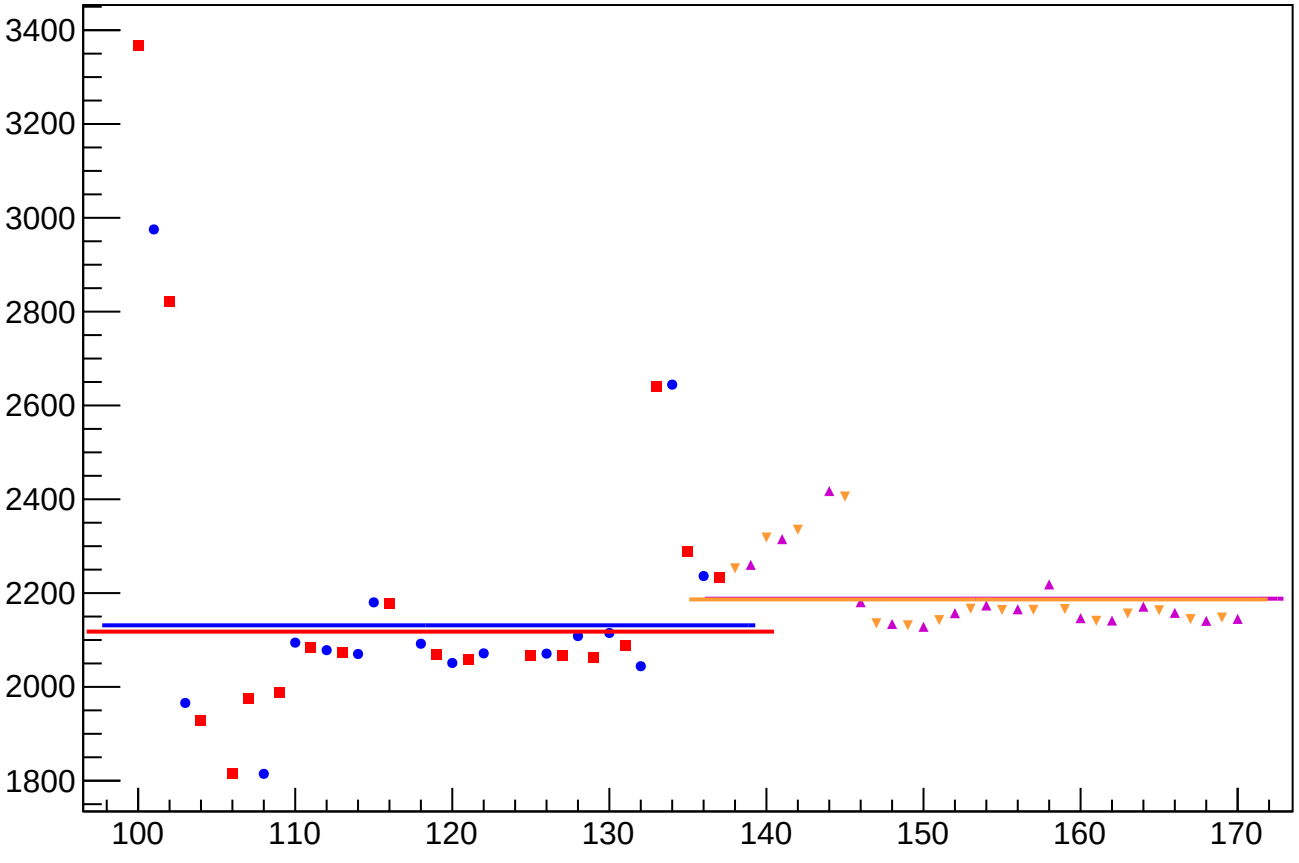
Left In: 524.754+/-602.106 $\chi^2$/NDF:9.6/15

+ sign -770.723+/-487.454 $\chi^2$/NDF: 35.8/31

All: -233.850+/-342.081 $\chi^2$/NDF: 62.8/65

- sign 287.121+/-480.180 $\chi^2$/NDF: 24.6/33

# dit_asym_us_dd_at2lr_dd_avg_rms vs Slug




Right In: 2131.298+/-0.564 $\chi^2$/NDF: 175943.3/15

Left Out: 2186.462+/-0.435 $\chi^2$/NDF:29615.4/15

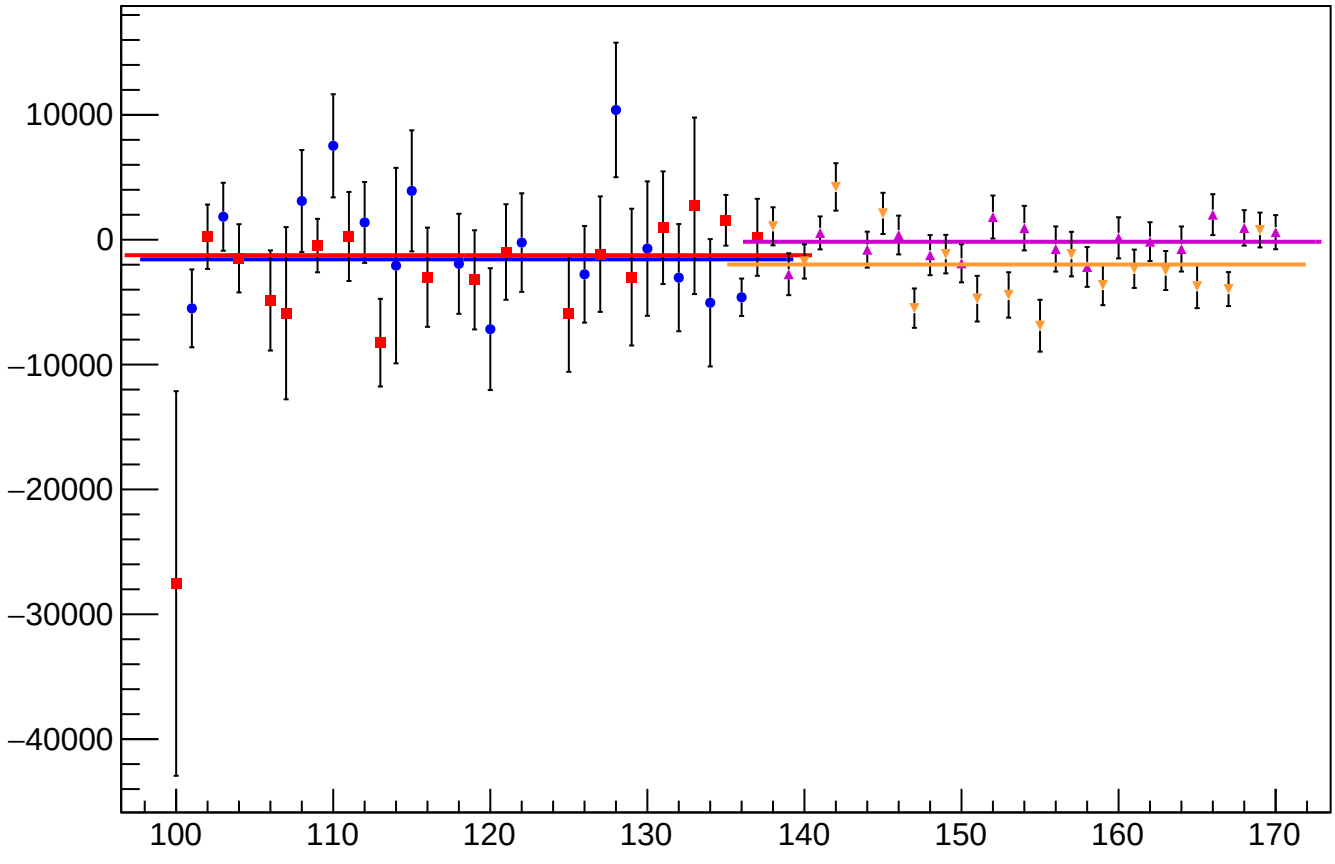
Right Out: 2117.868+/-0.563 $\chi^2$/NDF: 163622.7/17

Left In: 2188.078+/-0.426 $\chi^2$/NDF:29919.8/15

+ sign 2165.877+/-0.345 $\chi^2$/NDF: 211550.0/31

All: 2164.174+/-0.242 $\chi^2$/NDF: 415039.5/65

- sign 2162.522+/-0.340 $\chi^2$/NDF: 203441.4/33




Right In: -1571.073+/-859.754 $\chi^2$/NDF: 22.6/15

Left Out: -1985.261+/-402.390 $\chi^2$/NDF:44.1/15

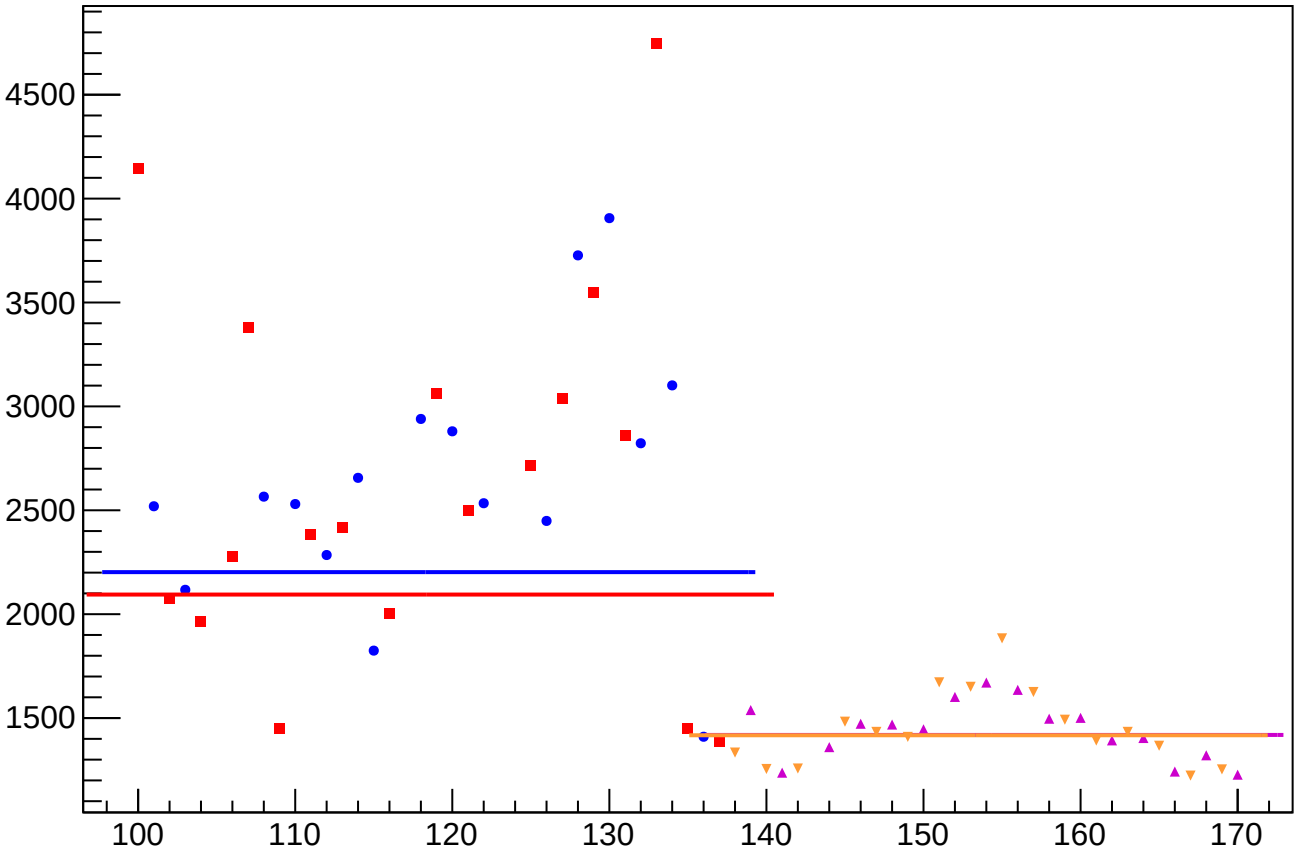
Right Out: -1241.008+/-819.775 $\chi^2$/NDF: 13.1/17

Left In: -162.981+/-392.654 $\chi^2$/NDF:10.9/15

+ sign -1910.835+/-364.449 $\chi^2$/NDF: 66.9/31

All: -1115.282+/-253.976 $\chi^2$/NDF: 101.6/65

- sign -364.150+/-354.128 $\chi^2$/NDF: 25.4/33




Right In: 2202.378+/-0.608 $\chi^2$/NDF: 1222965.0/15

Left Out: 1417.282+/-0.285 $\chi^2$/NDF:326446.7/15

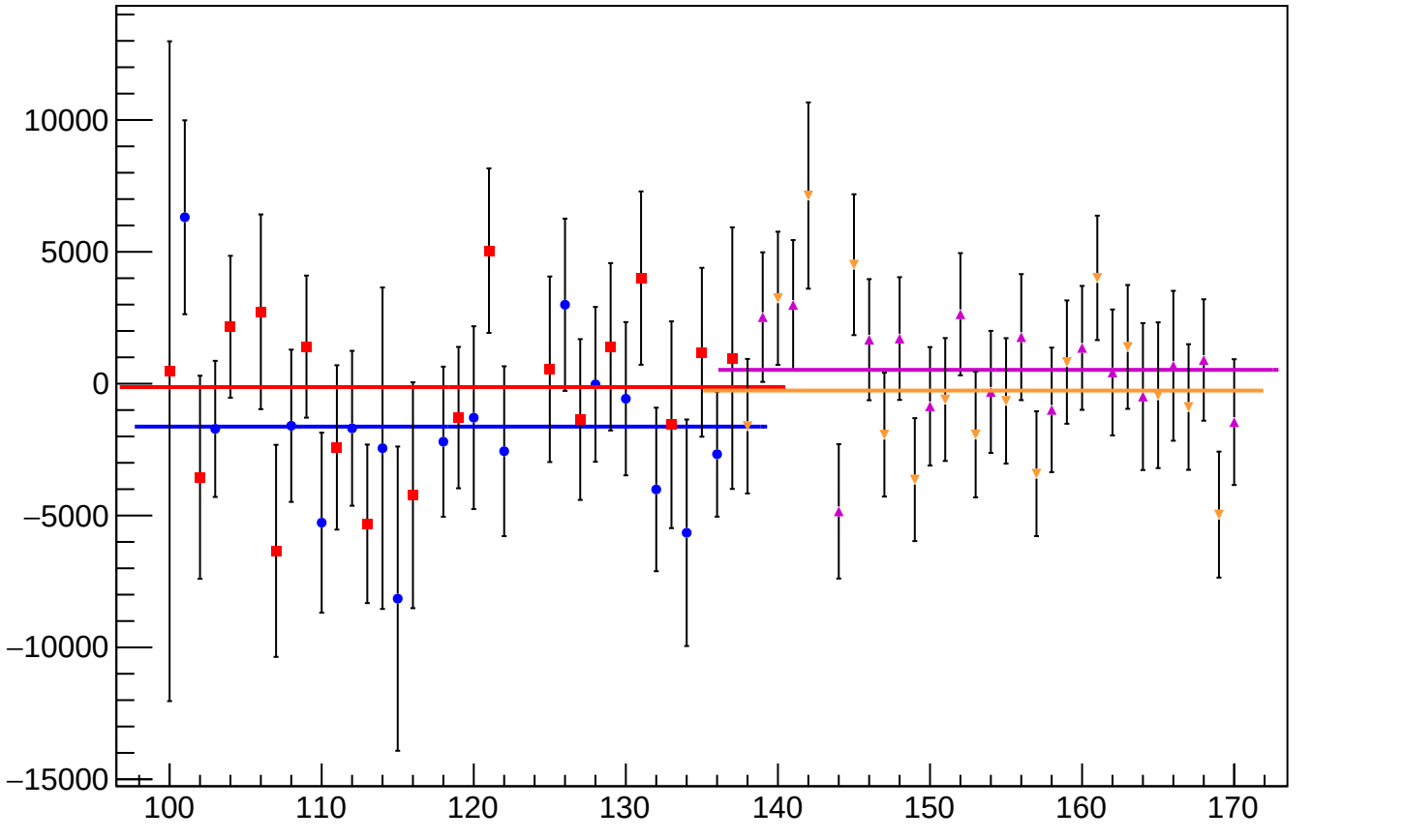
Right Out: 2094.445+/-0.580 $\chi^2$/NDF: 1373676.8/17

Left In: 1418.845+/-0.278 $\chi^2$/NDF:229894.5/15

+ sign 1558.356+/-0.258 $\chi^2$/NDF: 2917474.2/31

All: 1551.444+/-0.180 $\chi^2$/NDF: 5627334.3/65

- sign 1544.918+/-0.250 $\chi^2$/NDF: 2708461.5/33




Right In: -1627.637+/-797.966 $\chi^2$/NDF: 11.3/15

Left Out: -260.593+/-615.681 $\chi^2$/NDF:22.6/15

Right Out: -128.093+/-795.899 $\chi^2$/NDF: 14.6/17

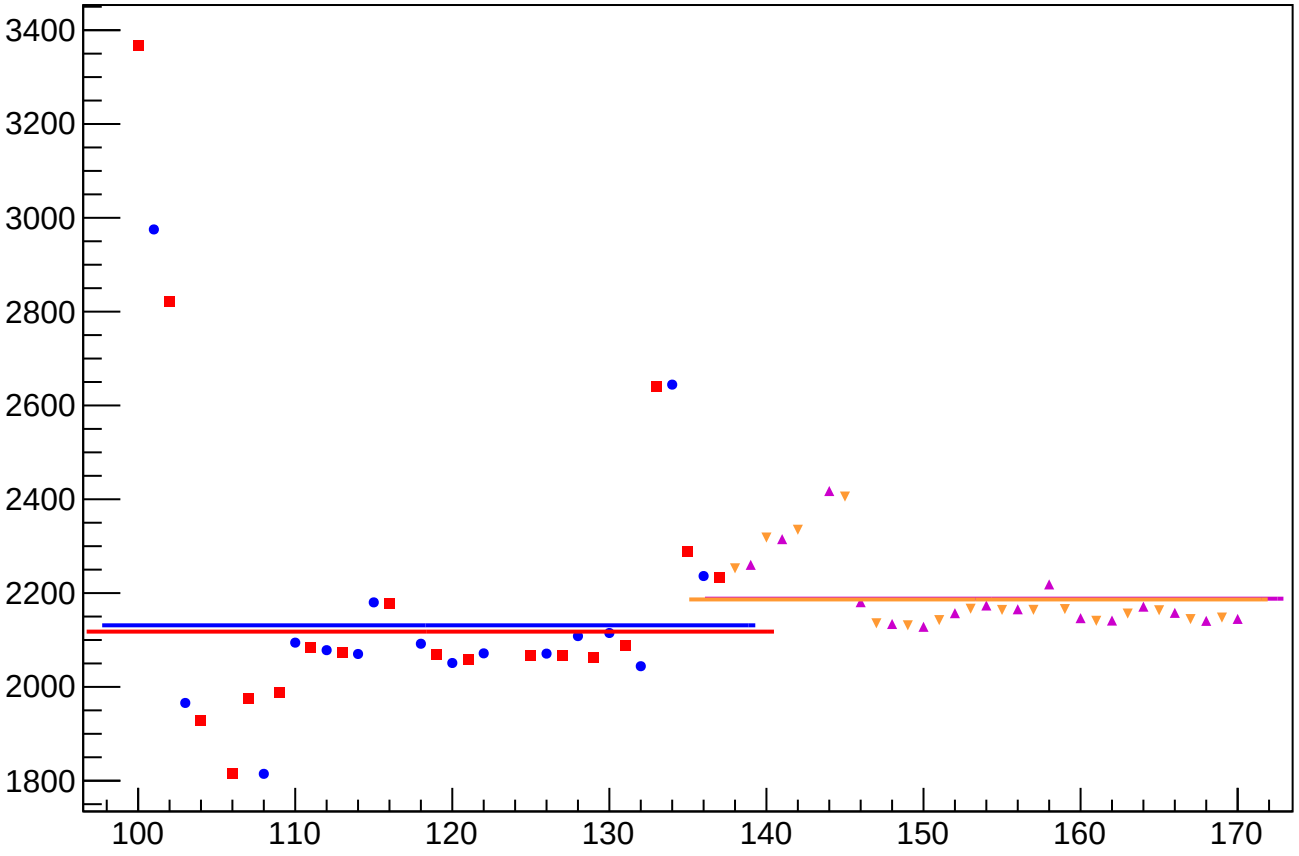
Left In: 524.755+/-602.106 $\chi^2$/NDF:9.6/15

+ sign -770.722+/-487.454 $\chi^2$/NDF: 35.8/31

All: -233.848+/-342.081 $\chi^2$/NDF: 62.8/65

- sign 287.124+/-480.180 $\chi^2$/NDF: 24.6/33

# eigen_dit_asym_us_dd_at2lr_dd_avg_rms vs Slug




Right In: 2131.298+/-0.564 $\chi^2$/NDF: 175943.3/15

Left Out: 2186.462+/-0.435 $\chi^2$/NDF:29615.5/15

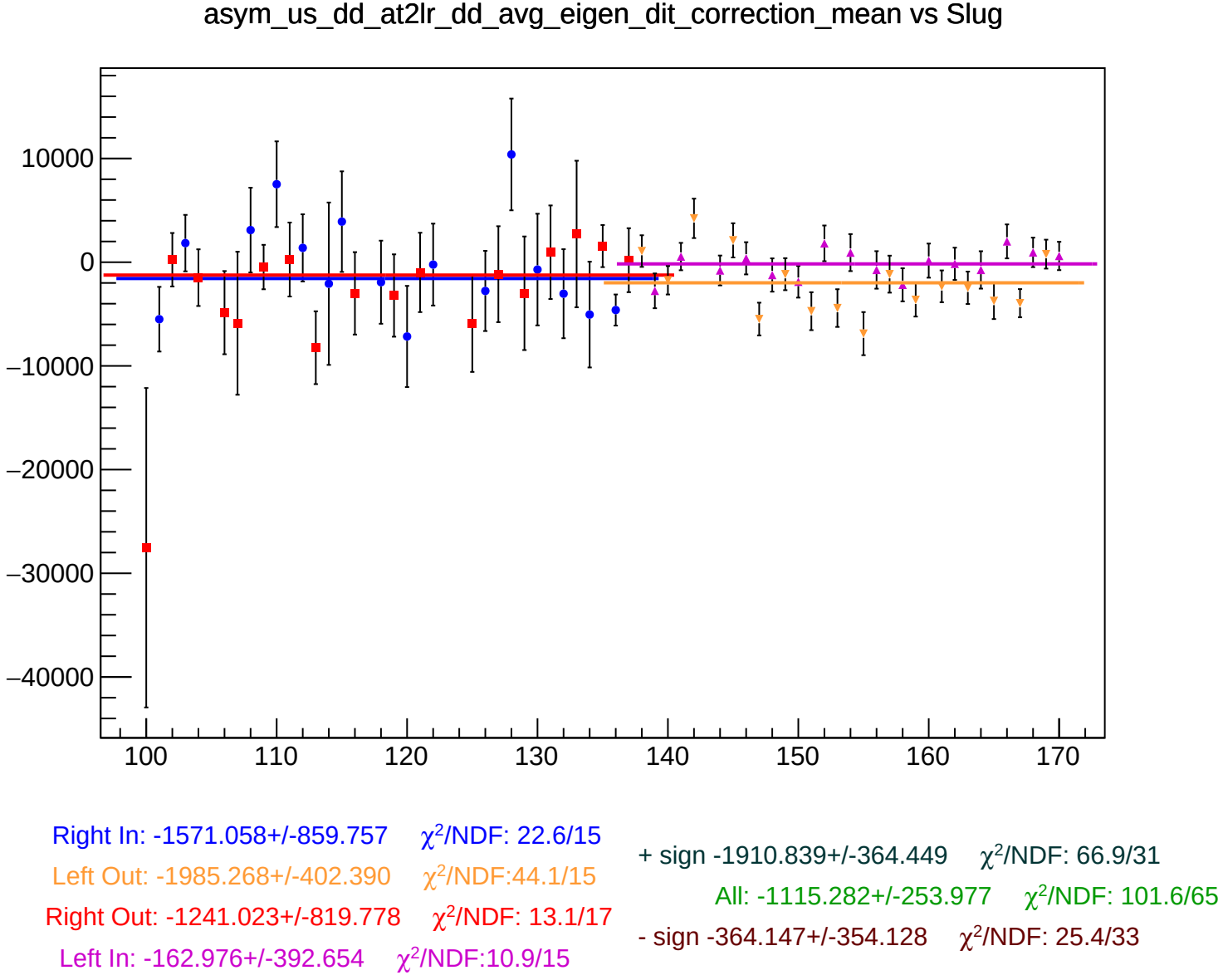
Right Out: 2117.868+/-0.563 $\chi^2$/NDF: 163622.6/17

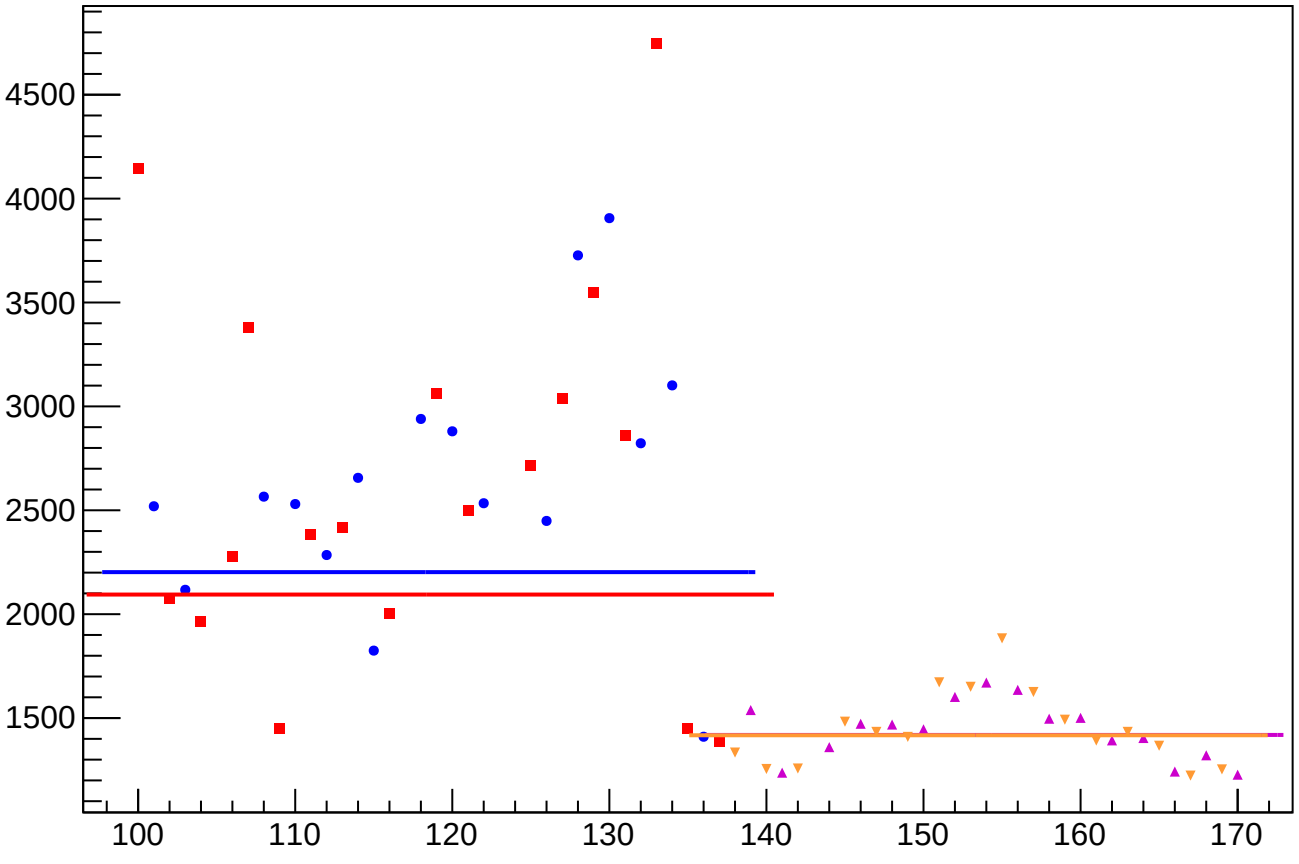
Left In: 2188.078+/-0.426 $\chi^2$/NDF:29919.9/15

+ sign 2165.877+/-0.345 $\chi^2$/NDF: 211550.0/31

All: 2164.174+/-0.242 $\chi^2$/NDF: 415039.5/65

- sign 2162.522+/-0.340 $\chi^2$/NDF: 203441.4/33


asym_us_dd_at2lr_dd_avg_eigen_dit_correction_mean vs Slug
10000
0
−10000
−20000
−30000
−40000
100
110
120
130
140
150
160
170
Right In: -1571.058+/-859.757 χ²/NDF: 22.6/15
Left Out: -1985.268+/-402.390 χ²/NDF:44.1/15
Right Out: -1241.023+/-819.778 χ²/NDF: 13.1/17
Left In: -162.976+/-392.654 χ²/NDF:10.9/15
+ sign -1910.839+/-364.449 χ²/NDF: 66.9/31
All: -1115.282+/-253.977 χ²/NDF: 101.6/65
- sign -364.147+/-354.128 χ²/NDF: 25.4/33




Right In: 2202.391+/-0.608 $\chi^2$/NDF: 1222905.3/15

Left Out: 1417.283+/-0.285 $\chi^2$/NDF:326440.8/15

Right Out: 2094.457+/-0.580 $\chi^2$/NDF: 1373629.6/17

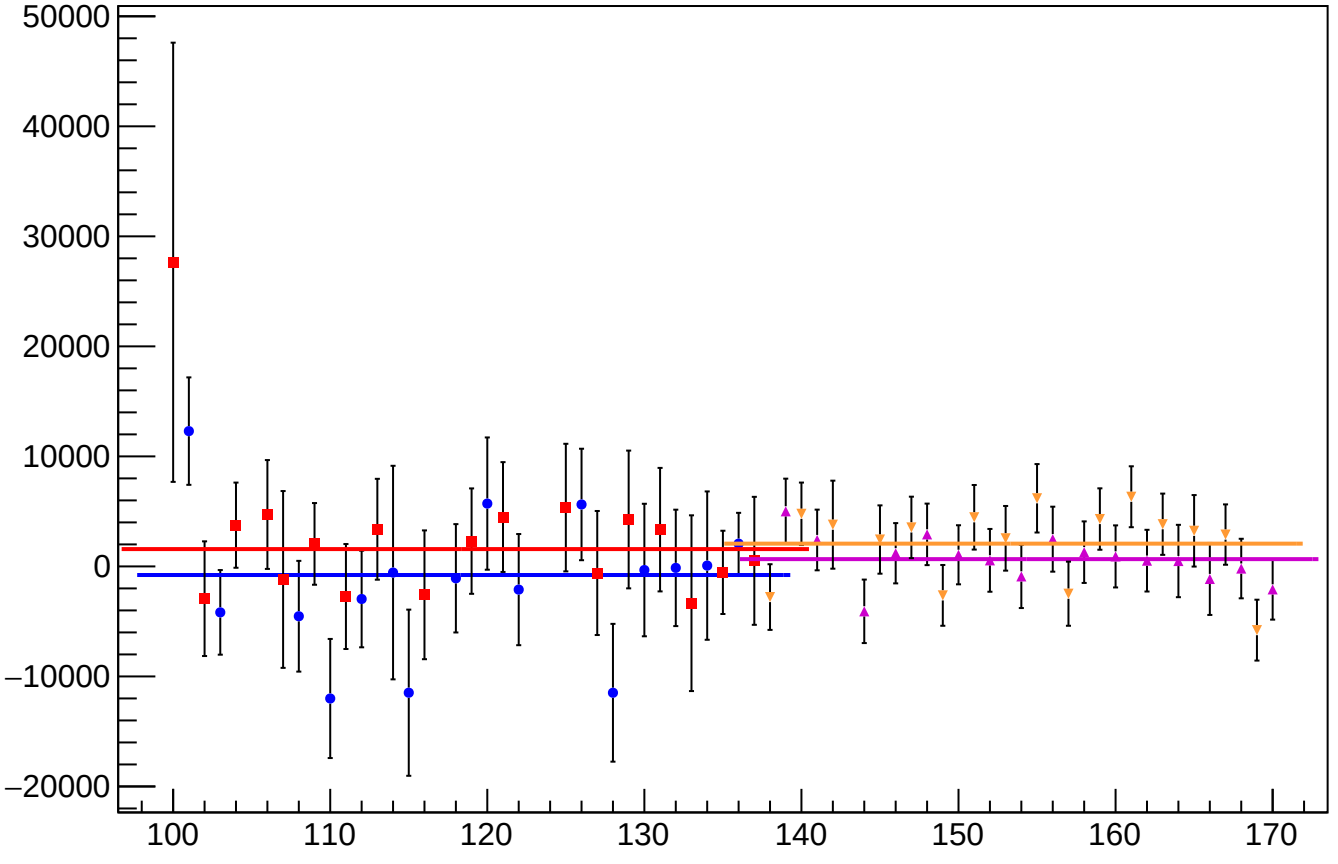
Left In: 1418.845+/-0.278 $\chi^2$/NDF:229899.9/15

+ sign 1558.359+/-0.258 $\chi^2$/NDF: 2917439.4/31

All: 1551.446+/-0.180 $\chi^2$/NDF: 5627293.7/65

- sign 1544.919+/-0.250 $\chi^2$/NDF: 2708455.2/33

# asym_us_dd_at2lr_dd_avg_mean vs Slug




Right In: -781.619+/-1241.711 $\chi^2$/NDF: 21.9/15

Left Out: 2069.067+/-733.051 $\chi^2$/NDF:23.5/15

Right Out: 1574.673+/-1218.961 $\chi^2$/NDF: 6.7/17

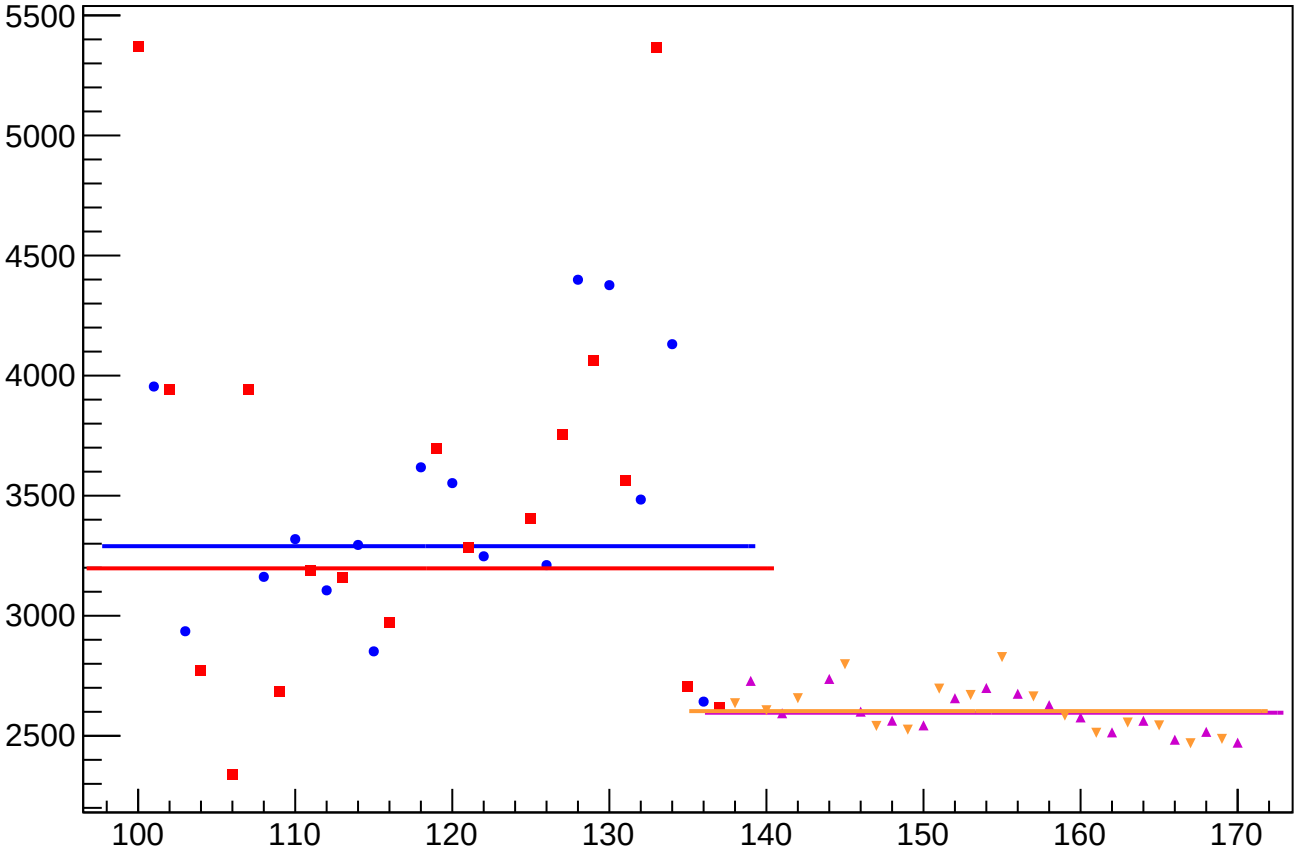
Left In: 661.814+/-714.466 $\chi^2$/NDF:8.1/15

+ sign 1332.318+/-631.256 $\chi^2$/NDF: 49.3/31

All: 1108.568+/-441.016 $\chi^2$/NDF: 64.8/65

- sign 895.232+/-616.390 $\chi^2$/NDF: 15.2/33

# asym_us_dd_at2lr_dd_avg_rms vs Slug




Right In: 3289.690+/-0.878 $\chi^2$/NDF: 347594.0/15

Left Out: 2602.855+/-0.518 $\chi^2$/NDF:37195.4/15

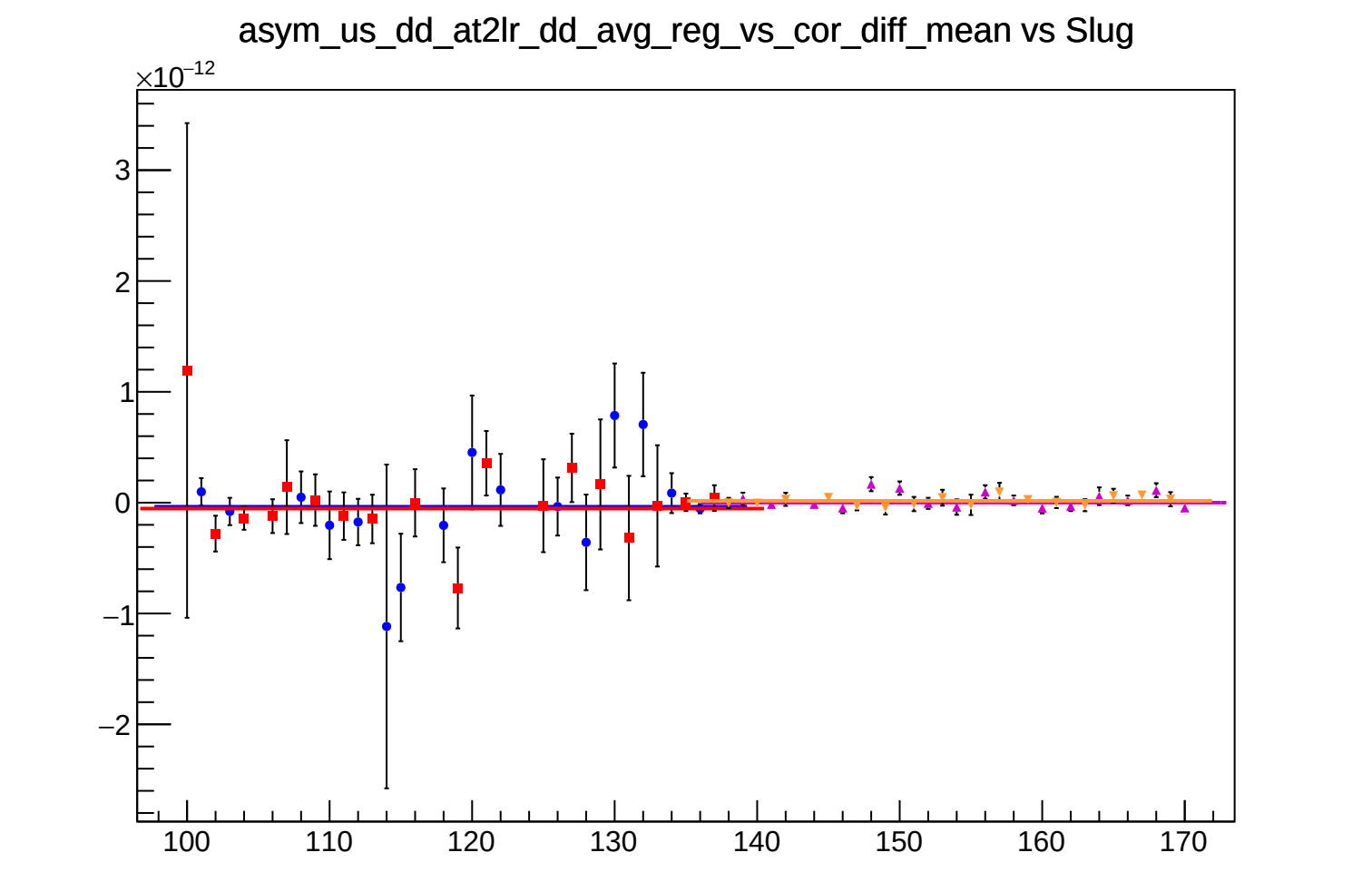
Right Out: 3197.375+/-0.862 $\chi^2$/NDF: 499934.1/17

Left In: 2596.213+/-0.505 $\chi^2$/NDF:25165.9/15

+ sign 2780.365+/-0.446 $\chi^2$/NDF: 838560.4/31

All: 2764.787+/-0.312 $\chi^2$/NDF: 1728109.2/65

- sign 2749.933+/-0.436 $\chi^2$/NDF: 887169.4/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 13.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:7.8/15

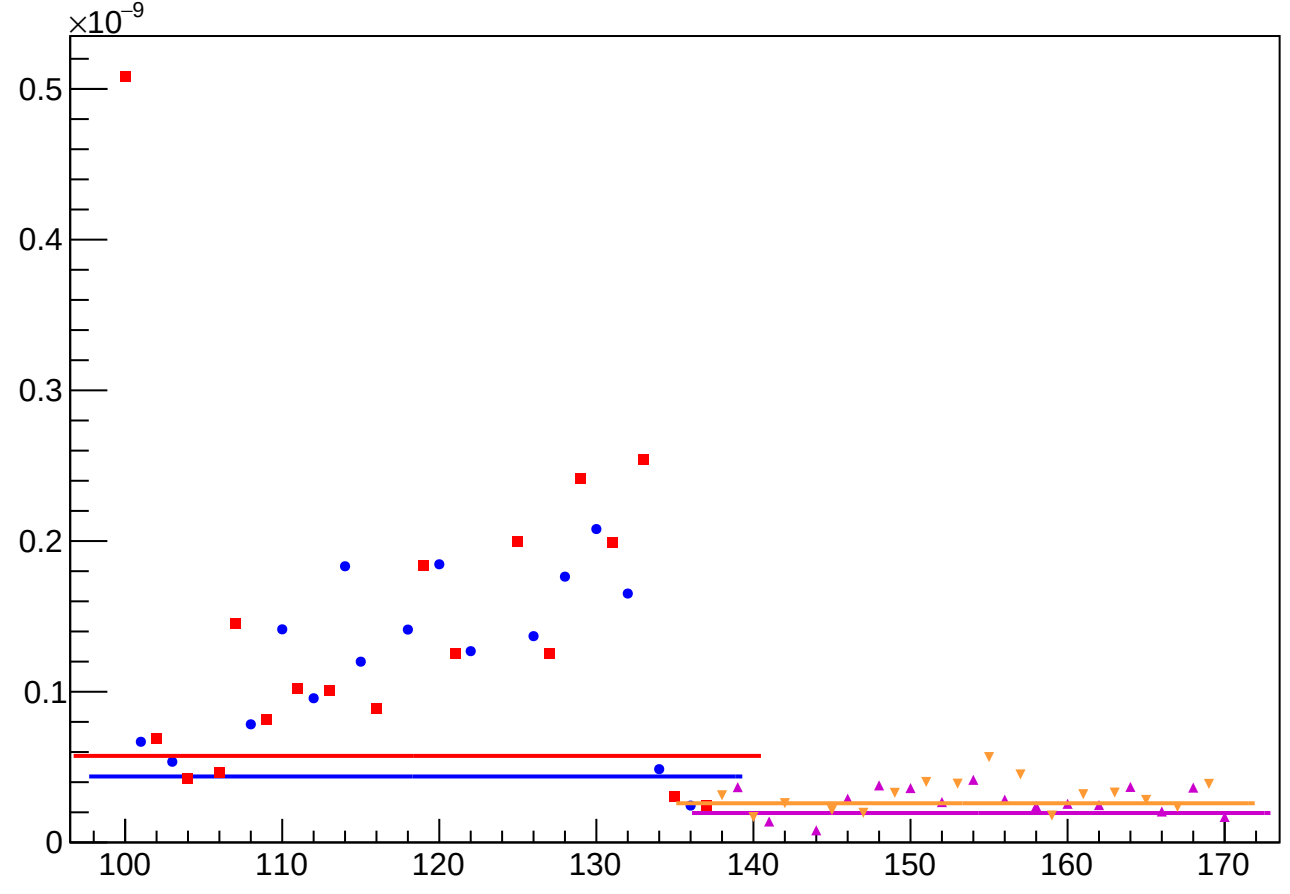
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 12.6/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:24.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 23.1/31

All: 0.000+/-0.000 $\chi^2$/NDF: 62.4/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 38.5/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2227887.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1050691.6/15

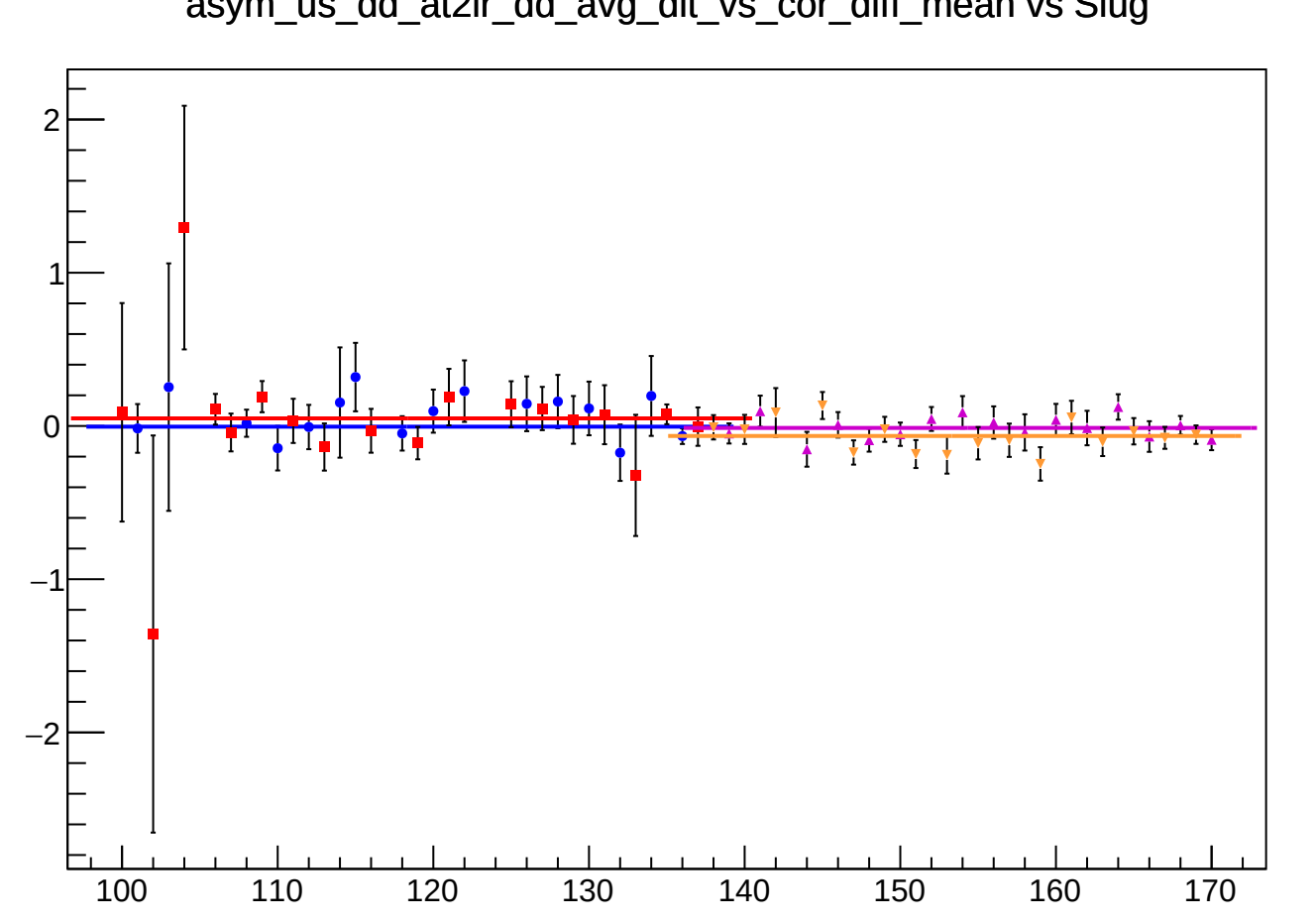
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2086696.1/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:2108306.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3753660.8/31

All: 0.000+/-0.000 $\chi^2$/NDF: 9765724.6/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 5644279.2/33




Right In: -0.005+/-0.032 $\chi^2$/NDF: 10.3/15

Left Out: -0.065+/-0.022 $\chi^2$/NDF:16.2/15

Right Out: 0.050+/-0.032 $\chi^2$/NDF: 13.0/17

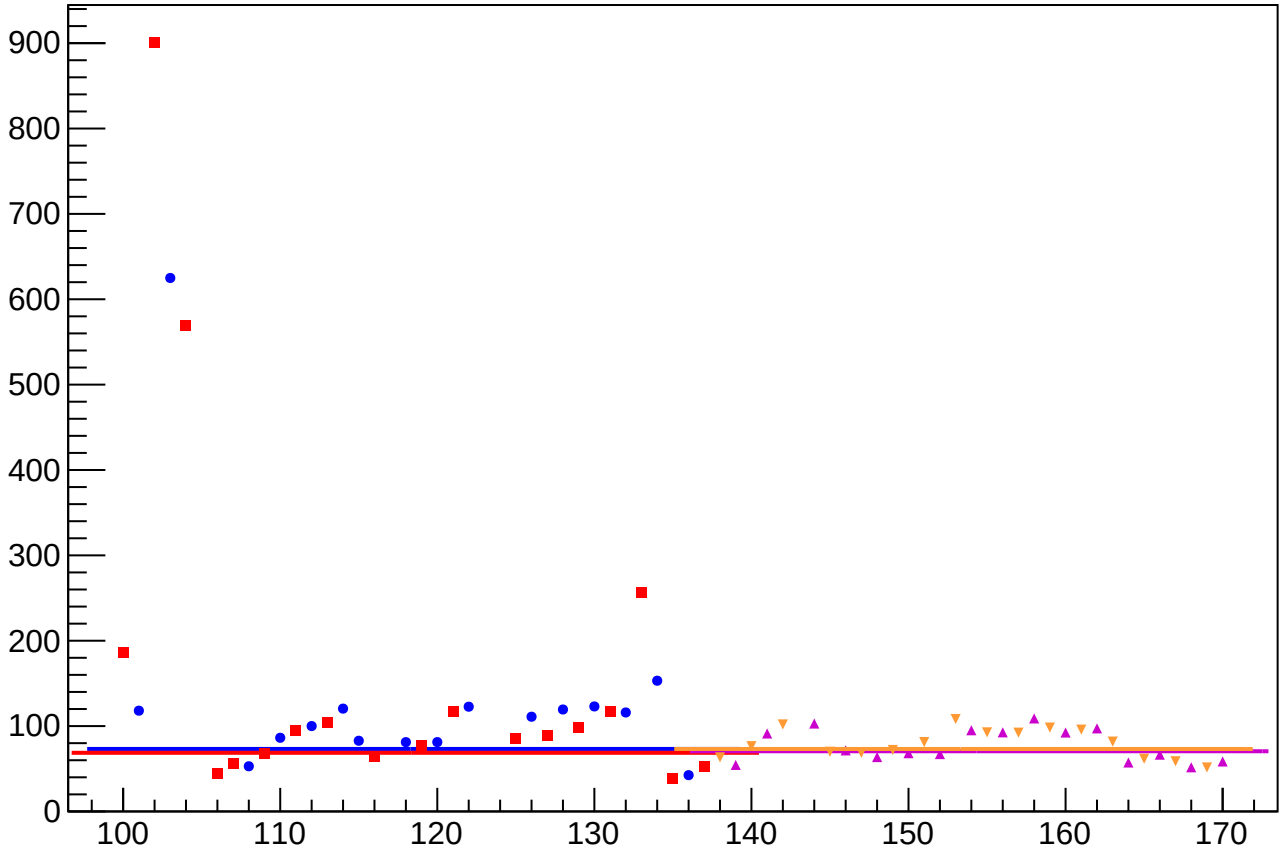
Left In: -0.013+/-0.021 $\chi^2$/NDF:10.8/15

+ sign -0.046+/-0.018 $\chi^2$/NDF: 28.9/31

All: -0.018+/-0.013 $\chi^2$/NDF: 59.5/65

- sign 0.007+/-0.018 $\chi^2$/NDF: 26.5/33

# asym_us_dd_at2lr_dd_avg_dit_vs_cor_diff_rms vs Slug




Right In: 73.234+/-0.023 $\chi^2$/NDF: 2854601.2/15

Left Out: 73.190+/-0.016 $\chi^2$/NDF:1002568.3/15

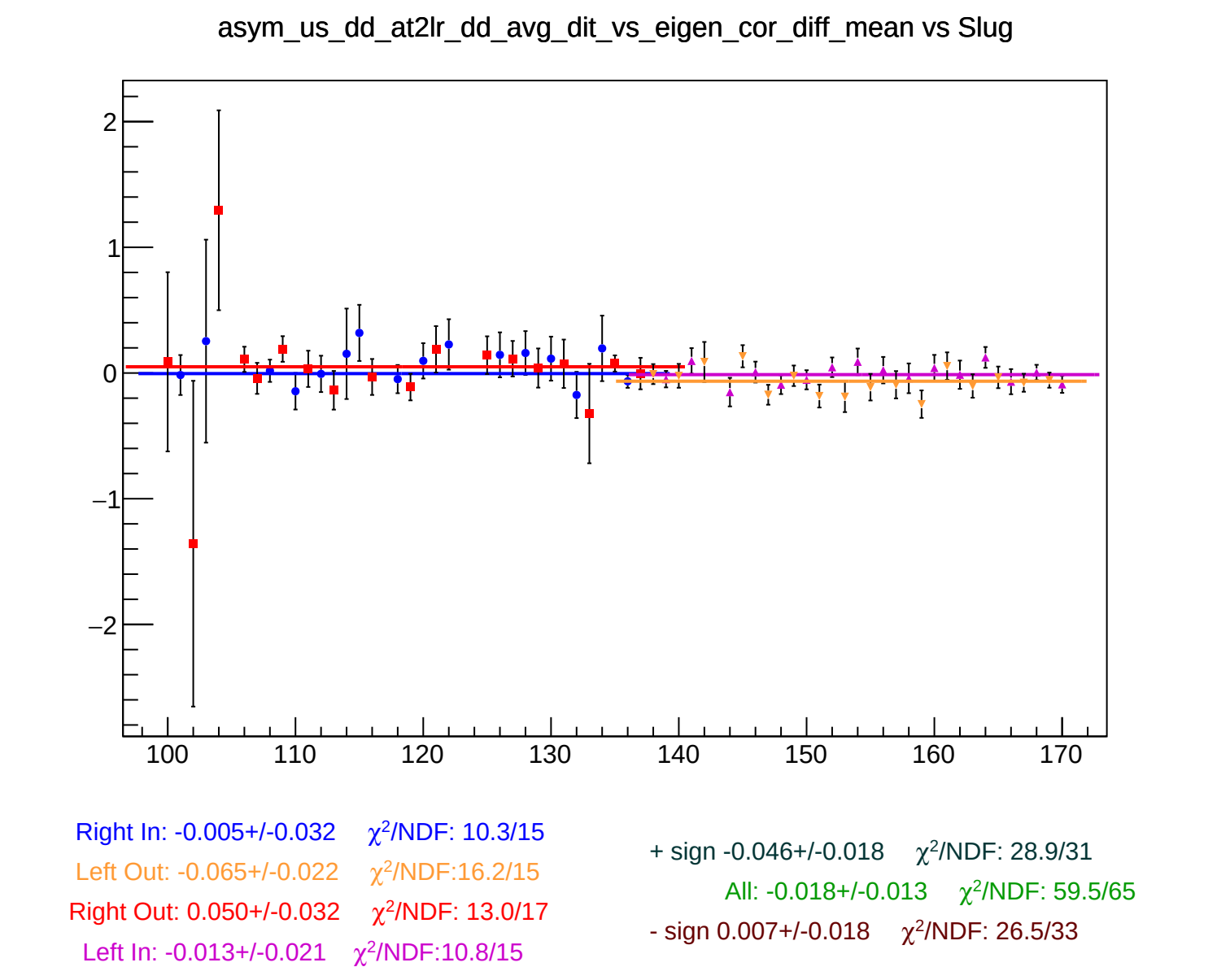
Right Out: 68.724+/-0.022 $\chi^2$/NDF: 3331744.2/17

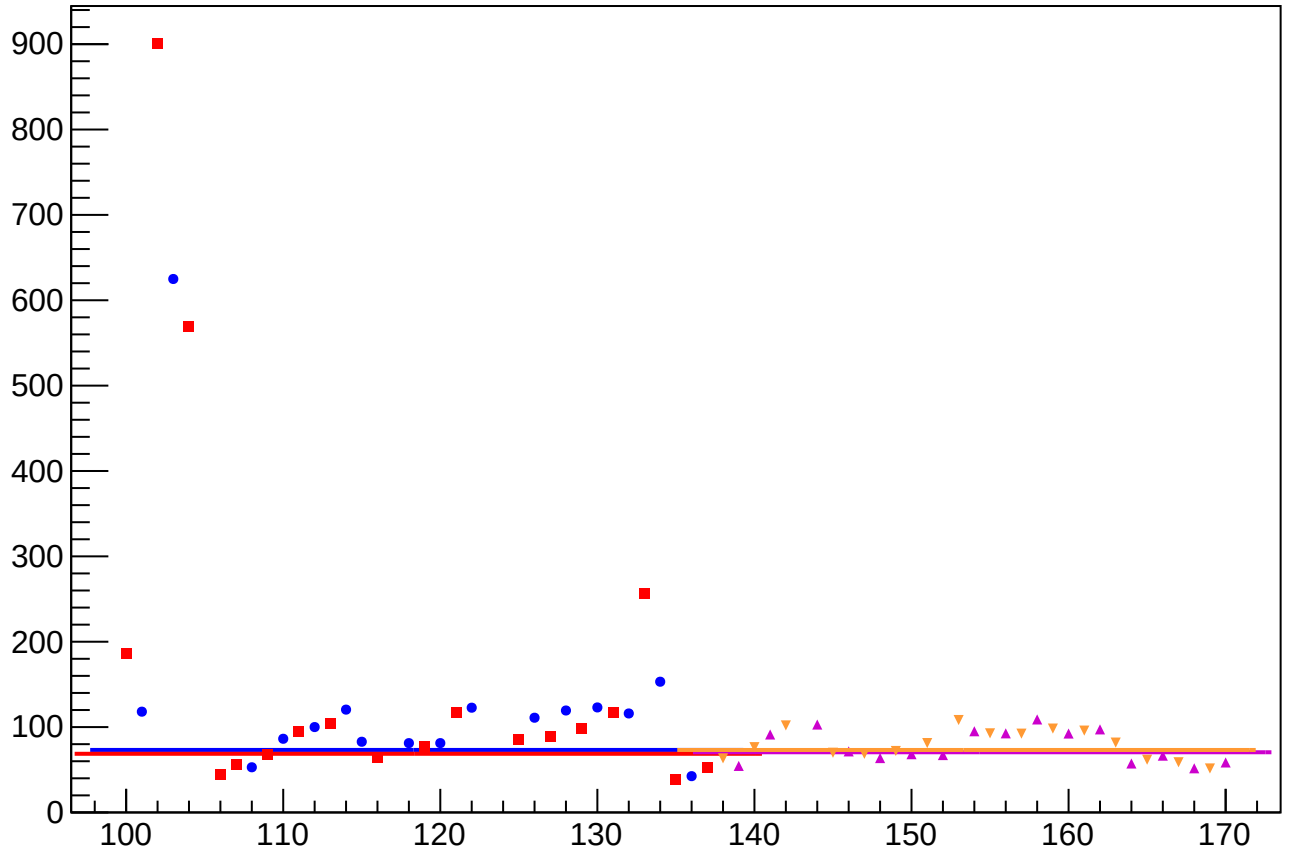
Left In: 70.517+/-0.015 $\chi^2$/NDF:1303508.7/15

+ sign 73.205+/-0.013 $\chi^2$/NDF: 3857172.1/31

All: 71.516+/-0.009 $\chi^2$/NDF: 8529291.3/65

- sign 69.961+/-0.012 $\chi^2$/NDF: 4639679.5/33


asym_us_dd_at2lr_dd_avg_dit_vs_eigen_cor_diff_mean vs Slug
2
1
0
−1
−2
100
110
120
130
140
150
160
170
Right In: -0.005+/-0.032 χ²/NDF: 10.3/15
Left Out: -0.065+/-0.022 χ²/NDF:16.2/15
Right Out: 0.050+/-0.032 χ²/NDF: 13.0/17
Left In: -0.013+/-0.021 χ²/NDF:10.8/15
+ sign -0.046+/-0.018 χ²/NDF: 28.9/31
All: -0.018+/-0.013 χ²/NDF: 59.5/65
- sign 0.007+/-0.018 χ²/NDF: 26.5/33




Right In: 73.234+/-0.023 $\chi^2$/NDF: 2854601.2/15

Left Out: 73.190+/-0.016 $\chi^2$/NDF:1002568.3/15

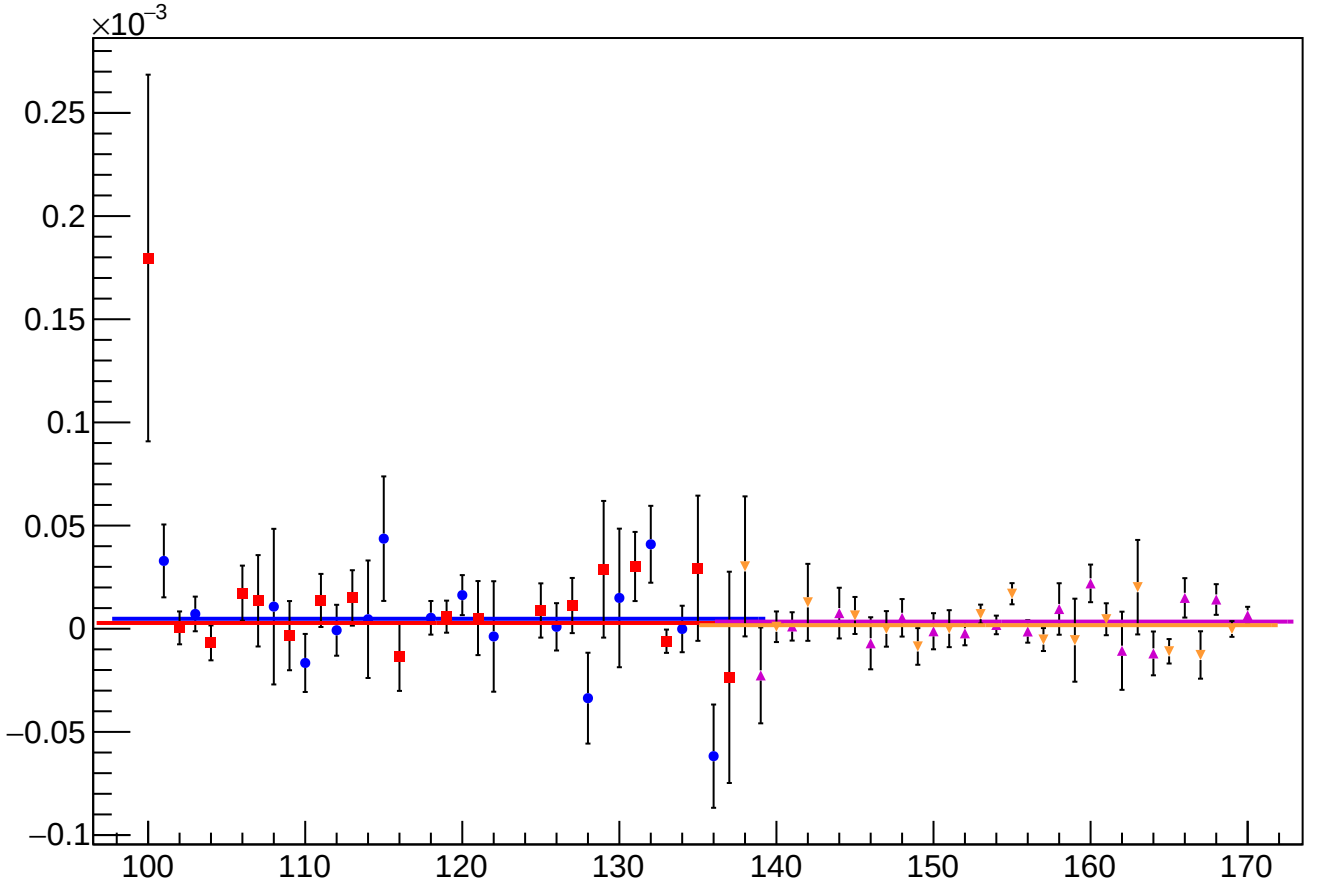
Right Out: 68.724+/-0.022 $\chi^2$/NDF: 3331744.2/17

Left In: 70.517+/-0.015 $\chi^2$/NDF:1303508.7/15

+ sign 73.205+/-0.013 $\chi^2$/NDF: 3857172.1/31

All: 71.516+/-0.009 $\chi^2$/NDF: 8529291.3/65

- sign 69.961+/-0.012 $\chi^2$/NDF: 4639679.5/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 22.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:21.8/15

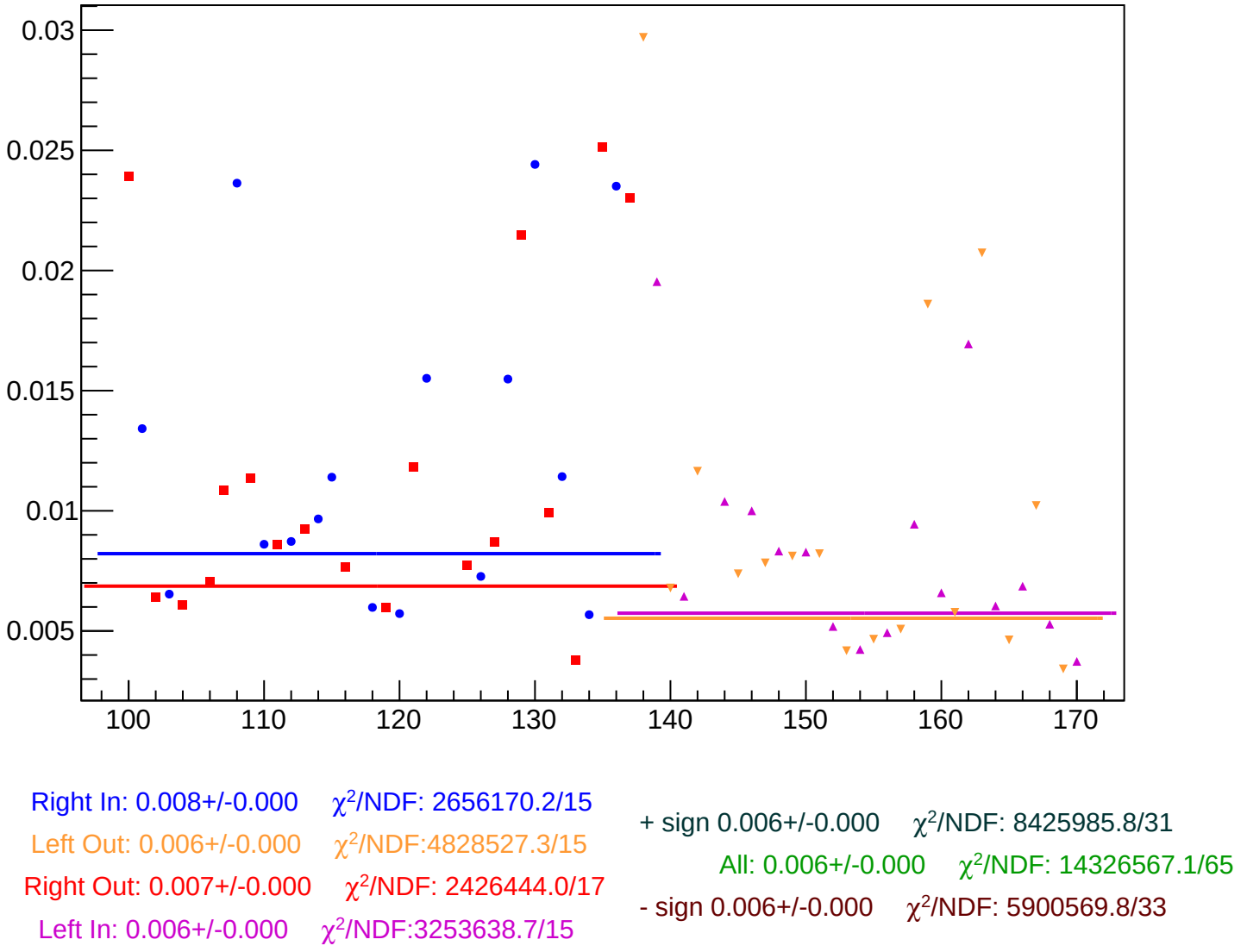
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 16.8/17

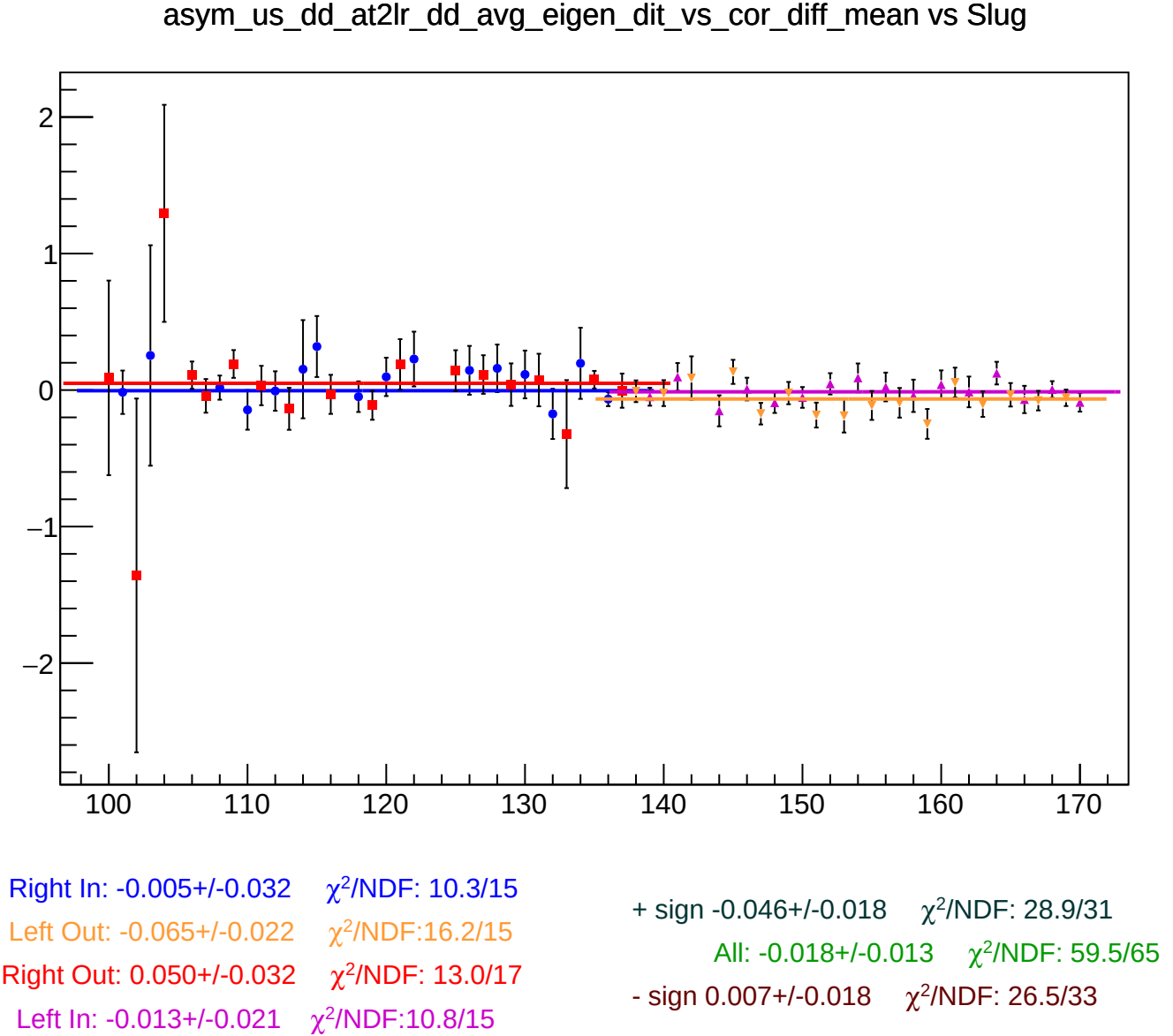
Left In: 0.000+/-0.000 $\chi^2$/NDF:15.4/15

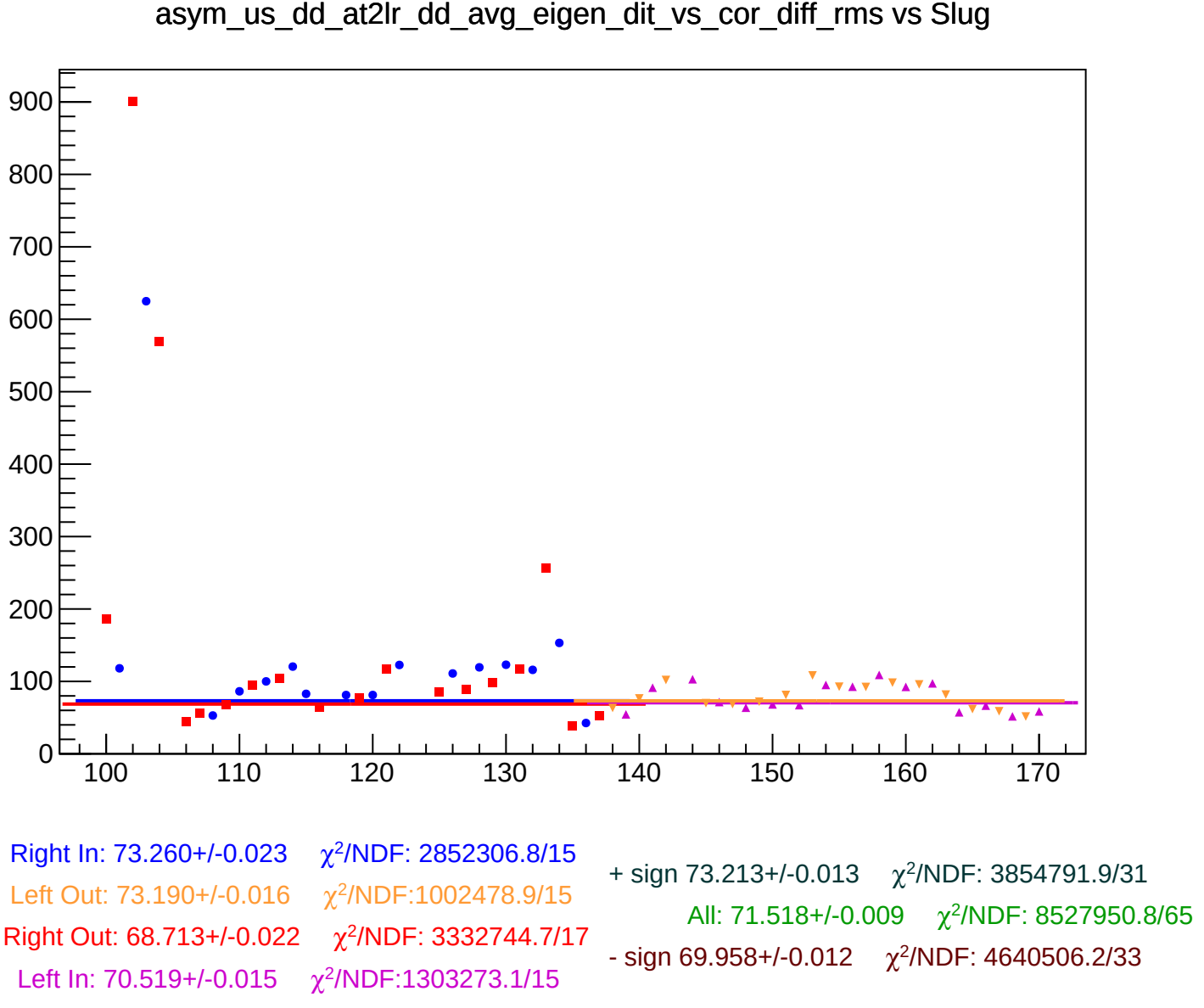
+ sign 0.000+/-0.000 $\chi^2$/NDF: 45.0/31

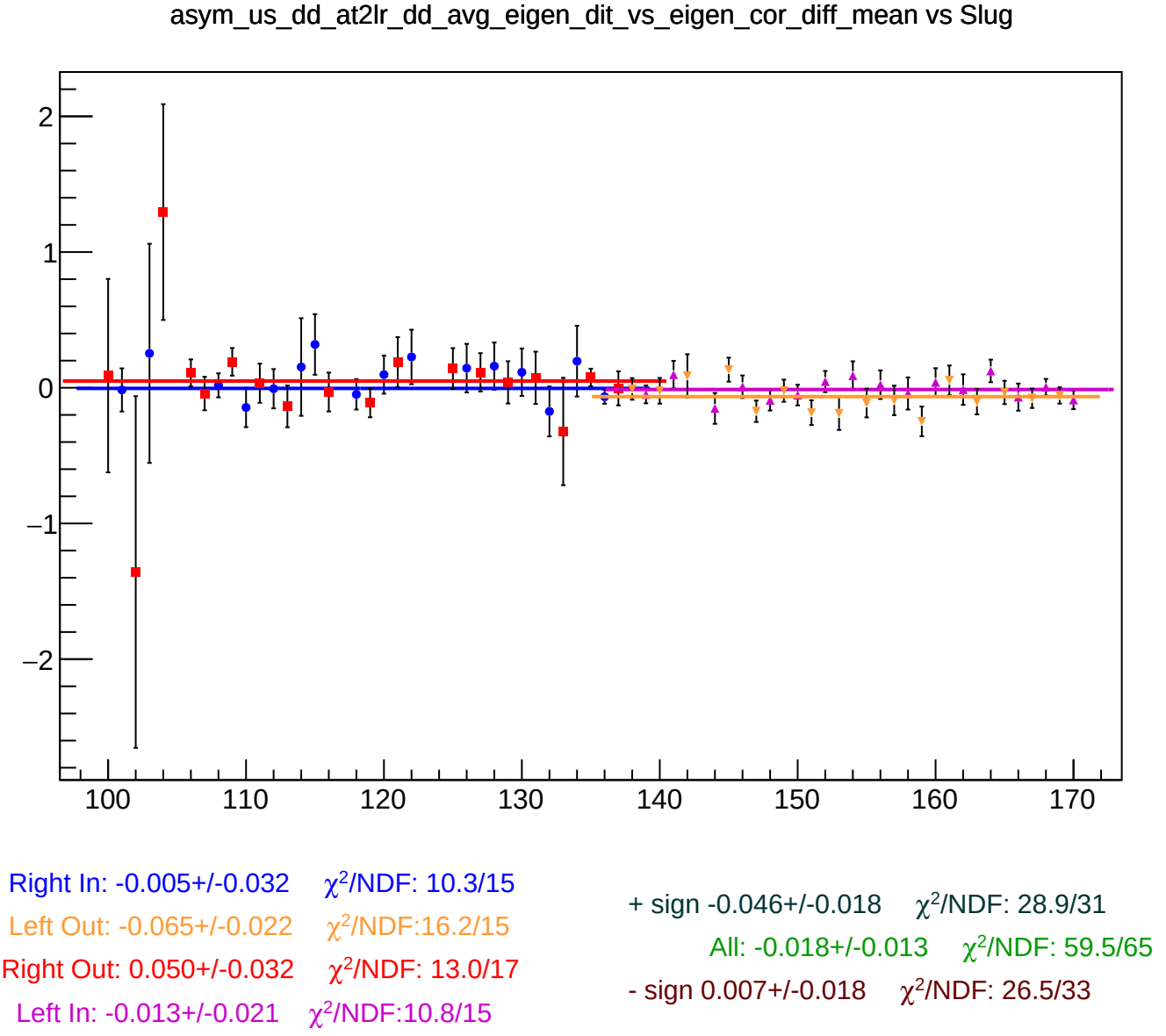
All: 0.000+/-0.000 $\chi^2$/NDF: 77.4/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 32.3/33

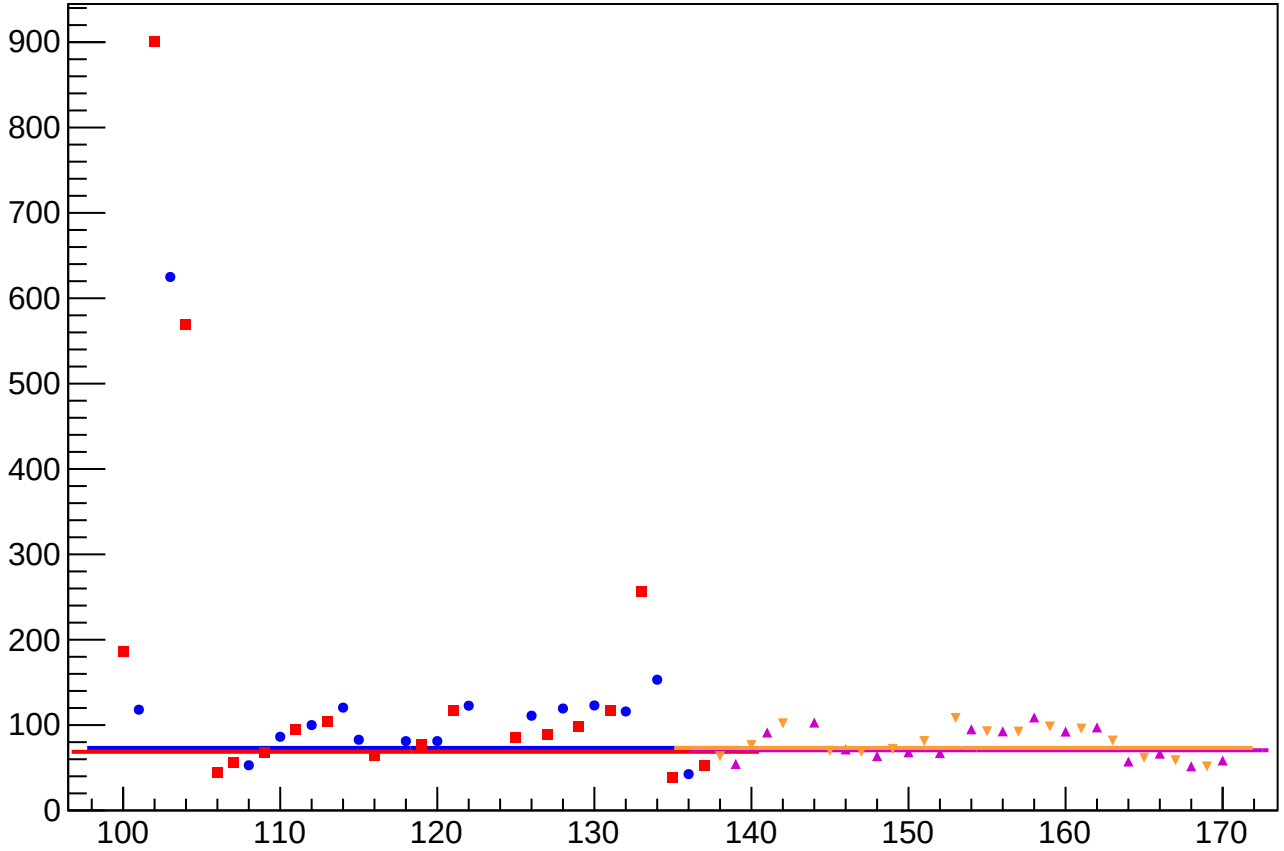

asym_us_dd_at2lr_dd_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.03
0.025
0.02
0.015
0.01
0.005
100
110
120
130
140
150
160
170
Right In: 0.008+/-0.000 χ²/NDF: 2656170.2/15
Left Out: 0.006+/-0.000 χ²/NDF:4828527.3/15
Right Out: 0.007+/-0.000 χ²/NDF: 2426444.0/17
Left In: 0.006+/-0.000 χ²/NDF:3253638.7/15
+ sign 0.006+/-0.000 χ²/NDF: 8425985.8/31
All: 0.006+/-0.000 χ²/NDF: 14326567.1/65
- sign 0.006+/-0.000 χ²/NDF: 5900569.8/33


asym_us_dd_at2lr_dd_avg_eigen_dit_vs_cor_diff_mean vs Slug
2
1
0
−1
−2
100
110
120
130
140
150
160
170
Right In: -0.005+/-0.032 χ²/NDF: 10.3/15
Left Out: -0.065+/-0.022 χ²/NDF:16.2/15
Right Out: 0.050+/-0.032 χ²/NDF: 13.0/17
Left In: -0.013+/-0.021 χ²/NDF:10.8/15
+ sign -0.046+/-0.018 χ²/NDF: 28.9/31
All: -0.018+/-0.013 χ²/NDF: 59.5/65
- sign 0.007+/-0.018 χ²/NDF: 26.5/33


asym_us_dd_at2lr_dd_avg_eigen_dit_vs_cor_diff_rms vs Slug
900
800
700
600
500
400
300
200
100
0
100
110
120
130
140
150
160
170
Right In: 73.260+/-0.023 χ²/NDF: 2852306.8/15
Left Out: 73.190+/-0.016 χ²/NDF:1002478.9/15
Right Out: 68.713+/-0.022 χ²/NDF: 3332744.7/17
Left In: 70.519+/-0.015 χ²/NDF:1303273.1/15
+ sign 73.213+/-0.013 χ²/NDF: 3854791.9/31
All: 71.518+/-0.009 χ²/NDF: 8527950.8/65
- sign 69.958+/-0.012 χ²/NDF: 4640506.2/33


asym_us_dd_at2lr_dd_avg_eigen_dit_vs_eigen_cor_diff_mean vs Slug
2
1
0
−1
−2
100
110
120
130
140
150
160
170
Right In: -0.005+/-0.032 χ²/NDF: 10.3/15
Left Out: -0.065+/-0.022 χ²/NDF:16.2/15
Right Out: 0.050+/-0.032 χ²/NDF: 13.0/17
Left In: -0.013+/-0.021 χ²/NDF:10.8/15
+ sign -0.046+/-0.018 χ²/NDF: 28.9/31
All: -0.018+/-0.013 χ²/NDF: 59.5/65
- sign 0.007+/-0.018 χ²/NDF: 26.5/33

asym_us_dd_at2lr_dd_avg_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 73.260+/-0.023 $\chi^2$/NDF: 2852306.8/15

Left Out: 73.190+/-0.016 $\chi^2$/NDF:1002478.9/15

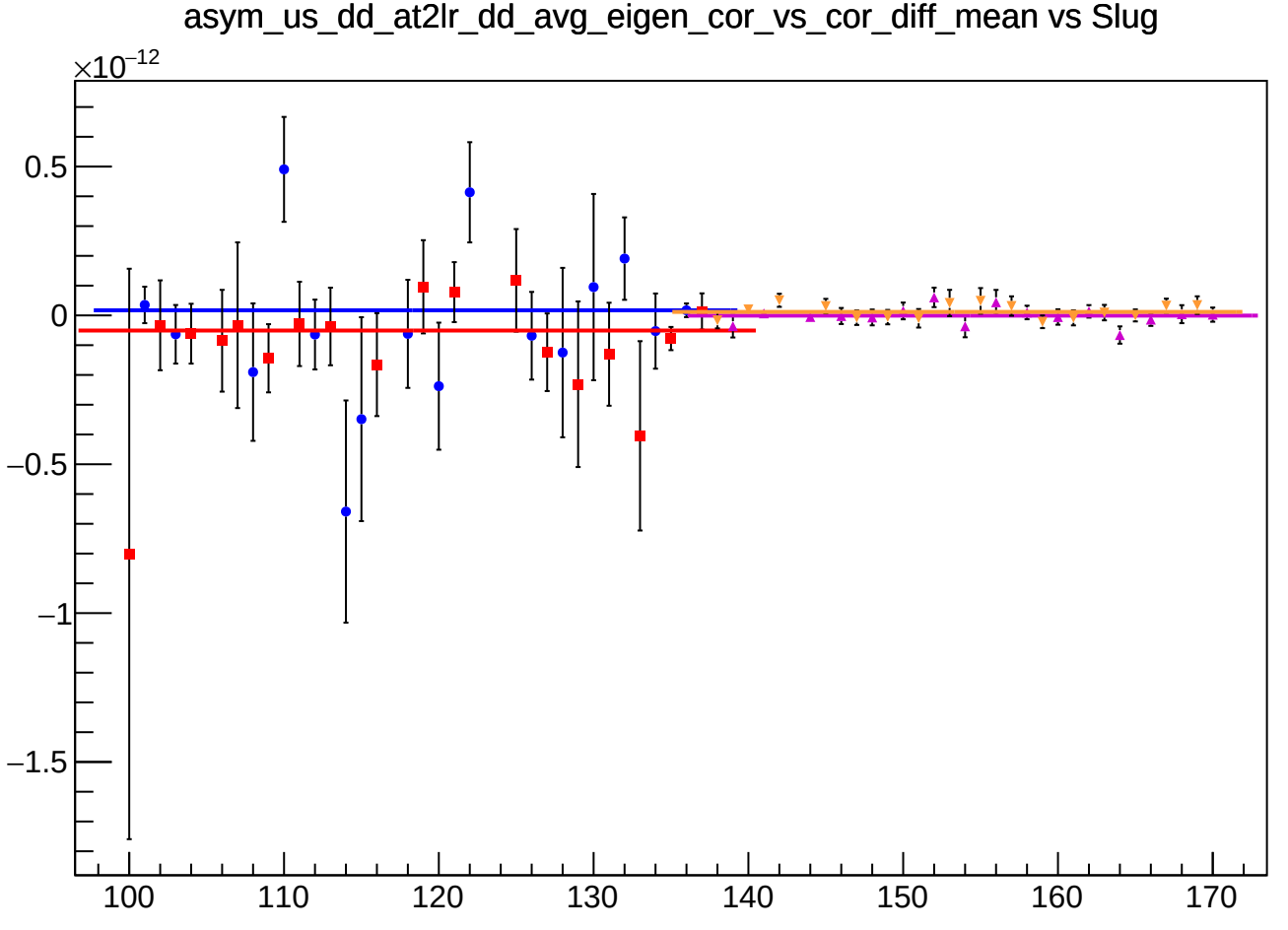
Right Out: 68.713+/-0.022 $\chi^2$/NDF: 3332744.7/17

Left In: 70.519+/-0.015 $\chi^2$/NDF:1303273.1/15

+ sign 73.213+/-0.013 $\chi^2$/NDF: 3854791.9/31

All: 71.518+/-0.009 $\chi^2$/NDF: 8527950.8/65

- sign 69.958+/-0.012 $\chi^2$/NDF: 4640506.2/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 23.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13.2/15

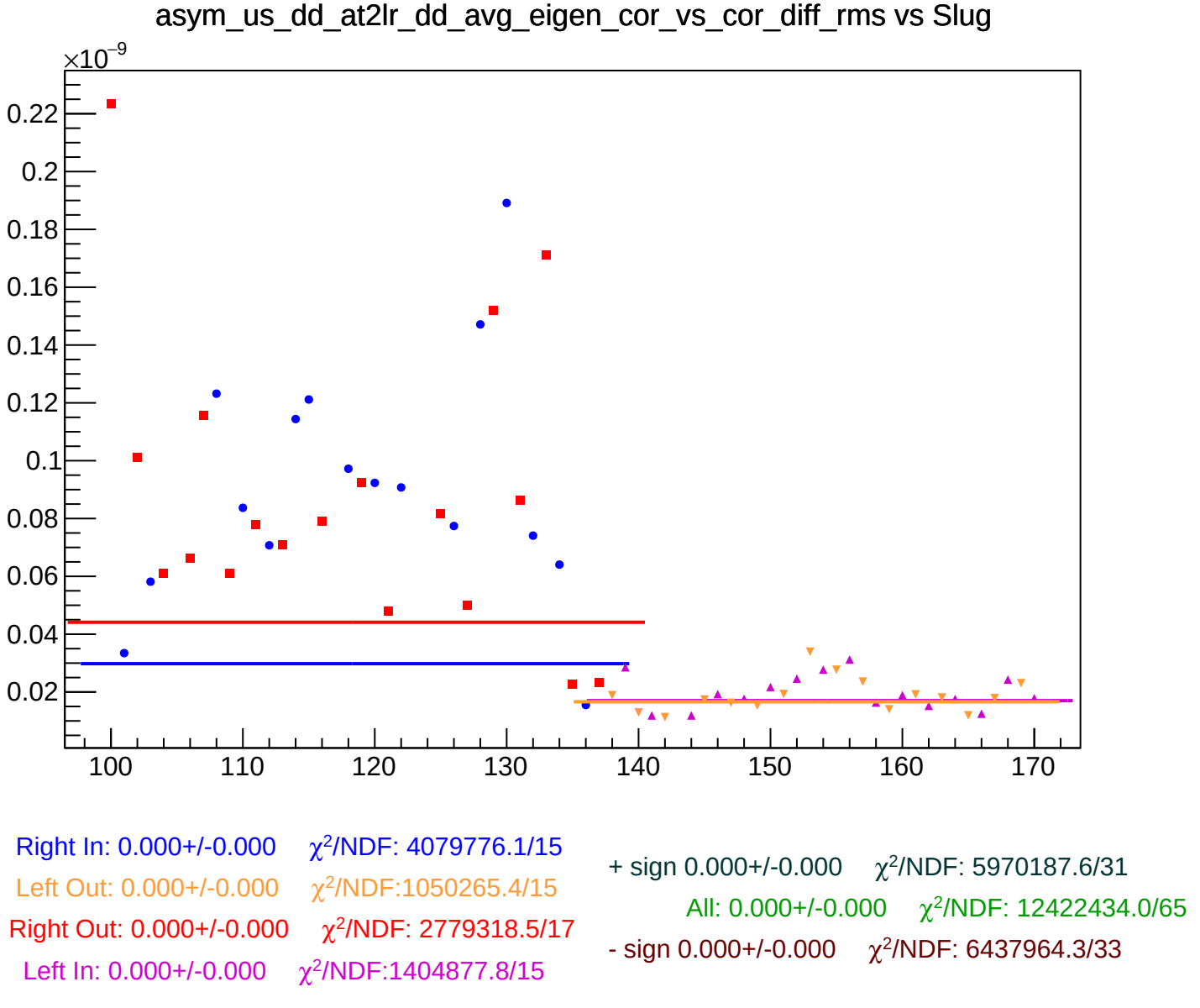
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 9.1/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:13.4/15

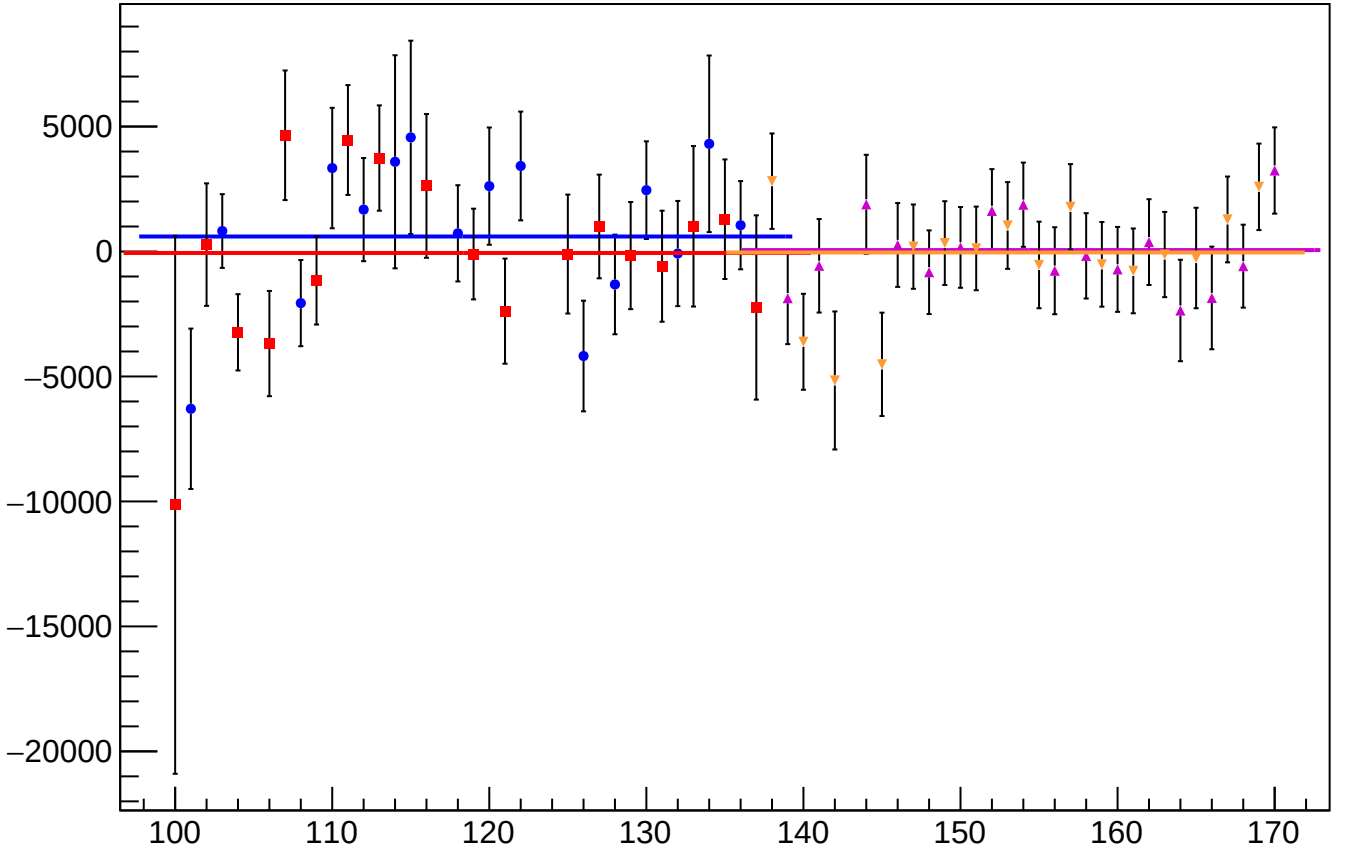
+ sign 0.000+/-0.000 $\chi^2$/NDF: 36.6/31

All: 0.000+/-0.000 $\chi^2$/NDF: 66.4/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 26.3/33


asym_us_dd_at2lr_dd_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10⁻⁹
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 4079776.1/15
Left Out: 0.000+/-0.000 χ²/NDF:1050265.4/15
Right Out: 0.000+/-0.000 χ²/NDF: 2779318.5/17
Left In: 0.000+/-0.000 χ²/NDF:1404877.8/15
+ sign 0.000+/-0.000 χ²/NDF: 5970187.6/31
All: 0.000+/-0.000 χ²/NDF: 12422434.0/65
- sign 0.000+/-0.000 χ²/NDF: 6437964.3/33

# reg_asym_us_dd_at2lr_dd_dd_mean vs Slug




Right In: 600.146+/-540.053 $\chi^2$/NDF: 20.3/15

Left Out: -38.110+/-449.793 $\chi^2$/NDF:18.7/15

Right Out: -59.091+/-530.206 $\chi^2$/NDF: 22.5/17

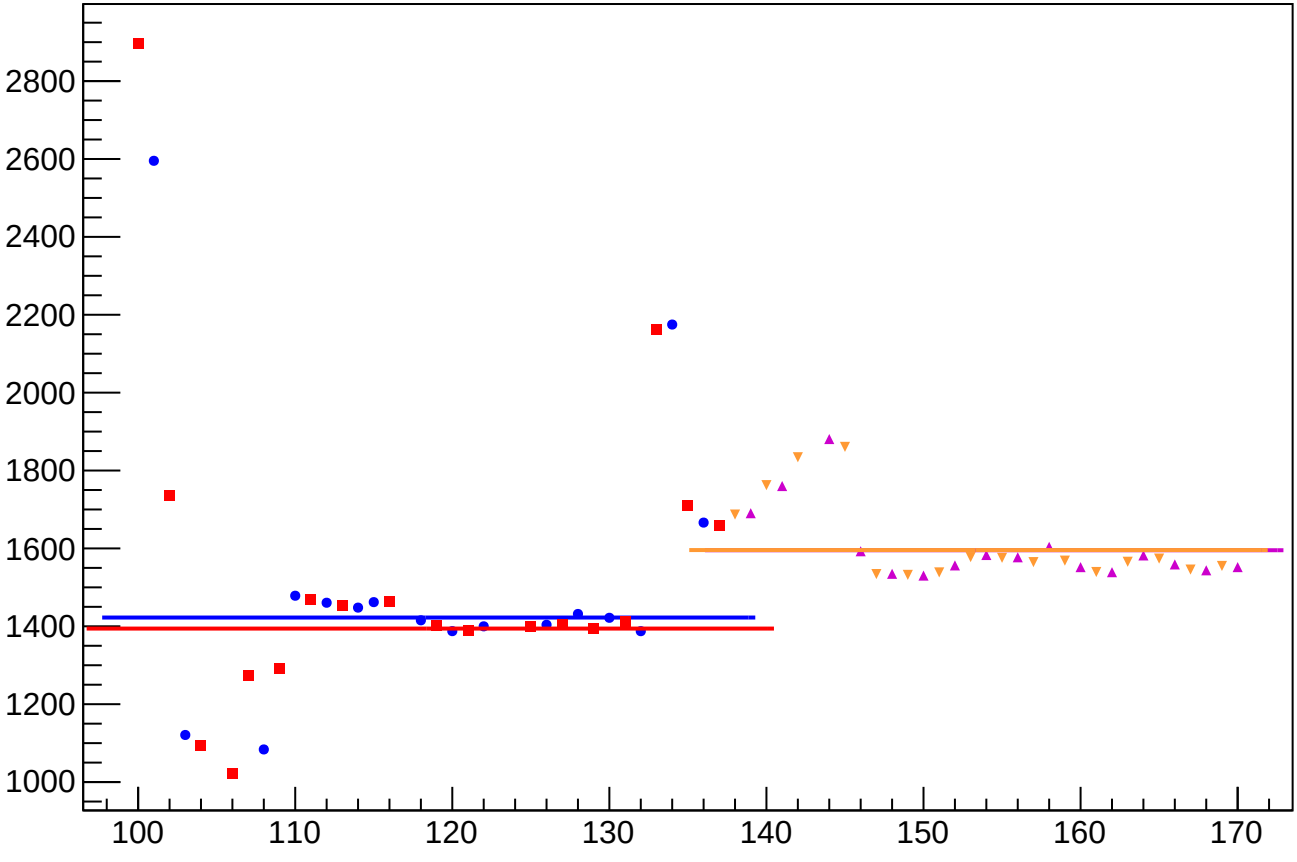
Left In: 56.063+/-439.415 $\chi^2$/NDF:10.7/15

+ sign 223.298+/-345.620 $\chi^2$/NDF: 39.8/31

All: 113.954+/-241.770 $\chi^2$/NDF: 73.3/65

- sign 9.175+/-338.327 $\chi^2$/NDF: 33.3/33

# reg_asym_us_dd_at2lr_dd_dd_rms vs Slug




Right In: 1422.515+/-0.382 $\chi^2$/NDF: 560259.3/15

Left Out: 1595.763+/-0.318 $\chi^2$/NDF:82813.1/15

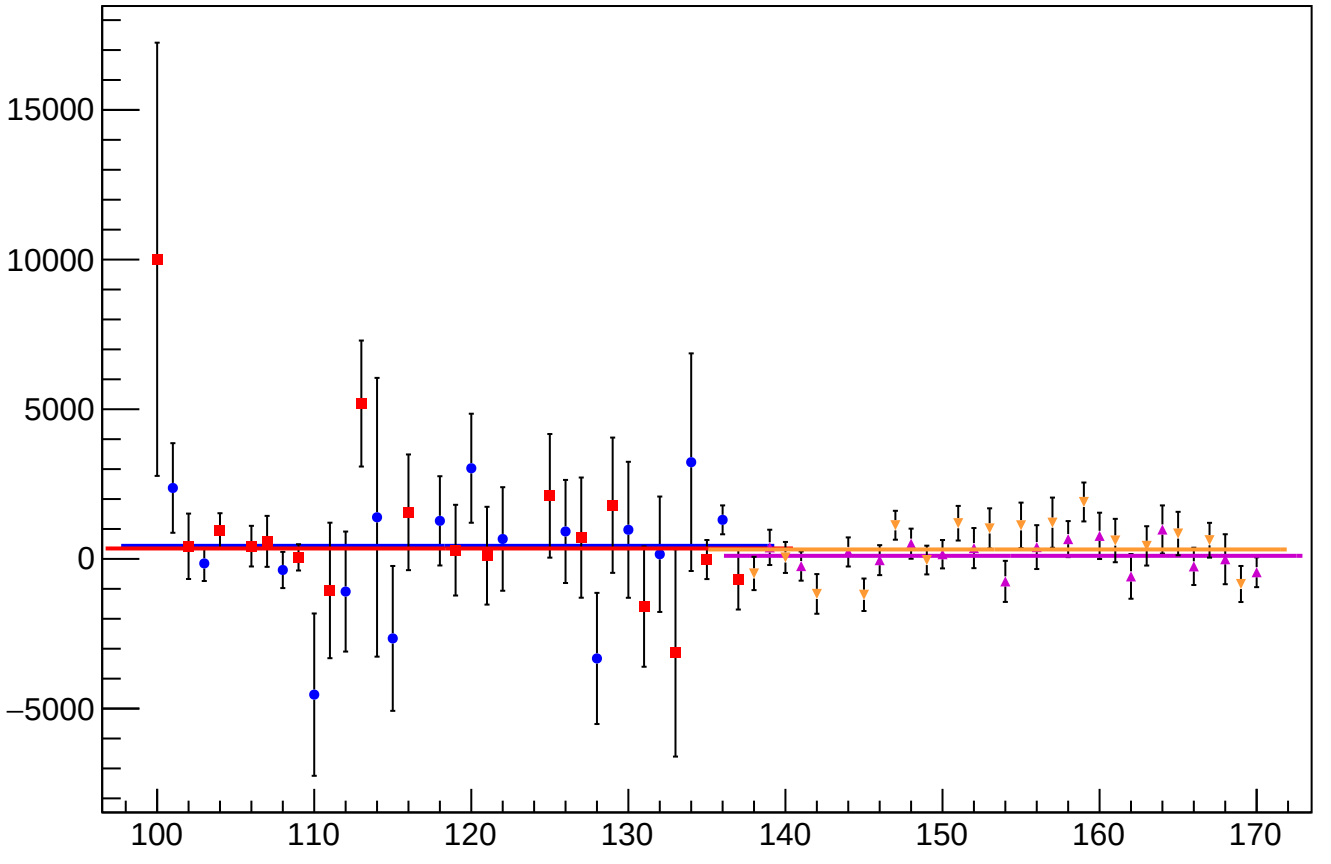
Right Out: 1394.171+/-0.375 $\chi^2$/NDF: 393666.0/17

Left In: 1595.330+/-0.311 $\chi^2$/NDF:77058.8/15

+ sign 1524.807+/-0.244 $\chi^2$/NDF: 764598.3/31

All: 1518.993+/-0.171 $\chi^2$/NDF: 1407098.0/65

- sign 1513.422+/-0.239 $\chi^2$/NDF: 641391.5/33




Right In: 436.509+/-275.917 $\chi^2$/NDF: 19.3/15

Left Out: 316.156+/-151.036 $\chi^2$/NDF:34.8/15

Right Out: 348.567+/-233.745 $\chi^2$/NDF: 13.9/17

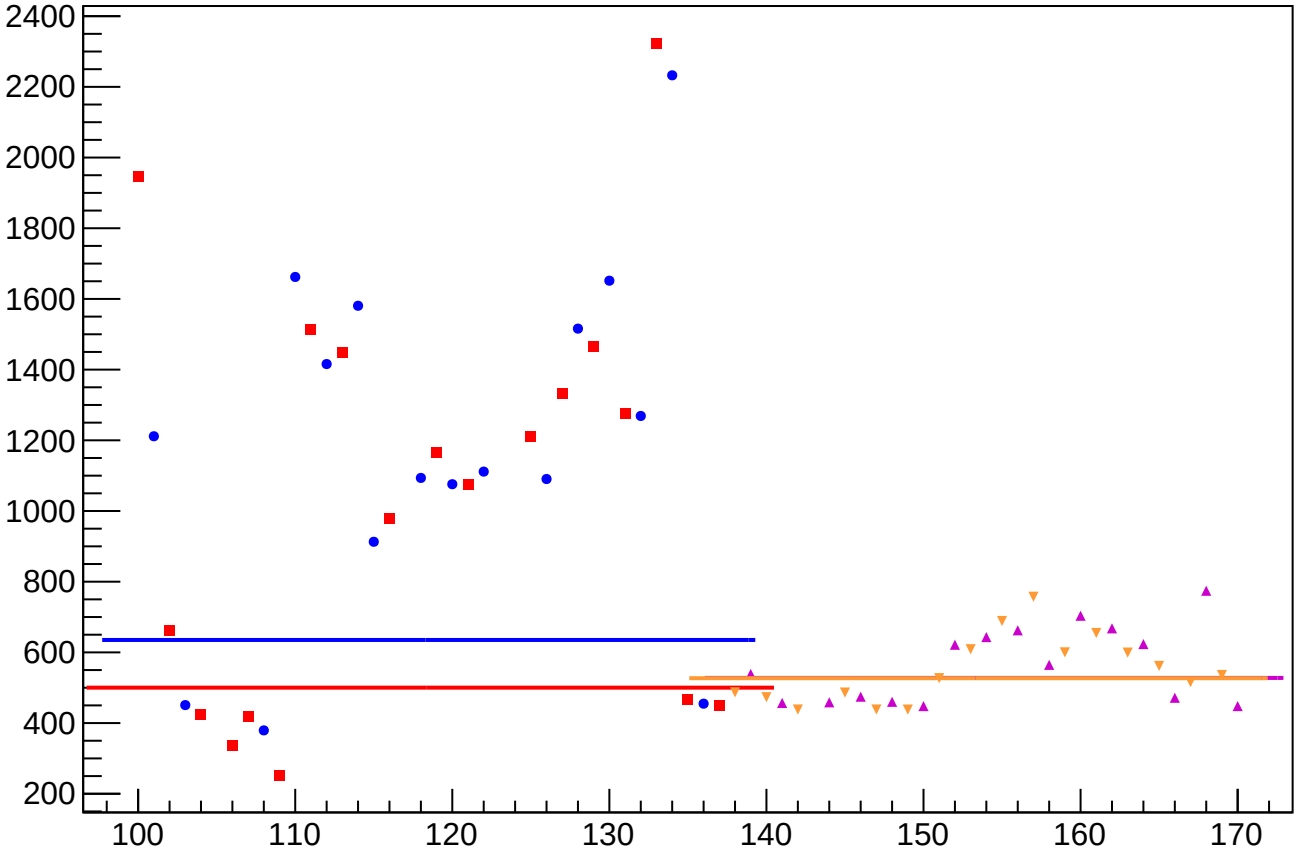
Left In: 103.218+/-147.885 $\chi^2$/NDF:8.6/15

+ sign 343.904+/-132.486 $\chi^2$/NDF: 54.3/31

All: 253.656+/-90.909 $\chi^2$/NDF: 78.5/65

- sign 173.353+/-124.973 $\chi^2$/NDF: 23.3/33

# asym_us_dd_at2lr_dd_dd_reg_correction_rms vs Slug




Right In: 635.135+/-0.195 $\chi^2$/NDF: 3752583.4/15

Left Out: 526.938+/-0.107 $\chi^2$/NDF:603871.1/15

Right Out: 500.231+/-0.165 $\chi^2$/NDF: 4309093.1/17

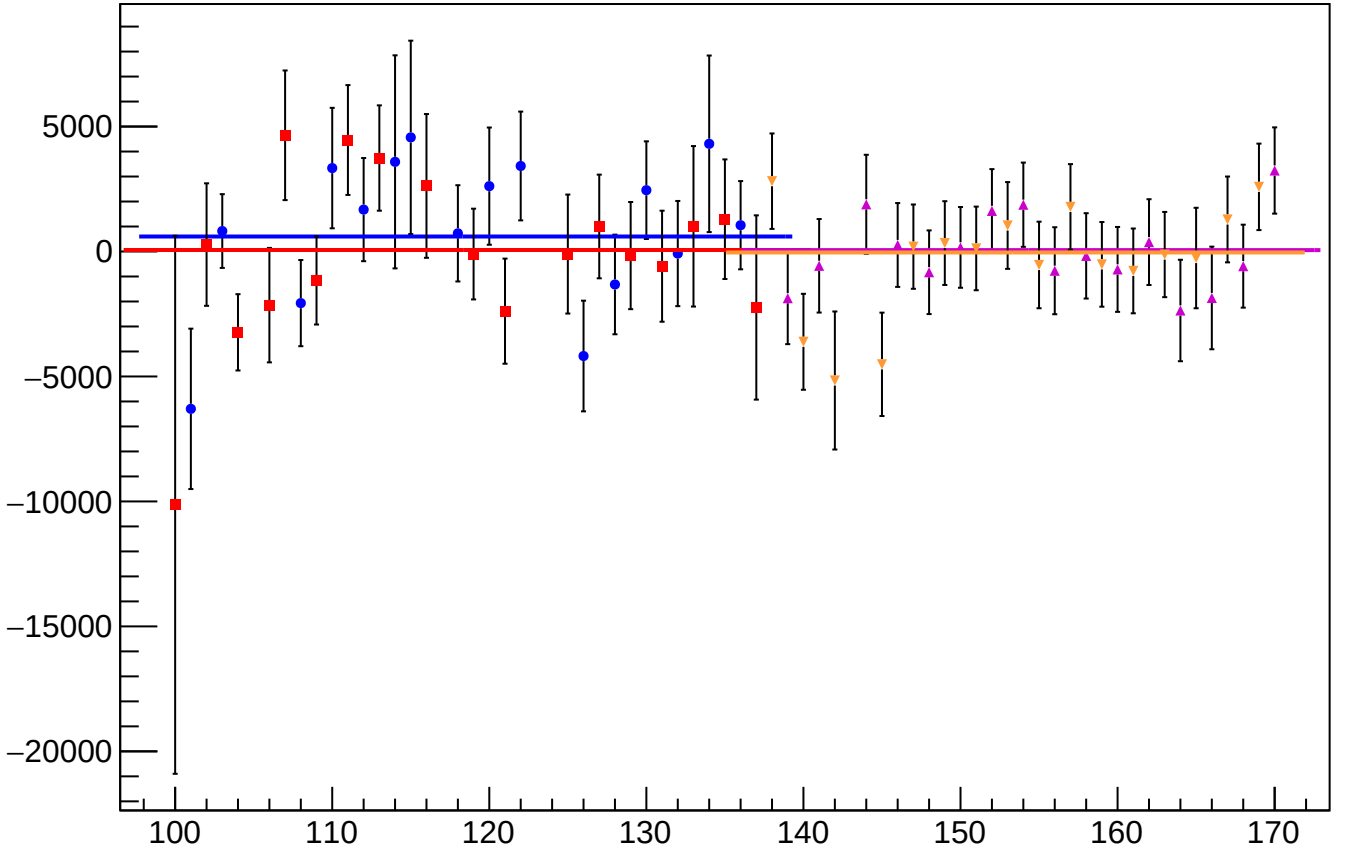
Left In: 527.709+/-0.105 $\chi^2$/NDF:813620.3/15

+ sign 551.884+/-0.094 $\chi^2$/NDF: 4593090.6/31

All: 534.935+/-0.064 $\chi^2$/NDF: 9797395.6/65

- sign 519.854+/-0.088 $\chi^2$/NDF: 5142450.7/33

# cor_asym_us_dd_at2lr_dd_dd_mean vs Slug




Right In: 600.020+/-540.053 $\chi^2$/NDF: 20.3/15

Left Out: -38.217+/-449.793 $\chi^2$/NDF:18.7/15

Right Out: 60.361+/-532.826 $\chi^2$/NDF: 20.4/17

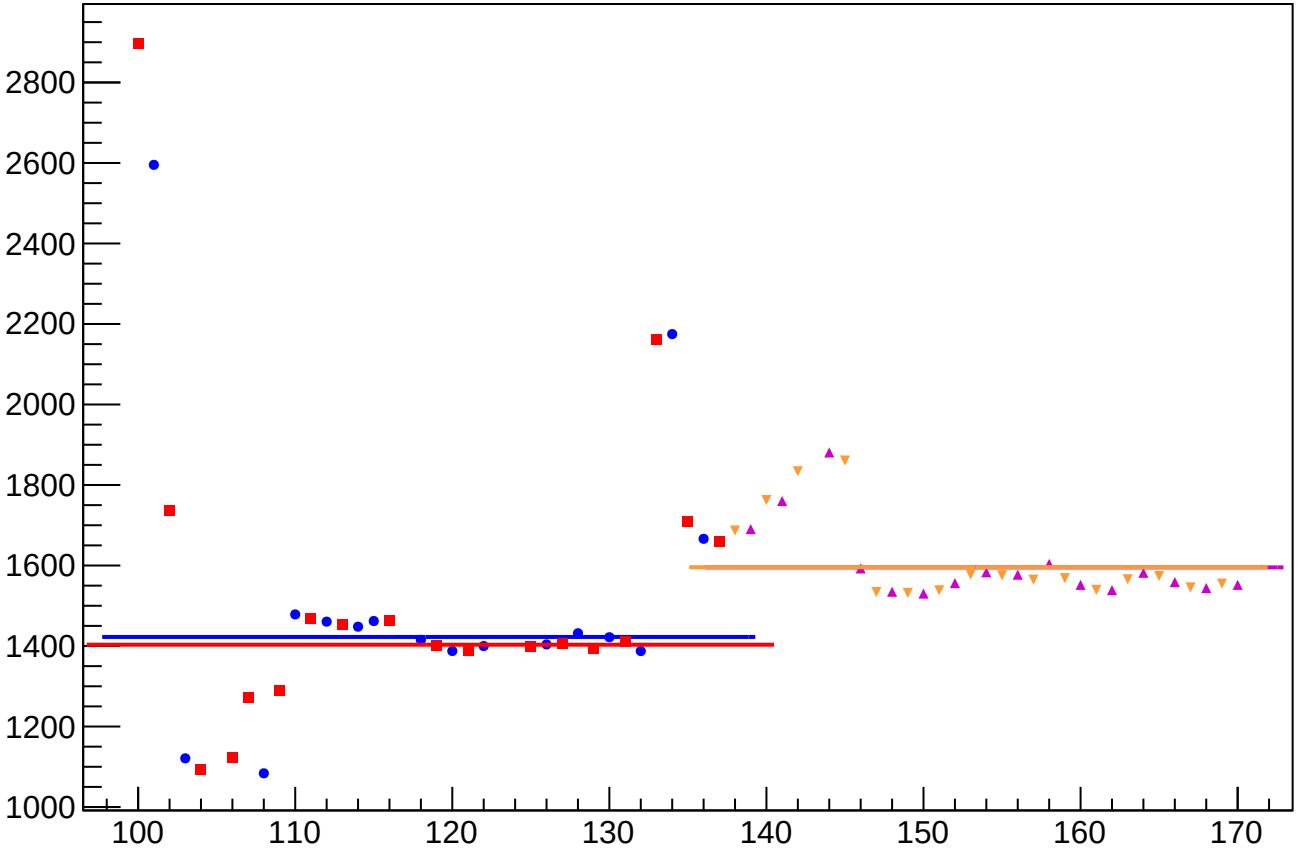
Left In: 56.096+/-439.415 $\chi^2$/NDF:10.7/15

+ sign 223.183+/-345.620 $\chi^2$/NDF: 39.8/31

All: 138.905+/-242.017 $\chi^2$/NDF: 71.0/65

- sign 57.822+/-339.005 $\chi^2$/NDF: 31.1/33

# cor_asym_us_dd_at2lr_dd_dd_rms vs Slug




Right In: 1422.515+/-0.382 $\chi^2$/NDF: 560259.5/15

Left Out: 1595.764+/-0.318 $\chi^2$/NDF:82813.1/15

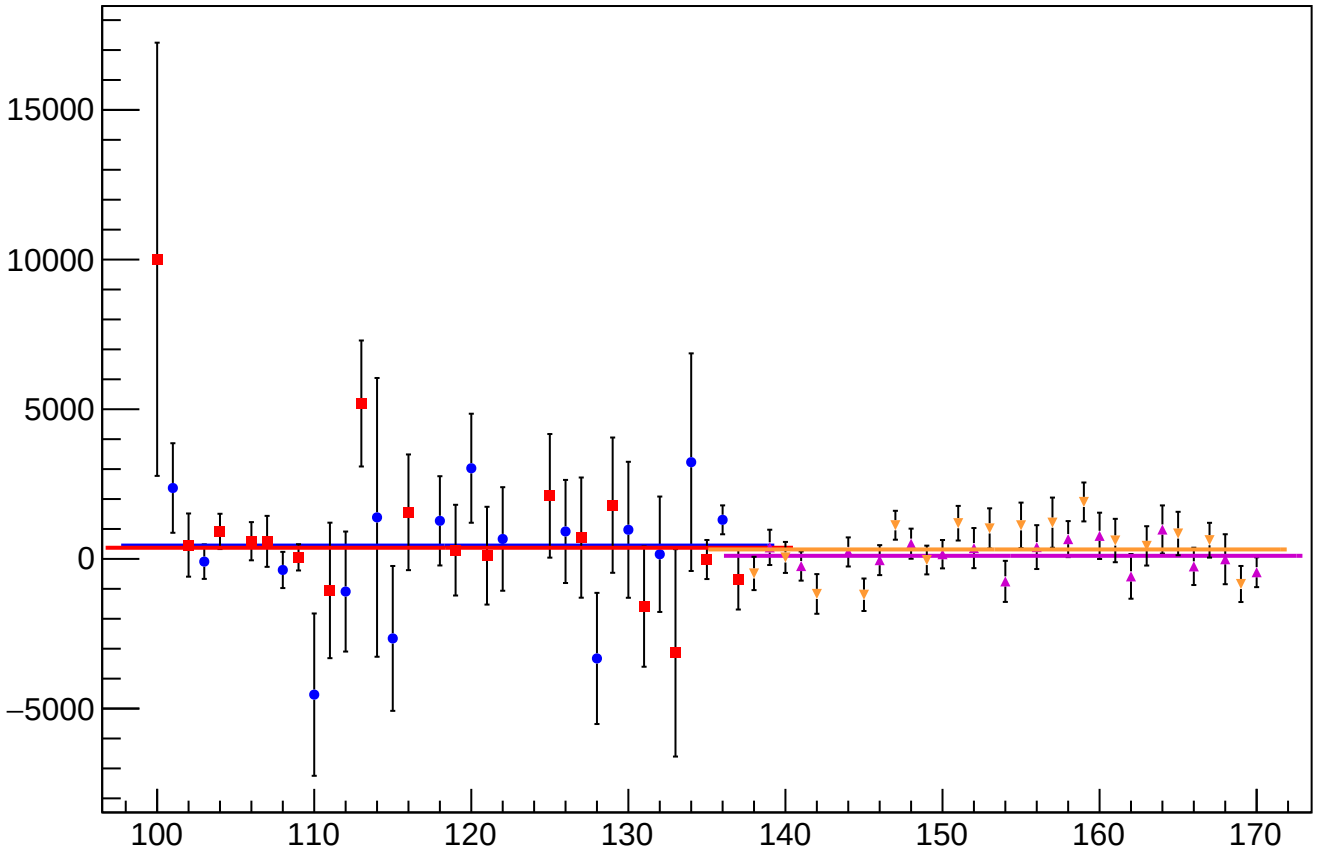
Right Out: 1403.220+/-0.377 $\chi^2$/NDF: 359113.5/17

Left In: 1595.330+/-0.311 $\chi^2$/NDF:77058.8/15

+ sign 1524.807+/-0.244 $\chi^2$/NDF: 764598.7/31

All: 1521.115+/-0.171 $\chi^2$/NDF: 1355967.2/65

- sign 1517.564+/-0.240 $\chi^2$/NDF: 590920.9/33




Right In: 445.121+/-274.737 $\chi^2$/NDF: 19.2/15

Left Out: 316.204+/-151.039 $\chi^2$/NDF:34.8/15

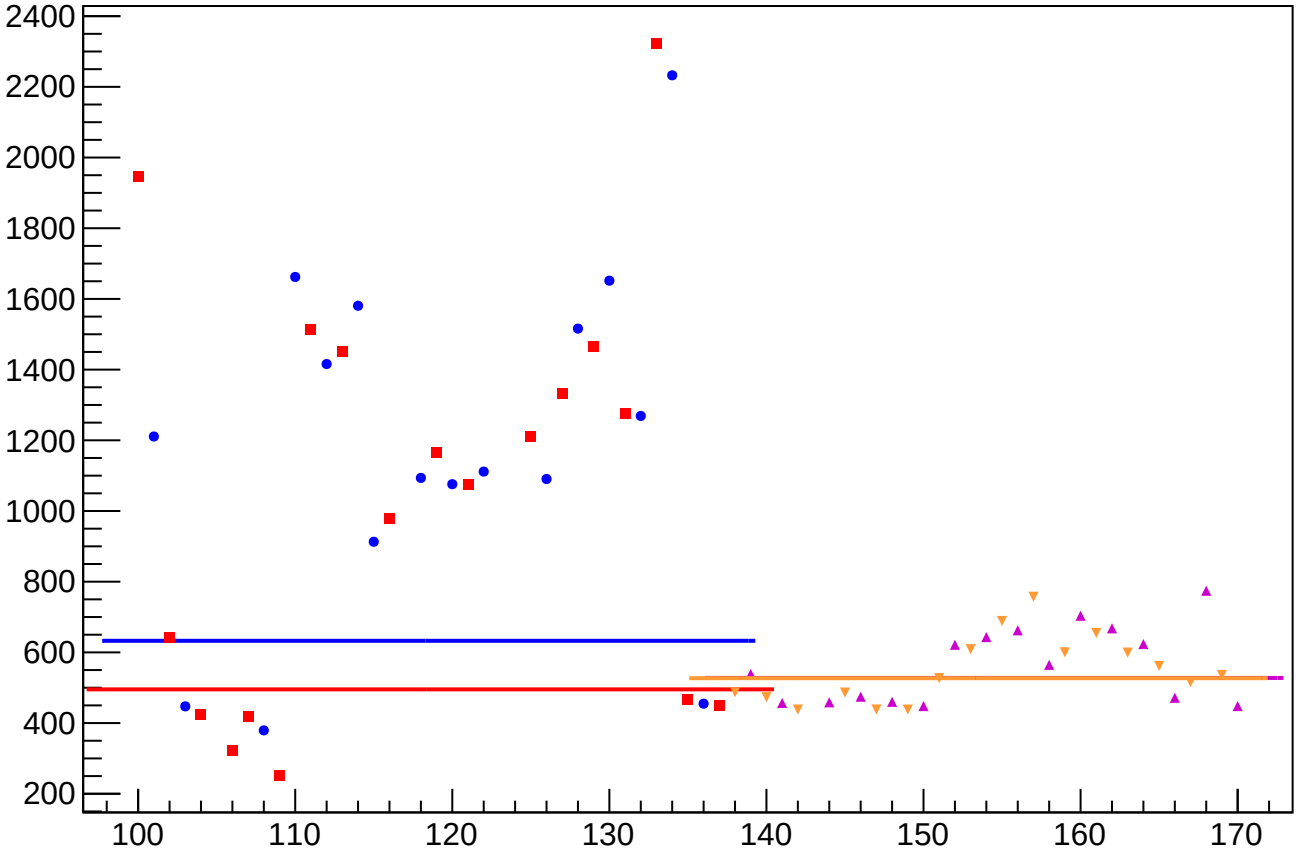
Right Out: 372.538+/-231.353 $\chi^2$/NDF: 14.0/17

Left In: 103.281+/-147.883 $\chi^2$/NDF:8.6/15

+ sign 346.124+/-132.356 $\chi^2$/NDF: 54.2/31

All: 258.788+/-90.725 $\chi^2$/NDF: 78.5/65

- sign 181.385+/-124.603 $\chi^2$/NDF: 23.5/33




Right In: 632.753+/-0.194 $\chi^2$/NDF: 3767731.7/15

Left Out: 526.948+/-0.107 $\chi^2$/NDF:603758.3/15

Right Out: 495.380+/-0.164 $\chi^2$/NDF: 4337484.8/17

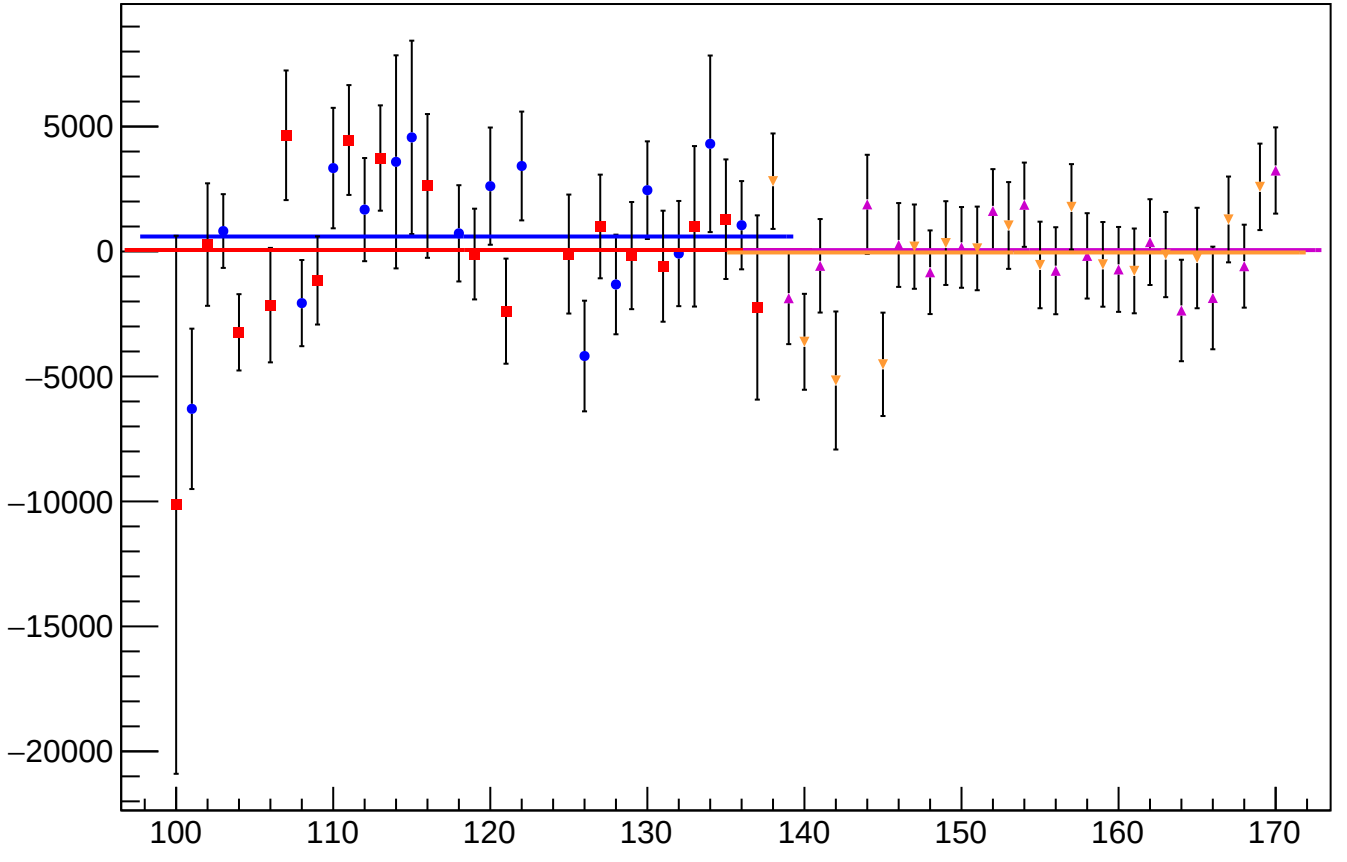
Left In: 527.704+/-0.105 $\chi^2$/NDF:813665.9/15

+ sign 551.504+/-0.094 $\chi^2$/NDF: 4599269.1/31

All: 533.916+/-0.064 $\chi^2$/NDF: 9844756.5/65

- sign 518.328+/-0.088 $\chi^2$/NDF: 5178867.4/33

# eigen_cor_asym_us_dd_at2lr_dd_dd_mean vs Slug




Right In: 600.020+/-540.053 $\chi^2$/NDF: 20.3/15

Left Out: -38.217+/-449.793 $\chi^2$/NDF:18.7/15

Right Out: 60.361+/-532.826 $\chi^2$/NDF: 20.4/17

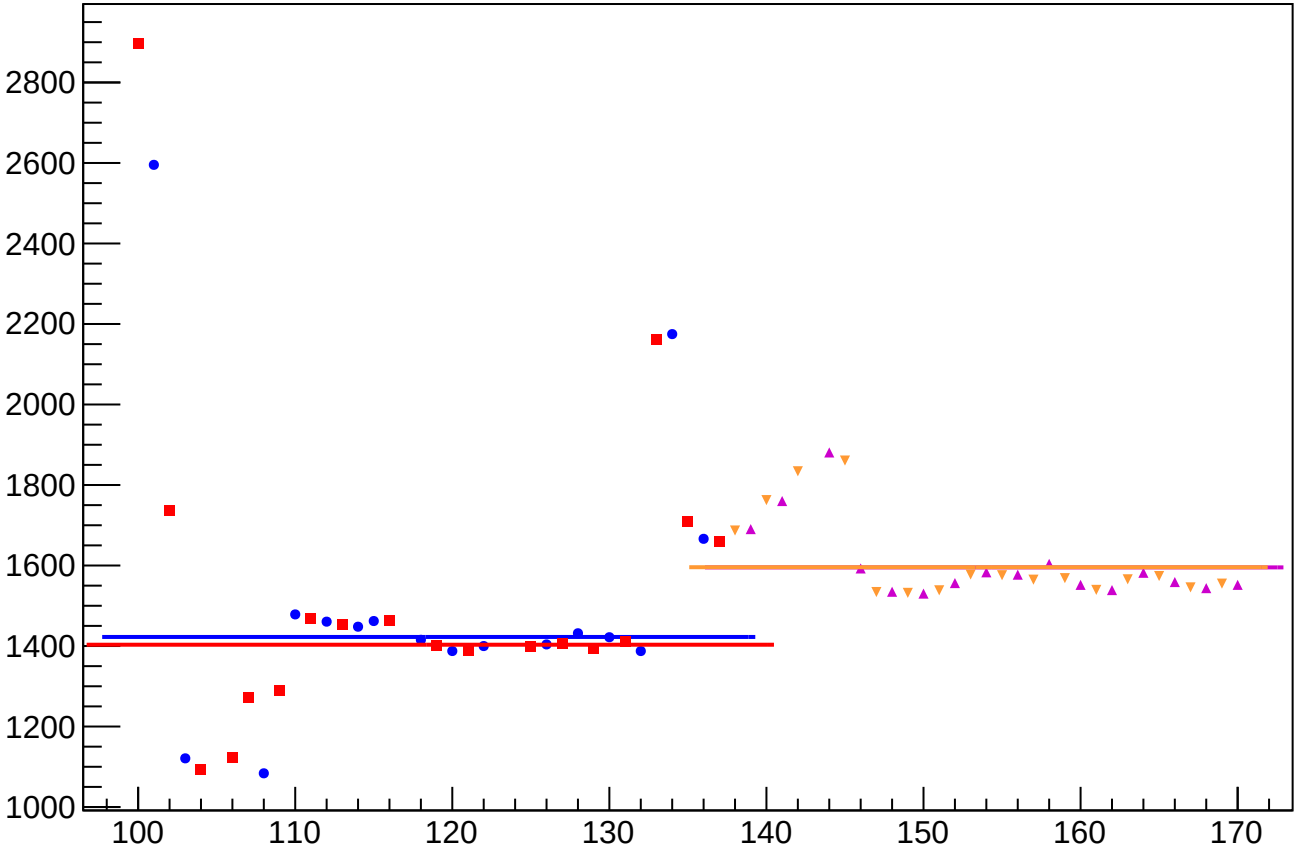
Left In: 56.096+/-439.415 $\chi^2$/NDF:10.7/15

+ sign 223.183+/-345.620 $\chi^2$/NDF: 39.8/31

All: 138.905+/-242.017 $\chi^2$/NDF: 71.0/65

- sign 57.822+/-339.005 $\chi^2$/NDF: 31.1/33

# eigen_cor_asym_us_dd_at2lr_dd_dd_rms vs Slug




Right In: 1422.515+/-0.382 $\chi^2$/NDF: 560259.5/15

Left Out: 1595.764+/-0.318 $\chi^2$/NDF:82813.1/15

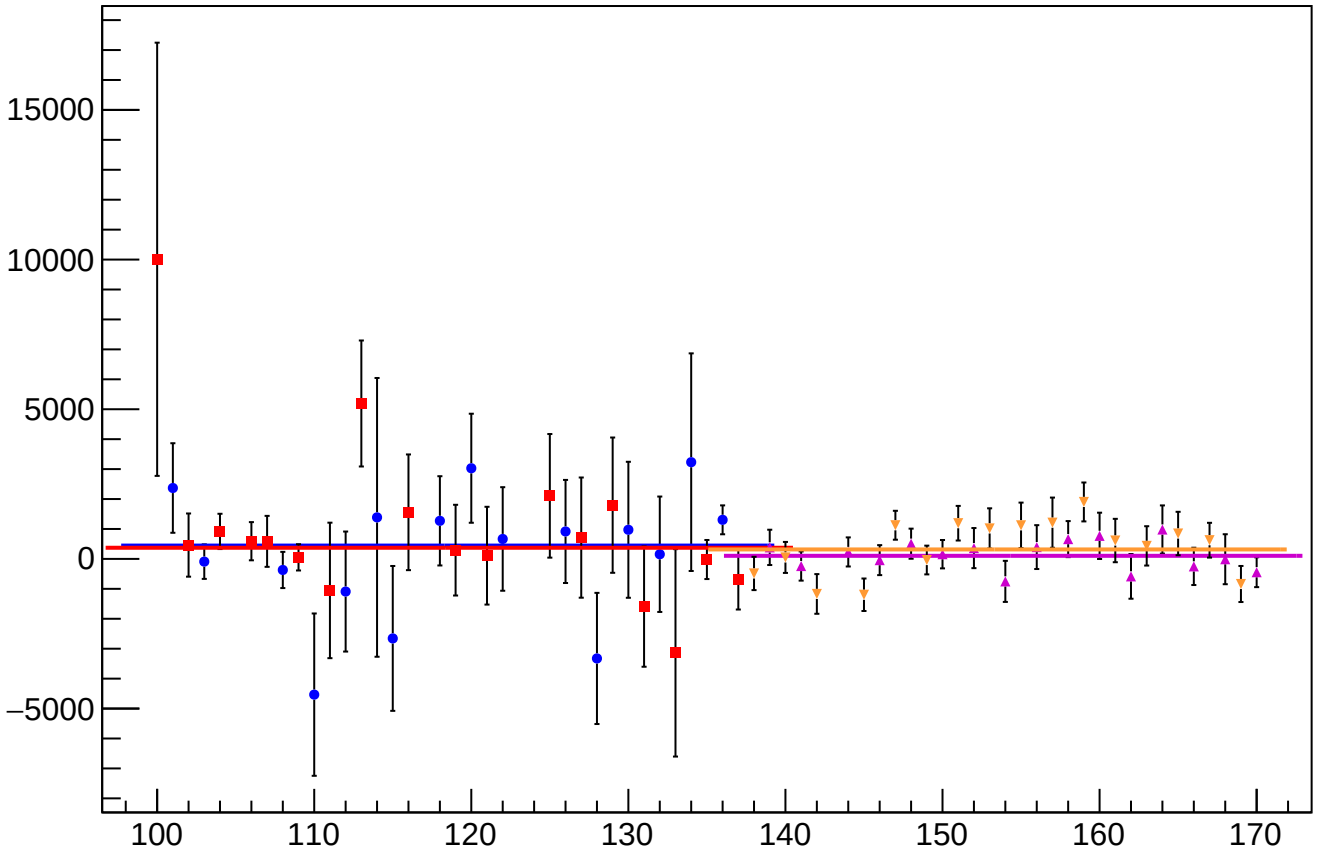
Right Out: 1403.220+/-0.377 $\chi^2$/NDF: 359113.5/17

Left In: 1595.330+/-0.311 $\chi^2$/NDF:77058.8/15

+ sign 1524.807+/-0.244 $\chi^2$/NDF: 764598.7/31

All: 1521.115+/-0.171 $\chi^2$/NDF: 1355967.2/65

- sign 1517.564+/-0.240 $\chi^2$/NDF: 590920.9/33




Right In: 445.121+/-274.737 $\chi^2$/NDF: 19.2/15

Left Out: 316.204+/-151.039 $\chi^2$/NDF:34.8/15

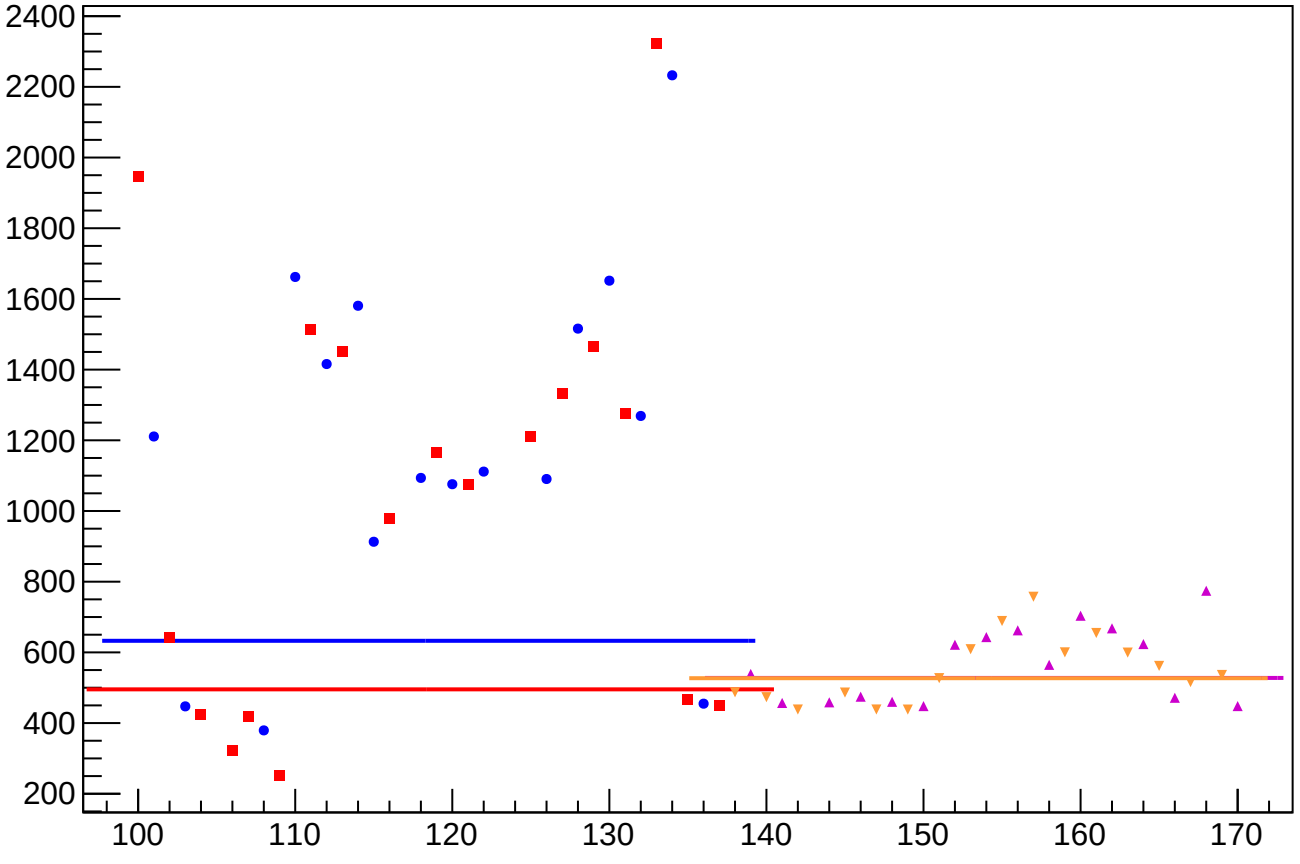
Right Out: 372.538+/-231.353 $\chi^2$/NDF: 14.0/17

Left In: 103.281+/-147.883 $\chi^2$/NDF:8.6/15

+ sign 346.124+/-132.356 $\chi^2$/NDF: 54.2/31

All: 258.788+/-90.725 $\chi^2$/NDF: 78.5/65

- sign 181.385+/-124.603 $\chi^2$/NDF: 23.5/33




Right In: 632.753+/-0.194 $\chi^2$/NDF: 3767731.7/15

Left Out: 526.948+/-0.107 $\chi^2$/NDF:603758.3/15

Right Out: 495.380+/-0.164 $\chi^2$/NDF: 4337484.8/17

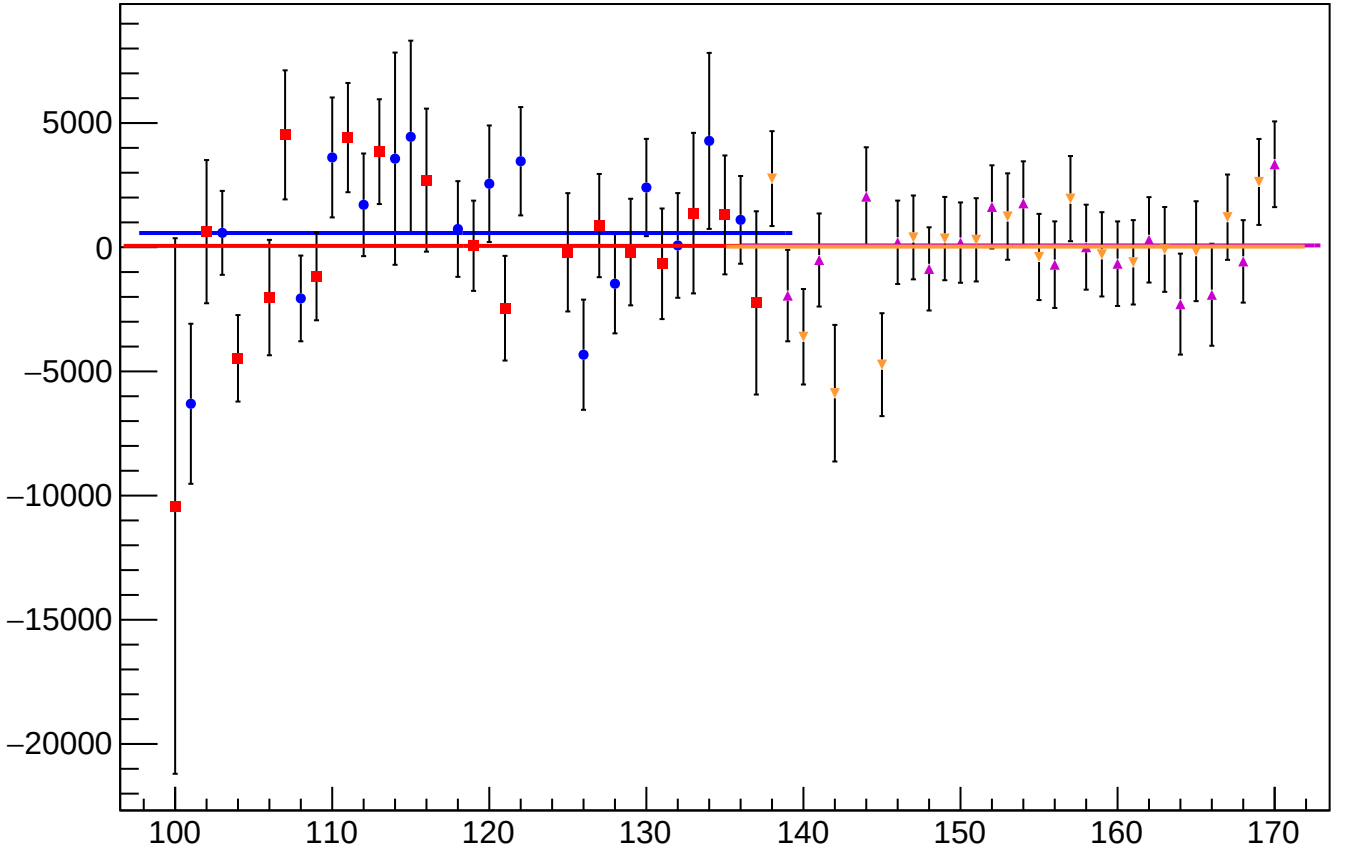
Left In: 527.704+/-0.105 $\chi^2$/NDF:813665.9/15

+ sign 551.504+/-0.094 $\chi^2$/NDF: 4599269.1/31

All: 533.916+/-0.064 $\chi^2$/NDF: 9844756.5/65

- sign 518.328+/-0.088 $\chi^2$/NDF: 5178867.4/33

# dit_asym_us_dd_at2lr_dd_dd_mean vs Slug




Right In: 572.289+/-549.638 $\chi^2$/NDF: 20.8/15

Left Out: 24.818+/-450.293 $\chi^2$/NDF:20.3/15

Right Out: 53.754+/-545.353 $\chi^2$/NDF: 22.5/17

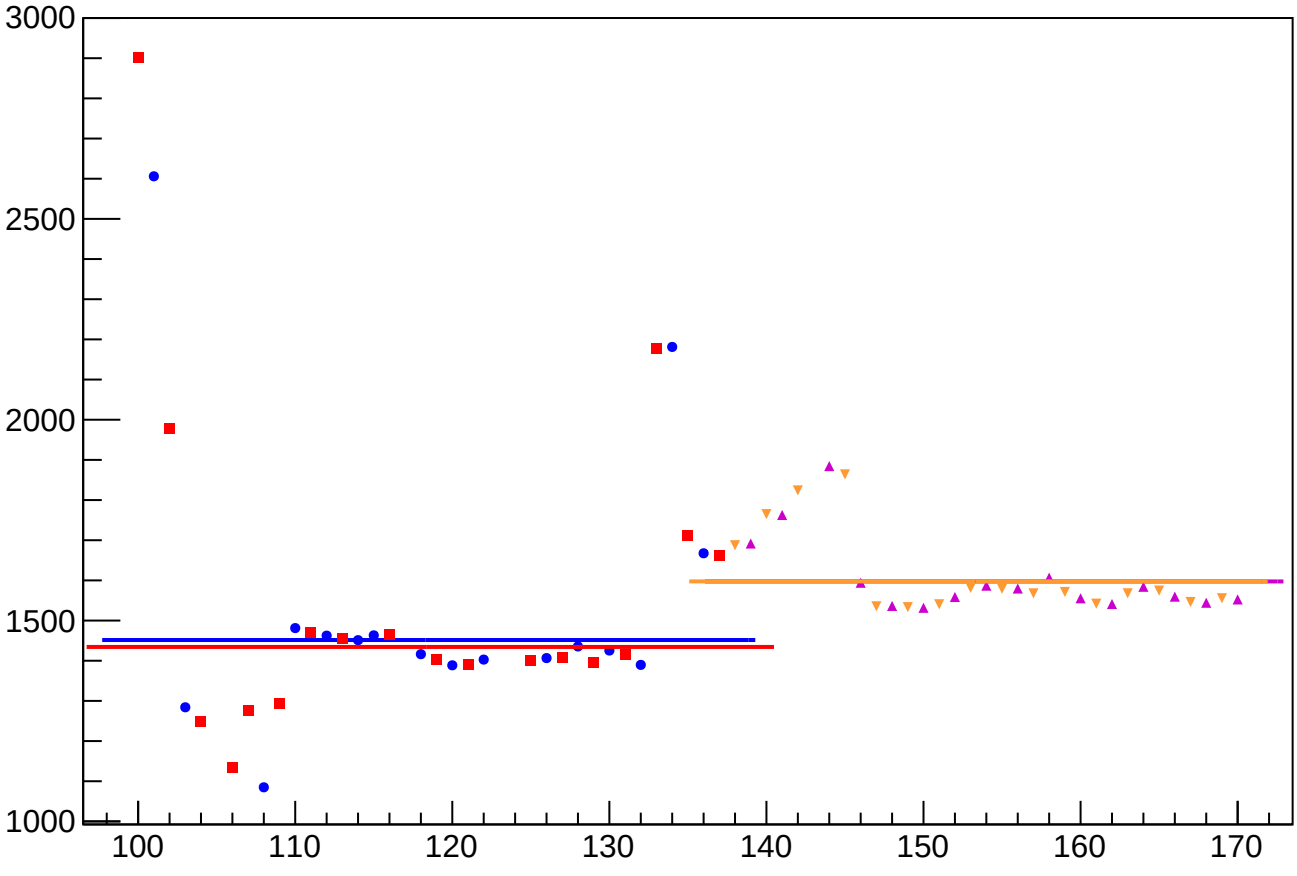
Left In: 72.097+/-439.992 $\chi^2$/NDF:10.9/15

+ sign 244.693+/-348.325 $\chi^2$/NDF: 41.7/31

All: 153.246+/-244.194 $\chi^2$/NDF: 75.3/65

- sign 64.865+/-342.437 $\chi^2$/NDF: 33.4/33

# dit_asym_us_dd_at2lr_dd_dd_rms vs Slug




Right In: 1451.579+/-0.389 $\chi^2$/NDF: 487836.7/15

Left Out: 1597.508+/-0.318 $\chi^2$/NDF:81641.0/15

Right Out: 1434.321+/-0.386 $\chi^2$/NDF: 328590.5/17

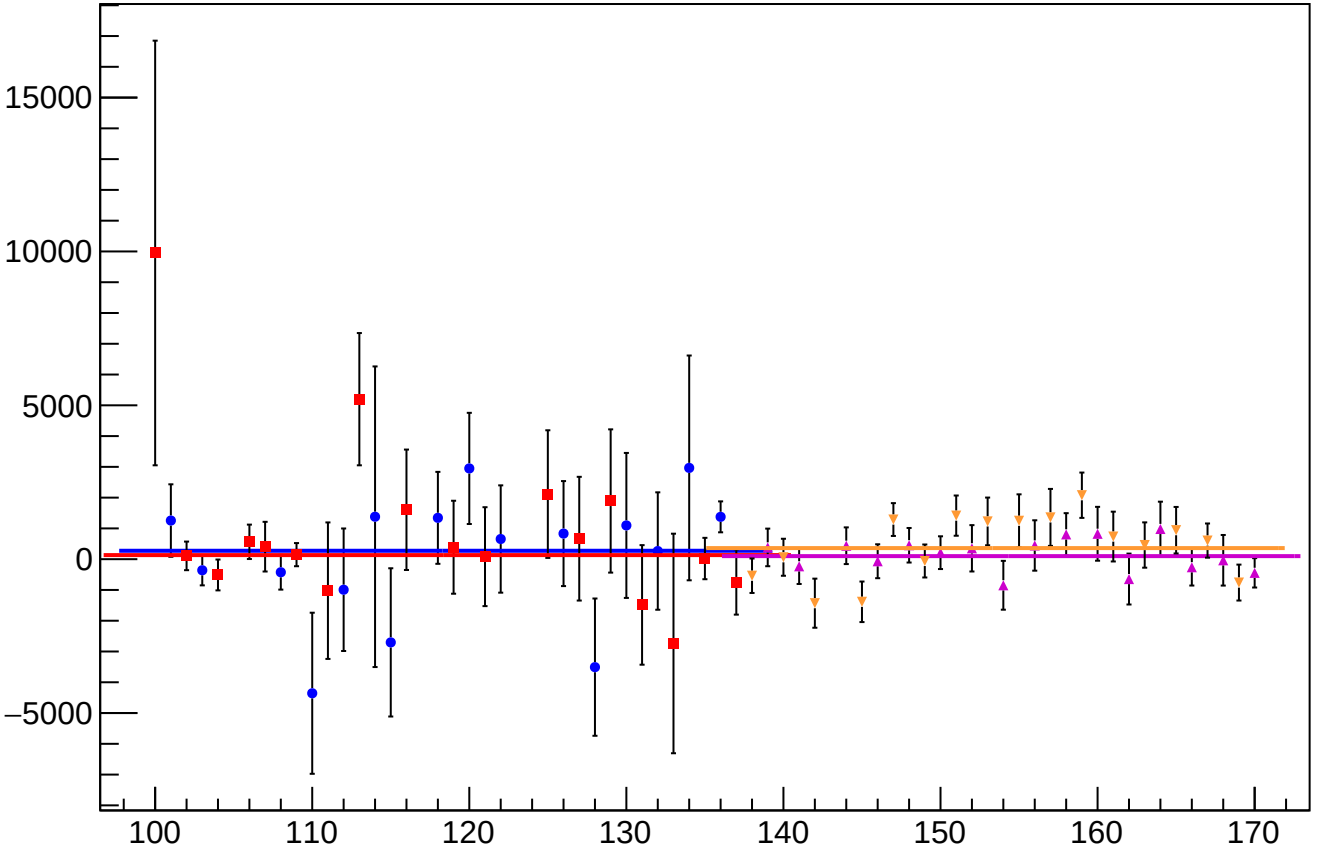
Left In: 1597.403+/-0.311 $\chi^2$/NDF:77507.1/15

+ sign 1538.900+/-0.246 $\chi^2$/NDF: 653837.7/31

All: 1535.952+/-0.173 $\chi^2$/NDF: 1168549.7/65

- sign 1533.103+/-0.242 $\chi^2$/NDF: 514430.3/33

# asym_us_dd_at2lr_dd_dd_dit_correction_mean vs Slug




Right In: 273.439+/-260.537 $\chi^2$/NDF: 20.2/15

Left Out: 360.219+/-165.517 $\chi^2$/NDF:34.7/15

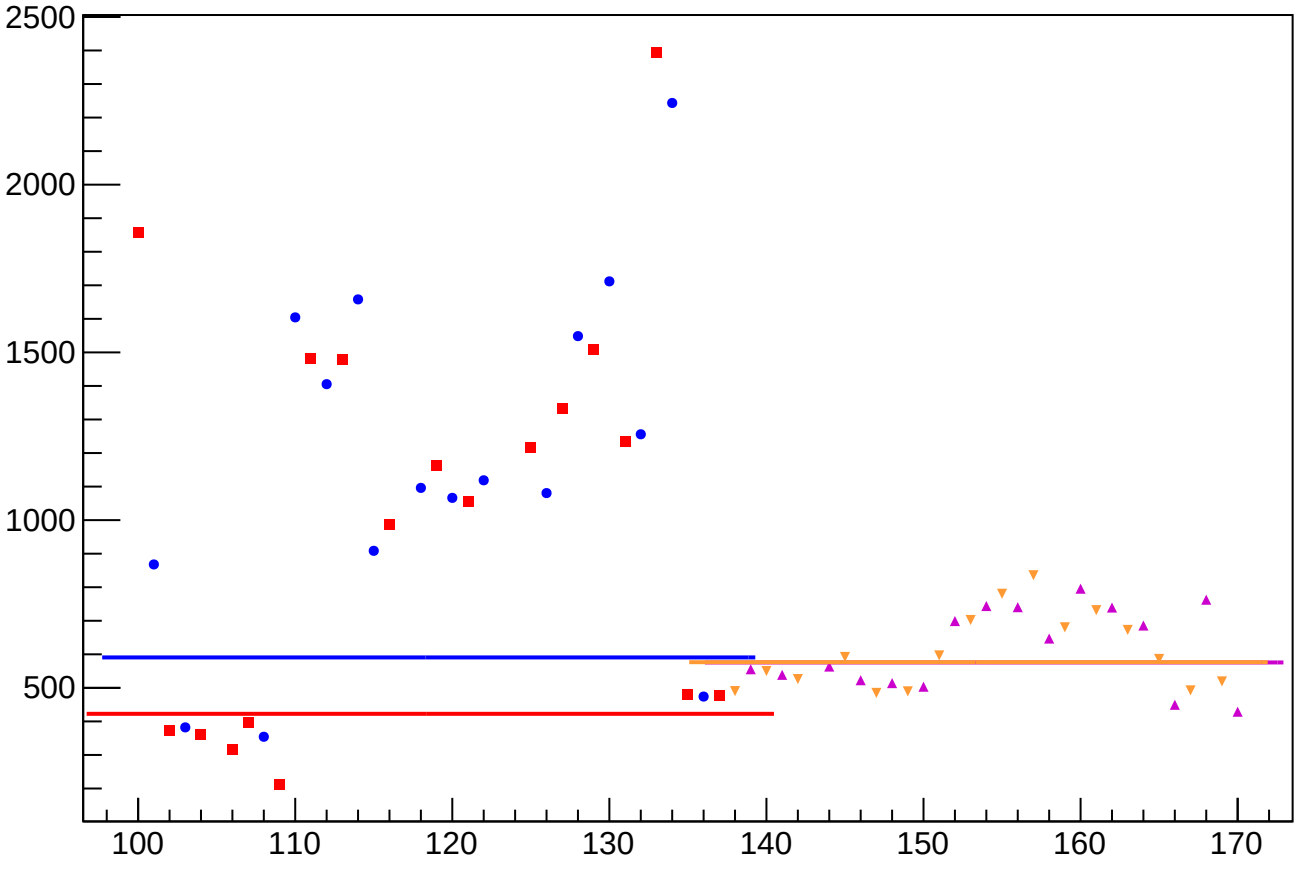
Right Out: 132.573+/-195.933 $\chi^2$/NDF: 14.4/17

Left In: 99.325+/-161.808 $\chi^2$/NDF:8.3/15

+ sign 335.266+/-139.708 $\chi^2$/NDF: 55.0/31

All: 211.505+/-93.058 $\chi^2$/NDF: 79.2/65

- sign 112.806+/-124.763 $\chi^2$/NDF: 22.8/33




Right In: 590.749+/-0.184 $\chi^2$/NDF: 3885502.1/15

Left Out: 576.564+/-0.117 $\chi^2$/NDF:708748.2/15

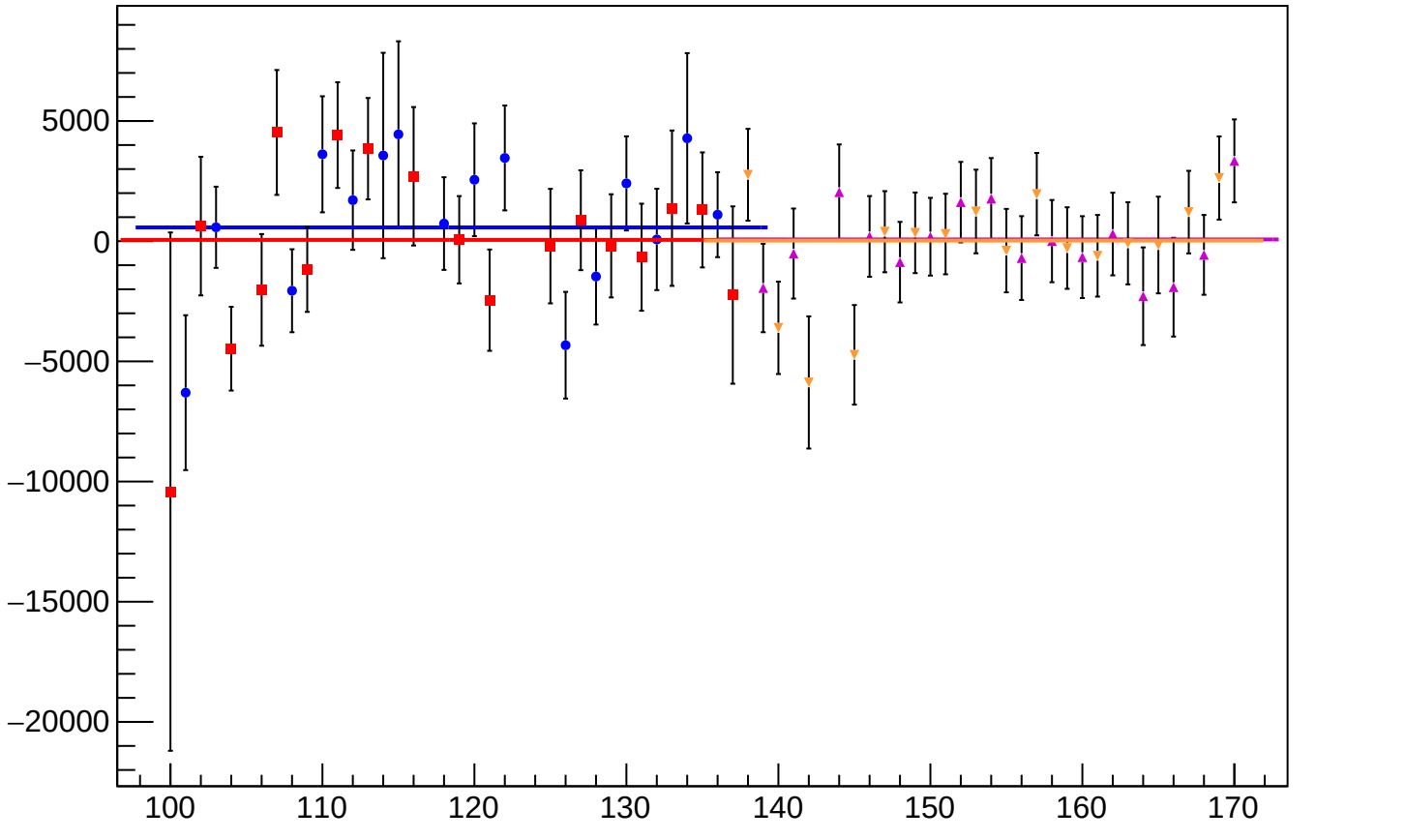
Right Out: 422.629+/-0.139 $\chi^2$/NDF: 4858014.6/17

Left In: 575.734+/-0.114 $\chi^2$/NDF:954694.8/15

+ sign 580.643+/-0.099 $\chi^2$/NDF: 4598473.9/31

All: 543.376+/-0.066 $\chi^2$/NDF: 11393047.2/65

- sign 513.655+/-0.088 $\chi^2$/NDF: 6538764.0/33




Right In: 572.290+/-549.638 $\chi^2$/NDF: 20.8/15

Left Out: 24.812+/-450.293 $\chi^2$/NDF:20.3/15

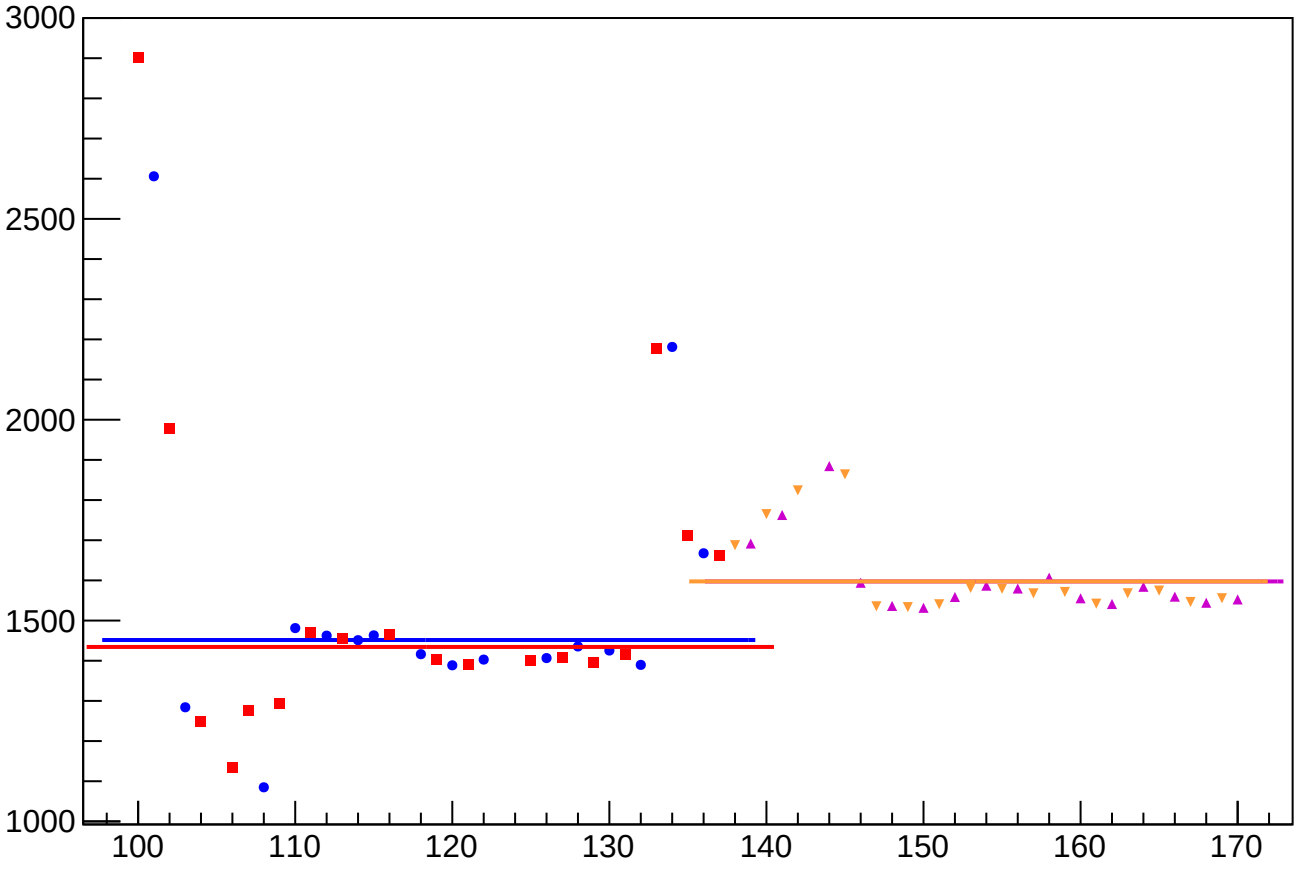
Right Out: 53.752+/-545.353 $\chi^2$/NDF: 22.5/17

Left In: 72.095+/-439.992 $\chi^2$/NDF:10.9/15

+ sign 244.690+/-348.325 $\chi^2$/NDF: 41.7/31

All: 153.244+/-244.194 $\chi^2$/NDF: 75.3/65

- sign 64.863+/-342.437 $\chi^2$/NDF: 33.4/33




Right In: 1451.579+/-0.389 $\chi^2$/NDF: 487836.2/15

Left Out: 1597.508+/-0.318 $\chi^2$/NDF:81641.2/15

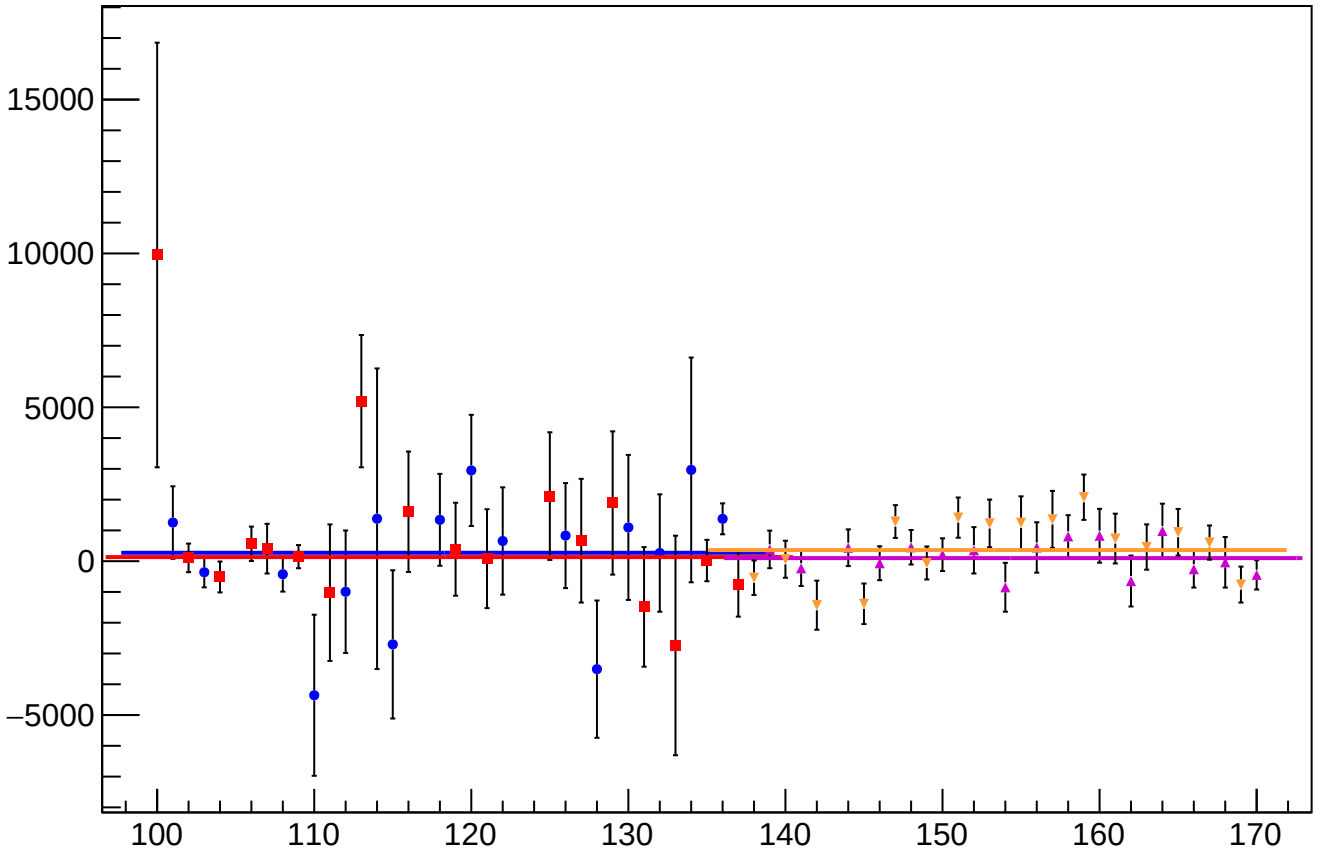
Right Out: 1434.321+/-0.386 $\chi^2$/NDF: 328590.5/17

Left In: 1597.403+/-0.311 $\chi^2$/NDF:77507.3/15

+ sign 1538.900+/-0.246 $\chi^2$/NDF: 653837.5/31

All: 1535.952+/-0.173 $\chi^2$/NDF: 1168549.8/65

- sign 1533.103+/-0.242 $\chi^2$/NDF: 514430.7/33




Right In: 273.429+/-260.536 $\chi^2$/NDF: 20.2/15

Left Out: 360.227+/-165.518 $\chi^2$/NDF:34.7/15

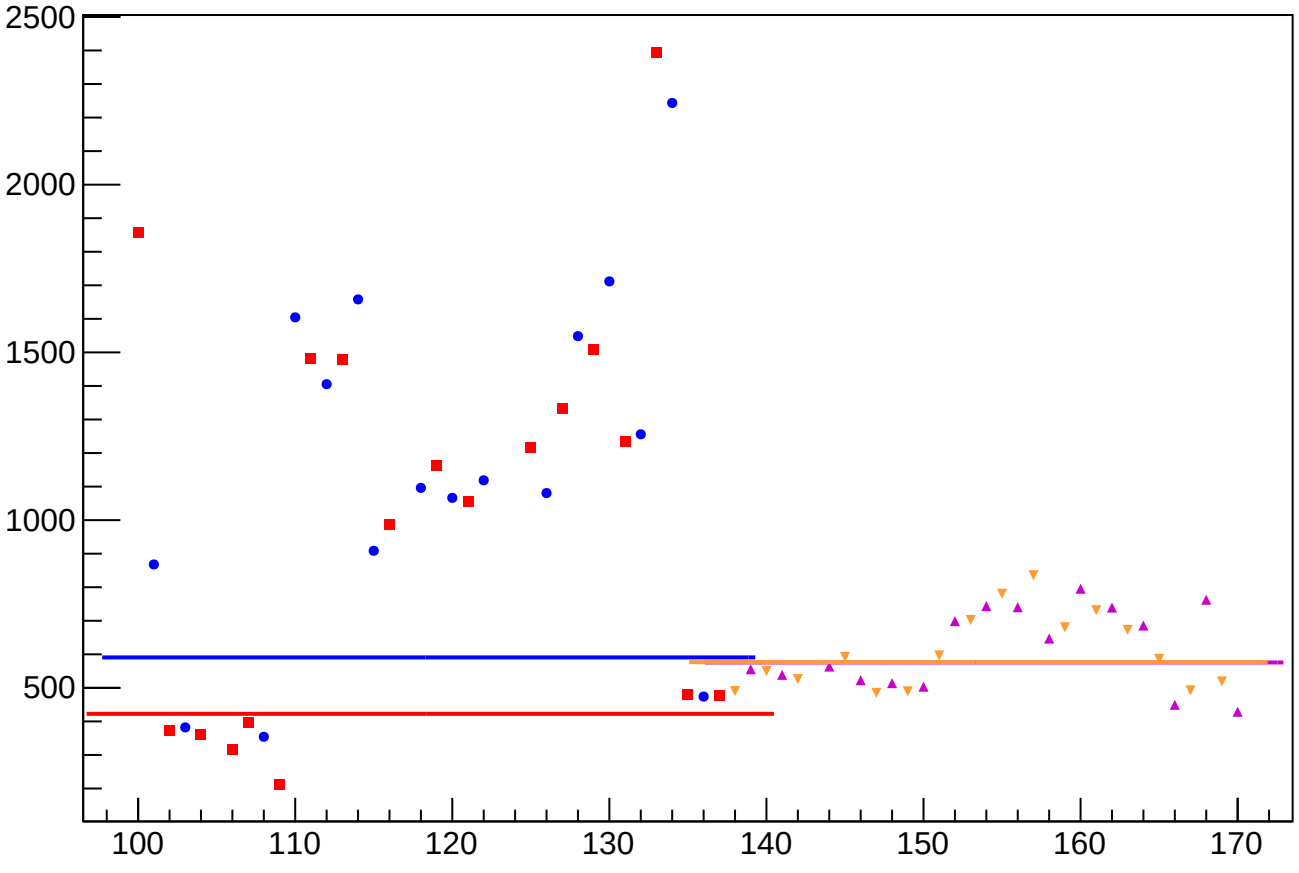
Right Out: 132.567+/-195.935 $\chi^2$/NDF: 14.4/17

Left In: 99.326+/-161.808 $\chi^2$/NDF:8.3/15

+ sign 335.268+/-139.708 $\chi^2$/NDF: 55.0/31

All: 211.505+/-93.058 $\chi^2$/NDF: 79.2/65

- sign 112.804+/-124.764 $\chi^2$/NDF: 22.8/33




Right In: 590.747+/-0.184 $\chi^2$/NDF: 3885530.6/15

Left Out: 576.567+/-0.117 $\chi^2$/NDF:708734.7/15

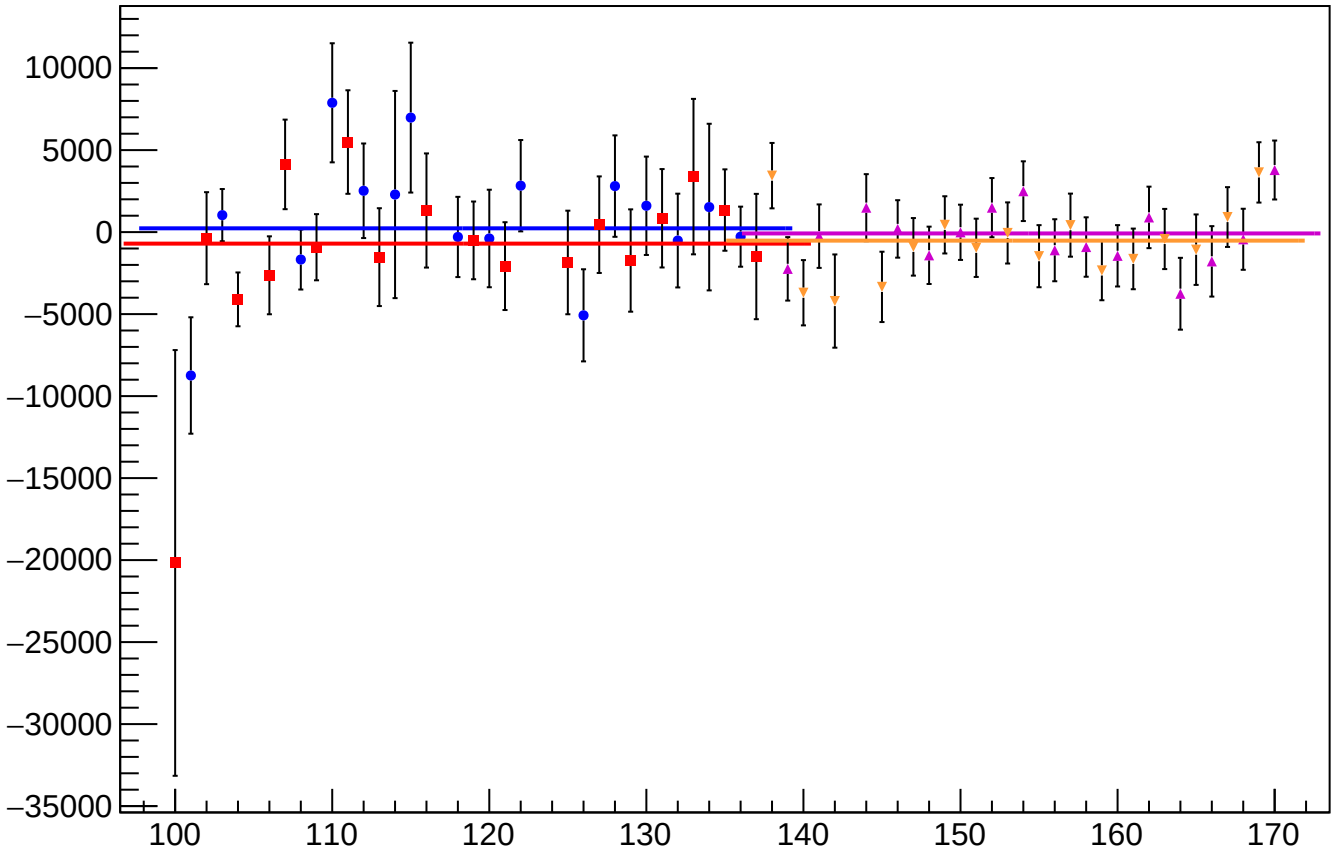
Right Out: 422.634+/-0.139 $\chi^2$/NDF: 4857932.7/17

Left In: 575.735+/-0.114 $\chi^2$/NDF:954705.5/15

+ sign 580.644+/-0.099 $\chi^2$/NDF: 4598486.4/31

All: 543.378+/-0.066 $\chi^2$/NDF: 11392918.3/65

- sign 513.658+/-0.088 $\chi^2$/NDF: 6538640.1/33




Right In: 230.761+/-666.241 $\chi^2$/NDF: 20.7/15

Left Out: -519.559+/-479.014 $\chi^2$/NDF:18.0/15

Right Out: -702.268+/-648.319 $\chi^2$/NDF: 17.0/17

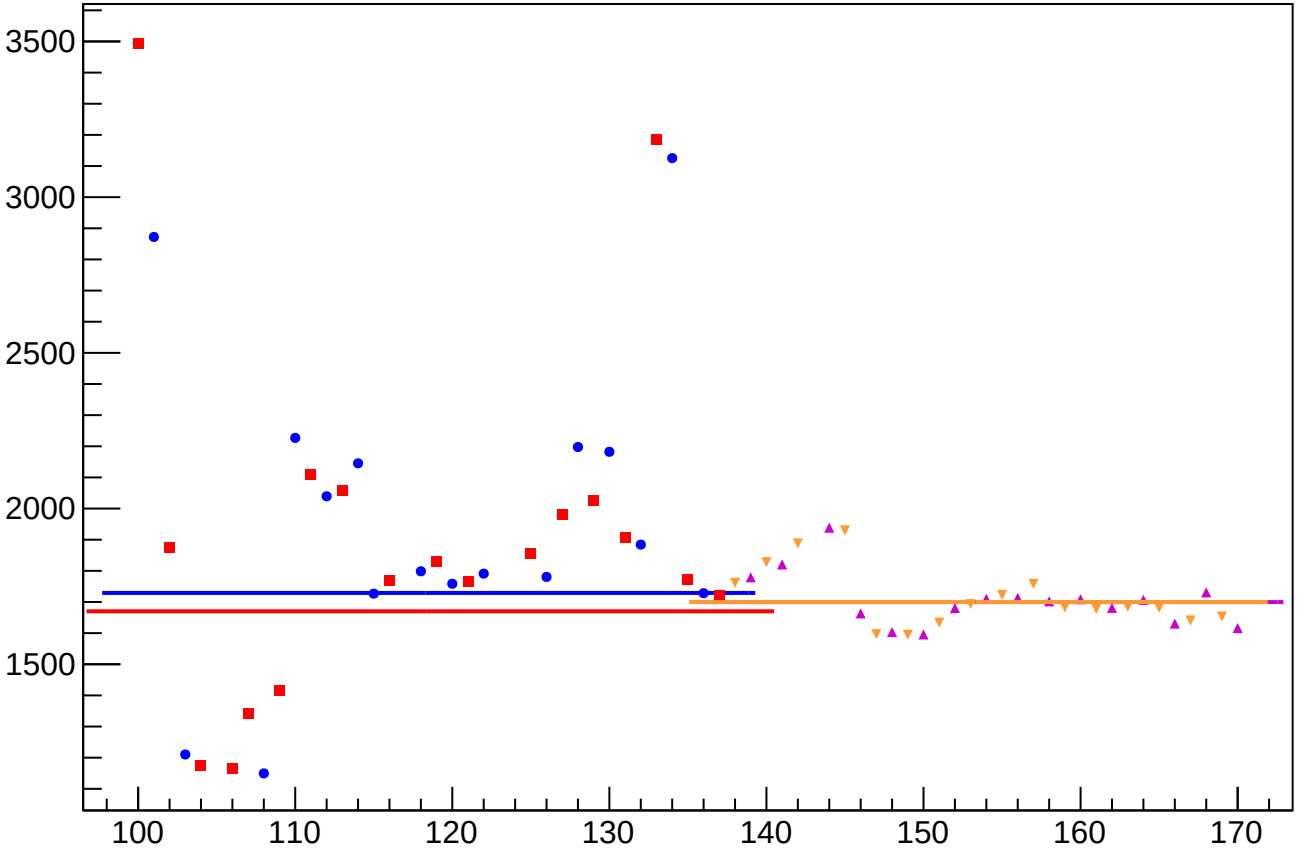
Left In: -80.957+/-468.024 $\chi^2$/NDF:14.6/15

\+ sign -263.869+/-388.924 $\chi^2$/NDF: 39.6/31

All: -279.212+/-271.608 $\chi^2$/NDF: 71.9/65

\- sign -293.819+/-379.475 $\chi^2$/NDF: 32.3/33

# asym_us_dd_at2lr_dd_dd_rms vs Slug




Right In: 1729.050+/-0.471 $\chi^2$/NDF: 942079.1/15

Left Out: 1699.966+/-0.339 $\chi^2$/NDF:65285.7/15

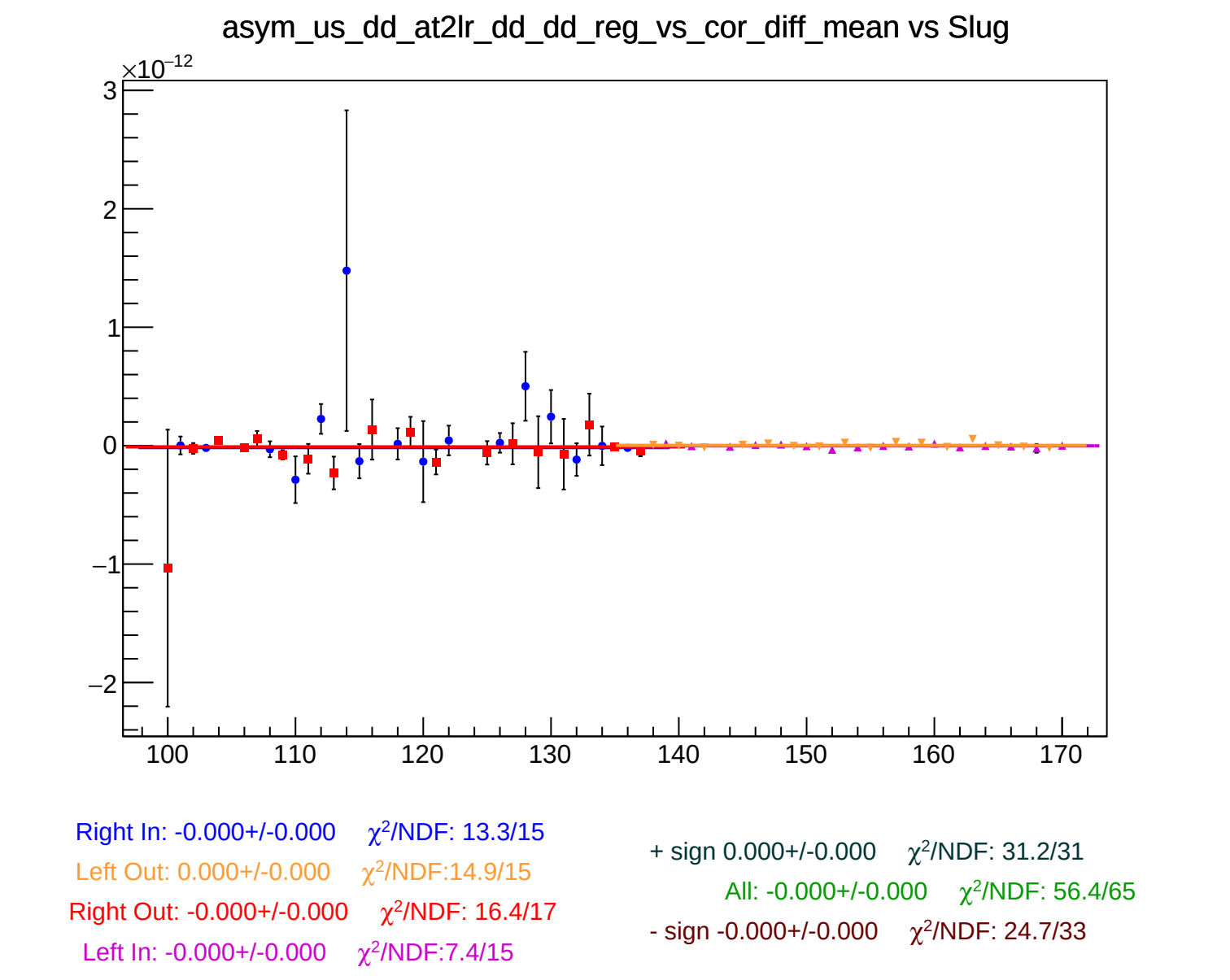
Right Out: 1670.056+/-0.458 $\chi^2$/NDF: 744452.0/17

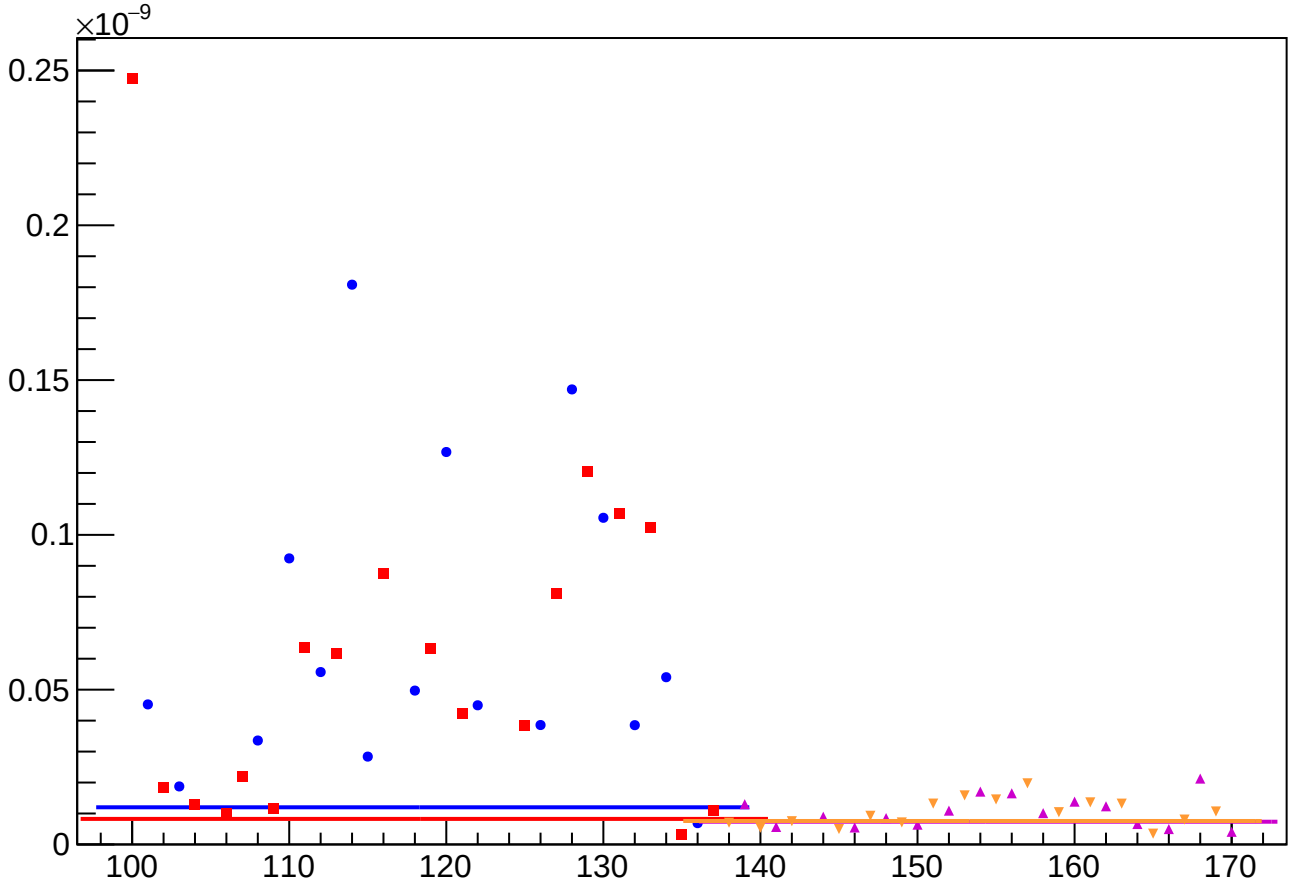
Left In: 1699.683+/-0.331 $\chi^2$/NDF:60701.8/15

+ sign 1709.877+/-0.275 $\chi^2$/NDF: 1009877.3/31

All: 1699.455+/-0.192 $\chi^2$/NDF: 1820580.3/65

- sign 1689.533+/-0.268 $\chi^2$/NDF: 807899.4/33


asym_us_dd_at2lr_dd_dd_reg_vs_cor_diff_mean vs Slug
×10^−12
3
2
1
0
−1
−2
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 13.3/15
Left Out: 0.000+/-0.000 χ²/NDF:14.9/15
Right Out: -0.000+/-0.000 χ²/NDF: 16.4/17
Left In: -0.000+/-0.000 χ²/NDF:7.4/15
+ sign 0.000+/-0.000 χ²/NDF: 31.2/31
All: -0.000+/-0.000 χ²/NDF: 56.4/65
- sign -0.000+/-0.000 χ²/NDF: 24.7/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3425893.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1789305.4/15

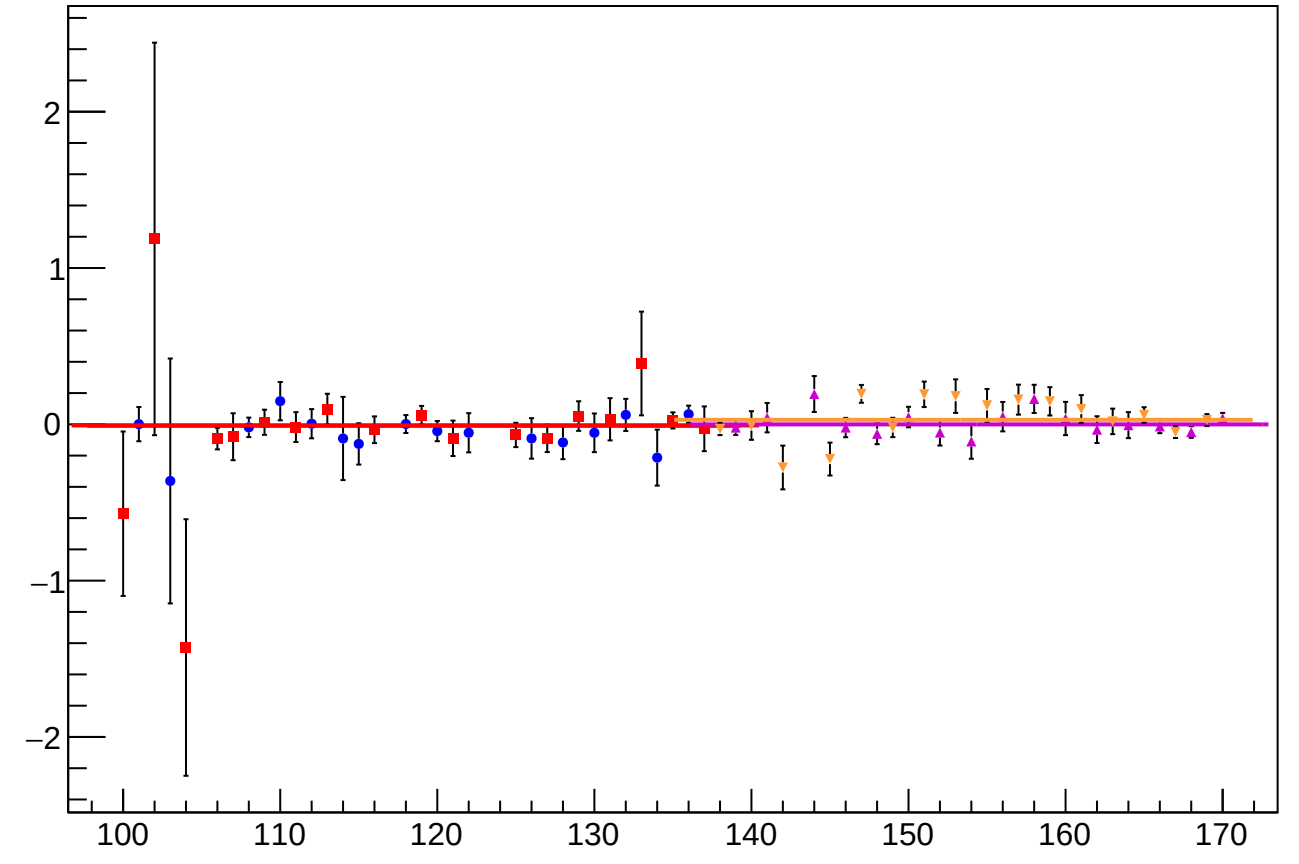
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3510130.7/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1884952.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5544676.8/31

All: 0.000+/-0.000 $\chi^2$/NDF: 10992125.3/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 5413998.3/33




Right In: -0.008+/-0.023 $\chi^2$/NDF: 8.3/15

Left Out: 0.029+/-0.016 $\chi^2$/NDF:37.2/15

Right Out: -0.007+/-0.022 $\chi^2$/NDF: 13.7/17

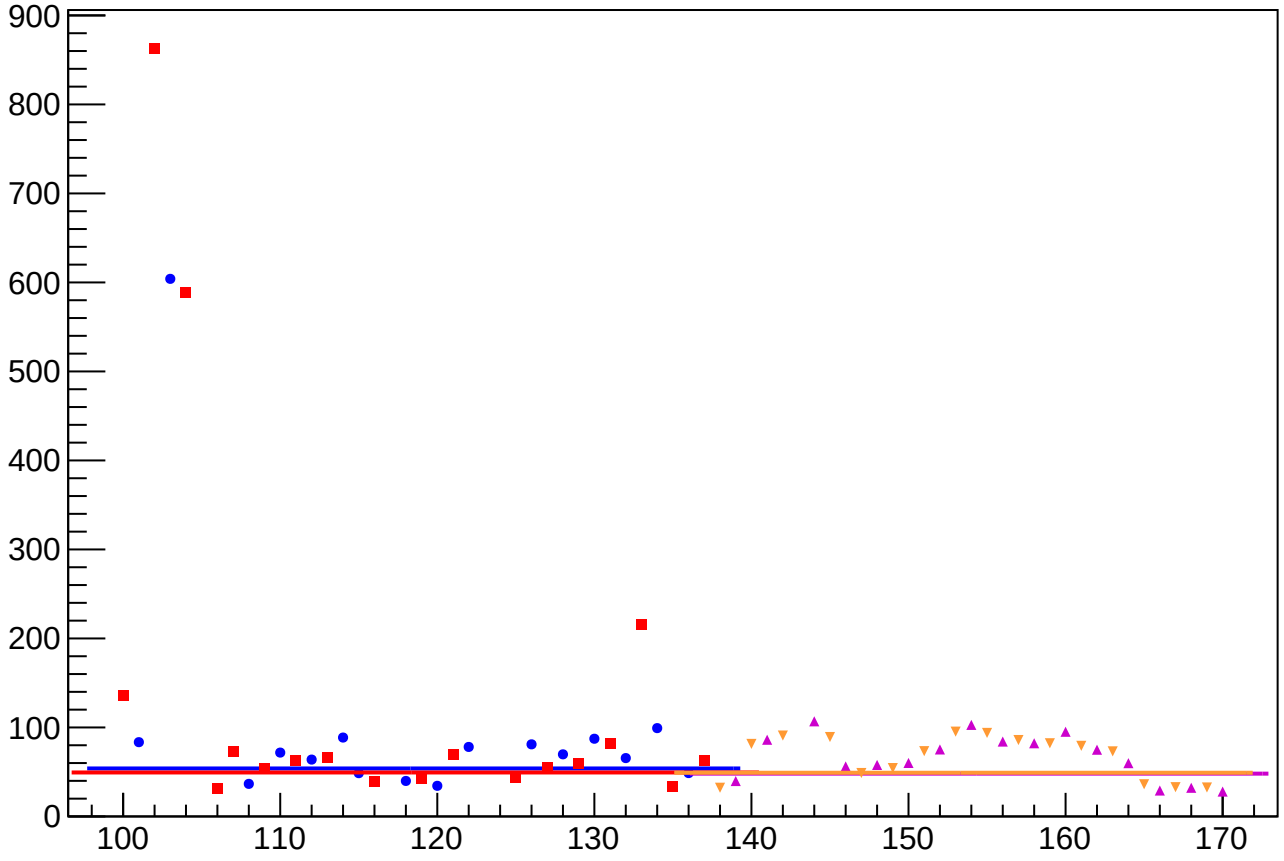
Left In: -0.000+/-0.015 $\chi^2$/NDF:13.0/15

+ sign 0.017+/-0.013 $\chi^2$/NDF: 47.2/31

All: 0.007+/-0.009 $\chi^2$/NDF: 75.1/65

- sign -0.003+/-0.013 $\chi^2$/NDF: 26.7/33

# asym_us_dd_at2lr_dd_dd_dit_vs_cor_diff_rms vs Slug




Right In: 53.926+/-0.016 $\chi^2$/NDF: 2214348.1/15

Left Out: 49.109+/-0.011 $\chi^2$/NDF:3827617.3/15

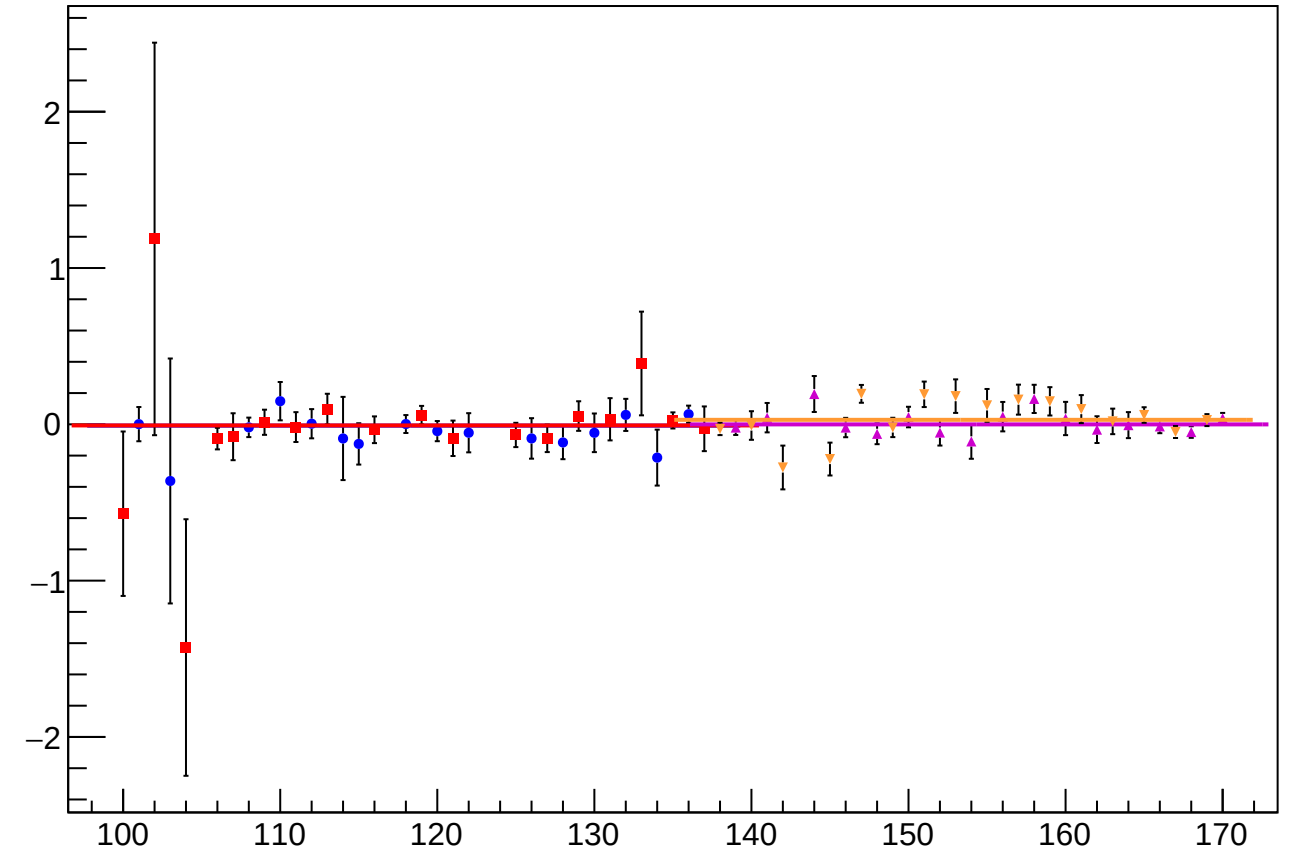
Right Out: 49.420+/-0.016 $\chi^2$/NDF: 3017719.3/17

Left In: 48.104+/-0.011 $\chi^2$/NDF:4386677.3/15

+ sign 50.632+/-0.009 $\chi^2$/NDF: 6101404.4/31

All: 49.547+/-0.006 $\chi^2$/NDF: 13537600.2/65

- sign 48.527+/-0.009 $\chi^2$/NDF: 7409154.7/33




Right In: -0.008+/-0.023 $\chi^2$/NDF: 8.3/15

Left Out: 0.029+/-0.016 $\chi^2$/NDF:37.2/15

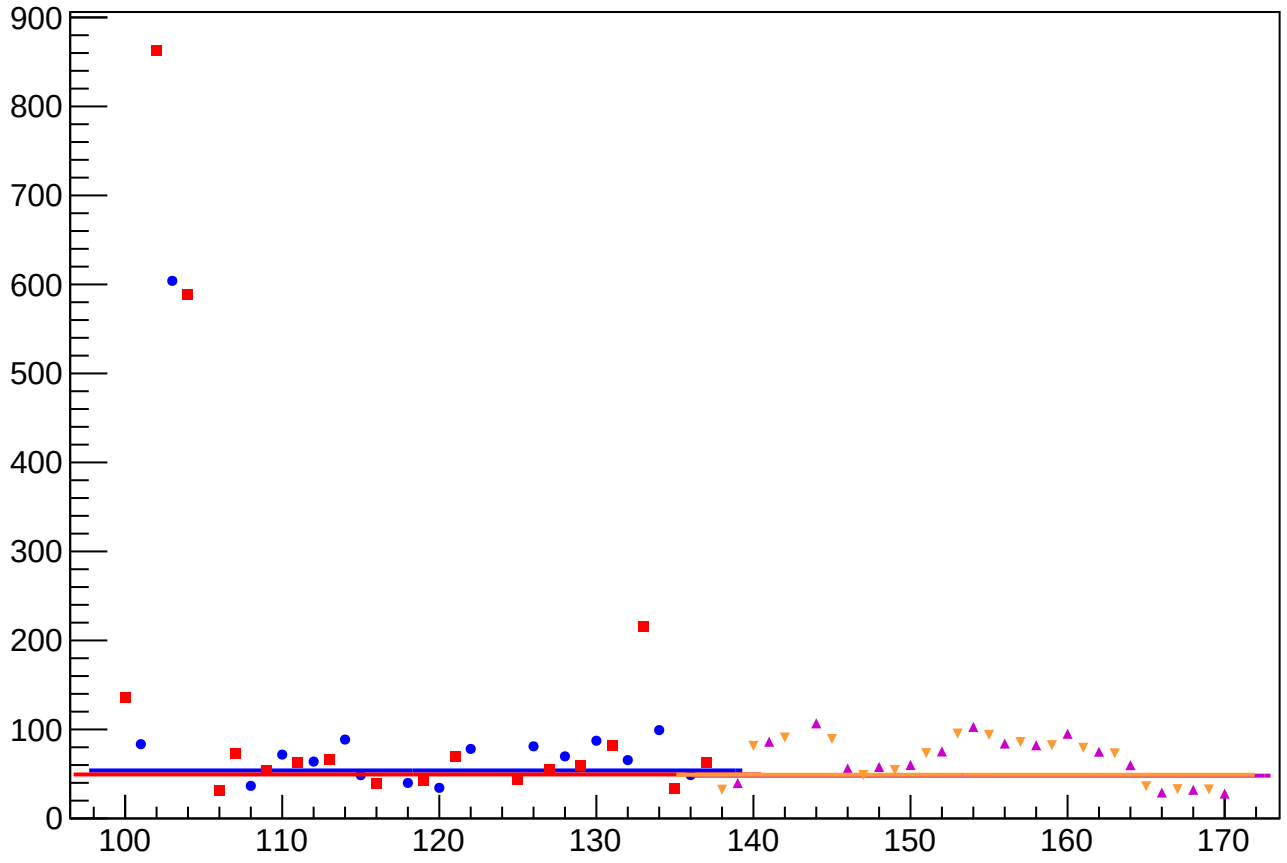
Right Out: -0.007+/-0.022 $\chi^2$/NDF: 13.7/17

Left In: -0.000+/-0.015 $\chi^2$/NDF:13.0/15

+ sign 0.017+/-0.013 $\chi^2$/NDF: 47.2/31

All: 0.007+/-0.009 $\chi^2$/NDF: 75.1/65

- sign -0.003+/-0.013 $\chi^2$/NDF: 26.7/33




Right In: 53.926+/-0.016 $\chi^2$/NDF: 2214348.1/15

Left Out: 49.109+/-0.011 $\chi^2$/NDF:3827617.3/15

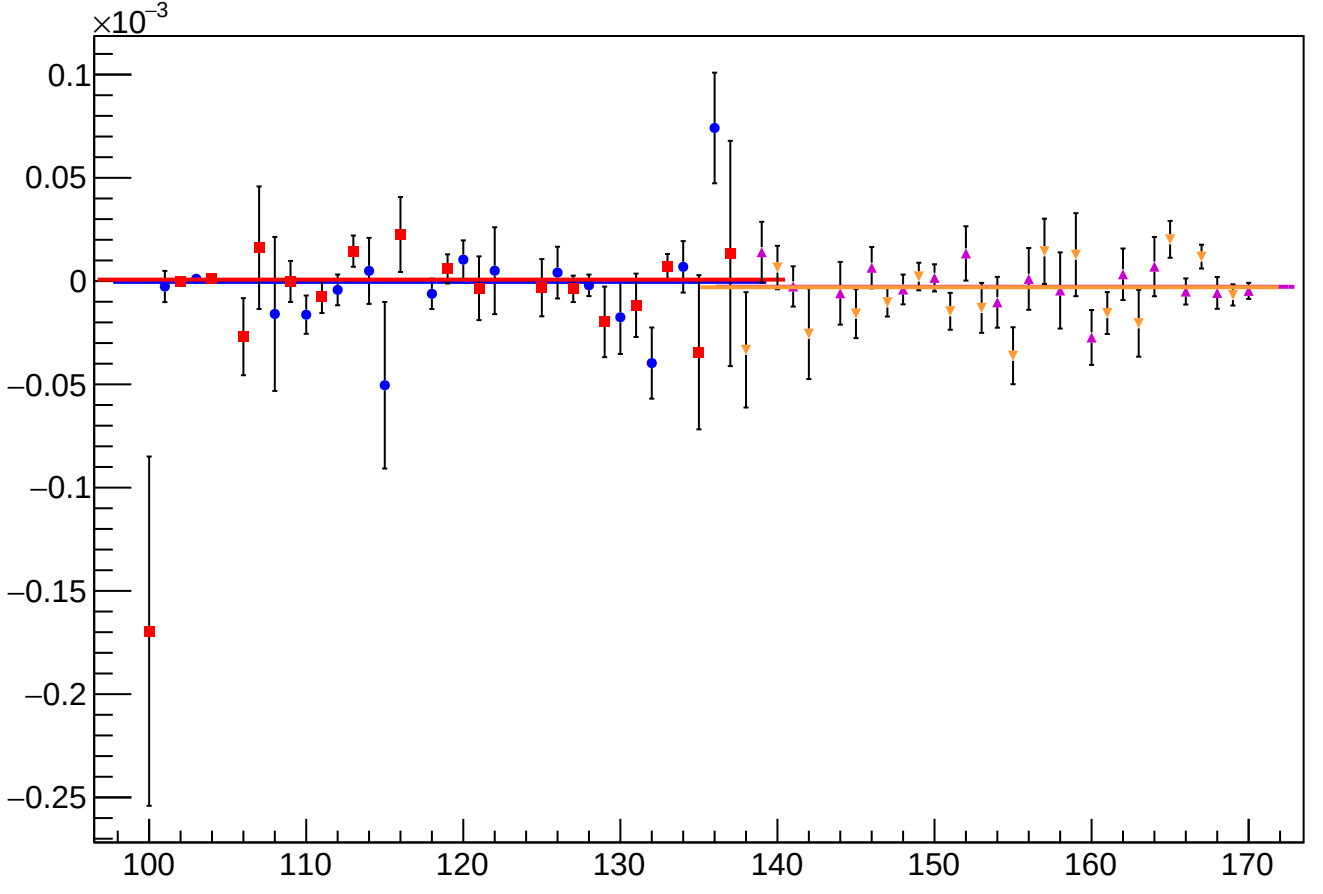
Right Out: 49.420+/-0.016 $\chi^2$/NDF: 3017719.3/17

Left In: 48.104+/-0.011 $\chi^2$/NDF:4386677.3/15

+ sign 50.632+/-0.009 $\chi^2$/NDF: 6101404.4/31

All: 49.547+/-0.006 $\chi^2$/NDF: 13537600.2/65

- sign 48.527+/-0.009 $\chi^2$/NDF: 7409154.7/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 22.1/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:32.5/15

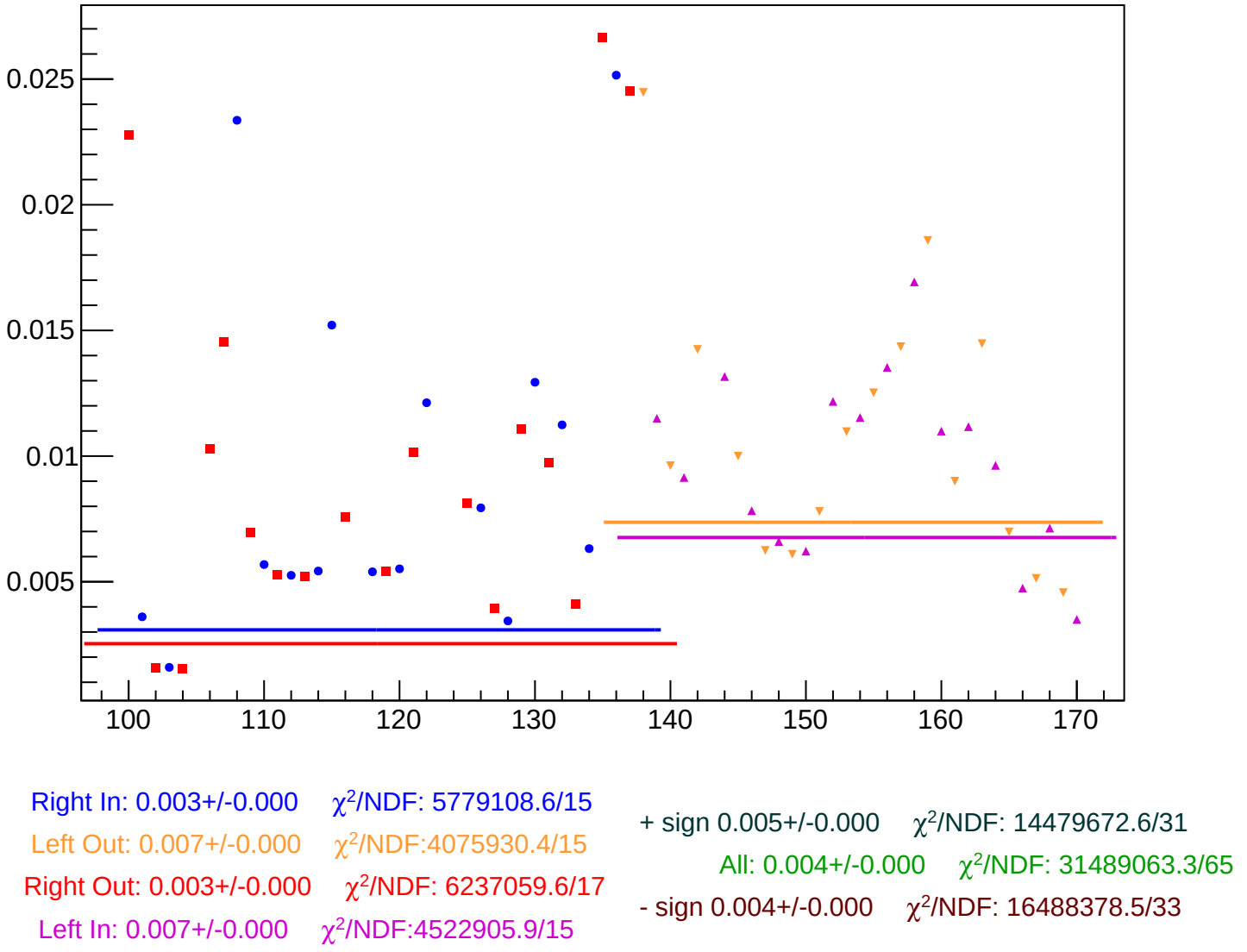
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.8/17

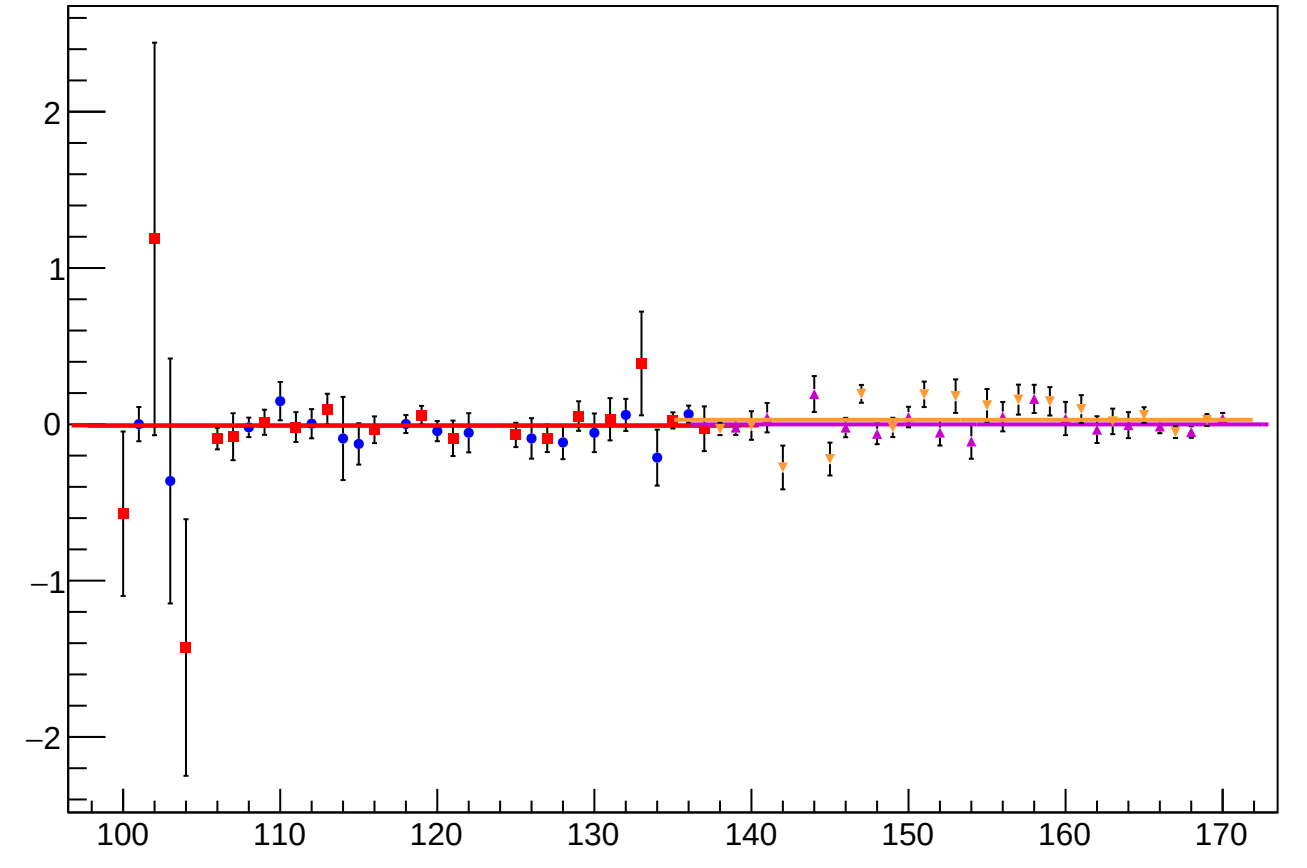
Left In: -0.000+/-0.000 $\chi^2$/NDF:9.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 55.5/31

All: -0.000+/-0.000 $\chi^2$/NDF: 84.9/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 29.0/33


asym_us_dd_at2lr_dd_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.025
0.02
0.015
0.01
0.005
100
110
120
130
140
150
160
170
Right In: 0.003+/-0.000 χ²/NDF: 5779108.6/15
Left Out: 0.007+/-0.000 χ²/NDF:4075930.4/15
Right Out: 0.003+/-0.000 χ²/NDF: 6237059.6/17
Left In: 0.007+/-0.000 χ²/NDF:4522905.9/15
+ sign 0.005+/-0.000 χ²/NDF: 14479672.6/31
All: 0.004+/-0.000 χ²/NDF: 31489063.3/65
- sign 0.004+/-0.000 χ²/NDF: 16488378.5/33




Right In: -0.008+/-0.023 $\chi^2$/NDF: 8.3/15

Left Out: 0.029+/-0.016 $\chi^2$/NDF:37.2/15

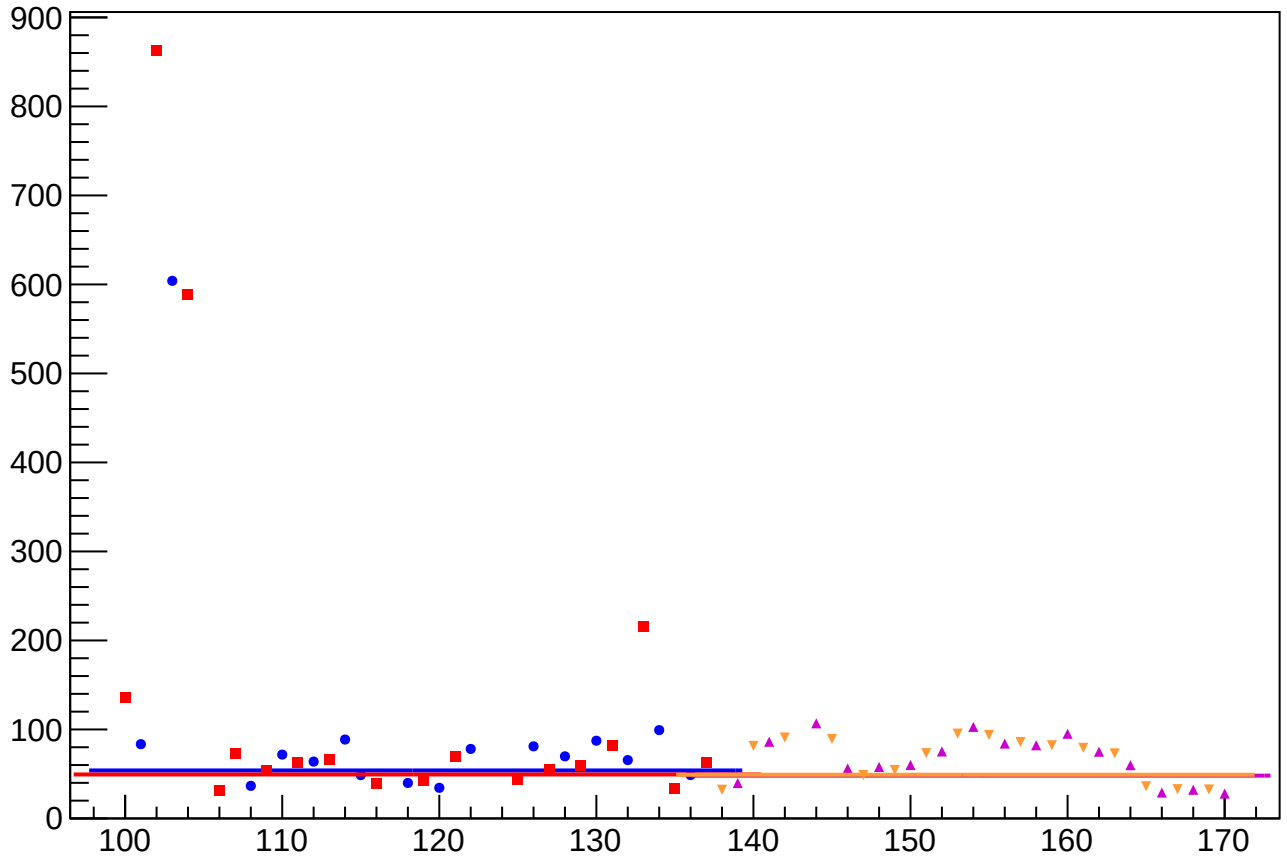
Right Out: -0.007+/-0.022 $\chi^2$/NDF: 13.7/17

Left In: -0.000+/-0.015 $\chi^2$/NDF:13.0/15

+ sign 0.017+/-0.013 $\chi^2$/NDF: 47.2/31

All: 0.007+/-0.009 $\chi^2$/NDF: 75.1/65

- sign -0.003+/-0.013 $\chi^2$/NDF: 26.7/33




Right In: 53.929+/-0.016 $\chi^2$/NDF: 2213950.2/15

Left Out: 49.111+/-0.011 $\chi^2$/NDF:3826884.7/15

Right Out: 49.422+/-0.016 $\chi^2$/NDF: 3017440.2/17

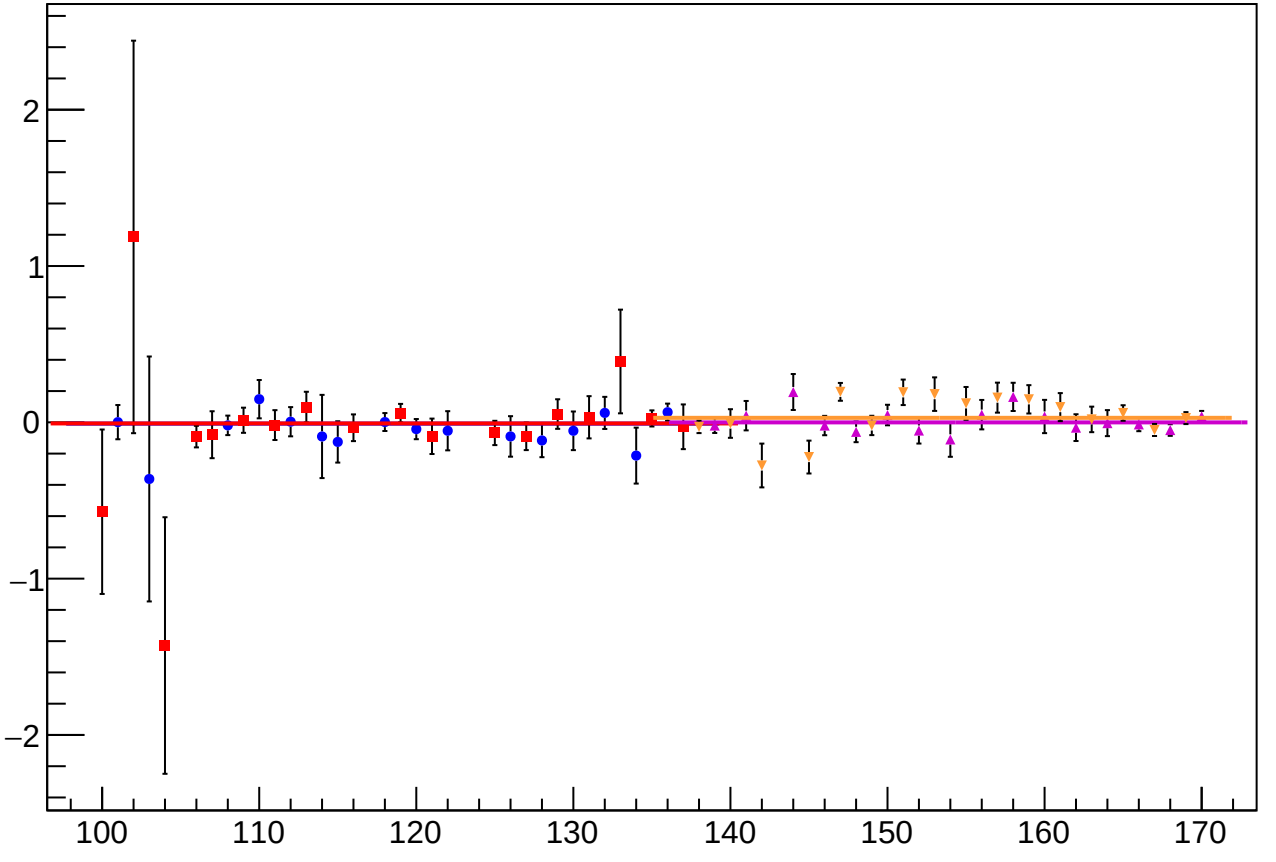
Left In: 48.104+/-0.011 $\chi^2$/NDF:4386630.8/15

+ sign 50.634+/-0.009 $\chi^2$/NDF: 6100293.9/31

All: 49.549+/-0.006 $\chi^2$/NDF: 13536227.4/65

- sign 48.528+/-0.009 $\chi^2$/NDF: 7408843.7/33

asym_us_dd_at2lr_dd_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.008+/-0.023 $\chi^2$/NDF: 8.3/15

Left Out: 0.029+/-0.016 $\chi^2$/NDF:37.2/15

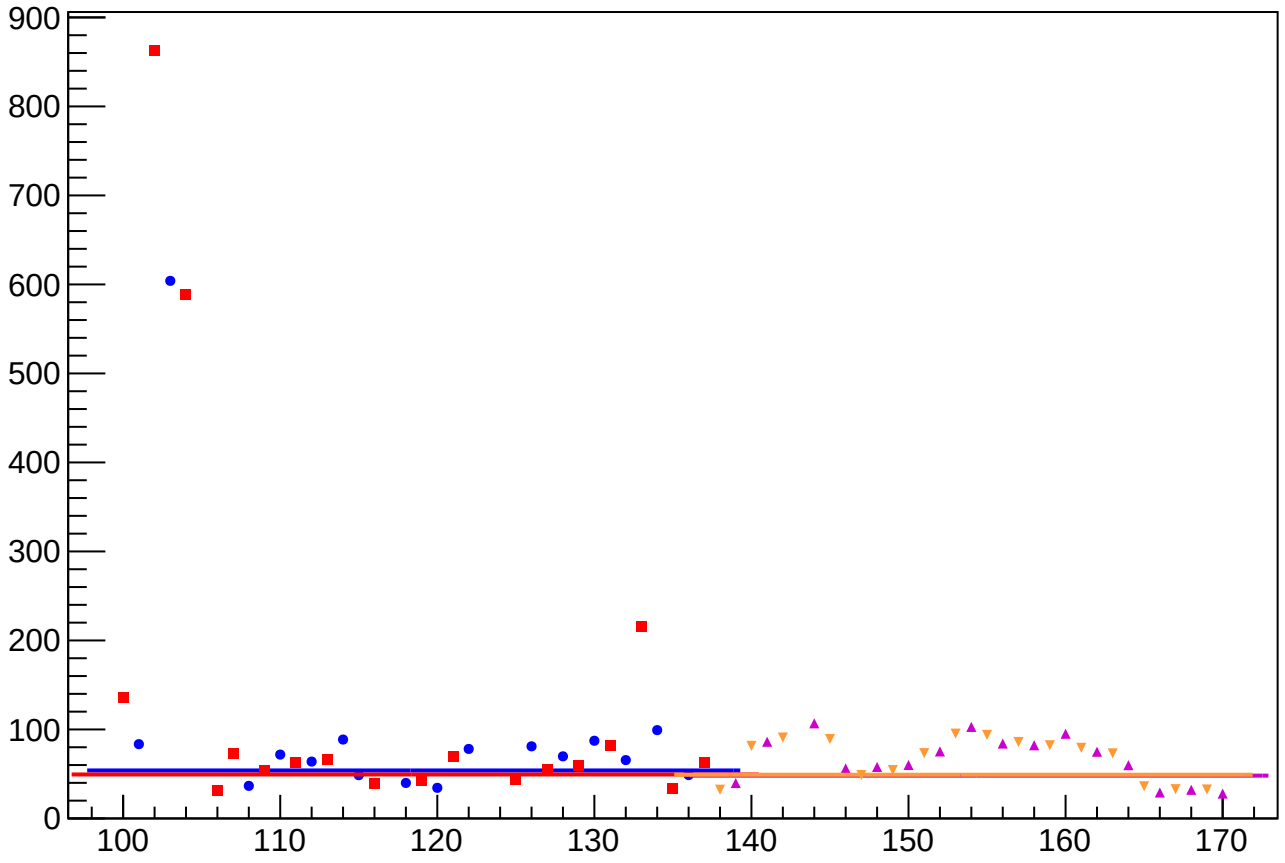
Right Out: -0.007+/-0.022 $\chi^2$/NDF: 13.7/17

Left In: -0.000+/-0.015 $\chi^2$/NDF:13.0/15

+ sign 0.017+/-0.013 $\chi^2$/NDF: 47.2/31

All: 0.007+/-0.009 $\chi^2$/NDF: 75.1/65

- sign -0.003+/-0.013 $\chi^2$/NDF: 26.7/33




Right In: 53.929+/-0.016 $\chi^2$/NDF: 2213950.2/15

Left Out: 49.111+/-0.011 $\chi^2$/NDF:3826884.7/15

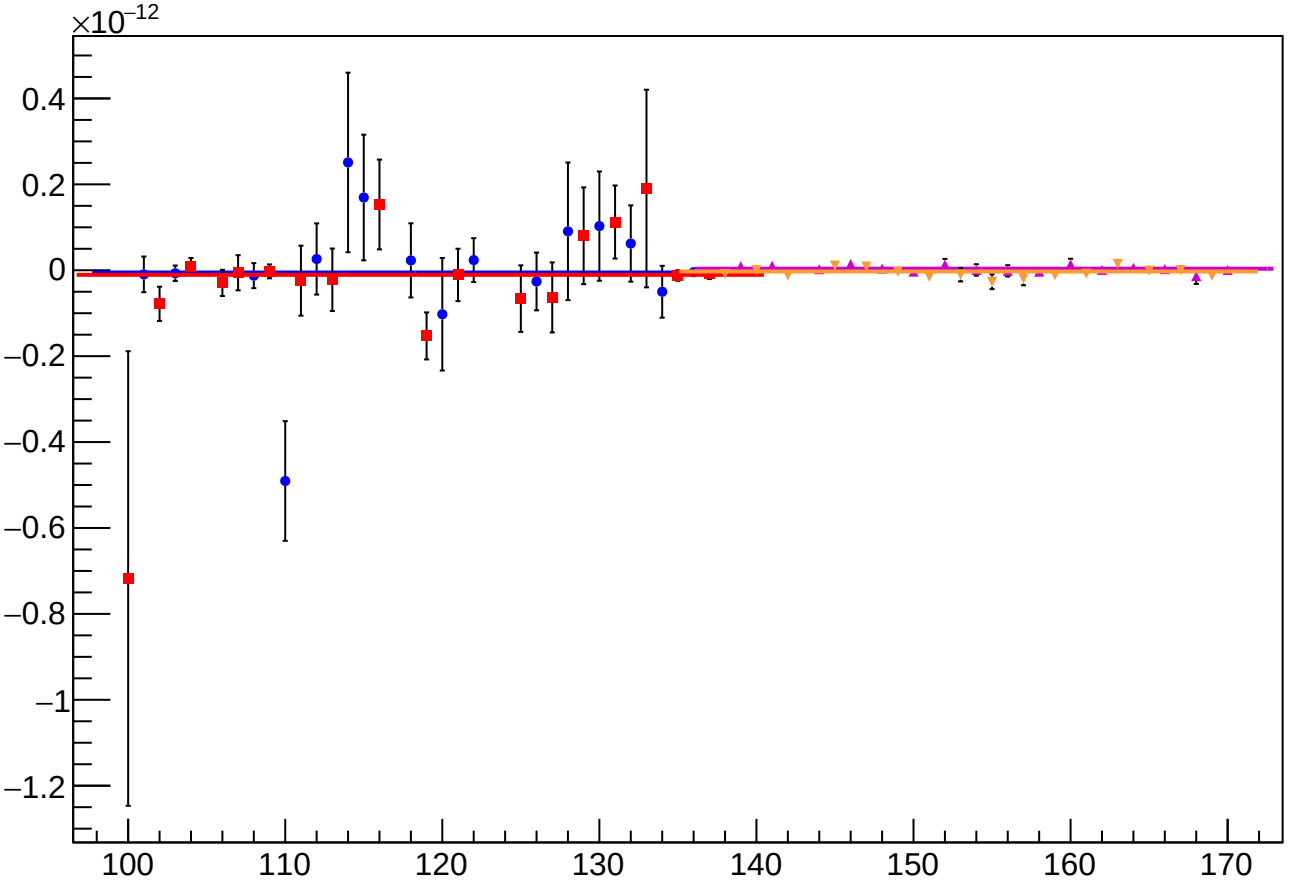
Right Out: 49.422+/-0.016 $\chi^2$/NDF: 3017440.2/17

Left In: 48.104+/-0.011 $\chi^2$/NDF:4386630.8/15

+ sign 50.634+/-0.009 $\chi^2$/NDF: 6100293.9/31

All: 49.549+/-0.006 $\chi^2$/NDF: 13536227.4/65

- sign 48.528+/-0.009 $\chi^2$/NDF: 7408843.7/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 18.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:15.3/15

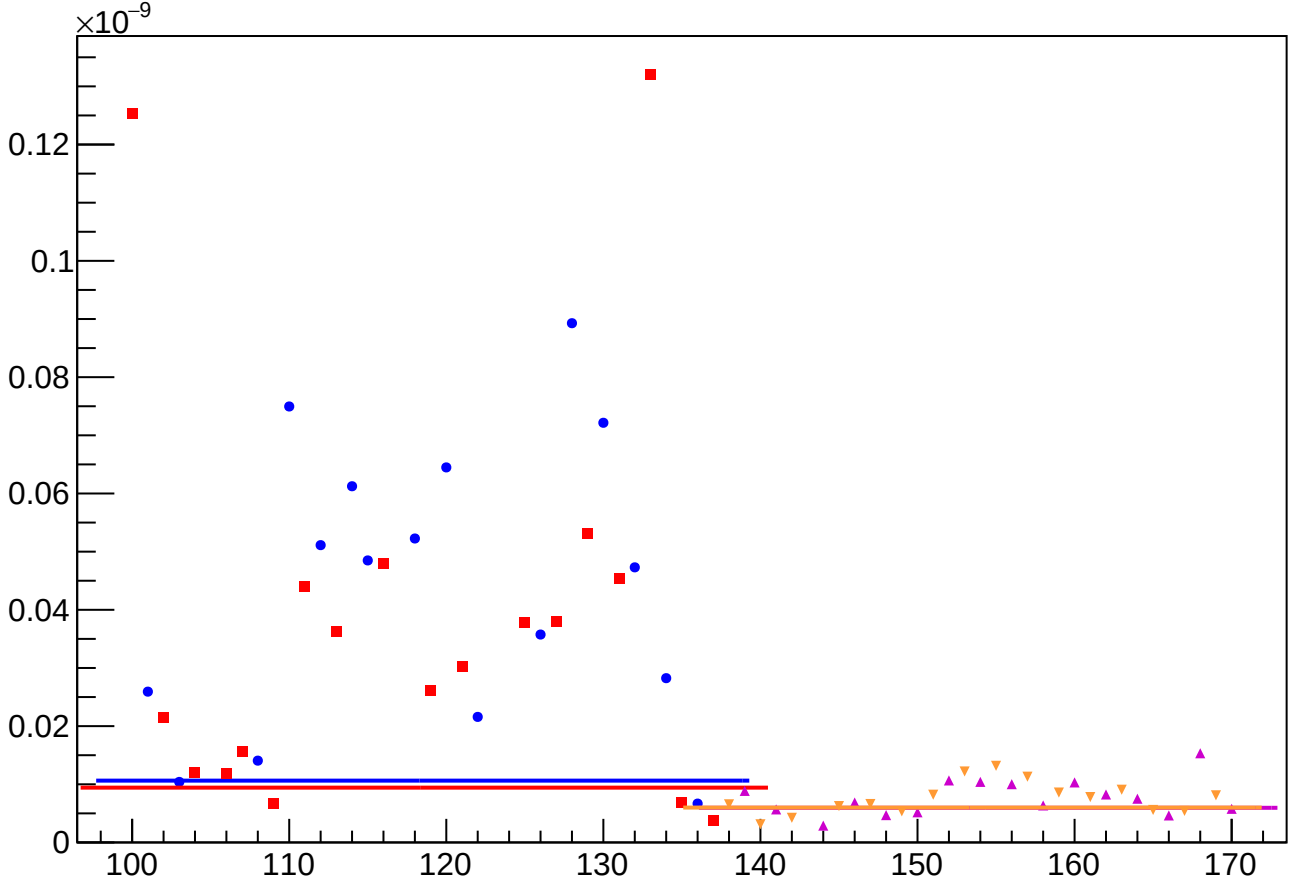
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 20.1/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:7.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 34.0/31

All: -0.000+/-0.000 $\chi^2$/NDF: 68.8/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 31.5/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 4557309.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2293642.8/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 4029424.5/17

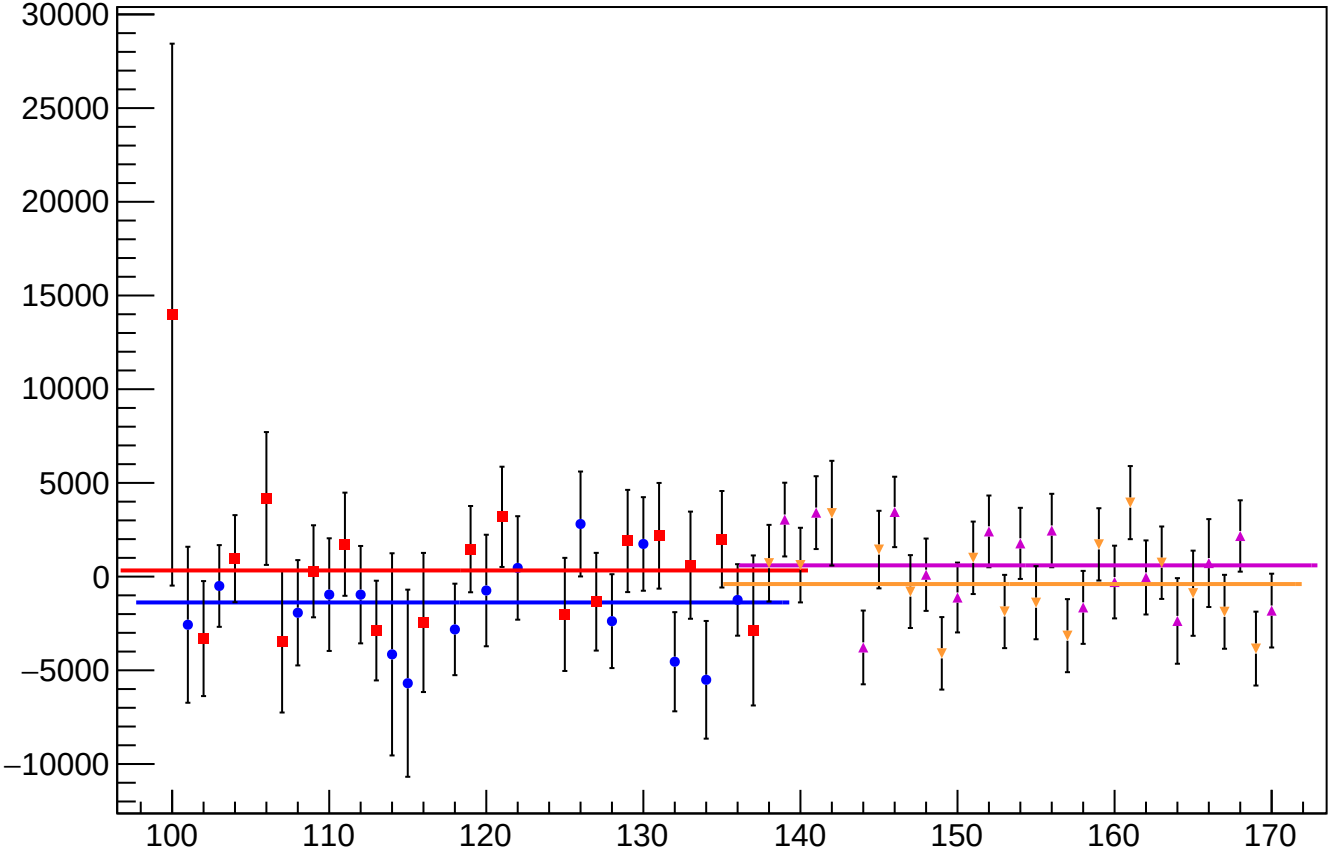
Left In: 0.000+/-0.000 $\chi^2$/NDF:2647178.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 7682270.5/31

All: 0.000+/-0.000 $\chi^2$/NDF: 14882210.6/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 7195812.7/33

# reg_asym_us_dd_atlr_dd_avg_mean vs Slug




Right In: -1378.758+/-689.030 $\chi^2$/NDF: 9.3/15

Left Out: -397.043+/-503.323 $\chi^2$/NDF:20.4/15

Right Out: 328.770+/-683.888 $\chi^2$/NDF: 11.0/17

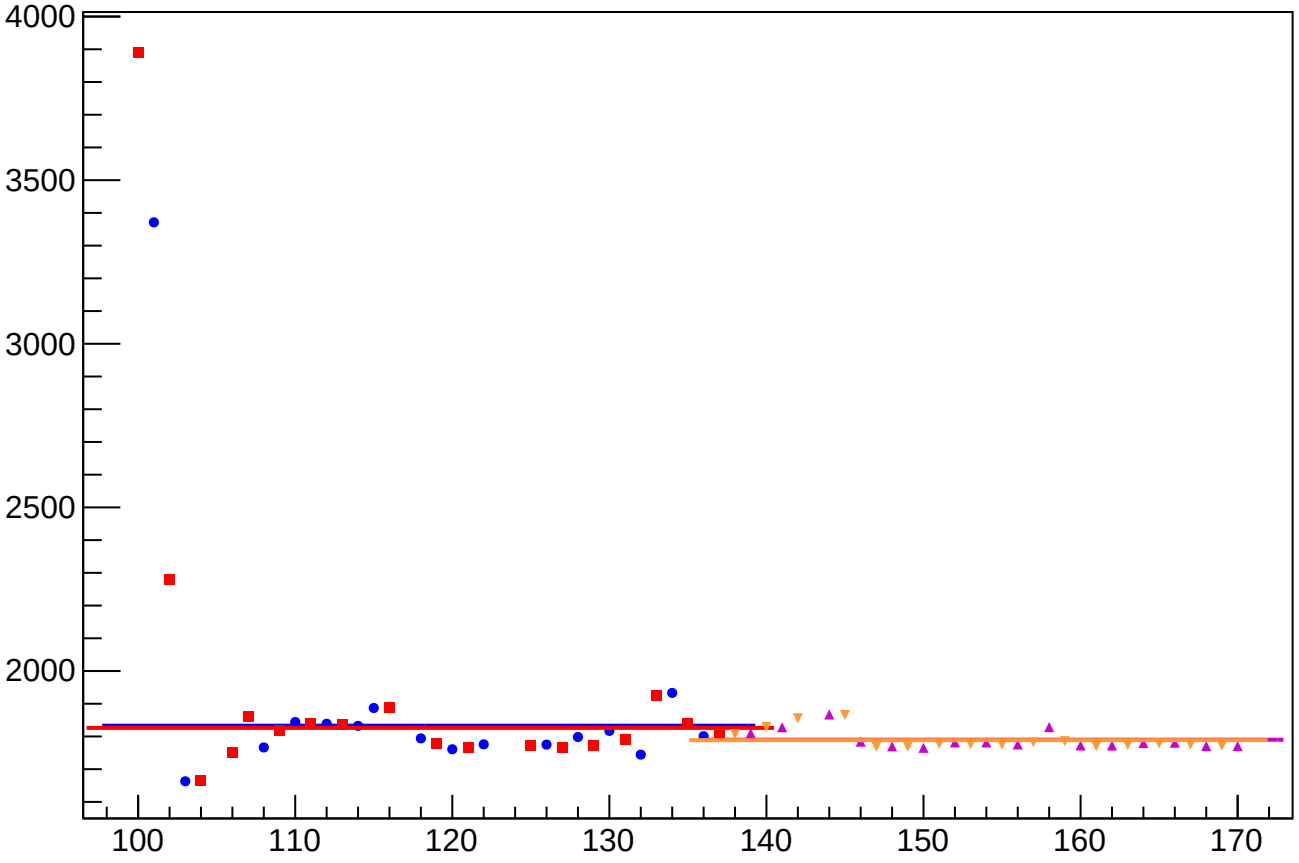
Left In: 600.119+/-492.348 $\chi^2$/NDF:19.5/15

+ sign -738.621+/-406.434 $\chi^2$/NDF: 31.0/31

All: -104.957+/-284.935 $\chi^2$/NDF: 66.4/65

- sign 507.490+/-399.572 $\chi^2$/NDF: 30.7/33

# reg_asym_us_dd_atlr_dd_avg_rms vs Slug




Right In: 1832.947+/-0.487 $\chi^2$/NDF: 295439.4/15

Left Out: 1788.644+/-0.356 $\chi^2$/NDF:6106.2/15

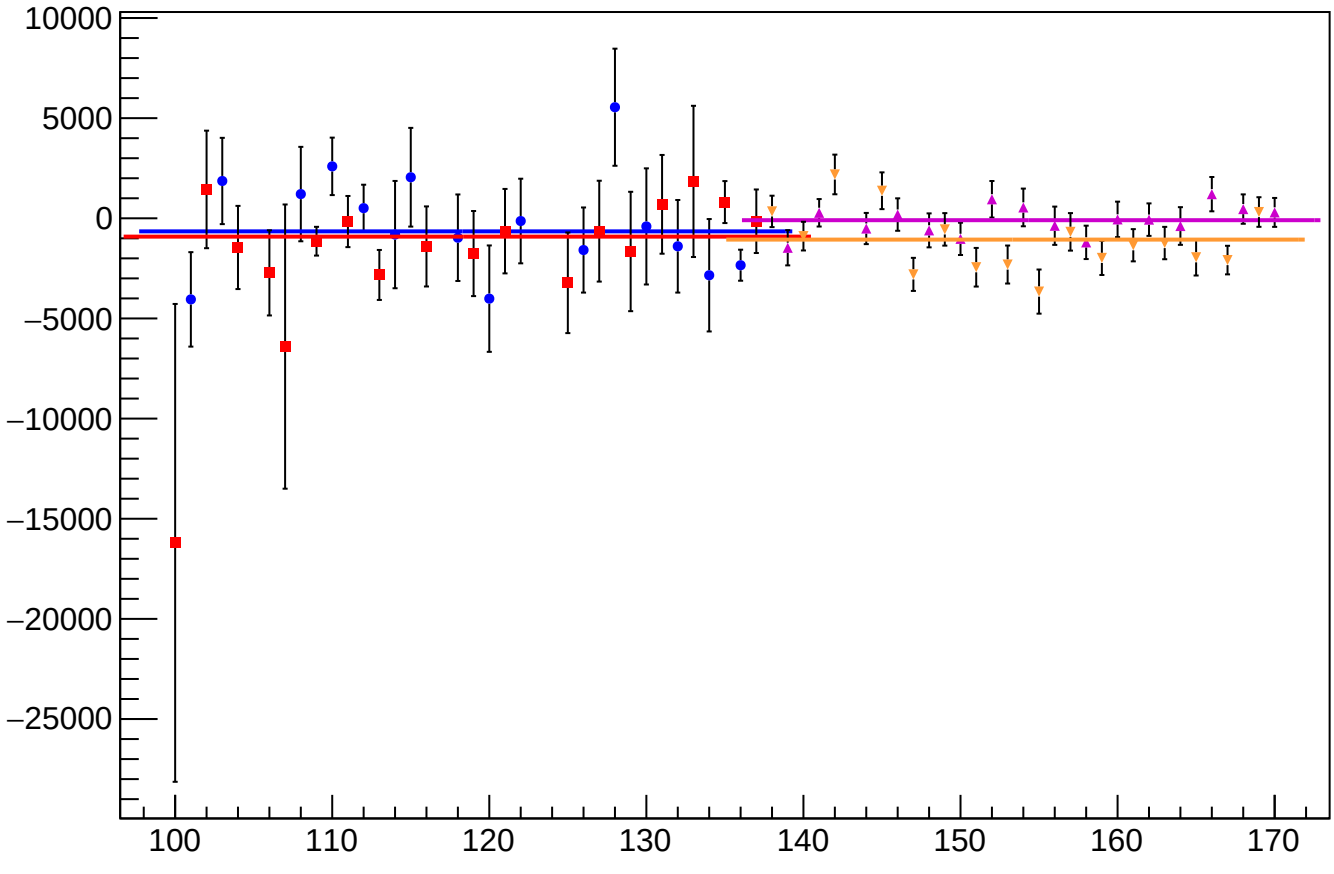
Right Out: 1826.208+/-0.484 $\chi^2$/NDF: 103006.6/17

Left In: 1790.067+/-0.348 $\chi^2$/NDF:6389.6/15

+ sign 1804.058+/-0.287 $\chi^2$/NDF: 306937.1/31

All: 1803.217+/-0.201 $\chi^2$/NDF: 420029.0/65

- sign 1802.404+/-0.283 $\chi^2$/NDF: 113075.0/33




Right In: -651.944+/-442.135 $\chi^2$/NDF: 23.2/15

Left Out: -1063.517+/-211.386 $\chi^2$/NDF:43.2/15

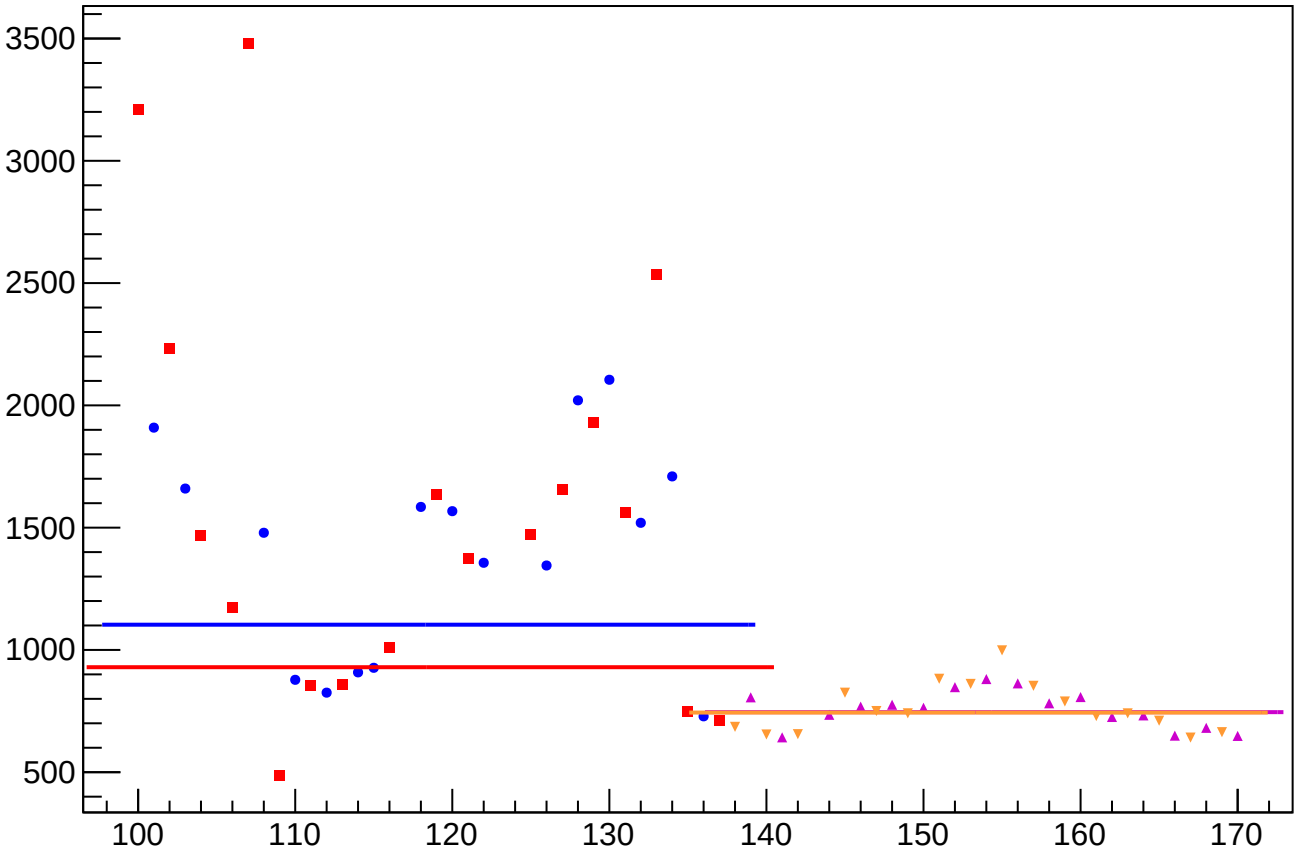
Right Out: -914.717+/-393.421 $\chi^2$/NDF: 11.5/17

Left In: -94.197+/-206.506 $\chi^2$/NDF:11.7/15

+ sign -986.943+/-190.710 $\chi^2$/NDF: 67.2/31

All: -614.135+/-131.985 $\chi^2$/NDF: 101.2/65

- sign -271.433+/-182.848 $\chi^2$/NDF: 26.7/33




Right In: 1103.183+/-0.313 $\chi^2$/NDF: 1878176.1/15

Left Out: 743.931+/-0.149 $\chi^2$/NDF:353311.5/15

Right Out: 929.356+/-0.278 $\chi^2$/NDF: 3054092.4/17

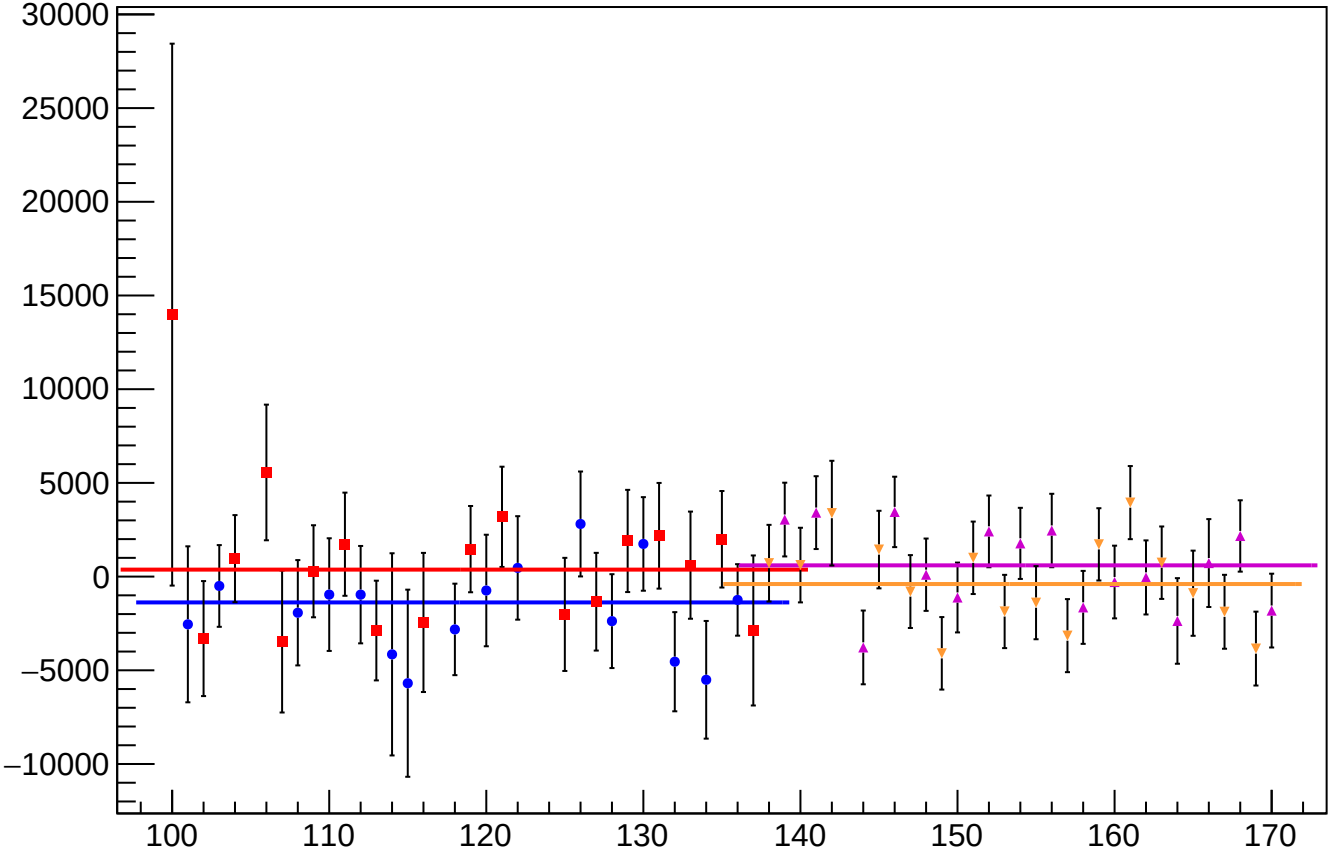
Left In: 745.610+/-0.146 $\chi^2$/NDF:248600.5/15

+ sign 810.771+/-0.135 $\chi^2$/NDF: 3306259.2/31

All: 797.500+/-0.093 $\chi^2$/NDF: 6969571.4/65

- sign 785.300+/-0.129 $\chi^2$/NDF: 3644724.1/33

# cor_asym_us_dd_atlr_dd_avg_mean vs Slug




Right In: -1378.133+/-689.030 $\chi^2$/NDF: 9.3/15

Left Out: -396.948+/-503.323 $\chi^2$/NDF:20.4/15

Right Out: 372.534+/-684.408 $\chi^2$/NDF: 12.0/17

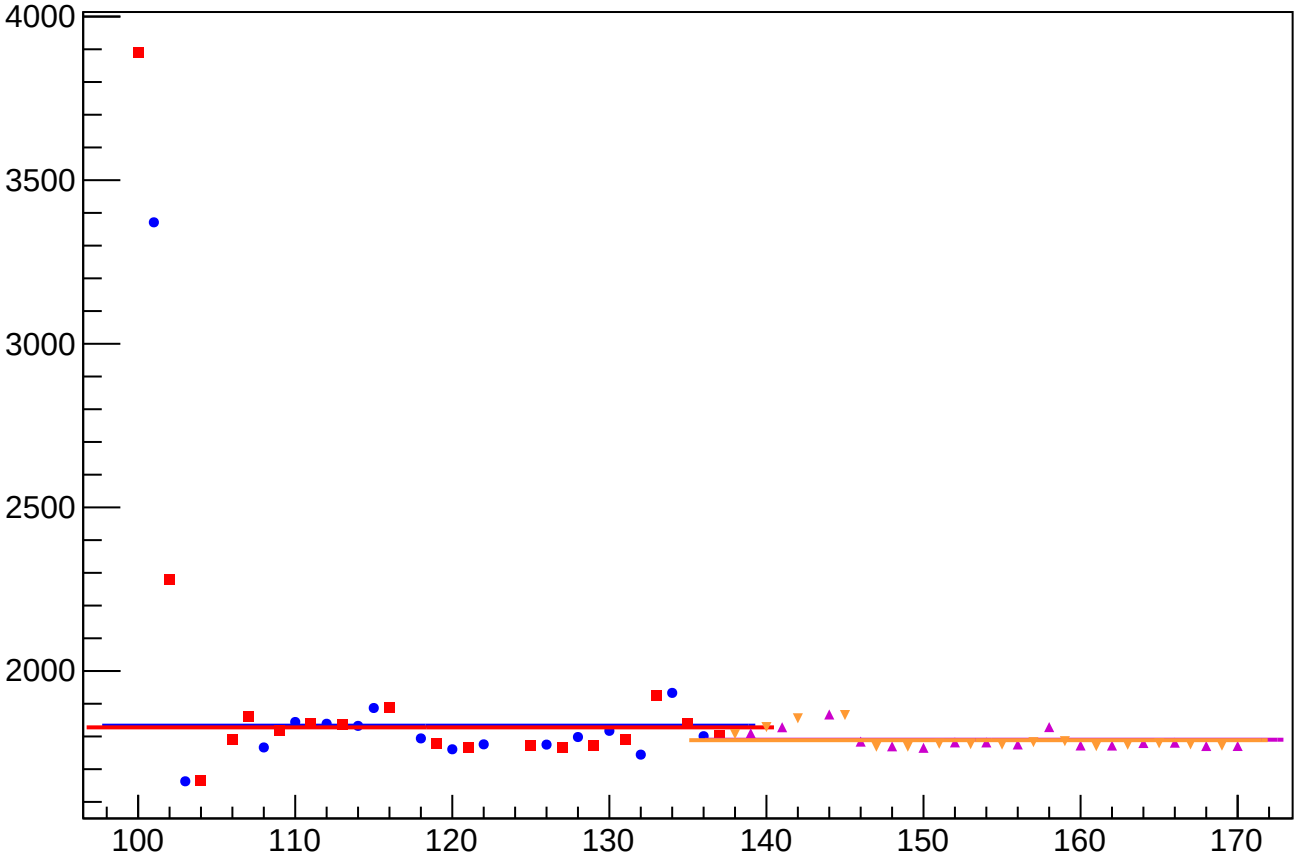
Left In: 600.006+/-492.348 $\chi^2$/NDF:19.5/15

+ sign -738.341+/-406.434 $\chi^2$/NDF: 31.0/31

All: -97.384+/-284.973 $\chi^2$/NDF: 67.4/65

- sign 522.433+/-399.676 $\chi^2$/NDF: 31.5/33

# cor_asym_us_dd_atlr_dd_avg_rms vs Slug




Right In: 1832.947+/-0.487 $\chi^2$/NDF: 295441.2/15

Left Out: 1788.644+/-0.356 $\chi^2$/NDF:6106.2/15

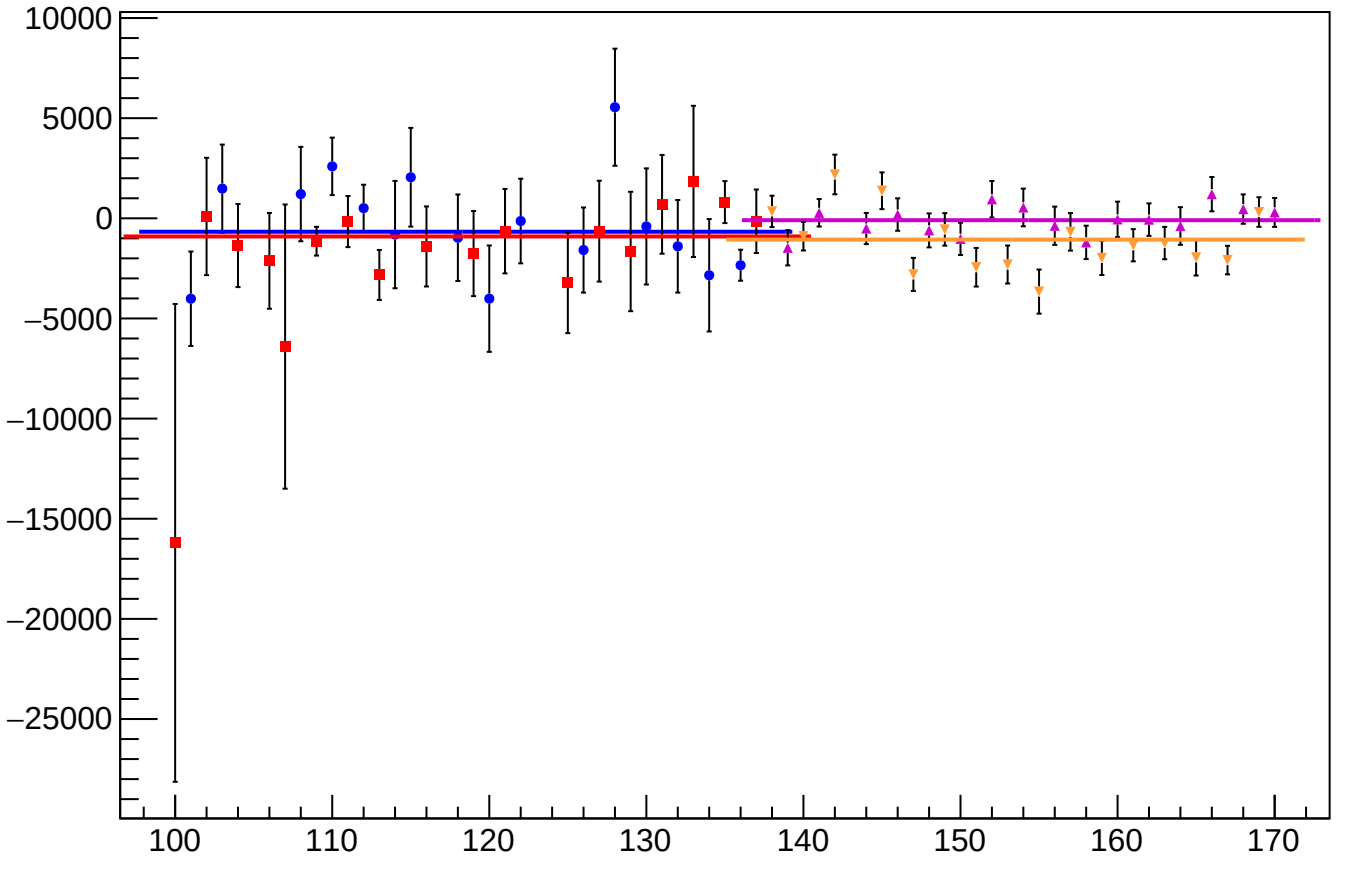
Right Out: 1827.785+/-0.484 $\chi^2$/NDF: 102270.3/17

Left In: 1790.067+/-0.348 $\chi^2$/NDF:6389.6/15

+ sign 1804.058+/-0.287 $\chi^2$/NDF: 306939.0/31

All: 1803.485+/-0.202 $\chi^2$/NDF: 419609.6/65

- sign 1802.930+/-0.283 $\chi^2$/NDF: 112662.7/33




Right In: -670.539+/-442.505 $\chi^2$/NDF: 22.8/15

Left Out: -1063.562+/-211.387 $\chi^2$/NDF:43.2/15

Right Out: -905.874+/-394.814 $\chi^2$/NDF: 10.5/17

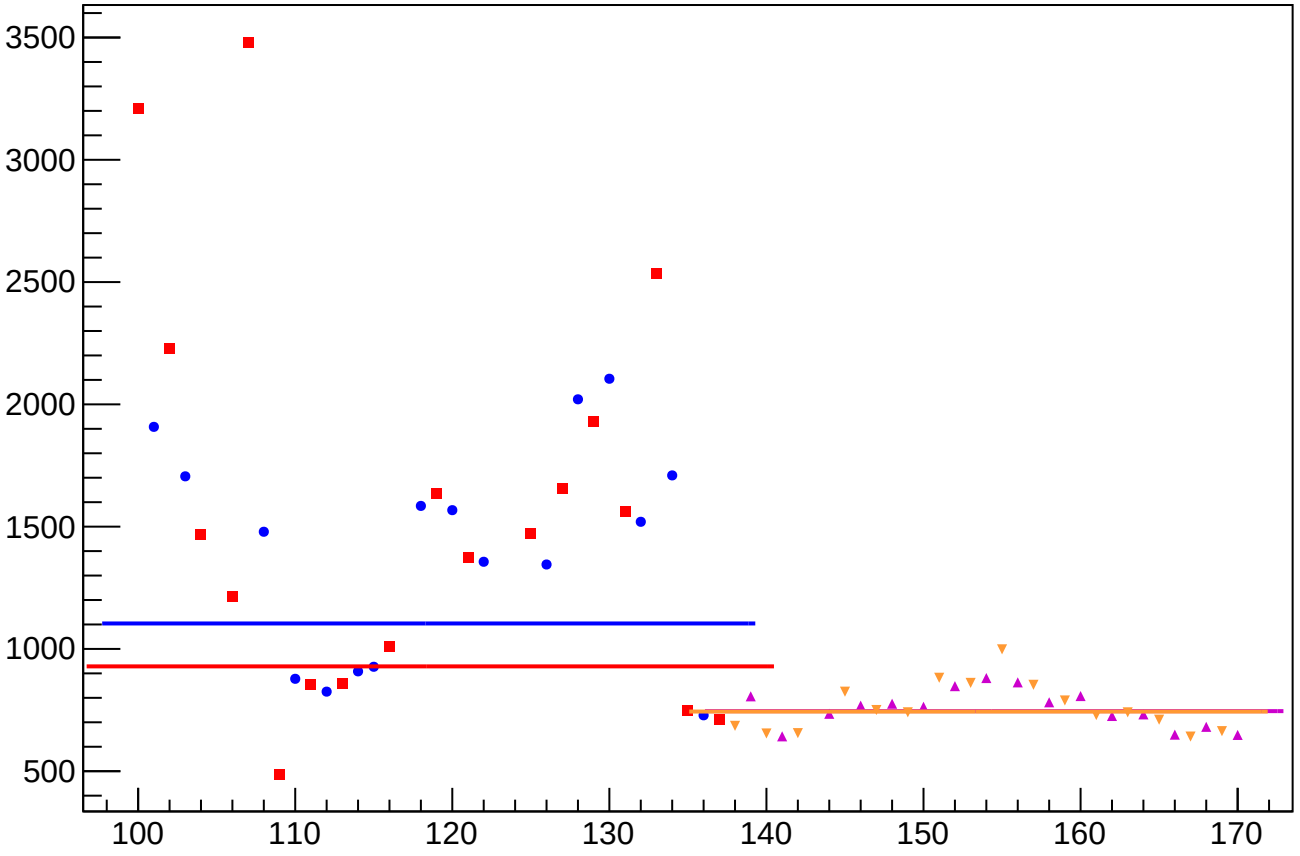
Left In: -94.128+/-206.506 $\chi^2$/NDF:11.7/15

+ sign -990.538+/-190.741 $\chi^2$/NDF: 66.6/31

All: -614.546+/-132.047 $\chi^2$/NDF: 99.6/65

- sign -268.500+/-182.987 $\chi^2$/NDF: 25.6/33

# asym_us_dd_atlr_dd_avg_cor_correction_rms vs Slug




Right In: 1104.103+/-0.313 $\chi^2$/NDF: 1894482.2/15

Left Out: 743.935+/-0.149 $\chi^2$/NDF:353284.9/15

Right Out: 928.629+/-0.279 $\chi^2$/NDF: 3054381.5/17

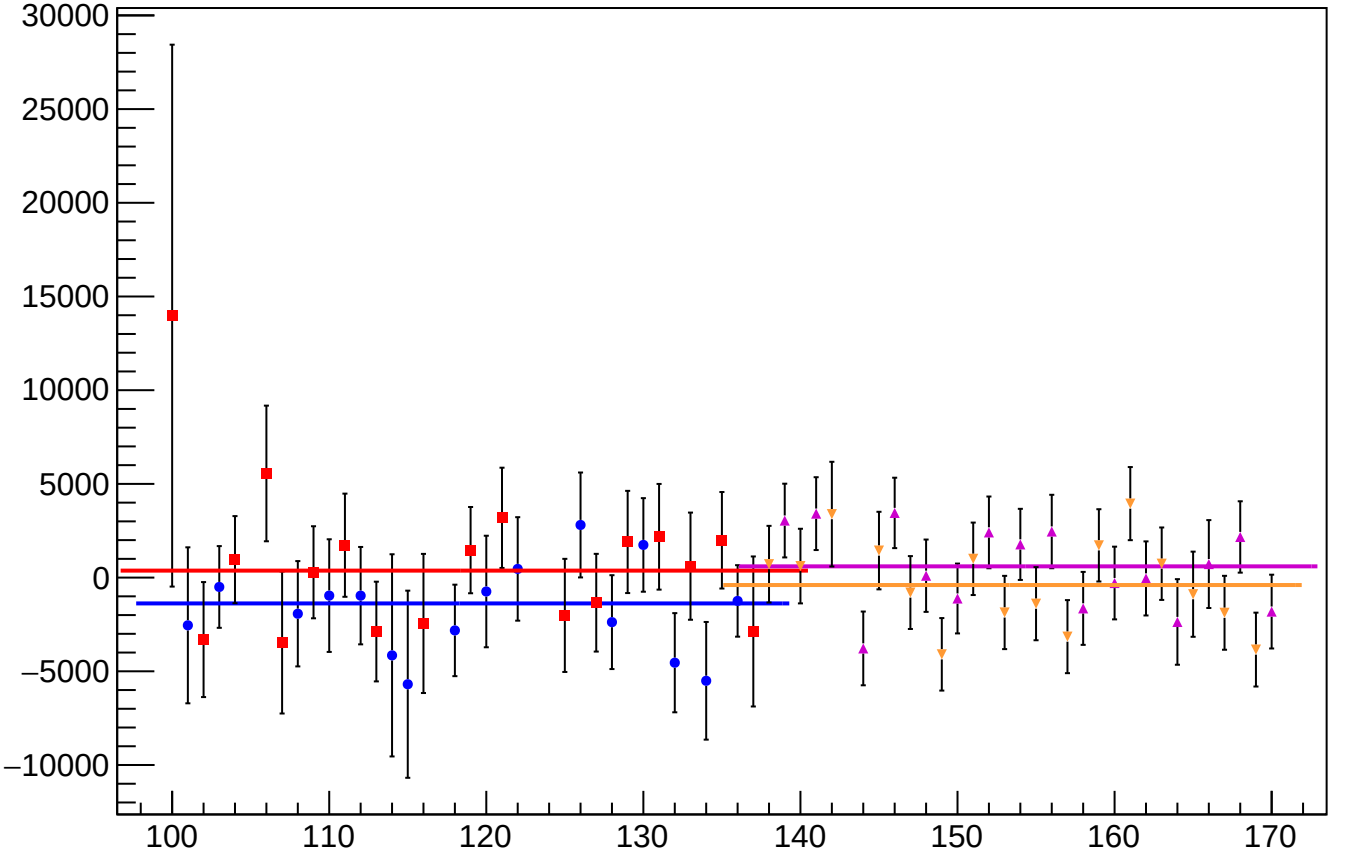
Left In: 745.609+/-0.146 $\chi^2$/NDF:248682.7/15

+ sign 810.855+/-0.135 $\chi^2$/NDF: 3326544.1/31

All: 797.352+/-0.093 $\chi^2$/NDF: 6986310.1/65

- sign 784.924+/-0.129 $\chi^2$/NDF: 3640517.1/33

# eigen_cor_asym_us_dd_atlr_dd_avg_mean vs Slug




Right In: -1378.133+/-689.030 $\chi^2$/NDF: 9.3/15

Left Out: -396.948+/-503.323 $\chi^2$/NDF:20.4/15

Right Out: 372.534+/-684.408 $\chi^2$/NDF: 12.0/17

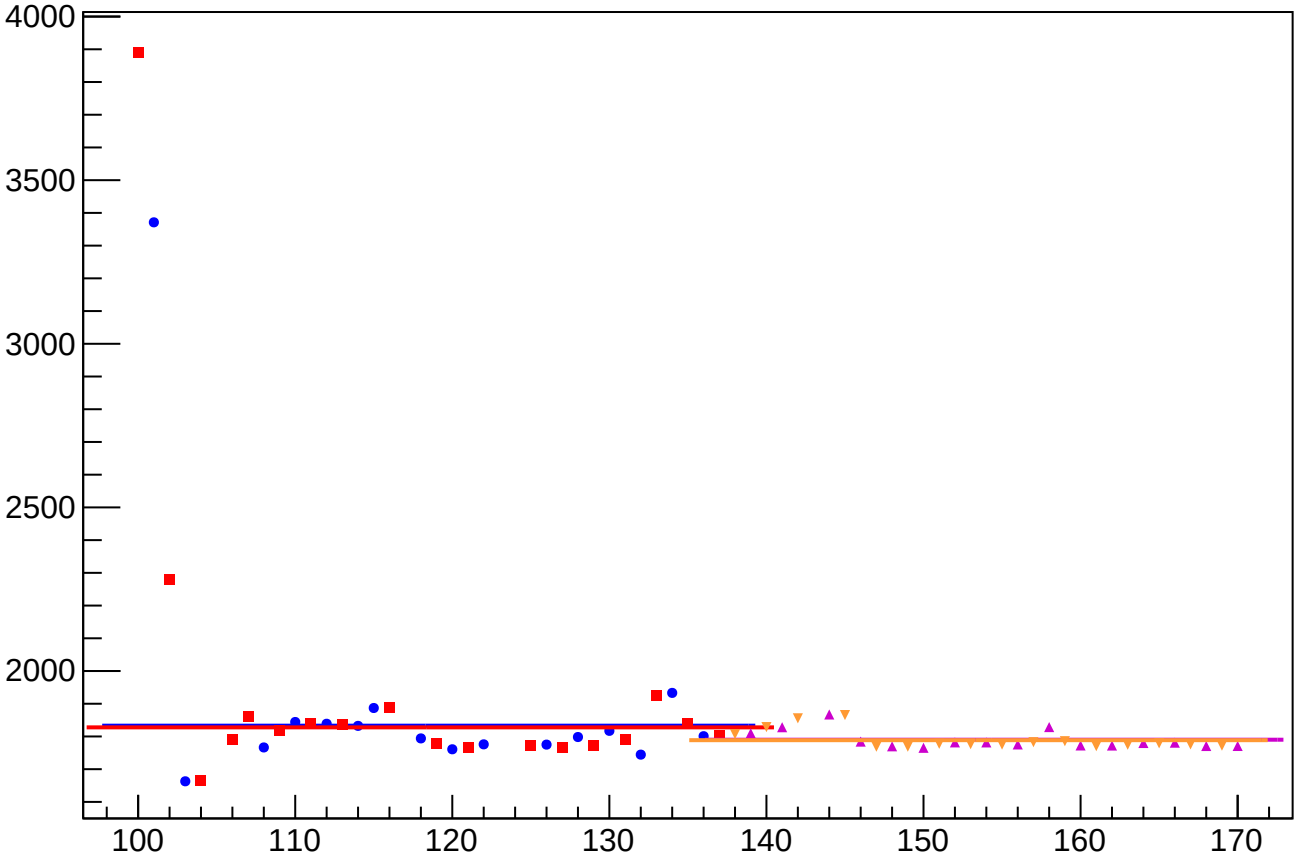
Left In: 600.006+/-492.348 $\chi^2$/NDF:19.5/15

+ sign -738.341+/-406.434 $\chi^2$/NDF: 31.0/31

All: -97.384+/-284.973 $\chi^2$/NDF: 67.4/65

- sign 522.433+/-399.676 $\chi^2$/NDF: 31.5/33

# eigen_cor_asym_us_dd_atlr_dd_avg_rms vs Slug




Right In: 1832.947+/-0.487 $\chi^2$/NDF: 295441.2/15

Left Out: 1788.644+/-0.356 $\chi^2$/NDF:6106.2/15

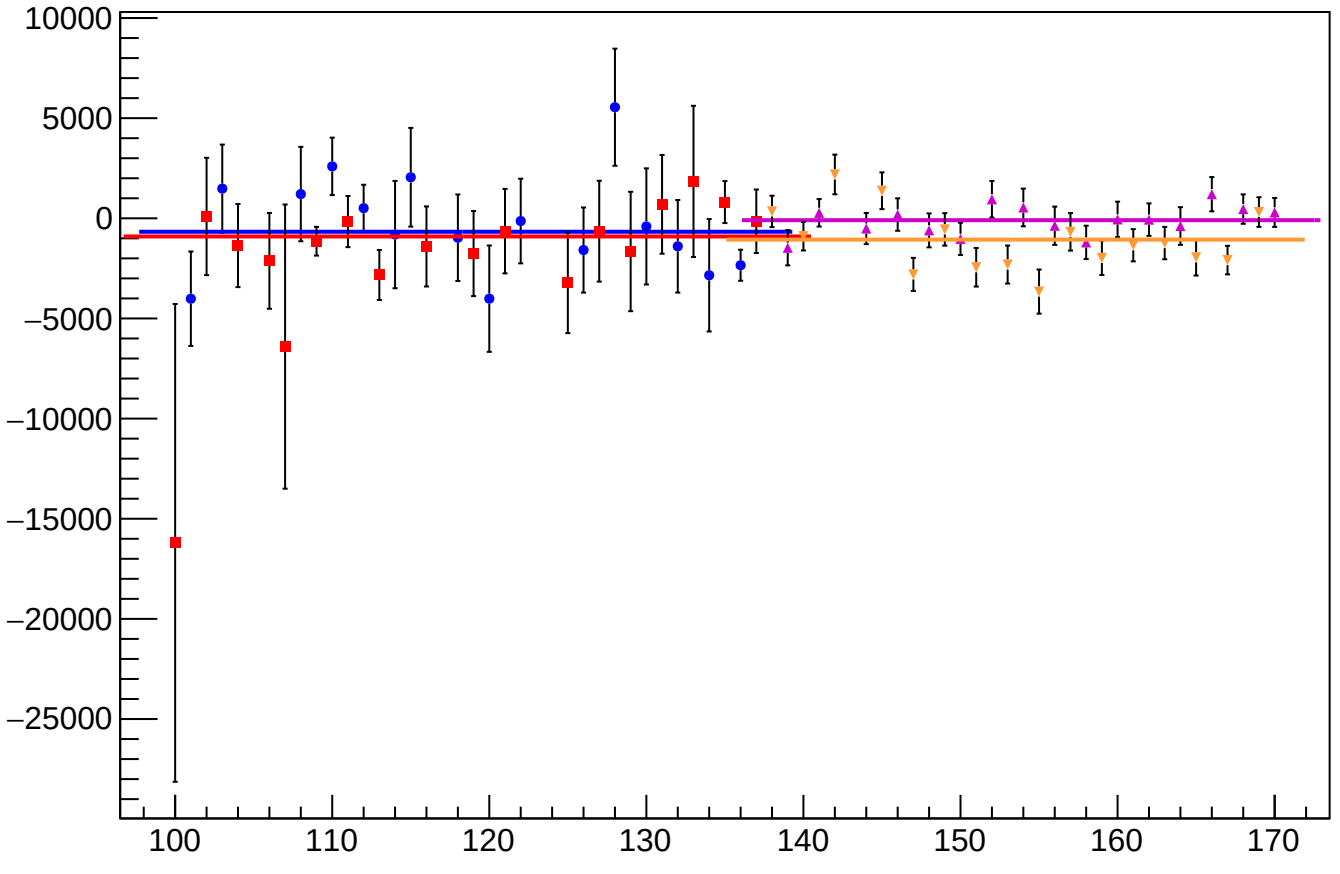
Right Out: 1827.785+/-0.484 $\chi^2$/NDF: 102270.3/17

Left In: 1790.067+/-0.348 $\chi^2$/NDF:6389.6/15

+ sign 1804.058+/-0.287 $\chi^2$/NDF: 306939.0/31

All: 1803.485+/-0.202 $\chi^2$/NDF: 419609.6/65

- sign 1802.930+/-0.283 $\chi^2$/NDF: 112662.7/33




Right In: -670.539+/-442.505 $\chi^2$/NDF: 22.8/15

Left Out: -1063.562+/-211.387 $\chi^2$/NDF:43.2/15

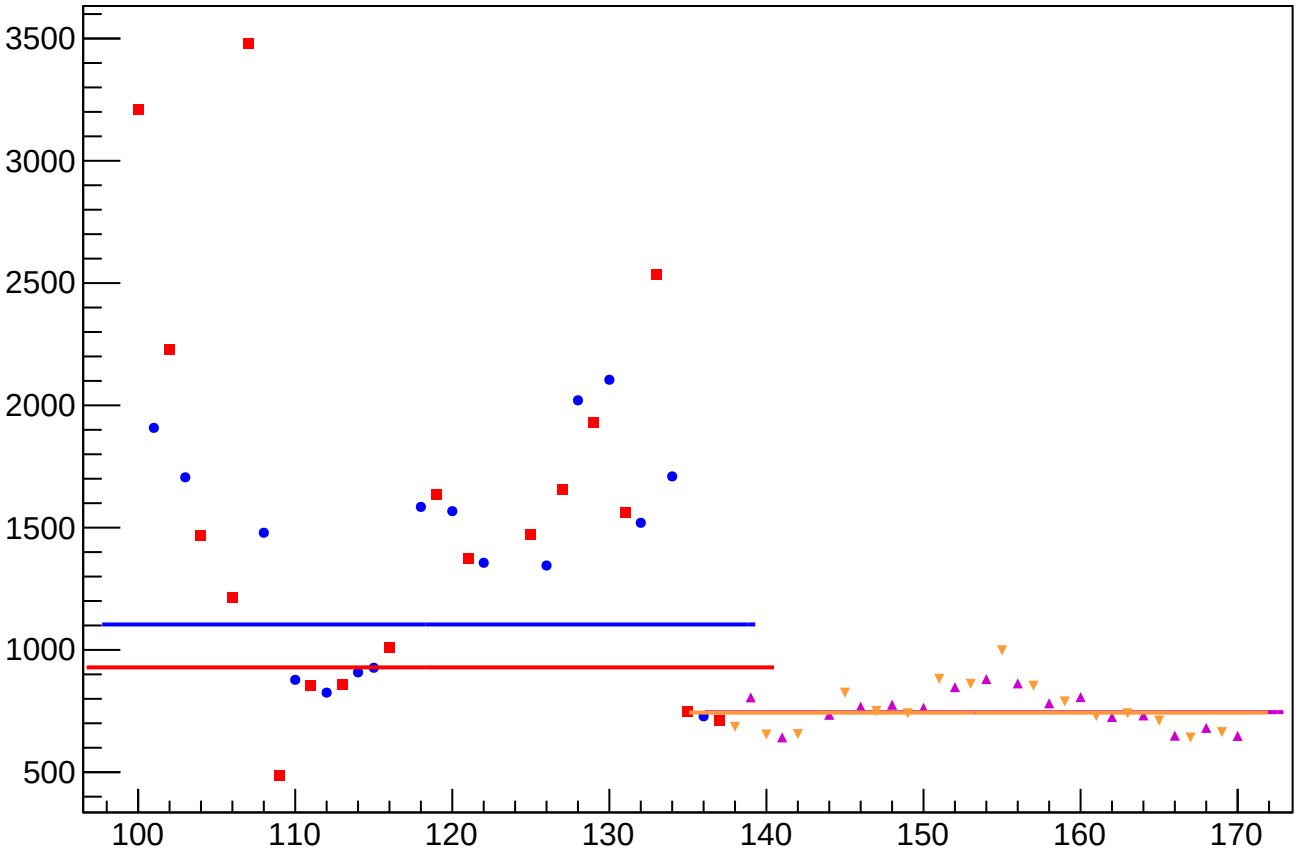
Right Out: -905.874+/-394.814 $\chi^2$/NDF: 10.5/17

Left In: -94.128+/-206.506 $\chi^2$/NDF:11.7/15

+ sign -990.538+/-190.741 $\chi^2$/NDF: 66.6/31

All: -614.546+/-132.047 $\chi^2$/NDF: 99.6/65

- sign -268.500+/-182.987 $\chi^2$/NDF: 25.6/33




Right In: 1104.103+/-0.313 $\chi^2$/NDF: 1894482.2/15

Left Out: 743.935+/-0.149 $\chi^2$/NDF:353284.9/15

Right Out: 928.629+/-0.279 $\chi^2$/NDF: 3054381.5/17

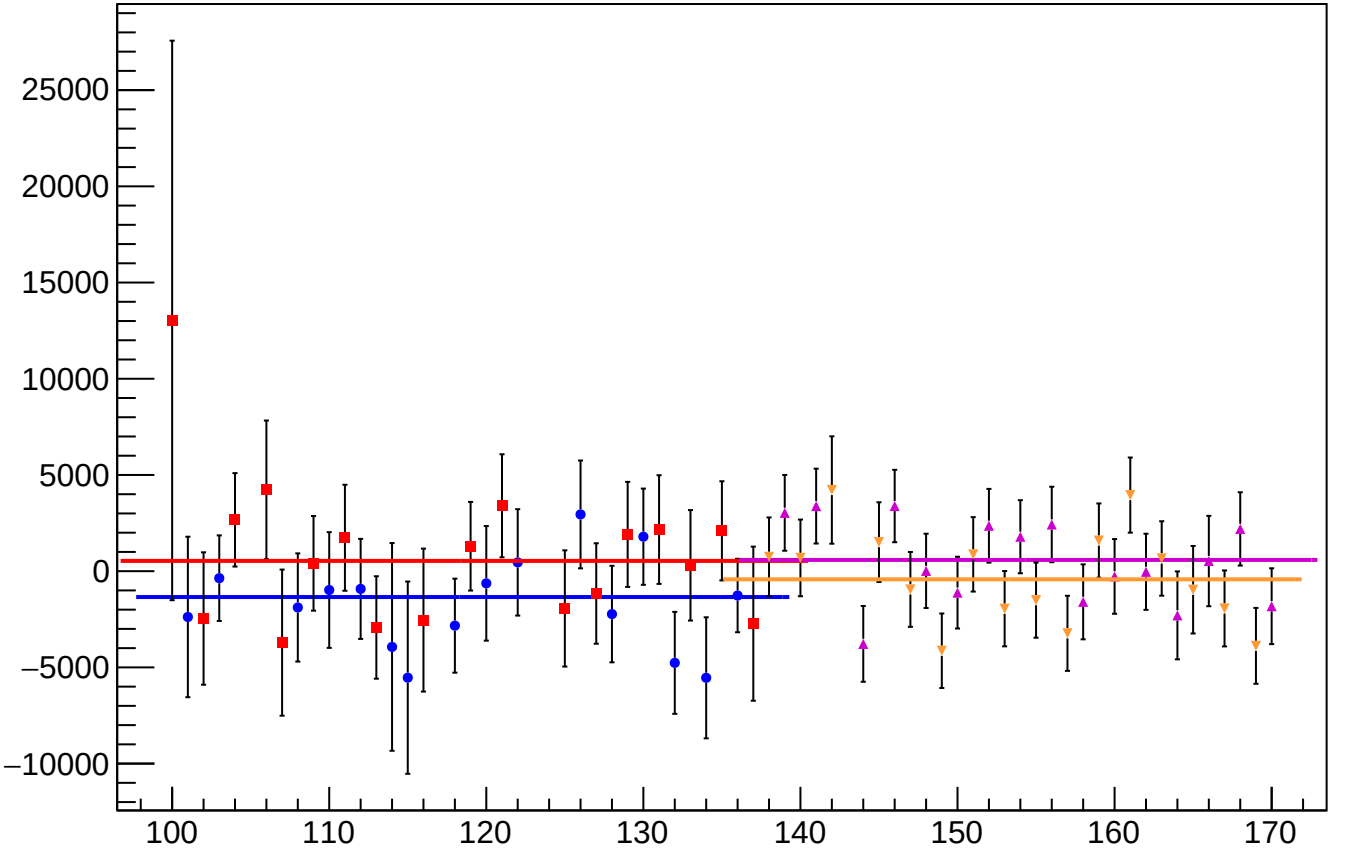
Left In: 745.609+/-0.146 $\chi^2$/NDF:248682.7/15

+ sign 810.855+/-0.135 $\chi^2$/NDF: 3326544.1/31

All: 797.352+/-0.093 $\chi^2$/NDF: 6986310.1/65

- sign 784.924+/-0.129 $\chi^2$/NDF: 3640517.1/33

# dit_asym_us_dd_atlr_dd_avg_mean vs Slug




Right In: -1343.952+/-690.940 $\chi^2$/NDF: 9.6/15

Left Out: -423.219+/-503.643 $\chi^2$/NDF:21.6/15

Right Out: 534.194+/-690.970 $\chi^2$/NDF: 11.1/17

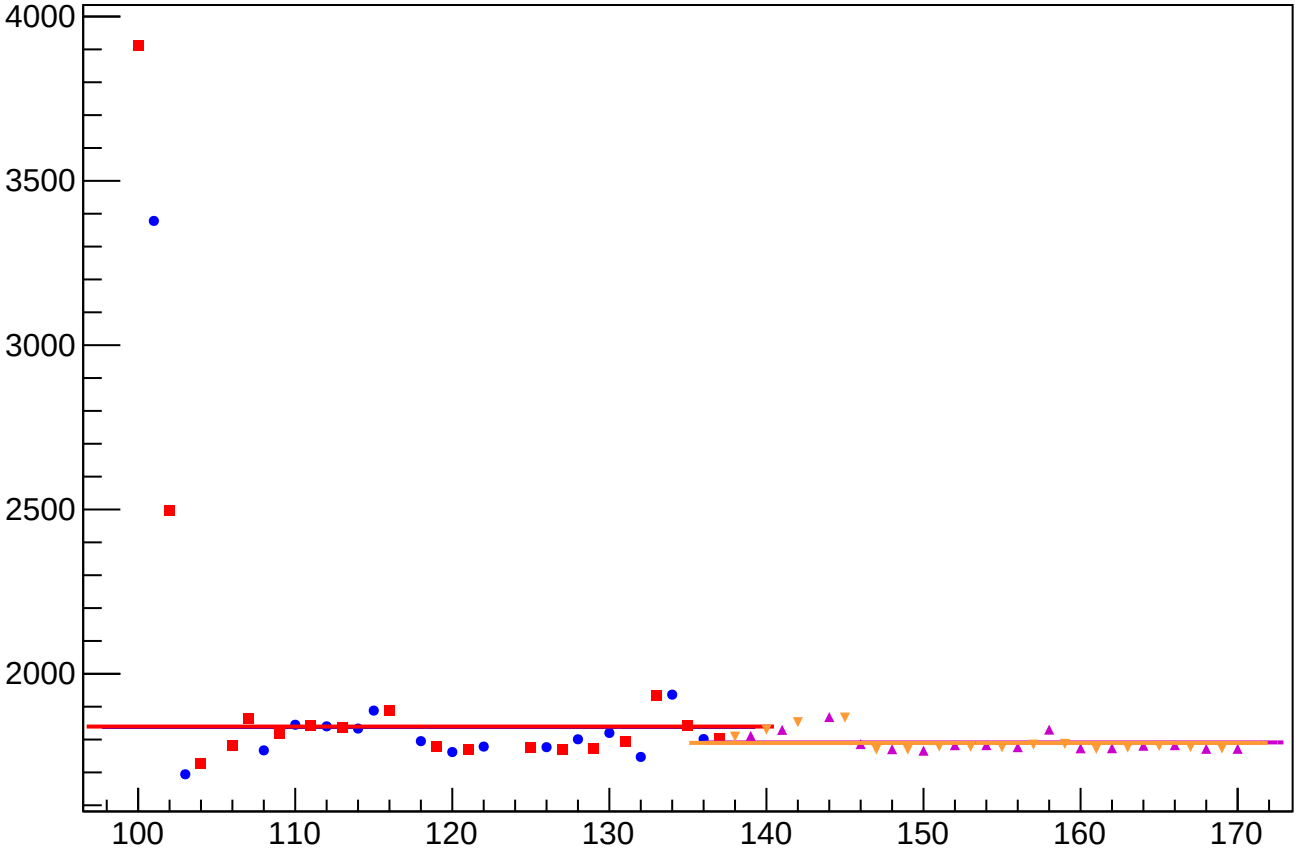
Left In: 584.009+/-492.684 $\chi^2$/NDF:19.1/15

+ sign -742.688+/-406.994 $\chi^2$/NDF: 32.4/31

All: -78.264+/-285.700 $\chi^2$/NDF: 67.9/65

- sign 567.219+/-401.151 $\chi^2$/NDF: 30.3/33

# dit_asym_us_dd_atlr_dd_avg_rms vs Slug




Right In: 1838.159+/-0.489 $\chi^2$/NDF: 291984.0/15

Left Out: 1789.775+/-0.356 $\chi^2$/NDF:6013.3/15

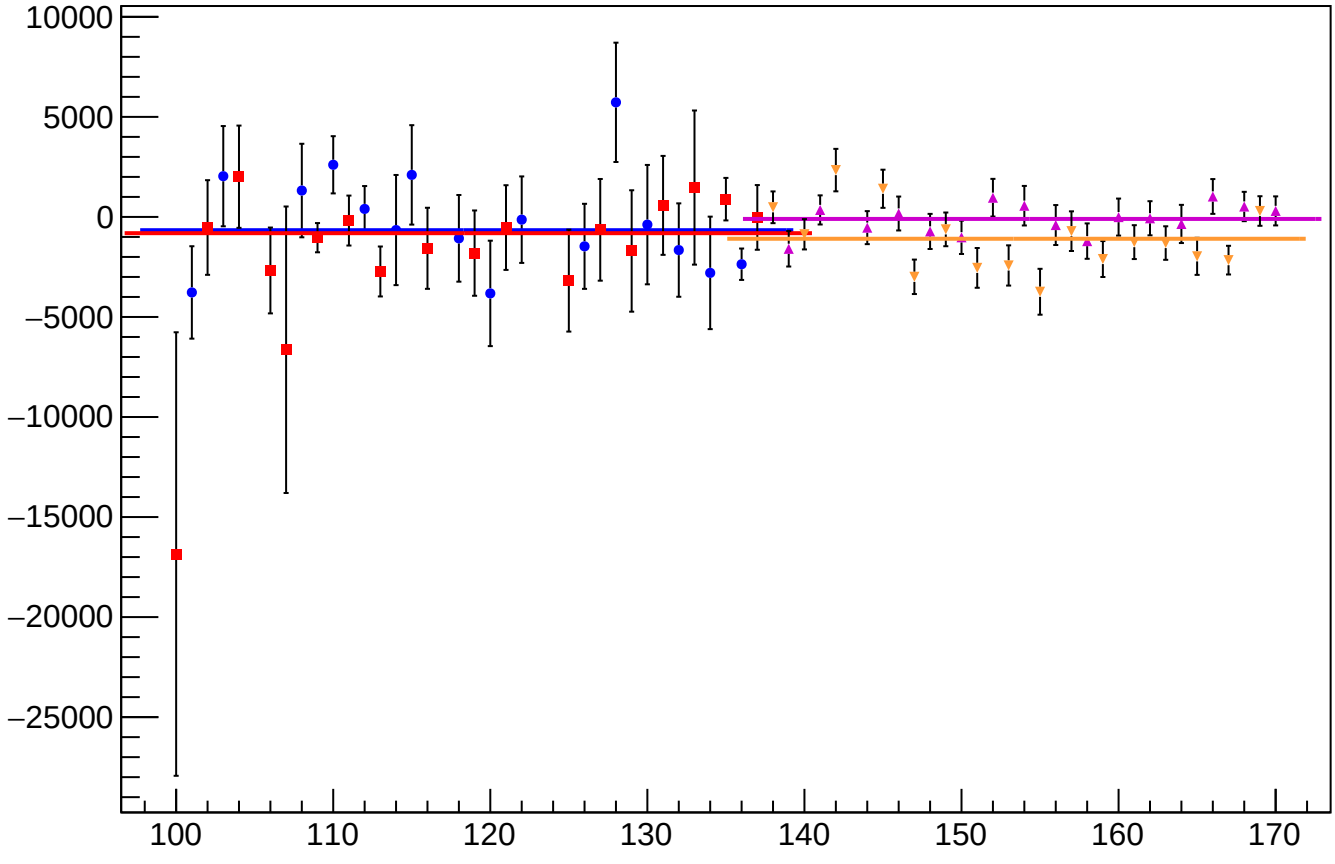
Right Out: 1839.517+/-0.489 $\chi^2$/NDF: 128253.5/17

Left In: 1791.282+/-0.348 $\chi^2$/NDF:6429.7/15

+ sign 1806.563+/-0.288 $\chi^2$/NDF: 304401.8/31

All: 1807.059+/-0.202 $\chi^2$/NDF: 445552.1/65

- sign 1807.540+/-0.284 $\chi^2$/NDF: 141144.5/33




Right In: -663.489+/-445.903 $\chi^2$/NDF: 22.8/15

Left Out: -1091.190+/-218.953 $\chi^2$/NDF:43.9/15

Right Out: -812.187+/-397.187 $\chi^2$/NDF: 12.2/17

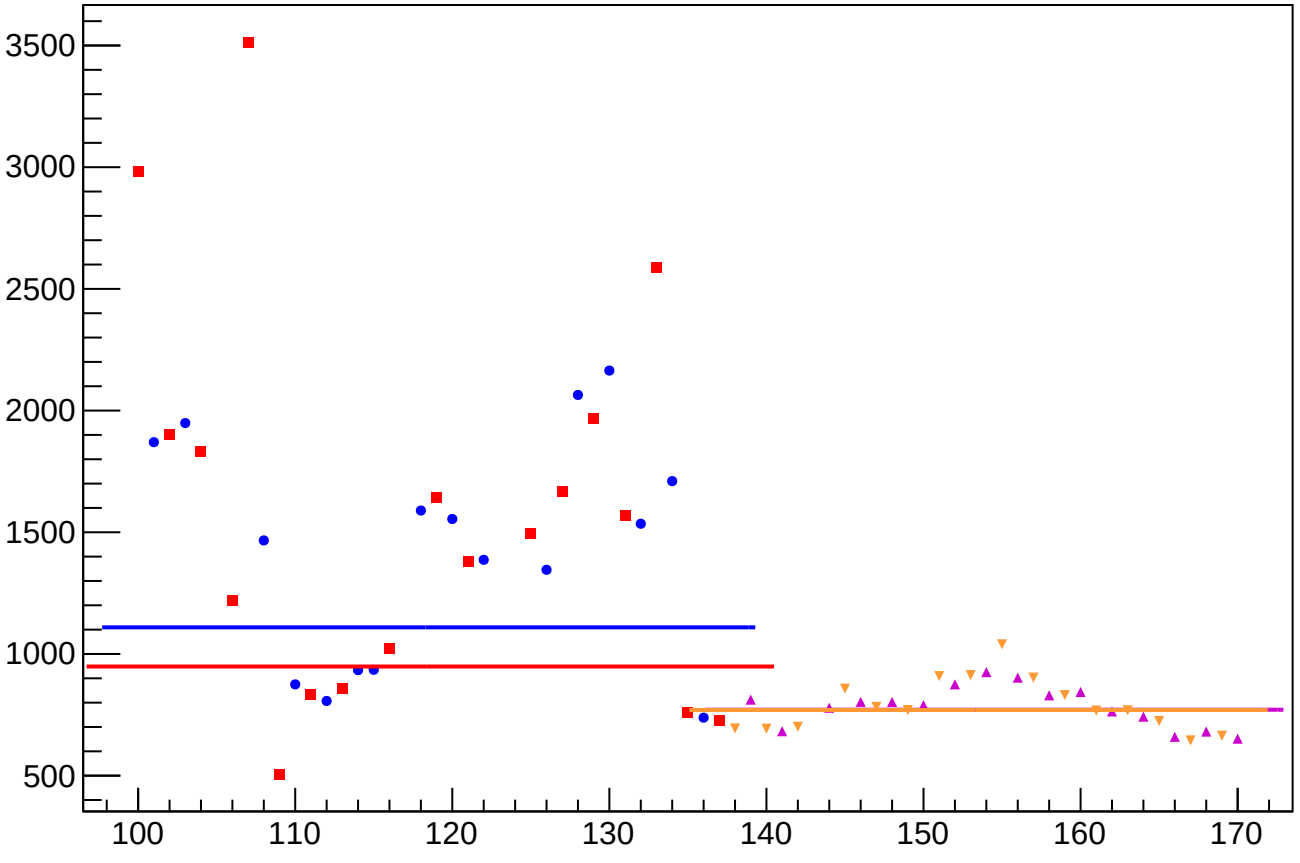
Left In: -100.293+/-213.628 $\chi^2$/NDF:11.5/15

+ sign -1008.101+/-196.537 $\chi^2$/NDF: 67.4/31

All: -617.743+/-135.907 $\chi^2$/NDF: 101.2/65

- sign -260.026+/-188.141 $\chi^2$/NDF: 26.2/33

# asym_us_dd_atlr_dd_avg_dit_correction_rms vs Slug




Right In: 1109.362+/-0.315 $\chi^2$/NDF: 1973363.9/15

Left Out: 769.893+/-0.155 $\chi^2$/NDF:407009.2/15

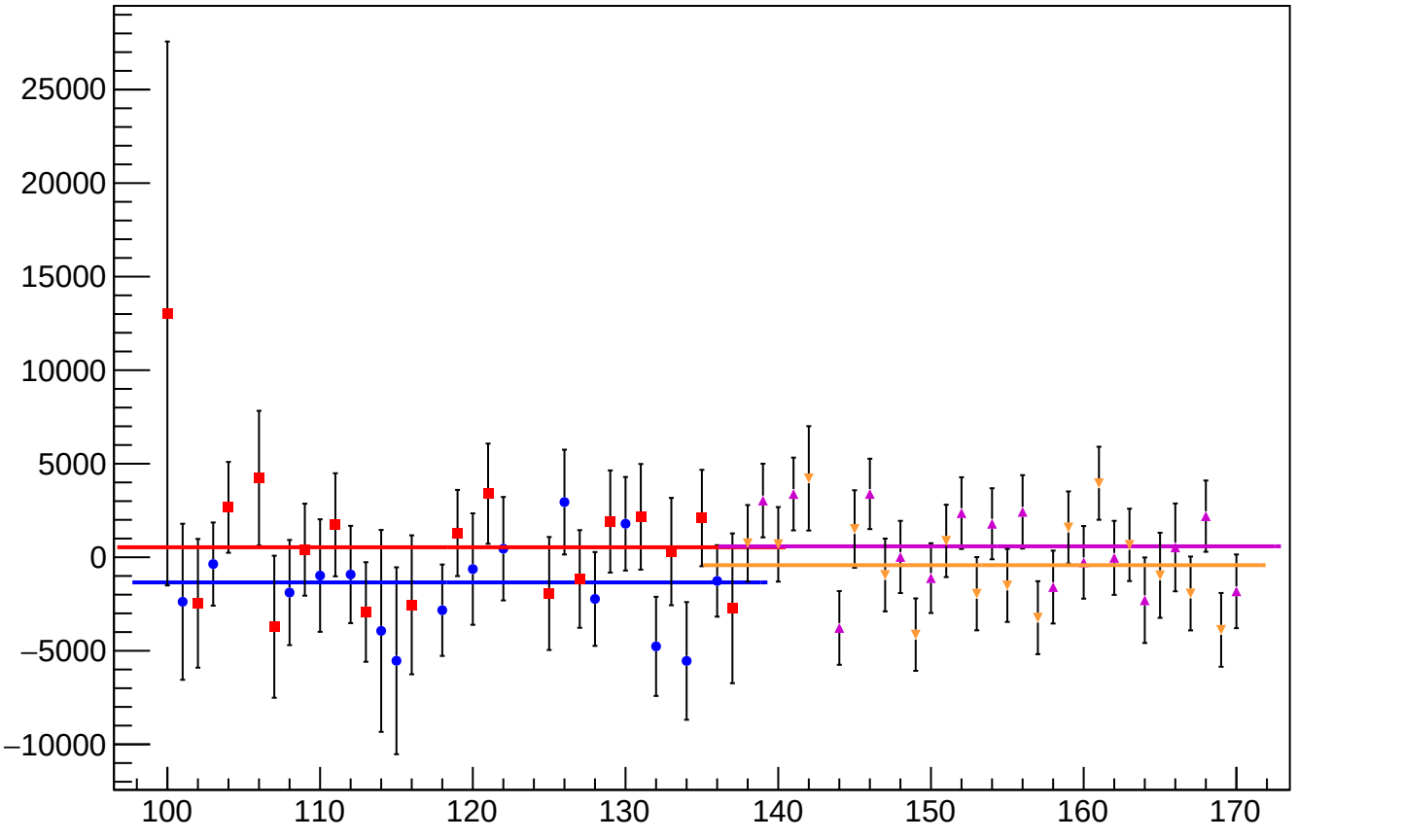
Right Out: 948.438+/-0.281 $\chi^2$/NDF: 3053670.4/17

Left In: 770.981+/-0.151 $\chi^2$/NDF:288766.3/15

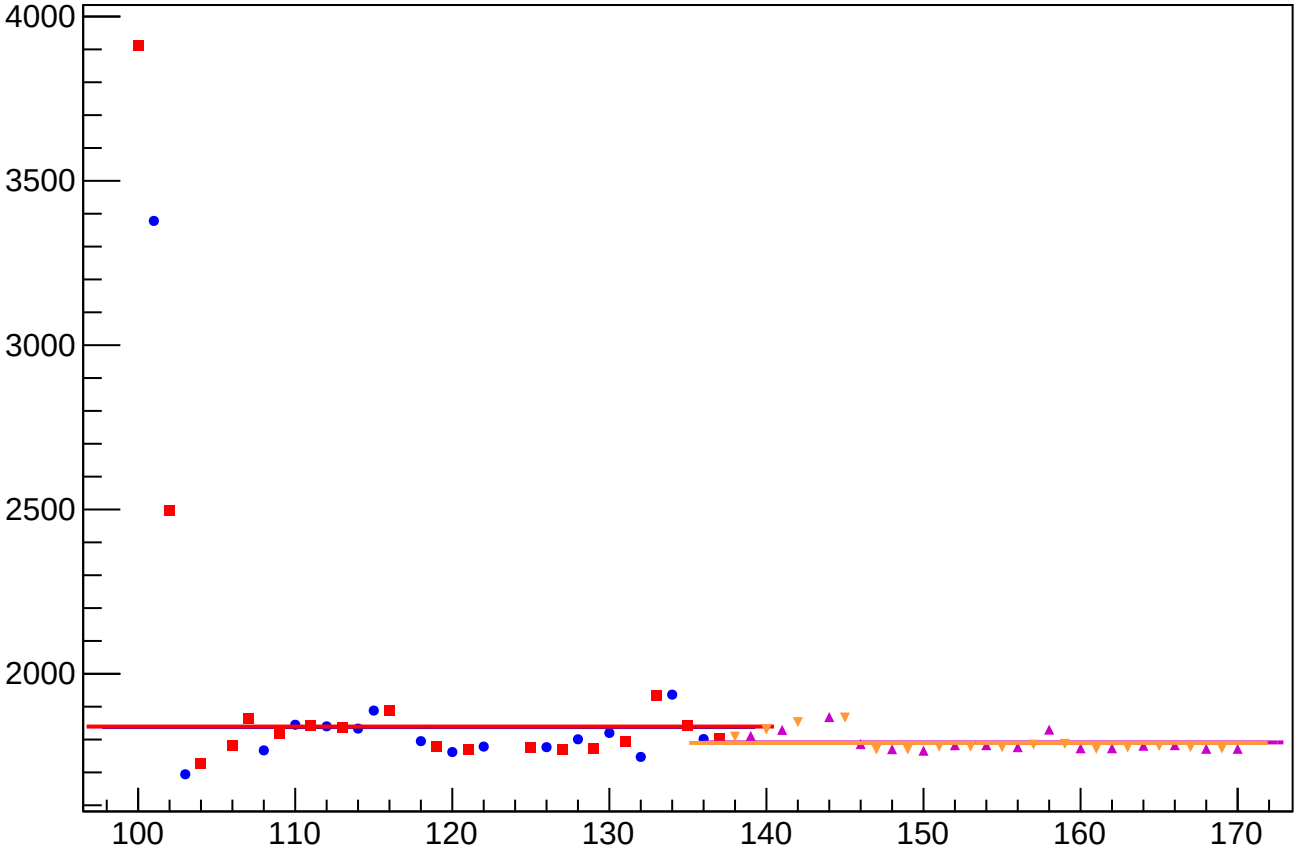
\+ sign 835.842+/-0.139 $\chi^2$/NDF: 3314349.8/31

All: 822.774+/-0.096 $\chi^2$/NDF: 6983386.5/65

\- sign 810.798+/-0.133 $\chi^2$/NDF: 3652091.1/33


eigen_dit_asym_us_dd_atlr_dd_avg_mean vs Slug
25000
20000
15000
10000
5000
0
−5000
−10000
100
110
120
130
140
150
160
170
Right In: -1343.955+/-690.940 χ²/NDF: 9.6/15
Left Out: -423.218+/-503.643 χ²/NDF:21.6/15
Right Out: 534.199+/-690.970 χ²/NDF: 11.1/17
Left In: 584.008+/-492.684 χ²/NDF:19.1/15
+ sign -742.689+/-406.994 χ²/NDF: 32.4/31
All: -78.263+/-285.700 χ²/NDF: 67.9/65
- sign 567.220+/-401.151 χ²/NDF: 30.3/33

# eigen_dit_asym_us_dd_atlr_dd_avg_rms vs Slug




Right In: 1838.159+/-0.489 $\chi^2$/NDF: 291984.0/15

Left Out: 1789.775+/-0.356 $\chi^2$/NDF:6013.3/15

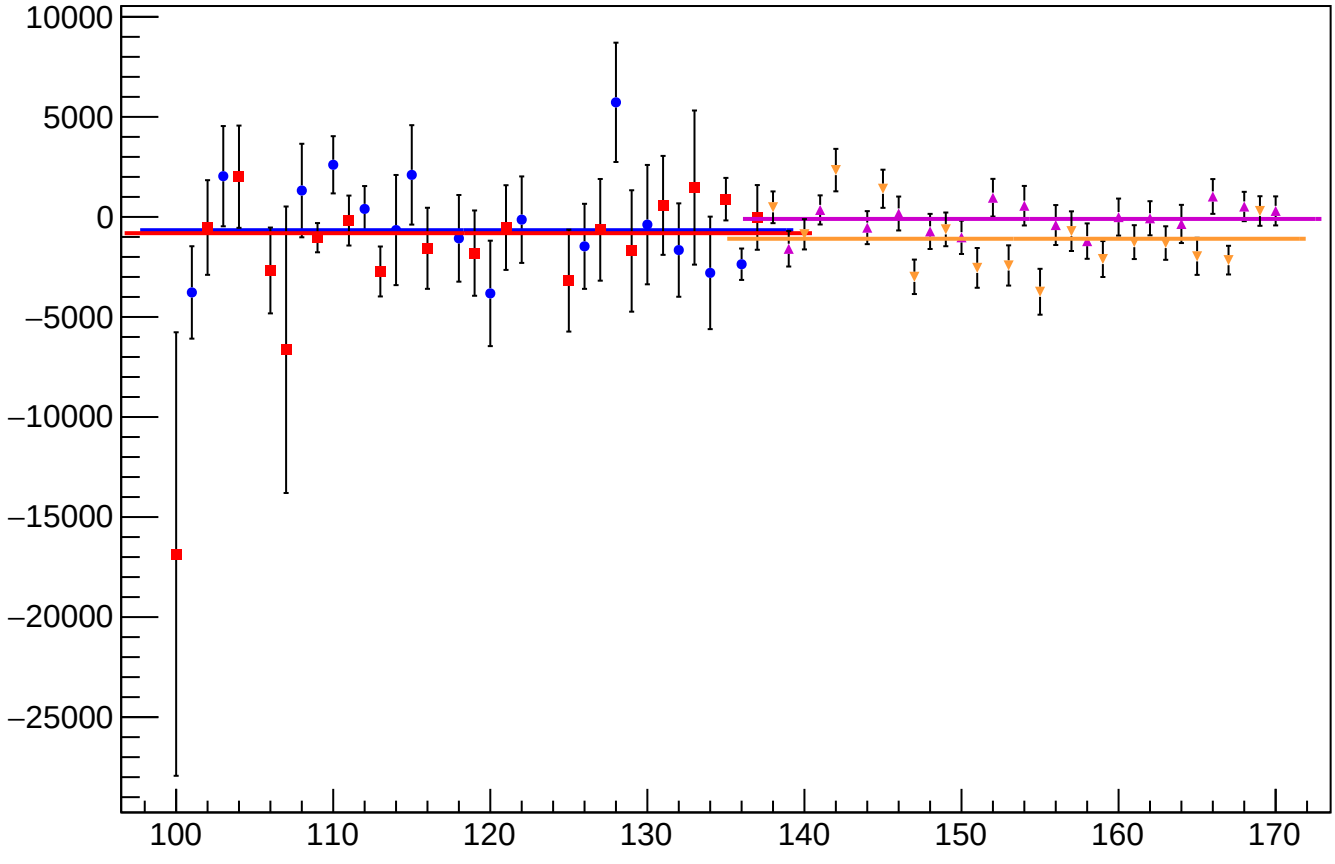
Right Out: 1839.517+/-0.489 $\chi^2$/NDF: 128253.6/17

Left In: 1791.282+/-0.348 $\chi^2$/NDF:6429.7/15

+ sign 1806.563+/-0.288 $\chi^2$/NDF: 304401.8/31

All: 1807.059+/-0.202 $\chi^2$/NDF: 445552.2/65

- sign 1807.540+/-0.284 $\chi^2$/NDF: 141144.5/33




Right In: -663.476+/-445.904 $\chi^2$/NDF: 22.8/15

Left Out: -1091.196+/-218.953 $\chi^2$/NDF:43.9/15

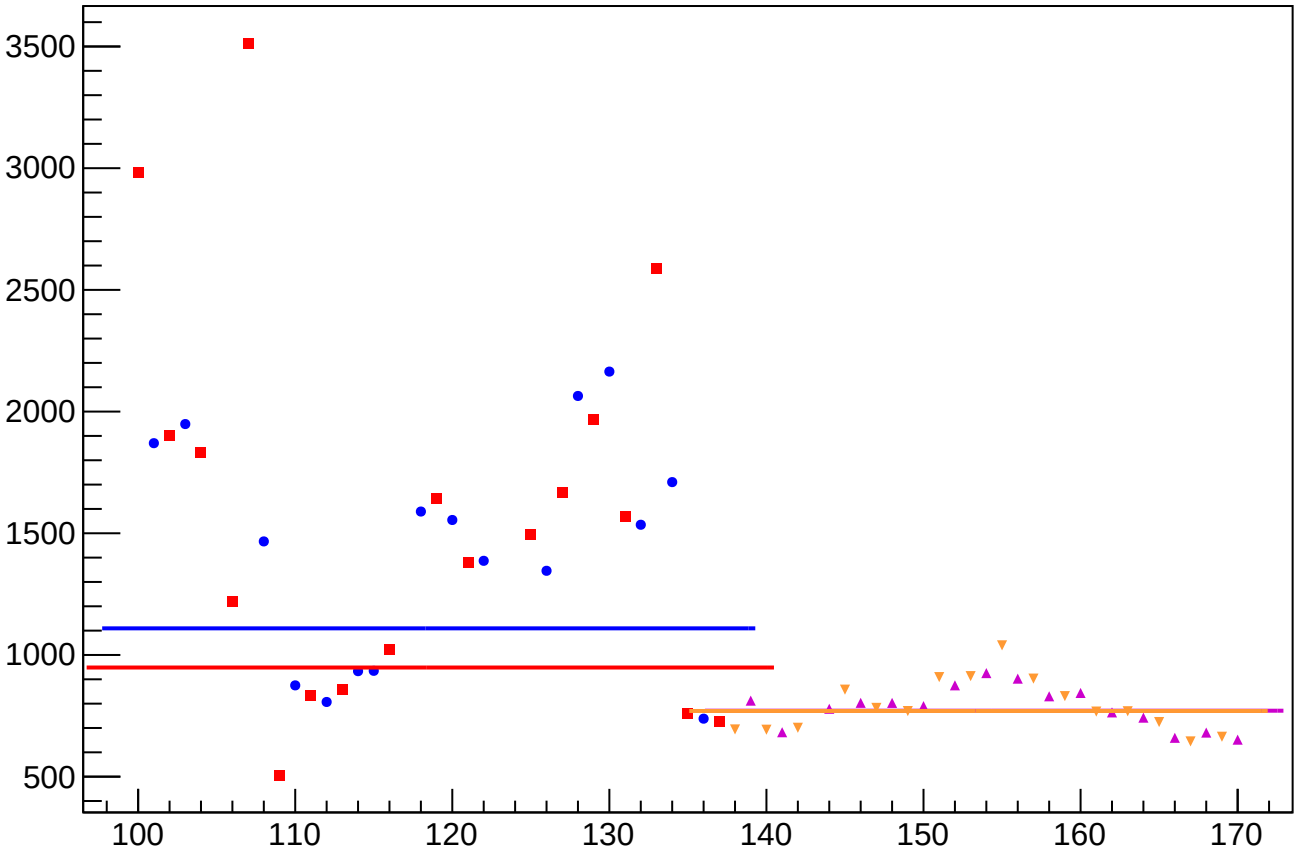
Right Out: -812.194+/-397.187 $\chi^2$/NDF: 12.2/17

Left In: -100.290+/-213.628 $\chi^2$/NDF:11.5/15

+ sign -1008.102+/-196.537 $\chi^2$/NDF: 67.4/31

All: -617.743+/-135.907 $\chi^2$/NDF: 101.2/65

- sign -260.024+/-188.141 $\chi^2$/NDF: 26.2/33




Right In: 1109.365+/-0.315 $\chi^2$/NDF: 1973324.5/15

Left Out: 769.894+/-0.155 $\chi^2$/NDF:407001.1/15

Right Out: 948.441+/-0.281 $\chi^2$/NDF: 3053644.5/17

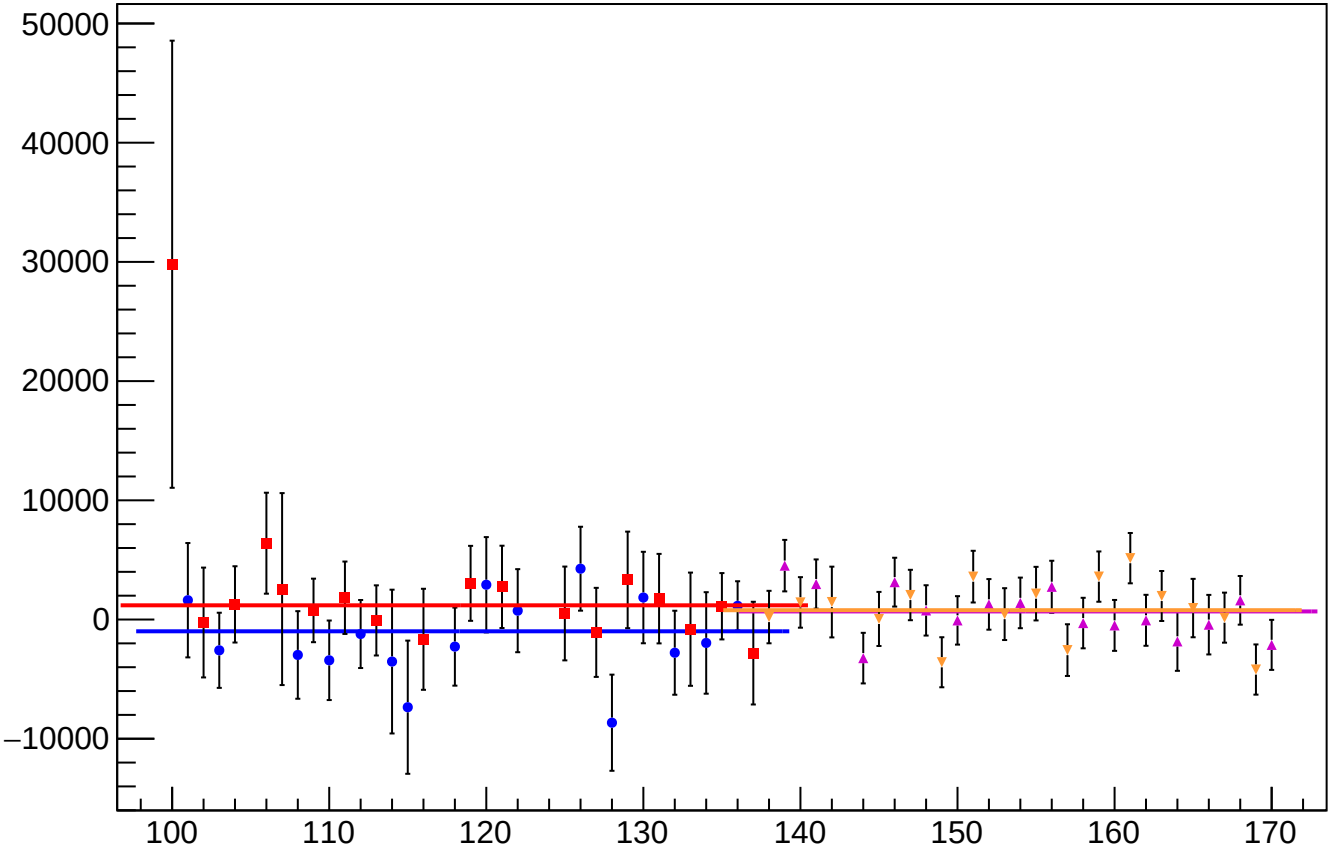
Left In: 770.981+/-0.151 $\chi^2$/NDF:288774.0/15

+ sign 835.844+/-0.139 $\chi^2$/NDF: 3314311.0/31

All: 822.775+/-0.096 $\chi^2$/NDF: 6983338.9/65

- sign 810.799+/-0.133 $\chi^2$/NDF: 3652081.0/33

# asym_us_dd_atlr_dd_avg_mean vs Slug




Right In: -987.532+/-873.840 $\chi^2$/NDF: 12.0/15

Left Out: 781.827+/-548.976 $\chi^2$/NDF:21.6/15

Right Out: 1192.173+/-870.432 $\chi^2$/NDF: 7.0/17

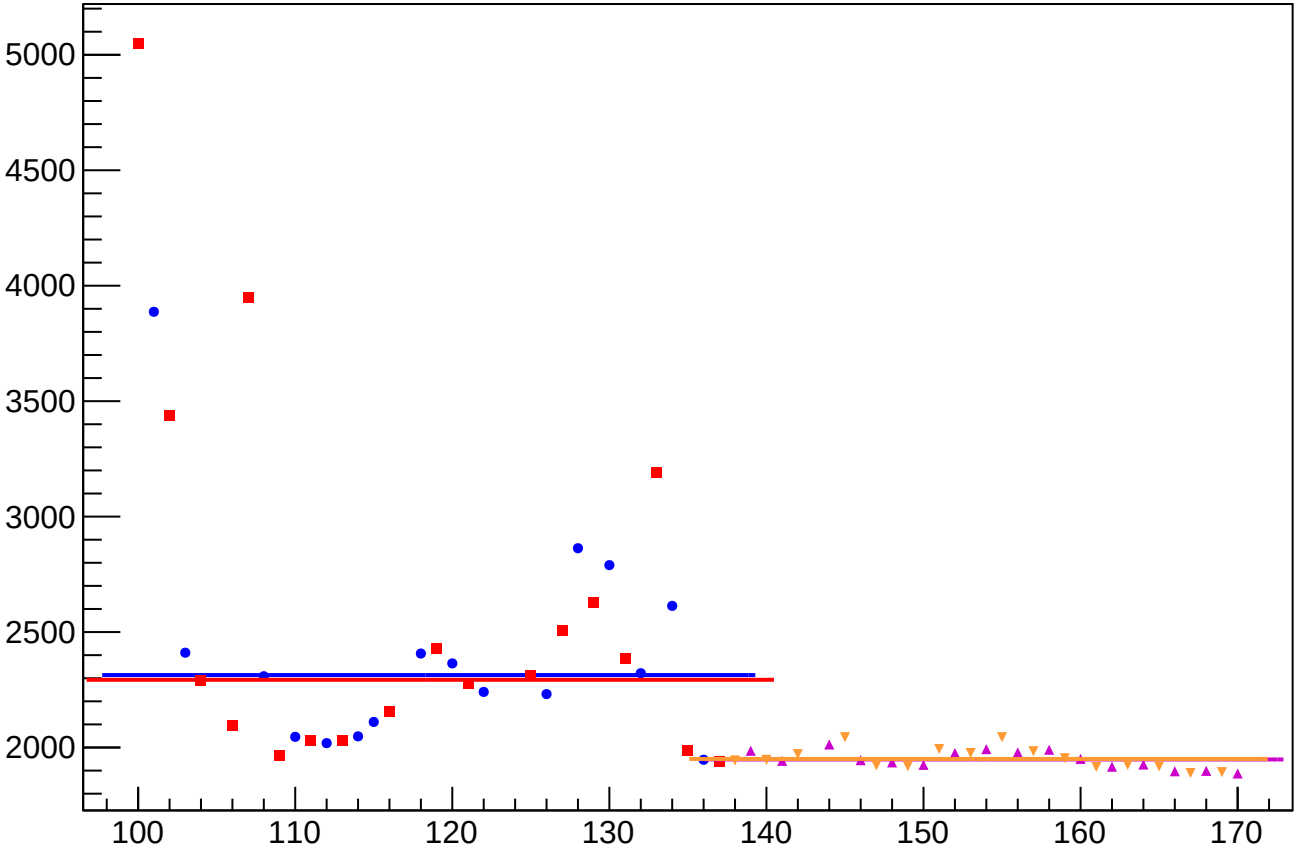
Left In: 679.072+/-535.924 $\chi^2$/NDF:14.3/15

+ sign 281.118+/-464.854 $\chi^2$/NDF: 36.5/31

All: 555.585+/-325.657 $\chi^2$/NDF: 58.7/65

- sign 820.114+/-456.360 $\chi^2$/NDF: 21.6/33

# asym_us_dd_atlr_dd_avg_rms vs Slug




Right In: 2313.740+/-0.618 $\chi^2$/NDF: 402756.6/15

Left Out: 1950.490+/-0.388 $\chi^2$/NDF:13761.3/15

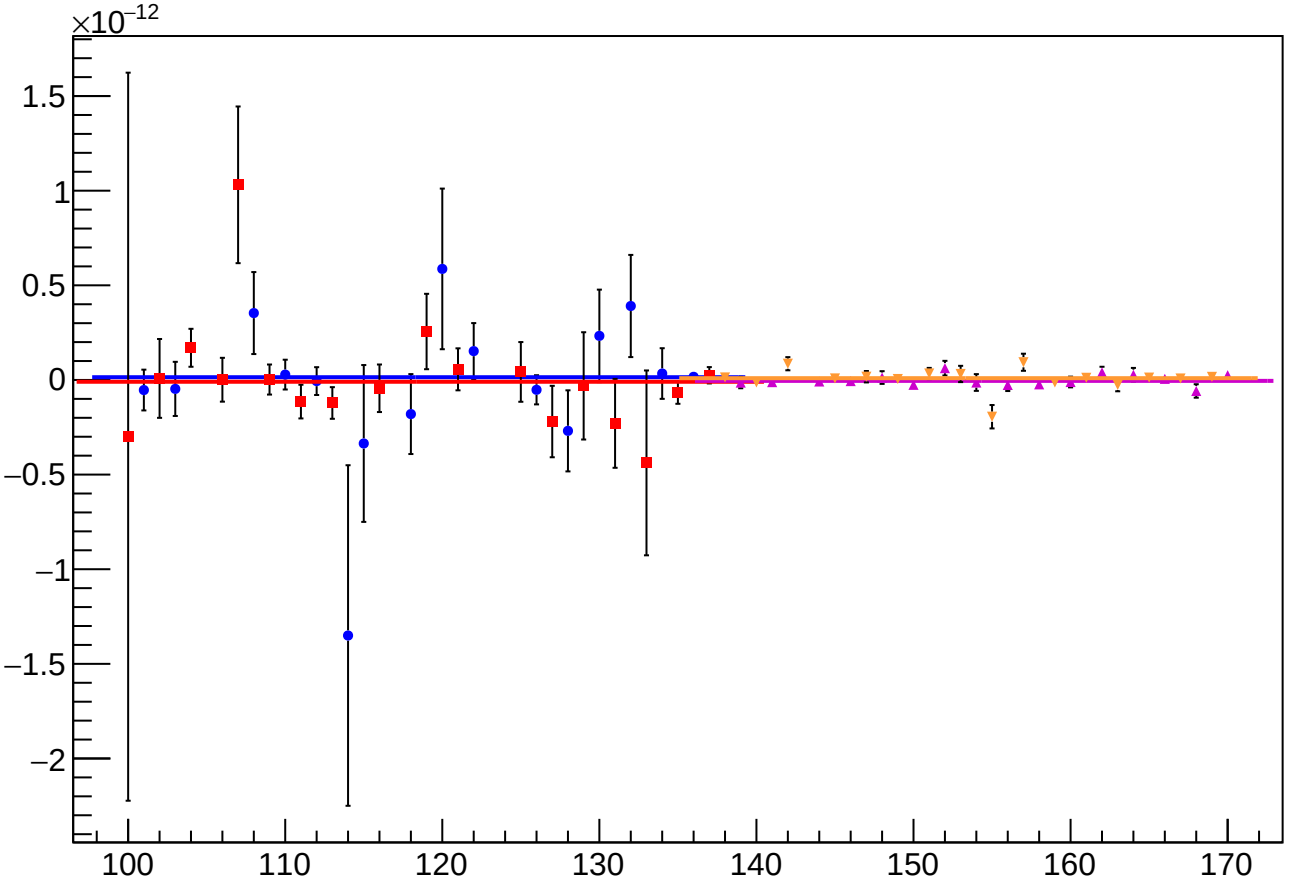
Right Out: 2293.273+/-0.615 $\chi^2$/NDF: 453202.3/17

Left In: 1948.269+/-0.379 $\chi^2$/NDF:9525.1/15

+ sign 2053.286+/-0.329 $\chi^2$/NDF: 664321.5/31

All: 2048.102+/-0.230 $\chi^2$/NDF: 1355374.4/65

- sign 2043.105+/-0.323 $\chi^2$/NDF: 690564.3/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 15.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:24.3/15

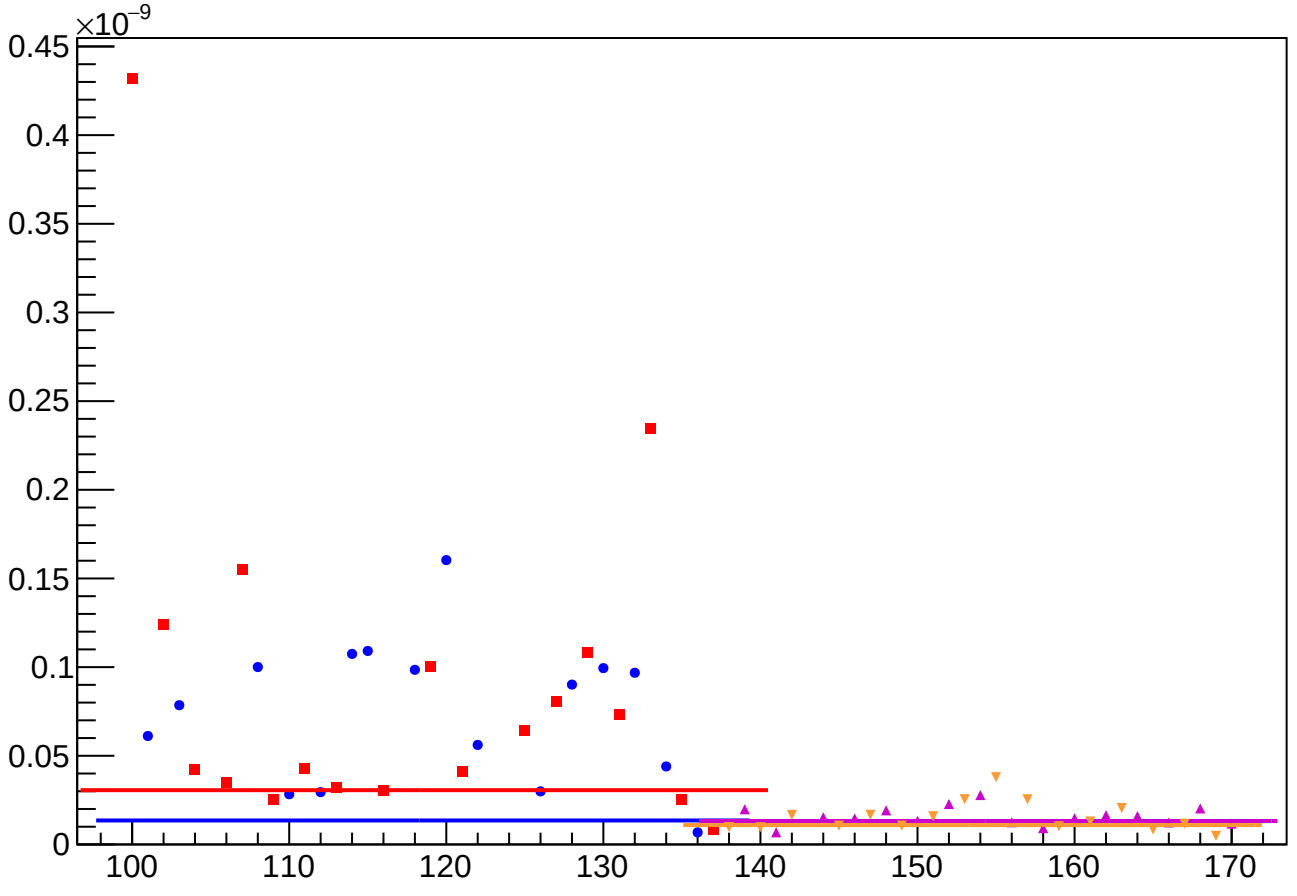
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 19.5/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:13.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 39.4/31

All: 0.000+/-0.000 $\chi^2$/NDF: 75.5/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 32.6/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3416094.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1677377.6/15

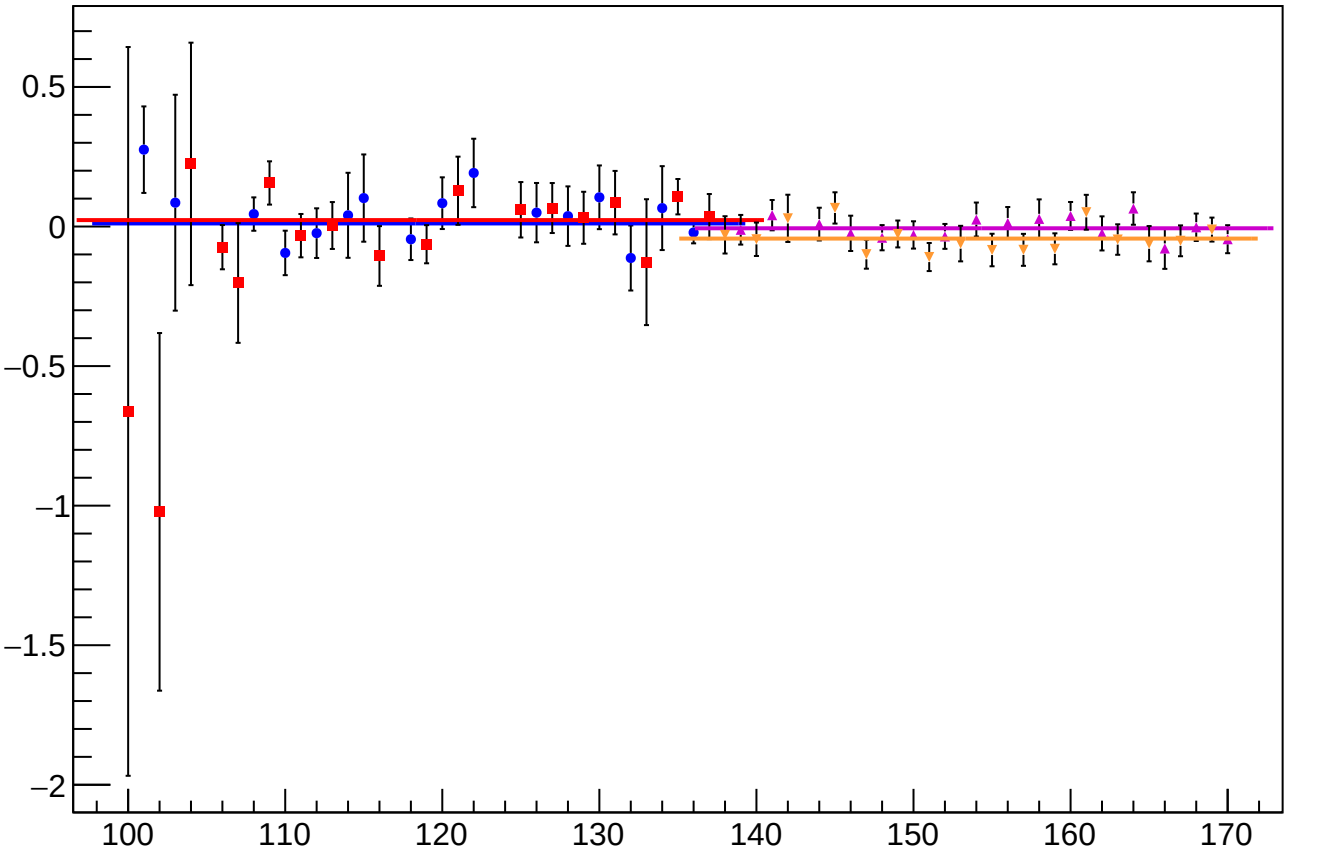
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2349183.7/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1139115.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5152403.1/31

All: 0.000+/-0.000 $\chi^2$/NDF: 9895001.7/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 4459569.3/33




Right In: 0.011+/-0.022 $\chi^2$/NDF: 11.7/15

Left Out: -0.043+/-0.014 $\chi^2$/NDF:12.1/15

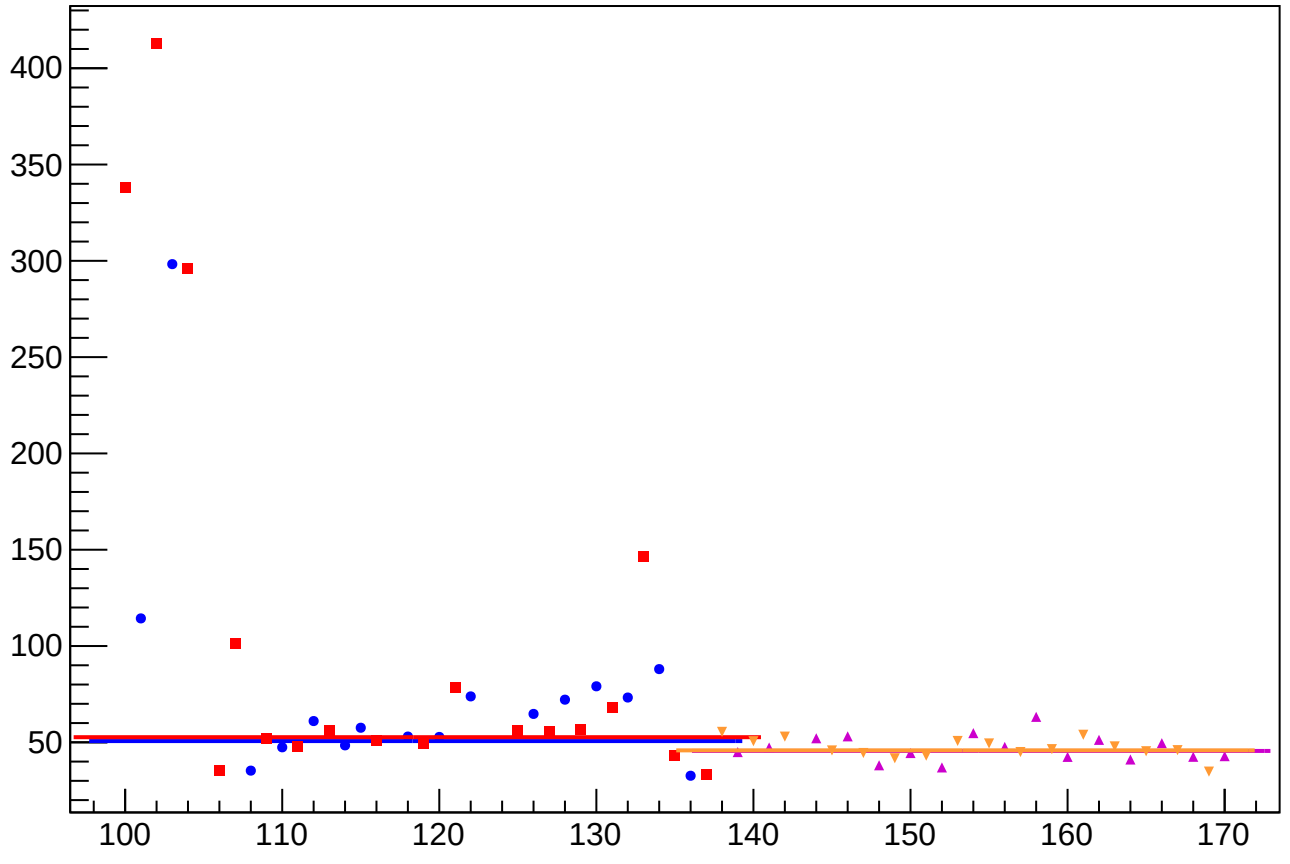
Right Out: 0.023+/-0.023 $\chi^2$/NDF: 16.0/17

Left In: -0.006+/-0.014 $\chi^2$/NDF:6.7/15

+ sign -0.027+/-0.012 $\chi^2$/NDF: 28.2/31

All: -0.013+/-0.008 $\chi^2$/NDF: 54.9/65

- sign 0.001+/-0.012 $\chi^2$/NDF: 23.8/33




Right In: 50.645+/-0.015 $\chi^2$/NDF: 2266445.6/15

Left Out: 45.825+/-0.010 $\chi^2$/NDF:279058.2/15

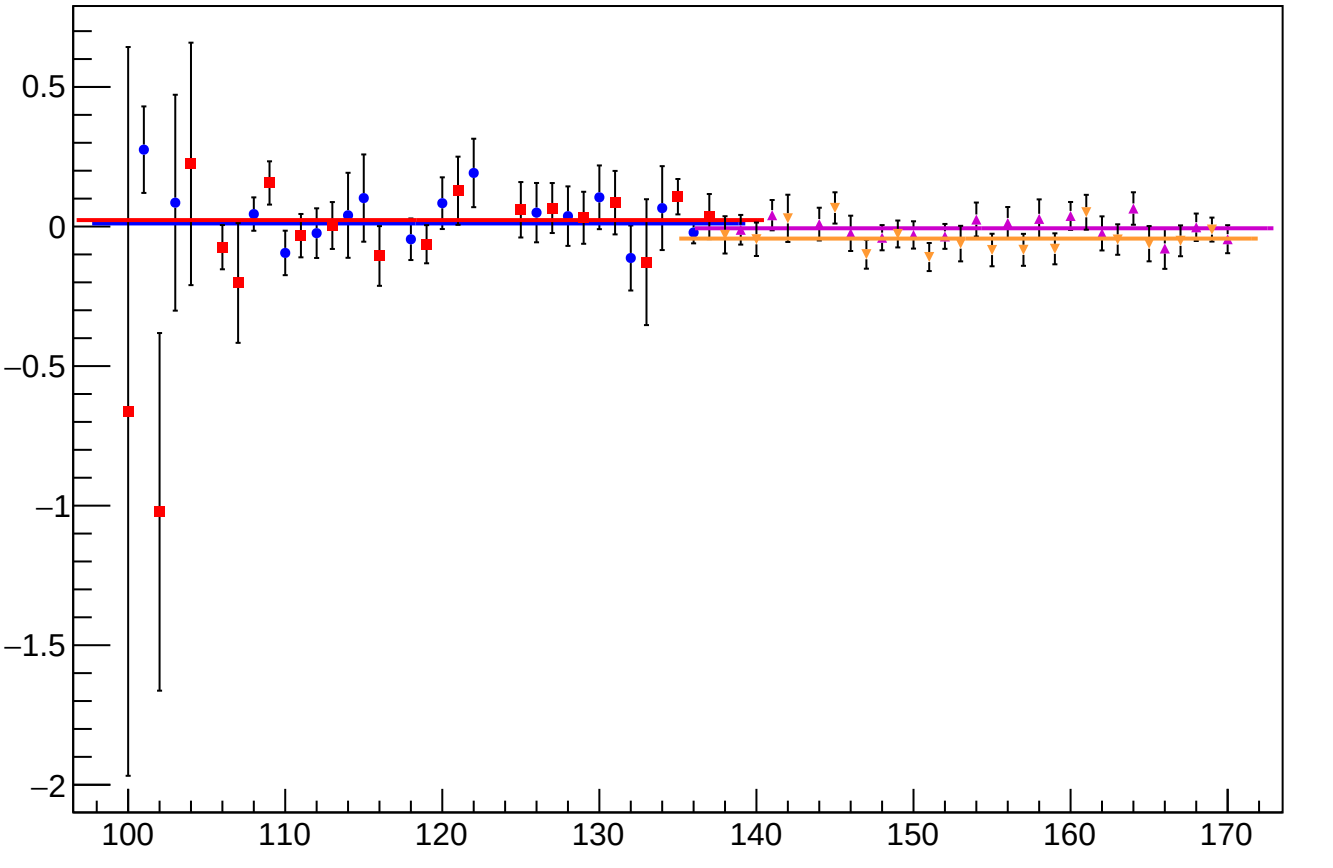
Right Out: 52.666+/-0.016 $\chi^2$/NDF: 2211938.1/17

Left In: 45.526+/-0.010 $\chi^2$/NDF:419413.5/15

+ sign 47.237+/-0.008 $\chi^2$/NDF: 2614180.0/31

All: 47.303+/-0.006 $\chi^2$/NDF: 5387319.2/65

- sign 47.367+/-0.008 $\chi^2$/NDF: 2773017.9/33




Right In: 0.011+/-0.022 $\chi^2$/NDF: 11.7/15

Left Out: -0.043+/-0.014 $\chi^2$/NDF:12.1/15

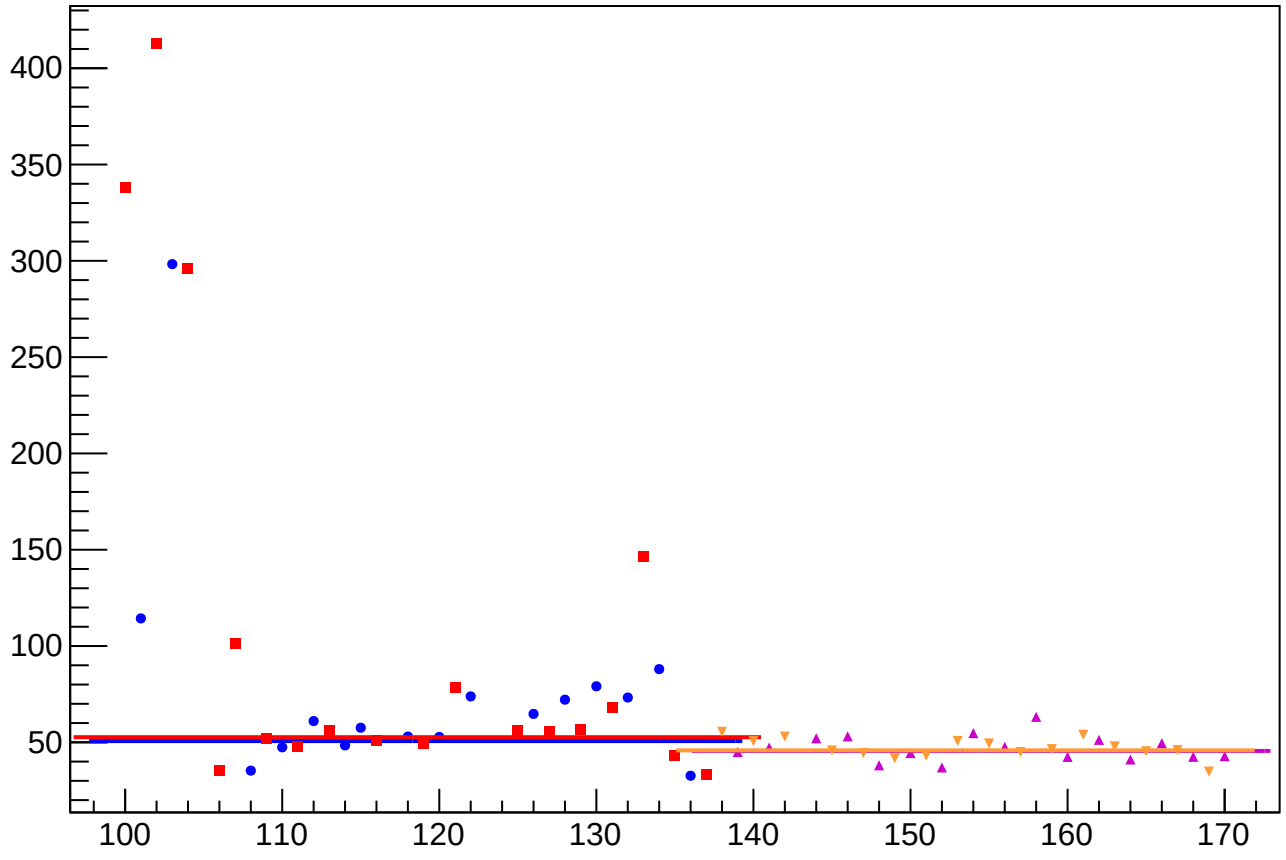
Right Out: 0.023+/-0.023 $\chi^2$/NDF: 16.0/17

Left In: -0.006+/-0.014 $\chi^2$/NDF:6.7/15

+ sign -0.027+/-0.012 $\chi^2$/NDF: 28.2/31

All: -0.013+/-0.008 $\chi^2$/NDF: 54.9/65

- sign 0.001+/-0.012 $\chi^2$/NDF: 23.8/33




Right In: 50.645+/-0.015 $\chi^2$/NDF: 2266445.6/15

Left Out: 45.825+/-0.010 $\chi^2$/NDF:279058.2/15

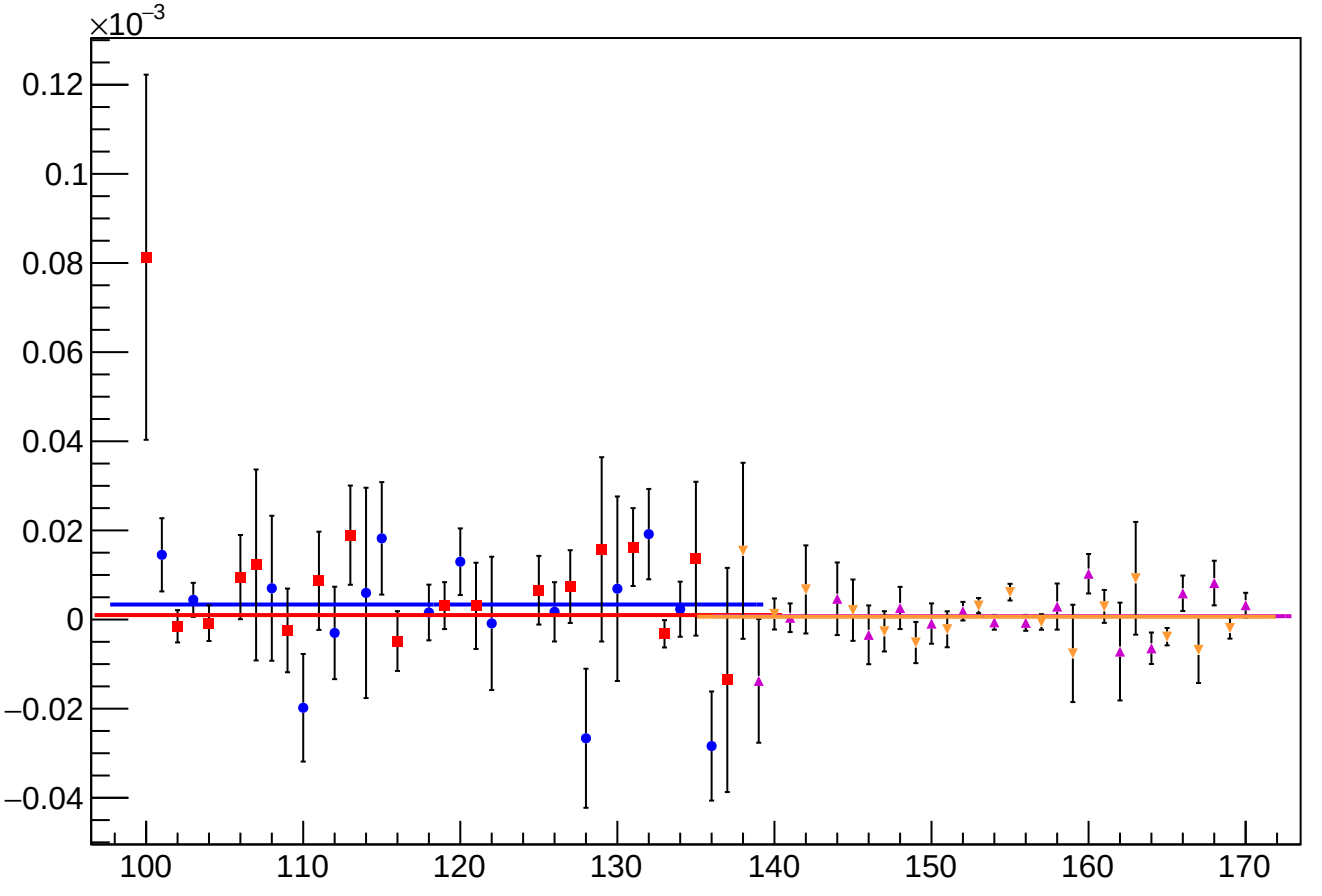
Right Out: 52.666+/-0.016 $\chi^2$/NDF: 2211938.1/17

Left In: 45.526+/-0.010 $\chi^2$/NDF:419413.5/15

+ sign 47.237+/-0.008 $\chi^2$/NDF: 2614180.0/31

All: 47.303+/-0.006 $\chi^2$/NDF: 5387319.2/65

- sign 47.367+/-0.008 $\chi^2$/NDF: 2773017.9/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 22.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:23.7/15

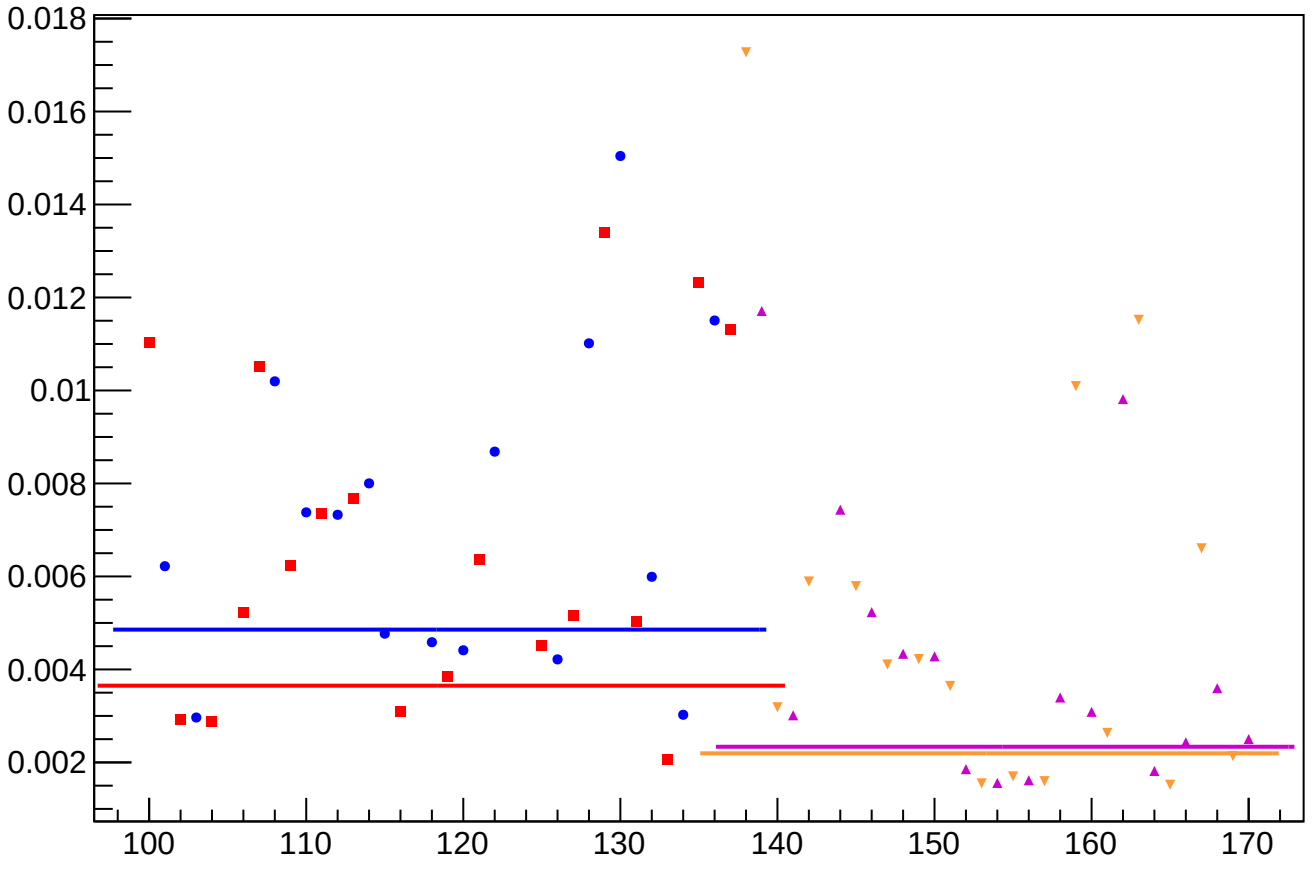
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.2/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:17.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 47.4/31

All: 0.000+/-0.000 $\chi^2$/NDF: 82.5/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 35.1/33




Right In: 0.005+/-0.000 $\chi^2$/NDF: 2745089.6/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:6921860.9/15

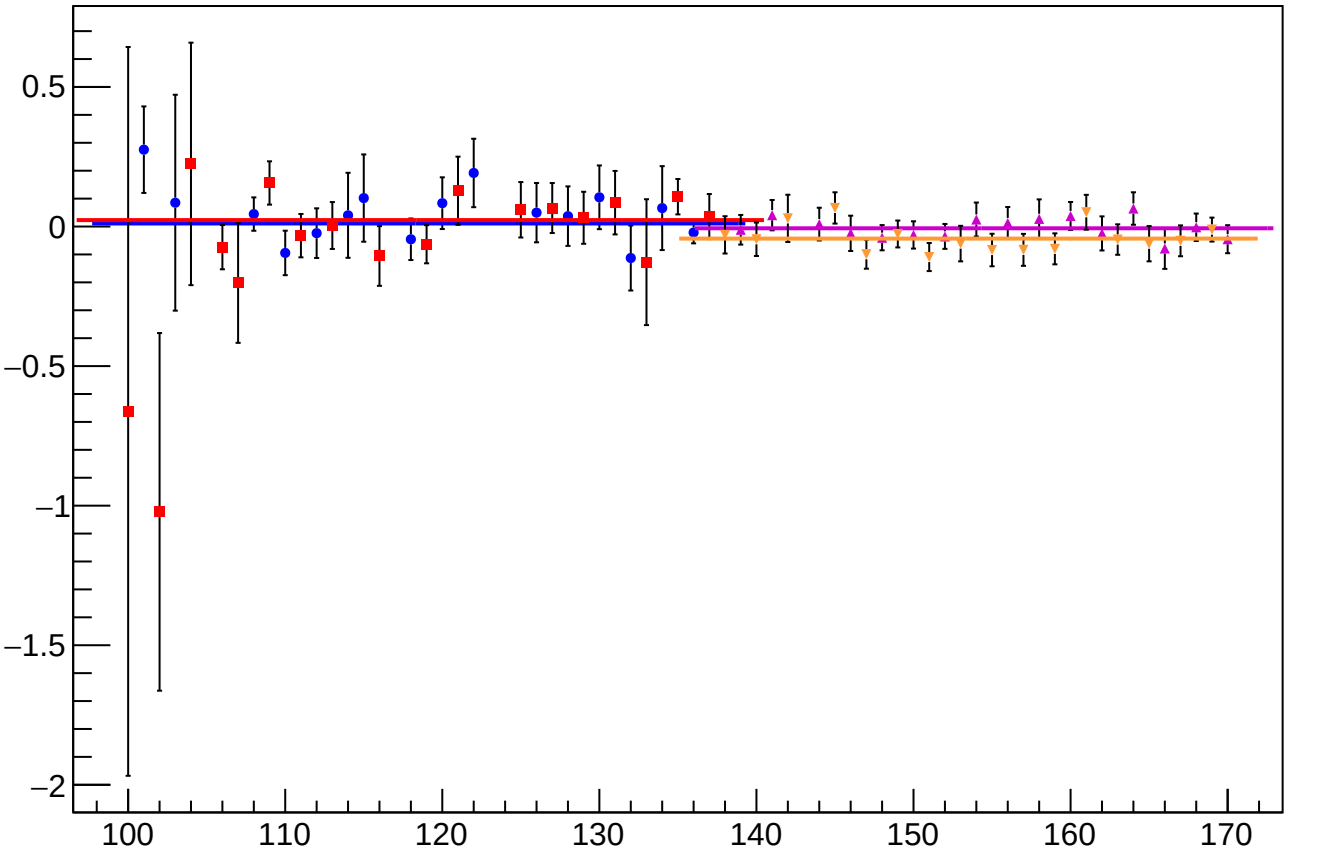
Right Out: 0.004+/-0.000 $\chi^2$/NDF: 3108848.8/17

Left In: 0.002+/-0.000 $\chi^2$/NDF:5014460.5/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 12563535.5/31

All: 0.003+/-0.000 $\chi^2$/NDF: 21823459.3/65

- sign 0.003+/-0.000 $\chi^2$/NDF: 9236591.5/33




Right In: 0.011+/-0.022 $\chi^2$/NDF: 11.7/15

Left Out: -0.043+/-0.014 $\chi^2$/NDF:12.1/15

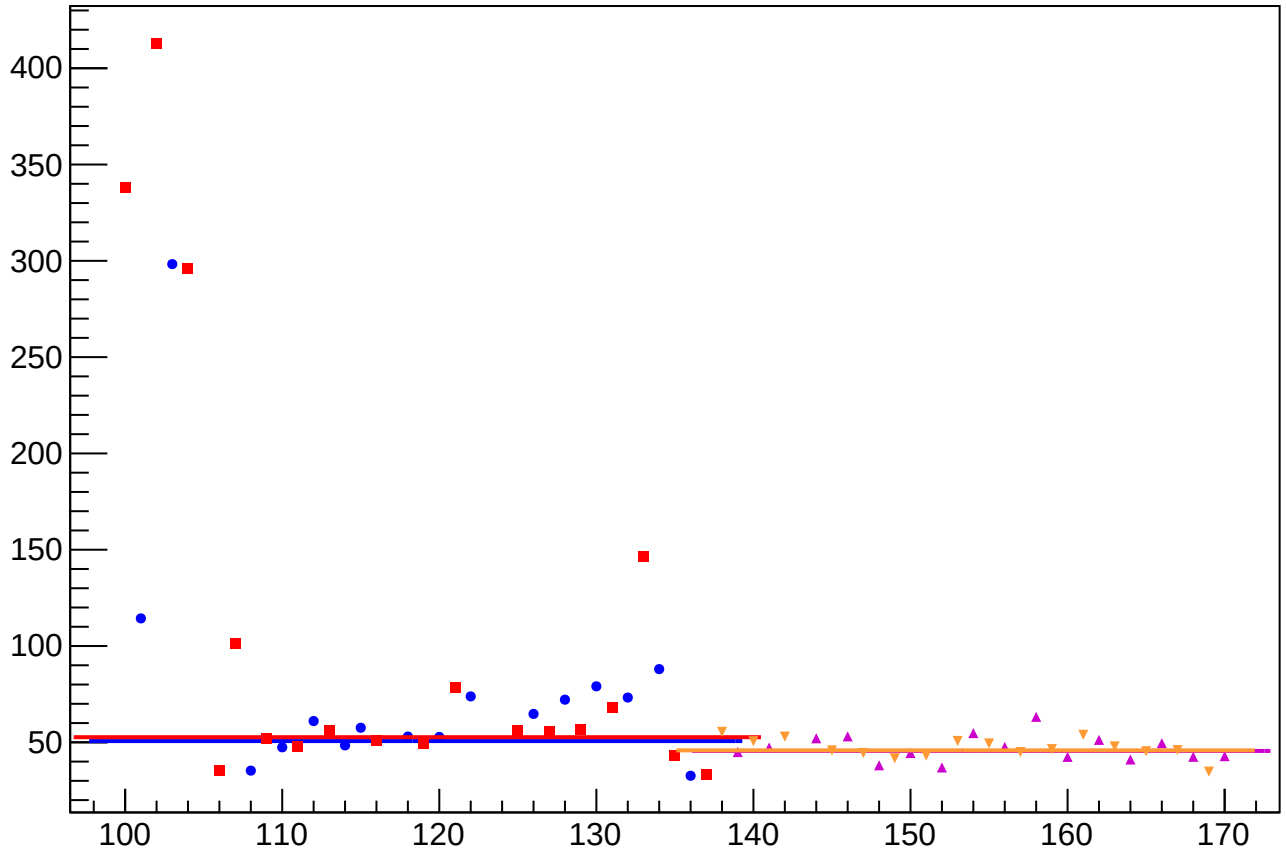
Right Out: 0.023+/-0.023 $\chi^2$/NDF: 15.9/17

Left In: -0.006+/-0.014 $\chi^2$/NDF:6.7/15

+ sign -0.027+/-0.012 $\chi^2$/NDF: 28.2/31

All: -0.013+/-0.008 $\chi^2$/NDF: 54.9/65

- sign 0.001+/-0.012 $\chi^2$/NDF: 23.8/33




Right In: 50.646+/-0.015 $\chi^2$/NDF: 2266348.3/15

Left Out: 45.825+/-0.010 $\chi^2$/NDF:279050.0/15

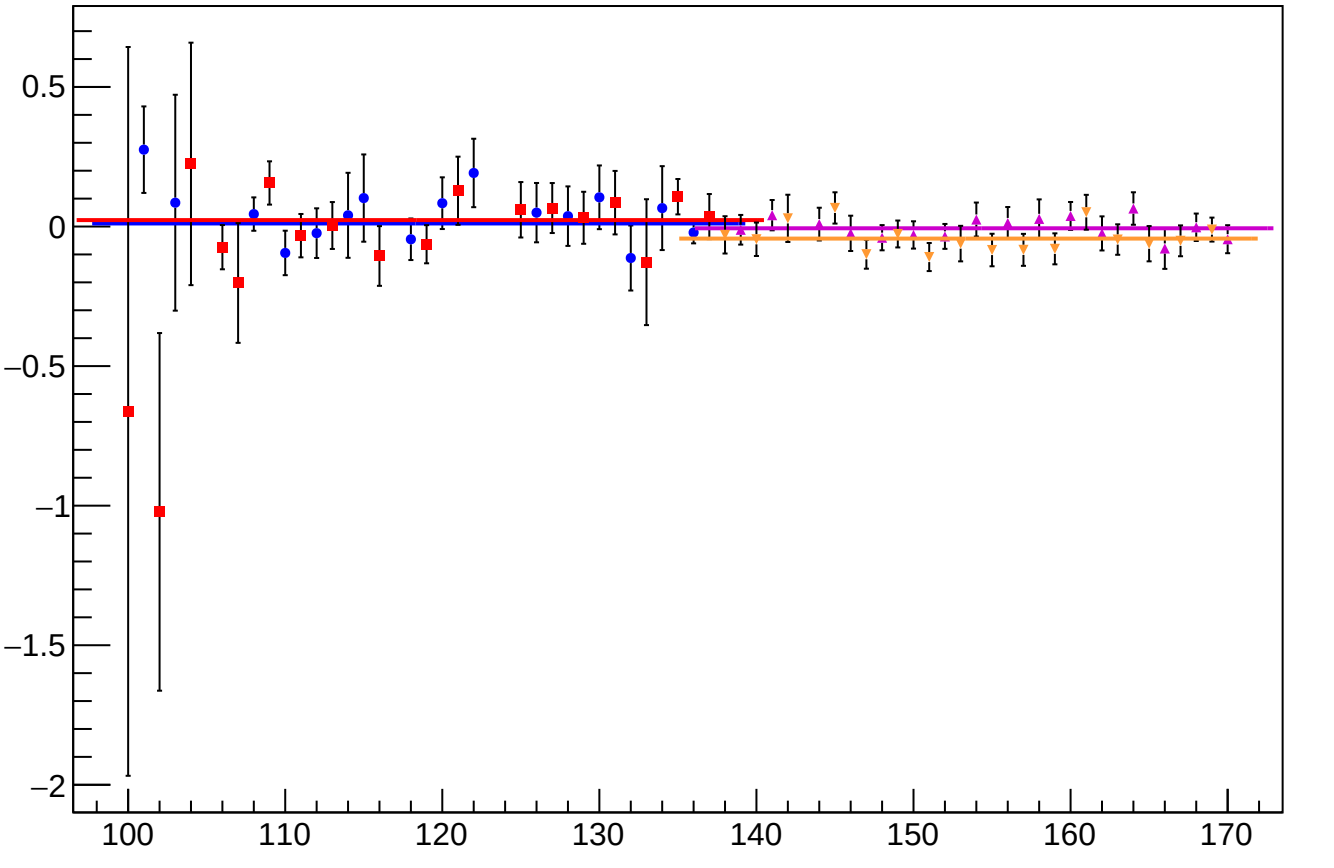
Right Out: 52.667+/-0.016 $\chi^2$/NDF: 2211822.2/17

Left In: 45.526+/-0.010 $\chi^2$/NDF:419374.3/15

\+ sign 47.237+/-0.008 $\chi^2$/NDF: 2614096.9/31

All: 47.303+/-0.006 $\chi^2$/NDF: 5387102.0/65

\- sign 47.367+/-0.008 $\chi^2$/NDF: 2772883.0/33




Right In: 0.011+/-0.022 $\chi^2$/NDF: 11.7/15

Left Out: -0.043+/-0.014 $\chi^2$/NDF:12.1/15

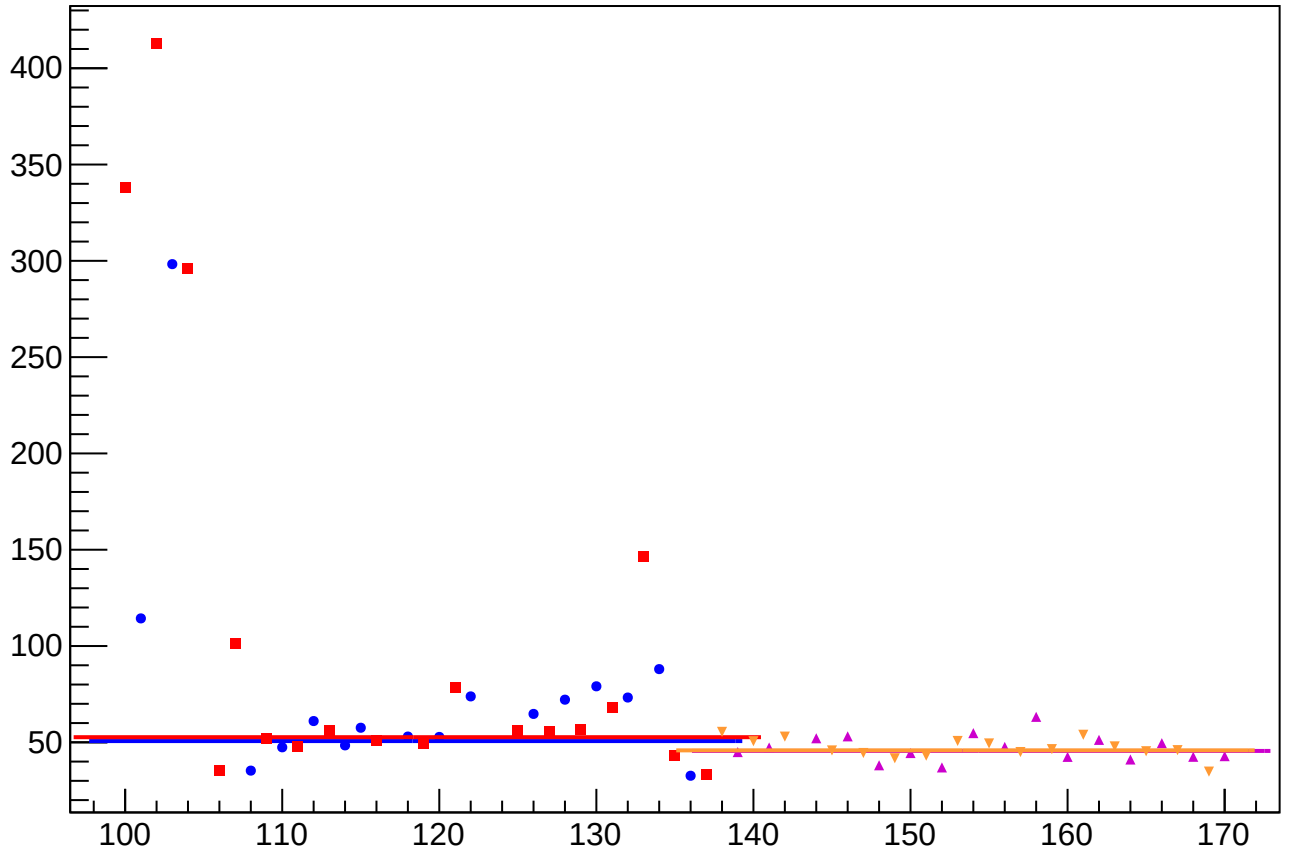
Right Out: 0.023+/-0.023 $\chi^2$/NDF: 15.9/17

Left In: -0.006+/-0.014 $\chi^2$/NDF:6.7/15

+ sign -0.027+/-0.012 $\chi^2$/NDF: 28.2/31

All: -0.013+/-0.008 $\chi^2$/NDF: 54.9/65

- sign 0.001+/-0.012 $\chi^2$/NDF: 23.8/33




Right In: 50.646+/-0.015 $\chi^2$/NDF: 2266348.3/15

Left Out: 45.825+/-0.010 $\chi^2$/NDF:279050.0/15

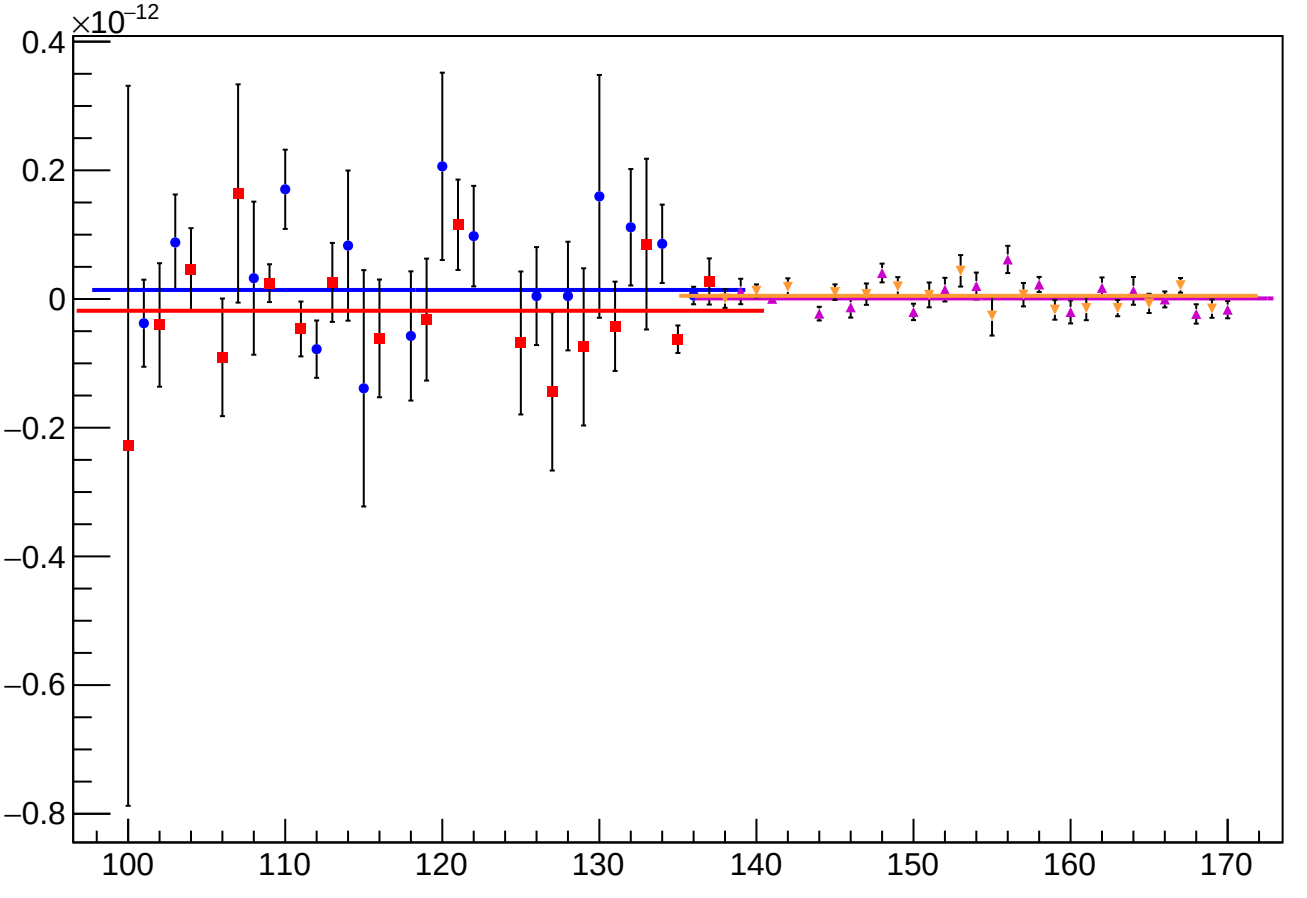
Right Out: 52.667+/-0.016 $\chi^2$/NDF: 2211822.2/17

Left In: 45.526+/-0.010 $\chi^2$/NDF:419374.3/15

\+ sign 47.237+/-0.008 $\chi^2$/NDF: 2614096.9/31

All: 47.303+/-0.006 $\chi^2$/NDF: 5387102.0/65

\- sign 47.367+/-0.008 $\chi^2$/NDF: 2772883.0/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 20.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:16.5/15

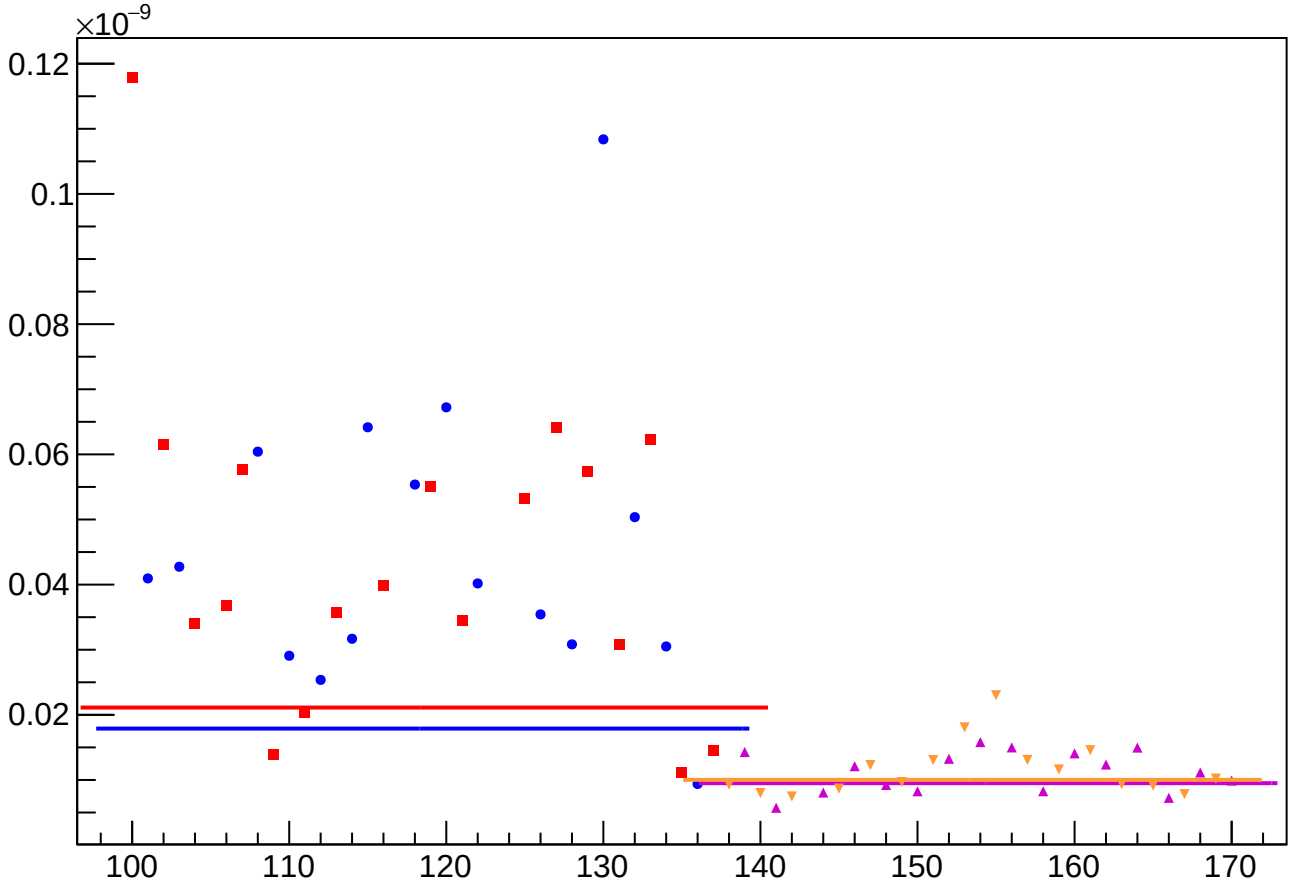
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.0/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:36.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 37.4/31

All: 0.000+/-0.000 $\chi^2$/NDF: 95.3/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 56.2/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3398524.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1124875.7/15

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2621588.2/17

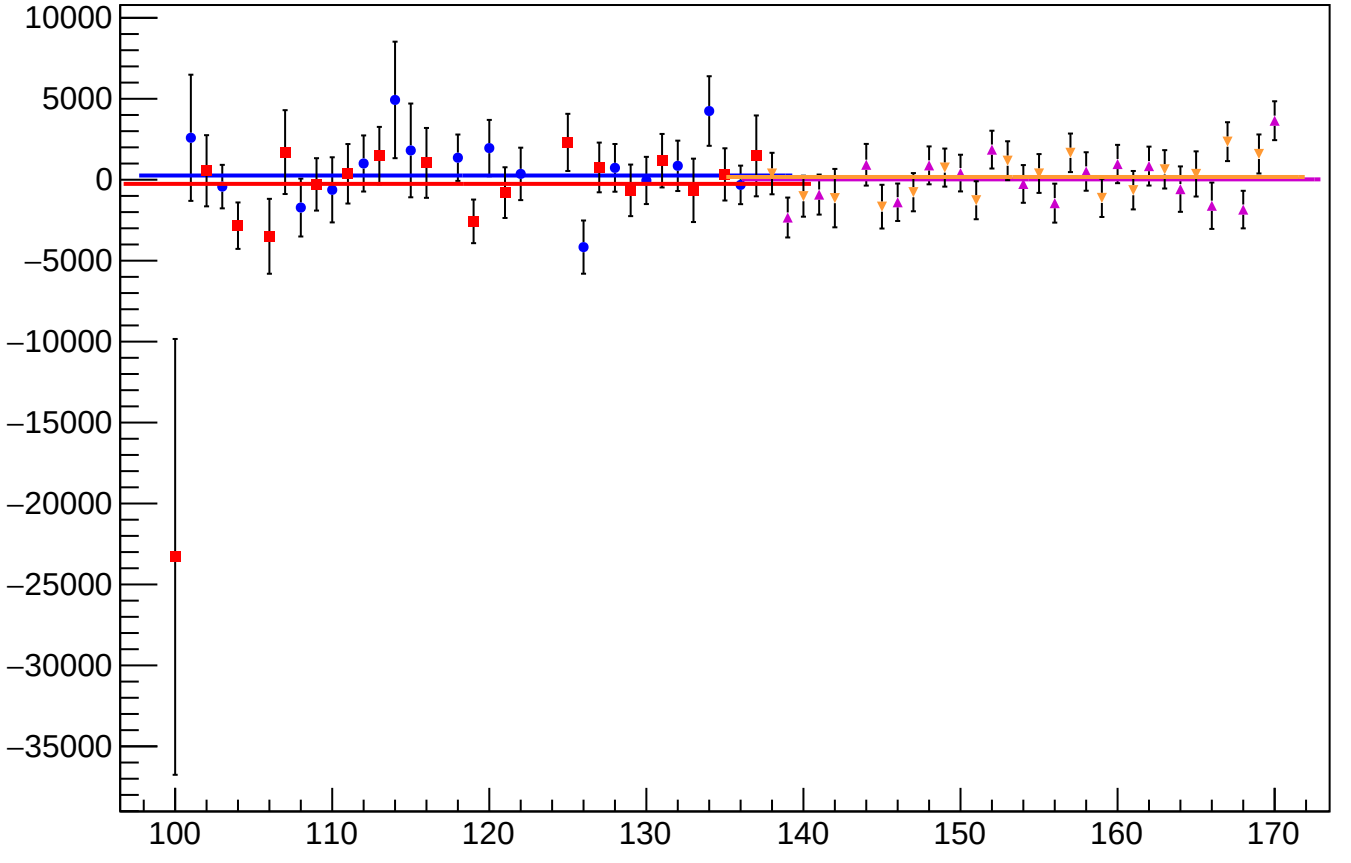
Left In: 0.000+/-0.000 $\chi^2$/NDF:1527304.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5399519.6/31

All: 0.000+/-0.000 $\chi^2$/NDF: 11158420.4/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 5743418.5/33

# reg_asym_us_dd_atlr_dd_dd_mean vs Slug




Right In: 260.797+/-424.657 $\chi^2$/NDF: 16.9/15

Left Out: 169.928+/-310.256 $\chi^2$/NDF:14.5/15

Right Out: -255.934+/-425.784 $\chi^2$/NDF: 17.4/17

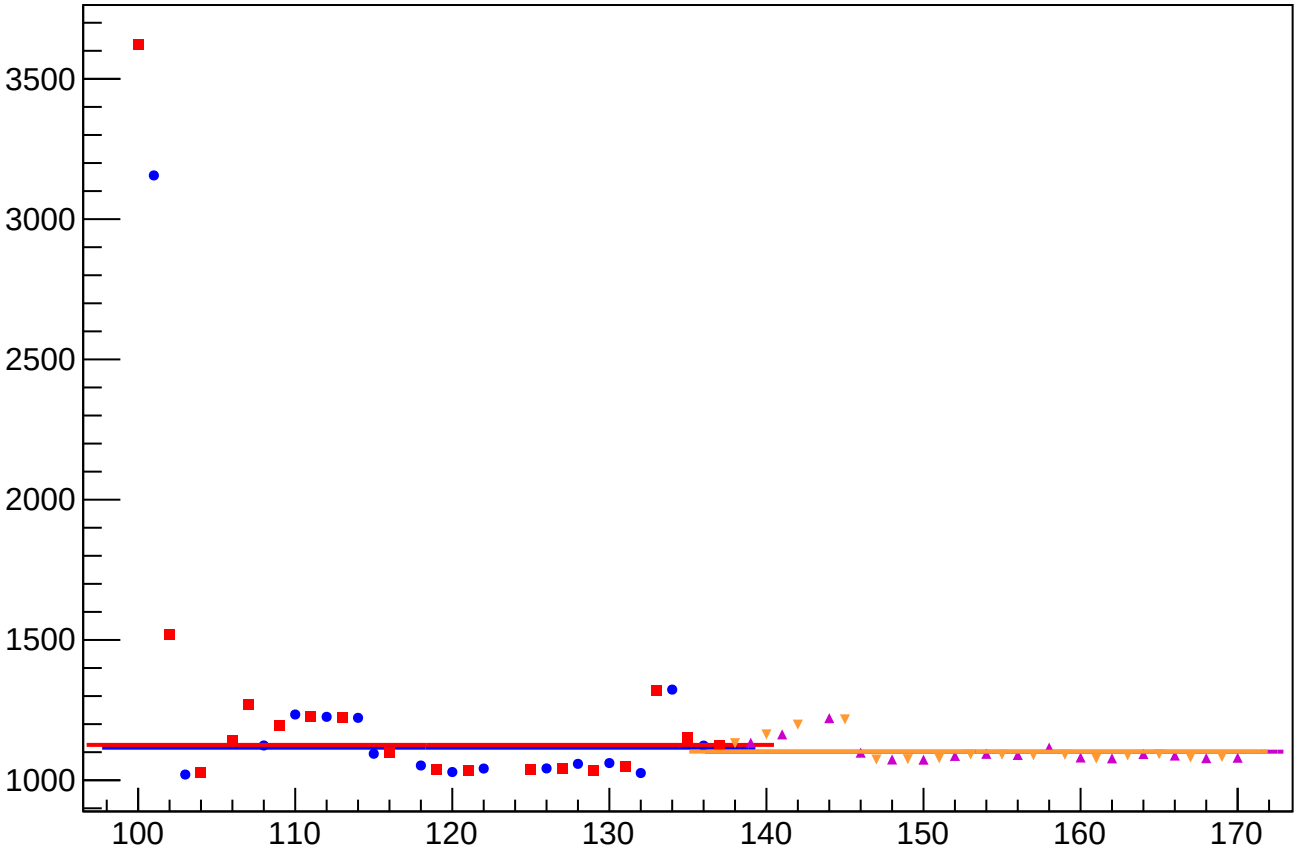
Left In: 22.212+/-303.204 $\chi^2$/NDF:25.3/15

+ sign 201.552+/-250.518 $\chi^2$/NDF: 31.5/31

All: 63.148+/-175.879 $\chi^2$/NDF: 75.1/65

- sign -71.377+/-246.982 $\chi^2$/NDF: 43.0/33

# reg_asym_us_dd_atlr_dd_dd_rms vs Slug




Right In: 1116.089+/-0.300 $\chi^2$/NDF: 623390.9/15

Left Out: 1101.922+/-0.219 $\chi^2$/NDF:32026.5/15

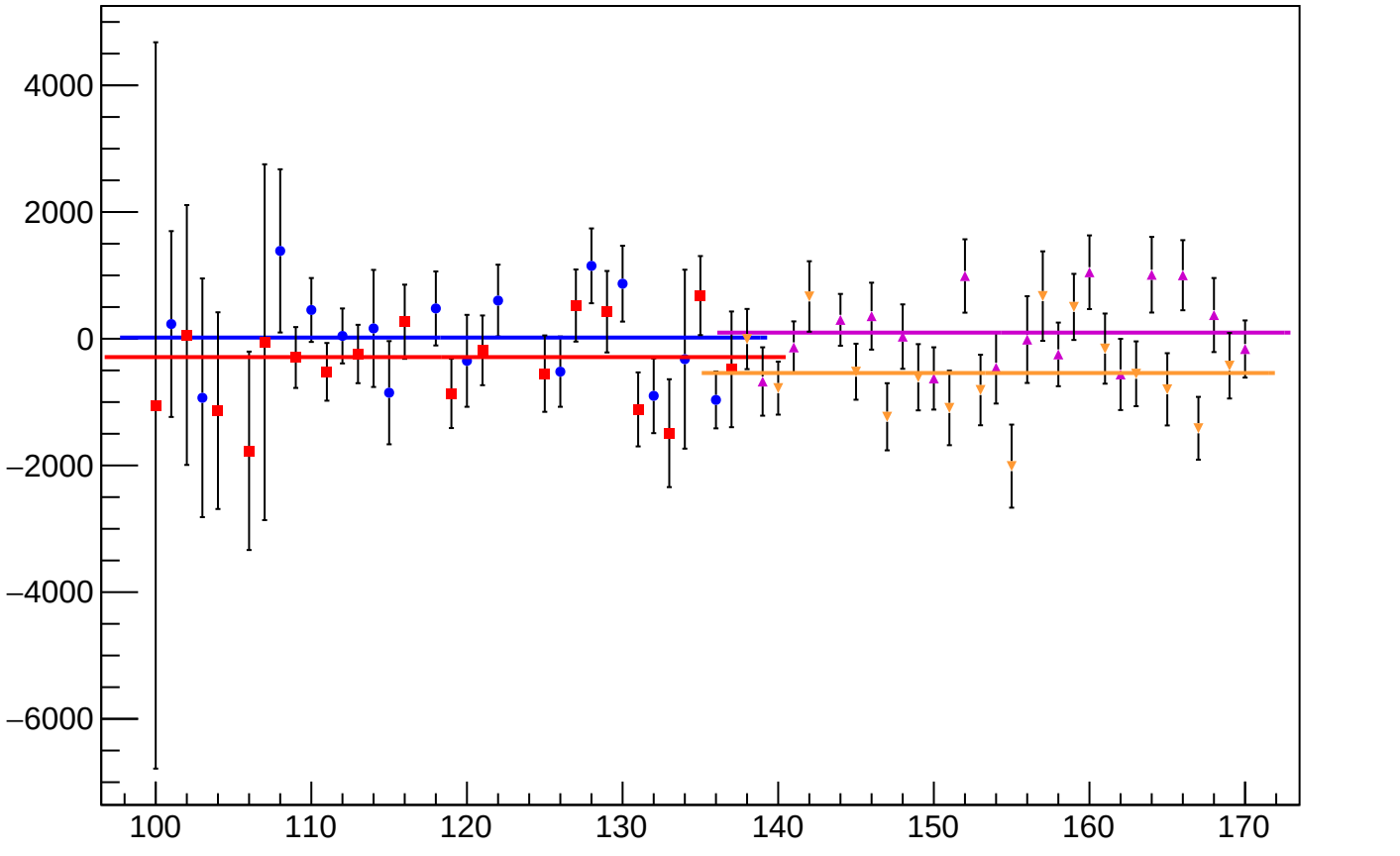
Right Out: 1126.016+/-0.301 $\chi^2$/NDF: 222106.0/17

Left In: 1101.842+/-0.214 $\chi^2$/NDF:29937.1/15

\+ sign 1106.853+/-0.177 $\chi^2$/NDF: 656868.6/31

All: 1108.436+/-0.124 $\chi^2$/NDF: 913346.9/65

\- sign 1109.976+/-0.175 $\chi^2$/NDF: 256320.7/33




Right In: 18.468+/-161.237 $\chi^2$/NDF: 19.2/15

Left Out: -541.001+/-131.526 $\chi^2$/NDF:25.0/15

Right Out: -289.946+/-156.189 $\chi^2$/NDF: 13.5/17

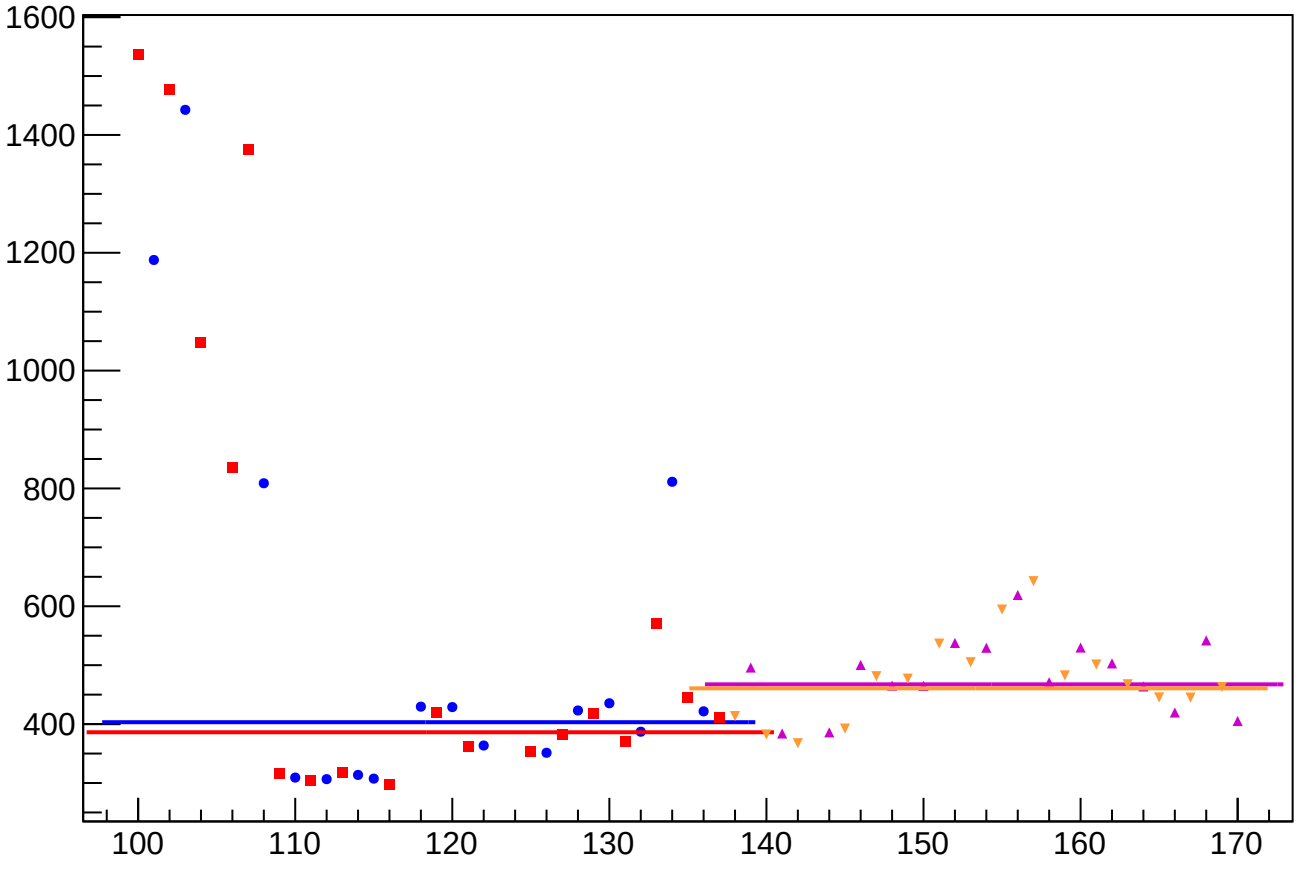
Left In: 96.418+/-129.967 $\chi^2$/NDF:18.5/15

+ sign -317.465+/-101.918 $\chi^2$/NDF: 51.4/31

All: -187.007+/-71.344 $\chi^2$/NDF: 90.2/65

- sign -61.655+/-99.903 $\chi^2$/NDF: 35.6/33

# asym_us_dd_atlr_dd_dd_reg_correction_rms vs Slug




Right In: 403.194+/-0.114 $\chi^2$/NDF: 1808432.3/15

Left Out: 460.694+/-0.093 $\chi^2$/NDF:478560.1/15

Right Out: 386.146+/-0.110 $\chi^2$/NDF: 1759113.8/17

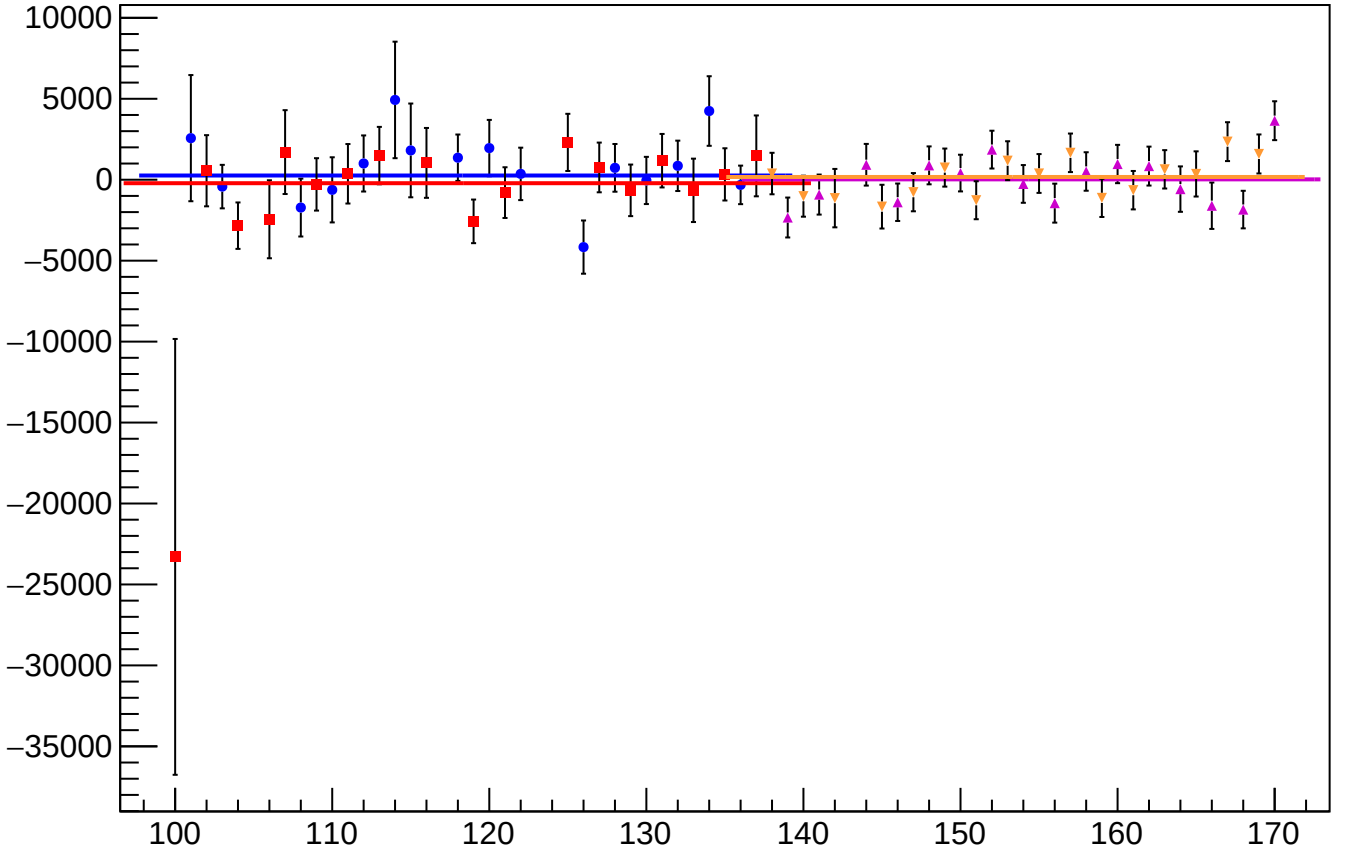
Left In: 467.454+/-0.092 $\chi^2$/NDF:444280.0/15

\+ sign 437.720+/-0.072 $\chi^2$/NDF: 2439717.4/31

All: 435.919+/-0.050 $\chi^2$/NDF: 4964583.2/65

\- sign 434.188+/-0.071 $\chi^2$/NDF: 2523641.2/33

# cor_asym_us_dd_atlr_dd_dd_mean vs Slug




Right In: 260.415+/-424.657 $\chi^2$/NDF: 16.9/15

Left Out: 169.909+/-310.256 $\chi^2$/NDF:14.5/15

Right Out: -214.501+/-426.342 $\chi^2$/NDF: 16.2/17

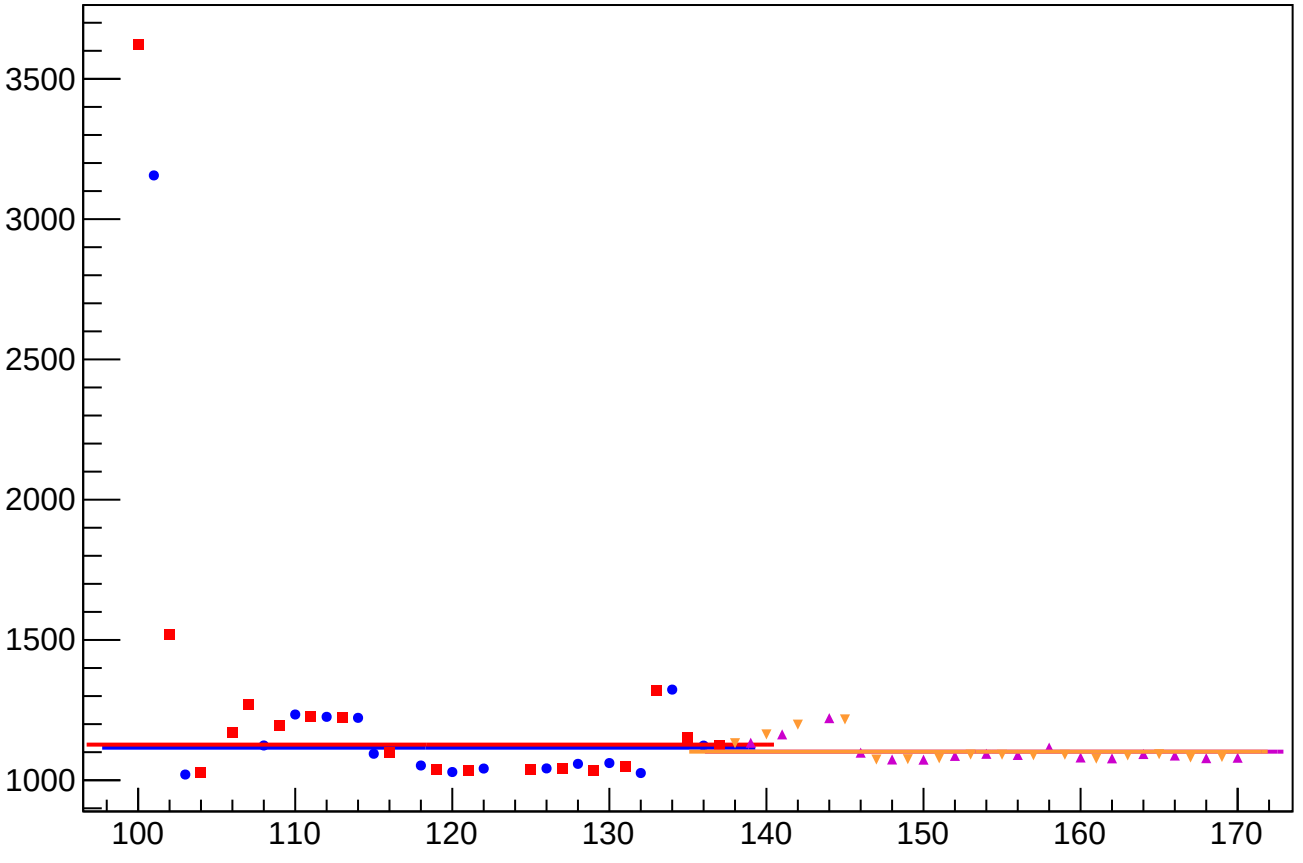
Left In: 22.192+/-303.204 $\chi^2$/NDF:25.3/15

+ sign 201.407+/-250.518 $\chi^2$/NDF: 31.5/31

All: 70.266+/-175.918 $\chi^2$/NDF: 73.8/65

- sign -57.311+/-247.090 $\chi^2$/NDF: 41.8/33

# cor_asym_us_dd_atlr_dd_dd_rms vs Slug




Right In: 1116.089+/-0.300 $\chi^2$/NDF: 623391.9/15

Left Out: 1101.922+/-0.219 $\chi^2$/NDF:32026.5/15

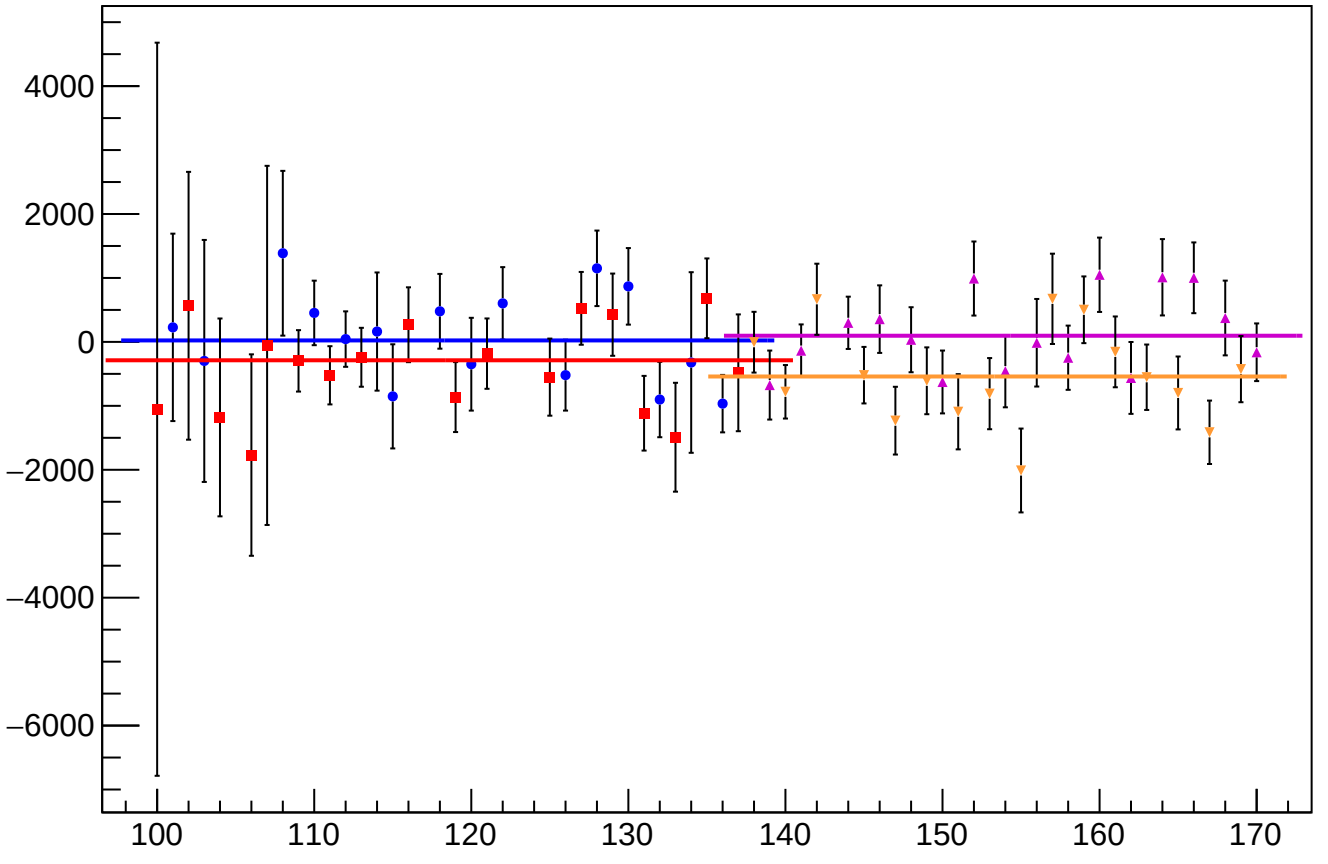
Right Out: 1126.960+/-0.301 $\chi^2$/NDF: 222740.2/17

Left In: 1101.842+/-0.214 $\chi^2$/NDF:29937.1/15

\+ sign 1106.853+/-0.177 $\chi^2$/NDF: 656869.5/31

All: 1108.589+/-0.124 $\chi^2$/NDF: 914346.9/65

\- sign 1110.279+/-0.175 $\chi^2$/NDF: 257287.8/33




Right In: 22.923+/-161.238 $\chi^2$/NDF: 19.0/15

Left Out: -541.057+/-131.526 $\chi^2$/NDF:25.0/15

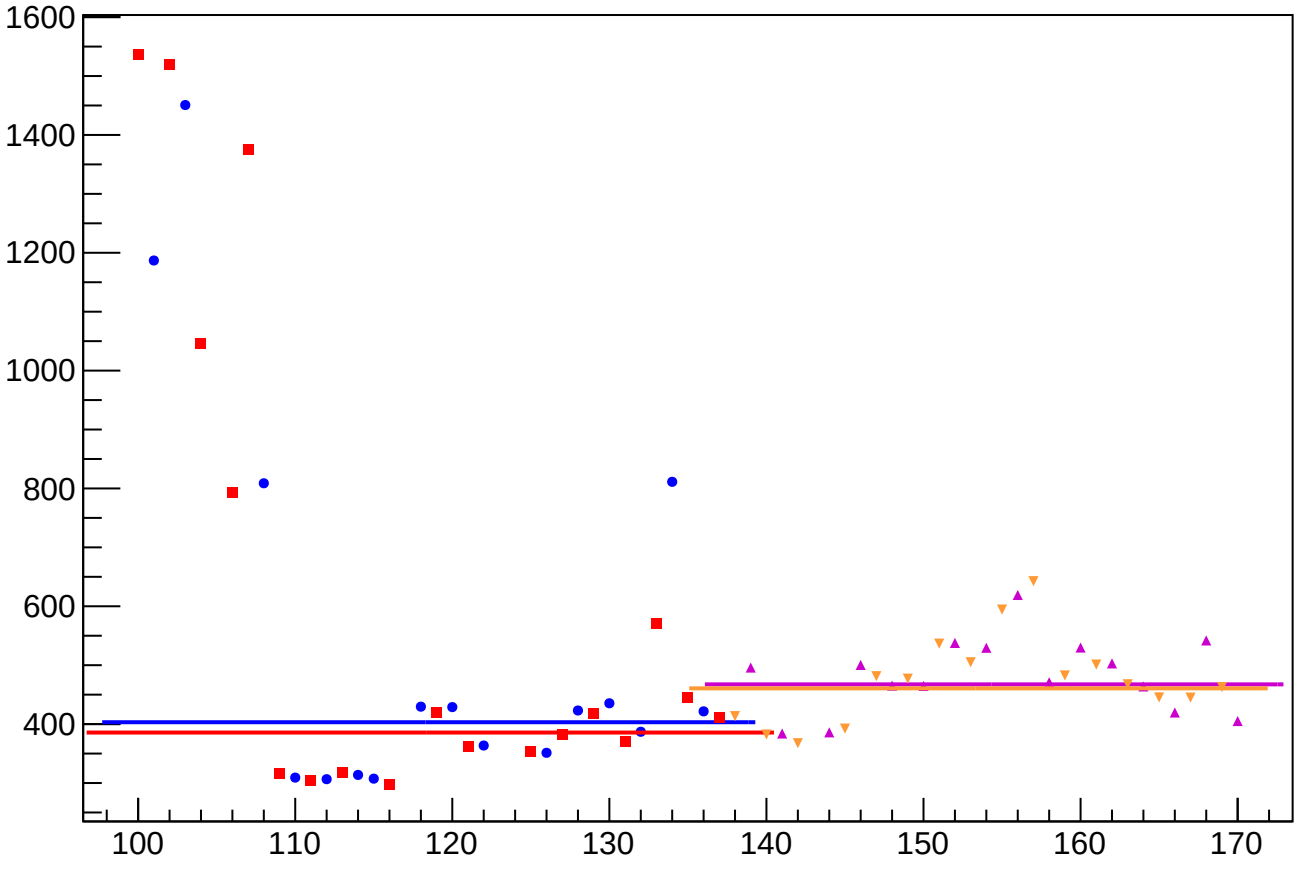
Right Out: -287.614+/-156.212 $\chi^2$/NDF: 13.7/17

Left In: 96.396+/-129.967 $\chi^2$/NDF:18.5/15

+ sign -315.721+/-101.918 $\chi^2$/NDF: 51.3/31

All: -185.665+/-71.346 $\chi^2$/NDF: 90.2/65

- sign -60.685+/-99.909 $\chi^2$/NDF: 35.7/33




Right In: 403.182+/-0.114 $\chi^2$/NDF: 1812111.0/15

Left Out: 460.692+/-0.093 $\chi^2$/NDF:478578.1/15

Right Out: 385.682+/-0.110 $\chi^2$/NDF: 1747152.2/17

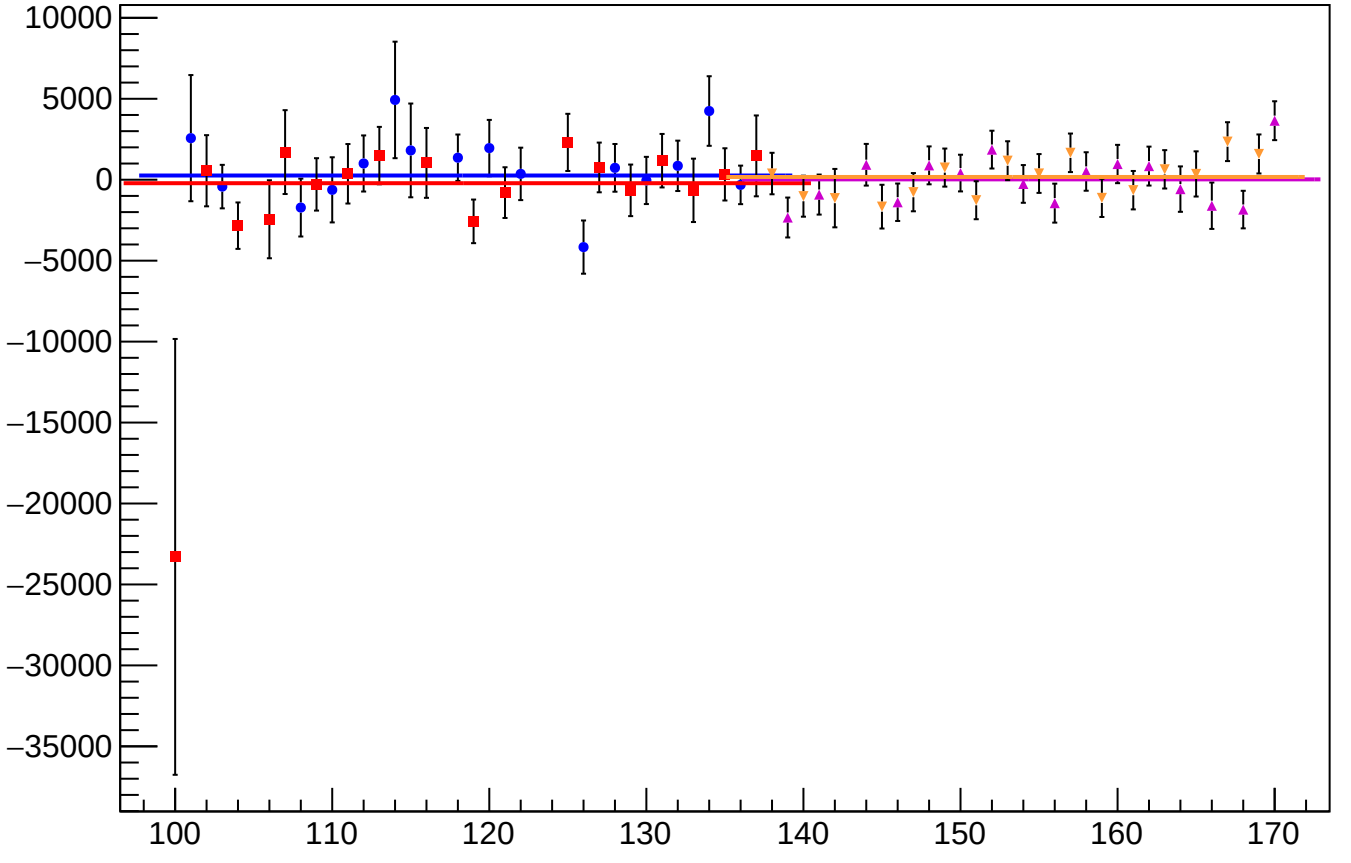
Left In: 467.452+/-0.092 $\chi^2$/NDF:444240.2/15

\+ sign 437.714+/-0.072 $\chi^2$/NDF: 2443467.6/31

All: 435.822+/-0.050 $\chi^2$/NDF: 4960059.2/65

\- sign 434.003+/-0.071 $\chi^2$/NDF: 2515239.4/33

# eigen_cor_asym_us_dd_atlr_dd_dd_mean vs Slug




Right In: 260.415+/-424.657 $\chi^2$/NDF: 16.9/15

Left Out: 169.909+/-310.256 $\chi^2$/NDF:14.5/15

Right Out: -214.501+/-426.342 $\chi^2$/NDF: 16.2/17

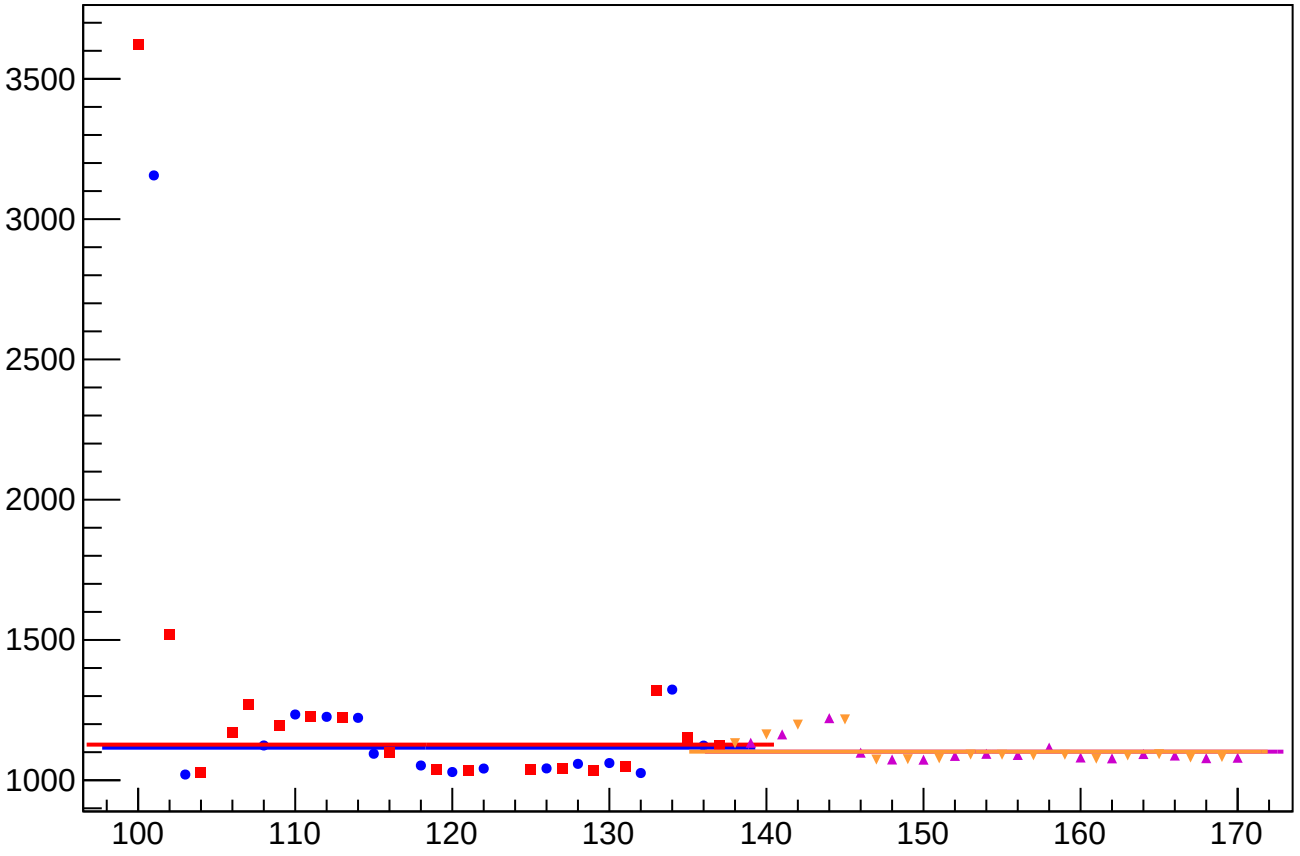
Left In: 22.192+/-303.204 $\chi^2$/NDF:25.3/15

+ sign 201.407+/-250.518 $\chi^2$/NDF: 31.5/31

All: 70.266+/-175.918 $\chi^2$/NDF: 73.8/65

- sign -57.311+/-247.090 $\chi^2$/NDF: 41.8/33

# eigen_cor_asym_us_dd_atlr_dd_dd_rms vs Slug




Right In: 1116.089+/-0.300 $\chi^2$/NDF: 623391.9/15

Left Out: 1101.922+/-0.219 $\chi^2$/NDF:32026.5/15

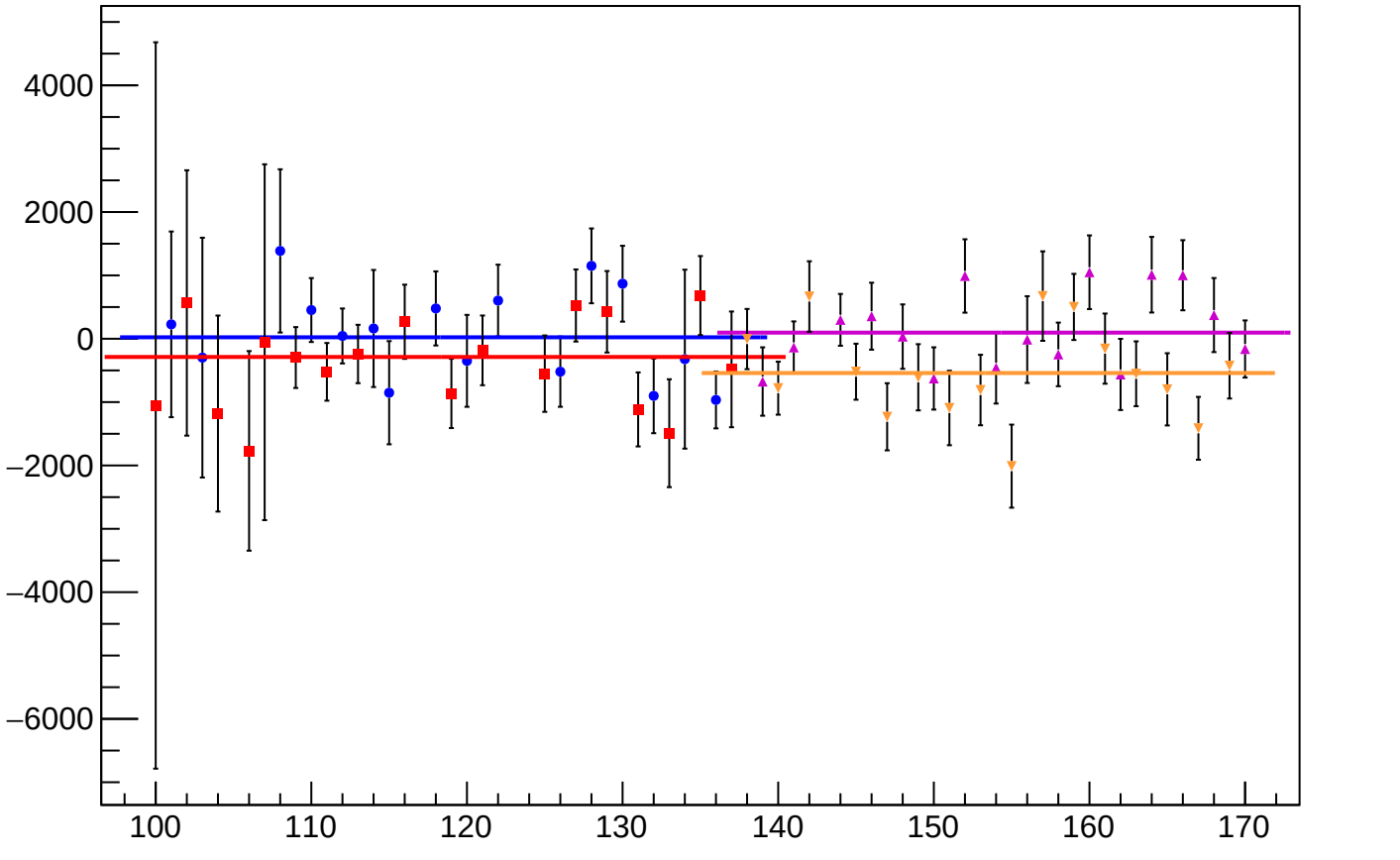
Right Out: 1126.960+/-0.301 $\chi^2$/NDF: 222740.2/17

Left In: 1101.842+/-0.214 $\chi^2$/NDF:29937.1/15

+ sign 1106.853+/-0.177 $\chi^2$/NDF: 656869.5/31

All: 1108.589+/-0.124 $\chi^2$/NDF: 914346.9/65

- sign 1110.279+/-0.175 $\chi^2$/NDF: 257287.8/33




Right In: 22.923+/-161.238 $\chi^2$/NDF: 19.0/15

Left Out: -541.057+/-131.526 $\chi^2$/NDF:25.0/15

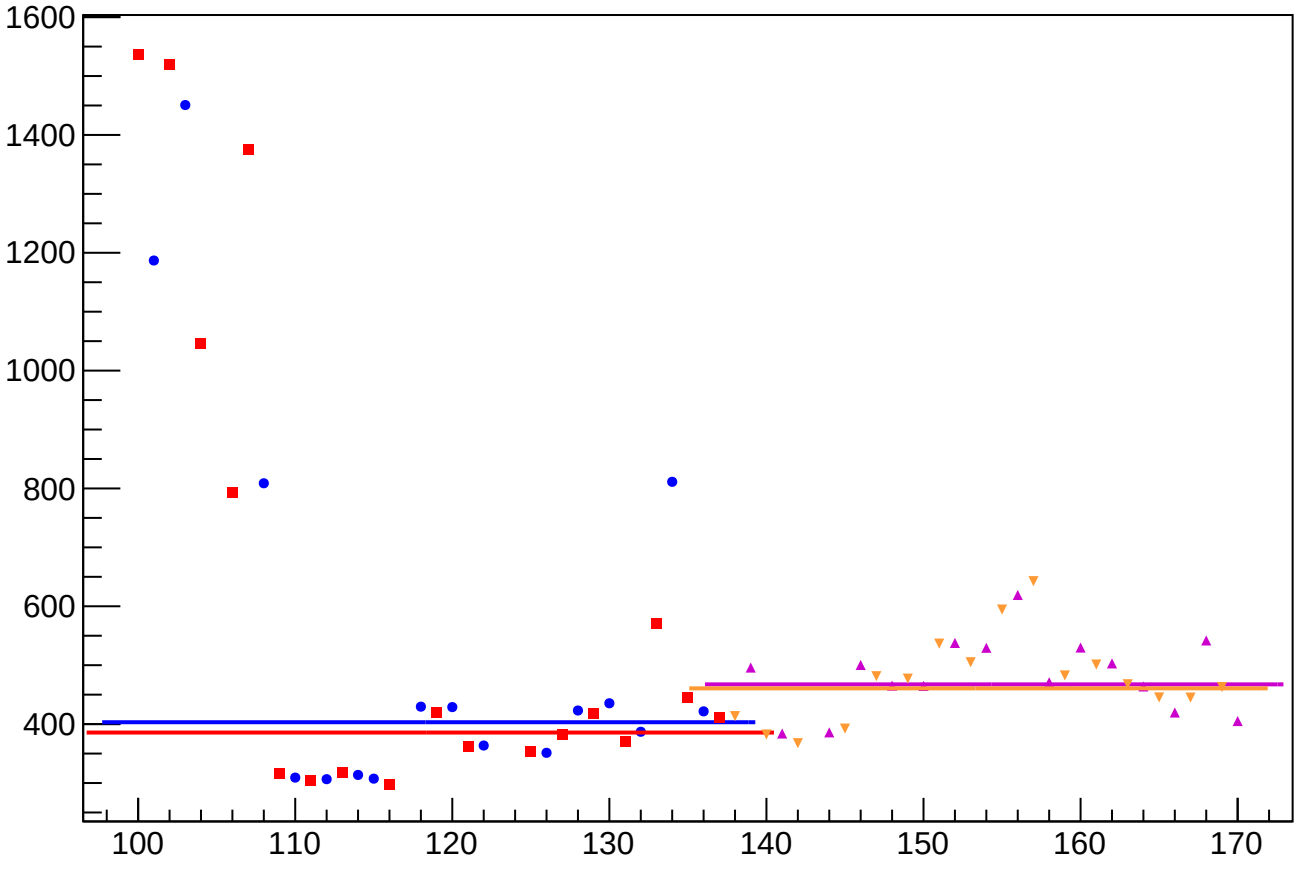
Right Out: -287.614+/-156.212 $\chi^2$/NDF: 13.7/17

Left In: 96.396+/-129.967 $\chi^2$/NDF:18.5/15

+ sign -315.721+/-101.918 $\chi^2$/NDF: 51.3/31

All: -185.665+/-71.346 $\chi^2$/NDF: 90.2/65

- sign -60.685+/-99.909 $\chi^2$/NDF: 35.7/33




Right In: 403.182+/-0.114 $\chi^2$/NDF: 1812111.0/15

Left Out: 460.692+/-0.093 $\chi^2$/NDF:478578.1/15

Right Out: 385.682+/-0.110 $\chi^2$/NDF: 1747152.2/17

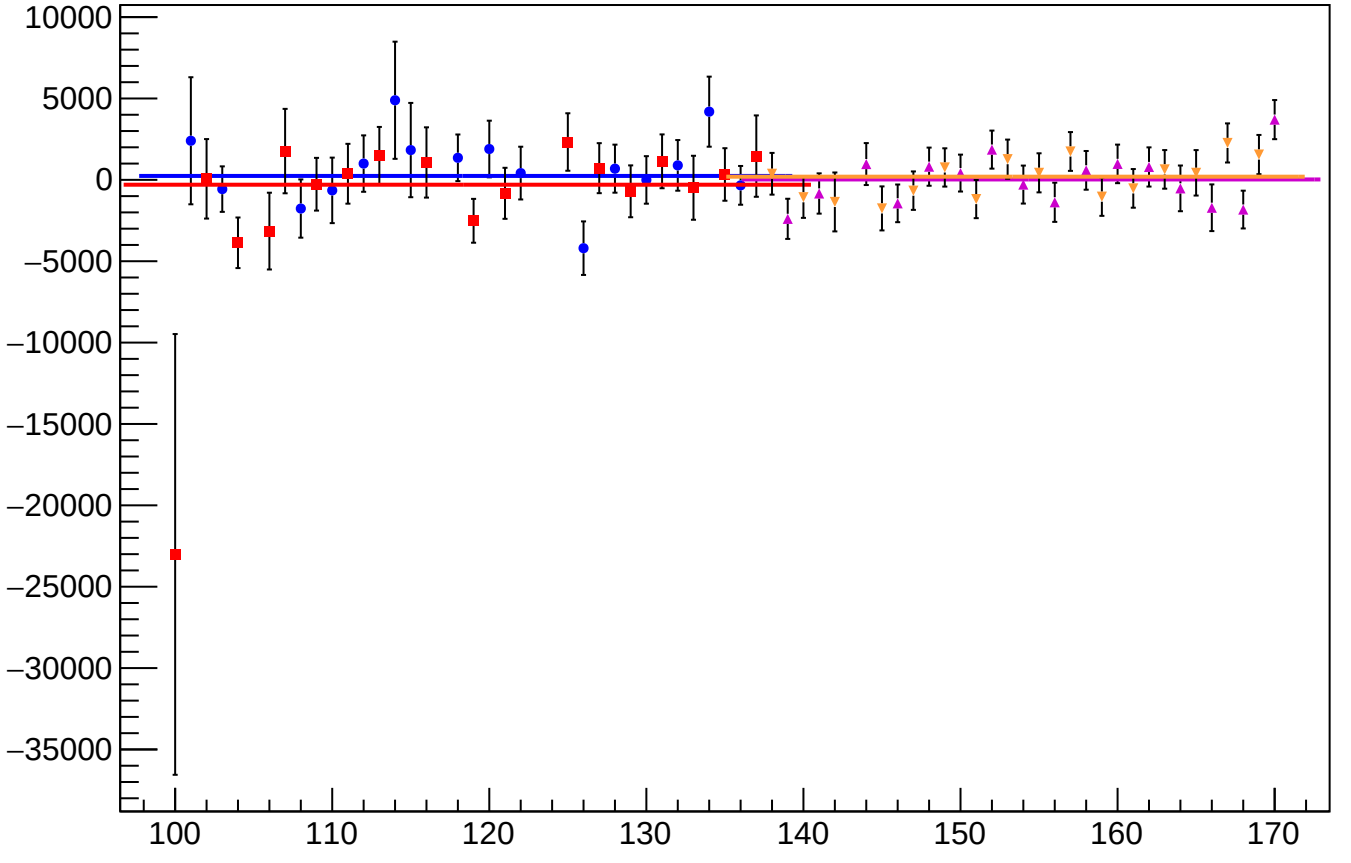
Left In: 467.452+/-0.092 $\chi^2$/NDF:444240.2/15

+ sign 437.714+/-0.072 $\chi^2$/NDF: 2443467.6/31

All: 435.822+/-0.050 $\chi^2$/NDF: 4960059.2/65

- sign 434.003+/-0.071 $\chi^2$/NDF: 2515239.4/33

# dit_asym_us_dd_atlr_dd_dd_mean vs Slug




Right In: 240.827+/-426.592 $\chi^2$/NDF: 17.0/15

Left Out: 194.777+/-310.593 $\chi^2$/NDF:14.4/15

Right Out: -298.921+/-430.767 $\chi^2$/NDF: 18.7/17

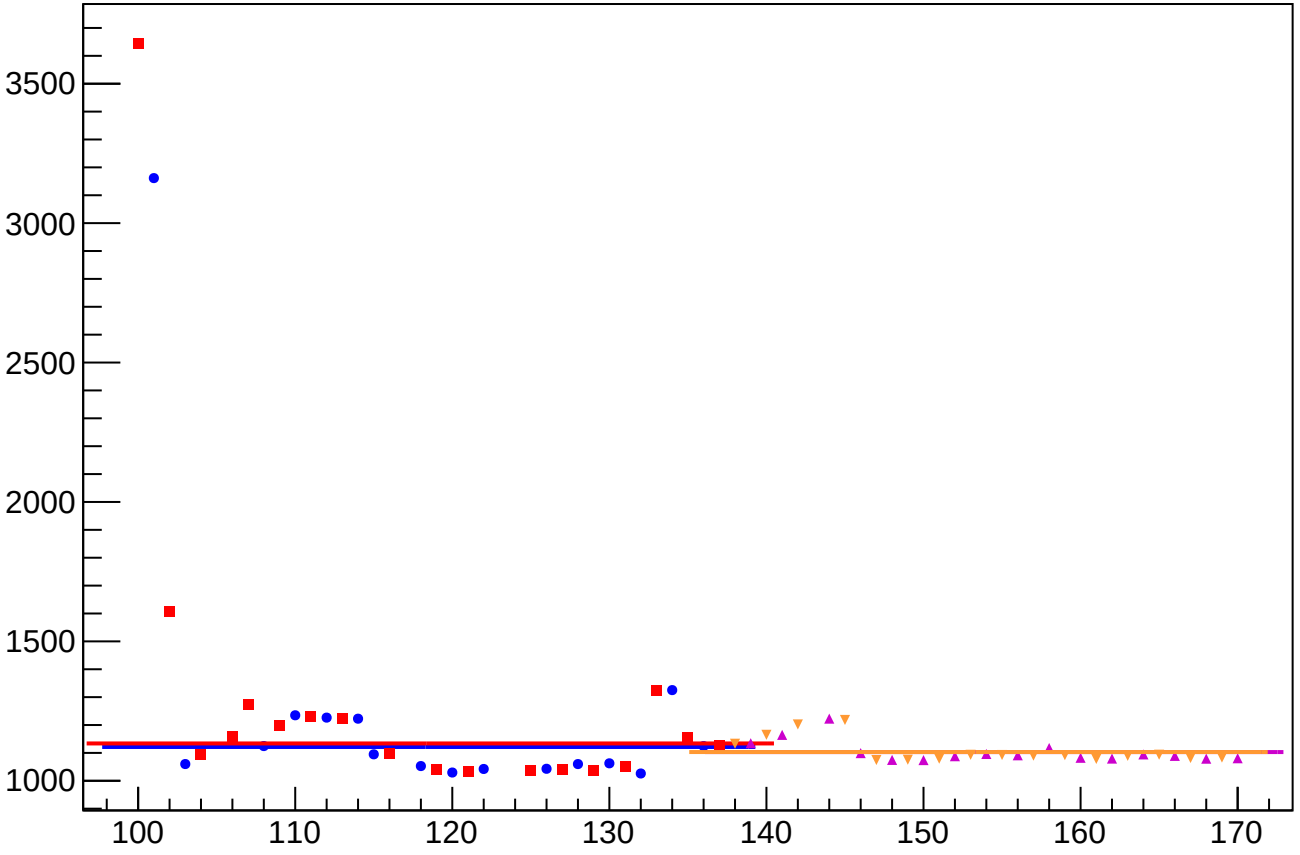
Left In: 24.208+/-303.525 $\chi^2$/NDF:25.7/15

+ sign 210.731+/-251.091 $\chi^2$/NDF: 31.3/31

All: 62.118+/-176.488 $\chi^2$/NDF: 76.8/65

- sign -82.995+/-248.118 $\chi^2$/NDF: 44.8/33

# dit_asym_us_dd_atlr_dd_dd_rms vs Slug




Right In: 1121.294+/-0.302 $\chi^2$/NDF: 617028.4/15

Left Out: 1103.103+/-0.220 $\chi^2$/NDF:32469.3/15

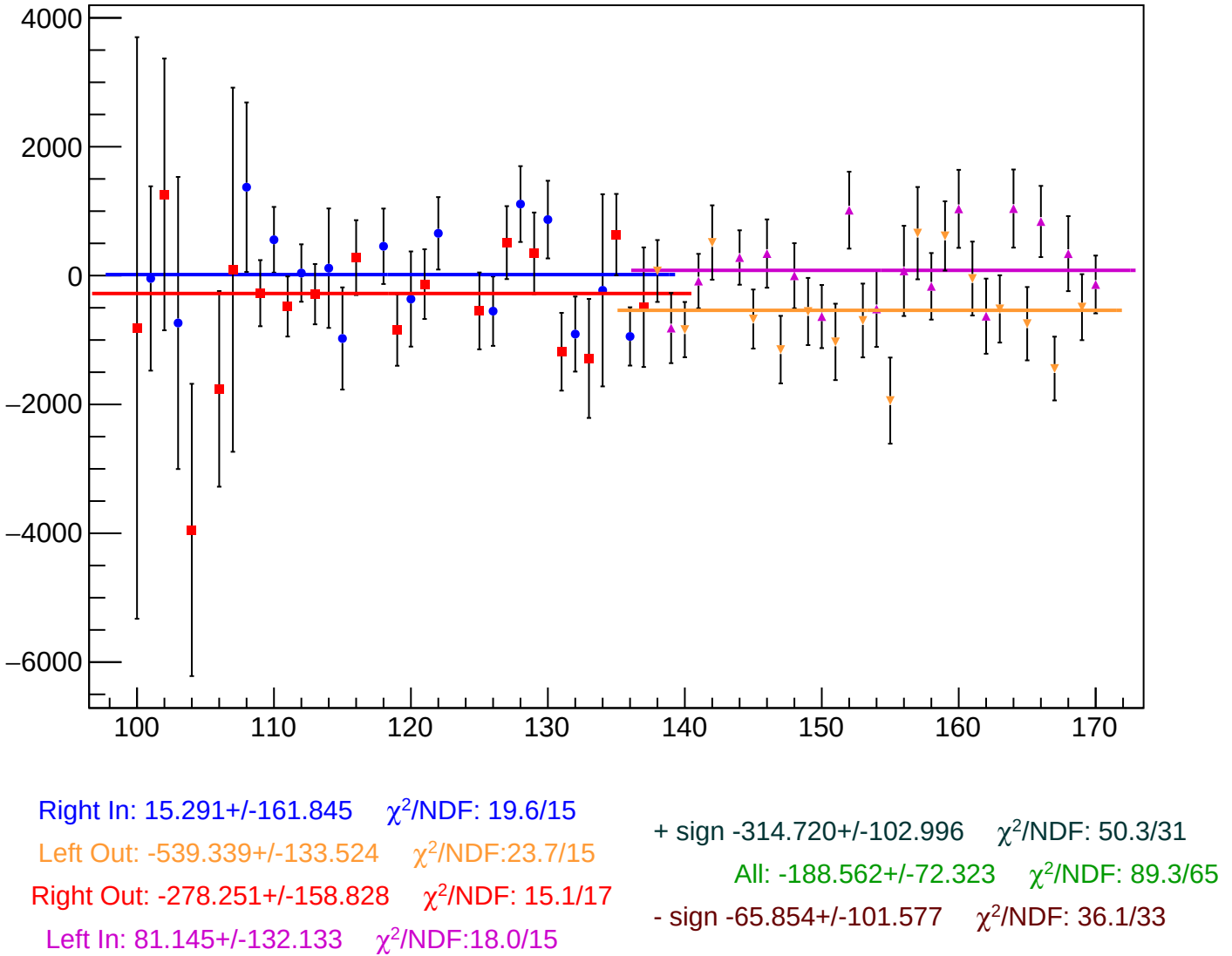
Right Out: 1133.929+/-0.305 $\chi^2$/NDF: 227457.1/17

Left In: 1103.001+/-0.215 $\chi^2$/NDF:30058.2/15

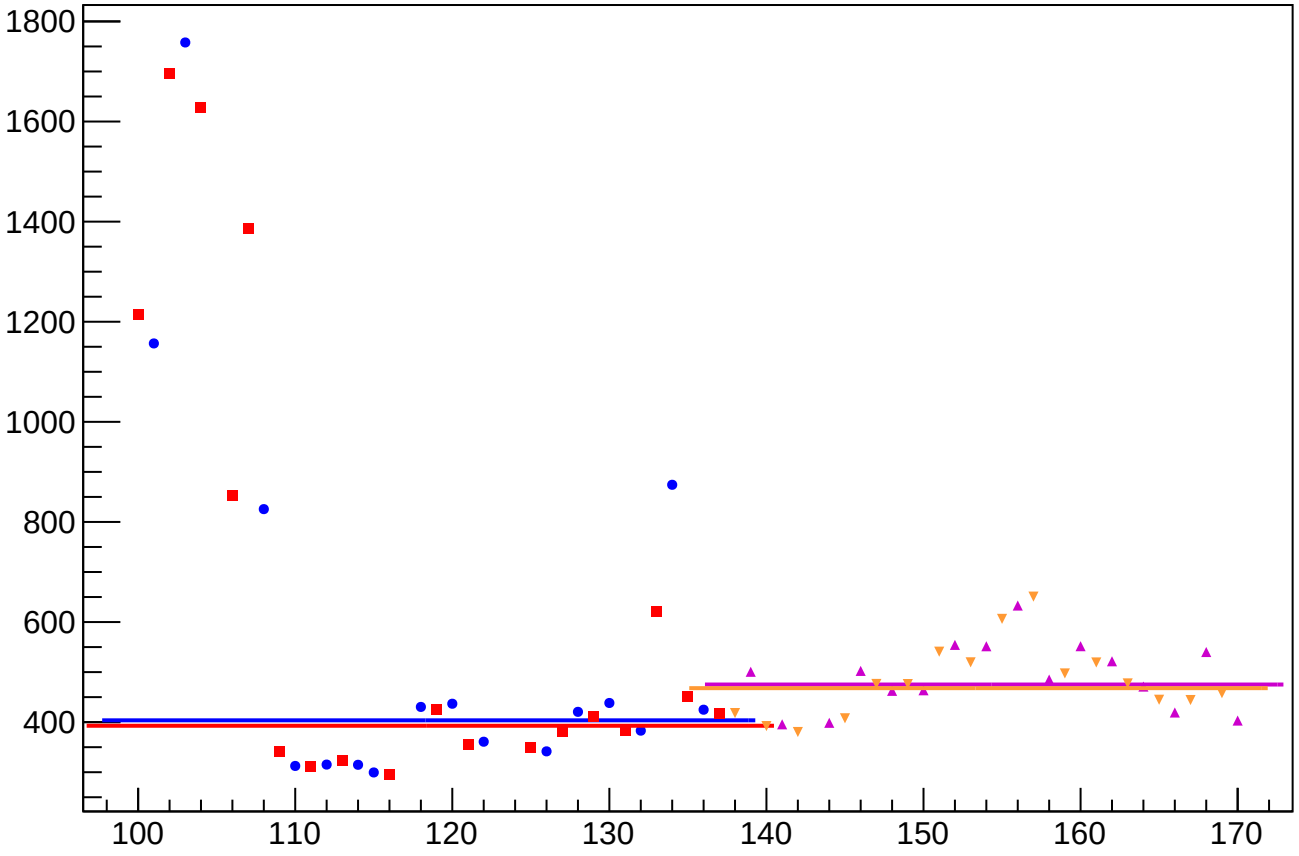
+ sign 1109.406+/-0.178 $\chi^2$/NDF: 651874.4/31

All: 1111.357+/-0.125 $\chi^2$/NDF: 916517.6/65

- sign 1113.262+/-0.175 $\chi^2$/NDF: 264404.5/33


asym_us_dd_atlr_dd_dd_dit_correction_mean vs Slug
4000
2000
0
−2000
−4000
−6000
100
110
120
130
140
150
160
170
Right In: 15.291+/-161.845 χ²/NDF: 19.6/15
Left Out: -539.339+/-133.524 χ²/NDF:23.7/15
Right Out: -278.251+/-158.828 χ²/NDF: 15.1/17
Left In: 81.145+/-132.133 χ²/NDF:18.0/15
+ sign -314.720+/-102.996 χ²/NDF: 50.3/31
All: -188.562+/-72.323 χ²/NDF: 89.3/65
- sign -65.854+/-101.577 χ²/NDF: 36.1/33

# asym_us_dd_atlr_dd_dd_dit_correction_rms vs Slug




Right In: 403.656+/-0.114 $\chi^2$/NDF: 1929597.5/15

Left Out: 467.929+/-0.094 $\chi^2$/NDF:459433.1/15

Right Out: 392.820+/-0.112 $\chi^2$/NDF: 2203456.1/17

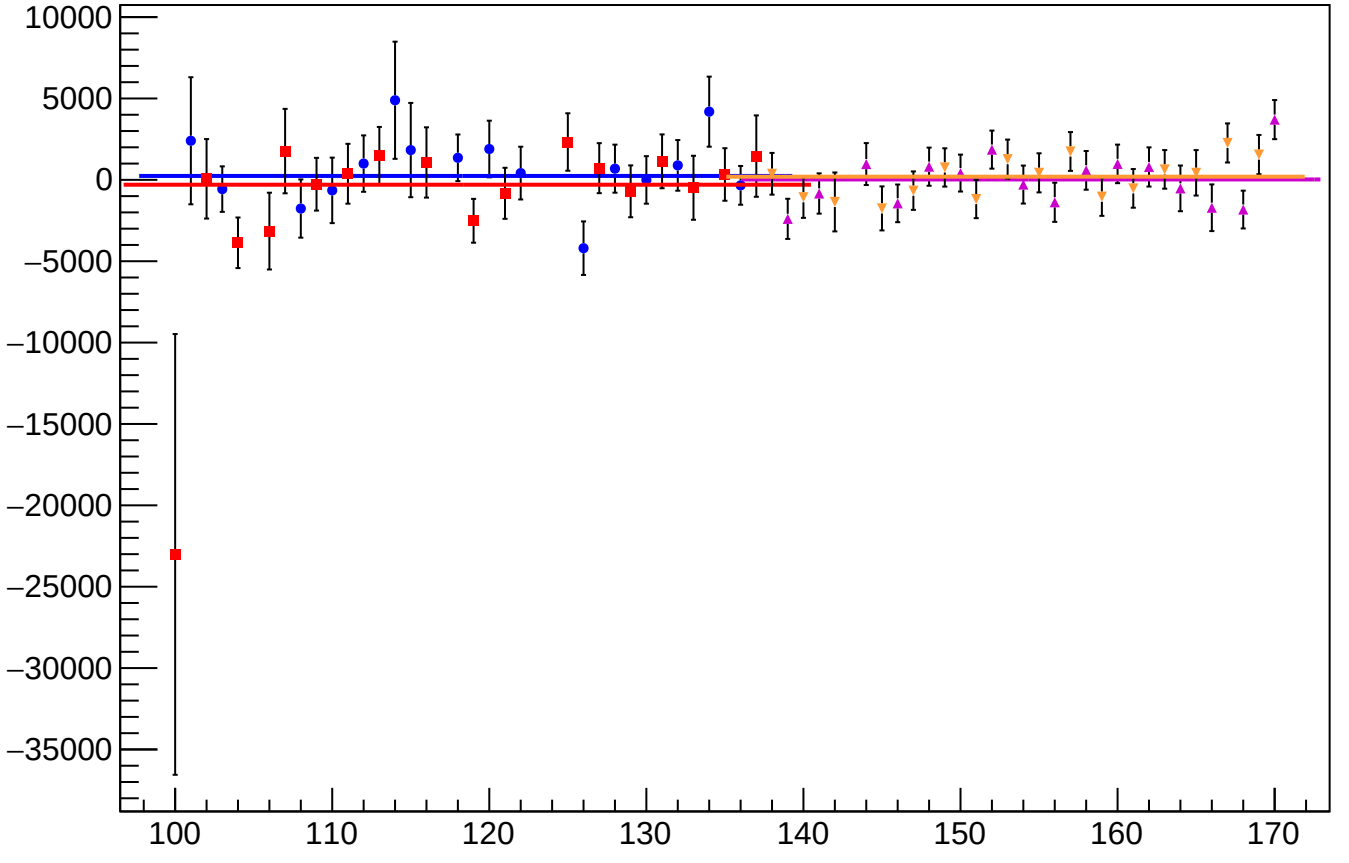
Left In: 475.189+/-0.093 $\chi^2$/NDF:461232.0/15

+ sign 441.899+/-0.073 $\chi^2$/NDF: 2576711.3/31

All: 441.696+/-0.051 $\chi^2$/NDF: 5559305.6/65

- sign 441.499+/-0.072 $\chi^2$/NDF: 2982578.9/33

# eigen_dit_asym_us_dd_atlr_dd_dd_mean vs Slug




Right In: 240.829+/-426.592 $\chi^2$/NDF: 17.0/15

Left Out: 194.773+/-310.593 $\chi^2$/NDF:14.4/15

Right Out: -298.922+/-430.767 $\chi^2$/NDF: 18.7/17

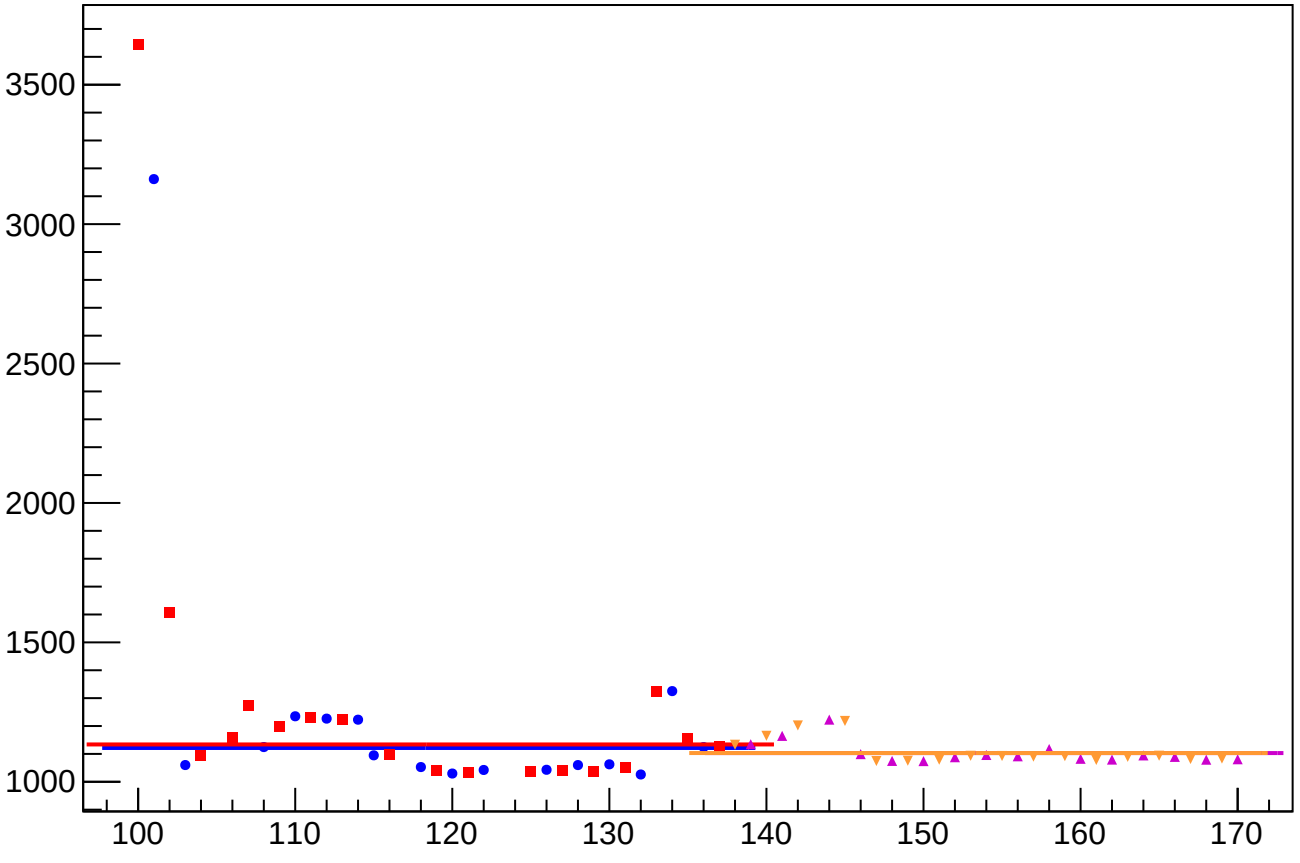
Left In: 24.207+/-303.525 $\chi^2$/NDF:25.7/15

+ sign 210.729+/-251.091 $\chi^2$/NDF: 31.3/31

All: 62.117+/-176.488 $\chi^2$/NDF: 76.8/65

- sign -82.996+/-248.118 $\chi^2$/NDF: 44.8/33

# eigen_dit_asym_us_dd_atlr_dd_dd_rms vs Slug




Right In: 1121.294+/-0.302 $\chi^2$/NDF: 617028.4/15

Left Out: 1103.104+/-0.220 $\chi^2$/NDF:32469.4/15

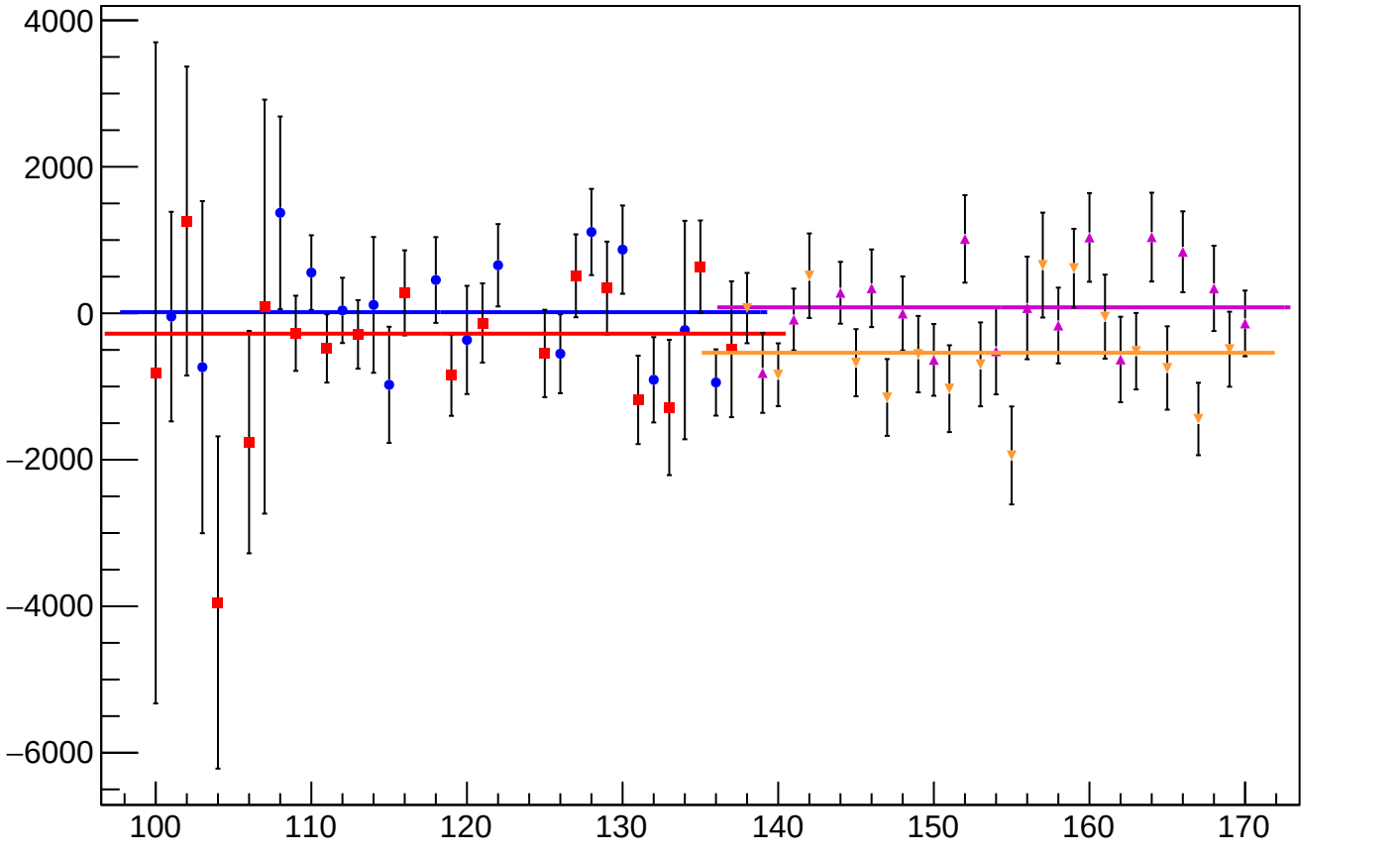
Right Out: 1133.929+/-0.305 $\chi^2$/NDF: 227457.1/17

Left In: 1103.002+/-0.215 $\chi^2$/NDF:30058.2/15

+ sign 1109.406+/-0.178 $\chi^2$/NDF: 651874.5/31

All: 1111.357+/-0.125 $\chi^2$/NDF: 916517.8/65

- sign 1113.262+/-0.175 $\chi^2$/NDF: 264404.6/33




Right In: 15.288+/-161.844 $\chi^2$/NDF: 19.6/15

Left Out: -539.342+/-133.524 $\chi^2$/NDF:23.7/15

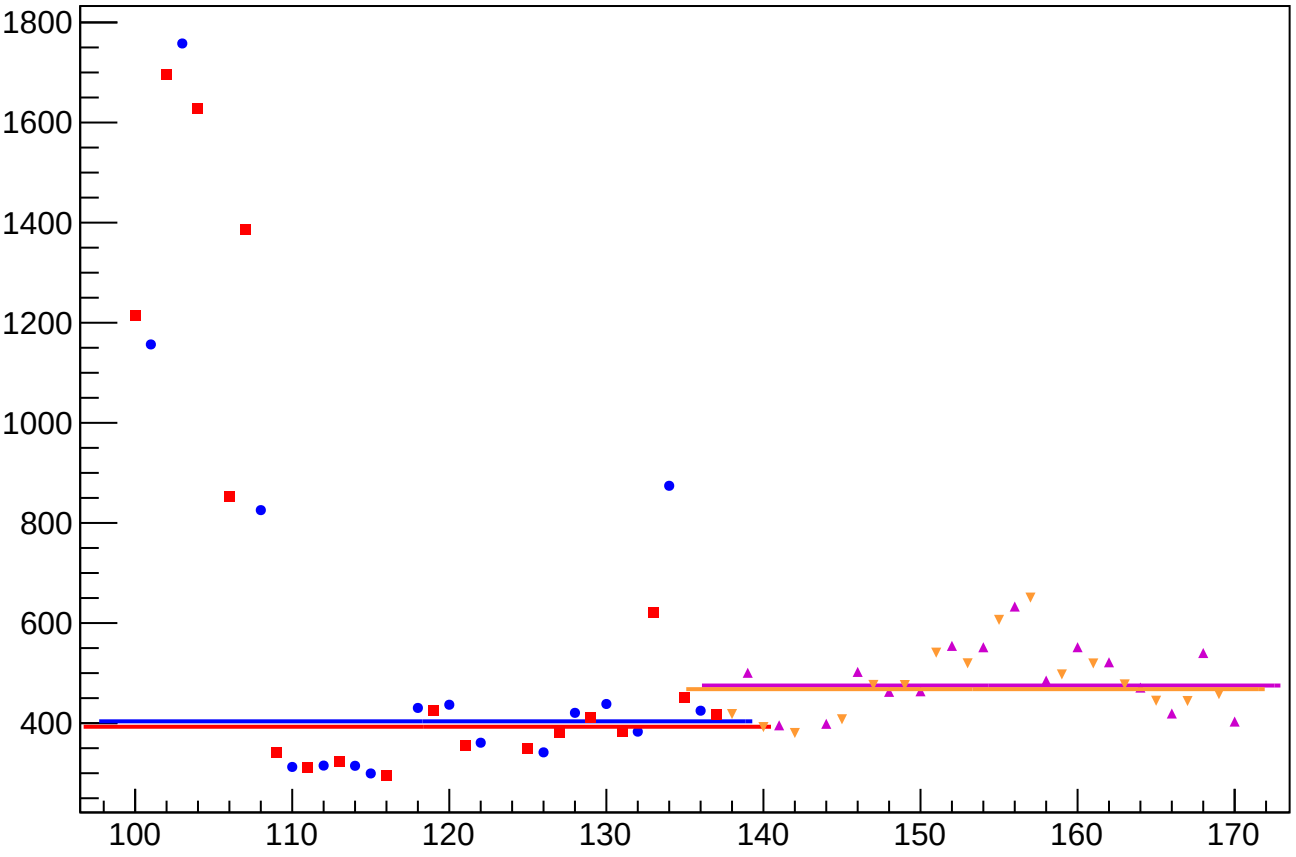
Right Out: -278.249+/-158.826 $\chi^2$/NDF: 15.1/17

Left In: 81.146+/-132.133 $\chi^2$/NDF:18.0/15

+ sign -314.722+/-102.996 $\chi^2$/NDF: 50.3/31

All: -188.562+/-72.322 $\chi^2$/NDF: 89.3/65

- sign -65.855+/-101.577 $\chi^2$/NDF: 36.1/33




Right In: 403.653+/-0.114 $\chi^2$/NDF: 1929594.3/15

Left Out: 467.929+/-0.094 $\chi^2$/NDF:459456.0/15

Right Out: 392.817+/-0.112 $\chi^2$/NDF: 2203462.7/17

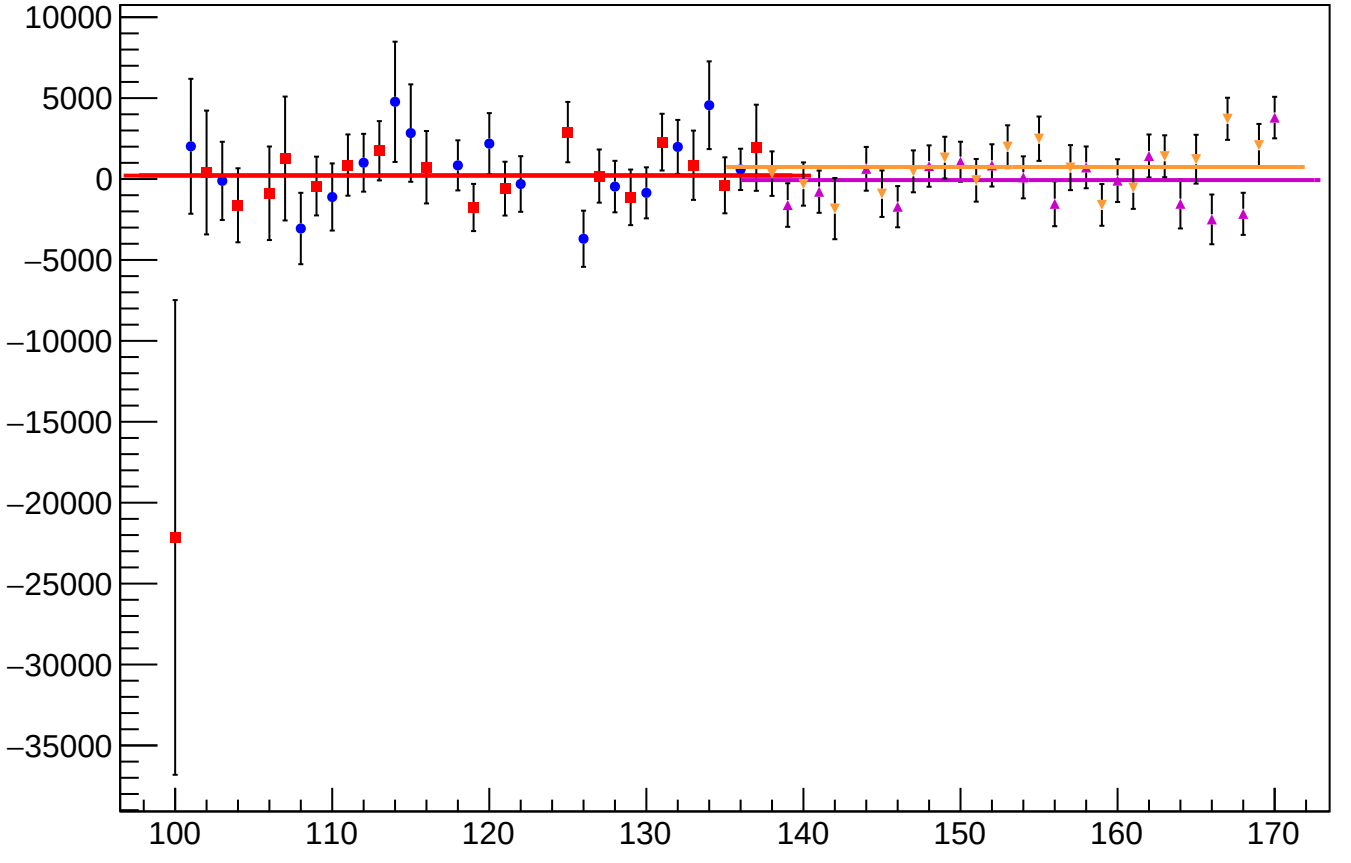
Left In: 475.190+/-0.093 $\chi^2$/NDF:461240.8/15

+ sign 441.898+/-0.073 $\chi^2$/NDF: 2576750.8/31

All: 441.695+/-0.051 $\chi^2$/NDF: 5559394.6/65

- sign 441.498+/-0.072 $\chi^2$/NDF: 2982628.5/33

# asym_us_dd_atlr_dd_dd_mean vs Slug




Right In: 224.817+/-474.559 $\chi^2$/NDF: 16.1/15

Left Out: 744.463+/-340.297 $\chi^2$/NDF:17.9/15

Right Out: 209.751+/-477.820 $\chi^2$/NDF: 11.0/17

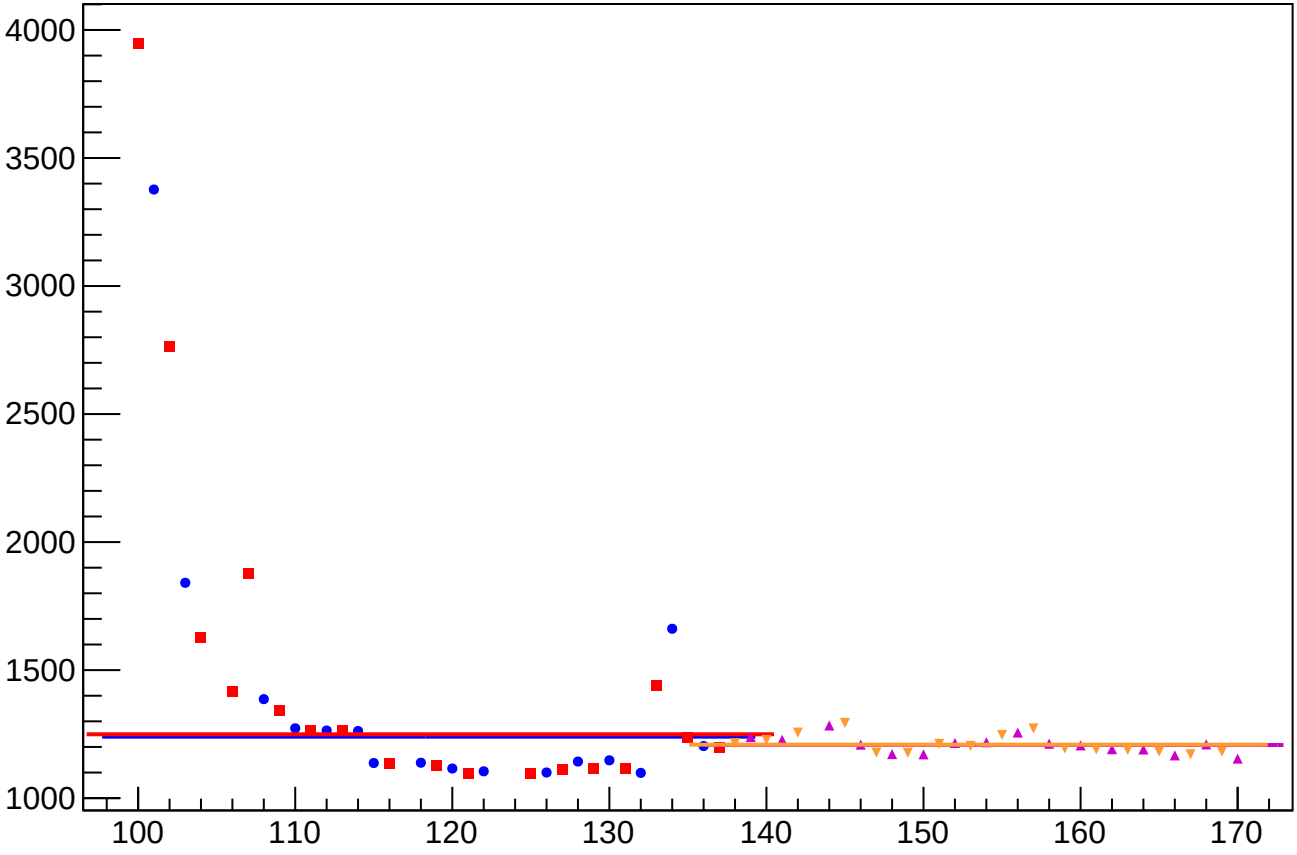
Left In: -65.689+/-332.261 $\chi^2$/NDF:23.1/15

\+ sign 567.998+/-276.545 $\chi^2$/NDF: 34.9/31

All: 292.326+/-194.206 $\chi^2$/NDF: 71.1/65

\- sign 24.087+/-272.791 $\chi^2$/NDF: 34.3/33

# asym_us_dd_atlr_dd_dd_rms vs Slug




Right In: 1240.140+/-0.336 $\chi^2$/NDF: 782679.7/15

Left Out: 1208.855+/-0.241 $\chi^2$/NDF:21016.4/15

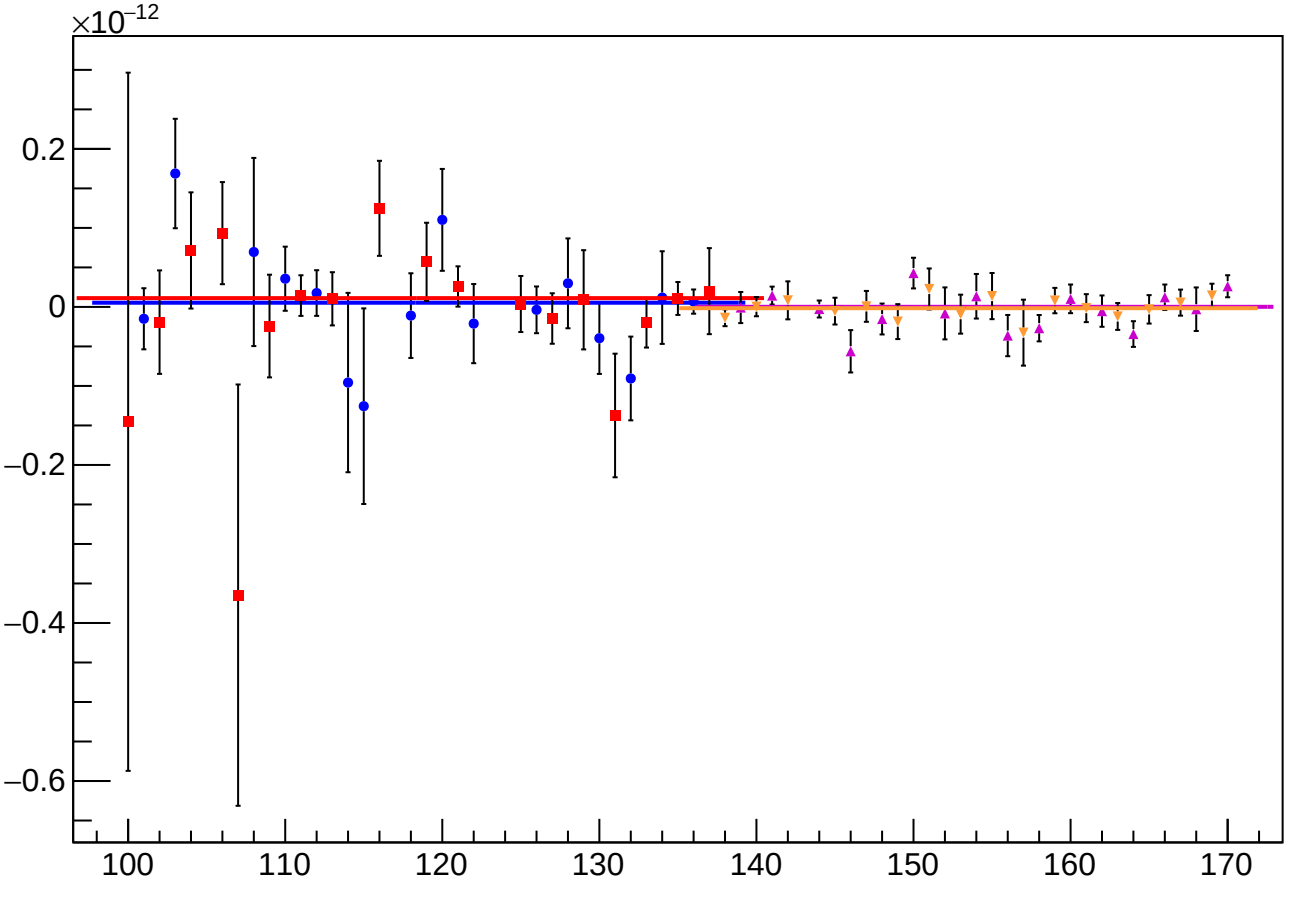
Right Out: 1249.410+/-0.338 $\chi^2$/NDF: 606099.2/17

Left In: 1207.620+/-0.235 $\chi^2$/NDF:19309.6/15

+ sign 1219.479+/-0.196 $\chi^2$/NDF: 809436.6/31

All: 1220.372+/-0.137 $\chi^2$/NDF: 1445198.7/65

- sign 1221.241+/-0.193 $\chi^2$/NDF: 635721.0/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 16.4/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:6.0/15

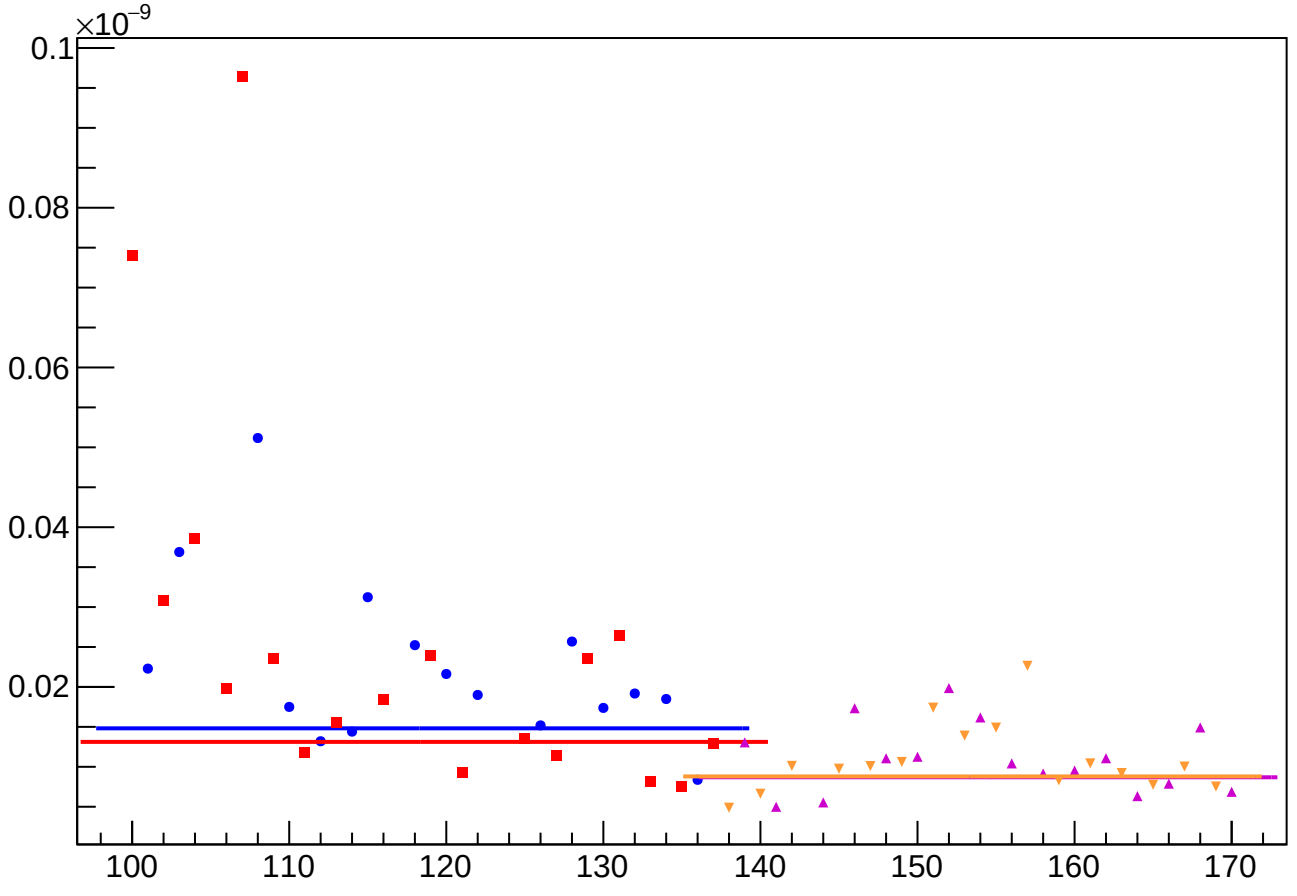
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.0/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:25.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 22.8/31

All: 0.000+/-0.000 $\chi^2$/NDF: 64.5/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 41.5/33




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1081472.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1035644.6/15

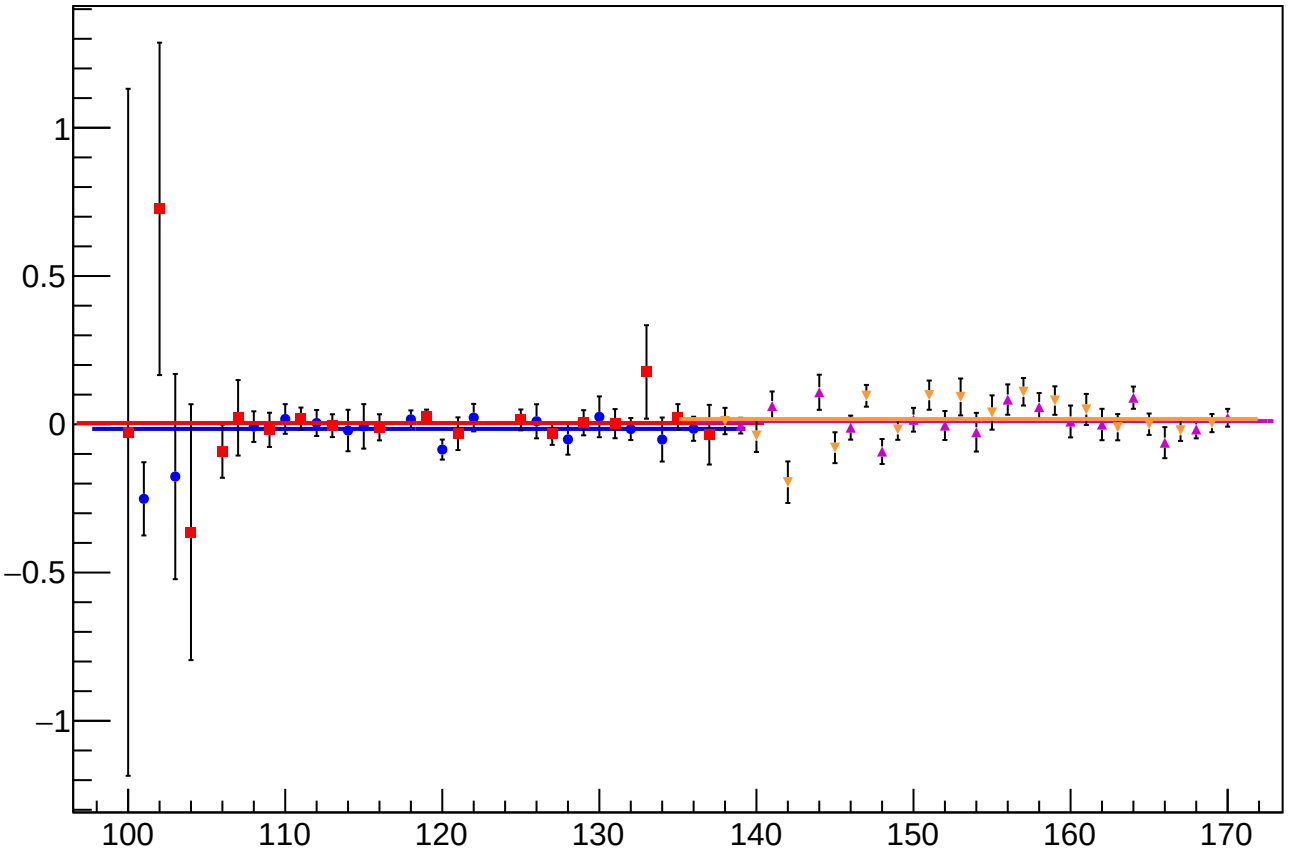
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1181949.6/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:1353436.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2762298.4/31

All: 0.000+/-0.000 $\chi^2$/NDF: 5673021.8/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 2903009.3/33




Right In: -0.016+/-0.012 $\chi^2$/NDF: 11.9/15

Left Out: 0.018+/-0.011 $\chi^2$/NDF:31.4/15

Right Out: 0.004+/-0.011 $\chi^2$/NDF: 7.9/17

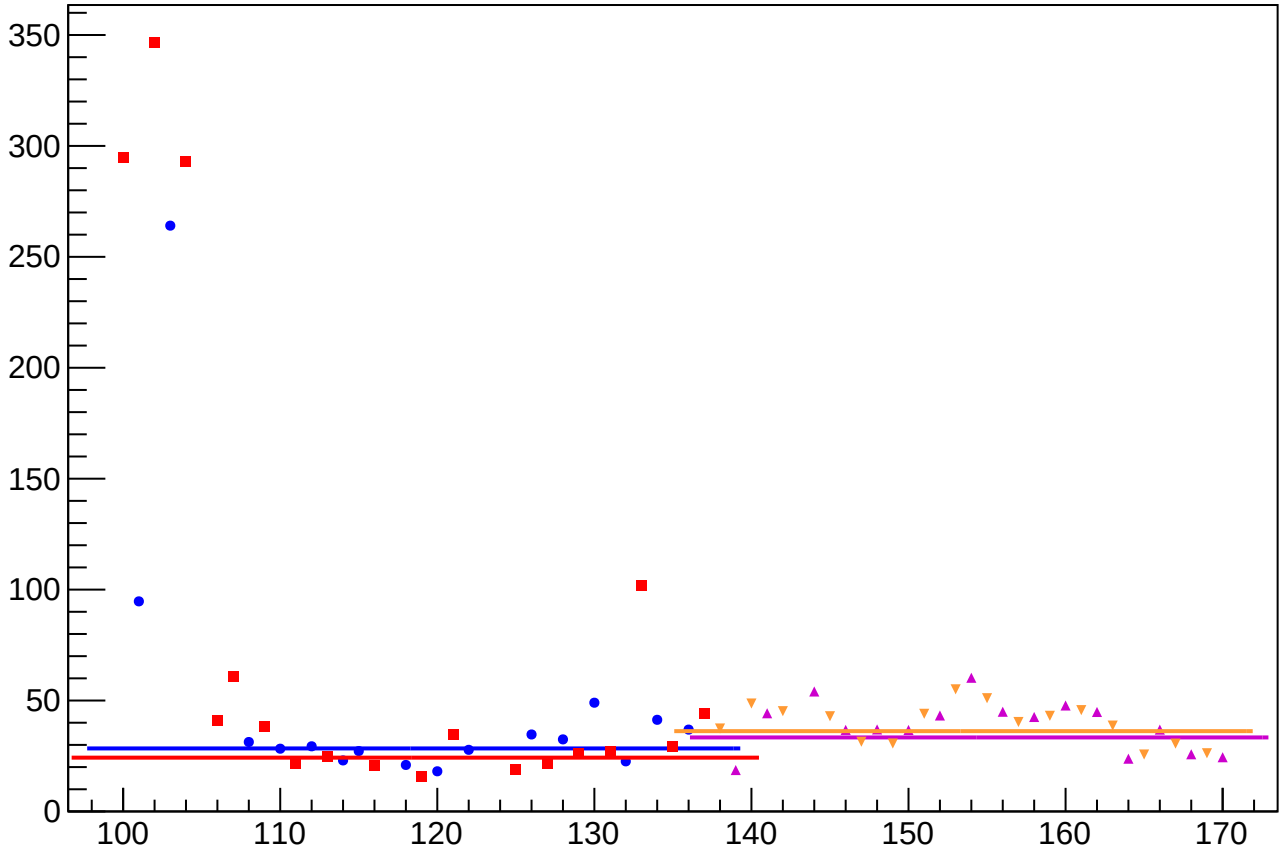
Left In: 0.011+/-0.010 $\chi^2$/NDF:21.2/15

+ sign 0.003+/-0.008 $\chi^2$/NDF: 47.4/31

All: 0.005+/-0.006 $\chi^2$/NDF: 76.8/65

- sign 0.008+/-0.008 $\chi^2$/NDF: 29.2/33

# asym_us_dd_atlr_dd_dd_dit_vs_cor_diff_rms vs Slug




Right In: 28.411+/-0.009 $\chi^2$/NDF: 2245642.8/15

Left Out: 36.199+/-0.008 $\chi^2$/NDF:1179349.6/15

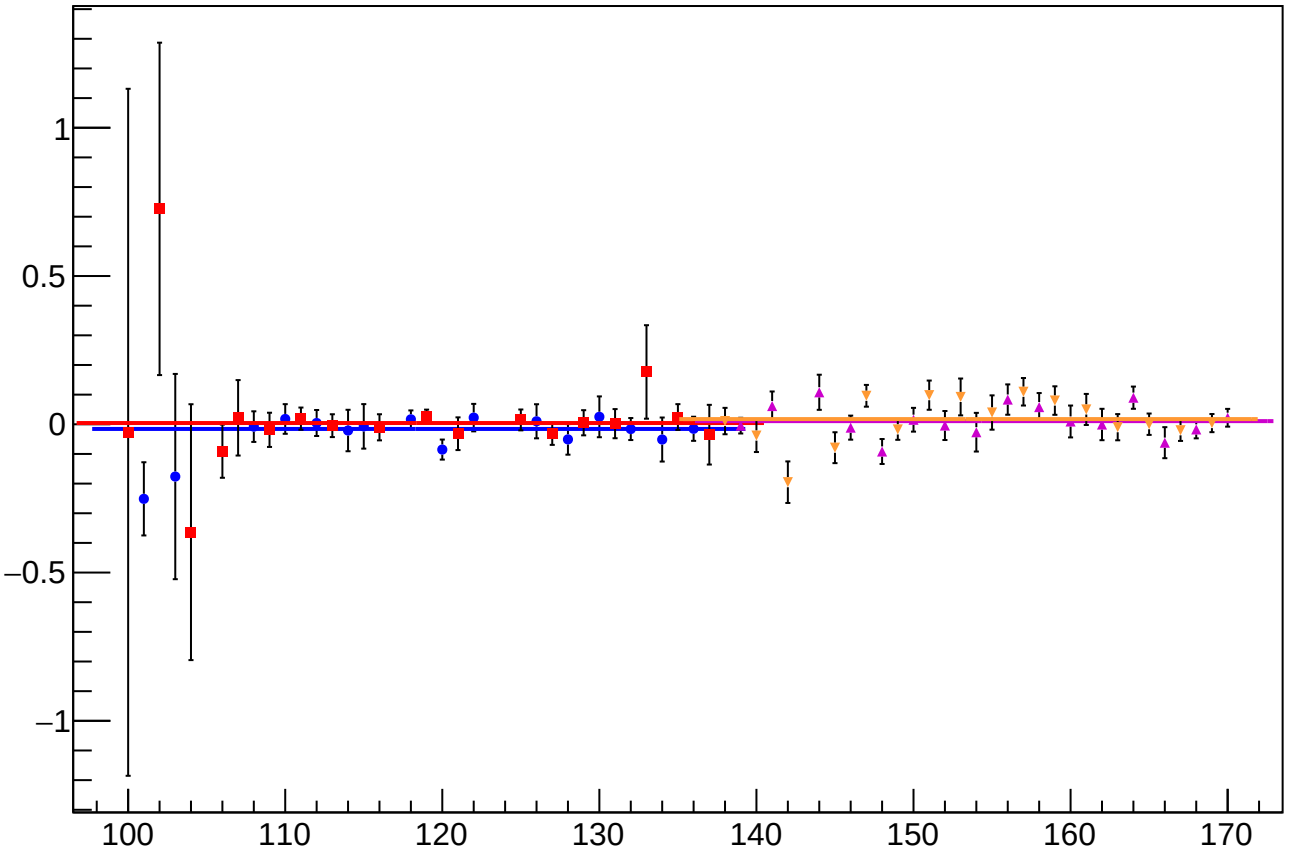
Right Out: 24.255+/-0.008 $\chi^2$/NDF: 2913469.3/17

Left In: 33.365+/-0.007 $\chi^2$/NDF:2283473.7/15

+ sign 32.751+/-0.006 $\chi^2$/NDF: 3871285.0/31

All: 30.899+/-0.004 $\chi^2$/NDF: 9959533.2/65

- sign 29.279+/-0.005 $\chi^2$/NDF: 5896469.9/33




Right In: -0.016+/-0.012 $\chi^2$/NDF: 11.9/15

Left Out: 0.018+/-0.011 $\chi^2$/NDF:31.4/15

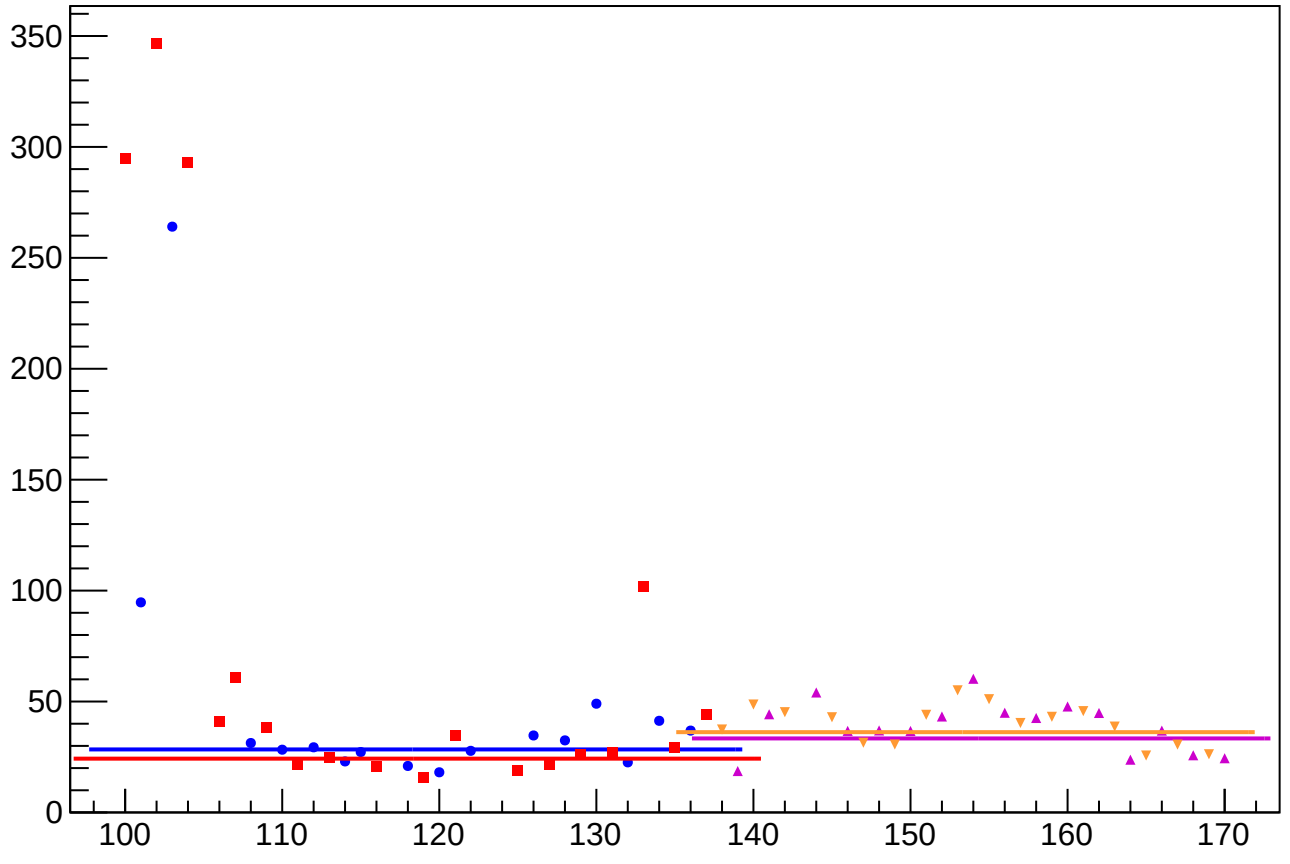
Right Out: 0.004+/-0.011 $\chi^2$/NDF: 7.9/17

Left In: 0.011+/-0.010 $\chi^2$/NDF:21.2/15

+ sign 0.003+/-0.008 $\chi^2$/NDF: 47.4/31

All: 0.005+/-0.006 $\chi^2$/NDF: 76.8/65

- sign 0.008+/-0.008 $\chi^2$/NDF: 29.2/33




Right In: 28.411+/-0.009 $\chi^2$/NDF: 2245642.8/15

Left Out: 36.199+/-0.008 $\chi^2$/NDF:1179349.6/15

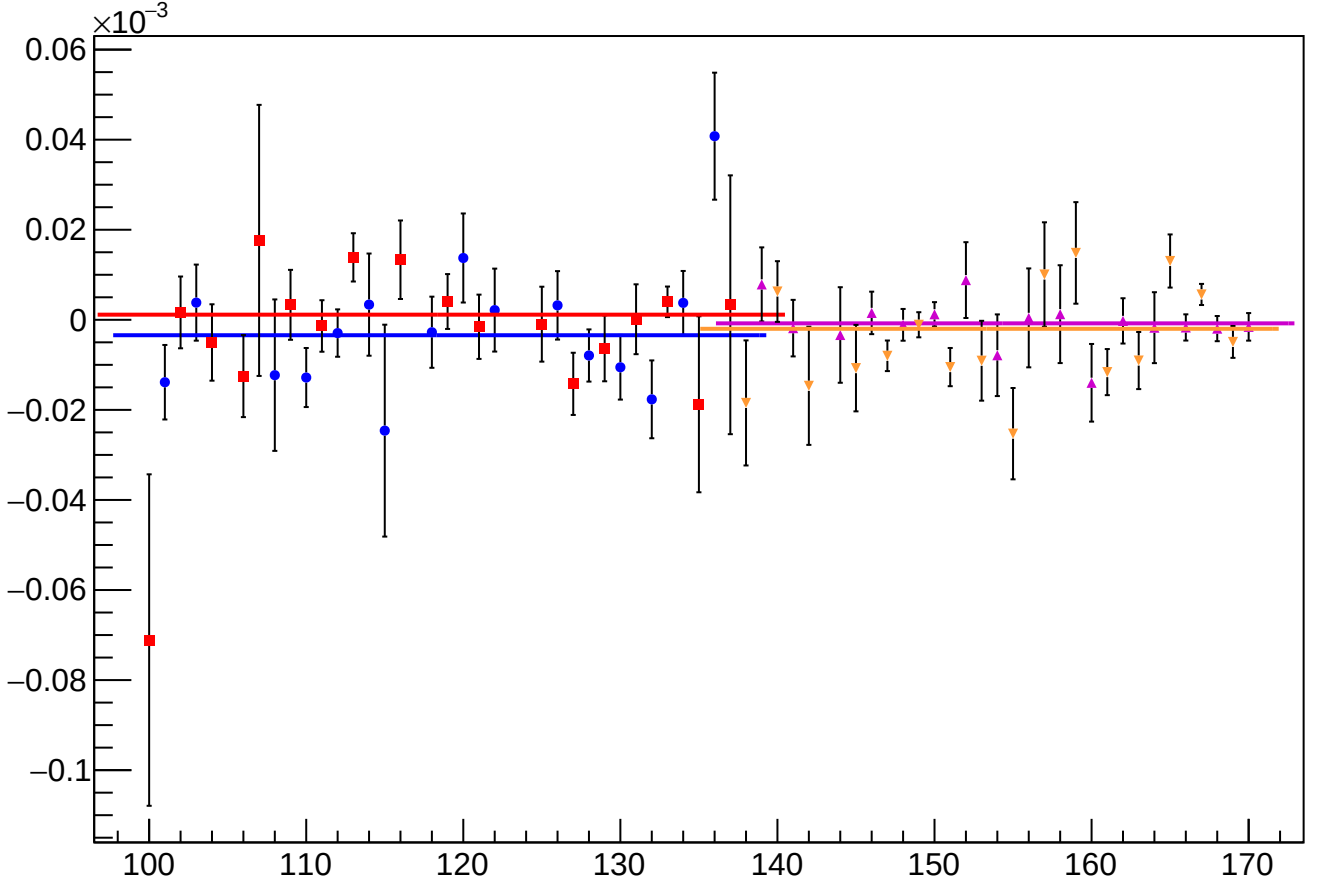
Right Out: 24.255+/-0.008 $\chi^2$/NDF: 2913469.3/17

Left In: 33.365+/-0.007 $\chi^2$/NDF:2283473.7/15

+ sign 32.751+/-0.006 $\chi^2$/NDF: 3871285.0/31

All: 30.899+/-0.004 $\chi^2$/NDF: 9959533.2/65

- sign 29.279+/-0.005 $\chi^2$/NDF: 5896469.9/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 25.1/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:43.7/15

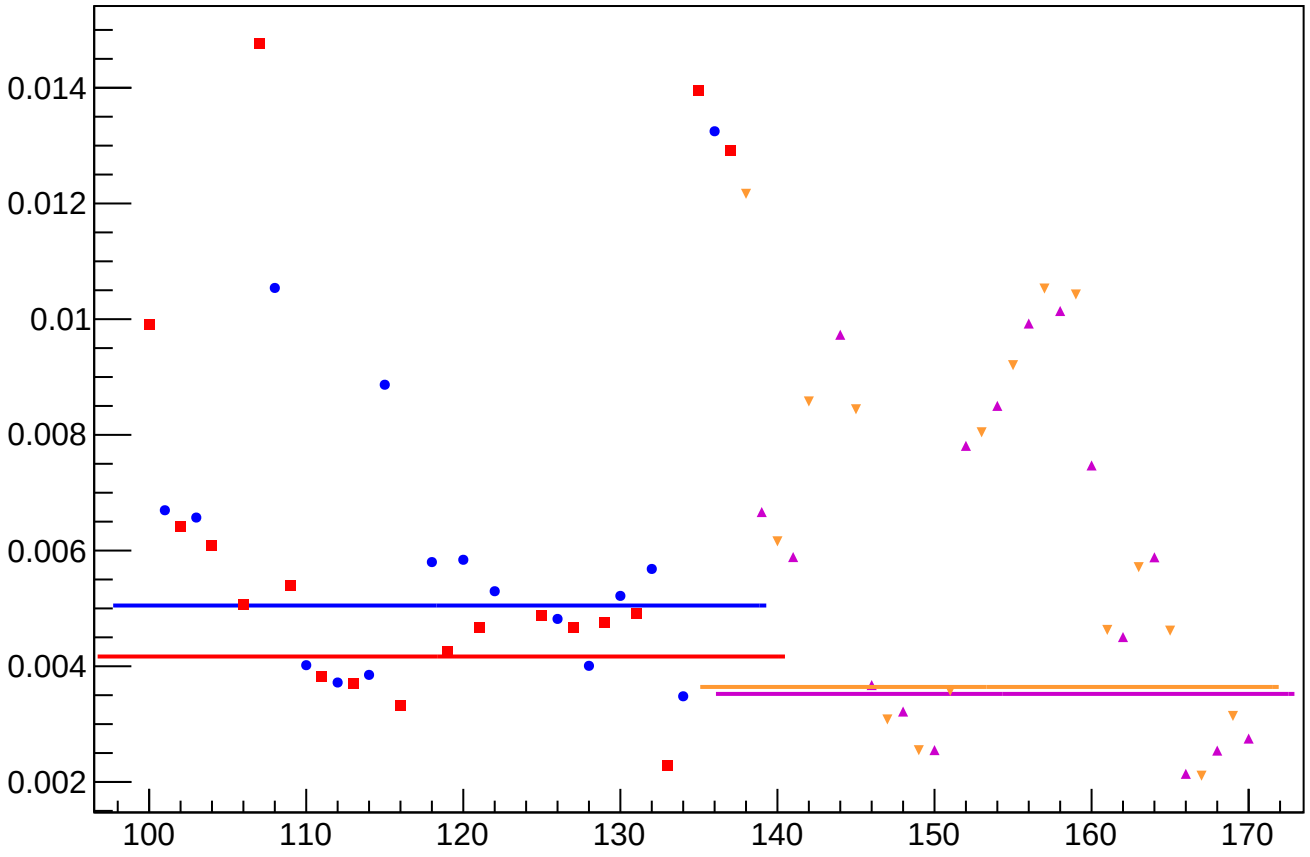
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 23.0/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:6.7/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 69.2/31

All: -0.000+/-0.000 $\chi^2$/NDF: 102.1/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 30.5/33




Right In: 0.005+/-0.000 $\chi^2$/NDF: 1494215.1/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:5941551.7/15

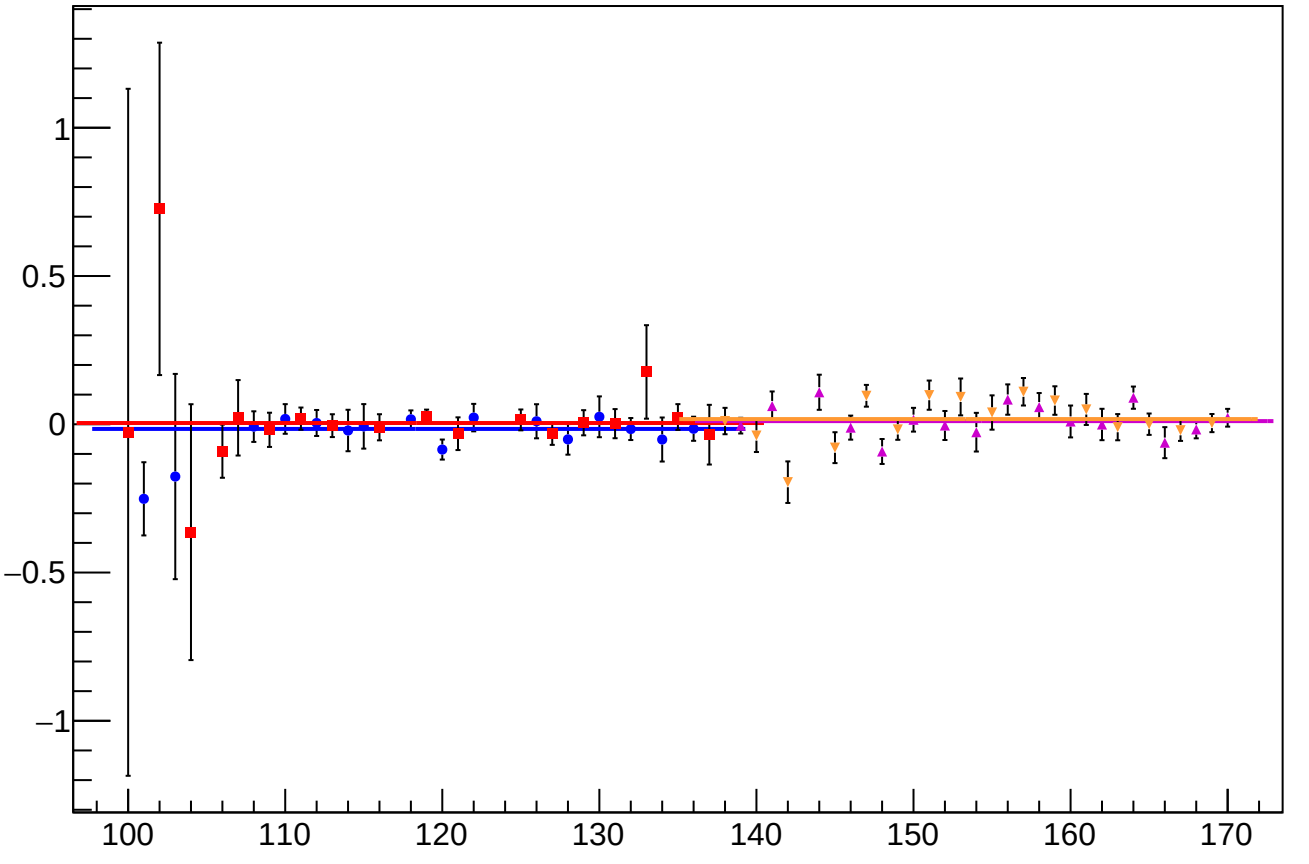
Right Out: 0.004+/-0.000 $\chi^2$/NDF: 2041975.6/17

Left In: 0.004+/-0.000 $\chi^2$/NDF:5581648.8/15

+ sign 0.004+/-0.000 $\chi^2$/NDF: 8154227.4/31

All: 0.004+/-0.000 $\chi^2$/NDF: 16060185.7/65

- sign 0.004+/-0.000 $\chi^2$/NDF: 7823885.7/33




Right In: -0.016+/-0.012 $\chi^2$/NDF: 11.9/15

Left Out: 0.018+/-0.011 $\chi^2$/NDF:31.4/15

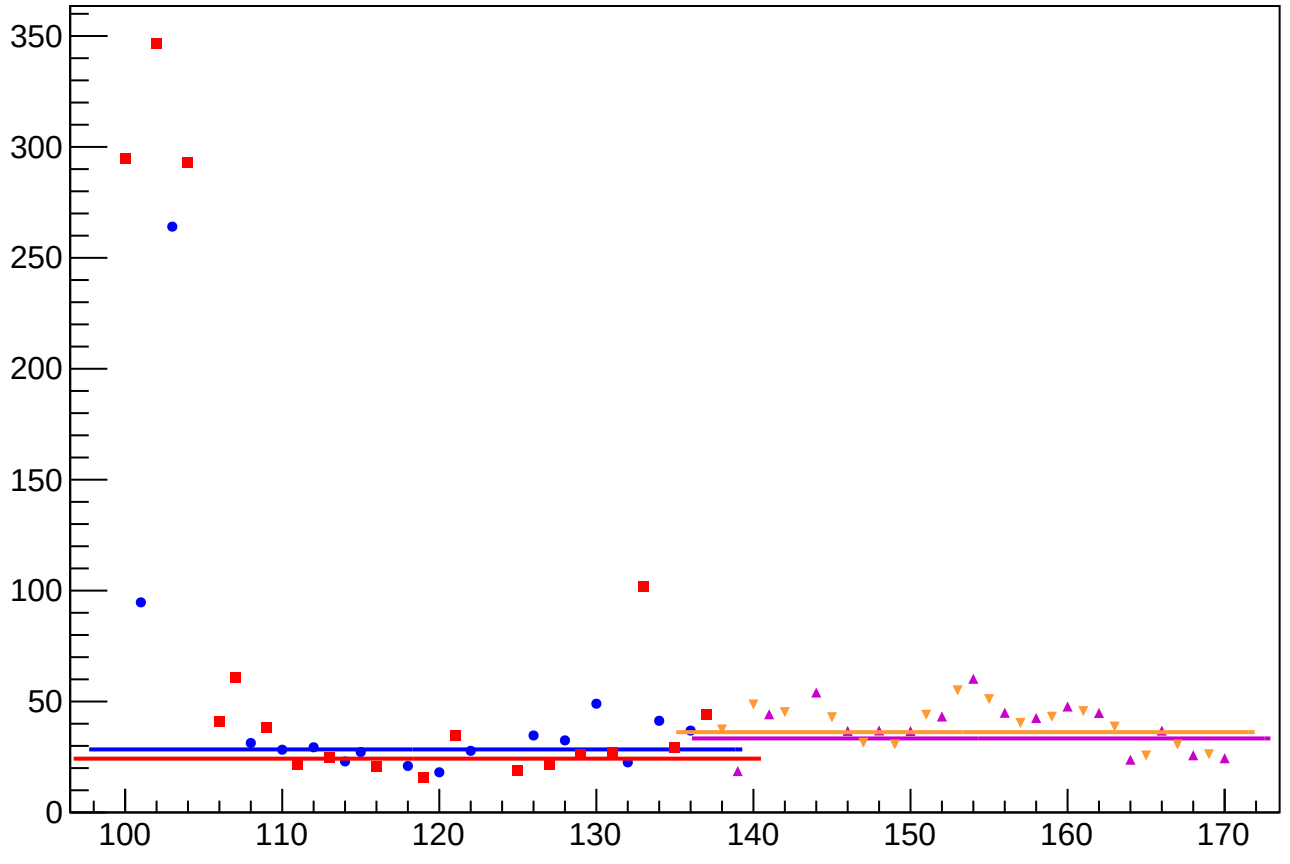
Right Out: 0.004+/-0.011 $\chi^2$/NDF: 7.9/17

Left In: 0.011+/-0.010 $\chi^2$/NDF:21.2/15

+ sign 0.003+/-0.008 $\chi^2$/NDF: 47.4/31

All: 0.005+/-0.006 $\chi^2$/NDF: 76.8/65

- sign 0.008+/-0.008 $\chi^2$/NDF: 29.2/33




Right In: 28.411+/-0.009 $\chi^2$/NDF: 2245663.3/15

Left Out: 36.199+/-0.008 $\chi^2$/NDF:1179525.7/15

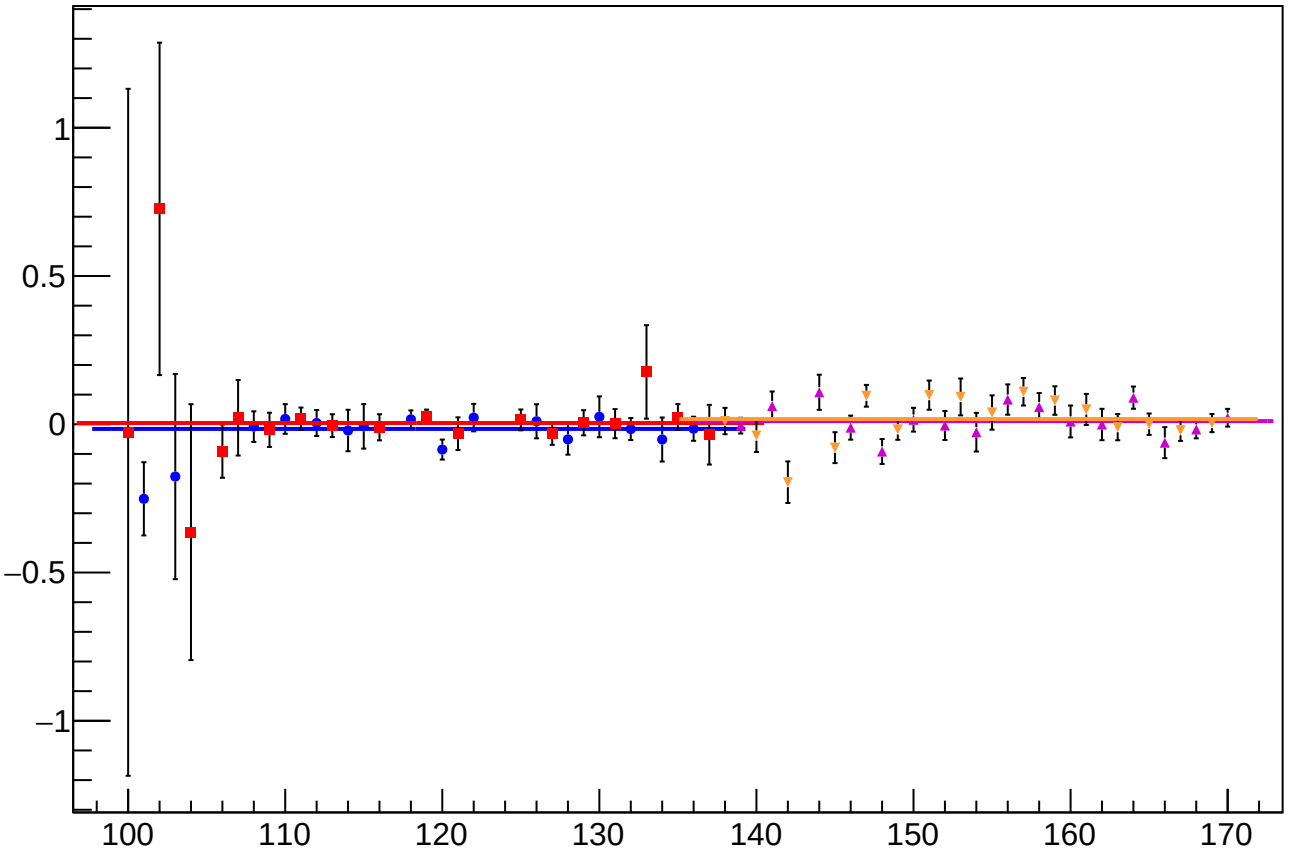
Right Out: 24.254+/-0.008 $\chi^2$/NDF: 2913710.0/17

Left In: 33.365+/-0.007 $\chi^2$/NDF:2283907.4/15

\+ sign 32.751+/-0.006 $\chi^2$/NDF: 3871443.4/31

All: 30.898+/-0.004 $\chi^2$/NDF: 9960691.0/65

\- sign 29.277+/-0.005 $\chi^2$/NDF: 5897370.3/33




Right In: -0.016+/-0.012 $\chi^2$/NDF: 11.9/15

Left Out: 0.018+/-0.011 $\chi^2$/NDF:31.4/15

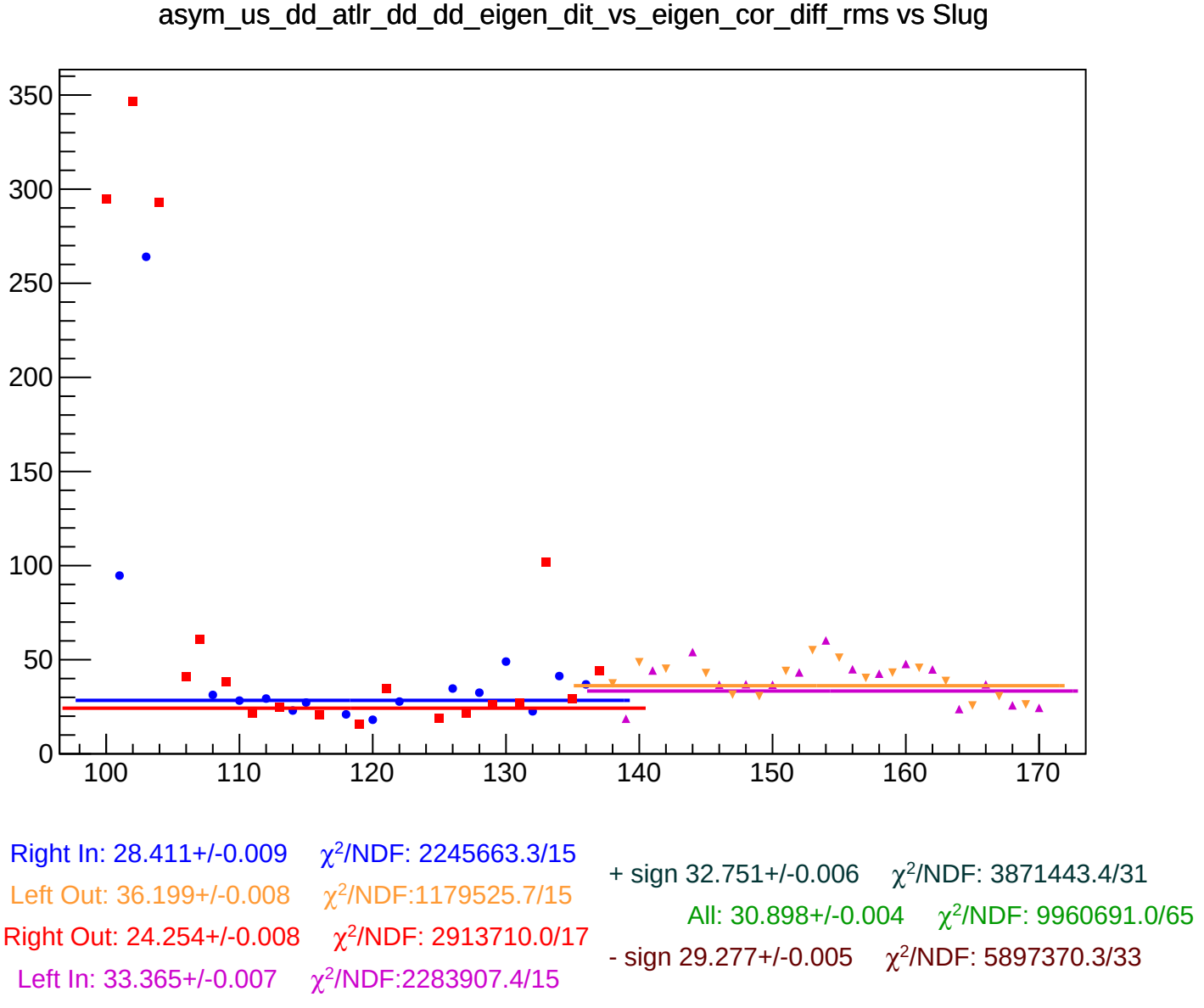
Right Out: 0.004+/-0.011 $\chi^2$/NDF: 7.9/17

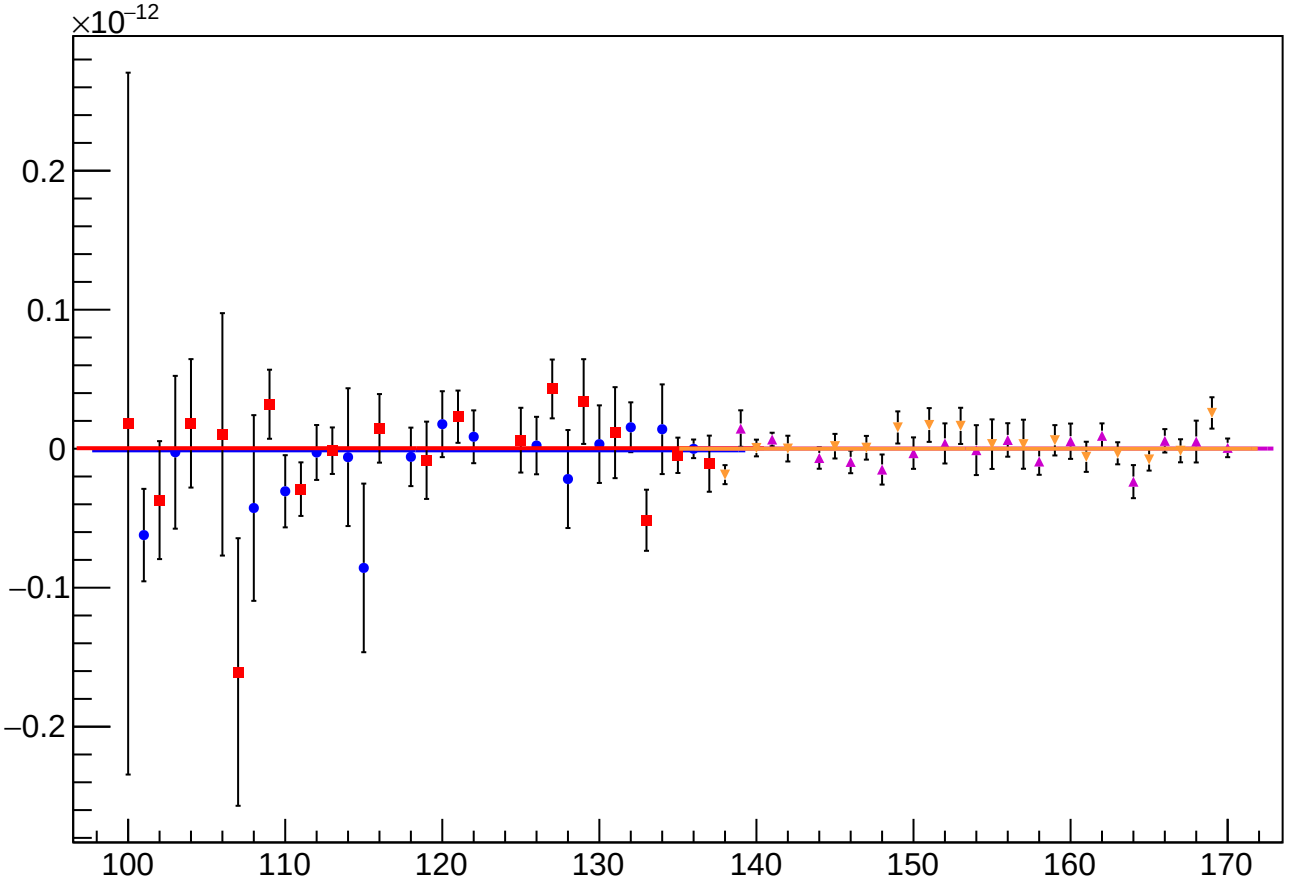
Left In: 0.011+/-0.010 $\chi^2$/NDF:21.2/15

+ sign 0.003+/-0.008 $\chi^2$/NDF: 47.4/31

All: 0.005+/-0.006 $\chi^2$/NDF: 76.8/65

- sign 0.008+/-0.008 $\chi^2$/NDF: 29.2/33


asym_us_dd_atlr_dd_dd_eigen_dit_vs_eigen_cor_diff_rms vs Slug
350
300
250
200
150
100
50
0
100
110
120
130
140
150
160
170
Right In: 28.411+/-0.009 χ²/NDF: 2245663.3/15
Left Out: 36.199+/-0.008 χ²/NDF:1179525.7/15
Right Out: 24.254+/-0.008 χ²/NDF: 2913710.0/17
Left In: 33.365+/-0.007 χ²/NDF:2283907.4/15
+ sign 32.751+/-0.006 χ²/NDF: 3871443.4/31
All: 30.898+/-0.004 χ²/NDF: 9960691.0/65
- sign 29.277+/-0.005 χ²/NDF: 5897370.3/33




Right In: -0.000+/-0.000 $\chi^2$/NDF: 9.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:19.8/15

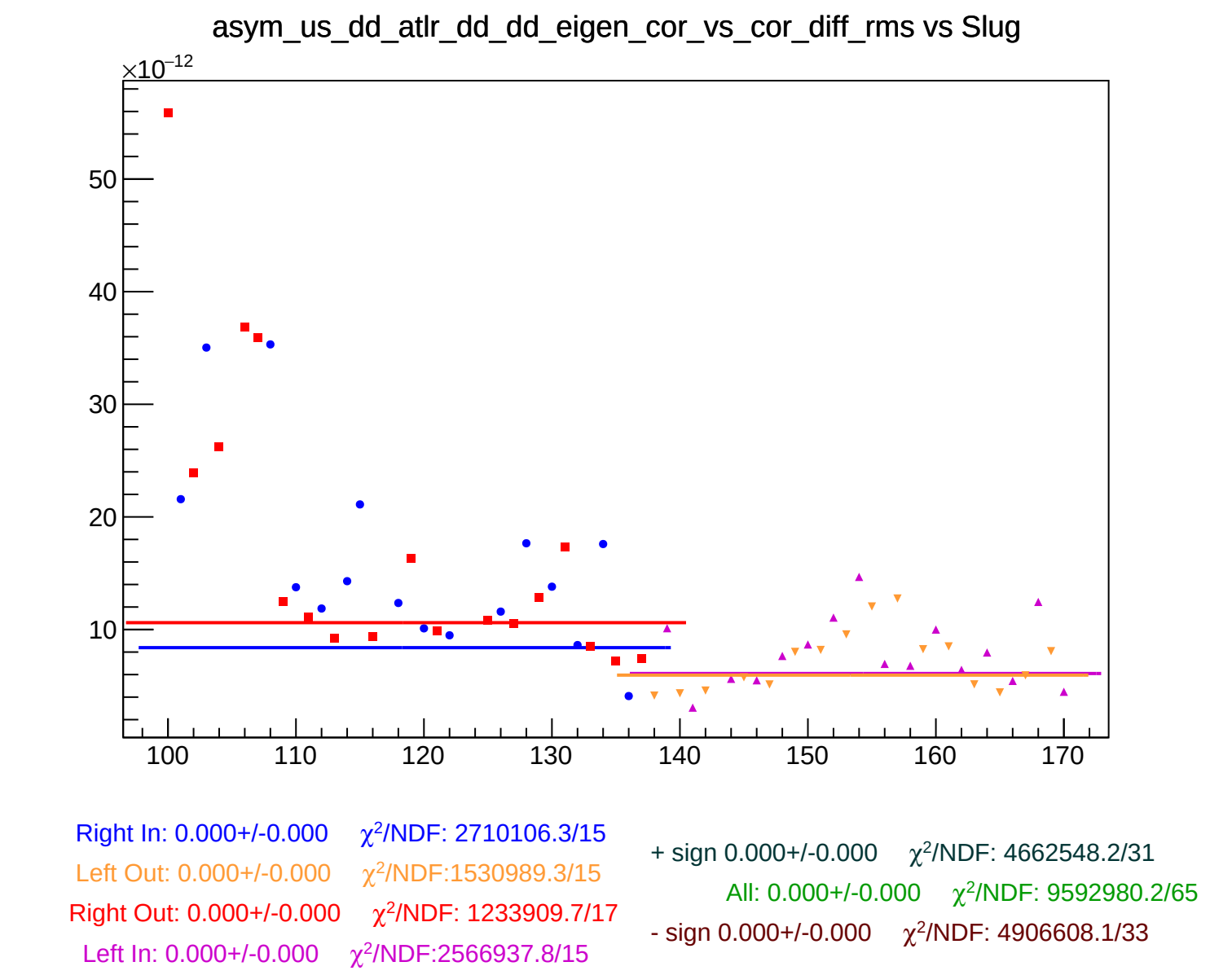
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.1/17

Left In: 0.000+/-0.000 $\chi^2$/NDF:14.2/15

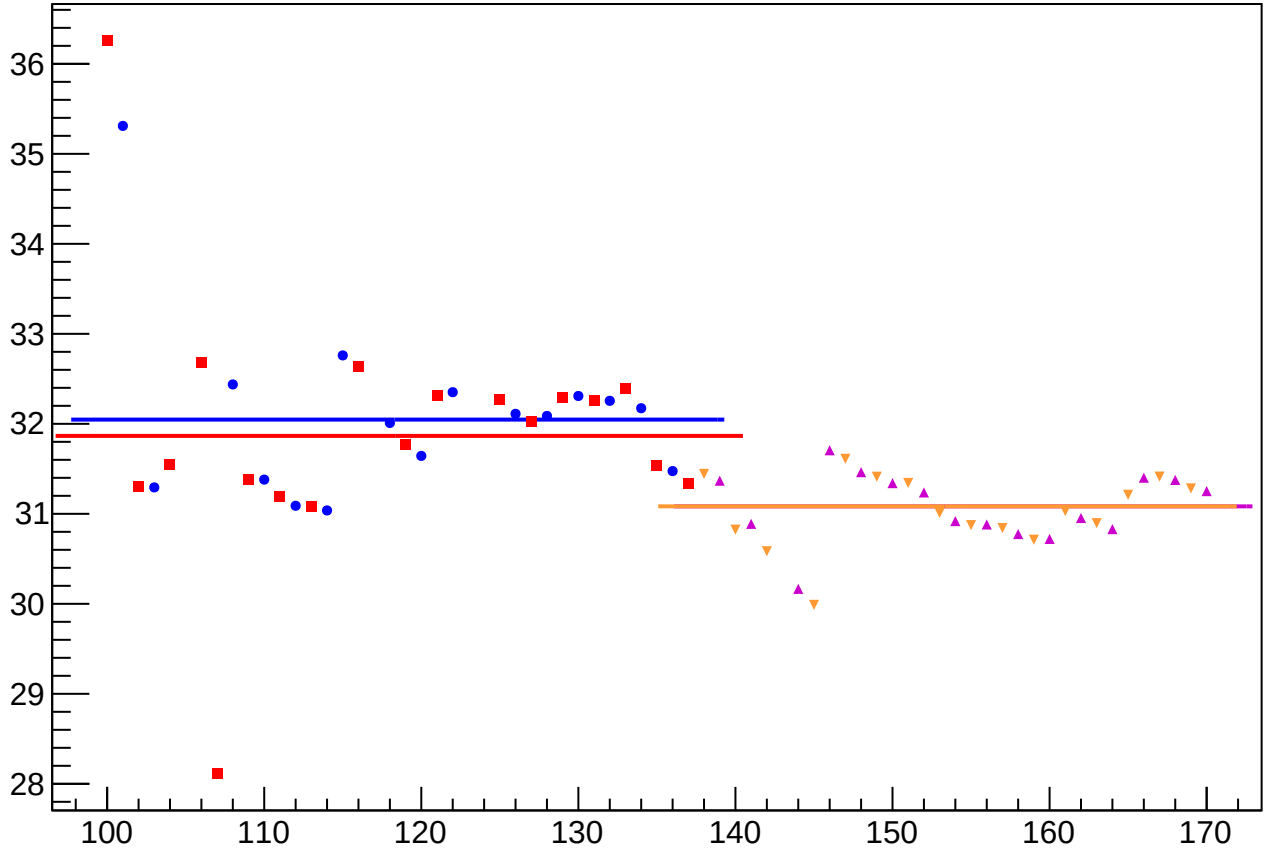
+ sign -0.000+/-0.000 $\chi^2$/NDF: 29.3/31

All: -0.000+/-0.000 $\chi^2$/NDF: 64.6/65

- sign 0.000+/-0.000 $\chi^2$/NDF: 35.3/33


asym_us_dd_atlr_dd_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2710106.3/15
Left Out: 0.000+/-0.000 χ²/NDF:1530989.3/15
Right Out: 0.000+/-0.000 χ²/NDF: 1233909.7/17
Left In: 0.000+/-0.000 χ²/NDF:2566937.8/15
+ sign 0.000+/-0.000 χ²/NDF: 4662548.2/31
All: 0.000+/-0.000 χ²/NDF: 9592980.2/65
- sign 0.000+/-0.000 χ²/NDF: 4906608.1/33

# yield_usl_mean vs Slug




Right In: 32.047+/-0.000 $\chi^2$/NDF: 898593424.6/15

Left Out: 31.083+/-0.000 $\chi^2$/NDF:244605774.8/15

Right Out: 31.866+/-0.000 $\chi^2$/NDF: 485941075.6/17

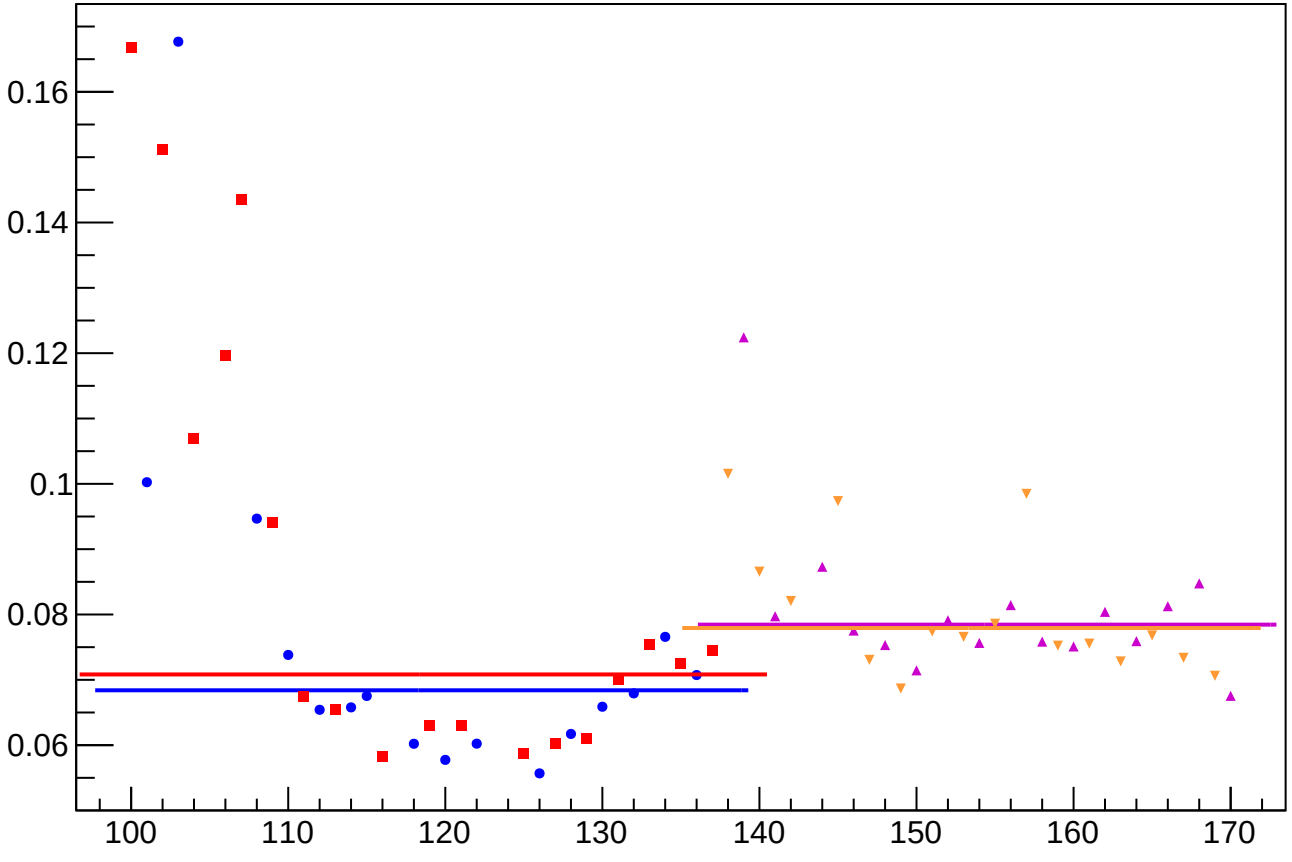
Left In: 31.083+/-0.000 $\chi^2$/NDF:251013635.7/15

+ sign 31.486+/-0.000 $\chi^2$/NDF: 1865883445.5/31

All: 31.439+/-0.000 $\chi^2$/NDF: 3080037313.6/6

- sign 31.390+/-0.000 $\chi^2$/NDF: 1199390599.1/33

# yield_usl_rms vs Slug




Right In: 0.068+/-0.000 $\chi^2$/NDF: 703207.9/15

Left Out: 0.078+/-0.000 $\chi^2$/NDF:281552.6/15

Right Out: 0.071+/-0.000 $\chi^2$/NDF: 868237.4/17

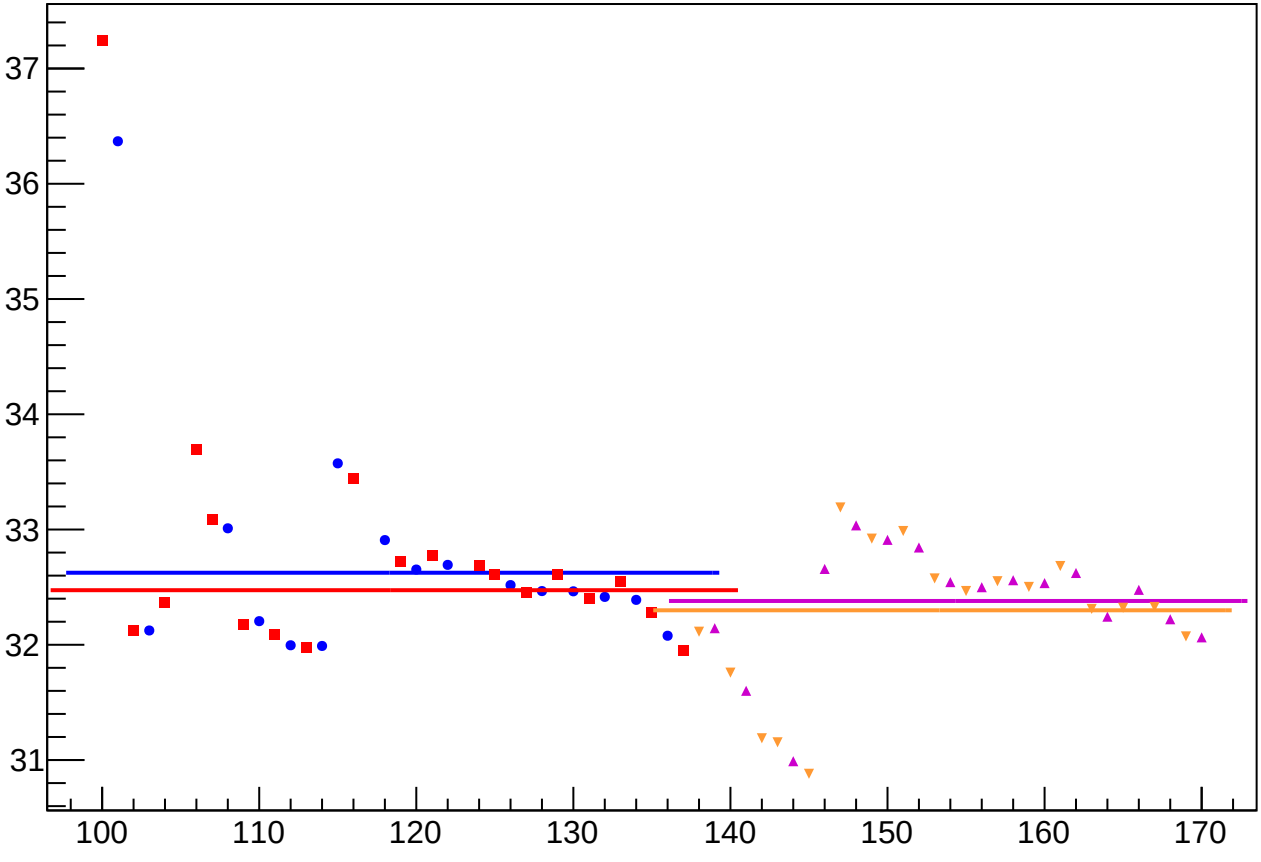
Left In: 0.078+/-0.000 $\chi^2$/NDF:299908.1/15

+ sign 0.074+/-0.000 $\chi^2$/NDF: 1126203.1/31

All: 0.075+/-0.000 $\chi^2$/NDF: 2389320.1/65

- sign 0.075+/-0.000 $\chi^2$/NDF: 1255828.8/33

# yield_usr_mean vs Slug




Right In: 32.625+/-0.000 $\chi^2$/NDF: 739141163.5/15

Left Out: 32.299+/-0.000 $\chi^2$/NDF:780588645.0/16

Right Out: 32.474+/-0.000 $\chi^2$/NDF: 156801553.7/18

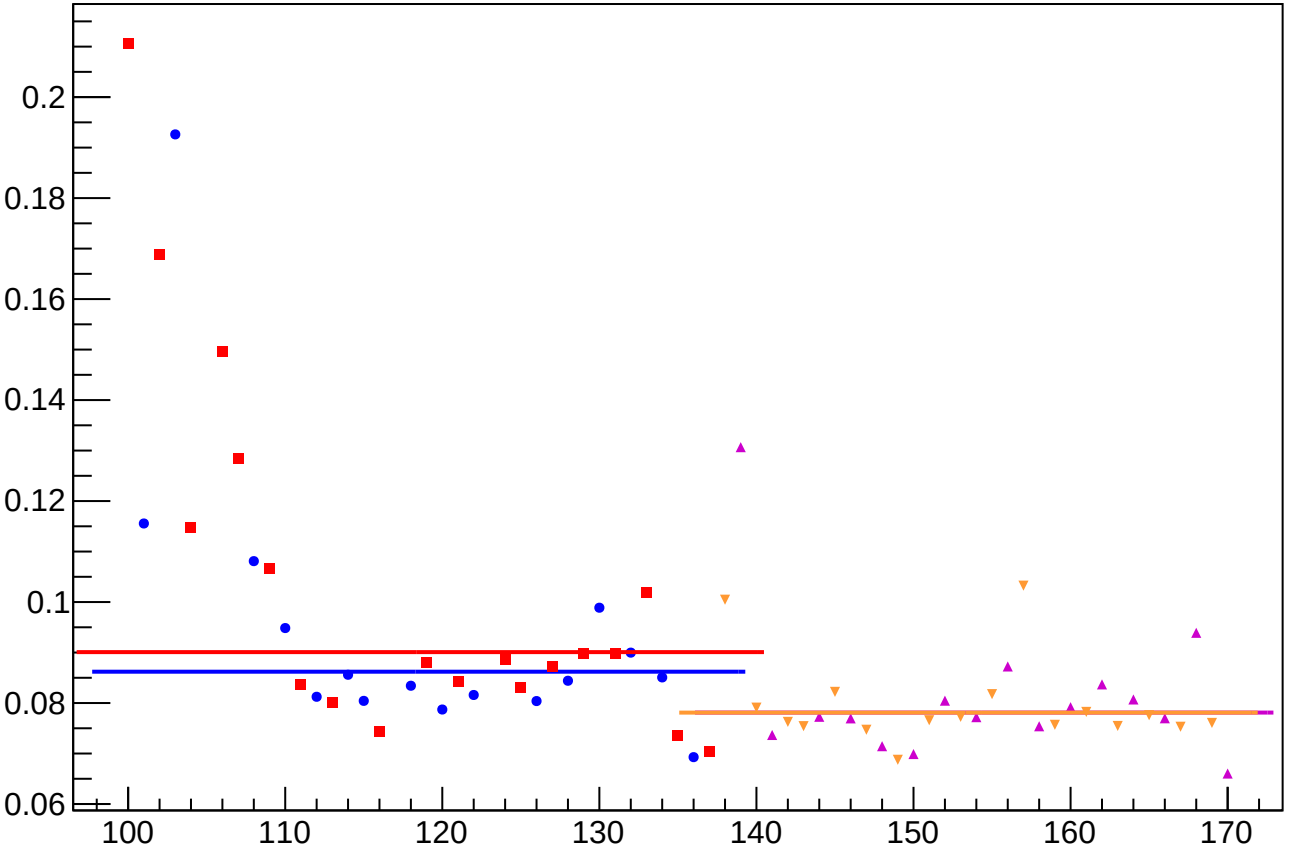
Left In: 32.380+/-0.000 $\chi^2$/NDF:550671153.7/15

+ sign 32.396+/-0.000 $\chi^2$/NDF: 1582661671.7/32

All: 32.402+/-0.000 $\chi^2$/NDF: 2295235651.9/6

- sign 32.407+/-0.000 $\chi^2$/NDF: 712416255.1/34

# yield_usr_rms vs Slug




Right In: 0.086+/-0.000 $\chi^2$/NDF: 598718.4/15

Left Out: 0.078+/-0.000 $\chi^2$/NDF:201381.4/16

Right Out: 0.090+/-0.000 $\chi^2$/NDF: 621848.1/18

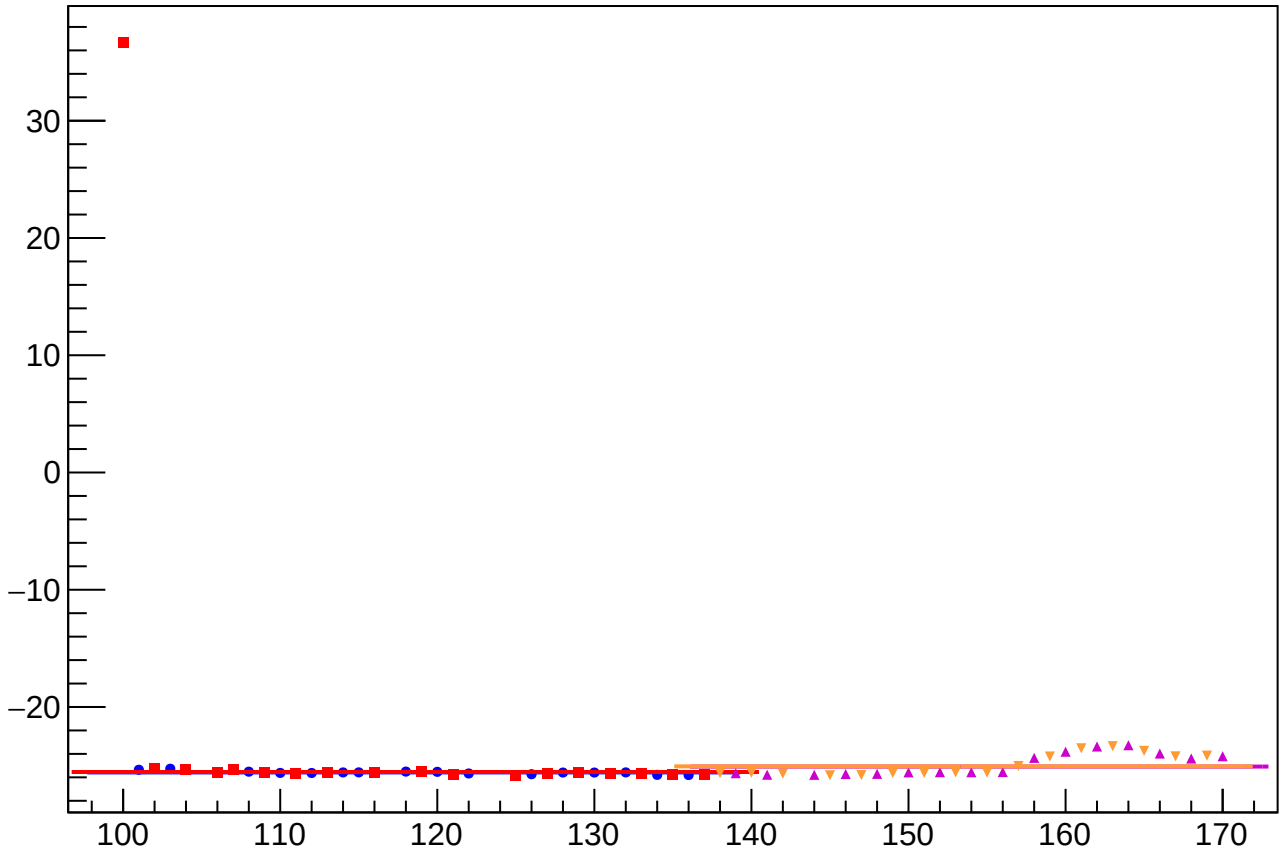
Left In: 0.078+/-0.000 $\chi^2$/NDF:432401.7/15

+ sign 0.081+/-0.000 $\chi^2$/NDF: 877911.6/32

All: 0.081+/-0.000 $\chi^2$/NDF: 2097399.9/67

- sign 0.082+/-0.000 $\chi^2$/NDF: 1216518.5/34

# yield_dsl_mean vs Slug




Right In: -25.579+/-0.000 $\chi^2$/NDF: 98389255.1/15

Left Out: -25.062+/-0.000 $\chi^2$/NDF:4384727971.3/15

Right Out: -25.544+/-0.000 $\chi^2$/NDF: 8907540506.8/17

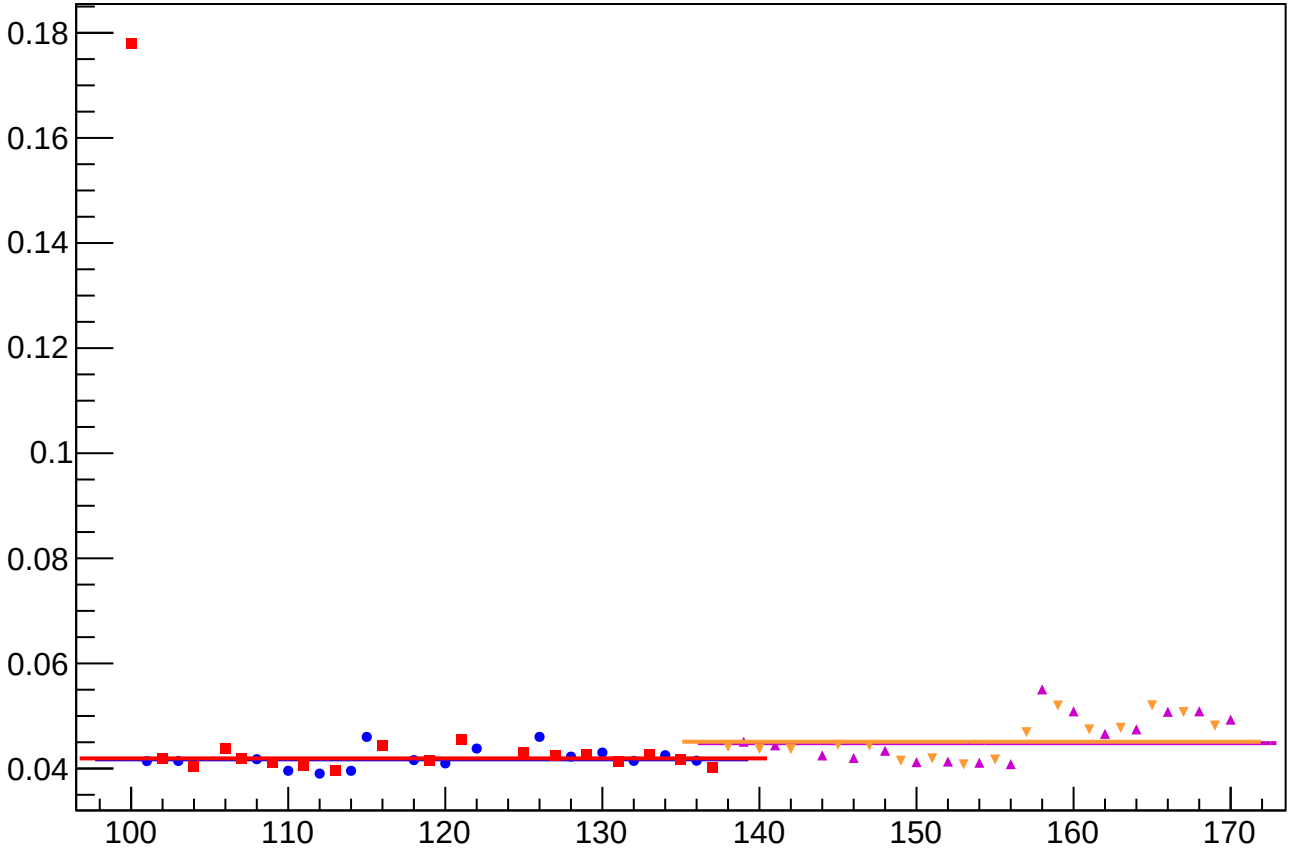
Left In: -25.082+/-0.000 $\chi^2$/NDF:4675176376.3/15

+ sign -25.271+/-0.000 $\chi^2$/NDF: 5136728054.8/31

All: -25.267+/-0.000 $\chi^2$/NDF: 19254077959.4

- sign -25.263+/-0.000 $\chi^2$/NDF: 14116963392.2/33

# yield_dsl_rms vs Slug




Right In: 0.042+/-0.000 $\chi^2$/NDF: 20733.3/15

Left Out: 0.045+/-0.000 $\chi^2$/NDF:141722.1/15

Right Out: 0.042+/-0.000 $\chi^2$/NDF: 100140.4/17

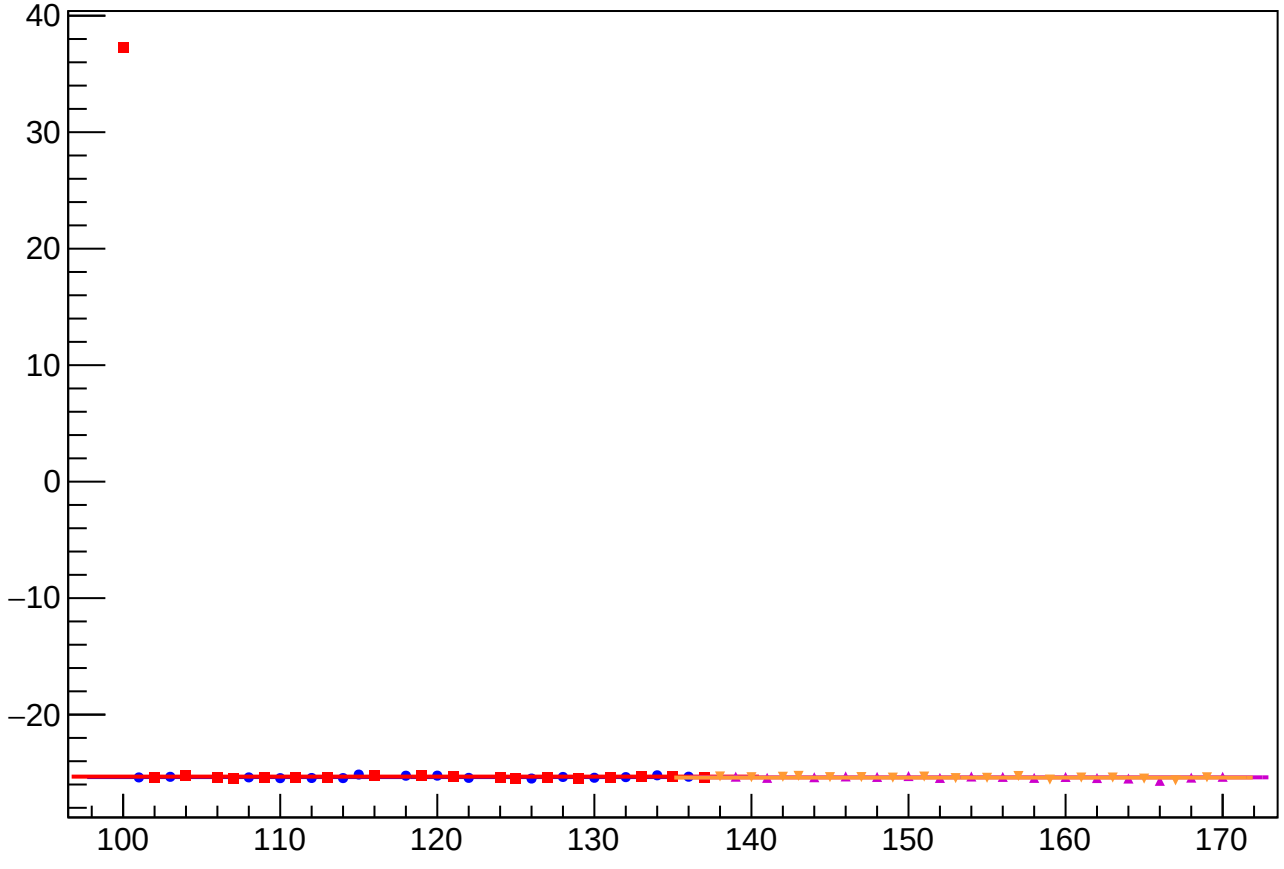
Left In: 0.045+/-0.000 $\chi^2$/NDF:210889.5/15

+ sign 0.044+/-0.000 $\chi^2$/NDF: 217278.6/31

All: 0.044+/-0.000 $\chi^2$/NDF: 570560.2/65

- sign 0.044+/-0.000 $\chi^2$/NDF: 353260.5/33

# yield_dsr_mean vs Slug




Right In: -25.360+/-0.000 $\chi^2$/NDF: 13284405.9/15

Left Out: -25.405+/-0.000 $\chi^2$/NDF:42330844.2/16

Right Out: -25.322+/-0.000 $\chi^2$/NDF: 6314907036.5/18

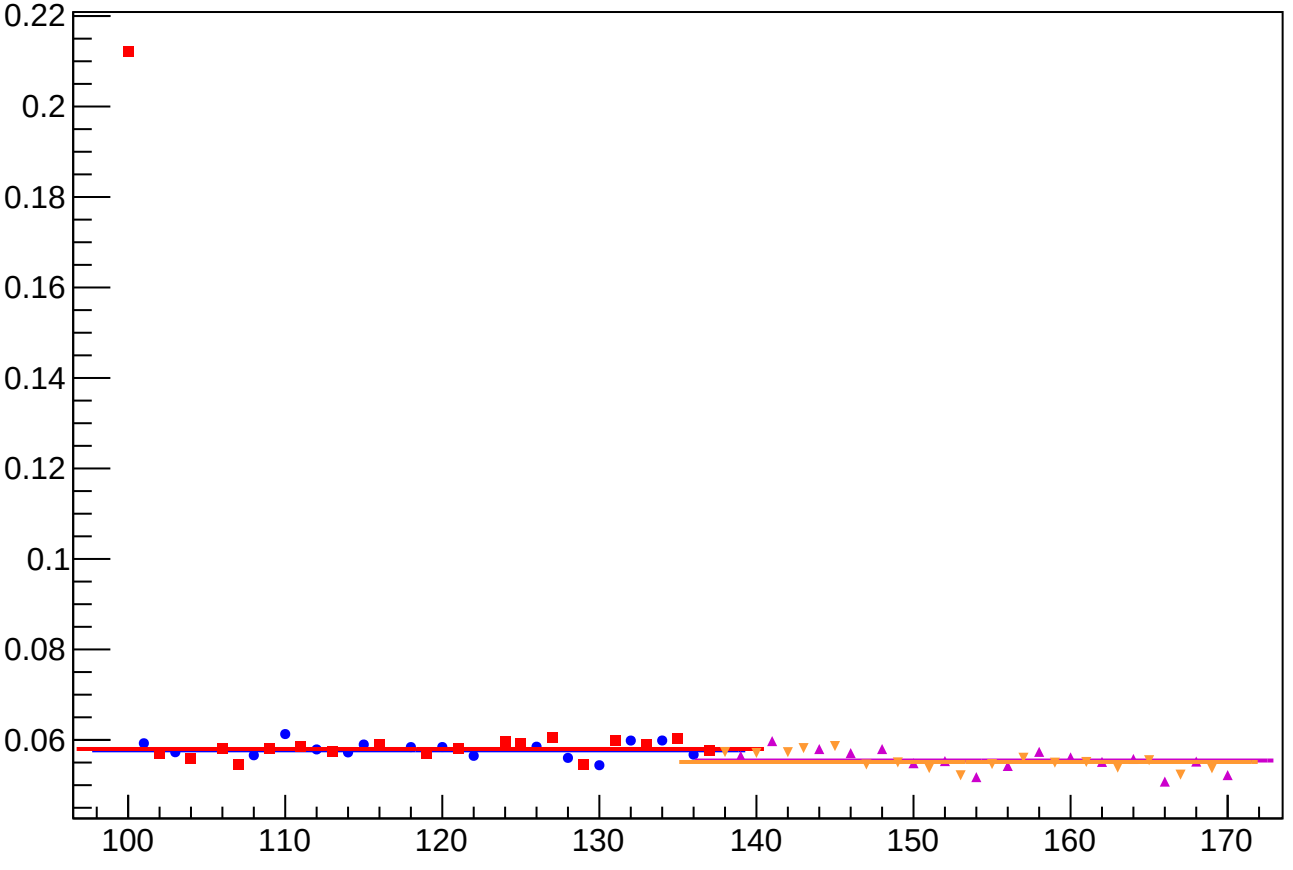
Left In: -25.384+/-0.000 $\chi^2$/NDF:33112255.6/15

+ sign -25.390+/-0.000 $\chi^2$/NDF: 58381730.2/32

All: -25.376+/-0.000 $\chi^2$/NDF: 6414149349.1/

- sign -25.363+/-0.000 $\chi^2$/NDF: 6353442138.0/34

# yield_dsr_rms vs Slug




Right In: 0.058+/-0.000 $\chi^2$/NDF: 11763.6/15

Left Out: 0.055+/-0.000 $\chi^2$/NDF:28677.5/16

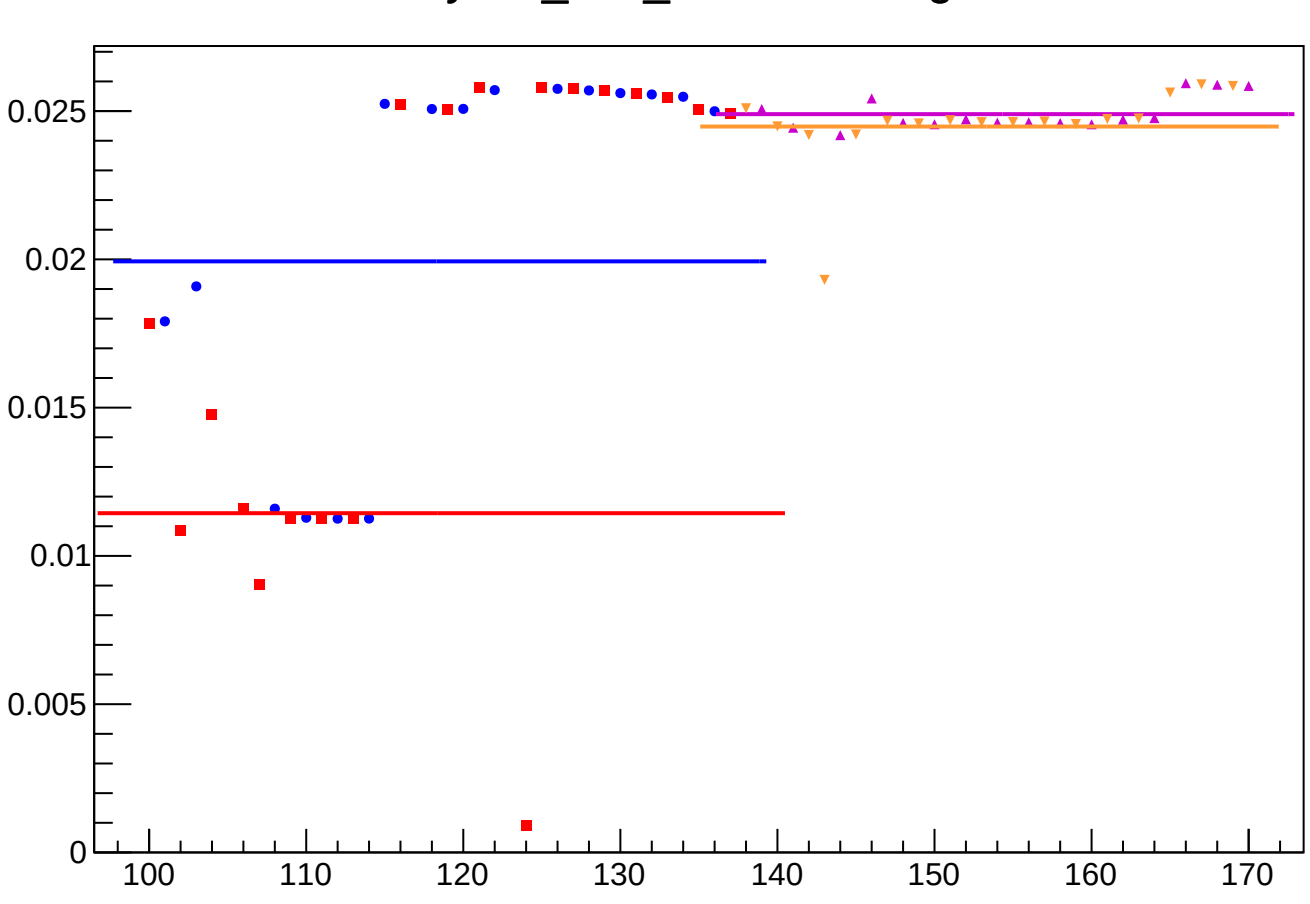
Right Out: 0.058+/-0.000 $\chi^2$/NDF: 88682.9/18

Left In: 0.055+/-0.000 $\chi^2$/NDF:44210.8/15

+ sign 0.056+/-0.000 $\chi^2$/NDF: 59095.6/32

All: 0.056+/-0.000 $\chi^2$/NDF: 211129.9/67

- sign 0.056+/-0.000 $\chi^2$/NDF: 151291.8/34




Right In: 0.020+/-0.000 $\chi^2$/NDF: 62465154056.0/15

Left Out: 0.024+/-0.000 $\chi^2$/NDF:5732472099.8/16

Right Out: 0.011+/-0.000 $\chi^2$/NDF: 253880264851.8/18

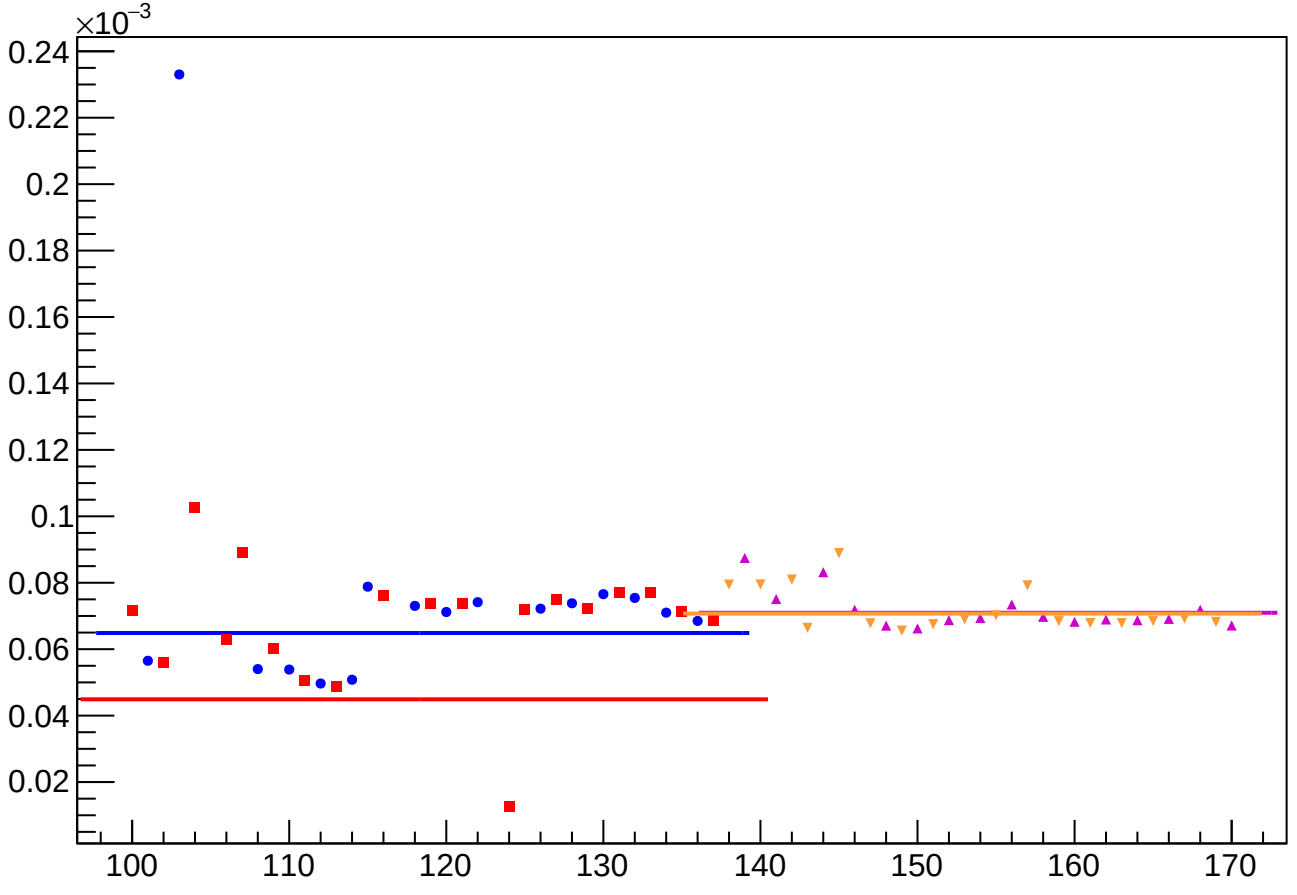
Left In: 0.025+/-0.000 $\chi^2$/NDF:716124932.0/15

+ sign 0.023+/-0.000 $\chi^2$/NDF: 88359633662.9/32

All: 0.020+/-0.000 $\chi^2$/NDF: 620651299325.4

- sign 0.018+/-0.000 $\chi^2$/NDF: 484714084161.6/34

# yield_atl1_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 816892.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:170572.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3770565.9/18

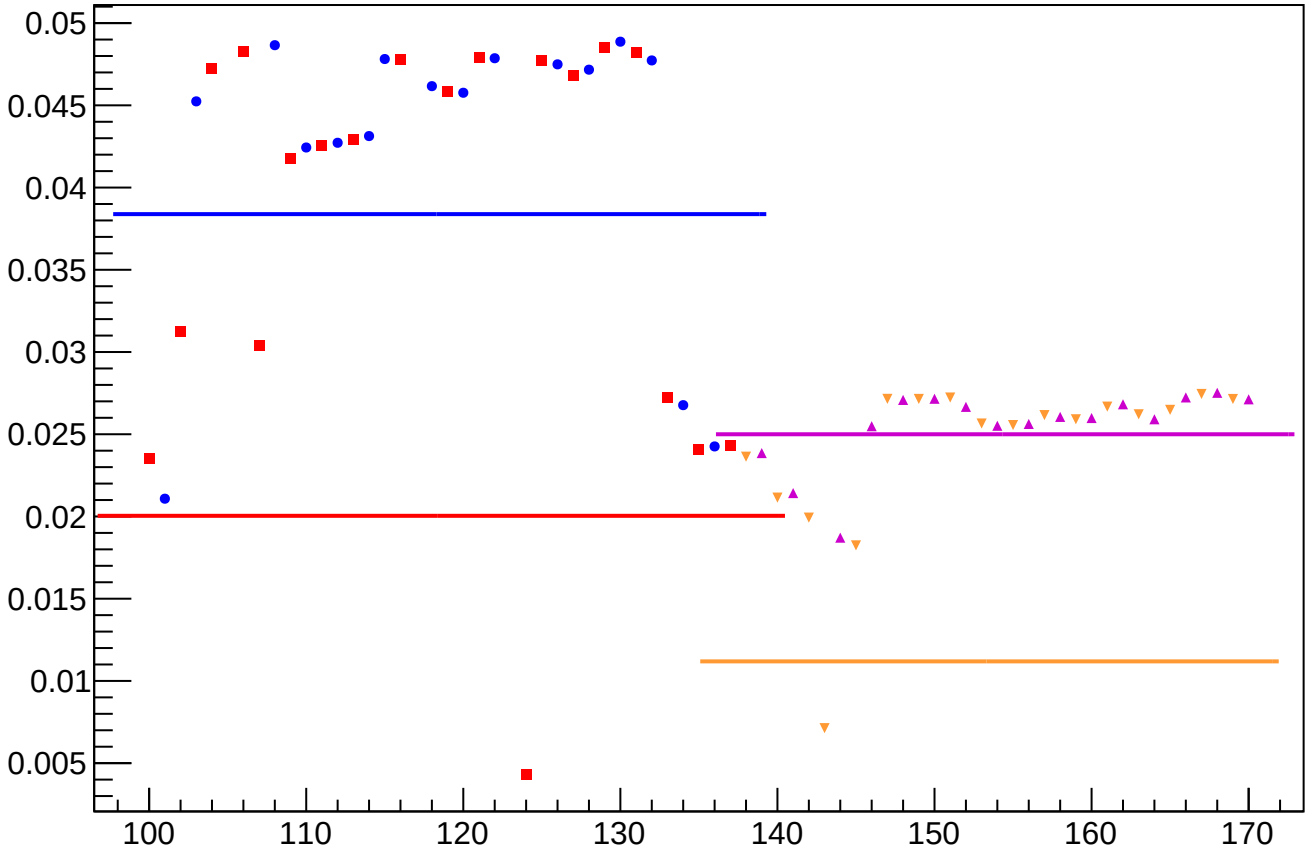
Left In: 0.000+/-0.000 $\chi^2$/NDF:131303.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 1053953.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 7185326.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5627308.2/34

# yield_atl2_mean vs Slug




Right In: 0.038+/-0.000 $\chi^2$/NDF: 7078619233.3/15

Left Out: 0.011+/-0.000 $\chi^2$/NDF:32516604170.5/16

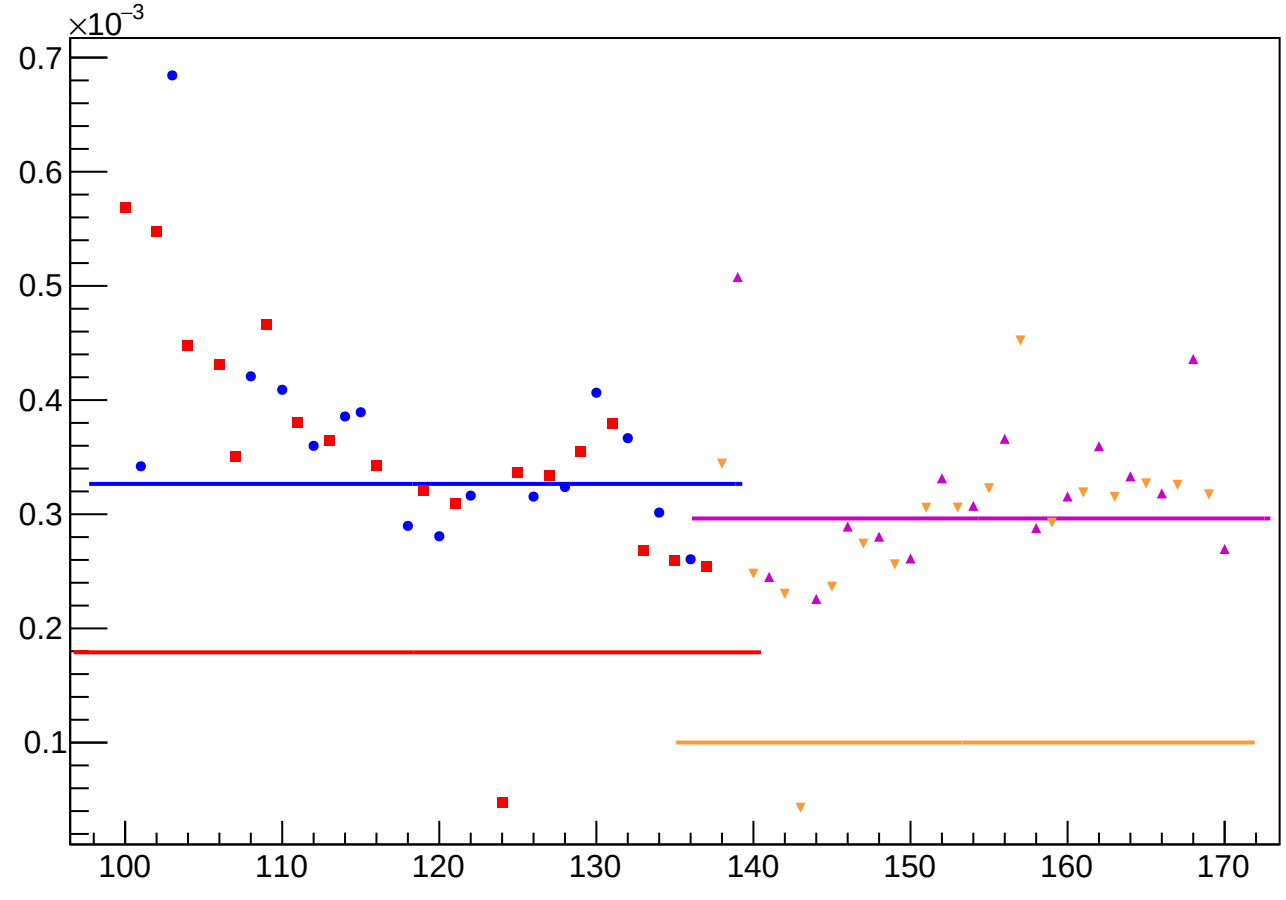
Right Out: 0.020+/-0.000 $\chi^2$/NDF: 42185025429.6/18

Left In: 0.025+/-0.000 $\chi^2$/NDF:1062048351.9/15

+ sign 0.014+/-0.000 $\chi^2$/NDF: 79231700559.1/32

All: 0.016+/-0.000 $\chi^2$/NDF: 138218976828.6

- sign 0.023+/-0.000 $\chi^2$/NDF: 44810015386.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 581428.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12905551.0/16

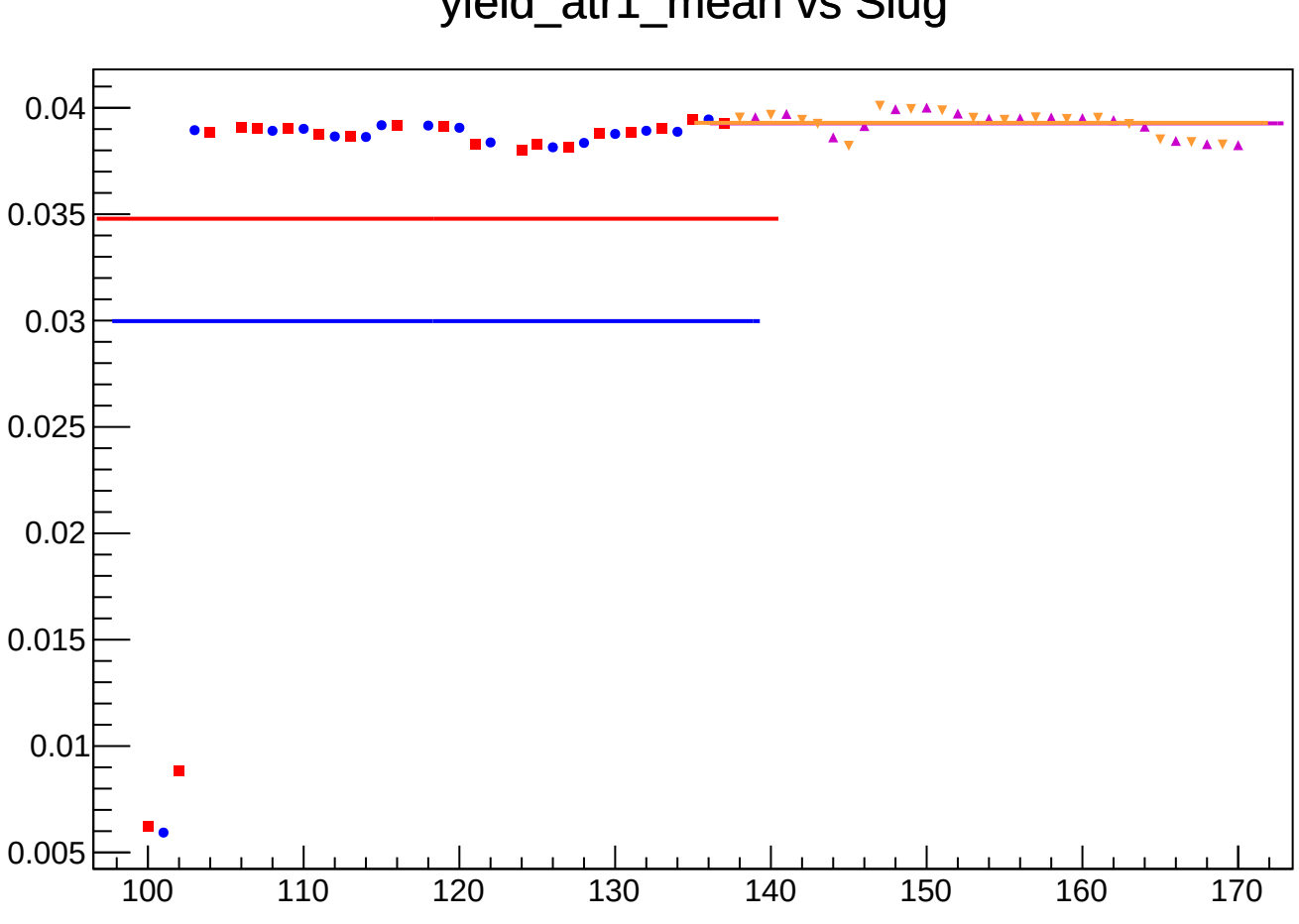
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 5660786.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:861560.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 18984561.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 32336024.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 8270022.0/34




Right In: 0.030+/-0.000 $\chi^2$/NDF: 108275706275.7/15

Left Out: 0.039+/-0.000 $\chi^2$/NDF:248066049.6/16

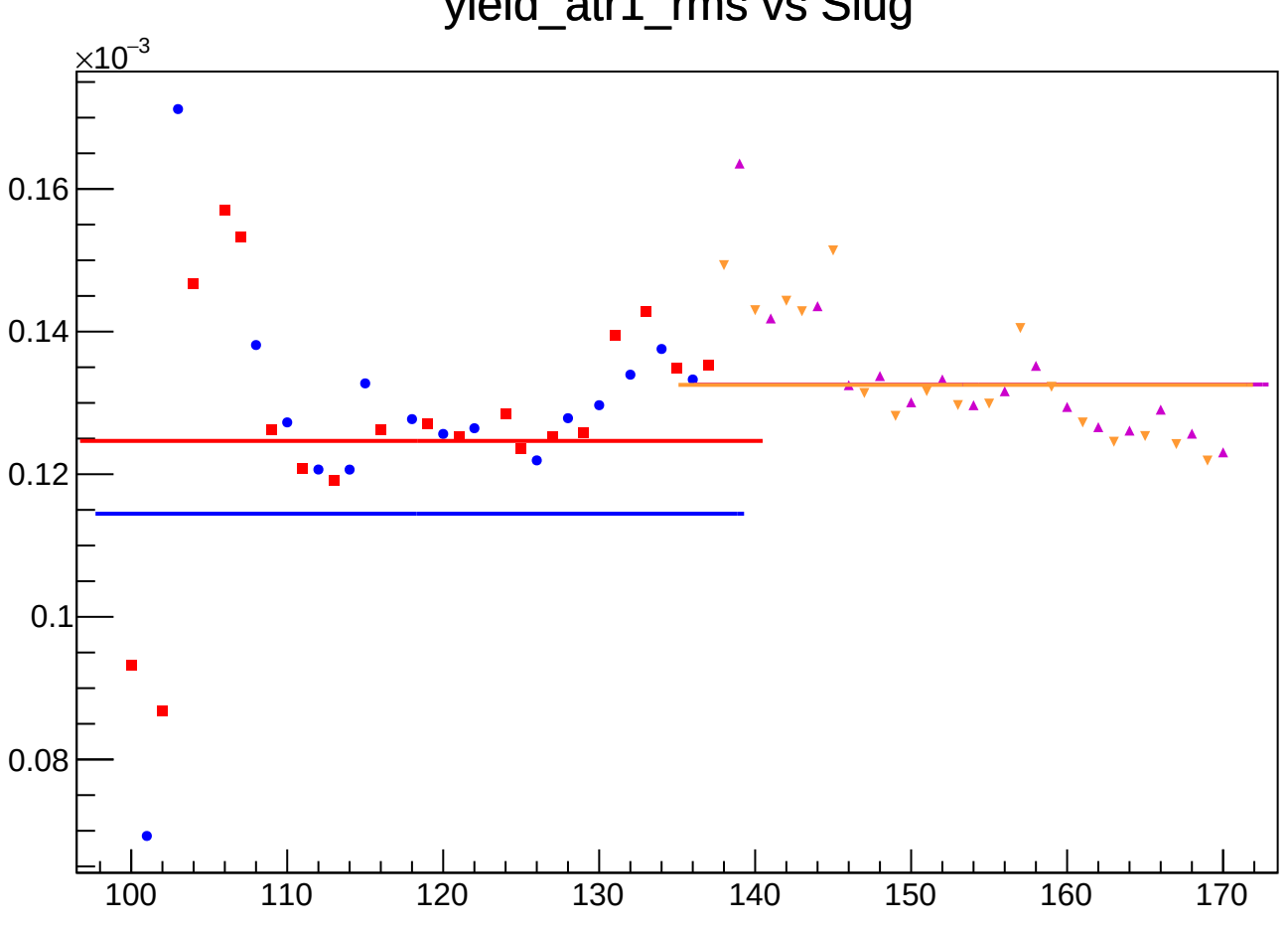
Right Out: 0.035+/-0.000 $\chi^2$/NDF: 47263545471.6/18

Left In: 0.039+/-0.000 $\chi^2$/NDF:232234971.5/15

+ sign 0.036+/-0.000 $\chi^2$/NDF: 134696029789.8/32

All: 0.037+/-0.000 $\chi^2$/NDF: 190332413210.4

- sign 0.038+/-0.000 $\chi^2$/NDF: 53061402850.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 853142.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:106878.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 260393.6/18

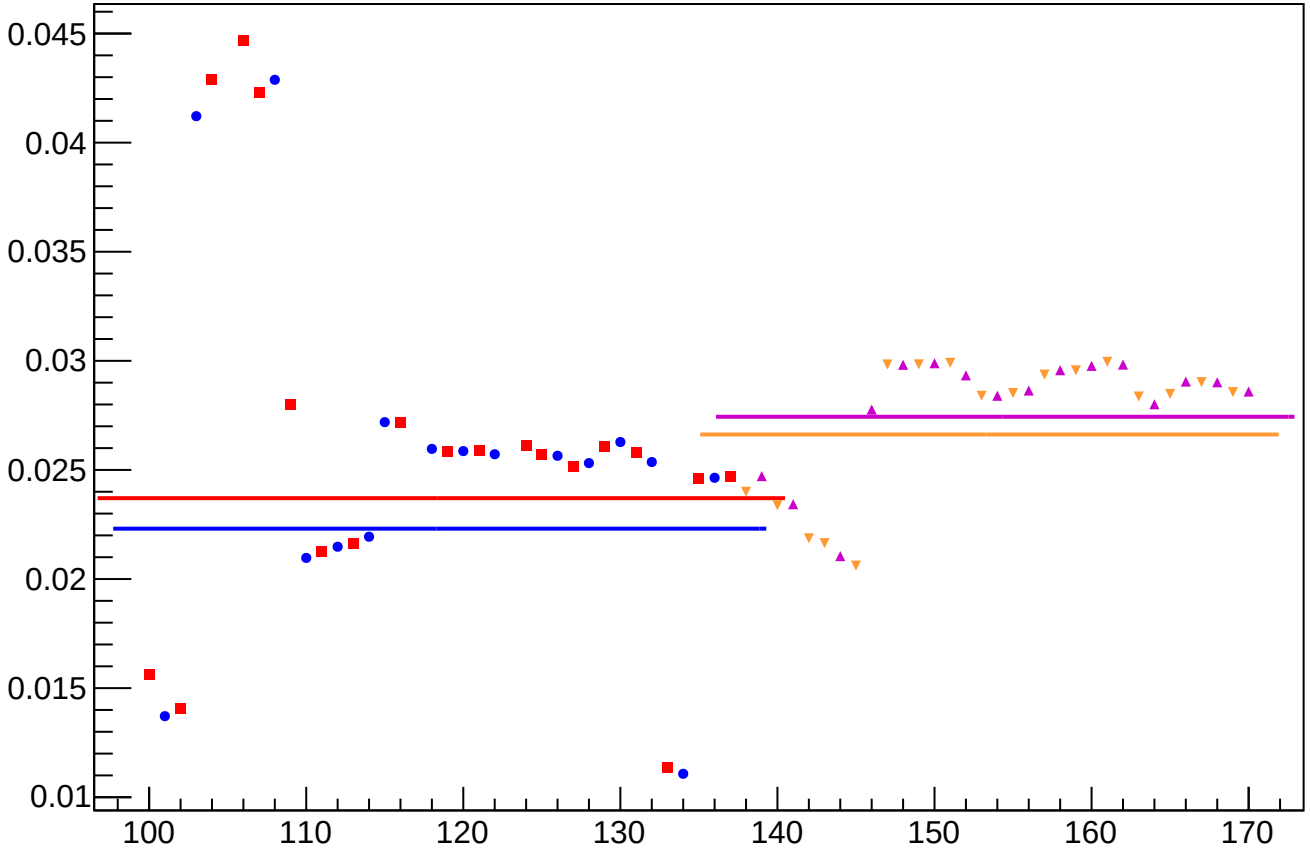
Left In: 0.000+/-0.000 $\chi^2$/NDF:102094.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 1156808.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 1577384.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 397165.0/34

# yield_atr2_mean vs Slug




Right In: 0.022+/-0.000 $\chi^2$/NDF: 5012486114.6/15

Left Out: 0.027+/-0.000 $\chi^2$/NDF:1878492782.0/16

Right Out: 0.024+/-0.000 $\chi^2$/NDF: 5581865088.7/18

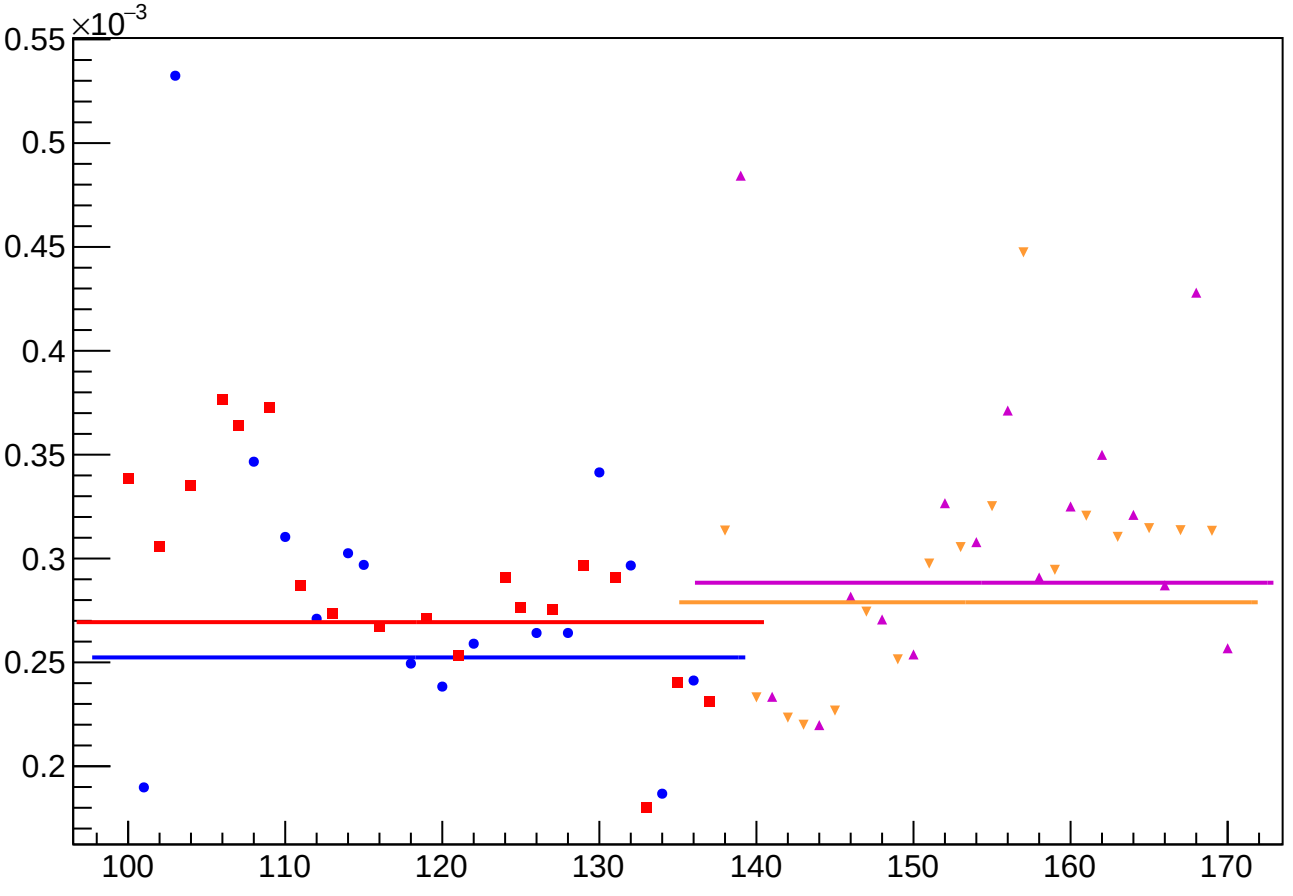
Left In: 0.027+/-0.000 $\chi^2$/NDF:1292327968.1/15

+ sign 0.025+/-0.000 $\chi^2$/NDF: 7997413445.9/32

All: 0.025+/-0.000 $\chi^2$/NDF: 15768262102.0/6

- sign 0.026+/-0.000 $\chi^2$/NDF: 7634121289.8/34

# yield_atr2_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 707863.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:638550.5/16

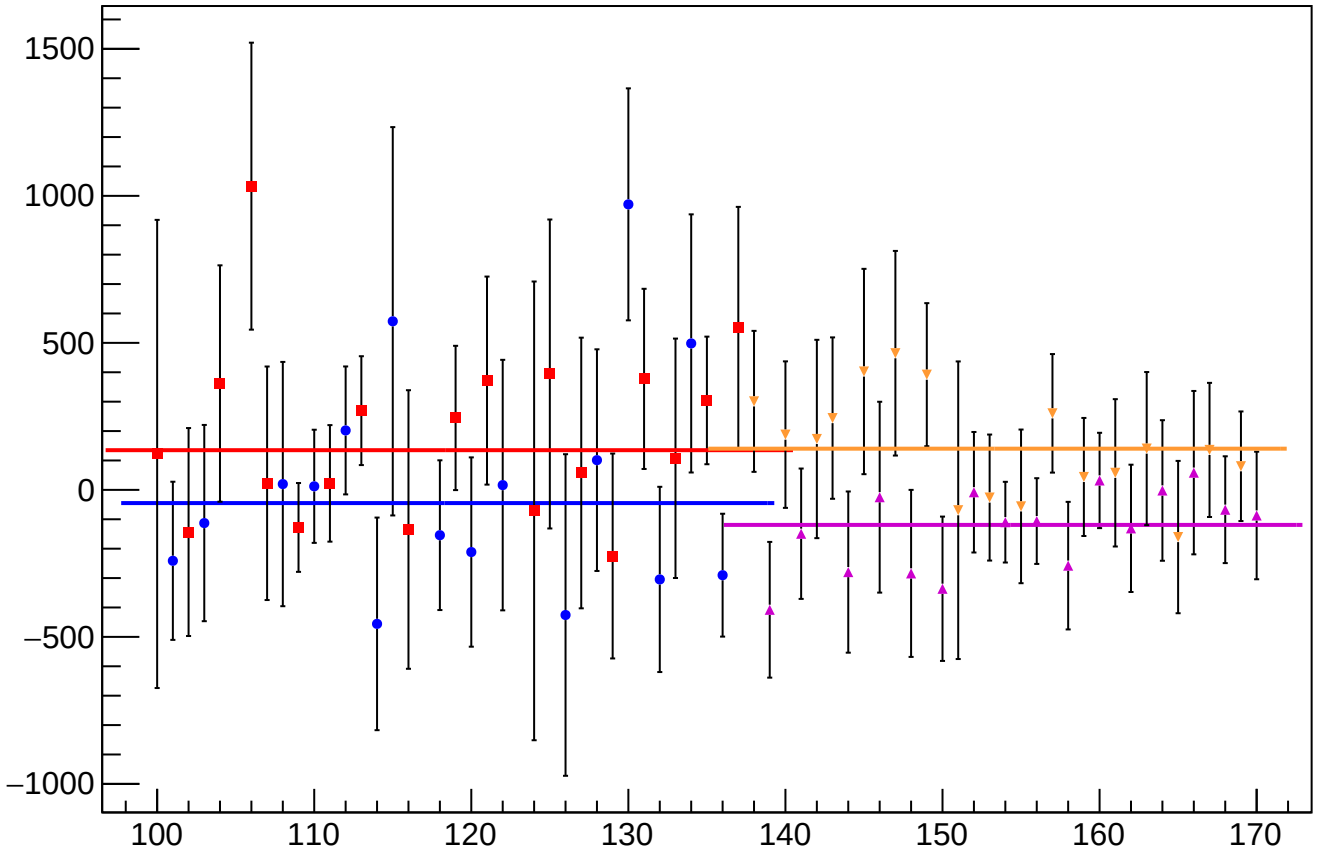
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 446359.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:921880.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 1430126.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 2875222.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 1407551.7/34




Right In: -44.917+/-76.198 $\chi^2$/NDF: 15.5/15

Left Out: 140.109+/-60.606 $\chi^2$/NDF:6.6/16

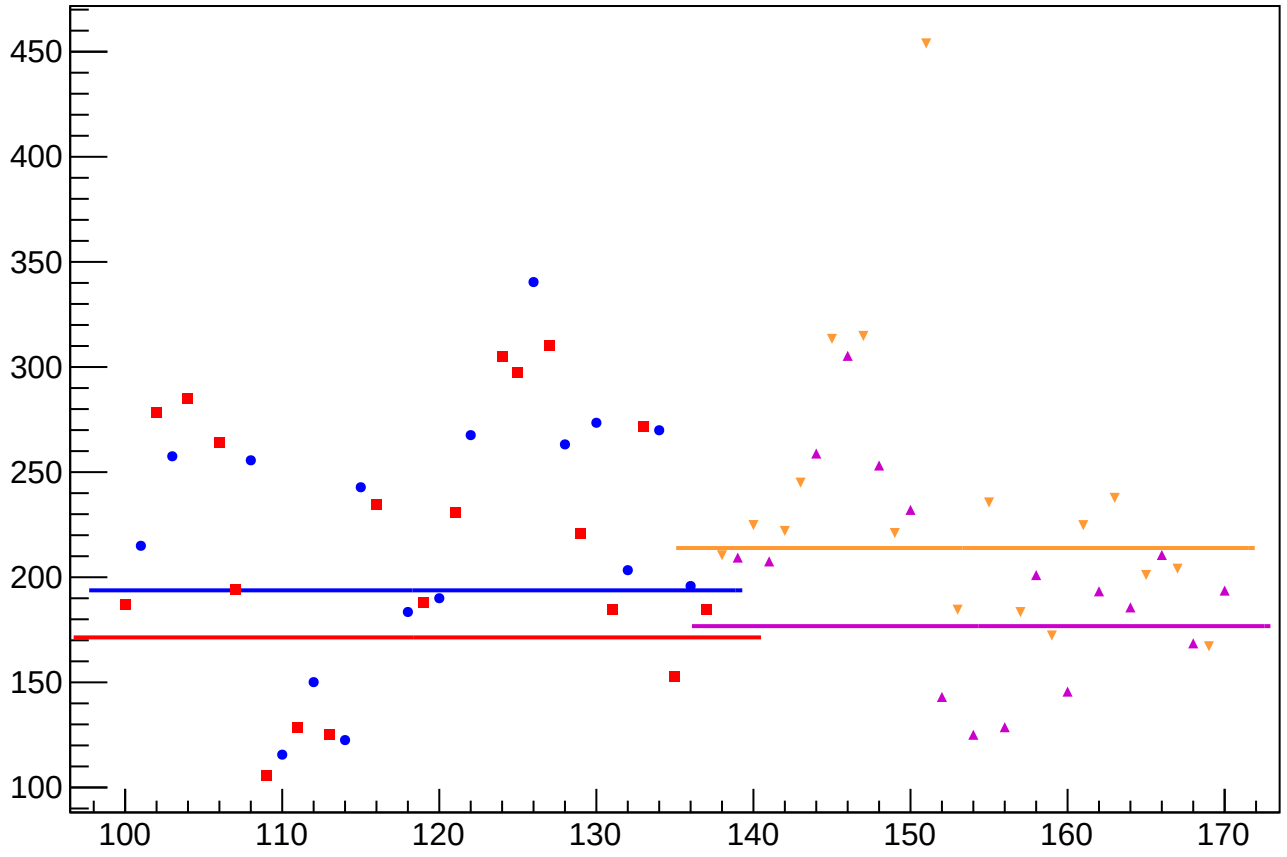
Right Out: 134.996+/-68.062 $\chi^2$/NDF: 12.9/18

Left In: -119.157+/-51.468 $\chi^2$/NDF:5.5/15

+ sign 68.414+/-47.432 $\chi^2$/NDF: 25.7/32

All: 14.036+/-31.041 $\chi^2$/NDF: 55.3/67

- sign -26.697+/-41.052 $\chi^2$/NDF: 27.3/34




Right In: 193.768+/-0.054 $\chi^2$/NDF: 1048095.1/15

Left Out: 213.904+/-0.043 $\chi^2$/NDF:1150939.2/16

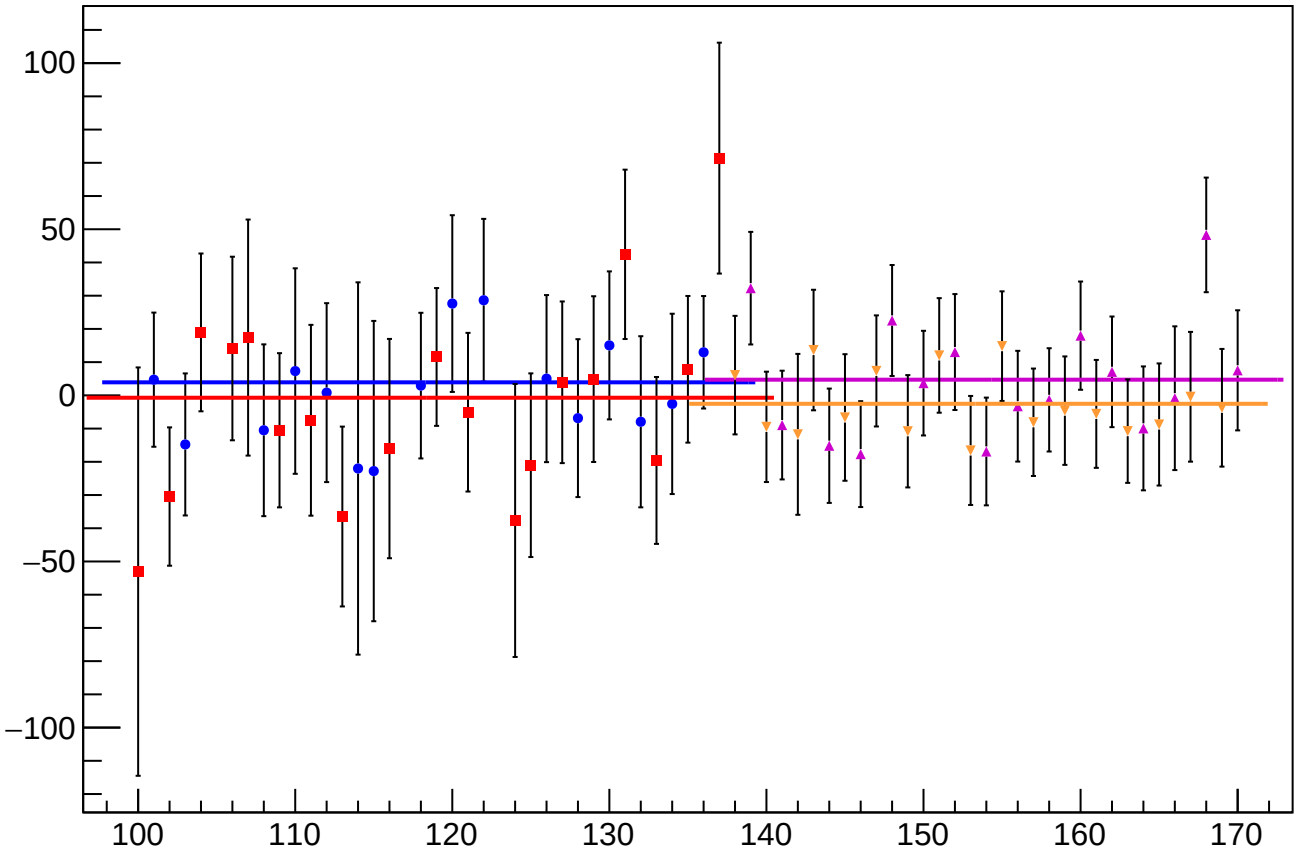
Right Out: 171.382+/-0.048 $\chi^2$/NDF: 1658079.5/18

Left In: 176.748+/-0.036 $\chi^2$/NDF:1532252.3/15

+ sign 206.101+/-0.034 $\chi^2$/NDF: 2284580.0/32

All: 188.203+/-0.022 $\chi^2$/NDF: 5980924.4/67

- sign 174.796+/-0.029 $\chi^2$/NDF: 3198240.3/34




Right In: 3.923+/-6.172 $\chi^2$/NDF: 4.5/15

Left Out: -2.540+/-4.212 $\chi^2$/NDF:5.1/16

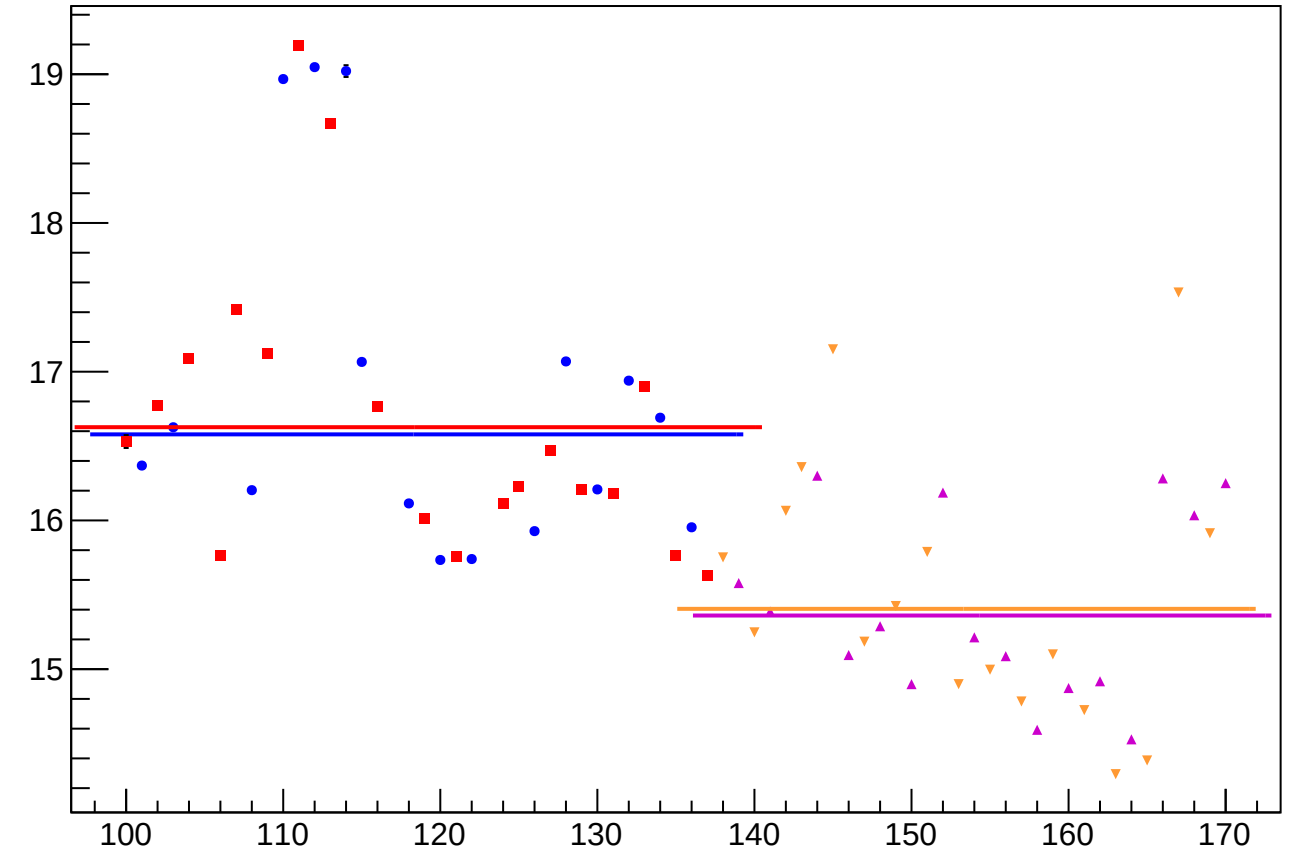
Right Out: -0.714+/-6.077 $\chi^2$/NDF: 15.9/18

Left In: 4.717+/-4.234 $\chi^2$/NDF:18.0/15

\+ sign -0.486+/-3.479 $\chi^2$/NDF: 10.4/32

All: 1.231+/-2.458 $\chi^2$/NDF: 45.2/67

\- sign 2.942+/-3.474 $\chi^2$/NDF: 34.4/34




Right In: 16.579+/-0.004 $\chi^2$/NDF: 44575.6/15

Left Out: 15.406+/-0.003 $\chi^2$/NDF:78084.6/16

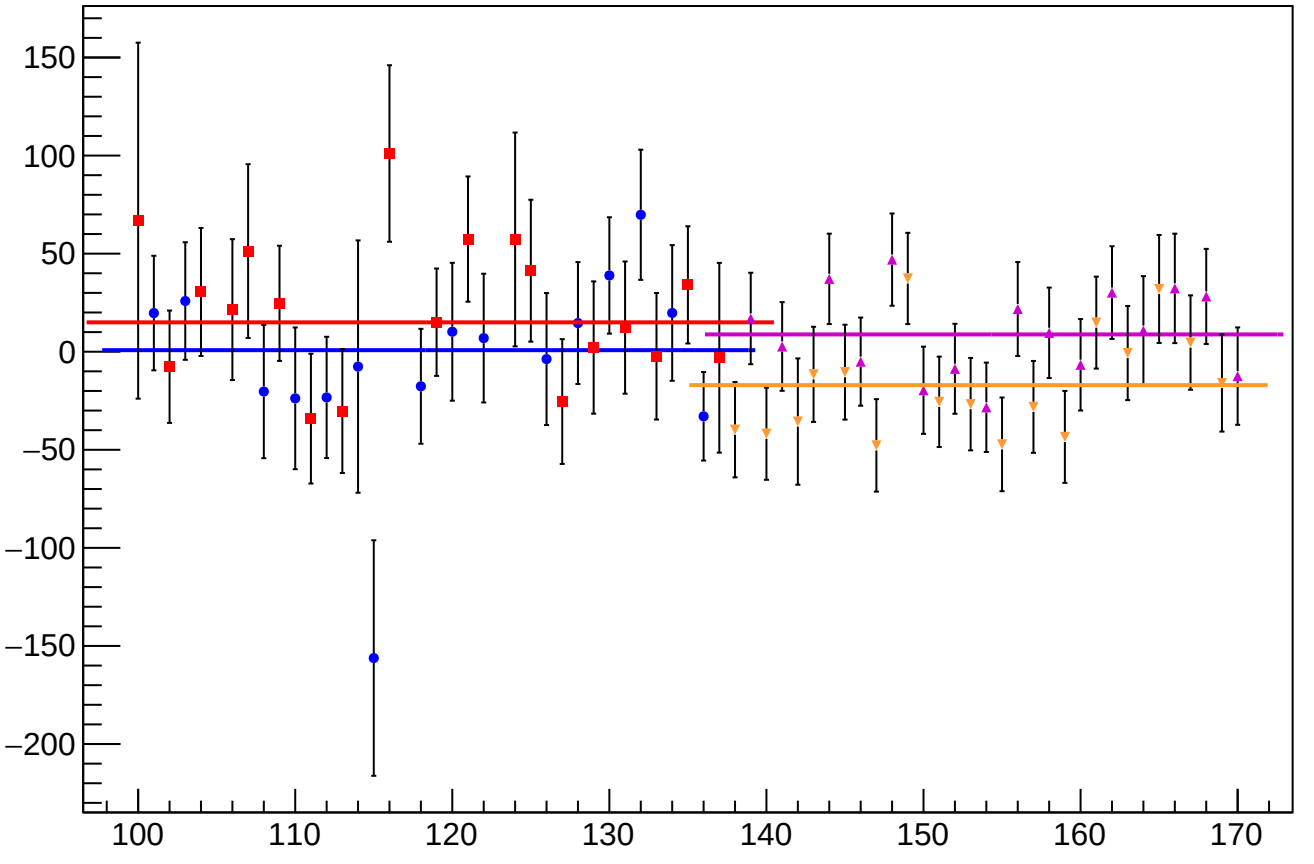
Right Out: 16.627+/-0.004 $\chi^2$/NDF: 43461.8/18

Left In: 15.361+/-0.003 $\chi^2$/NDF:37414.2/15

\+ sign 15.778+/-0.002 $\chi^2$/NDF: 171954.5/32

All: 15.776+/-0.002 $\chi^2$/NDF: 311292.8/67

\- sign 15.774+/-0.002 $\chi^2$/NDF: 139337.1/34




Right In: 0.790+/-8.125 $\chi^2$/NDF: 18.7/15

Left Out: -17.018+/-5.889 $\chi^2$/NDF:19.3/16

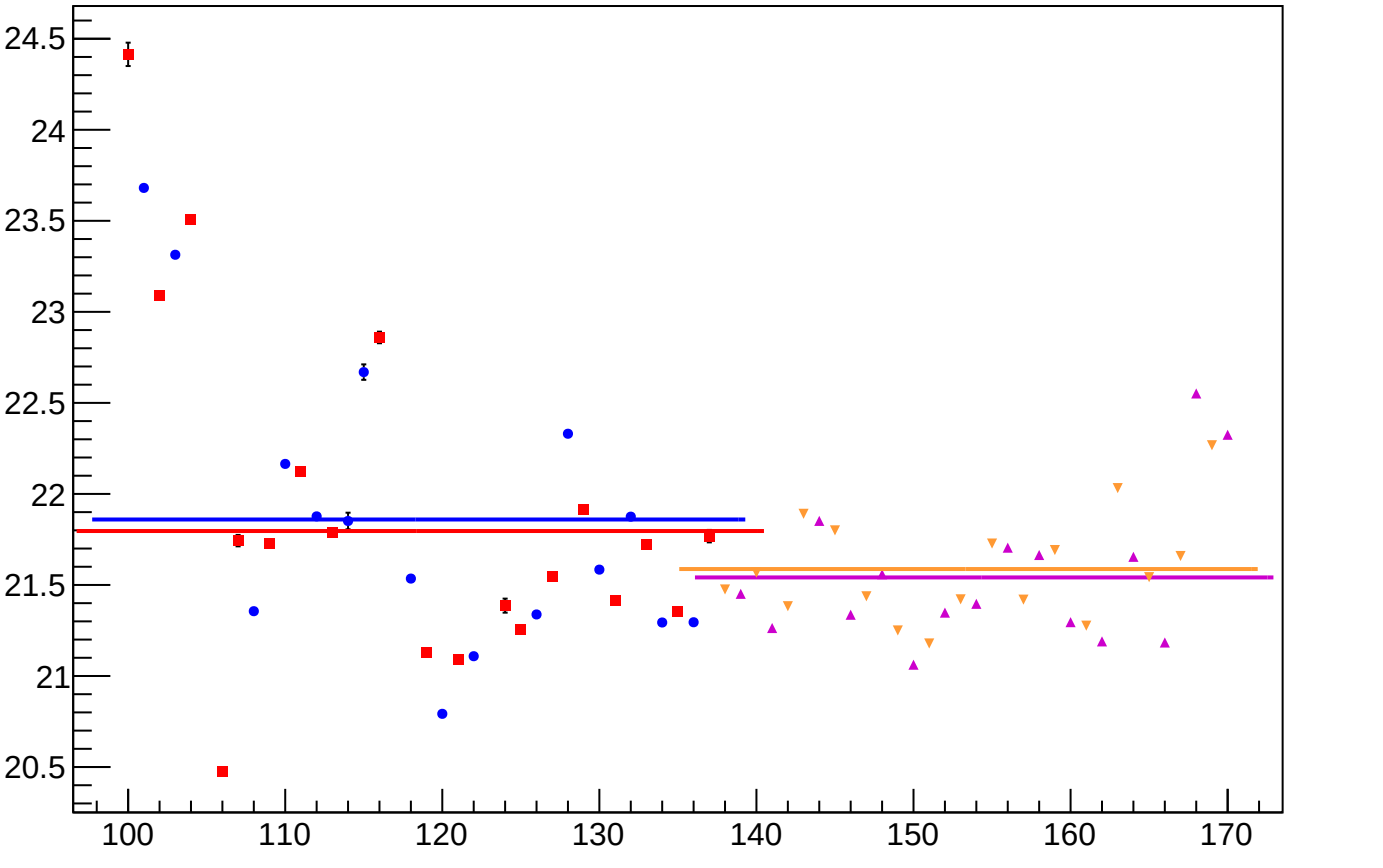
Right Out: 14.981+/-7.953 $\chi^2$/NDF: 15.4/18

Left In: 8.823+/-5.926 $\chi^2$/NDF:13.2/15

+ sign -10.885+/-4.768 $\chi^2$/NDF: 41.1/32

All: 0.105+/-3.366 $\chi^2$/NDF: 80.7/67

- sign 11.021+/-4.752 $\chi^2$/NDF: 29.0/34




Right In: 21.860+/-0.006 $\chi^2$/NDF: 19468.1/15

Left Out: 21.587+/-0.004 $\chi^2$/NDF:4600.6/16

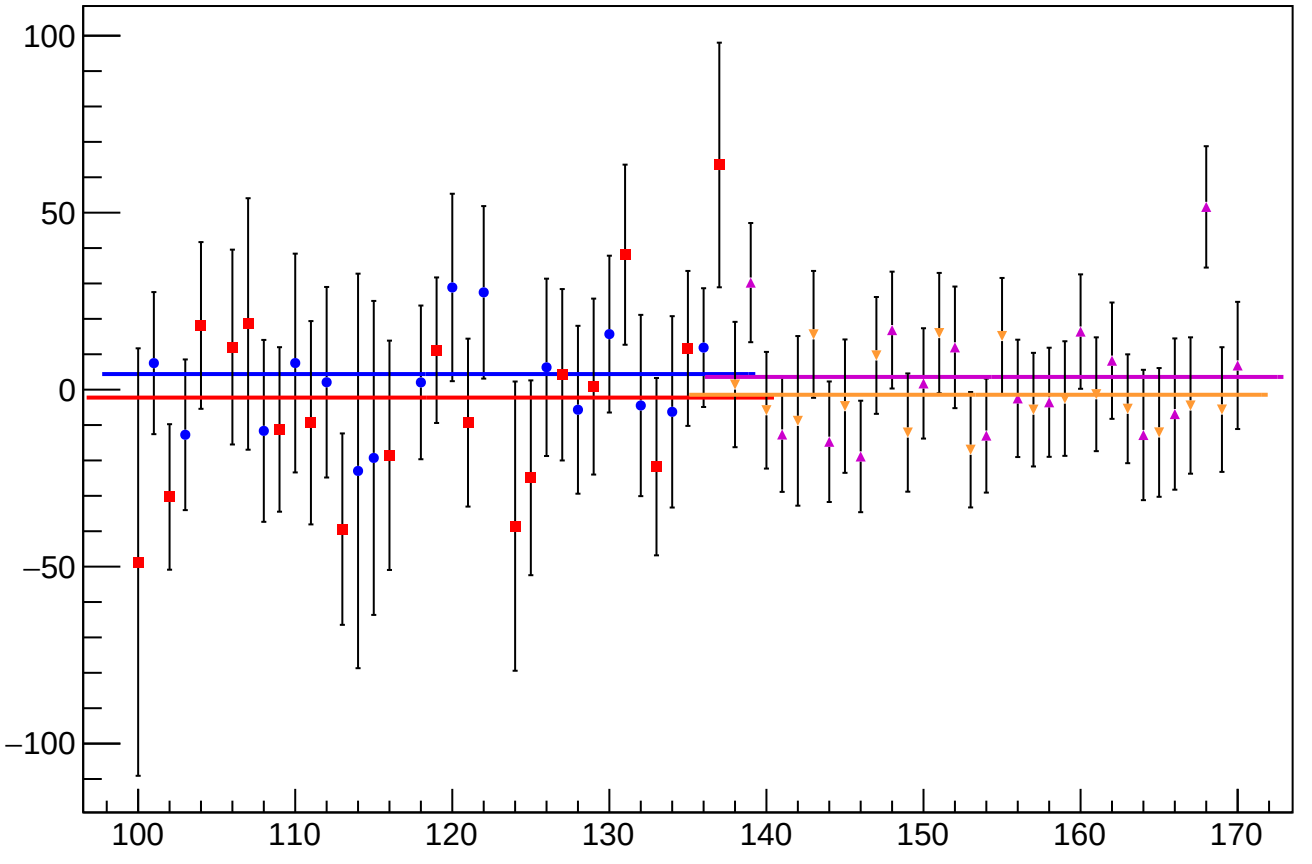
Right Out: 21.796+/-0.006 $\chi^2$/NDF: 18861.3/18

Left In: 21.541+/-0.004 $\chi^2$/NDF:8654.3/15

+ sign 21.681+/-0.003 $\chi^2$/NDF: 25539.6/32

All: 21.657+/-0.002 $\chi^2$/NDF: 54481.6/67

- sign 21.632+/-0.003 $\chi^2$/NDF: 28836.8/34




Right In: 4.404+/-6.137 $\chi^2$/NDF: 4.3/15

Left Out: -1.445+/-4.171 $\chi^2$/NDF:5.5/16

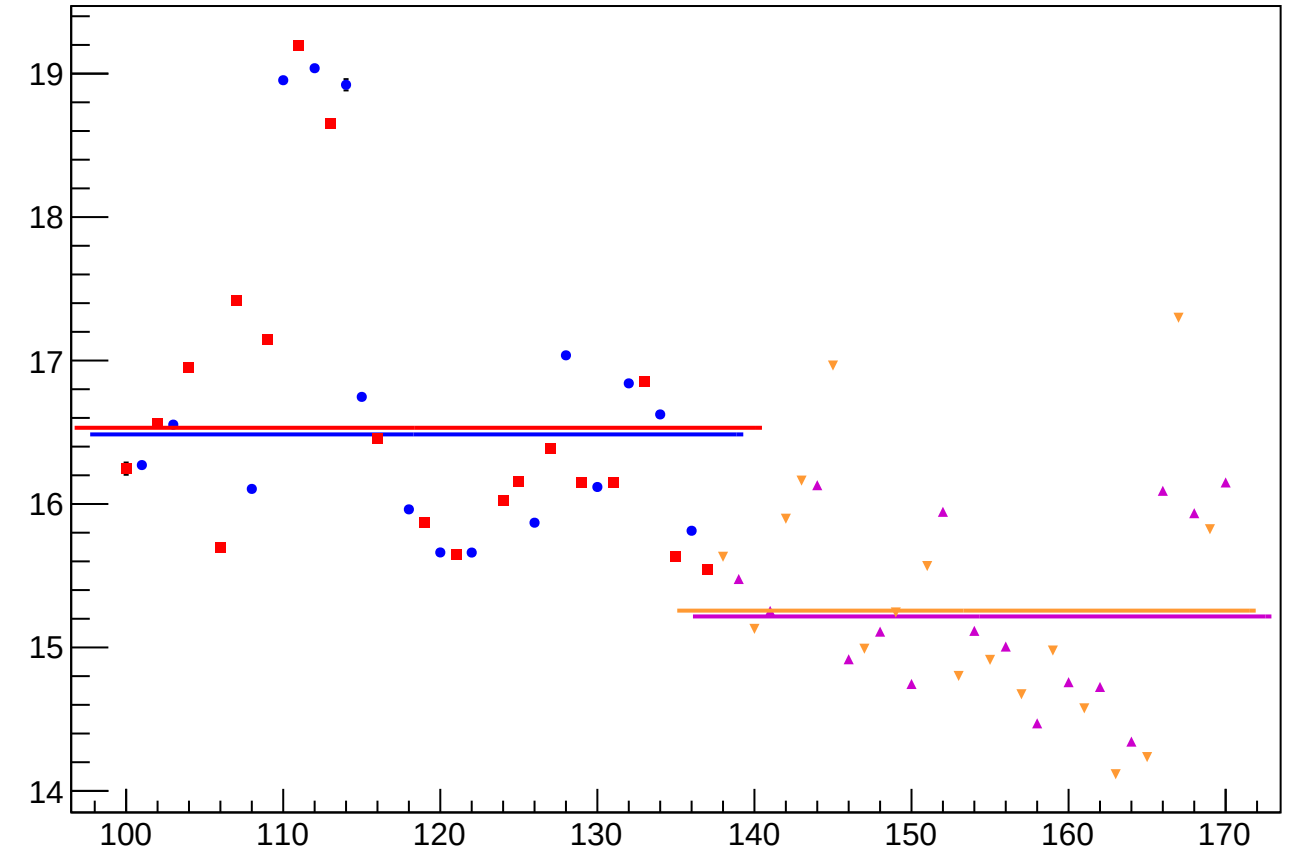
Right Out: -2.244+/-6.042 $\chi^2$/NDF: 15.4/18

Left In: 3.594+/-4.194 $\chi^2$/NDF:18.6/15

+ sign 0.404+/-3.450 $\chi^2$/NDF: 10.4/32

All: 1.051+/-2.438 $\chi^2$/NDF: 45.2/67

- sign 1.696+/-3.445 $\chi^2$/NDF: 34.6/34




Right In: 16.485+/-0.004 $\chi^2$/NDF: 47186.1/15

Left Out: 15.257+/-0.003 $\chi^2$/NDF:76290.7/16

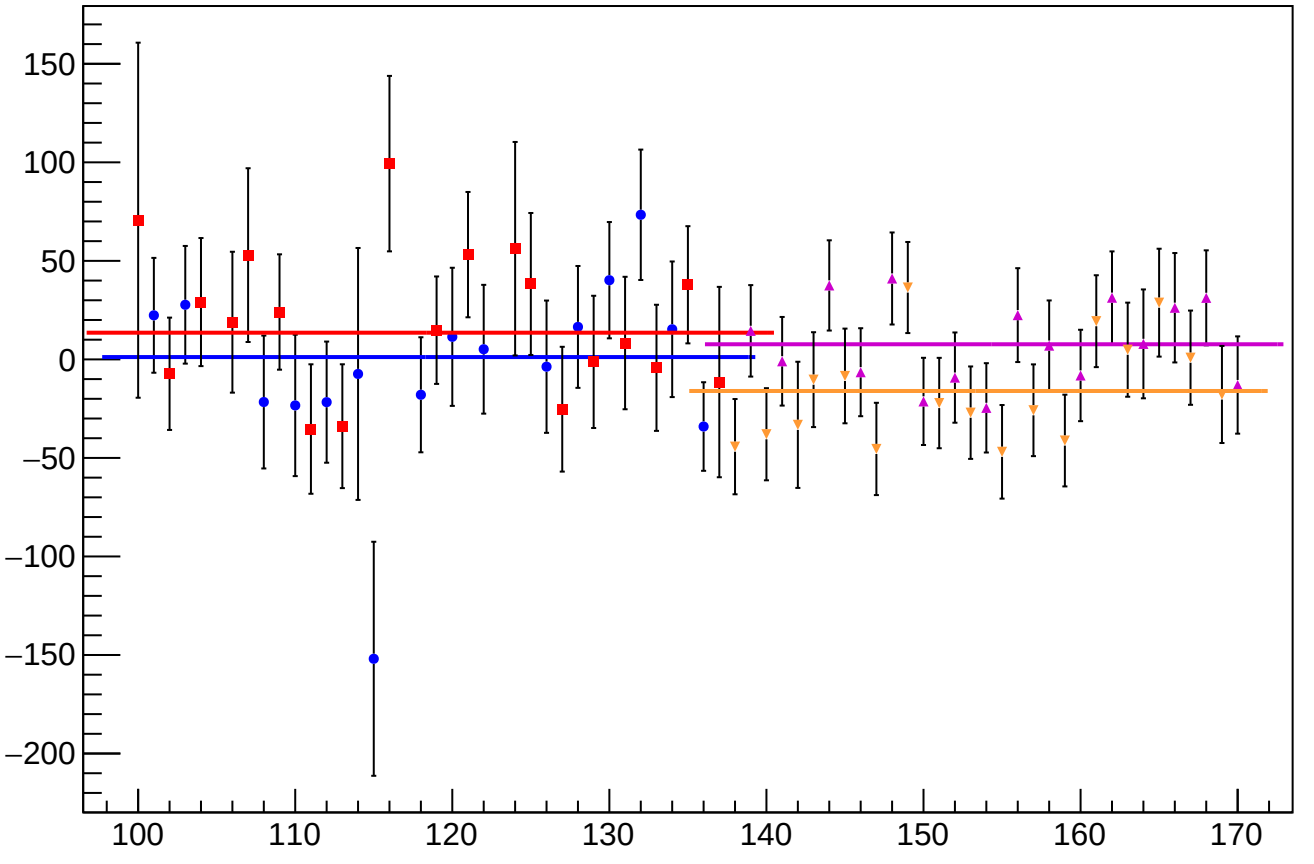
Right Out: 16.531+/-0.004 $\chi^2$/NDF: 46474.0/18

Left In: 15.216+/-0.003 $\chi^2$/NDF:37746.6/15

+ sign 15.645+/-0.002 $\chi^2$/NDF: 178282.0/32

All: 15.644+/-0.002 $\chi^2$/NDF: 326449.7/67

- sign 15.644+/-0.002 $\chi^2$/NDF: 148167.6/34




Right In: 1.185+/-8.088 $\chi^2$/NDF: 19.4/15

Left Out: -16.031+/-5.854 $\chi^2$/NDF:19.0/16

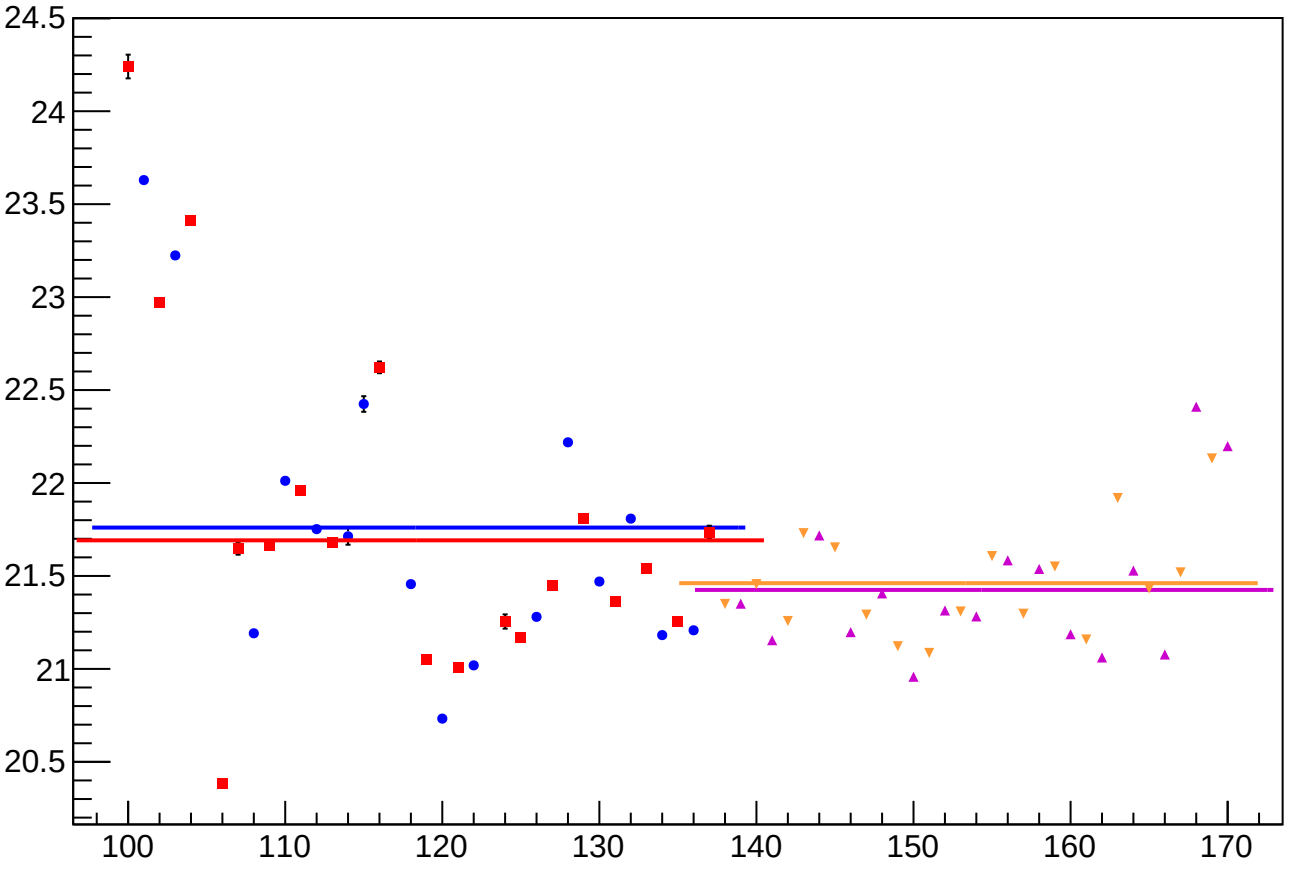
Right Out: 13.549+/-7.915 $\chi^2$/NDF: 15.9/18

Left In: 7.681+/-5.894 $\chi^2$/NDF:12.6/15

\+ sign -10.112+/-4.742 $\chi^2$/NDF: 41.4/32

All: -0.138+/-3.348 $\chi^2$/NDF: 79.1/67

\- sign 9.774+/-4.727 $\chi^2$/NDF: 28.9/34




Right In: 21.760+/-0.006 $\chi^2$/NDF: 19745.7/15

Left Out: 21.461+/-0.004 $\chi^2$/NDF:4433.6/16

Right Out: 21.692+/-0.006 $\chi^2$/NDF: 18330.7/18

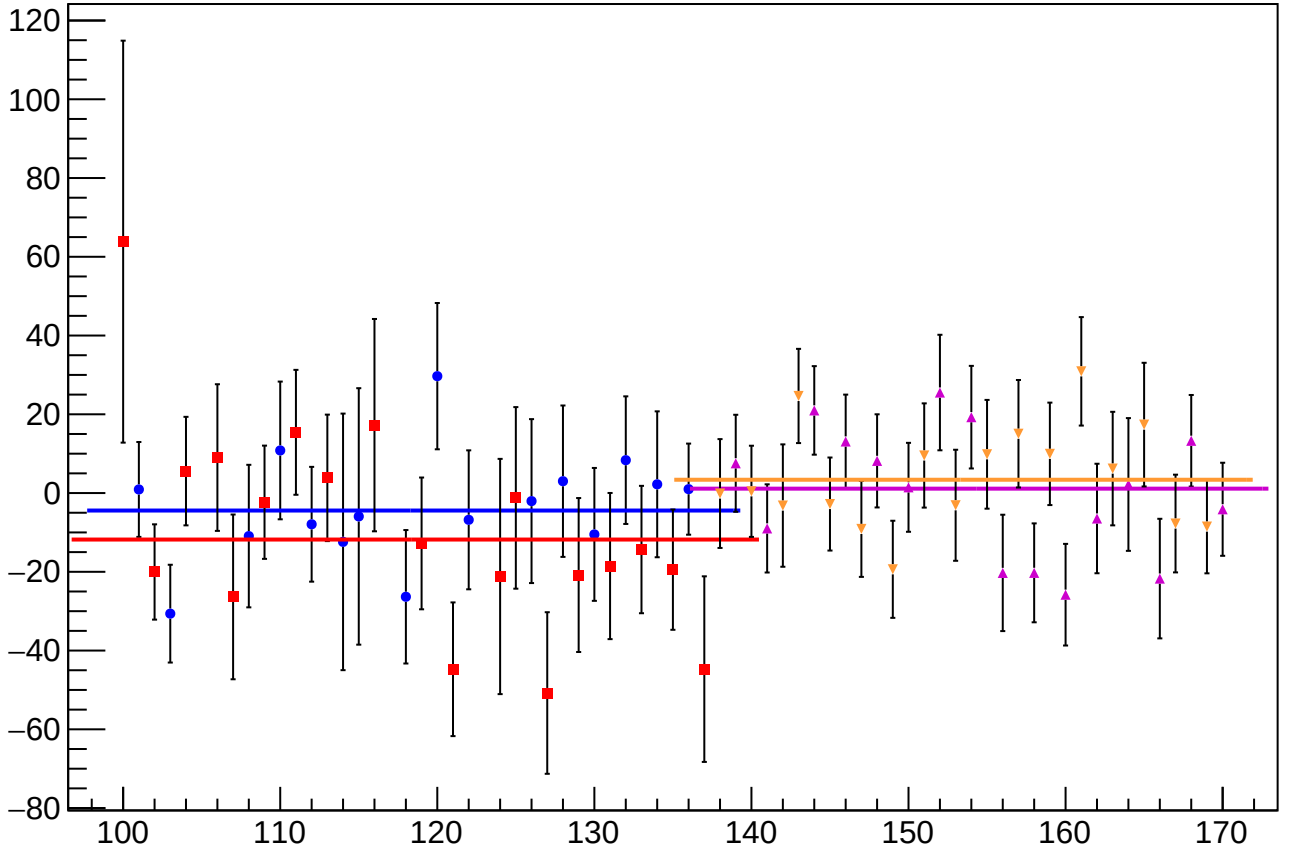
Left In: 21.425+/-0.004 $\chi^2$/NDF:8339.1/15

+ sign 21.564+/-0.003 $\chi^2$/NDF: 25973.9/32

All: 21.542+/-0.002 $\chi^2$/NDF: 54190.7/67

- sign 21.520+/-0.003 $\chi^2$/NDF: 28130.5/34

# asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs Slug




Right In: -4.440+/-4.131 $\chi^2$/NDF: 12.0/15

Left Out: 3.379+/-3.173 $\chi^2$/NDF:16.5/16

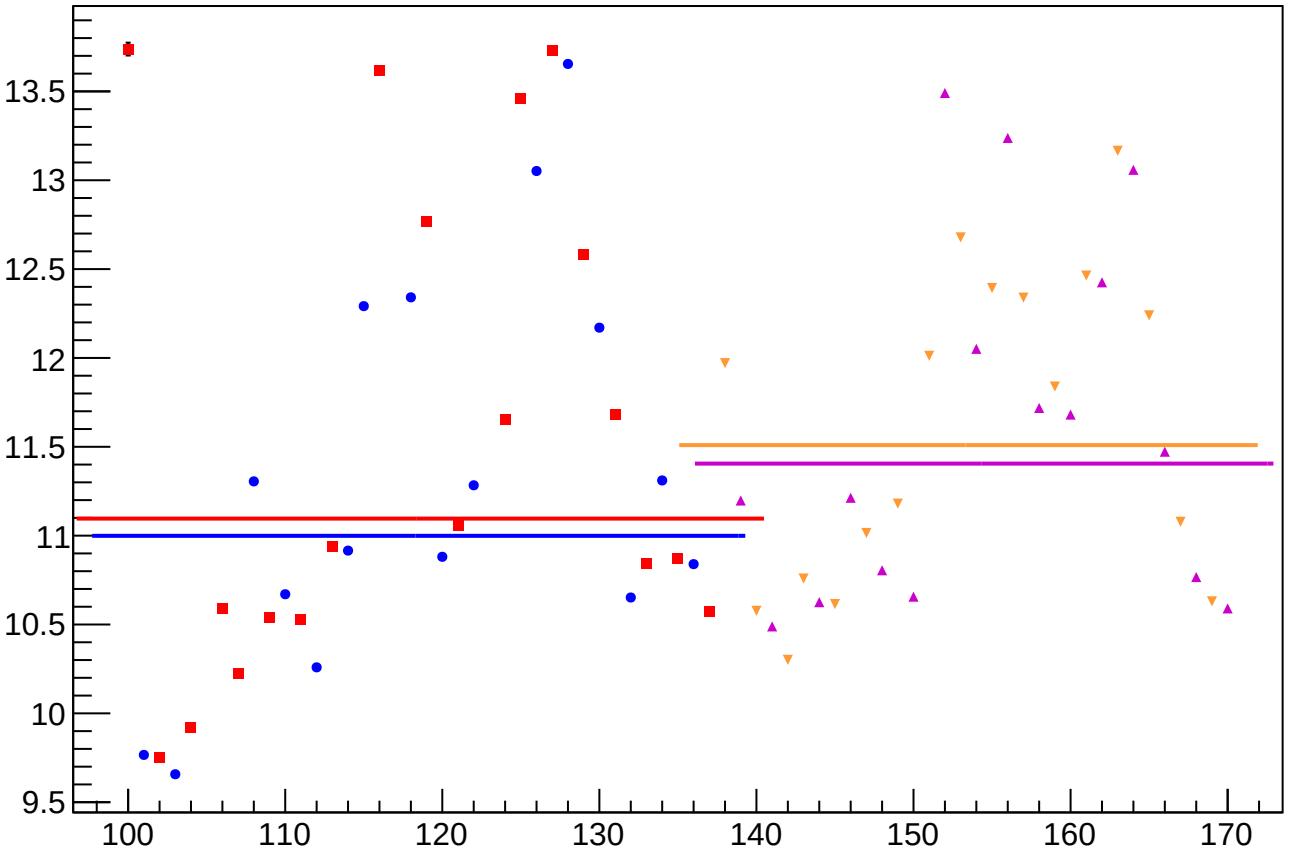
Right Out: -11.807+/-4.097 $\chi^2$/NDF: 21.7/18

Left In: 1.116+/-3.169 $\chi^2$/NDF:23.5/15

+ sign 0.477+/-2.517 $\chi^2$/NDF: 30.7/32

All: -1.630+/-1.776 $\chi^2$/NDF: 83.6/67

- sign -3.721+/-2.507 $\chi^2$/NDF: 51.5/34




Right In: 10.999+/-0.003 $\chi^2$/NDF: 136159.2/15

Left Out: 11.510+/-0.002 $\chi^2$/NDF:138579.6/16

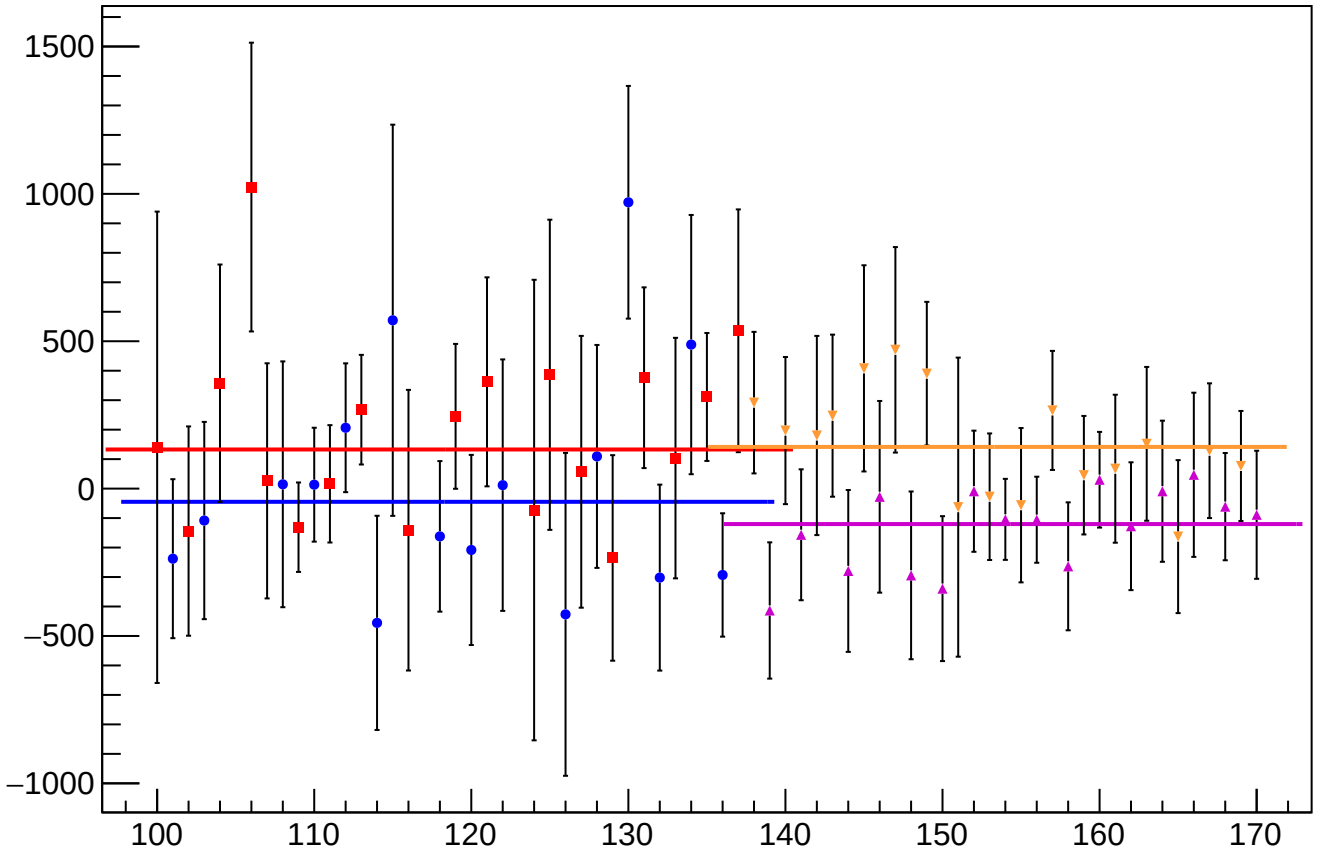
Right Out: 11.096+/-0.003 $\chi^2$/NDF: 162908.7/18

Left In: 11.405+/-0.002 $\chi^2$/NDF:161913.1/15

+ sign 11.320+/-0.002 $\chi^2$/NDF: 293948.5/32

All: 11.305+/-0.001 $\chi^2$/NDF: 626059.0/67

- sign 11.290+/-0.002 $\chi^2$/NDF: 331963.5/34




Right In: -44.797+/-76.424 $\chi^2$/NDF: 15.4/15

Left Out: 141.422+/-60.715 $\chi^2$/NDF:6.7/16

Right Out: 132.730+/-68.270 $\chi^2$/NDF: 12.9/18

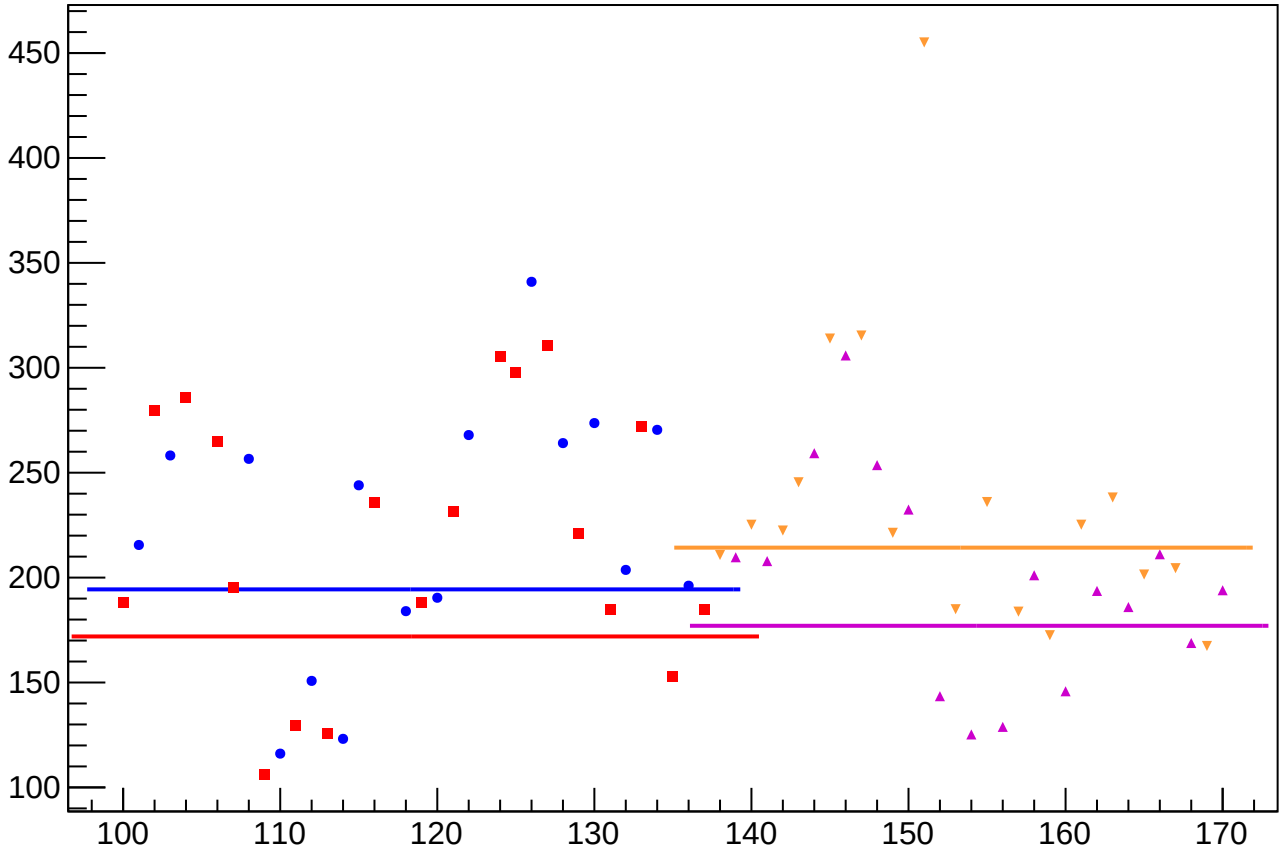
Left In: -120.309+/-51.552 $\chi^2$/NDF:5.5/15

+ sign 69.366+/-47.539 $\chi^2$/NDF: 25.7/32

All: 13.454+/-31.109 $\chi^2$/NDF: 55.3/67

- sign -28.420+/-41.140 $\chi^2$/NDF: 27.1/34

# asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs Slug




Right In: 194.385+/-0.054 $\chi^2$/NDF: 1042024.1/15

Left Out: 214.283+/-0.043 $\chi^2$/NDF:1151892.7/16

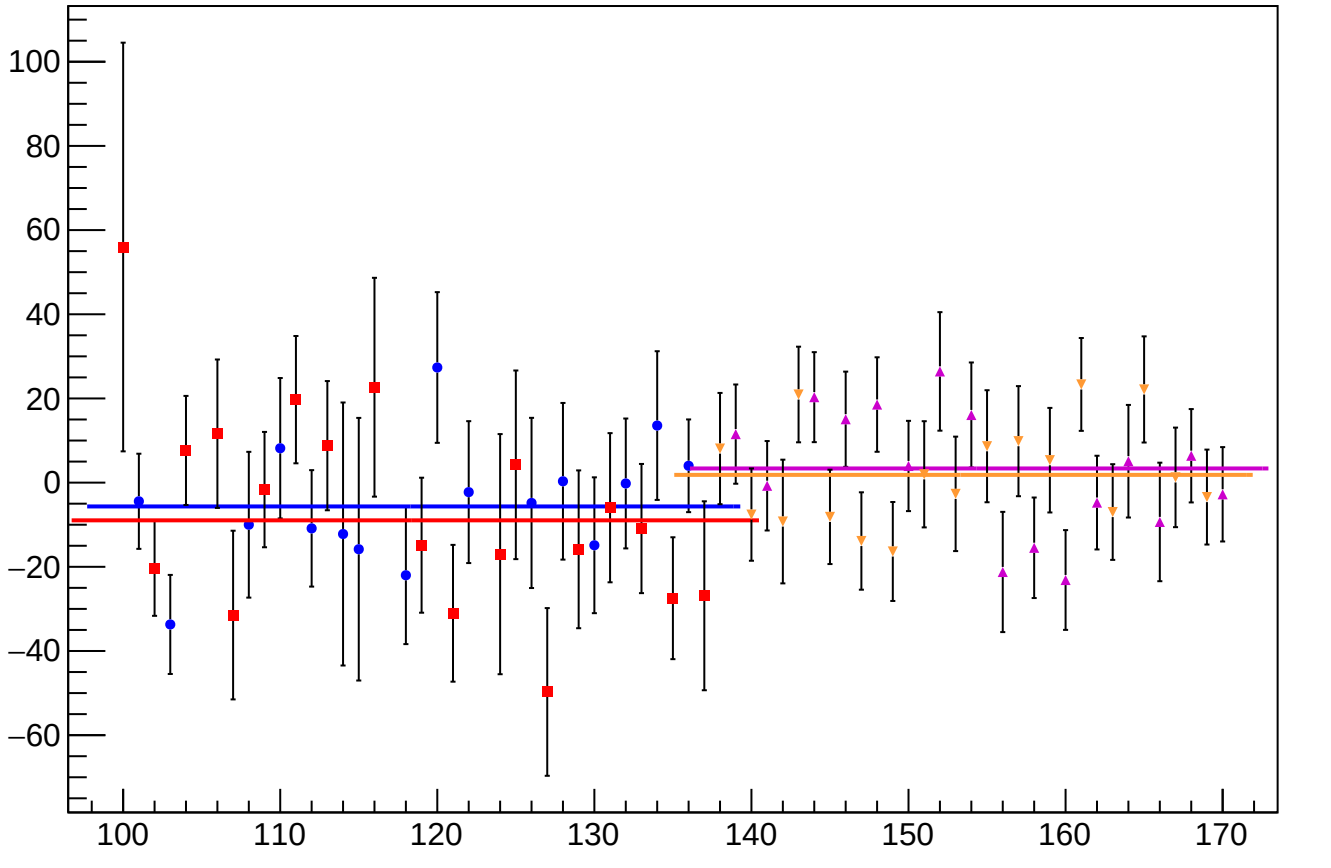
Right Out: 171.949+/-0.048 $\chi^2$/NDF: 1651343.7/18

Left In: 177.033+/-0.036 $\chi^2$/NDF:1532637.7/15

+ sign 206.583+/-0.034 $\chi^2$/NDF: 2277030.4/32

All: 188.631+/-0.022 $\chi^2$/NDF: 5966882.9/67

- sign 175.187+/-0.029 $\chi^2$/NDF: 3191045.4/34




Right In: -5.657+/-3.939 $\chi^2$/NDF: 13.7/15

Left Out: 1.842+/-2.936 $\chi^2$/NDF:17.4/16

Right Out: -8.960+/-3.901 $\chi^2$/NDF: 22.8/18

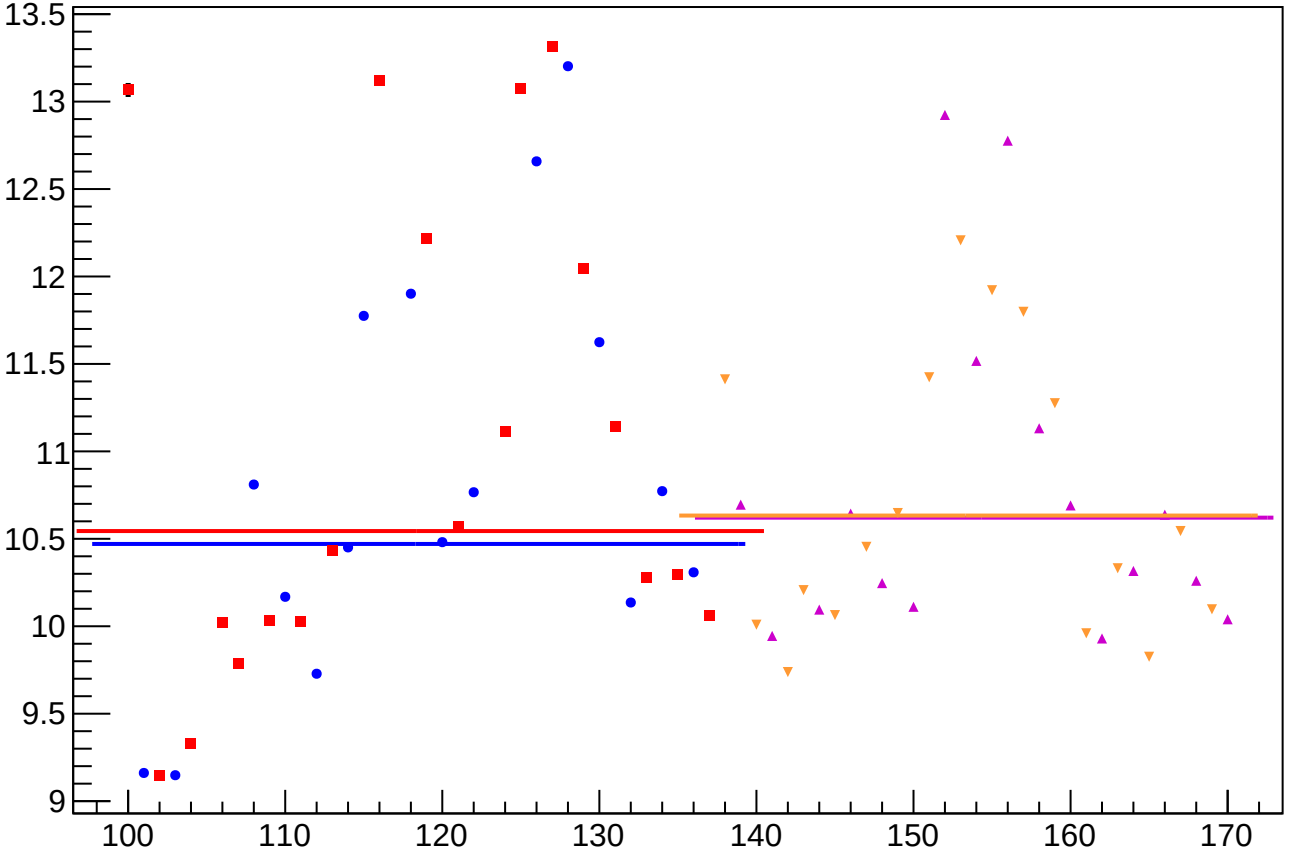
Left In: 3.366+/-2.955 $\chi^2$/NDF:22.0/15

+ sign -0.836+/-2.354 $\chi^2$/NDF: 33.4/32

All: -0.982+/-1.665 $\chi^2$/NDF: 84.5/67

- sign -1.128+/-2.355 $\chi^2$/NDF: 51.1/34

# asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs Slug




Right In: 10.471+/-0.003 $\chi^2$/NDF: 157365.8/15

Left Out: 10.633+/-0.002 $\chi^2$/NDF:125586.3/16

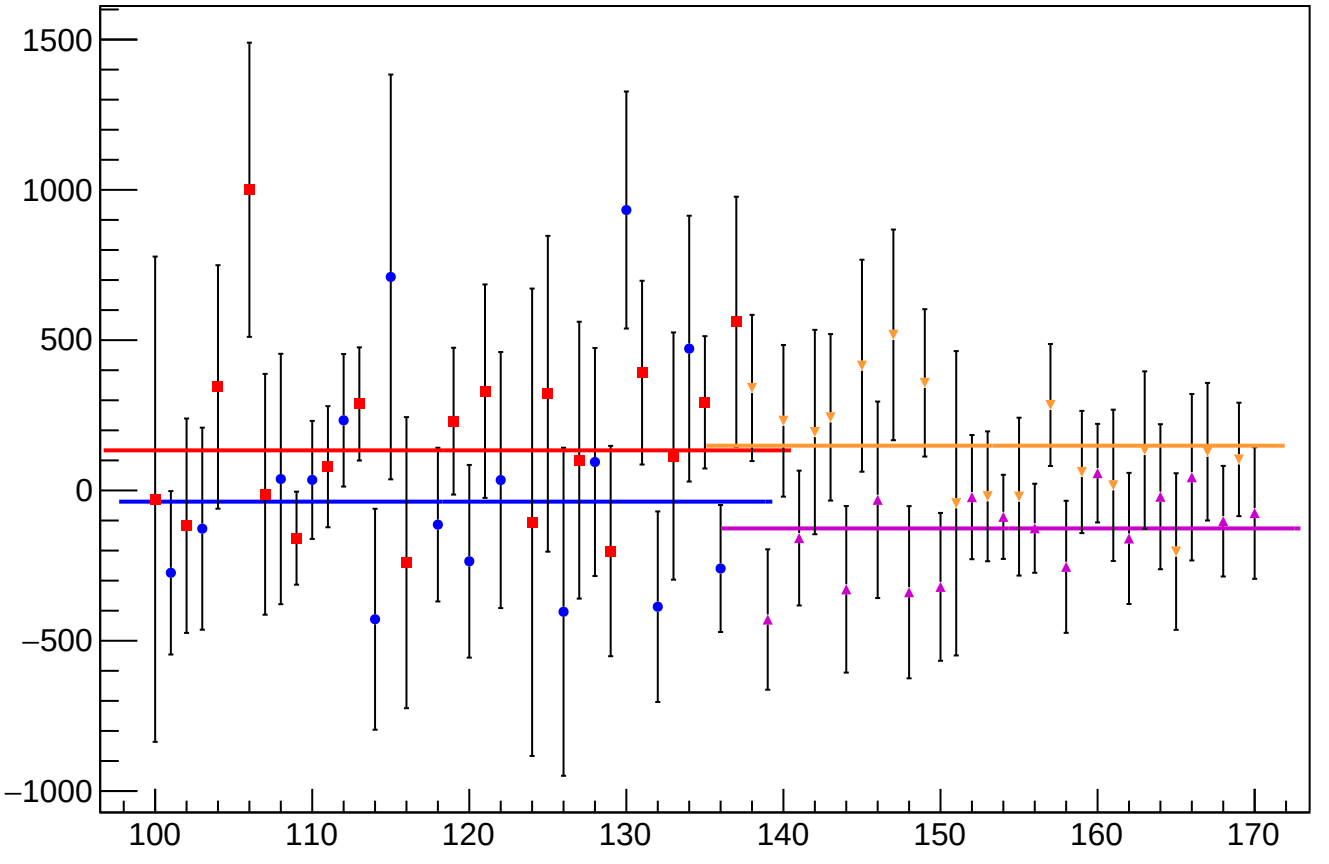
Right Out: 10.544+/-0.003 $\chi^2$/NDF: 186780.3/18

Left In: 10.621+/-0.002 $\chi^2$/NDF:149098.4/15

+ sign 10.575+/-0.002 $\chi^2$/NDF: 285137.1/32

All: 10.584+/-0.001 $\chi^2$/NDF: 621564.8/67

- sign 10.593+/-0.002 $\chi^2$/NDF: 336369.0/34




Right In: -37.241+/-76.915 $\chi^2$/NDF: 15.6/15

Left Out: 148.909+/-61.113 $\chi^2$/NDF:7.2/16

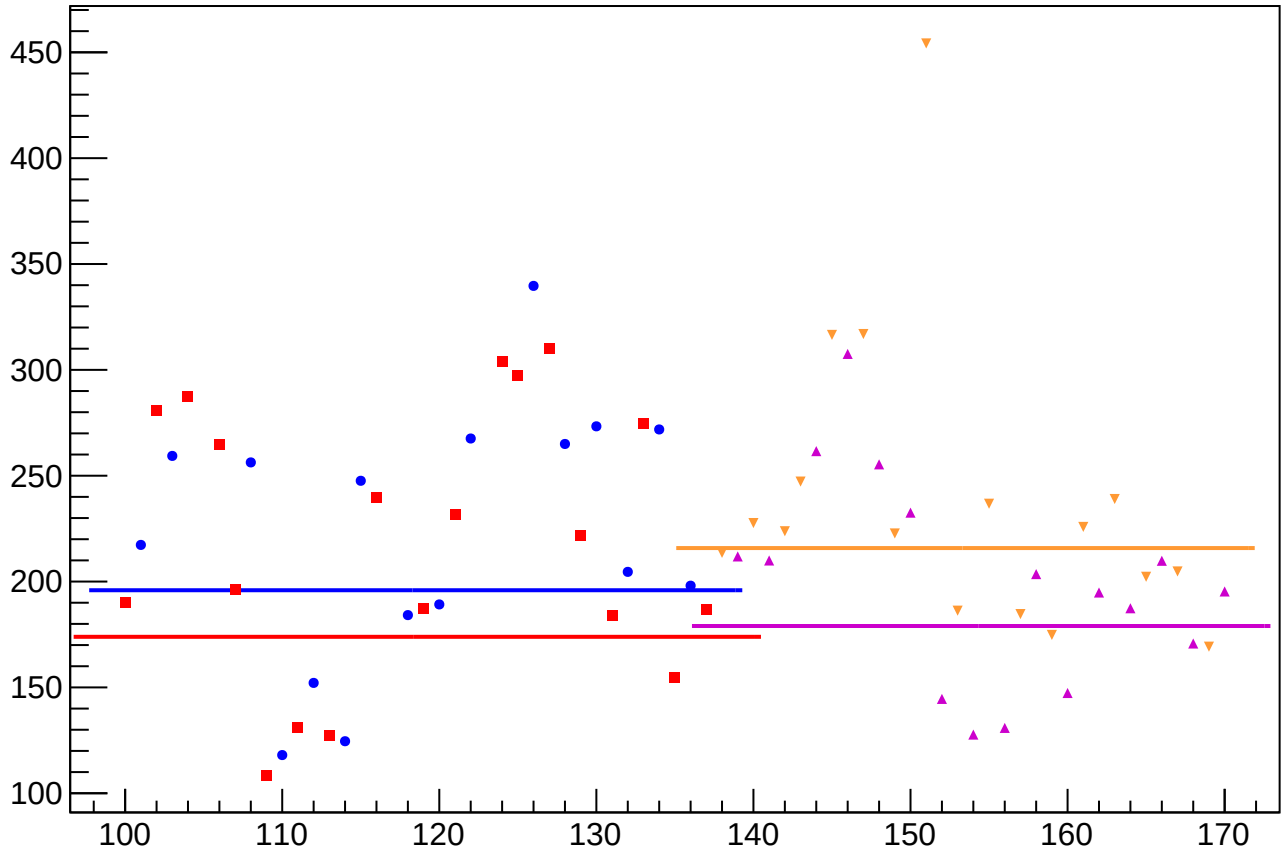
Right Out: 133.386+/-68.885 $\chi^2$/NDF: 12.9/18

Left In: -126.331+/-52.059 $\chi^2$/NDF:6.1/15

+ sign 76.870+/-47.848 $\chi^2$/NDF: 26.5/32

All: 14.826+/-31.365 $\chi^2$/NDF: 57.5/67

- sign -31.920+/-41.532 $\chi^2$/NDF: 28.0/34




Right In: 195.900+/-0.054 $\chi^2$/NDF: 1011012.3/15

Left Out: 215.824+/-0.043 $\chi^2$/NDF:1135740.0/16

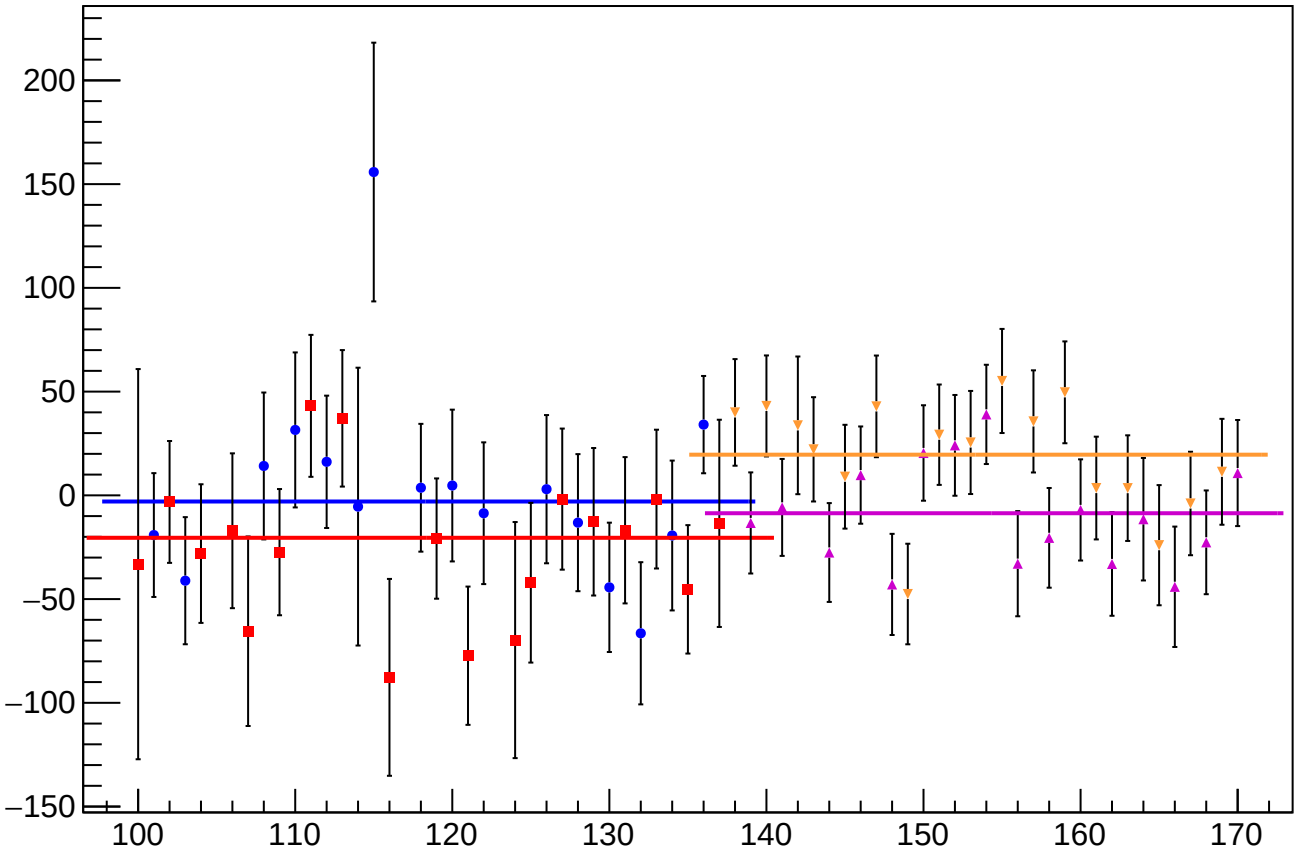
Right Out: 173.901+/-0.049 $\chi^2$/NDF: 1599608.1/18

Left In: 179.008+/-0.037 $\chi^2$/NDF:1489488.7/15

+ sign 208.113+/-0.034 $\chi^2$/NDF: 2229021.3/32

All: 190.456+/-0.022 $\chi^2$/NDF: 5802713.6/67

- sign 177.151+/-0.029 $\chi^2$/NDF: 3096091.3/34




Right In: -2.967+/-8.454 $\chi^2$/NDF: 17.9/15

Left Out: 19.600+/-6.155 $\chi^2$/NDF:18.7/16

Right Out: -20.457+/-8.292 $\chi^2$/NDF: 15.3/18

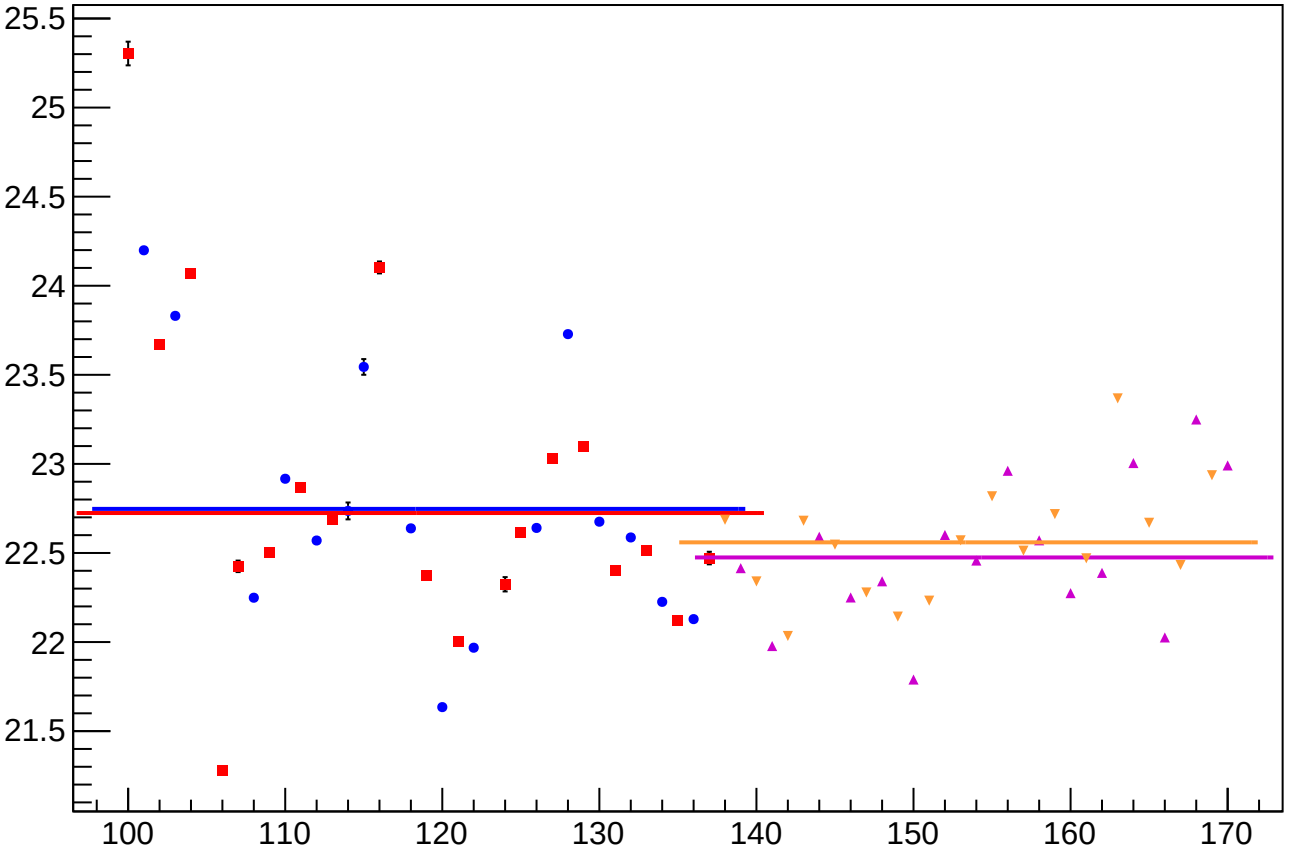
Left In: -8.621+/-6.183 $\chi^2$/NDF:15.2/15

+ sign 11.782+/-4.976 $\chi^2$/NDF: 41.3/32

All: -0.581+/-3.512 $\chi^2$/NDF: 85.4/67

- sign -12.851+/-4.957 $\chi^2$/NDF: 31.8/34

# asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs Slug




Right In: 22.747+/-0.006 $\chi^2$/NDF: 14622.8/15

Left Out: 22.560+/-0.004 $\chi^2$/NDF:4842.0/16

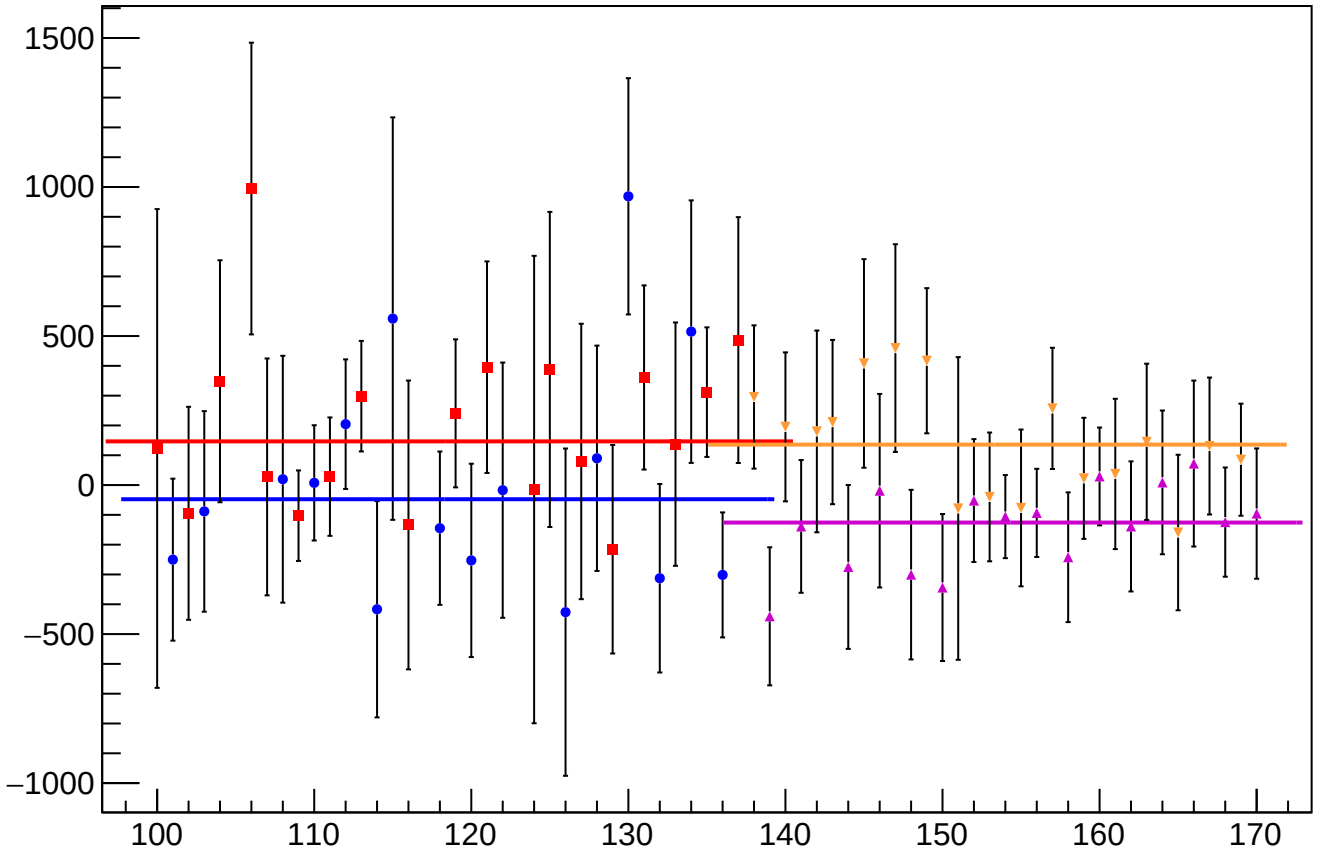
Right Out: 22.724+/-0.006 $\chi^2$/NDF: 14490.6/18

Left In: 22.475+/-0.004 $\chi^2$/NDF:7825.2/15

+ sign 22.625+/-0.004 $\chi^2$/NDF: 20110.2/32

All: 22.594+/-0.002 $\chi^2$/NDF: 43738.1/67

- sign 22.564+/-0.004 $\chi^2$/NDF: 23478.5/34




Right In: -47.523+/-76.571 $\chi^2$/NDF: 15.4/15

Left Out: 135.723+/-60.986 $\chi^2$/NDF:7.1/16

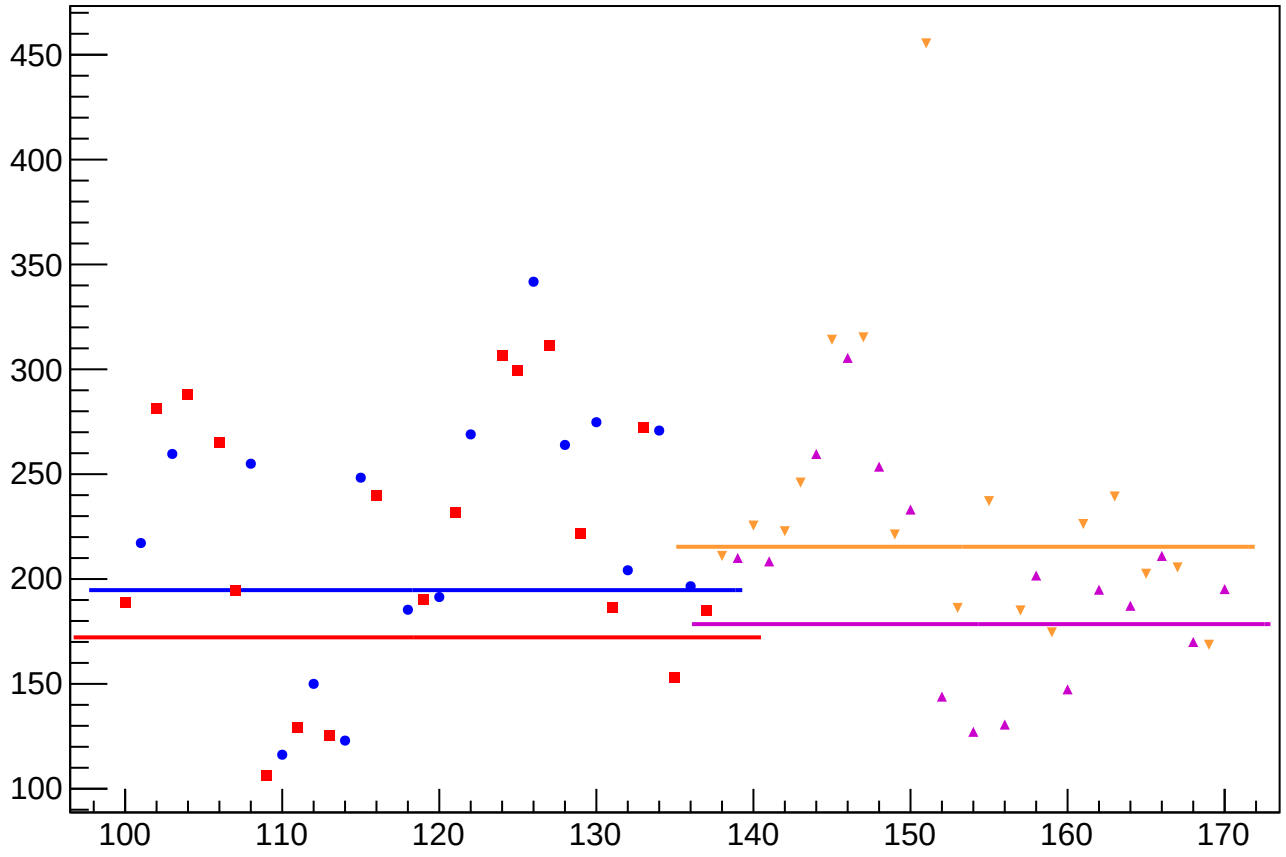
Right Out: 146.573+/-68.398 $\chi^2$/NDF: 11.6/18

Left In: -125.821+/-51.911 $\chi^2$/NDF:5.6/15

+ sign 64.598+/-47.704 $\chi^2$/NDF: 26.0/32

All: 12.716+/-31.246 $\chi^2$/NDF: 55.3/67

- sign -26.265+/-41.350 $\chi^2$/NDF: 27.3/34




Right In: 194.708+/-0.054 $\chi^2$/NDF: 1052288.9/15

Left Out: 215.380+/-0.043 $\chi^2$/NDF:1128925.7/16

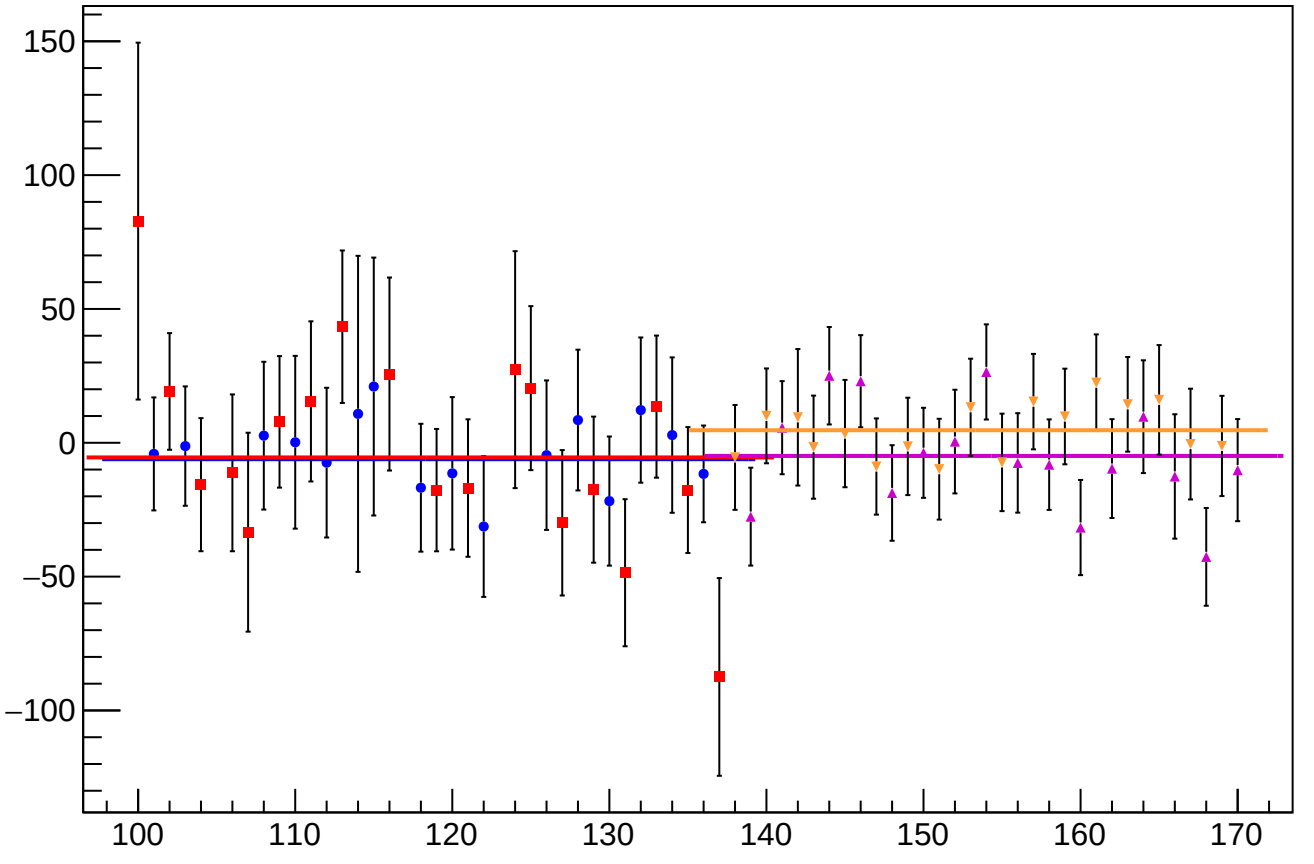
Right Out: 172.186+/-0.048 $\chi^2$/NDF: 1671068.3/18

Left In: 178.492+/-0.037 $\chi^2$/NDF:1479632.9/15

+ sign 207.356+/-0.034 $\chi^2$/NDF: 2270406.5/32

All: 189.559+/-0.022 $\chi^2$/NDF: 5919420.5/67

- sign 176.187+/-0.029 $\chi^2$/NDF: 3161487.2/34




Right In: -6.119+/-6.592 $\chi^2$/NDF: 3.1/15

Left Out: 4.689+/-4.582 $\chi^2$/NDF:4.6/16

Right Out: -5.470+/-6.509 $\chi^2$/NDF: 19.2/18

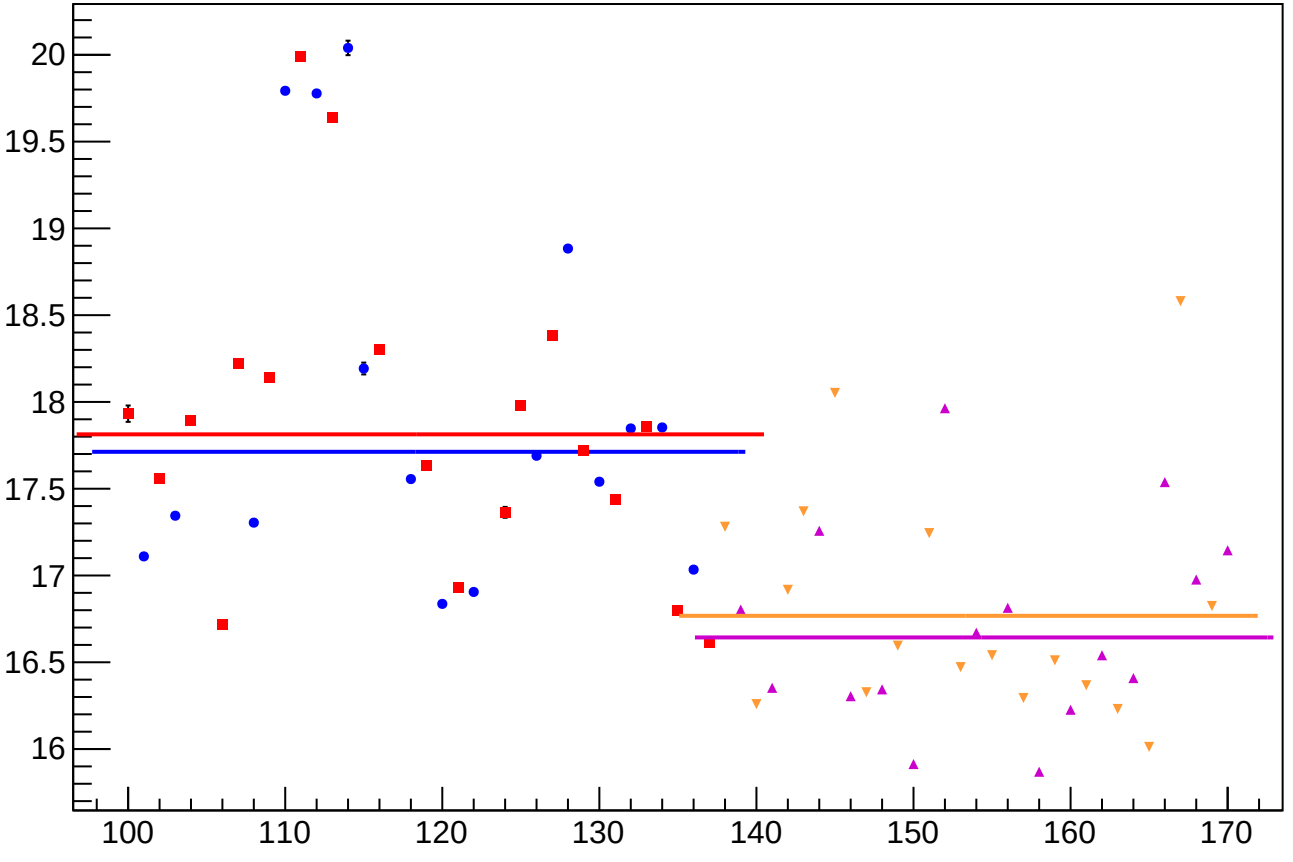
Left In: -4.915+/-4.587 $\chi^2$/NDF:18.4/15

+ sign 1.168+/-3.763 $\chi^2$/NDF: 9.6/32

All: -1.977+/-2.656 $\chi^2$/NDF: 48.5/67

- sign -5.099+/-3.749 $\chi^2$/NDF: 37.6/34

# asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs Slug




Right In: 17.713+/-0.005 $\chi^2$/NDF: 35983.5/15

Left Out: 16.768+/-0.003 $\chi^2$/NDF:39514.3/16

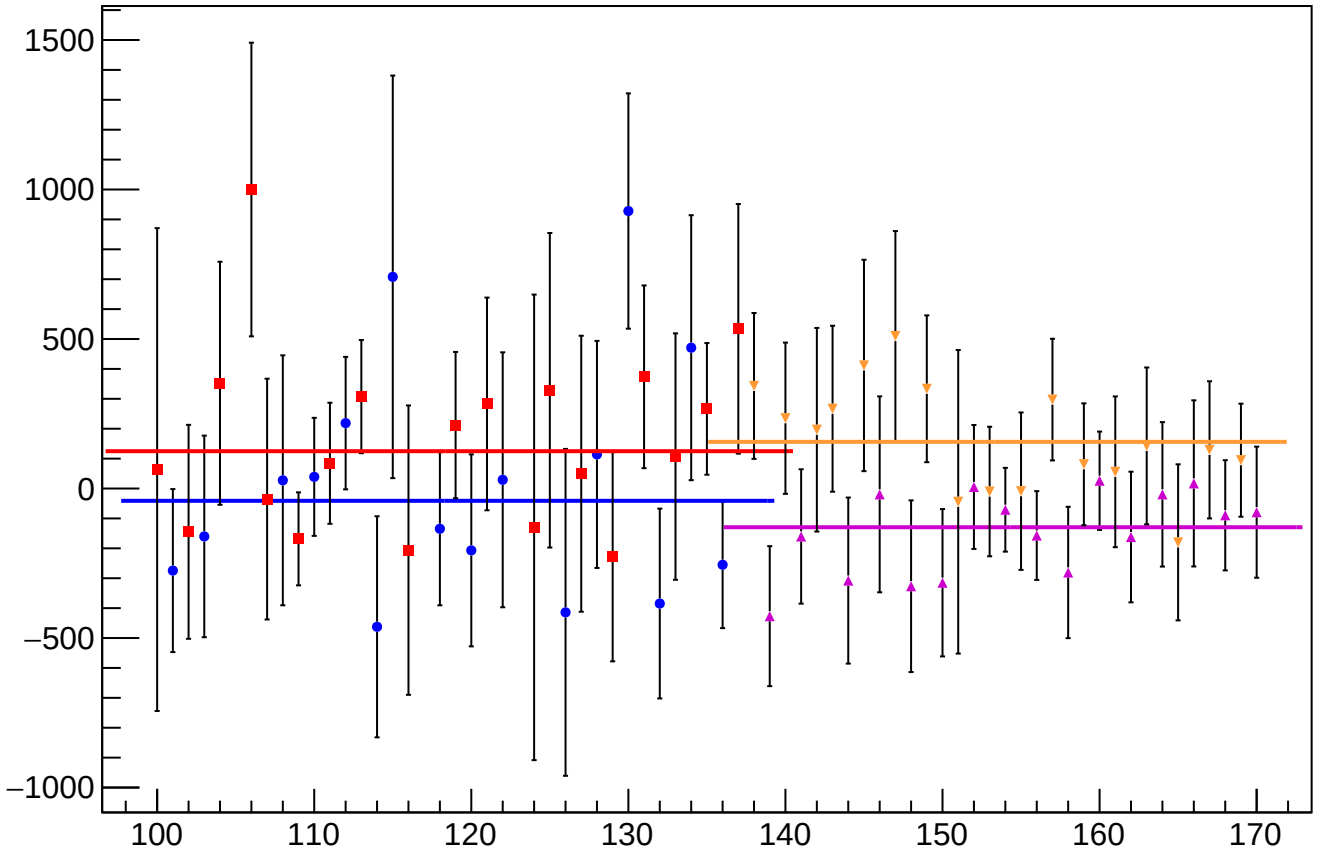
Right Out: 17.813+/-0.005 $\chi^2$/NDF: 32713.6/18

Left In: 16.643+/-0.003 $\chi^2$/NDF:28175.7/15

+ sign 17.076+/-0.003 $\chi^2$/NDF: 103205.5/32

All: 17.053+/-0.002 $\chi^2$/NDF: 207424.7/67

- sign 17.031+/-0.003 $\chi^2$/NDF: 104081.1/34




Right In: -41.114+/-77.139 $\chi^2$/NDF: 15.6/15

Left Out: 156.097+/-61.246 $\chi^2$/NDF:6.6/16

Right Out: 124.872+/-69.109 $\chi^2$/NDF: 12.9/18

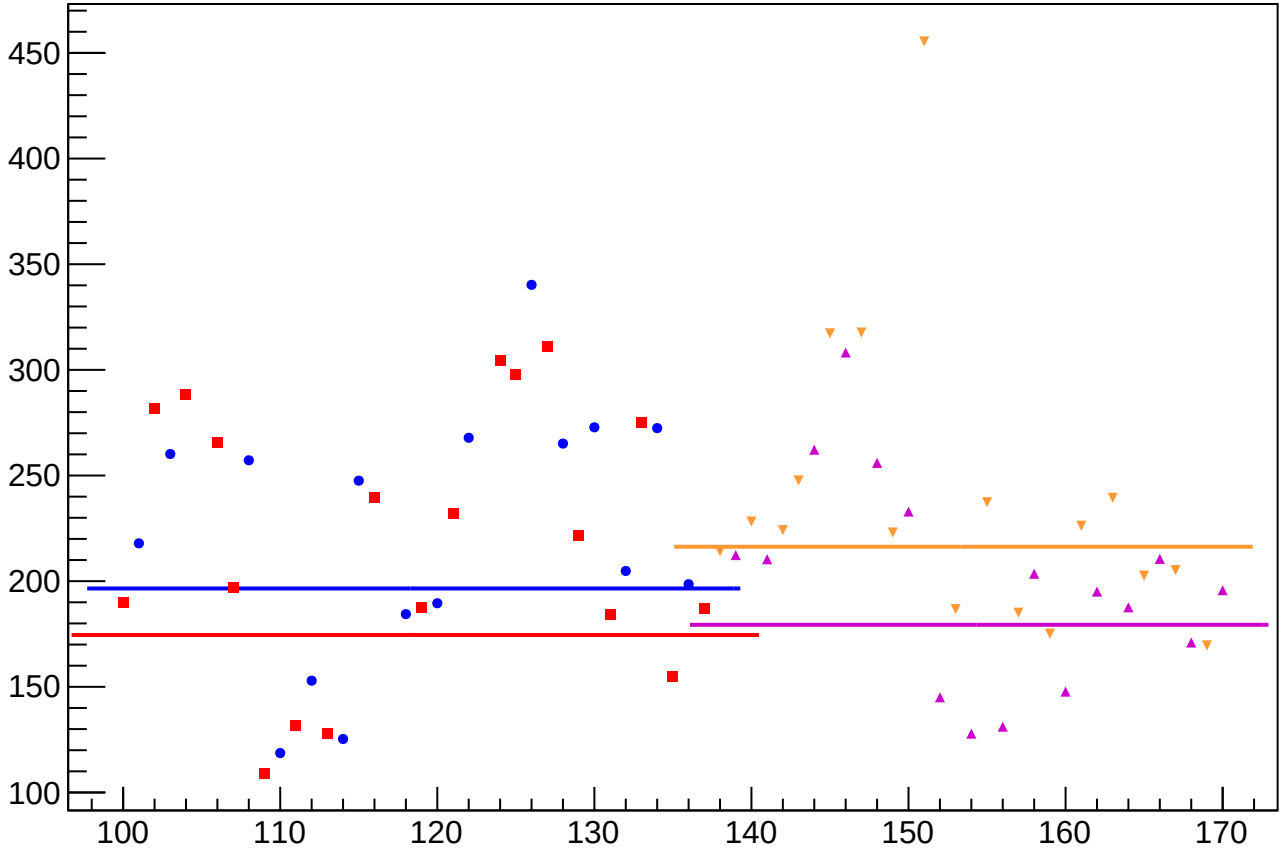
Left In: -129.418+/-52.161 $\chi^2$/NDF:5.8/15

+ sign 79.846+/-47.966 $\chi^2$/NDF: 26.2/32

All: 13.131+/-31.441 $\chi^2$/NDF: 56.9/67

- sign -37.131+/-41.633 $\chi^2$/NDF: 27.3/34

# asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs Slug




Right In: 196.542+/-0.055 $\chi^2$/NDF: 1000770.4/15

Left Out: 216.289+/-0.043 $\chi^2$/NDF:1136107.5/16

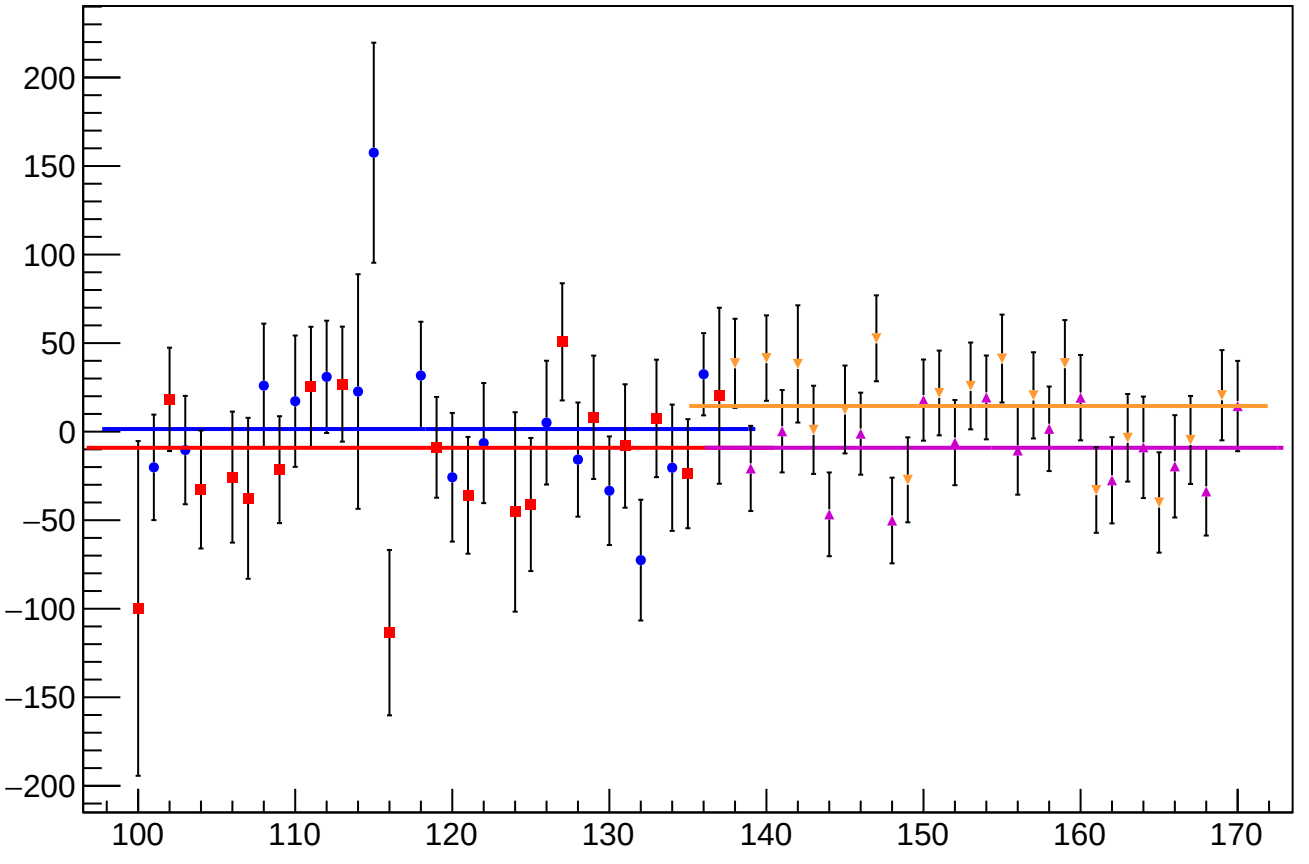
Right Out: 174.540+/-0.049 $\chi^2$/NDF: 1588725.2/18

Left In: 179.355+/-0.037 $\chi^2$/NDF:1489524.9/15

+ sign 208.654+/-0.034 $\chi^2$/NDF: 2217269.0/32

All: 190.948+/-0.022 $\chi^2$/NDF: 5779586.3/67

- sign 177.608+/-0.029 $\chi^2$/NDF: 3084436.2/34




Right In: 1.475+/-8.370 $\chi^2$/NDF: 18.7/15

Left Out: 14.477+/-6.080 $\chi^2$/NDF:19.8/16

Right Out: -9.113+/-8.198 $\chi^2$/NDF: 16.5/18

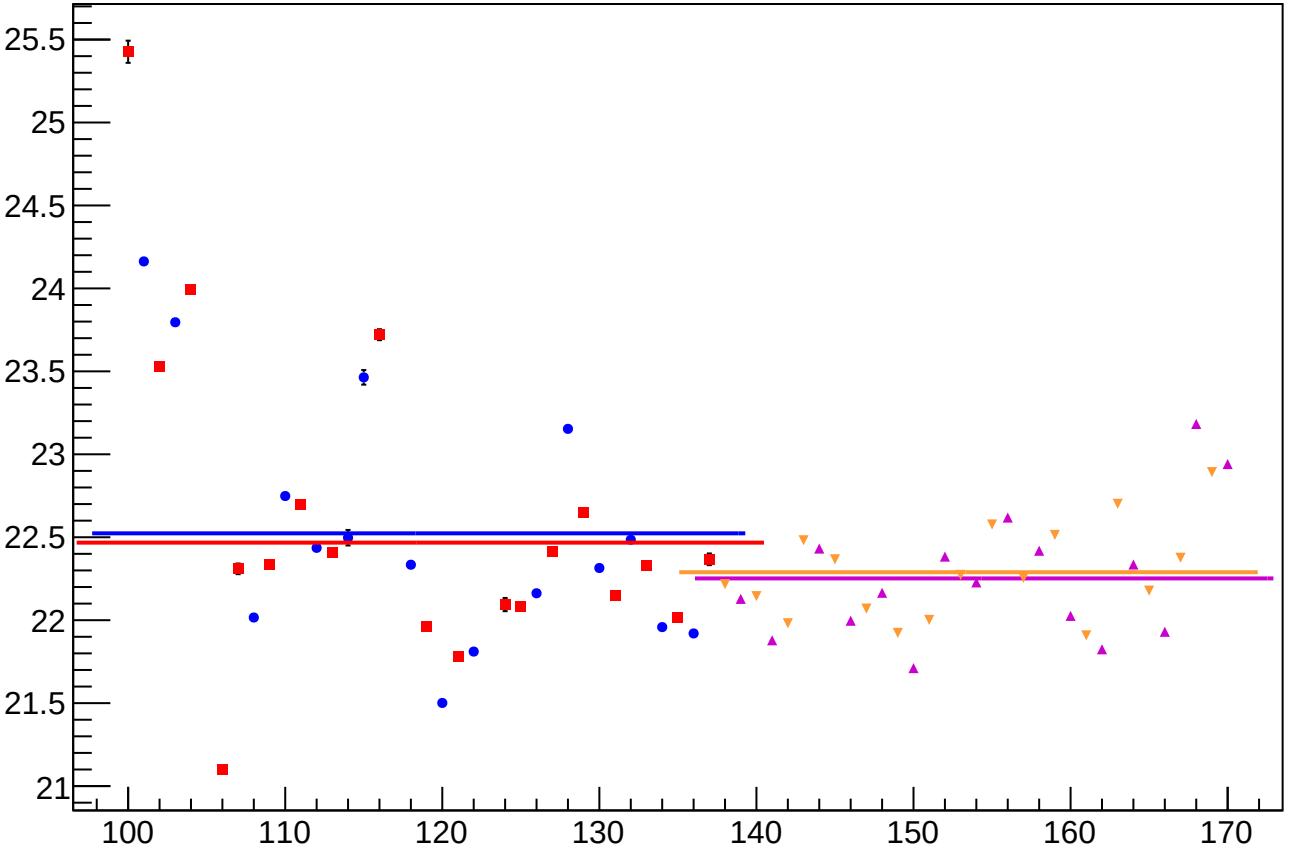
Left In: -9.107+/-6.122 $\chi^2$/NDF:12.9/15

+ sign 9.986+/-4.919 $\chi^2$/NDF: 40.0/32

All: 0.410+/-3.473 $\chi^2$/NDF: 76.9/67

- sign -9.109+/-4.905 $\chi^2$/NDF: 29.3/34

# asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs Slug




Right In: 22.524+/-0.006 $\chi^2$/NDF: 15947.8/15

Left Out: 22.289+/-0.004 $\chi^2$/NDF:3991.6/16

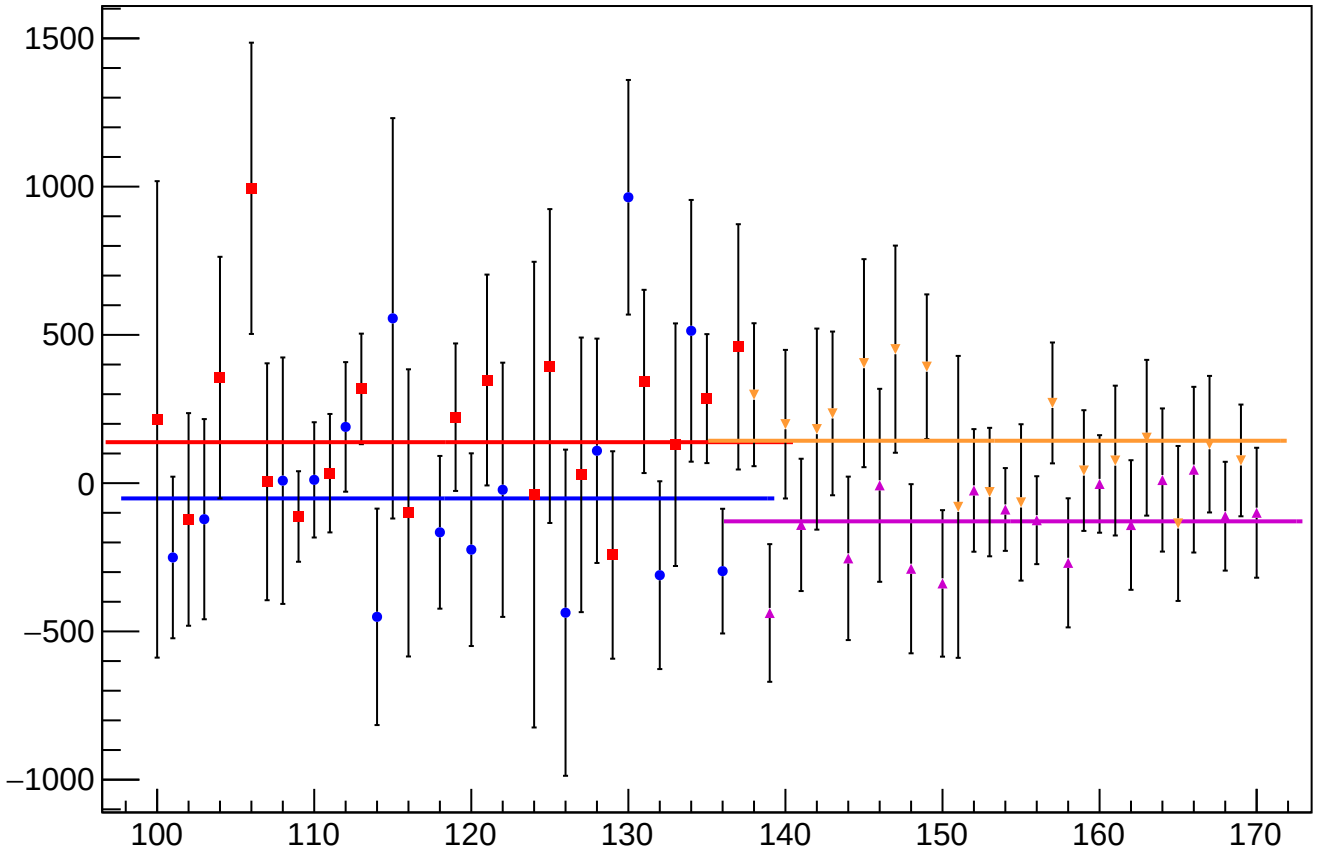
Right Out: 22.468+/-0.006 $\chi^2$/NDF: 15626.5/18

Left In: 22.252+/-0.004 $\chi^2$/NDF:7962.5/15

+ sign 22.370+/-0.003 $\chi^2$/NDF: 20965.2/32

All: 22.350+/-0.002 $\chi^2$/NDF: 45514.0/67

- sign 22.329+/-0.003 $\chi^2$/NDF: 24478.6/34




Right In: -51.492+/-76.798 $\chi^2$/NDF: 15.3/15

Left Out: 142.989+/-61.118 $\chi^2$/NDF:6.4/16

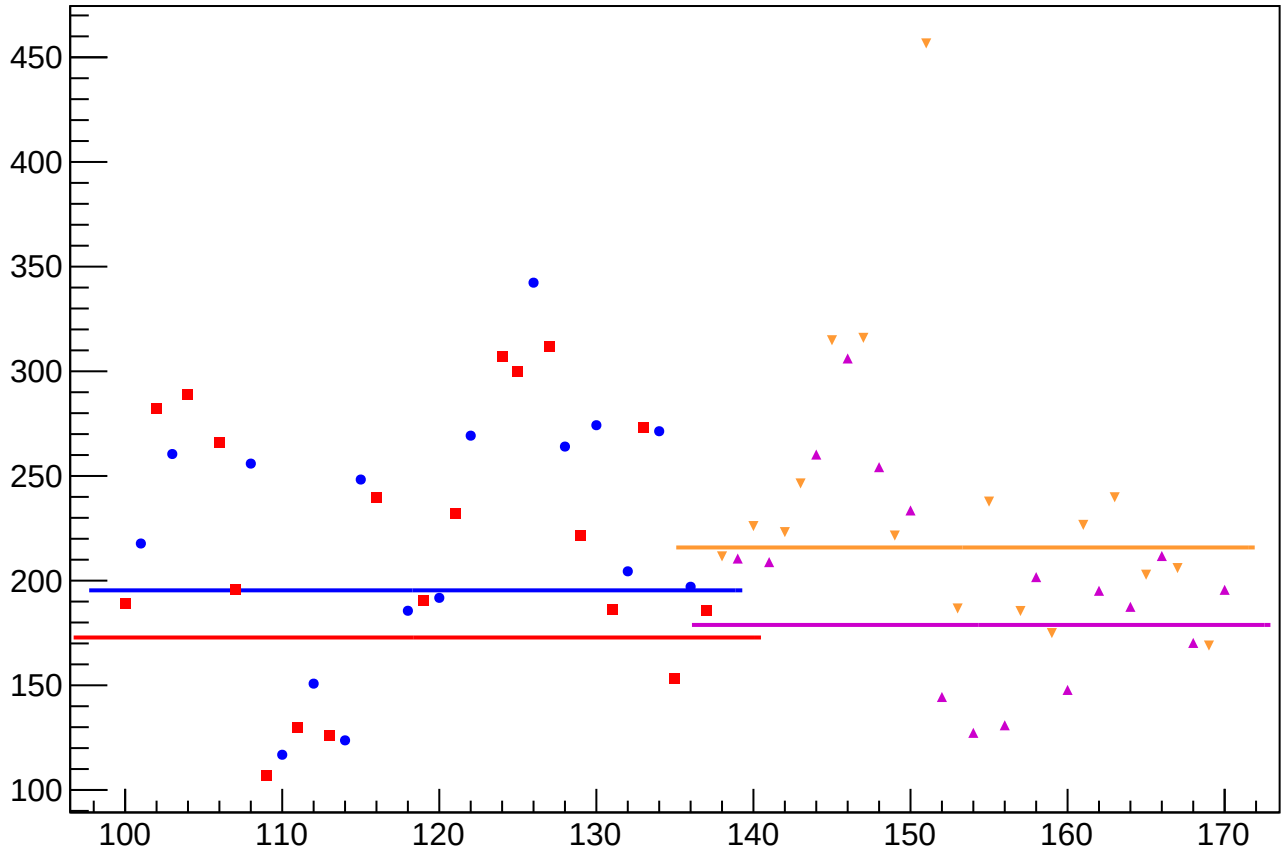
Right Out: 138.184+/-68.625 $\chi^2$/NDF: 11.6/18

Left In: -128.805+/-52.012 $\chi^2$/NDF:5.2/15

+ sign 67.576+/-47.822 $\chi^2$/NDF: 25.7/32

All: 11.064+/-31.323 $\chi^2$/NDF: 54.6/67

- sign -31.393+/-41.451 $\chi^2$/NDF: 26.5/34




Right In: 195.361+/-0.054 $\chi^2$/NDF: 1041432.1/15

Left Out: 215.845+/-0.043 $\chi^2$/NDF:1129291.5/16

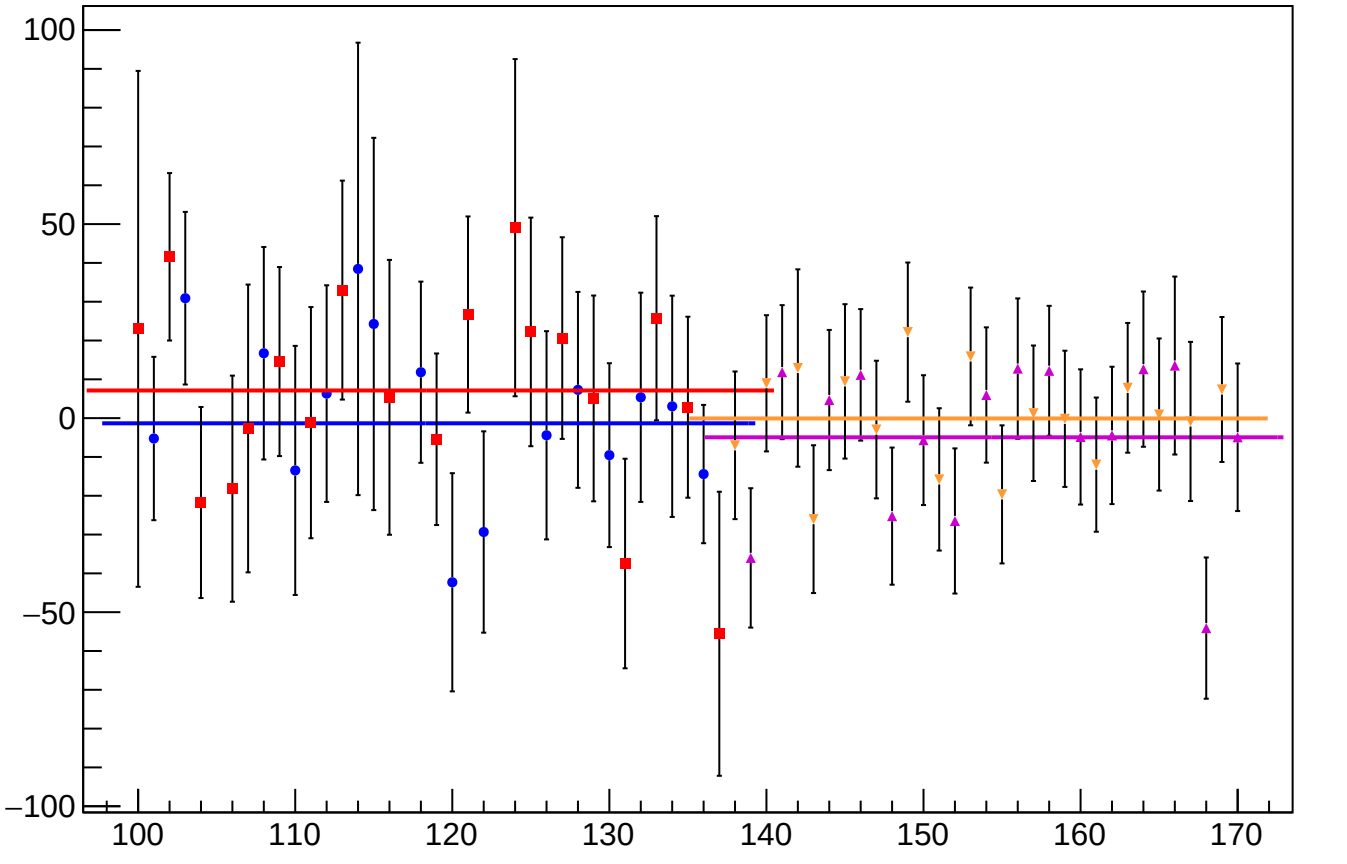
Right Out: 172.837+/-0.049 $\chi^2$/NDF: 1659430.2/18

Left In: 178.837+/-0.037 $\chi^2$/NDF:1479795.2/15

+ sign 207.902+/-0.034 $\chi^2$/NDF: 2257835.8/32

All: 190.056+/-0.022 $\chi^2$/NDF: 5894542.4/67

- sign 176.648+/-0.029 $\chi^2$/NDF: 3148936.9/34




Right In: -1.331+/-6.499 $\chi^2$/NDF: 8.0/15

Left Out: -0.082+/-4.484 $\chi^2$/NDF:7.9/16

Right Out: 7.126+/-6.402 $\chi^2$/NDF: 14.4/18

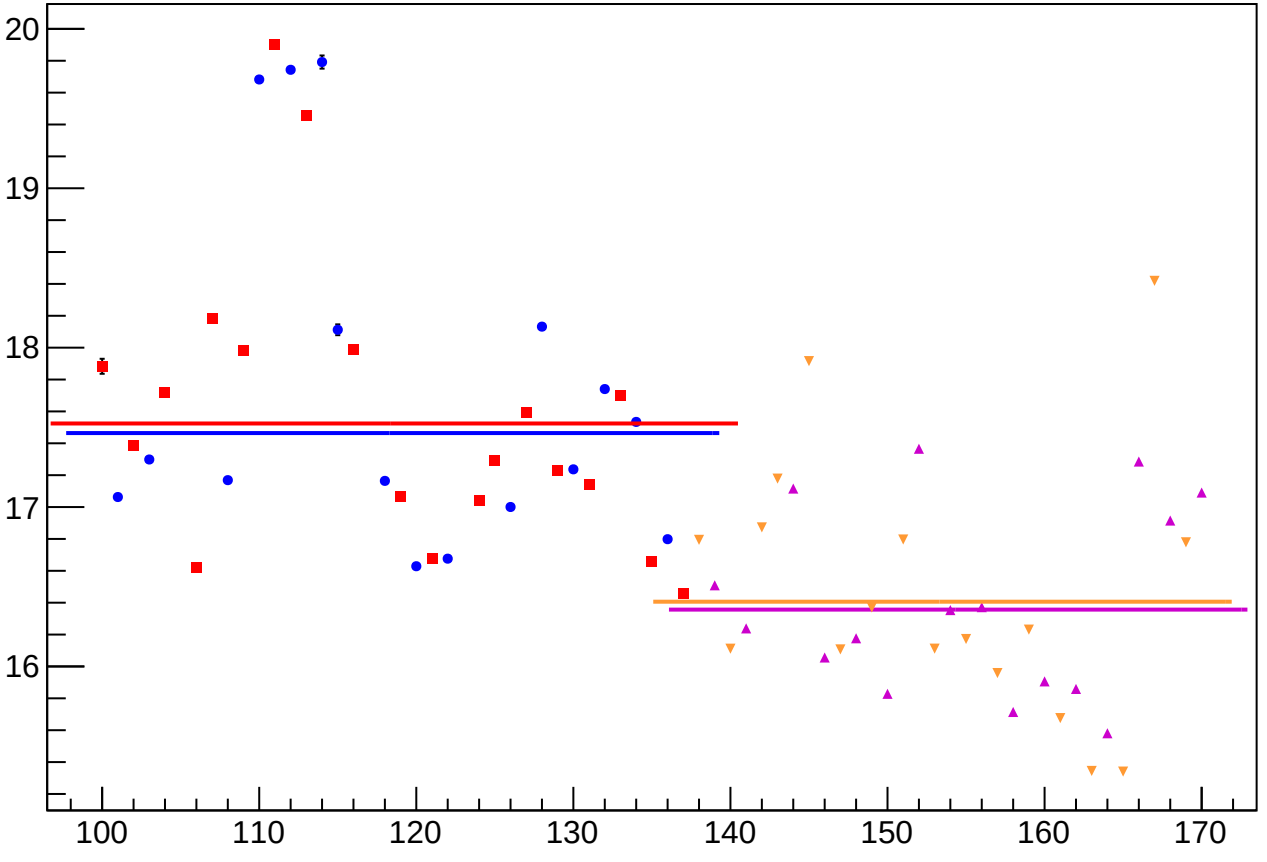
Left In: -4.942+/-4.507 $\chi^2$/NDF:18.9/15

+ sign -0.485+/-3.691 $\chi^2$/NDF: 16.0/32

All: -0.714+/-2.608 $\chi^2$/NDF: 51.7/67

- sign -0.943+/-3.685 $\chi^2$/NDF: 35.7/34

# asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs Slug




Right In: 17.464+/-0.005 $\chi^2$/NDF: 36650.1/15

Left Out: 16.406+/-0.003 $\chi^2$/NDF:58385.5/16

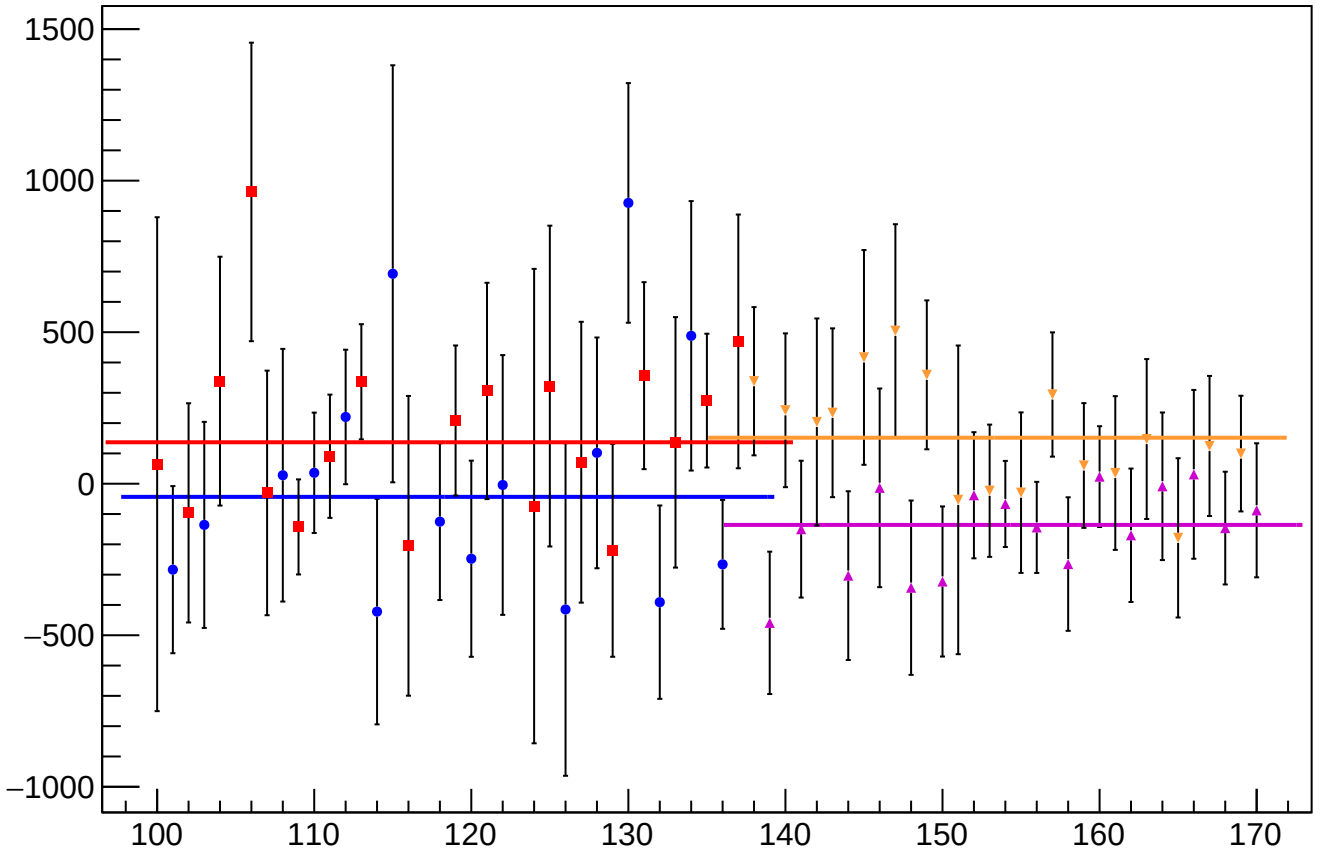
Right Out: 17.524+/-0.005 $\chi^2$/NDF: 34726.0/18

Left In: 16.357+/-0.003 $\chi^2$/NDF:29451.3/15

\+ sign 16.747+/-0.003 $\chi^2$/NDF: 130945.4/32

All: 16.745+/-0.002 $\chi^2$/NDF: 239615.4/67

\- sign 16.744+/-0.003 $\chi^2$/NDF: 108668.9/34




Right In: -43.384+/-77.584 $\chi^2$/NDF: 15.5/15

Left Out: 151.806+/-61.616 $\chi^2$/NDF:6.9/16

Right Out: 136.778+/-69.557 $\chi^2$/NDF: 11.5/18

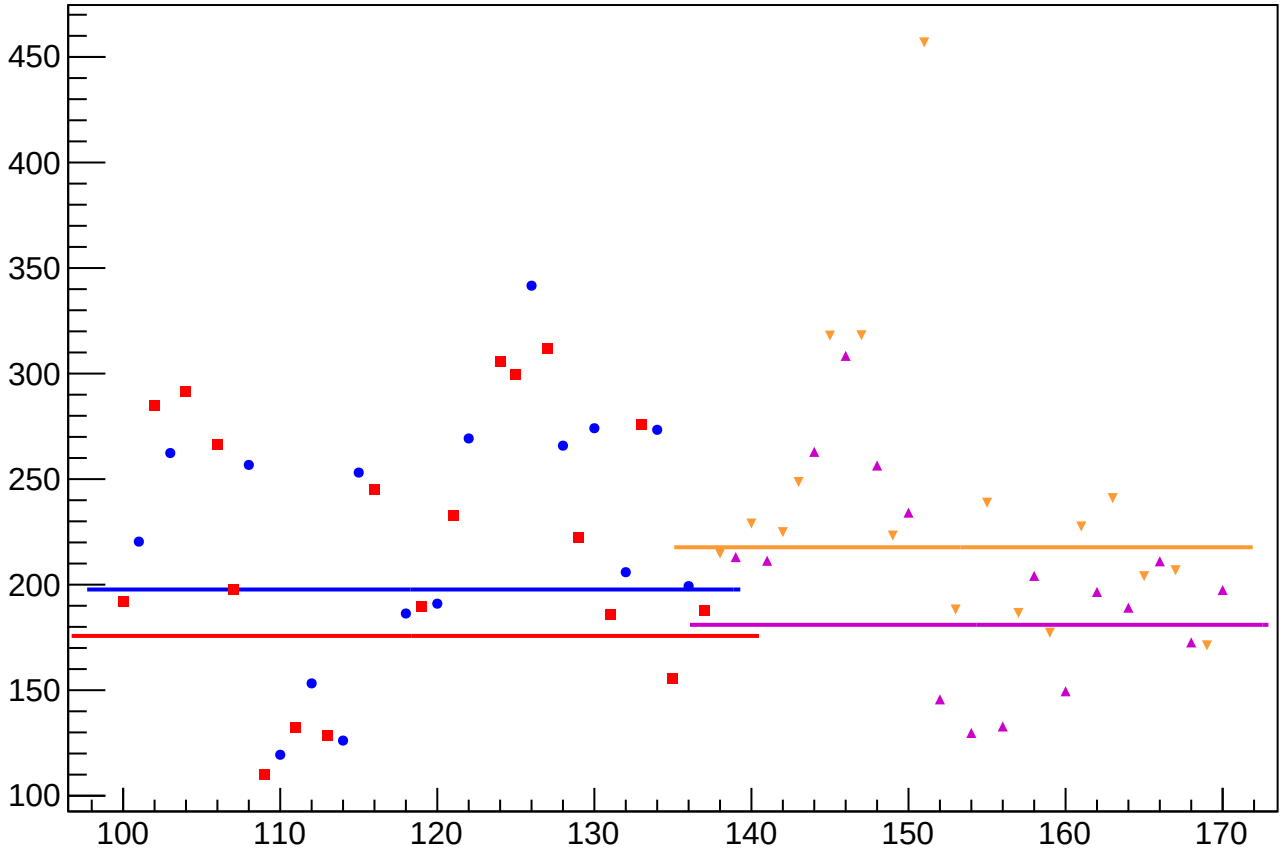
Left In: -135.931+/-52.577 $\chi^2$/NDF:5.9/15

+ sign 76.312+/-48.250 $\chi^2$/NDF: 26.3/32

All: 11.900+/-31.655 $\chi^2$/NDF: 56.6/67

- sign -36.772+/-41.943 $\chi^2$/NDF: 27.2/34

# asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs Slug




Right In: 197.707+/-0.055 $\chi^2$/NDF: 1000324.6/15

Left Out: 217.722+/-0.044 $\chi^2$/NDF:1115021.4/16

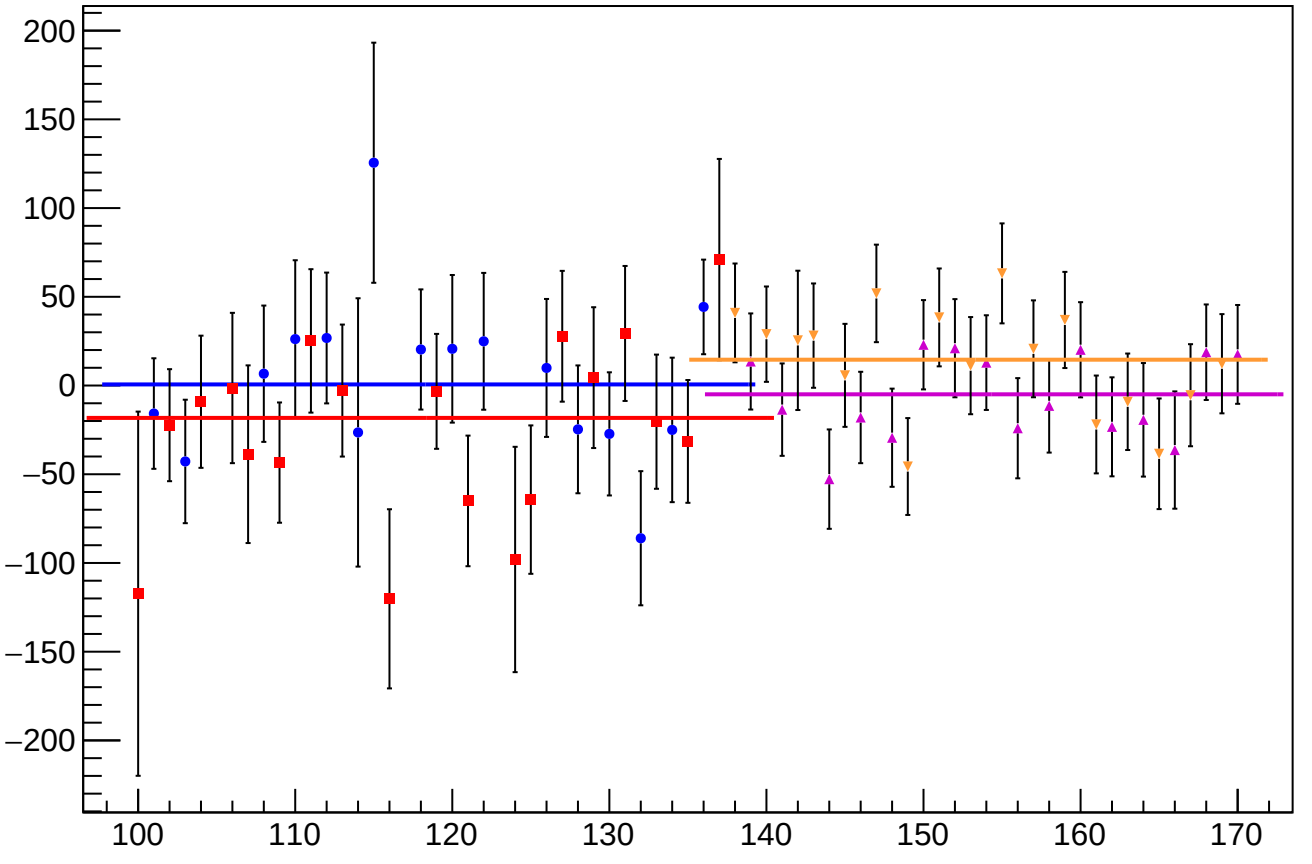
Right Out: 175.716+/-0.049 $\chi^2$/NDF: 1590559.8/18

Left In: 180.971+/-0.037 $\chi^2$/NDF:1446384.8/15

+ sign 209.981+/-0.034 $\chi^2$/NDF: 2196970.8/32

All: 192.368+/-0.022 $\chi^2$/NDF: 5709029.9/67

- sign 179.060+/-0.030 $\chi^2$/NDF: 3044209.4/34




Right In: 0.619+/-9.421 $\chi^2$/NDF: 16.7/15

Left Out: 14.554+/-6.879 $\chi^2$/NDF:18.7/16

Right Out: -18.248+/-9.208 $\chi^2$/NDF: 18.0/18

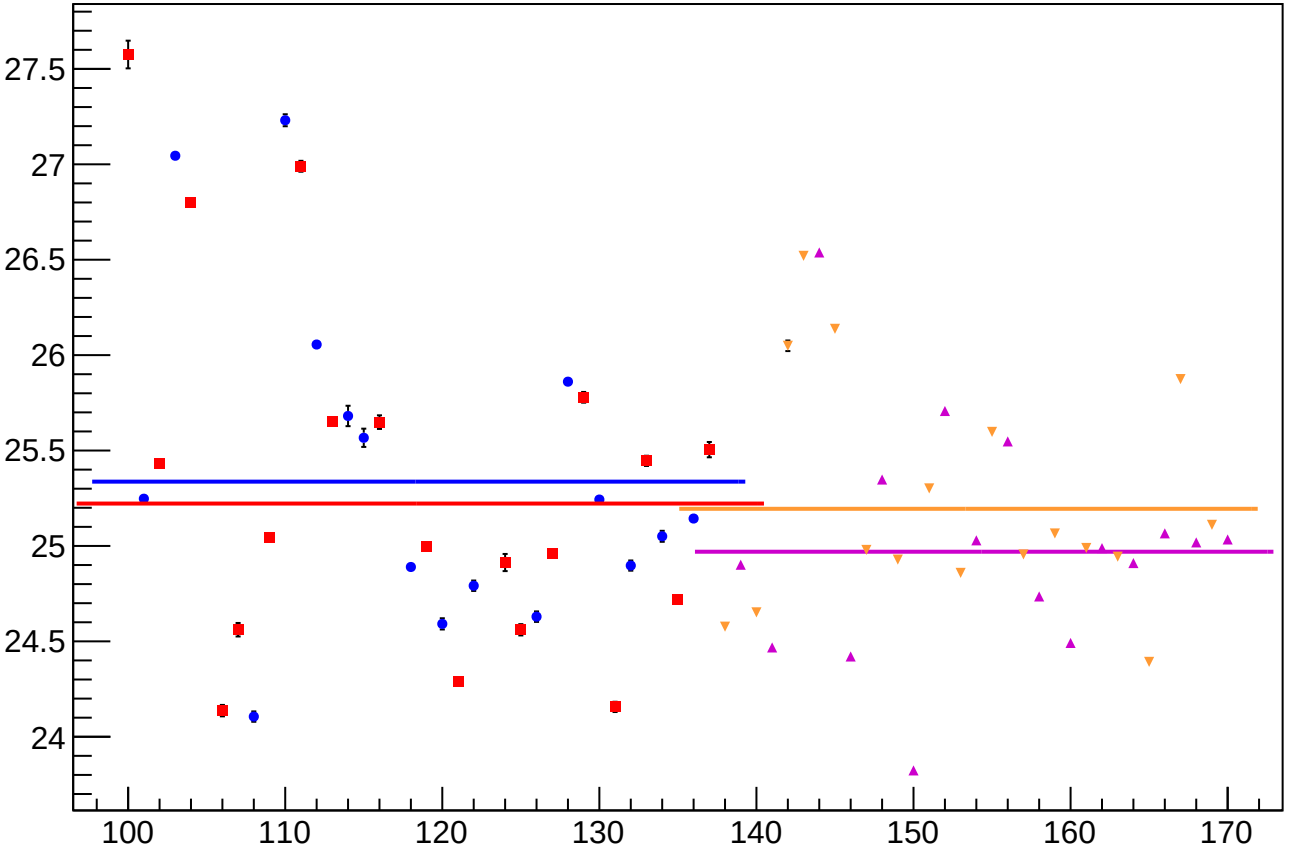
Left In: -4.952+/-6.876 $\chi^2$/NDF:11.5/15

+ sign 9.708+/-5.556 $\chi^2$/NDF: 36.8/32

All: -0.082+/-3.912 $\chi^2$/NDF: 73.8/67

- sign -9.712+/-5.510 $\chi^2$/NDF: 30.8/34

# asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs Slug




Right In: 25.337+/-0.007 $\chi^2$/NDF: 14315.0/15

Left Out: 25.195+/-0.005 $\chi^2$/NDF:12921.0/16

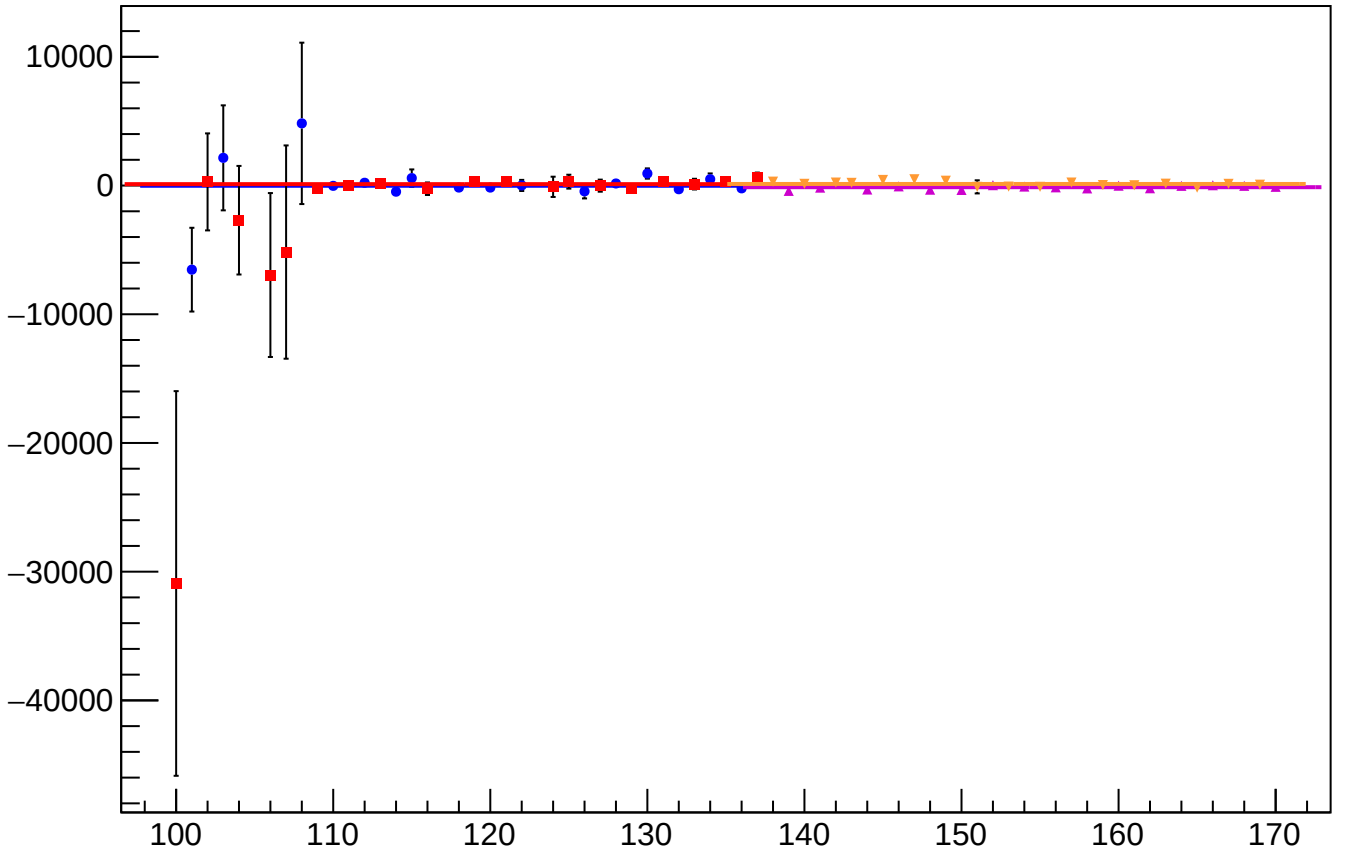
Right Out: 25.222+/-0.007 $\chi^2$/NDF: 15224.4/18

Left In: 24.970+/-0.005 $\chi^2$/NDF:15563.3/15

+ sign 25.244+/-0.004 $\chi^2$/NDF: 27533.9/32

All: 25.151+/-0.003 $\chi^2$/NDF: 60393.7/67

- sign 25.060+/-0.004 $\chi^2$/NDF: 31752.8/34




Right In: -15.450+/-84.701 $\chi^2$/NDF: 18.3/15

Left Out: 122.147+/-62.203 $\chi^2$/NDF:7.1/16

Right Out: 108.825+/-78.099 $\chi^2$/NDF: 14.0/18

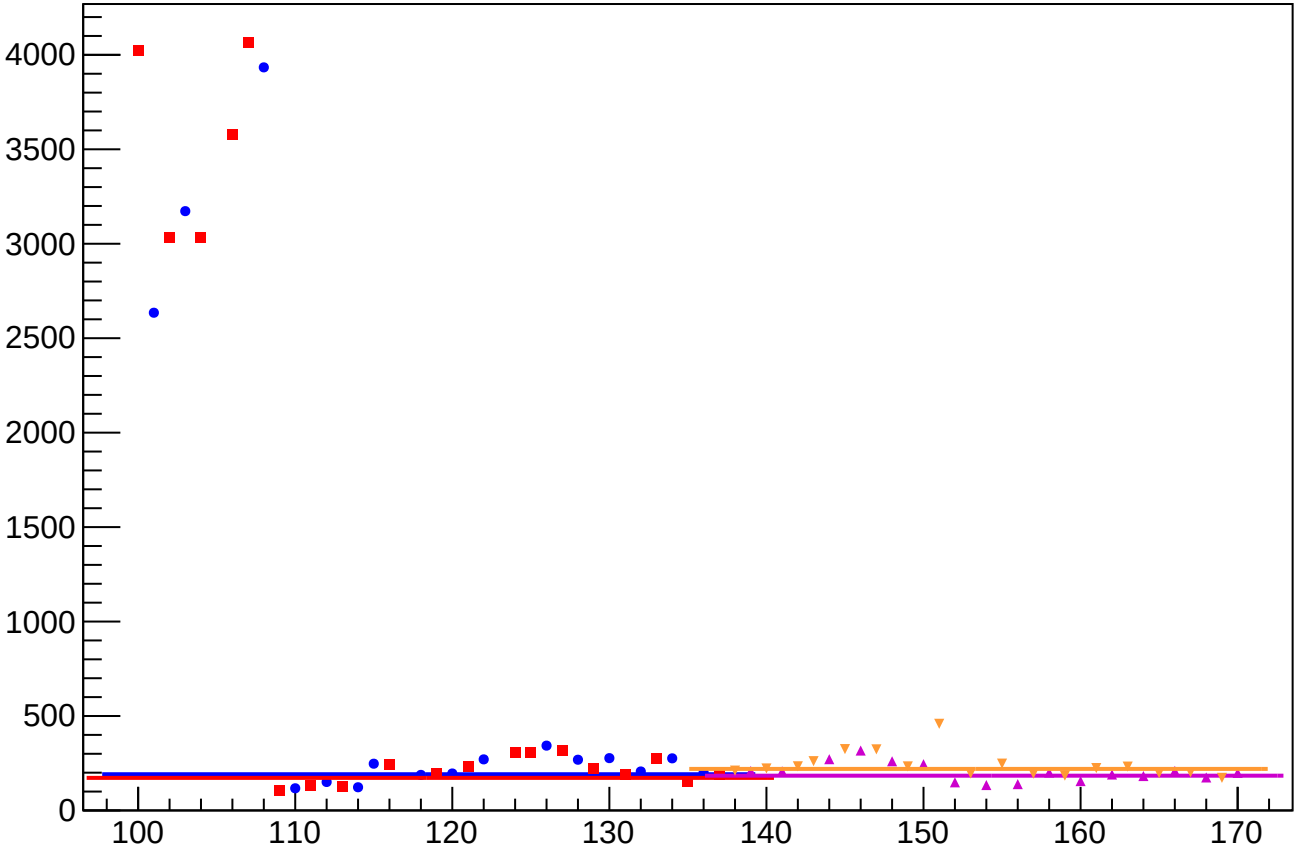
Left In: -127.706+/-53.338 $\chi^2$/NDF:5.4/15

\+ sign 73.938+/-50.136 $\chi^2$/NDF: 27.1/32

All: 2.593+/-33.090 $\chi^2$/NDF: 56.4/67

\- sign -52.473+/-44.046 $\chi^2$/NDF: 25.7/34

# asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs Slug




Right In: 191.736+/-0.060 $\chi^2$/NDF: 3821804.2/15

Left Out: 219.935+/-0.044 $\chi^2$/NDF:1110400.9/16

Right Out: 172.462+/-0.055 $\chi^2$/NDF: 4303129.4/18

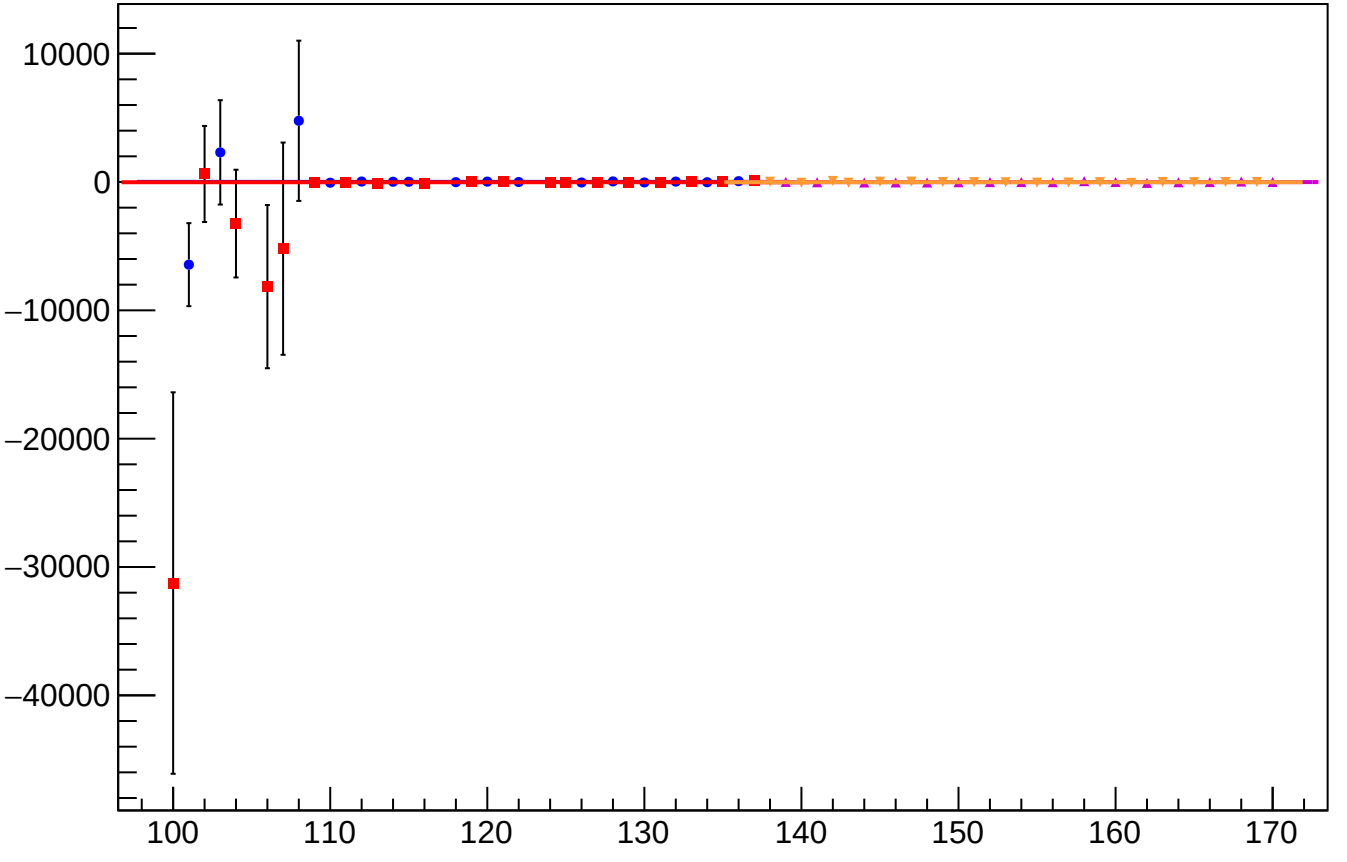
Left In: 184.089+/-0.038 $\chi^2$/NDF:1329957.6/15

+ sign 210.055+/-0.035 $\chi^2$/NDF: 5076221.6/32

All: 193.313+/-0.023 $\chi^2$/NDF: 11134704.8/67

- sign 180.391+/-0.031 $\chi^2$/NDF: 5663313.8/34

# asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs Slug




Right In: 9.576+/-11.685 $\chi^2$/NDF: 16.0/15

Left Out: -14.261+/-7.875 $\chi^2$/NDF:17.8/16

Right Out: -18.105+/-11.805 $\chi^2$/NDF: 24.8/18

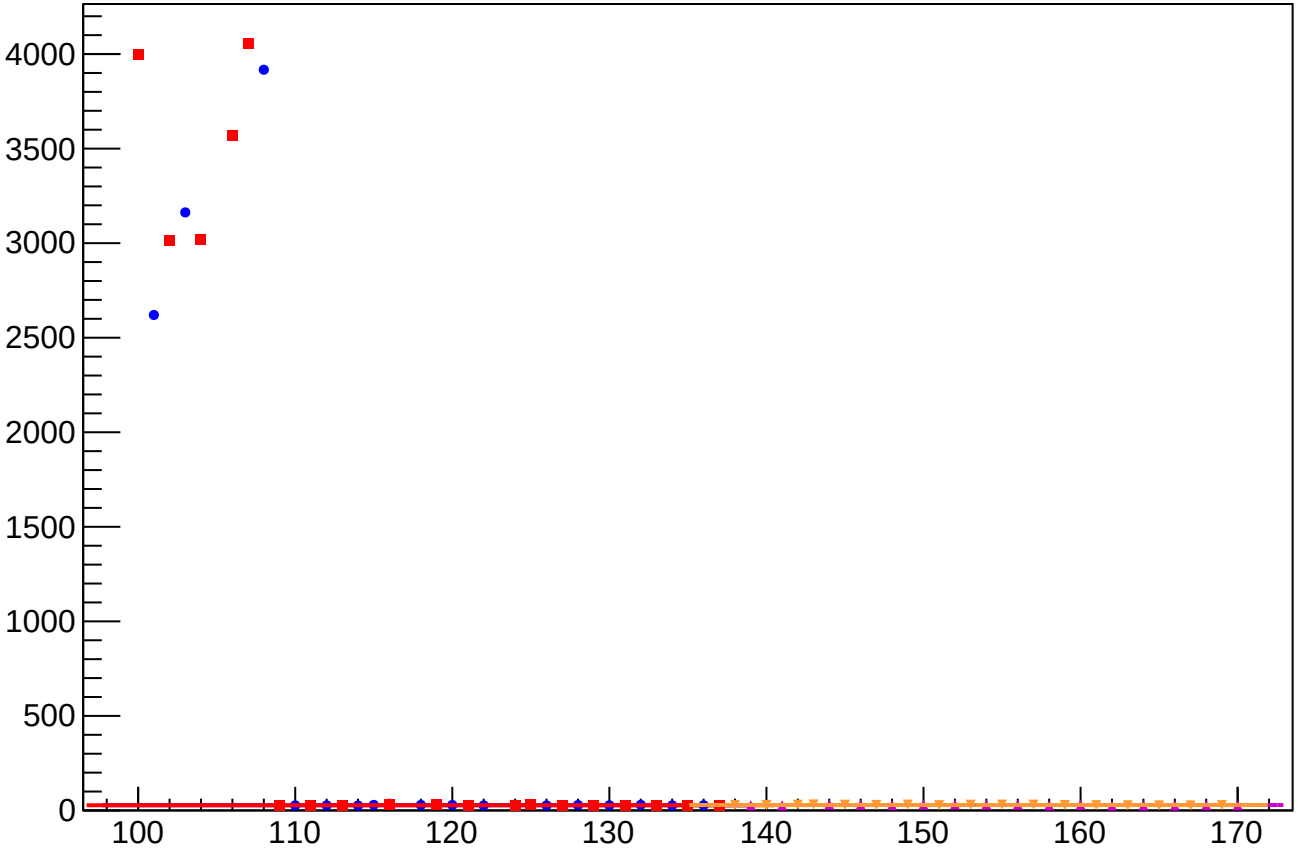
Left In: -7.498+/-7.930 $\chi^2$/NDF:16.5/15

+ sign -6.816+/-6.530 $\chi^2$/NDF: 36.6/32

All: -8.790+/-4.636 $\chi^2$/NDF: 78.6/67

- sign -10.796+/-6.583 $\chi^2$/NDF: 41.8/34

# asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs Slug




Right In: 27.642+/-0.008 $\chi^2$/NDF: 3265498.5/15

Left Out: 28.778+/-0.006 $\chi^2$/NDF:80927.6/16

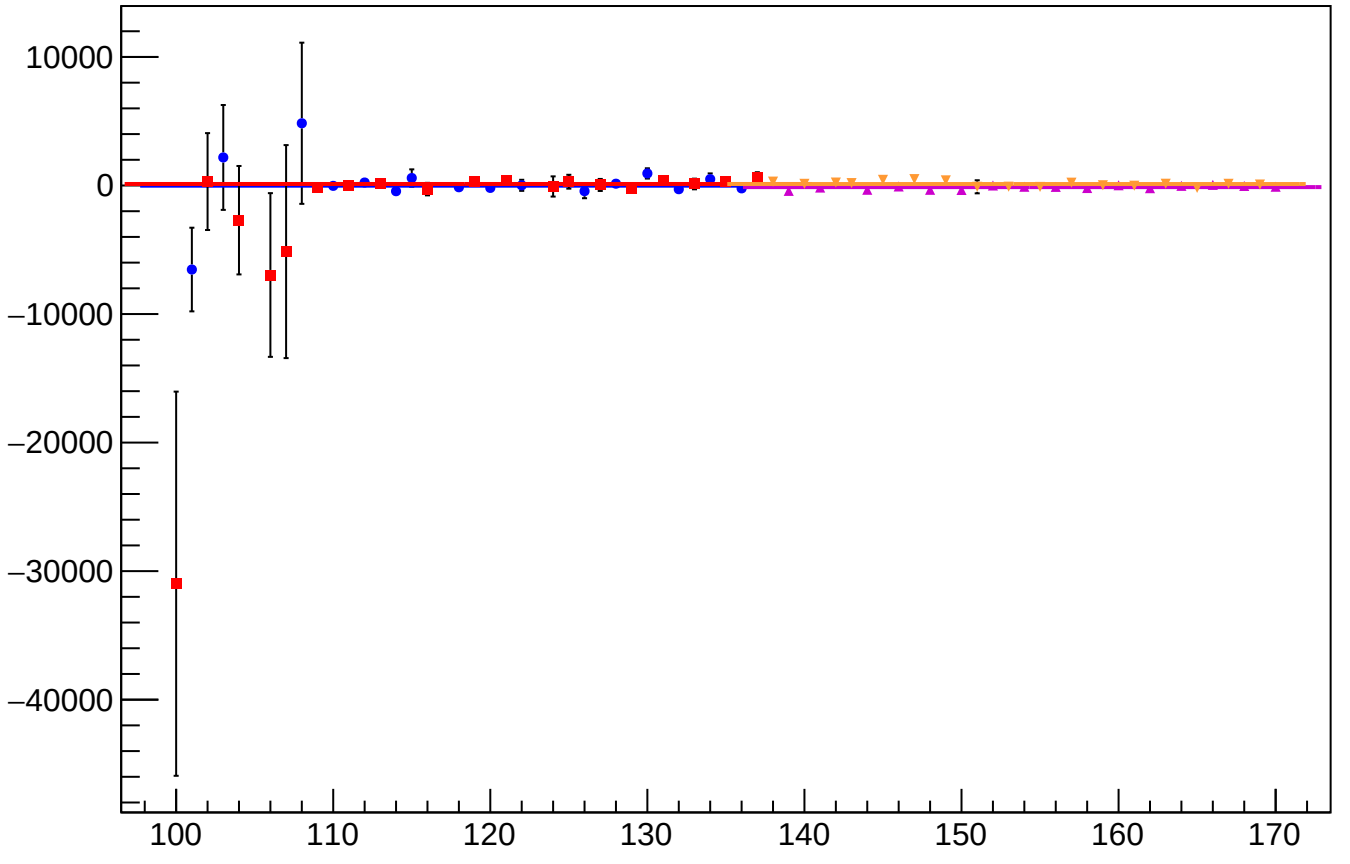
Right Out: 27.535+/-0.008 $\chi^2$/NDF: 3555229.4/18

Left In: 28.718+/-0.006 $\chi^2$/NDF:110286.0/15

+ sign 28.423+/-0.005 $\chi^2$/NDF: 3359431.9/32

All: 28.387+/-0.003 $\chi^2$/NDF: 7038912.9/67

- sign 28.350+/-0.005 $\chi^2$/NDF: 3679356.4/34




Right In: -13.160+/-84.454 $\chi^2$/NDF: 18.3/15

Left Out: 114.622+/-62.072 $\chi^2$/NDF:7.8/16

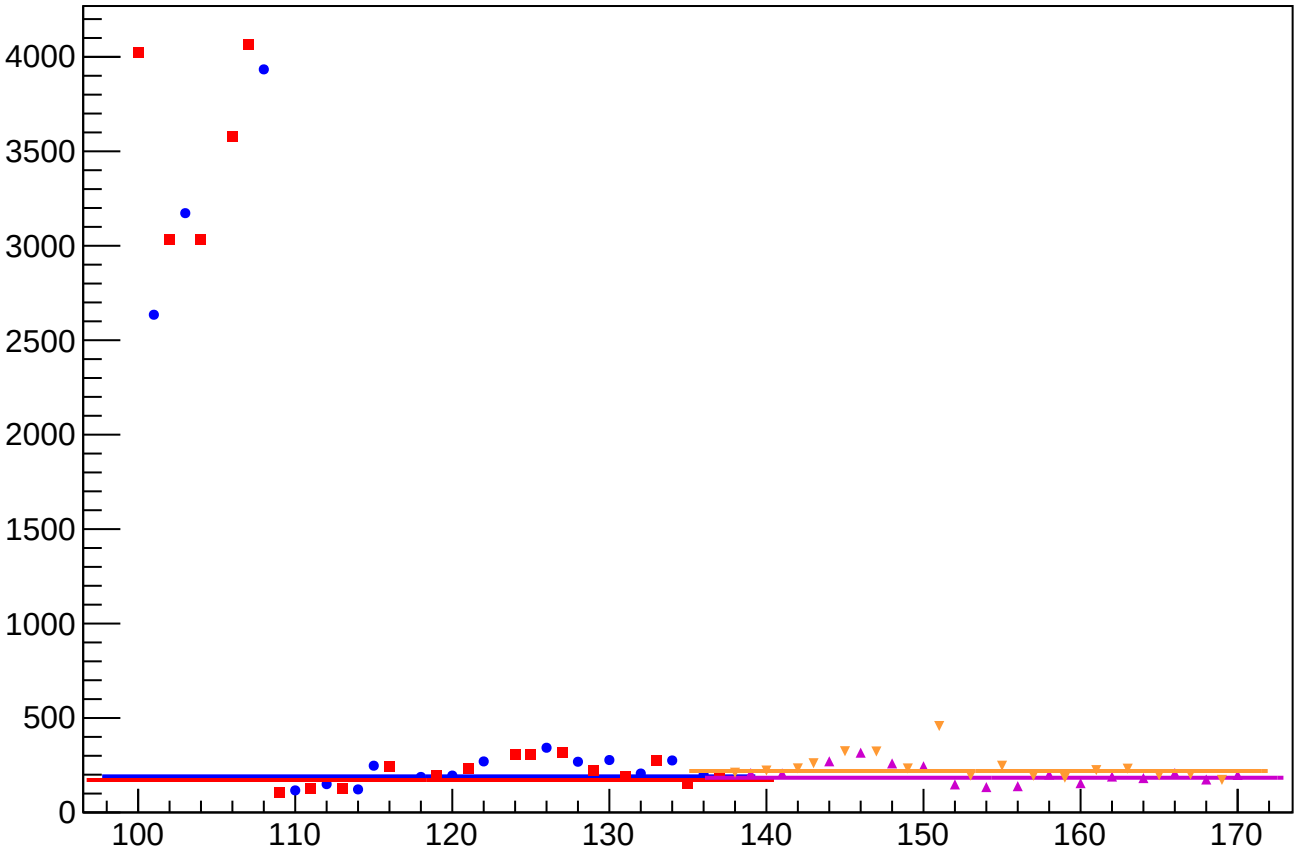
Right Out: 118.063+/-77.862 $\chi^2$/NDF: 14.4/18

Left In: -124.873+/-53.238 $\chi^2$/NDF:5.6/15

+ sign 69.805+/-50.016 $\chi^2$/NDF: 27.6/32

All: 3.618+/-33.014 $\chi^2$/NDF: 57.4/67

- sign -47.481+/-43.947 $\chi^2$/NDF: 26.7/34




Right In: 191.070+/-0.060 $\chi^2$/NDF: 3833952.4/15

Left Out: 219.476+/-0.044 $\chi^2$/NDF:1109932.8/16

Right Out: 171.835+/-0.055 $\chi^2$/NDF: 4314721.8/18

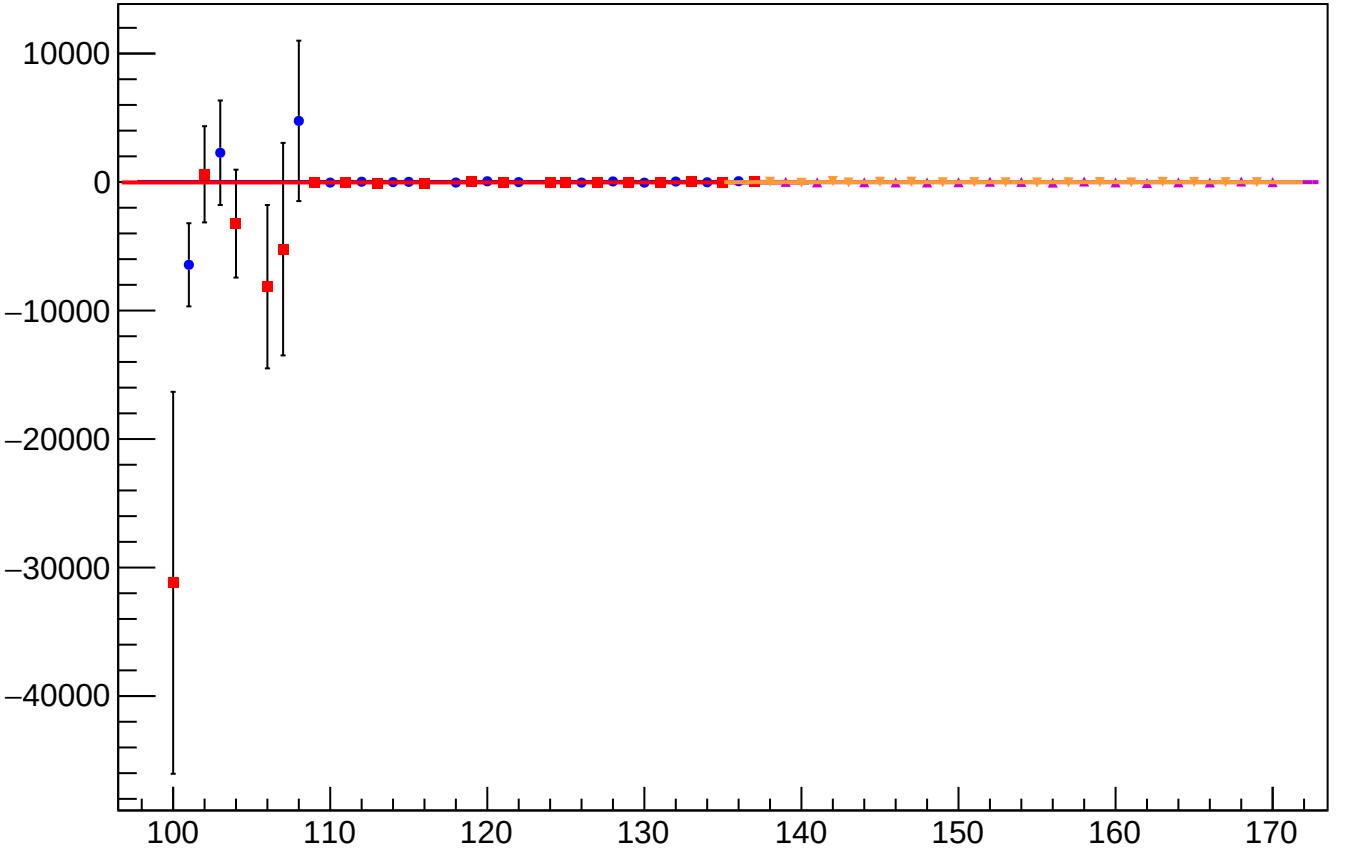
Left In: 183.748+/-0.038 $\chi^2$/NDF:1329465.7/15

+ sign 209.513+/-0.035 $\chi^2$/NDF: 5090791.6/32

All: 192.832+/-0.023 $\chi^2$/NDF: 11161116.4/67

- sign 179.953+/-0.031 $\chi^2$/NDF: 5676090.2/34

# asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs Slug




Right In: 6.490+/-11.764 $\chi^2$/NDF: 18.3/15

Left Out: -8.626+/-7.931 $\chi^2$/NDF:11.2/16

Right Out: -30.962+/-11.902 $\chi^2$/NDF: 19.9/18

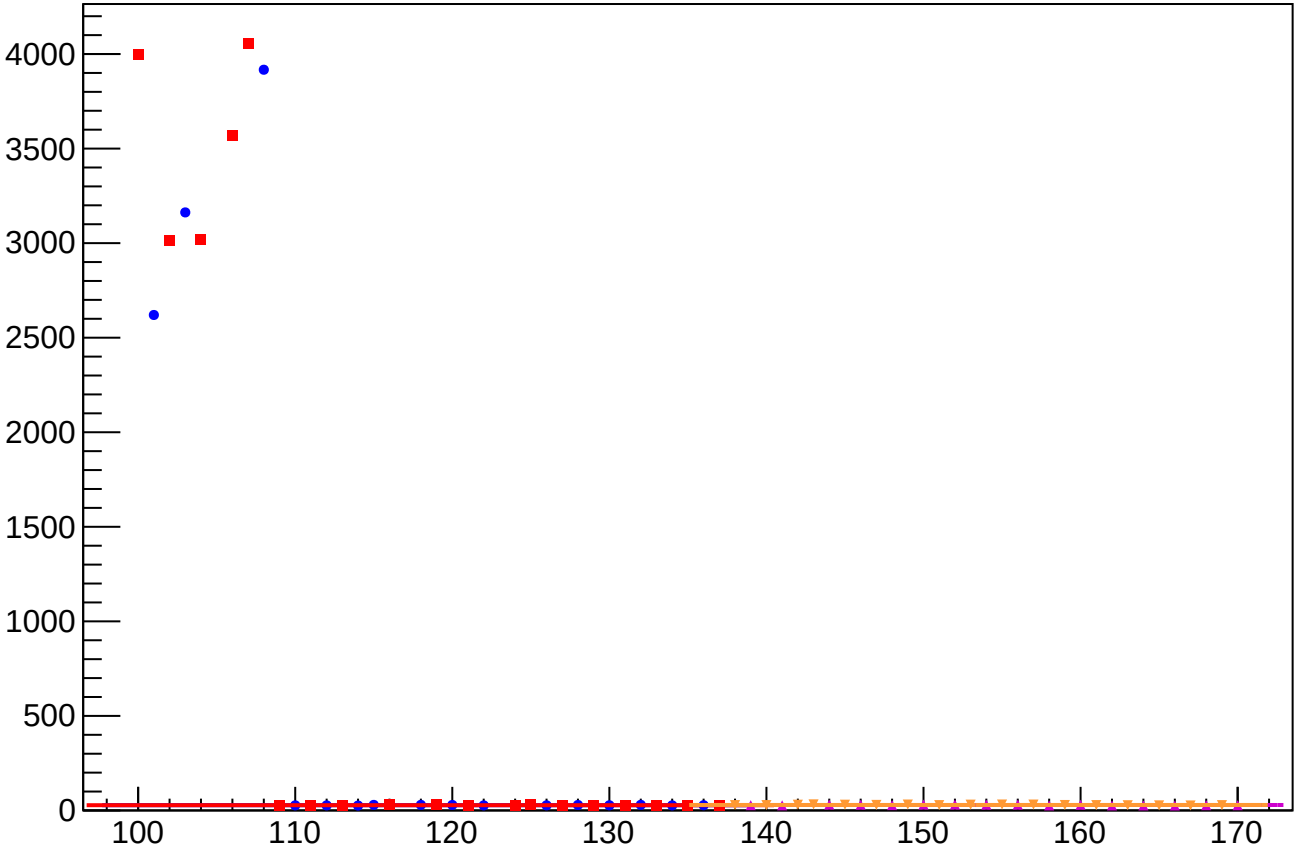
Left In: -8.567+/-7.977 $\chi^2$/NDF:16.0/15

+ sign -3.903+/-6.576 $\chi^2$/NDF: 30.7/32

All: -9.662+/-4.668 $\chi^2$/NDF: 70.5/67

- sign -15.510+/-6.627 $\chi^2$/NDF: 38.3/34

# asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs Slug




Right In: 27.825+/-0.008 $\chi^2$/NDF: 3265895.3/15

Left Out: 28.979+/-0.006 $\chi^2$/NDF:86613.8/16

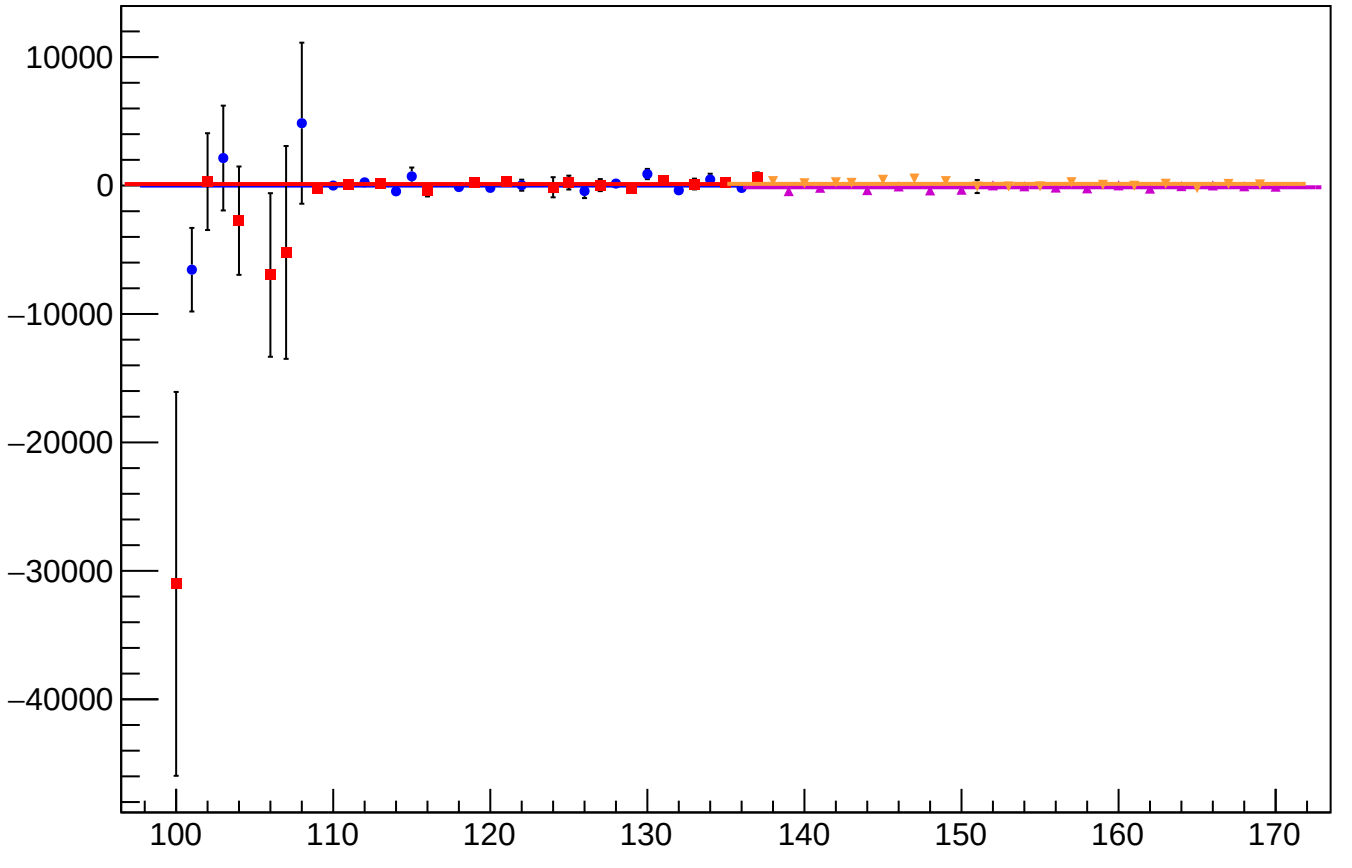
Right Out: 27.754+/-0.008 $\chi^2$/NDF: 3558676.9/18

Left In: 28.891+/-0.006 $\chi^2$/NDF:111648.8/15

+ sign 28.618+/-0.005 $\chi^2$/NDF: 3365744.4/32

All: 28.579+/-0.003 $\chi^2$/NDF: 7048820.9/67

- sign 28.538+/-0.005 $\chi^2$/NDF: 3682929.6/34




Right In: -2.795+/-85.508 $\chi^2$/NDF: 18.2/15

Left Out: 130.522+/-62.688 $\chi^2$/NDF:7.8/16

Right Out: 115.753+/-78.952 $\chi^2$/NDF: 13.8/18

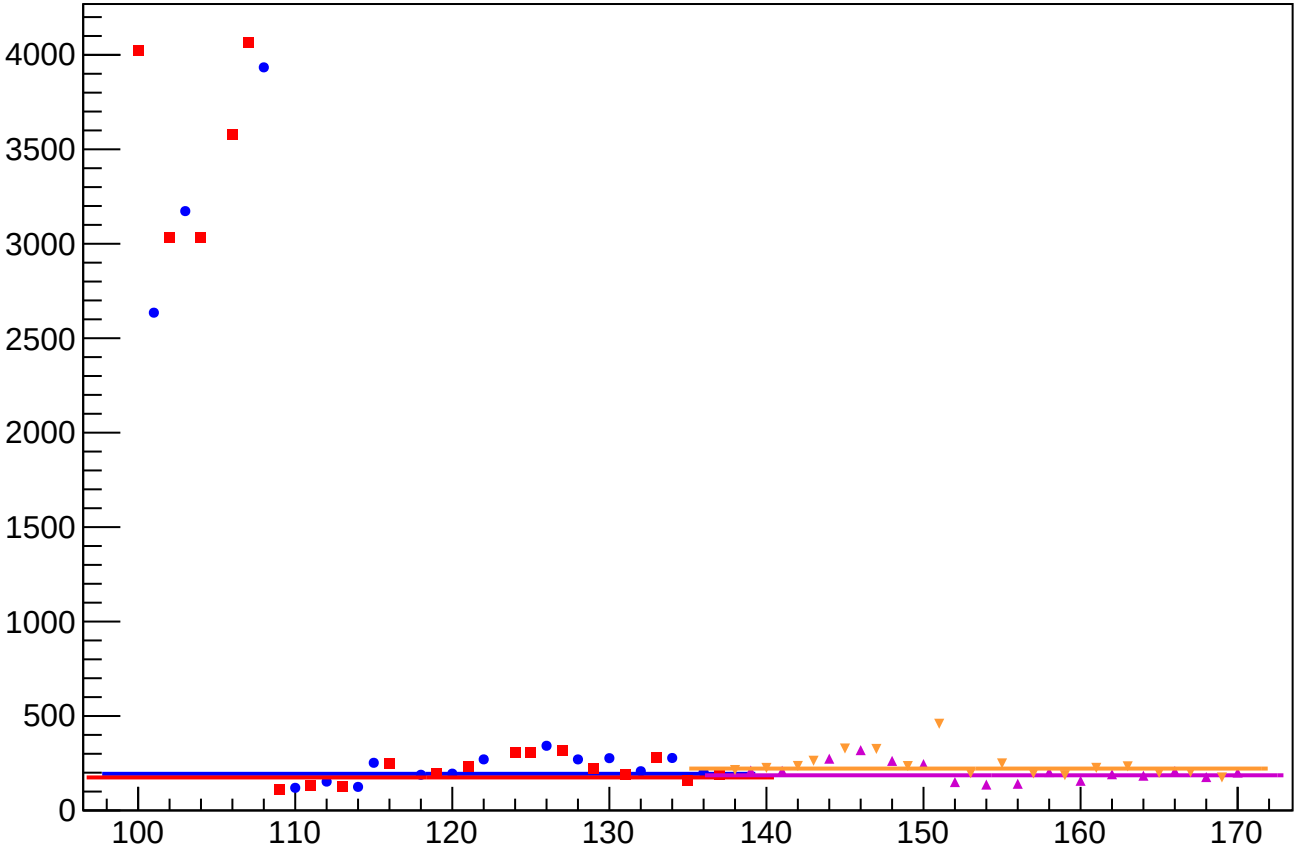
Left In: -135.475+/-53.887 $\chi^2$/NDF:6.0/15

+ sign 83.917+/-50.557 $\chi^2$/NDF: 27.6/32

All: 5.298+/-33.407 $\chi^2$/NDF: 58.6/67

- sign -55.635+/-44.509 $\chi^2$/NDF: 26.7/34

# asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs Slug




Right In: 193.946+/-0.060 $\chi^2$/NDF: 3784467.5/15

Left Out: 221.755+/-0.044 $\chi^2$/NDF:1098966.2/16

Right Out: 174.779+/-0.056 $\chi^2$/NDF: 4259323.6/18

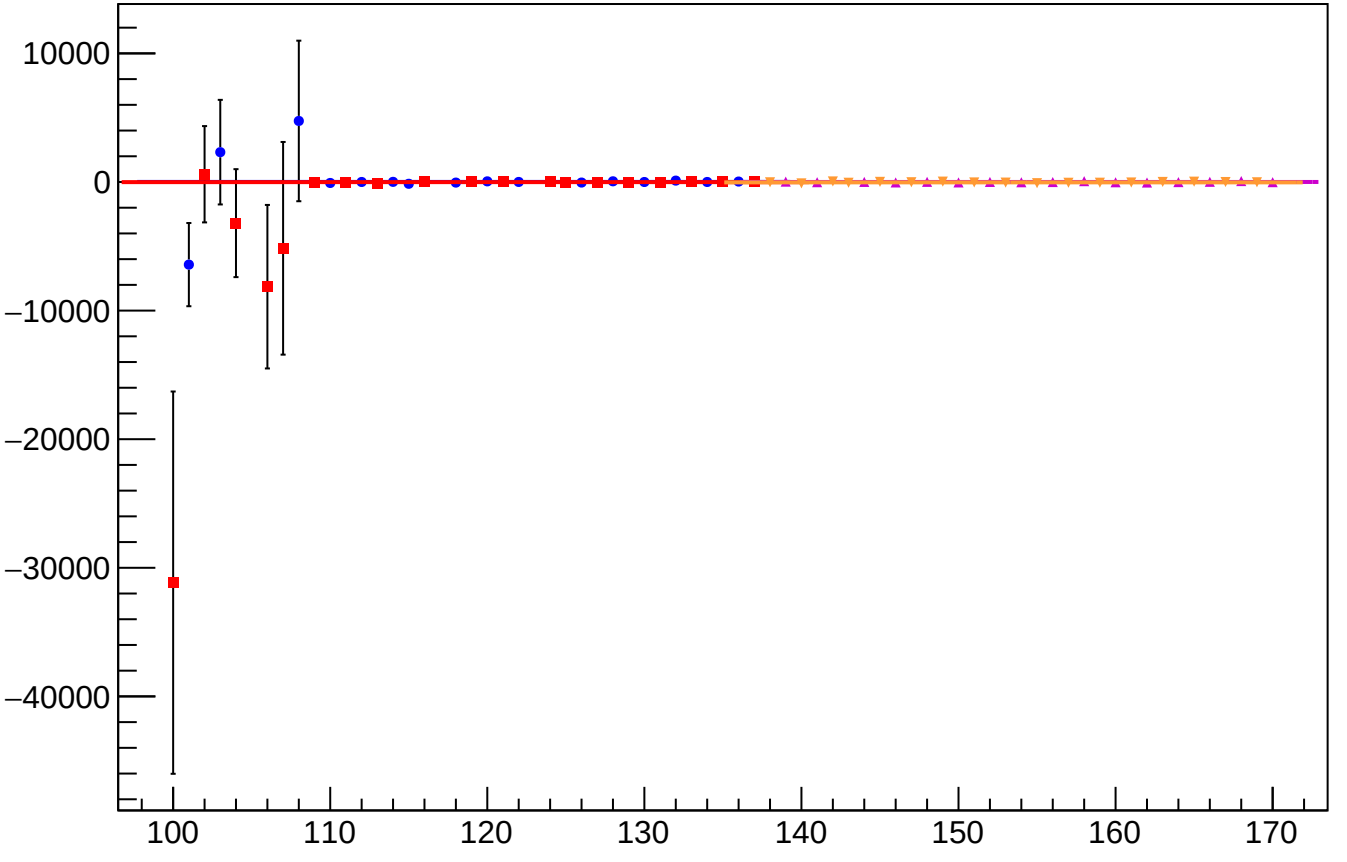
Left In: 186.161+/-0.038 $\chi^2$/NDF:1301299.2/15

+ sign 212.034+/-0.036 $\chi^2$/NDF: 5021021.6/32

All: 195.420+/-0.024 $\chi^2$/NDF: 10993356.1/67

- sign 182.544+/-0.031 $\chi^2$/NDF: 5588977.7/34

# asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs Slug




Right In: 5.660+/-14.306 $\chi^2$/NDF: 17.5/15

Left Out: -29.116+/-9.418 $\chi^2$/NDF:17.0/16

Right Out: -10.003+/-14.433 $\chi^2$/NDF: 23.4/18

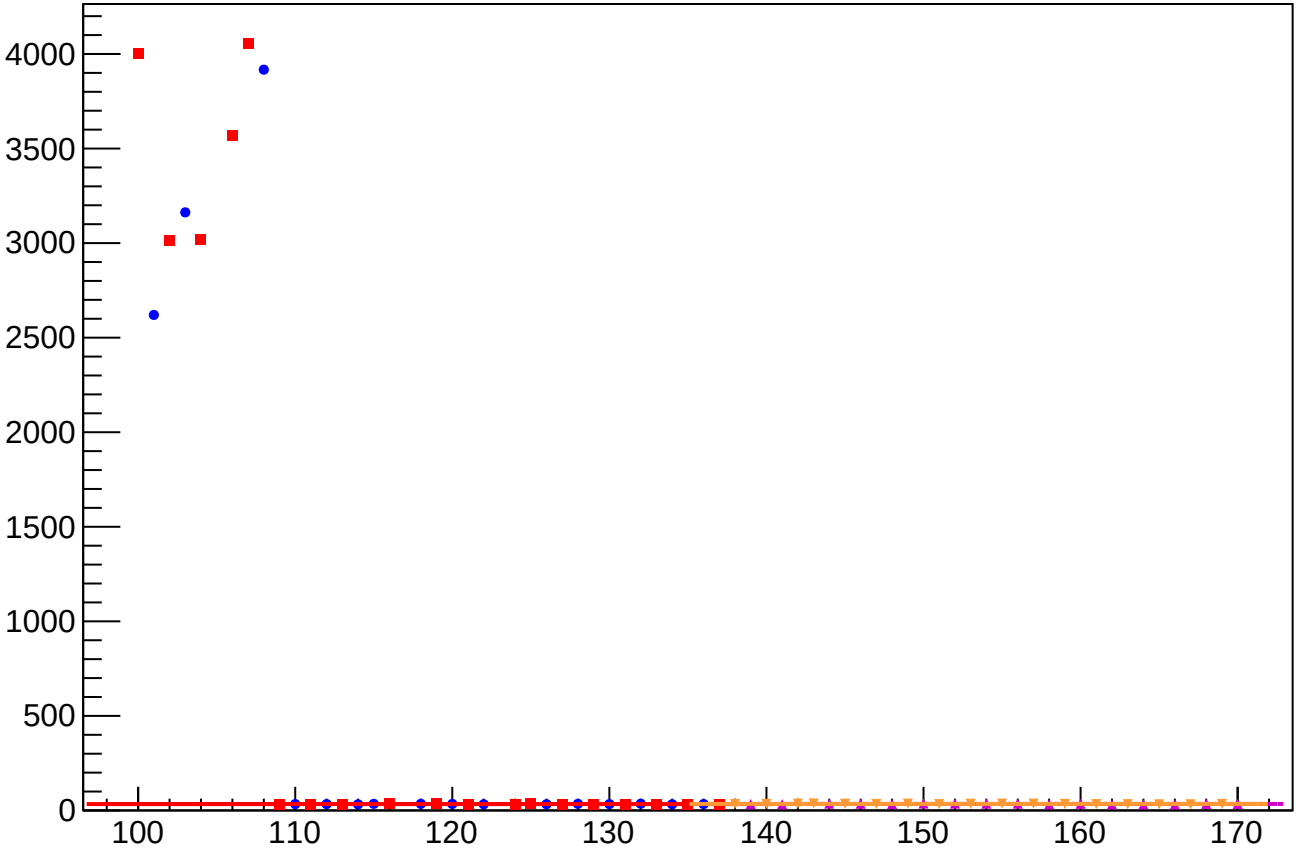
Left In: 2.056+/-9.505 $\chi^2$/NDF:11.9/15

+ sign -18.601+/-7.866 $\chi^2$/NDF: 38.6/32

All: -10.174+/-5.587 $\chi^2$/NDF: 76.7/67

- sign -1.592+/-7.938 $\chi^2$/NDF: 35.8/34

# asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs Slug




Right In: 33.899+/-0.010 $\chi^2$/NDF: 3244382.4/15

Left Out: 34.471+/-0.007 $\chi^2$/NDF:36832.4/16

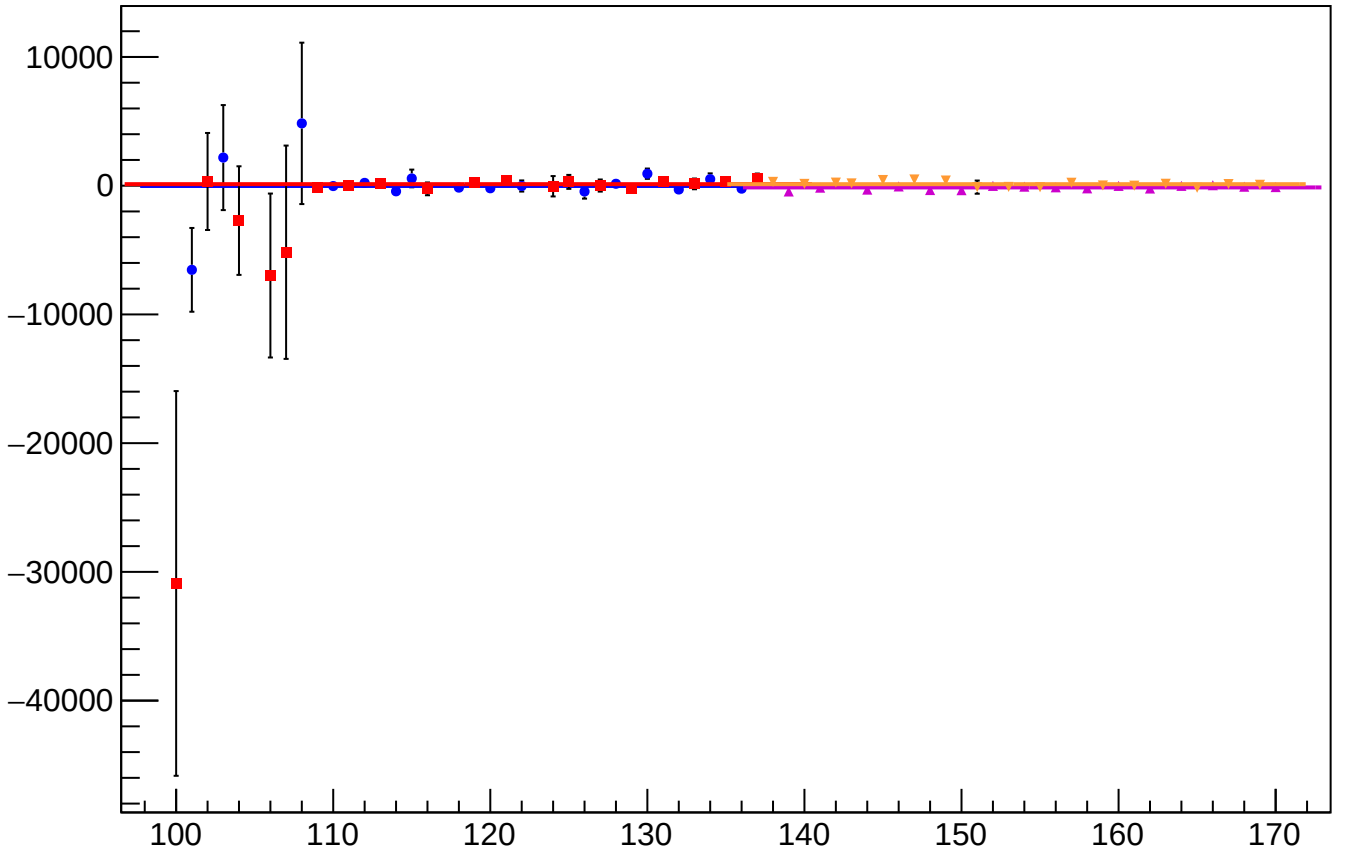
Right Out: 33.726+/-0.010 $\chi^2$/NDF: 3526463.8/18

Left In: 34.489+/-0.007 $\chi^2$/NDF:48890.3/15

+ sign 34.298+/-0.006 $\chi^2$/NDF: 3283438.9/32

All: 34.278+/-0.004 $\chi^2$/NDF: 6862720.1/67

- sign 34.259+/-0.006 $\chi^2$/NDF: 3579256.4/34




Right In: -19.522+/-85.063 $\chi^2$/NDF: 18.2/15

Left Out: 117.874+/-62.563 $\chi^2$/NDF:7.5/16

Right Out: 119.922+/-78.455 $\chi^2$/NDF: 13.3/18

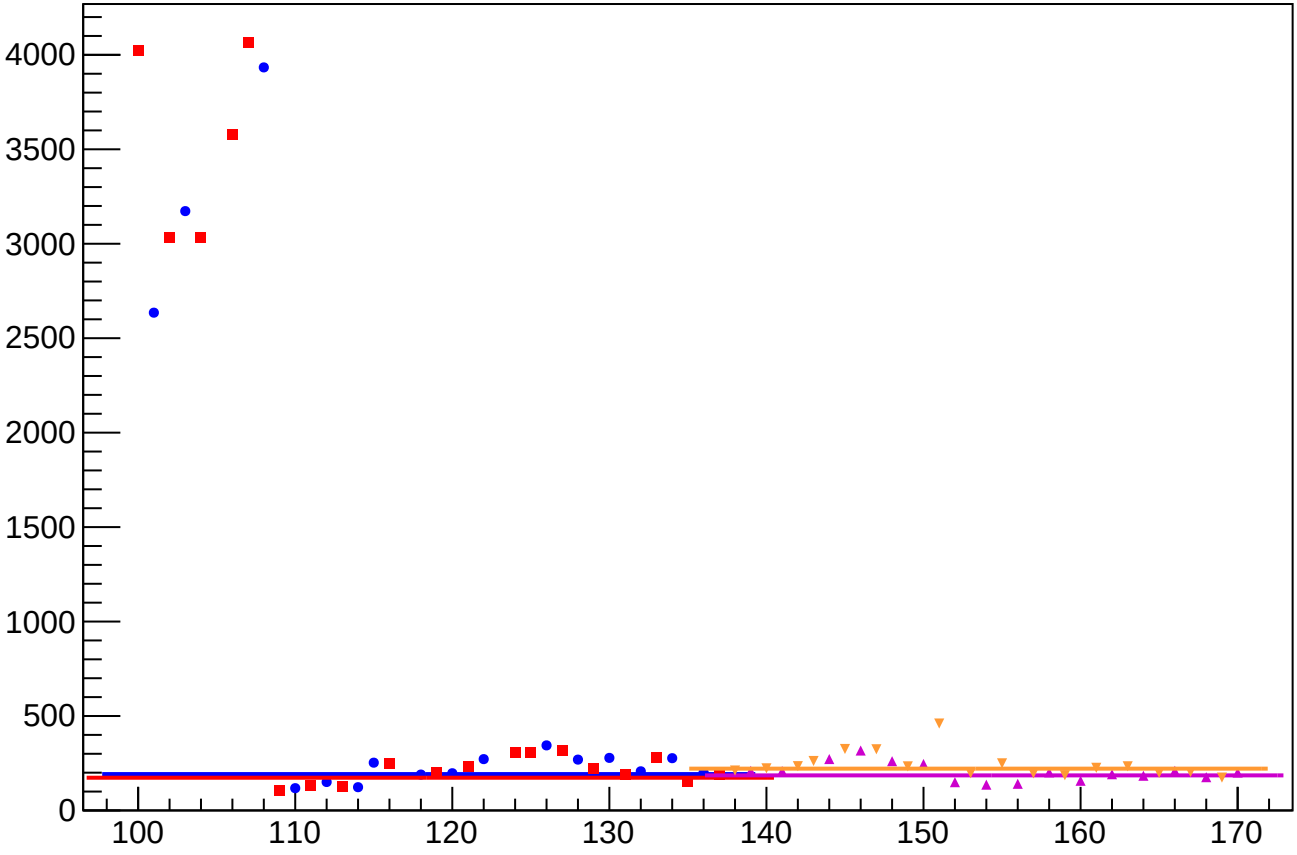
Left In: -134.537+/-53.744 $\chi^2$/NDF:5.3/15

+ sign 69.641+/-50.399 $\chi^2$/NDF: 27.4/32

All: 0.357+/-33.290 $\chi^2$/NDF: 56.5/67

- sign -53.266+/-44.338 $\chi^2$/NDF: 25.8/34

# asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs Slug




Right In: 192.560+/-0.060 $\chi^2$/NDF: 3822789.1/15

Left Out: 221.321+/-0.044 $\chi^2$/NDF:1092069.7/16

Right Out: 173.249+/-0.055 $\chi^2$/NDF: 4307420.2/18

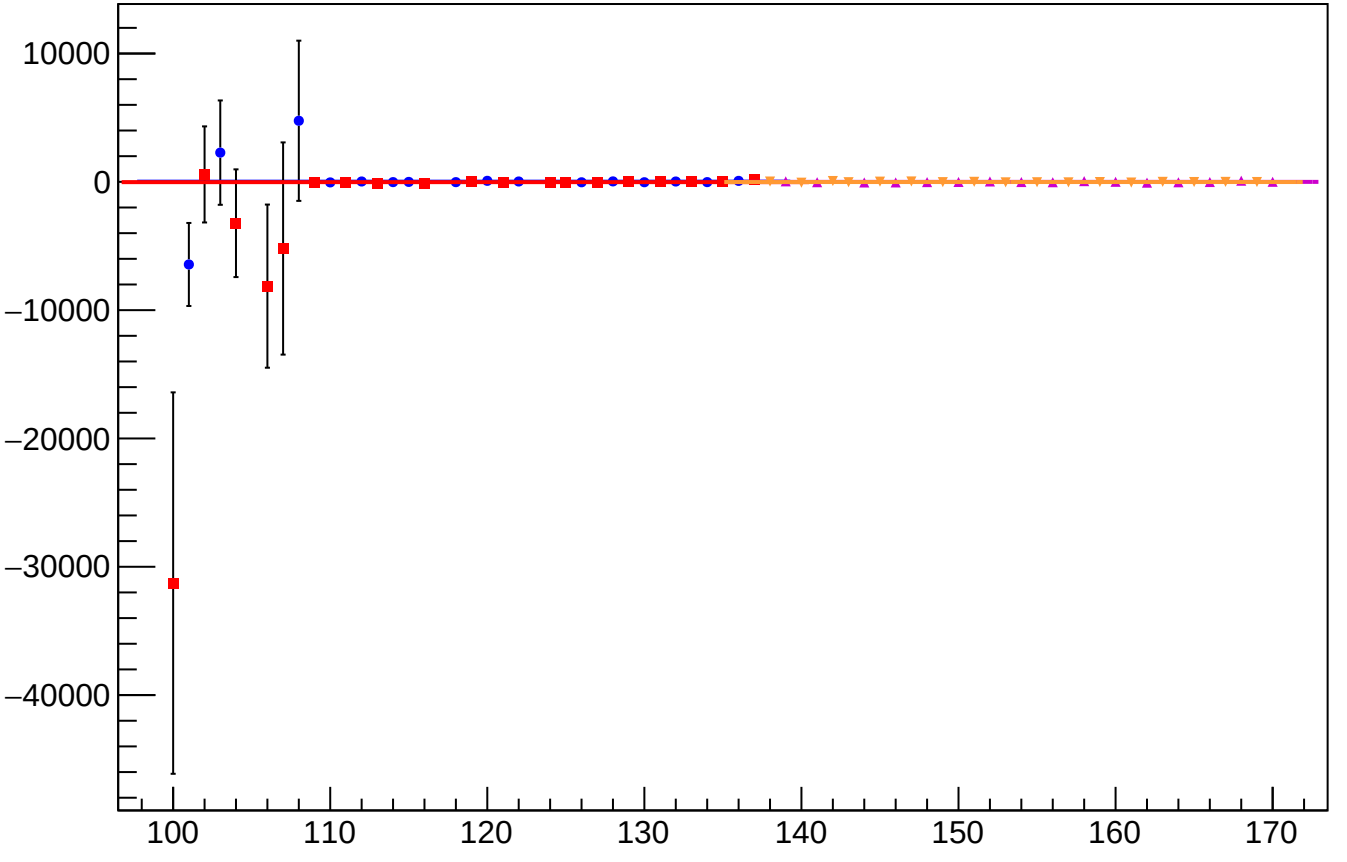
Left In: 185.670+/-0.038 $\chi^2$/NDF:1289504.6/15

+ sign 211.225+/-0.036 $\chi^2$/NDF: 5063240.6/32

All: 194.583+/-0.024 $\chi^2$/NDF: 11081130.6/67

- sign 181.703+/-0.031 $\chi^2$/NDF: 5631042.5/34

# asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs Slug




Right In: 13.713+/-13.062 $\chi^2$/NDF: 15.5/15

Left Out: -14.927+/-8.549 $\chi^2$/NDF:11.7/16

Right Out: -23.230+/-13.181 $\chi^2$/NDF: 28.7/18

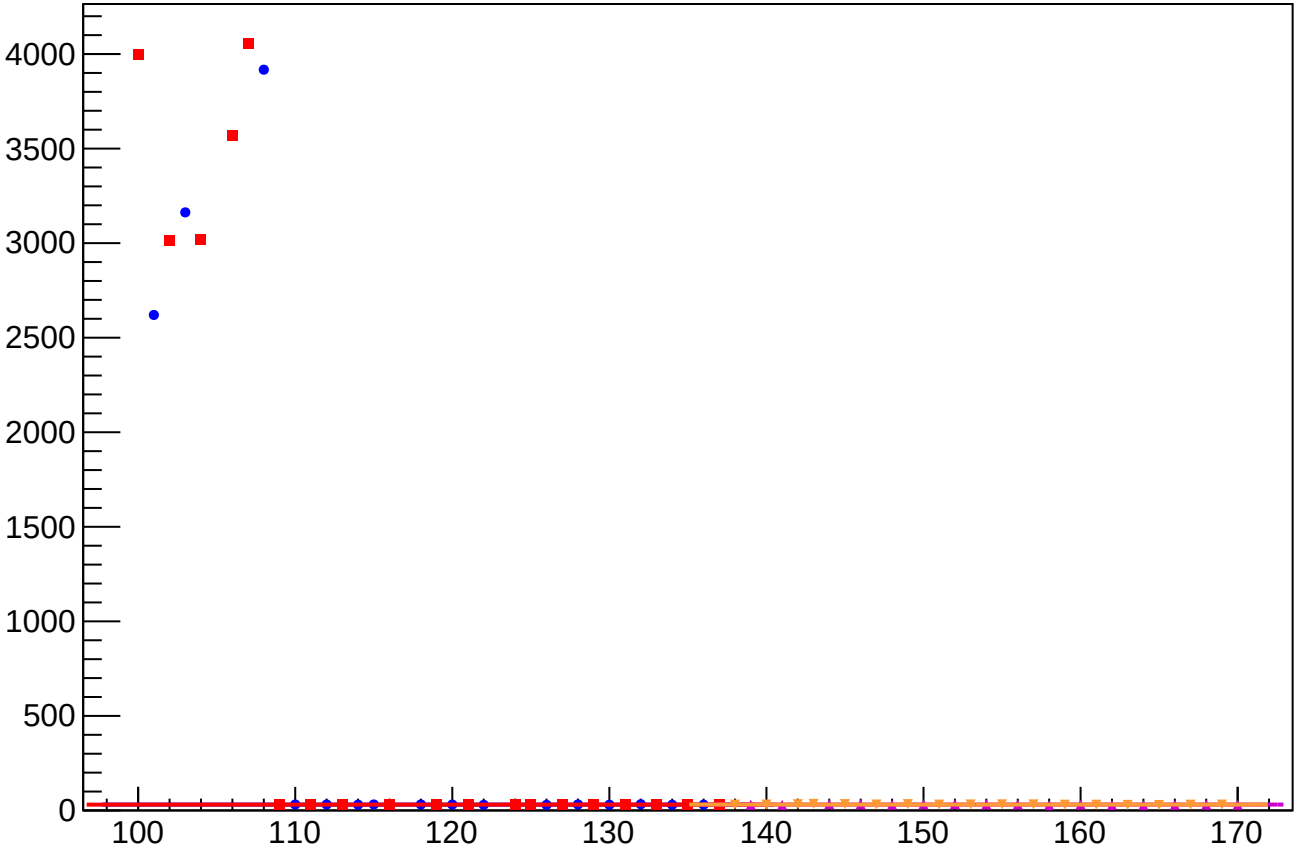
Left In: -2.869+/-8.606 $\chi^2$/NDF:22.5/15

+ sign -6.338+/-7.153 $\chi^2$/NDF: 30.5/32

All: -7.637+/-5.077 $\chi^2$/NDF: 83.5/67

- sign -8.955+/-7.206 $\chi^2$/NDF: 52.9/34

# asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs Slug




Right In: 30.928+/-0.009 $\chi^2$/NDF: 3252607.8/15

Left Out: 31.262+/-0.006 $\chi^2$/NDF:58390.0/16

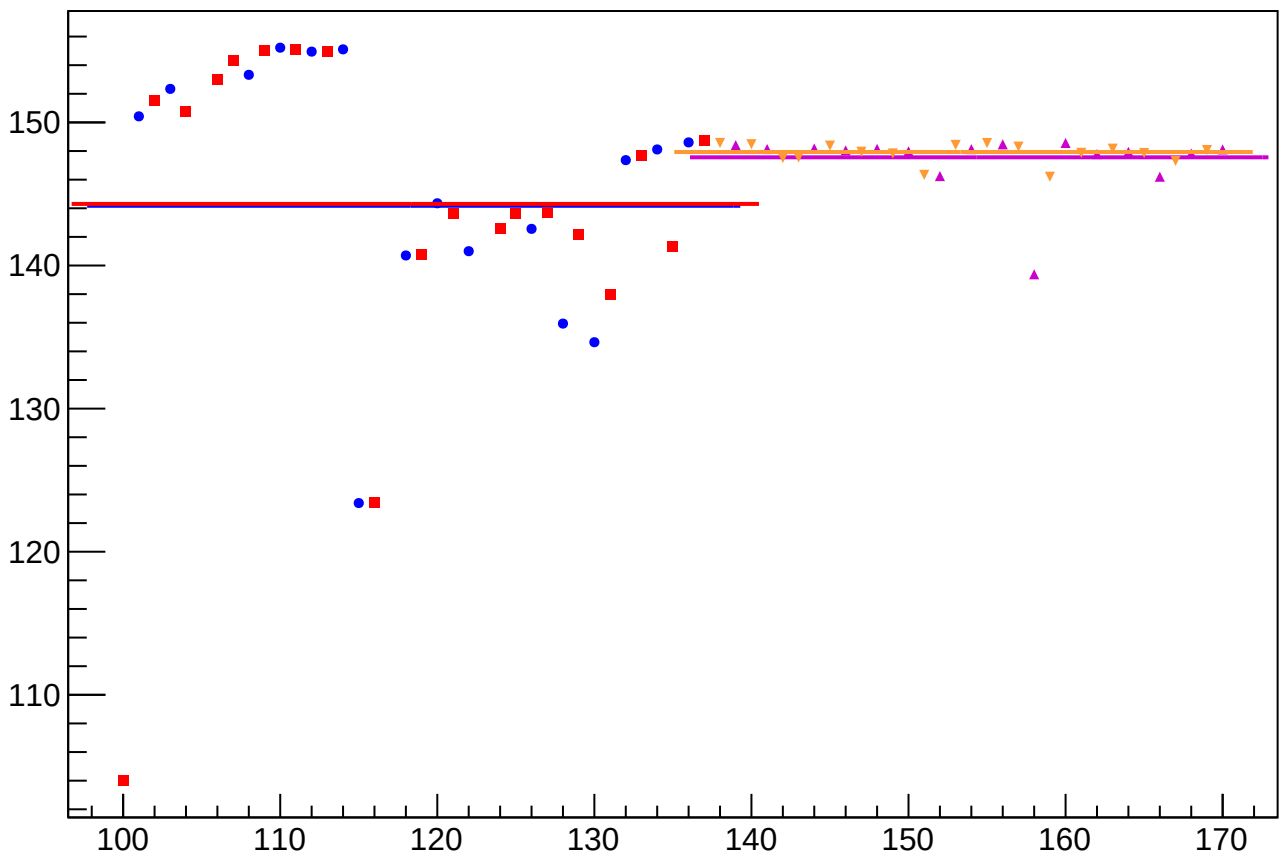
Right Out: 30.777+/-0.009 $\chi^2$/NDF: 3536234.6/18

Left In: 31.190+/-0.006 $\chi^2$/NDF:77087.6/15

+ sign 31.162+/-0.005 $\chi^2$/NDF: 3311909.9/32

All: 31.114+/-0.004 $\chi^2$/NDF: 6926783.2/67

- sign 31.066+/-0.005 $\chi^2$/NDF: 3614696.2/34




Right In: 144.176+/-0.000 $\chi^2$/NDF: 3724747268.7/15

Left Out: 147.933+/-0.000 $\chi^2$/NDF:33866453.0/16

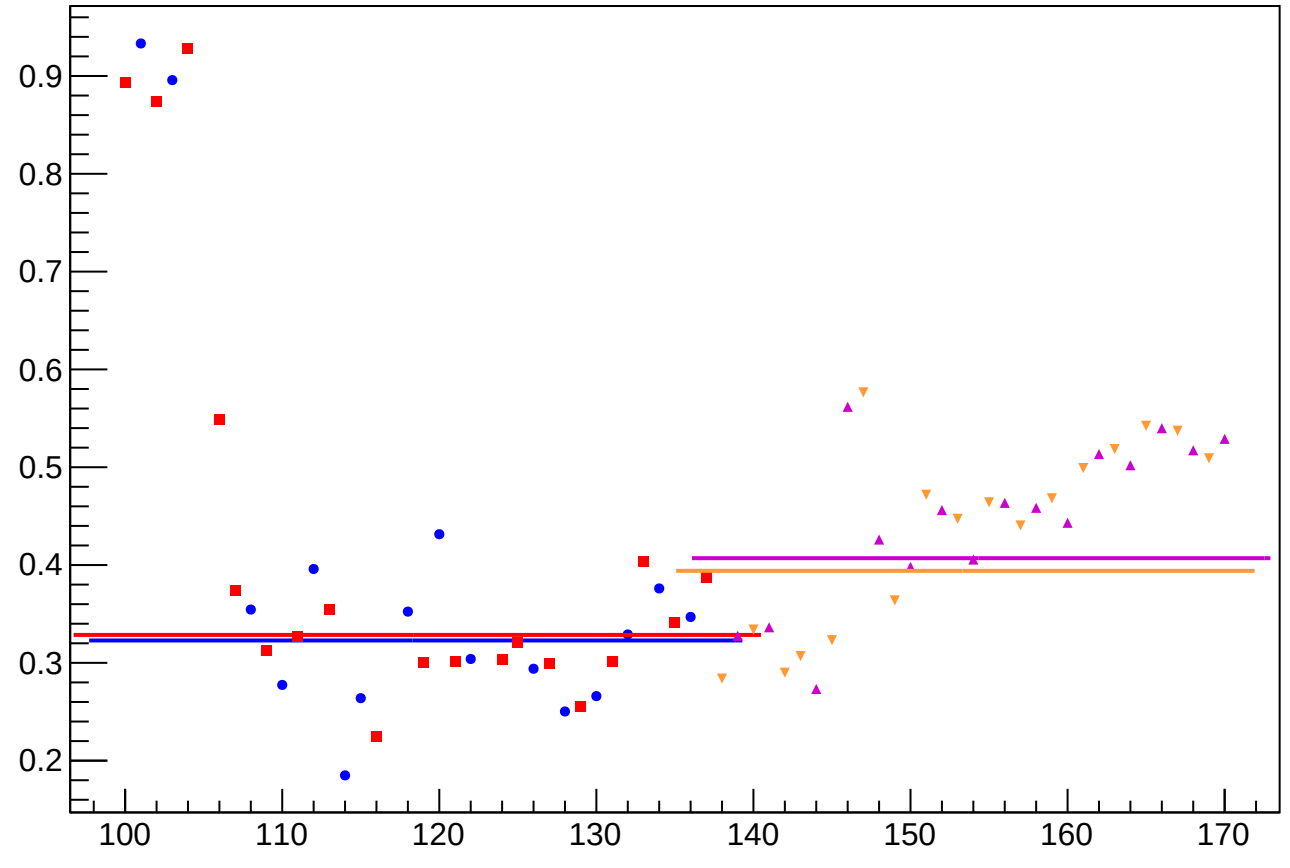
Right Out: 144.304+/-0.000 $\chi^2$/NDF: 4264494940.7/18

Left In: 147.560+/-0.000 $\chi^2$/NDF:289347277.7/15

+ sign 146.353+/-0.000 $\chi^2$/NDF: 4225416786.9/32

All: 146.250+/-0.000 $\chi^2$/NDF: 9120127228.4

- sign 146.143+/-0.000 $\chi^2$/NDF: 4891760828.8/34




Right In: 0.323+/-0.000 $\chi^2$/NDF: 1396024.1/15

Left Out: 0.394+/-0.000 $\chi^2$/NDF:1360297.5/16

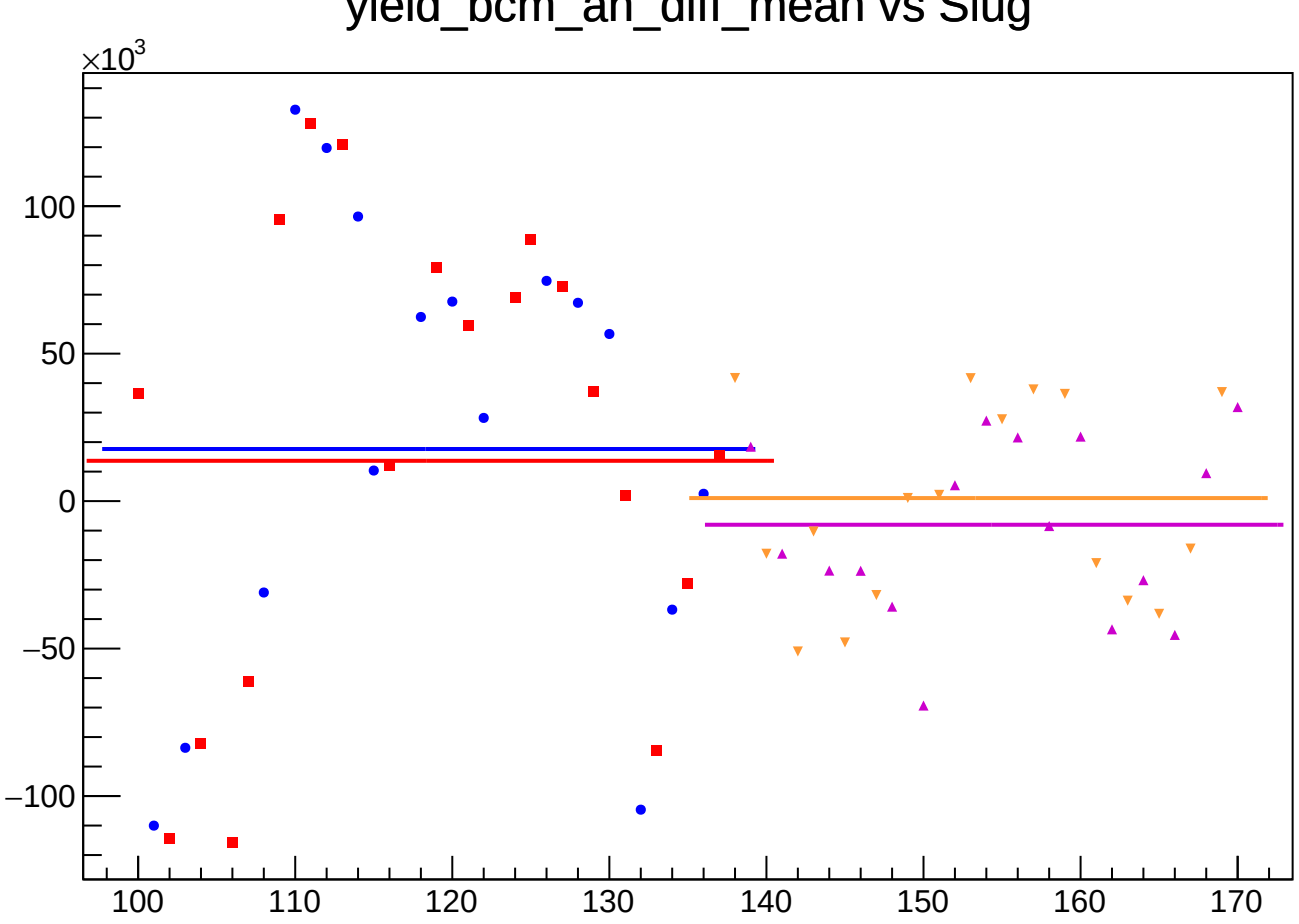
Right Out: 0.329+/-0.000 $\chi^2$/NDF: 1304148.7/18

Left In: 0.407+/-0.000 $\chi^2$/NDF:1131519.1/15

+ sign 0.364+/-0.000 $\chi^2$/NDF: 3091669.2/32

All: 0.368+/-0.000 $\chi^2$/NDF: 5929621.8/67

- sign 0.373+/-0.000 $\chi^2$/NDF: 2827922.7/34




Right In: 17663.790+/-2.006 $\chi^2$/NDF: 1398738701.8/15

Left Out: 1028.164+/-1.331 $\chi^2$/NDF:573876187.2/16

Right Out: 13666.312+/-1.925 $\chi^2$/NDF: 1856962869.6/18

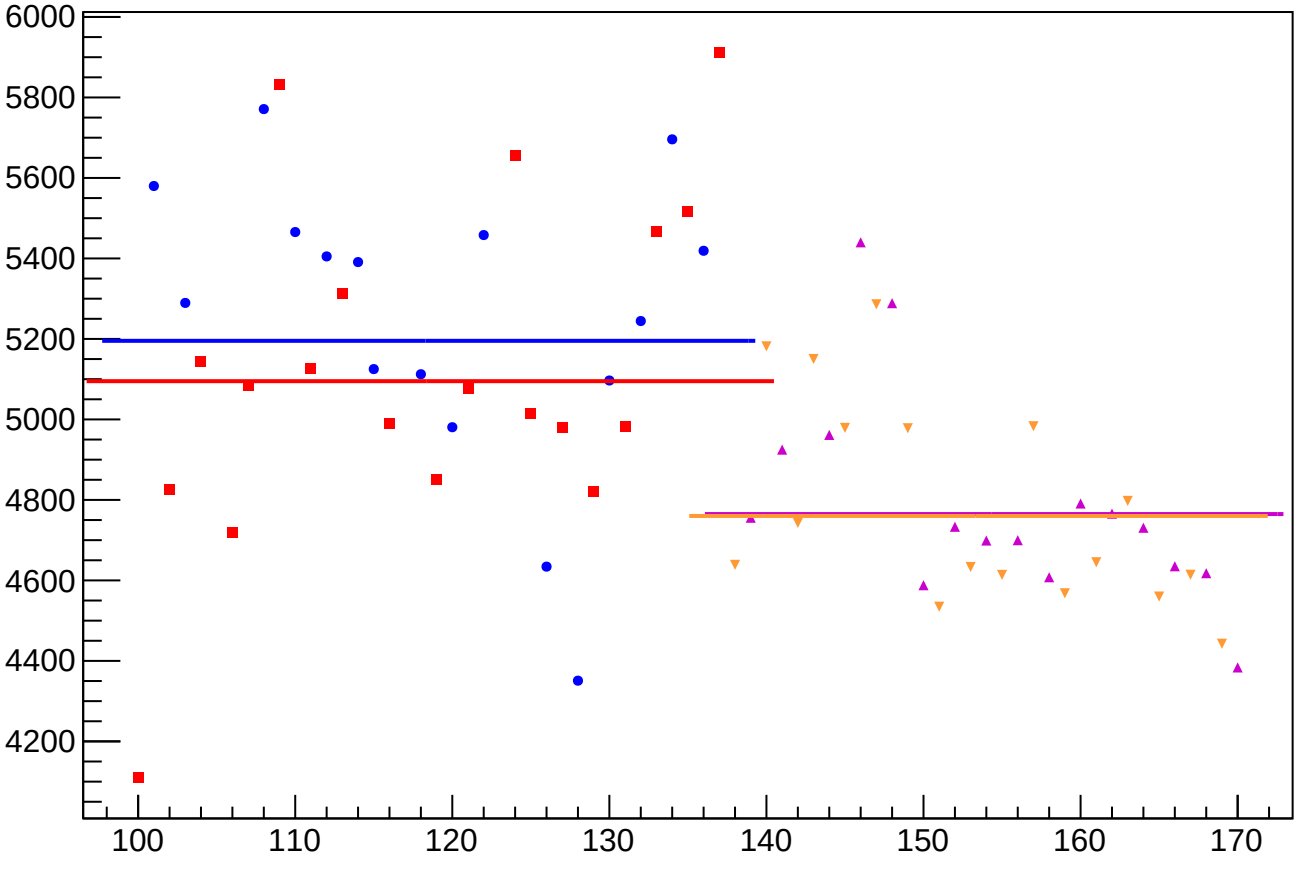
Left In: -8014.975+/-1.344 $\chi^2$/NDF:503410340.3/15

+ sign 6114.616+/-1.109 $\chi^2$/NDF: 2020382528.1/32

All: 2580.044+/-0.782 $\chi^2$/NDF: 4486236260.

- sign -909.866+/-1.102 $\chi^2$/NDF: 2445664535.9/34

# yield_bcm_an_diff_rms vs Slug




Right In: 5195.298+/-1.418 $\chi^2$/NDF: 77166.0/15

Left Out: 4760.152+/-0.941 $\chi^2$/NDF:66818.1/16

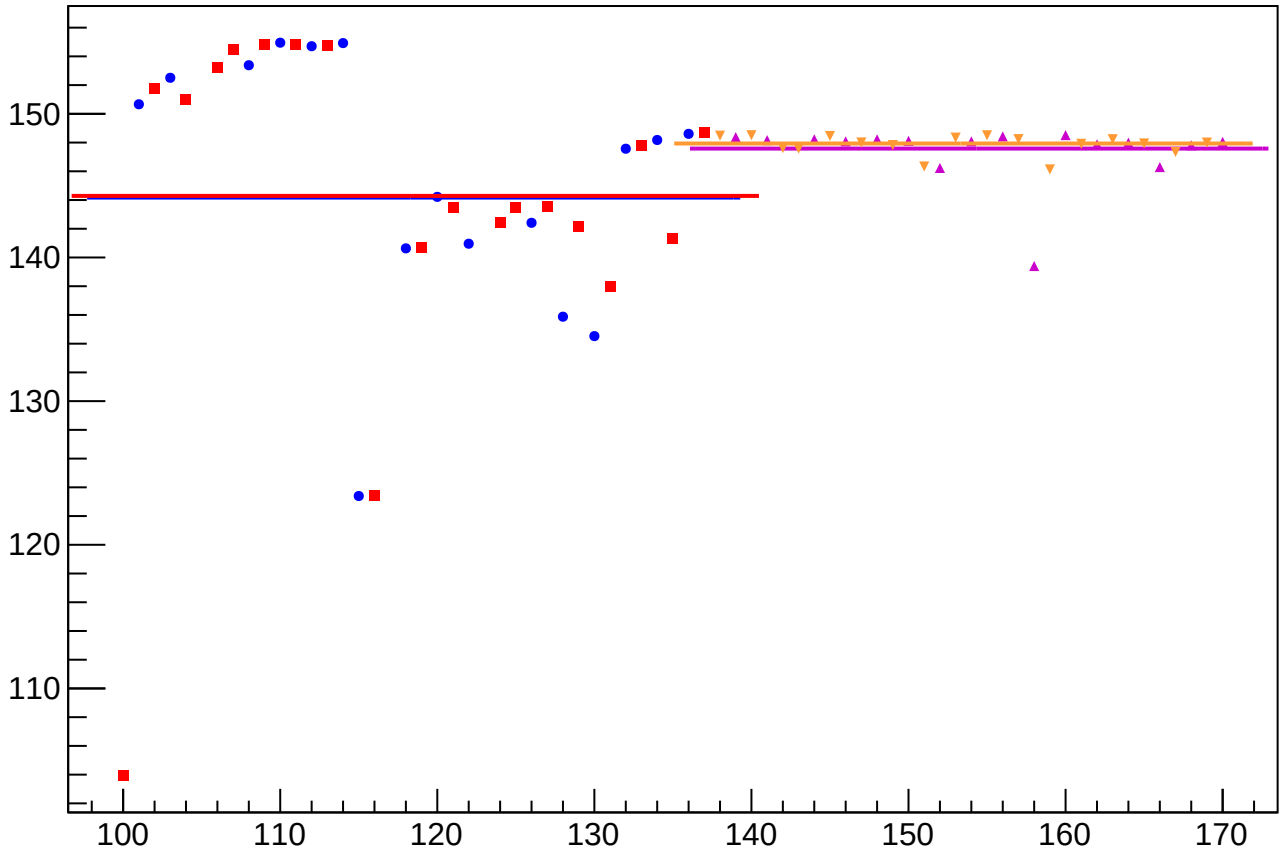
Right Out: 5095.047+/-1.361 $\chi^2$/NDF: 59112.0/18

Left In: 4764.841+/-0.950 $\chi^2$/NDF:64150.0/15

\+ sign 4893.201+/-0.784 $\chi^2$/NDF: 209350.8/32

All: 4883.062+/-0.553 $\chi^2$/NDF: 372512.4/67

\- sign 4873.052+/-0.779 $\chi^2$/NDF: 162829.3/34




Right In: 144.172+/-0.000 $\chi^2$/NDF: 3764836520.0/15

Left Out: 147.934+/-0.000 $\chi^2$/NDF:33798006.0/16

Right Out: 144.286+/-0.000 $\chi^2$/NDF: 4290223847.7/18

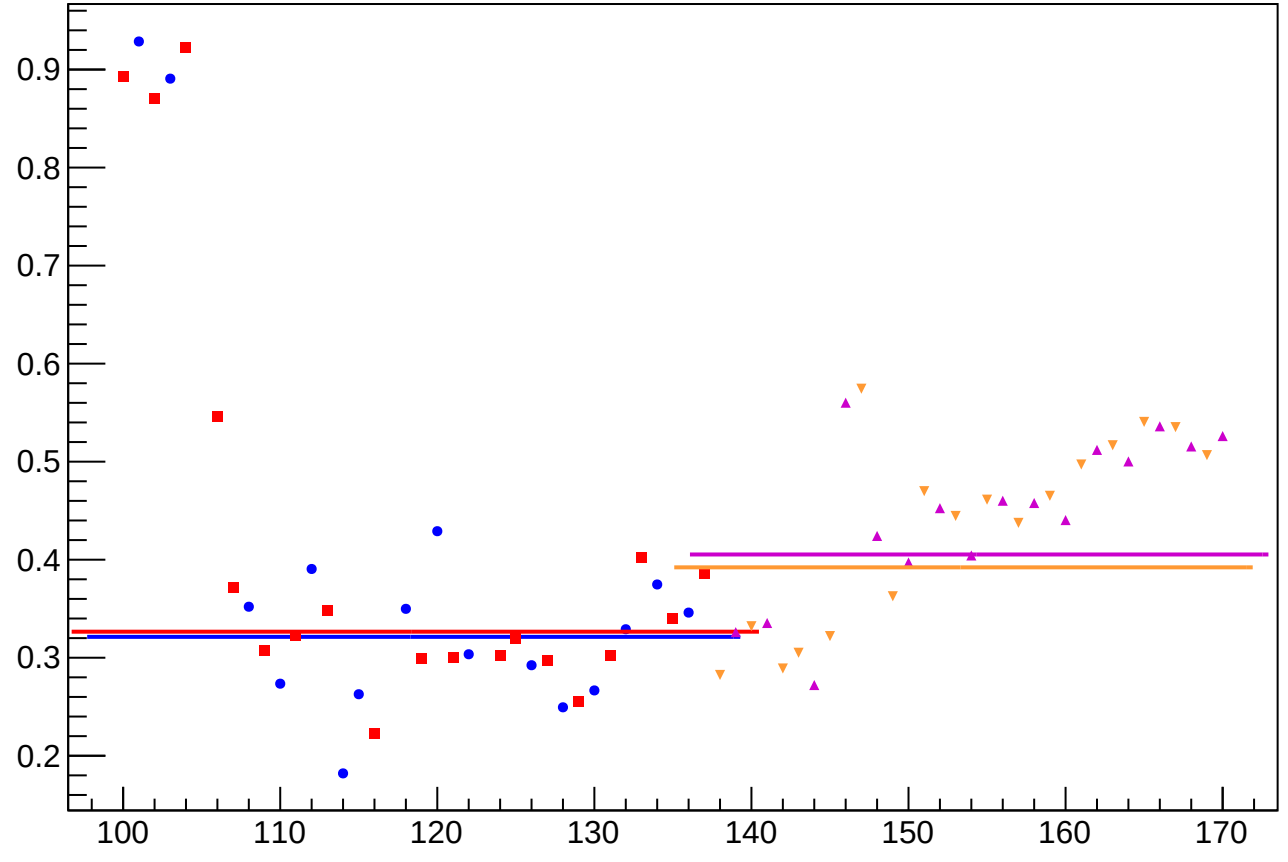
Left In: 147.581+/-0.000 $\chi^2$/NDF:289896145.1/15

+ sign 146.352+/-0.000 $\chi^2$/NDF: 4271510367.2/32

All: 146.250+/-0.000 $\chi^2$/NDF: 9204095642.6

- sign 146.143+/-0.000 $\chi^2$/NDF: 4929668387.3/34

# yield_bcm_an_ds_rms vs Slug




Right In: 0.321+/-0.000 $\chi^2$/NDF: 1396250.7/15

Left Out: 0.392+/-0.000 $\chi^2$/NDF:1361094.0/16

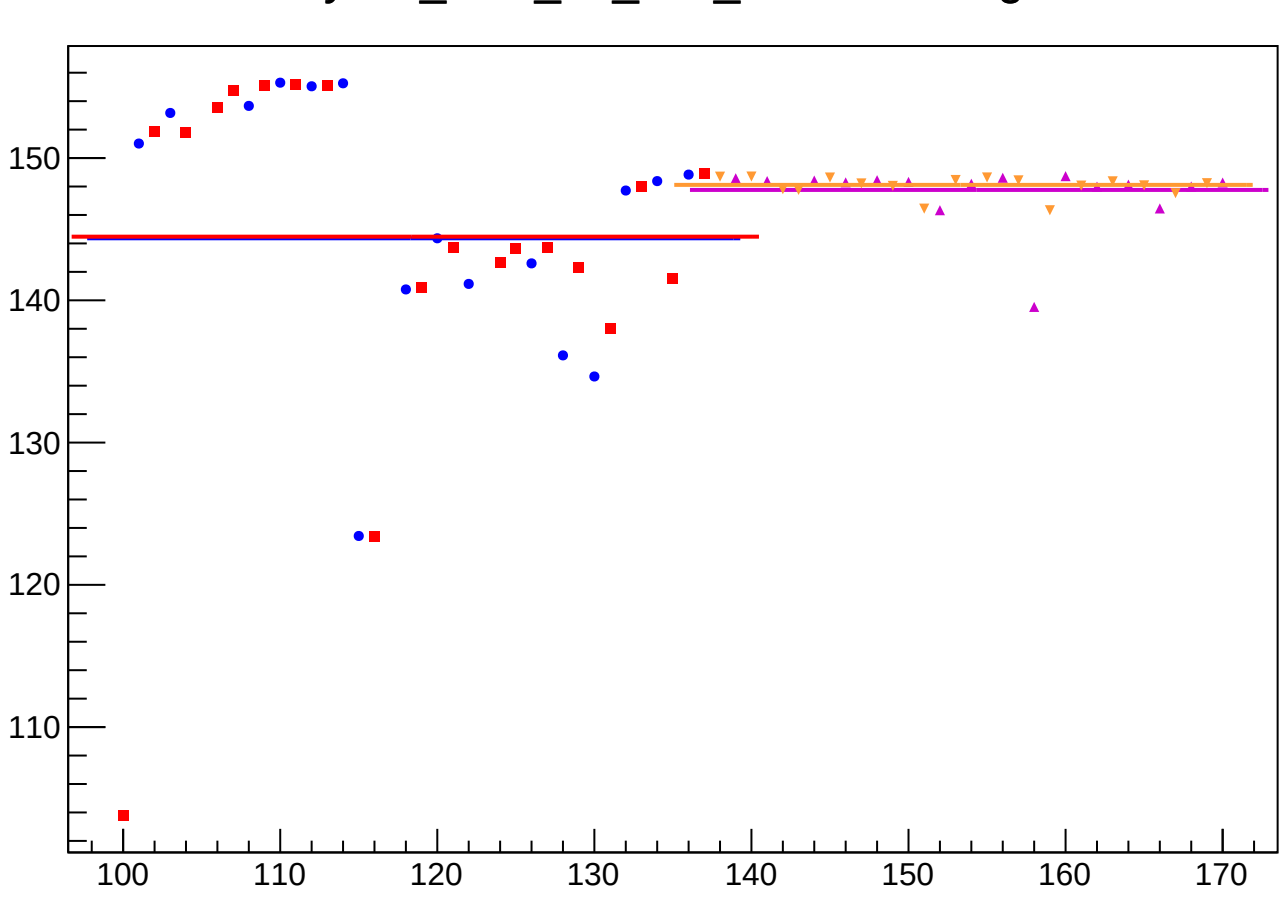
Right Out: 0.327+/-0.000 $\chi^2$/NDF: 1302732.4/18

Left In: 0.405+/-0.000 $\chi^2$/NDF:1128692.3/15

+ sign 0.362+/-0.000 $\chi^2$/NDF: 3093171.2/32

All: 0.367+/-0.000 $\chi^2$/NDF: 5934028.3/67

- sign 0.371+/-0.000 $\chi^2$/NDF: 2831004.1/34




Right In: 144.361+/-0.000 $\chi^2$/NDF: 3758625293.6/15

Left Out: 148.115+/-0.000 $\chi^2$/NDF:33776748.8/16

Right Out: 144.475+/-0.000 $\chi^2$/NDF: 4281975463.8/18

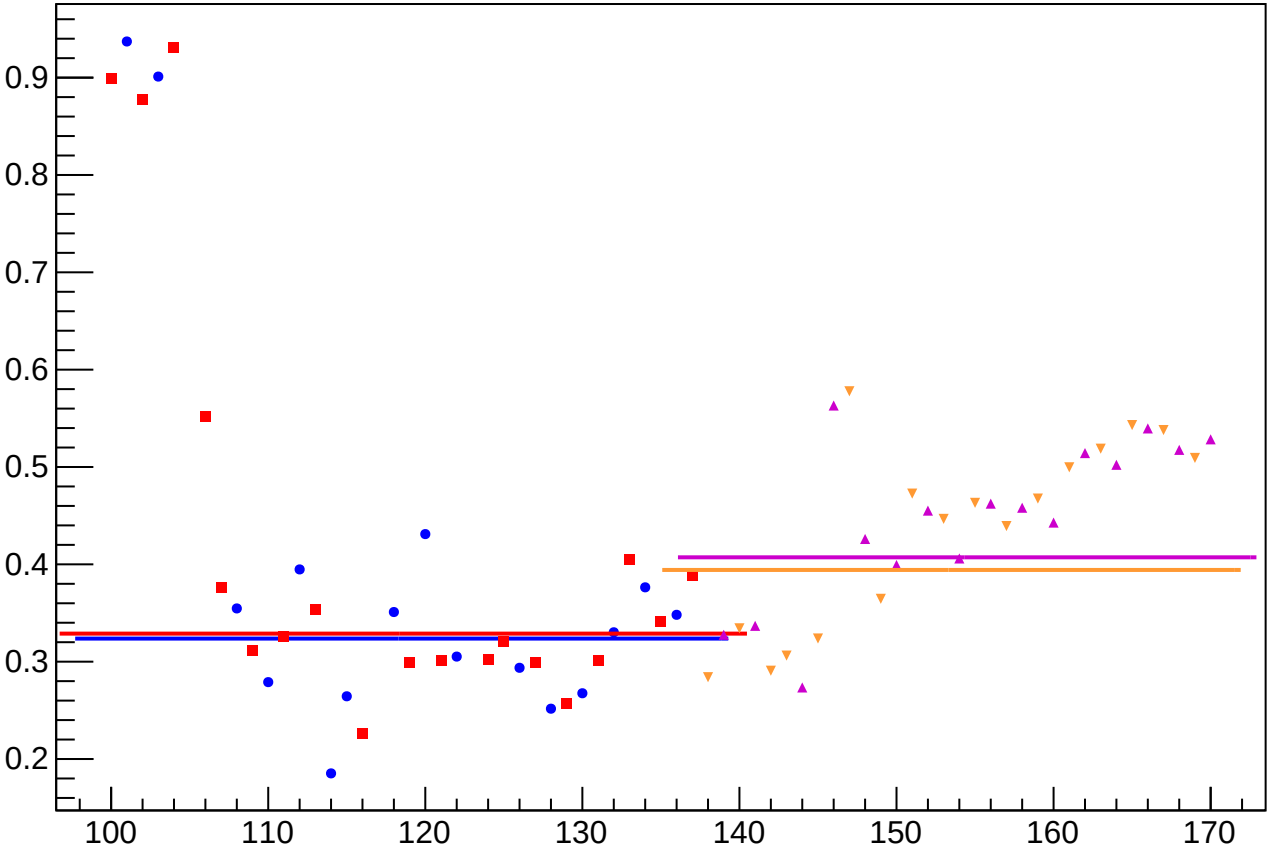
Left In: 147.760+/-0.000 $\chi^2$/NDF:294302931.9/15

+ sign 146.540+/-0.000 $\chi^2$/NDF: 4257243995.9/32

All: 146.437+/-0.000 $\chi^2$/NDF: 9180044220.3

- sign 146.330+/-0.000 $\chi^2$/NDF: 4919875721.5/34

# yield_bcm_an_ds3_rms vs Slug




Right In: 0.324+/-0.000 $\chi^2$/NDF: 1392377.9/15

Left Out: 0.394+/-0.000 $\chi^2$/NDF:1358880.3/16

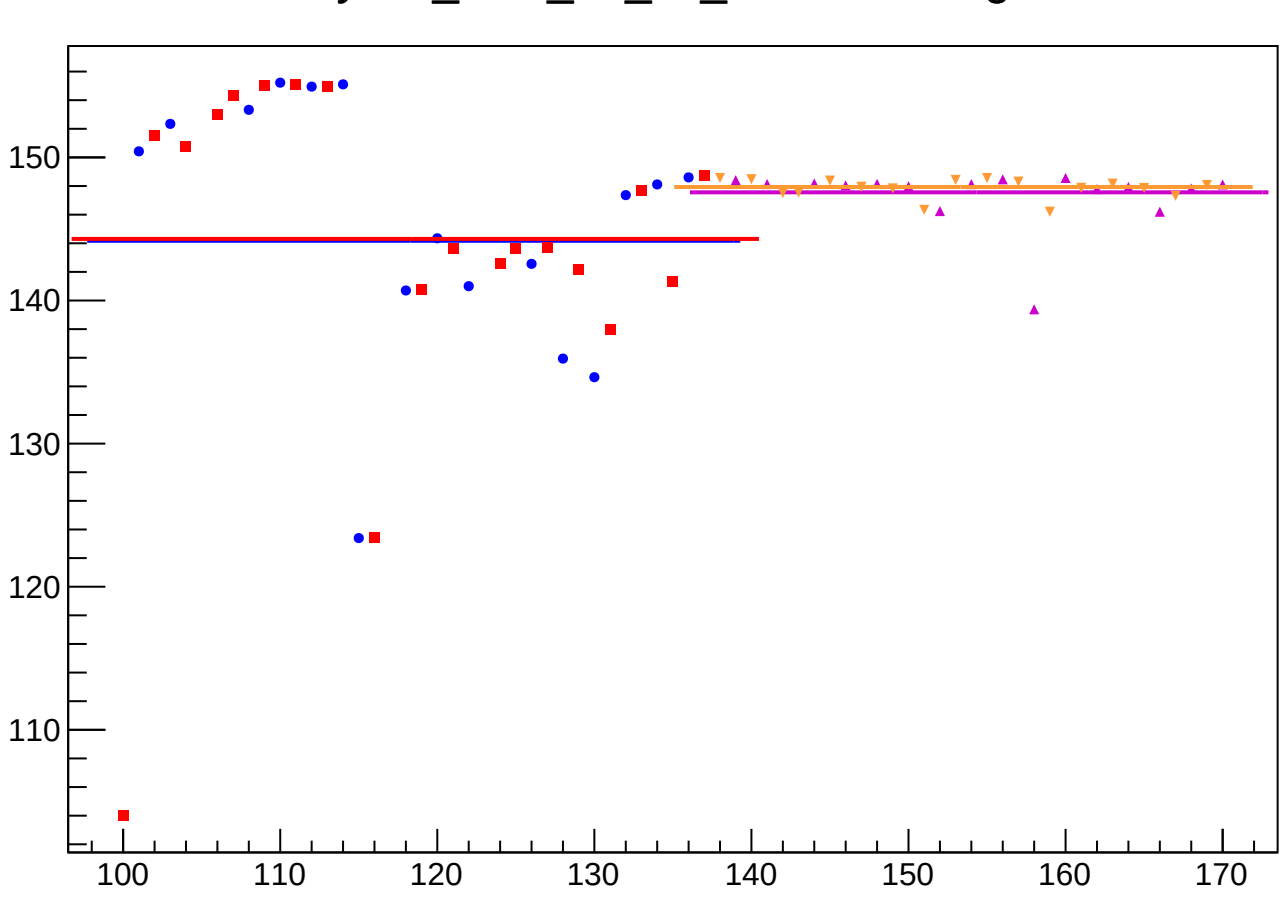
Right Out: 0.329+/-0.000 $\chi^2$/NDF: 1303222.2/18

Left In: 0.407+/-0.000 $\chi^2$/NDF:1127740.0/15

+ sign 0.365+/-0.000 $\chi^2$/NDF: 3079259.6/32

All: 0.369+/-0.000 $\chi^2$/NDF: 5910748.2/67

- sign 0.373+/-0.000 $\chi^2$/NDF: 2822070.1/34




Right In: 144.176+/-0.000 $\chi^2$/NDF: 3724747268.7/15

Left Out: 147.933+/-0.000 $\chi^2$/NDF:33866453.0/16

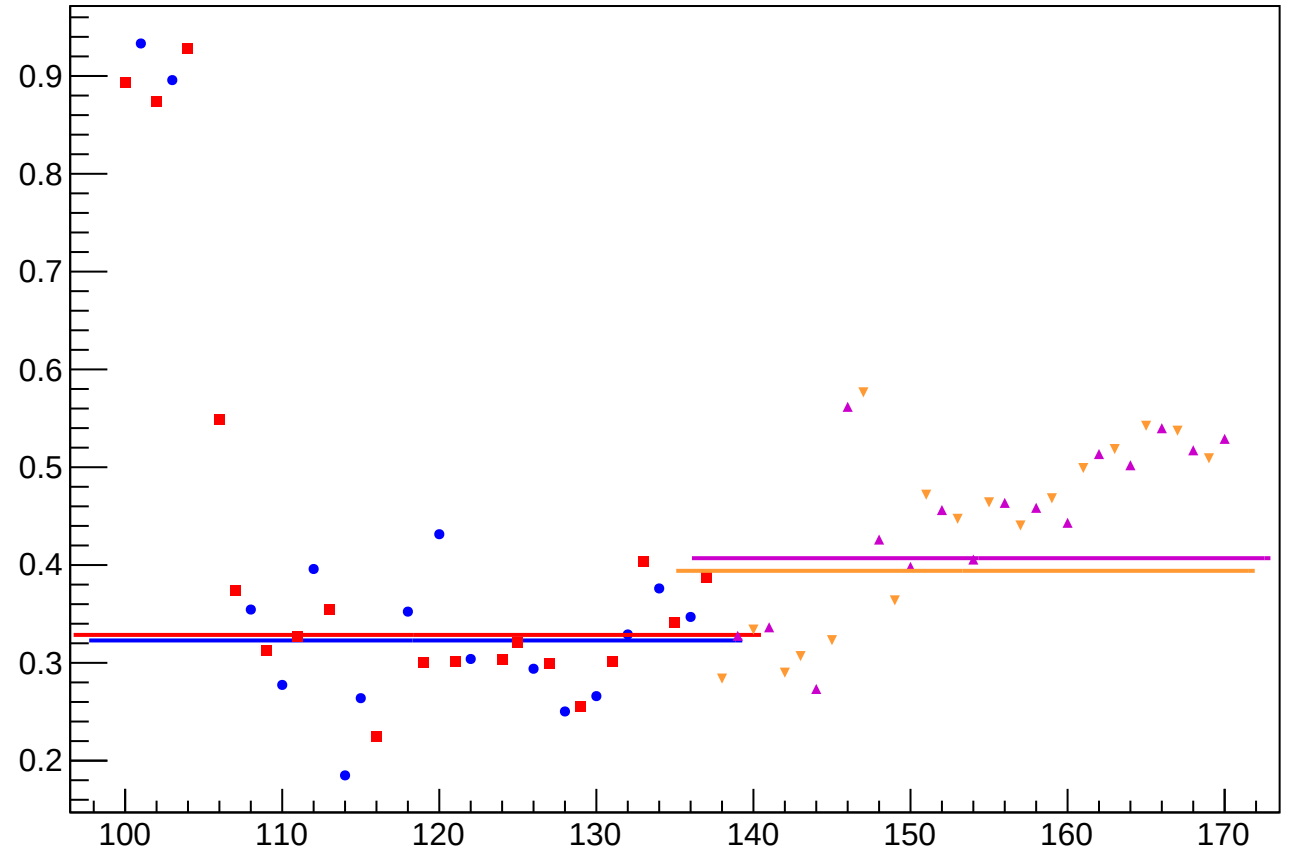
Right Out: 144.304+/-0.000 $\chi^2$/NDF: 4264494940.7/18

Left In: 147.560+/-0.000 $\chi^2$/NDF:289347277.7/15

+ sign 146.353+/-0.000 $\chi^2$/NDF: 4225416786.9/32

All: 146.250+/-0.000 $\chi^2$/NDF: 9120127228.4

- sign 146.143+/-0.000 $\chi^2$/NDF: 4891760828.8/34




Right In: 0.323+/-0.000 $\chi^2$/NDF: 1396024.1/15

Left Out: 0.394+/-0.000 $\chi^2$/NDF:1360297.5/16

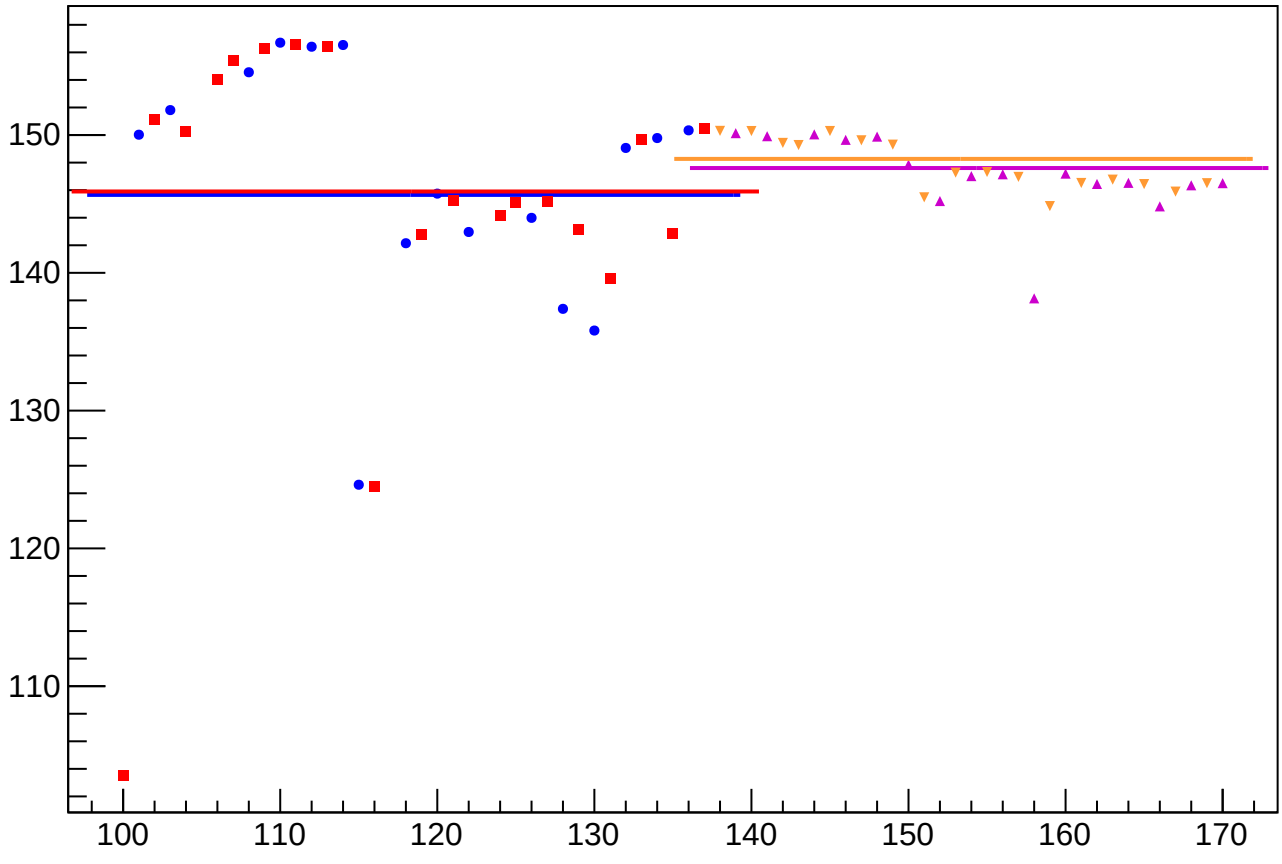
Right Out: 0.329+/-0.000 $\chi^2$/NDF: 1304148.7/18

Left In: 0.407+/-0.000 $\chi^2$/NDF:1131519.1/15

+ sign 0.364+/-0.000 $\chi^2$/NDF: 3091669.2/32

All: 0.368+/-0.000 $\chi^2$/NDF: 5929621.8/67

- sign 0.373+/-0.000 $\chi^2$/NDF: 2827922.7/34




Right In: 145.657+/-0.000 $\chi^2$/NDF: 3481495345.2/15

Left Out: 148.270+/-0.000 $\chi^2$/NDF:241048120.0/16

Right Out: 145.904+/-0.000 $\chi^2$/NDF: 3863011865.2/18

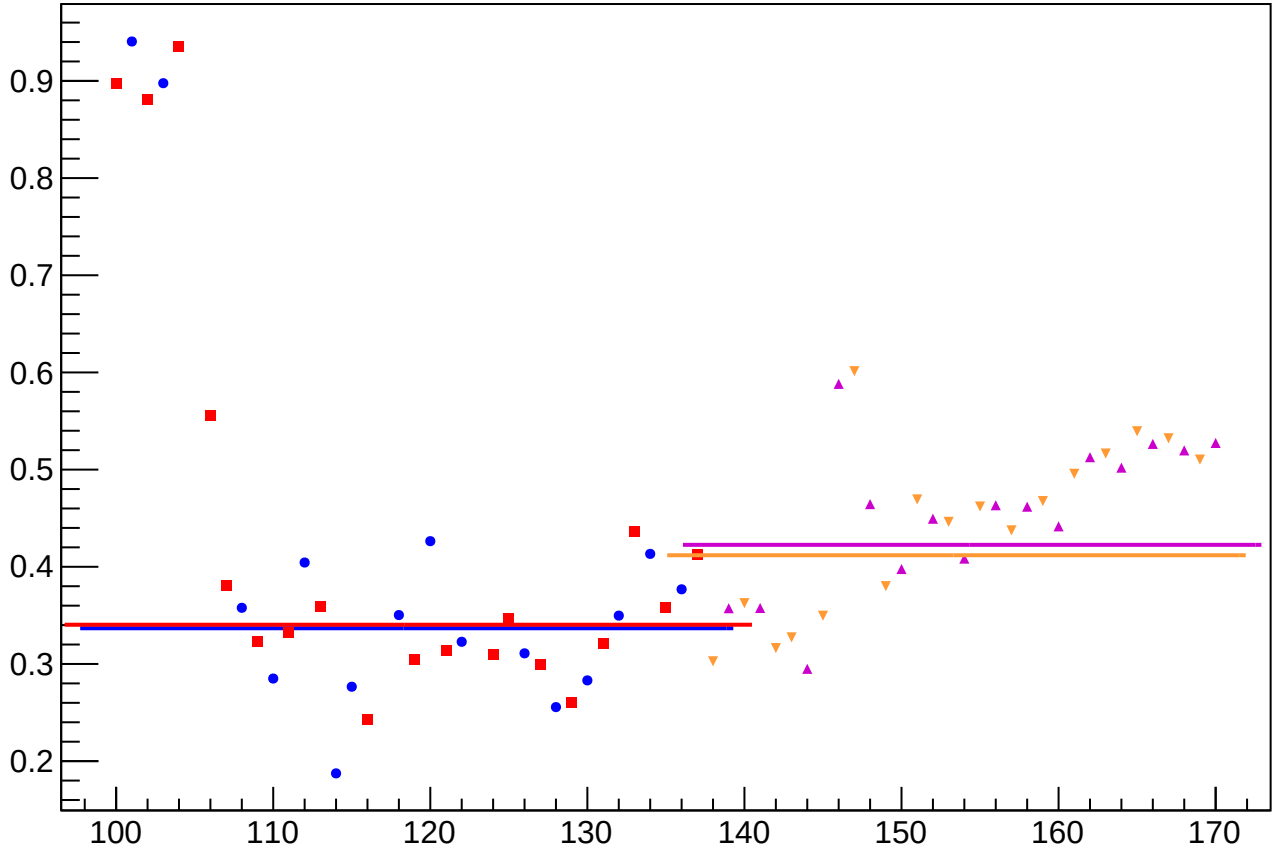
Left In: 147.606+/-0.000 $\chi^2$/NDF:555396900.4/15

+ sign 147.175+/-0.000 $\chi^2$/NDF: 3930628540.5/32

All: 147.024+/-0.000 $\chi^2$/NDF: 8441039544.4

- sign 146.868+/-0.000 $\chi^2$/NDF: 4504582369.4/34

# yield_bcm_dg_us_rms vs Slug




Right In: 0.337+/-0.000 $\chi^2$/NDF: 1370512.1/15

Left Out: 0.412+/-0.000 $\chi^2$/NDF:1012663.6/16

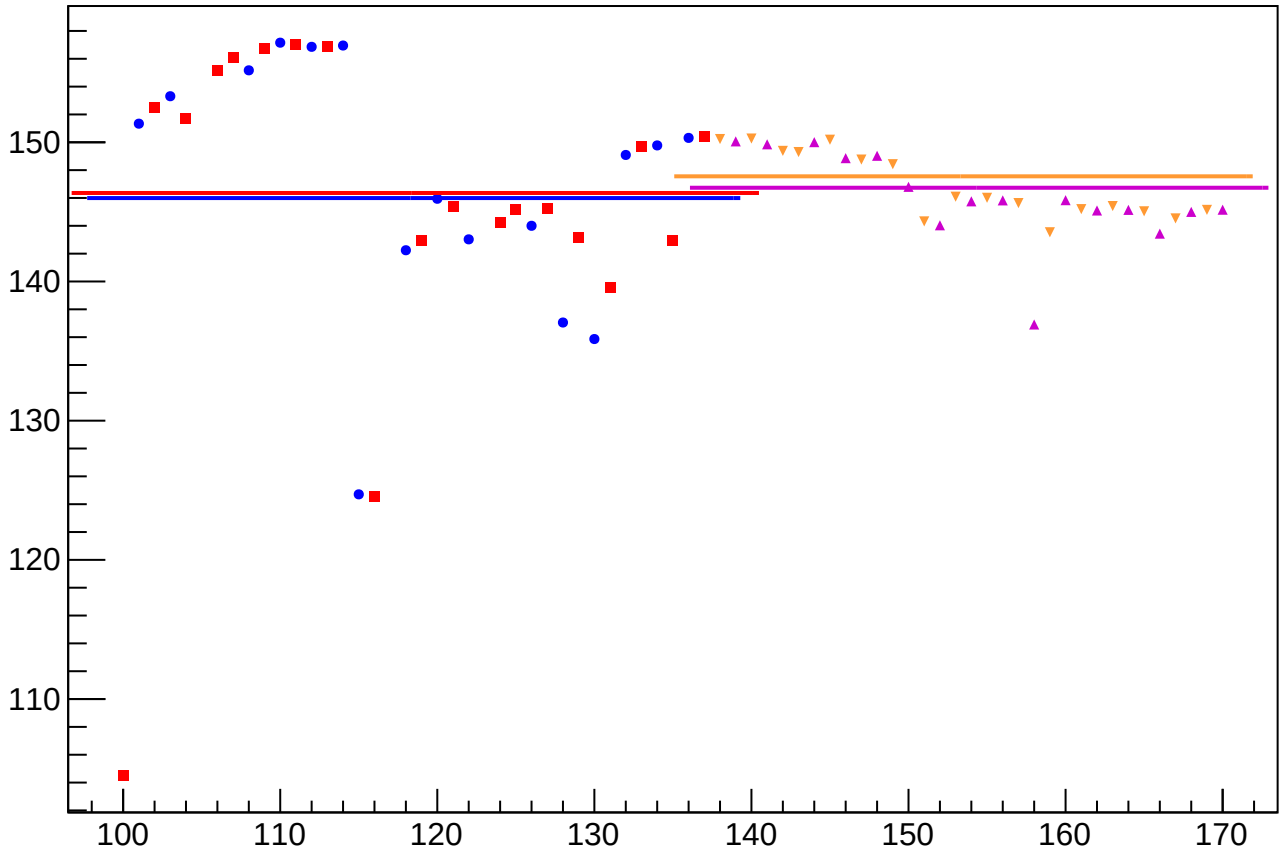
Right Out: 0.340+/-0.000 $\chi^2$/NDF: 1274717.4/18

Left In: 0.423+/-0.000 $\chi^2$/NDF:864121.9/15

+ sign 0.380+/-0.000 $\chi^2$/NDF: 2727288.9/32

All: 0.384+/-0.000 $\chi^2$/NDF: 5273646.3/67

- sign 0.387+/-0.000 $\chi^2$/NDF: 2541132.4/34




Right In: 145.993+/-0.000 $\chi^2$/NDF: 3621634656.4/15

Left Out: 147.555+/-0.000 $\chi^2$/NDF:407302637.2/16

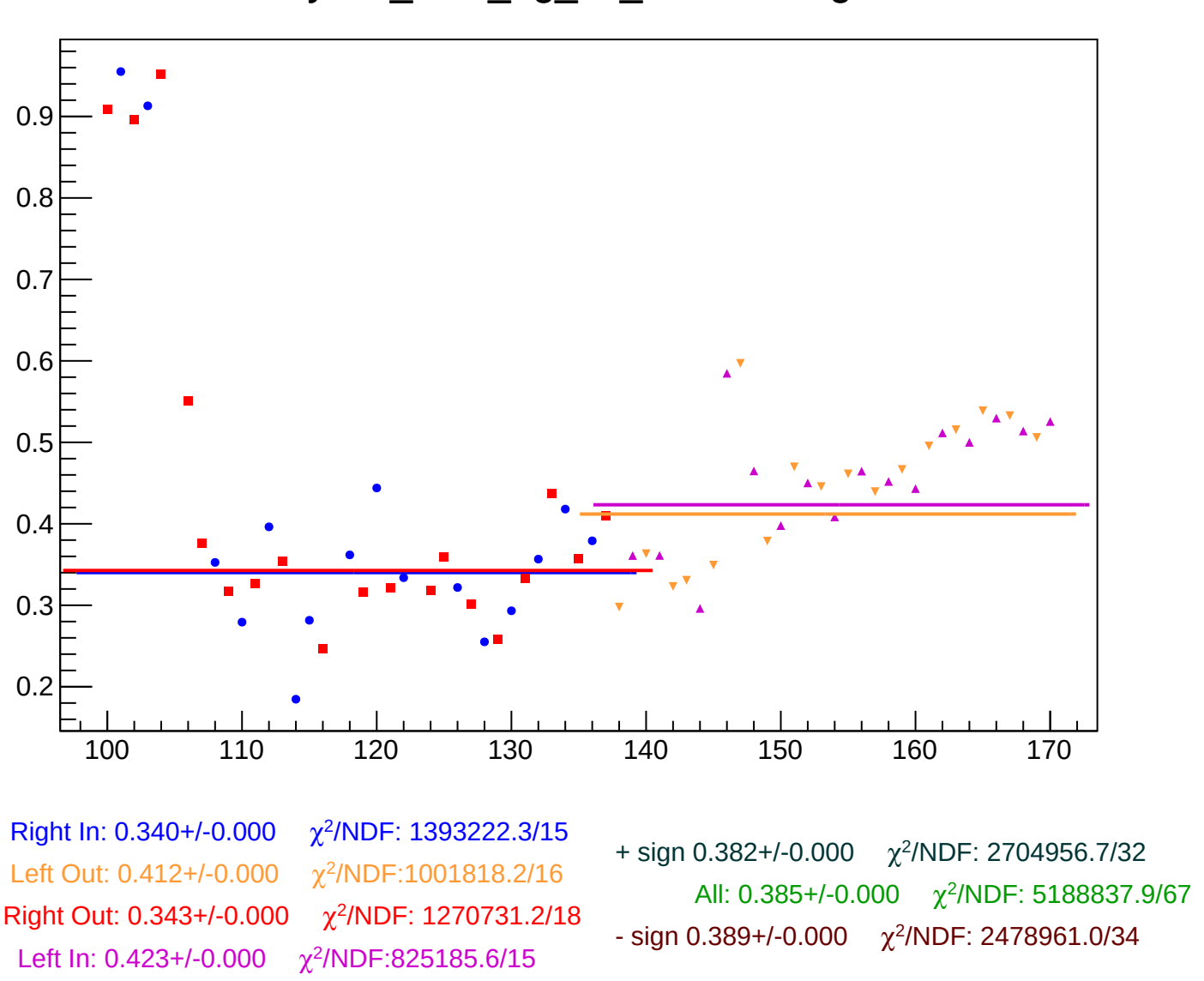
Right Out: 146.358+/-0.000 $\chi^2$/NDF: 3963122316.1/18

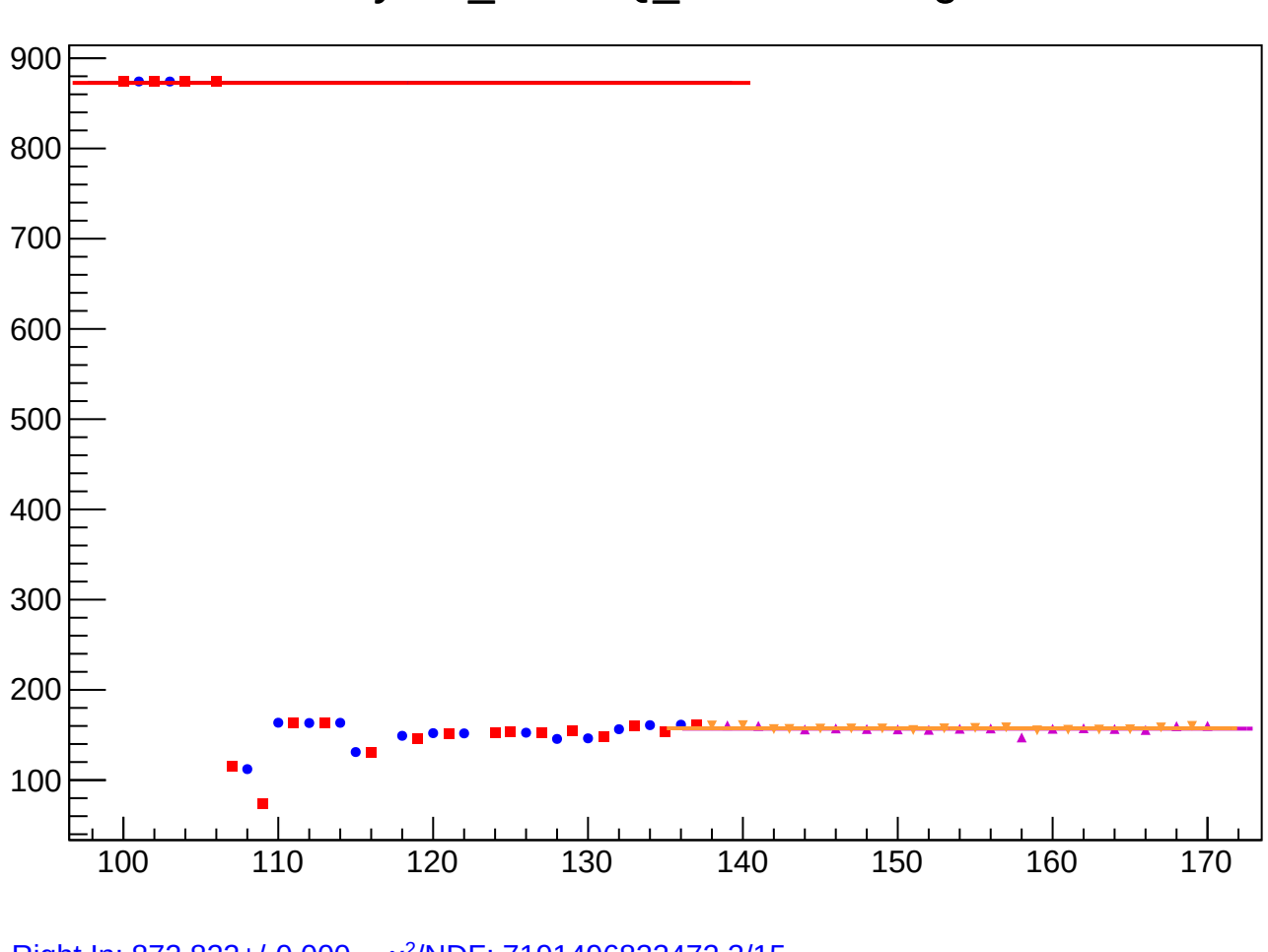
Left In: 146.735+/-0.000 $\chi^2$/NDF:735710303.0/15

+ sign 146.909+/-0.000 $\chi^2$/NDF: 4102279184.0/32

All: 146.743+/-0.000 $\chi^2$/NDF: 8812187354.7

- sign 146.573+/-0.000 $\chi^2$/NDF: 4703000207.9/34


yield_bcm_dg_ds_rms vs Slug
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
100
110
120
130
140
150
160
170
Right In: 0.340+/-0.000 χ²/NDF: 1393222.3/15
Left Out: 0.412+/-0.000 χ²/NDF:1001818.2/16
Right Out: 0.343+/-0.000 χ²/NDF: 1270731.2/18
Left In: 0.423+/-0.000 χ²/NDF:825185.6/15
+ sign 0.382+/-0.000 χ²/NDF: 2704956.7/32
All: 0.385+/-0.000 χ²/NDF: 5188837.9/67
- sign 0.389+/-0.000 χ²/NDF: 2478961.0/34




Right In: 872.822+/-0.000 $\chi^2$/NDF: 7191496833472.3/15

Left Out: 157.422+/-0.000 $\chi^2$/NDF:77861431.0/16

Right Out: 872.676+/-0.000 $\chi^2$/NDF: 9167298490018.9/18

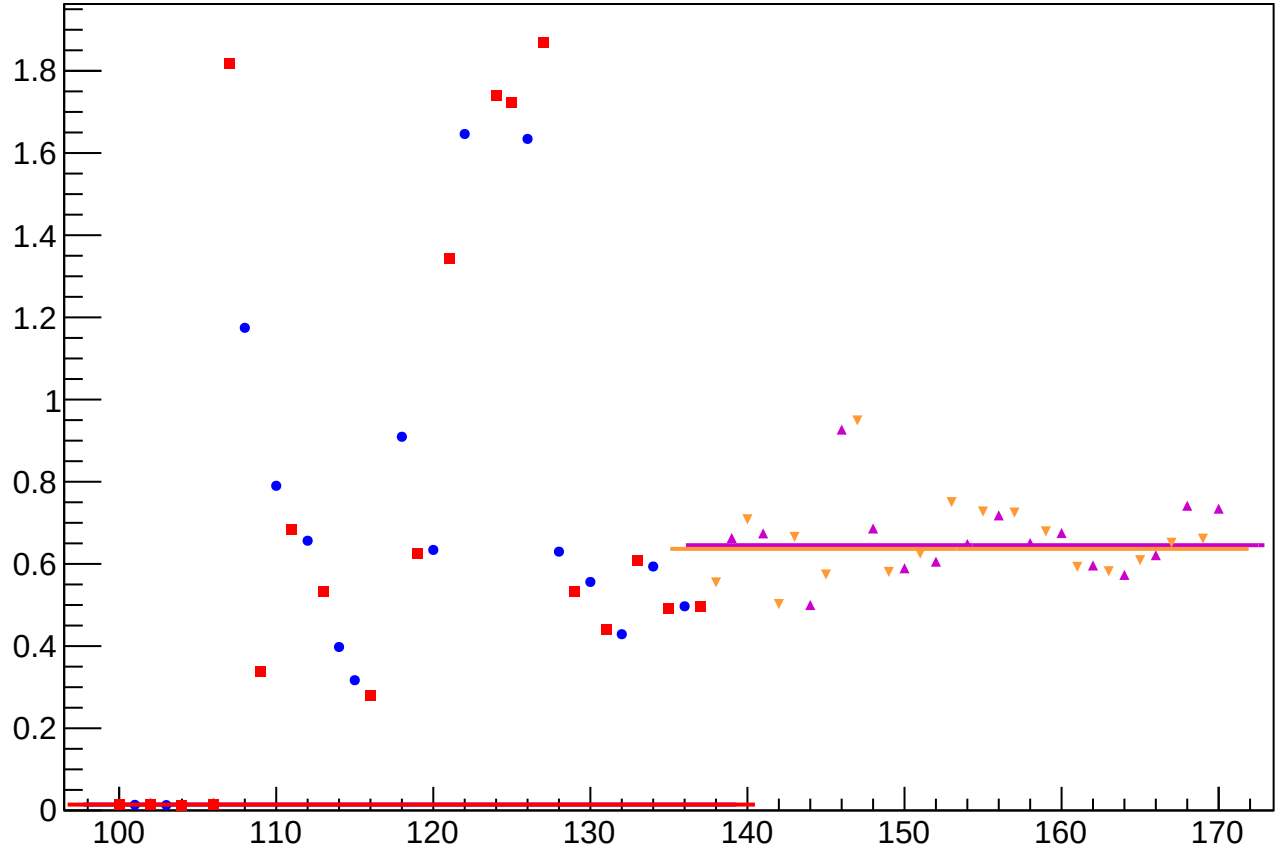
Left In: 157.006+/-0.000 $\chi^2$/NDF:197713974.4/15

+ sign 870.395+/-0.000 $\chi^2$/NDF: 19563489554127.

All: 870.524+/-0.000 $\chi^2$/NDF: 40715624846

- sign 870.636+/-0.000 $\chi^2$/NDF: 21151912638074.3

# yield_cav4bQ_rms vs Slug




Right In: 0.014+/-0.000 $\chi^2$/NDF: 9622176.3/15

Left Out: 0.637+/-0.000 $\chi^2$/NDF:304984.1/16

Right Out: 0.014+/-0.000 $\chi^2$/NDF: 9410025.7/18

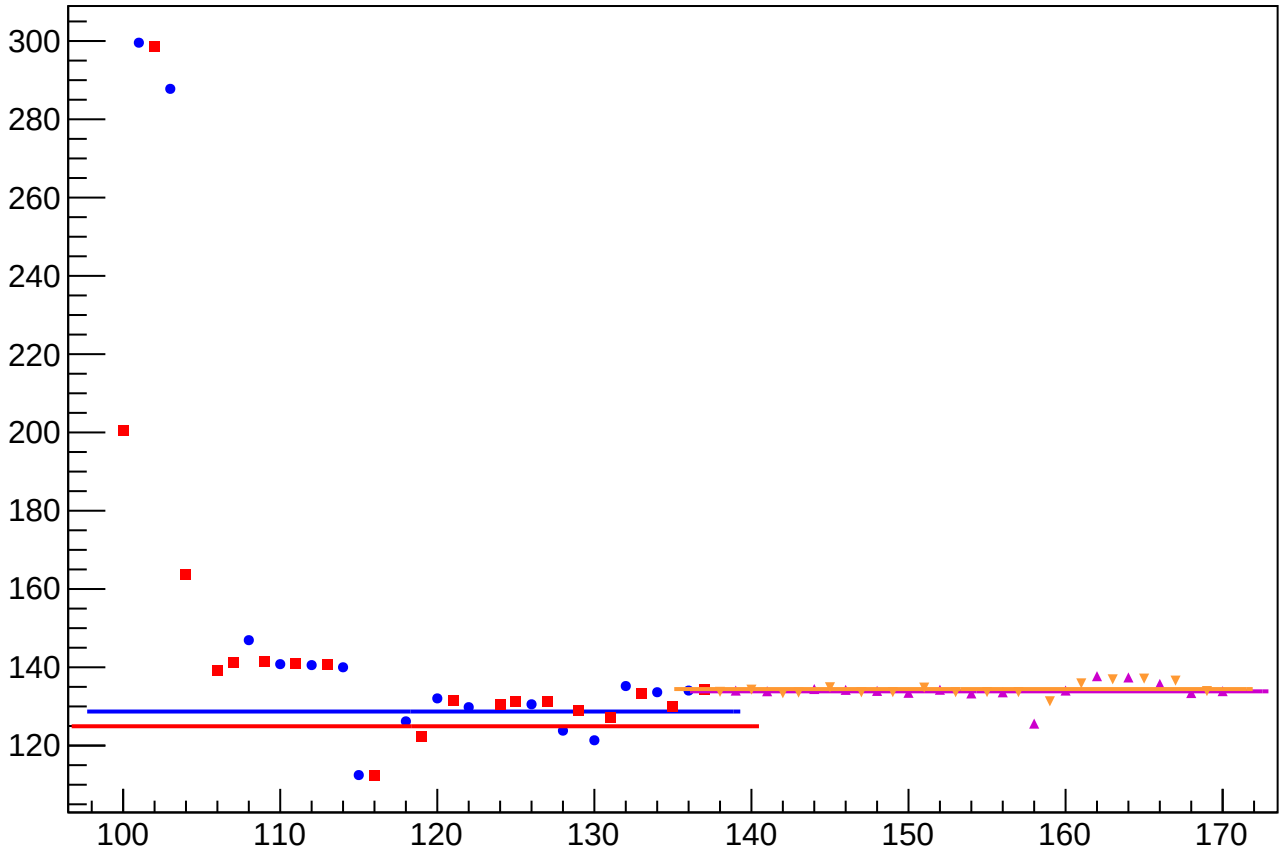
Left In: 0.646+/-0.000 $\chi^2$/NDF:301599.9/15

+ sign 0.016+/-0.000 $\chi^2$/NDF: 28645202.0/32

All: 0.016+/-0.000 $\chi^2$/NDF: 57011303.2/67

- sign 0.016+/-0.000 $\chi^2$/NDF: 28364533.9/34

# yield_cav4cQ_mean vs Slug




Right In: 128.701+/-0.000 $\chi^2$/NDF: 1656162604.0/15

Left Out: 134.440+/-0.000 $\chi^2$/NDF:116386904.2/16

Right Out: 124.935+/-0.000 $\chi^2$/NDF: 1397923053.7/18

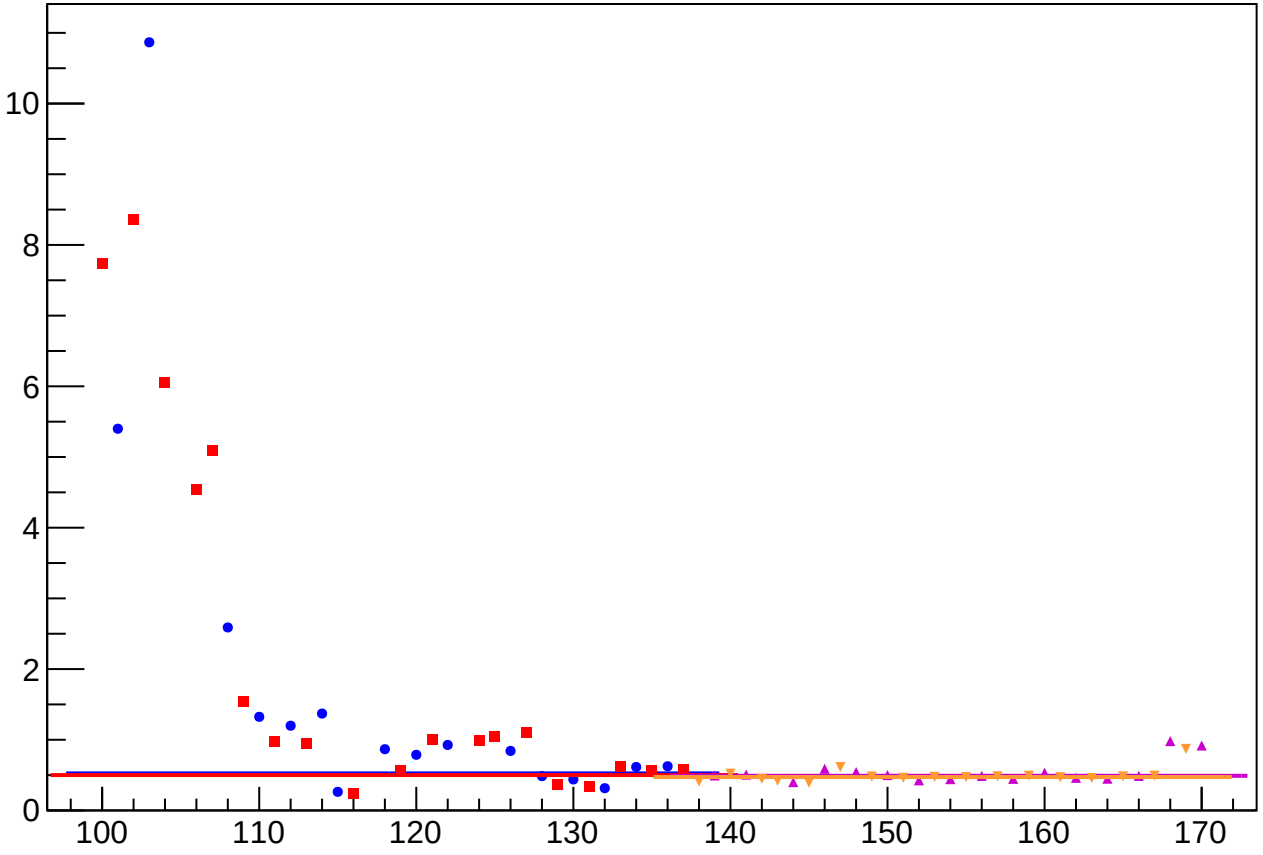
Left In: 133.859+/-0.000 $\chi^2$/NDF:367723403.5/15

+ sign 133.267+/-0.000 $\chi^2$/NDF: 2122905833.8/32

All: 132.561+/-0.000 $\chi^2$/NDF: 4815901503.2

- sign 131.801+/-0.000 $\chi^2$/NDF: 2625201642.5/34

# yield_cav4cQ_rms vs Slug




Right In: 0.524+/-0.000 $\chi^2$/NDF: 4138409.3/15

Left Out: 0.473+/-0.000 $\chi^2$/NDF:484299.3/16

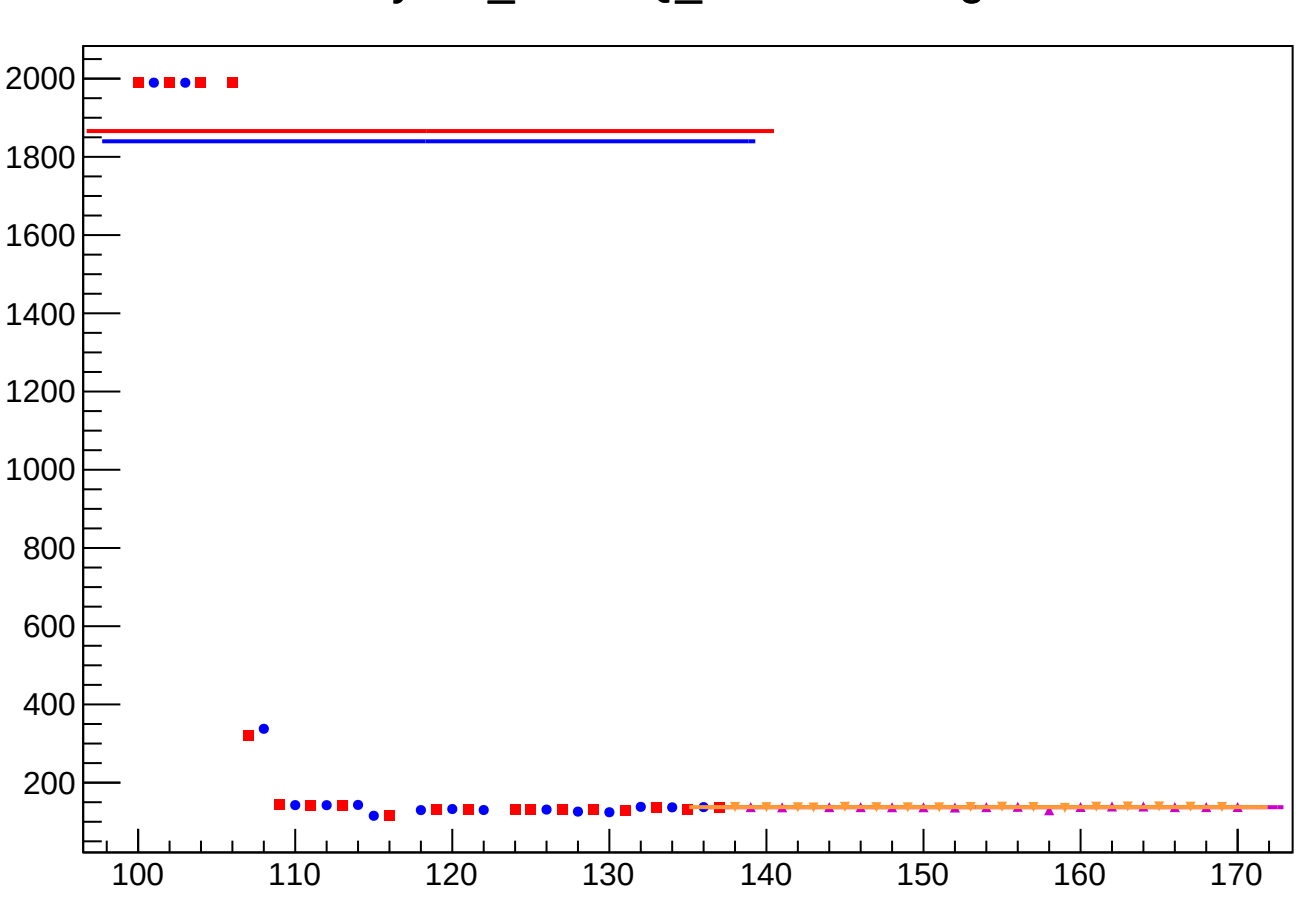
Right Out: 0.501+/-0.000 $\chi^2$/NDF: 4884137.3/18

Left In: 0.490+/-0.000 $\chi^2$/NDF:923591.6/15

+ sign 0.483+/-0.000 $\chi^2$/NDF: 4678492.3/32

All: 0.488+/-0.000 $\chi^2$/NDF: 10494040.0/67

- sign 0.493+/-0.000 $\chi^2$/NDF: 5809952.8/34




Right In: 1839.782+/-0.000 $\chi^2$/NDF: 145916014549797.4/15

Left Out: 137.476+/-0.000 $\chi^2$/NDF:58375309.9/16

Right Out: 1865.968+/-0.000 $\chi^2$/NDF: 1427691222760 45.8/18

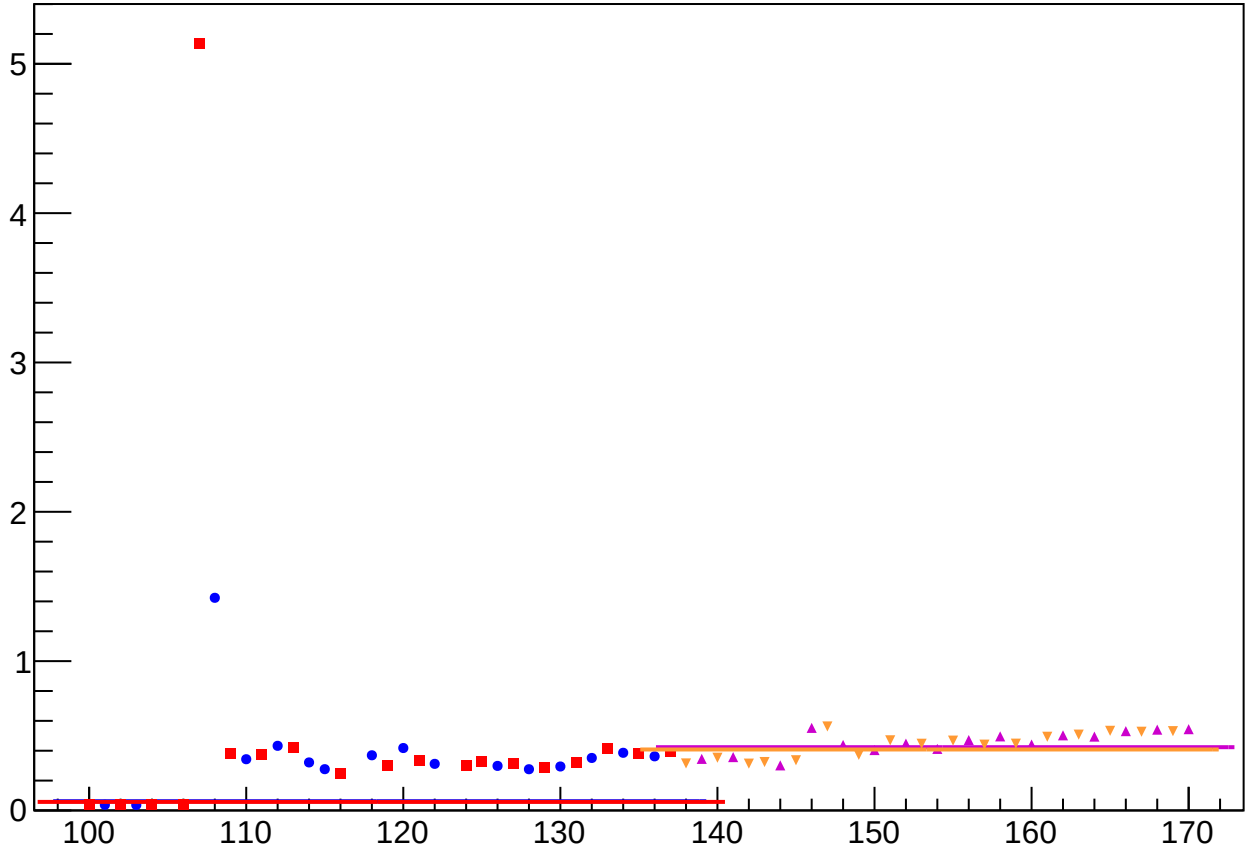
Left In: 137.228+/-0.000 $\chi^2$/NDF:227762351.5/15

+ sign 1642.616+/-0.000 $\chi^2$/NDF: 3373386944945

All: 1675.545+/-0.000 $\chi^2$/NDF: 667352112

- sign 1704.460+/-0.000 $\chi^2$/NDF: 32869982628456

# yield_cav4dQ_rms vs Slug




Right In: 0.062+/-0.000 $\chi^2$/NDF: 8173578.9/15

Left Out: 0.408+/-0.000 $\chi^2$/NDF:984655.4/16

Right Out: 0.057+/-0.000 $\chi^2$/NDF: 7741927.9/18

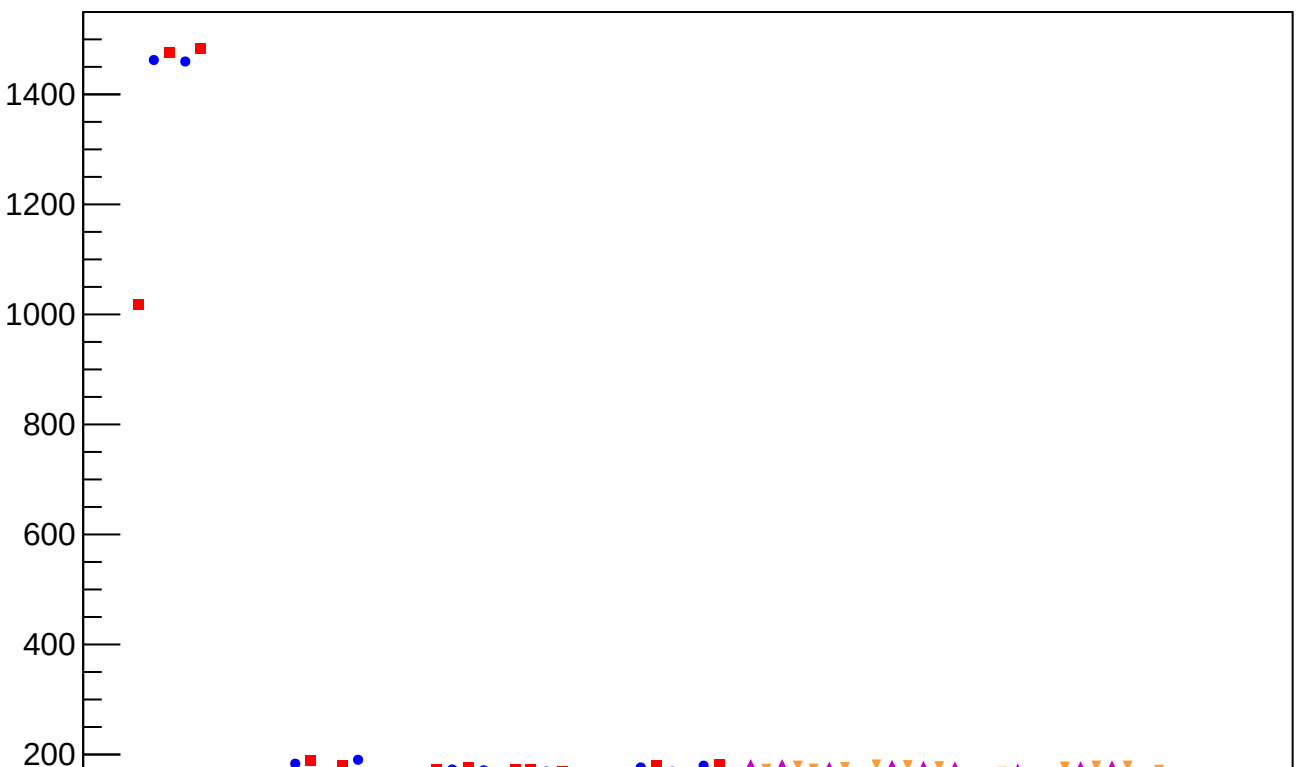
Left In: 0.424+/-0.000 $\chi^2$/NDF:853042.4/15

+ sign 0.102+/-0.000 $\chi^2$/NDF: 25025665.7/32

All: 0.096+/-0.000 $\chi^2$/NDF: 50395415.0/67

- sign 0.092+/-0.000 $\chi^2$/NDF: 25295485.7/34

# yield_bcm0l02_mean vs Slug




Right In: 167.017+/-0.000 $\chi^2$/NDF: 14614977518.5/15

Left Out: 168.250+/-0.000 $\chi^2$/NDF:1747922411.0/16

Right Out: 169.257+/-0.000 $\chi^2$/NDF: 16317542946.8/18

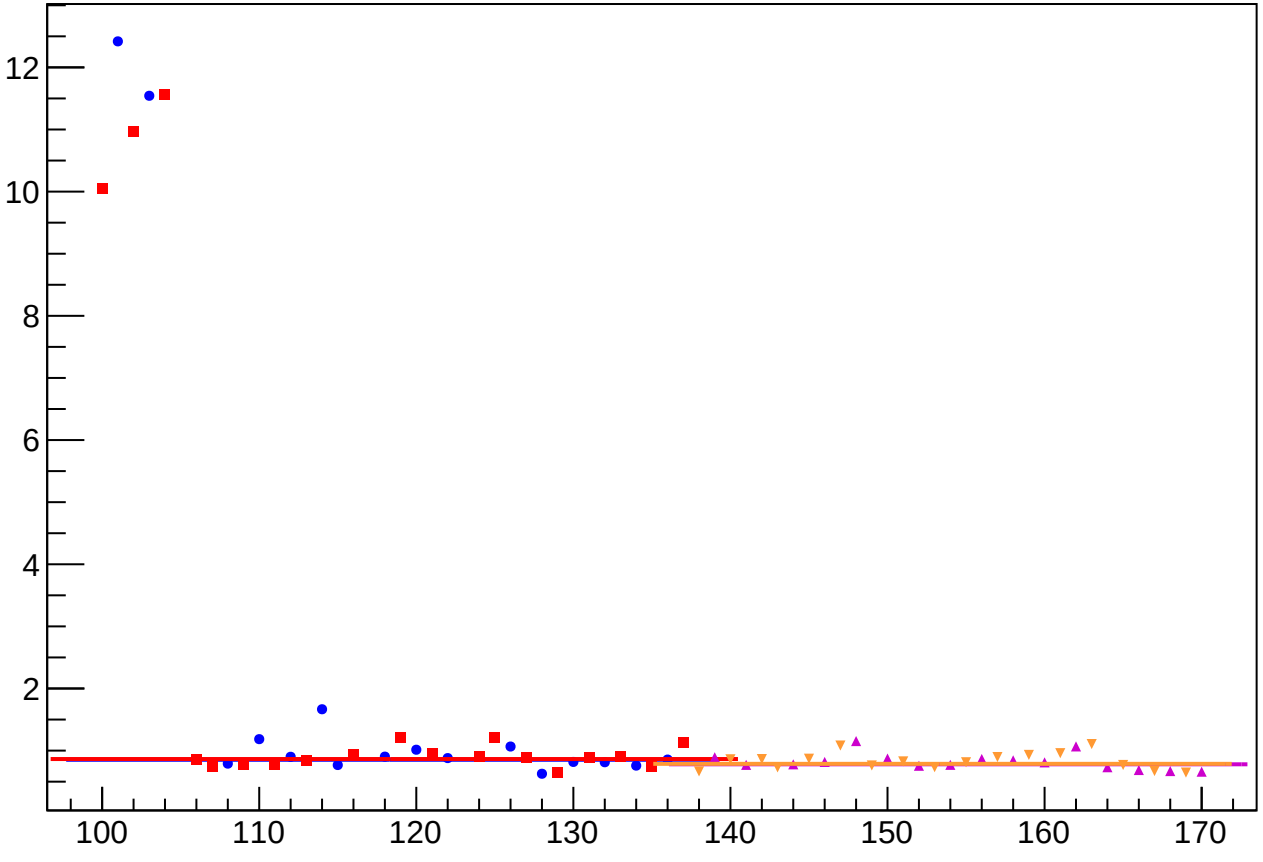
Left In: 166.259+/-0.000 $\chi^2$/NDF:2208196684.7/15

+ sign 167.914+/-0.000 $\chi^2$/NDF: 16368758374.8/32

All: 167.491+/-0.000 $\chi^2$/NDF: 34936966295.

- sign 167.078+/-0.000 $\chi^2$/NDF: 18561337670.8/34

# yield_bcm0l02_rms vs Slug




Right In: 0.853+/-0.000 $\chi^2$/NDF: 2302297.2/15

Left Out: 0.787+/-0.000 $\chi^2$/NDF:431366.8/16

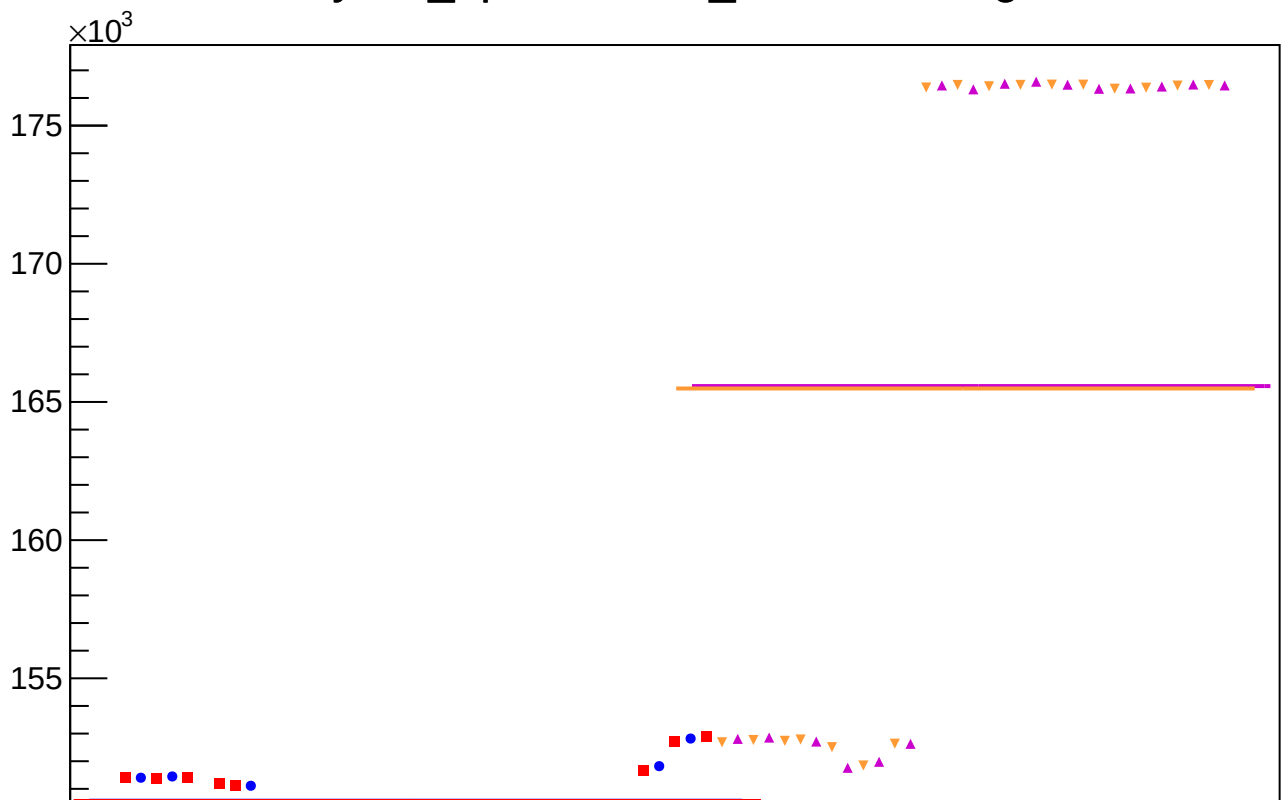
Right Out: 0.864+/-0.000 $\chi^2$/NDF: 2209232.6/18

Left In: 0.780+/-0.000 $\chi^2$/NDF:367139.7/15

+ sign 0.805+/-0.000 $\chi^2$/NDF: 2767248.7/32

All: 0.804+/-0.000 $\chi^2$/NDF: 5400508.9/67

- sign 0.803+/-0.000 $\chi^2$/NDF: 2633166.6/34




Right In: 150568.638+/-0.055 $\chi^2$/NDF: 237155171.8/15

Left Out: 165487.563+/-0.052 $\chi^2$/NDF:52503893875.8/16

Right Out: 150561.647+/-0.051 $\chi^2$/NDF: 197500782.5/18

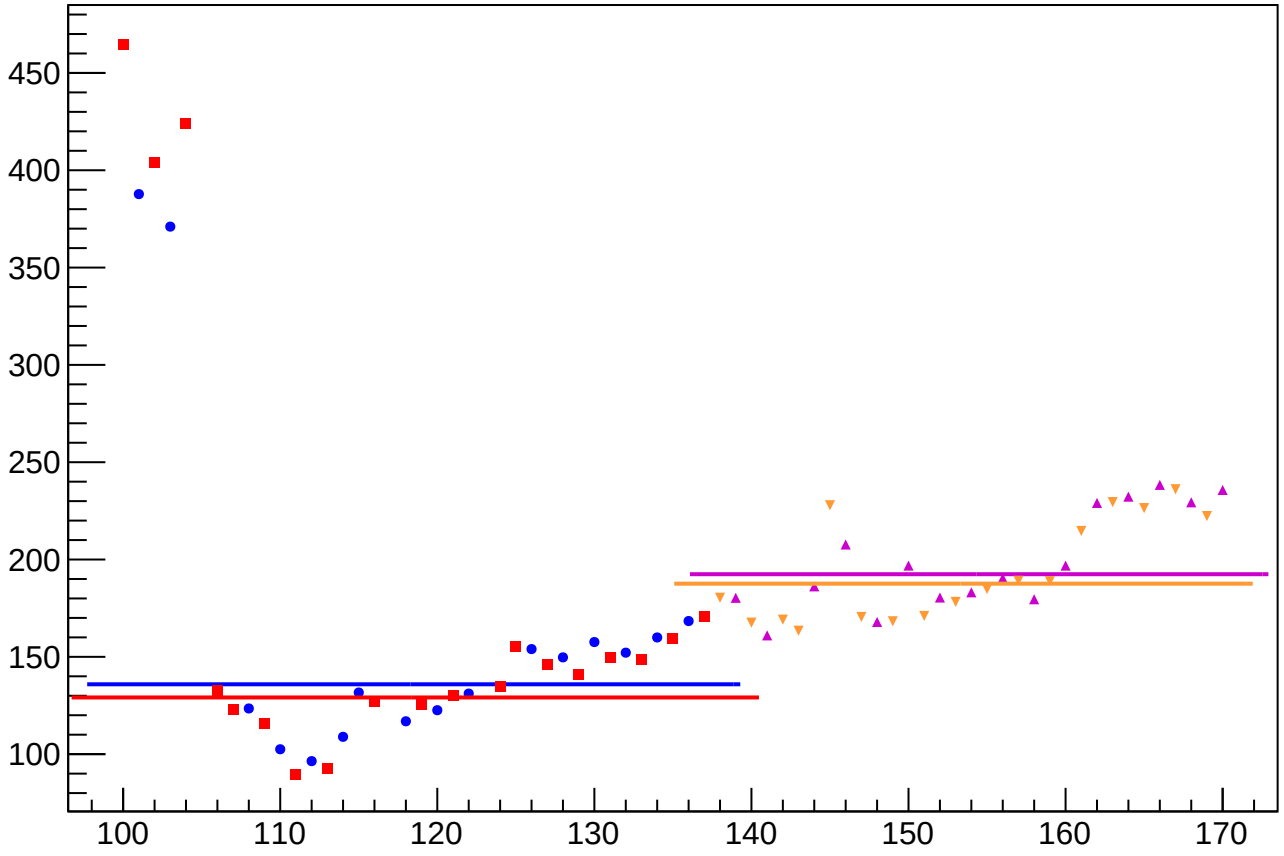
Left In: 165574.255+/-0.054 $\chi^2$/NDF:49432437926.3/15

+ sign 158402.447+/-0.038 $\chi^2$/NDF: 91929364044.

All: 158036.039+/-0.026 $\chi^2$/NDF: 18287582

- sign 157682.574+/-0.037 $\chi^2$/NDF: 90760222739.

# yield_bpm2i01WS_rms vs Slug




Right In: 135.896+/-0.039 $\chi^2$/NDF: 1416332.3/15

Left Out: 187.590+/-0.037 $\chi^2$/NDF:405299.1/16

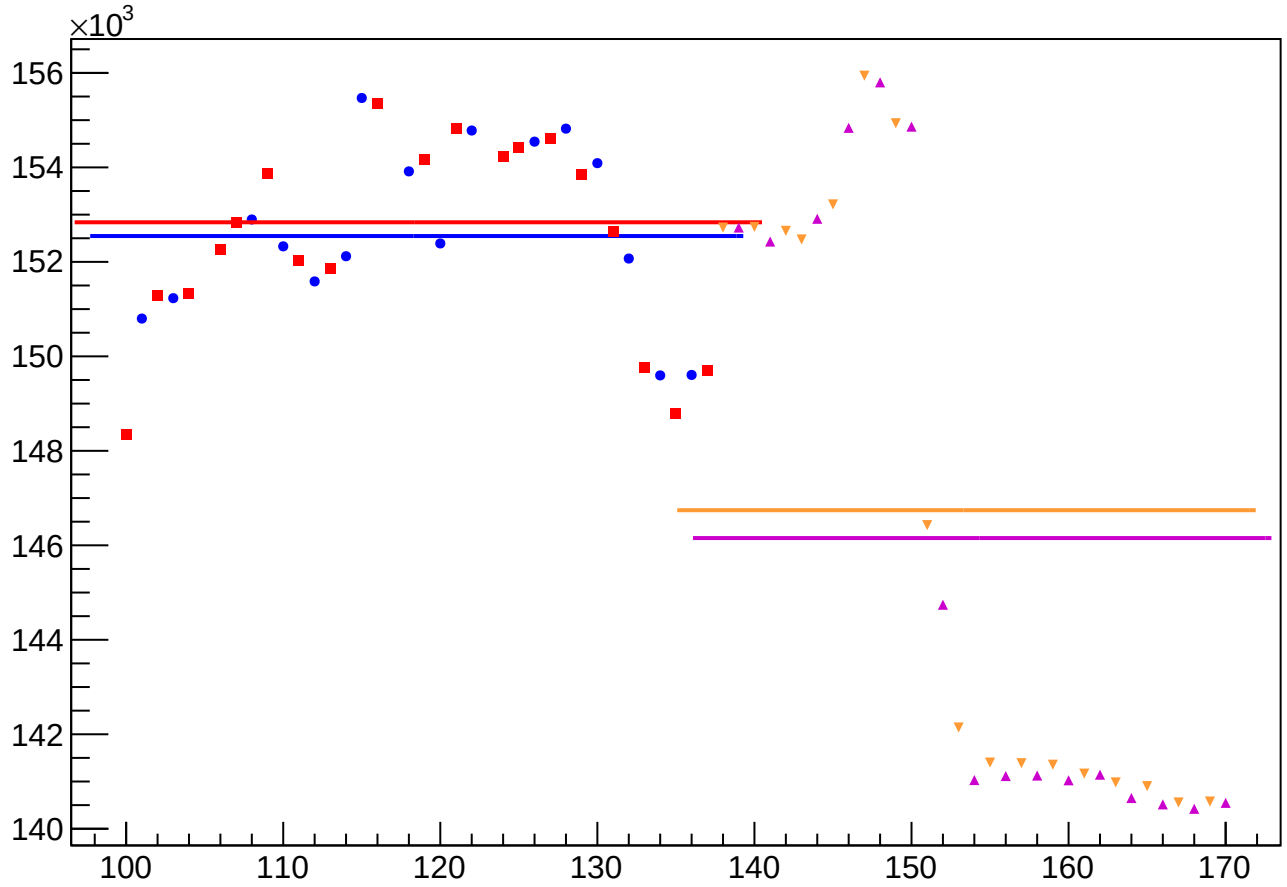
Right Out: 129.130+/-0.036 $\chi^2$/NDF: 1614311.0/18

Left In: 192.456+/-0.038 $\chi^2$/NDF:361382.9/15

+ sign 163.040+/-0.027 $\chi^2$/NDF: 2762631.8/32

All: 161.069+/-0.019 $\chi^2$/NDF: 6212733.5/67

- sign 159.167+/-0.026 $\chi^2$/NDF: 3439322.0/34




Right In: 152546.899+/-0.073 $\chi^2$/NDF: 654540559.6/15

Left Out: 146743.134+/-0.056 $\chi^2$/NDF:10799391556.4/16

Right Out: 152837.888+/-0.067 $\chi^2$/NDF: 736907066.8/18

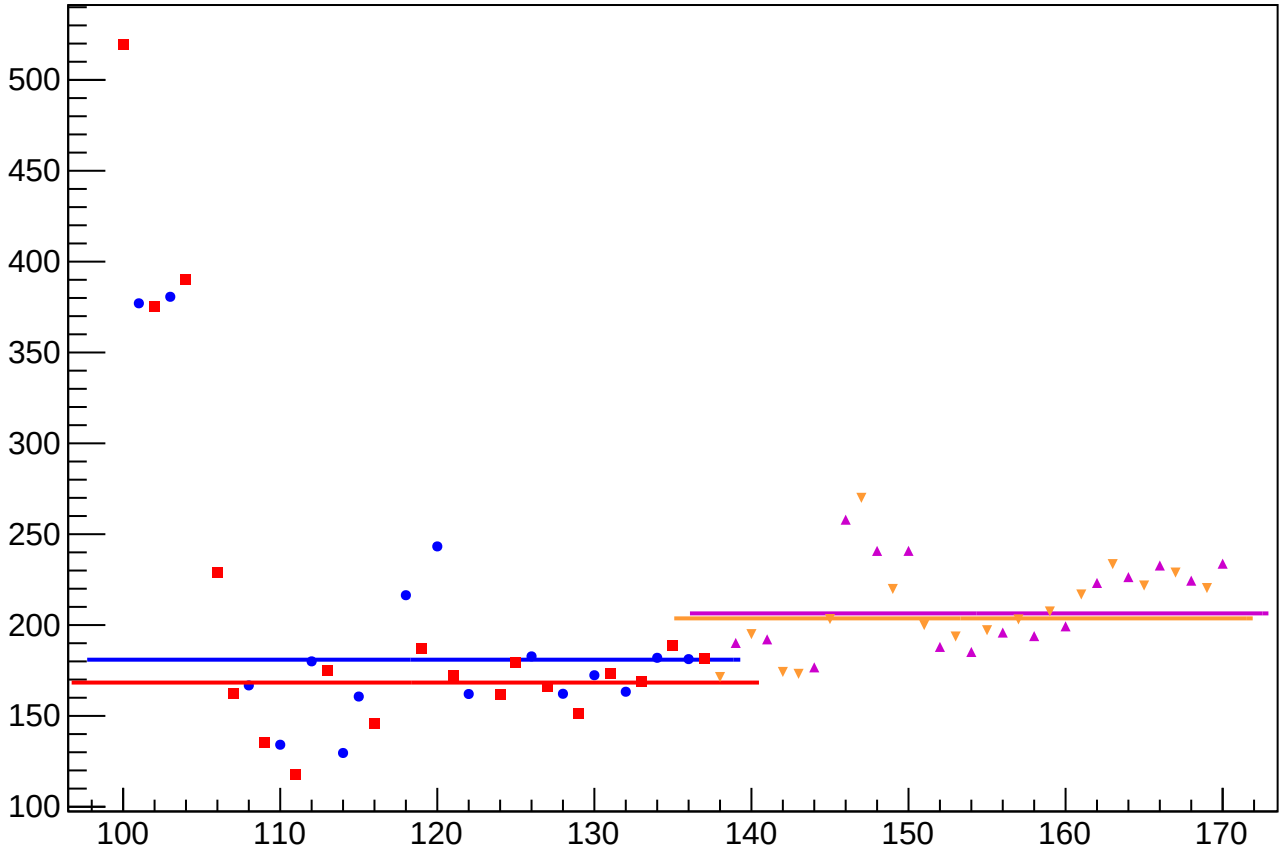
Left In: 146153.524+/-0.058 $\chi^2$/NDF:11144694238.0/15

+ sign 148929.572+/-0.045 $\chi^2$/NDF: 15435385692.

All: 148972.943+/-0.031 $\chi^2$/NDF: 330703466

- sign 149014.467+/-0.044 $\chi^2$/NDF: 17633107400.2

# yield_bpm0i07WS_rms vs Slug




Right In: 180.938+/-0.051 $\chi^2$/NDF: 907758.2/15

Left Out: 203.672+/-0.040 $\chi^2$/NDF:315474.3/16

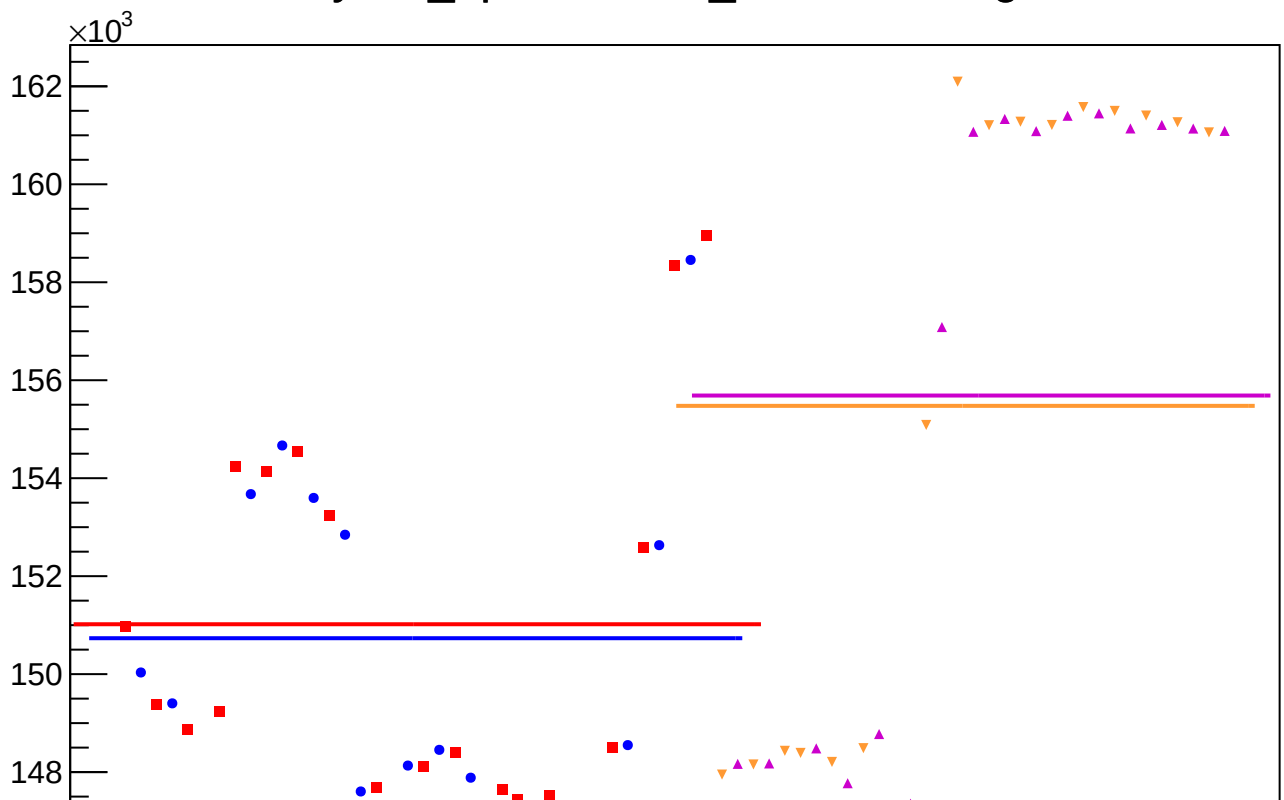
Right Out: 168.349+/-0.047 $\chi^2$/NDF: 1089090.2/18

Left In: 206.416+/-0.041 $\chi^2$/NDF:329681.2/15

+ sign 195.107+/-0.032 $\chi^2$/NDF: 1345405.9/32

All: 192.561+/-0.022 $\chi^2$/NDF: 3150024.6/67

- sign 190.123+/-0.031 $\chi^2$/NDF: 1791840.8/34




Right In: 150733.301+/-0.063 $\chi^2$/NDF: 3283848751.0/15

Left Out: 155476.769+/-0.055 $\chi^2$/NDF:13673972979.7/16

Right Out: 151018.500+/-0.060 $\chi^2$/NDF: 3286131878.7/18

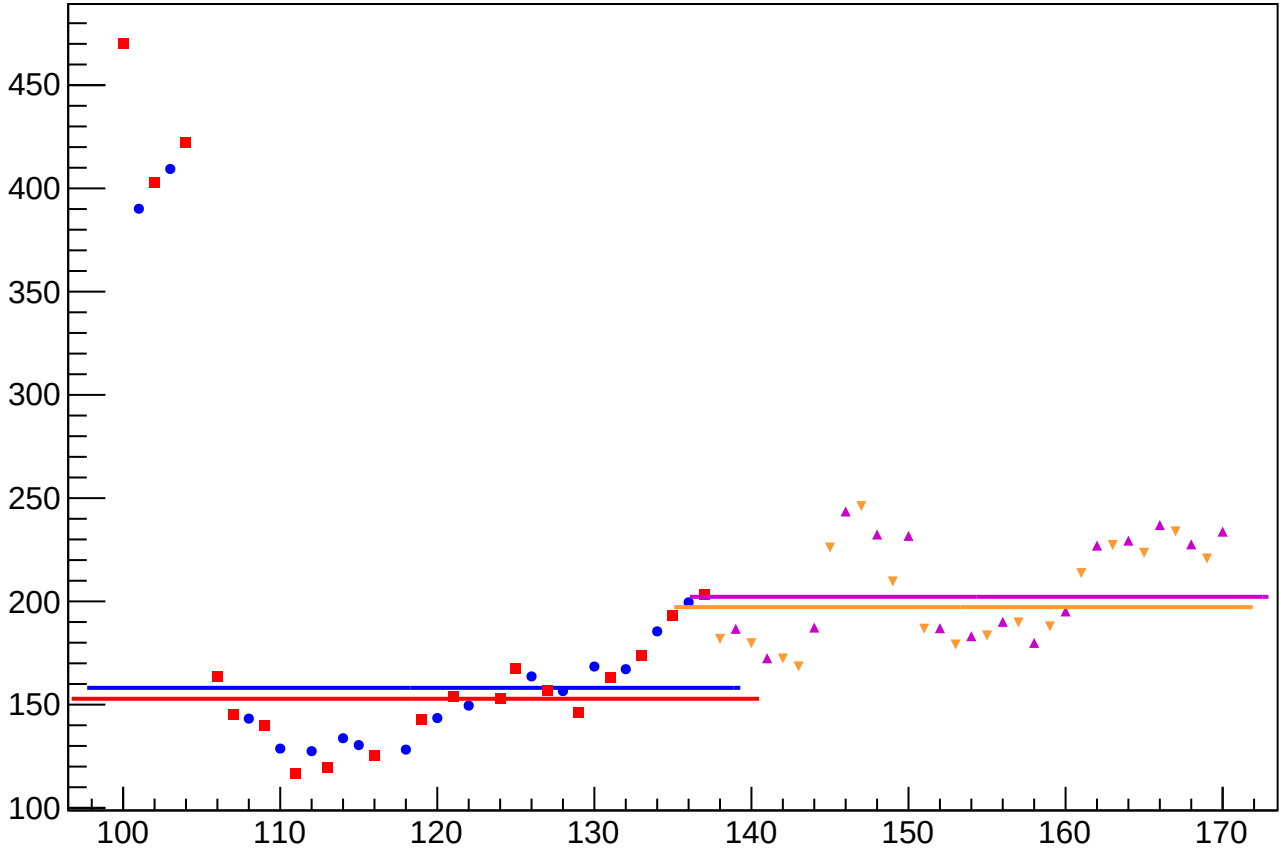
Left In: 155687.409+/-0.056 $\chi^2$/NDF:12214265191.9/15

+ sign 153440.479+/-0.041 $\chi^2$/NDF: 20203681120.9

All: 153470.148+/-0.029 $\chi^2$/NDF: 38917027

- sign 153499.672+/-0.041 $\chi^2$/NDF: 18712312357.8

# yield_bpm0i01WS_rms vs Slug




Right In: 158.138+/-0.044 $\chi^2$/NDF: 1195699.5/15

Left Out: 197.222+/-0.039 $\chi^2$/NDF:338386.7/16

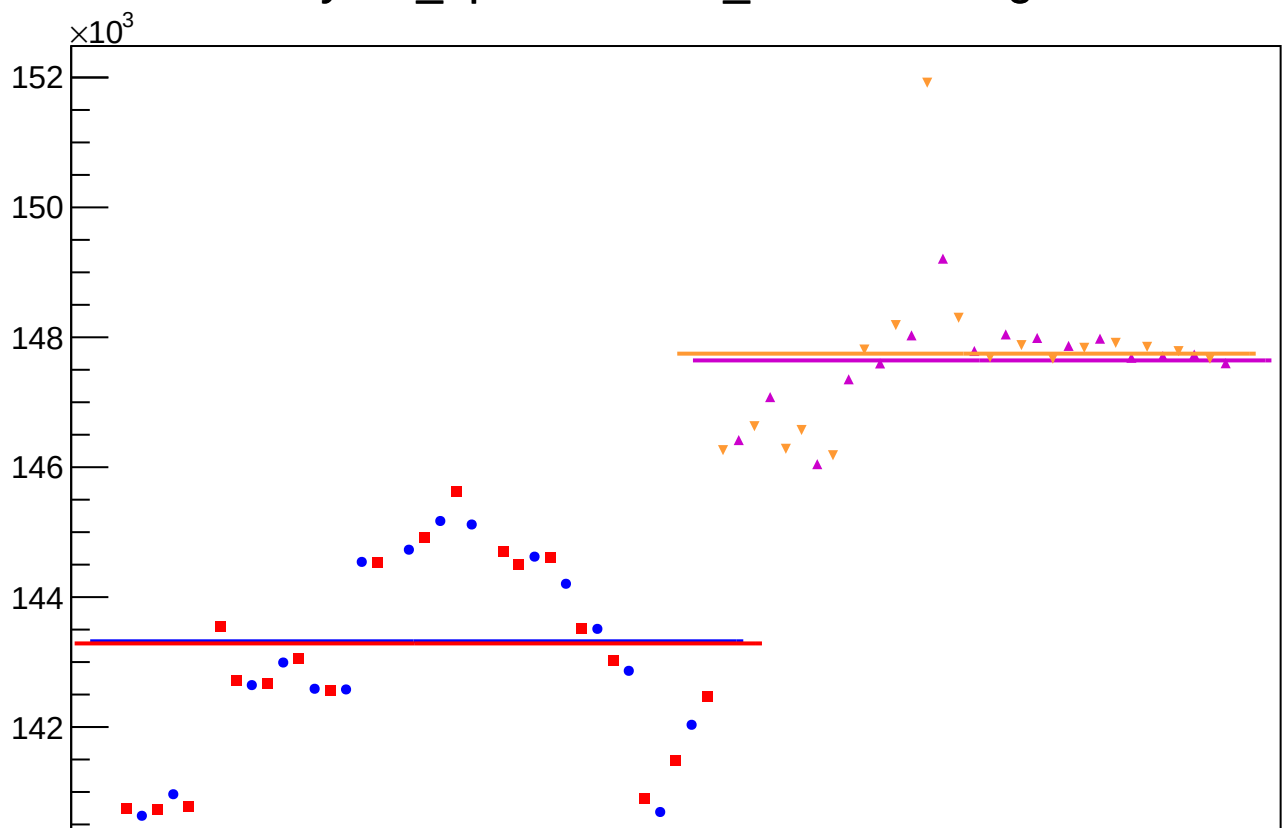
Right Out: 152.841+/-0.042 $\chi^2$/NDF: 1264236.1/18

Left In: 202.210+/-0.040 $\chi^2$/NDF:358826.0/15

\+ sign 180.444+/-0.029 $\chi^2$/NDF: 1974819.5/32

All: 179.759+/-0.021 $\chi^2$/NDF: 4317221.8/67

\- sign 179.077+/-0.029 $\chi^2$/NDF: 2341299.2/34




Right In: 143319.651+/-0.053 $\chi^2$/NDF: 559301530.7/15

Left Out: 147748.335+/-0.051 $\chi^2$/NDF:670586637.4/16

Right Out: 143286.960+/-0.050 $\chi^2$/NDF: 620521577.8/18

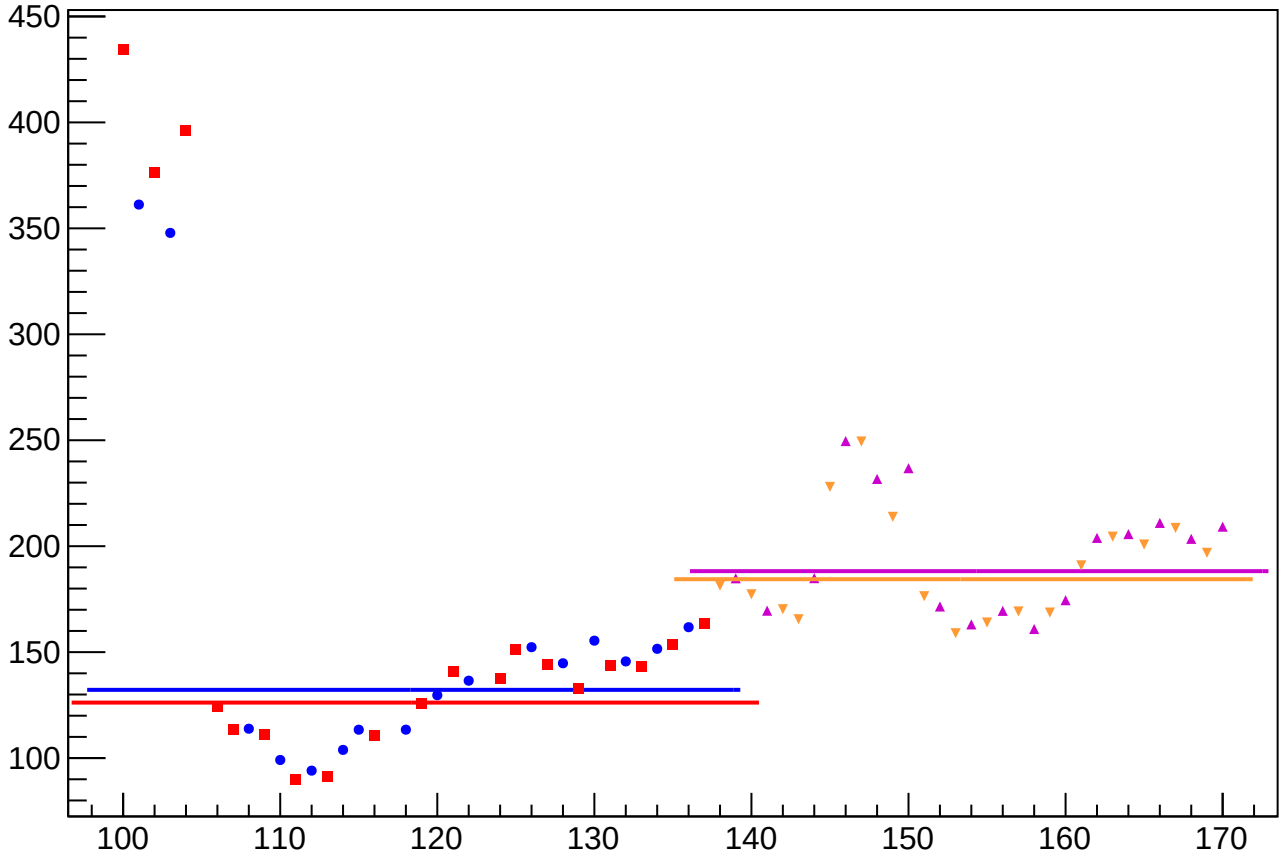
Left In: 147644.078+/-0.053 $\chi^2$/NDF:199474854.2/15

+ sign 145620.619+/-0.037 $\chi^2$/NDF: 4840651241.8

All: 145478.319+/-0.026 $\chi^2$/NDF: 93126754

- sign 145341.272+/-0.036 $\chi^2$/NDF: 4442706931.8/

# yield_bpm0i01aWS_rms vs Slug




Right In: 132.204+/-0.038 $\chi^2$/NDF: 1379168.6/15

Left Out: 184.419+/-0.036 $\chi^2$/NDF:382950.6/16

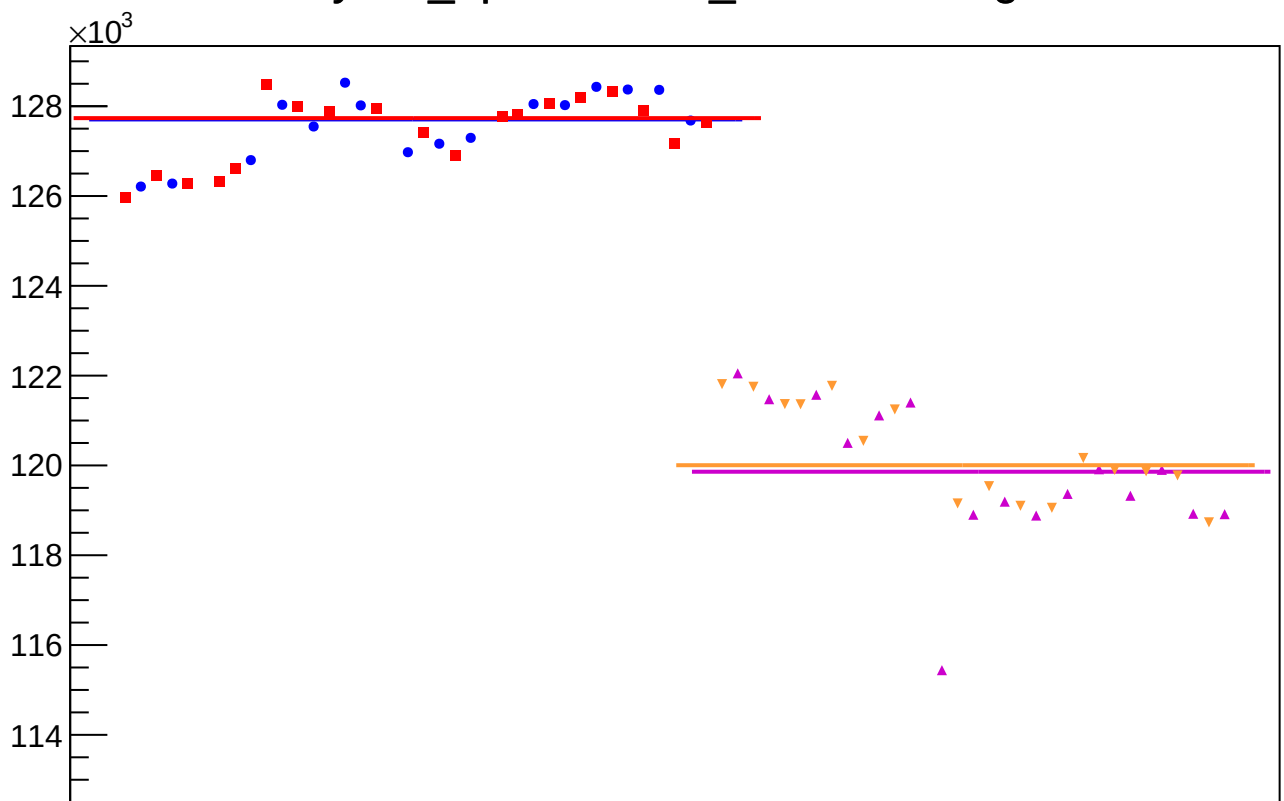
Right Out: 126.191+/-0.035 $\chi^2$/NDF: 1545034.5/18

Left In: 188.218+/-0.037 $\chi^2$/NDF:454755.1/15

+ sign 159.333+/-0.026 $\chi^2$/NDF: 2765951.0/32

All: 157.348+/-0.018 $\chi^2$/NDF: 6245503.4/67

- sign 155.436+/-0.026 $\chi^2$/NDF: 3468143.2/34




Right In: 127705.222+/-0.058 $\chi^2$/NDF: 104467207.7/15

Left Out: 120004.890+/-0.051 $\chi^2$/NDF:1785022472.1/16

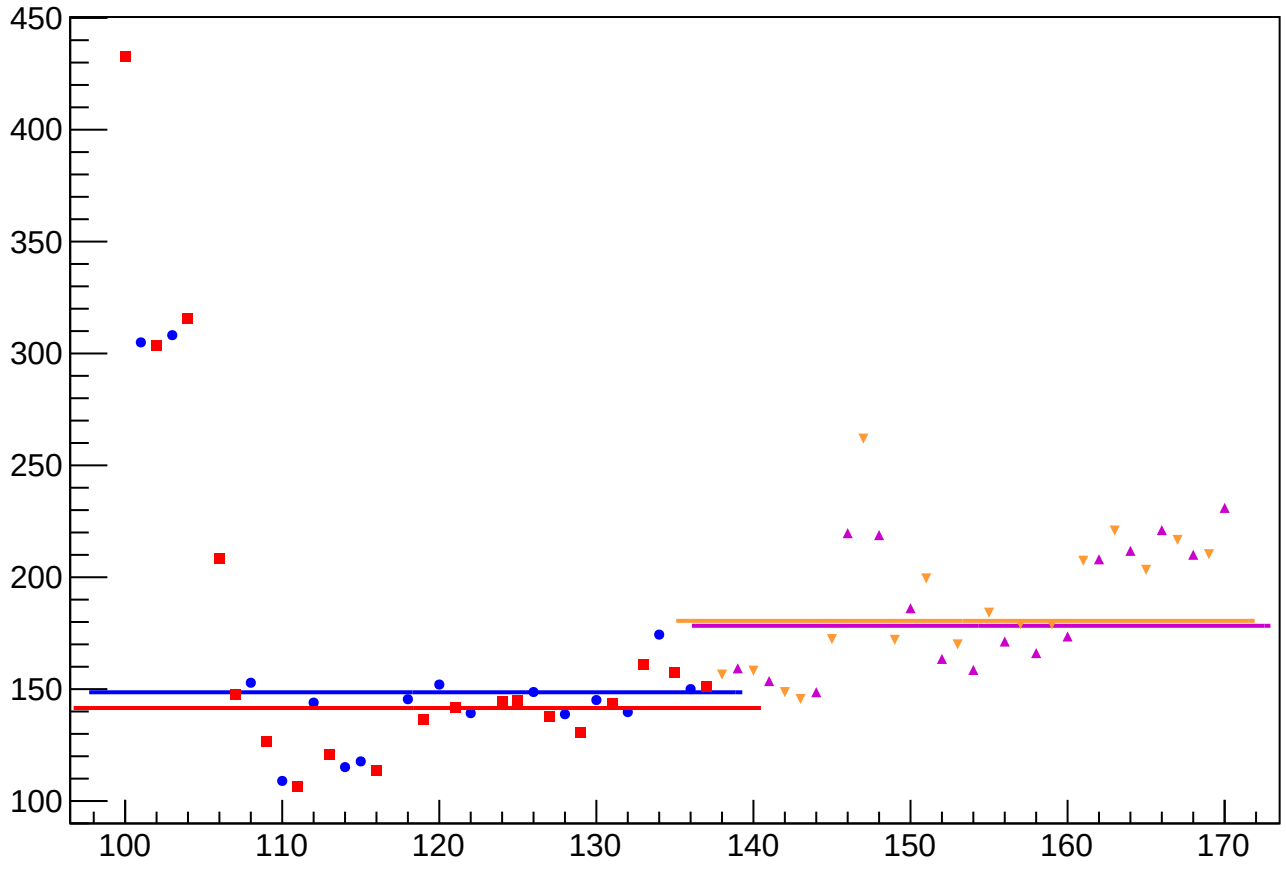
Right Out: 127734.542+/-0.055 $\chi^2$/NDF: 109469333.8/18

Left In: 119859.759+/-0.050 $\chi^2$/NDF:1182806064.4/15

+ sign 123300.117+/-0.038 $\chi^2$/NDF: 11829782017.

All: 123374.461+/-0.027 $\chi^2$/NDF: 24333132

- sign 123444.341+/-0.037 $\chi^2$/NDF: 12496007693.4




Right In: 148.593+/-0.041 $\chi^2$/NDF: 827701.4/15

Left Out: 180.519+/-0.036 $\chi^2$/NDF:555781.5/16

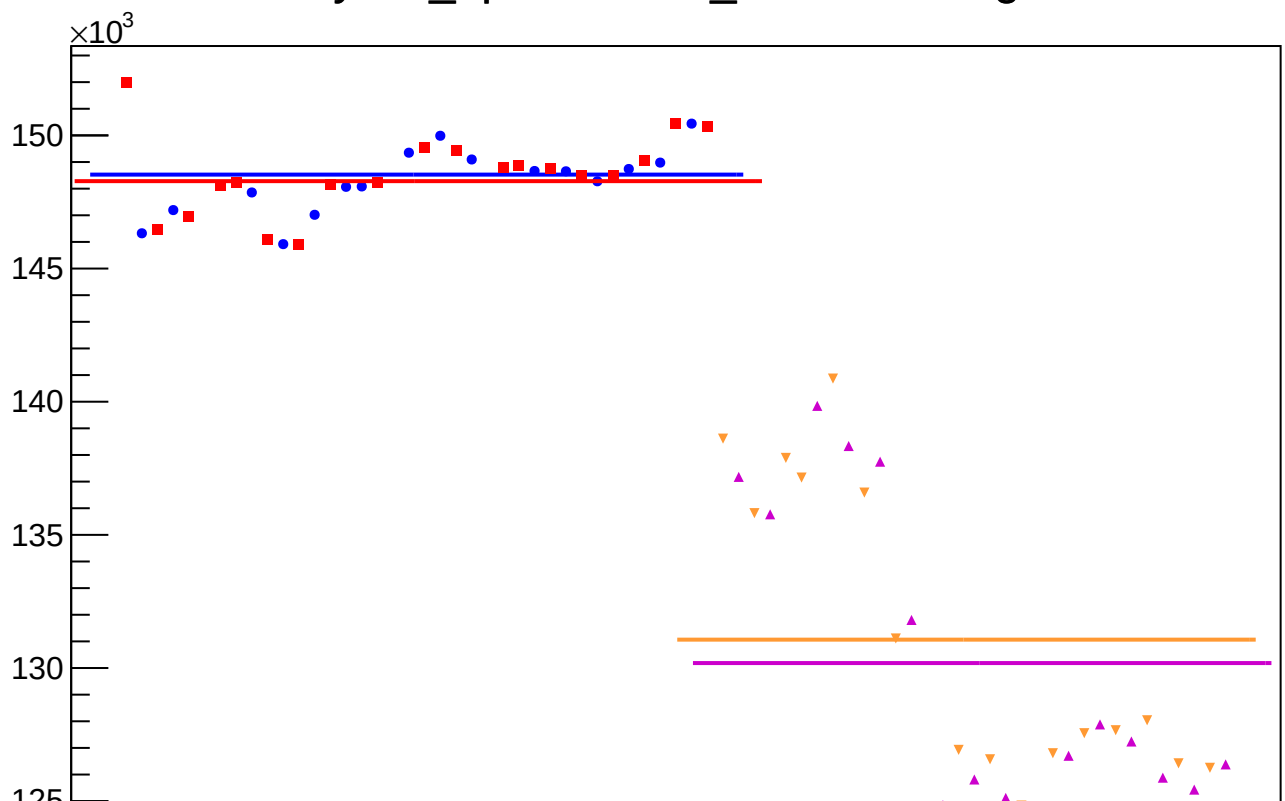
Right Out: 141.563+/-0.039 $\chi^2$/NDF: 1001225.3/18

Left In: 178.301+/-0.035 $\chi^2$/NDF:538841.0/15

+ sign 166.857+/-0.027 $\chi^2$/NDF: 1725231.9/32

All: 164.136+/-0.019 $\chi^2$/NDF: 3772672.7/67

- sign 161.578+/-0.026 $\chi^2$/NDF: 2027767.9/34




Right In: 148527.678+/-0.082 $\chi^2$/NDF: 209208133.0/15

Left Out: 131065.683+/-0.073 $\chi^2$/NDF:5472100795.0/16

Right Out: 148282.003+/-0.077 $\chi^2$/NDF: 294673557.8/18

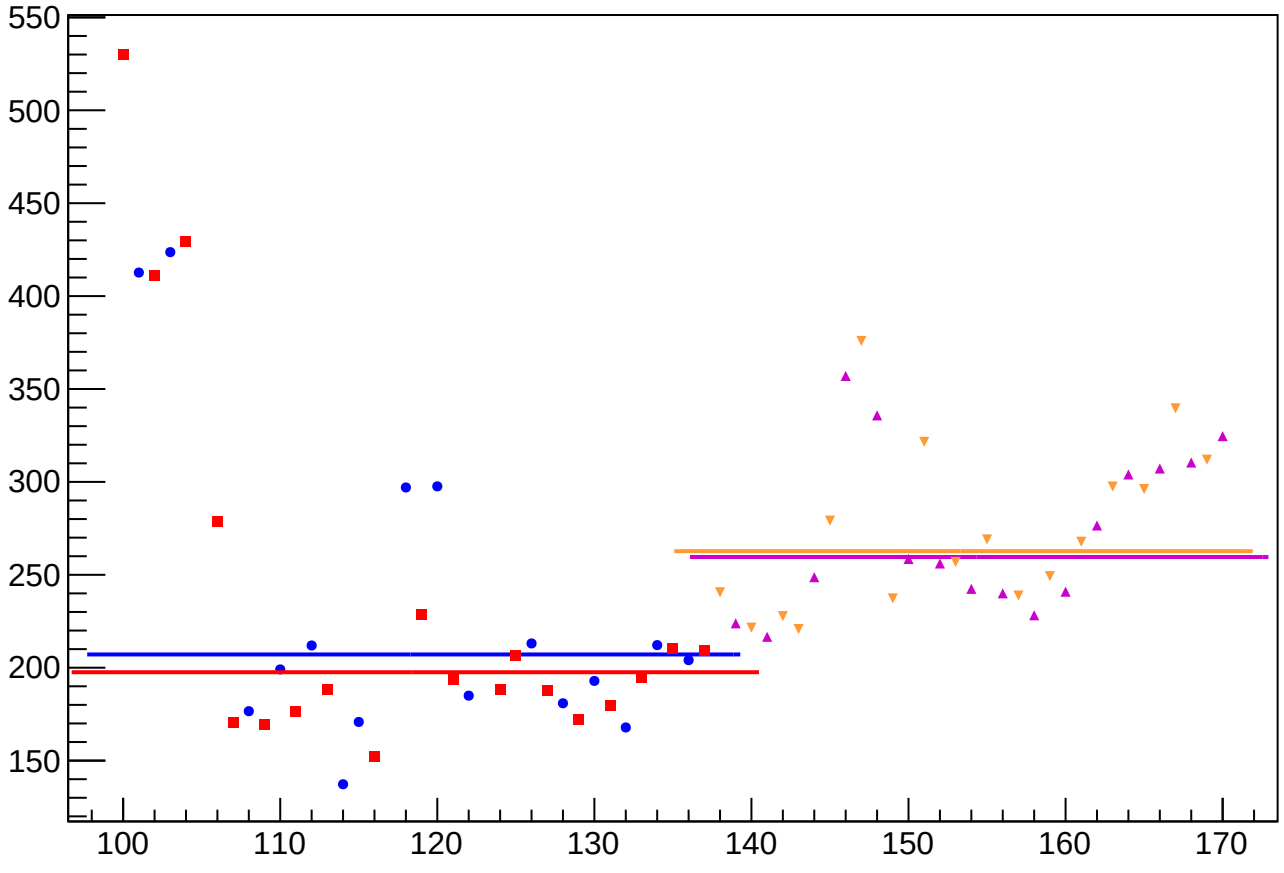
Left In: 130186.181+/-0.073 $\chi^2$/NDF:5891870222.1/15

+ sign 138810.778+/-0.055 $\chi^2$/NDF: 30952609940.

All: 138789.625+/-0.038 $\chi^2$/NDF: 664713105

- sign 138769.852+/-0.053 $\chi^2$/NDF: 35518409941.7

# yield_bpm0l02WS_rms vs Slug




Right In: 207.135+/-0.058 $\chi^2$/NDF: 972216.9/15

Left Out: 262.715+/-0.052 $\chi^2$/NDF:557591.2/16

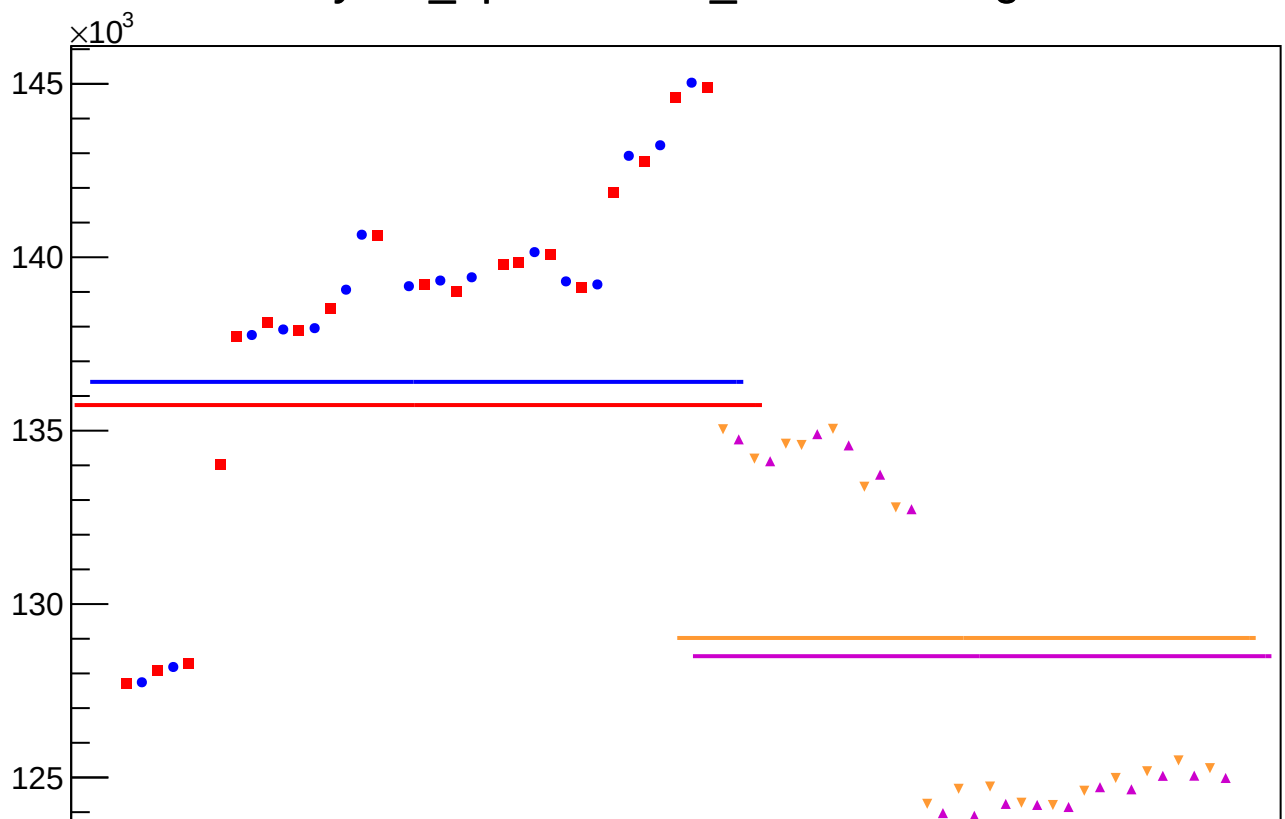
Right Out: 197.571+/-0.054 $\chi^2$/NDF: 903999.3/18

Left In: 259.571+/-0.051 $\chi^2$/NDF:560329.1/15

+ sign 238.063+/-0.039 $\chi^2$/NDF: 2041859.4/32

All: 233.979+/-0.027 $\chi^2$/NDF: 4216501.7/67

- sign 230.161+/-0.037 $\chi^2$/NDF: 2152968.6/34




Right In: 136406.923+/-0.169 $\chi^2$/NDF: 1577071044.7/15

Left Out: 129022.663+/-0.162 $\chi^2$/NDF:881651717.4/16

Right Out: 135738.412+/-0.177 $\chi^2$/NDF: 1174123878.0/18

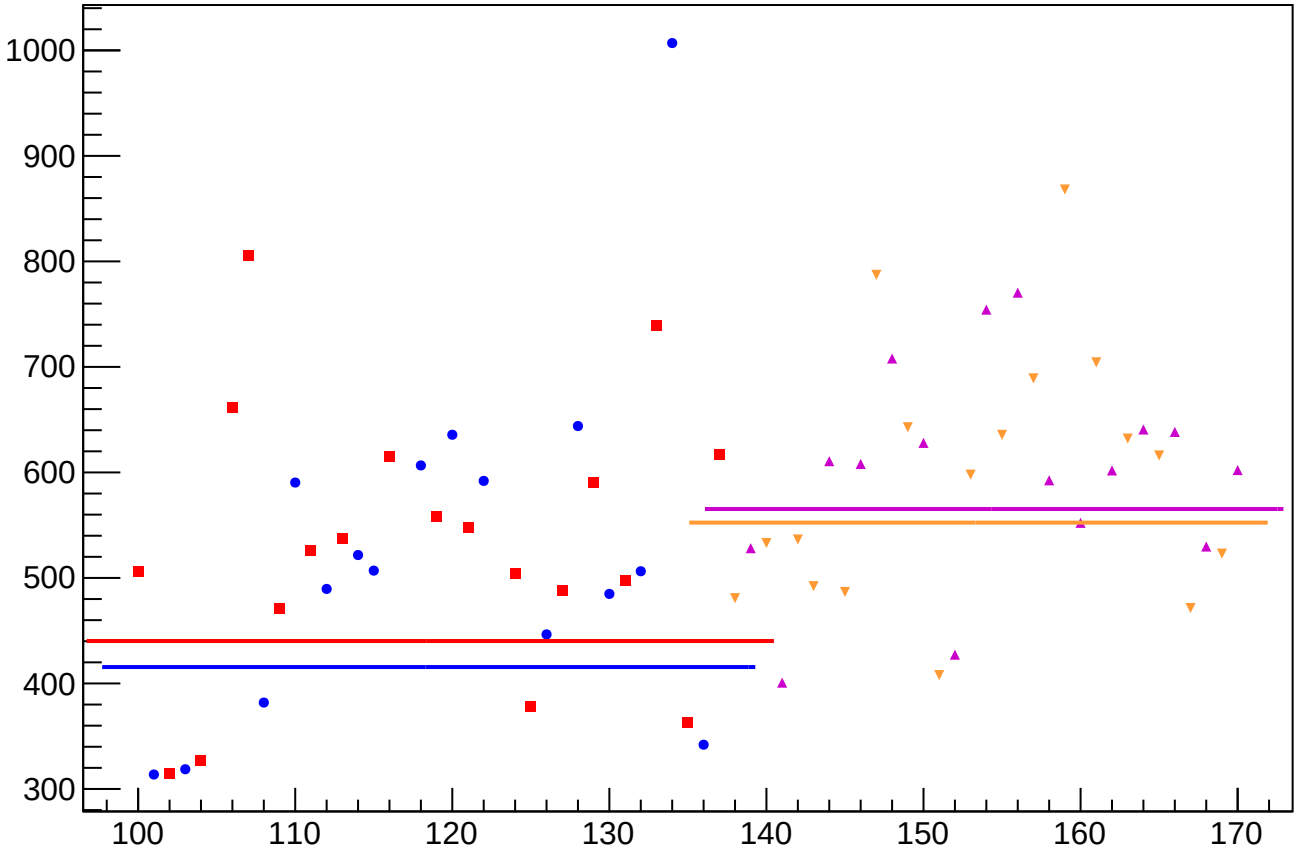
Left In: 128497.517+/-0.170 $\chi^2$/NDF:809196431.2/15

+ sign 132568.521+/-0.117 $\chi^2$/NDF: 3456115732.4

All: 132286.150+/-0.085 $\chi^2$/NDF: 6324545

- sign 131975.886+/-0.122 $\chi^2$/NDF: 2856166439.6/

# yield_bpm0l03WS_rms vs Slug




Right In: 415.547+/-0.119 $\chi^2$/NDF: 1031600.7/15

Left Out: 552.433+/-0.115 $\chi^2$/NDF:854643.2/16

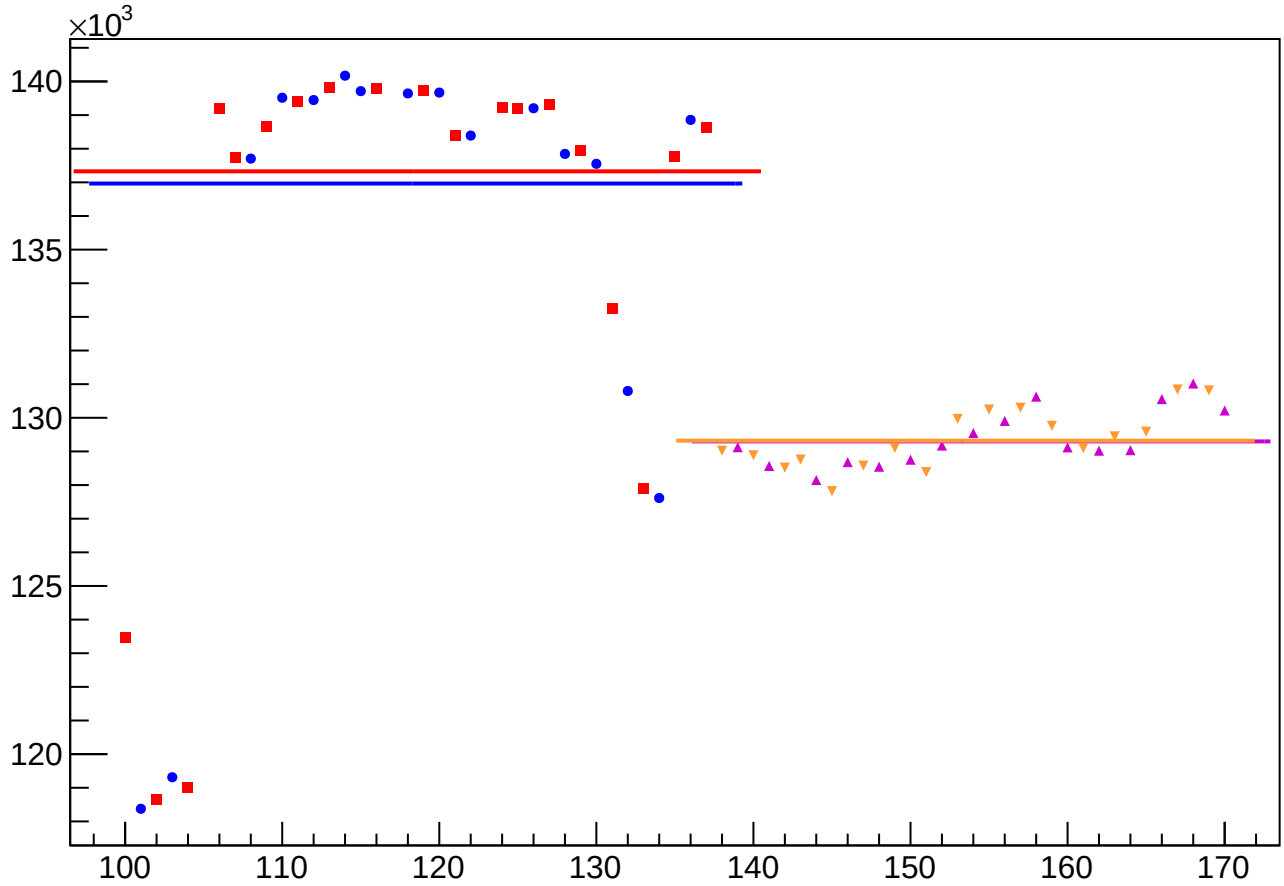
Right Out: 440.218+/-0.125 $\chi^2$/NDF: 910790.1/18

Left In: 565.332+/-0.120 $\chi^2$/NDF:726331.7/15

+ sign 486.702+/-0.083 $\chi^2$/NDF: 2571730.2/32

All: 495.530+/-0.060 $\chi^2$/NDF: 4754014.1/67

- sign 505.230+/-0.087 $\chi^2$/NDF: 2158311.7/34




Right In: 136964.958+/-0.070 $\chi^2$/NDF: 5807770301.4/15

Left Out: 129319.177+/-0.054 $\chi^2$/NDF:236152182.7/16

Right Out: 137327.469+/-0.066 $\chi^2$/NDF: 5737745895.7/18

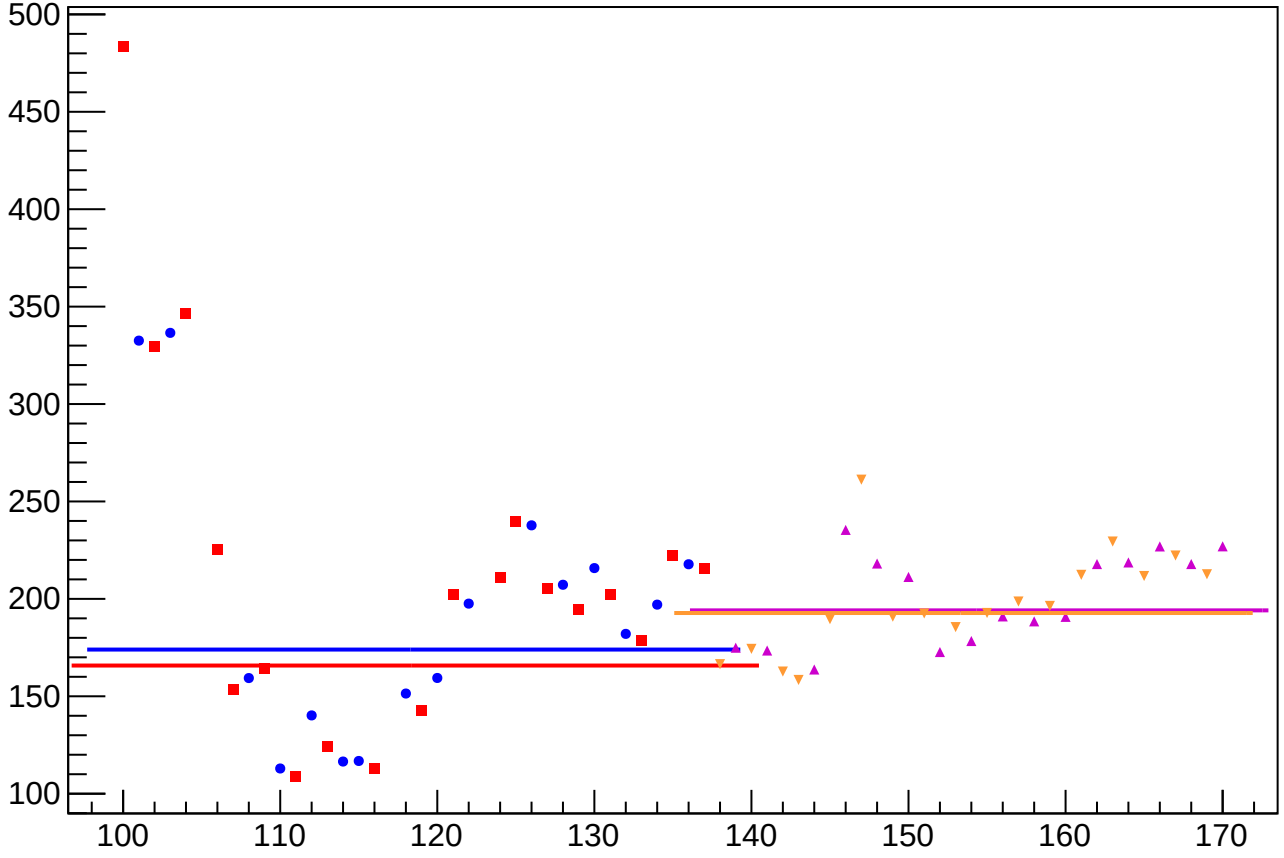
Left In: 129297.835+/-0.054 $\chi^2$/NDF:222101968.6/15

+ sign 132156.589+/-0.042 $\chi^2$/NDF: 13605520377.

All: 132361.322+/-0.030 $\chi^2$/NDF: 28499318

- sign 132559.866+/-0.042 $\chi^2$/NDF: 14848038475.

# yield_bpm0l04WS_rms vs Slug




Right In: 173.982+/-0.049 $\chi^2$/NDF: 1188493.1/15

Left Out: 192.742+/-0.038 $\chi^2$/NDF:384992.8/16

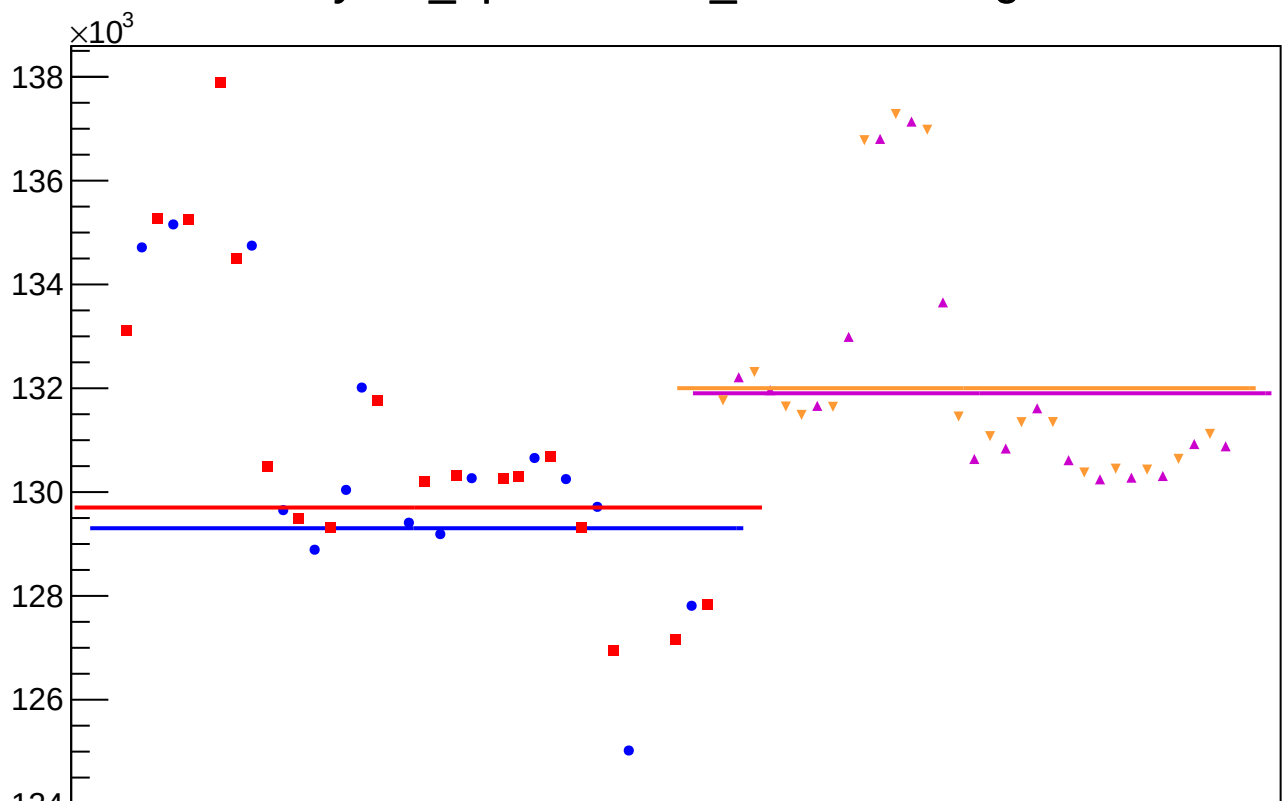
Right Out: 165.780+/-0.046 $\chi^2$/NDF: 1433162.4/18

Left In: 194.097+/-0.038 $\chi^2$/NDF:344262.1/15

+ sign 185.780+/-0.030 $\chi^2$/NDF: 1664534.7/32

All: 184.162+/-0.021 $\chi^2$/NDF: 3668750.1/67

- sign 182.594+/-0.030 $\chi^2$/NDF: 1998502.3/34




Right In: 129303.894+/-0.066 $\chi^2$/NDF: 1650235360.7/15

Left Out: 132001.858+/-0.054 $\chi^2$/NDF:1310606737.4/16

Right Out: 129702.568+/-0.062 $\chi^2$/NDF: 1777723481.2/18

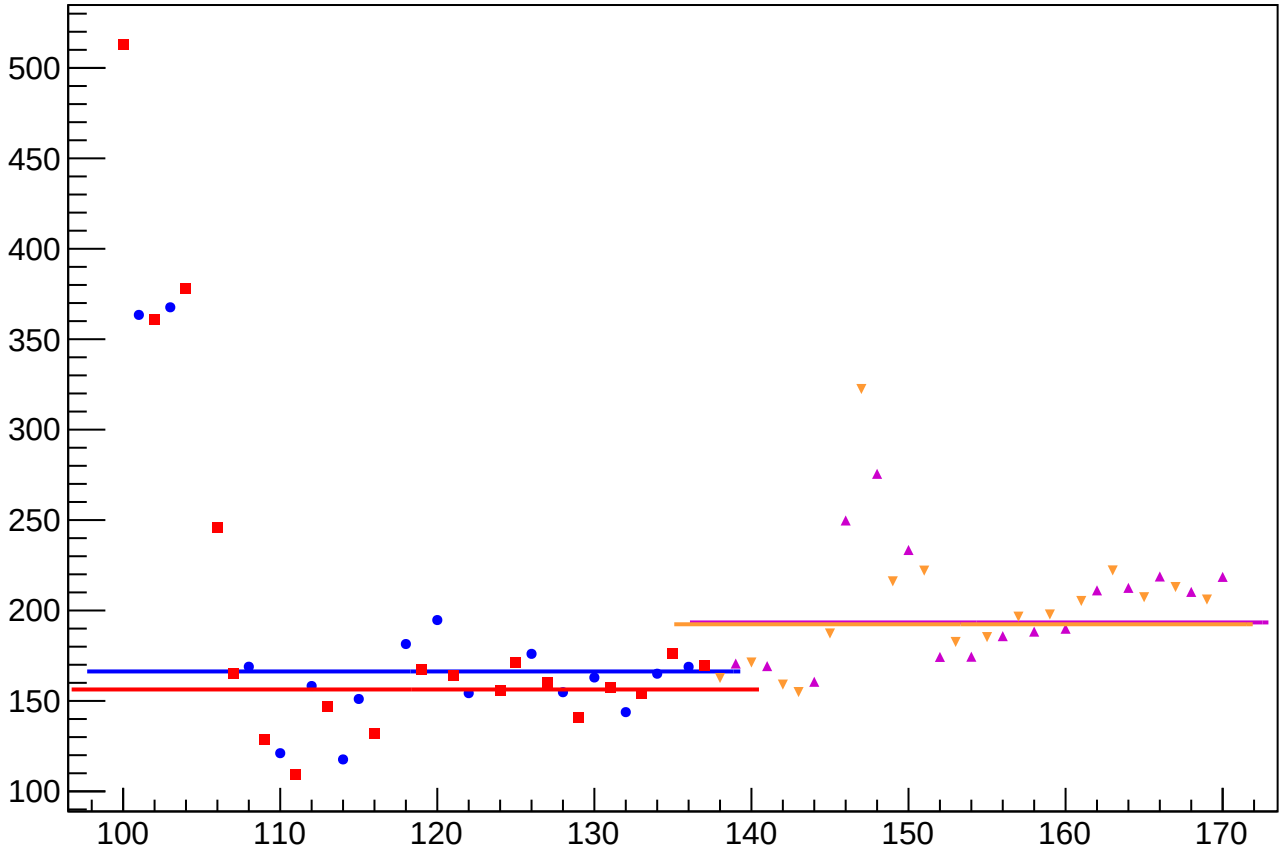
Left In: 131903.529+/-0.054 $\chi^2$/NDF:1065074753.4/15

+ sign 130929.292+/-0.042 $\chi^2$/NDF: 3961456514.8

All: 130934.484+/-0.029 $\chi^2$/NDF: 7523040

- sign 130939.428+/-0.041 $\chi^2$/NDF: 3561554249.8/

# yield_bpm0l05WS_rms vs Slug




Right In: 166.302+/-0.047 $\chi^2$/NDF: 937947.6/15

Left Out: 192.385+/-0.038 $\chi^2$/NDF:593025.4/16

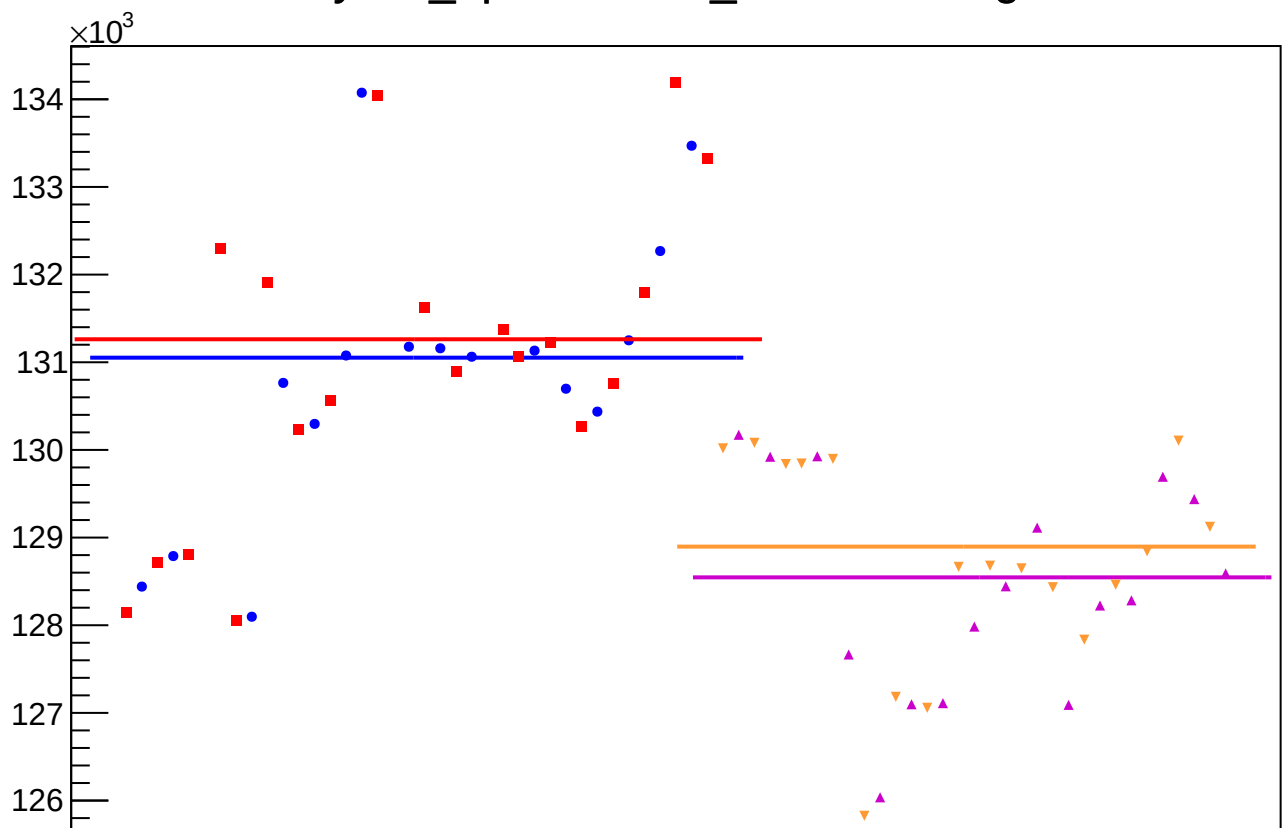
Right Out: 156.334+/-0.044 $\chi^2$/NDF: 1172834.9/18

Left In: 193.401+/-0.038 $\chi^2$/NDF:536414.4/15

+ sign 182.016+/-0.030 $\chi^2$/NDF: 1718007.9/32

All: 179.531+/-0.021 $\chi^2$/NDF: 3848812.4/67

- sign 177.164+/-0.029 $\chi^2$/NDF: 2116964.2/34




Right In: 131052.422+/-0.061 $\chi^2$/NDF: 523713045.8/15

Left Out: 128896.829+/-0.052 $\chi^2$/NDF:463202604.7/16

Right Out: 131262.232+/-0.057 $\chi^2$/NDF: 604278186.1/18

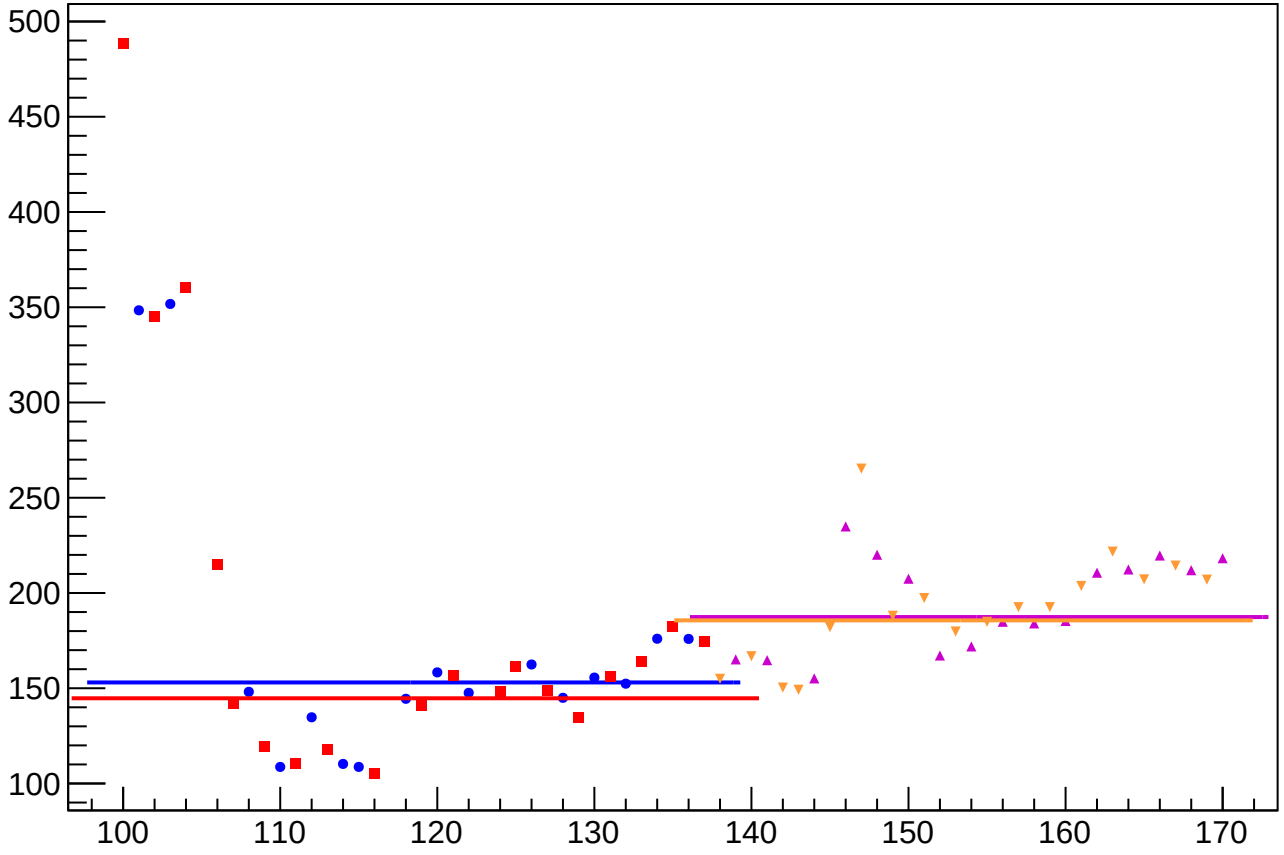
Left In: 128546.168+/-0.052 $\chi^2$/NDF:535953083.7/15

+ sign 129803.932+/-0.039 $\chi^2$/NDF: 1718775570.2

All: 129801.820+/-0.028 $\chi^2$/NDF: 40960978

- sign 129799.797+/-0.038 $\chi^2$/NDF: 2377316617.6/

# yield_bpm0l06WS_rms vs Slug




Right In: 153.043+/-0.043 $\chi^2$/NDF: 1059470.3/15

Left Out: 185.632+/-0.037 $\chi^2$/NDF:497784.8/16

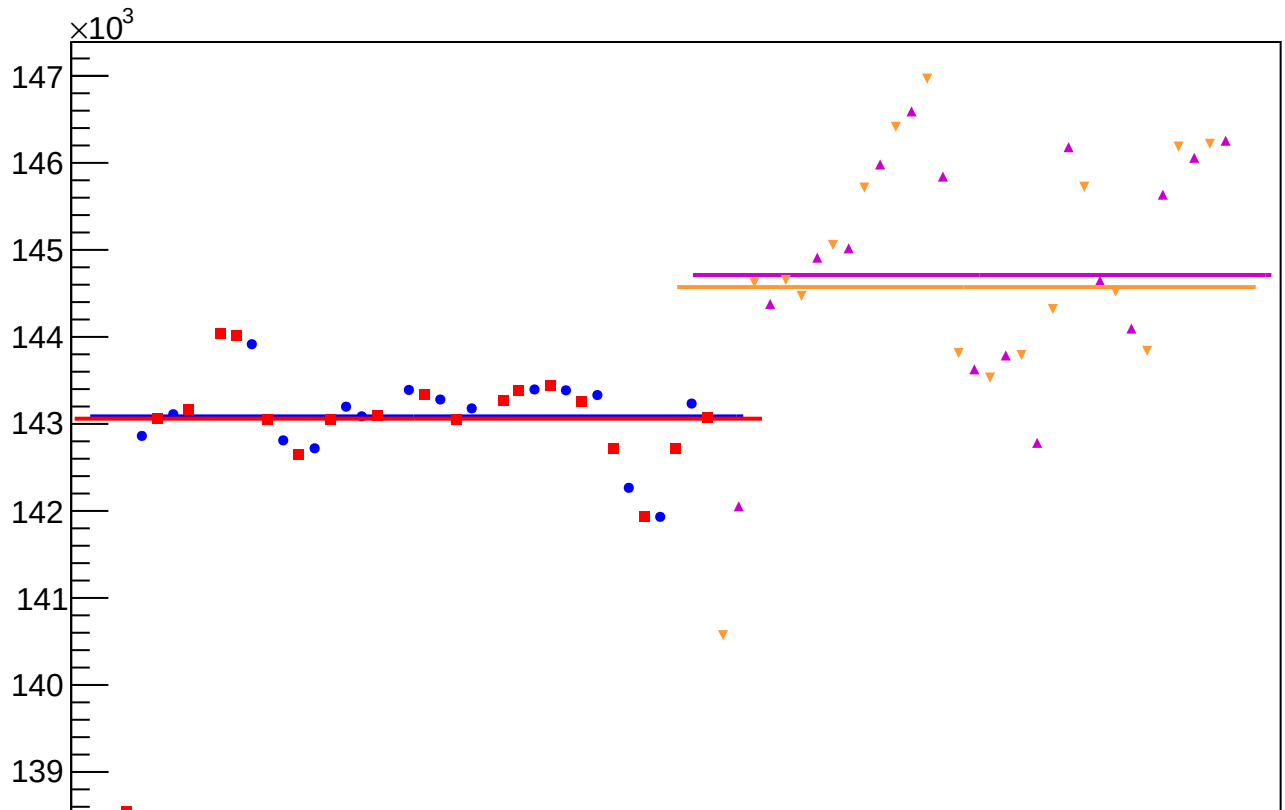
Right Out: 144.731+/-0.040 $\chi^2$/NDF: 1263423.6/18

Left In: 187.371+/-0.037 $\chi^2$/NDF:418916.7/15

+ sign 171.918+/-0.028 $\chi^2$/NDF: 1891827.3/32

All: 169.758+/-0.019 $\chi^2$/NDF: 4195785.1/67

- sign 167.690+/-0.027 $\chi^2$/NDF: 2292155.4/34




Right In: 143086.477+/-0.065 $\chi^2$/NDF: 46726277.8/15

Left Out: 144572.726+/-0.060 $\chi^2$/NDF:682897674.0/16

Right Out: 143060.268+/-0.061 $\chi^2$/NDF: 51715744.7/18

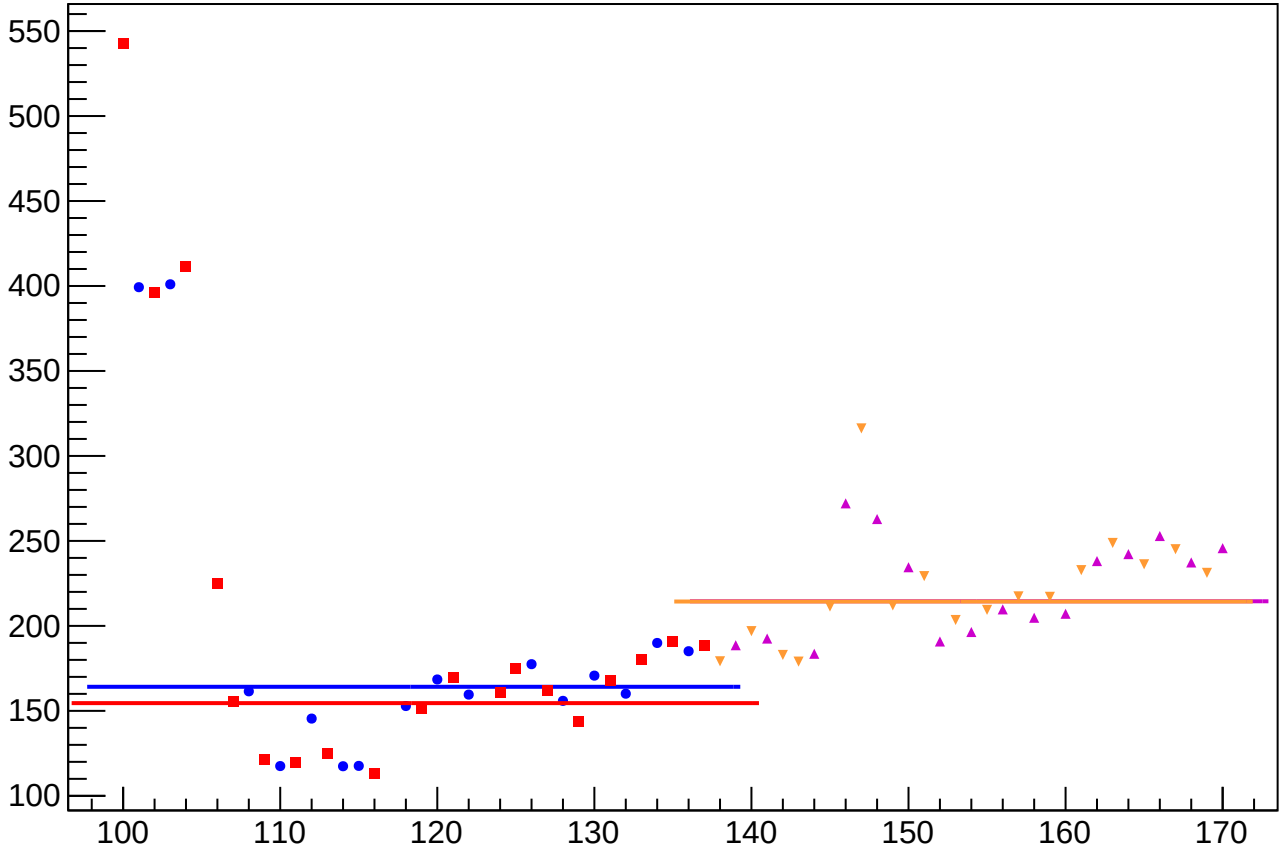
Left In: 144711.278+/-0.060 $\chi^2$/NDF:506739466.4/15

+ sign 143893.681+/-0.044 $\chi^2$/NDF: 1012851677.1

All: 143893.698+/-0.031 $\chi^2$/NDF: 19453209

- sign 143893.713+/-0.043 $\chi^2$/NDF: 932469288.9/3

# yield_bpm0l07WS_rms vs Slug




Right In: 164.167+/-0.046 $\chi^2$/NDF: 1129764.4/15

Left Out: 214.338+/-0.042 $\chi^2$/NDF:426164.3/16

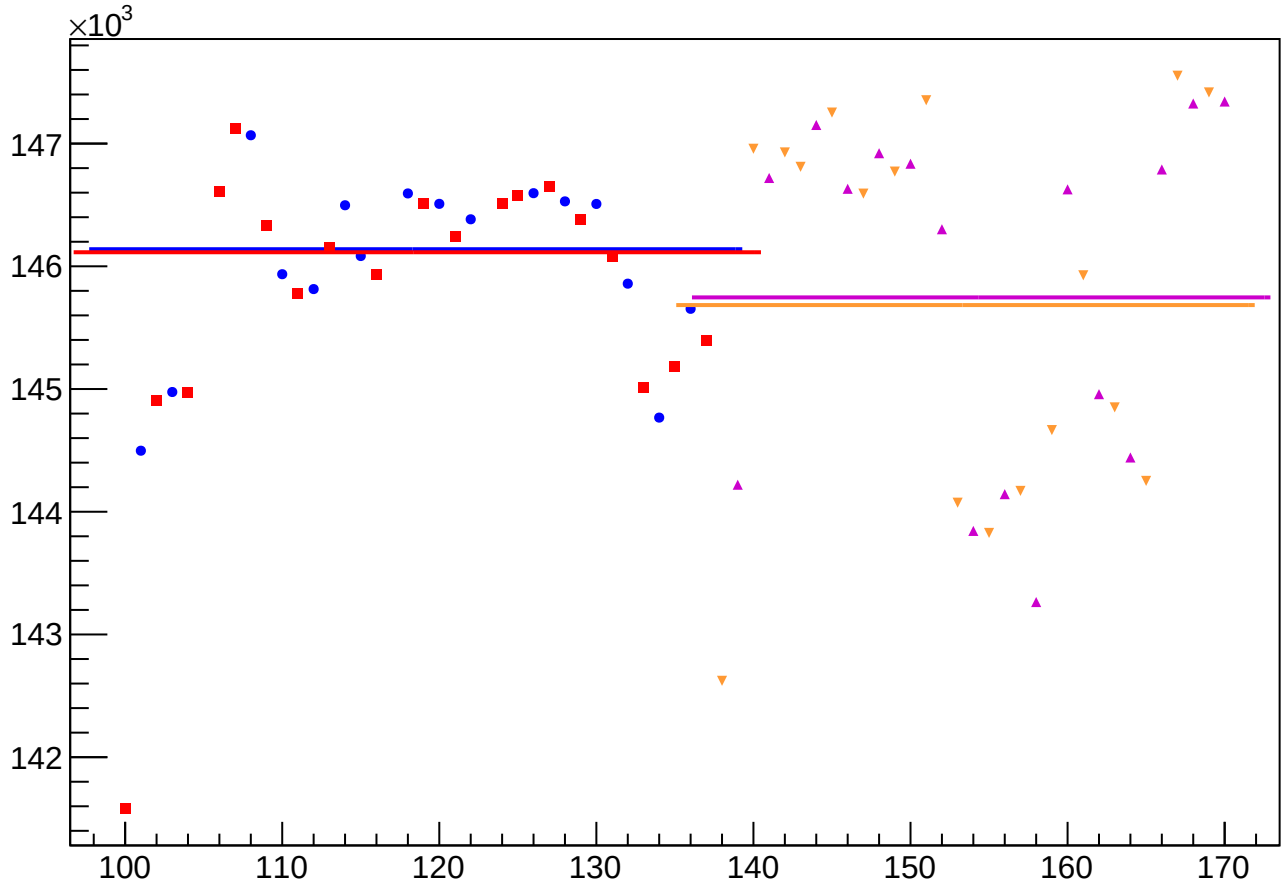
Right Out: 154.558+/-0.043 $\chi^2$/NDF: 1366830.5/18

Left In: 214.482+/-0.042 $\chi^2$/NDF:395955.1/15

+ sign 191.415+/-0.031 $\chi^2$/NDF: 2201424.6/32

All: 188.012+/-0.022 $\chi^2$/NDF: 4972875.8/67

- sign 184.808+/-0.030 $\chi^2$/NDF: 2748212.9/34




Right In: 146139.237+/-0.067 $\chi^2$/NDF: 71721843.8/15

Left Out: 145684.062+/-0.059 $\chi^2$/NDF:717644927.5/16

Right Out: 146114.458+/-0.062 $\chi^2$/NDF: 73102068.4/18

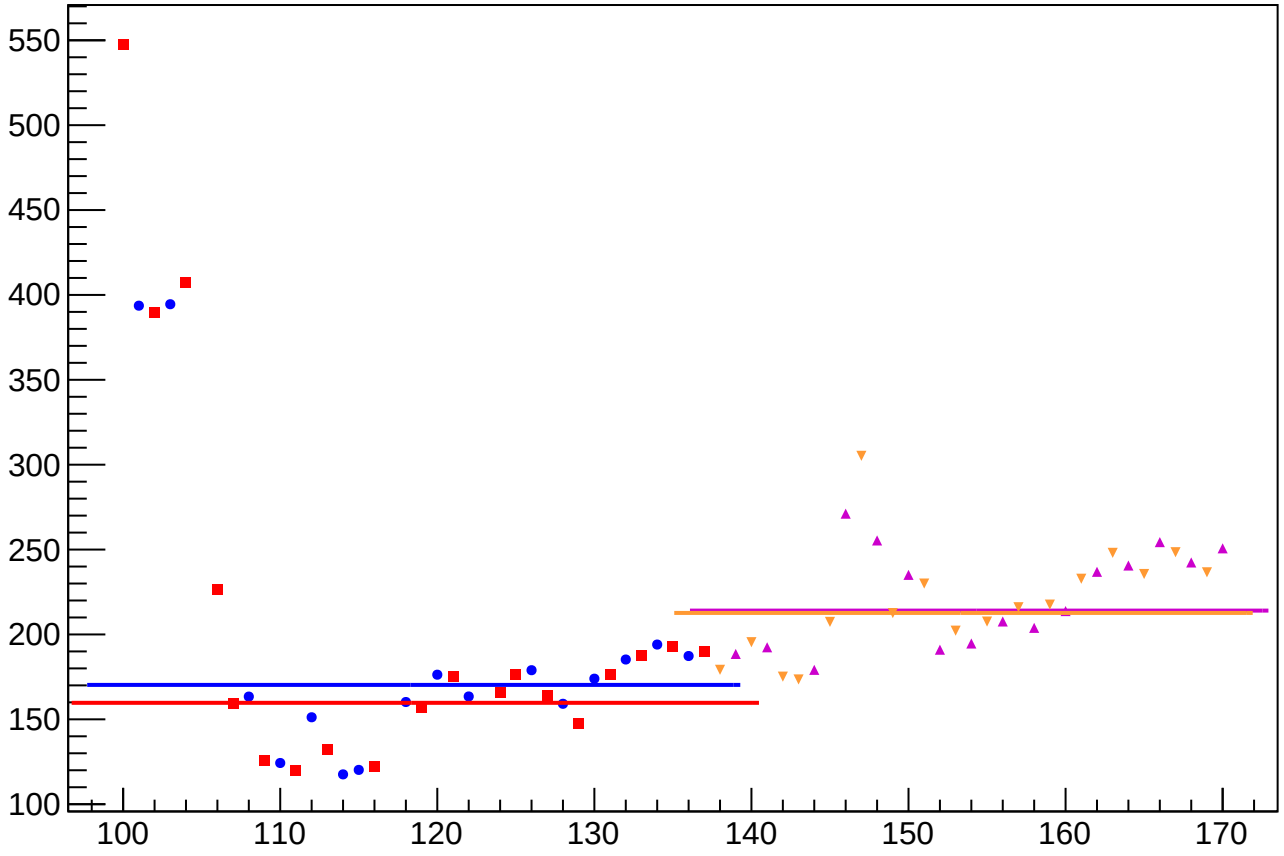
Left In: 145746.583+/-0.060 $\chi^2$/NDF:560354790.1/15

+ sign 145882.402+/-0.044 $\chi^2$/NDF: 815107413.2/3

All: 145903.293+/-0.031 $\chi^2$/NDF: 14670301

- sign 145923.061+/-0.043 $\chi^2$/NDF: 651493583.0/3

# yield_bpm0l08WS_rms vs Slug




Right In: 170.279+/-0.048 $\chi^2$/NDF: 1057631.0/15

Left Out: 212.678+/-0.042 $\chi^2$/NDF:458942.1/16

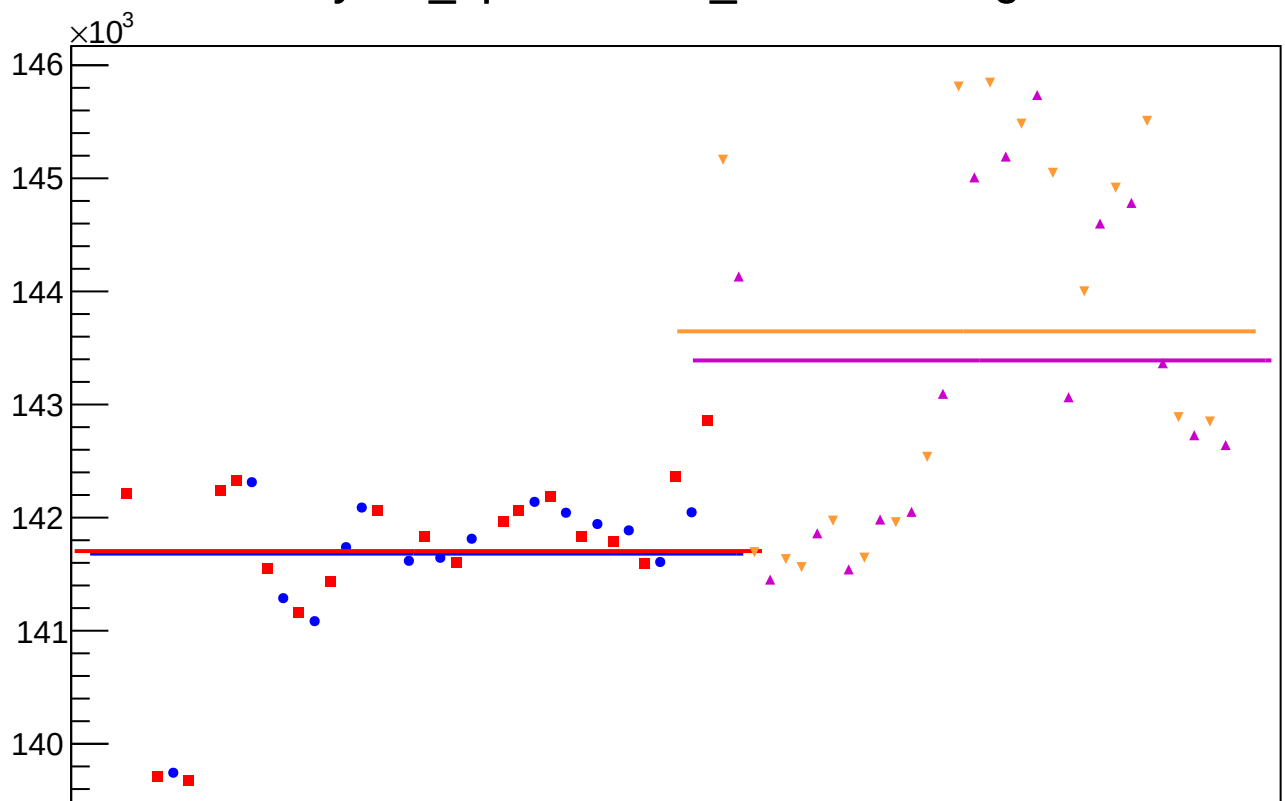
Right Out: 159.724+/-0.044 $\chi^2$/NDF: 1291290.8/18

Left In: 214.048+/-0.042 $\chi^2$/NDF:415655.2/15

+ sign 194.203+/-0.031 $\chi^2$/NDF: 1963262.1/32

All: 191.009+/-0.022 $\chi^2$/NDF: 4476895.5/67

- sign 187.988+/-0.031 $\chi^2$/NDF: 2493576.1/34




Right In: 141681.846+/-0.068 $\chi^2$/NDF: 64292997.9/15

Left Out: 143647.063+/-0.062 $\chi^2$/NDF:711566317.7/16

Right Out: 141704.185+/-0.064 $\chi^2$/NDF: 65526811.0/18

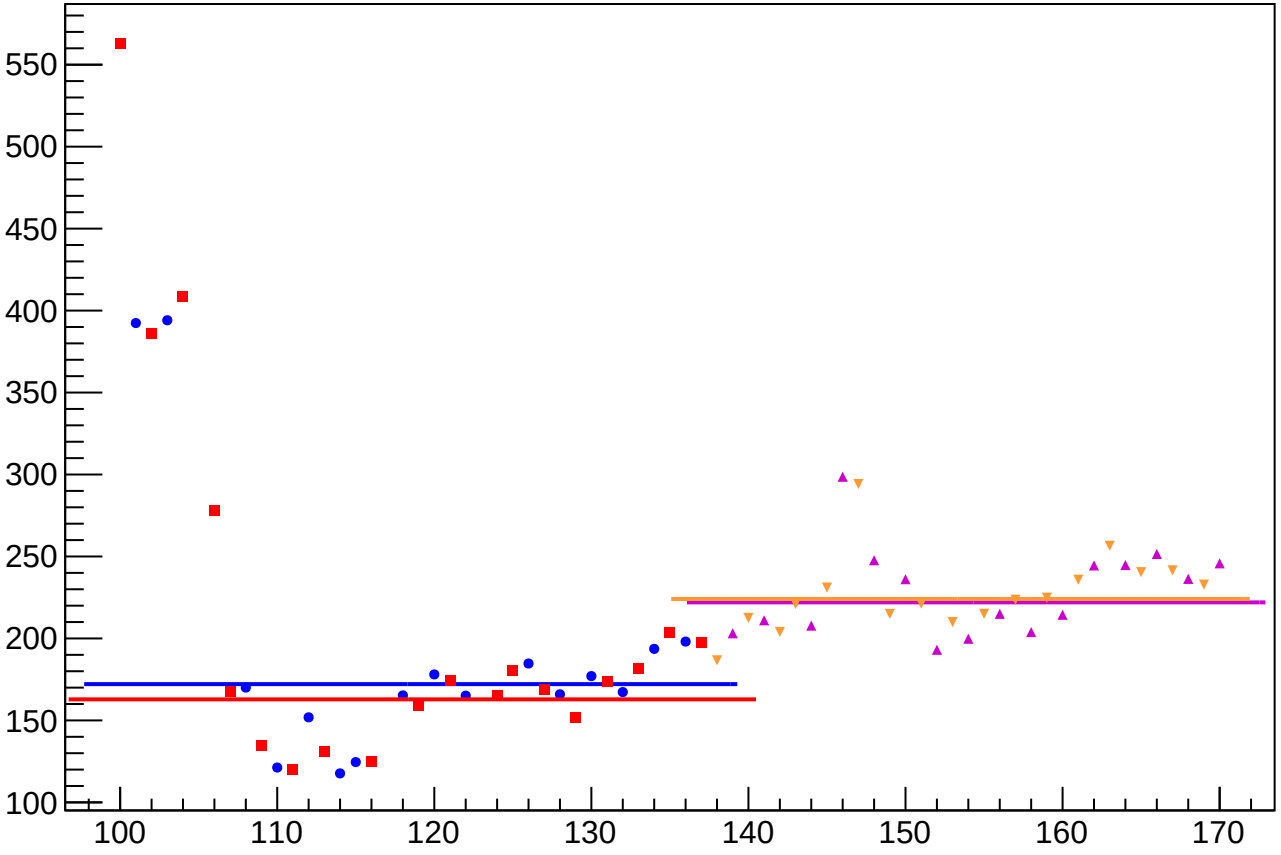
Left In: 143389.784+/-0.062 $\chi^2$/NDF:502390510.6/15

+ sign 142757.749+/-0.046 $\chi^2$/NDF: 1229514511.3

All: 142660.626+/-0.032 $\chi^2$/NDF: 21644757

- sign 142569.418+/-0.045 $\chi^2$/NDF: 926288783.6/3

# yield_bpm0l09WS_rms vs Slug




Right In: 172.139+/-0.048 $\chi^2$/NDF: 1068587.8/15

Left Out: 224.065+/-0.044 $\chi^2$/NDF:229652.6/16

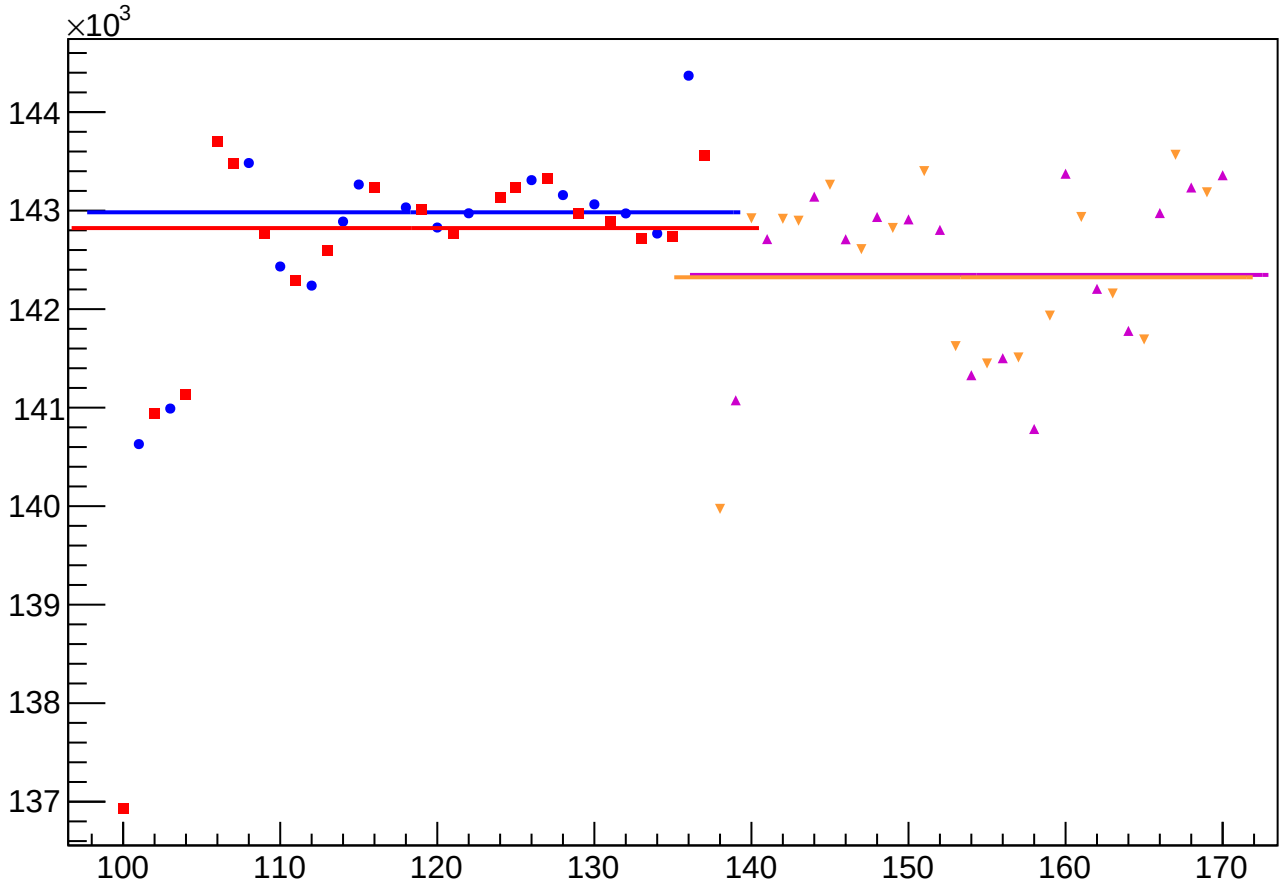
Right Out: 162.845+/-0.045 $\chi^2$/NDF: 1305855.8/18

Left In: 222.003+/-0.044 $\chi^2$/NDF:302151.6/15

+ sign 200.567+/-0.032 $\chi^2$/NDF: 1931675.8/32

All: 196.774+/-0.023 $\chi^2$/NDF: 4448998.2/67

- sign 193.211+/-0.031 $\chi^2$/NDF: 2490863.9/34




Right In: 142983.006+/-0.069 $\chi^2$/NDF: 107696217.2/15

Left Out: 142323.255+/-0.058 $\chi^2$/NDF:286338401.4/16

Right Out: 142822.727+/-0.064 $\chi^2$/NDF: 63581232.6/18

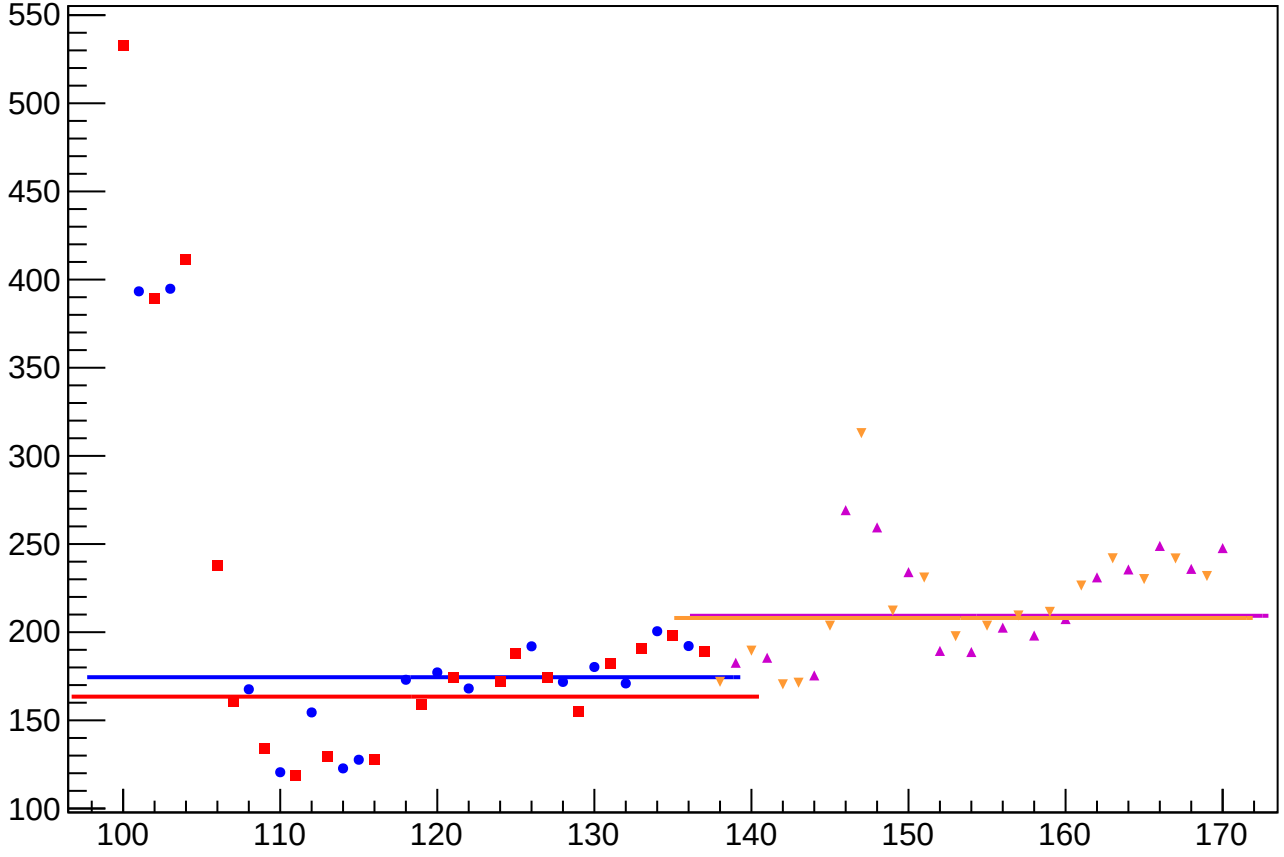
Left In: 142347.327+/-0.059 $\chi^2$/NDF:224025055.3/15

+ sign 142595.548+/-0.044 $\chi^2$/NDF: 447554688.6/3

All: 142579.493+/-0.031 $\chi^2$/NDF: 765385100

- sign 142564.255+/-0.043 $\chi^2$/NDF: 317575545.3/3

# yield_bpm0l10WS_rms vs Slug




Right In: 174.467+/-0.049 $\chi^2$/NDF: 1049126.7/15

Left Out: 208.057+/-0.041 $\chi^2$/NDF:506573.4/16

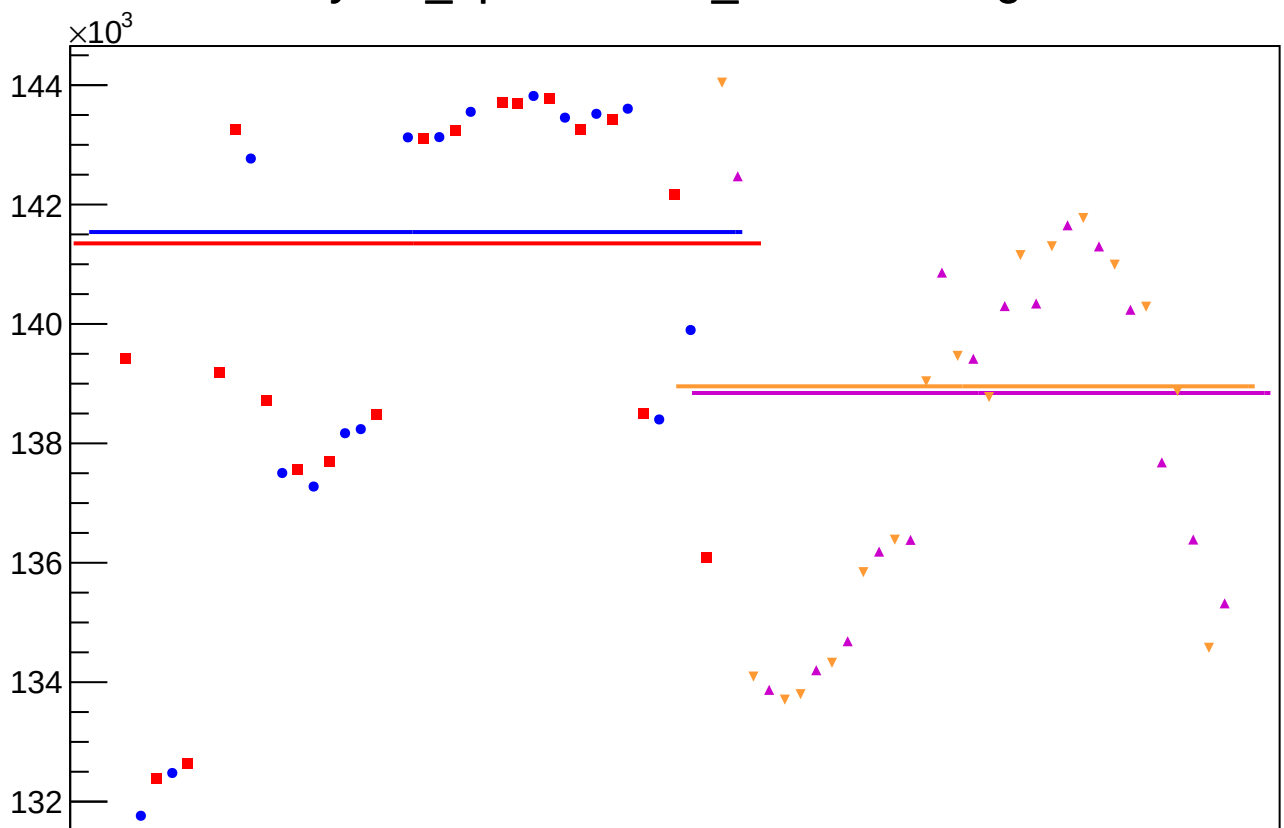
Right Out: 163.448+/-0.045 $\chi^2$/NDF: 1282494.1/18

Left In: 209.307+/-0.041 $\chi^2$/NDF:460887.7/15

+ sign 194.194+/-0.031 $\chi^2$/NDF: 1833166.1/32

All: 191.212+/-0.022 $\chi^2$/NDF: 4151871.2/67

- sign 188.381+/-0.031 $\chi^2$/NDF: 2301118.4/34




Right In: 141539.467+/-0.101 $\chi^2$/NDF: 947743743.7/15

Left Out: 138955.552+/-0.085 $\chi^2$/NDF:1587182303.3/16

Right Out: 141349.499+/-0.101 $\chi^2$/NDF: 926661757.9/18

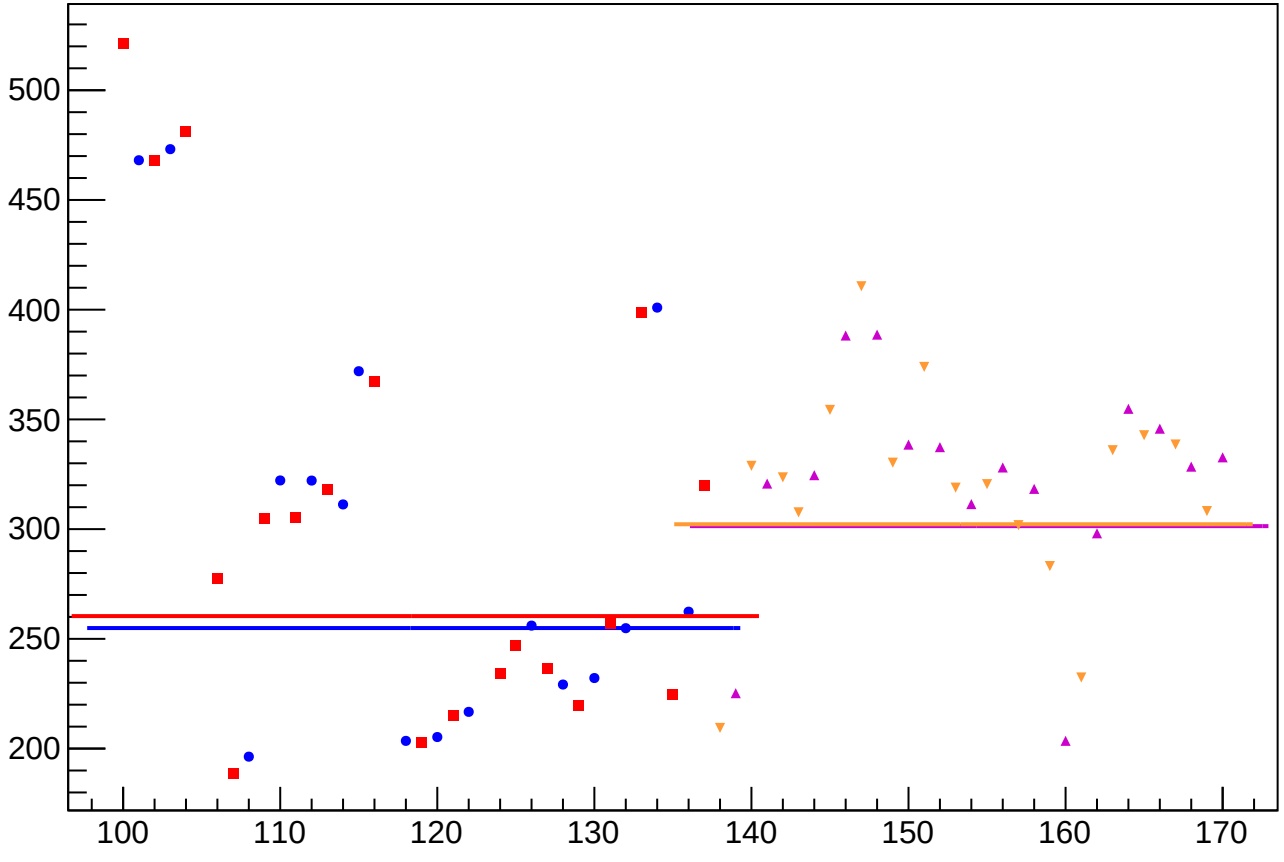
Left In: 138843.753+/-0.086 $\chi^2$/NDF:1198808842.9/15

+ sign 140028.085+/-0.065 $\chi^2$/NDF: 2919199256.5

All: 139960.031+/-0.046 $\chi^2$/NDF: 540471134

- sign 139891.166+/-0.065 $\chi^2$/NDF: 2483303202.5/

# yield_bpm0r03WS_rms vs Slug




Right In: 254.919+/-0.071 $\chi^2$/NDF: 949952.1/15

Left Out: 302.218+/-0.060 $\chi^2$/NDF:745826.9/16

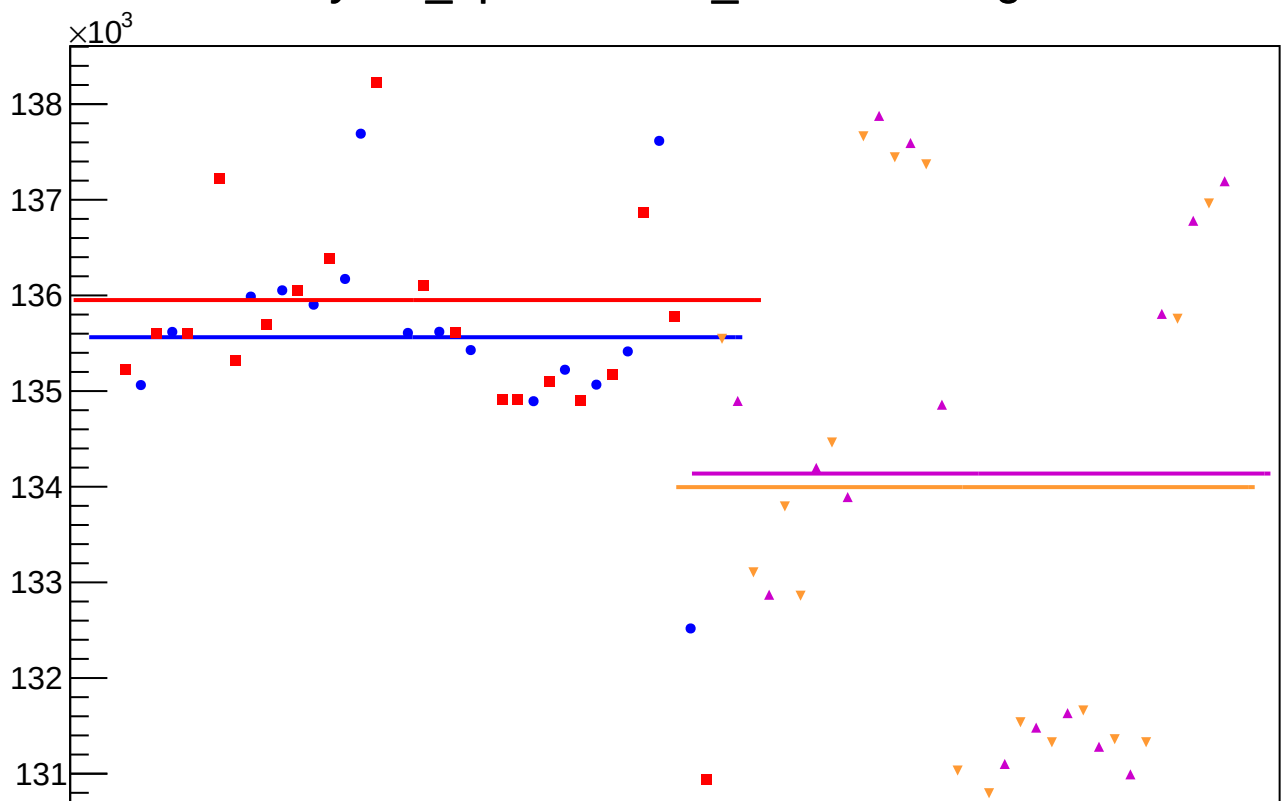
Right Out: 260.369+/-0.071 $\chi^2$/NDF: 993300.6/18

Left In: 301.361+/-0.061 $\chi^2$/NDF:872297.7/15

+ sign 282.585+/-0.046 $\chi^2$/NDF: 1953297.1/32

All: 283.401+/-0.033 $\chi^2$/NDF: 4011066.2/67

- sign 284.226+/-0.046 $\chi^2$/NDF: 2057134.3/34




Right In: 135563.062+/-0.118 $\chi^2$/NDF: 94169293.7/15

Left Out: 133995.817+/-0.074 $\chi^2$/NDF:857805867.2/16

Right Out: 135951.486+/-0.106 $\chi^2$/NDF: 91577209.6/18

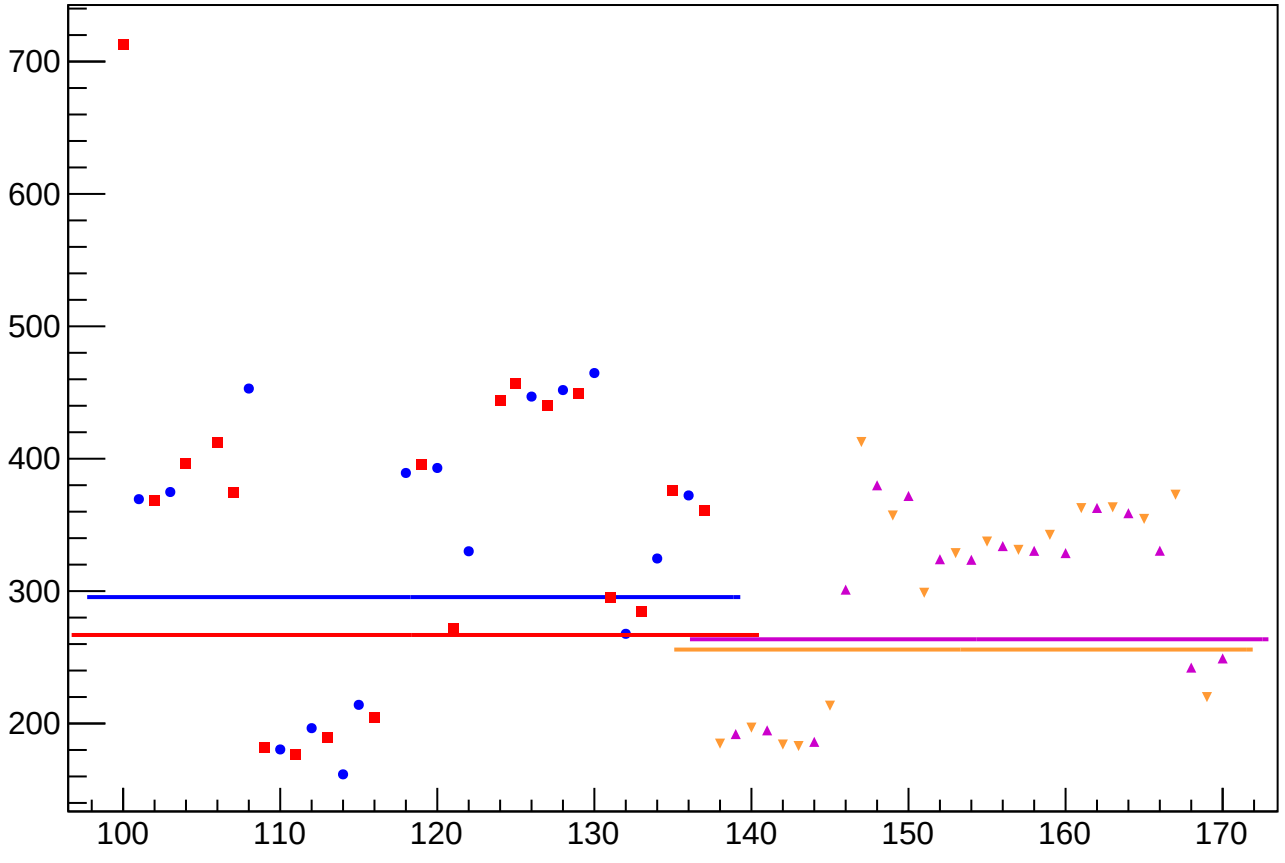
Left In: 134137.651+/-0.076 $\chi^2$/NDF:817994060.2/15

+ sign 134434.418+/-0.063 $\chi^2$/NDF: 1078253531.7

All: 134594.223+/-0.044 $\chi^2$/NDF: 219337532

- sign 134749.855+/-0.062 $\chi^2$/NDF: 1102262806.4/

# yield_bpm0r05WS_rms vs Slug




Right In: 295.481+/-0.084 $\chi^2$/NDF: 1442531.9/15

Left Out: 255.847+/-0.052 $\chi^2$/NDF:2149921.1/16

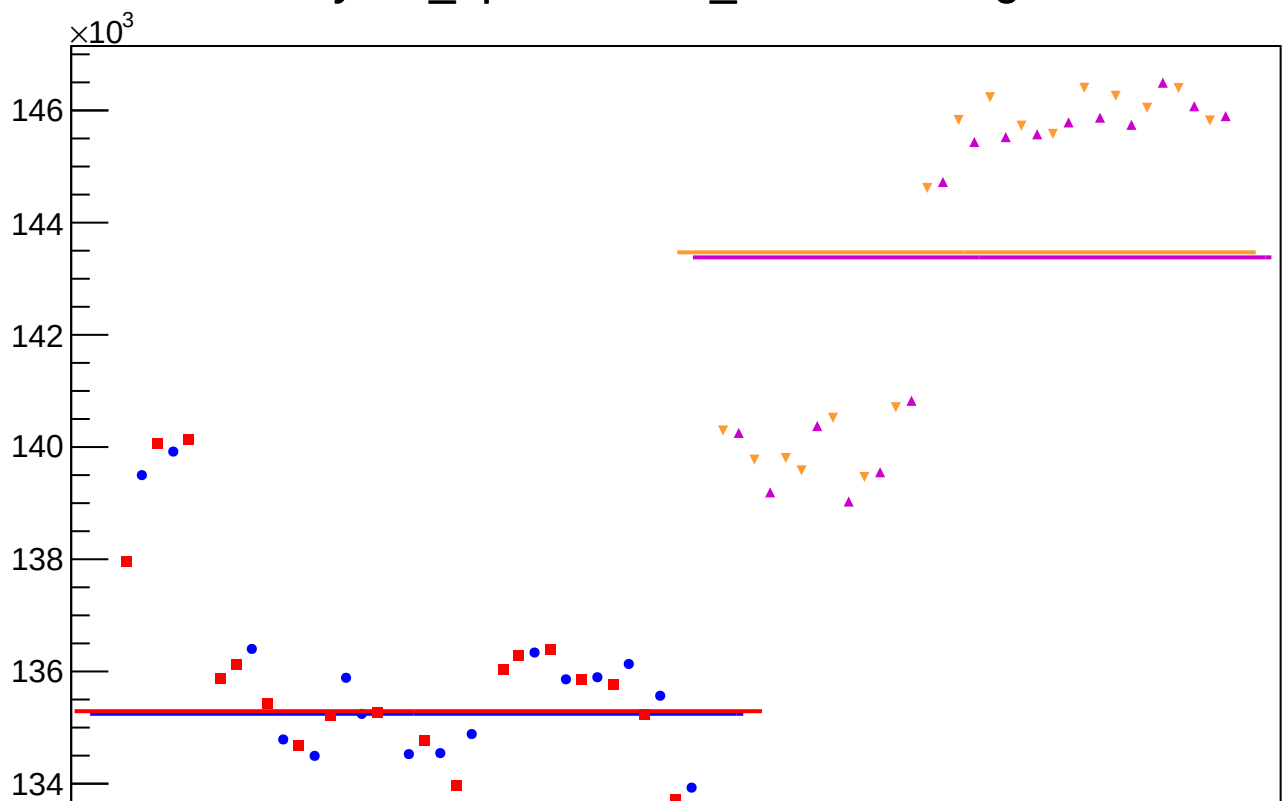
Right Out: 266.864+/-0.075 $\chi^2$/NDF: 1678073.6/18

Left In: 263.616+/-0.054 $\chi^2$/NDF:1670461.9/15

+ sign 266.939+/-0.044 $\chi^2$/NDF: 3753972.1/32

All: 265.811+/-0.031 $\chi^2$/NDF: 7105025.2/67

- sign 264.712+/-0.044 $\chi^2$/NDF: 3349771.3/34




Right In: 135246.269+/-0.055 $\chi^2$/NDF: 388384719.1/15

Left Out: 143471.051+/-0.054 $\chi^2$/NDF:2843170933.4/16

Right Out: 135291.851+/-0.052 $\chi^2$/NDF: 381790556.0/18

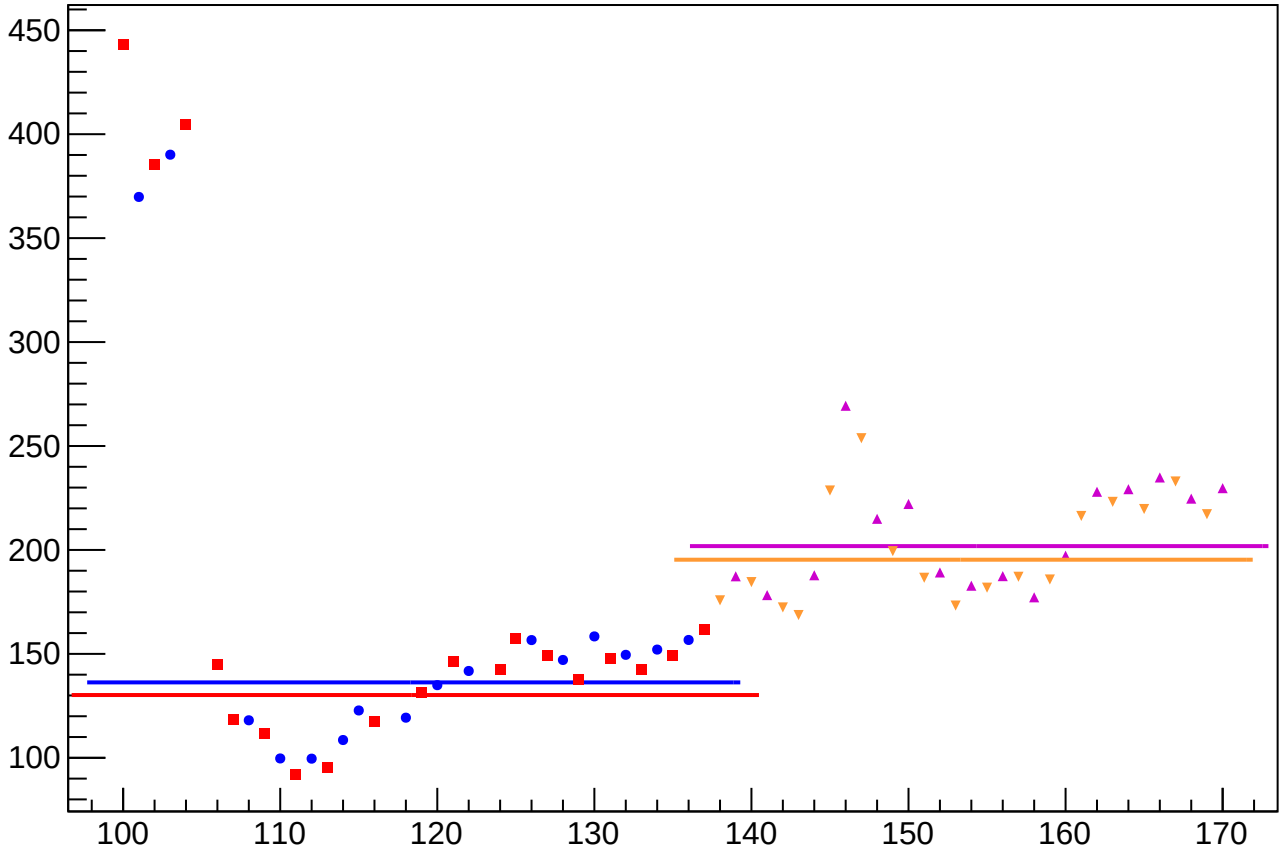
Left In: 143380.918+/-0.057 $\chi^2$/NDF:2521932853.7/15

+ sign 139389.518+/-0.039 $\chi^2$/NDF: 14611617575.

All: 139182.836+/-0.027 $\chi^2$/NDF: 28712909

- sign 138980.195+/-0.038 $\chi^2$/NDF: 14044360749.

# yield_bpm0i02WS_rms vs Slug




Right In: 136.285+/-0.039 $\chi^2$/NDF: 1384057.4/15

Left Out: 195.304+/-0.038 $\chi^2$/NDF:356610.2/16

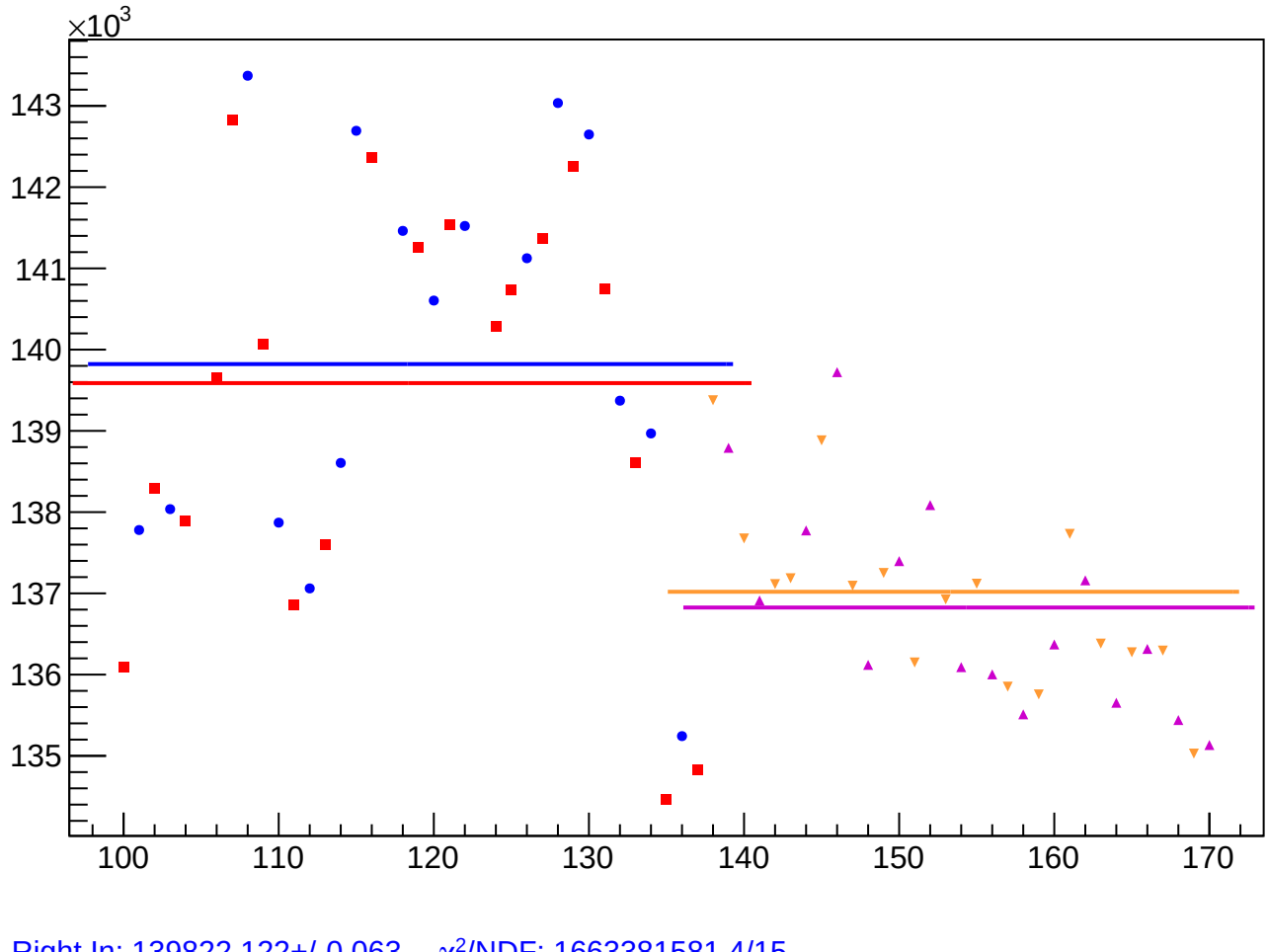
Right Out: 130.206+/-0.037 $\chi^2$/NDF: 1520840.8/18

Left In: 201.845+/-0.040 $\chi^2$/NDF:348623.1/15

+ sign 166.016+/-0.027 $\chi^2$/NDF: 2912631.7/32

All: 164.428+/-0.019 $\chi^2$/NDF: 6536428.4/67

- sign 162.871+/-0.027 $\chi^2$/NDF: 3617074.0/34




Right In: 139822.122+/-0.063 $\chi^2$/NDF: 1663381581.4/15

Left Out: 137019.577+/-0.056 $\chi^2$/NDF:385164270.7/16

Right Out: 139587.876+/-0.060 $\chi^2$/NDF: 1482934186.2/18

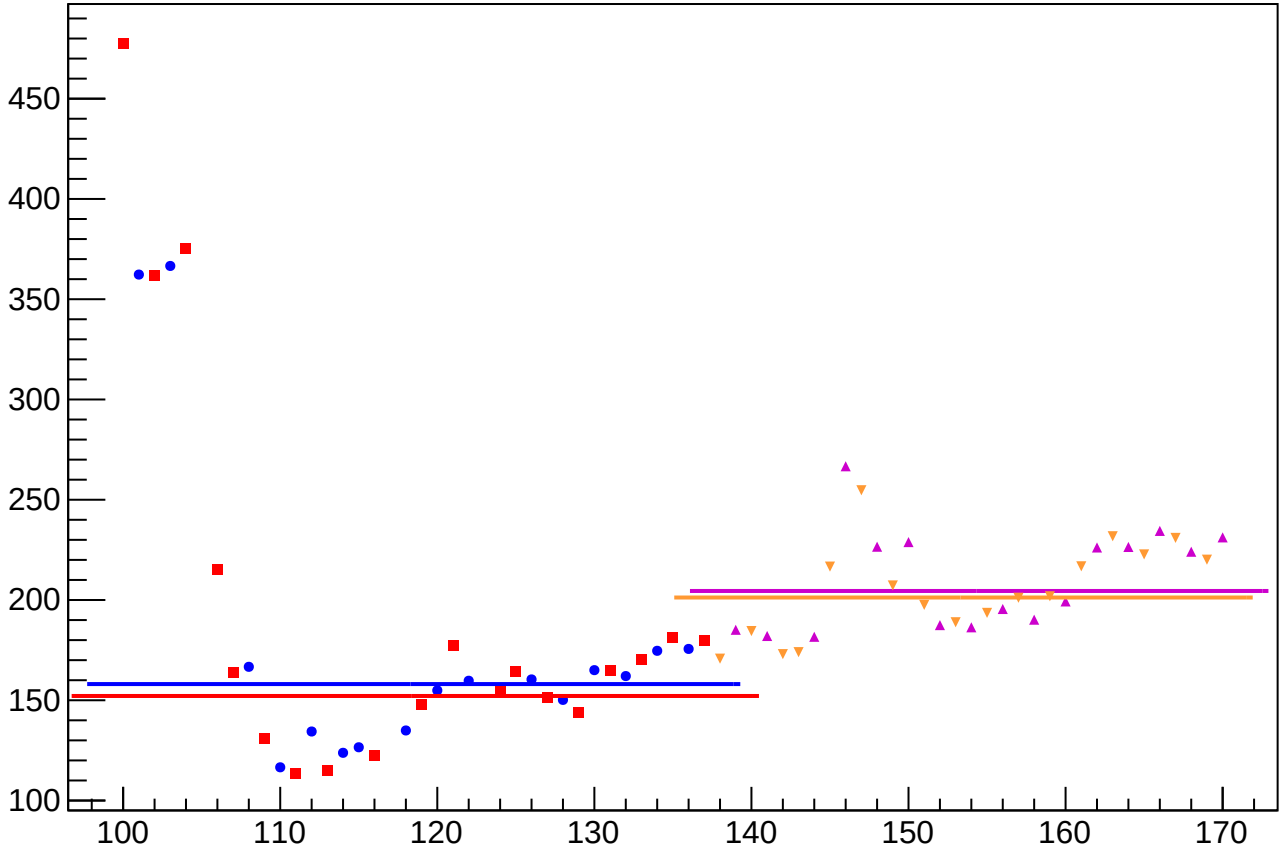
Left In: 136825.723+/-0.057 $\chi^2$/NDF:440083240.4/15

+ sign 138266.121+/-0.042 $\chi^2$/NDF: 3161630510.4

All: 138207.799+/-0.029 $\chi^2$/NDF: 62014663

- sign 138150.535+/-0.041 $\chi^2$/NDF: 3035967266.8/

# yield_bpm0i02aWS_rms vs Slug




Right In: 158.079+/-0.044 $\chi^2$/NDF: 1017928.9/15

Left Out: 201.243+/-0.040 $\chi^2$/NDF:299433.3/16

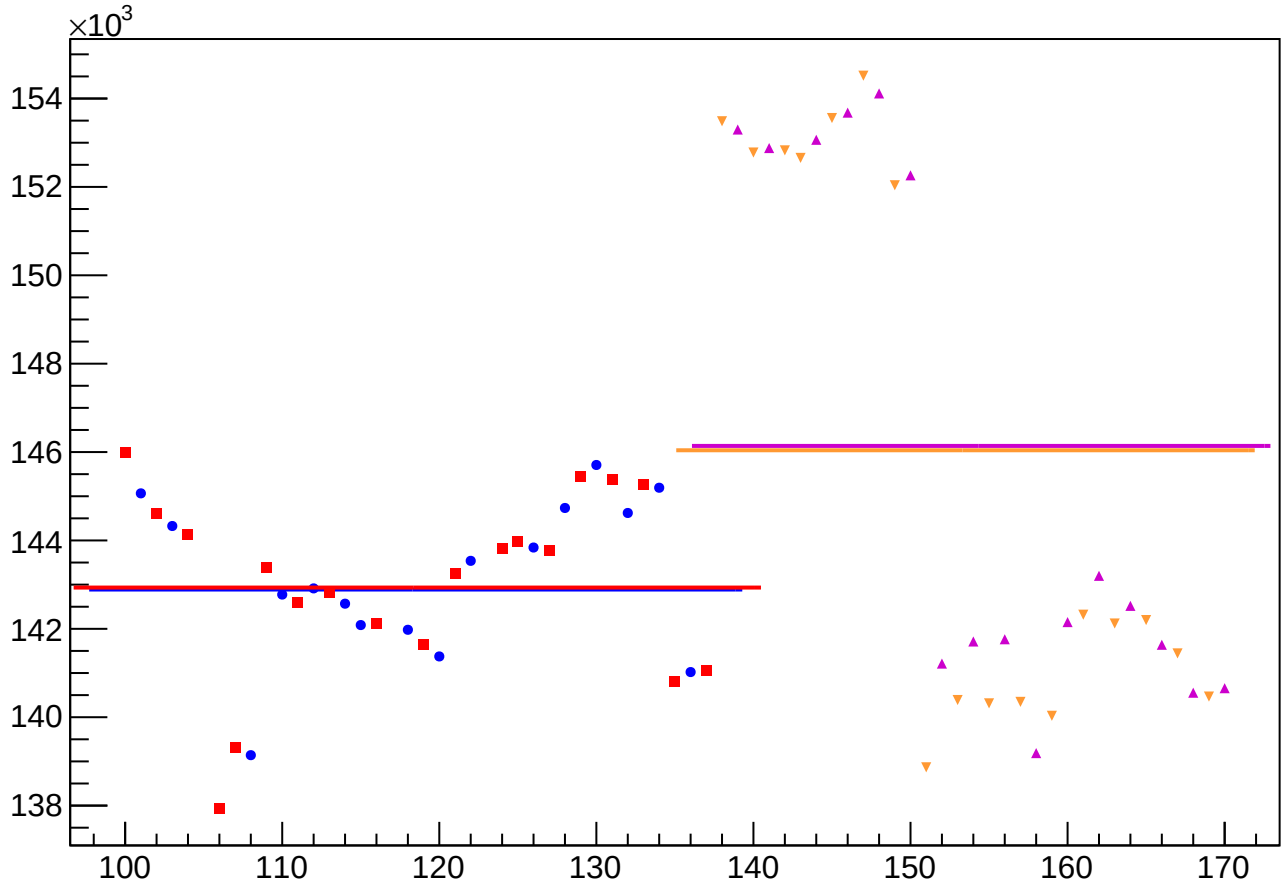
Right Out: 152.139+/-0.042 $\chi^2$/NDF: 1229053.9/18

Left In: 204.503+/-0.041 $\chi^2$/NDF:324336.2/15

+ sign 182.044+/-0.030 $\chi^2$/NDF: 1845431.8/32

All: 180.704+/-0.021 $\chi^2$/NDF: 4202890.0/67

- sign 179.388+/-0.029 $\chi^2$/NDF: 2353371.3/34




Right In: 142889.386+/-0.066 $\chi^2$/NDF: 763303771.6/15

Left Out: 146040.605+/-0.057 $\chi^2$/NDF:11885386418.3/16

Right Out: 142933.890+/-0.062 $\chi^2$/NDF: 787386856.4/18

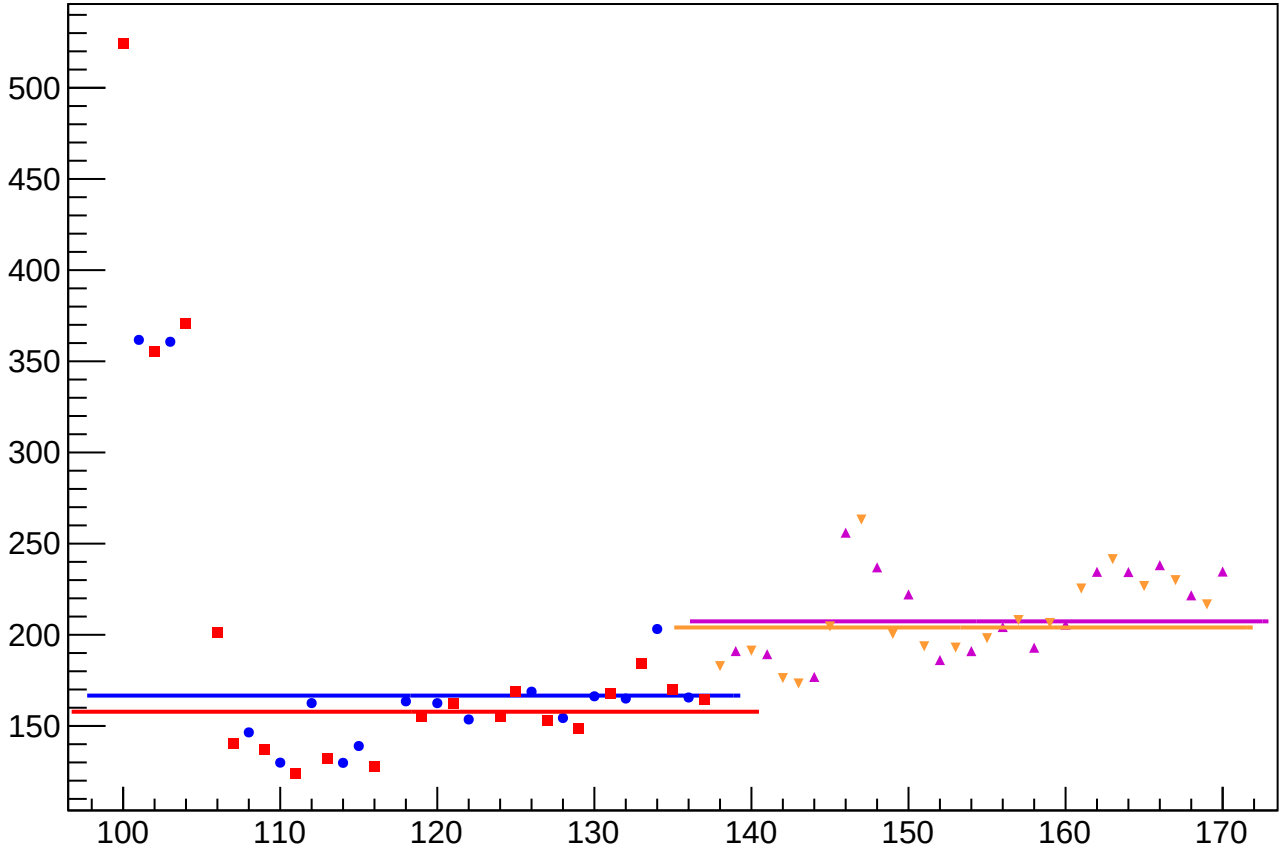
Left In: 146139.114+/-0.058 $\chi^2$/NDF:10238151119.1/15

+ sign 144694.062+/-0.043 $\chi^2$/NDF: 13966790998.

All: 144661.041+/-0.030 $\chi^2$/NDF: 26428351

- sign 144629.087+/-0.042 $\chi^2$/NDF: 12460397004.

# yield_bpm0i05WS_rms vs Slug




Right In: 166.656+/-0.046 $\chi^2$/NDF: 863574.7/15

Left Out: 204.017+/-0.040 $\chi^2$/NDF:284850.2/16

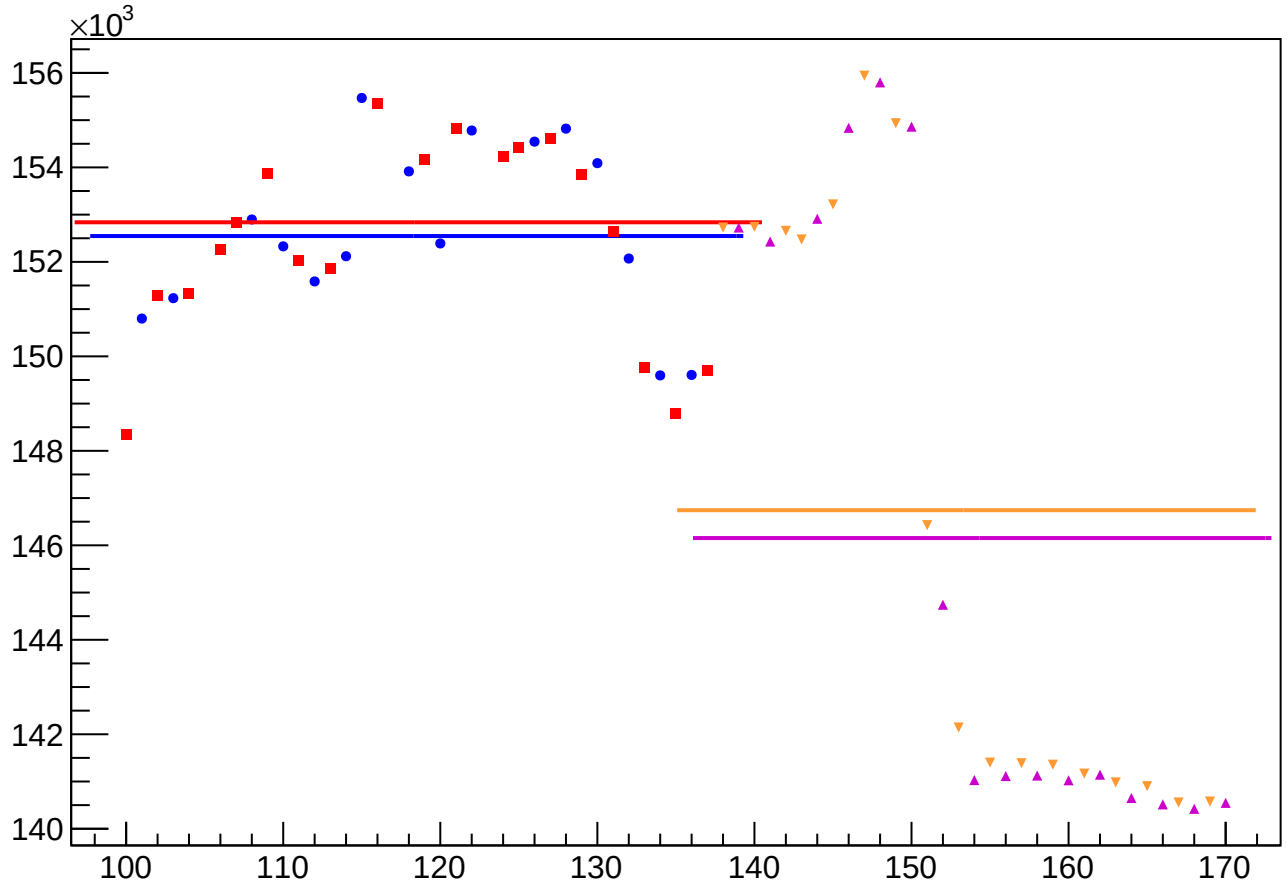
Right Out: 157.809+/-0.044 $\chi^2$/NDF: 1022332.1/18

Left In: 207.372+/-0.041 $\chi^2$/NDF:305060.8/15

+ sign 188.053+/-0.030 $\chi^2$/NDF: 1518985.9/32

All: 186.004+/-0.021 $\chi^2$/NDF: 3541511.5/67

- sign 184.022+/-0.030 $\chi^2$/NDF: 2013568.4/34




Right In: 152546.899+/-0.073 $\chi^2$/NDF: 654540559.6/15

Left Out: 146743.134+/-0.056 $\chi^2$/NDF:10799391556.4/16

Right Out: 152837.888+/-0.067 $\chi^2$/NDF: 736907066.8/18

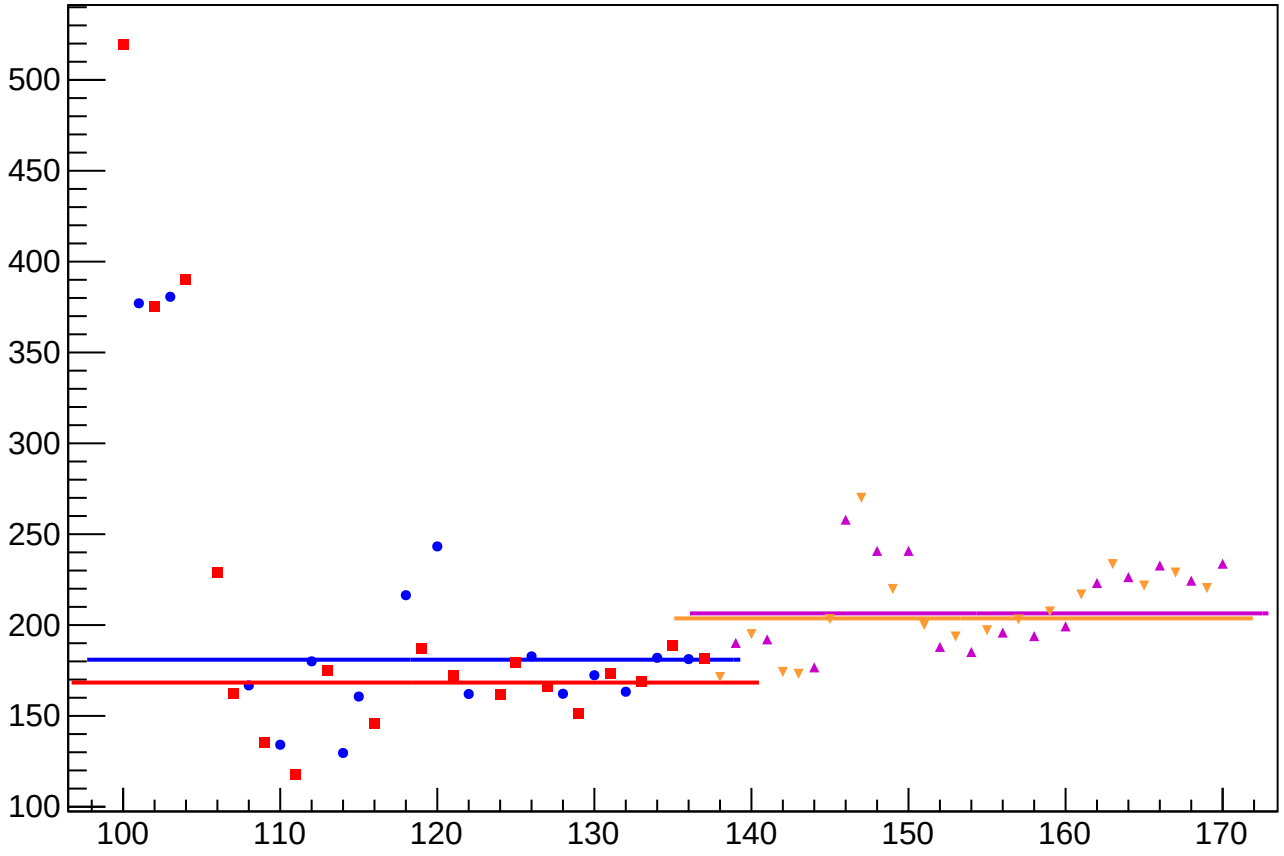
Left In: 146153.524+/-0.058 $\chi^2$/NDF:11144694238.0/15

+ sign 148929.572+/-0.045 $\chi^2$/NDF: 15435385692.

All: 148972.943+/-0.031 $\chi^2$/NDF: 330703466

- sign 149014.467+/-0.044 $\chi^2$/NDF: 17633107400.2

# yield_bpm0i07WS_rms vs Slug




Right In: 180.938+/-0.051 $\chi^2$/NDF: 907758.2/15

Left Out: 203.672+/-0.040 $\chi^2$/NDF:315474.3/16

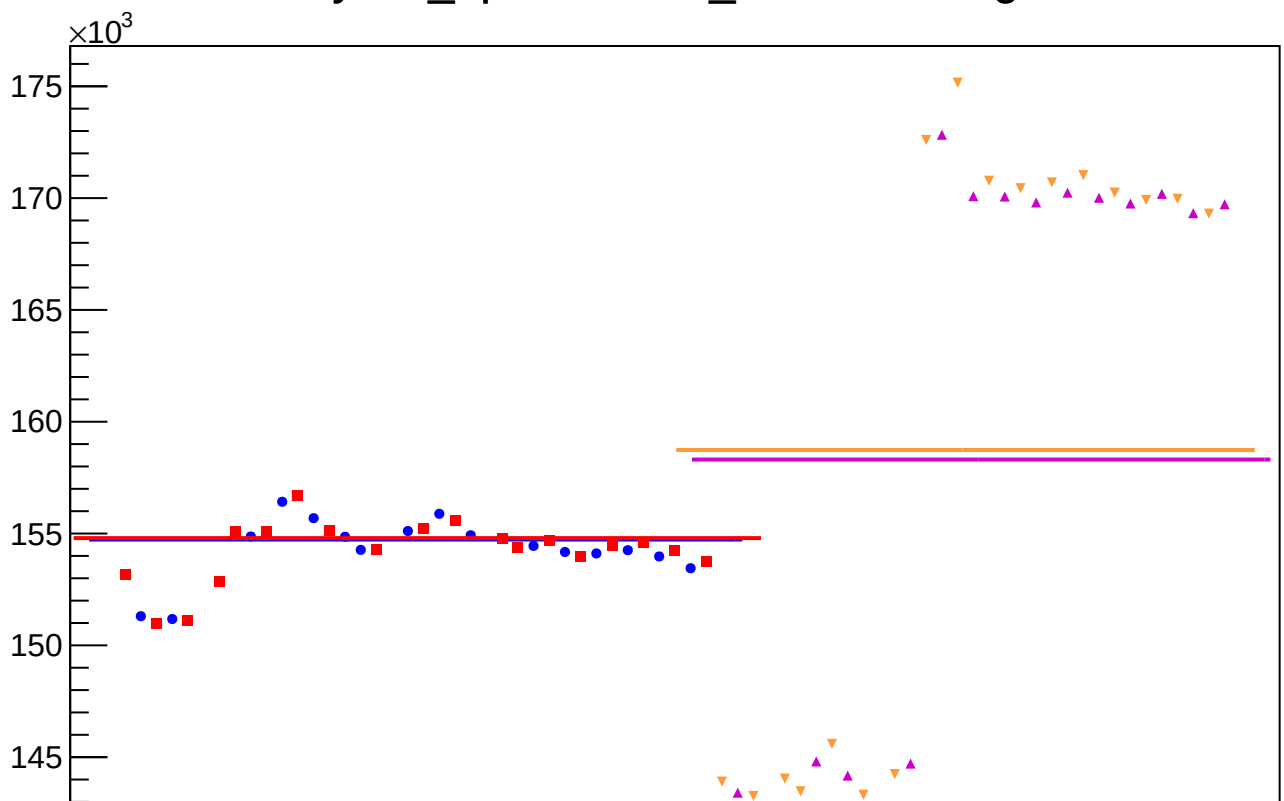
Right Out: 168.349+/-0.047 $\chi^2$/NDF: 1089090.2/18

Left In: 206.416+/-0.041 $\chi^2$/NDF:329681.2/15

+ sign 195.107+/-0.032 $\chi^2$/NDF: 1345405.9/32

All: 192.561+/-0.022 $\chi^2$/NDF: 3150024.6/67

- sign 190.123+/-0.031 $\chi^2$/NDF: 1791840.8/34




Right In: 154733.155+/-0.065 $\chi^2$/NDF: 274462319.1/15

Left Out: 158737.771+/-0.053 $\chi^2$/NDF:67232833945.8/16

Right Out: 154795.893+/-0.061 $\chi^2$/NDF: 304125082.4/18

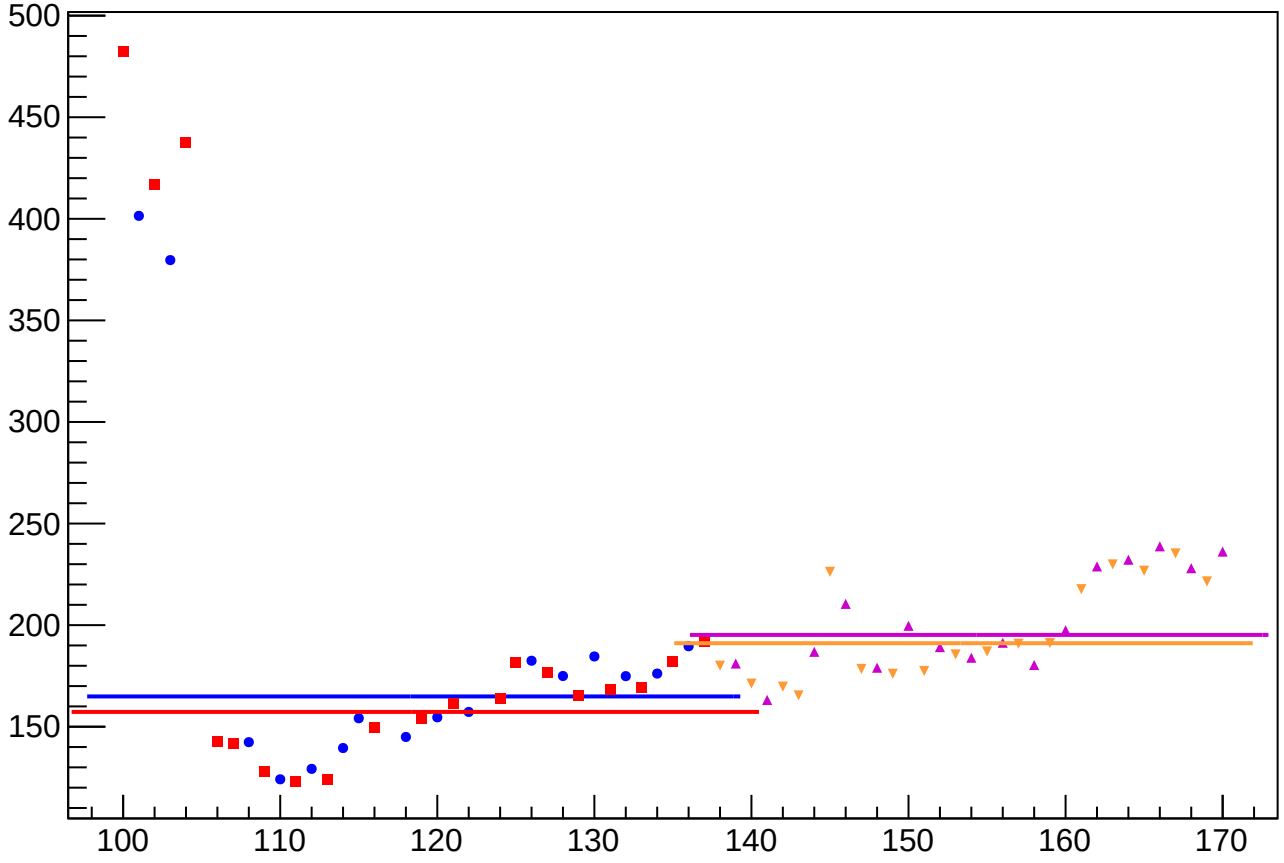
Left In: 158309.123+/-0.054 $\chi^2$/NDF:60133536164.1/15

+ sign 157148.439+/-0.041 $\chi^2$/NDF: 69782907791.9

All: 156949.839+/-0.029 $\chi^2$/NDF: 13211327

- sign 156755.726+/-0.041 $\chi^2$/NDF: 62284128319.2

# yield_bpm1i02WS_rms vs Slug




Right In: 164.906+/-0.046 $\chi^2$/NDF: 1072730.7/15

Left Out: 191.101+/-0.037 $\chi^2$/NDF:340118.3/16

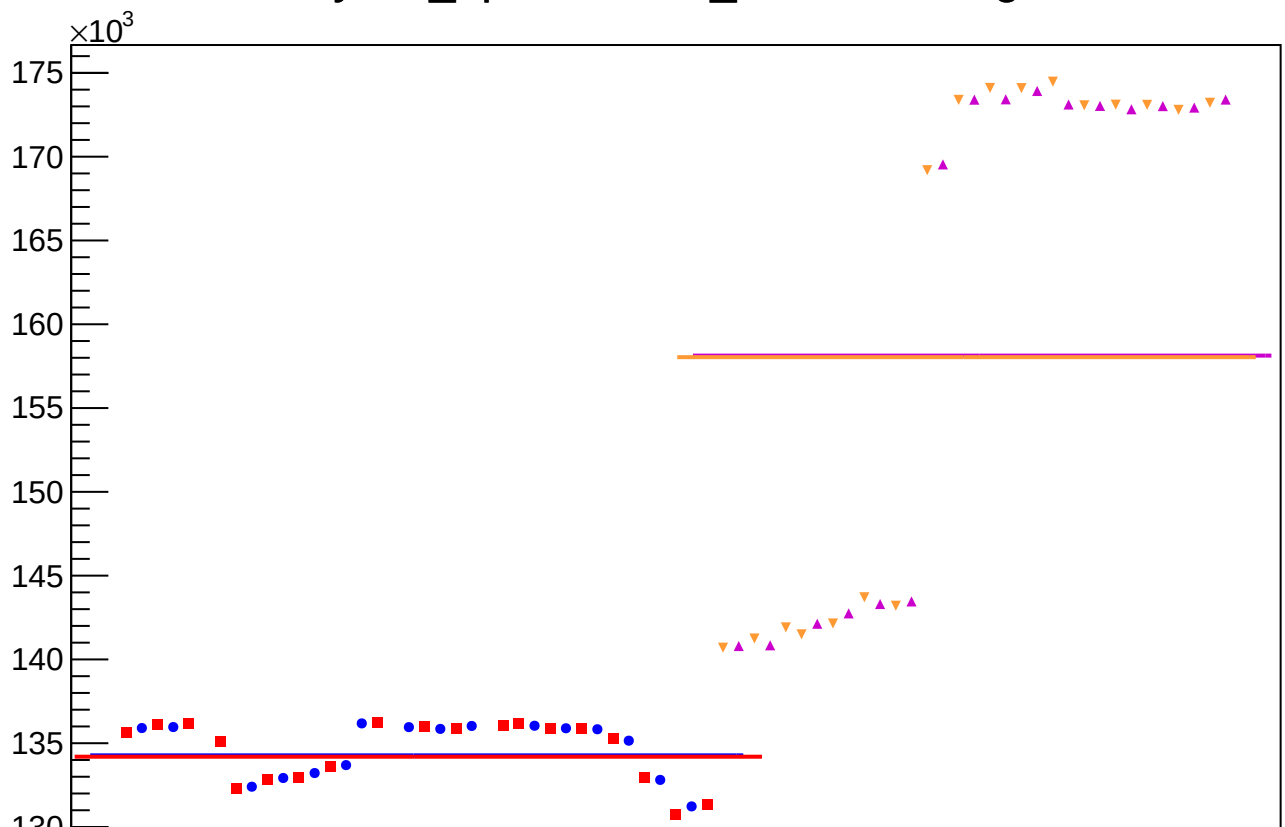
Right Out: 157.283+/-0.043 $\chi^2$/NDF: 1254831.2/18

Left In: 195.189+/-0.038 $\chi^2$/NDF:312871.0/15

+ sign 180.705+/-0.029 $\chi^2$/NDF: 1607580.5/32

All: 179.554+/-0.020 $\chi^2$/NDF: 3608288.1/67

- sign 178.428+/-0.029 $\chi^2$/NDF: 1997599.5/34




Right In: 134276.096+/-0.051 $\chi^2$/NDF: 1142867100.2/15

Left Out: 158036.273+/-0.053 $\chi^2$/NDF:83825516642.7/16

Right Out: 134195.257+/-0.048 $\chi^2$/NDF: 1205537499.7/18

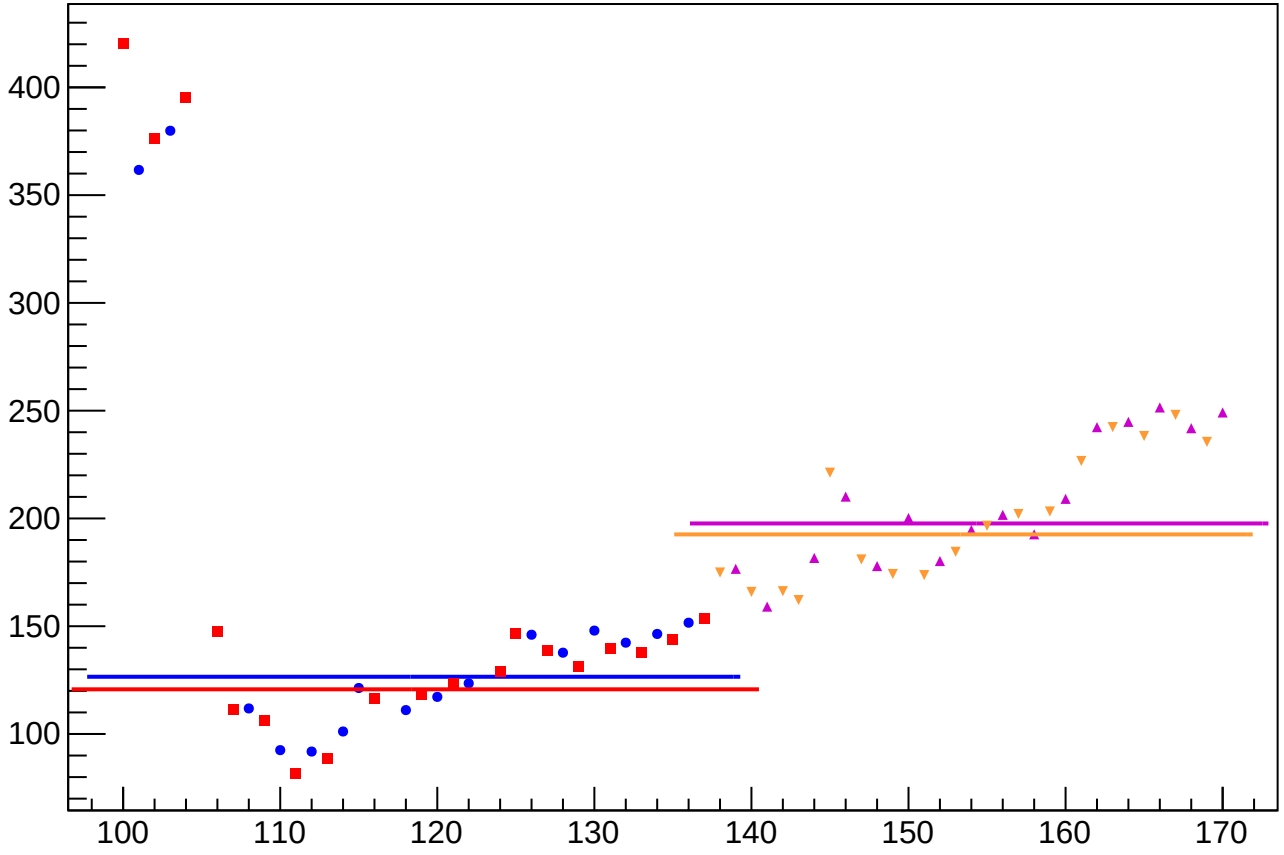
Left In: 158130.161+/-0.055 $\chi^2$/NDF:77231417932.8/15

+ sign 145549.257+/-0.037 $\chi^2$/NDF: 18865793866

All: 145005.270+/-0.026 $\chi^2$/NDF: 37447321

- sign 144479.296+/-0.036 $\chi^2$/NDF: 18538653974

# yield_bpm1i04WS_rms vs Slug




Right In: 126.551+/-0.036 $\chi^2$/NDF: 1477429.4/15

Left Out: 192.596+/-0.038 $\chi^2$/NDF:504955.5/16

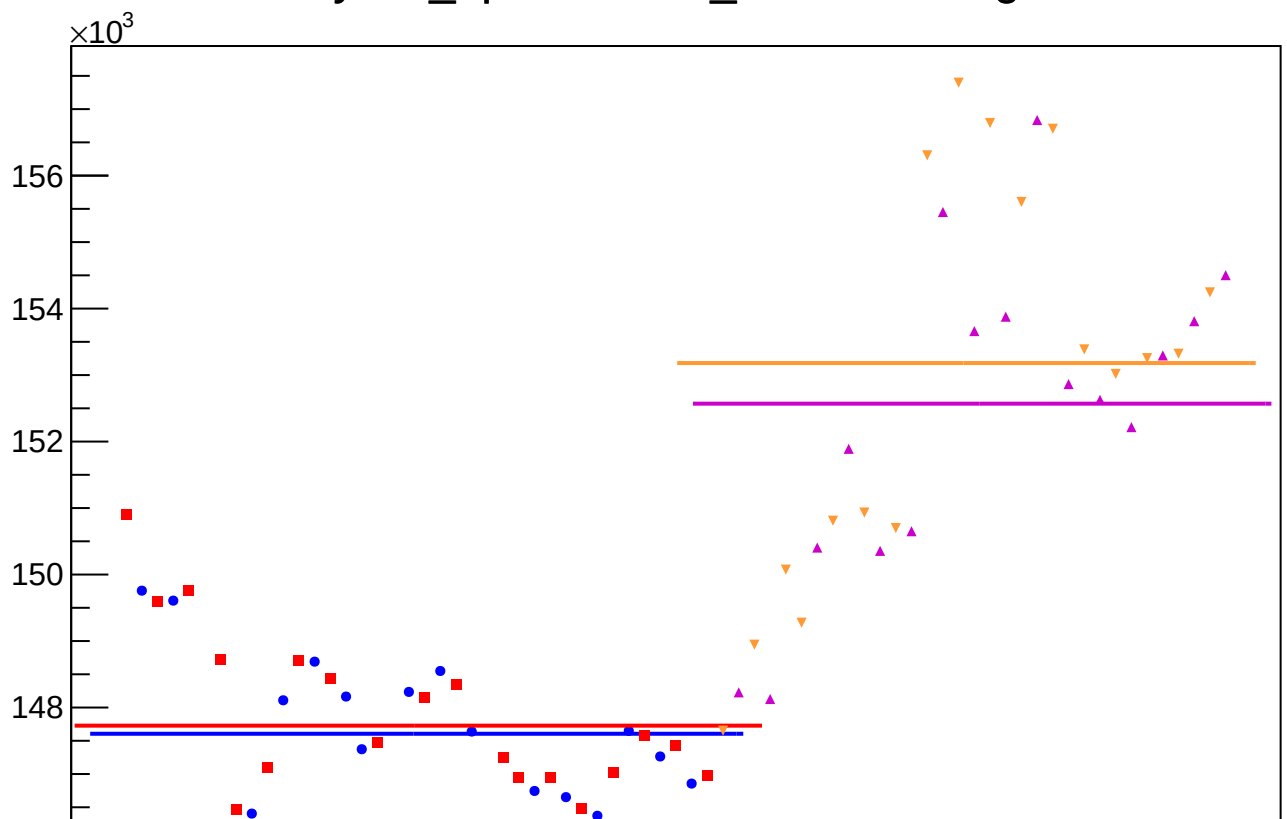
Right Out: 120.723+/-0.034 $\chi^2$/NDF: 1632726.2/18

Left In: 197.675+/-0.039 $\chi^2$/NDF:467372.0/15

+ sign 157.886+/-0.026 $\chi^2$/NDF: 3584685.4/32

All: 155.802+/-0.018 $\chi^2$/NDF: 7908375.0/67

- sign 153.787+/-0.026 $\chi^2$/NDF: 4311103.2/34




Right In: 147605.604+/-0.062 $\chi^2$/NDF: 200513366.5/15

Left Out: 153180.970+/-0.058 $\chi^2$/NDF:2928705775.1/16

Right Out: 147727.598+/-0.059 $\chi^2$/NDF: 194800119.4/18

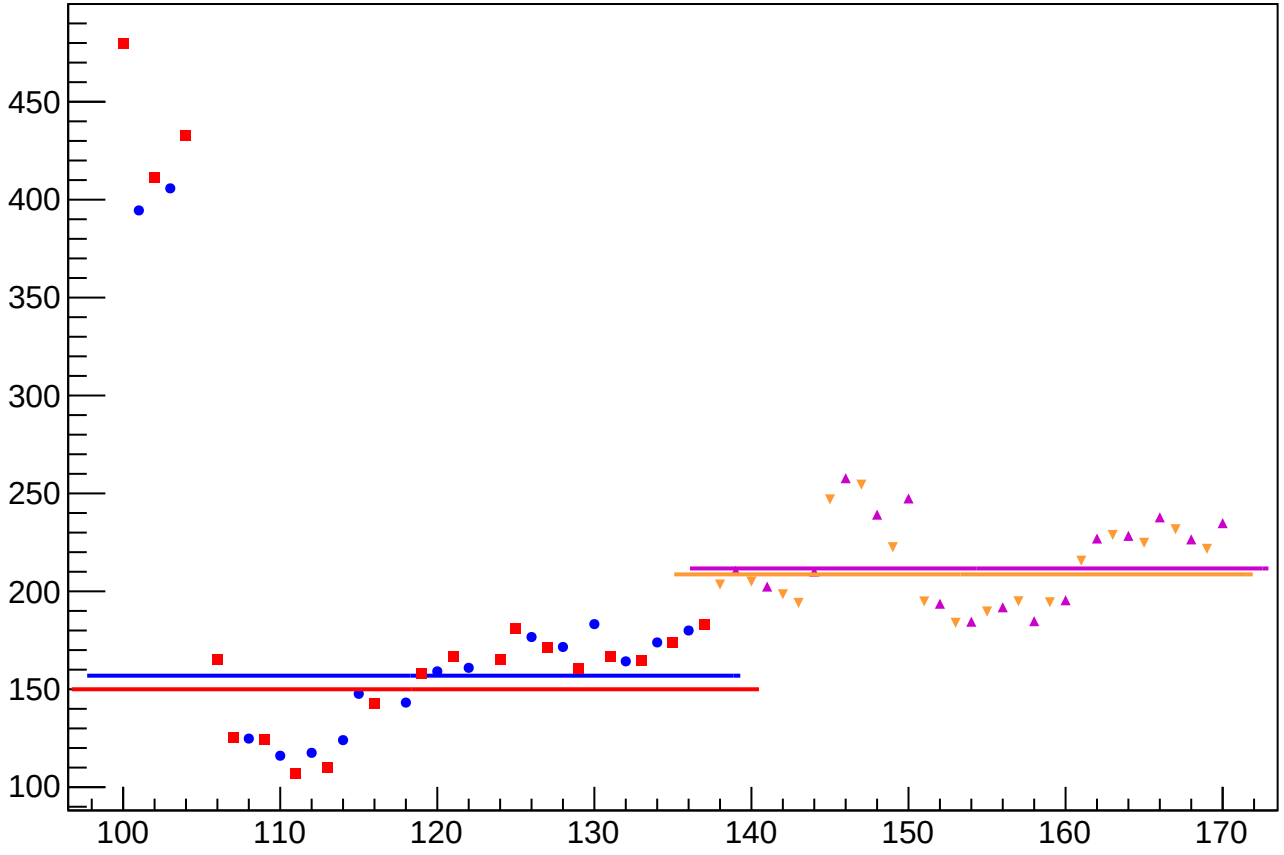
Left In: 152570.208+/-0.059 $\chi^2$/NDF:1808793213.9/15

+ sign 150615.875+/-0.042 $\chi^2$/NDF: 7429323050.2

All: 150377.648+/-0.030 $\chi^2$/NDF: 12868740

- sign 150147.100+/-0.042 $\chi^2$/NDF: 5377226383.3/

# yield_bpm1i06WS_rms vs Slug




Right In: 156.927+/-0.044 $\chi^2$/NDF: 1265768.6/15

Left Out: 208.655+/-0.041 $\chi^2$/NDF:224174.5/16

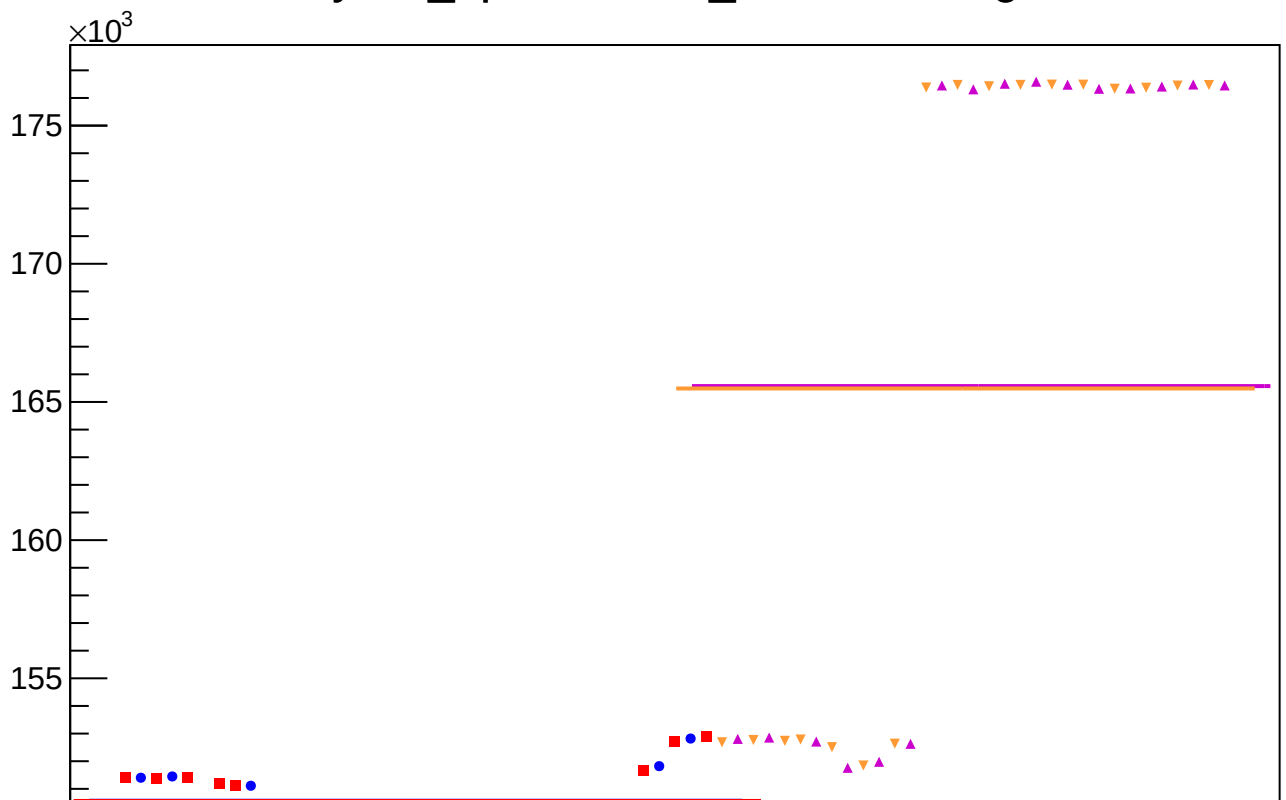
Right Out: 149.994+/-0.042 $\chi^2$/NDF: 1453928.8/18

Left In: 211.686+/-0.042 $\chi^2$/NDF:286780.5/15

+ sign 184.856+/-0.030 $\chi^2$/NDF: 2230254.3/32

All: 182.803+/-0.021 $\chi^2$/NDF: 5075218.6/67

- sign 180.817+/-0.029 $\chi^2$/NDF: 2835728.8/34




Right In: 150568.638+/-0.055 $\chi^2$/NDF: 237155171.8/15

Left Out: 165487.563+/-0.052 $\chi^2$/NDF:52503893875.8/16

Right Out: 150561.647+/-0.051 $\chi^2$/NDF: 197500782.5/18

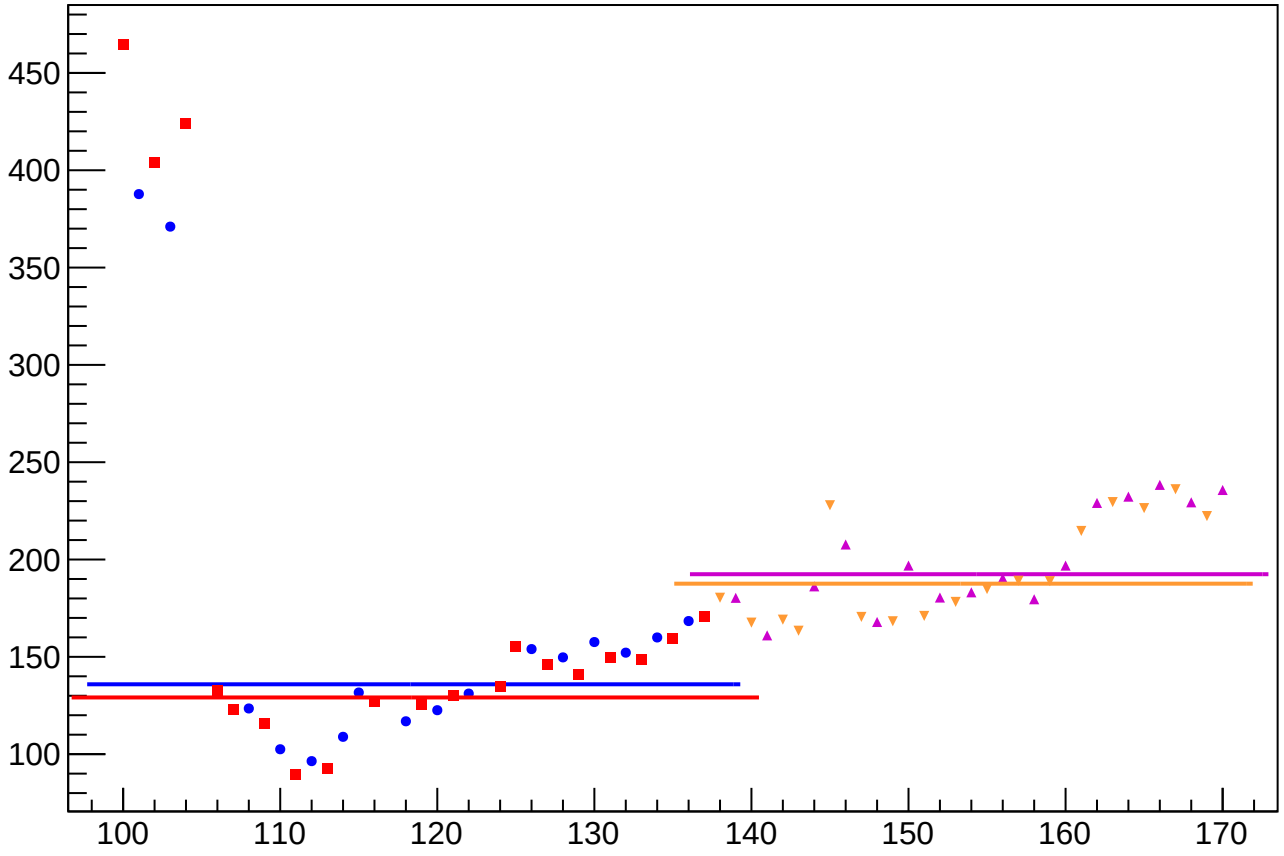
Left In: 165574.255+/-0.054 $\chi^2$/NDF:49432437926.3/15

+ sign 158402.447+/-0.038 $\chi^2$/NDF: 91929364044.

All: 158036.039+/-0.026 $\chi^2$/NDF: 18287582

- sign 157682.574+/-0.037 $\chi^2$/NDF: 90760222739.

# yield_bpm2i01WS_rms vs Slug




Right In: 135.896+/-0.039 $\chi^2$/NDF: 1416332.3/15

Left Out: 187.590+/-0.037 $\chi^2$/NDF:405299.1/16

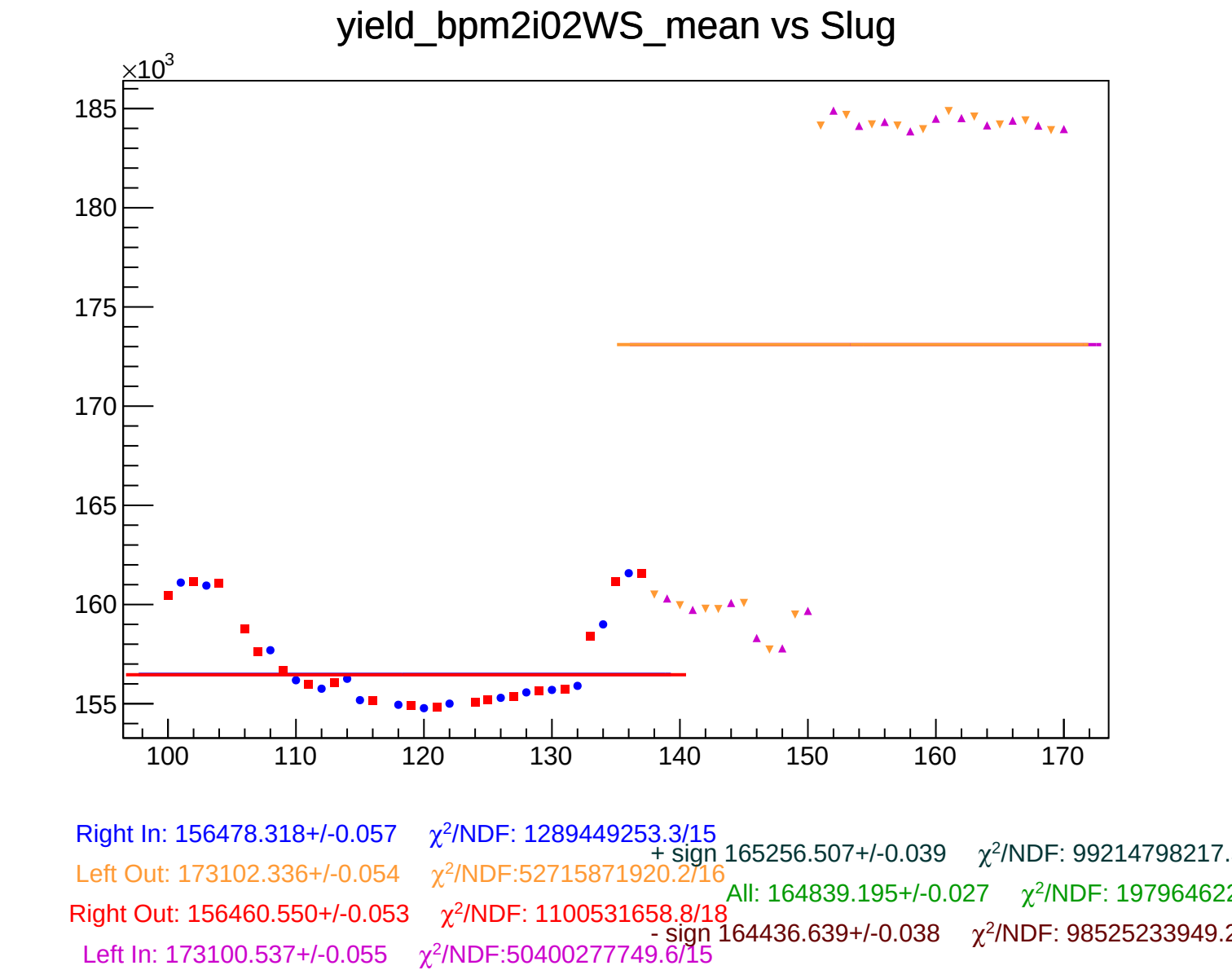
Right Out: 129.130+/-0.036 $\chi^2$/NDF: 1614311.0/18

Left In: 192.456+/-0.038 $\chi^2$/NDF:361382.9/15

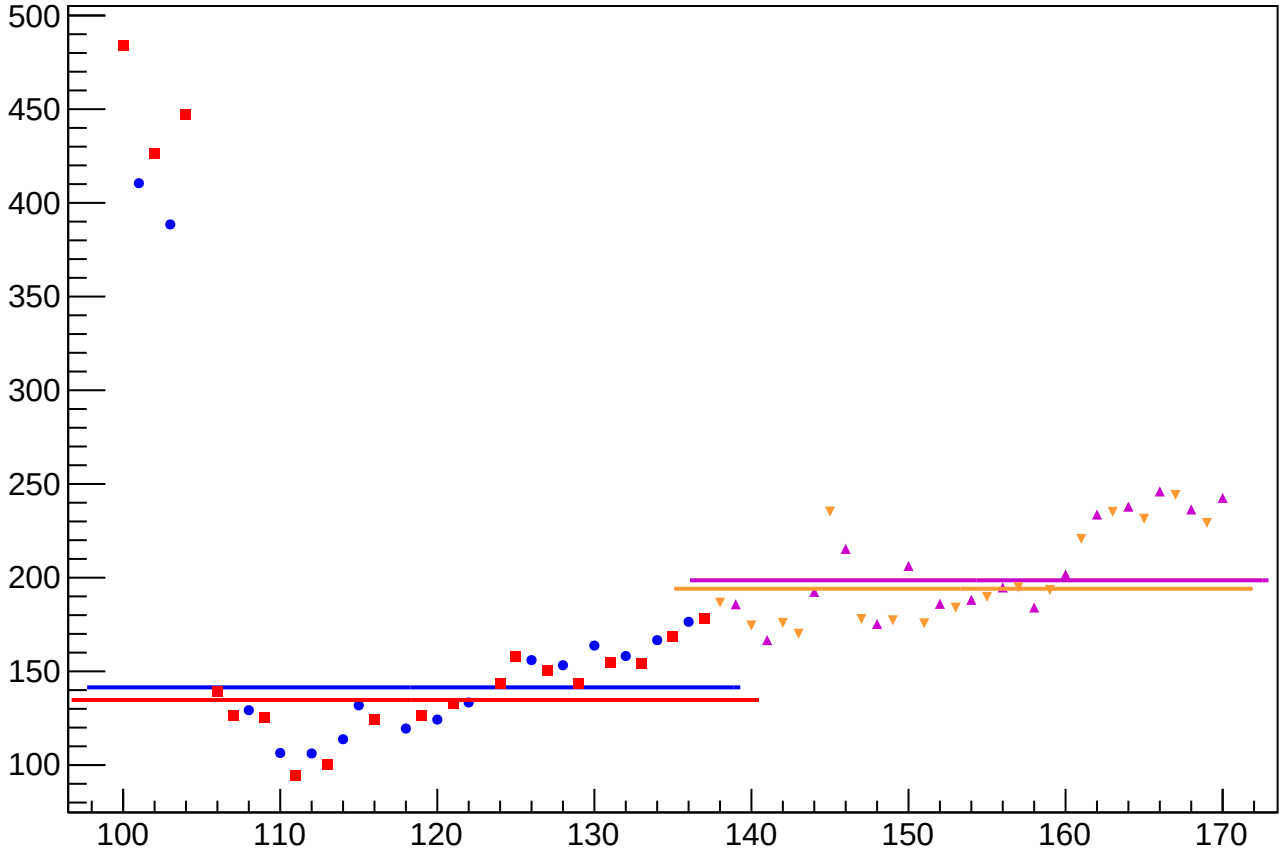
+ sign 163.040+/-0.027 $\chi^2$/NDF: 2762631.8/32

All: 161.069+/-0.019 $\chi^2$/NDF: 6212733.5/67

- sign 159.167+/-0.026 $\chi^2$/NDF: 3439322.0/34


yield_bpm2i02WS_mean vs Slug
×10^3
185
180
175
170
165
160
155
100
110
120
130
140
150
160
170
Right In: 156478.318+/-0.057 χ²/NDF: 1289449253.3/15
Left Out: 173102.336+/-0.054 χ²/NDF:52715871920.2/16
Right Out: 156460.550+/-0.053 χ²/NDF: 1100531658.8/18
Left In: 173100.537+/-0.055 χ²/NDF:50400277749.6/15
+ sign 165256.507+/-0.039 χ²/NDF: 99214798217.
All: 164839.195+/-0.027 χ²/NDF: 19796462
- sign 164436.639+/-0.038 χ²/NDF: 98525233949.2

# yield_bpm2i02WS_rms vs Slug




Right In: 141.470+/-0.040 $\chi^2$/NDF: 1391933.2/15

Left Out: 194.095+/-0.038 $\chi^2$/NDF:378112.3/16

Right Out: 134.746+/-0.038 $\chi^2$/NDF: 1579031.5/18

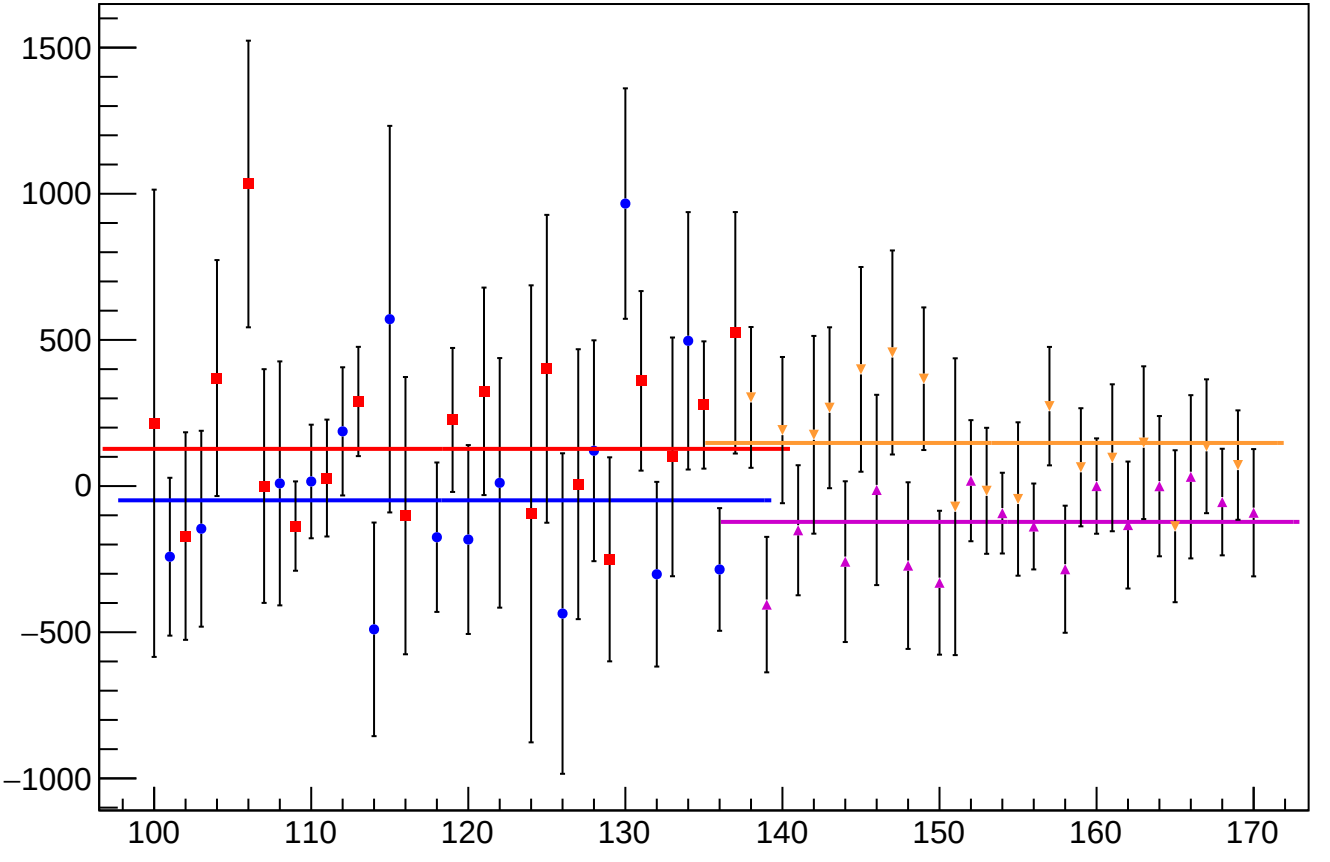
Left In: 198.589+/-0.039 $\chi^2$/NDF:349126.1/15

\+ sign 169.258+/-0.028 $\chi^2$/NDF: 2676129.4/32

All: 167.268+/-0.019 $\chi^2$/NDF: 5998969.1/67

\- sign 165.348+/-0.027 $\chi^2$/NDF: 3312622.4/34

# asym_bcm_target_mean vs Slug




Right In: -48.749+/-76.592 $\chi^2$/NDF: 15.4/15

Left Out: 147.522+/-60.856 $\chi^2$/NDF:6.0/16

Right Out: 127.249+/-68.506 $\chi^2$/NDF: 12.9/18

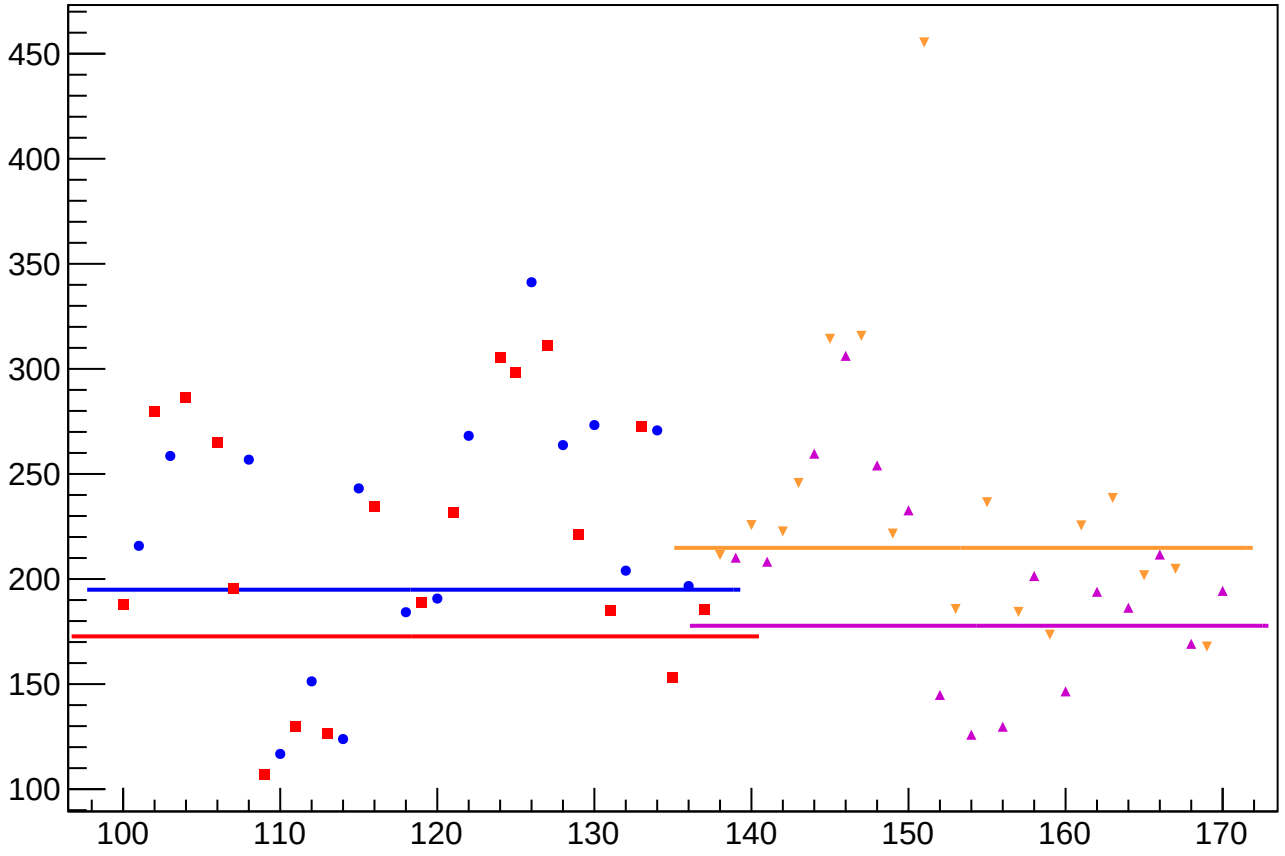
Left In: -122.538+/-51.731 $\chi^2$/NDF:5.2/15

+ sign 71.566+/-47.647 $\chi^2$/NDF: 25.5/32

All: 12.506+/-31.201 $\chi^2$/NDF: 54.7/67

- sign -31.829+/-41.283 $\chi^2$/NDF: 26.5/34

# asym_bcm_target_rms vs Slug




Right In: 194.923+/-0.054 $\chi^2$/NDF: 1028901.2/15

Left Out: 214.843+/-0.043 $\chi^2$/NDF:1143392.5/16

Right Out: 172.704+/-0.048 $\chi^2$/NDF: 1631350.4/18

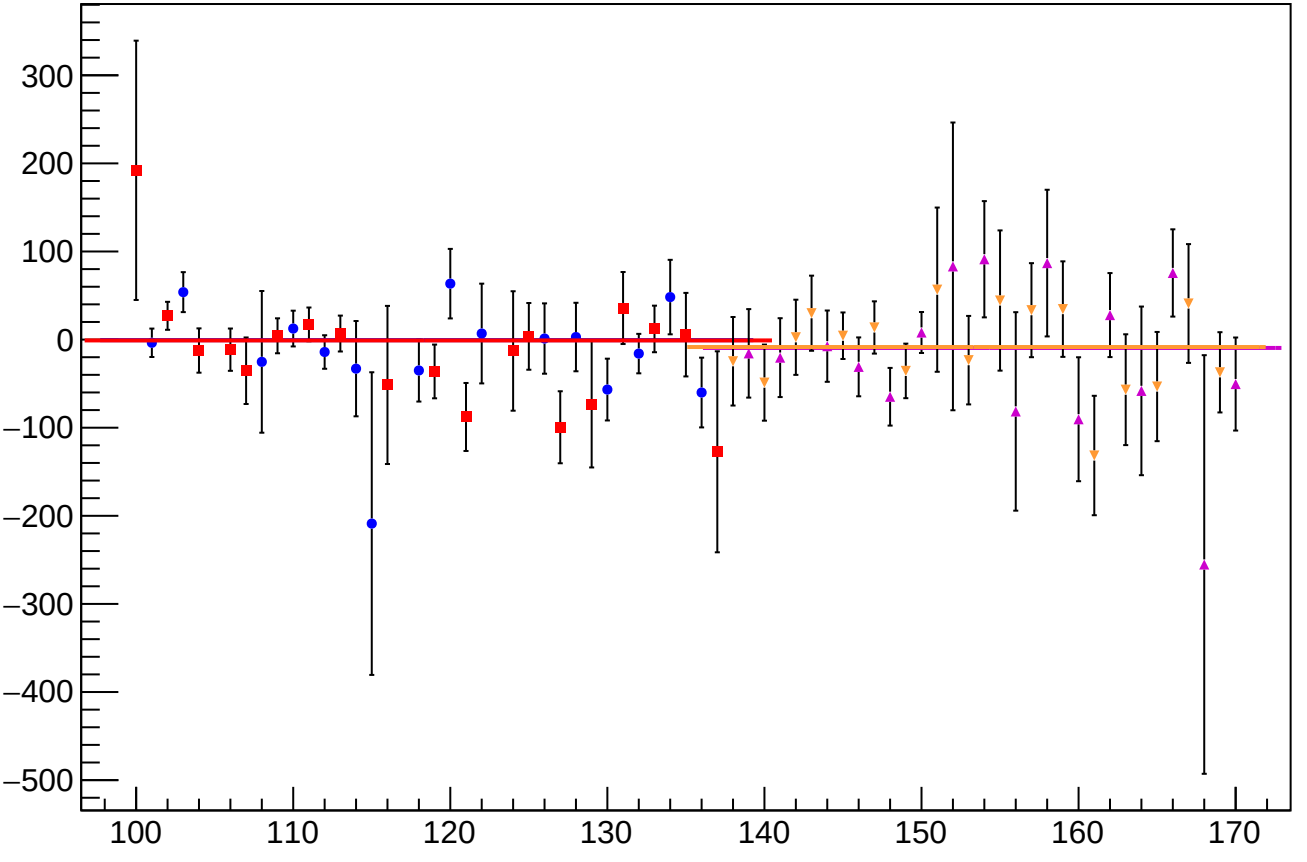
Left In: 177.752+/-0.037 $\chi^2$/NDF:1511104.1/15

+ sign 207.134+/-0.034 $\chi^2$/NDF: 2255223.6/32

All: 189.304+/-0.022 $\chi^2$/NDF: 5894909.3/67

- sign 175.919+/-0.029 $\chi^2$/NDF: 3149369.8/34

# asym_bcm_an_diff_mean vs Slug




Right In: -0.624+/-7.340 $\chi^2$/NDF: 18.9/15

Left Out: -8.431+/-10.885 $\chi^2$/NDF:11.0/16

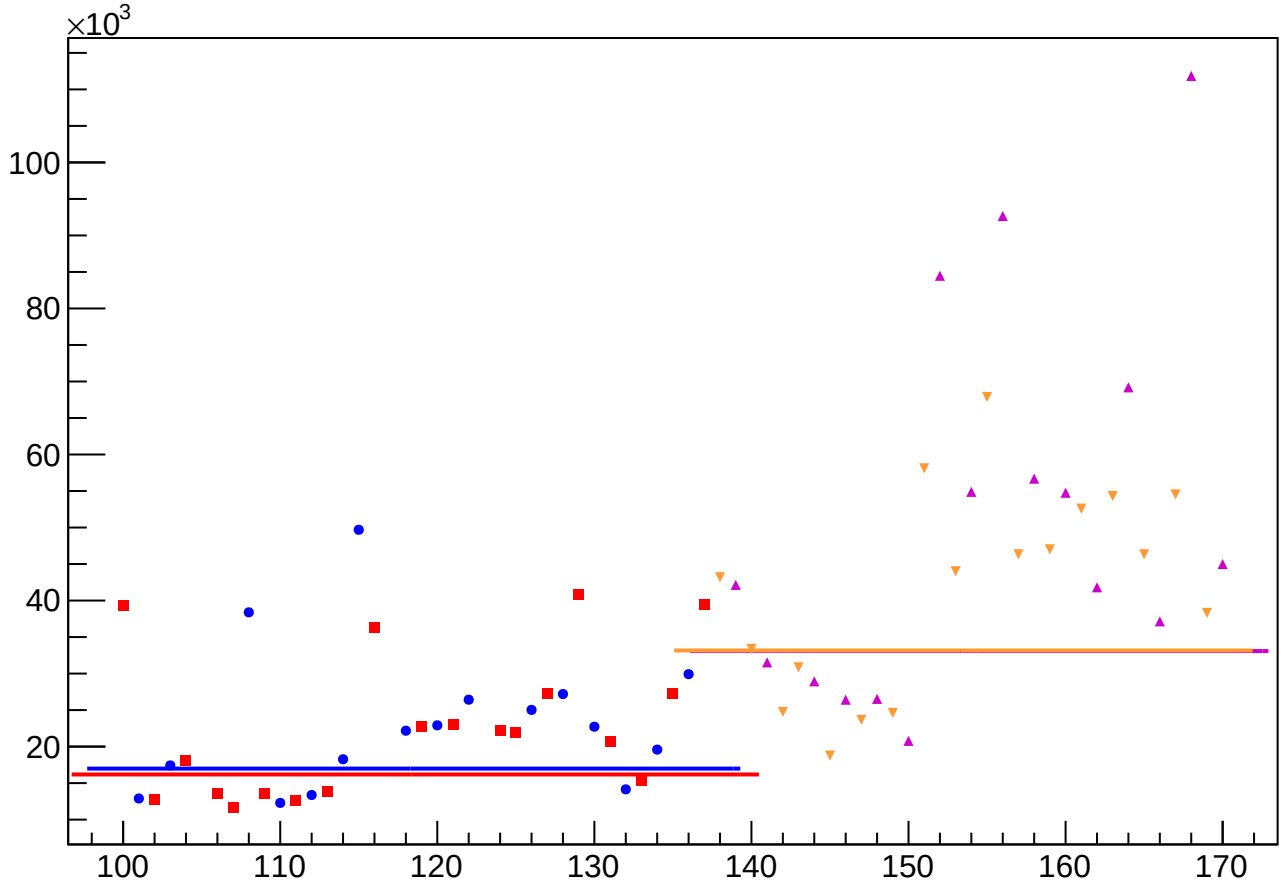
Right Out: -0.938+/-6.767 $\chi^2$/NDF: 23.1/18

Left In: -9.468+/-11.776 $\chi^2$/NDF:15.1/15

+ sign -3.064+/-6.086 $\chi^2$/NDF: 30.3/32

All: -3.060+/-4.224 $\chi^2$/NDF: 68.9/67

- sign -3.055+/-5.867 $\chi^2$/NDF: 38.6/34




Right In: 16986.402+/-5.190 $\chi^2$/NDF: 1194096.1/15

Left Out: 33164.787+/-7.697 $\chi^2$/NDF:2691943.3/16

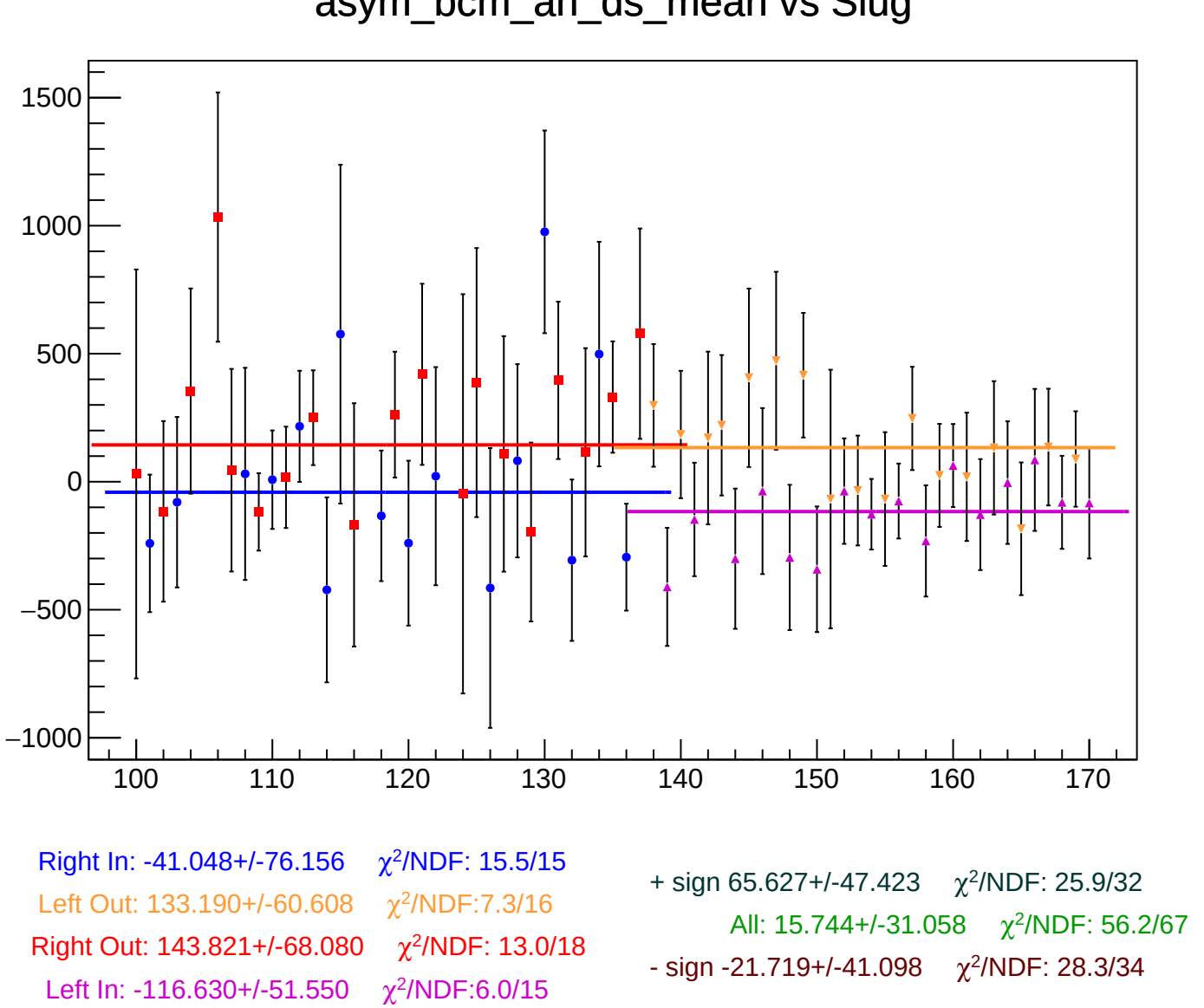
Right Out: 16181.928+/-4.785 $\chi^2$/NDF: 1251495.8/18

Left In: 33083.405+/-8.327 $\chi^2$/NDF:2821100.3/15

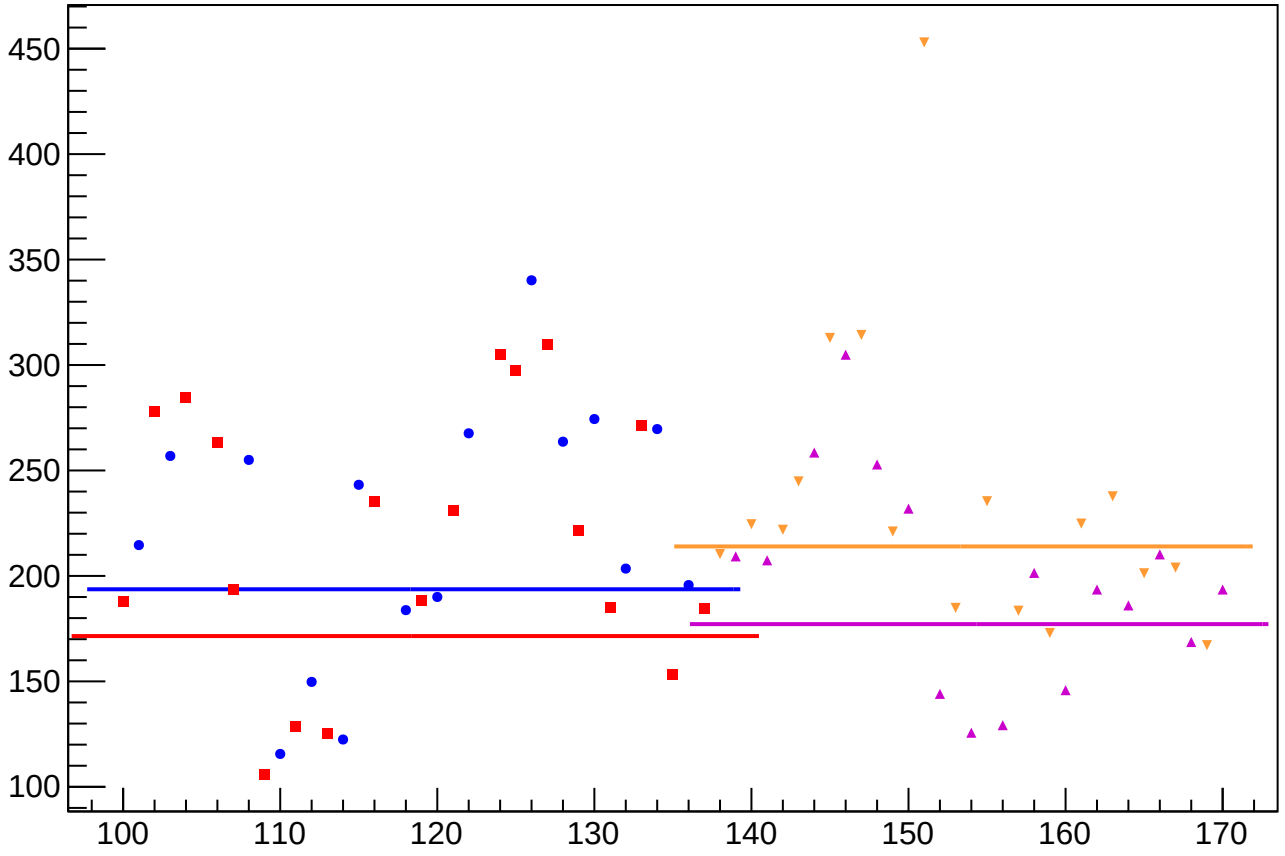
+ sign 22043.923+/-4.303 $\chi^2$/NDF: 6923268.0/32

All: 21180.280+/-2.987 $\chi^2$/NDF: 14170668.9

- sign 20377.530+/-4.149 $\chi^2$/NDF: 7169684.5/34


asym_bcm_an_ds_mean vs Slug
1500
1000
500
0
−500
−1000
100
110
120
130
140
150
160
170
Right In: -41.048+/-76.156 χ²/NDF: 15.5/15
Left Out: 133.190+/-60.608 χ²/NDF:7.3/16
Right Out: 143.821+/-68.080 χ²/NDF: 13.0/18
Left In: -116.630+/-51.550 χ²/NDF:6.0/15
+ sign 65.627+/-47.423 χ²/NDF: 25.9/32
All: 15.744+/-31.058 χ²/NDF: 56.2/67
- sign -21.719+/-41.098 χ²/NDF: 28.3/34

# asym_bcm_an_ds_rms vs Slug




Right In: 193.670+/-0.054 $\chi^2$/NDF: 1049772.0/15

Left Out: 213.981+/-0.043 $\chi^2$/NDF:1141950.3/16

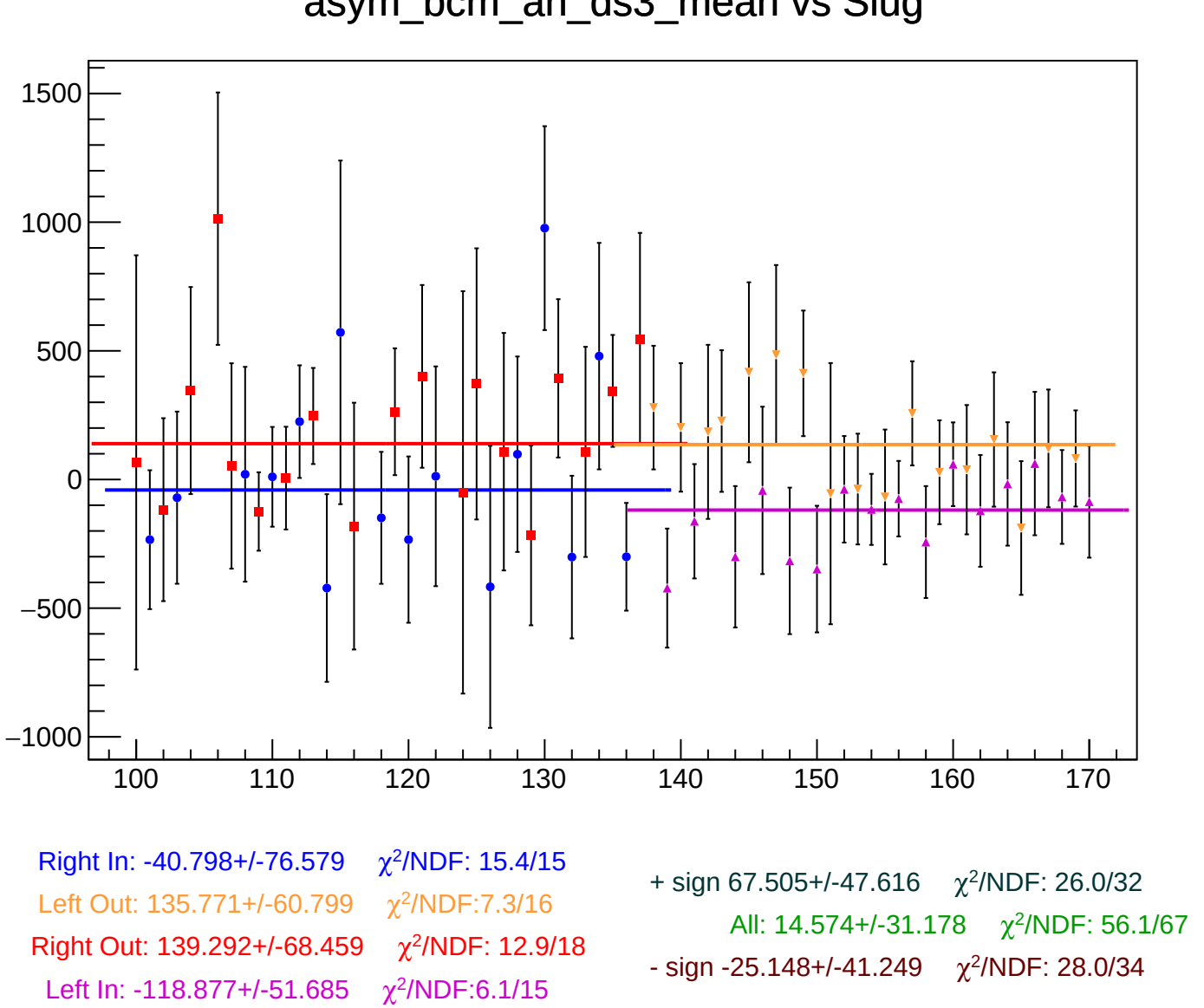
Right Out: 171.484+/-0.048 $\chi^2$/NDF: 1652989.7/18

Left In: 177.149+/-0.036 $\chi^2$/NDF:1507967.5/15

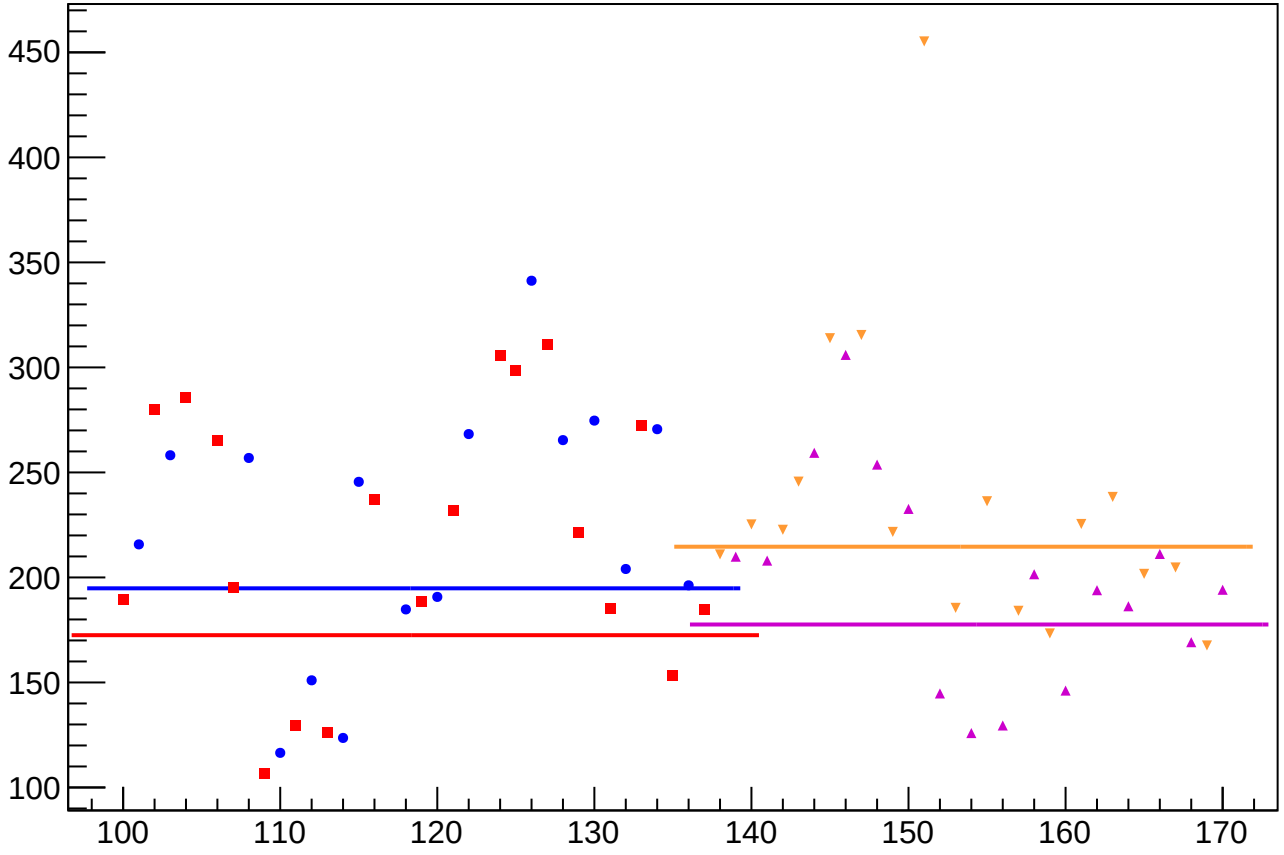
+ sign 206.105+/-0.034 $\chi^2$/NDF: 2278812.4/32

All: 188.389+/-0.022 $\chi^2$/NDF: 5937290.2/67

- sign 175.084+/-0.029 $\chi^2$/NDF: 3169758.7/34


asym_bcm_an_ds3_mean vs Slug
1500
1000
500
0
−500
−1000
100
110
120
130
140
150
160
170
Right In: -40.798+/-76.579 χ²/NDF: 15.4/15
Left Out: 135.771+/-60.799 χ²/NDF:7.3/16
Right Out: 139.292+/-68.459 χ²/NDF: 12.9/18
Left In: -118.877+/-51.685 χ²/NDF:6.1/15
+ sign 67.505+/-47.616 χ²/NDF: 26.0/32
All: 14.574+/-31.178 χ²/NDF: 56.1/67
- sign -25.148+/-41.249 χ²/NDF: 28.0/34

# asym_bcm_an_ds3_rms vs Slug




Right In: 194.819+/-0.054 $\chi^2$/NDF: 1039096.7/15

Left Out: 214.633+/-0.043 $\chi^2$/NDF:1144673.9/16

Right Out: 172.507+/-0.048 $\chi^2$/NDF: 1642059.1/18

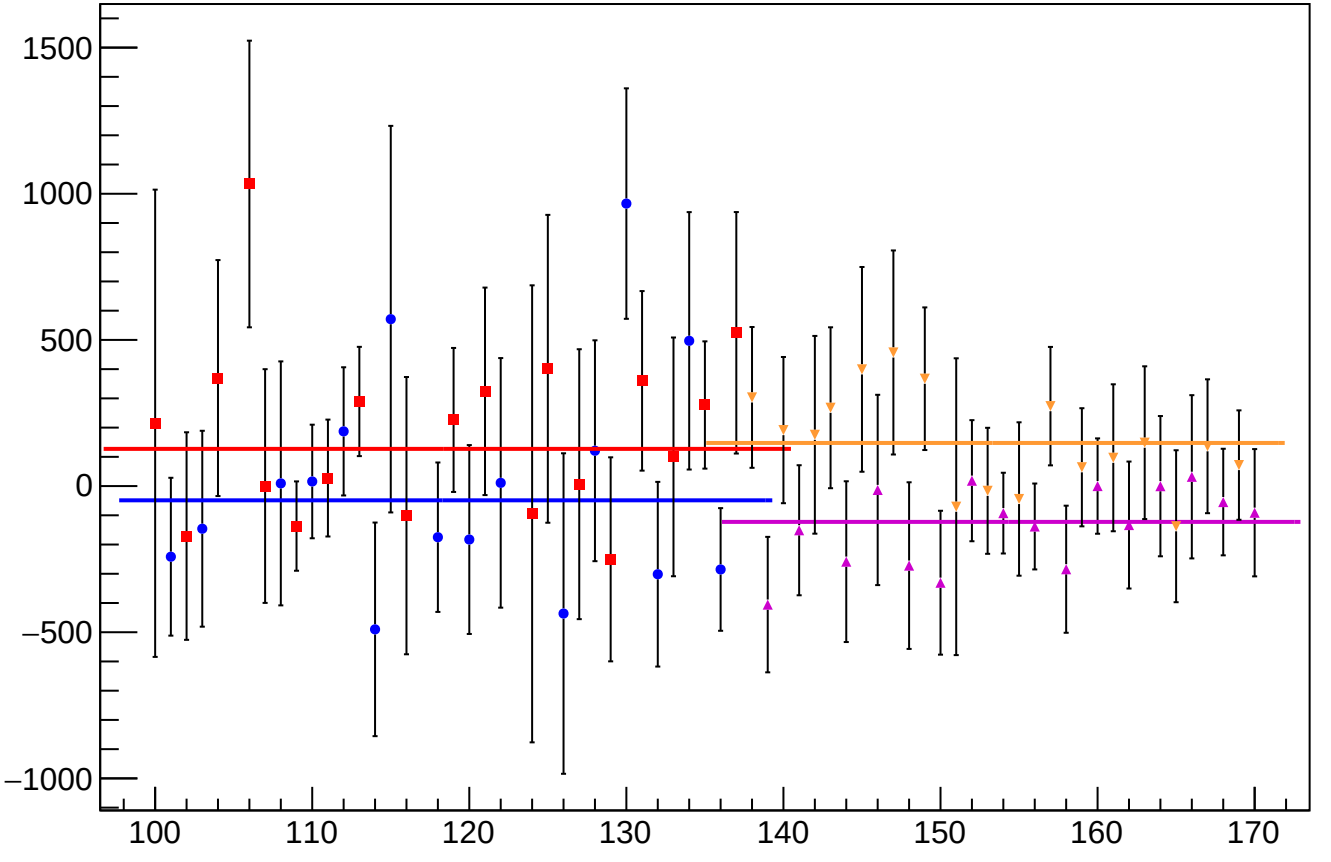
Left In: 177.594+/-0.037 $\chi^2$/NDF:1511282.0/15

+ sign 206.973+/-0.034 $\chi^2$/NDF: 2265894.6/32

All: 189.134+/-0.022 $\chi^2$/NDF: 5917619.0/67

- sign 175.747+/-0.029 $\chi^2$/NDF: 3160375.9/34

# asym_bcm_an_us_mean vs Slug




Right In: -48.749+/-76.592 $\chi^2$/NDF: 15.4/15

Left Out: 147.522+/-60.856 $\chi^2$/NDF:6.0/16

Right Out: 127.249+/-68.506 $\chi^2$/NDF: 12.9/18

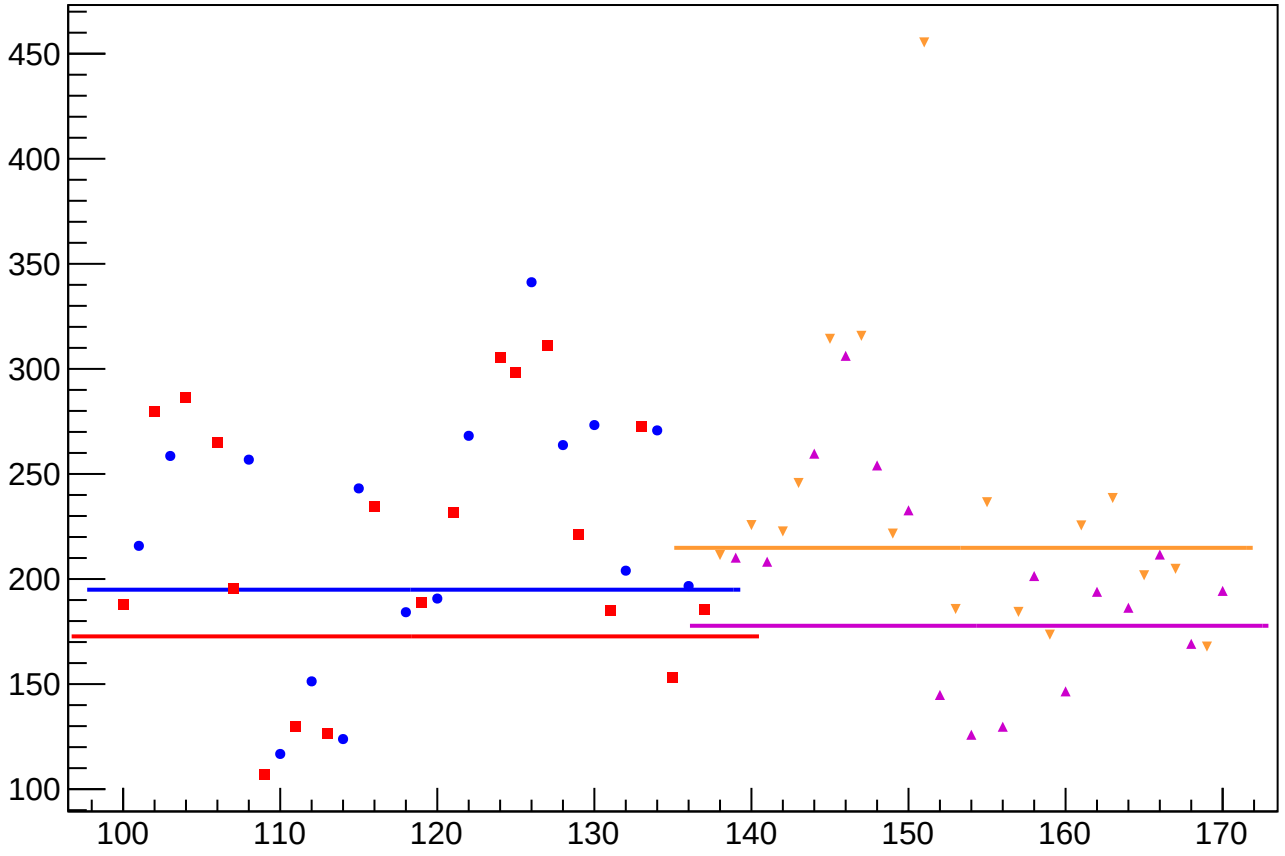
Left In: -122.538+/-51.731 $\chi^2$/NDF:5.2/15

+ sign 71.566+/-47.647 $\chi^2$/NDF: 25.5/32

All: 12.506+/-31.201 $\chi^2$/NDF: 54.7/67

- sign -31.829+/-41.283 $\chi^2$/NDF: 26.5/34

# asym_bcm_an_us_rms vs Slug




Right In: 194.923+/-0.054 $\chi^2$/NDF: 1028901.2/15

Left Out: 214.843+/-0.043 $\chi^2$/NDF:1143392.5/16

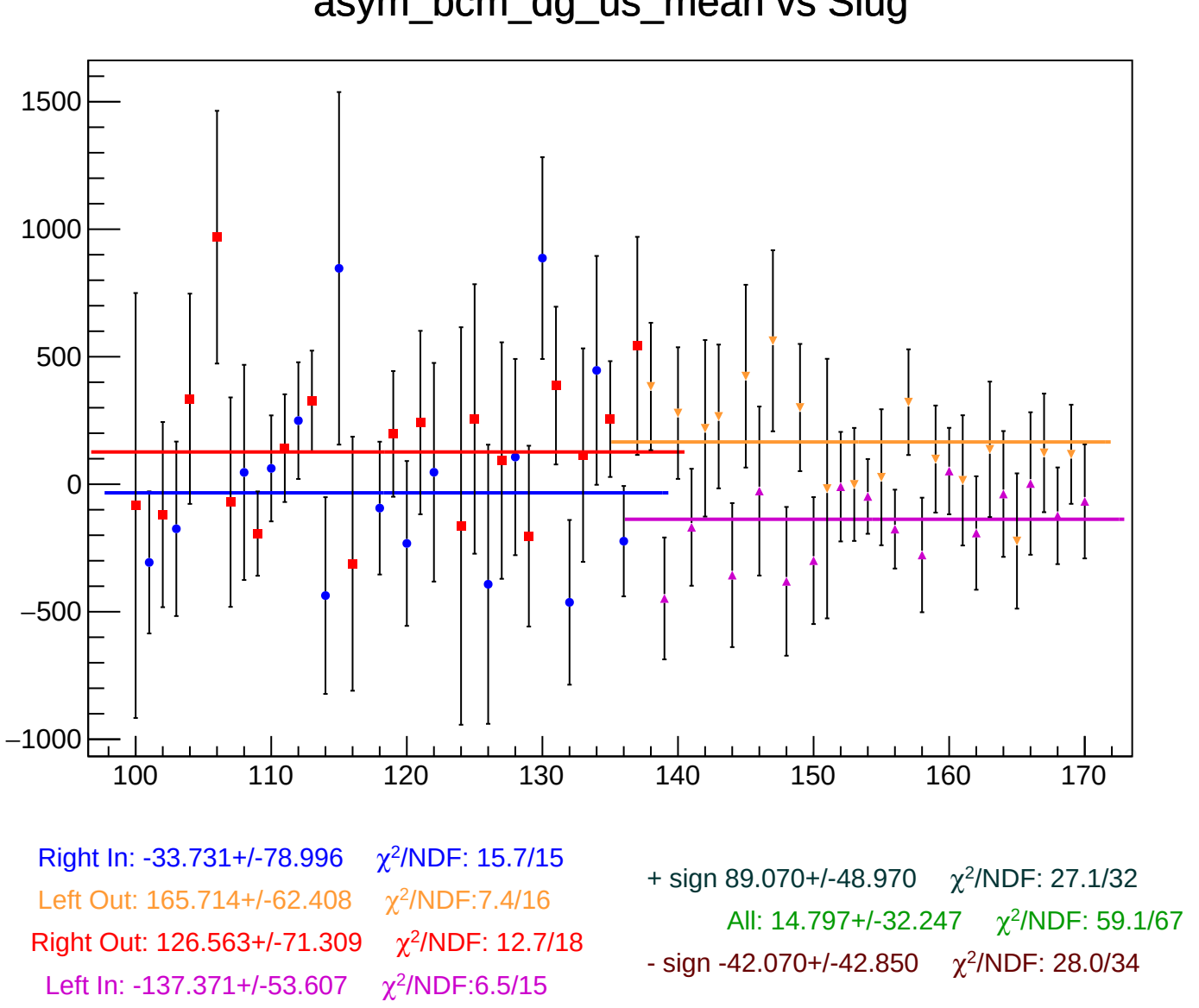
Right Out: 172.704+/-0.048 $\chi^2$/NDF: 1631350.4/18

Left In: 177.752+/-0.037 $\chi^2$/NDF:1511104.1/15

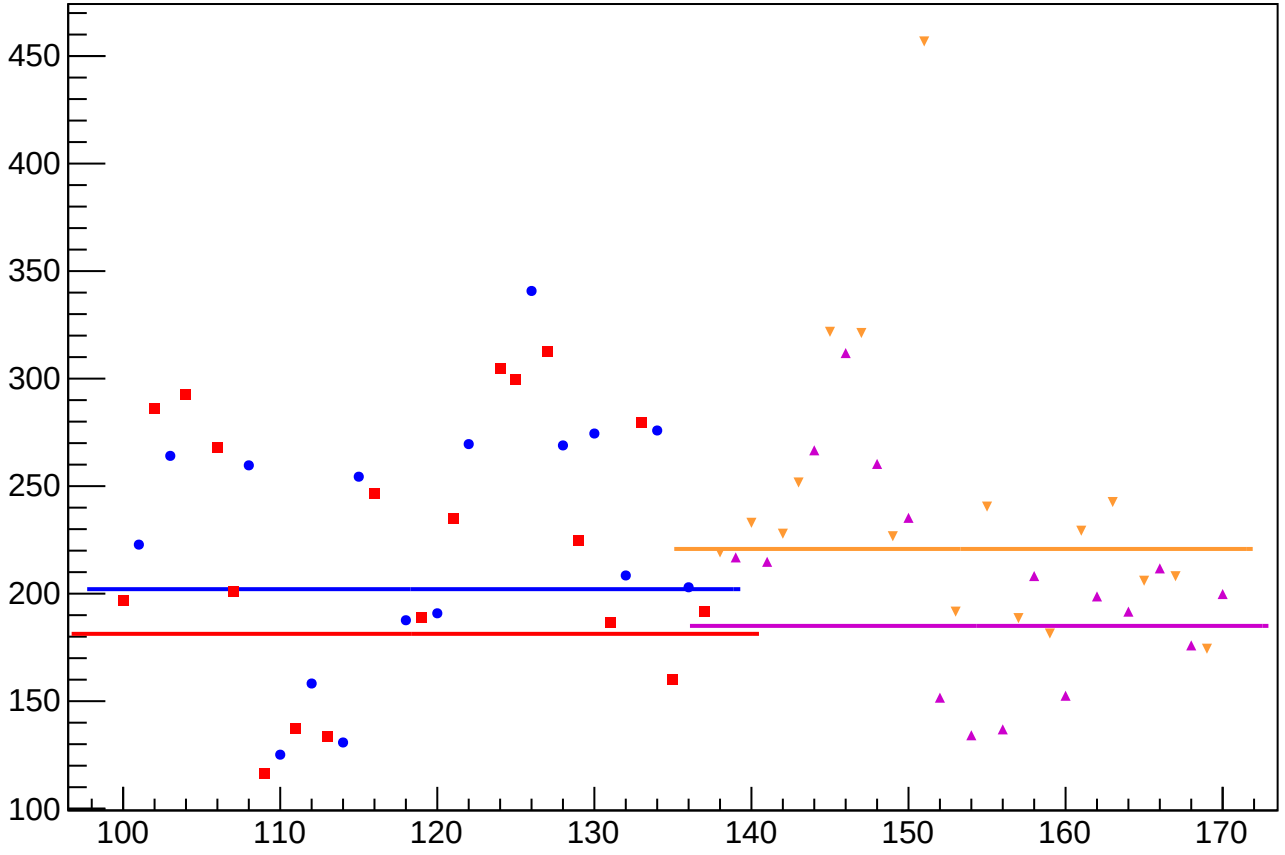
+ sign 207.134+/-0.034 $\chi^2$/NDF: 2255223.6/32

All: 189.304+/-0.022 $\chi^2$/NDF: 5894909.3/67

- sign 175.919+/-0.029 $\chi^2$/NDF: 3149369.8/34


asym_bcm_dg_us_mean vs Slug
1500
1000
500
0
−500
−1000
100
110
120
130
140
150
160
170
Right In: -33.731+/-78.996 χ²/NDF: 15.7/15
Left Out: 165.714+/-62.408 χ²/NDF:7.4/16
Right Out: 126.563+/-71.309 χ²/NDF: 12.7/18
Left In: -137.371+/-53.607 χ²/NDF:6.5/15
+ sign 89.070+/-48.970 χ²/NDF: 27.1/32
All: 14.797+/-32.247 χ²/NDF: 59.1/67
- sign -42.070+/-42.850 χ²/NDF: 28.0/34

# asym_bcm_dg_us_rms vs Slug




Right In: 202.090+/-0.056 $\chi^2$/NDF: 910259.2/15

Left Out: 220.794+/-0.044 $\chi^2$/NDF:1085082.5/16

Right Out: 181.312+/-0.050 $\chi^2$/NDF: 1440989.4/18

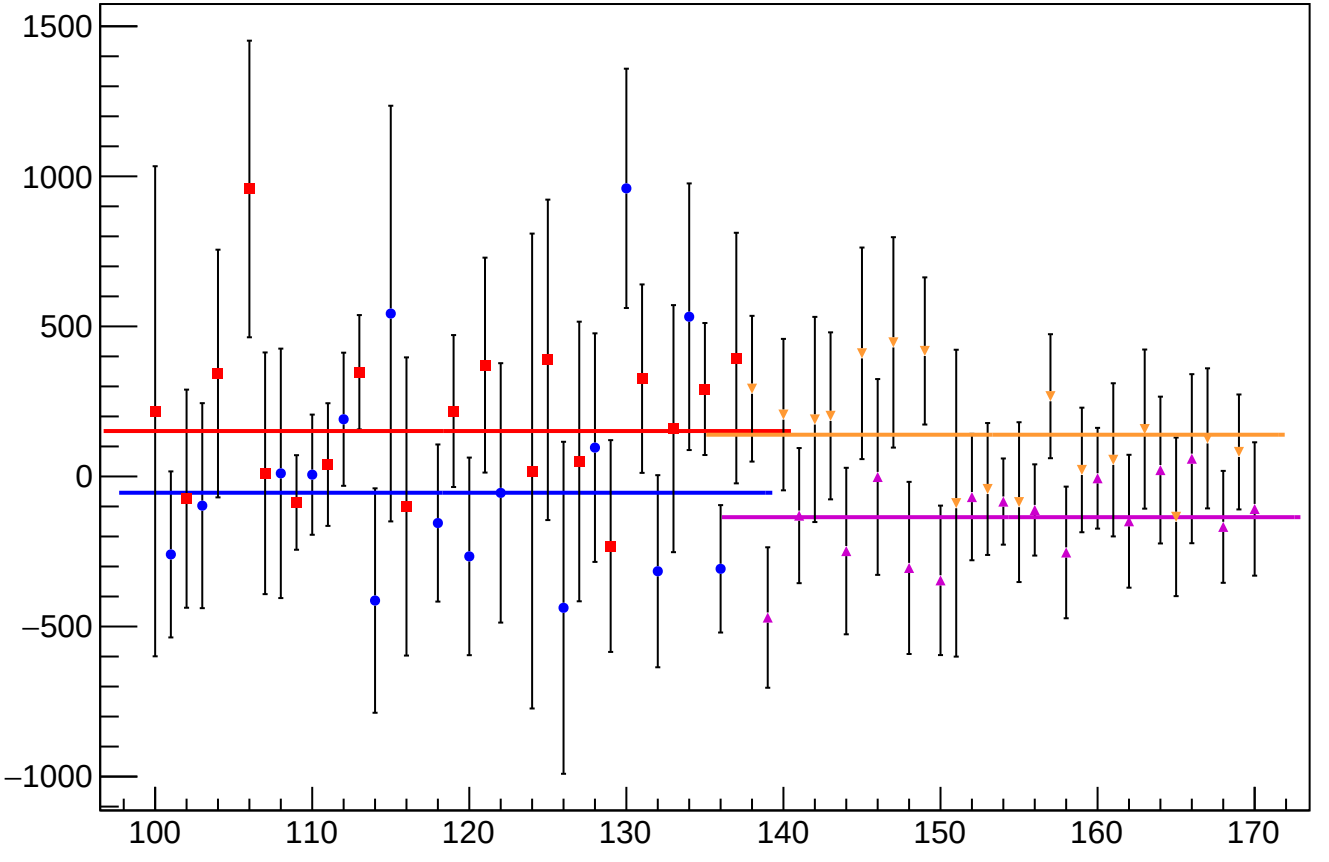
Left In: 185.011+/-0.038 $\chi^2$/NDF:1362888.1/15

+ sign 213.607+/-0.035 $\chi^2$/NDF: 2064378.4/32

All: 196.655+/-0.023 $\chi^2$/NDF: 5294849.1/67

- sign 183.676+/-0.030 $\chi^2$/NDF: 2807316.4/34

# asym_bcm_dg_ds_mean vs Slug




Right In: -54.254+/-77.946 $\chi^2$/NDF: 15.1/15

Left Out: 139.072+/-61.806 $\chi^2$/NDF:6.8/16

Right Out: 151.358+/-69.902 $\chi^2$/NDF: 10.2/18

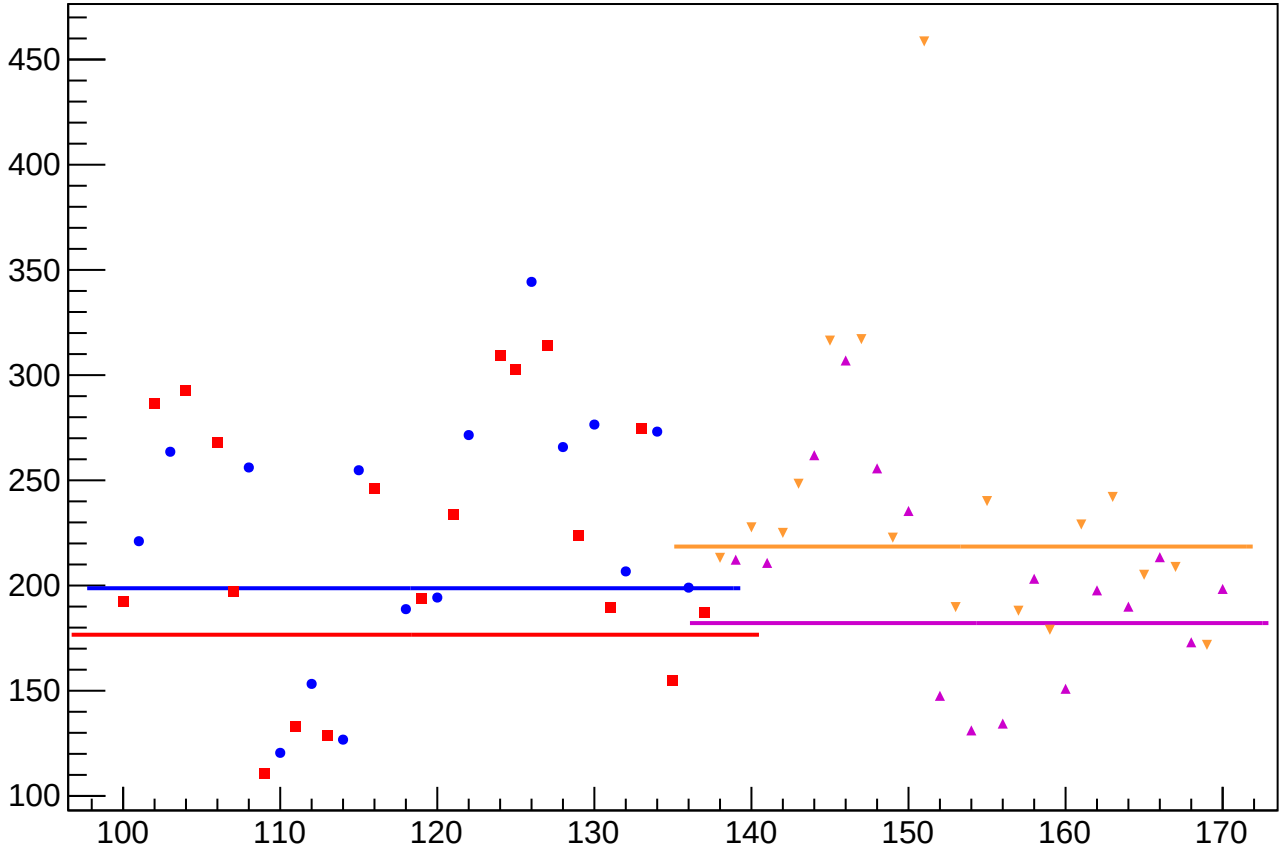
Left In: -135.640+/-52.852 $\chi^2$/NDF:5.5/15

+ sign 64.442+/-48.429 $\chi^2$/NDF: 25.6/32

All: 10.003+/-31.798 $\chi^2$/NDF: 54.3/67

- sign -31.250+/-42.158 $\chi^2$/NDF: 26.5/34

# asym_bcm_dg_ds_rms vs Slug




Right In: 198.718+/-0.055 $\chi^2$/NDF: 994068.9/15

Left Out: 218.527+/-0.044 $\chi^2$/NDF:1091788.9/16

Right Out: 176.621+/-0.049 $\chi^2$/NDF: 1595710.1/18

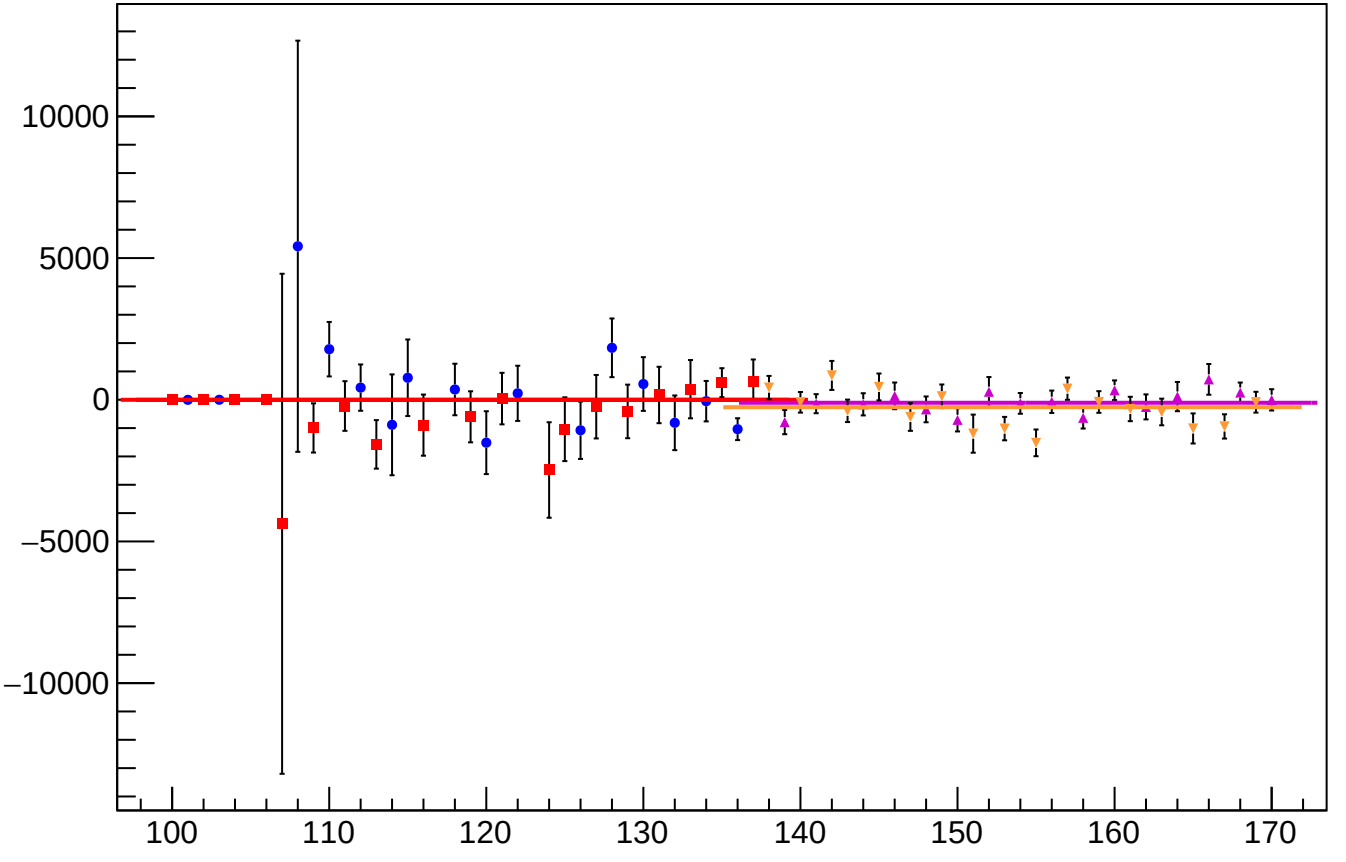
Left In: 182.152+/-0.037 $\chi^2$/NDF:1390046.7/15

+ sign 210.880+/-0.034 $\chi^2$/NDF: 2165164.3/32

All: 193.393+/-0.022 $\chi^2$/NDF: 5617302.6/67

- sign 180.141+/-0.030 $\chi^2$/NDF: 2993723.8/34

# asym_cav4bQ_mean vs Slug




Right In: -1.239+/-2.171 $\chi^2$/NDF: 19.9/15

Left Out: -262.443+/-105.255 $\chi^2$/NDF:31.9/16

Right Out: -1.377+/-2.022 $\chi^2$/NDF: 16.8/18

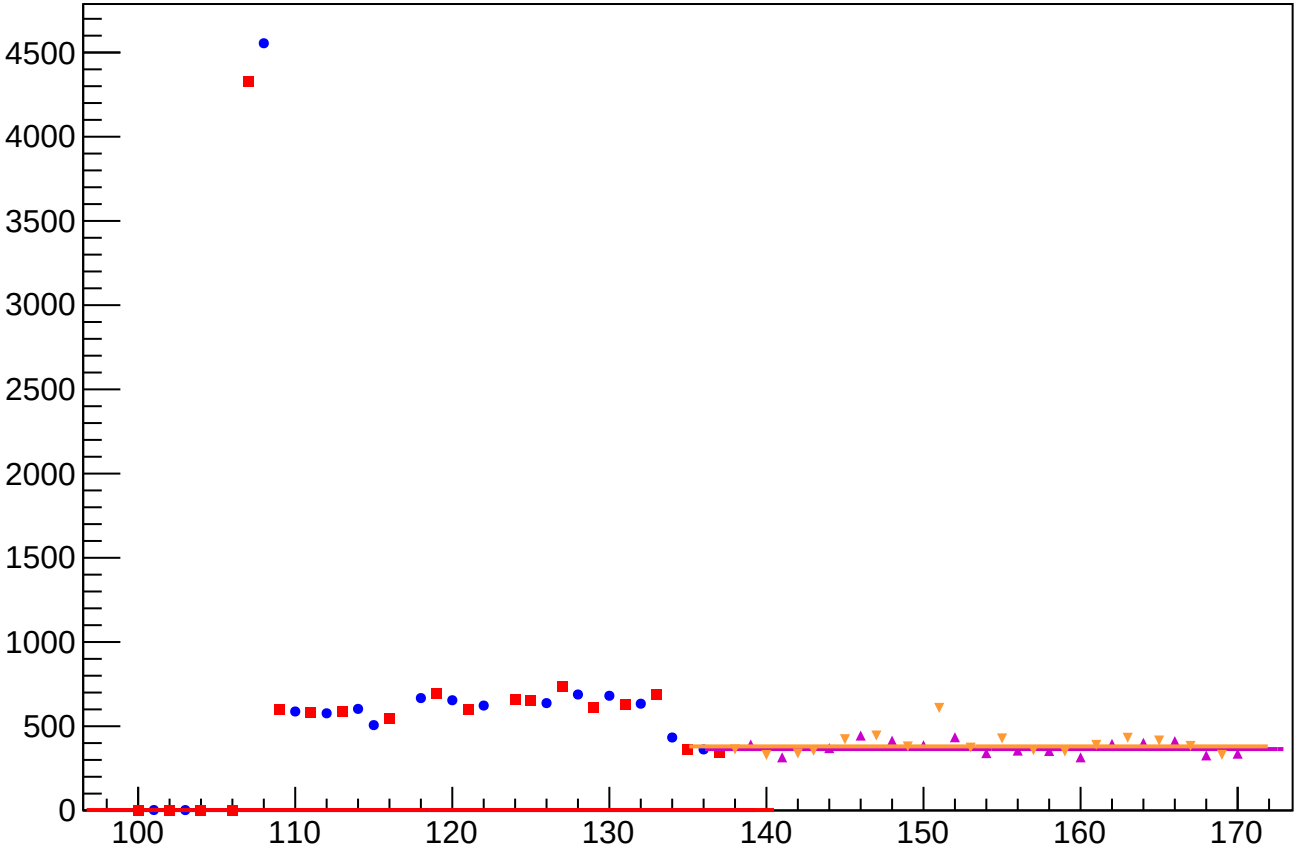
Left In: -105.777+/-101.836 $\chi^2$/NDF:13.2/15

+ sign -1.350+/-2.170 $\chi^2$/NDF: 57.9/32

All: -1.387+/-1.479 $\chi^2$/NDF: 89.0/67

- sign -1.419+/-2.022 $\chi^2$/NDF: 31.1/34

# asym_cav4bQ_rms vs Slug




Right In: 2.477+/-0.002 $\chi^2$/NDF: 11626192.3/15

Left Out: 380.351+/-0.074 $\chi^2$/NDF:456144.4/16

Right Out: 2.462+/-0.001 $\chi^2$/NDF: 11545445.6/18

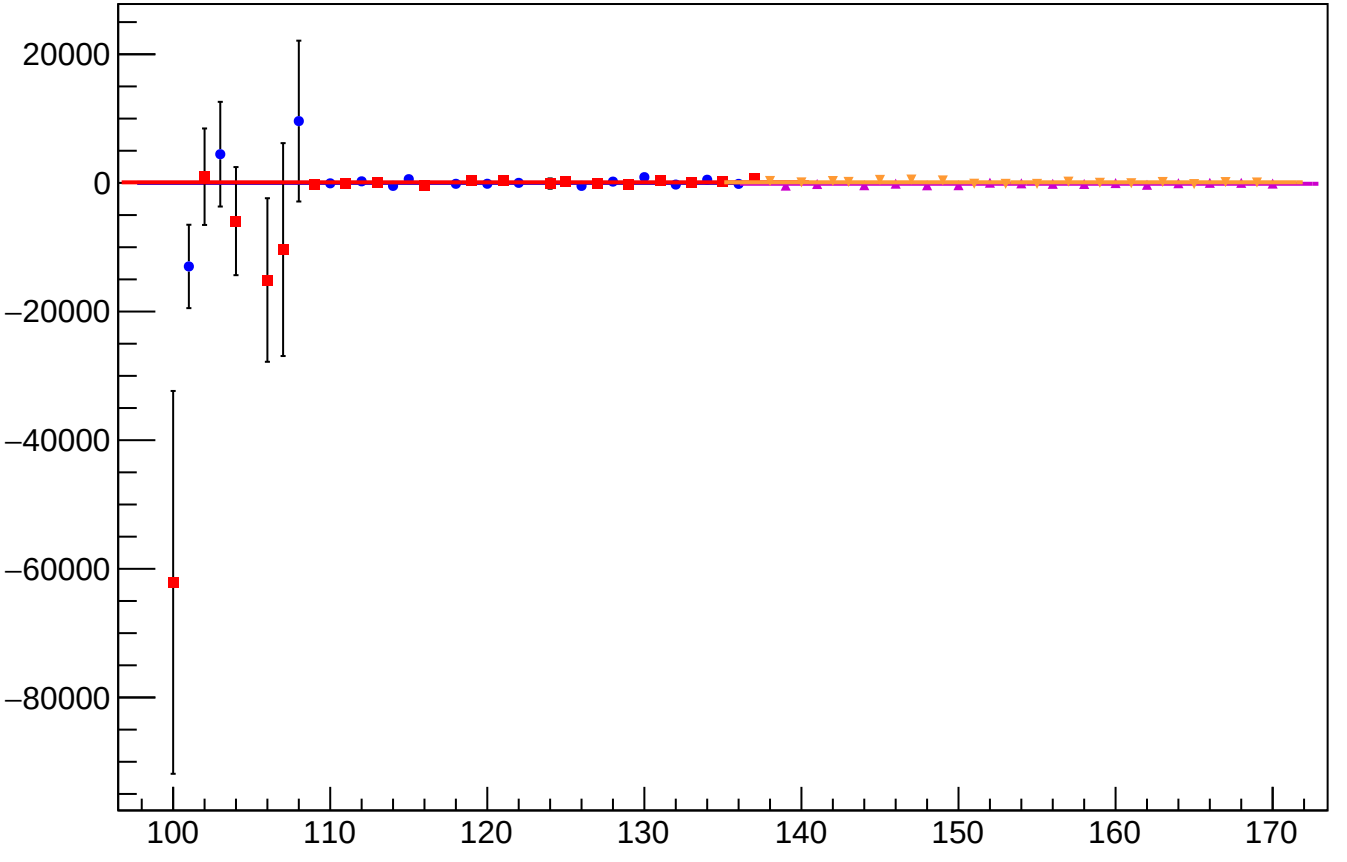
Left In: 364.402+/-0.072 $\chi^2$/NDF:295414.9/15

+ sign 2.637+/-0.002 $\chi^2$/NDF: 37848634.3/32

All: 2.620+/-0.001 $\chi^2$/NDF: 74943422.6/67

- sign 2.605+/-0.001 $\chi^2$/NDF: 37094548.1/34

# asym_cav4cQ_mean vs Slug




Right In: 0.575+/-87.823 $\chi^2$/NDF: 16.8/15

Left Out: 97.619+/-64.436 $\chi^2$/NDF:8.3/16

Right Out: 88.089+/-81.605 $\chi^2$/NDF: 14.9/18

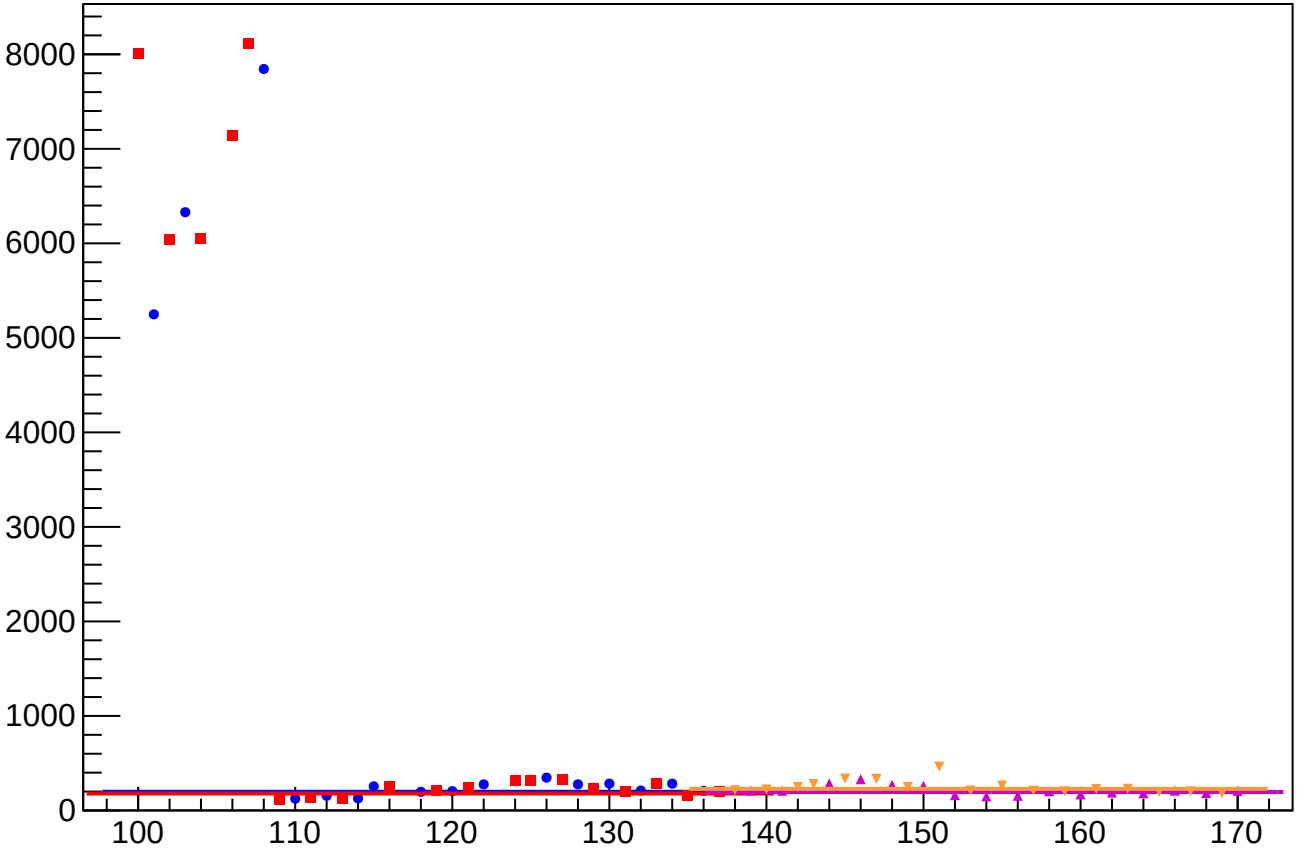
Left In: -135.295+/-56.201 $\chi^2$/NDF:5.9/15

+ sign 63.660+/-51.952 $\chi^2$/NDF: 25.9/32

All: -7.191+/-34.559 $\chi^2$/NDF: 55.1/67

- sign -63.430+/-46.286 $\chi^2$/NDF: 25.9/34

# asym_cav4cQ_rms vs Slug




Right In: 197.620+/-0.062 $\chi^2$/NDF: 3957192.6/15

Left Out: 228.271+/-0.046 $\chi^2$/NDF:1075634.3/16

Right Out: 179.250+/-0.058 $\chi^2$/NDF: 4418422.9/18

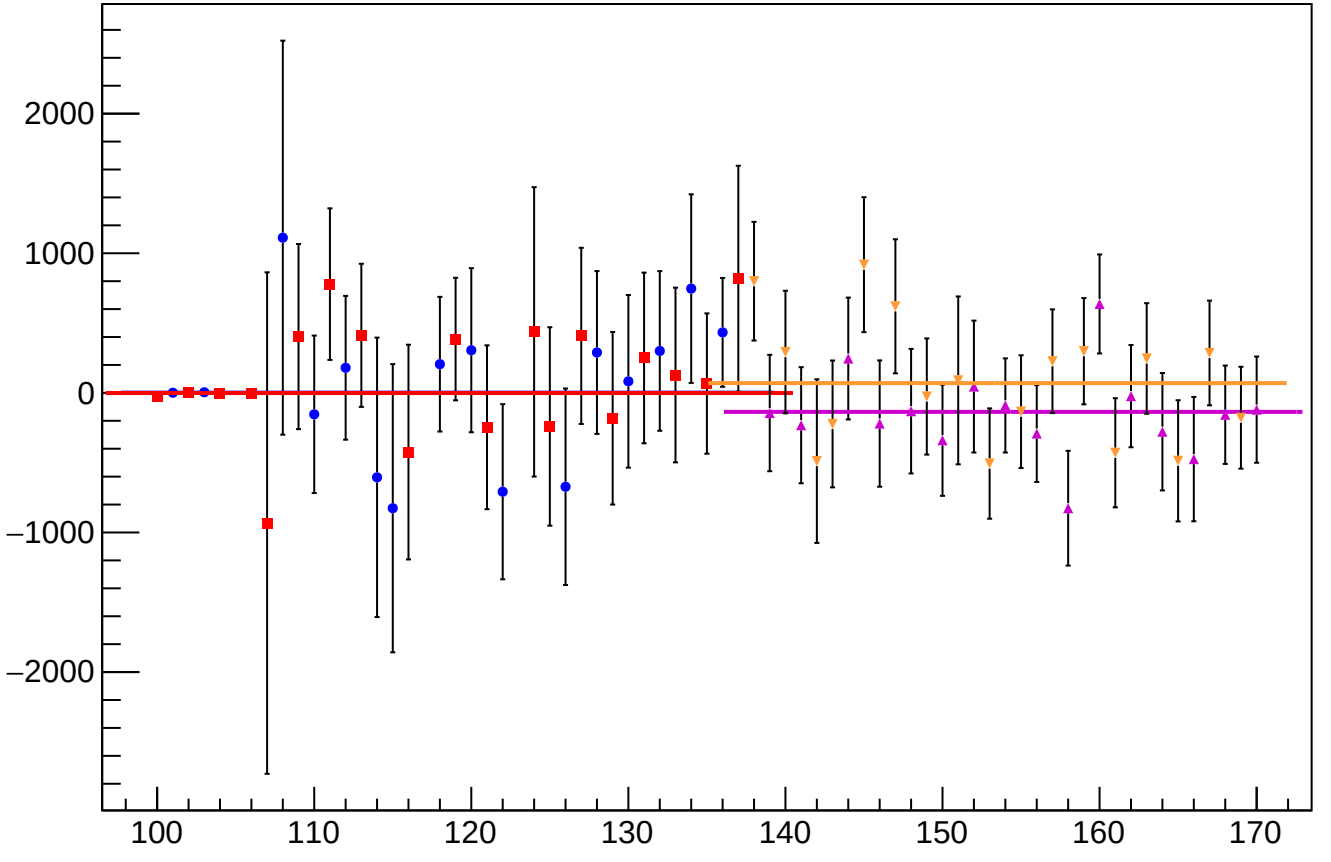
Left In: 195.226+/-0.040 $\chi^2$/NDF:1087999.9/15

+ sign 217.545+/-0.037 $\chi^2$/NDF: 5191191.4/32

All: 202.237+/-0.024 $\chi^2$/NDF: 11061068.7/67

- sign 190.087+/-0.033 $\chi^2$/NDF: 5558420.4/34

# asym_cav4dQ_mean vs Slug




Right In: 1.456+/-1.660 $\chi^2$/NDF: 7.9/15

Left Out: 70.088+/-102.504 $\chi^2$/NDF:16.2/16

Right Out: -1.094+/-1.528 $\chi^2$/NDF: 9.2/18

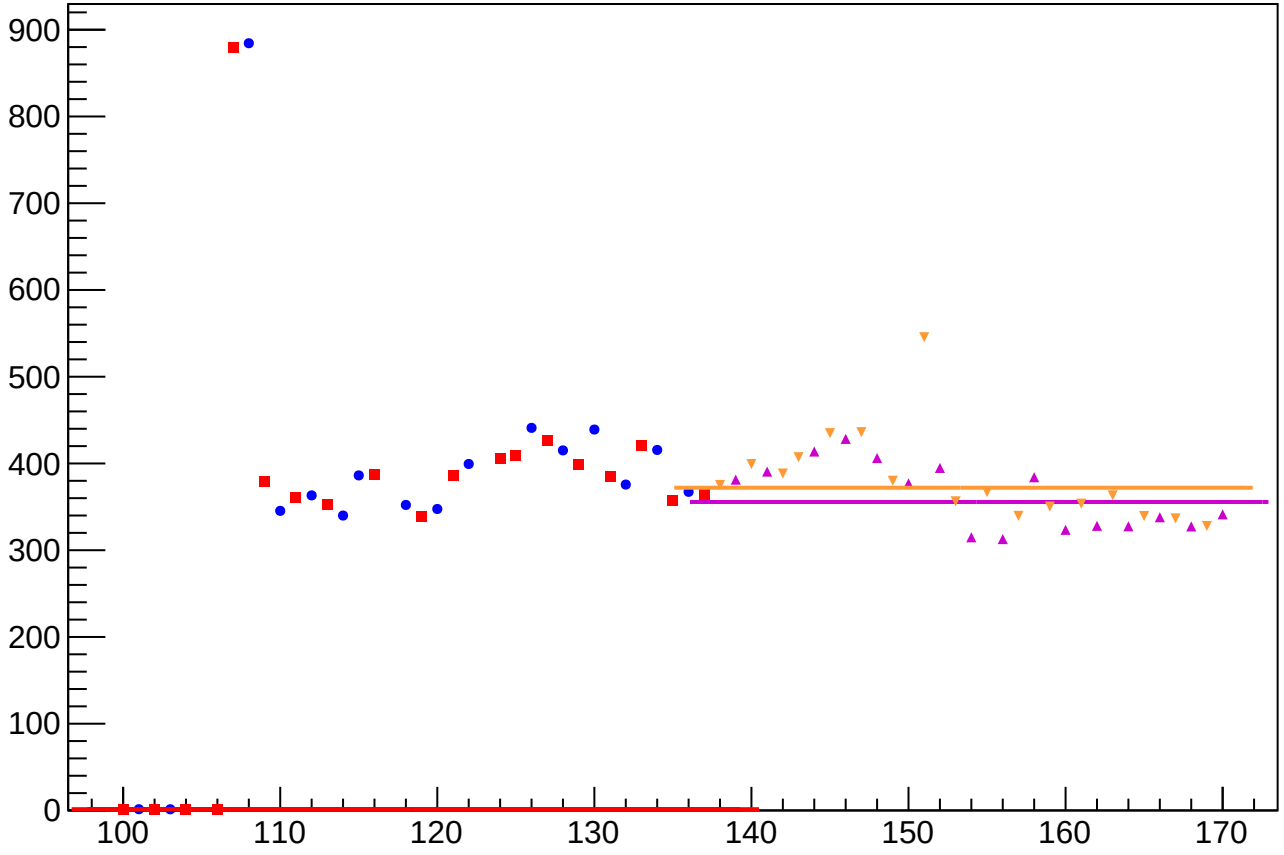
Left In: -136.041+/-99.211 $\chi^2$/NDF:9.8/15

+ sign 1.474+/-1.660 $\chi^2$/NDF: 24.5/32

All: 0.066+/-1.124 $\chi^2$/NDF: 46.7/67

- sign -1.126+/-1.528 $\chi^2$/NDF: 20.8/34

# asym_cav4dQ_rms vs Slug




Right In: 1.470+/-0.001 $\chi^2$/NDF: 11735334.0/15

Left Out: 372.045+/-0.072 $\chi^2$/NDF:346993.5/16

Right Out: 1.467+/-0.001 $\chi^2$/NDF: 11270430.6/18

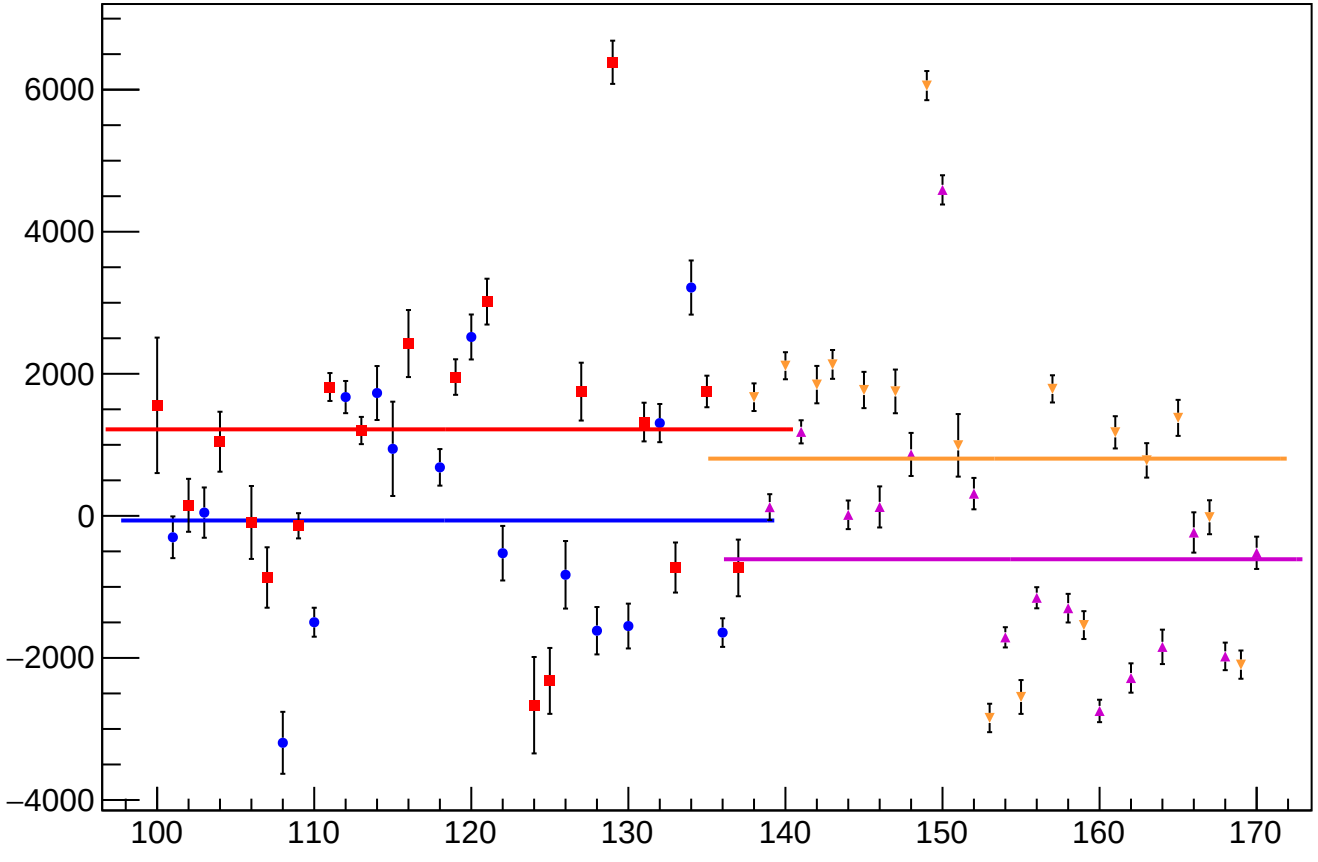
Left In: 355.609+/-0.070 $\chi^2$/NDF:278818.7/15

+ sign 1.567+/-0.001 $\chi^2$/NDF: 38214930.9/32

All: 1.559+/-0.001 $\chi^2$/NDF: 75241989.4/67

- sign 1.551+/-0.001 $\chi^2$/NDF: 37026954.7/34

# asym_bcm0l02_mean vs Slug




Right In: -64.993+/-74.895 $\chi^2$/NDF: 469.5/15

Left Out: 805.823+/-54.388 $\chi^2$/NDF:1737.1/16

Right Out: 1217.846+/-69.022 $\chi^2$/NDF: 594.6/18

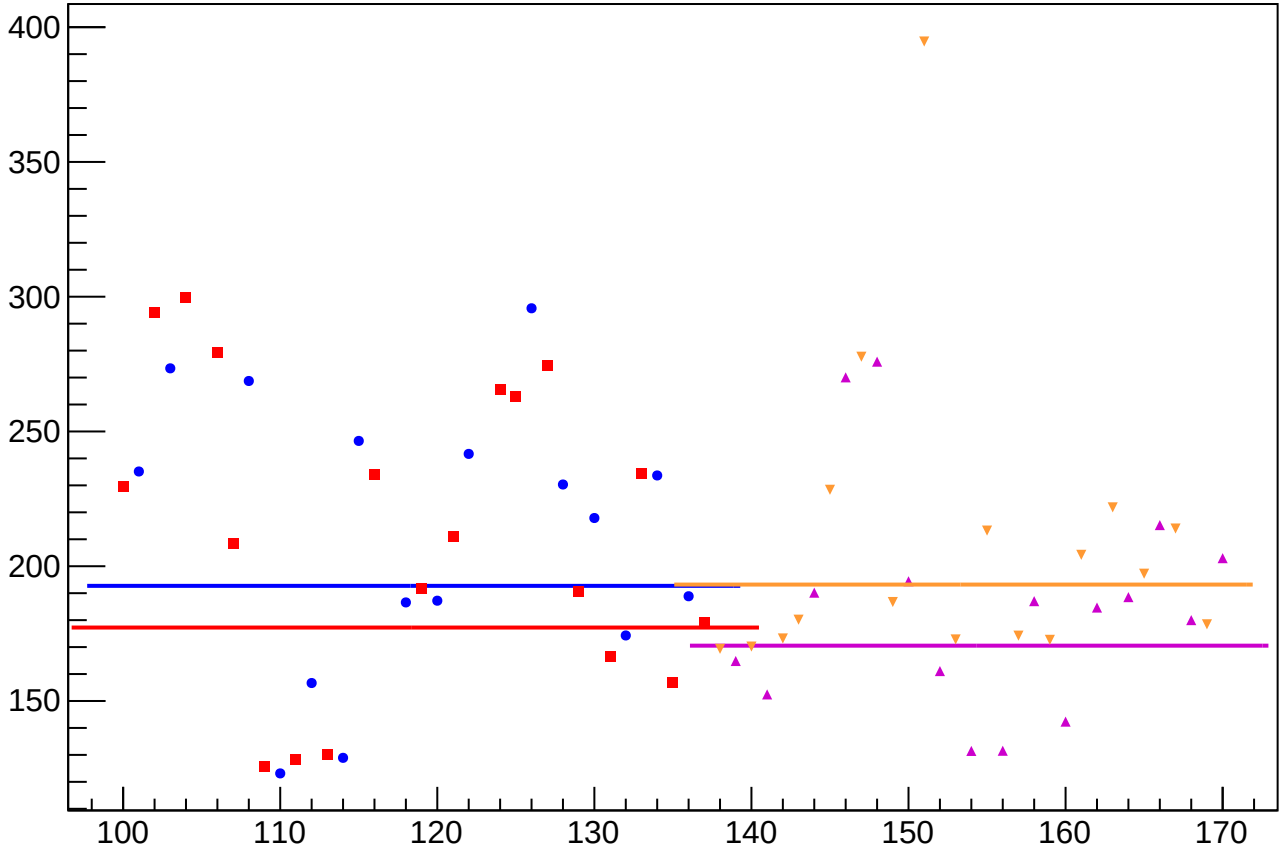
Left In: -610.823+/-48.933 $\chi^2$/NDF:1243.0/15

+ sign 505.155+/-44.008 $\chi^2$/NDF: 2295.1/32

All: 228.493+/-29.567 $\chi^2$/NDF: 4671.9/67

- sign 0.854+/-39.919 $\chi^2$/NDF: 2304.7/34

# asym_bcm0l02_rms vs Slug




Right In: 192.719+/-0.053 $\chi^2$/NDF: 759146.3/15

Left Out: 193.193+/-0.038 $\chi^2$/NDF:823876.5/16

Right Out: 177.251+/-0.049 $\chi^2$/NDF: 1226180.2/18

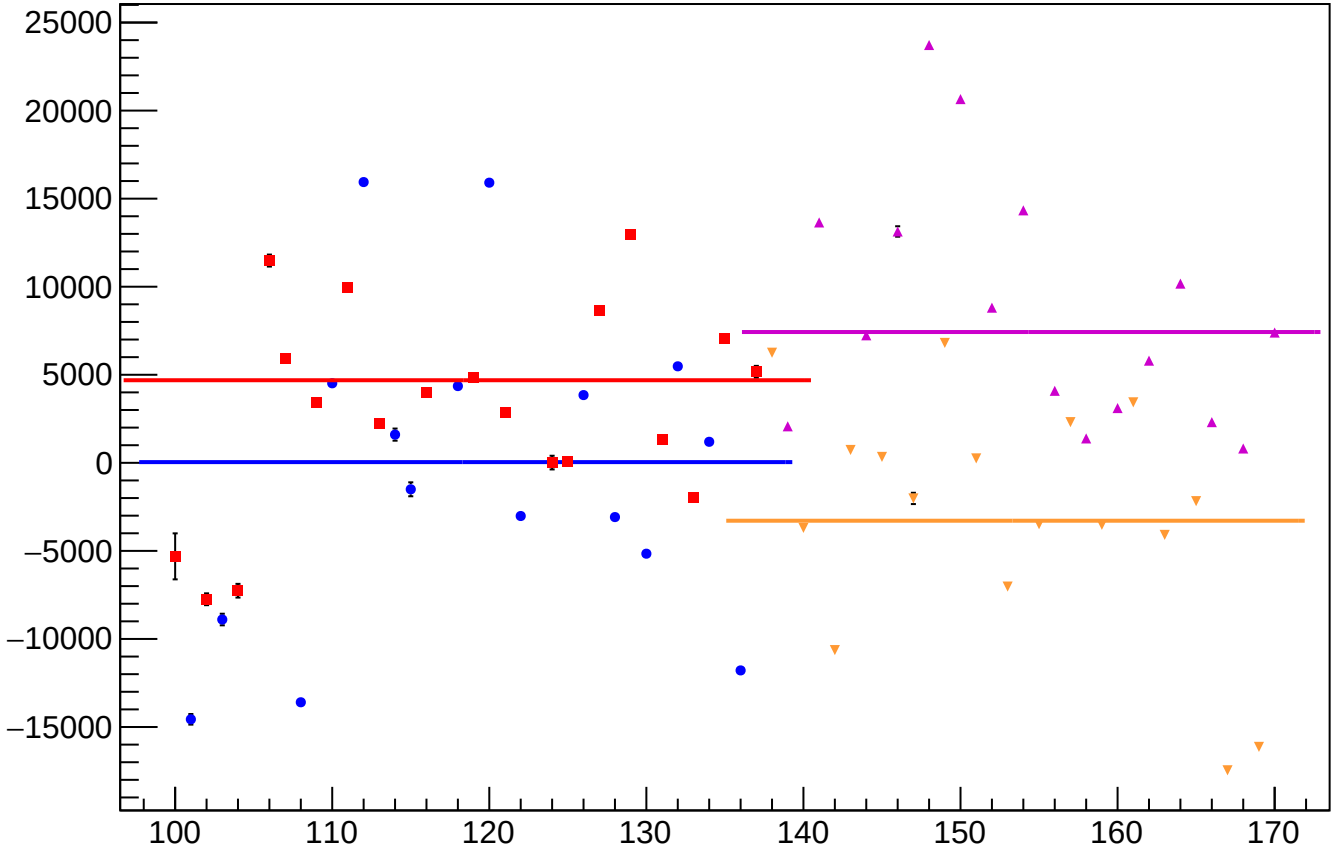
Left In: 170.527+/-0.035 $\chi^2$/NDF:1035803.7/15

+ sign 193.030+/-0.031 $\chi^2$/NDF: 1583075.3/32

All: 181.919+/-0.021 $\chi^2$/NDF: 4090075.8/67

- sign 172.776+/-0.028 $\chi^2$/NDF: 2274615.4/34

# asym_bpm0i02WS_mean vs Slug




Right In: 40.915+/-54.199 $\chi^2$/NDF: 30786.3/15

Left Out: -3287.074+/-47.001 $\chi^2$/NDF:20109.9/16

Right Out: 4689.710+/-52.095 $\chi^2$/NDF: 7795.7/18

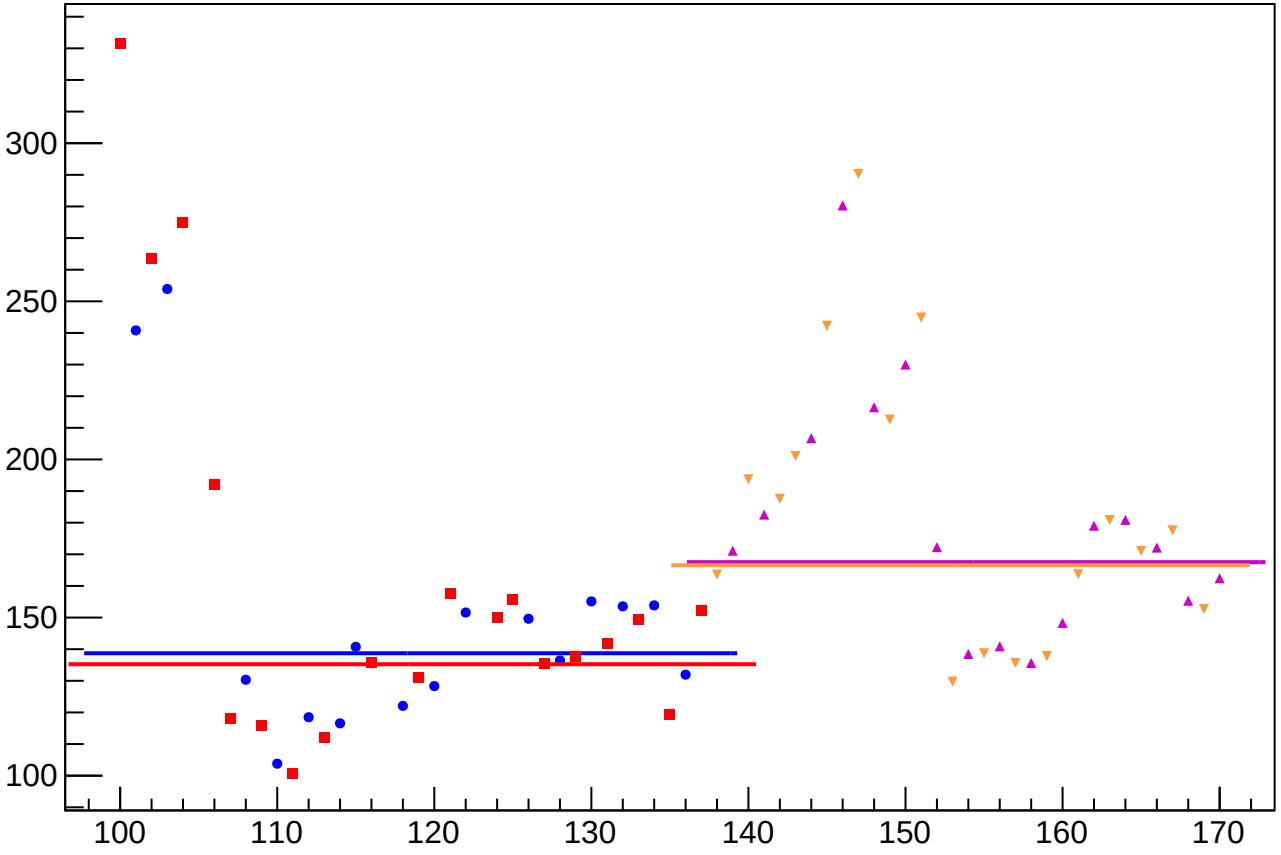
Left In: 7427.090+/-47.770 $\chi^2$/NDF:16829.9/15

+ sign -1858.587+/-35.509 $\chi^2$/NDF: 53048.2/32

All: 2193.192+/-25.002 $\chi^2$/NDF: 104994.8/67

- sign 6176.726+/-35.208 $\chi^2$/NDF: 26125.4/34

# asym_bpm0i02WS_rms vs Slug




Right In: 138.712+/-0.038 $\chi^2$/NDF: 657791.3/15

Left Out: 166.540+/-0.033 $\chi^2$/NDF:1157258.3/16

Right Out: 135.245+/-0.037 $\chi^2$/NDF: 890024.8/18

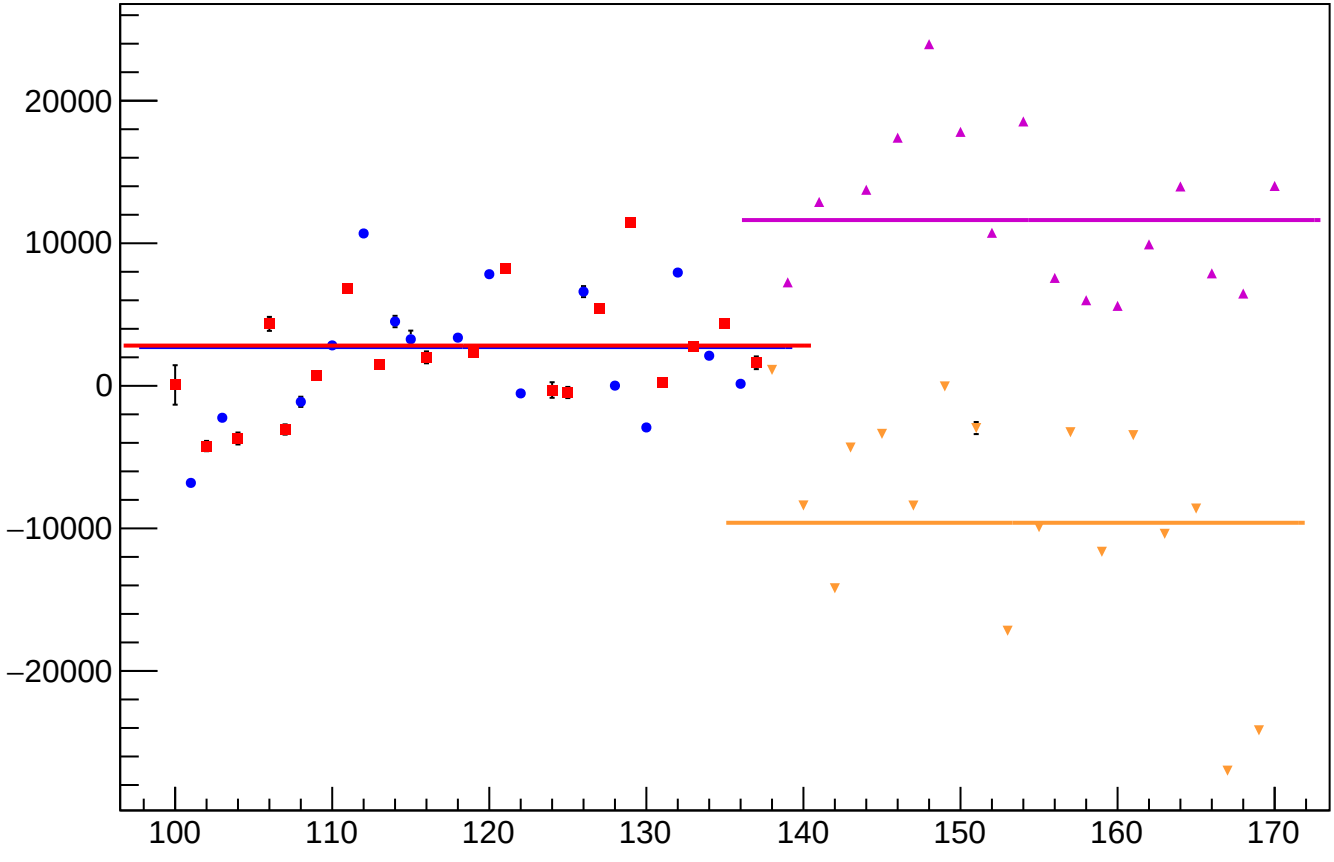
Left In: 167.522+/-0.034 $\chi^2$/NDF:860138.1/15

+ sign 154.595+/-0.025 $\chi^2$/NDF: 2115986.9/32

All: 153.679+/-0.018 $\chi^2$/NDF: 4285861.0/67

- sign 152.779+/-0.025 $\chi^2$/NDF: 2167235.7/34

# asym_bpm0i02aWS_mean vs Slug




Right In: 2719.896+/-69.247 $\chi^2$/NDF: 4129.3/15

Left Out: -9605.541+/-55.181 $\chi^2$/NDF:21589.0/16

Right Out: 2823.679+/-64.850 $\chi^2$/NDF: 3062.8/18

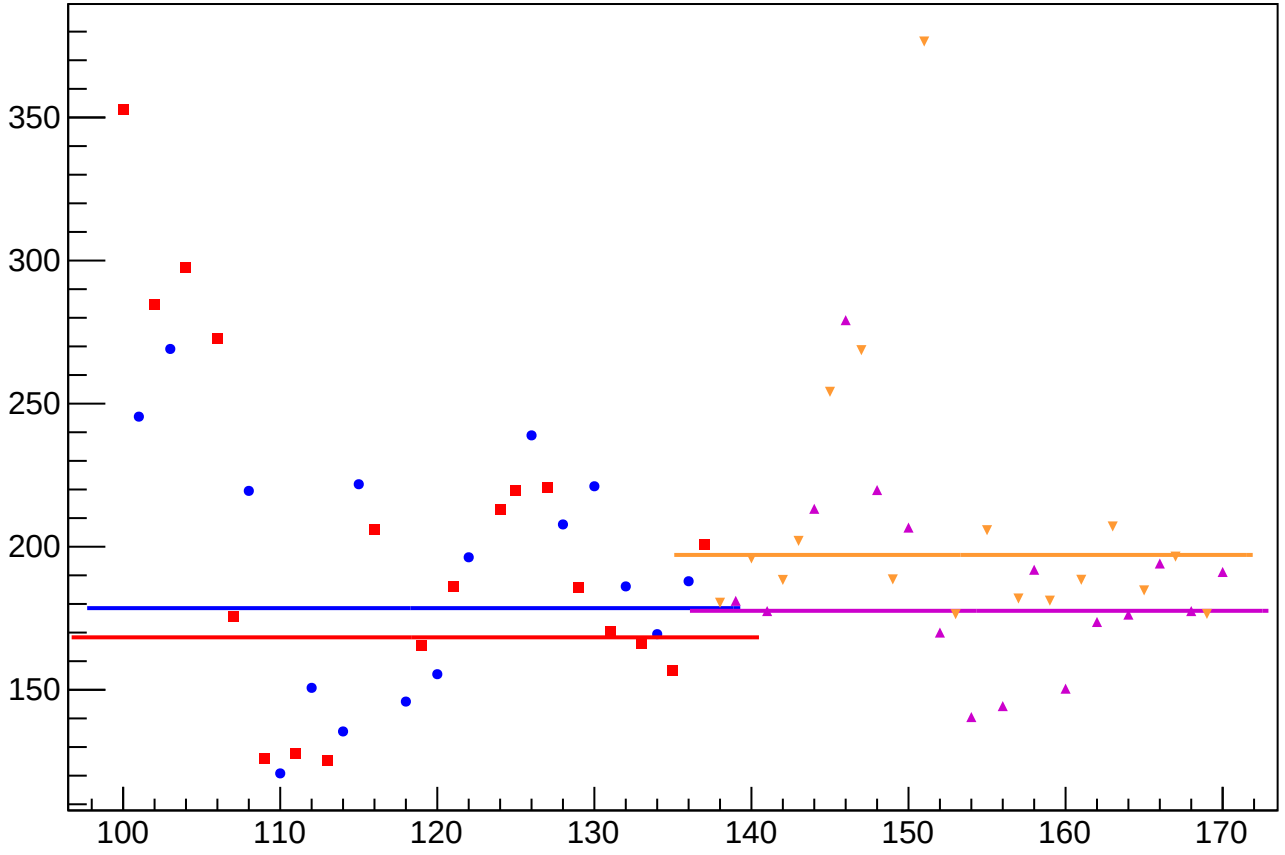
Left In: 11628.579+/-50.533 $\chi^2$/NDF:10328.5/15

+ sign -4818.518+/-43.155 $\chi^2$/NDF: 45095.0/32

All: 2261.761+/-29.281 $\chi^2$/NDF: 119838.1/67

- sign 8302.135+/-39.860 $\chi^2$/NDF: 24861.2/34

# asym_bpm0i02aWS_rms vs Slug




Right In: 178.541+/-0.049 $\chi^2$/NDF: 674566.0/15

Left Out: 197.135+/-0.039 $\chi^2$/NDF:657198.8/16

Right Out: 168.335+/-0.046 $\chi^2$/NDF: 979485.9/18

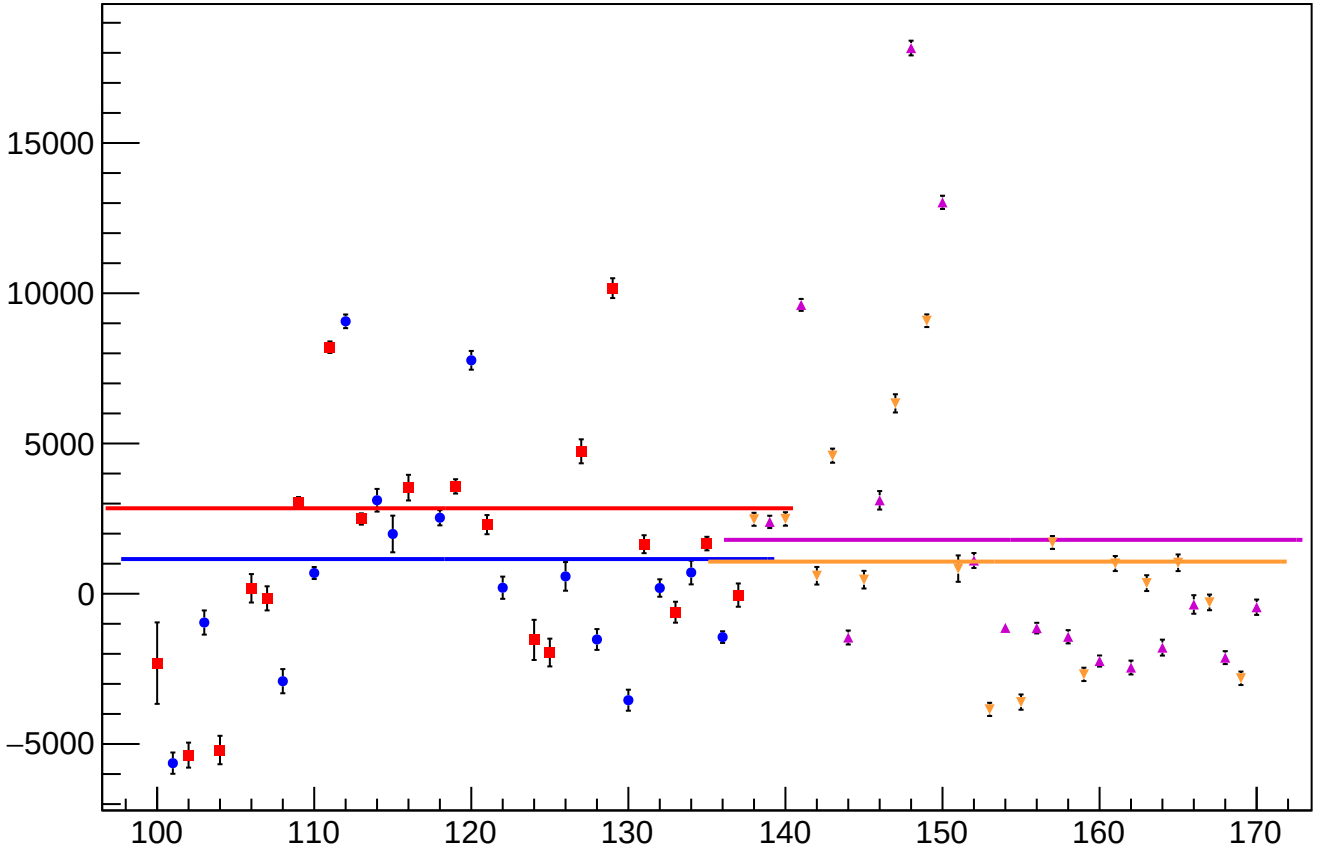
Left In: 177.604+/-0.036 $\chi^2$/NDF:665934.4/15

+ sign 189.914+/-0.031 $\chi^2$/NDF: 1419965.3/32

All: 181.381+/-0.021 $\chi^2$/NDF: 3235686.6/67

- sign 174.102+/-0.028 $\chi^2$/NDF: 1670846.3/34

# asym_bpm0i05WS_mean vs Slug




Right In: 1153.823+/-75.957 $\chi^2$/NDF: 2655.3/15

Left Out: 1069.753+/-60.079 $\chi^2$/NDF:3524.7/16

Right Out: 2843.895+/-69.139 $\chi^2$/NDF: 2453.1/18

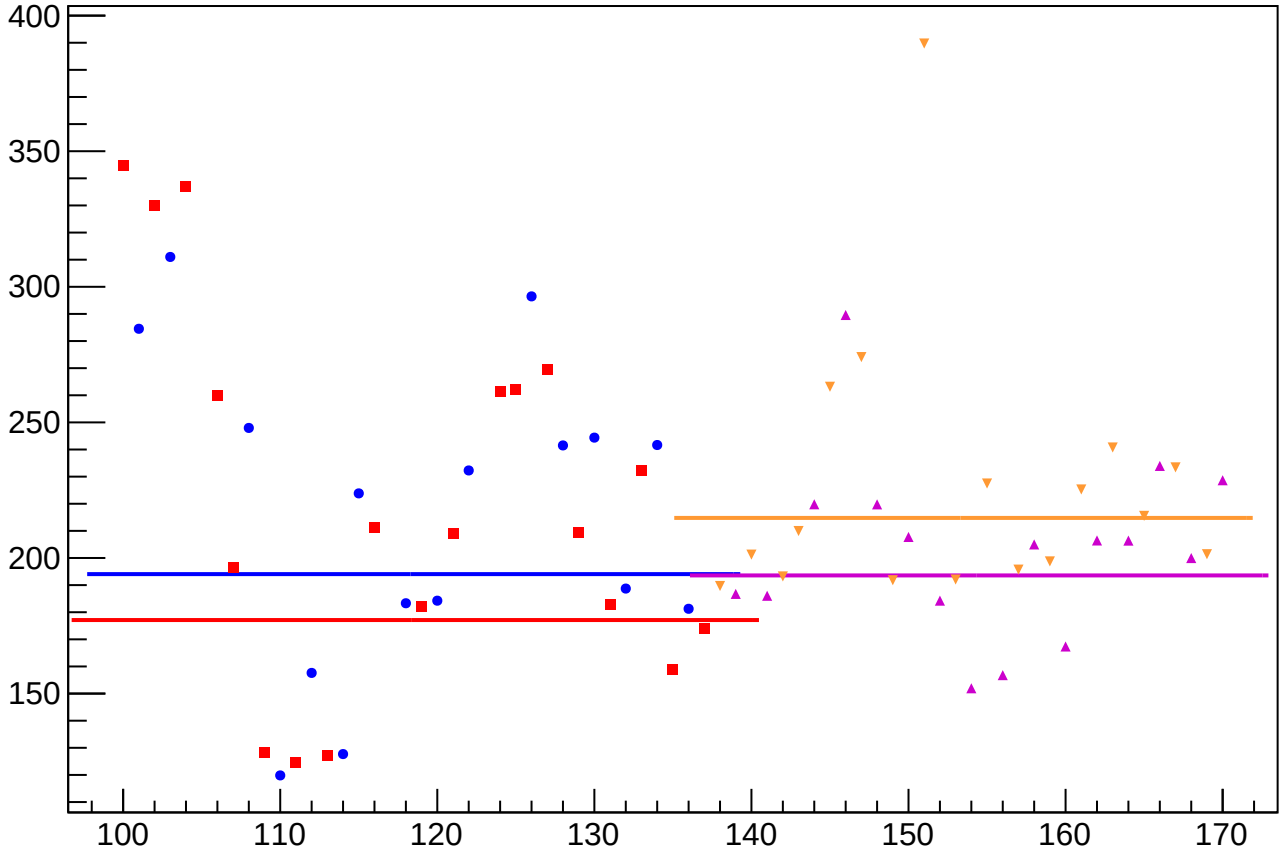
Left In: 1793.790+/-55.032 $\chi^2$/NDF:11082.0/15

+ sign 1102.107+/-47.121 $\chi^2$/NDF: 6180.8/32

All: 1701.001+/-31.786 $\chi^2$/NDF: 20153.6/67

- sign 2201.059+/-43.057 $\chi^2$/NDF: 13676.4/34

# asym_bpm0i05WS_rms vs Slug




Right In: 194.053+/-0.054 $\chi^2$/NDF: 965786.1/15

Left Out: 214.775+/-0.042 $\chi^2$/NDF:609962.3/16

Right Out: 177.115+/-0.049 $\chi^2$/NDF: 1359345.8/18

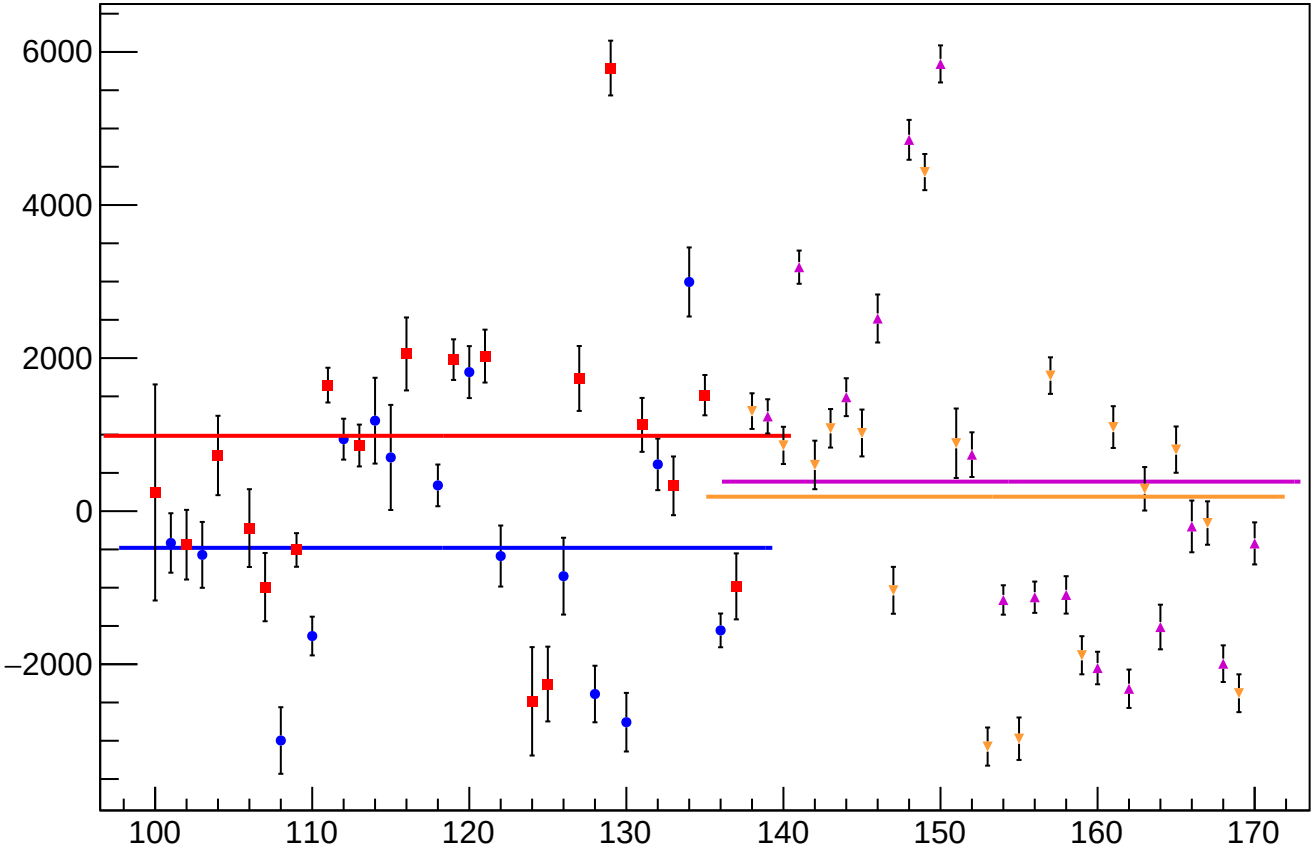
Left In: 193.571+/-0.039 $\chi^2$/NDF:603152.3/15

+ sign 206.800+/-0.033 $\chi^2$/NDF: 1667317.4/32

All: 196.112+/-0.022 $\chi^2$/NDF: 3887971.5/67

- sign 187.189+/-0.030 $\chi^2$/NDF: 2031853.8/34

# asym_bpm0i07WS_mean vs Slug




Right In: -479.302+/-86.685 $\chi^2$/NDF: 305.4/15

Left Out: 189.086+/-65.455 $\chi^2$/NDF:932.7/16

Right Out: 984.498+/-80.945 $\chi^2$/NDF: 398.1/18

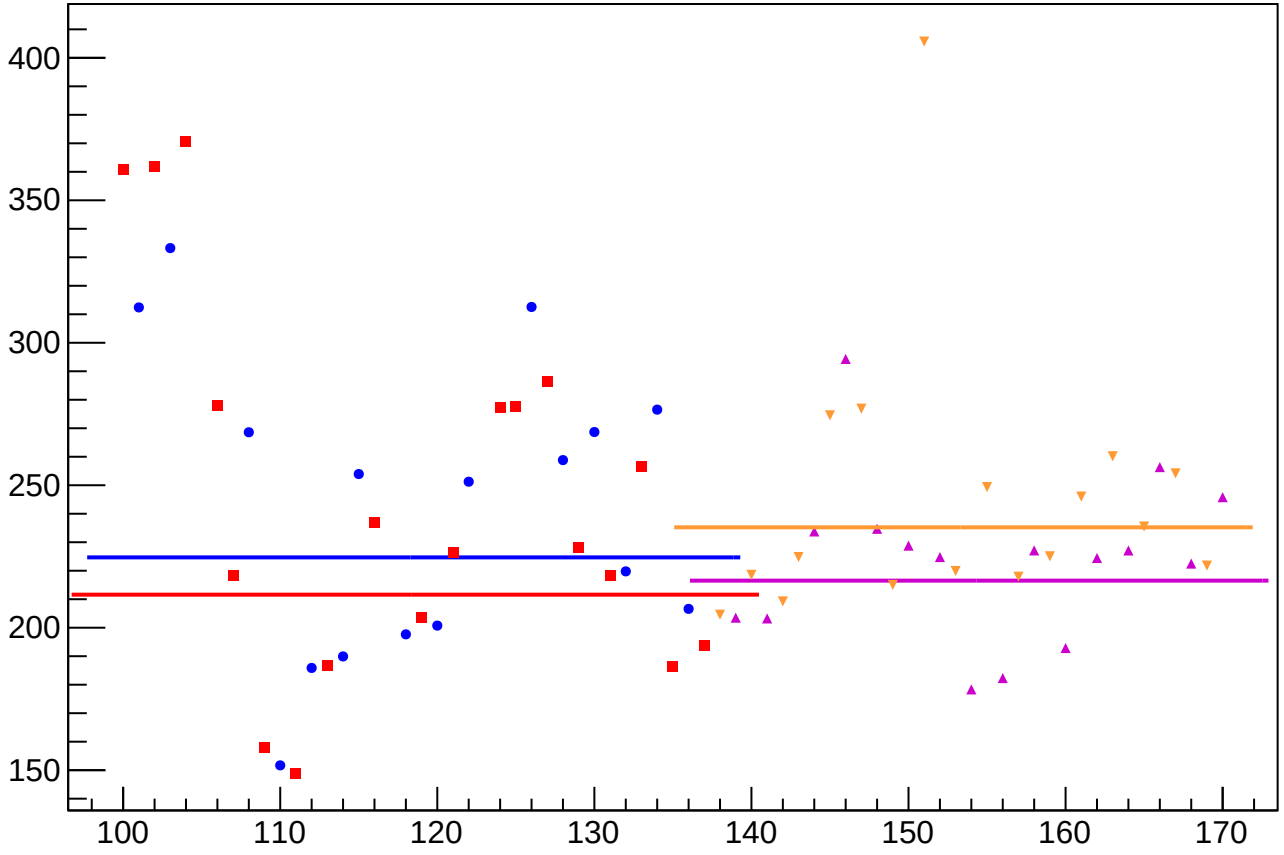
Left In: 385.709+/-61.066 $\chi^2$/NDF:1606.4/15

\+ sign -53.618+/-52.236 $\chi^2$/NDF: 1276.1/32

All: 297.276+/-35.640 $\chi^2$/NDF: 3399.9/67

\- sign 602.893+/-48.749 $\chi^2$/NDF: 2039.4/34

# asym_bpm0i07WS_rms vs Slug




Right In: 224.683+/-0.061 $\chi^2$/NDF: 653193.4/15

Left Out: 235.230+/-0.046 $\chi^2$/NDF:487638.5/16

Right Out: 211.595+/-0.057 $\chi^2$/NDF: 932902.5/18

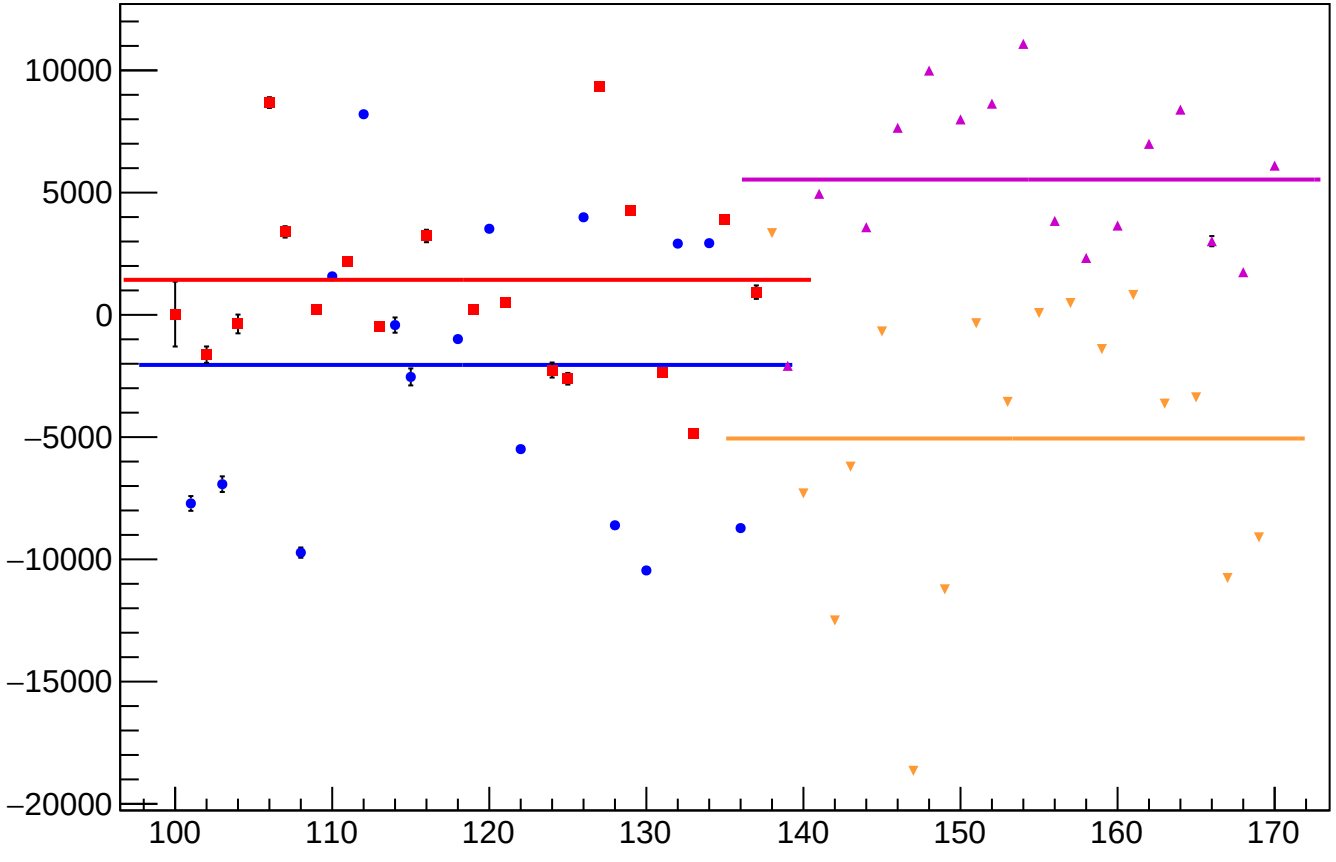
Left In: 216.522+/-0.043 $\chi^2$/NDF:383131.0/15

+ sign 231.400+/-0.037 $\chi^2$/NDF: 1159688.6/32

All: 222.493+/-0.025 $\chi^2$/NDF: 2589244.1/67

- sign 214.735+/-0.034 $\chi^2$/NDF: 1320756.6/34

# asym_bpm1i02WS_mean vs Slug




Right In: -2047.267+/-46.722 $\chi^2$/NDF: 16709.1/15

Left Out: -5057.000+/-33.975 $\chi^2$/NDF:31493.0/16

Right Out: 1432.909+/-44.729 $\chi^2$/NDF: 6387.8/18

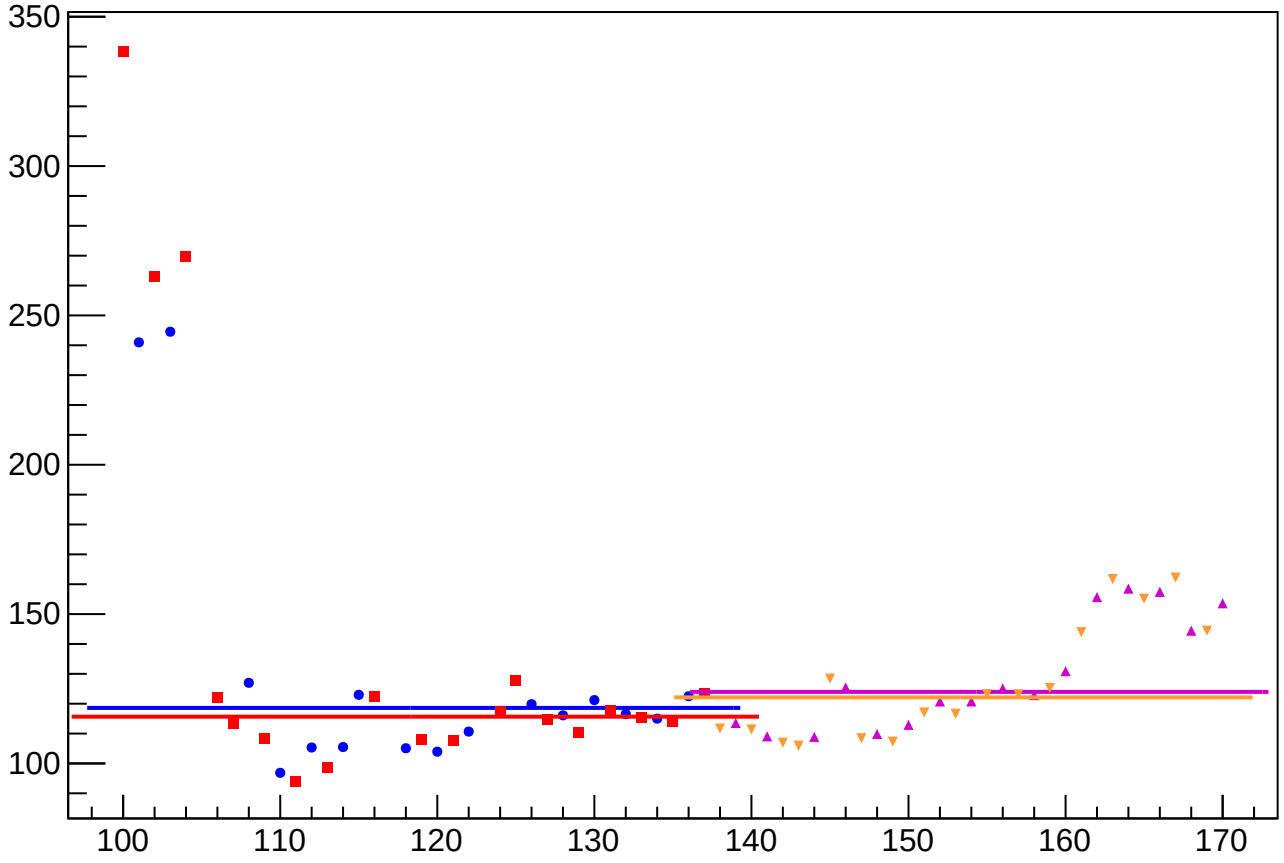
Left In: 5534.128+/-34.707 $\chi^2$/NDF:10238.4/15

+ sign -4015.960+/-27.478 $\chi^2$/NDF: 50916.5/32

All: -3.169+/-19.410 $\chi^2$/NDF: 115353.3/67

- sign 3992.814+/-27.421 $\chi^2$/NDF: 21873.7/34

# asym_bpm1i02WS_rms vs Slug




Right In: 118.596+/-0.033 $\chi^2$/NDF: 734158.7/15

Left Out: 122.112+/-0.024 $\chi^2$/NDF:479044.1/16

Right Out: 115.660+/-0.032 $\chi^2$/NDF: 864206.3/18

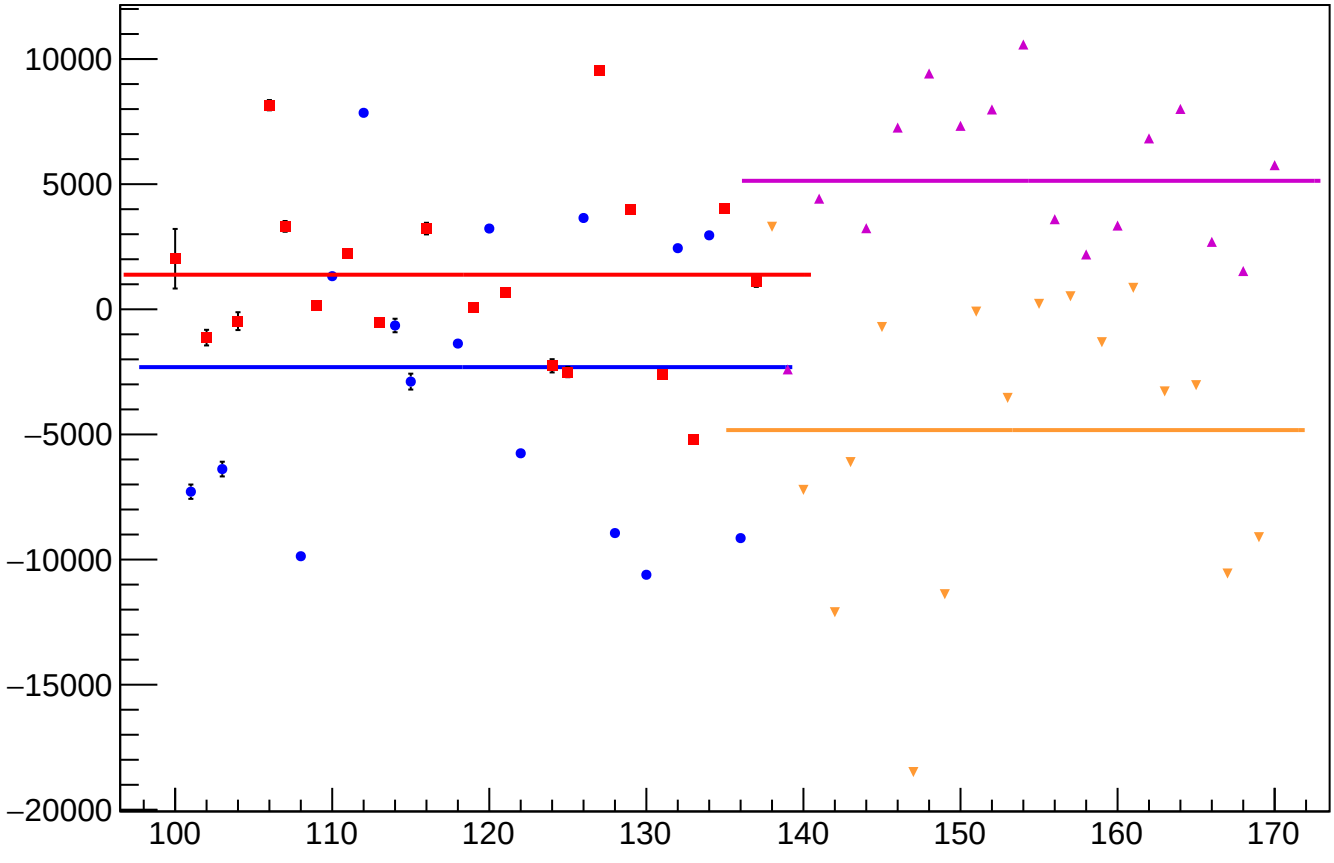
Left In: 123.954+/-0.025 $\chi^2$/NDF:399765.1/15

+ sign 120.896+/-0.019 $\chi^2$/NDF: 1220611.2/32

All: 120.866+/-0.014 $\chi^2$/NDF: 2527518.9/67

- sign 120.837+/-0.019 $\chi^2$/NDF: 1306903.1/34

# asym_bpm2i01WS_mean vs Slug




Right In: -2310.581+/-40.734 $\chi^2$/NDF: 21679.5/15

Left Out: -4826.734+/-30.488 $\chi^2$/NDF:38202.6/16

Right Out: 1382.178+/-39.342 $\chi^2$/NDF: 8578.9/18

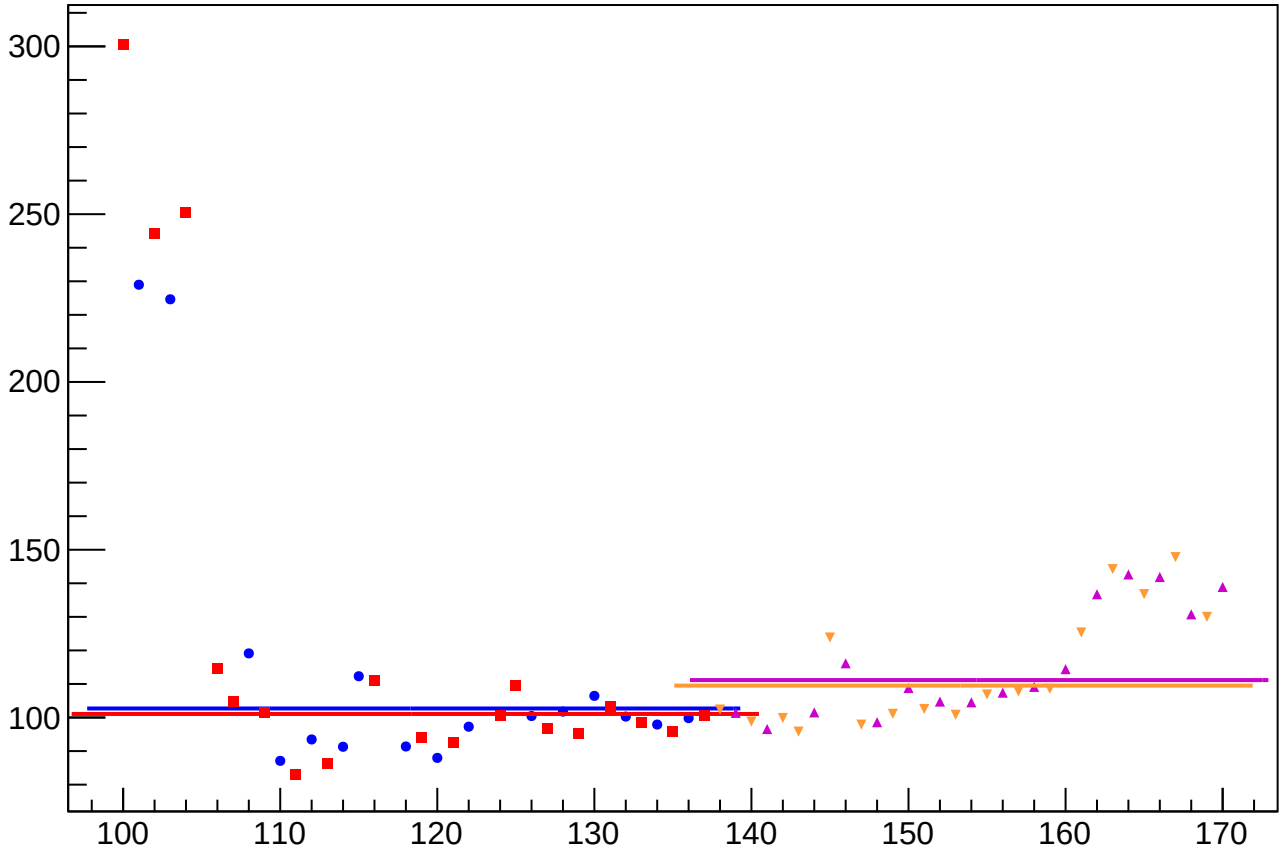
Left In: 5134.079+/-31.147 $\chi^2$/NDF:12114.4/15

+ sign -3923.307+/-24.408 $\chi^2$/NDF: 62327.7/32

All: -119.291+/-17.264 $\chi^2$/NDF: 137213.1/67

- sign 3688.474+/-24.420 $\chi^2$/NDF: 26283.9/34

# asym_bpm2i01WS_rms vs Slug




Right In: 102.694+/-0.029 $\chi^2$/NDF: 825801.5/15

Left Out: 109.510+/-0.022 $\chi^2$/NDF:459809.7/16

Right Out: 101.063+/-0.028 $\chi^2$/NDF: 930458.1/18

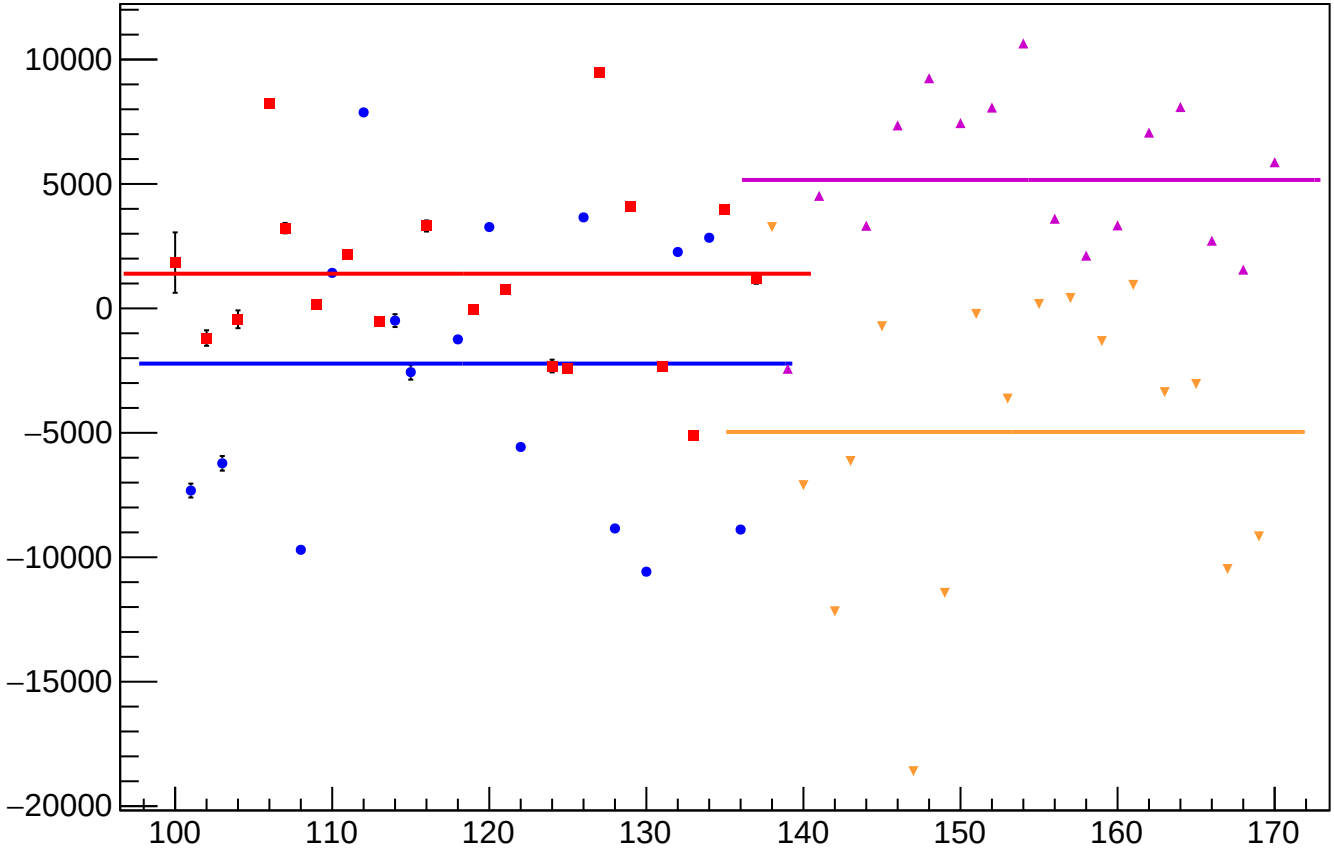
Left In: 111.158+/-0.022 $\chi^2$/NDF:387762.8/15

+ sign 107.063+/-0.017 $\chi^2$/NDF: 1321504.8/32

All: 107.166+/-0.012 $\chi^2$/NDF: 2720740.4/67

- sign 107.269+/-0.017 $\chi^2$/NDF: 1399164.4/34

# asym_bpm2i02WS_mean vs Slug




Right In: -2218.049+/-39.039 $\chi^2$/NDF: 23040.7/15

Left Out: -4963.573+/-29.848 $\chi^2$/NDF:41006.0/16

Right Out: 1393.557+/-37.580 $\chi^2$/NDF: 9152.1/18

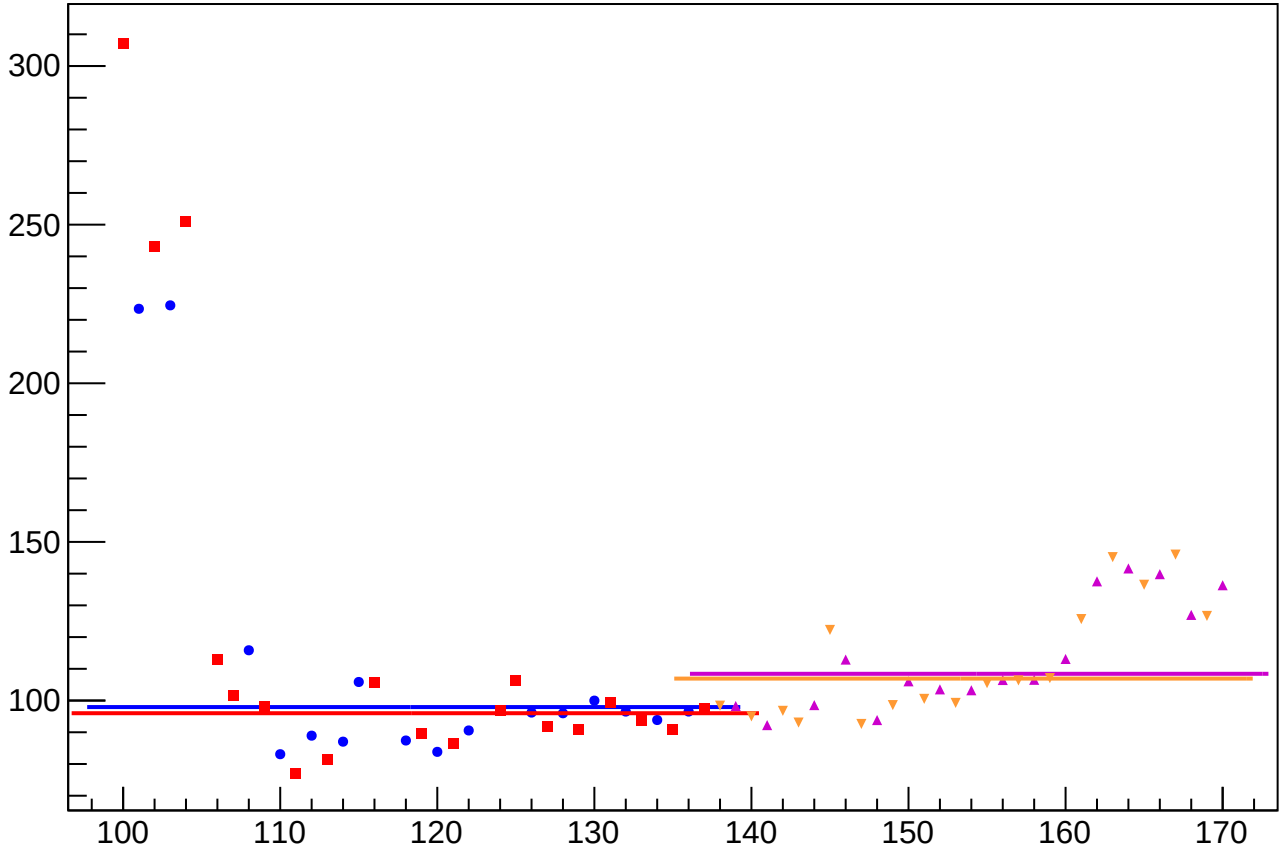
Left In: 5161.634+/-30.458 $\chi^2$/NDF:12834.9/15

\+ sign -3950.698+/-23.712 $\chi^2$/NDF: 67168.1/32

All: -133.499+/-16.749 $\chi^2$/NDF: 146946.8/67

\- sign 3667.751+/-23.662 $\chi^2$/NDF: 28055.0/34

# asym_bpm2i02WS_rms vs Slug




Right In: 97.944+/-0.028 $\chi^2$/NDF: 868148.4/15

Left Out: 106.919+/-0.021 $\chi^2$/NDF:533068.2/16

Right Out: 96.005+/-0.027 $\chi^2$/NDF: 1012287.0/18

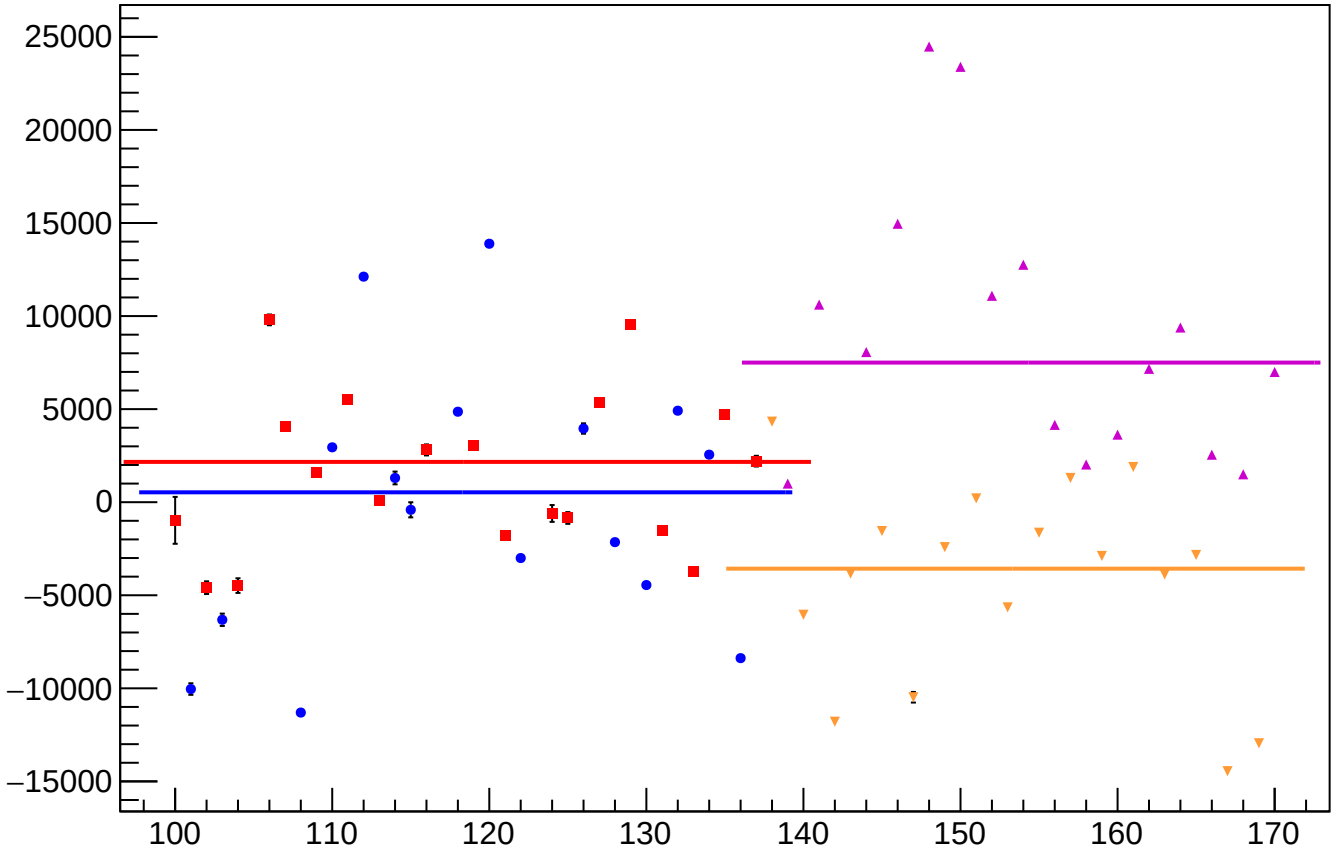
Left In: 108.430+/-0.022 $\chi^2$/NDF:440271.4/15

+ sign 103.608+/-0.017 $\chi^2$/NDF: 1467936.2/32

All: 103.556+/-0.012 $\chi^2$/NDF: 3052465.0/67

- sign 103.504+/-0.017 $\chi^2$/NDF: 1584509.4/34

# asym_bpm0i01WS_mean vs Slug




Right In: 530.568+/-54.855 $\chi^2$/NDF: 18587.6/15

Left Out: -3570.718+/-42.975 $\chi^2$/NDF:13808.7/16

Right Out: 2164.994+/-53.458 $\chi^2$/NDF: 4967.1/18

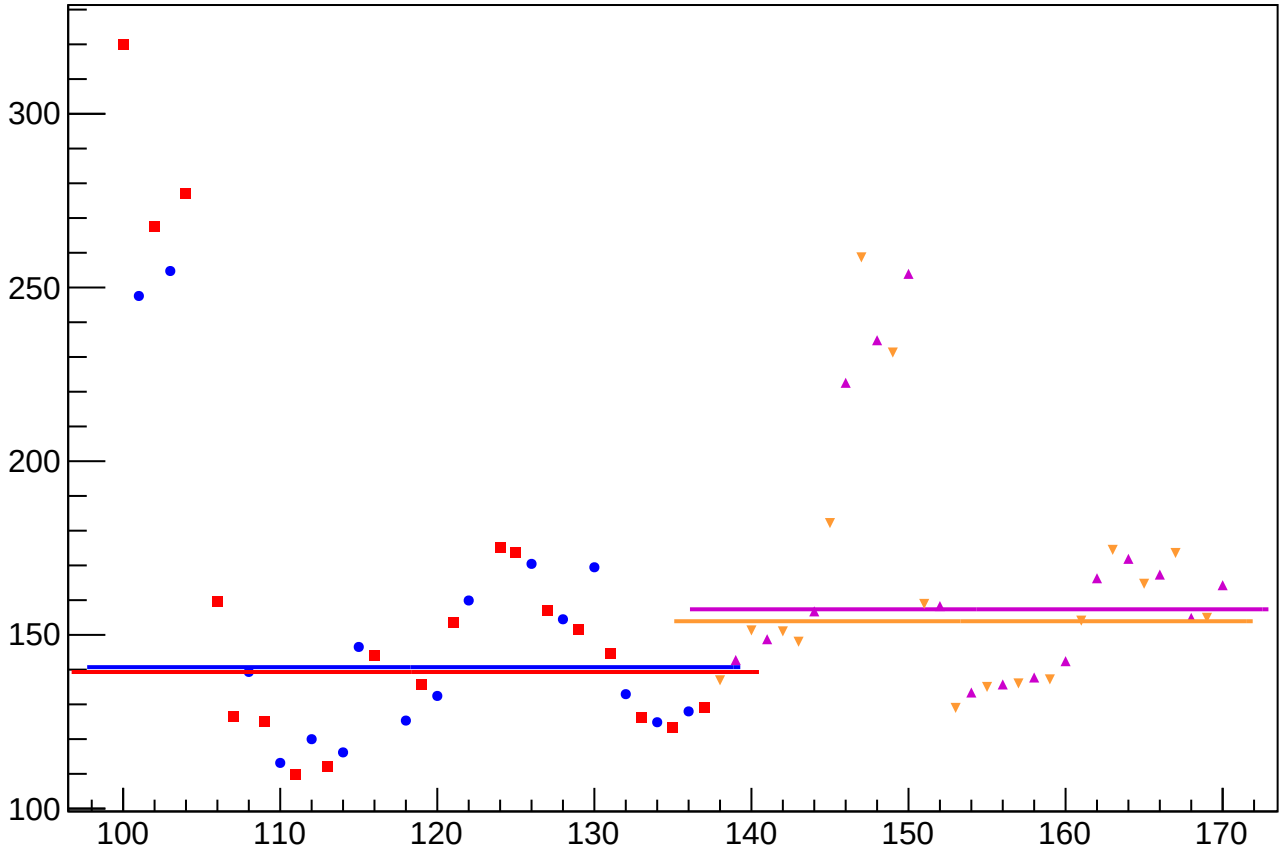
Left In: 7500.428+/-44.400 $\chi^2$/NDF:16860.0/15

+ sign -2010.878+/-33.829 $\chi^2$/NDF: 35860.3/32

All: 1620.563+/-24.036 $\chi^2$/NDF: 86851.8/67

- sign 5322.383+/-34.156 $\chi^2$/NDF: 27721.9/34

# asym_bpm0i01WS_rms vs Slug




Right In: 140.715+/-0.039 $\chi^2$/NDF: 675618.7/15

Left Out: 153.933+/-0.030 $\chi^2$/NDF:717901.7/16

Right Out: 139.317+/-0.038 $\chi^2$/NDF: 802317.0/18

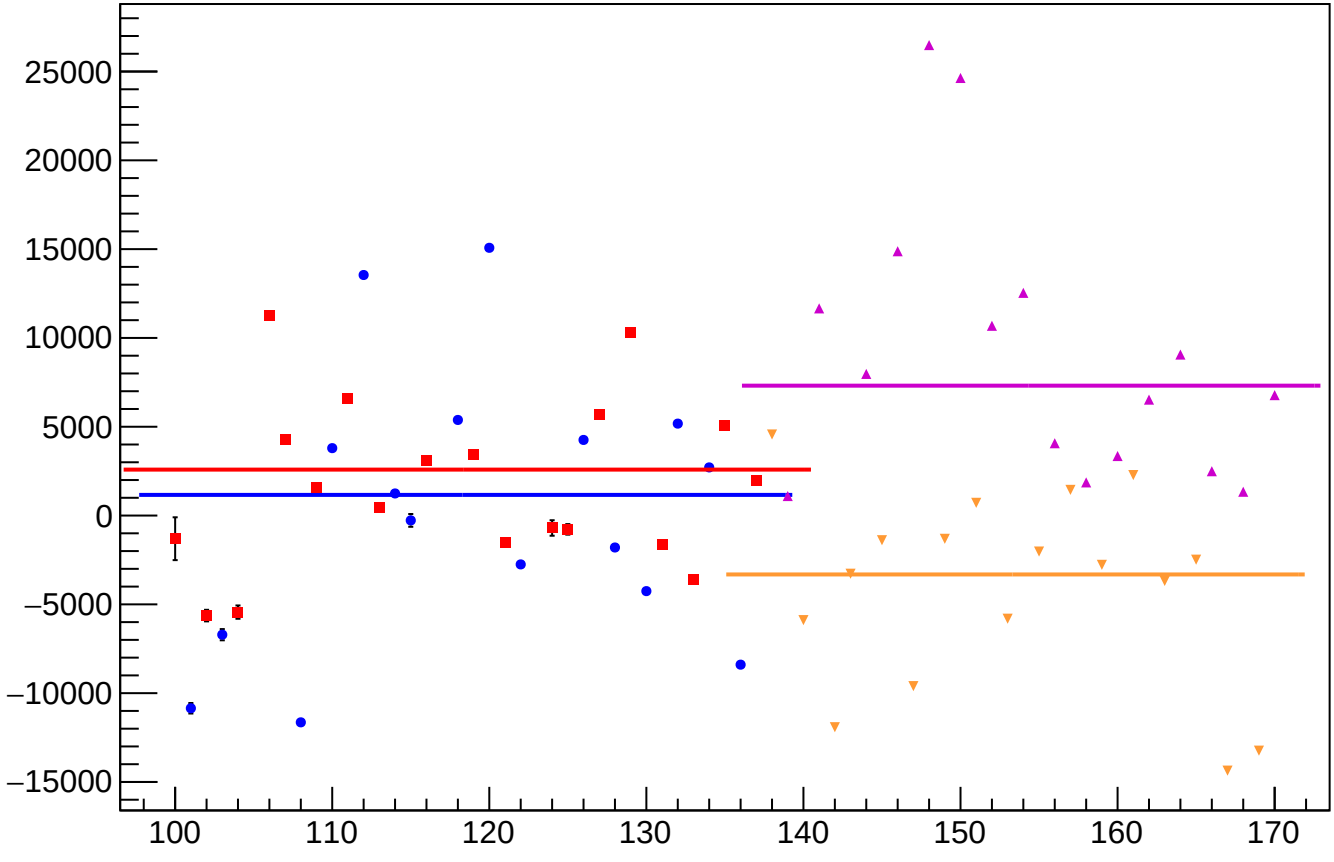
Left In: 157.368+/-0.031 $\chi^2$/NDF:779814.2/15

+ sign 148.906+/-0.024 $\chi^2$/NDF: 1465478.0/32

All: 149.447+/-0.017 $\chi^2$/NDF: 3183593.5/67

- sign 149.999+/-0.024 $\chi^2$/NDF: 1717080.8/34

# asym_bpm0i01aWS_mean vs Slug




Right In: 1162.980+/-45.930 $\chi^2$/NDF: 30754.3/15

Left Out: -3316.027+/-37.991 $\chi^2$/NDF:18004.5/16

Right Out: 2586.755+/-44.256 $\chi^2$/NDF: 8099.7/18

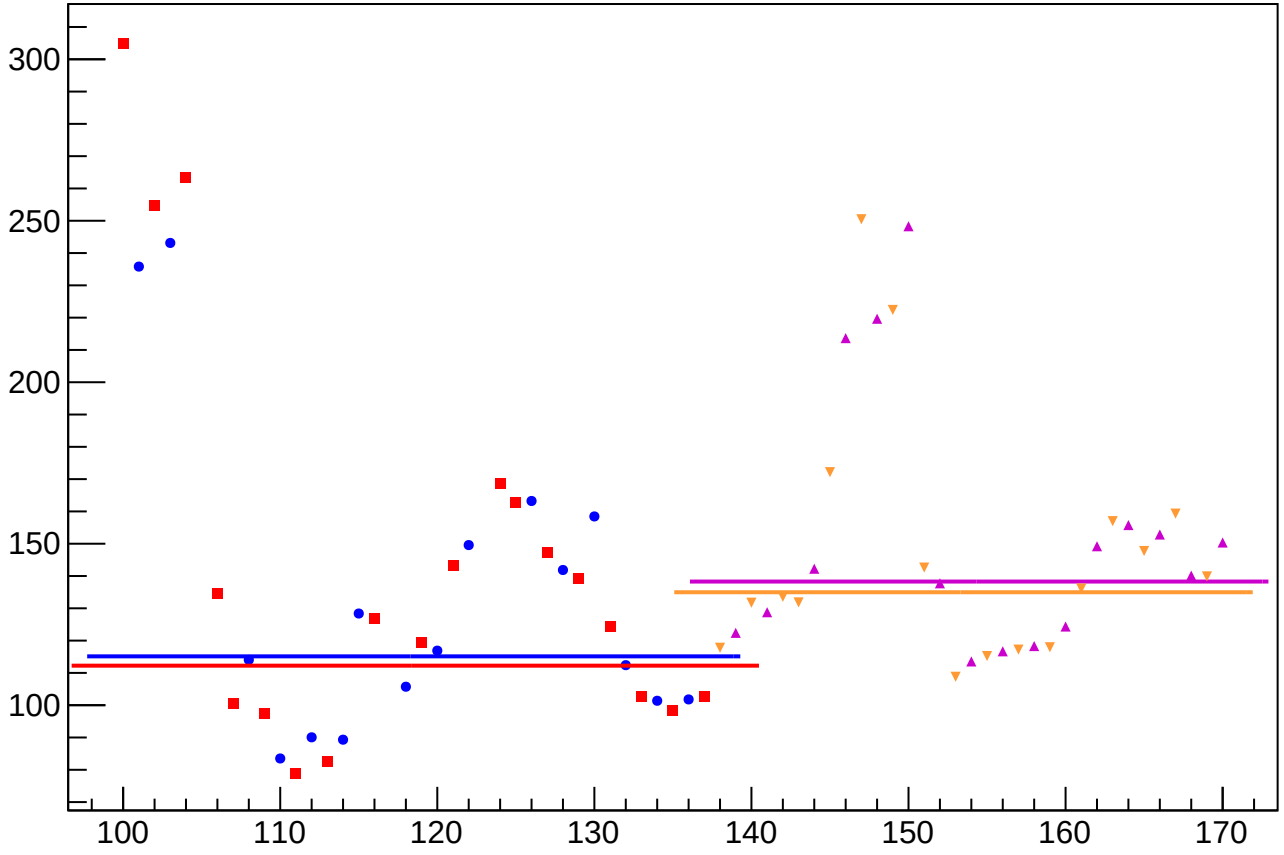
Left In: 7313.186+/-39.385 $\chi^2$/NDF:22326.0/15

+ sign -1496.467+/-29.275 $\chi^2$/NDF: 54405.4/32

All: 1847.073+/-20.752 $\chi^2$/NDF: 117416.6/67

- sign 5224.298+/-29.422 $\chi^2$/NDF: 36790.4/34

# asym_bpm0i01aWS_rms vs Slug




Right In: 115.125+/-0.032 $\chi^2$/NDF: 1112987.2/15

Left Out: 134.976+/-0.027 $\chi^2$/NDF:1013880.9/16

Right Out: 112.241+/-0.031 $\chi^2$/NDF: 1328156.6/18

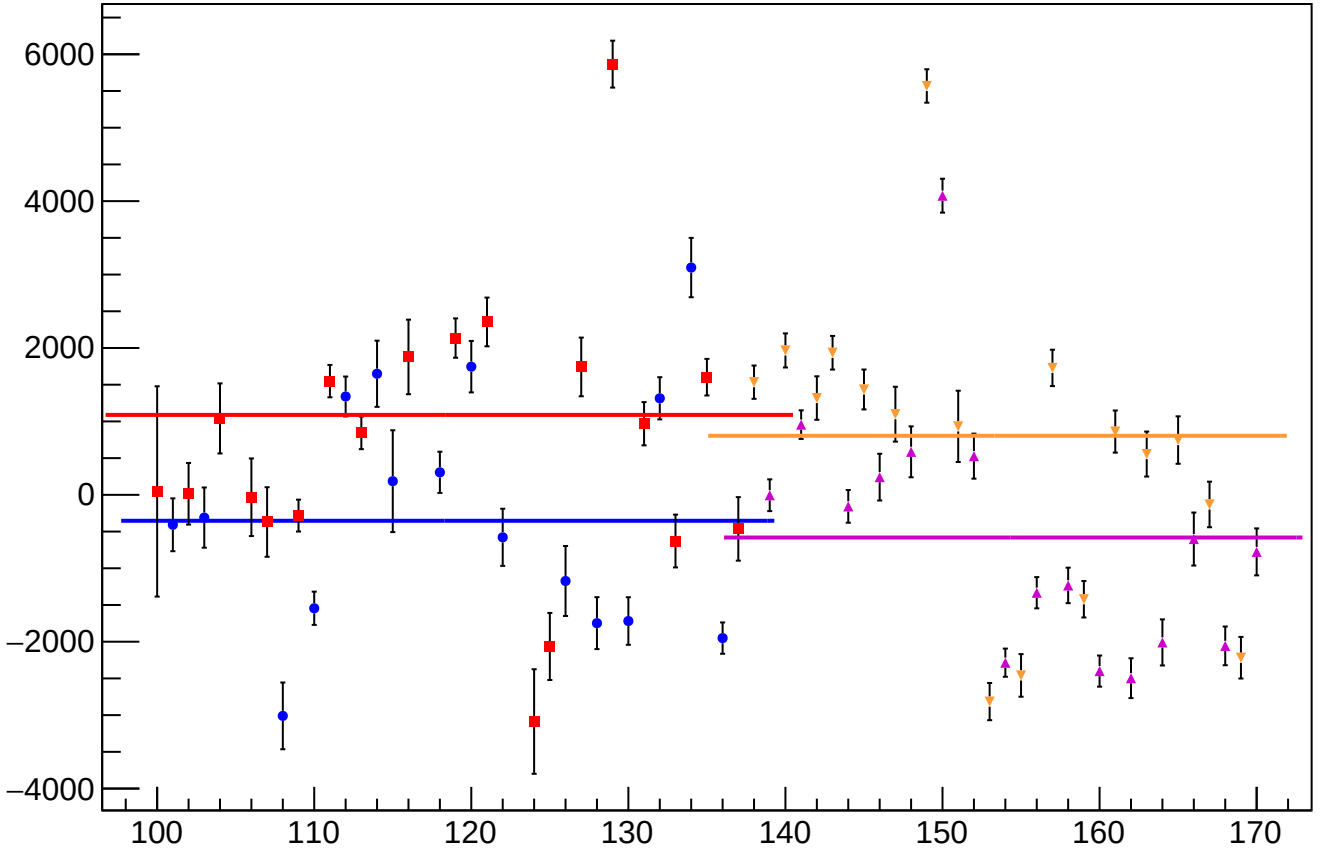
Left In: 138.286+/-0.028 $\chi^2$/NDF:1077544.0/15

+ sign 126.912+/-0.021 $\chi^2$/NDF: 2348687.4/32

All: 126.844+/-0.015 $\chi^2$/NDF: 5140946.6/67

- sign 126.775+/-0.021 $\chi^2$/NDF: 2792237.5/34

# asym_bpm0l01WS_mean vs Slug




Right In: -353.129+/-82.136 $\chi^2$/NDF: 361.8/15

Left Out: 804.445+/-66.234 $\chi^2$/NDF:1055.3/16

Right Out: 1088.752+/-76.444 $\chi^2$/NDF: 447.2/18

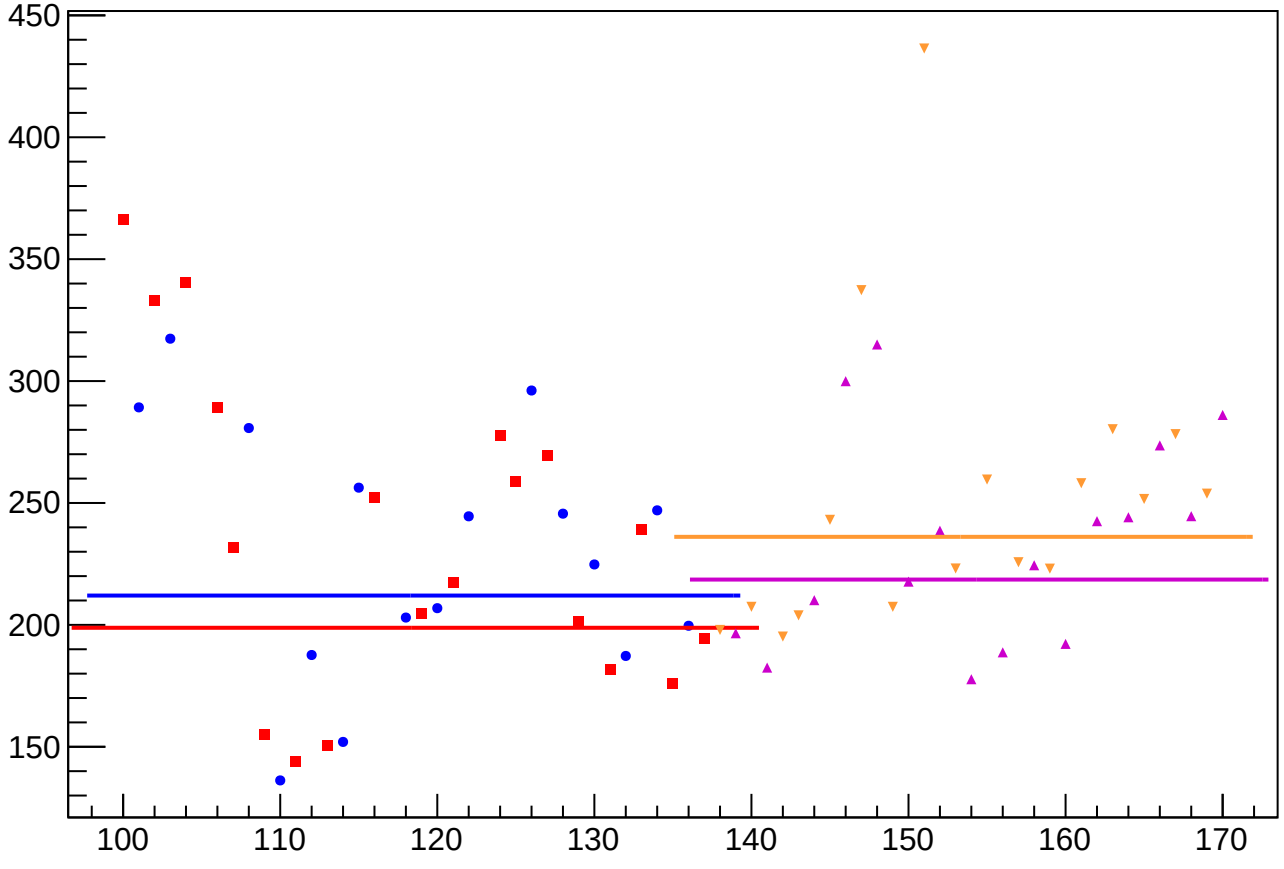
Left In: -581.195+/-62.056 $\chi^2$/NDF:786.2/15

+ sign 348.311+/-51.559 $\chi^2$/NDF: 1537.5/32

All: 206.220+/-35.202 $\chi^2$/NDF: 3072.7/67

- sign 82.146+/-48.179 $\chi^2$/NDF: 1521.0/34

# asym_bpm0l01WS_rms vs Slug




Right In: 212.027+/-0.058 $\chi^2$/NDF: 690358.0/15

Left Out: 236.112+/-0.047 $\chi^2$/NDF:815181.1/16

Right Out: 198.809+/-0.054 $\chi^2$/NDF: 974928.4/18

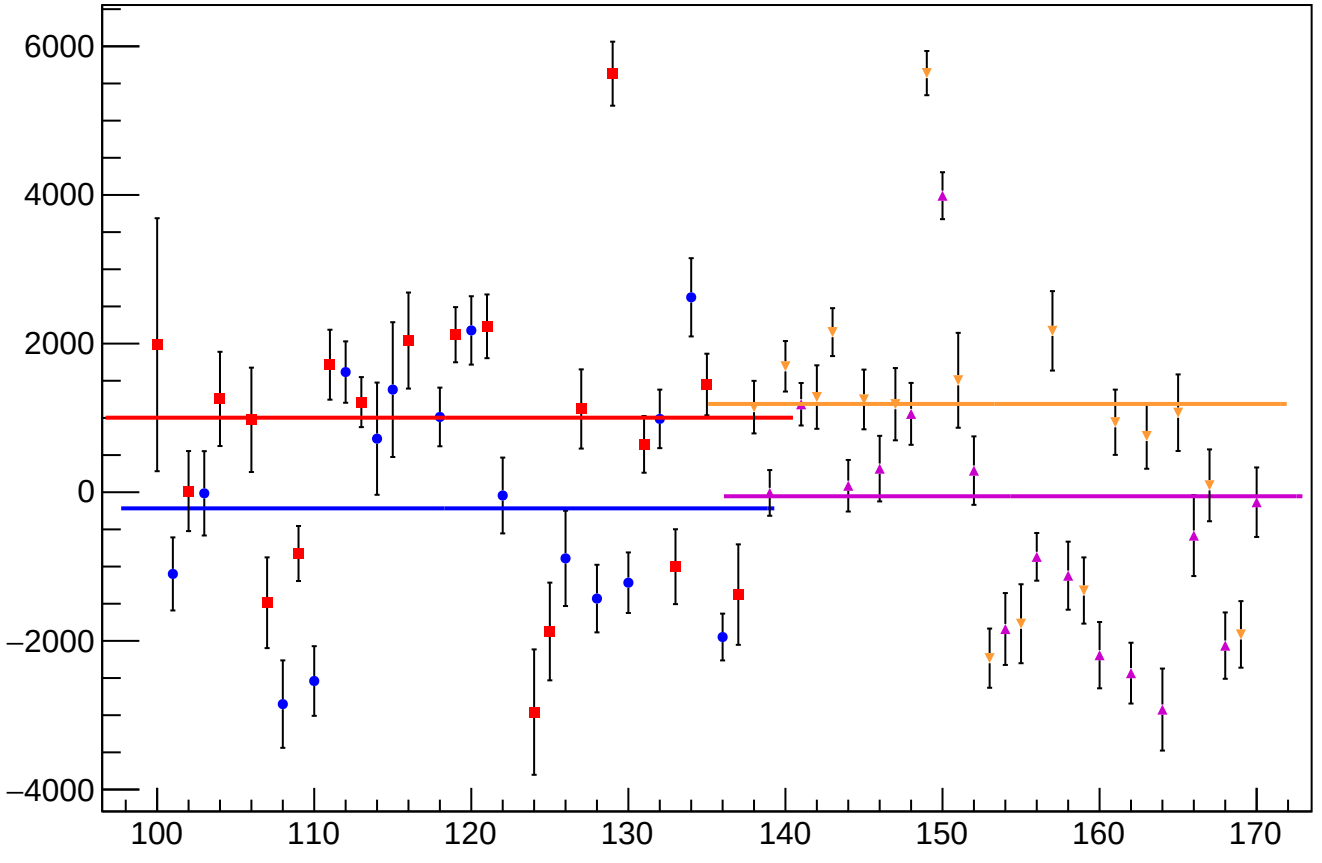
Left In: 218.586+/-0.044 $\chi^2$/NDF:732589.2/15

+ sign 226.622+/-0.036 $\chi^2$/NDF: 1609743.5/32

All: 218.138+/-0.025 $\chi^2$/NDF: 3499377.8/67

- sign 210.730+/-0.034 $\chi^2$/NDF: 1788202.0/34

# asym_bpm0l02WS_mean vs Slug




Right In: -216.948+/-117.887 $\chi^2$/NDF: 192.2/15

Left Out: 1188.092+/-101.170 $\chi^2$/NDF:430.0/16

Right Out: 1003.049+/-113.111 $\chi^2$/NDF: 254.3/18

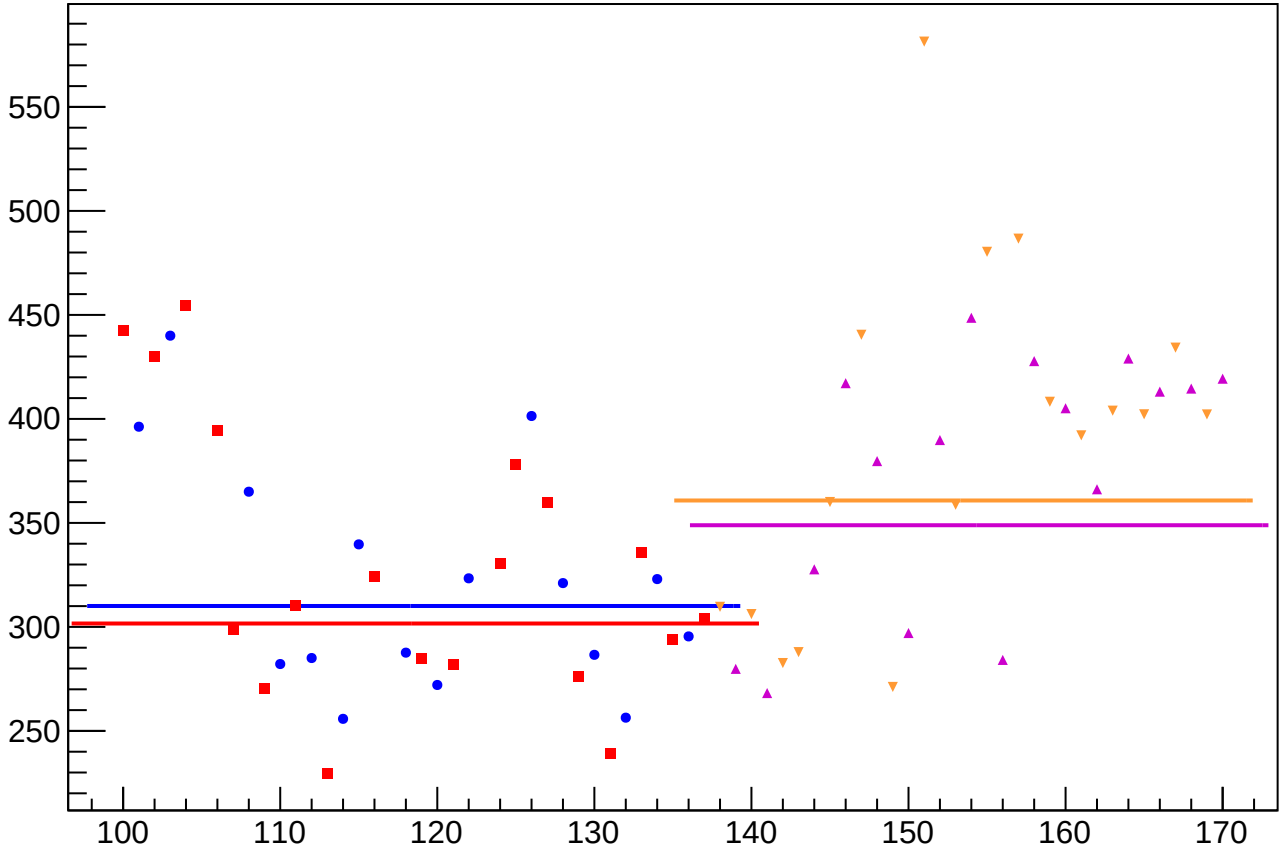
Left In: -54.082+/-98.644 $\chi^2$/NDF:322.0/15

+ sign 592.172+/-76.774 $\chi^2$/NDF: 704.0/32

All: 494.336+/-53.408 $\chi^2$/NDF: 1333.0/67

- sign 402.597+/-74.344 $\chi^2$/NDF: 625.9/34

# asym_bpm0l02WS_rms vs Slug




Right In: 310.062+/-0.083 $\chi^2$/NDF: 323283.5/15

Left Out: 360.783+/-0.072 $\chi^2$/NDF:1077352.3/16

Right Out: 301.637+/-0.080 $\chi^2$/NDF: 519888.9/18

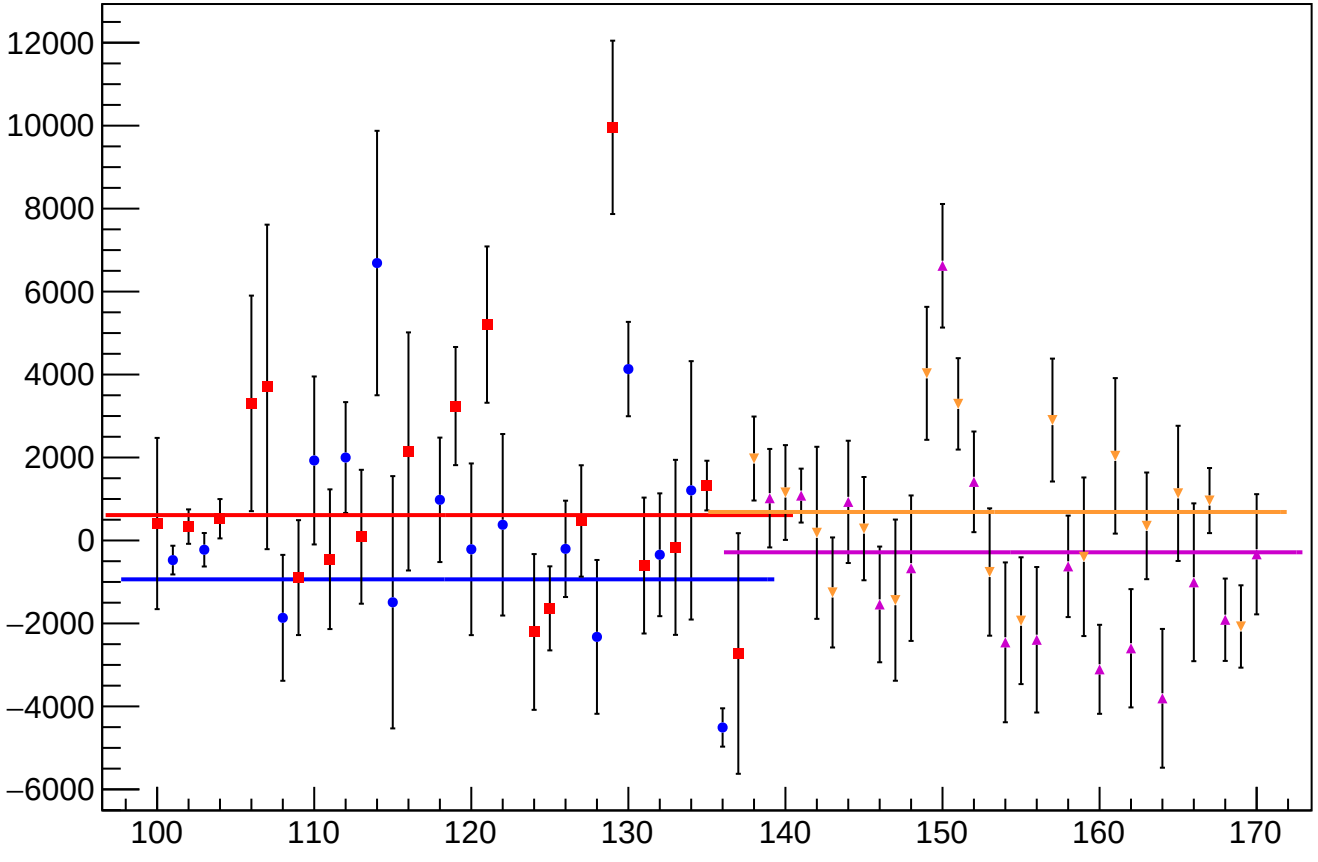
Left In: 348.885+/-0.070 $\chi^2$/NDF:816184.0/15

+ sign 339.270+/-0.054 $\chi^2$/NDF: 1613837.4/32

All: 333.699+/-0.038 $\chi^2$/NDF: 3168541.1/67

- sign 328.474+/-0.053 $\chi^2$/NDF: 1534293.3/34

# asym_bpm0l03WS_mean vs Slug




Right In: -936.949+/-204.717 $\chi^2$/NDF: 101.2/15

Left Out: 686.758+/-313.832 $\chi^2$/NDF:30.1/16

Right Out: 611.668+/-233.144 $\chi^2$/NDF: 44.1/18

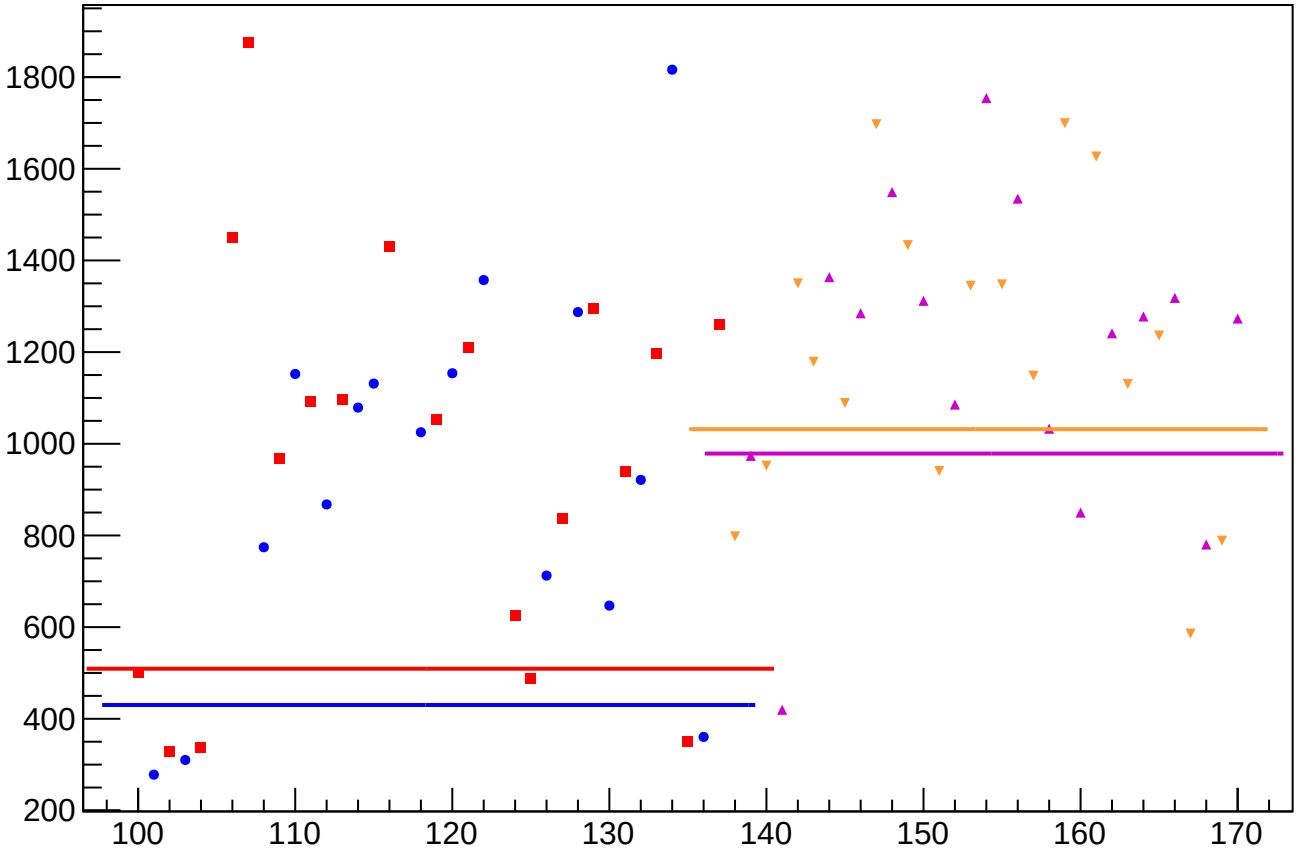
Left In: -284.990+/-312.283 $\chi^2$/NDF:50.2/15

+ sign -452.277+/-171.462 $\chi^2$/NDF: 150.1/32

All: -112.555+/-126.324 $\chi^2$/NDF: 258.3/67

- sign 290.757+/-186.822 $\chi^2$/NDF: 99.6/34

# asym_bpm0l03WS_rms vs Slug




Right In: 430.110+/-0.145 $\chi^2$/NDF: 3521861.8/15

Left Out: 1031.877+/-0.222 $\chi^2$/NDF:2002033.8/16

Right Out: 509.236+/-0.165 $\chi^2$/NDF: 3673425.8/18

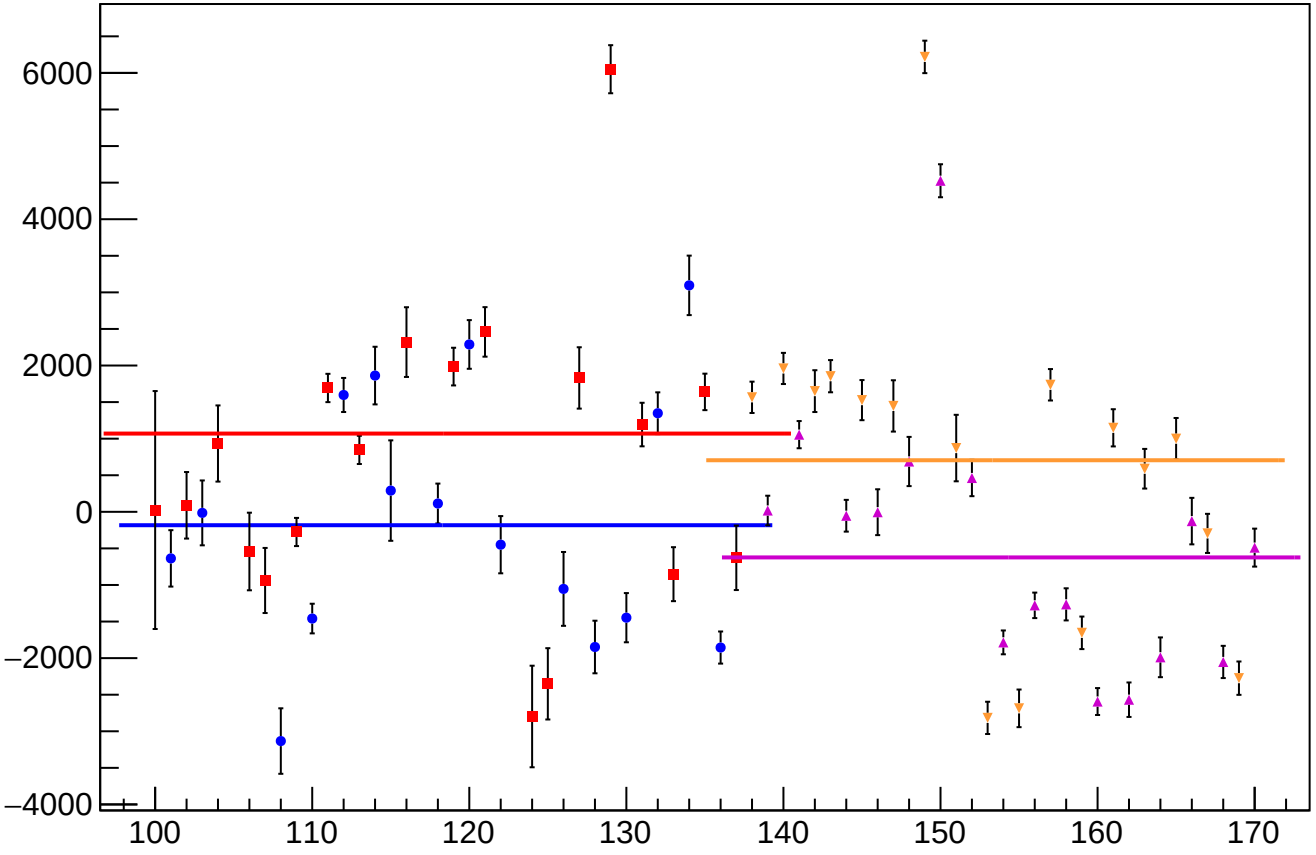
Left In: 978.642+/-0.221 $\chi^2$/NDF:2955188.2/15

+ sign 609.736+/-0.121 $\chi^2$/NDF: 10682361.7/32

All: 640.597+/-0.089 $\chi^2$/NDF: 20354275.3/67

- sign 677.235+/-0.132 $\chi^2$/NDF: 9530203.8/34

# asym_bpm0l04WS_mean vs Slug




Right In: -183.020+/-79.863 $\chi^2$/NDF: 417.7/15

Left Out: 705.073+/-60.233 $\chi^2$/NDF:1473.4/16

Right Out: 1069.729+/-73.060 $\chi^2$/NDF: 492.3/18

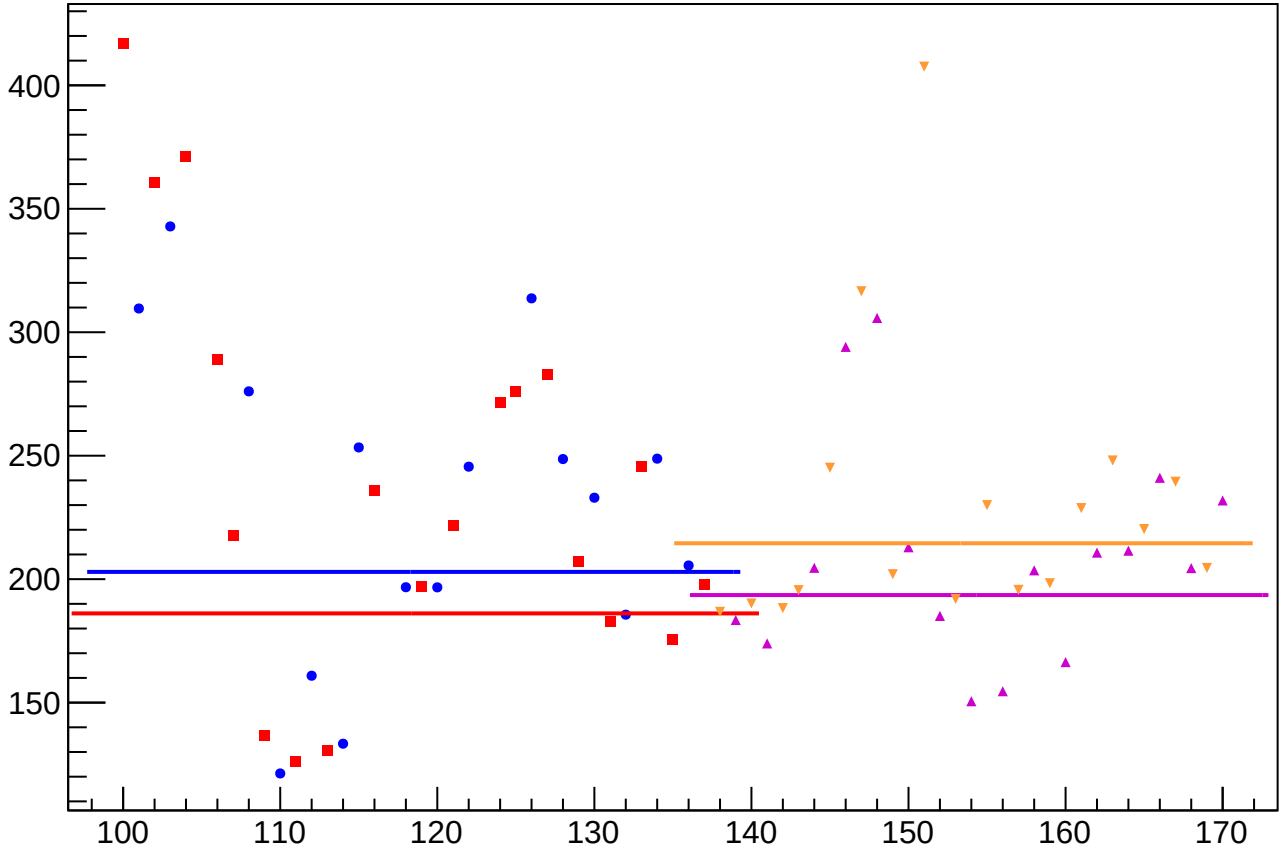
Left In: -623.296+/-55.283 $\chi^2$/NDF:983.7/15

+ sign 383.067+/-48.089 $\chi^2$/NDF: 1969.9/32

All: 171.183+/-32.496 $\chi^2$/NDF: 3823.0/67

- sign -6.880+/-44.085 $\chi^2$/NDF: 1817.4/34

# asym_bpm0l04WS_rms vs Slug




Right In: 202.941+/-0.056 $\chi^2$/NDF: 1071859.2/15

Left Out: 214.528+/-0.043 $\chi^2$/NDF:766122.7/16

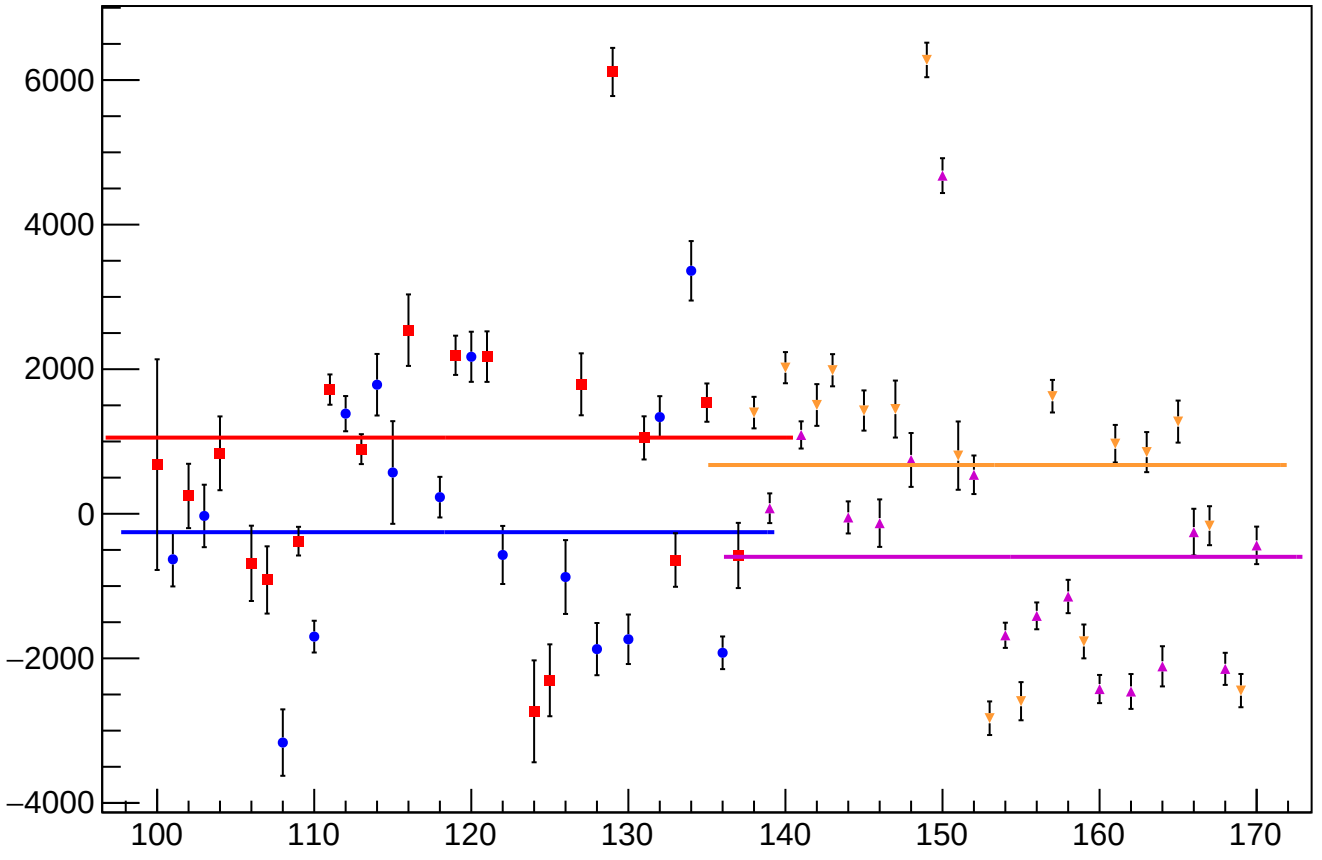
Right Out: 186.129+/-0.052 $\chi^2$/NDF: 1481664.4/18

Left In: 193.560+/-0.039 $\chi^2$/NDF:877294.6/15

+ sign 210.327+/-0.034 $\chi^2$/NDF: 1864813.4/32

All: 199.746+/-0.023 $\chi^2$/NDF: 4415103.6/67

- sign 190.855+/-0.031 $\chi^2$/NDF: 2372117.3/34




Right In: -254.470+/-82.490 $\chi^2$/NDF: 409.3/15

Left Out: 674.631+/-62.114 $\chi^2$/NDF:1361.3/16

Right Out: 1053.731+/-75.969 $\chi^2$/NDF: 477.7/18

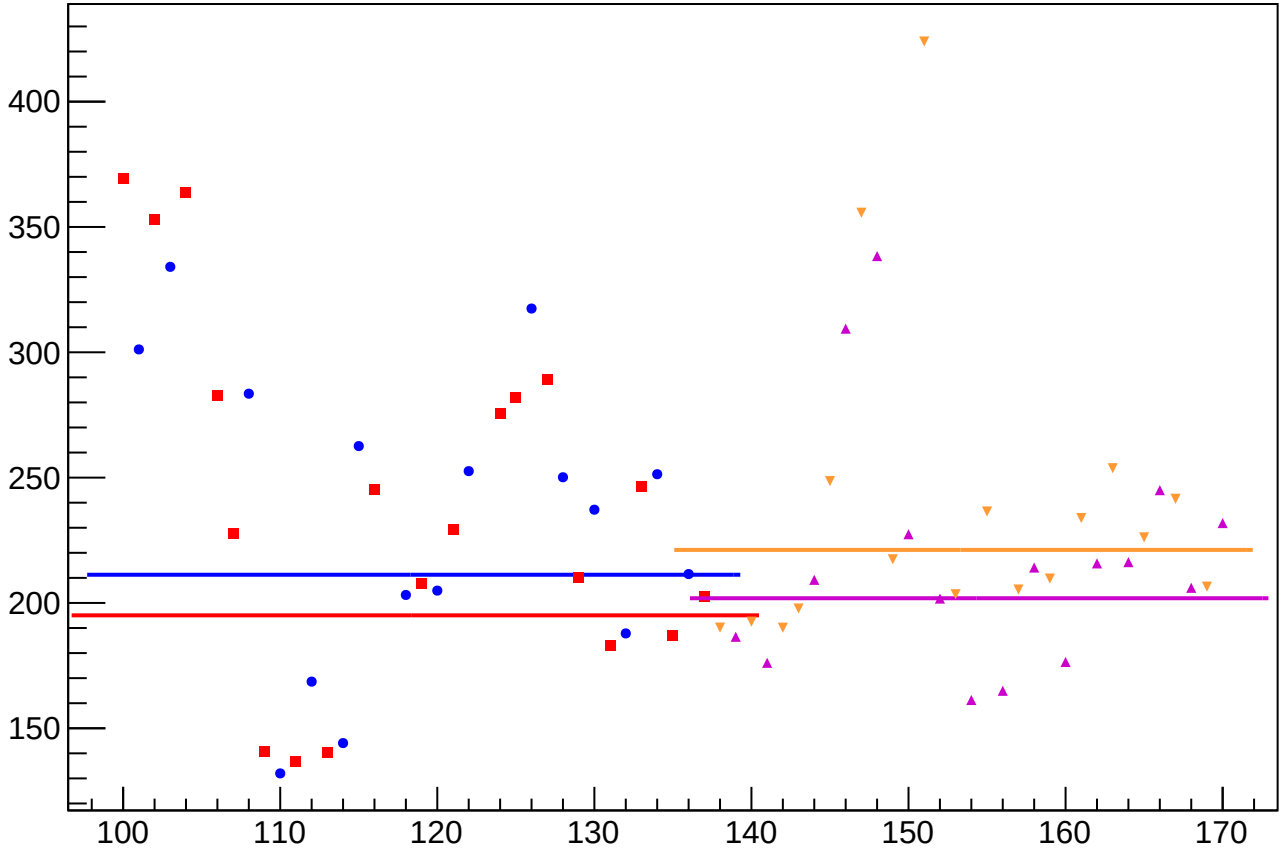
Left In: -595.508+/-57.553 $\chi^2$/NDF:900.6/15

+ sign 338.447+/-49.620 $\chi^2$/NDF: 1851.5/32

All: 159.142+/-33.685 $\chi^2$/NDF: 3553.4/67

- sign 5.882+/-45.875 $\chi^2$/NDF: 1677.7/34

# asym_bpm0l05WS_rms vs Slug




Right In: 211.254+/-0.058 $\chi^2$/NDF: 884363.6/15

Left Out: 221.160+/-0.044 $\chi^2$/NDF:827865.4/16

Right Out: 195.061+/-0.054 $\chi^2$/NDF: 1284879.9/18

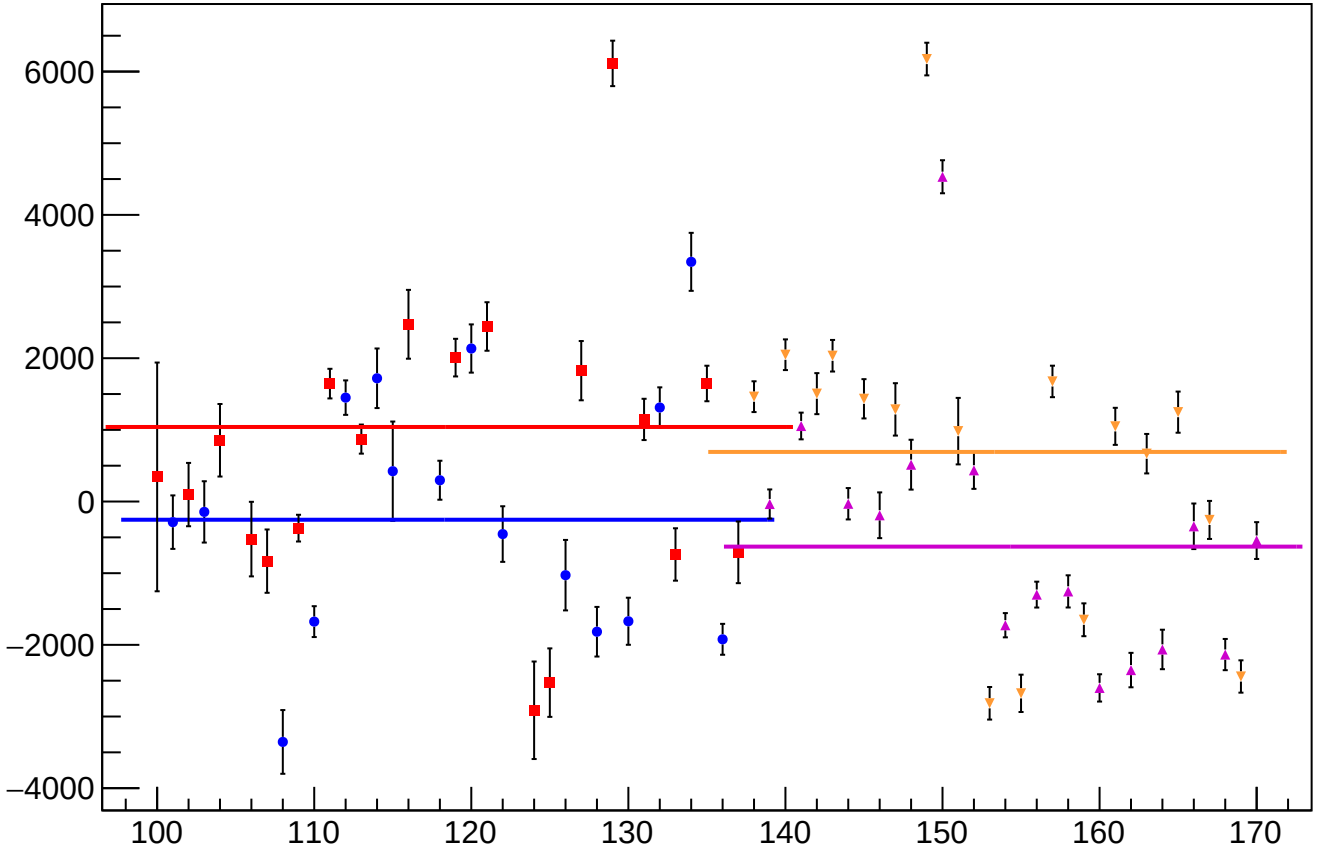
Left In: 201.873+/-0.041 $\chi^2$/NDF:858440.4/15

+ sign 217.575+/-0.035 $\chi^2$/NDF: 1730636.5/32

All: 207.770+/-0.024 $\chi^2$/NDF: 4029027.4/67

- sign 199.389+/-0.032 $\chi^2$/NDF: 2153535.8/34

# asym_bpm0l06WS_mean vs Slug




Right In: -254.044+/-80.222 $\chi^2$/NDF: 432.1/15

Left Out: 692.255+/-60.982 $\chi^2$/NDF:1428.6/16

Right Out: 1040.361+/-73.363 $\chi^2$/NDF: 533.4/18

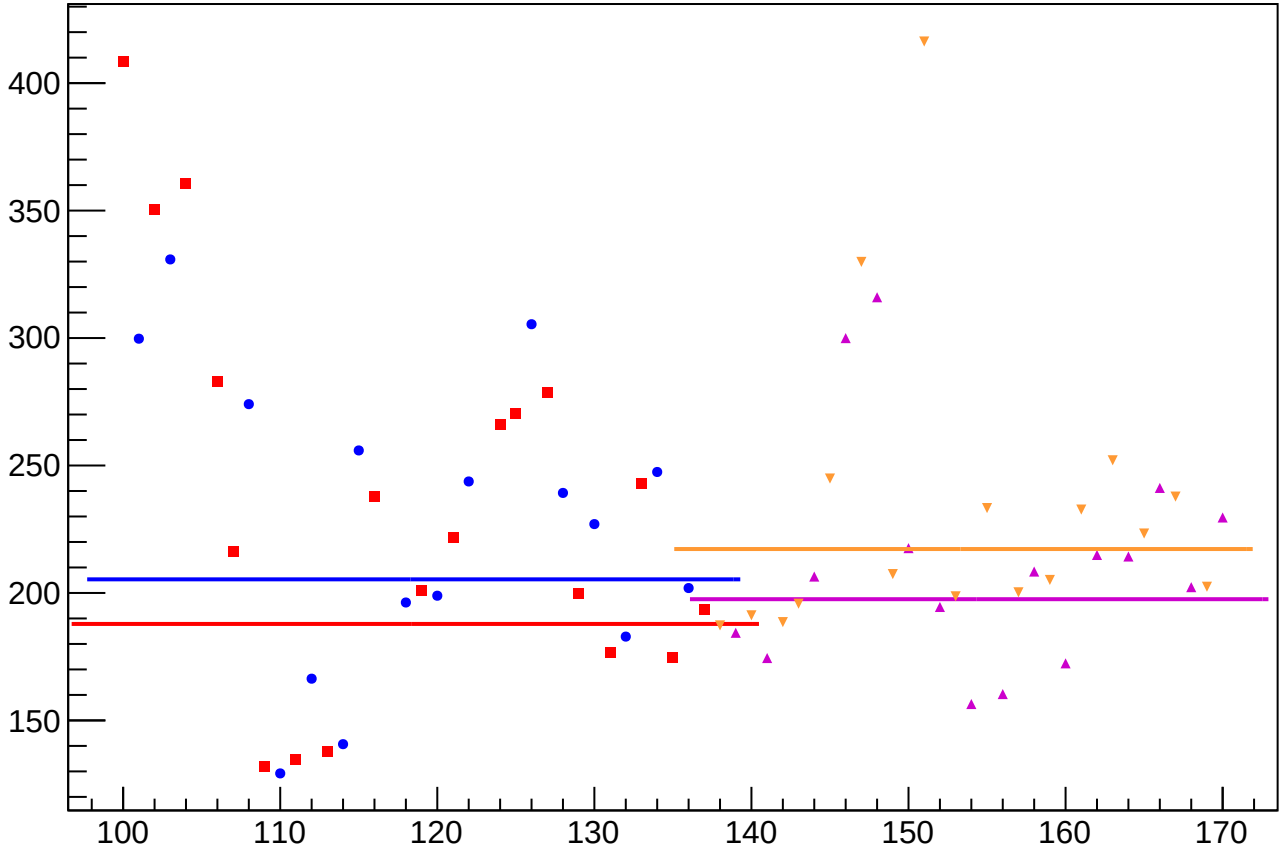
Left In: -629.221+/-56.324 $\chi^2$/NDF:926.1/15

+ sign 345.696+/-48.548 $\chi^2$/NDF: 1948.9/32

All: 153.060+/-32.874 $\chi^2$/NDF: 3763.4/67

- sign -10.072+/-44.676 $\chi^2$/NDF: 1785.4/34

# asym_bpm0l06WS_rms vs Slug




Right In: 205.341+/-0.057 $\chi^2$/NDF: 877398.6/15

Left Out: 217.233+/-0.043 $\chi^2$/NDF:788577.2/16

Right Out: 187.848+/-0.052 $\chi^2$/NDF: 1337049.4/18

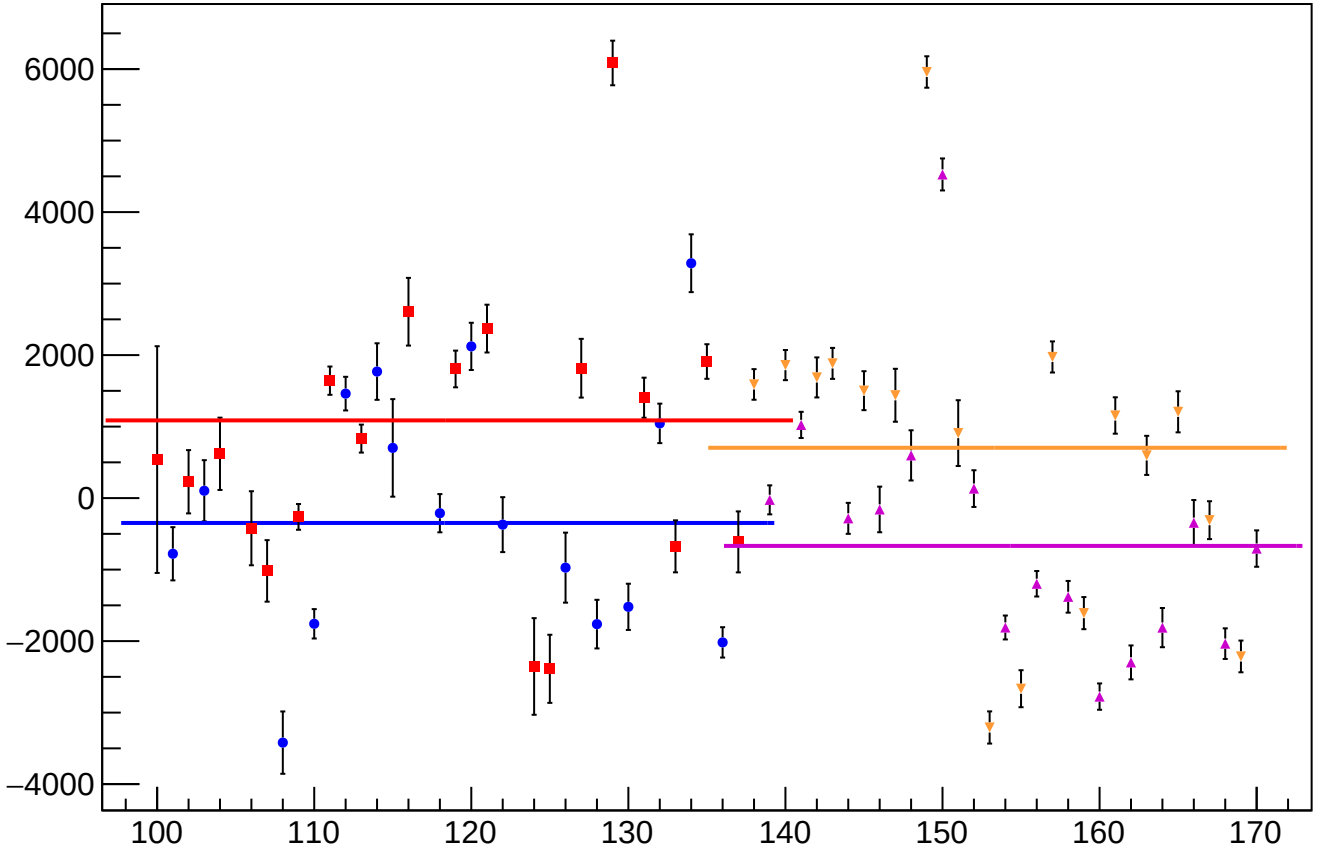
Left In: 197.555+/-0.040 $\chi^2$/NDF:825916.1/15

+ sign 212.878+/-0.034 $\chi^2$/NDF: 1693830.2/32

All: 202.632+/-0.023 $\chi^2$/NDF: 4043350.8/67

- sign 193.955+/-0.032 $\chi^2$/NDF: 2184992.8/34

# asym_bpm0l07WS_mean vs Slug




Right In: -347.666+/-78.567 $\chi^2$/NDF: 445.8/15

Left Out: 703.967+/-60.219 $\chi^2$/NDF:1479.3/16

Right Out: 1086.638+/-71.539 $\chi^2$/NDF: 527.2/18

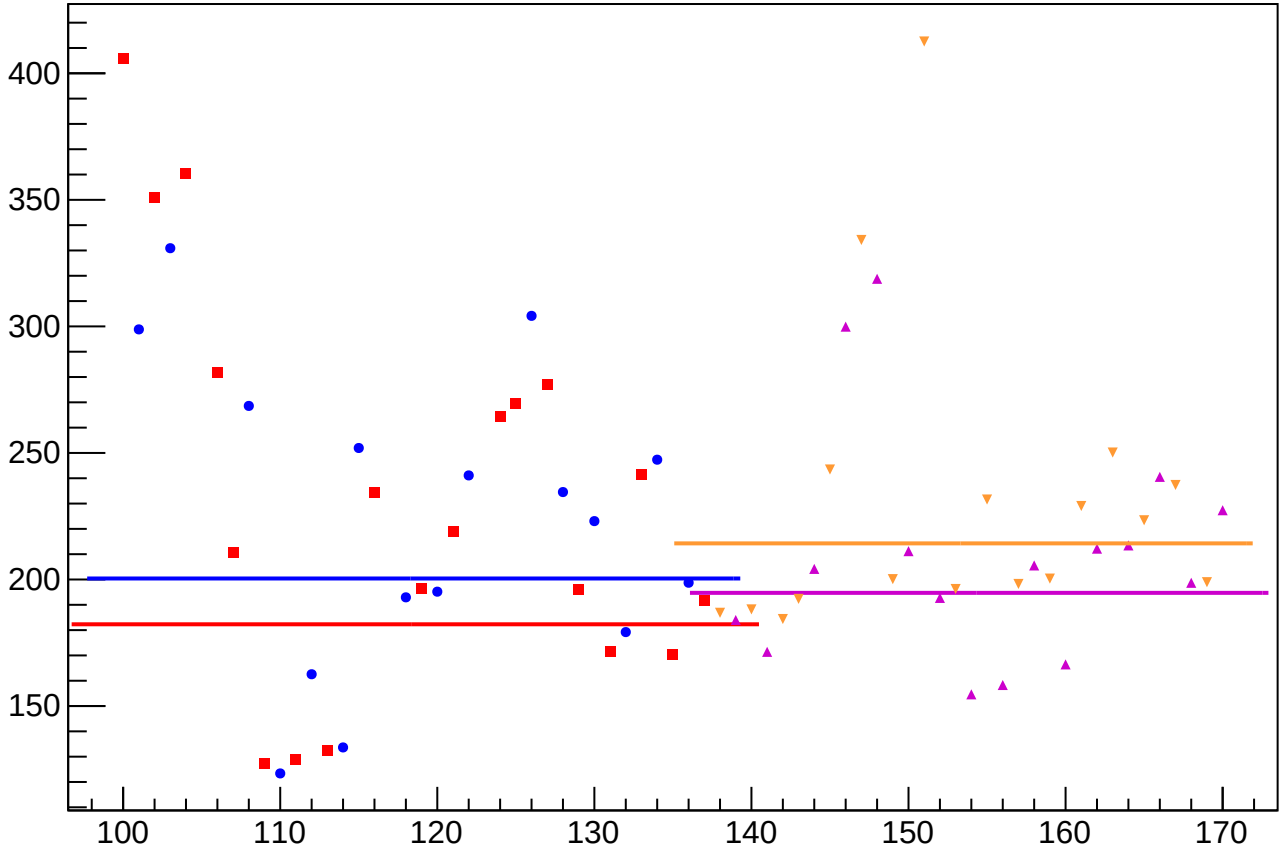
Left In: -668.653+/-55.571 $\chi^2$/NDF:965.8/15

+ sign 314.790+/-47.795 $\chi^2$/NDF: 2038.0/32

All: 139.606+/-32.326 $\chi^2$/NDF: 3931.2/67

- sign -8.093+/-43.886 $\chi^2$/NDF: 1868.5/34

# asym_bpm0l07WS_rms vs Slug




Right In: 200.399+/-0.056 $\chi^2$/NDF: 959000.8/15

Left Out: 214.272+/-0.043 $\chi^2$/NDF:827222.3/16

Right Out: 182.302+/-0.051 $\chi^2$/NDF: 1447197.0/18

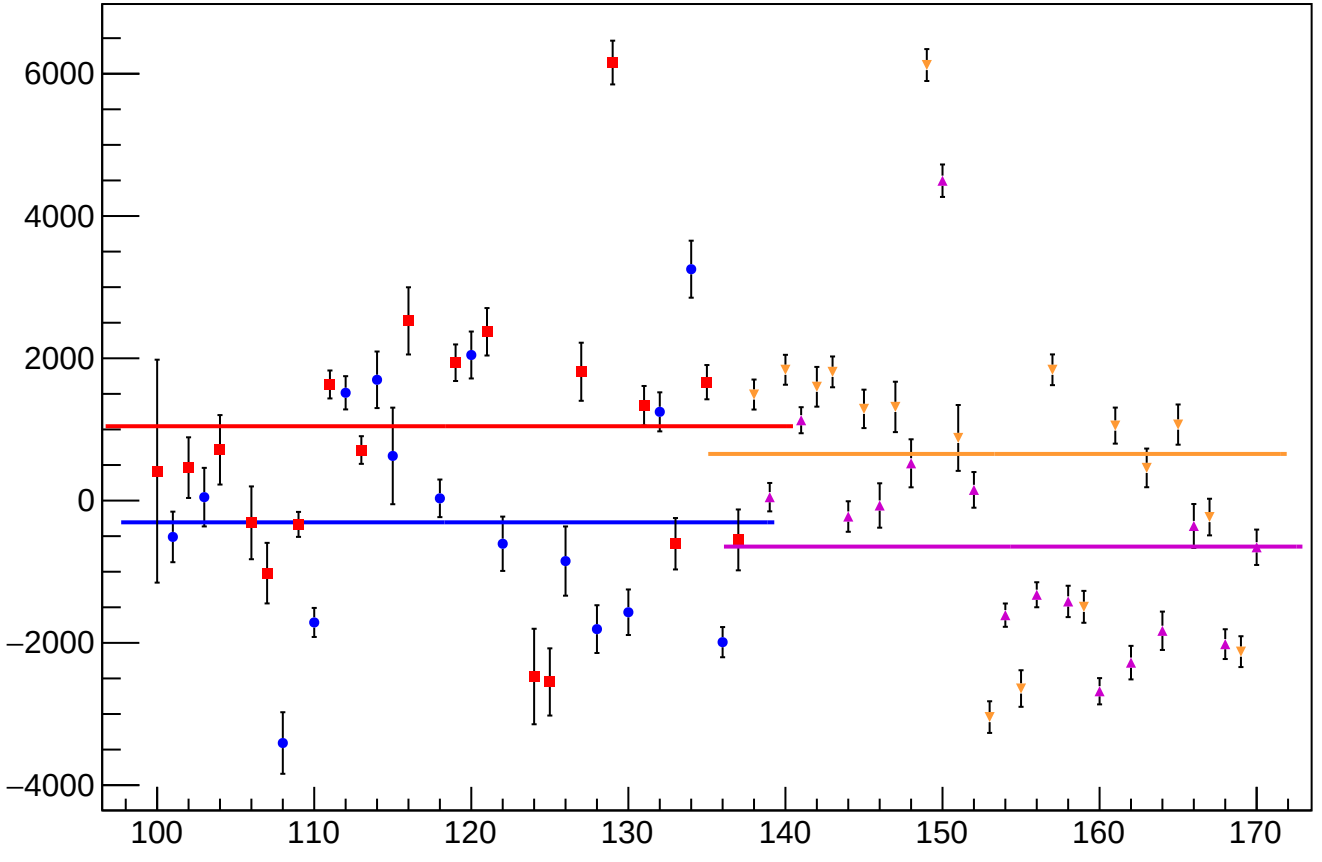
Left In: 194.723+/-0.039 $\chi^2$/NDF:865982.0/15

+ sign 209.138+/-0.034 $\chi^2$/NDF: 1825506.4/32

All: 198.781+/-0.023 $\chi^2$/NDF: 4349392.3/67

- sign 190.049+/-0.031 $\chi^2$/NDF: 2350786.1/34

# asym_bpm0l08WS_mean vs Slug




Right In: -305.649+/-77.868 $\chi^2$/NDF: 451.8/15

Left Out: 655.830+/-59.750 $\chi^2$/NDF:1434.4/16

Right Out: 1045.144+/-70.824 $\chi^2$/NDF: 552.2/18

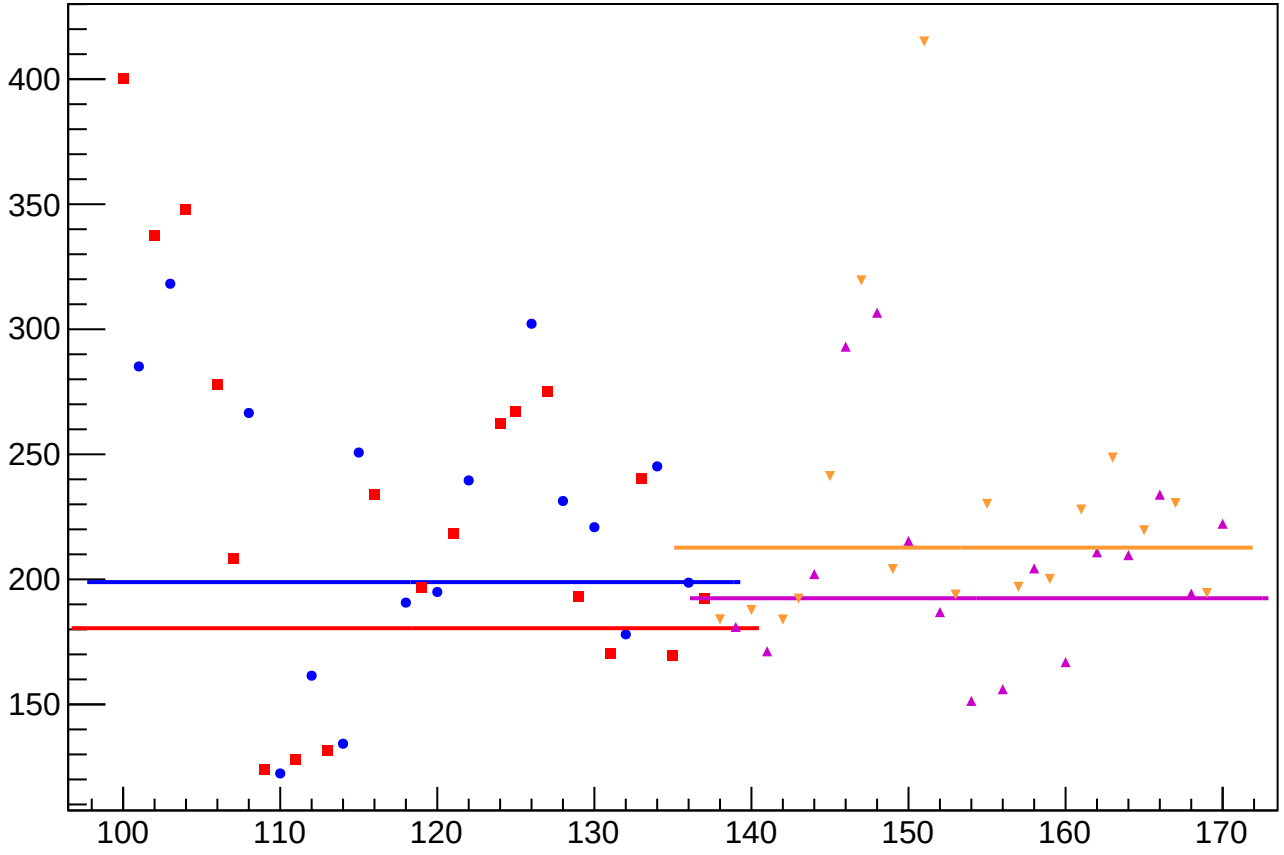
Left In: -646.749+/-54.921 $\chi^2$/NDF:937.6/15

+ sign 299.519+/-47.403 $\chi^2$/NDF: 1982.2/32

All: 130.383+/-32.011 $\chi^2$/NDF: 3851.7/67

- sign -11.399+/-43.401 $\chi^2$/NDF: 1846.1/34

# asym_bpm0l08WS_rms vs Slug




Right In: 198.903+/-0.055 $\chi^2$/NDF: 912765.0/15

Left Out: 212.694+/-0.042 $\chi^2$/NDF:800978.4/16

Right Out: 180.473+/-0.050 $\chi^2$/NDF: 1434435.8/18

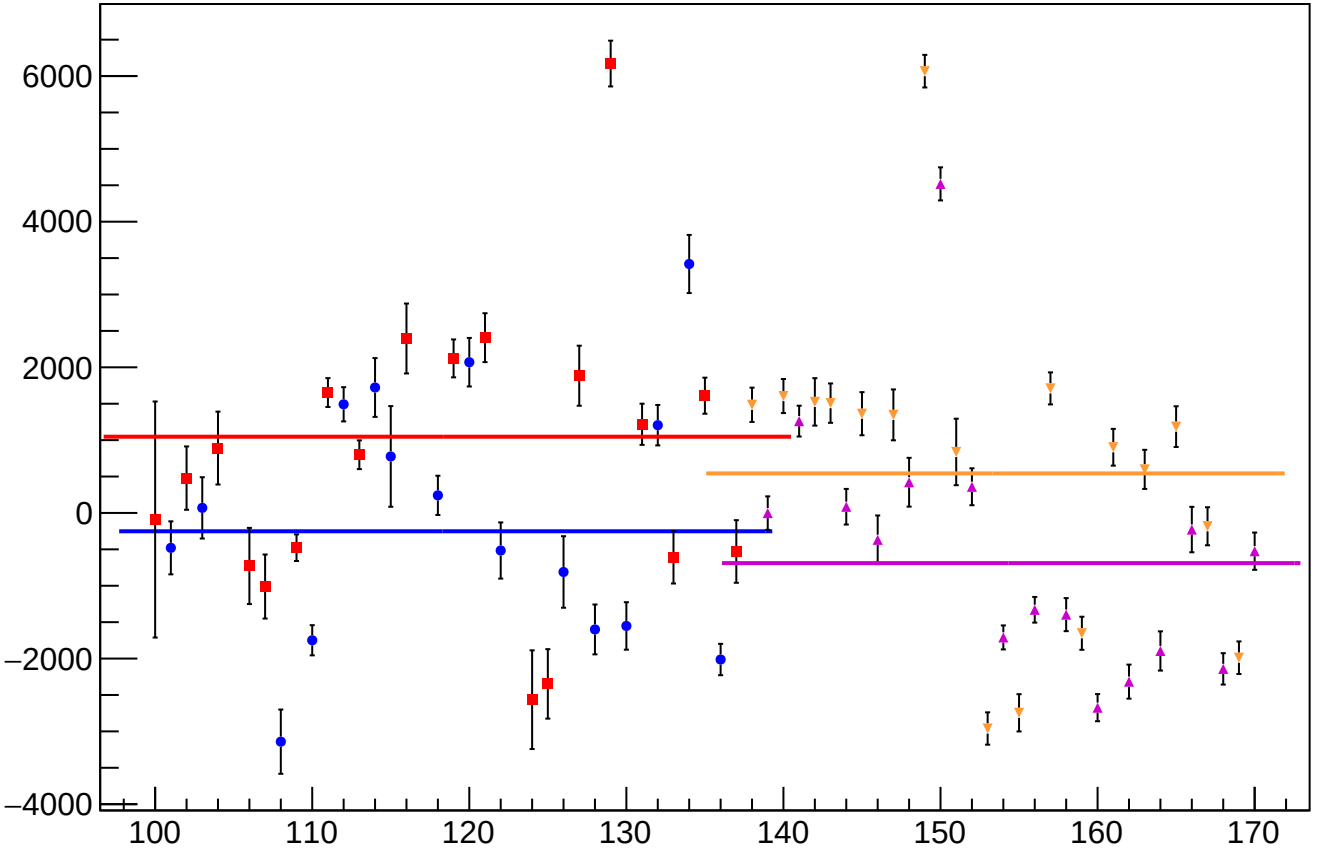
Left In: 192.448+/-0.039 $\chi^2$/NDF:835521.4/15

+ sign 207.583+/-0.034 $\chi^2$/NDF: 1753232.9/32

All: 196.904+/-0.023 $\chi^2$/NDF: 4245514.2/67

- sign 187.951+/-0.031 $\chi^2$/NDF: 2305665.8/34

# asym_bpm0l09WS_mean vs Slug




Right In: -251.795+/-78.974 $\chi^2$/NDF: 441.2/15

Left Out: 542.894+/-62.451 $\chi^2$/NDF:1359.8/16

Right Out: 1047.132+/-72.190 $\chi^2$/NDF: 546.7/18

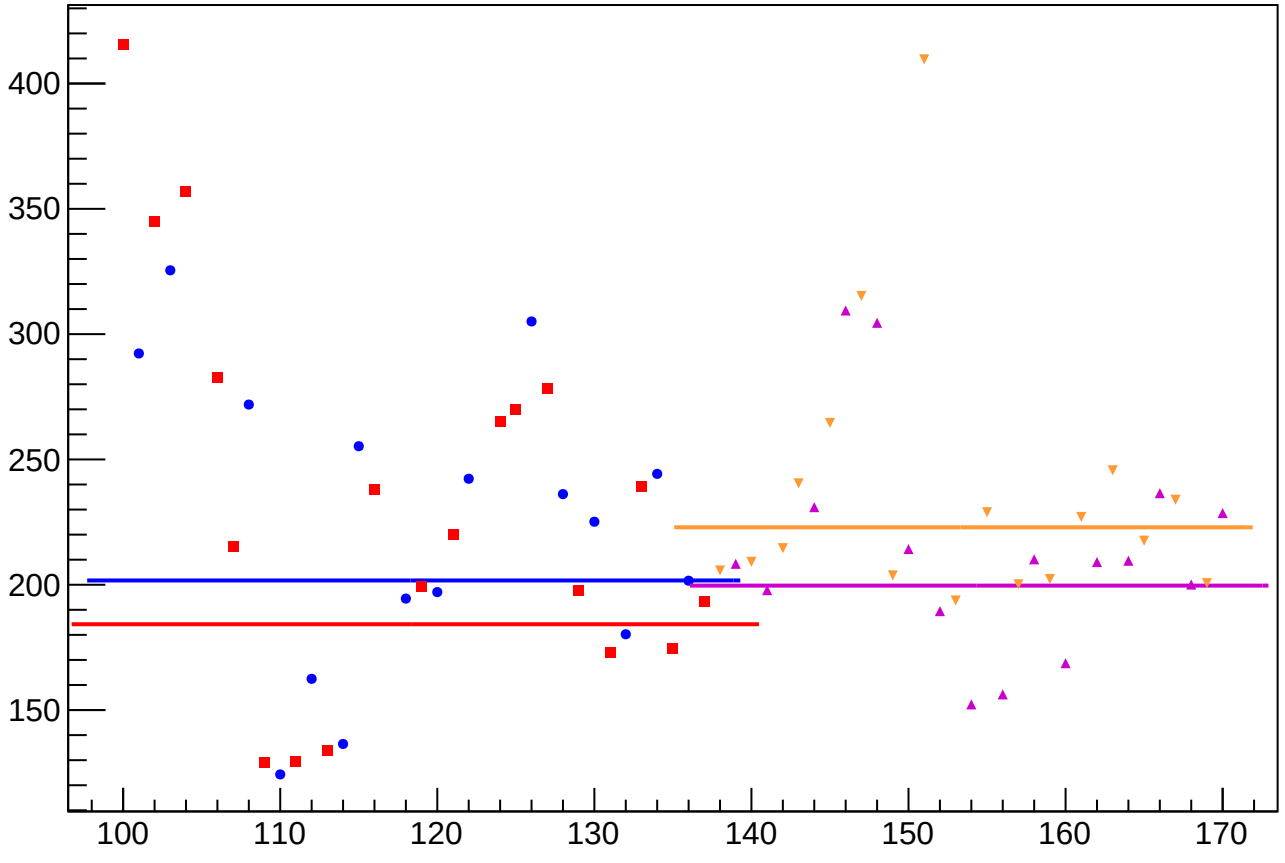
Left In: -688.938+/-57.062 $\chi^2$/NDF:950.1/15

+ sign 237.144+/-48.986 $\chi^2$/NDF: 1863.3/32

All: 96.289+/-33.046 $\chi^2$/NDF: 3731.3/67

- sign -21.345+/-44.766 $\chi^2$/NDF: 1852.8/34

# asym_bpm0l09WS_rms vs Slug




Right In: 201.714+/-0.056 $\chi^2$/NDF: 924210.1/15

Left Out: 222.922+/-0.044 $\chi^2$/NDF:668236.9/16

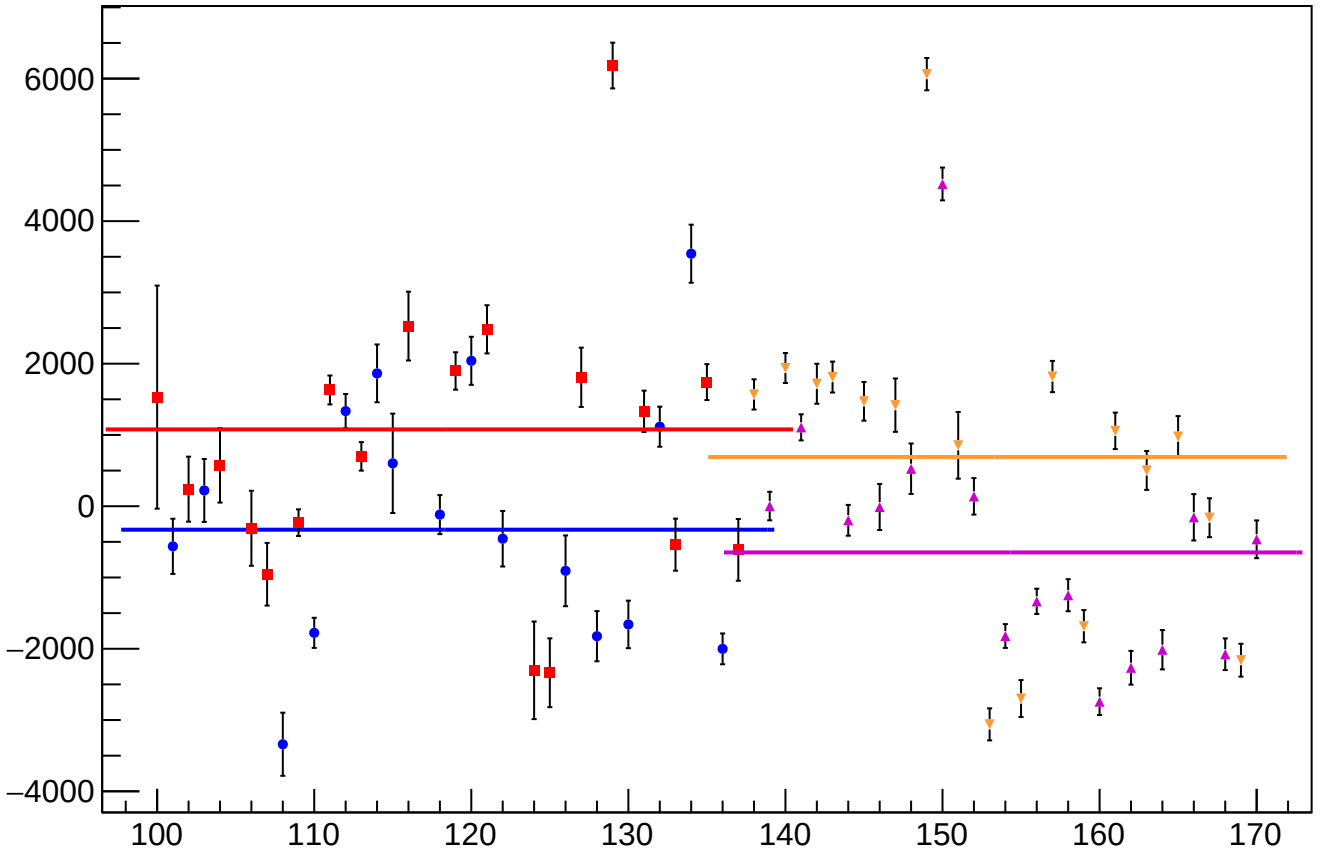
Right Out: 184.244+/-0.051 $\chi^2$/NDF: 1403761.8/18

Left In: 199.659+/-0.040 $\chi^2$/NDF:864840.7/15

+ sign 214.762+/-0.035 $\chi^2$/NDF: 1681191.1/32

All: 203.302+/-0.023 $\chi^2$/NDF: 4206803.4/67

- sign 193.731+/-0.032 $\chi^2$/NDF: 2324729.7/34




Right In: -329.377+/-80.367 $\chi^2$/NDF: 436.4/15

Left Out: 690.738+/-60.677 $\chi^2$/NDF:1418.4/16

Right Out: 1077.876+/-73.404 $\chi^2$/NDF: 502.0/18

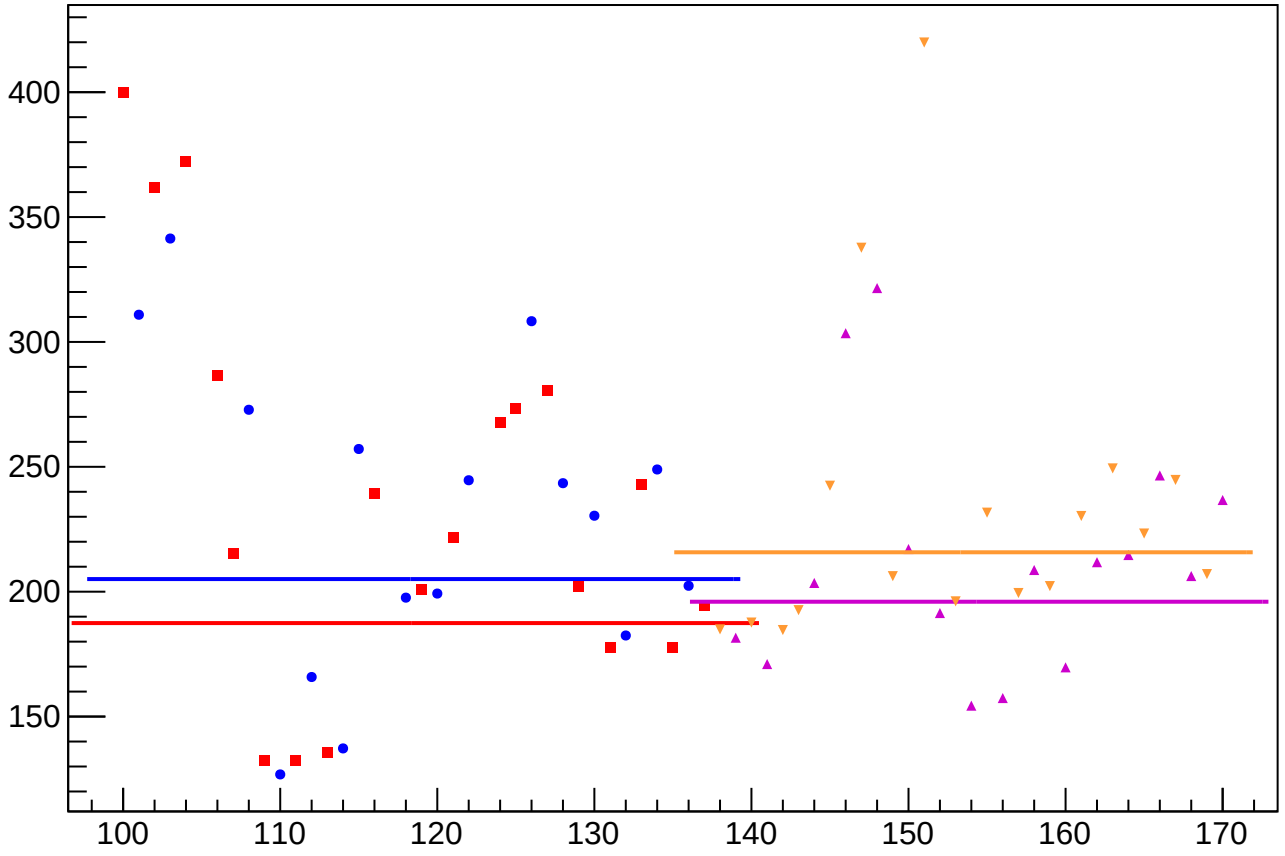
Left In: -648.622+/-56.011 $\chi^2$/NDF:947.9/15

+ sign 320.369+/-48.425 $\chi^2$/NDF: 1957.4/32

All: 139.575+/-32.778 $\chi^2$/NDF: 3782.6/67

- sign -13.293+/-44.529 $\chi^2$/NDF: 1799.5/34

# asym_bpm0l10WS_rms vs Slug




Right In: 205.053+/-0.057 $\chi^2$/NDF: 963052.0/15

Left Out: 215.778+/-0.043 $\chi^2$/NDF:845661.9/16

Right Out: 187.431+/-0.052 $\chi^2$/NDF: 1410802.2/18

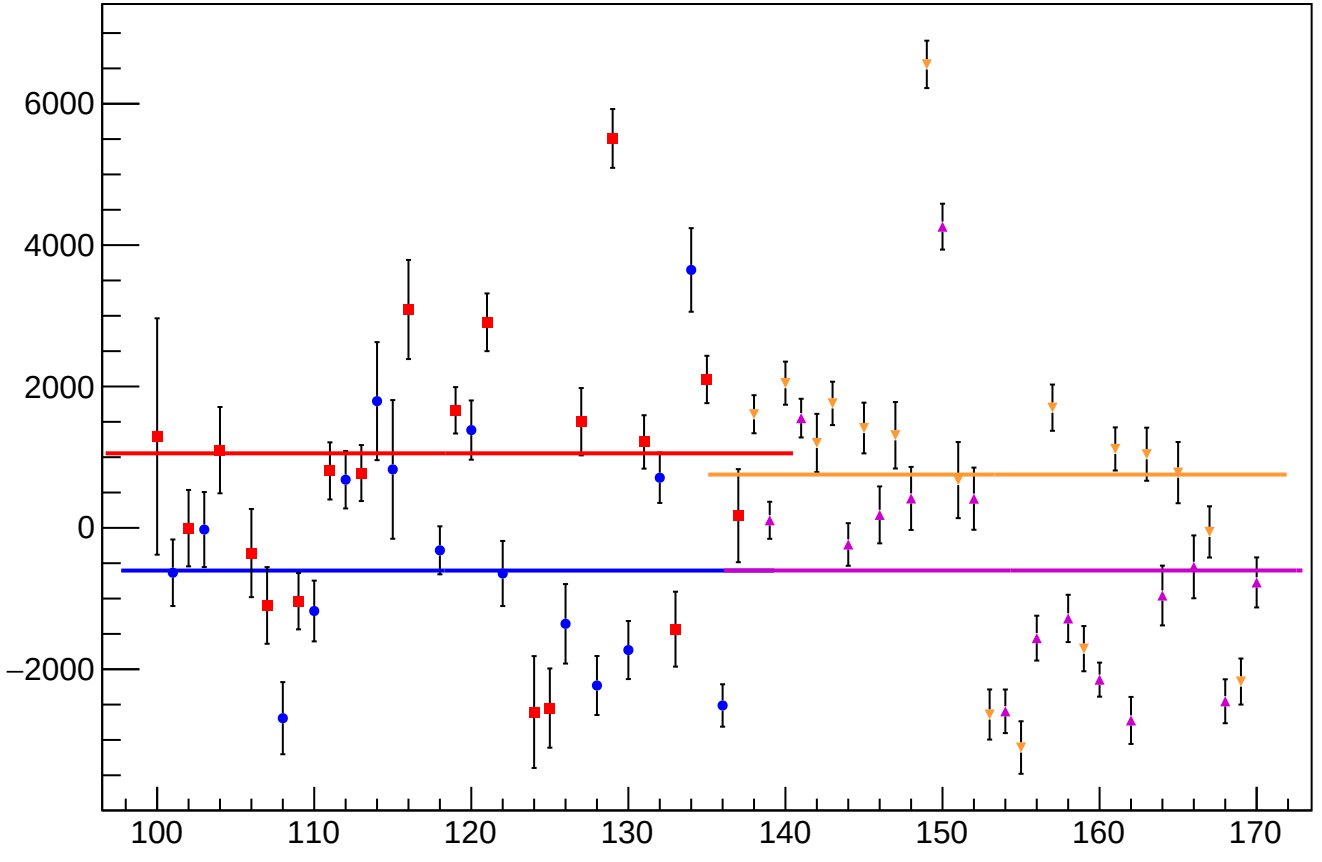
Left In: 195.980+/-0.040 $\chi^2$/NDF:923058.9/15

+ sign 211.884+/-0.034 $\chi^2$/NDF: 1831401.7/32

All: 201.562+/-0.023 $\chi^2$/NDF: 4350115.4/67

- sign 192.834+/-0.031 $\chi^2$/NDF: 2351005.8/34

# asym_bpm0r03WS_mean vs Slug




Right In: -603.855+/-110.693 $\chi^2$/NDF: 193.5/15

Left Out: 754.221+/-84.444 $\chi^2$/NDF:699.3/16

Right Out: 1054.556+/-108.264 $\chi^2$/NDF: 297.7/18

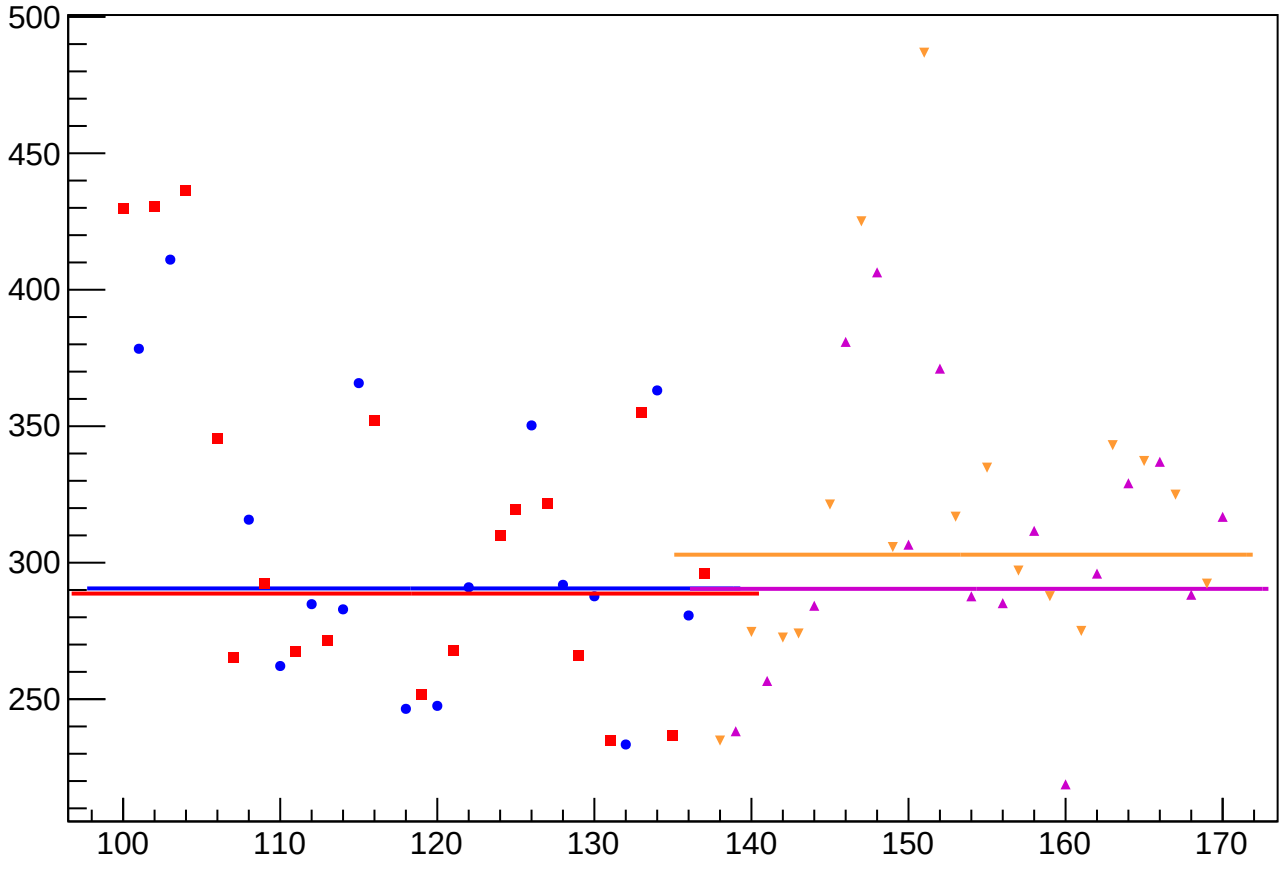
Left In: -602.739+/-81.814 $\chi^2$/NDF:482.8/15

+ sign 254.620+/-67.138 $\chi^2$/NDF: 988.0/32

All: 123.557+/-46.800 $\chi^2$/NDF: 1925.1/67

- sign -0.323+/-65.273 $\chi^2$/NDF: 929.7/34

# asym_bpm0r03WS_rms vs Slug




Right In: 290.566+/-0.078 $\chi^2$/NDF: 359807.1/15

Left Out: 302.934+/-0.060 $\chi^2$/NDF:632266.3/16

Right Out: 288.686+/-0.077 $\chi^2$/NDF: 489094.8/18

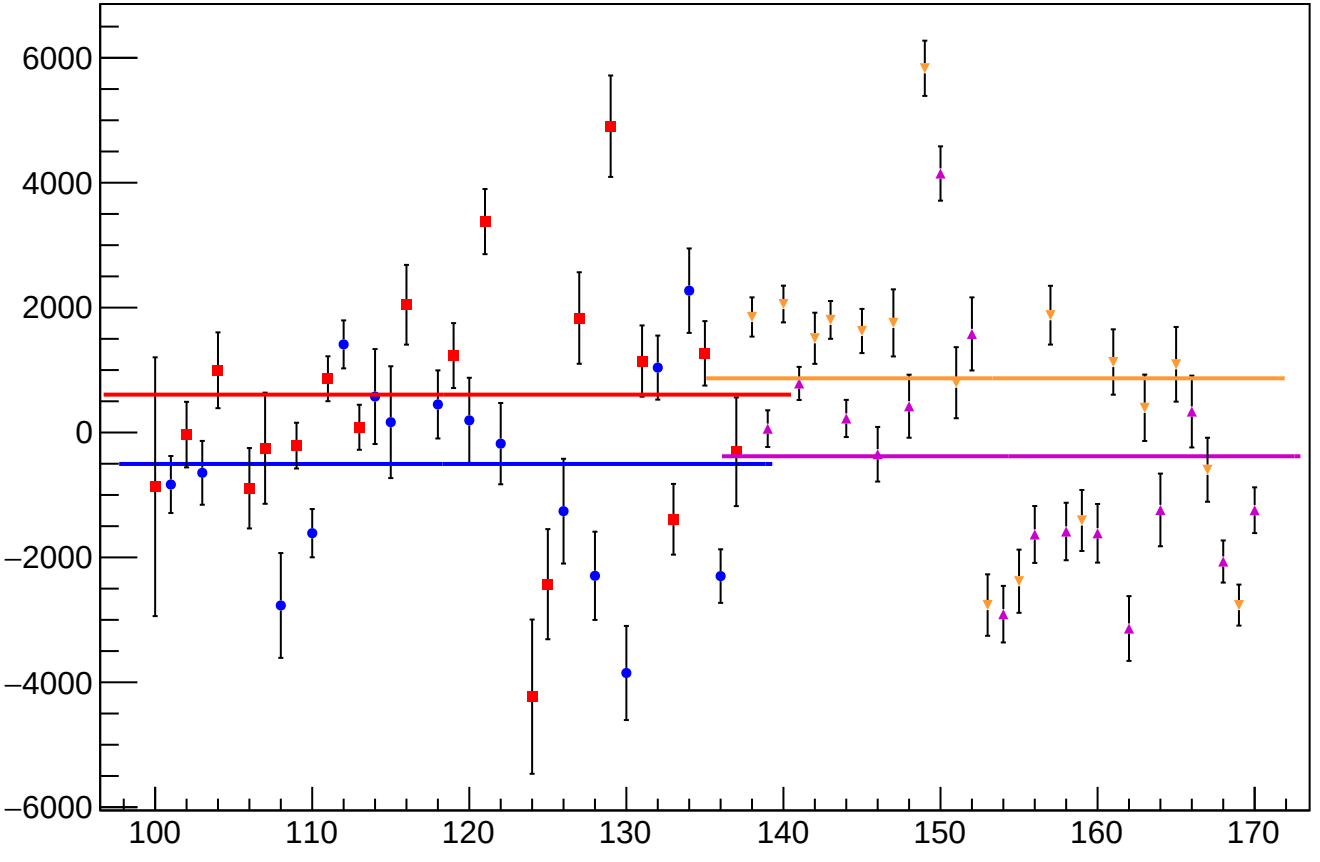
Left In: 290.418+/-0.058 $\chi^2$/NDF:654870.9/15

+ sign 298.384+/-0.047 $\chi^2$/NDF: 1007856.6/32

All: 293.965+/-0.033 $\chi^2$/NDF: 2169002.7/67

- sign 289.788+/-0.046 $\chi^2$/NDF: 1144291.5/34

# asym_bpm0r05WS_mean vs Slug




Right In: -503.675+/-140.058 $\chi^2$/NDF: 118.2/15

Left Out: 868.001+/-101.004 $\chi^2$/NDF:425.1/16

Right Out: 606.880+/-129.609 $\chi^2$/NDF: 125.1/18

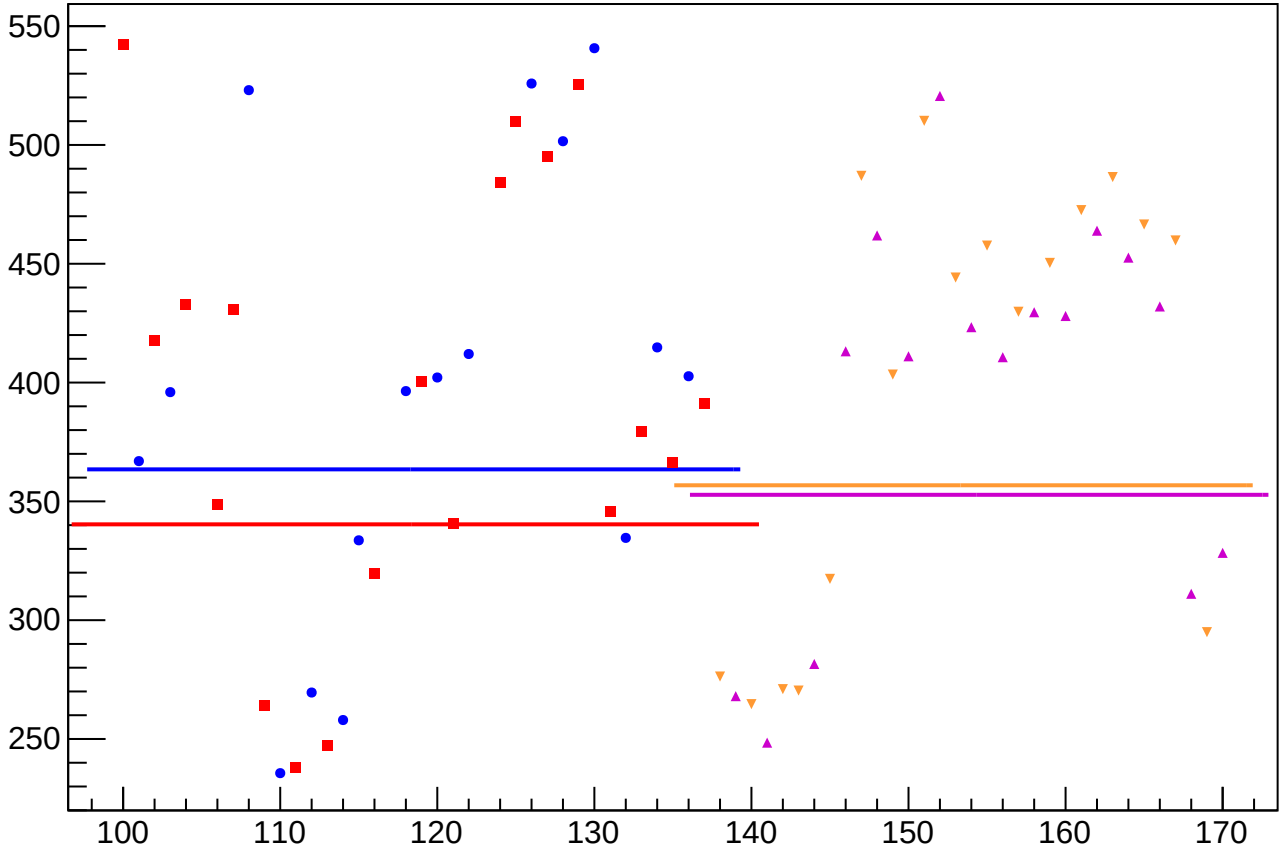
Left In: -380.443+/-100.333 $\chi^2$/NDF:262.9/15

+ sign 398.700+/-81.923 $\chi^2$/NDF: 606.4/32

All: 187.551+/-56.993 $\chi^2$/NDF: 1043.6/67

- sign -10.482+/-79.338 $\chi^2$/NDF: 424.3/34

# asym_bpm0r05WS_rms vs Slug




Right In: 363.471+/-0.099 $\chi^2$/NDF: 780893.2/15

Left Out: 356.773+/-0.071 $\chi^2$/NDF:1588323.5/16

Right Out: 340.332+/-0.092 $\chi^2$/NDF: 856230.3/18

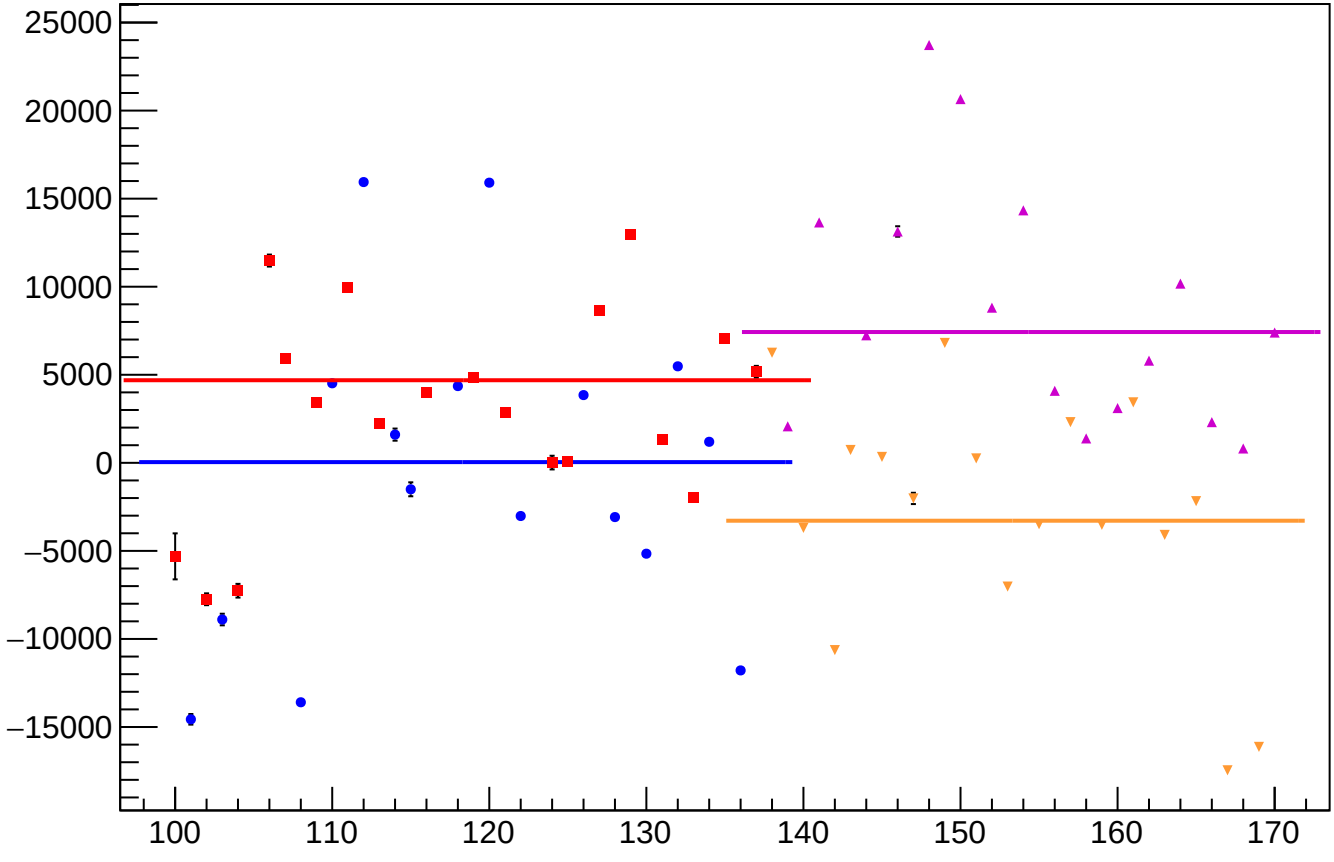
Left In: 352.760+/-0.071 $\chi^2$/NDF:1338673.1/15

+ sign 359.065+/-0.058 $\chi^2$/NDF: 2372226.0/32

All: 353.408+/-0.040 $\chi^2$/NDF: 4597104.5/67

- sign 348.103+/-0.056 $\chi^2$/NDF: 2206401.2/34

# asym_bpm0i02WS_mean vs Slug




Right In: 40.915+/-54.199 $\chi^2$/NDF: 30786.3/15

Left Out: -3287.074+/-47.001 $\chi^2$/NDF:20109.9/16

Right Out: 4689.710+/-52.095 $\chi^2$/NDF: 7795.7/18

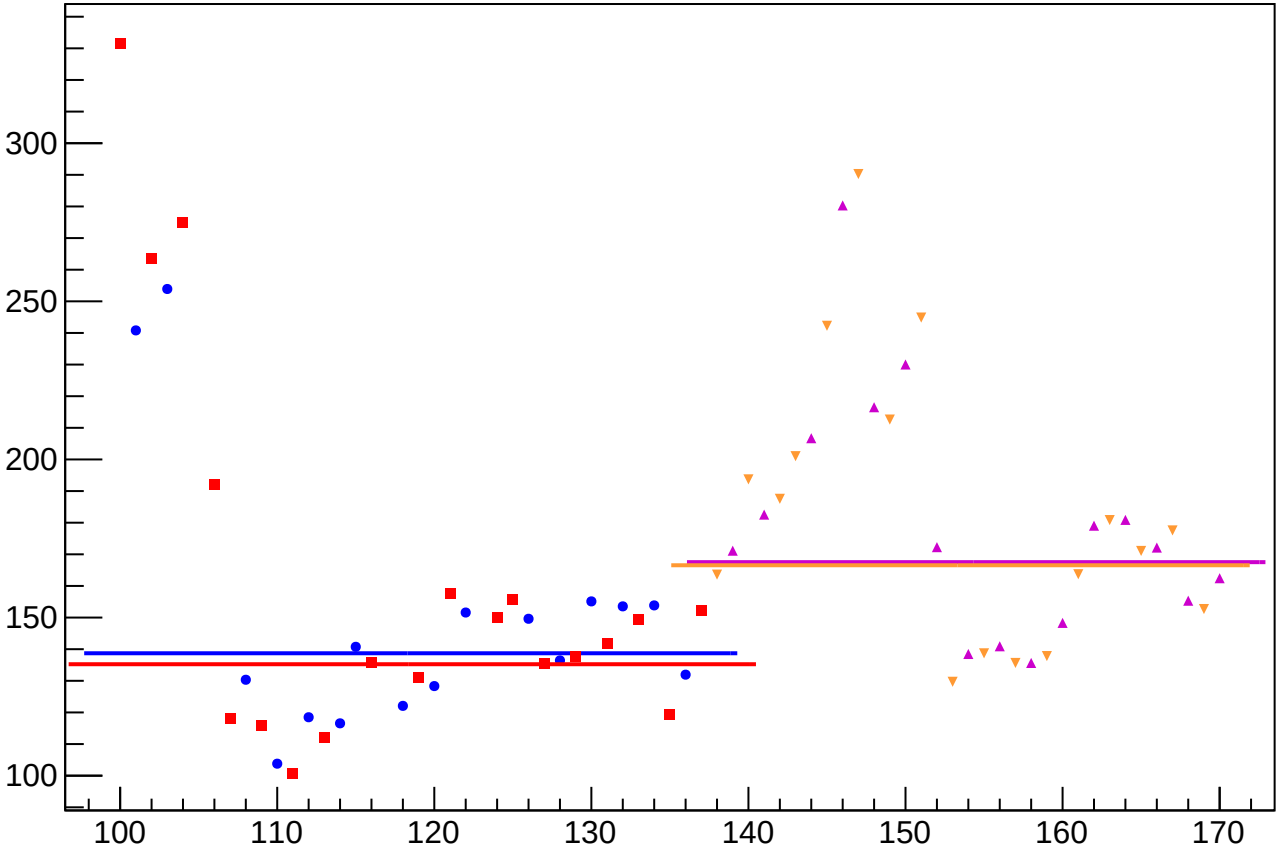
Left In: 7427.090+/-47.770 $\chi^2$/NDF:16829.9/15

+ sign -1858.587+/-35.509 $\chi^2$/NDF: 53048.2/32

All: 2193.192+/-25.002 $\chi^2$/NDF: 104994.8/67

- sign 6176.726+/-35.208 $\chi^2$/NDF: 26125.4/34

# asym_bpm0i02WS_rms vs Slug




Right In: 138.712+/-0.038 $\chi^2$/NDF: 657791.3/15

Left Out: 166.540+/-0.033 $\chi^2$/NDF:1157258.3/16

Right Out: 135.245+/-0.037 $\chi^2$/NDF: 890024.8/18

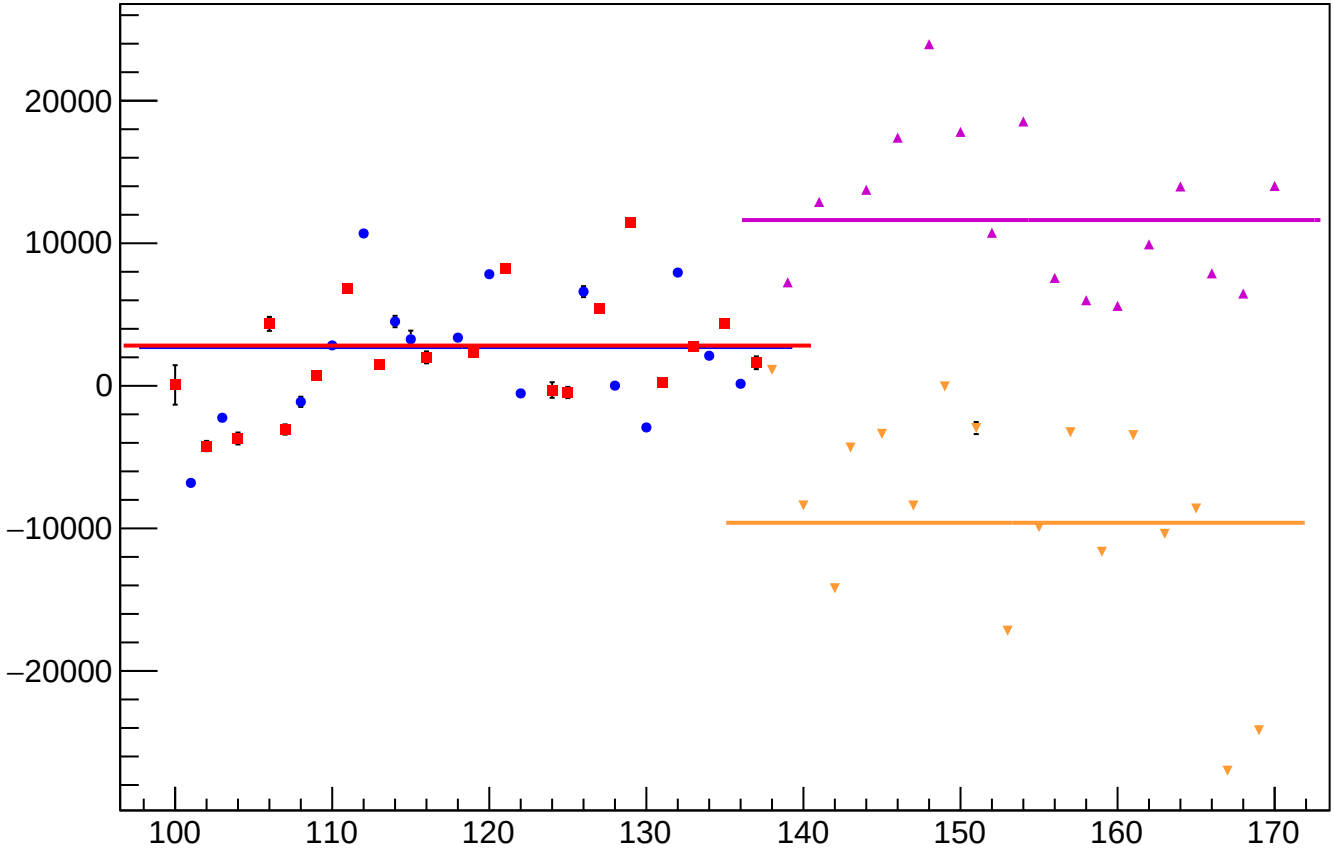
Left In: 167.522+/-0.034 $\chi^2$/NDF:860138.1/15

+ sign 154.595+/-0.025 $\chi^2$/NDF: 2115986.9/32

All: 153.679+/-0.018 $\chi^2$/NDF: 4285861.0/67

- sign 152.779+/-0.025 $\chi^2$/NDF: 2167235.7/34

# asym_bpm0i02aWS_mean vs Slug




Right In: 2719.896+/-69.247 $\chi^2$/NDF: 4129.3/15

Left Out: -9605.541+/-55.181 $\chi^2$/NDF:21589.0/16

Right Out: 2823.679+/-64.850 $\chi^2$/NDF: 3062.8/18

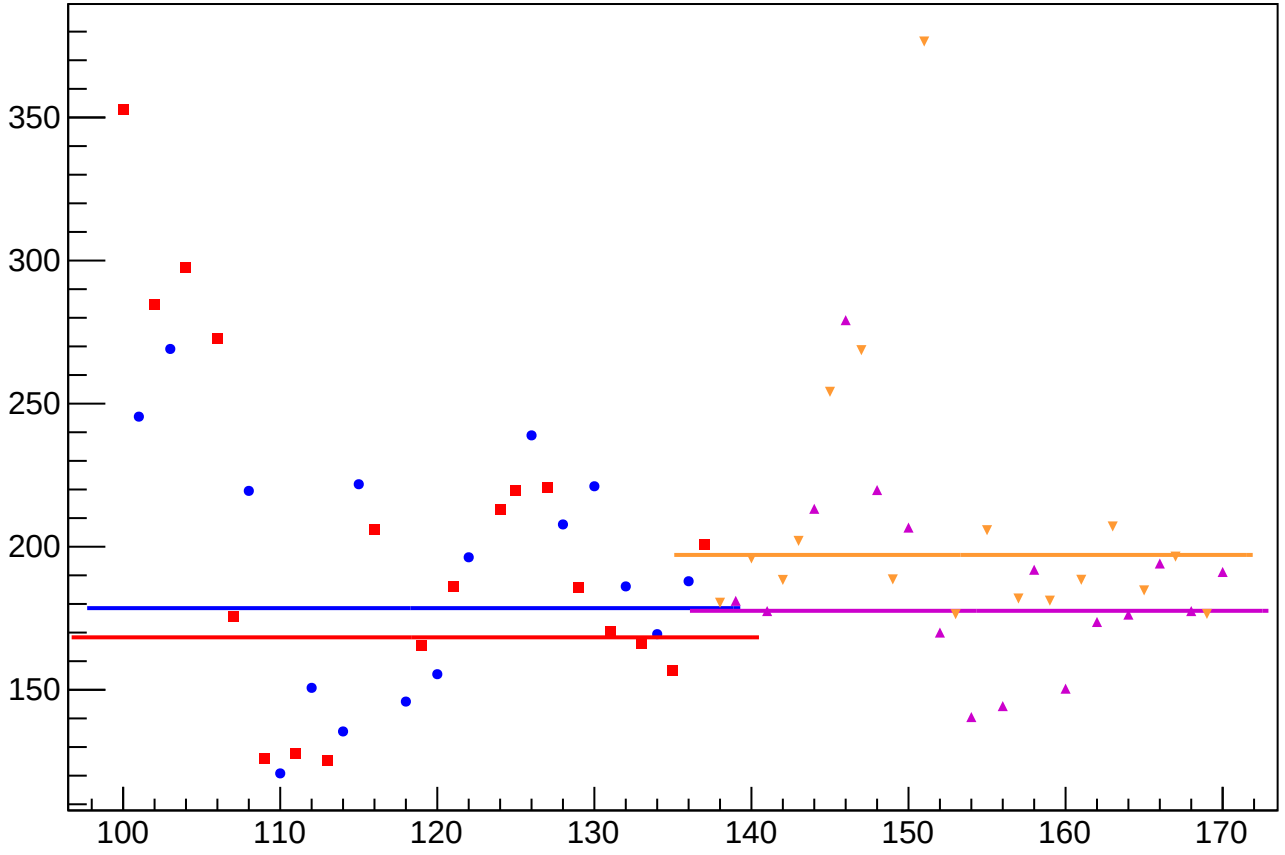
Left In: 11628.579+/-50.533 $\chi^2$/NDF:10328.5/15

+ sign -4818.518+/-43.155 $\chi^2$/NDF: 45095.0/32

All: 2261.761+/-29.281 $\chi^2$/NDF: 119838.1/67

- sign 8302.135+/-39.860 $\chi^2$/NDF: 24861.2/34

# asym_bpm0i02aWS_rms vs Slug




Right In: 178.541+/-0.049 $\chi^2$/NDF: 674566.0/15

Left Out: 197.135+/-0.039 $\chi^2$/NDF:657198.8/16

Right Out: 168.335+/-0.046 $\chi^2$/NDF: 979485.9/18

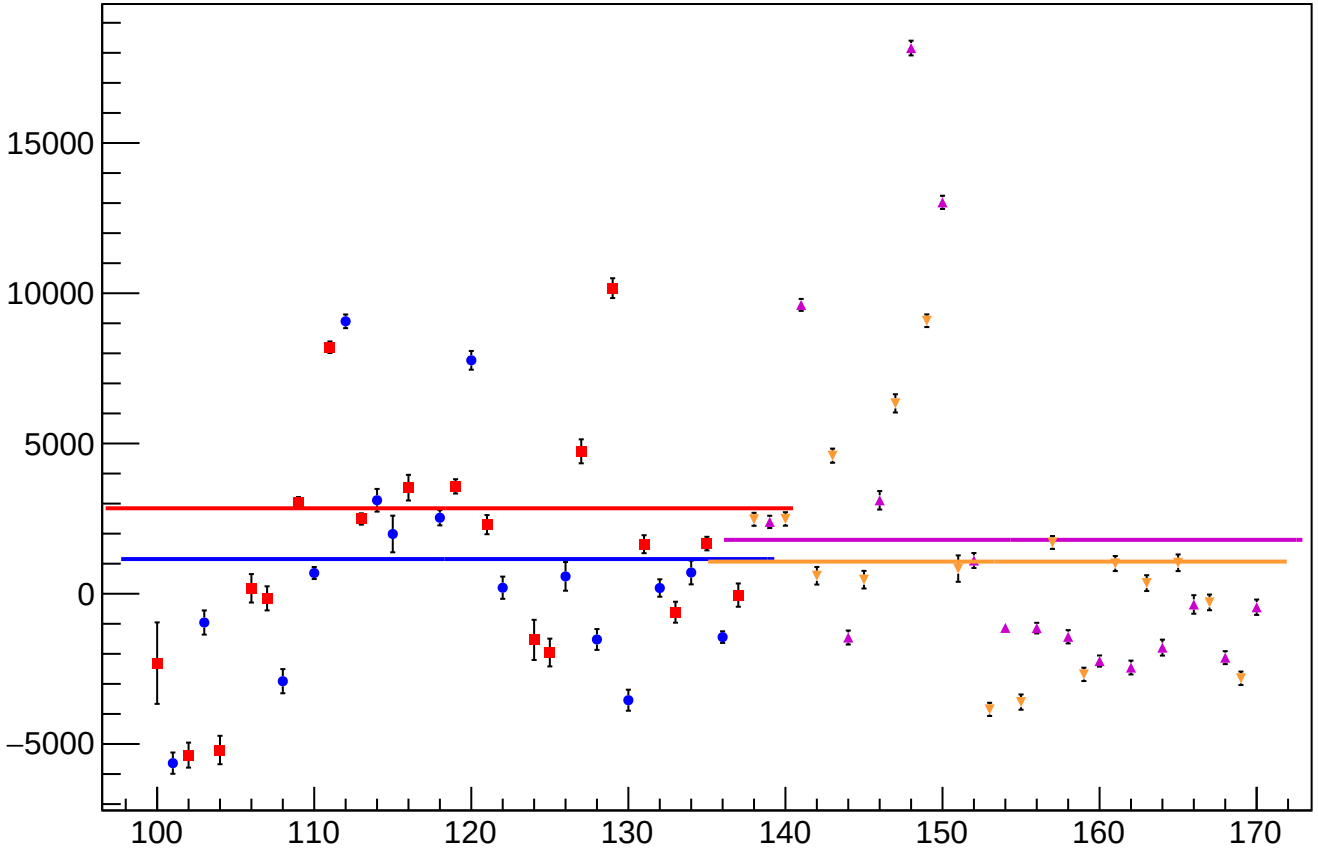
Left In: 177.604+/-0.036 $\chi^2$/NDF:665934.4/15

+ sign 189.914+/-0.031 $\chi^2$/NDF: 1419965.3/32

All: 181.381+/-0.021 $\chi^2$/NDF: 3235686.6/67

- sign 174.102+/-0.028 $\chi^2$/NDF: 1670846.3/34

# asym_bpm0i05WS_mean vs Slug




Right In: 1153.823+/-75.957 $\chi^2$/NDF: 2655.3/15

Left Out: 1069.753+/-60.079 $\chi^2$/NDF:3524.7/16

Right Out: 2843.895+/-69.139 $\chi^2$/NDF: 2453.1/18

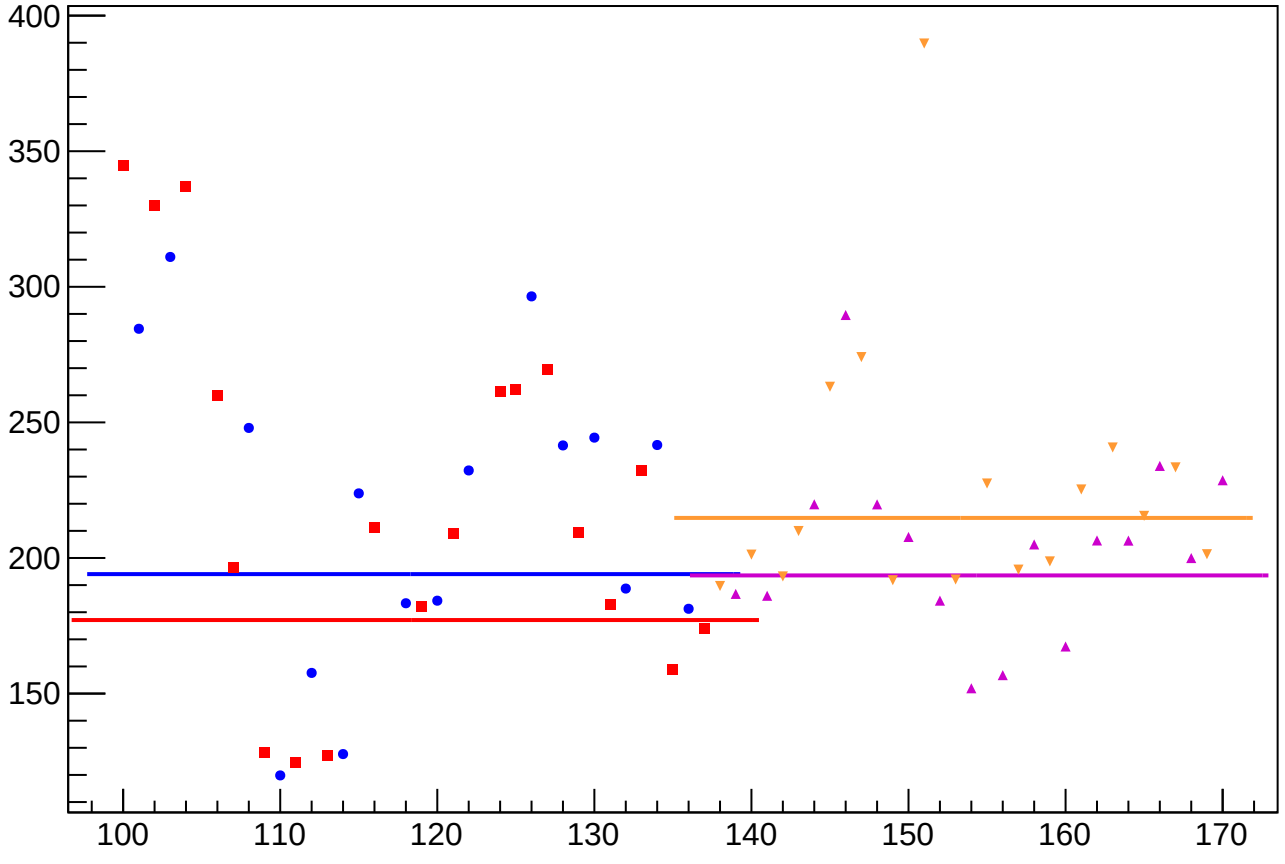
Left In: 1793.790+/-55.032 $\chi^2$/NDF:11082.0/15

+ sign 1102.107+/-47.121 $\chi^2$/NDF: 6180.8/32

All: 1701.001+/-31.786 $\chi^2$/NDF: 20153.6/67

- sign 2201.059+/-43.057 $\chi^2$/NDF: 13676.4/34

# asym_bpm0i05WS_rms vs Slug




Right In: 194.053+/-0.054 $\chi^2$/NDF: 965786.1/15

Left Out: 214.775+/-0.042 $\chi^2$/NDF:609962.3/16

Right Out: 177.115+/-0.049 $\chi^2$/NDF: 1359345.8/18

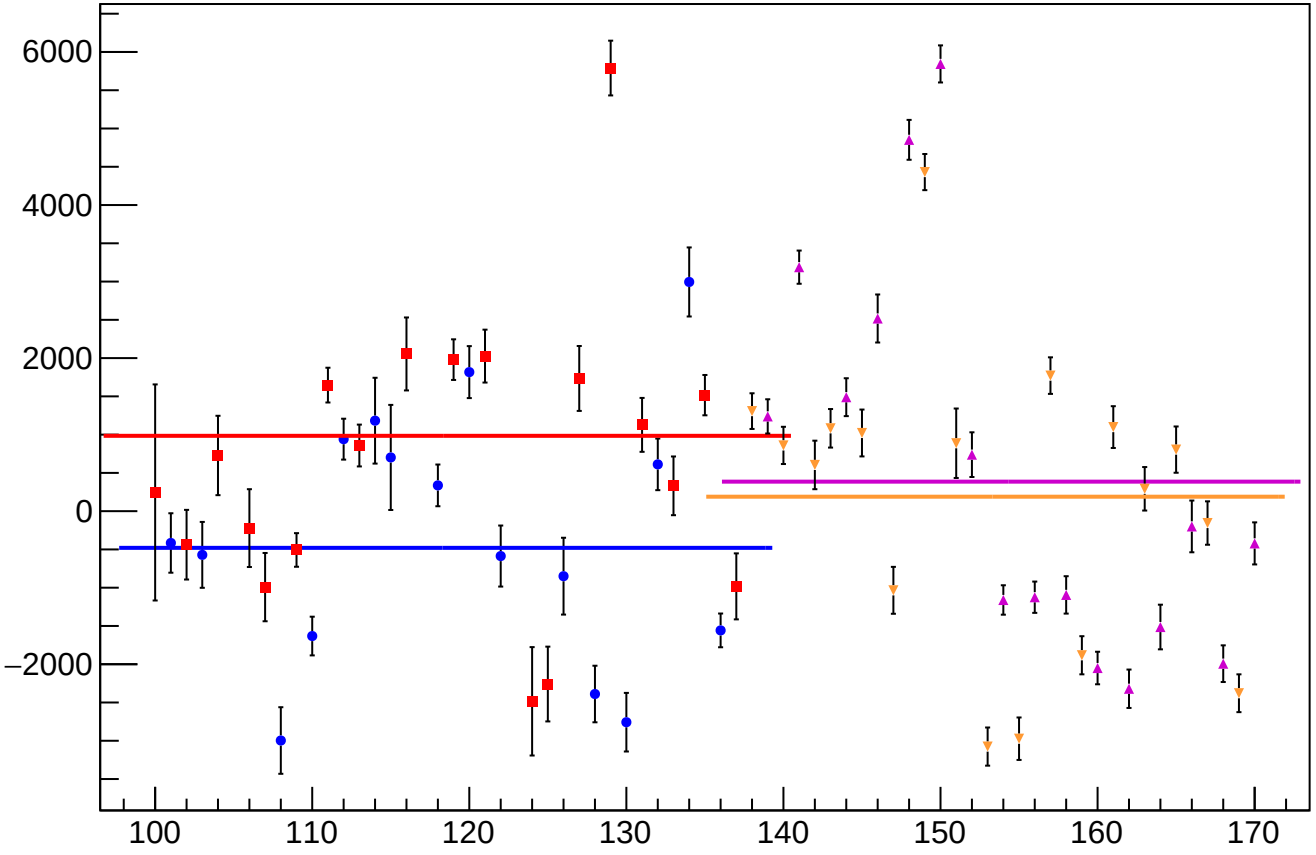
Left In: 193.571+/-0.039 $\chi^2$/NDF:603152.3/15

+ sign 206.800+/-0.033 $\chi^2$/NDF: 1667317.4/32

All: 196.112+/-0.022 $\chi^2$/NDF: 3887971.5/67

- sign 187.189+/-0.030 $\chi^2$/NDF: 2031853.8/34

# asym_bpm0i07WS_mean vs Slug




Right In: -479.302+/-86.685 $\chi^2$/NDF: 305.4/15

Left Out: 189.086+/-65.455 $\chi^2$/NDF:932.7/16

Right Out: 984.498+/-80.945 $\chi^2$/NDF: 398.1/18

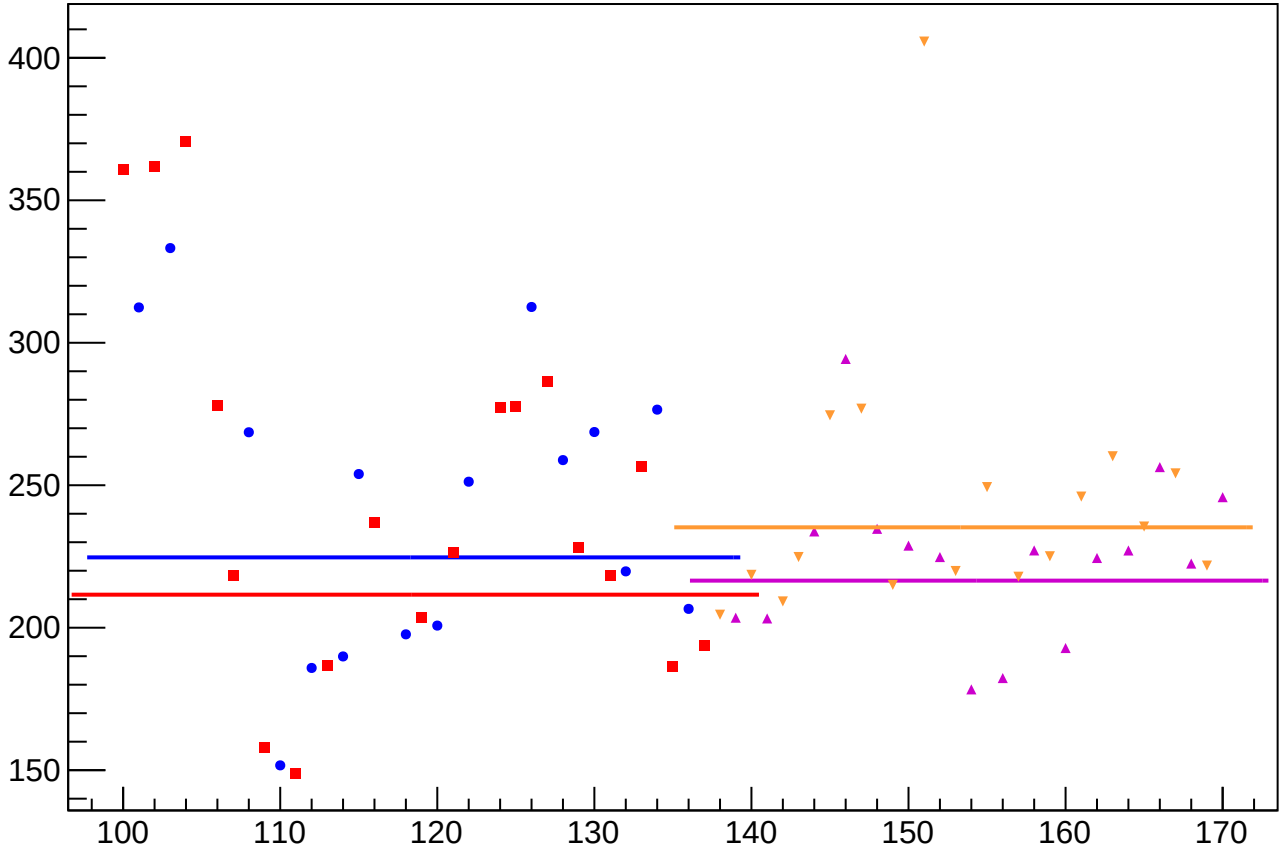
Left In: 385.709+/-61.066 $\chi^2$/NDF:1606.4/15

\+ sign -53.618+/-52.236 $\chi^2$/NDF: 1276.1/32

All: 297.276+/-35.640 $\chi^2$/NDF: 3399.9/67

\- sign 602.893+/-48.749 $\chi^2$/NDF: 2039.4/34

# asym_bpm0i07WS_rms vs Slug




Right In: 224.683+/-0.061 $\chi^2$/NDF: 653193.4/15

Left Out: 235.230+/-0.046 $\chi^2$/NDF:487638.5/16

Right Out: 211.595+/-0.057 $\chi^2$/NDF: 932902.5/18

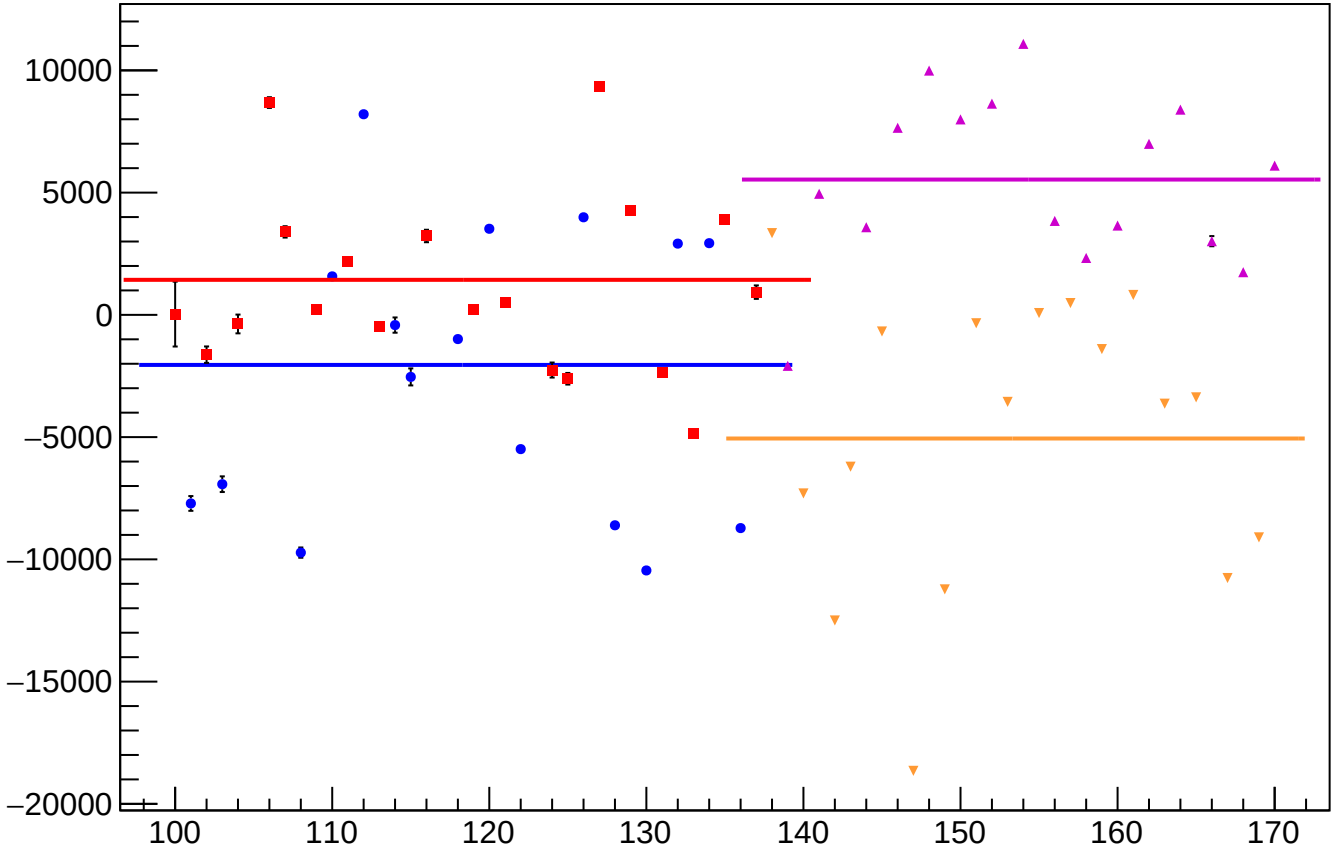
Left In: 216.522+/-0.043 $\chi^2$/NDF:383131.0/15

+ sign 231.400+/-0.037 $\chi^2$/NDF: 1159688.6/32

All: 222.493+/-0.025 $\chi^2$/NDF: 2589244.1/67

- sign 214.735+/-0.034 $\chi^2$/NDF: 1320756.6/34

# asym_bpm1i02WS_mean vs Slug




Right In: -2047.267+/-46.722 $\chi^2$/NDF: 16709.1/15

Left Out: -5057.000+/-33.975 $\chi^2$/NDF:31493.0/16

Right Out: 1432.909+/-44.729 $\chi^2$/NDF: 6387.8/18

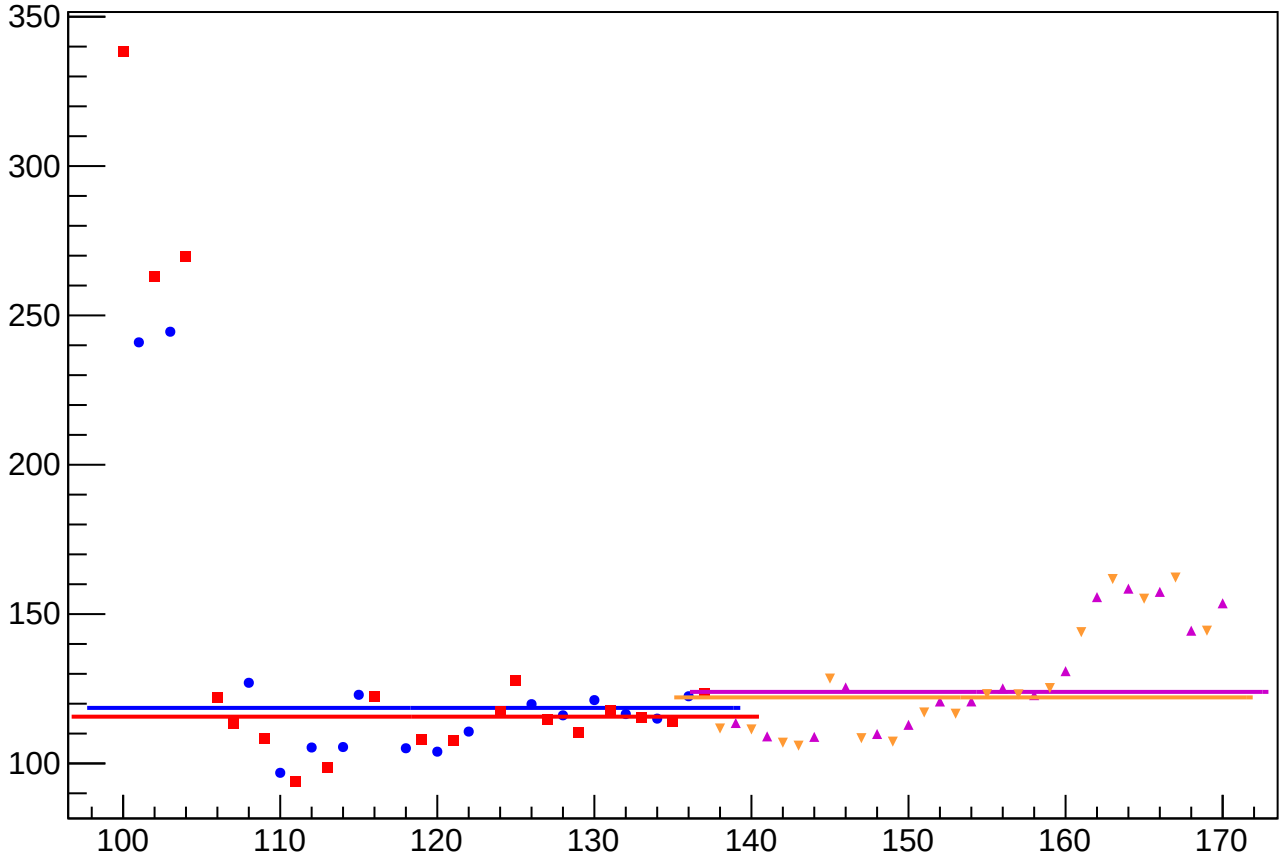
Left In: 5534.128+/-34.707 $\chi^2$/NDF:10238.4/15

+ sign -4015.960+/-27.478 $\chi^2$/NDF: 50916.5/32

All: -3.169+/-19.410 $\chi^2$/NDF: 115353.3/67

- sign 3992.814+/-27.421 $\chi^2$/NDF: 21873.7/34

# asym_bpm1i02WS_rms vs Slug




Right In: 118.596+/-0.033 $\chi^2$/NDF: 734158.7/15

Left Out: 122.112+/-0.024 $\chi^2$/NDF:479044.1/16

Right Out: 115.660+/-0.032 $\chi^2$/NDF: 864206.3/18

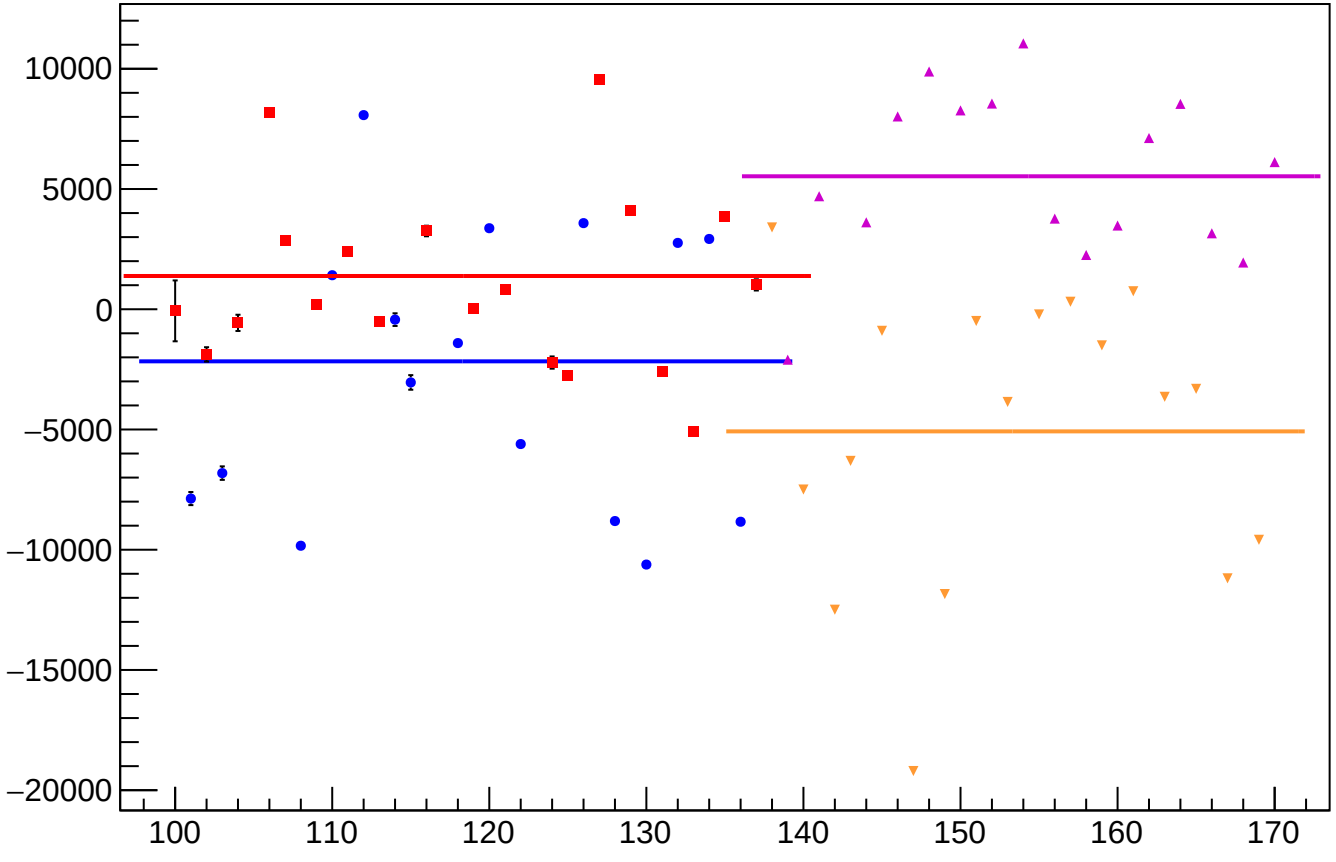
Left In: 123.954+/-0.025 $\chi^2$/NDF:399765.1/15

+ sign 120.896+/-0.019 $\chi^2$/NDF: 1220611.2/32

All: 120.866+/-0.014 $\chi^2$/NDF: 2527518.9/67

- sign 120.837+/-0.019 $\chi^2$/NDF: 1306903.1/34

# asym_bpm1i04WS_mean vs Slug




Right In: -2165.877+/-39.632 $\chi^2$/NDF: 22874.8/15

Left Out: -5078.532+/-30.617 $\chi^2$/NDF:38681.7/16

Right Out: 1383.103+/-37.976 $\chi^2$/NDF: 9148.6/18

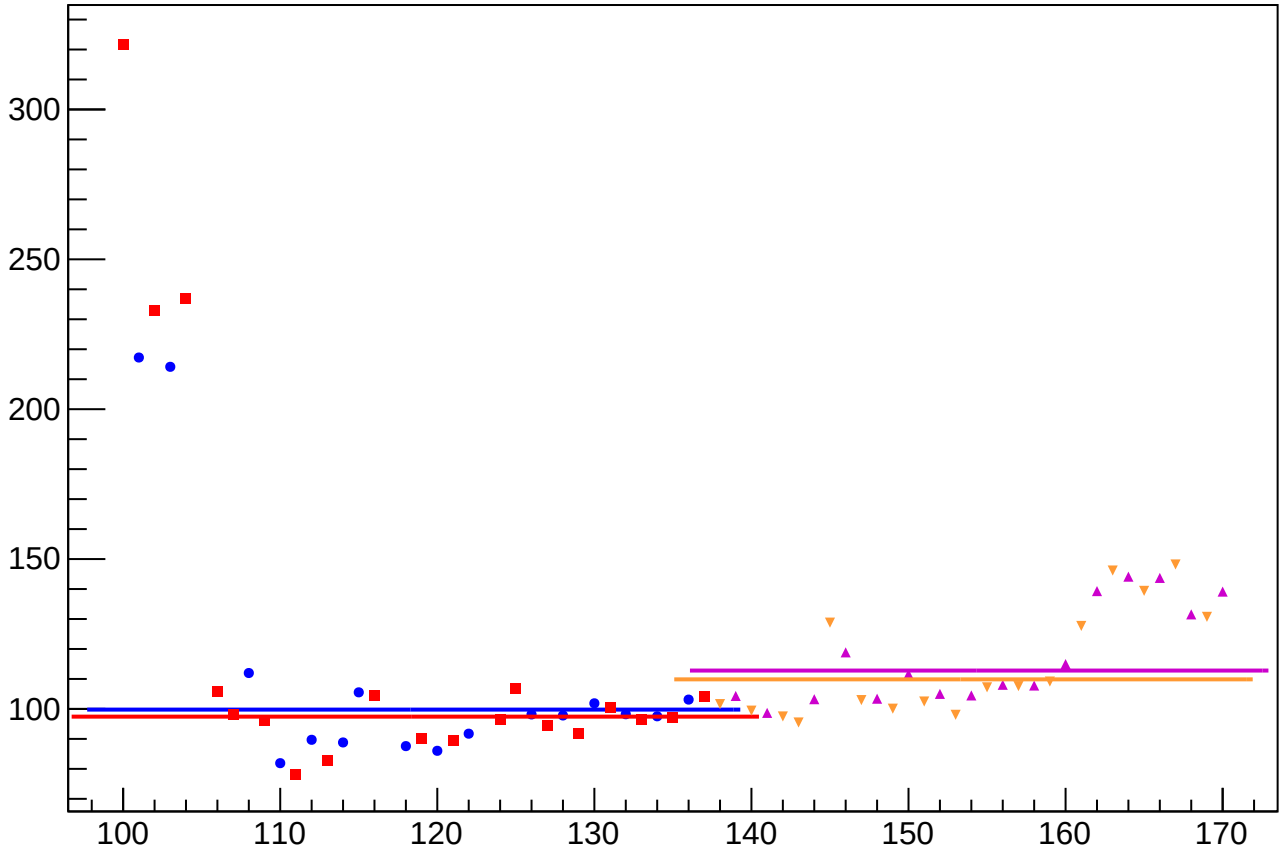
Left In: 5529.568+/-31.592 $\chi^2$/NDF:12553.0/15

+ sign -3989.924+/-24.229 $\chi^2$/NDF: 64938.9/32

All: -87.423+/-17.153 $\chi^2$/NDF: 145695.1/67

- sign 3833.663+/-24.287 $\chi^2$/NDF: 28747.4/34

# asym_bpm1i04WS_rms vs Slug




Right In: 99.775+/-0.028 $\chi^2$/NDF: 809152.9/15

Left Out: 109.864+/-0.022 $\chi^2$/NDF:504063.4/16

Right Out: 97.428+/-0.027 $\chi^2$/NDF: 926047.7/18

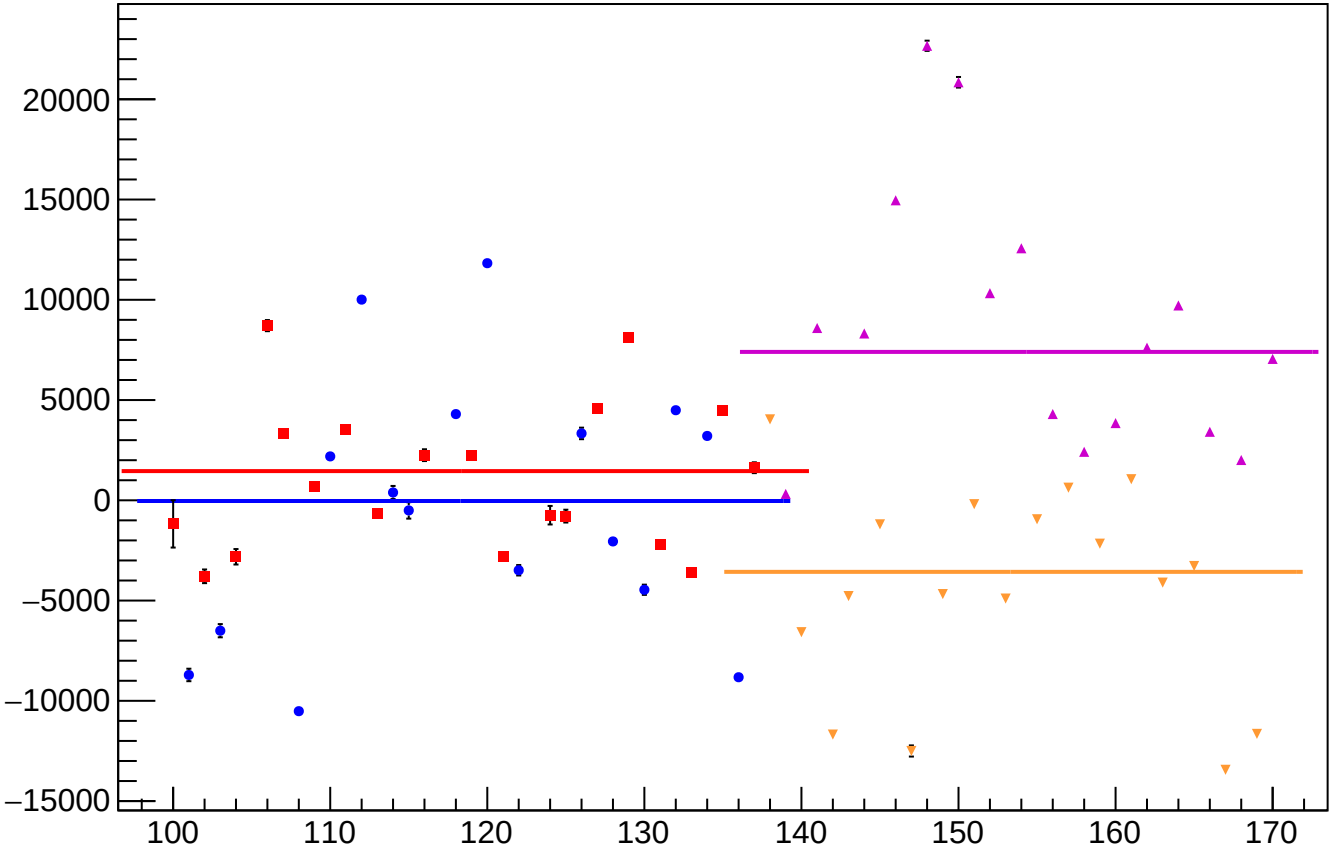
Left In: 112.801+/-0.022 $\chi^2$/NDF:366093.8/15

+ sign 106.093+/-0.017 $\chi^2$/NDF: 1394392.6/32

All: 106.303+/-0.012 $\chi^2$/NDF: 2880546.2/67

- sign 106.513+/-0.017 $\chi^2$/NDF: 1485853.6/34

# asym_bpm1i06WS_mean vs Slug




Right In: -34.667+/-53.465 $\chi^2$/NDF: 16802.8/15

Left Out: -3568.085+/-43.230 $\chi^2$/NDF:11972.6/16

Right Out: 1456.665+/-51.946 $\chi^2$/NDF: 4117.0/18

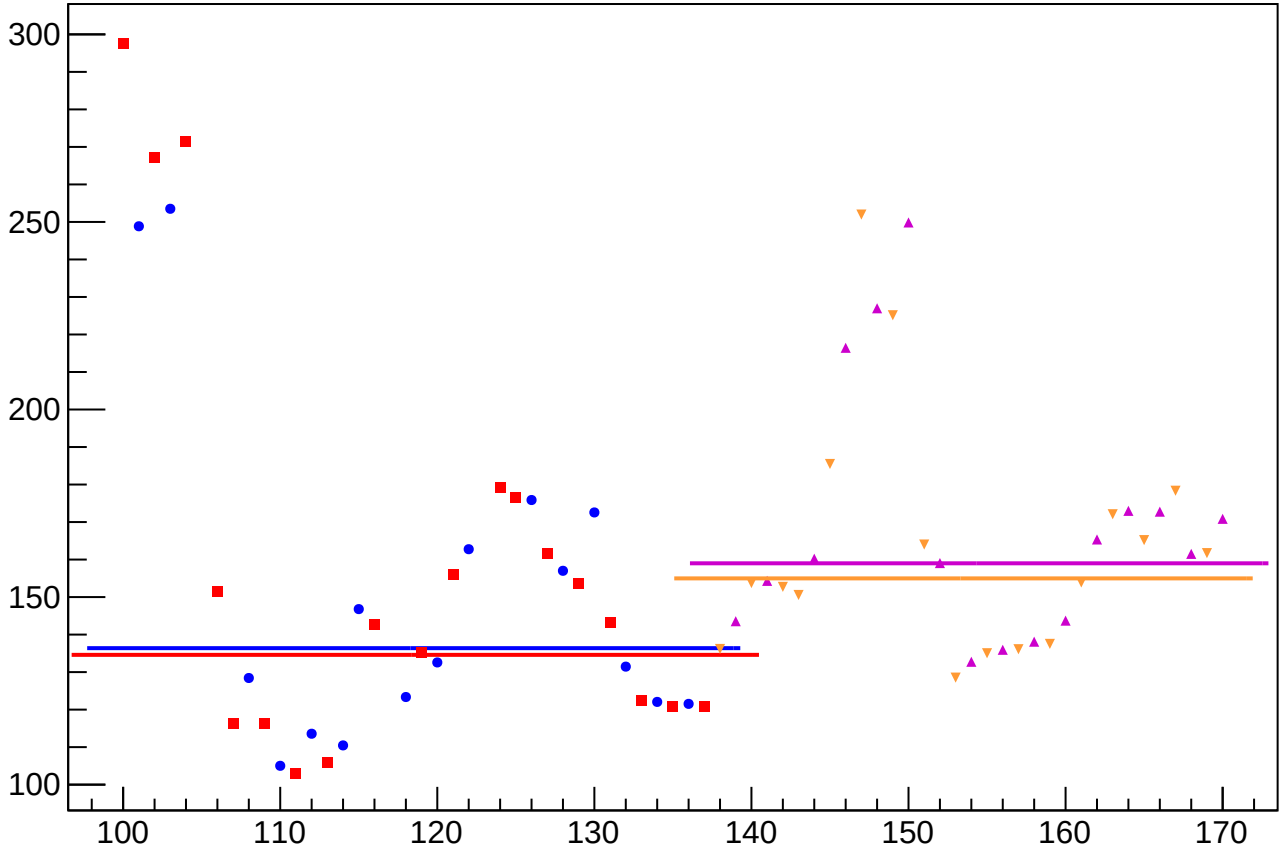
Left In: 7401.023+/-44.812 $\chi^2$/NDF:14339.3/15

+ sign -2171.231+/-33.616 $\chi^2$/NDF: 31416.4/32

All: 1313.951+/-23.881 $\chi^2$/NDF: 79079.9/67

- sign 4864.720+/-33.931 $\chi^2$/NDF: 25964.1/34

# asym_bpm1i06WS_rms vs Slug




Right In: 136.383+/-0.038 $\chi^2$/NDF: 796855.7/15

Left Out: 154.981+/-0.031 $\chi^2$/NDF:699167.5/16

Right Out: 134.598+/-0.037 $\chi^2$/NDF: 919605.2/18

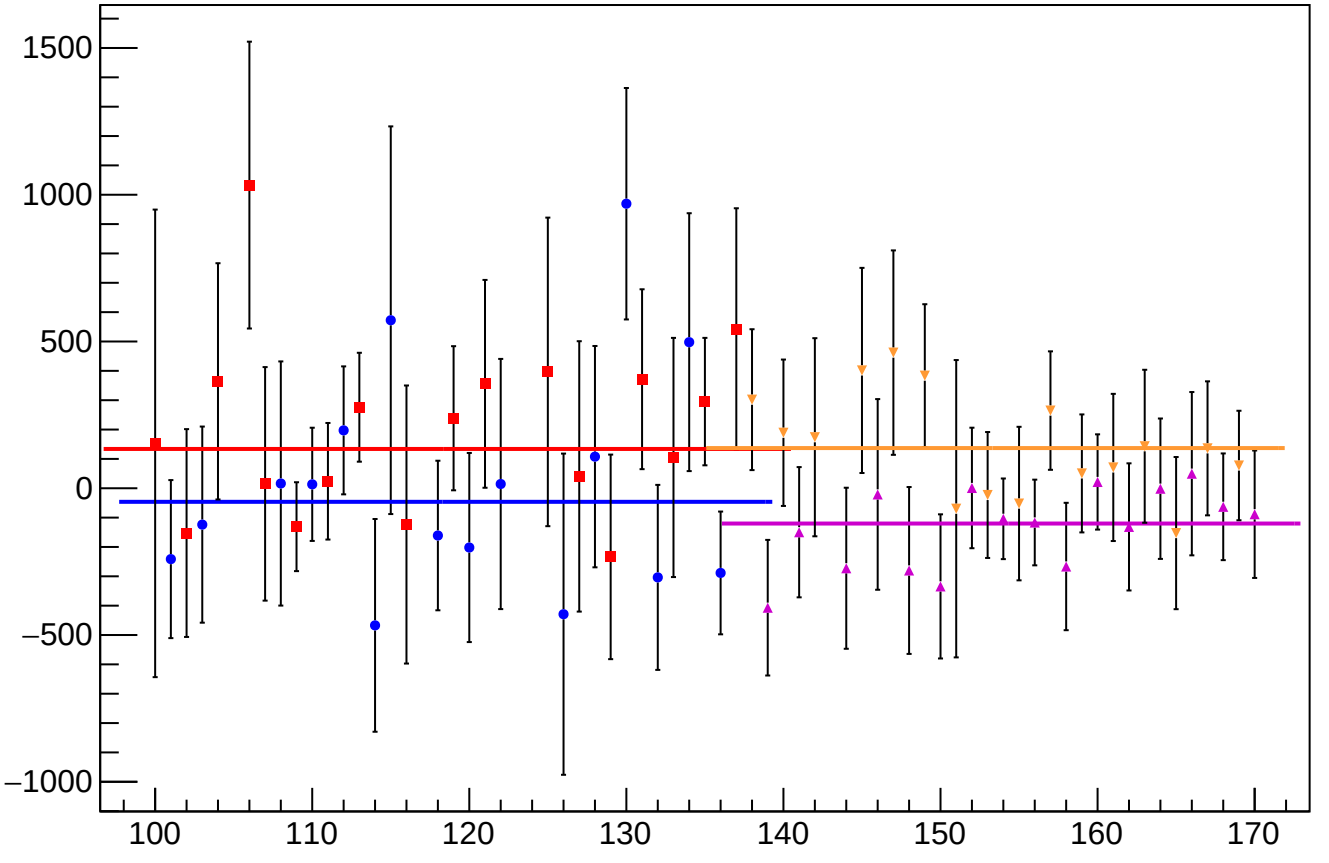
Left In: 159.003+/-0.032 $\chi^2$/NDF:723587.6/15

+ sign 147.629+/-0.024 $\chi^2$/NDF: 1642353.9/32

All: 148.105+/-0.017 $\chi^2$/NDF: 3539436.6/67

- sign 148.590+/-0.024 $\chi^2$/NDF: 1896273.2/34

# asym_bcm_2an_us_an_ds_avg_mean vs Slug




Right In: -46.199+/-76.283 $\chi^2$/NDF: 15.5/15

Left Out: 136.908+/-62.191 $\chi^2$/NDF:6.3/15

Right Out: 133.913+/-68.414 $\chi^2$/NDF: 12.8/17

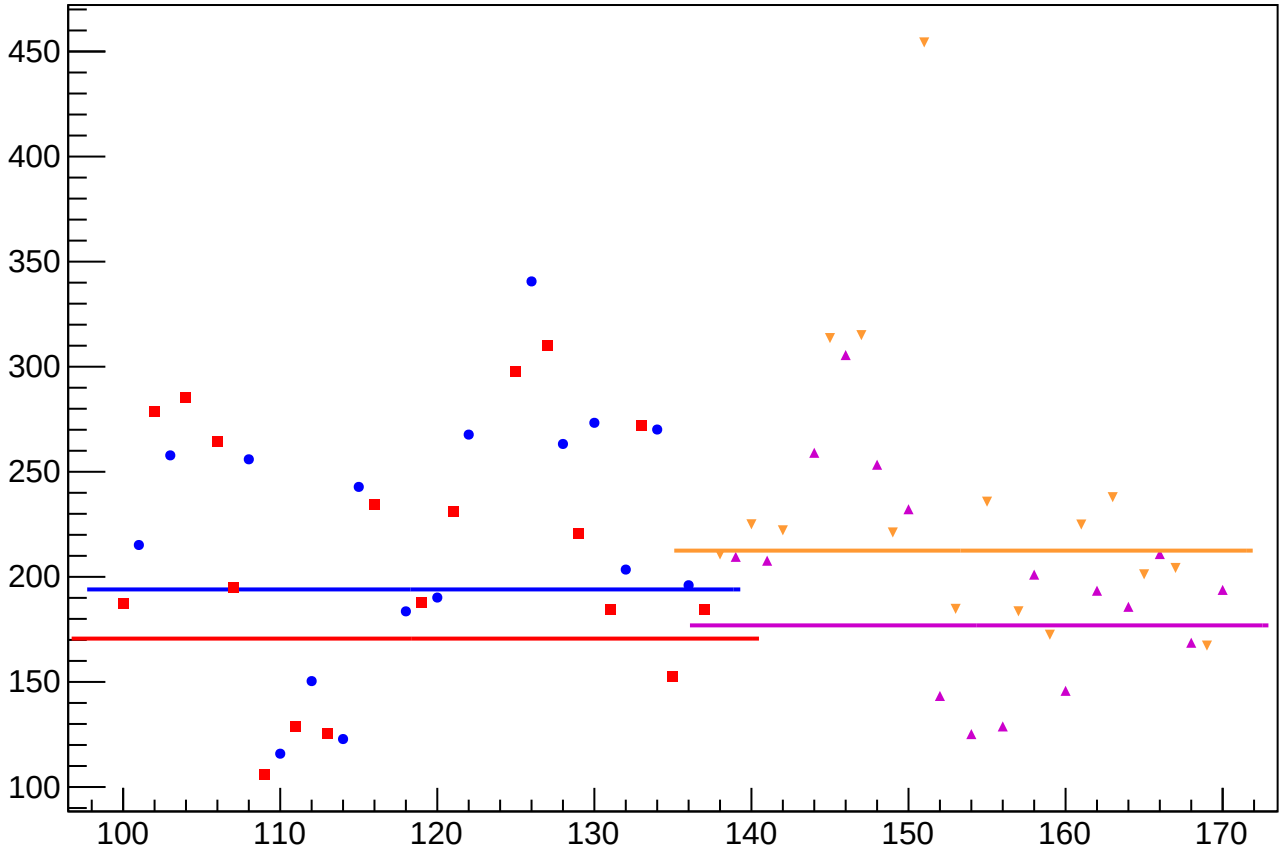
Left In: -120.184+/-51.512 $\chi^2$/NDF:5.4/15

+ sign 63.798+/-48.202 $\chi^2$/NDF: 25.2/31

All: 10.556+/-31.297 $\chi^2$/NDF: 54.3/65

- sign -28.249+/-41.151 $\chi^2$/NDF: 27.0/33

# asym_bcm_2an_us_an_ds_avg_rms vs Slug




Right In: 194.017+/-0.054 $\chi^2$/NDF: 1043588.7/15

Left Out: 212.489+/-0.044 $\chi^2$/NDF:1123333.7/15

Right Out: 170.624+/-0.048 $\chi^2$/NDF: 1593735.4/17

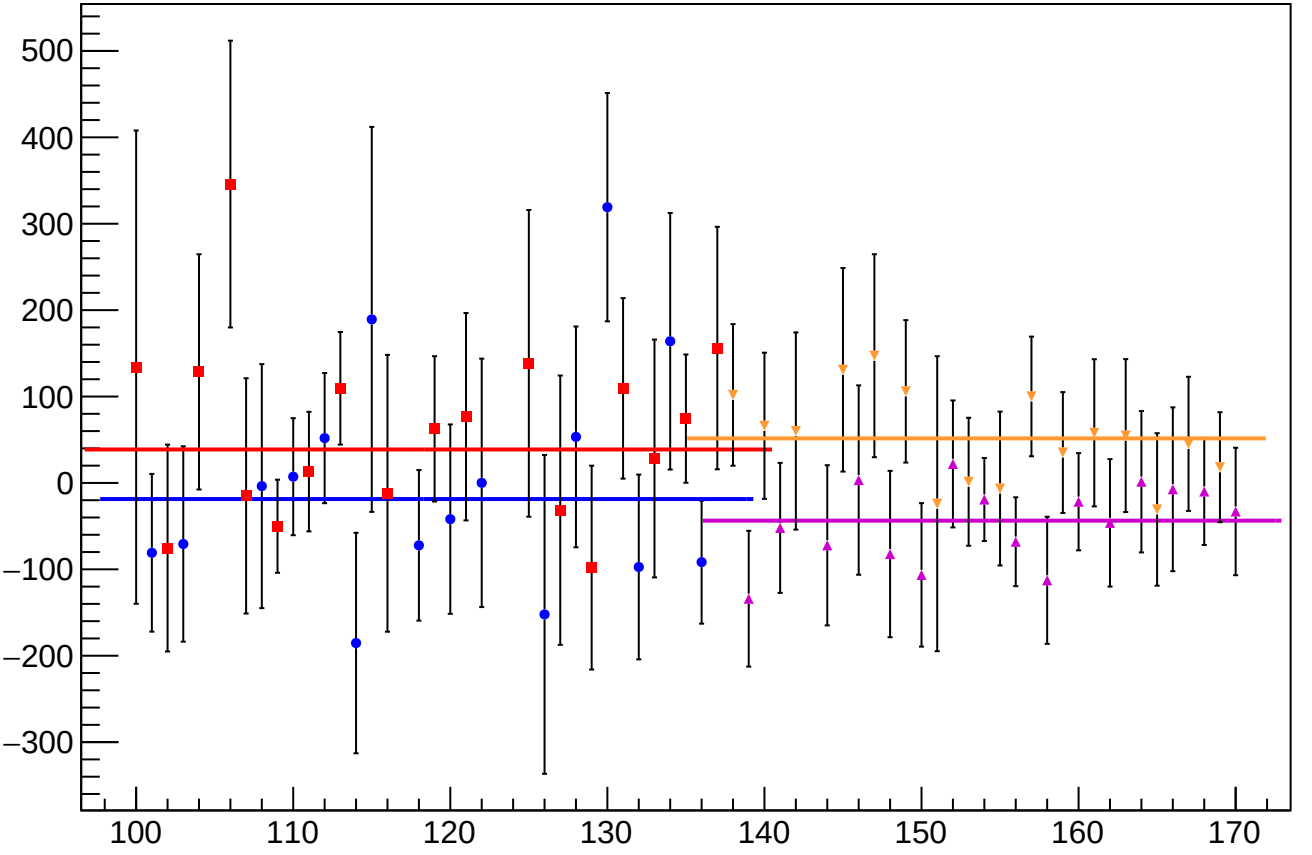
Left In: 176.909+/-0.036 $\chi^2$/NDF:1530201.8/15

+ sign 205.114+/-0.034 $\chi^2$/NDF: 2237376.3/31

All: 187.484+/-0.022 $\chi^2$/NDF: 5834616.6/65

- sign 174.635+/-0.029 $\chi^2$/NDF: 3134711.3/33

# asym_bcm_2an_us_an_ds_dd_mean vs Slug




Right In: -18.645+/-26.122 $\chi^2$/NDF: 15.2/15

Left Out: 51.569+/-21.226 $\chi^2$/NDF:4.7/15

Right Out: 38.716+/-23.652 $\chi^2$/NDF: 12.6/17

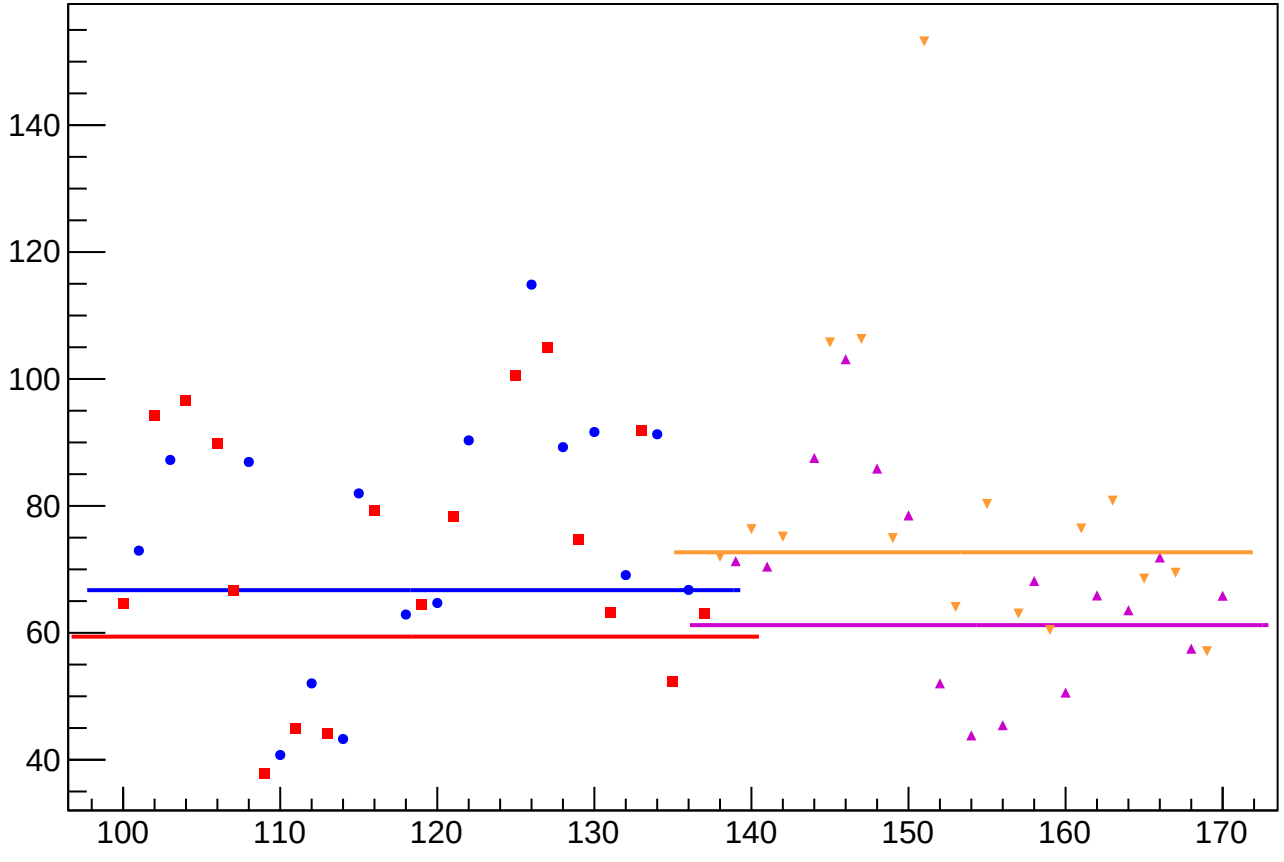
Left In: -43.668+/-17.739 $\chi^2$/NDF:5.4/15

+ sign 23.647+/-16.473 $\chi^2$/NDF: 24.3/31

All: 2.033+/-10.752 $\chi^2$/NDF: 53.1/65

- sign -14.008+/-14.191 $\chi^2$/NDF: 25.8/33

# asym_bcm_2an_us_an_ds_dd_rms vs Slug




Right In: 66.724+/-0.018 $\chi^2$/NDF: 947040.2/15

Left Out: 72.692+/-0.015 $\chi^2$/NDF:1062765.5/15

Right Out: 59.400+/-0.017 $\chi^2$/NDF: 1445371.1/17

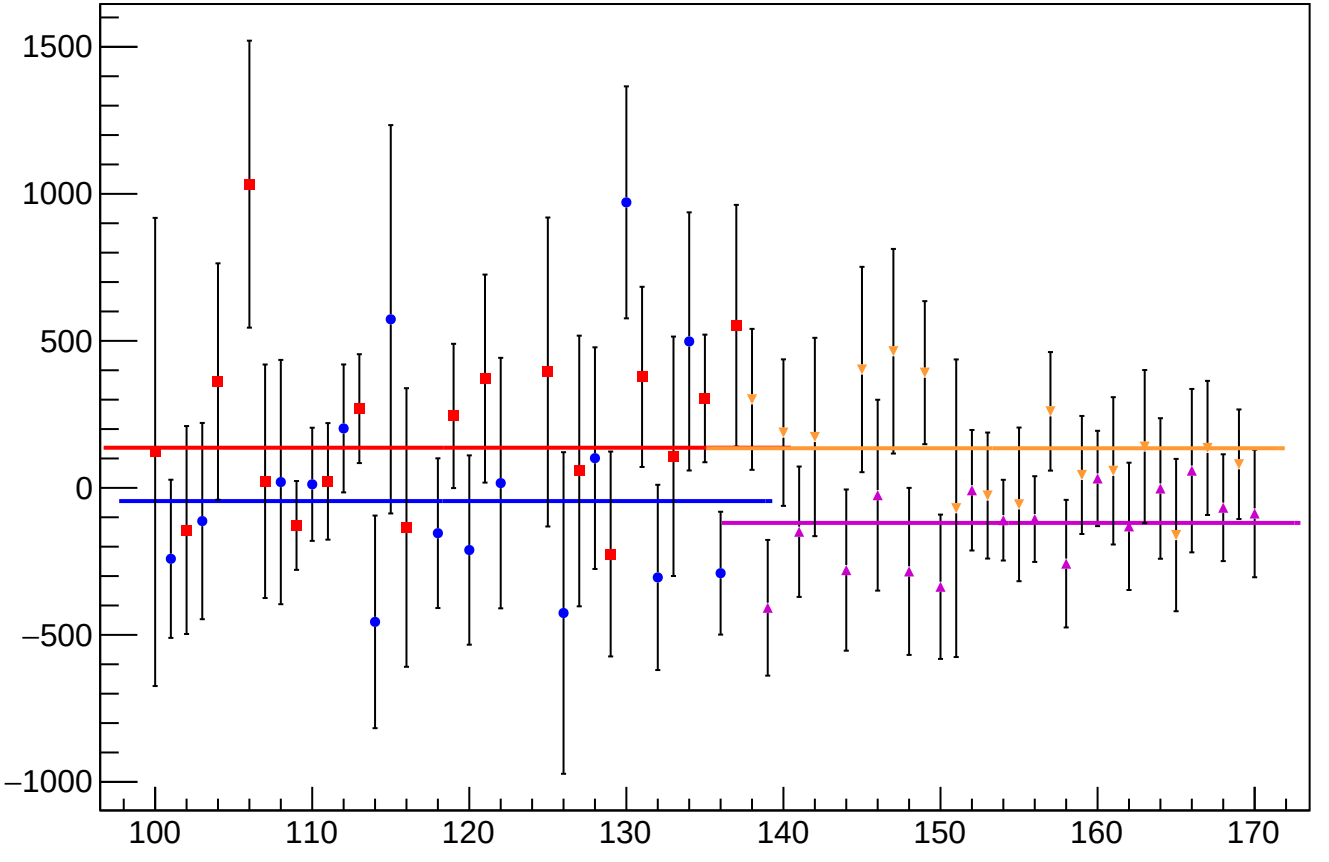
Left In: 61.216+/-0.013 $\chi^2$/NDF:1355125.6/15

+ sign 70.319+/-0.012 $\chi^2$/NDF: 2072669.0/31

All: 64.718+/-0.008 $\chi^2$/NDF: 5283387.6/65

- sign 60.562+/-0.010 $\chi^2$/NDF: 2808035.9/33

# asym_bcm_an_us_an_ds_avg_mean vs Slug




Right In: -44.917+/-76.198 $\chi^2$/NDF: 15.5/15

Left Out: 134.777+/-62.140 $\chi^2$/NDF:6.5/15

Right Out: 136.579+/-68.322 $\chi^2$/NDF: 12.9/17

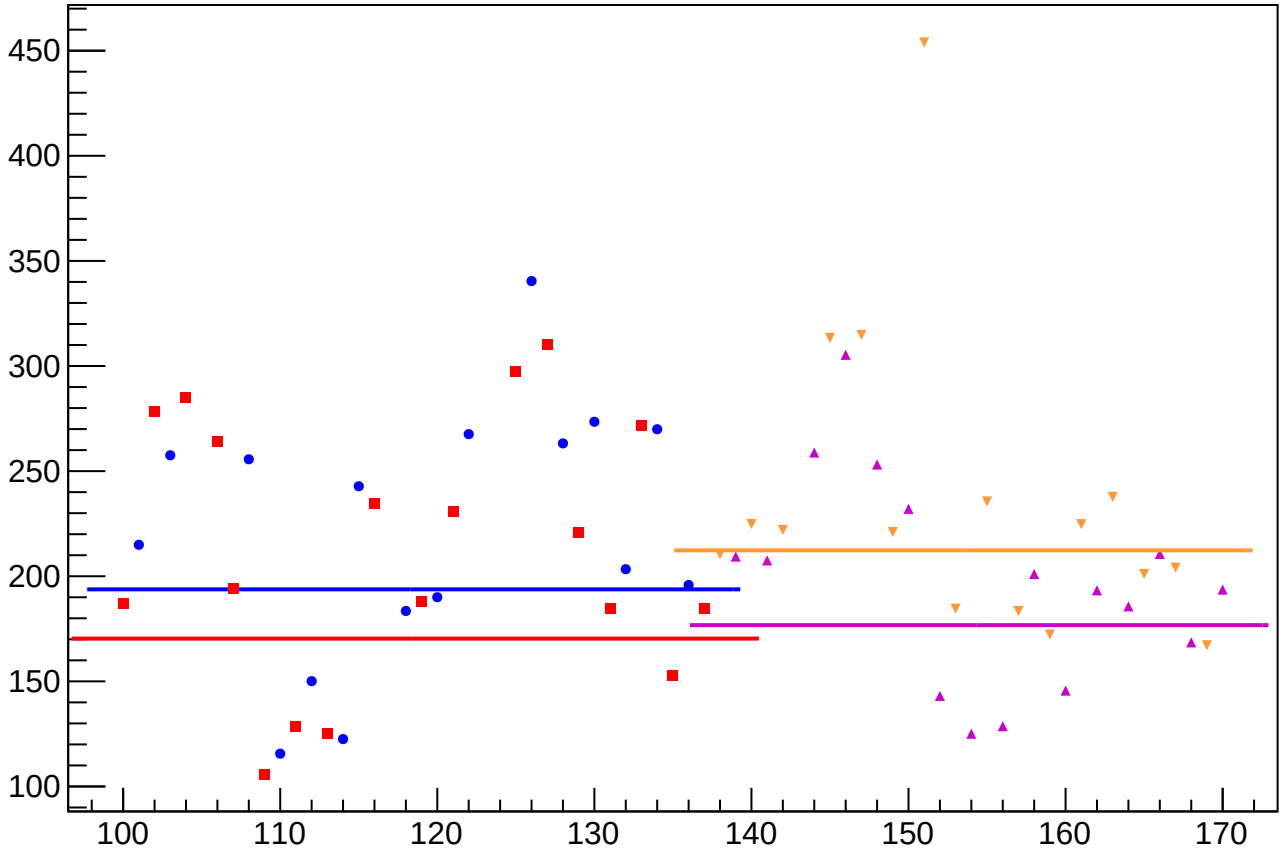
Left In: -119.157+/-51.468 $\chi^2$/NDF:5.5/15

+ sign 63.004+/-48.157 $\chi^2$/NDF: 25.3/31

All: 11.187+/-31.266 $\chi^2$/NDF: 54.5/65

- sign -26.573+/-41.109 $\chi^2$/NDF: 27.3/33

# asym_bcm_an_us_an_ds_avg_rms vs Slug




Right In: 193.768+/-0.054 $\chi^2$/NDF: 1048095.1/15

Left Out: 212.310+/-0.044 $\chi^2$/NDF:1123950.4/15

Right Out: 170.358+/-0.048 $\chi^2$/NDF: 1599025.1/17

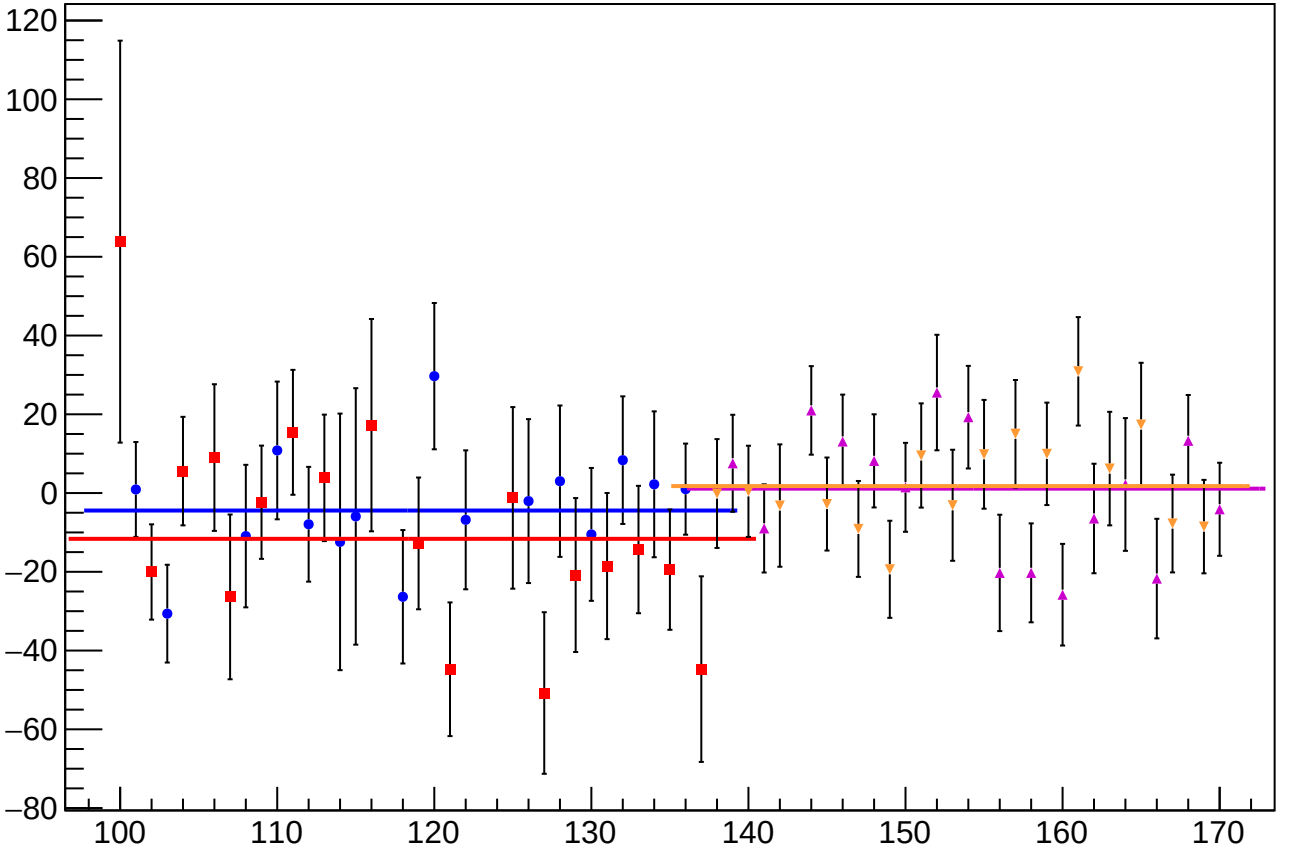
Left In: 176.748+/-0.036 $\chi^2$/NDF:1532252.3/15

+ sign 204.904+/-0.034 $\chi^2$/NDF: 2243171.1/31

All: 187.278+/-0.022 $\chi^2$/NDF: 5848759.5/65

- sign 174.434+/-0.029 $\chi^2$/NDF: 3142438.9/33

# asym_bcm_an_us_an_ds_dd_mean vs Slug




Right In: -4.440+/-4.131 $\chi^2$/NDF: 12.0/15

Left Out: 1.770+/-3.291 $\chi^2$/NDF:13.1/15

Right Out: -11.627+/-4.137 $\chi^2$/NDF: 21.6/17

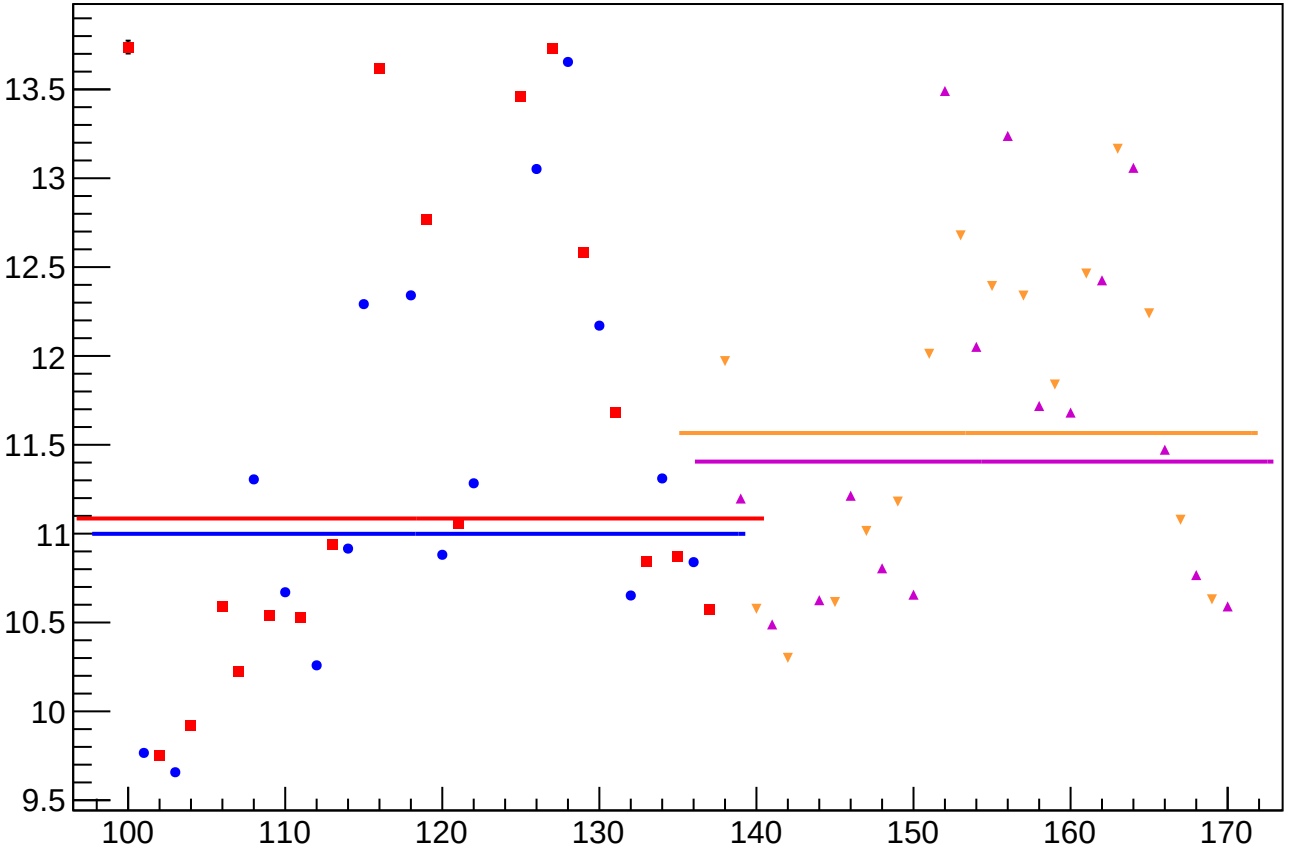
Left In: 1.116+/-3.169 $\chi^2$/NDF:23.5/15

+ sign -0.641+/-2.574 $\chi^2$/NDF: 26.4/31

All: -2.153+/-1.799 $\chi^2$/NDF: 78.2/65

- sign -3.597+/-2.516 $\chi^2$/NDF: 51.1/33

# asym_bcm_an_us_an_ds_dd_rms vs Slug




Right In: 10.999+/-0.003 $\chi^2$/NDF: 136159.2/15

Left Out: 11.566+/-0.002 $\chi^2$/NDF:130108.0/15

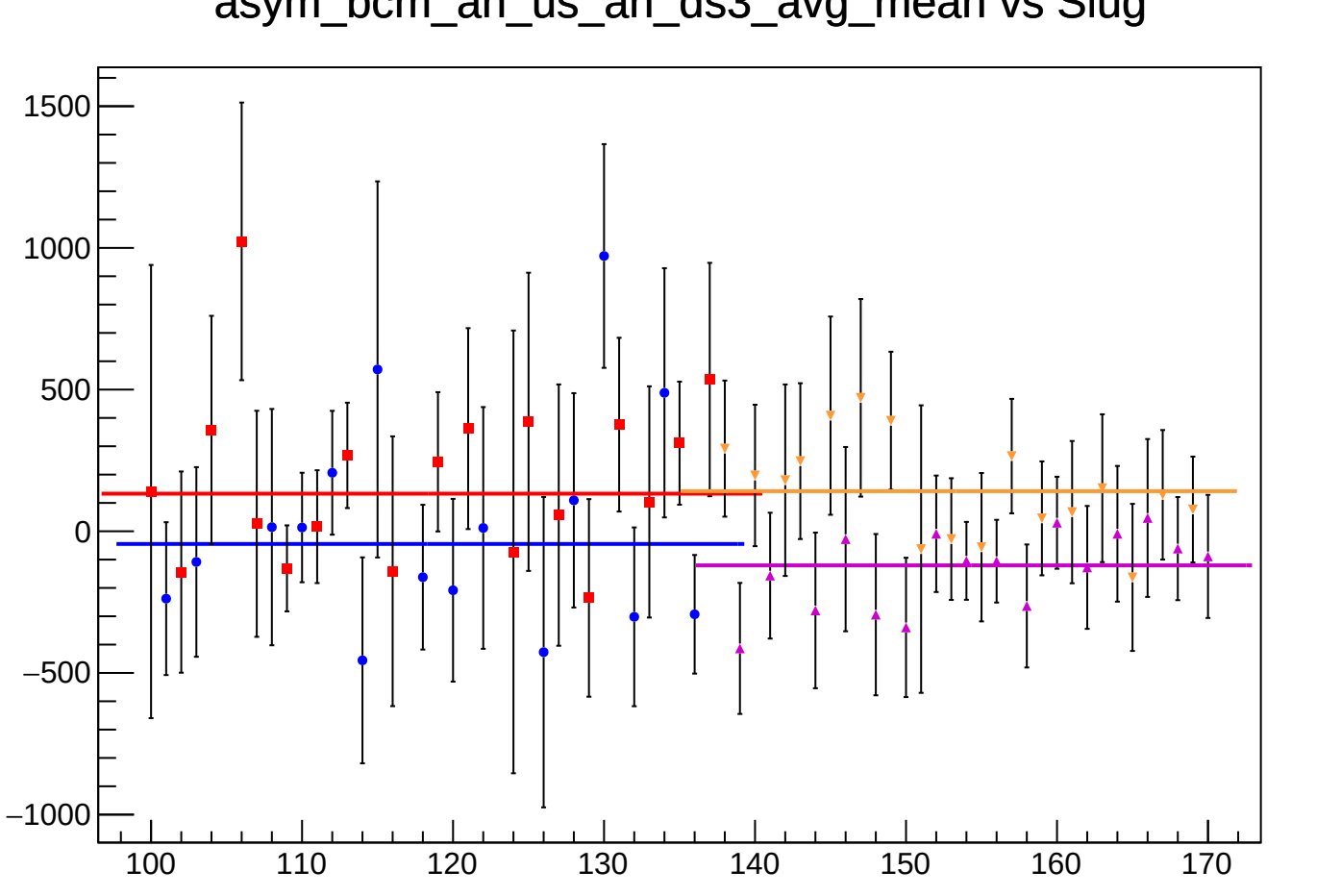
Right Out: 11.085+/-0.003 $\chi^2$/NDF: 162204.2/17

Left In: 11.405+/-0.002 $\chi^2$/NDF:161913.1/15

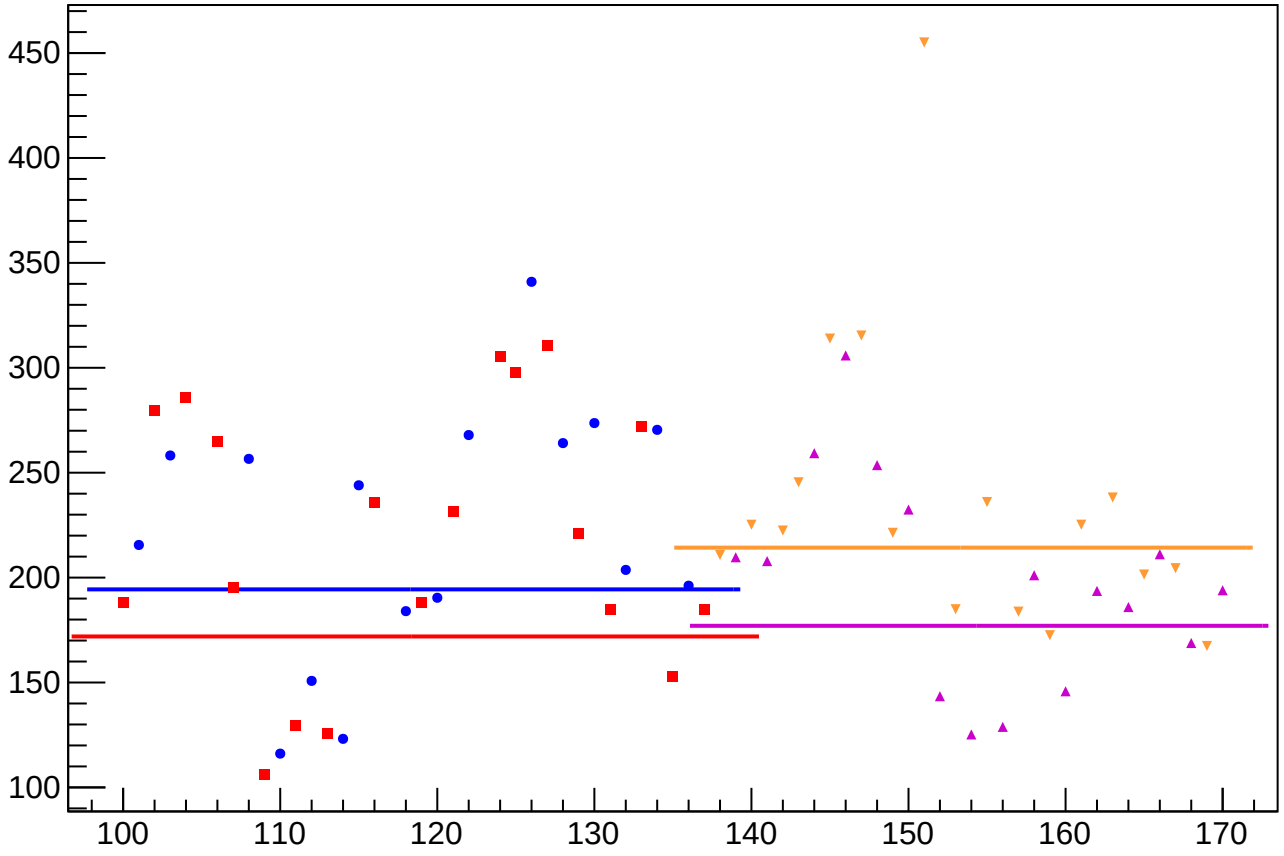
+ sign 11.346+/-0.002 $\chi^2$/NDF: 289342.2/31

All: 11.316+/-0.001 $\chi^2$/NDF: 621547.8/65

- sign 11.287+/-0.002 $\chi^2$/NDF: 331668.3/33


asym_bcm_an_us_an_ds3_avg_mean vs Slug
1500
1000
500
0
−500
−1000
100
110
120
130
140
150
160
170
Right In: -44.797+/-76.424 χ²/NDF: 15.4/15
Left Out: 141.422+/-60.715 χ²/NDF:6.7/16
Right Out: 132.730+/-68.270 χ²/NDF: 12.9/18
Left In: -120.309+/-51.552 χ²/NDF:5.5/15
+ sign 69.366+/-47.539 χ²/NDF: 25.7/32
All: 13.454+/-31.109 χ²/NDF: 55.3/67
- sign -28.420+/-41.140 χ²/NDF: 27.1/34

# asym_bcm_an_us_an_ds3_avg_rms vs Slug




Right In: 194.385+/-0.054 $\chi^2$/NDF: 1042024.1/15

Left Out: 214.283+/-0.043 $\chi^2$/NDF:1151892.7/16

Right Out: 171.949+/-0.048 $\chi^2$/NDF: 1651343.7/18

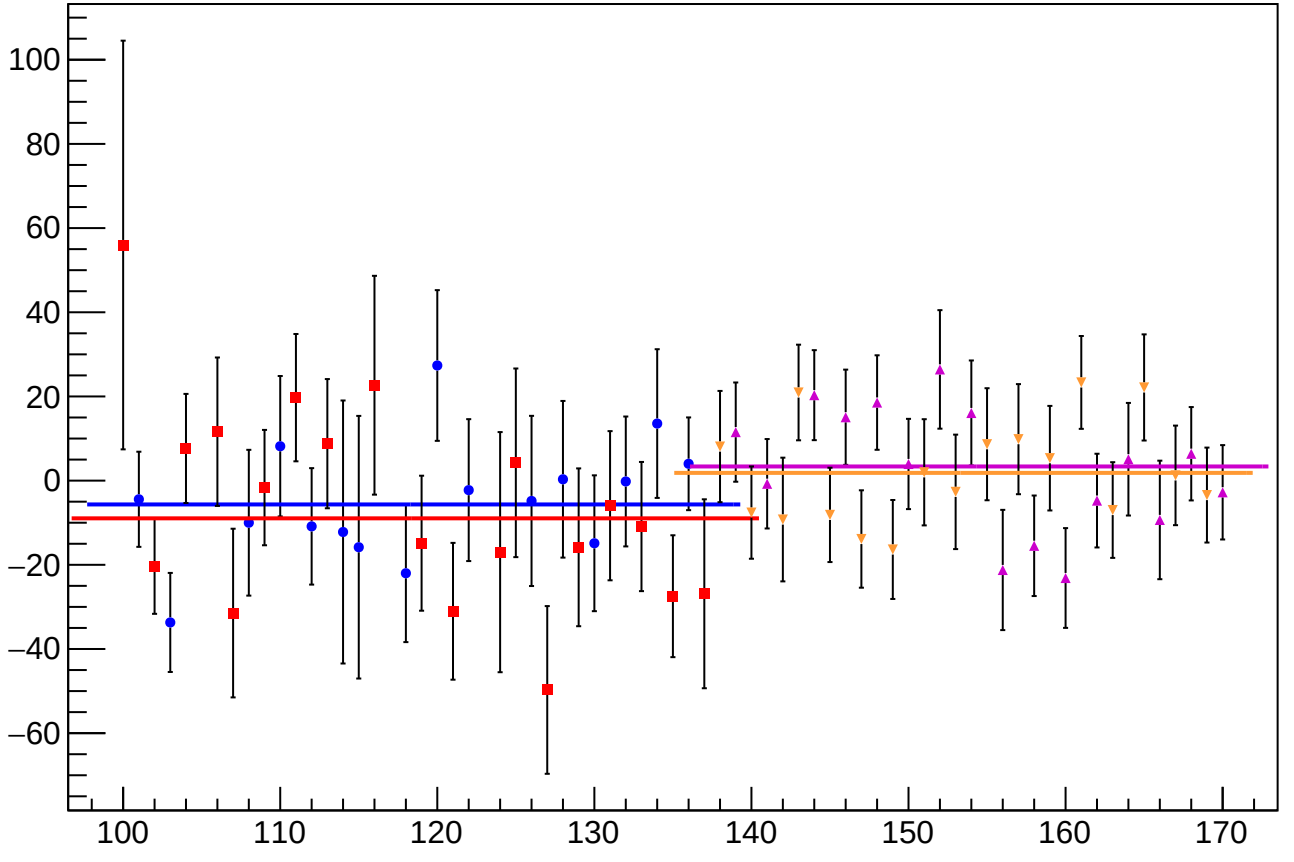
Left In: 177.033+/-0.036 $\chi^2$/NDF:1532637.7/15

+ sign 206.583+/-0.034 $\chi^2$/NDF: 2277030.4/32

All: 188.631+/-0.022 $\chi^2$/NDF: 5966882.9/67

- sign 175.187+/-0.029 $\chi^2$/NDF: 3191045.4/34

# asym_bcm_an_us_an_ds3_dd_mean vs Slug




Right In: -5.657+/-3.939 $\chi^2$/NDF: 13.7/15

Left Out: 1.842+/-2.936 $\chi^2$/NDF:17.4/16

Right Out: -8.960+/-3.901 $\chi^2$/NDF: 22.8/18

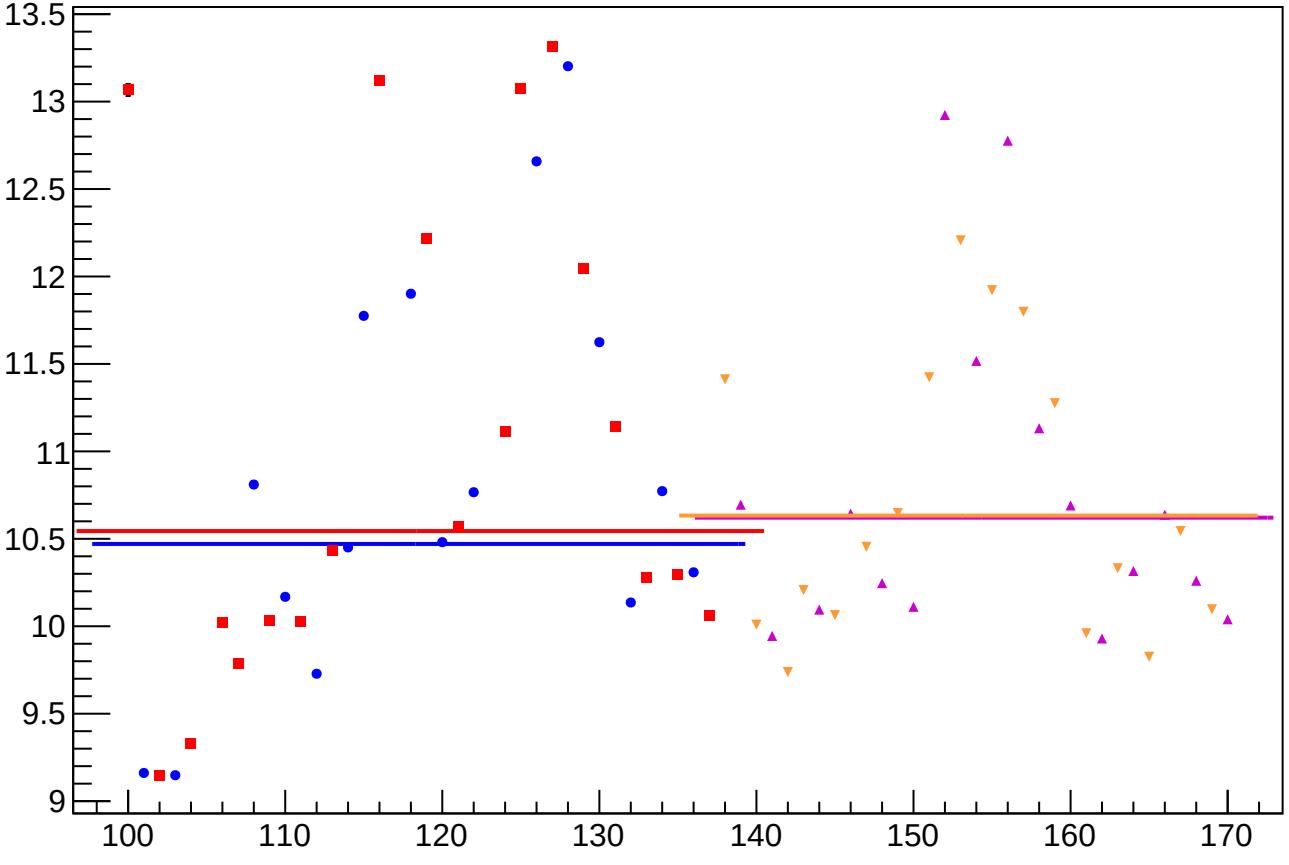
Left In: 3.366+/-2.955 $\chi^2$/NDF:22.0/15

+ sign -0.836+/-2.354 $\chi^2$/NDF: 33.4/32

All: -0.982+/-1.665 $\chi^2$/NDF: 84.5/67

- sign -1.128+/-2.355 $\chi^2$/NDF: 51.1/34

# asym_bcm_an_us_an_ds3_dd_rms vs Slug




Right In: 10.471+/-0.003 $\chi^2$/NDF: 157365.8/15

Left Out: 10.633+/-0.002 $\chi^2$/NDF:125586.3/16

Right Out: 10.544+/-0.003 $\chi^2$/NDF: 186780.3/18

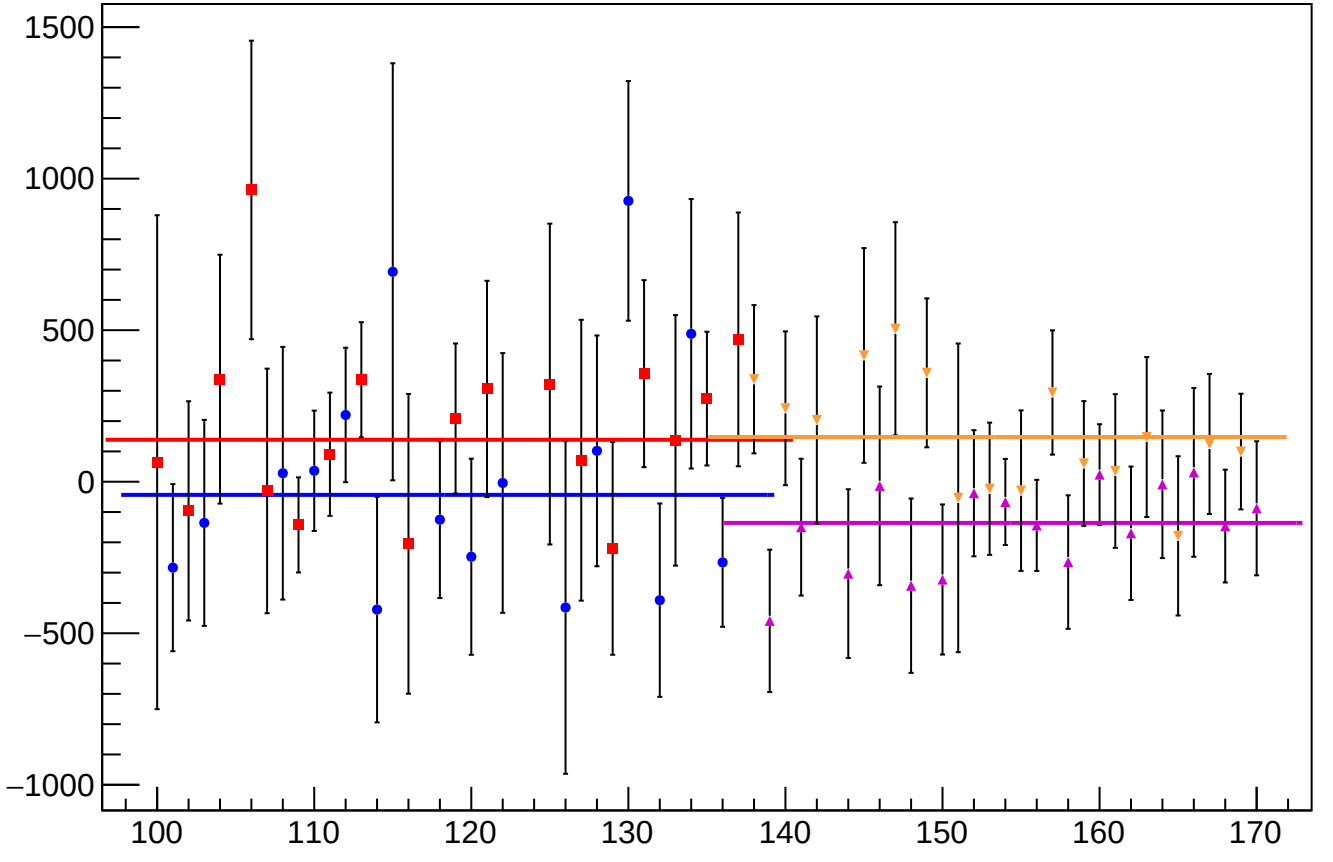
Left In: 10.621+/-0.002 $\chi^2$/NDF:149098.4/15

+ sign 10.575+/-0.002 $\chi^2$/NDF: 285137.1/32

All: 10.584+/-0.001 $\chi^2$/NDF: 621564.8/67

- sign 10.593+/-0.002 $\chi^2$/NDF: 336369.0/34

# asym_bcm_dg_us_dg_ds_avg_mean vs Slug




Right In: -43.384+/-77.584 $\chi^2$/NDF: 15.5/15

Left Out: 147.570+/-63.181 $\chi^2$/NDF:6.8/15

Right Out: 138.455+/-69.833 $\chi^2$/NDF: 11.5/17

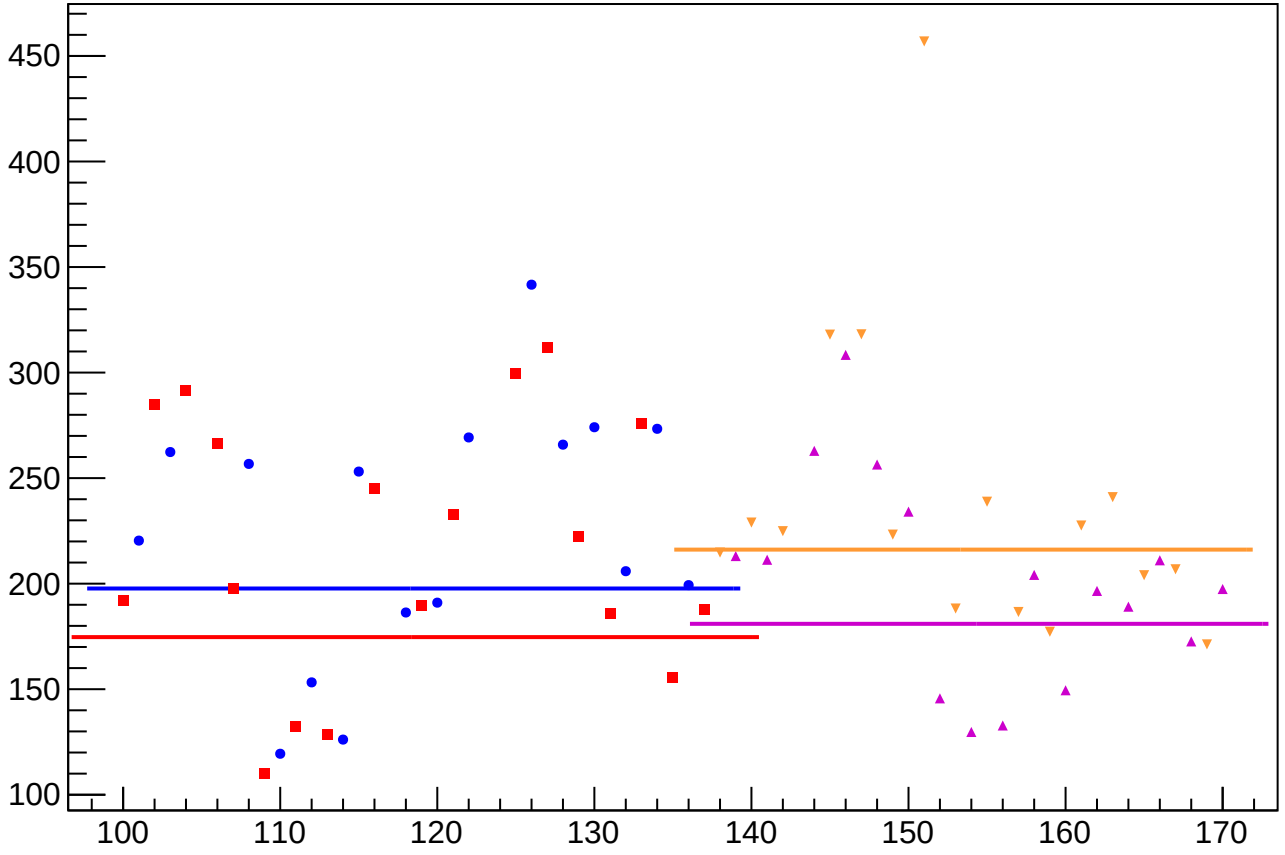
Left In: -135.931+/-52.577 $\chi^2$/NDF:5.9/15

+ sign 71.428+/-48.991 $\chi^2$/NDF: 25.9/31

All: 9.129+/-31.888 $\chi^2$/NDF: 56.0/65

- sign -36.665+/-42.003 $\chi^2$/NDF: 27.2/33

# asym_bcm_dg_us_dg_ds_avg_rms vs Slug




Right In: 197.707+/-0.055 $\chi^2$/NDF: 1000324.6/15

Left Out: 216.133+/-0.045 $\chi^2$/NDF:1089159.1/15

Right Out: 174.679+/-0.049 $\chi^2$/NDF: 1534751.1/17

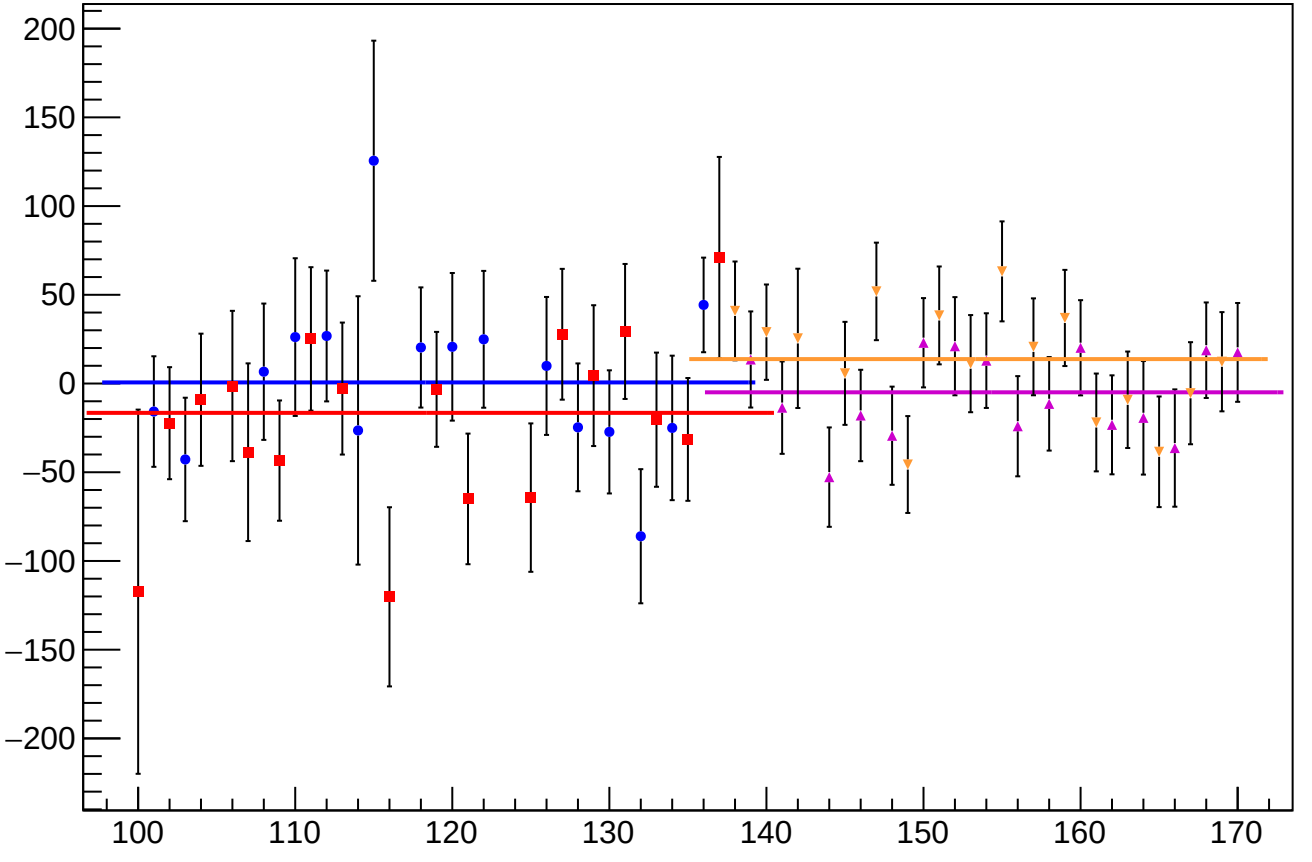
Left In: 180.971+/-0.037 $\chi^2$/NDF:1446384.8/15

+ sign 208.786+/-0.035 $\chi^2$/NDF: 2157308.5/31

All: 191.443+/-0.023 $\chi^2$/NDF: 5583676.5/65

- sign 178.694+/-0.030 $\chi^2$/NDF: 2991497.3/33

# asym_bcm_dg_us_dg_ds_dd_mean vs Slug




Right In: 0.619+/-9.421 $\chi^2$/NDF: 16.7/15

Left Out: 13.768+/-7.075 $\chi^2$/NDF:18.4/15

Right Out: -16.534+/-9.307 $\chi^2$/NDF: 16.4/17

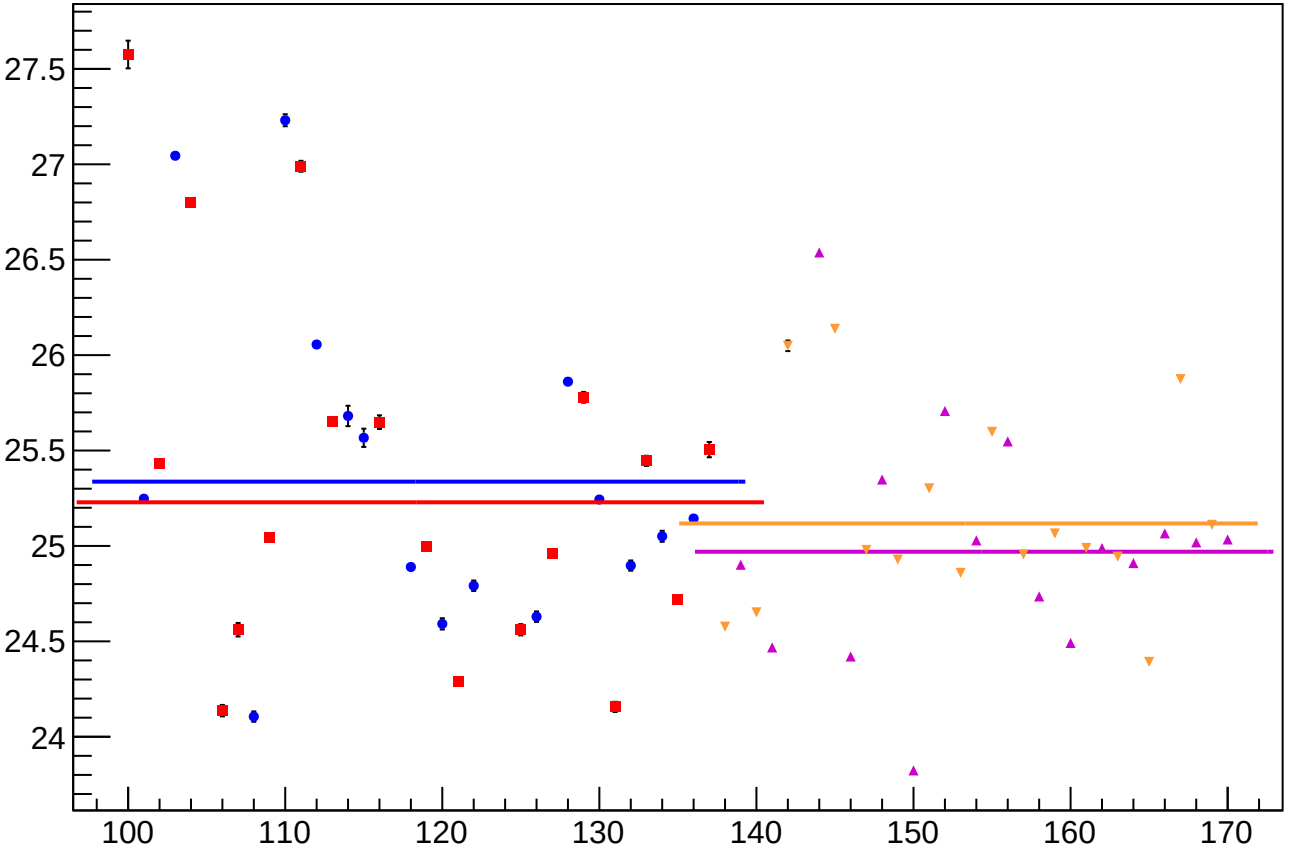
Left In: -4.952+/-6.876 $\chi^2$/NDF:11.5/15

+ sign 9.026+/-5.658 $\chi^2$/NDF: 36.4/31

All: -0.213+/-3.955 $\chi^2$/NDF: 70.5/65

- sign -9.042+/-5.530 $\chi^2$/NDF: 28.8/33

# asym_bcm_dg_us_dg_ds_dd_rms vs Slug




Right In: 25.337+/-0.007 $\chi^2$/NDF: 14315.0/15

Left Out: 25.118+/-0.005 $\chi^2$/NDF:8618.1/15

Right Out: 25.229+/-0.007 $\chi^2$/NDF: 15176.1/17

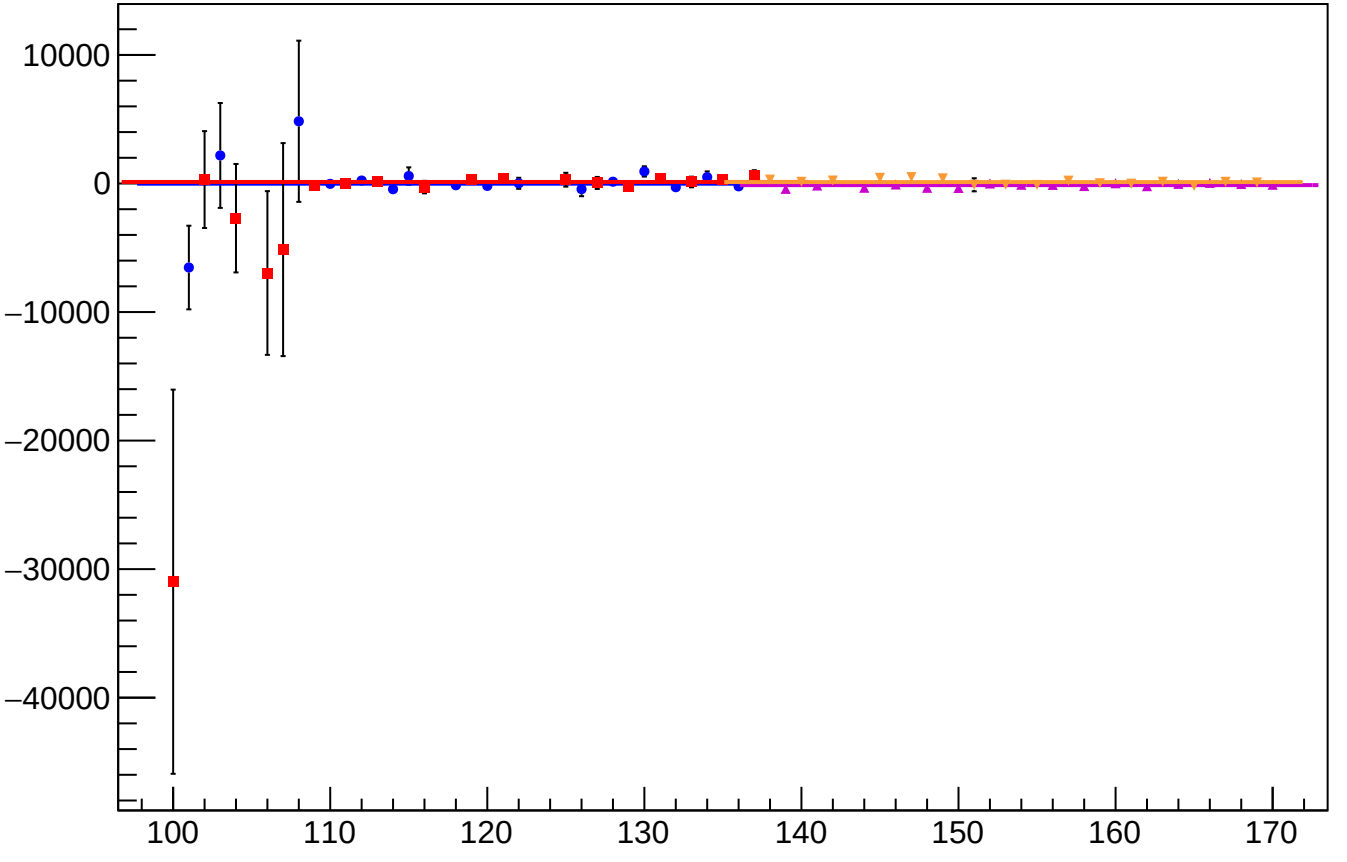
Left In: 24.970+/-0.005 $\chi^2$/NDF:15563.3/15

+ sign 25.197+/-0.004 $\chi^2$/NDF: 23625.1/31

All: 25.127+/-0.003 $\chi^2$/NDF: 55955.4/65

- sign 25.061+/-0.004 $\chi^2$/NDF: 31742.0/33

# asym_bcm_cav4cQ_an_ds_avg_mean vs Slug




Right In: -13.160+/-84.454 $\chi^2$/NDF: 18.3/15

Left Out: 111.239+/-63.527 $\chi^2$/NDF:7.8/15

Right Out: 119.984+/-78.247 $\chi^2$/NDF: 14.4/17

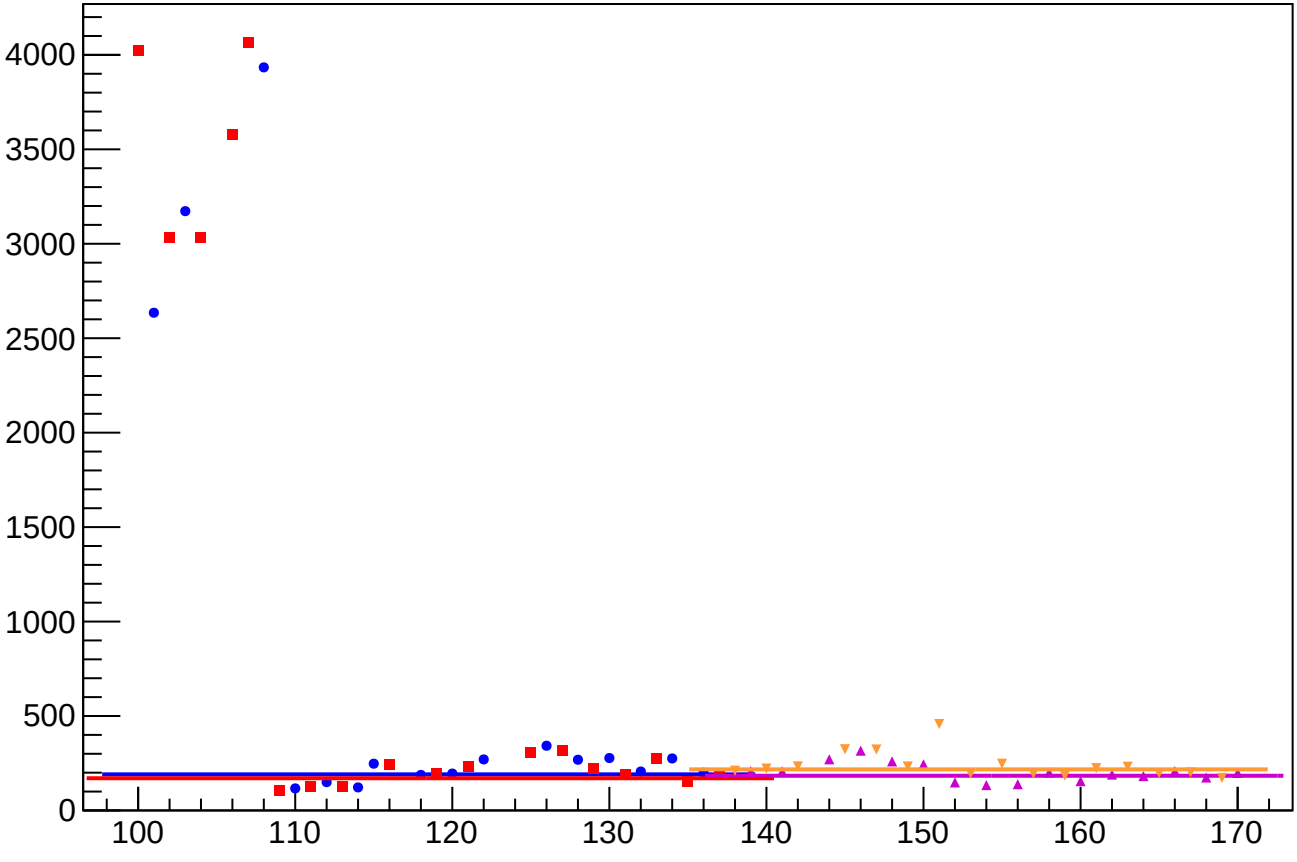
Left In: -124.873+/-53.238 $\chi^2$/NDF:5.6/15

+ sign 66.286+/-50.768 $\chi^2$/NDF: 27.5/31

All: 1.390+/-33.257 $\chi^2$/NDF: 57.0/65

- sign -47.392+/-44.016 $\chi^2$/NDF: 26.7/33

# asym_bcm_cav4cQ_an_ds_avg_rms vs Slug




Right In: 191.070+/-0.060 $\chi^2$/NDF: 3833952.4/15

Left Out: 217.535+/-0.045 $\chi^2$/NDF:1068697.8/15

Right Out: 170.494+/-0.055 $\chi^2$/NDF: 4254820.8/17

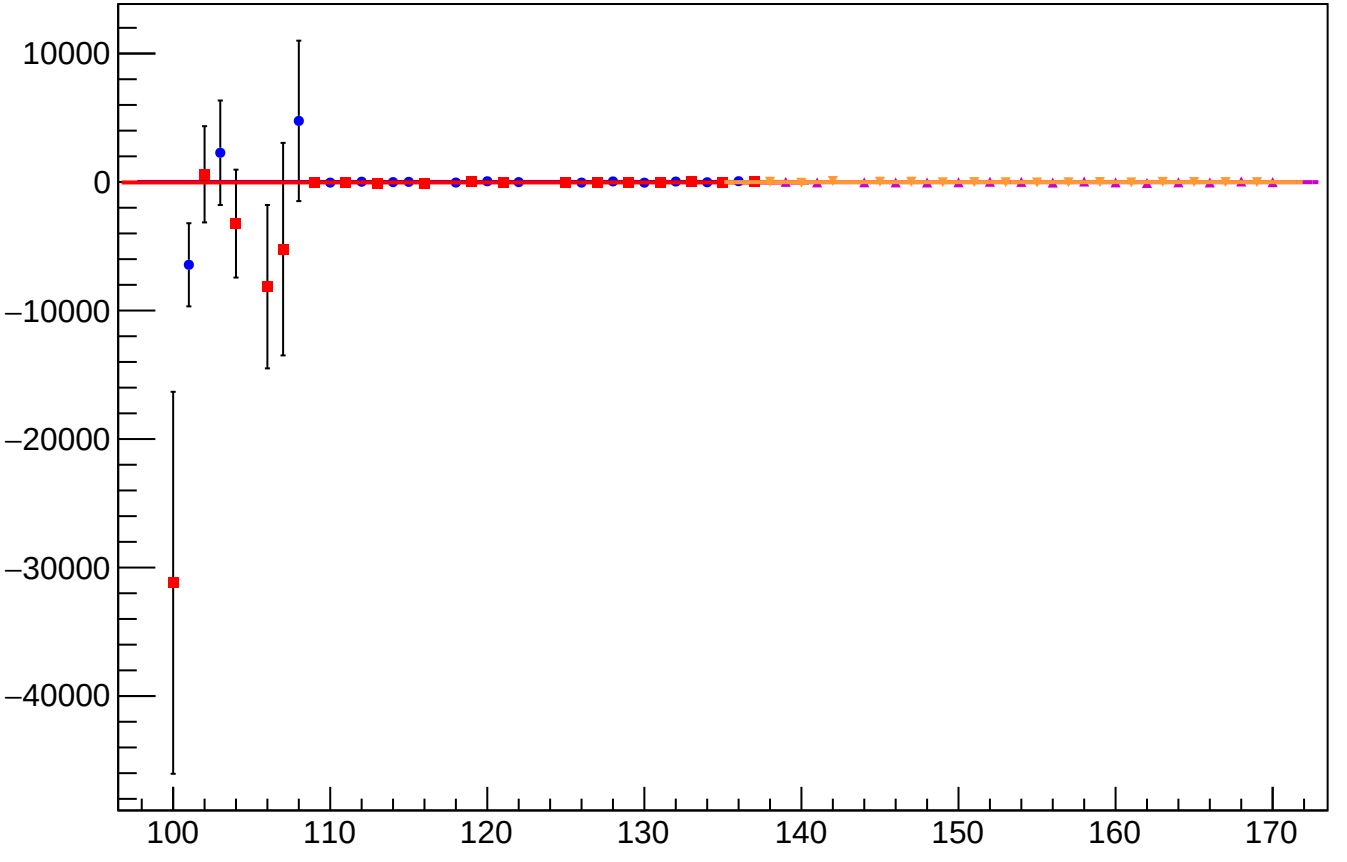
Left In: 183.748+/-0.038 $\chi^2$/NDF:1329465.7/15

+ sign 207.972+/-0.036 $\chi^2$/NDF: 5028079.1/31

All: 191.749+/-0.024 $\chi^2$/NDF: 11009340.1/65

- sign 179.554+/-0.031 $\chi^2$/NDF: 5623513.7/33

# asym_bcm_cav4cQ_an_ds_dd_mean vs Slug




Right In: 6.490+/-11.764 $\chi^2$/NDF: 18.3/15

Left Out: -7.336+/-8.134 $\chi^2$/NDF:10.7/15

Right Out: -30.740+/-12.084 $\chi^2$/NDF: 19.9/17

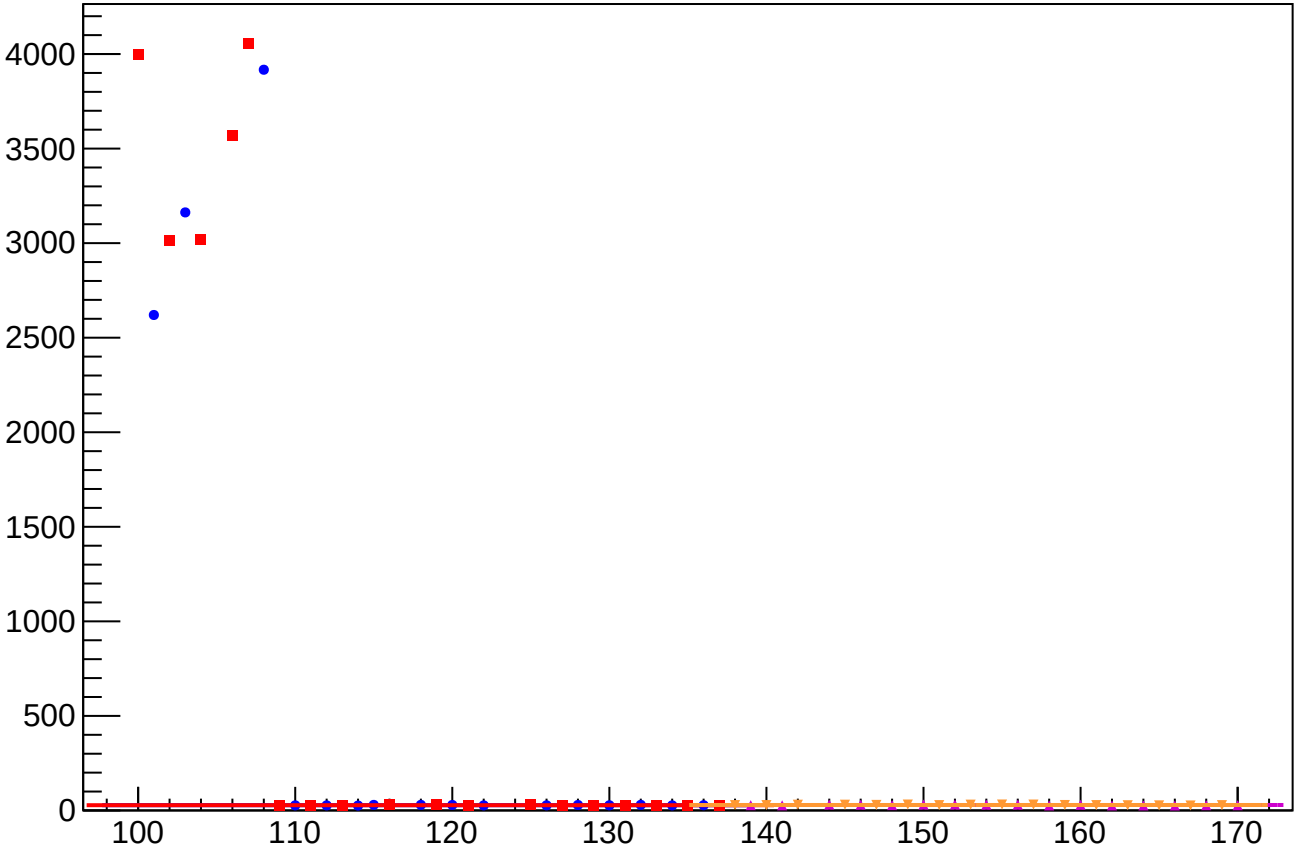
Left In: -8.567+/-7.977 $\chi^2$/NDF:16.0/15

+ sign -2.864+/-6.691 $\chi^2$/NDF: 29.9/31

All: -9.111+/-4.719 $\chi^2$/NDF: 69.9/65

- sign -15.297+/-6.658 $\chi^2$/NDF: 38.2/33

# asym_bcm_cav4cQ_an_ds_dd_rms vs Slug




Right In: 27.825+/-0.008 $\chi^2$/NDF: 3265895.3/15

Left Out: 28.821+/-0.006 $\chi^2$/NDF:71299.8/15

Right Out: 27.778+/-0.009 $\chi^2$/NDF: 3558398.6/17

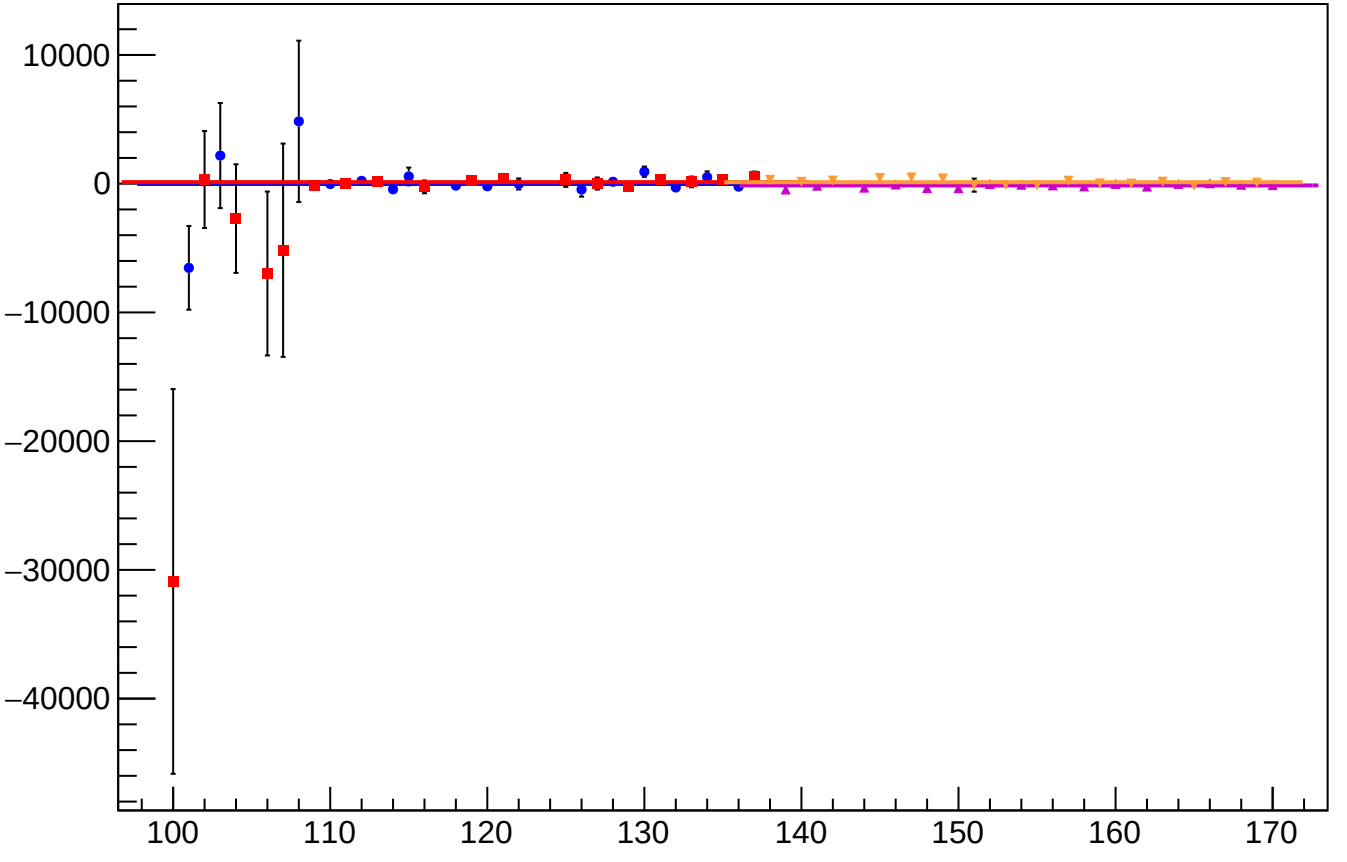
Left In: 28.891+/-0.006 $\chi^2$/NDF:111648.8/15

+ sign 28.499+/-0.005 $\chi^2$/NDF: 3346897.7/31

All: 28.526+/-0.003 $\chi^2$/NDF: 7028822.7/65

- sign 28.553+/-0.005 $\chi^2$/NDF: 3681858.5/33

# asym_bcm_cav4cQ_dg_ds_avg_mean vs Slug




Right In: -19.522+/-85.063 $\chi^2$/NDF: 18.2/15

Left Out: 115.050+/-64.037 $\chi^2$/NDF:7.5/15

Right Out: 121.544+/-78.844 $\chi^2$/NDF: 13.2/17

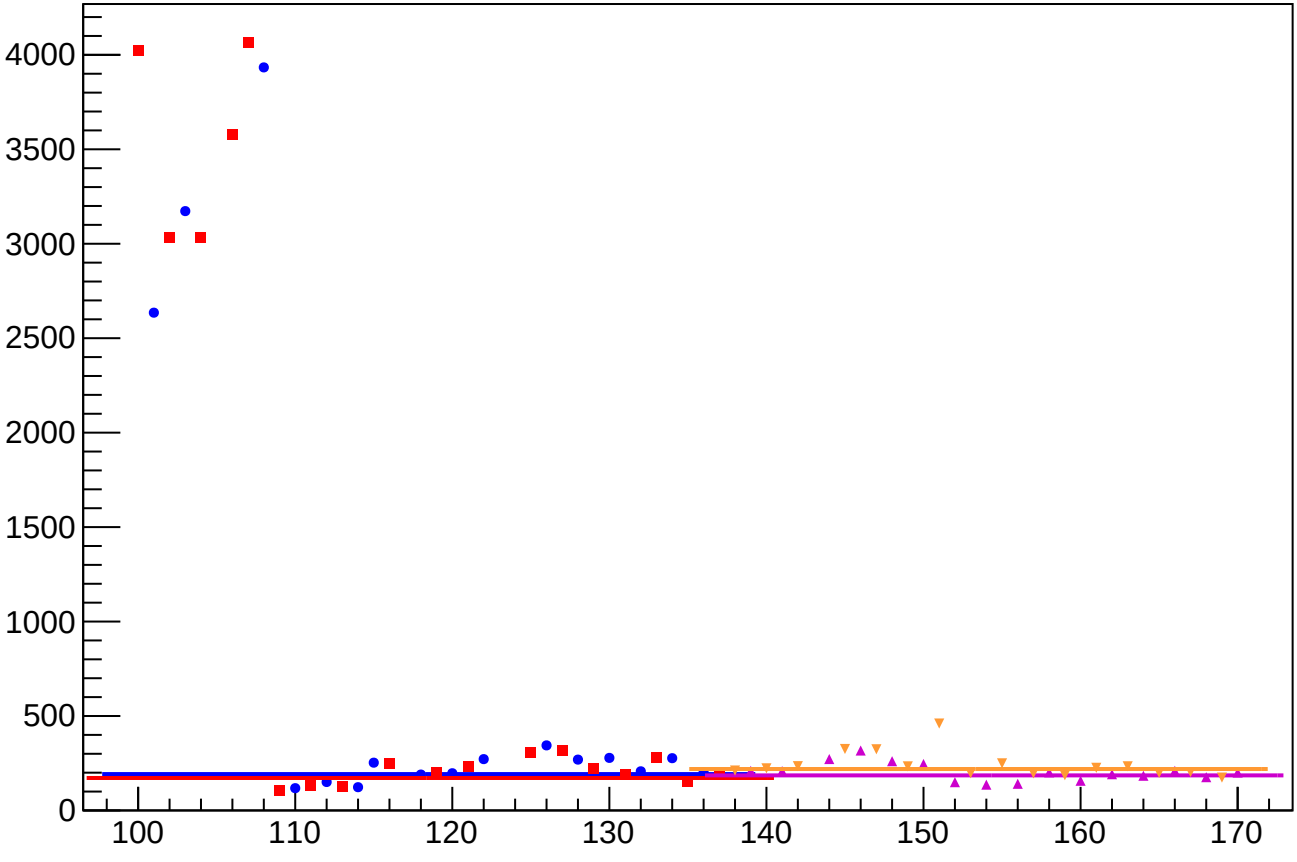
Left In: -134.537+/-53.744 $\chi^2$/NDF:5.3/15

+ sign 66.371+/-51.160 $\chi^2$/NDF: 27.3/31

All: -1.876+/-33.536 $\chi^2$/NDF: 56.2/65

- sign -53.297+/-44.408 $\chi^2$/NDF: 25.8/33

# asym_bcm_cav4cQ_dg_ds_avg_rms vs Slug




Right In: 192.560+/-0.060 $\chi^2$/NDF: 3822789.1/15

Left Out: 219.391+/-0.045 $\chi^2$/NDF:1052121.3/15

Right Out: 171.899+/-0.056 $\chi^2$/NDF: 4247800.5/17

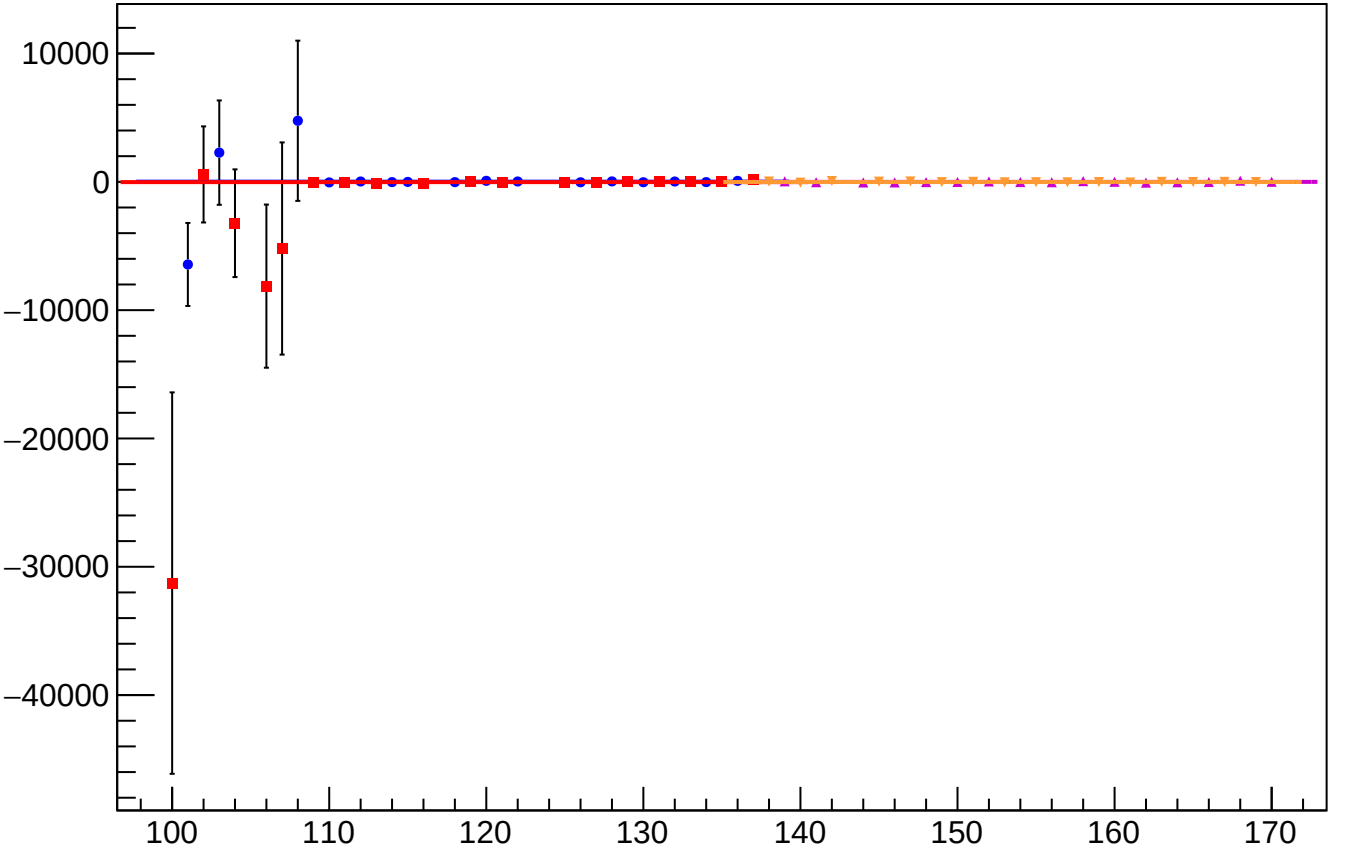
Left In: 185.670+/-0.038 $\chi^2$/NDF:1289504.6/15

+ sign 209.685+/-0.036 $\chi^2$/NDF: 5001913.7/31

All: 193.498+/-0.024 $\chi^2$/NDF: 10931971.1/65

- sign 181.301+/-0.031 $\chi^2$/NDF: 5578961.8/33

# asym_bcm_cav4cQ_dg_ds_dd_mean vs Slug




Right In: 13.713+/-13.062 $\chi^2$/NDF: 15.5/15

Left Out: -14.166+/-8.766 $\chi^2$/NDF:11.5/15

Right Out: -21.906+/-13.382 $\chi^2$/NDF: 28.4/17

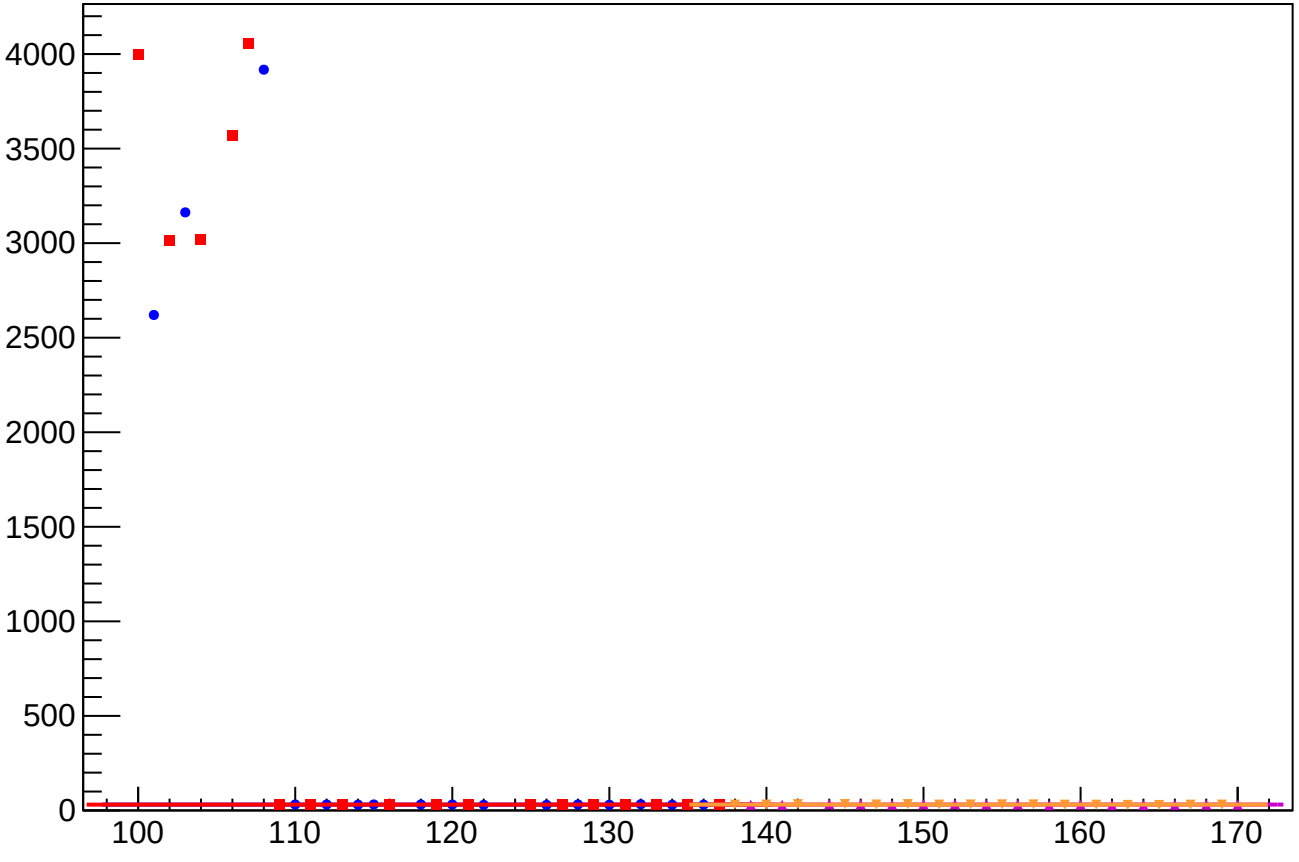
Left In: -2.869+/-8.606 $\chi^2$/NDF:22.5/15

+ sign -5.509+/-7.279 $\chi^2$/NDF: 30.1/31

All: -6.982+/-5.133 $\chi^2$/NDF: 82.5/65

- sign -8.439+/-7.238 $\chi^2$/NDF: 52.3/33

# asym_bcm_cav4cQ_dg_ds_dd_rms vs Slug




Right In: 30.928+/-0.009 $\chi^2$/NDF: 3252607.8/15

Left Out: 31.085+/-0.006 $\chi^2$/NDF:41805.6/15

Right Out: 30.804+/-0.009 $\chi^2$/NDF: 3535959.8/17

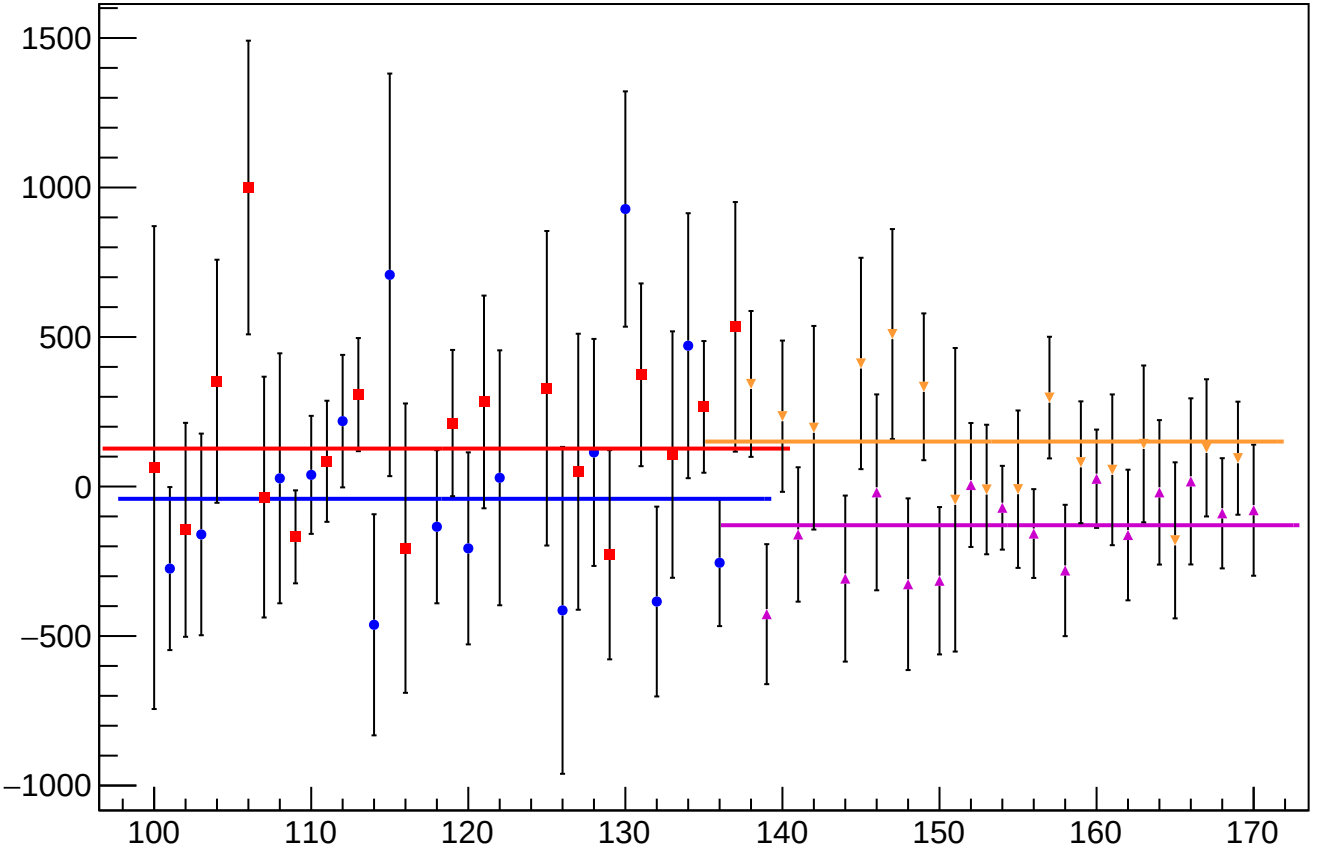
Left In: 31.190+/-0.006 $\chi^2$/NDF:77087.6/15

+ sign 31.036+/-0.005 $\chi^2$/NDF: 3294612.1/31

All: 31.057+/-0.004 $\chi^2$/NDF: 6908864.2/65

- sign 31.077+/-0.005 $\chi^2$/NDF: 3614221.2/33

# asym_bcm_dg_us_an_us_avg_mean vs Slug




Right In: -41.114+/-77.139 $\chi^2$/NDF: 15.6/15

Left Out: 150.426+/-62.794 $\chi^2$/NDF:6.4/15

Right Out: 126.896+/-69.382 $\chi^2$/NDF: 12.8/17

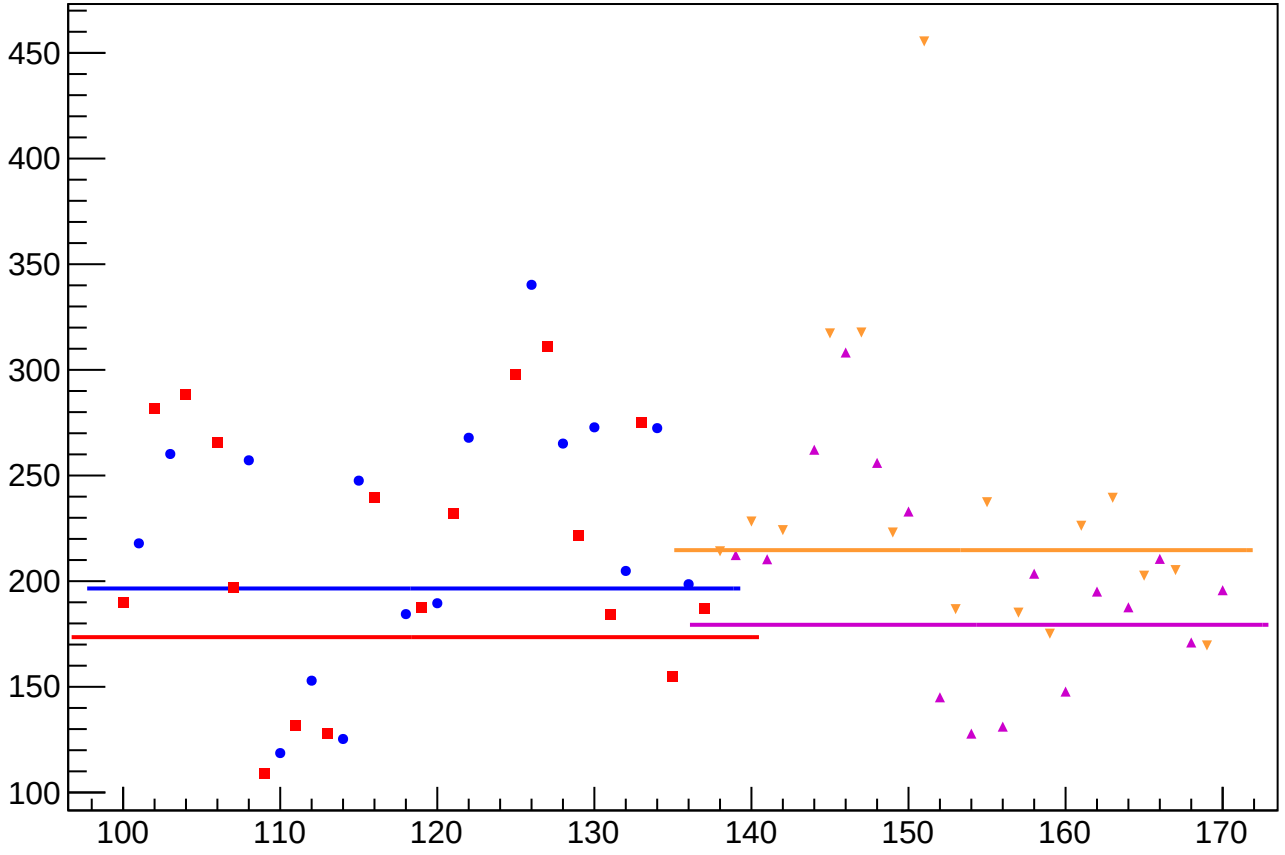
Left In: -129.418+/-52.161 $\chi^2$/NDF:5.8/15

+ sign 74.087+/-48.699 $\chi^2$/NDF: 25.8/31

All: 10.063+/-31.671 $\chi^2$/NDF: 56.1/65

- sign -36.865+/-41.693 $\chi^2$/NDF: 27.3/33

# asym_bcm_dg_us_an_us_avg_rms vs Slug




Right In: 196.542+/-0.055 $\chi^2$/NDF: 1000770.4/15

Left Out: 214.681+/-0.044 $\chi^2$/NDF:1109188.6/15

Right Out: 173.509+/-0.049 $\chi^2$/NDF: 1532720.5/17

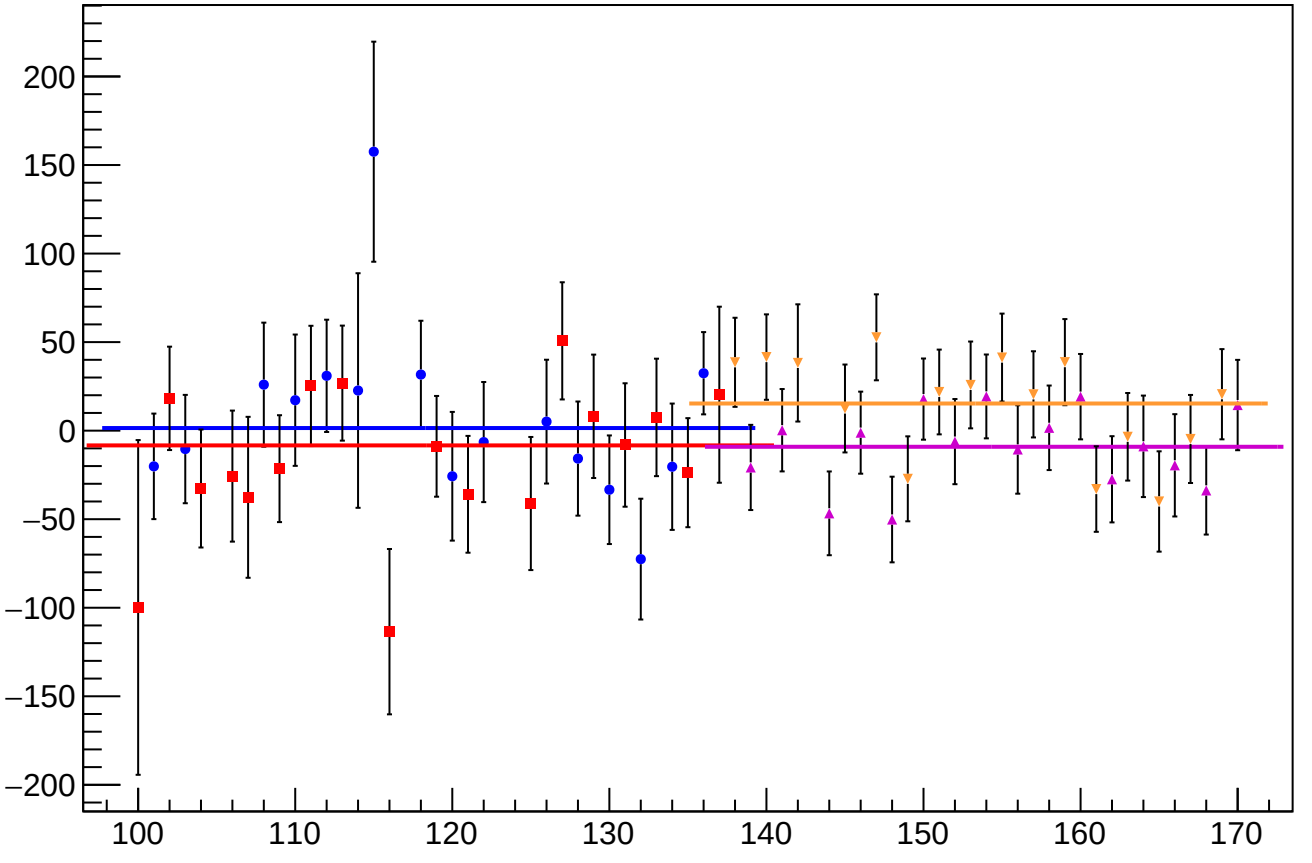
Left In: 179.355+/-0.037 $\chi^2$/NDF:1489524.9/15

+ sign 207.452+/-0.034 $\chi^2$/NDF: 2176473.3/31

All: 190.021+/-0.022 $\chi^2$/NDF: 5651844.8/65

- sign 177.244+/-0.029 $\chi^2$/NDF: 3031317.2/33

# asym_bcm_dg_us_an_us_dd_mean vs Slug




Right In: 1.475+/-8.370 $\chi^2$/NDF: 18.7/15

Left Out: 15.329+/-6.270 $\chi^2$/NDF:19.4/15

Right Out: -8.329+/-8.286 $\chi^2$/NDF: 16.0/17

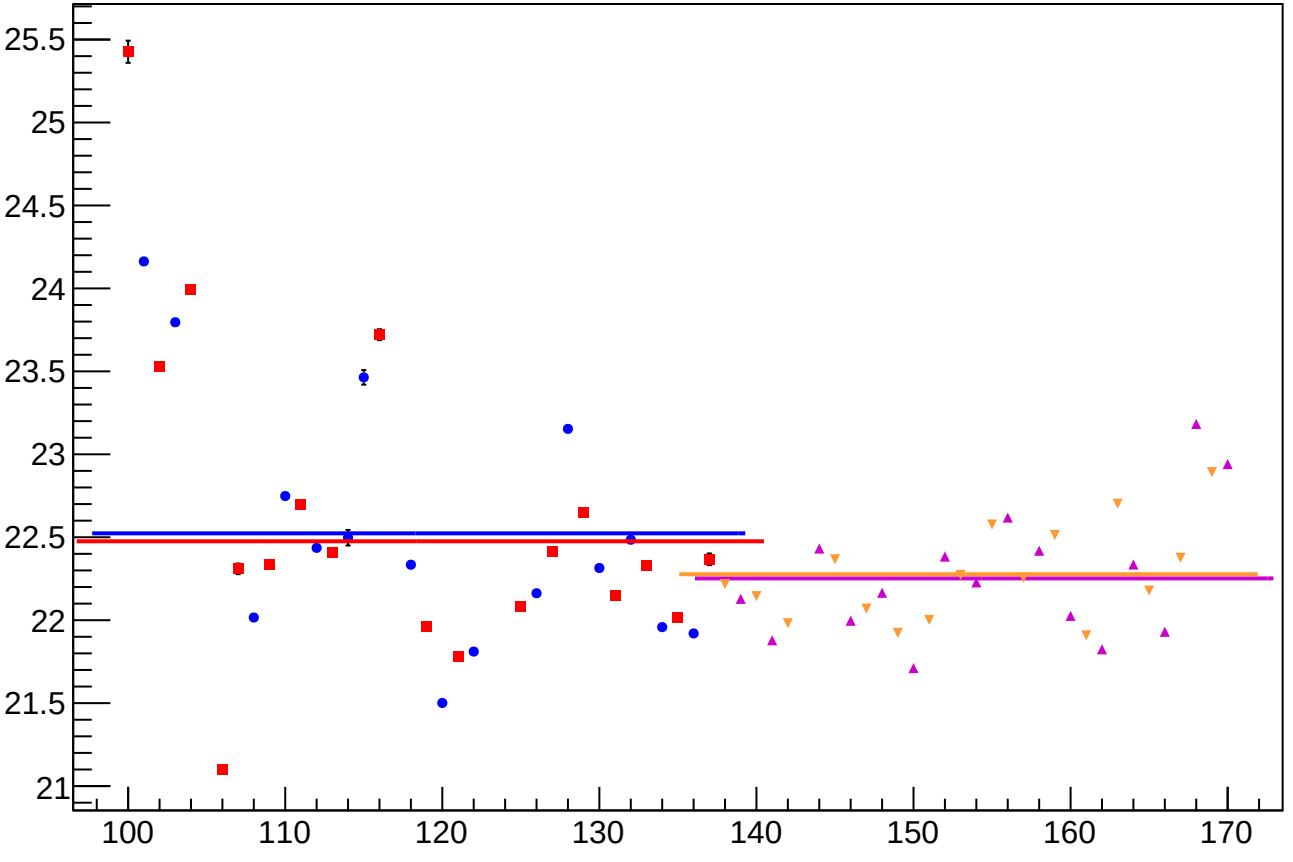
Left In: -9.107+/-6.122 $\chi^2$/NDF:12.9/15

+ sign 10.350+/-5.018 $\chi^2$/NDF: 39.9/31

All: 0.576+/-3.514 $\chi^2$/NDF: 76.2/65

- sign -8.832+/-4.924 $\chi^2$/NDF: 28.9/33

# asym_bcm_dg_us_an_us_dd_rms vs Slug




Right In: 22.524+/-0.006 $\chi^2$/NDF: 15947.8/15

Left Out: 22.277+/-0.004 $\chi^2$/NDF:3864.6/15

Right Out: 22.476+/-0.006 $\chi^2$/NDF: 15536.6/17

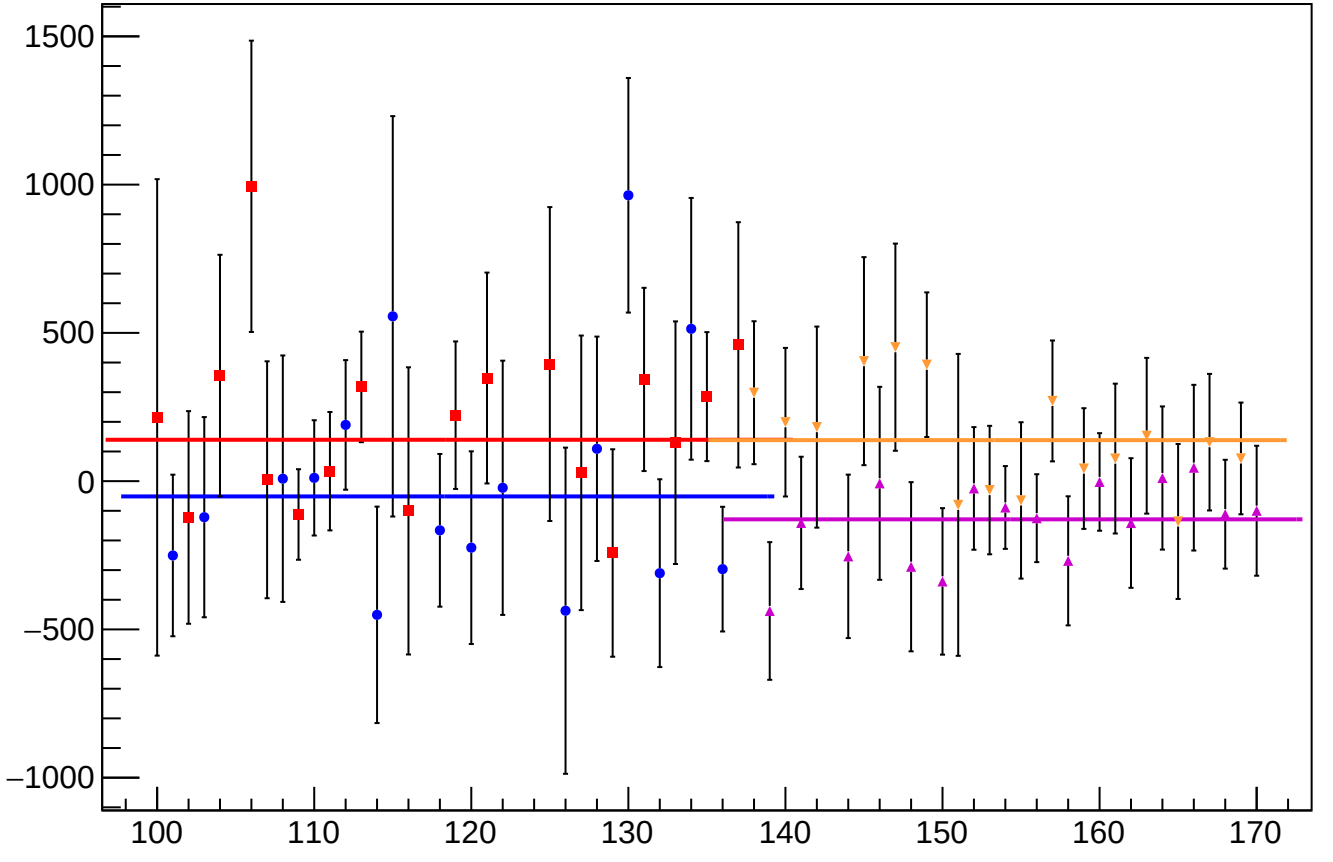
Left In: 22.252+/-0.004 $\chi^2$/NDF:7962.5/15

+ sign 22.366+/-0.004 $\chi^2$/NDF: 20923.5/31

All: 22.348+/-0.002 $\chi^2$/NDF: 45416.1/65

- sign 22.331+/-0.003 $\chi^2$/NDF: 24443.5/33

# asym_bcm_dg_ds_an_us_avg_mean vs Slug




Right In: -51.492+/-76.798 $\chi^2$/NDF: 15.3/15

Left Out: 138.238+/-62.674 $\chi^2$/NDF:6.3/15

Right Out: 139.546+/-68.888 $\chi^2$/NDF: 11.6/17

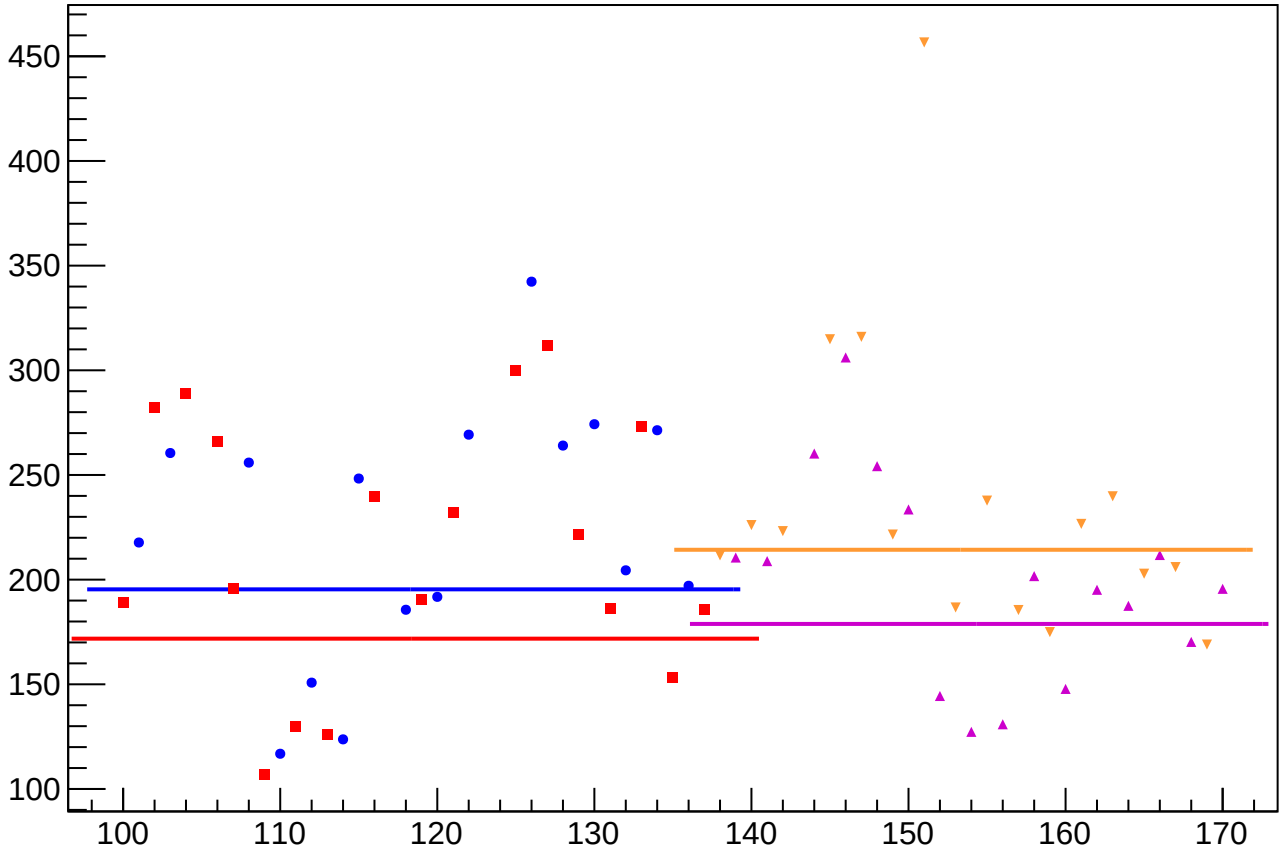
Left In: -128.805+/-52.012 $\chi^2$/NDF:5.2/15

+ sign 62.392+/-48.557 $\chi^2$/NDF: 25.3/31

All: 8.217+/-31.552 $\chi^2$/NDF: 53.9/65

- sign -31.373+/-41.509 $\chi^2$/NDF: 26.5/33

# asym_bcm_dg_ds_an_us_avg_rms vs Slug




Right In: 195.361+/-0.054 $\chi^2$/NDF: 1041432.1/15

Left Out: 214.269+/-0.044 $\chi^2$/NDF:1103480.4/15

Right Out: 171.805+/-0.049 $\chi^2$/NDF: 1600663.6/17

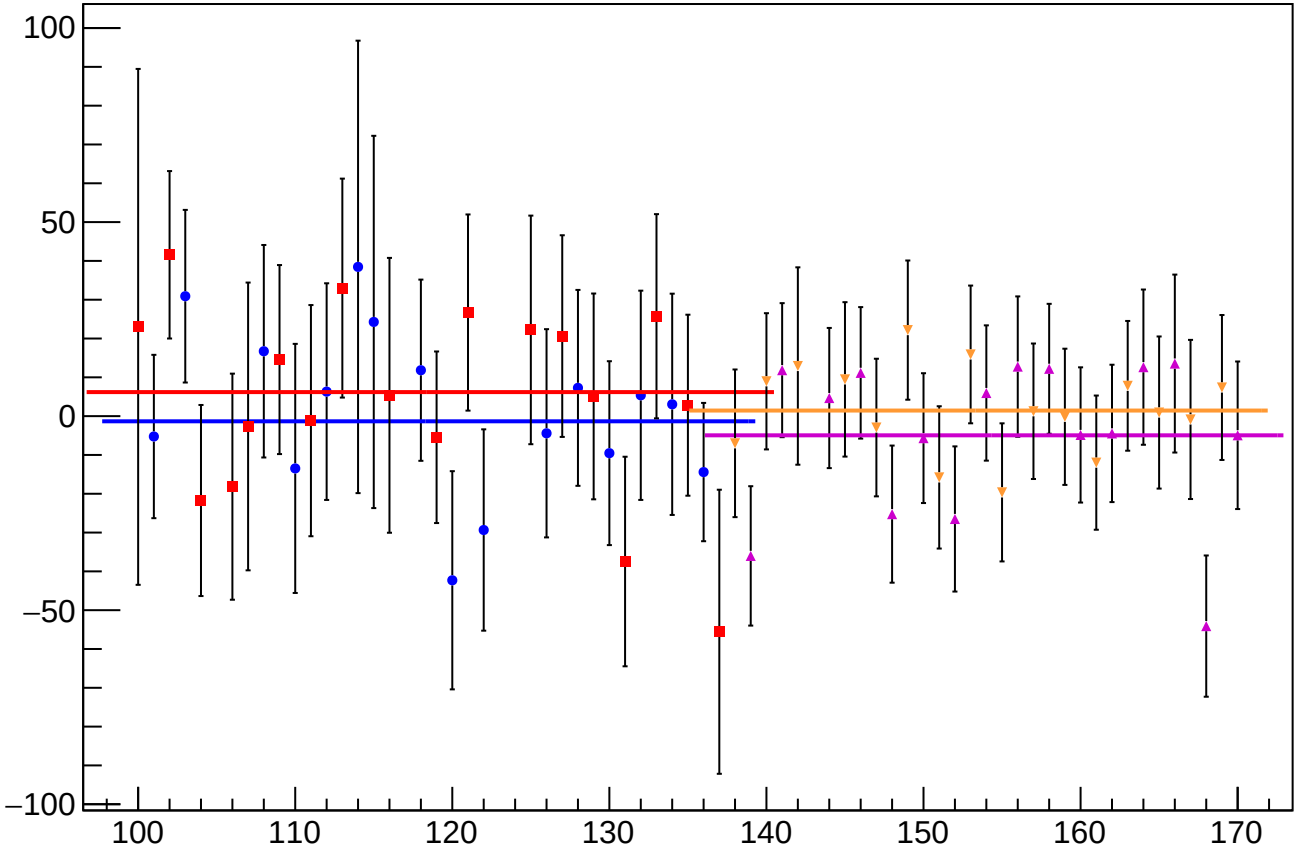
Left In: 178.837+/-0.037 $\chi^2$/NDF:1479795.2/15

+ sign 206.710+/-0.034 $\chi^2$/NDF: 2217679.6/31

All: 189.131+/-0.022 $\chi^2$/NDF: 5765127.8/65

- sign 176.284+/-0.029 $\chi^2$/NDF: 3093733.3/33

# asym_bcm_dg_ds_an_us_dd_mean vs Slug




Right In: -1.331+/-6.499 $\chi^2$/NDF: 8.0/15

Left Out: 1.441+/-4.613 $\chi^2$/NDF:6.0/15

Right Out: 6.195+/-6.473 $\chi^2$/NDF: 13.5/17

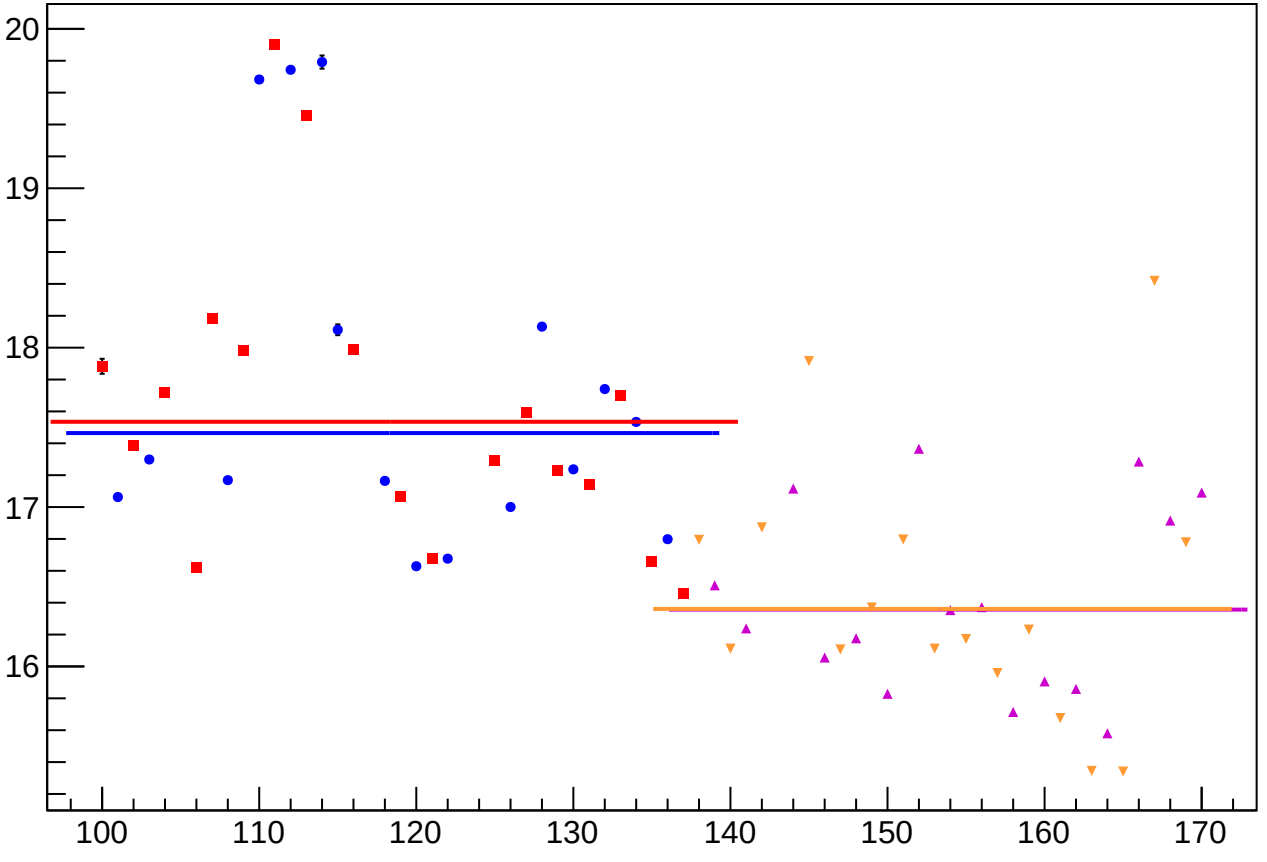
Left In: -4.942+/-4.507 $\chi^2$/NDF:18.9/15

+ sign 0.512+/-3.762 $\chi^2$/NDF: 14.1/31

All: -0.412+/-2.637 $\chi^2$/NDF: 48.6/65

- sign -1.305+/-3.699 $\chi^2$/NDF: 34.3/33

# asym_bcm_dg_ds_an_us_dd_rms vs Slug




Right In: 17.464+/-0.005 $\chi^2$/NDF: 36650.1/15

Left Out: 16.361+/-0.003 $\chi^2$/NDF:54904.9/15

Right Out: 17.535+/-0.005 $\chi^2$/NDF: 34475.1/17

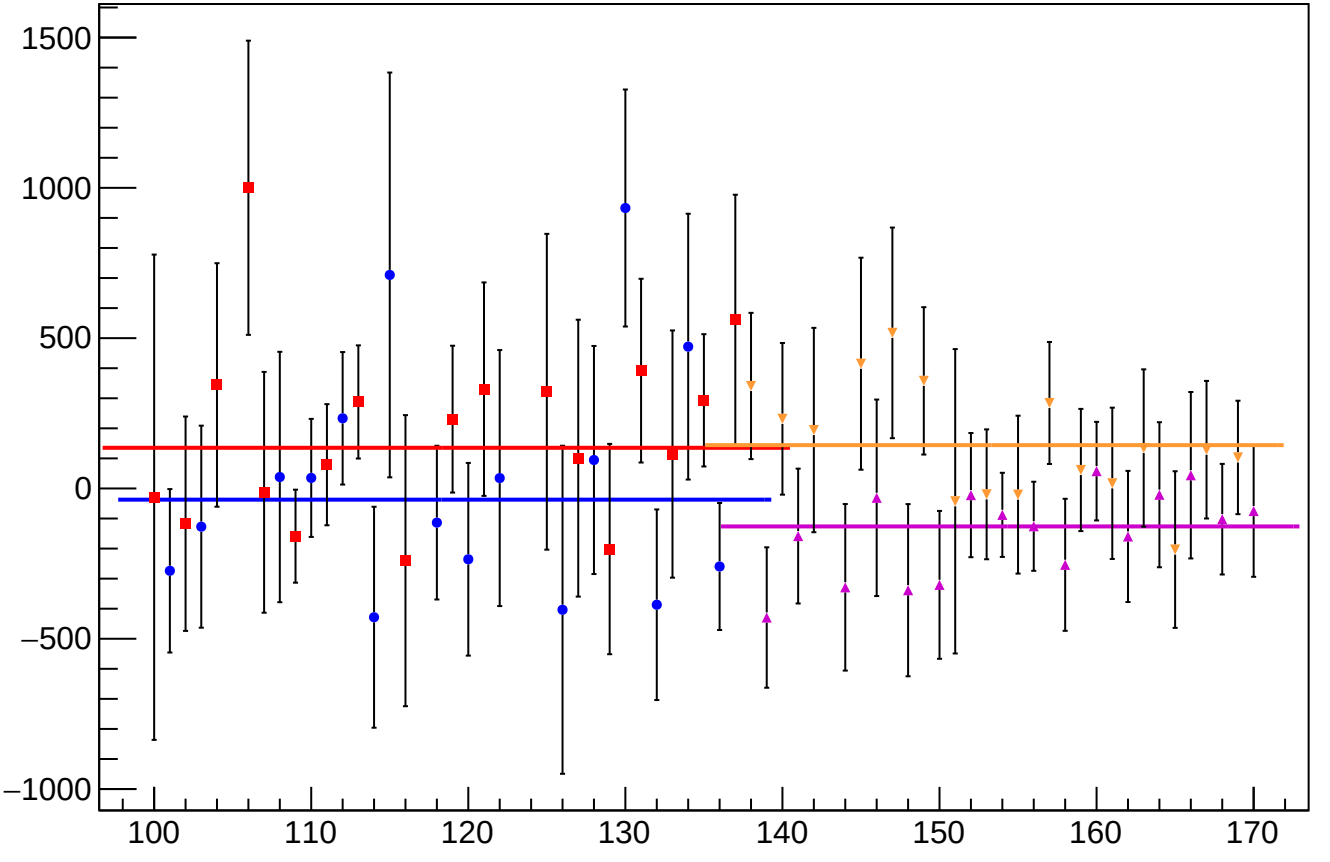
Left In: 16.357+/-0.003 $\chi^2$/NDF:29451.3/15

+ sign 16.731+/-0.003 $\chi^2$/NDF: 129881.4/31

All: 16.736+/-0.002 $\chi^2$/NDF: 238462.8/65

- sign 16.741+/-0.003 $\chi^2$/NDF: 108573.1/33

# asym_bcm_dg_us_an_ds_avg_mean vs Slug




Right In: -37.241+/-76.915 $\chi^2$/NDF: 15.6/15

Left Out: 144.080+/-62.657 $\chi^2$/NDF:7.1/15

Right Out: 135.279+/-69.157 $\chi^2$/NDF: 12.8/17

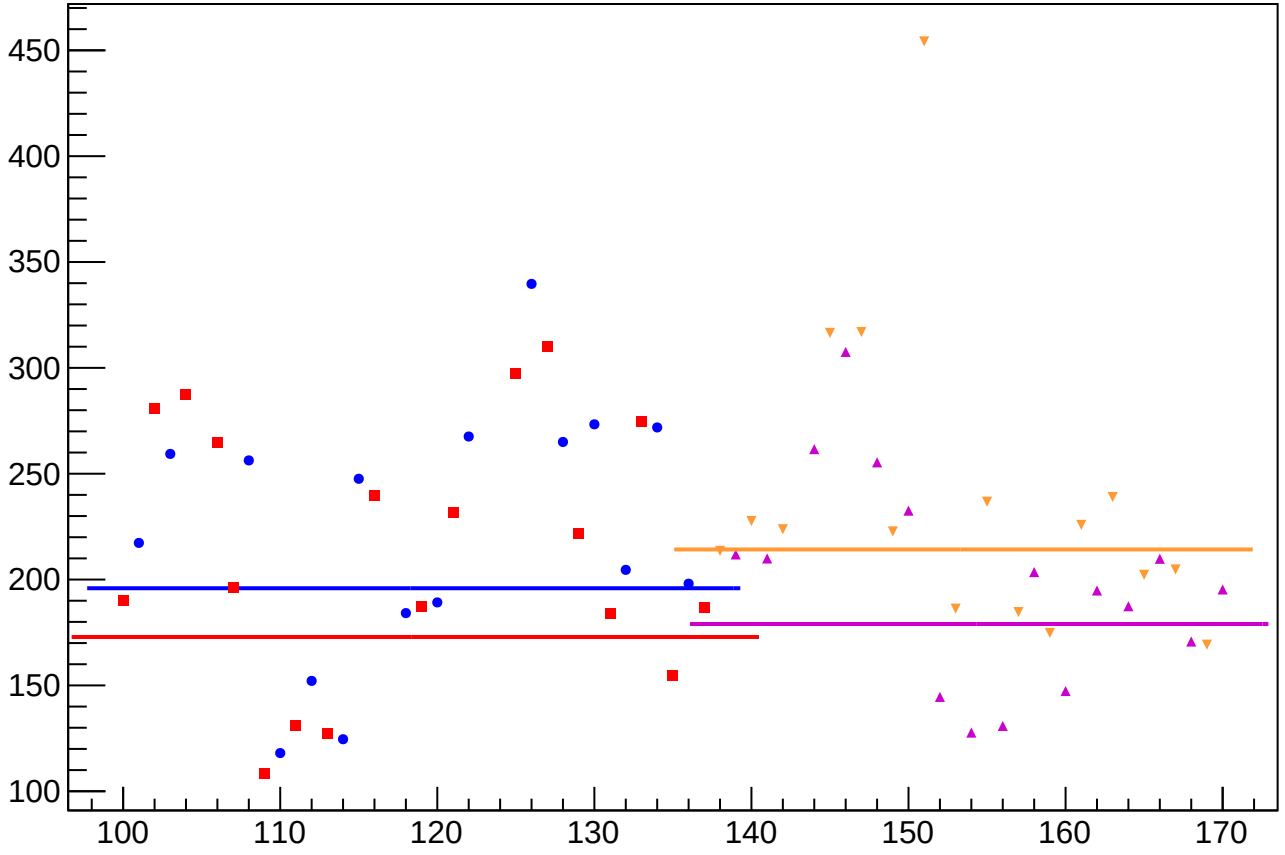
Left In: -126.331+/-52.059 $\chi^2$/NDF:6.1/15

+ sign 71.751+/-48.578 $\chi^2$/NDF: 26.1/31

All: 12.053+/-31.594 $\chi^2$/NDF: 56.7/65

- sign -31.708+/-41.592 $\chi^2$/NDF: 28.0/33

# asym_bcm_dg_us_an_ds_avg_rms vs Slug




Right In: 195.900+/-0.054 $\chi^2$/NDF: 1011012.3/15

Left Out: 214.217+/-0.044 $\chi^2$/NDF:1108709.2/15

Right Out: 172.873+/-0.049 $\chi^2$/NDF: 1543258.3/17

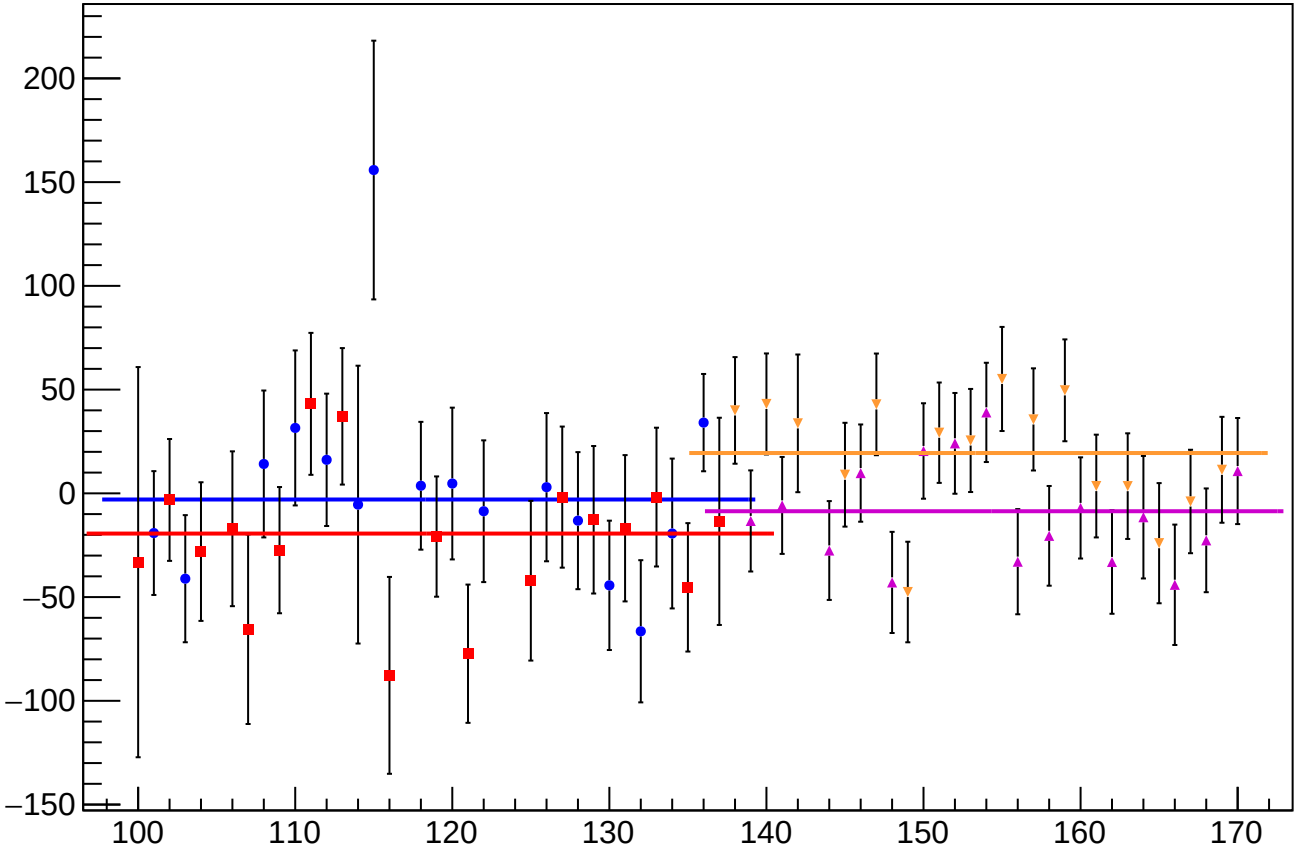
Left In: 179.008+/-0.037 $\chi^2$/NDF:1489488.7/15

+ sign 206.910+/-0.034 $\chi^2$/NDF: 2187901.8/31

All: 189.529+/-0.022 $\chi^2$/NDF: 5674381.2/65

- sign 176.789+/-0.029 $\chi^2$/NDF: 3042792.5/33

# asym_bcm_dg_us_an_ds_dd_mean vs Slug




Right In: -2.967+/-8.454 $\chi^2$/NDF: 17.9/15

Left Out: 19.436+/-6.348 $\chi^2$/NDF:18.7/15

Right Out: -19.387+/-8.381 $\chi^2$/NDF: 14.5/17

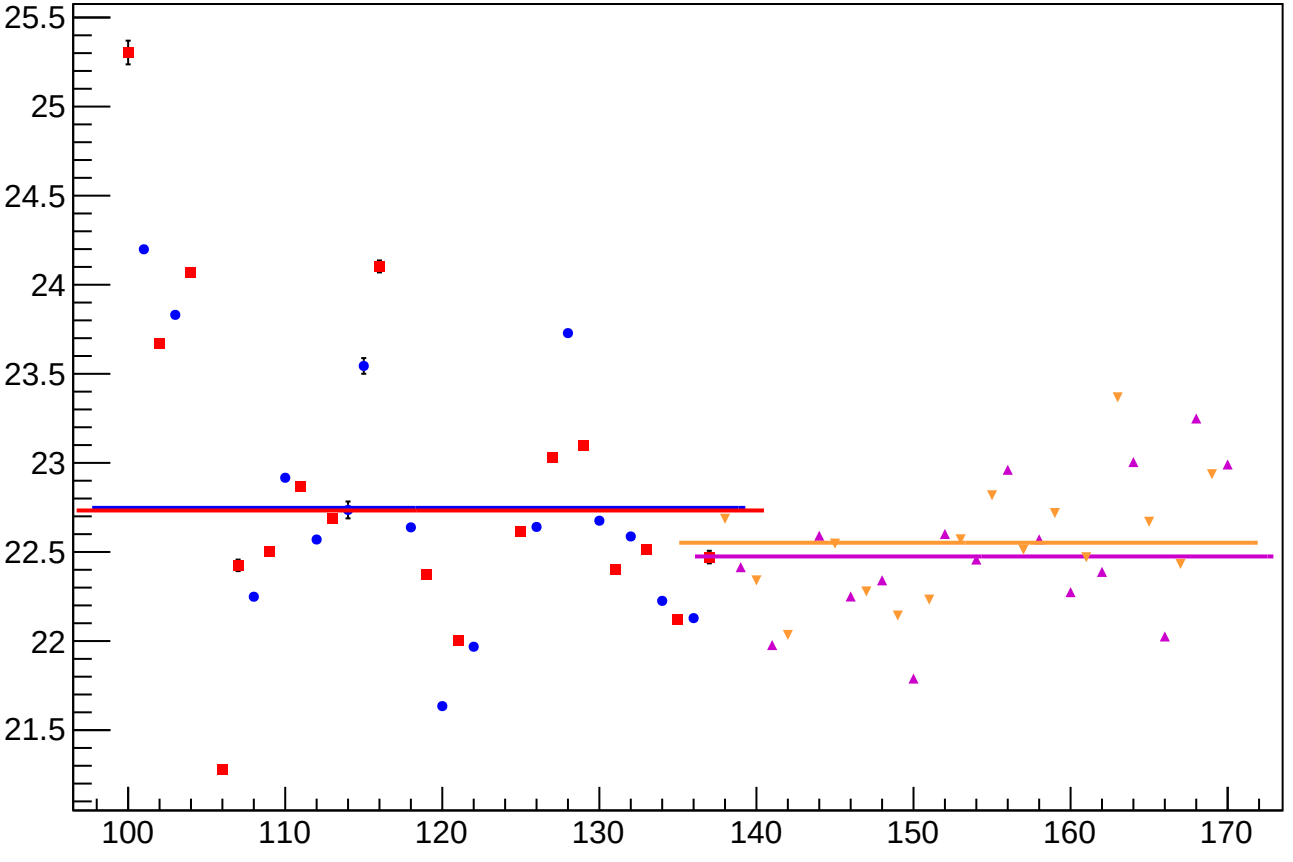
Left In: -8.621+/-6.183 $\chi^2$/NDF:15.2/15

+ sign 11.358+/-5.076 $\chi^2$/NDF: 41.1/31

All: -0.766+/-3.553 $\chi^2$/NDF: 83.1/65

- sign -12.415+/-4.976 $\chi^2$/NDF: 30.8/33

# asym_bcm_dg_us_an_ds_dd_rms vs Slug




Right In: 22.747+/-0.006 $\chi^2$/NDF: 14622.8/15

Left Out: 22.552+/-0.004 $\chi^2$/NDF:4792.4/15

Right Out: 22.733+/-0.006 $\chi^2$/NDF: 14389.6/17

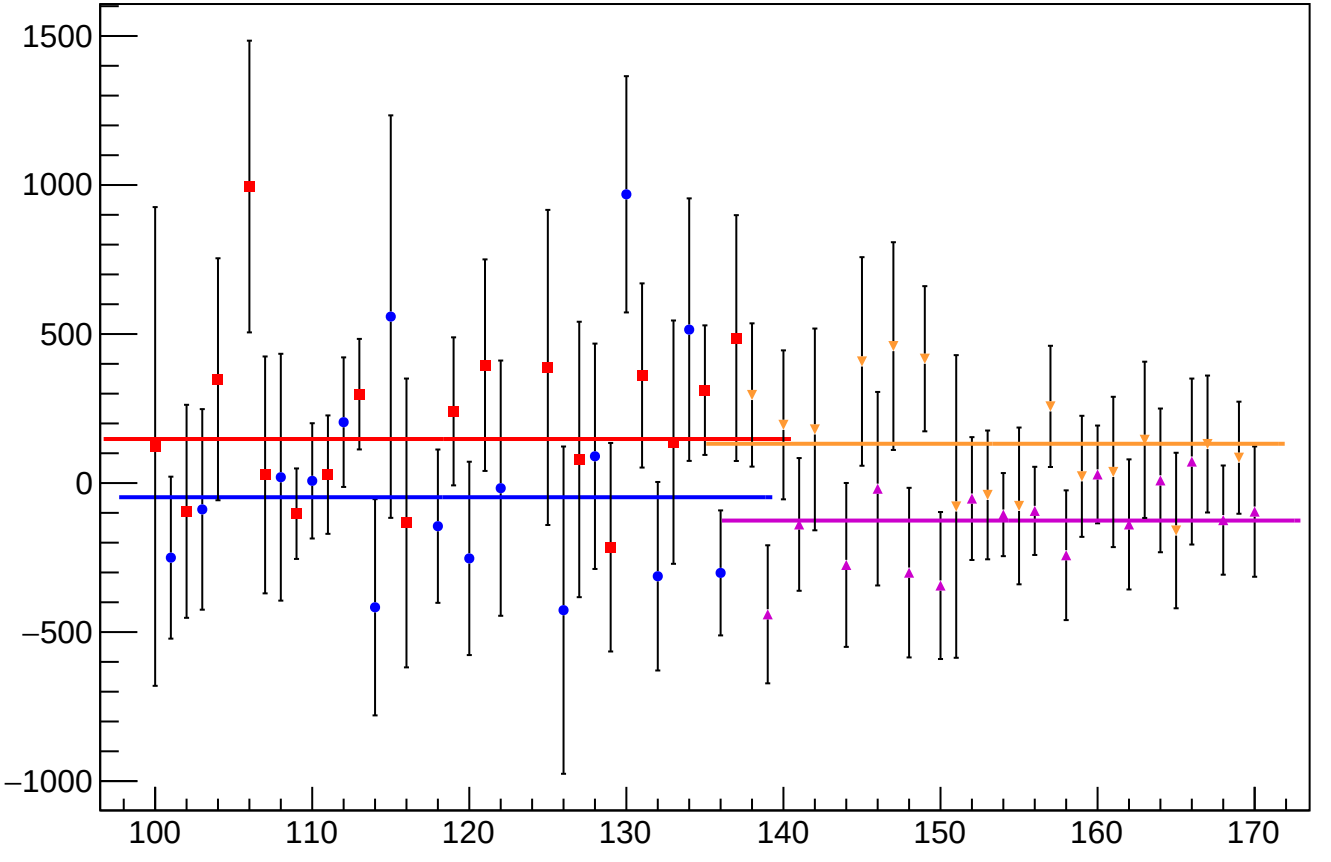
Left In: 22.475+/-0.004 $\chi^2$/NDF:7825.2/15

+ sign 22.622+/-0.004 $\chi^2$/NDF: 20099.8/31

All: 22.594+/-0.003 $\chi^2$/NDF: 43669.2/65

- sign 22.566+/-0.004 $\chi^2$/NDF: 23442.7/33

# asym_bcm_dg_ds_an_ds_avg_mean vs Slug




Right In: -47.523+/-76.571 $\chi^2$/NDF: 15.4/15

Left Out: 131.829+/-62.537 $\chi^2$/NDF:7.0/15

Right Out: 147.812+/-68.660 $\chi^2$/NDF: 11.5/17

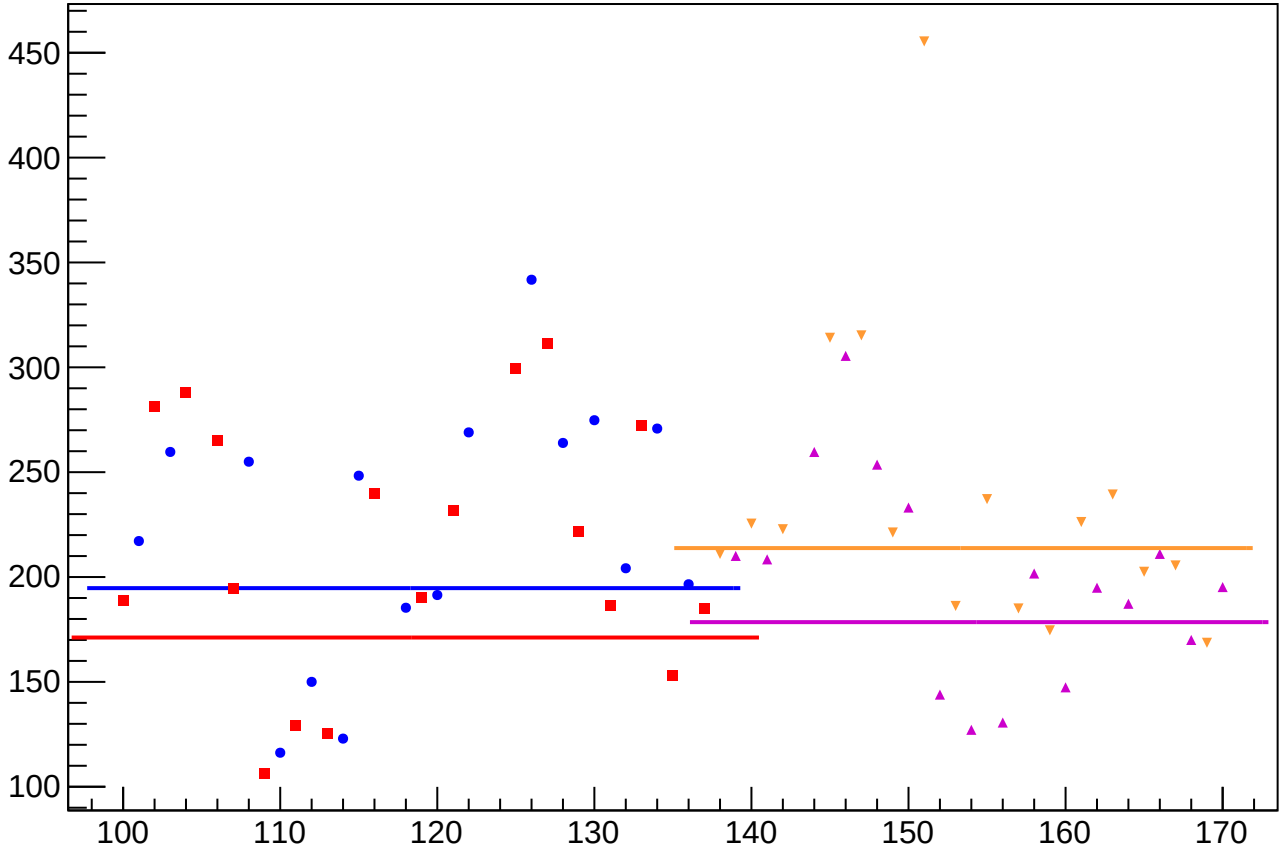
Left In: -125.821+/-51.911 $\chi^2$/NDF:5.6/15

+ sign 60.065+/-48.436 $\chi^2$/NDF: 25.7/31

All: 10.170+/-31.474 $\chi^2$/NDF: 54.8/65

- sign -26.297+/-41.408 $\chi^2$/NDF: 27.3/33

# asym_bcm_dg_ds_an_ds_avg_rms vs Slug




Right In: 194.708+/-0.054 $\chi^2$/NDF: 1052288.9/15

Left Out: 213.805+/-0.044 $\chi^2$/NDF:1103010.3/15

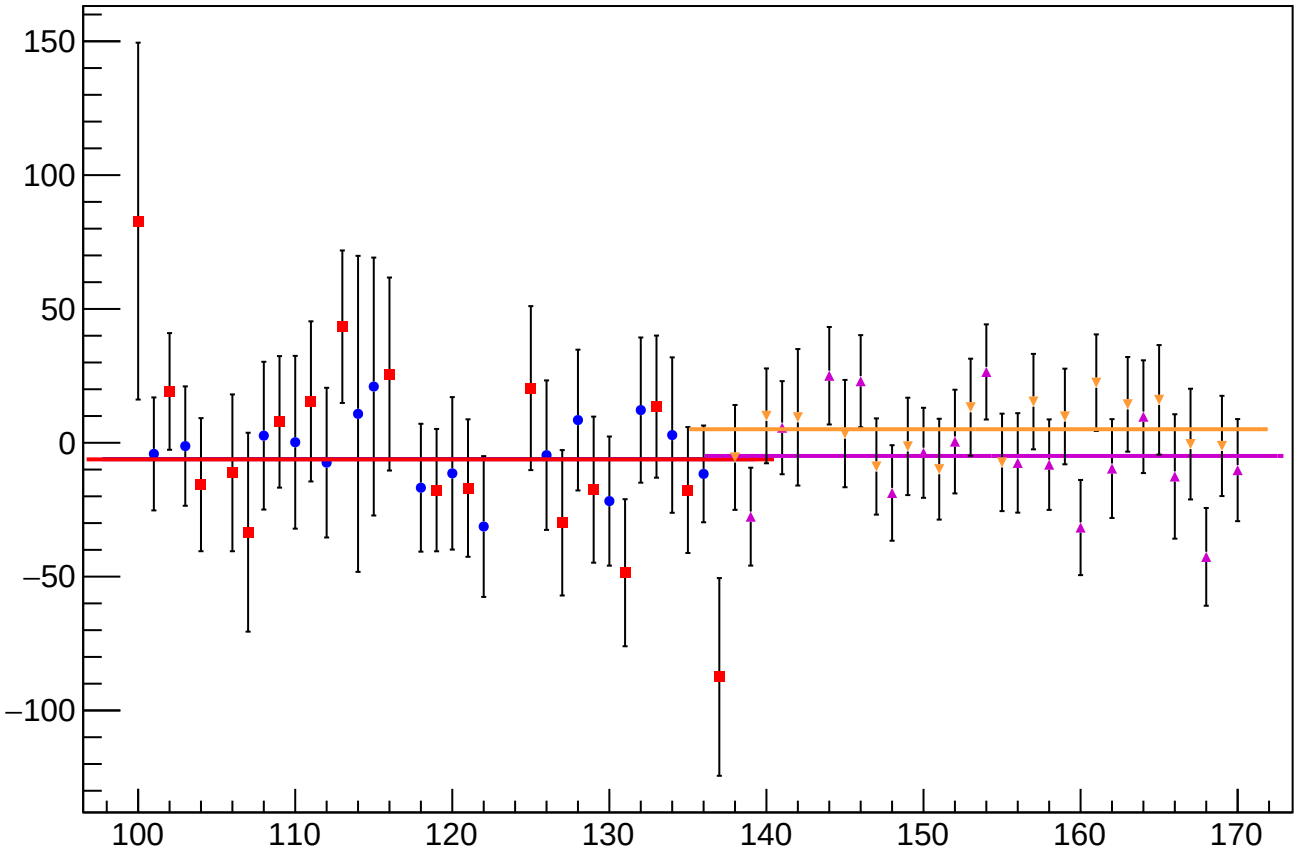
Right Out: 171.156+/-0.049 $\chi^2$/NDF: 1611935.6/17

Left In: 178.492+/-0.037 $\chi^2$/NDF:1479632.9/15

+ sign 206.163+/-0.034 $\chi^2$/NDF: 2229922.1/31

All: 188.635+/-0.022 $\chi^2$/NDF: 5789395.0/65

- sign 175.824+/-0.029 $\chi^2$/NDF: 3106094.3/33




Right In: -6.119+/-6.592 $\chi^2$/NDF: 3.1/15

Left Out: 5.068+/-4.718 $\chi^2$/NDF:4.5/15

Right Out: -6.195+/-6.580 $\chi^2$/NDF: 18.6/17

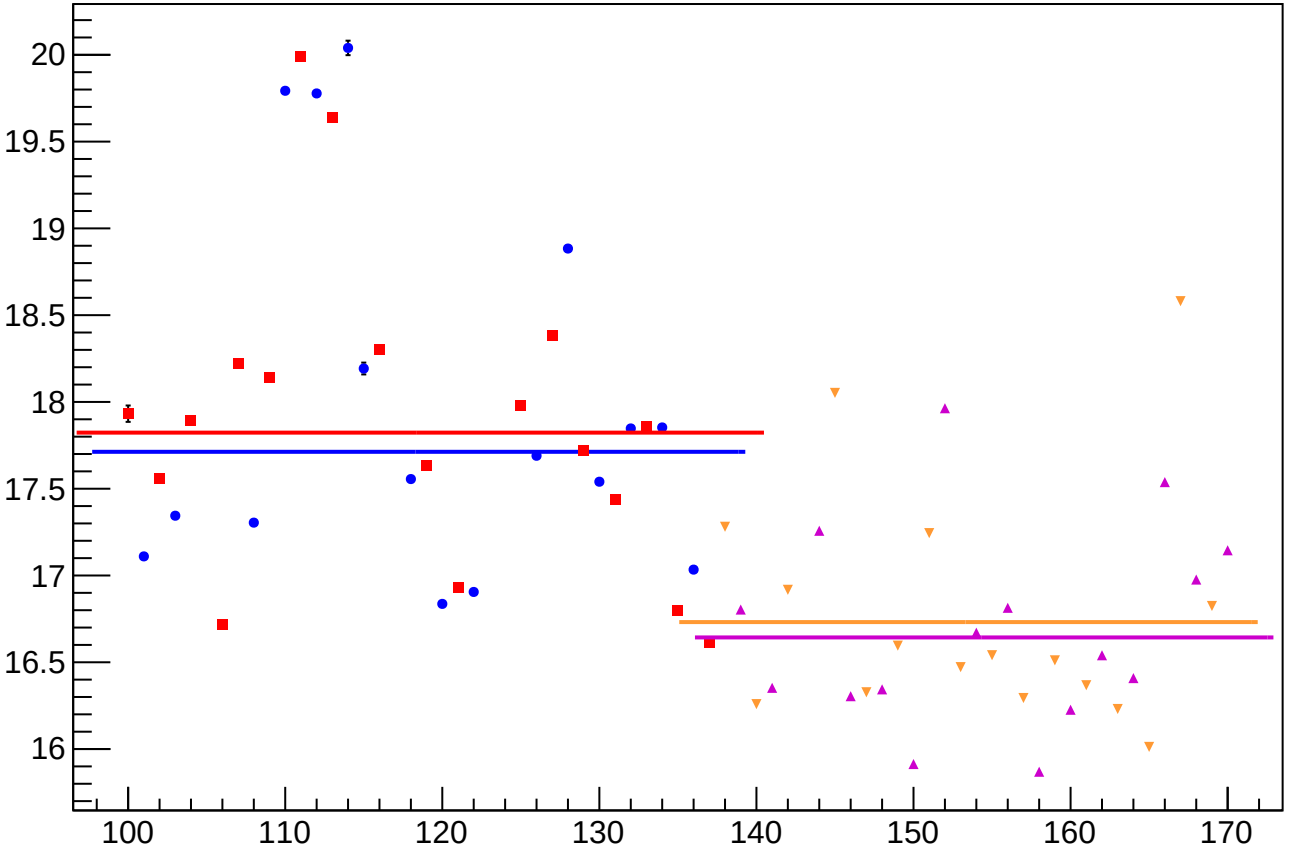
Left In: -4.915+/-4.587 $\chi^2$/NDF:18.4/15

+ sign 1.279+/-3.837 $\chi^2$/NDF: 9.5/31

All: -2.091+/-2.686 $\chi^2$/NDF: 48.1/65

- sign -5.334+/-3.763 $\chi^2$/NDF: 37.0/33

# asym_bcm_dg_ds_an_ds_dd_rms vs Slug




Right In: 17.713+/-0.005 $\chi^2$/NDF: 35983.5/15

Left Out: 16.732+/-0.003 $\chi^2$/NDF:37442.9/15

Right Out: 17.823+/-0.005 $\chi^2$/NDF: 32502.9/17

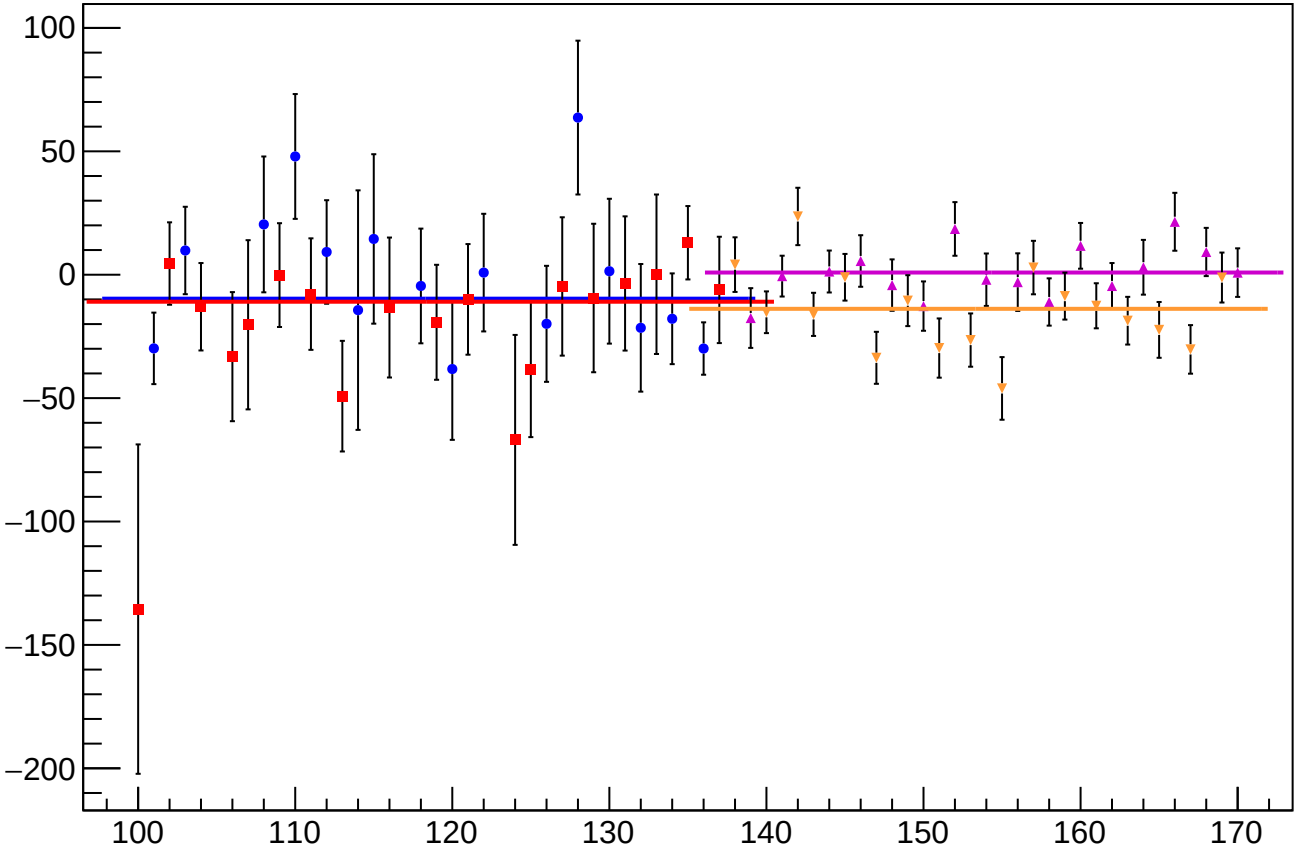
Left In: 16.643+/-0.003 $\chi^2$/NDF:28175.7/15

+ sign 17.064+/-0.003 $\chi^2$/NDF: 102720.4/31

All: 17.046+/-0.002 $\chi^2$/NDF: 206772.0/65

- sign 17.029+/-0.003 $\chi^2$/NDF: 103967.4/33

# diff_bpm_4aX_4acX_avg_mean vs Slug




Right In: -9.702+/-5.231 $\chi^2$/NDF: 22.0/15

Left Out: -13.817+/-2.468 $\chi^2$/NDF:36.0/16

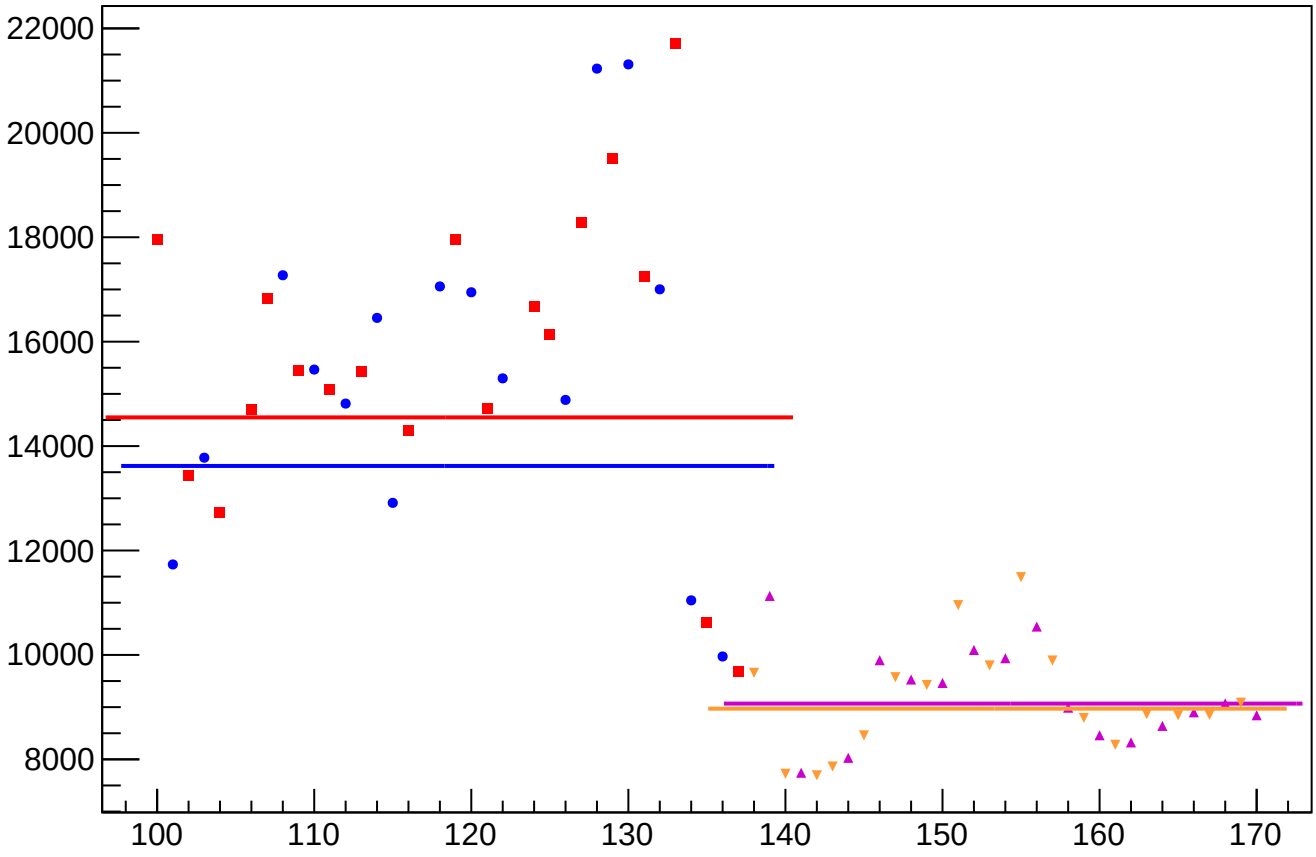
Right Out: -10.938+/-5.436 $\chi^2$/NDF: 14.1/18

Left In: 0.889+/-2.511 $\chi^2$/NDF:14.6/15

+ sign -13.068+/-2.232 $\chi^2$/NDF: 58.5/32

All: -7.253+/-1.595 $\chi^2$/NDF: 104.9/67

- sign -1.190+/-2.279 $\chi^2$/NDF: 32.6/34




Right In: 13619.845+/-3.699 $\chi^2$/NDF: 746985.9/15

Left Out: 8970.931+/-1.745 $\chi^2$/NDF:296706.1/16

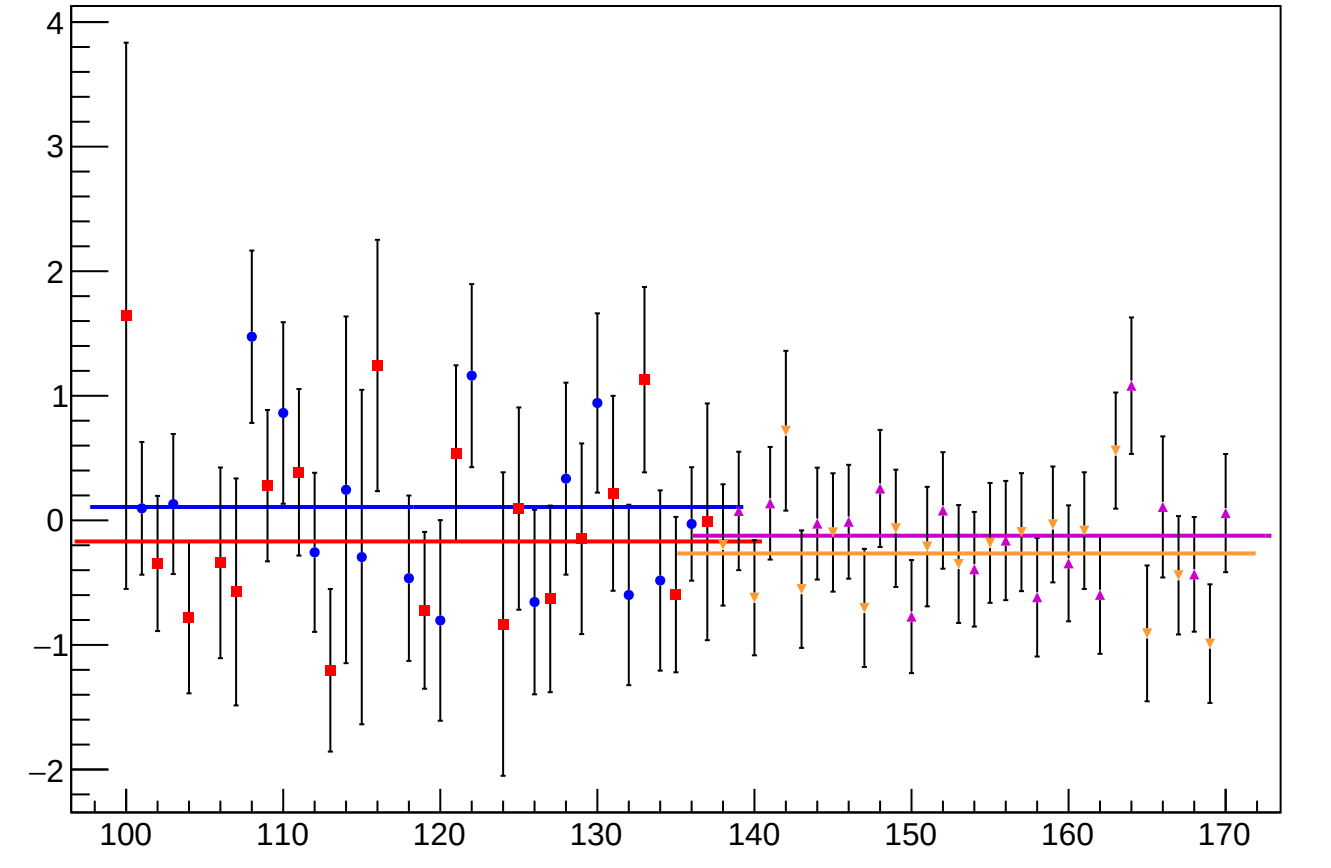
Right Out: 14549.658+/-3.844 $\chi^2$/NDF: 555902.2/18

Left In: 9067.783+/-1.775 $\chi^2$/NDF:248005.8/15

+ sign 9817.327+/-1.578 $\chi^2$/NDF: 2335558.4/32

All: 9922.184+/-1.128 $\chi^2$/NDF: 4824691.7/67

- sign 10031.519+/-1.612 $\chi^2$/NDF: 2480118.1/34




Right In: 0.107+/-0.172 $\chi^2$/NDF: 13.7/15

Left Out: -0.265+/-0.117 $\chi^2$/NDF:12.1/16

Right Out: -0.169+/-0.169 $\chi^2$/NDF: 14.1/18

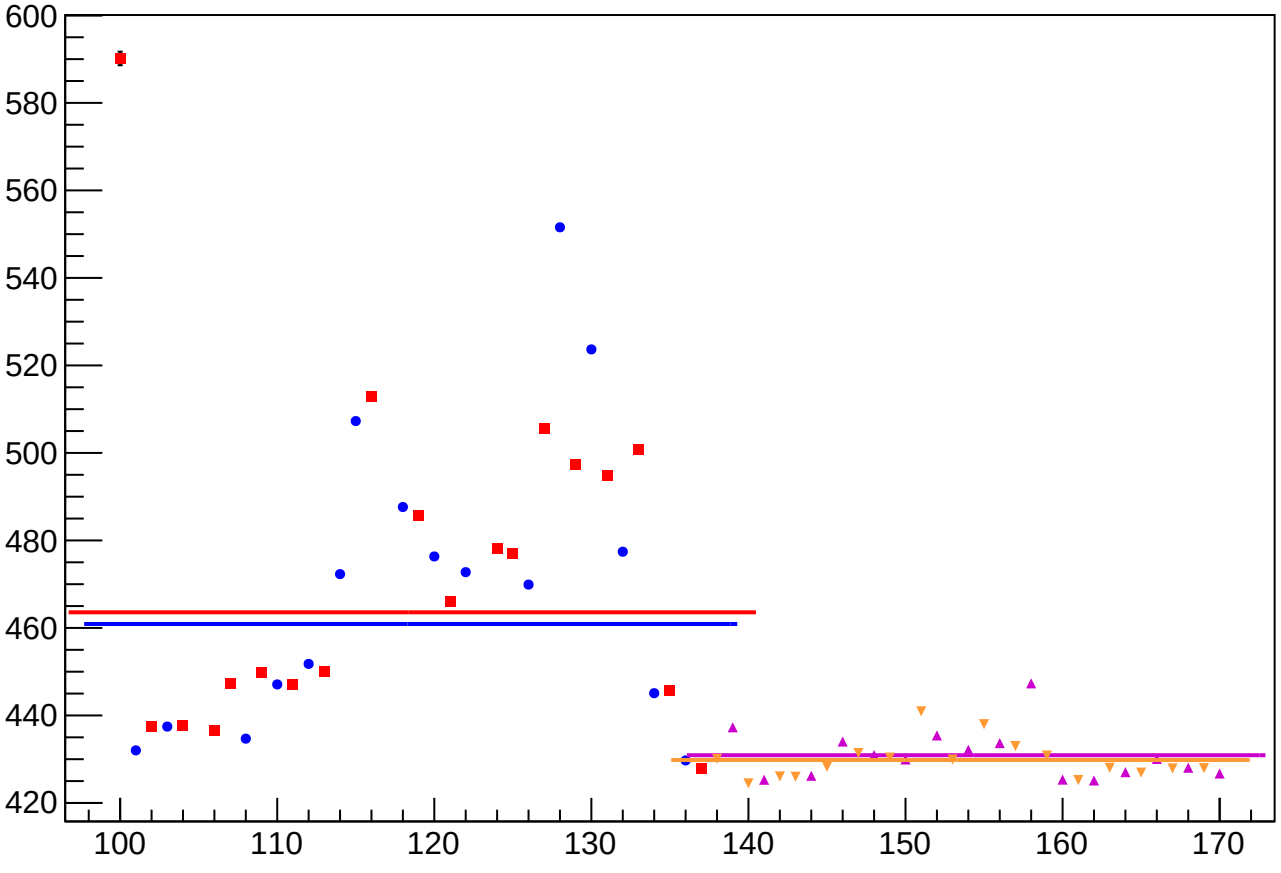
Left In: -0.123+/-0.119 $\chi^2$/NDF:11.7/15

+ sign -0.147+/-0.097 $\chi^2$/NDF: 29.0/32

All: -0.143+/-0.069 $\chi^2$/NDF: 54.9/67

- sign -0.138+/-0.097 $\chi^2$/NDF: 25.9/34

# diff_bpm_4aX_4acX_dd_rms vs Slug




Right In: 460.906+/-0.121 $\chi^2$/NDF: 74930.1/15

Left Out: 429.820+/-0.083 $\chi^2$/NDF:2607.3/16

Right Out: 463.573+/-0.120 $\chi^2$/NDF: 52175.6/18

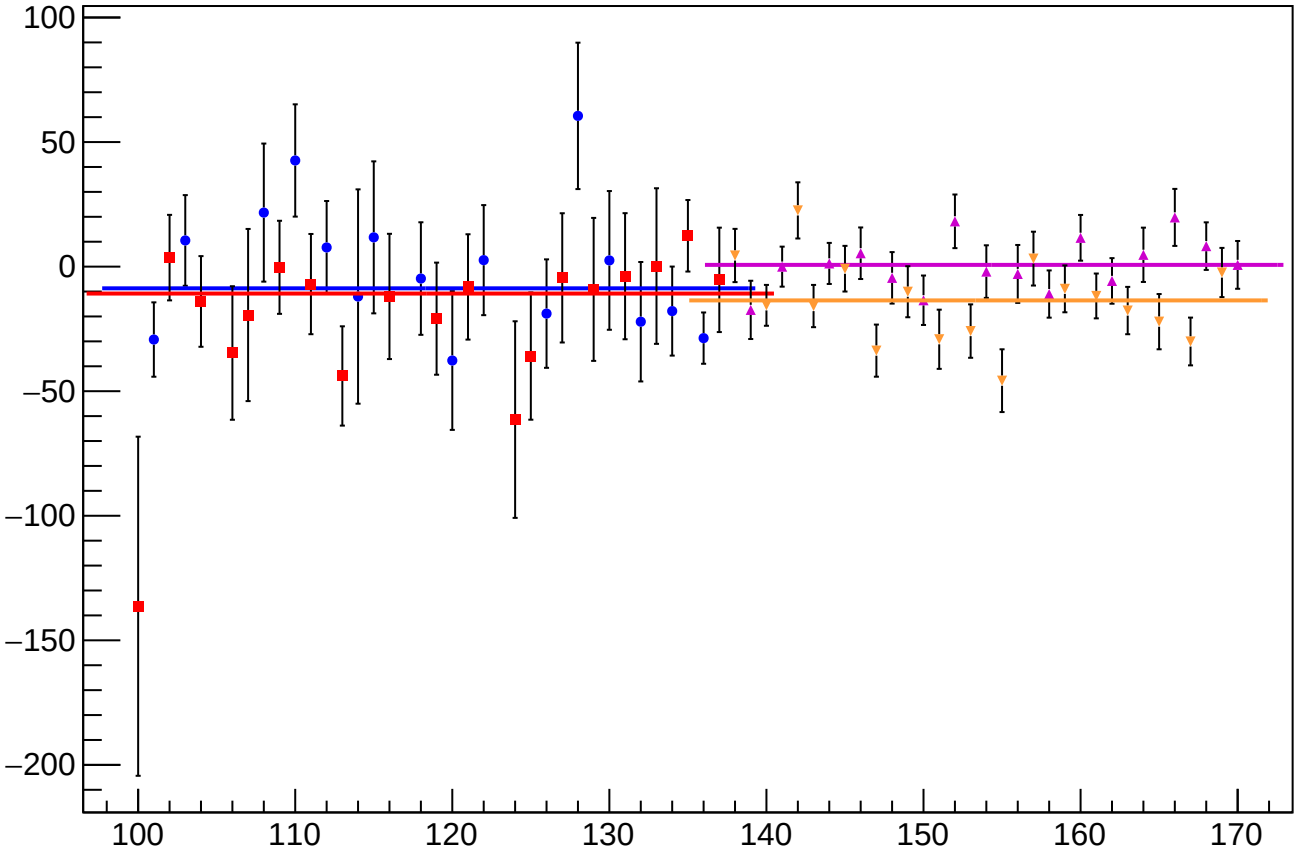
Left In: 430.914+/-0.084 $\chi^2$/NDF:4557.8/15

+ sign 439.702+/-0.068 $\chi^2$/NDF: 122251.7/32

All: 440.670+/-0.048 $\chi^2$/NDF: 229280.9/67

- sign 441.643+/-0.069 $\chi^2$/NDF: 106628.2/34

# diff_bpm_4aX_4eX_avg_mean vs Slug




Right In: -8.707+/-5.036 $\chi^2$/NDF: 22.3/15

Left Out: -13.558+/-2.421 $\chi^2$/NDF:36.3/16

Right Out: -10.807+/-5.192 $\chi^2$/NDF: 13.9/18

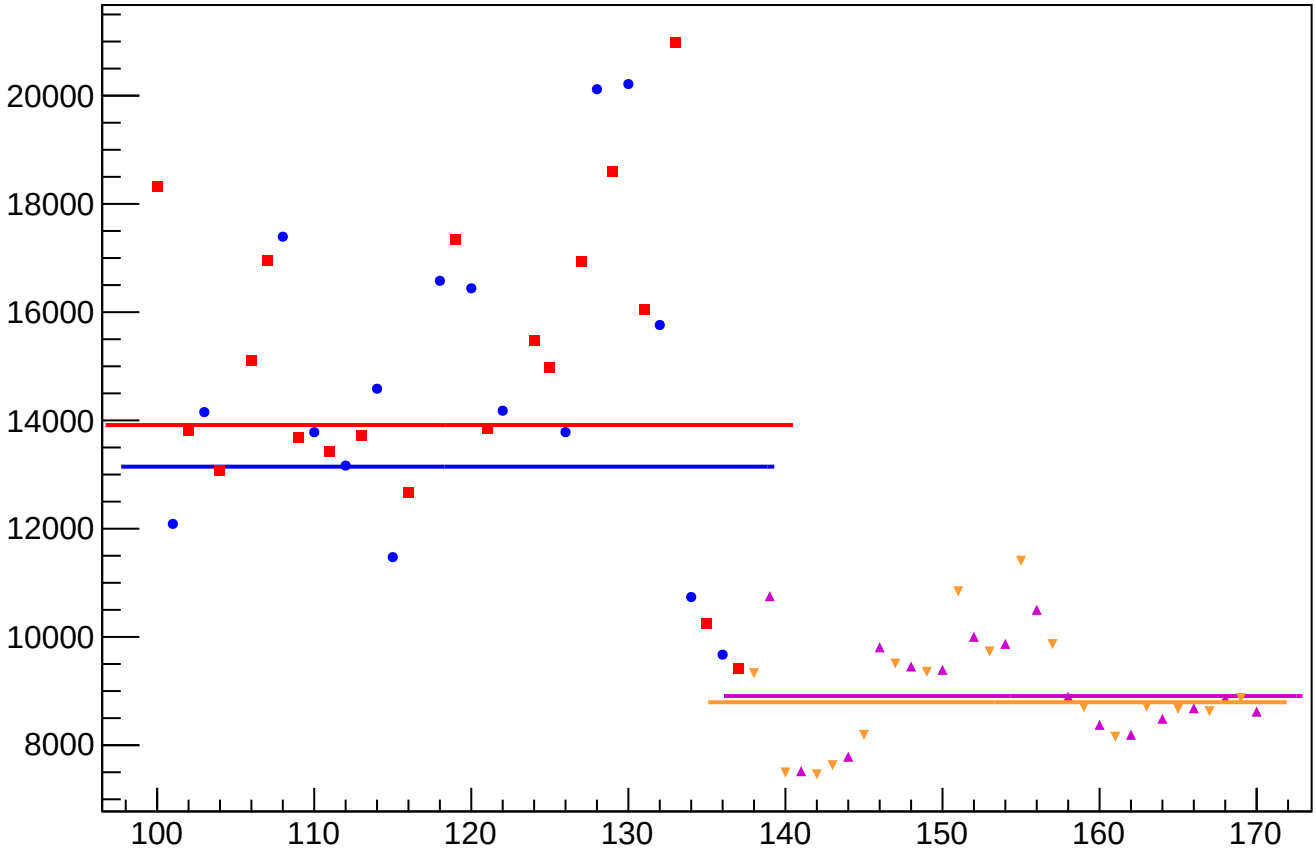
Left In: 0.702+/-2.467 $\chi^2$/NDF:14.7/15

+ sign -12.648+/-2.182 $\chi^2$/NDF: 59.3/32

All: -7.152+/-1.559 $\chi^2$/NDF: 104.8/67

- sign -1.419+/-2.229 $\chi^2$/NDF: 32.5/34

# diff_bpm_4aX_4eX_avg_rms vs Slug




Right In: 13145.853+/-3.561 $\chi^2$/NDF: 682620.1/15

Left Out: 8793.017+/-1.712 $\chi^2$/NDF:336488.5/16

Right Out: 13914.770+/-3.671 $\chi^2$/NDF: 511000.7/18

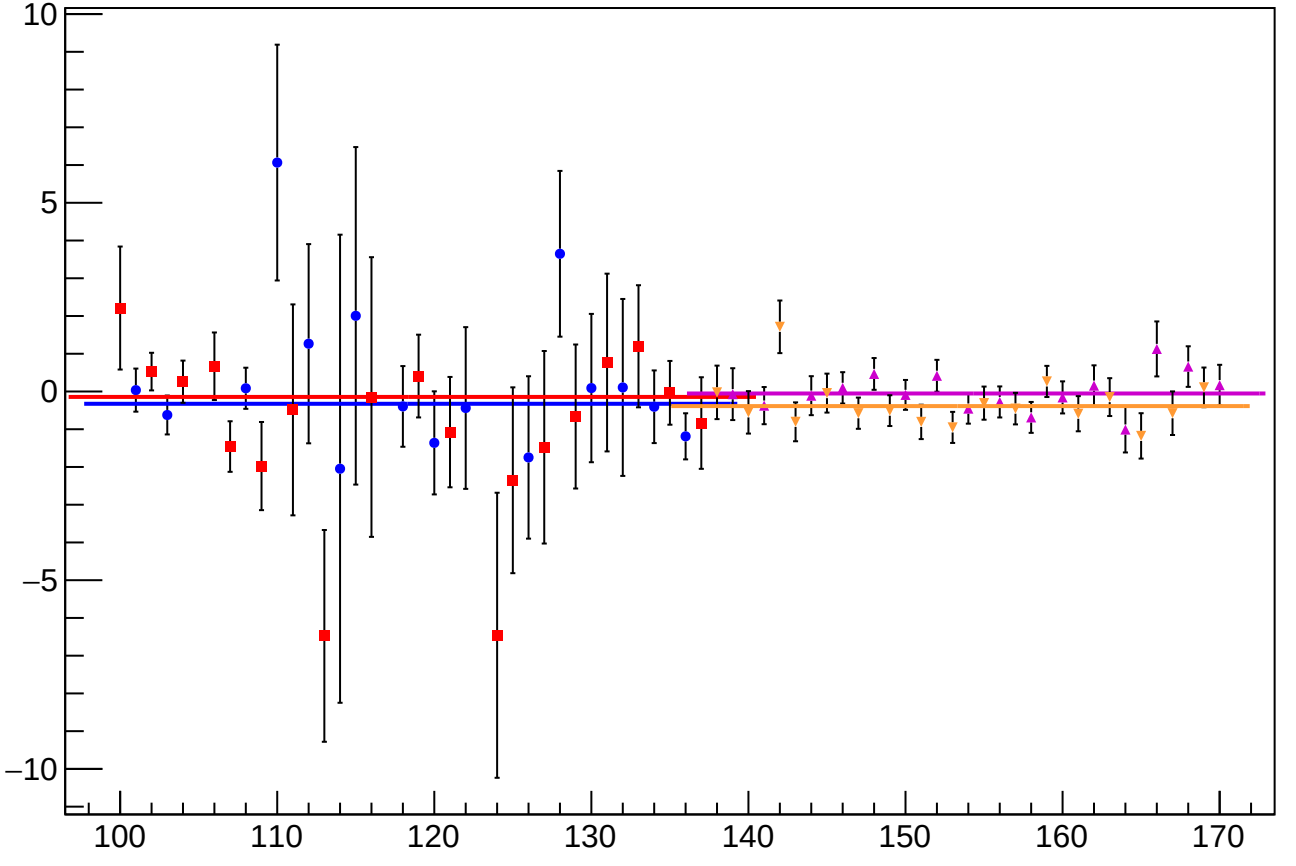
Left In: 8907.839+/-1.745 $\chi^2$/NDF:271537.4/15

+ sign 9610.313+/-1.543 $\chi^2$/NDF: 2232861.4/32

All: 9718.071+/-1.102 $\chi^2$/NDF: 4542850.3/67

- sign 9830.471+/-1.576 $\chi^2$/NDF: 2300023.8/34

# diff_bpm_4aX_4eX_dd_mean vs Slug




Right In: -0.326+/-0.244 $\chi^2$/NDF: 12.6/15

Left Out: -0.387+/-0.118 $\chi^2$/NDF:19.3/16

Right Out: -0.144+/-0.244 $\chi^2$/NDF: 22.5/18

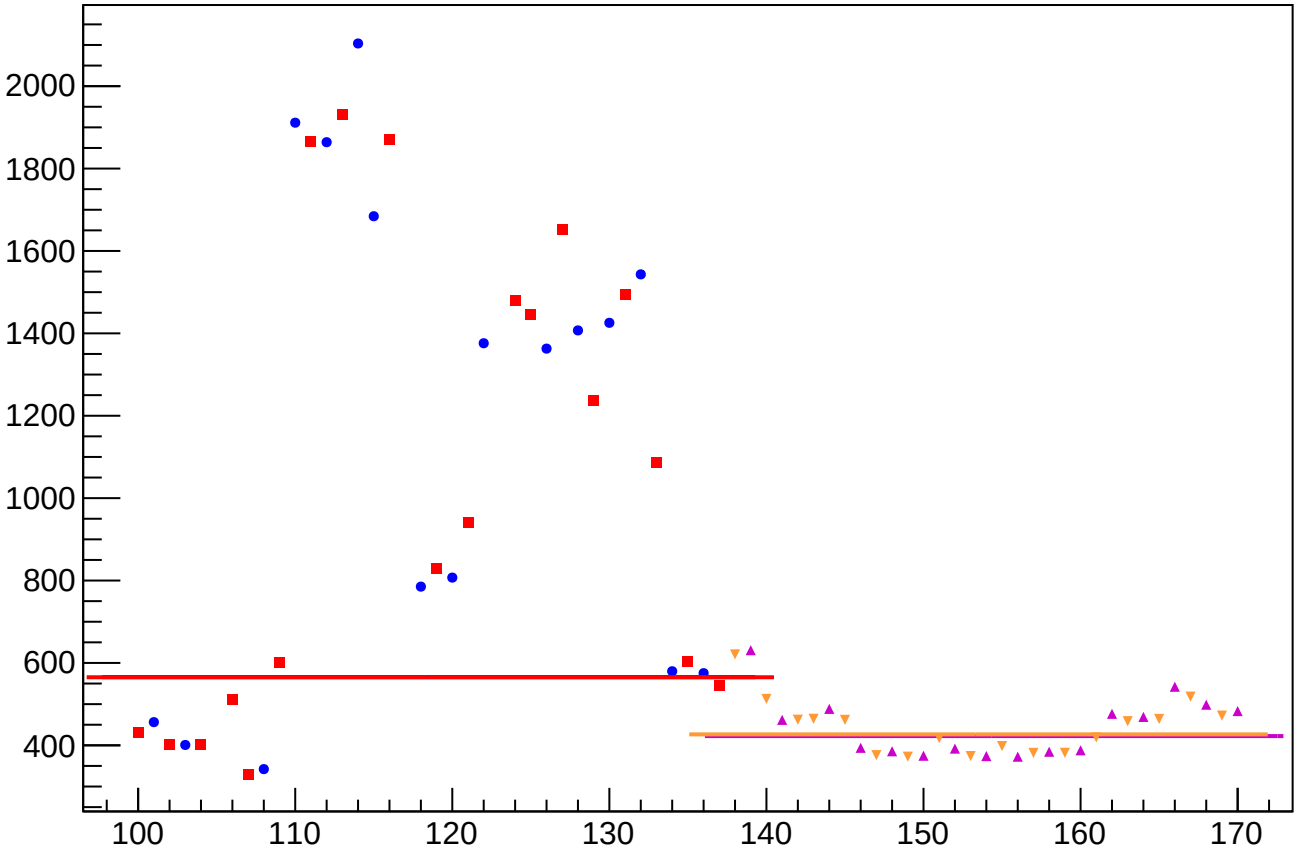
Left In: -0.053+/-0.118 $\chi^2$/NDF:14.3/15

+ sign -0.375+/-0.106 $\chi^2$/NDF: 31.9/32

All: -0.223+/-0.075 $\chi^2$/NDF: 72.9/67

- sign -0.070+/-0.106 $\chi^2$/NDF: 36.8/34

# diff_bpm_4aX_4eX_dd_rms vs Slug




Right In: 565.531+/-0.173 $\chi^2$/NDF: 3450533.8/15

Left Out: 426.599+/-0.083 $\chi^2$/NDF:457423.3/16

Right Out: 565.223+/-0.173 $\chi^2$/NDF: 3571620.7/18

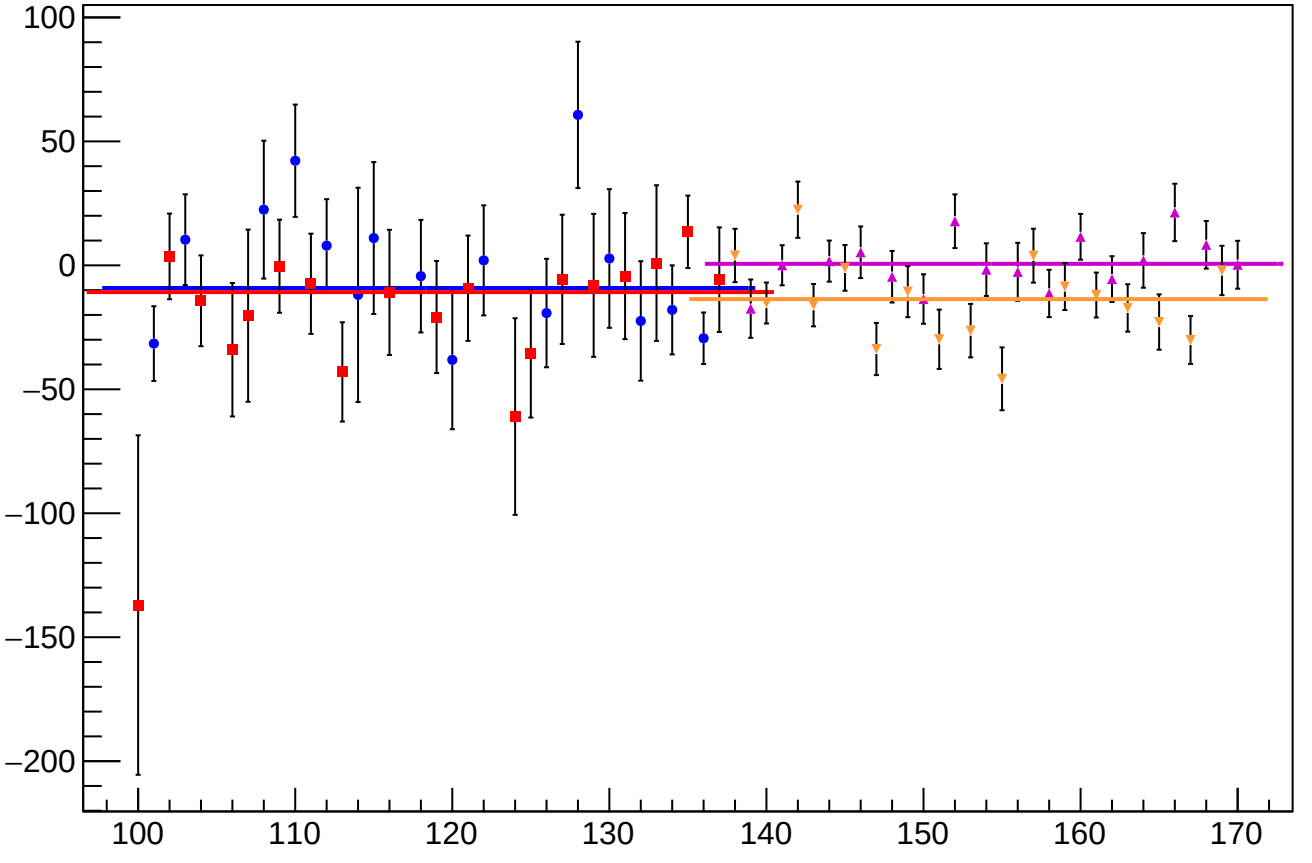
Left In: 422.426+/-0.083 $\chi^2$/NDF:535148.0/15

+ sign 452.836+/-0.075 $\chi^2$/NDF: 4433382.7/32

All: 451.089+/-0.053 $\chi^2$/NDF: 9095445.3/67

- sign 449.342+/-0.075 $\chi^2$/NDF: 4660978.1/34

# diff_bpm_4aX_4ecX_avg_mean vs Slug




Right In: -9.130+/-5.069 $\chi^2$/NDF: 22.7/15

Left Out: -13.624+/-2.437 $\chi^2$/NDF:36.2/16

Right Out: -10.788+/-5.227 $\chi^2$/NDF: 13.7/18

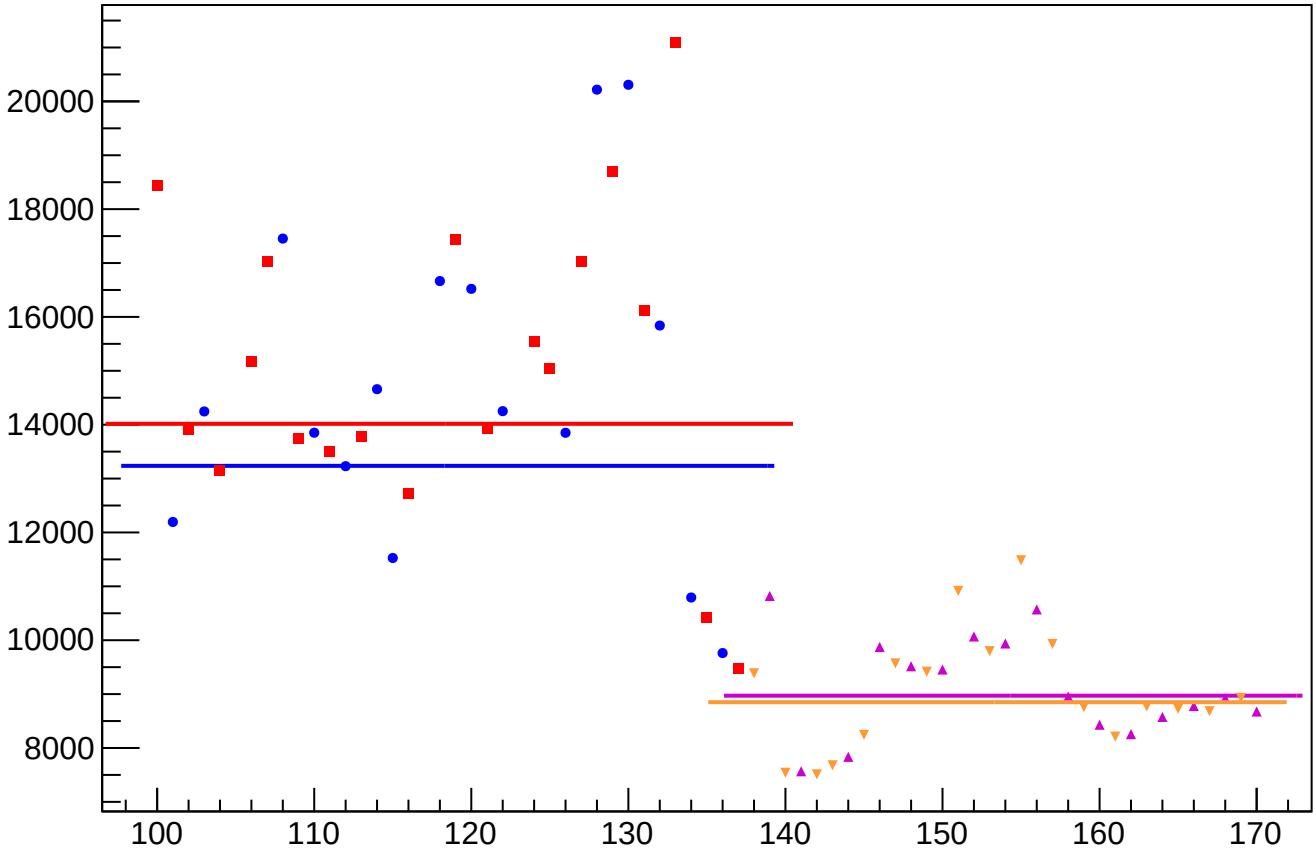
Left In: 0.615+/-2.485 $\chi^2$/NDF:14.8/15

+ sign -12.780+/-2.196 $\chi^2$/NDF: 59.5/32

All: -7.256+/-1.570 $\chi^2$/NDF: 104.8/67

- sign -1.487+/-2.244 $\chi^2$/NDF: 32.3/34

# diff_bpm_4aX_4ecX_avg_rms vs Slug




Right In: 13235.828+/-3.585 $\chi^2$/NDF: 673887.0/15

Left Out: 8850.060+/-1.723 $\chi^2$/NDF:337123.1/16

Right Out: 14016.035+/-3.696 $\chi^2$/NDF: 498592.9/18

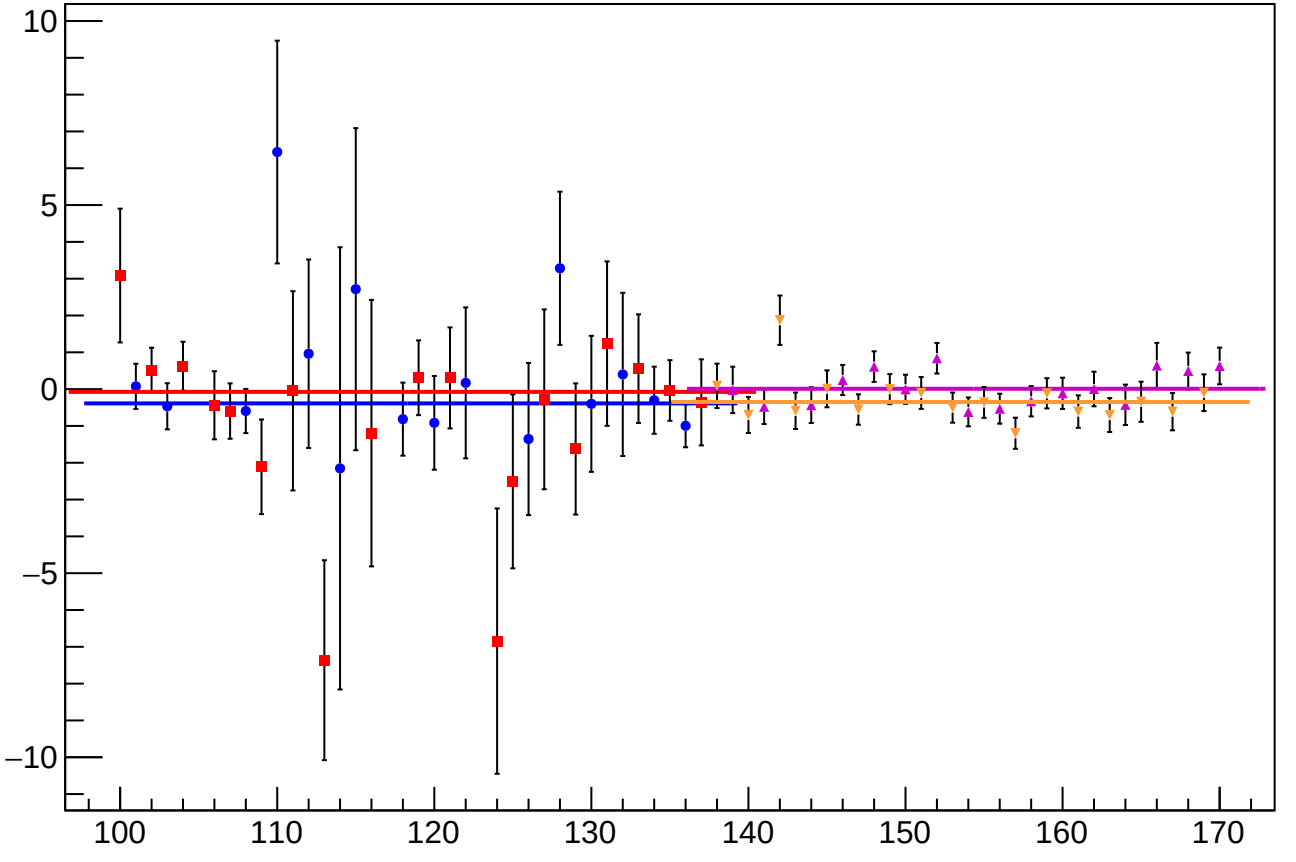
Left In: 8970.670+/-1.757 $\chi^2$/NDF:270951.1/15

+ sign 9673.336+/-1.553 $\chi^2$/NDF: 2227031.8/32

All: 9784.540+/-1.110 $\chi^2$/NDF: 4526757.4/67

- sign 9900.655+/-1.587 $\chi^2$/NDF: 2289244.7/34

# diff_bpm_4aX_4ecX_dd_mean vs Slug




Right In: -0.388+/-0.256 $\chi^2$/NDF: 11.7/15

Left Out: -0.349+/-0.113 $\chi^2$/NDF:20.1/16

Right Out: -0.075+/-0.265 $\chi^2$/NDF: 21.7/18

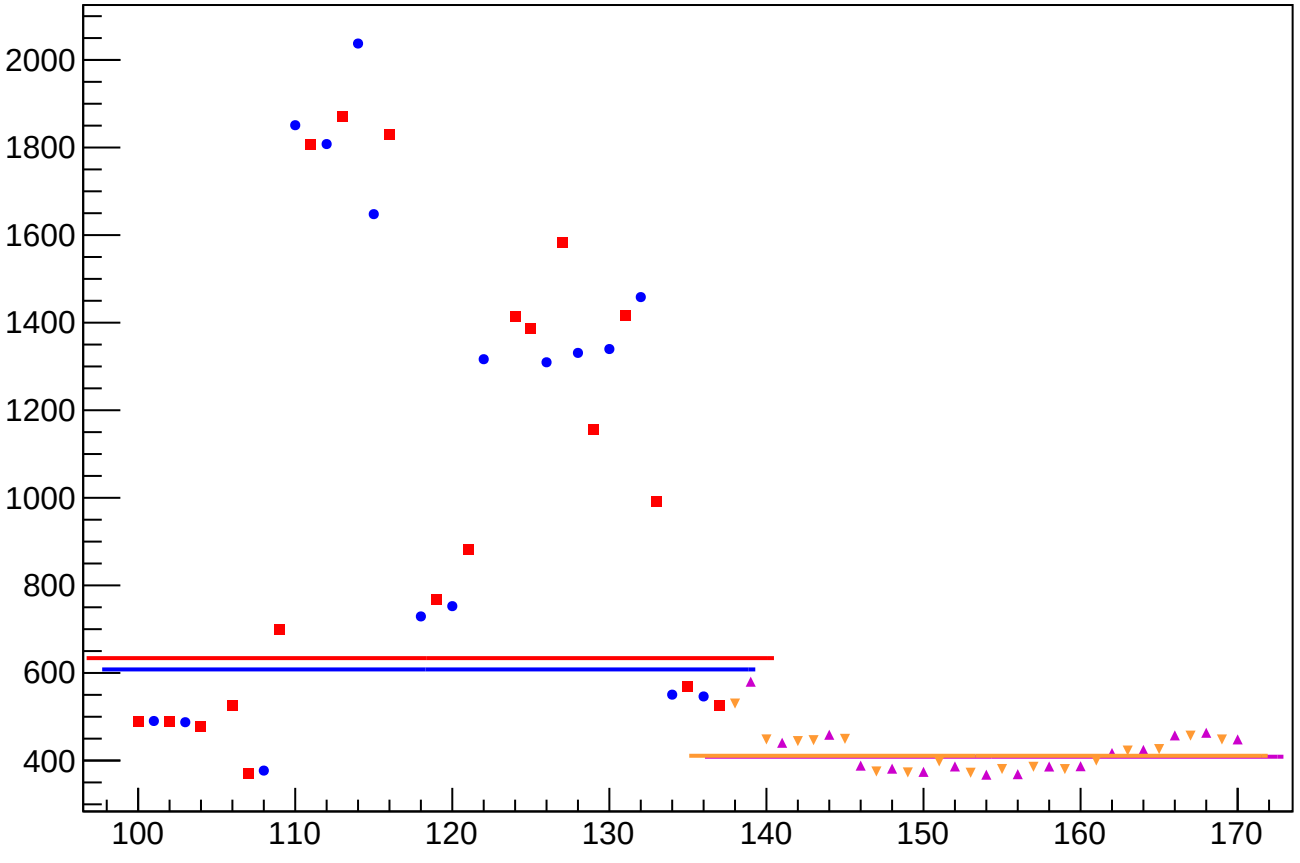
Left In: 0.009+/-0.113 $\chi^2$/NDF:17.6/15

+ sign -0.355+/-0.103 $\chi^2$/NDF: 31.7/32

All: -0.181+/-0.073 $\chi^2$/NDF: 76.9/67

- sign -0.004+/-0.104 $\chi^2$/NDF: 39.4/34

# diff_bpm_4aX_4ecX_dd_rms vs Slug




Right In: 608.063+/-0.181 $\chi^2$/NDF: 2852722.1/15

Left Out: 410.899+/-0.080 $\chi^2$/NDF:229348.1/16

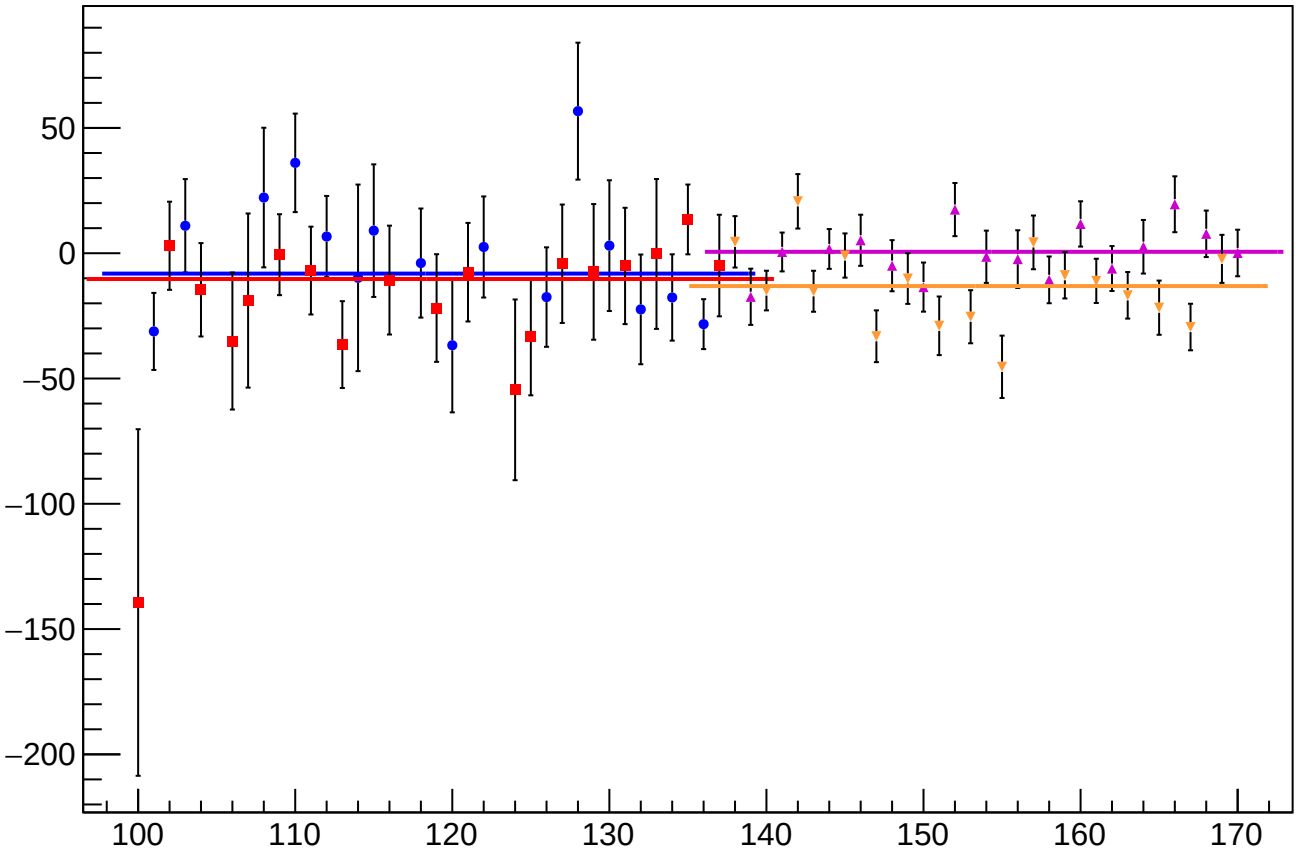
Right Out: 633.883+/-0.187 $\chi^2$/NDF: 2788449.1/18

Left In: 408.710+/-0.080 $\chi^2$/NDF:316493.2/15

+ sign 442.963+/-0.073 $\chi^2$/NDF: 4077791.5/32

All: 443.304+/-0.052 $\chi^2$/NDF: 8407132.5/67

- sign 443.653+/-0.074 $\chi^2$/NDF: 4329296.7/34




Right In: -8.132+/-4.779 $\chi^2$/NDF: 23.1/15

Left Out: -13.106+/-2.361 $\chi^2$/NDF:36.5/16

Right Out: -10.288+/-4.873 $\chi^2$/NDF: 13.7/18

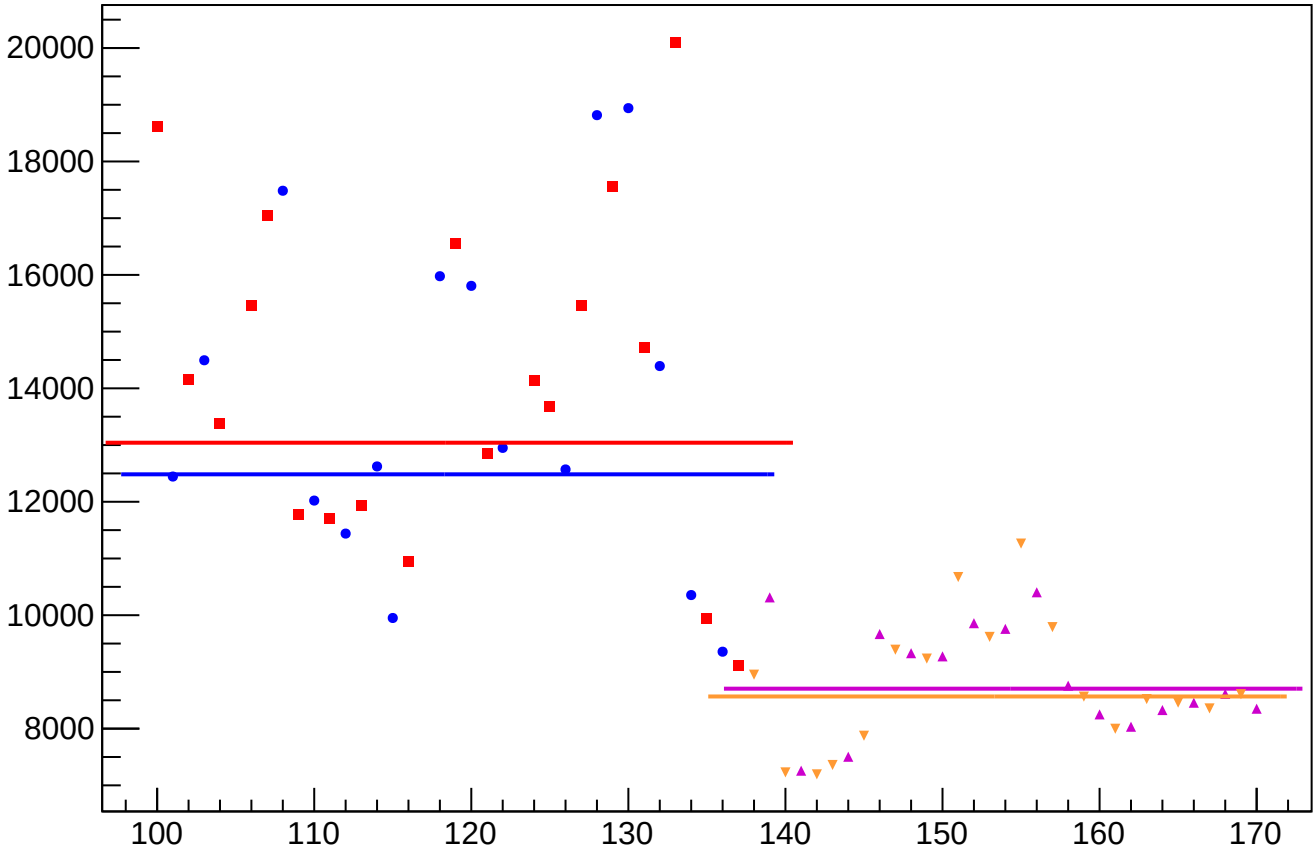
Left In: 0.569+/-2.412 $\chi^2$/NDF:14.8/15

+ sign -12.130+/-2.117 $\chi^2$/NDF: 60.5/32

All: -6.960+/-1.513 $\chi^2$/NDF: 105.1/67

- sign -1.568+/-2.162 $\chi^2$/NDF: 32.5/34

# diff_bpm_4eX_4ecX_avg_rms vs Slug




Right In: 12483.955+/-3.379 $\chi^2$/NDF: 671560.0/15

Left Out: 8567.000+/-1.670 $\chi^2$/NDF:383472.3/16

Right Out: 13041.241+/-3.446 $\chi^2$/NDF: 544486.8/18

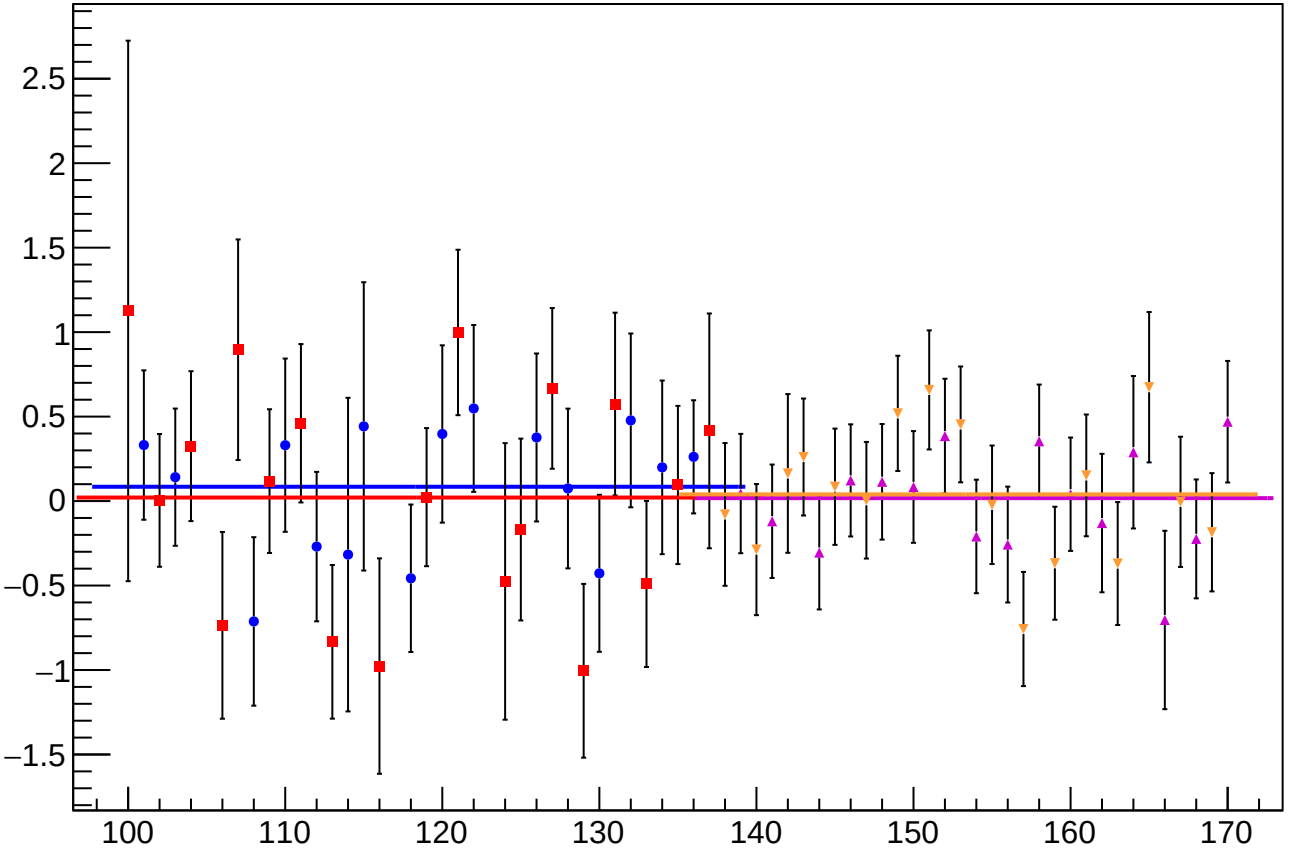
Left In: 8704.538+/-1.706 $\chi^2$/NDF:299076.4/15

+ sign 9335.534+/-1.497 $\chi^2$/NDF: 2134926.8/32

All: 9444.469+/-1.070 $\chi^2$/NDF: 4261341.2/67

- sign 9558.101+/-1.529 $\chi^2$/NDF: 2115593.7/34

# diff_bpm_4eX_4ecX_dd_mean vs Slug




Right In: 0.085+/-0.120 $\chi^2$/NDF: 9.4/15

Left Out: 0.040+/-0.088 $\chi^2$/NDF:18.7/16

Right Out: 0.021+/-0.117 $\chi^2$/NDF: 24.3/18

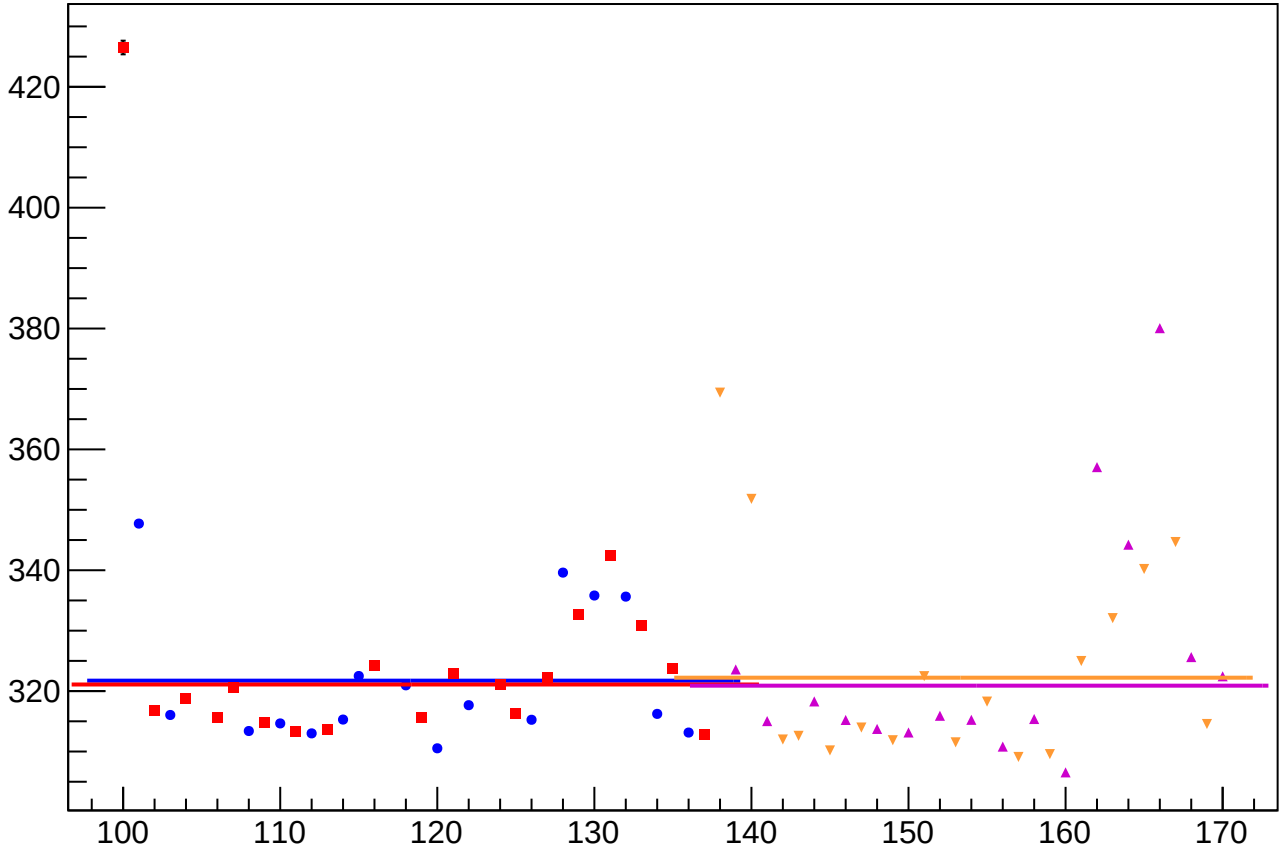
Left In: 0.017+/-0.089 $\chi^2$/NDF:9.0/15

+ sign 0.056+/-0.071 $\chi^2$/NDF: 28.2/32

All: 0.037+/-0.050 $\chi^2$/NDF: 61.6/67

- sign 0.019+/-0.071 $\chi^2$/NDF: 33.3/34

# diff_bpm_4eX_4ecX_dd_rms vs Slug




Right In: 321.727+/-0.085 $\chi^2$/NDF: 18214.6/15

Left Out: 322.219+/-0.062 $\chi^2$/NDF:65161.5/16

Right Out: 321.093+/-0.083 $\chi^2$/NDF: 16579.3/18

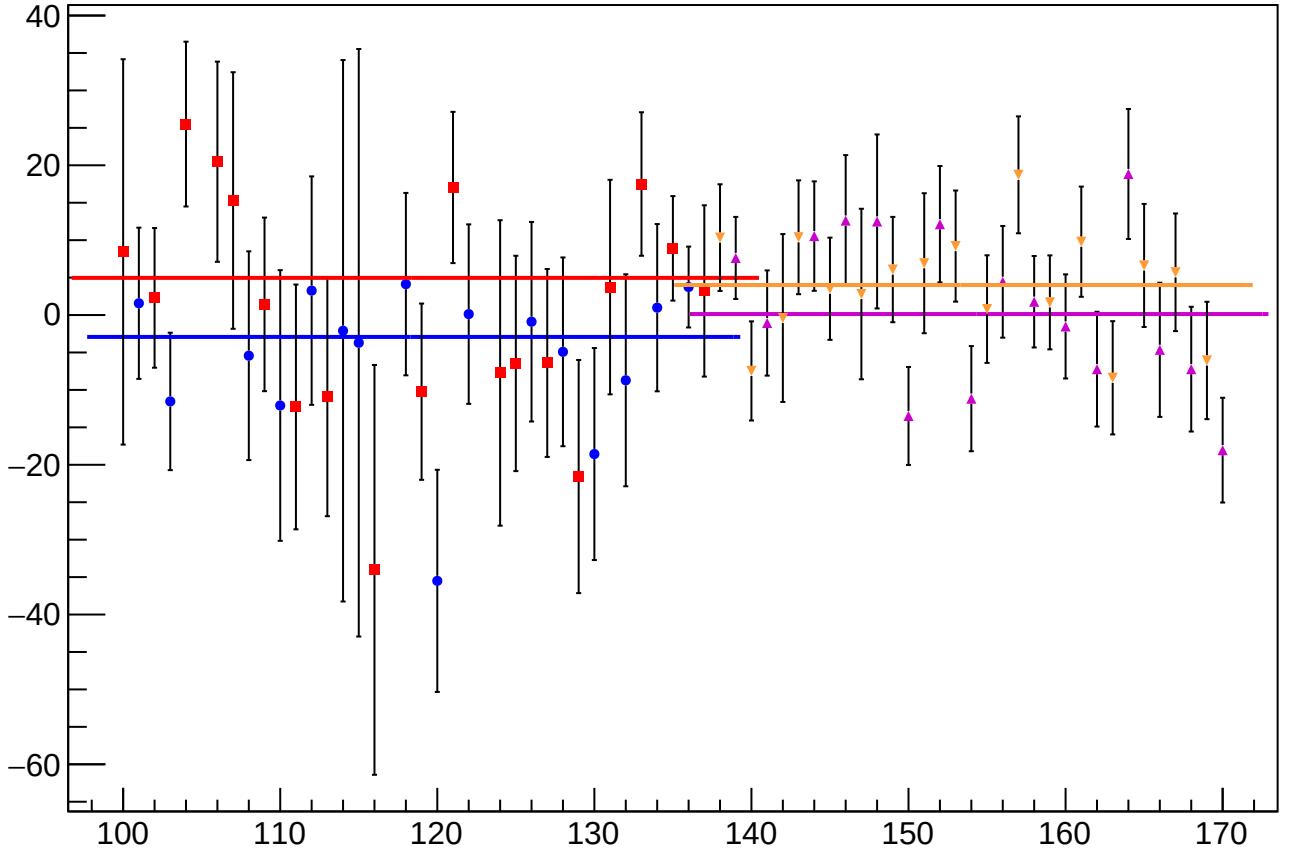
Left In: 320.899+/-0.063 $\chi^2$/NDF:56757.1/15

+ sign 322.047+/-0.050 $\chi^2$/NDF: 83397.8/32

All: 321.506+/-0.036 $\chi^2$/NDF: 156967.7/67

- sign 320.969+/-0.050 $\chi^2$/NDF: 73339.8/34

# diff_bpm_4aY_4acY_avg_mean vs Slug




Right In: -2.922+/-2.910 $\chi^2$/NDF: 9.8/15

Left Out: 4.011+/-1.853 $\chi^2$/NDF:14.3/16

Right Out: 4.965+/-2.824 $\chi^2$/NDF: 19.4/18

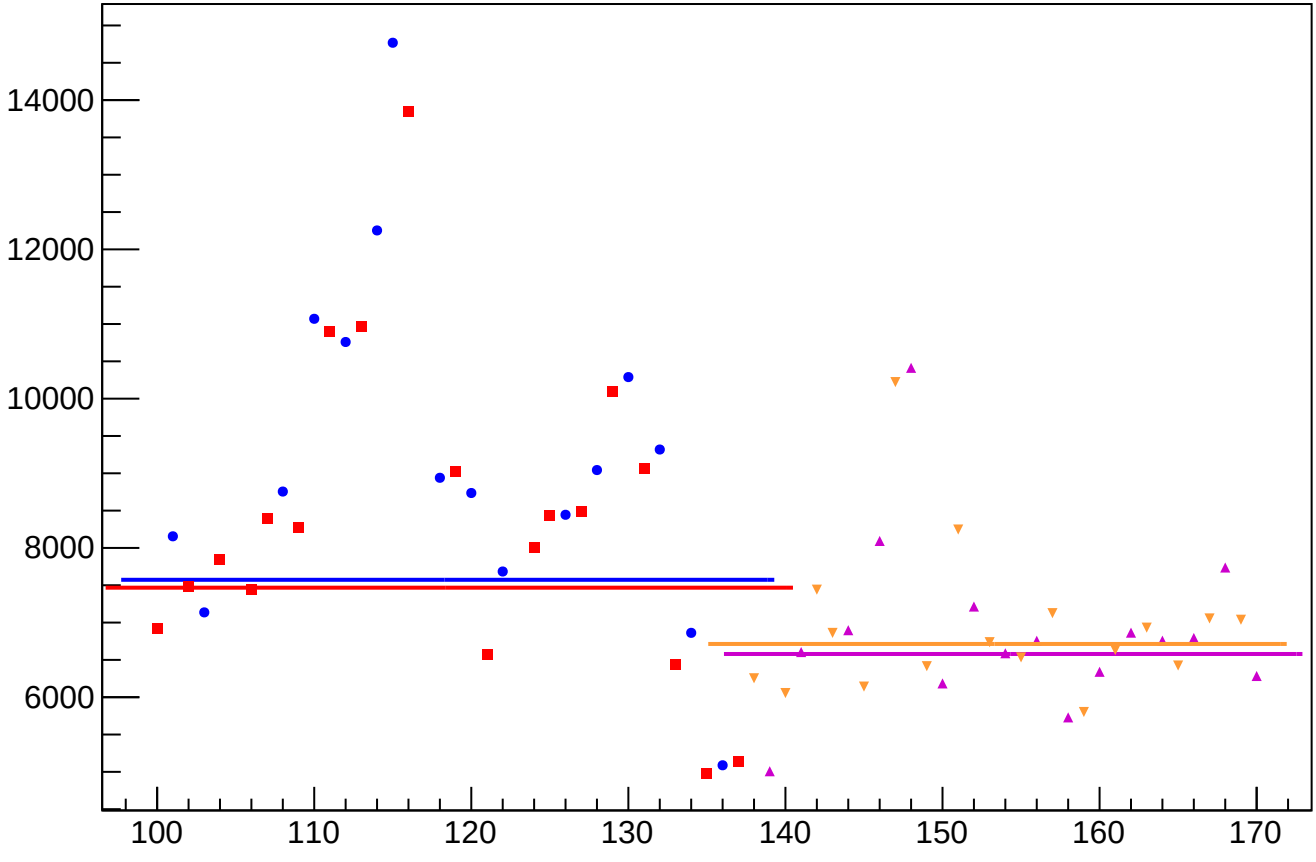
Left In: 0.133+/-1.838 $\chi^2$/NDF:30.2/15

+ sign 2.011+/-1.563 $\chi^2$/NDF: 28.2/32

All: 1.788+/-1.097 $\chi^2$/NDF: 80.0/67

- sign 1.571+/-1.540 $\chi^2$/NDF: 51.7/34

# diff_bpm_4aY_4acY_avg_rms vs Slug




Right In: 7573.161+/-2.058 $\chi^2$/NDF: 897588.4/15

Left Out: 6713.478+/-1.310 $\chi^2$/NDF:359176.5/16

Right Out: 7467.477+/-1.997 $\chi^2$/NDF: 828353.3/18

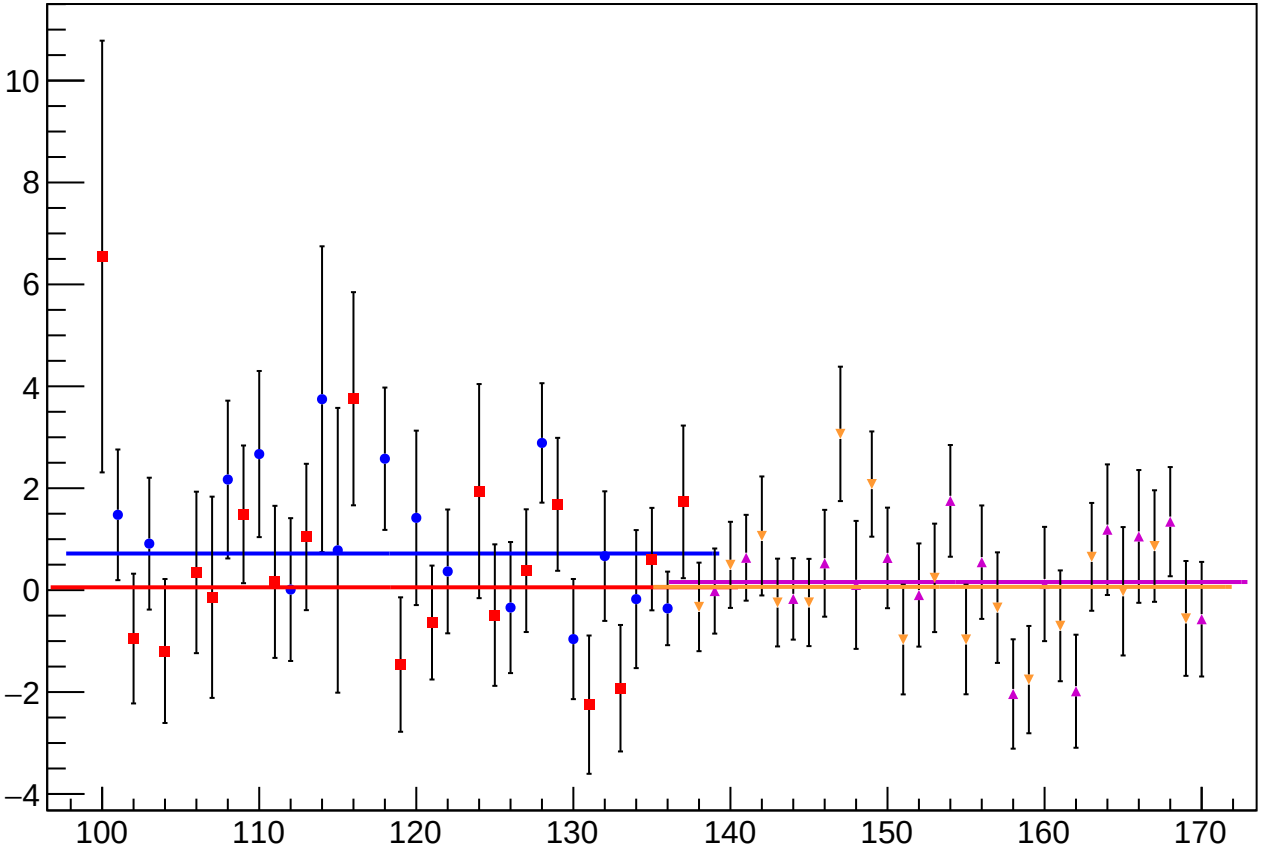
Left In: 6579.118+/-1.300 $\chi^2$/NDF:555832.9/15

+ sign 6961.479+/-1.105 $\chi^2$/NDF: 1380934.4/32

All: 6901.599+/-0.776 $\chi^2$/NDF: 2909933.8/67

- sign 6843.448+/-1.089 $\chi^2$/NDF: 1523214.3/34

# diff_bpm_4aY_4acY_dd_mean vs Slug




Right In: 0.719+/-0.326 $\chi^2$/NDF: 14.8/15

Left Out: 0.064+/-0.250 $\chi^2$/NDF:17.1/16

Right Out: 0.056+/-0.323 $\chi^2$/NDF: 19.8/18

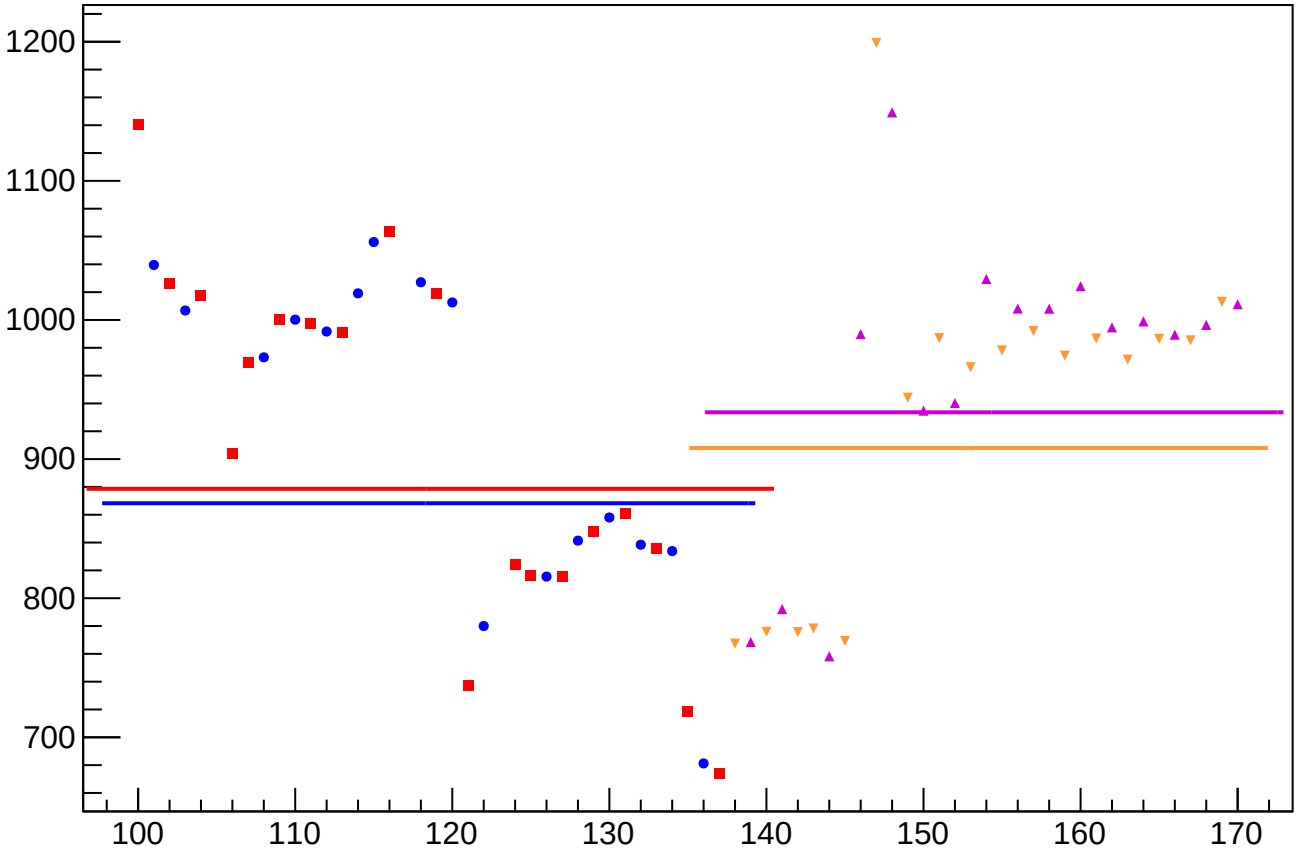
Left In: 0.159+/-0.259 $\chi^2$/NDF:13.9/15

+ sign 0.306+/-0.198 $\chi^2$/NDF: 34.4/32

All: 0.214+/-0.141 $\chi^2$/NDF: 68.6/67

- sign 0.119+/-0.202 $\chi^2$/NDF: 33.7/34

# diff_bpm_4aY_4acY_dd_rms vs Slug




Right In: 868.253+/-0.230 $\chi^2$/NDF: 302409.6/15

Left Out: 907.971+/-0.177 $\chi^2$/NDF:422863.5/16

Right Out: 878.658+/-0.229 $\chi^2$/NDF: 272530.7/18

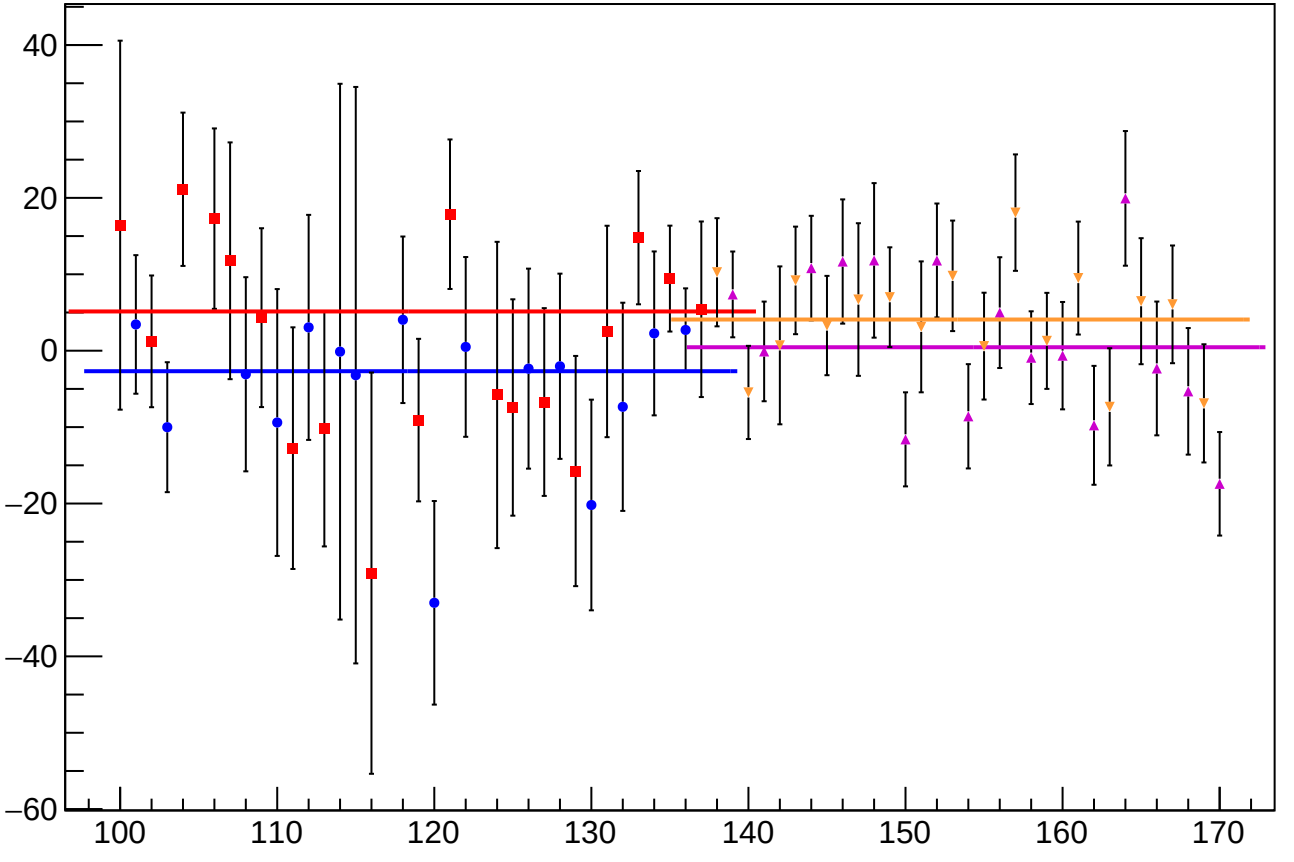
Left In: 933.620+/-0.183 $\chi^2$/NDF:374188.4/15

+ sign 893.280+/-0.140 $\chi^2$/NDF: 743989.3/32

All: 902.540+/-0.100 $\chi^2$/NDF: 1434829.9/67

- sign 912.161+/-0.143 $\chi^2$/NDF: 681940.8/34

# diff_bpm_4aY_4eY_avg_mean vs Slug




Right In: -2.683+/-2.788 $\chi^2$/NDF: 10.1/15

Left Out: 4.081+/-1.788 $\chi^2$/NDF:13.5/16

Right Out: 5.136+/-2.692 $\chi^2$/NDF: 17.3/18

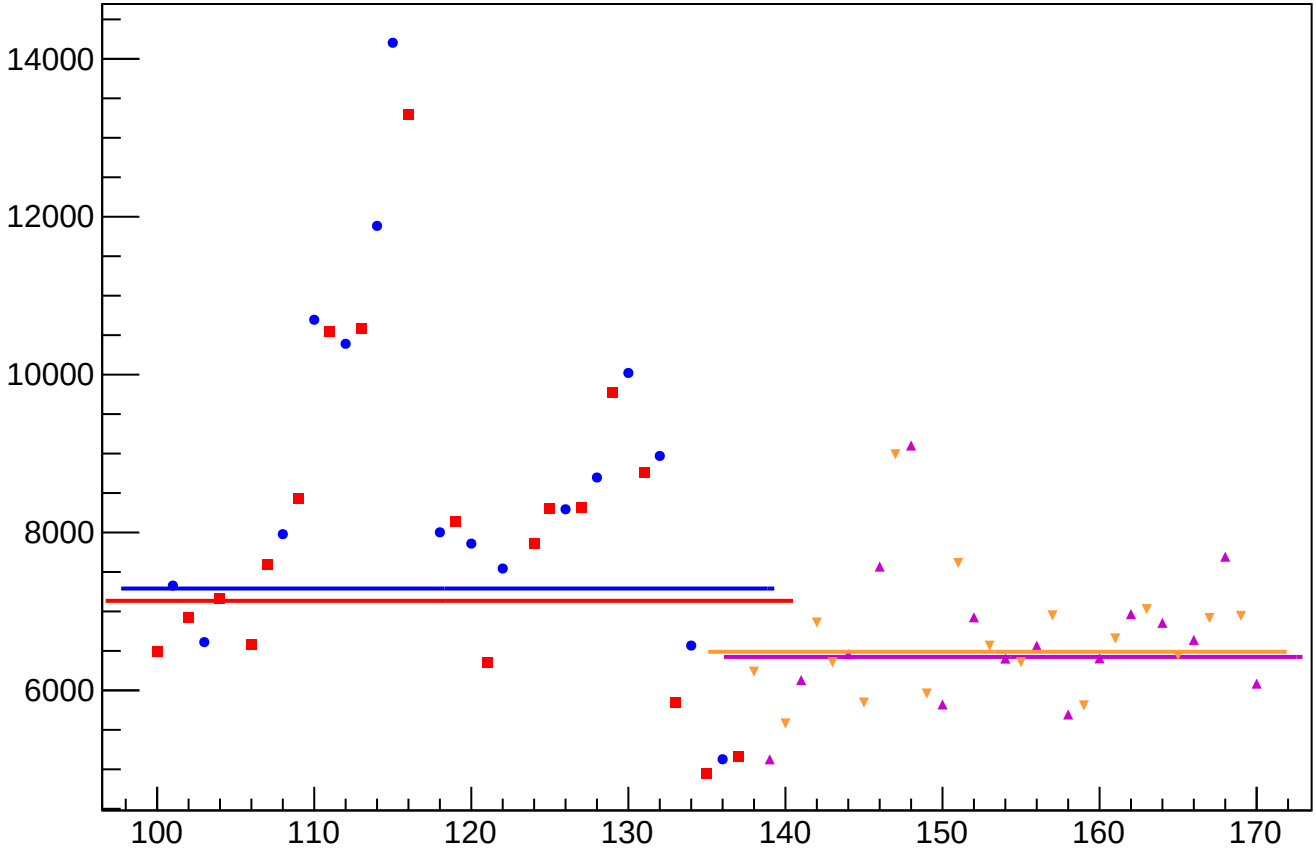
Left In: 0.453+/-1.788 $\chi^2$/NDF:29.5/15

+ sign 2.110+/-1.505 $\chi^2$/NDF: 27.7/32

All: 1.997+/-1.059 $\chi^2$/NDF: 76.6/67

- sign 1.887+/-1.490 $\chi^2$/NDF: 48.9/34

# diff_bpm_4aY_4eY_avg_rms vs Slug




Right In: 7290.246+/-1.972 $\chi^2$/NDF: 770518.2/15

Left Out: 6489.032+/-1.264 $\chi^2$/NDF:298594.3/16

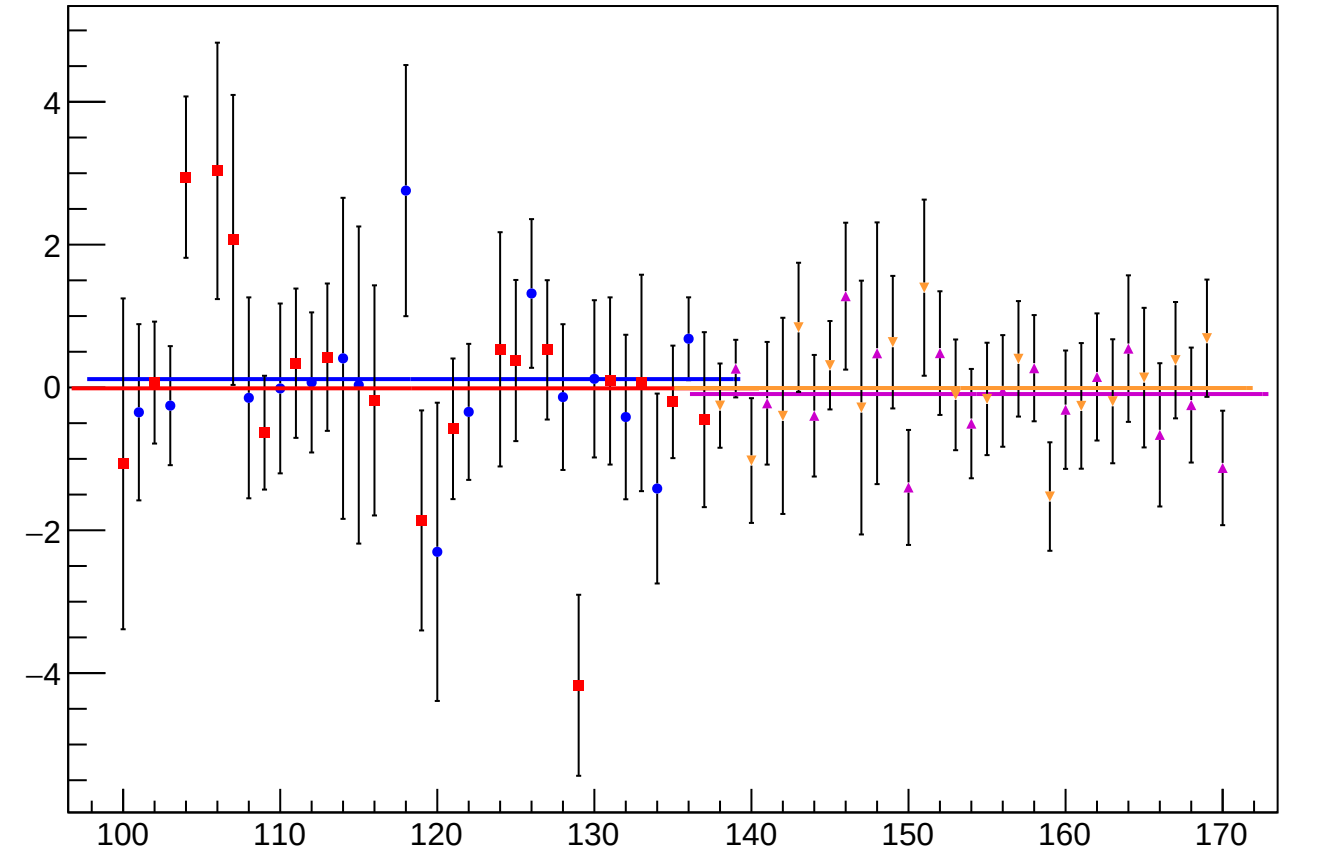
Right Out: 7134.411+/-1.903 $\chi^2$/NDF: 792788.1/18

Left In: 6423.924+/-1.265 $\chi^2$/NDF:416449.4/15

+ sign 6722.445+/-1.064 $\chi^2$/NDF: 1186151.8/32

All: 6681.553+/-0.749 $\chi^2$/NDF: 2494971.7/67

- sign 6641.487+/-1.053 $\chi^2$/NDF: 1305896.4/34




Right In: 0.117+/-0.273 $\chi^2$/NDF: 8.1/15

Left Out: -0.008+/-0.205 $\chi^2$/NDF:10.0/16

Right Out: -0.012+/-0.263 $\chi^2$/NDF: 25.2/18

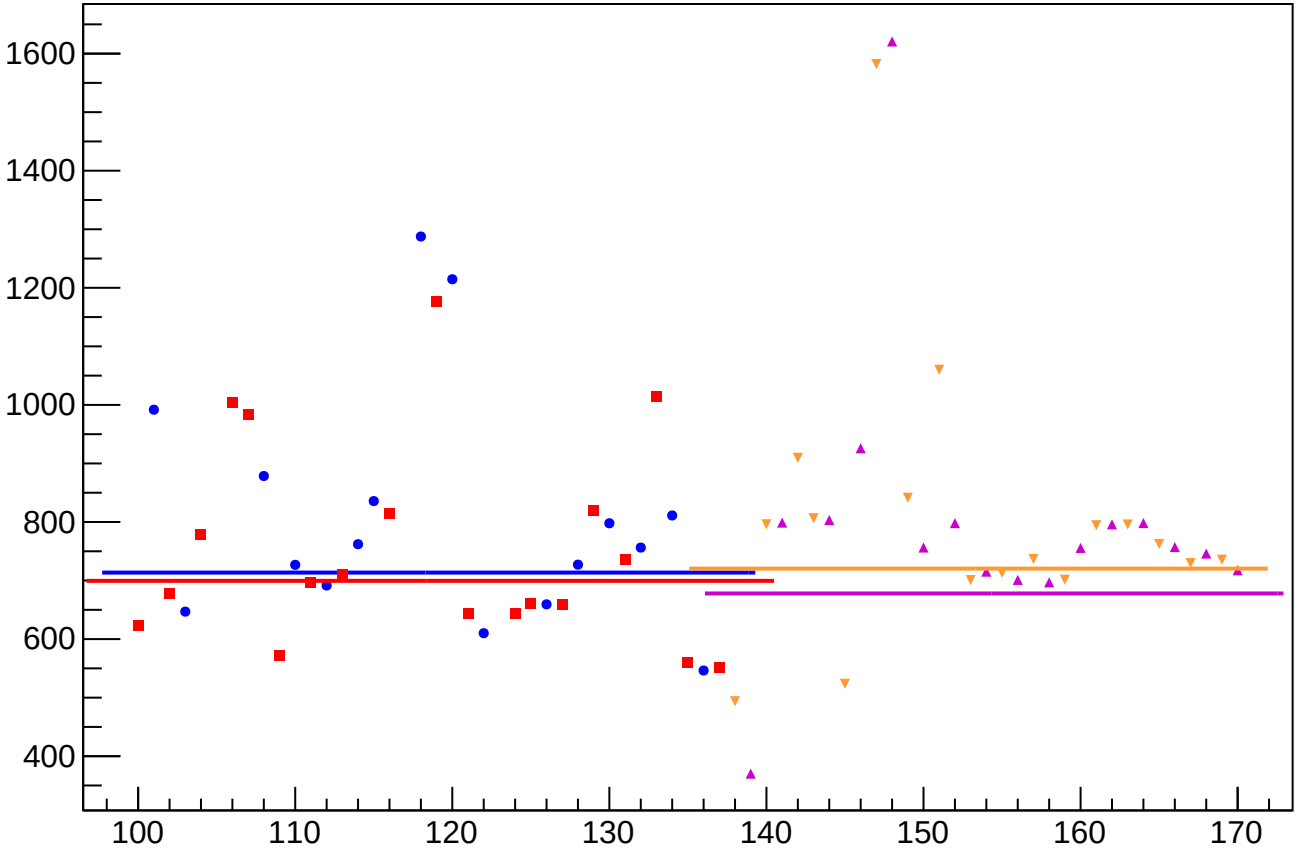
Left In: -0.092+/-0.196 $\chi^2$/NDF:9.0/15

+ sign 0.037+/-0.164 $\chi^2$/NDF: 18.2/32

All: -0.015+/-0.113 $\chi^2$/NDF: 52.6/67

- sign -0.064+/-0.157 $\chi^2$/NDF: 34.2/34

# diff_bpm_4aY_4eY_dd_rms vs Slug




Right In: 713.627+/-0.193 $\chi^2$/NDF: 699303.9/15

Left Out: 720.451+/-0.145 $\chi^2$/NDF:1261745.6/16

Right Out: 699.502+/-0.186 $\chi^2$/NDF: 575759.9/18

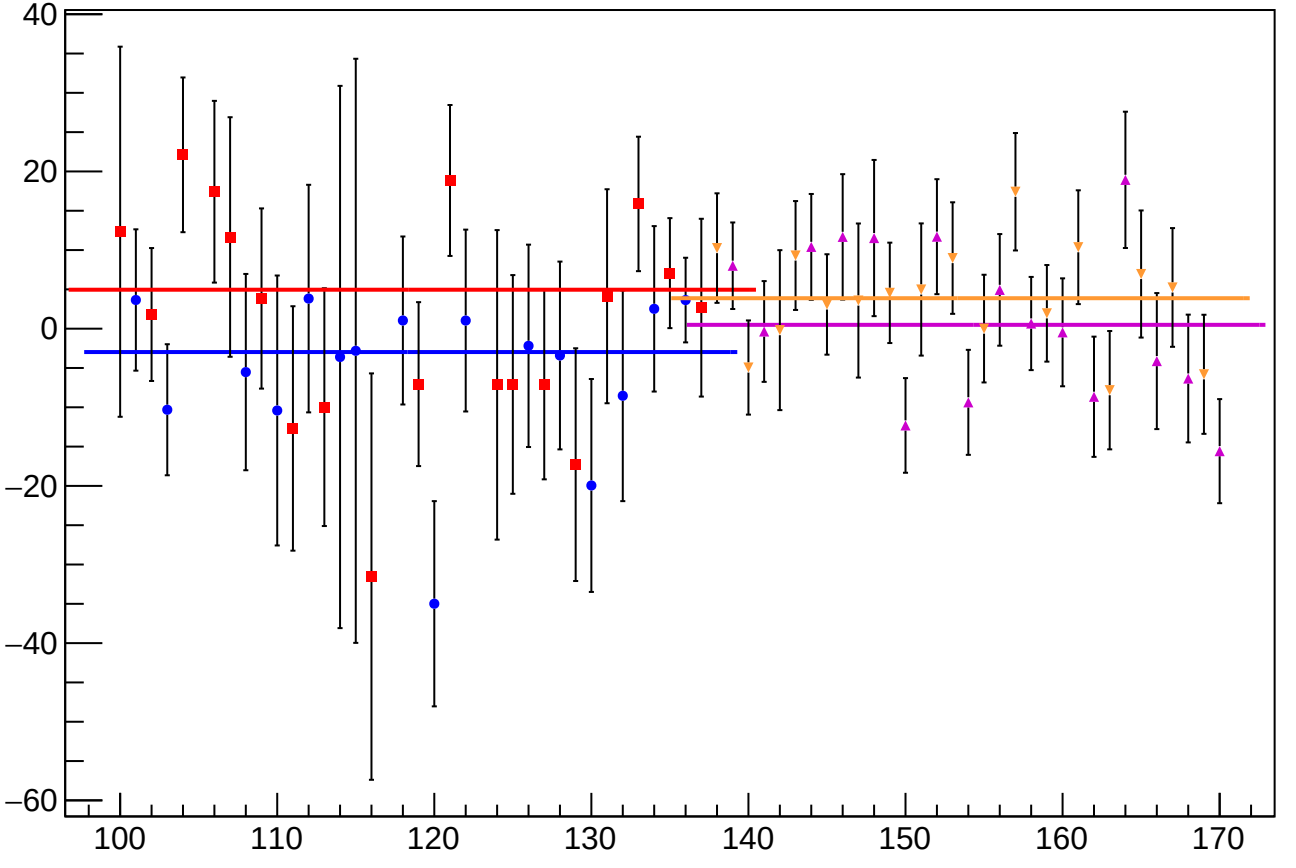
Left In: 677.950+/-0.139 $\chi^2$/NDF:2070993.0/15

+ sign 717.998+/-0.116 $\chi^2$/NDF: 1961849.0/32

All: 701.190+/-0.080 $\chi^2$/NDF: 4657742.1/67

- sign 685.660+/-0.111 $\chi^2$/NDF: 2655365.8/34

# diff_bpm_4aY_4ecY_avg_mean vs Slug




Right In: -2.974+/-2.746 $\chi^2$/NDF: 11.6/15

Left Out: 3.875+/-1.754 $\chi^2$/NDF:13.1/16

Right Out: 4.955+/-2.653 $\chi^2$/NDF: 18.5/18

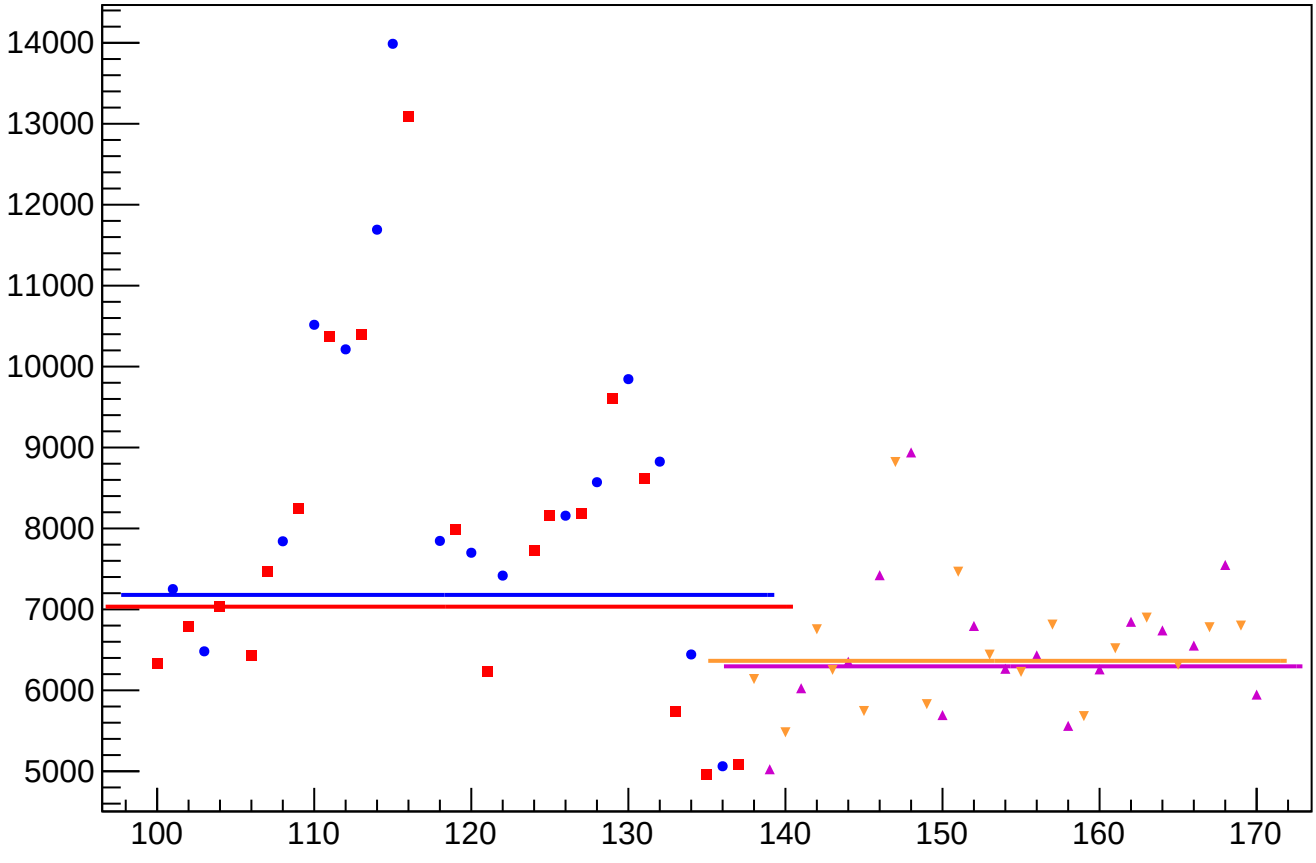
Left In: 0.488+/-1.753 $\chi^2$/NDF:29.6/15

+ sign 1.891+/-1.478 $\chi^2$/NDF: 29.1/32

All: 1.868+/-1.040 $\chi^2$/NDF: 79.1/67

- sign 1.846+/-1.463 $\chi^2$/NDF: 50.0/34

# diff_bpm_4aY_4ecY_avg_rms vs Slug




Right In: 7178.925+/-1.942 $\chi^2$/NDF: 761936.2/15

Left Out: 6364.492+/-1.240 $\chi^2$/NDF:298511.7/16

Right Out: 7033.538+/-1.876 $\chi^2$/NDF: 766389.2/18

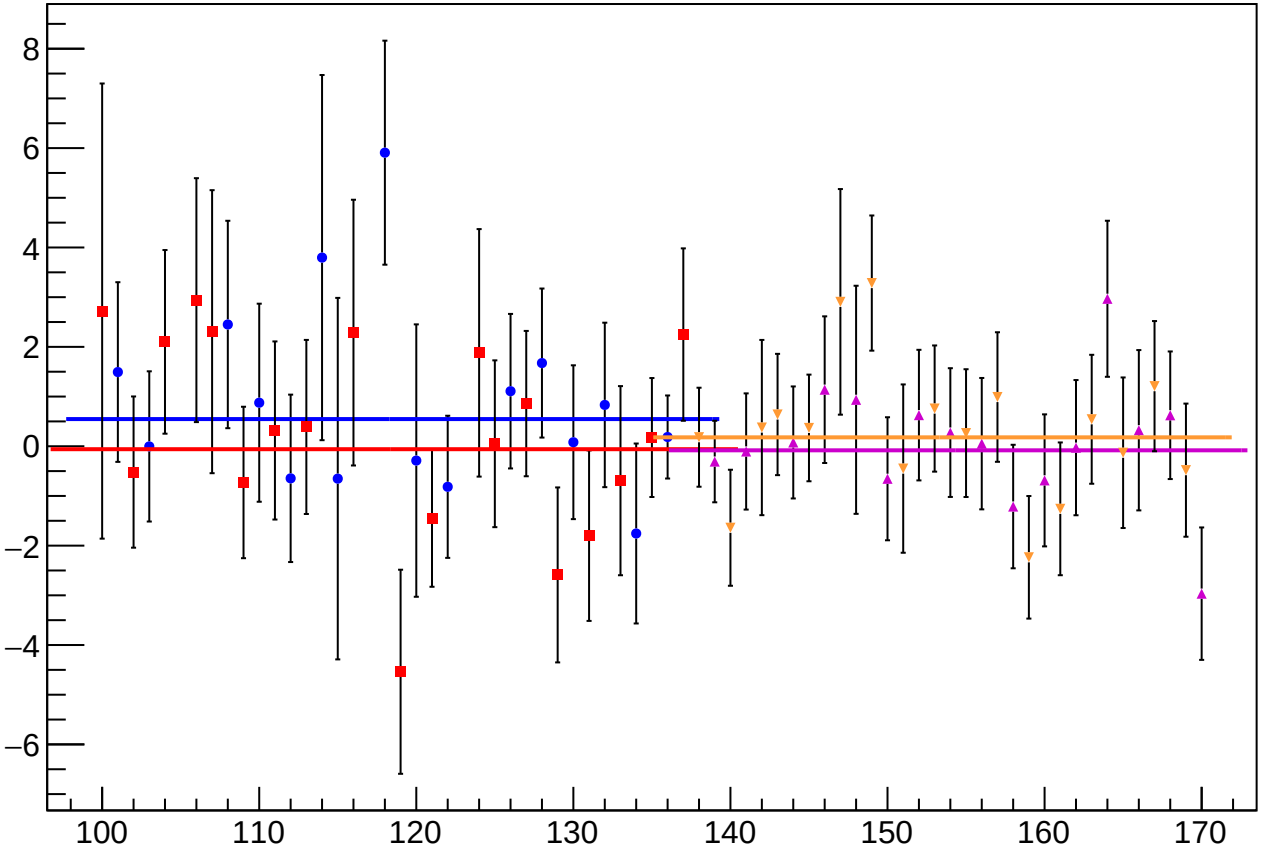
Left In: 6296.350+/-1.240 $\chi^2$/NDF:423215.4/15

+ sign 6600.407+/-1.045 $\chi^2$/NDF: 1185412.0/32

All: 6560.023+/-0.735 $\chi^2$/NDF: 2485435.0/67

- sign 6520.458+/-1.034 $\chi^2$/NDF: 1297066.8/34

# diff_bpm_4aY_4ecY_dd_mean vs Slug




Right In: 0.547+/-0.411 $\chi^2$/NDF: 11.9/15

Left Out: 0.179+/-0.318 $\chi^2$/NDF:16.0/16

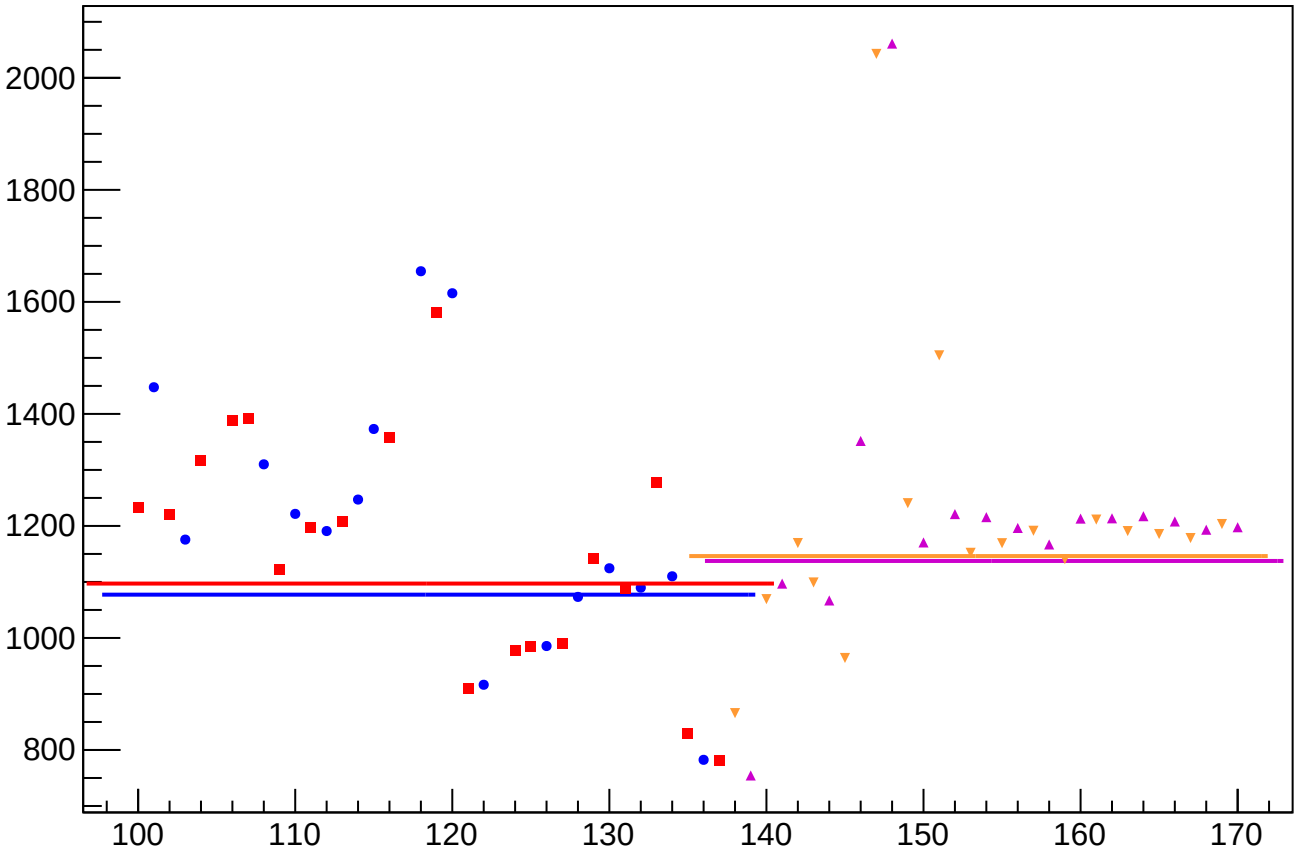
Right Out: -0.059+/-0.409 $\chi^2$/NDF: 16.9/18

Left In: -0.082+/-0.320 $\chi^2$/NDF:11.4/15

+ sign 0.317+/-0.251 $\chi^2$/NDF: 28.4/32

All: 0.122+/-0.178 $\chi^2$/NDF: 57.9/67

- sign -0.073+/-0.252 $\chi^2$/NDF: 28.3/34




Right In: 1077.306+/-0.291 $\chi^2$/NDF: 646521.7/15

Left Out: 1146.196+/-0.225 $\chi^2$/NDF:655484.2/16

Right Out: 1097.108+/-0.289 $\chi^2$/NDF: 484370.7/18

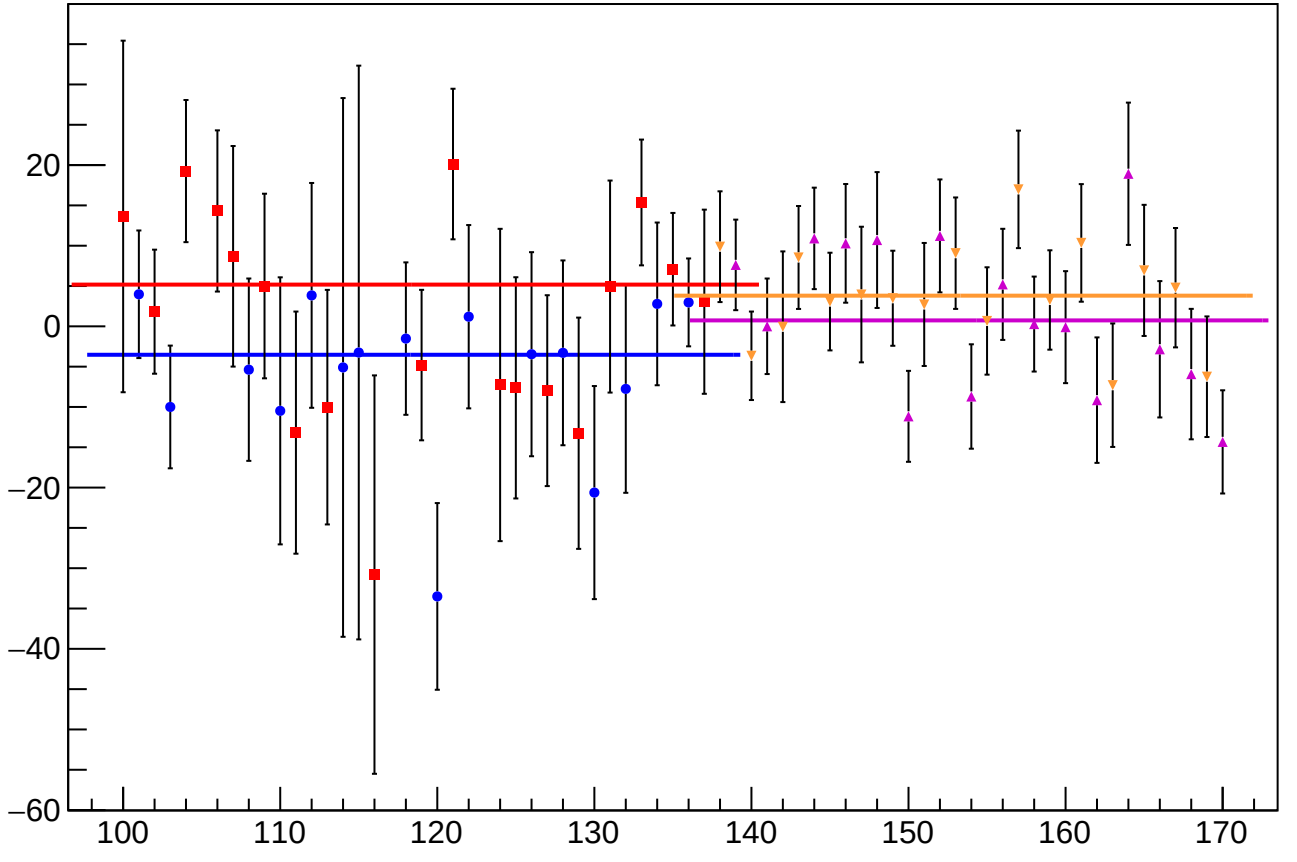
Left In: 1137.461+/-0.226 $\chi^2$/NDF:864153.3/15

+ sign 1120.386+/-0.178 $\chi^2$/NDF: 1337165.7/32

All: 1121.258+/-0.126 $\chi^2$/NDF: 2697821.1/67

- sign 1122.134+/-0.178 $\chi^2$/NDF: 1360607.2/34

# diff_bpm_4eY_4ecY_avg_mean vs Slug




Right In: -3.527+/-2.608 $\chi^2$/NDF: 12.6/15

Left Out: 3.805+/-1.682 $\chi^2$/NDF:12.4/16

Right Out: 5.176+/-2.508 $\chi^2$/NDF: 18.2/18

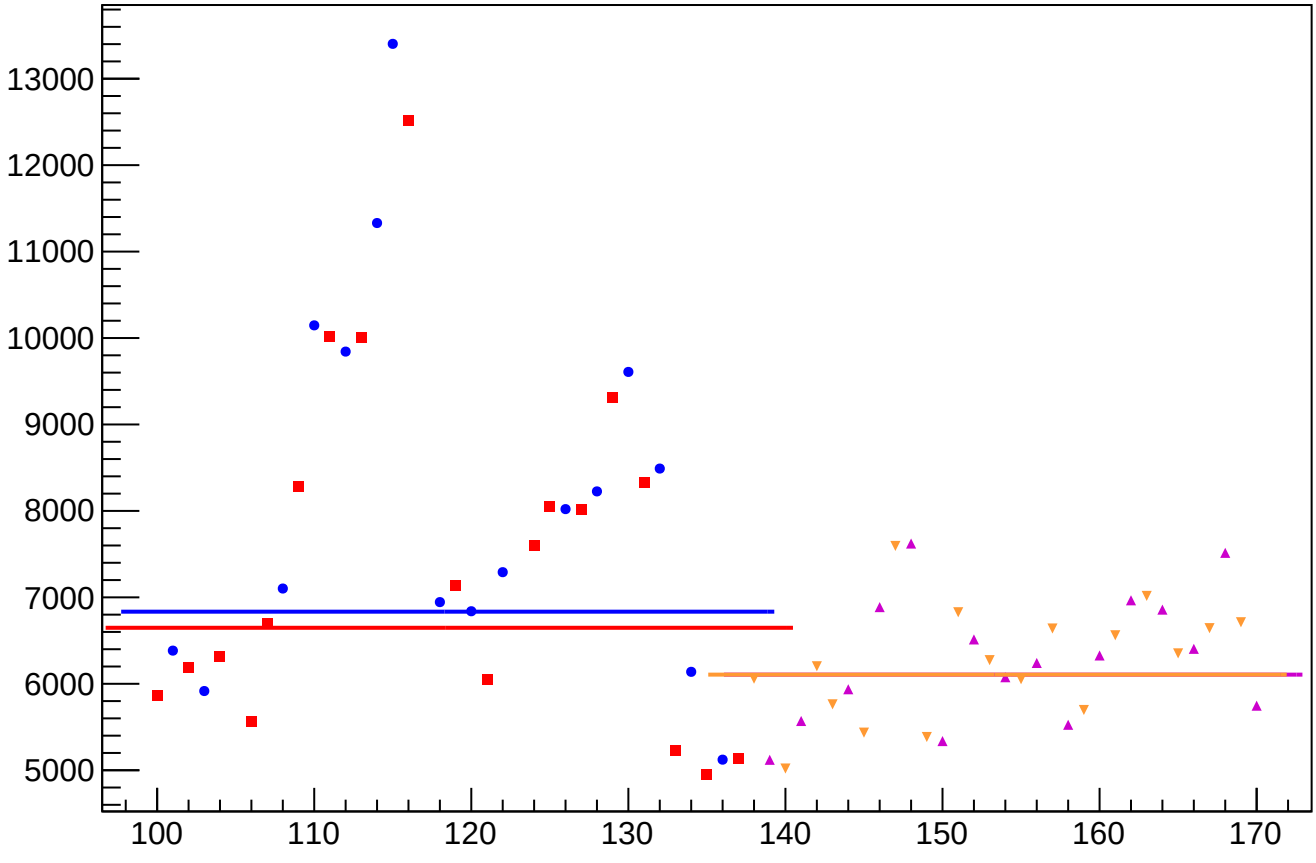
Left In: 0.736+/-1.697 $\chi^2$/NDF:28.7/15

+ sign 1.651+/-1.414 $\chi^2$/NDF: 30.6/32

All: 1.892+/-0.997 $\chi^2$/NDF: 79.7/67

- sign 2.130+/-1.405 $\chi^2$/NDF: 49.1/34

# diff_bpm_4eY_4ecY_avg_rms vs Slug




Right In: 6834.346+/-1.844 $\chi^2$/NDF: 692722.6/15

Left Out: 6106.124+/-1.189 $\chi^2$/NDF:301929.3/16

Right Out: 6647.996+/-1.773 $\chi^2$/NDF: 785102.6/18

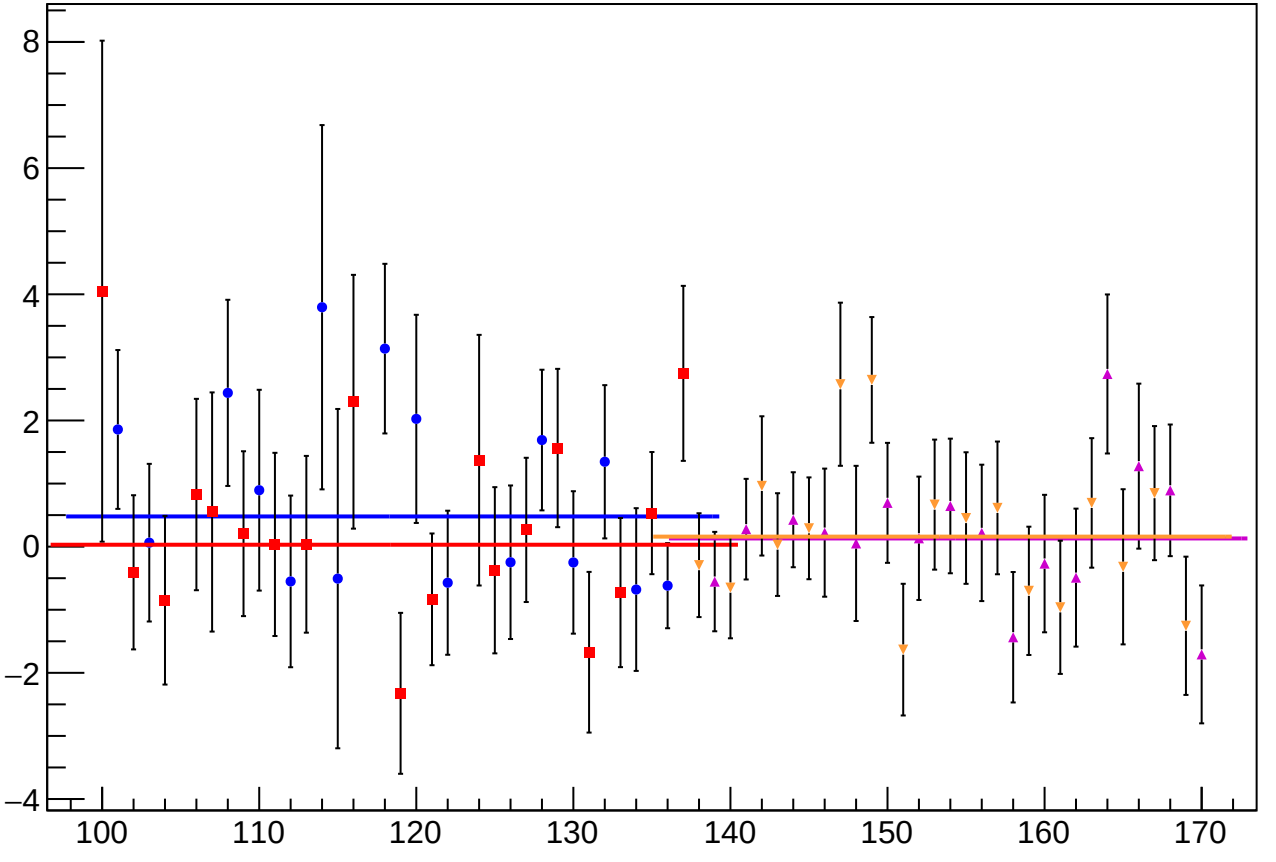
Left In: 6105.934+/-1.200 $\chi^2$/NDF:341238.3/15

+ sign 6320.021+/-1.000 $\chi^2$/NDF: 1104771.9/32

All: 6297.962+/-0.705 $\chi^2$/NDF: 2296172.2/67

- sign 6276.156+/-0.994 $\chi^2$/NDF: 1190431.8/34

# diff_bpm_4eY_4ecY_dd_mean vs Slug




Right In: 0.479+/-0.311 $\chi^2$/NDF: 16.7/15

Left Out: 0.159+/-0.240 $\chi^2$/NDF:19.4/16

Right Out: 0.030+/-0.309 $\chi^2$/NDF: 15.7/18

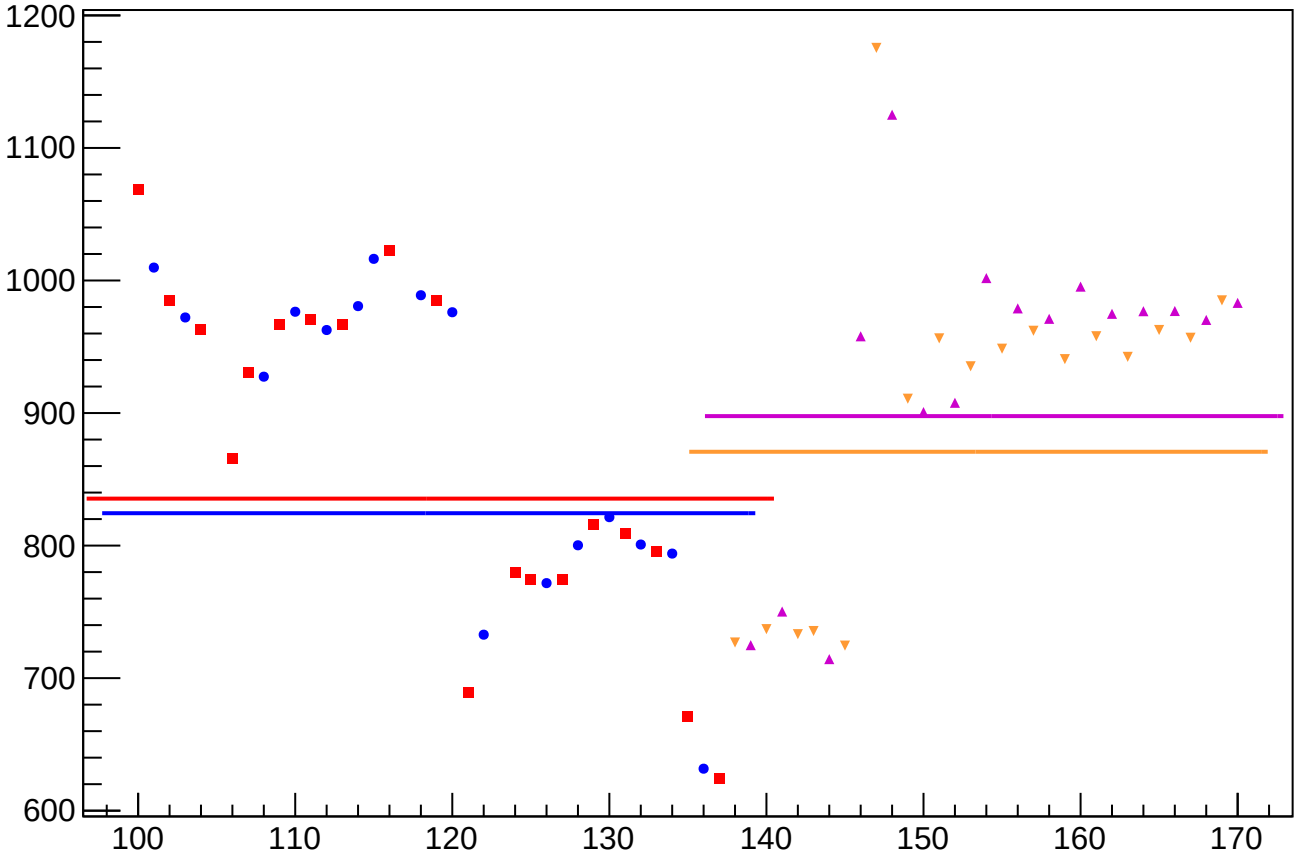
Left In: 0.130+/-0.250 $\chi^2$/NDF:12.7/15

+ sign 0.278+/-0.190 $\chi^2$/NDF: 36.8/32

All: 0.187+/-0.136 $\chi^2$/NDF: 65.7/67

- sign 0.091+/-0.194 $\chi^2$/NDF: 28.5/34

# diff_bpm_4eY_4ecY_dd_rms vs Slug




Right In: 824.431+/-0.220 $\chi^2$/NDF: 365461.7/15

Left Out: 870.786+/-0.170 $\chi^2$/NDF:509259.1/16

Right Out: 835.437+/-0.218 $\chi^2$/NDF: 319302.1/18

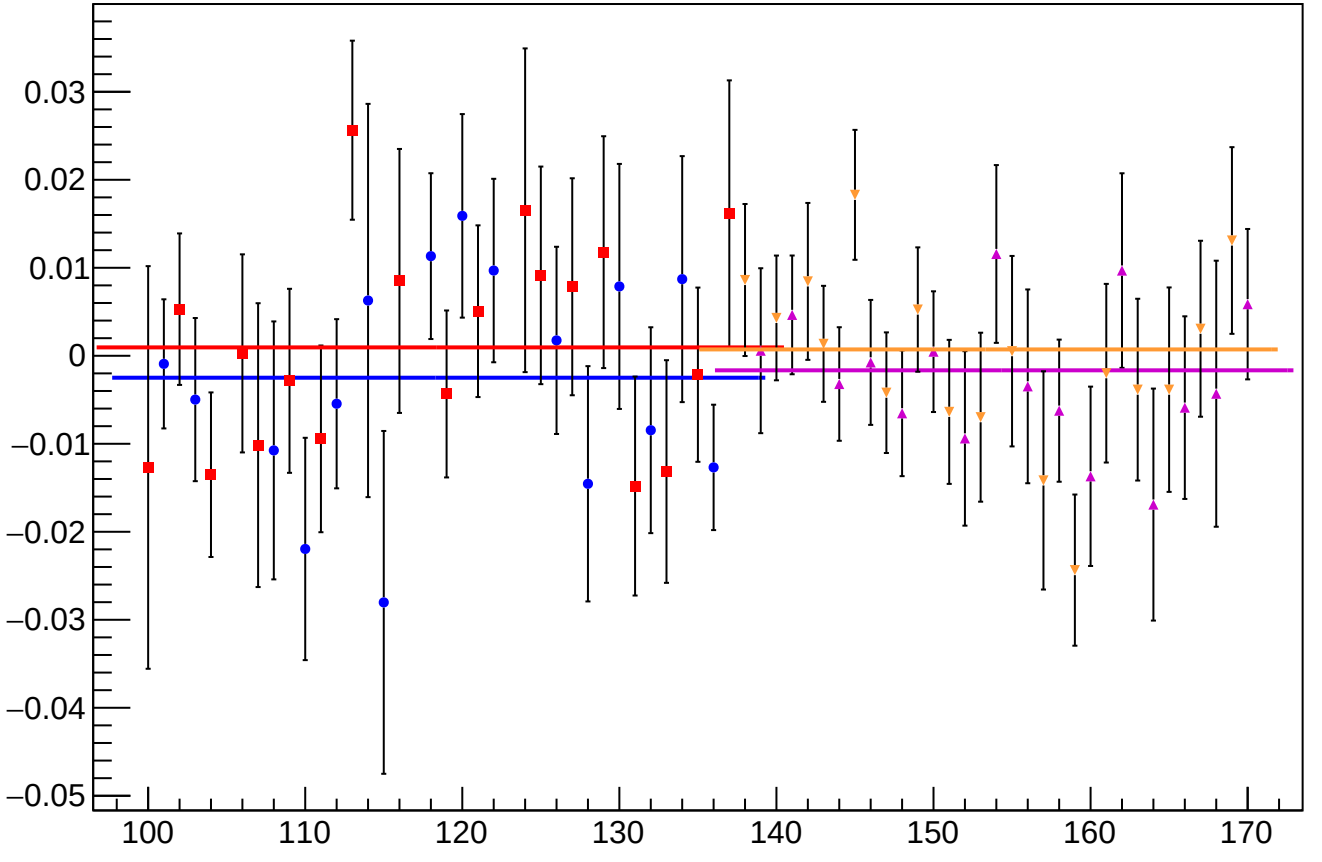
Left In: 897.685+/-0.177 $\chi^2$/NDF:462469.5/15

+ sign 853.478+/-0.134 $\chi^2$/NDF: 902601.2/32

All: 863.058+/-0.096 $\chi^2$/NDF: 1743978.5/67

- sign 873.061+/-0.137 $\chi^2$/NDF: 830974.6/34

# diff_dispE_bpm12X_mean vs Slug




Right In: -0.002+/-0.003 $\chi^2$/NDF: 15.3/15

Left Out: 0.001+/-0.002 $\chi^2$/NDF:21.6/16

Right Out: 0.001+/-0.003 $\chi^2$/NDF: 17.3/18

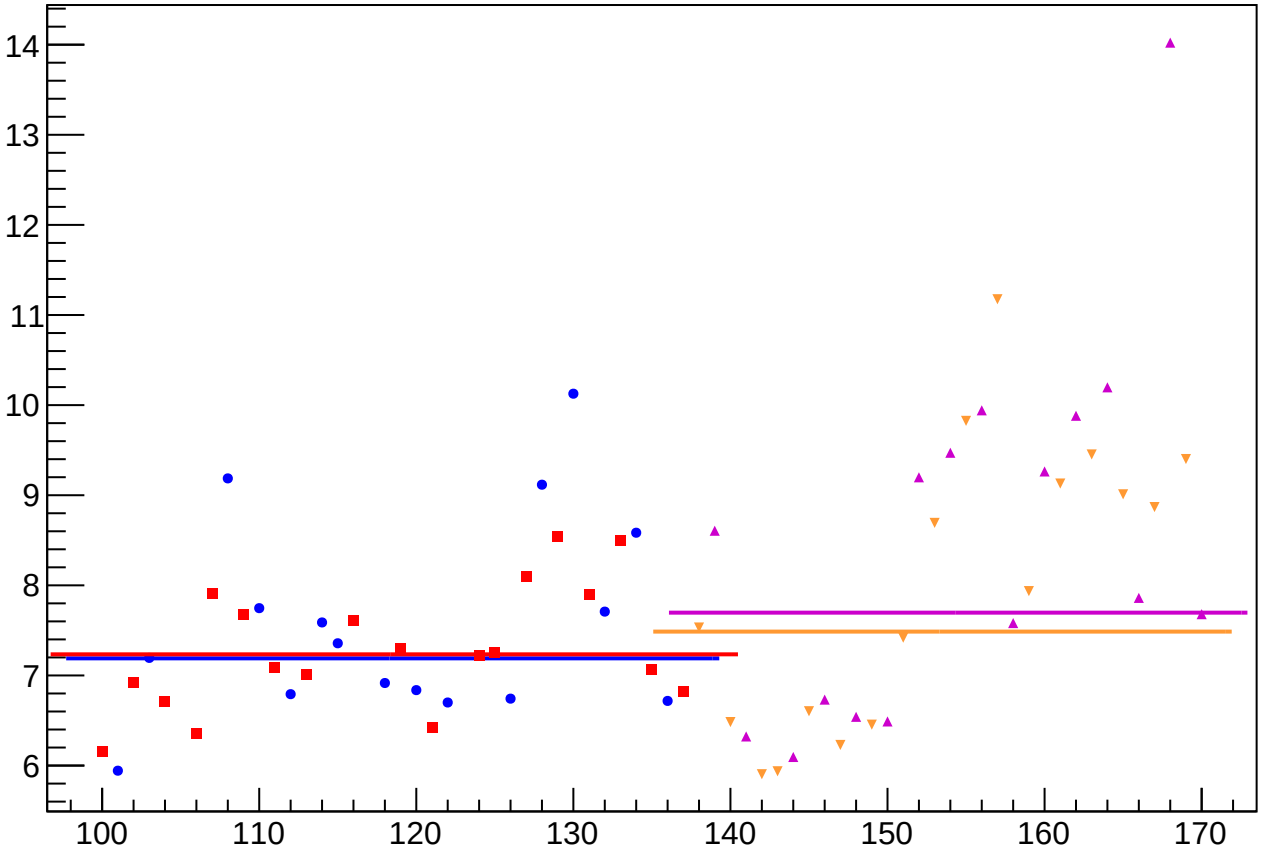
Left In: -0.002+/-0.002 $\chi^2$/NDF:9.0/15

+ sign -0.000+/-0.002 $\chi^2$/NDF: 37.8/32

All: -0.001+/-0.001 $\chi^2$/NDF: 64.7/67

- sign -0.001+/-0.002 $\chi^2$/NDF: 26.9/34

# diff_dispE_bpm12X_rms vs Slug




Right In: 7.190+/-0.002 $\chi^2$/NDF: 277639.9/15

Left Out: 7.487+/-0.001 $\chi^2$/NDF:922753.1/16

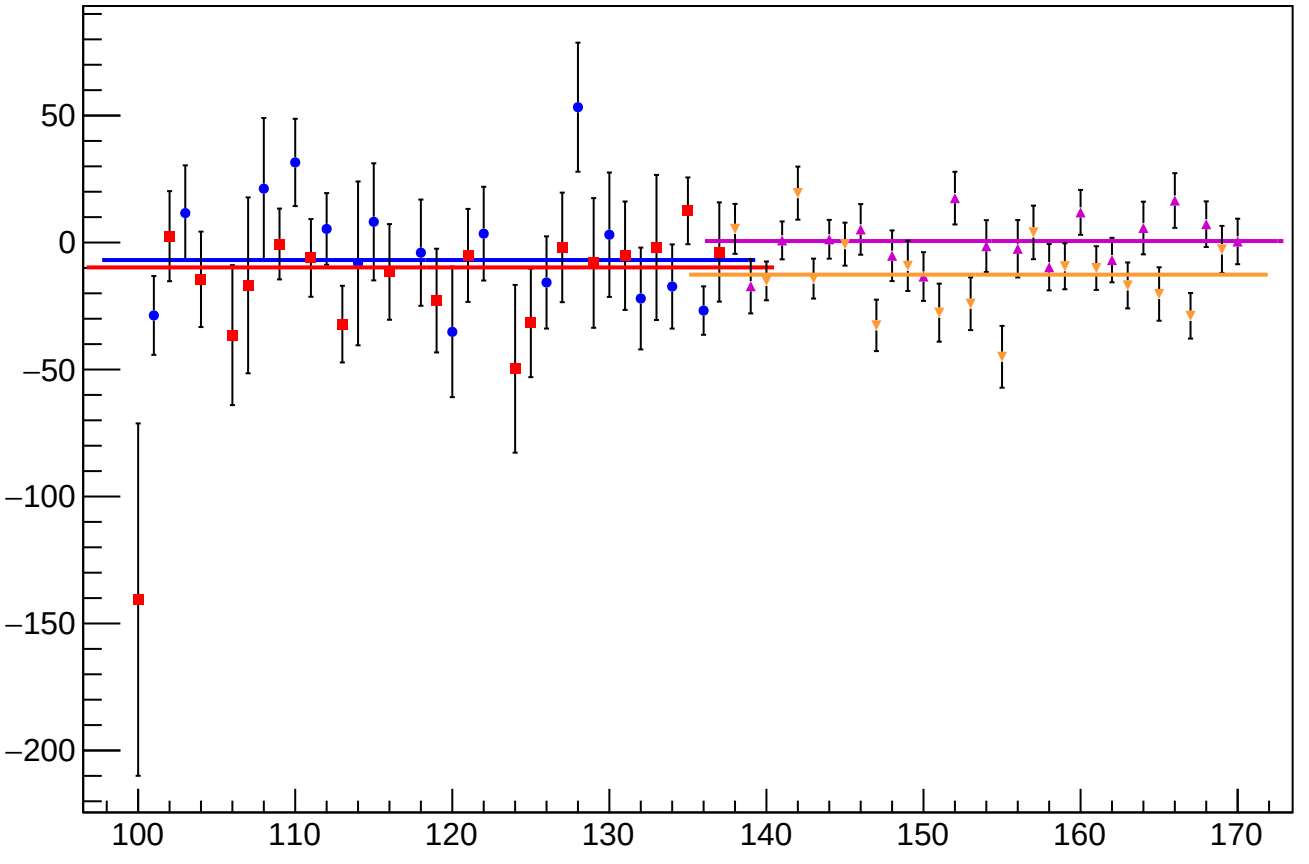
Right Out: 7.234+/-0.002 $\chi^2$/NDF: 106266.0/18

Left In: 7.697+/-0.002 $\chi^2$/NDF:1115591.5/15

+ sign 7.376+/-0.001 $\chi^2$/NDF: 1215437.1/32

All: 7.443+/-0.001 $\chi^2$/NDF: 2480310.9/67

- sign 7.512+/-0.001 $\chi^2$/NDF: 1258189.8/34




Right In: -6.891+/-4.488 $\chi^2$/NDF: 23.0/15

Left Out: -12.642+/-2.291 $\chi^2$/NDF:36.8/16

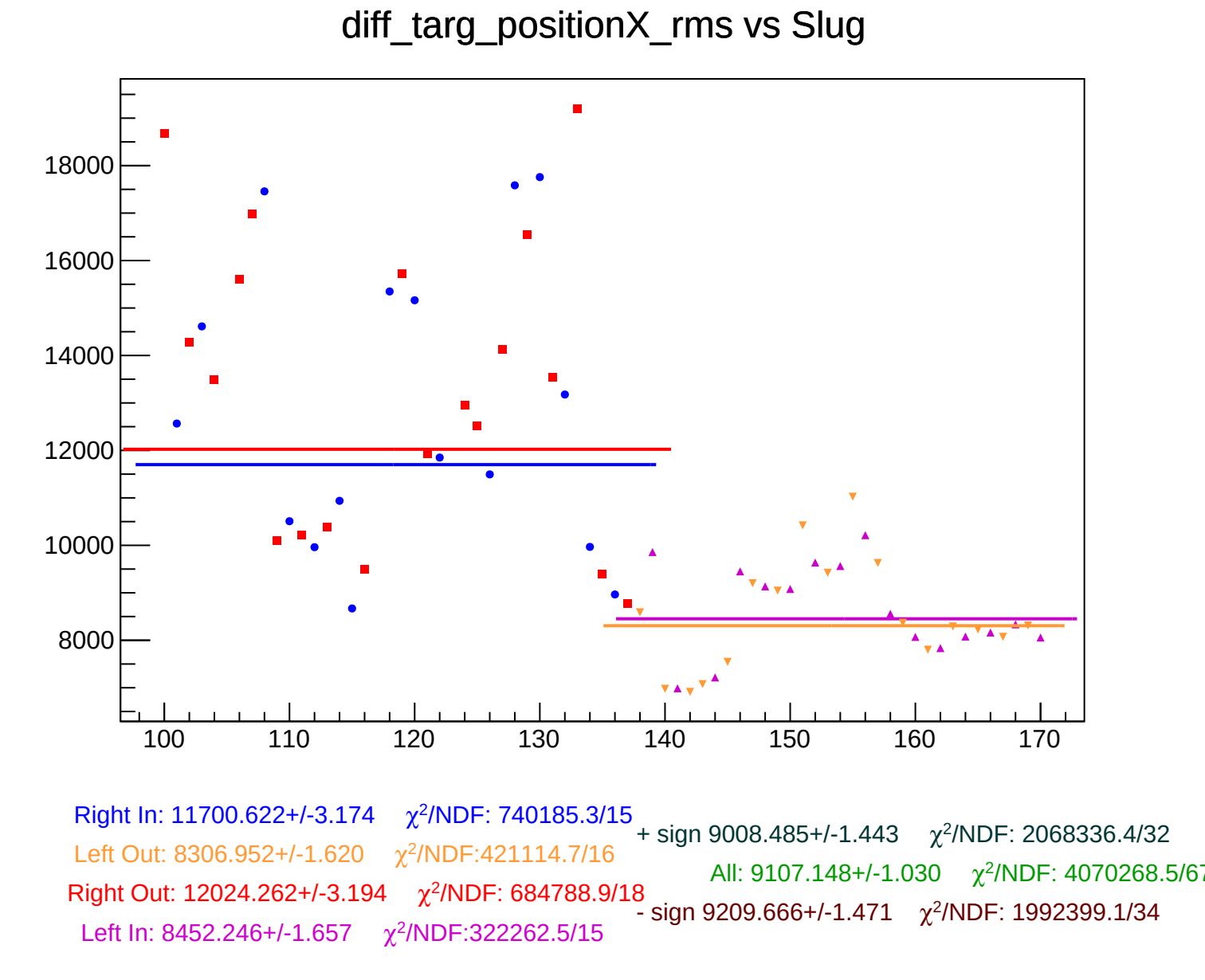
Right Out: -9.790+/-4.517 $\chi^2$/NDF: 14.0/18

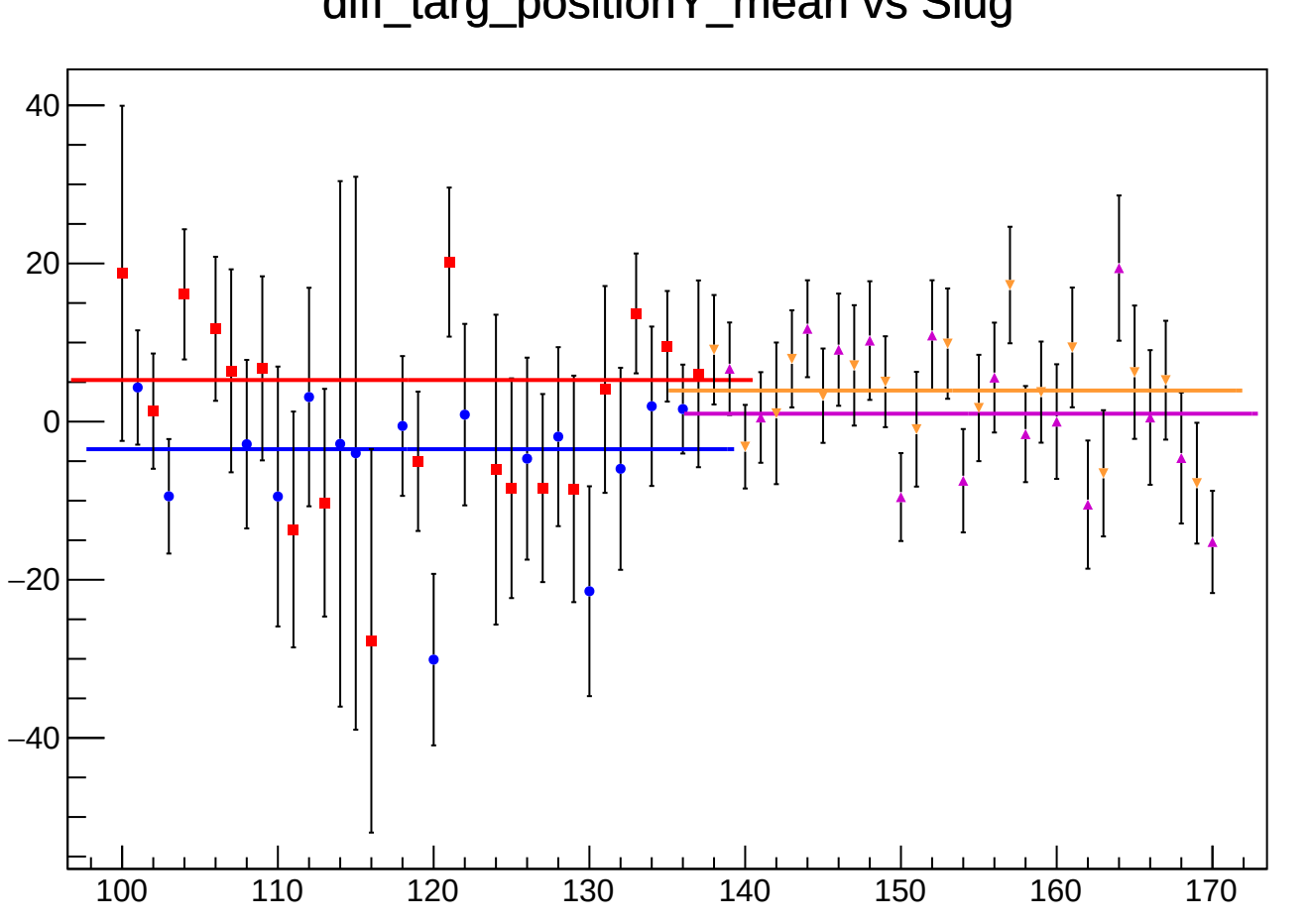
Left In: 0.592+/-2.343 $\chi^2$/NDF:14.8/15

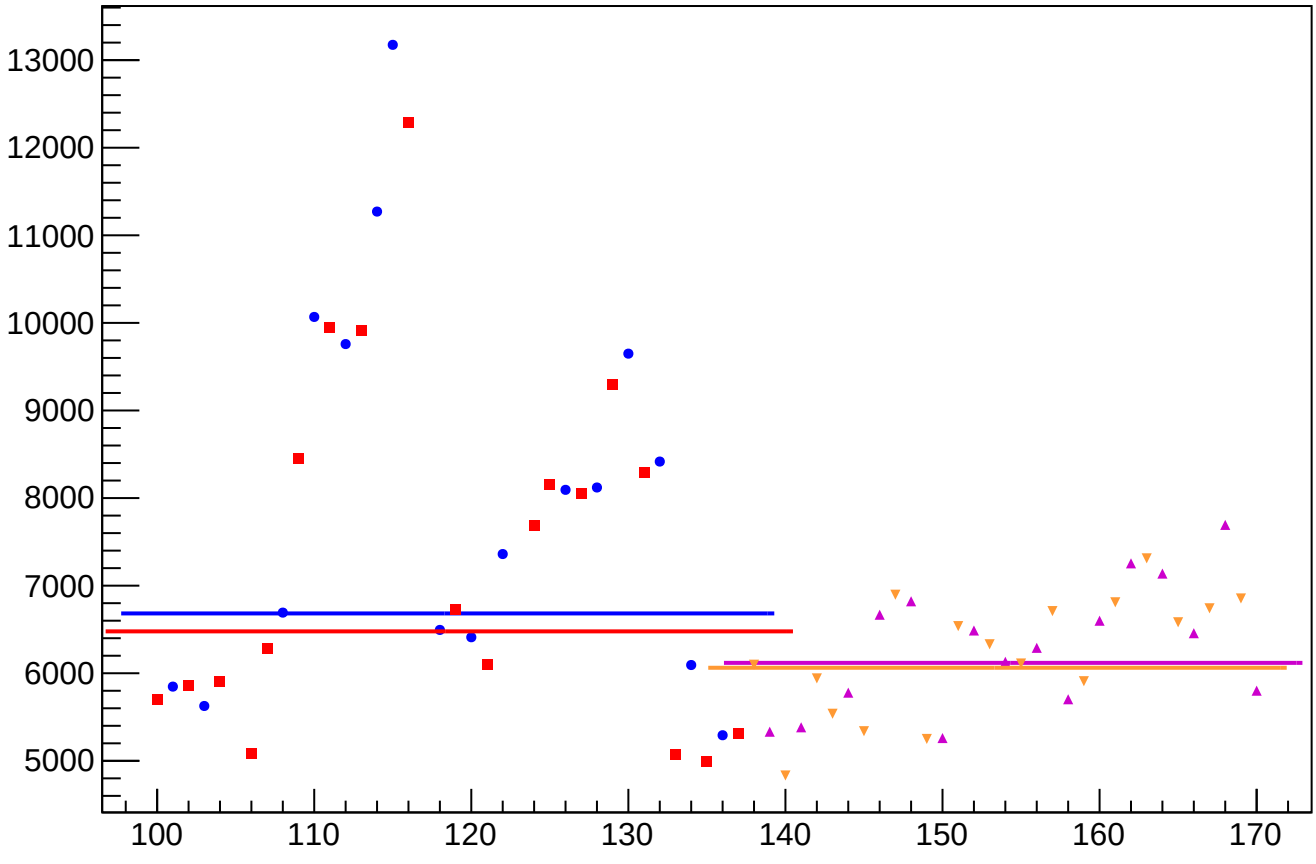
+ sign -11.453+/-2.041 $\chi^2$/NDF: 61.2/32

All: -6.625+/-1.457 $\chi^2$/NDF: 105.6/67

- sign -1.609+/-2.080 $\chi^2$/NDF: 33.0/34


diff_targ_positionX_rms vs Slug
18000
16000
14000
12000
10000
8000
100
110
120
130
140
150
160
170
Right In: 11700.622+/-3.174 χ²/NDF: 740185.3/15
Left Out: 8306.952+/-1.620 χ²/NDF:421114.7/16
Right Out: 12024.262+/-3.194 χ²/NDF: 684788.9/18
Left In: 8452.246+/-1.657 χ²/NDF:322262.5/15
+ sign 9008.485+/-1.443 χ²/NDF: 2068336.4/32
All: 9107.148+/-1.030 χ²/NDF: 4070268.5/67
- sign 9209.666+/-1.471 χ²/NDF: 1992399.1/34


diff_targ_positionY_mean vs Slug
40
20
0
−20
−40
100
110
120
130
140
150
160
170
Right In: -3.485+/-2.550 χ²/NDF: 11.5/15
Left Out: 3.934+/-1.672 χ²/NDF:12.4/16
Right Out: 5.259+/-2.446 χ²/NDF: 16.6/18
Left In: 1.001+/-1.699 χ²/NDF:27.6/15
+ sign 1.704+/-1.398 χ²/NDF: 29.8/32
All: 2.046+/-0.988 χ²/NDF: 76.1/67
- sign 2.387+/-1.395 χ²/NDF: 46.2/34




Right In: 6682.988+/-1.803 $\chi^2$/NDF: 692200.2/15

Left Out: 6062.640+/-1.182 $\chi^2$/NDF:358822.1/16

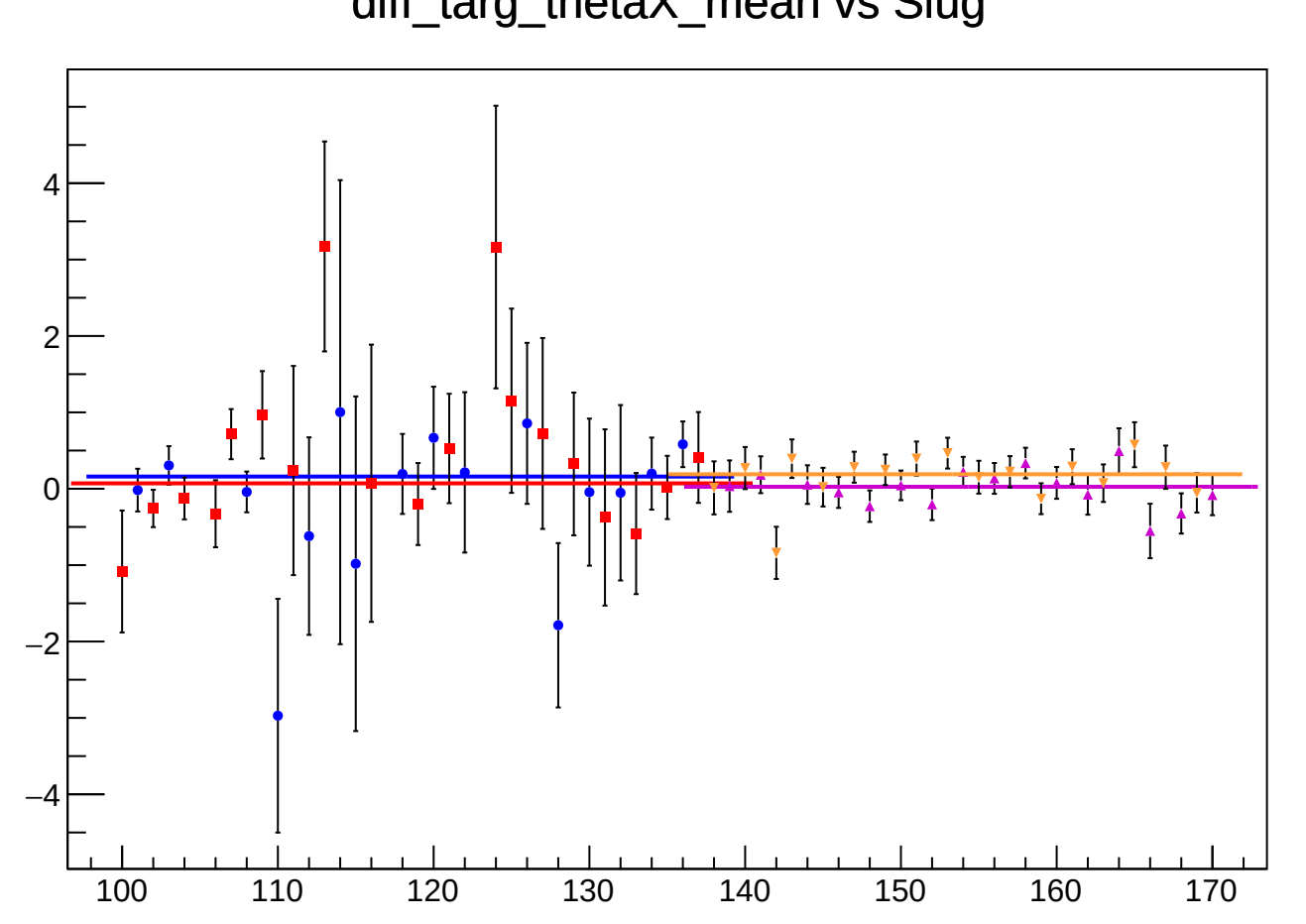
Right Out: 6478.126+/-1.730 $\chi^2$/NDF: 839226.8/18

Left In: 6118.567+/-1.201 $\chi^2$/NDF:321750.7/15

+ sign 6249.122+/-0.988 $\chi^2$/NDF: 1133828.9/32

All: 6242.322+/-0.698 $\chi^2$/NDF: 2324049.8/67

- sign 6235.547+/-0.987 $\chi^2$/NDF: 1190126.4/34




Right In: 0.160+/-0.120 $\chi^2$/NDF: 12.6/15

Left Out: 0.190+/-0.058 $\chi^2$/NDF:19.3/16

Right Out: 0.070+/-0.120 $\chi^2$/NDF: 22.5/18

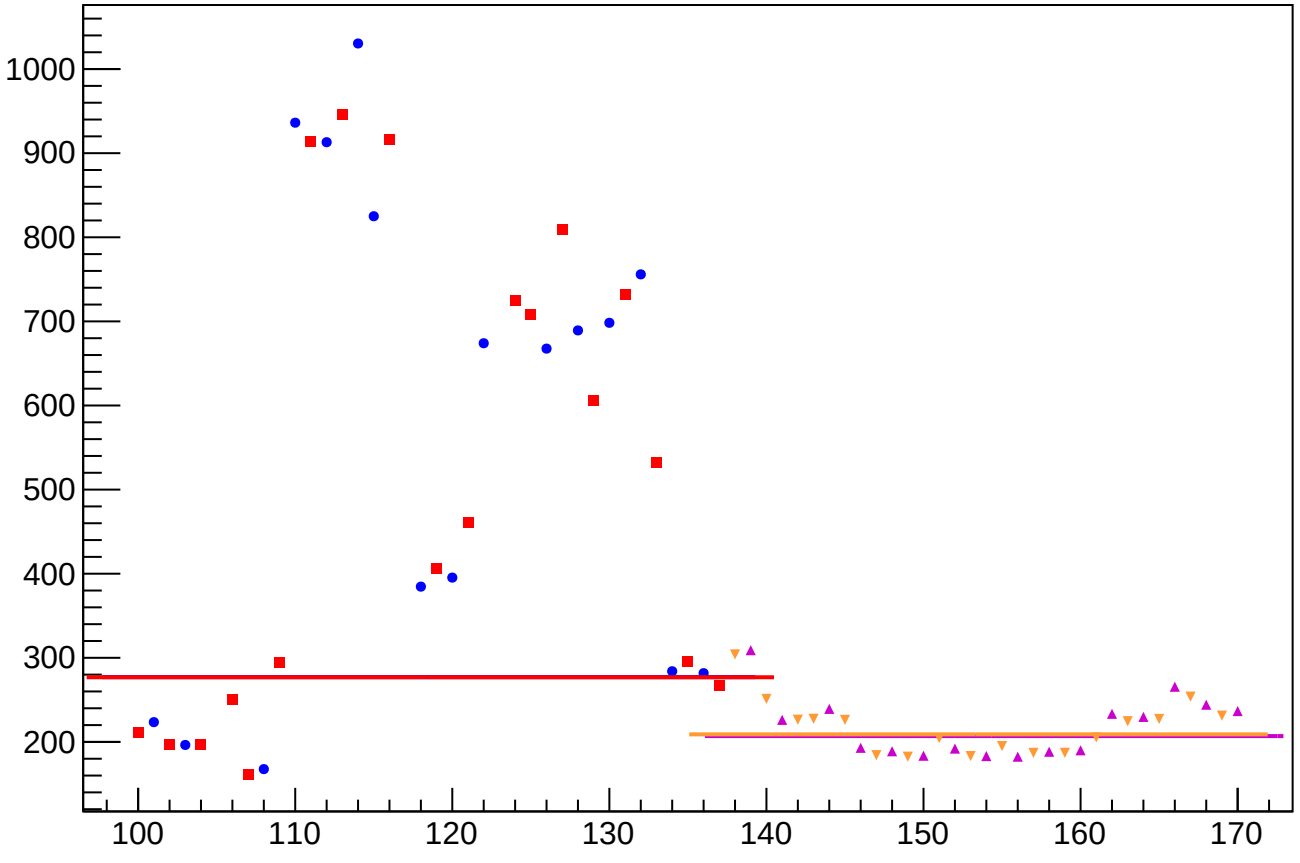
Left In: 0.026+/-0.058 $\chi^2$/NDF:14.3/15

+ sign 0.184+/-0.052 $\chi^2$/NDF: 31.9/32

All: 0.109+/-0.037 $\chi^2$/NDF: 72.9/67

- sign 0.034+/-0.052 $\chi^2$/NDF: 36.8/34

# diff_targ_thetaX_rms vs Slug




Right In: 277.017+/-0.085 $\chi^2$/NDF: 3450533.8/15

Left Out: 208.963+/-0.041 $\chi^2$/NDF:457423.3/16

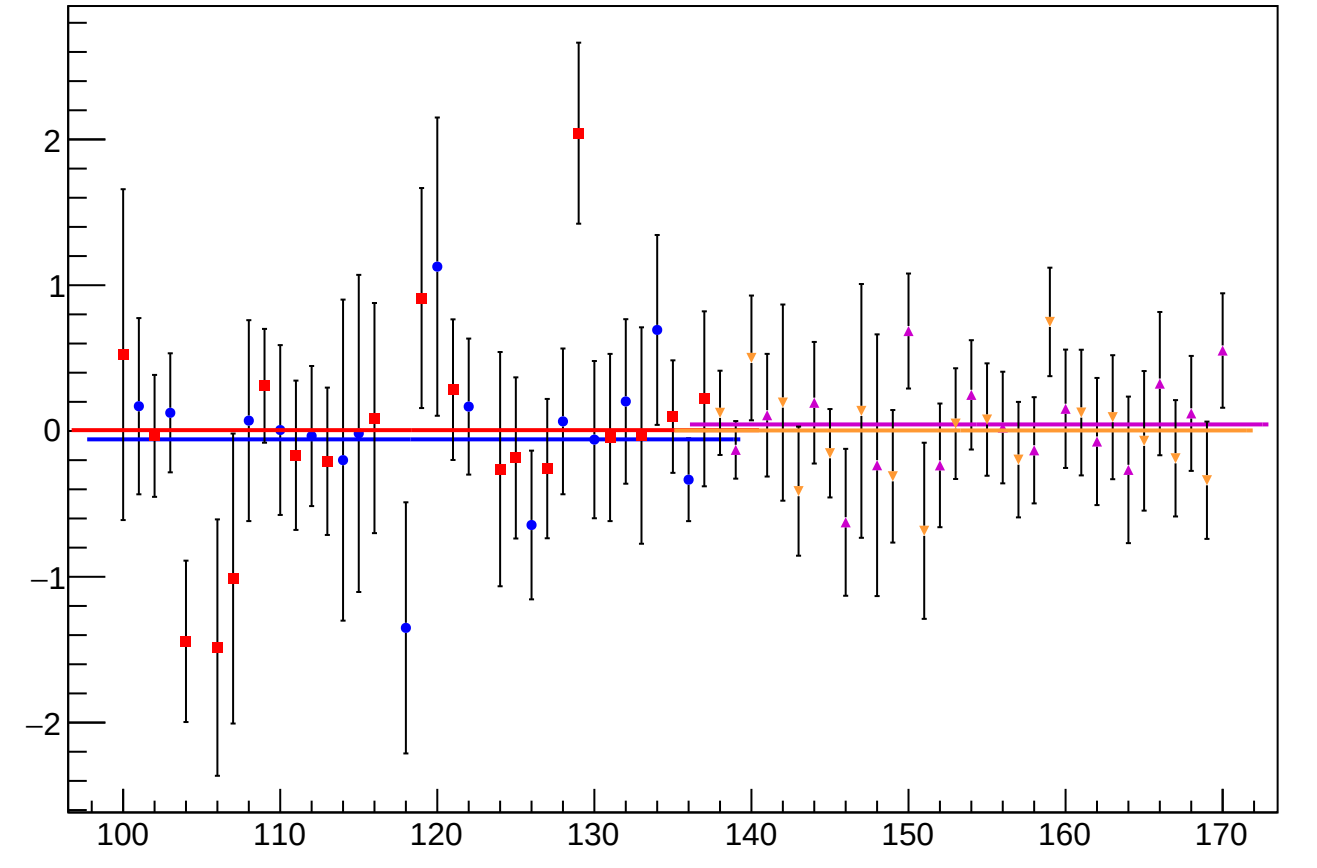
Right Out: 276.866+/-0.085 $\chi^2$/NDF: 3571620.7/18

Left In: 206.919+/-0.041 $\chi^2$/NDF:535148.0/15

+ sign 221.815+/-0.037 $\chi^2$/NDF: 4433382.7/32

All: 220.959+/-0.026 $\chi^2$/NDF: 9095445.3/67

- sign 220.104+/-0.037 $\chi^2$/NDF: 4660978.1/34




Right In: -0.057+/-0.134 $\chi^2$/NDF: 8.1/15

Left Out: 0.004+/-0.100 $\chi^2$/NDF:10.0/16

Right Out: 0.006+/-0.129 $\chi^2$/NDF: 25.2/18

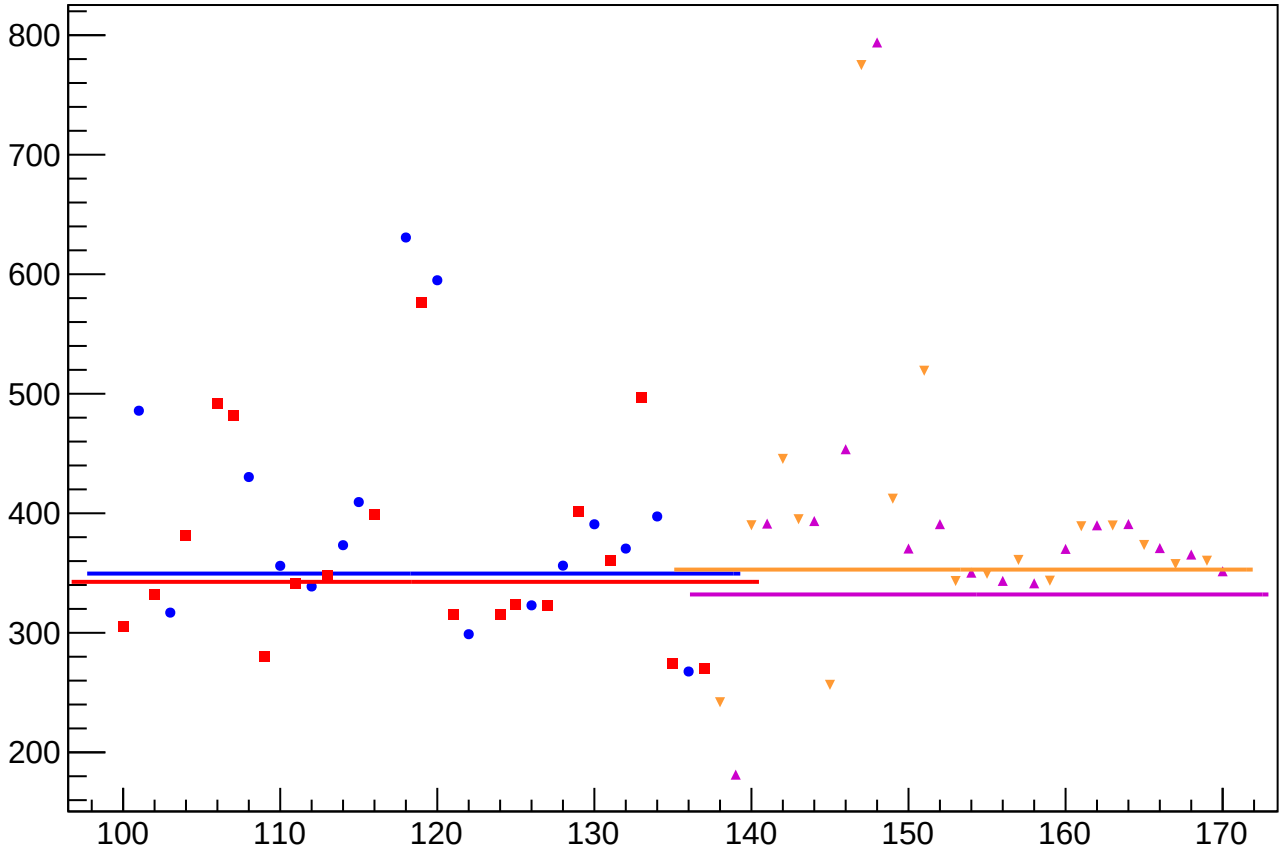
Left In: 0.045+/-0.096 $\chi^2$/NDF:9.0/15

+ sign -0.018+/-0.080 $\chi^2$/NDF: 18.2/32

All: 0.007+/-0.056 $\chi^2$/NDF: 52.6/67

- sign 0.031+/-0.077 $\chi^2$/NDF: 34.2/34

# diff_targ_thetaY_rms vs Slug




Right In: 349.560+/-0.095 $\chi^2$/NDF: 699303.9/15

Left Out: 352.903+/-0.071 $\chi^2$/NDF:1261745.6/16

Right Out: 342.641+/-0.091 $\chi^2$/NDF: 575759.9/18

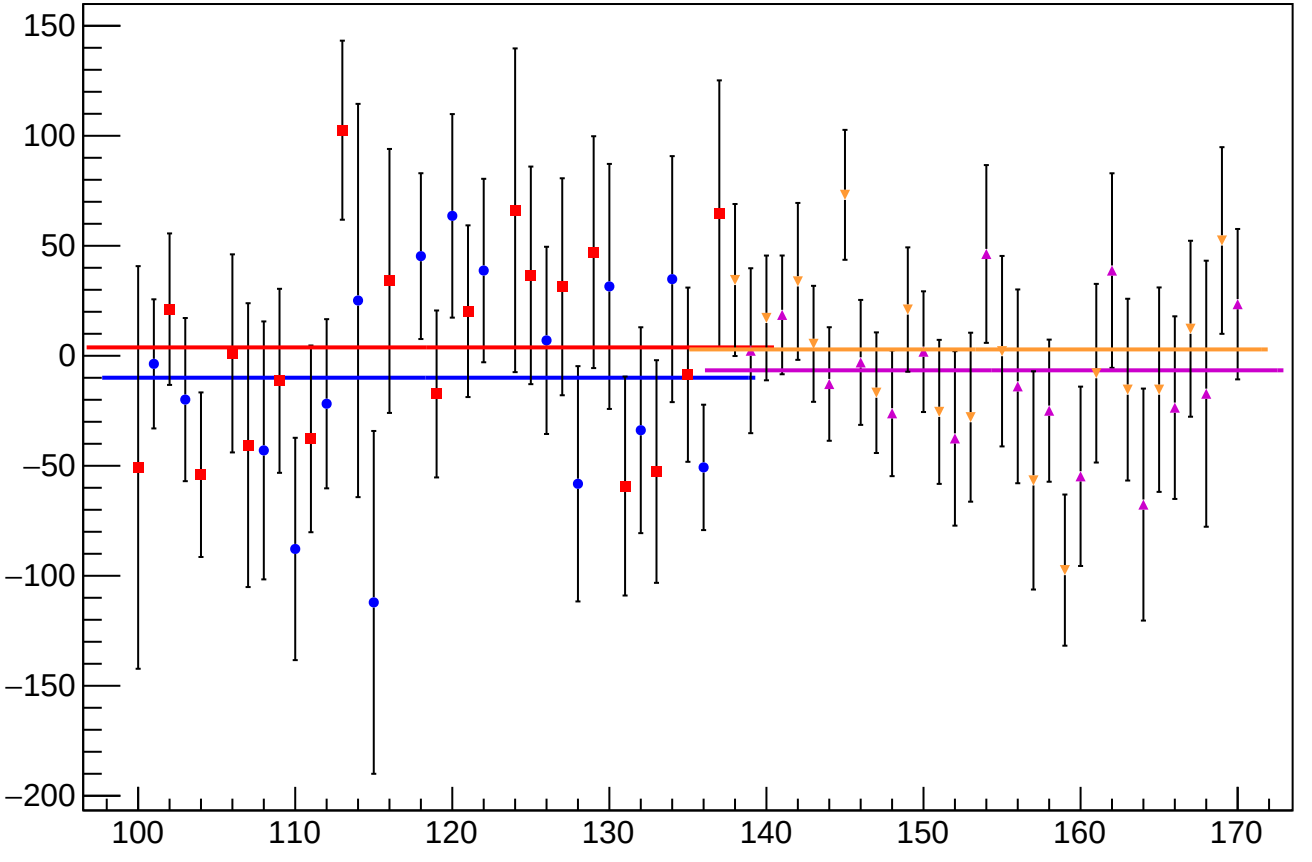
Left In: 332.084+/-0.068 $\chi^2$/NDF:2070993.0/15

\+ sign 351.701+/-0.057 $\chi^2$/NDF: 1961849.0/32

All: 343.468+/-0.039 $\chi^2$/NDF: 4657742.1/67

\- sign 335.861+/-0.055 $\chi^2$/NDF: 2655365.8/34

# diff_bpmE_mean vs Slug




Right In: -9.969+/-10.836 $\chi^2$/NDF: 15.3/15

Left Out: 2.889+/-8.371 $\chi^2$/NDF:21.6/16

Right Out: 3.814+/-10.636 $\chi^2$/NDF: 17.3/18

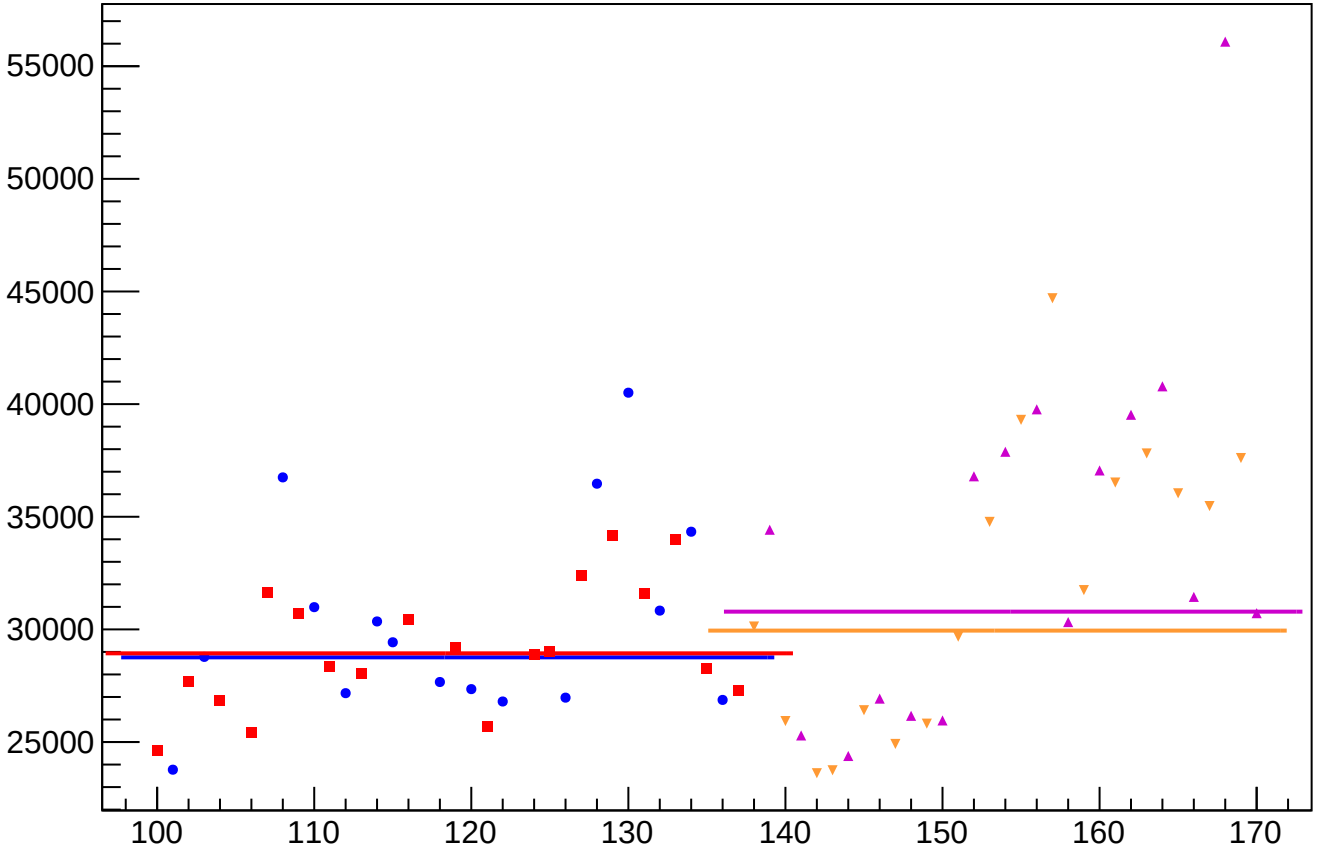
Left In: -6.607+/-8.676 $\chi^2$/NDF:9.0/15

+ sign -1.916+/-6.625 $\chi^2$/NDF: 37.8/32

All: -2.176+/-4.719 $\chi^2$/NDF: 64.7/67

- sign -2.443+/-6.723 $\chi^2$/NDF: 26.9/34

# diff_bpmE_rms vs Slug




Right In: 28759.090+/-7.662 $\chi^2$/NDF: 277639.9/15

Left Out: 29946.685+/-5.919 $\chi^2$/NDF:922753.1/16

Right Out: 28937.633+/-7.521 $\chi^2$/NDF: 106266.0/18

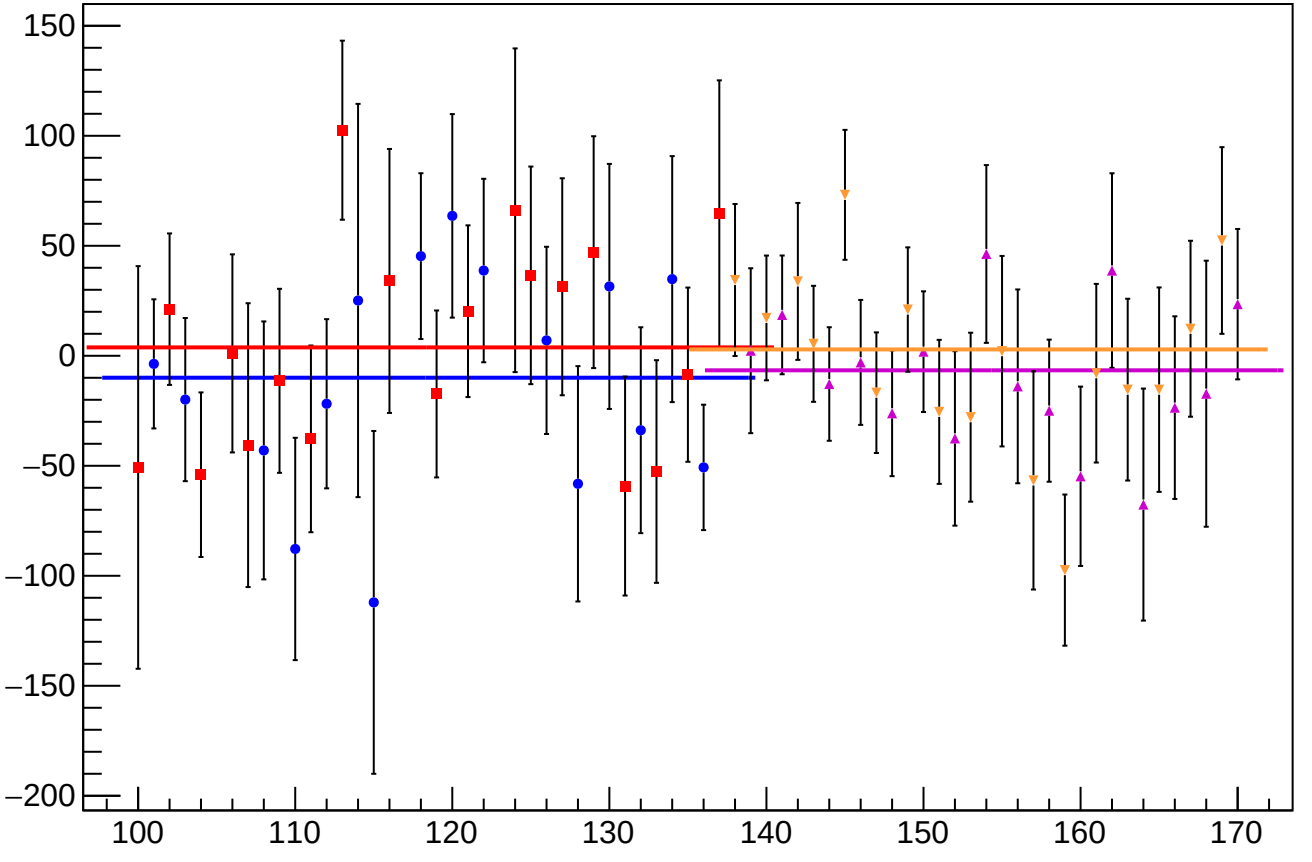
Left In: 30787.672+/-6.135 $\chi^2$/NDF:1115591.5/15

+ sign 29502.844+/-4.684 $\chi^2$/NDF: 1215437.1/32

All: 29771.636+/-3.337 $\chi^2$/NDF: 2480310.9/6

- sign 30048.487+/-4.754 $\chi^2$/NDF: 1258189.8/34

# diff_bpmEX_mean vs Slug




Right In: -9.969+/-10.836 $\chi^2$/NDF: 15.3/15

Left Out: 2.889+/-8.371 $\chi^2$/NDF:21.6/16

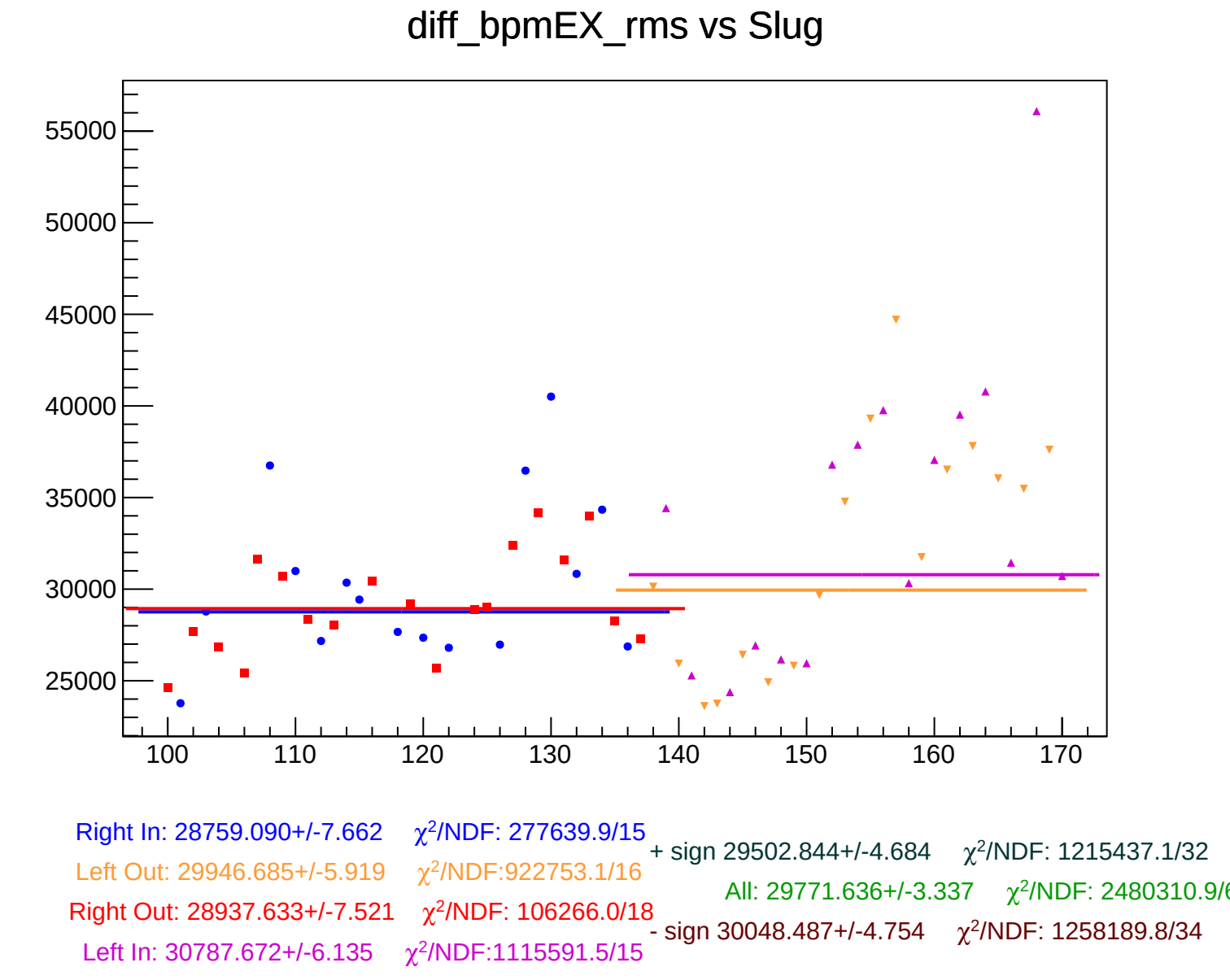
Right Out: 3.814+/-10.636 $\chi^2$/NDF: 17.3/18

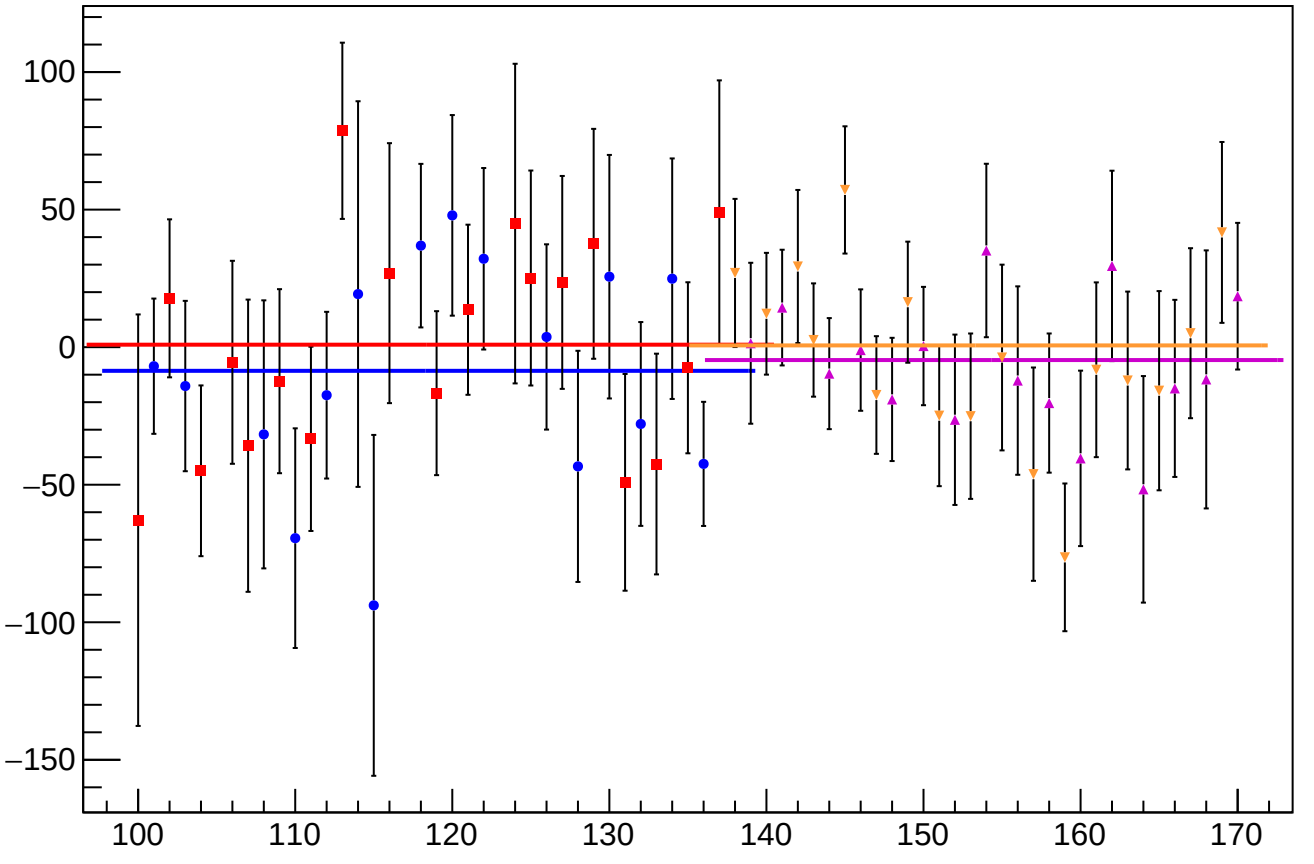
Left In: -6.607+/-8.676 $\chi^2$/NDF:9.0/15

+ sign -1.916+/-6.625 $\chi^2$/NDF: 37.8/32

All: -2.176+/-4.719 $\chi^2$/NDF: 64.7/67

- sign -2.443+/-6.723 $\chi^2$/NDF: 26.9/34


diff_bpmEX_rms vs Slug
55000
50000
45000
40000
35000
30000
25000
100
110
120
130
140
150
160
170
Right In: 28759.090+/-7.662 χ²/NDF: 277639.9/15
Left Out: 29946.685+/-5.919 χ²/NDF:922753.1/16
Right Out: 28937.633+/-7.521 χ²/NDF: 106266.0/18
Left In: 30787.672+/-6.135 χ²/NDF:1115591.5/15
+ sign 29502.844+/-4.684 χ²/NDF: 1215437.1/32
All: 29771.636+/-3.337 χ²/NDF: 2480310.9/6
- sign 30048.487+/-4.754 χ²/NDF: 1258189.8/34




Right In: -8.599+/-8.678 $\chi^2$/NDF: 15.5/15

Left Out: 0.641+/-6.533 $\chi^2$/NDF:22.9/16

Right Out: 0.904+/-8.506 $\chi^2$/NDF: 17.6/18

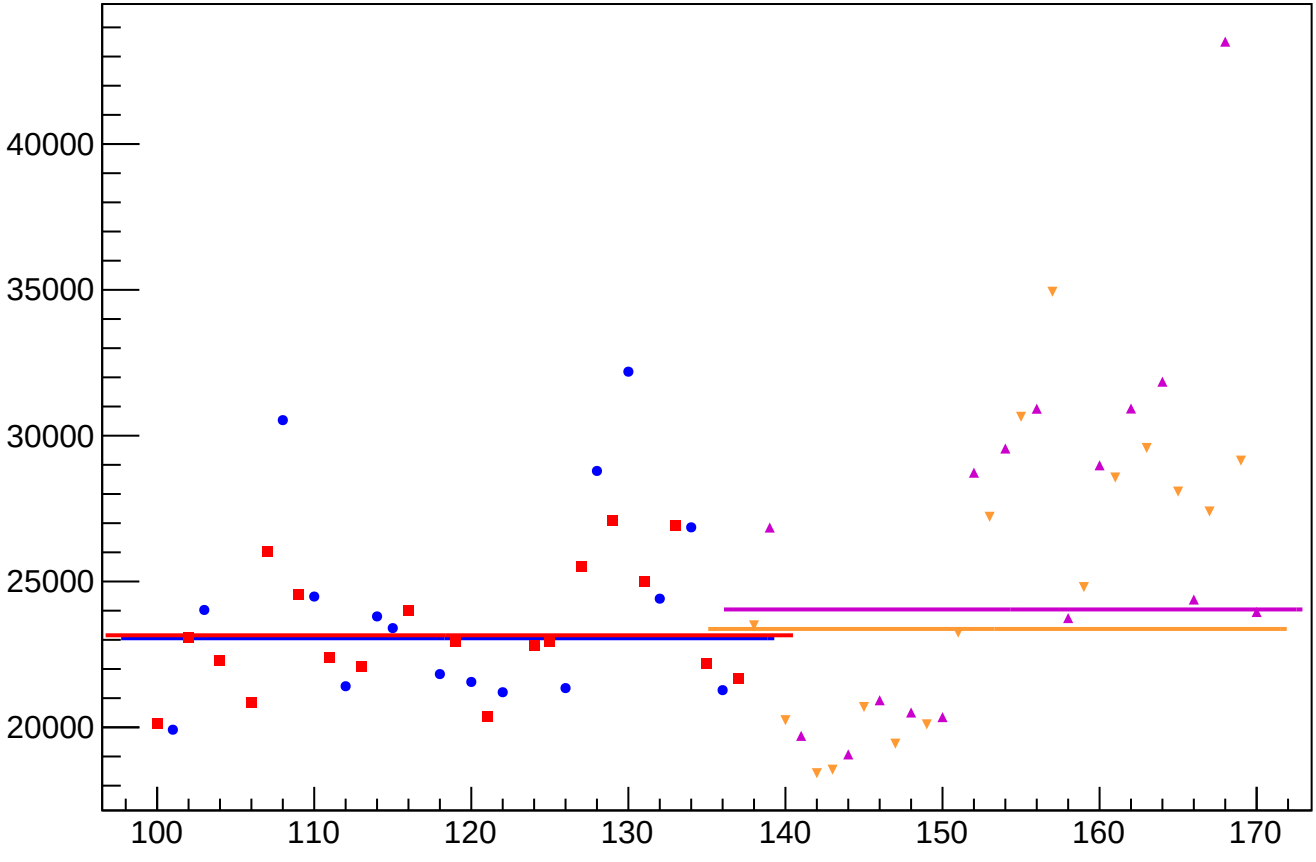
Left In: -4.685+/-6.774 $\chi^2$/NDF:8.4/15

+ sign -2.701+/-5.219 $\chi^2$/NDF: 39.2/32

All: -2.610+/-3.718 $\chi^2$/NDF: 65.4/67

- sign -2.516+/-5.299 $\chi^2$/NDF: 26.2/34

# diff_bpmE_11X12X_rms vs Slug




Right In: 23053.910+/-6.137 $\chi^2$/NDF: 261444.9/15

Left Out: 23373.301+/-4.619 $\chi^2$/NDF:917571.4/16

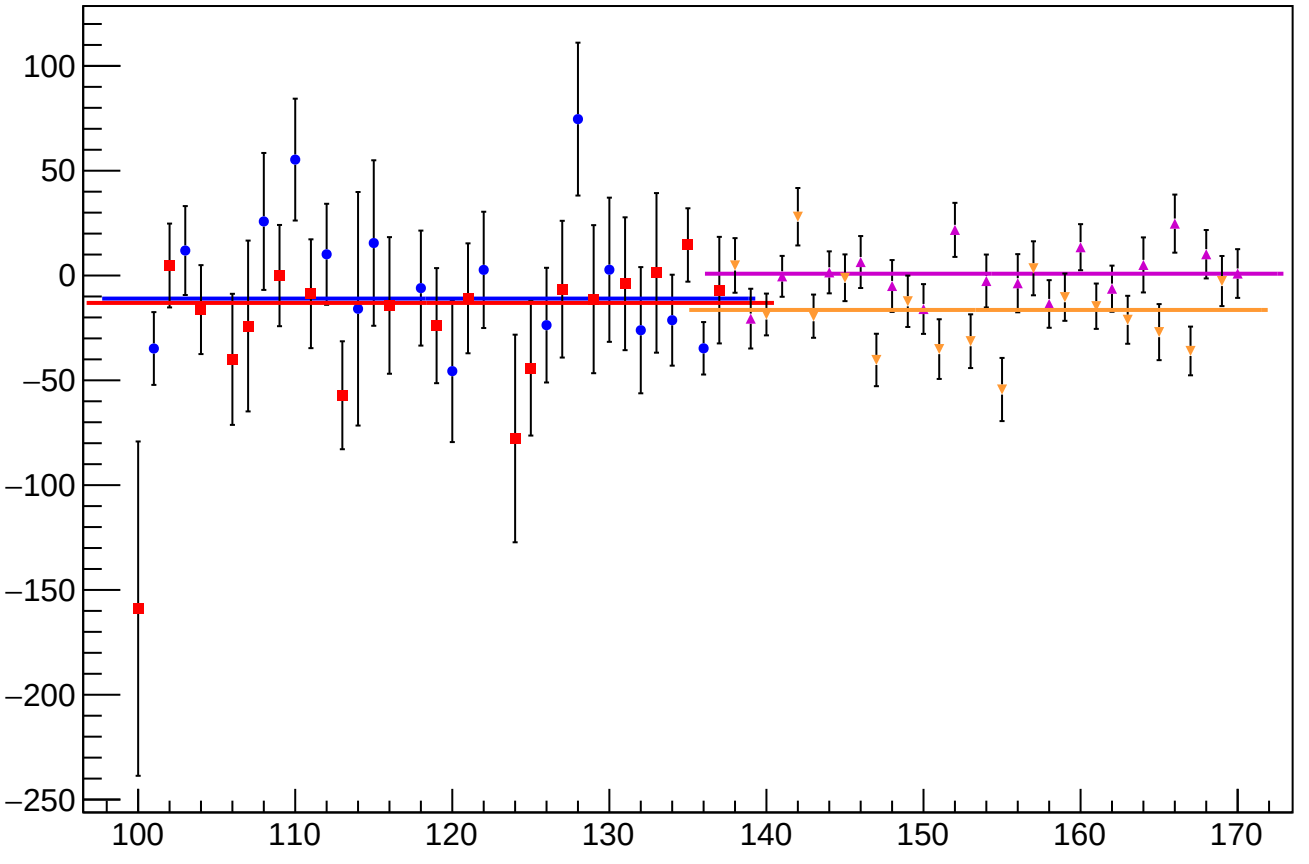
Right Out: 23155.251+/-6.015 $\chi^2$/NDF: 93894.1/18

Left In: 24041.665+/-4.790 $\chi^2$/NDF:1105480.1/15

+ sign 23257.782+/-3.691 $\chi^2$/NDF: 1180745.4/32

All: 23474.386+/-2.629 $\chi^2$/NDF: 2400405.7/6

- sign 23697.653+/-3.747 $\chi^2$/NDF: 1212665.0/34




Right In: -11.002+/-6.155 $\chi^2$/NDF: 22.0/15

Left Out: -16.424+/-2.920 $\chi^2$/NDF:36.0/16

Right Out: -13.071+/-6.382 $\chi^2$/NDF: 13.9/18

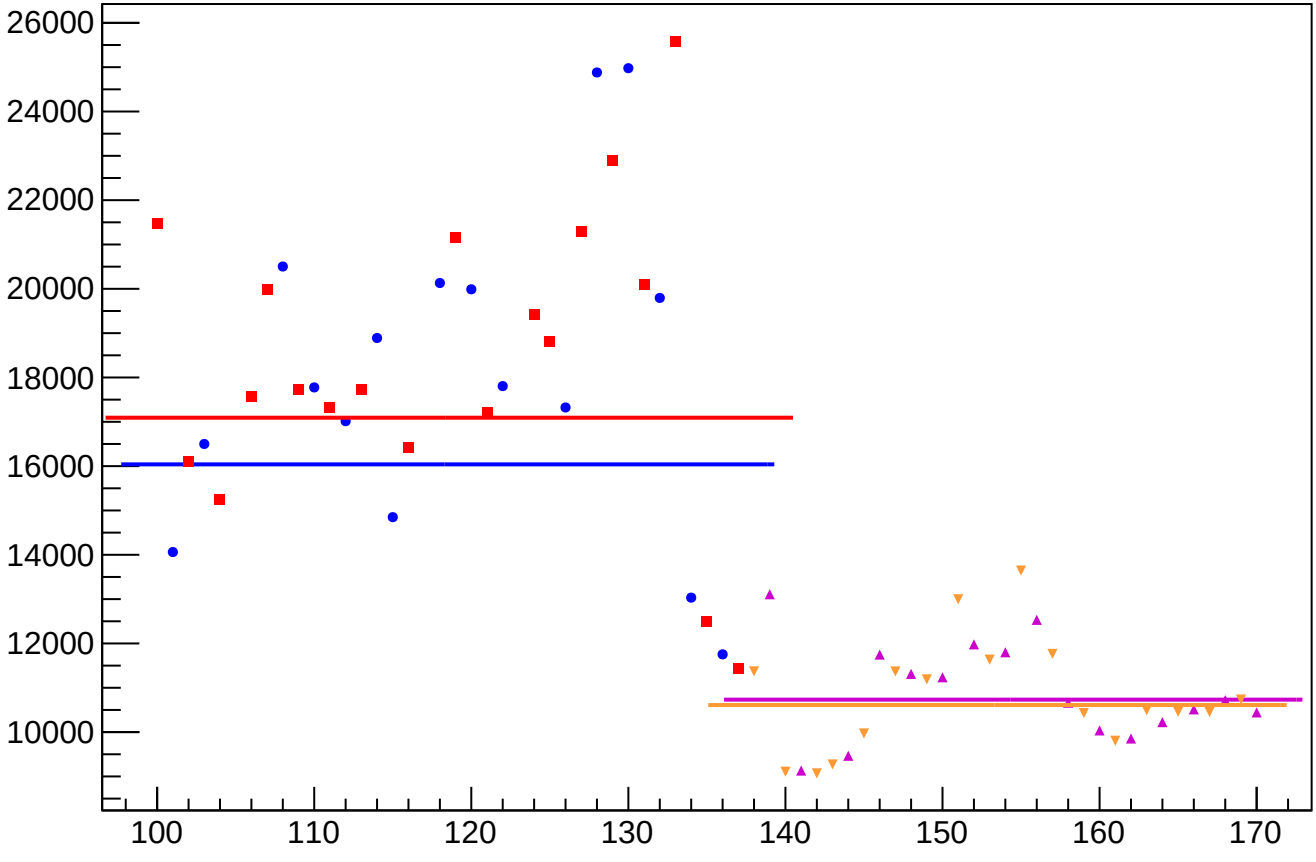
Left In: 0.860+/-2.972 $\chi^2$/NDF:14.6/15

+ sign -15.428+/-2.638 $\chi^2$/NDF: 58.7/32

All: -8.670+/-1.885 $\chi^2$/NDF: 104.5/67

- sign -1.623+/-2.694 $\chi^2$/NDF: 32.4/34

# diff_bpm4aesumX_rms vs Slug




Right In: 16040.060+/-4.352 $\chi^2$/NDF: 722678.9/15

Left Out: 10610.569+/-2.065 $\chi^2$/NDF:308495.2/16

Right Out: 17092.658+/-4.513 $\chi^2$/NDF: 535464.0/18

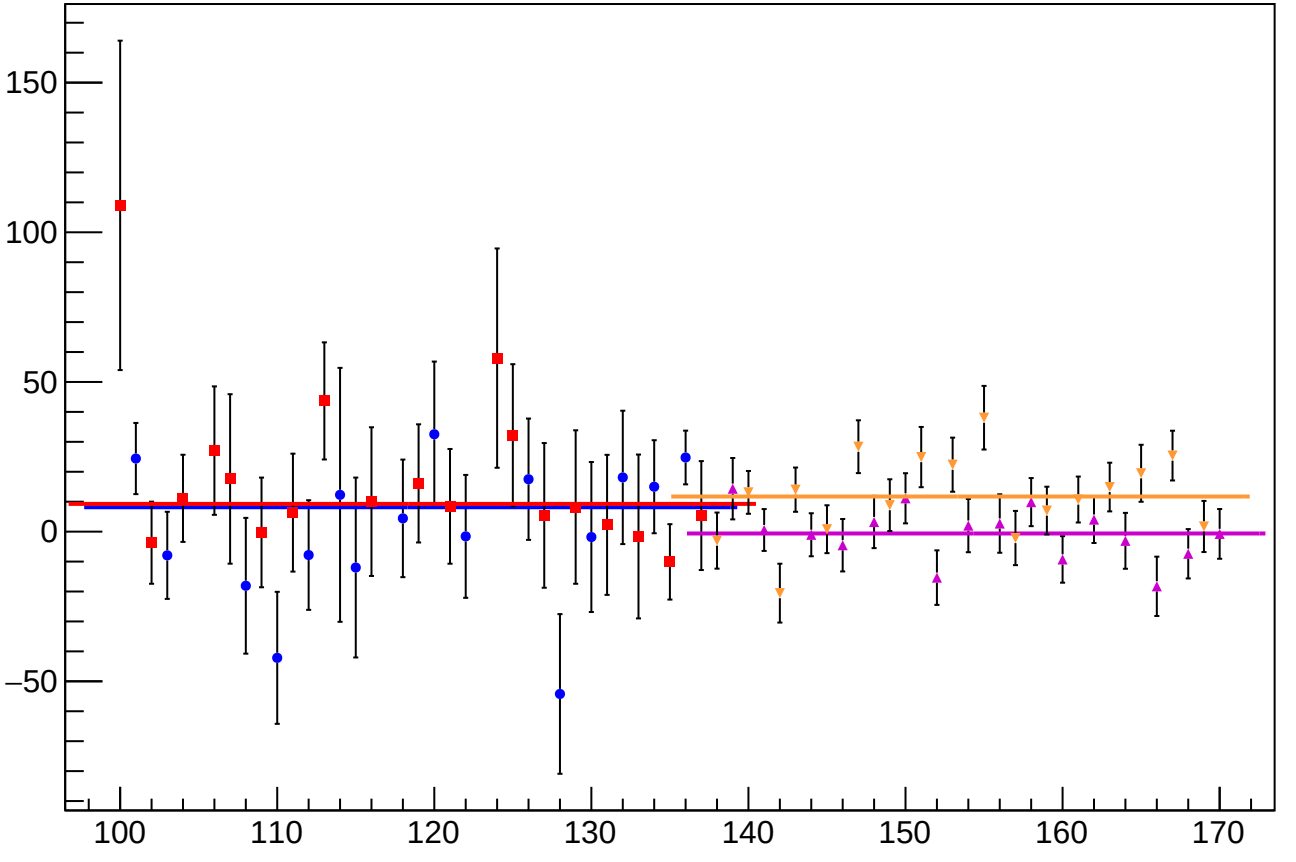
Left In: 10732.558+/-2.102 $\chi^2$/NDF:255073.3/15

+ sign 11608.071+/-1.865 $\chi^2$/NDF: 2301586.5/32

All: 11734.359+/-1.333 $\chi^2$/NDF: 4733831.1/6

- sign 11866.072+/-1.905 $\chi^2$/NDF: 2422881.6/34

# diff_bpm4aediffX_mean vs Slug




Right In: 8.150+/-4.423 $\chi^2$/NDF: 21.8/15

Left Out: 11.730+/-2.077 $\chi^2$/NDF:35.8/16

Right Out: 9.270+/-4.607 $\chi^2$/NDF: 13.9/18

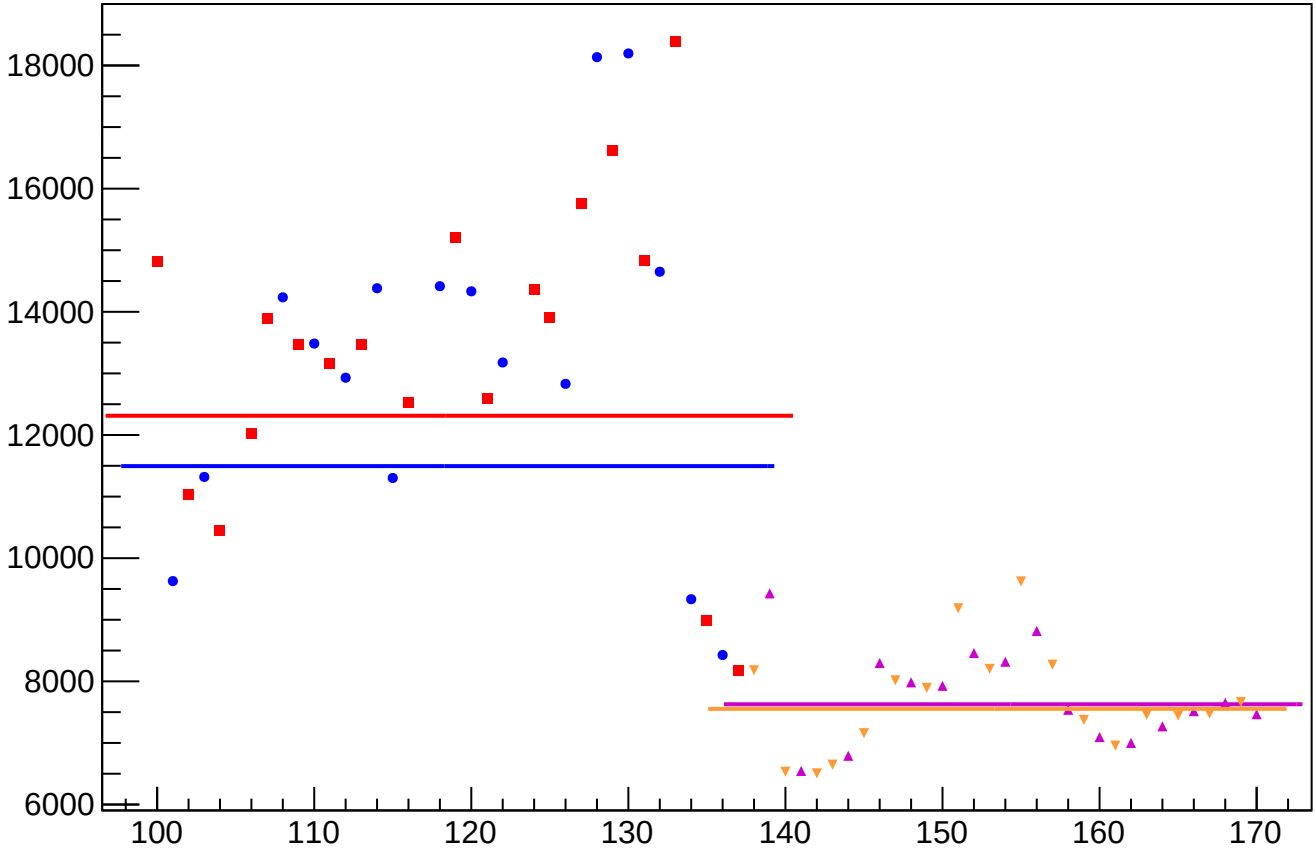
Left In: -0.614+/-2.112 $\chi^2$/NDF:14.6/15

+ sign 11.083+/-1.880 $\chi^2$/NDF: 58.1/32

All: 6.196+/-1.343 $\chi^2$/NDF: 104.1/67

- sign 1.102+/-1.920 $\chi^2$/NDF: 32.2/34

# diff_bpm4aediffX_rms vs Slug




Right In: 11494.969+/-3.127 $\chi^2$/NDF: 789990.1/15

Left Out: 7553.313+/-1.469 $\chi^2$/NDF:281490.8/16

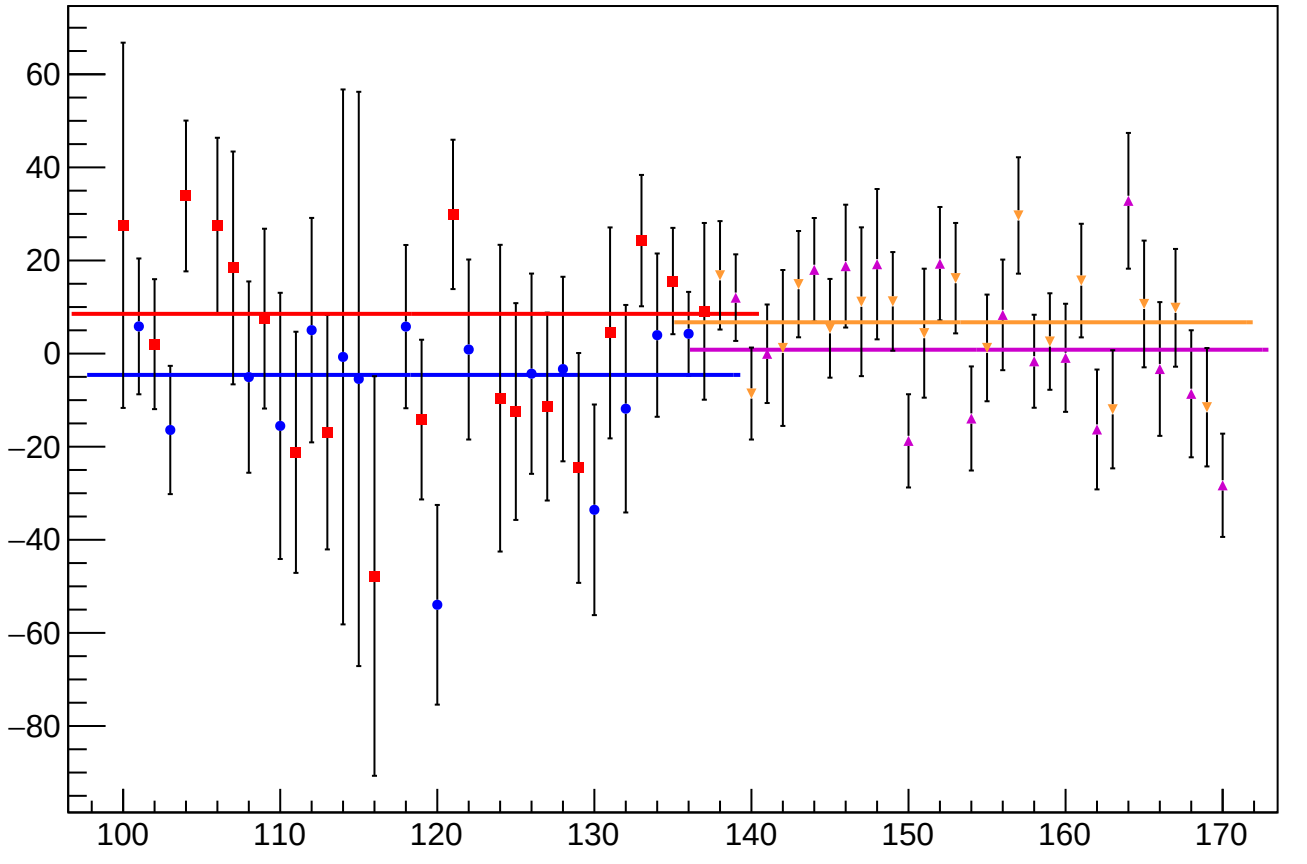
Right Out: 12312.550+/-3.258 $\chi^2$/NDF: 598755.3/18

Left In: 7628.315+/-1.493 $\chi^2$/NDF:239410.0/15

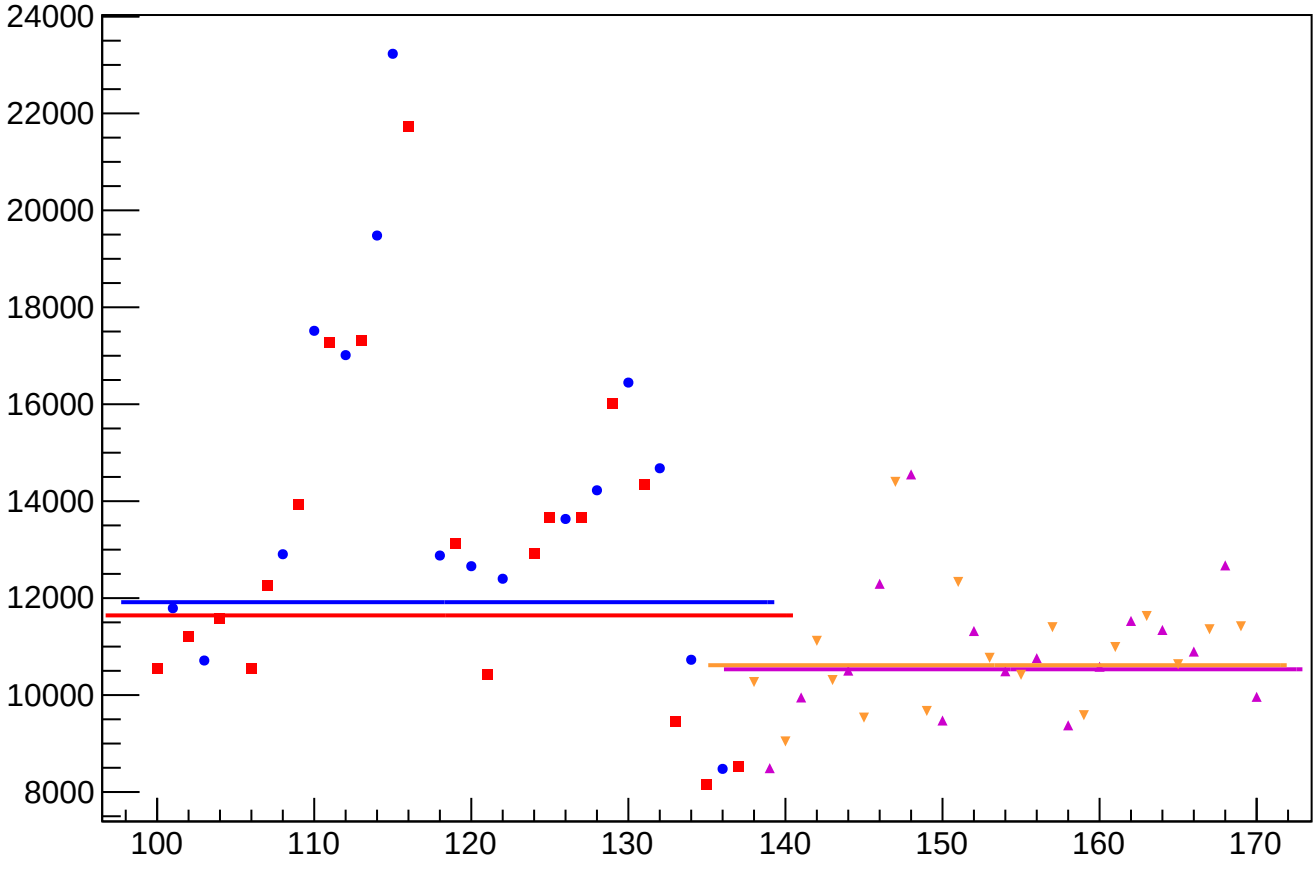
+ sign 8265.780+/-1.330 $\chi^2$/NDF: 2372854.0/32

All: 8351.880+/-0.950 $\chi^2$/NDF: 4928074.1/67

- sign 8441.623+/-1.357 $\chi^2$/NDF: 2546656.2/34


diff_bpm4aesumY_mean vs Slug
60
40
20
0
−20
−40
−60
−80
100
110
120
130
140
150
160
170
Right In: -4.578+/-4.554 χ²/NDF: 10.2/15
Left Out: 6.726+/-2.924 χ²/NDF:13.4/16
Right Out: 8.537+/-4.392 χ²/NDF: 17.2/18
Left In: 0.831+/-2.930 χ²/NDF:29.4/15
+ sign 3.426+/-2.461 χ²/NDF: 28.0/32
All: 3.315+/-1.732 χ²/NDF: 76.7/67
- sign 3.205+/-2.438 χ²/NDF: 48.7/34

# diff_bpm4aesumY_rms vs Slug




Right In: 11916.355+/-3.220 $\chi^2$/NDF: 749775.2/15

Left Out: 10616.094+/-2.068 $\chi^2$/NDF:293227.6/16

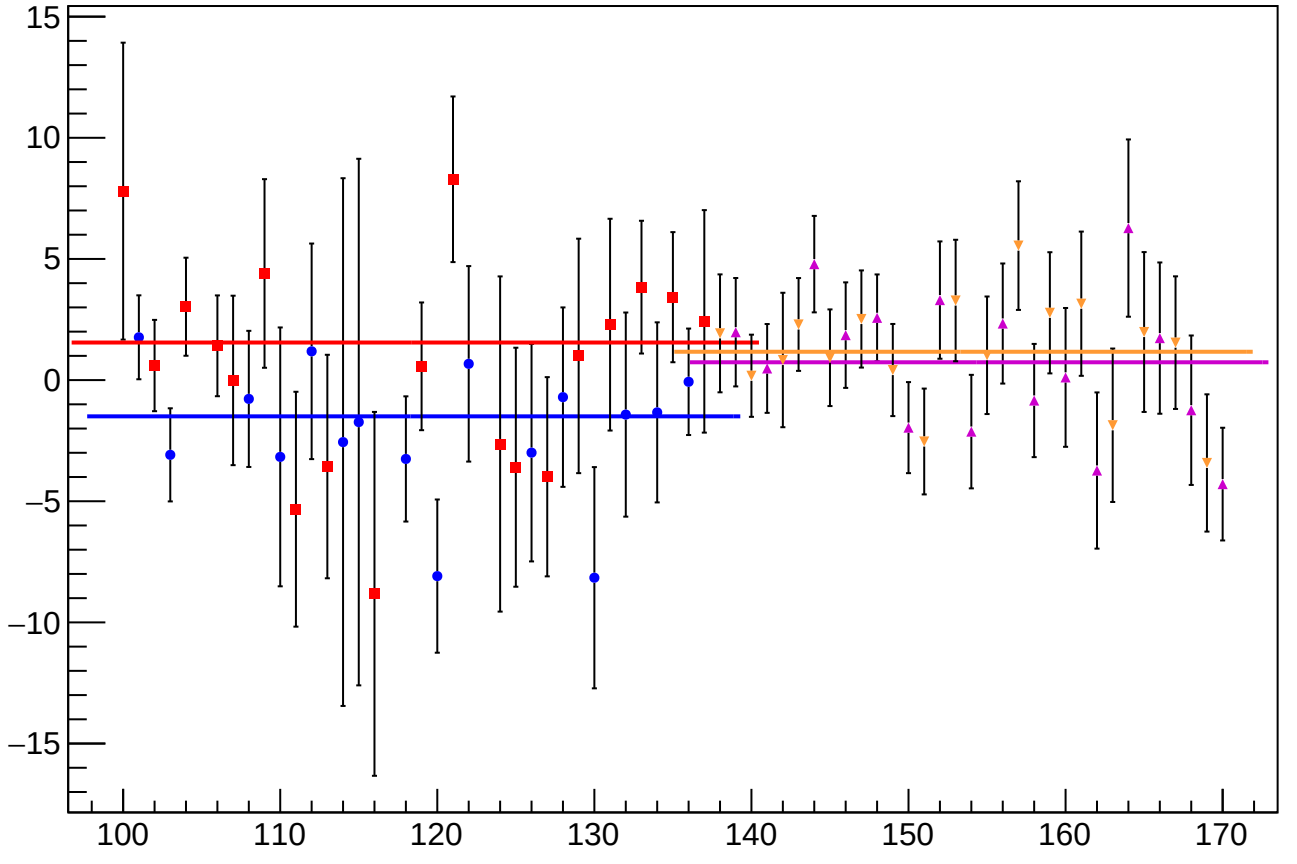
Right Out: 11643.622+/-3.106 $\chi^2$/NDF: 790359.6/18

Left In: 10531.970+/-2.072 $\chi^2$/NDF:394273.8/15

+ sign 10995.658+/-1.740 $\chi^2$/NDF: 1158449.3/32

All: 10934.455+/-1.225 $\chi^2$/NDF: 2434184.8/6

- sign 10874.381+/-1.724 $\chi^2$/NDF: 1273283.4/34




Right In: -1.496+/-0.778 $\chi^2$/NDF: 12.6/15

Left Out: 1.170+/-0.568 $\chi^2$/NDF:12.2/16

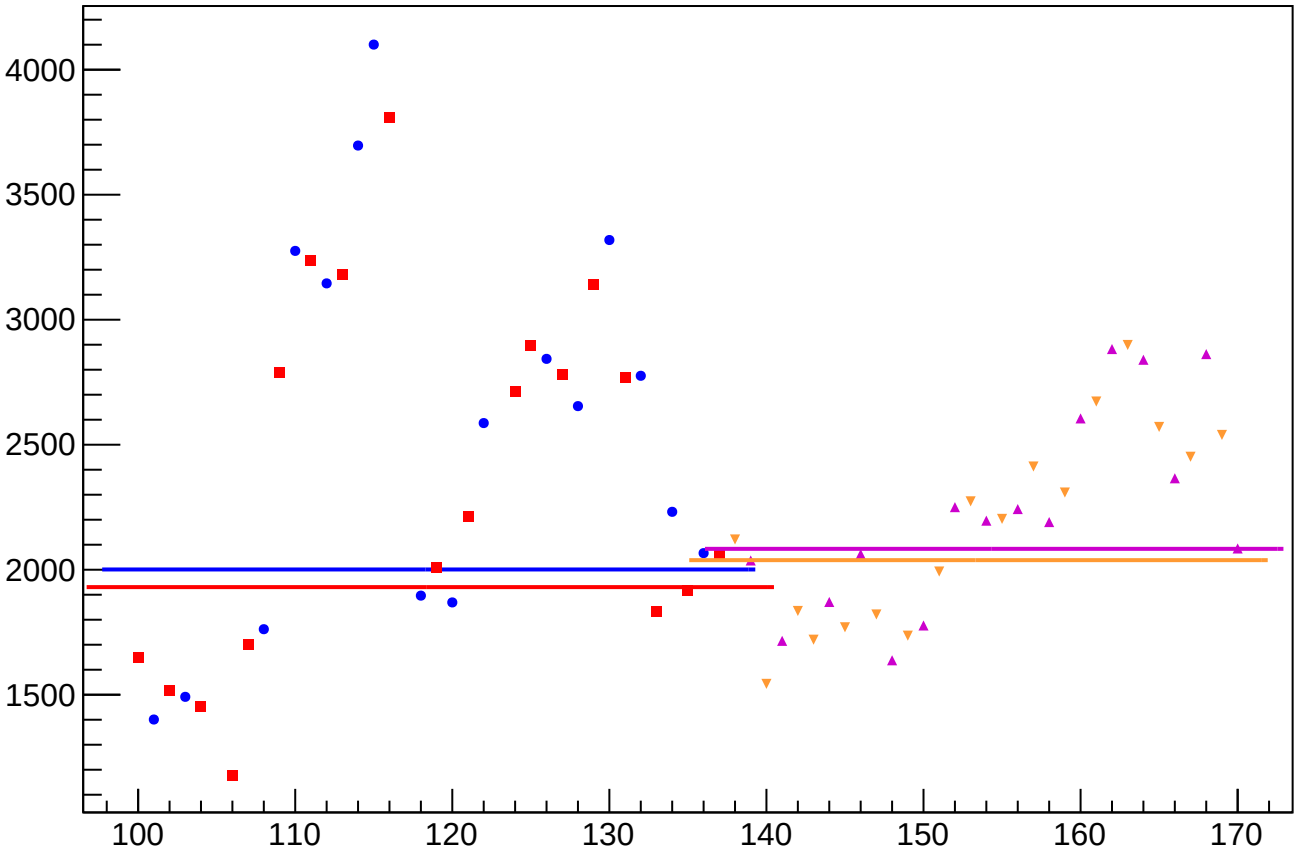
Right Out: 1.551+/-0.745 $\chi^2$/NDF: 16.3/18

Left In: 0.735+/-0.583 $\chi^2$/NDF:20.8/15

+ sign 0.243+/-0.459 $\chi^2$/NDF: 32.5/32

All: 0.644+/-0.325 $\chi^2$/NDF: 71.8/67

- sign 1.045+/-0.459 $\chi^2$/NDF: 37.8/34




Right In: 2001.000+/-0.550 $\chi^2$/NDF: 1189784.2/15

Left Out: 2038.277+/-0.402 $\chi^2$/NDF:838796.4/16

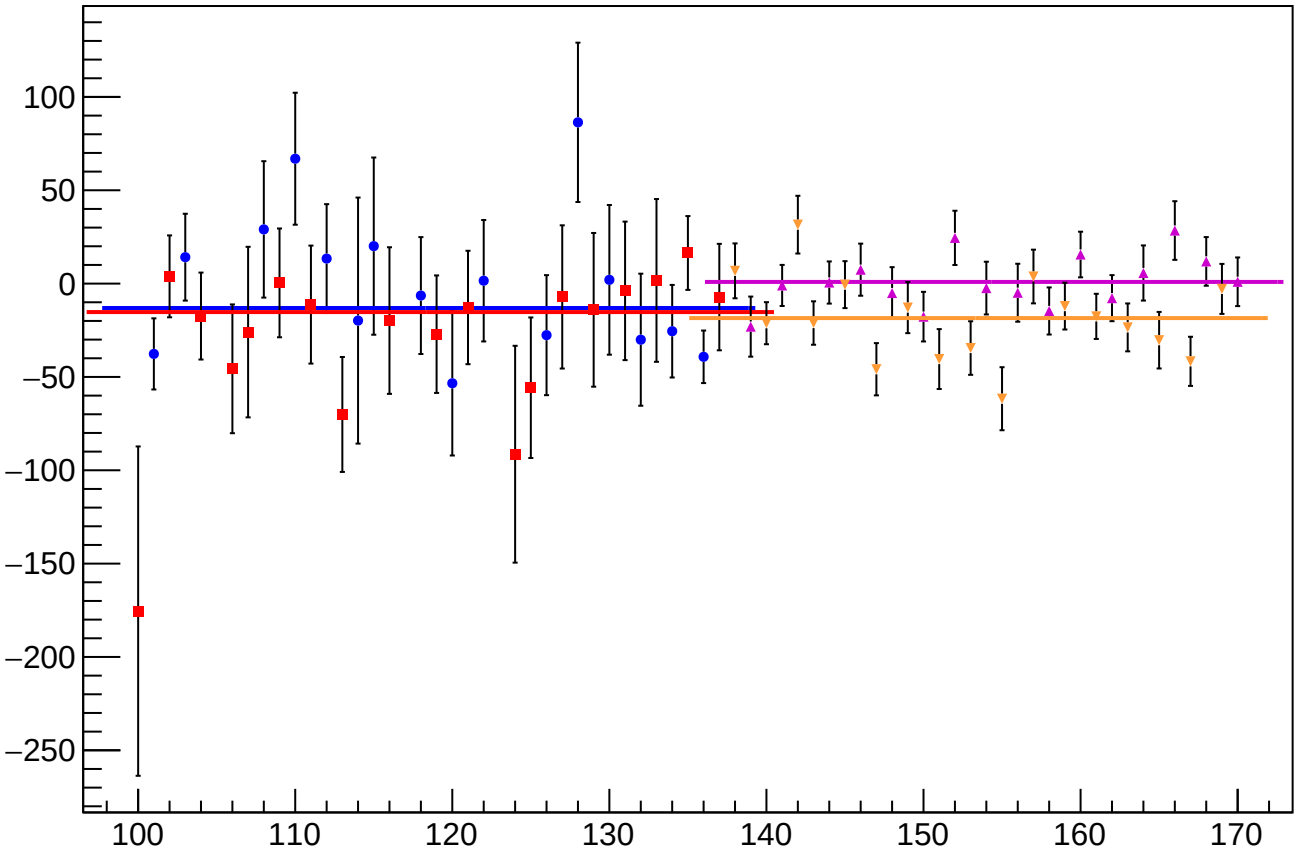
Right Out: 1930.434+/-0.526 $\chi^2$/NDF: 1403552.6/18

Left In: 2083.513+/-0.412 $\chi^2$/NDF:726860.2/15

+ sign 2025.320+/-0.324 $\chi^2$/NDF: 2031574.2/32

All: 2025.311+/-0.229 $\chi^2$/NDF: 4214384.7/67

- sign 2025.302+/-0.325 $\chi^2$/NDF: 2182810.5/34




Right In: -13.066+/-7.026 $\chi^2$/NDF: 21.9/15

Left Out: -18.471+/-3.281 $\chi^2$/NDF:37.1/16

Right Out: -15.253+/-7.321 $\chi^2$/NDF: 14.3/18

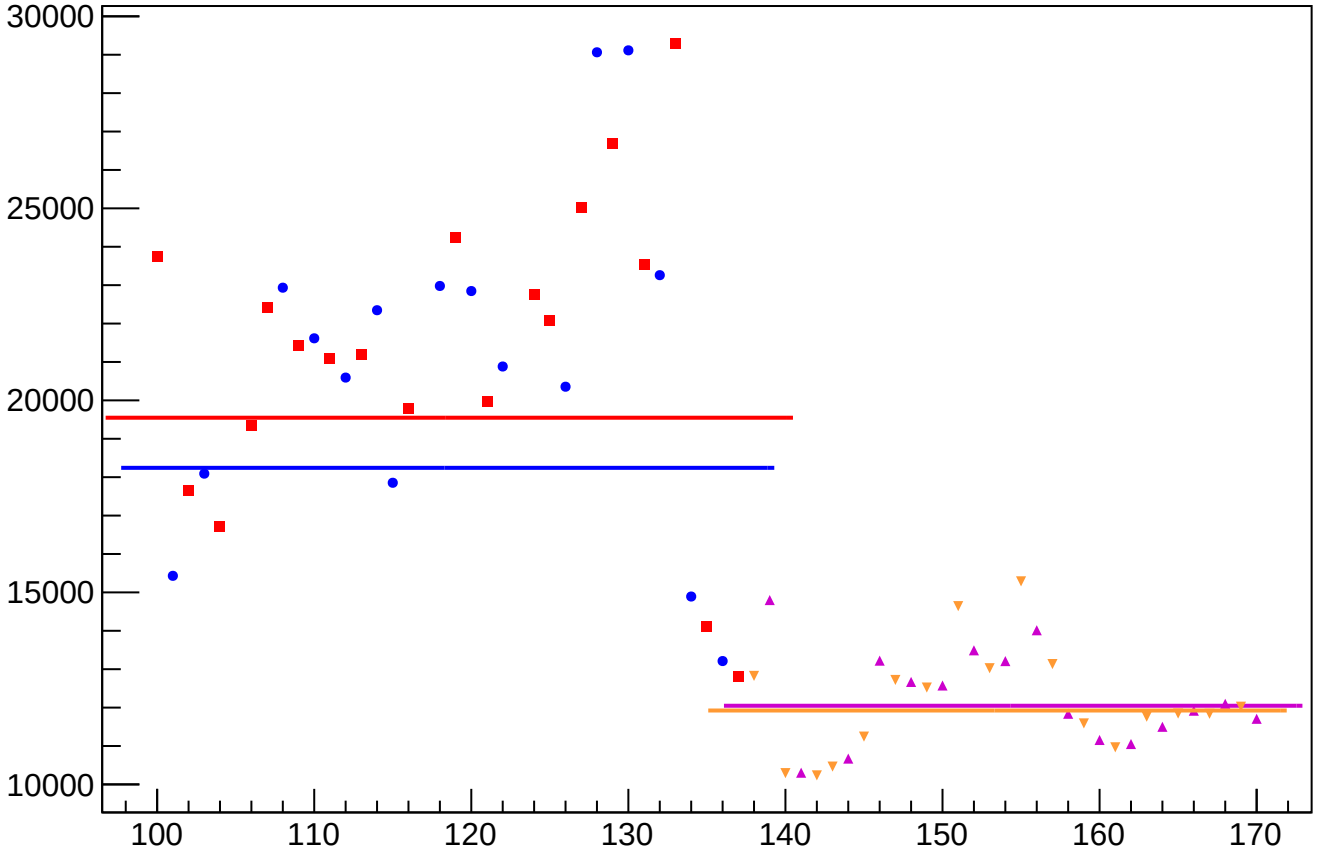
Left In: 0.901+/-3.336 $\chi^2$/NDF:14.8/15

+ sign -17.504+/-2.973 $\chi^2$/NDF: 59.5/32

All: -9.855+/-2.124 $\chi^2$/NDF: 106.2/67

- sign -1.877+/-3.036 $\chi^2$/NDF: 33.2/34

# diff_bpmtargetsumX_rms vs Slug




Right In: 18243.342+/-4.968 $\chi^2$/NDF: 819828.6/15

Left Out: 11924.349+/-2.320 $\chi^2$/NDF:298119.3/16

Right Out: 19548.426+/-5.176 $\chi^2$/NDF: 621716.4/18

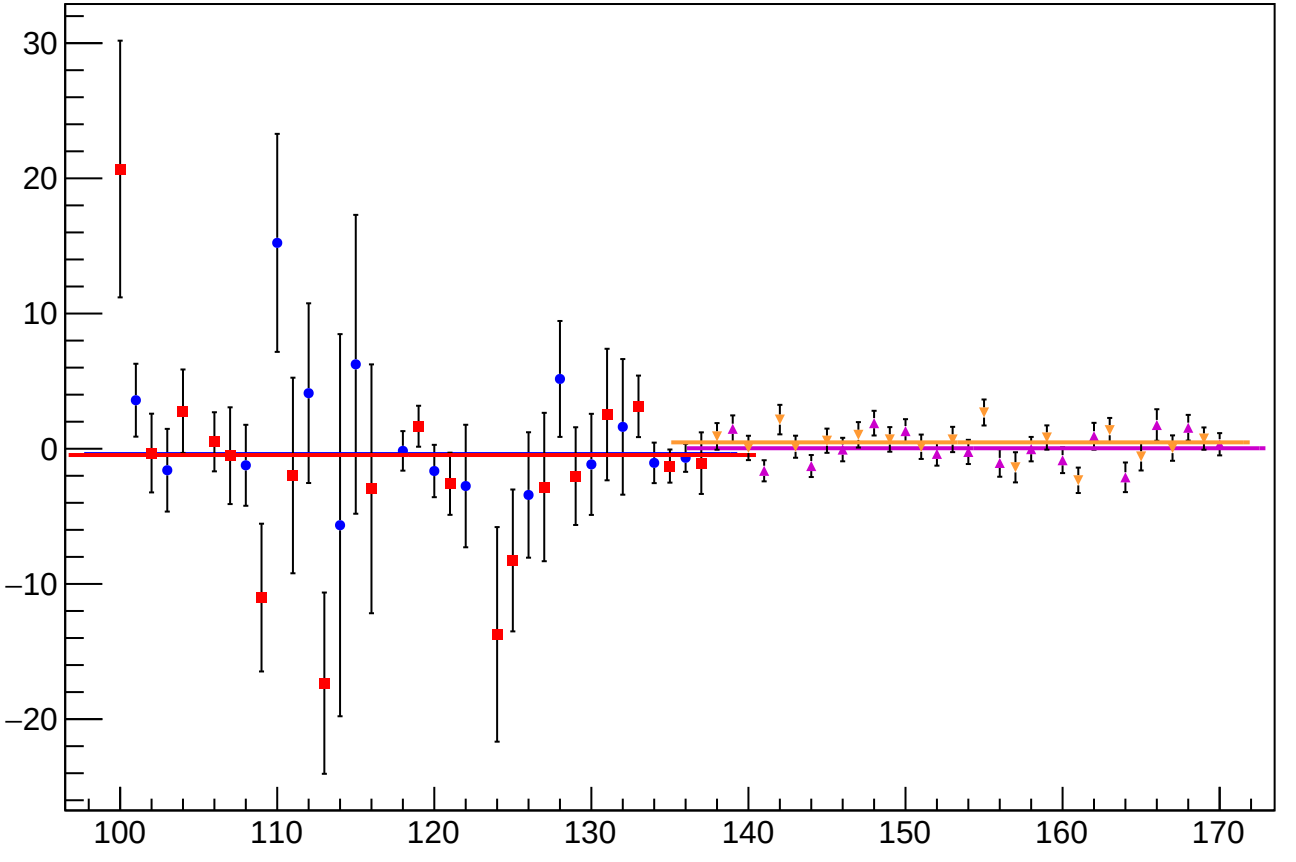
Left In: 12048.312+/-2.359 $\chi^2$/NDF:253568.0/15

+ sign 13055.424+/-2.102 $\chi^2$/NDF: 2445976.1/32

All: 13193.839+/-1.502 $\chi^2$/NDF: 5068329.8/6

- sign 13338.204+/-2.147 $\chi^2$/NDF: 2613495.2/34

# diff_bpmtargetdiffX_mean vs Slug




Right In: -0.394+/-0.600 $\chi^2$/NDF: 10.4/15

Left Out: 0.472+/-0.226 $\chi^2$/NDF:23.0/16

Right Out: -0.464+/-0.634 $\chi^2$/NDF: 28.0/18

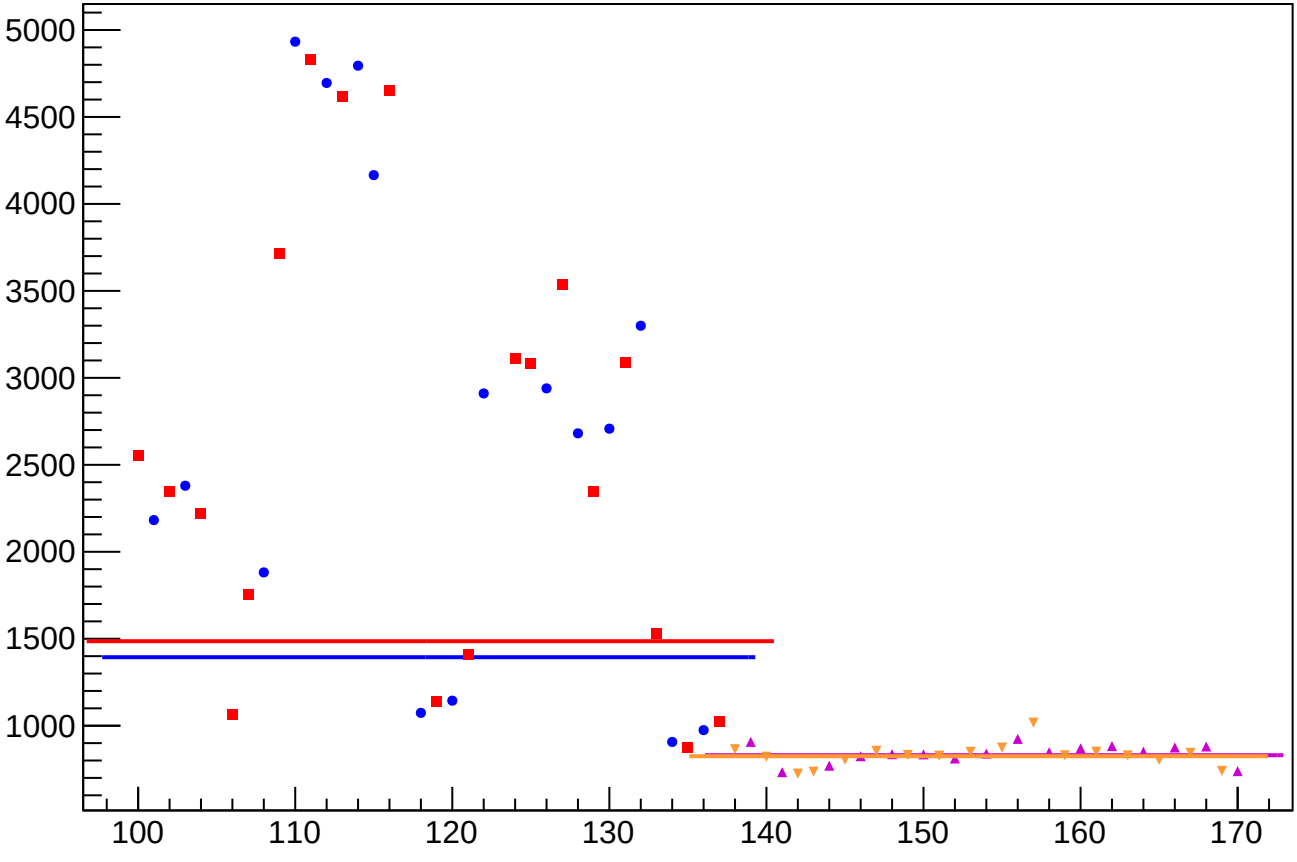
Left In: 0.036+/-0.229 $\chi^2$/NDF:27.3/15

+ sign 0.364+/-0.212 $\chi^2$/NDF: 35.2/32

All: 0.175+/-0.151 $\chi^2$/NDF: 92.7/67

- sign -0.022+/-0.216 $\chi^2$/NDF: 55.9/34

# diff_bpmtargetdiffX_rms vs Slug




Right In: 1393.912+/-0.424 $\chi^2$/NDF: 3381007.0/15

Left Out: 824.617+/-0.160 $\chi^2$/NDF:138319.5/16

Right Out: 1486.000+/-0.448 $\chi^2$/NDF: 3398817.4/18

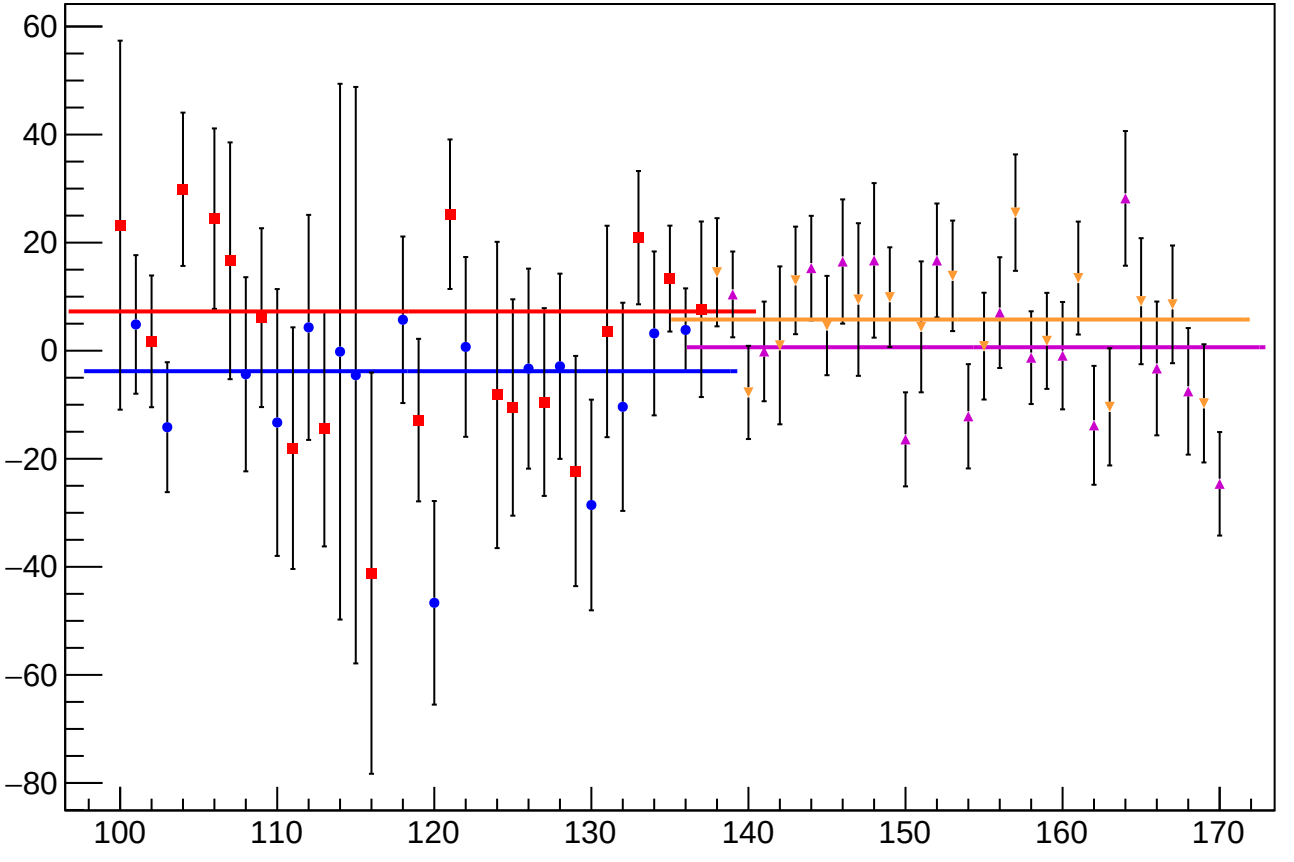
Left In: 830.528+/-0.162 $\chi^2$/NDF:115770.8/15

+ sign 895.345+/-0.150 $\chi^2$/NDF: 5095470.3/32

All: 900.797+/-0.107 $\chi^2$/NDF: 10503424.0/67

- sign 906.469+/-0.153 $\chi^2$/NDF: 5405243.3/34

# diff_bpmtargetsumY_mean vs Slug




Right In: -3.795+/-3.943 $\chi^2$/NDF: 10.1/15

Left Out: 5.771+/-2.528 $\chi^2$/NDF:13.5/16

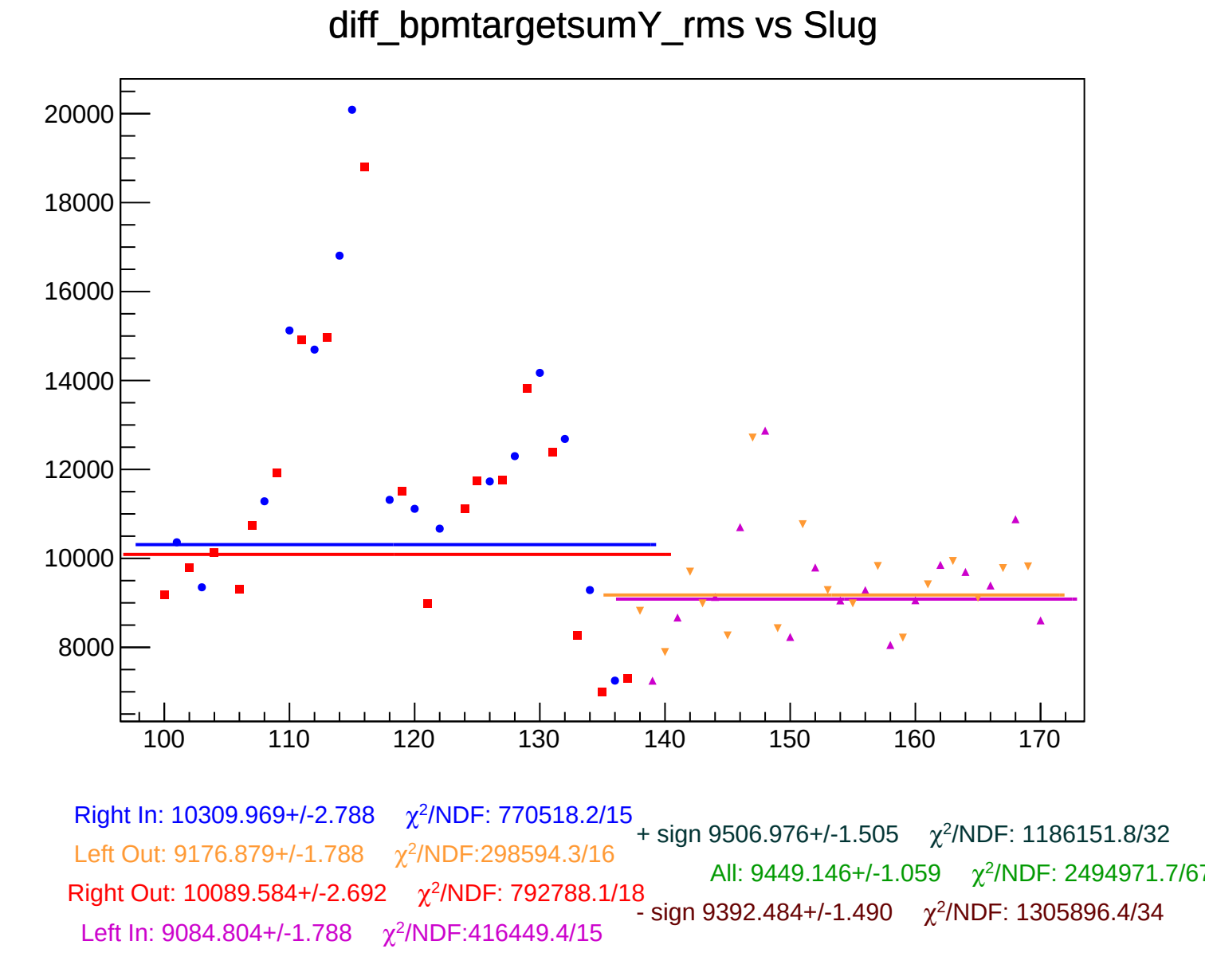
Right Out: 7.264+/-3.807 $\chi^2$/NDF: 17.3/18

Left In: 0.640+/-2.529 $\chi^2$/NDF:29.5/15

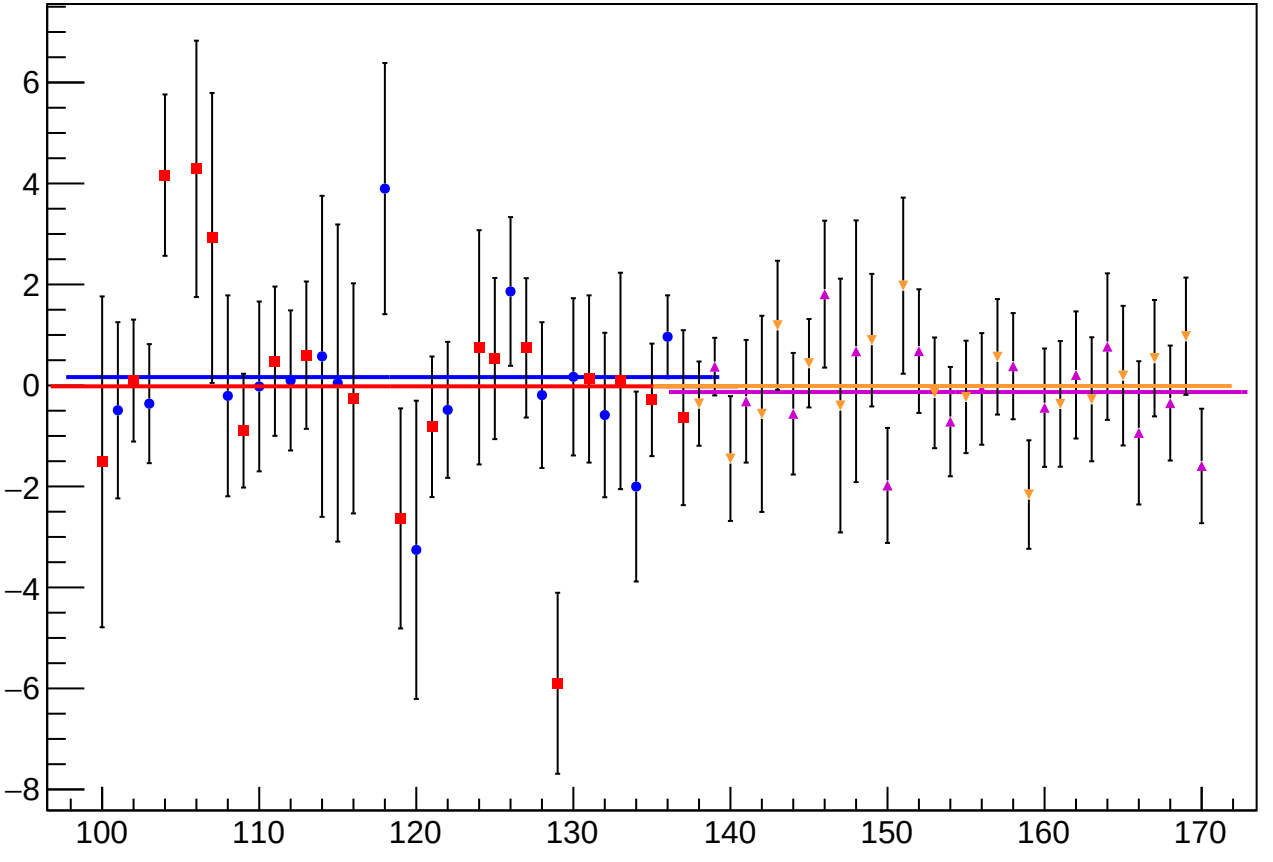
+ sign 2.984+/-2.128 $\chi^2$/NDF: 27.7/32

All: 2.825+/-1.497 $\chi^2$/NDF: 76.6/67

- sign 2.669+/-2.107 $\chi^2$/NDF: 48.9/34


diff_bpmtargetsumY_rms vs Slug
20000
18000
16000
14000
12000
10000
8000
100
110
120
130
140
150
160
170
Right In: 10309.969+/-2.788 χ²/NDF: 770518.2/15
Left Out: 9176.879+/-1.788 χ²/NDF:298594.3/16
Right Out: 10089.584+/-2.692 χ²/NDF: 792788.1/18
Left In: 9084.804+/-1.788 χ²/NDF:416449.4/15
+ sign 9506.976+/-1.505 χ²/NDF: 1186151.8/32
All: 9449.146+/-1.059 χ²/NDF: 2494971.7/67
- sign 9392.484+/-1.490 χ²/NDF: 1305896.4/34

# diff_bpmtargetdiffY_mean vs Slug




Right In: 0.165+/-0.386 $\chi^2$/NDF: 8.1/15

Left Out: -0.011+/-0.289 $\chi^2$/NDF:10.0/16

Right Out: -0.017+/-0.372 $\chi^2$/NDF: 25.2/18

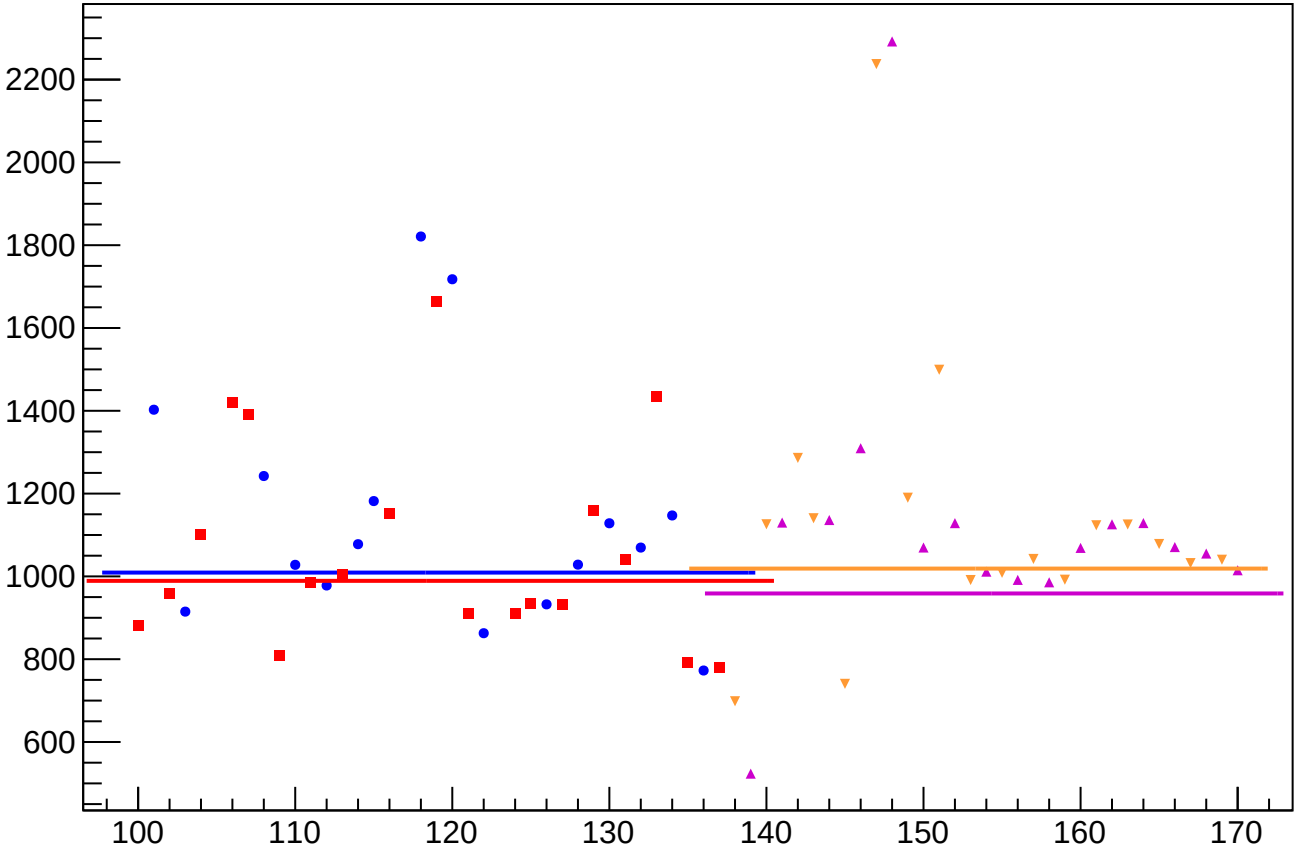
Left In: -0.130+/-0.278 $\chi^2$/NDF:9.0/15

+ sign 0.052+/-0.232 $\chi^2$/NDF: 18.2/32

All: -0.022+/-0.161 $\chi^2$/NDF: 52.6/67

- sign -0.090+/-0.223 $\chi^2$/NDF: 34.2/34

# diff_bpmtargetdiffY_rms vs Slug




Right In: 1009.222+/-0.273 $\chi^2$/NDF: 699303.9/15

Left Out: 1018.872+/-0.205 $\chi^2$/NDF:1261745.6/16

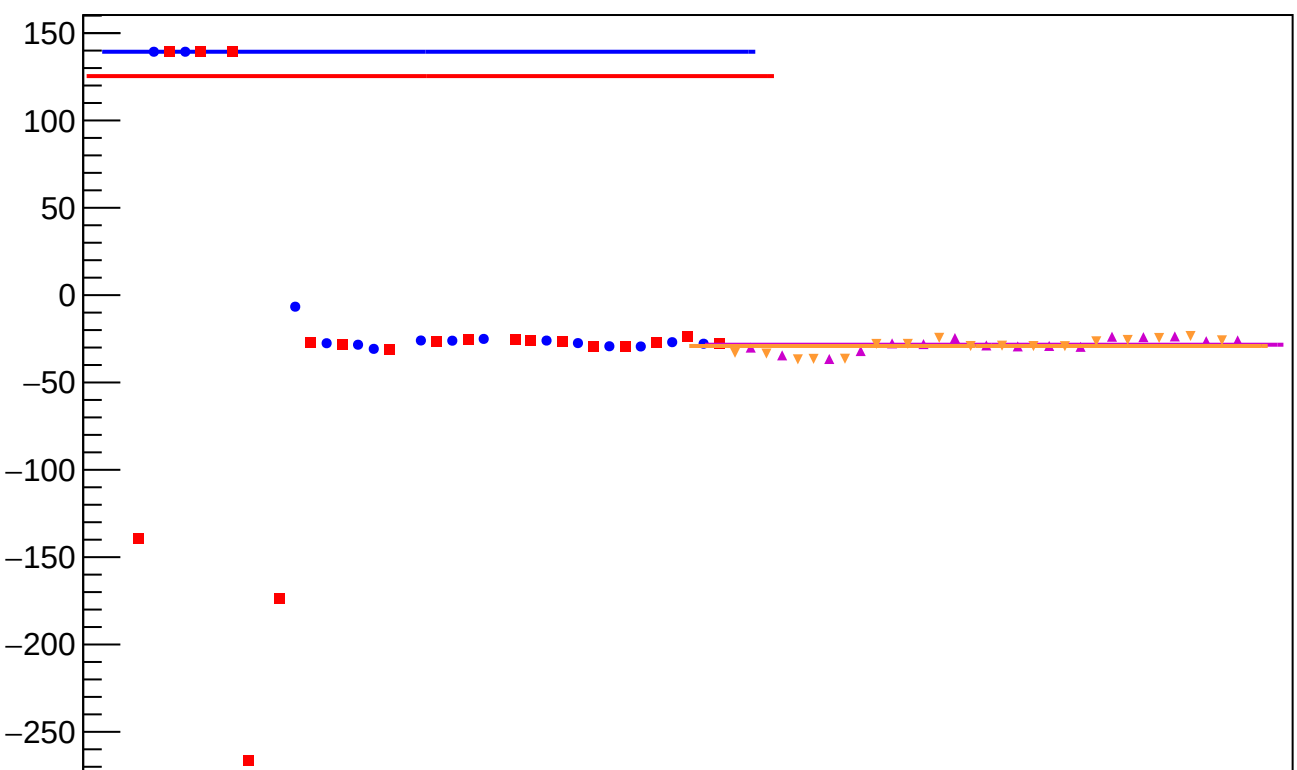
Right Out: 989.246+/-0.263 $\chi^2$/NDF: 575759.9/18

Left In: 958.766+/-0.196 $\chi^2$/NDF:2070993.0/15

+ sign 1015.403+/-0.164 $\chi^2$/NDF: 1961849.0/32

All: 991.632+/-0.113 $\chi^2$/NDF: 4657742.1/67

- sign 969.670+/-0.157 $\chi^2$/NDF: 2655365.8/34




Right In: 139.337+/-0.000 $\chi^2$/NDF: 47088045550.1/15

Left Out: -29.105+/-0.000 $\chi^2$/NDF:134164937.9/16

Right Out: 125.392+/-0.000 $\chi^2$/NDF: 774173119844052.5/18

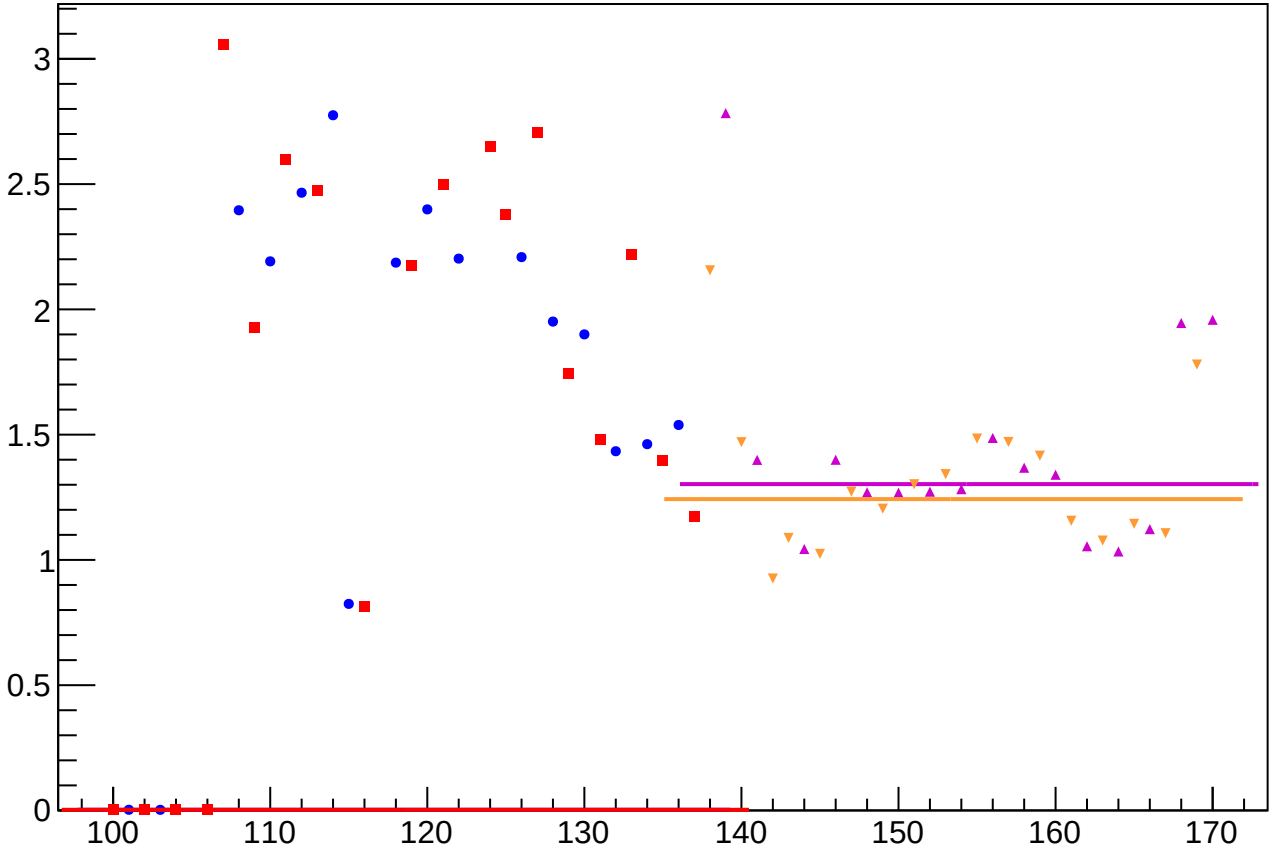
Left In: -28.386+/-0.000 $\chi^2$/NDF:97523337.6/15

+ sign 139.330+/-0.000 $\chi^2$/NDF: 240857844711.2/3

All: 131.813+/-0.000 $\chi^2$/NDF: 79333907728

- sign 125.387+/-0.000 $\chi^2$/NDF: 774317976218291

# yield_cav4bX_rms vs Slug




Right In: 0.003+/-0.000 $\chi^2$/NDF: 9565657.6/15

Left Out: 1.243+/-0.000 $\chi^2$/NDF:701089.9/16

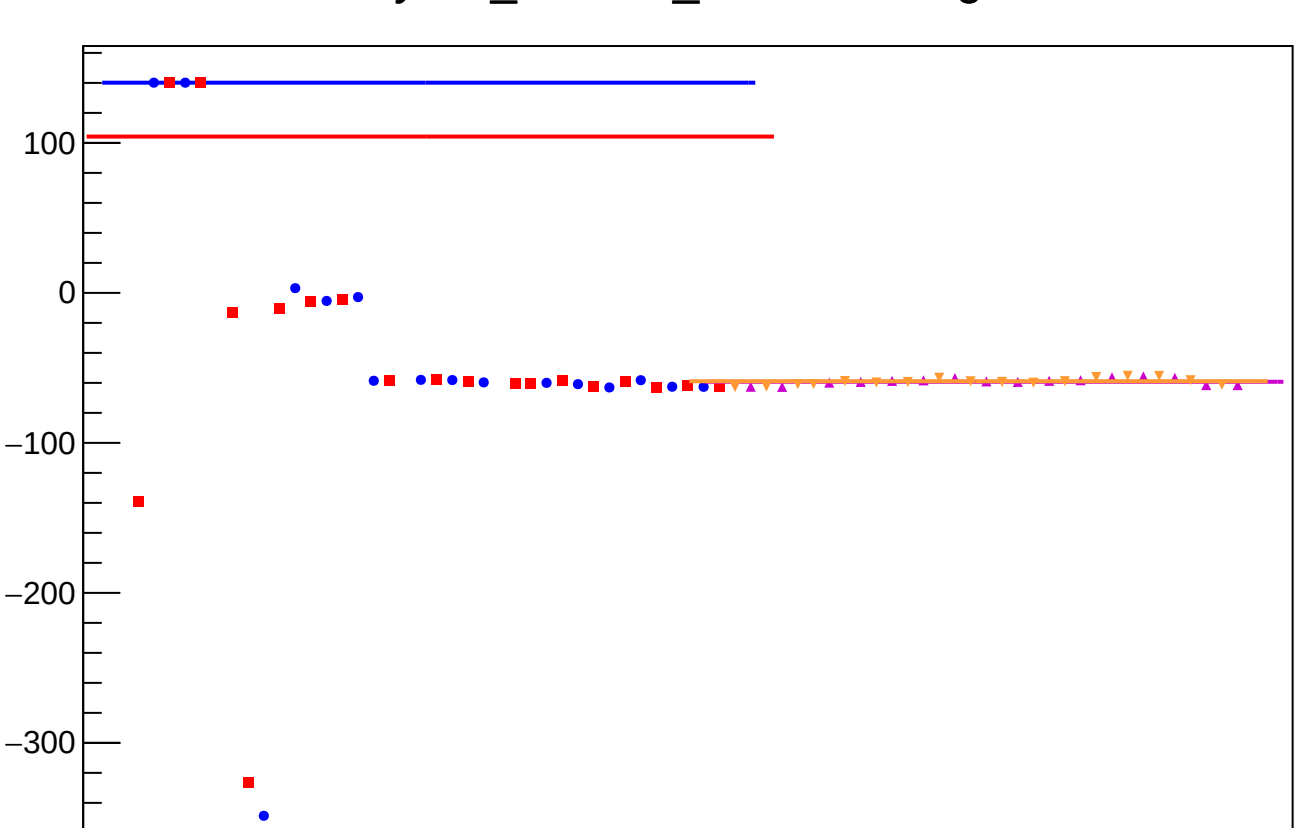
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 9733783.1/18

Left In: 1.303+/-0.000 $\chi^2$/NDF:1064683.9/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 31256524.3/32

All: 0.003+/-0.000 $\chi^2$/NDF: 62743457.2/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 31486622.3/34




Right In: 140.143+/-0.000 $\chi^2$/NDF: 187461723281.9/15

Left Out: -58.907+/-0.000 $\chi^2$/NDF:131757068.4/16

Right Out: 104.224+/-0.000 $\chi^2$/NDF: 1257401882577977.0/18

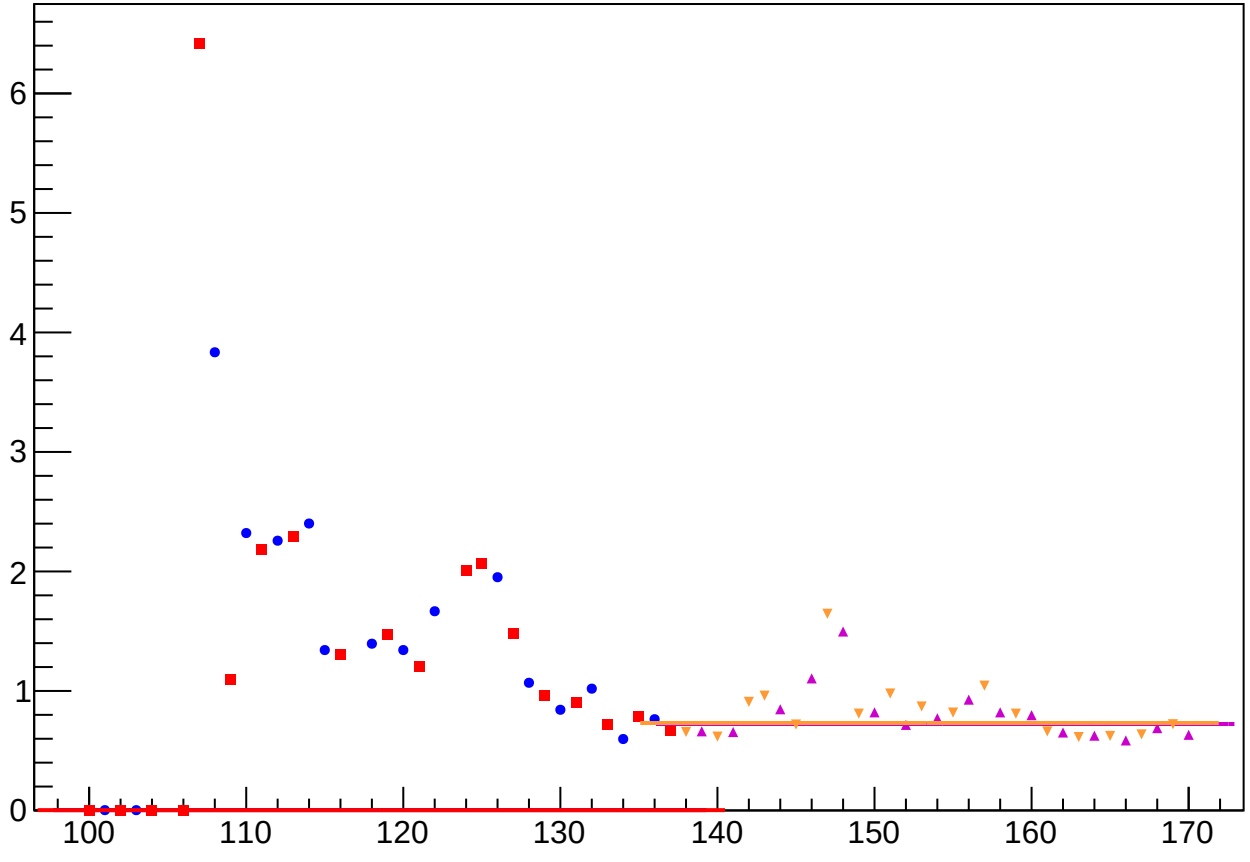
Left In: -59.258+/-0.000 $\chi^2$/NDF:118877960.2/15

+ sign 140.121+/-0.000 $\chi^2$/NDF: 972415685378.3/3

All: 120.813+/-0.000 $\chi^2$/NDF: 13821915912

- sign 104.208+/-0.000 $\chi^2$/NDF: 125794235413283

# yield_cav4bY_rms vs Slug




Right In: 0.003+/-0.000 $\chi^2$/NDF: 10578723.1/15

Left Out: 0.732+/-0.000 $\chi^2$/NDF:1011142.2/16

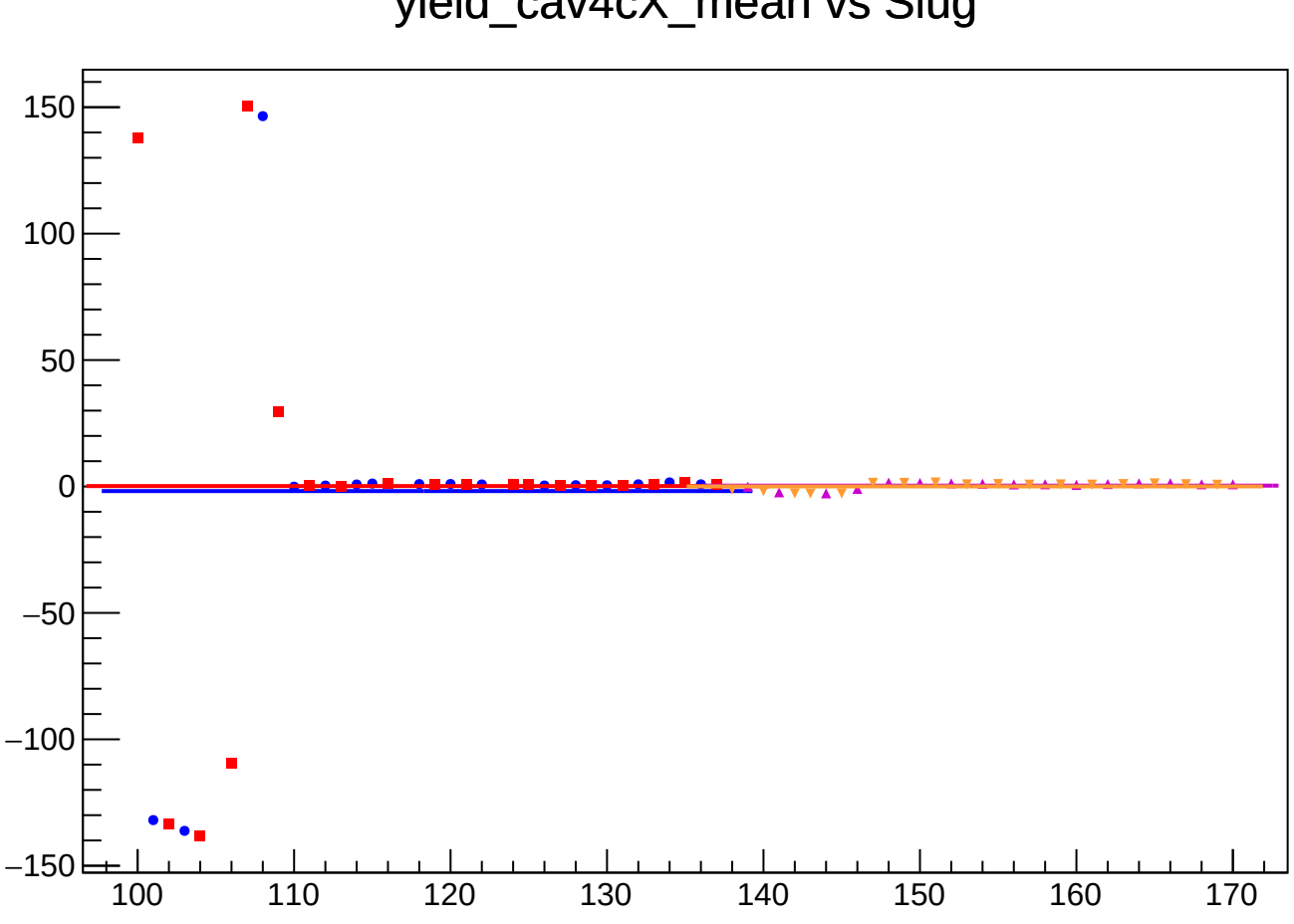
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 10266772.6/18

Left In: 0.723+/-0.000 $\chi^2$/NDF:839588.9/15

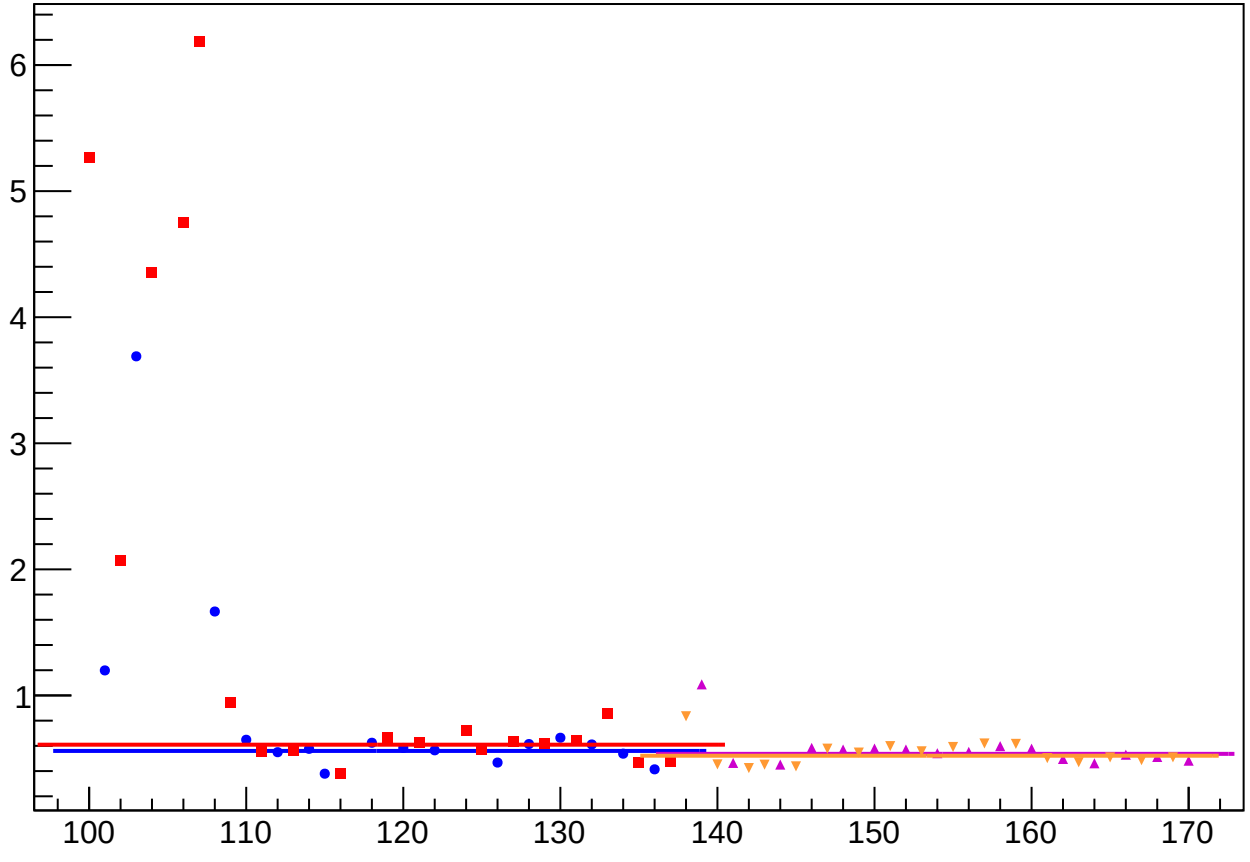
+ sign 0.003+/-0.000 $\chi^2$/NDF: 32654523.5/32

All: 0.003+/-0.000 $\chi^2$/NDF: 64763988.8/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 32109101.0/34


yield_cav4cX_mean vs Slug
150
100
50
0
−50
−100
−150
100
110
120
130
140
150
160
170
Right In: -1.818+/-0.000 χ²/NDF: 9887177310.2/15
Left Out: 0.034+/-0.000 χ²/NDF:98505936.9/16
Right Out: 0.165+/-0.000 χ²/NDF: 3611245020.0/18
Left In: 0.342+/-0.000 χ²/NDF:70201101.5/15
+ sign -0.507+/-0.000 χ²/NDF: 10024854335.0/32
All: -0.125+/-0.000 χ²/NDF: 1372349380.2/
- sign 0.295+/-0.000 χ²/NDF: 3681755653.8/34

# yield_cav4cX_rms vs Slug




Right In: 0.560+/-0.000 $\chi^2$/NDF: 1598439.5/15

Left Out: 0.522+/-0.000 $\chi^2$/NDF:475164.4/16

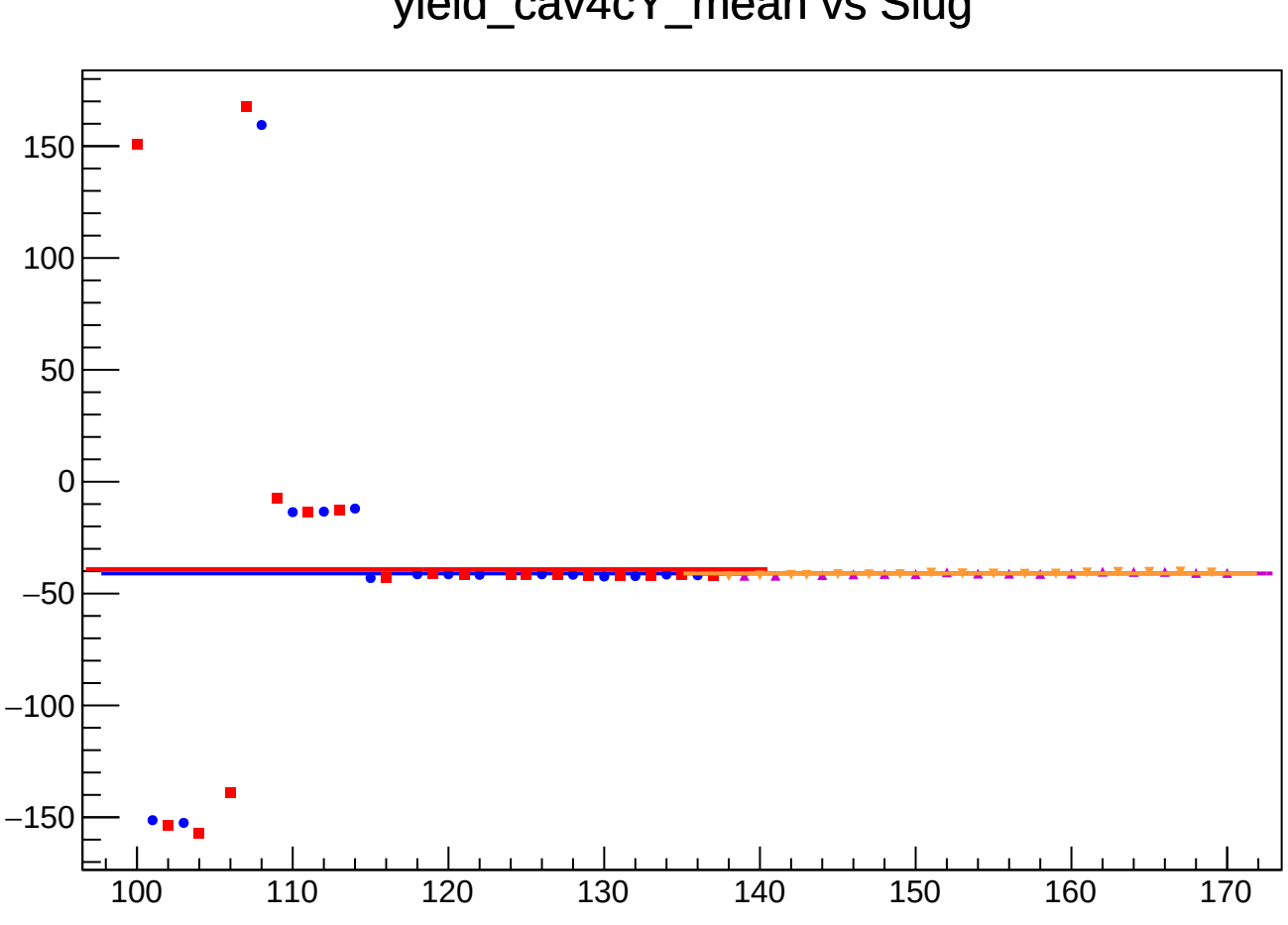
Right Out: 0.609+/-0.000 $\chi^2$/NDF: 2476010.3/18

Left In: 0.537+/-0.000 $\chi^2$/NDF:614557.6/15

+ sign 0.533+/-0.000 $\chi^2$/NDF: 2106515.8/32

All: 0.544+/-0.000 $\chi^2$/NDF: 5328885.1/67

- sign 0.556+/-0.000 $\chi^2$/NDF: 3194368.8/34




Right In: -40.987+/-0.000 $\chi^2$/NDF: 3449622021.8/15

Left Out: -40.997+/-0.000 $\chi^2$/NDF:31015632.1/16

Right Out: -39.101+/-0.000 $\chi^2$/NDF: 2480133442.0/18

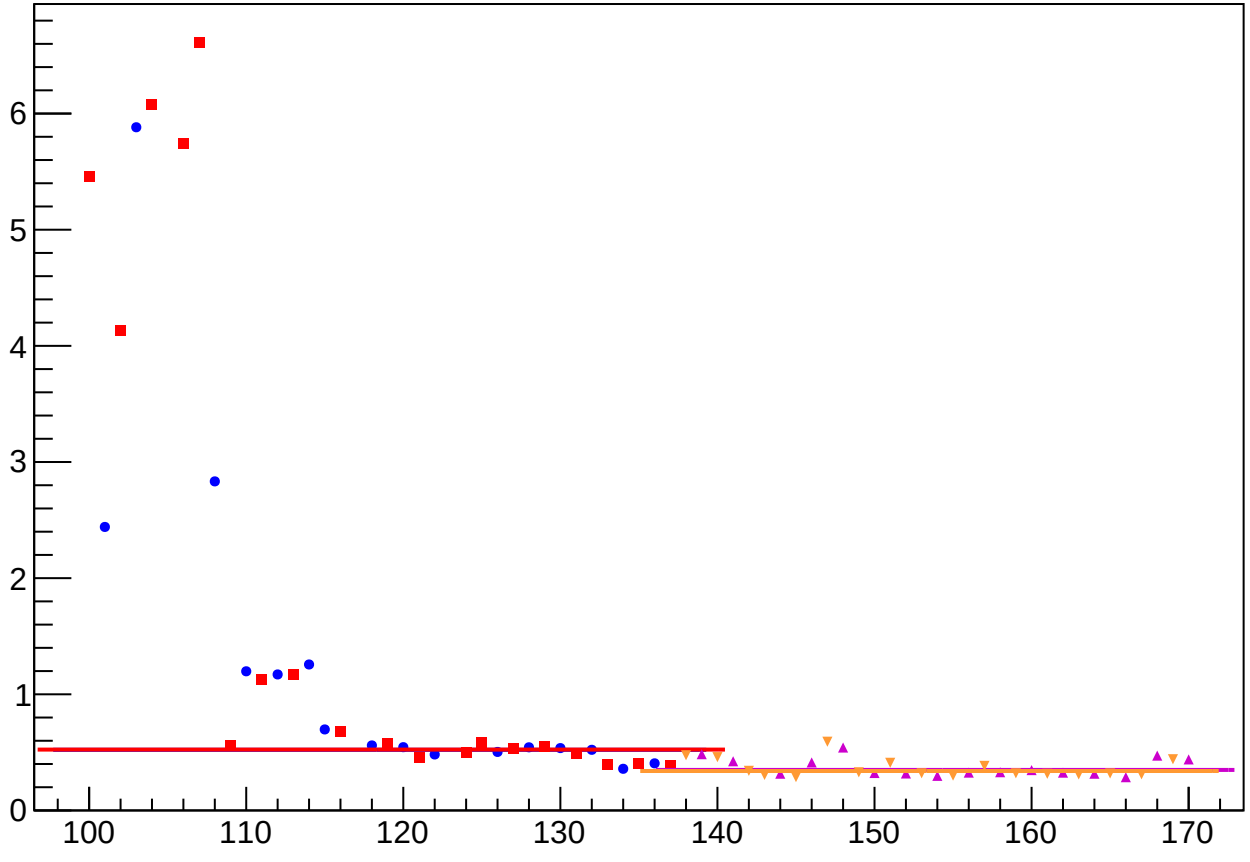
Left In: -41.006+/-0.000 $\chi^2$/NDF:27657354.7/15

+ sign -40.996+/-0.000 $\chi^2$/NDF: 3480639311.6/32

All: -40.860+/-0.000 $\chi^2$/NDF: 6048260081.0/

- sign -40.715+/-0.000 $\chi^2$/NDF: 2562848949.3/34

# yield_cav4cY_rms vs Slug




Right In: 0.522+/-0.000 $\chi^2$/NDF: 2949327.6/15

Left Out: 0.340+/-0.000 $\chi^2$/NDF:801609.8/16

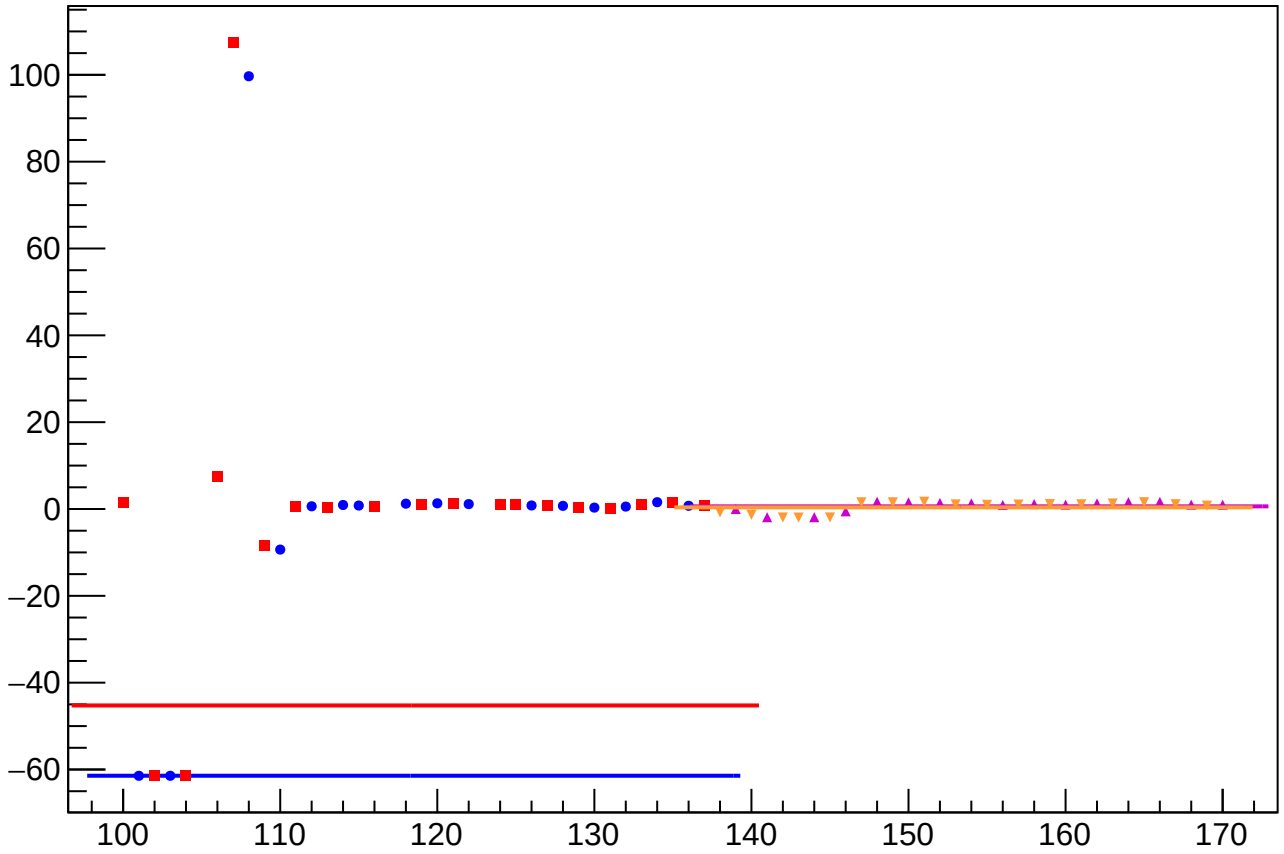
Right Out: 0.524+/-0.000 $\chi^2$/NDF: 3264460.0/18

Left In: 0.349+/-0.000 $\chi^2$/NDF:759894.0/15

+ sign 0.366+/-0.000 $\chi^2$/NDF: 4797933.1/32

All: 0.371+/-0.000 $\chi^2$/NDF: 9762596.7/67

- sign 0.376+/-0.000 $\chi^2$/NDF: 4954480.1/34




Right In: -61.436+/-0.000 $\chi^2$/NDF: 273496278670.9/15

Left Out: 0.378+/-0.000 $\chi^2$/NDF:100798962.1/16

Right Out: -45.245+/-0.000 $\chi^2$/NDF: 357870328061478.0/18

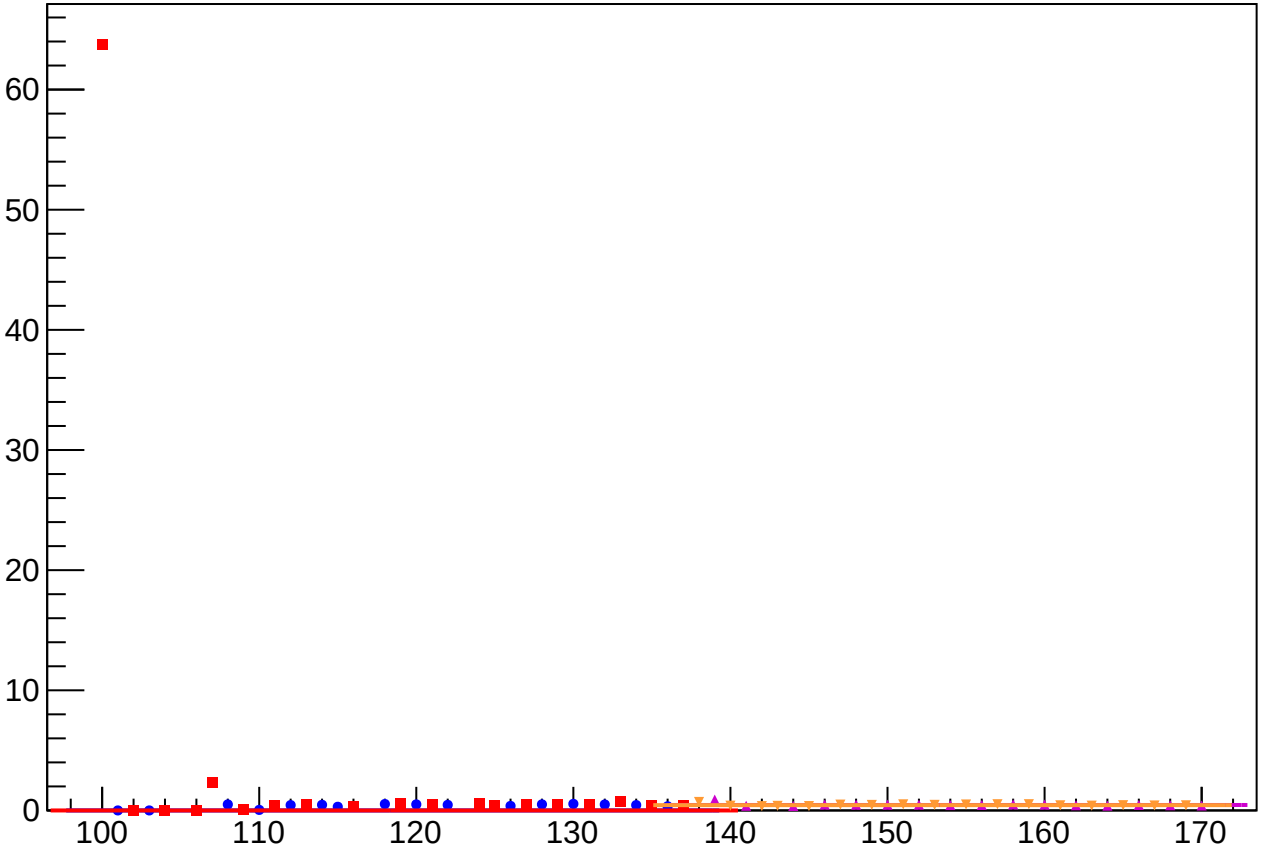
Left In: 0.610+/-0.000 $\chi^2$/NDF:77245913.3/15

+ sign -61.427+/-0.000 $\chi^2$/NDF: 482969998710.9/3

All: -52.742+/-0.000 $\chi^2$/NDF: 409422629341

- sign -45.239+/-0.000 $\chi^2$/NDF: 357978133395954.

# yield_cav4dX_rms vs Slug




Right In: 0.001+/-0.000 $\chi^2$/NDF: 9156181.6/15

Left Out: 0.442+/-0.000 $\chi^2$/NDF:462507.2/16

Right Out: 0.001+/-0.000 $\chi^2$/NDF: 9345109.5/18

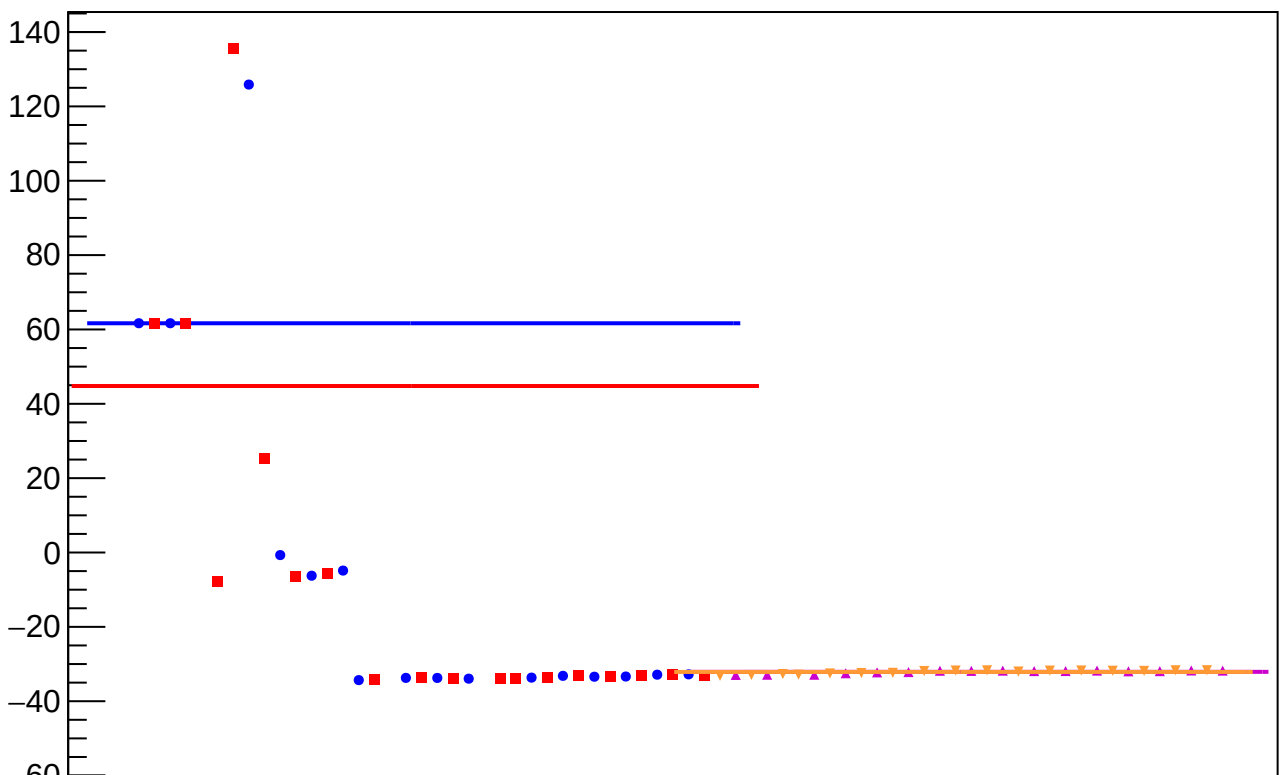
Left In: 0.455+/-0.000 $\chi^2$/NDF:584696.1/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 30863380.8/32

All: 0.002+/-0.000 $\chi^2$/NDF: 61893941.5/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 31030489.4/34

# yield_cav4dY_mean vs Slug




Right In: 61.662+/-0.000 $\chi^2$/NDF: 369463062074.0/15

Left Out: -32.125+/-0.000 $\chi^2$/NDF:35579810.1/16

Right Out: 44.786+/-0.000 $\chi^2$/NDF: 366094778229951.8/18

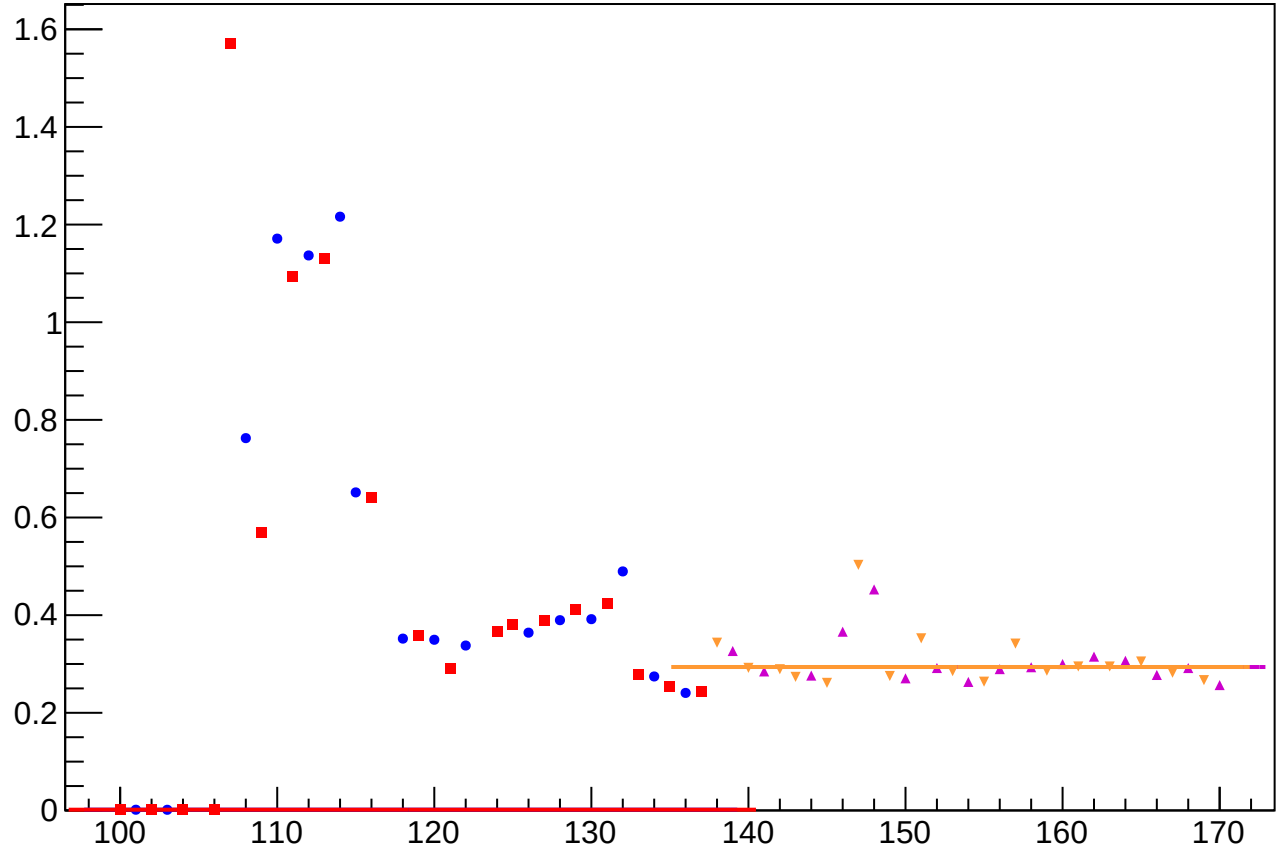
Left In: -32.099+/-0.000 $\chi^2$/NDF:26811500.2/15

+ sign 61.621+/-0.000 $\chi^2$/NDF: 1663022491795.6/3

All: 52.654+/-0.000 $\chi^2$/NDF: 419668604802

- sign 44.756+/-0.000 $\chi^2$/NDF: 366952116441338.1

# yield_cav4dY_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 11024564.1/15

Left Out: 0.294+/-0.000 $\chi^2$/NDF:466103.4/16

Right Out: 0.002+/-0.000 $\chi^2$/NDF: 10559220.1/18

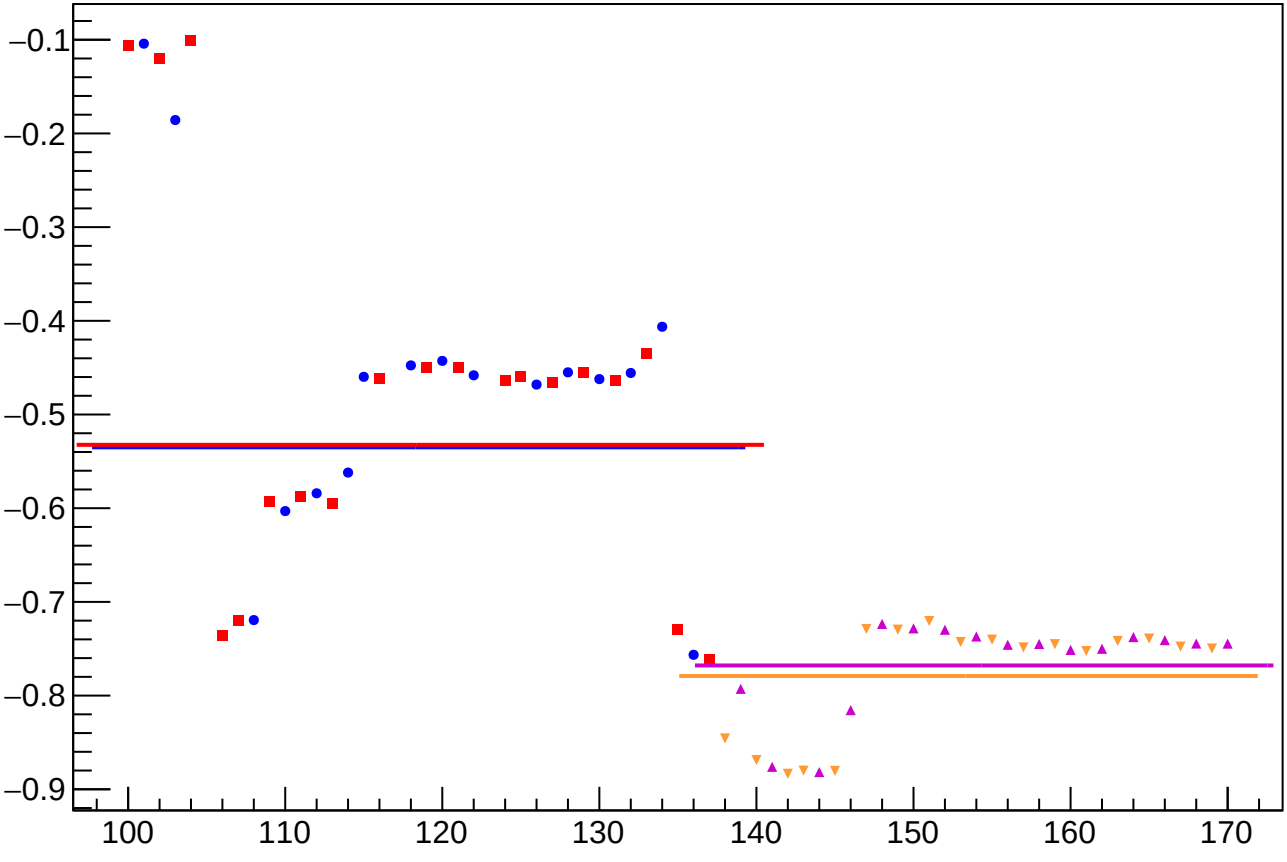
Left In: 0.294+/-0.000 $\chi^2$/NDF:367463.3/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 36623723.4/32

All: 0.002+/-0.000 $\chi^2$/NDF: 72326776.1/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 35703051.1/34

# yield_bpm4aX_mean vs Slug




Right In: -0.535+/-0.000 $\chi^2$/NDF: 300846309.5/15

Left Out: -0.779+/-0.000 $\chi^2$/NDF:109230197.5/16

Right Out: -0.532+/-0.000 $\chi^2$/NDF: 214124648.5/18

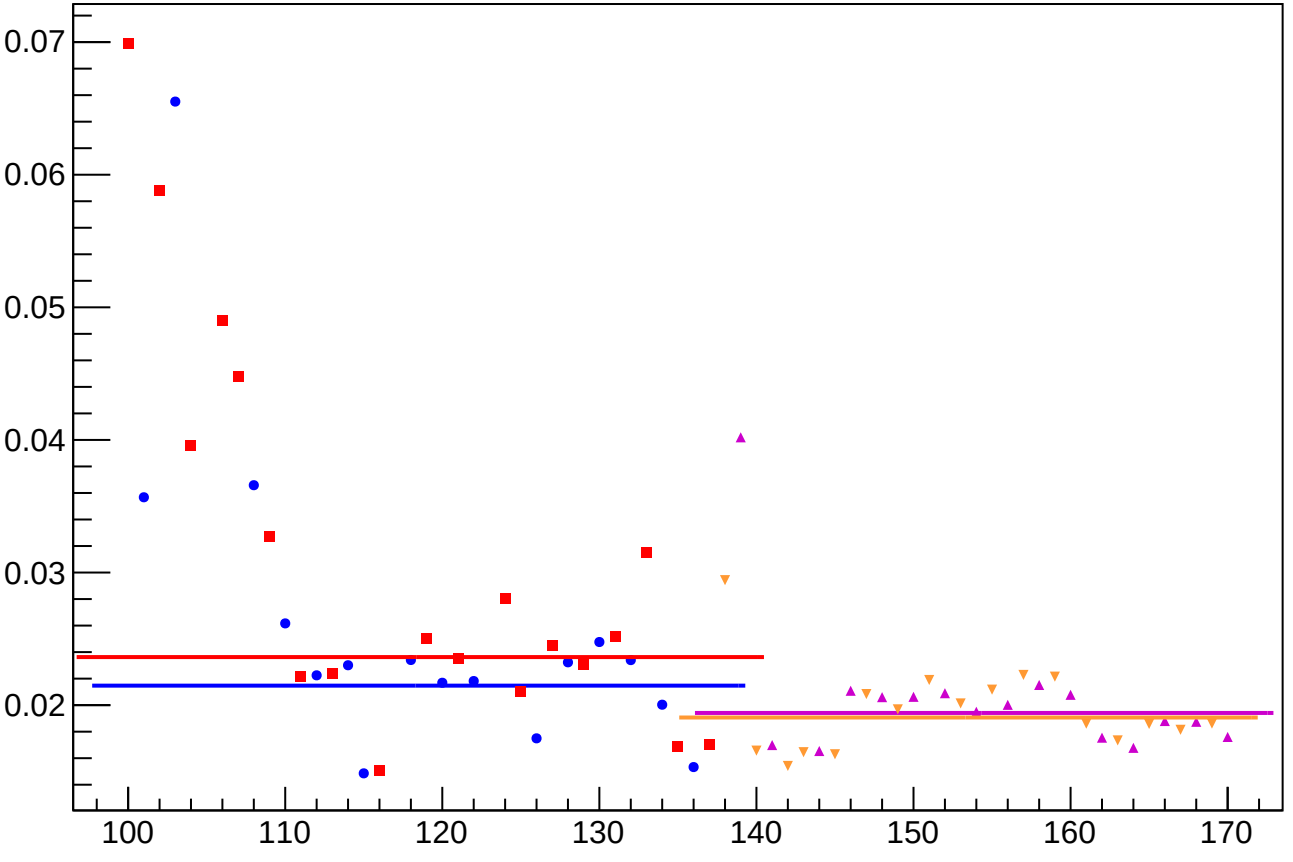
Left In: -0.768+/-0.000 $\chi^2$/NDF:77434794.8/15

+ sign -0.710+/-0.000 $\chi^2$/NDF: 905995631.0/32

All: -0.708+/-0.000 $\chi^2$/NDF: 1606265548.3/6

- sign -0.706+/-0.000 $\chi^2$/NDF: 699972626.4/34

# yield_bpm4aX_rms vs Slug




Right In: 0.021+/-0.000 $\chi^2$/NDF: 1153987.6/15

Left Out: 0.019+/-0.000 $\chi^2$/NDF:410481.3/16

Right Out: 0.024+/-0.000 $\chi^2$/NDF: 1277268.6/18

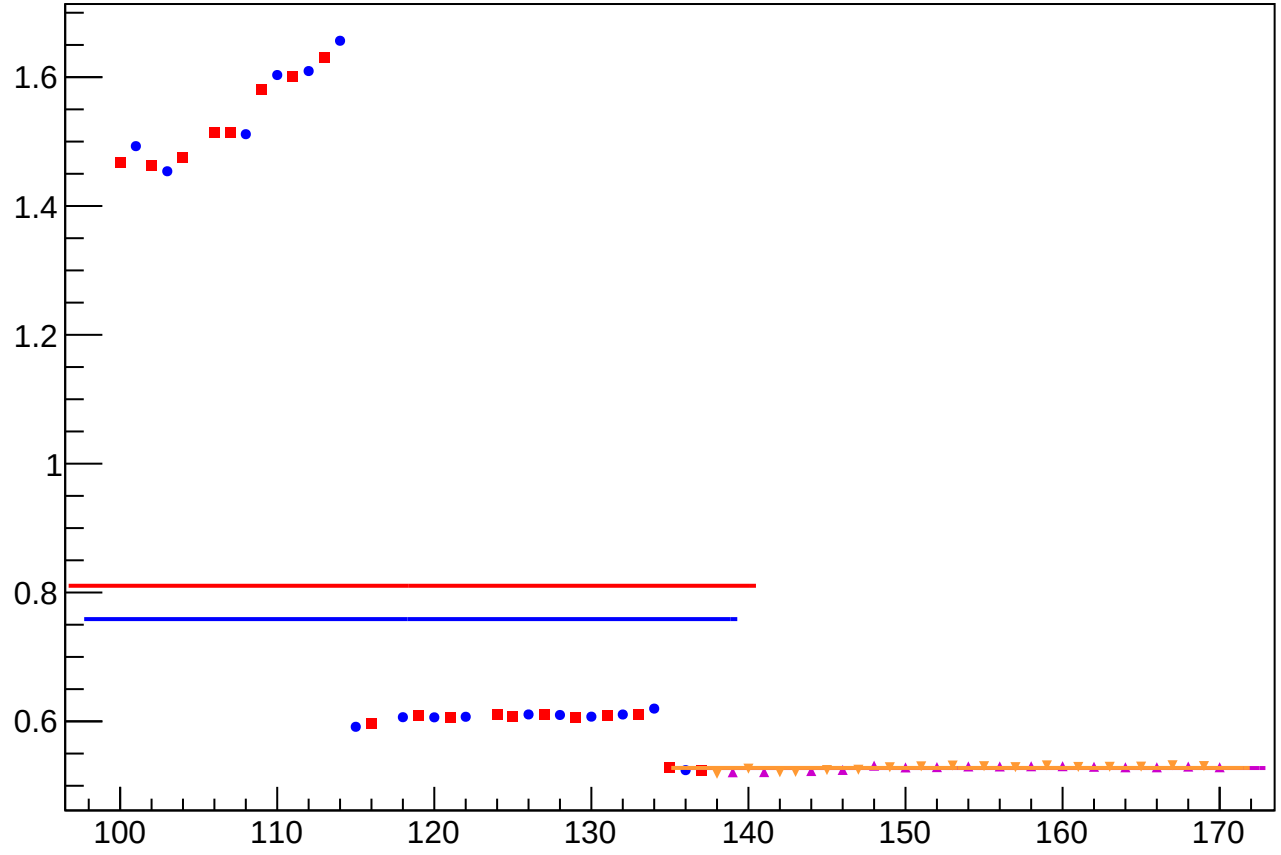
Left In: 0.019+/-0.000 $\chi^2$/NDF:618267.1/15

+ sign 0.020+/-0.000 $\chi^2$/NDF: 1660658.7/32

All: 0.020+/-0.000 $\chi^2$/NDF: 3841015.9/67

- sign 0.021+/-0.000 $\chi^2$/NDF: 2156981.1/34

# yield_bpm4aY_mean vs Slug




Right In: 0.759+/-0.000 $\chi^2$/NDF: 4304169889.2/15

Left Out: 0.528+/-0.000 $\chi^2$/NDF:1344369.9/16

Right Out: 0.810+/-0.000 $\chi^2$/NDF: 4769381416.8/18

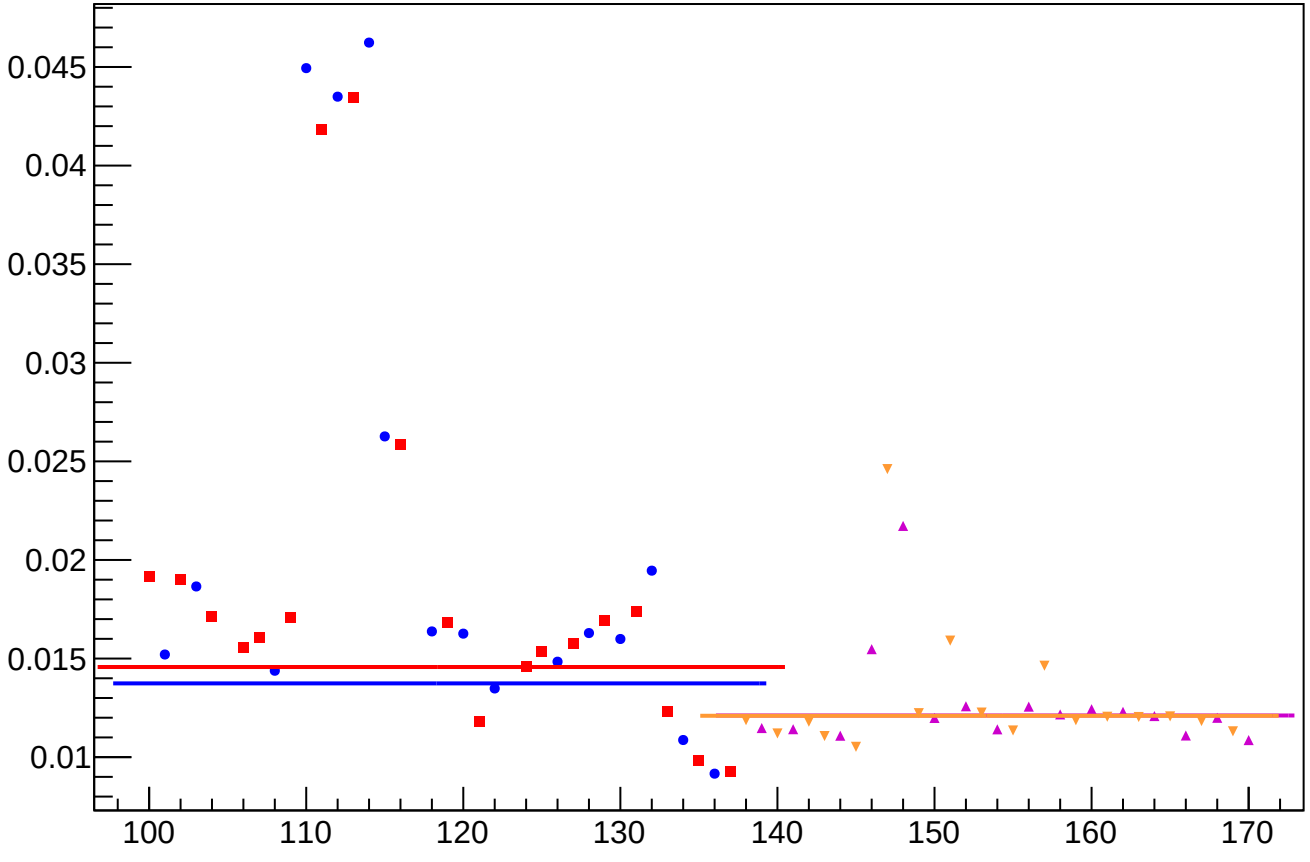
Left In: 0.528+/-0.000 $\chi^2$/NDF:977606.1/15

+ sign 0.589+/-0.000 $\chi^2$/NDF: 5539958721.4/32

All: 0.594+/-0.000 $\chi^2$/NDF: 12068367310.5/6

- sign 0.600+/-0.000 $\chi^2$/NDF: 6521975387.9/34

# yield_bpm4aY_rms vs Slug




Right In: 0.014+/-0.000 $\chi^2$/NDF: 1649769.2/15

Left Out: 0.012+/-0.000 $\chi^2$/NDF:623699.9/16

Right Out: 0.015+/-0.000 $\chi^2$/NDF: 1455054.4/18

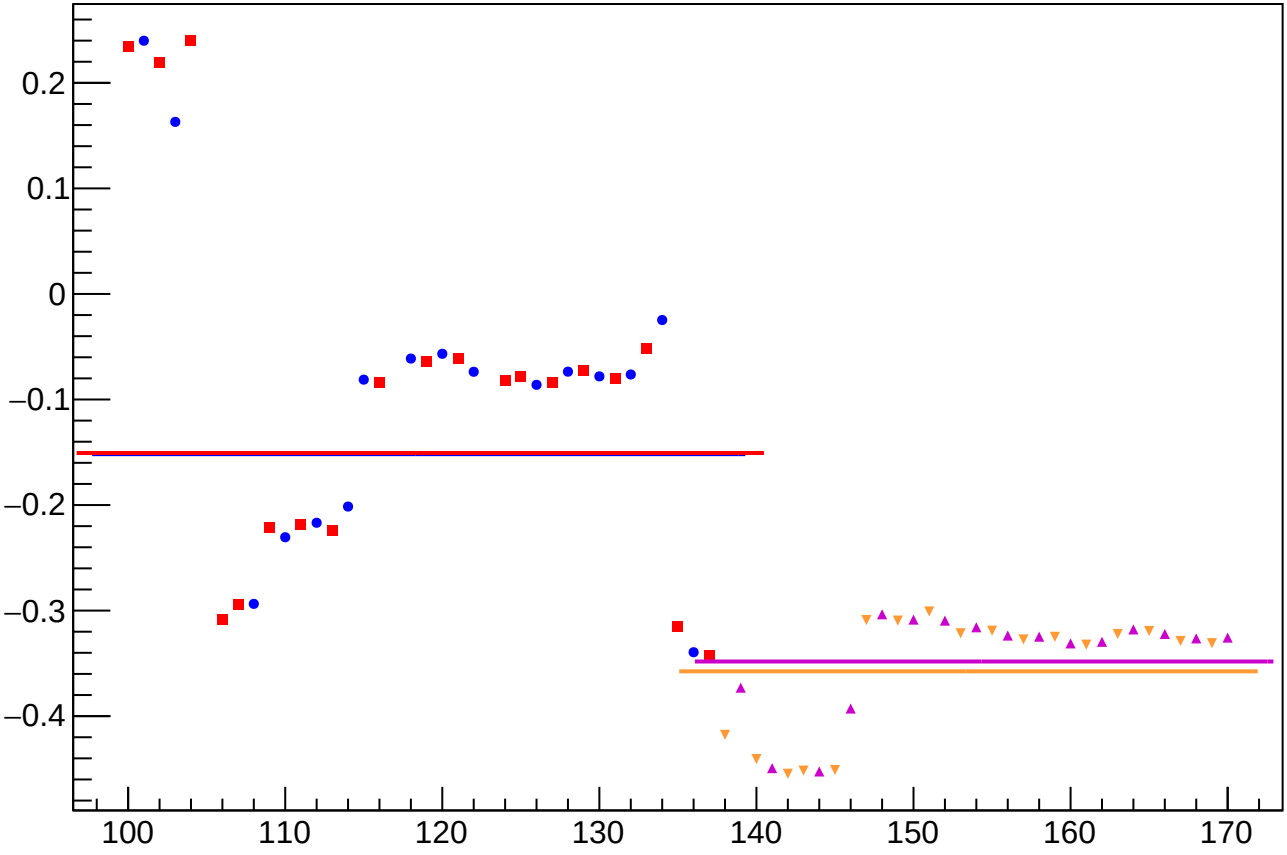
Left In: 0.012+/-0.000 $\chi^2$/NDF:453091.0/15

+ sign 0.013+/-0.000 $\chi^2$/NDF: 2398211.8/32

All: 0.013+/-0.000 $\chi^2$/NDF: 4575737.0/67

- sign 0.013+/-0.000 $\chi^2$/NDF: 2172648.7/34

# yield_bpm4eX_mean vs Slug




Right In: -0.152+/-0.000 $\chi^2$/NDF: 276791709.3/15

Left Out: -0.358+/-0.000 $\chi^2$/NDF:105397941.8/16

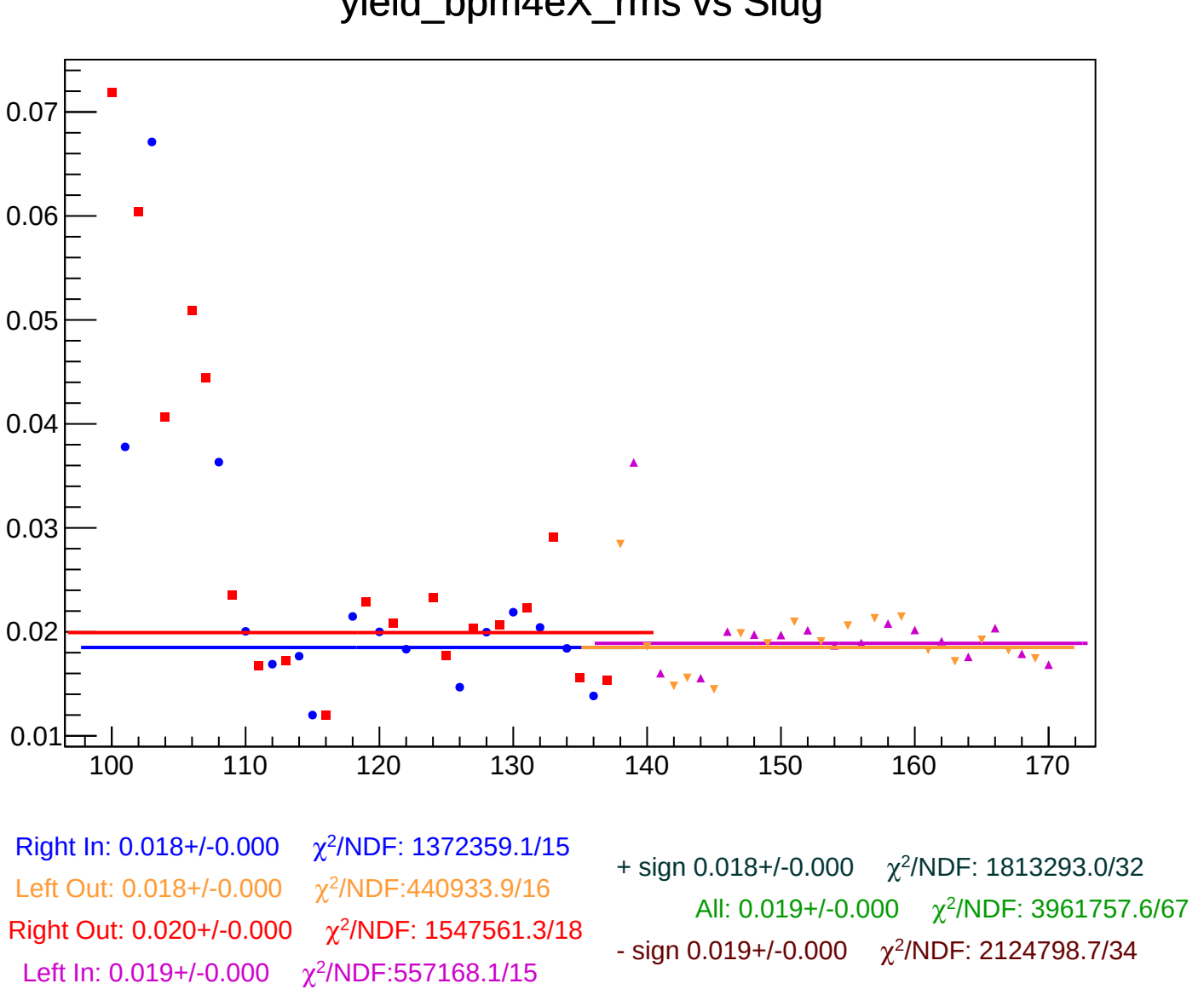
Right Out: -0.151+/-0.000 $\chi^2$/NDF: 199410234.4/18

Left In: -0.348+/-0.000 $\chi^2$/NDF:77938729.2/15

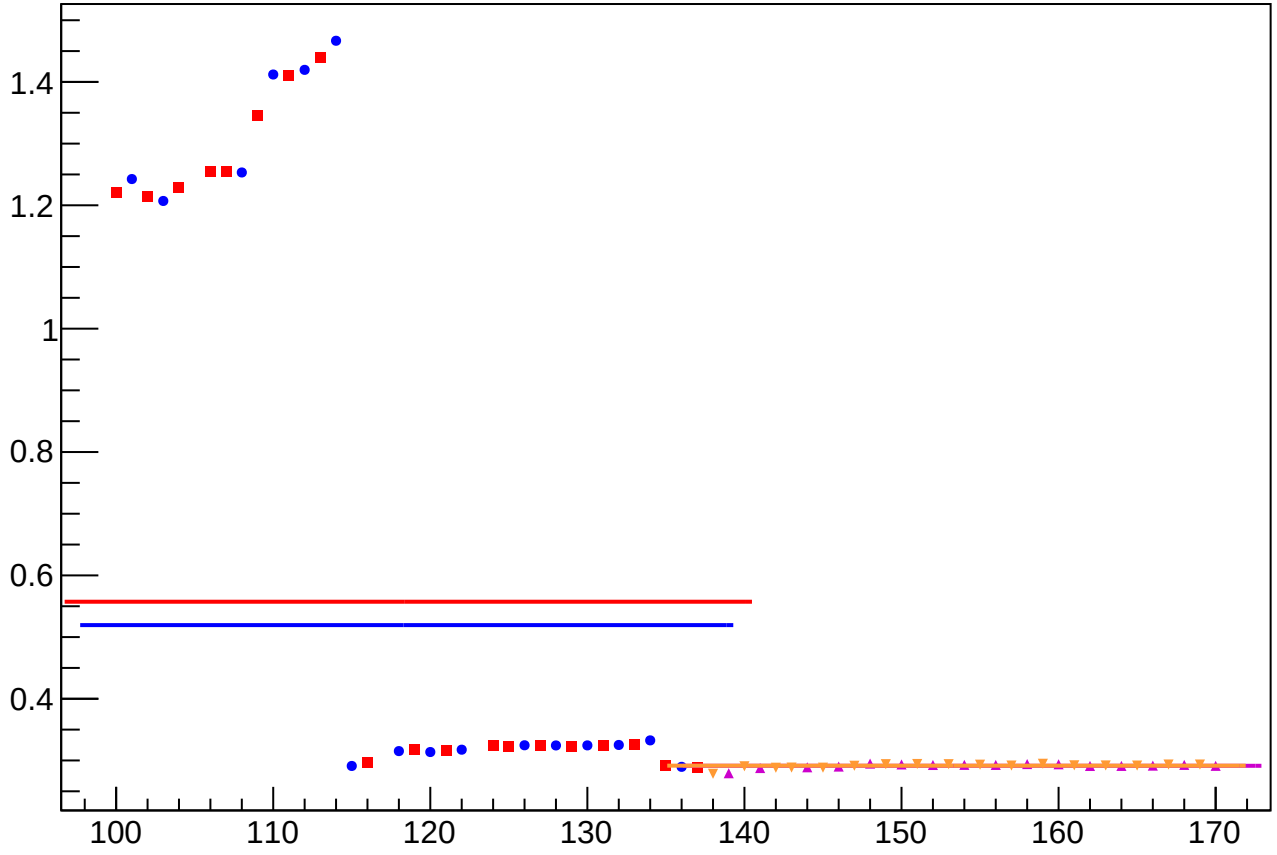
+ sign -0.290+/-0.000 $\chi^2$/NDF: 820438081.4/32

All: -0.288+/-0.000 $\chi^2$/NDF: 1464922379.2/6

- sign -0.286+/-0.000 $\chi^2$/NDF: 644150087.0/34


yield_bpm4eX_rms vs Slug
0.07
0.06
0.05
0.04
0.03
0.02
0.01
100
110
120
130
140
150
160
170
Right In: 0.018+/-0.000 χ²/NDF: 1372359.1/15
Left Out: 0.018+/-0.000 χ²/NDF:440933.9/16
Right Out: 0.020+/-0.000 χ²/NDF: 1547561.3/18
Left In: 0.019+/-0.000 χ²/NDF:557168.1/15
+ sign 0.018+/-0.000 χ²/NDF: 1813293.0/32
All: 0.019+/-0.000 χ²/NDF: 3961757.6/67
- sign 0.019+/-0.000 χ²/NDF: 2124798.7/34

# yield_bpm4eY_mean vs Slug




Right In: 0.519+/-0.000 $\chi^2$/NDF: 6319132275.3/15

Left Out: 0.292+/-0.000 $\chi^2$/NDF:1195825.0/16

Right Out: 0.557+/-0.000 $\chi^2$/NDF: 6746144835.5/18

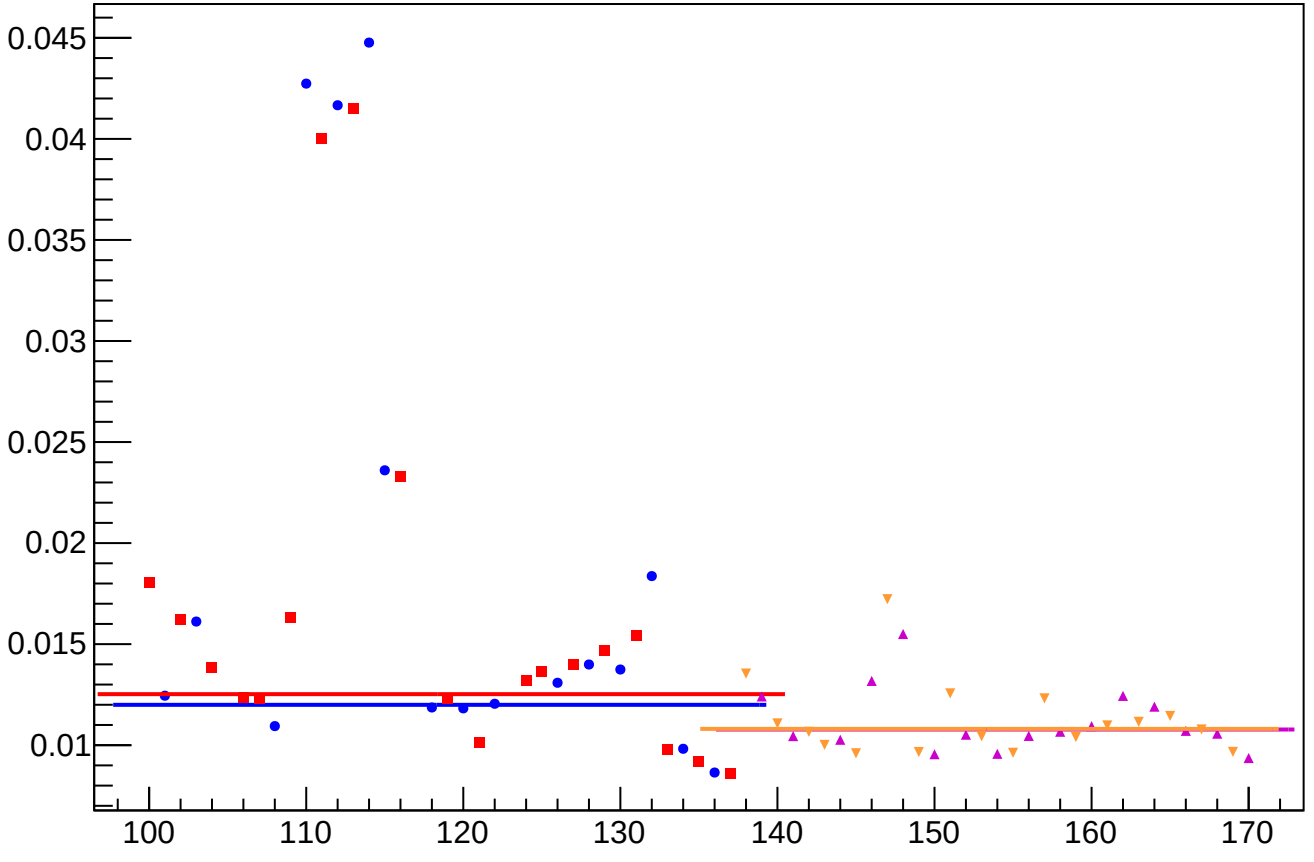
Left In: 0.291+/-0.000 $\chi^2$/NDF:1186096.5/15

+ sign 0.354+/-0.000 $\chi^2$/NDF: 7876992664.1/32

All: 0.358+/-0.000 $\chi^2$/NDF: 16655359782.6/6

- sign 0.362+/-0.000 $\chi^2$/NDF: 8774028559.4/34

# yield_bpm4eY_rms vs Slug




Right In: 0.012+/-0.000 $\chi^2$/NDF: 1491608.2/15

Left Out: 0.011+/-0.000 $\chi^2$/NDF:451927.5/16

Right Out: 0.013+/-0.000 $\chi^2$/NDF: 1434210.5/18

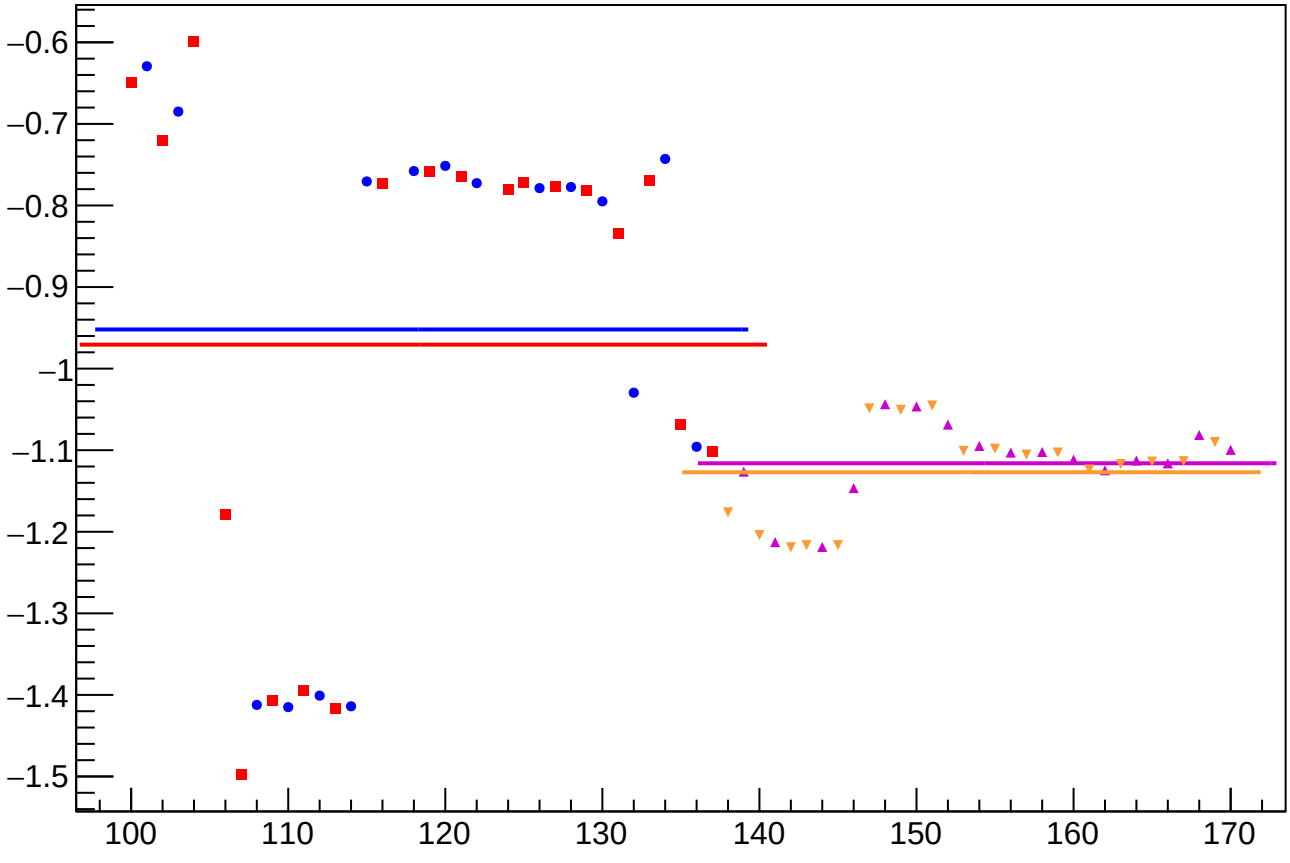
Left In: 0.011+/-0.000 $\chi^2$/NDF:370960.3/15

+ sign 0.011+/-0.000 $\chi^2$/NDF: 2028482.2/32

All: 0.011+/-0.000 $\chi^2$/NDF: 4010671.5/67

- sign 0.011+/-0.000 $\chi^2$/NDF: 1980529.5/34

# yield_bpm4acX_mean vs Slug




Right In: -0.952+/-0.000 $\chi^2$/NDF: 699468857.6/15

Left Out: -1.127+/-0.000 $\chi^2$/NDF:101153642.3/16

Right Out: -0.971+/-0.000 $\chi^2$/NDF: 714505458.0/18

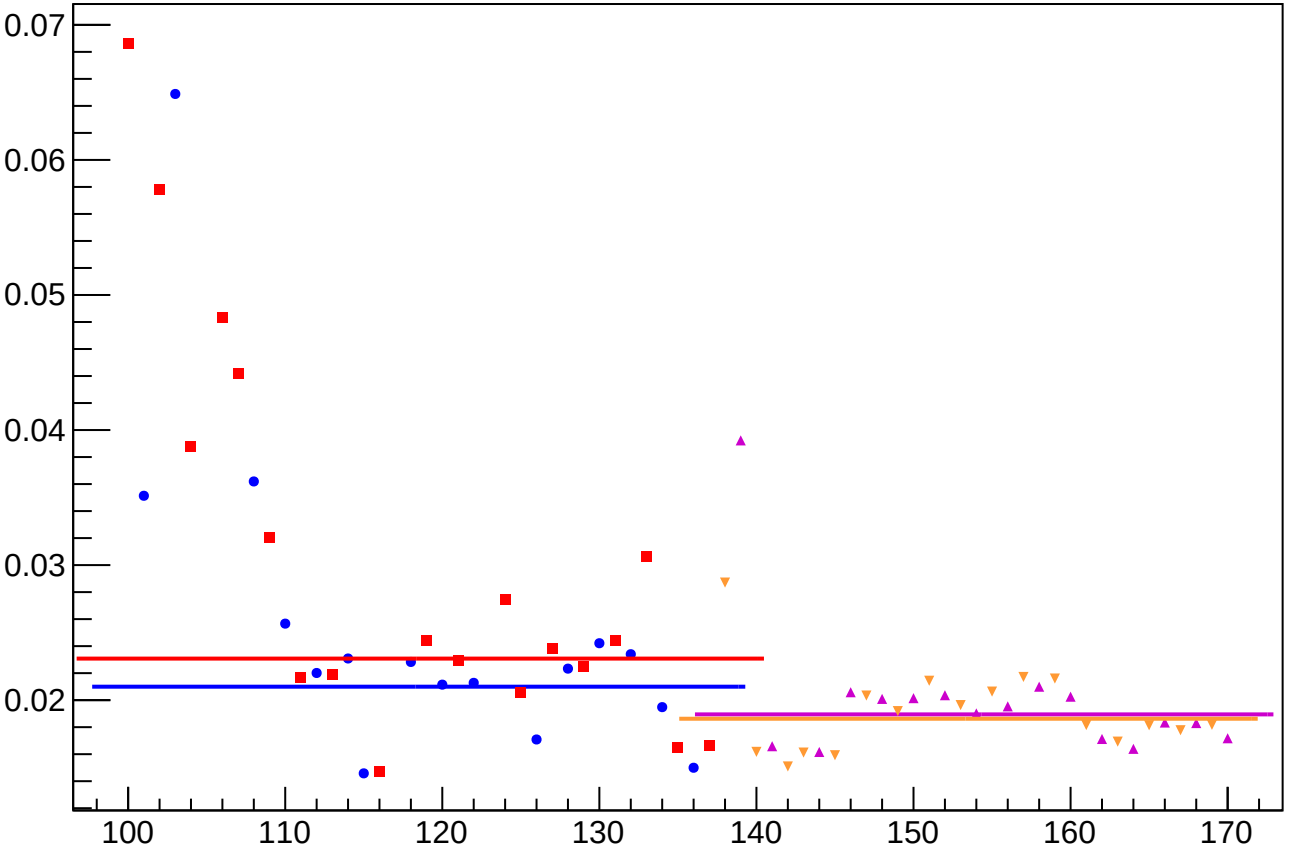
Left In: -1.116+/-0.000 $\chi^2$/NDF:75283376.5/15

\+ sign -1.077+/-0.000 $\chi^2$/NDF: 1067200909.2/32

All: -1.078+/-0.000 $\chi^2$/NDF: 2019988880.6/6

\- sign -1.078+/-0.000 $\chi^2$/NDF: 952783790.8/34

# yield_bpm4acX_rms vs Slug




Right In: 0.021+/-0.000 $\chi^2$/NDF: 1166992.9/15

Left Out: 0.019+/-0.000 $\chi^2$/NDF:406570.5/16

Right Out: 0.023+/-0.000 $\chi^2$/NDF: 1281311.4/18

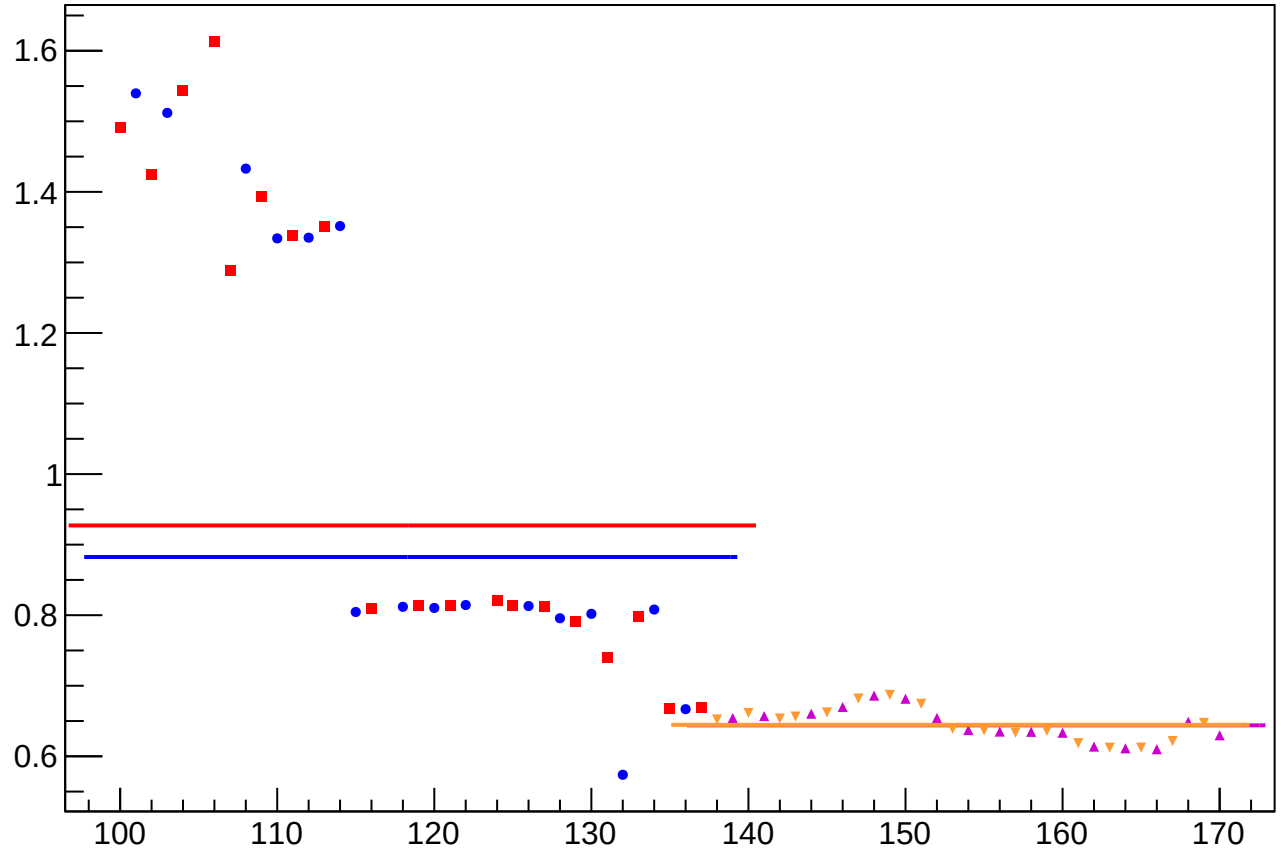
Left In: 0.019+/-0.000 $\chi^2$/NDF:616638.2/15

+ sign 0.019+/-0.000 $\chi^2$/NDF: 1671609.9/32

All: 0.020+/-0.000 $\chi^2$/NDF: 3854662.1/67

- sign 0.020+/-0.000 $\chi^2$/NDF: 2160866.6/34

# yield_bpm4acY_mean vs Slug




Right In: 0.882+/-0.000 $\chi^2$/NDF: 2784156746.4/15

Left Out: 0.645+/-0.000 $\chi^2$/NDF:38301513.3/16

Right Out: 0.927+/-0.000 $\chi^2$/NDF: 2762998321.3/18

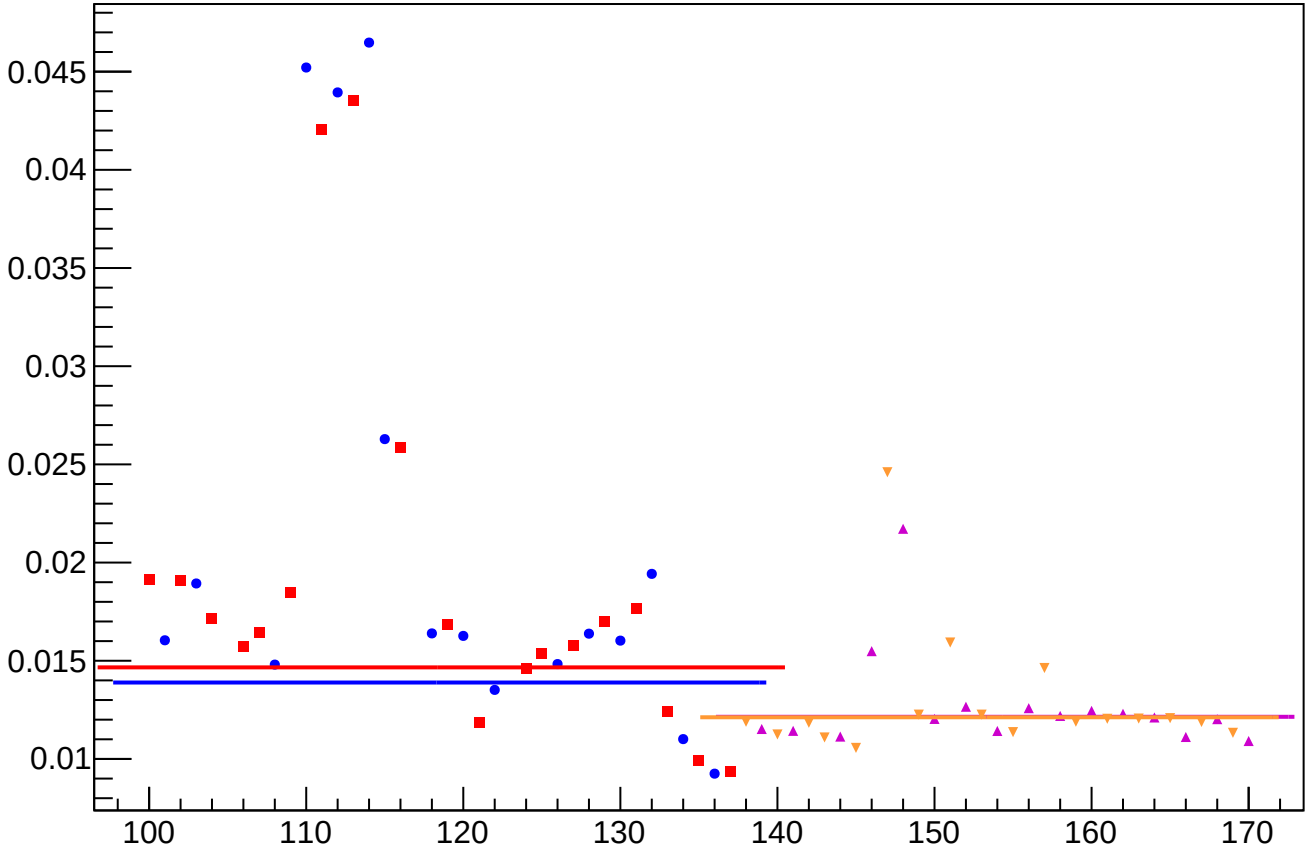
Left In: 0.644+/-0.000 $\chi^2$/NDF:35670051.2/15

+ sign 0.707+/-0.000 $\chi^2$/NDF: 4105041464.9/32

All: 0.711+/-0.000 $\chi^2$/NDF: 8638183402.6/67

- sign 0.716+/-0.000 $\chi^2$/NDF: 4528821305.9/34

# yield_bpm4acY_rms vs Slug




Right In: 0.014+/-0.000 $\chi^2$/NDF: 1646691.8/15

Left Out: 0.012+/-0.000 $\chi^2$/NDF:618413.7/16

Right Out: 0.015+/-0.000 $\chi^2$/NDF: 1467025.6/18

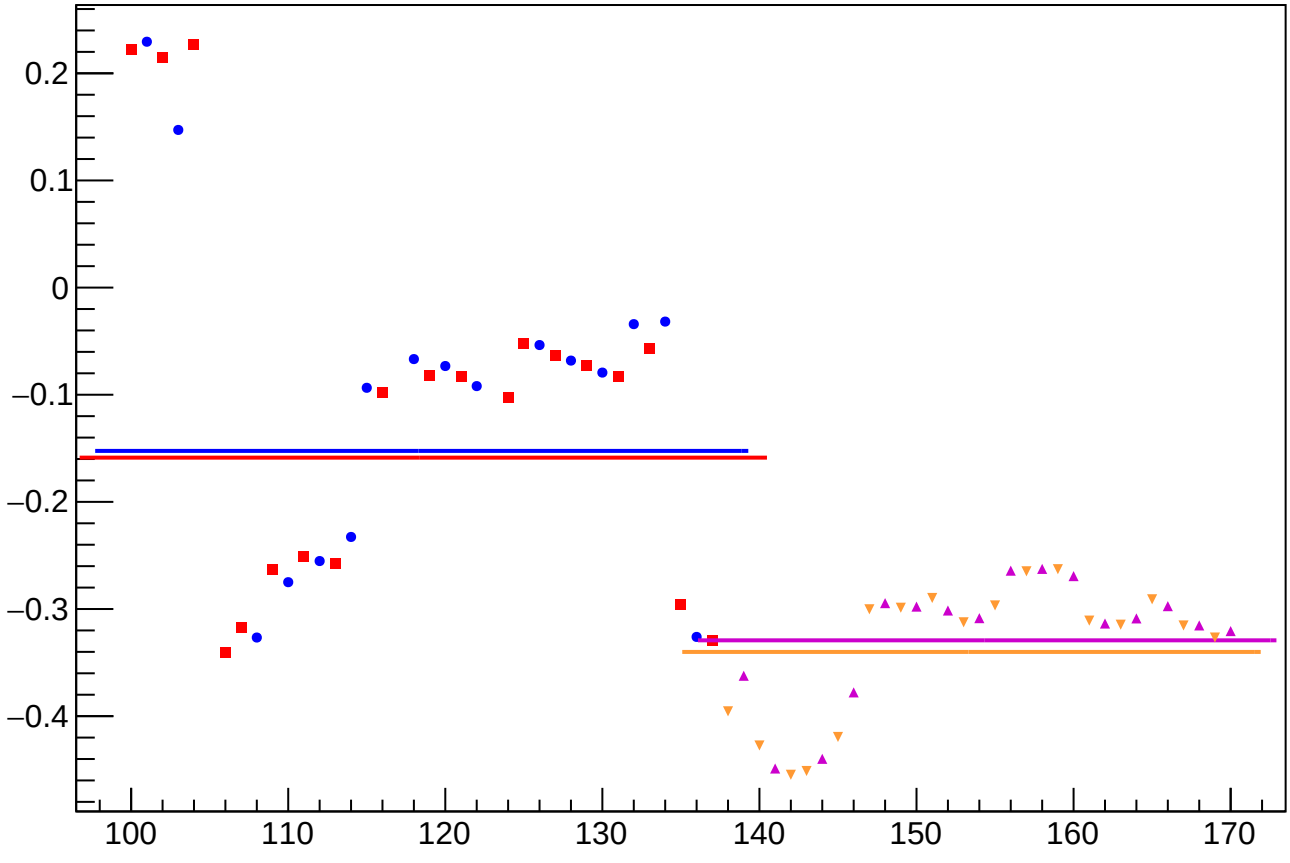
Left In: 0.012+/-0.000 $\chi^2$/NDF:449003.4/15

+ sign 0.013+/-0.000 $\chi^2$/NDF: 2407077.1/32

All: 0.013+/-0.000 $\chi^2$/NDF: 4600743.1/67

- sign 0.013+/-0.000 $\chi^2$/NDF: 2189188.8/34

# yield_bpm4ecX_mean vs Slug




Right In: -0.152+/-0.000 $\chi^2$/NDF: 274261842.6/15

Left Out: -0.340+/-0.000 $\chi^2$/NDF:123752771.5/16

Right Out: -0.159+/-0.000 $\chi^2$/NDF: 195614120.0/18

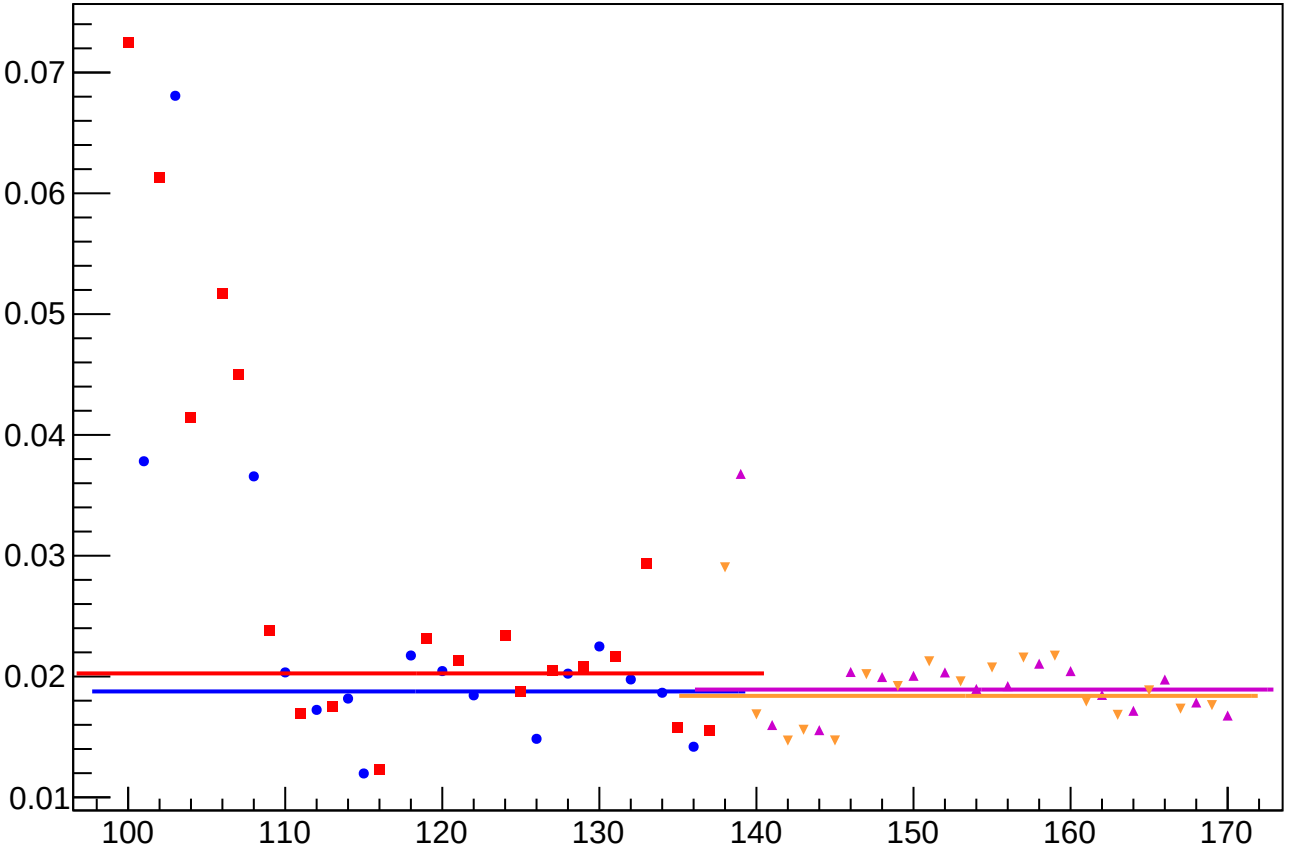
Left In: -0.329+/-0.000 $\chi^2$/NDF:103561306.9/15

+ sign -0.280+/-0.000 $\chi^2$/NDF: 756221082.3/32

All: -0.278+/-0.000 $\chi^2$/NDF: 1322159171.4/6

- sign -0.277+/-0.000 $\chi^2$/NDF: 565706633.5/34

# yield_bpm4ecX_rms vs Slug




Right In: 0.019+/-0.000 $\chi^2$/NDF: 1349412.3/15

Left Out: 0.018+/-0.000 $\chi^2$/NDF:486992.8/16

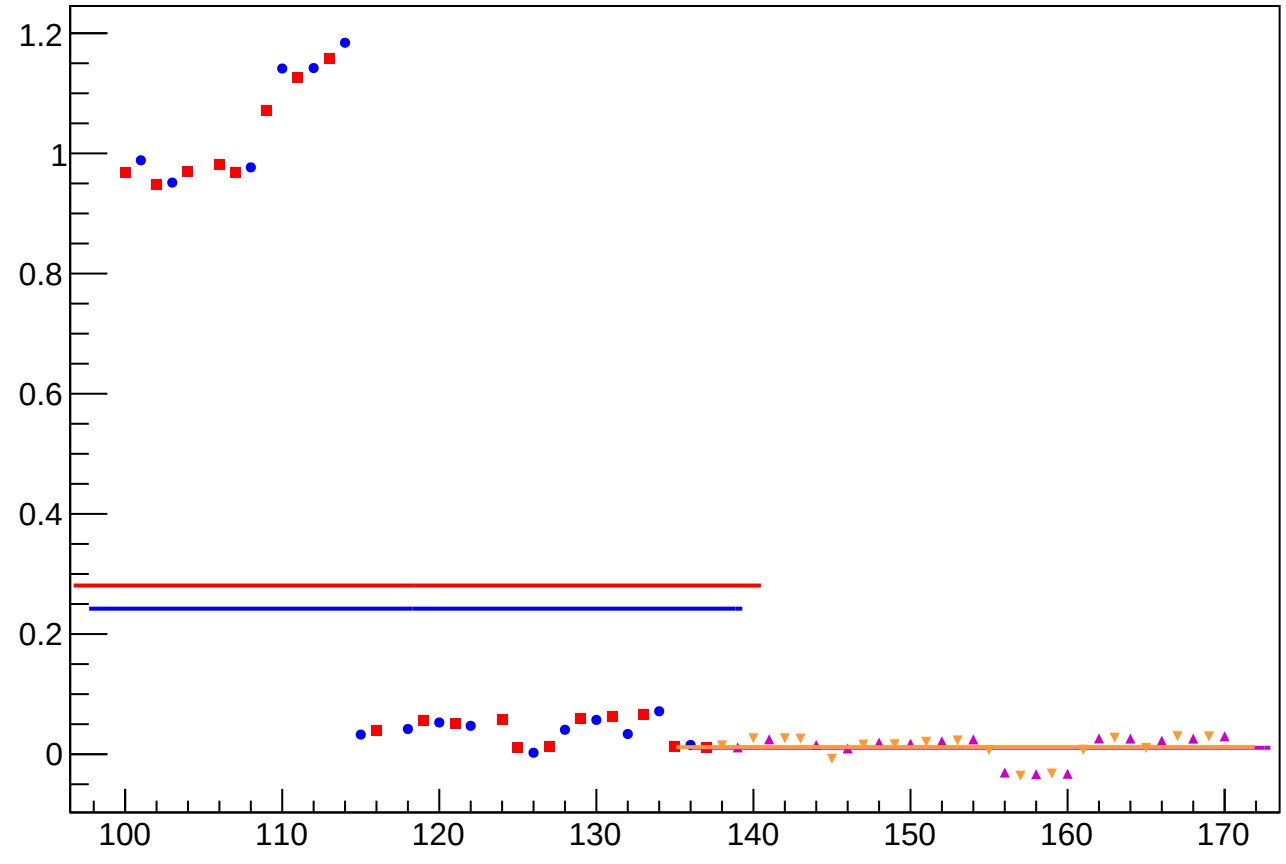
Right Out: 0.020+/-0.000 $\chi^2$/NDF: 1529624.9/18

Left In: 0.019+/-0.000 $\chi^2$/NDF:586240.7/15

+ sign 0.019+/-0.000 $\chi^2$/NDF: 1839140.1/32

All: 0.019+/-0.000 $\chi^2$/NDF: 4017632.4/67

- sign 0.019+/-0.000 $\chi^2$/NDF: 2148634.7/34




Right In: 0.242+/-0.000 $\chi^2$/NDF: 6507444426.7/15

Left Out: 0.012+/-0.000 $\chi^2$/NDF:44201370.6/16

Right Out: 0.281+/-0.000 $\chi^2$/NDF: 6757631639.3/18

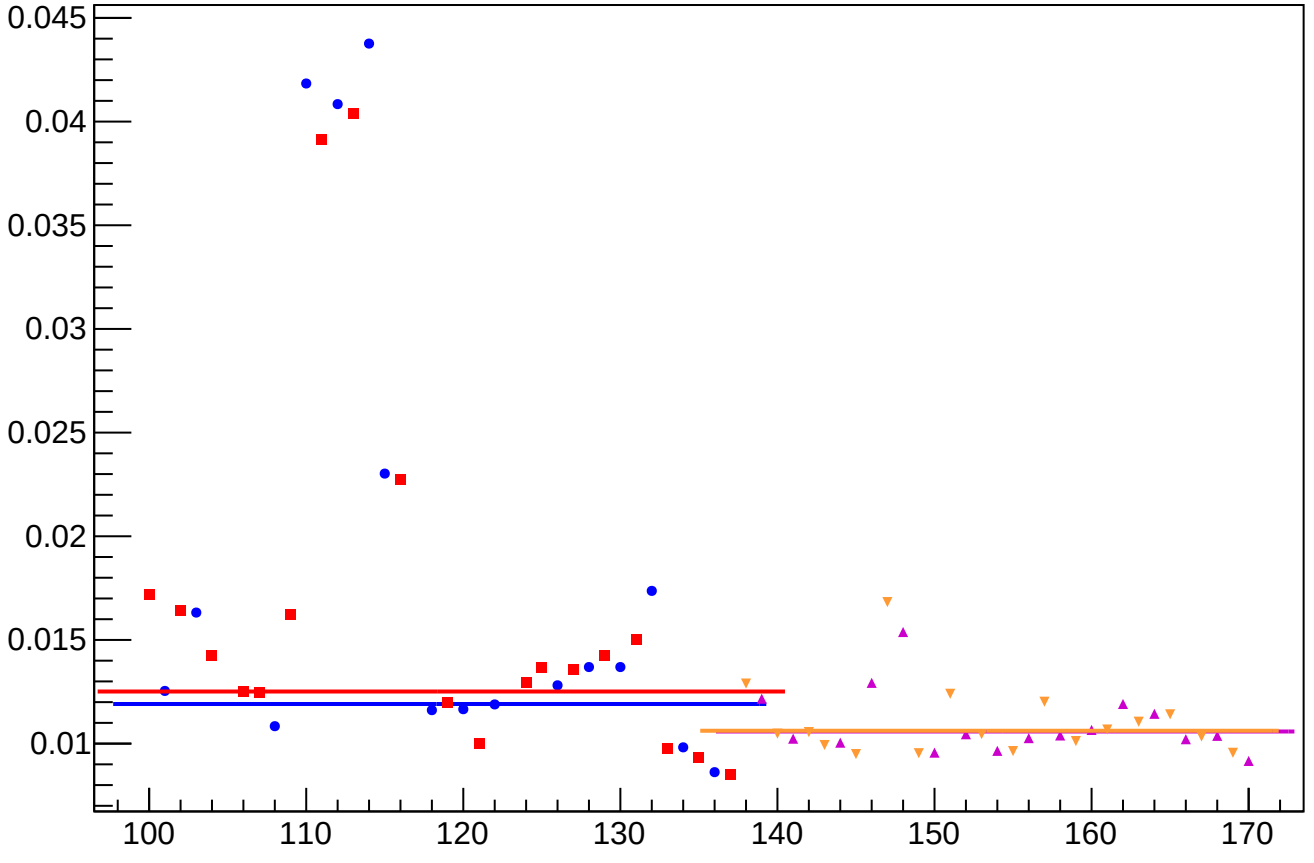
Left In: 0.011+/-0.000 $\chi^2$/NDF:55005814.1/15

+ sign 0.074+/-0.000 $\chi^2$/NDF: 8179633258.6/32

All: 0.078+/-0.000 $\chi^2$/NDF: 17109527844.0/6

- sign 0.081+/-0.000 $\chi^2$/NDF: 8926724193.9/34

# yield_bpm4ecY_rms vs Slug




Right In: 0.012+/-0.000 $\chi^2$/NDF: 1459428.8/15

Left Out: 0.011+/-0.000 $\chi^2$/NDF:418481.4/16

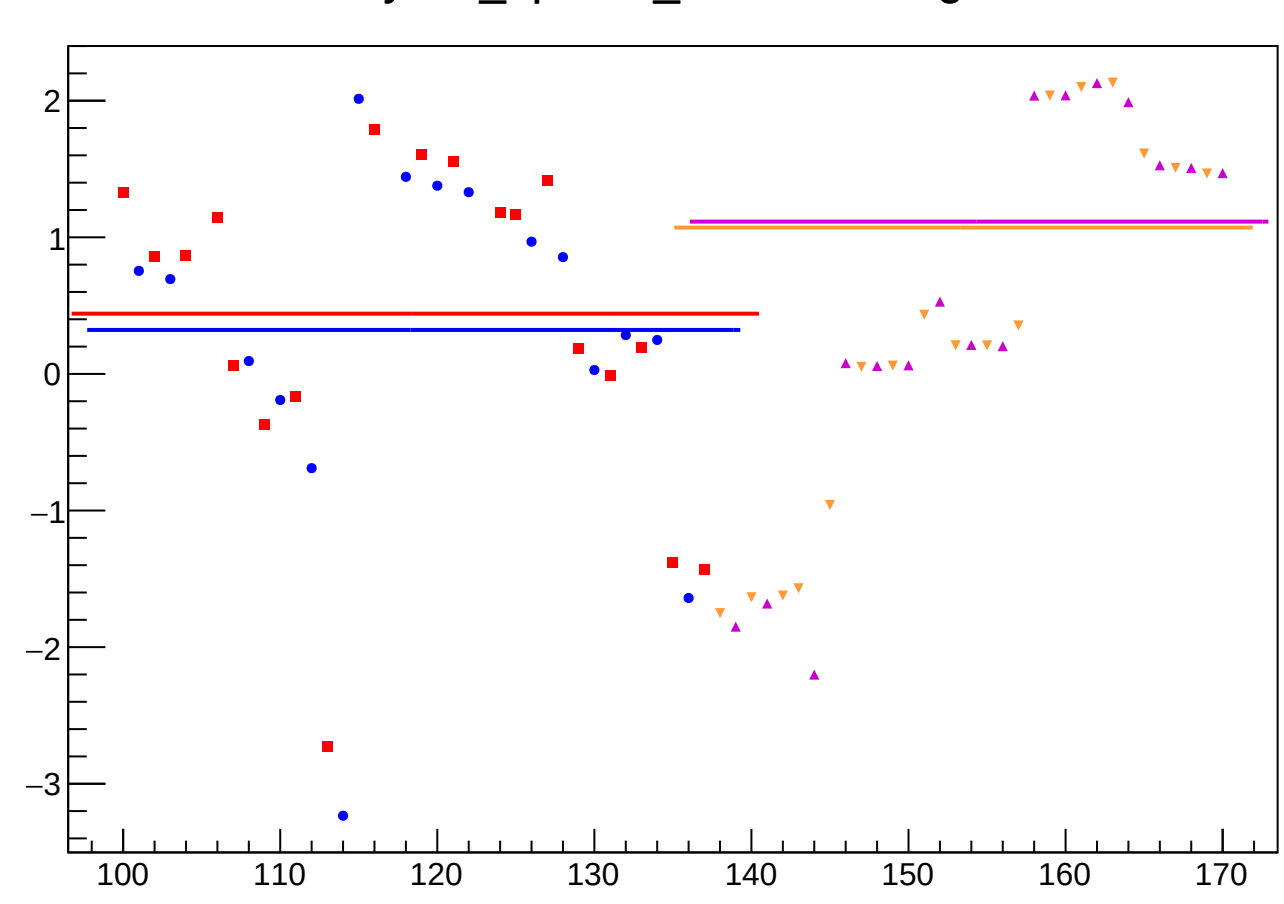
Right Out: 0.013+/-0.000 $\chi^2$/NDF: 1392455.1/18

Left In: 0.011+/-0.000 $\chi^2$/NDF:348487.3/15

+ sign 0.011+/-0.000 $\chi^2$/NDF: 1979870.6/32

All: 0.011+/-0.000 $\chi^2$/NDF: 3938351.8/67

- sign 0.011+/-0.000 $\chi^2$/NDF: 1956484.7/34




Right In: 0.322+/-0.000 $\chi^2$/NDF: 1664983742.5/15

Left Out: 1.071+/-0.000 $\chi^2$/NDF:29057311156.2/16

Right Out: 0.441+/-0.000 $\chi^2$/NDF: 1796703168.4/18

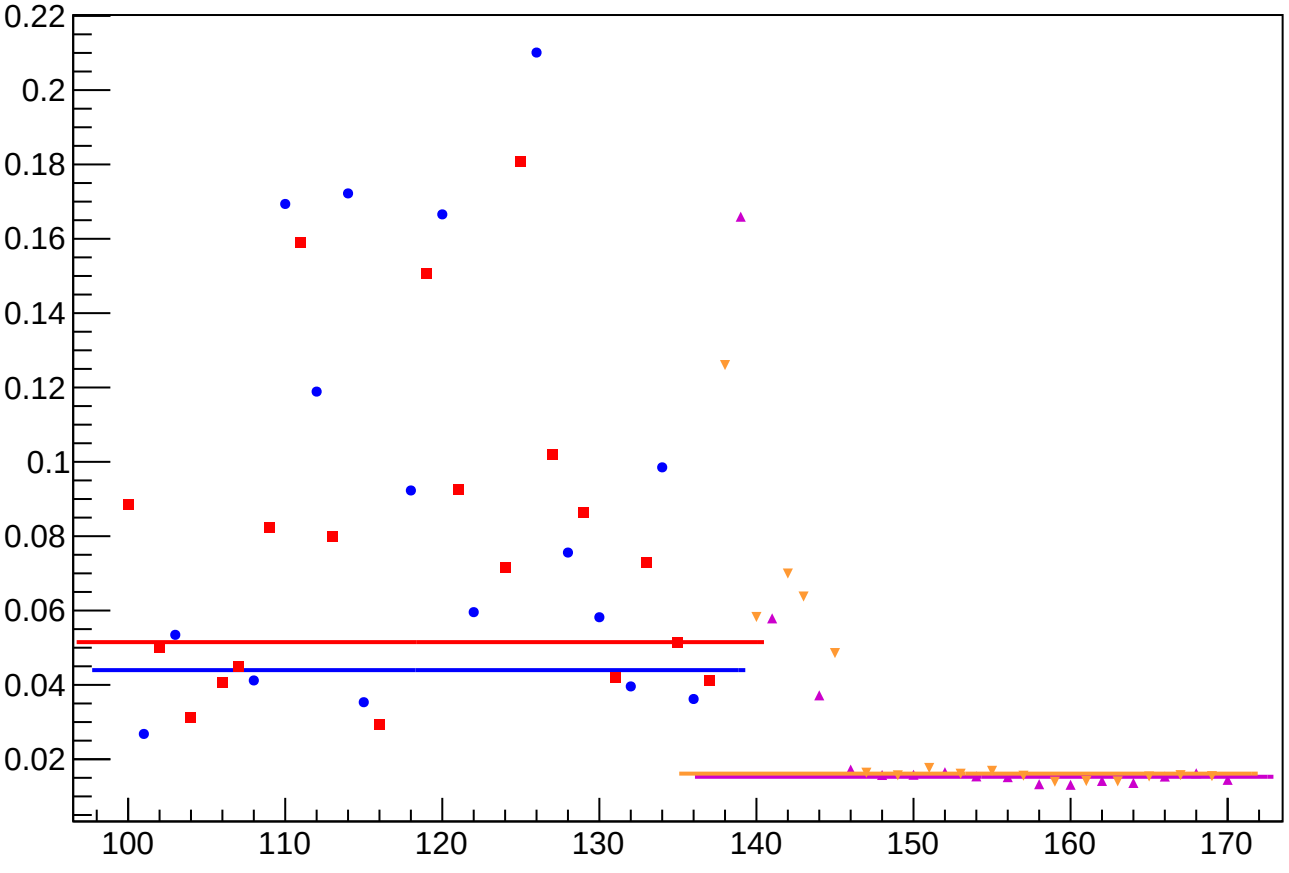
Left In: 1.115+/-0.000 $\chi^2$/NDF:33344508835.3/15

+ sign 1.033+/-0.000 $\chi^2$/NDF: 31779534905.3/32

All: 1.062+/-0.000 $\chi^2$/NDF: 67702654459.3/6

- sign 1.089+/-0.000 $\chi^2$/NDF: 35859512072.5/34

# yield_bpm1X_rms vs Slug




Right In: 0.044+/-0.000 $\chi^2$/NDF: 2787474.8/15

Left Out: 0.016+/-0.000 $\chi^2$/NDF:2880948.9/16

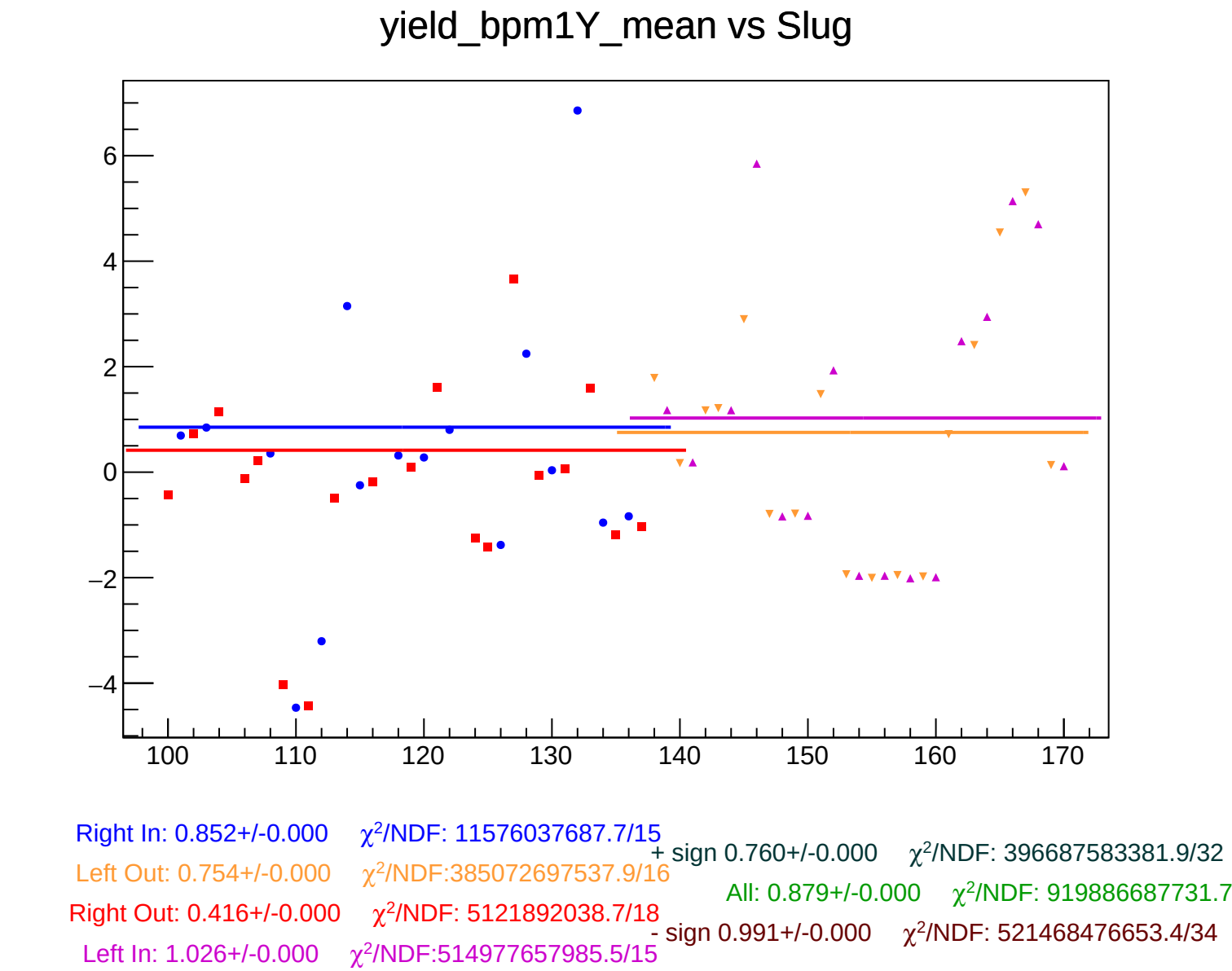
Right Out: 0.052+/-0.000 $\chi^2$/NDF: 2367478.8/18

Left In: 0.015+/-0.000 $\chi^2$/NDF:2153464.3/15

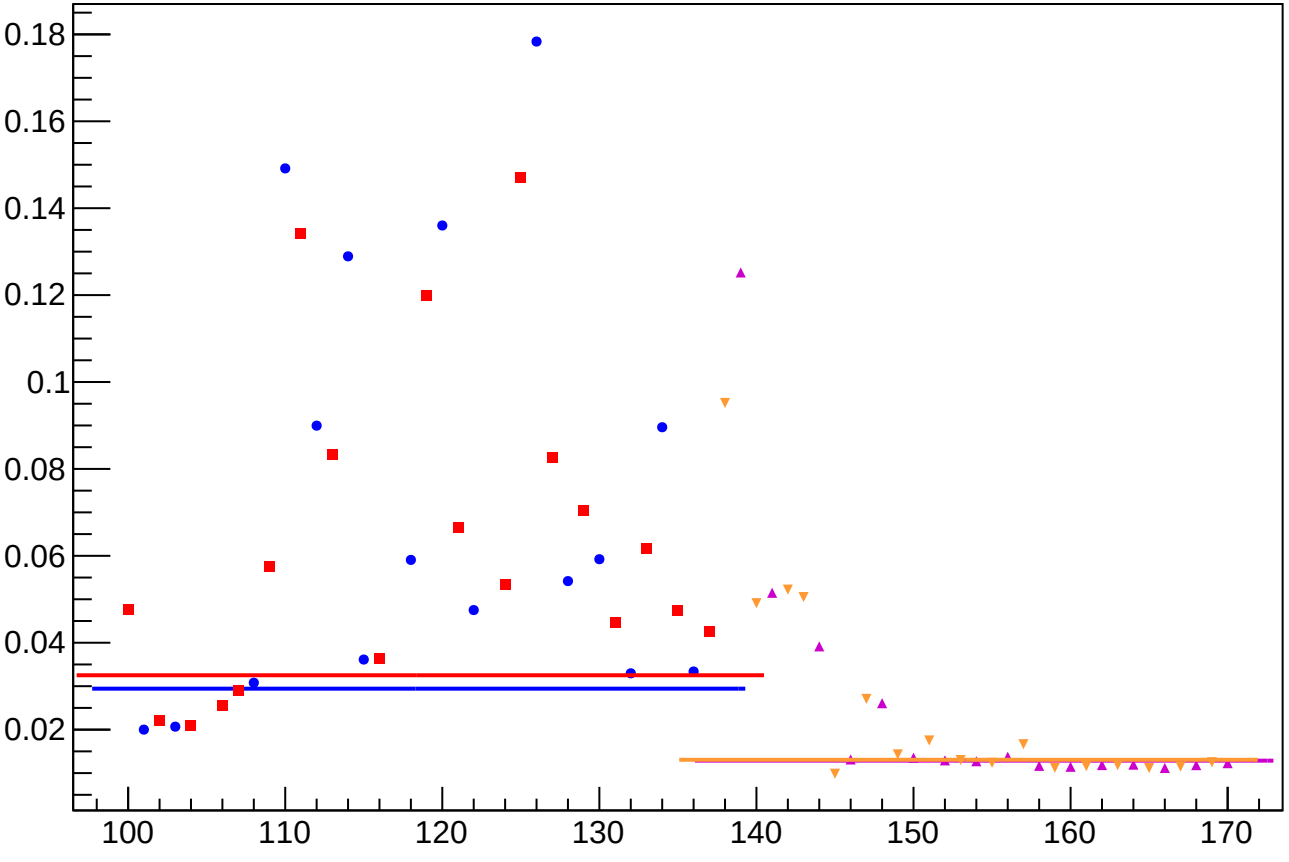
+ sign 0.018+/-0.000 $\chi^2$/NDF: 8585982.9/32

All: 0.017+/-0.000 $\chi^2$/NDF: 17290086.8/67

- sign 0.017+/-0.000 $\chi^2$/NDF: 8672468.6/34


yield_bpm1Y_mean vs Slug
6
4
2
0
−2
−4
100
110
120
130
140
150
160
170
Right In: 0.852+/-0.000 χ²/NDF: 11576037687.7/15
Left Out: 0.754+/-0.000 χ²/NDF:385072697537.9/16
Right Out: 0.416+/-0.000 χ²/NDF: 5121892038.7/18
Left In: 1.026+/-0.000 χ²/NDF:514977657985.5/15
+ sign 0.760+/-0.000 χ²/NDF: 396687583381.9/32
All: 0.879+/-0.000 χ²/NDF: 919886687731.7
- sign 0.991+/-0.000 χ²/NDF: 521468476653.4/34

# yield_bpm1Y_rms vs Slug




Right In: 0.029+/-0.000 $\chi^2$/NDF: 3192424.8/15

Left Out: 0.013+/-0.000 $\chi^2$/NDF:3110135.3/16

Right Out: 0.033+/-0.000 $\chi^2$/NDF: 3315430.7/18

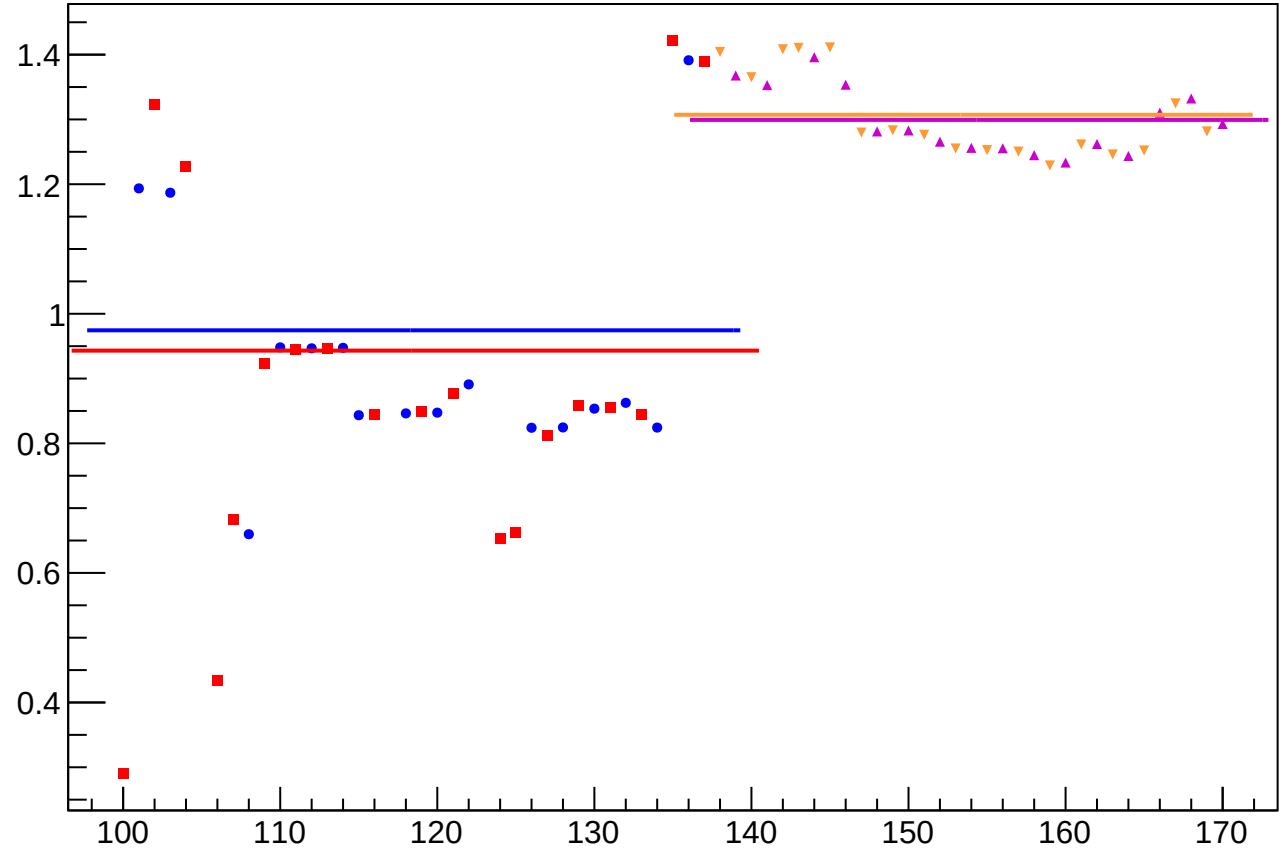
Left In: 0.013+/-0.000 $\chi^2$/NDF:2683735.3/15

+ sign 0.014+/-0.000 $\chi^2$/NDF: 8429246.6/32

All: 0.014+/-0.000 $\chi^2$/NDF: 17269697.7/67

- sign 0.014+/-0.000 $\chi^2$/NDF: 8838579.0/34

# yield_bpm11X_mean vs Slug




Right In: 0.974+/-0.000 $\chi^2$/NDF: 1458735246.5/15

Left Out: 1.307+/-0.000 $\chi^2$/NDF:263245355.8/16

Right Out: 0.943+/-0.000 $\chi^2$/NDF: 1670579900.3/18

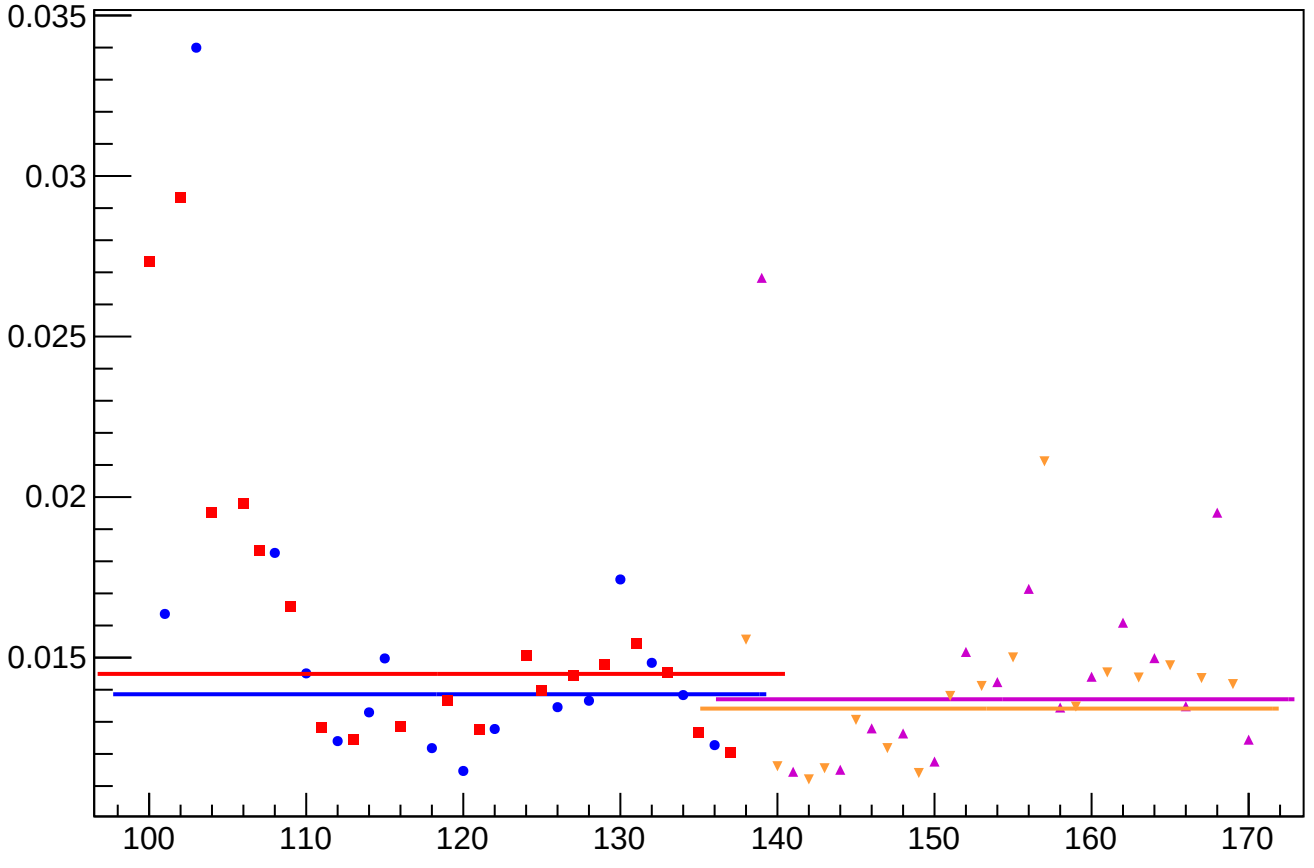
Left In: 1.299+/-0.000 $\chi^2$/NDF:154799114.9/15

+ sign 1.196+/-0.000 $\chi^2$/NDF: 4104652011.6/32

All: 1.189+/-0.000 $\chi^2$/NDF: 8526095536.5/67

- sign 1.181+/-0.000 $\chi^2$/NDF: 4411104749.5/34

# yield_bpm11X_rms vs Slug




Right In: 0.014+/-0.000 $\chi^2$/NDF: 599979.5/15

Left Out: 0.013+/-0.000 $\chi^2$/NDF:412606.2/16

Right Out: 0.014+/-0.000 $\chi^2$/NDF: 544337.7/18

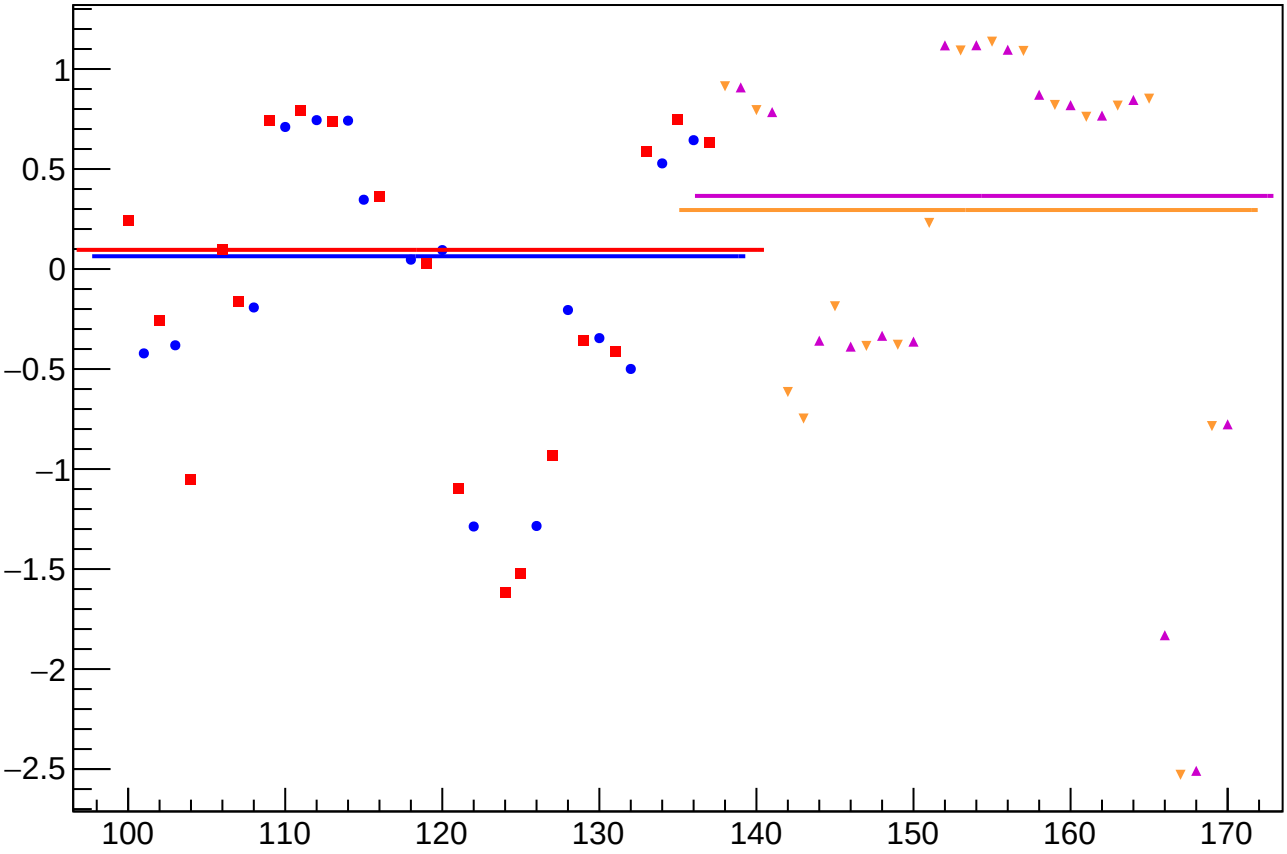
Left In: 0.014+/-0.000 $\chi^2$/NDF:842296.9/15

+ sign 0.014+/-0.000 $\chi^2$/NDF: 1021172.8/32

All: 0.014+/-0.000 $\chi^2$/NDF: 2448583.1/67

- sign 0.014+/-0.000 $\chi^2$/NDF: 1412076.7/34

# yield_bpm11Y_mean vs Slug




Right In: 0.064+/-0.000 $\chi^2$/NDF: 11035911379.4/15

Left Out: 0.295+/-0.000 $\chi^2$/NDF:72500761588.3/16

Right Out: 0.096+/-0.000 $\chi^2$/NDF: 17784850774.3/18

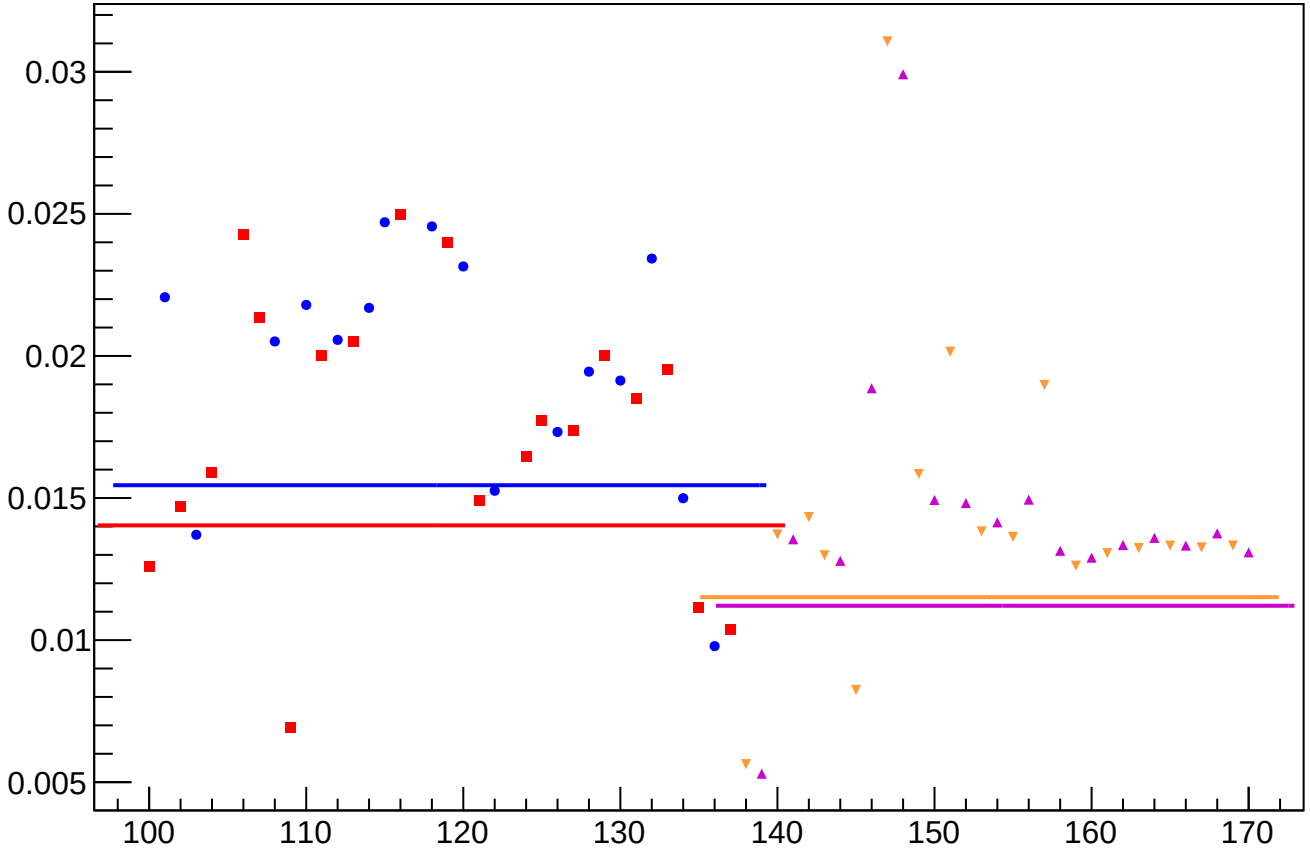
Left In: 0.366+/-0.000 $\chi^2$/NDF:83510806883.0/15

+ sign 0.242+/-0.000 $\chi^2$/NDF: 84569468571.9/32

All: 0.270+/-0.000 $\chi^2$/NDF: 187647055201.9

- sign 0.296+/-0.000 $\chi^2$/NDF: 102908791789.8/34

# yield_bpm11Y_rms vs Slug




Right In: 0.015+/-0.000 $\chi^2$/NDF: 1293711.1/15

Left Out: 0.012+/-0.000 $\chi^2$/NDF:3134577.2/16

Right Out: 0.014+/-0.000 $\chi^2$/NDF: 1686554.4/18

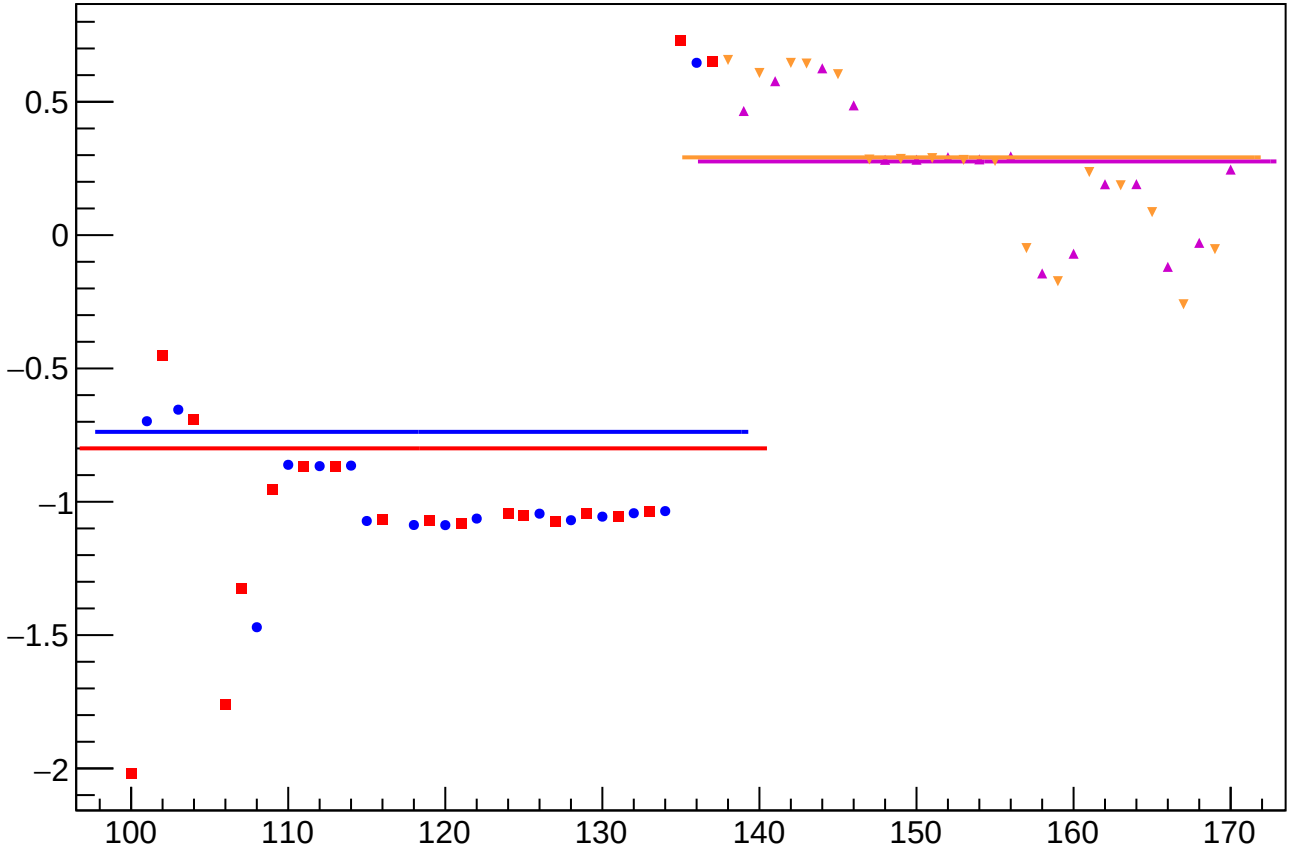
Left In: 0.011+/-0.000 $\chi^2$/NDF:3566428.0/15

+ sign 0.012+/-0.000 $\chi^2$/NDF: 5028489.3/32

All: 0.012+/-0.000 $\chi^2$/NDF: 10662962.1/67

- sign 0.012+/-0.000 $\chi^2$/NDF: 5607728.4/34

# yield_bpm12X_mean vs Slug




Right In: -0.738+/-0.000 $\chi^2$/NDF: 2072845802.4/15

Left Out: 0.292+/-0.000 $\chi^2$/NDF:738314460.4/16

Right Out: -0.800+/-0.000 $\chi^2$/NDF: 1883862445.0/18

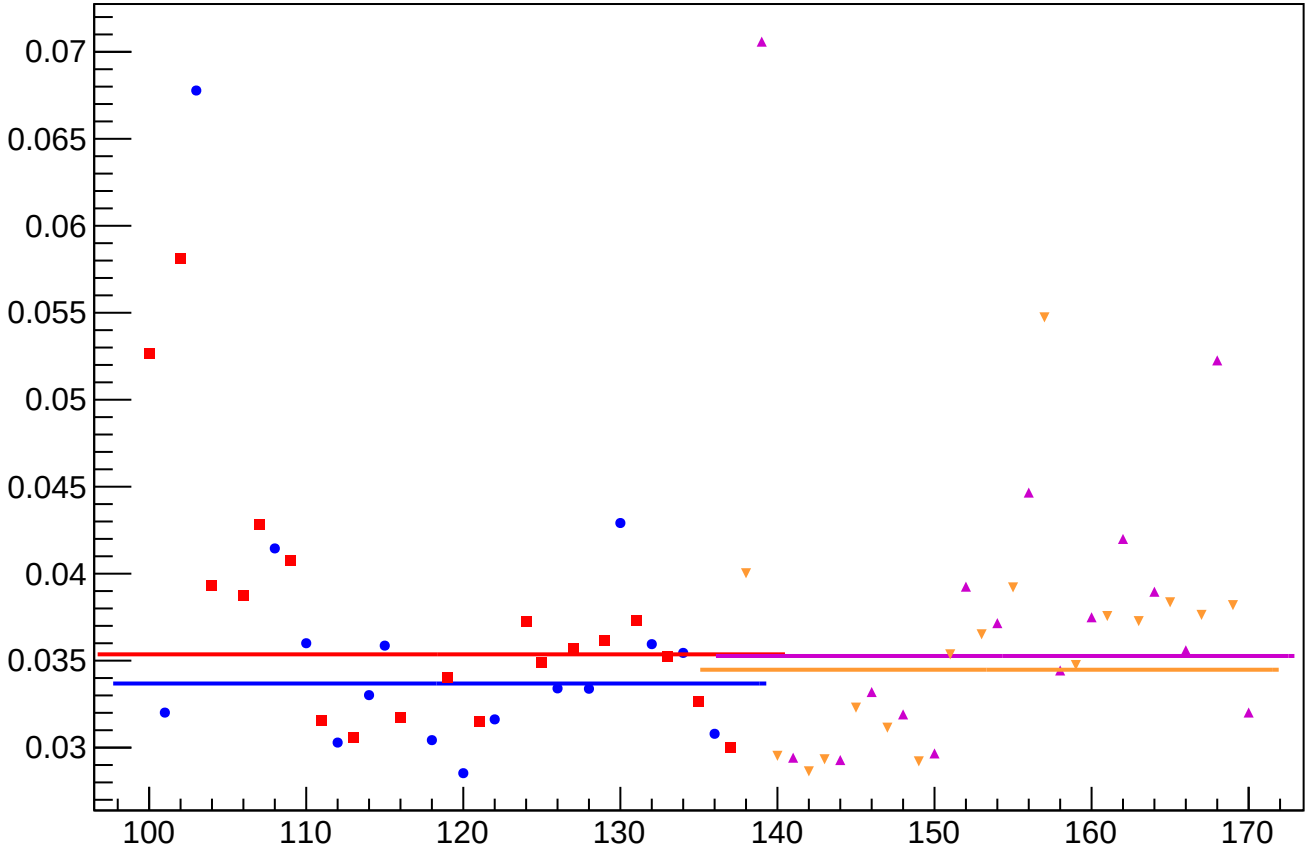
Left In: 0.276+/-0.000 $\chi^2$/NDF:501775340.7/15

+ sign -0.085+/-0.000 $\chi^2$/NDF: 6545567839.4/32

All: -0.098+/-0.000 $\chi^2$/NDF: 12763784192.2/

- sign -0.112+/-0.000 $\chi^2$/NDF: 6212762724.4/34

# yield_bpm12X_rms vs Slug




Right In: 0.034+/-0.000 $\chi^2$/NDF: 420227.2/15

Left Out: 0.034+/-0.000 $\chi^2$/NDF:462551.4/16

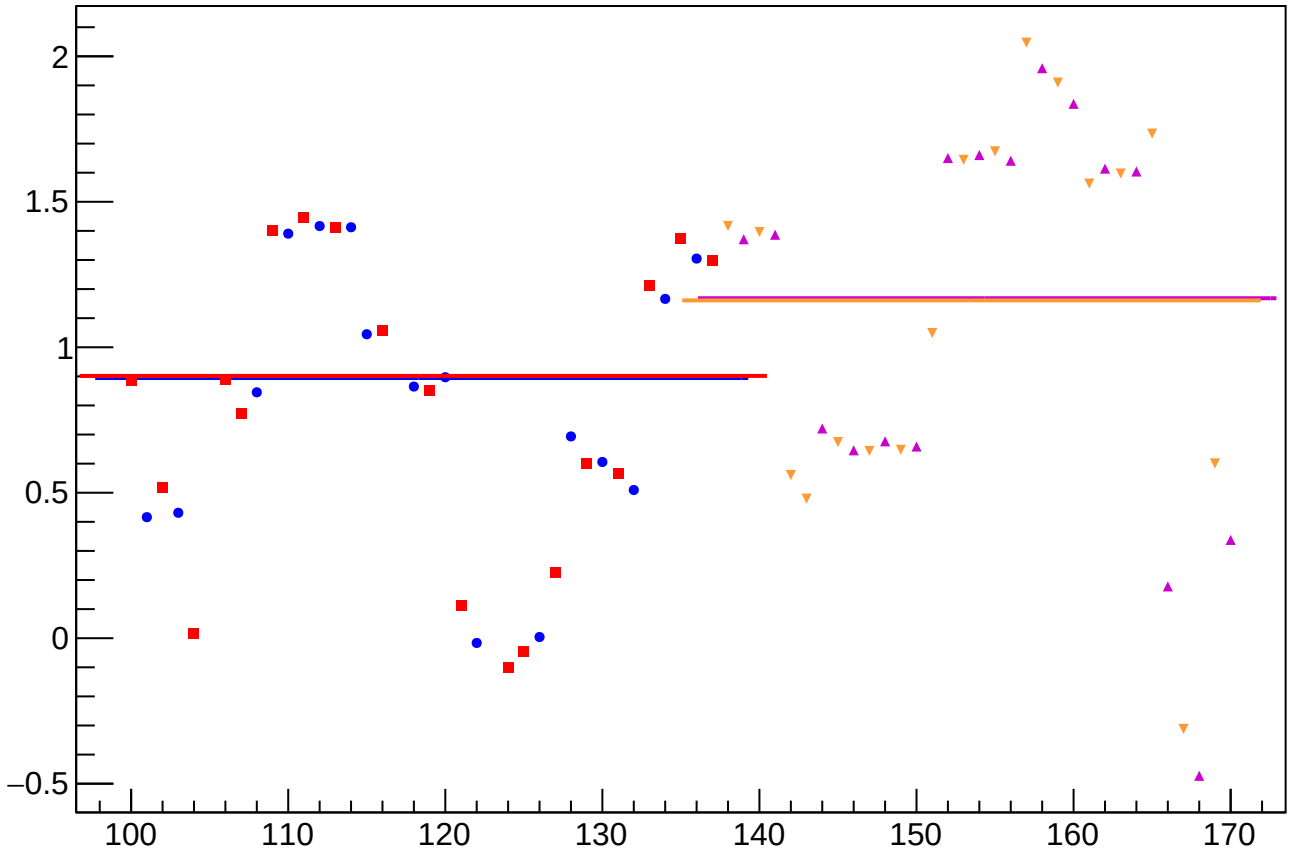
Right Out: 0.035+/-0.000 $\chi^2$/NDF: 296353.9/18

Left In: 0.035+/-0.000 $\chi^2$/NDF:929092.3/15

+ sign 0.034+/-0.000 $\chi^2$/NDF: 887202.4/32

All: 0.035+/-0.000 $\chi^2$/NDF: 2131010.3/67

- sign 0.035+/-0.000 $\chi^2$/NDF: 1225505.2/34




Right In: 0.894+/-0.000 $\chi^2$/NDF: 12749707787.6/15

Left Out: 1.161+/-0.000 $\chi^2$/NDF:58342106663.3/16

Right Out: 0.902+/-0.000 $\chi^2$/NDF: 17893051843.7/18

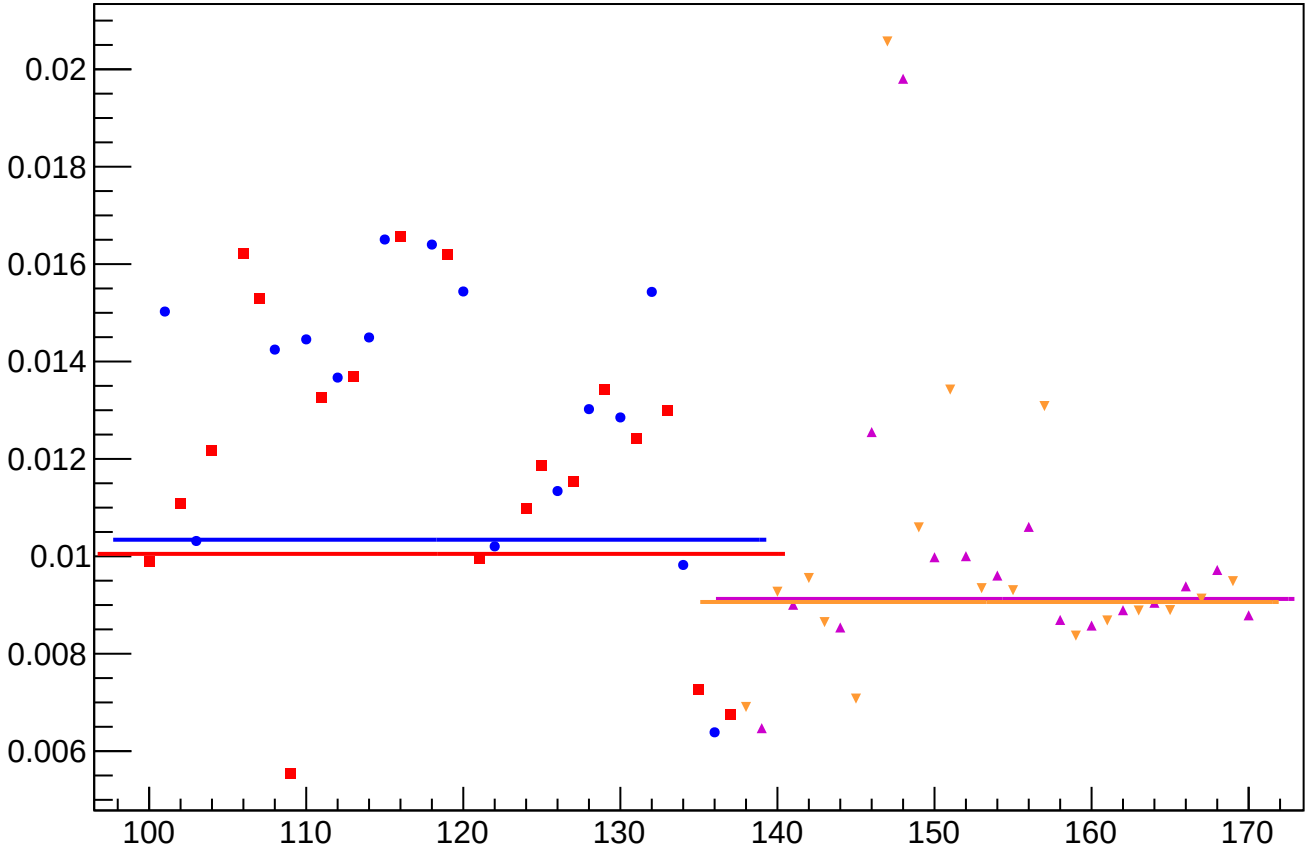
Left In: 1.168+/-0.000 $\chi^2$/NDF:65081580843.2/15

+ sign 1.088+/-0.000 $\chi^2$/NDF: 73981134663.2/32

All: 1.089+/-0.000 $\chi^2$/NDF: 159992147077.1

- sign 1.090+/-0.000 $\chi^2$/NDF: 86010671907.3/34

# yield_bpm12Y_rms vs Slug




Right In: 0.010+/-0.000 $\chi^2$/NDF: 1350446.6/15

Left Out: 0.009+/-0.000 $\chi^2$/NDF:1127238.1/16

Right Out: 0.010+/-0.000 $\chi^2$/NDF: 1336866.7/18

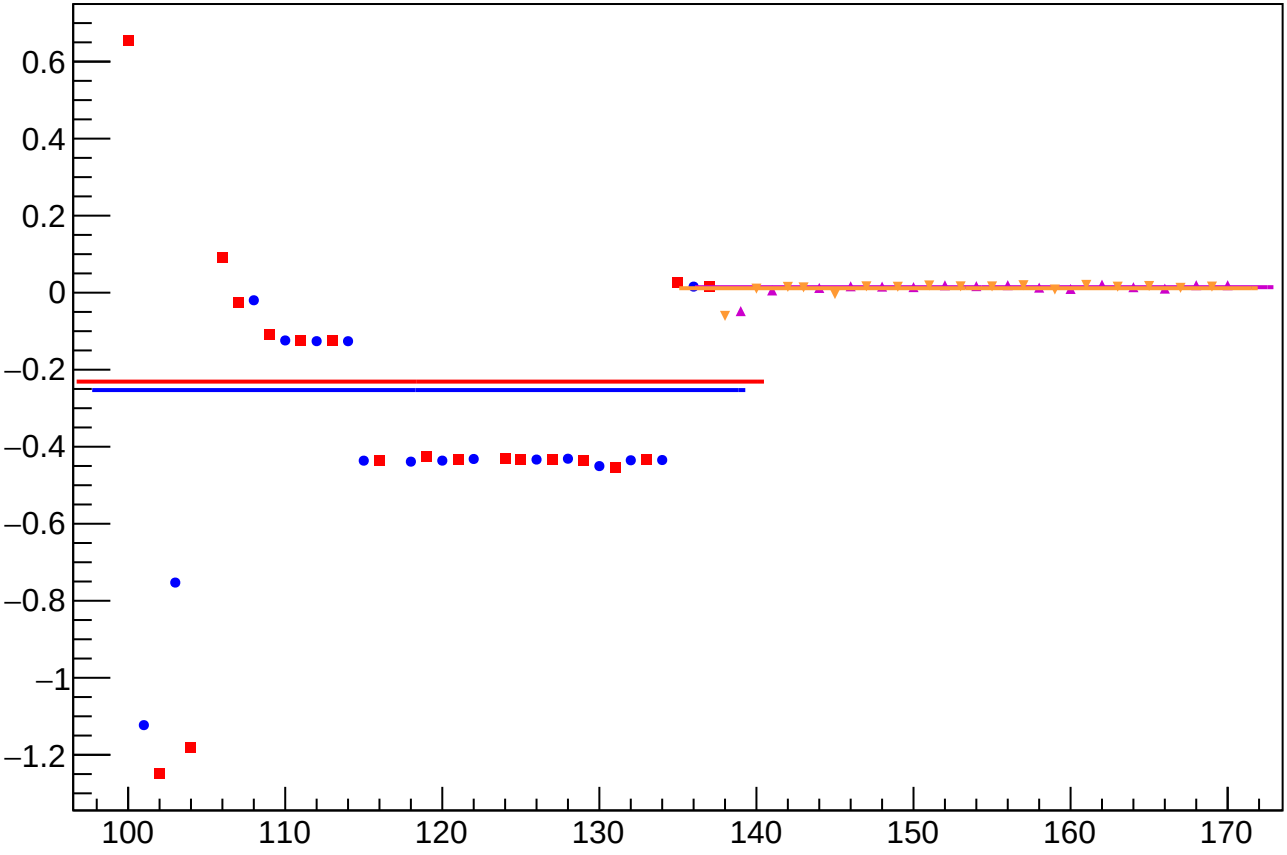
Left In: 0.009+/-0.000 $\chi^2$/NDF:927418.2/15

+ sign 0.009+/-0.000 $\chi^2$/NDF: 2610313.9/32

All: 0.009+/-0.000 $\chi^2$/NDF: 4947599.3/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 2337241.2/34

# yield_bpm16X_mean vs Slug




Right In: -0.253+/-0.000 $\chi^2$/NDF: 2025242410.1/15

Left Out: 0.012+/-0.000 $\chi^2$/NDF:23224505.4/16

Right Out: -0.231+/-0.000 $\chi^2$/NDF: 1808702536.0/18

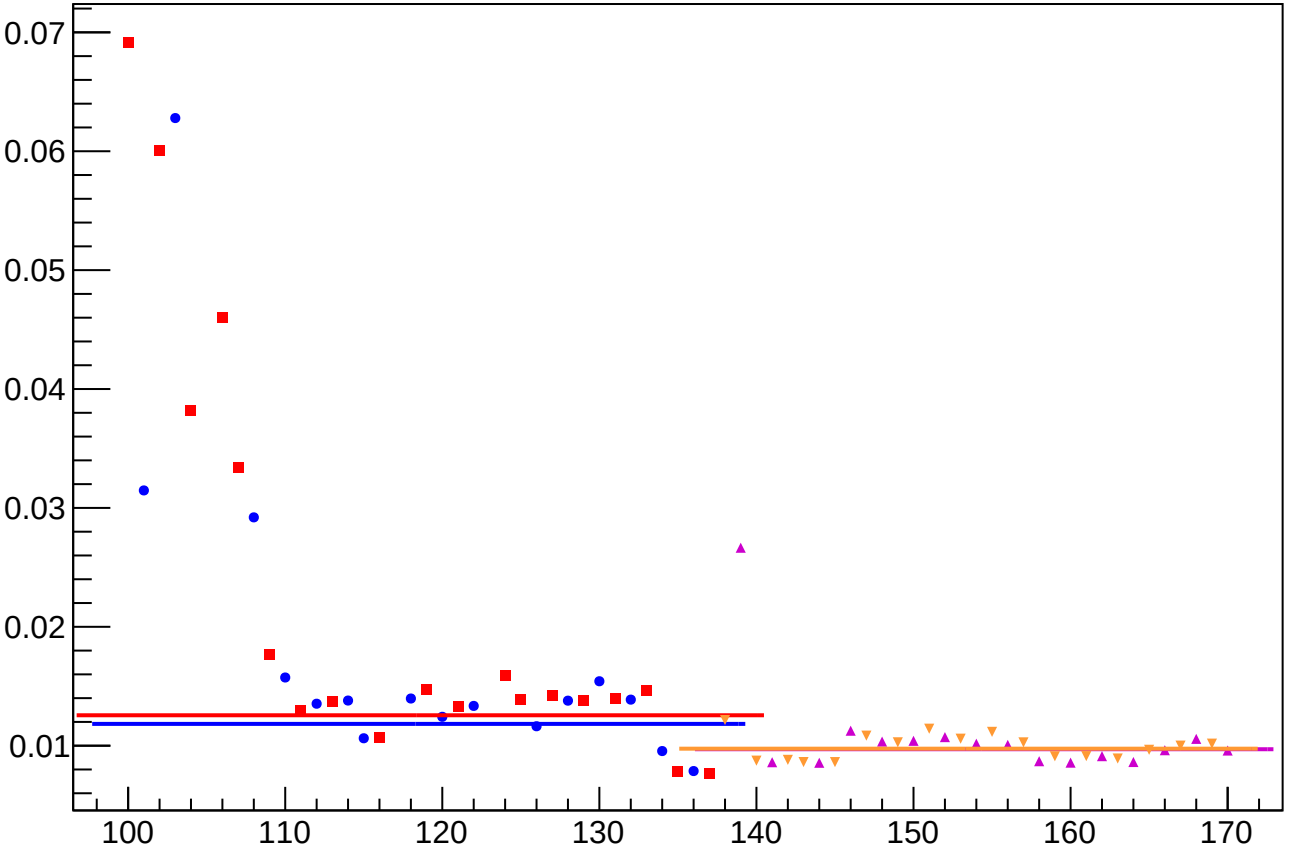
Left In: 0.014+/-0.000 $\chi^2$/NDF:6698040.6/15

+ sign -0.050+/-0.000 $\chi^2$/NDF: 3956444050.1/32

All: -0.044+/-0.000 $\chi^2$/NDF: 7278265283.7/6

- sign -0.039+/-0.000 $\chi^2$/NDF: 3312529490.4/34

# yield_bpm16X_rms vs Slug




Right In: 0.012+/-0.000 $\chi^2$/NDF: 1942550.6/15

Left Out: 0.010+/-0.000 $\chi^2$/NDF:225991.9/16

Right Out: 0.013+/-0.000 $\chi^2$/NDF: 2217419.3/18

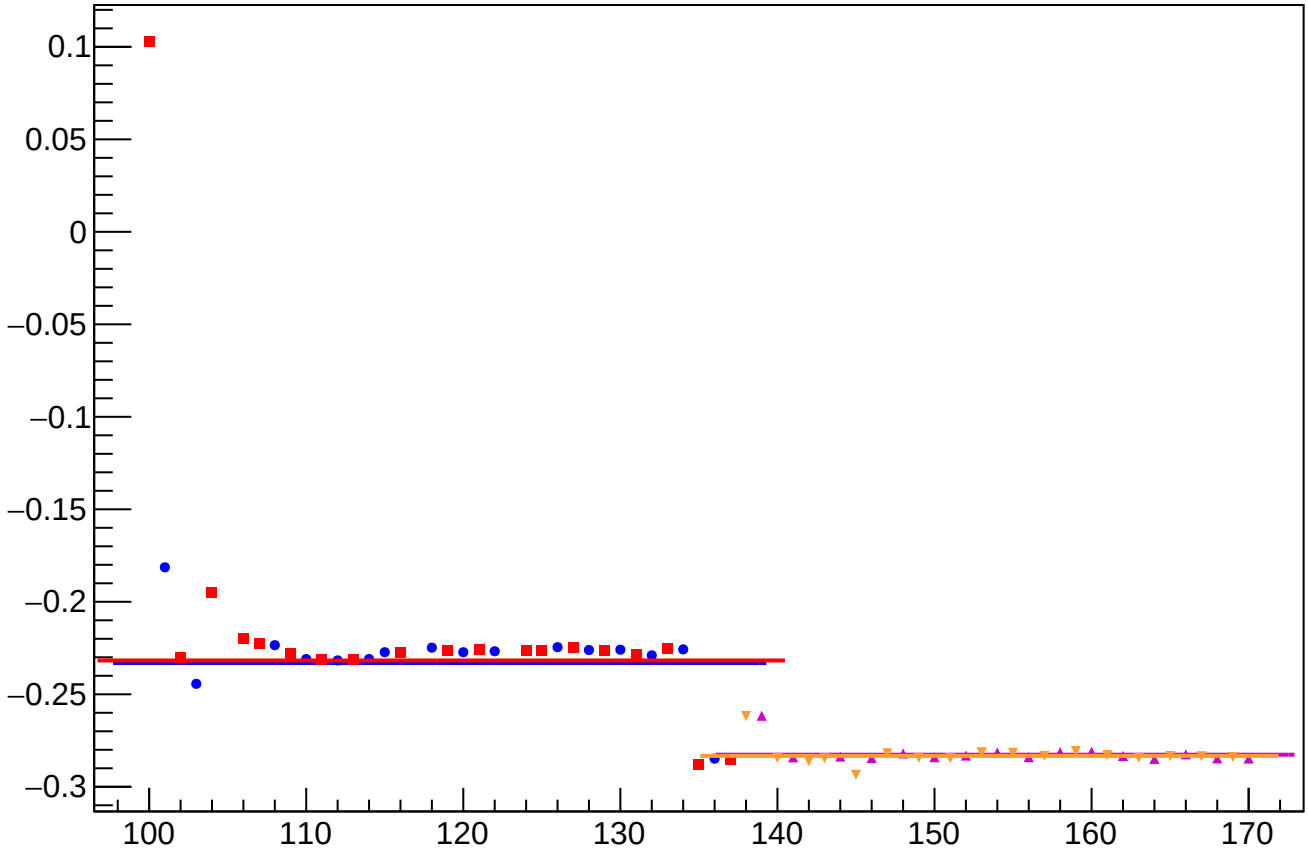
Left In: 0.010+/-0.000 $\chi^2$/NDF:856469.8/15

+ sign 0.010+/-0.000 $\chi^2$/NDF: 2405671.2/32

All: 0.010+/-0.000 $\chi^2$/NDF: 5887147.0/67

- sign 0.010+/-0.000 $\chi^2$/NDF: 3480346.8/34

# yield_bpm16Y_mean vs Slug




Right In: -0.233+/-0.000 $\chi^2$/NDF: 199059878.3/15

Left Out: -0.283+/-0.000 $\chi^2$/NDF:15027655.2/16

Right Out: -0.232+/-0.000 $\chi^2$/NDF: 287244778.7/18

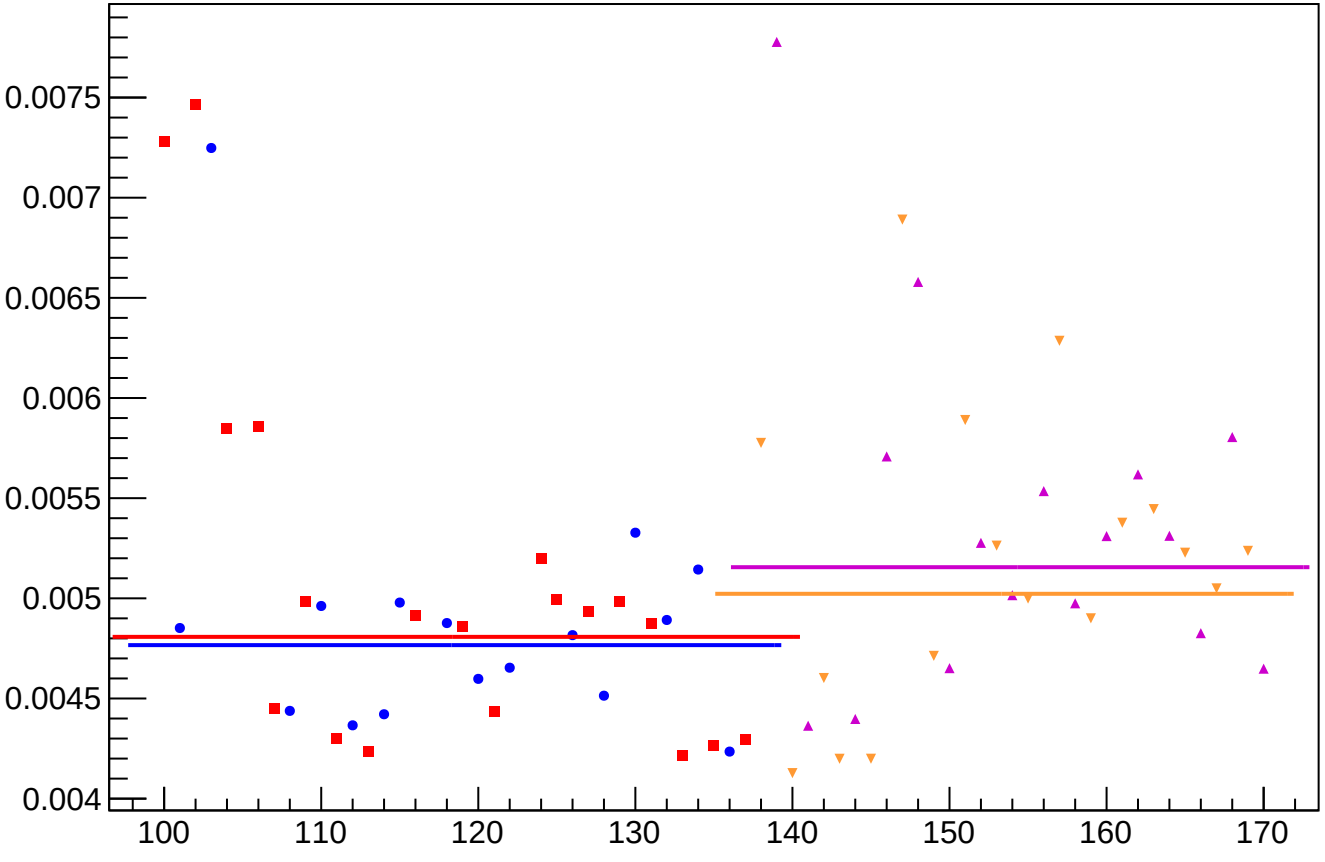
Left In: -0.283+/-0.000 $\chi^2$/NDF:6766351.5/15

+ sign -0.265+/-0.000 $\chi^2$/NDF: 666749549.4/32

All: -0.264+/-0.000 $\chi^2$/NDF: 1424820286.6/6

- sign -0.263+/-0.000 $\chi^2$/NDF: 756683680.9/34

# yield_bpm16Y_rms vs Slug




Right In: 0.005+/-0.000 $\chi^2$/NDF: 191759.7/15

Left Out: 0.005+/-0.000 $\chi^2$/NDF:456032.1/16

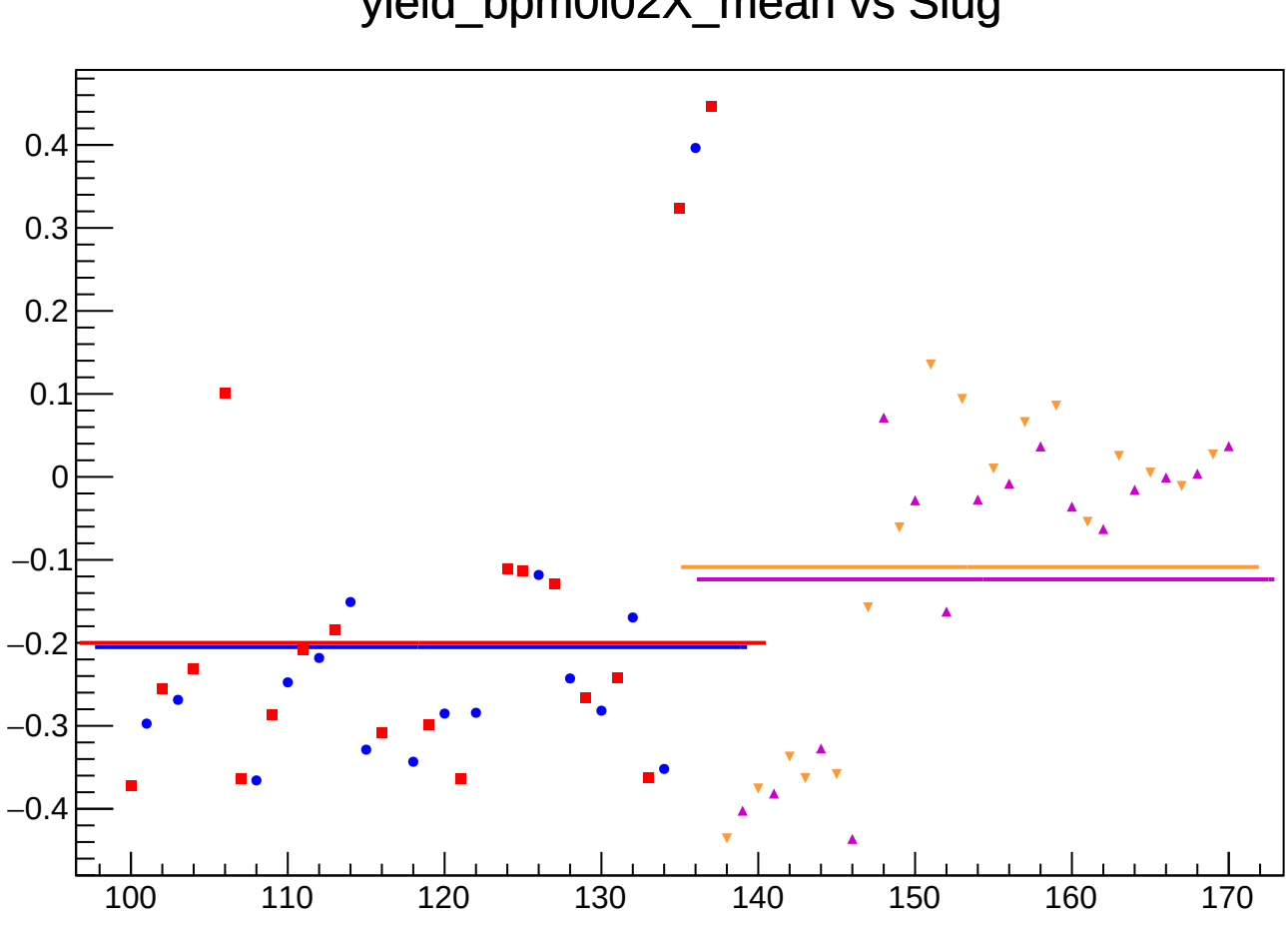
Right Out: 0.005+/-0.000 $\chi^2$/NDF: 293738.0/18

Left In: 0.005+/-0.000 $\chi^2$/NDF:463091.8/15

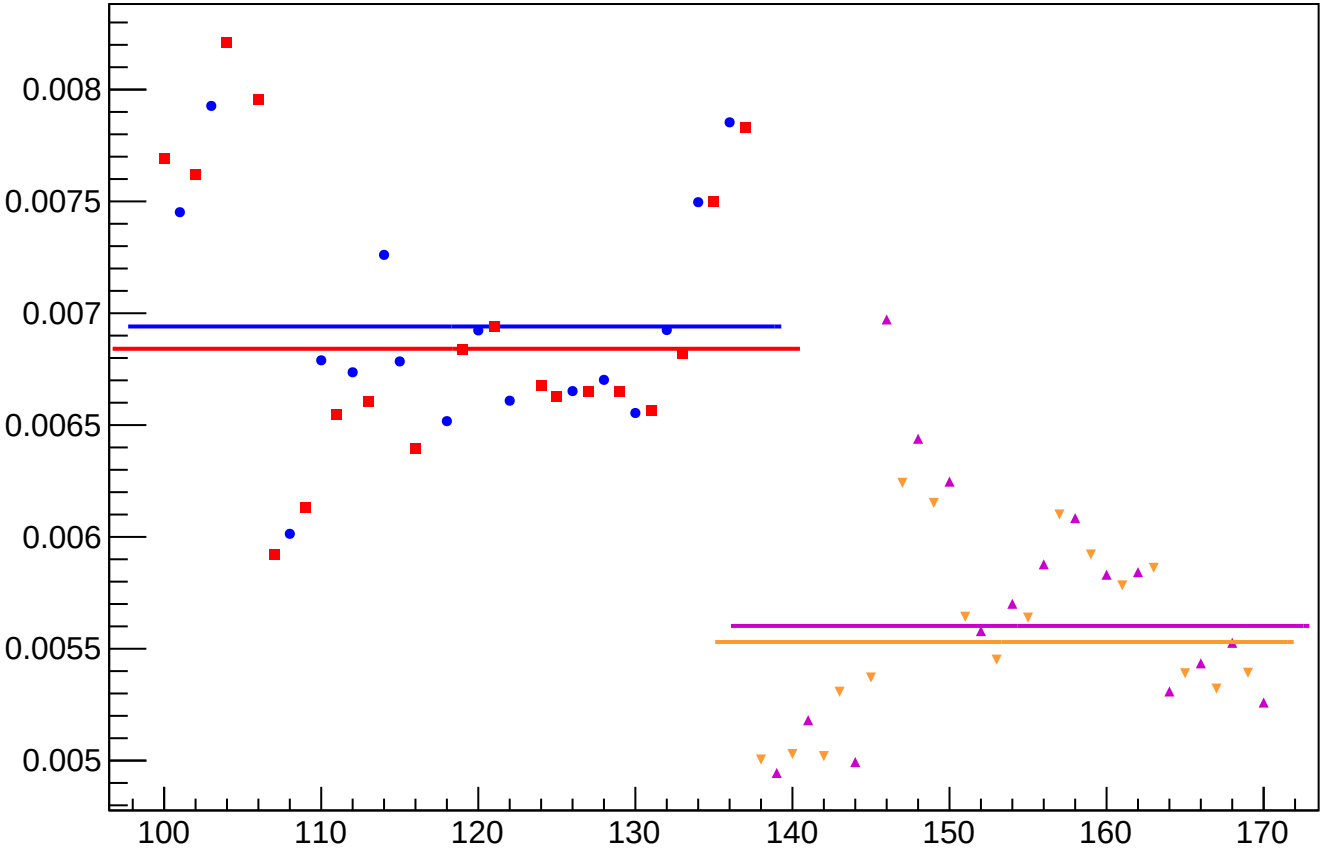
+ sign 0.005+/-0.000 $\chi^2$/NDF: 671387.1/32

All: 0.005+/-0.000 $\chi^2$/NDF: 1477893.9/67

- sign 0.005+/-0.000 $\chi^2$/NDF: 799966.1/34


yield_bpm0i02X_mean vs Slug
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
100
110
120
130
140
150
160
170
Right In: -0.205+/-0.000 χ²/NDF: 6189271855.3/15
Left Out: -0.109+/-0.000 χ²/NDF:15623610881.8/16
Right Out: -0.200+/-0.000 χ²/NDF: 5249978819.5/18
Left In: -0.123+/-0.000 χ²/NDF:11570613440.6/15
+ sign -0.134+/-0.000 χ²/NDF: 22815089284.3/32
All: -0.139+/-0.000 χ²/NDF: 40318272893.5/
- sign -0.145+/-0.000 χ²/NDF: 17468856261.0/34

# yield_bpm0i02X_rms vs Slug




Right In: 0.007+/-0.000 $\chi^2$/NDF: 85159.0/15

Left Out: 0.006+/-0.000 $\chi^2$/NDF:113567.7/16

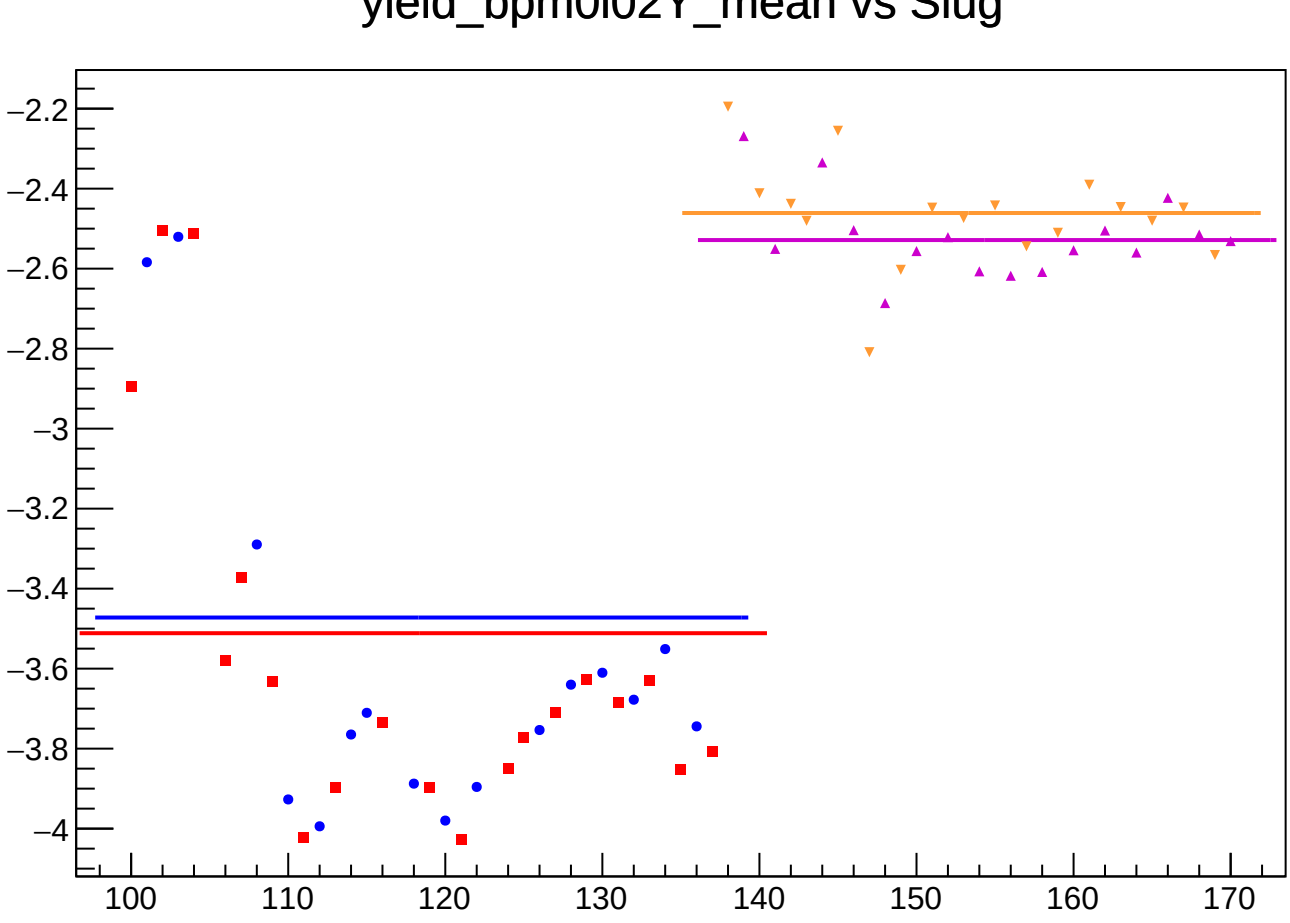
Right Out: 0.007+/-0.000 $\chi^2$/NDF: 99819.4/18

Left In: 0.006+/-0.000 $\chi^2$/NDF:193151.8/15

+ sign 0.006+/-0.000 $\chi^2$/NDF: 627433.4/32

All: 0.006+/-0.000 $\chi^2$/NDF: 1261398.8/67

- sign 0.006+/-0.000 $\chi^2$/NDF: 632460.5/34




Right In: -3.472+/-0.000 $\chi^2$/NDF: 29592353445.4/15

Left Out: -2.461+/-0.000 $\chi^2$/NDF:1769117306.5/16

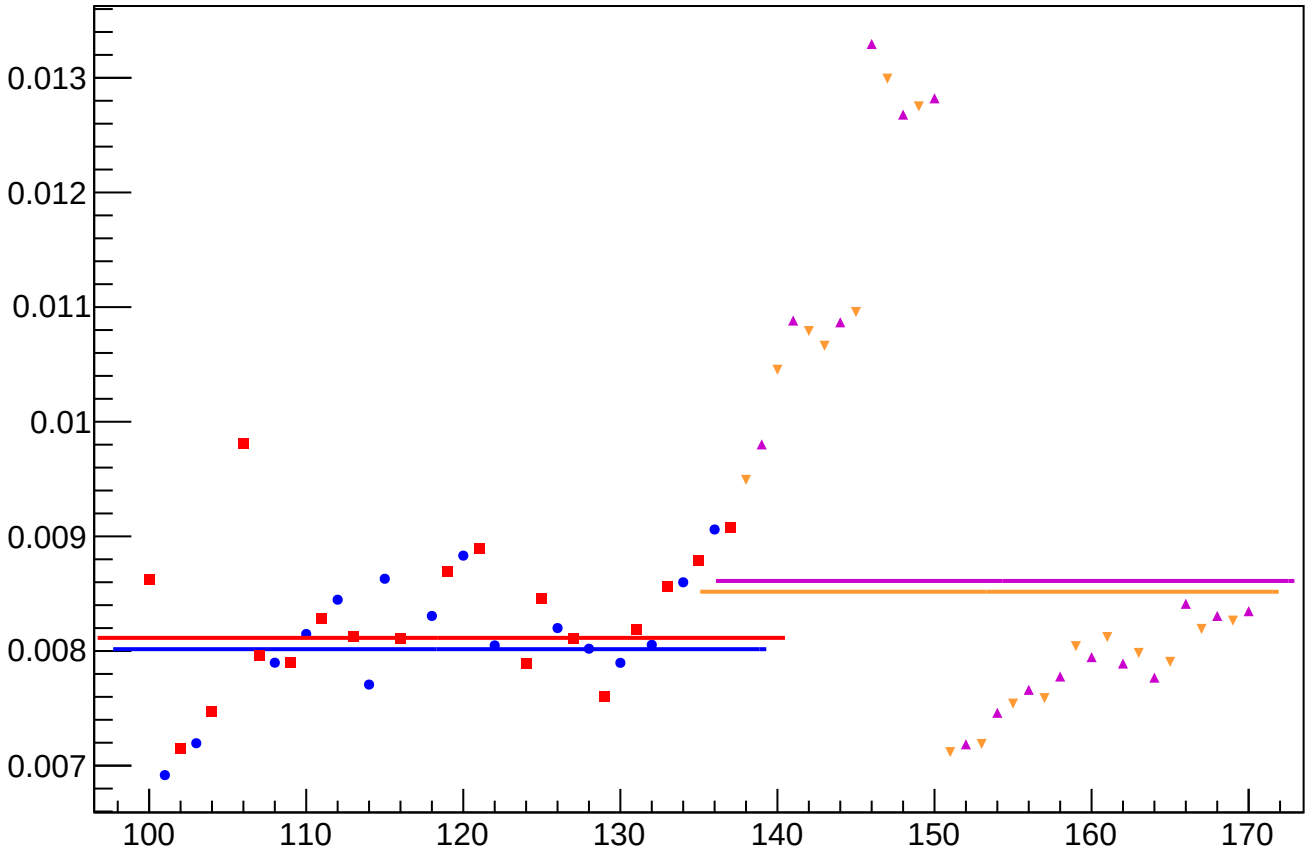
Right Out: -3.511+/-0.000 $\chi^2$/NDF: 29716501733.6/18

Left In: -2.529+/-0.000 $\chi^2$/NDF:1393129798.6/15

+ sign -2.856+/-0.000 $\chi^2$/NDF: 99078505718.2/32

All: -2.888+/-0.000 $\chi^2$/NDF: 193486446292.

- sign -2.921+/-0.000 $\chi^2$/NDF: 93841737598.6/34




Right In: 0.008+/-0.000 $\chi^2$/NDF: 86232.2/15

Left Out: 0.009+/-0.000 $\chi^2$/NDF:747916.2/16

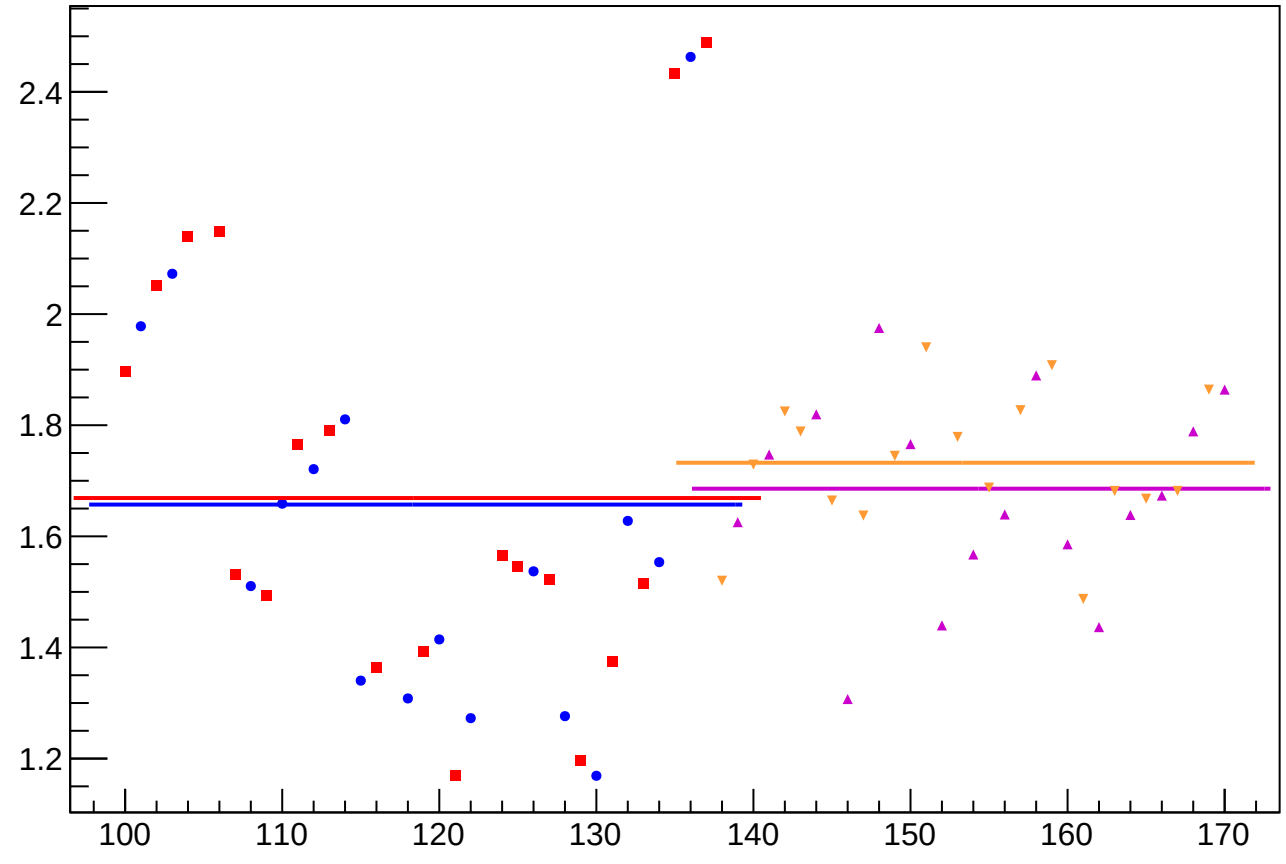
Right Out: 0.008+/-0.000 $\chi^2$/NDF: 71067.5/18

Left In: 0.009+/-0.000 $\chi^2$/NDF:850074.3/15

+ sign 0.008+/-0.000 $\chi^2$/NDF: 867393.0/32

All: 0.008+/-0.000 $\chi^2$/NDF: 1822870.6/67

- sign 0.008+/-0.000 $\chi^2$/NDF: 953160.0/34




Right In: 1.657+/-0.000 $\chi^2$/NDF: 6666154117.3/15

Left Out: 1.732+/-0.000 $\chi^2$/NDF:1452345180.3/16

Right Out: 1.669+/-0.000 $\chi^2$/NDF: 6357589265.5/18

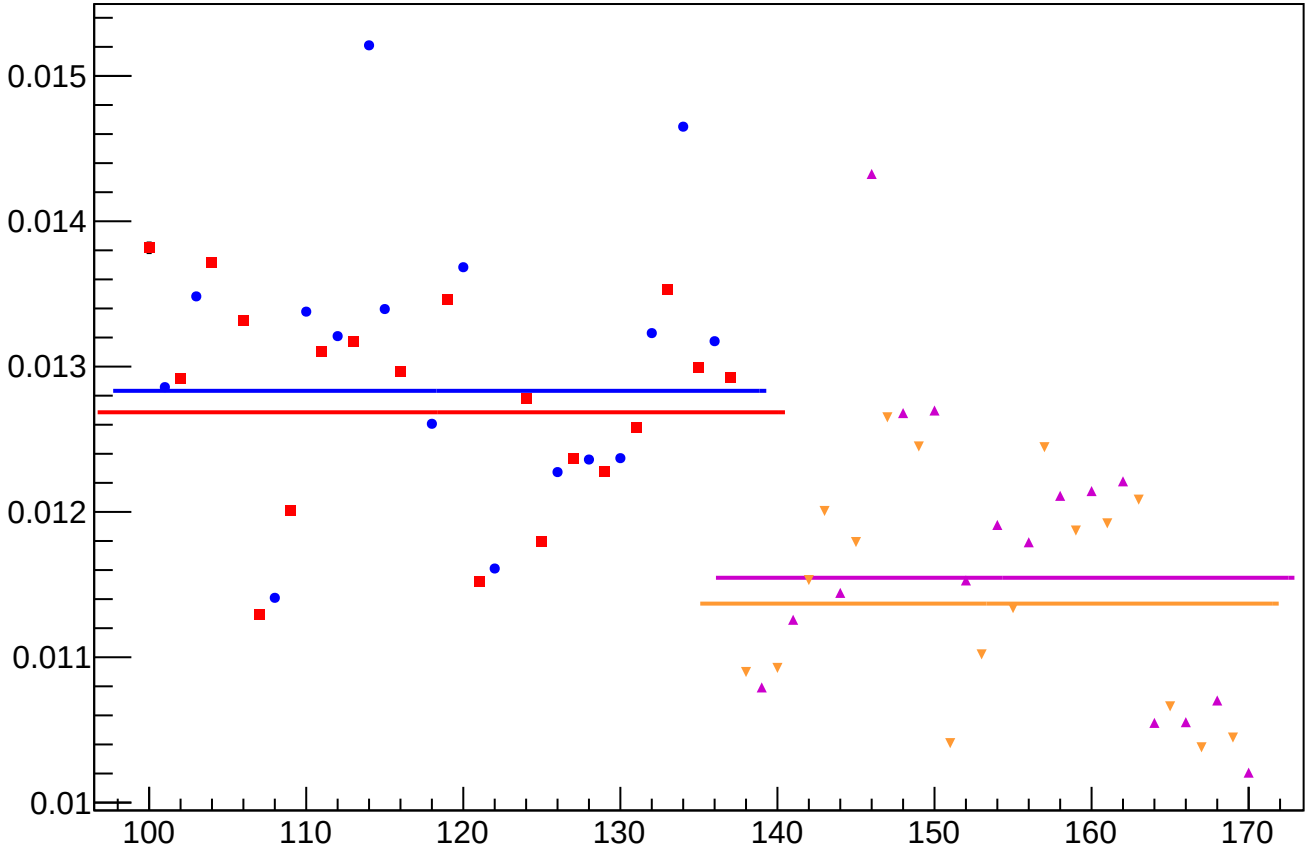
Left In: 1.686+/-0.000 $\chi^2$/NDF:2523260797.9/15

+ sign 1.710+/-0.000 $\chi^2$/NDF: 8286840243.3/32

All: 1.695+/-0.000 $\chi^2$/NDF: 17236245508.4/6

- sign 1.680+/-0.000 $\chi^2$/NDF: 8889407779.1/34

# yield_bpm0i02aX_rms vs Slug




Right In: 0.013+/-0.000 $\chi^2$/NDF: 52516.5/15

Left Out: 0.011+/-0.000 $\chi^2$/NDF:108974.7/16

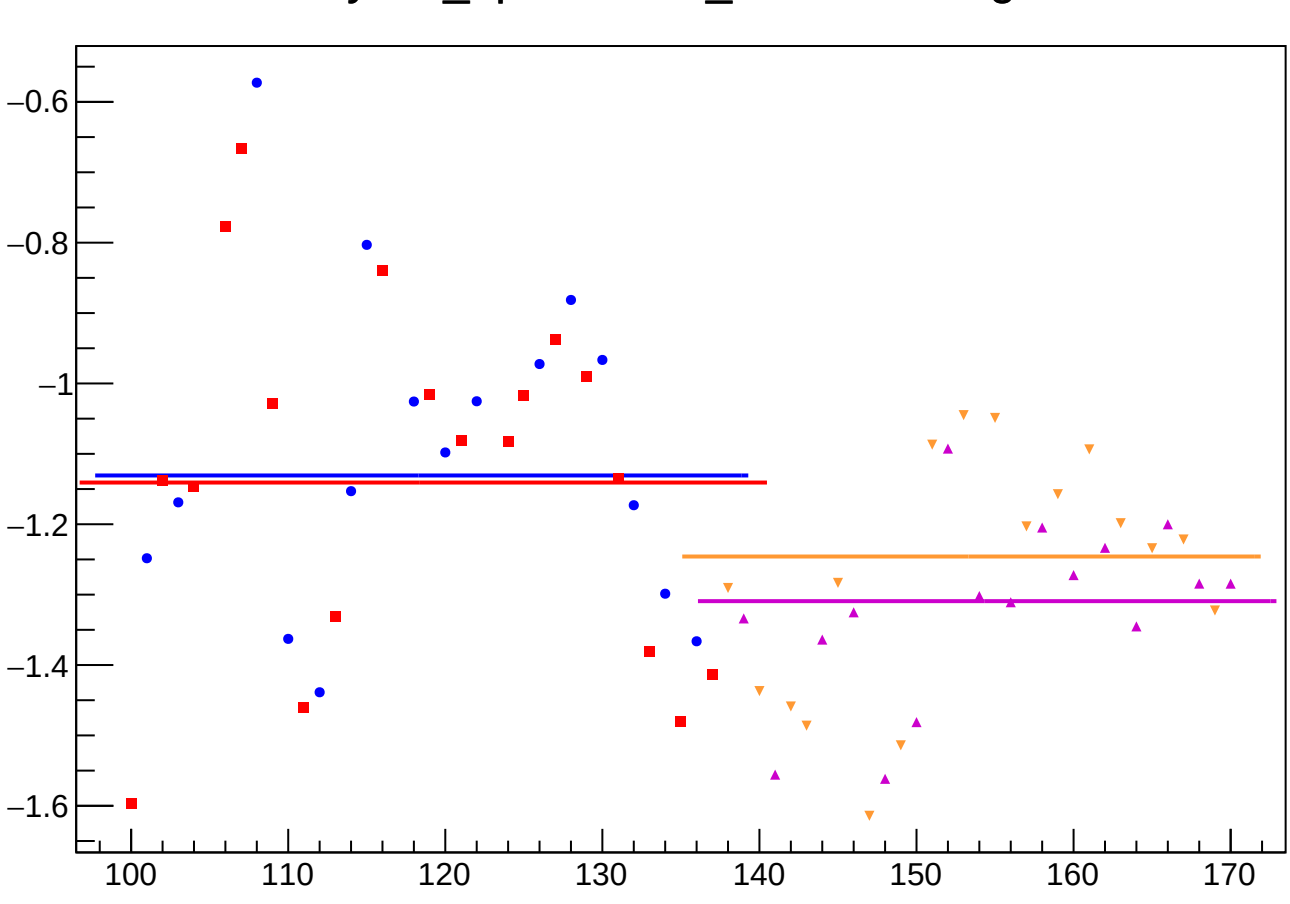
Right Out: 0.013+/-0.000 $\chi^2$/NDF: 43279.9/18

Left In: 0.012+/-0.000 $\chi^2$/NDF:166649.8/15

+ sign 0.012+/-0.000 $\chi^2$/NDF: 288842.2/32

All: 0.012+/-0.000 $\chi^2$/NDF: 578675.1/67

- sign 0.012+/-0.000 $\chi^2$/NDF: 288283.0/34




Right In: -1.131+/-0.000 $\chi^2$/NDF: 3790121991.7/15

Left Out: -1.246+/-0.000 $\chi^2$/NDF:4462271647.1/16

Right Out: -1.141+/-0.000 $\chi^2$/NDF: 3544012262.4/18

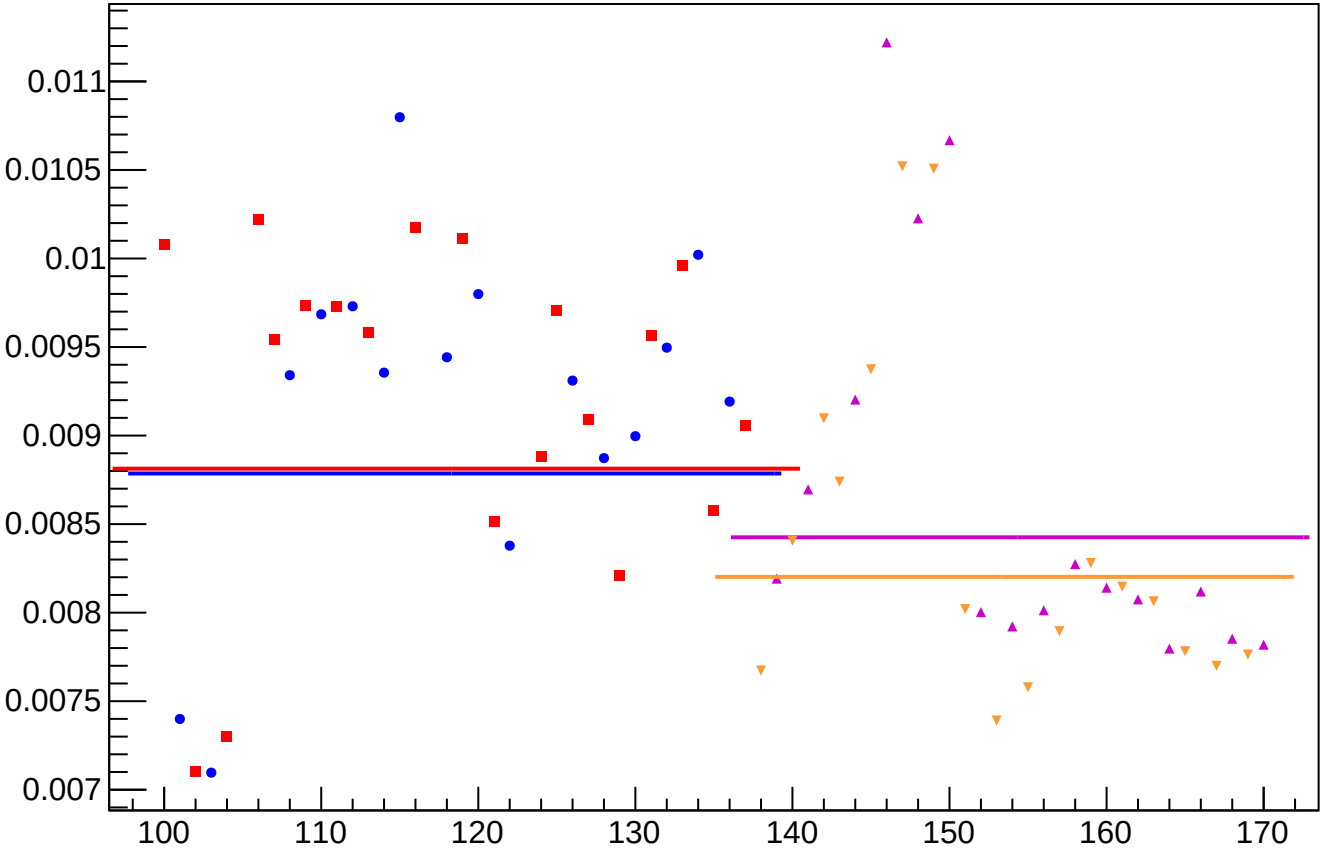
Left In: -1.309+/-0.000 $\chi^2$/NDF:2283145848.4/15

+ sign -1.208+/-0.000 $\chi^2$/NDF: 9045139452.0/32

All: -1.230+/-0.000 $\chi^2$/NDF: 16791528183.0/

- sign -1.252+/-0.000 $\chi^2$/NDF: 7496251833.5/34

# yield_bpm0i02aY_rms vs Slug




Right In: 0.009+/-0.000 $\chi^2$/NDF: 173477.6/15

Left Out: 0.008+/-0.000 $\chi^2$/NDF:226119.3/16

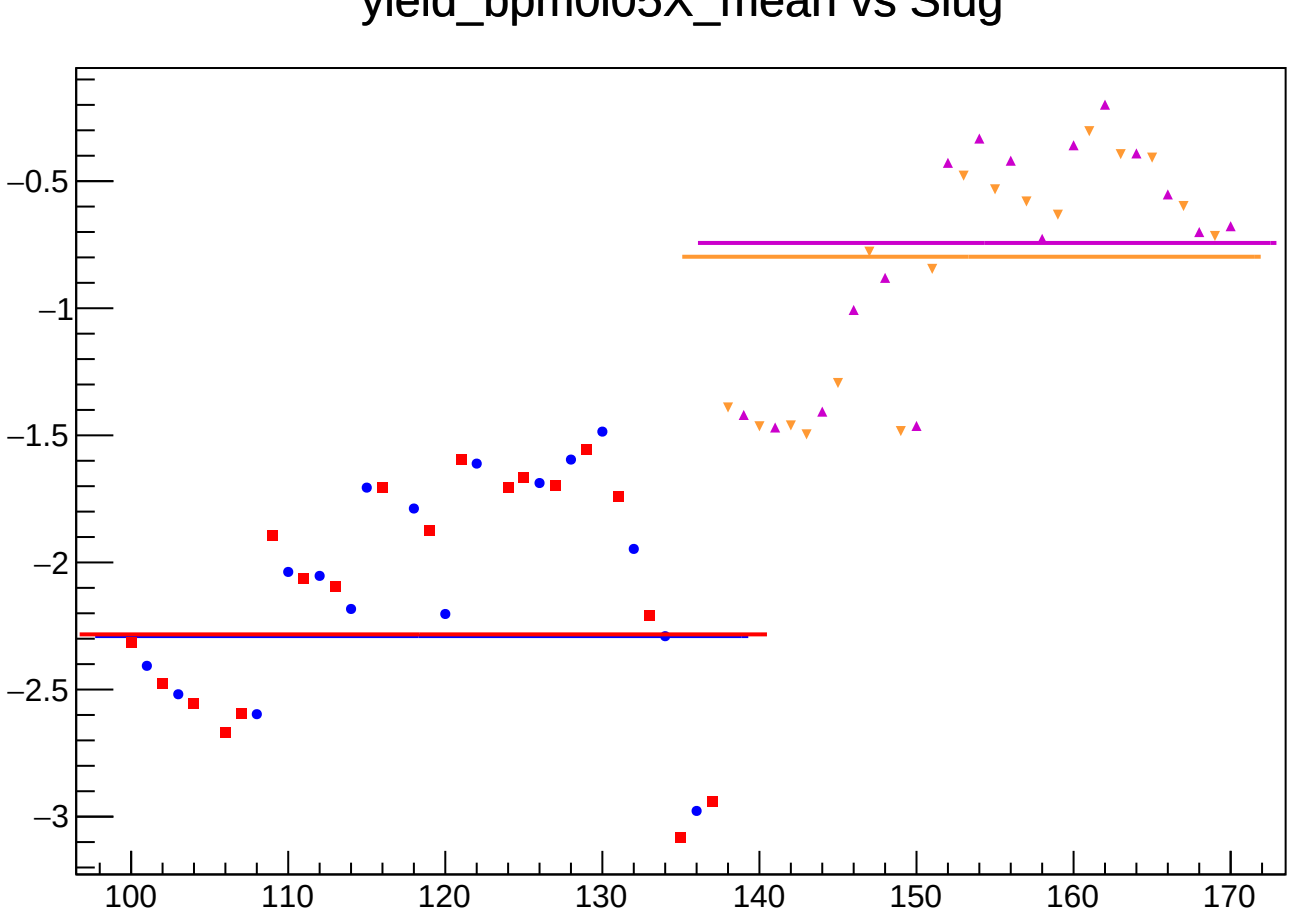
Right Out: 0.009+/-0.000 $\chi^2$/NDF: 204443.3/18

Left In: 0.008+/-0.000 $\chi^2$/NDF:261717.6/15

+ sign 0.008+/-0.000 $\chi^2$/NDF: 440363.4/32

All: 0.008+/-0.000 $\chi^2$/NDF: 931519.2/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 483838.4/34




Right In: -2.290+/-0.000 $\chi^2$/NDF: 15222817978.4/15

Left Out: -0.797+/-0.000 $\chi^2$/NDF:32544863748.5/16

Right Out: -2.283+/-0.000 $\chi^2$/NDF: 17032219519.1/18

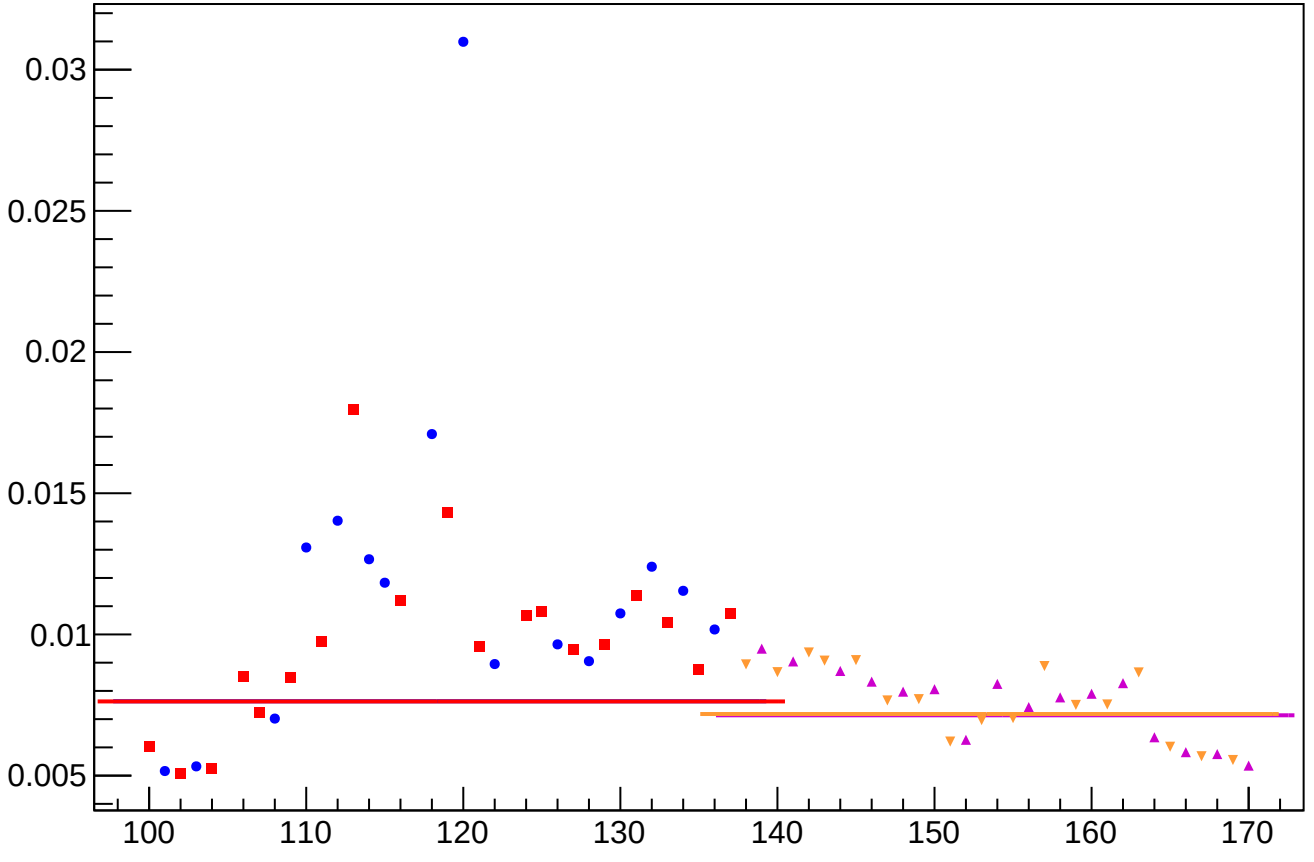
Left In: -0.743+/-0.000 $\chi^2$/NDF:32690250005.3/15

+ sign -1.223+/-0.000 $\chi^2$/NDF: 186676187567.0/32

All: -1.216+/-0.000 $\chi^2$/NDF: 393938365176.4

- sign -1.209+/-0.000 $\chi^2$/NDF: 207233714432.8/34

# yield_bpm0i05X_rms vs Slug




Right In: 0.008+/-0.000 $\chi^2$/NDF: 1710797.2/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:686961.4/16

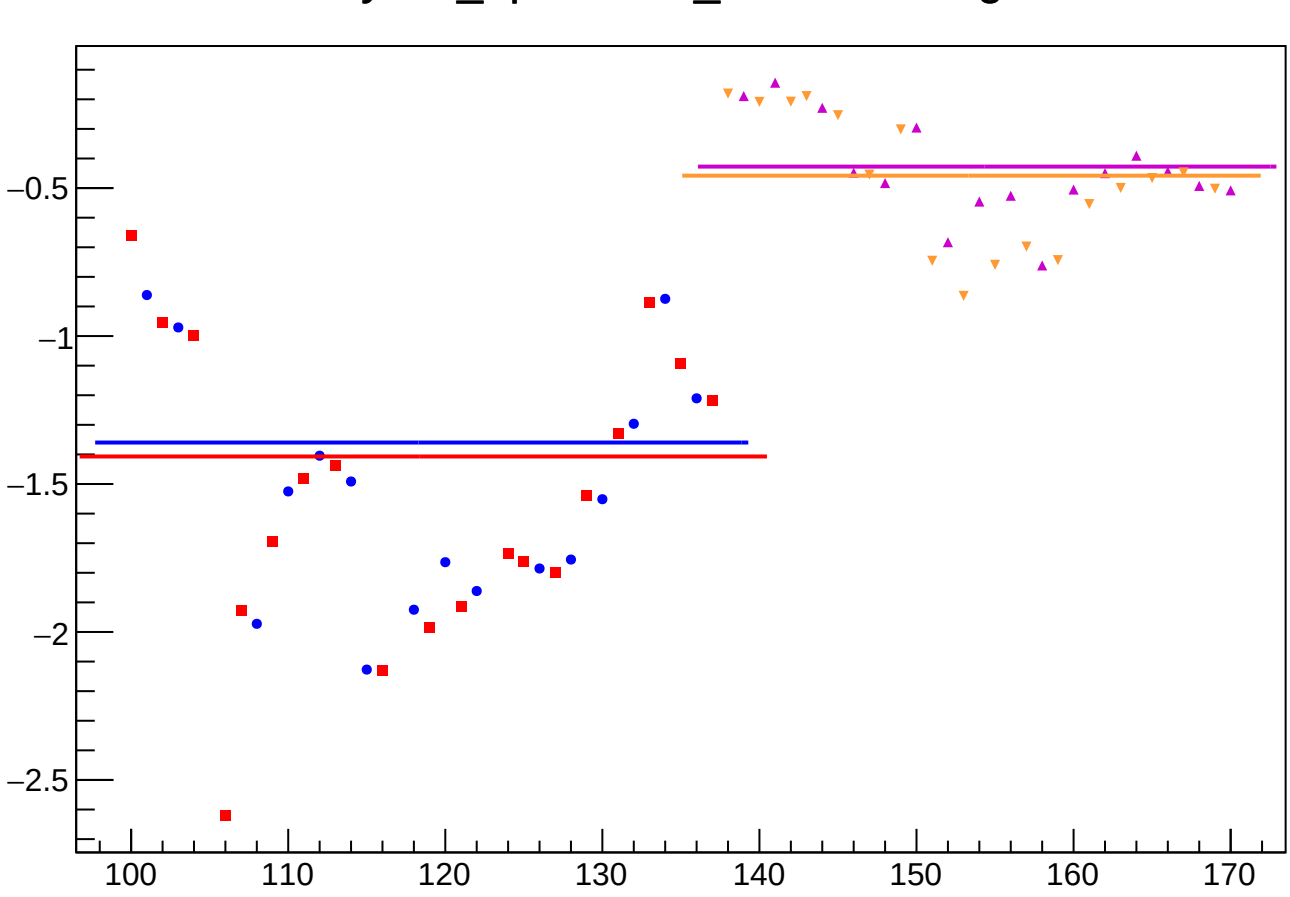
Right Out: 0.008+/-0.000 $\chi^2$/NDF: 1317740.1/18

Left In: 0.007+/-0.000 $\chi^2$/NDF:730215.5/15

+ sign 0.007+/-0.000 $\chi^2$/NDF: 2423124.8/32

All: 0.007+/-0.000 $\chi^2$/NDF: 4503309.1/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 2079986.2/34




Right In: -1.360+/-0.000 $\chi^2$/NDF: 21491965614.5/15

Left Out: -0.458+/-0.000 $\chi^2$/NDF:27986335911.1/16

Right Out: -1.407+/-0.000 $\chi^2$/NDF: 29835610413.0/18

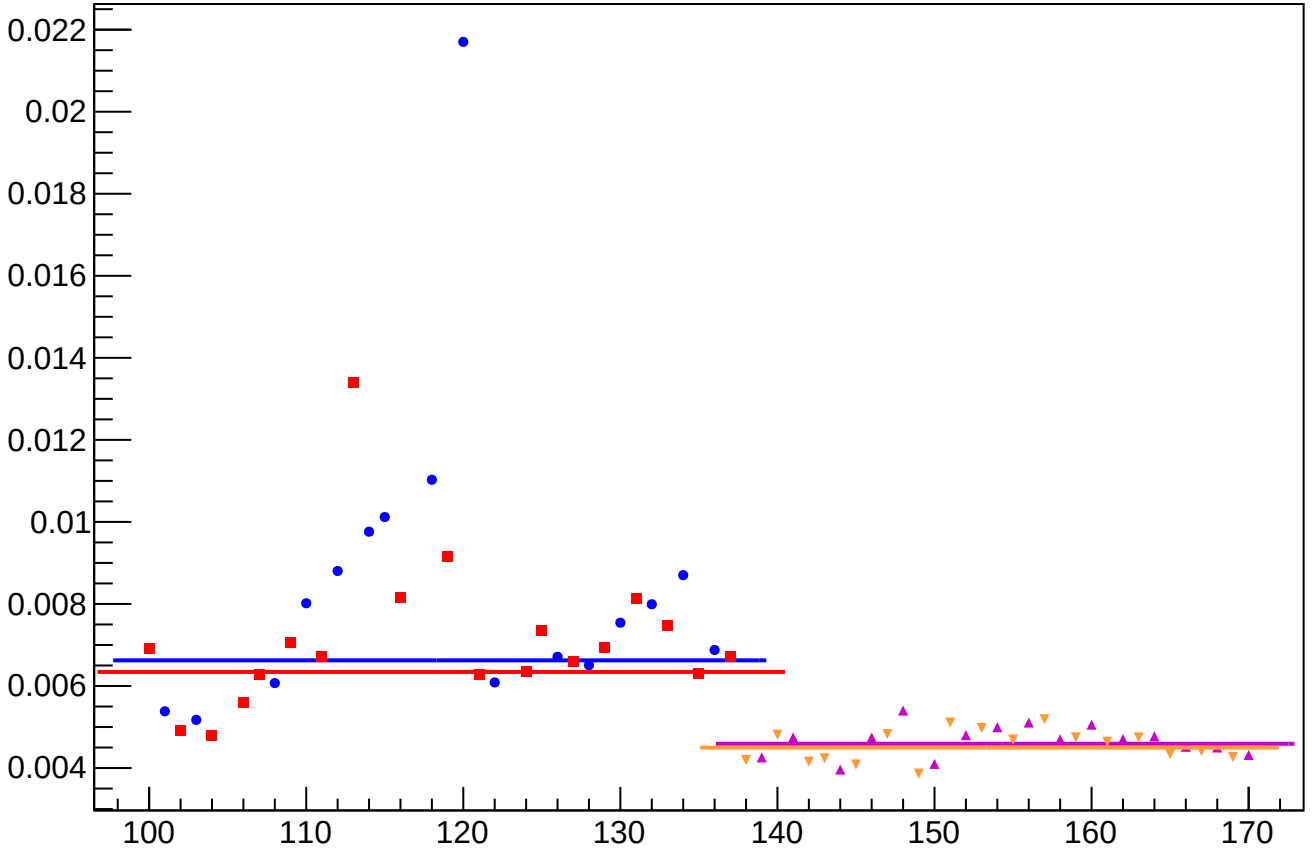
Left In: -0.427+/-0.000 $\chi^2$/NDF:16036109750.2/15

+ sign -0.622+/-0.000 $\chi^2$/NDF: 137279068139.1/32

All: -0.629+/-0.000 $\chi^2$/NDF: 298008009909.9

- sign -0.637+/-0.000 $\chi^2$/NDF: 160650328341.1/34

# yield_bpm0i05Y_rms vs Slug




Right In: 0.007+/-0.000 $\chi^2$/NDF: 693783.1/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:162755.1/16

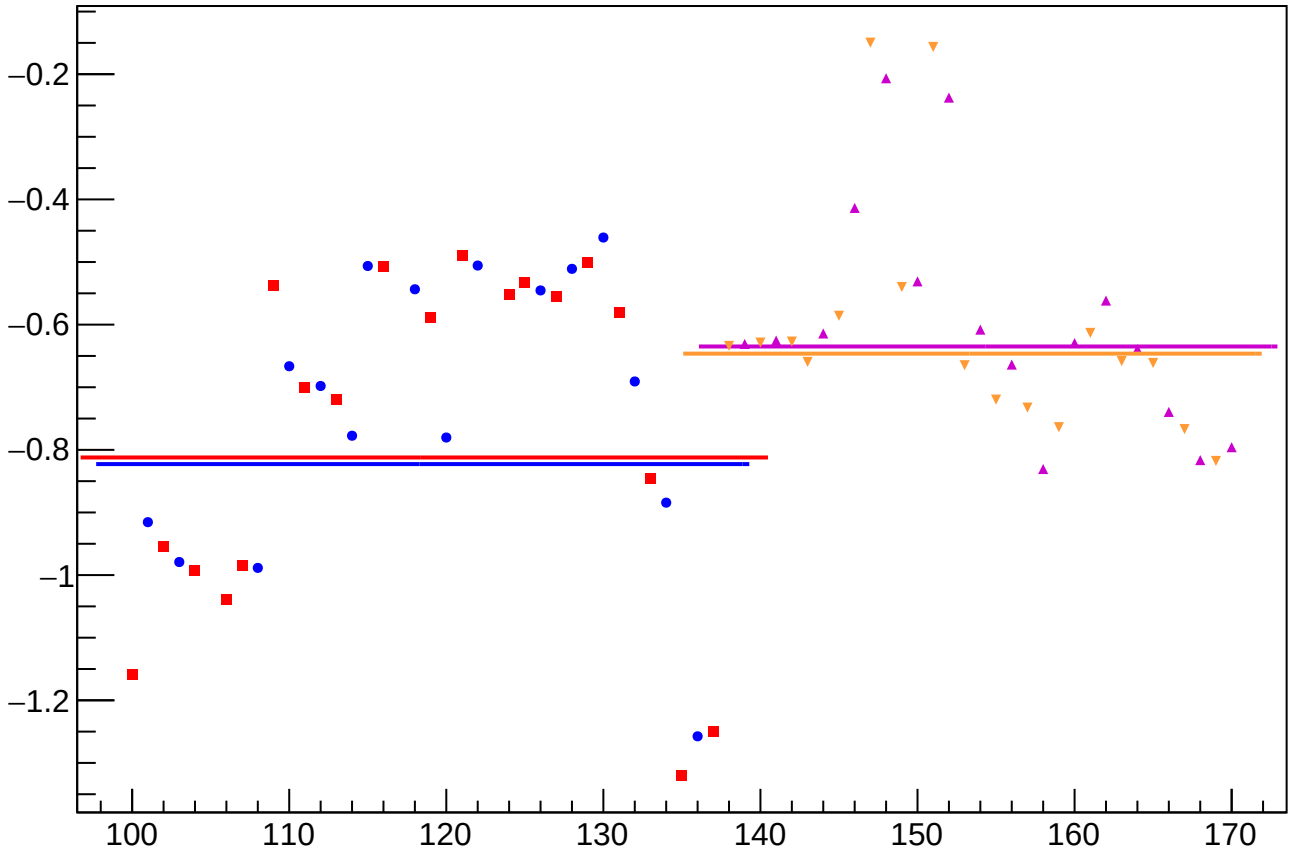
Right Out: 0.006+/-0.000 $\chi^2$/NDF: 529170.9/18

Left In: 0.005+/-0.000 $\chi^2$/NDF:157258.7/15

+ sign 0.005+/-0.000 $\chi^2$/NDF: 1833535.4/32

All: 0.005+/-0.000 $\chi^2$/NDF: 3259100.1/67

- sign 0.005+/-0.000 $\chi^2$/NDF: 1420786.0/34




Right In: -0.823+/-0.000 $\chi^2$/NDF: 12226599844.5/15

Left Out: -0.646+/-0.000 $\chi^2$/NDF:18594305758.9/16

Right Out: -0.812+/-0.000 $\chi^2$/NDF: 14825441332.4/18

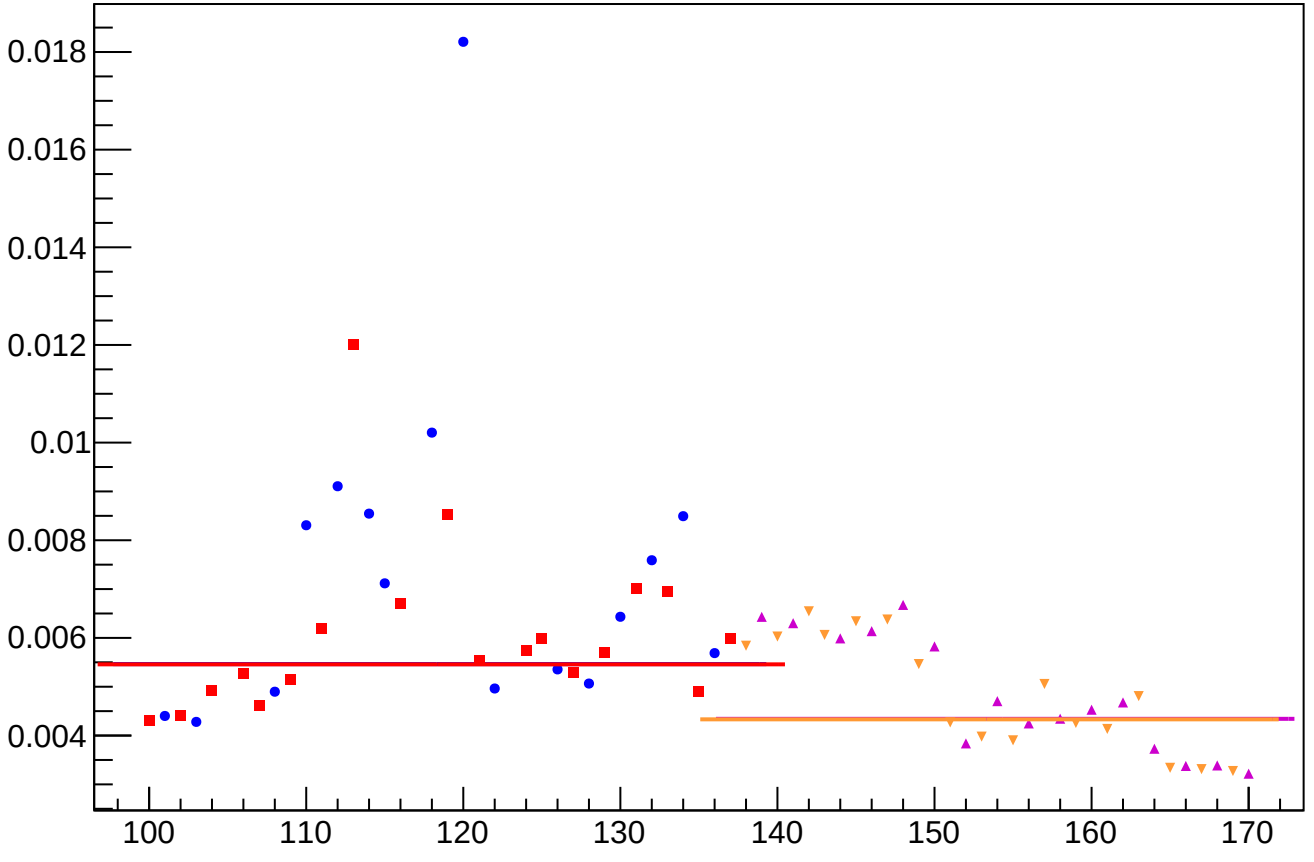
Left In: -0.635+/-0.000 $\chi^2$/NDF:19582515091.9/15

+ sign -0.688+/-0.000 $\chi^2$/NDF: 35206247932.5/32

All: -0.684+/-0.000 $\chi^2$/NDF: 74356254507.0/

- sign -0.680+/-0.000 $\chi^2$/NDF: 39125517656.7/34

# yield_bpm0i07X_rms vs Slug




Right In: 0.005+/-0.000 $\chi^2$/NDF: 961483.6/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:1252037.1/16

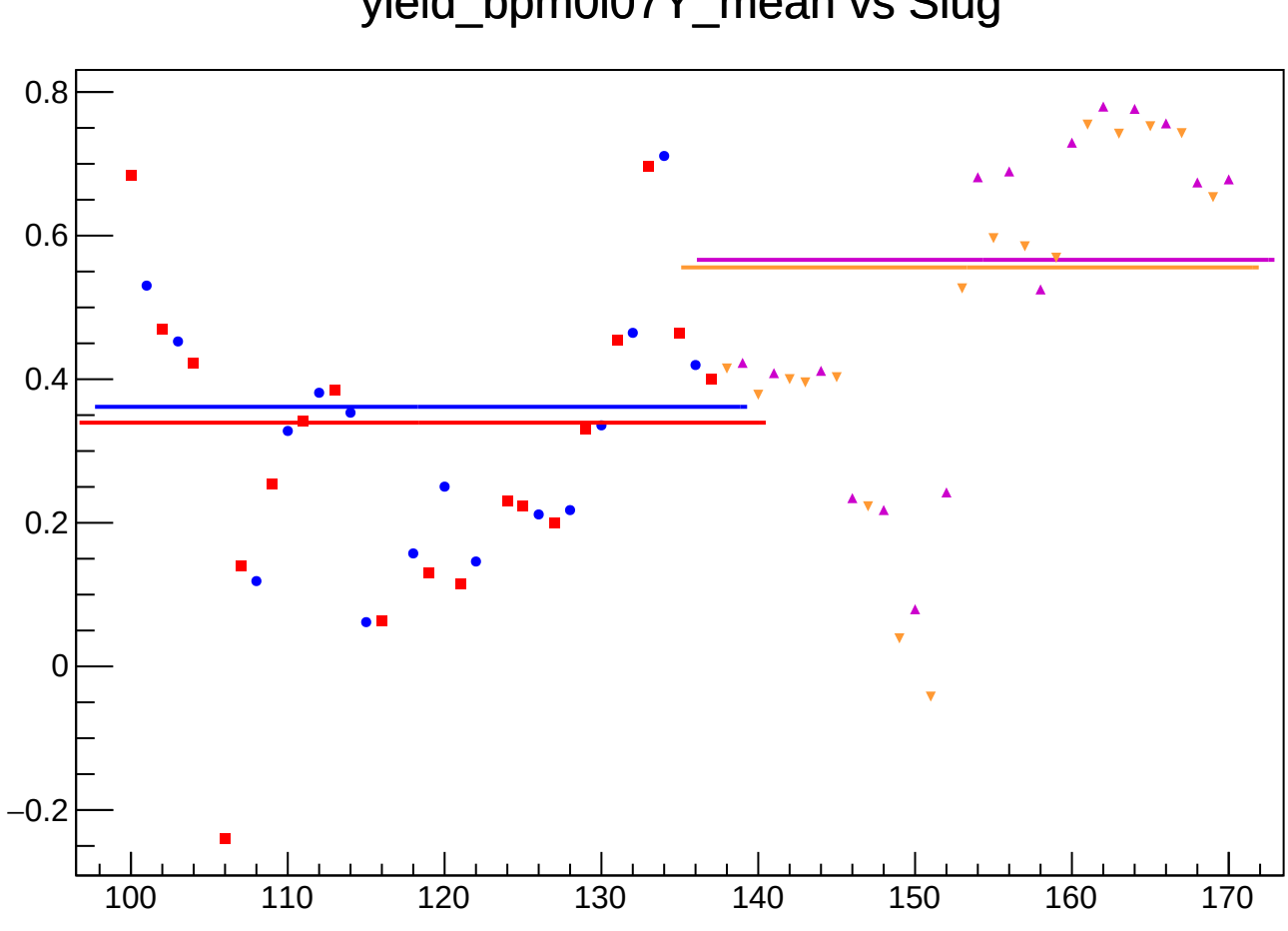
Right Out: 0.005+/-0.000 $\chi^2$/NDF: 507792.7/18

Left In: 0.004+/-0.000 $\chi^2$/NDF:1344177.2/15

+ sign 0.005+/-0.000 $\chi^2$/NDF: 2574243.5/32

All: 0.005+/-0.000 $\chi^2$/NDF: 4800687.1/67

- sign 0.005+/-0.000 $\chi^2$/NDF: 2225837.4/34




Right In: 0.362+/-0.000 $\chi^2$/NDF: 8775952187.9/15

Left Out: 0.556+/-0.000 $\chi^2$/NDF:38269106668.9/16

Right Out: 0.339+/-0.000 $\chi^2$/NDF: 12071802789.9/18

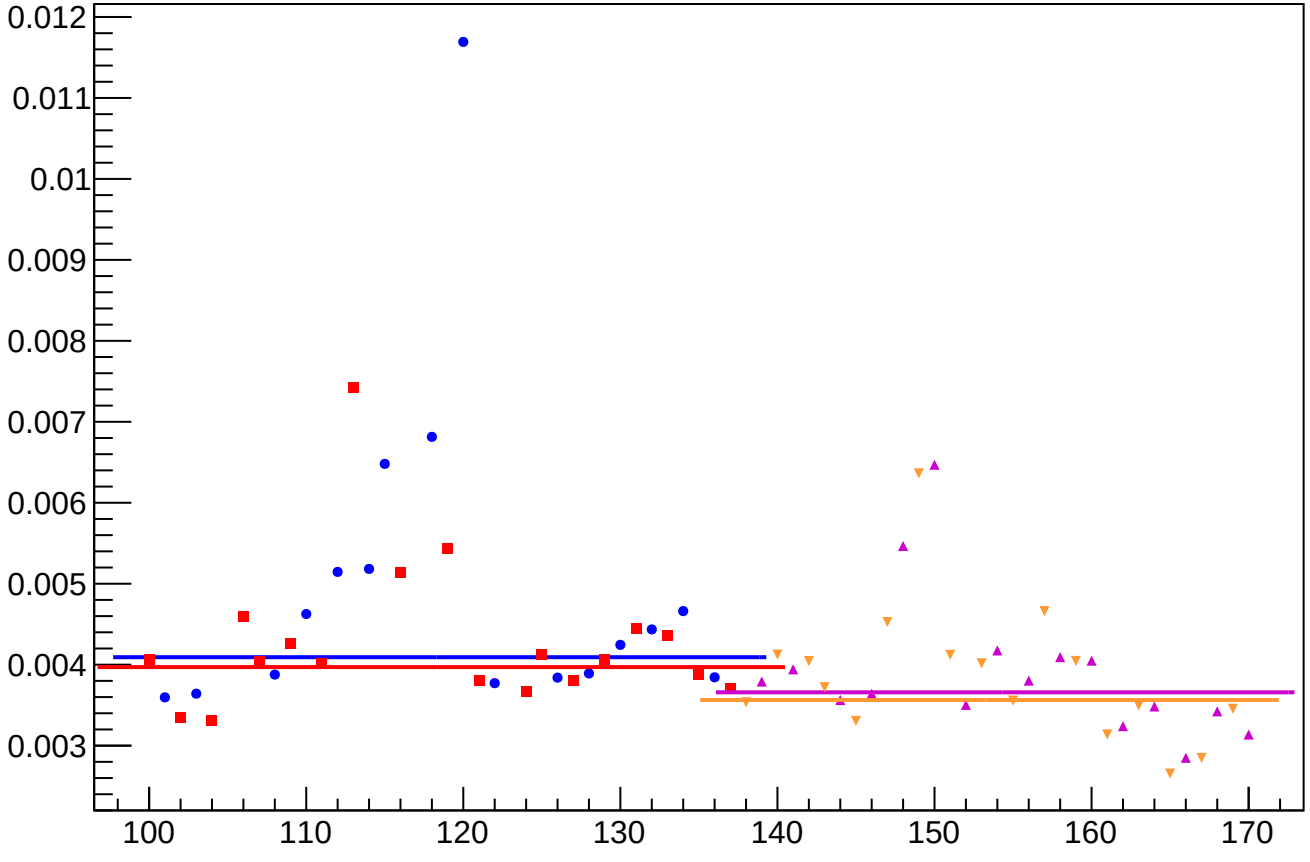
Left In: 0.566+/-0.000 $\chi^2$/NDF:33252614157.8/15

+ sign 0.496+/-0.000 $\chi^2$/NDF: 56627848602.9/32

All: 0.493+/-0.000 $\chi^2$/NDF: 115775095648.3

- sign 0.489+/-0.000 $\chi^2$/NDF: 59113743190.2/34

# yield_bpm0i07Y_rms vs Slug




Right In: 0.004+/-0.000 $\chi^2$/NDF: 491748.3/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:740307.6/16

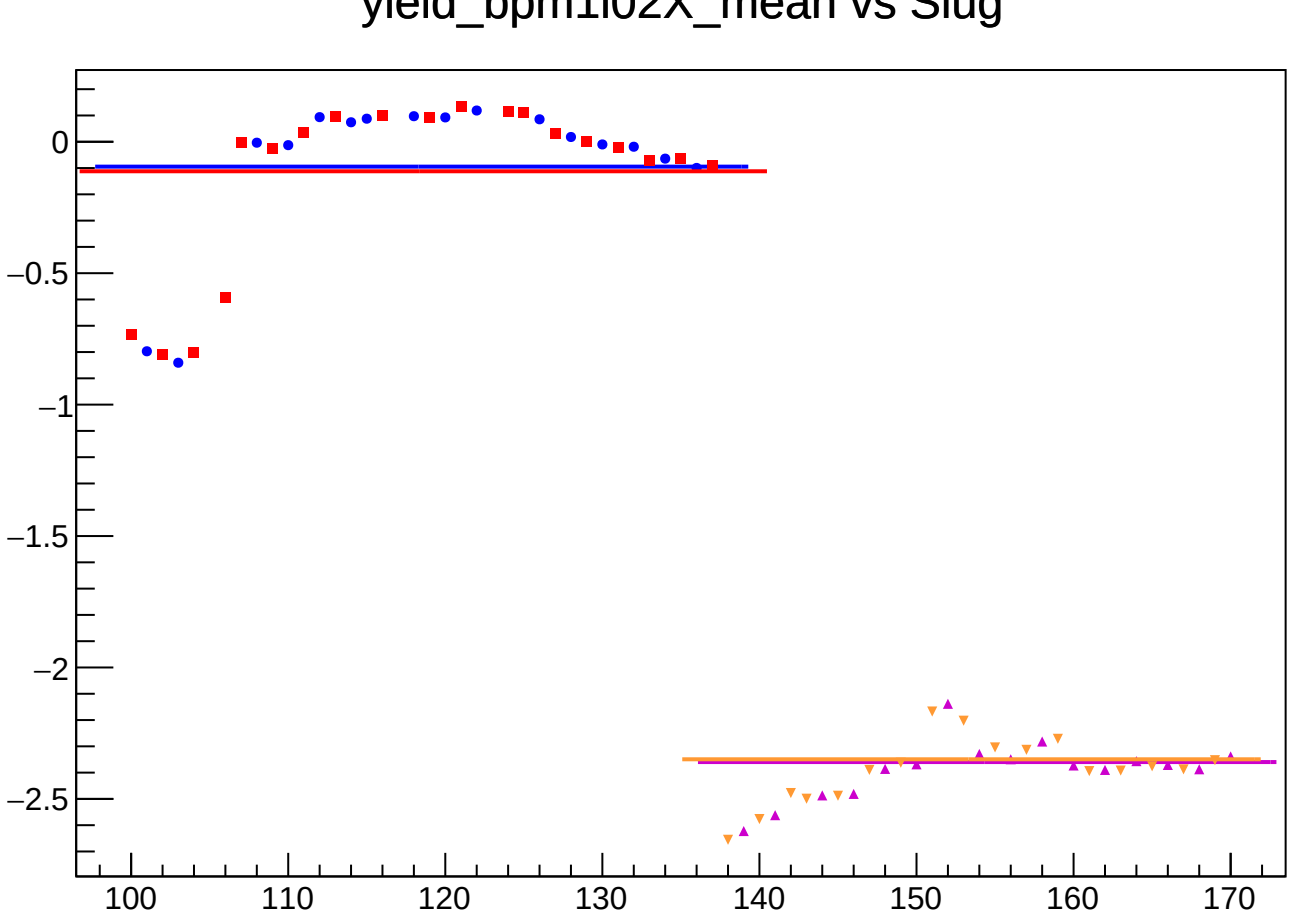
Right Out: 0.004+/-0.000 $\chi^2$/NDF: 313701.1/18

Left In: 0.004+/-0.000 $\chi^2$/NDF:630886.8/15

+ sign 0.004+/-0.000 $\chi^2$/NDF: 1374353.2/32

All: 0.004+/-0.000 $\chi^2$/NDF: 2372921.3/67

- sign 0.004+/-0.000 $\chi^2$/NDF: 996646.0/34




Right In: -0.095+/-0.000 $\chi^2$/NDF: 5489721985.1/15

Left Out: -2.349+/-0.000 $\chi^2$/NDF:1671964983.4/16

Right Out: -0.112+/-0.000 $\chi^2$/NDF: 6190163375.6/18

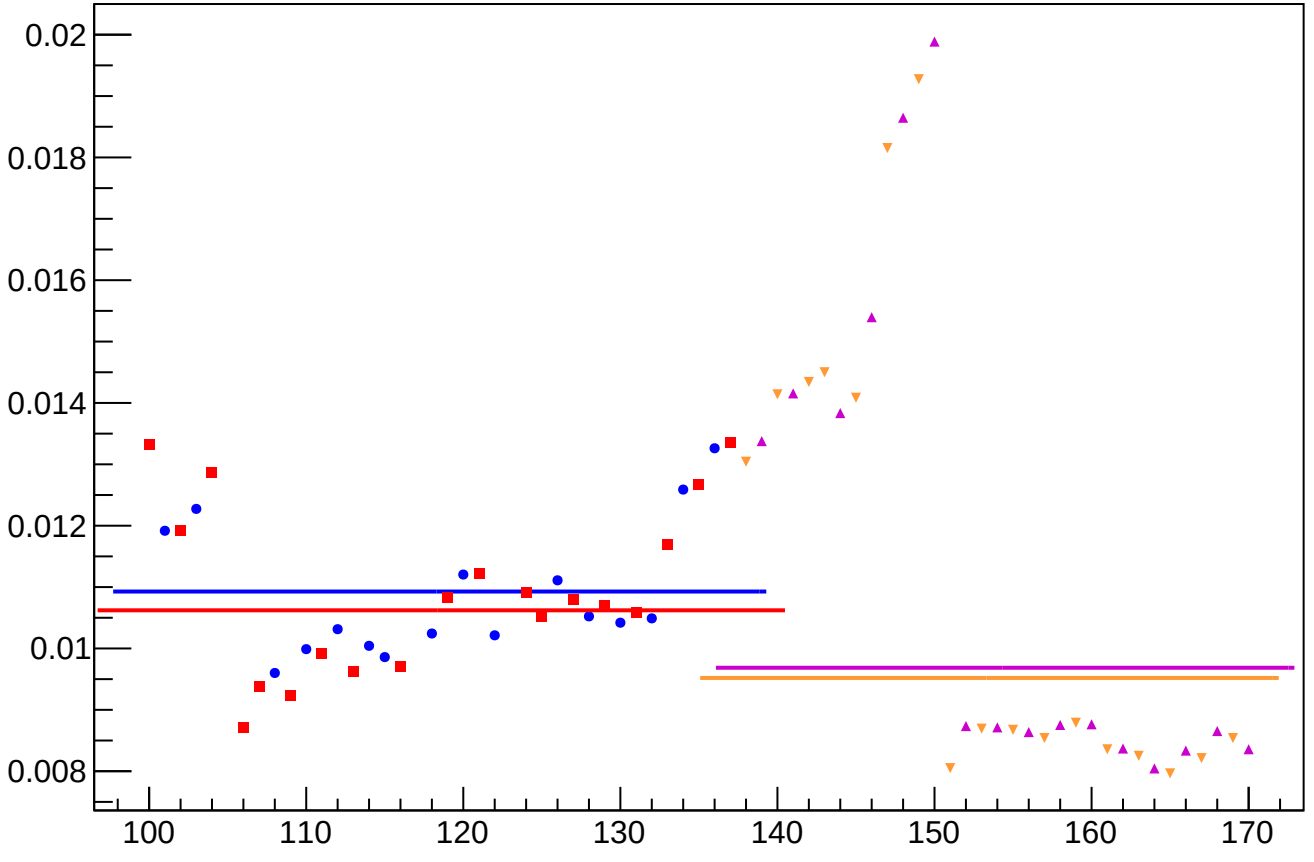
Left In: -2.360+/-0.000 $\chi^2$/NDF:1297057945.0/15

+ sign -1.664+/-0.000 $\chi^2$/NDF: 218254496696.3/32

All: -1.636+/-0.000 $\chi^2$/NDF: 445726222200.1

- sign -1.608+/-0.000 $\chi^2$/NDF: 227162225115.8/34

# yield_bpm1i02X_rms vs Slug




Right In: 0.011+/-0.000 $\chi^2$/NDF: 136478.1/15

Left Out: 0.010+/-0.000 $\chi^2$/NDF:1844193.2/16

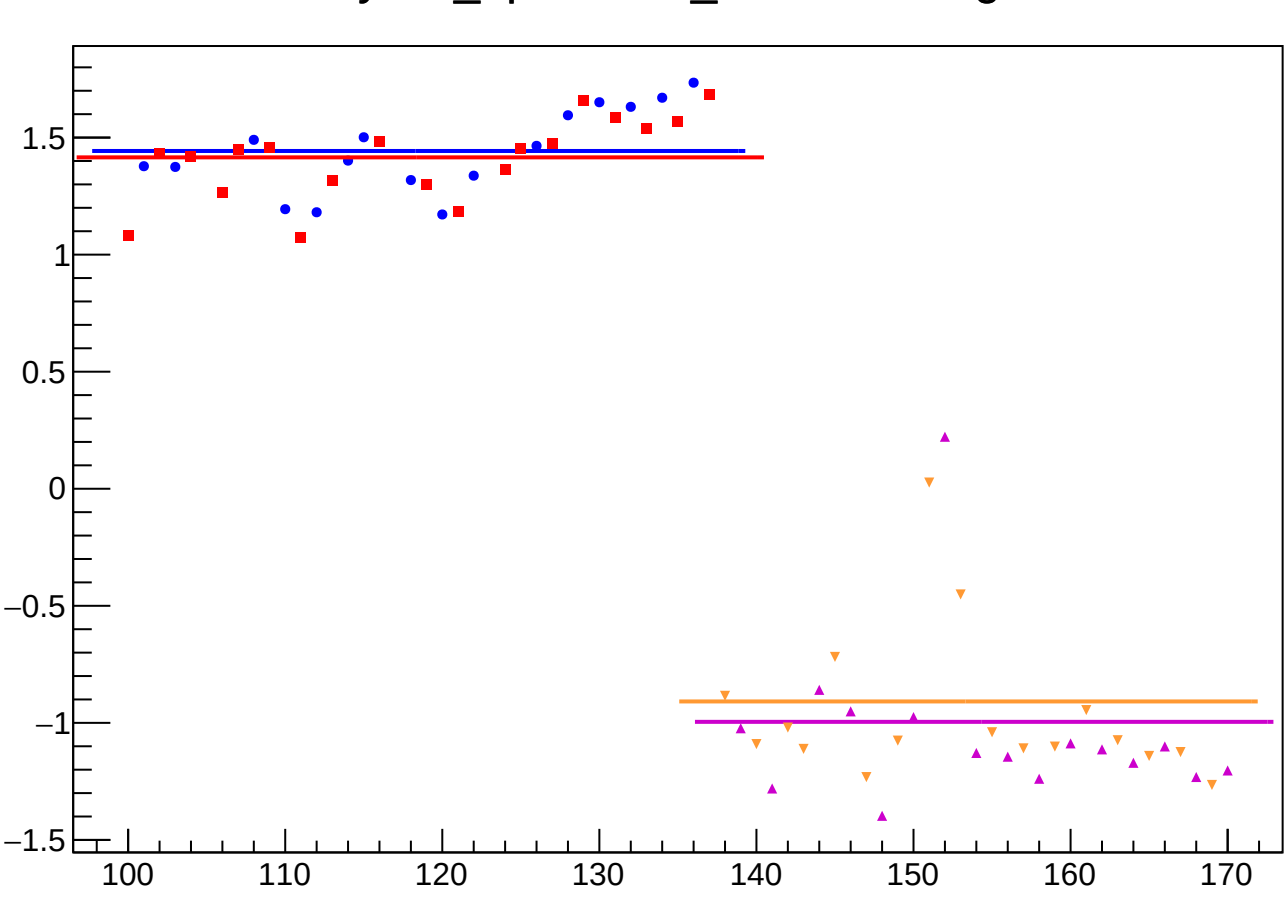
Right Out: 0.011+/-0.000 $\chi^2$/NDF: 190526.1/18

Left In: 0.010+/-0.000 $\chi^2$/NDF:1854371.2/15

+ sign 0.010+/-0.000 $\chi^2$/NDF: 2145275.1/32

All: 0.010+/-0.000 $\chi^2$/NDF: 4266848.1/67

- sign 0.010+/-0.000 $\chi^2$/NDF: 2121059.2/34




Right In: 1.443+/-0.000 $\chi^2$/NDF: 3739724691.1/15

Left Out: -0.909+/-0.000 $\chi^2$/NDF:32467653480.2/16

Right Out: 1.415+/-0.000 $\chi^2$/NDF: 2803466123.0/18

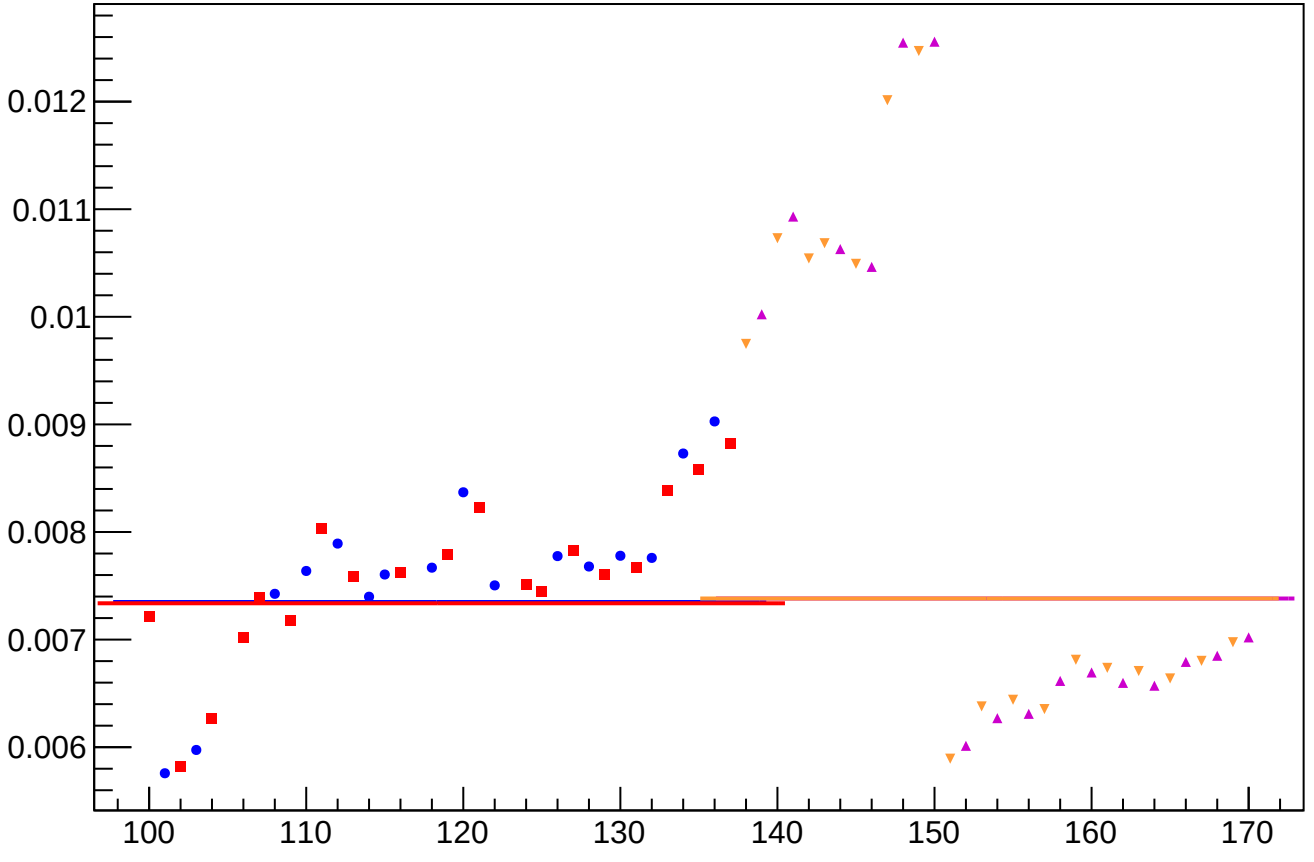
Left In: -0.996+/-0.000 $\chi^2$/NDF:41746277721.3/15

+ sign -0.059+/-0.000 $\chi^2$/NDF: 498068010616.0/32

All: -0.074+/-0.000 $\chi^2$/NDF: 1039605004142

- sign -0.089+/-0.000 $\chi^2$/NDF: 541366781148.1/34

# yield_bpm1i02Y_rms vs Slug




Right In: 0.007+/-0.000 $\chi^2$/NDF: 270864.2/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:1453230.4/16

Right Out: 0.007+/-0.000 $\chi^2$/NDF: 195372.6/18

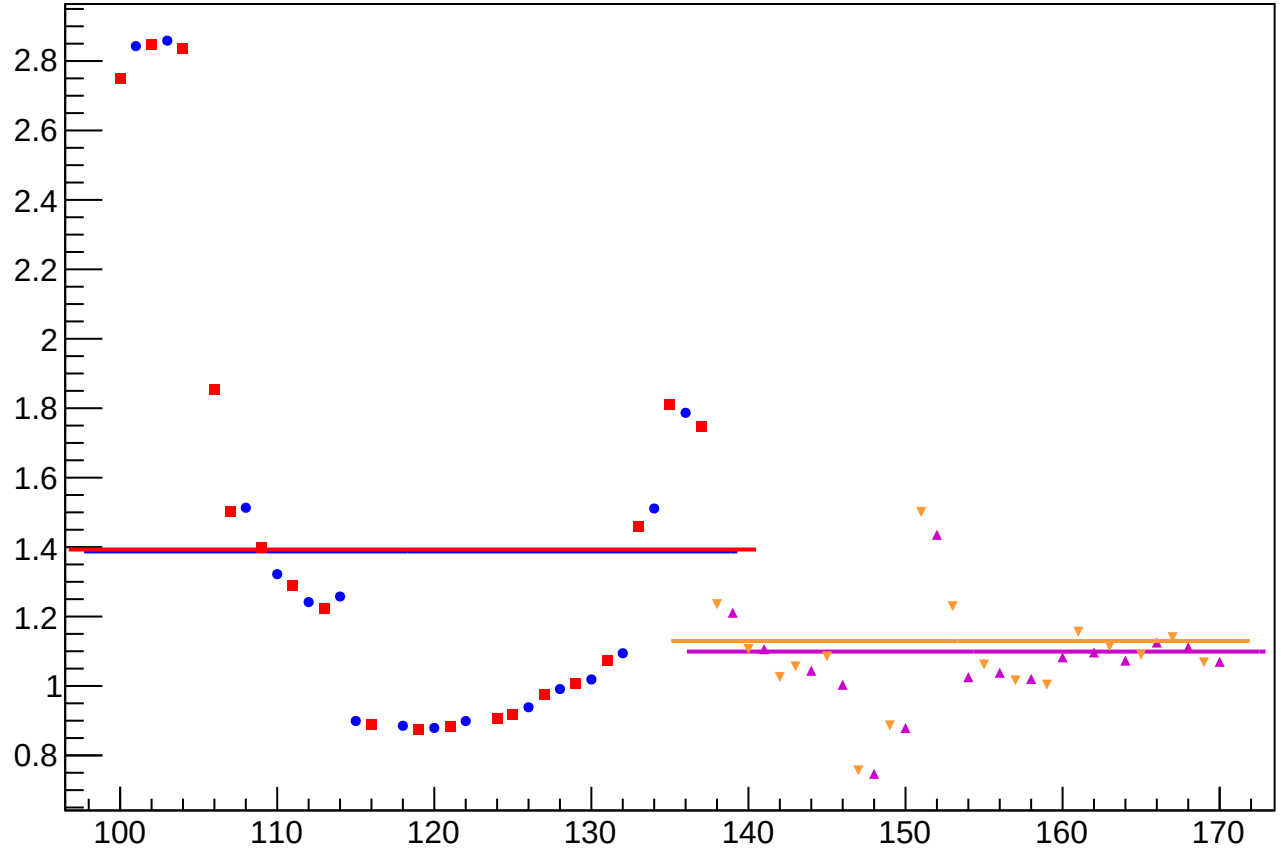
Left In: 0.007+/-0.000 $\chi^2$/NDF:1508618.5/15

+ sign 0.007+/-0.000 $\chi^2$/NDF: 1724272.3/32

All: 0.007+/-0.000 $\chi^2$/NDF: 3428608.1/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 1704326.6/34

# yield_bpm1i04X_mean vs Slug




Right In: 1.388+/-0.000 $\chi^2$/NDF: 58612635453.0/15

Left Out: 1.130+/-0.000 $\chi^2$/NDF:5410079755.3/16

Right Out: 1.393+/-0.000 $\chi^2$/NDF: 55365724659.7/18

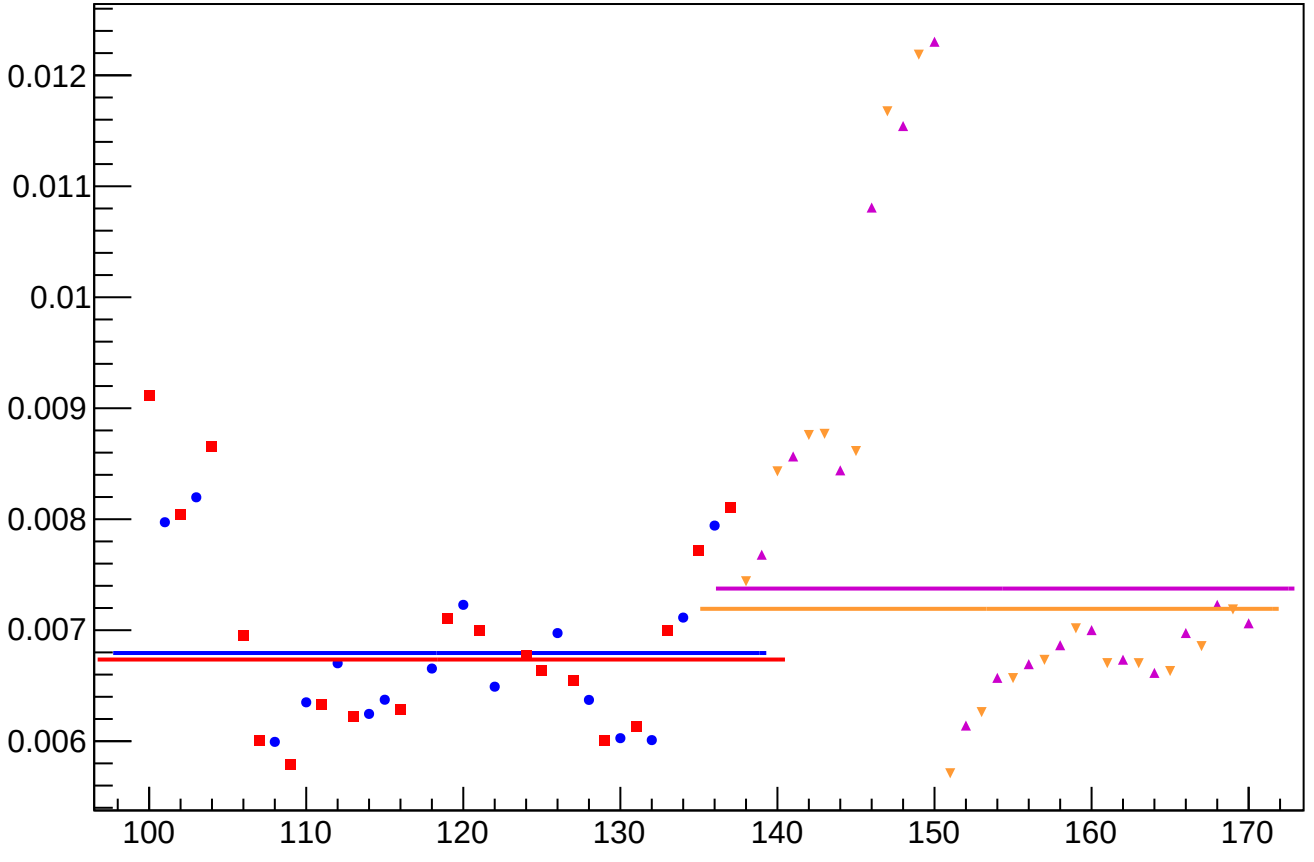
Left In: 1.099+/-0.000 $\chi^2$/NDF:4178633200.2/15

+ sign 1.230+/-0.000 $\chi^2$/NDF: 70297095897.1/32

All: 1.225+/-0.000 $\chi^2$/NDF: 138057517849.1

- sign 1.221+/-0.000 $\chi^2$/NDF: 67745882516.3/34

# yield_bpm1i04X_rms vs Slug




Right In: 0.007+/-0.000 $\chi^2$/NDF: 164456.7/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:824974.1/16

Right Out: 0.007+/-0.000 $\chi^2$/NDF: 198492.7/18

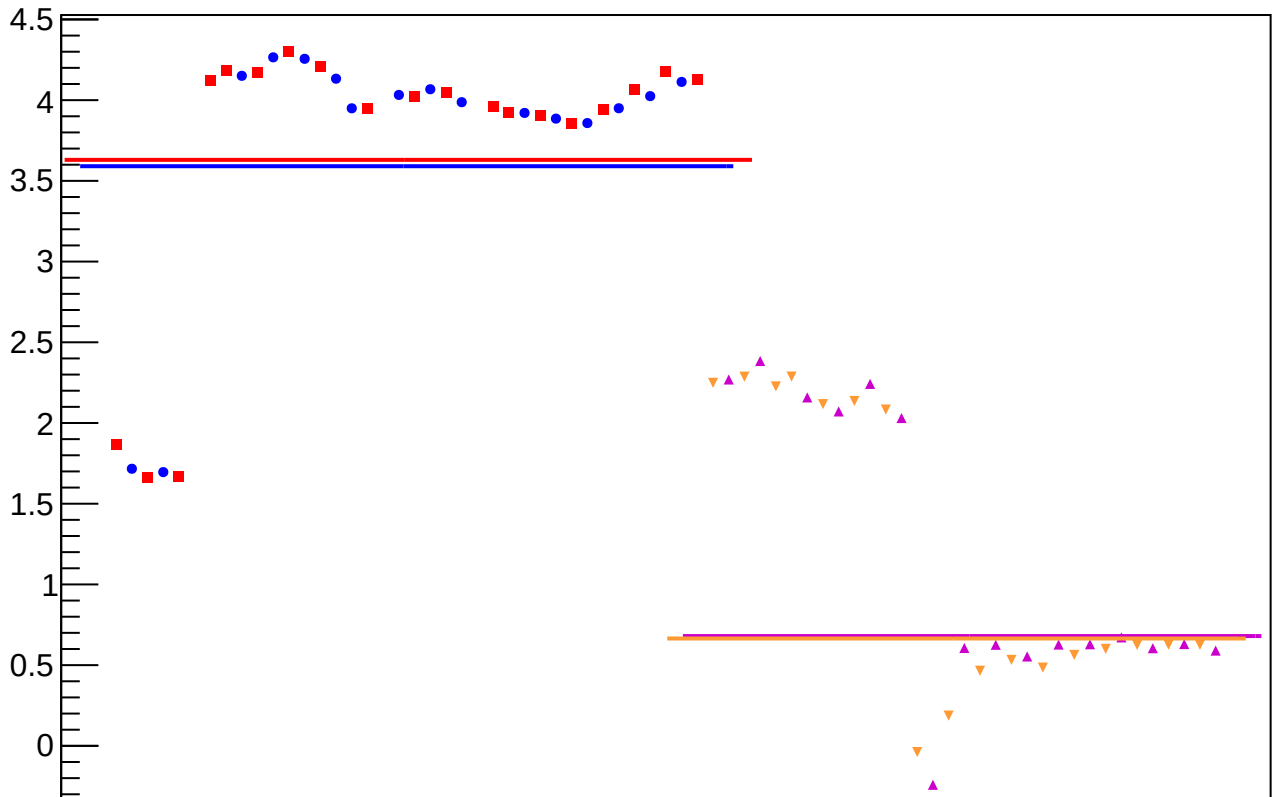
Left In: 0.007+/-0.000 $\chi^2$/NDF:859898.8/15

+ sign 0.007+/-0.000 $\chi^2$/NDF: 1019324.6/32

All: 0.007+/-0.000 $\chi^2$/NDF: 2157363.3/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 1136014.4/34

# yield_bpm1i04Y_mean vs Slug




Right In: 3.591+/-0.000 $\chi^2$/NDF: 202184644473.7/15

Left Out: 0.665+/-0.000 $\chi^2$/NDF:244269794707.7/16

Right Out: 3.630+/-0.000 $\chi^2$/NDF: 212588390342.3/18

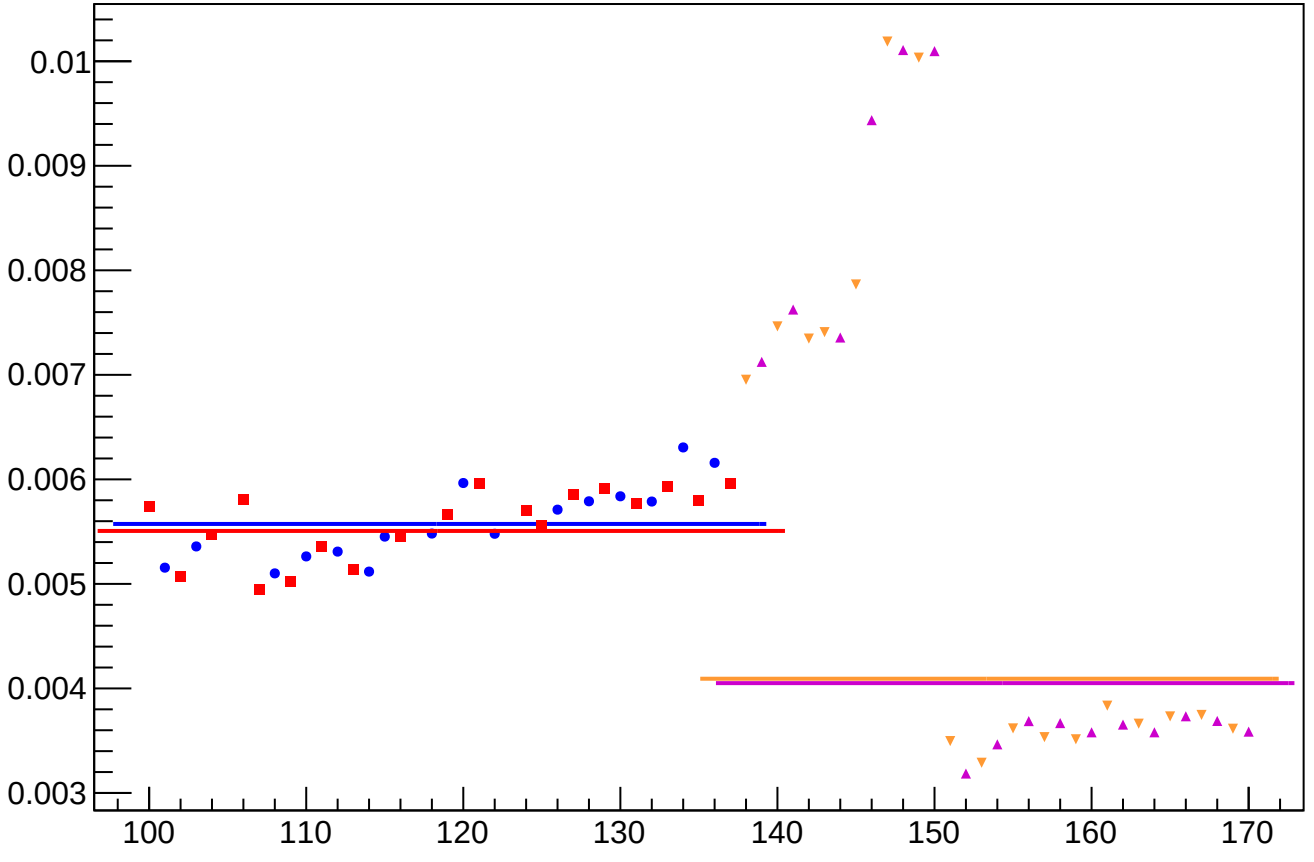
Left In: 0.680+/-0.000 $\chi^2$/NDF:242986359181.0/15

+ sign 1.406+/-0.000 $\chi^2$/NDF: 1920995022847.8/32

All: 1.427+/-0.000 $\chi^2$/NDF: 3927337658202.

- sign 1.448+/-0.000 $\chi^2$/NDF: 2005532715762.5/34

# yield_bpm1i04Y_rms vs Slug




Right In: 0.006+/-0.000 $\chi^2$/NDF: 59130.1/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:2811680.2/16

Right Out: 0.006+/-0.000 $\chi^2$/NDF: 57427.9/18

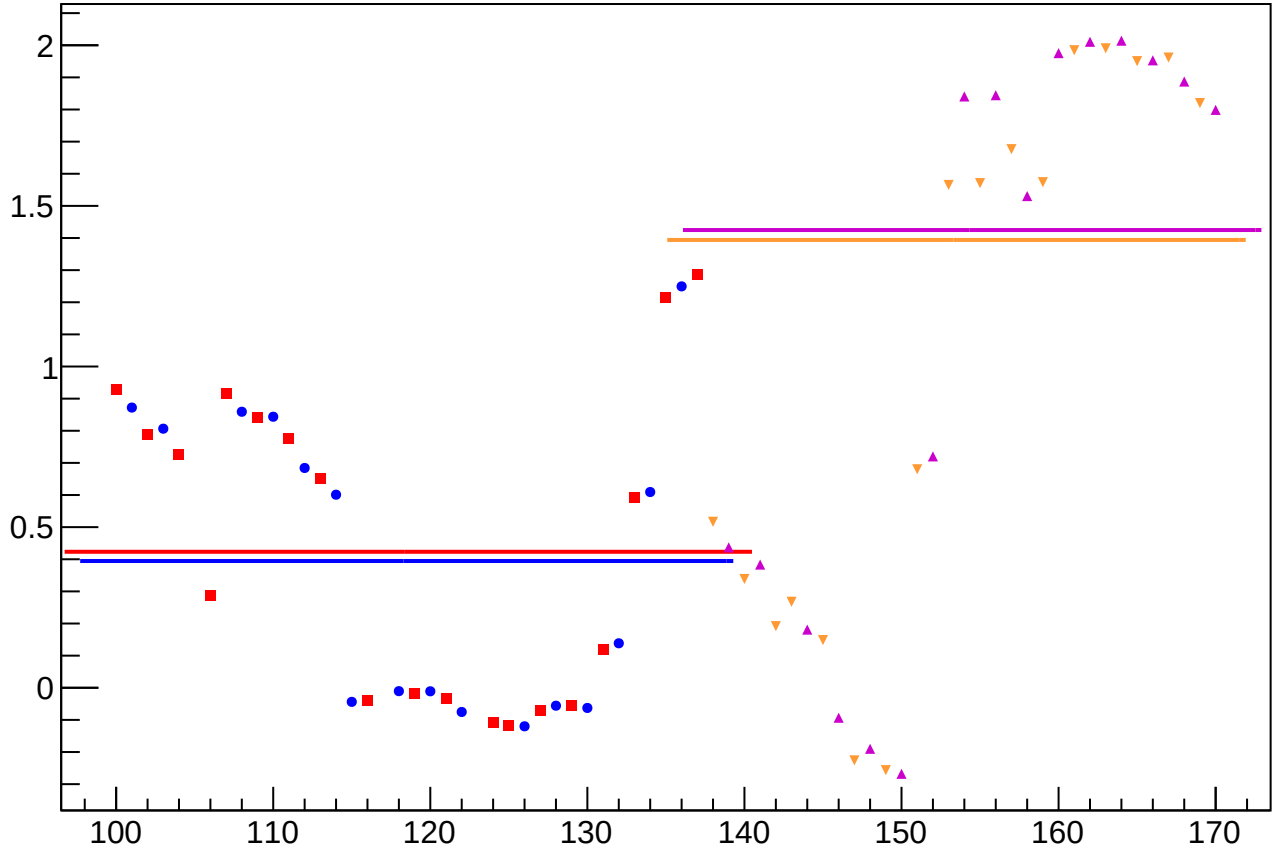
Left In: 0.004+/-0.000 $\chi^2$/NDF:3013452.0/15

+ sign 0.004+/-0.000 $\chi^2$/NDF: 3626205.2/32

All: 0.004+/-0.000 $\chi^2$/NDF: 7453538.9/67

- sign 0.004+/-0.000 $\chi^2$/NDF: 3825995.2/34

# yield_bpm1i06X_mean vs Slug




Right In: 0.395+/-0.000 $\chi^2$/NDF: 7412548044.8/15

Left Out: 1.394+/-0.000 $\chi^2$/NDF:50787933462.5/16

Right Out: 0.423+/-0.000 $\chi^2$/NDF: 6904060515.1/18

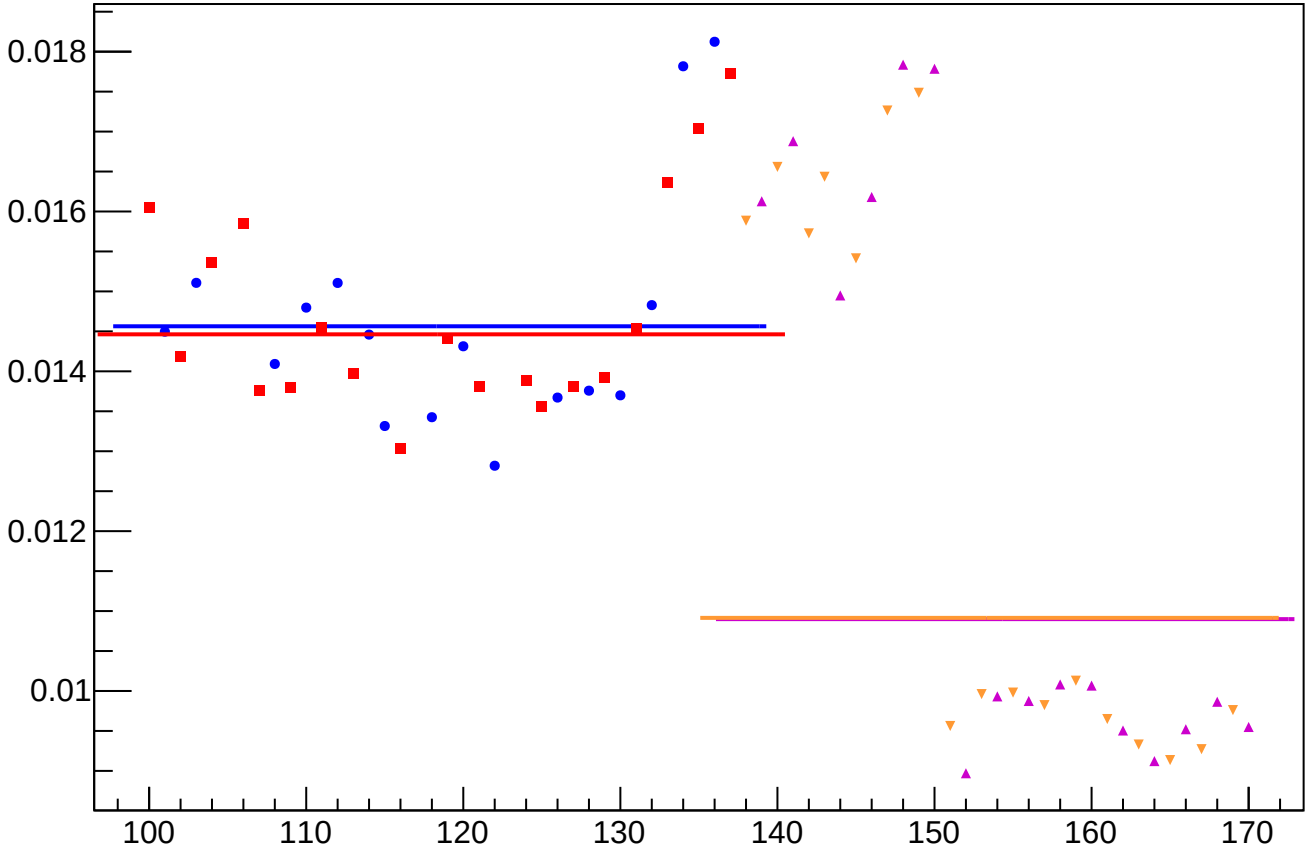
Left In: 1.425+/-0.000 $\chi^2$/NDF:56316514117.9/15

+ sign 1.152+/-0.000 $\chi^2$/NDF: 83529616784.6/32

All: 1.162+/-0.000 $\chi^2$/NDF: 172922067490.5

- sign 1.173+/-0.000 $\chi^2$/NDF: 89362490252.0/34

# yield_bpm1i06X_rms vs Slug




Right In: 0.015+/-0.000 $\chi^2$/NDF: 133134.7/15

Left Out: 0.011+/-0.000 $\chi^2$/NDF:1479923.8/16

Right Out: 0.014+/-0.000 $\chi^2$/NDF: 77396.3/18

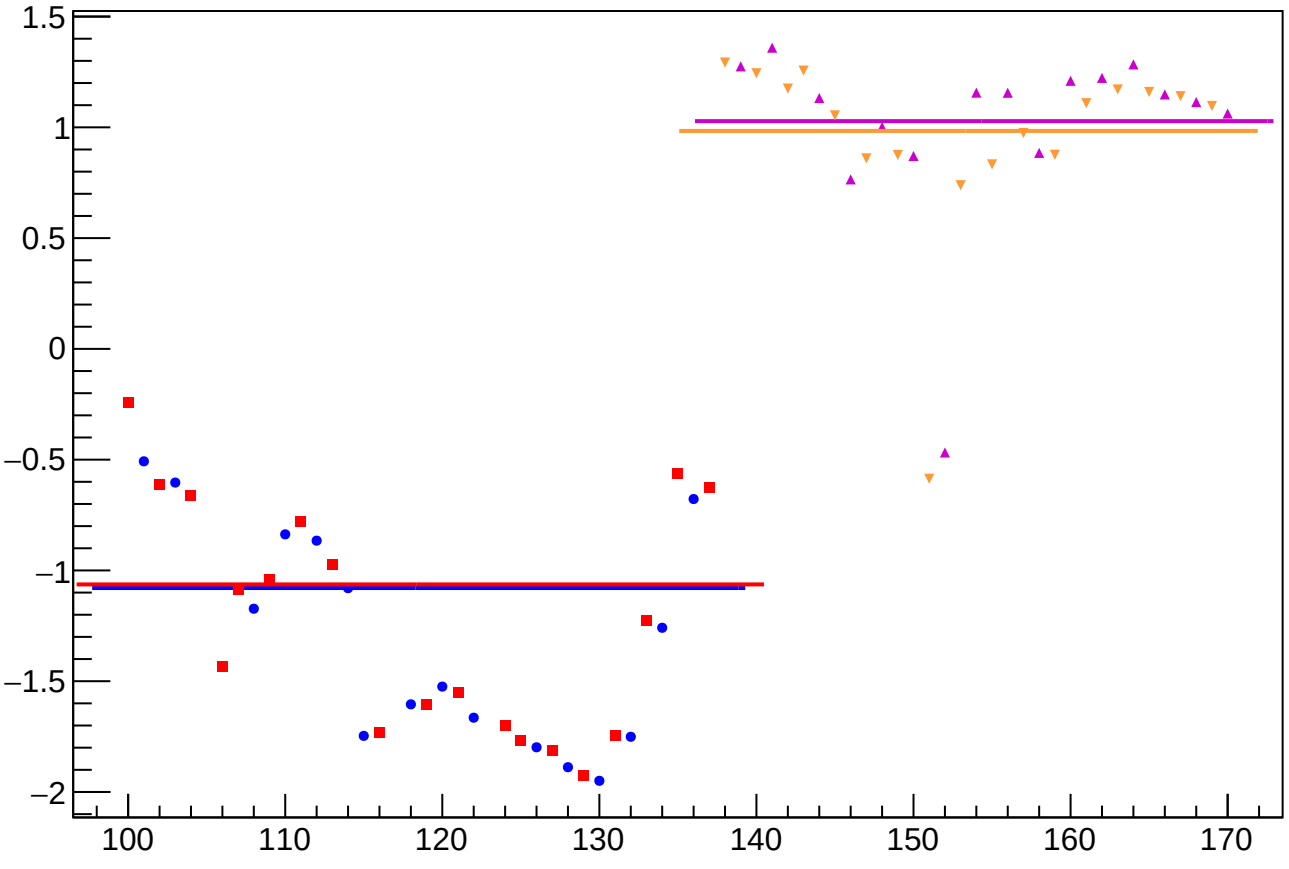
Left In: 0.011+/-0.000 $\chi^2$/NDF:1518545.3/15

+ sign 0.012+/-0.000 $\chi^2$/NDF: 2288216.0/32

All: 0.012+/-0.000 $\chi^2$/NDF: 4546178.6/67

- sign 0.012+/-0.000 $\chi^2$/NDF: 2257961.7/34

# yield_bpm1i06Y_mean vs Slug




Right In: -1.079+/-0.000 $\chi^2$/NDF: 59756571764.5/15

Left Out: 0.984+/-0.000 $\chi^2$/NDF:108841100640.4/16

Right Out: -1.063+/-0.000 $\chi^2$/NDF: 49910403943.5/18

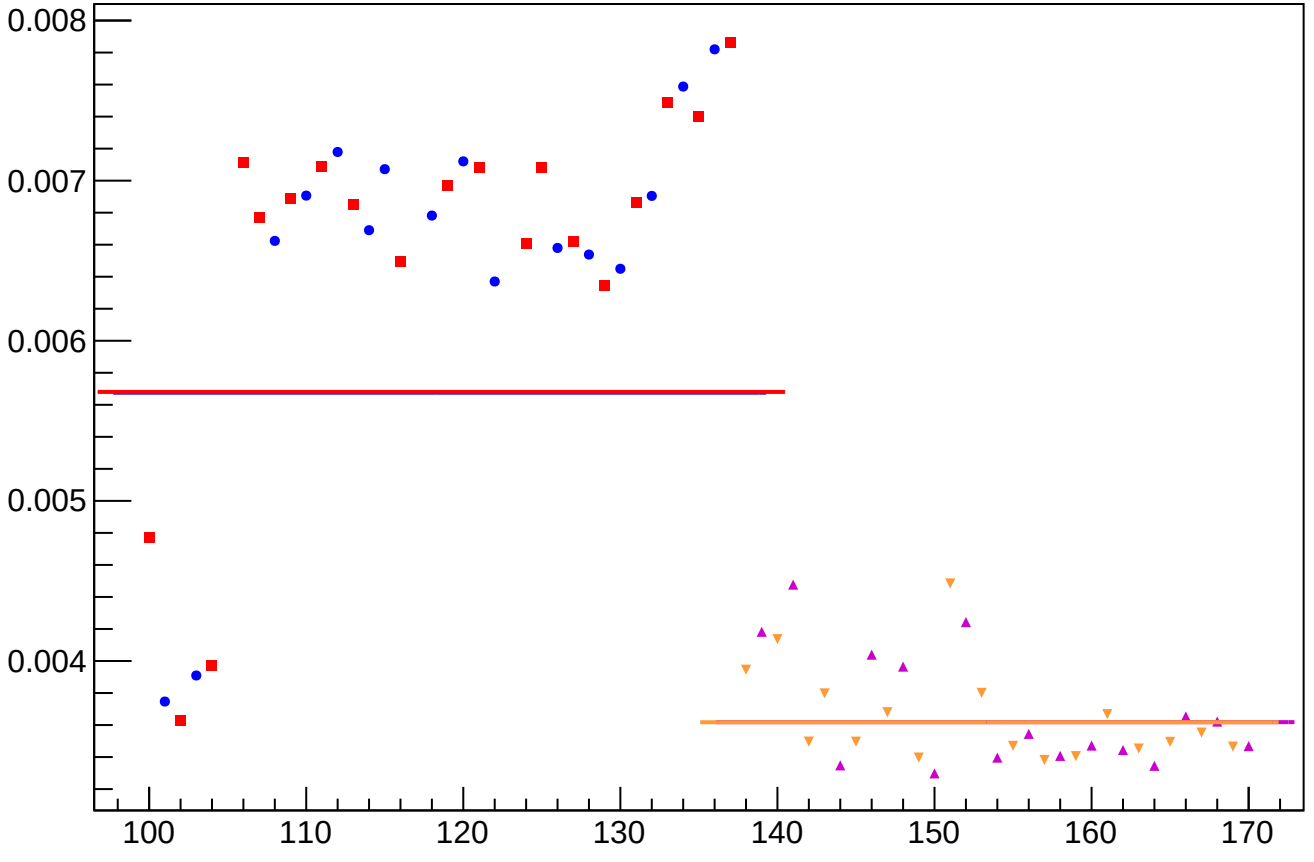
Left In: 1.028+/-0.000 $\chi^2$/NDF:124818205464.5/15

+ sign 0.620+/-0.000 $\chi^2$/NDF: 861695346266.8/32

All: 0.635+/-0.000 $\chi^2$/NDF: 1752388709263.

- sign 0.649+/-0.000 $\chi^2$/NDF: 890232624347.0/34

# yield_bpm1i06Y_rms vs Slug




Right In: 0.006+/-0.000 $\chi^2$/NDF: 944822.9/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:126536.7/16

Right Out: 0.006+/-0.000 $\chi^2$/NDF: 980583.9/18

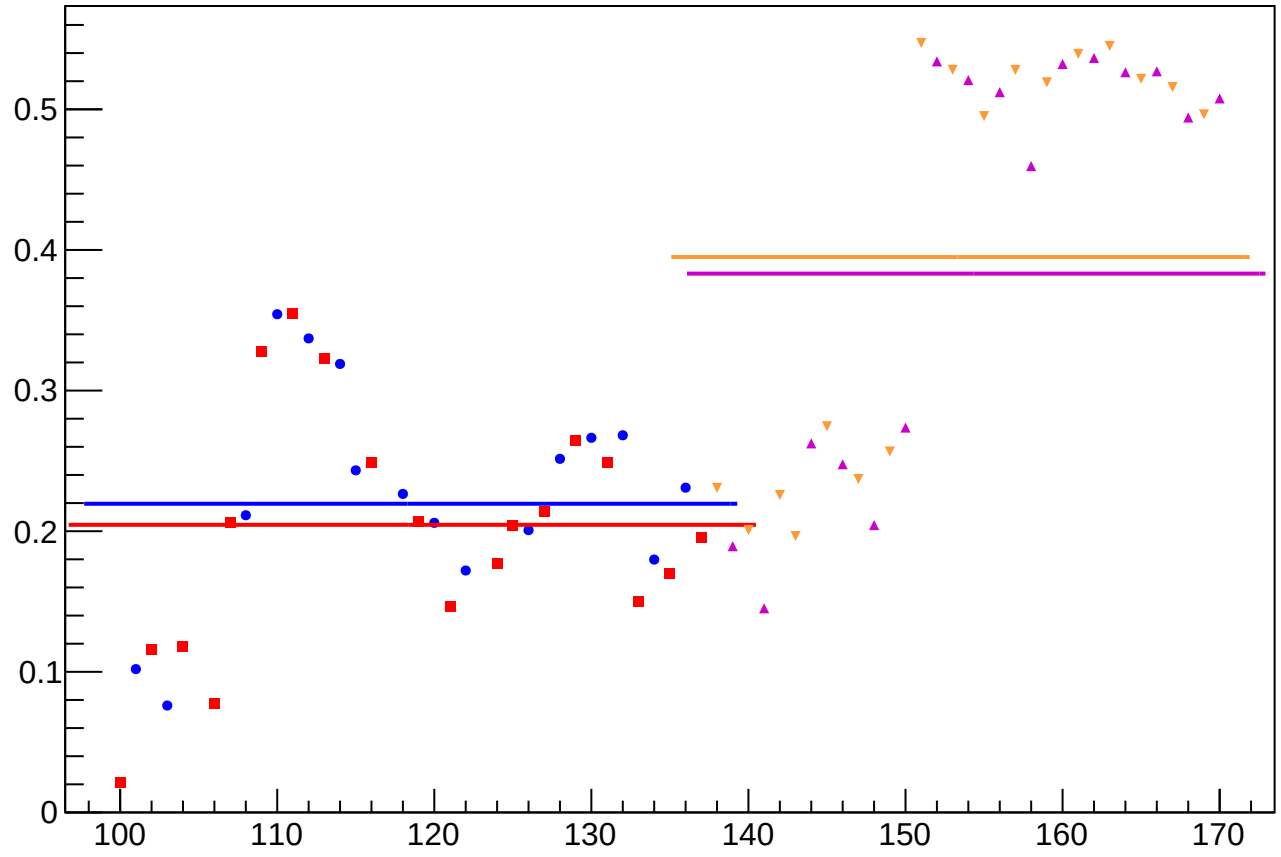
Left In: 0.004+/-0.000 $\chi^2$/NDF:206041.3/15

+ sign 0.004+/-0.000 $\chi^2$/NDF: 2451270.4/32

All: 0.004+/-0.000 $\chi^2$/NDF: 5030121.0/67

- sign 0.004+/-0.000 $\chi^2$/NDF: 2578698.7/34

# yield_bpm2i01X_mean vs Slug




Right In: 0.220+/-0.000 $\chi^2$/NDF: 16729743257.8/15

Left Out: 0.395+/-0.000 $\chi^2$/NDF:130272193609.4/16

Right Out: 0.205+/-0.000 $\chi^2$/NDF: 22312377506.1/18

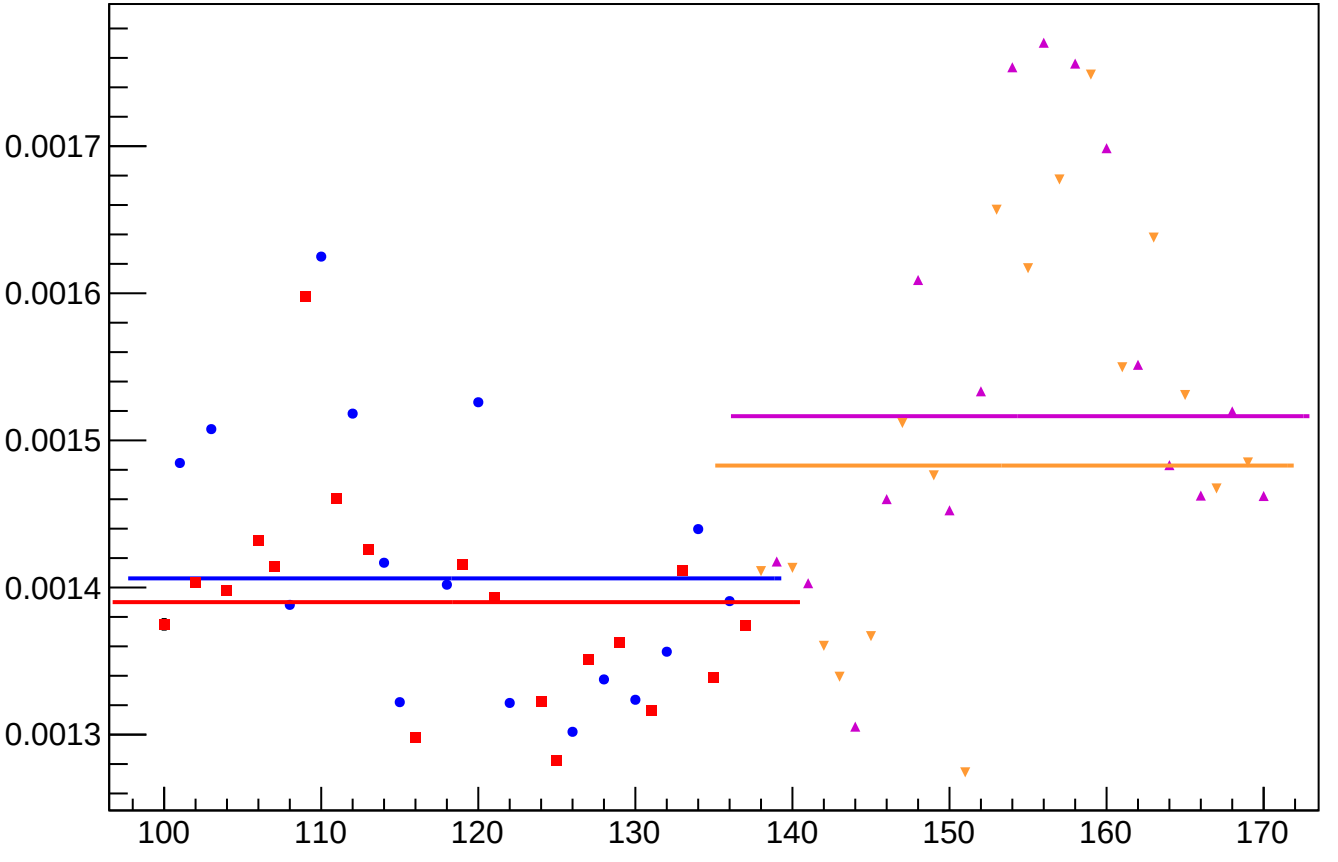
Left In: 0.383+/-0.000 $\chi^2$/NDF:126036049995.7/15

+ sign 0.330+/-0.000 $\chi^2$/NDF: 215148478847.8/32

All: 0.321+/-0.000 $\chi^2$/NDF: 437426578719.9

- sign 0.311+/-0.000 $\chi^2$/NDF: 220541028354.6/34

# yield_bpm2i01X_rms vs Slug




Right In: 0.001+/-0.000 $\chi^2$/NDF: 48200.9/15

Left Out: 0.001+/-0.000 $\chi^2$/NDF:200805.2/16

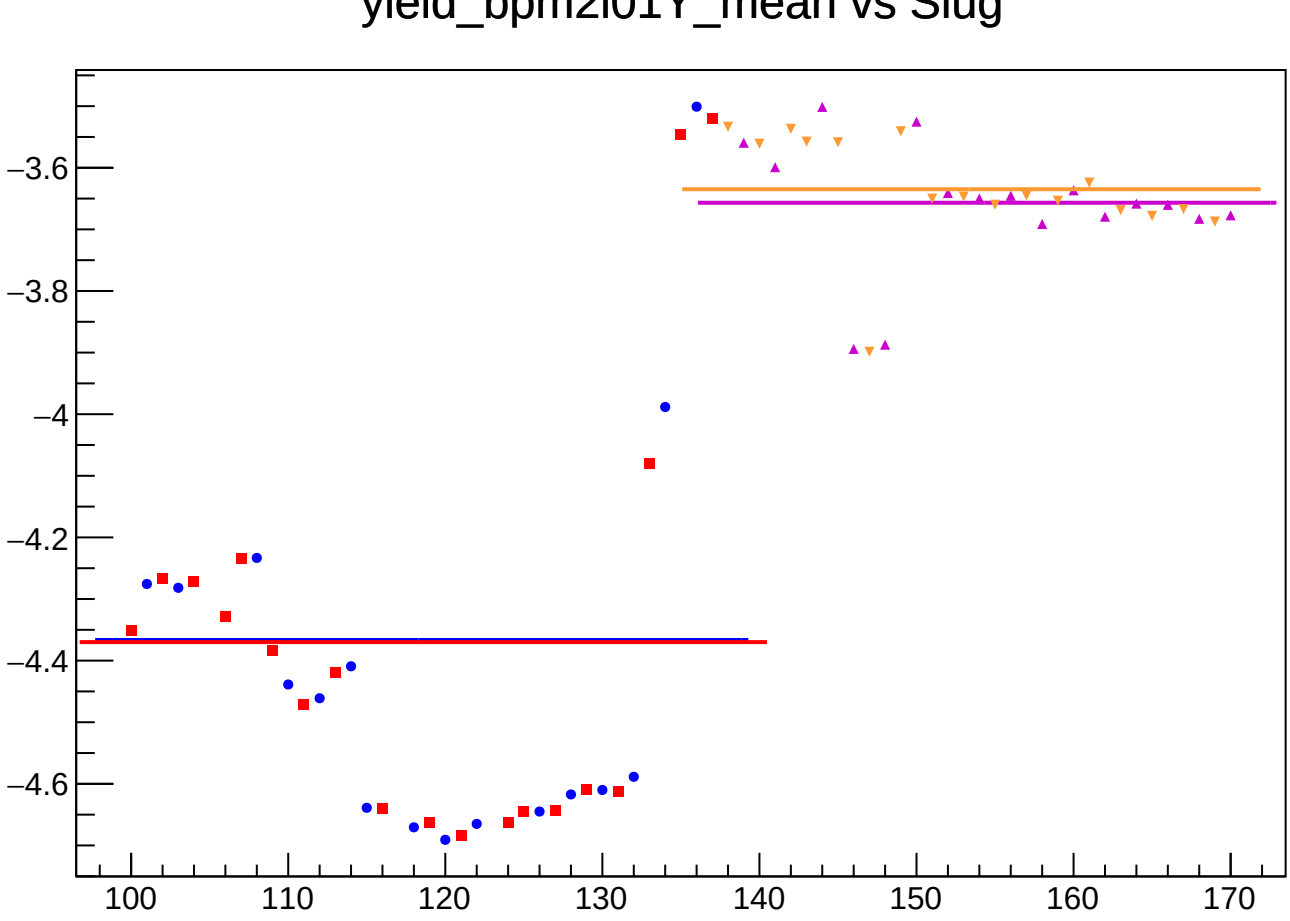
Right Out: 0.001+/-0.000 $\chi^2$/NDF: 34786.9/18

Left In: 0.002+/-0.000 $\chi^2$/NDF:198757.8/15

+ sign 0.001+/-0.000 $\chi^2$/NDF: 275049.8/32

All: 0.001+/-0.000 $\chi^2$/NDF: 581991.5/67

- sign 0.001+/-0.000 $\chi^2$/NDF: 305835.0/34




Right In: -4.367+/-0.000 $\chi^2$/NDF: 353013303743.6/15

Left Out: -3.635+/-0.000 $\chi^2$/NDF:23034299331.5/16

Right Out: -4.370+/-0.000 $\chi^2$/NDF: 296136368274.3/18

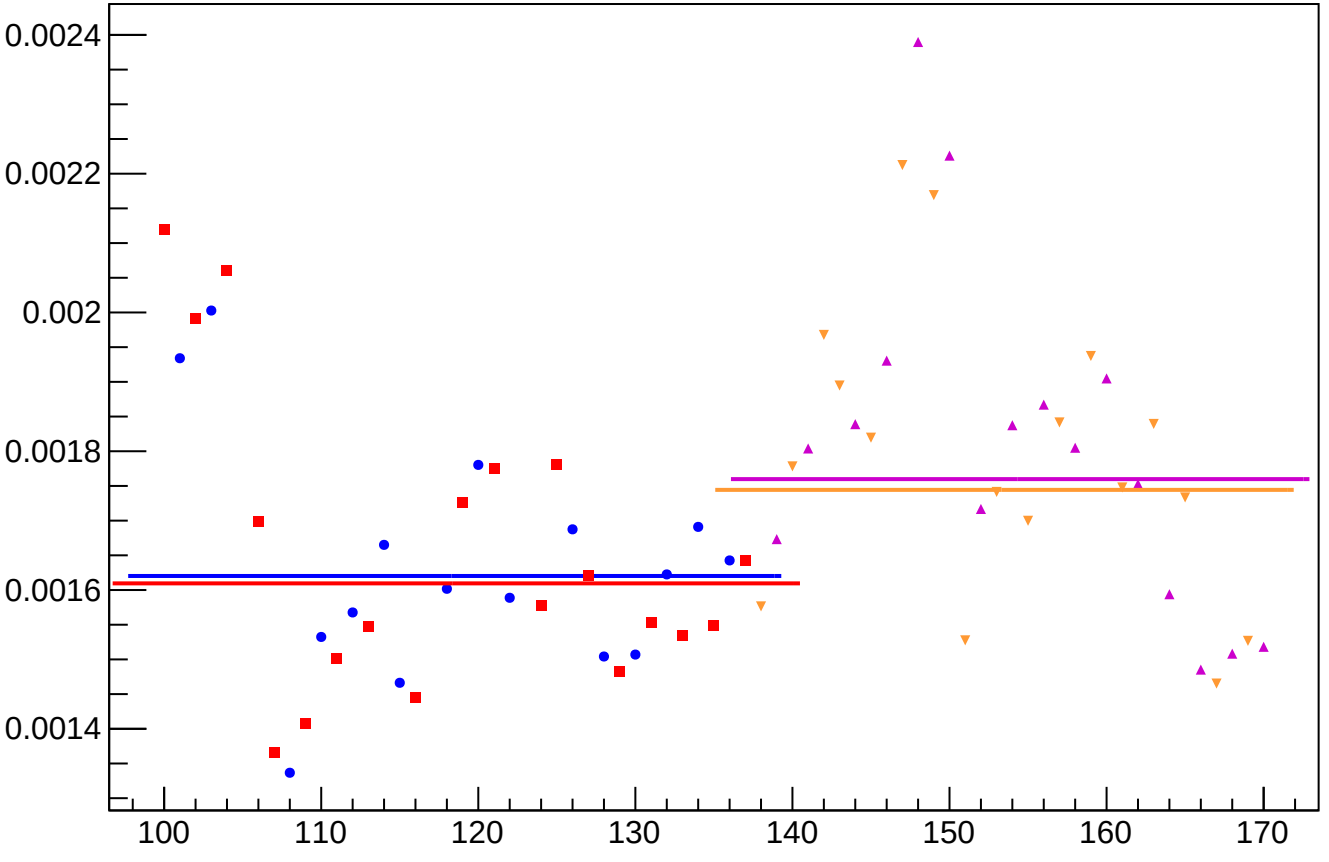
Left In: -3.657+/-0.000 $\chi^2$/NDF:33691985444.5/15

+ sign -3.916+/-0.000 $\chi^2$/NDF: 1240092524285.8/3

All: -3.930+/-0.000 $\chi^2$/NDF: 2407273383450

- sign -3.944+/-0.000 $\chi^2$/NDF: 1164408734076.7/34

# yield_bpm2i01Y_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 140216.3/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:323487.8/16

Right Out: 0.002+/-0.000 $\chi^2$/NDF: 184968.0/18

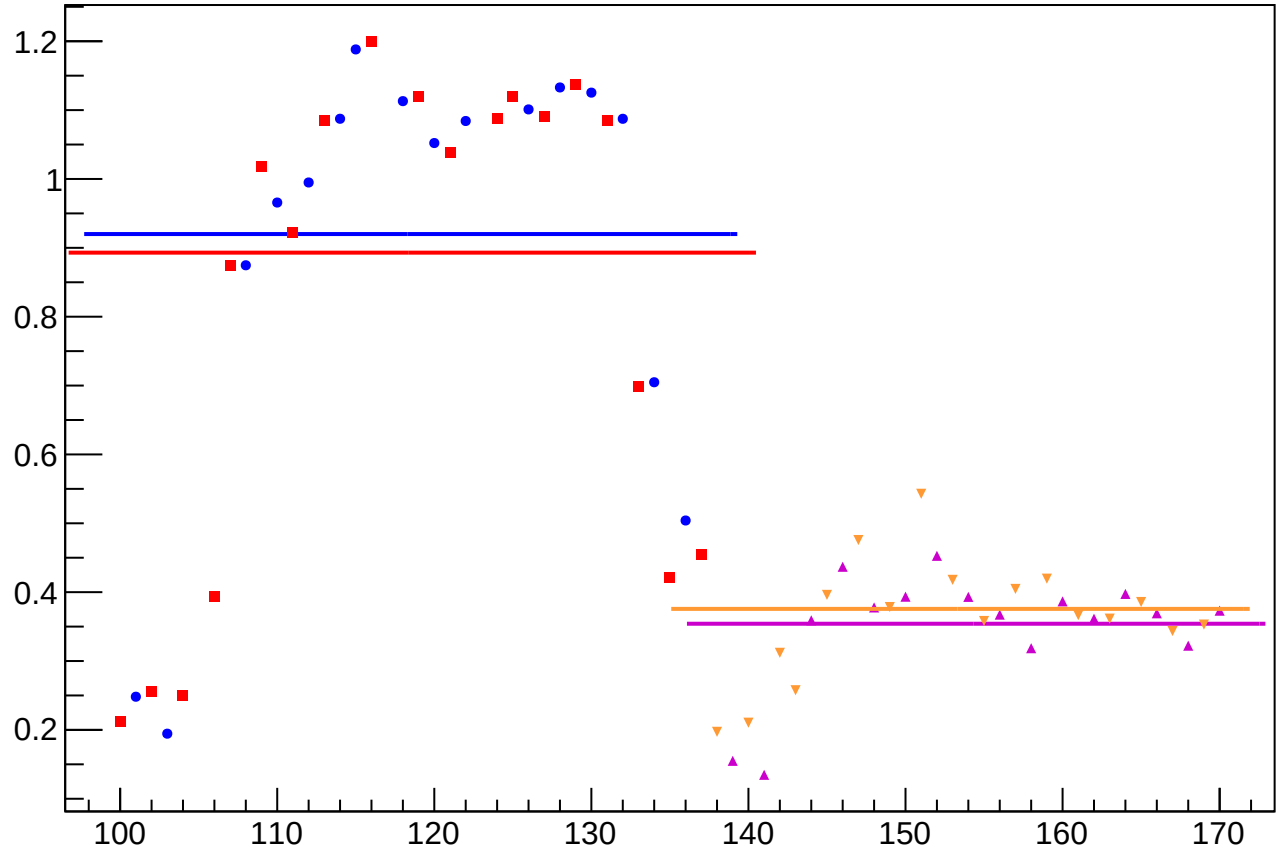
Left In: 0.002+/-0.000 $\chi^2$/NDF:369543.5/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 513402.5/32

All: 0.002+/-0.000 $\chi^2$/NDF: 1142056.4/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 628608.0/34

# yield_bpm2i02X_mean vs Slug




Right In: 0.920+/-0.000 $\chi^2$/NDF: 14566431727.4/15

Left Out: 0.376+/-0.000 $\chi^2$/NDF:1710321196.5/16

Right Out: 0.893+/-0.000 $\chi^2$/NDF: 17642154019.1/18

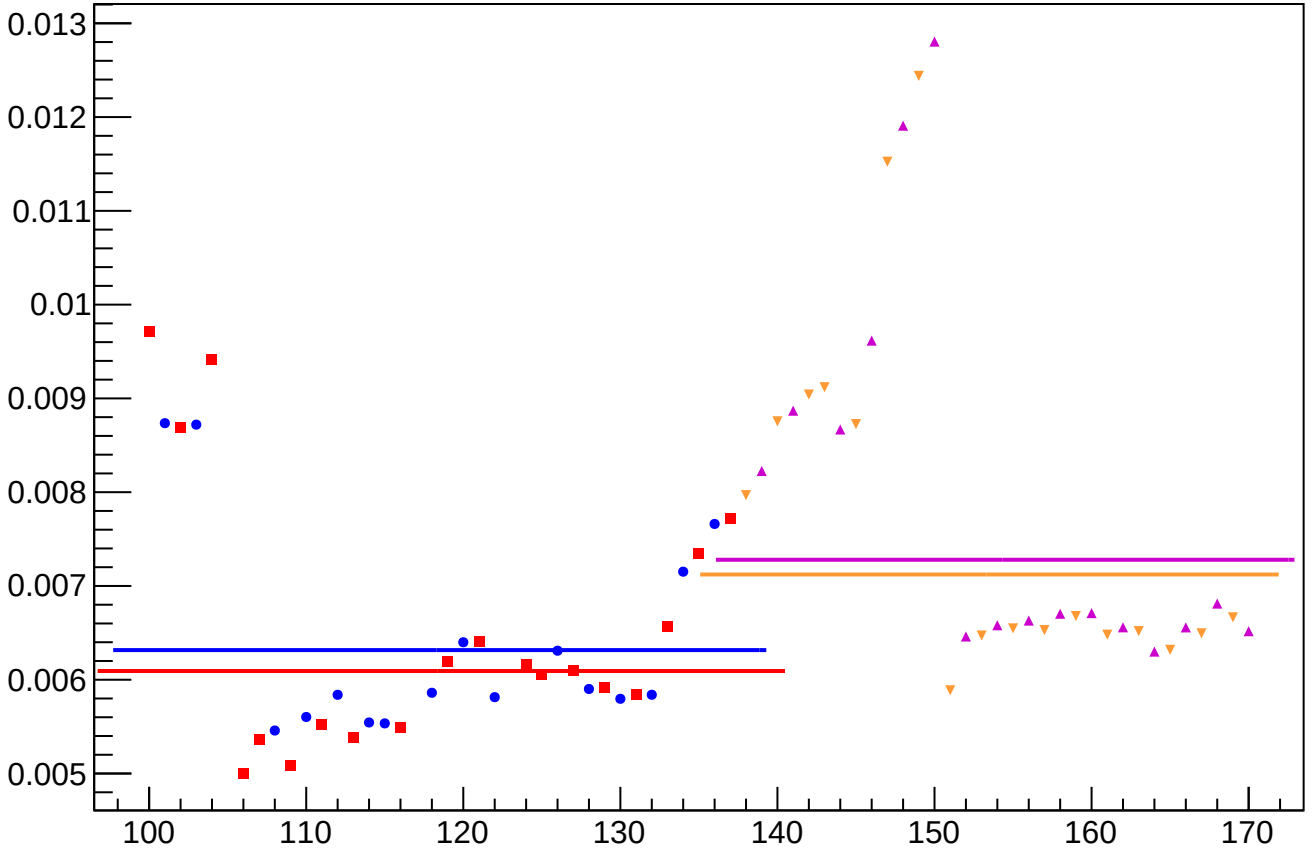
Left In: 0.354+/-0.000 $\chi^2$/NDF:1446467483.8/15

+ sign 0.599+/-0.000 $\chi^2$/NDF: 47000800451.5/32

All: 0.598+/-0.000 $\chi^2$/NDF: 97273752570.4/6

- sign 0.597+/-0.000 $\chi^2$/NDF: 50272059722.1/34

# yield_bpm2i02X_rms vs Slug




Right In: 0.006+/-0.000 $\chi^2$/NDF: 335709.2/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:986350.1/16

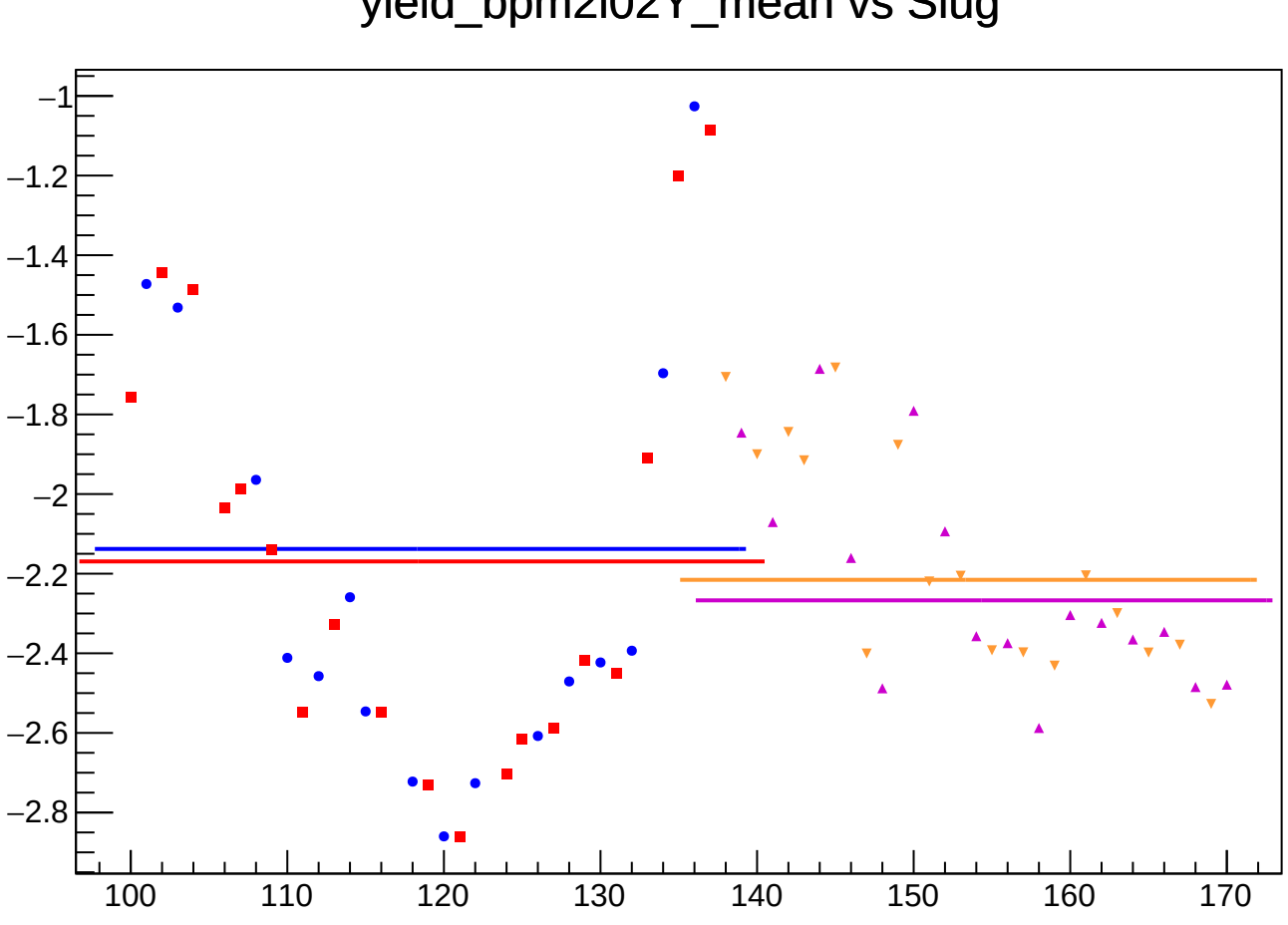
Right Out: 0.006+/-0.000 $\chi^2$/NDF: 435933.6/18

Left In: 0.007+/-0.000 $\chi^2$/NDF:993415.6/15

+ sign 0.007+/-0.000 $\chi^2$/NDF: 1456901.3/32

All: 0.007+/-0.000 $\chi^2$/NDF: 3189387.7/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 1731548.0/34




Right In: -2.138+/-0.000 $\chi^2$/NDF: 65666622158.4/15

Left Out: -2.215+/-0.000 $\chi^2$/NDF:19036871391.7/16

Right Out: -2.169+/-0.000 $\chi^2$/NDF: 57409196879.6/18

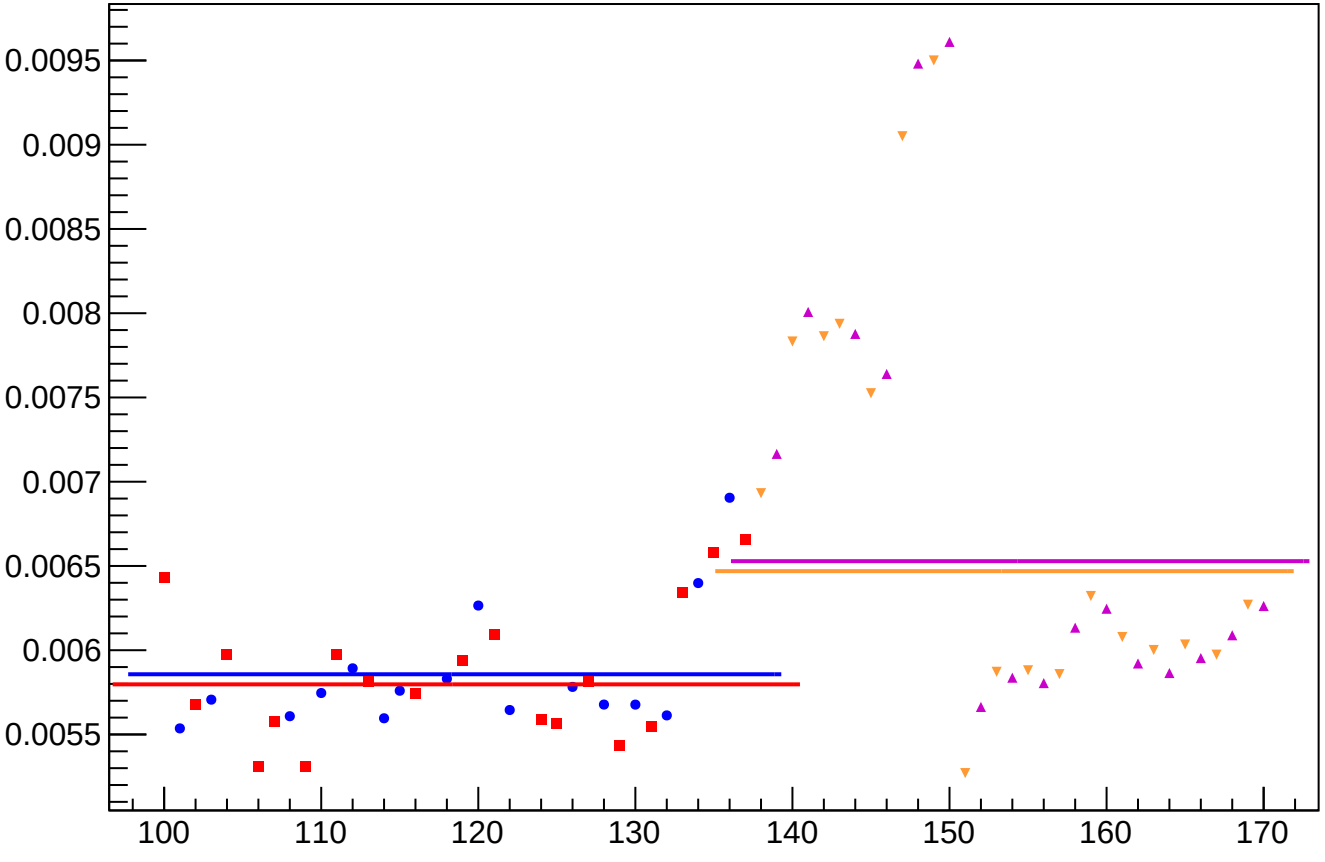
Left In: -2.267+/-0.000 $\chi^2$/NDF:17277403243.1/15

+ sign -2.184+/-0.000 $\chi^2$/NDF: 85457302976.1/32

All: -2.205+/-0.000 $\chi^2$/NDF: 161810630981.

- sign -2.226+/-0.000 $\chi^2$/NDF: 75907636307.1/34

# yield_bpm2i02Y_rms vs Slug




Right In: 0.006+/-0.000 $\chi^2$/NDF: 61946.9/15

Left Out: 0.006+/-0.000 $\chi^2$/NDF:651568.1/16

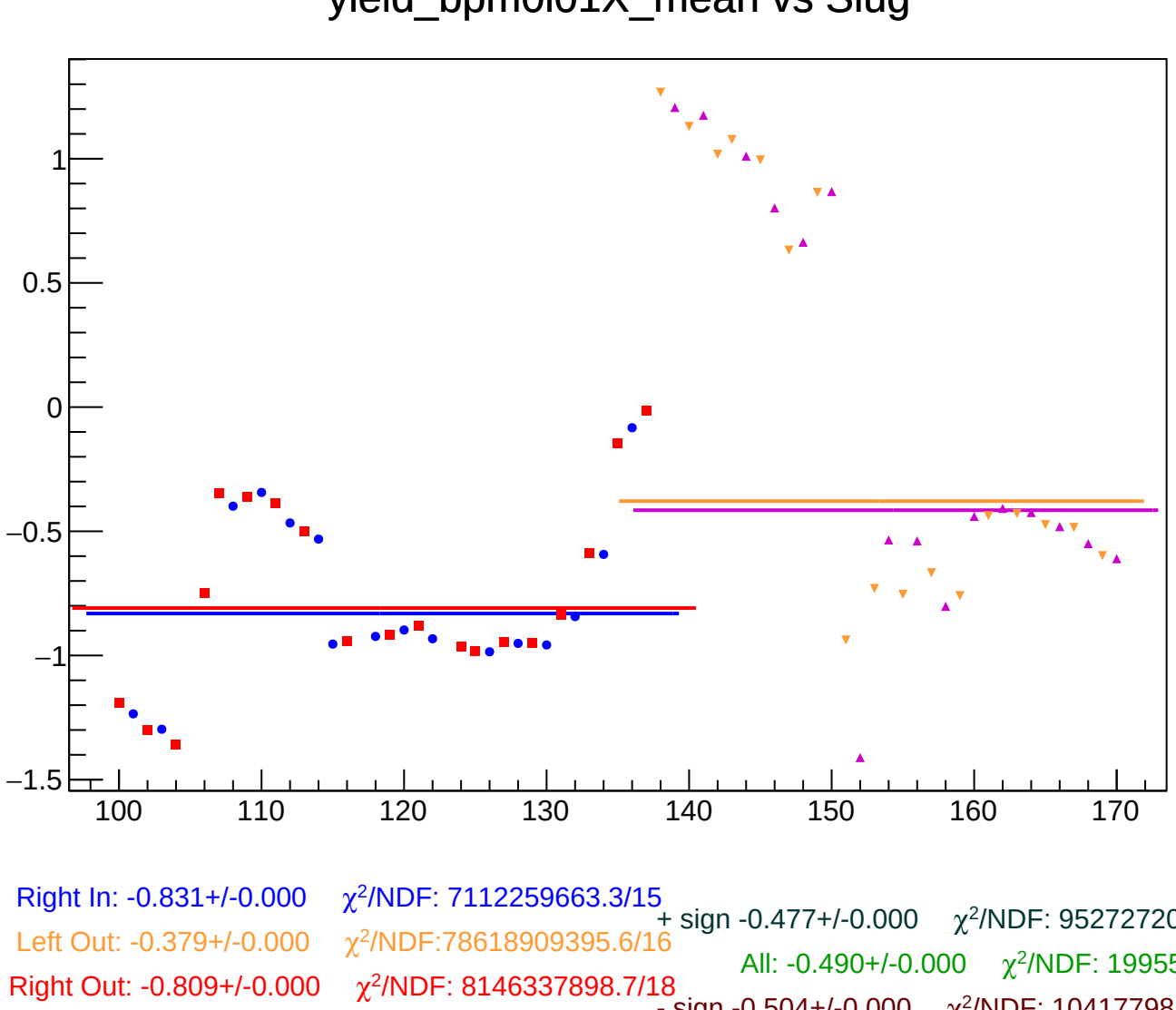
Right Out: 0.006+/-0.000 $\chi^2$/NDF: 56374.2/18

Left In: 0.007+/-0.000 $\chi^2$/NDF:665600.6/15

+ sign 0.006+/-0.000 $\chi^2$/NDF: 807361.8/32

All: 0.006+/-0.000 $\chi^2$/NDF: 1665919.8/67

- sign 0.006+/-0.000 $\chi^2$/NDF: 858546.7/34




Right In: -0.831+/-0.000 $\chi^2$/NDF: 7112259663.3/15

Left Out: -0.379+/-0.000 $\chi^2$/NDF:78618909395.6/16

Right Out: -0.809+/-0.000 $\chi^2$/NDF: 8146337898.7/18

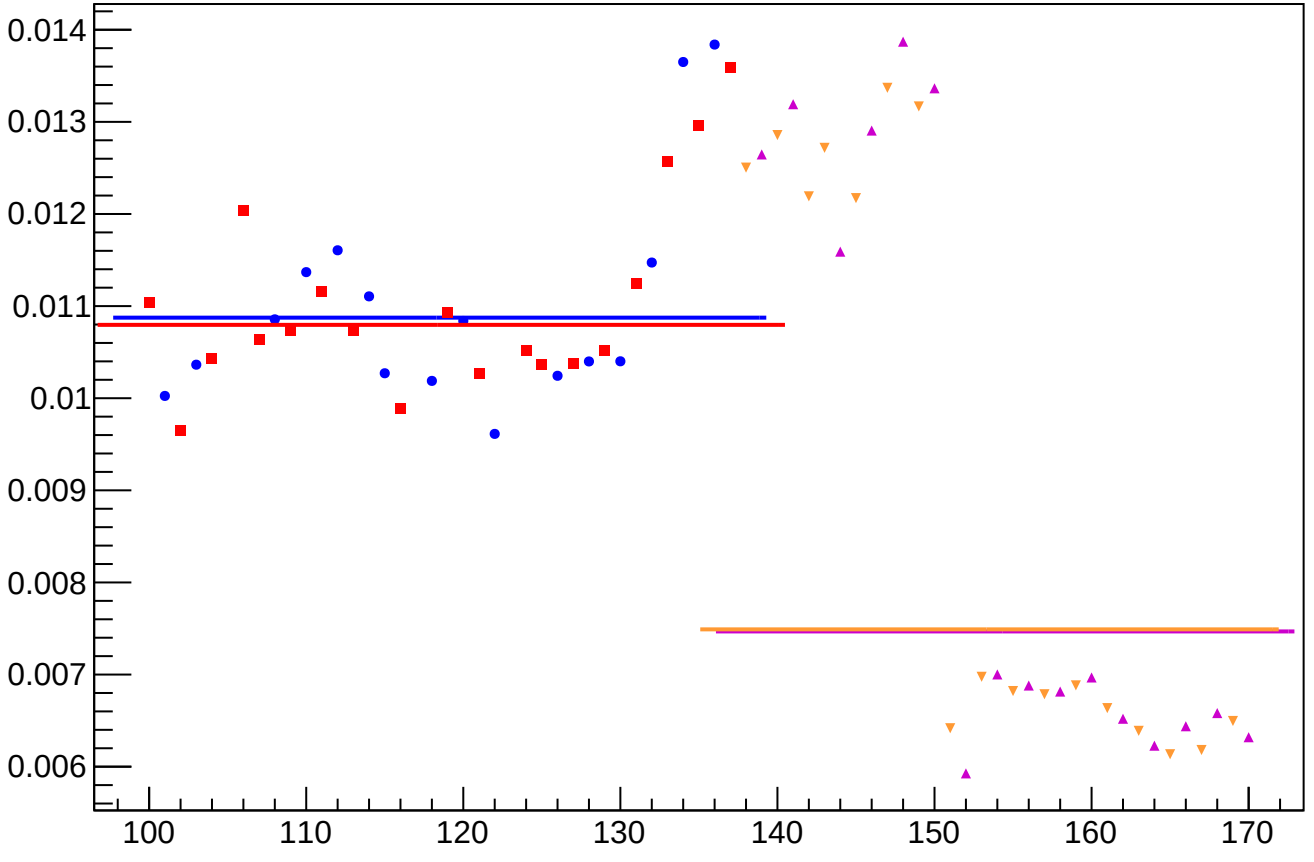
Left In: -0.415+/-0.000 $\chi^2$/NDF:88577374634.4/15

+ sign -0.477+/-0.000 $\chi^2$/NDF: 95272720283.8/32

All: -0.490+/-0.000 $\chi^2$/NDF: 199552566040.

- sign -0.504+/-0.000 $\chi^2$/NDF: 104177981050.6/34

# yield_bpm0i01X_rms vs Slug




Right In: 0.011+/-0.000 $\chi^2$/NDF: 157612.7/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:2123046.4/16

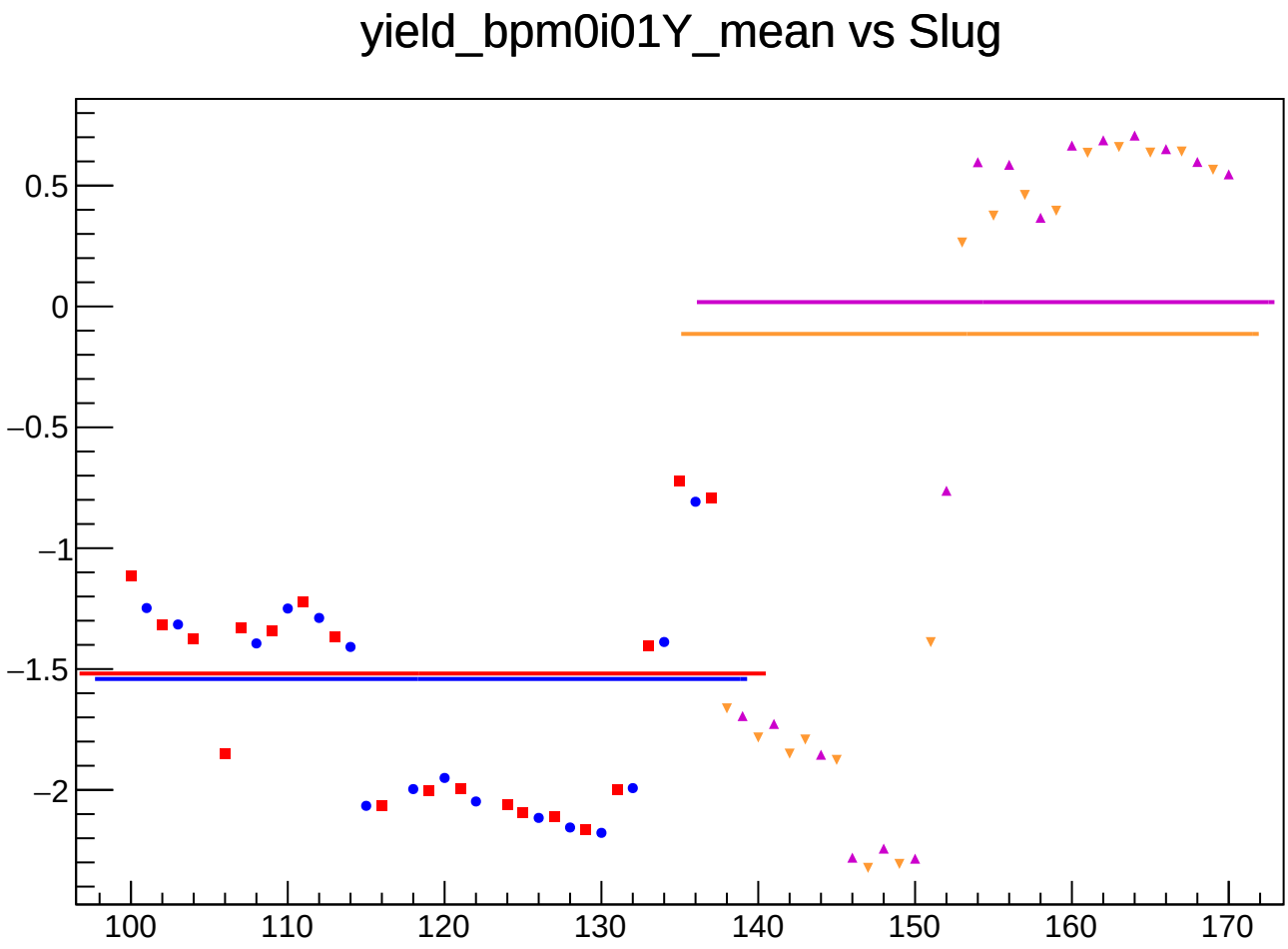
Right Out: 0.011+/-0.000 $\chi^2$/NDF: 99122.1/18

Left In: 0.007+/-0.000 $\chi^2$/NDF:2176000.4/15

+ sign 0.008+/-0.000 $\chi^2$/NDF: 3347621.7/32

All: 0.008+/-0.000 $\chi^2$/NDF: 6686468.6/67

- sign 0.008+/-0.000 $\chi^2$/NDF: 3338837.4/34




Right In: -1.541+/-0.000 $\chi^2$/NDF: 162409397922.2/15

Left Out: -0.114+/-0.000 $\chi^2$/NDF:2057131457925.7/16

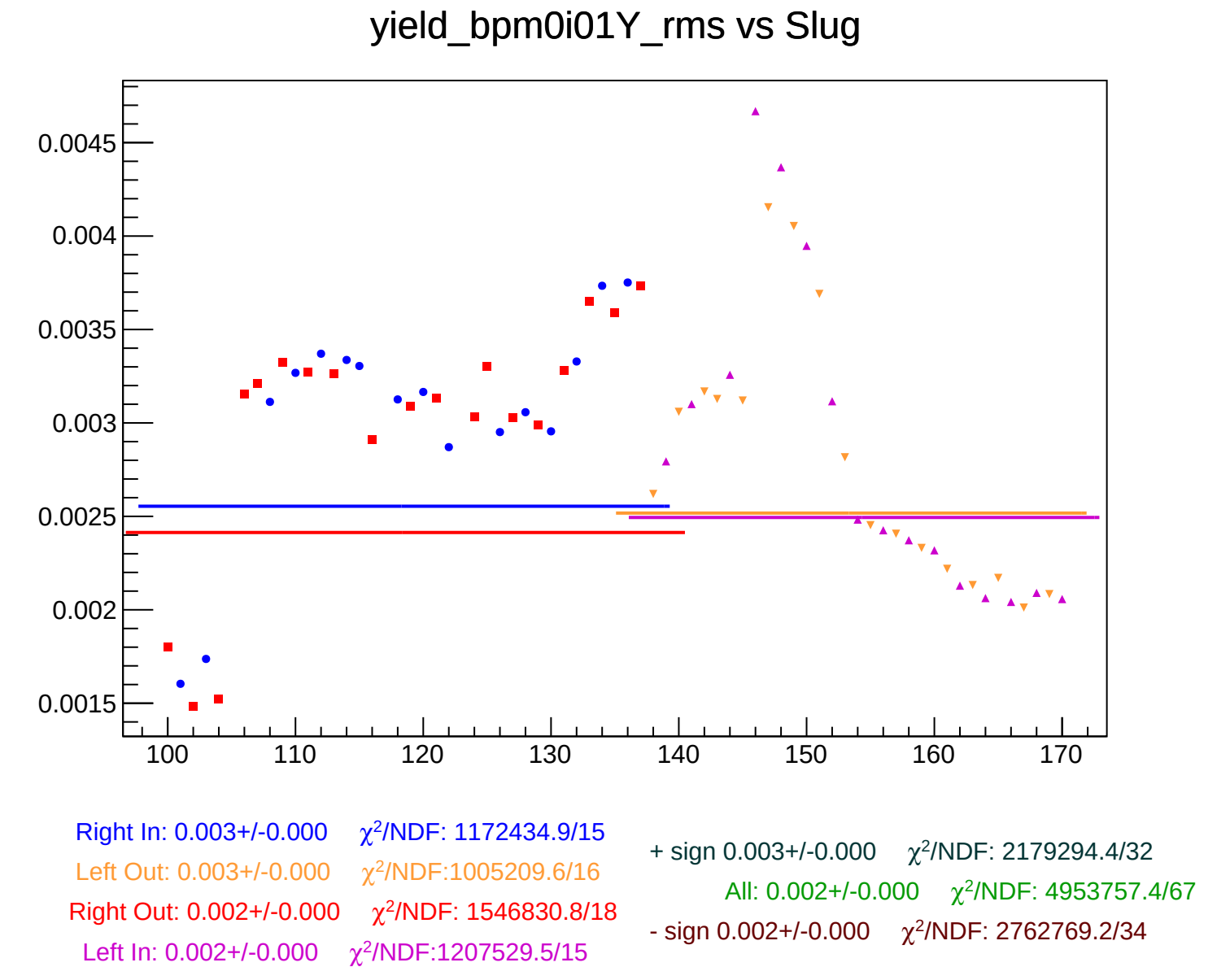
Right Out: -1.519+/-0.000 $\chi^2$/NDF: 145077318641.2/18

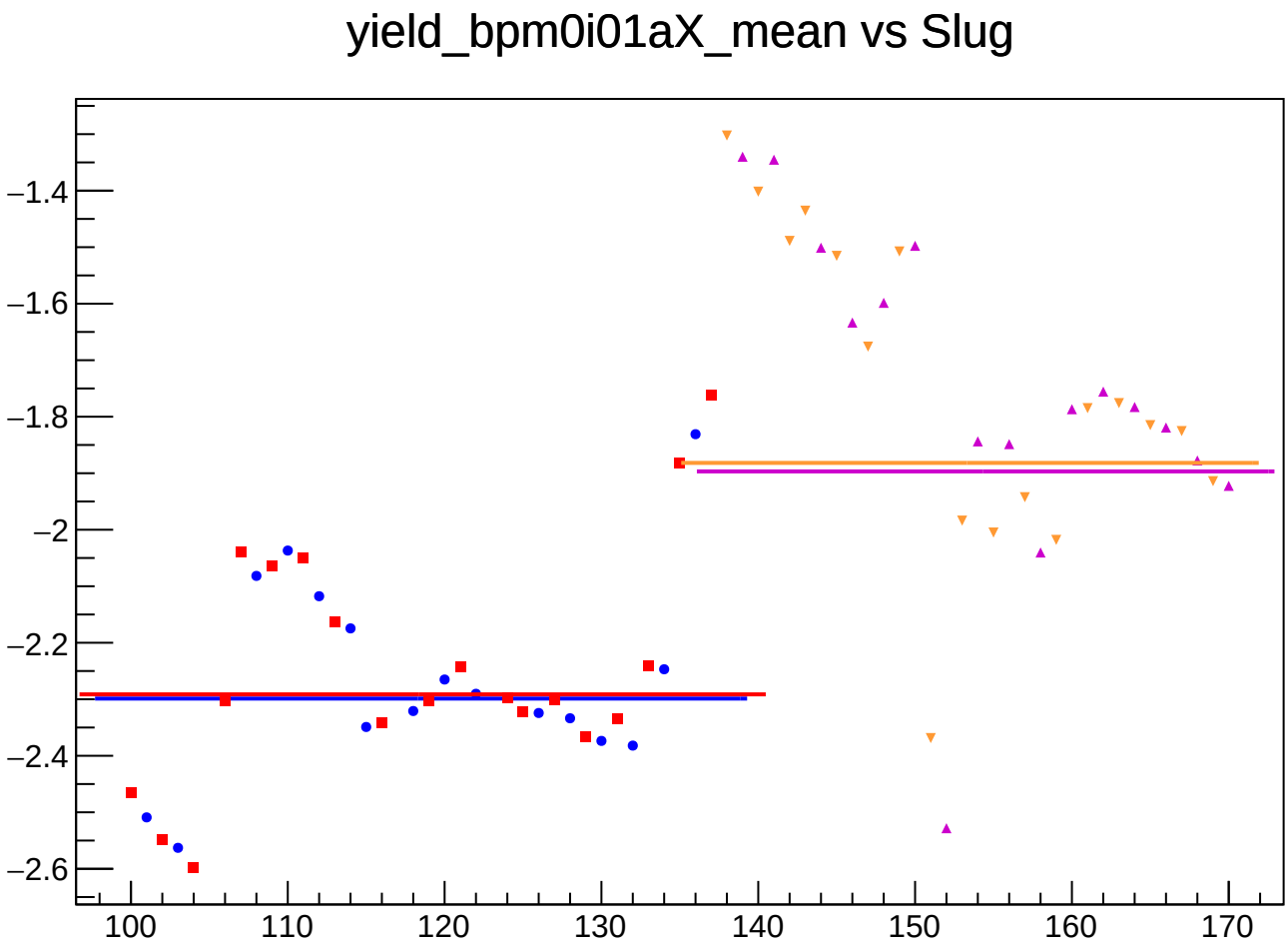
Left In: 0.018+/-0.000 $\chi^2$/NDF:1912928757495.8/15

+ sign -0.596+/-0.000 $\chi^2$/NDF: 3472420810592.5/3

All: -0.566+/-0.000 $\chi^2$/NDF: 7070442845484

- sign -0.536+/-0.000 $\chi^2$/NDF: 3593078436389.8/34


yield_bpm0i01Y_rms vs Slug
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
100
110
120
130
140
150
160
170
Right In: 0.003+/-0.000 χ²/NDF: 1172434.9/15
Left Out: 0.003+/-0.000 χ²/NDF:1005209.6/16
Right Out: 0.002+/-0.000 χ²/NDF: 1546830.8/18
Left In: 0.002+/-0.000 χ²/NDF:1207529.5/15
+ sign 0.003+/-0.000 χ²/NDF: 2179294.4/32
All: 0.002+/-0.000 χ²/NDF: 4953757.4/67
- sign 0.002+/-0.000 χ²/NDF: 2762769.2/34




Right In: -2.299+/-0.000 $\chi^2$/NDF: 6129071089.8/15

Left Out: -1.882+/-0.000 $\chi^2$/NDF:27261455479.9/16

Right Out: -2.291+/-0.000 $\chi^2$/NDF: 6831007568.9/18

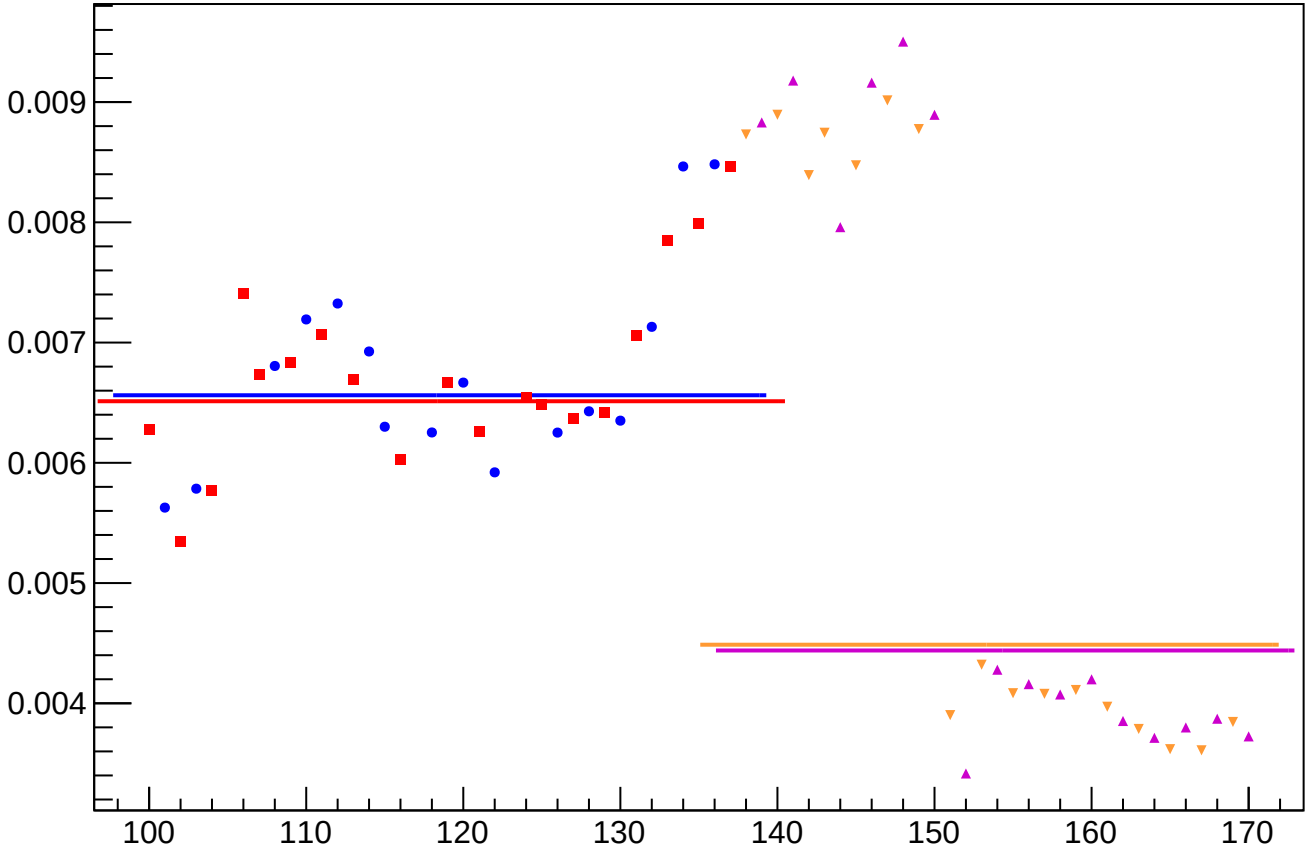
Left In: -1.897+/-0.000 $\chi^2$/NDF:43342626221.2/15

+ sign -1.973+/-0.000 $\chi^2$/NDF: 55211673781.6/32

All: -1.980+/-0.000 $\chi^2$/NDF: 125614446714.3

- sign -1.986+/-0.000 $\chi^2$/NDF: 70343328376.8/34

# yield_bpm0i01aX_rms vs Slug




Right In: 0.007+/-0.000 $\chi^2$/NDF: 221890.3/15

Left Out: 0.004+/-0.000 $\chi^2$/NDF:2803711.6/16

Right Out: 0.007+/-0.000 $\chi^2$/NDF: 184961.7/18

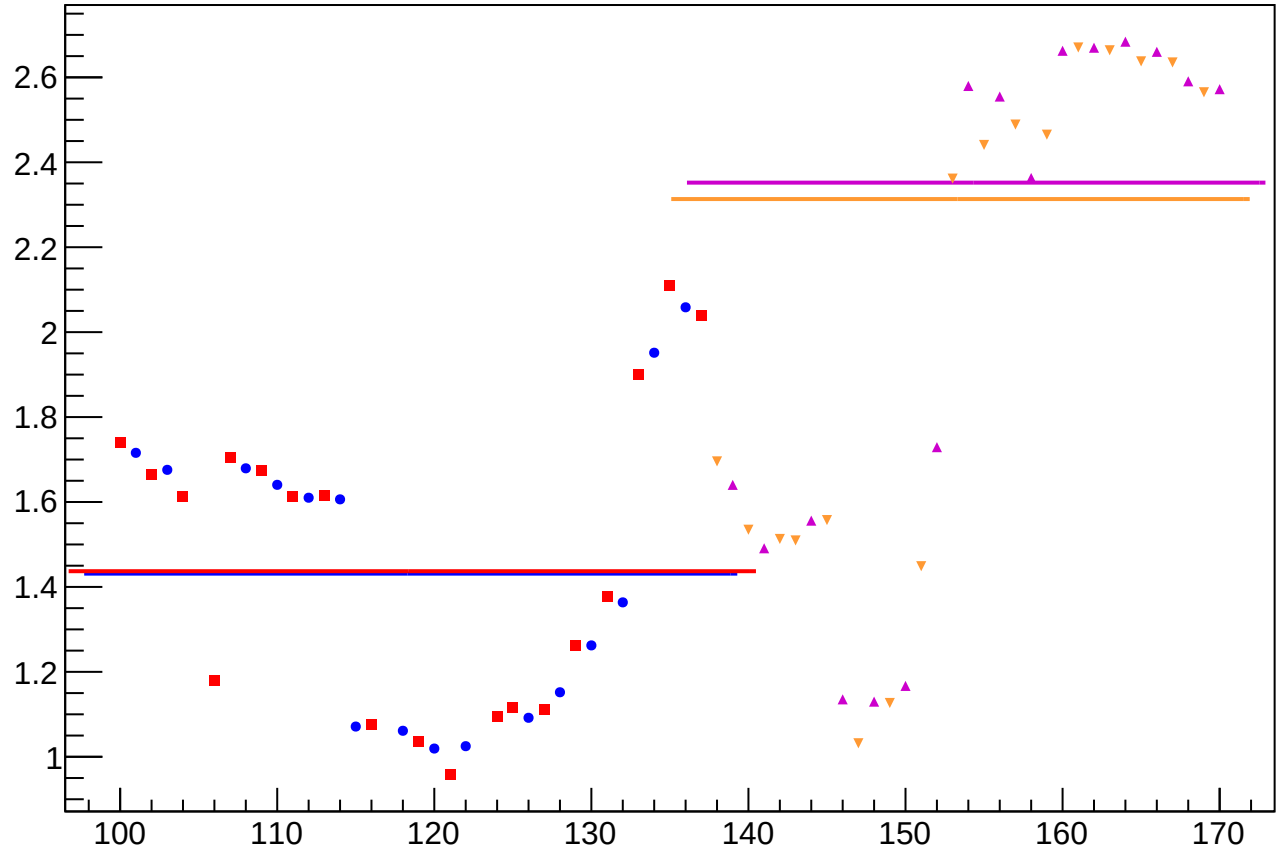
Left In: 0.004+/-0.000 $\chi^2$/NDF:2899798.6/15

+ sign 0.005+/-0.000 $\chi^2$/NDF: 4105403.0/32

All: 0.005+/-0.000 $\chi^2$/NDF: 8304391.7/67

- sign 0.005+/-0.000 $\chi^2$/NDF: 4198100.1/34

# yield_bpm0i01aY_mean vs Slug




Right In: 1.431+/-0.000 $\chi^2$/NDF: 189180734956.1/15

Left Out: 2.313+/-0.000 $\chi^2$/NDF:211564570079.5/16

Right Out: 1.437+/-0.000 $\chi^2$/NDF: 182019221175.5/18

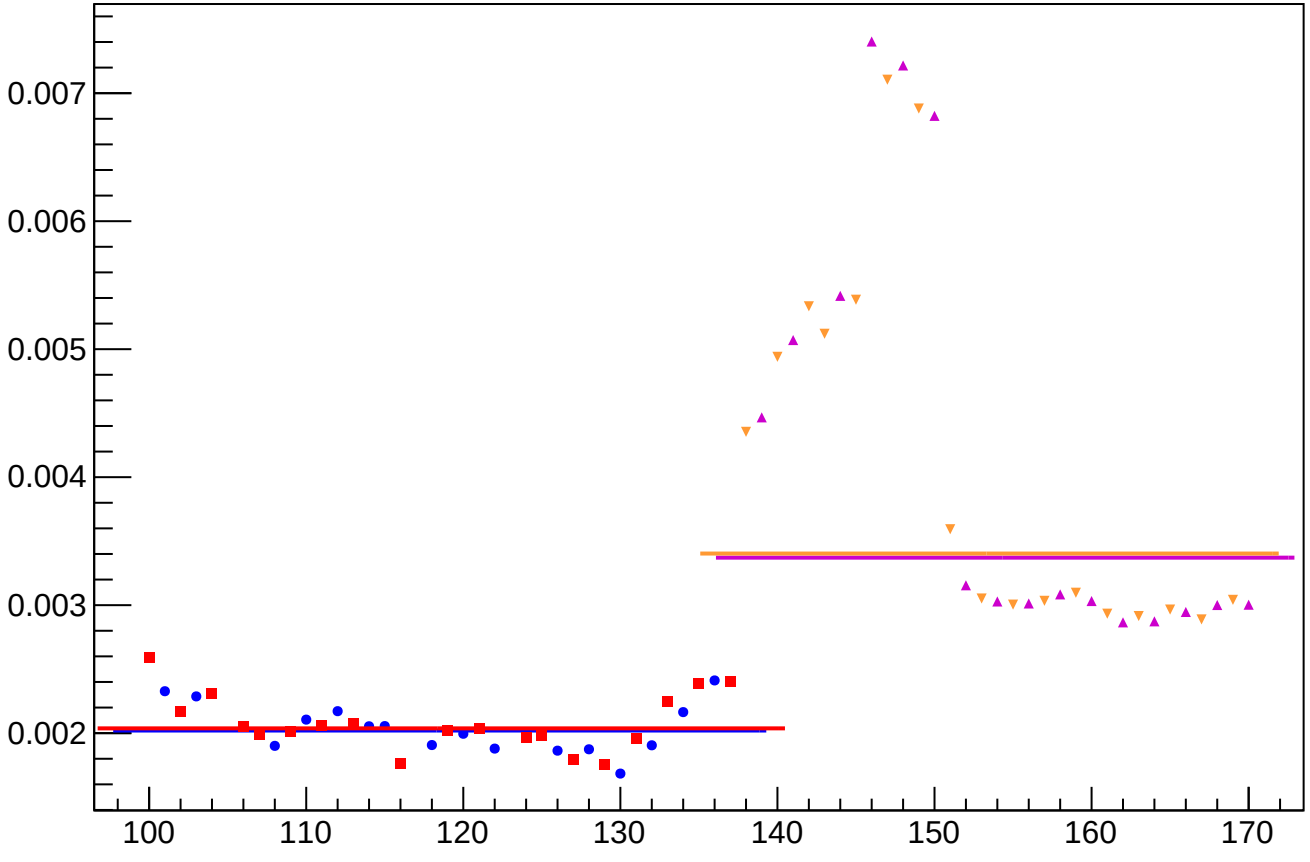
Left In: 2.352+/-0.000 $\chi^2$/NDF:206670882872.5/15

+ sign 1.769+/-0.000 $\chi^2$/NDF: 885127081691.6/32

All: 1.777+/-0.000 $\chi^2$/NDF: 1793533623563.

- sign 1.785+/-0.000 $\chi^2$/NDF: 908076486476.3/34

# yield_bpm0i01aY_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 154923.3/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:1681346.1/16

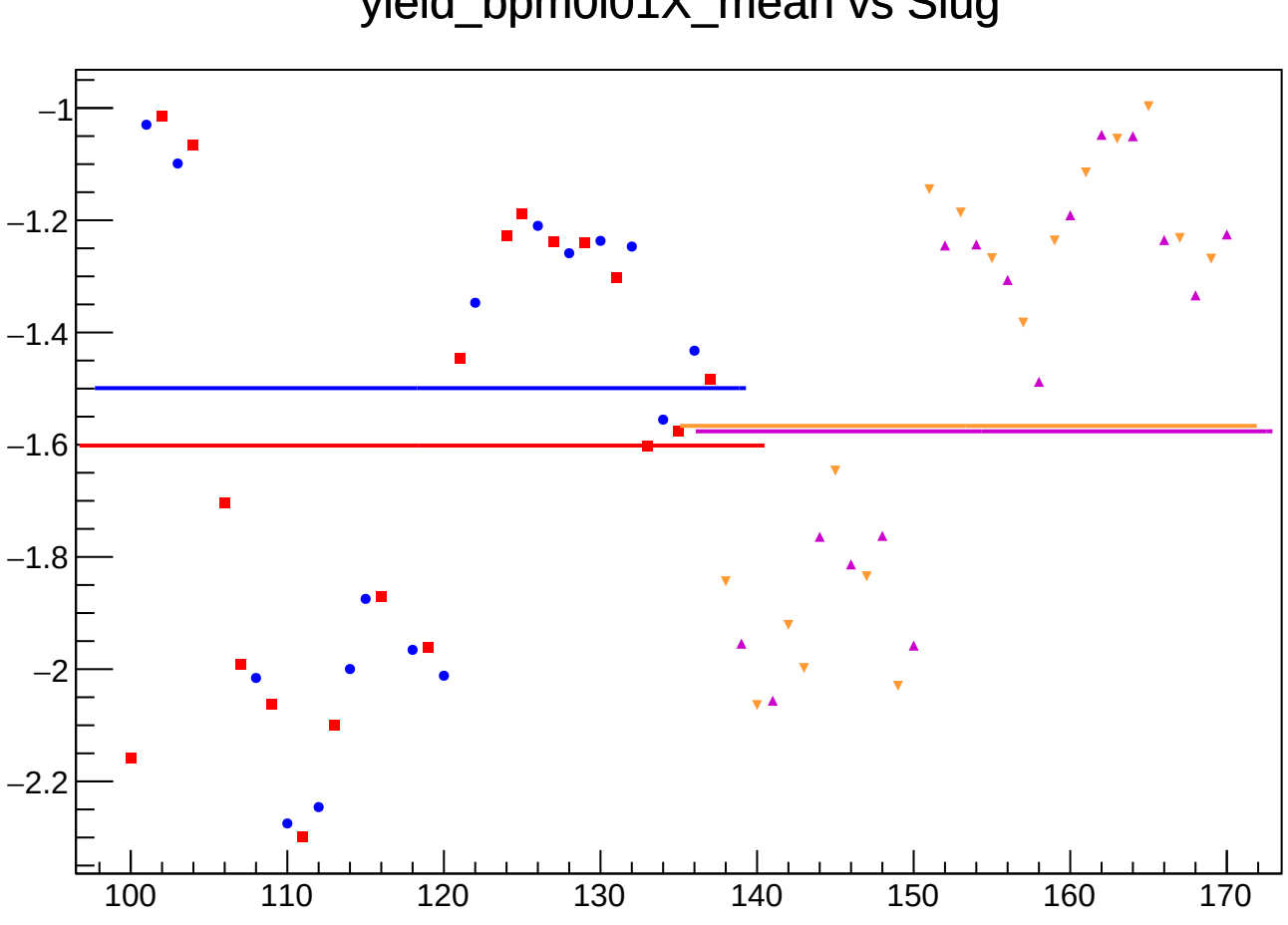
Right Out: 0.002+/-0.000 $\chi^2$/NDF: 113640.4/18

Left In: 0.003+/-0.000 $\chi^2$/NDF:1932543.3/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 4216941.4/32

All: 0.003+/-0.000 $\chi^2$/NDF: 8470132.7/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 4253111.8/34




Right In: -1.499+/-0.000 $\chi^2$/NDF: 22930357522.2/15

Left Out: -1.566+/-0.000 $\chi^2$/NDF:40259075279.2/16

Right Out: -1.601+/-0.000 $\chi^2$/NDF: 28324914147.6/18

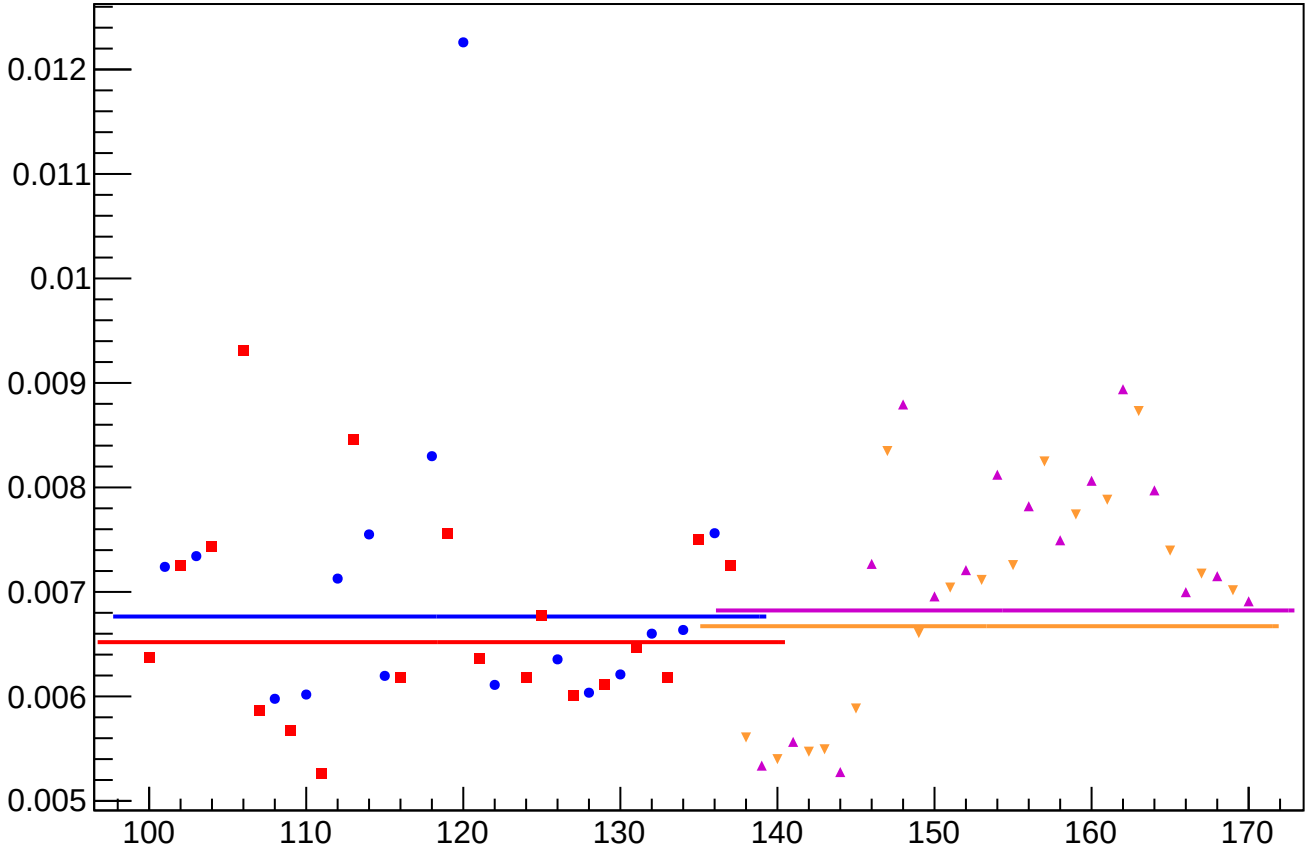
Left In: -1.576+/-0.000 $\chi^2$/NDF:30633604454.6/15

+ sign -1.544+/-0.000 $\chi^2$/NDF: 63614070412.5/32

All: -1.565+/-0.000 $\chi^2$/NDF: 123010980621.3

- sign -1.586+/-0.000 $\chi^2$/NDF: 59022564557.0/34

# yield_bpm0l01X_rms vs Slug




Right In: 0.007+/-0.000 $\chi^2$/NDF: 238566.1/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:598532.9/16

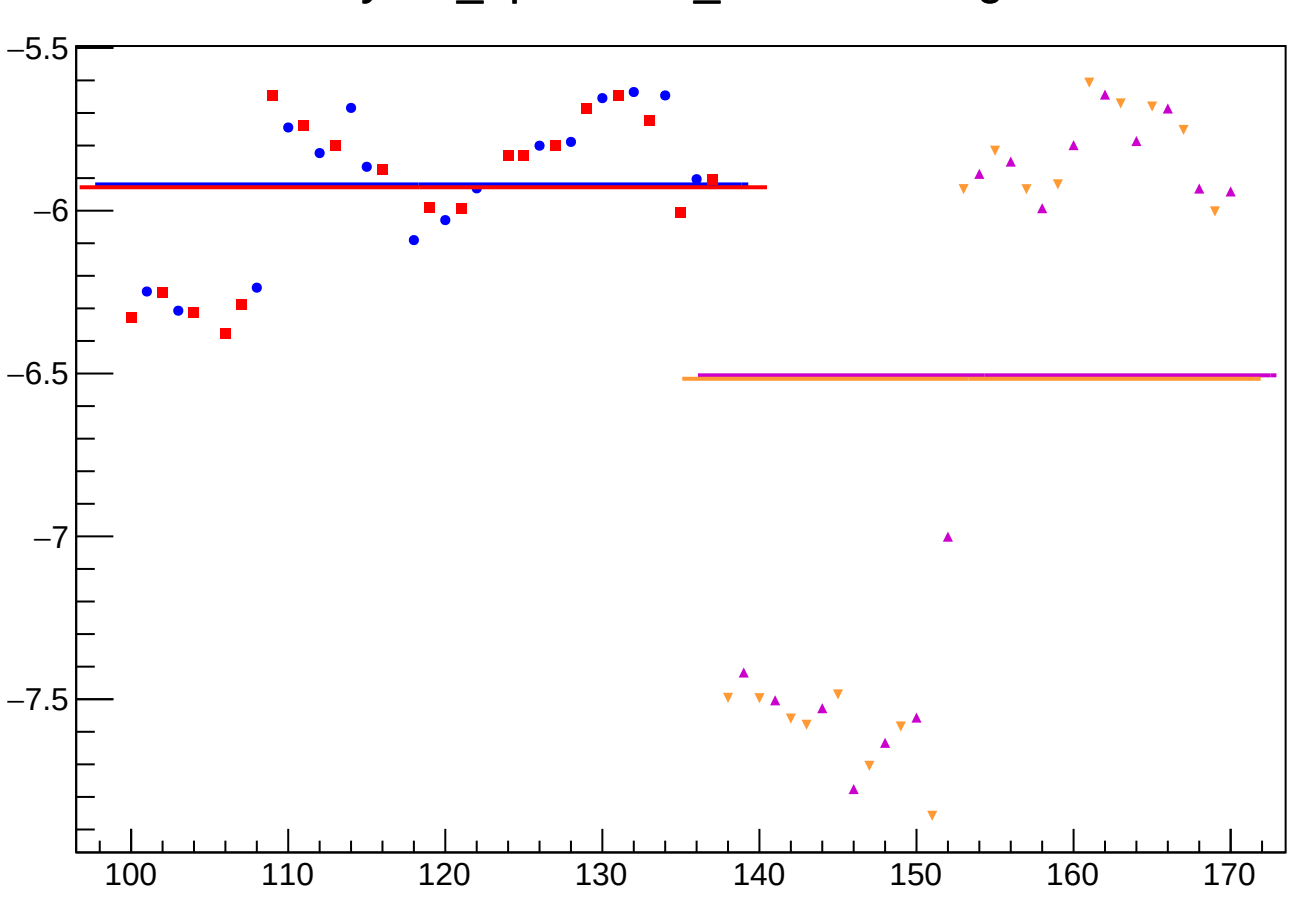
Right Out: 0.007+/-0.000 $\chi^2$/NDF: 245428.1/18

Left In: 0.007+/-0.000 $\chi^2$/NDF:678687.1/15

+ sign 0.007+/-0.000 $\chi^2$/NDF: 838711.0/32

All: 0.007+/-0.000 $\chi^2$/NDF: 1781191.0/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 942477.0/34




Right In: -5.919+/-0.000 $\chi^2$/NDF: 11742457053.3/15

Left Out: -6.516+/-0.000 $\chi^2$/NDF:97365386761.2/16

Right Out: -5.928+/-0.000 $\chi^2$/NDF: 12641528579.2/18

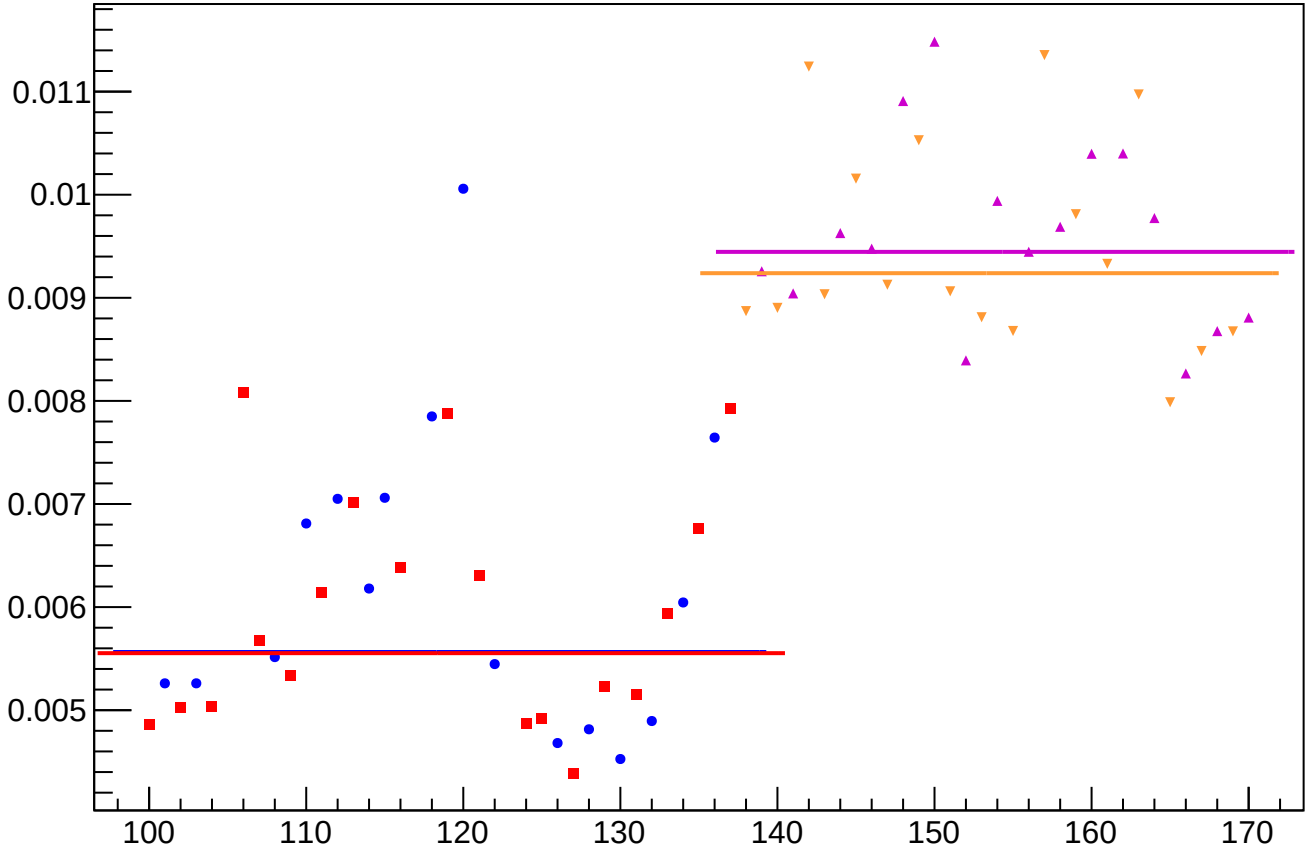
Left In: -6.506+/-0.000 $\chi^2$/NDF:78223335631.0/15

+ sign -6.150+/-0.000 $\chi^2$/NDF: 136337152540.1/32

All: -6.143+/-0.000 $\chi^2$/NDF: 252578021586.

- sign -6.137+/-0.000 $\chi^2$/NDF: 116212566469.9/34

# yield_bpm0l01Y_rms vs Slug




Right In: 0.006+/-0.000 $\chi^2$/NDF: 495546.3/15

Left Out: 0.009+/-0.000 $\chi^2$/NDF:195571.7/16

Right Out: 0.006+/-0.000 $\chi^2$/NDF: 364541.1/18

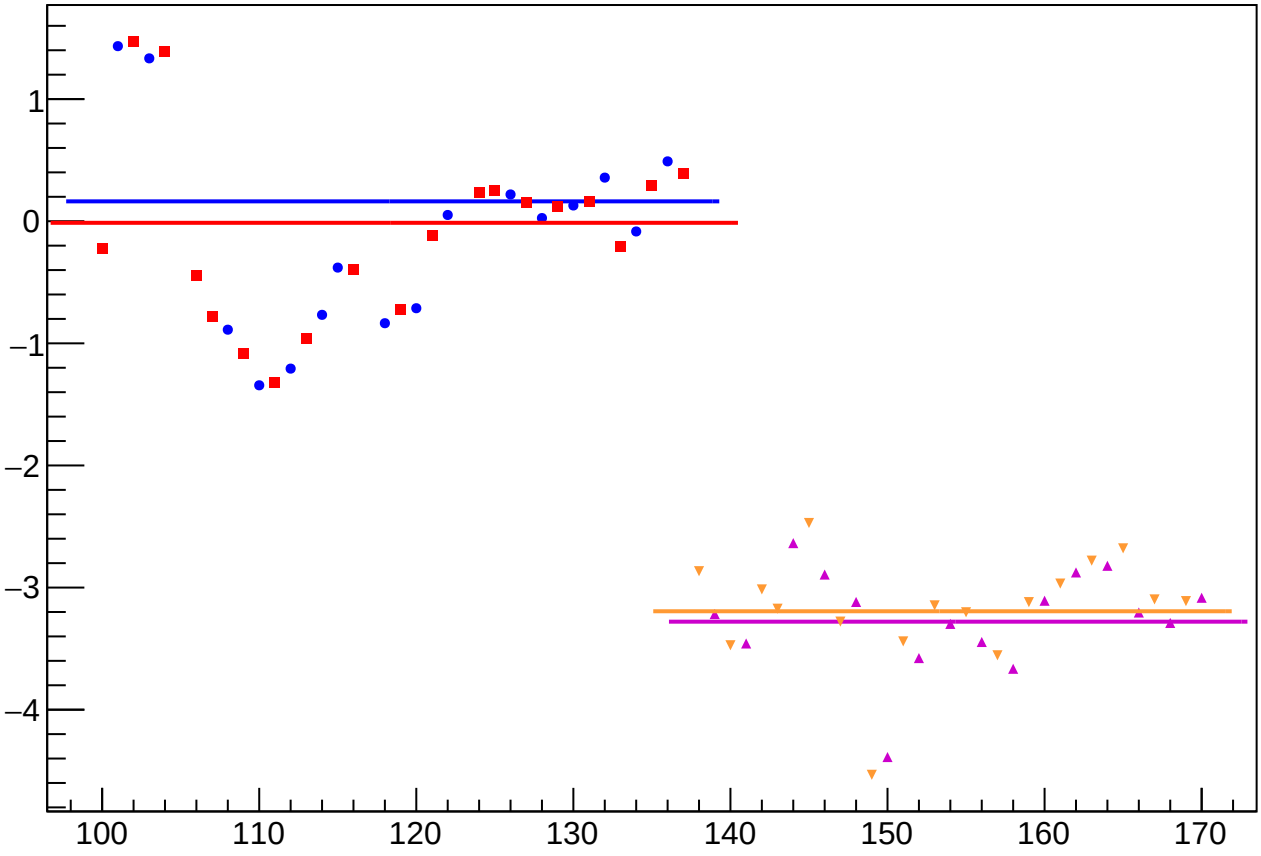
Left In: 0.009+/-0.000 $\chi^2$/NDF:163962.4/15

+ sign 0.007+/-0.000 $\chi^2$/NDF: 2756051.3/32

All: 0.007+/-0.000 $\chi^2$/NDF: 5588589.2/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 2832344.5/34

# yield_bpm0l02X_mean vs Slug




Right In: 0.163+/-0.000 $\chi^2$/NDF: 17940034444.3/15

Left Out: -3.194+/-0.000 $\chi^2$/NDF:8124701507.6/16

Right Out: -0.013+/-0.000 $\chi^2$/NDF: 22484002798.8/18

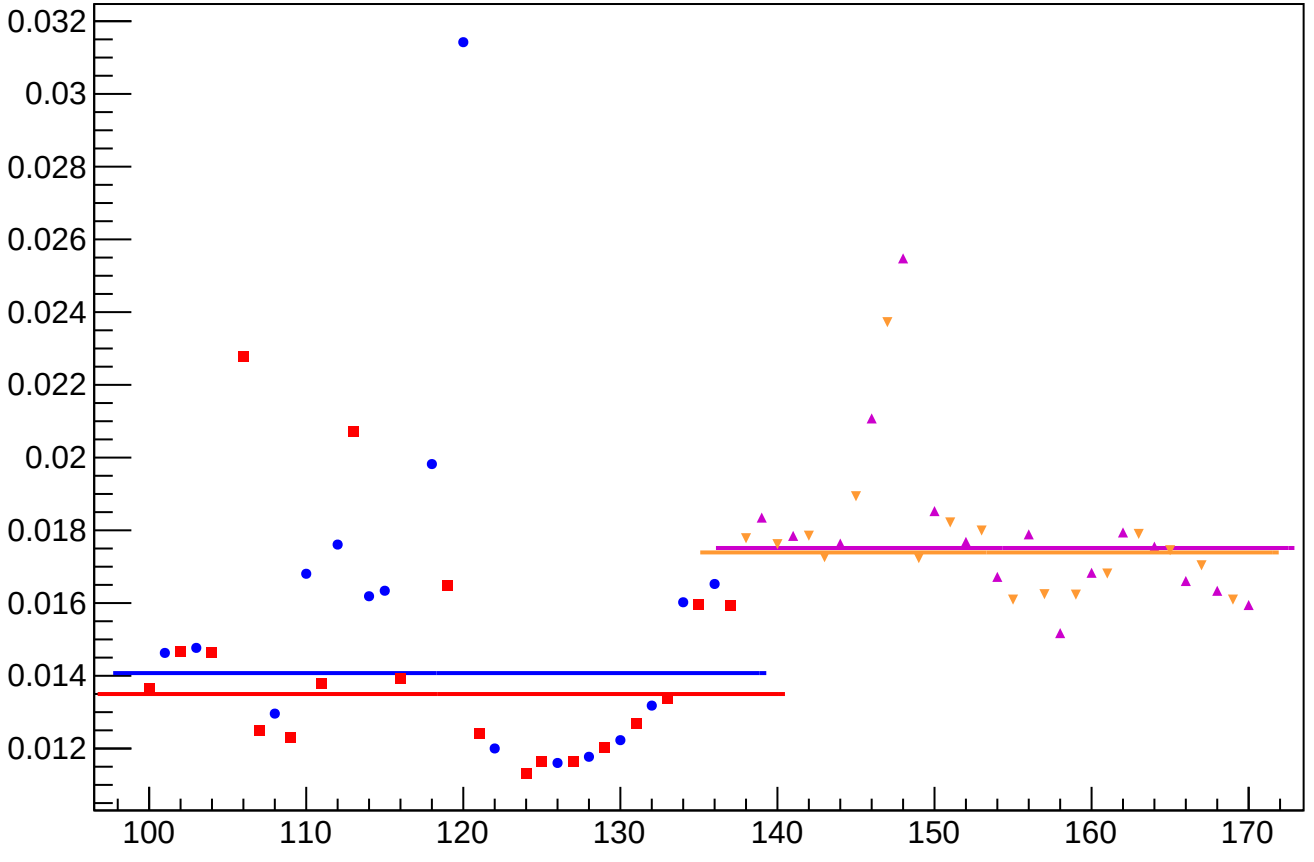
Left In: -3.279+/-0.000 $\chi^2$/NDF:6413123729.9/15

+ sign -1.750+/-0.000 $\chi^2$/NDF: 230408571468.1/32

All: -1.735+/-0.000 $\chi^2$/NDF: 466751936018.3

- sign -1.721+/-0.000 $\chi^2$/NDF: 236311997990.0/34

# yield_bpm0l02X_rms vs Slug




Right In: 0.014+/-0.000 $\chi^2$/NDF: 465421.6/15

Left Out: 0.017+/-0.000 $\chi^2$/NDF:164740.3/16

Right Out: 0.013+/-0.000 $\chi^2$/NDF: 314810.3/18

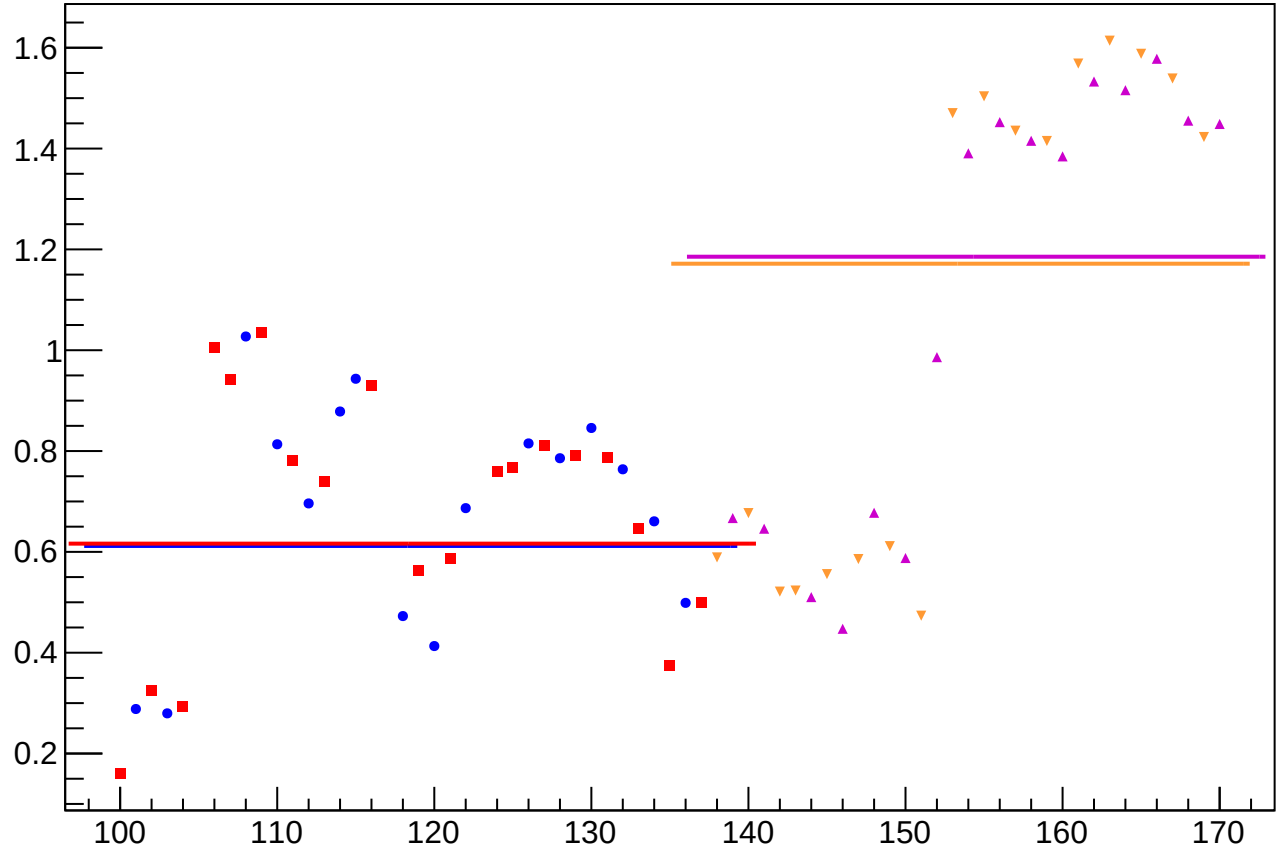
Left In: 0.018+/-0.000 $\chi^2$/NDF:278034.7/15

+ sign 0.016+/-0.000 $\chi^2$/NDF: 1029440.5/32

All: 0.016+/-0.000 $\chi^2$/NDF: 2259467.6/67

- sign 0.016+/-0.000 $\chi^2$/NDF: 1219846.4/34

# yield_bpm0l02Y_mean vs Slug




Right In: 0.612+/-0.000 $\chi^2$/NDF: 5639014502.0/15

Left Out: 1.172+/-0.000 $\chi^2$/NDF:40632129344.0/16

Right Out: 0.616+/-0.000 $\chi^2$/NDF: 6419512040.7/18

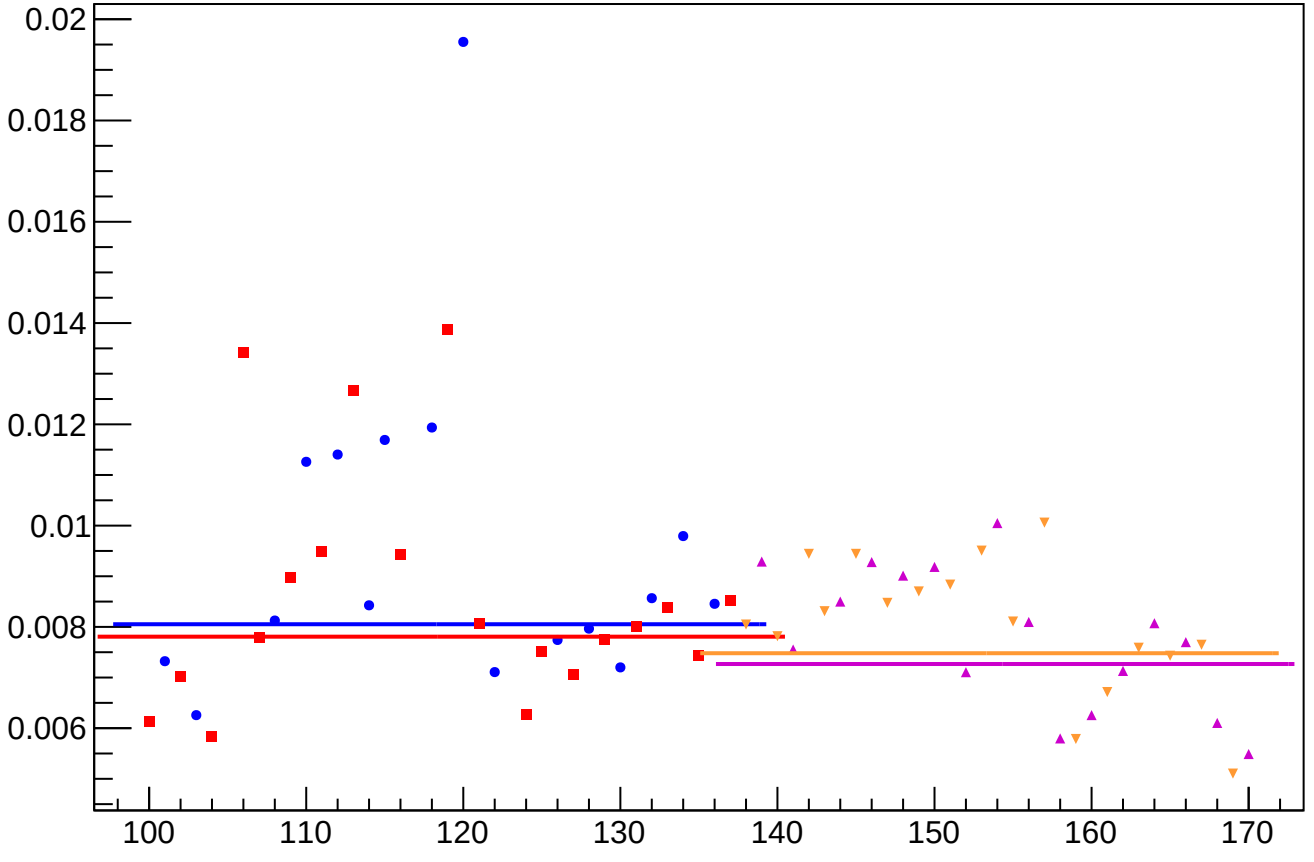
Left In: 1.185+/-0.000 $\chi^2$/NDF:33030759658.3/15

+ sign 0.996+/-0.000 $\chi^2$/NDF: 66588444425.0/32

All: 0.998+/-0.000 $\chi^2$/NDF: 129062514830.9

- sign 1.001+/-0.000 $\chi^2$/NDF: 62470368965.8/34

# yield_bpm0l02Y_rms vs Slug




Right In: 0.008+/-0.000 $\chi^2$/NDF: 598309.5/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:875438.2/16

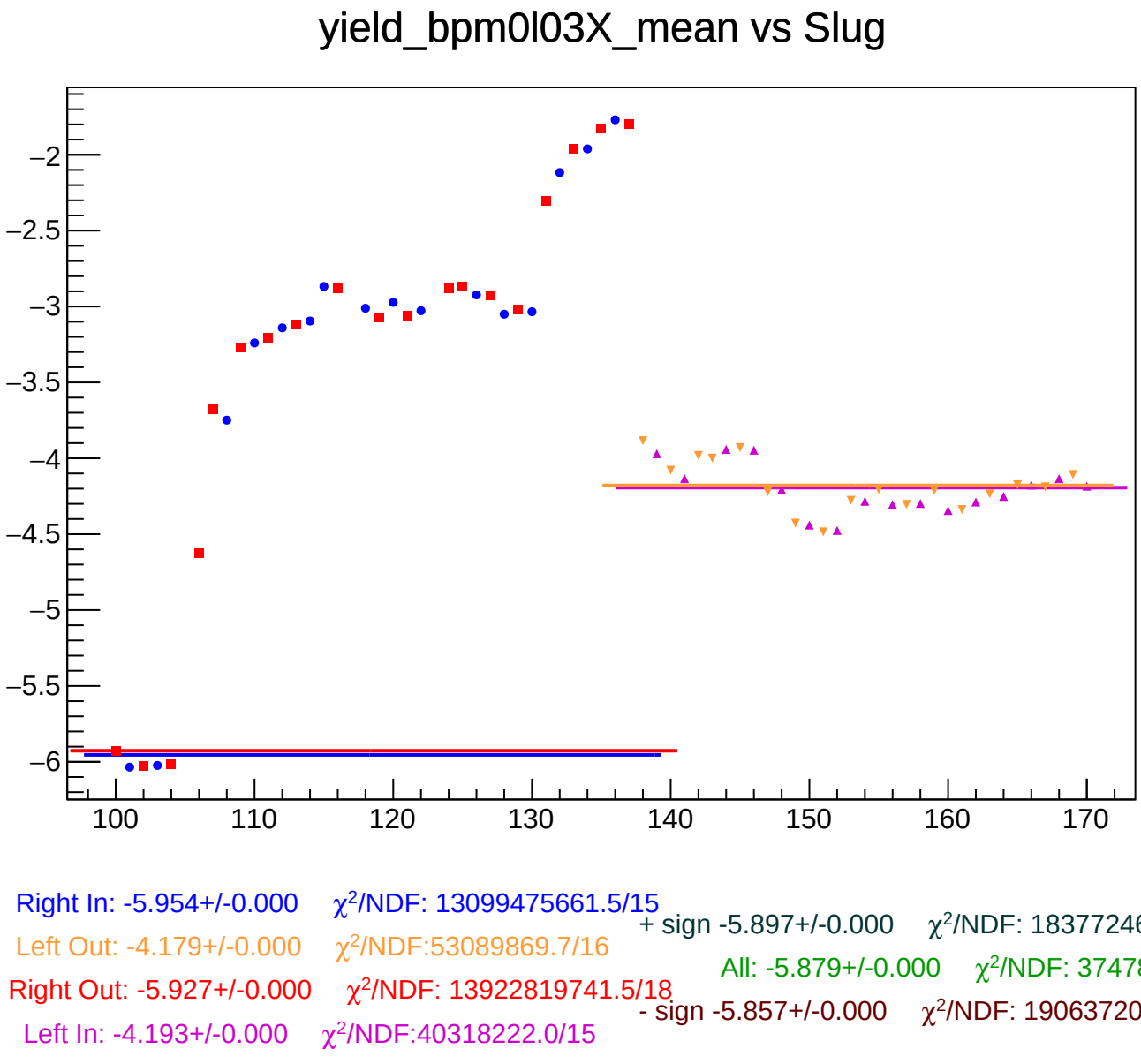
Right Out: 0.008+/-0.000 $\chi^2$/NDF: 587157.2/18

Left In: 0.007+/-0.000 $\chi^2$/NDF:829208.9/15

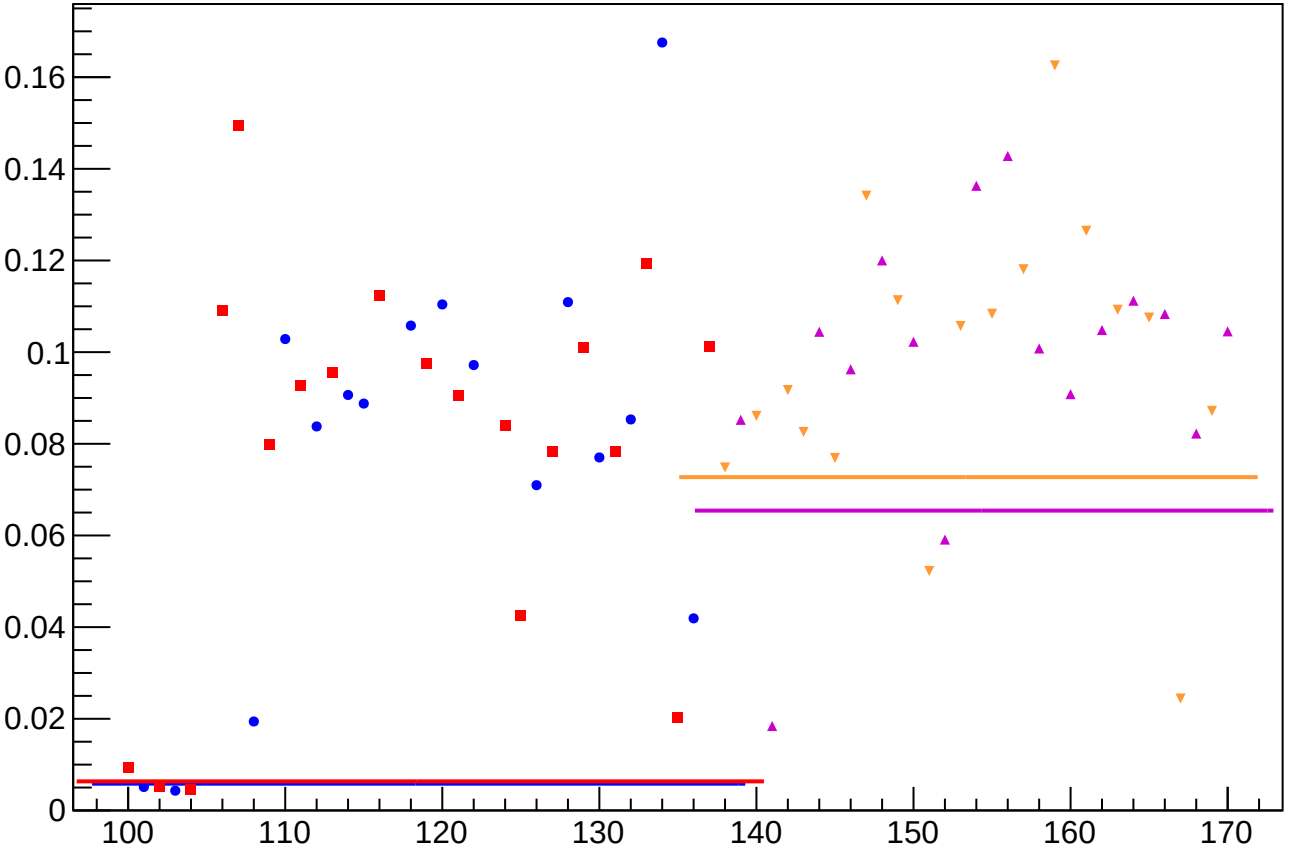
+ sign 0.008+/-0.000 $\chi^2$/NDF: 1516217.3/32

All: 0.008+/-0.000 $\chi^2$/NDF: 2988778.1/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 1457793.2/34


yield_bpm0l03X_mean vs Slug
−2
−2.5
−3
−3.5
−4
−4.5
−5
−5.5
−6
100
110
120
130
140
150
160
170
Right In: -5.954+/-0.000 χ²/NDF: 13099475661.5/15
Left Out: -4.179+/-0.000 χ²/NDF:53089869.7/16
Right Out: -5.927+/-0.000 χ²/NDF: 13922819741.5/18
Left In: -4.193+/-0.000 χ²/NDF:40318222.0/15
+ sign -5.897+/-0.000 χ²/NDF: 18377246328.7/32
All: -5.879+/-0.000 χ²/NDF: 37478848085.1/
- sign -5.857+/-0.000 χ²/NDF: 19063720470.8/34

# yield_bpm0l03X_rms vs Slug




Right In: 0.006+/-0.000 $\chi^2$/NDF: 8700553.3/15

Left Out: 0.073+/-0.000 $\chi^2$/NDF:4252559.5/16

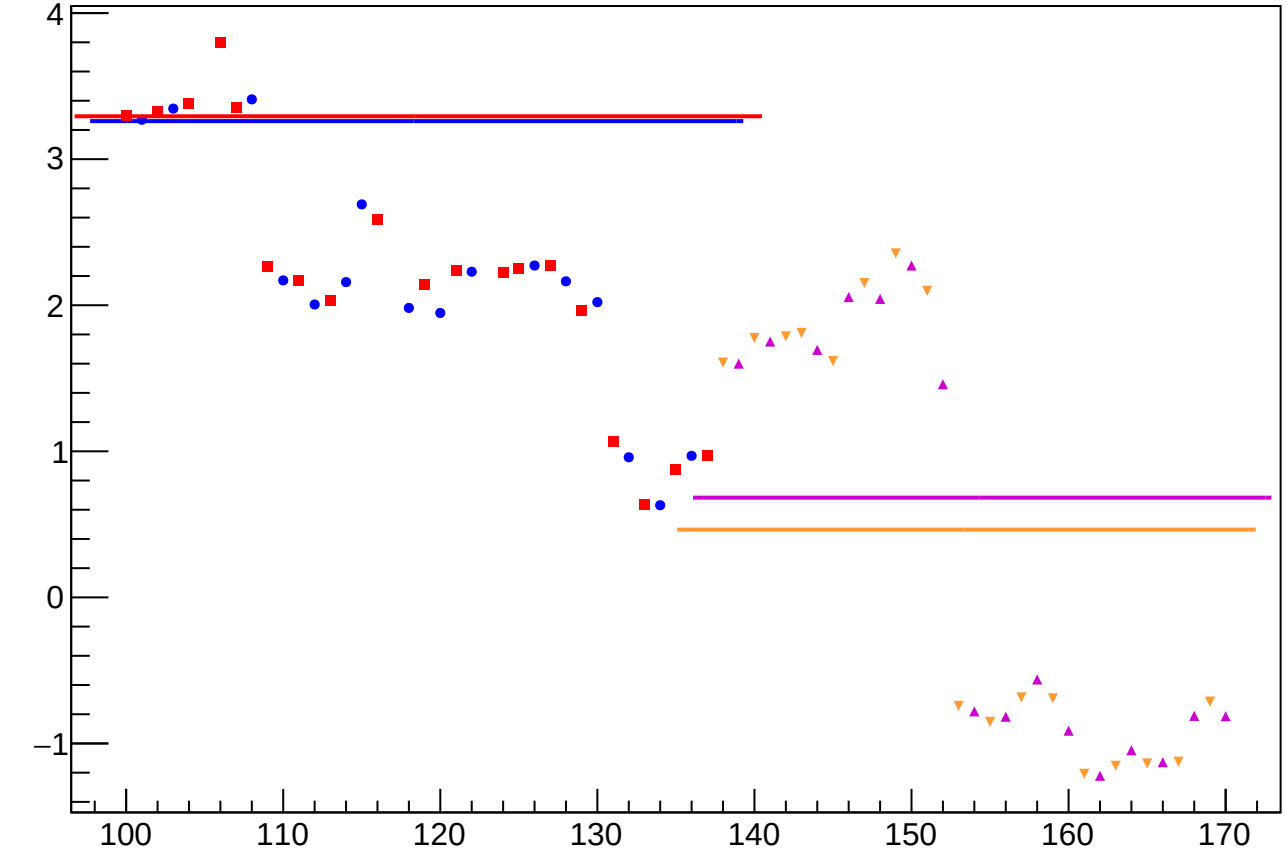
Right Out: 0.006+/-0.000 $\chi^2$/NDF: 8751831.3/18

Left In: 0.065+/-0.000 $\chi^2$/NDF:5873422.5/15

+ sign 0.008+/-0.000 $\chi^2$/NDF: 27786747.0/32

All: 0.008+/-0.000 $\chi^2$/NDF: 54285176.8/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 26473411.9/34




Right In: 3.260+/-0.000 $\chi^2$/NDF: 3009624113.9/15

Left Out: 0.464+/-0.000 $\chi^2$/NDF:2943364335.1/16

Right Out: 3.294+/-0.000 $\chi^2$/NDF: 3243748149.8/18

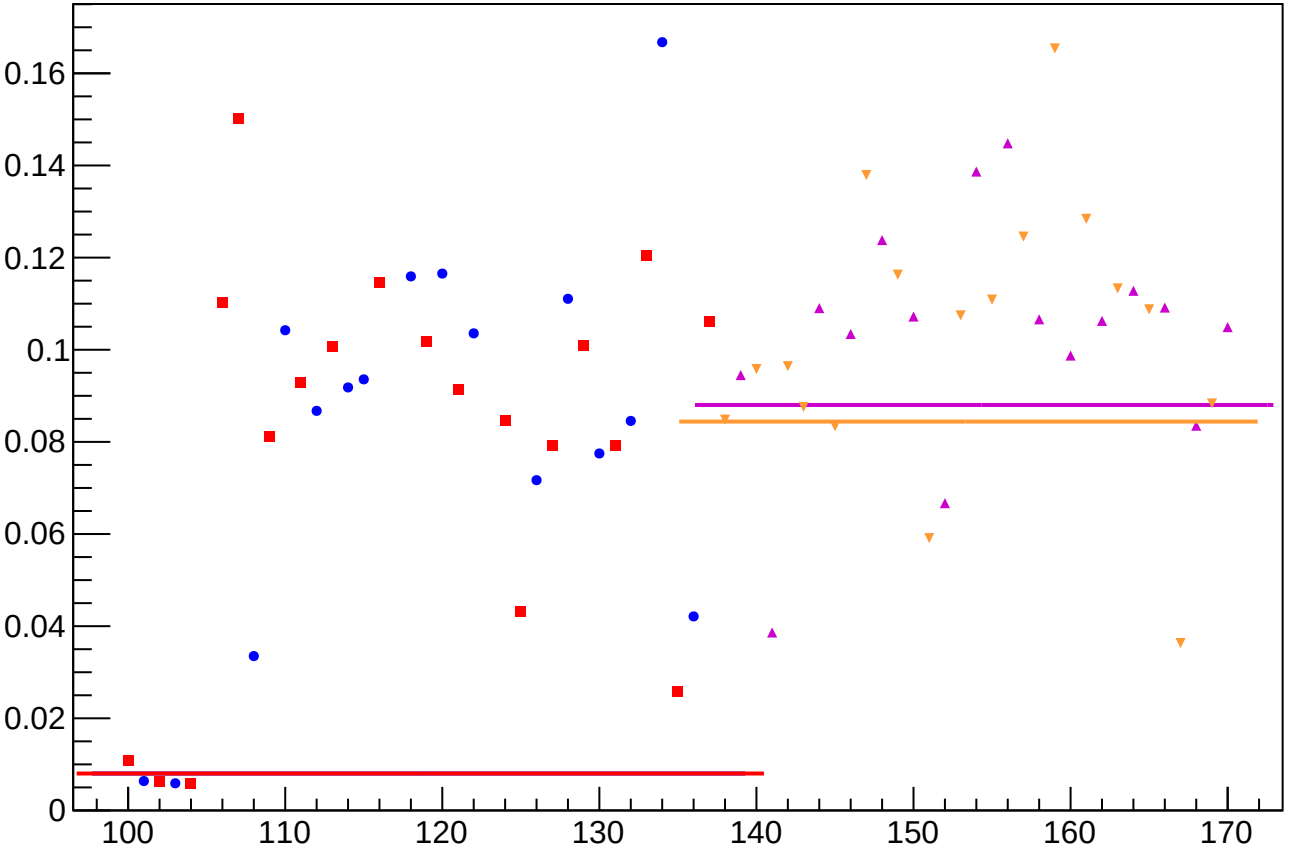
Left In: 0.683+/-0.000 $\chi^2$/NDF:2175320557.4/15

+ sign 3.139+/-0.000 $\chi^2$/NDF: 16458603057.4/32

All: 3.163+/-0.000 $\chi^2$/NDF: 30035057285.1/6

- sign 3.187+/-0.000 $\chi^2$/NDF: 13540368264.8/34

# yield_bpm0l03Y_rms vs Slug




Right In: 0.008+/-0.000 $\chi^2$/NDF: 8415681.1/15

Left Out: 0.084+/-0.000 $\chi^2$/NDF:2752035.1/16

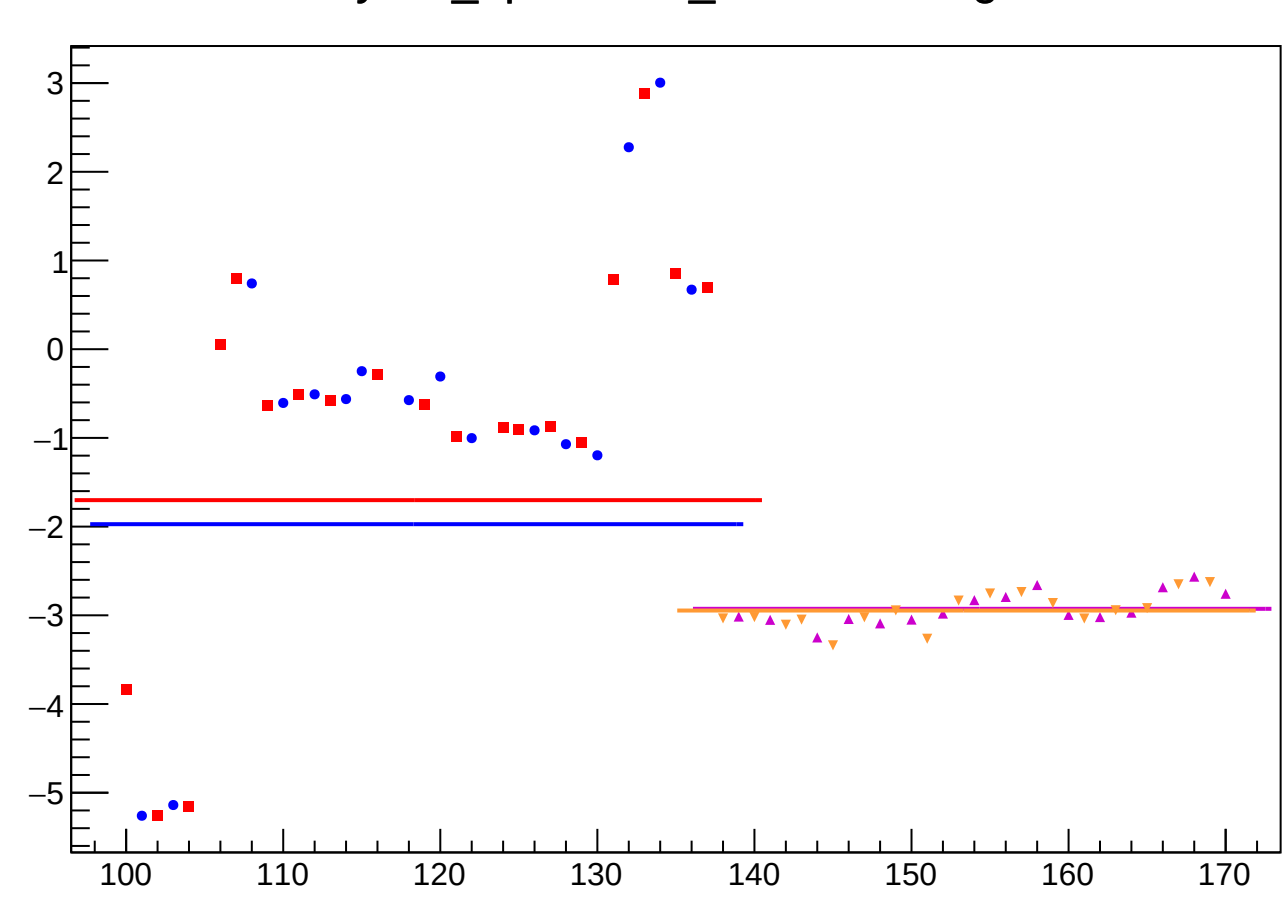
Right Out: 0.008+/-0.000 $\chi^2$/NDF: 8542249.7/18

Left In: 0.088+/-0.000 $\chi^2$/NDF:2287498.3/15

+ sign 0.011+/-0.000 $\chi^2$/NDF: 26841553.2/32

All: 0.011+/-0.000 $\chi^2$/NDF: 52918109.0/67

- sign 0.011+/-0.000 $\chi^2$/NDF: 26076467.8/34




Right In: -1.973+/-0.000 $\chi^2$/NDF: 161975701237.3/15

Left Out: -2.946+/-0.000 $\chi^2$/NDF:7359595969.7/16

Right Out: -1.702+/-0.000 $\chi^2$/NDF: 168156981746.0/18

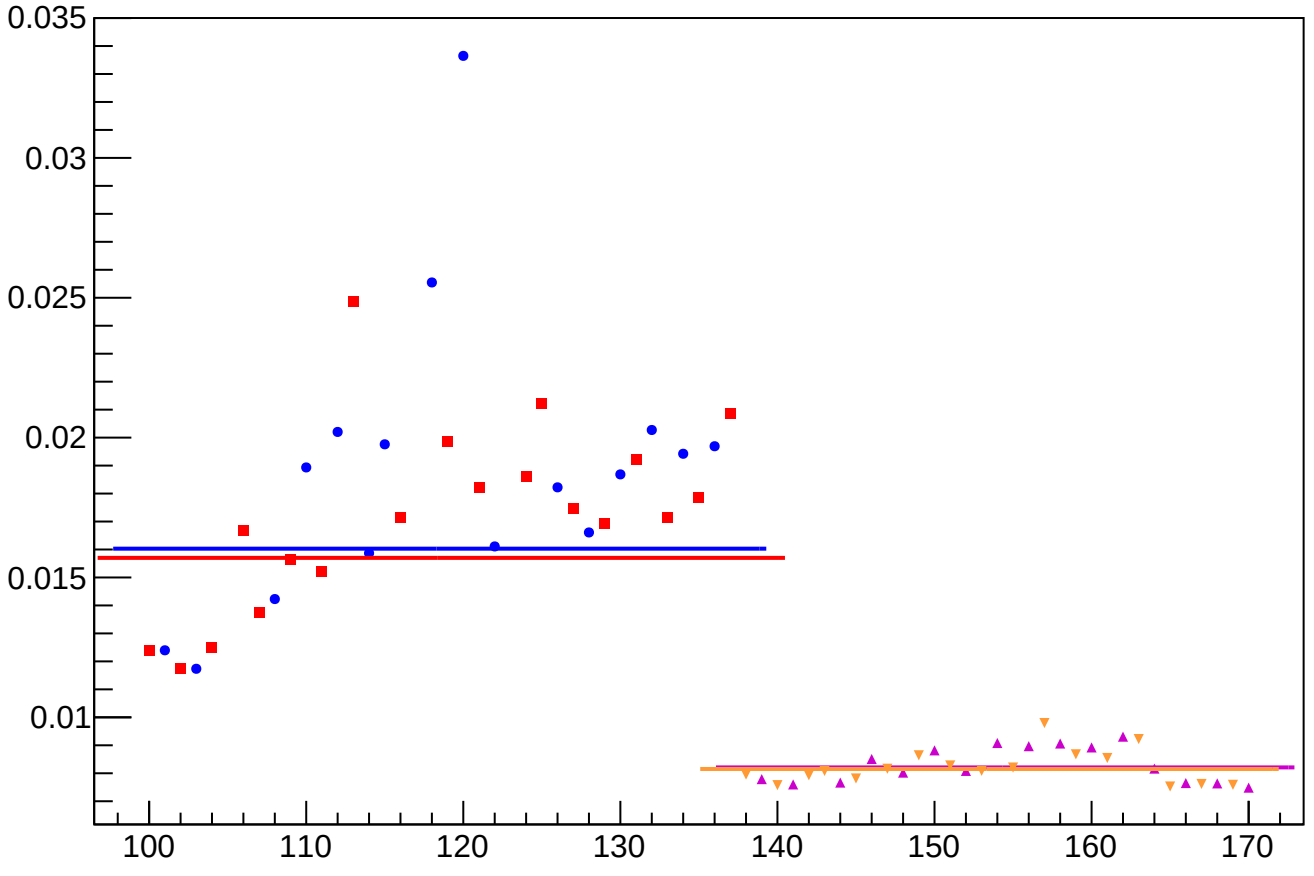
Left In: -2.927+/-0.000 $\chi^2$/NDF:6572072517.4/15

+ sign -2.843+/-0.000 $\chi^2$/NDF: 188521100601.7/32

All: -2.810+/-0.000 $\chi^2$/NDF: 397743028821.

- sign -2.777+/-0.000 $\chi^2$/NDF: 208762014883.4/34

# yield_bpm0l04X_rms vs Slug




Right In: 0.016+/-0.000 $\chi^2$/NDF: 735736.8/15

Left Out: 0.008+/-0.000 $\chi^2$/NDF:116996.6/16

Right Out: 0.016+/-0.000 $\chi^2$/NDF: 504766.0/18

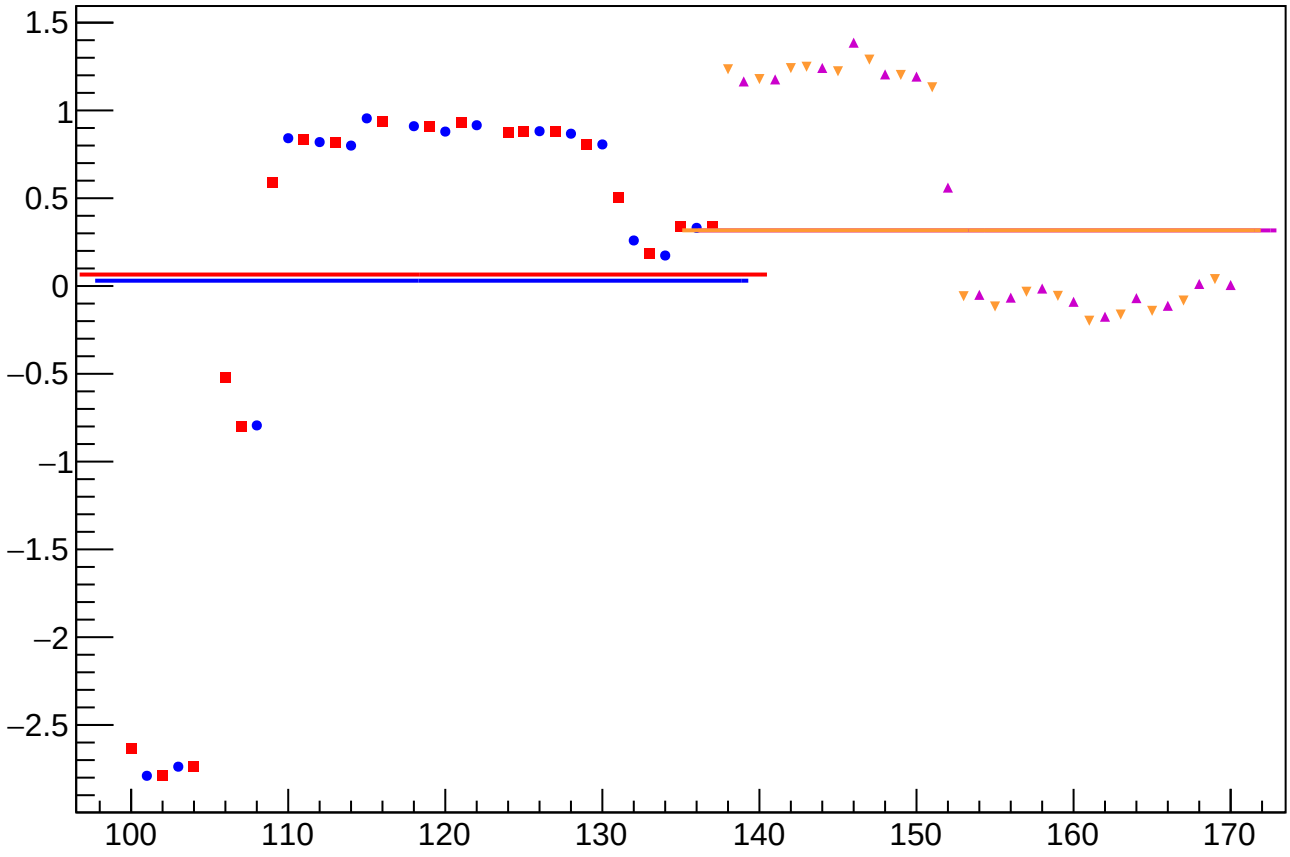
Left In: 0.008+/-0.000 $\chi^2$/NDF:137775.1/15

+ sign 0.009+/-0.000 $\chi^2$/NDF: 3365259.6/32

All: 0.009+/-0.000 $\chi^2$/NDF: 6556540.2/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 3187335.9/34

# yield_bpm0l04Y_mean vs Slug




Right In: 0.030+/-0.000 $\chi^2$/NDF: 851677270962.0/15

Left Out: 0.317+/-0.000 $\chi^2$/NDF:94844755708.7/16

Right Out: 0.065+/-0.000 $\chi^2$/NDF: 935478930138.7/18

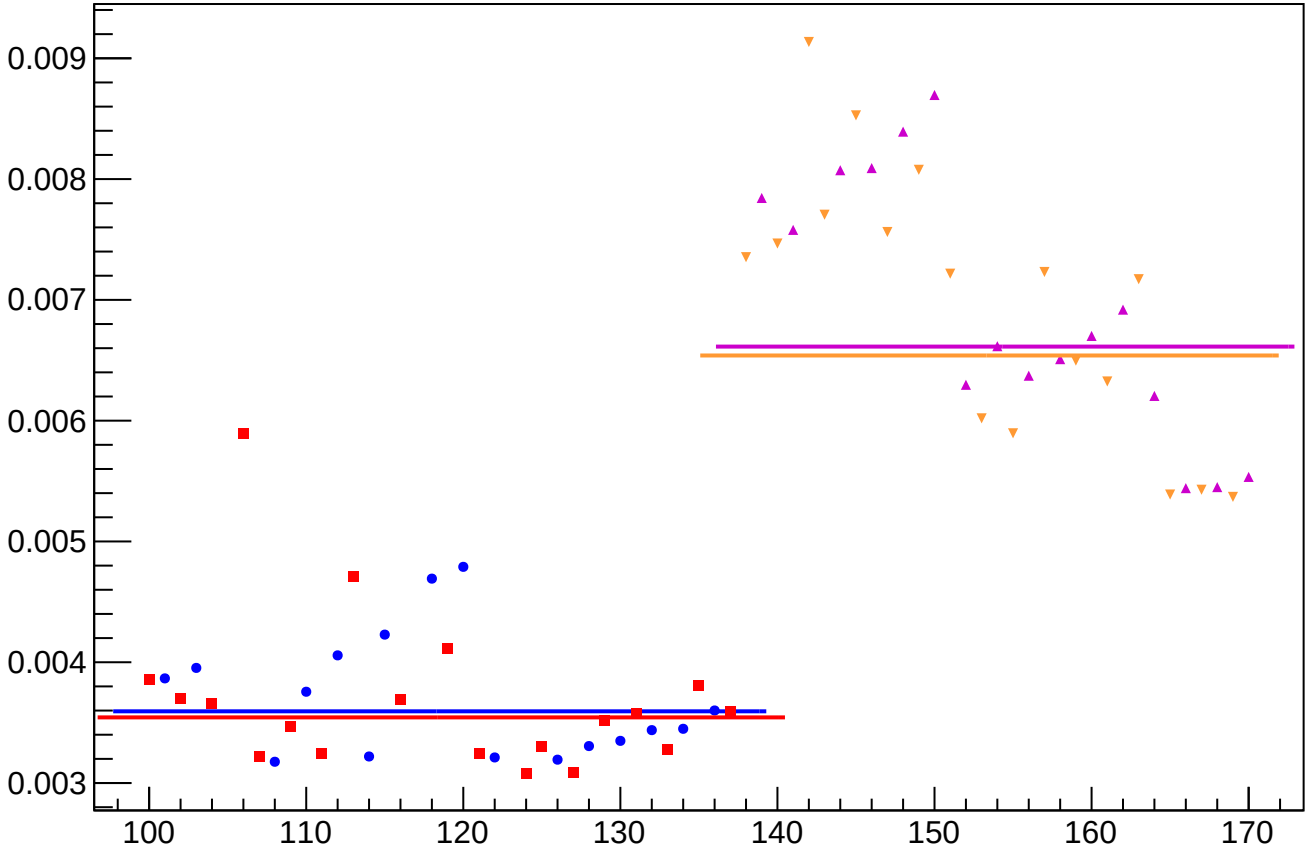
Left In: 0.317+/-0.000 $\chi^2$/NDF:78654176222.1/15

+ sign 0.126+/-0.000 $\chi^2$/NDF: 960824608693.9/32

All: 0.135+/-0.000 $\chi^2$/NDF: 1986105801658.

- sign 0.144+/-0.000 $\chi^2$/NDF: 1025155172807.0/34

# yield_bpm0l04Y_rms vs Slug




Right In: 0.004+/-0.000 $\chi^2$/NDF: 180415.0/15

Left Out: 0.007+/-0.000 $\chi^2$/NDF:524691.4/16

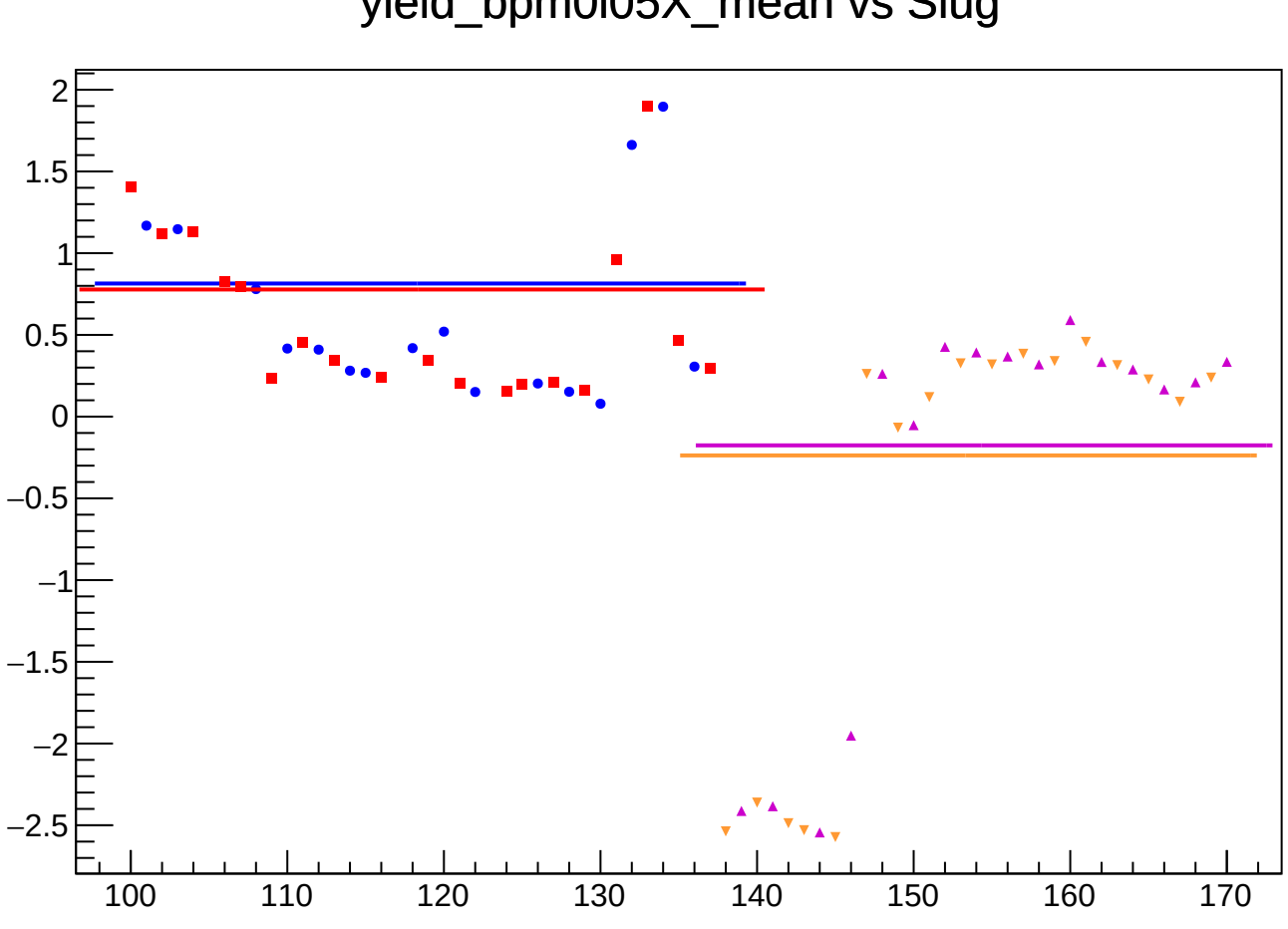
Right Out: 0.004+/-0.000 $\chi^2$/NDF: 224729.1/18

Left In: 0.007+/-0.000 $\chi^2$/NDF:498698.5/15

+ sign 0.005+/-0.000 $\chi^2$/NDF: 3720471.1/32

All: 0.005+/-0.000 $\chi^2$/NDF: 7738261.1/67

- sign 0.005+/-0.000 $\chi^2$/NDF: 4013288.9/34




Right In: 0.814+/-0.000 $\chi^2$/NDF: 35412149008.2/15

Left Out: -0.237+/-0.000 $\chi^2$/NDF:364528923814.7/16

Right Out: 0.778+/-0.000 $\chi^2$/NDF: 34603328062.2/18

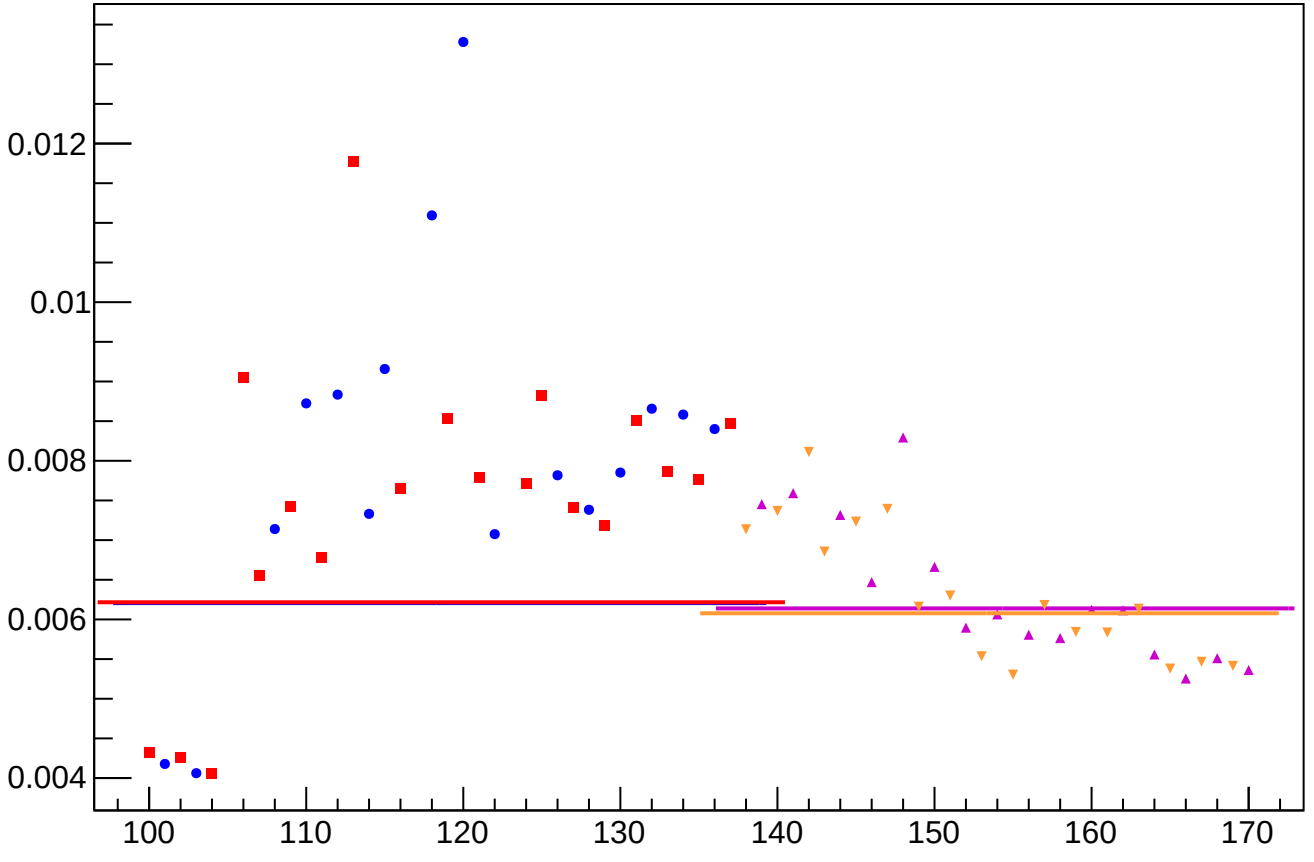
Left In: -0.176+/-0.000 $\chi^2$/NDF:333090978062.3/15

+ sign 0.087+/-0.000 $\chi^2$/NDF: 510274876579.9/32

All: 0.113+/-0.000 $\chi^2$/NDF: 973350051314.7

- sign 0.139+/-0.000 $\chi^2$/NDF: 462456725013.3/34

# yield_bpm0l05X_rms vs Slug




Right In: 0.006+/-0.000 $\chi^2$/NDF: 1423886.1/15

Left Out: 0.006+/-0.000 $\chi^2$/NDF:334319.2/16

Right Out: 0.006+/-0.000 $\chi^2$/NDF: 1161117.9/18

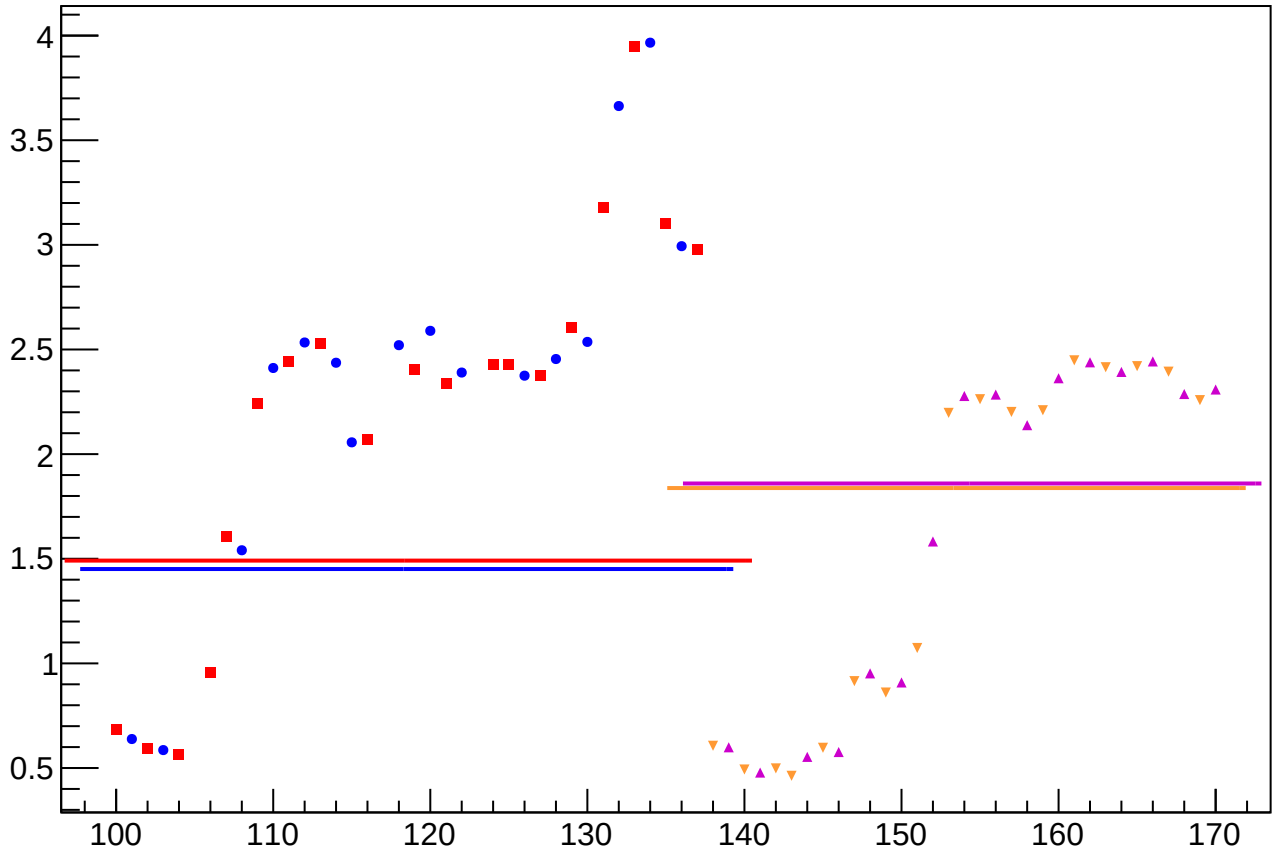
Left In: 0.006+/-0.000 $\chi^2$/NDF:370452.8/15

+ sign 0.006+/-0.000 $\chi^2$/NDF: 1761483.6/32

All: 0.006+/-0.000 $\chi^2$/NDF: 3295342.6/67

- sign 0.006+/-0.000 $\chi^2$/NDF: 1532816.7/34

# yield_bpm0l05Y_mean vs Slug




Right In: 1.451+/-0.000 $\chi^2$/NDF: 169635774704.4/15

Left Out: 1.838+/-0.000 $\chi^2$/NDF:193916602977.7/16

Right Out: 1.491+/-0.000 $\chi^2$/NDF: 186952709821.0/18

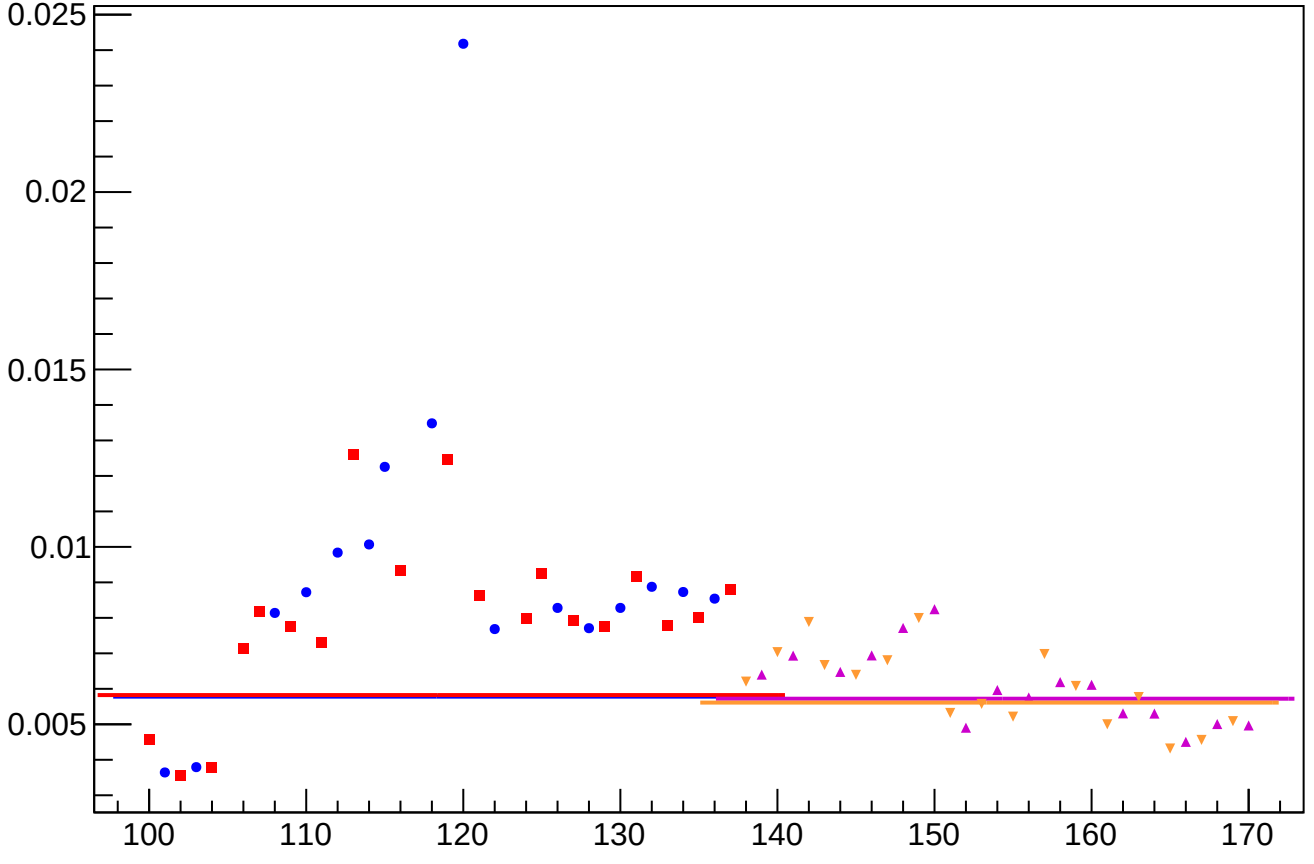
Left In: 1.860+/-0.000 $\chi^2$/NDF:170049178578.7/15

+ sign 1.721+/-0.000 $\chi^2$/NDF: 379183792649.1/32

All: 1.729+/-0.000 $\chi^2$/NDF: 750969408806.8

- sign 1.738+/-0.000 $\chi^2$/NDF: 371706093629.6/34

# yield_bpm0l05Y_rms vs Slug




Right In: 0.006+/-0.000 $\chi^2$/NDF: 2213885.3/15

Left Out: 0.006+/-0.000 $\chi^2$/NDF:610305.7/16

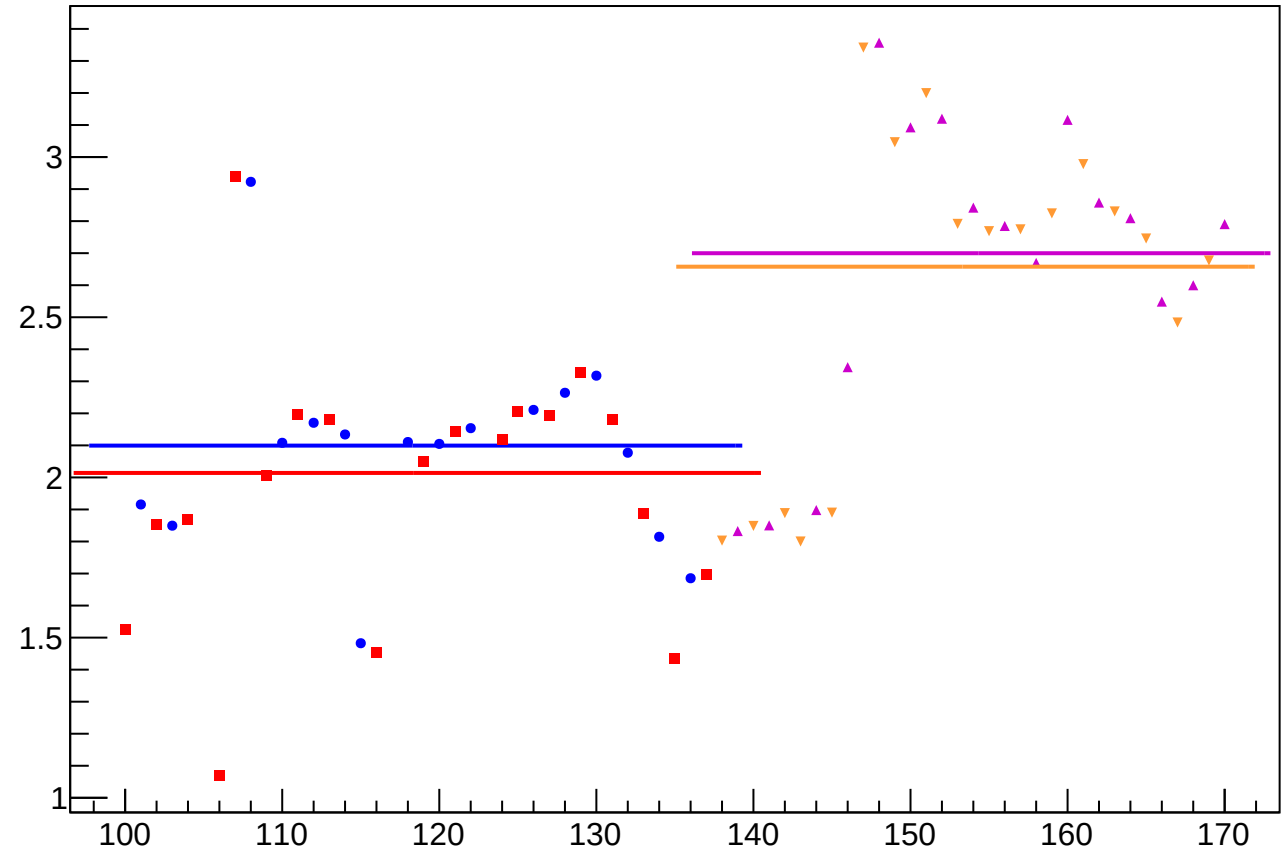
Right Out: 0.006+/-0.000 $\chi^2$/NDF: 1955751.4/18

Left In: 0.006+/-0.000 $\chi^2$/NDF:552535.0/15

+ sign 0.006+/-0.000 $\chi^2$/NDF: 2830116.8/32

All: 0.006+/-0.000 $\chi^2$/NDF: 5344836.5/67

- sign 0.006+/-0.000 $\chi^2$/NDF: 2510562.2/34




Right In: 2.099+/-0.000 $\chi^2$/NDF: 13928556396.8/15

Left Out: 2.658+/-0.000 $\chi^2$/NDF:43400838750.9/16

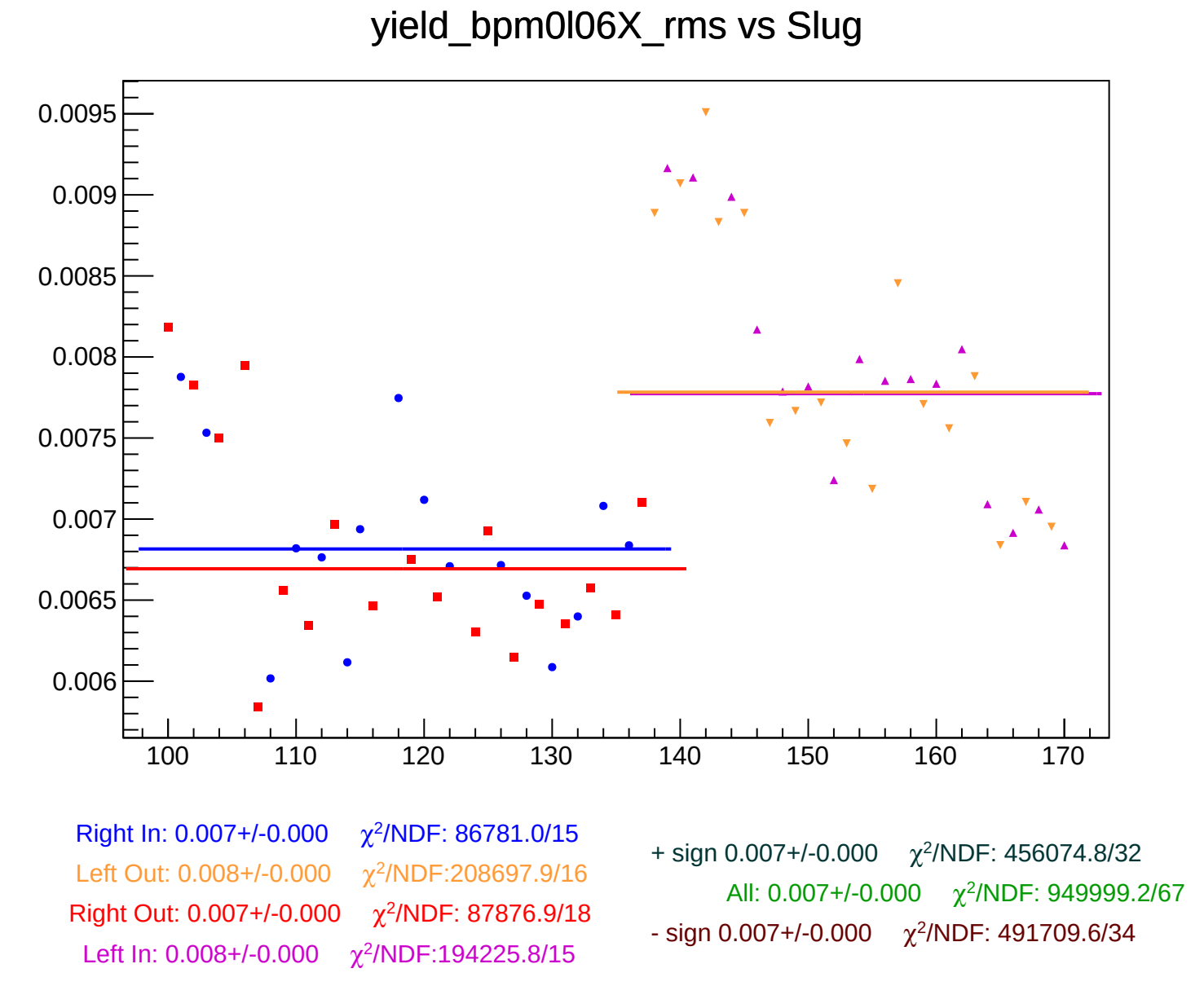
Right Out: 2.014+/-0.000 $\chi^2$/NDF: 19615856596.5/18

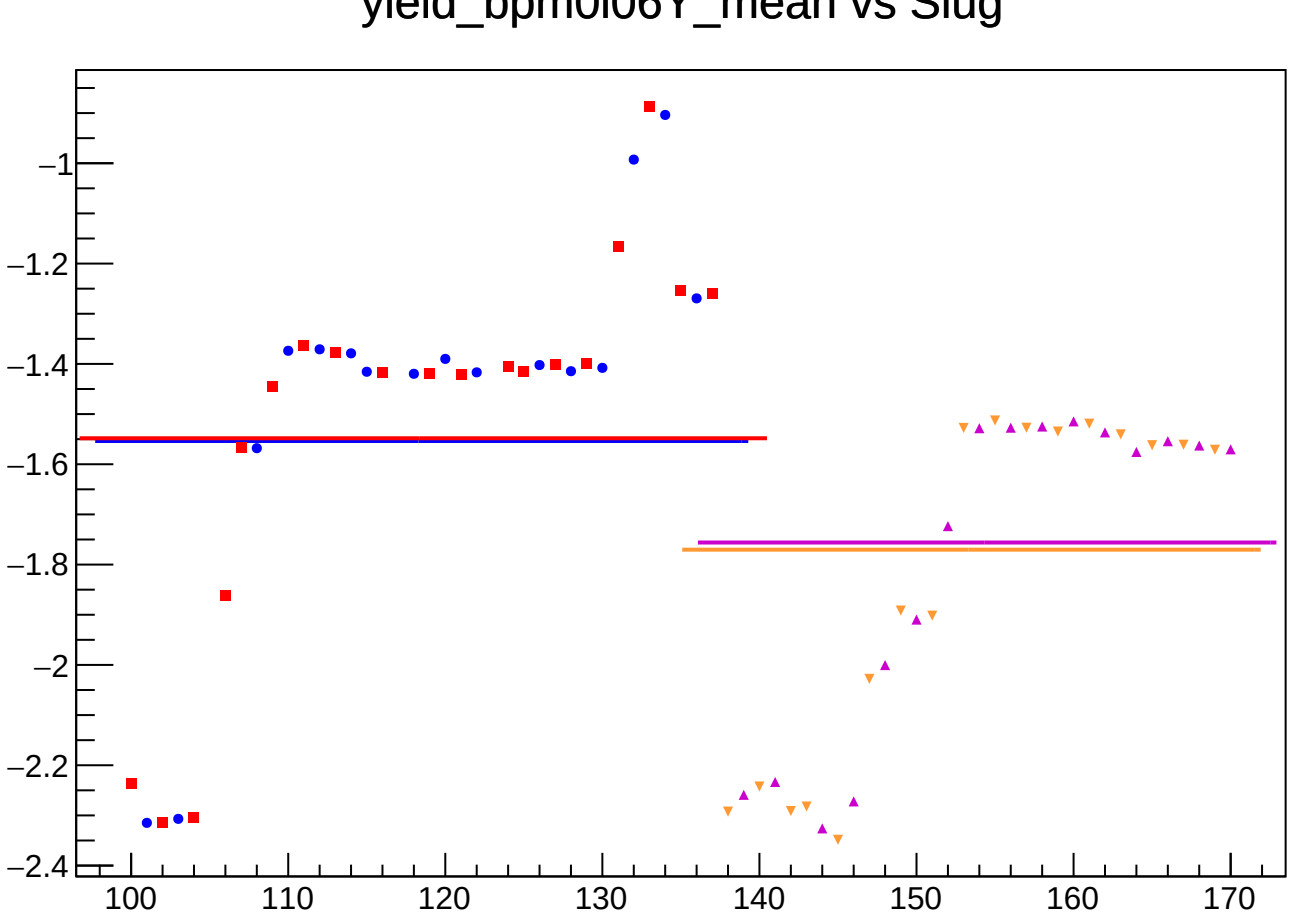
Left In: 2.700+/-0.000 $\chi^2$/NDF:36760675635.7/15

+ sign 2.425+/-0.000 $\chi^2$/NDF: 84094460827.0/32

All: 2.413+/-0.000 $\chi^2$/NDF: 182823990084.5

- sign 2.400+/-0.000 $\chi^2$/NDF: 98616924098.6/34


yield_bpm0l06X_rms vs Slug
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065
0.006
100
110
120
130
140
150
160
170
Right In: 0.007+/-0.000 χ²/NDF: 86781.0/15
Left Out: 0.008+/-0.000 χ²/NDF:208697.9/16
Right Out: 0.007+/-0.000 χ²/NDF: 87876.9/18
Left In: 0.008+/-0.000 χ²/NDF:194225.8/15
+ sign 0.007+/-0.000 χ²/NDF: 456074.8/32
All: 0.007+/-0.000 χ²/NDF: 949999.2/67
- sign 0.007+/-0.000 χ²/NDF: 491709.6/34




Right In: -1.554+/-0.000 $\chi^2$/NDF: 175176621986.0/15

Left Out: -1.770+/-0.000 $\chi^2$/NDF:137126024259.9/16

Right Out: -1.548+/-0.000 $\chi^2$/NDF: 174743666302.8/18

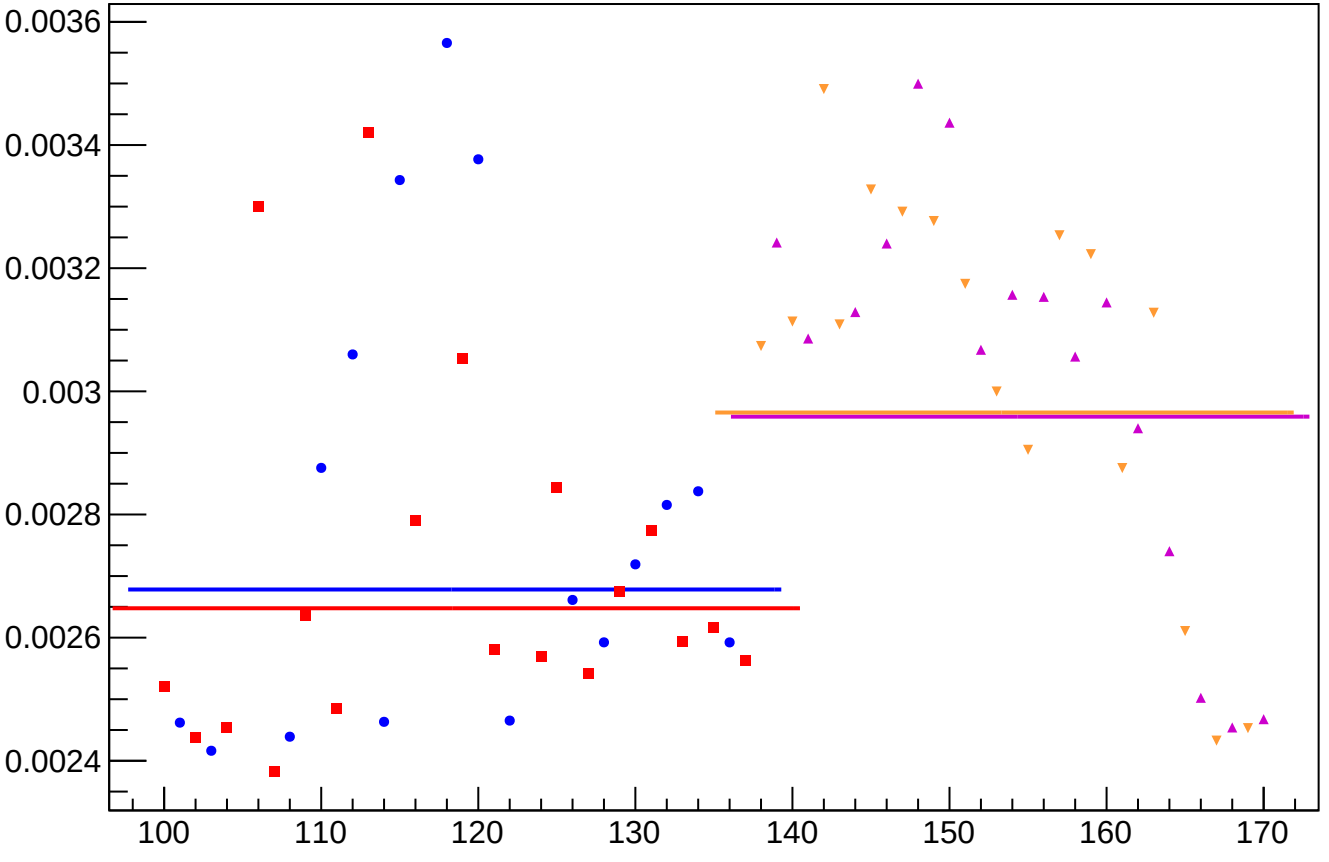
Left In: -1.756+/-0.000 $\chi^2$/NDF:126400665831.3/15

+ sign -1.683+/-0.000 $\chi^2$/NDF: 338592822682.9/32

All: -1.676+/-0.000 $\chi^2$/NDF: 665109458808.4

- sign -1.669+/-0.000 $\chi^2$/NDF: 326278567058.8/34

# yield_bpm0l06Y_rms vs Slug




Right In: 0.003+/-0.000 $\chi^2$/NDF: 157881.5/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:275016.4/16

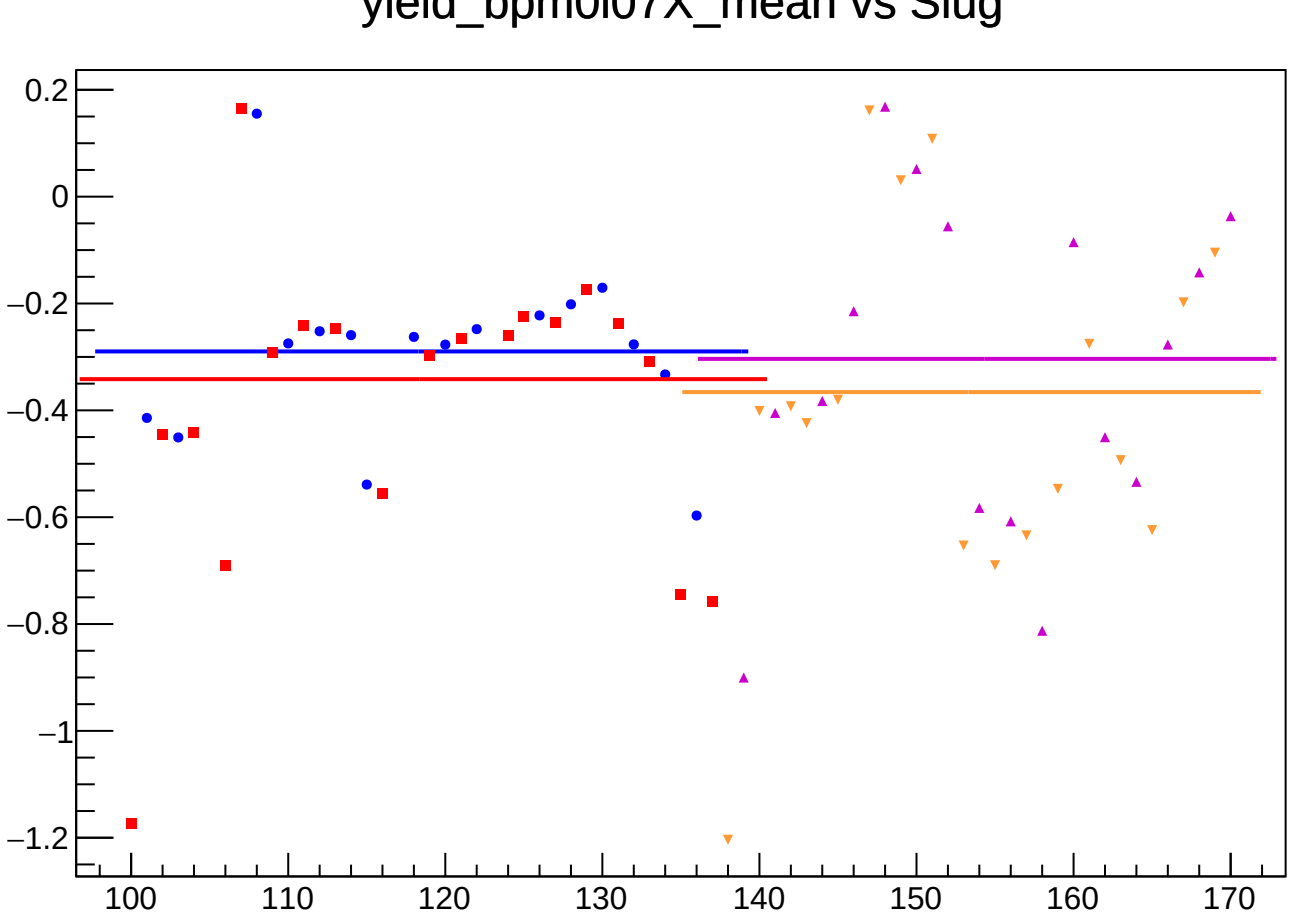
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 116150.5/18

Left In: 0.003+/-0.000 $\chi^2$/NDF:301552.9/15

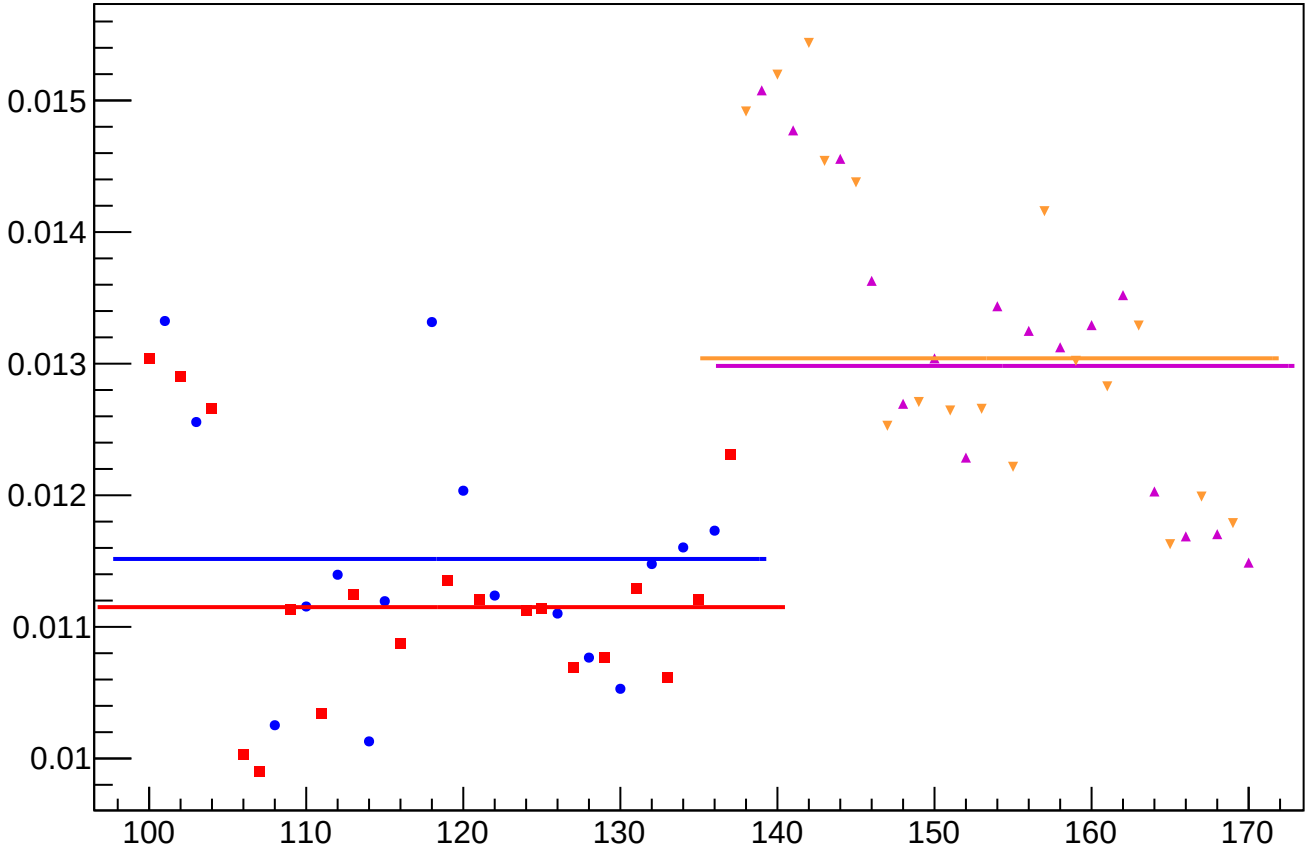
+ sign 0.003+/-0.000 $\chi^2$/NDF: 525426.0/32

All: 0.003+/-0.000 $\chi^2$/NDF: 1056961.1/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 530449.1/34


yield_bpm0l07X_mean vs Slug
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
100
110
120
130
140
150
160
170
Right In: -0.290+/-0.000 χ²/NDF: 1645174238.4/15
Left Out: -0.366+/-0.000 χ²/NDF:7887764507.5/16
Right Out: -0.342+/-0.000 χ²/NDF: 2609243421.7/18
Left In: -0.304+/-0.000 χ²/NDF:6546066955.0/15
+ sign -0.334+/-0.000 χ²/NDF: 9709736782.4/32
All: -0.327+/-0.000 χ²/NDF: 18924313874.1/
- sign -0.320+/-0.000 χ²/NDF: 9202101612.7/34

# yield_bpm0l07X_rms vs Slug




Right In: 0.012+/-0.000 $\chi^2$/NDF: 84278.9/15

Left Out: 0.013+/-0.000 $\chi^2$/NDF:172642.5/16

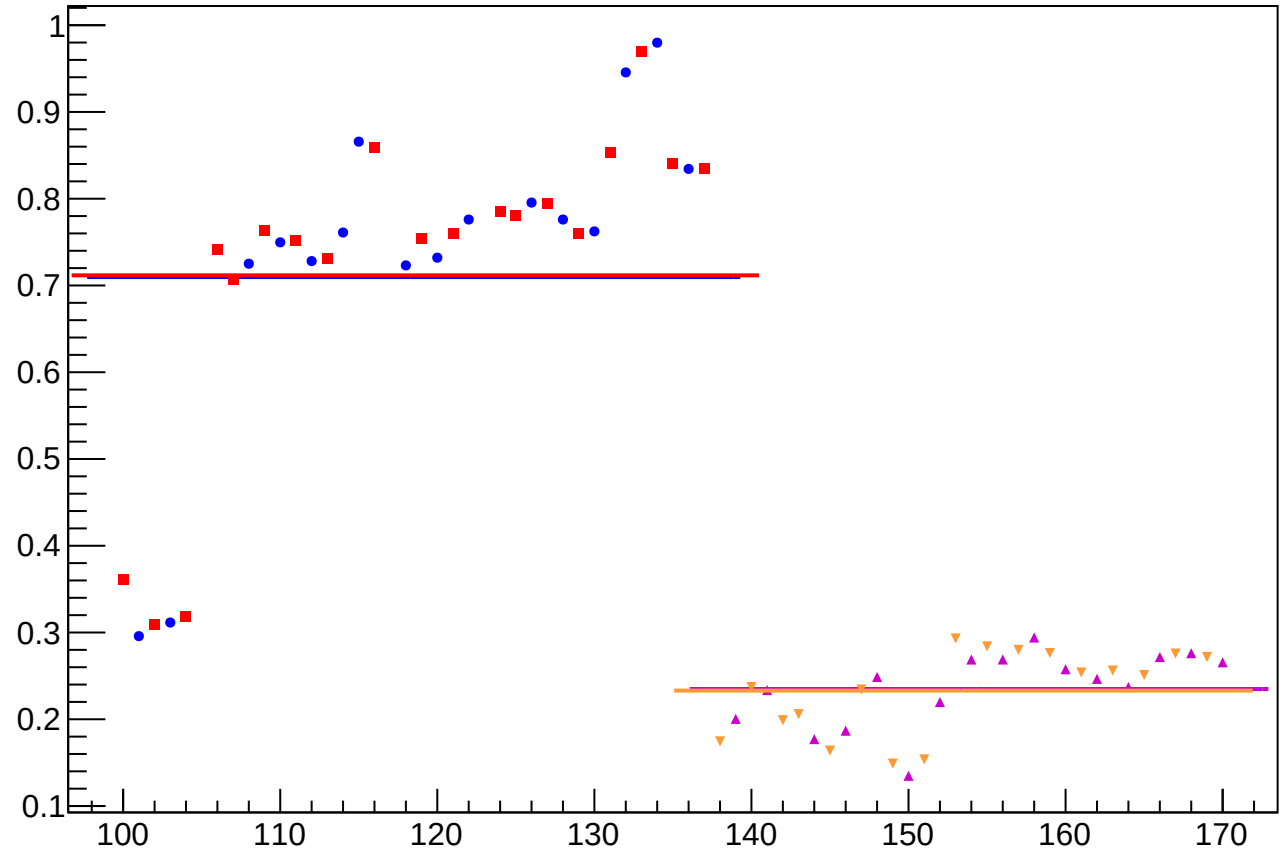
Right Out: 0.011+/-0.000 $\chi^2$/NDF: 70560.1/18

Left In: 0.013+/-0.000 $\chi^2$/NDF:157955.6/15

+ sign 0.012+/-0.000 $\chi^2$/NDF: 399015.0/32

All: 0.012+/-0.000 $\chi^2$/NDF: 853503.8/67

- sign 0.012+/-0.000 $\chi^2$/NDF: 447224.9/34




Right In: 0.710+/-0.000 $\chi^2$/NDF: 48924347494.6/15

Left Out: 0.233+/-0.000 $\chi^2$/NDF:6445000519.2/16

Right Out: 0.712+/-0.000 $\chi^2$/NDF: 44174681920.8/18

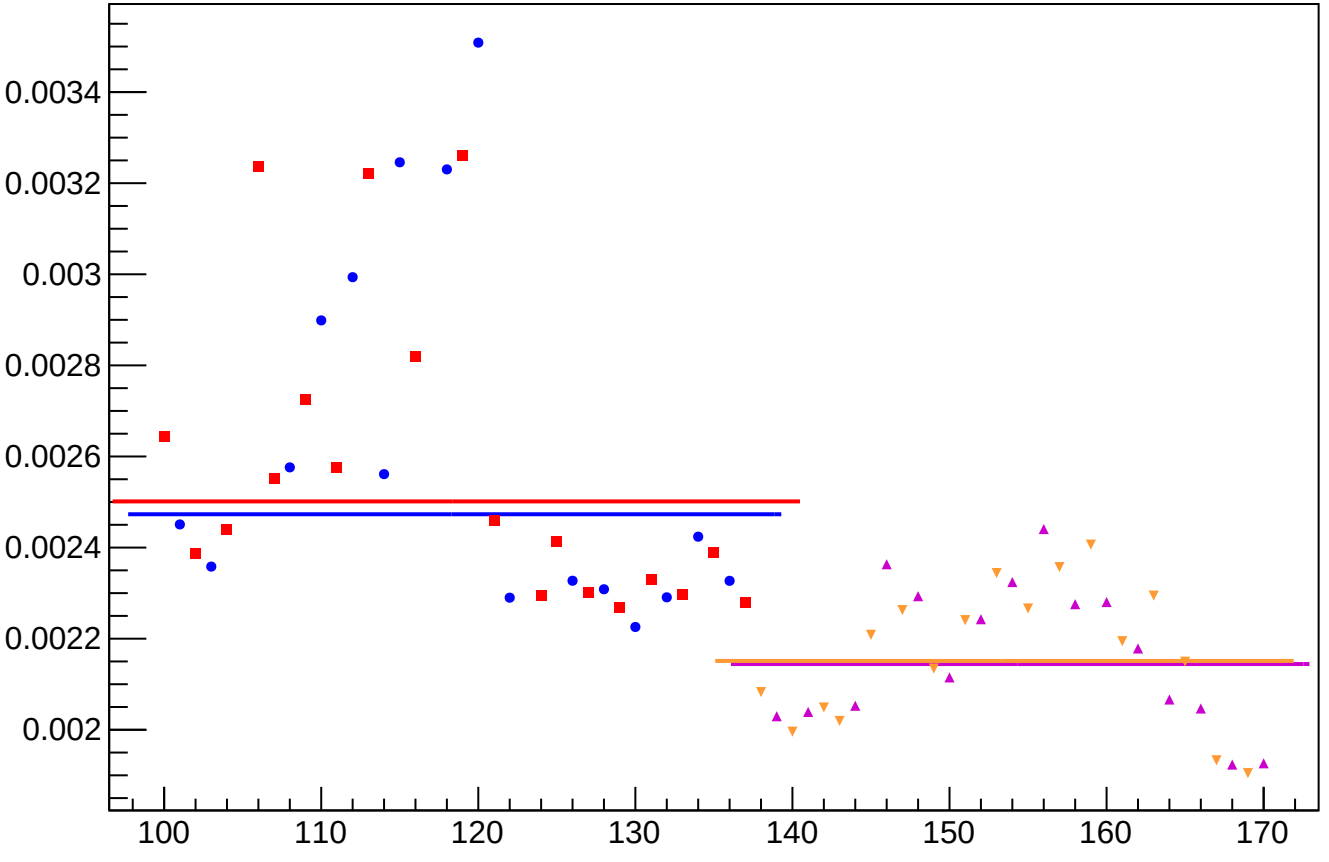
Left In: 0.235+/-0.000 $\chi^2$/NDF:5211398684.4/15

+ sign 0.367+/-0.000 $\chi^2$/NDF: 237576805002.2/32

All: 0.369+/-0.000 $\chi^2$/NDF: 469924207030.4

- sign 0.370+/-0.000 $\chi^2$/NDF: 232322271490.5/34

# yield_bpm0l07Y_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 208046.5/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:130256.9/16

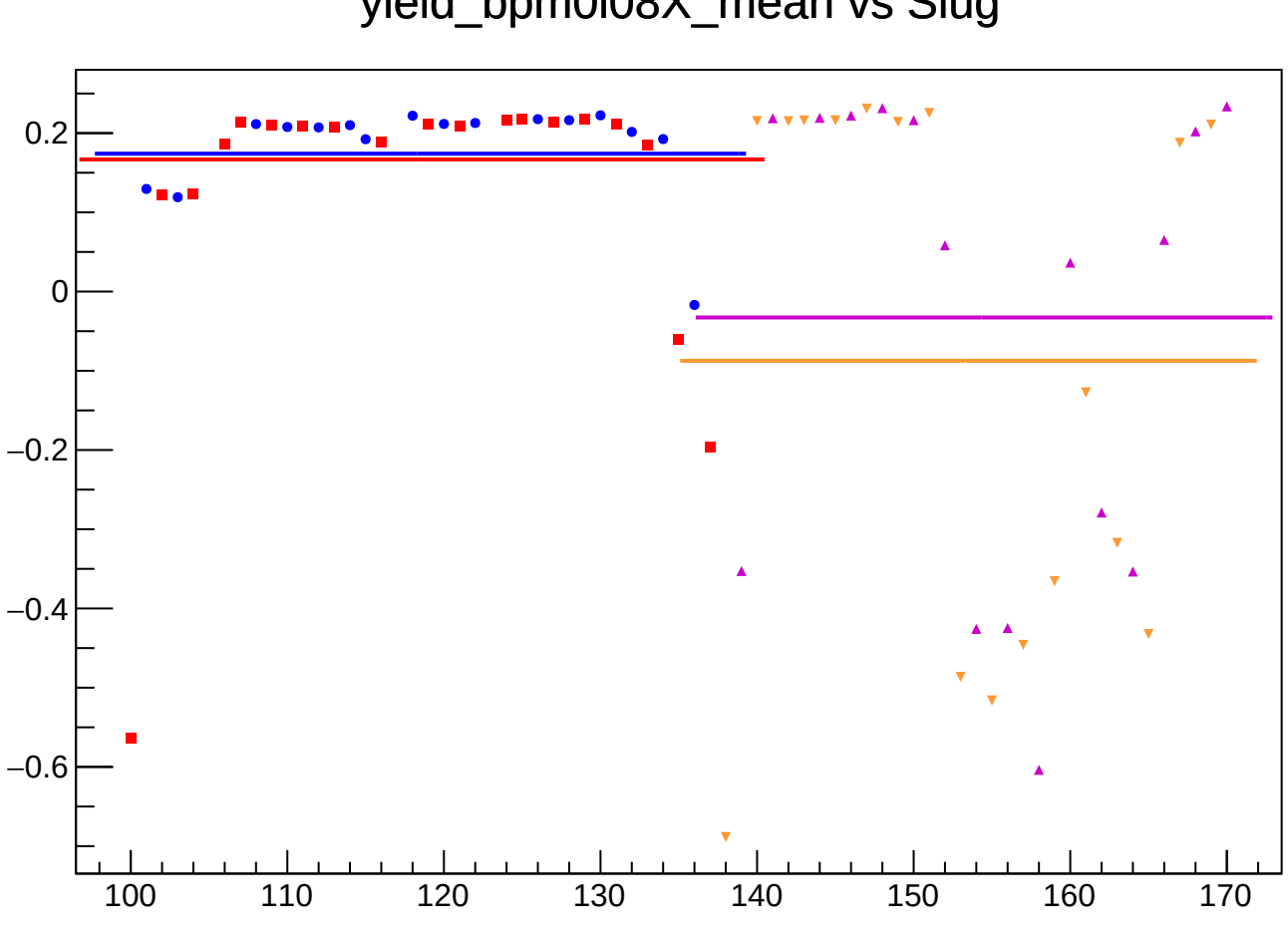
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 177427.2/18

Left In: 0.002+/-0.000 $\chi^2$/NDF:133558.4/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 504622.1/32

All: 0.002+/-0.000 $\chi^2$/NDF: 1020876.0/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 516181.1/34




Right In: 0.174+/-0.000 $\chi^2$/NDF: 401946344.0/15

Left Out: -0.087+/-0.000 $\chi^2$/NDF:9792446367.1/16

Right Out: 0.167+/-0.000 $\chi^2$/NDF: 894131198.6/18

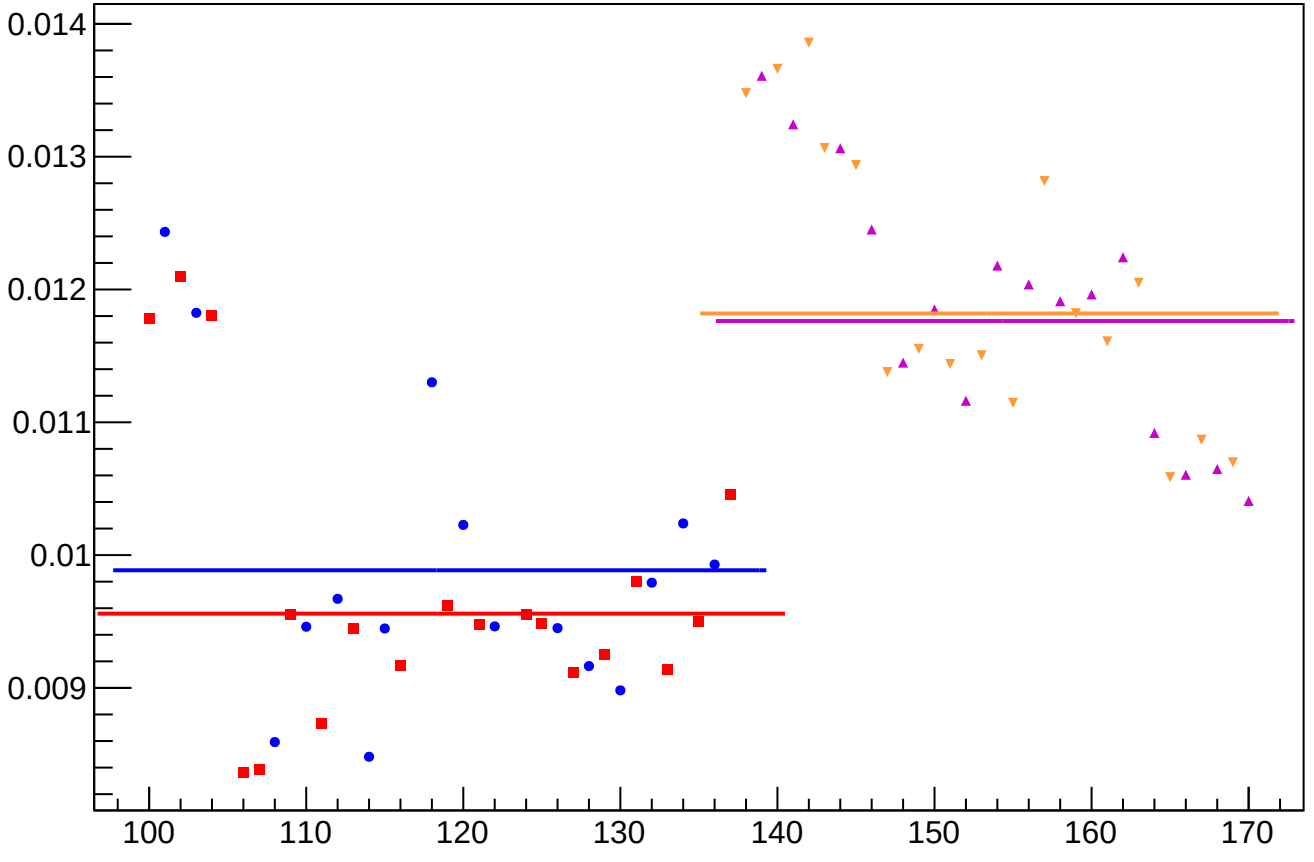
Left In: -0.033+/-0.000 $\chi^2$/NDF:7714884855.0/15

+ sign 0.027+/-0.000 $\chi^2$/NDF: 12893421910.2/32

All: 0.044+/-0.000 $\chi^2$/NDF: 23265260028.5/6

- sign 0.060+/-0.000 $\chi^2$/NDF: 10279701196.6/34

# yield_bpm0l08X_rms vs Slug




Right In: 0.010+/-0.000 $\chi^2$/NDF: 148562.0/15

Left Out: 0.012+/-0.000 $\chi^2$/NDF:158947.5/16

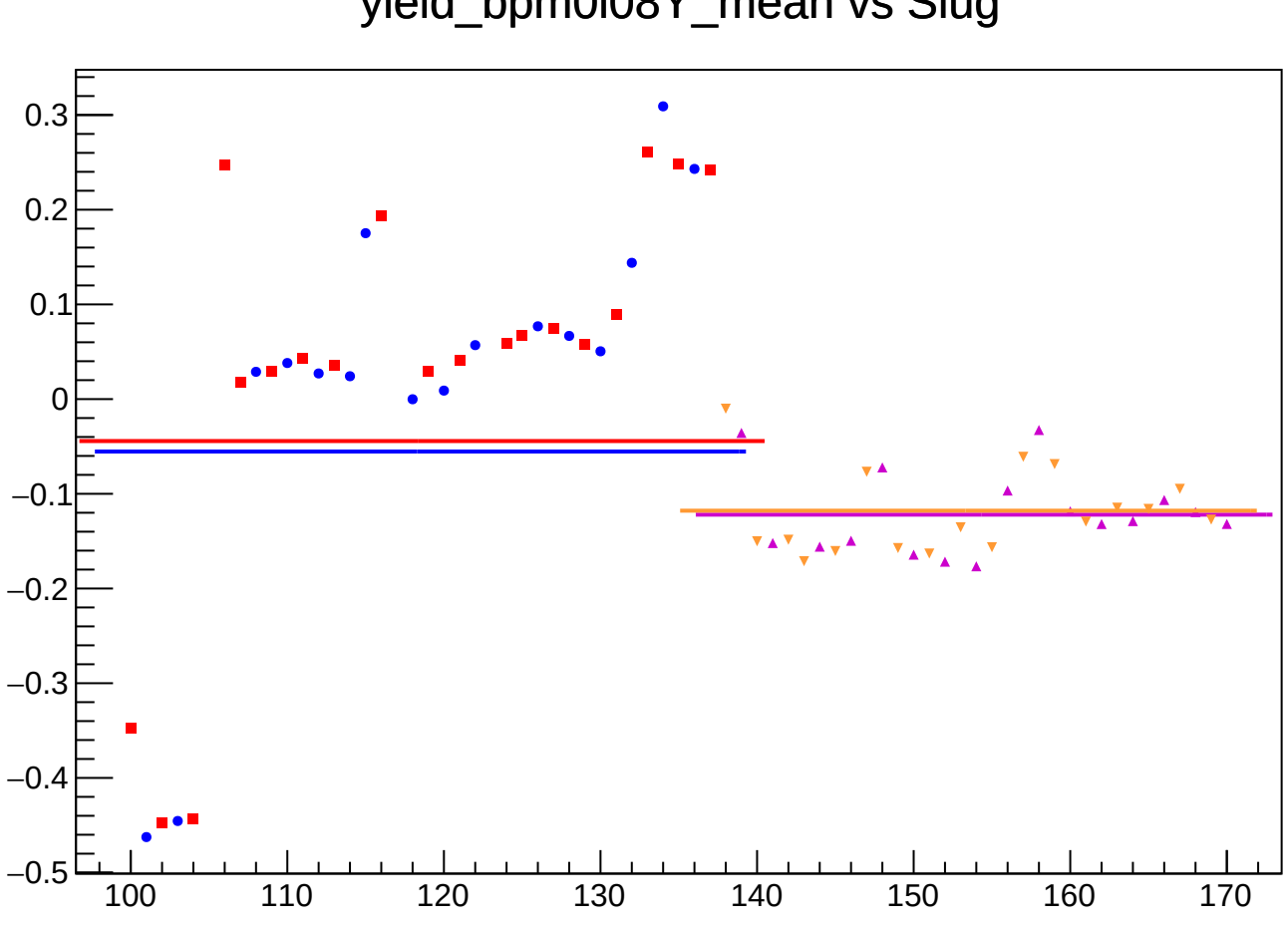
Right Out: 0.010+/-0.000 $\chi^2$/NDF: 136197.0/18

Left In: 0.012+/-0.000 $\chi^2$/NDF:148946.6/15

+ sign 0.011+/-0.000 $\chi^2$/NDF: 602830.7/32

All: 0.011+/-0.000 $\chi^2$/NDF: 1305301.3/67

- sign 0.011+/-0.000 $\chi^2$/NDF: 692983.3/34




Right In: -0.055+/-0.000 $\chi^2$/NDF: 24081939190.6/15

Left Out: -0.118+/-0.000 $\chi^2$/NDF:2810642440.1/16

Right Out: -0.044+/-0.000 $\chi^2$/NDF: 22136167141.7/18

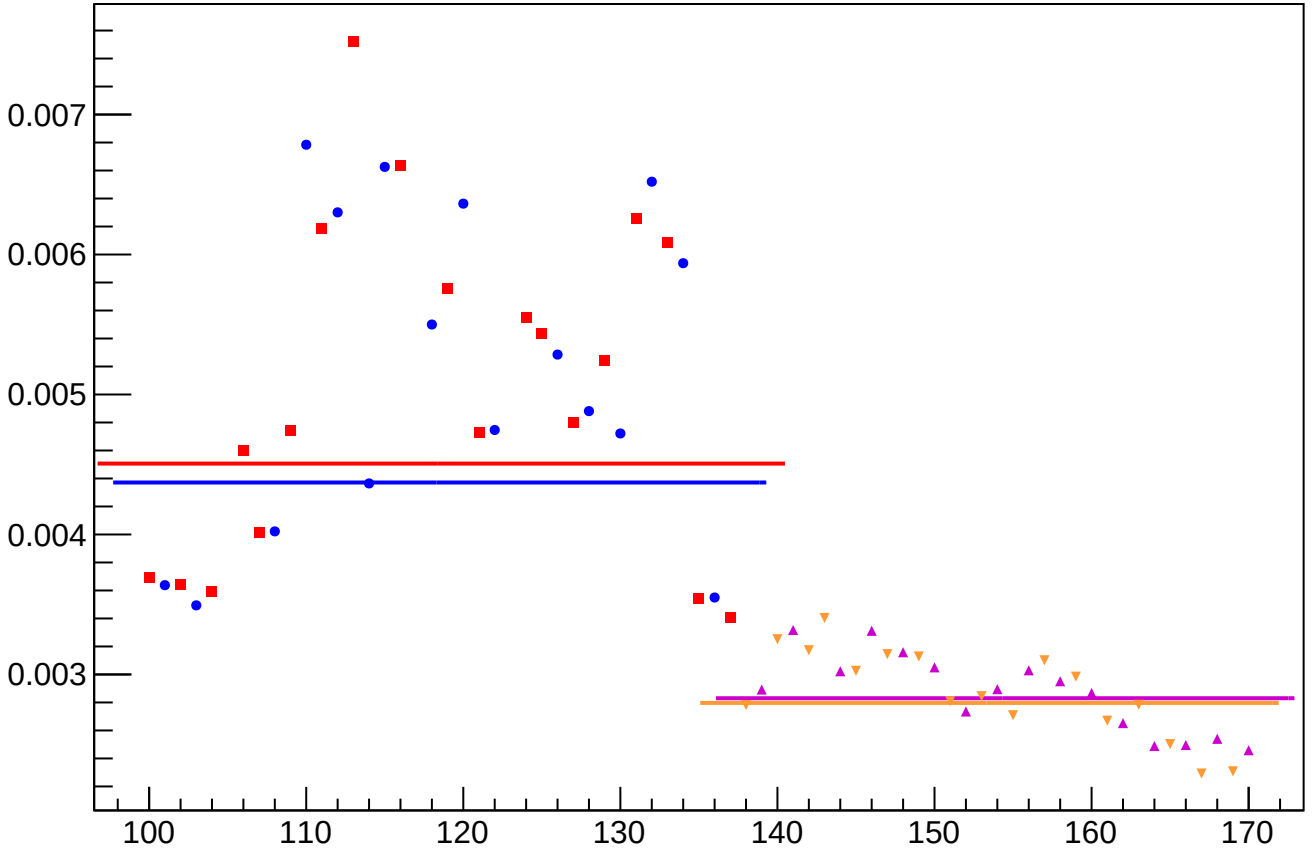
Left In: -0.122+/-0.000 $\chi^2$/NDF:2773256610.7/15

+ sign -0.108+/-0.000 $\chi^2$/NDF: 27933832774.5/32

All: -0.108+/-0.000 $\chi^2$/NDF: 54426110608.4/

- sign -0.109+/-0.000 $\chi^2$/NDF: 26490366203.7/34

# yield_bpm0l08Y_rms vs Slug




Right In: 0.004+/-0.000 $\chi^2$/NDF: 660432.6/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:326442.7/16

Right Out: 0.005+/-0.000 $\chi^2$/NDF: 704549.6/18

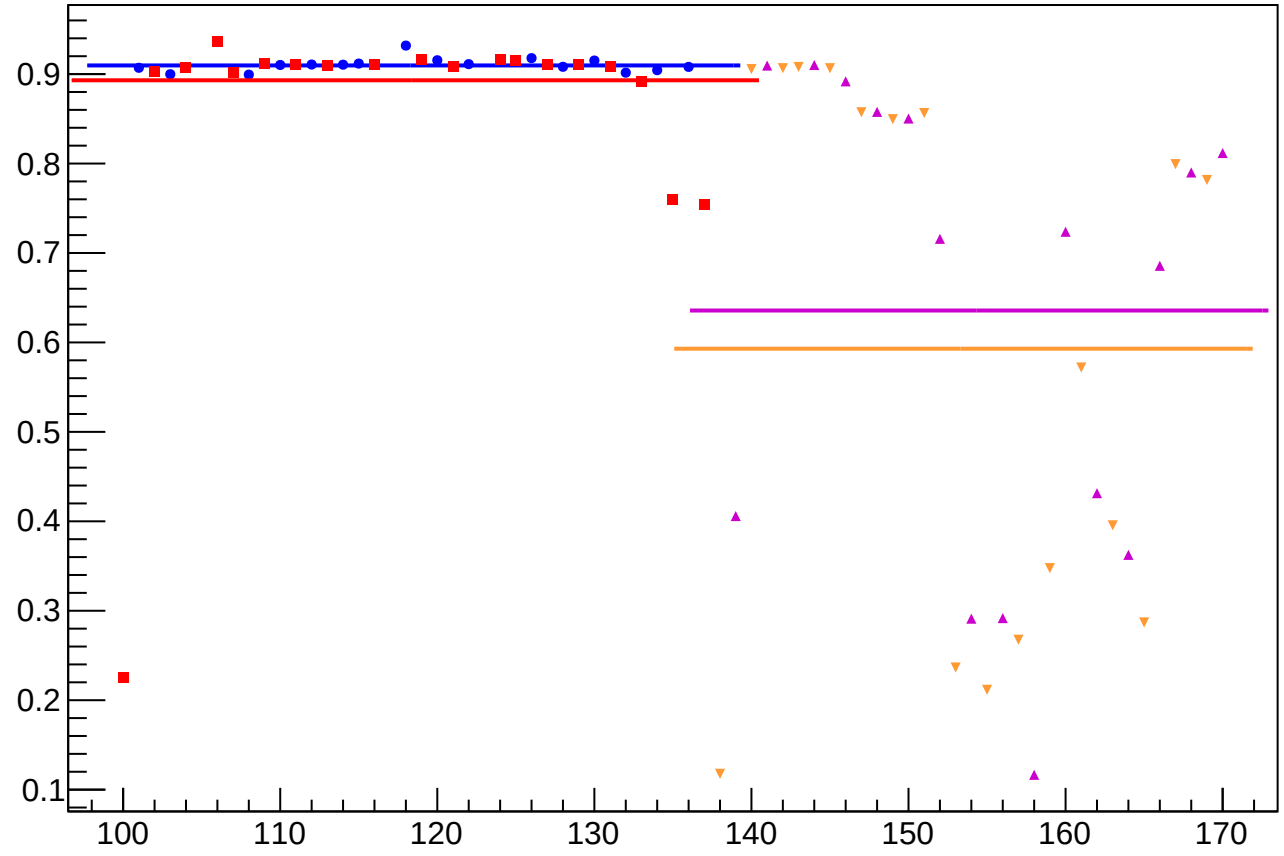
Left In: 0.003+/-0.000 $\chi^2$/NDF:221456.2/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 2309372.0/32

All: 0.003+/-0.000 $\chi^2$/NDF: 4712569.1/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 2397239.4/34

# yield_bpm0l09X_mean vs Slug




Right In: 0.910+/-0.000 $\chi^2$/NDF: 3133349.6/15

Left Out: 0.593+/-0.000 $\chi^2$/NDF:7847591913.7/16

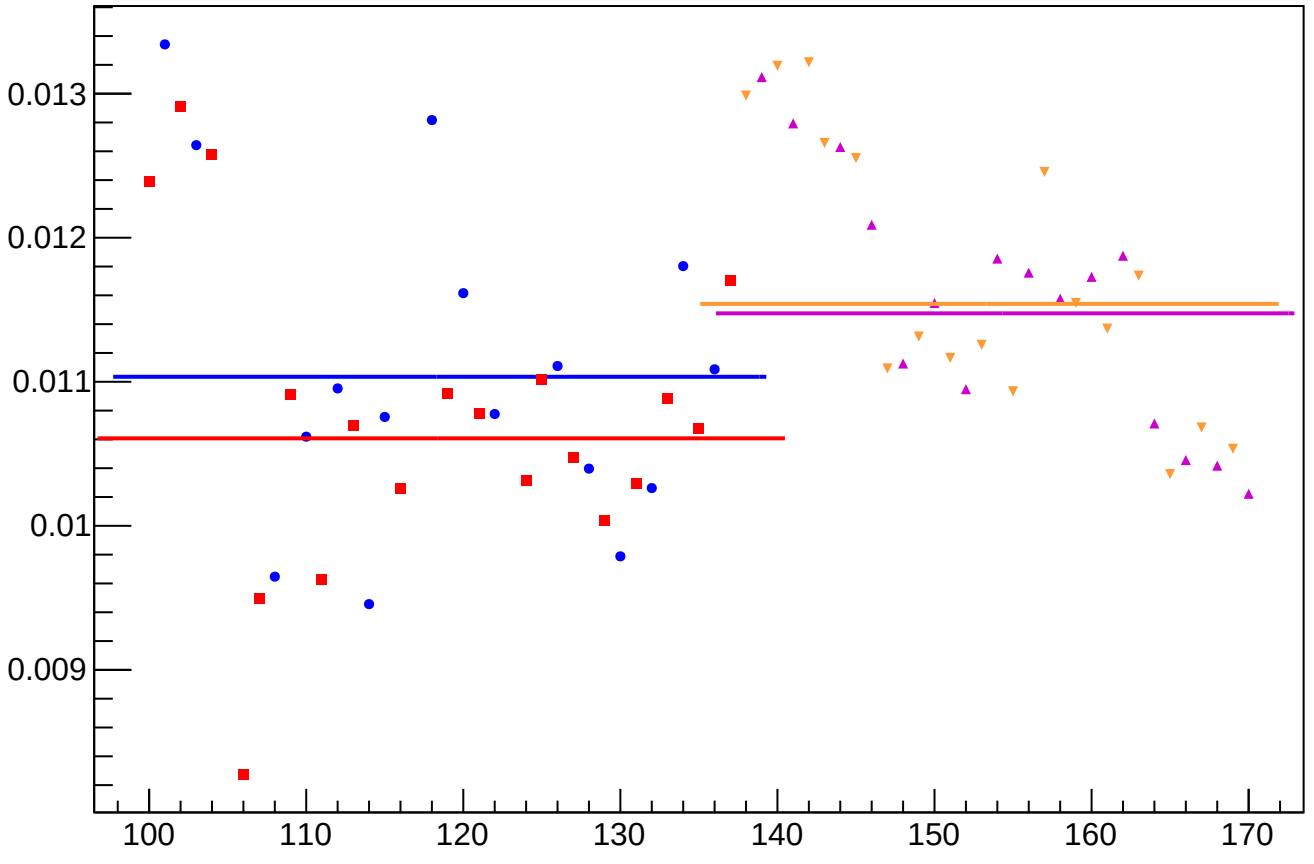
Right Out: 0.893+/-0.000 $\chi^2$/NDF: 327979021.4/18

Left In: 0.636+/-0.000 $\chi^2$/NDF:6241448033.2/15

+ sign 0.711+/-0.000 $\chi^2$/NDF: 11405034040.1/32

All: 0.725+/-0.000 $\chi^2$/NDF: 20573710891.8/6

- sign 0.739+/-0.000 $\chi^2$/NDF: 9105394988.2/34




Right In: 0.011+/-0.000 $\chi^2$/NDF: 130353.1/15

Left Out: 0.012+/-0.000 $\chi^2$/NDF:136720.2/16

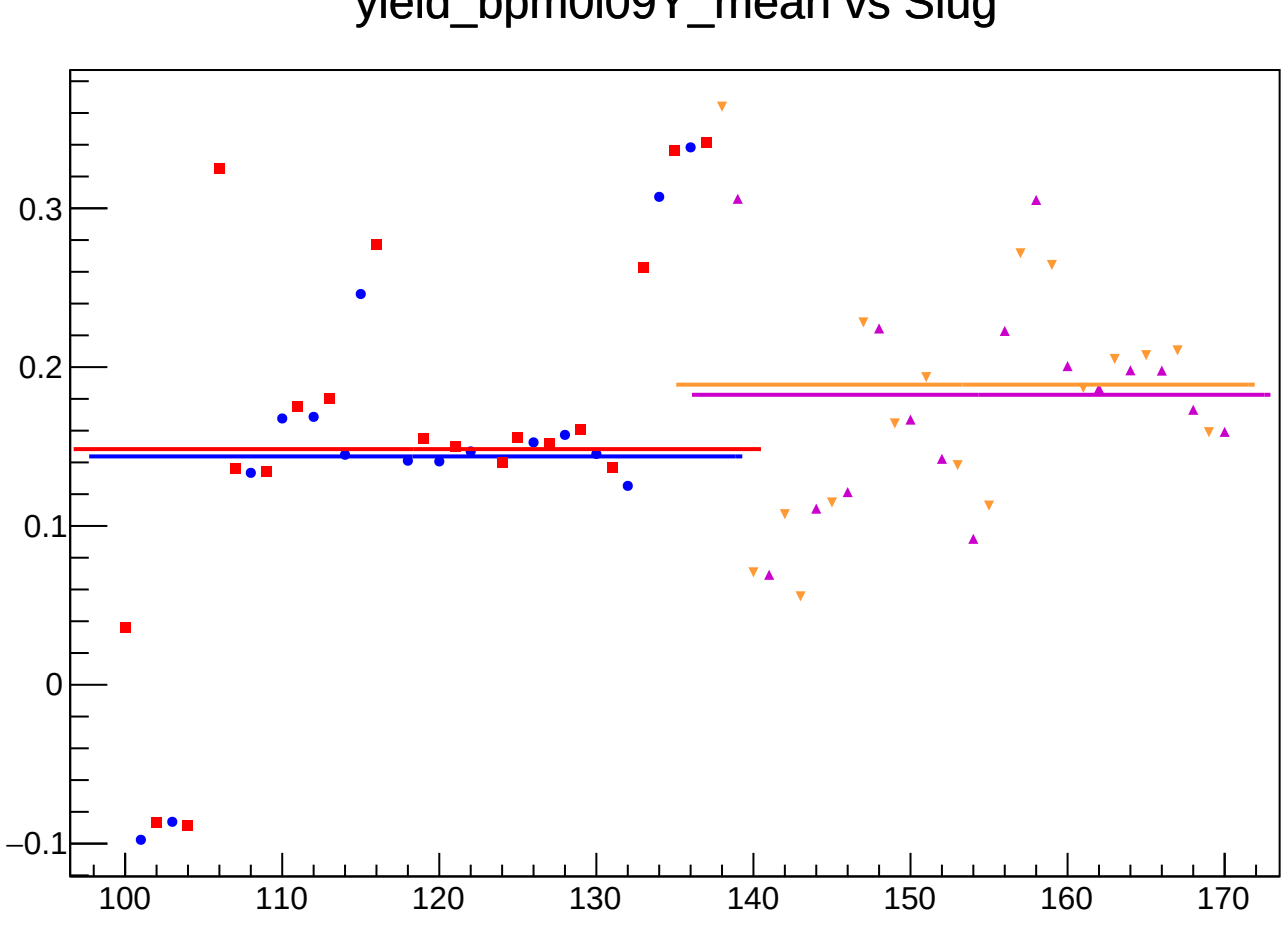
Right Out: 0.011+/-0.000 $\chi^2$/NDF: 143947.4/18

Left In: 0.011+/-0.000 $\chi^2$/NDF:129744.8/15

+ sign 0.011+/-0.000 $\chi^2$/NDF: 285222.2/32

All: 0.011+/-0.000 $\chi^2$/NDF: 624531.7/67

- sign 0.011+/-0.000 $\chi^2$/NDF: 331326.2/34




Right In: 0.144+/-0.000 $\chi^2$/NDF: 7867304536.4/15

Left Out: 0.189+/-0.000 $\chi^2$/NDF:6098584440.6/16

Right Out: 0.148+/-0.000 $\chi^2$/NDF: 7128567107.5/18

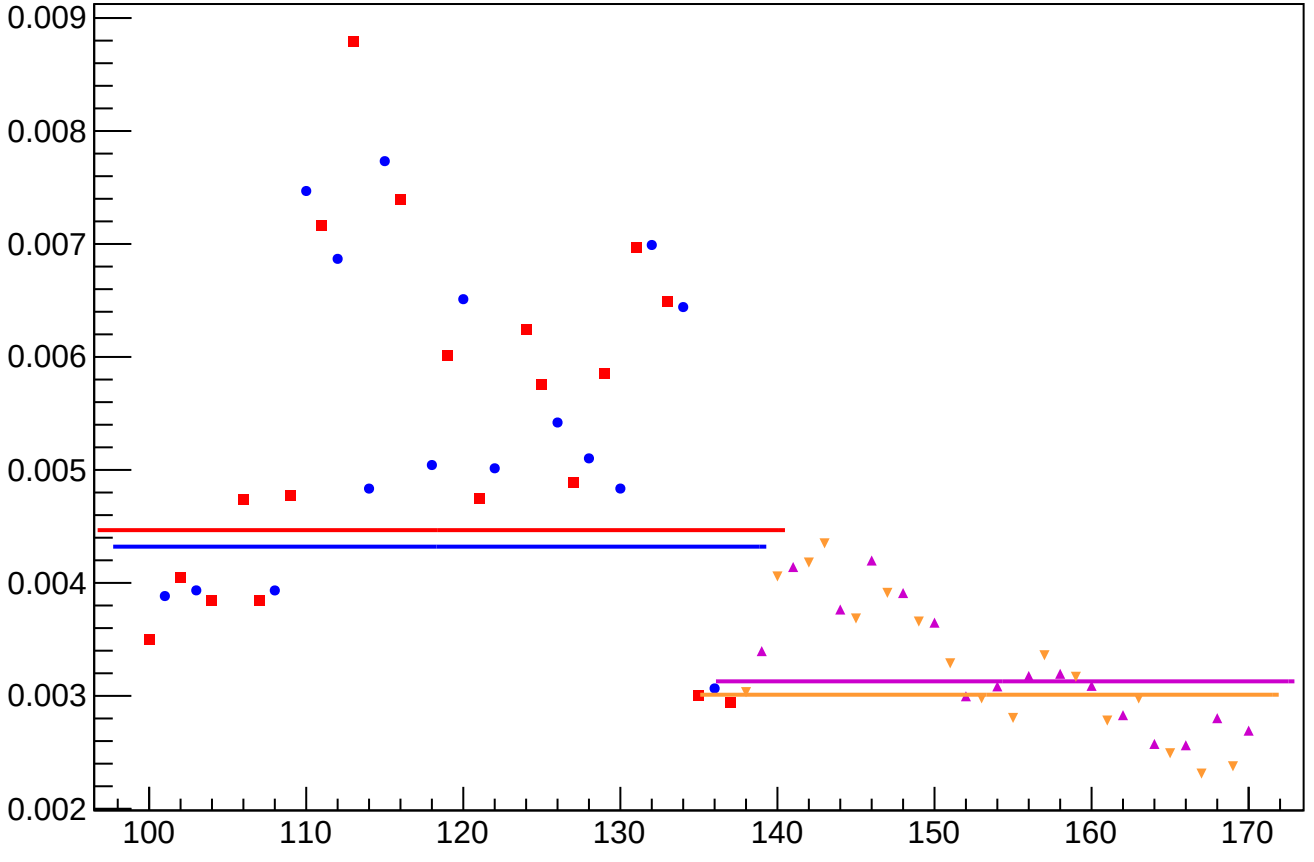
Left In: 0.183+/-0.000 $\chi^2$/NDF:4497284191.1/15

+ sign 0.181+/-0.000 $\chi^2$/NDF: 14474842070.7/32

All: 0.178+/-0.000 $\chi^2$/NDF: 26397354983.8/6

- sign 0.176+/-0.000 $\chi^2$/NDF: 11905599822.9/34

# yield_bpm0l09Y_rms vs Slug




Right In: 0.004+/-0.000 $\chi^2$/NDF: 878343.4/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:827330.2/16

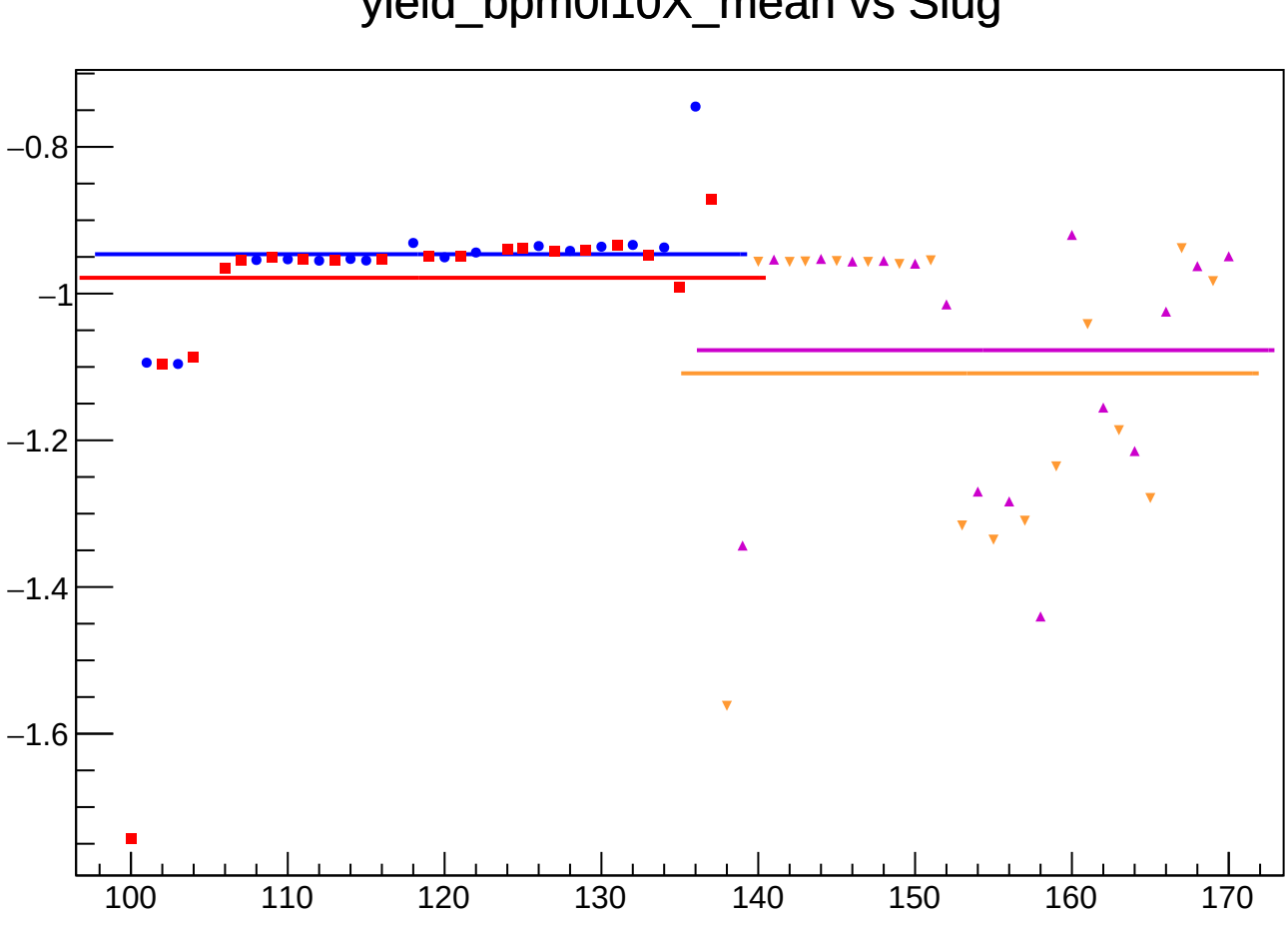
Right Out: 0.004+/-0.000 $\chi^2$/NDF: 1085759.3/18

Left In: 0.003+/-0.000 $\chi^2$/NDF:530144.0/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 2562185.6/32

All: 0.003+/-0.000 $\chi^2$/NDF: 5064010.2/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 2472972.3/34




Right In: -0.946+/-0.000 $\chi^2$/NDF: 404509465.5/15

Left Out: -1.109+/-0.000 $\chi^2$/NDF:3993391971.1/16

Right Out: -0.978+/-0.000 $\chi^2$/NDF: 461081476.3/18

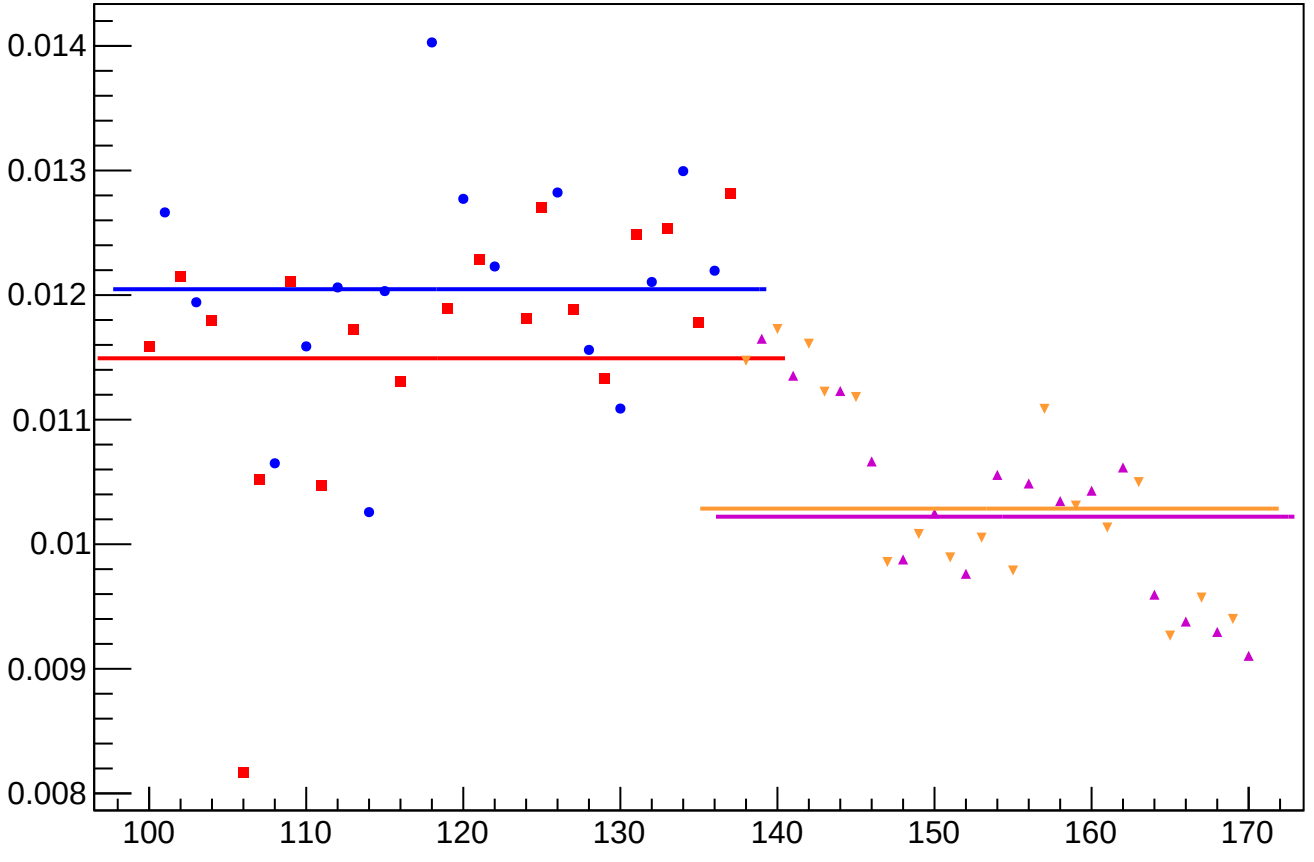
Left In: -1.077+/-0.000 $\chi^2$/NDF:3288990665.0/15

+ sign -1.063+/-0.000 $\chi^2$/NDF: 5294501563.9/32

All: -1.055+/-0.000 $\chi^2$/NDF: 9431932372.8/6

- sign -1.047+/-0.000 $\chi^2$/NDF: 4114405021.3/34

# yield_bpm0l10X_rms vs Slug




Right In: 0.012+/-0.000 $\chi^2$/NDF: 62476.3/15

Left Out: 0.010+/-0.000 $\chi^2$/NDF:127645.9/16

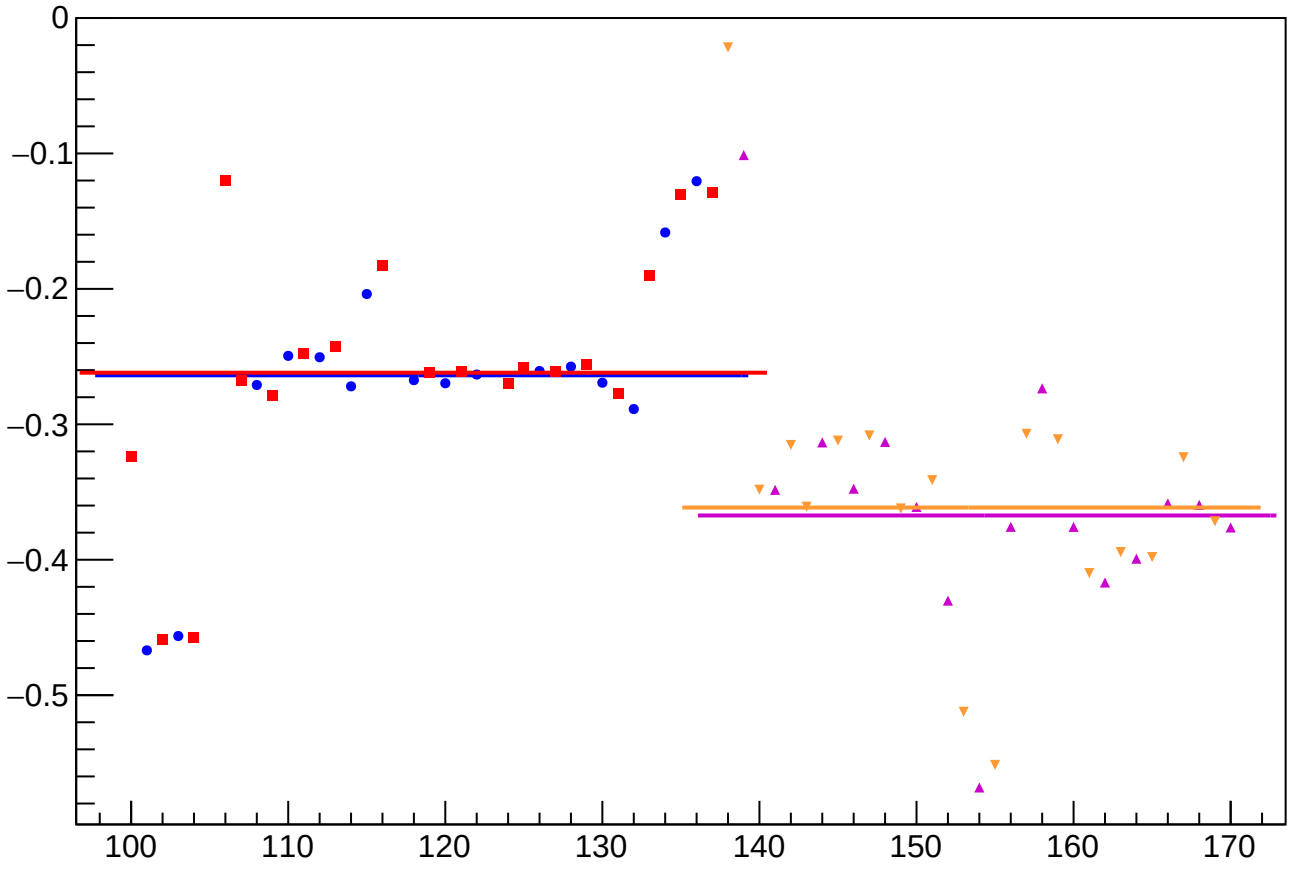
Right Out: 0.011+/-0.000 $\chi^2$/NDF: 151309.4/18

Left In: 0.010+/-0.000 $\chi^2$/NDF:123874.4/15

+ sign 0.011+/-0.000 $\chi^2$/NDF: 401005.8/32

All: 0.011+/-0.000 $\chi^2$/NDF: 801887.4/67

- sign 0.011+/-0.000 $\chi^2$/NDF: 396106.5/34




Right In: -0.264+/-0.000 $\chi^2$/NDF: 6106171444.3/15

Left Out: -0.361+/-0.000 $\chi^2$/NDF:11843979653.2/16

Right Out: -0.262+/-0.000 $\chi^2$/NDF: 5250043427.3/18

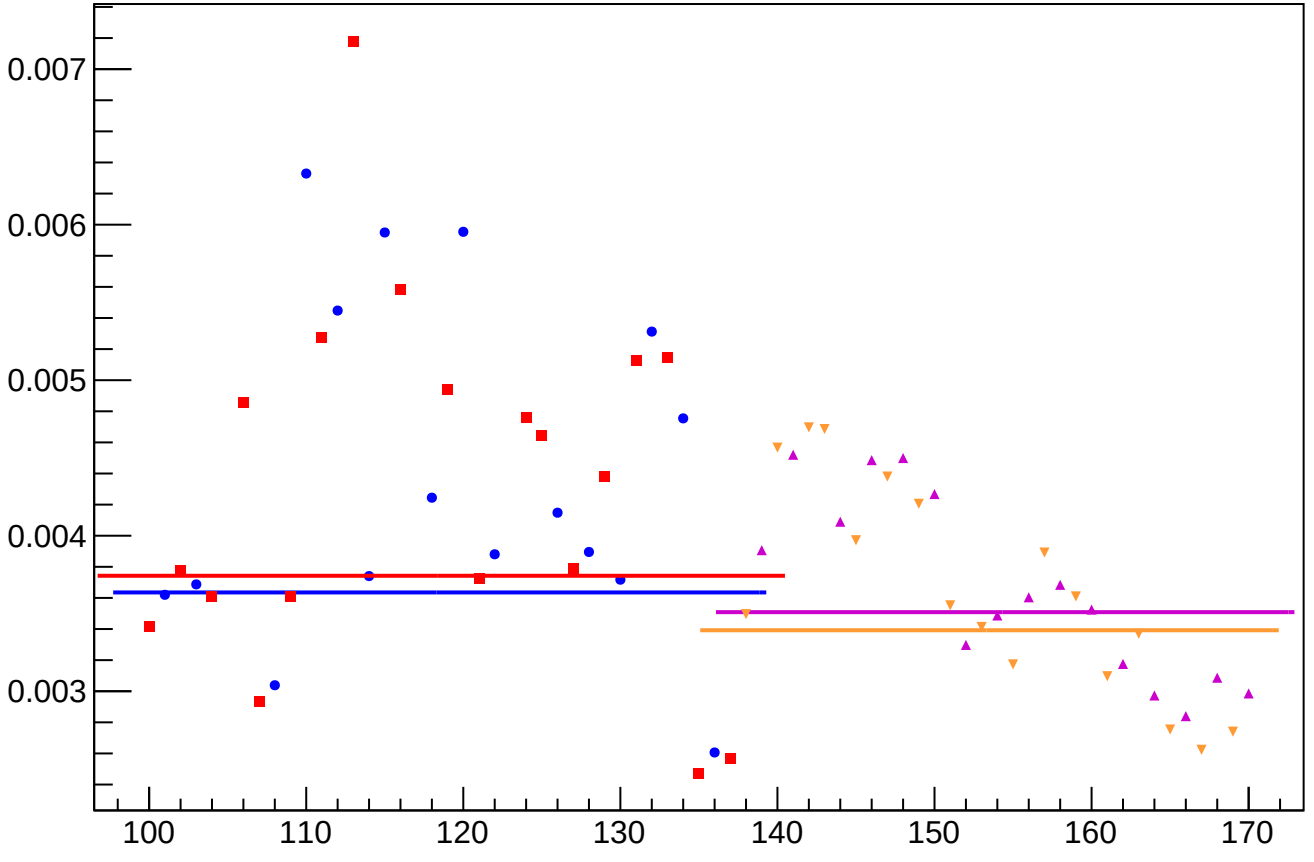
Left In: -0.367+/-0.000 $\chi^2$/NDF:7561366458.1/15

+ sign -0.333+/-0.000 $\chi^2$/NDF: 20879796666.0/32

All: -0.334+/-0.000 $\chi^2$/NDF: 36992617116.4/

- sign -0.335+/-0.000 $\chi^2$/NDF: 16109562941.5/34

# yield_bpm0l10Y_rms vs Slug




Right In: 0.004+/-0.000 $\chi^2$/NDF: 728598.9/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:762690.6/16

Right Out: 0.004+/-0.000 $\chi^2$/NDF: 894189.4/18

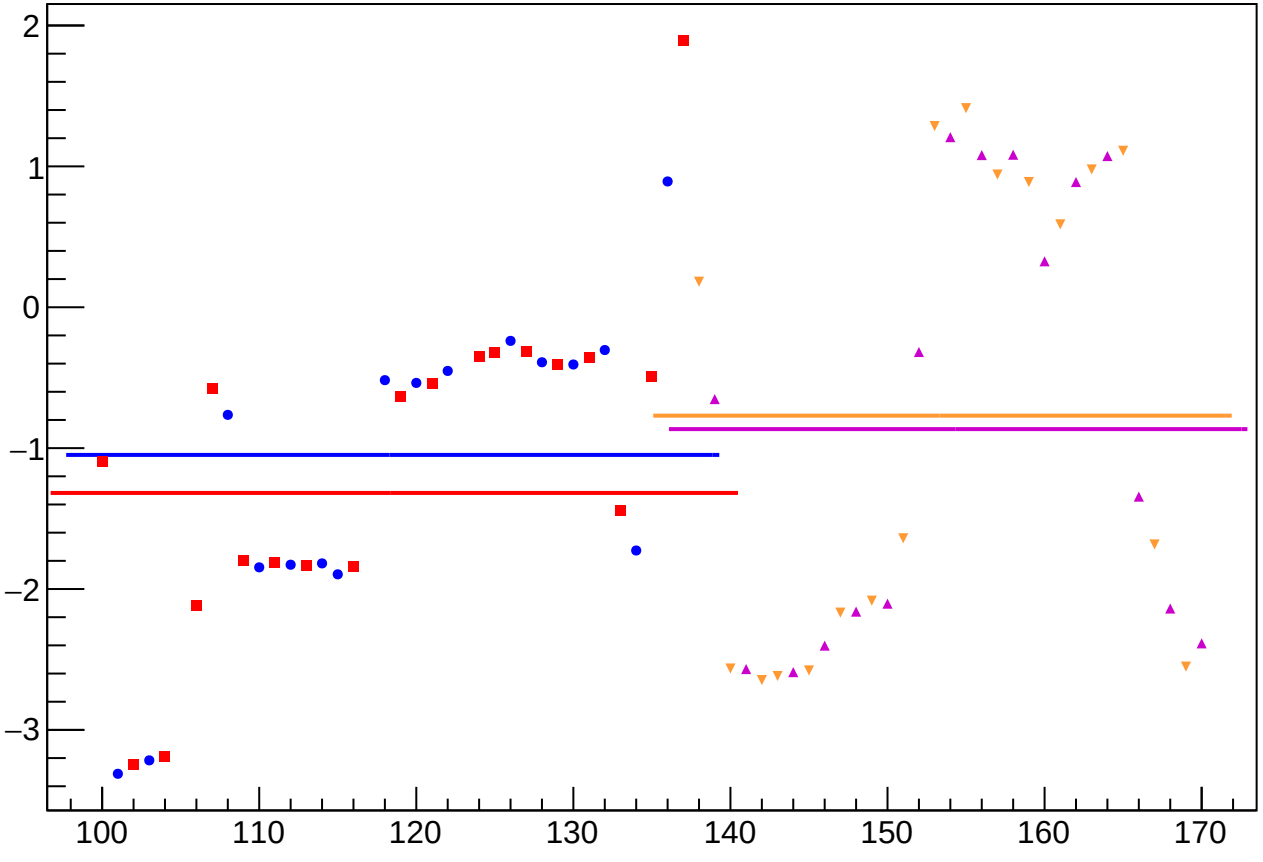
Left In: 0.004+/-0.000 $\chi^2$/NDF:519140.9/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 1527612.6/32

All: 0.004+/-0.000 $\chi^2$/NDF: 2992944.1/67

- sign 0.004+/-0.000 $\chi^2$/NDF: 1445810.1/34

# yield_bpm0r03X_mean vs Slug




Right In: -1.048+/-0.000 $\chi^2$/NDF: 2347020985.5/15

Left Out: -0.769+/-0.000 $\chi^2$/NDF:6196152242.3/16

Right Out: -1.318+/-0.000 $\chi^2$/NDF: 1847995615.1/18

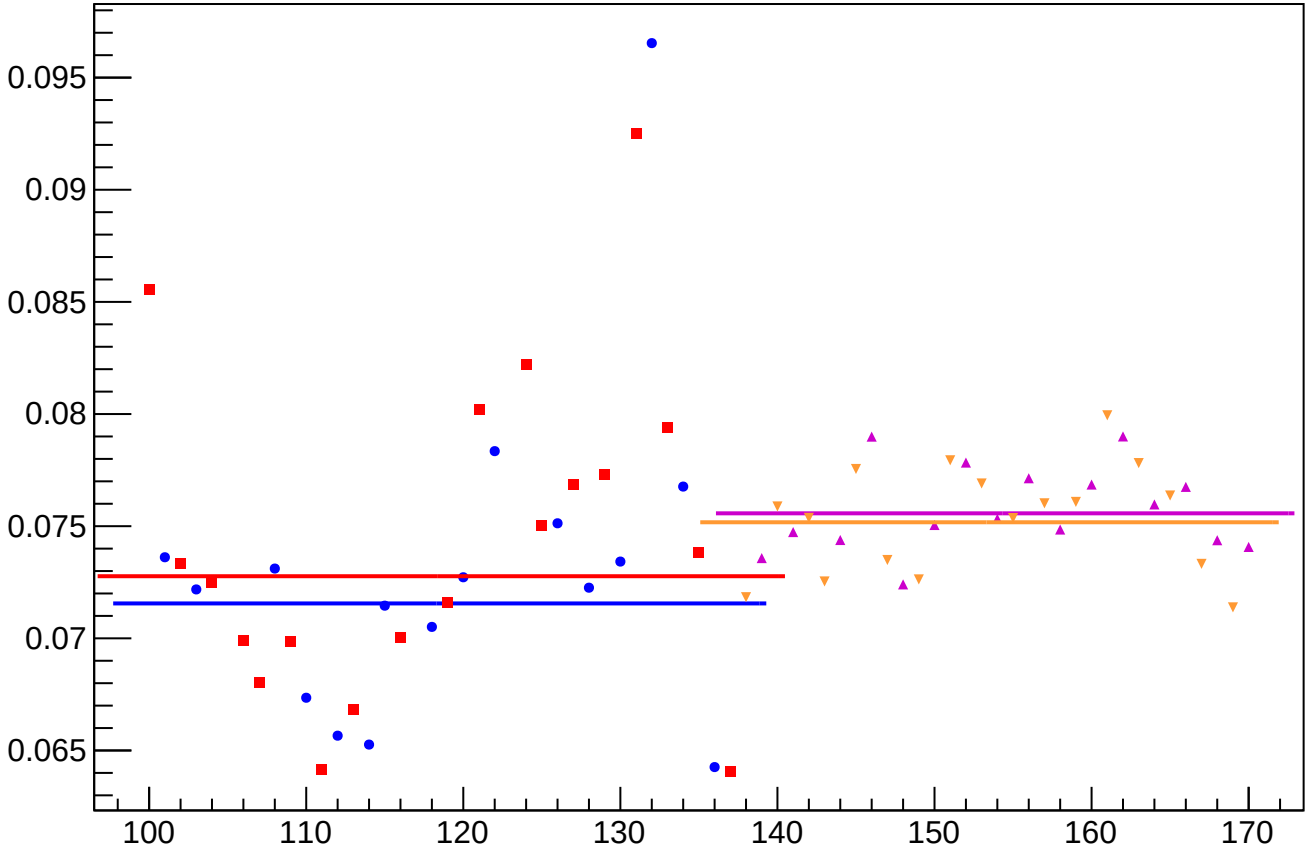
Left In: -0.865+/-0.000 $\chi^2$/NDF:5148890387.0/15

+ sign -0.872+/-0.000 $\chi^2$/NDF: 8610203346.2/32

All: -0.953+/-0.000 $\chi^2$/NDF: 15831543958.8/

- sign -1.036+/-0.000 $\chi^2$/NDF: 7172292595.3/34

# yield_bpm0r03X_rms vs Slug




Right In: 0.072+/-0.000 $\chi^2$/NDF: 101238.7/15

Left Out: 0.075+/-0.000 $\chi^2$/NDF:26932.2/16

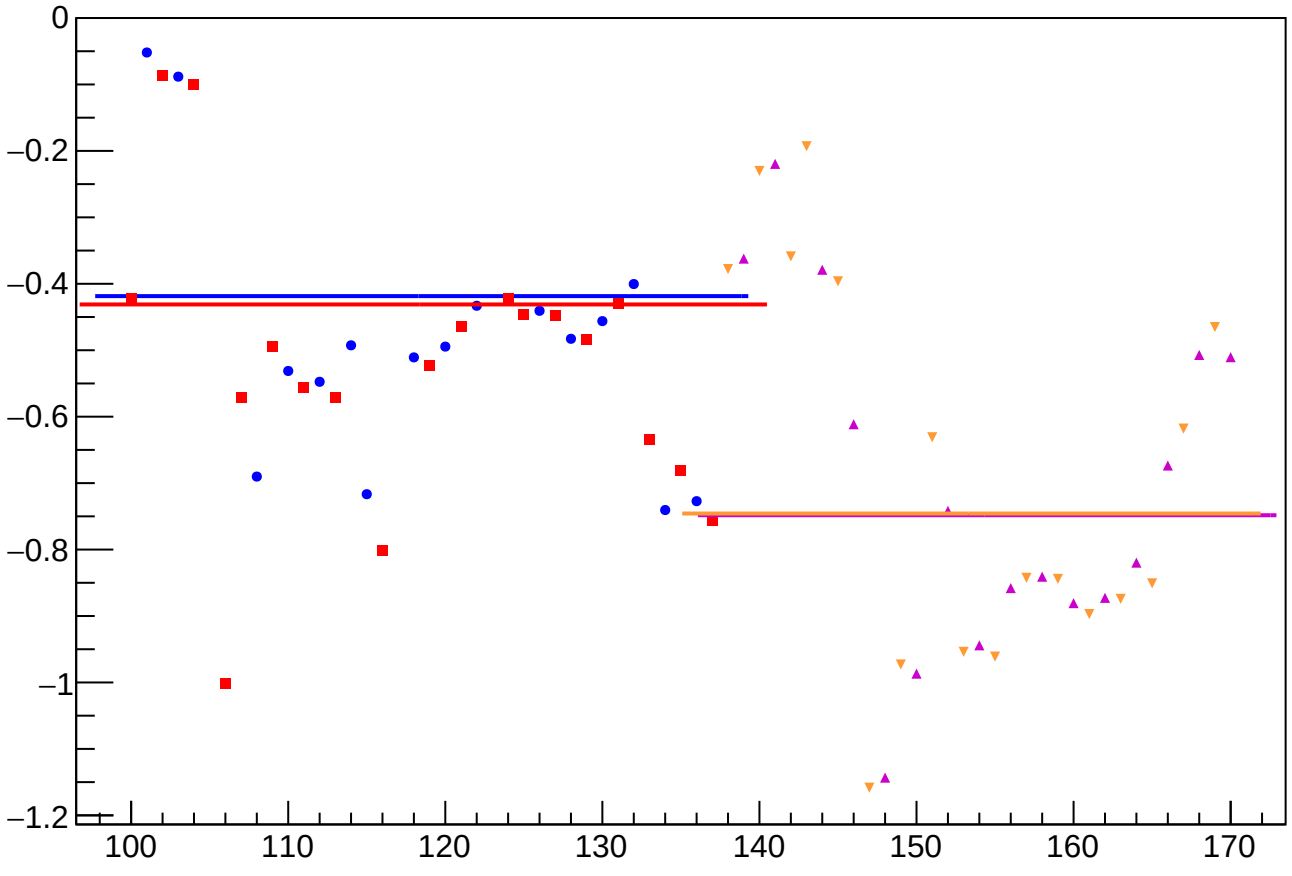
Right Out: 0.073+/-0.000 $\chi^2$/NDF: 96874.2/18

Left In: 0.076+/-0.000 $\chi^2$/NDF:15351.2/15

+ sign 0.074+/-0.000 $\chi^2$/NDF: 150785.6/32

All: 0.074+/-0.000 $\chi^2$/NDF: 278136.3/67

- sign 0.075+/-0.000 $\chi^2$/NDF: 125663.2/34




Right In: -0.419+/-0.000 $\chi^2$/NDF: 3072147227.9/15

Left Out: -0.746+/-0.000 $\chi^2$/NDF:17089043410.2/16

Right Out: -0.431+/-0.000 $\chi^2$/NDF: 3196655095.4/18

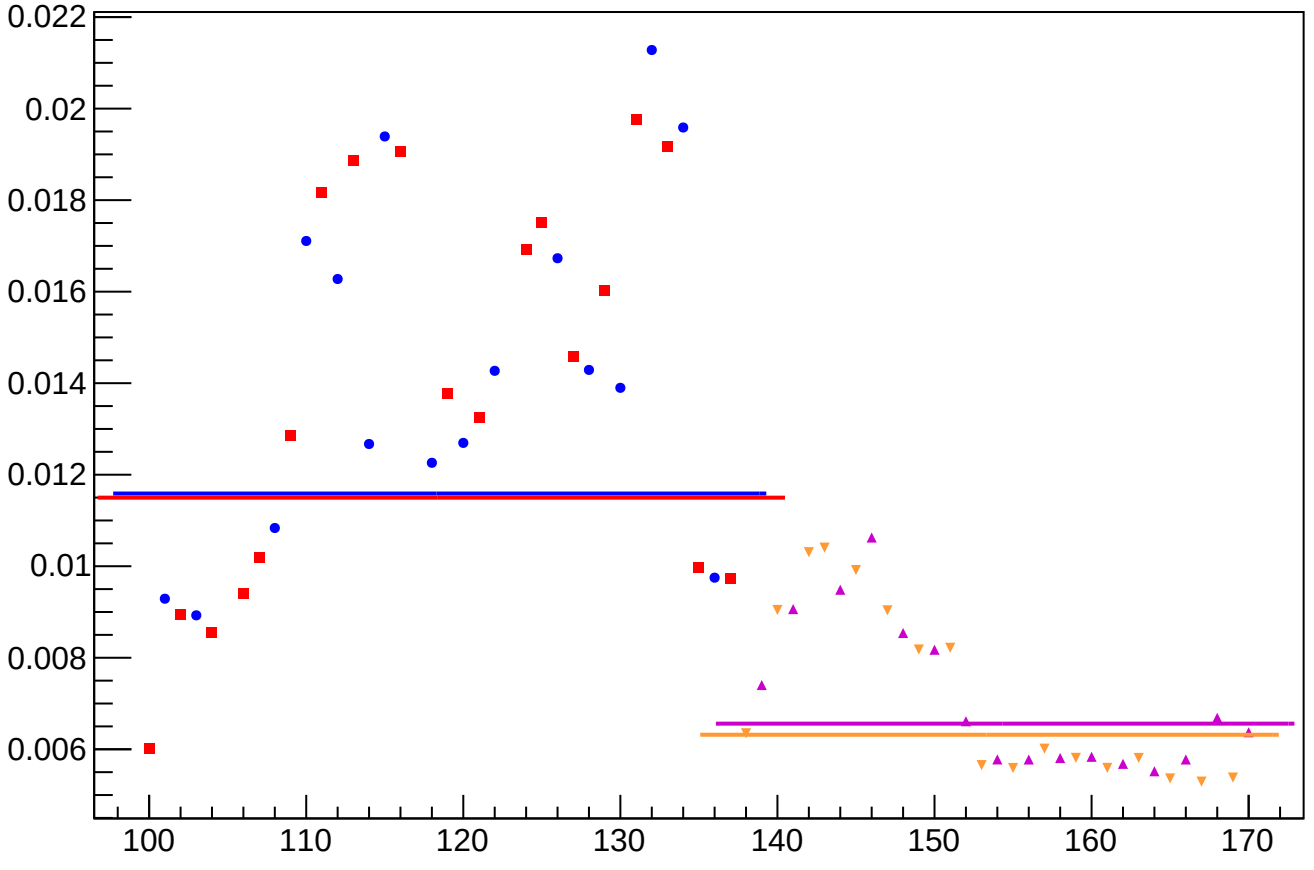
Left In: -0.748+/-0.000 $\chi^2$/NDF:13116742896.6/15

+ sign -0.704+/-0.000 $\chi^2$/NDF: 24304301615.2/32

All: -0.704+/-0.000 $\chi^2$/NDF: 44546313875.4/

- sign -0.704+/-0.000 $\chi^2$/NDF: 20242008199.6/34

# yield_bpm0r03Y_rms vs Slug




Right In: 0.012+/-0.000 $\chi^2$/NDF: 786260.7/15

Left Out: 0.006+/-0.000 $\chi^2$/NDF:1212749.1/16

Right Out: 0.011+/-0.000 $\chi^2$/NDF: 1164657.0/18

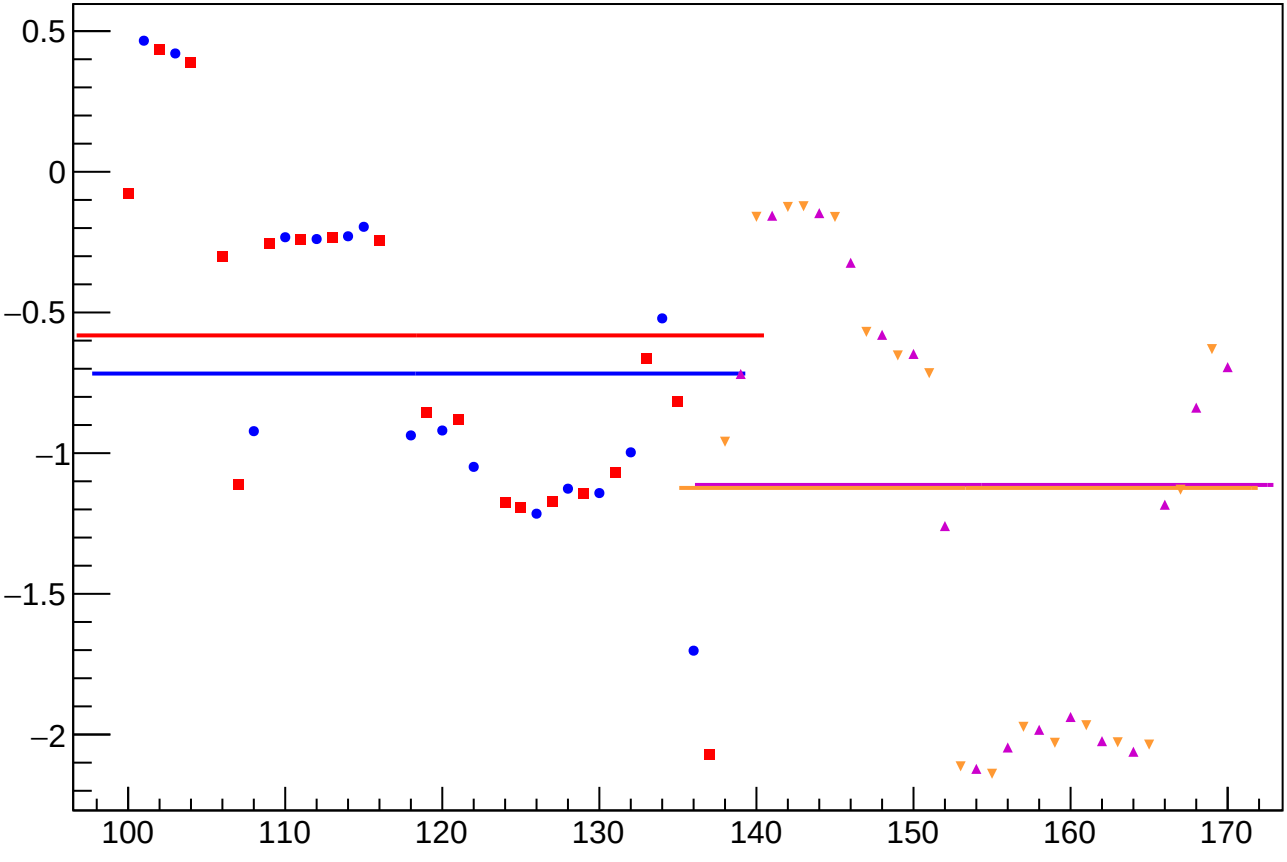
Left In: 0.007+/-0.000 $\chi^2$/NDF:876810.6/15

+ sign 0.007+/-0.000 $\chi^2$/NDF: 4149636.3/32

All: 0.007+/-0.000 $\chi^2$/NDF: 8118415.1/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 3945771.4/34

# yield_bpm0r05X_mean vs Slug




Right In: -0.717+/-0.000 $\chi^2$/NDF: 437423792.4/15

Left Out: -1.124+/-0.000 $\chi^2$/NDF:1102039344.2/16

Right Out: -0.582+/-0.000 $\chi^2$/NDF: 342062039.8/18

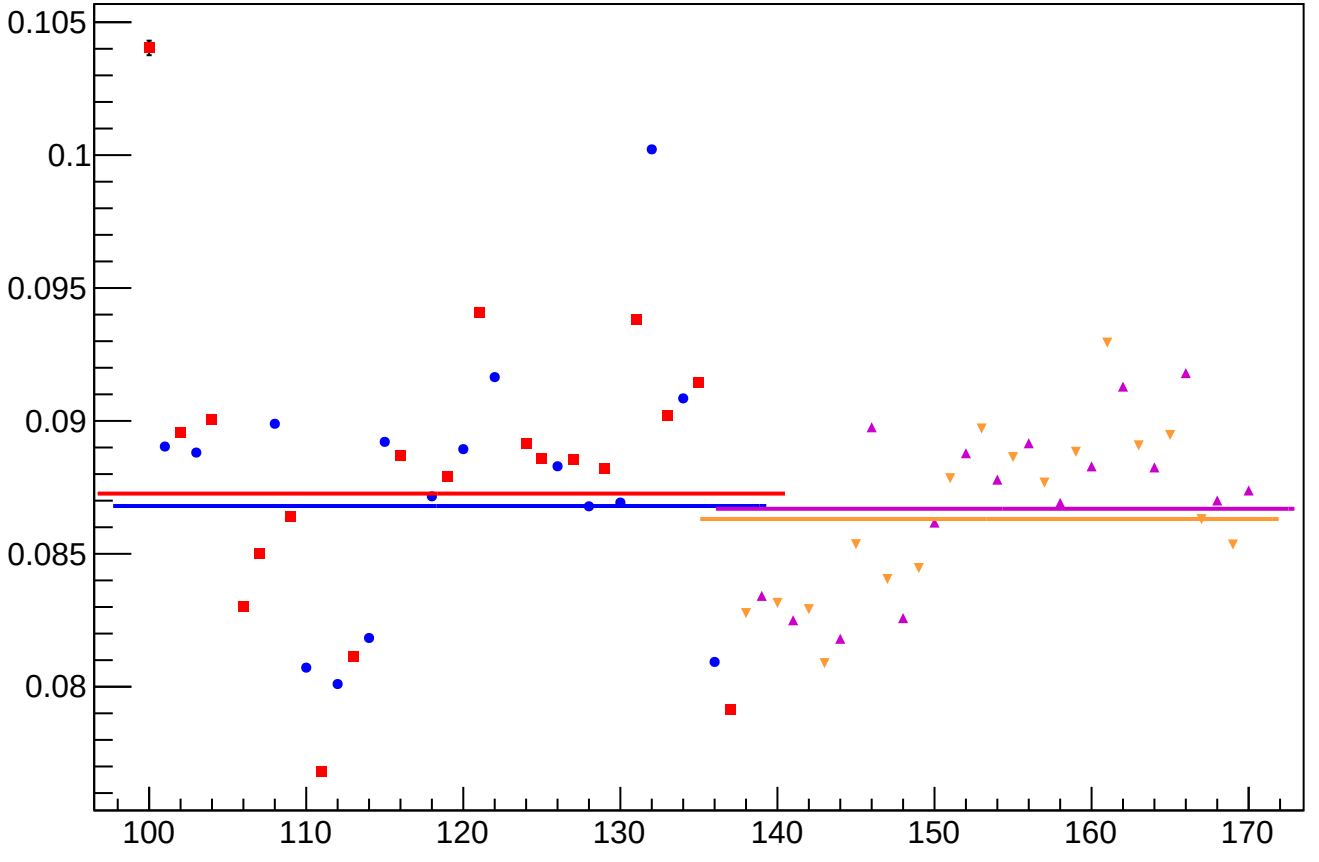
Left In: -1.113+/-0.000 $\chi^2$/NDF:934622130.9/15

+ sign -0.983+/-0.000 $\chi^2$/NDF: 1642188167.0/32

All: -0.952+/-0.000 $\chi^2$/NDF: 3100729657.0/6

- sign -0.922+/-0.000 $\chi^2$/NDF: 1453533591.4/34

# yield_bpm0r05X_rms vs Slug




Right In: 0.087+/-0.000 $\chi^2$/NDF: 43575.8/15

Left Out: 0.086+/-0.000 $\chi^2$/NDF:33570.6/16

Right Out: 0.087+/-0.000 $\chi^2$/NDF: 46163.9/18

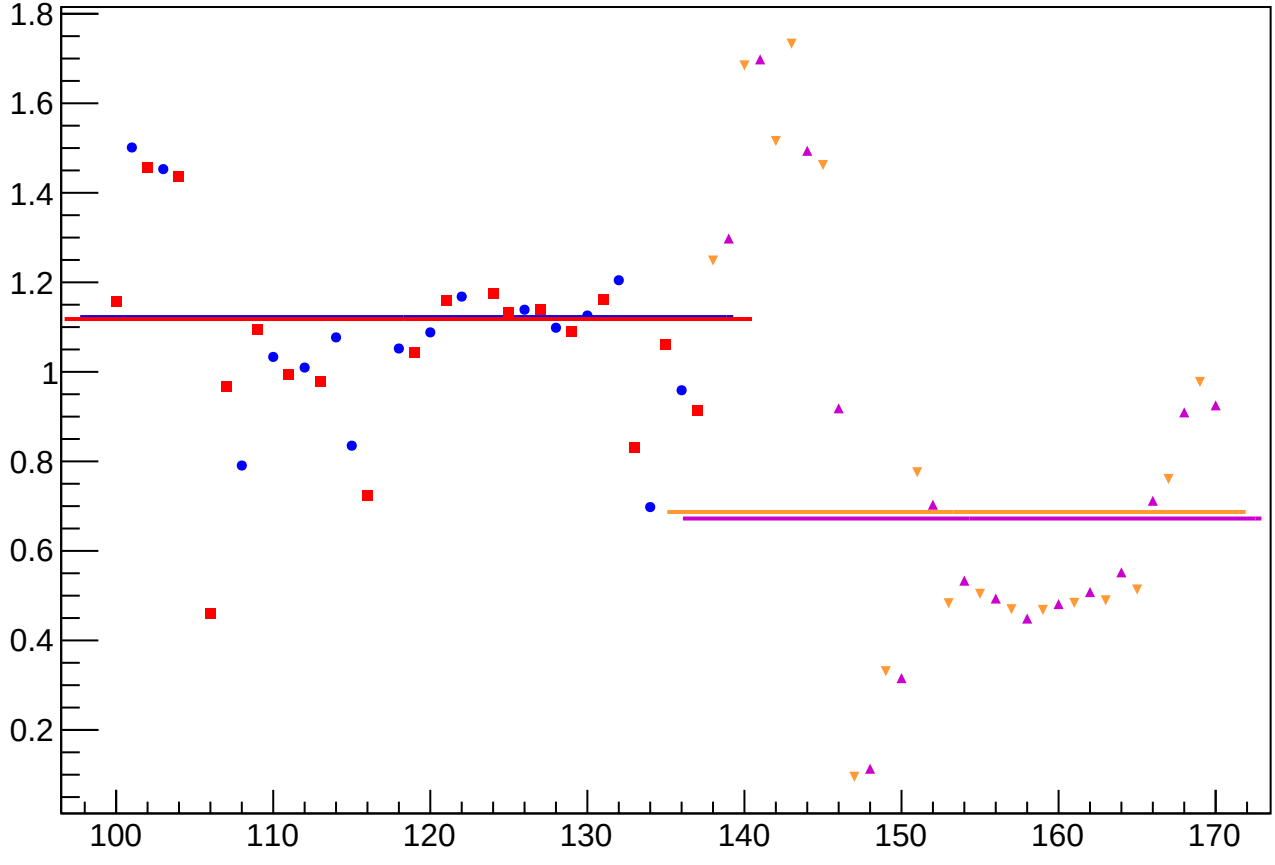
Left In: 0.087+/-0.000 $\chi^2$/NDF:30817.6/15

+ sign 0.086+/-0.000 $\chi^2$/NDF: 77443.8/32

All: 0.087+/-0.000 $\chi^2$/NDF: 155318.4/67

- sign 0.087+/-0.000 $\chi^2$/NDF: 77390.8/34

# yield_bpm0r05Y_mean vs Slug




Right In: 1.122+/-0.000 $\chi^2$/NDF: 1454303379.1/15

Left Out: 0.687+/-0.000 $\chi^2$/NDF:29778303534.5/16

Right Out: 1.118+/-0.000 $\chi^2$/NDF: 1570269350.9/18

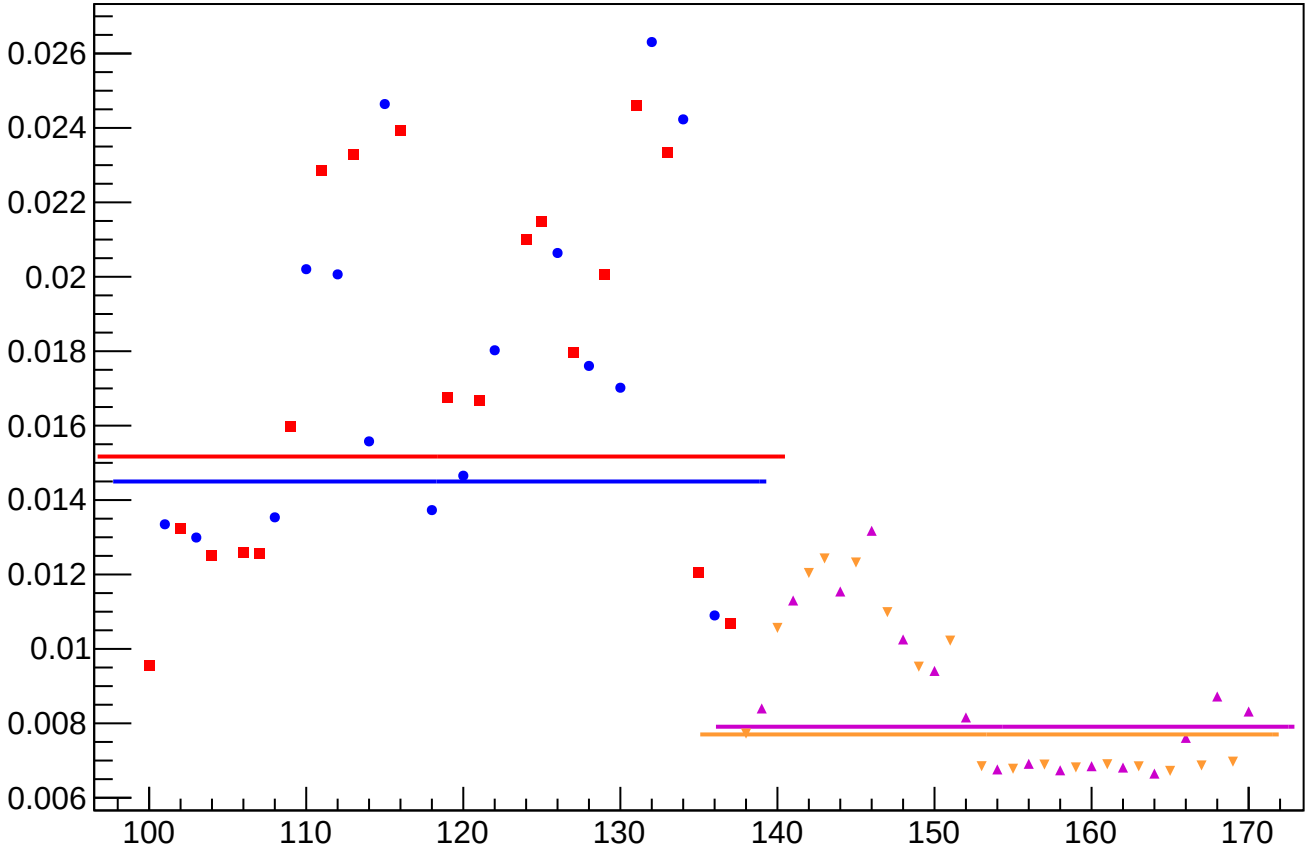
Left In: 0.672+/-0.000 $\chi^2$/NDF:23320206774.2/15

+ sign 0.739+/-0.000 $\chi^2$/NDF: 35968276712.4/32

All: 0.733+/-0.000 $\chi^2$/NDF: 65528172912.8/6

- sign 0.727+/-0.000 $\chi^2$/NDF: 29541114449.6/34

# yield_bpm0r05Y_rms vs Slug




Right In: 0.014+/-0.000 $\chi^2$/NDF: 710345.3/15

Left Out: 0.008+/-0.000 $\chi^2$/NDF:1131837.9/16

Right Out: 0.015+/-0.000 $\chi^2$/NDF: 864637.6/18

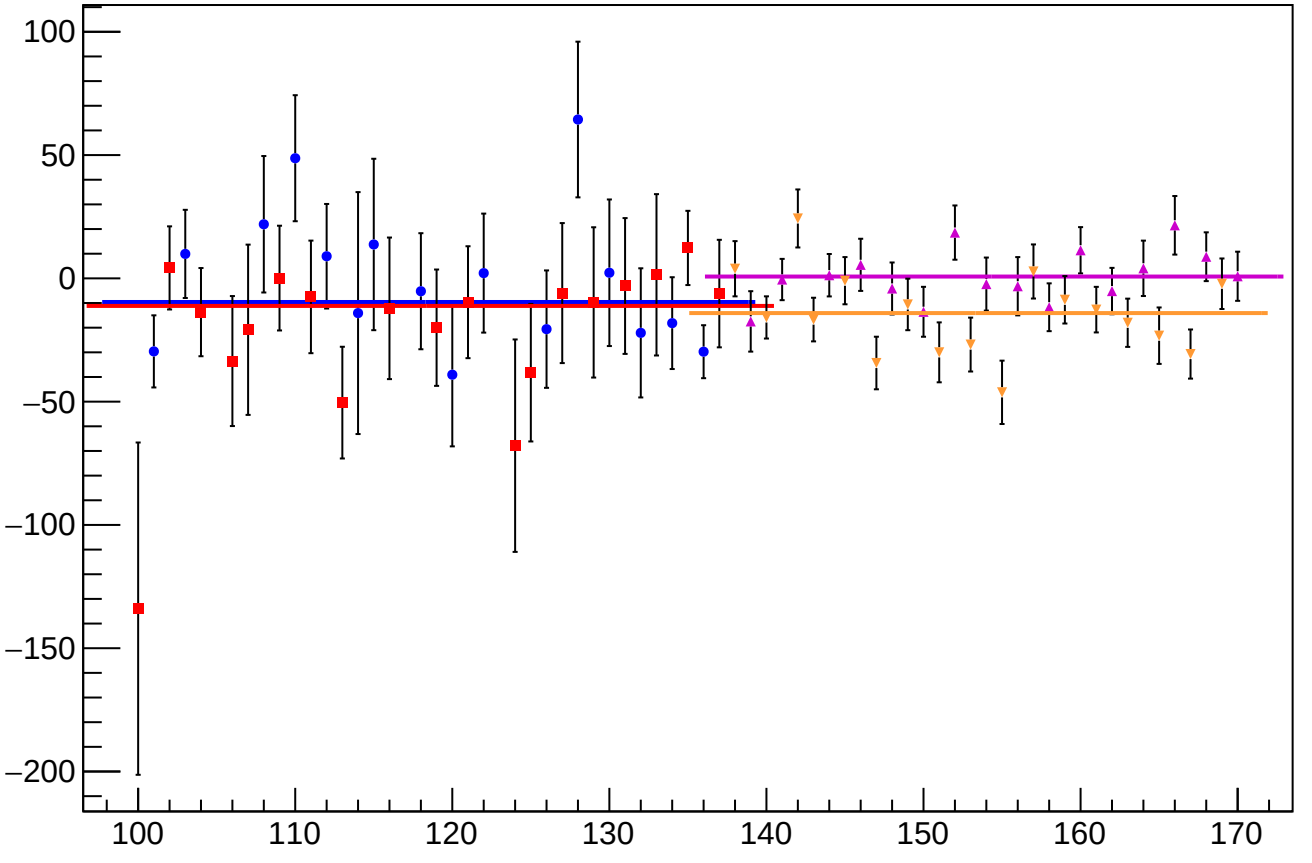
Left In: 0.008+/-0.000 $\chi^2$/NDF:953071.1/15

+ sign 0.009+/-0.000 $\chi^2$/NDF: 4150064.4/32

All: 0.009+/-0.000 $\chi^2$/NDF: 8452788.0/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 4286035.9/34

# diff_bpm4aX_mean vs Slug




Right In: -9.581+/-5.291 $\chi^2$/NDF: 21.9/15

Left Out: -14.077+/-2.499 $\chi^2$/NDF:35.9/16

Right Out: -11.177+/-5.497 $\chi^2$/NDF: 13.9/18

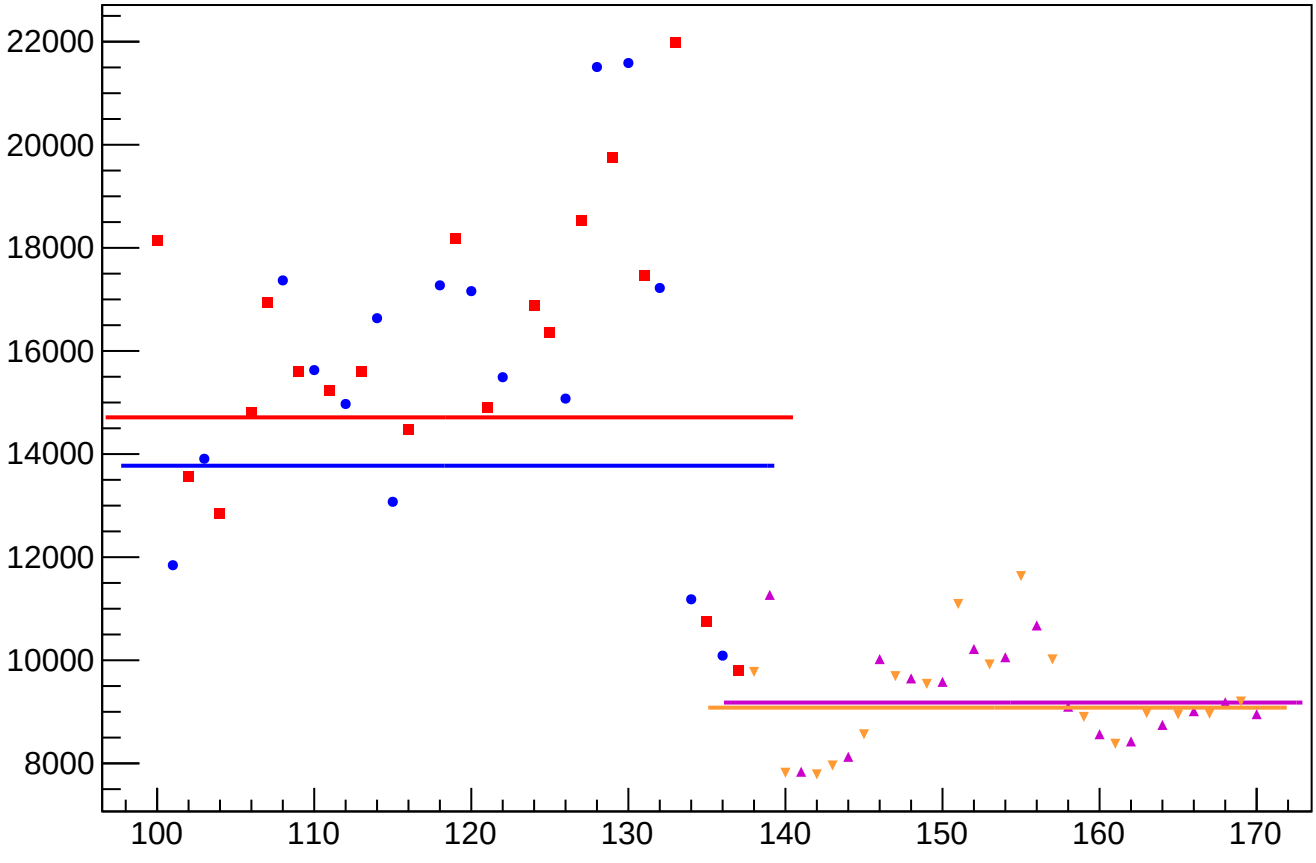
Left In: 0.738+/-2.542 $\chi^2$/NDF:14.6/15

+ sign -13.257+/-2.259 $\chi^2$/NDF: 58.4/32

All: -7.433+/-1.614 $\chi^2$/NDF: 104.3/67

- sign -1.360+/-2.307 $\chi^2$/NDF: 32.3/34

# diff_bpm4aX_rms vs Slug




Right In: 13773.886+/-3.741 $\chi^2$/NDF: 747586.2/15

Left Out: 9081.192+/-1.767 $\chi^2$/NDF:297051.1/16

Right Out: 14712.201+/-3.887 $\chi^2$/NDF: 557305.5/18

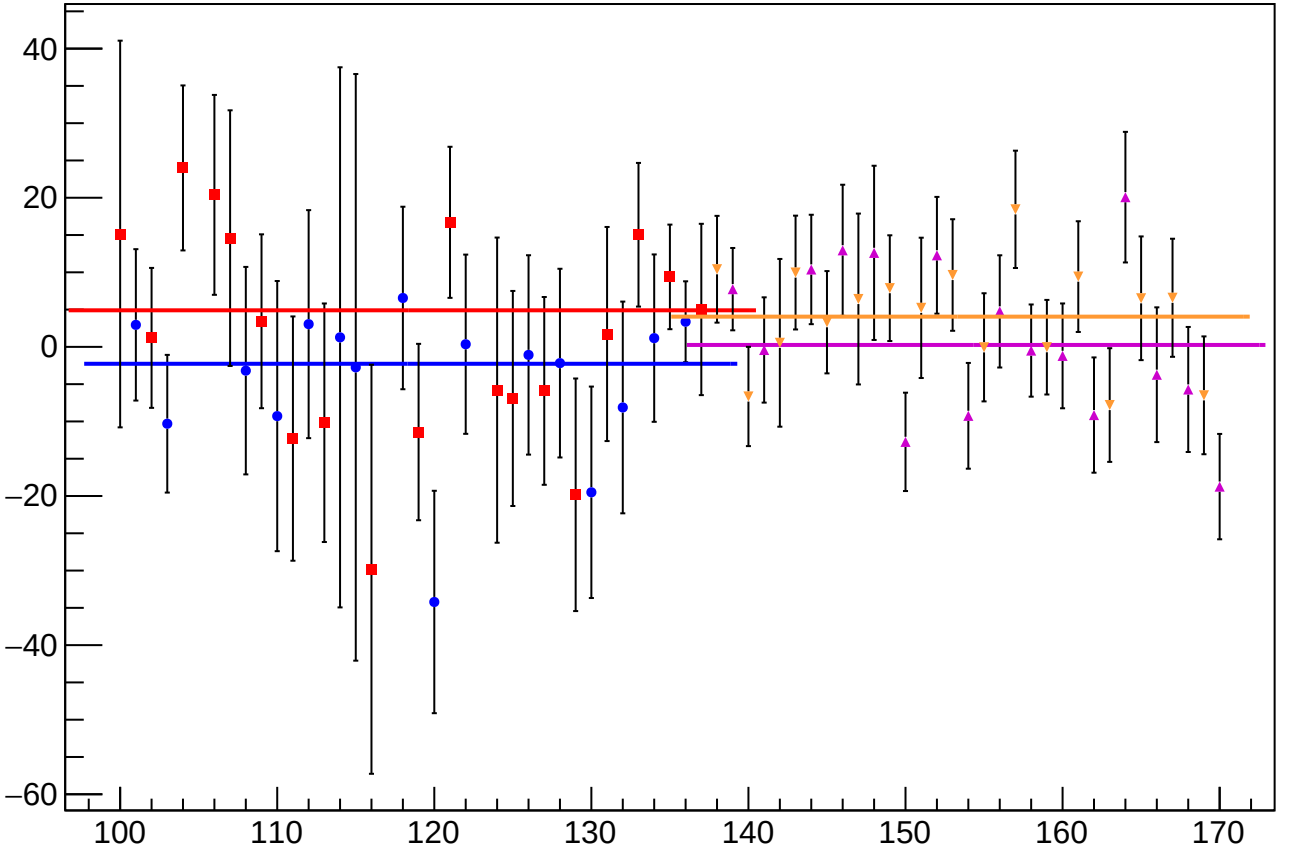
Left In: 9179.642+/-1.797 $\chi^2$/NDF:248404.7/15

+ sign 9936.905+/-1.598 $\chi^2$/NDF: 2331161.8/32

All: 10043.222+/-1.141 $\chi^2$/NDF: 4814948.1/6

- sign 10154.084+/-1.631 $\chi^2$/NDF: 2474738.9/34

# diff_bpm4aY_mean vs Slug




Right In: -2.267+/-2.922 $\chi^2$/NDF: 9.3/15

Left Out: 4.055+/-1.867 $\chi^2$/NDF:14.0/16

Right Out: 4.904+/-2.836 $\chi^2$/NDF: 17.6/18

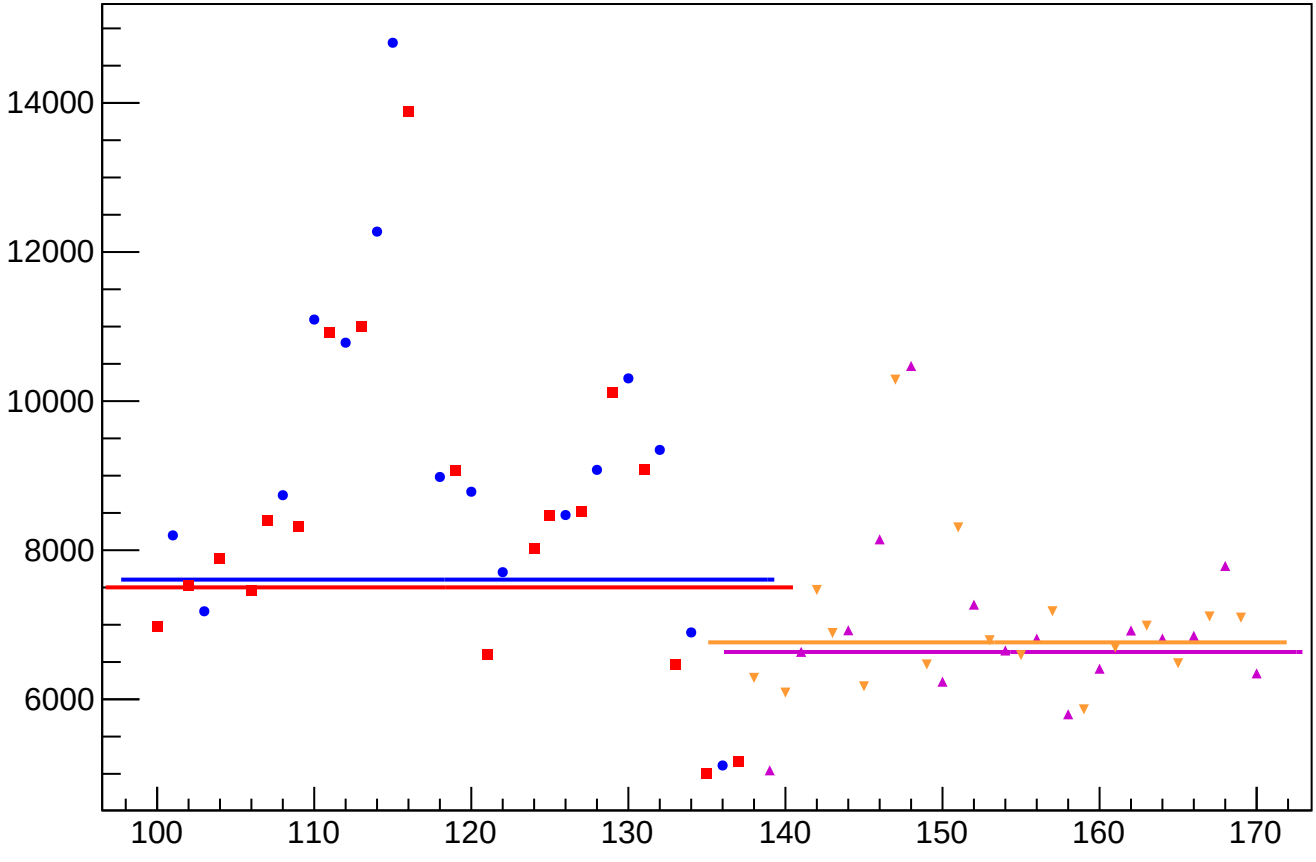
Left In: 0.258+/-1.853 $\chi^2$/NDF:29.9/15

+ sign 2.222+/-1.573 $\chi^2$/NDF: 26.6/32

All: 1.931+/-1.105 $\chi^2$/NDF: 76.1/67

- sign 1.648+/-1.551 $\chi^2$/NDF: 49.4/34

# diff_bpm4aY_rms vs Slug




Right In: 7605.700+/-2.066 $\chi^2$/NDF: 891494.3/15

Left Out: 6763.834+/-1.320 $\chi^2$/NDF:357448.9/16

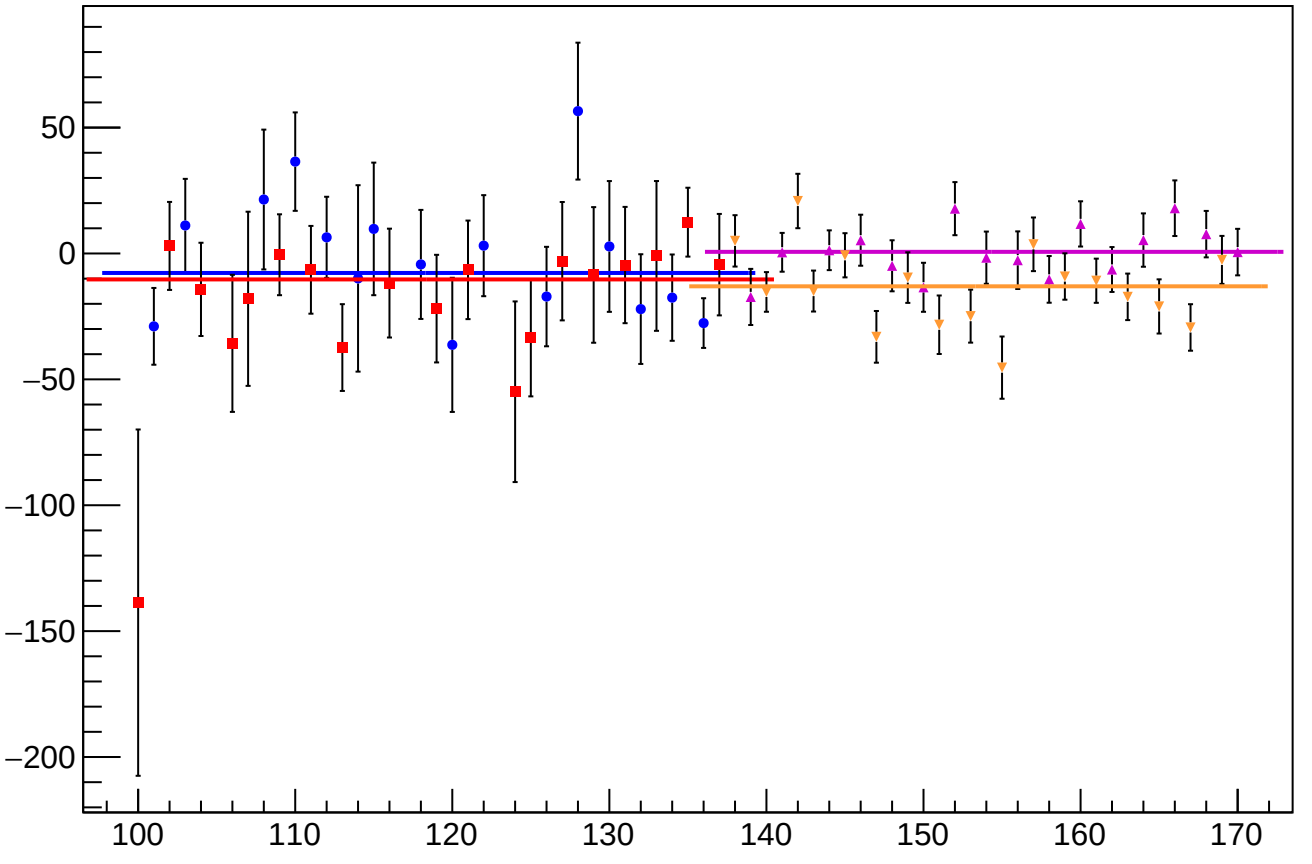
Right Out: 7501.522+/-2.005 $\chi^2$/NDF: 823557.5/18

Left In: 6634.667+/-1.310 $\chi^2$/NDF:549396.6/15

+ sign 7007.841+/-1.112 $\chi^2$/NDF: 1366839.4/32

All: 6950.142+/-0.781 $\chi^2$/NDF: 2876054.6/67

- sign 6894.037+/-1.097 $\chi^2$/NDF: 1503908.6/34




Right In: -7.741+/-4.748 $\chi^2$/NDF: 22.7/15

Left Out: -13.046+/-2.347 $\chi^2$/NDF:36.6/16

Right Out: -10.307+/-4.840 $\chi^2$/NDF: 13.9/18

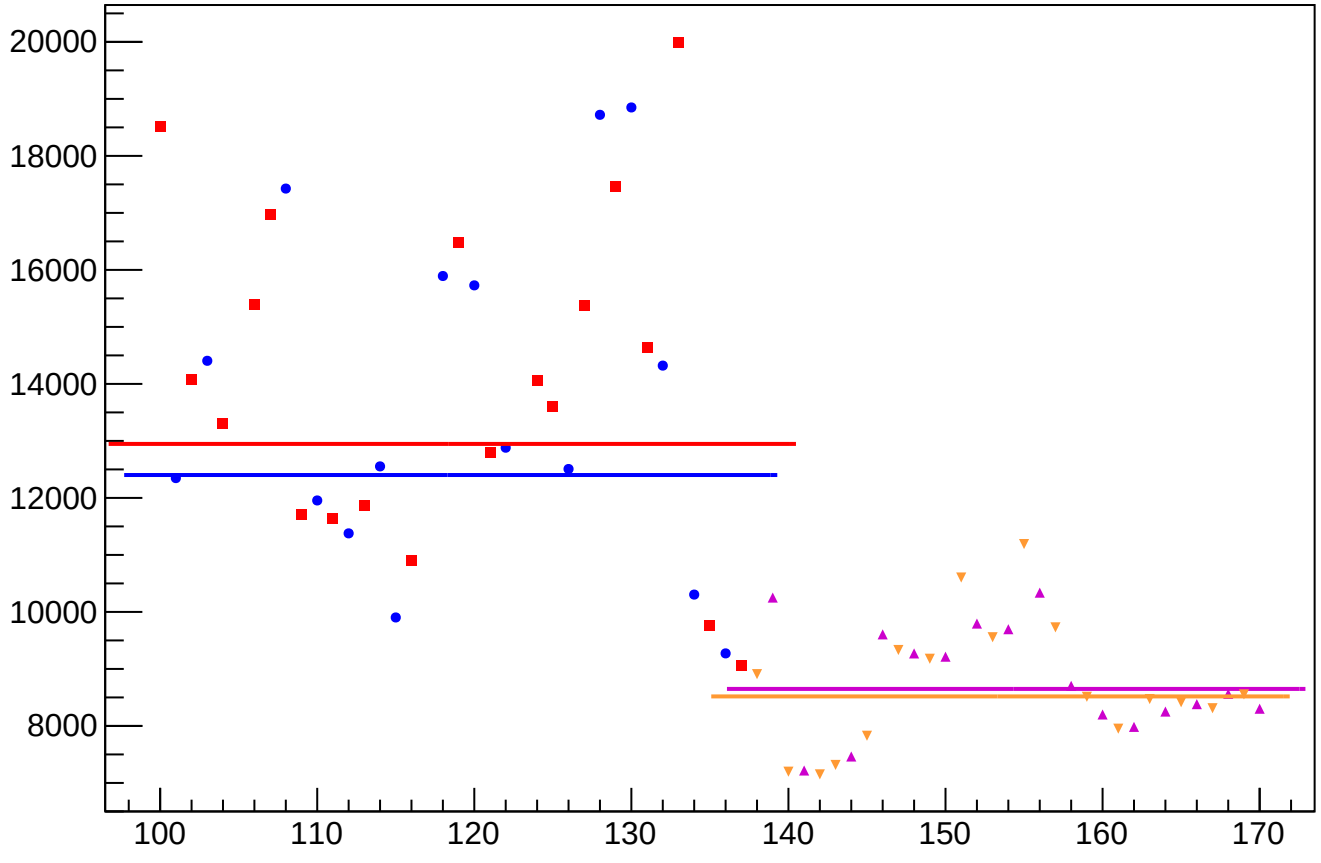
Left In: 0.648+/-2.397 $\chi^2$/NDF:14.7/15

+ sign -12.004+/-2.104 $\chi^2$/NDF: 60.3/32

All: -6.865+/-1.503 $\chi^2$/NDF: 105.3/67

- sign -1.510+/-2.148 $\chi^2$/NDF: 32.8/34

# diff_bpm4eX_rms vs Slug




Right In: 12401.769+/-3.357 $\chi^2$/NDF: 678310.8/15

Left Out: 8517.755+/-1.660 $\chi^2$/NDF:381356.4/16

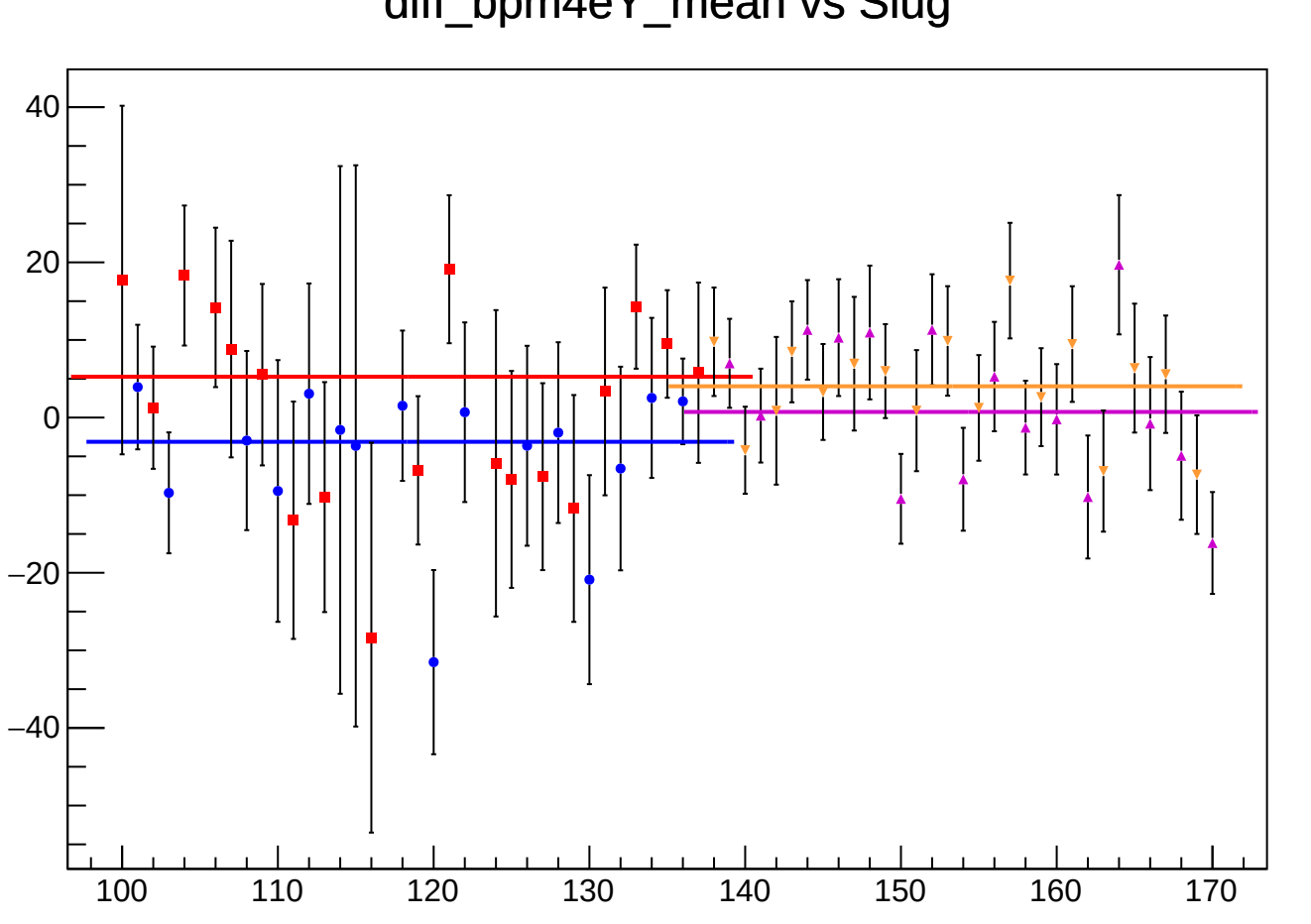
Right Out: 12947.255+/-3.422 $\chi^2$/NDF: 555198.3/18

Left In: 8649.407+/-1.695 $\chi^2$/NDF:298275.4/15

+ sign 9280.652+/-1.488 $\chi^2$/NDF: 2135066.4/32

All: 9386.124+/-1.063 $\chi^2$/NDF: 4265332.4/67

- sign 9496.018+/-1.519 $\chi^2$/NDF: 2120007.0/34




Right In: -3.123+/-2.656 $\chi^2$/NDF: 10.9/15

Left Out: 4.030+/-1.719 $\chi^2$/NDF:12.9/16

Right Out: 5.265+/-2.553 $\chi^2$/NDF: 16.9/18

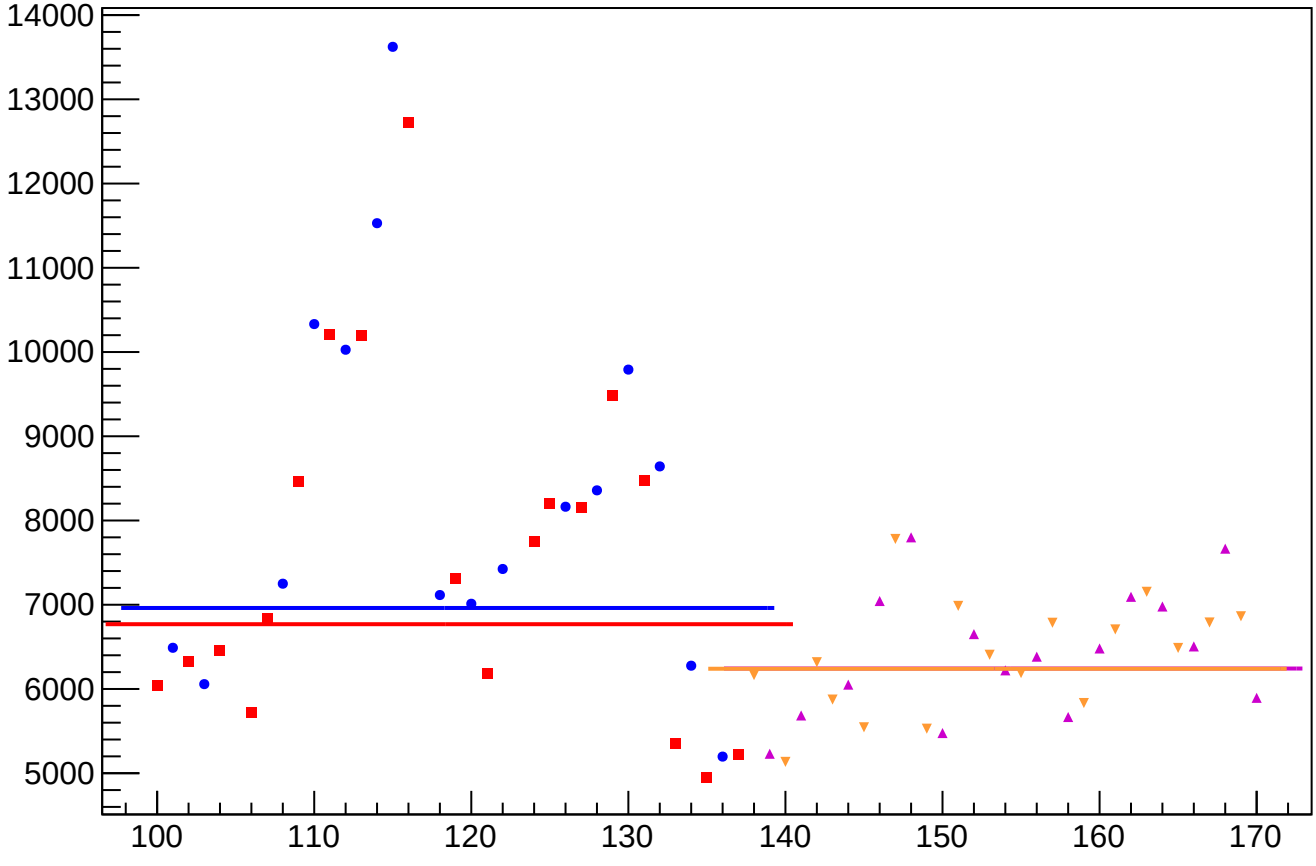
Left In: 0.726+/-1.734 $\chi^2$/NDF:28.6/15

+ sign 1.919+/-1.443 $\chi^2$/NDF: 28.9/32

All: 2.040+/-1.017 $\chi^2$/NDF: 76.6/67

- sign 2.159+/-1.435 $\chi^2$/NDF: 47.7/34

# diff_bpm4eY_rms vs Slug




Right In: 6961.606+/-1.878 $\chi^2$/NDF: 696410.4/15

Left Out: 6240.226+/-1.215 $\chi^2$/NDF:300675.1/16

Right Out: 6768.993+/-1.805 $\chi^2$/NDF: 798105.0/18

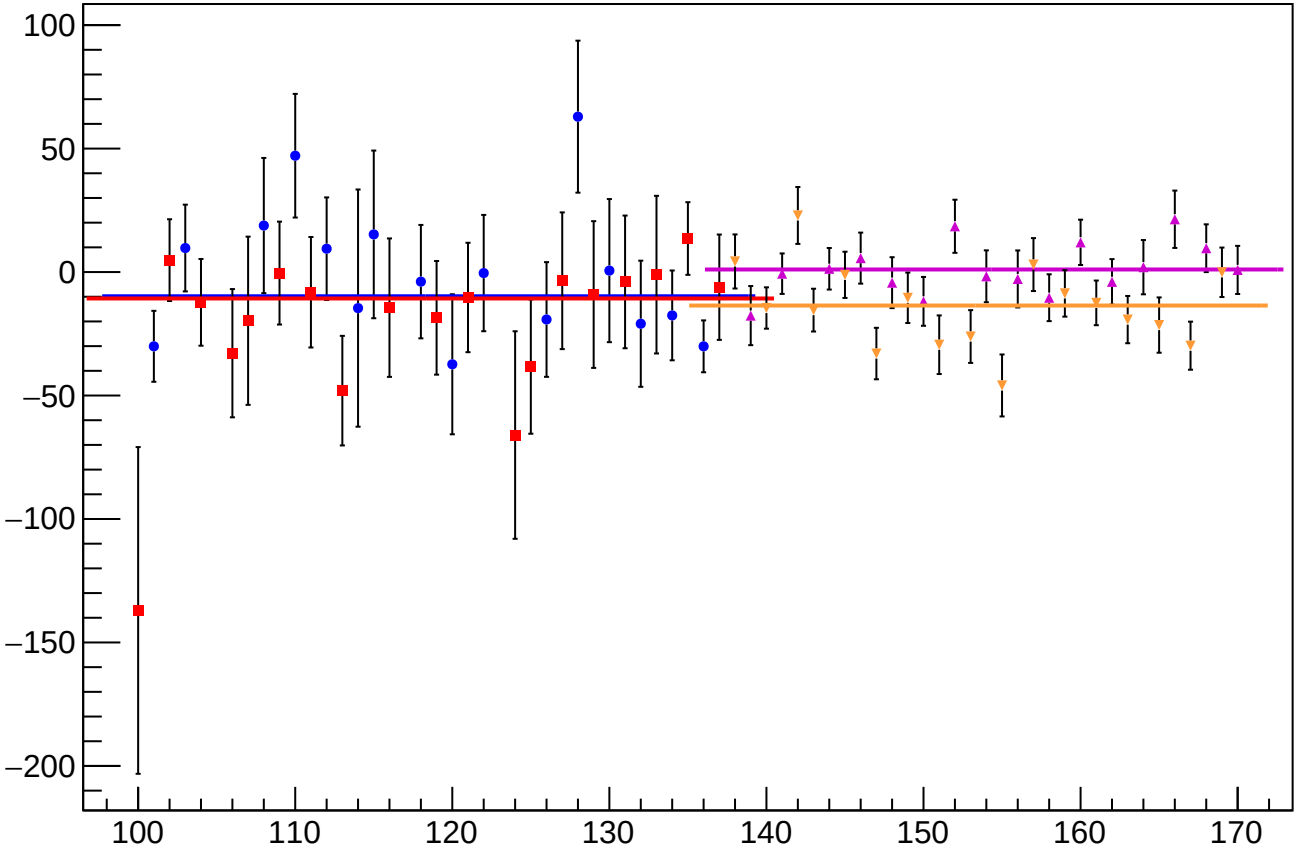
Left In: 6242.734+/-1.226 $\chi^2$/NDF:335270.6/15

+ sign 6453.162+/-1.020 $\chi^2$/NDF: 1101099.1/32

All: 6430.905+/-0.719 $\chi^2$/NDF: 2293567.6/67

- sign 6408.901+/-1.014 $\chi^2$/NDF: 1191522.1/34

# diff_bpm4acX_mean vs Slug




Right In: -9.810+/-5.178 $\chi^2$/NDF: 22.0/15

Left Out: -13.560+/-2.443 $\chi^2$/NDF:36.0/16

Right Out: -10.703+/-5.381 $\chi^2$/NDF: 14.3/18

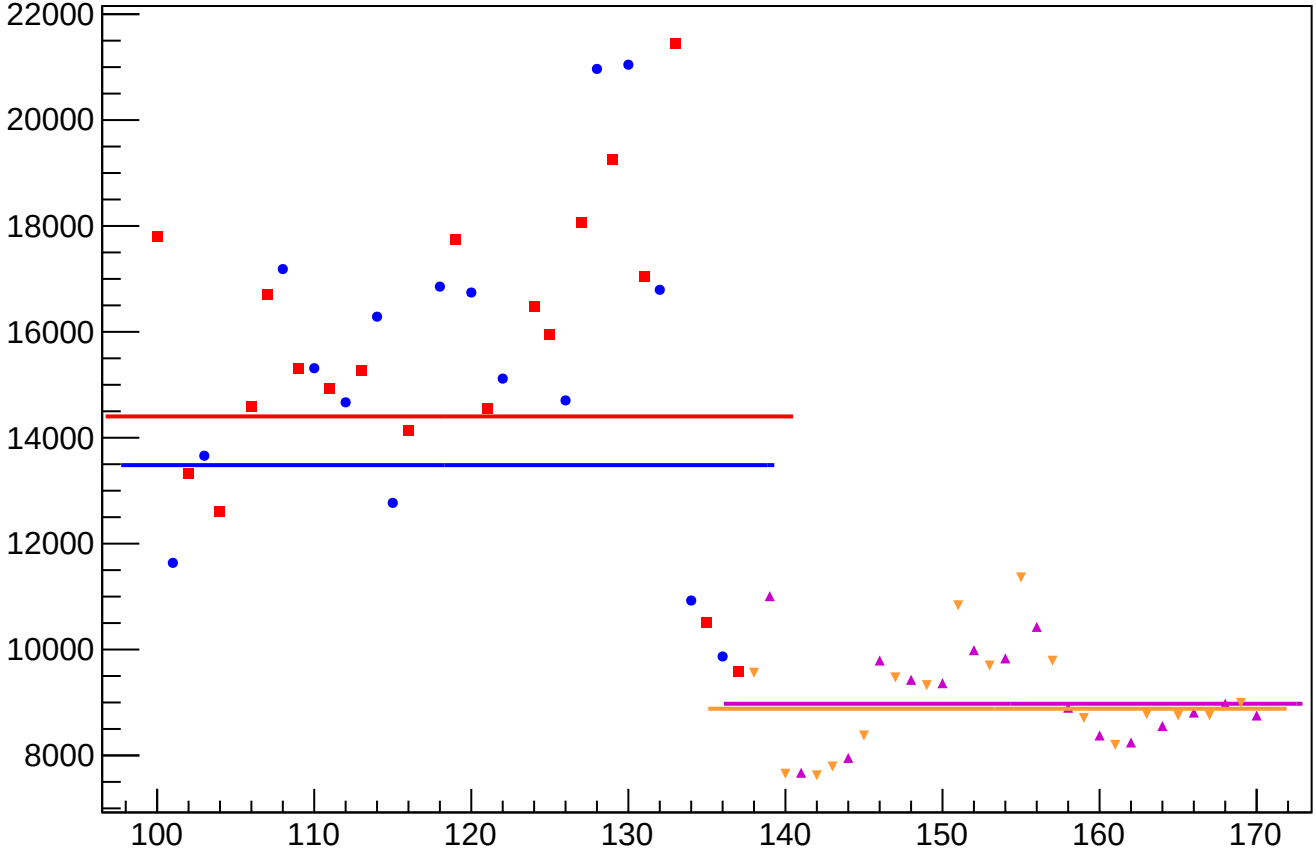
Left In: 1.040+/-2.485 $\chi^2$/NDF:14.5/15

+ sign -12.877+/-2.210 $\chi^2$/NDF: 58.5/32

All: -7.074+/-1.579 $\chi^2$/NDF: 105.4/67

- sign -1.025+/-2.256 $\chi^2$/NDF: 32.8/34

# diff_bpm4acX_rms vs Slug




Right In: 13482.879+/-3.661 $\chi^2$/NDF: 743704.4/15

Left Out: 8881.668+/-1.728 $\chi^2$/NDF:293863.3/16

Right Out: 14402.670+/-3.805 $\chi^2$/NDF: 552430.0/18

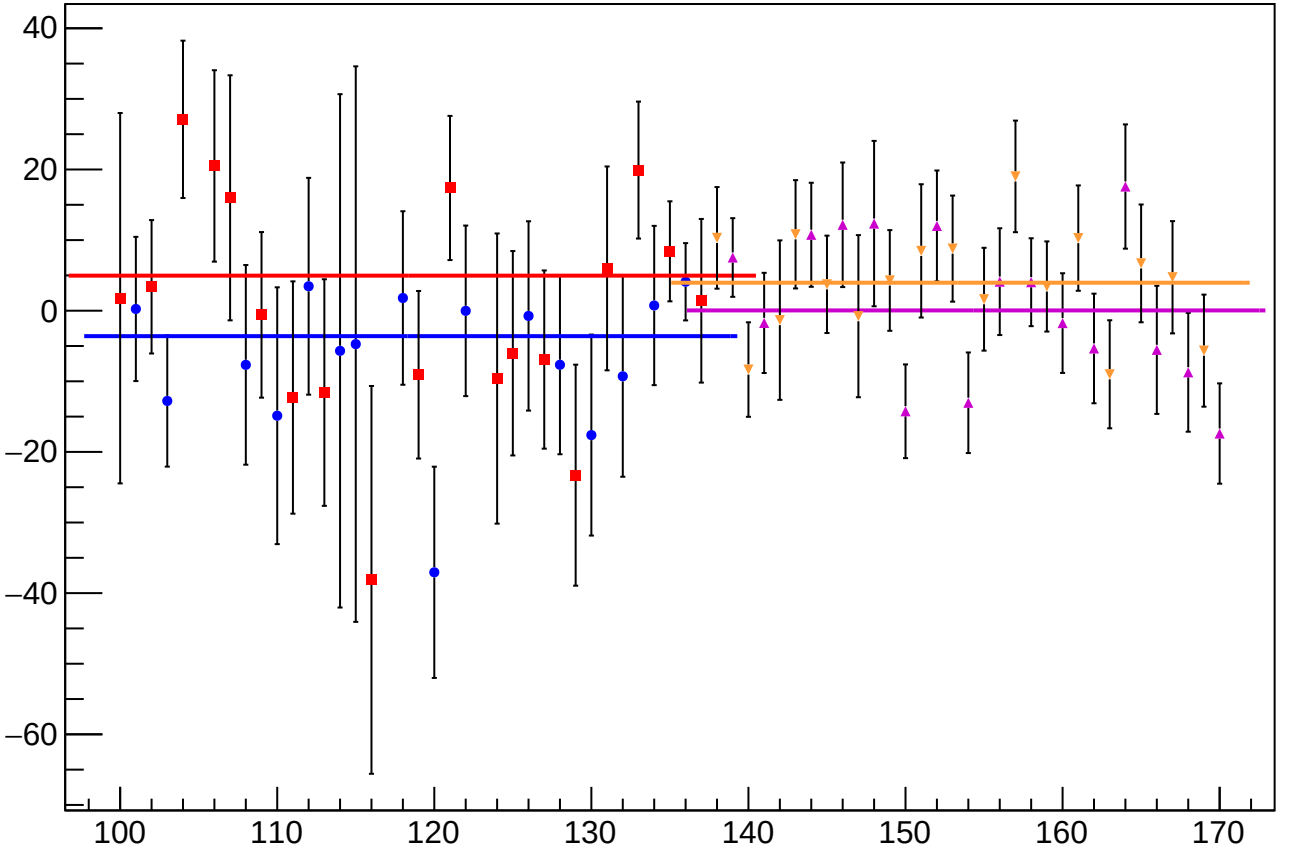
Left In: 8976.455+/-1.757 $\chi^2$/NDF:245452.1/15

+ sign 9719.593+/-1.562 $\chi^2$/NDF: 2329189.0/32

All: 9822.873+/-1.116 $\chi^2$/NDF: 4812412.2/67

- sign 9930.545+/-1.595 $\chi^2$/NDF: 2474299.1/34

# diff_bpm4acY_mean vs Slug




Right In: -3.605+/-2.940 $\chi^2$/NDF: 10.5/15

Left Out: 3.963+/-1.876 $\chi^2$/NDF:14.9/16

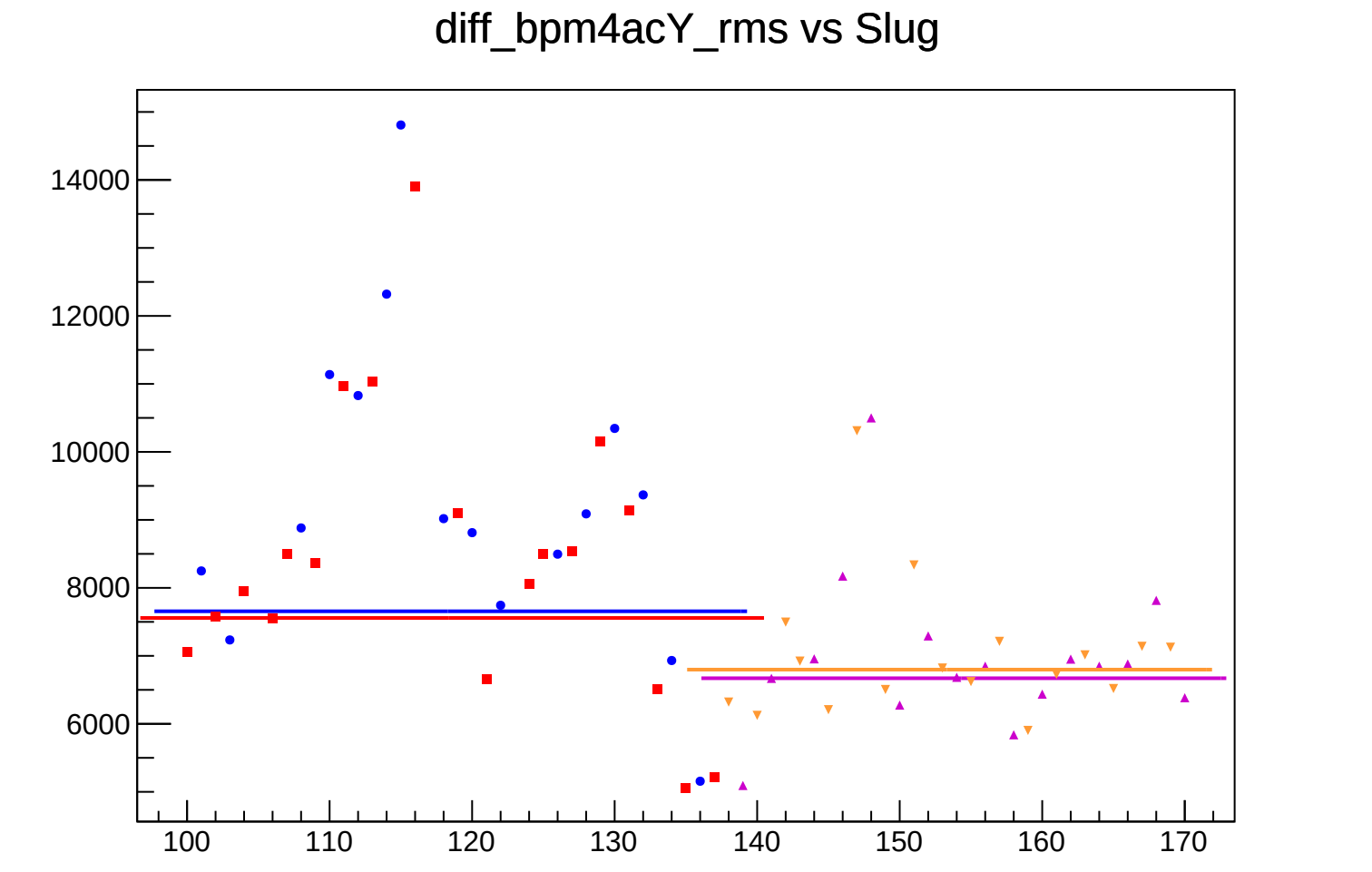
Right Out: 4.965+/-2.855 $\chi^2$/NDF: 21.4/18

Left In: 0.040+/-1.863 $\chi^2$/NDF:30.0/15

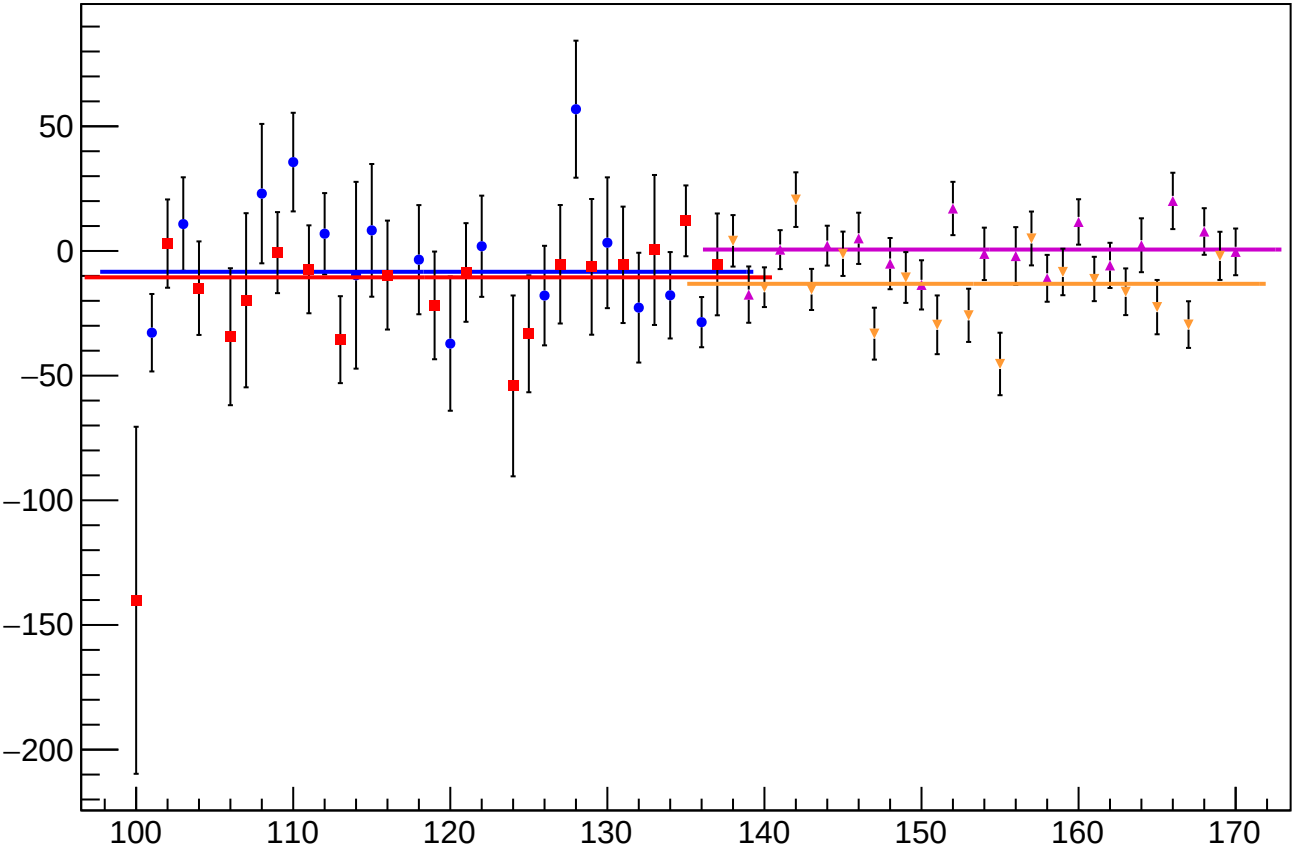
+ sign 1.773+/-1.581 $\chi^2$/NDF: 30.1/32

All: 1.640+/-1.111 $\chi^2$/NDF: 83.6/67

- sign 1.510+/-1.560 $\chi^2$/NDF: 53.5/34


diff_bpm4acY_rms vs Slug
14000
12000
10000
8000
6000
100
110
120
130
140
150
160
170
Right In: 7655.851+/-2.079 χ²/NDF: 879769.7/15
Left Out: 6797.669+/-1.326 χ²/NDF:352799.6/16
Right Out: 7557.497+/-2.019 χ²/NDF: 809860.3/18
Left In: 6670.804+/-1.317 χ²/NDF:538688.5/15
+ sign 7045.946+/-1.118 χ²/NDF: 1353682.9/32
All: 6989.966+/-0.785 χ²/NDF: 2842467.1/67
- sign 6935.480+/-1.103 χ²/NDF: 1483838.2/34

# diff_bpm4ecX_mean vs Slug




Right In: -8.352+/-4.814 $\chi^2$/NDF: 23.2/15

Left Out: -13.173+/-2.379 $\chi^2$/NDF:36.3/16

Right Out: -10.573+/-4.911 $\chi^2$/NDF: 12.9/18

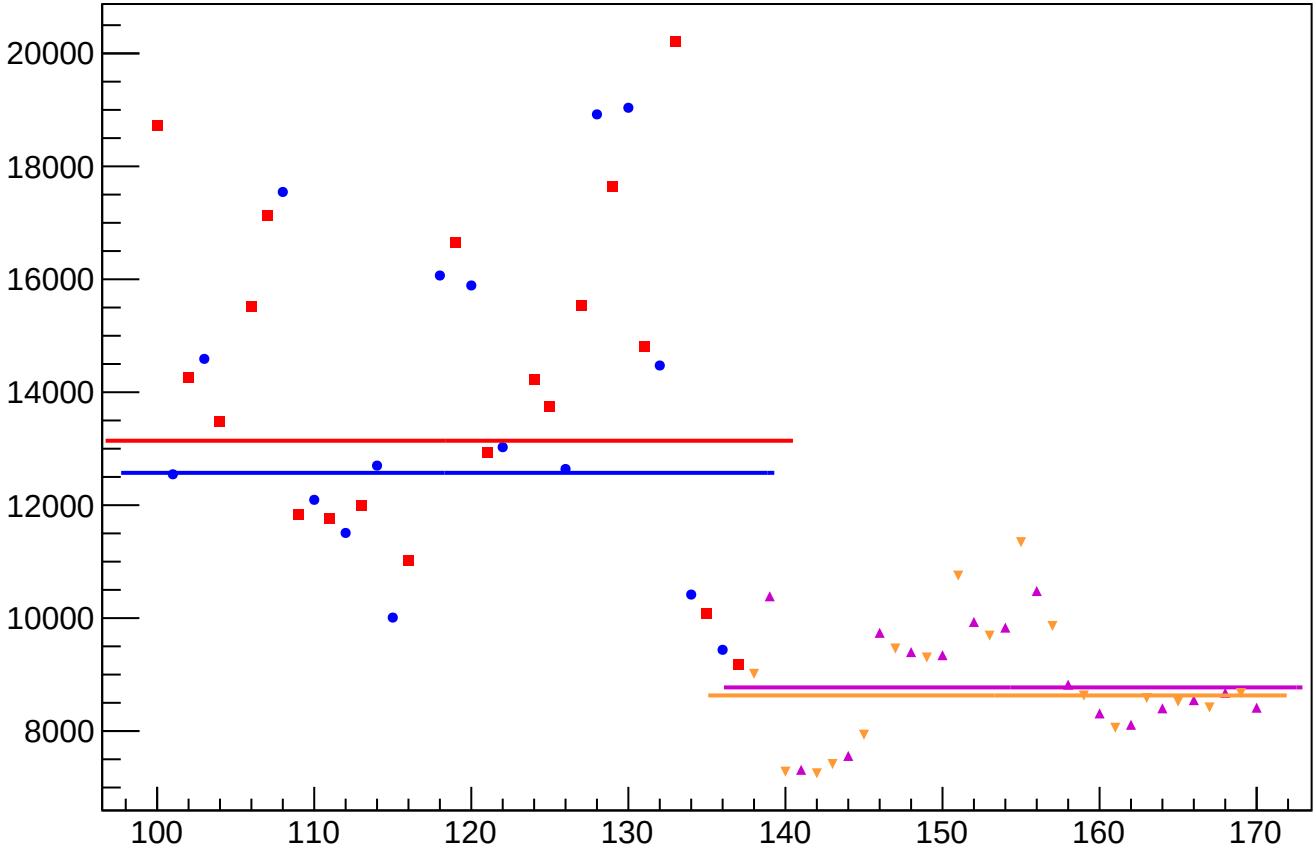
Left In: 0.571+/-2.432 $\chi^2$/NDF:14.7/15

+ sign -12.227+/-2.133 $\chi^2$/NDF: 60.4/32

All: -7.040+/-1.524 $\chi^2$/NDF: 104.2/67

- sign -1.623+/-2.179 $\chi^2$/NDF: 31.7/34

# diff_bpm4ecX_rms vs Slug




Right In: 12572.586+/-3.404 $\chi^2$/NDF: 665026.8/15

Left Out: 8630.622+/-1.682 $\chi^2$/NDF:382920.0/16

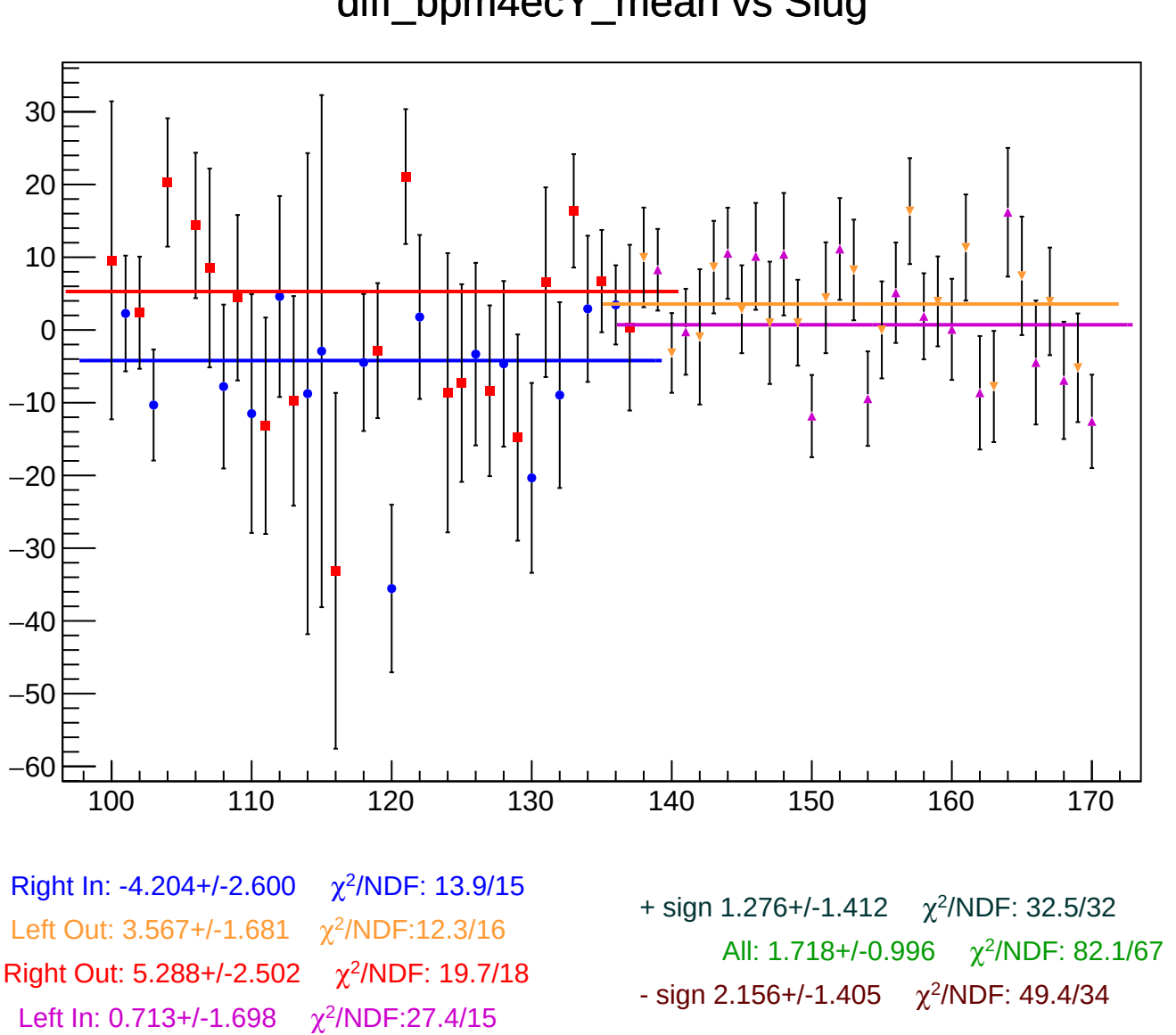
Right Out: 13141.218+/-3.473 $\chi^2$/NDF: 534726.5/18

Left In: 8772.848+/-1.720 $\chi^2$/NDF:297702.1/15

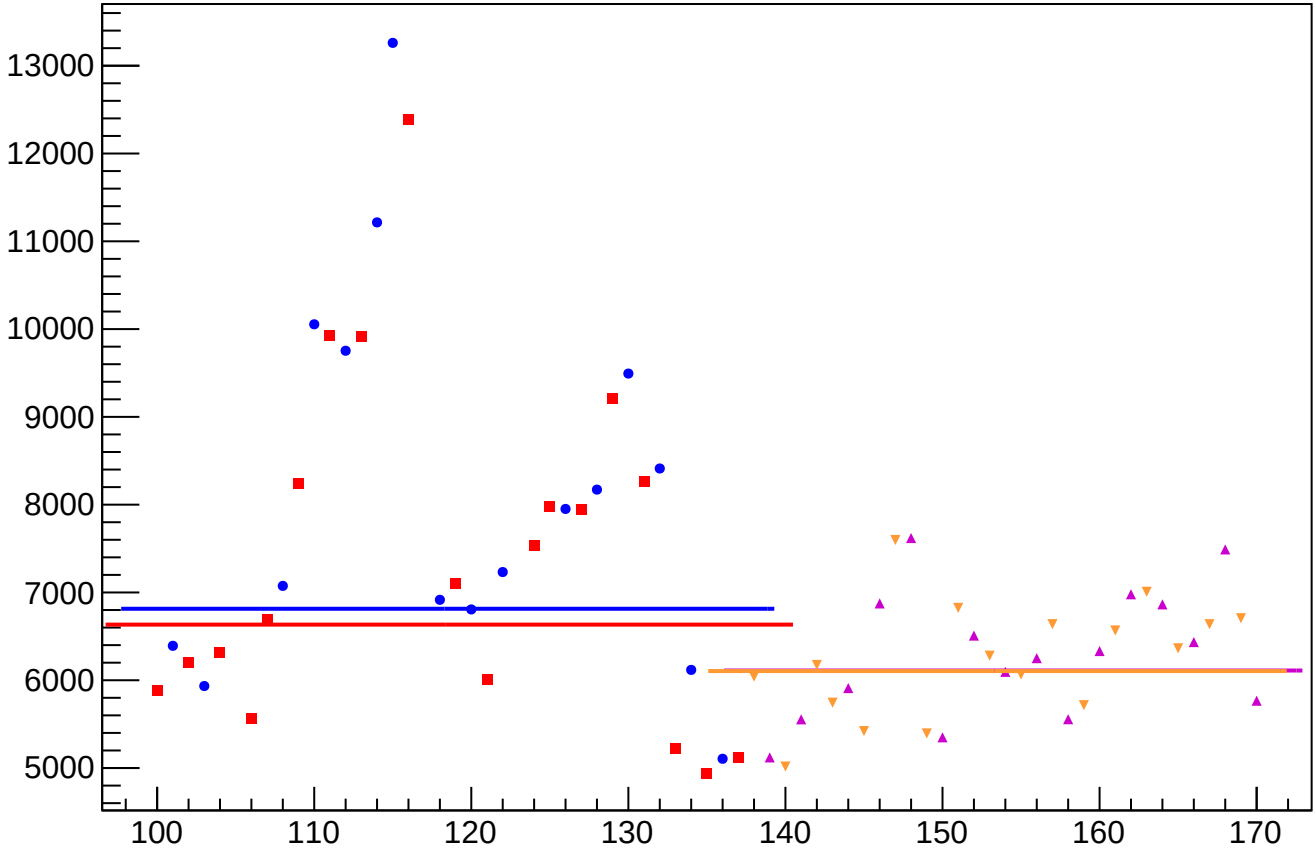
+ sign 9404.257+/-1.508 $\chi^2$/NDF: 2125916.9/32

All: 9516.190+/-1.078 $\chi^2$/NDF: 4240493.5/67

- sign 9633.083+/-1.541 $\chi^2$/NDF: 2103312.2/34


diff_bpm4ecY_mean vs Slug
30
20
10
0
−10
−20
−30
−40
−50
−60
100
110
120
130
140
150
160
170
Right In: -4.204+/-2.600 χ²/NDF: 13.9/15
Left Out: 3.567+/-1.681 χ²/NDF:12.3/16
Right Out: 5.288+/-2.502 χ²/NDF: 19.7/18
Left In: 0.713+/-1.698 χ²/NDF:27.4/15
+ sign 1.276+/-1.412 χ²/NDF: 32.5/32
All: 1.718+/-0.996 χ²/NDF: 82.1/67
- sign 2.156+/-1.405 χ²/NDF: 49.4/34

# diff_bpm4ecY_rms vs Slug




Right In: 6814.282+/-1.839 $\chi^2$/NDF: 674093.4/15

Left Out: 6104.644+/-1.189 $\chi^2$/NDF:302151.2/16

Right Out: 6633.695+/-1.769 $\chi^2$/NDF: 763347.6/18

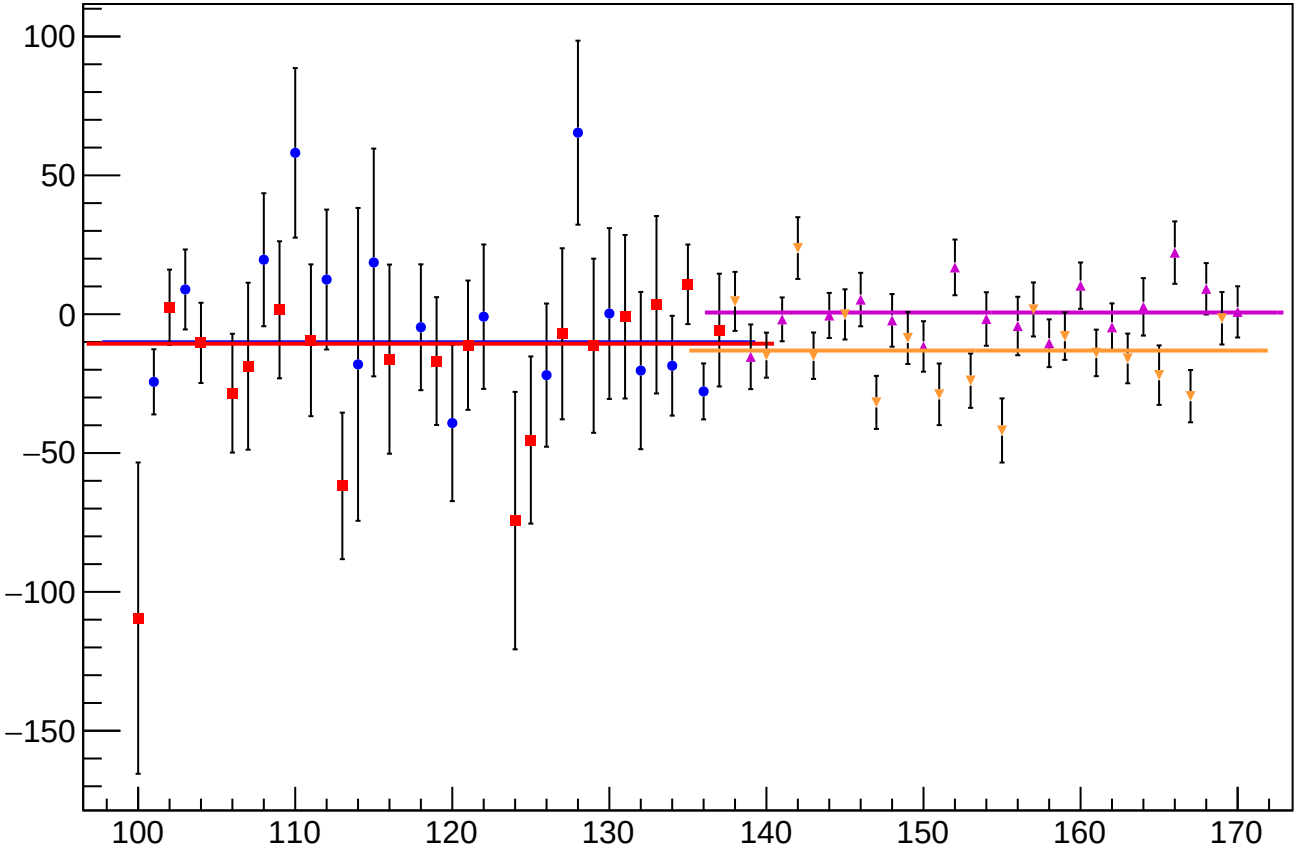
Left In: 6110.751+/-1.201 $\chi^2$/NDF:337401.4/15

+ sign 6313.850+/-0.998 $\chi^2$/NDF: 1081283.1/32

All: 6294.682+/-0.704 $\chi^2$/NDF: 2242577.8/67

- sign 6275.697+/-0.994 $\chi^2$/NDF: 1160561.0/34

# diff_bpm1X_mean vs Slug




Right In: -10.113+/-5.017 $\chi^2$/NDF: 21.3/15

Left Out: -13.082+/-2.299 $\chi^2$/NDF:37.5/16

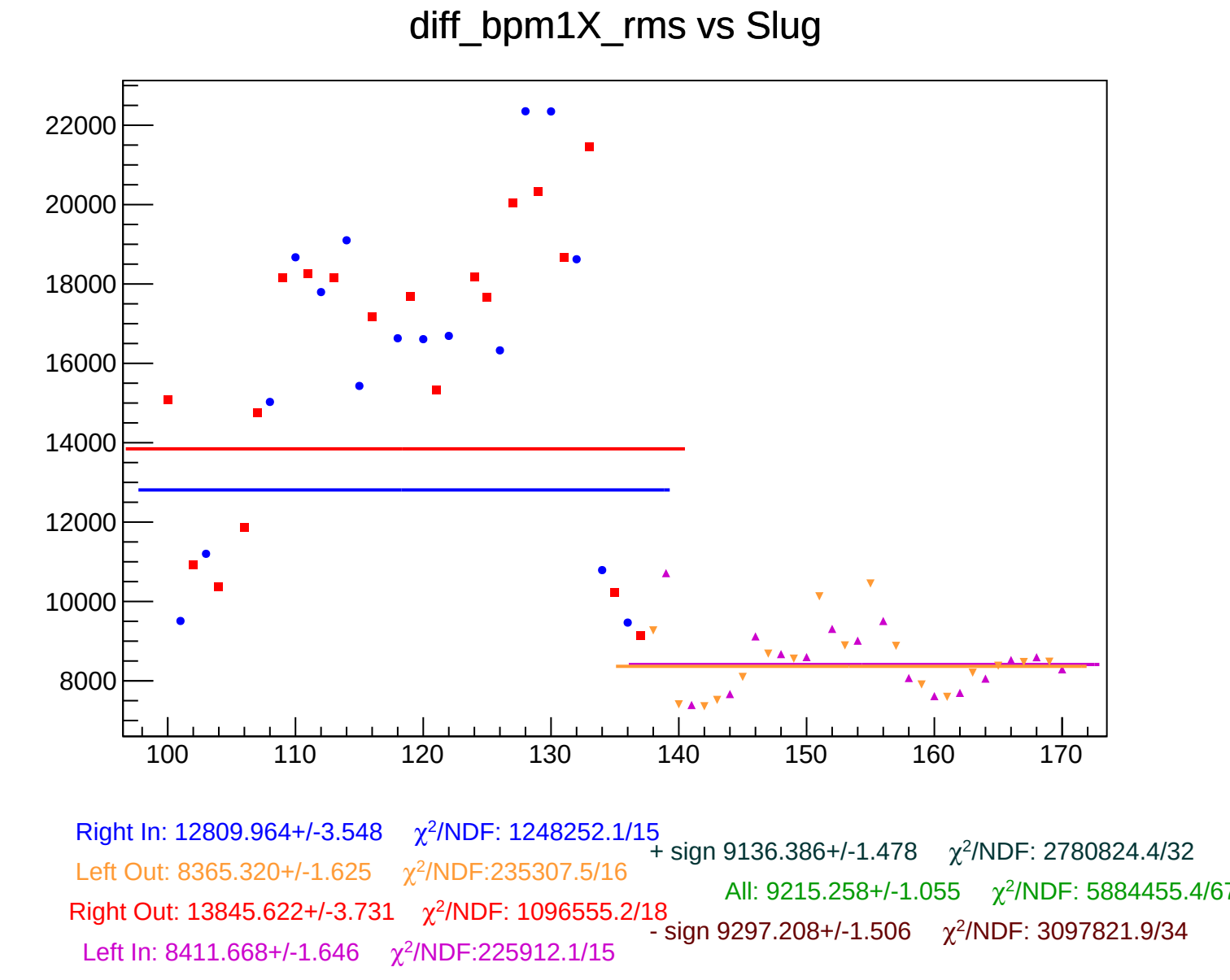
Right Out: -10.624+/-5.277 $\chi^2$/NDF: 14.7/18

Left In: 0.609+/-2.328 $\chi^2$/NDF:15.0/15

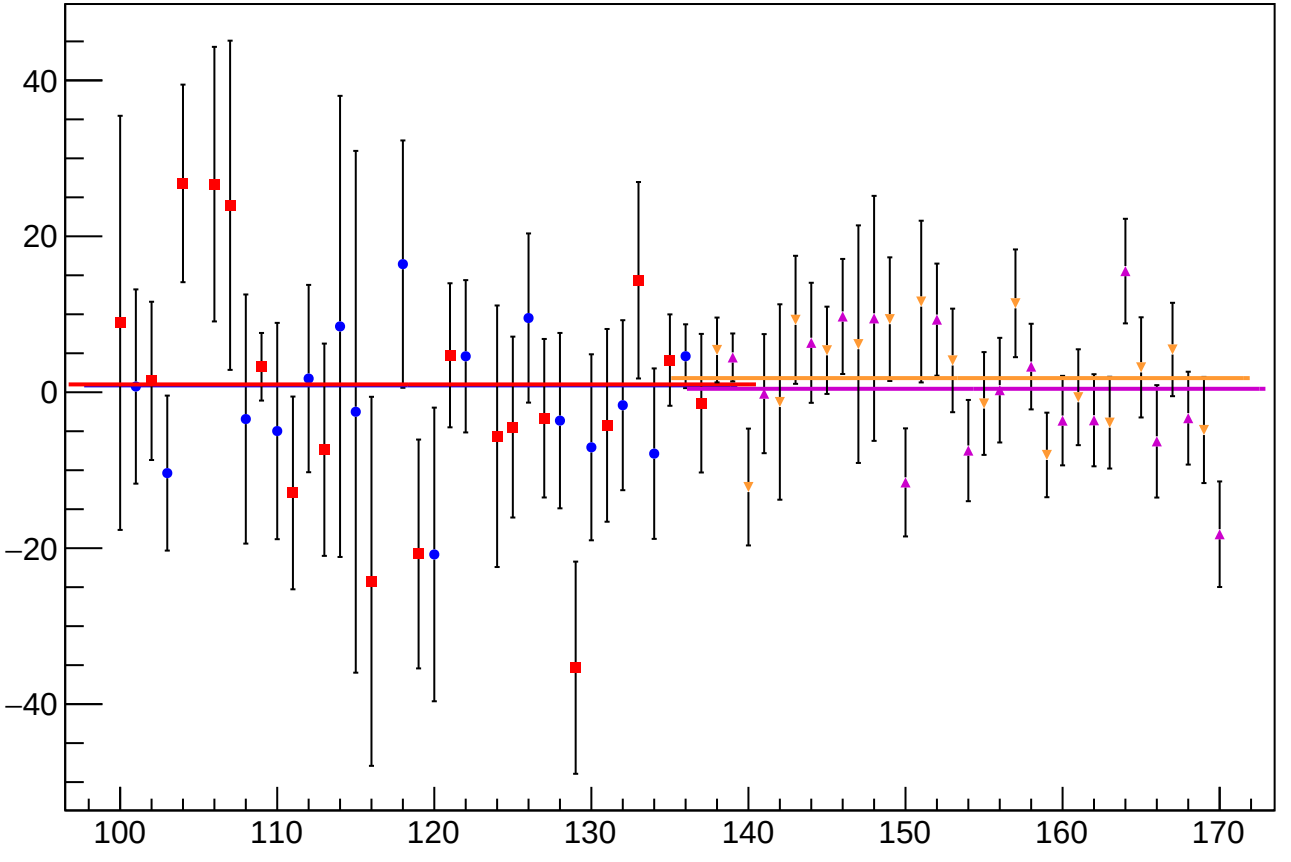
+ sign -12.567+/-2.090 $\chi^2$/NDF: 59.0/32

All: -7.003+/-1.492 $\chi^2$/NDF: 107.0/67

- sign -1.222+/-2.130 $\chi^2$/NDF: 33.5/34


diff_bpm1X_rms vs Slug
22000
20000
18000
16000
14000
12000
10000
8000
100
110
120
130
140
150
160
170
Right In: 12809.964+/-3.548 χ²/NDF: 1248252.1/15
Left Out: 8365.320+/-1.625 χ²/NDF:235307.5/16
Right Out: 13845.622+/-3.731 χ²/NDF: 1096555.2/18
Left In: 8411.668+/-1.646 χ²/NDF:225912.1/15
+ sign 9136.386+/-1.478 χ²/NDF: 2780824.4/32
All: 9215.258+/-1.055 χ²/NDF: 5884455.4/67
- sign 9297.208+/-1.506 χ²/NDF: 3097821.9/34

# diff_bpm1Y_mean vs Slug




Right In: 0.882+/-2.566 $\chi^2$/NDF: 6.8/15

Left Out: 1.815+/-1.605 $\chi^2$/NDF:15.5/16

Right Out: 1.006+/-2.314 $\chi^2$/NDF: 22.3/18

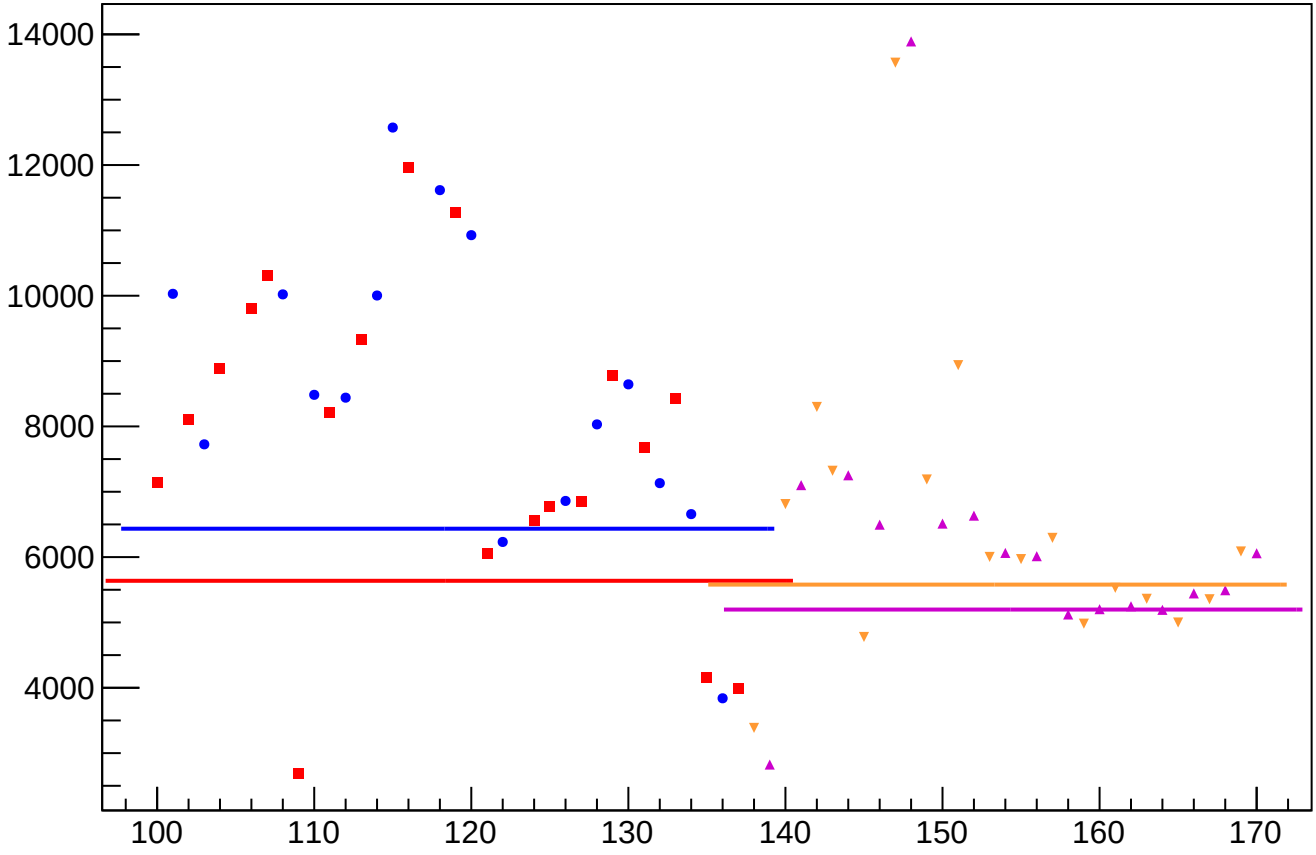
Left In: 0.443+/-1.521 $\chi^2$/NDF:25.4/15

+ sign 1.553+/-1.361 $\chi^2$/NDF: 22.4/32

All: 1.051+/-0.929 $\chi^2$/NDF: 70.4/67

- sign 0.613+/-1.271 $\chi^2$/NDF: 47.8/34

# diff_bpm1Y_rms vs Slug




Right In: 6434.559+/-1.814 $\chi^2$/NDF: 1750609.4/15

Left Out: 5579.056+/-1.135 $\chi^2$/NDF:1772245.2/16

Right Out: 5637.344+/-1.636 $\chi^2$/NDF: 2580013.6/18

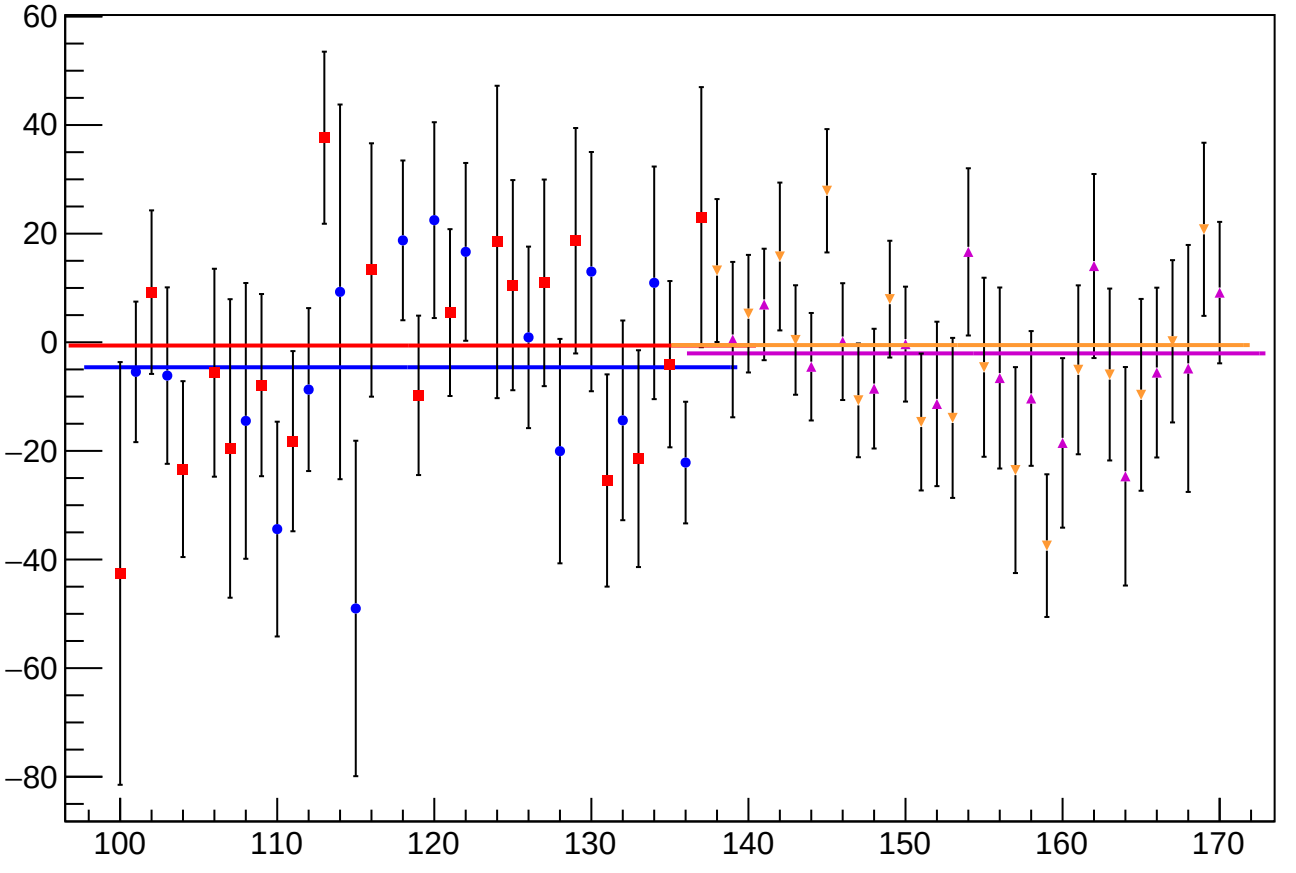
Left In: 5197.281+/-1.076 $\chi^2$/NDF:2390858.4/15

+ sign 5819.699+/-0.962 $\chi^2$/NDF: 3682622.7/32

All: 5558.204+/-0.657 $\chi^2$/NDF: 8842250.7/67

- sign 5330.086+/-0.899 $\chi^2$/NDF: 5021380.4/34

# diff_bpm11X_mean vs Slug




Right In: -4.602+/-4.355 $\chi^2$/NDF: 15.8/15

Left Out: -0.518+/-3.195 $\chi^2$/NDF:24.4/16

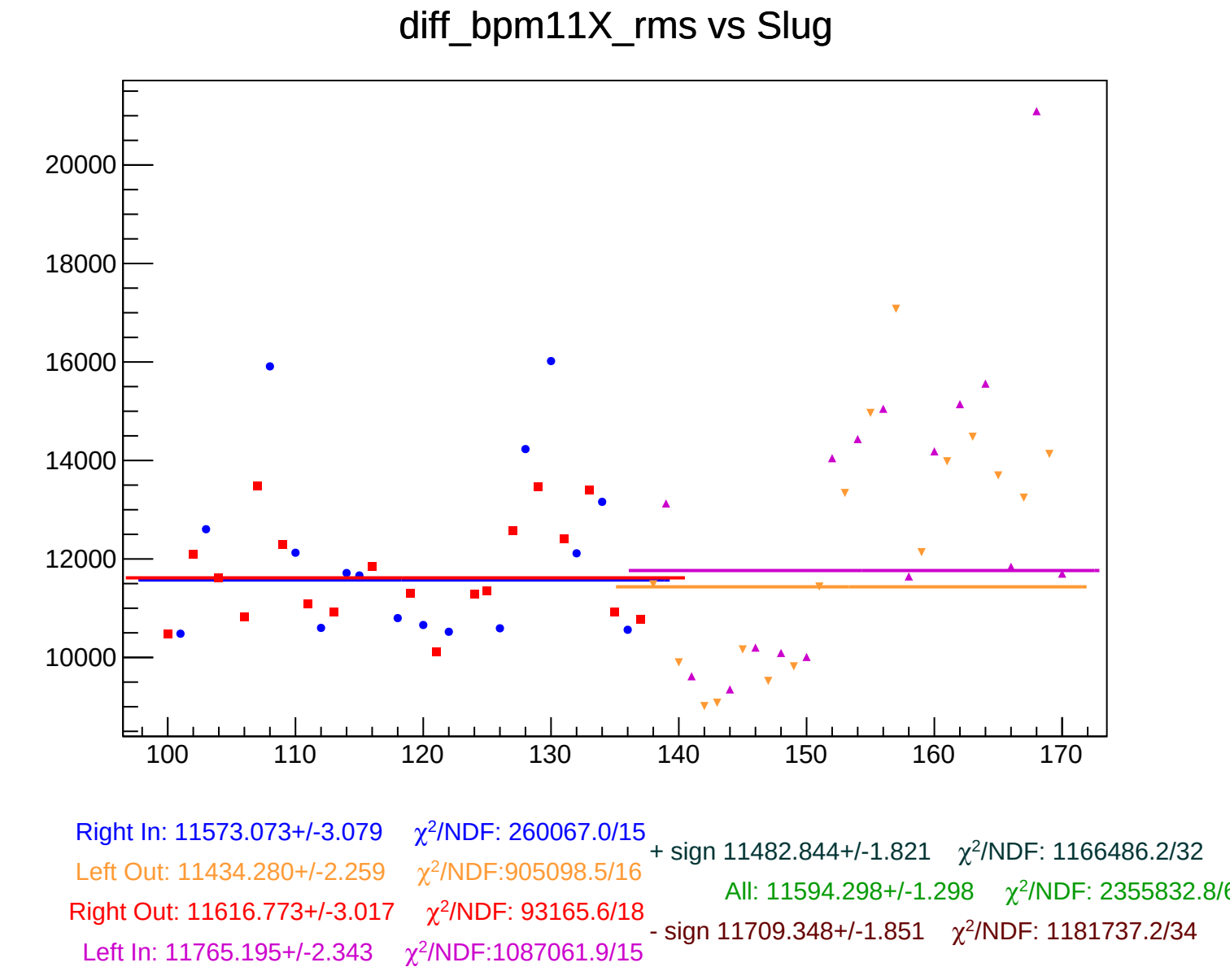
Right Out: -0.600+/-4.266 $\chi^2$/NDF: 17.9/18

Left In: -2.046+/-3.314 $\chi^2$/NDF:7.7/15

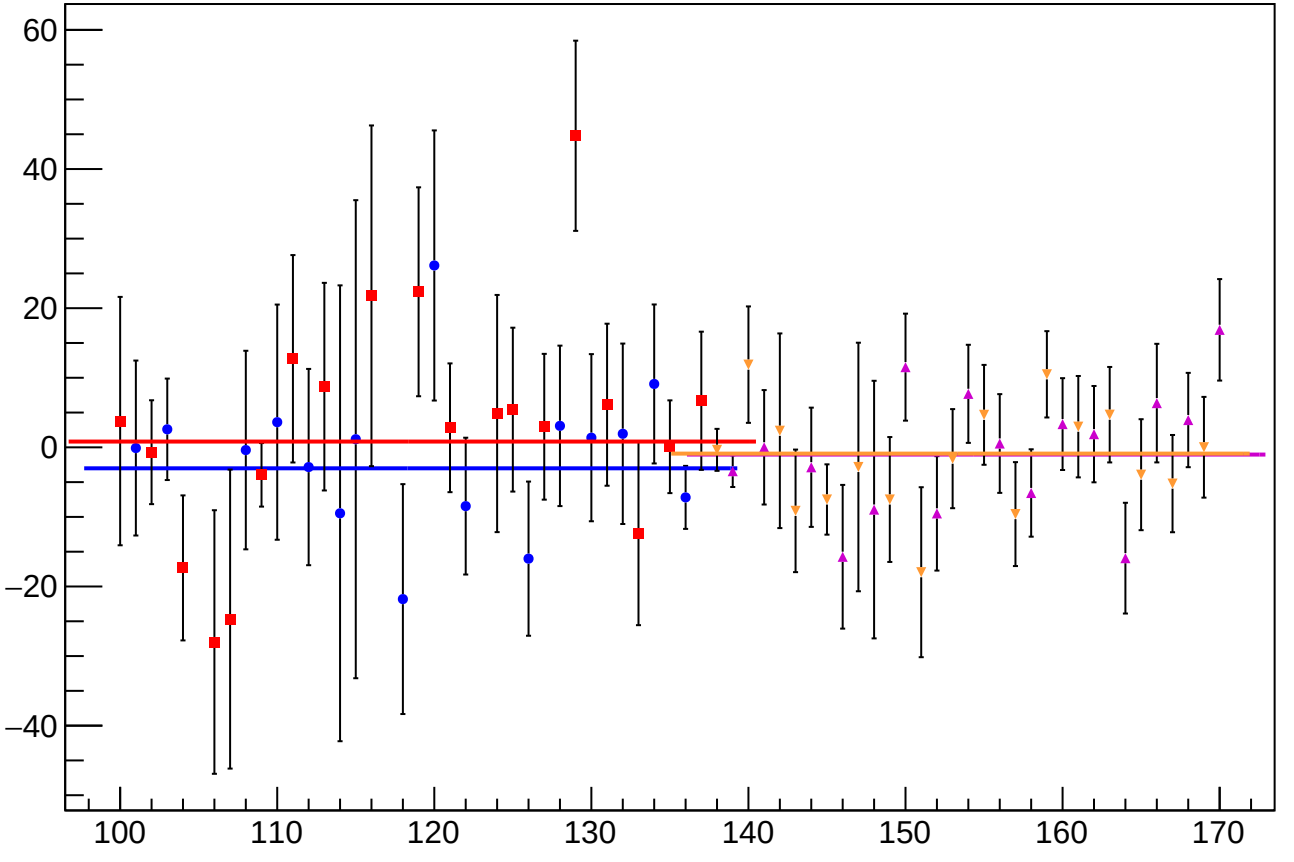
+ sign -1.947+/-2.576 $\chi^2$/NDF: 40.8/32

All: -1.728+/-1.836 $\chi^2$/NDF: 66.5/67

- sign -1.502+/-2.617 $\chi^2$/NDF: 25.7/34


diff_bpm11X_rms vs Slug
20000
18000
16000
14000
12000
10000
100
110
120
130
140
150
160
170
Right In: 11573.073+/-3.079 χ²/NDF: 260067.0/15
Left Out: 11434.280+/-2.259 χ²/NDF:905098.5/16
Right Out: 11616.773+/-3.017 χ²/NDF: 93165.6/18
Left In: 11765.195+/-2.343 χ²/NDF:1087061.9/15
+ sign 11482.844+/-1.821 χ²/NDF: 1166486.2/32
All: 11594.298+/-1.298 χ²/NDF: 2355832.8/6
- sign 11709.348+/-1.851 χ²/NDF: 1181737.2/34

# diff_bpm11Y_mean vs Slug




Right In: -3.014+/-2.654 $\chi^2$/NDF: 8.7/15

Left Out: -0.902+/-1.618 $\chi^2$/NDF:14.3/16

Right Out: 0.831+/-2.352 $\chi^2$/NDF: 23.8/18

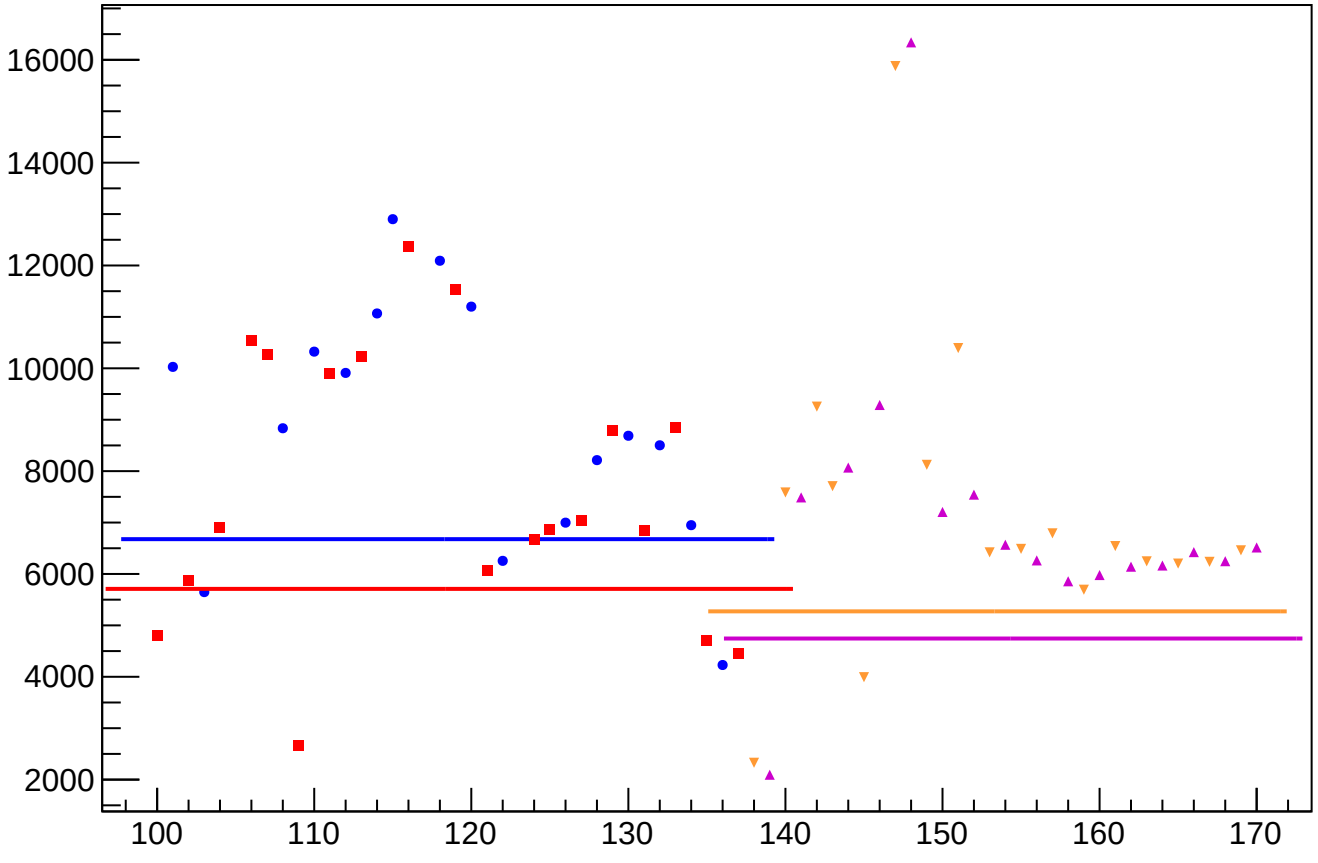
Left In: -1.040+/-1.501 $\chi^2$/NDF:20.9/15

+ sign -1.474+/-1.382 $\chi^2$/NDF: 23.4/32

All: -0.943+/-0.933 $\chi^2$/NDF: 68.9/67

- sign -0.498+/-1.265 $\chi^2$/NDF: 45.2/34

# diff_bpm11Y_rms vs Slug




Right In: 6676.920+/-1.877 $\chi^2$/NDF: 1572864.3/15

Left Out: 5272.682+/-1.144 $\chi^2$/NDF:4180048.1/16

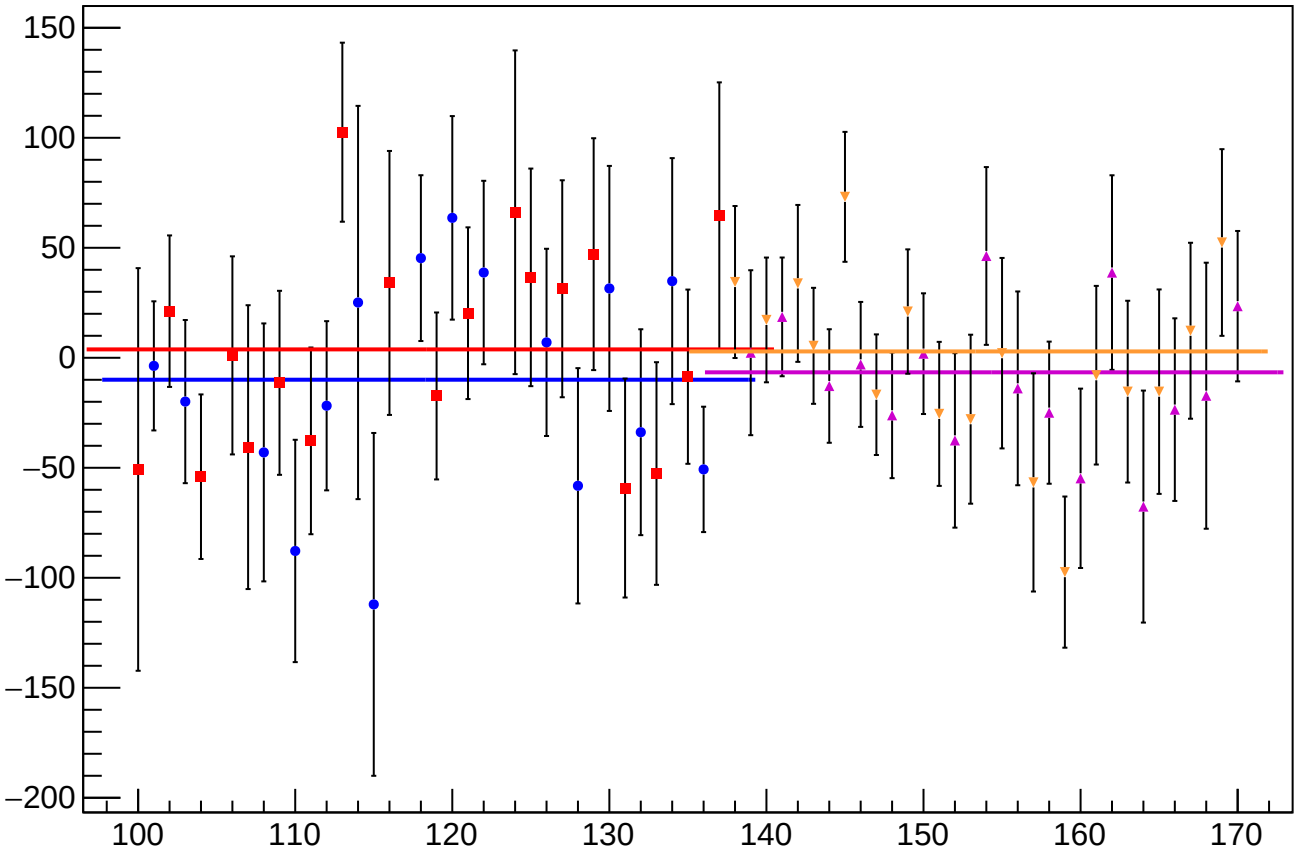
Right Out: 5709.821+/-1.663 $\chi^2$/NDF: 2301039.5/18

Left In: 4744.311+/-1.061 $\chi^2$/NDF:5629773.1/15

+ sign 5653.242+/-0.977 $\chi^2$/NDF: 6161084.4/32

All: 5310.810+/-0.660 $\chi^2$/NDF: 14557333.6/

- sign 5023.721+/-0.895 $\chi^2$/NDF: 8170388.7/34




Right In: -9.969+/-10.836 $\chi^2$/NDF: 15.3/15

Left Out: 2.889+/-8.371 $\chi^2$/NDF:21.6/16

Right Out: 3.814+/-10.636 $\chi^2$/NDF: 17.3/18

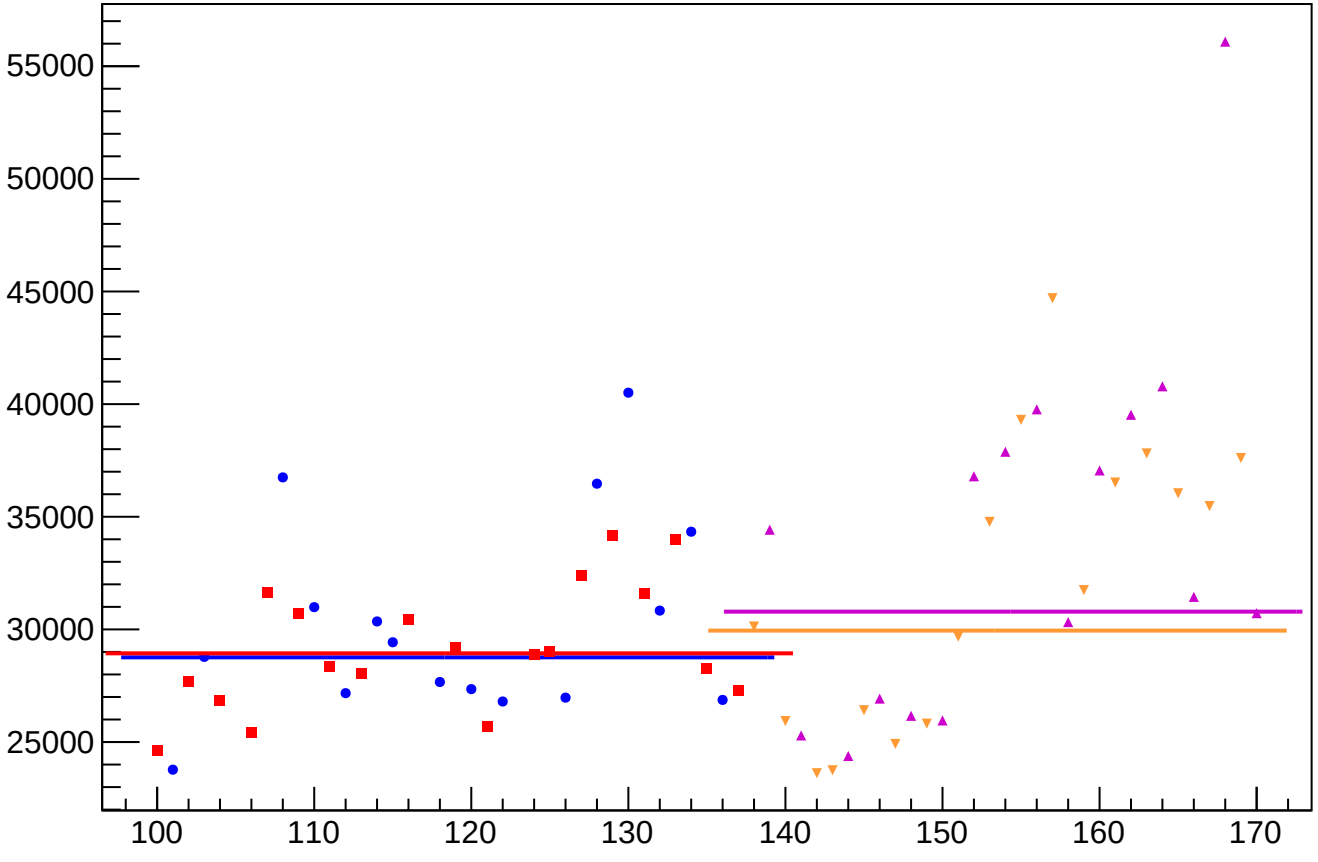
Left In: -6.607+/-8.676 $\chi^2$/NDF:9.0/15

+ sign -1.916+/-6.625 $\chi^2$/NDF: 37.8/32

All: -2.176+/-4.719 $\chi^2$/NDF: 64.7/67

- sign -2.443+/-6.723 $\chi^2$/NDF: 26.9/34

# diff_bpm12X_rms vs Slug




Right In: 28759.090+/-7.662 $\chi^2$/NDF: 277639.9/15

Left Out: 29946.685+/-5.919 $\chi^2$/NDF:922753.1/16

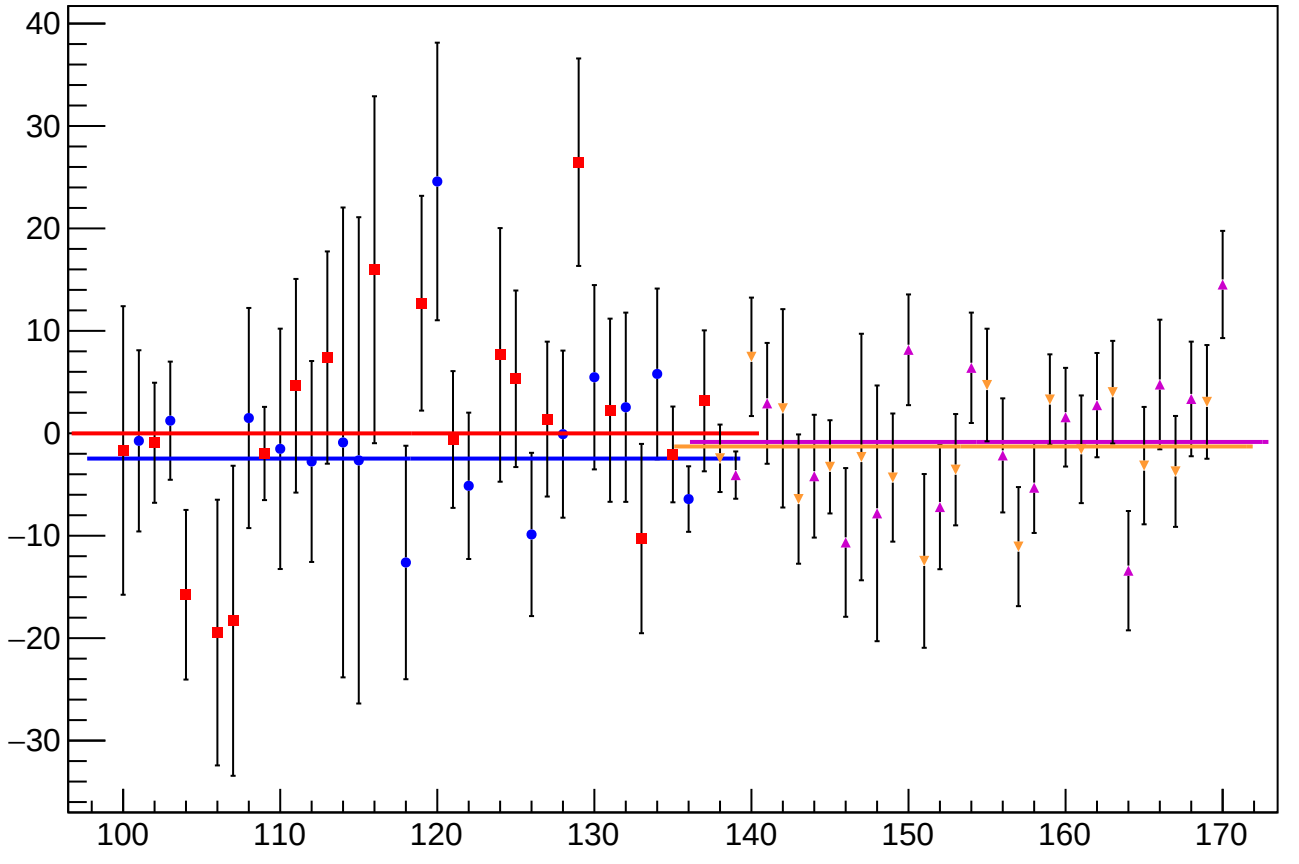
Right Out: 28937.633+/-7.521 $\chi^2$/NDF: 106266.0/18

Left In: 30787.672+/-6.135 $\chi^2$/NDF:1115591.5/15

+ sign 29502.844+/-4.684 $\chi^2$/NDF: 1215437.1/32

All: 29771.636+/-3.337 $\chi^2$/NDF: 2480310.9/6

- sign 30048.487+/-4.754 $\chi^2$/NDF: 1258189.8/34




Right In: -2.467+/-1.916 $\chi^2$/NDF: 10.0/15

Left Out: -1.287+/-1.320 $\chi^2$/NDF:12.7/16

Right Out: -0.009+/-1.828 $\chi^2$/NDF: 20.0/18

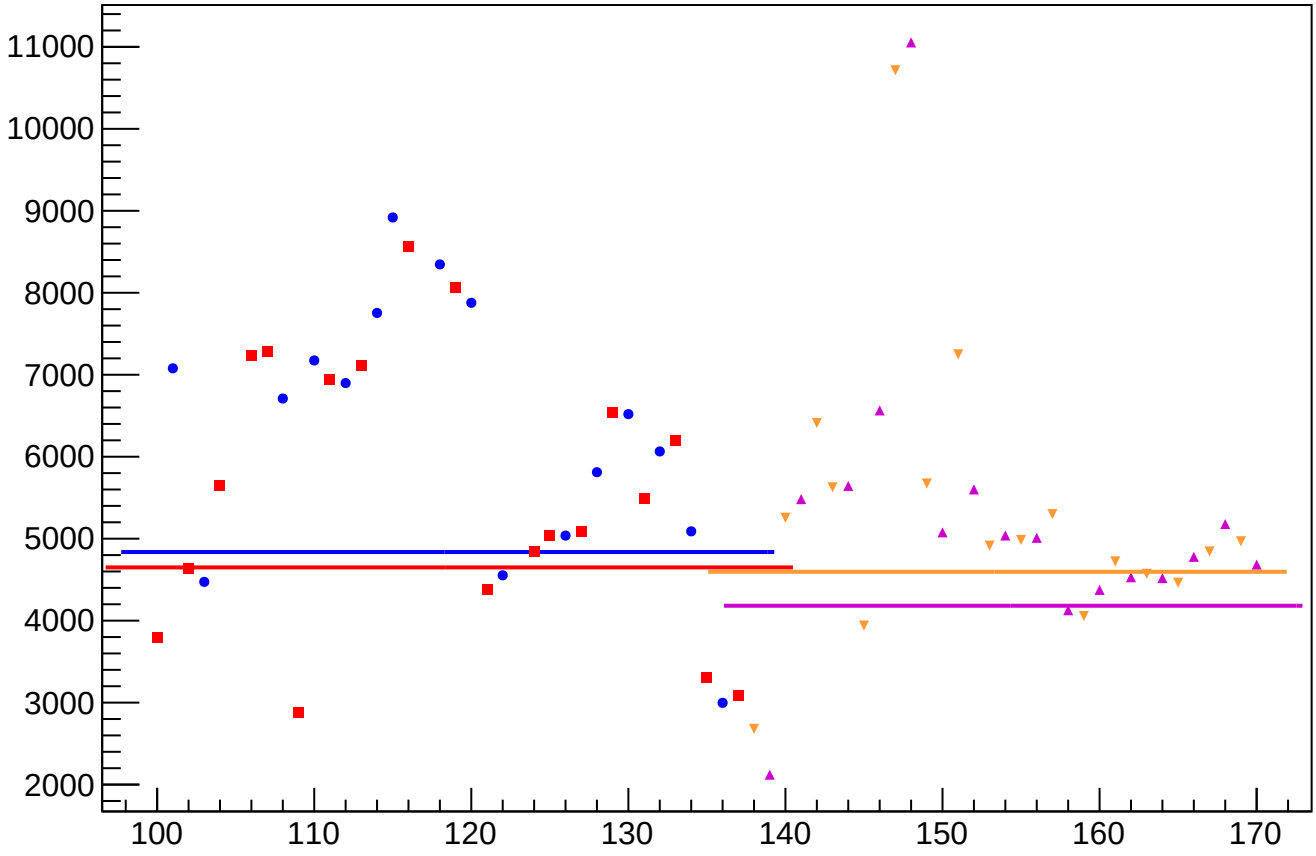
Left In: -0.845+/-1.237 $\chi^2$/NDF:26.9/15

+ sign -1.667+/-1.087 $\chi^2$/NDF: 23.0/32

All: -1.093+/-0.746 $\chi^2$/NDF: 70.6/67

- sign -0.582+/-1.025 $\chi^2$/NDF: 47.1/34

# diff_bpm12Y_rms vs Slug




Right In: 4837.176+/-1.355 $\chi^2$/NDF: 1547766.9/15

Left Out: 4596.159+/-0.934 $\chi^2$/NDF:1732239.7/16

Right Out: 4649.613+/-1.293 $\chi^2$/NDF: 1434548.7/18

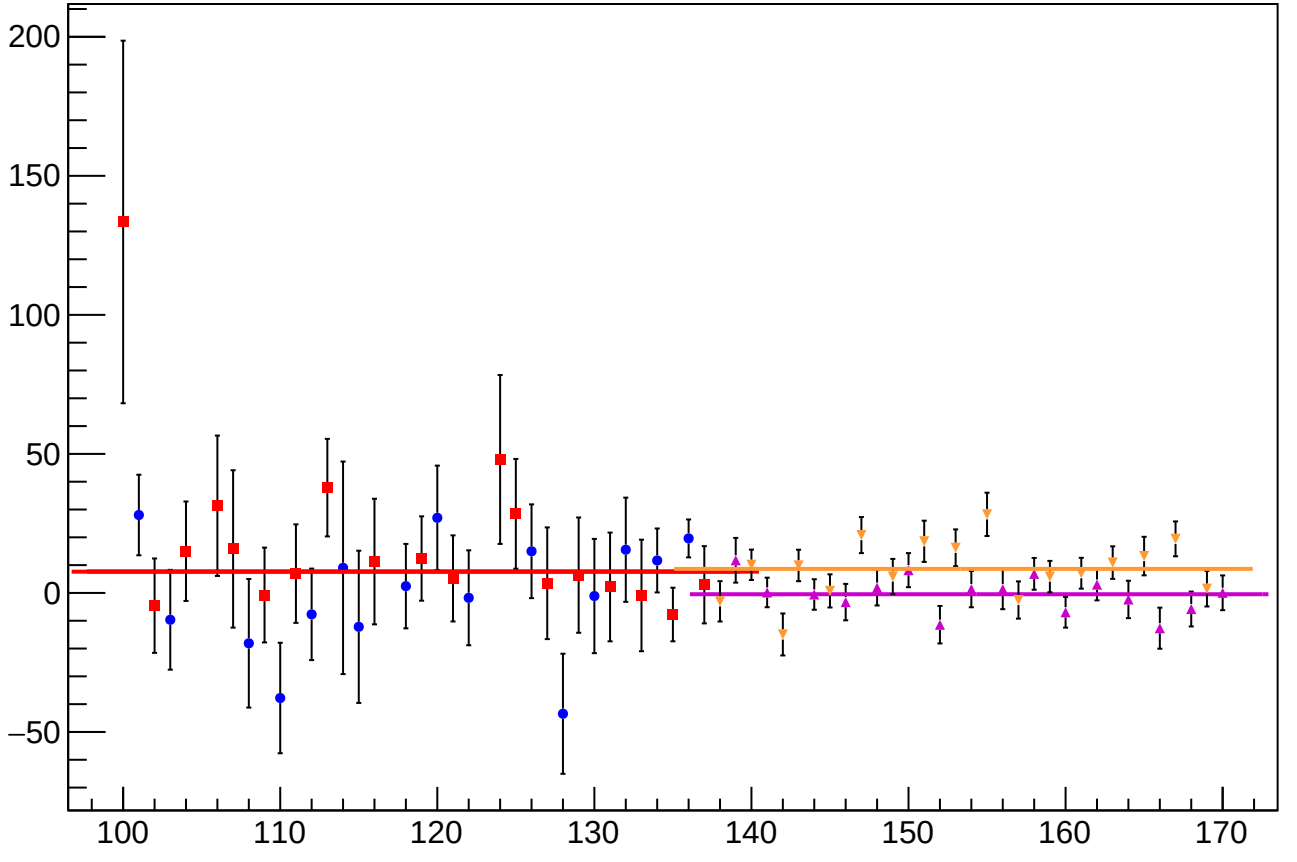
Left In: 4182.248+/-0.875 $\chi^2$/NDF:3009789.2/15

+ sign 4673.793+/-0.769 $\chi^2$/NDF: 3301467.9/32

All: 4491.218+/-0.527 $\chi^2$/NDF: 7941952.2/67

- sign 4329.061+/-0.725 $\chi^2$/NDF: 4533991.3/34

# diff_bpm16X_mean vs Slug




Right In: 7.699+/-3.820 $\chi^2$/NDF: 21.6/15

Left Out: 8.656+/-1.540 $\chi^2$/NDF:35.3/16

Right Out: 7.650+/-4.099 $\chi^2$/NDF: 14.6/18

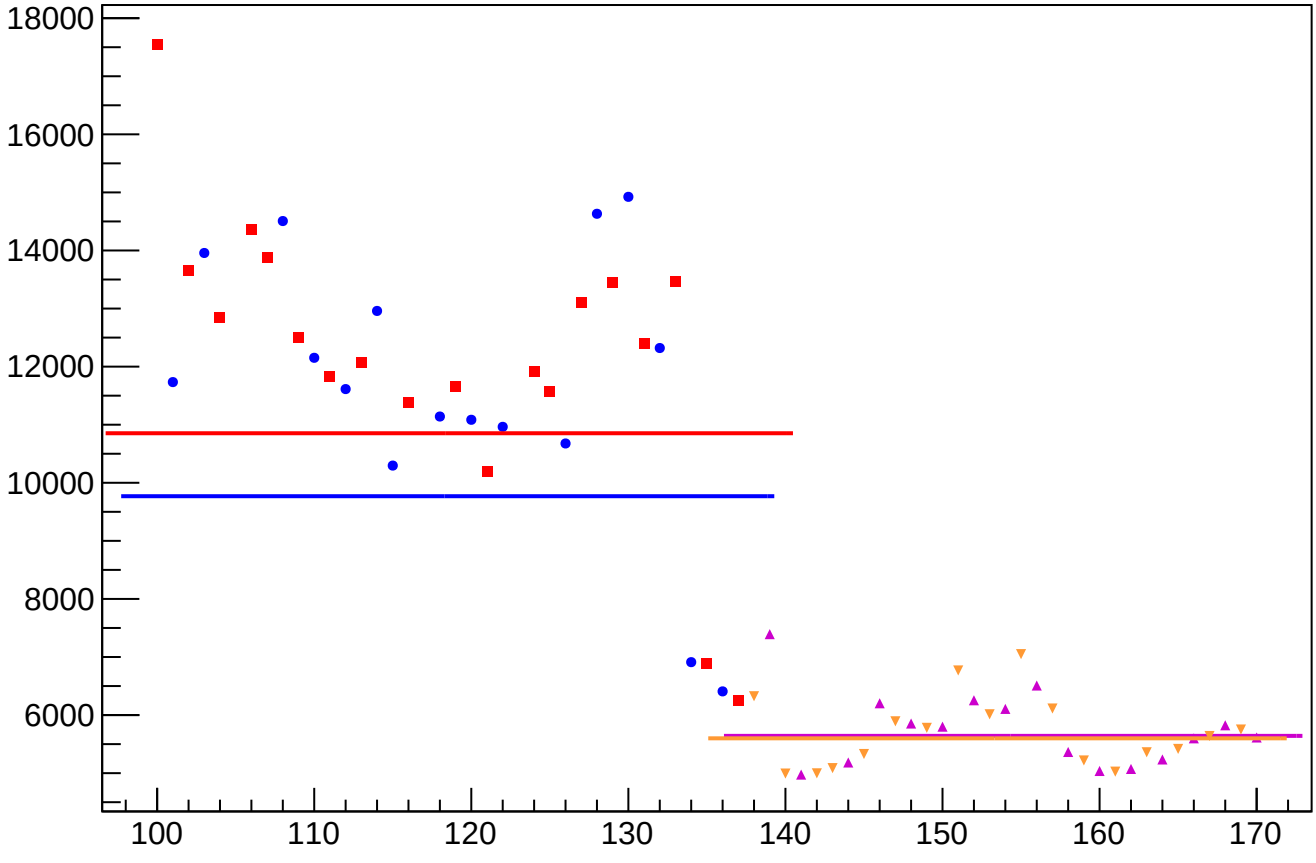
Left In: -0.468+/-1.563 $\chi^2$/NDF:14.4/15

+ sign 8.522+/-1.428 $\chi^2$/NDF: 56.9/32

All: 4.631+/-1.021 $\chi^2$/NDF: 104.5/67

- sign 0.562+/-1.460 $\chi^2$/NDF: 32.4/34

# diff_bpm16X_rms vs Slug




Right In: 9768.772+/-2.701 $\chi^2$/NDF: 1213694.6/15

Left Out: 5599.788+/-1.089 $\chi^2$/NDF:258691.6/16

Right Out: 10852.989+/-2.899 $\chi^2$/NDF: 874500.2/18

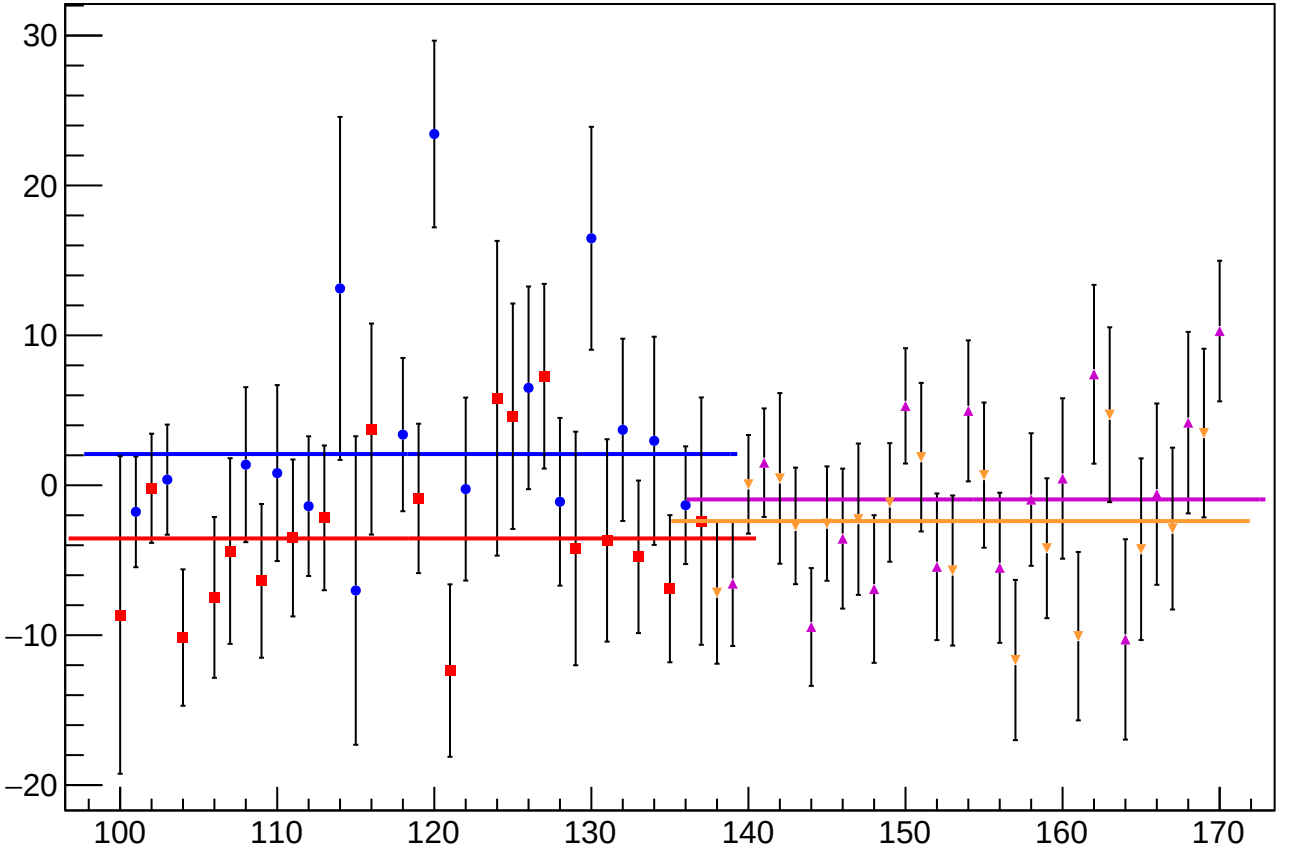
Left In: 5642.068+/-1.105 $\chi^2$/NDF:272270.4/15

\+ sign 6182.487+/-1.010 $\chi^2$/NDF: 3521804.7/32

All: 6241.628+/-0.722 $\chi^2$/NDF: 7497261.7/67

\- sign 6303.482+/-1.033 $\chi^2$/NDF: 3968439.1/34

# diff_bpm16Y_mean vs Slug




Right In: 2.082+/-1.345 $\chi^2$/NDF: 21.0/15

Left Out: -2.387+/-1.144 $\chi^2$/NDF:11.2/16

Right Out: -3.546+/-1.304 $\chi^2$/NDF: 13.4/18

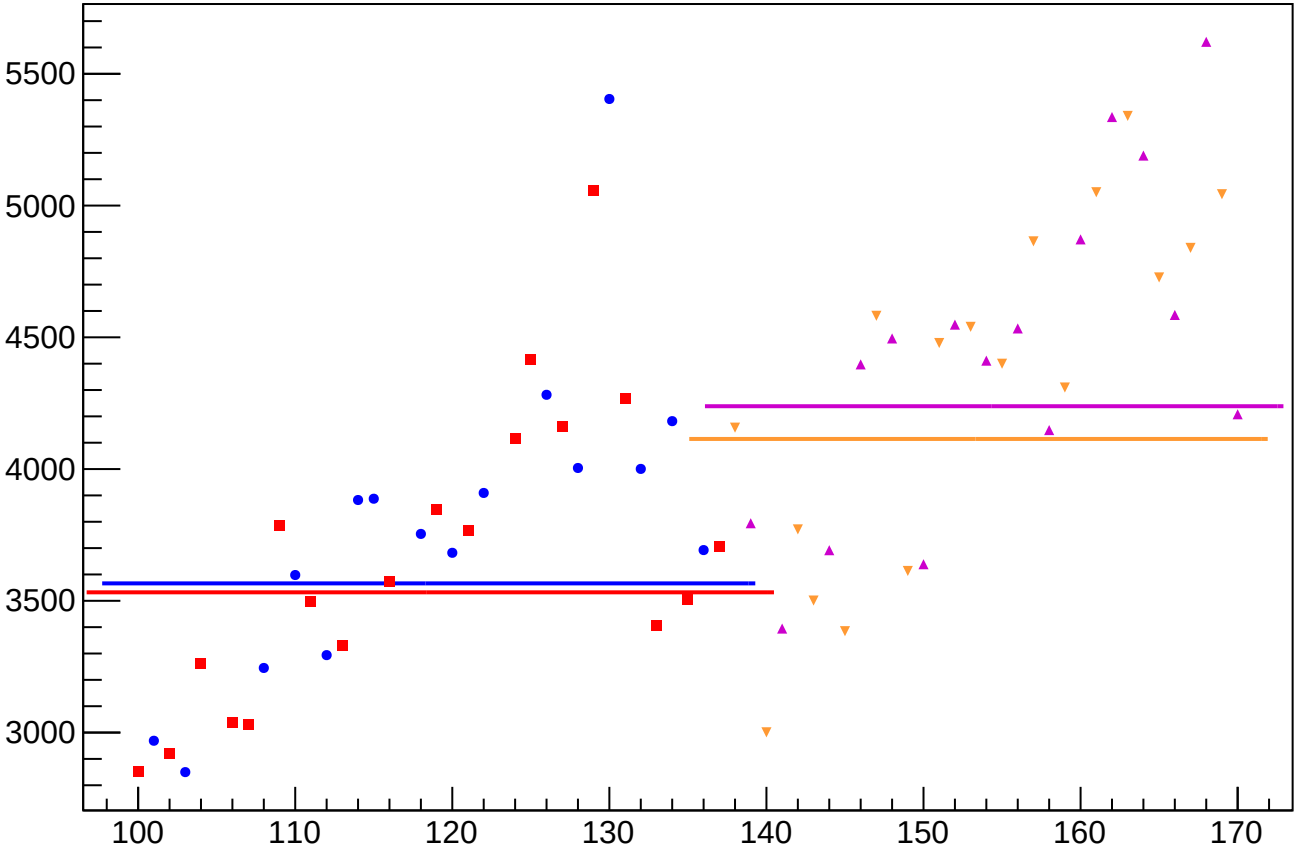
Left In: -0.944+/-1.181 $\chi^2$/NDF:25.1/15

+ sign -0.511+/-0.871 $\chi^2$/NDF: 38.6/32

All: -1.310+/-0.618 $\chi^2$/NDF: 80.9/67

- sign -2.117+/-0.875 $\chi^2$/NDF: 40.7/34

# diff_bpm16Y_rms vs Slug




Right In: 3566.150+/-0.951 $\chi^2$/NDF: 341105.5/15

Left Out: 4114.280+/-0.809 $\chi^2$/NDF:738563.7/16

Right Out: 3532.189+/-0.922 $\chi^2$/NDF: 278693.0/18

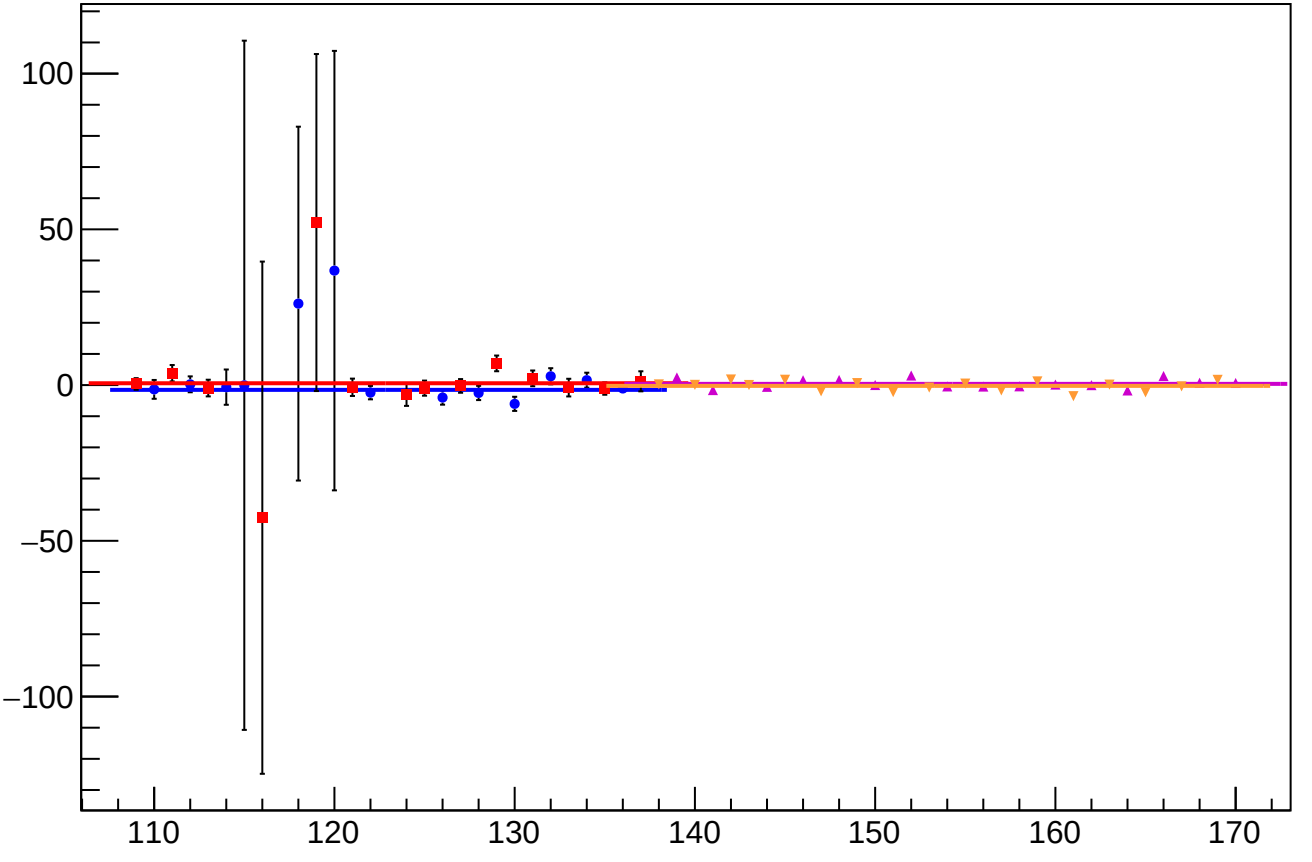
Left In: 4238.505+/-0.835 $\chi^2$/NDF:492227.7/15

+ sign 3884.266+/-0.616 $\chi^2$/NDF: 1272356.4/32

All: 3902.178+/-0.437 $\chi^2$/NDF: 2367271.7/67

- sign 3920.252+/-0.619 $\chi^2$/NDF: 1093217.9/34

# diff_bpm1p02bX_mean vs Slug




Right In: -1.536+/-0.733 $\chi^2$/NDF: 11.1/12

Left Out: -0.255+/-0.278 $\chi^2$/NDF:29.3/16

Right Out: 0.588+/-0.717 $\chi^2$/NDF: 12.7/13

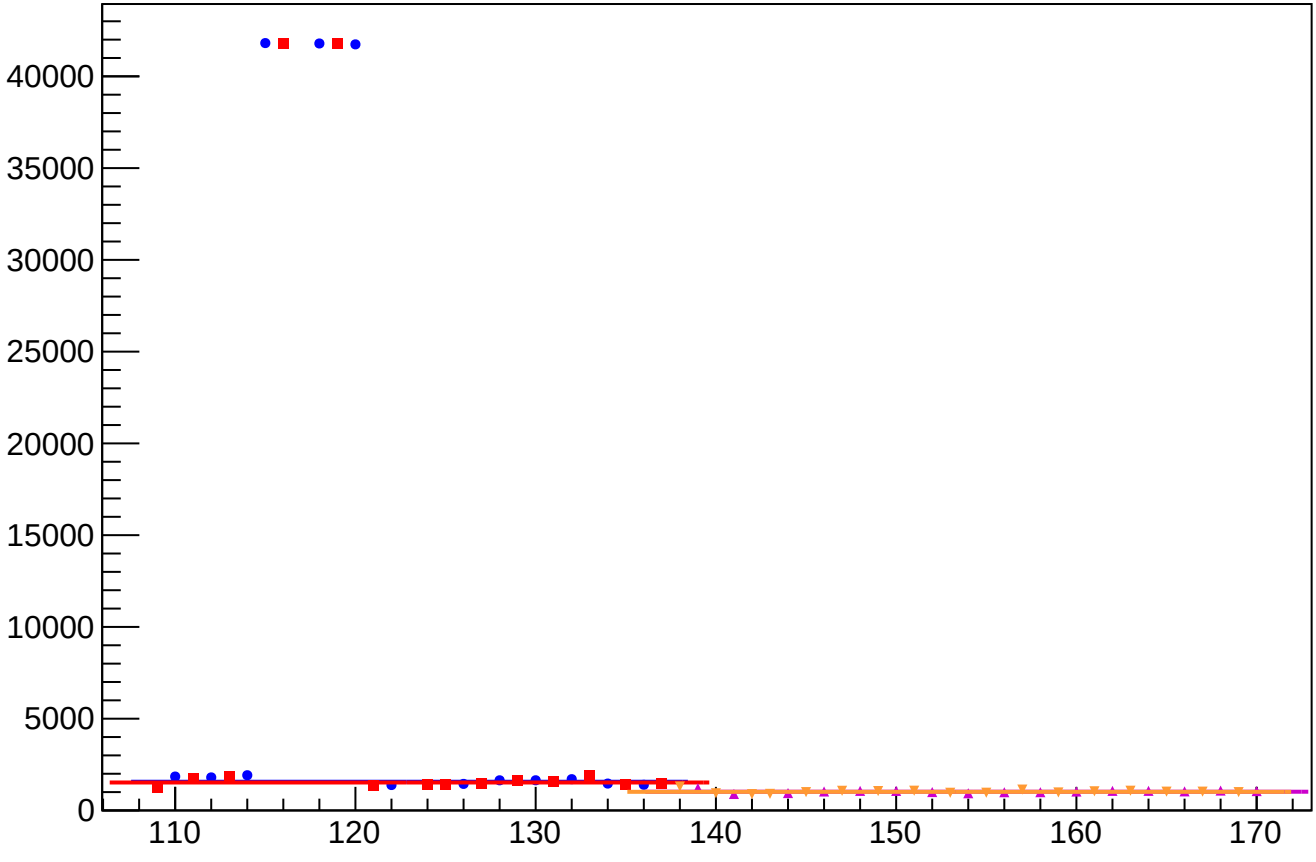
Left In: 0.389+/-0.282 $\chi^2$/NDF:24.0/15

+ sign -0.417+/-0.260 $\chi^2$/NDF: 43.1/29

All: -0.004+/-0.185 $\chi^2$/NDF: 84.9/59

- sign 0.416+/-0.262 $\chi^2$/NDF: 36.8/29

# diff_bpm1p02bX_rms vs Slug




Right In: 1564.307+/-0.518 $\chi^2$/NDF: 2016990.6/12

Left Out: 1015.137+/-0.197 $\chi^2$/NDF:177939.5/16

Right Out: 1523.678+/-0.507 $\chi^2$/NDF: 1739658.0/13

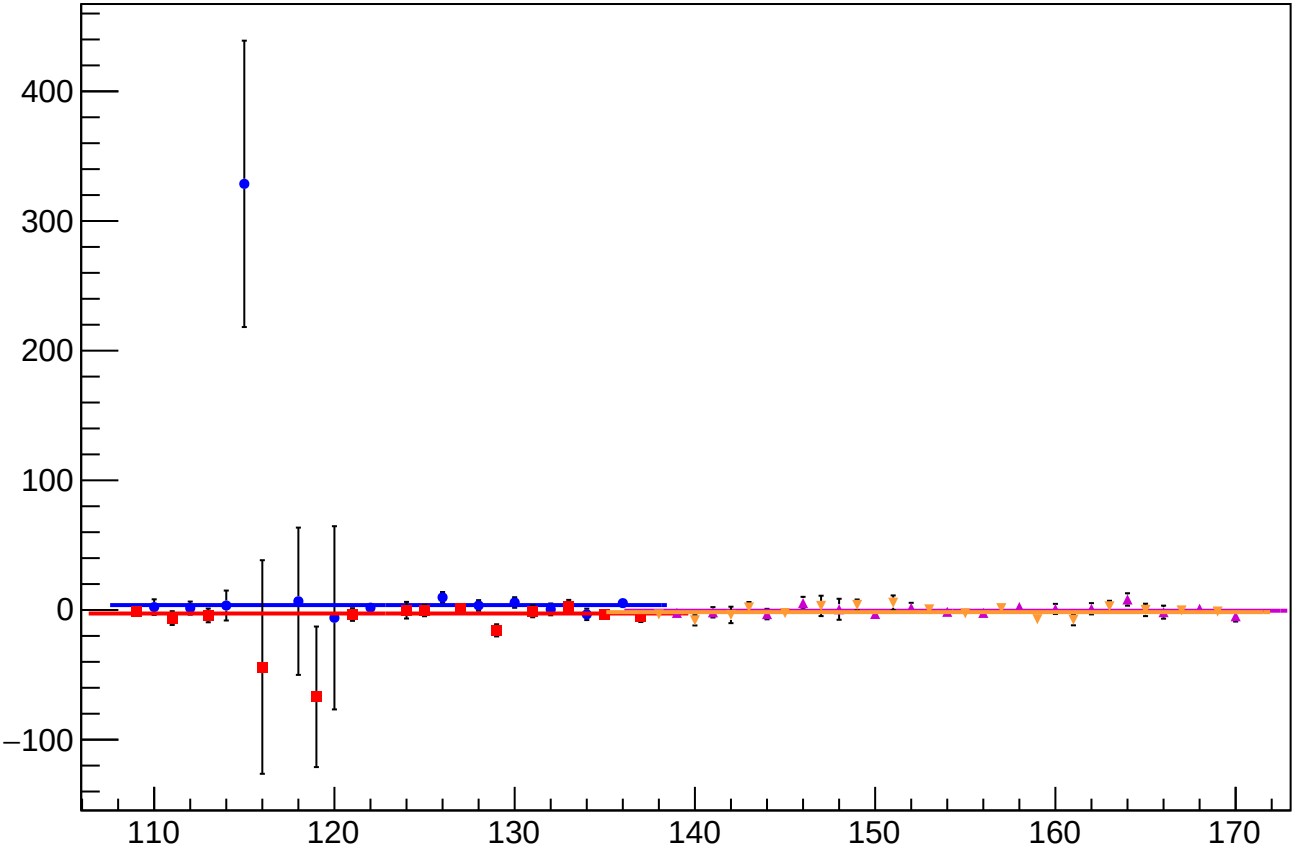
Left In: 1020.544+/-0.199 $\chi^2$/NDF:123836.5/15

+ sign 1084.427+/-0.184 $\chi^2$/NDF: 3176679.4/29

All: 1086.149+/-0.131 $\chi^2$/NDF: 5893107.5/59

- sign 1087.899+/-0.186 $\chi^2$/NDF: 2716251.6/29

# diff_bpm1p02bY_mean vs Slug




Right In: 3.777+/-1.248 $\chi^2$/NDF: 15.2/12

Left Out: -1.655+/-0.933 $\chi^2$/NDF:14.2/16

Right Out: -2.709+/-1.211 $\chi^2$/NDF: 13.6/13

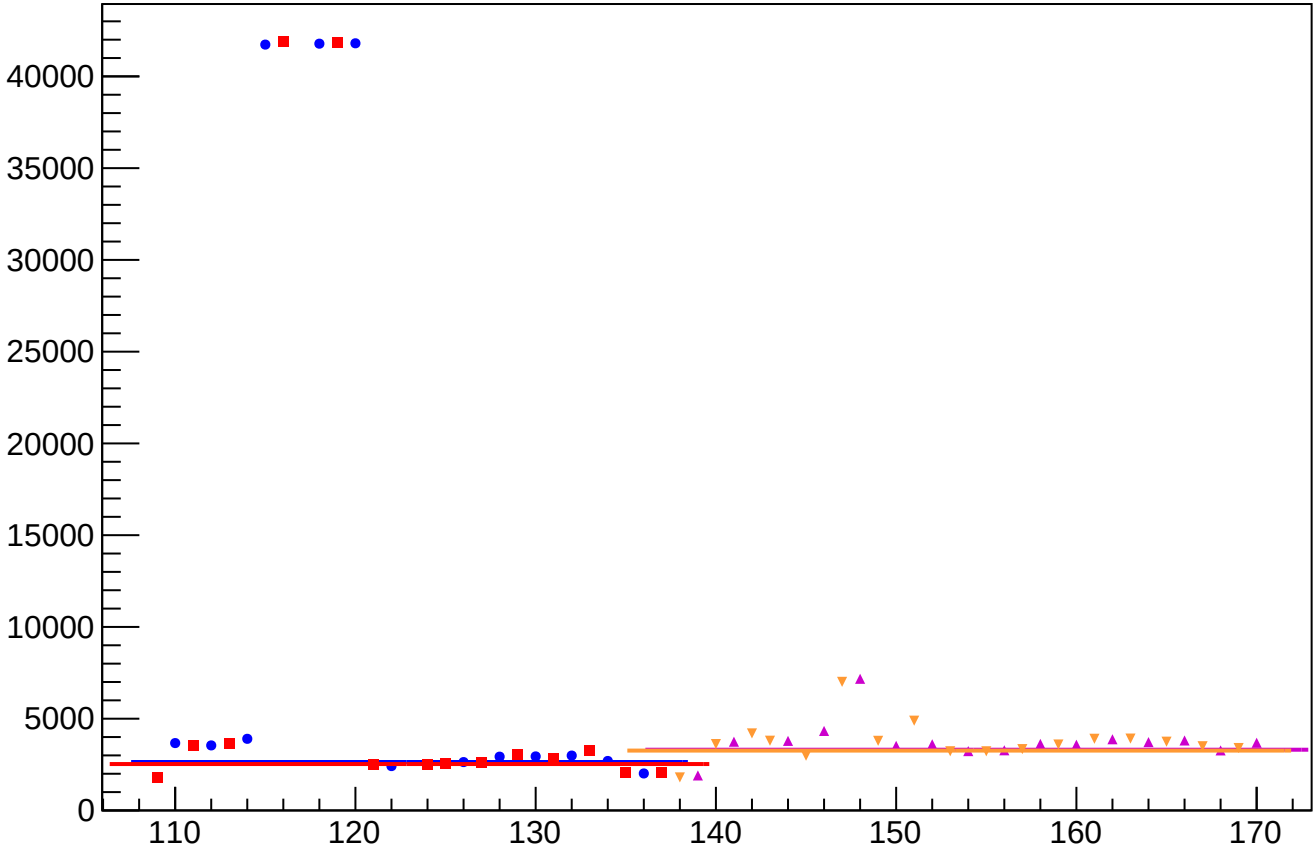
Left In: -0.553+/-0.949 $\chi^2$/NDF:9.1/15

+ sign 0.293+/-0.747 $\chi^2$/NDF: 41.5/29

All: -0.541+/-0.528 $\chi^2$/NDF: 68.7/59

- sign -1.373+/-0.747 $\chi^2$/NDF: 24.7/29

# diff_bpm1p02bY_rms vs Slug




Right In: 2639.943+/-0.883 $\chi^2$/NDF: 2173395.1/12

Left Out: 3262.648+/-0.660 $\chi^2$/NDF:1869597.1/16

Right Out: 2529.018+/-0.856 $\chi^2$/NDF: 1949928.1/13

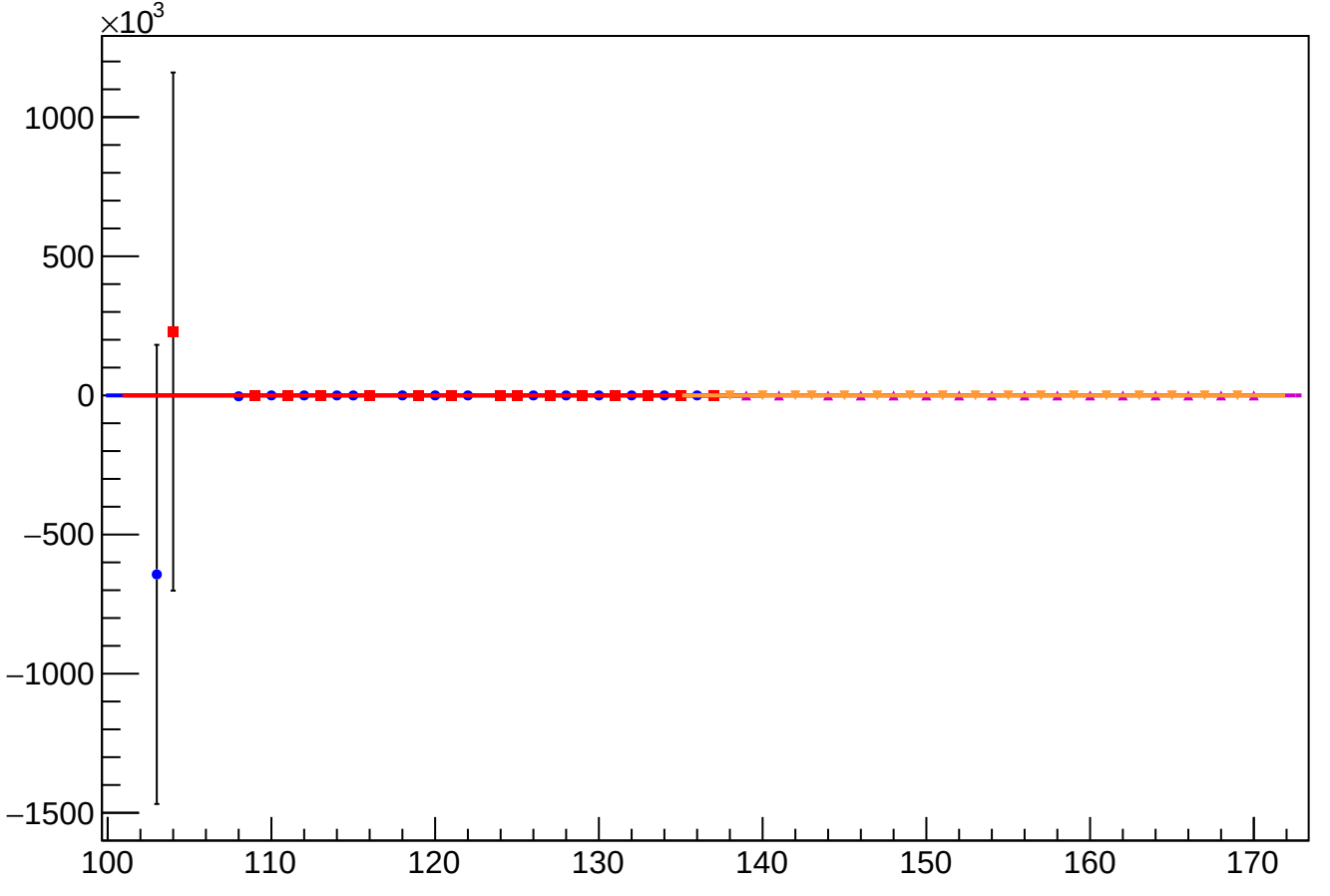
Left In: 3309.590+/-0.671 $\chi^2$/NDF:1608295.9/15

+ sign 3039.392+/-0.529 $\chi^2$/NDF: 4362229.6/29

All: 3025.976+/-0.374 $\chi^2$/NDF: 8436565.5/59

- sign 3012.578+/-0.528 $\chi^2$/NDF: 4073048.2/29

# diff_bpm1p03aX_mean vs Slug




Right In: -1.215+/-1.125 $\chi^2$/NDF: 18.8/14

Left Out: -2.119+/-0.435 $\chi^2$/NDF:31.2/16

Right Out: -2.670+/-1.211 $\chi^2$/NDF: 14.4/14

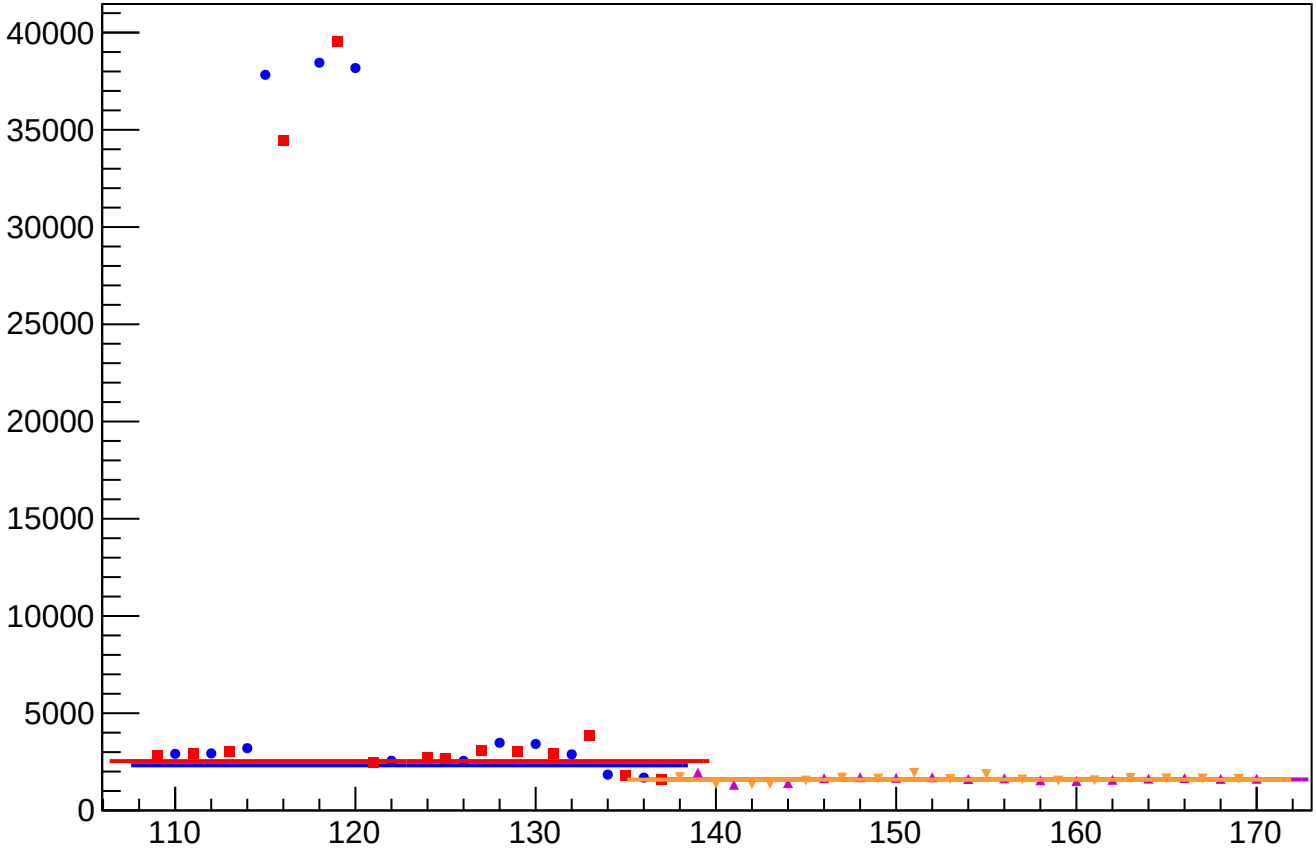
Left In: 0.214+/-0.441 $\chi^2$/NDF:17.2/15

+ sign -2.002+/-0.406 $\chi^2$/NDF: 50.5/31

All: -1.083+/-0.290 $\chi^2$/NDF: 97.7/62

- sign -0.124+/-0.415 $\chi^2$/NDF: 36.7/30

# diff_bpm1p03aX_rms vs Slug




Right In: 2320.446+/-0.796 $\chi^2$/NDF: 2461445.1/12

Left Out: 1584.371+/-0.308 $\chi^2$/NDF:228334.5/16

Right Out: 2537.615+/-0.856 $\chi^2$/NDF: 2038153.2/13

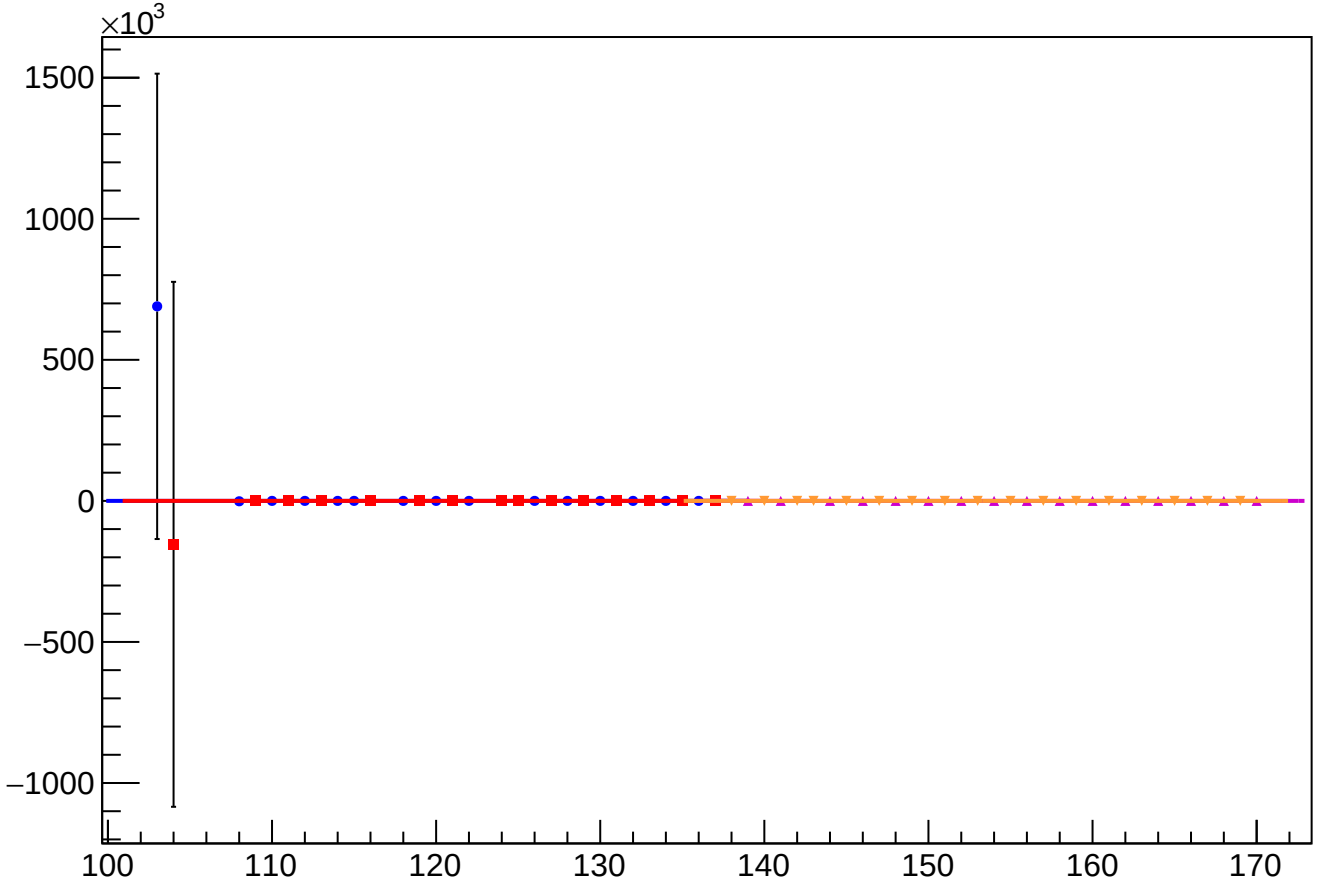
Left In: 1594.693+/-0.312 $\chi^2$/NDF:196045.0/15

+ sign 1680.088+/-0.287 $\chi^2$/NDF: 3434269.4/29

All: 1692.370+/-0.205 $\chi^2$/NDF: 6742419.0/59

- sign 1705.194+/-0.293 $\chi^2$/NDF: 3304404.0/29

# diff_bpm1p03aY_mean vs Slug




Right In: 1.708+/-1.076 $\chi^2$/NDF: 5.0/14

Left Out: -0.789+/-0.603 $\chi^2$/NDF:17.8/16

Right Out: -1.893+/-1.052 $\chi^2$/NDF: 15.3/14

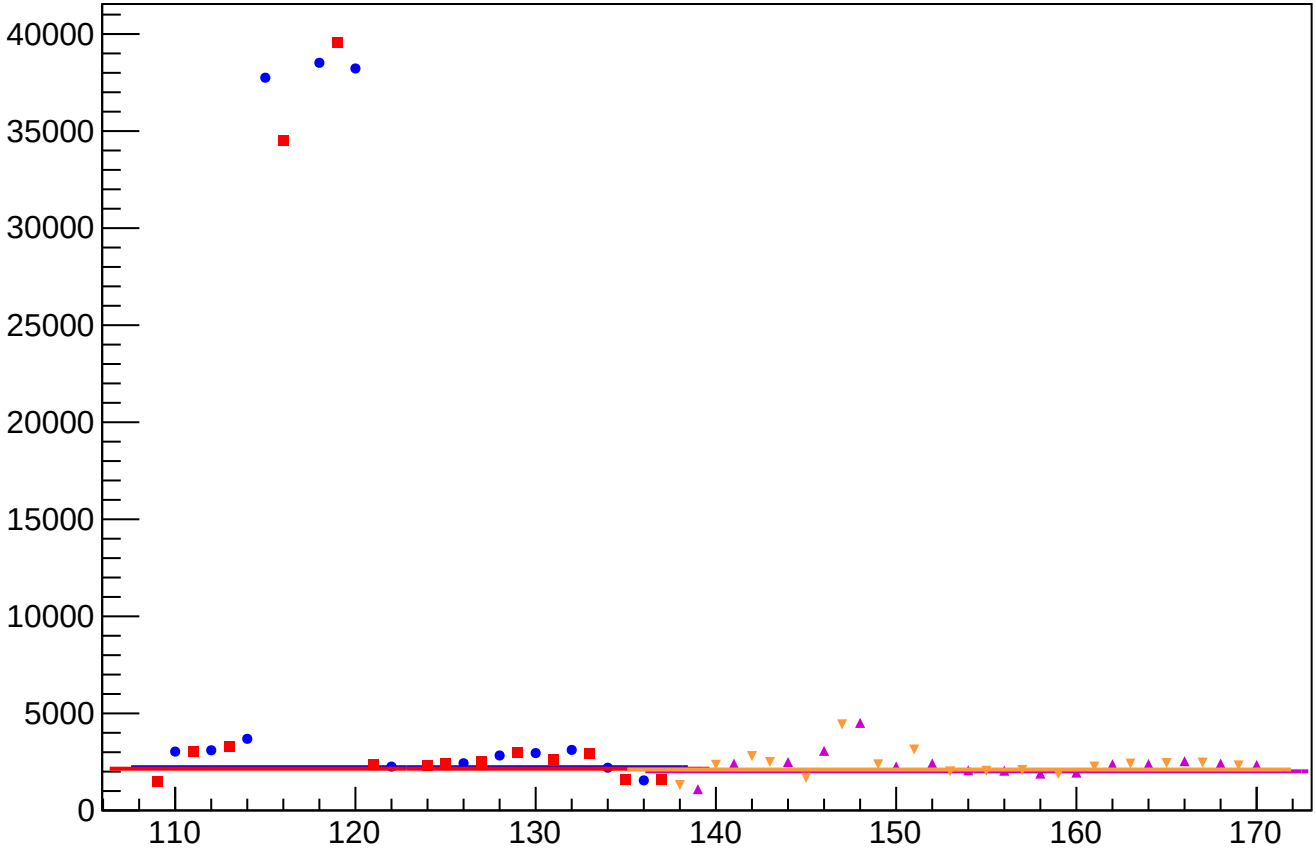
Left In: -0.053+/-0.586 $\chi^2$/NDF:12.7/15

+ sign -0.193+/-0.526 $\chi^2$/NDF: 26.9/31

All: -0.345+/-0.367 $\chi^2$/NDF: 57.4/62

- sign -0.488+/-0.512 $\chi^2$/NDF: 30.3/30

# diff_bpm1p03aY_rms vs Slug




Right In: 2226.944+/-0.761 $\chi^2$/NDF: 2522286.5/12

Left Out: 2108.739+/-0.426 $\chi^2$/NDF:1454151.0/16

Right Out: 2150.841+/-0.744 $\chi^2$/NDF: 2231322.0/13

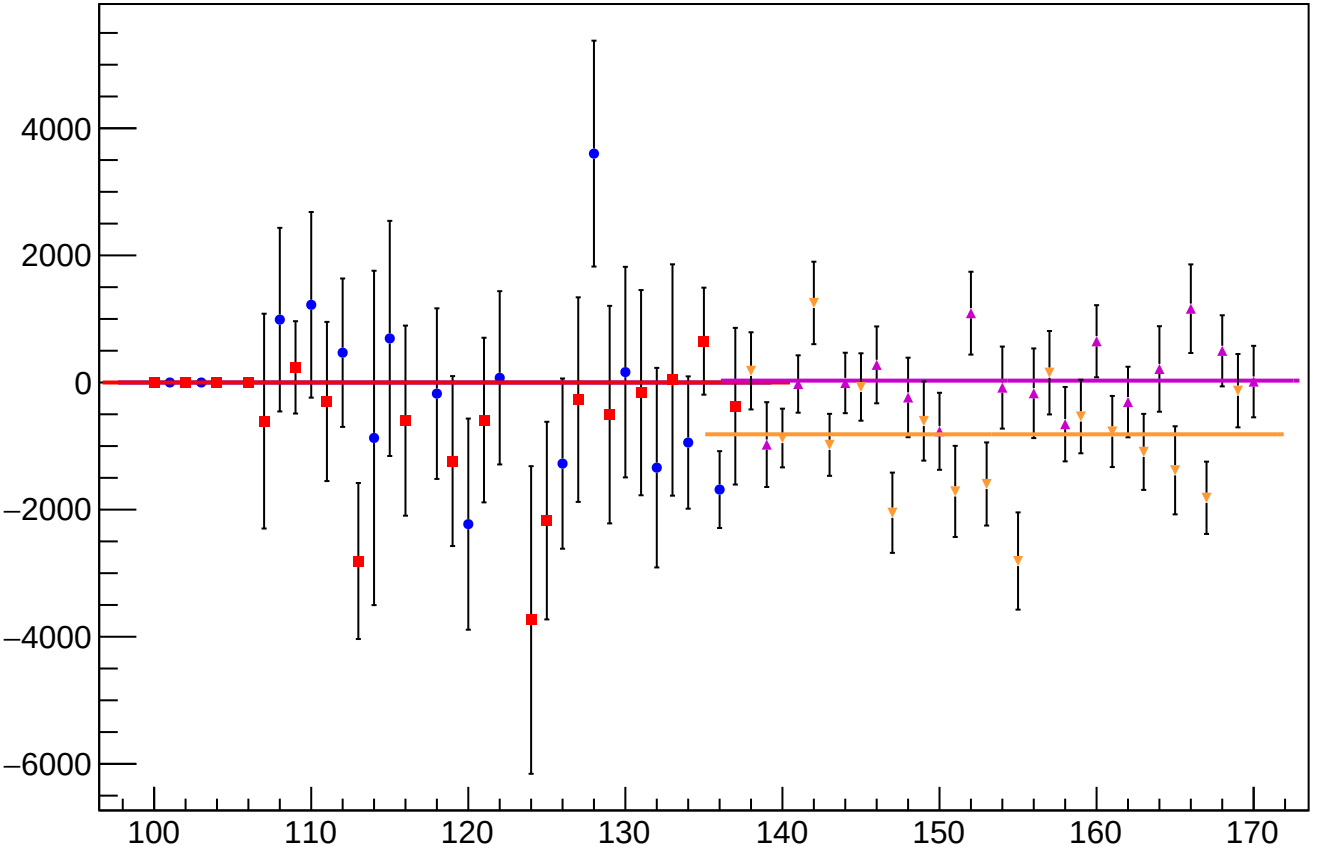
Left In: 2014.490+/-0.414 $\chi^2$/NDF:2243239.7/15

+ sign 2136.946+/-0.372 $\chi^2$/NDF: 3994801.4/29

All: 2090.622+/-0.259 $\chi^2$/NDF: 8525245.7/59

- sign 2046.759+/-0.362 $\chi^2$/NDF: 4500221.8/29

# diff_cav4bX_mean vs Slug




Right In: 0.255+/-0.356 $\chi^2$/NDF: 17.7/15

Left Out: -814.813+/-144.202 $\chi^2$/NDF:36.5/16

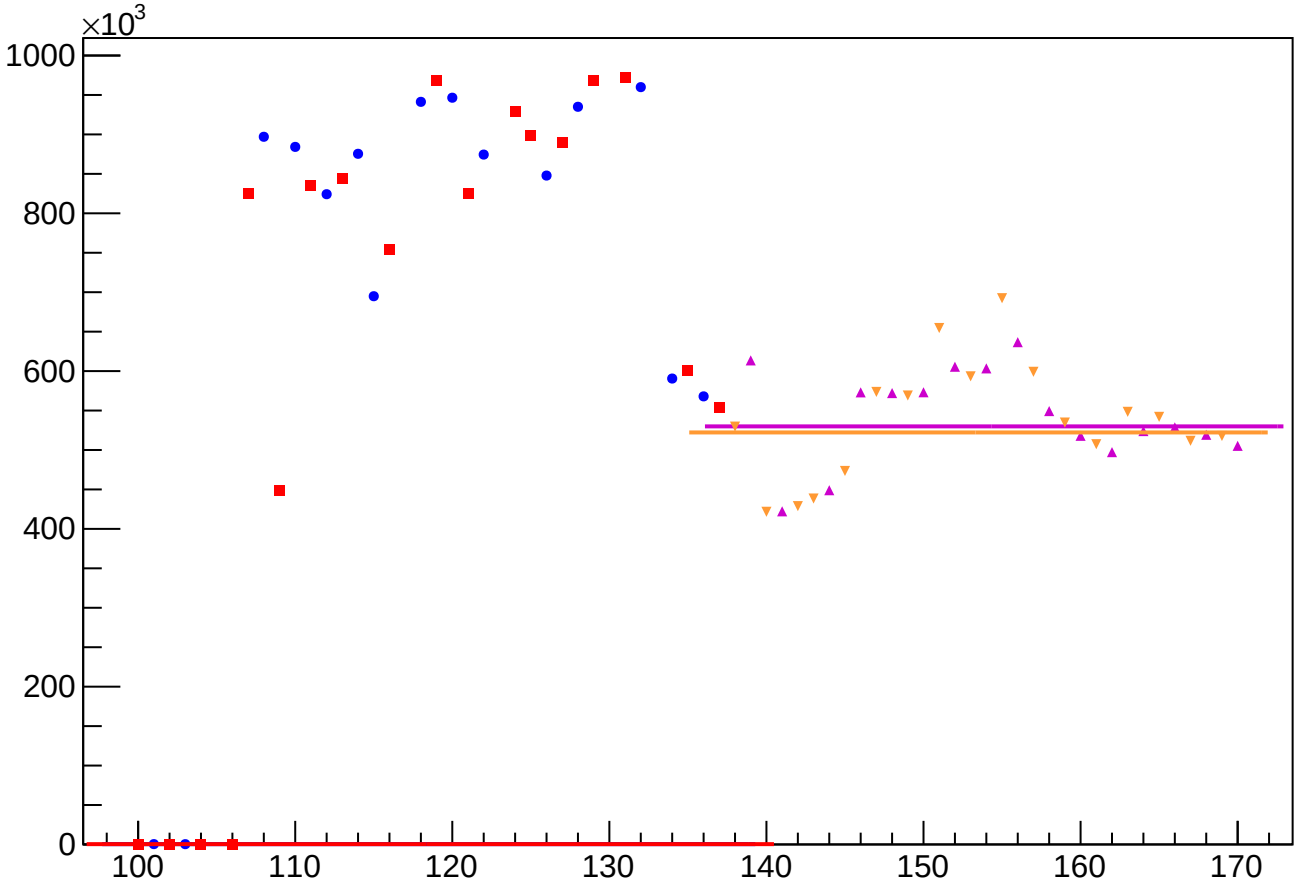
Right Out: 0.096+/-0.328 $\chi^2$/NDF: 15.4/18

Left In: 29.600+/-147.044 $\chi^2$/NDF:13.5/15

+ sign 0.250+/-0.356 $\chi^2$/NDF: 86.2/32

All: 0.167+/-0.241 $\chi^2$/NDF: 115.2/67

- sign 0.096+/-0.328 $\chi^2$/NDF: 28.9/34




Right In: 398.881+/-0.251 $\chi^2$/NDF: 8491830.9/14

Left Out: 522246.105+/-101.966 $\chi^2$/NDF:463949.9/16

Right Out: 393.240+/-0.232 $\chi^2$/NDF: 7648578.2/17

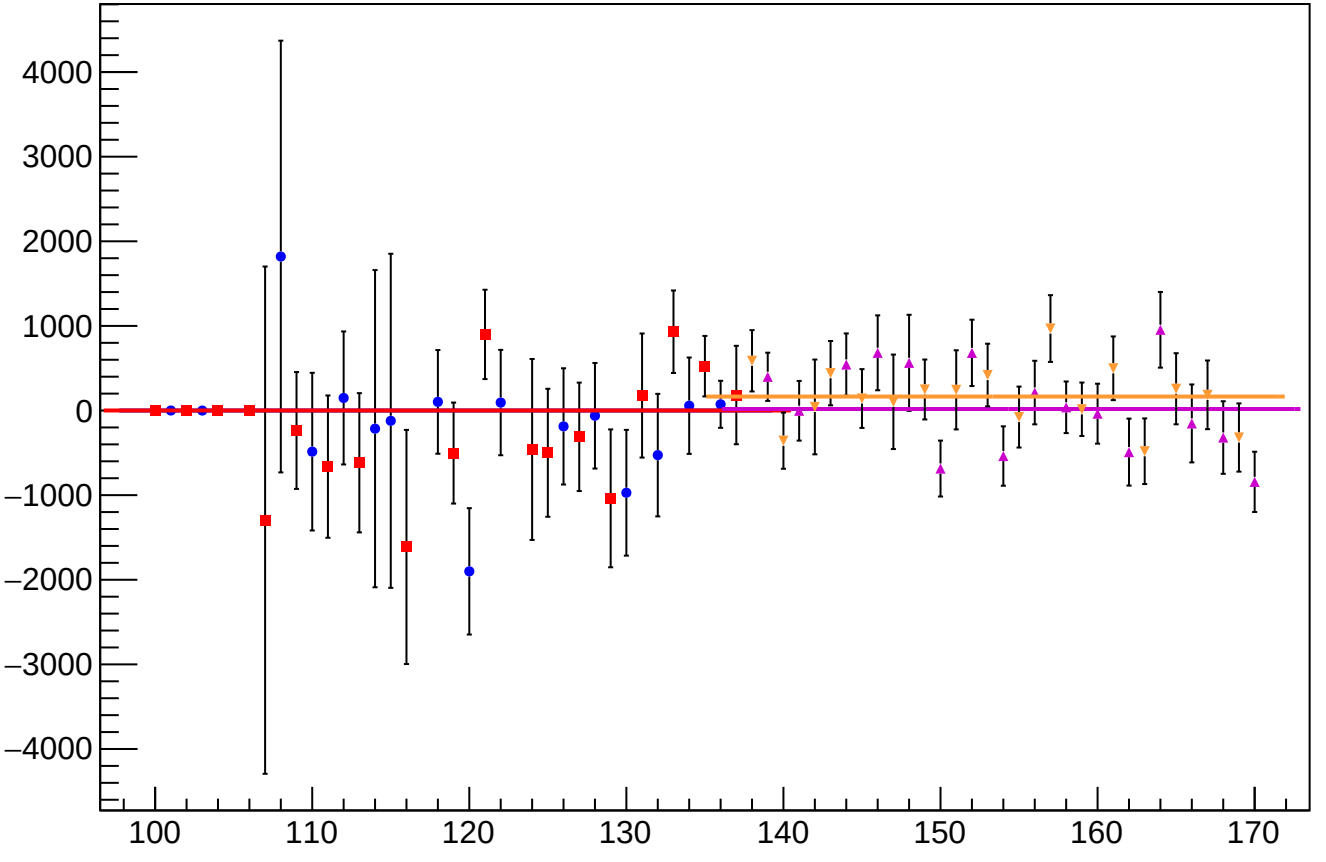
Left In: 529927.540+/-103.976 $\chi^2$/NDF:346093.0/15

+ sign 402.055+/-0.251 $\chi^2$/NDF: 35147809.4/31

All: 398.711+/-0.170 $\chi^2$/NDF: 69079784.9/65

- sign 395.871+/-0.232 $\chi^2$/NDF: 33931648.5/33

# diff_cav4bY_mean vs Slug




Right In: -0.020+/-0.347 $\chi^2$/NDF: 10.5/15

Left Out: 165.294+/-93.705 $\chi^2$/NDF:14.9/16

Right Out: 0.599+/-0.324 $\chi^2$/NDF: 15.0/18

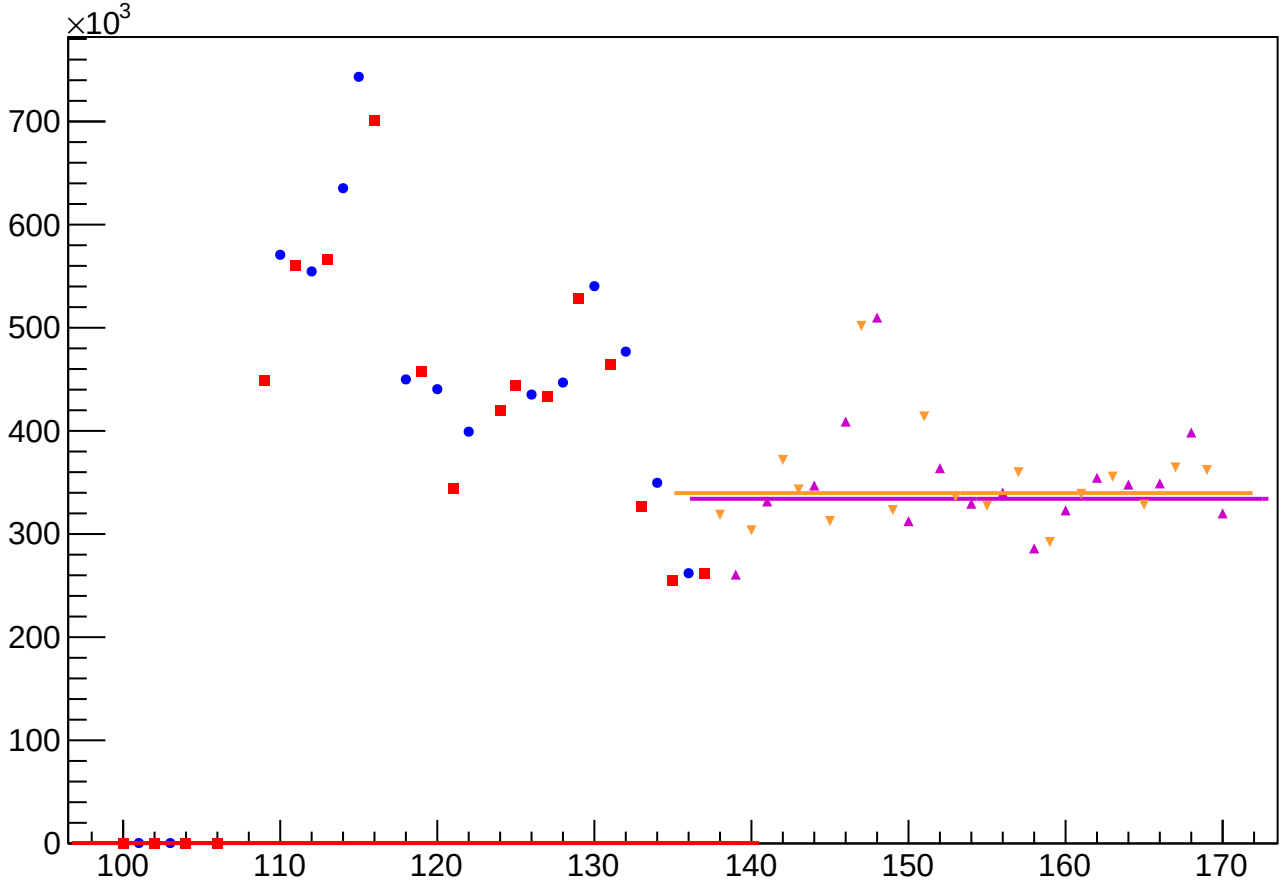
Left In: 18.157+/-93.269 $\chi^2$/NDF:29.8/15

+ sign -0.018+/-0.347 $\chi^2$/NDF: 28.5/32

All: 0.312+/-0.237 $\chi^2$/NDF: 75.0/67

- sign 0.599+/-0.324 $\chi^2$/NDF: 44.9/34

# diff_cav4bY_rms vs Slug




Right In: 390.276+/-0.245 $\chi^2$/NDF: 11132240.7/14

Left Out: 339698.110+/-66.259 $\chi^2$/NDF:344353.4/16

Right Out: 387.984+/-0.229 $\chi^2$/NDF: 11074302.3/17

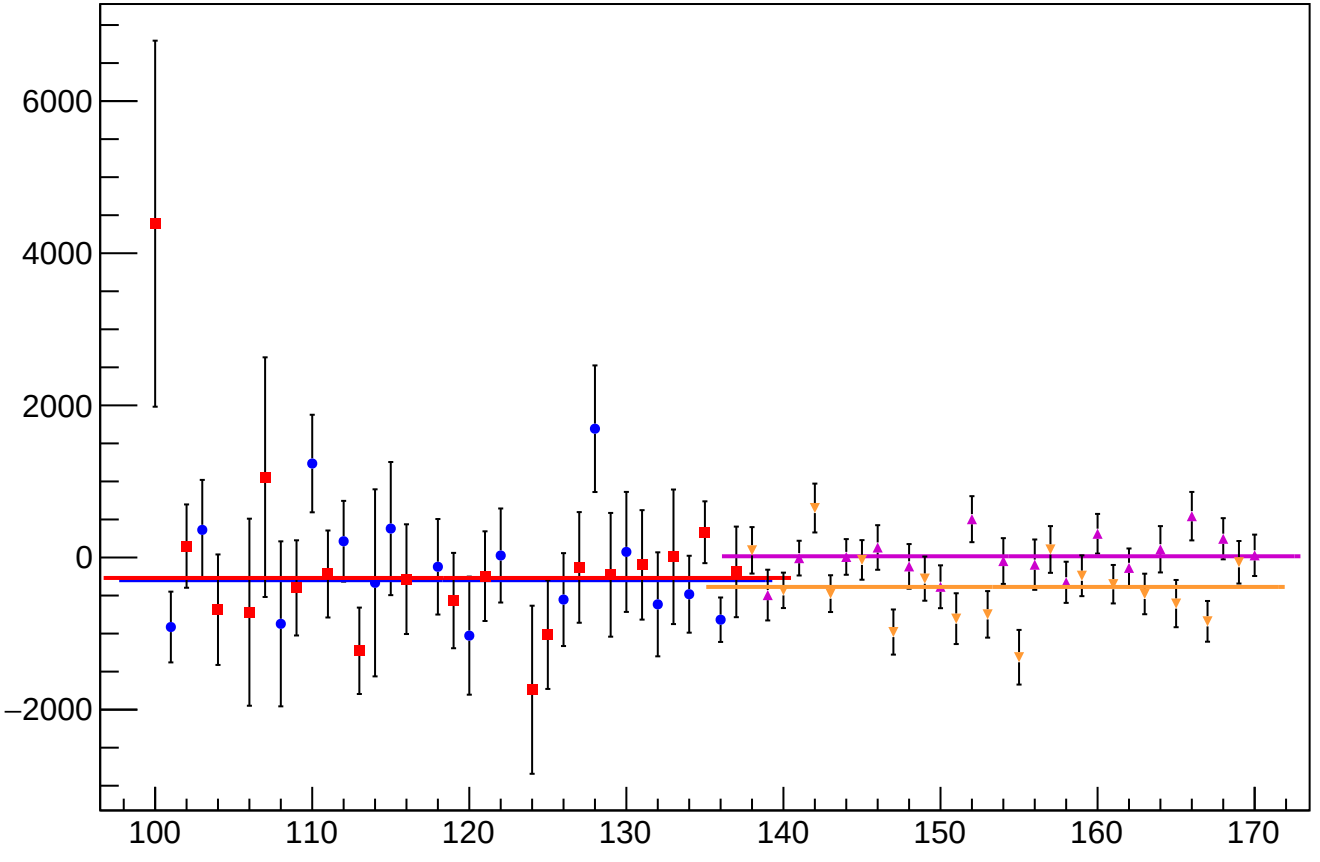
Left In: 334153.317+/-65.956 $\chi^2$/NDF:514295.3/15

+ sign 394.932+/-0.245 $\chi^2$/NDF: 37699842.9/31

All: 393.368+/-0.167 $\chi^2$/NDF: 74896475.3/65

- sign 392.006+/-0.229 $\chi^2$/NDF: 37196556.5/33

# diff_cav4cX_mean vs Slug




Right In: -298.263+/-147.367 $\chi^2$/NDF: 21.2/15

Left Out: -386.791+/-68.577 $\chi^2$/NDF:36.4/16

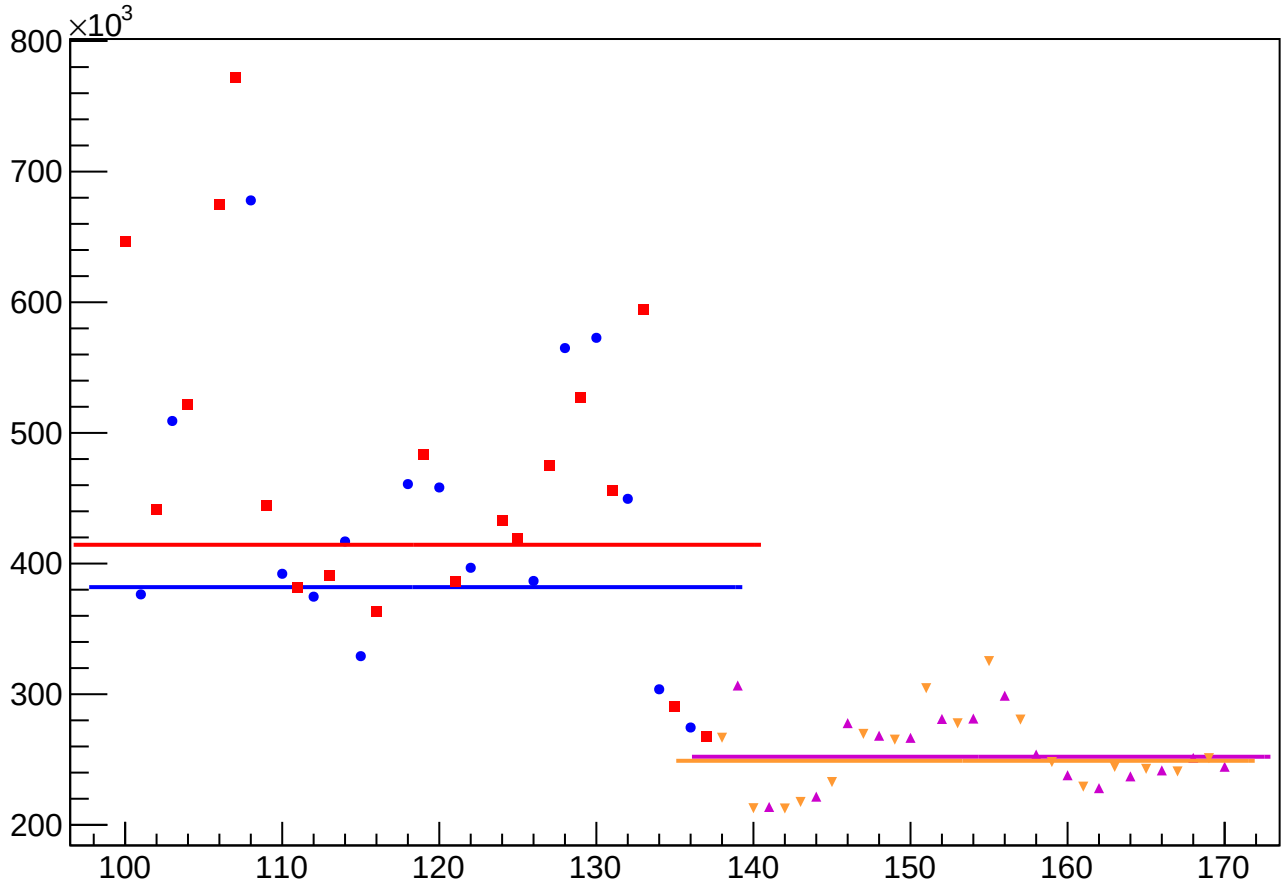
Right Out: -268.892+/-156.582 $\chi^2$/NDF: 13.9/18

Left In: 16.236+/-69.853 $\chi^2$/NDF:14.3/15

+ sign -371.033+/-62.174 $\chi^2$/NDF: 57.8/32

All: -205.428+/-44.525 $\chi^2$/NDF: 103.3/67

- sign -31.090+/-63.793 $\chi^2$/NDF: 30.9/34




Right In: 381960.471+/-104.223 $\chi^2$/NDF: 836441.6/15

Left Out: 249048.628+/-48.491 $\chi^2$/NDF:338570.7/16

Right Out: 414378.043+/-110.748 $\chi^2$/NDF: 760082.5/18

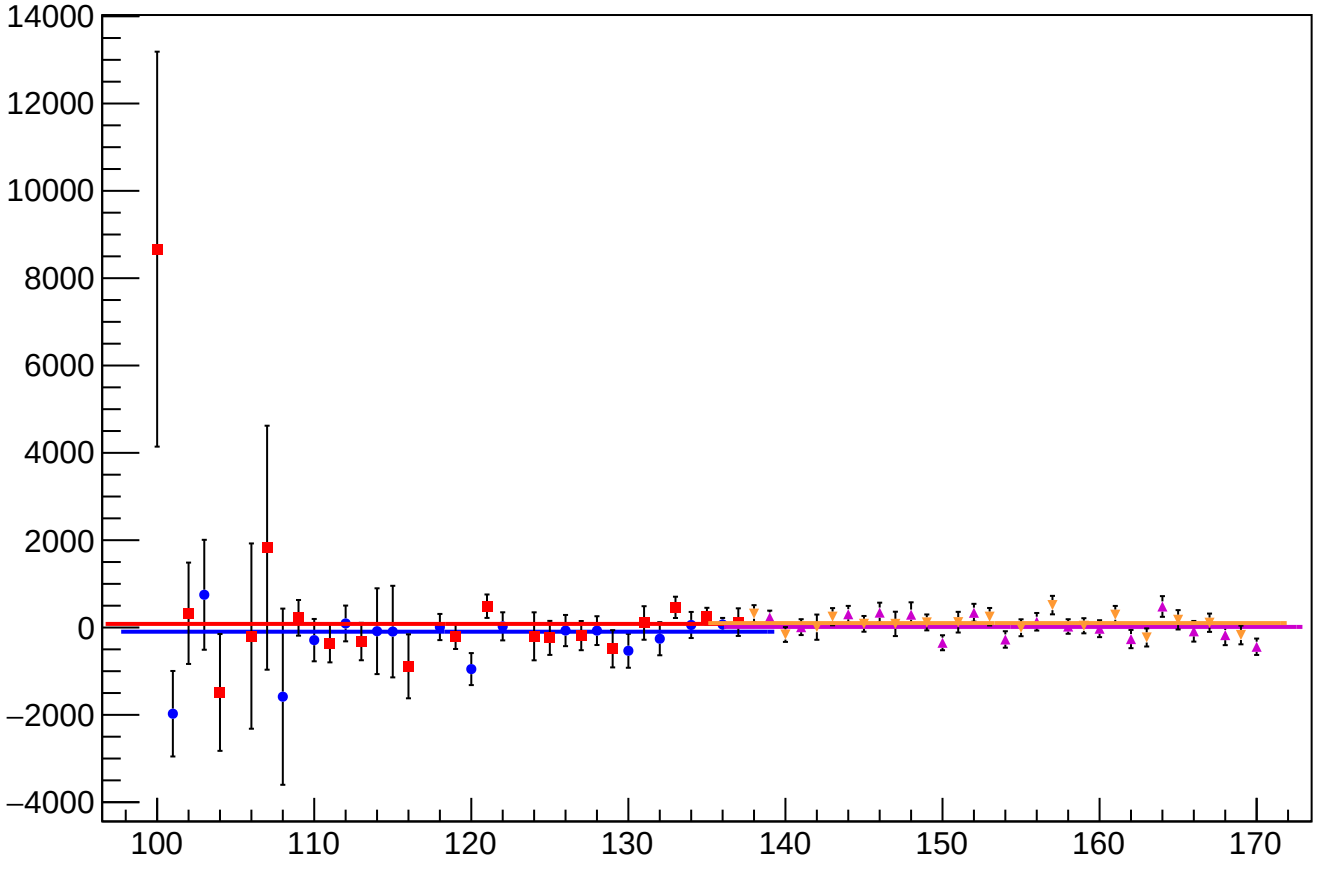
Left In: 252139.112+/-49.393 $\chi^2$/NDF:280177.3/15

+ sign 272700.045+/-43.965 $\chi^2$/NDF: 2511910.9/32

All: 275796.552+/-31.485 $\chi^2$/NDF: 5352332.

- sign 279056.431+/-45.110 $\chi^2$/NDF: 2830238.5/34

# diff_cav4cY_mean vs Slug




Right In: -95.850+/-88.267 $\chi^2$/NDF: 13.7/15

Left Out: 101.667+/-49.369 $\chi^2$/NDF:14.2/16

Right Out: 82.750+/-87.316 $\chi^2$/NDF: 19.1/18

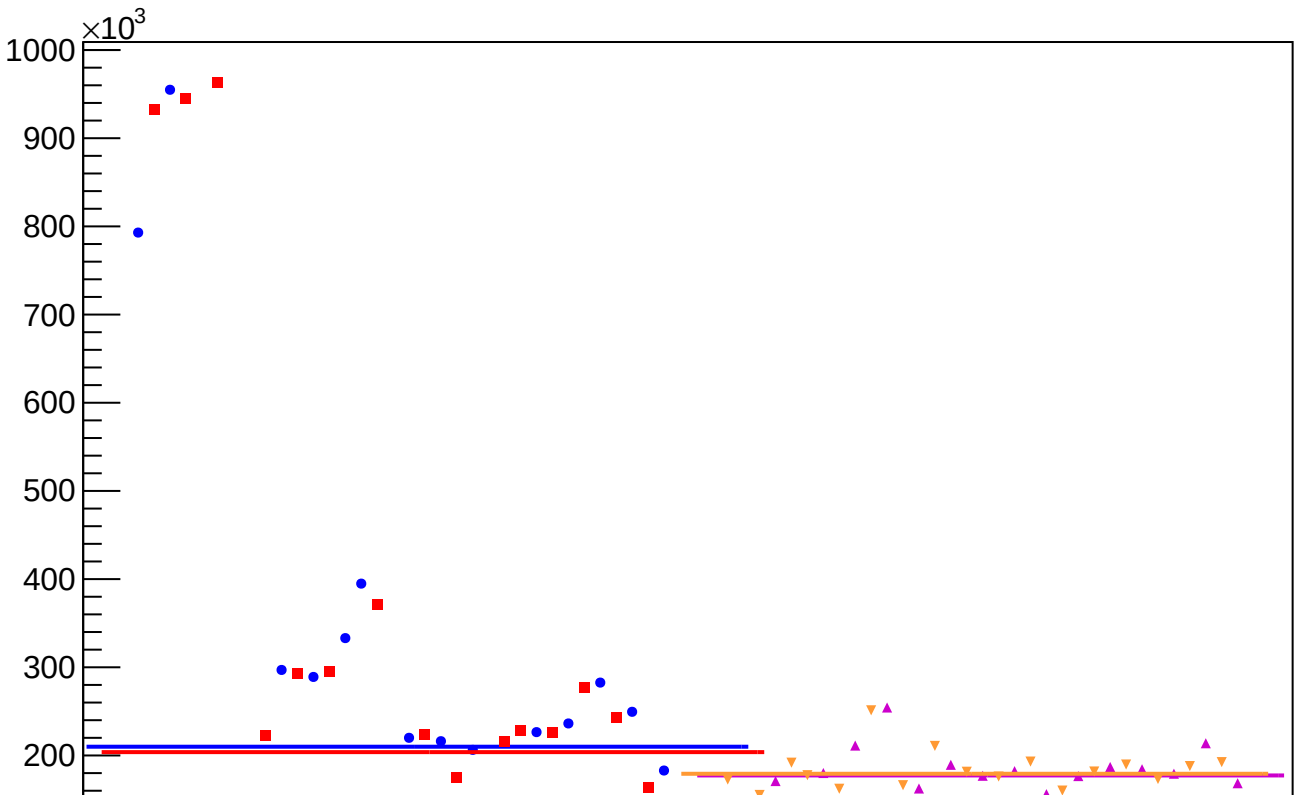
Left In: 14.086+/-49.370 $\chi^2$/NDF:29.4/15

+ sign 54.600+/-43.087 $\chi^2$/NDF: 31.7/32

All: 42.629+/-30.428 $\chi^2$/NDF: 80.8/67

- sign 30.720+/-42.976 $\chi^2$/NDF: 49.0/34

# diff_cav4cY_rms vs Slug




Right In: 209929.195+/-62.523 $\chi^2$/NDF: 1959897.2/14

Left Out: 179239.481+/-34.909 $\chi^2$/NDF:294160.4/16

Right Out: 203793.382+/-61.895 $\chi^2$/NDF: 2070478.1/16

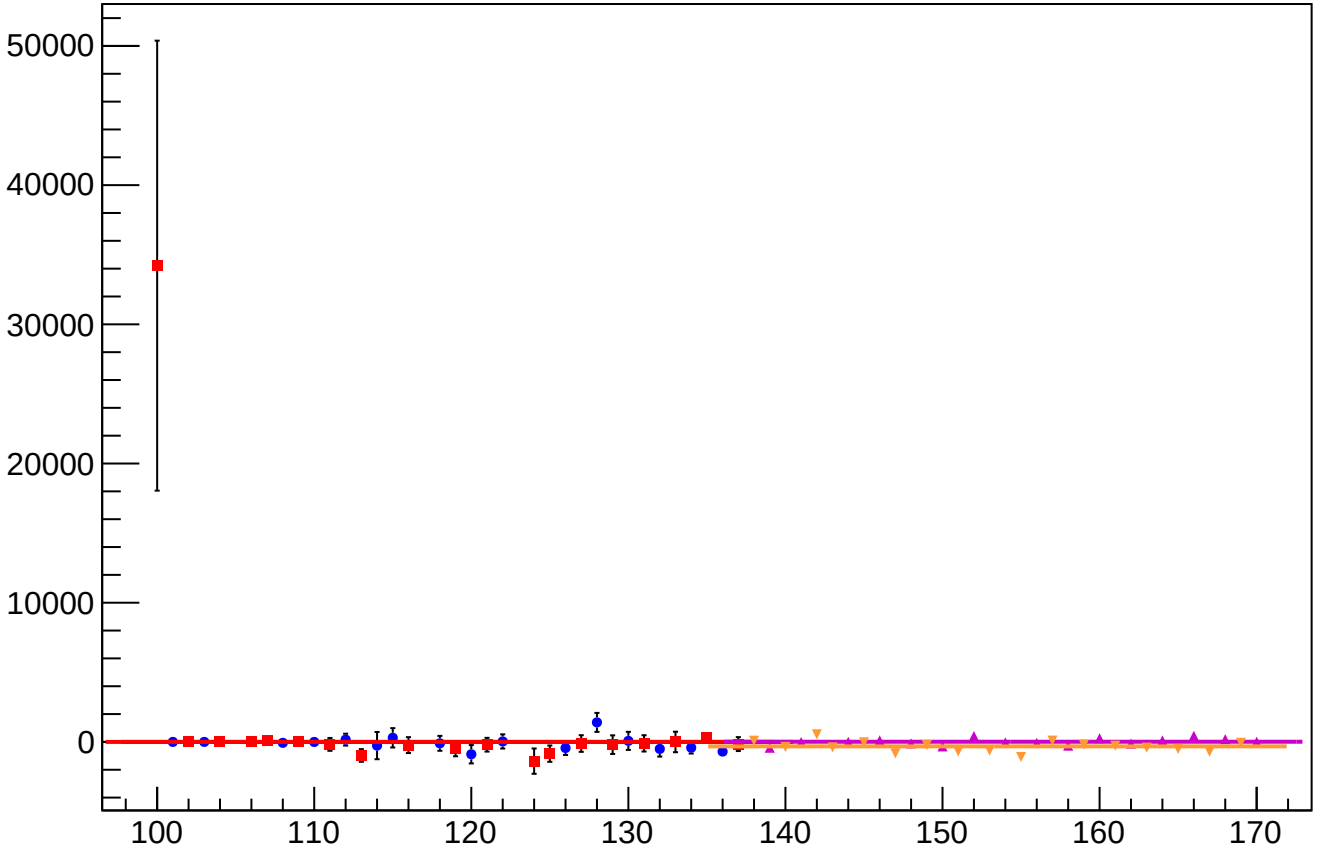
Left In: 177343.663+/-34.910 $\chi^2$/NDF:413743.6/15

+ sign 186533.123+/-30.480 $\chi^2$/NDF: 2437736.8/31

All: 185126.765+/-21.527 $\chi^2$/NDF: 5064748.

- sign 183727.143+/-30.407 $\chi^2$/NDF: 2622763.6/32

# diff_cav4dX_mean vs Slug




Right In: -0.035+/-0.172 $\chi^2$/NDF: 18.1/15

Left Out: -320.548+/-57.421 $\chi^2$/NDF:36.4/16

Right Out: -0.355+/-0.160 $\chi^2$/NDF: 16.5/18

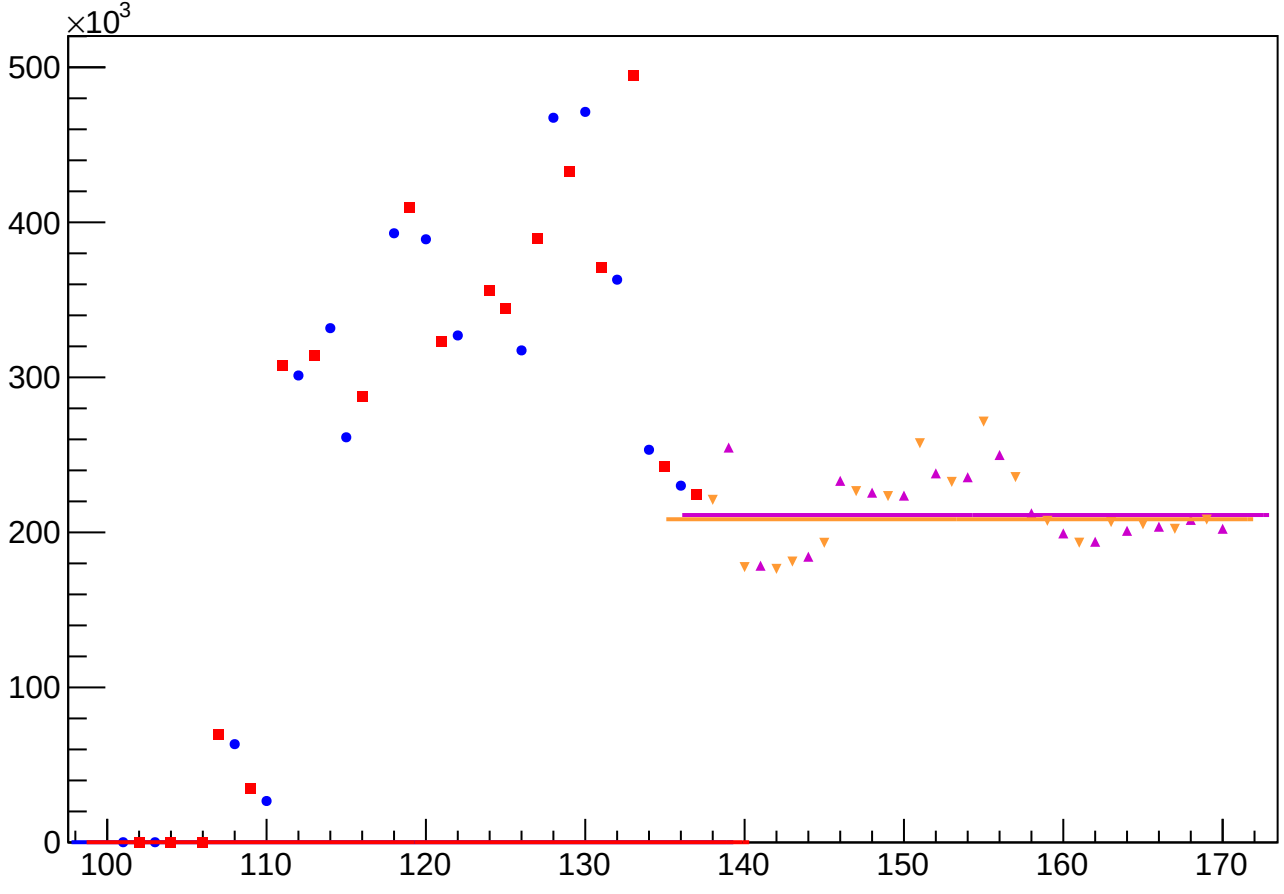
Left In: 12.416+/-58.514 $\chi^2$/NDF:14.1/15

+ sign -0.038+/-0.172 $\chi^2$/NDF: 85.7/32

All: -0.208+/-0.117 $\chi^2$/NDF: 118.1/67

- sign -0.355+/-0.160 $\chi^2$/NDF: 30.6/34

# diff_cav4dX_rms vs Slug




Right In: 149.092+/-0.122 $\chi^2$/NDF: 11301940.9/15

Left Out: 208480.622+/-40.603 $\chi^2$/NDF:349363.0/16

Right Out: 149.379+/-0.113 $\chi^2$/NDF: 11288711.4/17

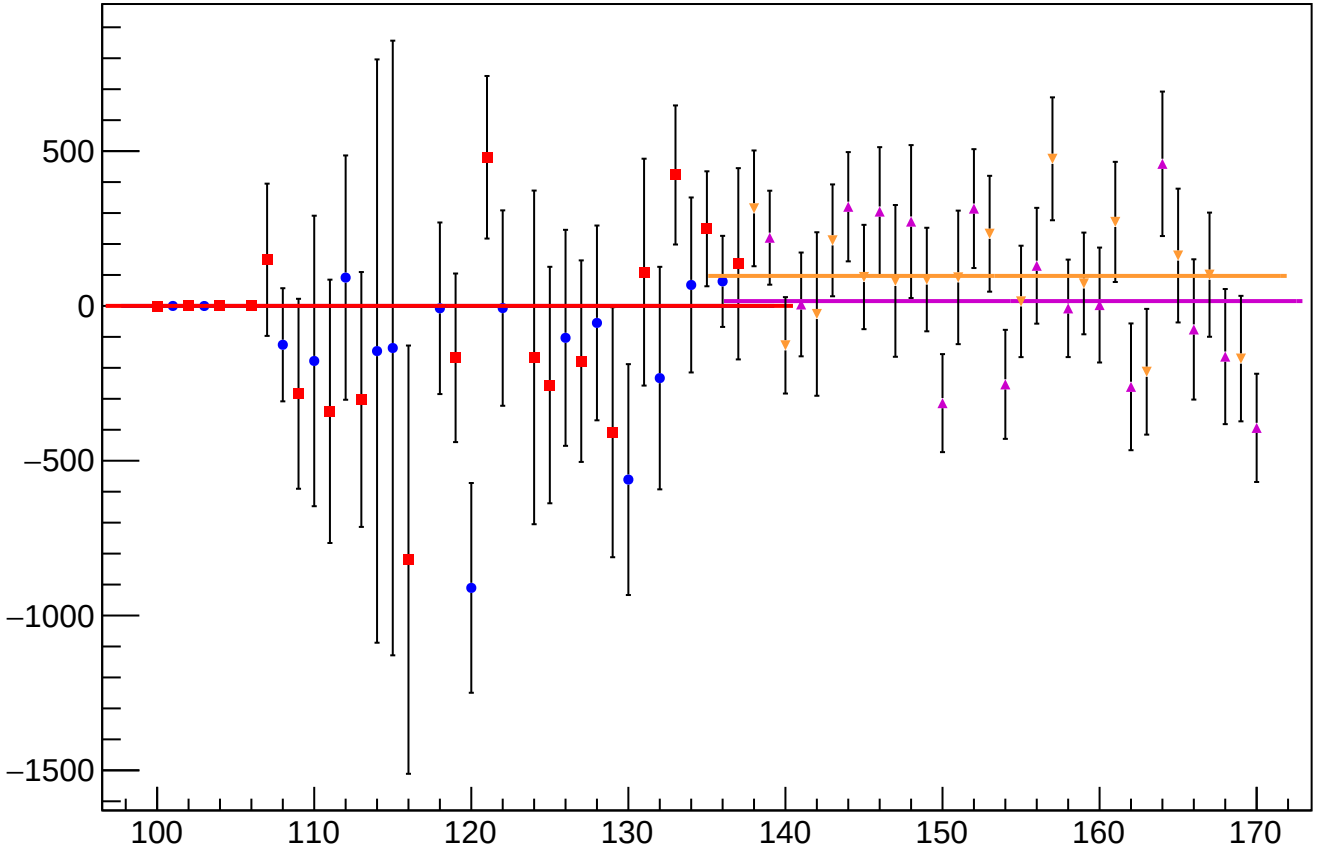
Left In: 211205.783+/-41.376 $\chi^2$/NDF:281401.0/15

+ sign 150.967+/-0.122 $\chi^2$/NDF: 37977974.3/32

All: 150.963+/-0.083 $\chi^2$/NDF: 75567464.4/66

- sign 150.959+/-0.113 $\chi^2$/NDF: 37589490.1/33

# diff_cav4dY_mean vs Slug




Right In: -0.068+/-0.177 $\chi^2$/NDF: 11.2/15

Left Out: 96.944+/-46.260 $\chi^2$/NDF:13.4/16

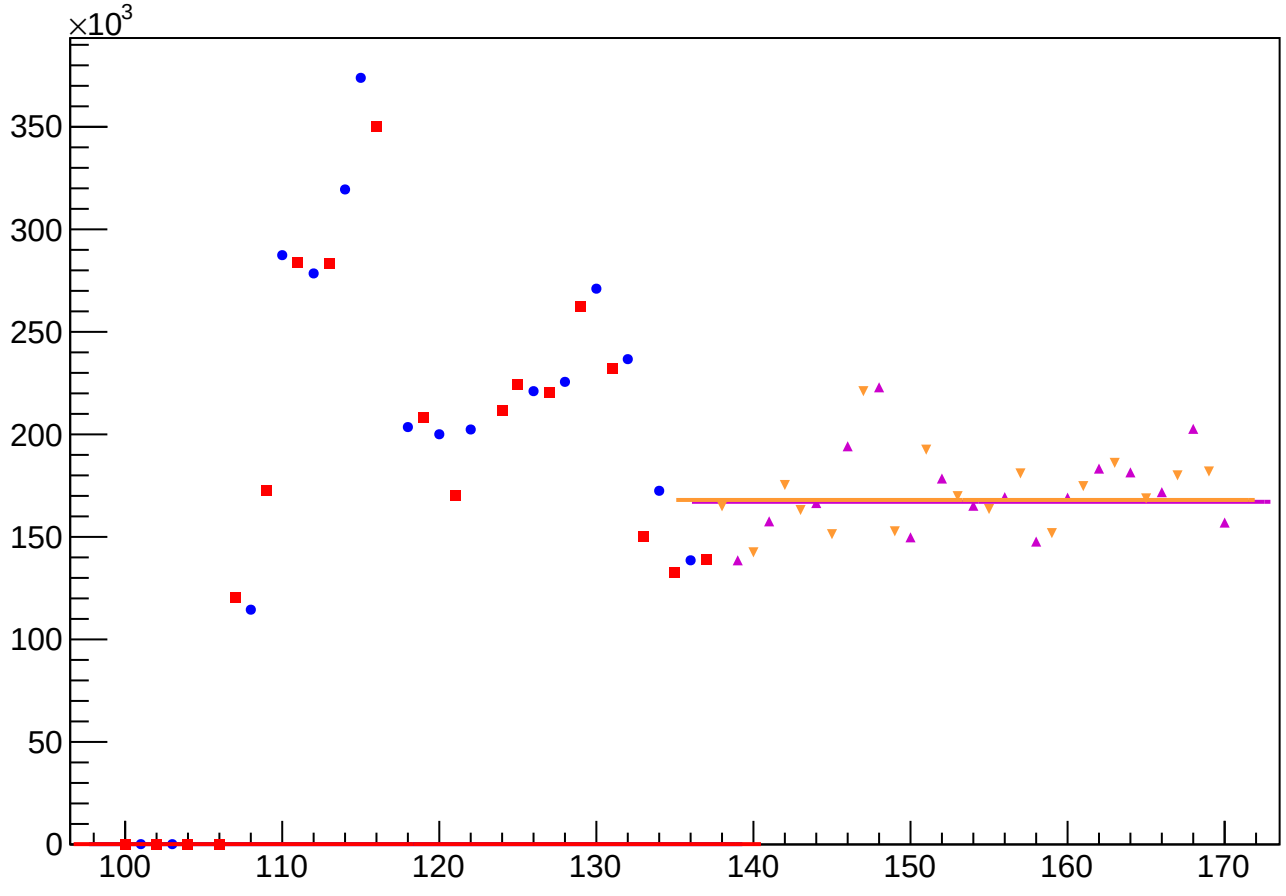
Right Out: 0.126+/-0.166 $\chi^2$/NDF: 15.2/18

Left In: 15.624+/-46.459 $\chi^2$/NDF:29.1/15

+ sign -0.067+/-0.177 $\chi^2$/NDF: 29.0/32

All: 0.036+/-0.121 $\chi^2$/NDF: 74.1/67

- sign 0.126+/-0.166 $\chi^2$/NDF: 44.4/34




Right In: 153.460+/-0.125 $\chi^2$/NDF: 11904914.7/15

Left Out: 168021.153+/-32.711 $\chi^2$/NDF:277497.5/16

Right Out: 156.158+/-0.118 $\chi^2$/NDF: 11330885.6/18

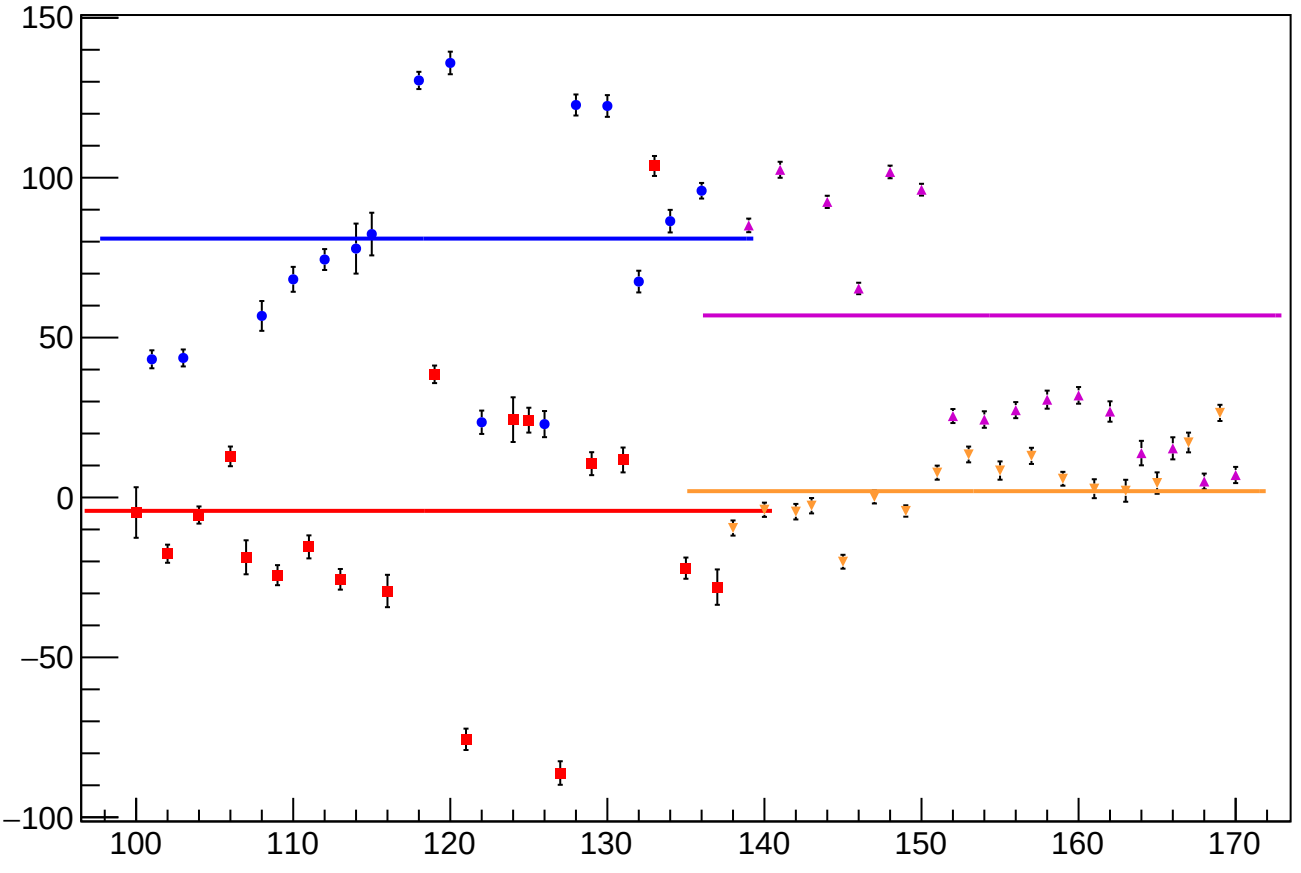
Left In: 167120.732+/-32.852 $\chi^2$/NDF:356221.5/15

+ sign 155.924+/-0.125 $\chi^2$/NDF: 38518415.4/32

All: 157.187+/-0.086 $\chi^2$/NDF: 76035912.5/67

- sign 158.302+/-0.118 $\chi^2$/NDF: 37517305.9/34

# diff_bpm0i01X_mean vs Slug




Right In: 80.955+/-0.851 $\chi^2$/NDF: 1813.9/15

Left Out: 1.975+/-0.587 $\chi^2$/NDF:331.8/16

Right Out: -4.183+/-0.820 $\chi^2$/NDF: 2719.7/18

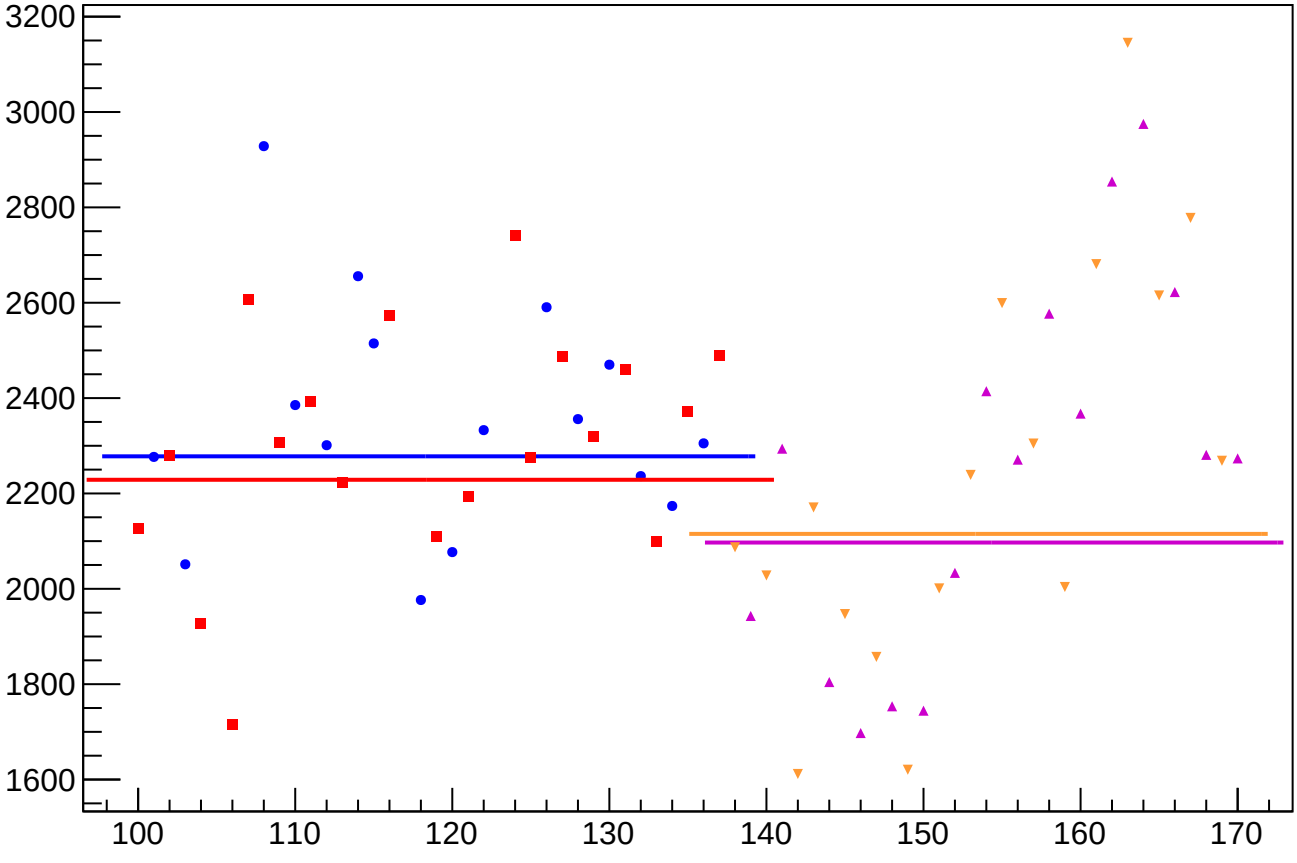
Left In: 56.928+/-0.590 $\chi^2$/NDF:3720.9/15

+ sign 27.431+/-0.483 $\chi^2$/NDF: 7976.7/32

All: 31.809+/-0.340 $\chi^2$/NDF: 18240.4/67

- sign 36.104+/-0.479 $\chi^2$/NDF: 10101.2/34

# diff_bpm0i01X_rms vs Slug




Right In: 2277.867+/-0.602 $\chi^2$/NDF: 115771.4/15

Left Out: 2115.186+/-0.415 $\chi^2$/NDF:769908.2/16

Right Out: 2228.689+/-0.580 $\chi^2$/NDF: 151135.6/18

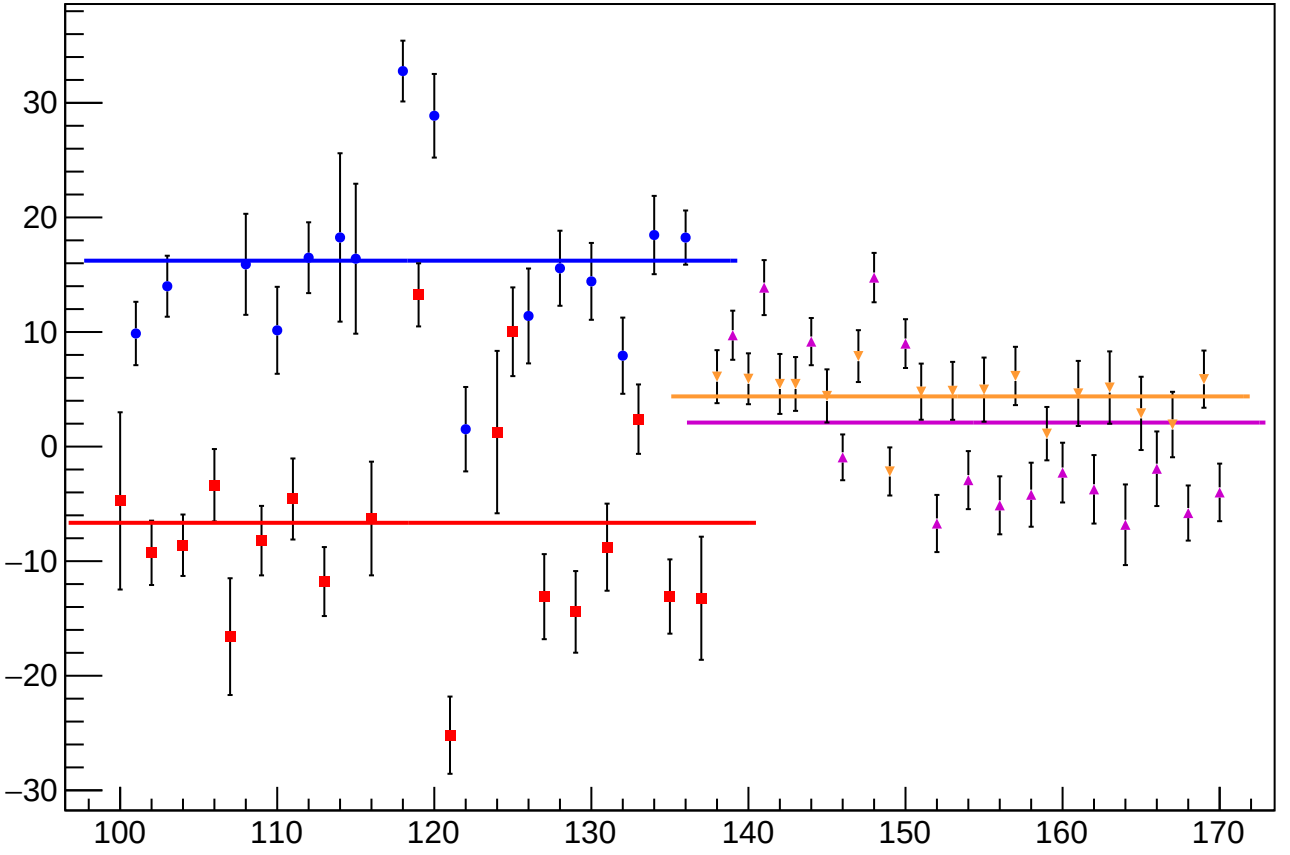
Left In: 2097.049+/-0.417 $\chi^2$/NDF:708603.3/15

+ sign 2167.620+/-0.342 $\chi^2$/NDF: 935157.7/32

All: 2154.639+/-0.241 $\chi^2$/NDF: 1831724.1/67

- sign 2141.908+/-0.339 $\chi^2$/NDF: 893709.7/34

# diff_bpm0i01Y_mean vs Slug




Right In: 16.226+/-0.838 $\chi^2$/NDF: 84.5/15

Left Out: 4.380+/-0.606 $\chi^2$/NDF:17.5/16

Right Out: -6.652+/-0.809 $\chi^2$/NDF: 134.6/18

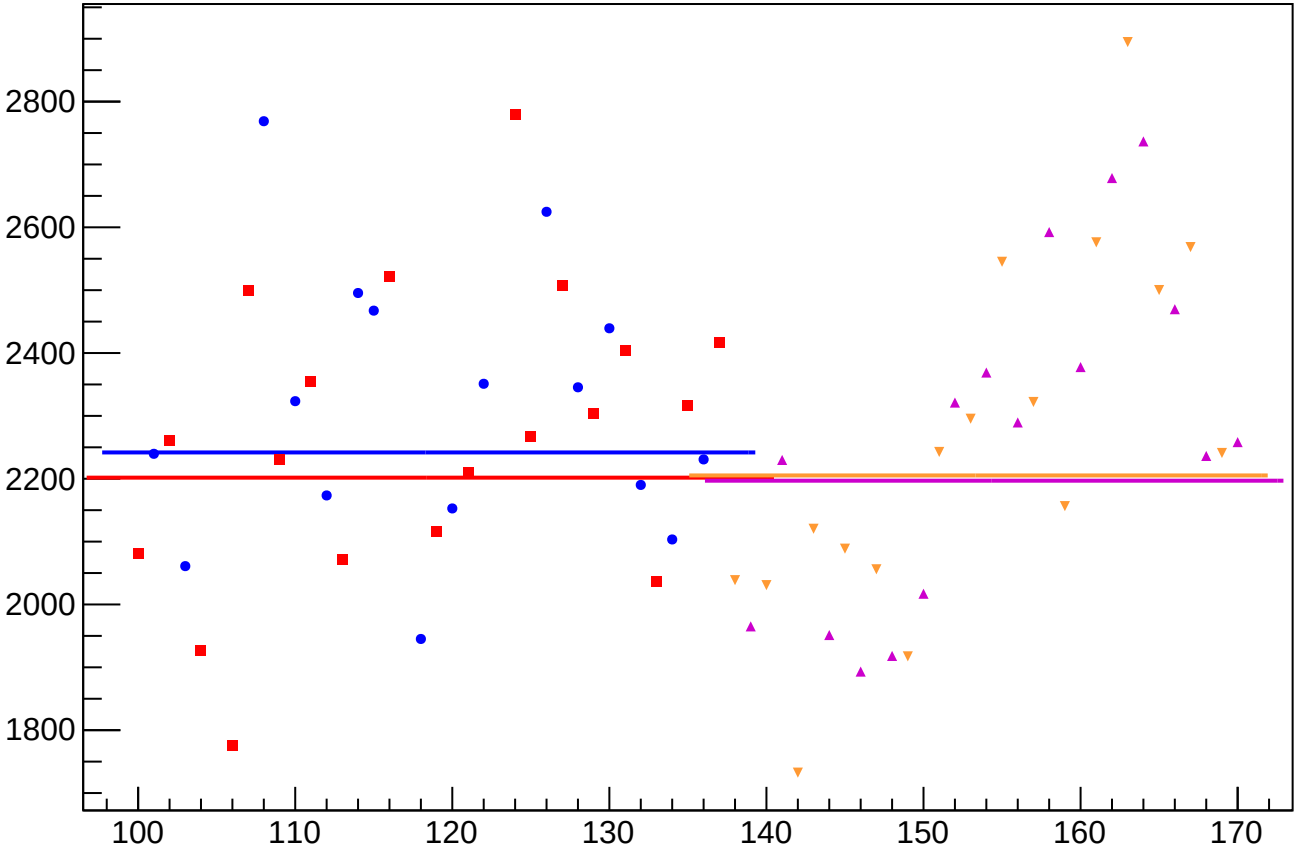
Left In: 2.096+/-0.611 $\chi^2$/NDF:156.6/15

+ sign 8.454+/-0.491 $\chi^2$/NDF: 233.3/32

All: 3.652+/-0.346 $\chi^2$/NDF: 788.6/67

- sign -1.080+/-0.488 $\chi^2$/NDF: 365.6/34

# diff_bpm0i01Y_rms vs Slug




Right In: 2241.853+/-0.592 $\chi^2$/NDF: 102260.7/15

Left Out: 2205.261+/-0.429 $\chi^2$/NDF:358733.1/16

Right Out: 2201.739+/-0.572 $\chi^2$/NDF: 129882.5/18

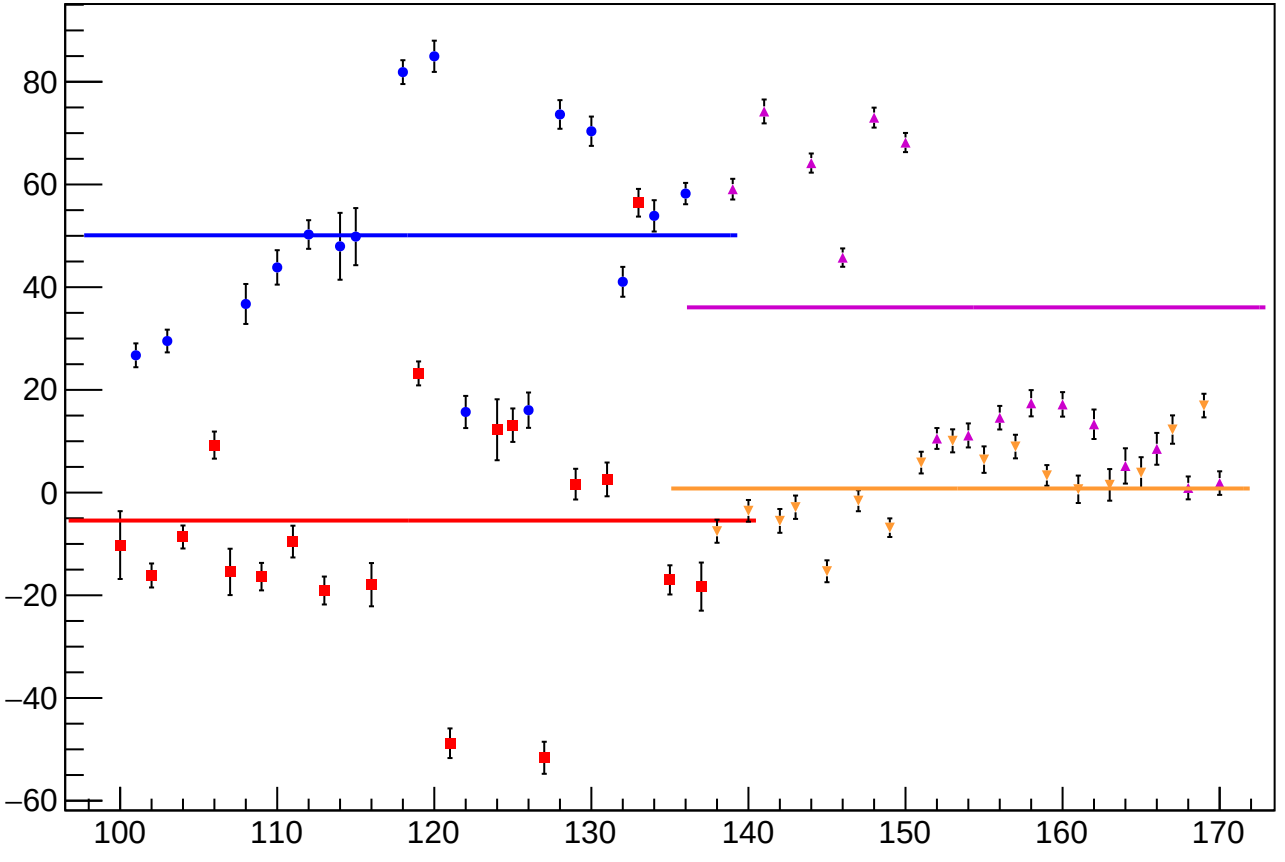
Left In: 2196.894+/-0.432 $\chi^2$/NDF:327346.7/15

+ sign 2217.846+/-0.347 $\chi^2$/NDF: 463498.0/32

All: 2208.179+/-0.245 $\chi^2$/NDF: 922310.8/67

- sign 2198.653+/-0.345 $\chi^2$/NDF: 457274.9/34

# diff_bpm0i01aX_mean vs Slug




Right In: 50.102+/-0.722 $\chi^2$/NDF: 888.5/15

Left Out: 0.797+/-0.555 $\chi^2$/NDF:213.8/16

Right Out: -5.444+/-0.694 $\chi^2$/NDF: 1311.6/18

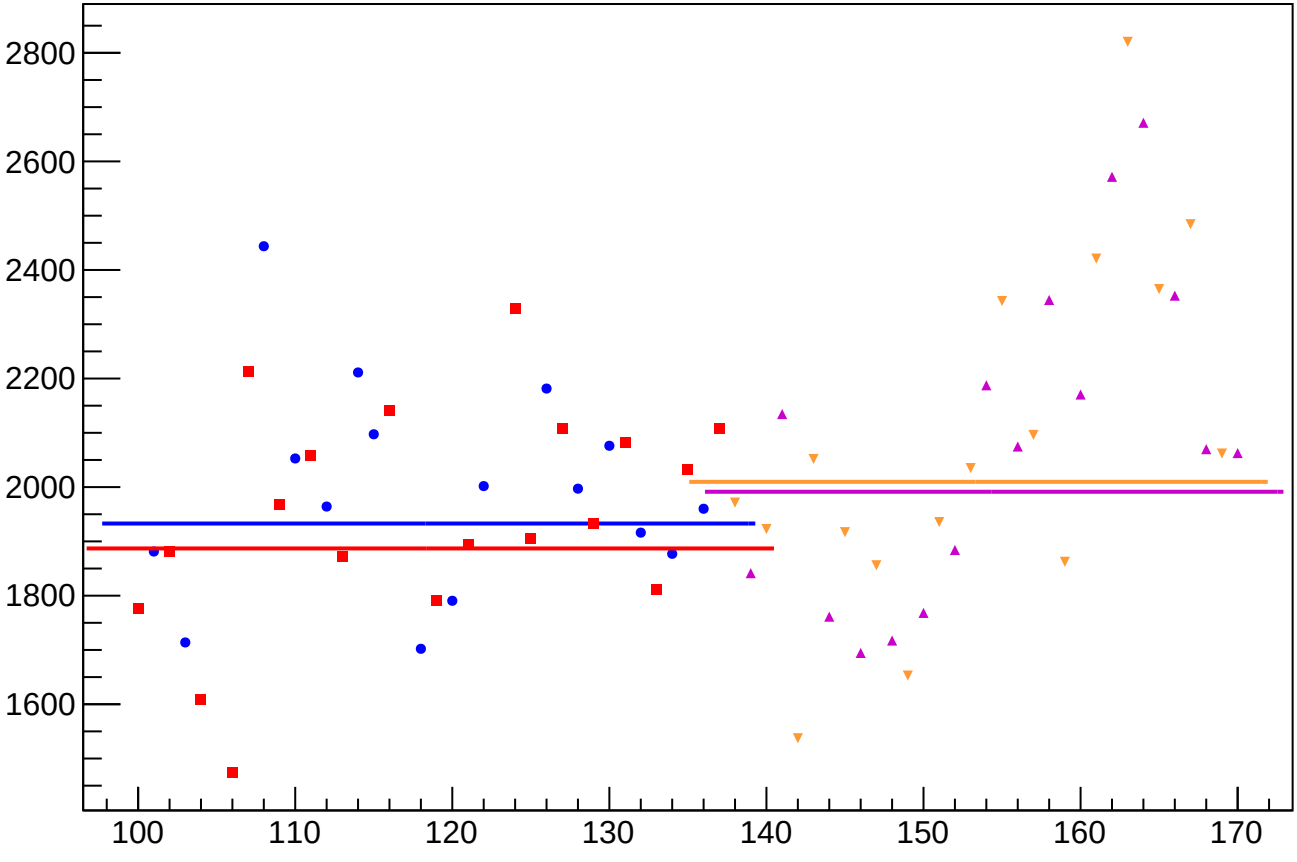
Left In: 36.070+/-0.557 $\chi^2$/NDF:2482.1/15

\+ sign 19.090+/-0.440 $\chi^2$/NDF: 4034.6/32

All: 19.464+/-0.309 $\chi^2$/NDF: 10006.2/67

\- sign 19.827+/-0.434 $\chi^2$/NDF: 5970.2/34

# diff_bpm0i01aX_rms vs Slug




Right In: 1932.904+/-0.511 $\chi^2$/NDF: 105967.6/15

Left Out: 2009.694+/-0.392 $\chi^2$/NDF:503396.9/16

Right Out: 1887.006+/-0.491 $\chi^2$/NDF: 149746.6/18

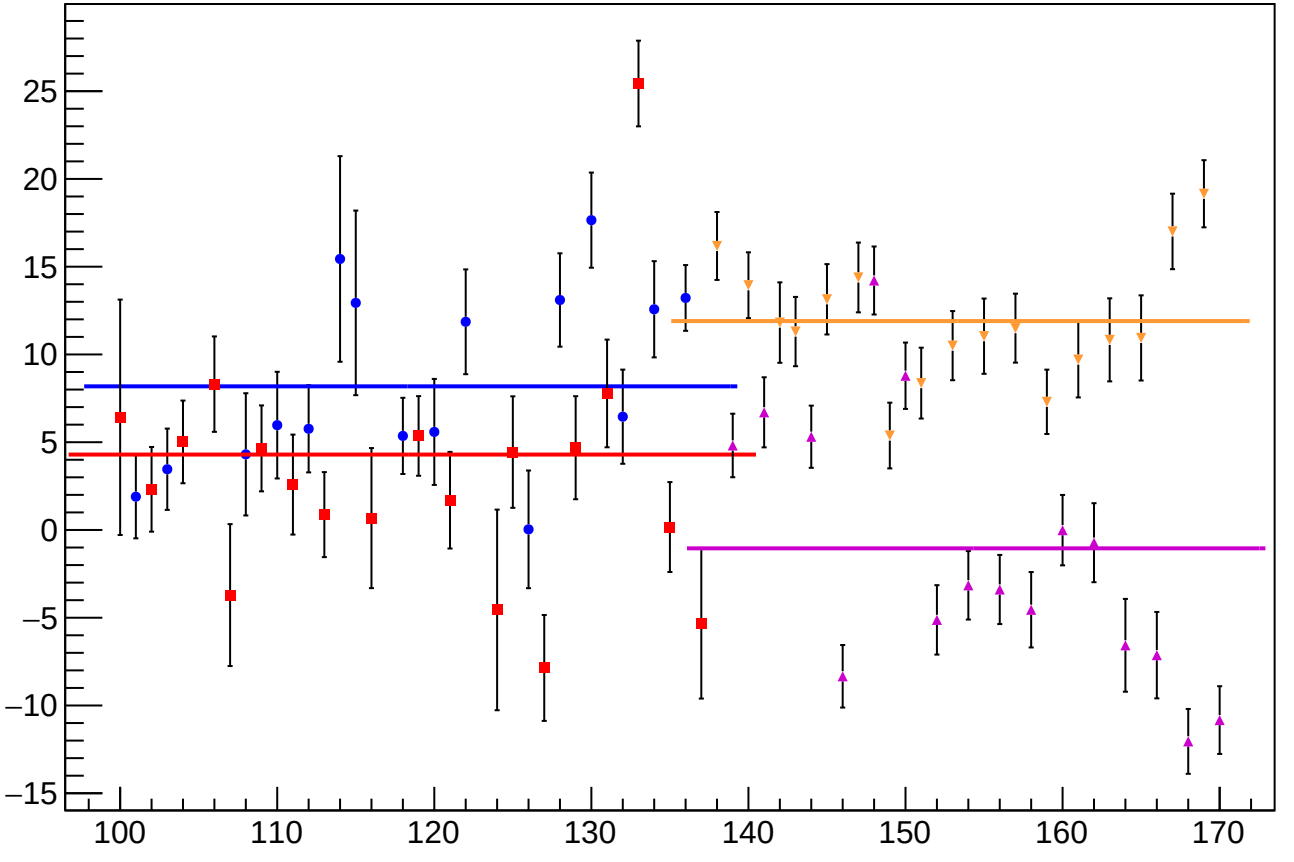
Left In: 1991.432+/-0.394 $\chi^2$/NDF:435739.1/15

+ sign 1981.204+/-0.311 $\chi^2$/NDF: 623589.3/32

All: 1965.693+/-0.219 $\chi^2$/NDF: 1241530.0/67

- sign 1950.574+/-0.307 $\chi^2$/NDF: 613029.7/34

# diff_bpm0i01aY_mean vs Slug




Right In: 8.183+/-0.684 $\chi^2$/NDF: 52.0/15

Left Out: 11.902+/-0.493 $\chi^2$/NDF:51.7/16

Right Out: 4.297+/-0.665 $\chi^2$/NDF: 114.0/18

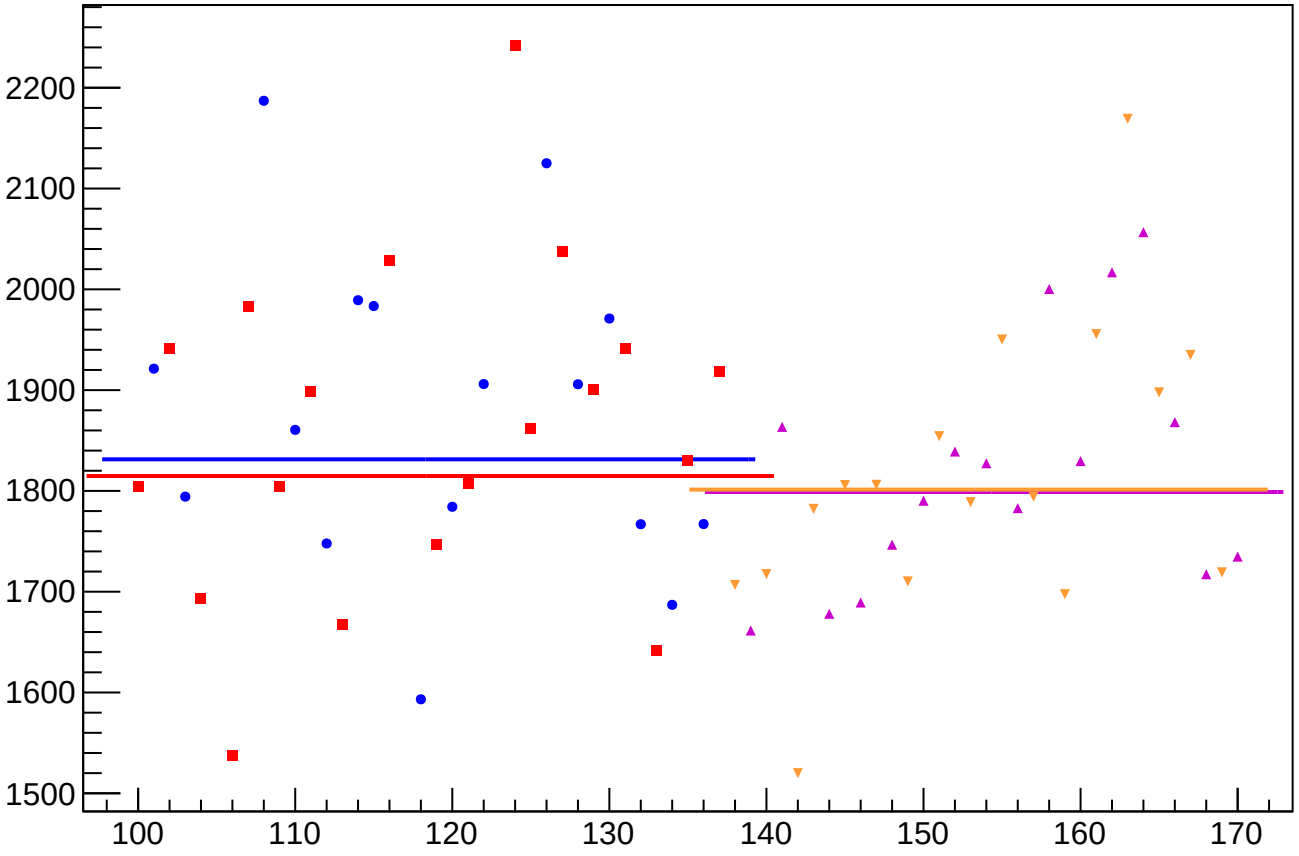
Left In: -1.047+/-0.497 $\chi^2$/NDF:225.7/15

+ sign 10.630+/-0.400 $\chi^2$/NDF: 123.1/32

All: 5.730+/-0.282 $\chi^2$/NDF: 803.3/67

- sign 0.868+/-0.398 $\chi^2$/NDF: 381.0/34

# diff_bpm0i01aY_rms vs Slug




Right In: 1831.359+/-0.483 $\chi^2$/NDF: 86919.2/15

Left Out: 1801.310+/-0.349 $\chi^2$/NDF:134555.6/16

Right Out: 1814.774+/-0.471 $\chi^2$/NDF: 90738.7/18

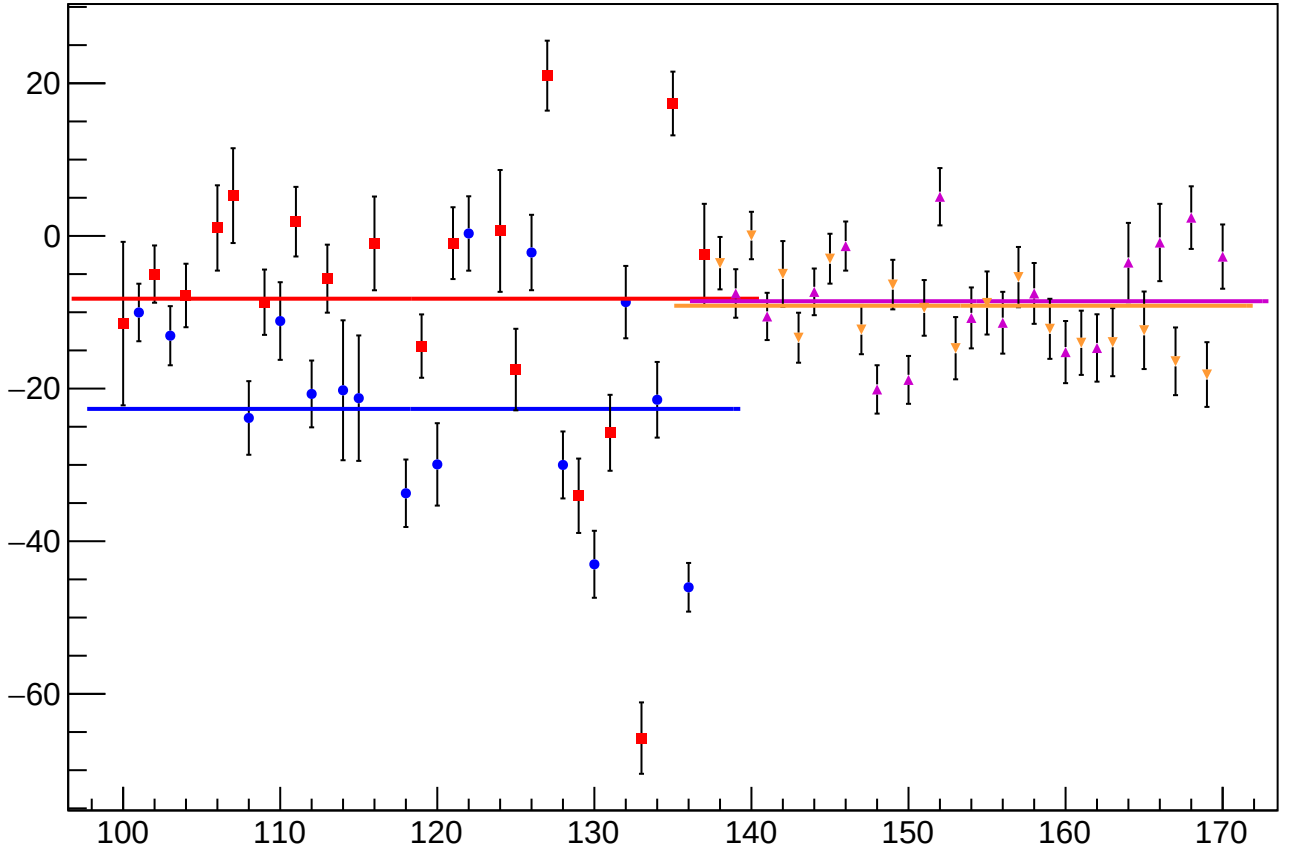
Left In: 1798.936+/-0.352 $\chi^2$/NDF:96914.5/15

+ sign 1811.590+/-0.283 $\chi^2$/NDF: 224017.5/32

All: 1808.087+/-0.200 $\chi^2$/NDF: 412703.5/67

- sign 1804.611+/-0.282 $\chi^2$/NDF: 188380.1/34

# diff_bpm0l01X_mean vs Slug




Right In: -22.663+/-1.152 $\chi^2$/NDF: 157.2/15

Left Out: -9.147+/-0.915 $\chi^2$/NDF:32.7/16

Right Out: -8.224+/-1.129 $\chi^2$/NDF: 294.8/18

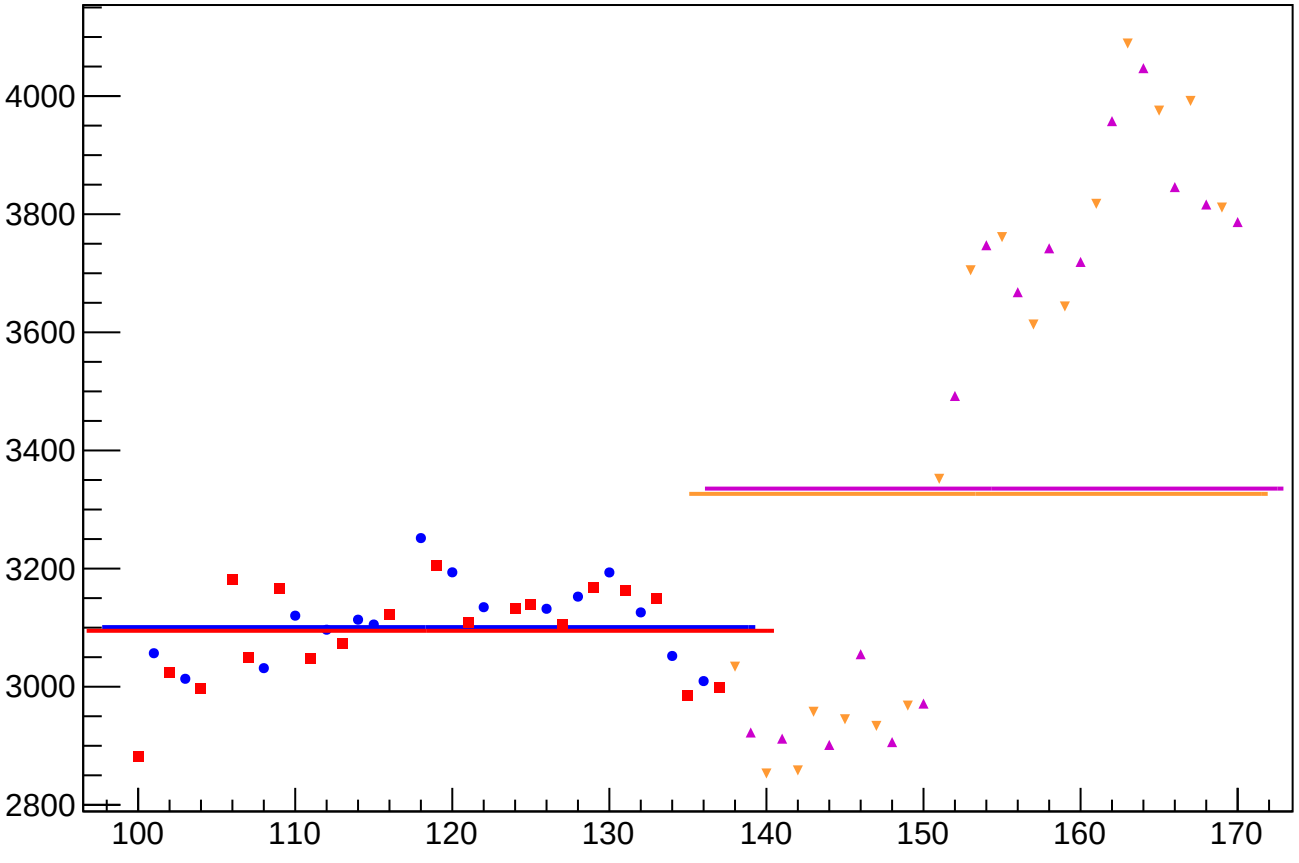
Left In: -8.553+/-0.925 $\chi^2$/NDF:60.9/15

+ sign -14.375+/-0.716 $\chi^2$/NDF: 274.3/32

All: -11.393+/-0.506 $\chi^2$/NDF: 664.6/67

- sign -8.421+/-0.715 $\chi^2$/NDF: 355.7/34

# diff_bpm0l01X_rms vs Slug




Right In: 3100.940+/-0.815 $\chi^2$/NDF: 7893.7/15

Left Out: 3326.518+/-0.647 $\chi^2$/NDF:443883.1/16

Right Out: 3094.688+/-0.798 $\chi^2$/NDF: 8584.4/18

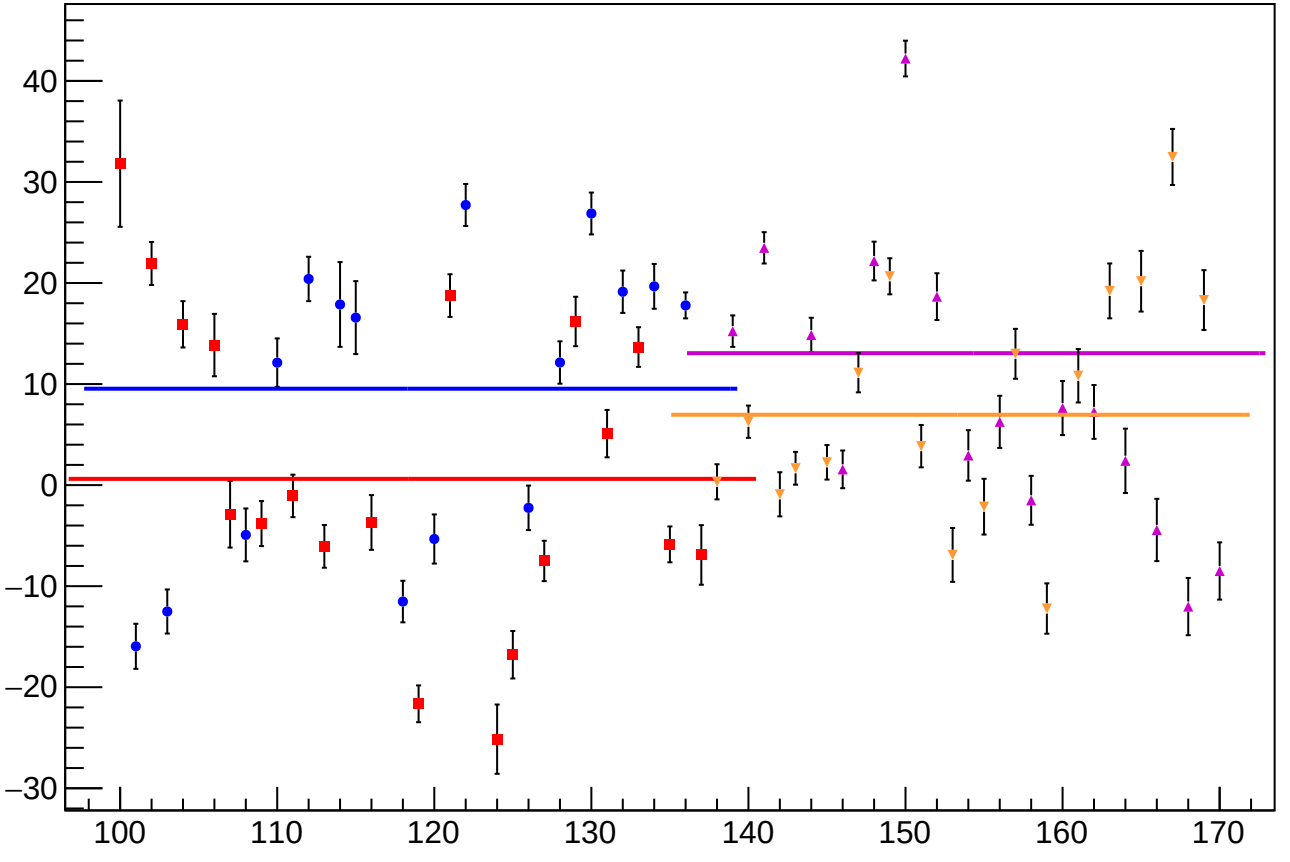
Left In: 3335.430+/-0.654 $\chi^2$/NDF:415233.1/15

+ sign 3239.266+/-0.507 $\chi^2$/NDF: 498806.6/32

All: 3239.003+/-0.358 $\chi^2$/NDF: 977058.3/67

- sign 3238.741+/-0.506 $\chi^2$/NDF: 478251.2/34

# diff_bpm0l01Y_mean vs Slug




Right In: 9.540+/-0.541 $\chi^2$/NDF: 698.7/15

Left Out: 6.963+/-0.520 $\chi^2$/NDF:355.9/16

Right Out: 0.620+/-0.534 $\chi^2$/NDF: 665.8/18

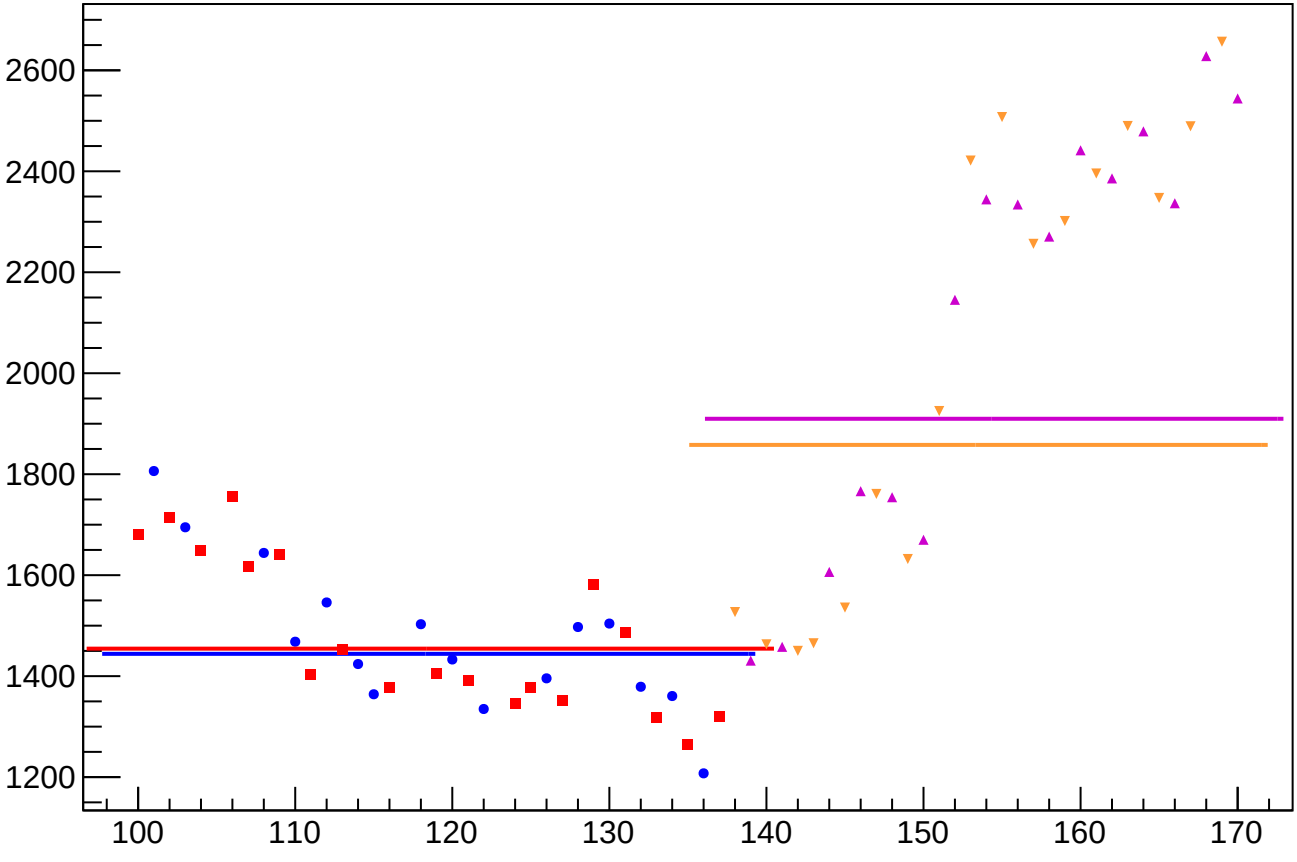
Left In: 13.058+/-0.538 $\chi^2$/NDF:635.0/15

+ sign 8.201+/-0.375 $\chi^2$/NDF: 1066.4/32

All: 7.504+/-0.267 $\chi^2$/NDF: 2643.3/67

- sign 6.793+/-0.379 $\chi^2$/NDF: 1570.0/34

# diff_bpm0l01Y_rms vs Slug




Right In: 1444.188+/-0.383 $\chi^2$/NDF: 180147.9/15

Left Out: 1858.030+/-0.368 $\chi^2$/NDF:1300499.8/16

Right Out: 1454.470+/-0.378 $\chi^2$/NDF: 142772.9/18

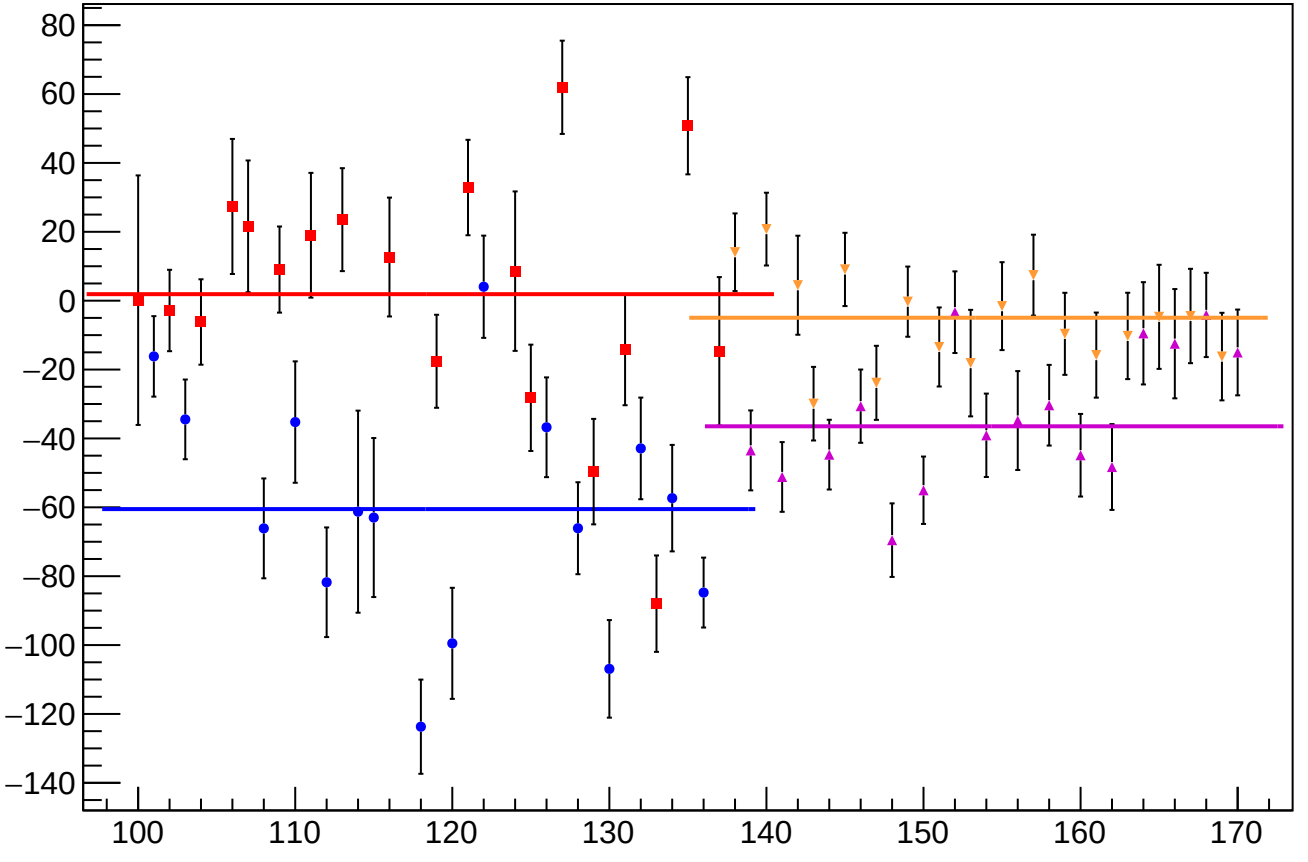
Left In: 1909.787+/-0.380 $\chi^2$/NDF:1138042.2/15

+ sign 1659.261+/-0.265 $\chi^2$/NDF: 2088185.8/32

All: 1669.741+/-0.189 $\chi^2$/NDF: 4093494.0/67

- sign 1680.442+/-0.268 $\chi^2$/NDF: 2002153.7/34

# diff_bpm0l02X_mean vs Slug




Right In: -60.516+/-3.596 $\chi^2$/NDF: 90.3/15

Left Out: -4.953+/-2.904 $\chi^2$/NDF:24.0/16

Right Out: 1.894+/-3.543 $\chi^2$/NDF: 103.8/18

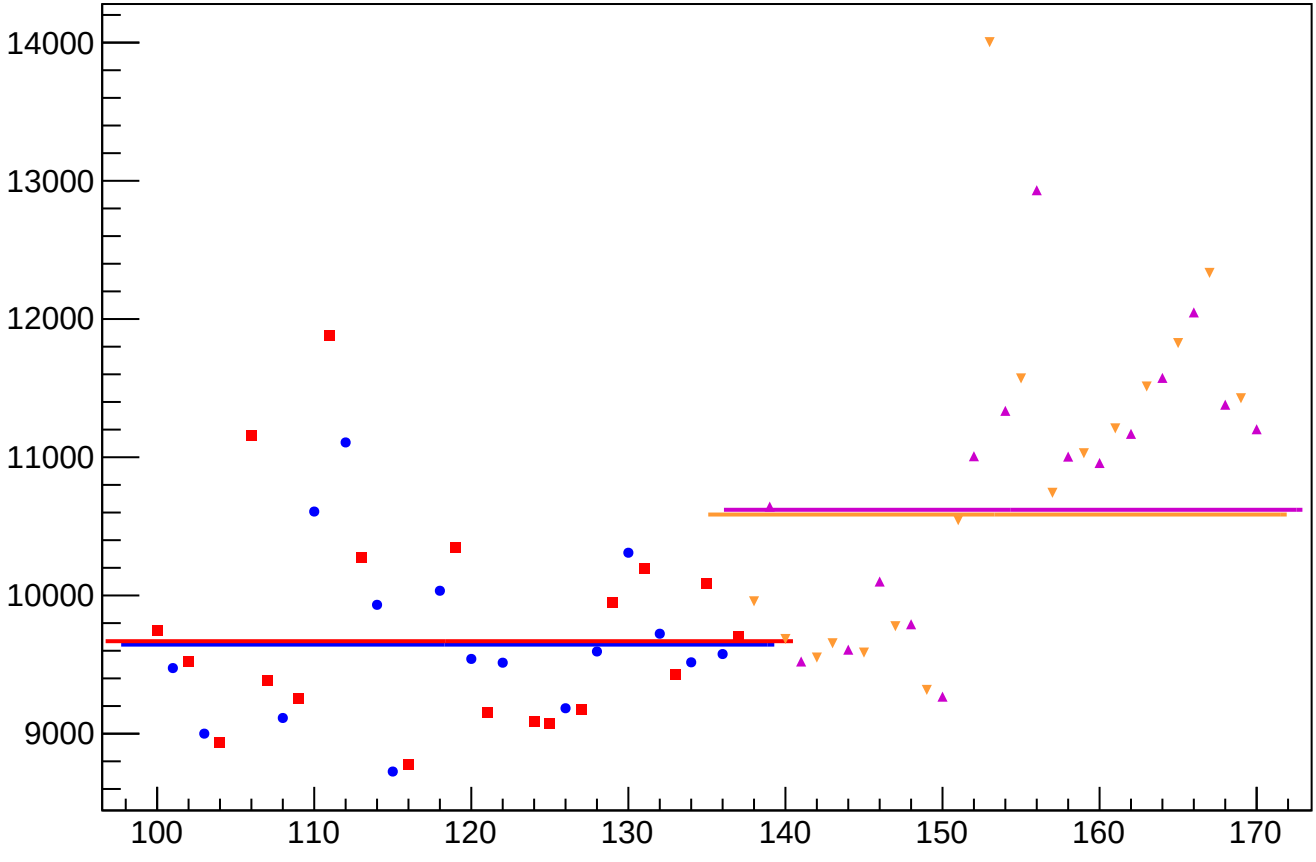
Left In: -36.475+/-2.935 $\chi^2$/NDF:41.7/15

+ sign -26.887+/-2.260 $\chi^2$/NDF: 258.9/32

All: -23.874+/-1.598 $\chi^2$/NDF: 477.5/67

- sign -20.860+/-2.260 $\chi^2$/NDF: 215.1/34

# diff_bpm0l02X_rms vs Slug




Right In: 9644.396+/-2.543 $\chi^2$/NDF: 44101.6/15

Left Out: 10585.579+/-2.054 $\chi^2$/NDF:289738.3/16

Right Out: 9669.136+/-2.505 $\chi^2$/NDF: 79878.1/18

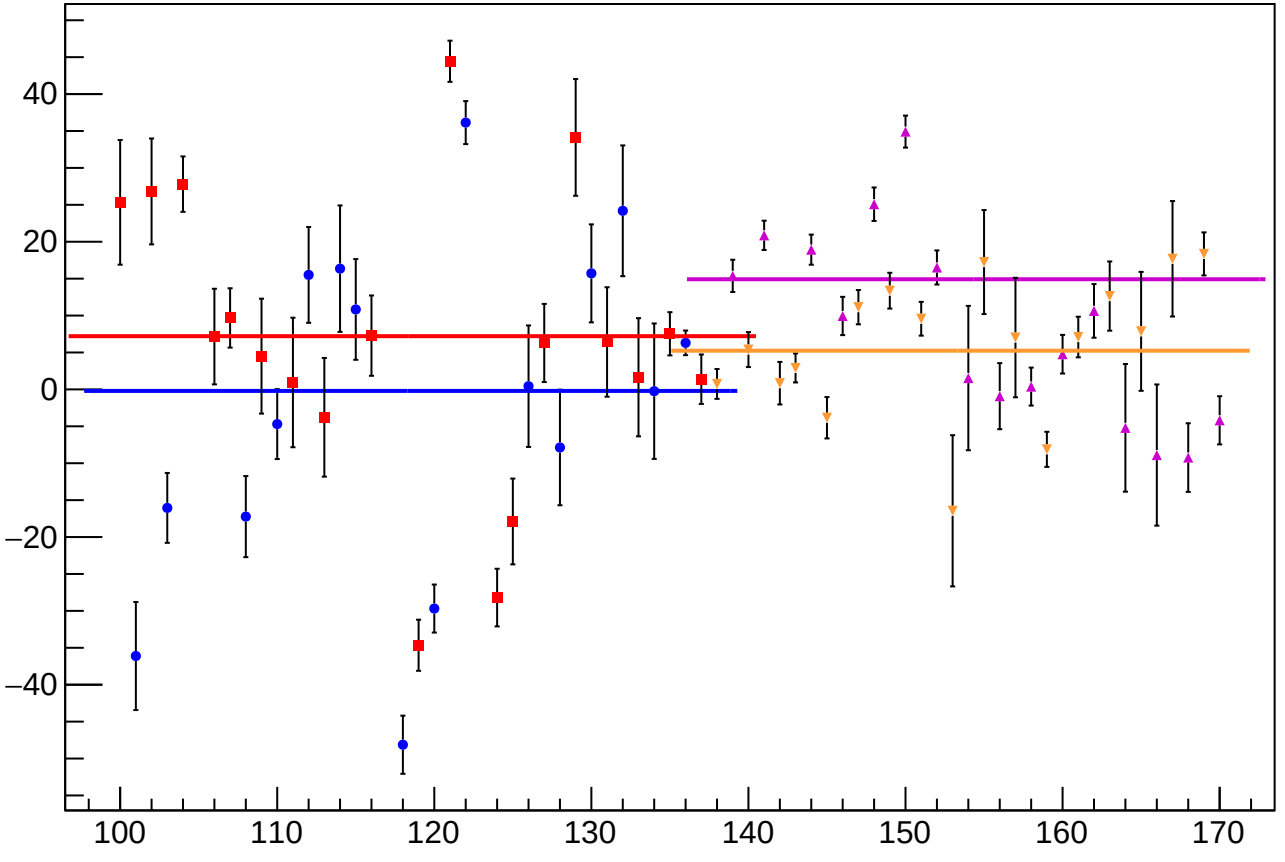
Left In: 10619.914+/-2.075 $\chi^2$/NDF:203662.2/15

+ sign 10214.038+/-1.598 $\chi^2$/NDF: 416749.8/32

All: 10223.499+/-1.130 $\chi^2$/NDF: 785779.5/67

- sign 10232.965+/-1.598 $\chi^2$/NDF: 368959.5/34

# diff_bpm0l02Y_mean vs Slug




Right In: -0.206+/-1.045 $\chi^2$/NDF: 473.7/15

Left Out: 5.242+/-0.703 $\chi^2$/NDF:105.3/16

Right Out: 7.206+/-1.074 $\chi^2$/NDF: 485.6/18

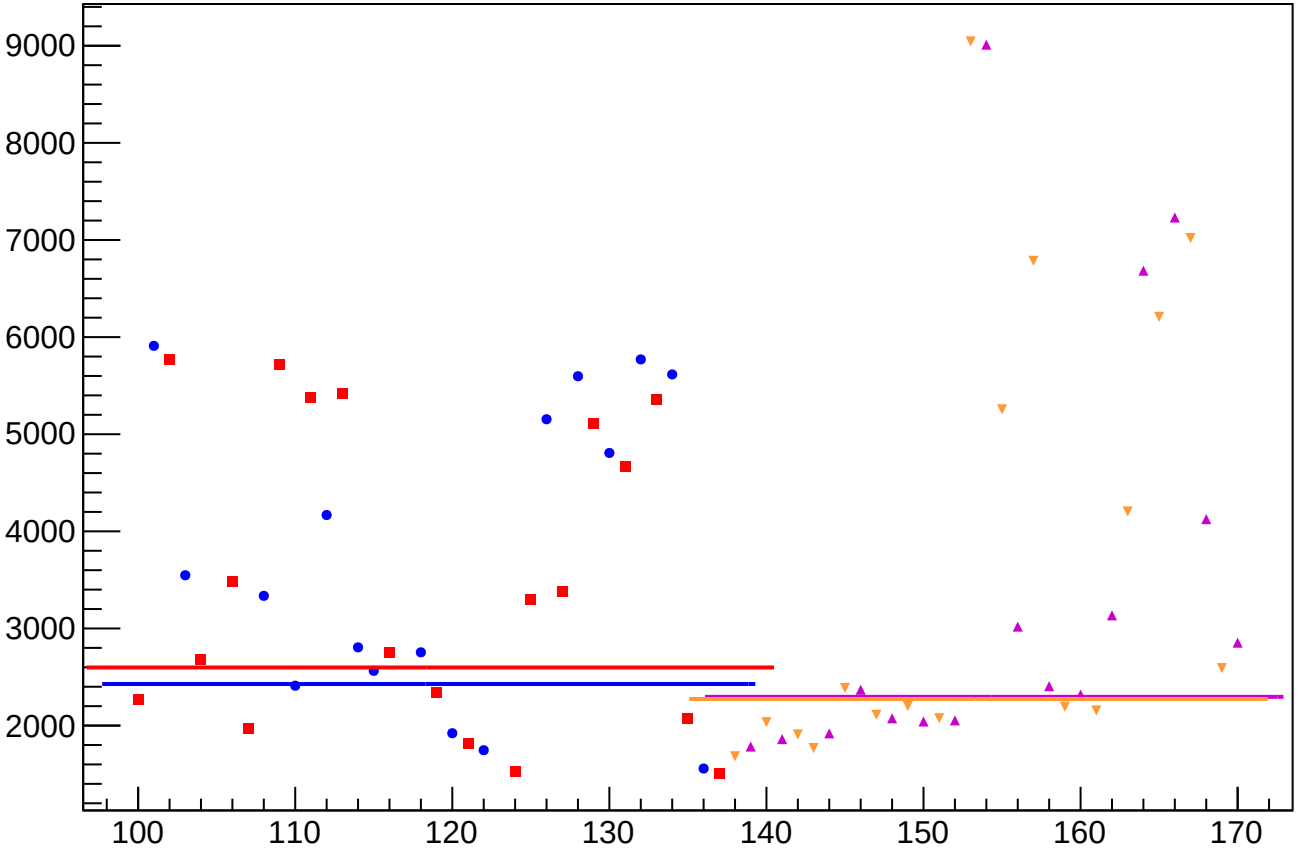
Left In: 14.920+/-0.699 $\chi^2$/NDF:258.3/15

+ sign 3.547+/-0.583 $\chi^2$/NDF: 597.7/32

All: 8.065+/-0.413 $\chi^2$/NDF: 1498.5/67

- sign 12.624+/-0.586 $\chi^2$/NDF: 780.2/34

# diff_bpm0l02Y_rms vs Slug




Right In: 2428.080+/-0.739 $\chi^2$/NDF: 2815335.2/15

Left Out: 2273.680+/-0.497 $\chi^2$/NDF:3822465.2/16

Right Out: 2598.321+/-0.759 $\chi^2$/NDF: 2514932.7/18

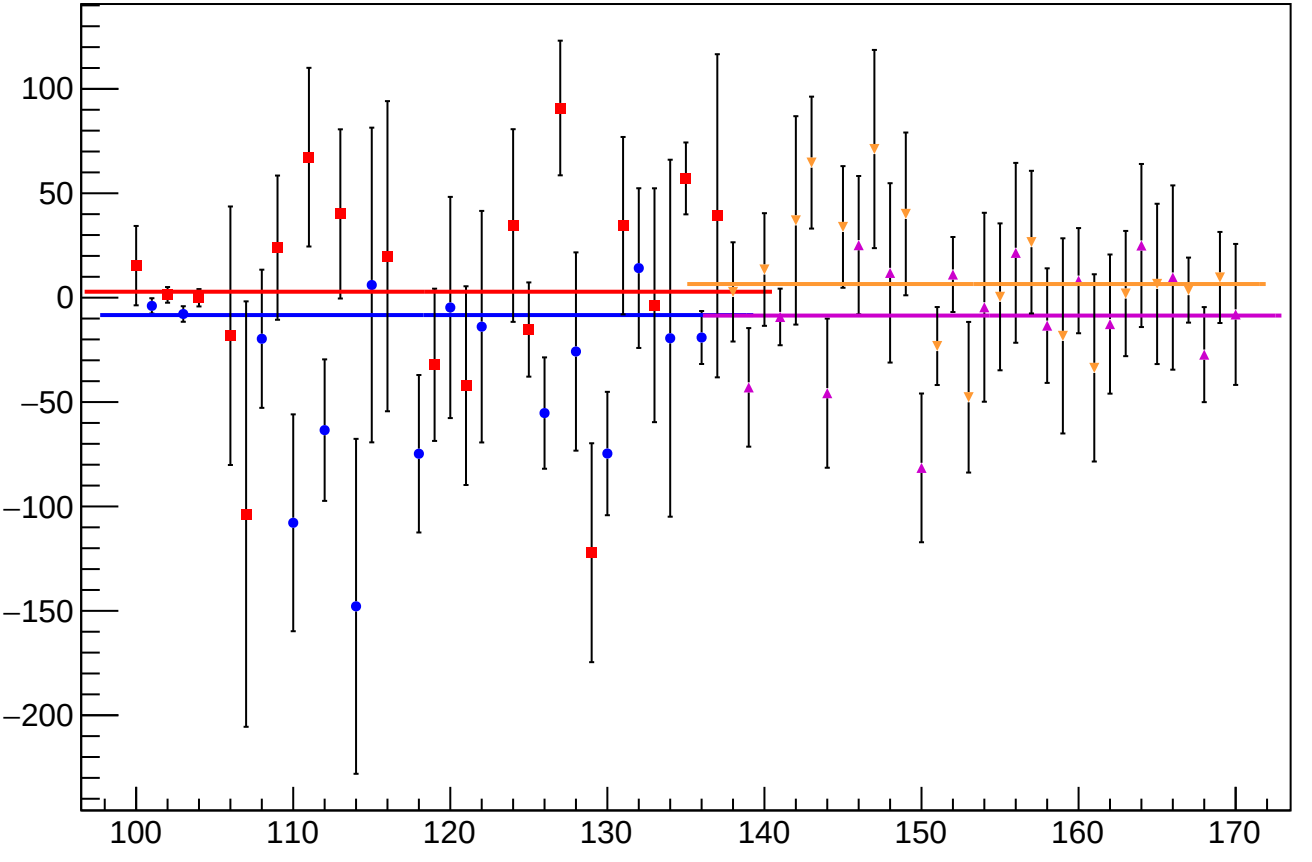
Left In: 2295.893+/-0.494 $\chi^2$/NDF:2867134.2/15

+ sign 2321.725+/-0.412 $\chi^2$/NDF: 6667854.8/32

All: 2353.673+/-0.292 $\chi^2$/NDF: 12173444.9/6

- sign 2385.906+/-0.414 $\chi^2$/NDF: 5493530.1/34

# diff_bpm0l03X_mean vs Slug




Right In: -8.332+/-2.499 $\chi^2$/NDF: 23.4/15

Left Out: 6.534+/-6.884 $\chi^2$/NDF:13.7/16

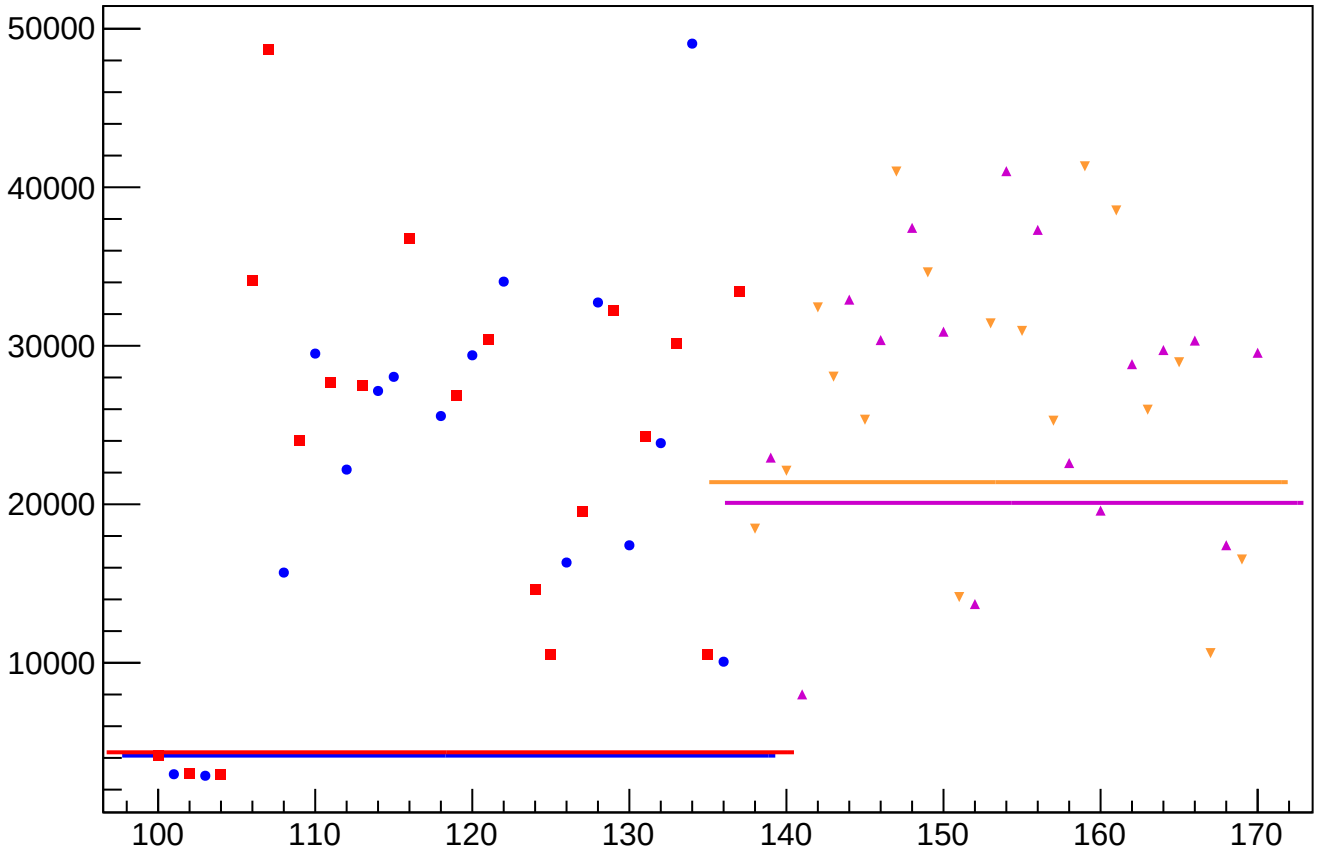
Right Out: 2.848+/-2.640 $\chi^2$/NDF: 32.6/18

Left In: -8.572+/-6.802 $\chi^2$/NDF:11.8/15

+ sign -6.601+/-2.349 $\chi^2$/NDF: 41.2/32

All: -2.808+/-1.699 $\chi^2$/NDF: 93.5/67

- sign 1.353+/-2.461 $\chi^2$/NDF: 46.8/34




Right In: 4145.795+/-1.767 $\chi^2$/NDF: 6836950.5/15

Left Out: 21397.070+/-4.868 $\chi^2$/NDF:3293611.6/16

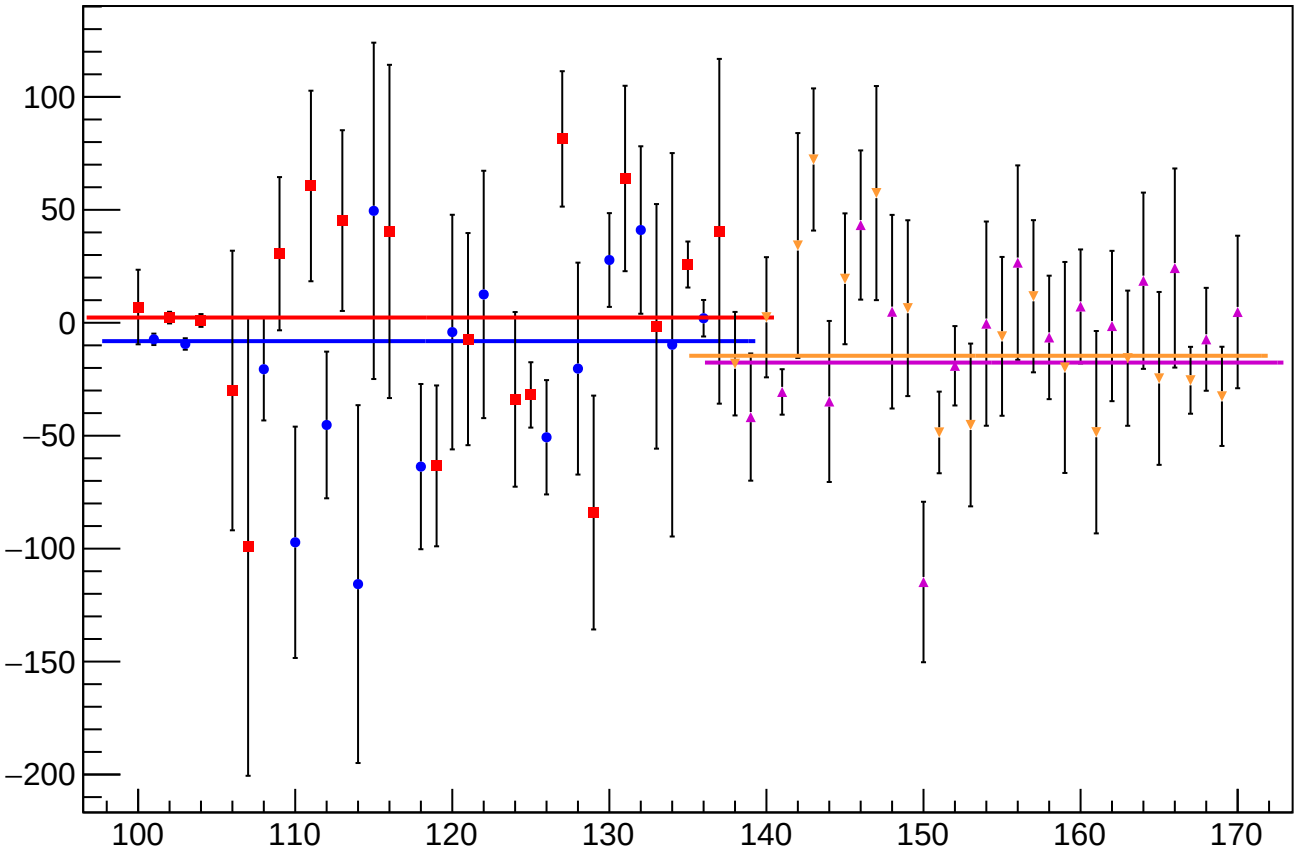
Right Out: 4354.437+/-1.866 $\chi^2$/NDF: 7624762.5/18

Left In: 20090.252+/-4.809 $\chi^2$/NDF:4139902.1/15

+ sign 6154.751+/-1.661 $\chi^2$/NDF: 21226386.8/32

All: 6278.465+/-1.202 $\chi^2$/NDF: 42306698.1/6

- sign 6414.192+/-1.740 $\chi^2$/NDF: 21068680.9/34




Right In: -8.132+/-1.720 $\chi^2$/NDF: 19.1/15

Left Out: -14.608+/-6.751 $\chi^2$/NDF:19.8/16

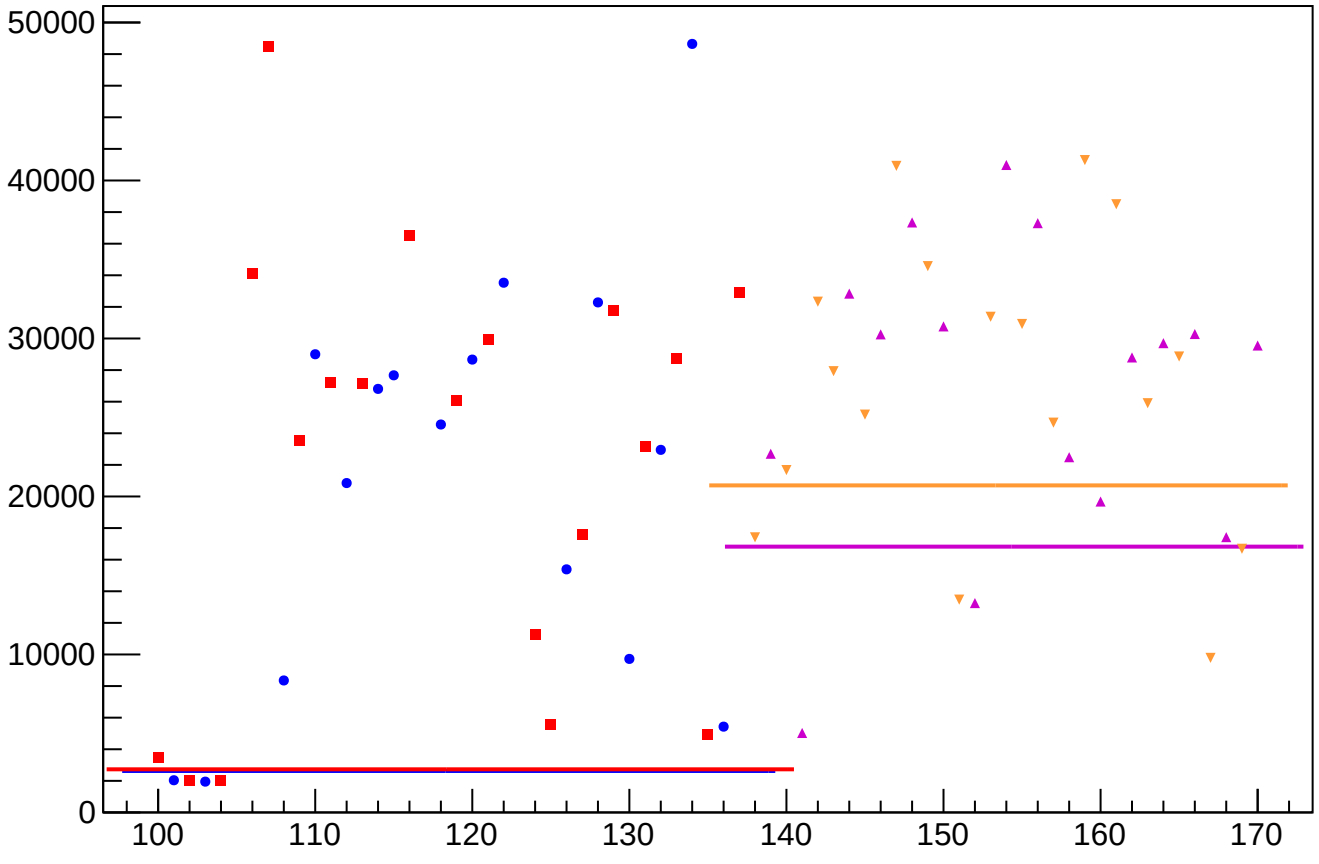
Right Out: 2.325+/-1.822 $\chi^2$/NDF: 33.1/18

Left In: -17.627+/-6.175 $\chi^2$/NDF:18.8/15

+ sign -8.527+/-1.667 $\chi^2$/NDF: 39.8/32

All: -4.117+/-1.206 $\chi^2$/NDF: 115.9/67

- sign 0.727+/-1.747 $\chi^2$/NDF: 61.4/34




Right In: 2626.430+/-1.216 $\chi^2$/NDF: 6780884.6/15

Left Out: 20701.105+/-4.774 $\chi^2$/NDF:3626584.5/16

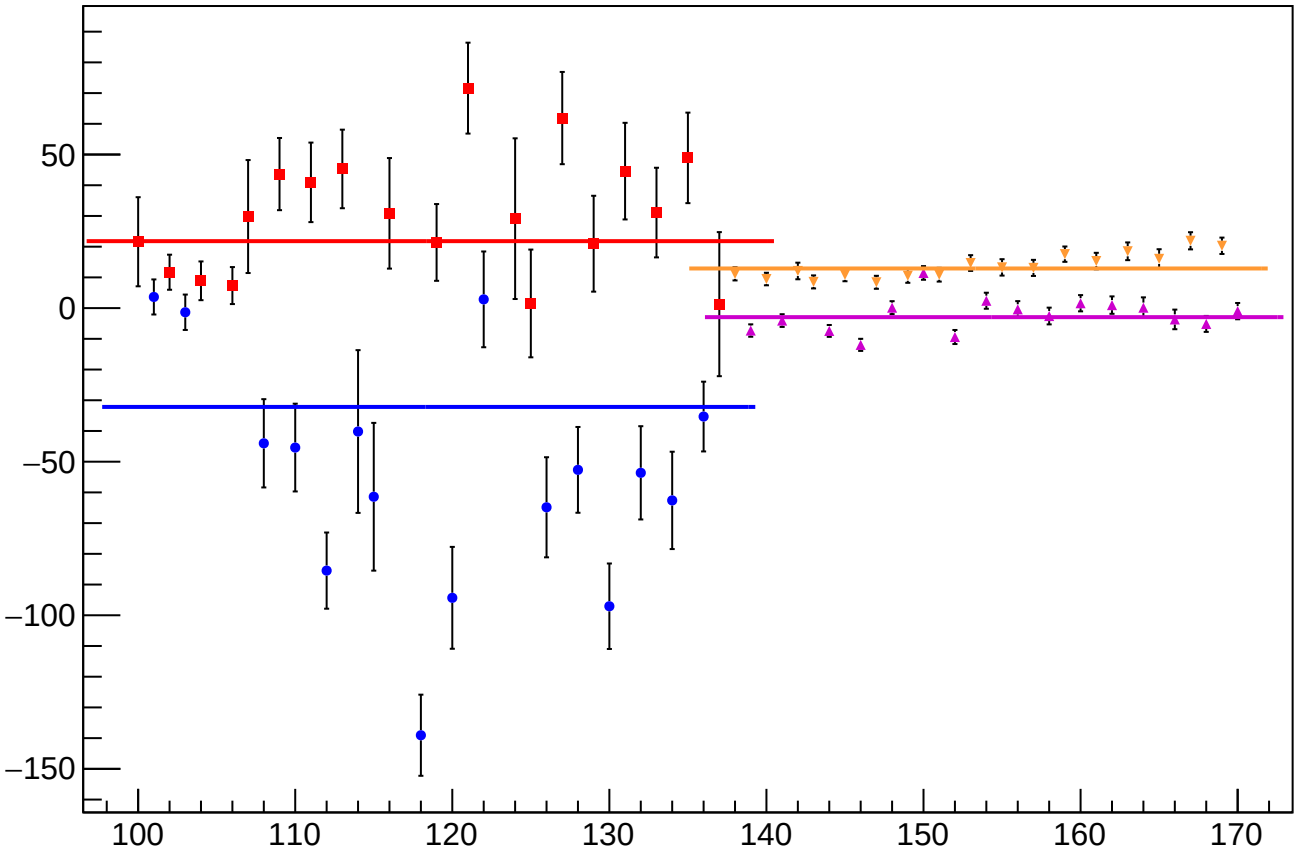
Right Out: 2730.235+/-1.288 $\chi^2$/NDF: 7985984.4/18

Left In: 16824.778+/-4.366 $\chi^2$/NDF:6501013.6/15

+ sign 3728.657+/-1.179 $\chi^2$/NDF: 23869719.6/32

All: 3790.667+/-0.853 $\chi^2$/NDF: 47949128.5/6

- sign 3858.779+/-1.235 $\chi^2$/NDF: 24073602.4/34




Right In: -32.171+/-2.842 $\chi^2$/NDF: 207.8/15

Left Out: 12.901+/-0.589 $\chi^2$/NDF:42.9/16

Right Out: 21.801+/-2.557 $\chi^2$/NDF: 49.1/18

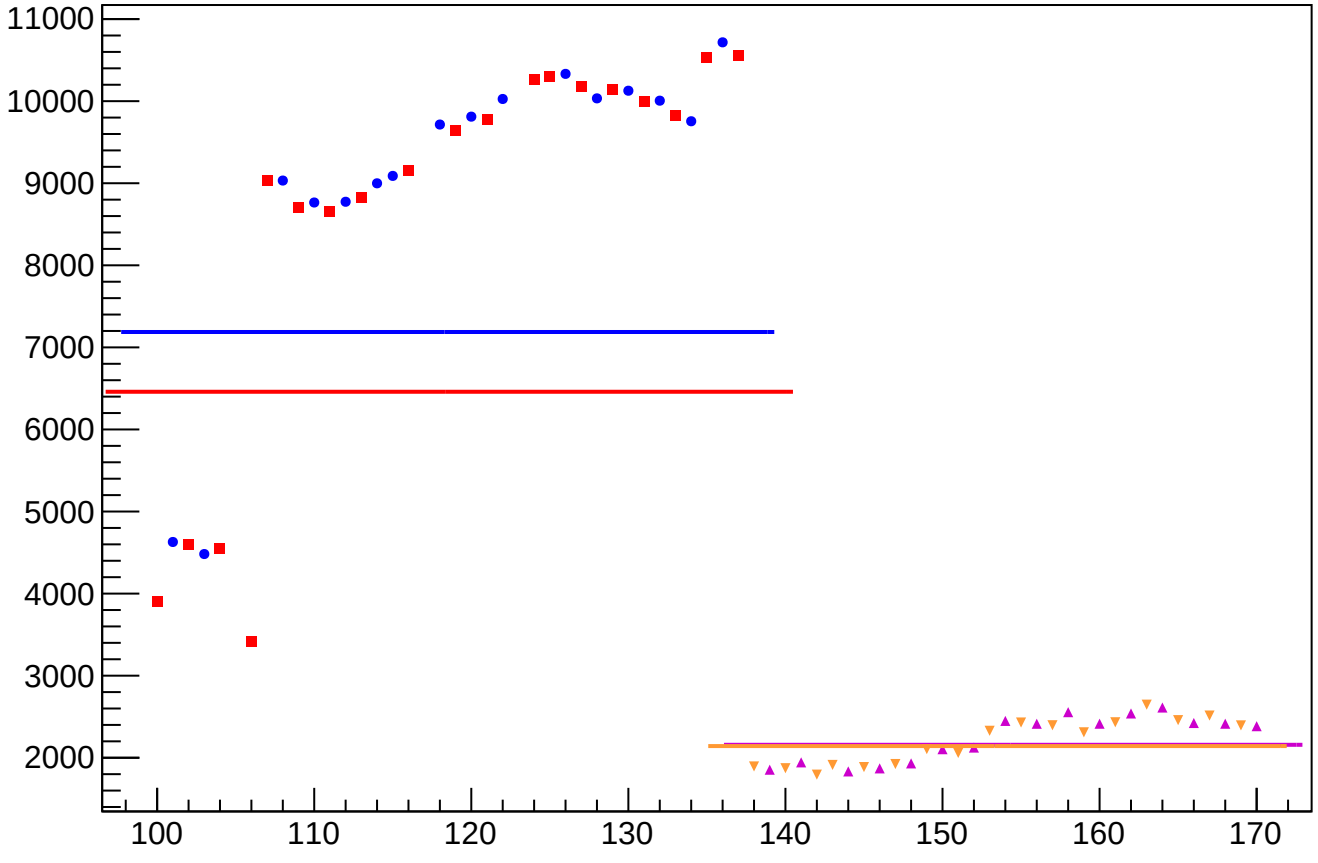
Left In: -2.941+/-0.599 $\chi^2$/NDF:95.6/15

+ sign 11.046+/-0.577 $\chi^2$/NDF: 491.8/32

All: 4.764+/-0.410 $\chi^2$/NDF: 965.2/67

- sign -1.655+/-0.583 $\chi^2$/NDF: 233.4/34

# diff_bpm0l04X_rms vs Slug




Right In: 7187.494+/-2.009 $\chi^2$/NDF: 1705887.0/15

Left Out: 2142.234+/-0.416 $\chi^2$/NDF:392443.3/16

Right Out: 6459.323+/-1.808 $\chi^2$/NDF: 2276337.9/18

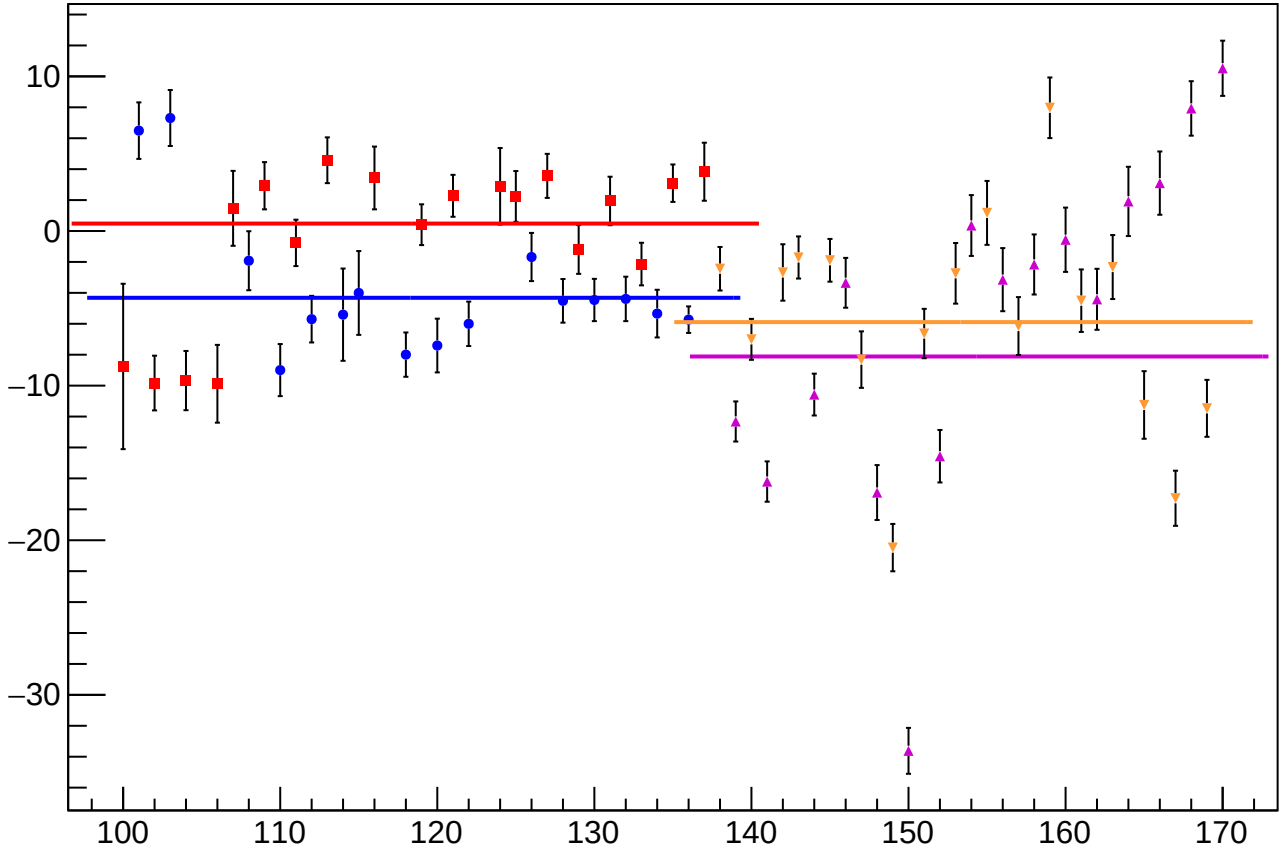
Left In: 2157.742+/-0.423 $\chi^2$/NDF:416039.3/15

+ sign 2349.935+/-0.408 $\chi^2$/NDF: 8142760.9/32

All: 2365.404+/-0.290 $\chi^2$/NDF: 16202736.2/6

- sign 2381.213+/-0.412 $\chi^2$/NDF: 8057064.5/34

# diff_bpm0l04Y_mean vs Slug




Right In: -4.319+/-0.380 $\chi^2$/NDF: 103.7/15

Left Out: -5.892+/-0.412 $\chi^2$/NDF:244.0/16

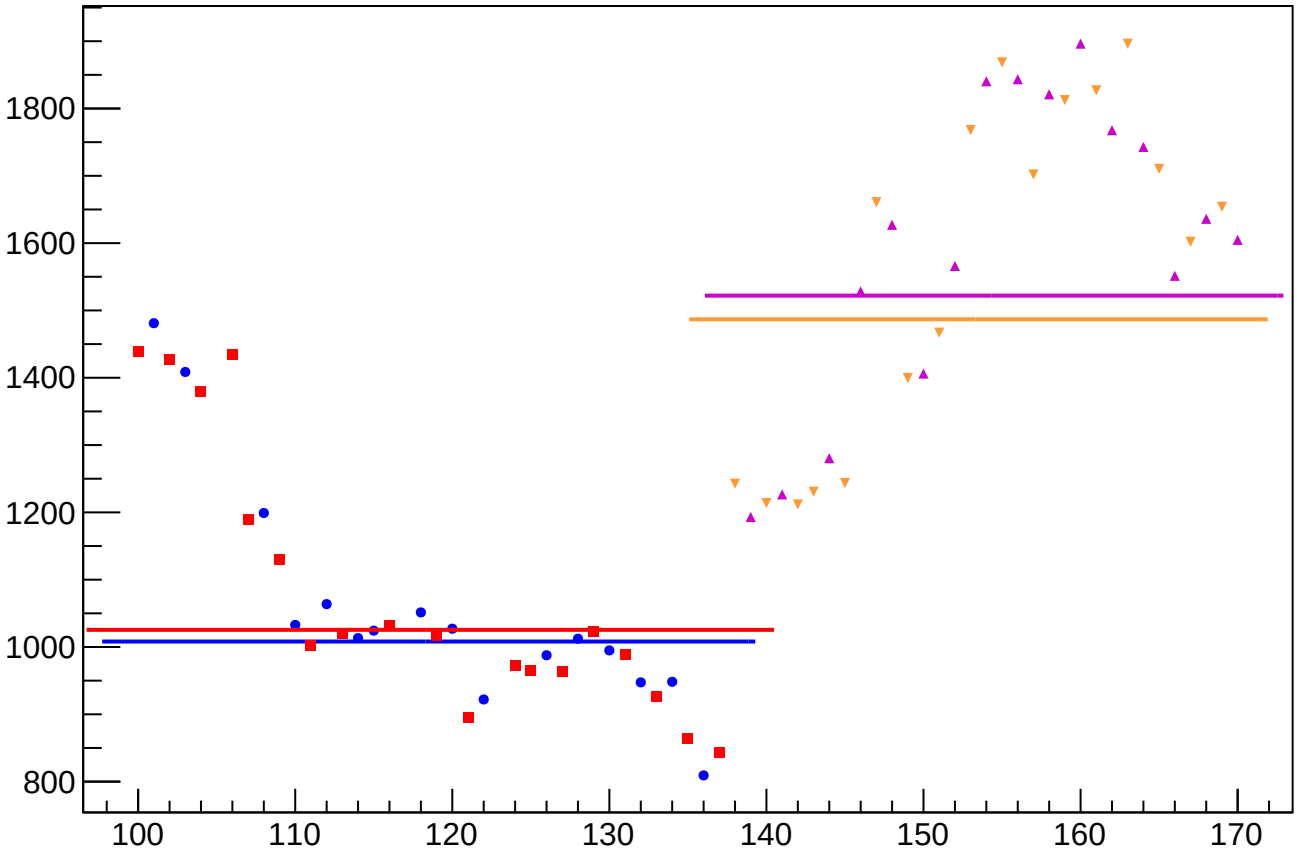
Right Out: 0.481+/-0.379 $\chi^2$/NDF: 117.2/18

Left In: -8.116+/-0.424 $\chi^2$/NDF:687.4/15

+ sign -5.042+/-0.279 $\chi^2$/NDF: 355.5/32

All: -4.196+/-0.199 $\chi^2$/NDF: 1407.2/67

- sign -3.331+/-0.283 $\chi^2$/NDF: 1033.1/34




Right In: 1008.116+/-0.269 $\chi^2$/NDF: 378836.2/15

Left Out: 1486.853+/-0.291 $\chi^2$/NDF:719707.6/16

Right Out: 1025.486+/-0.268 $\chi^2$/NDF: 345991.2/18

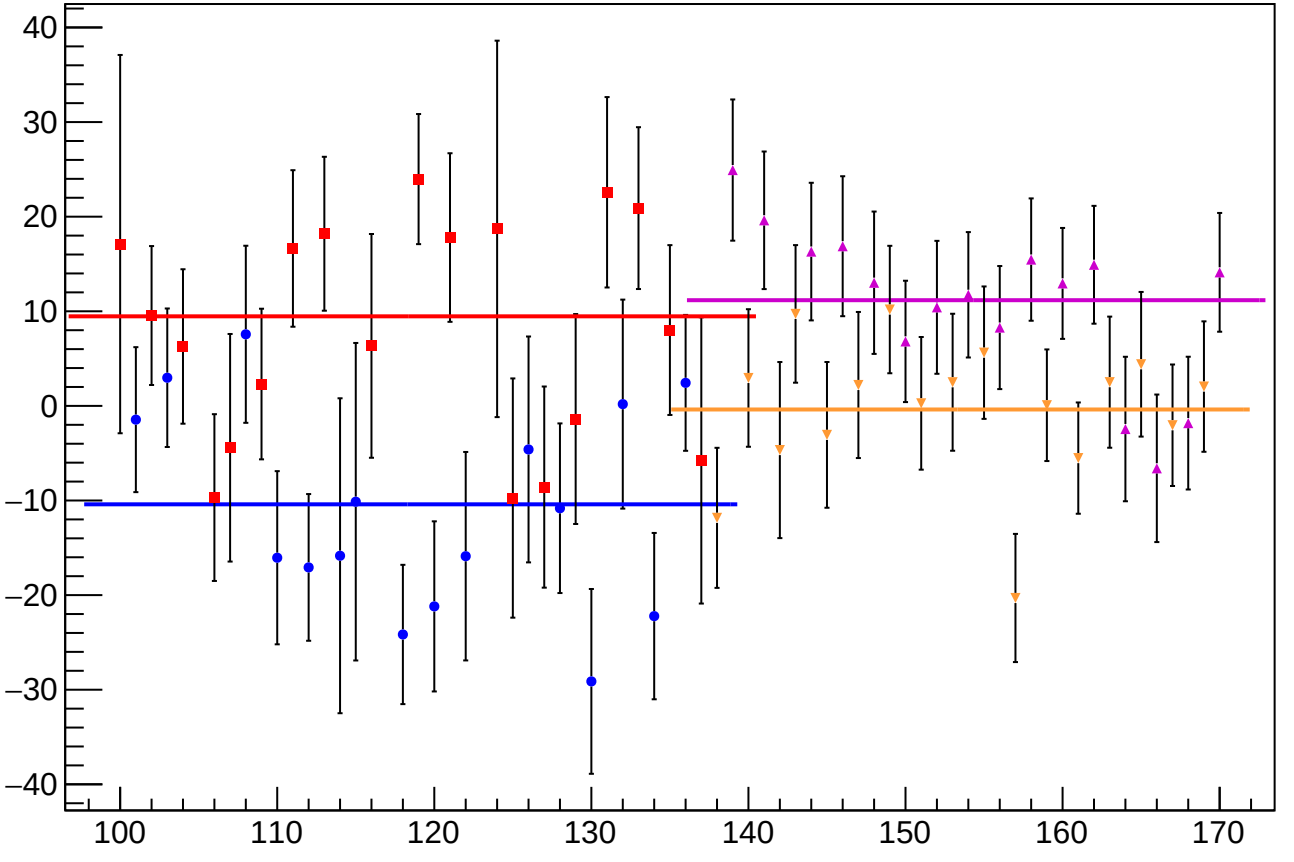
Left In: 1522.023+/-0.300 $\chi^2$/NDF:592921.8/15

+ sign 1228.020+/-0.197 $\chi^2$/NDF: 2558641.2/32

All: 1236.730+/-0.140 $\chi^2$/NDF: 5026350.2/67

- sign 1245.646+/-0.200 $\chi^2$/NDF: 2463770.7/34

# diff_bpm0l05X_mean vs Slug




Right In: -10.404+/-2.280 $\chi^2$/NDF: 24.6/15

Left Out: -0.380+/-1.700 $\chi^2$/NDF:18.5/16

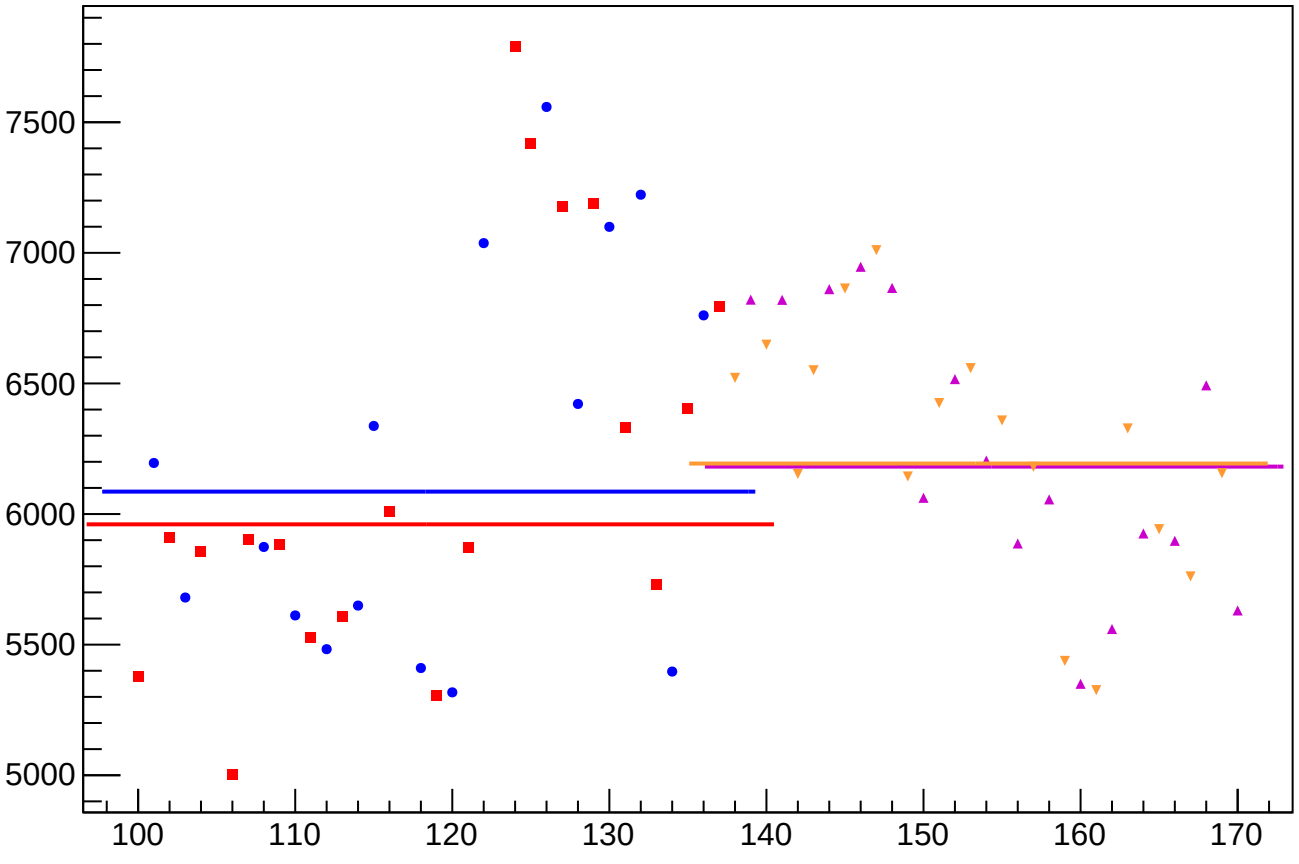
Right Out: 9.467+/-2.191 $\chi^2$/NDF: 25.4/18

Left In: 11.172+/-1.713 $\chi^2$/NDF:19.5/15

+ sign -3.963+/-1.363 $\chi^2$/NDF: 55.6/32

All: 3.354+/-0.959 $\chi^2$/NDF: 157.8/67

- sign 10.525+/-1.350 $\chi^2$/NDF: 45.2/34




Right In: 6085.873+/-1.612 $\chi^2$/NDF: 179118.8/15

Left Out: 6193.367+/-1.202 $\chi^2$/NDF:151005.6/16

Right Out: 5960.613+/-1.549 $\chi^2$/NDF: 162772.6/18

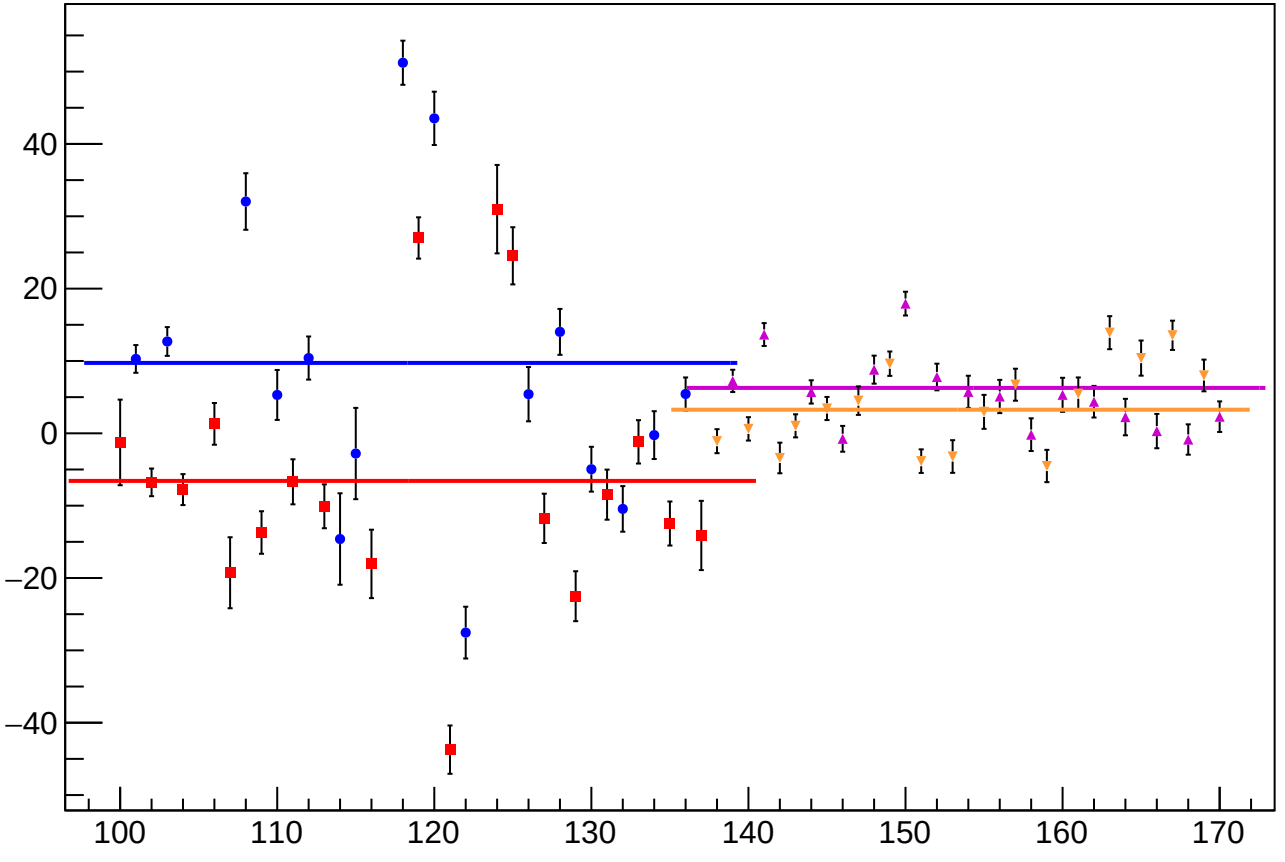
Left In: 6181.585+/-1.211 $\chi^2$/NDF:179980.6/15

+ sign 6154.945+/-0.964 $\chi^2$/NDF: 332981.0/32

All: 6126.059+/-0.678 $\chi^2$/NDF: 690138.7/67

- sign 6097.748+/-0.954 $\chi^2$/NDF: 355379.4/34

# diff_bpm0l05Y_mean vs Slug




Right In: 9.733+/-0.755 $\chi^2$/NDF: 512.4/15

Left Out: 3.265+/-0.469 $\chi^2$/NDF:139.9/16

Right Out: -6.576+/-0.730 $\chi^2$/NDF: 423.8/18

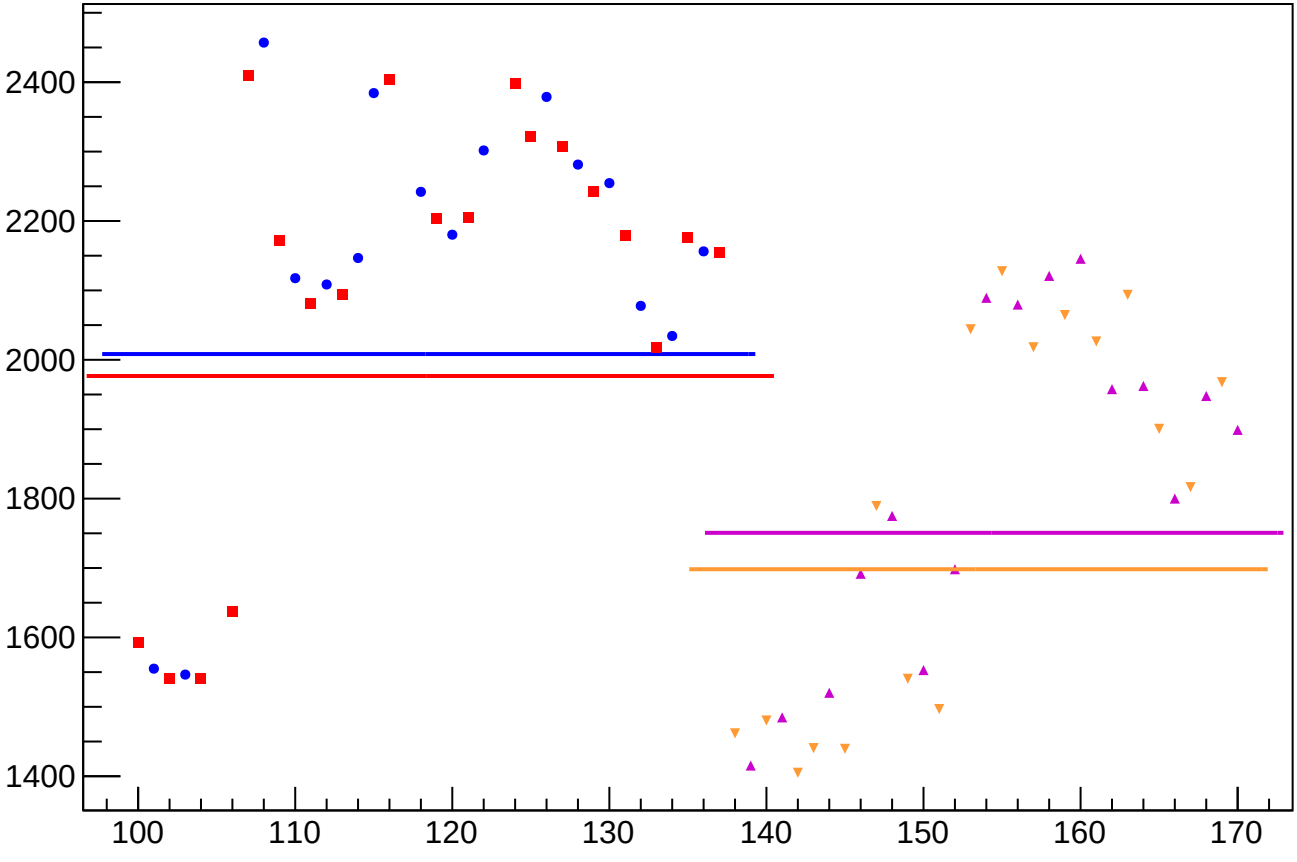
Left In: 6.277+/-0.487 $\chi^2$/NDF:124.0/15

+ sign 5.069+/-0.399 $\chi^2$/NDF: 705.2/32

All: 3.718+/-0.284 $\chi^2$/NDF: 1490.7/67

- sign 2.322+/-0.405 $\chi^2$/NDF: 762.1/34

# diff_bpm0l05Y_rms vs Slug




Right In: 2008.296+/-0.534 $\chi^2$/NDF: 344387.2/15

Left Out: 1698.237+/-0.332 $\chi^2$/NDF:635938.4/16

Right Out: 1976.677+/-0.516 $\chi^2$/NDF: 365375.1/18

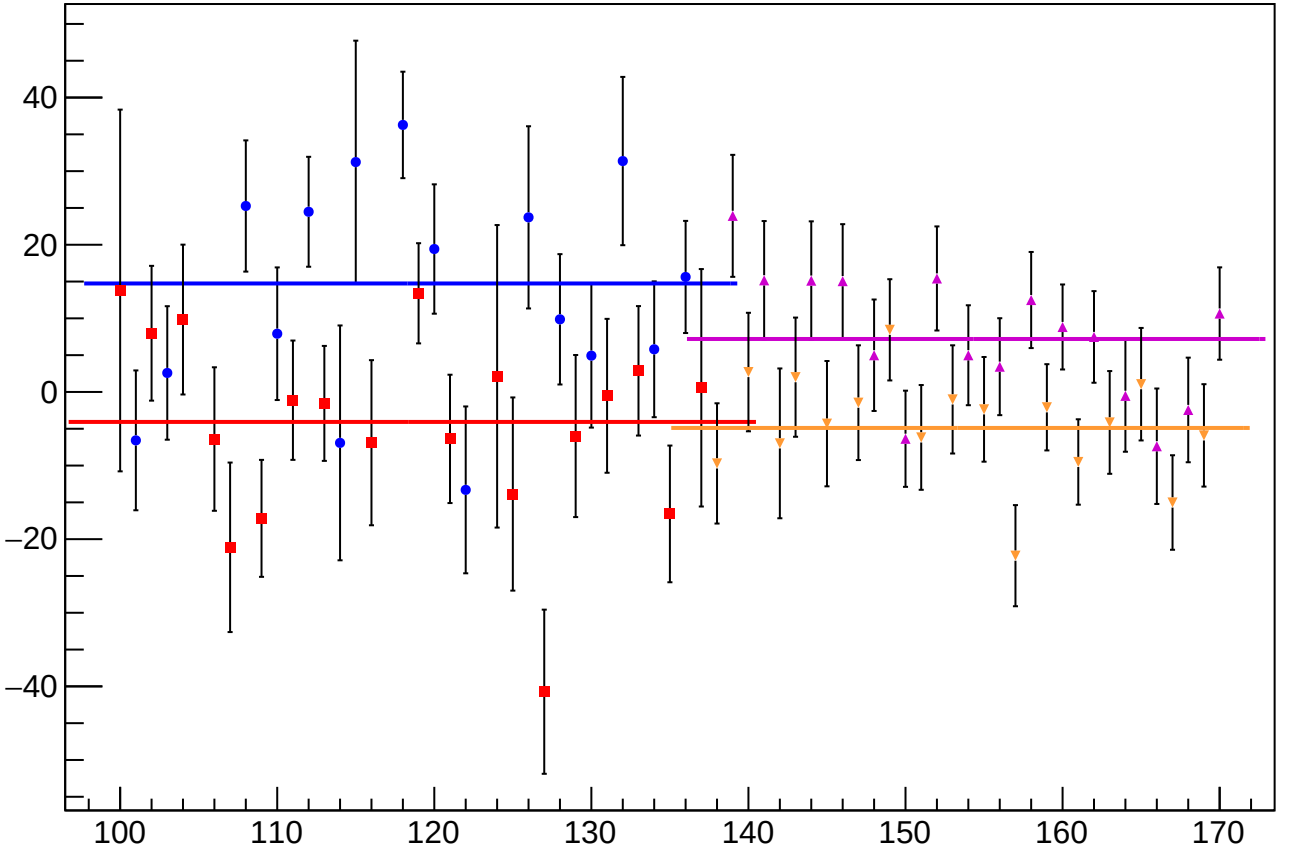
Left In: 1750.695+/-0.344 $\chi^2$/NDF:483443.2/15

+ sign 1784.695+/-0.282 $\chi^2$/NDF: 1223625.0/32

All: 1802.175+/-0.201 $\chi^2$/NDF: 2212828.6/67

- sign 1820.227+/-0.286 $\chi^2$/NDF: 981387.1/34

# diff_bpm0l06X_mean vs Slug




Right In: 14.739+/-2.358 $\chi^2$/NDF: 33.5/15

Left Out: -4.890+/-1.748 $\chi^2$/NDF:16.8/16

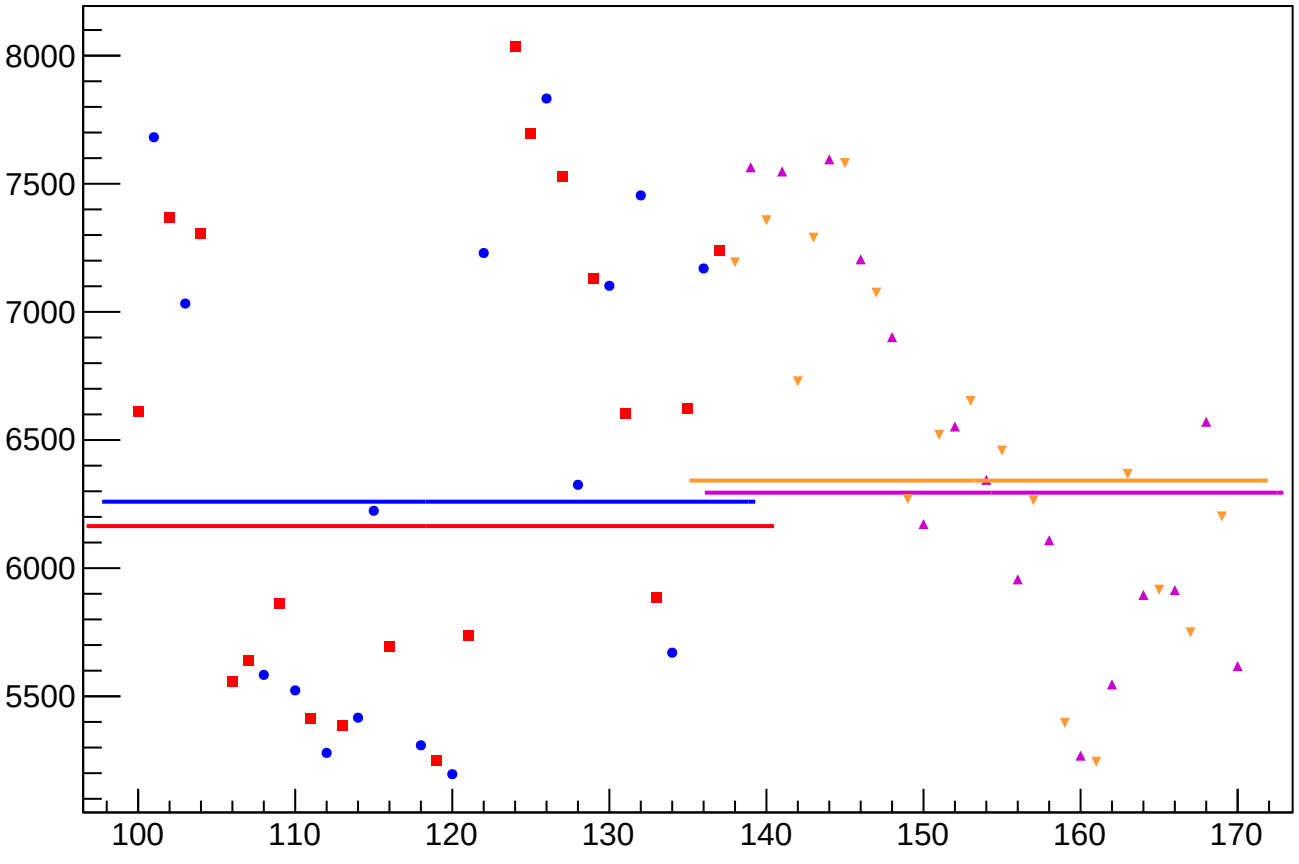
Right Out: -4.072+/-2.274 $\chi^2$/NDF: 30.2/18

Left In: 7.198+/-1.752 $\chi^2$/NDF:20.6/15

+ sign 2.072+/-1.404 $\chi^2$/NDF: 95.0/32

All: 2.541+/-0.987 $\chi^2$/NDF: 161.4/67

- sign 2.999+/-1.388 $\chi^2$/NDF: 66.2/34




Right In: 6259.416+/-1.667 $\chi^2$/NDF: 308606.8/15

Left Out: 6341.790+/-1.236 $\chi^2$/NDF:297433.5/16

Right Out: 6164.140+/-1.608 $\chi^2$/NDF: 265058.6/18

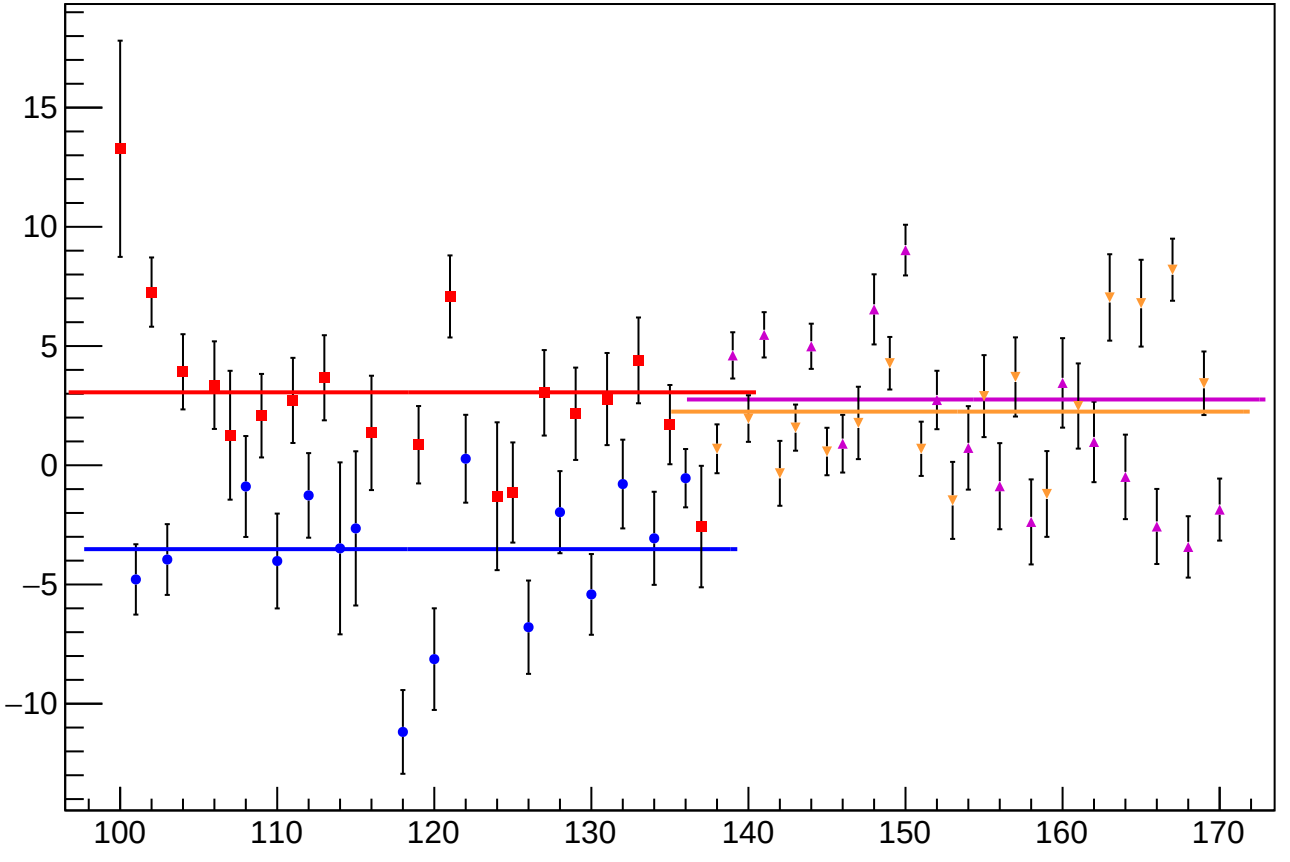
Left In: 6294.664+/-1.239 $\chi^2$/NDF:327042.5/15

+ sign 6312.574+/-0.993 $\chi^2$/NDF: 607615.9/32

All: 6278.918+/-0.698 $\chi^2$/NDF: 1206124.0/67

- sign 6246.036+/-0.981 $\chi^2$/NDF: 596236.3/34

# diff_bpm0l06Y_mean vs Slug




Right In: -3.518+/-0.452 $\chi^2$/NDF: 45.1/15

Left Out: 2.250+/-0.314 $\chi^2$/NDF:59.5/16

Right Out: 3.059+/-0.438 $\chi^2$/NDF: 34.8/18

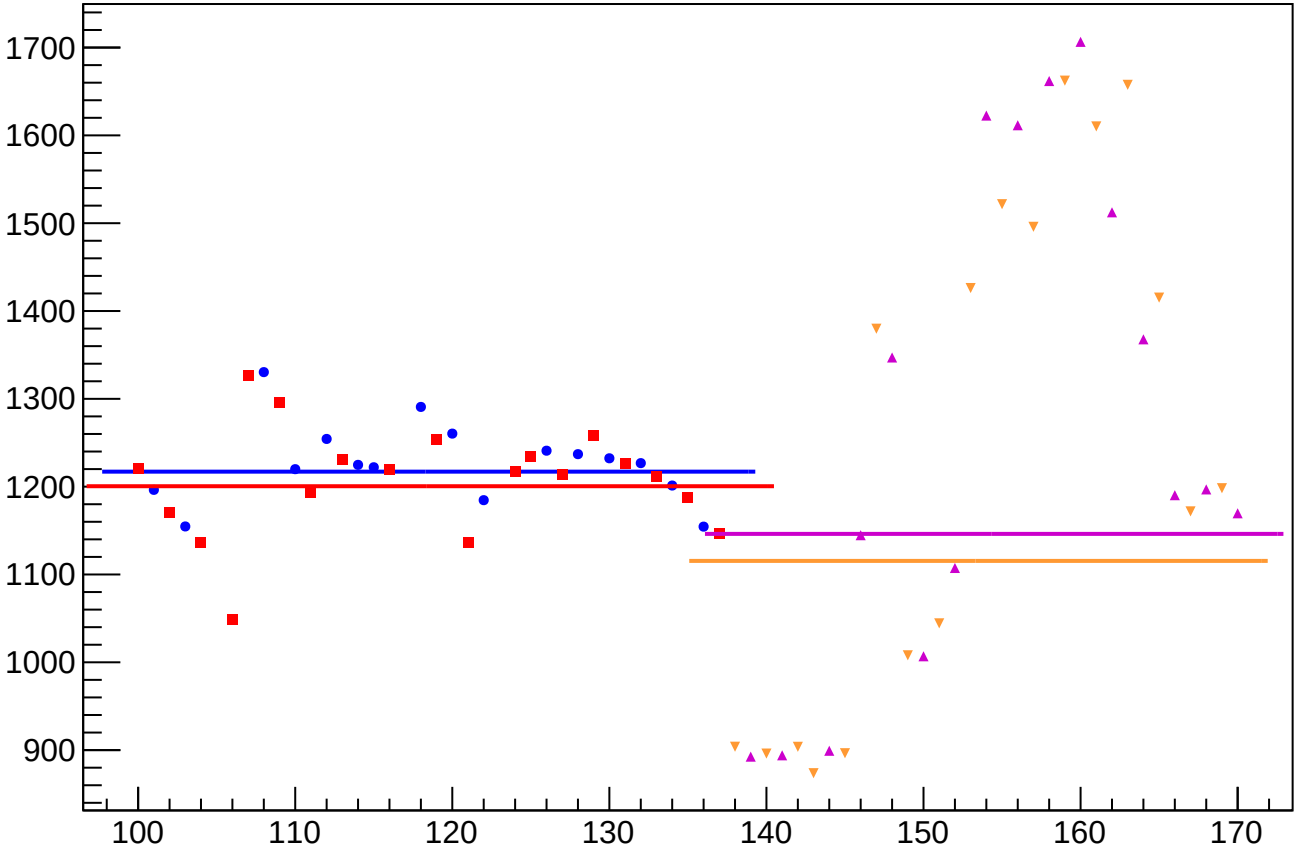
Left In: 2.759+/-0.325 $\chi^2$/NDF:126.4/15

+ sign 0.372+/-0.258 $\chi^2$/NDF: 214.2/32

All: 1.605+/-0.184 $\chi^2$/NDF: 421.9/67

- sign 2.865+/-0.261 $\chi^2$/NDF: 161.5/34

# diff_bpm0l06Y_rms vs Slug




Right In: 1217.094+/-0.320 $\chi^2$/NDF: 21686.7/15

Left Out: 1115.464+/-0.222 $\chi^2$/NDF:1417681.9/16

Right Out: 1200.497+/-0.310 $\chi^2$/NDF: 37654.3/18

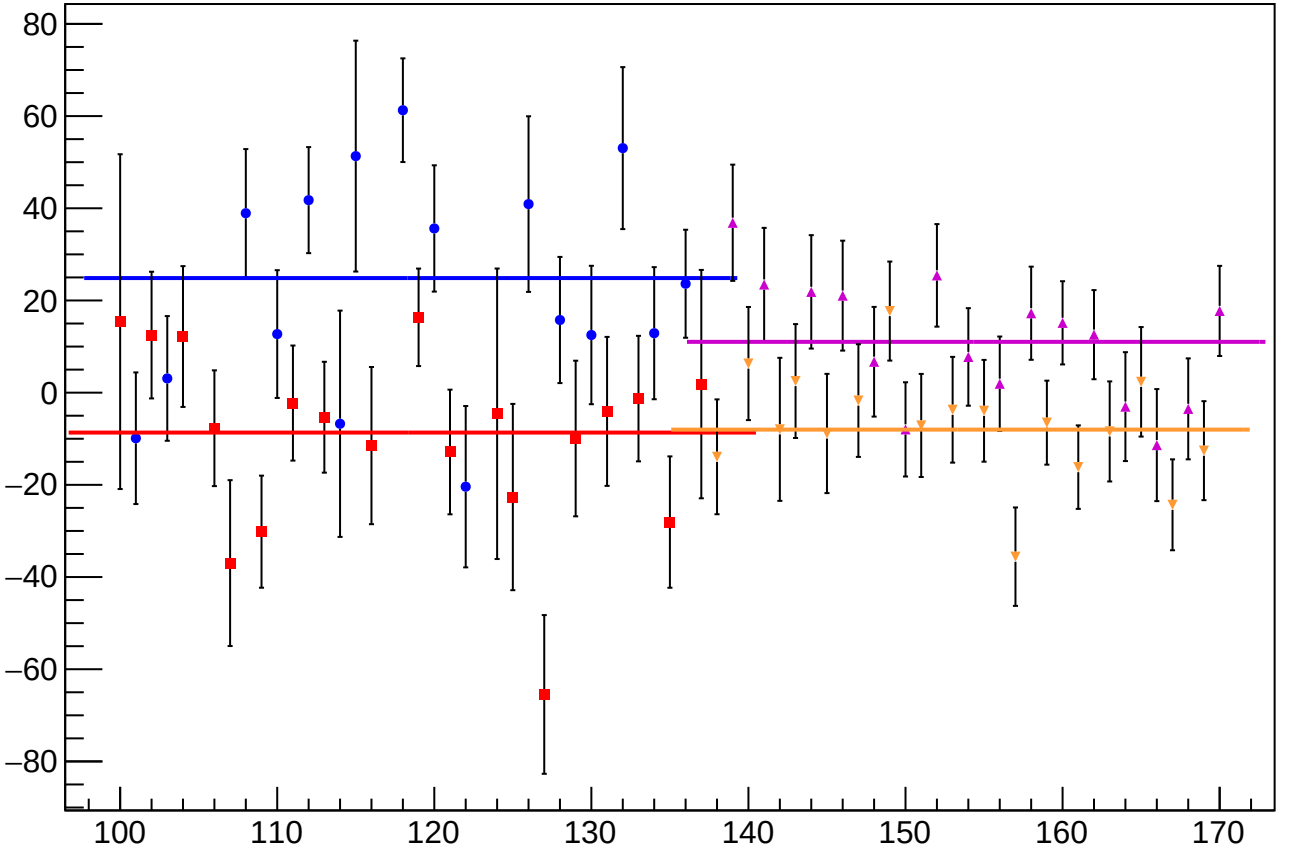
Left In: 1146.225+/-0.230 $\chi^2$/NDF:1243923.1/15

+ sign 1148.564+/-0.183 $\chi^2$/NDF: 1507425.7/32

All: 1156.923+/-0.130 $\chi^2$/NDF: 2813031.9/67

- sign 1165.464+/-0.185 $\chi^2$/NDF: 1301367.6/34

# diff_bpm0l07X_mean vs Slug




Right In: 24.860+/-3.628 $\chi^2$/NDF: 38.1/15

Left Out: -8.018+/-2.707 $\chi^2$/NDF:19.8/16

Right Out: -8.658+/-3.454 $\chi^2$/NDF: 30.1/18

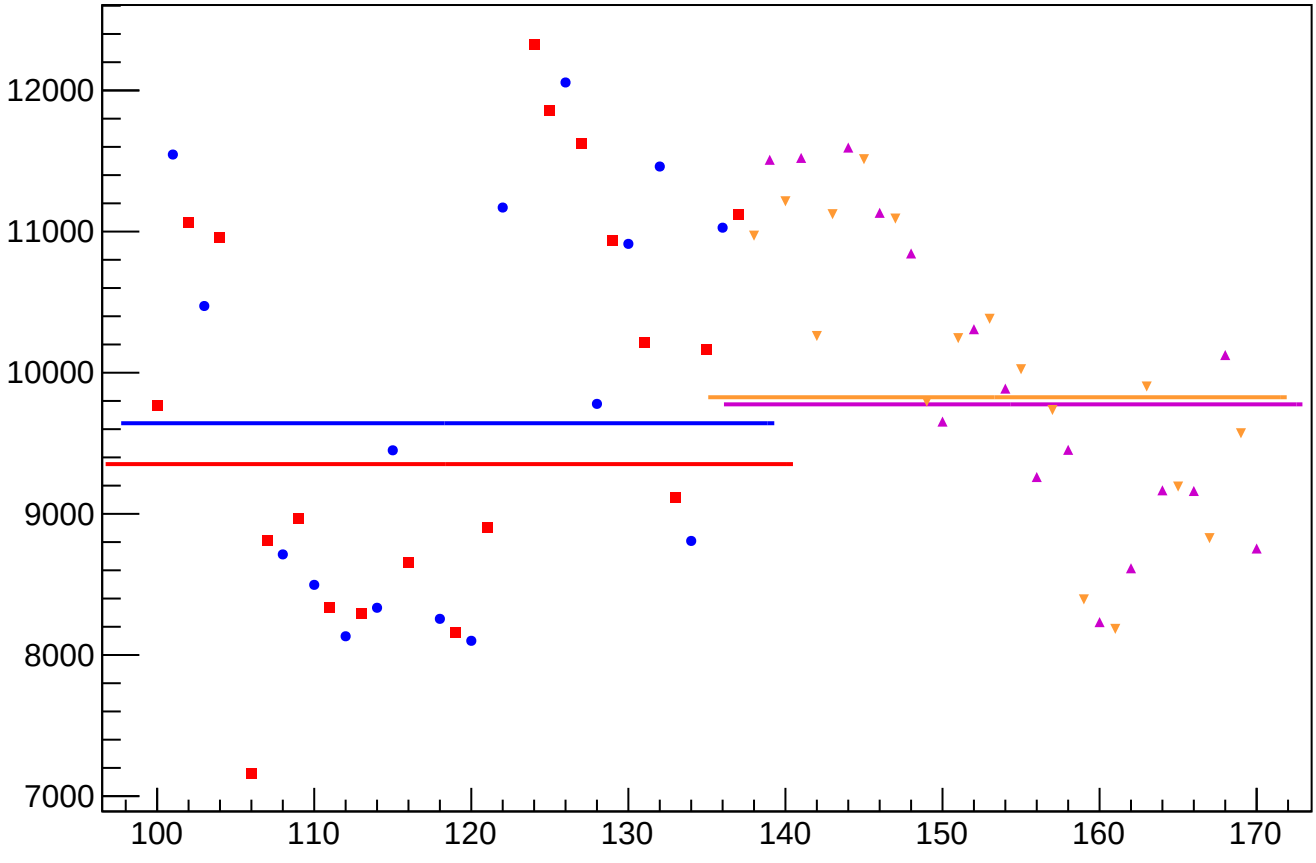
Left In: 11.024+/-2.719 $\chi^2$/NDF:20.5/15

+ sign 3.741+/-2.170 $\chi^2$/NDF: 110.7/32

All: 3.614+/-1.522 $\chi^2$/NDF: 181.4/67

- sign 3.492+/-2.136 $\chi^2$/NDF: 70.7/34

# diff_bpm0l07X_rms vs Slug




Right In: 9642.075+/-2.565 $\chi^2$/NDF: 279657.4/15

Left Out: 9826.236+/-1.914 $\chi^2$/NDF:272328.7/16

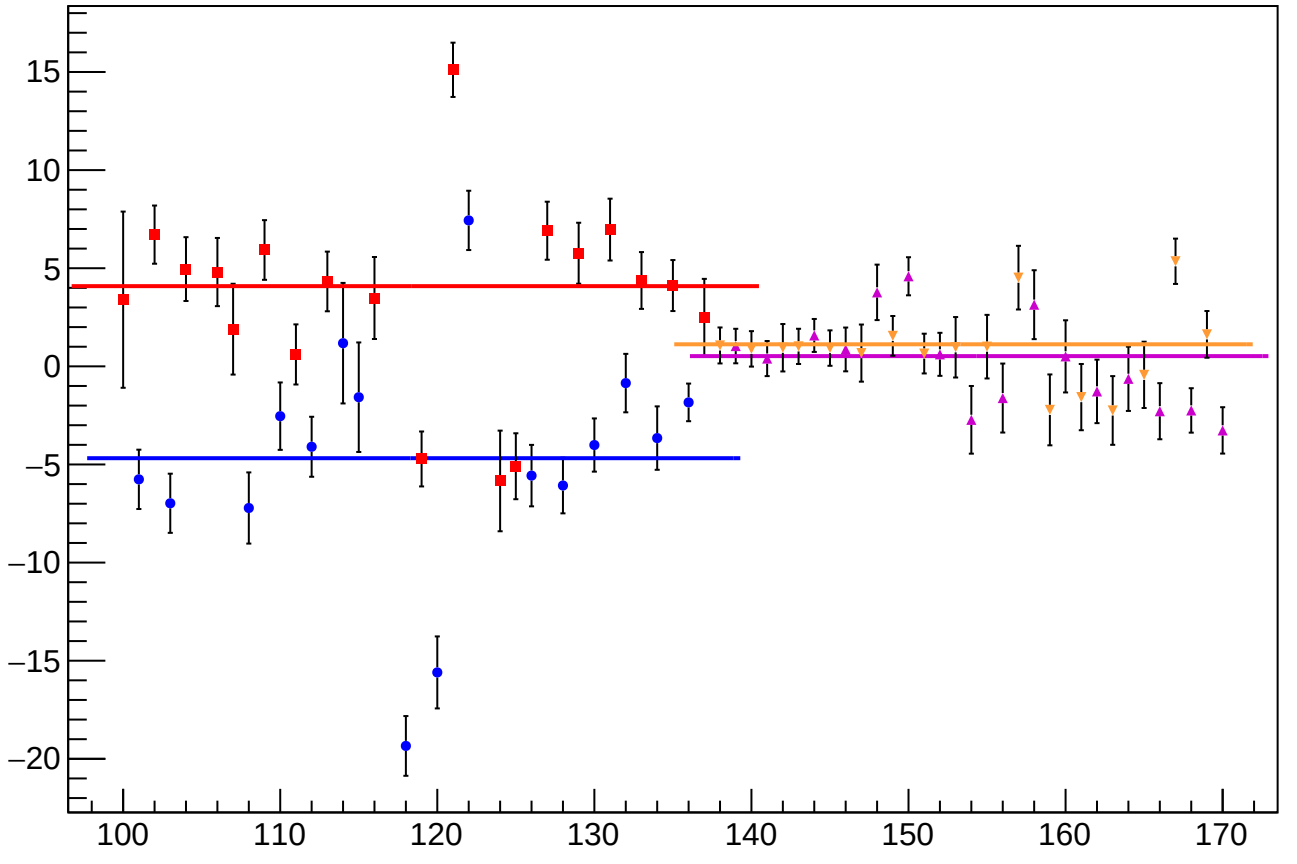
Right Out: 9352.503+/-2.442 $\chi^2$/NDF: 301779.3/18

Left In: 9775.871+/-1.923 $\chi^2$/NDF:297702.5/15

+ sign 9760.372+/-1.534 $\chi^2$/NDF: 555296.6/32

All: 9685.987+/-1.076 $\chi^2$/NDF: 1177961.5/67

- sign 9613.858+/-1.511 $\chi^2$/NDF: 618034.6/34




Right In: -4.681+/-0.386 $\chi^2$/NDF: 221.2/15

Left Out: 1.123+/-0.289 $\chi^2$/NDF:29.2/16

Right Out: 4.087+/-0.376 $\chi^2$/NDF: 168.1/18

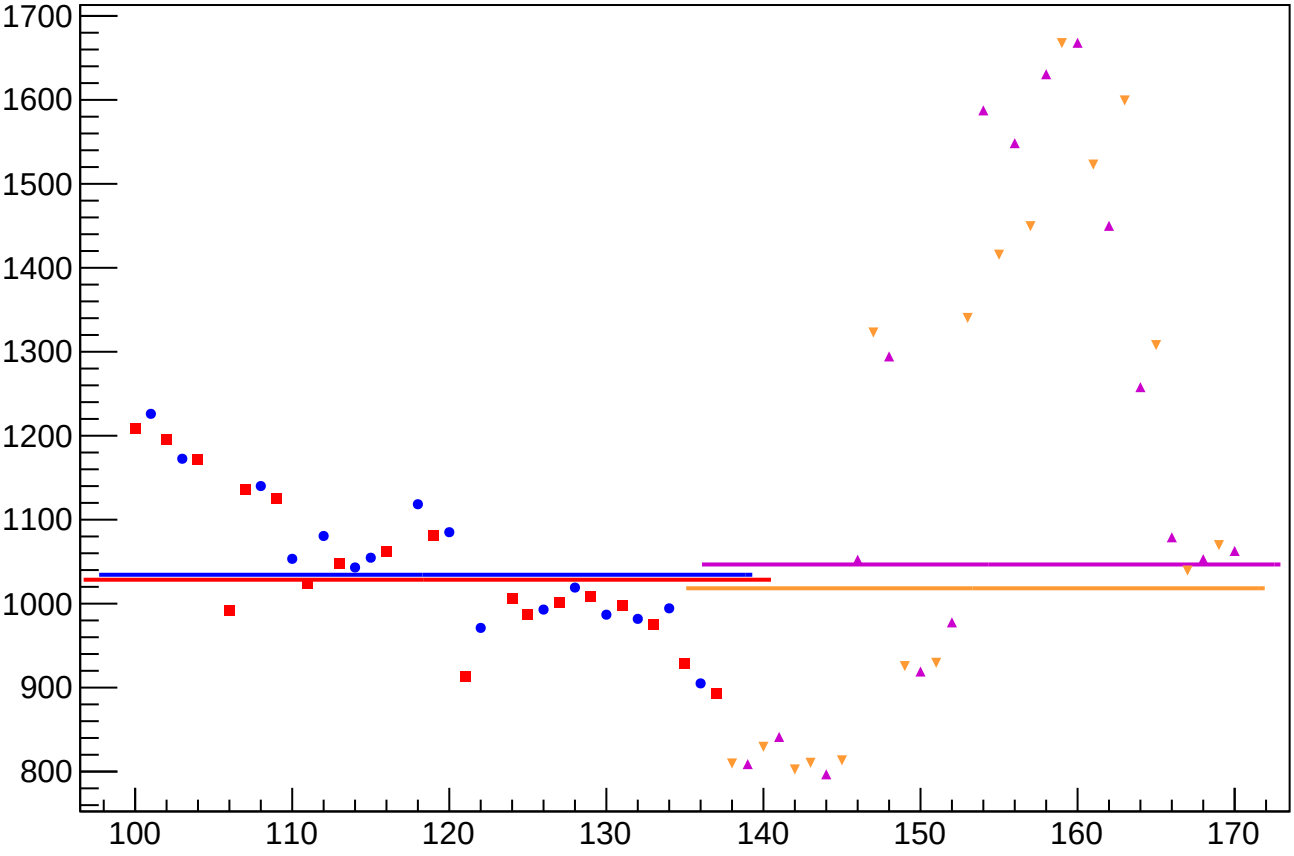
Left In: 0.521+/-0.299 $\chi^2$/NDF:54.0/15

\+ sign -0.964+/-0.231 $\chi^2$/NDF: 395.3/32

All: 0.451+/-0.165 $\chi^2$/NDF: 748.1/67

\- sign 1.901+/-0.234 $\chi^2$/NDF: 277.0/34

# diff_bpm0l07Y_rms vs Slug




Right In: 1034.402+/-0.273 $\chi^2$/NDF: 113278.6/15

Left Out: 1018.302+/-0.204 $\chi^2$/NDF:1654869.5/16

Right Out: 1028.501+/-0.266 $\chi^2$/NDF: 101624.8/18

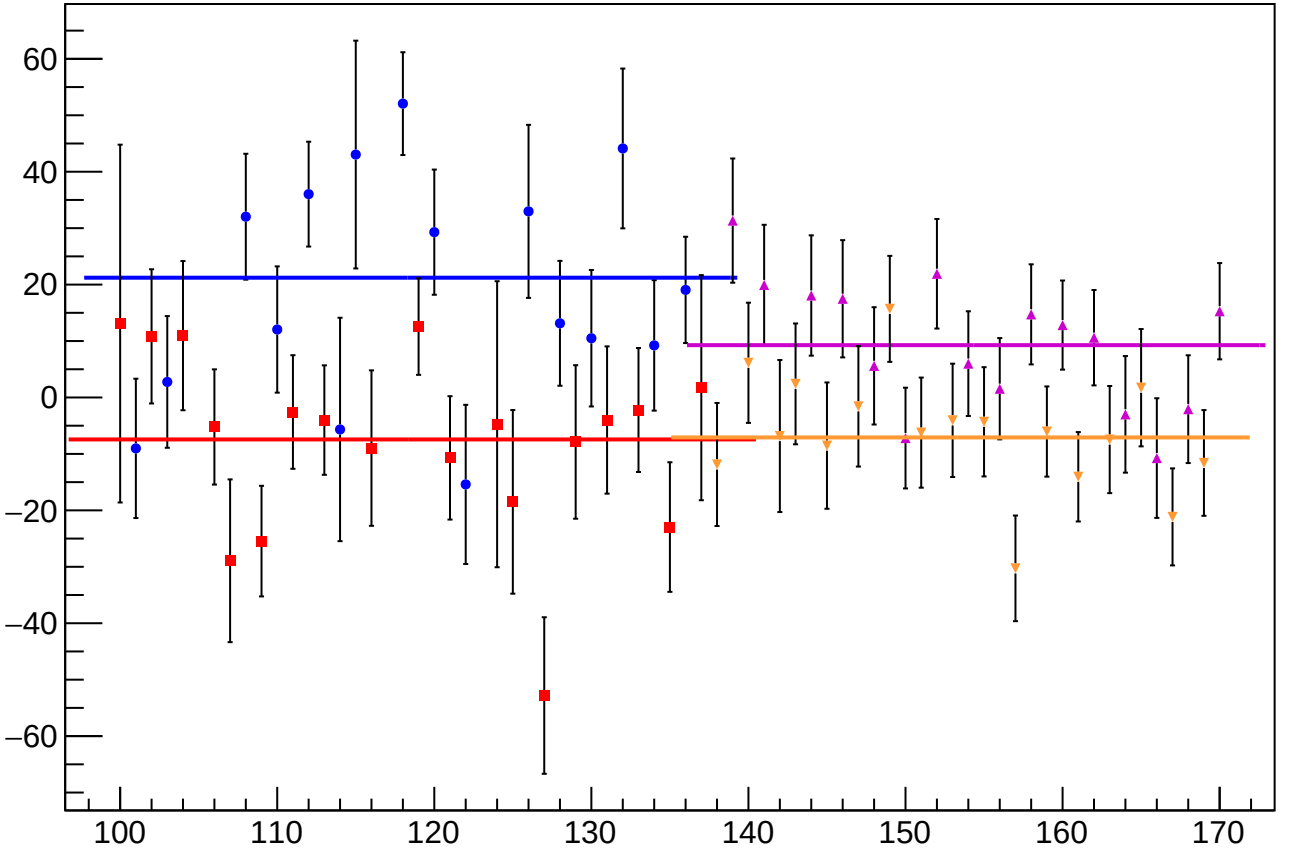
Left In: 1046.642+/-0.211 $\chi^2$/NDF:1501337.3/15

+ sign 1024.092+/-0.164 $\chi^2$/NDF: 1770379.0/32

All: 1031.763+/-0.116 $\chi^2$/NDF: 3380640.7/67

- sign 1039.621+/-0.166 $\chi^2$/NDF: 1605810.2/34

# diff_bpm0l08X_mean vs Slug




Right In: 21.222+/-2.952 $\chi^2$/NDF: 40.1/15

Left Out: -7.080+/-2.364 $\chi^2$/NDF:19.4/16

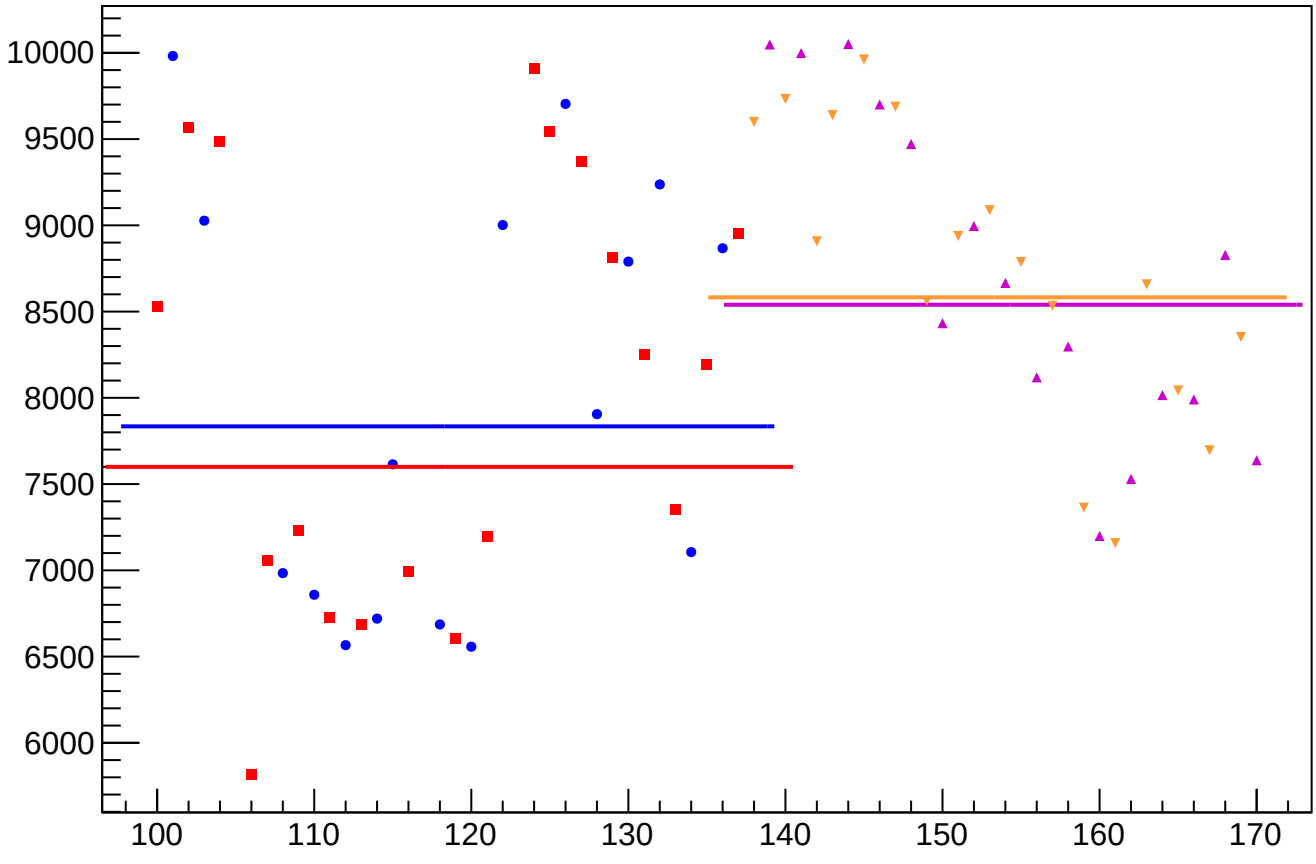
Right Out: -7.435+/-2.810 $\chi^2$/NDF: 29.8/18

Left In: 9.268+/-2.375 $\chi^2$/NDF:19.9/15

+ sign 3.978+/-1.845 $\chi^2$/NDF: 115.5/32

All: 3.130+/-1.293 $\chi^2$/NDF: 186.3/67

- sign 2.310+/-1.814 $\chi^2$/NDF: 70.3/34




Right In: 7834.618+/-2.087 $\chi^2$/NDF: 318089.6/15

Left Out: 8582.484+/-1.671 $\chi^2$/NDF:261147.1/16

Right Out: 7599.749+/-1.987 $\chi^2$/NDF: 344296.8/18

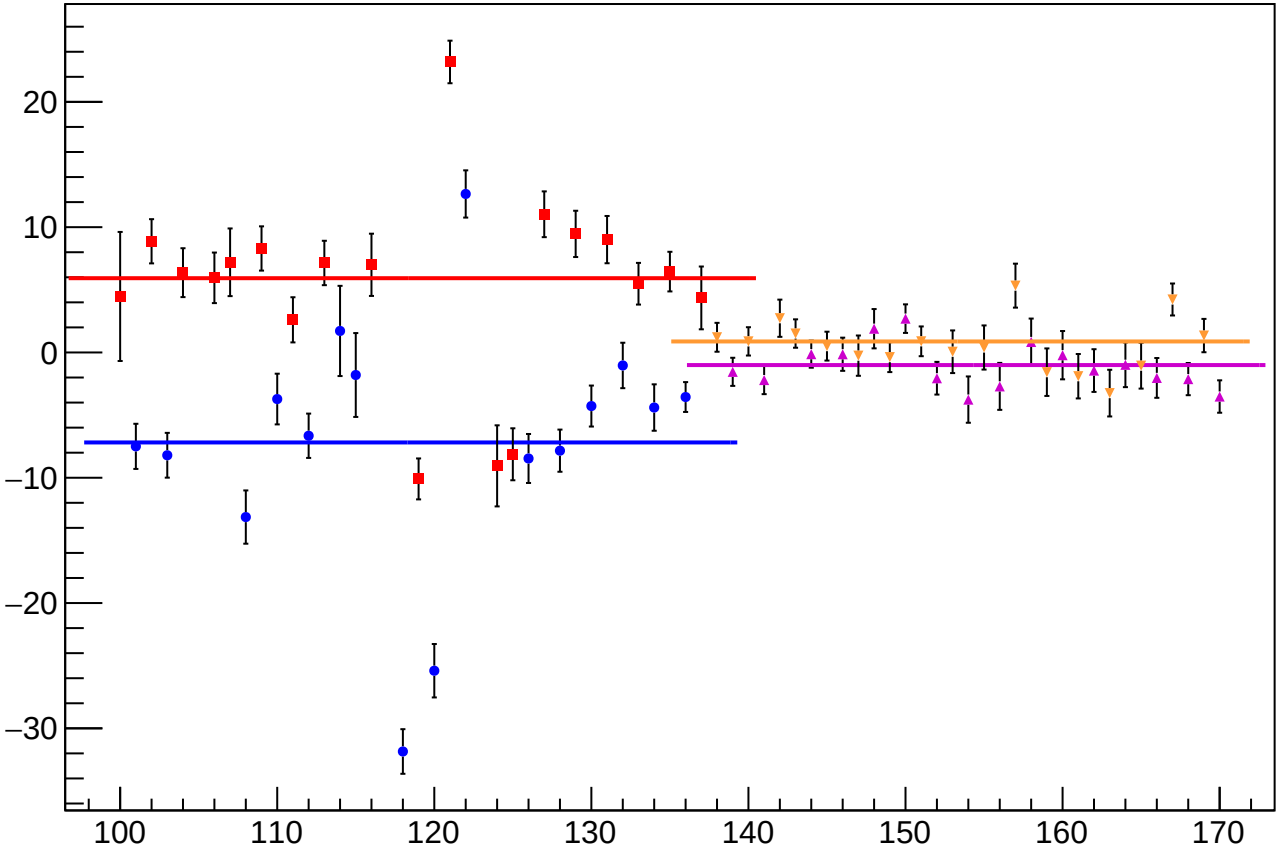
Left In: 8539.706+/-1.679 $\chi^2$/NDF:288185.2/15

+ sign 8290.272+/-1.305 $\chi^2$/NDF: 657456.4/32

All: 8217.992+/-0.915 $\chi^2$/NDF: 1426507.2/67

- sign 8148.140+/-1.283 $\chi^2$/NDF: 763015.5/34

# diff_bpm0l08Y_mean vs Slug




Right In: -7.183+/-0.462 $\chi^2$/NDF: 422.2/15

Left Out: 0.879+/-0.340 $\chi^2$/NDF:27.6/16

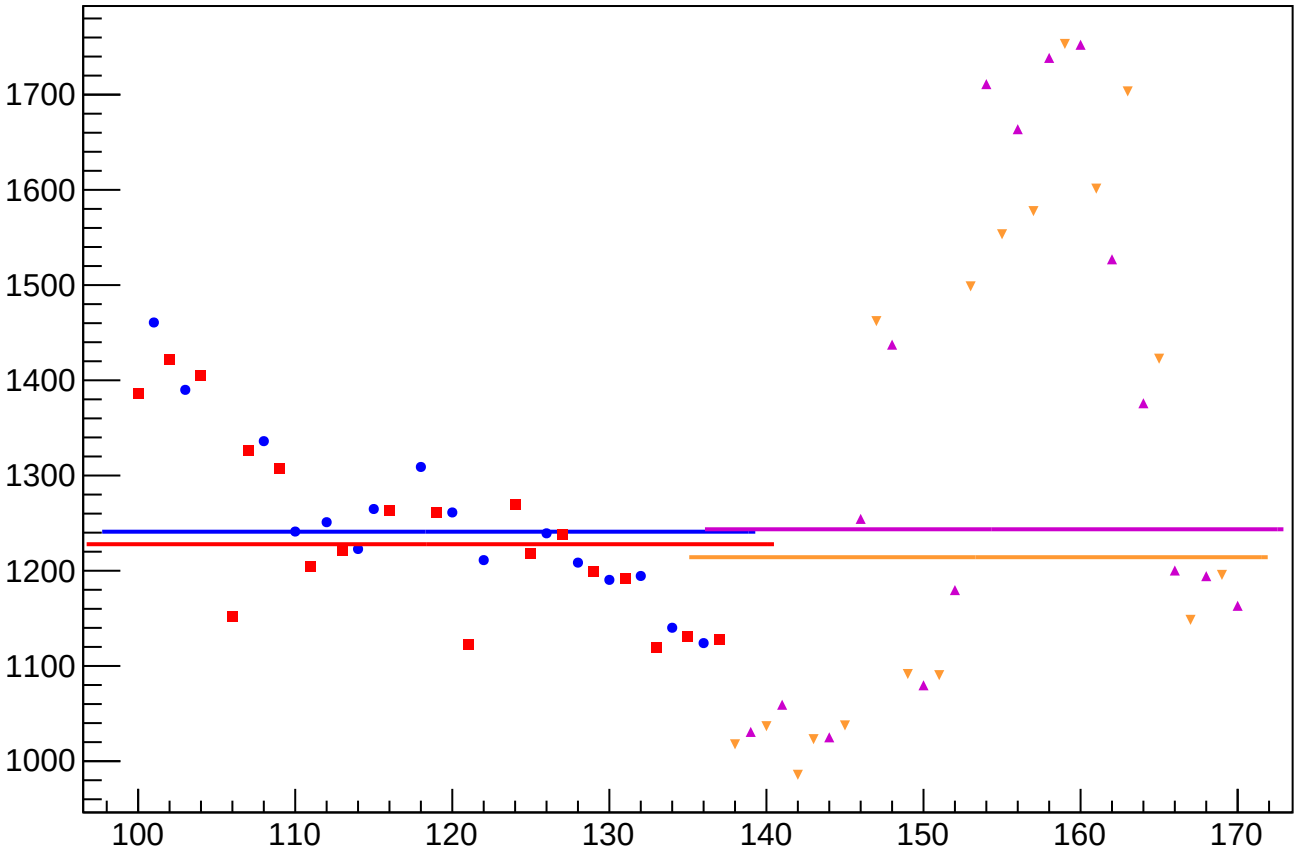
Right Out: 5.927+/-0.449 $\chi^2$/NDF: 290.4/18

Left In: -1.006+/-0.350 $\chi^2$/NDF:26.3/15

+ sign -1.946+/-0.274 $\chi^2$/NDF: 647.3/32

All: -0.182+/-0.194 $\chi^2$/NDF: 1196.0/67

- sign 1.613+/-0.276 $\chi^2$/NDF: 464.9/34




Right In: 1241.007+/-0.327 $\chi^2$/NDF: 80653.5/15

Left Out: 1214.223+/-0.240 $\chi^2$/NDF:991447.0/16

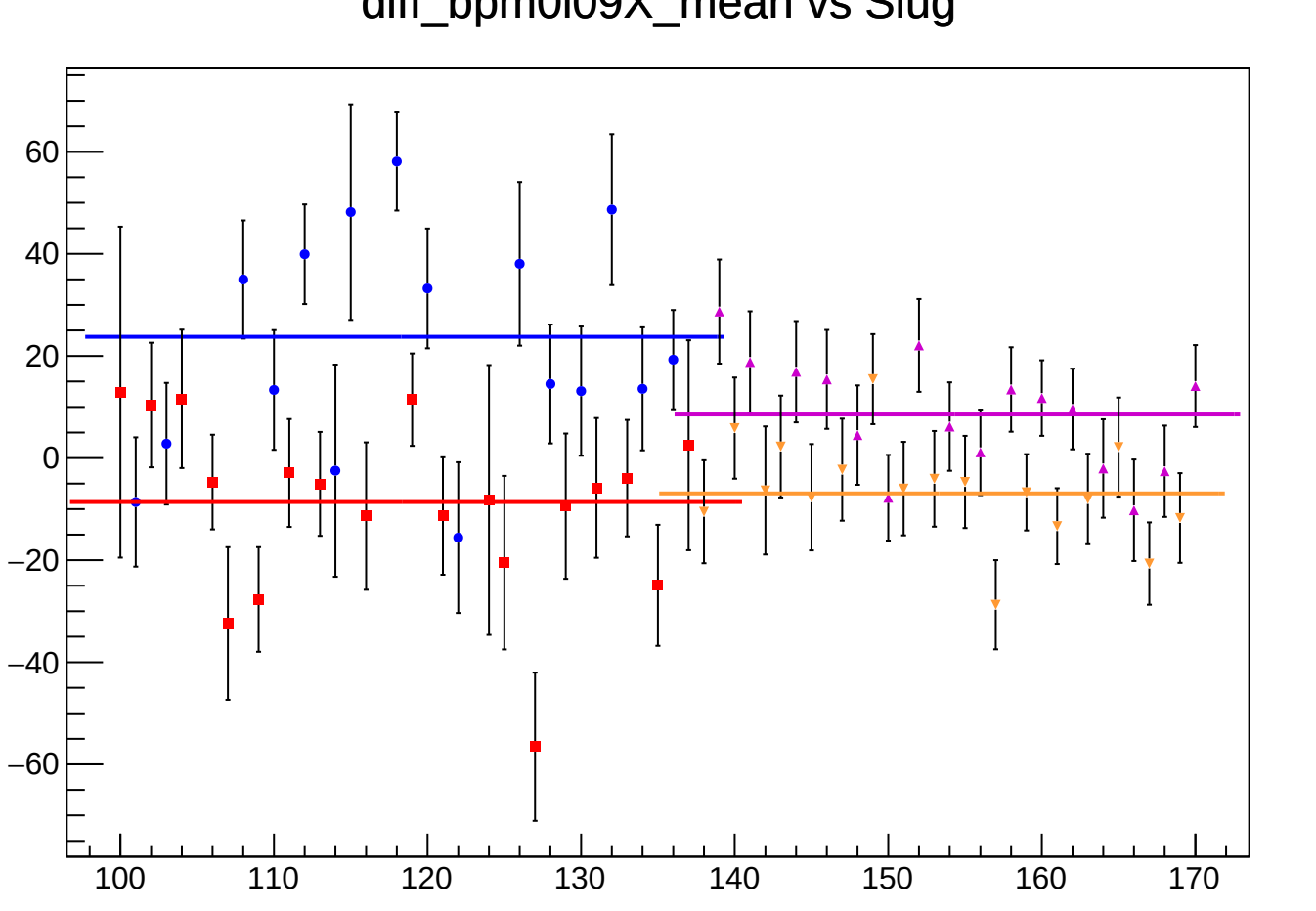
Right Out: 1227.864+/-0.318 $\chi^2$/NDF: 82339.2/18

Left In: 1243.547+/-0.247 $\chi^2$/NDF:870928.7/15

+ sign 1223.608+/-0.194 $\chi^2$/NDF: 1076460.9/32

All: 1230.553+/-0.137 $\chi^2$/NDF: 2033845.5/67

- sign 1237.622+/-0.195 $\chi^2$/NDF: 954785.1/34




Right In: 23.750+/-3.081 $\chi^2$/NDF: 43.4/15

Left Out: -6.922+/-2.209 $\chi^2$/NDF:20.5/16

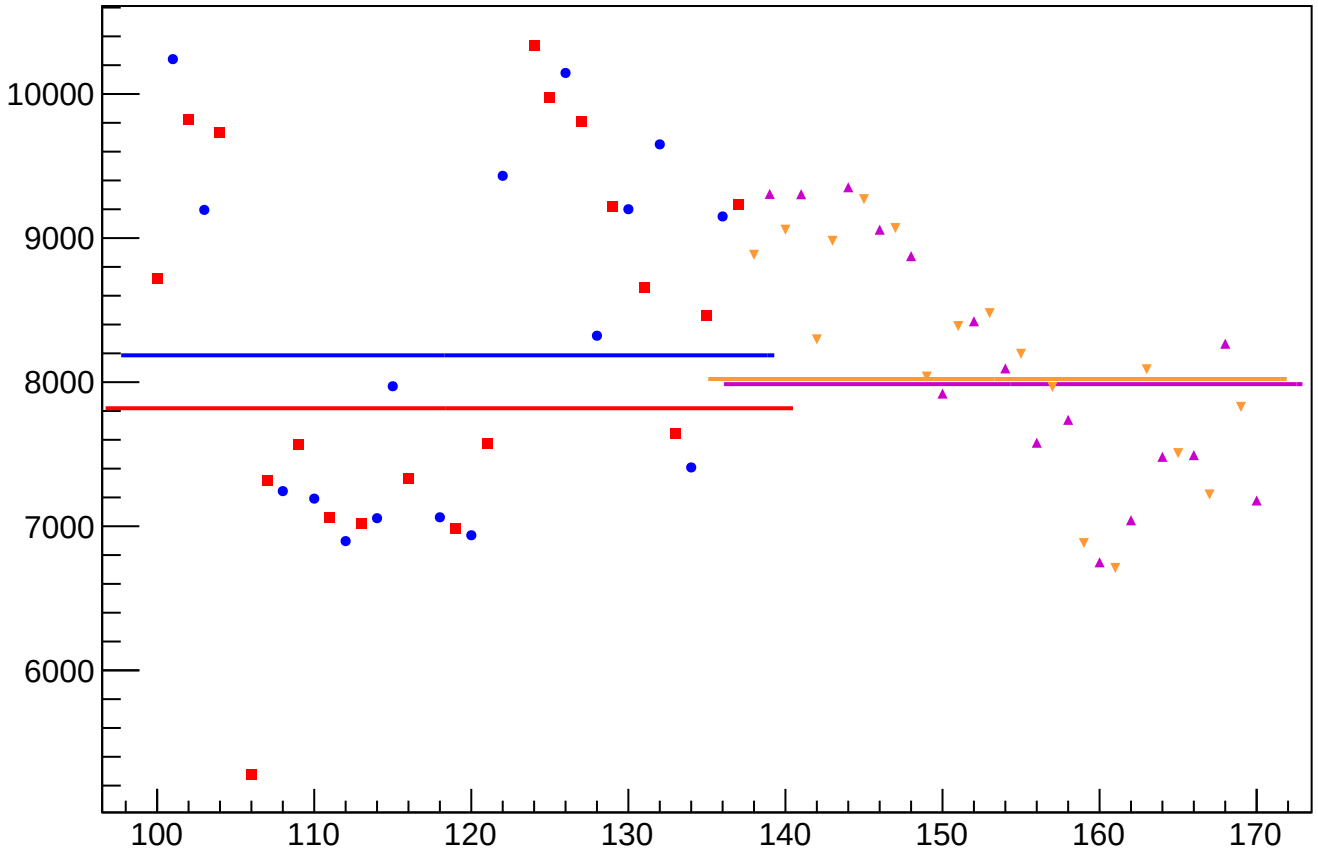
Right Out: -8.609+/-2.899 $\chi^2$/NDF: 30.5/18

Left In: 8.536+/-2.220 $\chi^2$/NDF:20.6/15

+ sign 3.489+/-1.795 $\chi^2$/NDF: 129.4/32

All: 2.832+/-1.258 $\chi^2$/NDF: 202.8/67

- sign 2.198+/-1.763 $\chi^2$/NDF: 73.1/34




Right In: 8186.361+/-2.179 $\chi^2$/NDF: 290628.8/15

Left Out: 8021.958+/-1.562 $\chi^2$/NDF:250718.8/16

Right Out: 7818.965+/-2.050 $\chi^2$/NDF: 422998.1/18

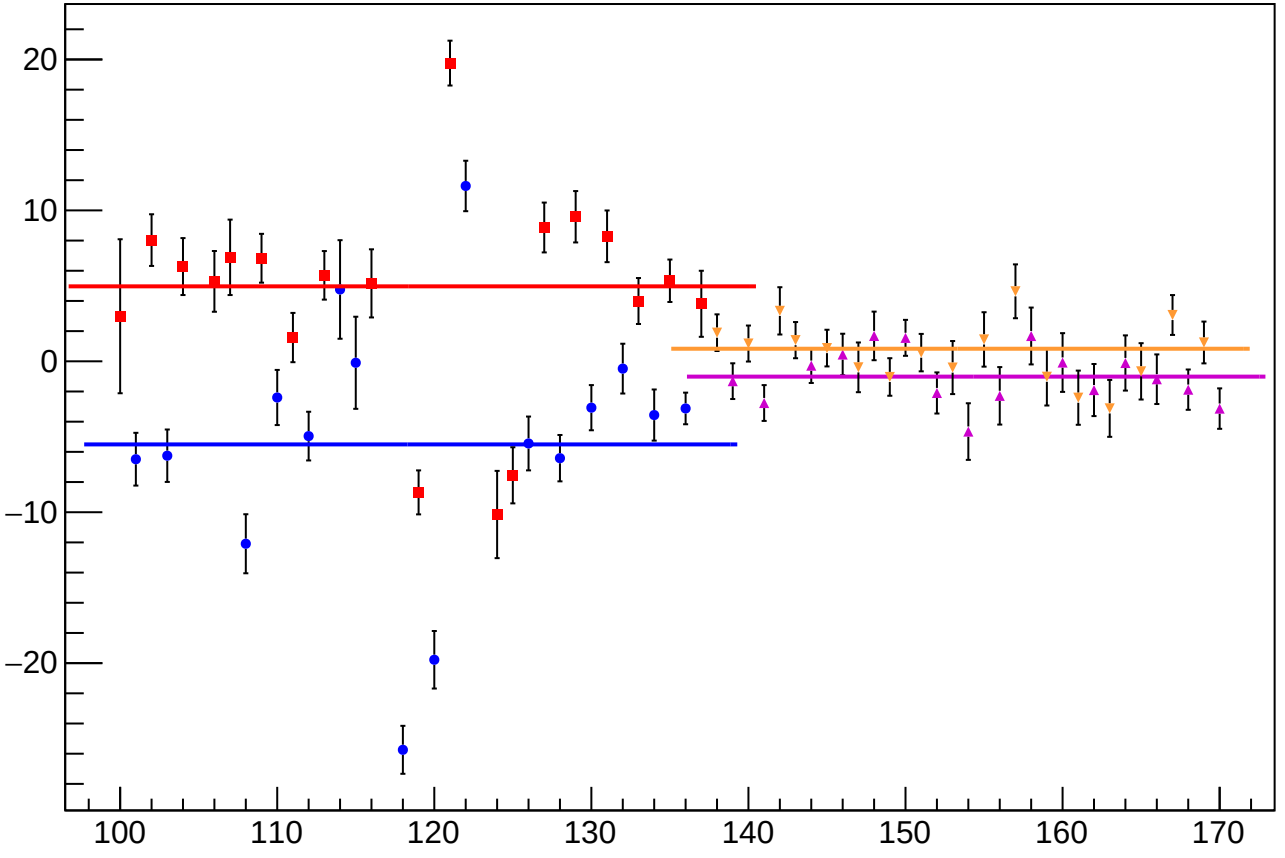
Left In: 7986.371+/-1.570 $\chi^2$/NDF:276552.1/15

+ sign 8077.762+/-1.269 $\chi^2$/NDF: 545108.2/32

All: 7999.717+/-0.889 $\chi^2$/NDF: 1256285.4/67

- sign 7924.483+/-1.246 $\chi^2$/NDF: 703753.9/34

# diff_bpm0l09Y_mean vs Slug




Right In: -5.506+/-0.421 $\chi^2$/NDF: 369.8/15

Left Out: 0.833+/-0.353 $\chi^2$/NDF:23.9/16

Right Out: 4.967+/-0.410 $\chi^2$/NDF: 287.3/18

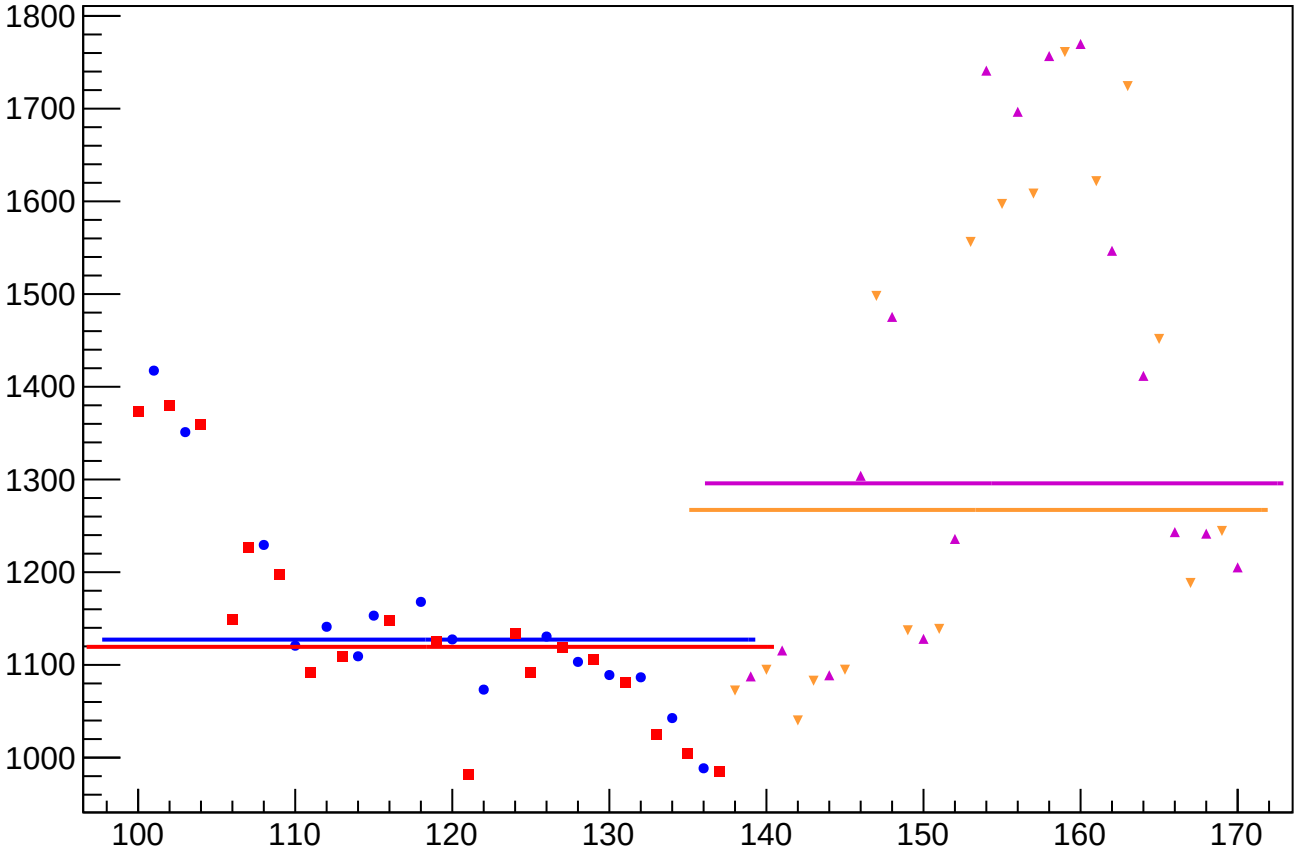
Left In: -1.014+/-0.363 $\chi^2$/NDF:21.8/15

+ sign -1.786+/-0.271 $\chi^2$/NDF: 526.8/32

All: -0.095+/-0.192 $\chi^2$/NDF: 1033.6/67

- sign 1.616+/-0.272 $\chi^2$/NDF: 428.2/34

# diff_bpm0l09Y_rms vs Slug




Right In: 1127.290+/-0.298 $\chi^2$/NDF: 140615.8/15

Left Out: 1267.171+/-0.250 $\chi^2$/NDF:856536.4/16

Right Out: 1119.473+/-0.290 $\chi^2$/NDF: 140736.0/18

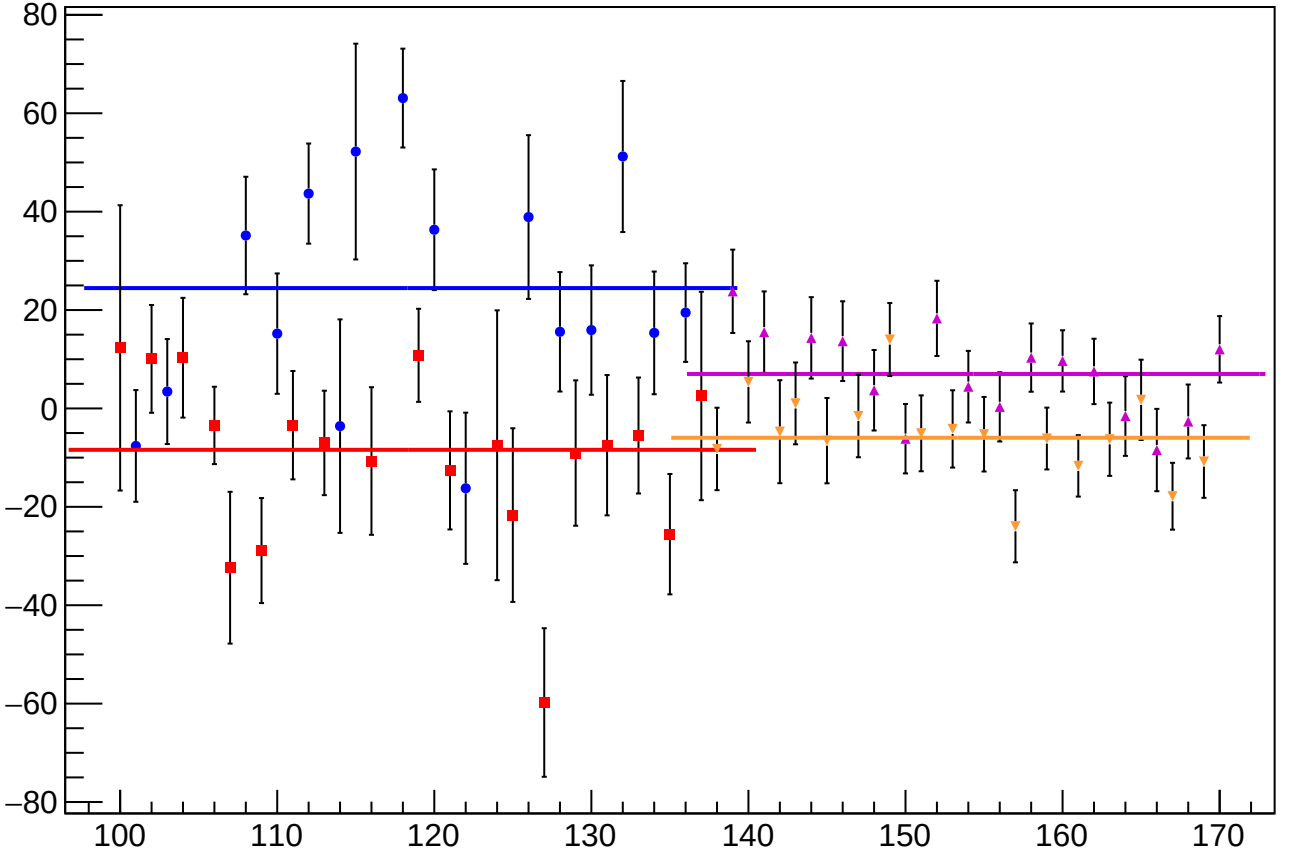
Left In: 1295.844+/-0.257 $\chi^2$/NDF:745874.0/15

+ sign 1209.381+/-0.191 $\chi^2$/NDF: 1126804.9/32

All: 1213.813+/-0.136 $\chi^2$/NDF: 2221525.0/67

- sign 1218.297+/-0.192 $\chi^2$/NDF: 1093640.1/34

# diff_bpm0l10X_mean vs Slug




Right In: 24.463+/-3.136 $\chi^2$/NDF: 48.3/15

Left Out: -5.962+/-1.853 $\chi^2$/NDF:21.5/16

Right Out: -8.413+/-2.891 $\chi^2$/NDF: 31.1/18

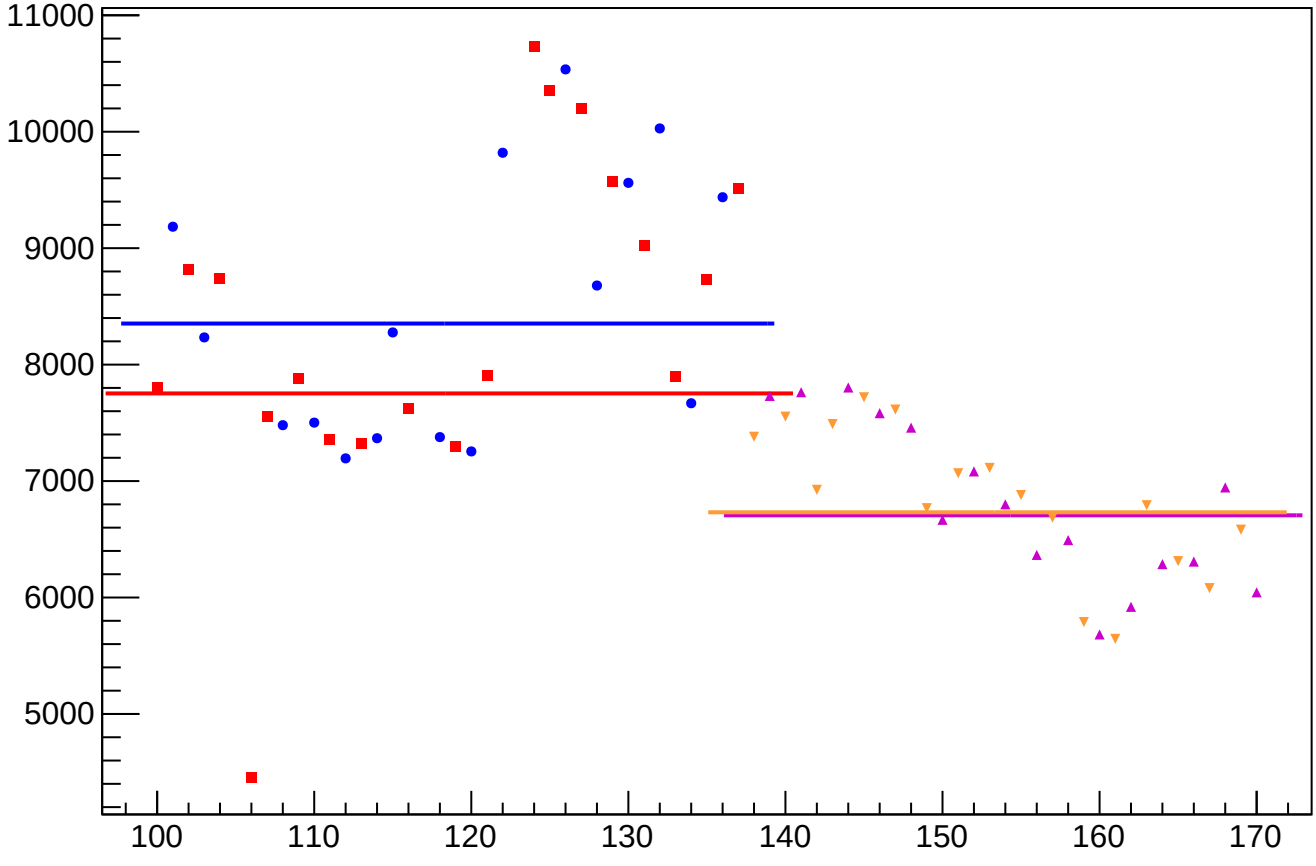
Left In: 7.006+/-1.864 $\chi^2$/NDF:20.5/15

+ sign 1.911+/-1.595 $\chi^2$/NDF: 139.6/32

All: 2.201+/-1.118 $\chi^2$/NDF: 211.4/67

- sign 2.479+/-1.566 $\chi^2$/NDF: 71.7/34

# diff_bpm0l10X_rms vs Slug




Right In: 8352.758+/-2.218 $\chi^2$/NDF: 220412.5/15

Left Out: 6731.876+/-1.310 $\chi^2$/NDF:236664.6/16

Right Out: 7752.674+/-2.044 $\chi^2$/NDF: 588072.1/18

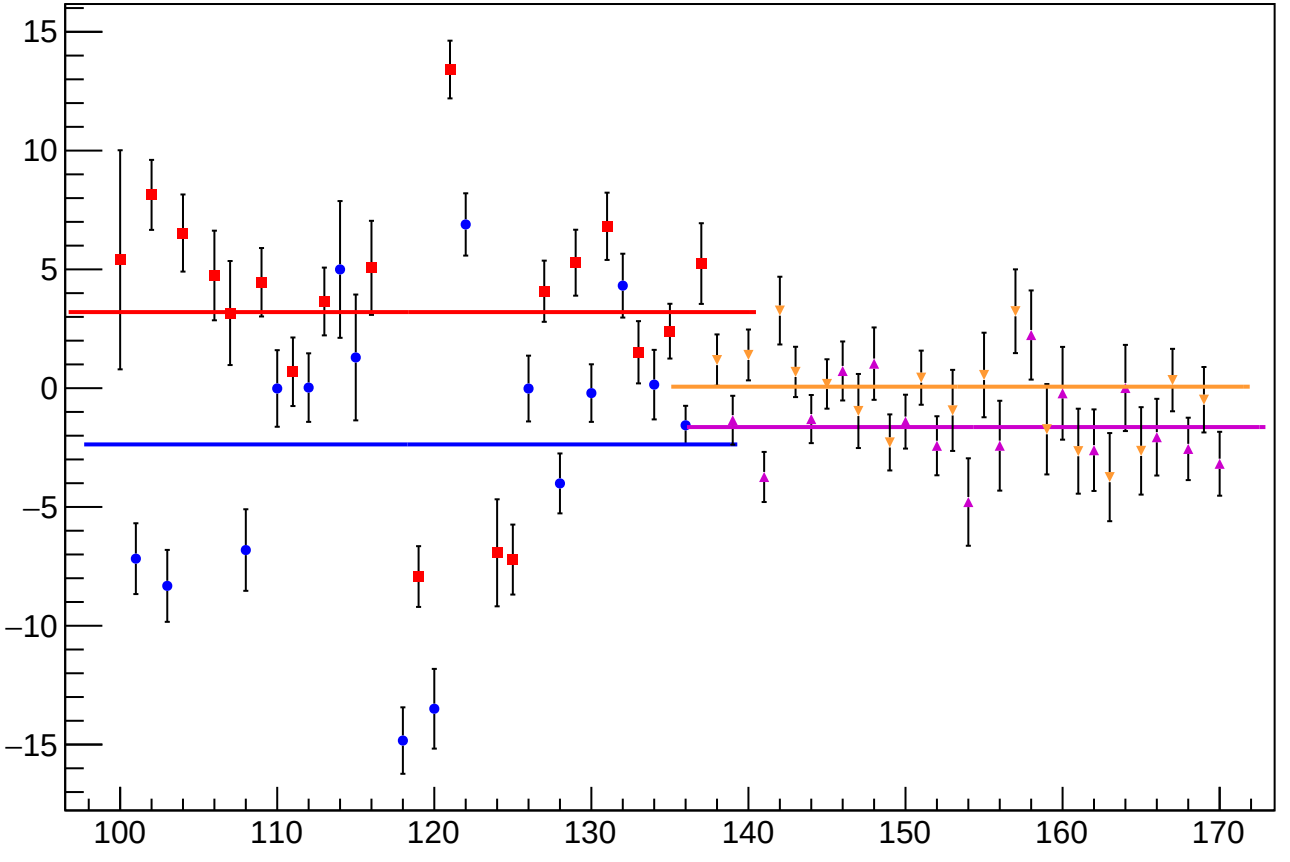
Left In: 6706.049+/-1.318 $\chi^2$/NDF:262291.9/15

+ sign 7151.317+/-1.128 $\chi^2$/NDF: 853074.1/32

All: 7081.036+/-0.790 $\chi^2$/NDF: 1896248.5/67

- sign 7013.288+/-1.108 $\chi^2$/NDF: 1035551.4/34

# diff_bpm0l10Y_mean vs Slug




Right In: -2.368+/-0.350 $\chi^2$/NDF: 255.6/15

Left Out: 0.063+/-0.330 $\chi^2$/NDF:26.0/16

Right Out: 3.203+/-0.346 $\chi^2$/NDF: 250.5/18

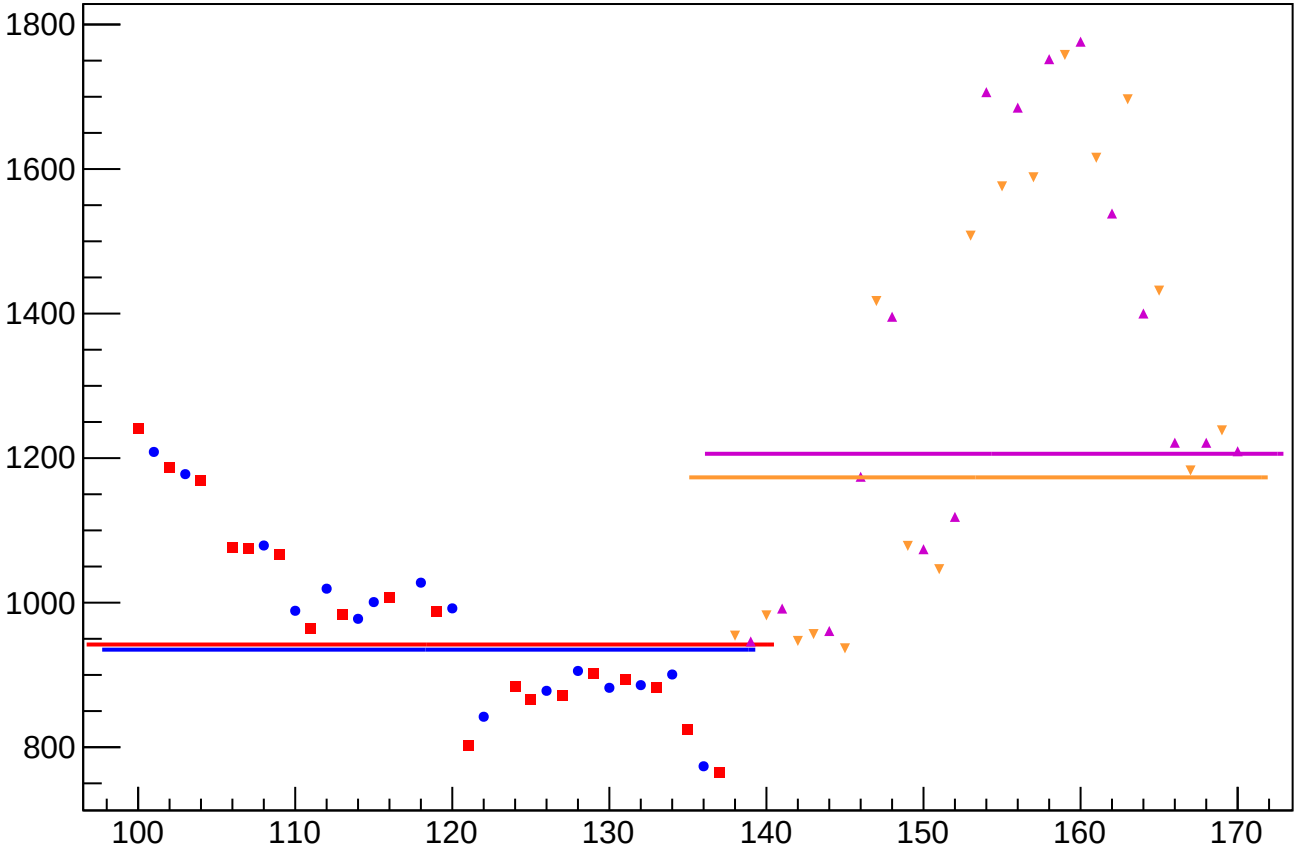
Left In: -1.637+/-0.341 $\chi^2$/NDF:22.2/15

\+ sign -1.078+/-0.240 $\chi^2$/NDF: 307.0/32

All: -0.177+/-0.171 $\chi^2$/NDF: 707.4/67

\- sign 0.745+/-0.243 $\chi^2$/NDF: 371.9/34

# diff_bpm0l10Y_rms vs Slug




Right In: 934.975+/-0.248 $\chi^2$/NDF: 254363.7/15

Left Out: 1173.371+/-0.233 $\chi^2$/NDF:1274802.6/16

Right Out: 942.096+/-0.245 $\chi^2$/NDF: 232453.5/18

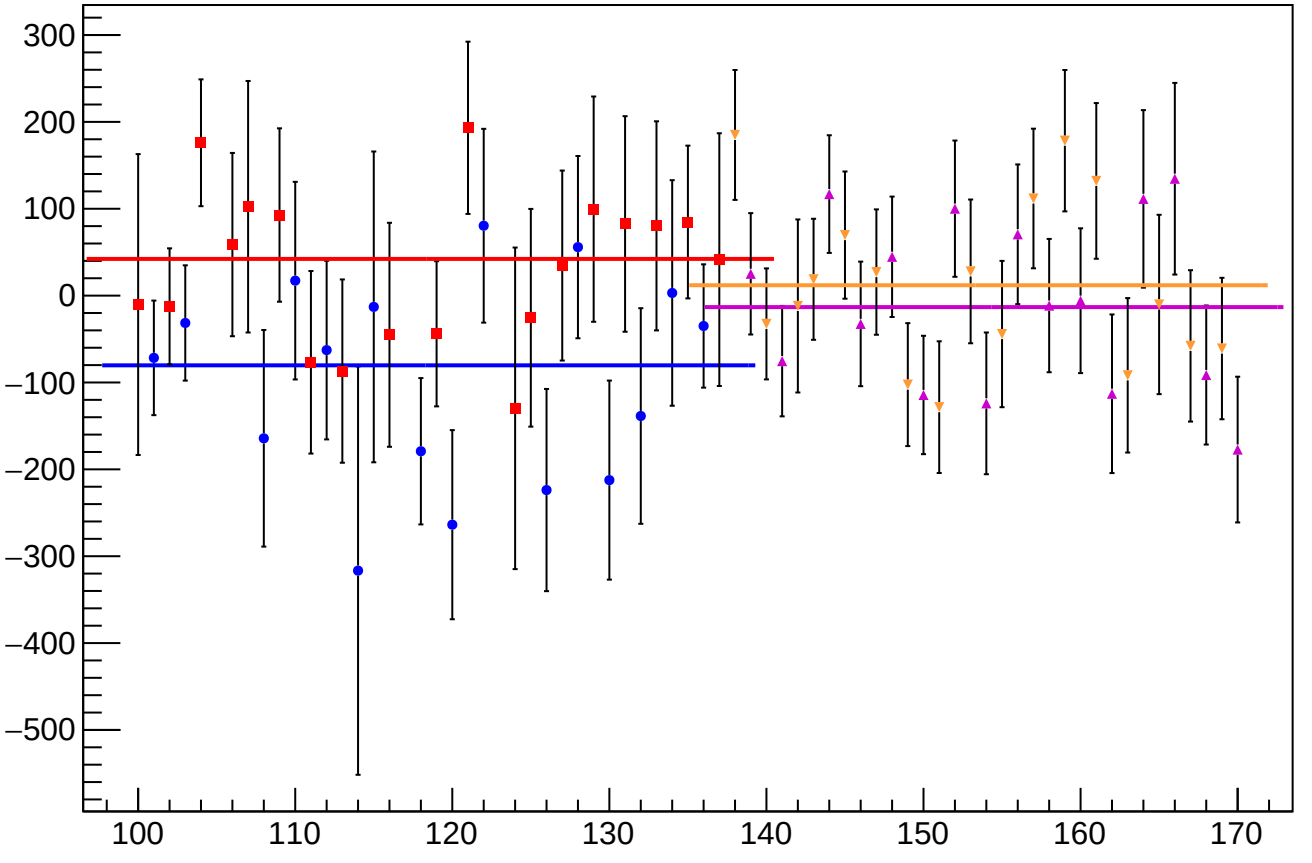
Left In: 1206.011+/-0.241 $\chi^2$/NDF:1110810.1/15

+ sign 1061.445+/-0.170 $\chi^2$/NDF: 2020144.4/32

All: 1068.709+/-0.121 $\chi^2$/NDF: 3956885.4/67

- sign 1076.145+/-0.172 $\chi^2$/NDF: 1933037.2/34

# diff_bpm0r03X_mean vs Slug




Right In: -80.250+/-24.909 $\chi^2$/NDF: 14.8/15

Left Out: 11.959+/-19.234 $\chi^2$/NDF:23.5/16

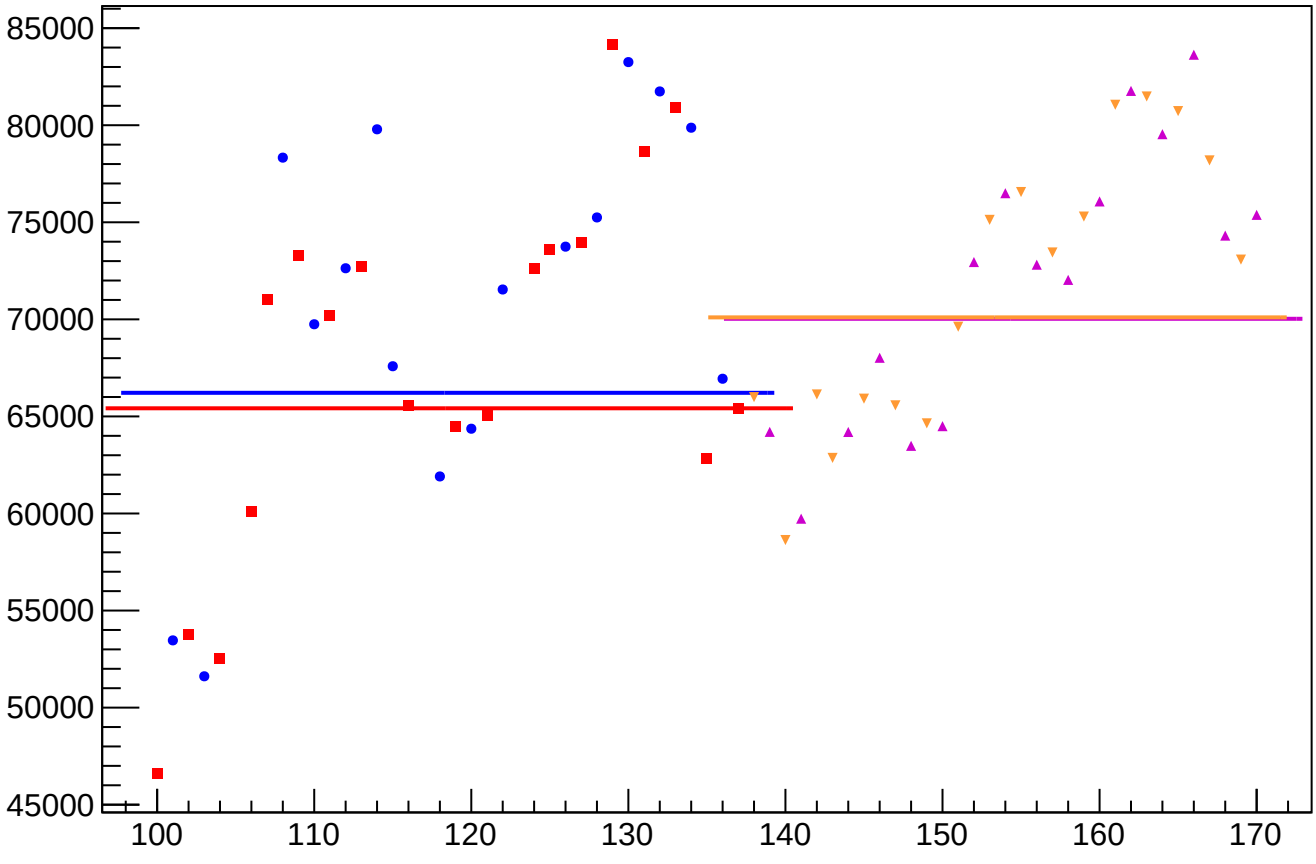
Right Out: 42.263+/-24.144 $\chi^2$/NDF: 13.0/18

Left In: -13.218+/-19.369 $\chi^2$/NDF:22.2/15

+ sign -22.485+/-15.224 $\chi^2$/NDF: 46.8/32

All: -6.871+/-10.724 $\chi^2$/NDF: 87.3/67

- sign 8.506+/-15.108 $\chi^2$/NDF: 38.4/34




Right In: 66216.115+/-17.613 $\chi^2$/NDF: 338377.6/15

Left Out: 70101.825+/-13.601 $\chi^2$/NDF:256086.3/16

Right Out: 65418.529+/-17.073 $\chi^2$/NDF: 304555.9/18

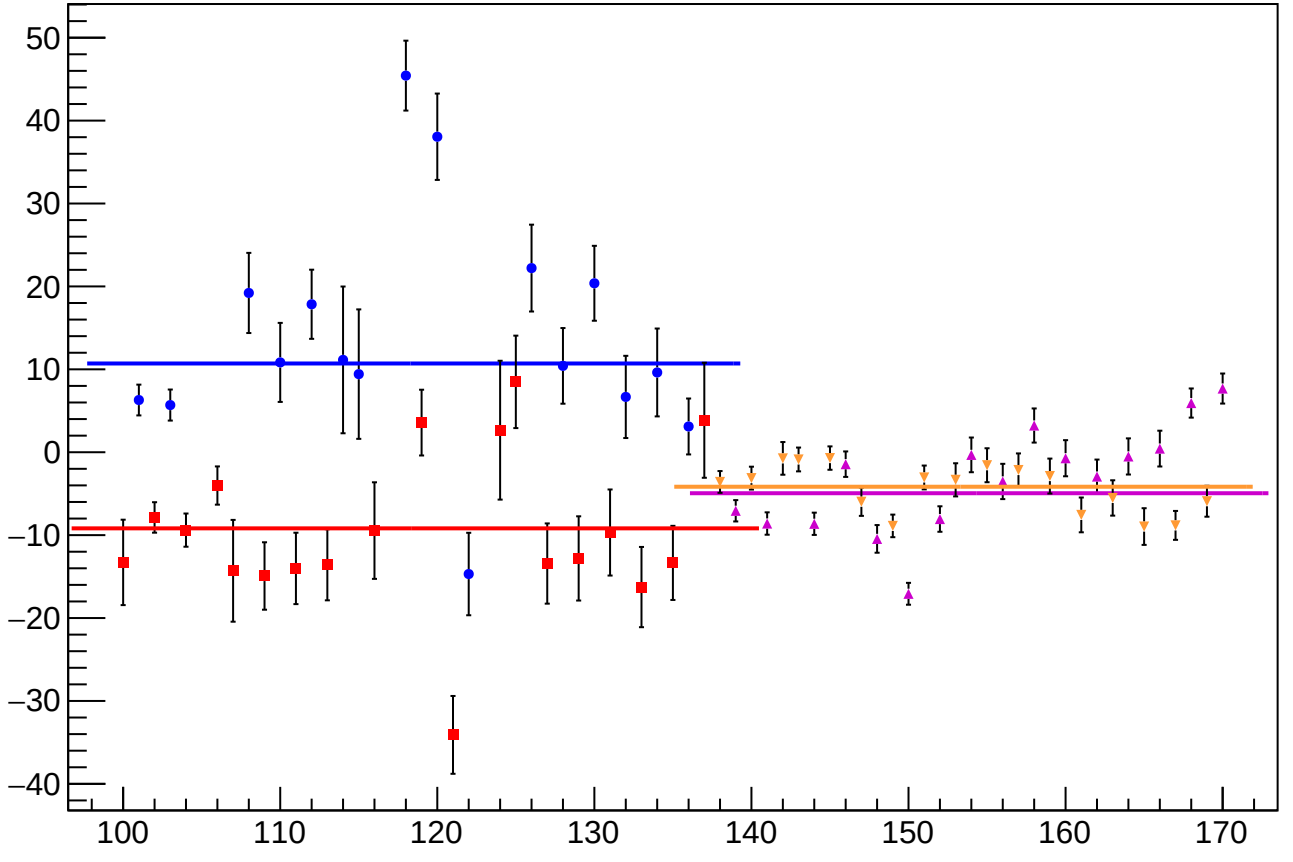
Left In: 70028.782+/-13.696 $\chi^2$/NDF:238063.4/15

+ sign 68650.345+/-10.765 $\chi^2$/NDF: 624953.5/32

All: 68435.352+/-7.583 $\chi^2$/NDF: 1212731.9/6

- sign 68223.612+/-10.683 $\chi^2$/NDF: 586986.7/34

# diff_bpm0r03Y_mean vs Slug




Right In: 10.705+/-0.921 $\chi^2$/NDF: 155.6/15

Left Out: -4.161+/-0.410 $\chi^2$/NDF:47.7/16

Right Out: -9.182+/-0.850 $\chi^2$/NDF: 69.6/18

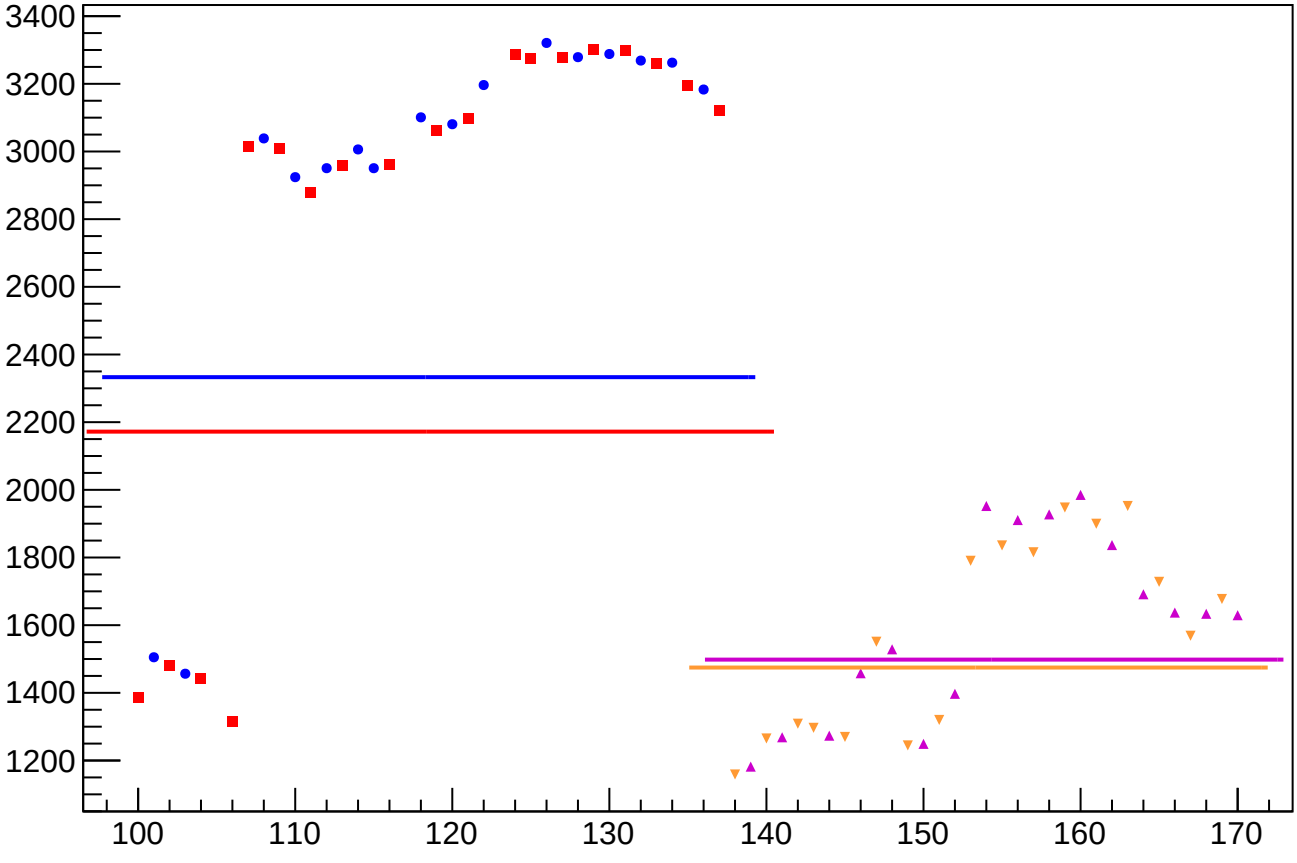
Left In: -4.945+/-0.420 $\chi^2$/NDF:245.3/15

+ sign -1.701+/-0.375 $\chi^2$/NDF: 420.9/32

All: -3.728+/-0.265 $\chi^2$/NDF: 814.6/67

- sign -5.775+/-0.376 $\chi^2$/NDF: 334.8/34

# diff_bpm0r03Y_rms vs Slug




Right In: 2333.021+/-0.651 $\chi^2$/NDF: 1651407.8/15

Left Out: 1474.774+/-0.290 $\chi^2$/NDF:842586.0/16

Right Out: 2172.041+/-0.601 $\chi^2$/NDF: 1984197.6/18

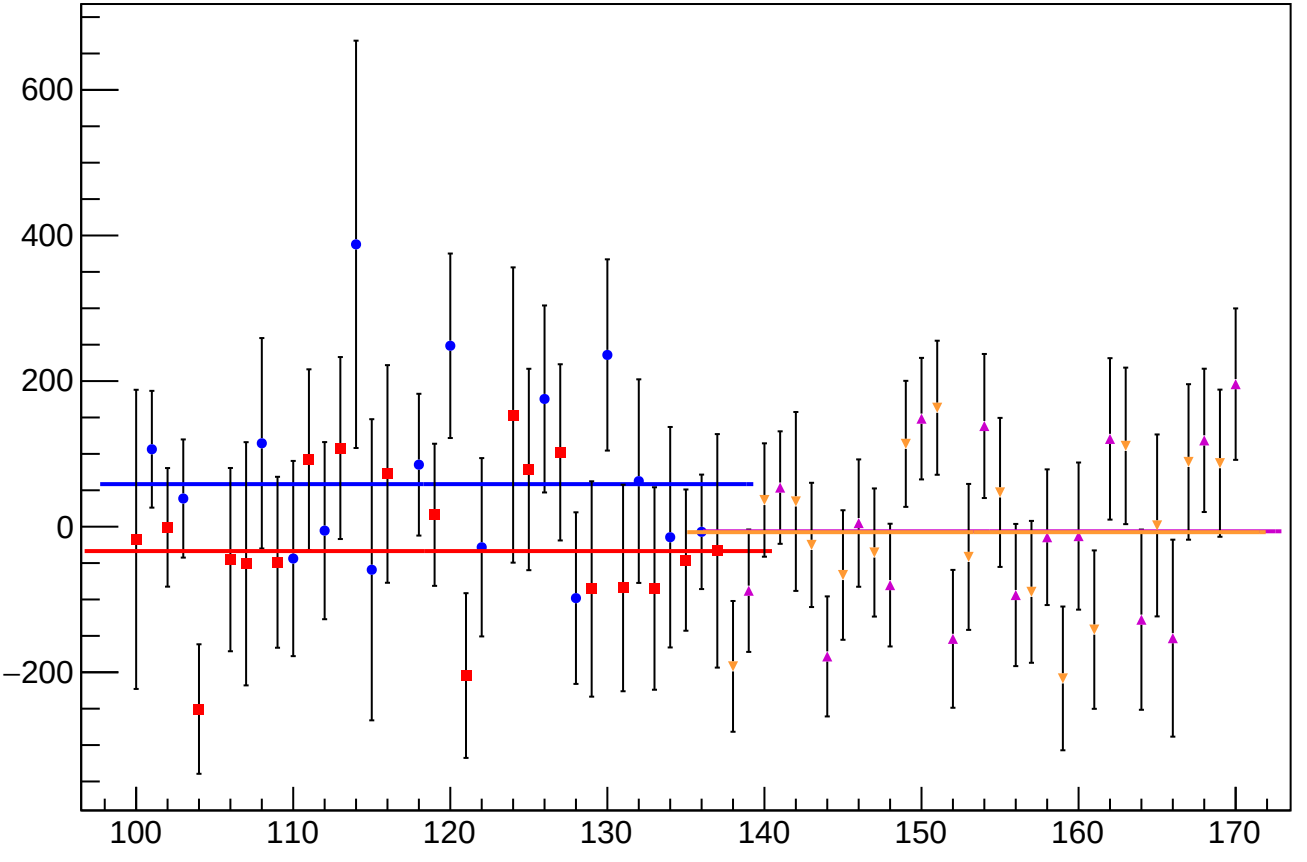
Left In: 1498.216+/-0.297 $\chi^2$/NDF:773763.7/15

+ sign 1616.820+/-0.265 $\chi^2$/NDF: 3944711.2/32

All: 1623.524+/-0.188 $\chi^2$/NDF: 7714137.5/67

- sign 1630.296+/-0.266 $\chi^2$/NDF: 3768137.9/34

# diff_bpm0r05X_mean vs Slug




Right In: 58.446+/-28.918 $\chi^2$/NDF: 11.3/15

Left Out: -7.544+/-23.425 $\chi^2$/NDF:20.3/16

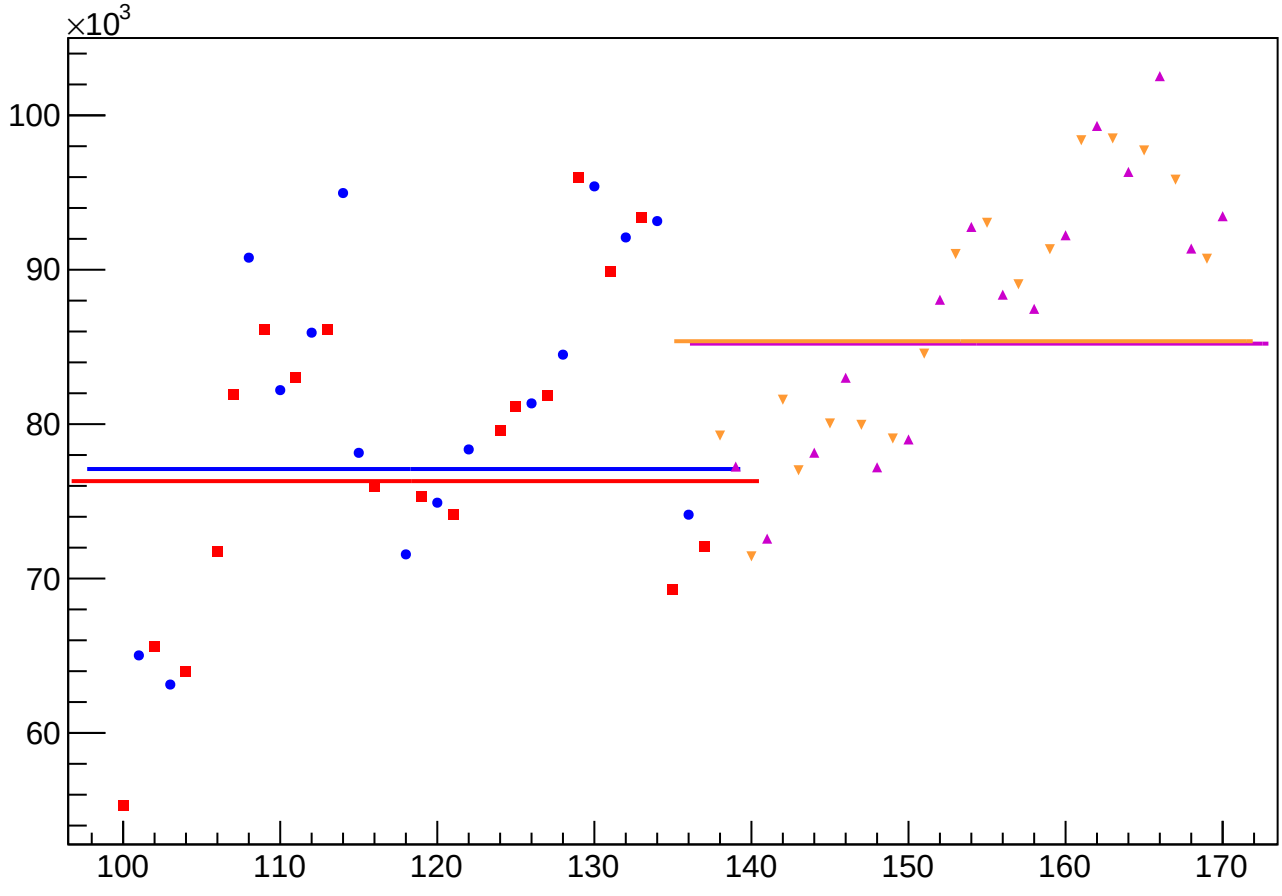
Right Out: -33.520+/-28.106 $\chi^2$/NDF: 14.7/18

Left In: -6.341+/-23.575 $\chi^2$/NDF:24.3/15

+ sign 18.601+/-18.202 $\chi^2$/NDF: 34.8/32

All: 0.378+/-12.821 $\chi^2$/NDF: 76.3/67

- sign -17.566+/-18.062 $\chi^2$/NDF: 39.6/34




Right In: 77093.125+/-20.448 $\chi^2$/NDF: 248542.7/15

Left Out: 85370.405+/-16.564 $\chi^2$/NDF:250374.3/16

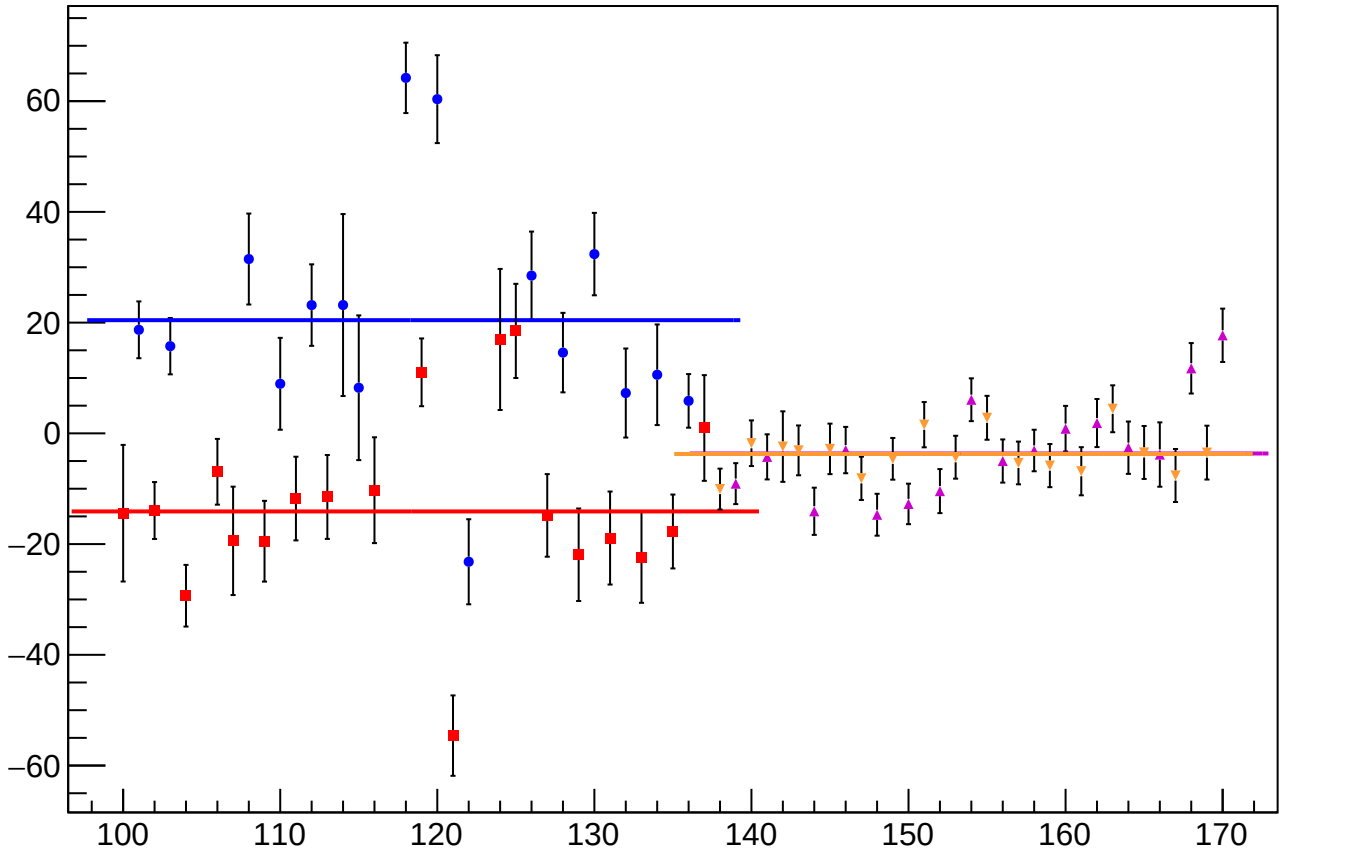
Right Out: 76308.708+/-19.874 $\chi^2$/NDF: 234433.2/18

Left In: 85213.872+/-16.670 $\chi^2$/NDF:244497.3/15

+ sign 82090.950+/-12.871 $\chi^2$/NDF: 597857.6/32

All: 81811.344+/-9.066 $\chi^2$/NDF: 1195584.3/6

- sign 81536.018+/-12.772 $\chi^2$/NDF: 596790.0/34




Right In: 20.441+/-1.782 $\chi^2$/NDF: 127.8/15

Left Out: -3.728+/-1.025 $\chi^2$/NDF:14.4/16

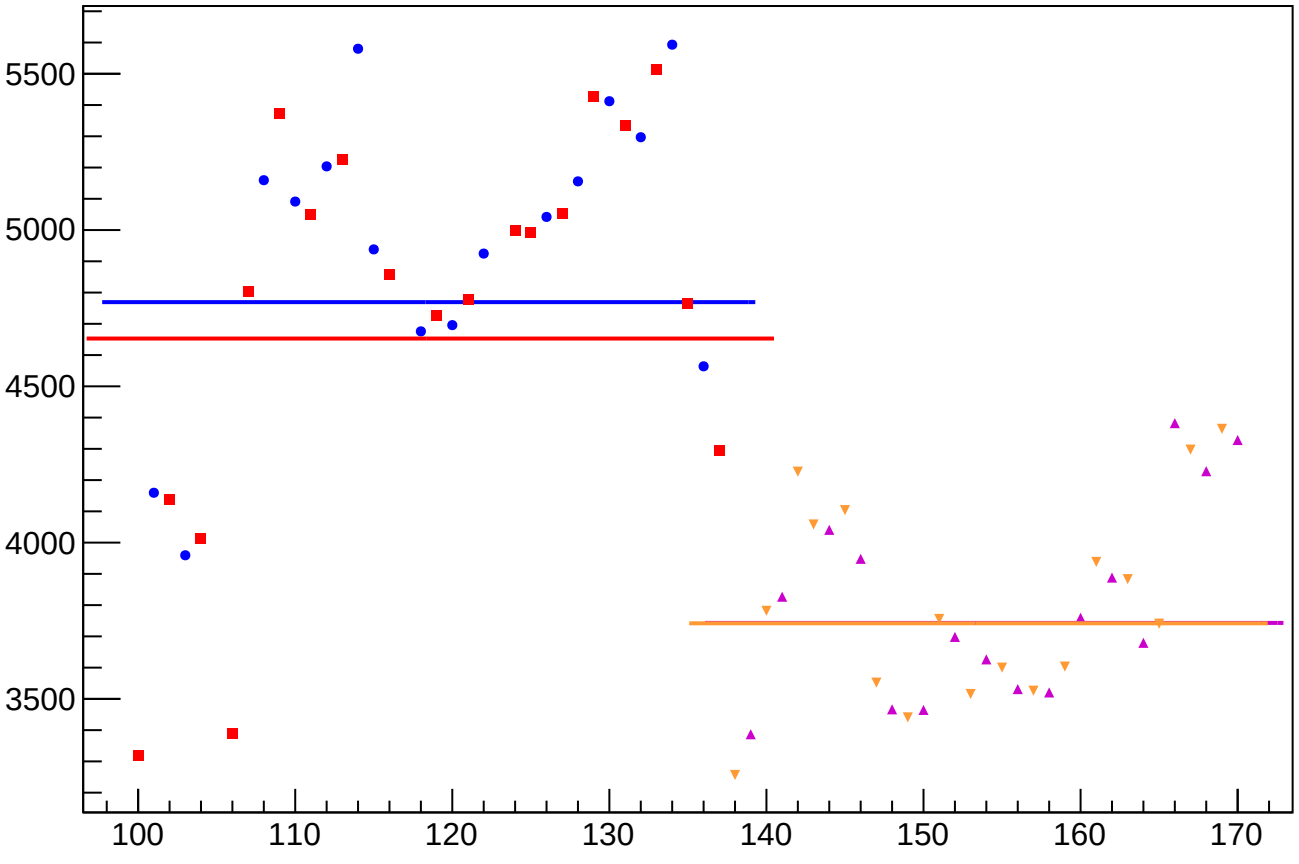
Right Out: -14.102+/-1.714 $\chi^2$/NDF: 83.8/18

Left In: -3.638+/-1.034 $\chi^2$/NDF:66.2/15

+ sign 2.281+/-0.888 $\chi^2$/NDF: 280.4/32

All: -2.090+/-0.627 $\chi^2$/NDF: 506.0/67

- sign -6.432+/-0.886 $\chi^2$/NDF: 177.3/34




Right In: 4769.375+/-1.260 $\chi^2$/NDF: 151678.3/15

Left Out: 3741.790+/-0.725 $\chi^2$/NDF:170553.8/16

Right Out: 4652.924+/-1.212 $\chi^2$/NDF: 265116.1/18

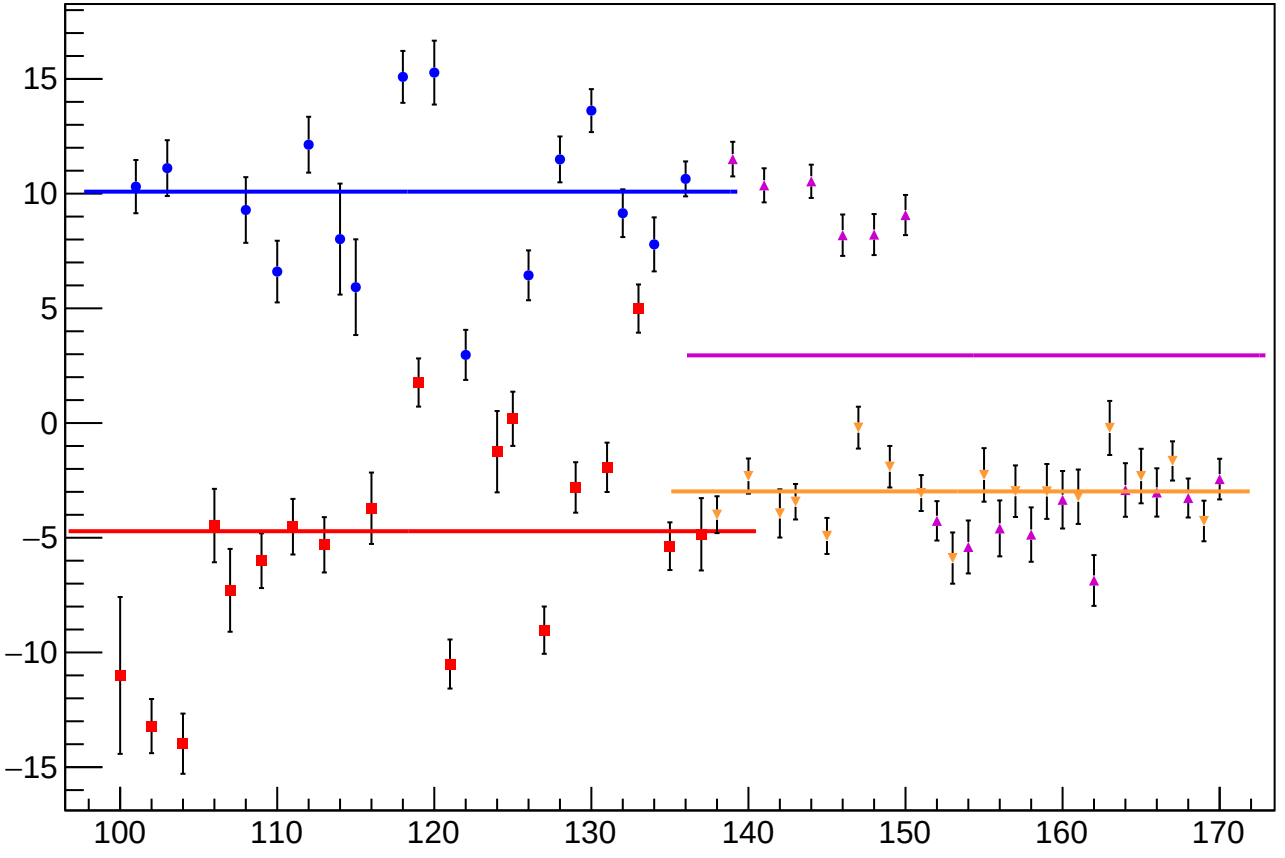
Left In: 3743.054+/-0.731 $\chi^2$/NDF:150233.7/15

+ sign 3997.243+/-0.628 $\chi^2$/NDF: 821970.5/32

All: 3991.636+/-0.444 $\chi^2$/NDF: 1650751.2/67

- sign 3986.065+/-0.626 $\chi^2$/NDF: 828621.8/34

# diff_bpm2i01X_mean vs Slug




Right In: 10.086+/-0.288 $\chi^2$/NDF: 123.9/15

Left Out: -2.979+/-0.228 $\chi^2$/NDF:37.9/16

Right Out: -4.715+/-0.286 $\chi^2$/NDF: 310.2/18

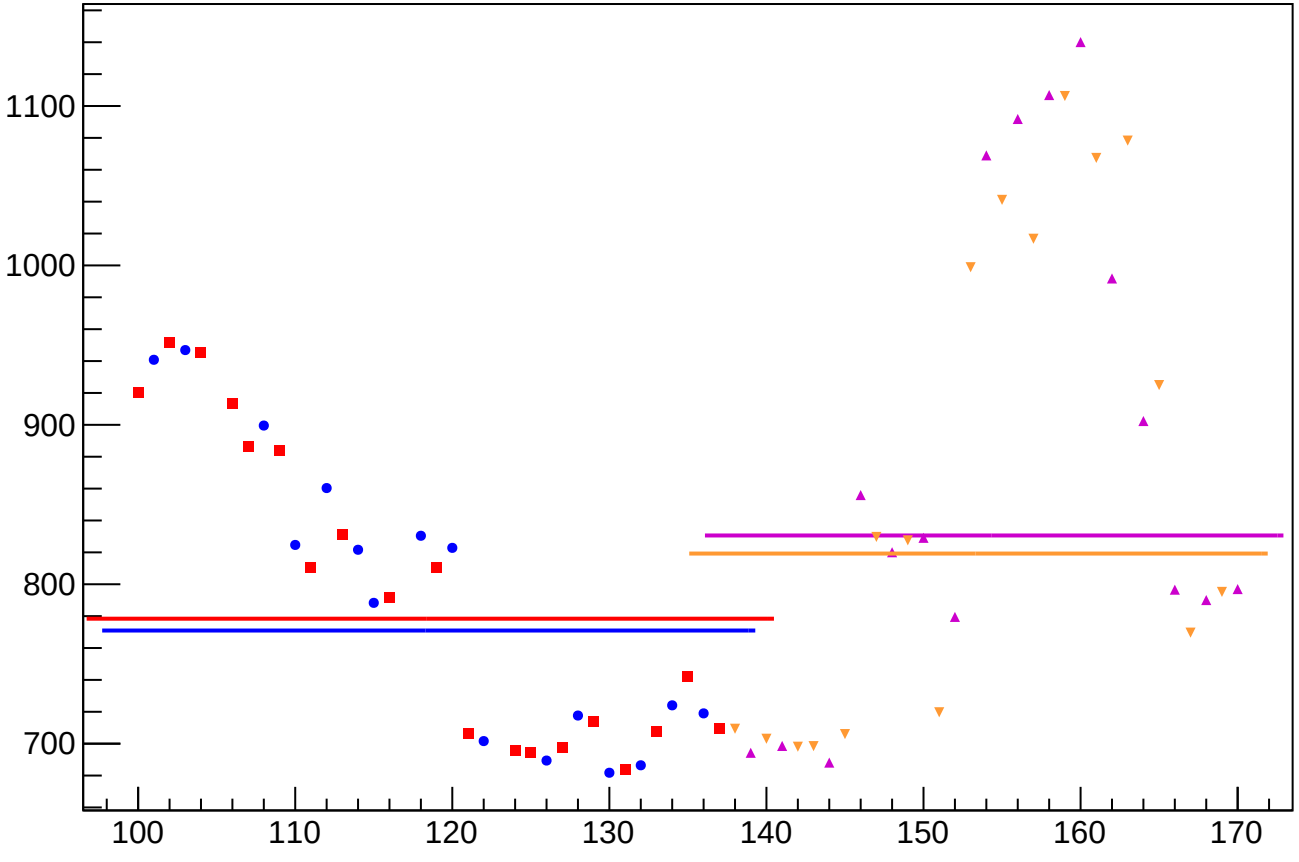
Left In: 2.950+/-0.233 $\chi^2$/NDF:911.5/15

+ sign 2.034+/-0.179 $\chi^2$/NDF: 1427.0/32

All: 0.976+/-0.127 $\chi^2$/NDF: 3152.5/67

- sign -0.103+/-0.180 $\chi^2$/NDF: 1654.6/34

# diff_bpm2i01X_rms vs Slug




Right In: 770.973+/-0.204 $\chi^2$/NDF: 192911.9/15

Left Out: 819.253+/-0.161 $\chi^2$/NDF:742225.1/16

Right Out: 778.394+/-0.202 $\chi^2$/NDF: 196544.2/18

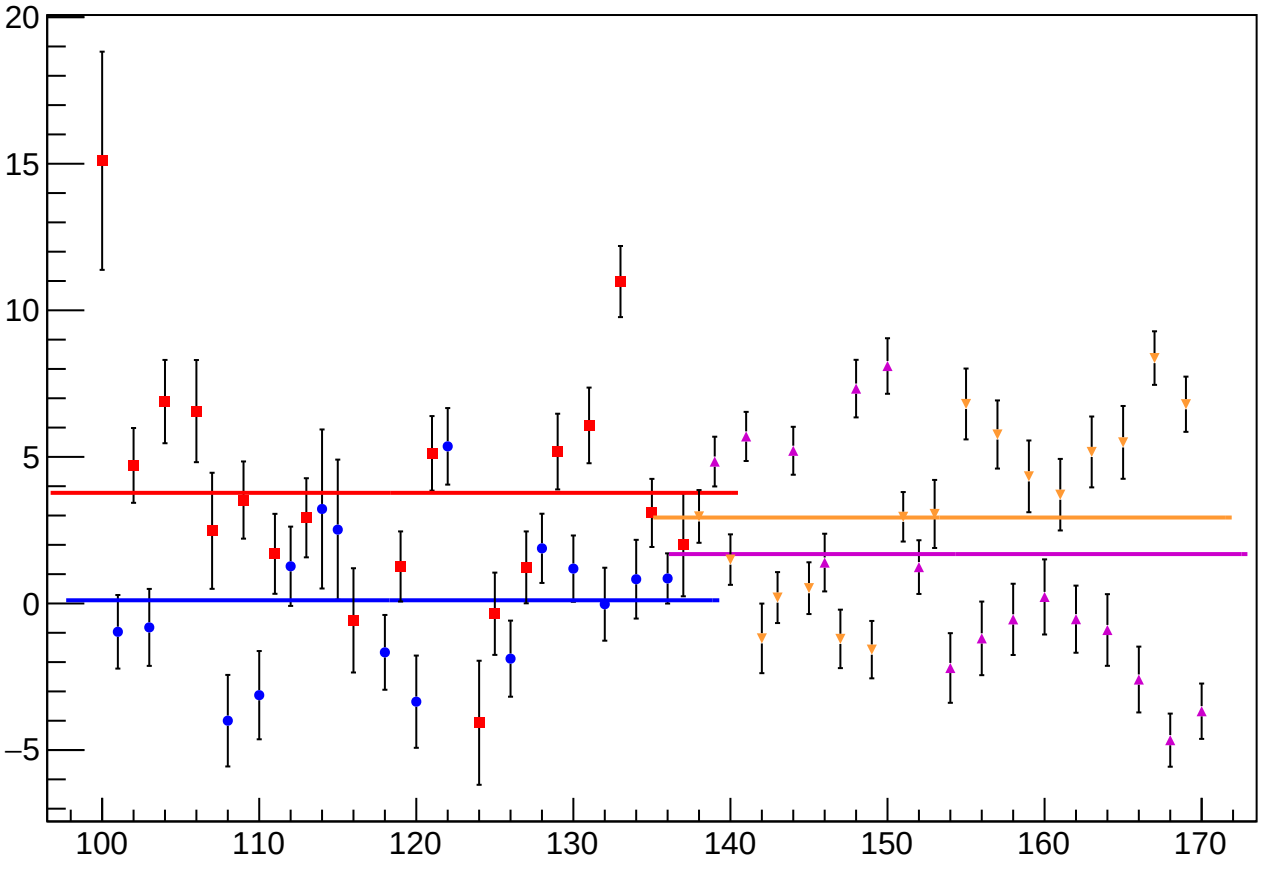
Left In: 830.598+/-0.164 $\chi^2$/NDF:681901.7/15

+ sign 800.728+/-0.126 $\chi^2$/NDF: 969686.9/32

All: 805.222+/-0.090 $\chi^2$/NDF: 1890846.8/67

- sign 809.803+/-0.128 $\chi^2$/NDF: 918604.2/34

# diff_bpm2i01Y_mean vs Slug




Right In: 0.109+/-0.330 $\chi^2$/NDF: 45.4/15

Left Out: 2.932+/-0.246 $\chi^2$/NDF:148.5/16

Right Out: 3.774+/-0.326 $\chi^2$/NDF: 99.6/18

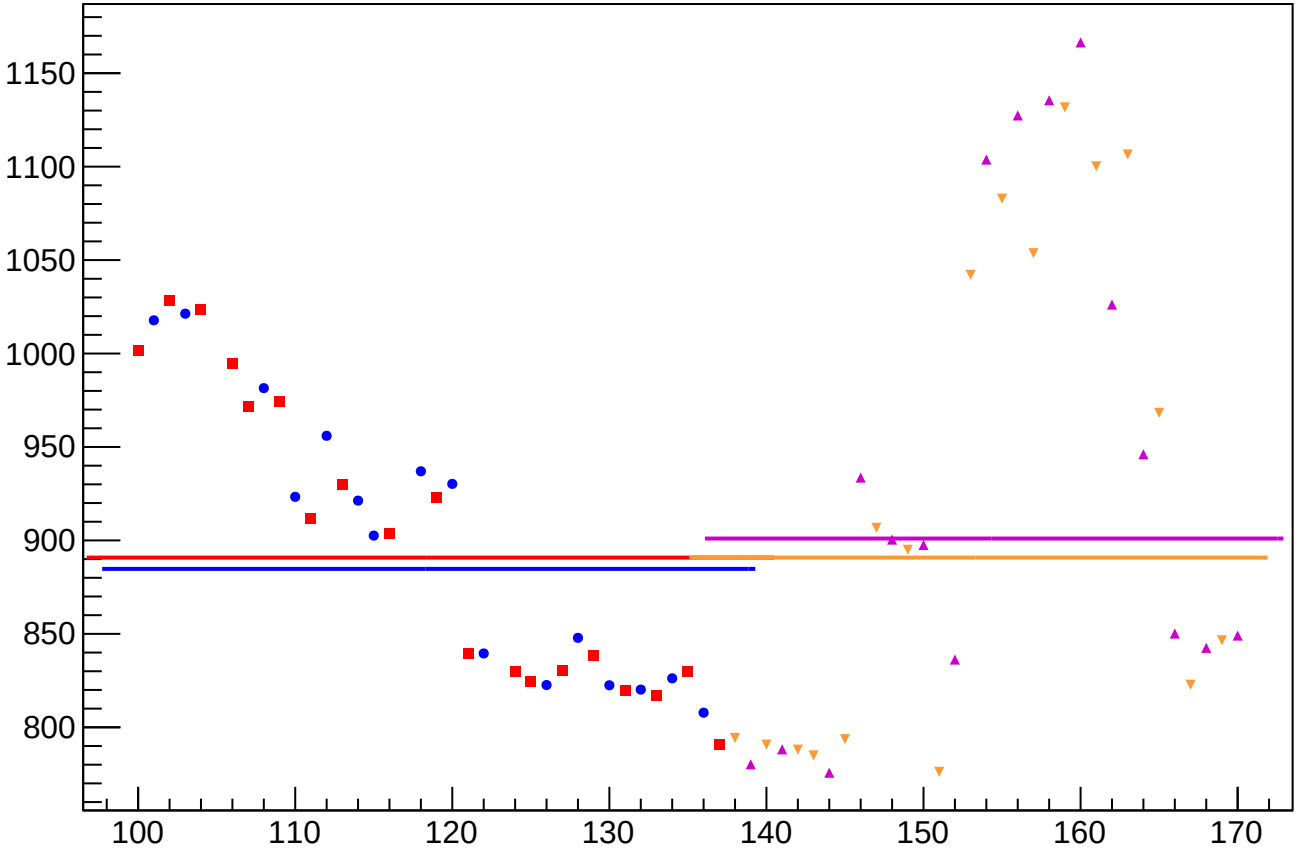
Left In: 1.685+/-0.251 $\chi^2$/NDF:259.3/15

+ sign 1.923+/-0.197 $\chi^2$/NDF: 240.9/32

All: 2.190+/-0.140 $\chi^2$/NDF: 629.2/67

- sign 2.462+/-0.199 $\chi^2$/NDF: 384.6/34

# diff_bpm2i01Y_rms vs Slug




Right In: 884.773+/-0.233 $\chi^2$/NDF: 104494.1/15

Left Out: 890.810+/-0.174 $\chi^2$/NDF:503418.0/16

Right Out: 890.815+/-0.231 $\chi^2$/NDF: 107763.6/18

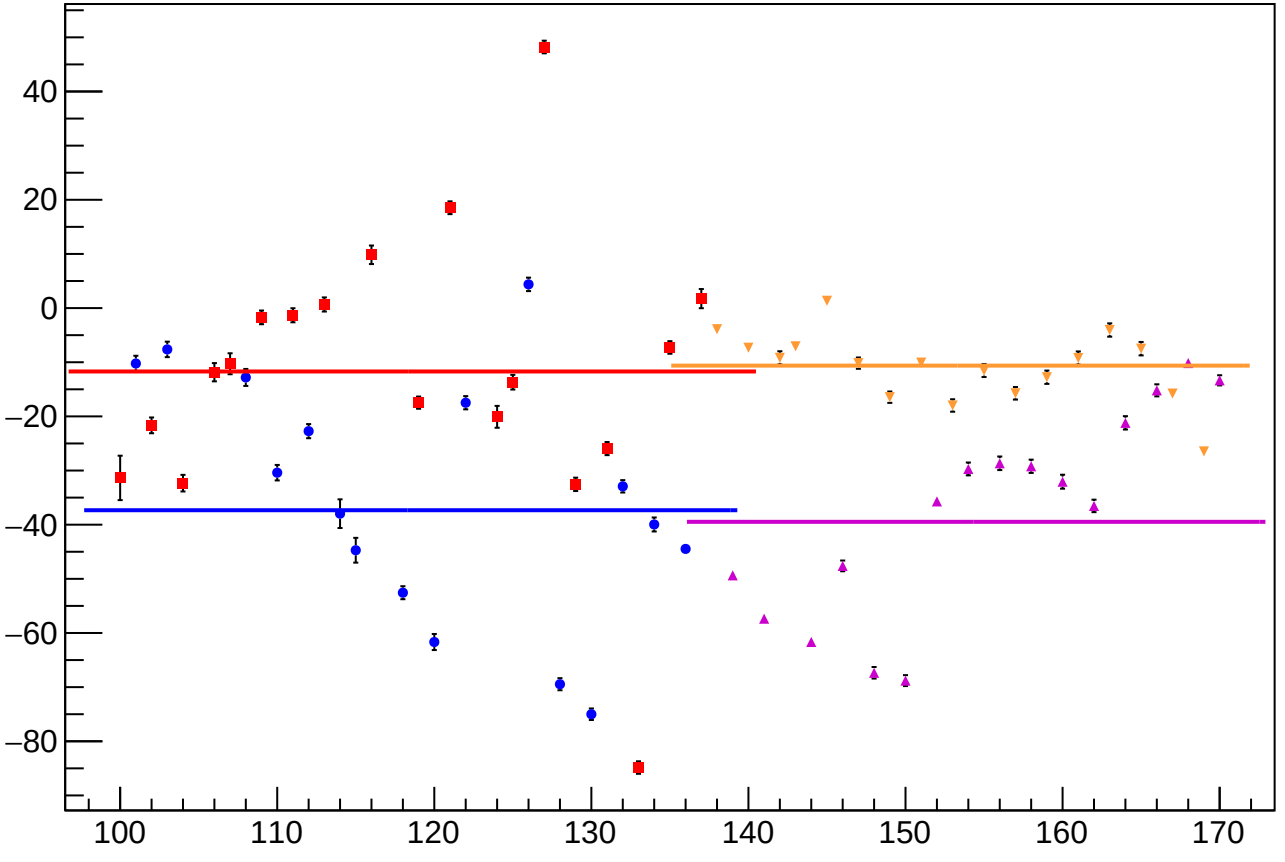
Left In: 901.006+/-0.177 $\chi^2$/NDF:464855.9/15

+ sign 888.652+/-0.139 $\chi^2$/NDF: 608342.5/32

All: 892.899+/-0.099 $\chi^2$/NDF: 1184058.4/67

- sign 897.216+/-0.141 $\chi^2$/NDF: 573846.5/34

# diff_bpm2i02X_mean vs Slug




Right In: -37.330+/-0.322 $\chi^2$/NDF: 5184.7/15

Left Out: -10.624+/-0.249 $\chi^2$/NDF:714.0/16

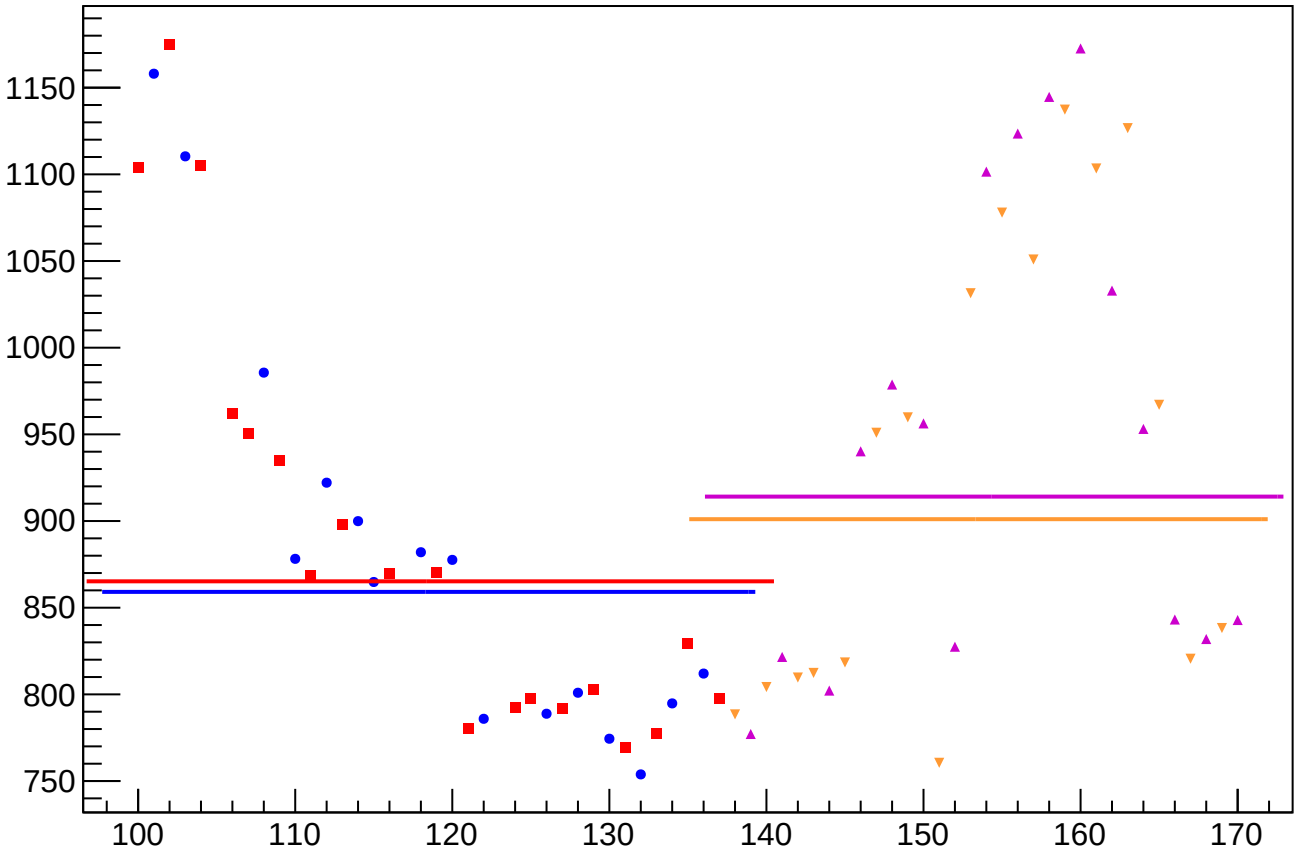
Right Out: -11.706+/-0.318 $\chi^2$/NDF: 8463.6/18

Left In: -39.471+/-0.255 $\chi^2$/NDF:5653.8/15

\+ sign -20.625+/-0.197 $\chi^2$/NDF: 10208.4/32

All: -24.586+/-0.140 $\chi^2$/NDF: 29789.2/67

\- sign -28.621+/-0.199 $\chi^2$/NDF: 18764.0/34




Right In: 859.126+/-0.228 $\chi^2$/NDF: 228710.0/15

Left Out: 901.066+/-0.176 $\chi^2$/NDF:499949.3/16

Right Out: 865.213+/-0.225 $\chi^2$/NDF: 223669.1/18

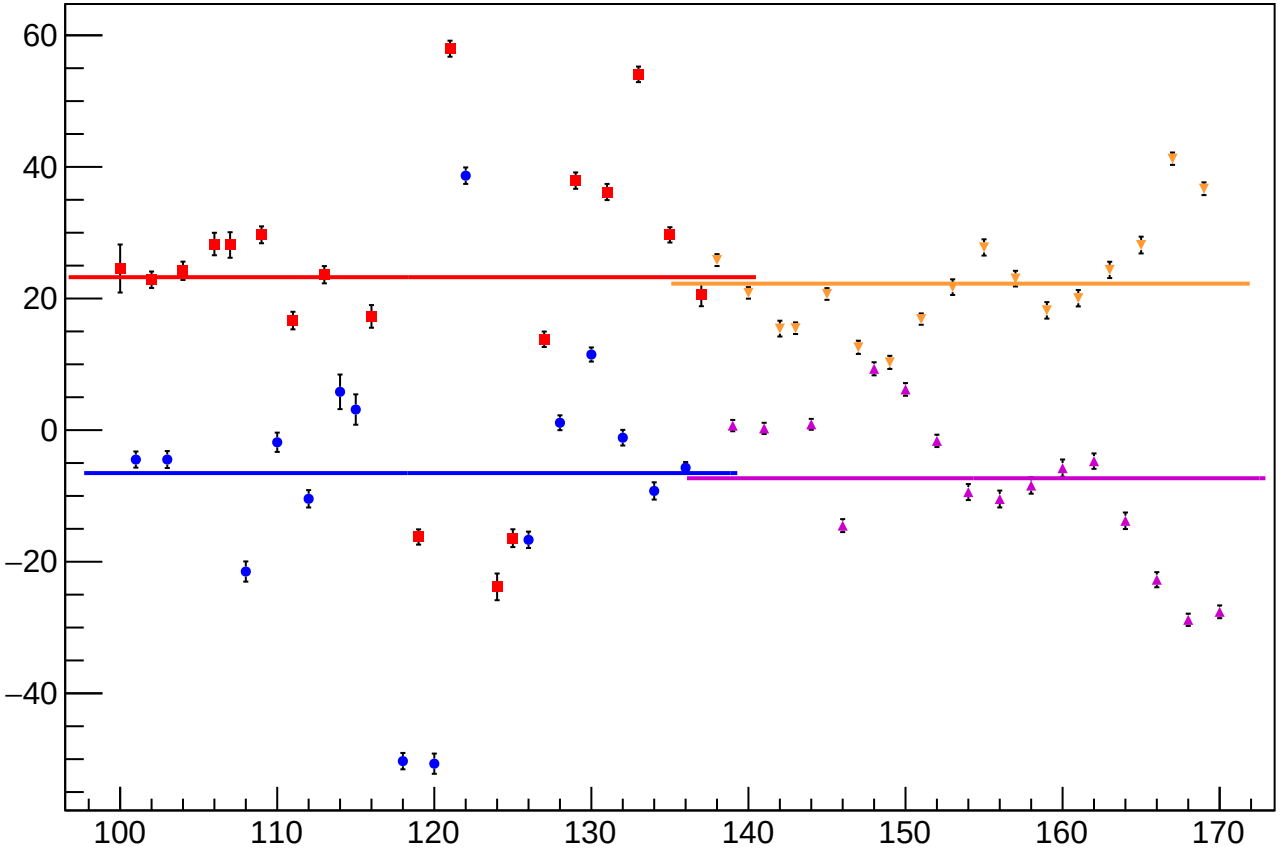
Left In: 914.089+/-0.180 $\chi^2$/NDF:457408.2/15

+ sign 885.360+/-0.139 $\chi^2$/NDF: 749917.4/32

All: 890.129+/-0.099 $\chi^2$/NDF: 1462162.0/67

- sign 894.988+/-0.141 $\chi^2$/NDF: 709875.3/34

# diff_bpm2i02Y_mean vs Slug




Right In: -6.529+/-0.321 $\chi^2$/NDF: 3946.1/15

Left Out: 22.261+/-0.251 $\chi^2$/NDF:1075.8/16

Right Out: 23.244+/-0.317 $\chi^2$/NDF: 4470.0/18

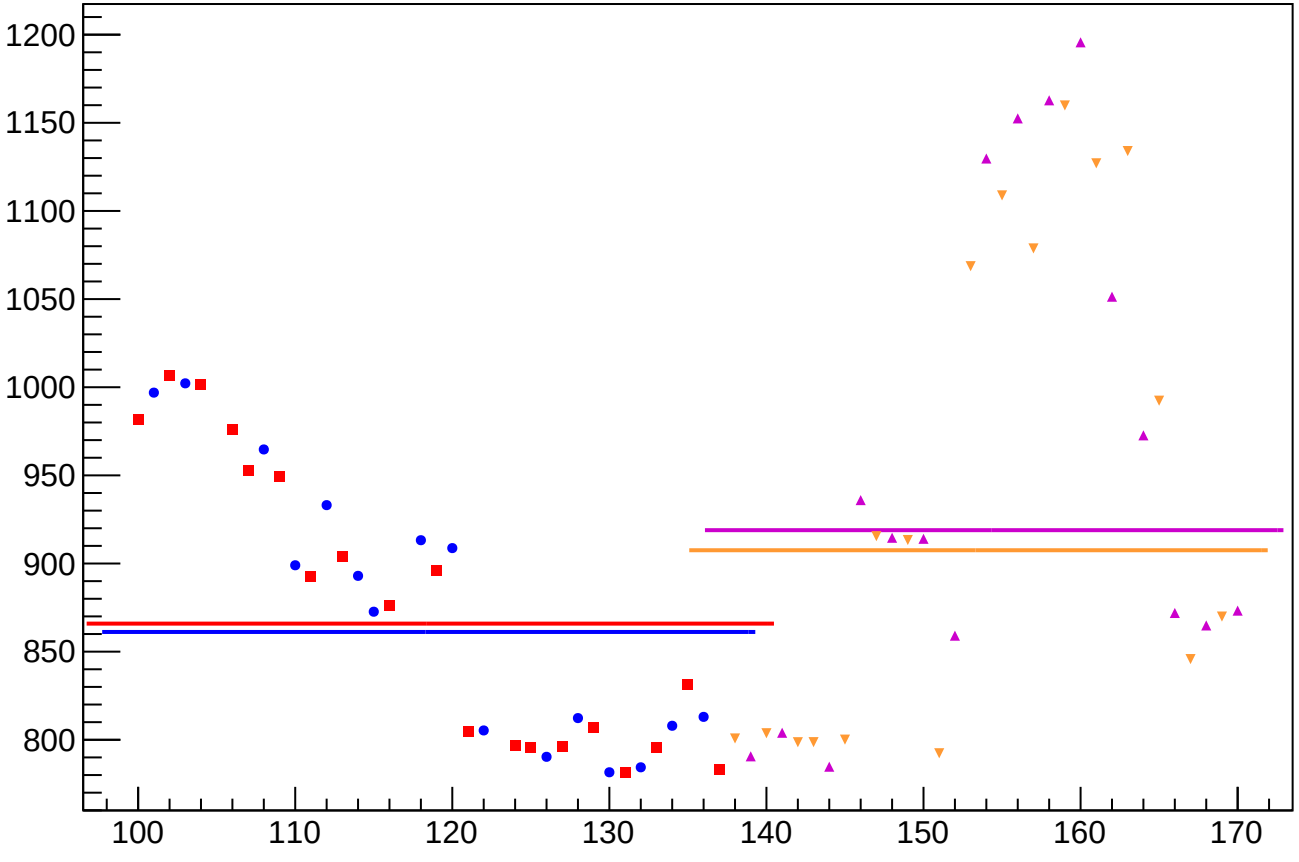
Left In: -7.310+/-0.256 $\chi^2$/NDF:2020.6/15

\+ sign 11.358+/-0.198 $\chi^2$/NDF: 10013.3/32

All: 8.077+/-0.140 $\chi^2$/NDF: 22682.3/67

\- sign 4.747+/-0.199 $\chi^2$/NDF: 12113.9/34

# diff_bpm2i02Y_rms vs Slug




Right In: 861.169+/-0.227 $\chi^2$/NDF: 113529.7/15

Left Out: 907.526+/-0.177 $\chi^2$/NDF:528697.3/16

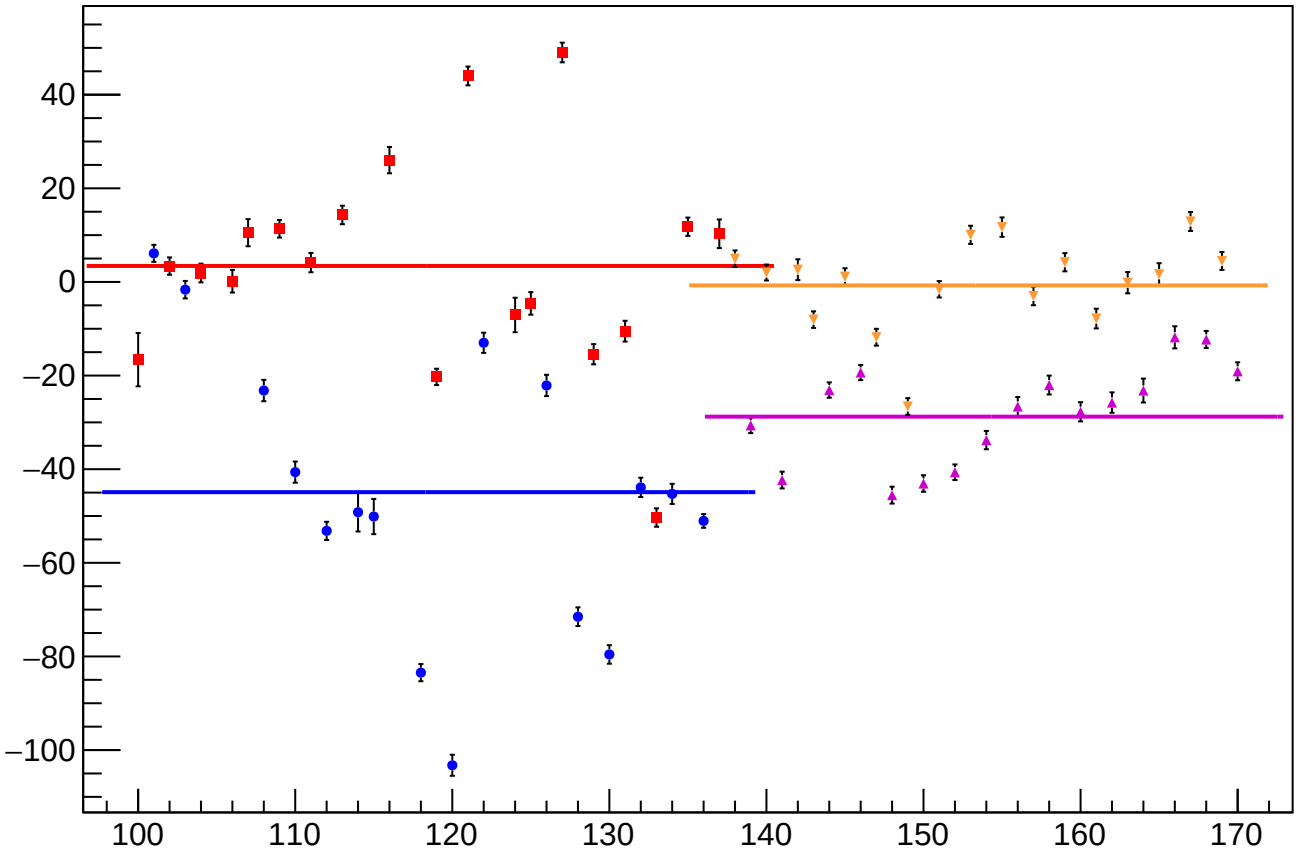
Right Out: 865.907+/-0.224 $\chi^2$/NDF: 118418.0/18

Left In: 918.915+/-0.181 $\chi^2$/NDF:478048.1/15

+ sign 889.970+/-0.140 $\chi^2$/NDF: 668110.0/32

All: 893.953+/-0.099 $\chi^2$/NDF: 1300063.4/67

- sign 897.997+/-0.141 $\chi^2$/NDF: 630316.5/34




Right In: -44.905+/-0.520 $\chi^2$/NDF: 3377.6/15

Left Out: -0.738+/-0.467 $\chi^2$/NDF:423.6/16

Right Out: 3.416+/-0.509 $\chi^2$/NDF: 2102.1/18

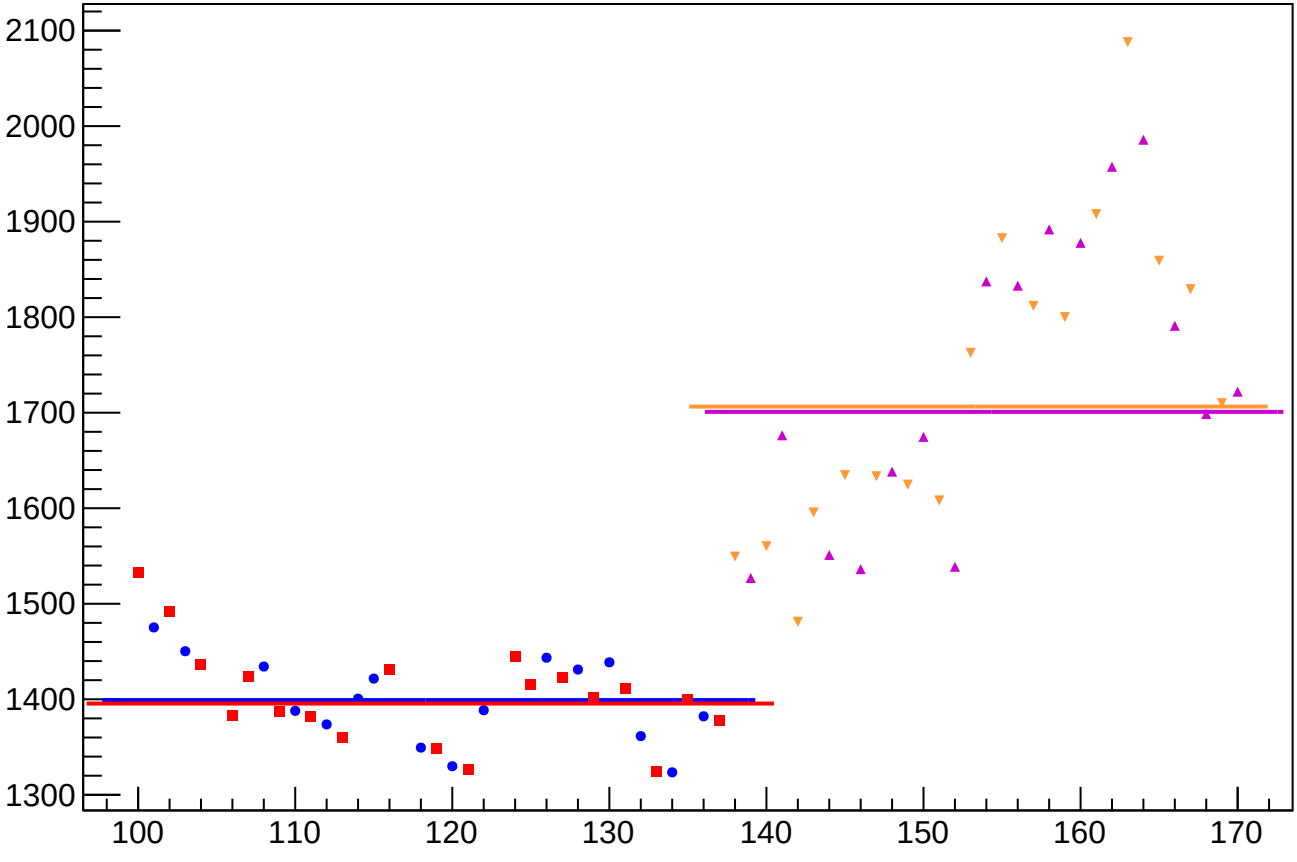
Left In: -28.775+/-0.470 $\chi^2$/NDF:492.1/15

+ sign -20.473+/-0.348 $\chi^2$/NDF: 7793.4/32

All: -17.196+/-0.245 $\chi^2$/NDF: 12721.9/67

- sign -13.958+/-0.345 $\chi^2$/NDF: 4751.7/34

# diff_bpm0i02X_rms vs Slug




Right In: 1399.172+/-0.368 $\chi^2$/NDF: 14844.1/15

Left Out: 1706.427+/-0.330 $\chi^2$/NDF:192654.2/16

Right Out: 1395.546+/-0.360 $\chi^2$/NDF: 16240.9/18

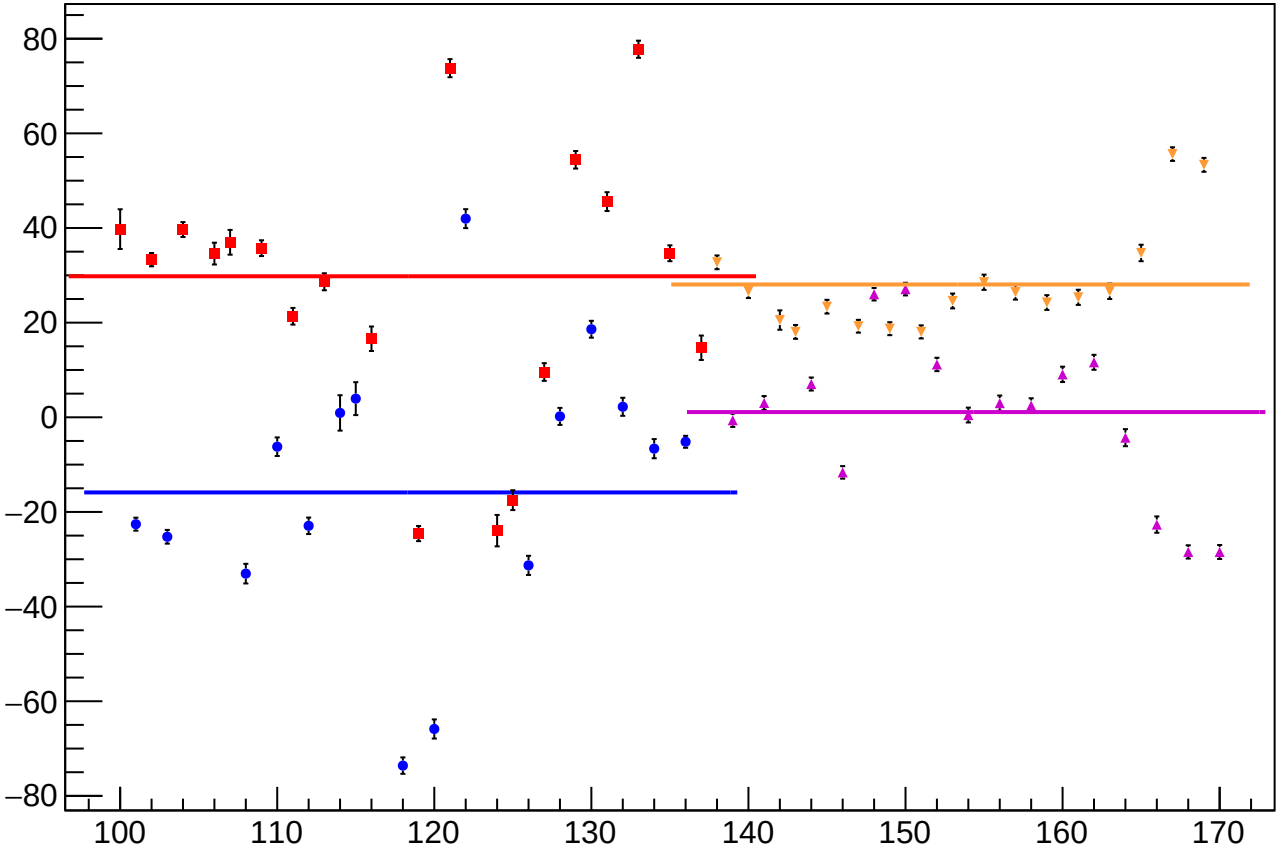
Left In: 1700.871+/-0.332 $\chi^2$/NDF:188296.0/15

+ sign 1569.138+/-0.246 $\chi^2$/NDF: 593915.1/32

All: 1564.709+/-0.173 $\chi^2$/NDF: 1187262.5/67

- sign 1560.334+/-0.244 $\chi^2$/NDF: 592701.6/34

# diff_bpm0i02Y_mean vs Slug




Right In: -15.878+/-0.455 $\chi^2$/NDF: 3477.8/15

Left Out: 28.068+/-0.368 $\chi^2$/NDF:916.3/16

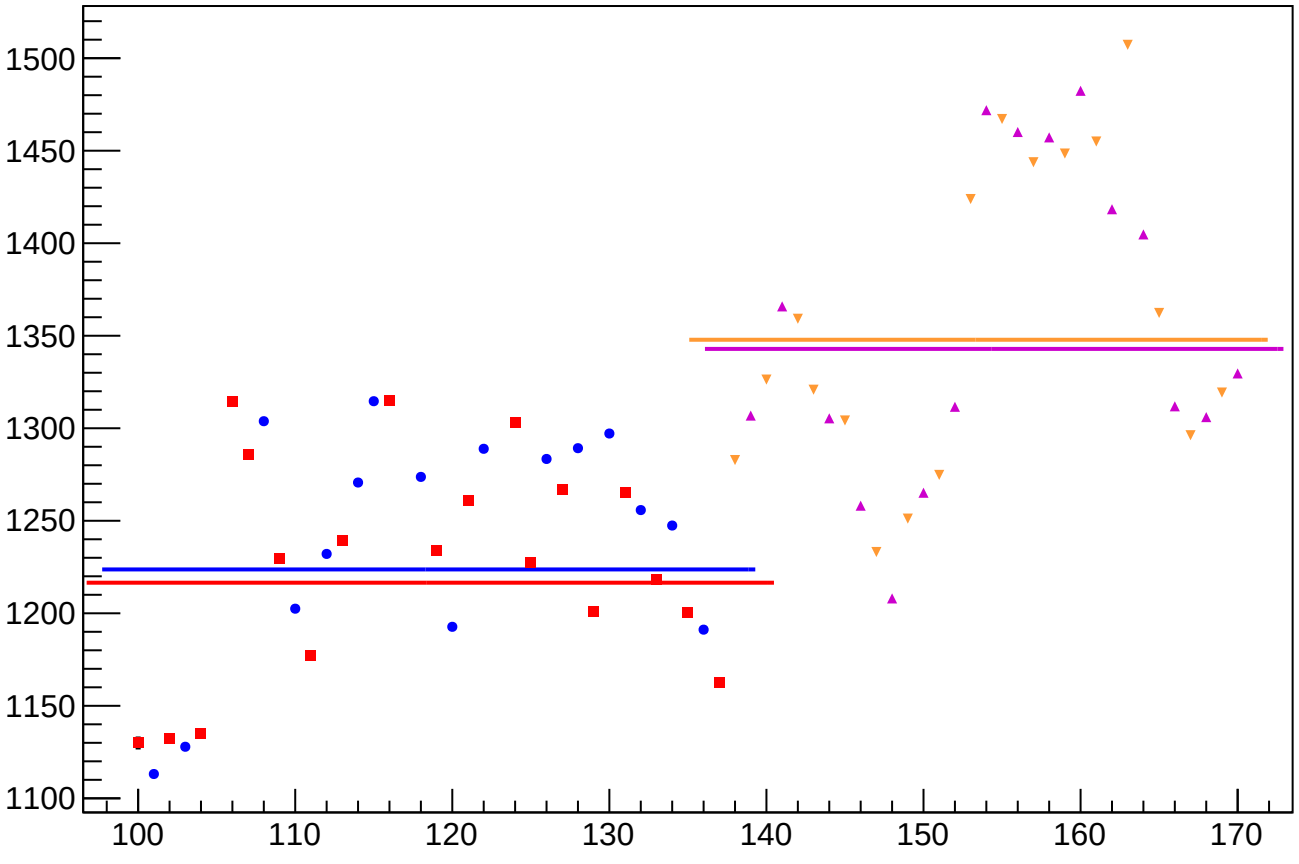
Right Out: 29.801+/-0.444 $\chi^2$/NDF: 3681.2/18

Left In: 1.105+/-0.370 $\chi^2$/NDF:2012.7/15

+ sign 10.677+/-0.286 $\chi^2$/NDF: 10025.1/32

All: 11.779+/-0.202 $\chi^2$/NDF: 18209.4/67

- sign 12.867+/-0.284 $\chi^2$/NDF: 8154.9/34




Right In: 1223.702+/-0.322 $\chi^2$/NDF: 40883.8/15

Left Out: 1347.834+/-0.261 $\chi^2$/NDF:99355.7/16

Right Out: 1216.533+/-0.314 $\chi^2$/NDF: 29381.0/18

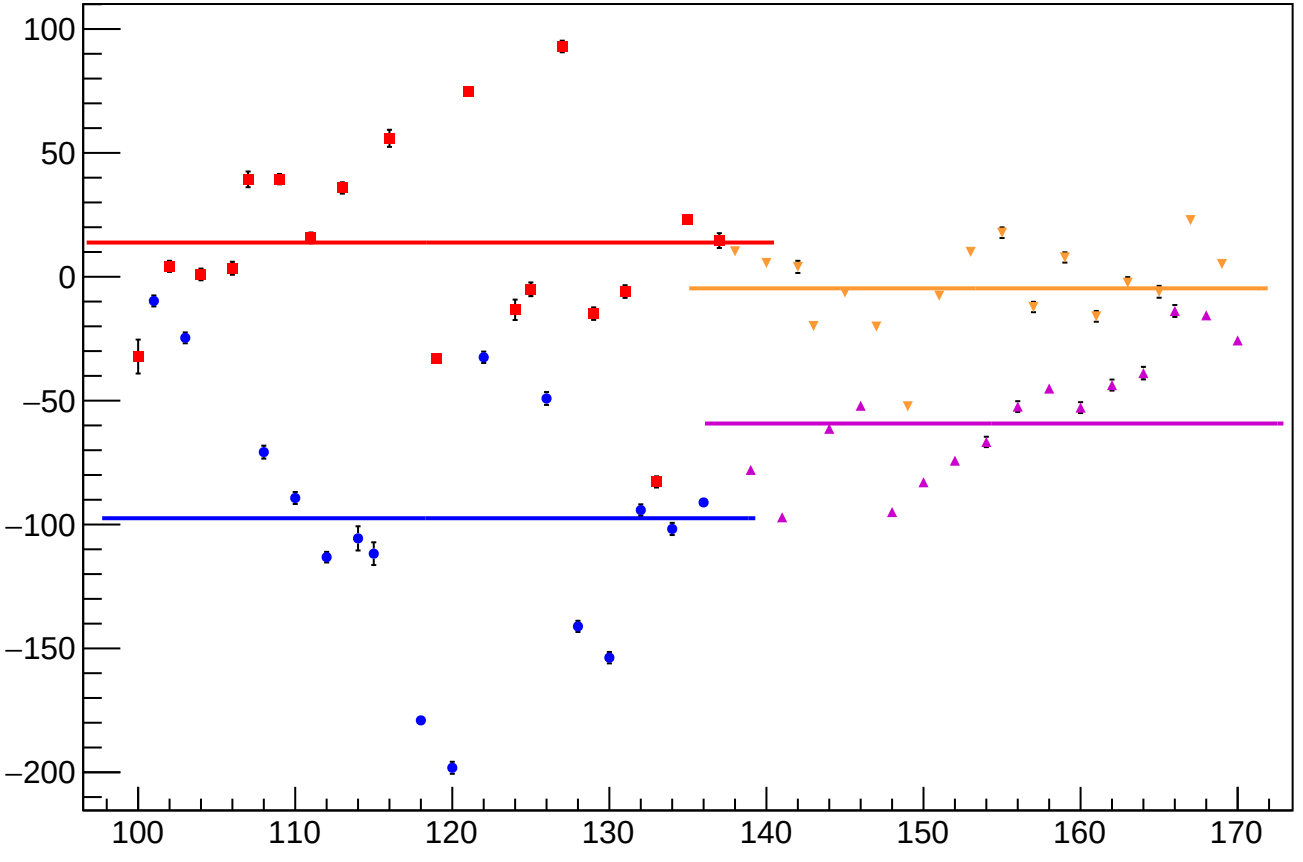
Left In: 1342.884+/-0.262 $\chi^2$/NDF:98961.9/15

+ sign 1298.710+/-0.203 $\chi^2$/NDF: 230093.8/32

All: 1294.877+/-0.143 $\chi^2$/NDF: 454571.8/67

- sign 1291.094+/-0.201 $\chi^2$/NDF: 223766.1/34

# diff_bpm0i02aX_mean vs Slug




Right In: -97.455+/-0.579 $\chi^2$/NDF: 8300.2/15

Left Out: -4.665+/-0.480 $\chi^2$/NDF:1421.7/16

Right Out: 13.816+/-0.566 $\chi^2$/NDF: 5352.2/18

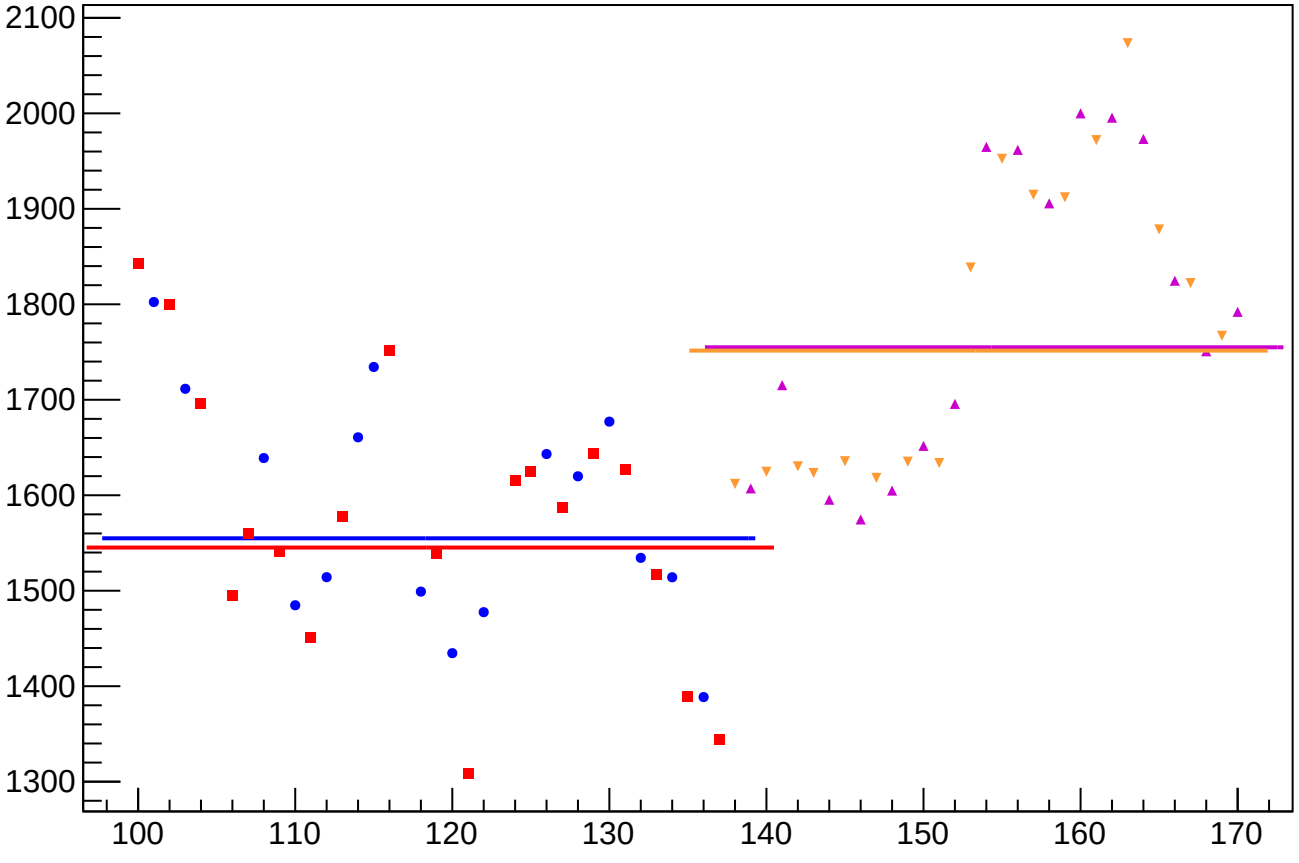
Left In: -59.228+/-0.485 $\chi^2$/NDF:2601.0/15

+ sign -42.398+/-0.369 $\chi^2$/NDF: 24938.8/32

All: -35.316+/-0.261 $\chi^2$/NDF: 43234.8/67

- sign -28.285+/-0.368 $\chi^2$/NDF: 17563.9/34

# diff_bpm0i02aX_rms vs Slug




Right In: 1554.908+/-0.410 $\chi^2$/NDF: 87920.1/15

Left Out: 1751.502+/-0.339 $\chi^2$/NDF:188294.8/16

Right Out: 1545.239+/-0.400 $\chi^2$/NDF: 108789.4/18

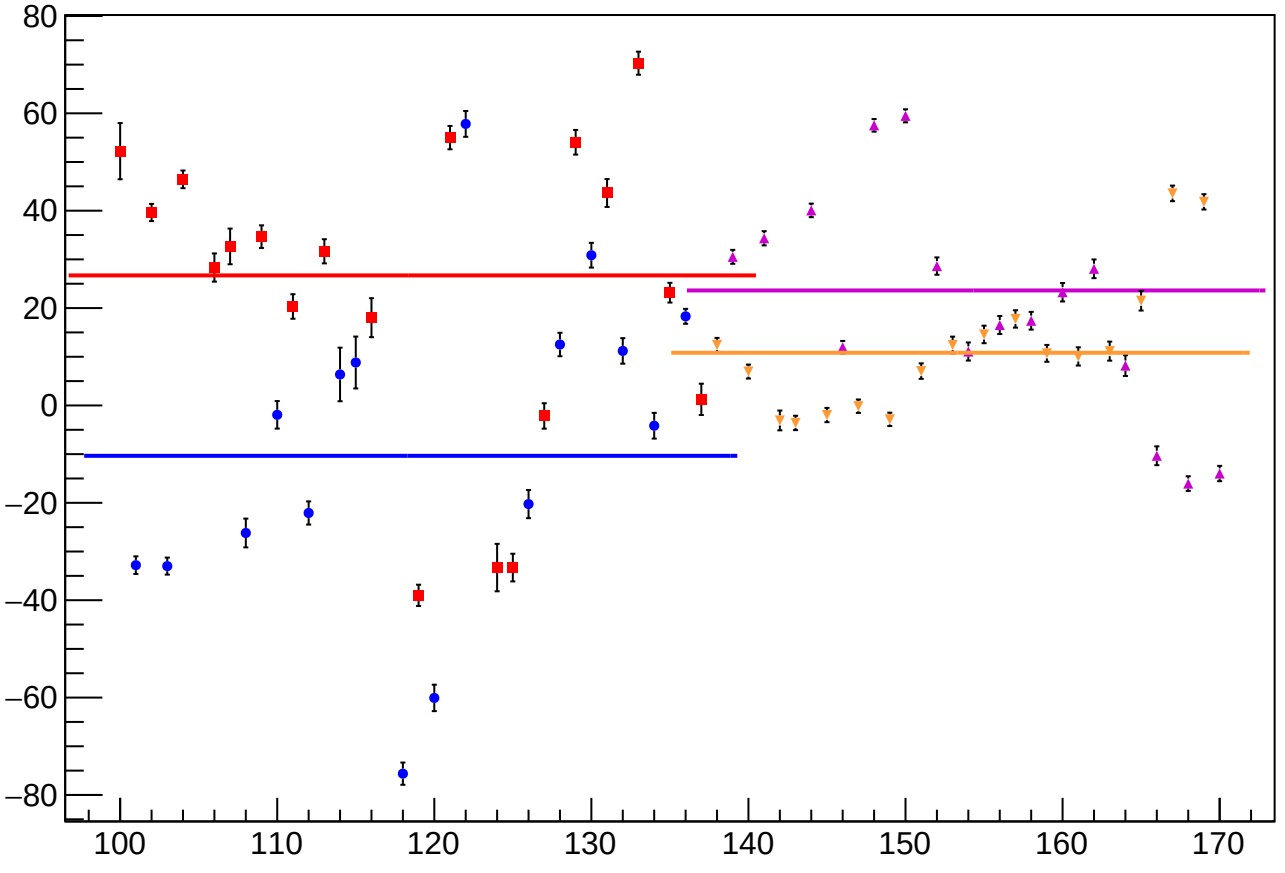
Left In: 1754.965+/-0.343 $\chi^2$/NDF:195557.9/15

+ sign 1671.556+/-0.261 $\chi^2$/NDF: 412825.8/32

All: 1668.829+/-0.184 $\chi^2$/NDF: 875851.1/67

- sign 1666.122+/-0.260 $\chi^2$/NDF: 462808.2/34

# diff_bpm0i02aY_mean vs Slug




Right In: -10.345+/-0.603 $\chi^2$/NDF: 3007.0/15

Left Out: 10.824+/-0.393 $\chi^2$/NDF:1248.2/16

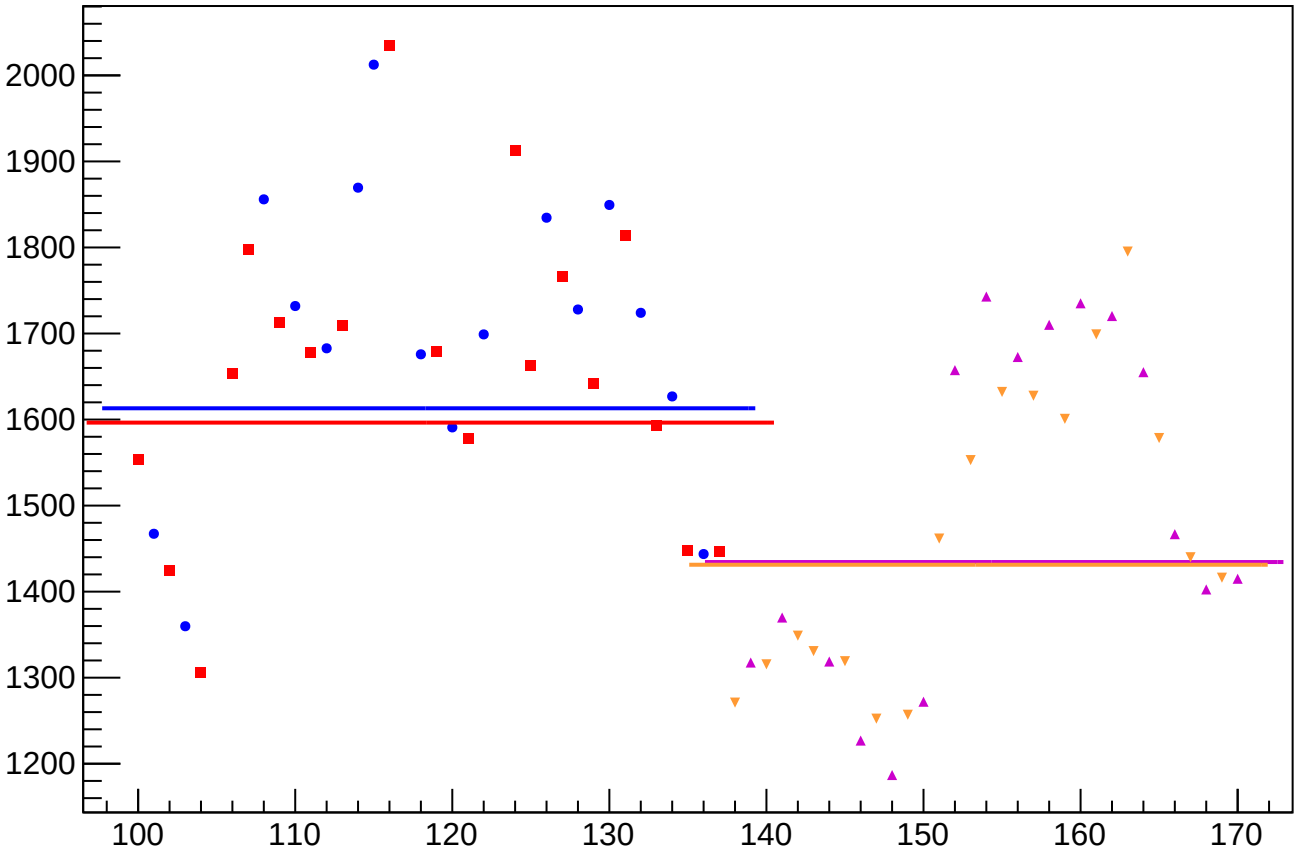
Right Out: 26.709+/-0.586 $\chi^2$/NDF: 2540.7/18

Left In: 23.619+/-0.399 $\chi^2$/NDF:3402.8/15

+ sign 4.507+/-0.329 $\chi^2$/NDF: 5119.5/32

All: 14.545+/-0.233 $\chi^2$/NDF: 12939.6/67

- sign 24.596+/-0.330 $\chi^2$/NDF: 5962.5/34




Right In: 1613.094+/-0.426 $\chi^2$/NDF: 154710.6/15

Left Out: 1431.261+/-0.278 $\chi^2$/NDF:327902.6/16

Right Out: 1596.442+/-0.415 $\chi^2$/NDF: 160714.8/18

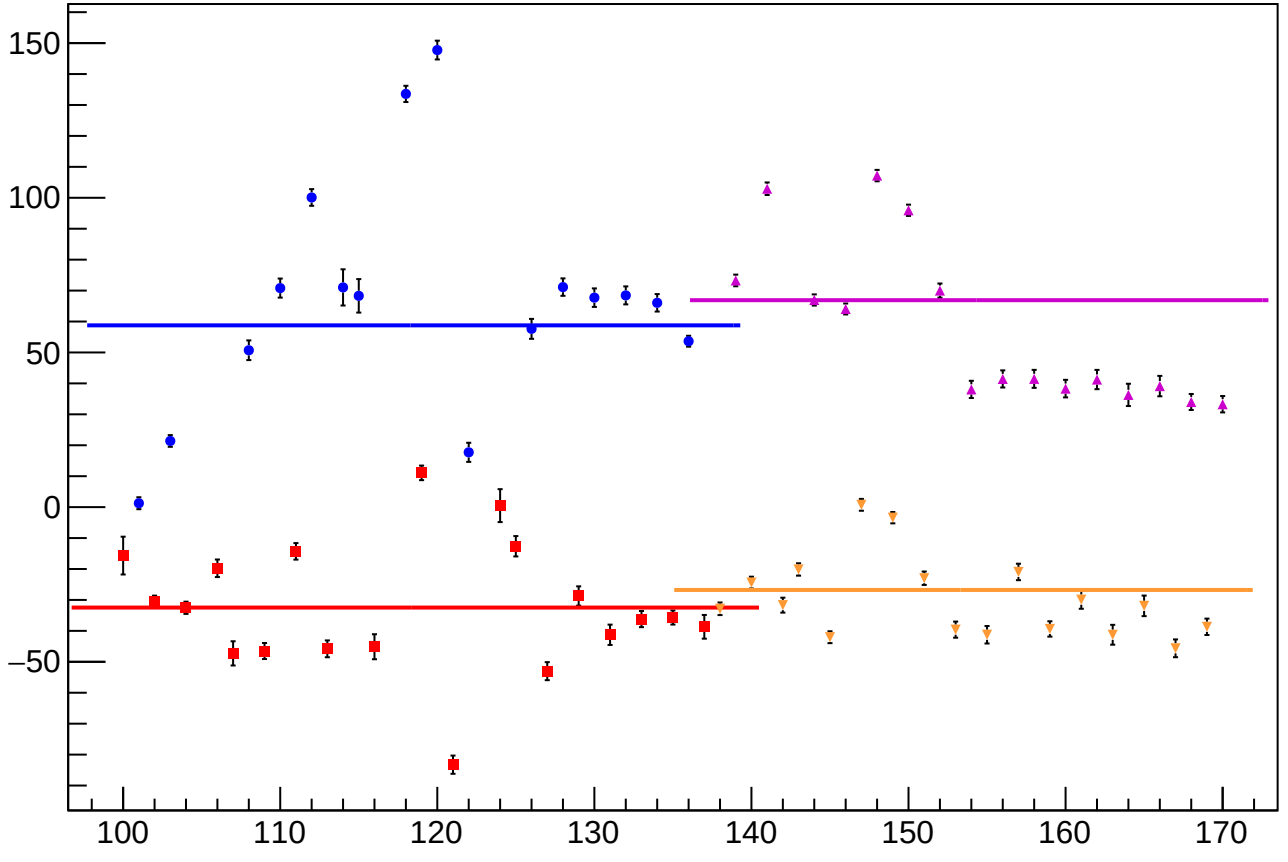
Left In: 1434.404+/-0.282 $\chi^2$/NDF:467247.9/15

+ sign 1485.521+/-0.233 $\chi^2$/NDF: 610148.9/32

All: 1485.575+/-0.165 $\chi^2$/NDF: 1342561.3/67

- sign 1485.630+/-0.233 $\chi^2$/NDF: 732412.3/34

# diff_bpm0i05X_mean vs Slug




Right In: 58.761+/-0.672 $\chi^2$/NDF: 3443.3/15

Left Out: -26.775+/-0.565 $\chi^2$/NDF:629.6/16

Right Out: -32.467+/-0.648 $\chi^2$/NDF: 930.8/18

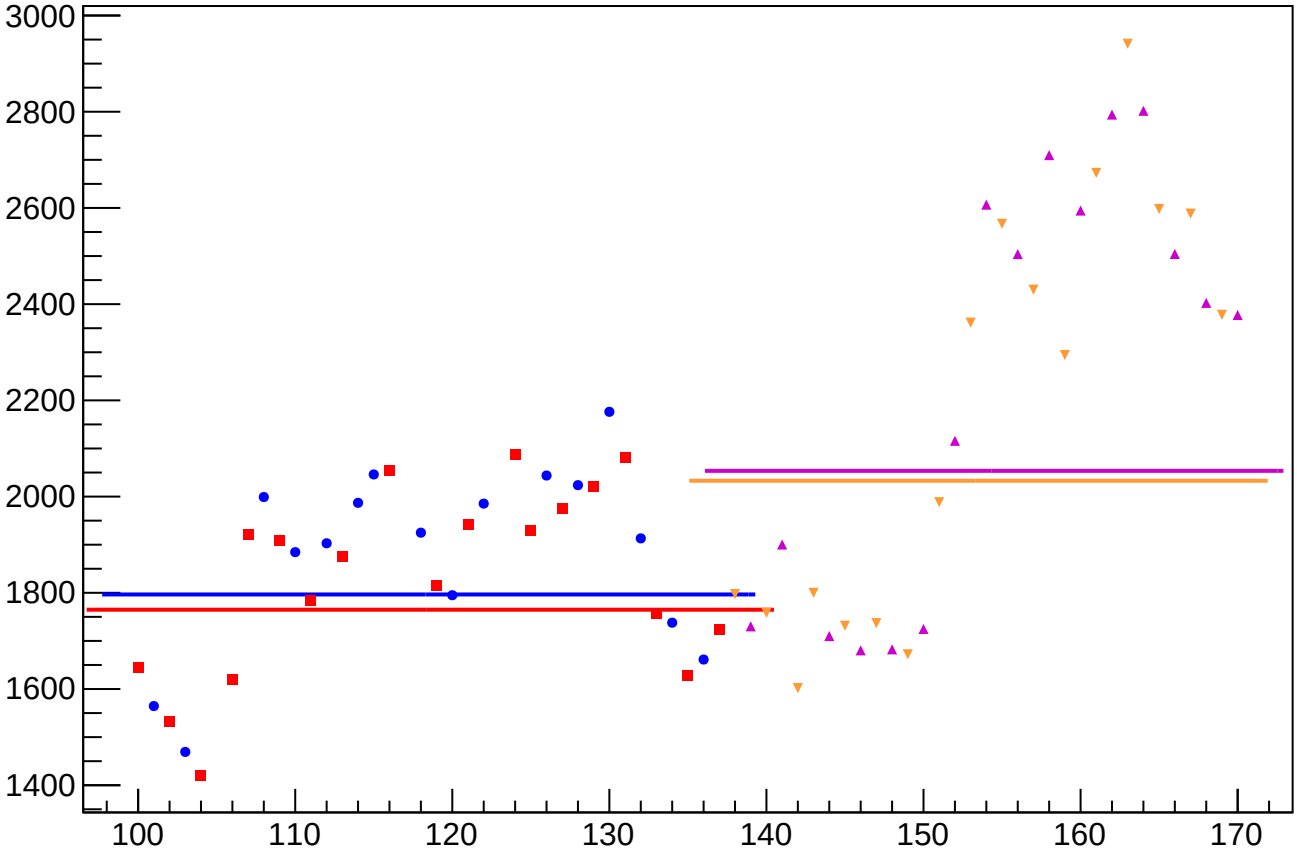
Left In: 66.896+/-0.577 $\chi^2$/NDF:1967.8/15

+ sign 8.632+/-0.433 $\chi^2$/NDF: 13555.3/32

All: 15.836+/-0.305 $\chi^2$/NDF: 30110.9/67

- sign 22.988+/-0.431 $\chi^2$/NDF: 16003.1/34

# diff_bpm0i05X_rms vs Slug




Right In: 1796.555+/-0.475 $\chi^2$/NDF: 193171.9/15

Left Out: 2032.954+/-0.400 $\chi^2$/NDF:924922.9/16

Right Out: 1764.860+/-0.459 $\chi^2$/NDF: 189987.9/18

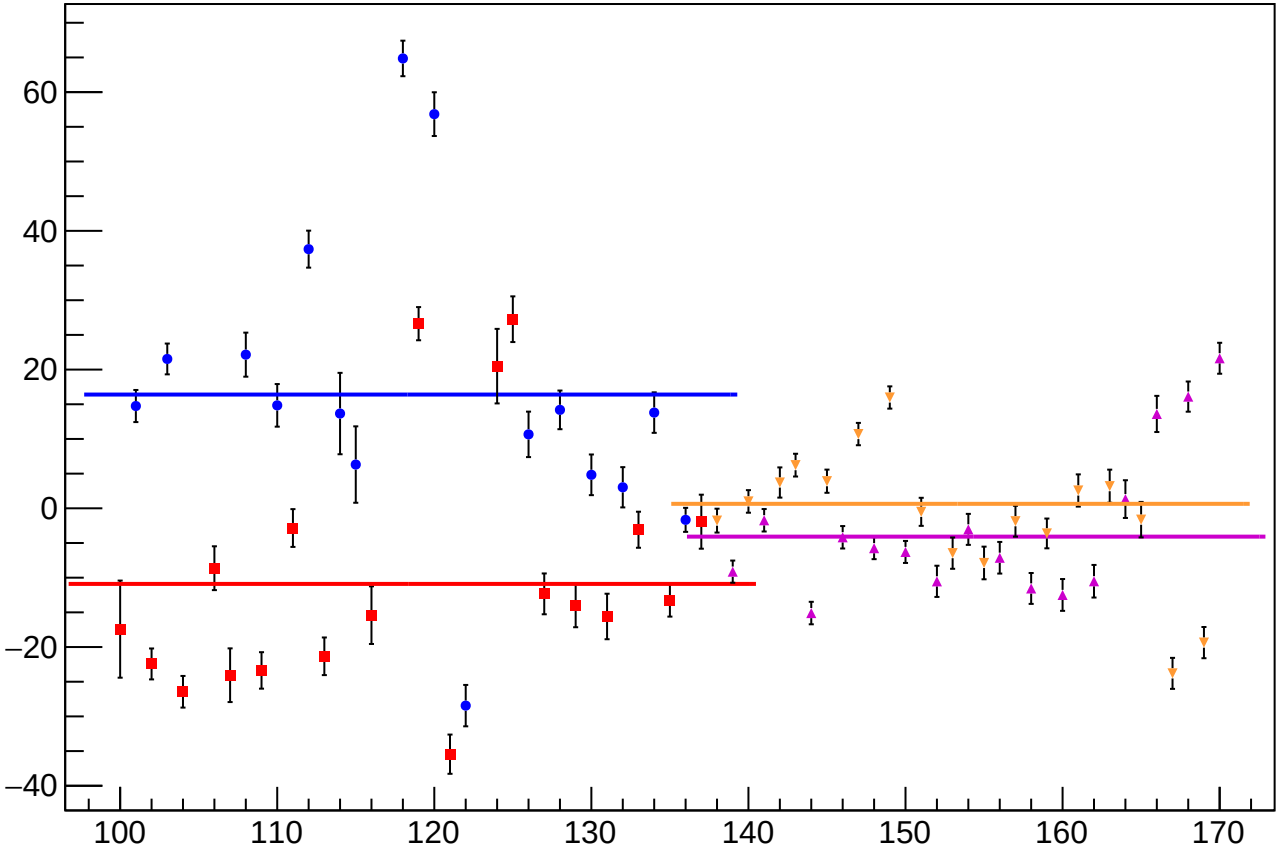
Left In: 2053.539+/-0.408 $\chi^2$/NDF:988876.9/15

+ sign 1935.099+/-0.306 $\chi^2$/NDF: 1262952.9/32

All: 1930.519+/-0.216 $\chi^2$/NDF: 2663490.1/67

- sign 1925.972+/-0.305 $\chi^2$/NDF: 1400090.6/34

# diff_bpm0i05Y_mean vs Slug




Right In: 16.400+/-0.695 $\chi^2$/NDF: 973.0/15

Left Out: 0.646+/-0.478 $\chi^2$/NDF:379.4/16

Right Out: -10.899+/-0.676 $\chi^2$/NDF: 641.7/18

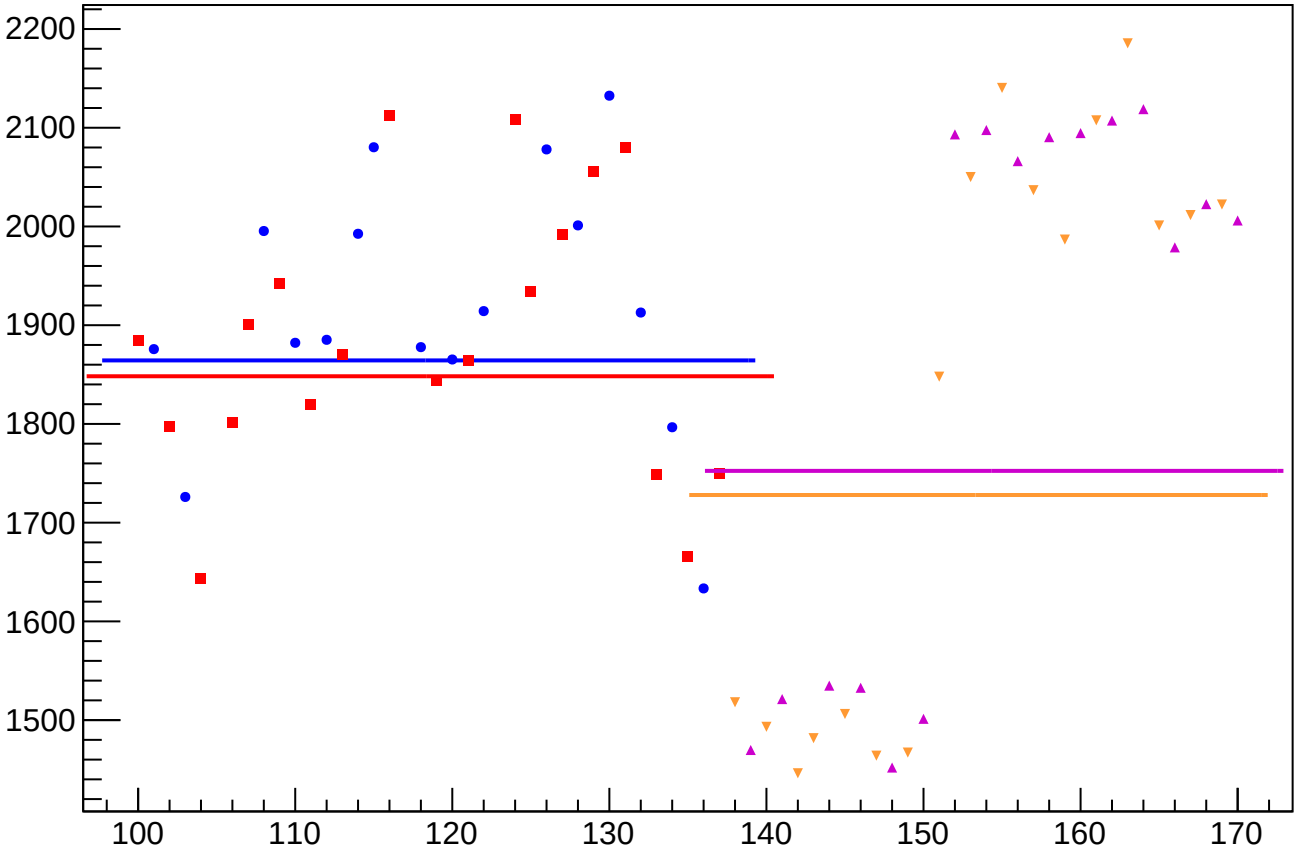
Left In: -4.082+/-0.489 $\chi^2$/NDF:372.7/15

+ sign 5.701+/-0.394 $\chi^2$/NDF: 1701.4/32

All: -0.323+/-0.279 $\chi^2$/NDF: 3253.7/67

- sign -6.420+/-0.396 $\chi^2$/NDF: 1081.2/34

# diff_bpm0i05Y_rms vs Slug




Right In: 1864.335+/-0.491 $\chi^2$/NDF: 83311.5/15

Left Out: 1728.007+/-0.338 $\chi^2$/NDF:684822.2/16

Right Out: 1848.284+/-0.478 $\chi^2$/NDF: 74956.9/18

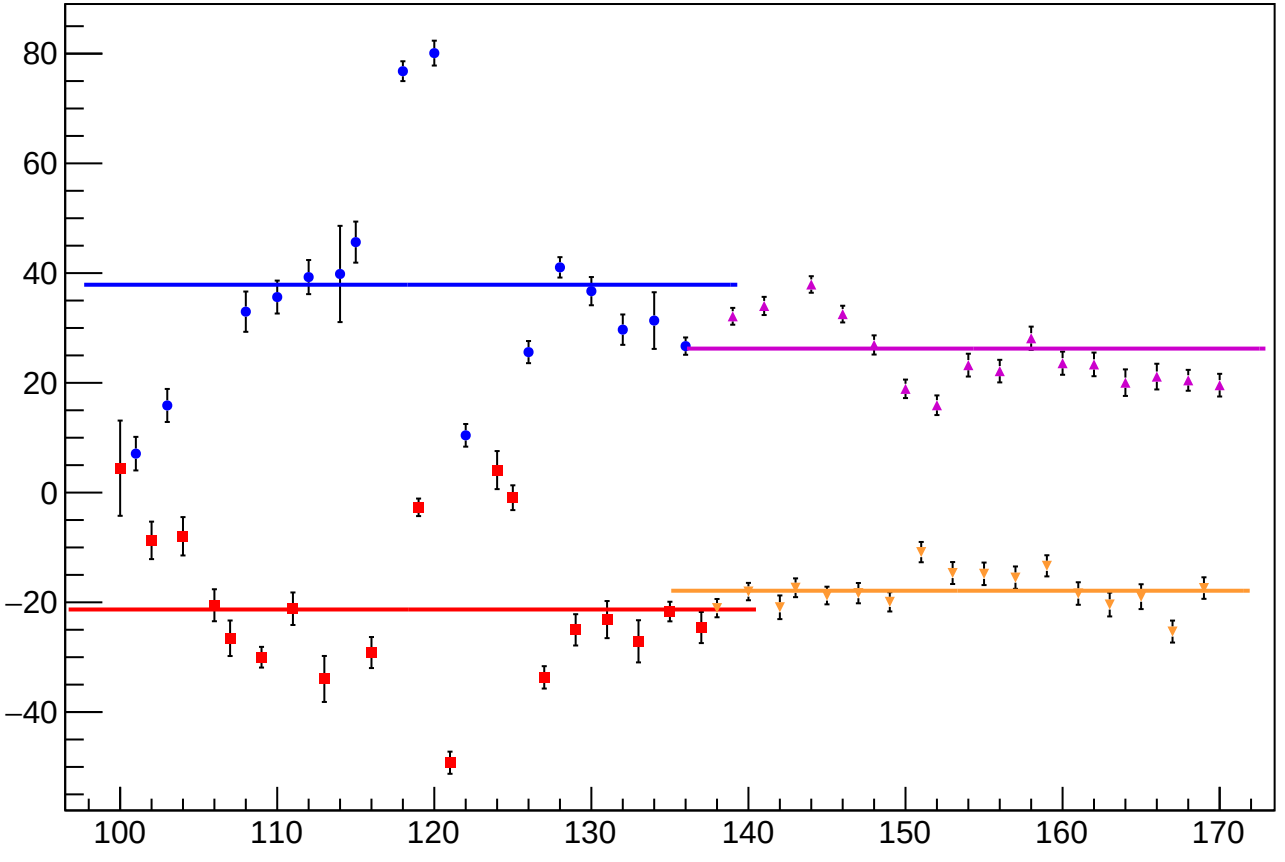
Left In: 1752.448+/-0.345 $\chi^2$/NDF:674088.7/15

+ sign 1771.754+/-0.278 $\chi^2$/NDF: 820398.0/32

All: 1778.494+/-0.197 $\chi^2$/NDF: 1597014.7/67

- sign 1785.315+/-0.280 $\chi^2$/NDF: 775437.2/34

# diff_bpm0i07X_mean vs Slug




Right In: 37.880+/-0.622 $\chi^2$/NDF: 1249.8/15

Left Out: -17.887+/-0.458 $\chi^2$/NDF:49.1/16

Right Out: -21.306+/-0.593 $\chi^2$/NDF: 582.6/18

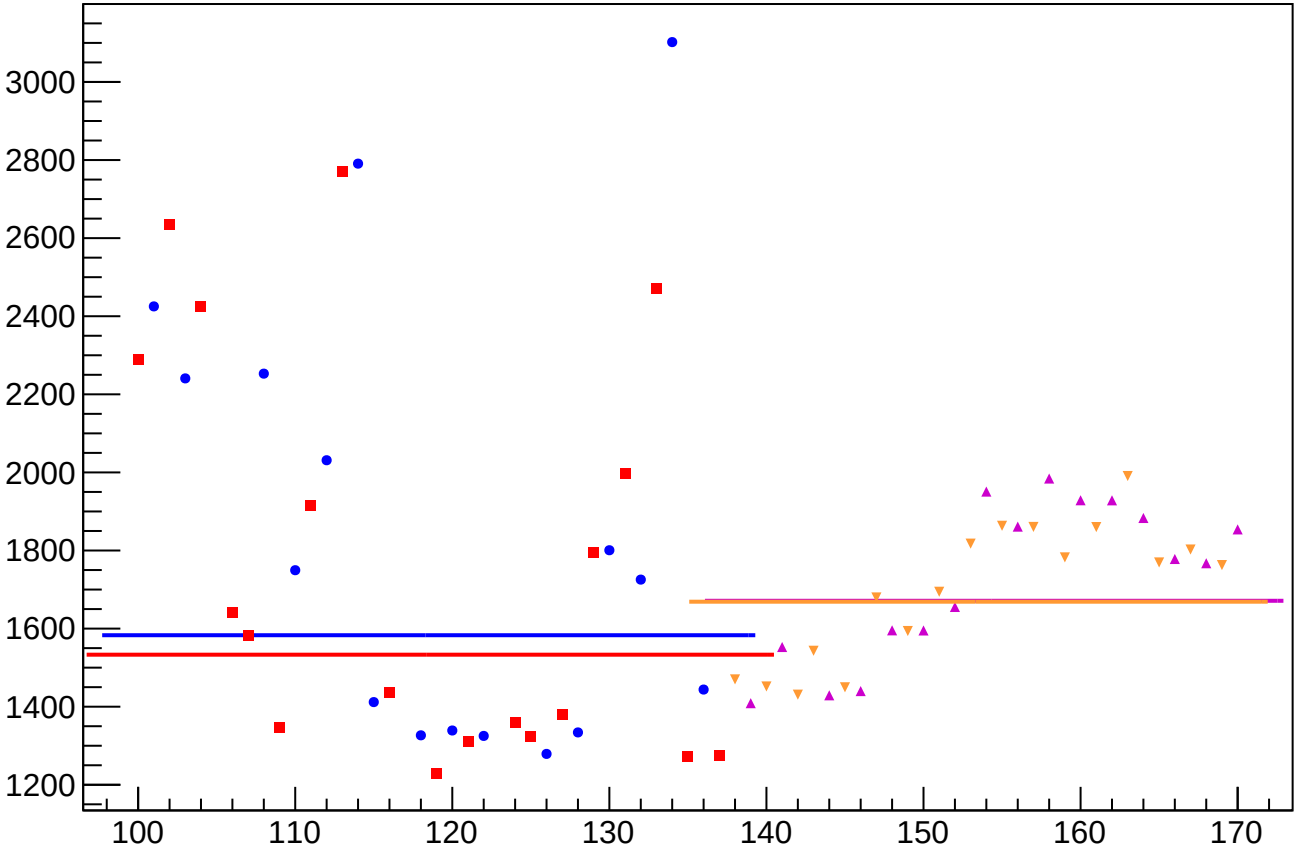
Left In: 26.243+/-0.464 $\chi^2$/NDF:207.4/15

+ sign 1.719+/-0.369 $\chi^2$/NDF: 6505.3/32

All: 4.983+/-0.260 $\chi^2$/NDF: 11438.8/67

- sign 8.184+/-0.365 $\chi^2$/NDF: 4778.5/34

# diff_bpm0i07X_rms vs Slug




Right In: 1583.050+/-0.440 $\chi^2$/NDF: 787672.4/15

Left Out: 1668.900+/-0.324 $\chi^2$/NDF:274796.3/16

Right Out: 1533.190+/-0.419 $\chi^2$/NDF: 950777.4/18

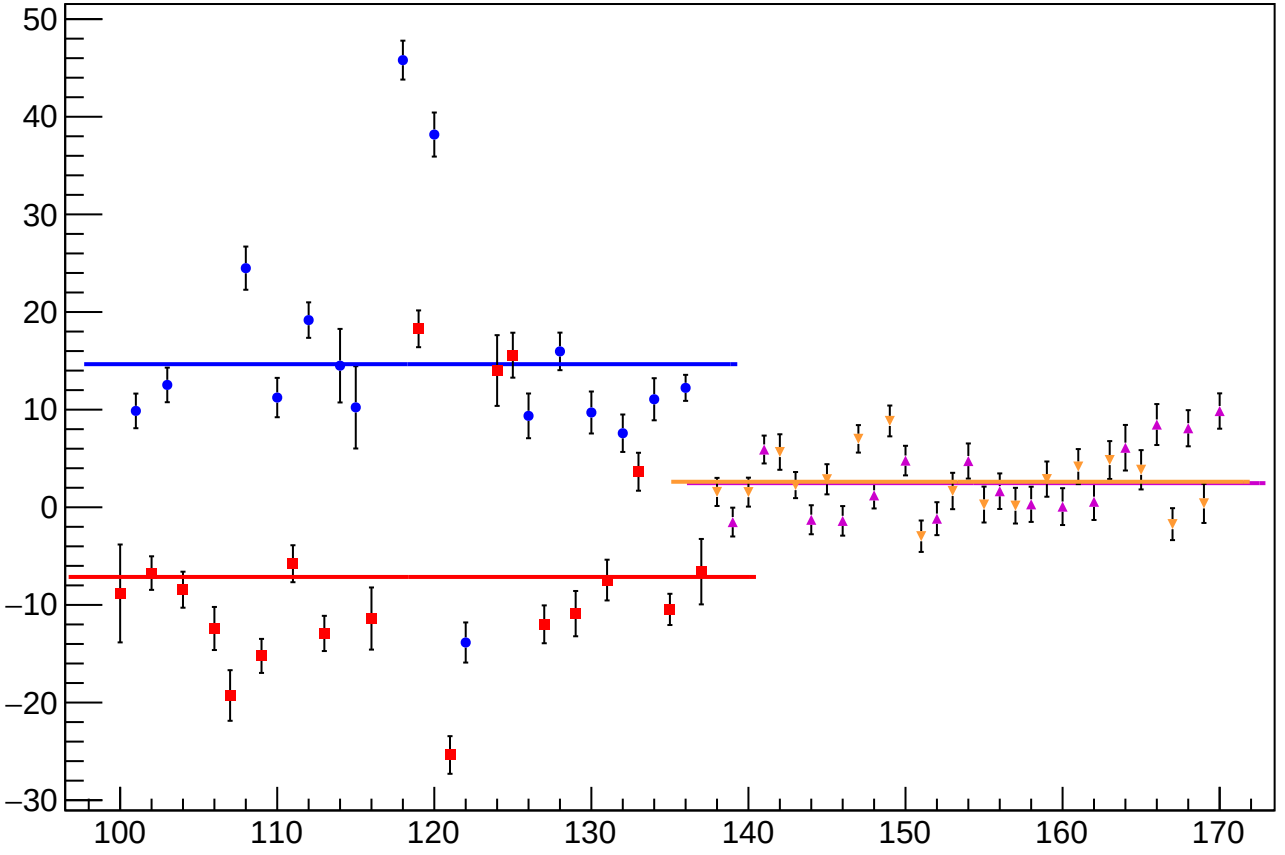
Left In: 1671.237+/-0.328 $\chi^2$/NDF:369789.4/15

+ sign 1638.719+/-0.261 $\chi^2$/NDF: 1087145.9/32

All: 1628.665+/-0.184 $\chi^2$/NDF: 2477888.9/67

- sign 1618.806+/-0.258 $\chi^2$/NDF: 1387802.7/34

# diff_bpm0i07Y_mean vs Slug




Right In: 14.658+/-0.504 $\chi^2$/NDF: 614.8/15

Left Out: 2.615+/-0.403 $\chi^2$/NDF:55.7/16

Right Out: -7.135+/-0.483 $\chi^2$/NDF: 509.4/18

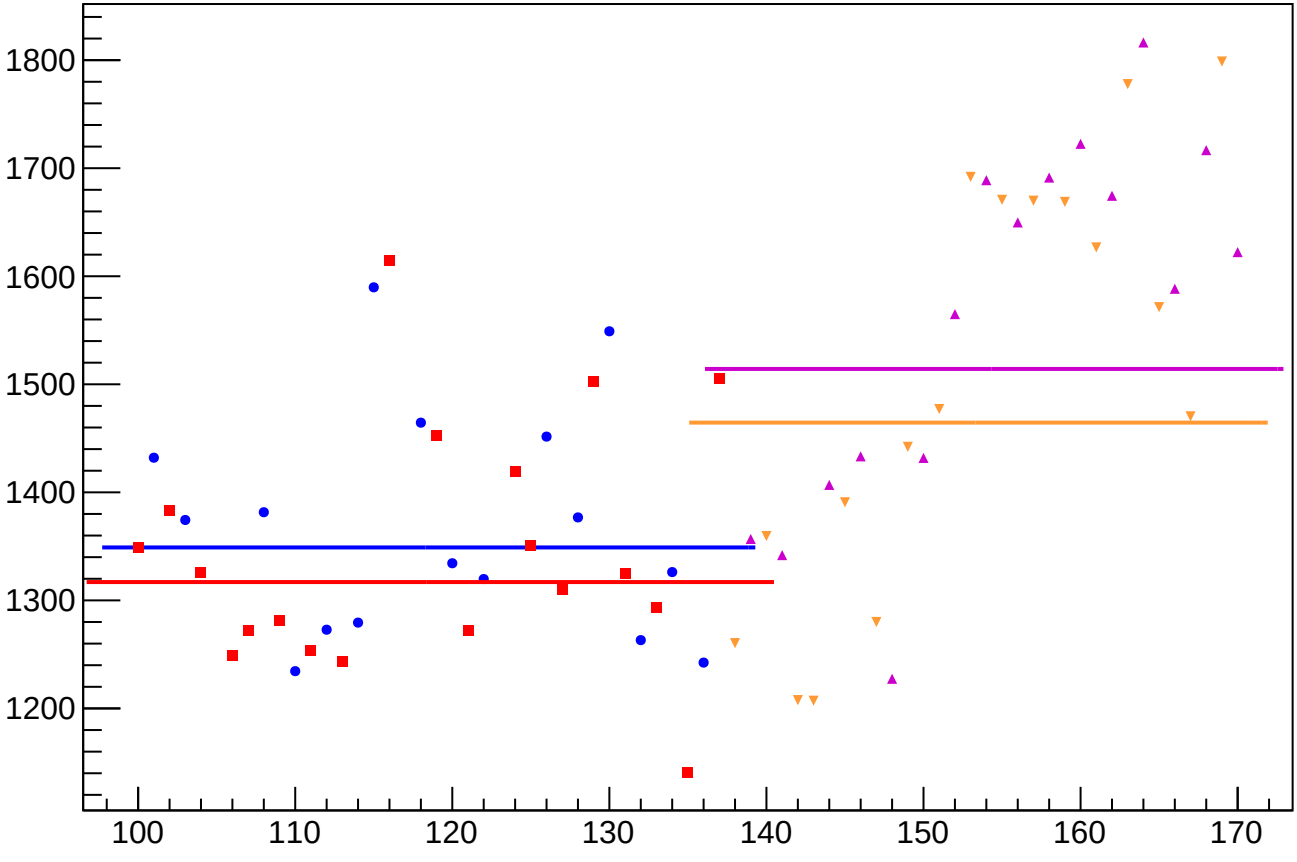
Left In: 2.472+/-0.420 $\chi^2$/NDF:76.2/15

+ sign 7.312+/-0.315 $\chi^2$/NDF: 1018.1/32

All: 2.852+/-0.223 $\chi^2$/NDF: 2232.1/67

- sign -1.660+/-0.317 $\chi^2$/NDF: 810.9/34

# diff_bpm0i07Y_rms vs Slug




Right In: 1349.000+/-0.357 $\chi^2$/NDF: 68383.7/15

Left Out: 1464.544+/-0.285 $\chi^2$/NDF:439062.7/16

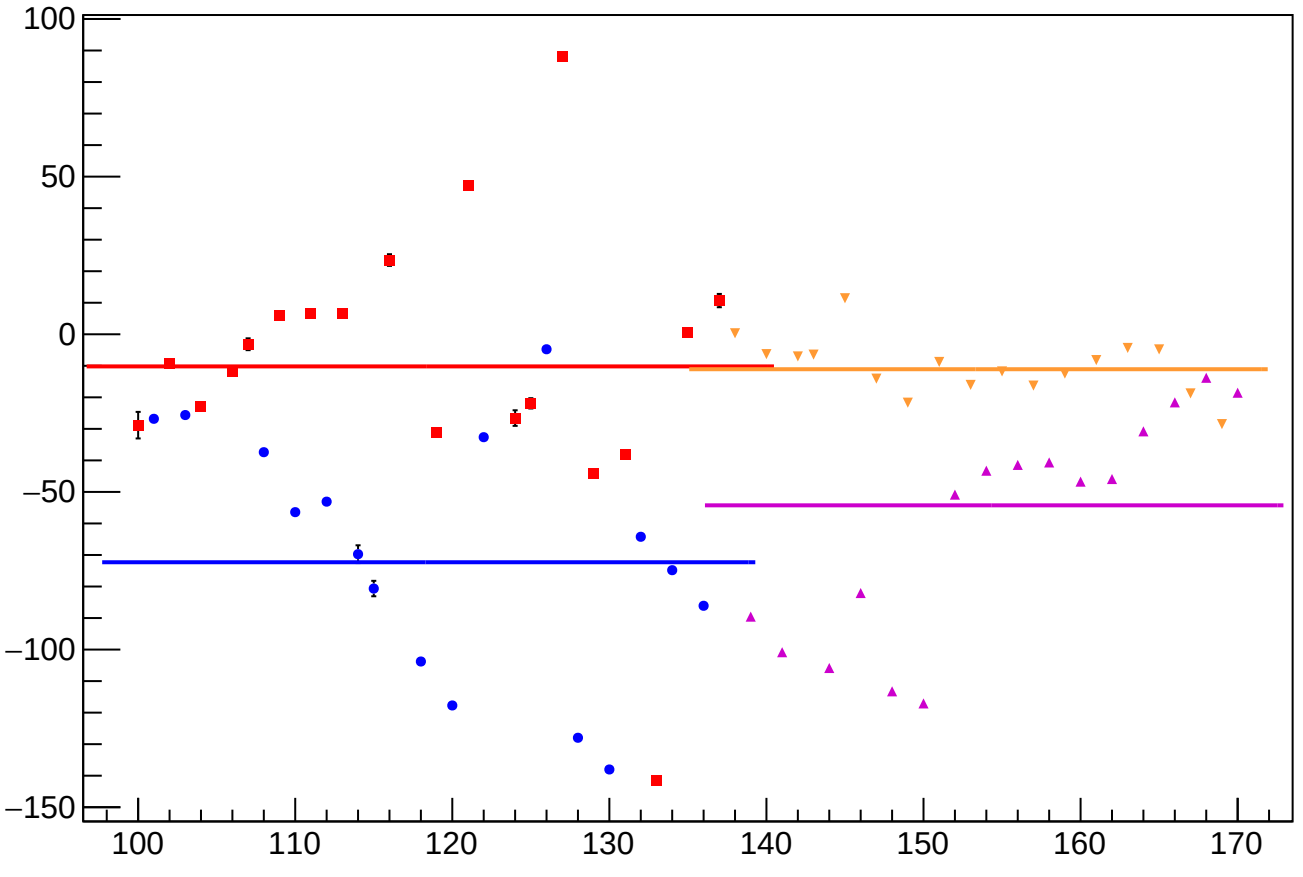
Right Out: 1316.961+/-0.342 $\chi^2$/NDF: 86873.7/18

Left In: 1514.203+/-0.297 $\chi^2$/NDF:322664.9/15

+ sign 1419.481+/-0.223 $\chi^2$/NDF: 571440.2/32

All: 1424.395+/-0.158 $\chi^2$/NDF: 1171889.4/67

- sign 1429.365+/-0.224 $\chi^2$/NDF: 599470.8/34




Right In: -72.304+/-0.349 $\chi^2$/NDF: 12153.8/15

Left Out: -11.084+/-0.228 $\chi^2$/NDF:1487.1/16

Right Out: -10.188+/-0.345 $\chi^2$/NDF: 19045.9/18

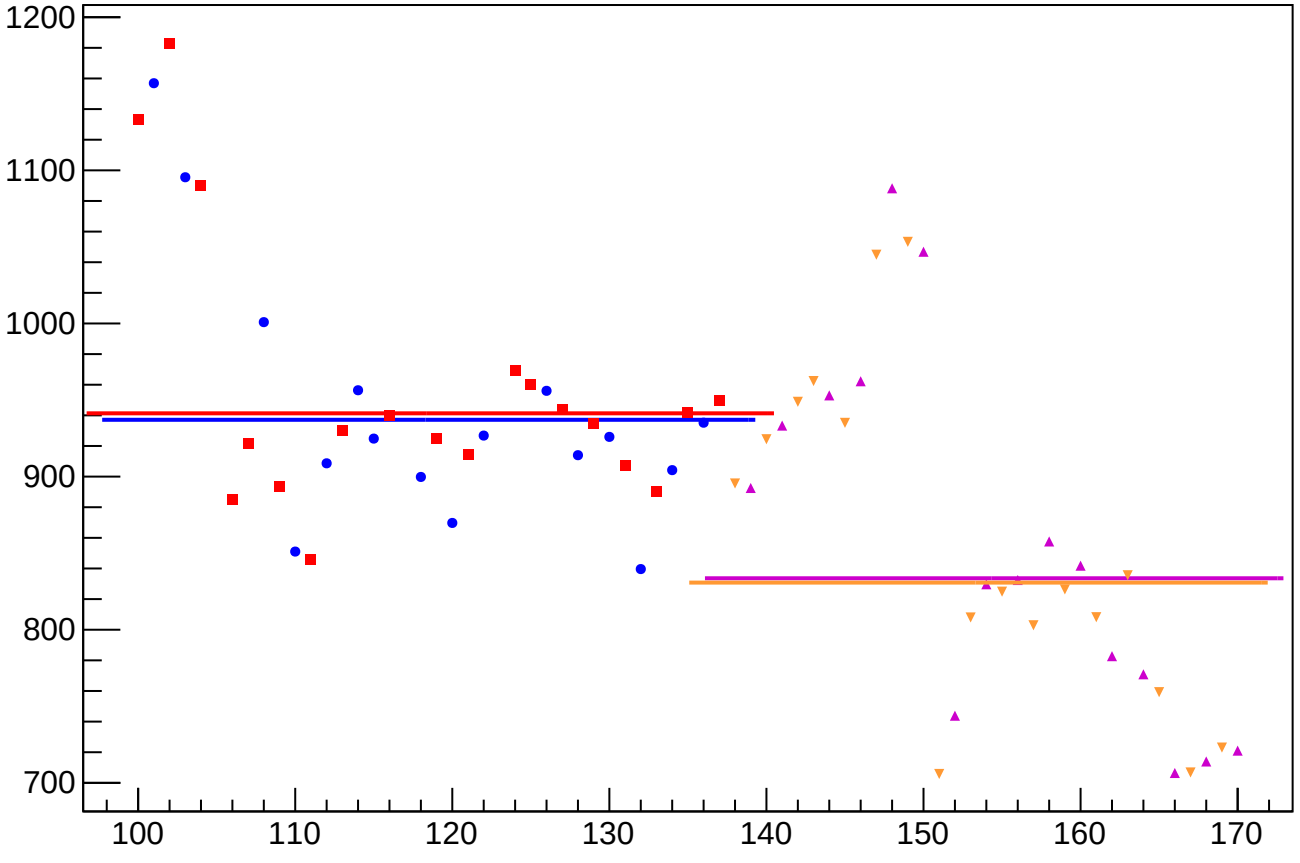
Left In: -54.253+/-0.231 $\chi^2$/NDF:19914.4/15

\+ sign -29.412+/-0.191 $\chi^2$/NDF: 35143.7/32

All: -34.960+/-0.136 $\chi^2$/NDF: 87069.2/67

\- sign -40.558+/-0.192 $\chi^2$/NDF: 50233.8/34

# diff_bpm1i02X_rms vs Slug




Right In: 937.097+/-0.247 $\chi^2$/NDF: 104660.4/15

Left Out: 830.782+/-0.162 $\chi^2$/NDF:388221.8/16

Right Out: 941.323+/-0.244 $\chi^2$/NDF: 101031.2/18

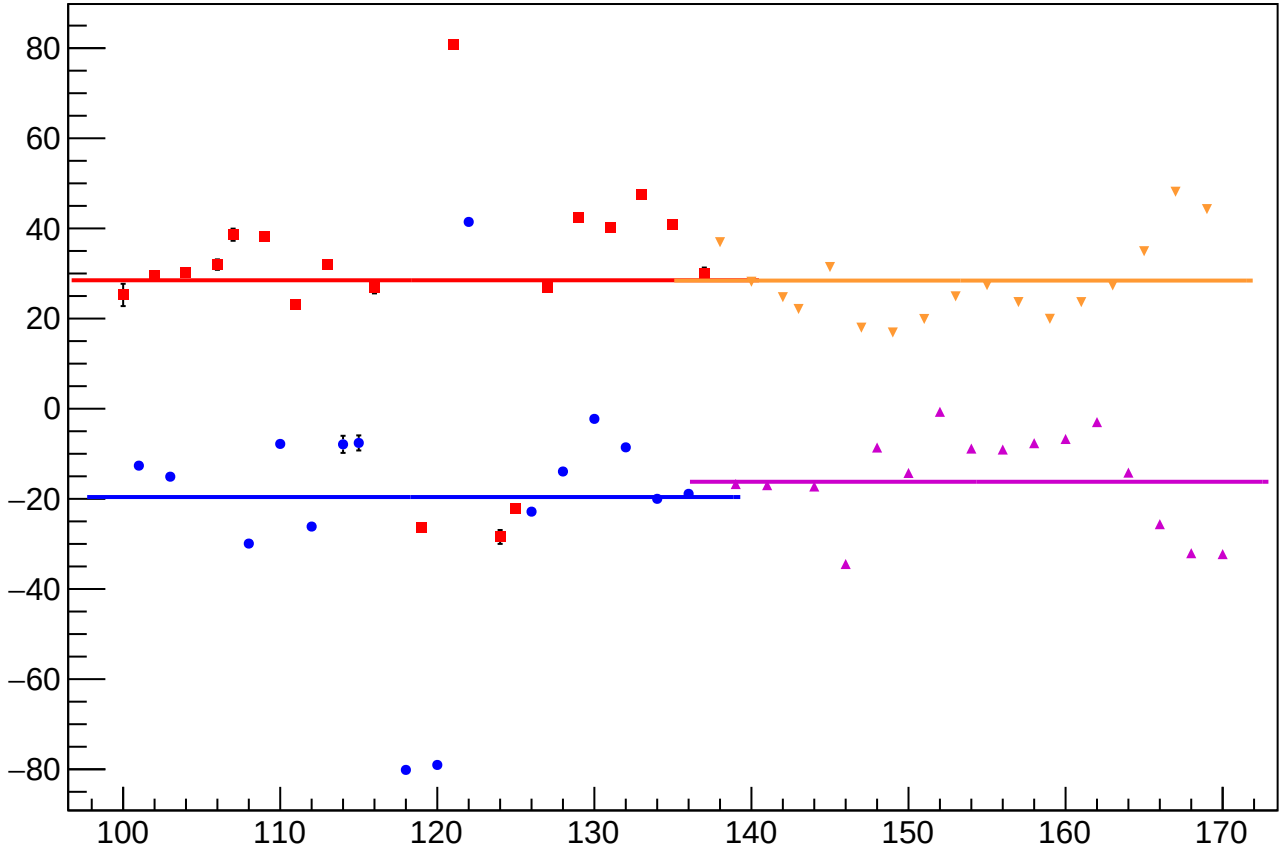
Left In: 833.602+/-0.164 $\chi^2$/NDF:421177.6/15

+ sign 862.610+/-0.135 $\chi^2$/NDF: 622577.0/32

All: 864.835+/-0.096 $\chi^2$/NDF: 1280076.7/67

- sign 867.079+/-0.136 $\chi^2$/NDF: 656955.8/34

# diff_bpm1i02Y_mean vs Slug




Right In: -19.597+/-0.234 $\chi^2$/NDF: 13170.1/15

Left Out: 28.431+/-0.179 $\chi^2$/NDF:2683.8/16

Right Out: 28.496+/-0.230 $\chi^2$/NDF: 12971.2/18

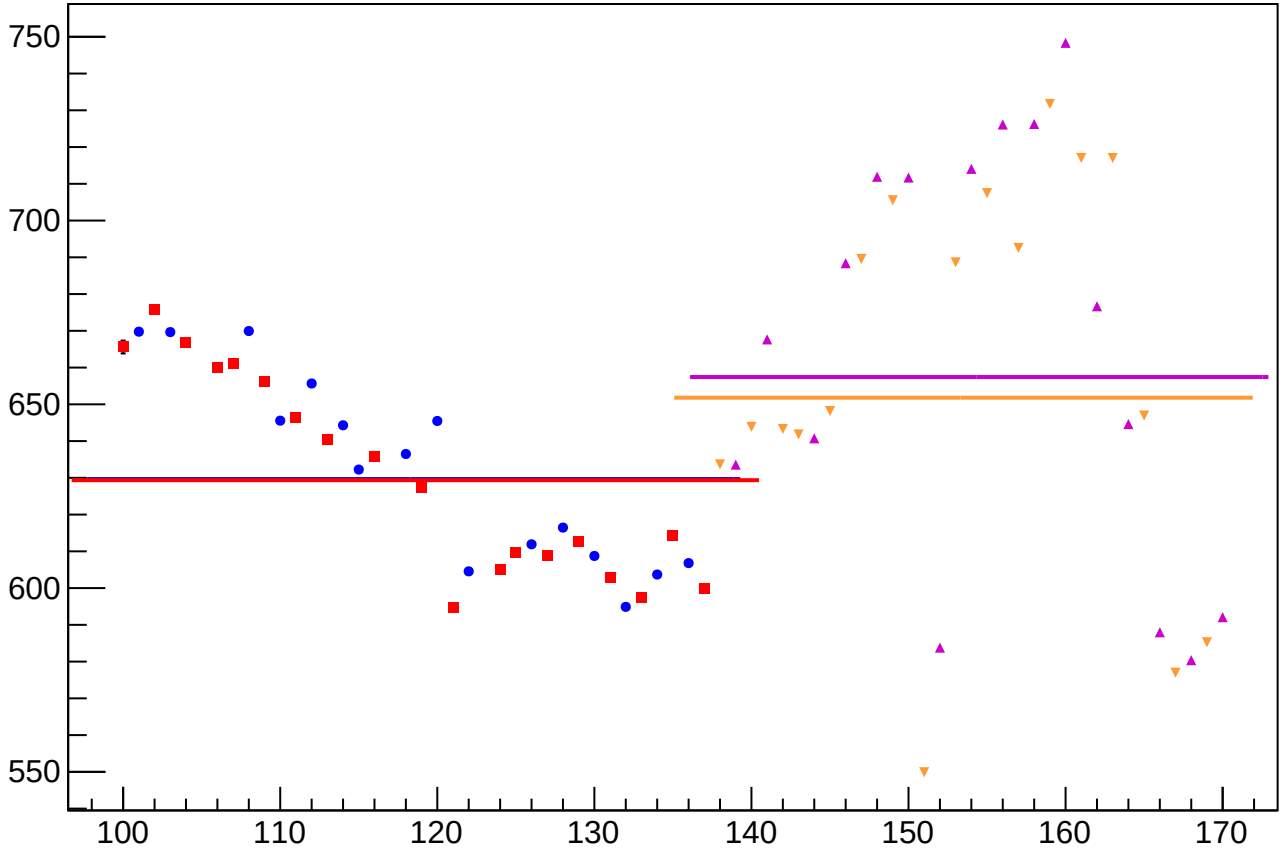
Left In: -16.209+/-0.182 $\chi^2$/NDF:3468.2/15

+ sign 10.750+/-0.142 $\chi^2$/NDF: 42459.1/32

All: 5.897+/-0.101 $\chi^2$/NDF: 84537.8/67

- sign 1.008+/-0.143 $\chi^2$/NDF: 39734.7/34

# diff_bpm1i02Y_rms vs Slug




Right In: 629.660+/-0.166 $\chi^2$/NDF: 25315.5/15

Left Out: 651.811+/-0.126 $\chi^2$/NDF:191420.9/16

Right Out: 629.361+/-0.162 $\chi^2$/NDF: 26791.2/18

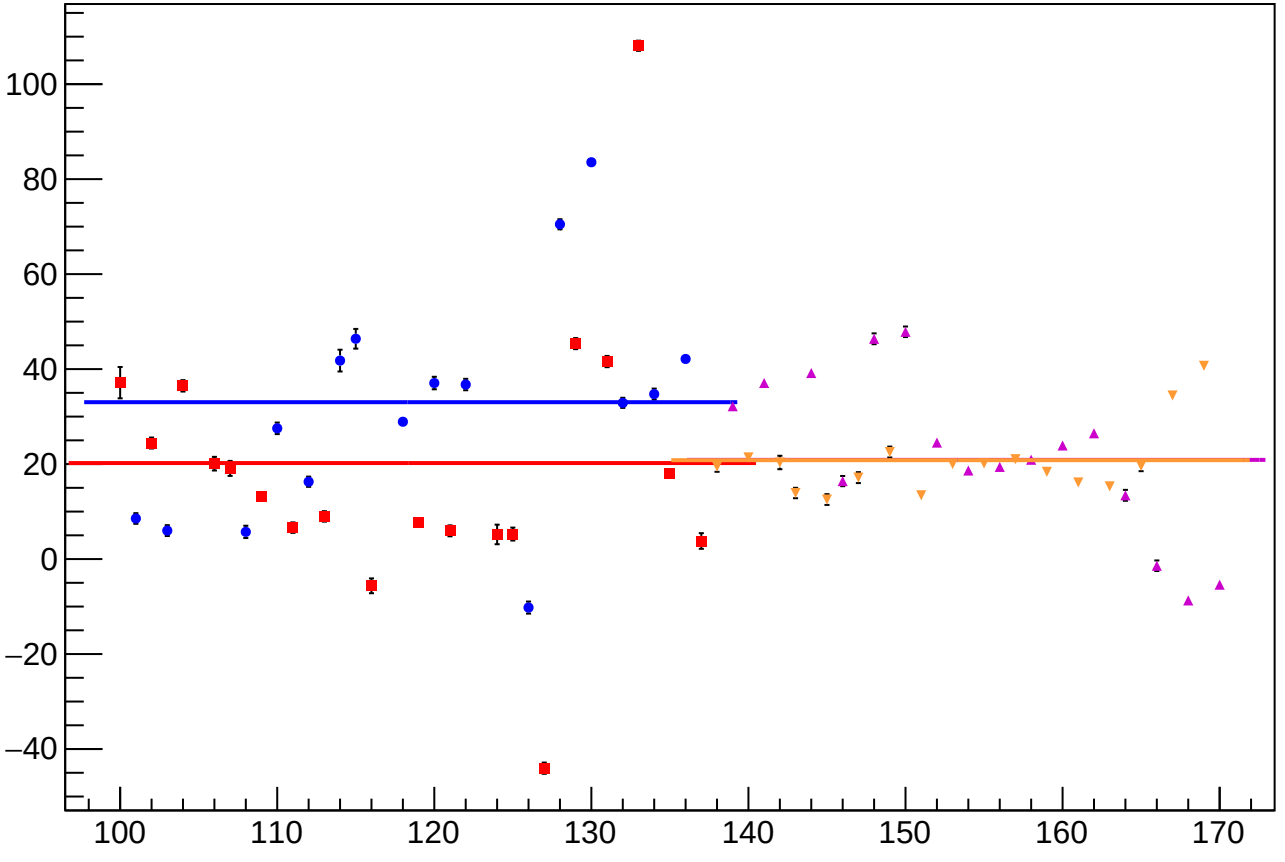
Left In: 657.430+/-0.129 $\chi^2$/NDF:188892.8/15

+ sign 643.656+/-0.100 $\chi^2$/NDF: 228054.5/32

All: 645.133+/-0.071 $\chi^2$/NDF: 462539.8/67

- sign 646.620+/-0.101 $\chi^2$/NDF: 234051.2/34

# diff_bpm1i04X_mean vs Slug




Right In: 33.033+/-0.289 $\chi^2$/NDF: 6700.1/15

Left Out: 20.823+/-0.254 $\chi^2$/NDF:902.8/16

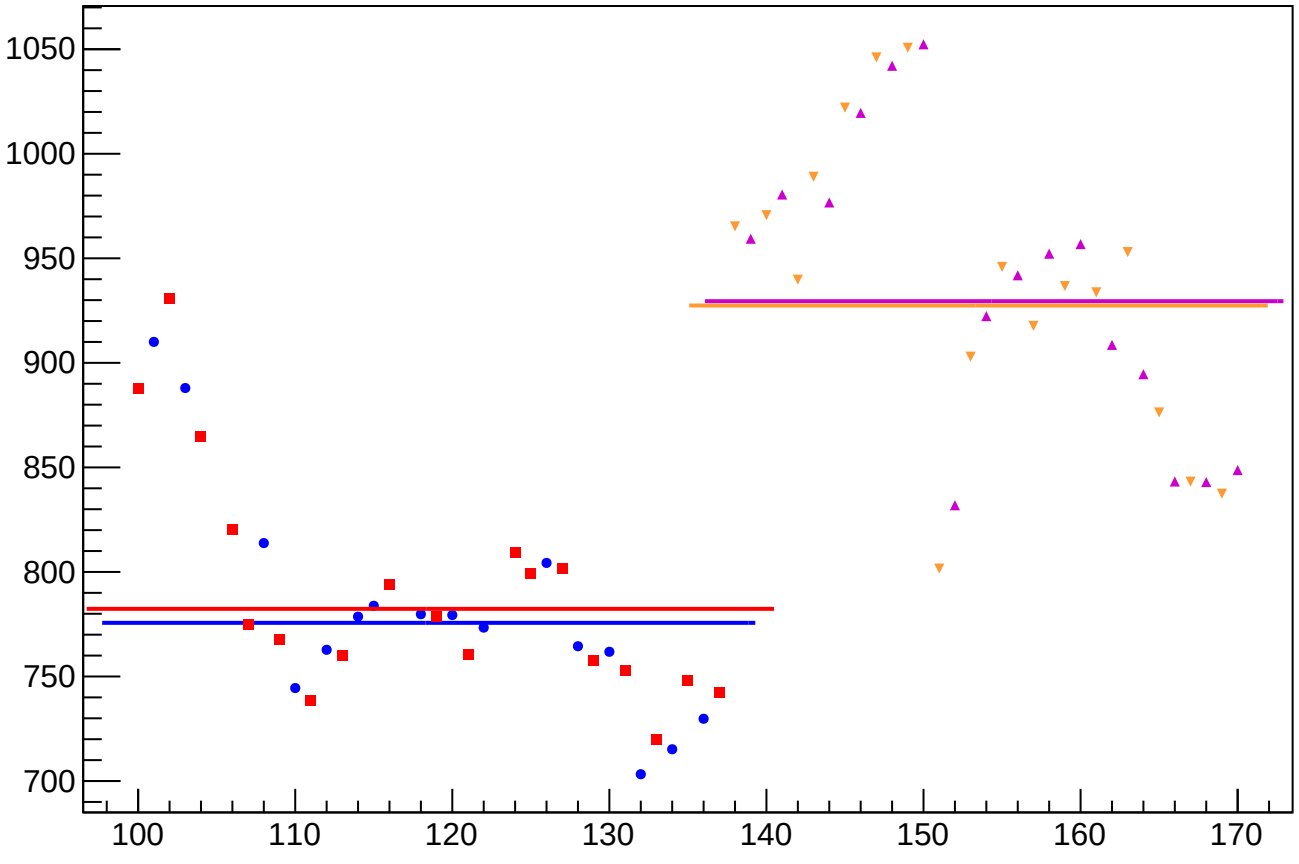
Right Out: 20.215+/-0.286 $\chi^2$/NDF: 11869.7/18

Left In: 20.886+/-0.257 $\chi^2$/NDF:4128.8/15

\+ sign 26.142+/-0.191 $\chi^2$/NDF: 8611.0/32

All: 23.369+/-0.135 $\chi^2$/NDF: 25036.2/67

\- sign 20.587+/-0.191 $\chi^2$/NDF: 16001.5/34




Right In: 775.664+/-0.204 $\chi^2$/NDF: 74660.0/15

Left Out: 927.431+/-0.179 $\chi^2$/NDF:154492.3/16

Right Out: 782.358+/-0.202 $\chi^2$/NDF: 64566.3/18

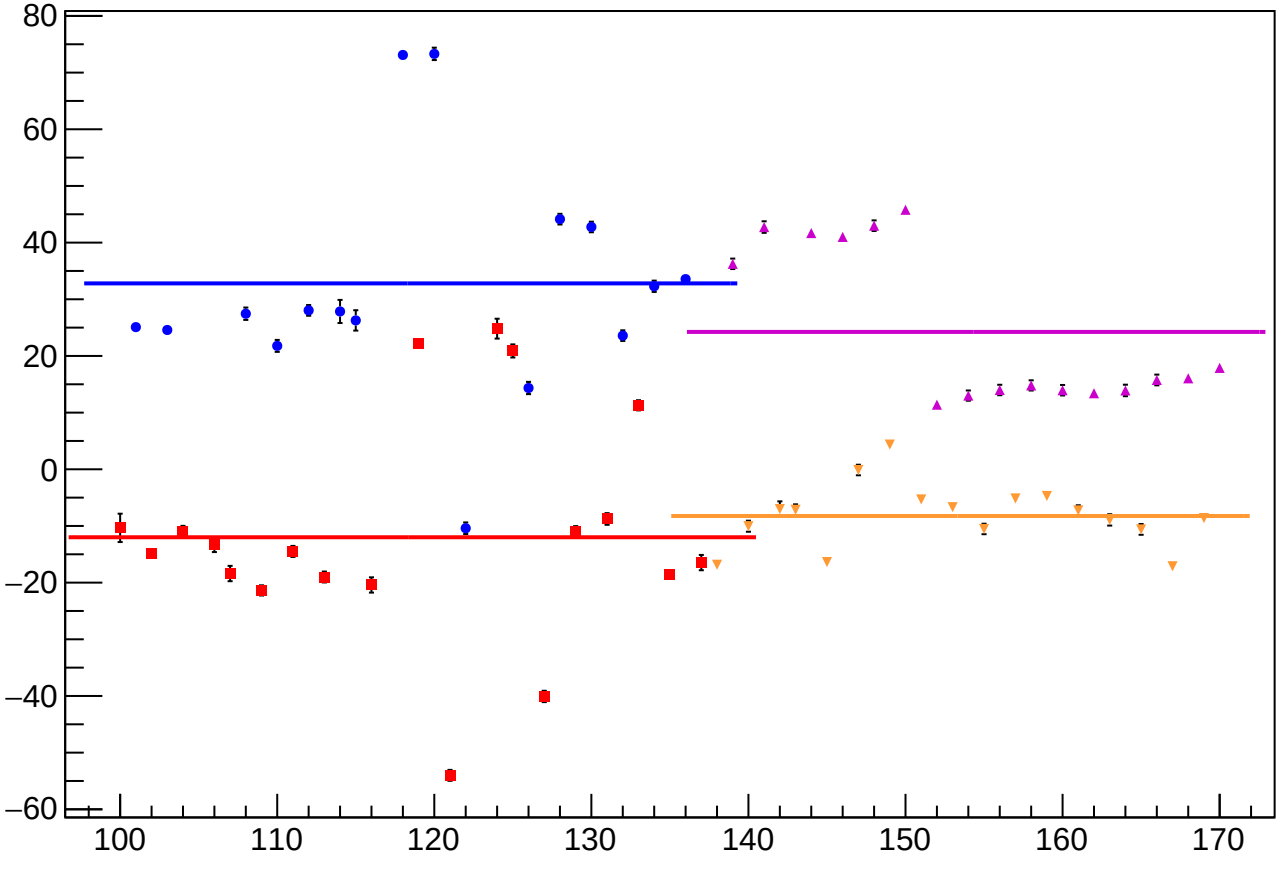
Left In: 929.501+/-0.181 $\chi^2$/NDF:142711.6/15

+ sign 861.320+/-0.135 $\chi^2$/NDF: 540646.1/32

All: 862.594+/-0.095 $\chi^2$/NDF: 1041457.5/67

- sign 863.872+/-0.135 $\chi^2$/NDF: 500632.7/34

# diff_bpm1i04Y_mean vs Slug




Right In: 32.804+/-0.244 $\chi^2$/NDF: 6259.3/15

Left Out: -8.242+/-0.215 $\chi^2$/NDF:656.1/16

Right Out: -11.994+/-0.241 $\chi^2$/NDF: 6559.7/18

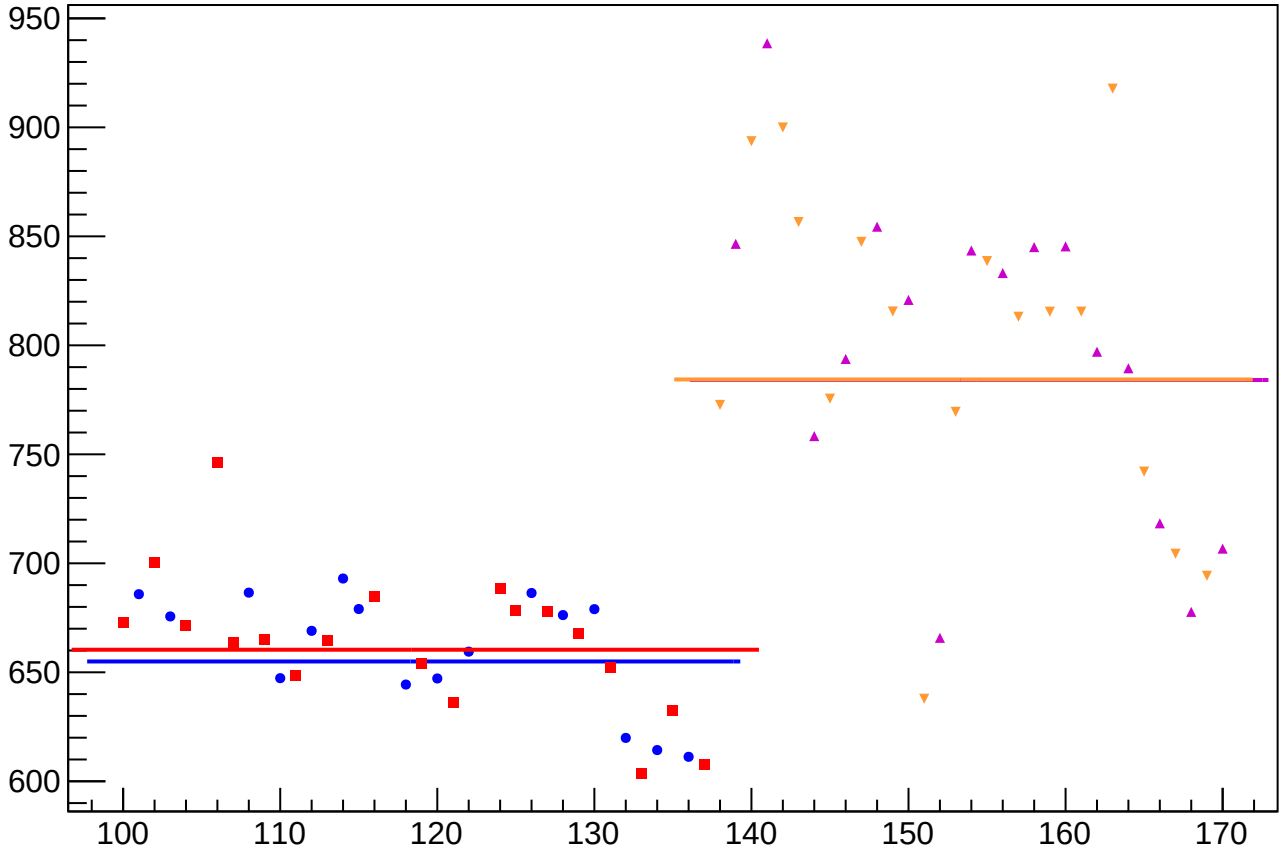
Left In: 24.241+/-0.217 $\chi^2$/NDF:3739.6/15

+ sign 9.783+/-0.161 $\chi^2$/NDF: 22849.3/32

All: 8.886+/-0.114 $\chi^2$/NDF: 45662.7/67

- sign 7.987+/-0.161 $\chi^2$/NDF: 22751.5/34

# diff_bpm1i04Y_rms vs Slug




Right In: 654.970+/-0.172 $\chi^2$/NDF: 26744.4/15

Left Out: 784.341+/-0.152 $\chi^2$/NDF:254207.6/16

Right Out: 660.355+/-0.171 $\chi^2$/NDF: 30417.5/18

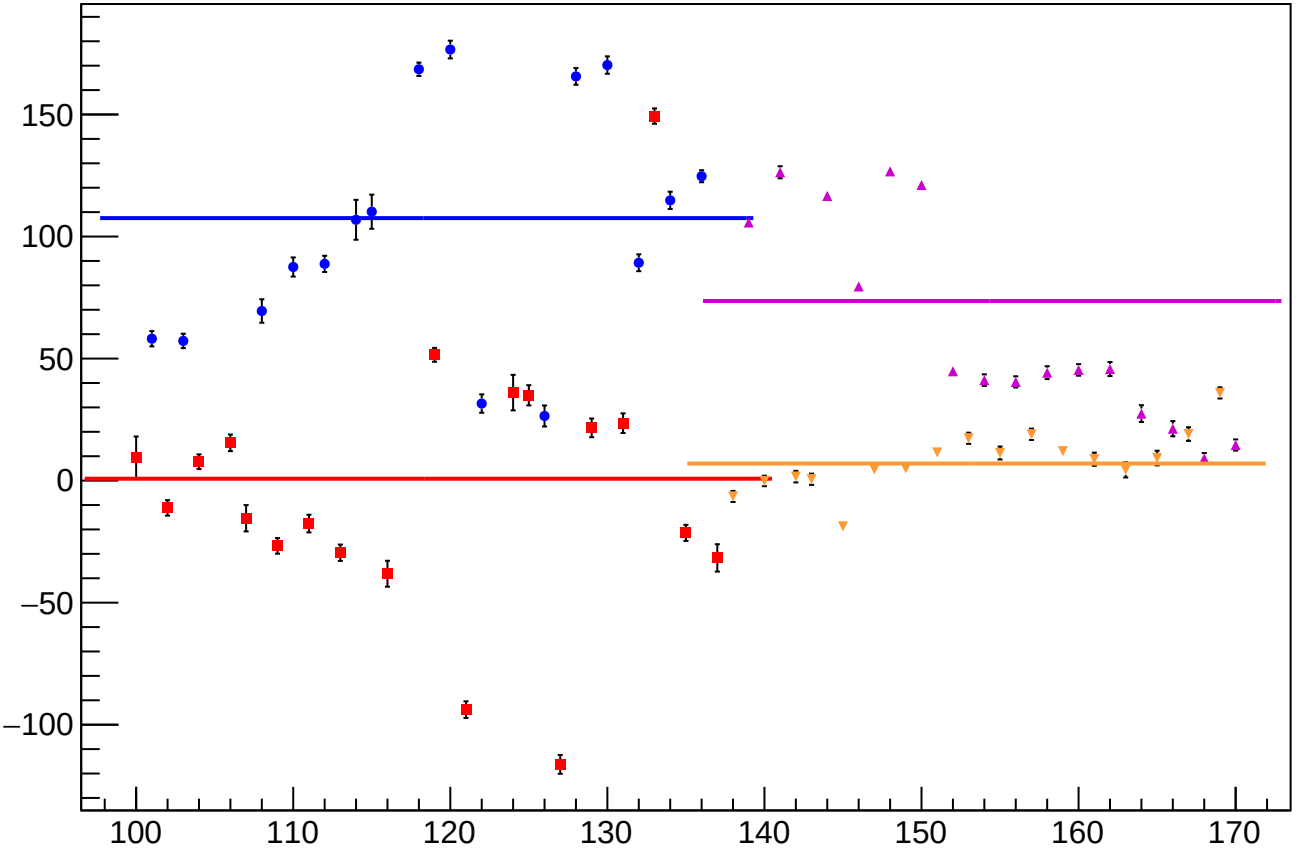
Left In: 784.089+/-0.154 $\chi^2$/NDF:230446.0/15

+ sign 727.530+/-0.114 $\chi^2$/NDF: 597545.1/32

All: 728.057+/-0.081 $\chi^2$/NDF: 1148864.0/67

- sign 728.586+/-0.114 $\chi^2$/NDF: 551276.1/34

# diff_bpm1i06X_mean vs Slug




Right In: 107.548+/-0.885 $\chi^2$/NDF: 2955.8/15

Left Out: 7.014+/-0.541 $\chi^2$/NDF:476.5/16

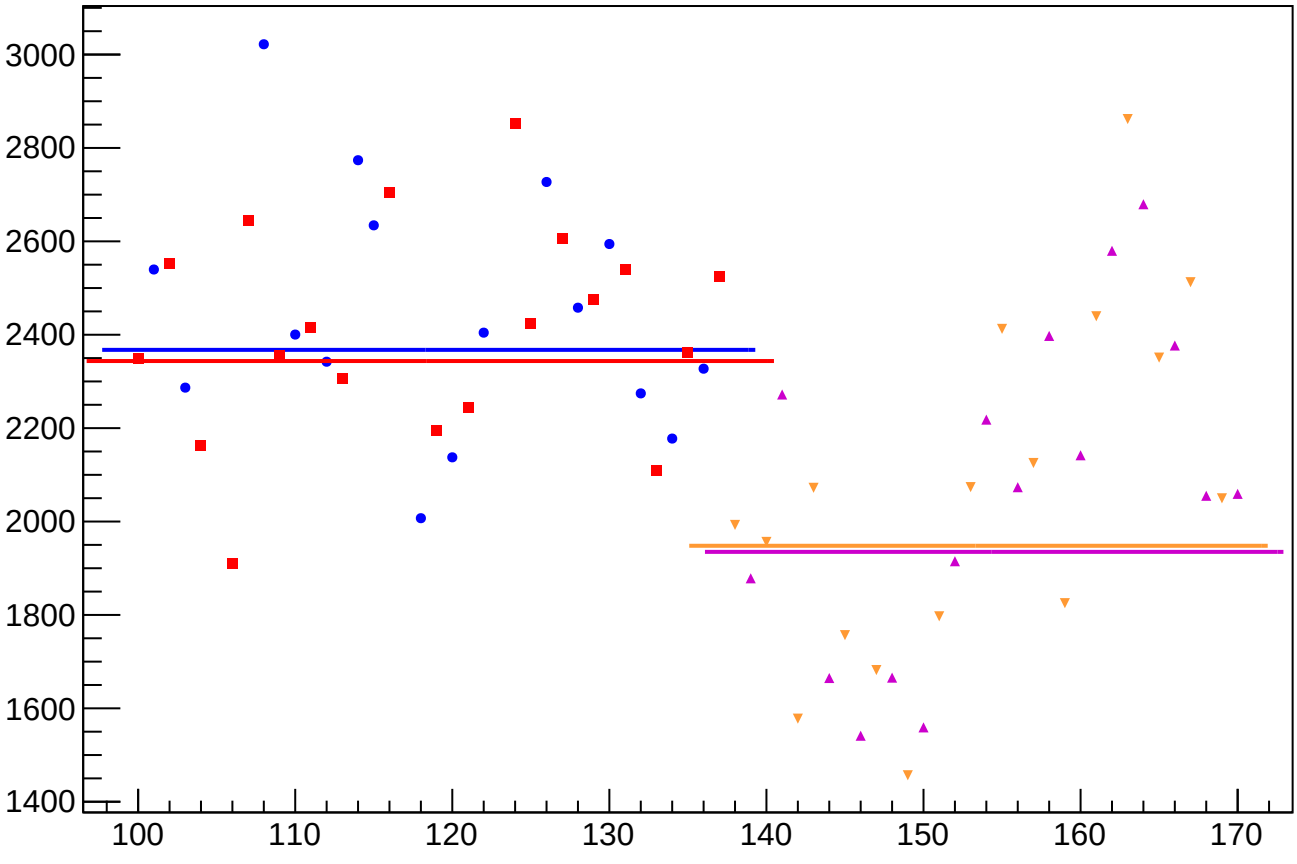
Right Out: 0.788+/-0.861 $\chi^2$/NDF: 4763.9/18

Left In: 73.597+/-0.544 $\chi^2$/NDF:5875.8/15

\+ sign 34.357+/-0.462 $\chi^2$/NDF: 12819.8/32

All: 43.637+/-0.326 $\chi^2$/NDF: 29378.0/67

\- sign 52.835+/-0.460 $\chi^2$/NDF: 15753.7/34




Right In: 2367.633+/-0.626 $\chi^2$/NDF: 126764.1/15

Left Out: 1948.114+/-0.383 $\chi^2$/NDF:761255.6/16

Right Out: 2343.704+/-0.609 $\chi^2$/NDF: 112274.4/18

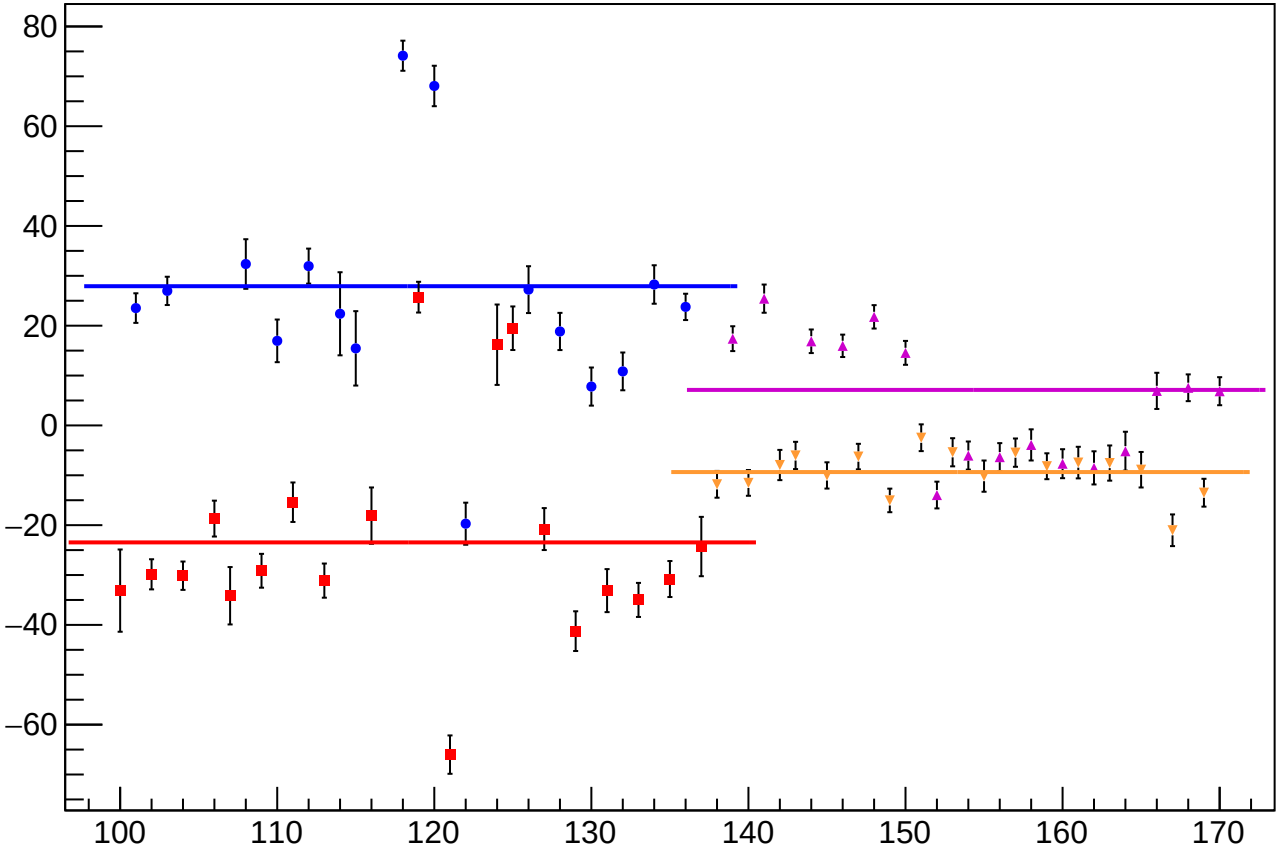
Left In: 1935.039+/-0.384 $\chi^2$/NDF:706809.5/15

+ sign 2062.214+/-0.326 $\chi^2$/NDF: 1214953.9/32

All: 2056.869+/-0.230 $\chi^2$/NDF: 2356790.3/67

- sign 2051.572+/-0.325 $\chi^2$/NDF: 1141302.9/34

# diff_bpm1i06Y_mean vs Slug




Right In: 27.916+/-0.937 $\chi^2$/NDF: 530.7/15

Left Out: -9.351+/-0.685 $\chi^2$/NDF:37.6/16

Right Out: -23.457+/-0.903 $\chi^2$/NDF: 567.9/18

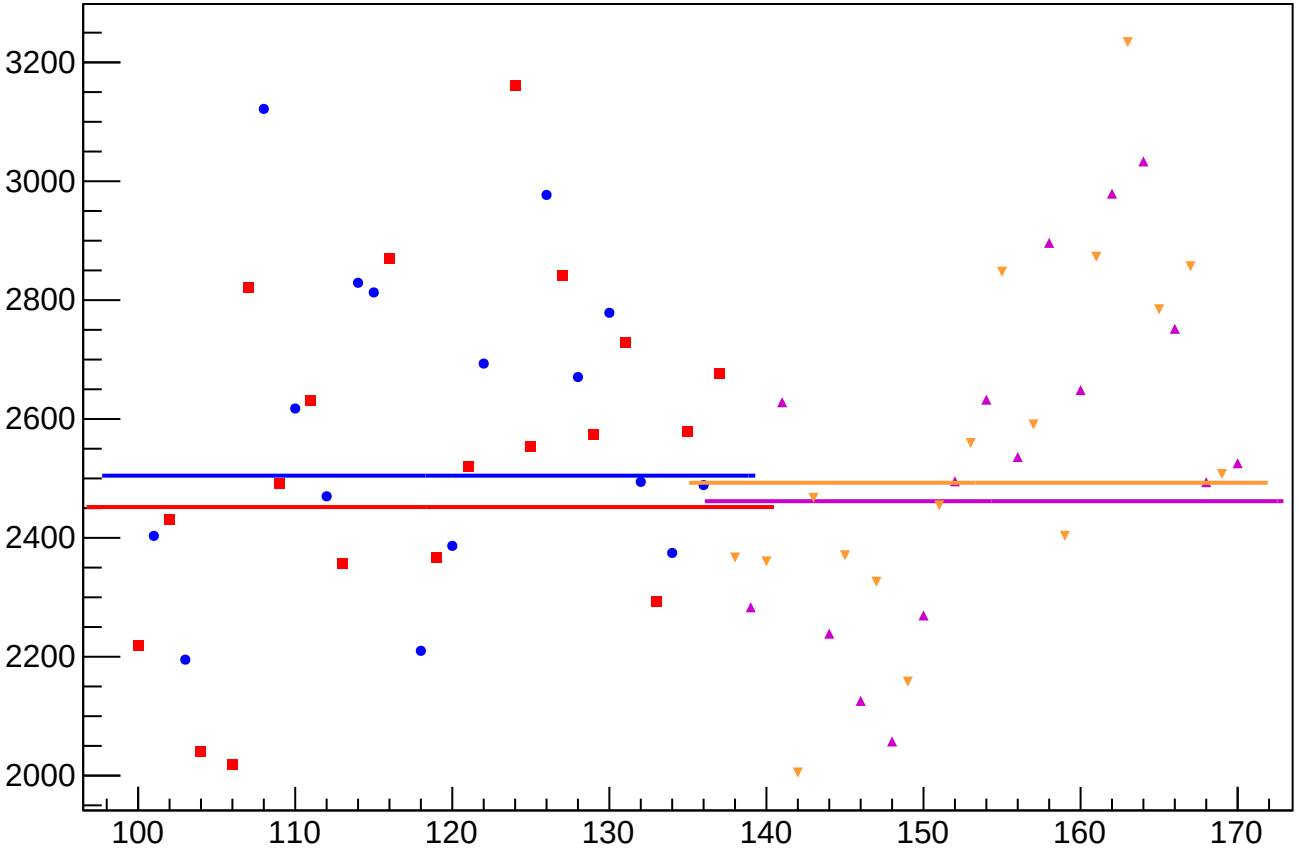
Left In: 7.122+/-0.685 $\chi^2$/NDF:317.1/15

+ sign 3.631+/-0.553 $\chi^2$/NDF: 1599.6/32

All: -0.264+/-0.388 $\chi^2$/NDF: 3310.6/67

- sign -4.059+/-0.546 $\chi^2$/NDF: 1613.0/34

# diff_bpm1i06Y_rms vs Slug




Right In: 2504.654+/-0.662 $\chi^2$/NDF: 126599.1/15

Left Out: 2492.723+/-0.484 $\chi^2$/NDF:303227.7/16

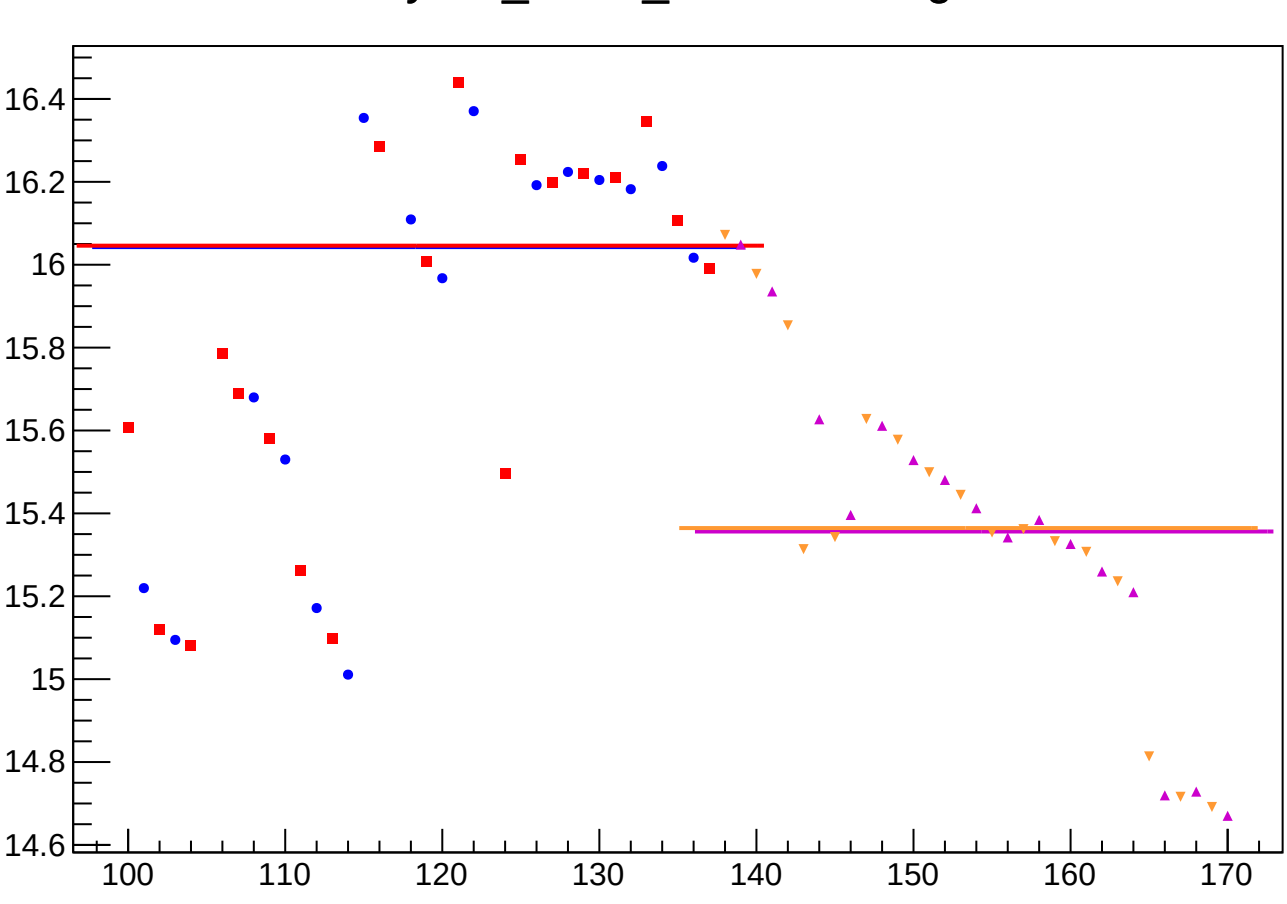
Right Out: 2451.880+/-0.638 $\chi^2$/NDF: 153237.1/18

Left In: 2461.730+/-0.485 $\chi^2$/NDF:313488.2/15

+ sign 2496.880+/-0.391 $\chi^2$/NDF: 430038.1/32

All: 2477.254+/-0.275 $\chi^2$/NDF: 901890.3/67

- sign 2458.128+/-0.386 $\chi^2$/NDF: 466876.3/34




Right In: 16.043+/-0.000 $\chi^2$/NDF: 2840540588.4/15

Left Out: 15.365+/-0.000 $\chi^2$/NDF:16963754165.0/16

Right Out: 16.046+/-0.000 $\chi^2$/NDF: 3552158387.5/18

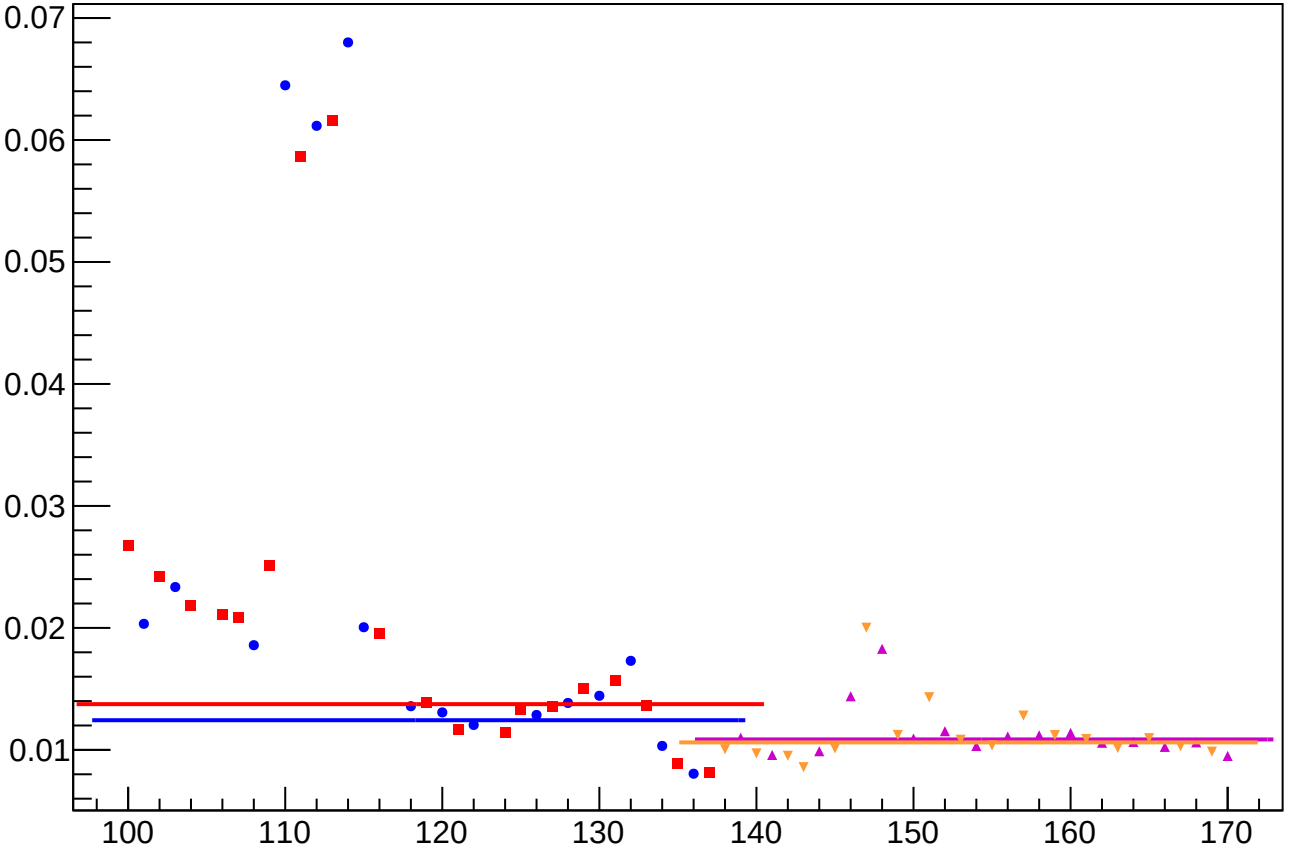
Left In: 15.356+/-0.000 $\chi^2$/NDF:16695321638.8/15

+ sign 15.529+/-0.000 $\chi^2$/NDF: 32195967028.9/32

All: 15.520+/-0.000 $\chi^2$/NDF: 63581743908.5

- sign 15.510+/-0.000 $\chi^2$/NDF: 31360439899.2/34

# yield_sam1_rms vs Slug




Right In: 0.012+/-0.000 $\chi^2$/NDF: 2316842.7/15

Left Out: 0.011+/-0.000 $\chi^2$/NDF:648454.4/16

Right Out: 0.014+/-0.000 $\chi^2$/NDF: 2230614.9/18

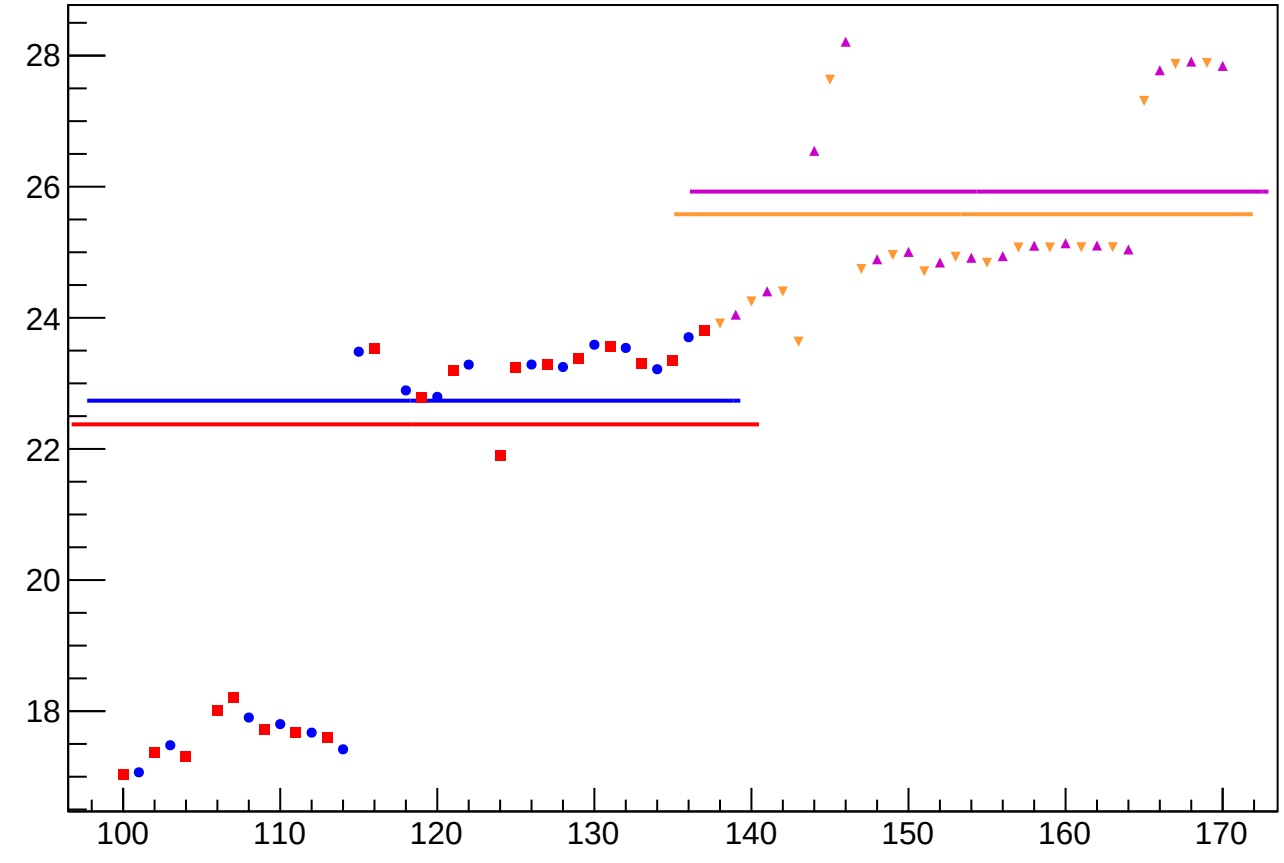
Left In: 0.011+/-0.000 $\chi^2$/NDF:458452.3/15

+ sign 0.011+/-0.000 $\chi^2$/NDF: 3143415.6/32

All: 0.011+/-0.000 $\chi^2$/NDF: 6251569.6/67

- sign 0.012+/-0.000 $\chi^2$/NDF: 3080091.2/34

# yield_sam2_mean vs Slug




Right In: 22.736+/-0.000 $\chi^2$/NDF: 1220713728.0/15

Left Out: 25.580+/-0.000 $\chi^2$/NDF:1956393690.3/16

Right Out: 22.375+/-0.000 $\chi^2$/NDF: 1215661430.7/18

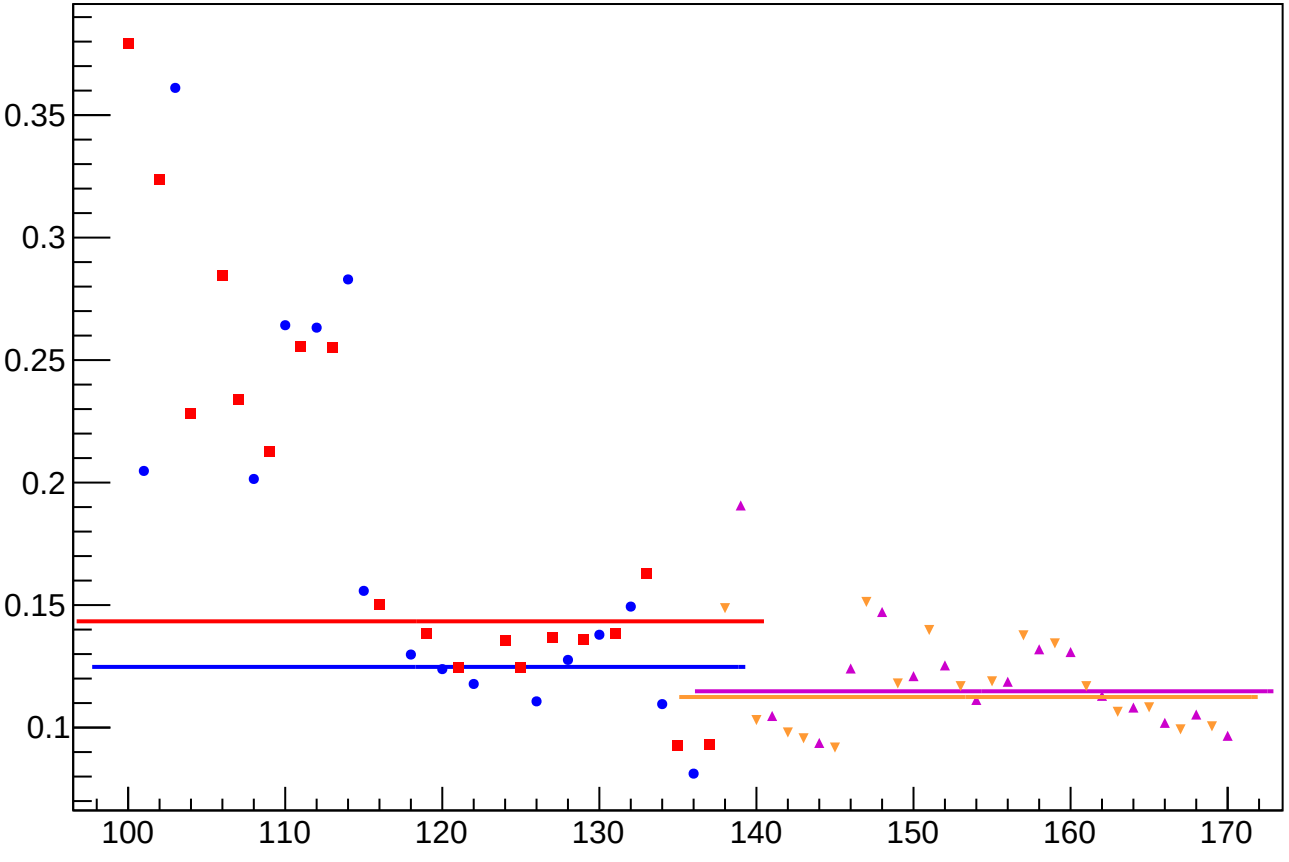
Left In: 25.925+/-0.000 $\chi^2$/NDF:1636063956.8/15

+ sign 24.797+/-0.000 $\chi^2$/NDF: 5190704581.7/32

All: 24.918+/-0.000 $\chi^2$/NDF: 10738501128.8

- sign 25.052+/-0.000 $\chi^2$/NDF: 5509006240.0/34

# yield_sam2_rms vs Slug




Right In: 0.125+/-0.000 $\chi^2$/NDF: 1749818.7/15

Left Out: 0.112+/-0.000 $\chi^2$/NDF:526738.6/16

Right Out: 0.143+/-0.000 $\chi^2$/NDF: 1570103.9/18

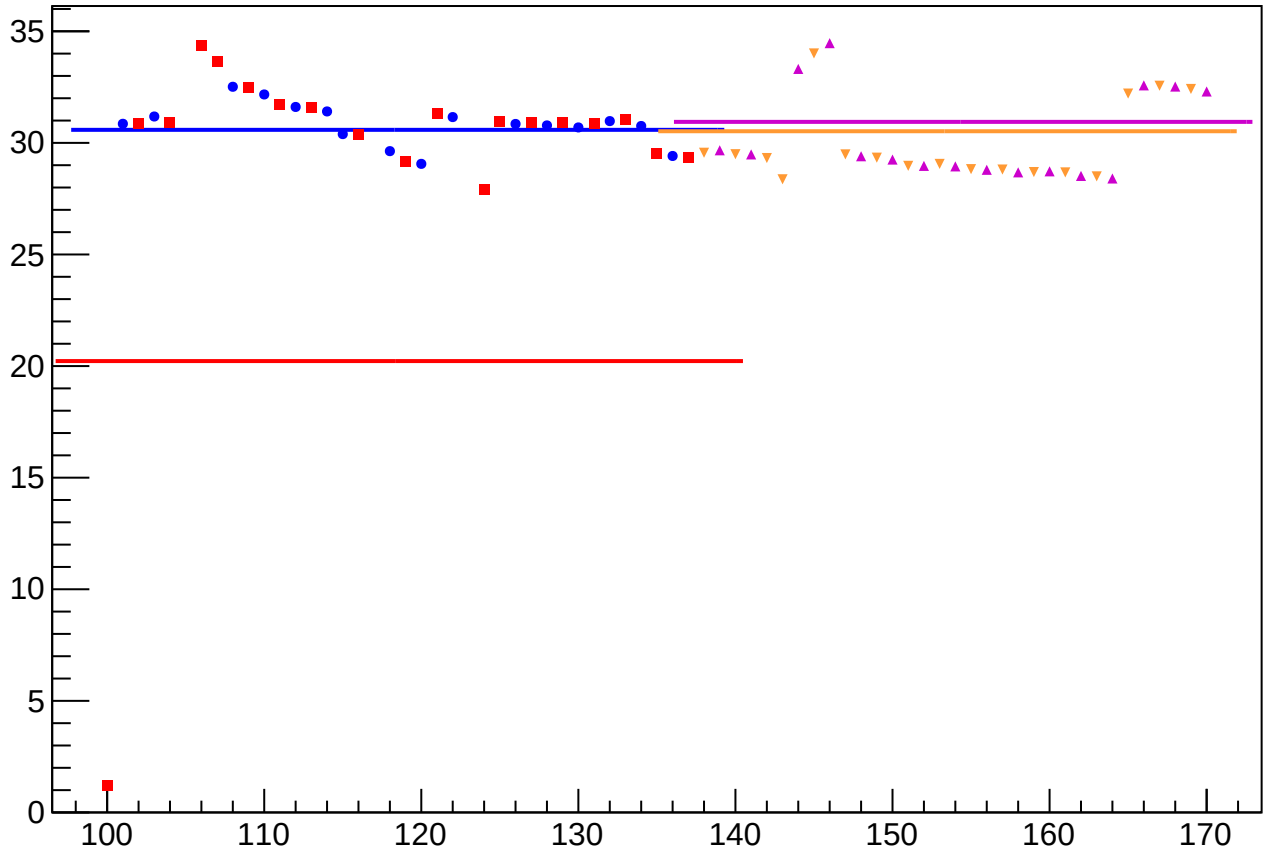
Left In: 0.115+/-0.000 $\chi^2$/NDF:586000.4/15

+ sign 0.116+/-0.000 $\chi^2$/NDF: 2351803.5/32

All: 0.119+/-0.000 $\chi^2$/NDF: 4894141.7/67

- sign 0.122+/-0.000 $\chi^2$/NDF: 2499771.7/34

# yield_sam3_mean vs Slug




Right In: 30.585+/-0.000 $\chi^2$/NDF: 652266844.4/15

Left Out: 30.522+/-0.000 $\chi^2$/NDF:10027681458.8/16

Right Out: 20.224+/-0.000 $\chi^2$/NDF: 221262816636.2/18

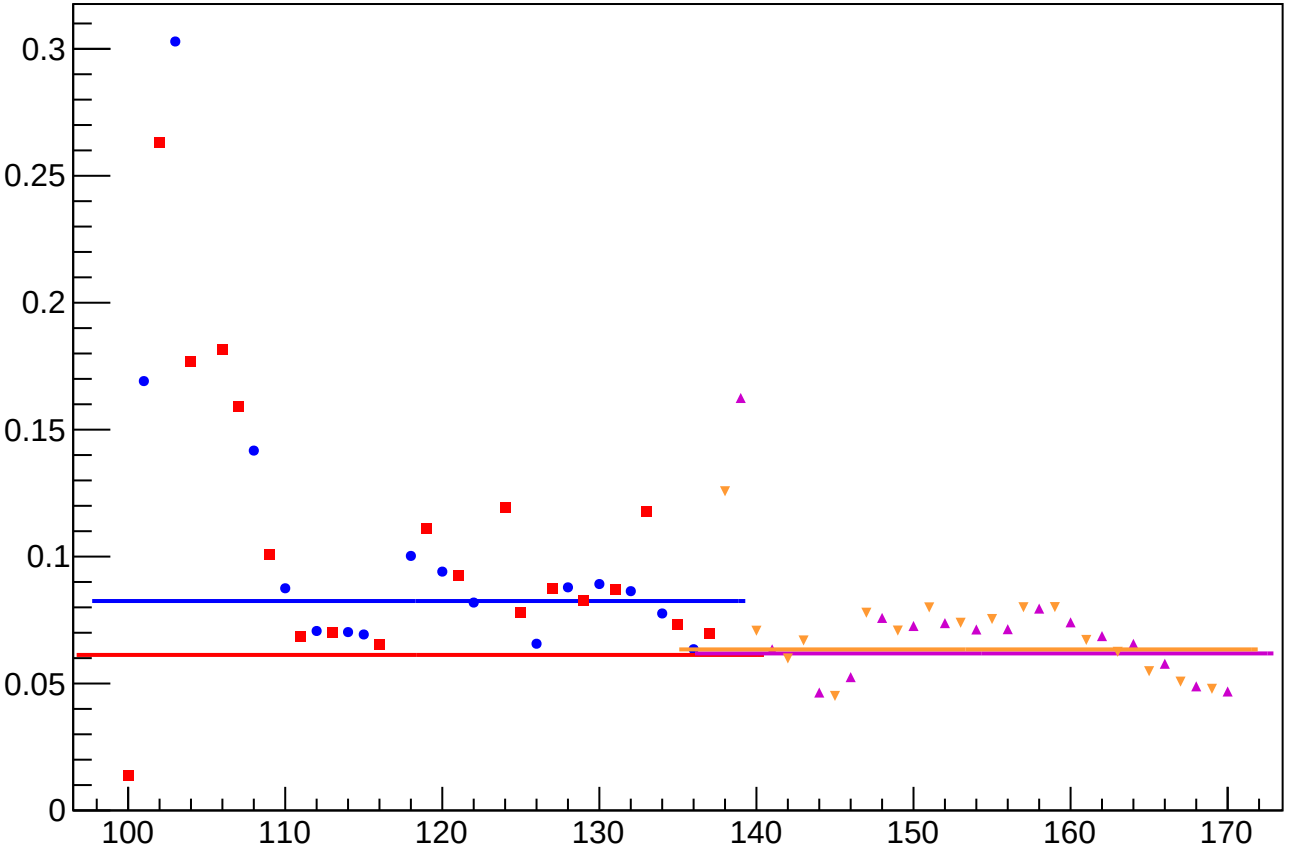
Left In: 30.942+/-0.000 $\chi^2$/NDF:11707770043.4/15

+ sign 30.536+/-0.000 $\chi^2$/NDF: 10682289049.9/32

All: 29.076+/-0.000 $\chi^2$/NDF: 344933964198.

- sign 27.768+/-0.000 $\chi^2$/NDF: 320947646852.2/34

# yield_sam3_rms vs Slug




Right In: 0.082+/-0.000 $\chi^2$/NDF: 1261492.7/15

Left Out: 0.063+/-0.000 $\chi^2$/NDF:1085288.2/16

Right Out: 0.061+/-0.000 $\chi^2$/NDF: 4014305.3/18

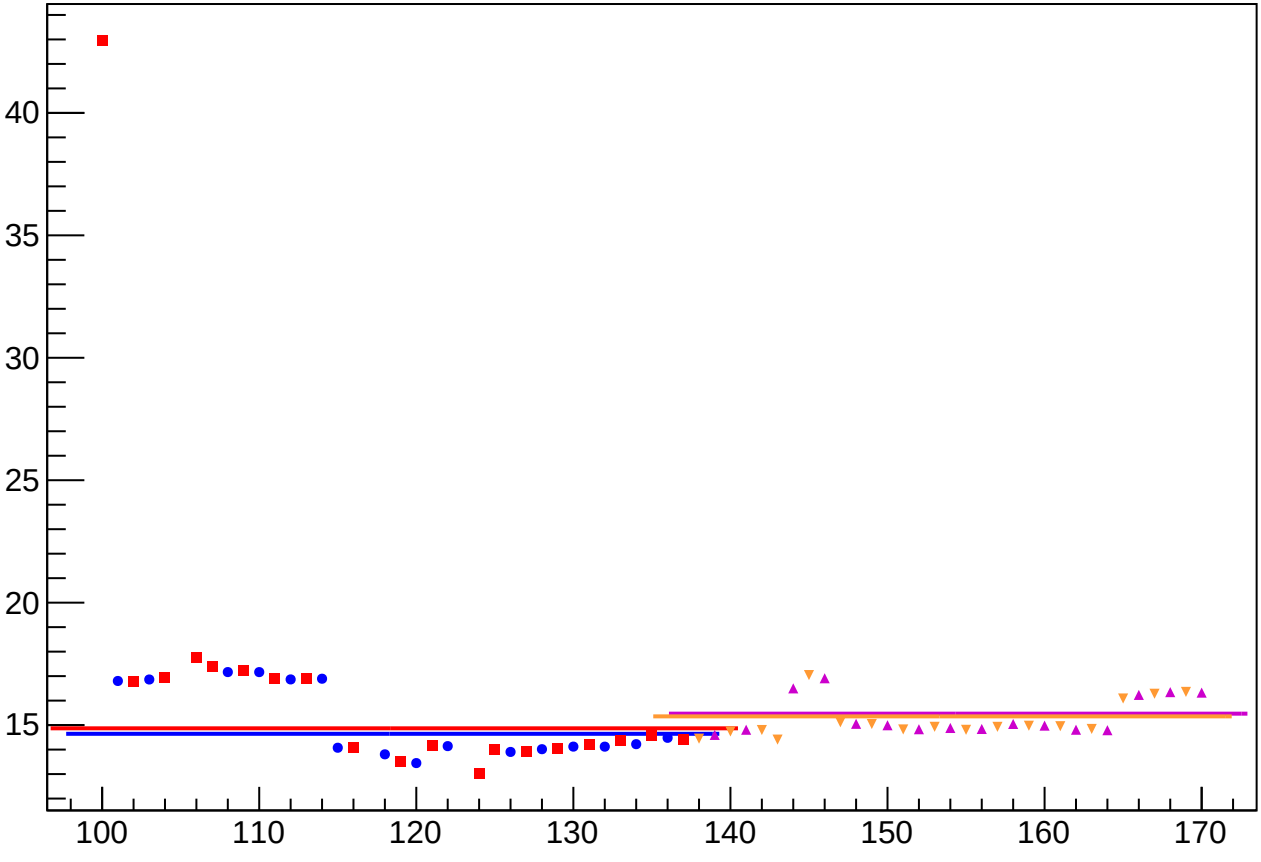
Left In: 0.062+/-0.000 $\chi^2$/NDF:1342032.9/15

+ sign 0.068+/-0.000 $\chi^2$/NDF: 2776714.3/32

All: 0.065+/-0.000 $\chi^2$/NDF: 8268912.1/67

- sign 0.062+/-0.000 $\chi^2$/NDF: 5356872.7/34

# yield_sam4_mean vs Slug




Right In: 14.644+/-0.000 $\chi^2$/NDF: 1193913109.5/15

Left Out: 15.356+/-0.000 $\chi^2$/NDF:1627409163.6/16

Right Out: 14.868+/-0.000 $\chi^2$/NDF: 1730040006.8/18

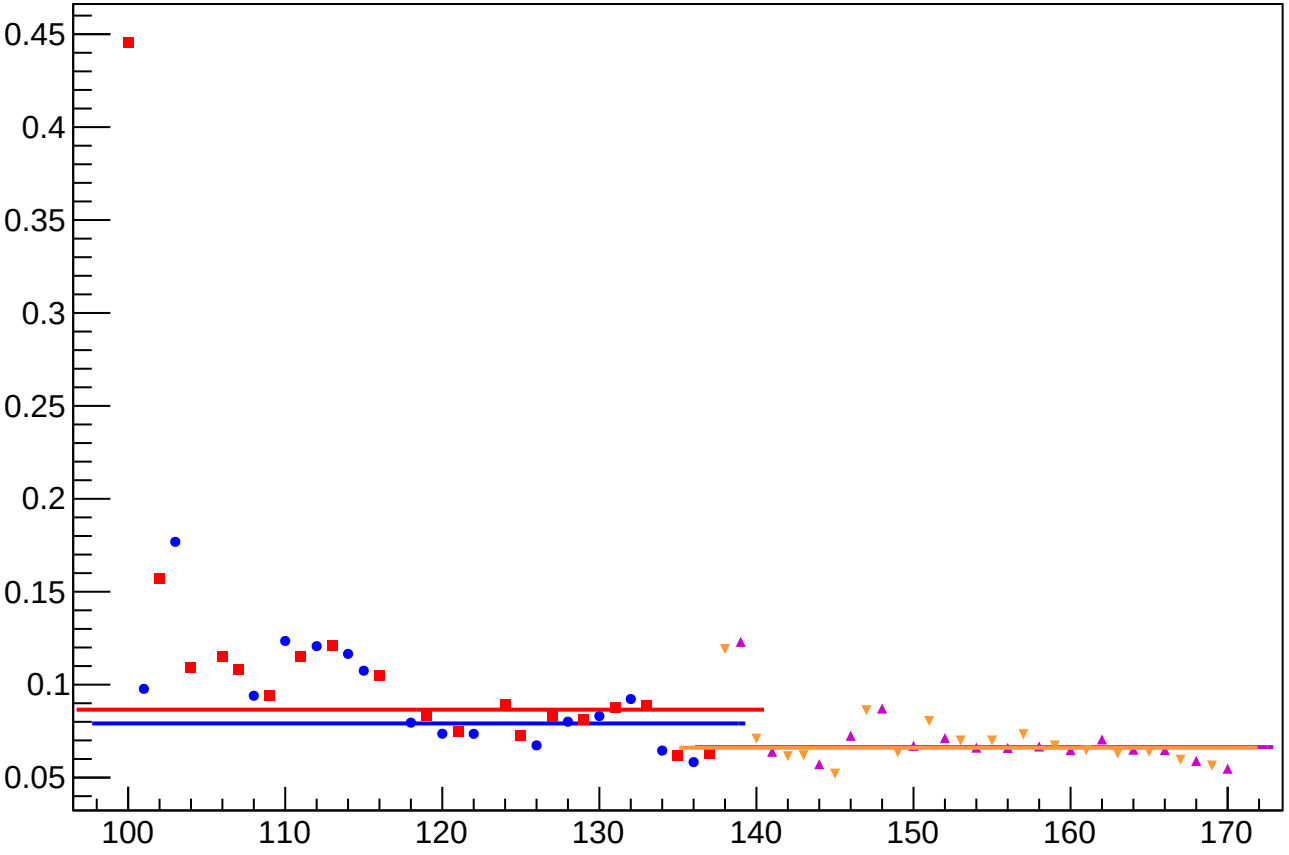
Left In: 15.467+/-0.000 $\chi^2$/NDF:1476976981.3/15

+ sign 15.166+/-0.000 $\chi^2$/NDF: 3170042556.9/32

All: 15.241+/-0.000 $\chi^2$/NDF: 6639389201.1/6

- sign 15.320+/-0.000 $\chi^2$/NDF: 3428932399.4/34

# yield_sam4_rms vs Slug




Right In: 0.079+/-0.000 $\chi^2$/NDF: 918198.7/15

Left Out: 0.066+/-0.000 $\chi^2$/NDF:608555.7/16

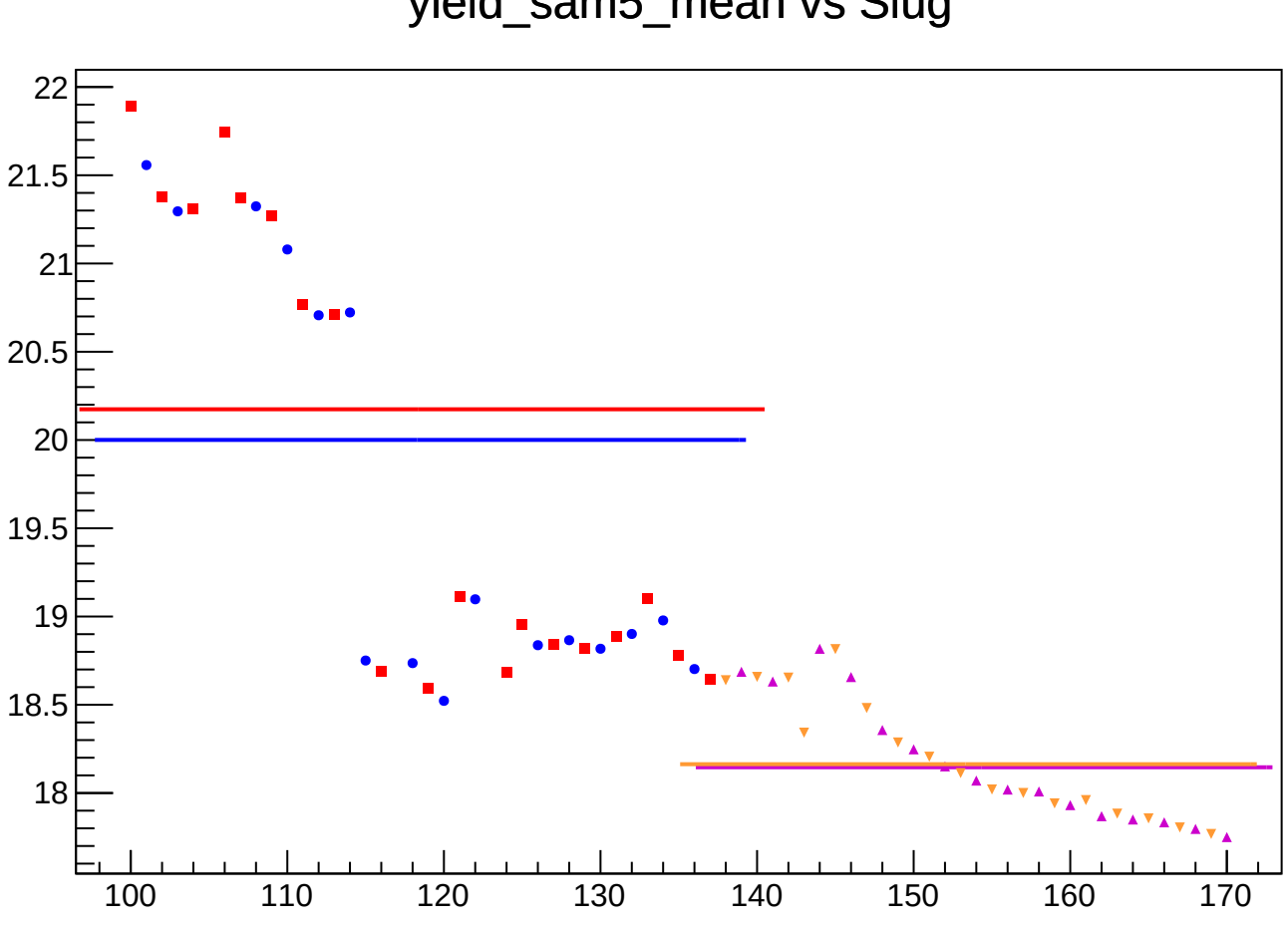
Right Out: 0.087+/-0.000 $\chi^2$/NDF: 793345.8/18

Left In: 0.066+/-0.000 $\chi^2$/NDF:583222.5/15

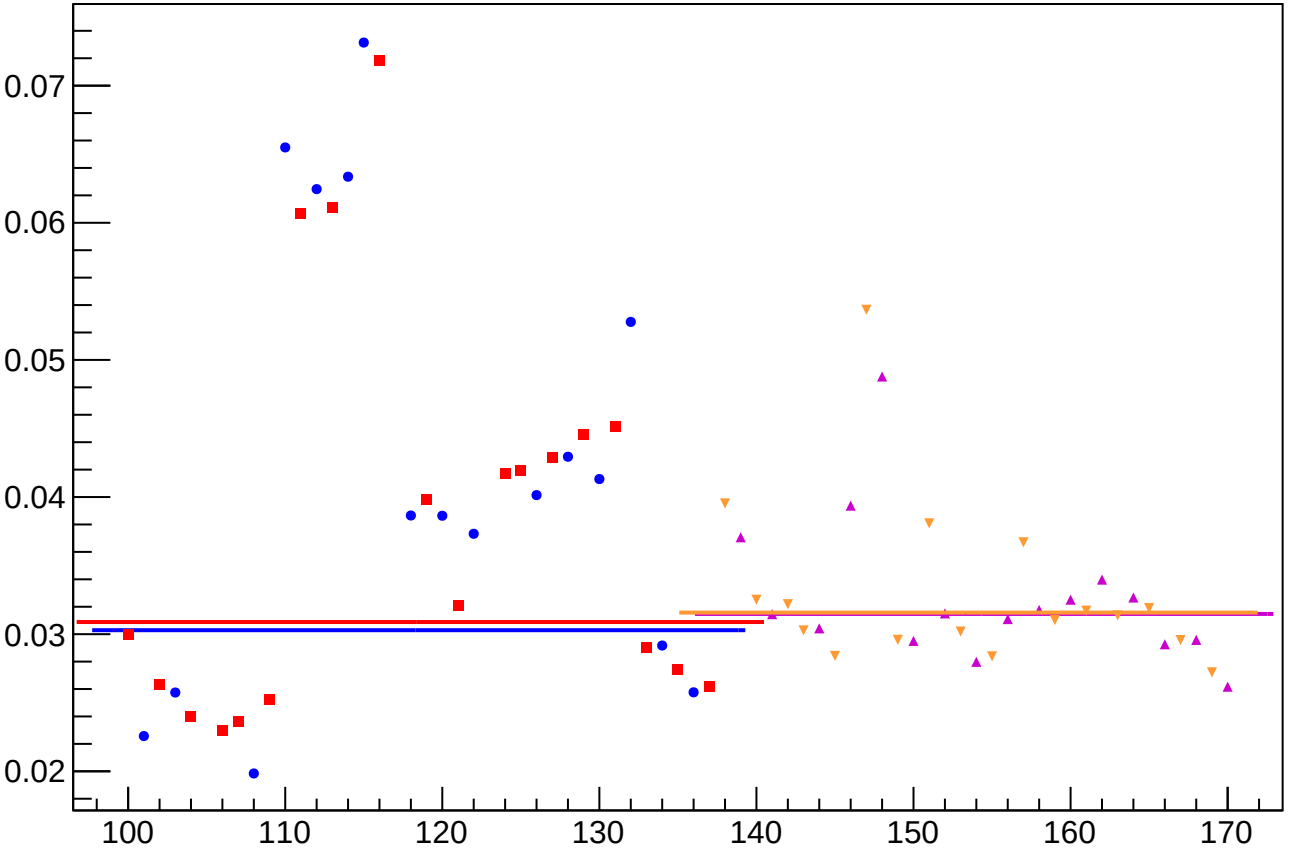
+ sign 0.070+/-0.000 $\chi^2$/NDF: 1761535.8/32

All: 0.070+/-0.000 $\chi^2$/NDF: 3651125.0/67

- sign 0.071+/-0.000 $\chi^2$/NDF: 1878423.5/34


yield_sam5_mean vs Slug
22
21.5
21
20.5
20
19.5
19
18.5
18
100
110
120
130
140
150
160
170
Right In: 20.001+/-0.000 χ²/NDF: 10878846617.7/15
Left Out: 18.163+/-0.000 χ²/NDF:1382795457.0/16
Right Out: 20.174+/-0.000 χ²/NDF: 10426322430.8/18
Left In: 18.146+/-0.000 χ²/NDF:1477172020.0/15
+ sign 18.786+/-0.000 χ²/NDF: 26766289700.0/32
All: 18.812+/-0.000 χ²/NDF: 56351155845.5
- sign 18.839+/-0.000 χ²/NDF: 29557652137.5/34

# yield_sam5_rms vs Slug




Right In: 0.030+/-0.000 $\chi^2$/NDF: 1447374.9/15

Left Out: 0.032+/-0.000 $\chi^2$/NDF:510660.1/16

Right Out: 0.031+/-0.000 $\chi^2$/NDF: 1204729.6/18

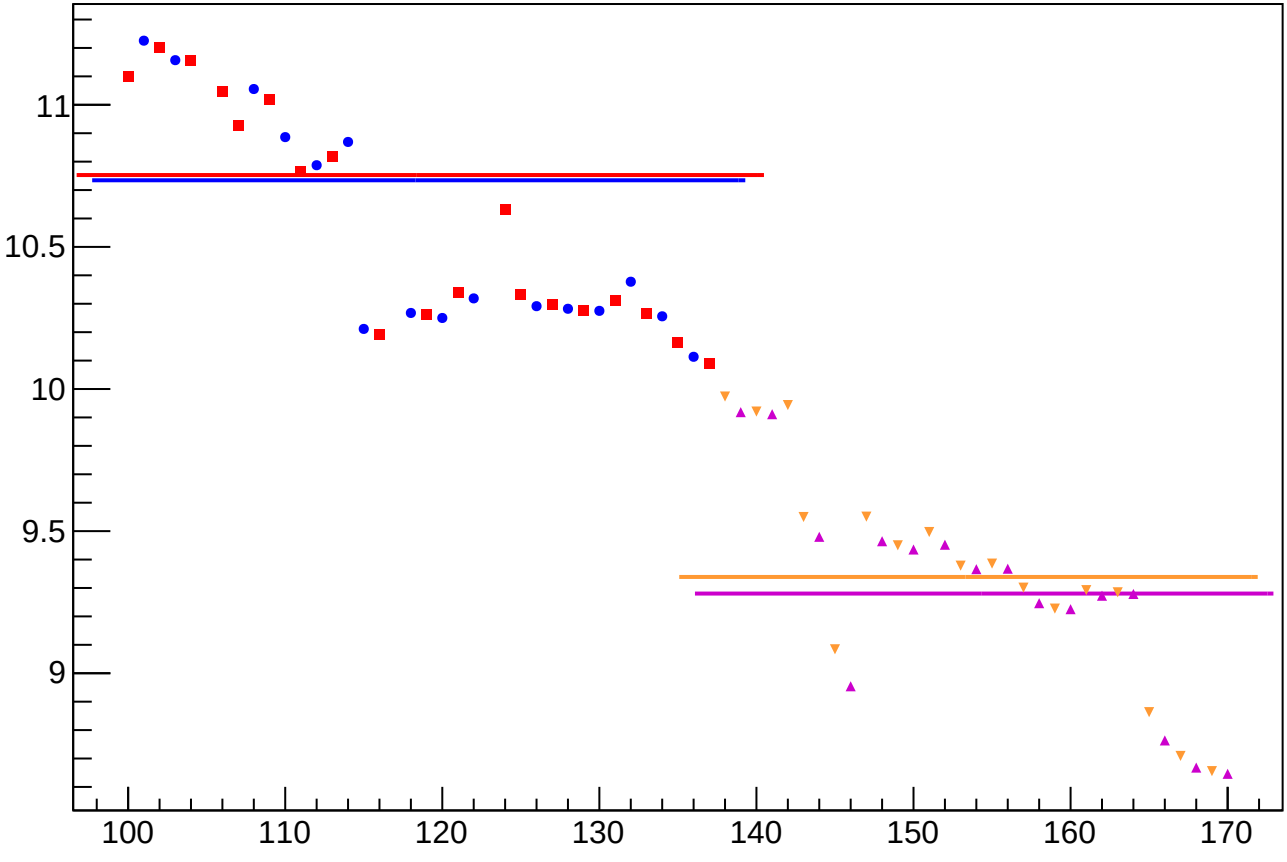
Left In: 0.031+/-0.000 $\chi^2$/NDF:428759.0/15

+ sign 0.031+/-0.000 $\chi^2$/NDF: 1972225.3/32

All: 0.031+/-0.000 $\chi^2$/NDF: 3609048.5/67

- sign 0.031+/-0.000 $\chi^2$/NDF: 1636474.5/34

# yield_sam6_mean vs Slug




Right In: 10.734+/-0.000 $\chi^2$/NDF: 5879444478.4/15

Left Out: 9.339+/-0.000 $\chi^2$/NDF:4436798468.3/16

Right Out: 10.753+/-0.000 $\chi^2$/NDF: 4344265704.2/18

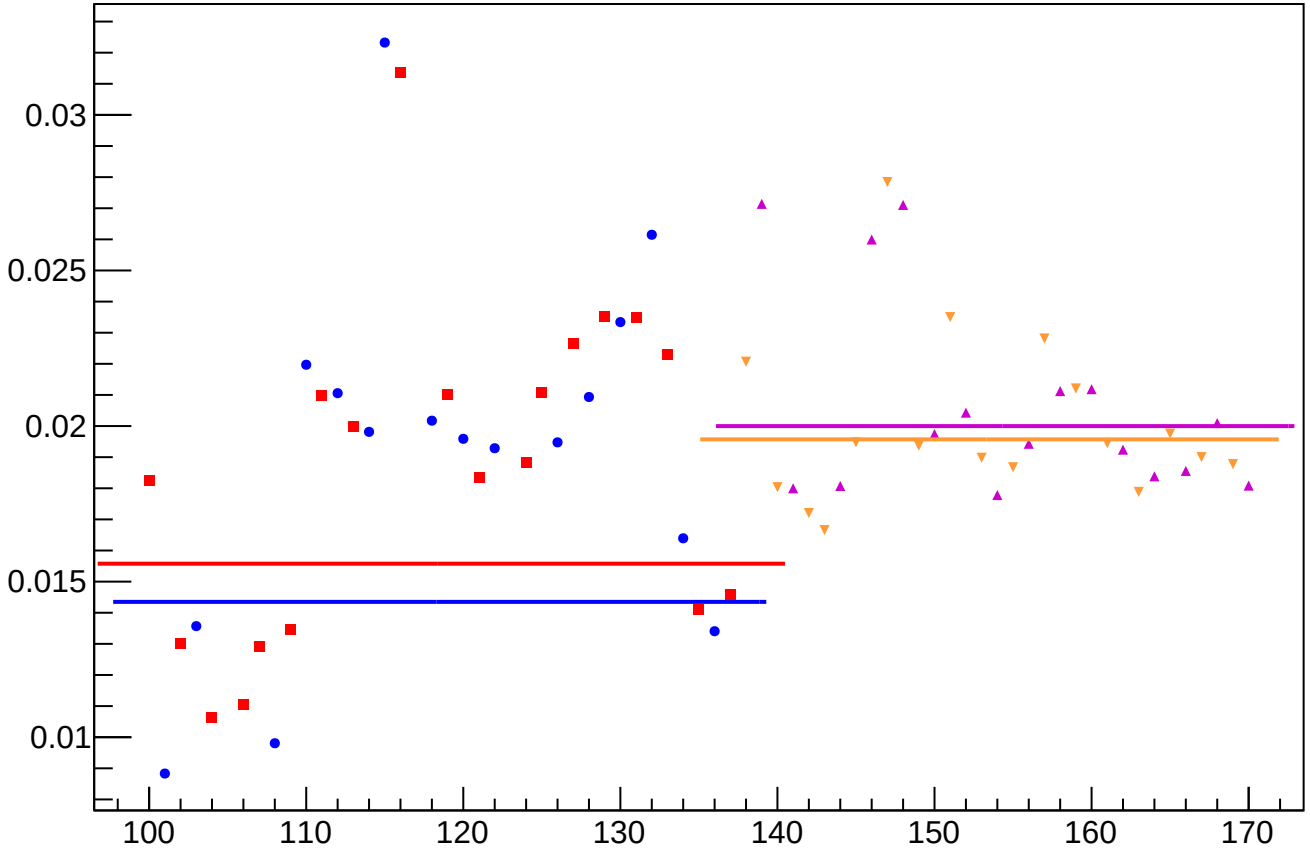
Left In: 9.280+/-0.000 $\chi^2$/NDF:3922660557.4/15

+ sign 9.988+/-0.000 $\chi^2$/NDF: 39085759335.6/32

All: 9.974+/-0.000 $\chi^2$/NDF: 77210453488.9/6

- sign 9.959+/-0.000 $\chi^2$/NDF: 38100061554.6/34

# yield_sam6_rms vs Slug




Right In: 0.014+/-0.000 $\chi^2$/NDF: 1481790.8/15

Left Out: 0.020+/-0.000 $\chi^2$/NDF:335095.6/16

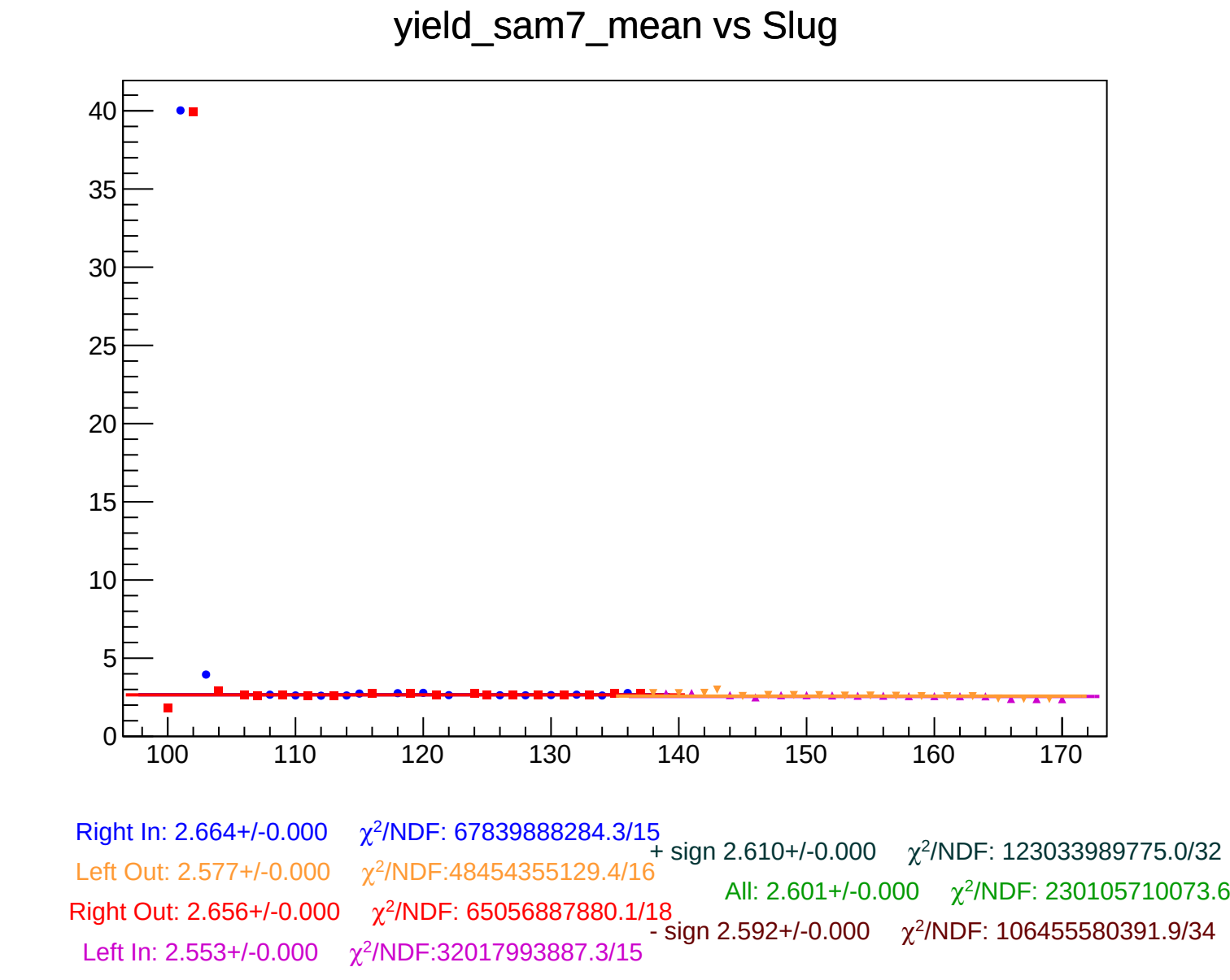
Right Out: 0.016+/-0.000 $\chi^2$/NDF: 1071979.1/18

Left In: 0.020+/-0.000 $\chi^2$/NDF:418333.6/15

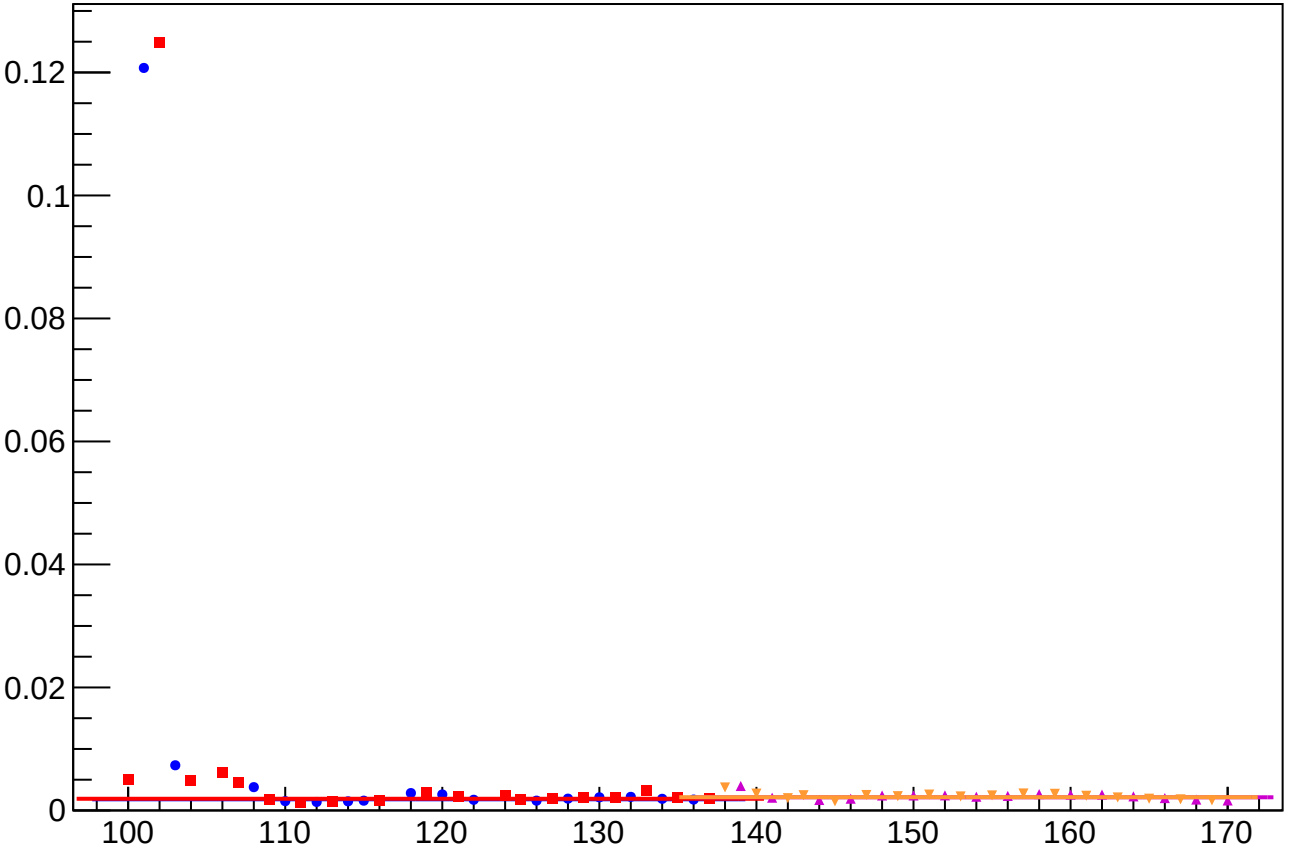
+ sign 0.017+/-0.000 $\chi^2$/NDF: 2622466.4/32

All: 0.018+/-0.000 $\chi^2$/NDF: 4689189.3/67

- sign 0.018+/-0.000 $\chi^2$/NDF: 2028286.4/34


yield_sam7_mean vs Slug
40
35
30
25
20
15
10
5
0
100
110
120
130
140
150
160
170
Right In: 2.664+/-0.000 χ²/NDF: 67839888284.3/15
Left Out: 2.577+/-0.000 χ²/NDF:48454355129.4/16
Right Out: 2.656+/-0.000 χ²/NDF: 65056887880.1/18
Left In: 2.553+/-0.000 χ²/NDF:32017993887.3/15
+ sign 2.610+/-0.000 χ²/NDF: 123033989775.0/32
All: 2.601+/-0.000 χ²/NDF: 230105710073.6
- sign 2.592+/-0.000 χ²/NDF: 106455580391.9/34

# yield_sam7_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 1822680.9/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:1040815.5/16

Right Out: 0.002+/-0.000 $\chi^2$/NDF: 2525514.7/18

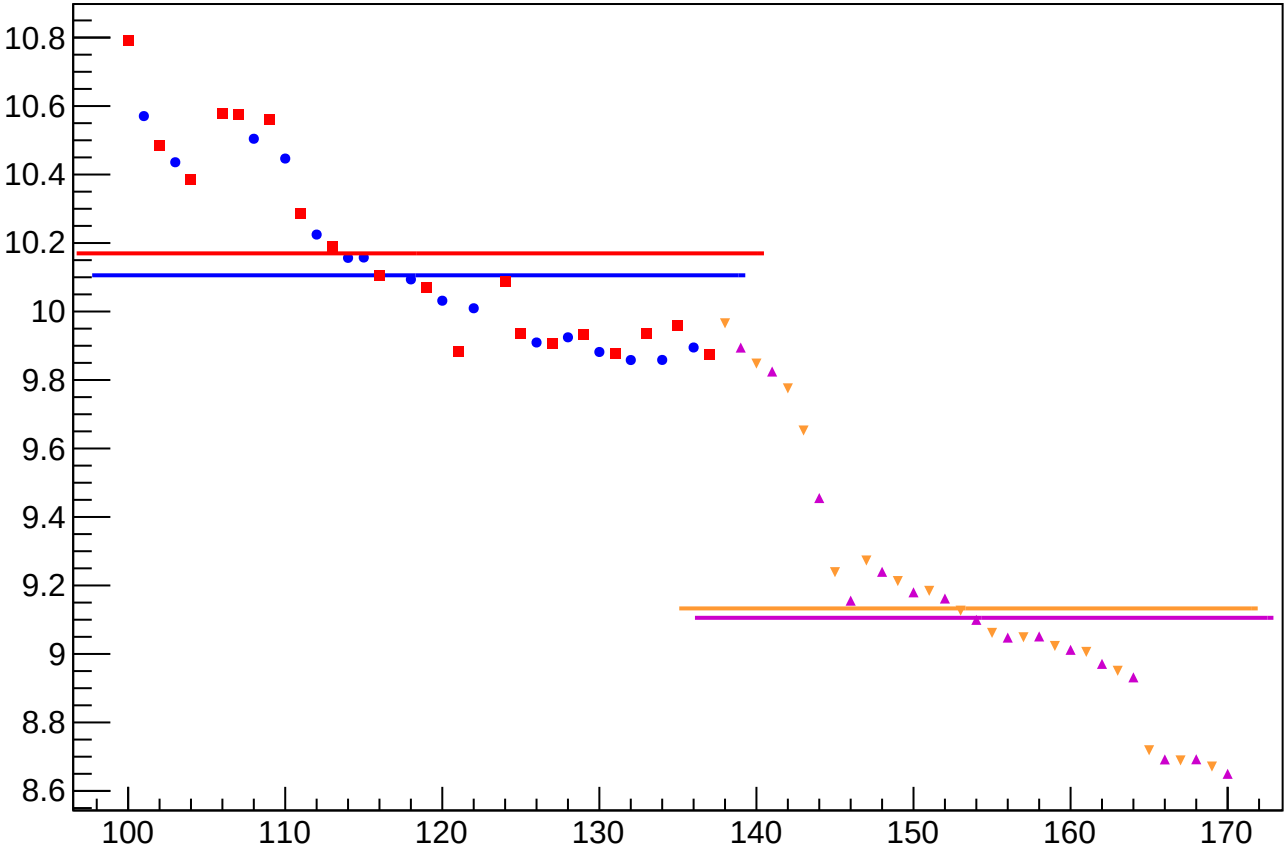
Left In: 0.002+/-0.000 $\chi^2$/NDF:890673.9/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 3071300.1/32

All: 0.002+/-0.000 $\chi^2$/NDF: 6592868.1/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 3519163.0/34

# yield_sam8_mean vs Slug




Right In: 10.106+/-0.000 $\chi^2$/NDF: 9126550621.3/15

Left Out: 9.133+/-0.000 $\chi^2$/NDF:32130723214.6/16

Right Out: 10.170+/-0.000 $\chi^2$/NDF: 9135610954.1/18

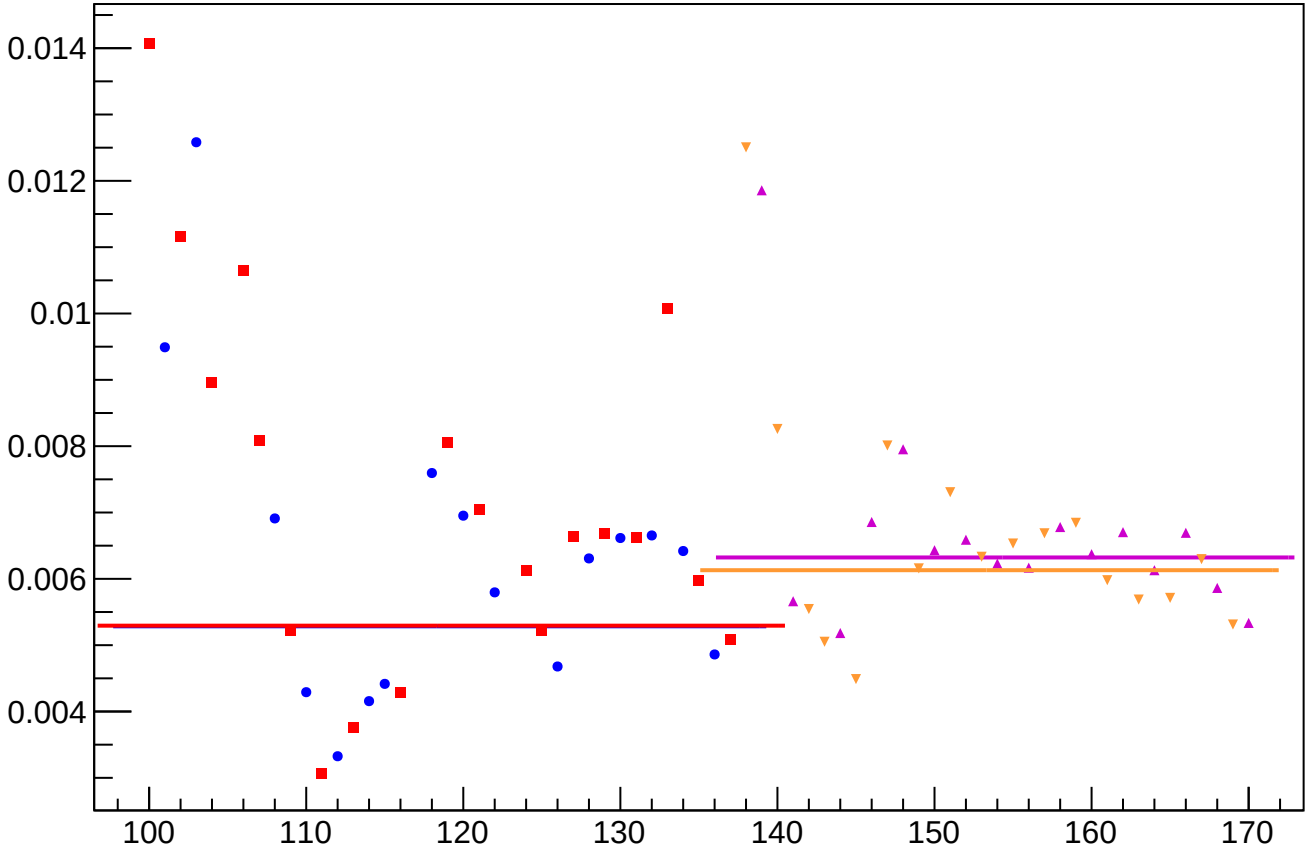
Left In: 9.106+/-0.000 $\chi^2$/NDF:28103068110.1/15

+ sign 9.527+/-0.000 $\chi^2$/NDF: 150221141680.5/32

All: 9.542+/-0.000 $\chi^2$/NDF: 315727505119.8

- sign 9.559+/-0.000 $\chi^2$/NDF: 165264605304.2/34

# yield_sam8_rms vs Slug




Right In: 0.005+/-0.000 $\chi^2$/NDF: 1274133.0/15

Left Out: 0.006+/-0.000 $\chi^2$/NDF:862575.3/16

Right Out: 0.005+/-0.000 $\chi^2$/NDF: 1792250.8/18

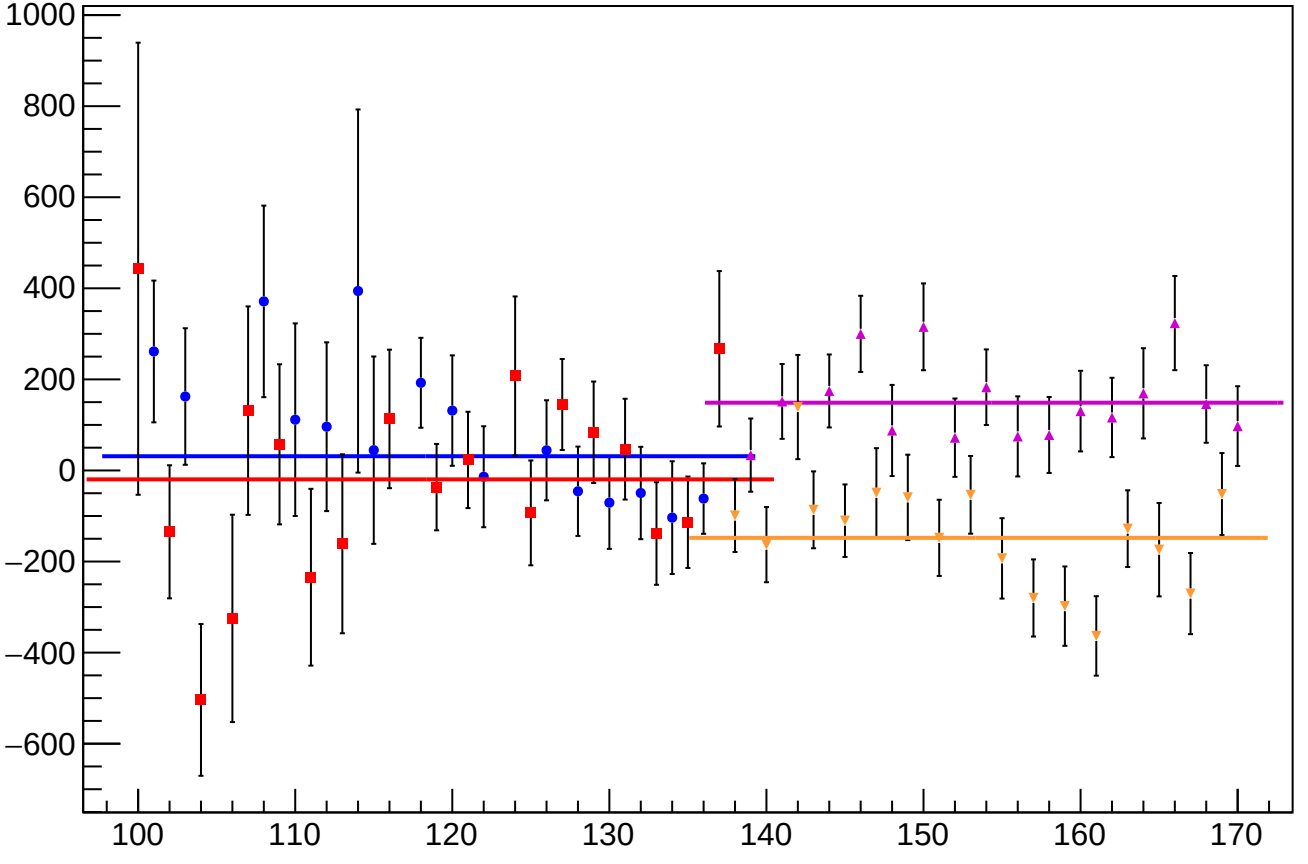
Left In: 0.006+/-0.000 $\chi^2$/NDF:567864.1/15

+ sign 0.006+/-0.000 $\chi^2$/NDF: 2301449.2/32

All: 0.006+/-0.000 $\chi^2$/NDF: 4904958.2/67

- sign 0.006+/-0.000 $\chi^2$/NDF: 2599140.5/34

# reg_asym_sam1_mean vs Slug




Right In: 31.249+/-30.786 $\chi^2$/NDF: 15.1/15

Left Out: -147.991+/-21.356 $\chi^2$/NDF:25.5/16

Right Out: -19.573+/-31.059 $\chi^2$/NDF: 25.9/18

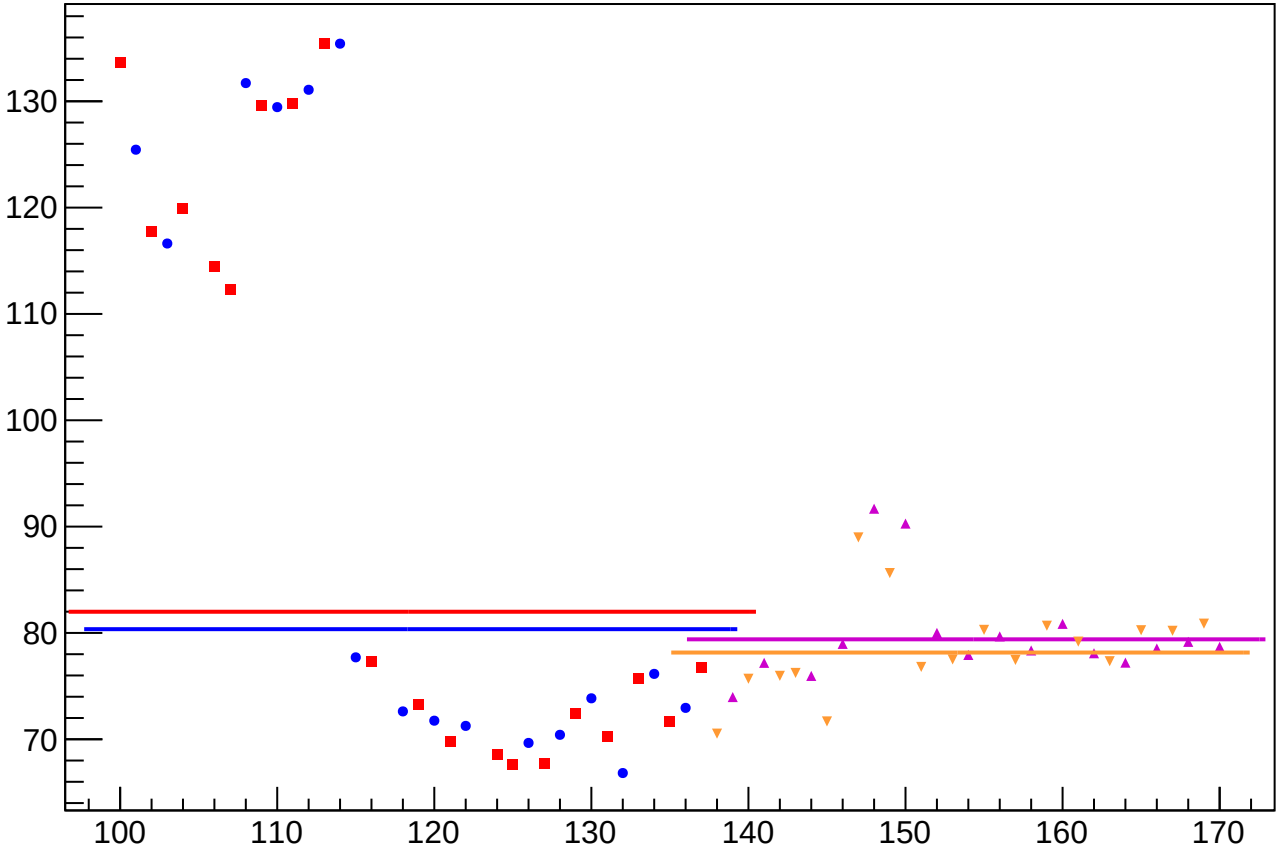
Left In: 148.785+/-21.885 $\chi^2$/NDF:14.7/15

+ sign -89.759+/-17.548 $\chi^2$/NDF: 63.5/32

All: -0.178+/-12.527 $\chi^2$/NDF: 176.8/67

- sign 92.929+/-17.890 $\chi^2$/NDF: 60.2/34

# reg_asym_sam1_rms vs Slug




Right In: 80.354+/-0.022 $\chi^2$/NDF: 840039.5/15

Left Out: 78.156+/-0.015 $\chi^2$/NDF:79963.2/16

Right Out: 81.993+/-0.022 $\chi^2$/NDF: 932337.7/18

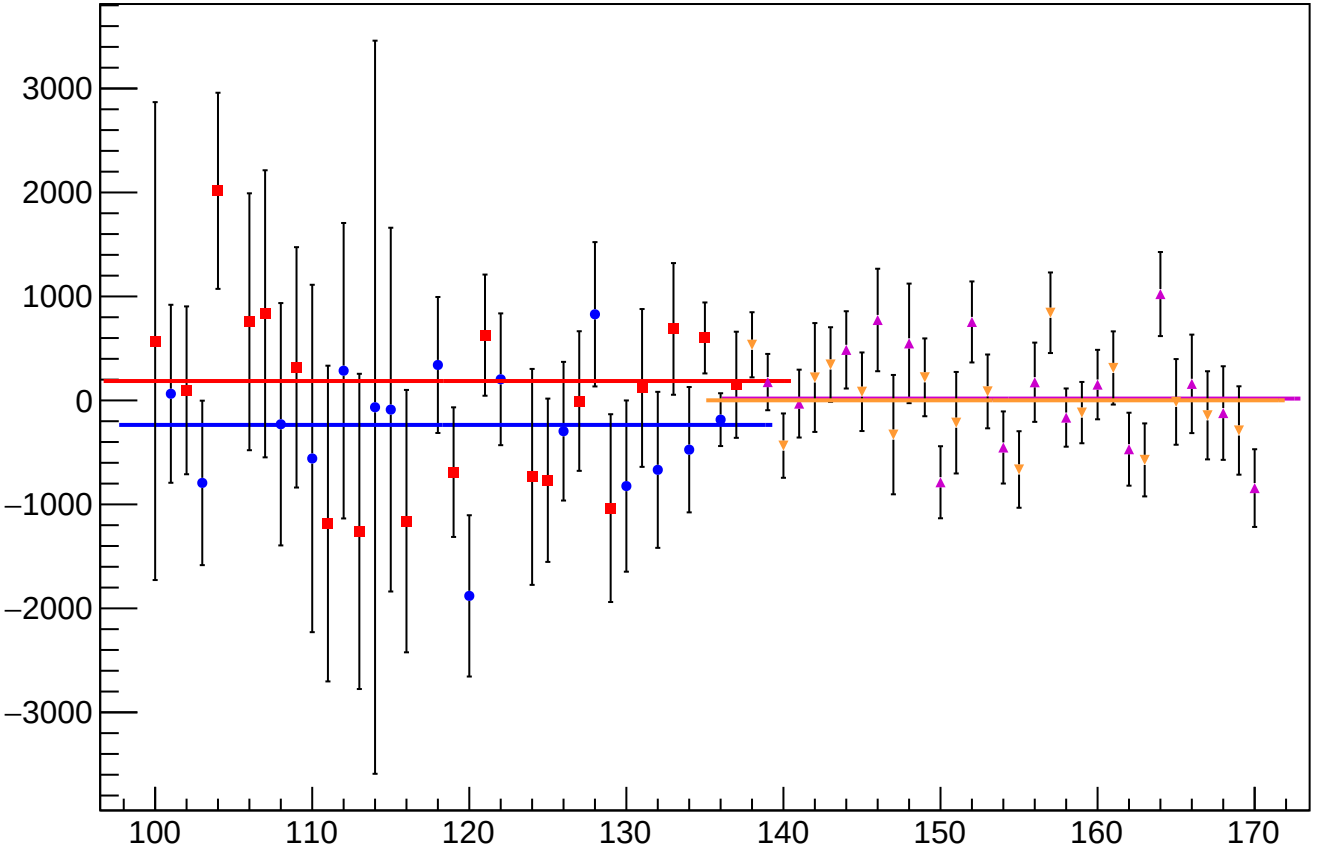
Left In: 79.398+/-0.015 $\chi^2$/NDF:73814.0/15

+ sign 78.870+/-0.012 $\chi^2$/NDF: 926884.3/32

All: 79.551+/-0.009 $\chi^2$/NDF: 1948507.4/67

- sign 80.259+/-0.013 $\chi^2$/NDF: 1015477.6/34

# asym_sam1_reg_correction_mean vs Slug




Right In: -235.521+/-163.765 $\chi^2$/NDF: 9.9/15

Left Out: 1.034+/-91.251 $\chi^2$/NDF:19.1/16

Right Out: 186.618+/-170.394 $\chi^2$/NDF: 16.0/18

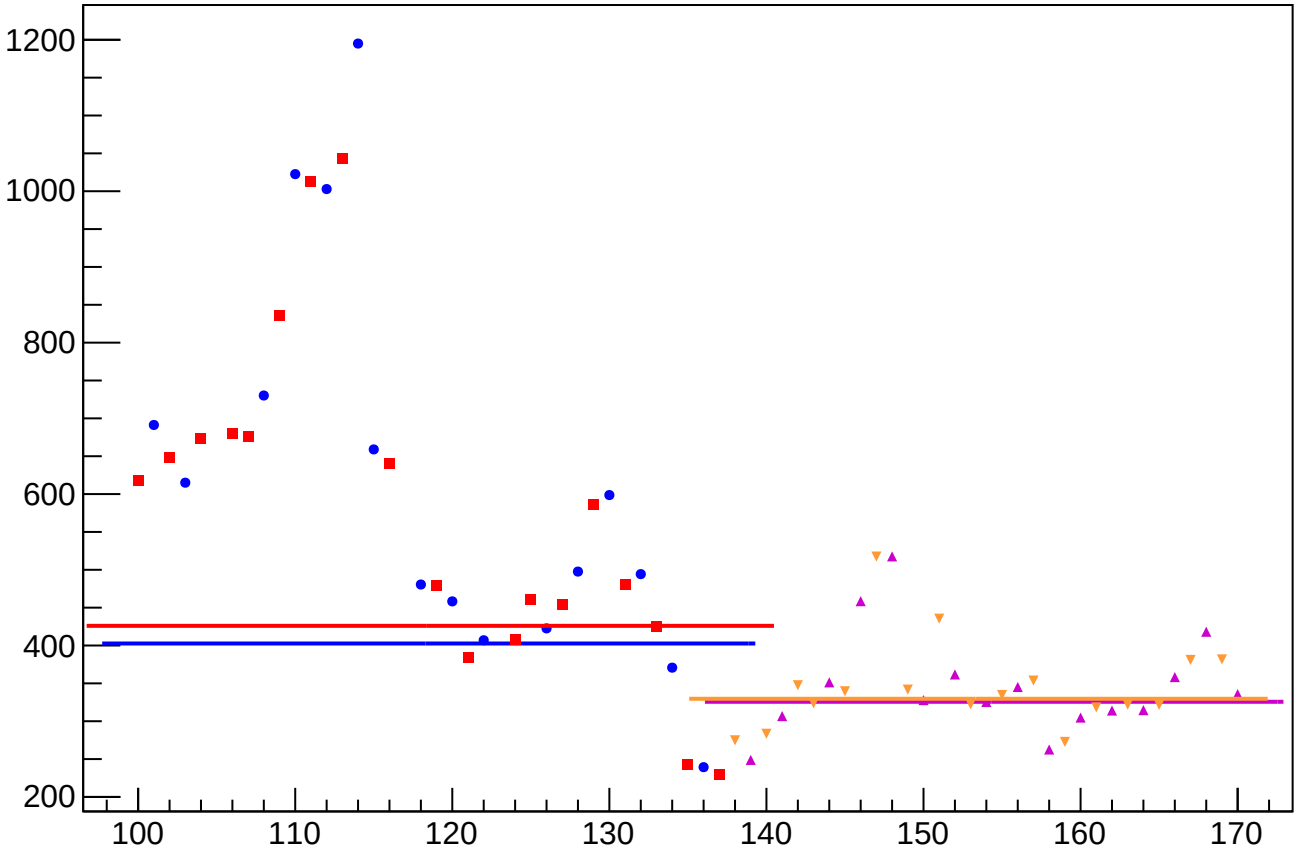
Left In: 17.691+/-91.270 $\chi^2$/NDF:30.3/15

+ sign -55.011+/-79.712 $\chi^2$/NDF: 30.7/32

All: -0.341+/-56.626 $\chi^2$/NDF: 78.7/67

- sign 55.353+/-80.455 $\chi^2$/NDF: 47.1/34

# asym_sam1_reg_correction_rms vs Slug




Right In: 402.658+/-0.116 $\chi^2$/NDF: 2360092.2/15

Left Out: 329.646+/-0.065 $\chi^2$/NDF:566958.2/16

Right Out: 425.980+/-0.120 $\chi^2$/NDF: 2368792.4/18

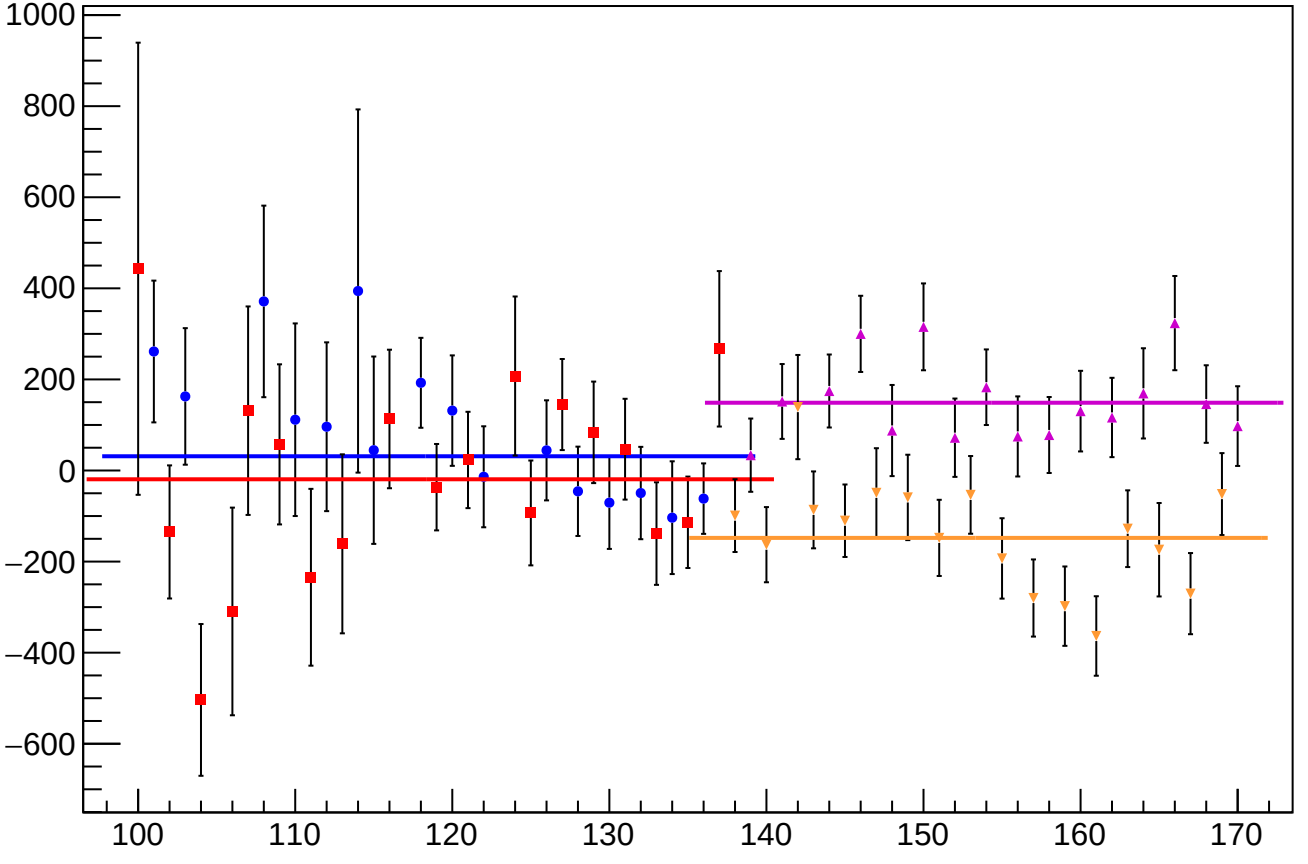
Left In: 325.681+/-0.065 $\chi^2$/NDF:776333.6/15

+ sign 346.944+/-0.056 $\chi^2$/NDF: 3230398.0/32

All: 347.488+/-0.040 $\chi^2$/NDF: 6914180.3/67

- sign 348.042+/-0.057 $\chi^2$/NDF: 3683594.2/34

# cor_asym_sam1_mean vs Slug




Right In: 31.260+/-30.786 $\chi^2$/NDF: 15.1/15

Left Out: -147.988+/-21.356 $\chi^2$/NDF:25.5/16

Right Out: -19.282+/-31.060 $\chi^2$/NDF: 25.7/18

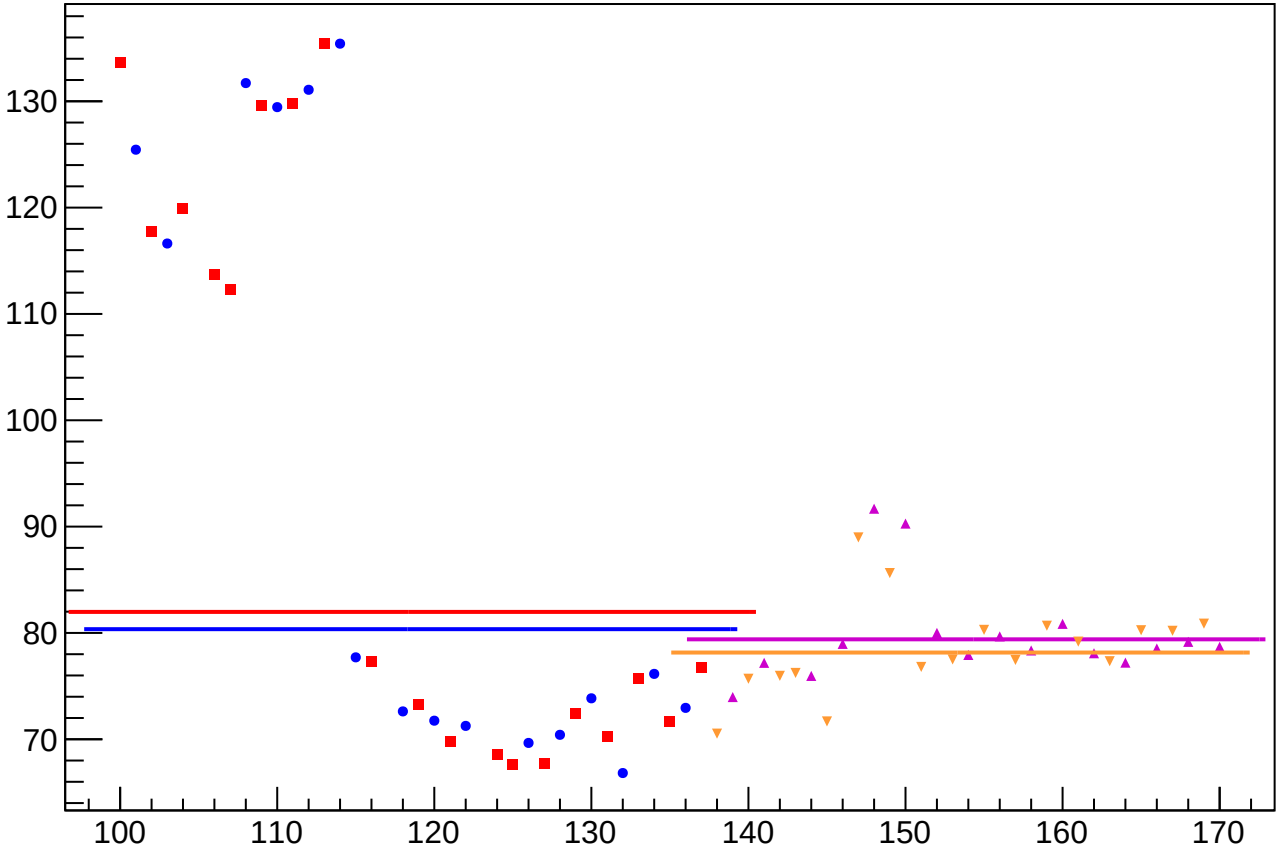
Left In: 148.791+/-21.885 $\chi^2$/NDF:14.7/15

+ sign -89.754+/-17.548 $\chi^2$/NDF: 63.5/32

All: -0.125+/-12.527 $\chi^2$/NDF: 176.6/67

- sign 93.032+/-17.890 $\chi^2$/NDF: 60.0/34

# cor_asym_sam1_rms vs Slug




Right In: 80.354+/-0.022 $\chi^2$/NDF: 840039.7/15

Left Out: 78.156+/-0.015 $\chi^2$/NDF:79963.2/16

Right Out: 81.978+/-0.022 $\chi^2$/NDF: 930466.5/18

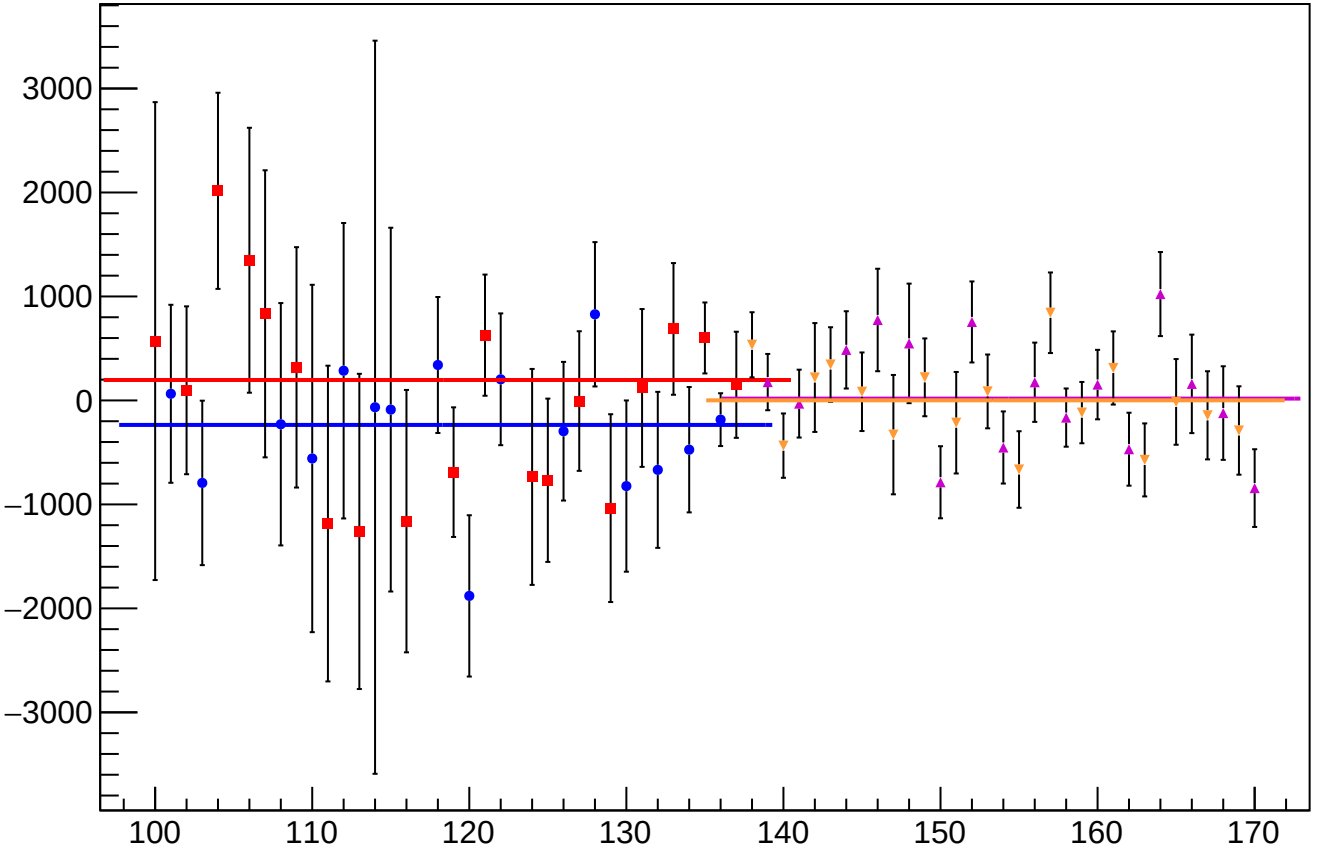
Left In: 79.398+/-0.015 $\chi^2$/NDF:73814.0/15

+ sign 78.870+/-0.012 $\chi^2$/NDF: 926884.5/32

All: 79.549+/-0.009 $\chi^2$/NDF: 1946483.7/67

- sign 80.254+/-0.013 $\chi^2$/NDF: 1013498.2/34

# asym_sam1_cor_correction_mean vs Slug




Right In: -235.519+/-163.765 $\chi^2$/NDF: 9.9/15

Left Out: 1.035+/-91.251 $\chi^2$/NDF:19.1/16

Right Out: 196.579+/-170.492 $\chi^2$/NDF: 16.6/18

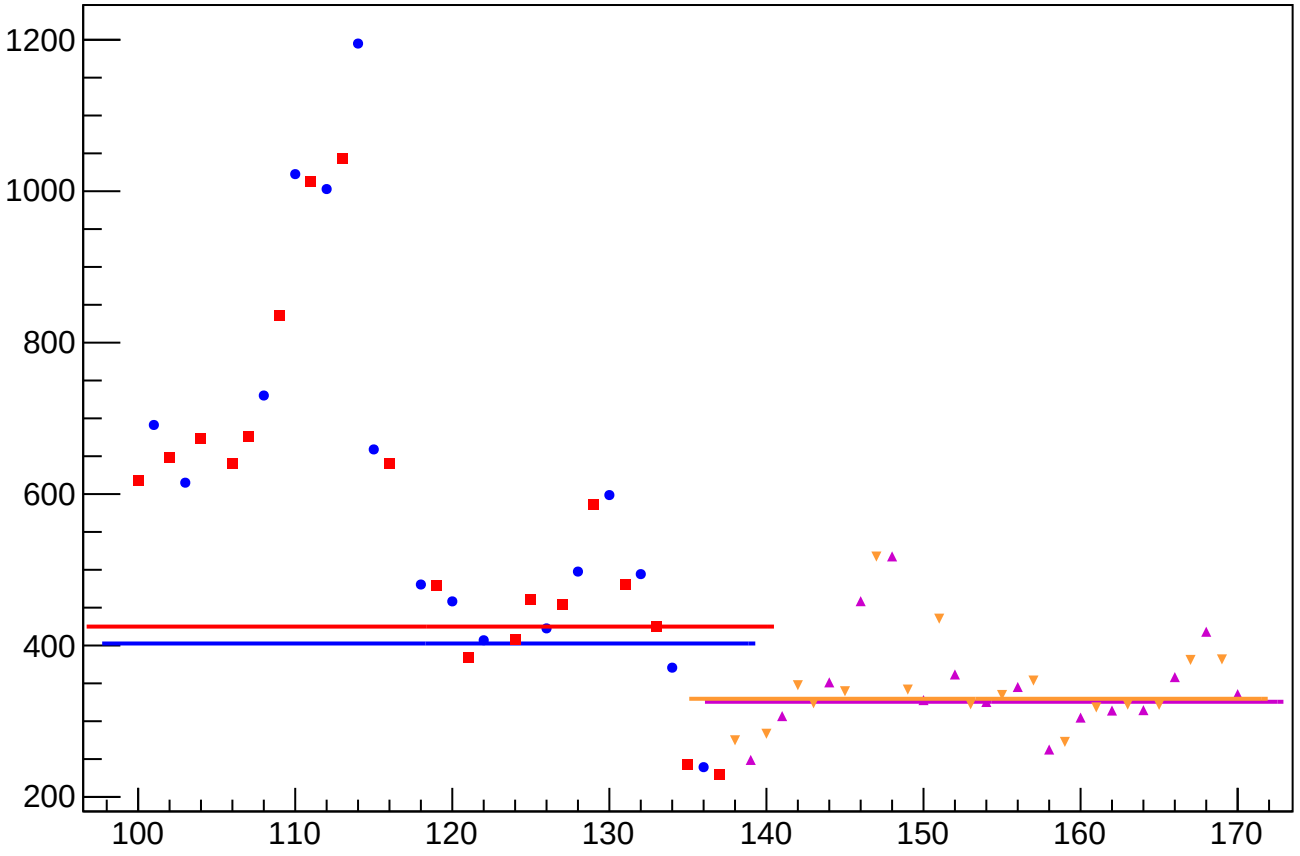
Left In: 17.697+/-91.270 $\chi^2$/NDF:30.3/15

+ sign -55.010+/-79.712 $\chi^2$/NDF: 30.7/32

All: 0.737+/-56.629 $\chi^2$/NDF: 79.4/67

- sign 57.543+/-80.466 $\chi^2$/NDF: 47.8/34

# asym_sam1_cor_correction_rms vs Slug




Right In: 402.658+/-0.116 $\chi^2$/NDF: 2360087.3/15

Left Out: 329.646+/-0.065 $\chi^2$/NDF:566965.7/16

Right Out: 424.988+/-0.121 $\chi^2$/NDF: 2341027.2/18

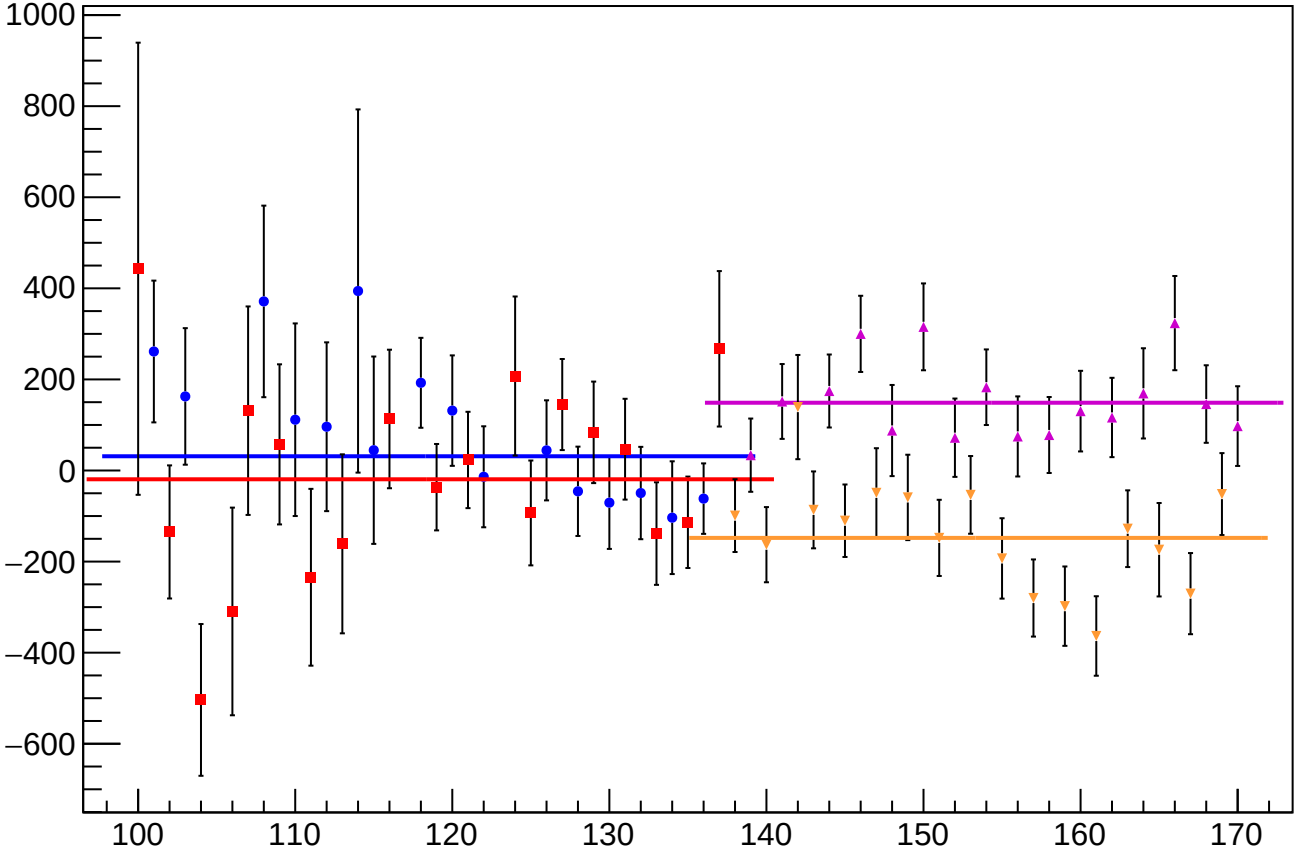
Left In: 325.681+/-0.065 $\chi^2$/NDF:776333.4/15

+ sign 346.944+/-0.056 $\chi^2$/NDF: 3230403.6/32

All: 347.369+/-0.040 $\chi^2$/NDF: 6875276.4/67

- sign 347.802+/-0.057 $\chi^2$/NDF: 3644758.1/34

# eigen_cor_asym_sam1_mean vs Slug




Right In: 31.260+/-30.786 $\chi^2$/NDF: 15.1/15

Left Out: -147.988+/-21.356 $\chi^2$/NDF:25.5/16

Right Out: -19.282+/-31.060 $\chi^2$/NDF: 25.7/18

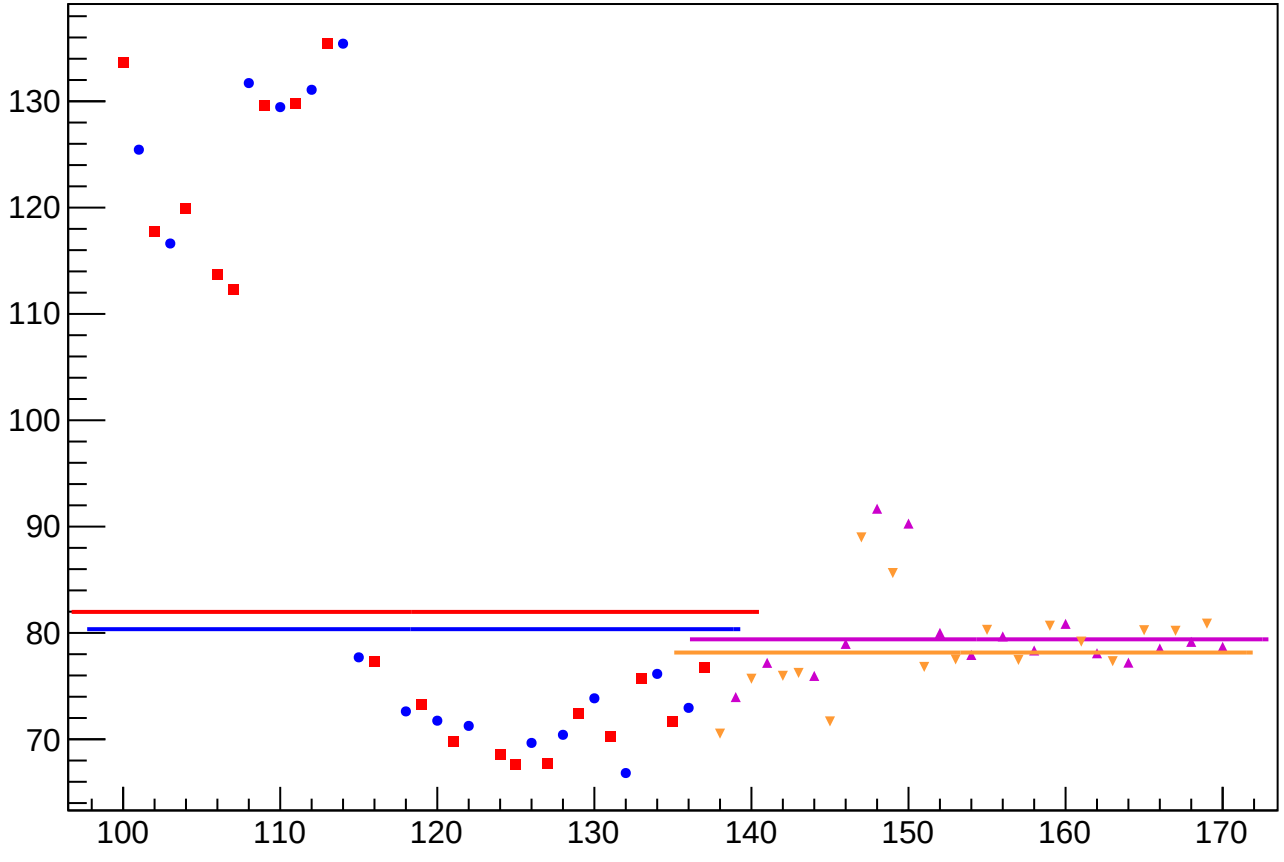
Left In: 148.791+/-21.885 $\chi^2$/NDF:14.7/15

+ sign -89.754+/-17.548 $\chi^2$/NDF: 63.5/32

All: -0.125+/-12.527 $\chi^2$/NDF: 176.6/67

- sign 93.032+/-17.890 $\chi^2$/NDF: 60.0/34

# eigen_cor_asym_sam1_rms vs Slug




Right In: 80.354+/-0.022 $\chi^2$/NDF: 840039.7/15

Left Out: 78.156+/-0.015 $\chi^2$/NDF:79963.2/16

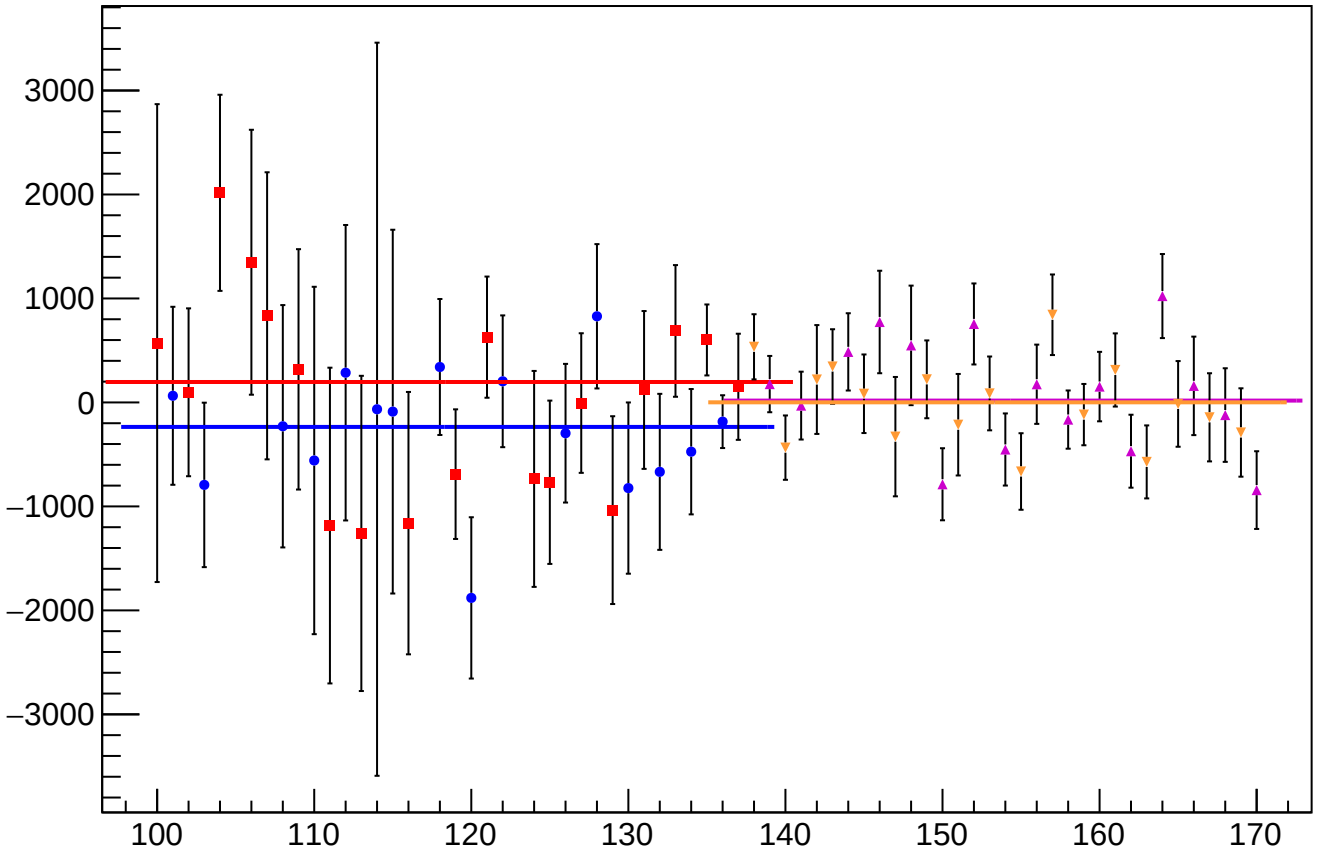
Right Out: 81.978+/-0.022 $\chi^2$/NDF: 930466.5/18

Left In: 79.398+/-0.015 $\chi^2$/NDF:73814.0/15

+ sign 78.870+/-0.012 $\chi^2$/NDF: 926884.5/32

All: 79.549+/-0.009 $\chi^2$/NDF: 1946483.7/67

- sign 80.254+/-0.013 $\chi^2$/NDF: 1013498.2/34




Right In: -235.519+/-163.765 $\chi^2$/NDF: 9.9/15

Left Out: 1.035+/-91.251 $\chi^2$/NDF:19.1/16

Right Out: 196.579+/-170.492 $\chi^2$/NDF: 16.6/18

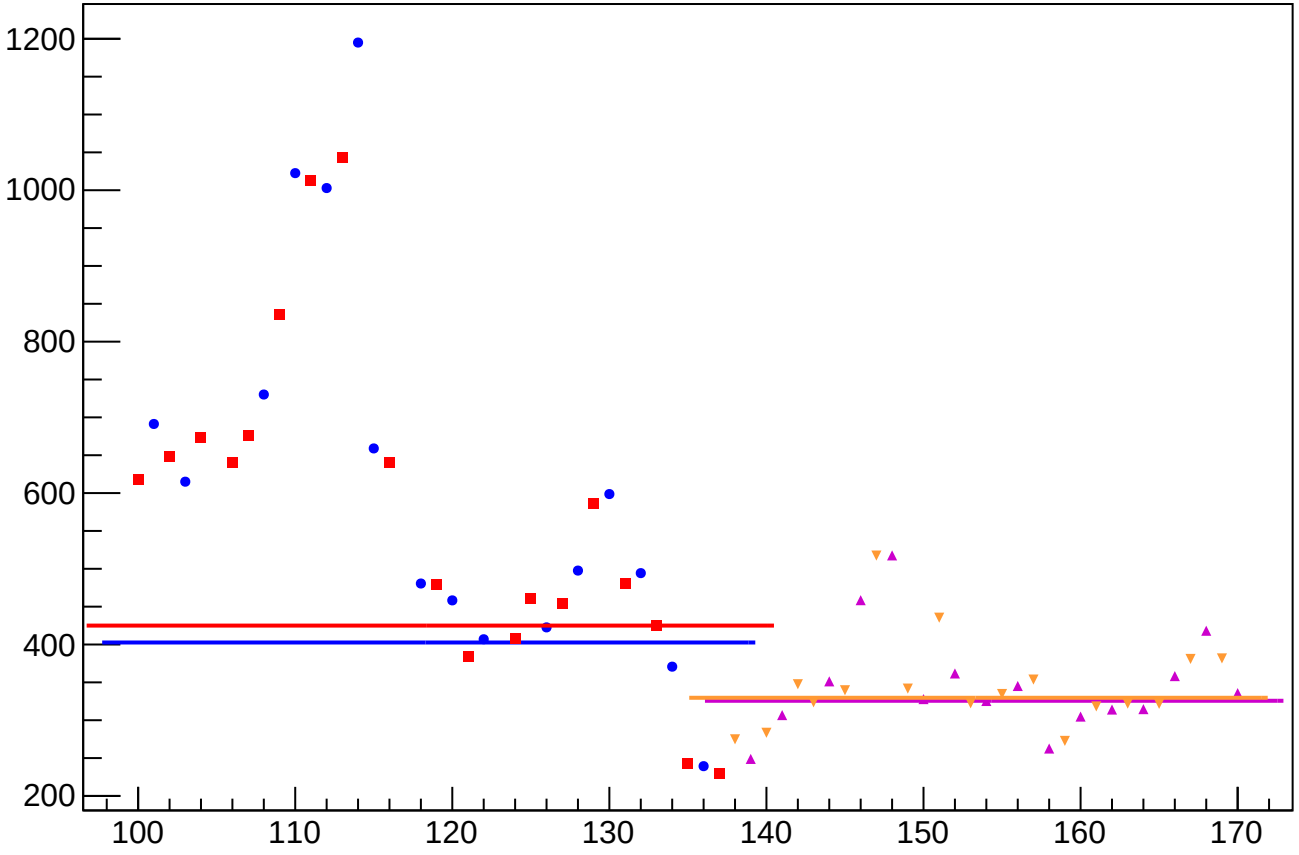
Left In: 17.697+/-91.270 $\chi^2$/NDF:30.3/15

+ sign -55.010+/-79.712 $\chi^2$/NDF: 30.7/32

All: 0.737+/-56.629 $\chi^2$/NDF: 79.4/67

- sign 57.543+/-80.466 $\chi^2$/NDF: 47.8/34

# asym_sam1_eigen_cor_correction_rms vs Slug




Right In: 402.658+/-0.116 $\chi^2$/NDF: 2360087.3/15

Left Out: 329.646+/-0.065 $\chi^2$/NDF:566965.7/16

Right Out: 424.988+/-0.121 $\chi^2$/NDF: 2341027.2/18

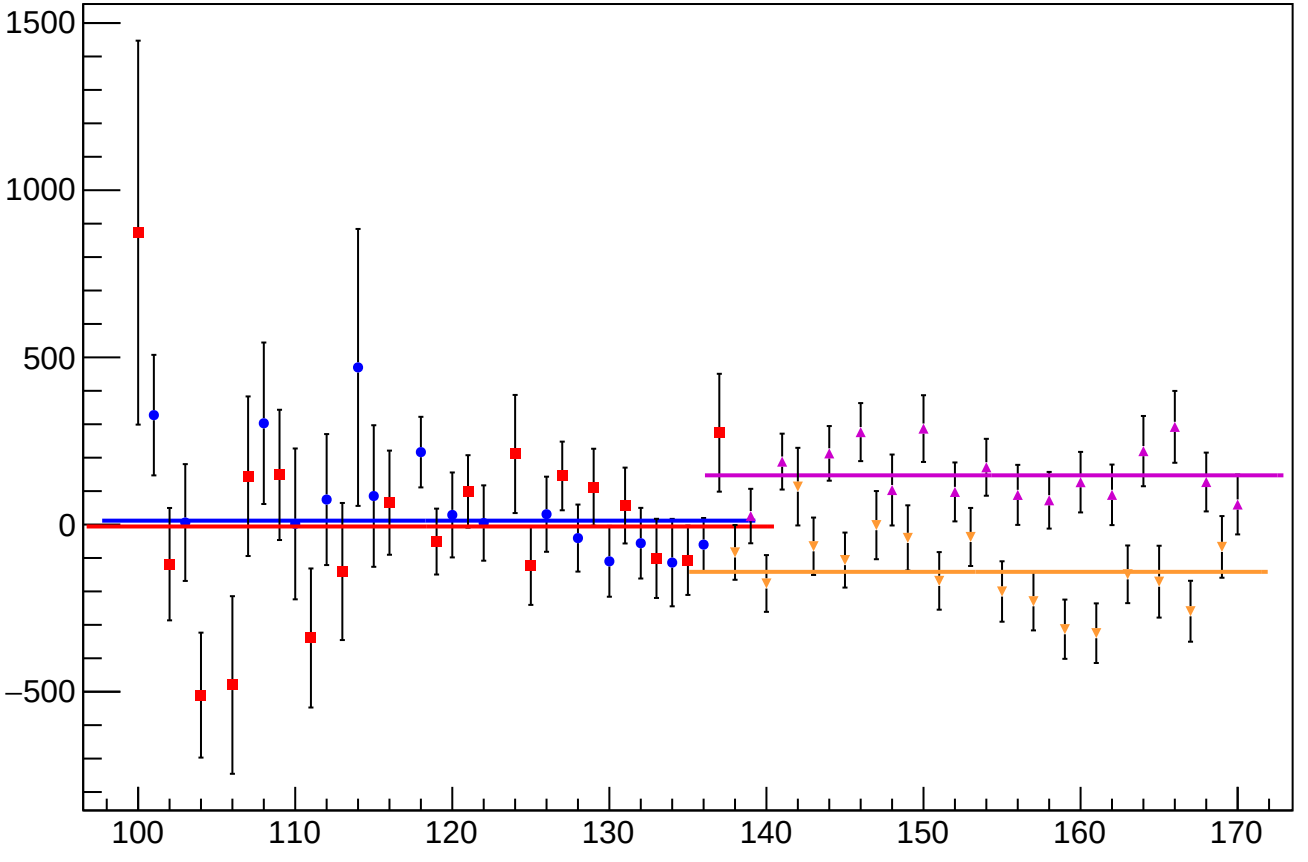
Left In: 325.681+/-0.065 $\chi^2$/NDF:776333.4/15

+ sign 346.944+/-0.056 $\chi^2$/NDF: 3230403.6/32

All: 347.369+/-0.040 $\chi^2$/NDF: 6875276.4/67

- sign 347.802+/-0.057 $\chi^2$/NDF: 3644758.1/34

# dit_asym_sam1_mean vs Slug




Right In: 11.651+/-32.297 $\chi^2$/NDF: 13.5/15

Left Out: -141.468+/-21.923 $\chi^2$/NDF:22.8/16

Right Out: -5.817+/-32.444 $\chi^2$/NDF: 28.8/18

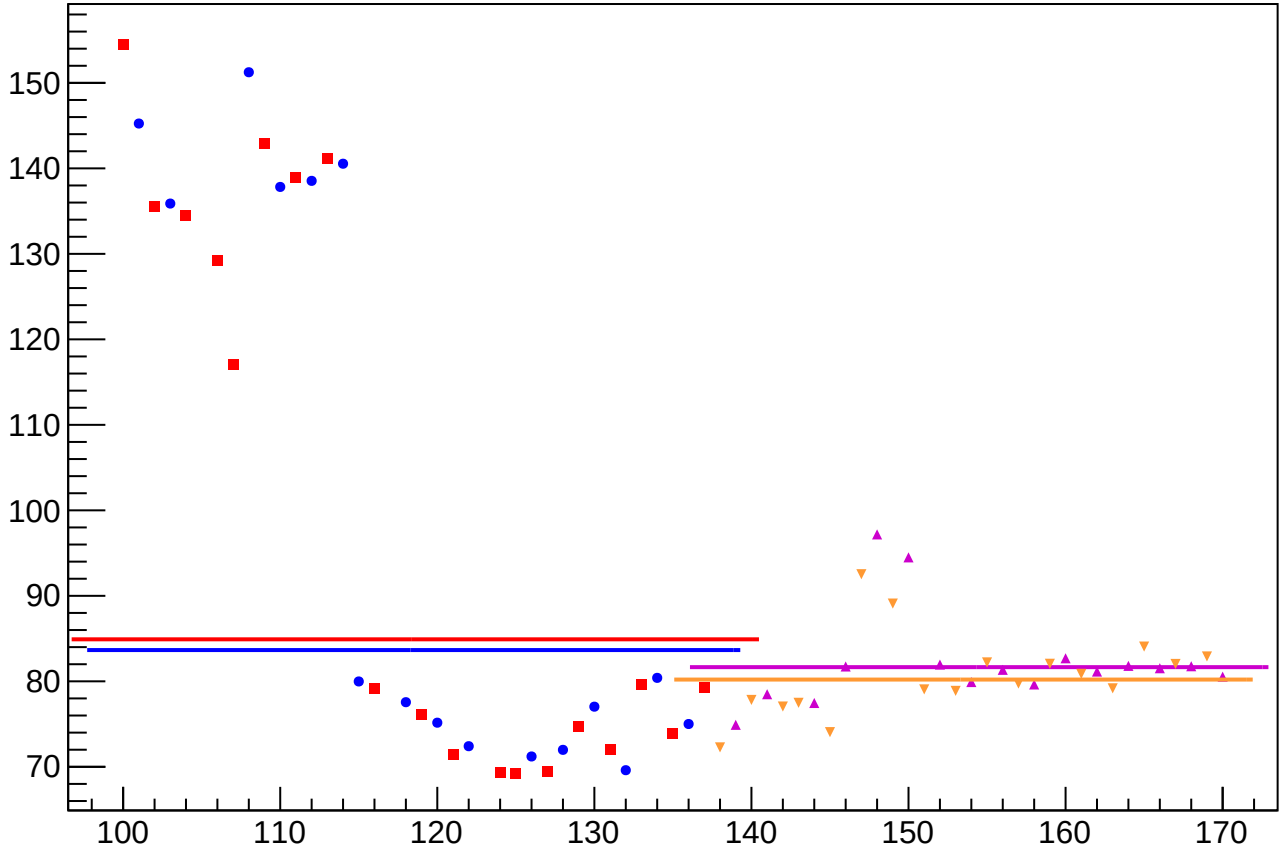
Left In: 147.216+/-22.527 $\chi^2$/NDF:12.8/15

+ sign -93.170+/-18.139 $\chi^2$/NDF: 51.7/32

All: 0.237+/-12.953 $\chi^2$/NDF: 162.4/67

- sign 97.438+/-18.504 $\chi^2$/NDF: 56.6/34

# dit_asym_sam1_rms vs Slug




Right In: 83.657+/-0.023 $\chi^2$/NDF: 1034794.6/15

Left Out: 80.206+/-0.016 $\chi^2$/NDF:89079.0/16

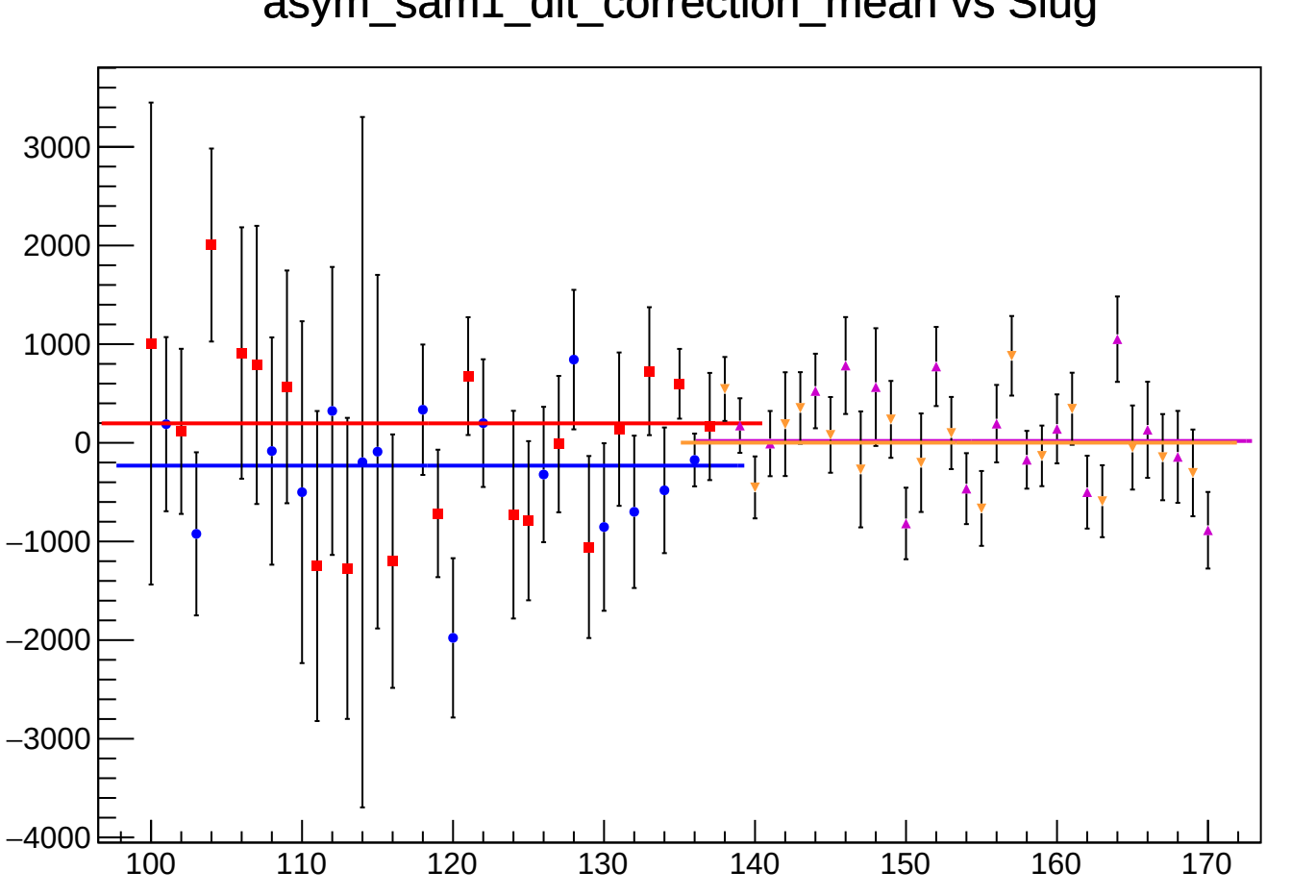
Right Out: 84.913+/-0.023 $\chi^2$/NDF: 1121669.5/18

Left In: 81.659+/-0.016 $\chi^2$/NDF:100464.6/15

+ sign 81.295+/-0.013 $\chi^2$/NDF: 1139505.1/32

All: 81.992+/-0.009 $\chi^2$/NDF: 2381244.9/67

- sign 82.717+/-0.013 $\chi^2$/NDF: 1235711.0/34




Right In: -231.407+/-170.133 $\chi^2$/NDF: 10.4/15

Left Out: 1.581+/-93.960 $\chi^2$/NDF:19.0/16

Right Out: 197.206+/-176.091 $\chi^2$/NDF: 15.9/18

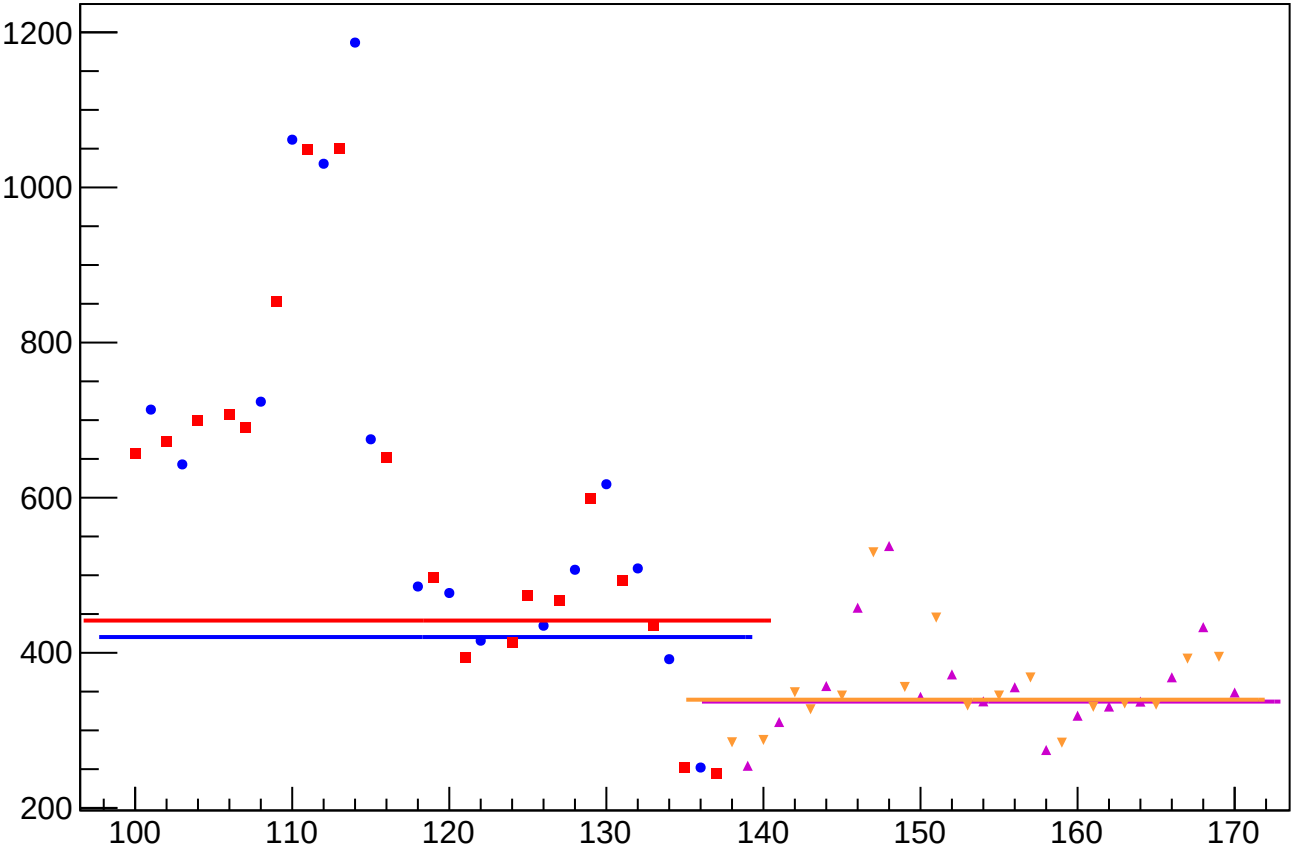
Left In: 18.607+/-94.411 $\chi^2$/NDF:30.1/15

\+ sign -52.873+/-82.250 $\chi^2$/NDF: 30.9/32

All: 2.162+/-58.495 $\chi^2$/NDF: 78.5/67

\- sign 58.484+/-83.207 $\chi^2$/NDF: 46.8/34

# asym_sam1_dit_correction_rms vs Slug




Right In: 420.329+/-0.120 $\chi^2$/NDF: 2254610.0/15

Left Out: 339.556+/-0.066 $\chi^2$/NDF:557491.6/16

Right Out: 441.598+/-0.125 $\chi^2$/NDF: 2307588.5/18

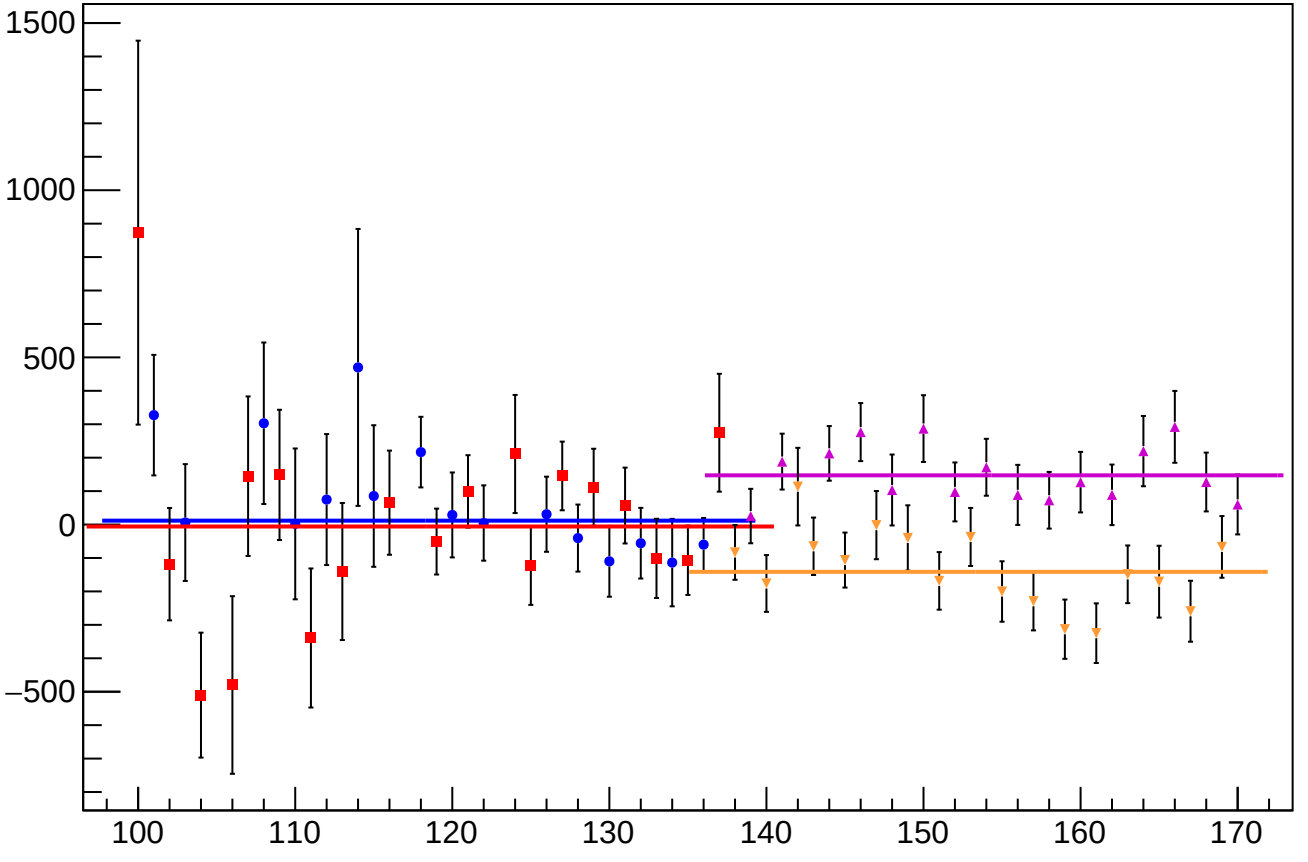
Left In: 337.121+/-0.067 $\chi^2$/NDF:756571.6/15

+ sign 358.435+/-0.058 $\chi^2$/NDF: 3157541.8/32

All: 359.430+/-0.041 $\chi^2$/NDF: 6769138.6/67

- sign 360.448+/-0.059 $\chi^2$/NDF: 3611004.6/34

# eigen_dit_asym_sam1_mean vs Slug




Right In: 11.652+/-32.297 $\chi^2$/NDF: 13.5/15

Left Out: -141.467+/-21.923 $\chi^2$/NDF:22.8/16

Right Out: -5.816+/-32.444 $\chi^2$/NDF: 28.8/18

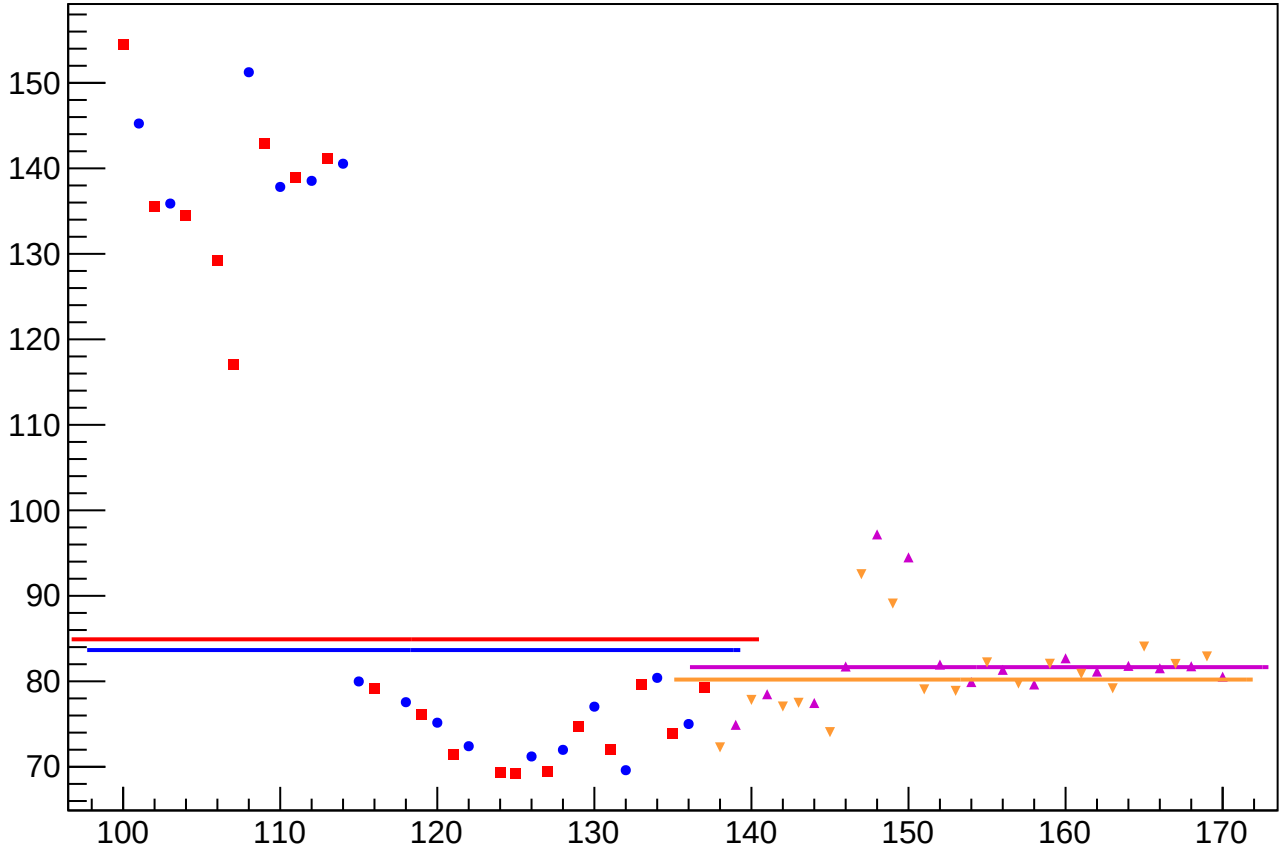
Left In: 147.216+/-22.527 $\chi^2$/NDF:12.8/15

+ sign -93.169+/-18.139 $\chi^2$/NDF: 51.7/32

All: 0.238+/-12.953 $\chi^2$/NDF: 162.4/67

- sign 97.438+/-18.504 $\chi^2$/NDF: 56.6/34

# eigen_dit_asym_sam1_rms vs Slug




Right In: 83.657+/-0.023 $\chi^2$/NDF: 1034794.1/15

Left Out: 80.206+/-0.016 $\chi^2$/NDF:89078.4/16

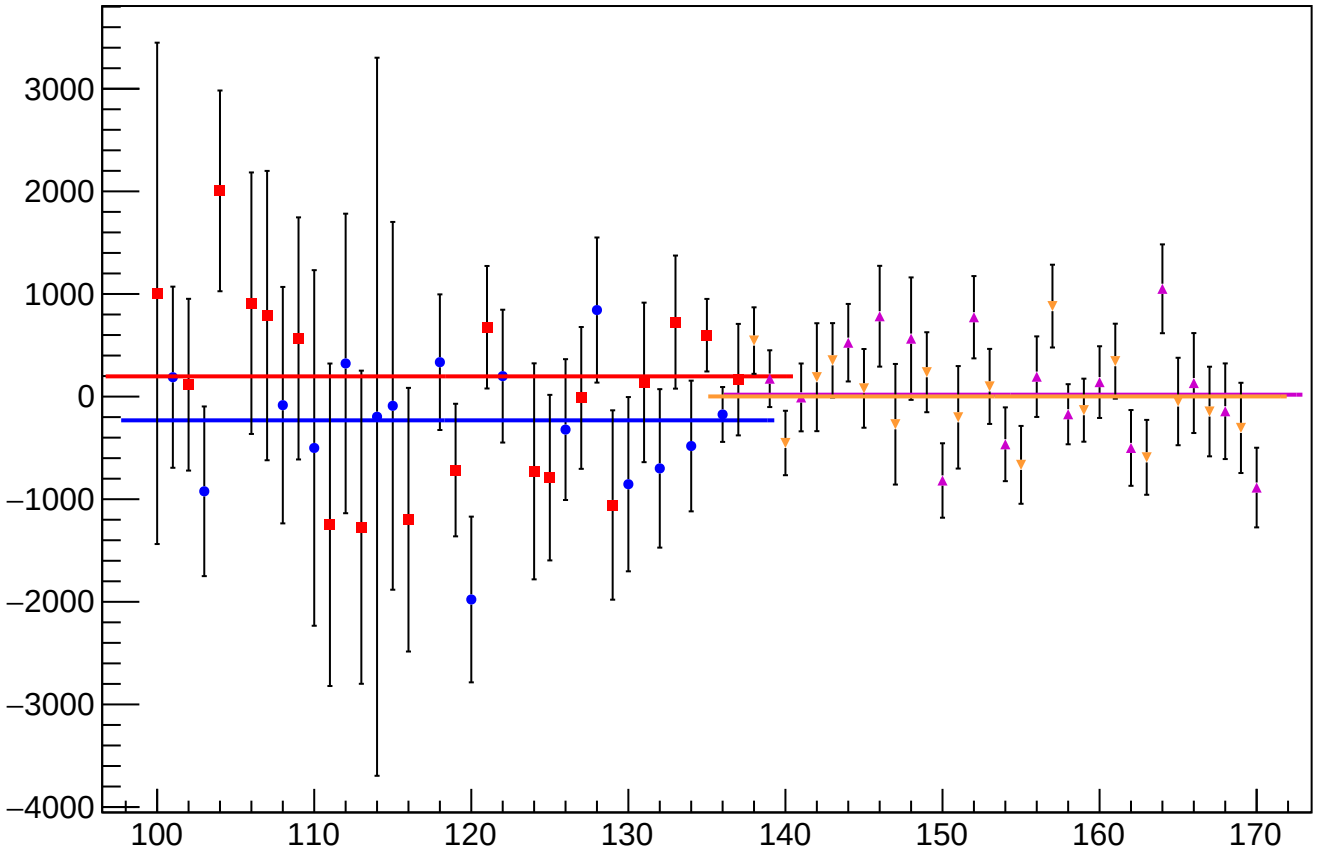
Right Out: 84.913+/-0.023 $\chi^2$/NDF: 1121668.5/18

Left In: 81.659+/-0.016 $\chi^2$/NDF:100463.8/15

+ sign 81.295+/-0.013 $\chi^2$/NDF: 1139503.5/32

All: 81.992+/-0.009 $\chi^2$/NDF: 2381241.0/67

- sign 82.717+/-0.013 $\chi^2$/NDF: 1235708.8/34




Right In: -231.405+/-170.132 $\chi^2$/NDF: 10.4/15

Left Out: 1.581+/-93.960 $\chi^2$/NDF:19.0/16

Right Out: 197.207+/-176.091 $\chi^2$/NDF: 15.9/18

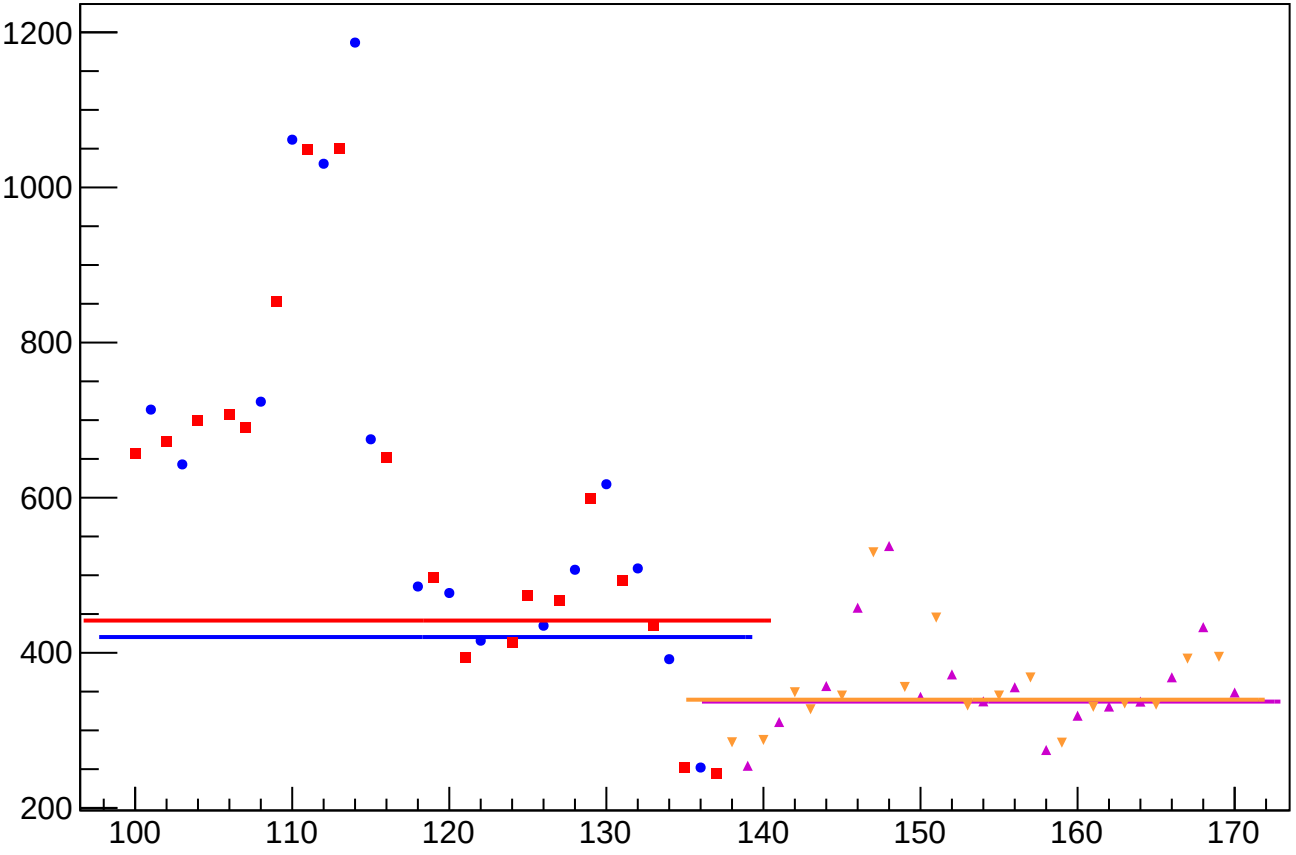
Left In: 18.608+/-94.411 $\chi^2$/NDF:30.1/15

\+ sign -52.872+/-82.250 $\chi^2$/NDF: 30.9/32

All: 2.162+/-58.495 $\chi^2$/NDF: 78.5/67

\- sign 58.485+/-83.207 $\chi^2$/NDF: 46.8/34

# asym_sam1_eigen_dit_correction_rms vs Slug




Right In: 420.329+/-0.120 $\chi^2$/NDF: 2254614.9/15

Left Out: 339.556+/-0.066 $\chi^2$/NDF:557491.9/16

Right Out: 441.597+/-0.125 $\chi^2$/NDF: 2307595.1/18

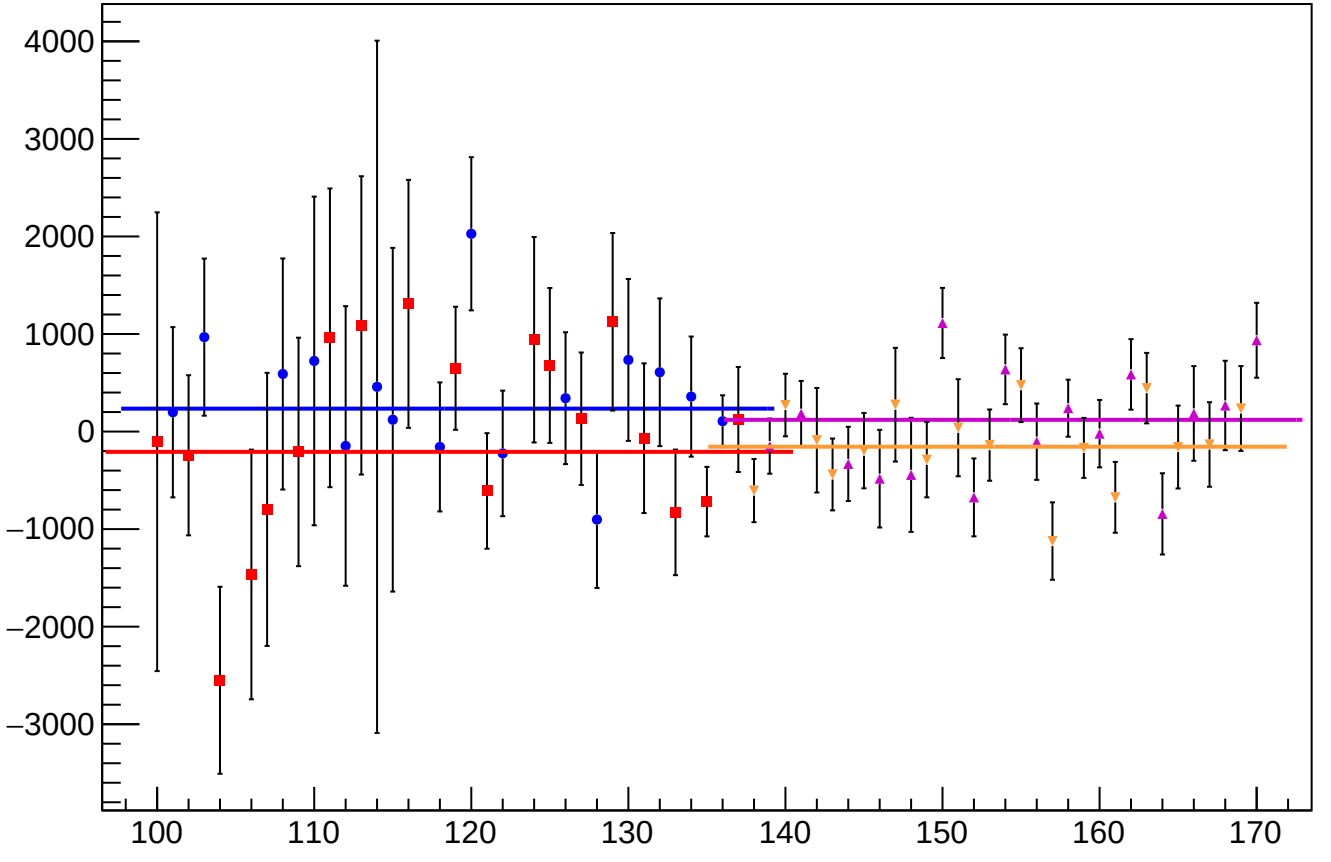
Left In: 337.120+/-0.067 $\chi^2$/NDF:756573.8/15

+ sign 358.434+/-0.058 $\chi^2$/NDF: 3157543.1/32

All: 359.429+/-0.041 $\chi^2$/NDF: 6769143.0/67

- sign 360.447+/-0.059 $\chi^2$/NDF: 3611007.8/34

# asym_sam1_mean vs Slug




Right In: 235.054+/-168.199 $\chi^2$/NDF: 10.7/15

Left Out: -155.242+/-93.938 $\chi^2$/NDF:19.5/16

Right Out: -207.936+/-174.716 $\chi^2$/NDF: 20.4/18

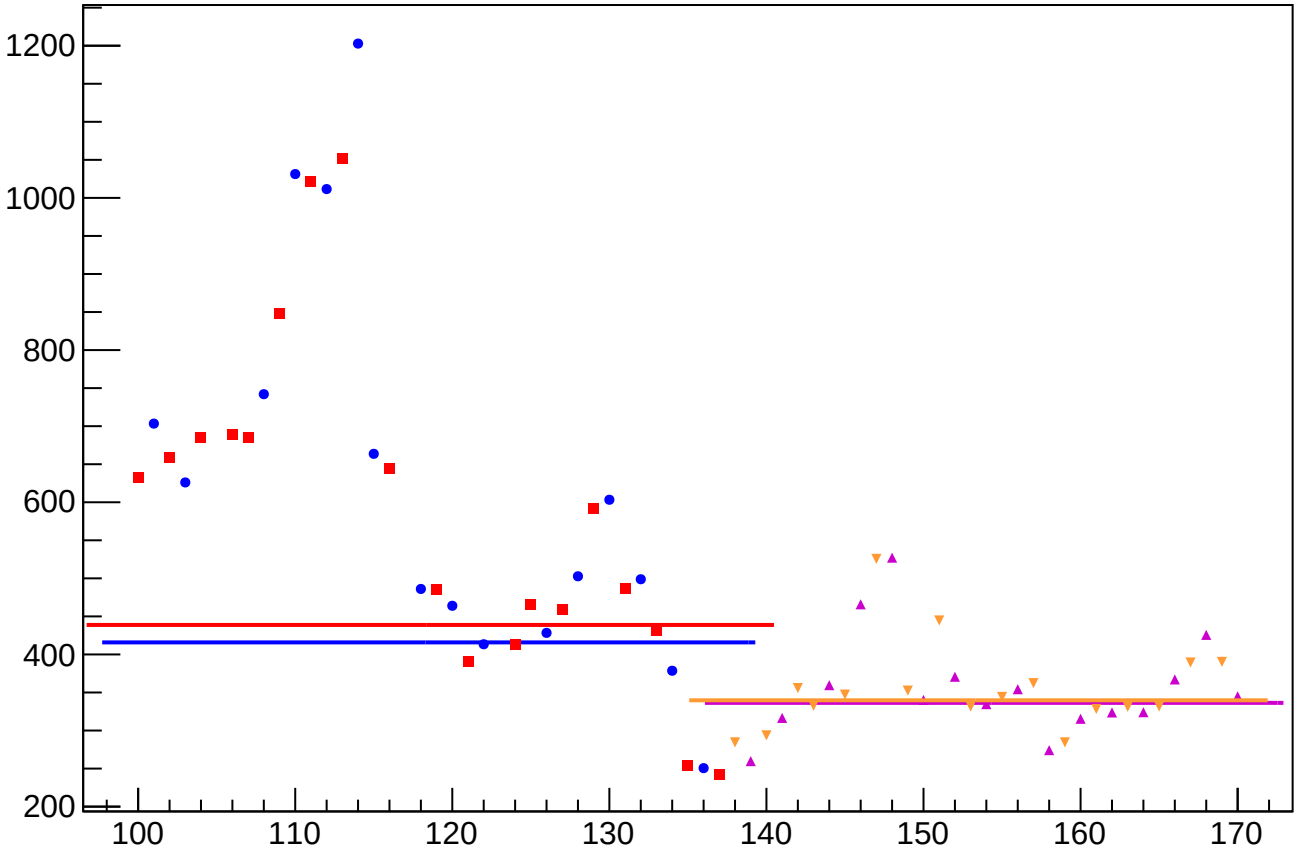
Left In: 120.377+/-94.126 $\chi^2$/NDF:30.8/15

+ sign -62.447+/-82.014 $\chi^2$/NDF: 34.3/32

All: -8.525+/-58.291 $\chi^2$/NDF: 89.0/67

- sign 46.523+/-82.866 $\chi^2$/NDF: 53.9/34

# asym_sam1_rms vs Slug




Right In: 415.840+/-0.119 $\chi^2$/NDF: 2223949.6/15

Left Out: 339.731+/-0.066 $\chi^2$/NDF:526804.3/16

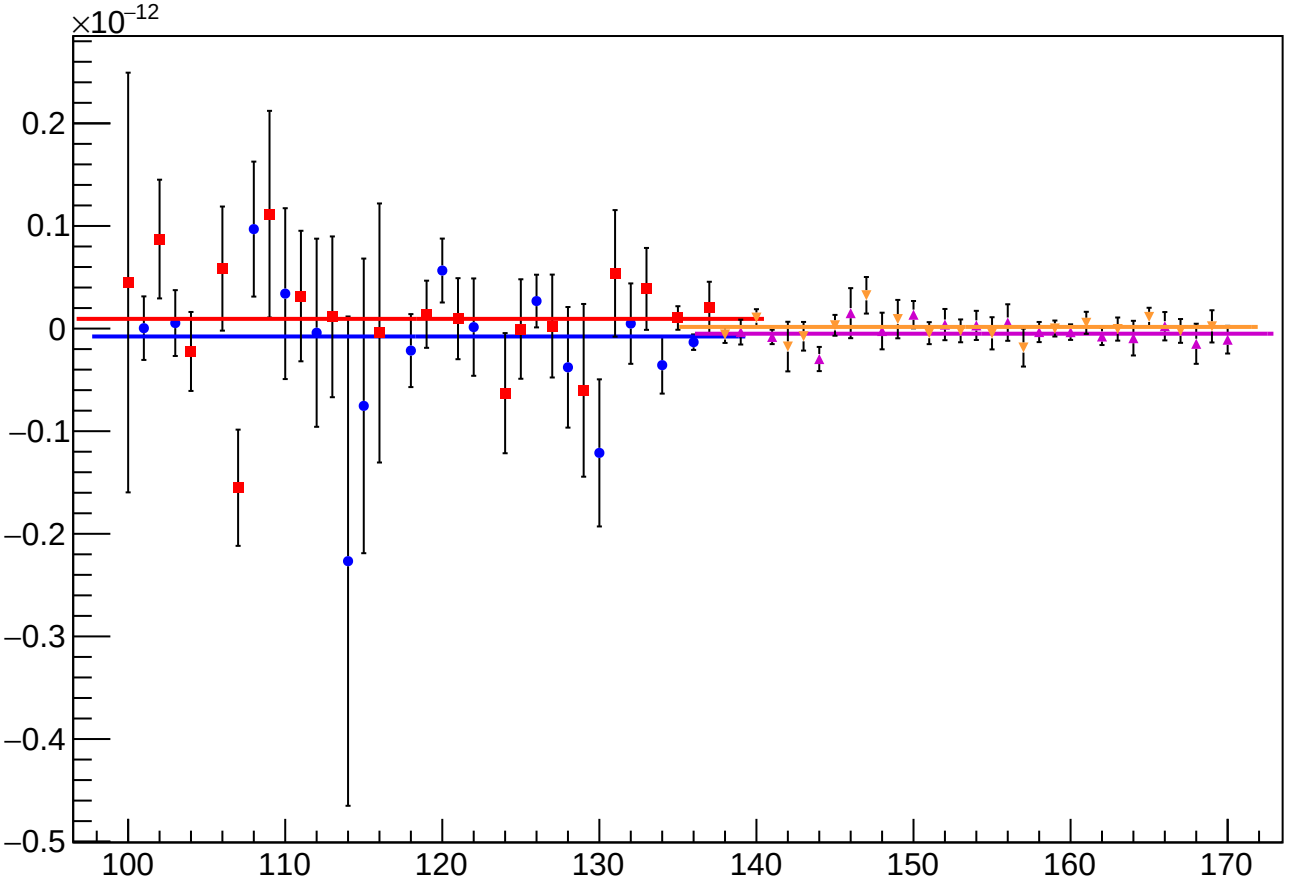
Right Out: 438.773+/-0.124 $\chi^2$/NDF: 2234776.6/18

Left In: 336.360+/-0.067 $\chi^2$/NDF:714374.0/15

+ sign 357.826+/-0.058 $\chi^2$/NDF: 3062887.6/32

All: 358.604+/-0.041 $\chi^2$/NDF: 6545011.8/67

- sign 359.397+/-0.059 $\chi^2$/NDF: 3481761.1/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:9.5/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 16.3/18

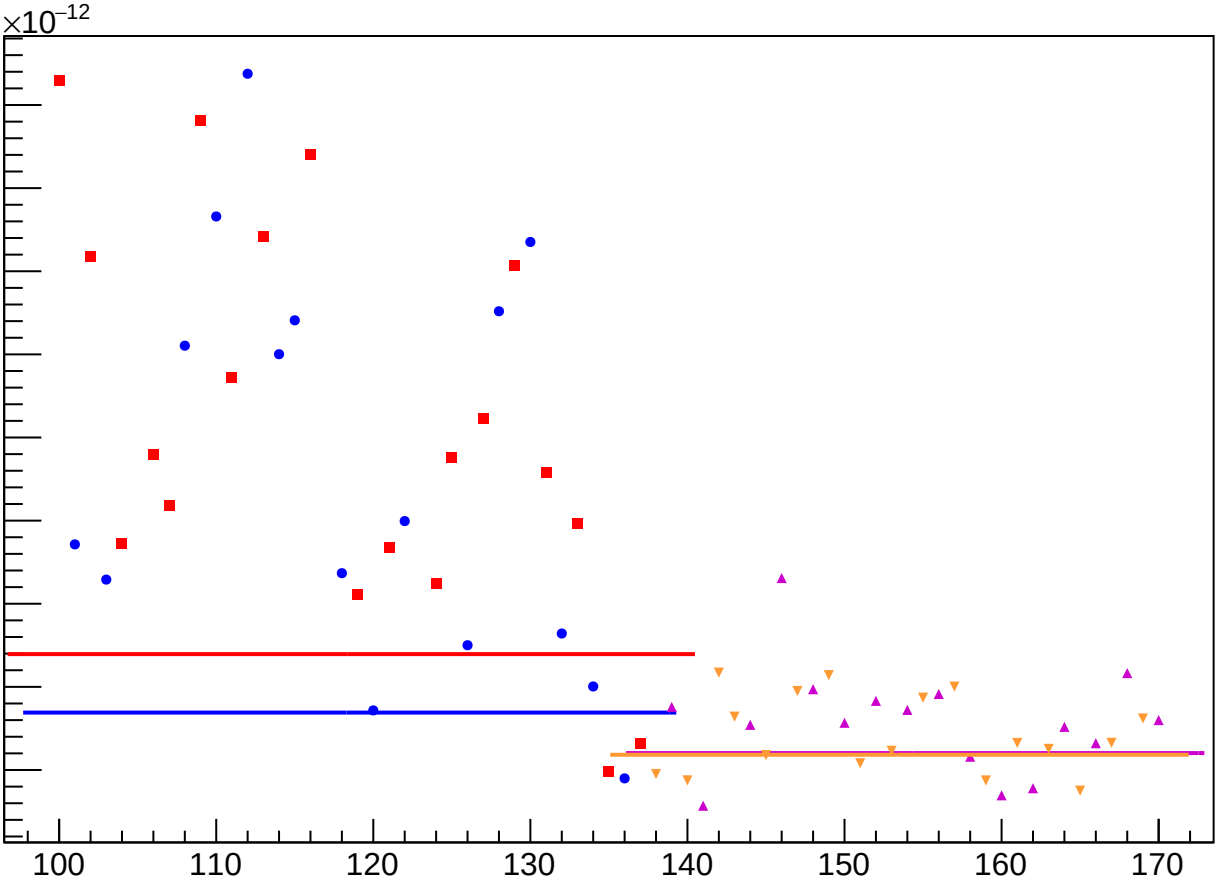
Left In: -0.000+/-0.000 $\chi^2$/NDF:9.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 26.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 55.4/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 28.3/34

# asym_sam1_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2756090.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:921870.6/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2760154.9/18

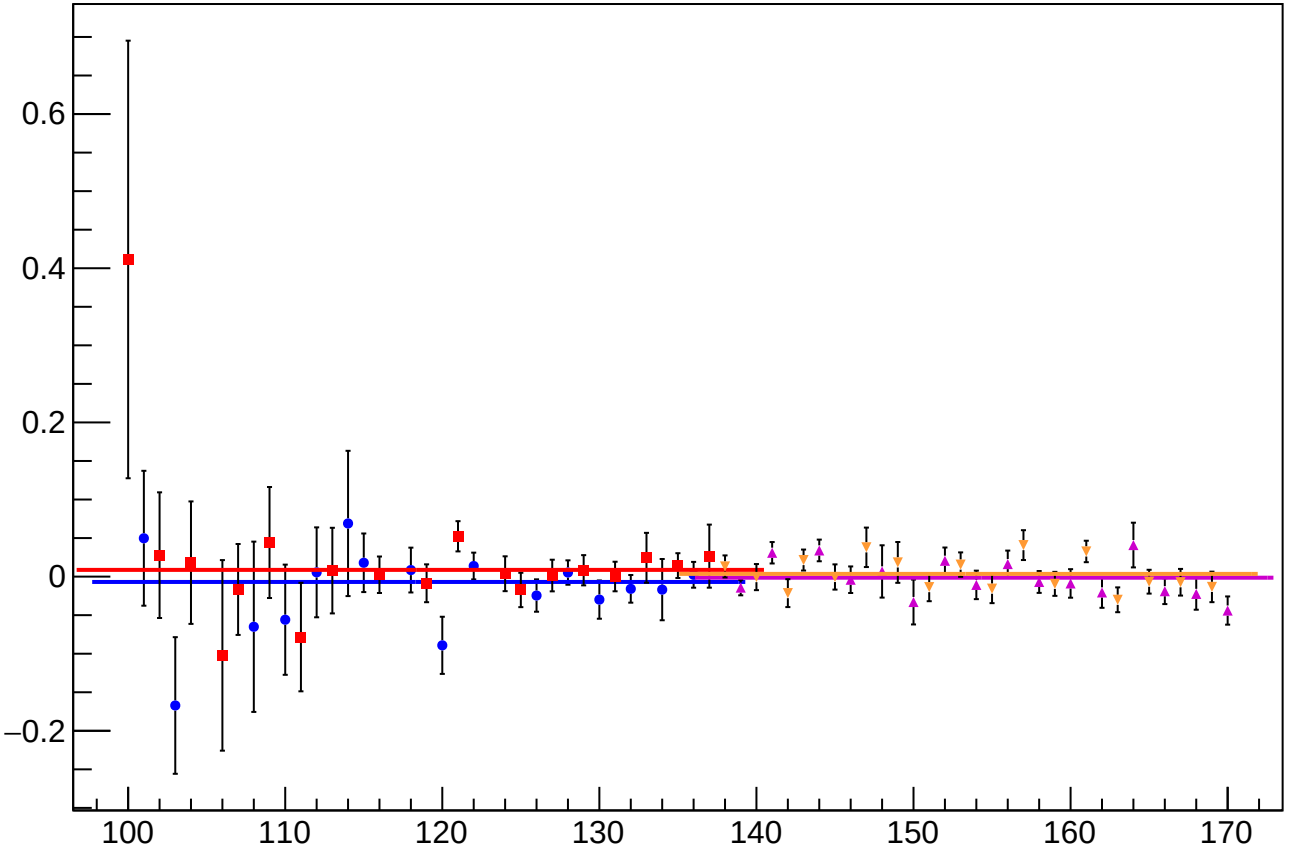
Left In: 0.000+/-0.000 $\chi^2$/NDF:1827681.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3960819.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 9511683.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5531932.3/34

# asym_sam1_dit_vs_cor_diff_mean vs Slug




Right In: -0.007+/-0.007 $\chi^2$/NDF: 14.9/15

Left Out: 0.004+/-0.004 $\chi^2$/NDF:23.5/16

Right Out: 0.009+/-0.006 $\chi^2$/NDF: 12.6/18

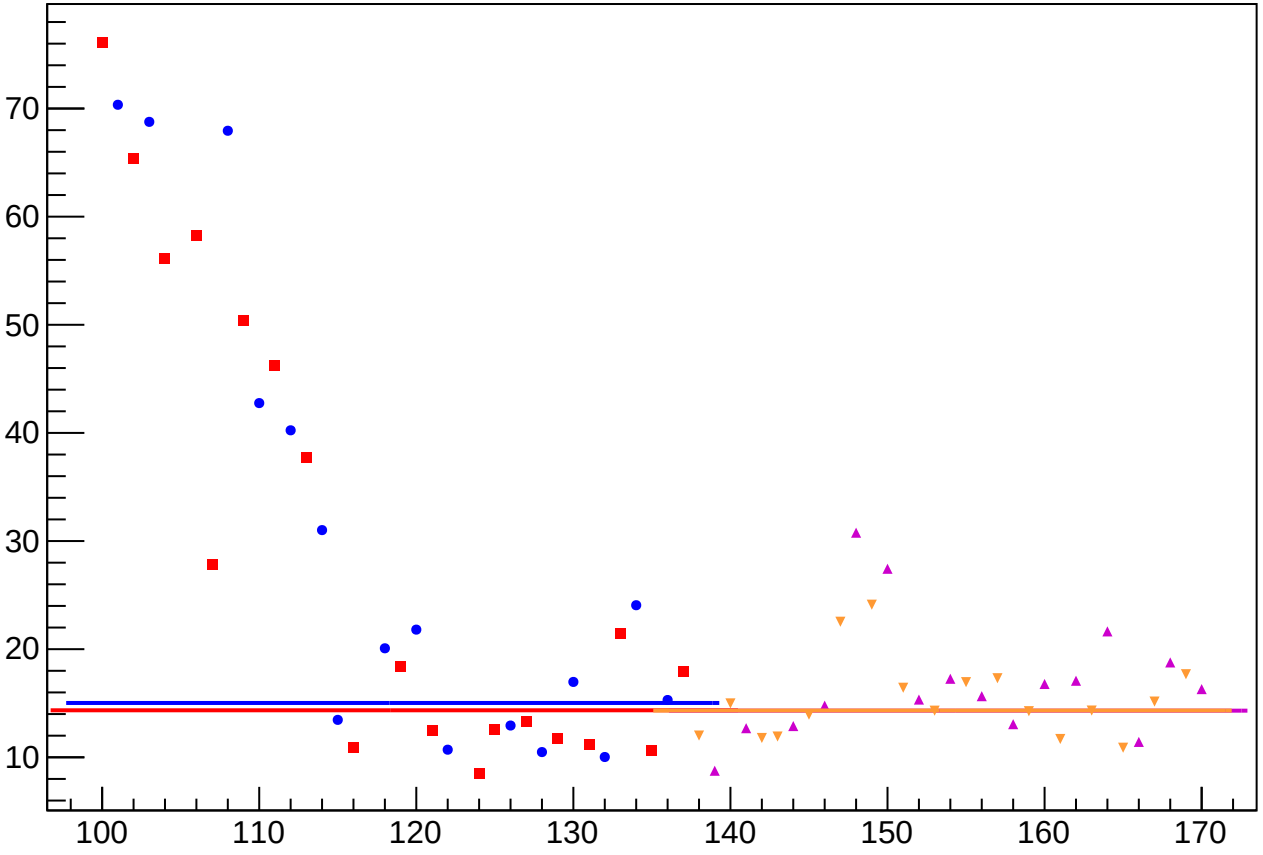
Left In: -0.001+/-0.004 $\chi^2$/NDF:28.5/15

+ sign 0.001+/-0.004 $\chi^2$/NDF: 40.2/32

All: 0.001+/-0.002 $\chi^2$/NDF: 83.1/67

- sign 0.002+/-0.004 $\chi^2$/NDF: 42.9/34

# asym_sam1_dit_vs_cor_diff_rms vs Slug




Right In: 15.026+/-0.005 $\chi^2$/NDF: 3438260.9/15

Left Out: 14.328+/-0.003 $\chi^2$/NDF:983289.7/16

Right Out: 14.348+/-0.005 $\chi^2$/NDF: 3629014.9/18

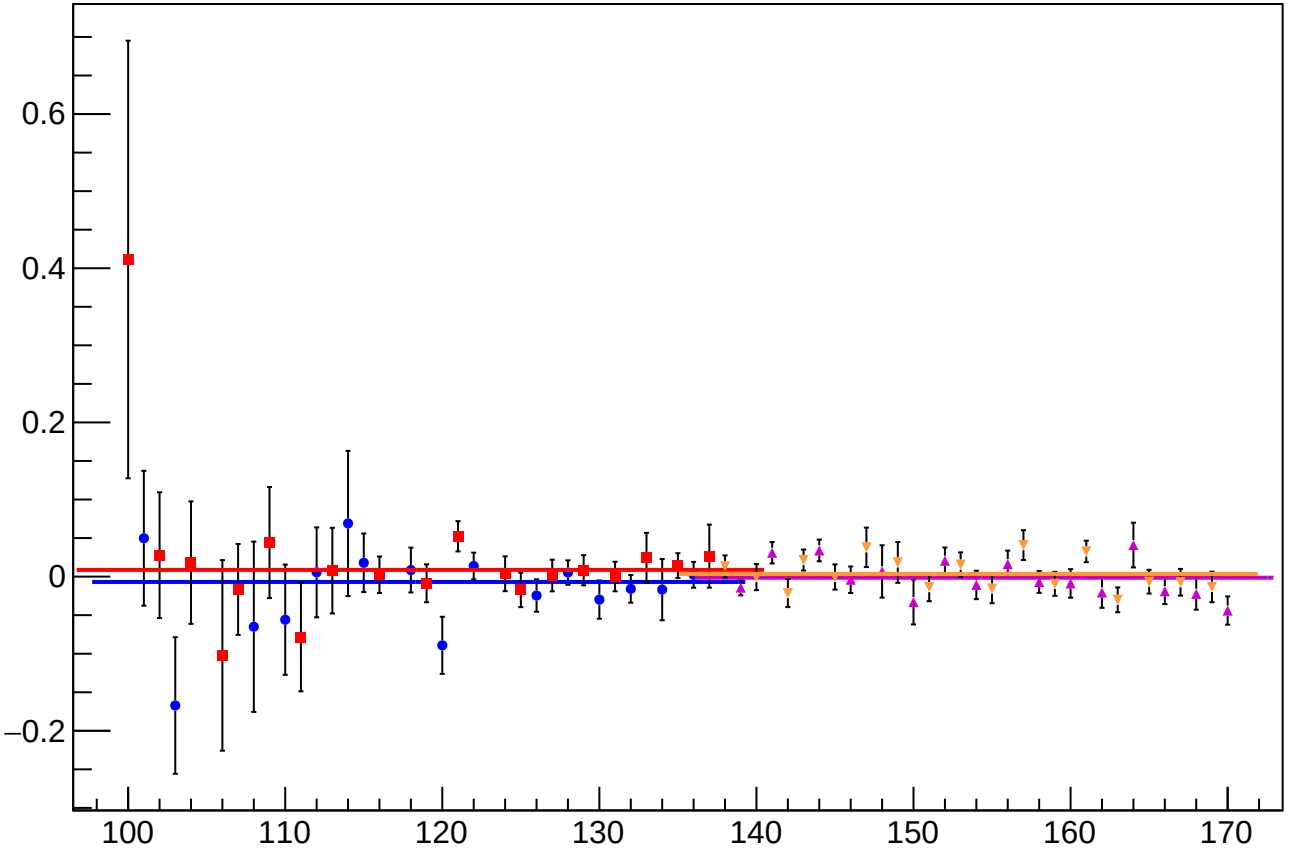
Left In: 14.314+/-0.003 $\chi^2$/NDF:2003151.1/15

+ sign 14.517+/-0.002 $\chi^2$/NDF: 4437208.0/32

All: 14.421+/-0.002 $\chi^2$/NDF: 10072420.4/67

- sign 14.324+/-0.002 $\chi^2$/NDF: 5632206.8/34

# asym_sam1_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.007+/-0.007 $\chi^2$/NDF: 14.9/15

Left Out: 0.004+/-0.004 $\chi^2$/NDF:23.5/16

Right Out: 0.009+/-0.006 $\chi^2$/NDF: 12.6/18

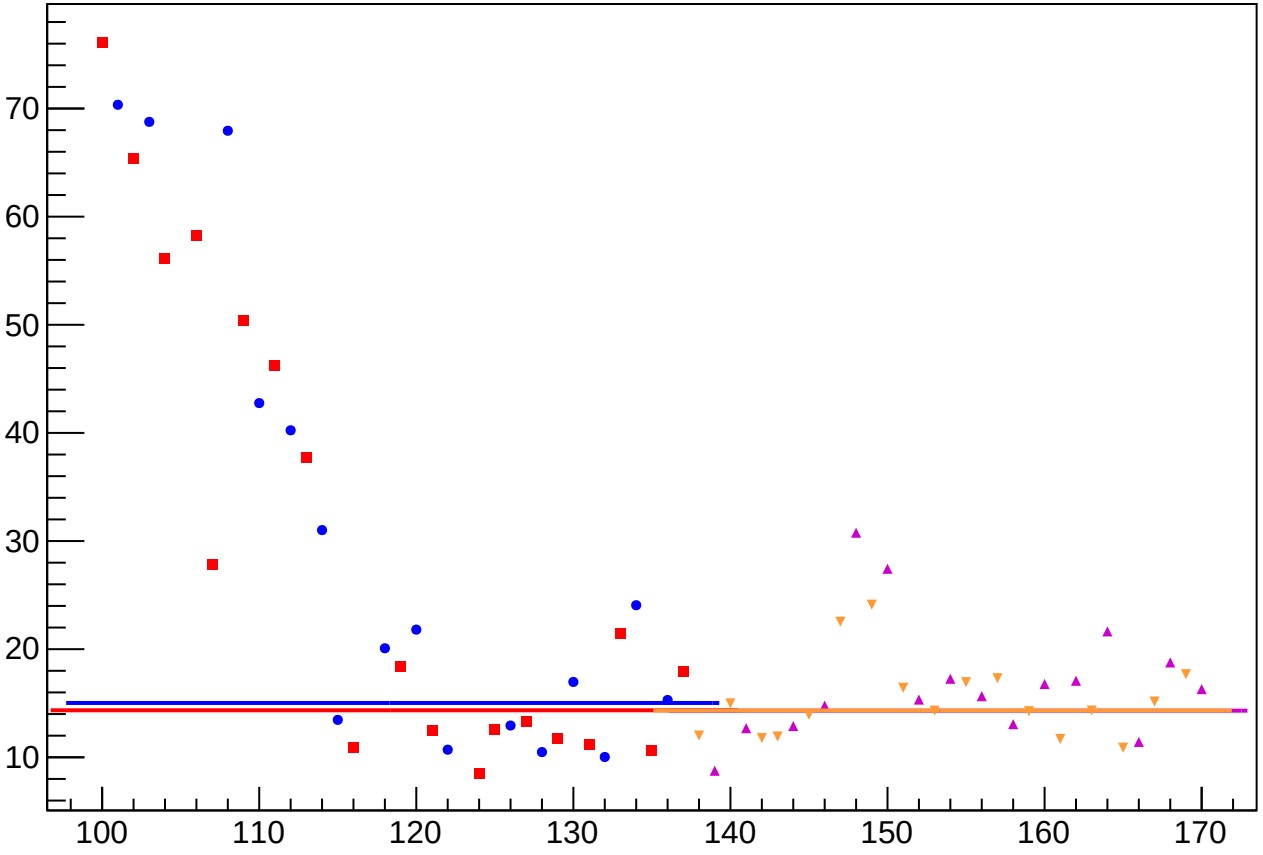
Left In: -0.001+/-0.004 $\chi^2$/NDF:28.5/15

+ sign 0.001+/-0.004 $\chi^2$/NDF: 40.2/32

All: 0.001+/-0.002 $\chi^2$/NDF: 83.1/67

- sign 0.002+/-0.004 $\chi^2$/NDF: 42.9/34

# asym_sam1_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 15.026+/-0.005 $\chi^2$/NDF: 3438260.9/15

Left Out: 14.328+/-0.003 $\chi^2$/NDF:983289.7/16

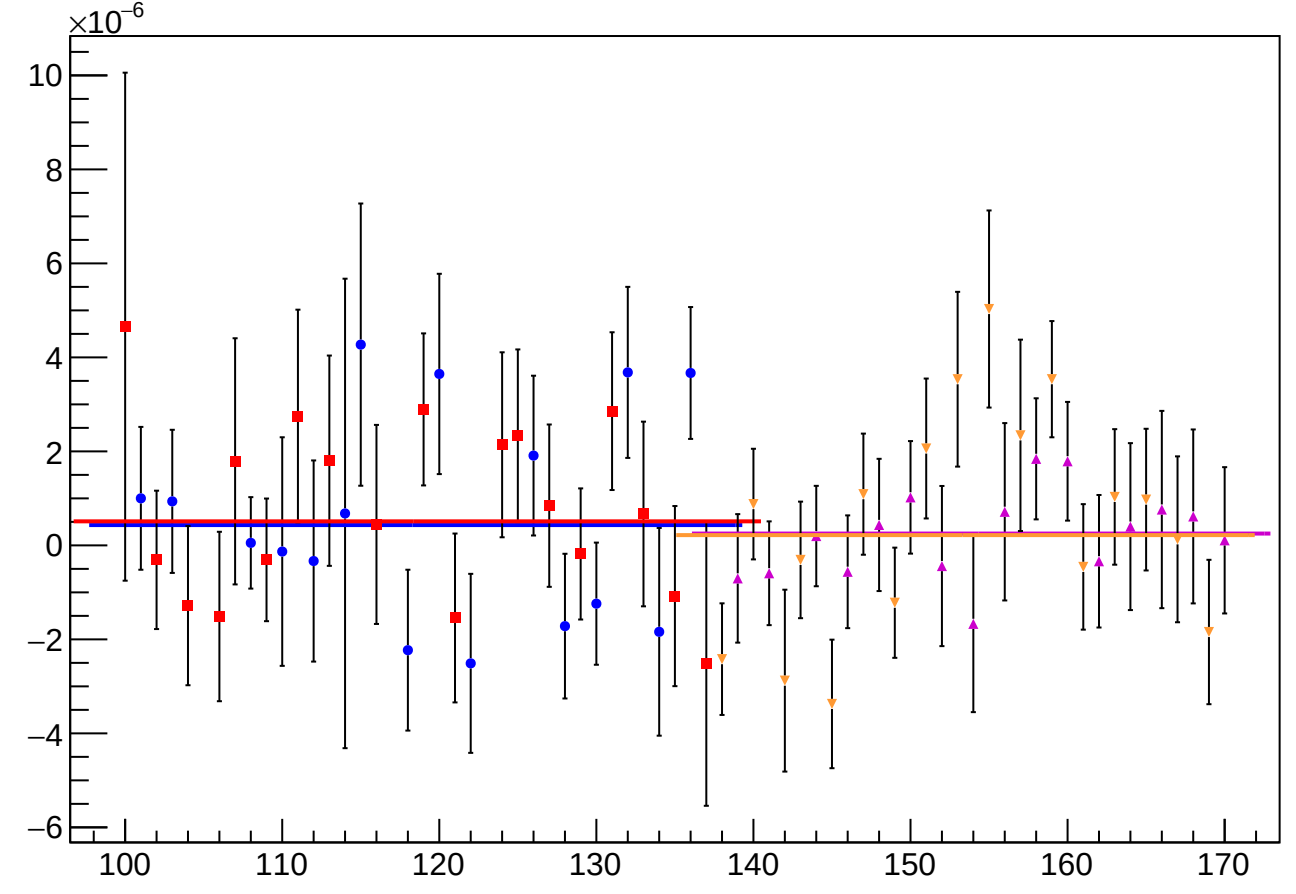
Right Out: 14.348+/-0.005 $\chi^2$/NDF: 3629014.9/18

Left In: 14.314+/-0.003 $\chi^2$/NDF:2003151.1/15

+ sign 14.517+/-0.002 $\chi^2$/NDF: 4437208.0/32

All: 14.421+/-0.002 $\chi^2$/NDF: 10072420.4/67

- sign 14.324+/-0.002 $\chi^2$/NDF: 5632206.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 23.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:37.8/16

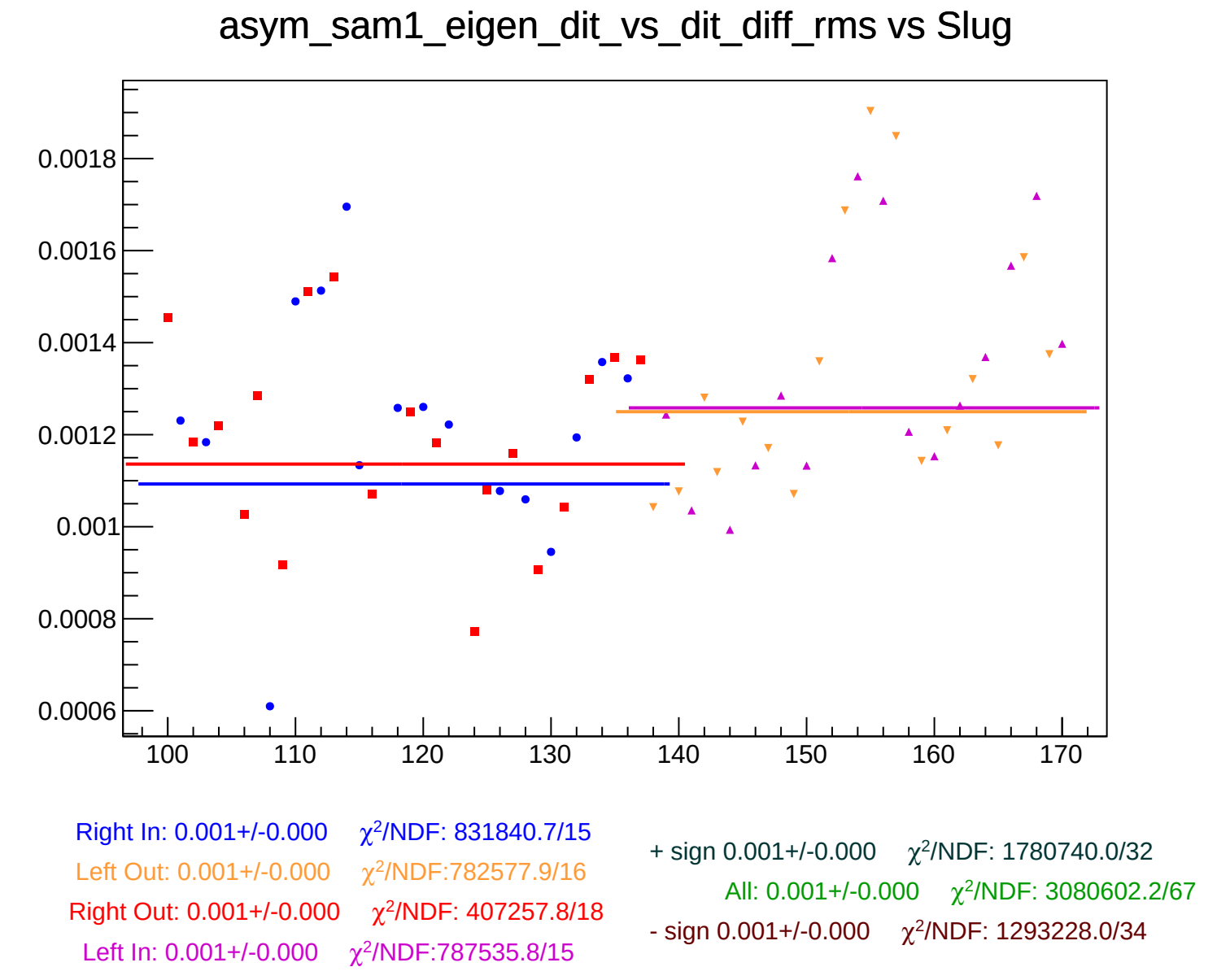
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:6.5/15

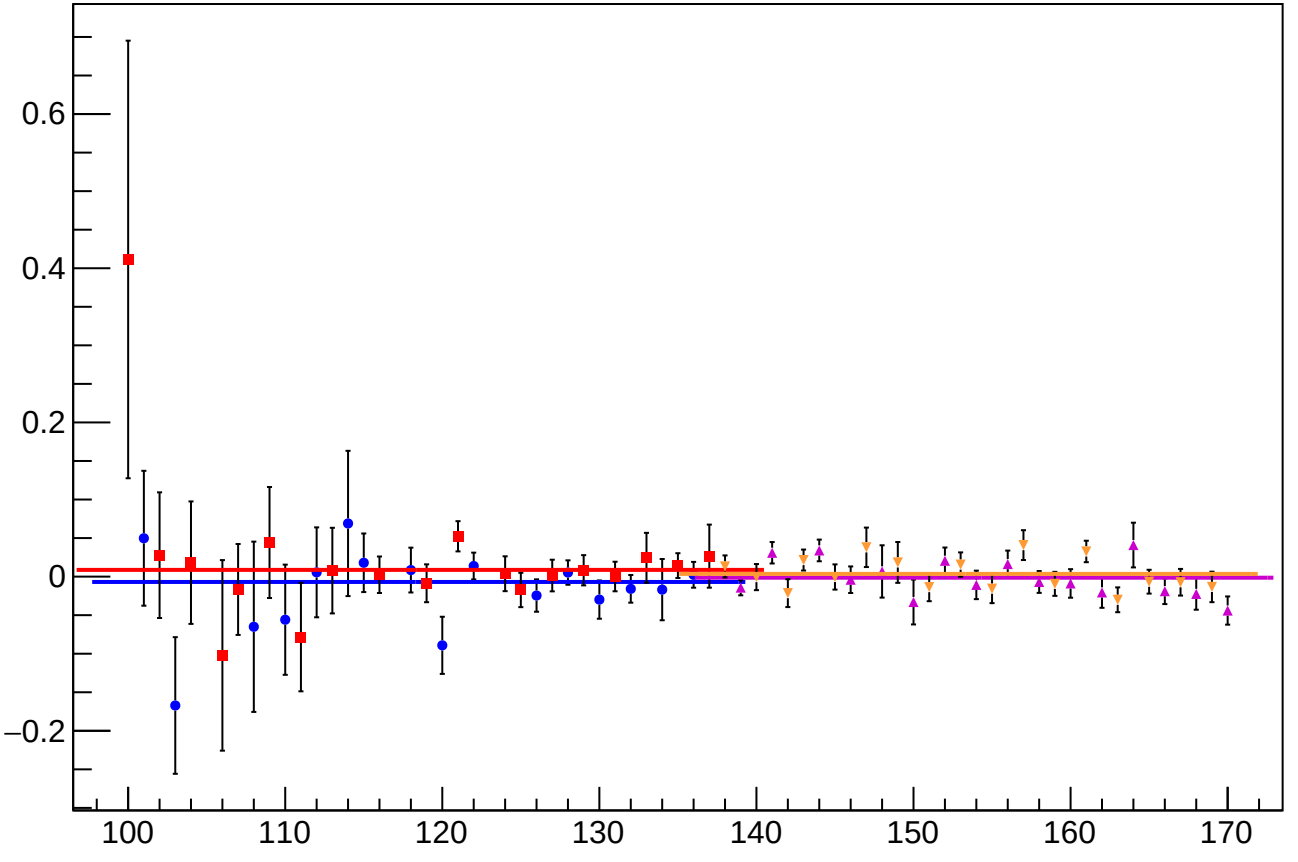
+ sign 0.000+/-0.000 $\chi^2$/NDF: 61.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 82.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 21.1/34


asym_sam1_eigen_dit_vs_dit_diff_rms vs Slug
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 831840.7/15
Left Out: 0.001+/-0.000 χ²/NDF:782577.9/16
Right Out: 0.001+/-0.000 χ²/NDF: 407257.8/18
Left In: 0.001+/-0.000 χ²/NDF:787535.8/15
+ sign 0.001+/-0.000 χ²/NDF: 1780740.0/32
All: 0.001+/-0.000 χ²/NDF: 3080602.2/67
- sign 0.001+/-0.000 χ²/NDF: 1293228.0/34

# asym_sam1_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.007+/-0.007 $\chi^2$/NDF: 14.9/15

Left Out: 0.004+/-0.004 $\chi^2$/NDF:23.5/16

Right Out: 0.009+/-0.006 $\chi^2$/NDF: 12.6/18

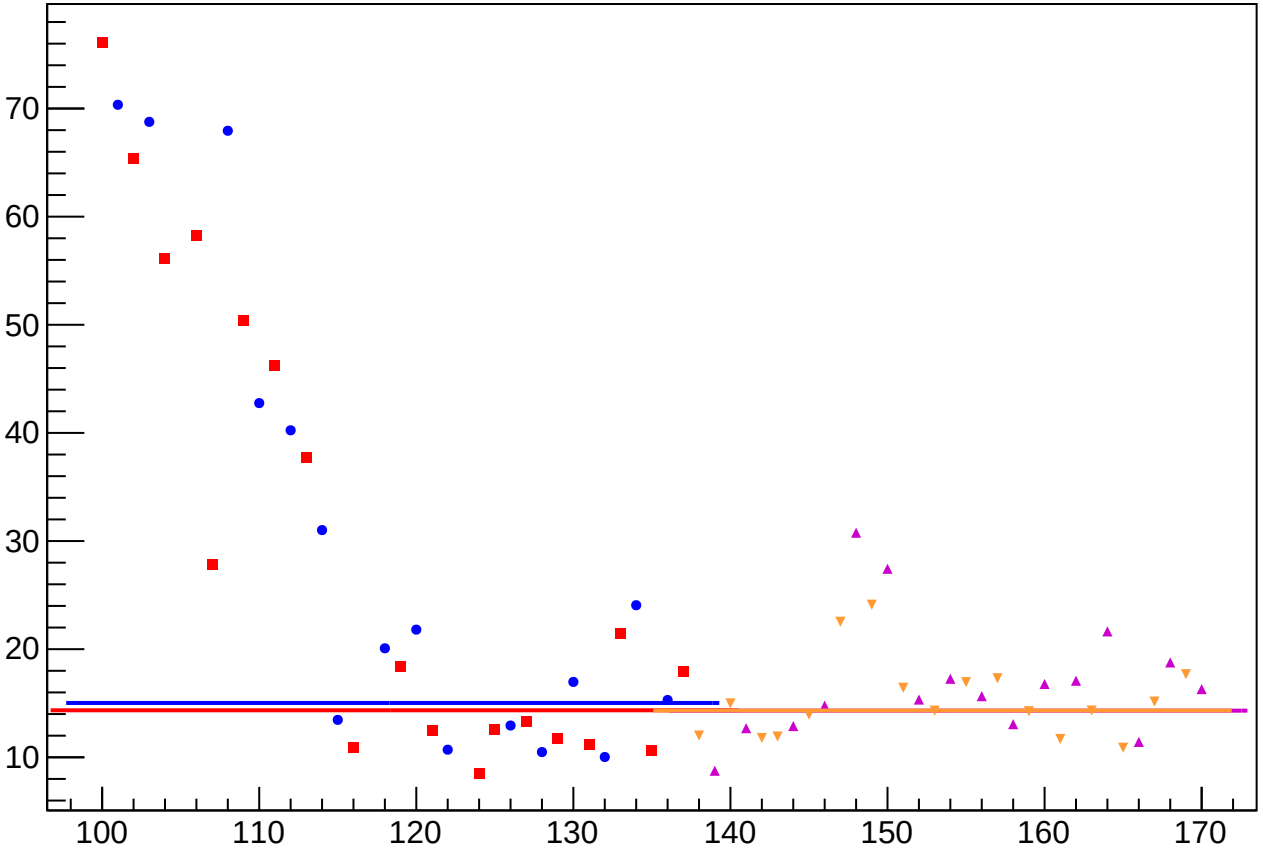
Left In: -0.001+/-0.004 $\chi^2$/NDF:28.5/15

+ sign 0.001+/-0.004 $\chi^2$/NDF: 40.2/32

All: 0.001+/-0.002 $\chi^2$/NDF: 83.1/67

- sign 0.002+/-0.004 $\chi^2$/NDF: 42.9/34

# asym_sam1_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 15.025+/-0.005 $\chi^2$/NDF: 3438279.3/15

Left Out: 14.328+/-0.003 $\chi^2$/NDF:983355.4/16

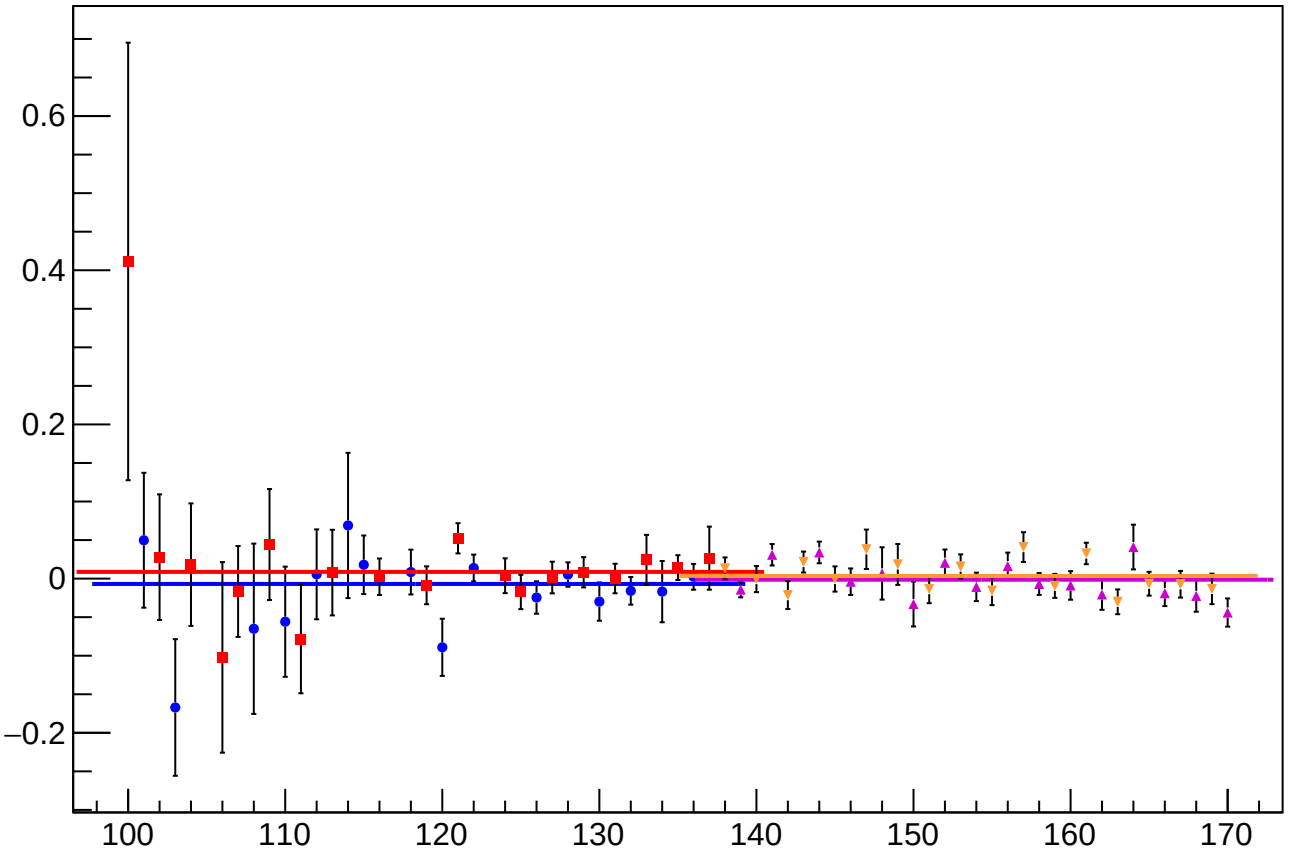
Right Out: 14.348+/-0.005 $\chi^2$/NDF: 3629004.9/18

Left In: 14.313+/-0.003 $\chi^2$/NDF:2003217.2/15

+ sign 14.517+/-0.002 $\chi^2$/NDF: 4437288.5/32

All: 14.421+/-0.002 $\chi^2$/NDF: 10072556.3/67

- sign 14.324+/-0.002 $\chi^2$/NDF: 5632263.0/34




Right In: -0.007+/-0.007 $\chi^2$/NDF: 14.9/15

Left Out: 0.004+/-0.004 $\chi^2$/NDF:23.5/16

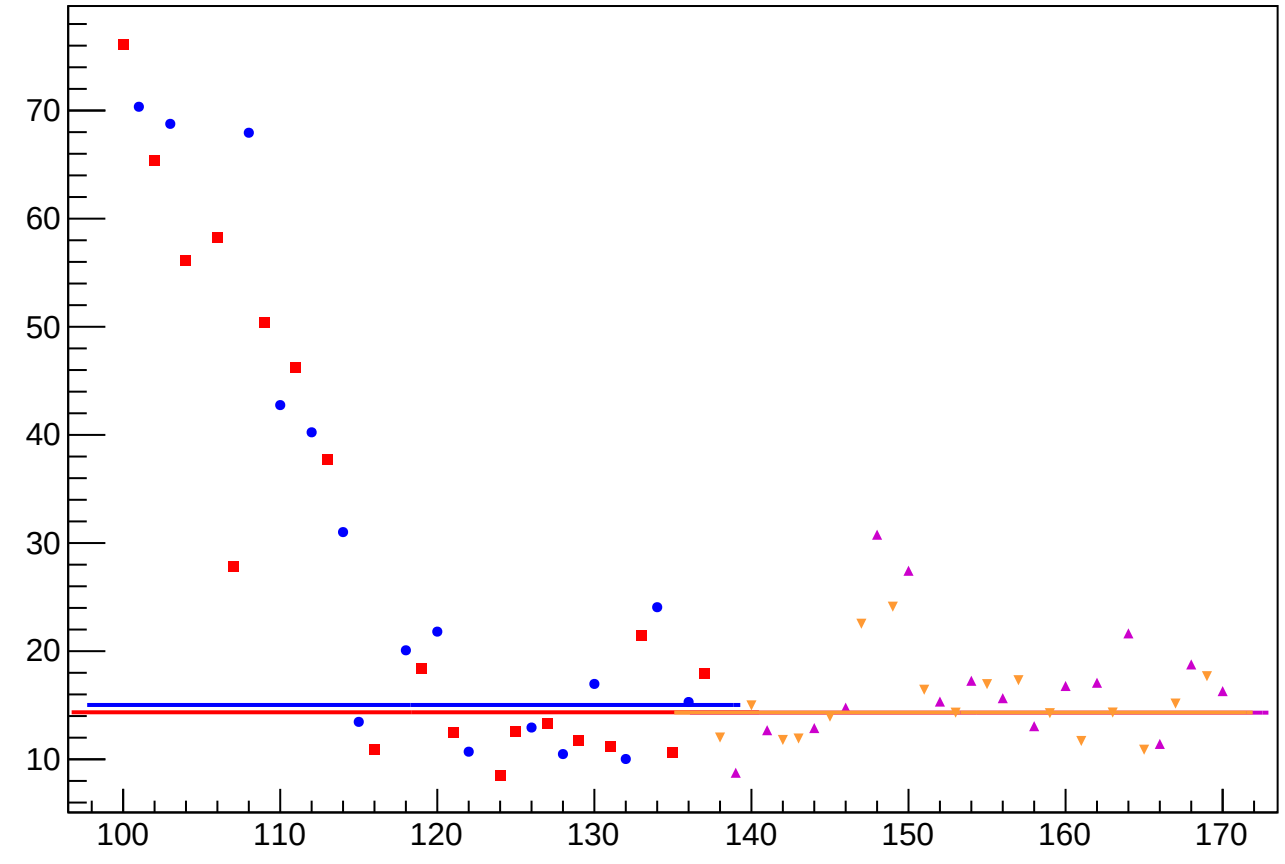
Right Out: 0.009+/-0.006 $\chi^2$/NDF: 12.6/18

Left In: -0.001+/-0.004 $\chi^2$/NDF:28.5/15

+ sign 0.001+/-0.004 $\chi^2$/NDF: 40.2/32

All: 0.001+/-0.002 $\chi^2$/NDF: 83.1/67

- sign 0.002+/-0.004 $\chi^2$/NDF: 42.9/34




Right In: 15.025+/-0.005 $\chi^2$/NDF: 3438279.3/15

Left Out: 14.328+/-0.003 $\chi^2$/NDF:983355.4/16

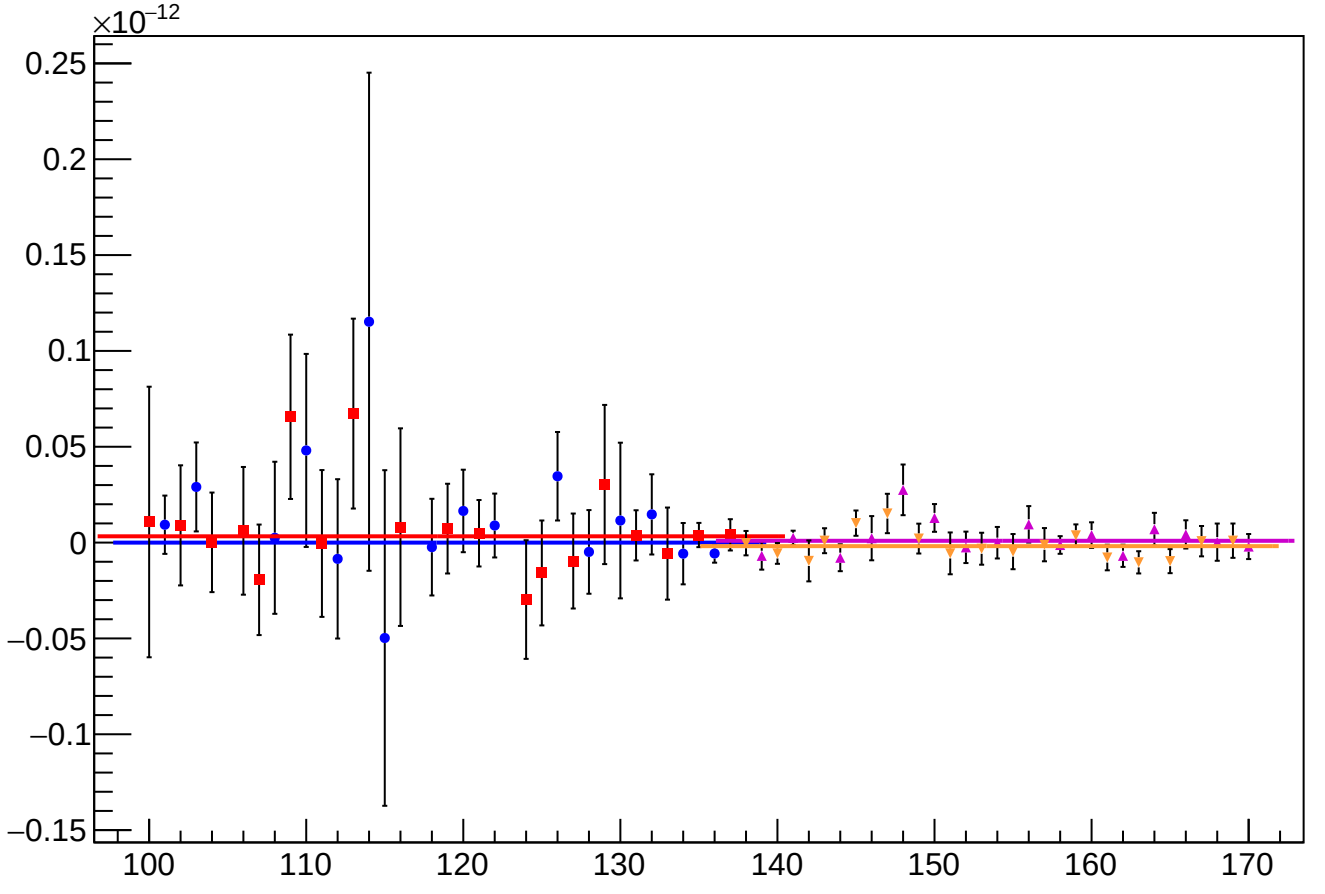
Right Out: 14.348+/-0.005 $\chi^2$/NDF: 3629004.9/18

Left In: 14.313+/-0.003 $\chi^2$/NDF:2003217.2/15

+ sign 14.517+/-0.002 $\chi^2$/NDF: 4437288.5/32

All: 14.421+/-0.002 $\chi^2$/NDF: 10072556.3/67

- sign 14.324+/-0.002 $\chi^2$/NDF: 5632263.0/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 9.3/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:13.5/16

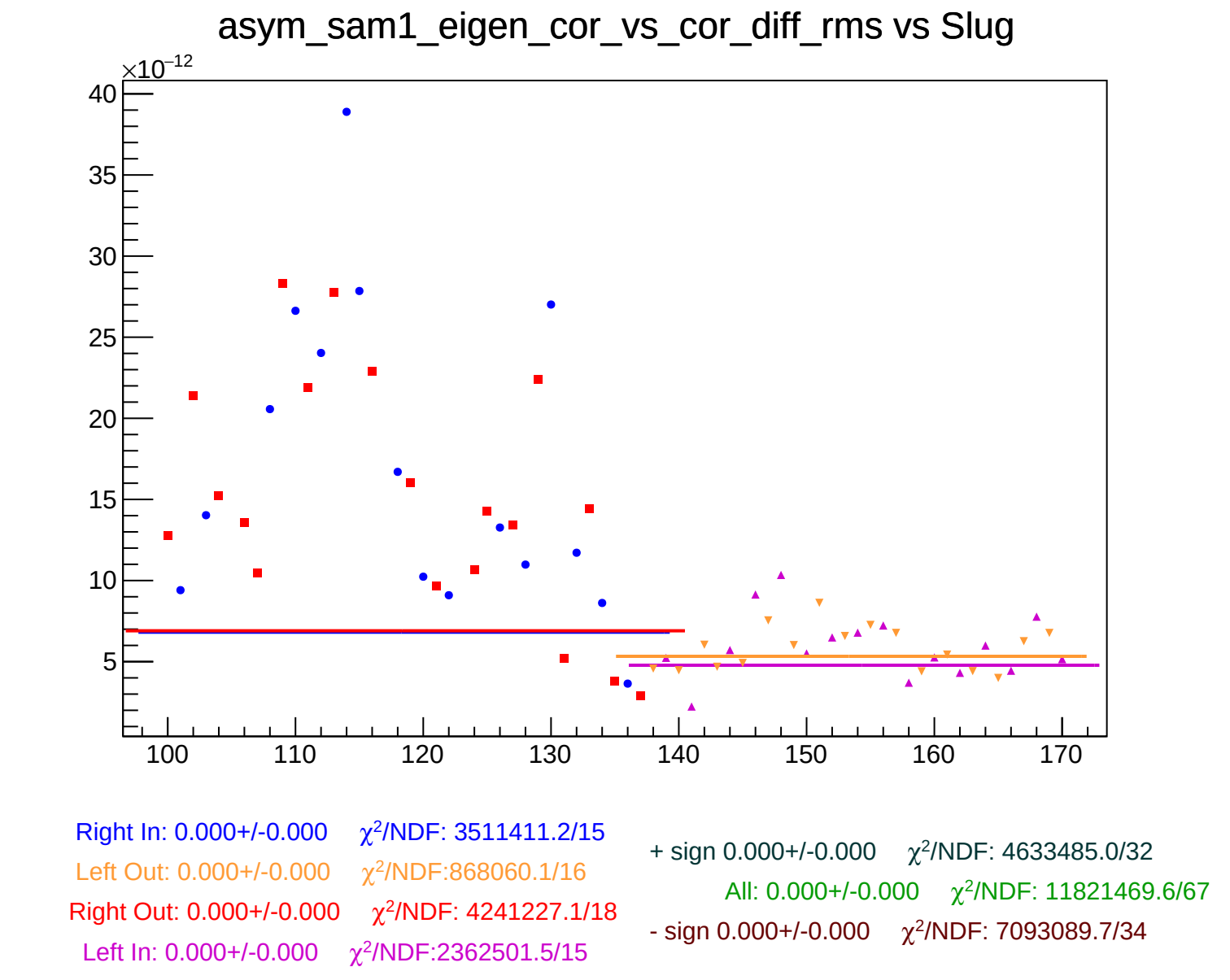
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 7.0/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:13.9/15

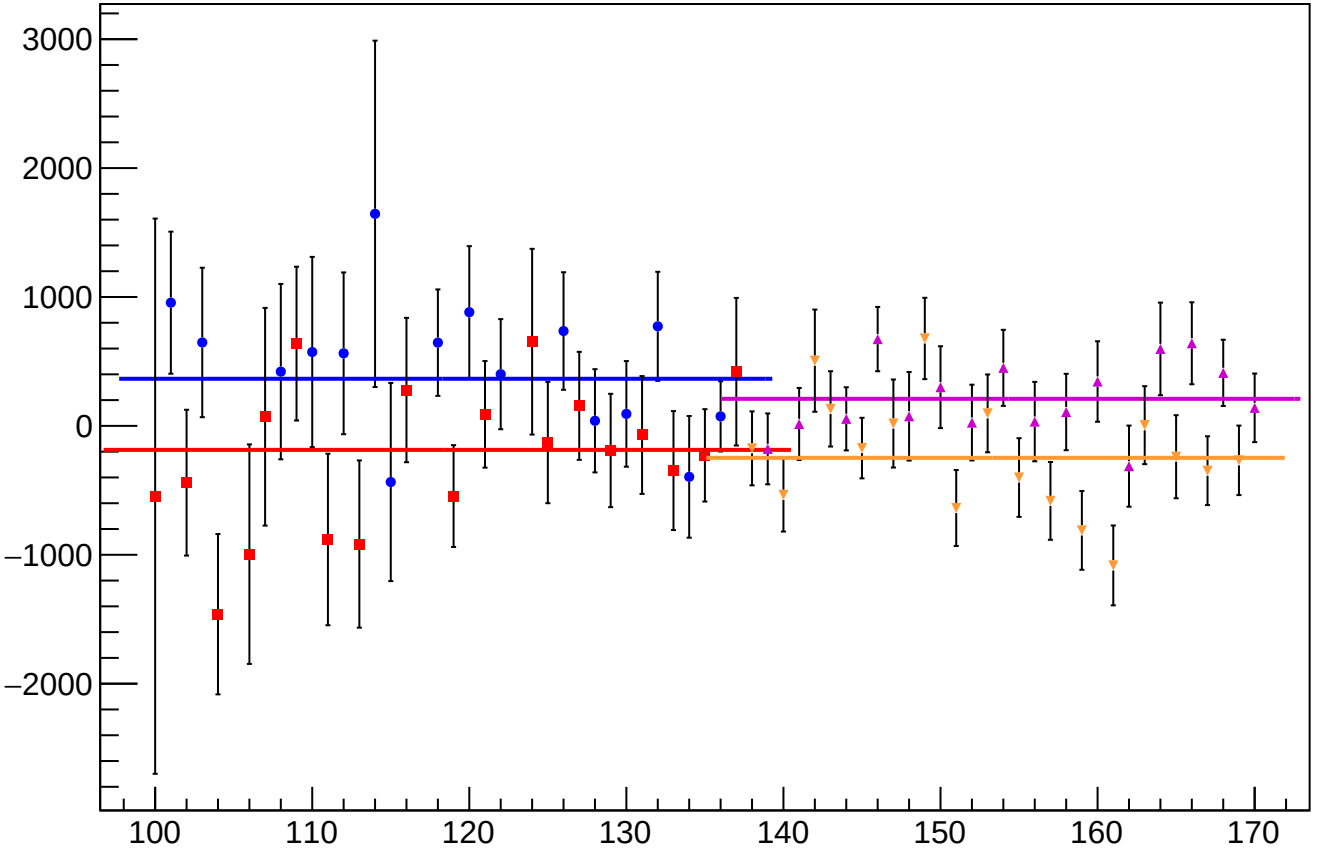
+ sign -0.000+/-0.000 $\chi^2$/NDF: 23.0/32

All: -0.000+/-0.000 $\chi^2$/NDF: 45.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 21.2/34


asym_sam1_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
40
35
30
25
20
15
10
5
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3511411.2/15
Left Out: 0.000+/-0.000 χ²/NDF:868060.1/16
Right Out: 0.000+/-0.000 χ²/NDF: 4241227.1/18
Left In: 0.000+/-0.000 χ²/NDF:2362501.5/15
+ sign 0.000+/-0.000 χ²/NDF: 4633485.0/32
All: 0.000+/-0.000 χ²/NDF: 11821469.6/67
- sign 0.000+/-0.000 χ²/NDF: 7093089.7/34

# reg_asym_sam2_mean vs Slug




Right In: 365.540+/-118.873 $\chi^2$/NDF: 11.5/15

Left Out: -247.839+/-71.979 $\chi^2$/NDF:31.7/16

Right Out: -186.141+/-120.188 $\chi^2$/NDF: 15.0/18

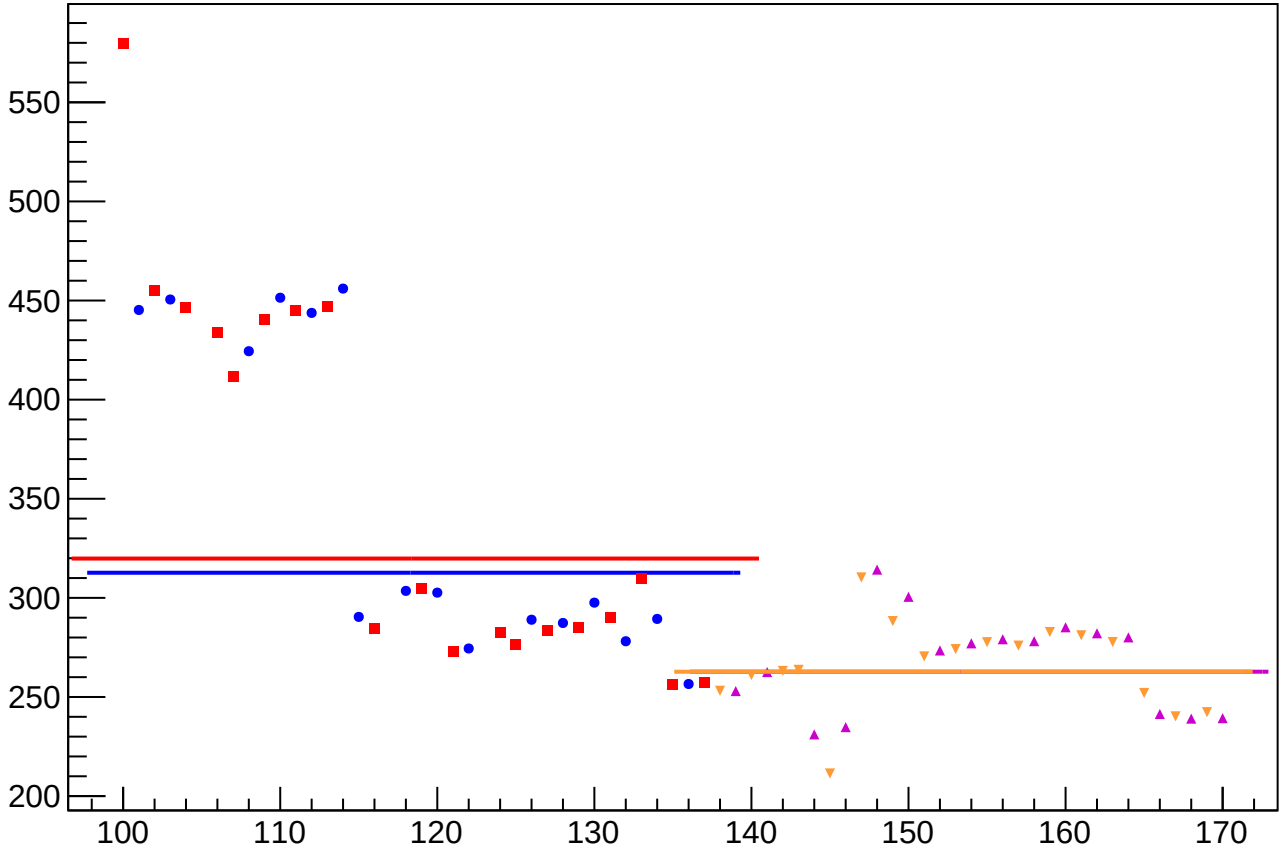
Left In: 209.939+/-72.658 $\chi^2$/NDF:14.7/15

+ sign -83.282+/-61.571 $\chi^2$/NDF: 62.7/32

All: 9.403+/-43.751 $\chi^2$/NDF: 104.9/67

- sign 103.928+/-62.179 $\chi^2$/NDF: 37.7/34

# reg_asym_sam2_rms vs Slug




Right In: 312.683+/-0.084 $\chi^2$/NDF: 602207.7/15

Left Out: 262.739+/-0.051 $\chi^2$/NDF:210992.1/16

Right Out: 319.841+/-0.085 $\chi^2$/NDF: 697878.1/18

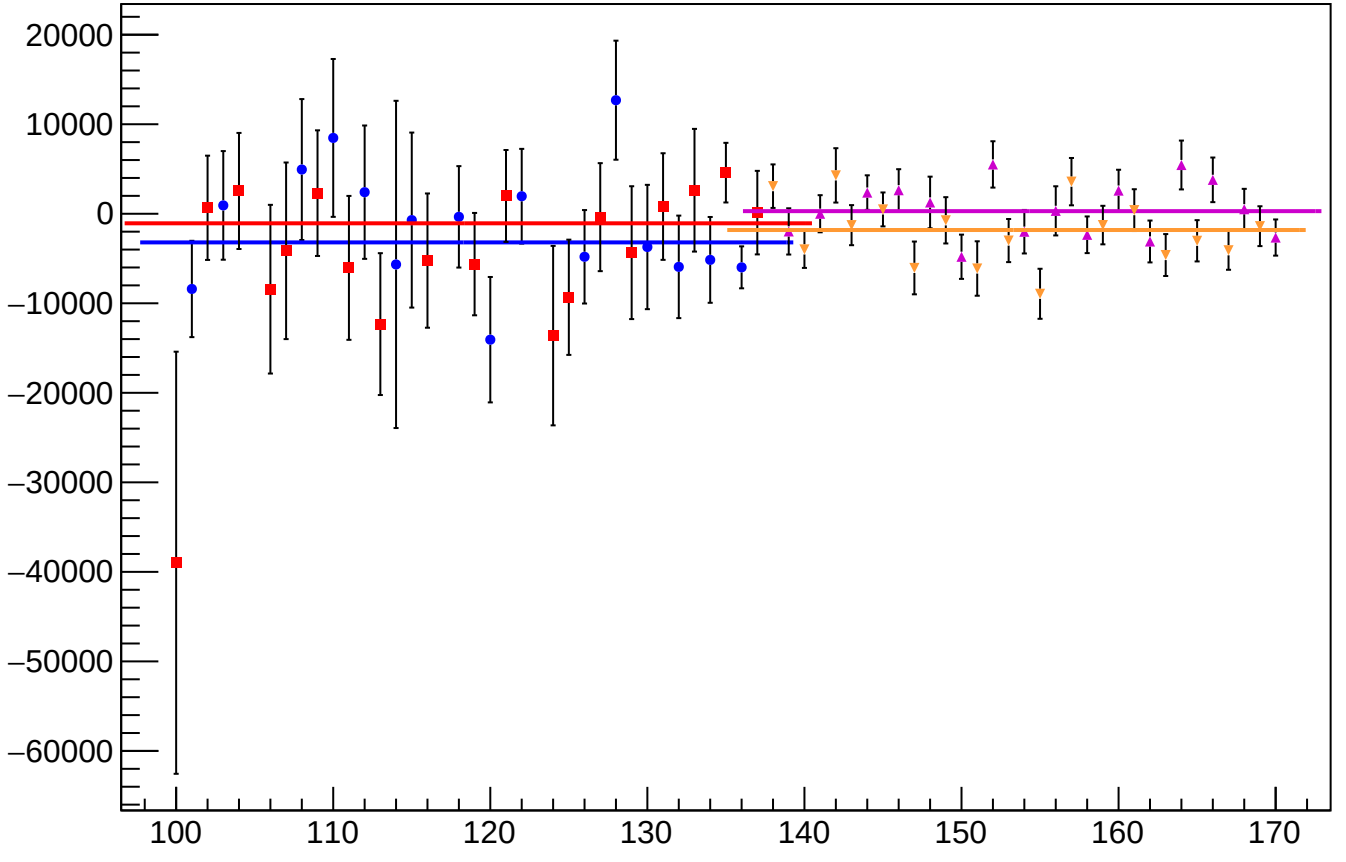
Left In: 262.753+/-0.051 $\chi^2$/NDF:216713.2/15

+ sign 276.138+/-0.044 $\chi^2$/NDF: 1071527.7/32

All: 277.076+/-0.031 $\chi^2$/NDF: 2317508.4/67

- sign 278.033+/-0.044 $\chi^2$/NDF: 1245042.8/34

# asym_sam2_reg_correction_mean vs Slug




Right In: -3198.742+/-1353.814 $\chi^2$/NDF: 16.1/15

Left Out: -1815.206+/-578.369 $\chi^2$/NDF:29.7/16

Right Out: -1065.939+/-1443.326 $\chi^2$/NDF: 14.4/18

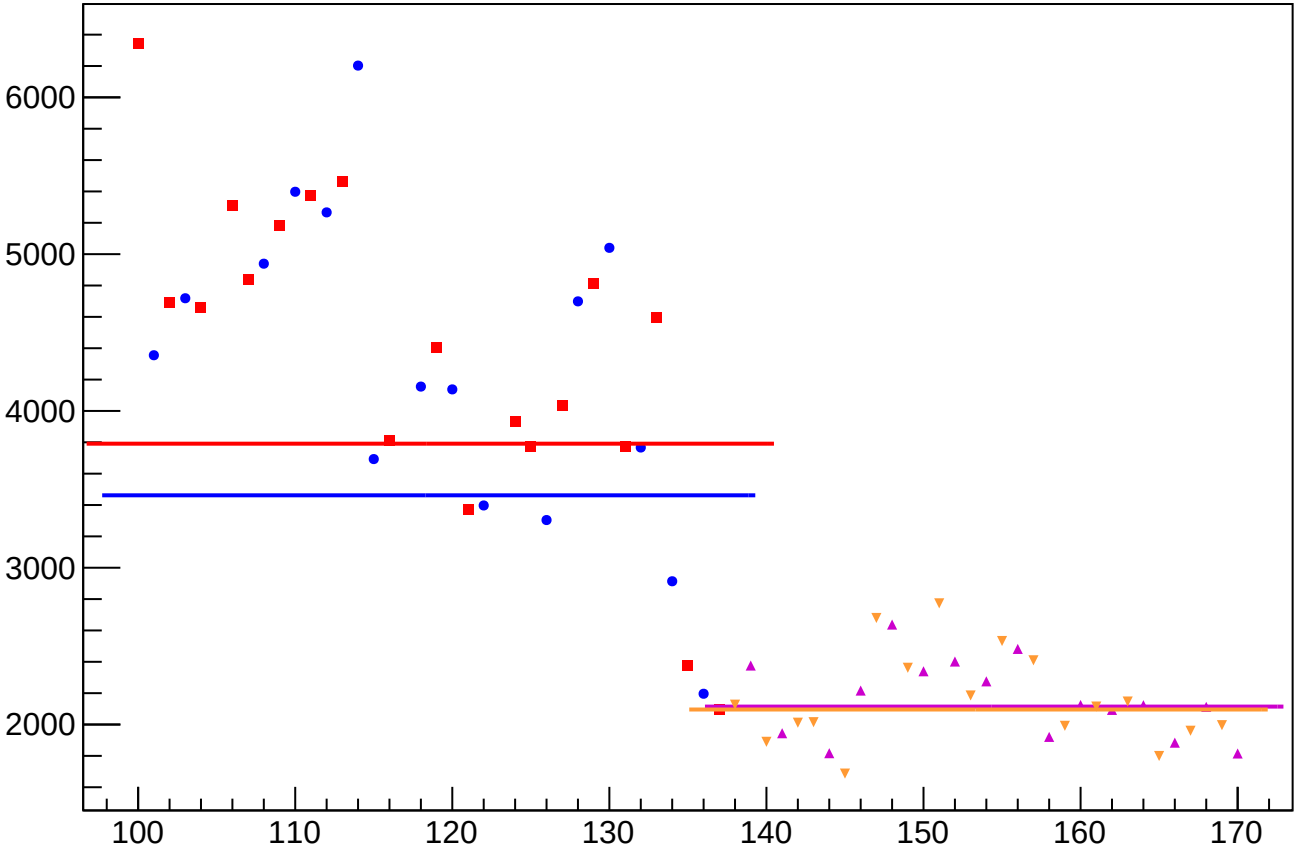
Left In: 292.228+/-586.558 $\chi^2$/NDF:24.7/15

+ sign -2028.745+/-531.866 $\chi^2$/NDF: 46.7/32

All: -987.342+/-380.098 $\chi^2$/NDF: 94.3/67

- sign 99.715+/-543.399 $\chi^2$/NDF: 39.8/34

# asym_sam2_reg_correction_rms vs Slug




Right In: 3461.927+/-0.957 $\chi^2$/NDF: 1309580.1/15

Left Out: 2095.759+/-0.409 $\chi^2$/NDF:446734.6/16

Right Out: 3791.207+/-1.021 $\chi^2$/NDF: 1155755.9/18

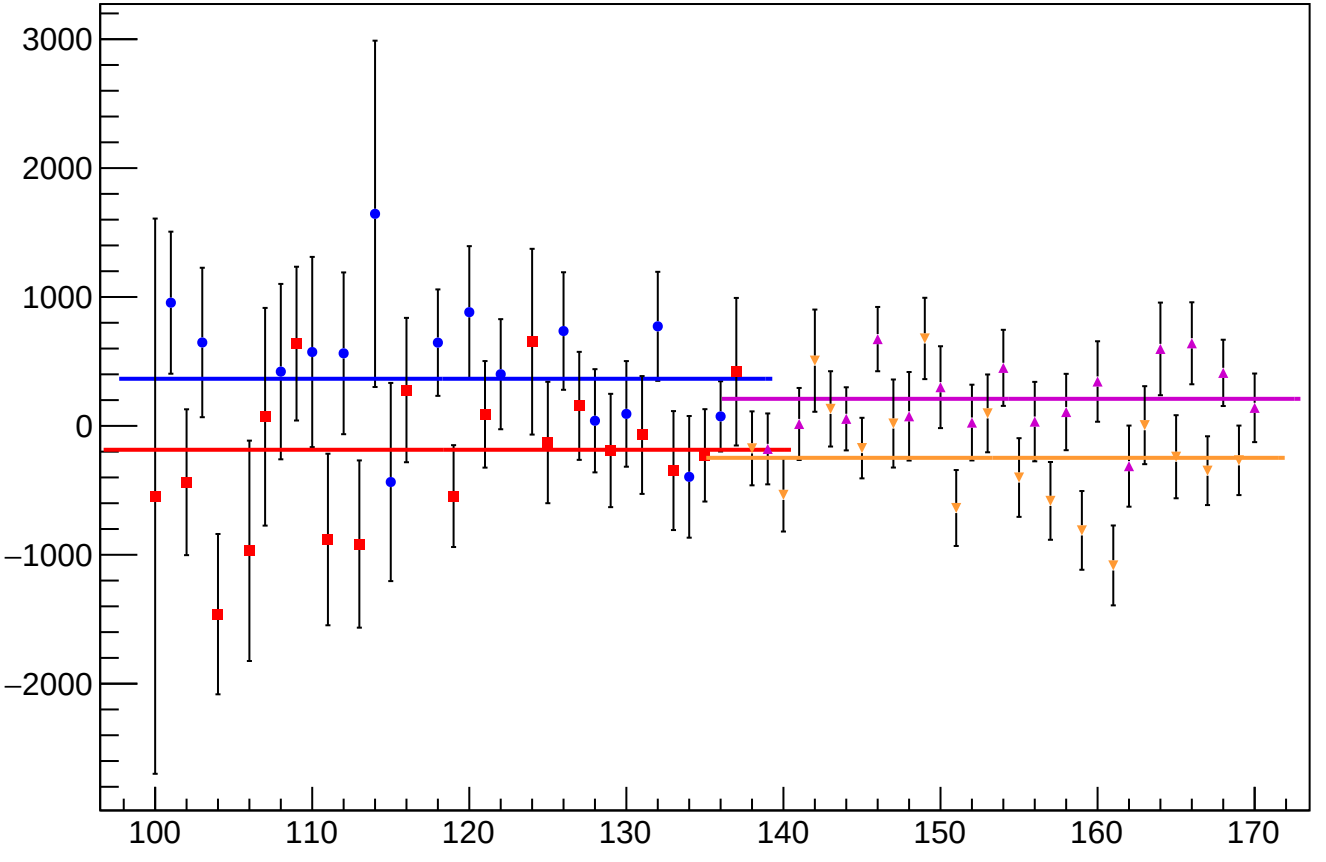
Left In: 2114.383+/-0.415 $\chi^2$/NDF:315931.0/15

+ sign 2306.617+/-0.376 $\chi^2$/NDF: 3478640.0/32

All: 2328.854+/-0.269 $\chi^2$/NDF: 7274293.3/67

- sign 2352.065+/-0.384 $\chi^2$/NDF: 3788508.4/34

# cor_asym_sam2_mean vs Slug




Right In: 365.523+/-118.873 $\chi^2$/NDF: 11.5/15

Left Out: -247.835+/-71.979 $\chi^2$/NDF:31.7/16

Right Out: -185.331+/-120.199 $\chi^2$/NDF: 14.9/18

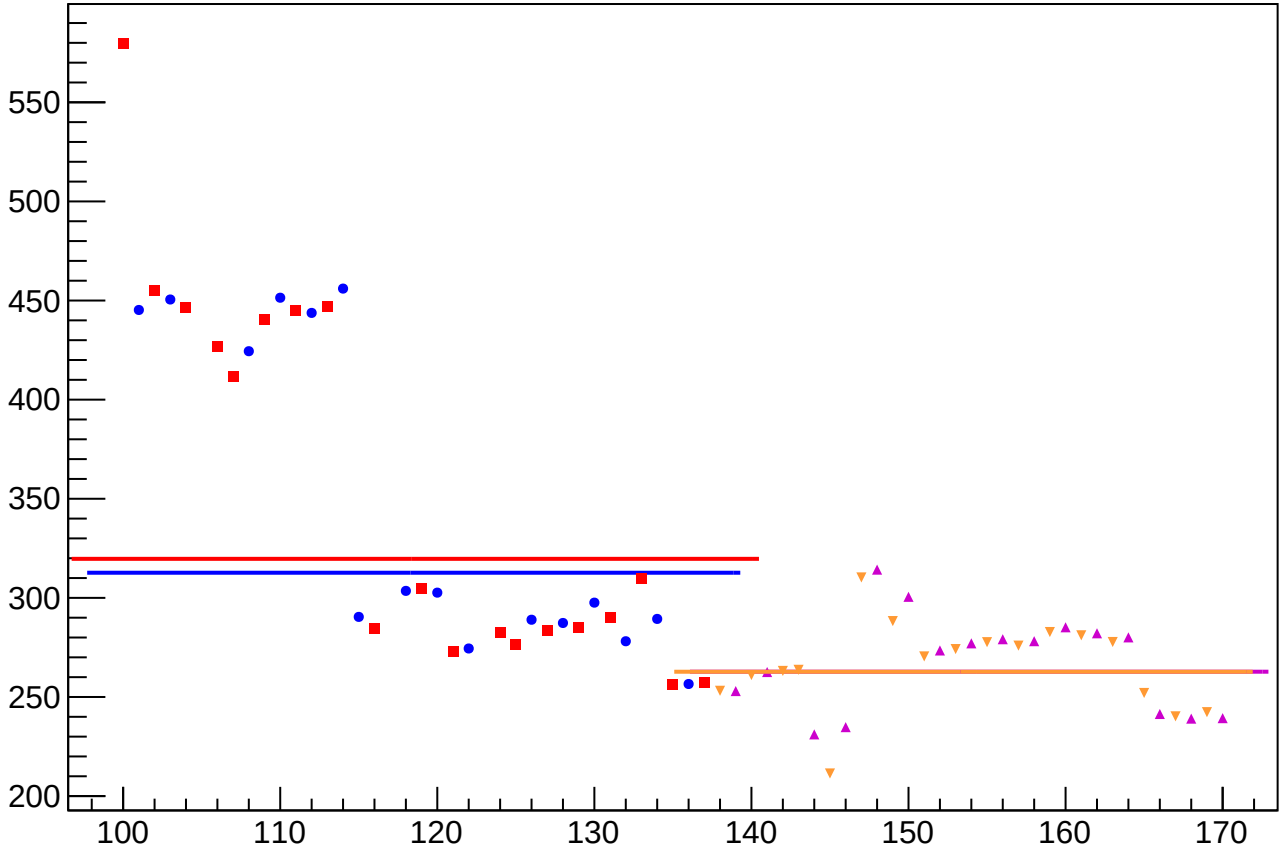
Left In: 209.943+/-72.658 $\chi^2$/NDF:14.7/15

+ sign -83.284+/-61.571 $\chi^2$/NDF: 62.7/32

All: 9.515+/-43.751 $\chi^2$/NDF: 104.8/67

- sign 104.162+/-62.181 $\chi^2$/NDF: 37.6/34

# cor_asym_sam2_rms vs Slug




Right In: 312.683+/-0.084 $\chi^2$/NDF: 602209.1/15

Left Out: 262.739+/-0.051 $\chi^2$/NDF:210992.1/16

Right Out: 319.693+/-0.085 $\chi^2$/NDF: 693714.1/18

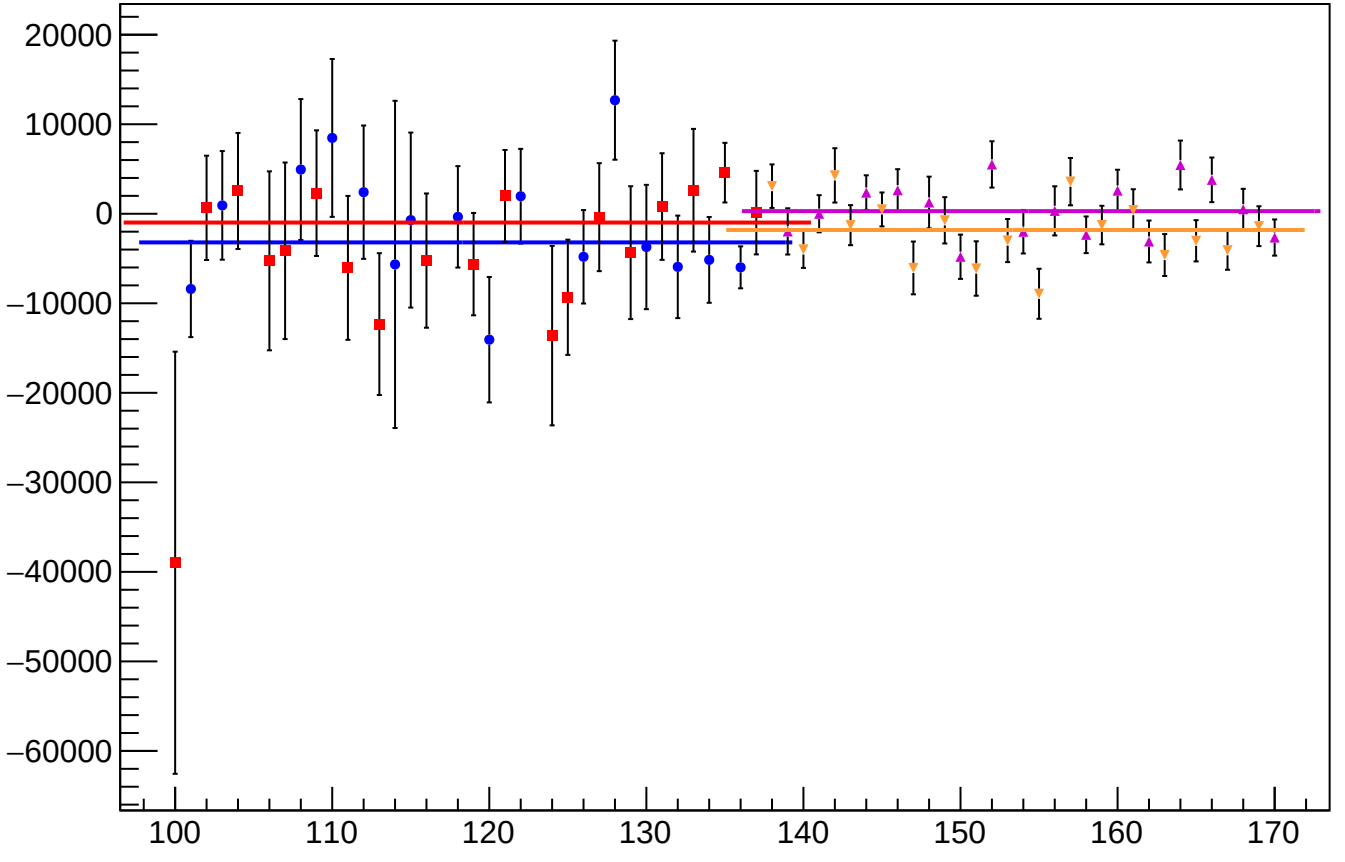
Left In: 262.753+/-0.051 $\chi^2$/NDF:216713.2/15

+ sign 276.138+/-0.044 $\chi^2$/NDF: 1071529.3/32

All: 277.055+/-0.031 $\chi^2$/NDF: 2311547.8/67

- sign 277.991+/-0.044 $\chi^2$/NDF: 1239121.5/34

# asym_sam2_cor_correction_mean vs Slug




Right In: -3198.673+/-1353.816 $\chi^2$/NDF: 16.1/15

Left Out: -1815.199+/-578.369 $\chi^2$/NDF:29.7/16

Right Out: -980.937+/-1445.265 $\chi^2$/NDF: 14.0/18

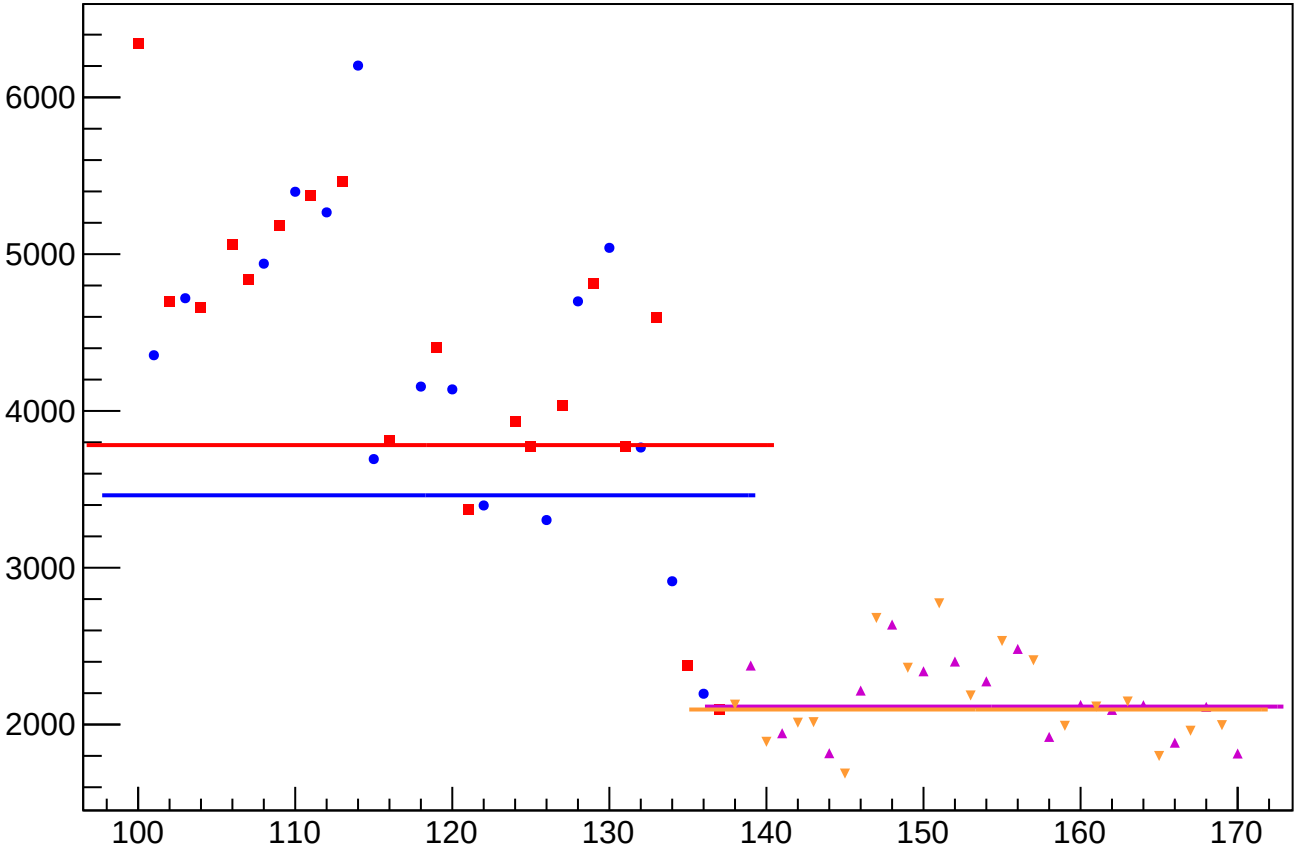
Left In: 292.221+/-586.558 $\chi^2$/NDF:24.7/15

+ sign -2028.728+/-531.866 $\chi^2$/NDF: 46.7/32

All: -981.442+/-380.133 $\chi^2$/NDF: 93.9/67

- sign 112.172+/-543.502 $\chi^2$/NDF: 39.3/34

# asym_sam2_cor_correction_rms vs Slug




Right In: 3461.932+/-0.957 $\chi^2$/NDF: 1309596.2/15

Left Out: 2095.759+/-0.409 $\chi^2$/NDF:446735.3/16

Right Out: 3782.176+/-1.022 $\chi^2$/NDF: 1136342.8/18

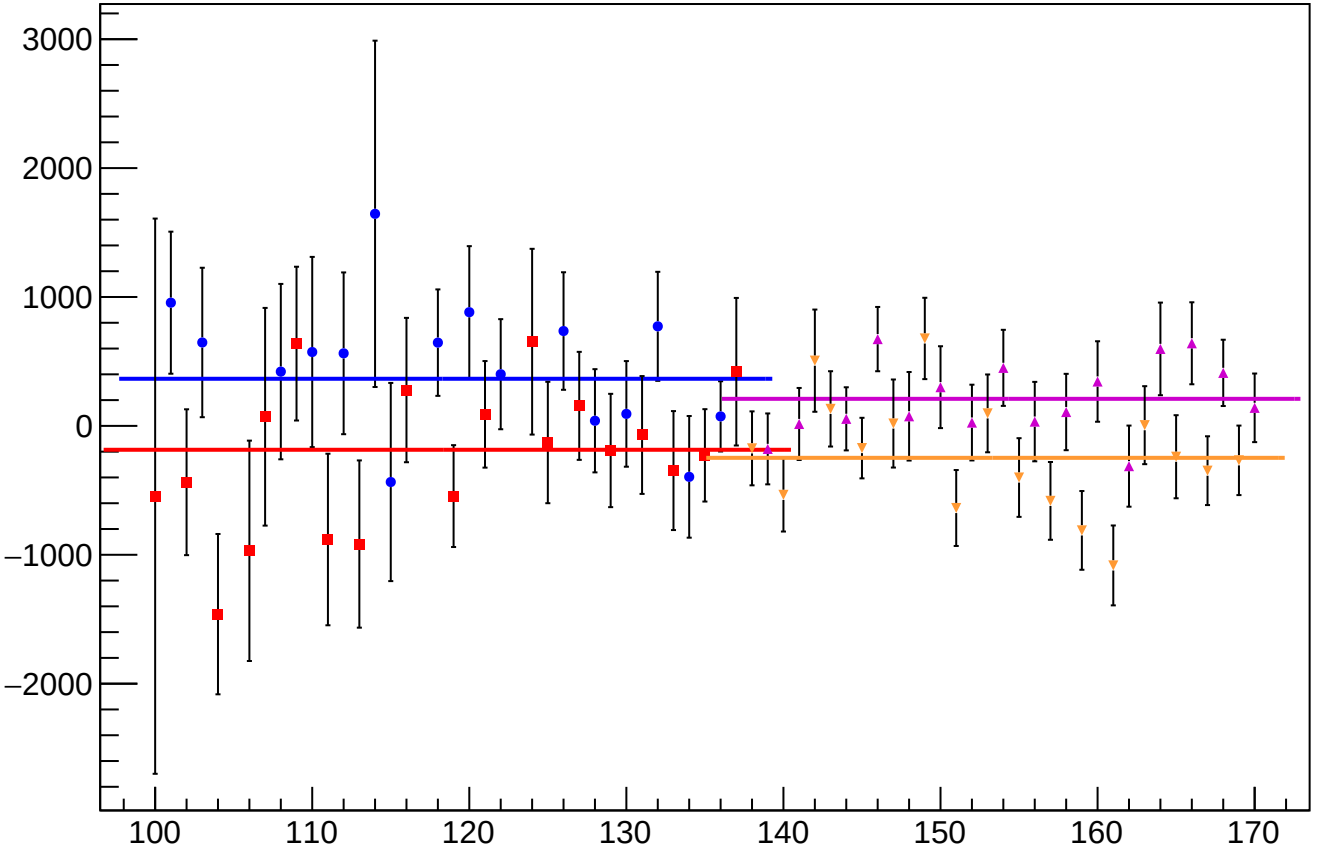
Left In: 2114.383+/-0.415 $\chi^2$/NDF:315932.1/15

+ sign 2306.617+/-0.376 $\chi^2$/NDF: 3478661.4/32

All: 2327.957+/-0.269 $\chi^2$/NDF: 7224172.6/67

- sign 2350.241+/-0.384 $\chi^2$/NDF: 3738929.3/34

# eigen_cor_asym_sam2_mean vs Slug




Right In: 365.523+/-118.873 $\chi^2$/NDF: 11.5/15

Left Out: -247.835+/-71.979 $\chi^2$/NDF:31.7/16

Right Out: -185.331+/-120.199 $\chi^2$/NDF: 14.9/18

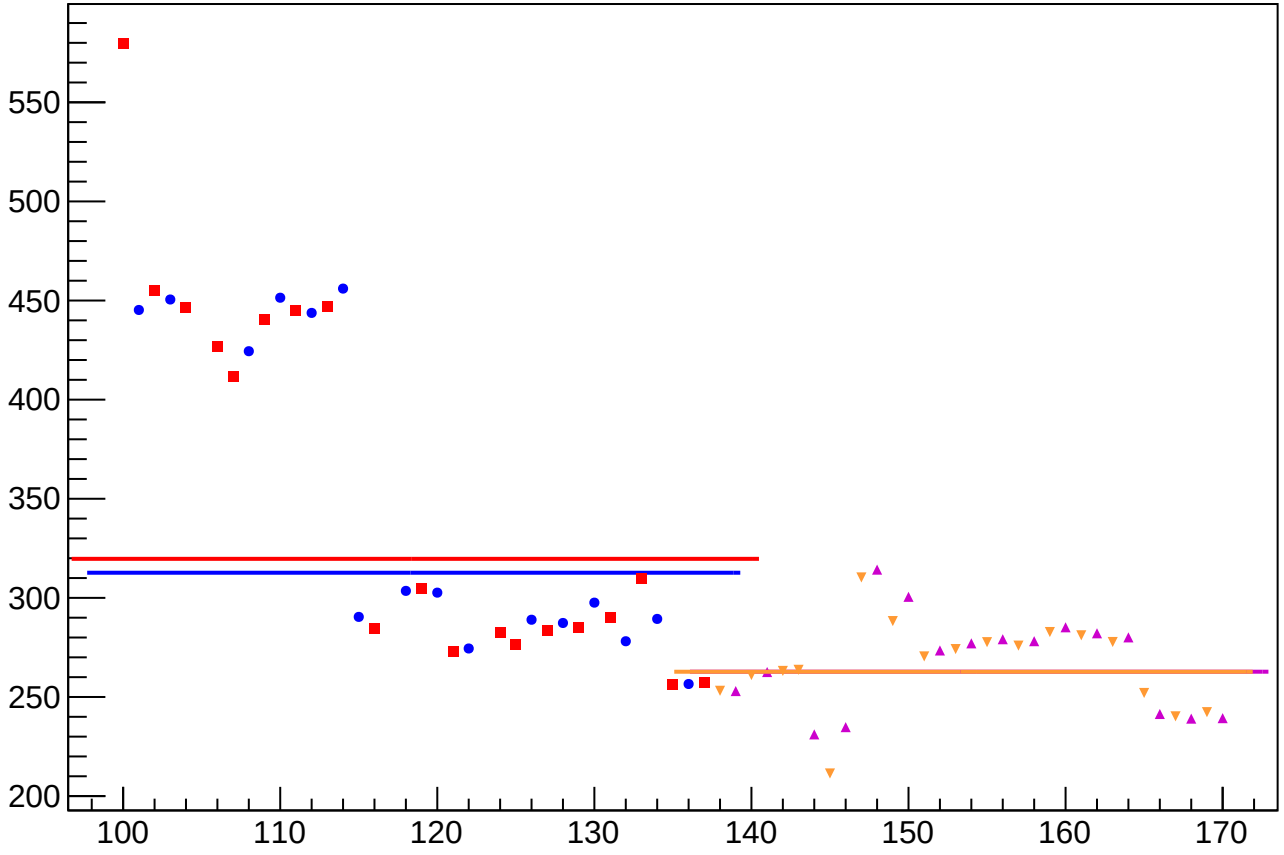
Left In: 209.943+/-72.658 $\chi^2$/NDF:14.7/15

+ sign -83.284+/-61.571 $\chi^2$/NDF: 62.7/32

All: 9.515+/-43.751 $\chi^2$/NDF: 104.8/67

- sign 104.162+/-62.181 $\chi^2$/NDF: 37.6/34

# eigen_cor_asym_sam2_rms vs Slug




Right In: 312.683+/-0.084 $\chi^2$/NDF: 602209.1/15

Left Out: 262.739+/-0.051 $\chi^2$/NDF:210992.1/16

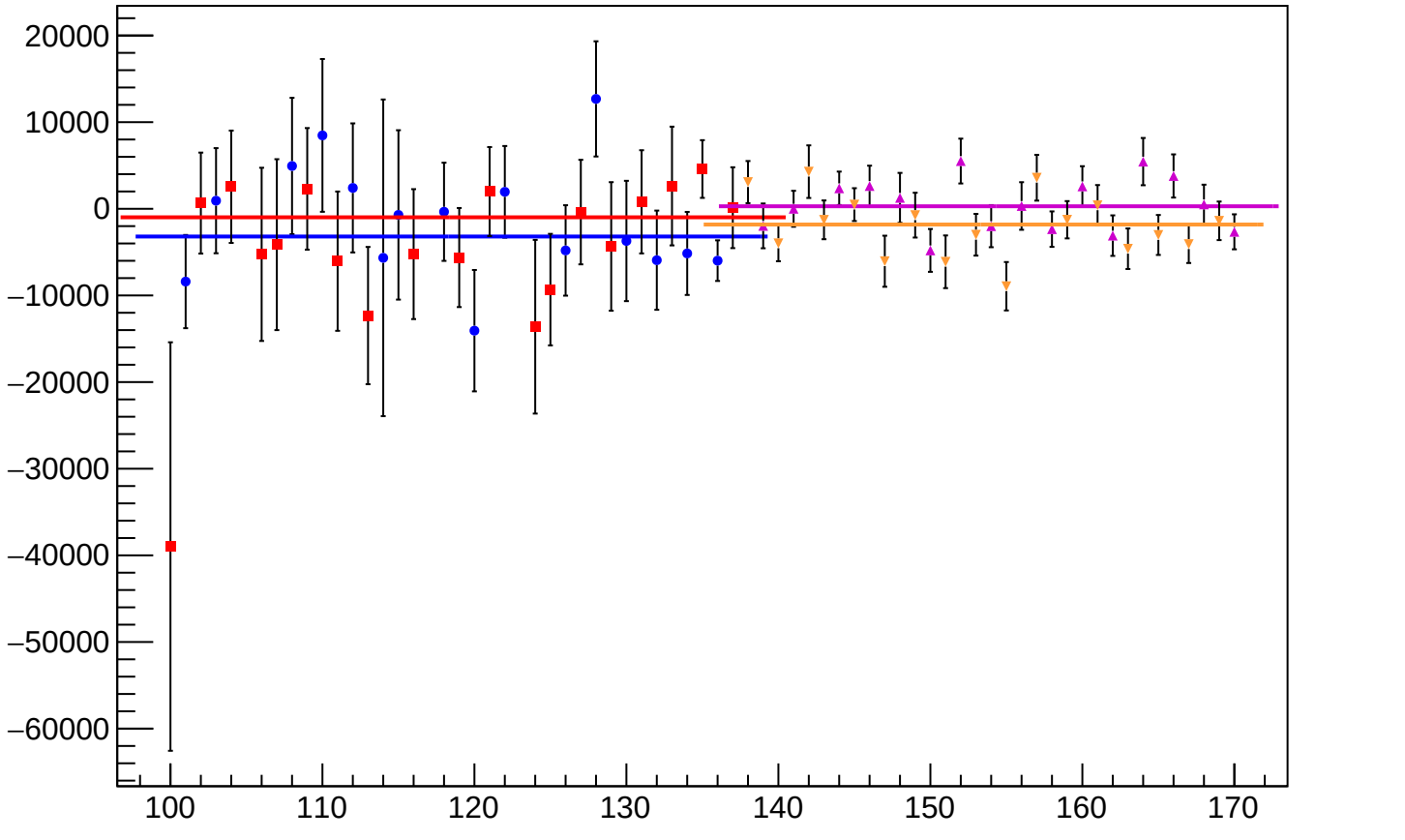
Right Out: 319.693+/-0.085 $\chi^2$/NDF: 693714.1/18

Left In: 262.753+/-0.051 $\chi^2$/NDF:216713.2/15

+ sign 276.138+/-0.044 $\chi^2$/NDF: 1071529.3/32

All: 277.055+/-0.031 $\chi^2$/NDF: 2311547.8/67

- sign 277.991+/-0.044 $\chi^2$/NDF: 1239121.5/34




Right In: -3198.673+/-1353.816 $\chi^2$/NDF: 16.1/15

Left Out: -1815.199+/-578.369 $\chi^2$/NDF:29.7/16

Right Out: -980.937+/-1445.265 $\chi^2$/NDF: 14.0/18

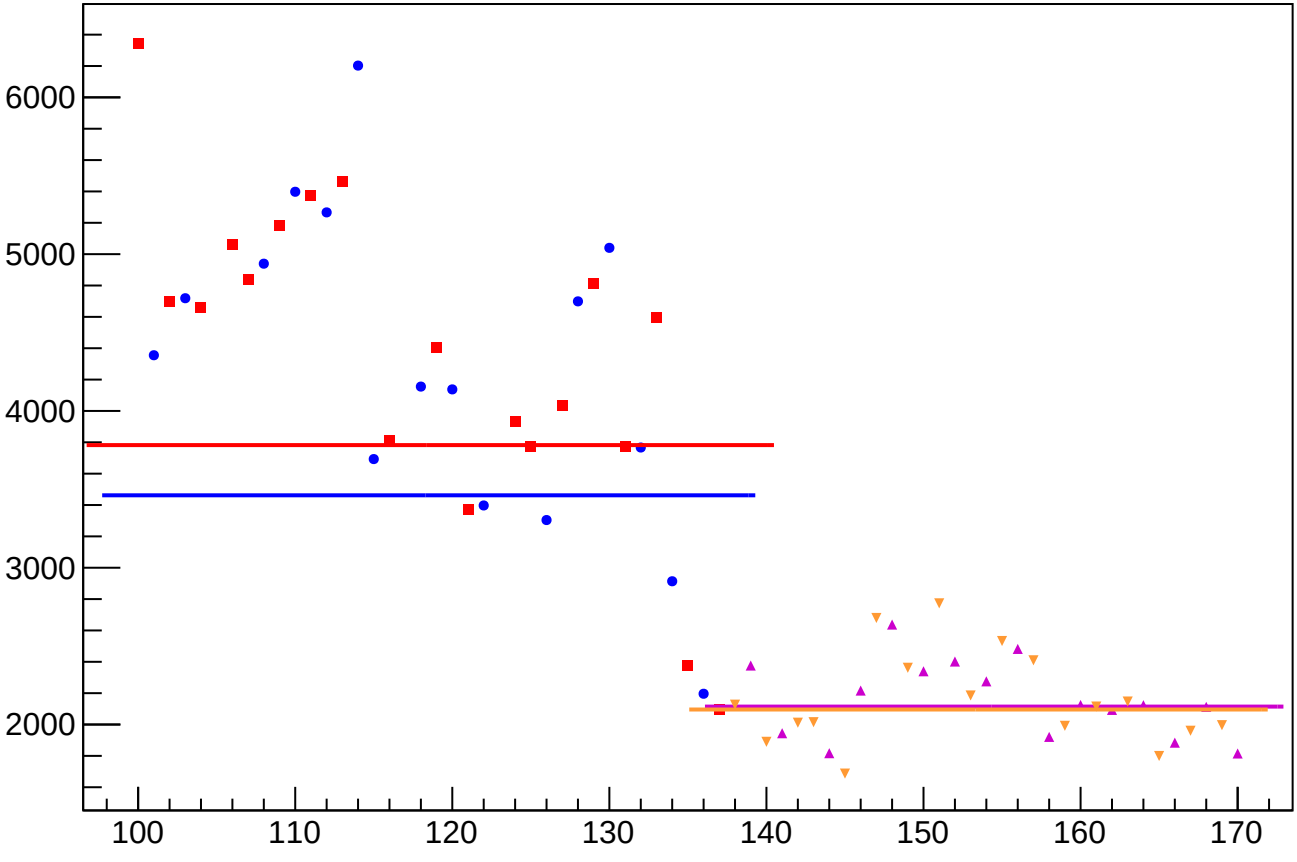
Left In: 292.221+/-586.558 $\chi^2$/NDF:24.7/15

+ sign -2028.728+/-531.866 $\chi^2$/NDF: 46.7/32

All: -981.442+/-380.133 $\chi^2$/NDF: 93.9/67

- sign 112.172+/-543.502 $\chi^2$/NDF: 39.3/34

# asym_sam2_eigen_cor_correction_rms vs Slug




Right In: 3461.932+/-0.957 $\chi^2$/NDF: 1309596.2/15

Left Out: 2095.759+/-0.409 $\chi^2$/NDF:446735.3/16

Right Out: 3782.176+/-1.022 $\chi^2$/NDF: 1136342.8/18

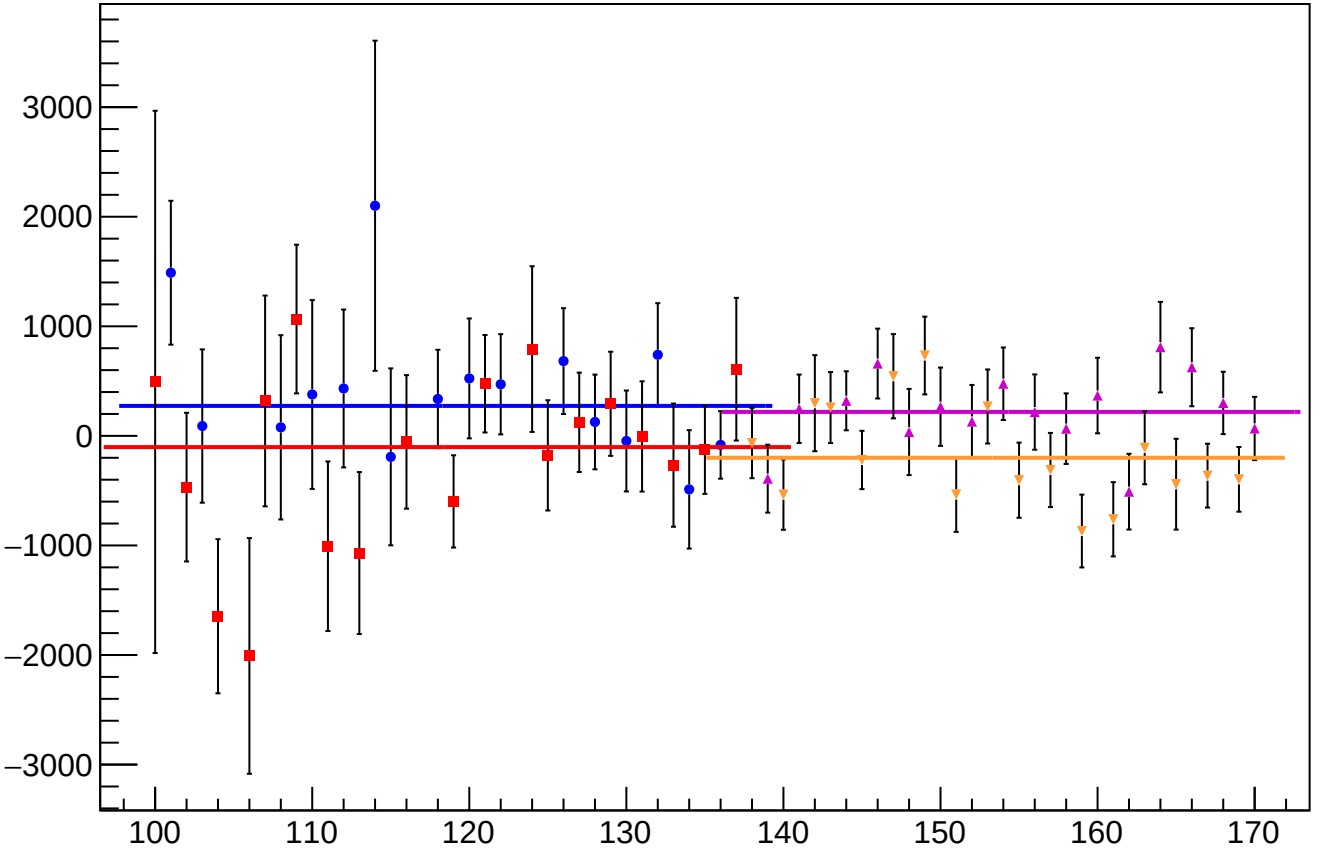
Left In: 2114.383+/-0.415 $\chi^2$/NDF:315932.1/15

+ sign 2306.617+/-0.376 $\chi^2$/NDF: 3478661.4/32

All: 2327.957+/-0.269 $\chi^2$/NDF: 7224172.6/67

- sign 2350.241+/-0.384 $\chi^2$/NDF: 3738929.3/34

# dit_asym_sam2_mean vs Slug




Right In: 273.578+/-132.537 $\chi^2$/NDF: 11.4/15

Left Out: -199.986+/-80.738 $\chi^2$/NDF:26.5/16

Right Out: -102.369+/-133.606 $\chi^2$/NDF: 21.3/18

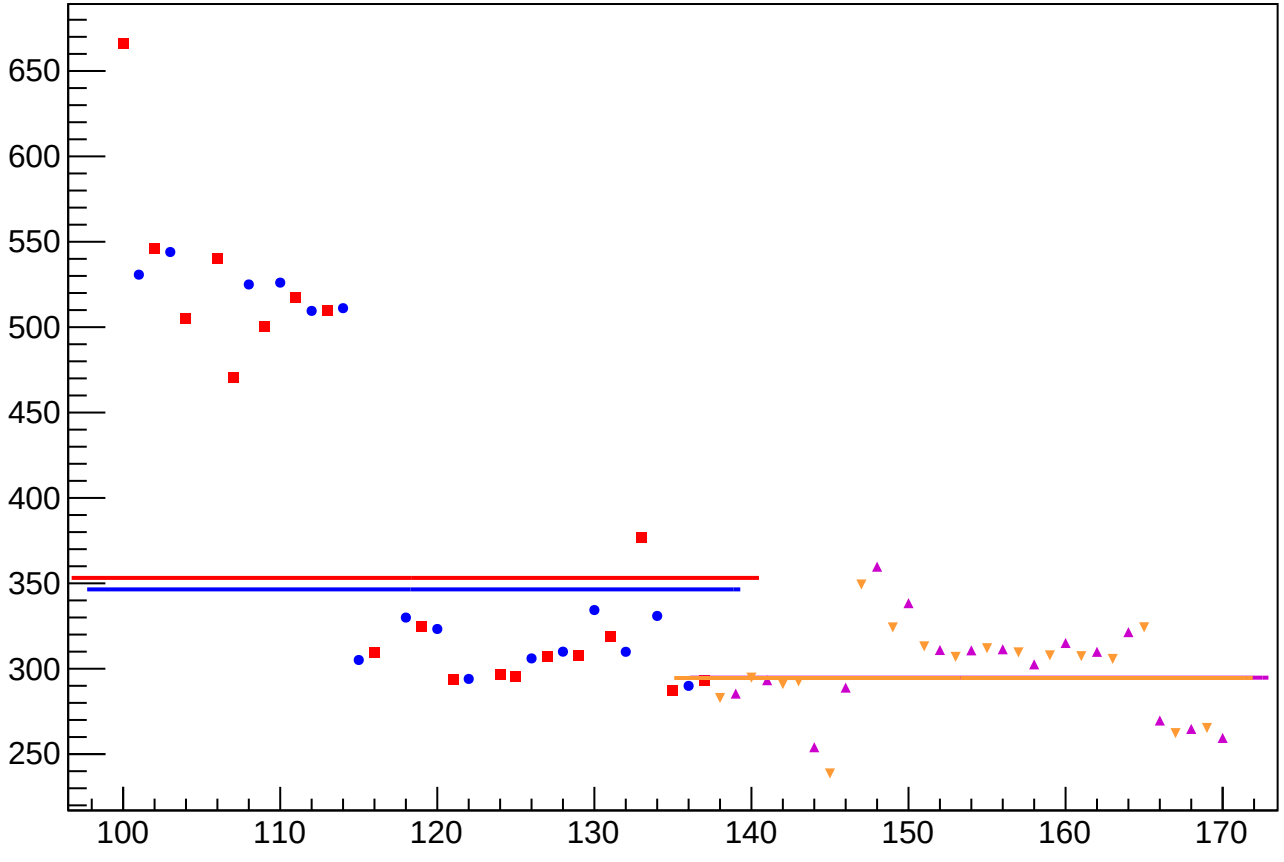
Left In: 218.737+/-81.746 $\chi^2$/NDF:15.4/15

+ sign -71.814+/-68.952 $\chi^2$/NDF: 47.3/32

All: 28.590+/-49.029 $\chi^2$/NDF: 92.5/67

- sign 131.273+/-69.730 $\chi^2$/NDF: 40.9/34

# dit_asym_sam2_rms vs Slug




Right In: 346.455+/-0.094 $\chi^2$/NDF: 768763.1/15

Left Out: 294.570+/-0.057 $\chi^2$/NDF:225966.0/16

Right Out: 353.178+/-0.094 $\chi^2$/NDF: 866364.3/18

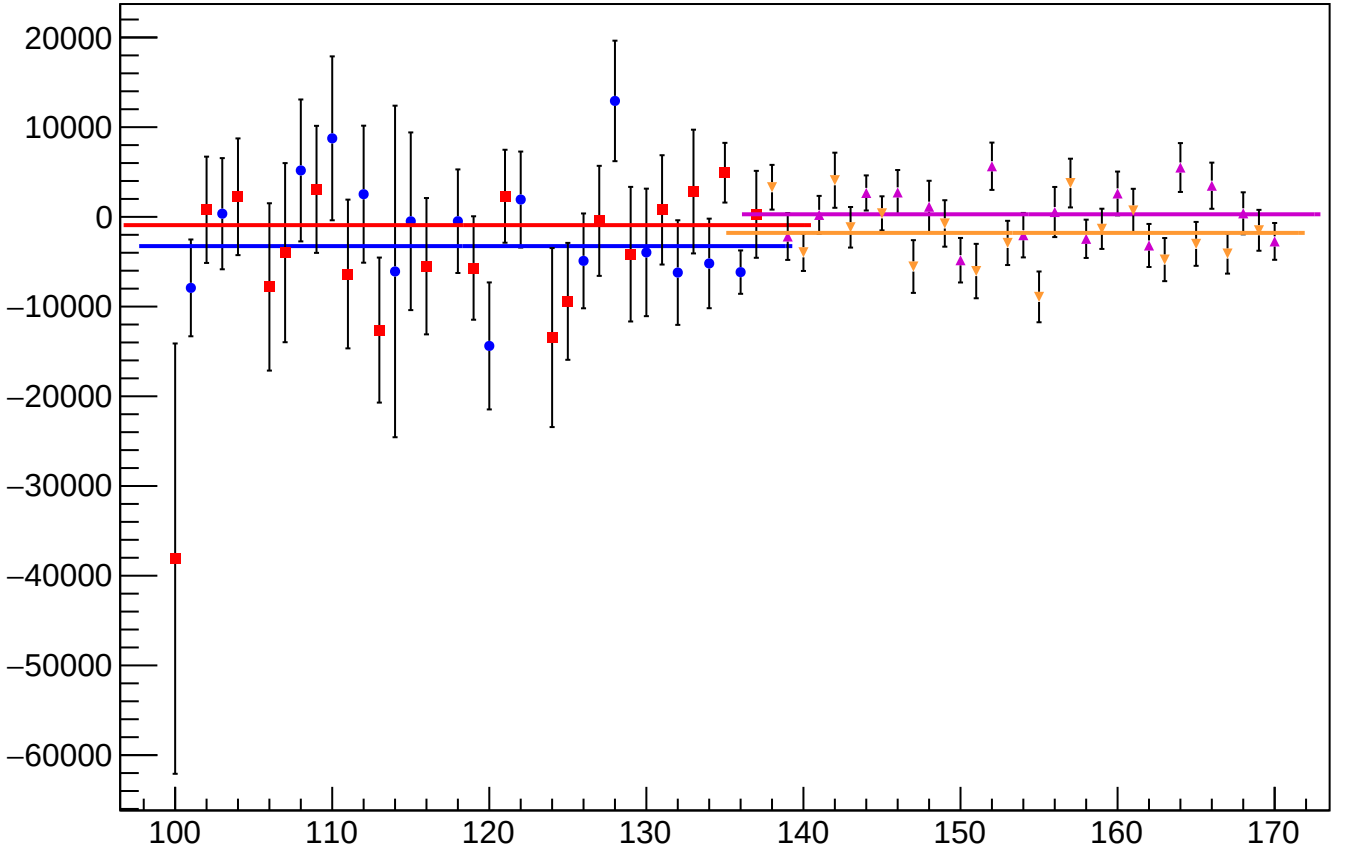
Left In: 294.767+/-0.058 $\chi^2$/NDF:229154.2/15

+ sign 308.613+/-0.049 $\chi^2$/NDF: 1218275.4/32

All: 309.633+/-0.035 $\chi^2$/NDF: 2592824.4/67

- sign 310.677+/-0.049 $\chi^2$/NDF: 1373663.0/34

# asym_sam2_dit_correction_mean vs Slug




Right In: -3258.837+/-1384.139 $\chi^2$/NDF: 16.0/15

Left Out: -1786.013+/-590.063 $\chi^2$/NDF:28.8/16

Right Out: -921.196+/-1460.727 $\chi^2$/NDF: 14.6/18

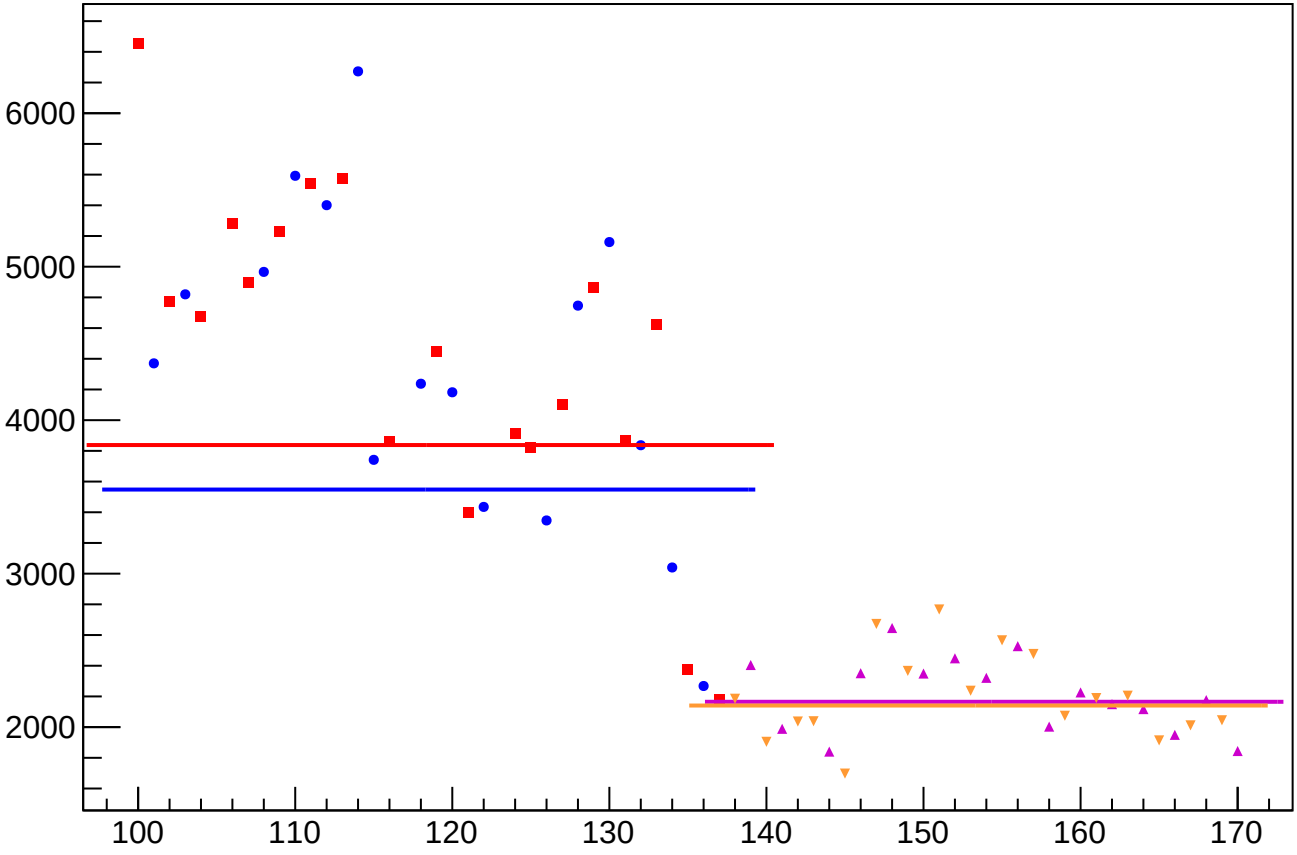
Left In: 288.835+/-600.426 $\chi^2$/NDF:24.7/15

+ sign -2012.513+/-542.798 $\chi^2$/NDF: 45.8/32

All: -973.571+/-388.175 $\chi^2$/NDF: 93.2/67

- sign 113.940+/-555.341 $\chi^2$/NDF: 39.9/34

# asym_sam2_dit_correction_rms vs Slug




Right In: 3547.969+/-0.979 $\chi^2$/NDF: 1258486.8/15

Left Out: 2140.705+/-0.417 $\chi^2$/NDF:417890.5/16

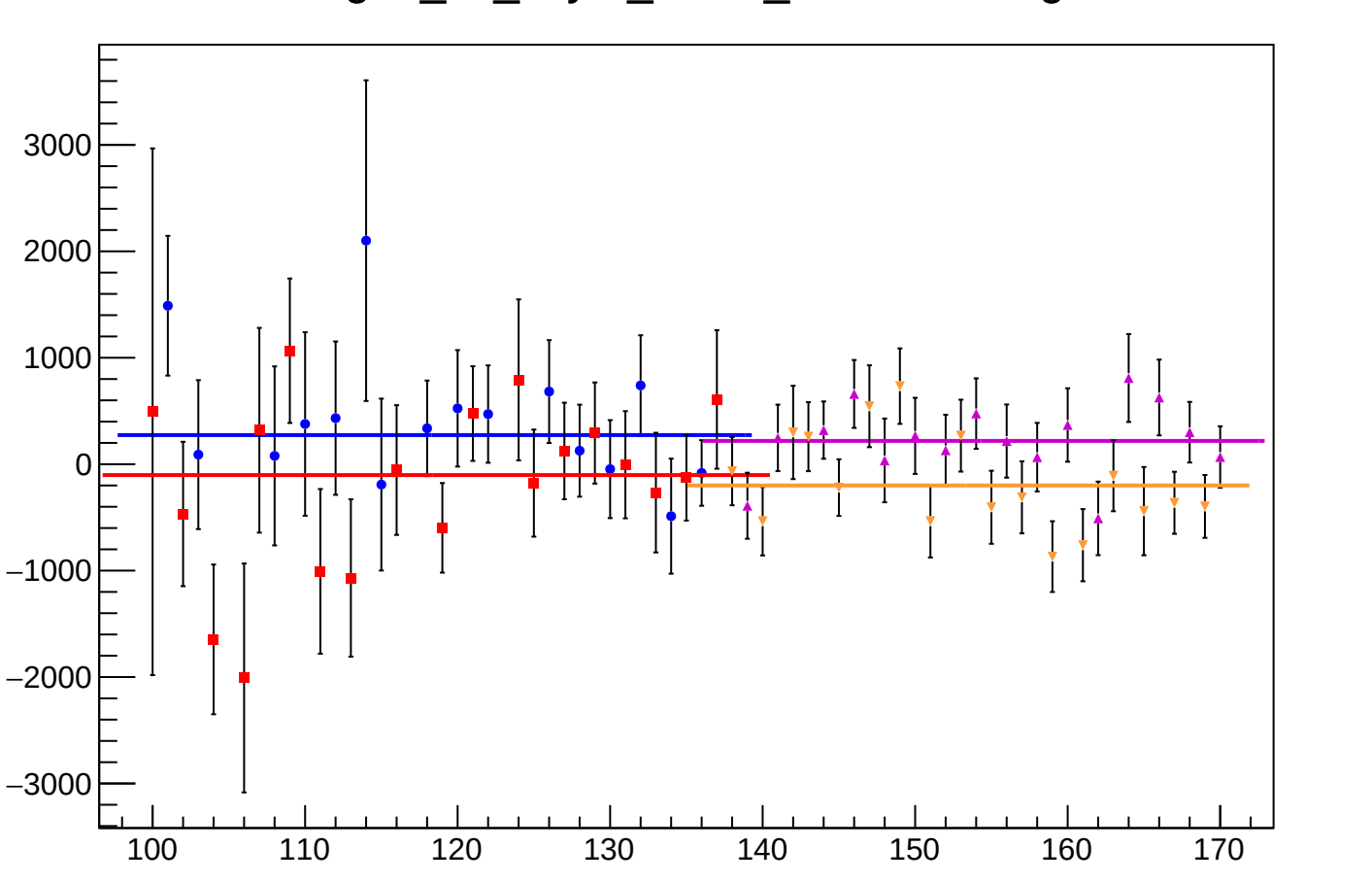
Right Out: 3837.970+/-1.033 $\chi^2$/NDF: 1155831.8/18

Left In: 2165.079+/-0.425 $\chi^2$/NDF:304168.1/15

+ sign 2357.122+/-0.384 $\chi^2$/NDF: 3425829.3/32

All: 2381.430+/-0.274 $\chi^2$/NDF: 7138064.8/67

- sign 2406.874+/-0.393 $\chi^2$/NDF: 3704026.1/34




Right In: 273.582+/-132.536 $\chi^2$/NDF: 11.4/15

Left Out: -199.988+/-80.738 $\chi^2$/NDF:26.5/16

Right Out: -102.368+/-133.606 $\chi^2$/NDF: 21.3/18

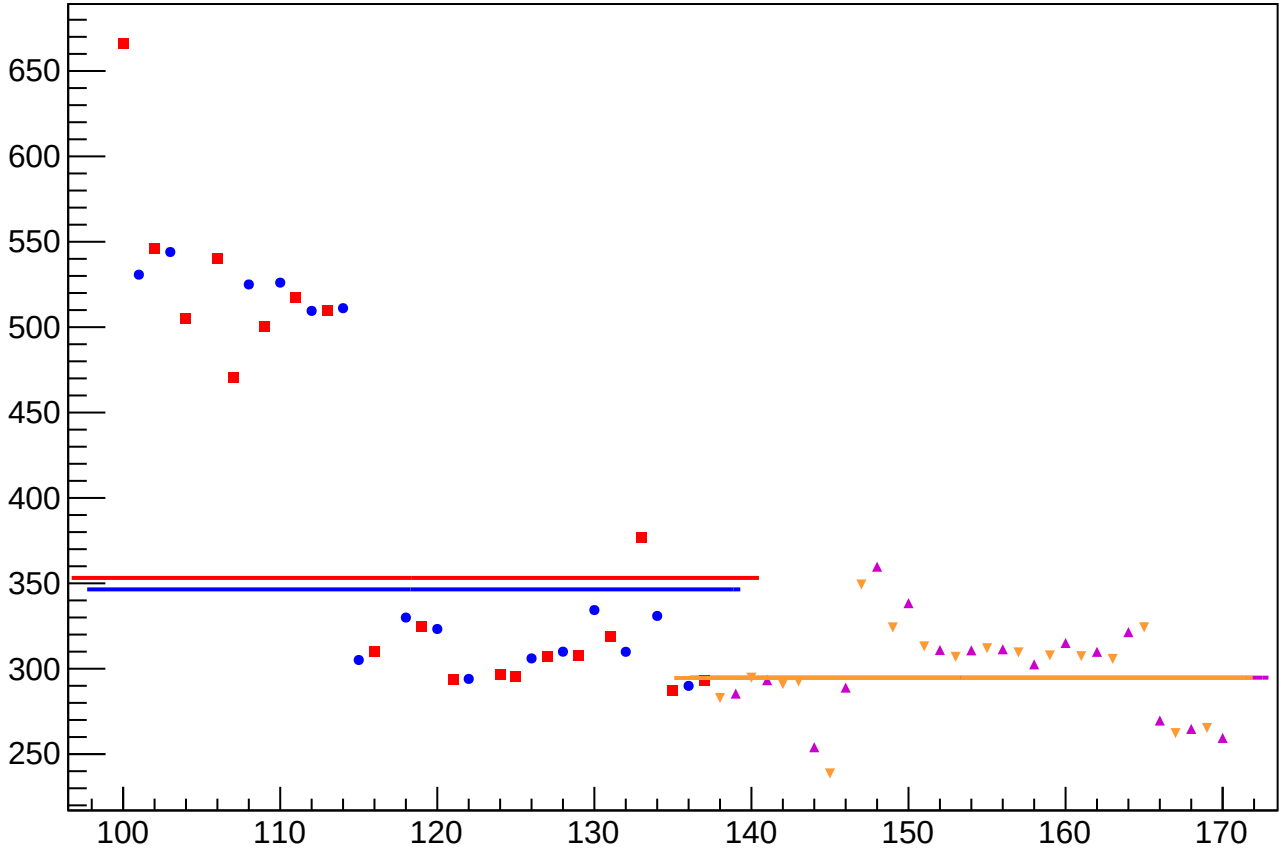
Left In: 218.742+/-81.746 $\chi^2$/NDF:15.4/15

+ sign -71.814+/-68.951 $\chi^2$/NDF: 47.3/32

All: 28.592+/-49.029 $\chi^2$/NDF: 92.5/67

- sign 131.277+/-69.730 $\chi^2$/NDF: 40.9/34

# eigen_dit_asym_sam2_rms vs Slug




Right In: 346.453+/-0.094 $\chi^2$/NDF: 768754.7/15

Left Out: 294.570+/-0.057 $\chi^2$/NDF:225971.6/16

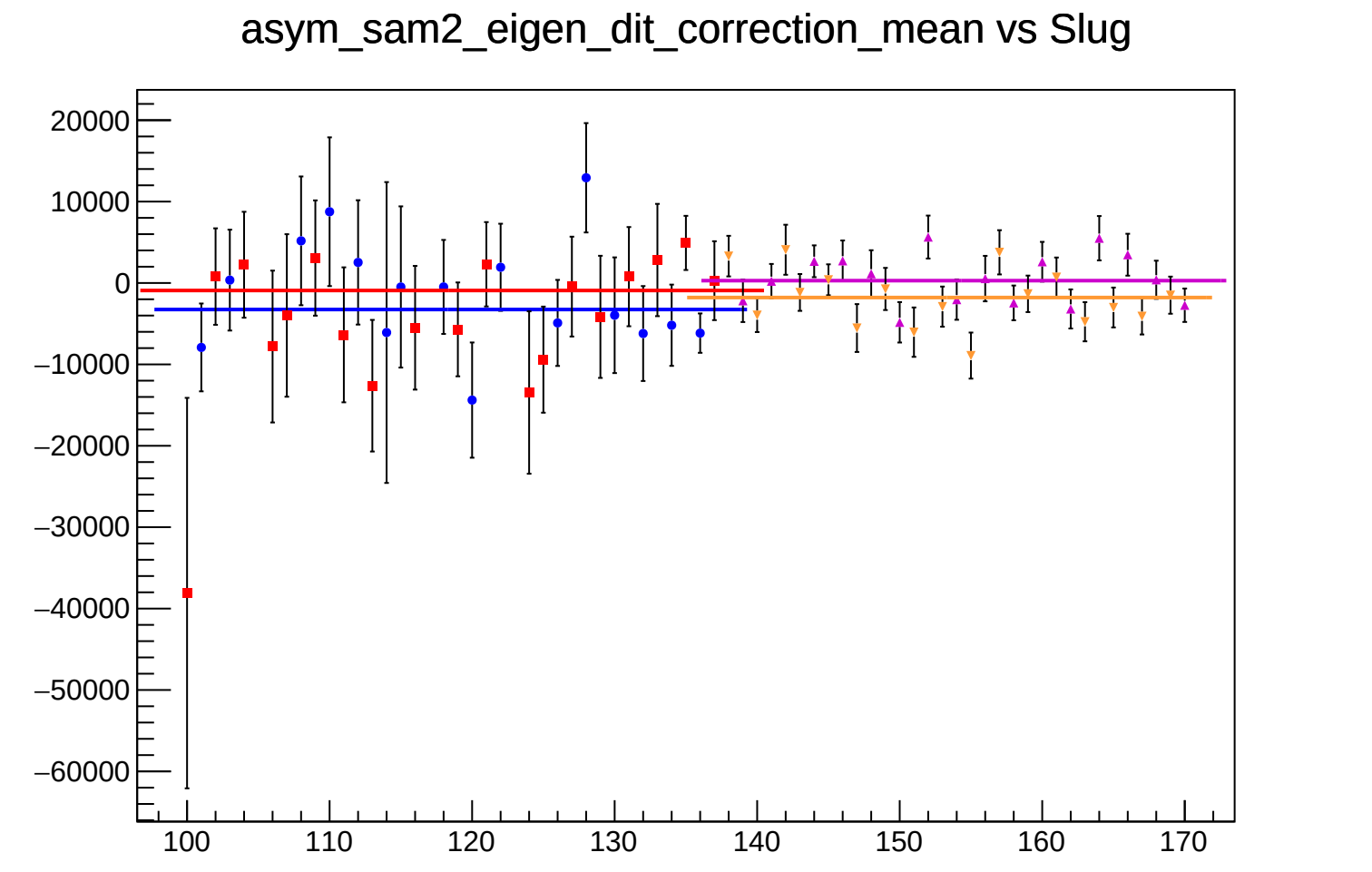
Right Out: 353.176+/-0.094 $\chi^2$/NDF: 866353.6/18

Left In: 294.766+/-0.058 $\chi^2$/NDF:229157.9/15

+ sign 308.613+/-0.049 $\chi^2$/NDF: 1218256.8/32

All: 309.633+/-0.035 $\chi^2$/NDF: 2592789.3/67

- sign 310.677+/-0.049 $\chi^2$/NDF: 1373646.5/34




Right In: -3258.828+/-1384.137 $\chi^2$/NDF: 16.0/15

Left Out: -1786.012+/-590.063 $\chi^2$/NDF:28.8/16

Right Out: -921.200+/-1460.725 $\chi^2$/NDF: 14.6/18

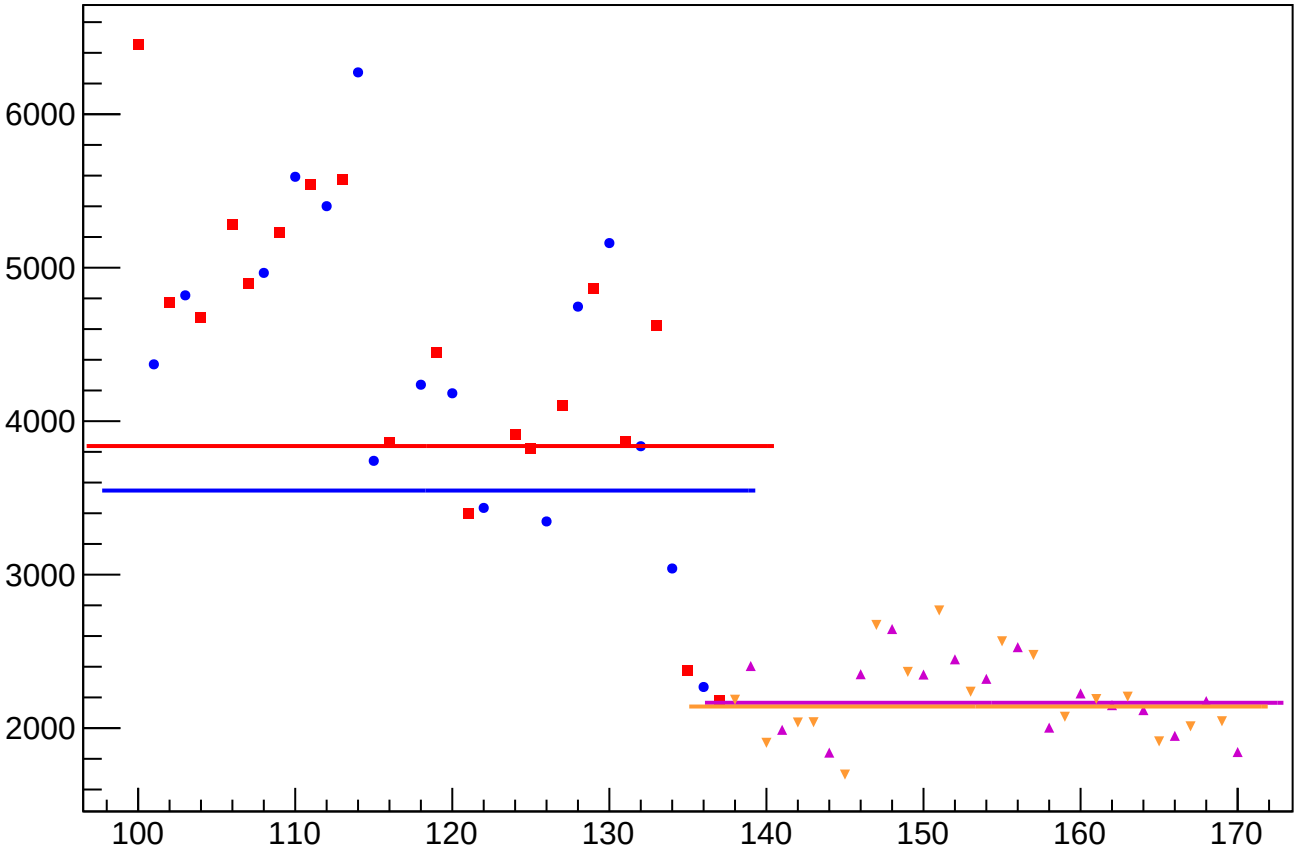
Left In: 288.834+/-600.425 $\chi^2$/NDF:24.7/15

+ sign -2012.511+/-542.798 $\chi^2$/NDF: 45.8/32

All: -973.571+/-388.175 $\chi^2$/NDF: 93.2/67

- sign 113.938+/-555.341 $\chi^2$/NDF: 39.9/34

# asym_sam2_eigen_dit_correction_rms vs Slug




Right In: 3547.966+/-0.979 $\chi^2$/NDF: 1258472.8/15

Left Out: 2140.704+/-0.417 $\chi^2$/NDF:417897.1/16

Right Out: 3837.965+/-1.033 $\chi^2$/NDF: 1155821.5/18

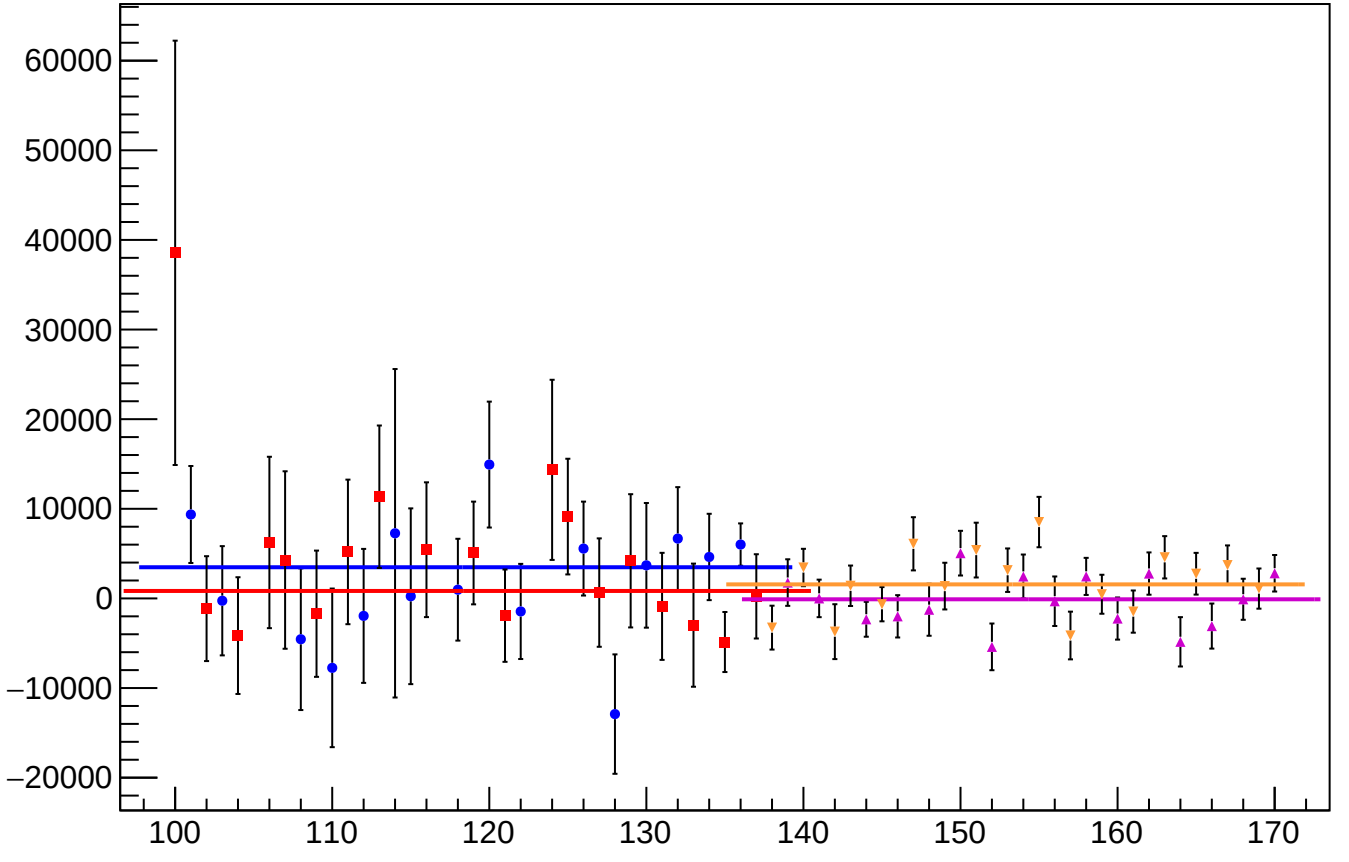
Left In: 2165.078+/-0.425 $\chi^2$/NDF:304172.3/15

+ sign 2357.122+/-0.384 $\chi^2$/NDF: 3425820.5/32

All: 2381.429+/-0.274 $\chi^2$/NDF: 7138046.9/67

- sign 2406.873+/-0.393 $\chi^2$/NDF: 3704017.1/34

# asym_sam2_mean vs Slug




Right In: 3478.372+/-1360.356 $\chi^2$/NDF: 16.3/15

Left Out: 1566.506+/-583.042 $\chi^2$/NDF:28.9/16

Right Out: 832.583+/-1449.649 $\chi^2$/NDF: 14.0/18

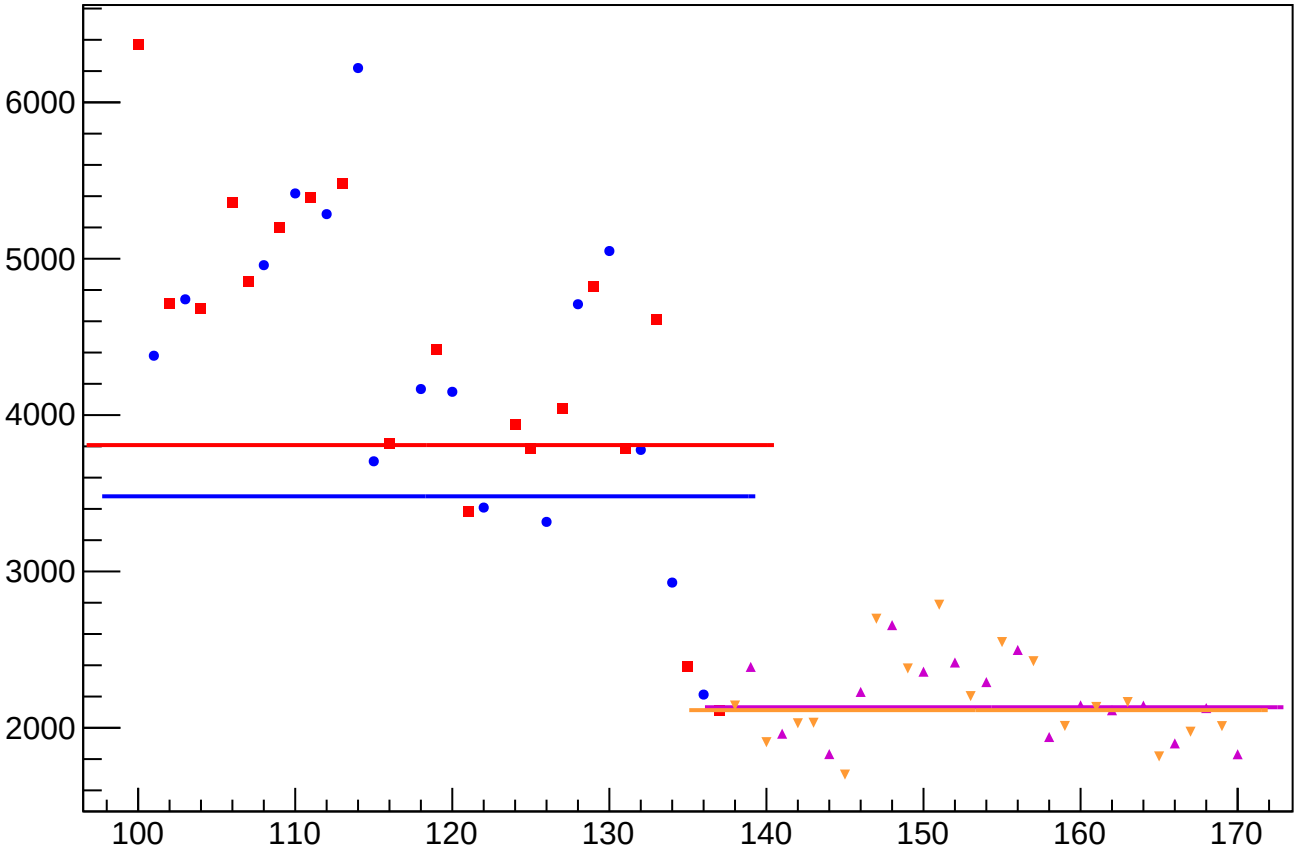
Left In: -98.385+/-591.254 $\chi^2$/NDF:22.4/15

+ sign 1863.203+/-535.896 $\chi^2$/NDF: 46.9/32

All: 968.334+/-382.962 $\chi^2$/NDF: 89.3/67

- sign 34.393+/-547.469 $\chi^2$/NDF: 36.8/34

# asym_sam2_rms vs Slug




Right In: 3480.559+/-0.962 $\chi^2$/NDF: 1296641.6/15

Left Out: 2113.085+/-0.412 $\chi^2$/NDF:440924.2/16

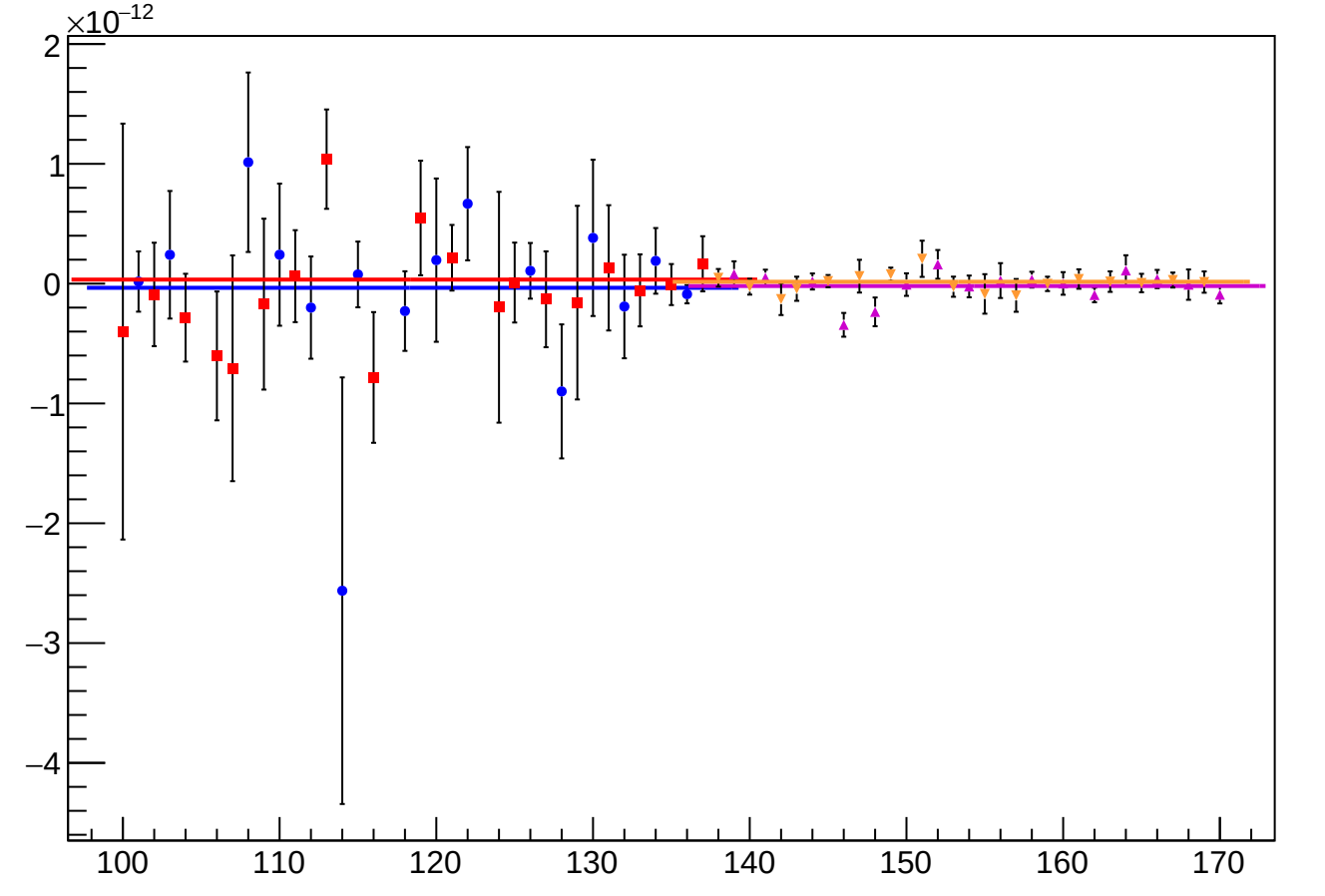
Right Out: 3808.151+/-1.025 $\chi^2$/NDF: 1147564.2/18

Left In: 2131.609+/-0.418 $\chi^2$/NDF:311249.1/15

+ sign 2325.299+/-0.379 $\chi^2$/NDF: 3444921.8/32

All: 2347.527+/-0.271 $\chi^2$/NDF: 7204297.8/67

- sign 2370.725+/-0.387 $\chi^2$/NDF: 3752344.1/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 11.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:6.6/16

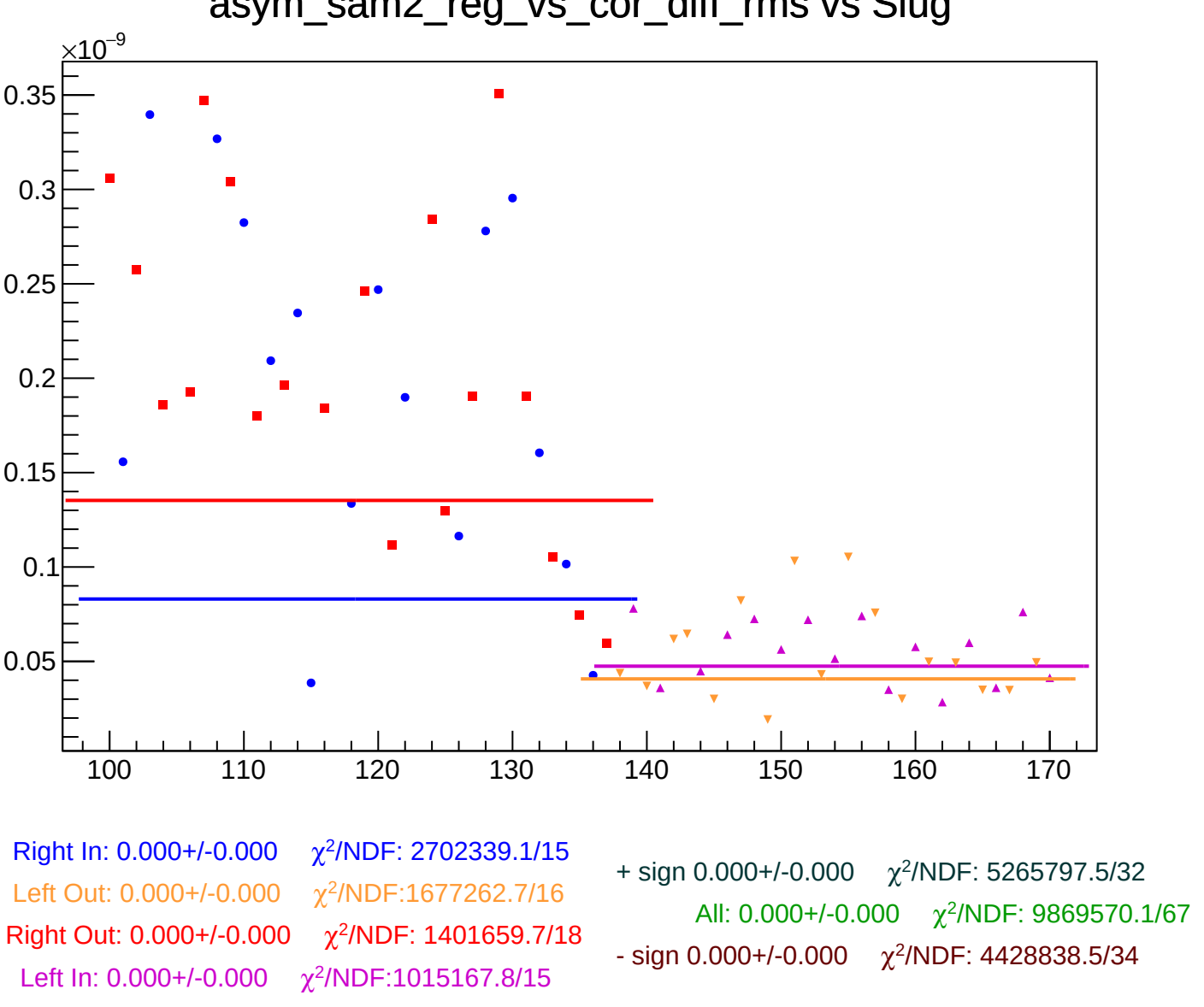
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 13.5/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:23.3/15

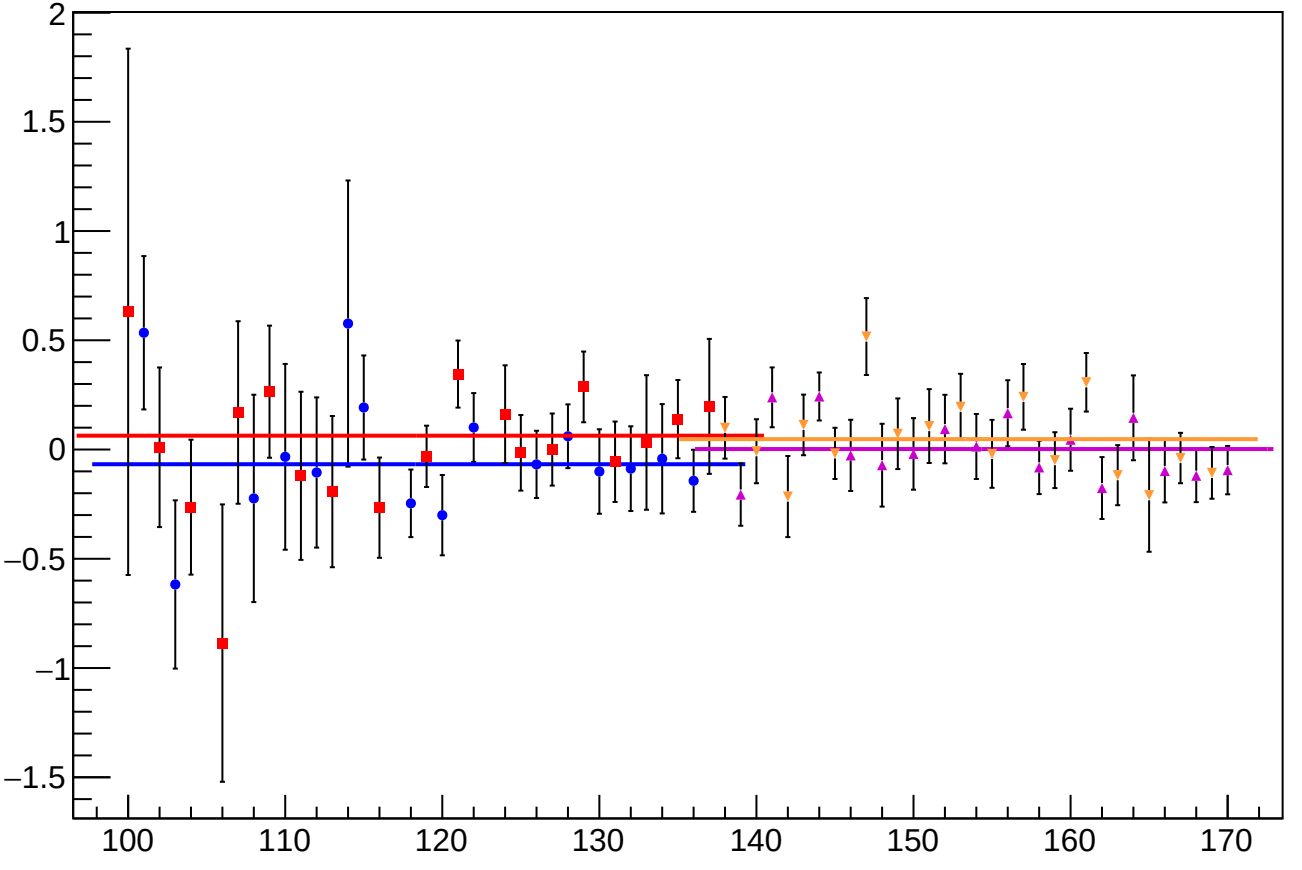
+ sign 0.000+/-0.000 $\chi^2$/NDF: 19.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 57.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 37.2/34


asym_sam2_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.35
0.3
0.25
0.2
0.15
0.1
0.05
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2702339.1/15
Left Out: 0.000+/-0.000 χ²/NDF:1677262.7/16
Right Out: 0.000+/-0.000 χ²/NDF: 1401659.7/18
Left In: 0.000+/-0.000 χ²/NDF:1015167.8/15
+ sign 0.000+/-0.000 χ²/NDF: 5265797.5/32
All: 0.000+/-0.000 χ²/NDF: 9869570.1/67
- sign 0.000+/-0.000 χ²/NDF: 4428838.5/34

# asym_sam2_dit_vs_cor_diff_mean vs Slug




Right In: -0.067+/-0.052 $\chi^2$/NDF: 12.5/15

Left Out: 0.048+/-0.035 $\chi^2$/NDF:21.9/16

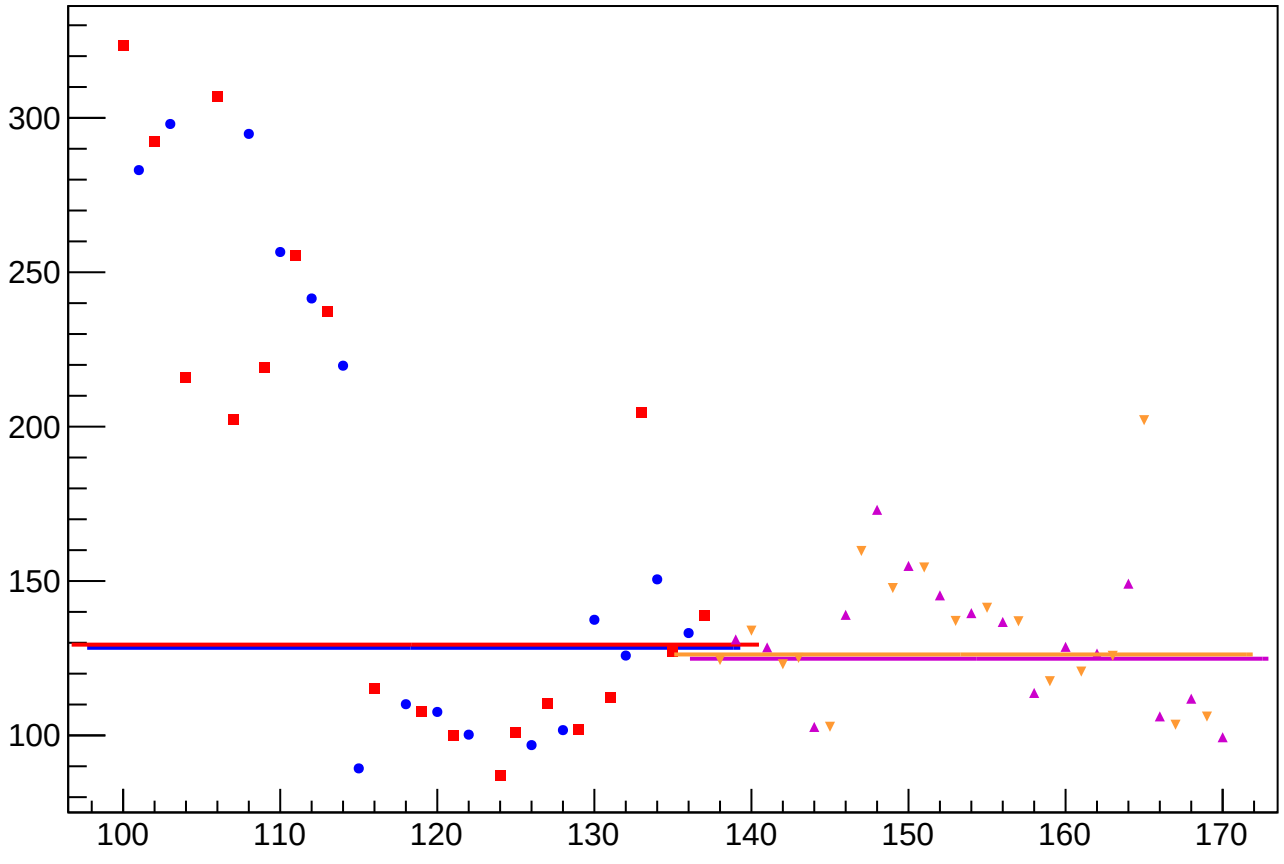
Right Out: 0.063+/-0.052 $\chi^2$/NDF: 14.0/18

Left In: 0.002+/-0.035 $\chi^2$/NDF:16.6/15

+ sign 0.012+/-0.029 $\chi^2$/NDF: 37.7/32

All: 0.017+/-0.021 $\chi^2$/NDF: 69.4/67

- sign 0.022+/-0.029 $\chi^2$/NDF: 31.6/34




Right In: 128.380+/-0.037 $\chi^2$/NDF: 1805078.6/15

Left Out: 126.216+/-0.025 $\chi^2$/NDF:609570.3/16

Right Out: 129.399+/-0.037 $\chi^2$/NDF: 1888271.6/18

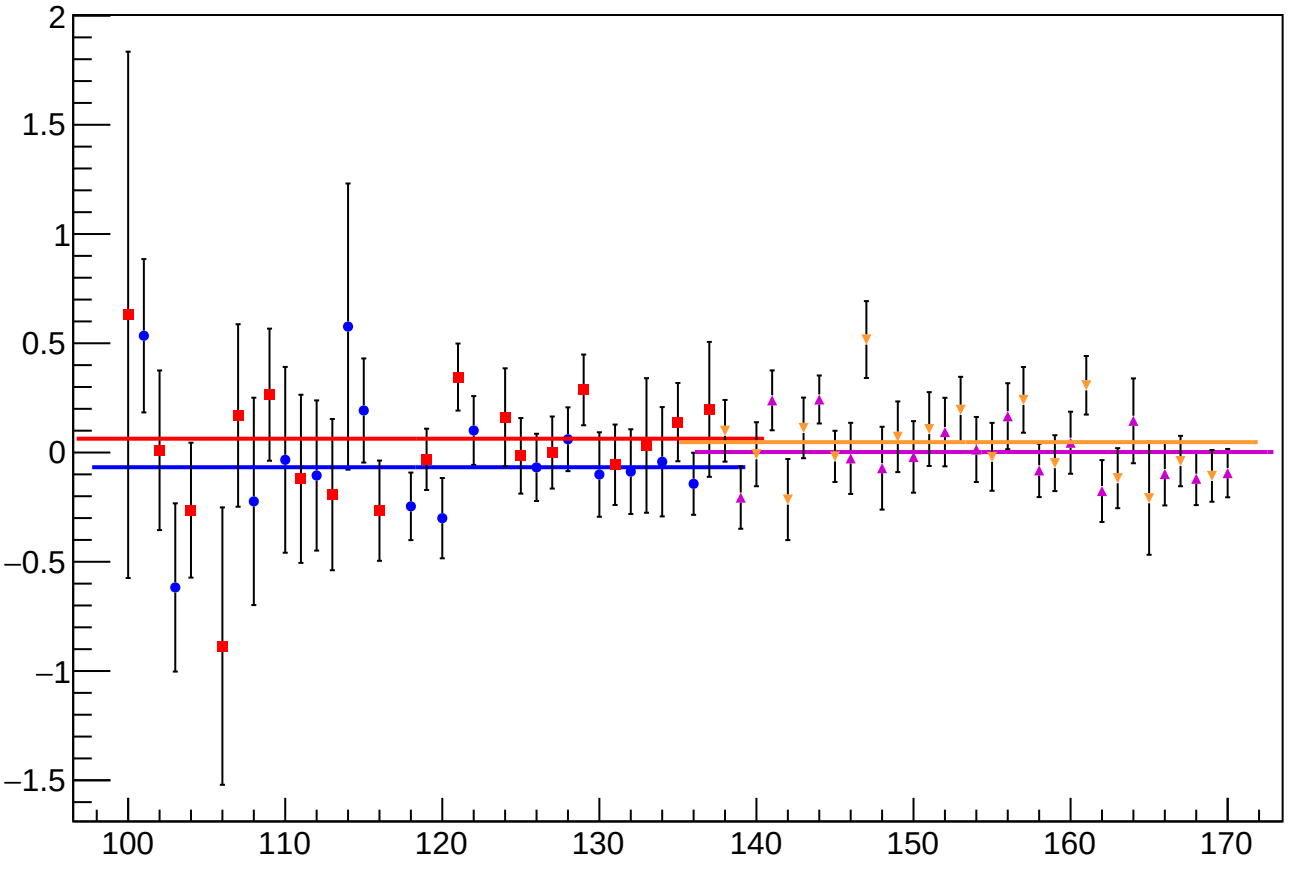
Left In: 124.840+/-0.025 $\chi^2$/NDF:576660.2/15

+ sign 126.895+/-0.020 $\chi^2$/NDF: 2417046.5/32

All: 126.590+/-0.015 $\chi^2$/NDF: 4893078.8/67

- sign 126.284+/-0.021 $\chi^2$/NDF: 2475589.7/34

# asym_sam2_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.067+/-0.052 $\chi^2$/NDF: 12.5/15

Left Out: 0.048+/-0.035 $\chi^2$/NDF:21.9/16

Right Out: 0.063+/-0.052 $\chi^2$/NDF: 14.0/18

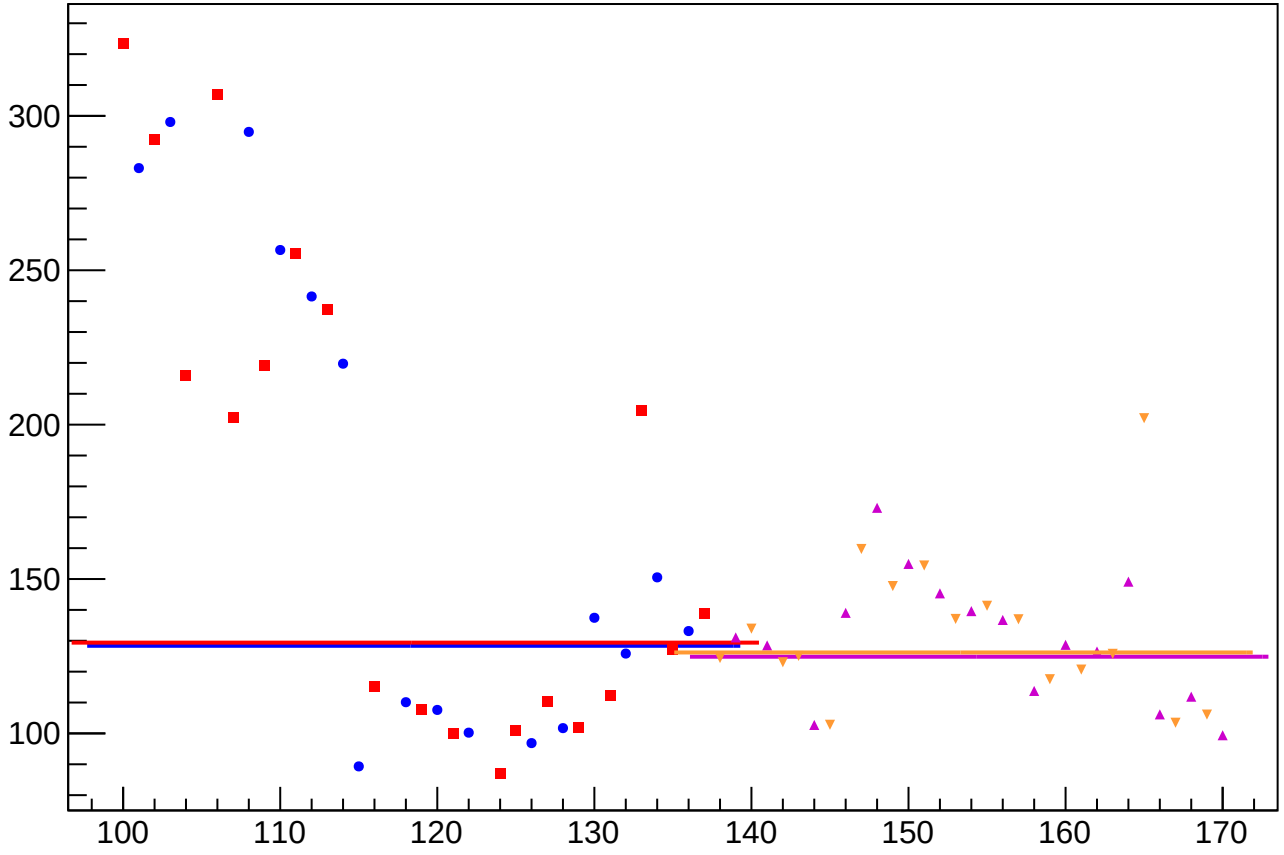
Left In: 0.002+/-0.035 $\chi^2$/NDF:16.6/15

+ sign 0.012+/-0.029 $\chi^2$/NDF: 37.7/32

All: 0.017+/-0.021 $\chi^2$/NDF: 69.4/67

- sign 0.022+/-0.029 $\chi^2$/NDF: 31.6/34

# asym_sam2_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 128.380+/-0.037 $\chi^2$/NDF: 1805078.6/15

Left Out: 126.216+/-0.025 $\chi^2$/NDF:609570.3/16

Right Out: 129.399+/-0.037 $\chi^2$/NDF: 1888271.6/18

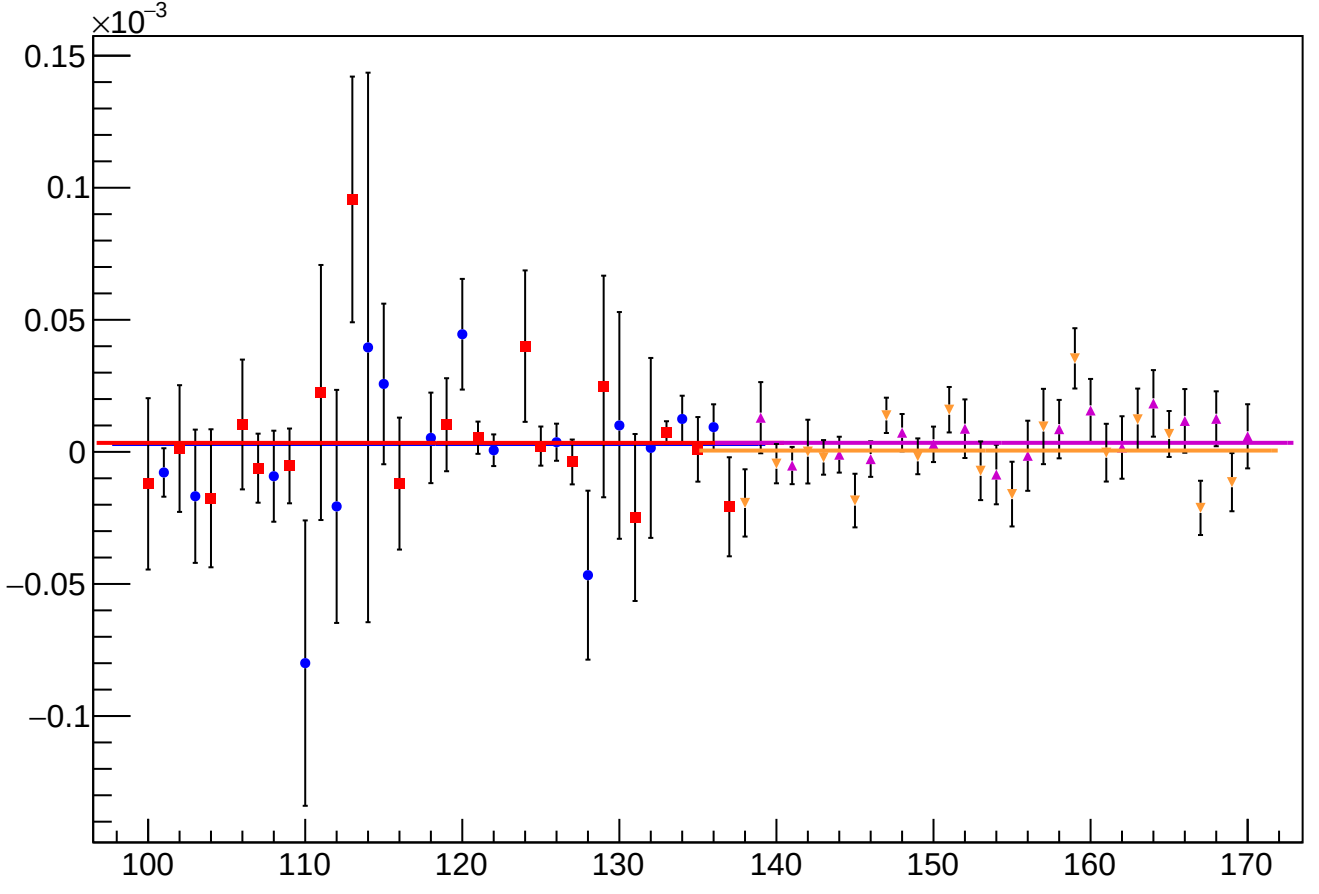
Left In: 124.840+/-0.025 $\chi^2$/NDF:576660.2/15

+ sign 126.895+/-0.020 $\chi^2$/NDF: 2417046.5/32

All: 126.590+/-0.015 $\chi^2$/NDF: 4893078.8/67

- sign 126.284+/-0.021 $\chi^2$/NDF: 2475589.7/34

# asym_sam2_eigen_dit_vs_dit_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:33.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 12.6/18

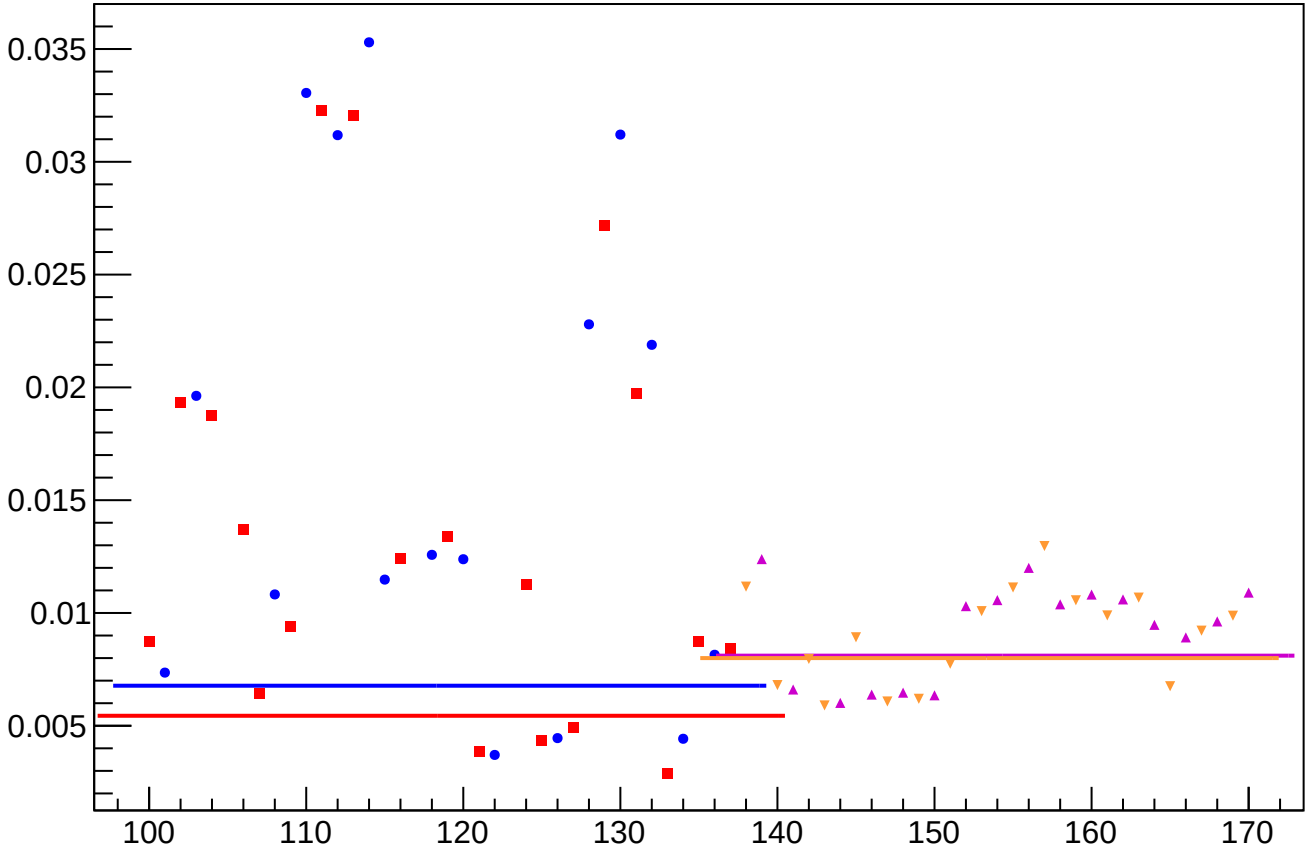
Left In: 0.000+/-0.000 $\chi^2$/NDF:9.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 47.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 69.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 21.6/34

# asym_sam2_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.007+/-0.000 $\chi^2$/NDF: 4772275.3/15

Left Out: 0.008+/-0.000 $\chi^2$/NDF:1543687.3/16

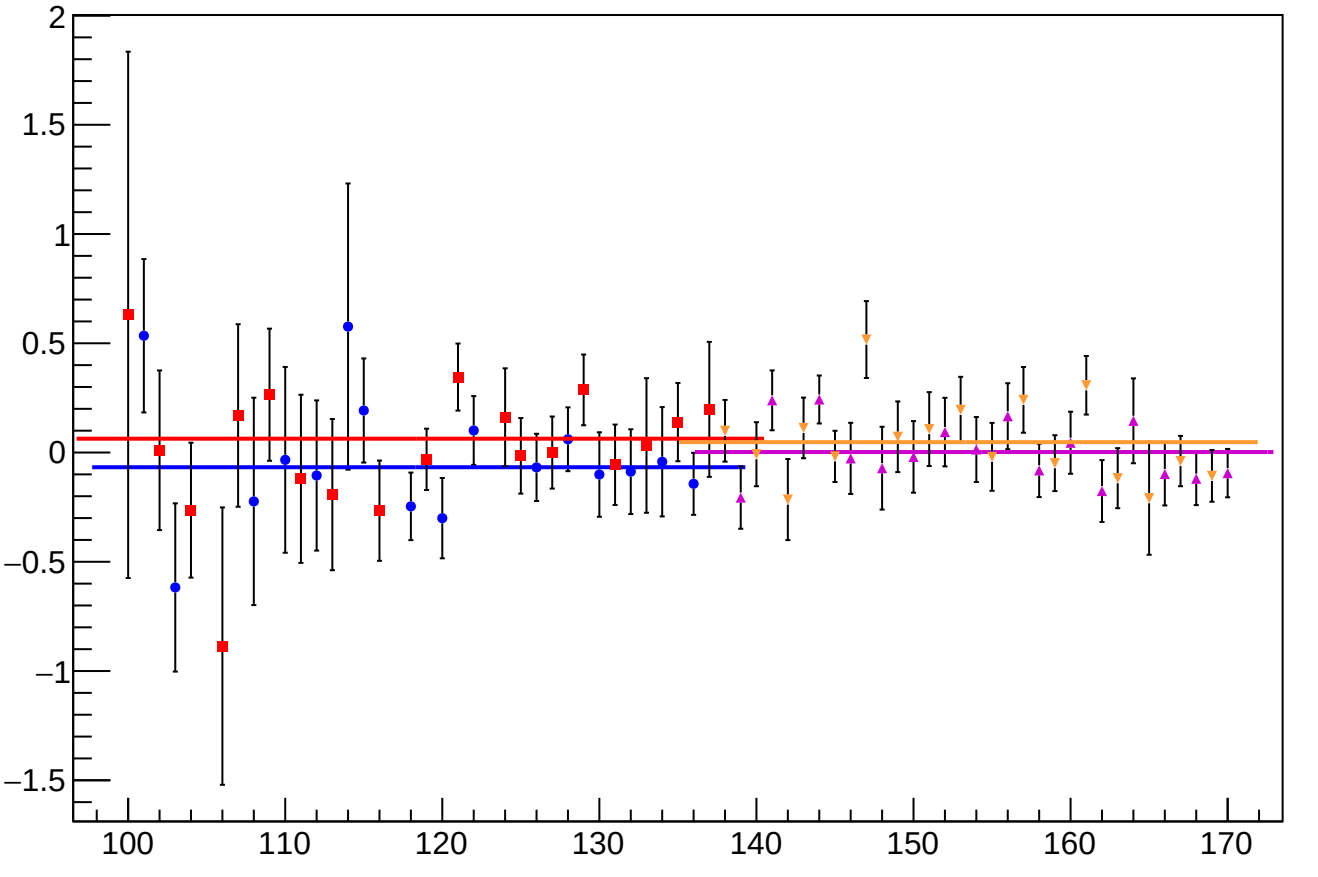
Right Out: 0.005+/-0.000 $\chi^2$/NDF: 5572364.1/18

Left In: 0.008+/-0.000 $\chi^2$/NDF:1662607.0/15

+ sign 0.008+/-0.000 $\chi^2$/NDF: 6516163.7/32

All: 0.007+/-0.000 $\chi^2$/NDF: 15058490.3/67

- sign 0.007+/-0.000 $\chi^2$/NDF: 8404759.8/34




Right In: -0.067+/-0.052 $\chi^2$/NDF: 12.5/15

Left Out: 0.048+/-0.035 $\chi^2$/NDF:21.9/16

Right Out: 0.063+/-0.052 $\chi^2$/NDF: 14.0/18

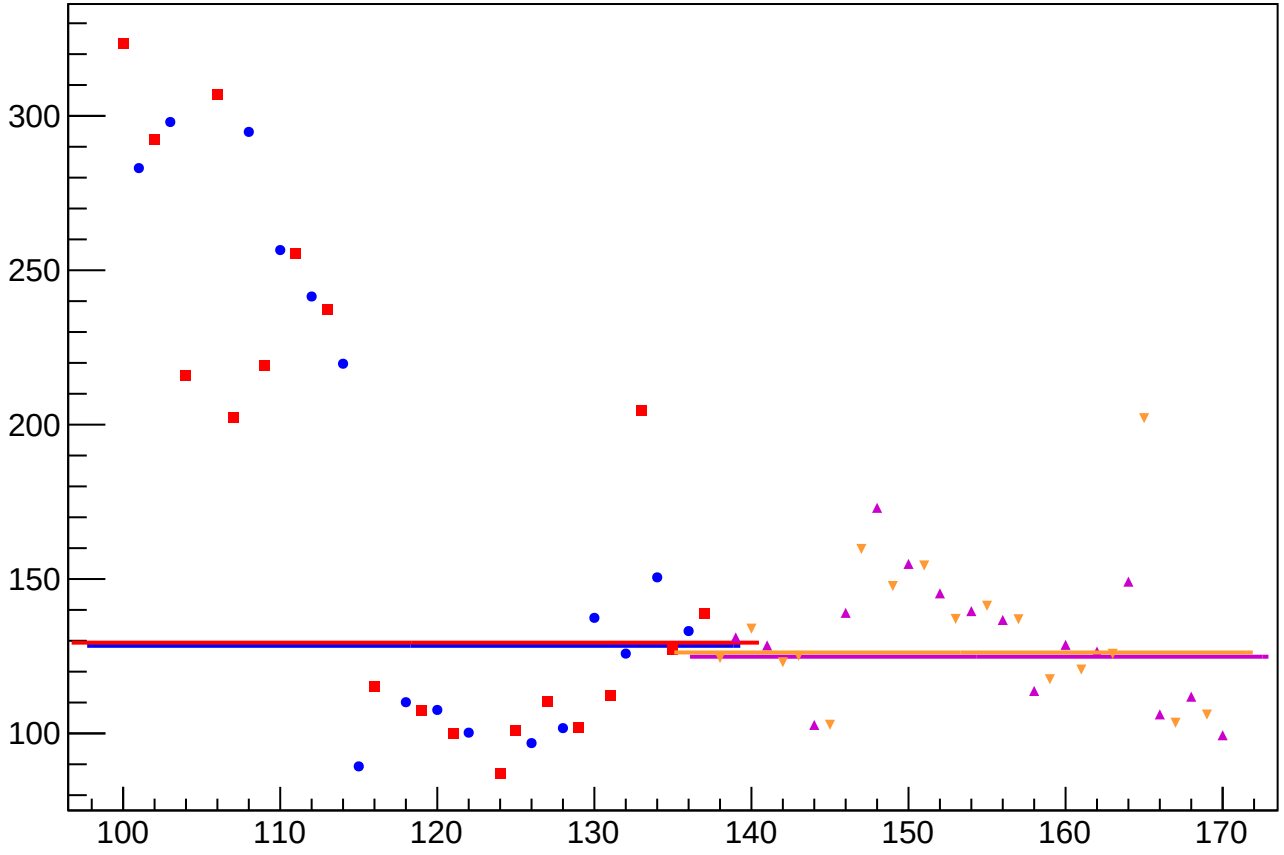
Left In: 0.002+/-0.035 $\chi^2$/NDF:16.6/15

+ sign 0.012+/-0.029 $\chi^2$/NDF: 37.7/32

All: 0.017+/-0.021 $\chi^2$/NDF: 69.4/67

- sign 0.022+/-0.029 $\chi^2$/NDF: 31.6/34

# asym_sam2_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 128.377+/-0.037 $\chi^2$/NDF: 1805026.7/15

Left Out: 126.216+/-0.025 $\chi^2$/NDF:609624.9/16

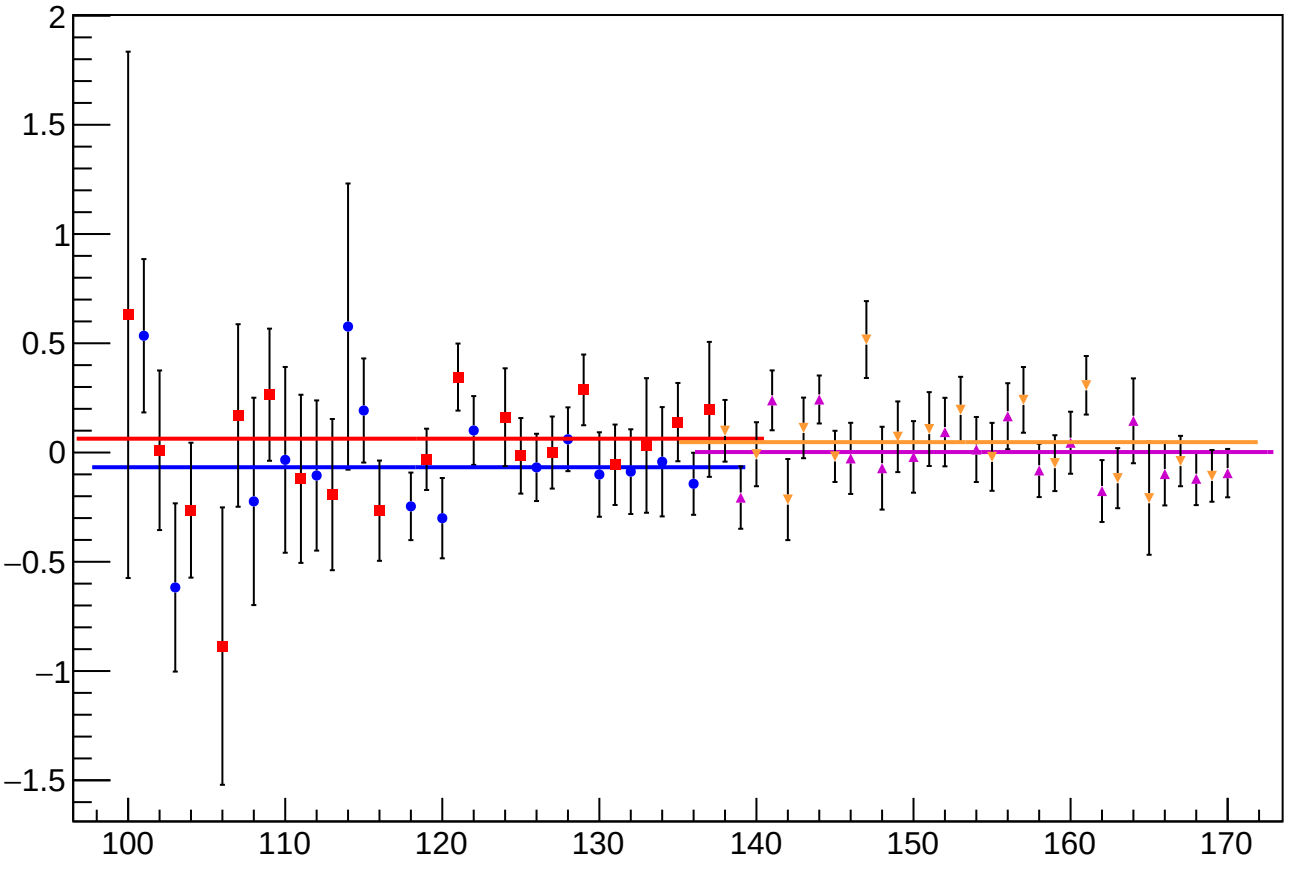
Right Out: 129.396+/-0.036 $\chi^2$/NDF: 1888272.8/18

Left In: 124.840+/-0.025 $\chi^2$/NDF:576700.7/15

+ sign 126.894+/-0.020 $\chi^2$/NDF: 2417043.5/32

All: 126.589+/-0.015 $\chi^2$/NDF: 4893105.9/67

- sign 126.283+/-0.021 $\chi^2$/NDF: 2475619.6/34




Right In: -0.067+/-0.052 $\chi^2$/NDF: 12.5/15

Left Out: 0.048+/-0.035 $\chi^2$/NDF:21.9/16

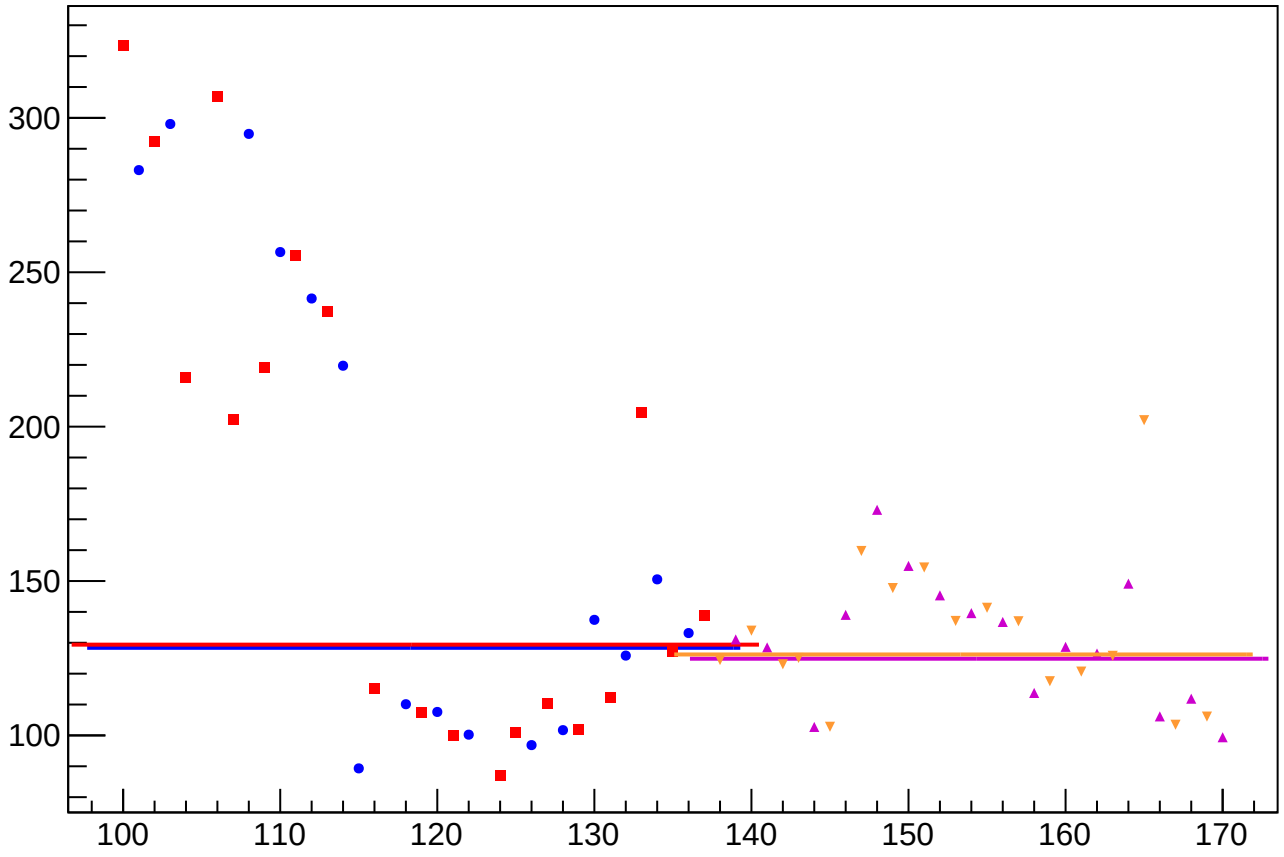
Right Out: 0.063+/-0.052 $\chi^2$/NDF: 14.0/18

Left In: 0.002+/-0.035 $\chi^2$/NDF:16.6/15

+ sign 0.012+/-0.029 $\chi^2$/NDF: 37.7/32

All: 0.017+/-0.021 $\chi^2$/NDF: 69.4/67

- sign 0.022+/-0.029 $\chi^2$/NDF: 31.6/34




Right In: 128.377+/-0.037 $\chi^2$/NDF: 1805026.7/15

Left Out: 126.216+/-0.025 $\chi^2$/NDF:609624.9/16

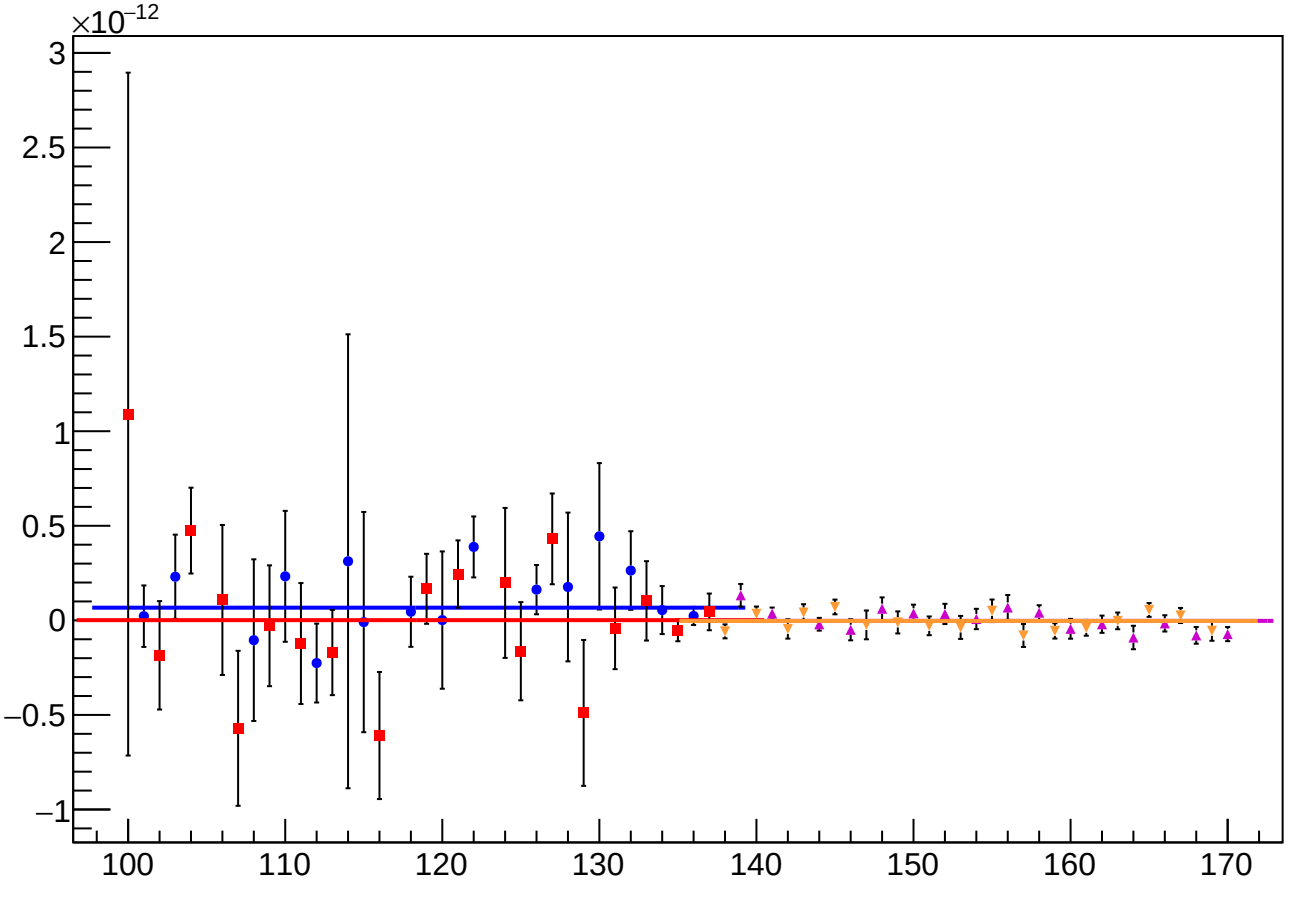
Right Out: 129.396+/-0.036 $\chi^2$/NDF: 1888272.8/18

Left In: 124.840+/-0.025 $\chi^2$/NDF:576700.7/15

+ sign 126.894+/-0.020 $\chi^2$/NDF: 2417043.5/32

All: 126.589+/-0.015 $\chi^2$/NDF: 4893105.9/67

- sign 126.283+/-0.021 $\chi^2$/NDF: 2475619.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 10.4/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:18.1/16

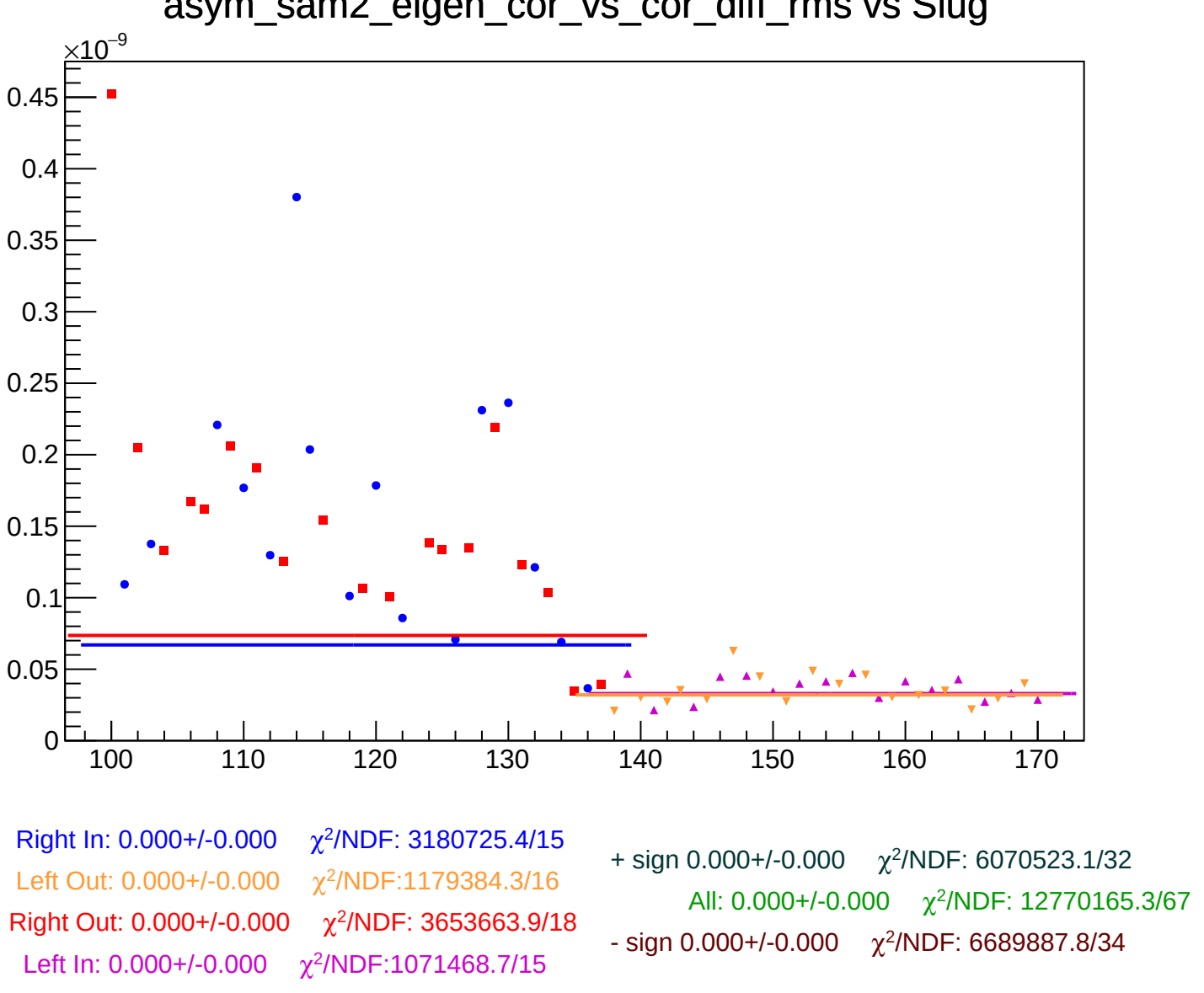
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 20.7/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:21.8/15

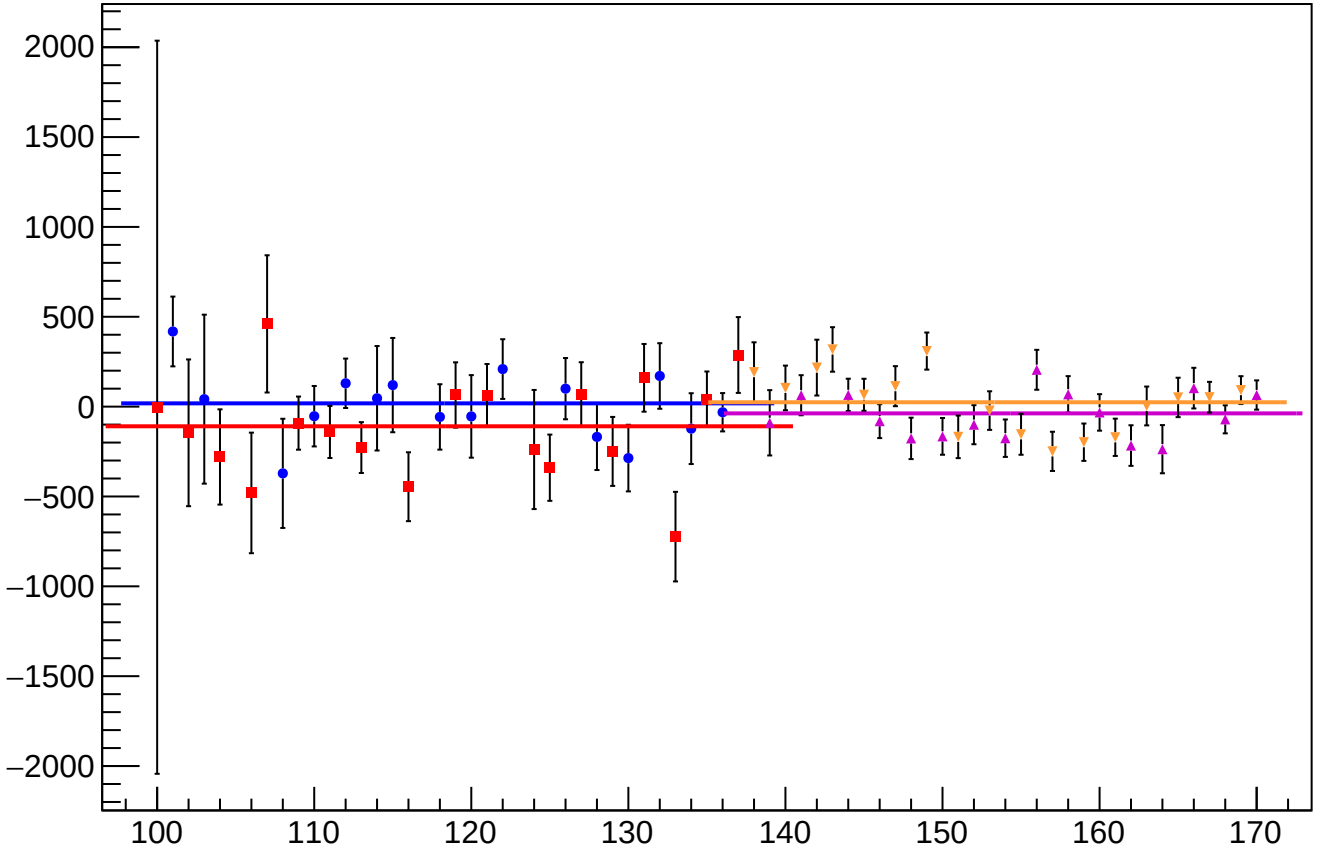
+ sign 0.000+/-0.000 $\chi^2$/NDF: 31.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 74.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 42.4/34


asym_sam2_eigen_cor_vs_cor_diff_rms vs Slug
×10⁻⁹
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3180725.4/15
Left Out: 0.000+/-0.000 χ²/NDF:1179384.3/16
Right Out: 0.000+/-0.000 χ²/NDF: 3653663.9/18
Left In: 0.000+/-0.000 χ²/NDF:1071468.7/15
+ sign 0.000+/-0.000 χ²/NDF: 6070523.1/32
All: 0.000+/-0.000 χ²/NDF: 12770165.3/67
- sign 0.000+/-0.000 χ²/NDF: 6689887.8/34

# reg_asym_sam3_mean vs Slug




Right In: 18.204+/-45.704 $\chi^2$/NDF: 13.9/15

Left Out: 24.309+/-25.947 $\chi^2$/NDF:37.7/16

Right Out: -109.432+/-45.825 $\chi^2$/NDF: 25.5/18

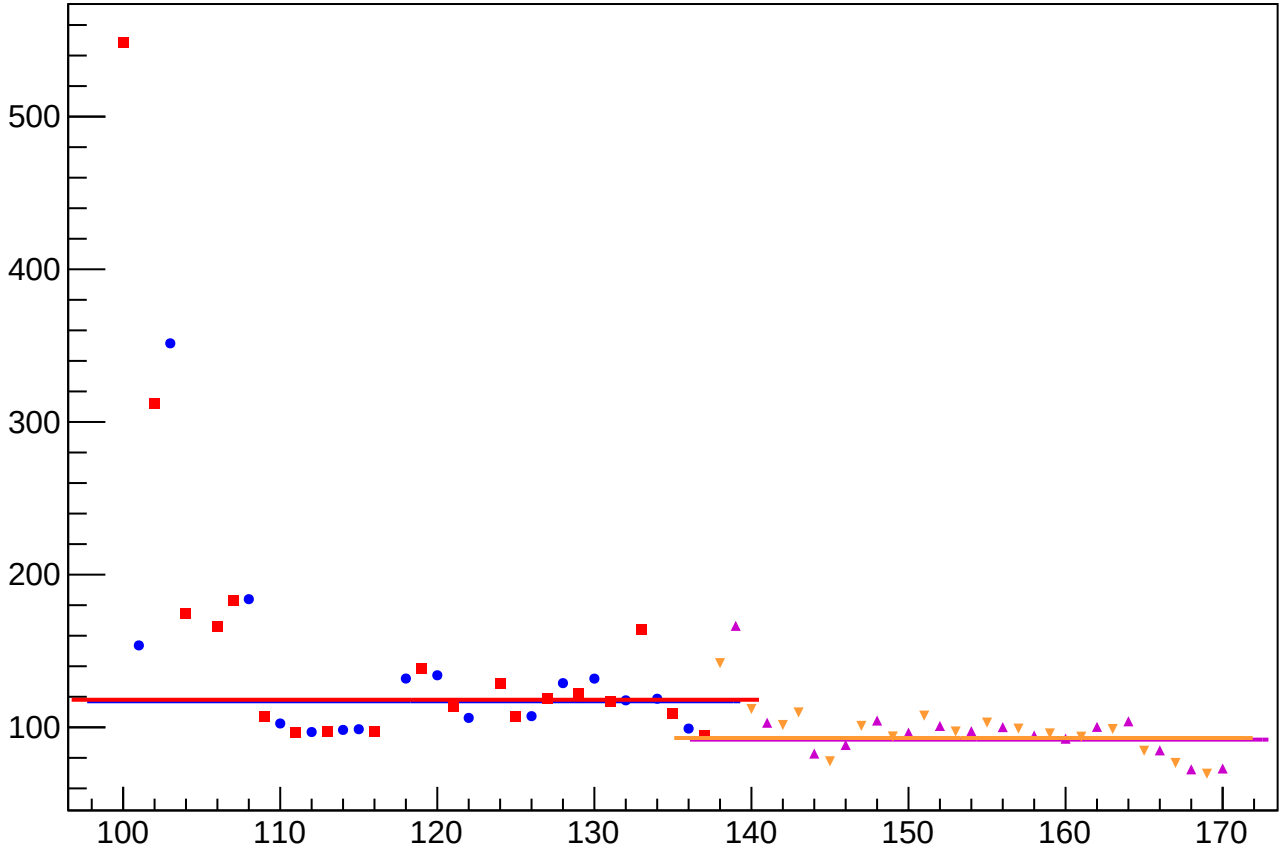
Left In: -37.566+/-25.847 $\chi^2$/NDF:21.4/15

+ sign 22.821+/-22.564 $\chi^2$/NDF: 51.6/32

All: -16.134+/-15.937 $\chi^2$/NDF: 106.3/67

- sign -54.912+/-22.513 $\chi^2$/NDF: 48.8/34

# reg_asym_sam3_rms vs Slug




Right In: 117.063+/-0.032 $\chi^2$/NDF: 858400.8/15

Left Out: 93.009+/-0.018 $\chi^2$/NDF:662767.9/16

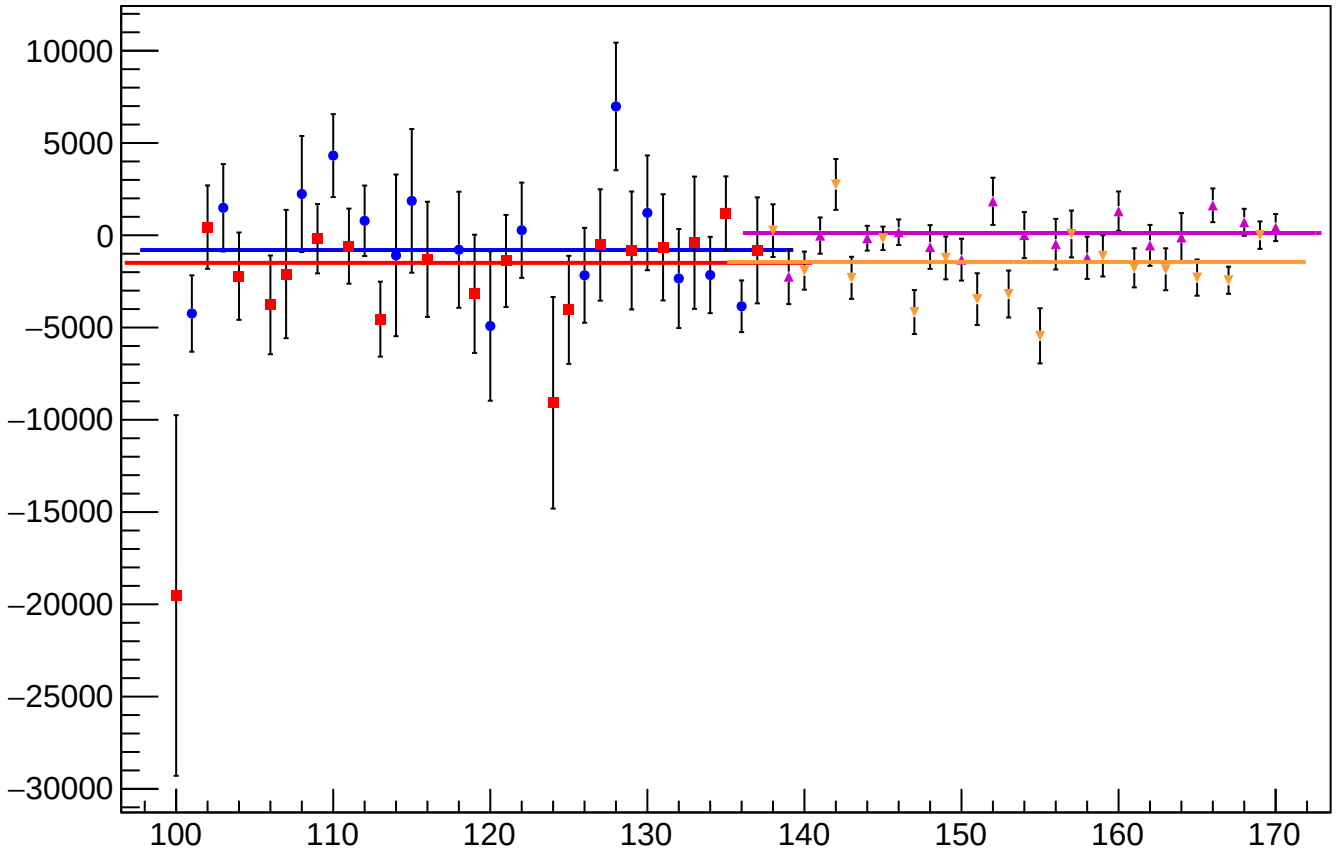
Right Out: 118.057+/-0.032 $\chi^2$/NDF: 990748.0/18

Left In: 91.942+/-0.018 $\chi^2$/NDF:705193.2/15

+ sign 98.872+/-0.016 $\chi^2$/NDF: 1940101.1/32

All: 98.558+/-0.011 $\chi^2$/NDF: 4129600.7/67

- sign 98.245+/-0.016 $\chi^2$/NDF: 2188726.8/34




Right In: -799.133+/-616.009 $\chi^2$/NDF: 23.4/15

Left Out: -1445.663+/-250.004 $\chi^2$/NDF:40.0/16

Right Out: -1493.897+/-613.097 $\chi^2$/NDF: 12.9/18

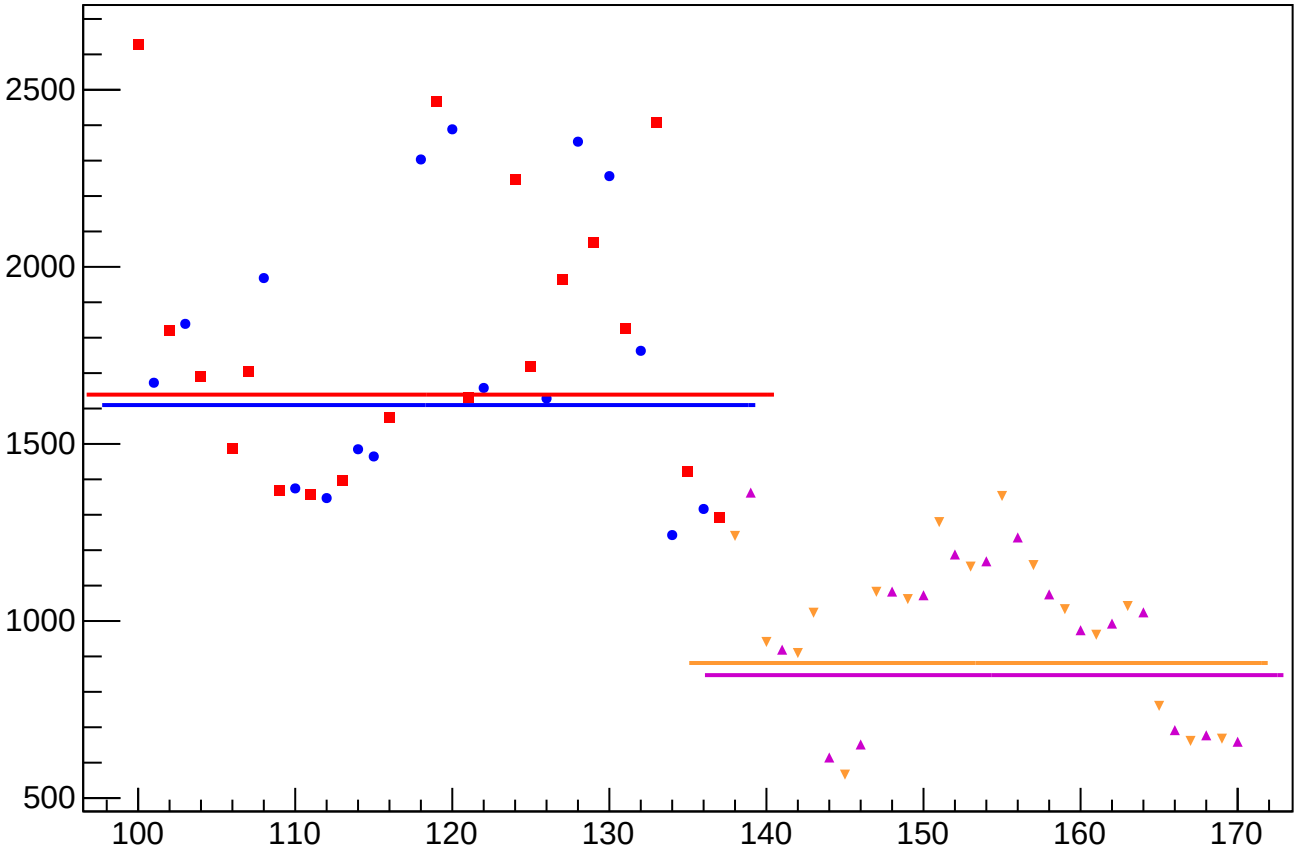
Left In: 123.249+/-242.420 $\chi^2$/NDF:13.2/15

+ sign -1354.233+/-231.653 $\chi^2$/NDF: 64.4/32

All: -707.698+/-161.561 $\chi^2$/NDF: 111.7/67

- sign -95.397+/-225.437 $\chi^2$/NDF: 32.2/34

# asym_sam3_reg_correction_rms vs Slug




Right In: 1609.782+/-0.436 $\chi^2$/NDF: 619129.2/15

Left Out: 881.451+/-0.177 $\chi^2$/NDF:1771514.1/16

Right Out: 1639.241+/-0.434 $\chi^2$/NDF: 520182.2/18

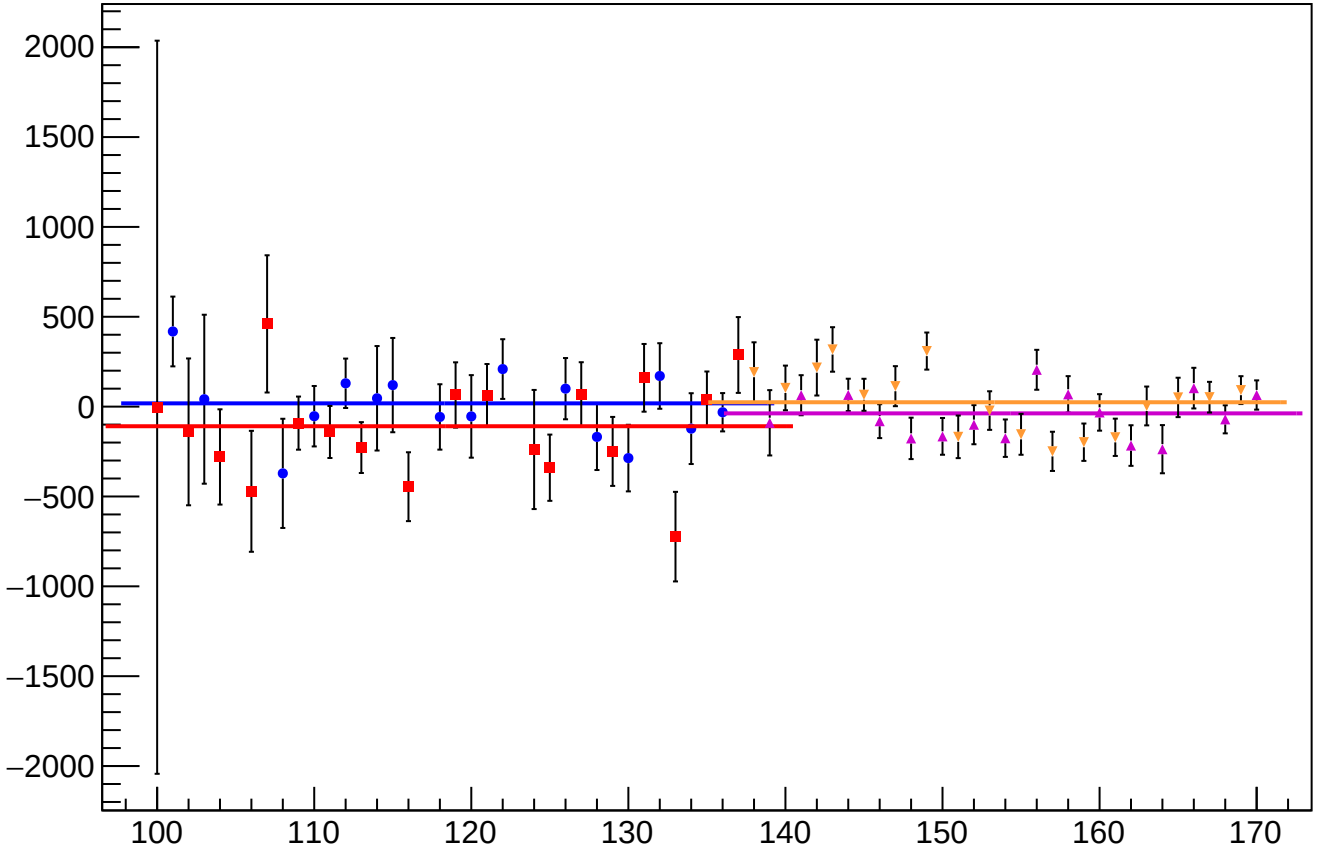
Left In: 847.191+/-0.171 $\chi^2$/NDF:1719562.9/15

+ sign 984.449+/-0.164 $\chi^2$/NDF: 4791107.5/32

All: 968.954+/-0.114 $\chi^2$/NDF: 9934895.5/67

- sign 954.280+/-0.159 $\chi^2$/NDF: 5126366.0/34

# cor_asym_sam3_mean vs Slug




Right In: 18.191+/-45.704 $\chi^2$/NDF: 13.9/15

Left Out: 24.316+/-25.947 $\chi^2$/NDF:37.7/16

Right Out: -109.151+/-45.828 $\chi^2$/NDF: 25.4/18

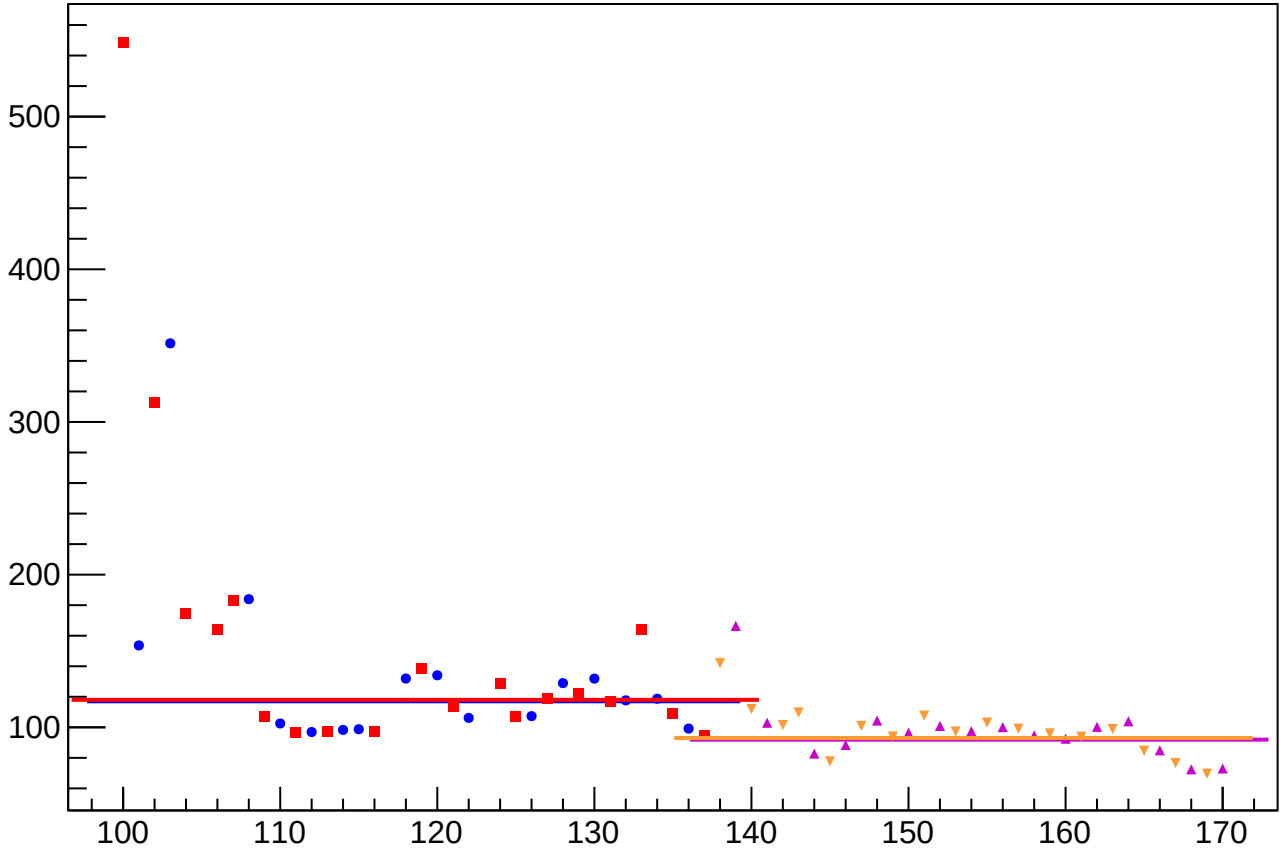
Left In: -37.565+/-25.848 $\chi^2$/NDF:21.4/15

+ sign 22.823+/-22.564 $\chi^2$/NDF: 51.6/32

All: -16.097+/-15.937 $\chi^2$/NDF: 106.2/67

- sign -54.841+/-22.513 $\chi^2$/NDF: 48.7/34

# cor_asym_sam3_rms vs Slug




Right In: 117.063+/-0.032 $\chi^2$/NDF: 858402.8/15

Left Out: 93.009+/-0.018 $\chi^2$/NDF:662767.8/16

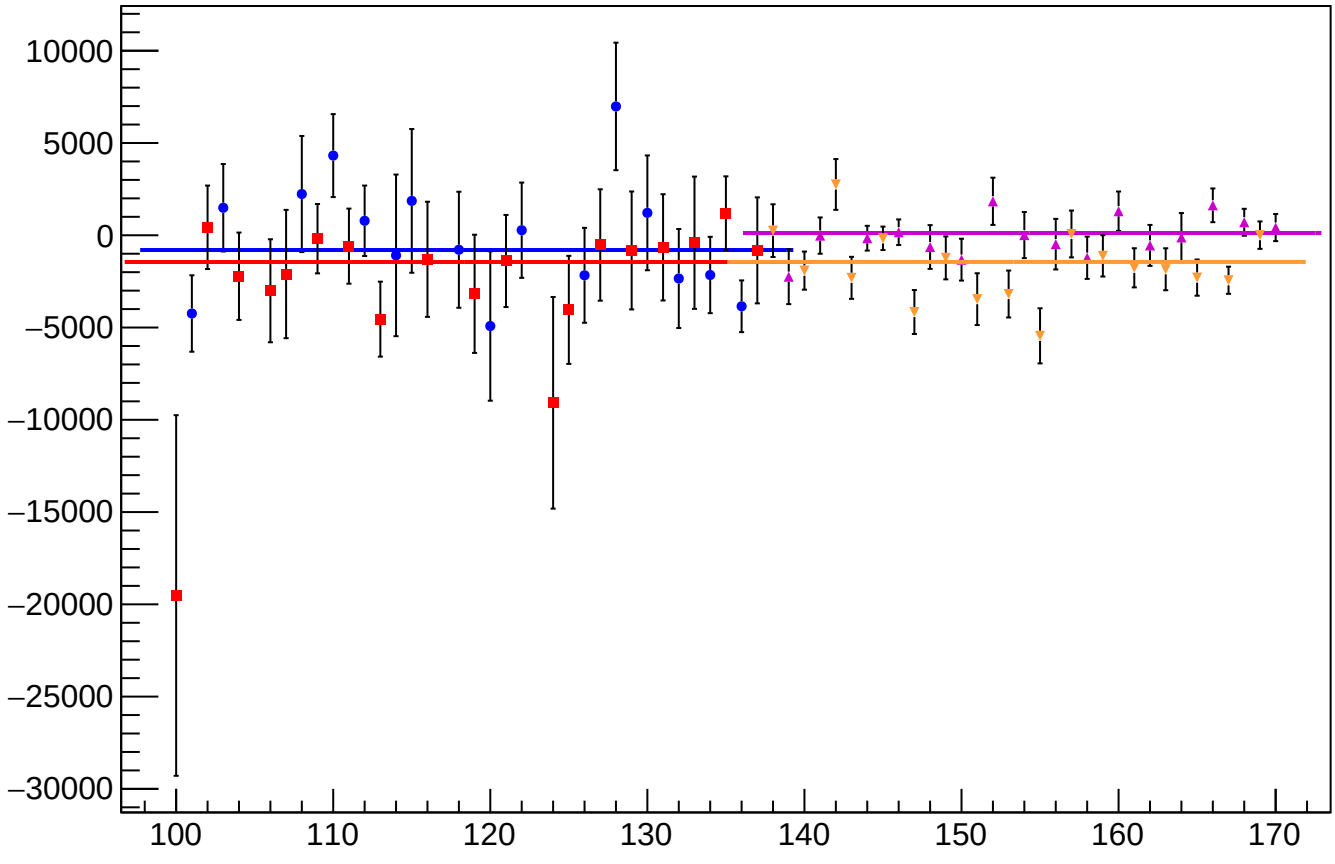
Right Out: 118.006+/-0.032 $\chi^2$/NDF: 986553.8/18

Left In: 91.942+/-0.018 $\chi^2$/NDF:705193.2/15

+ sign 98.872+/-0.016 $\chi^2$/NDF: 1940102.8/32

All: 98.551+/-0.011 $\chi^2$/NDF: 4123439.5/67

- sign 98.232+/-0.016 $\chi^2$/NDF: 2182531.3/34




Right In: -799.116+/-616.014 $\chi^2$/NDF: 23.4/15

Left Out: -1445.651+/-250.004 $\chi^2$/NDF:40.0/16

Right Out: -1448.433+/-614.443 $\chi^2$/NDF: 12.5/18

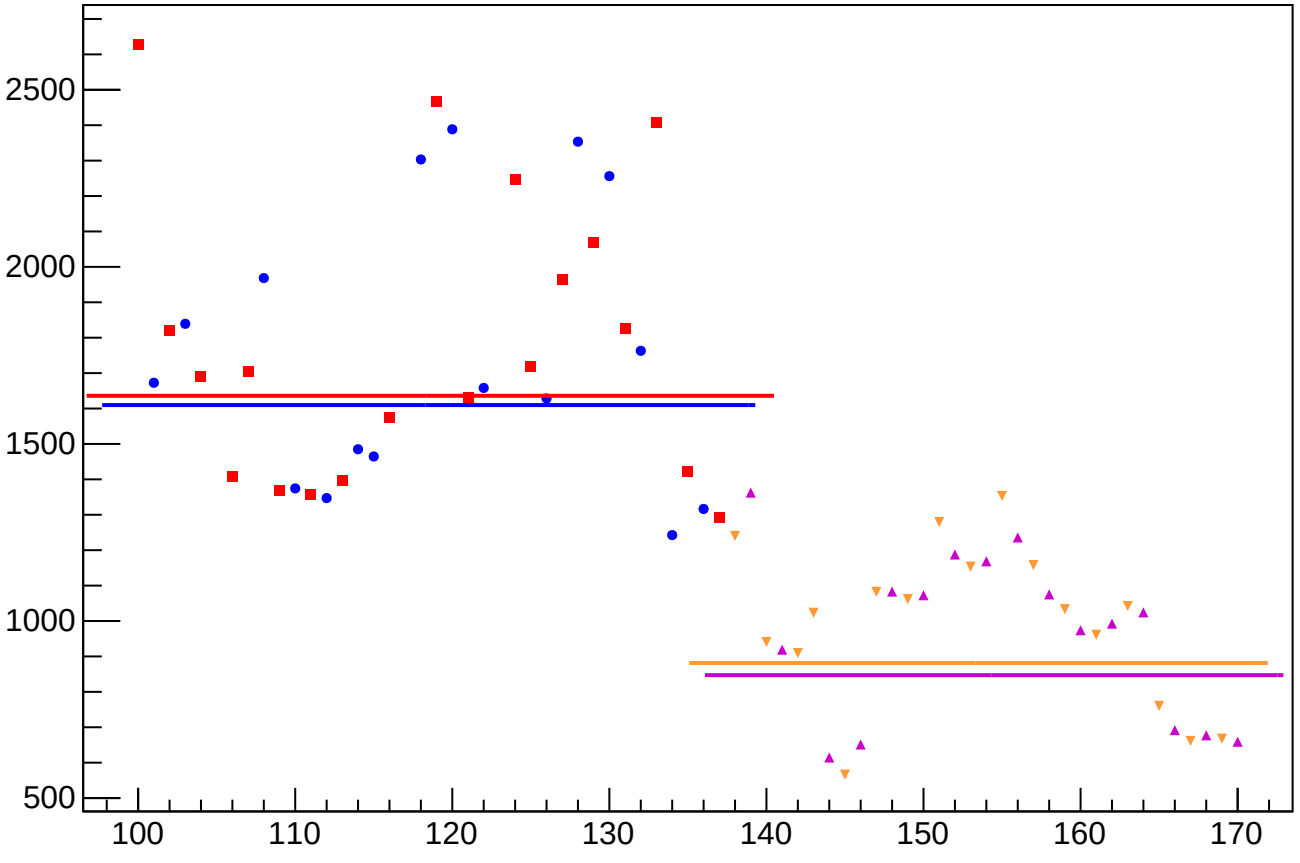
Left In: 123.244+/-242.420 $\chi^2$/NDF:13.2/15

+ sign -1354.221+/-231.653 $\chi^2$/NDF: 64.4/32

All: -704.311+/-161.585 $\chi^2$/NDF: 111.1/67

- sign -88.449+/-225.503 $\chi^2$/NDF: 31.4/34

# asym_sam3_cor_correction_rms vs Slug




Right In: 1609.791+/-0.436 $\chi^2$/NDF: 619158.3/15

Left Out: 881.450+/-0.177 $\chi^2$/NDF:1771518.5/16

Right Out: 1636.046+/-0.434 $\chi^2$/NDF: 527809.9/18

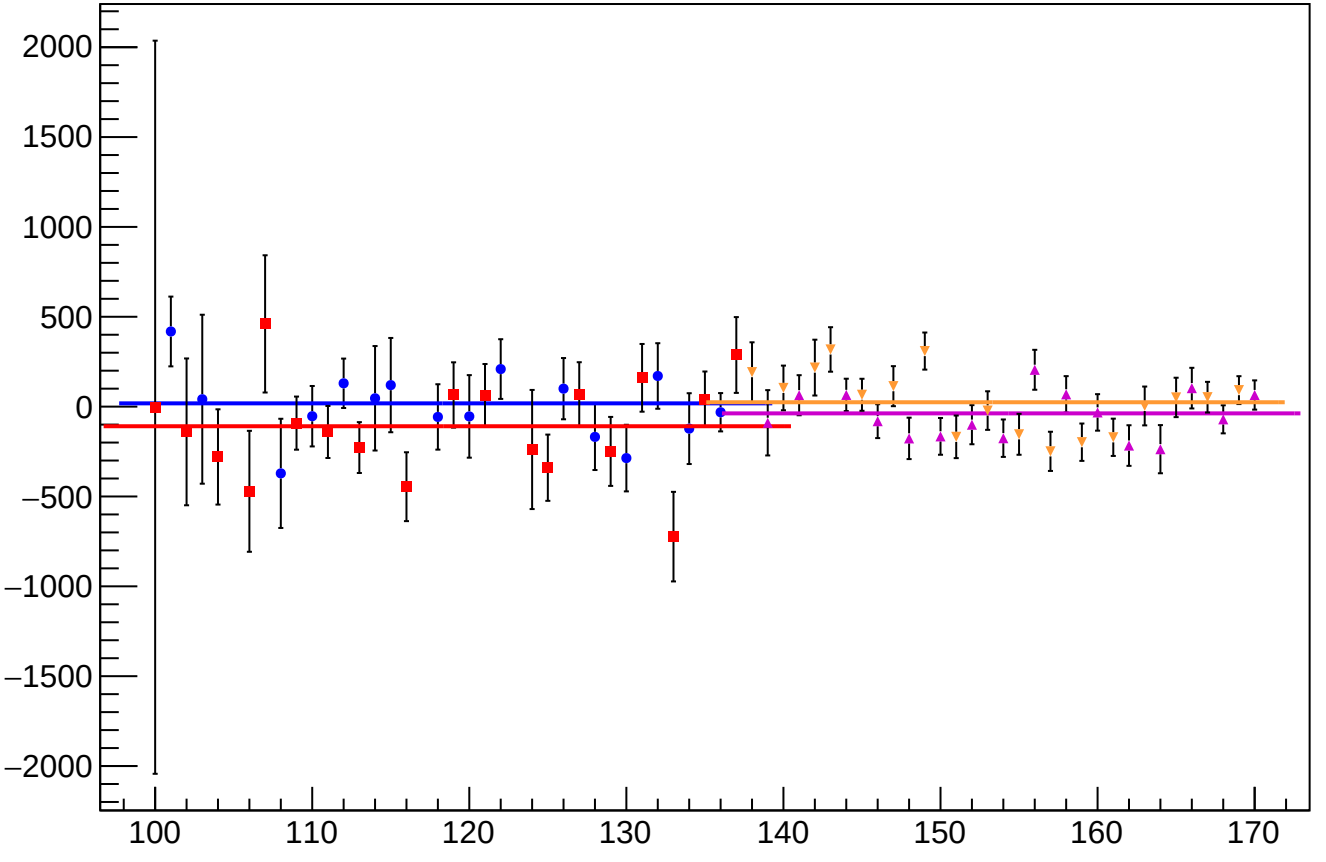
Left In: 847.191+/-0.171 $\chi^2$/NDF:1719563.2/15

+ sign 984.449+/-0.164 $\chi^2$/NDF: 4791176.5/32

All: 968.529+/-0.114 $\chi^2$/NDF: 9909480.8/67

- sign 953.444+/-0.159 $\chi^2$/NDF: 5099909.2/34

# eigen_cor_asym_sam3_mean vs Slug




Right In: 18.191+/-45.704 $\chi^2$/NDF: 13.9/15

Left Out: 24.316+/-25.947 $\chi^2$/NDF:37.7/16

Right Out: -109.151+/-45.828 $\chi^2$/NDF: 25.4/18

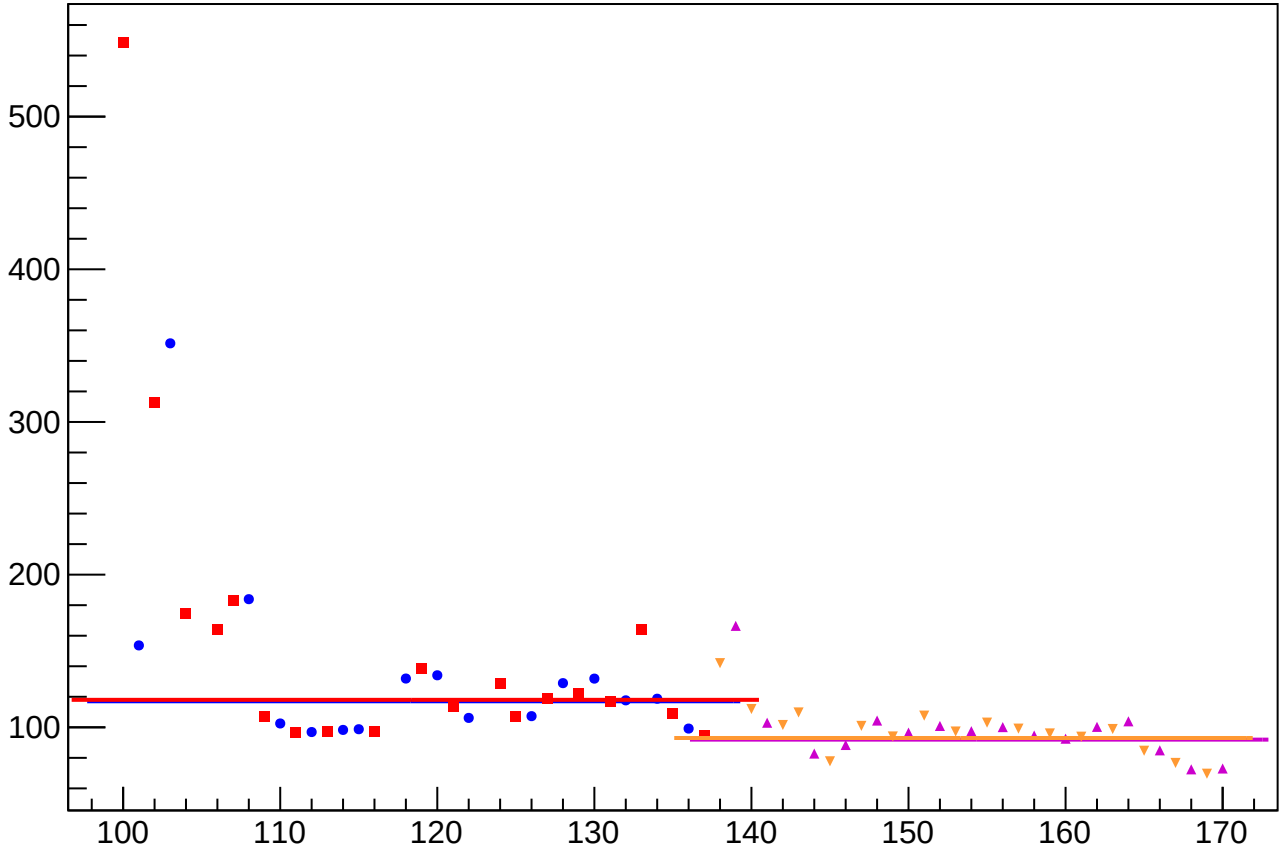
Left In: -37.565+/-25.848 $\chi^2$/NDF:21.4/15

+ sign 22.823+/-22.564 $\chi^2$/NDF: 51.6/32

All: -16.097+/-15.937 $\chi^2$/NDF: 106.2/67

- sign -54.841+/-22.513 $\chi^2$/NDF: 48.7/34

# eigen_cor_asym_sam3_rms vs Slug




Right In: 117.063+/-0.032 $\chi^2$/NDF: 858402.8/15

Left Out: 93.009+/-0.018 $\chi^2$/NDF:662767.8/16

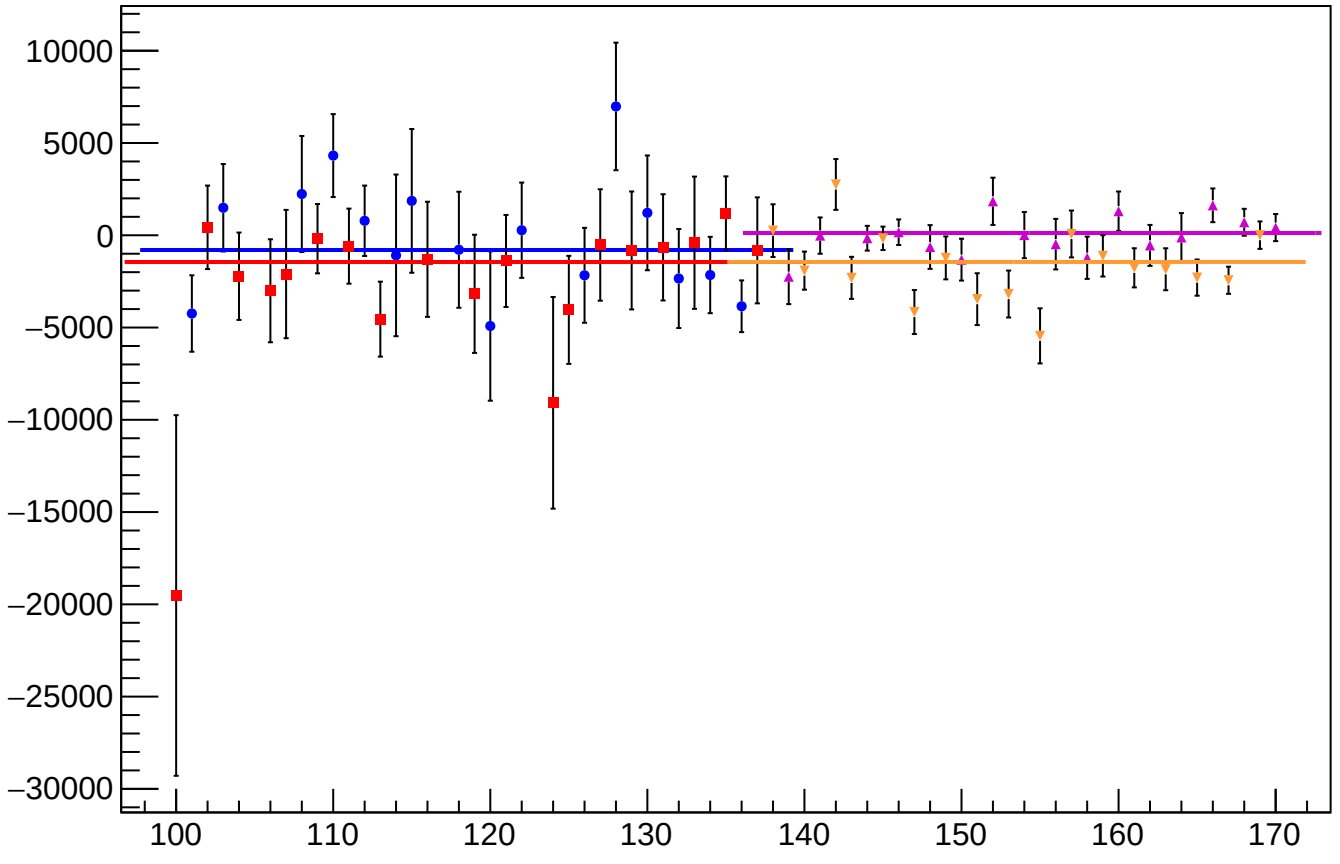
Right Out: 118.006+/-0.032 $\chi^2$/NDF: 986553.8/18

Left In: 91.942+/-0.018 $\chi^2$/NDF:705193.2/15

+ sign 98.872+/-0.016 $\chi^2$/NDF: 1940102.8/32

All: 98.551+/-0.011 $\chi^2$/NDF: 4123439.5/67

- sign 98.232+/-0.016 $\chi^2$/NDF: 2182531.3/34




Right In: -799.116+/-616.014 $\chi^2$/NDF: 23.4/15

Left Out: -1445.651+/-250.004 $\chi^2$/NDF:40.0/16

Right Out: -1448.433+/-614.443 $\chi^2$/NDF: 12.5/18

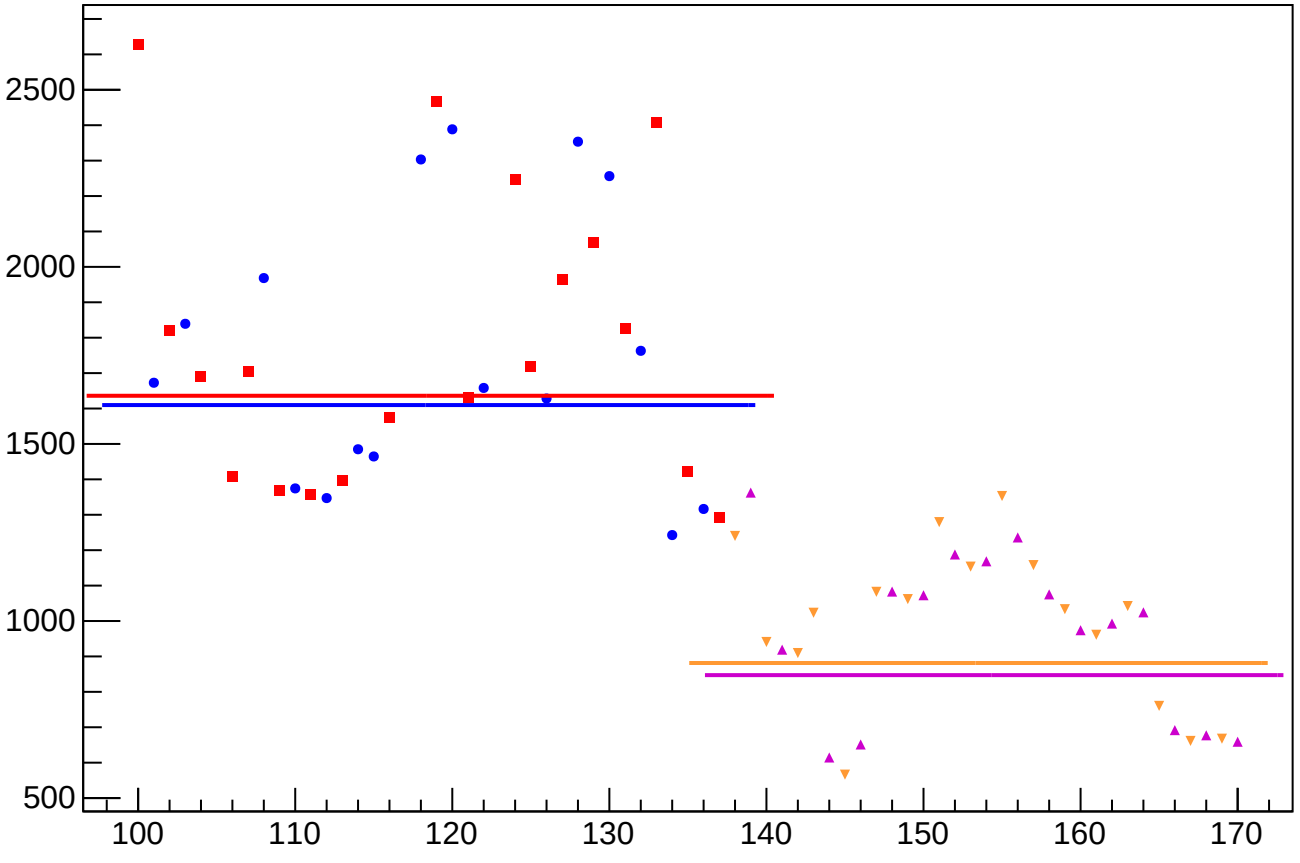
Left In: 123.244+/-242.420 $\chi^2$/NDF:13.2/15

+ sign -1354.221+/-231.653 $\chi^2$/NDF: 64.4/32

All: -704.311+/-161.585 $\chi^2$/NDF: 111.1/67

- sign -88.449+/-225.503 $\chi^2$/NDF: 31.4/34

# asym_sam3_eigen_cor_correction_rms vs Slug




Right In: 1609.791+/-0.436 $\chi^2$/NDF: 619158.3/15

Left Out: 881.450+/-0.177 $\chi^2$/NDF:1771518.5/16

Right Out: 1636.046+/-0.434 $\chi^2$/NDF: 527809.9/18

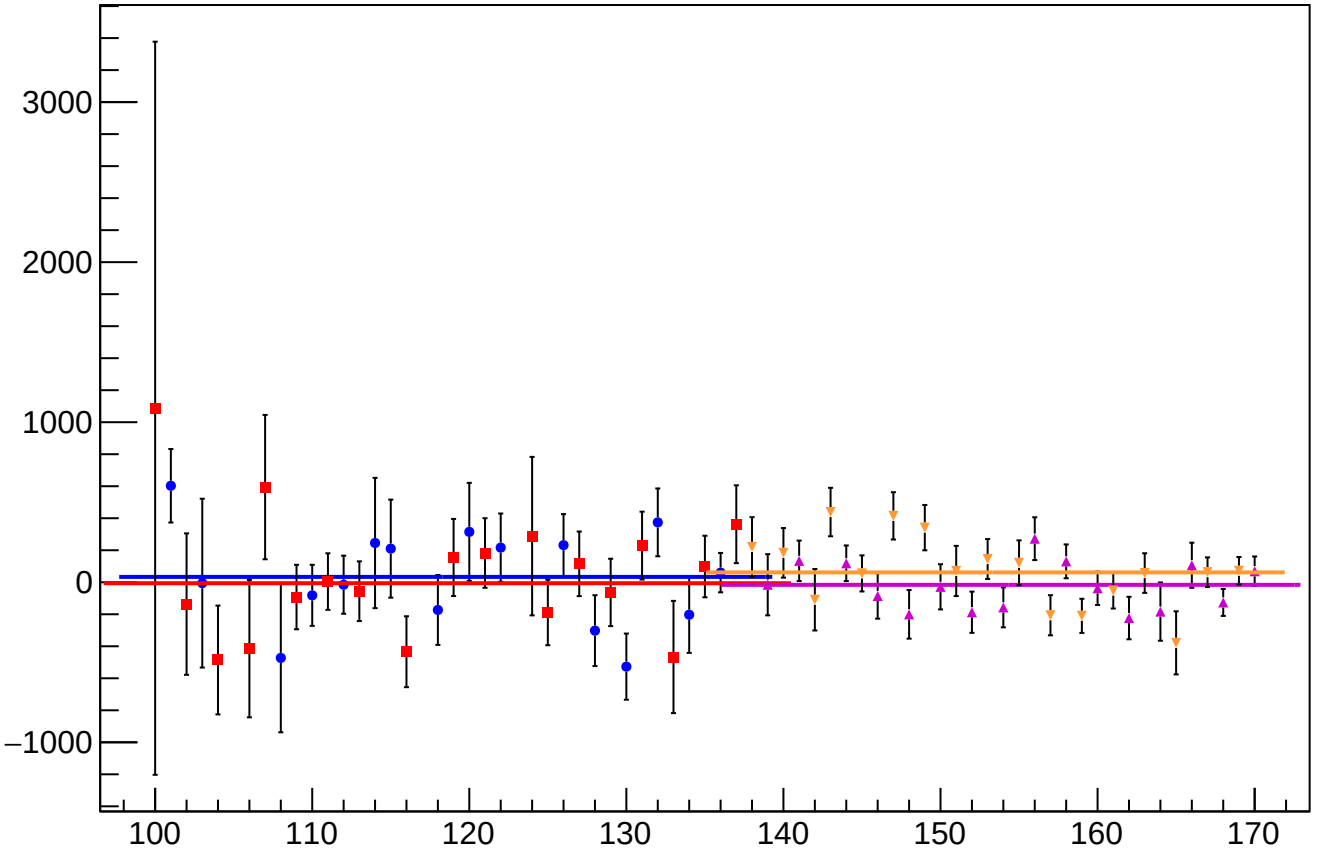
Left In: 847.191+/-0.171 $\chi^2$/NDF:1719563.2/15

+ sign 984.449+/-0.164 $\chi^2$/NDF: 4791176.5/32

All: 968.529+/-0.114 $\chi^2$/NDF: 9909480.8/67

- sign 953.444+/-0.159 $\chi^2$/NDF: 5099909.2/34

# dit_asym_sam3_mean vs Slug




Right In: 33.471+/-54.908 $\chi^2$/NDF: 25.2/15

Left Out: 61.550+/-30.924 $\chi^2$/NDF:35.7/16

Right Out: -6.107+/-56.090 $\chi^2$/NDF: 17.3/18

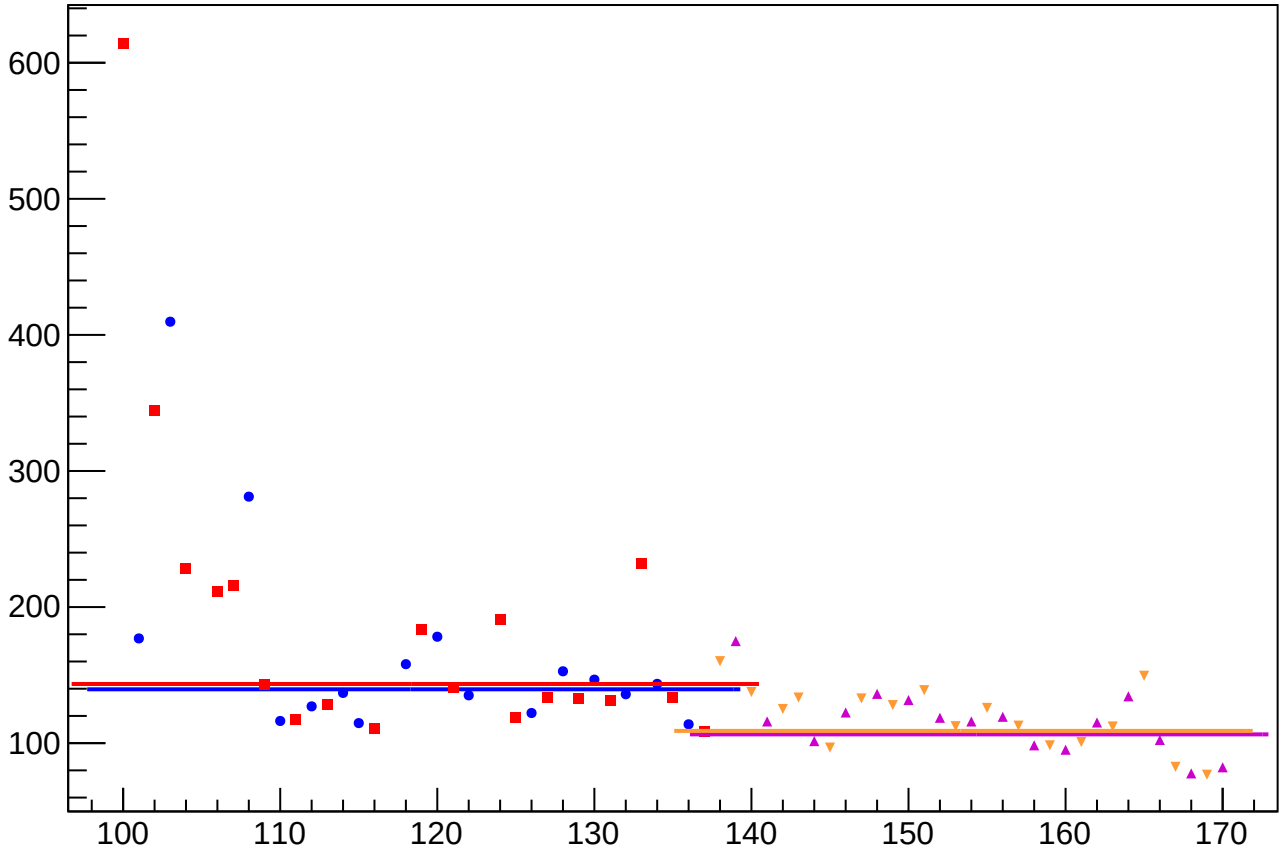
Left In: -16.140+/-30.550 $\chi^2$/NDF:20.9/15

+ sign 54.788+/-26.945 $\chi^2$/NDF: 61.0/32

All: 20.324+/-19.012 $\chi^2$/NDF: 102.5/67

- sign -13.845+/-26.829 $\chi^2$/NDF: 38.2/34

# dit_asym_sam3_rms vs Slug




Right In: 139.566+/-0.039 $\chi^2$/NDF: 976734.6/15

Left Out: 109.018+/-0.022 $\chi^2$/NDF:1063148.4/16

Right Out: 143.479+/-0.040 $\chi^2$/NDF: 1116671.9/18

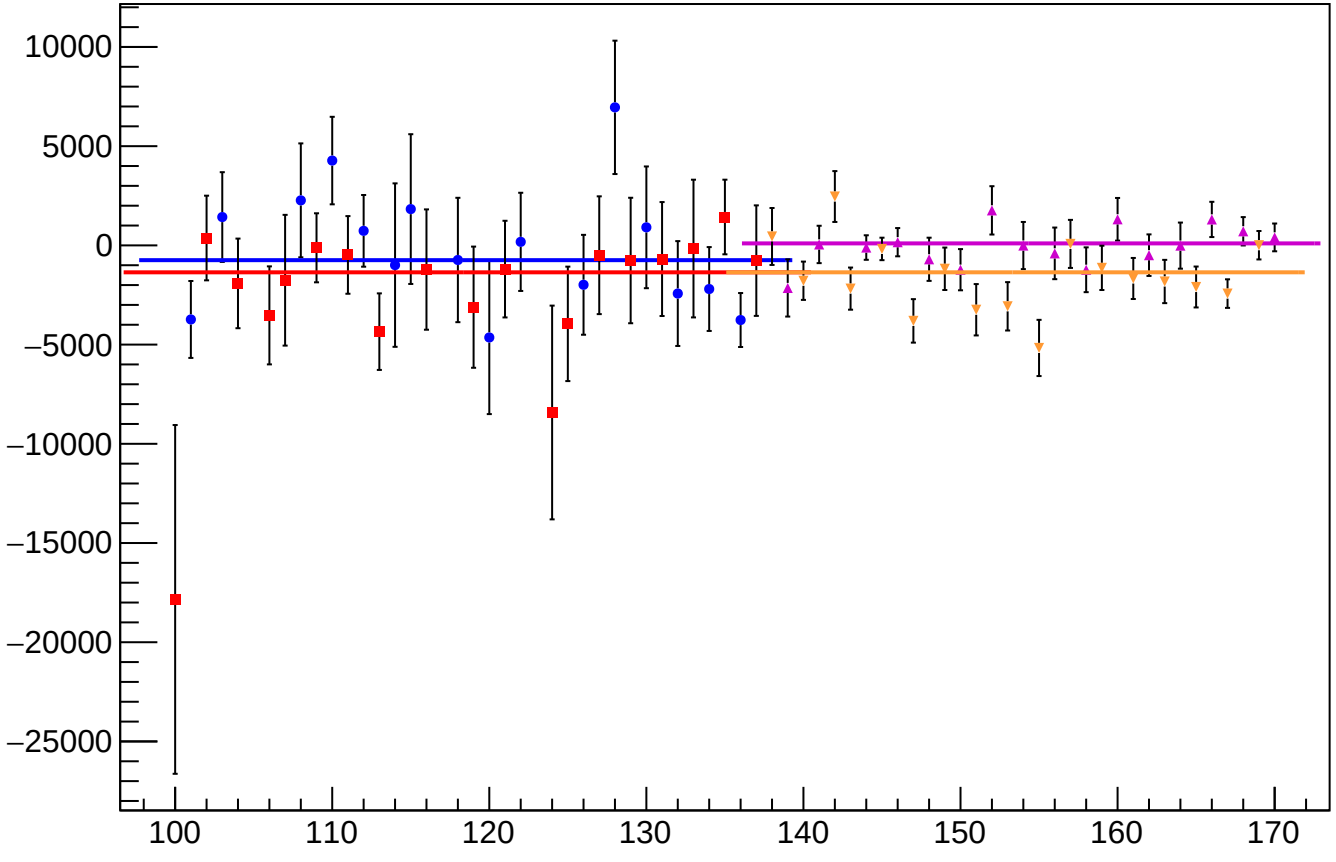
Left In: 106.442+/-0.022 $\chi^2$/NDF:949095.7/15

+ sign 116.374+/-0.019 $\chi^2$/NDF: 2509880.1/32

All: 115.642+/-0.013 $\chi^2$/NDF: 5251141.1/67

- sign 114.915+/-0.019 $\chi^2$/NDF: 2738315.5/34

# asym_sam3_dit_correction_mean vs Slug




Right In: -744.681+/-595.810 $\chi^2$/NDF: 23.5/15

Left Out: -1357.020+/-237.490 $\chi^2$/NDF:40.0/16

Right Out: -1357.874+/-585.808 $\chi^2$/NDF: 13.5/18

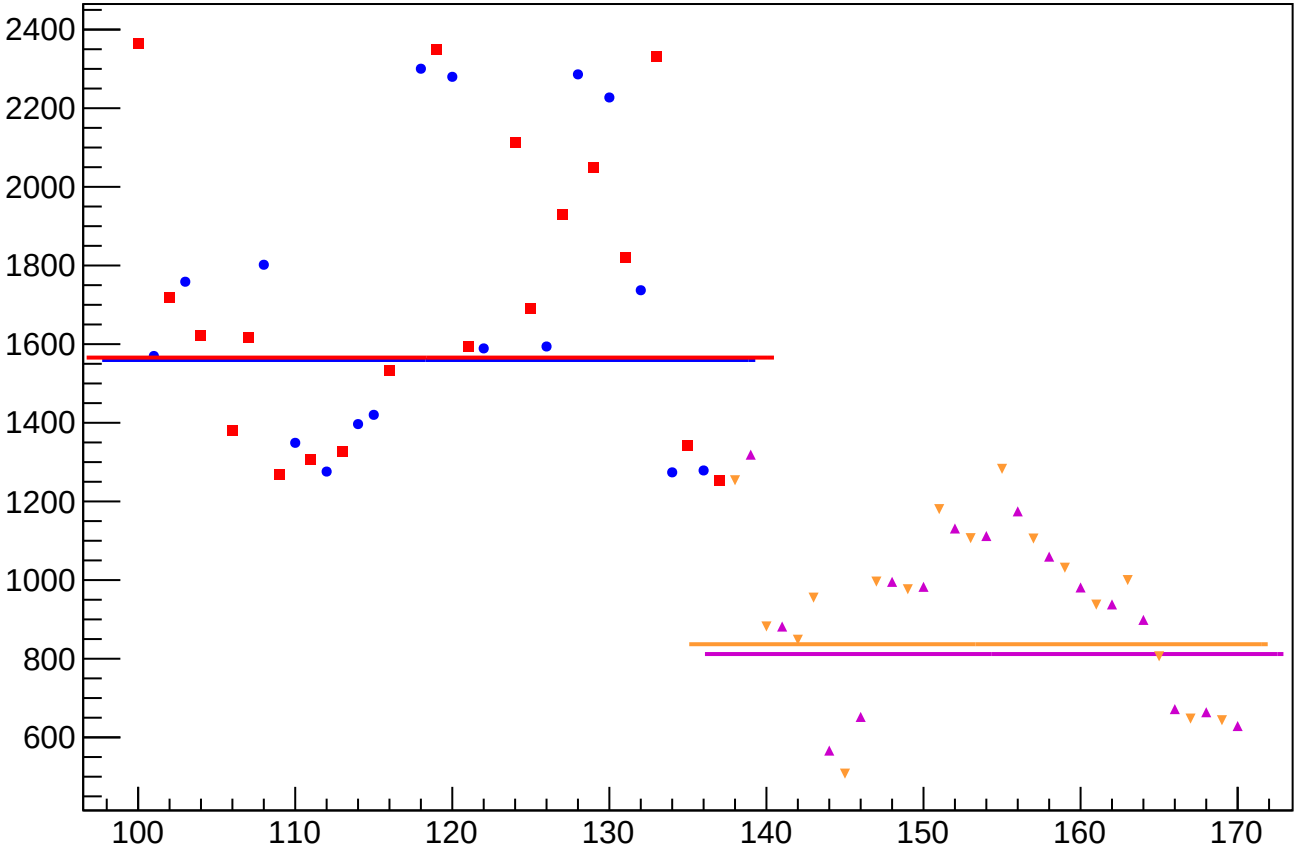
Left In: 100.452+/-232.404 $\chi^2$/NDF:12.5/15

+ sign -1273.069+/-220.610 $\chi^2$/NDF: 64.4/32

All: -673.125+/-154.348 $\chi^2$/NDF: 110.3/67

- sign -97.860+/-216.025 $\chi^2$/NDF: 31.4/34

# asym_sam3_dit_correction_rms vs Slug




Right In: 1559.735+/-0.421 $\chi^2$/NDF: 604209.5/15

Left Out: 836.889+/-0.168 $\chi^2$/NDF:1896197.5/16

Right Out: 1565.808+/-0.414 $\chi^2$/NDF: 563847.8/18

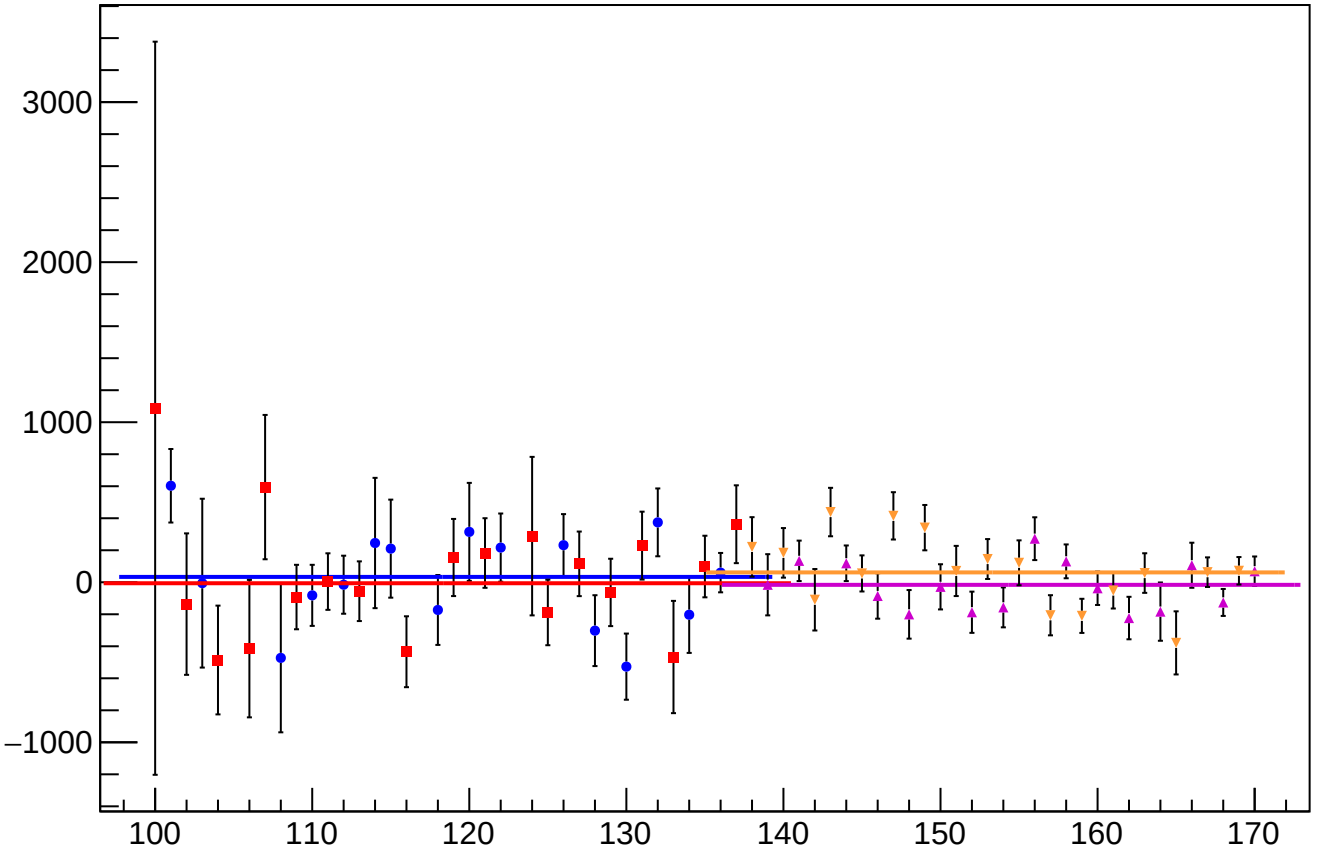
Left In: 811.914+/-0.164 $\chi^2$/NDF:1665246.1/15

+ sign 935.990+/-0.156 $\chi^2$/NDF: 5040608.3/32

All: 924.986+/-0.109 $\chi^2$/NDF: 10141387.5/67

- sign 914.434+/-0.153 $\chi^2$/NDF: 5091030.8/34

# eigen_dit_asym_sam3_mean vs Slug




Right In: 33.469+/-54.908 $\chi^2$/NDF: 25.2/15

Left Out: 61.552+/-30.924 $\chi^2$/NDF:35.7/16

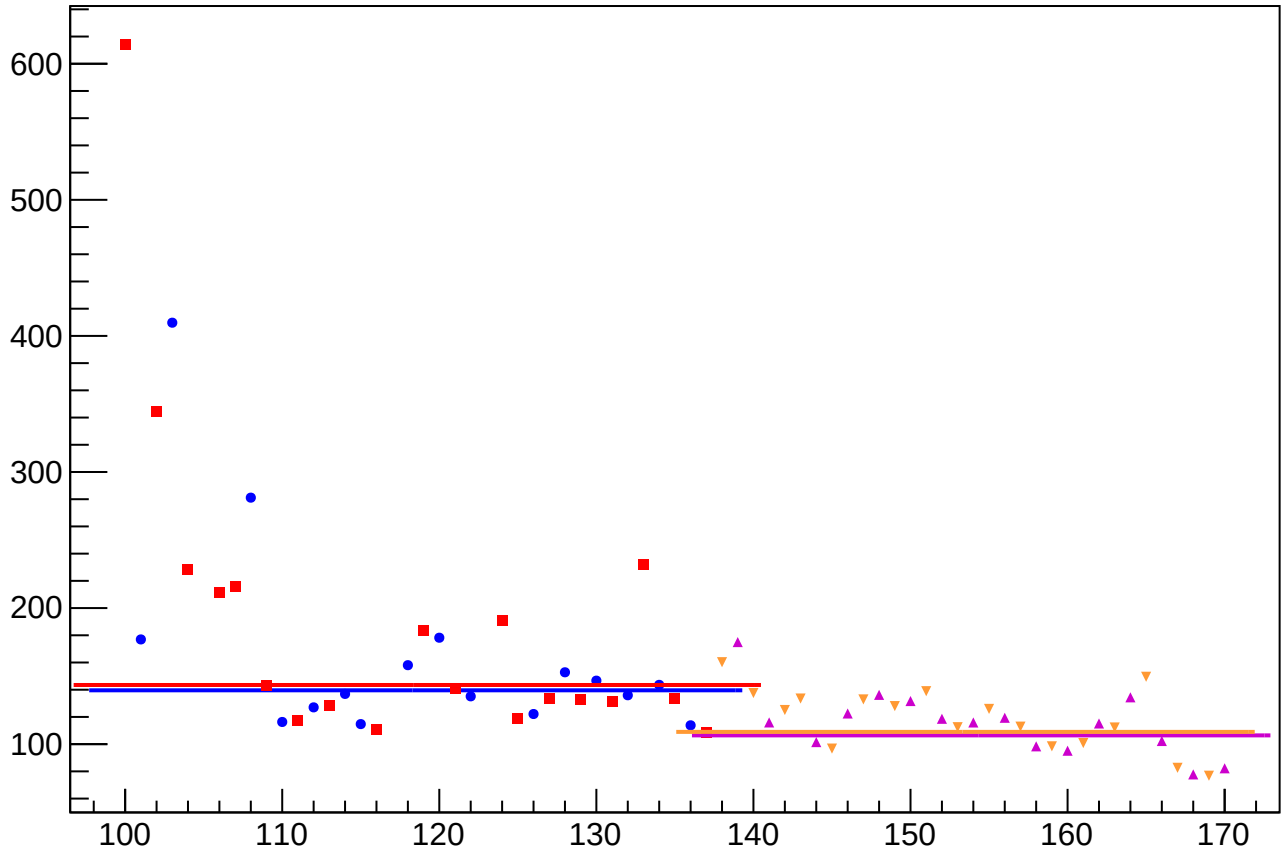
Right Out: -6.103+/-56.090 $\chi^2$/NDF: 17.3/18

Left In: -16.139+/-30.550 $\chi^2$/NDF:20.9/15

+ sign 54.789+/-26.945 $\chi^2$/NDF: 61.0/32

All: 20.325+/-19.012 $\chi^2$/NDF: 102.5/67

- sign -13.843+/-26.829 $\chi^2$/NDF: 38.2/34




Right In: 139.567+/-0.039 $\chi^2$/NDF: 976737.0/15

Left Out: 109.018+/-0.022 $\chi^2$/NDF:1063171.9/16

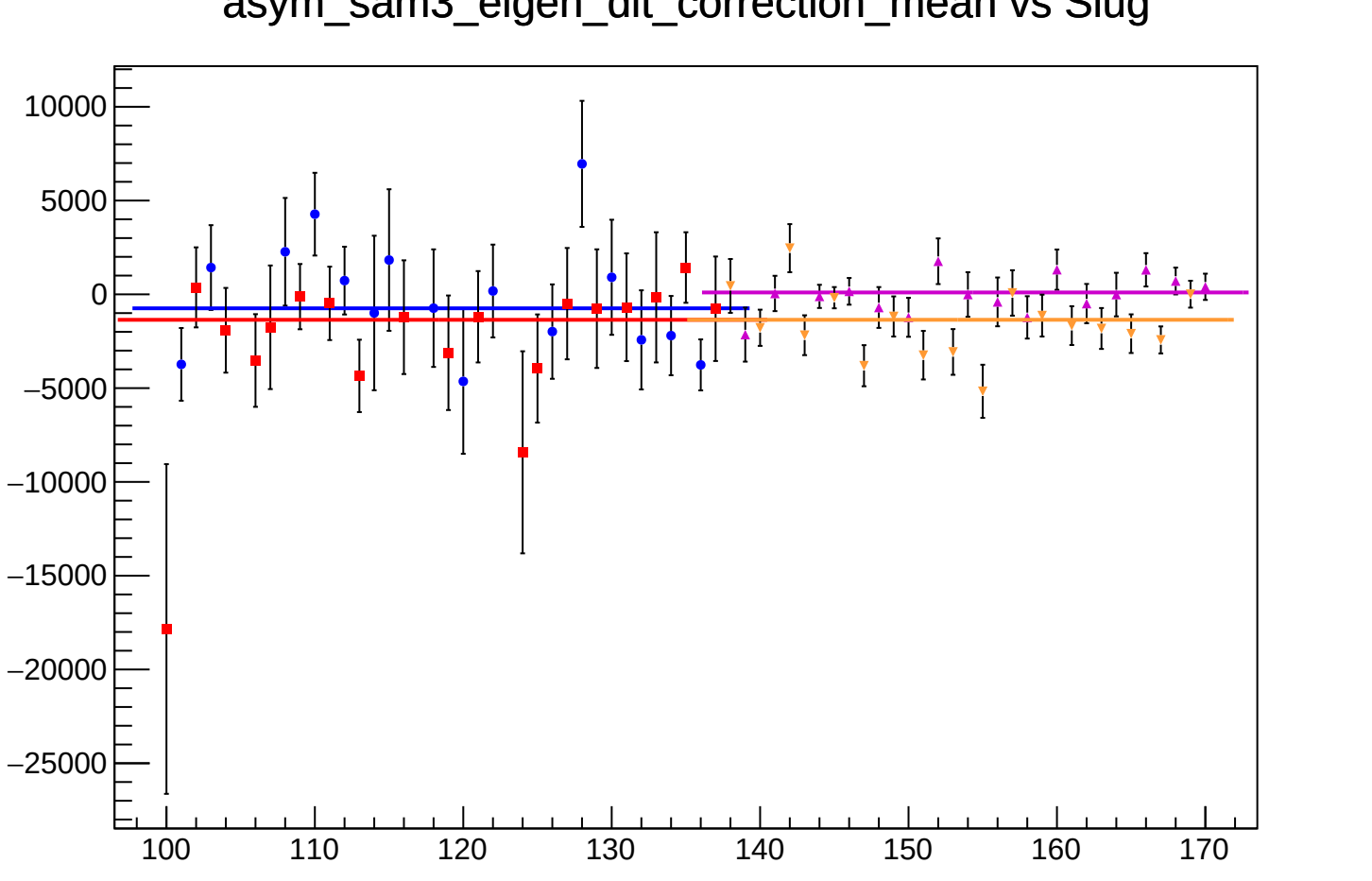
Right Out: 143.480+/-0.040 $\chi^2$/NDF: 1116678.4/18

Left In: 106.442+/-0.022 $\chi^2$/NDF:949112.7/15

+ sign 116.375+/-0.019 $\chi^2$/NDF: 2509900.9/32

All: 115.642+/-0.013 $\chi^2$/NDF: 5251186.9/67

- sign 114.916+/-0.019 $\chi^2$/NDF: 2738340.5/34




Right In: -744.678+/-595.809 $\chi^2$/NDF: 23.5/15

Left Out: -1357.021+/-237.489 $\chi^2$/NDF:40.0/16

Right Out: -1357.874+/-585.807 $\chi^2$/NDF: 13.5/18

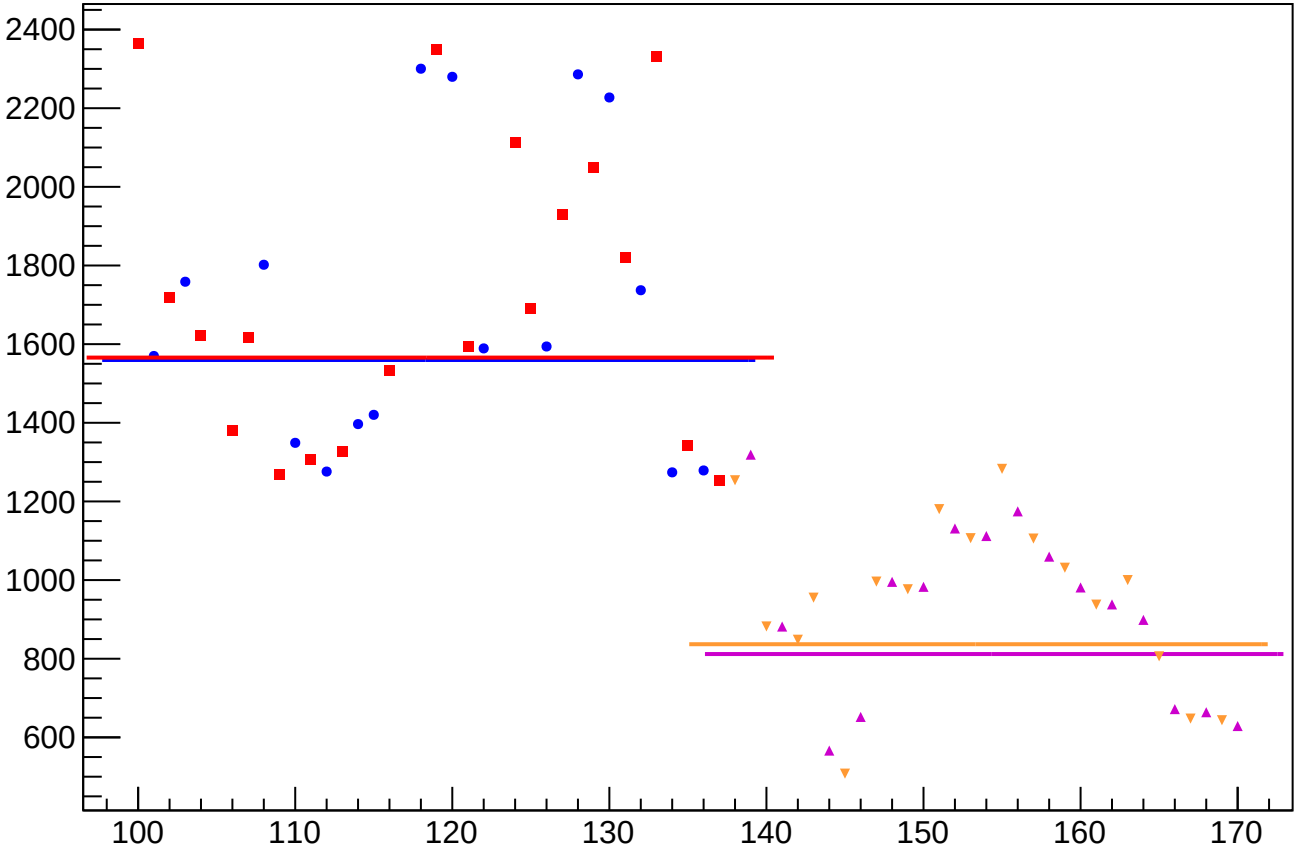
Left In: 100.453+/-232.404 $\chi^2$/NDF:12.5/15

+ sign -1273.069+/-220.610 $\chi^2$/NDF: 64.4/32

All: -673.125+/-154.348 $\chi^2$/NDF: 110.3/67

- sign -97.860+/-216.025 $\chi^2$/NDF: 31.4/34

# asym_sam3_eigen_dit_correction_rms vs Slug




Right In: 1559.734+/-0.421 $\chi^2$/NDF: 604209.8/15

Left Out: 836.888+/-0.168 $\chi^2$/NDF:1896192.1/16

Right Out: 1565.806+/-0.414 $\chi^2$/NDF: 563845.7/18

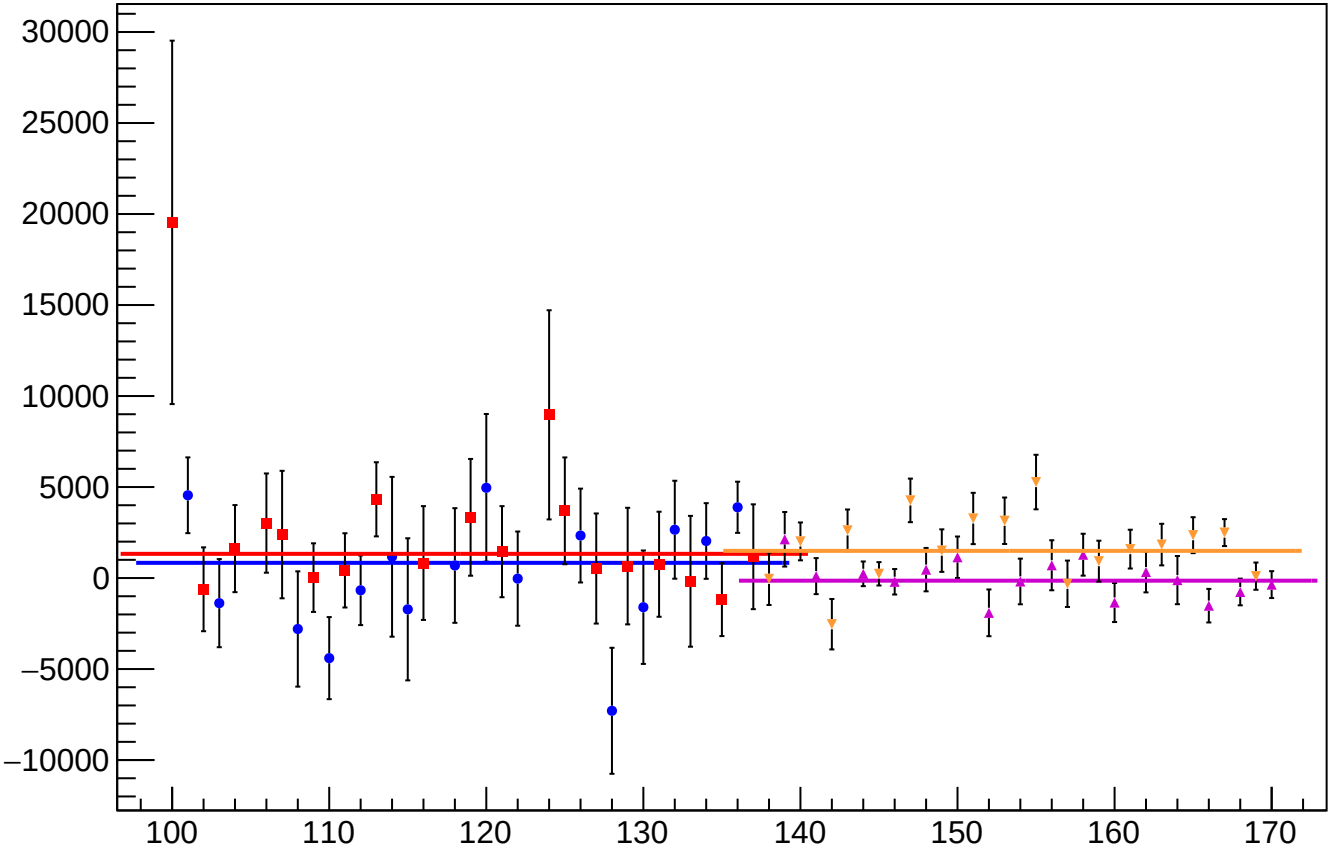
Left In: 811.914+/-0.164 $\chi^2$/NDF:1665241.0/15

+ sign 935.989+/-0.156 $\chi^2$/NDF: 5040602.9/32

All: 924.985+/-0.109 $\chi^2$/NDF: 10141372.0/67

- sign 914.433+/-0.153 $\chi^2$/NDF: 5091020.7/34

# asym_sam3_mean vs Slug




Right In: 835.496+/-618.780 $\chi^2$/NDF: 24.9/15

Left Out: 1492.635+/-251.549 $\chi^2$/NDF:38.1/16

Right Out: 1329.538+/-616.428 $\chi^2$/NDF: 12.1/18

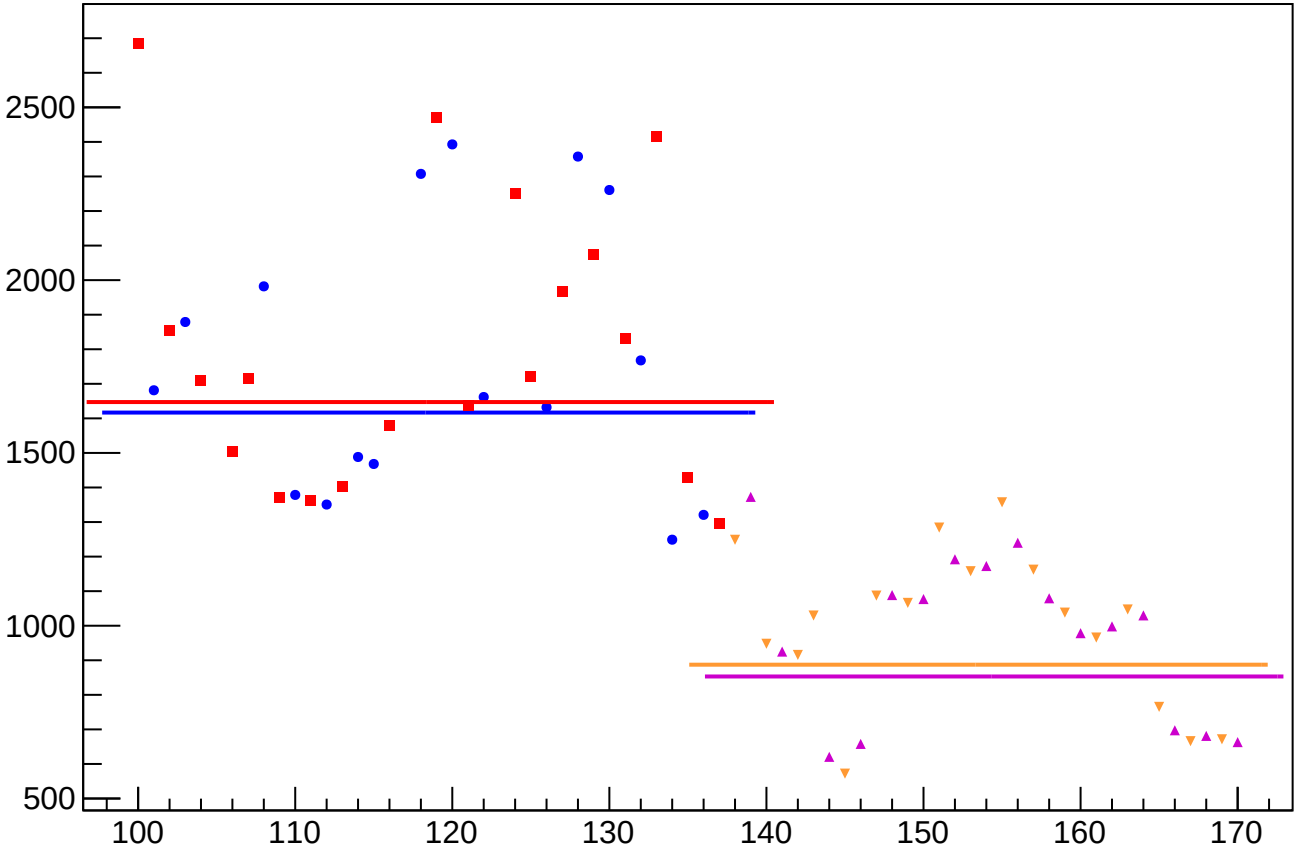
Left In: -144.903+/-244.015 $\chi^2$/NDF:12.5/15

+ sign 1399.437+/-233.030 $\chi^2$/NDF: 64.0/32

All: 709.179+/-162.561 $\chi^2$/NDF: 110.6/67

- sign 54.842+/-226.885 $\chi^2$/NDF: 29.6/34

# asym_sam3_rms vs Slug




Right In: 1616.804+/-0.438 $\chi^2$/NDF: 622271.0/15

Left Out: 887.241+/-0.178 $\chi^2$/NDF:1750099.5/16

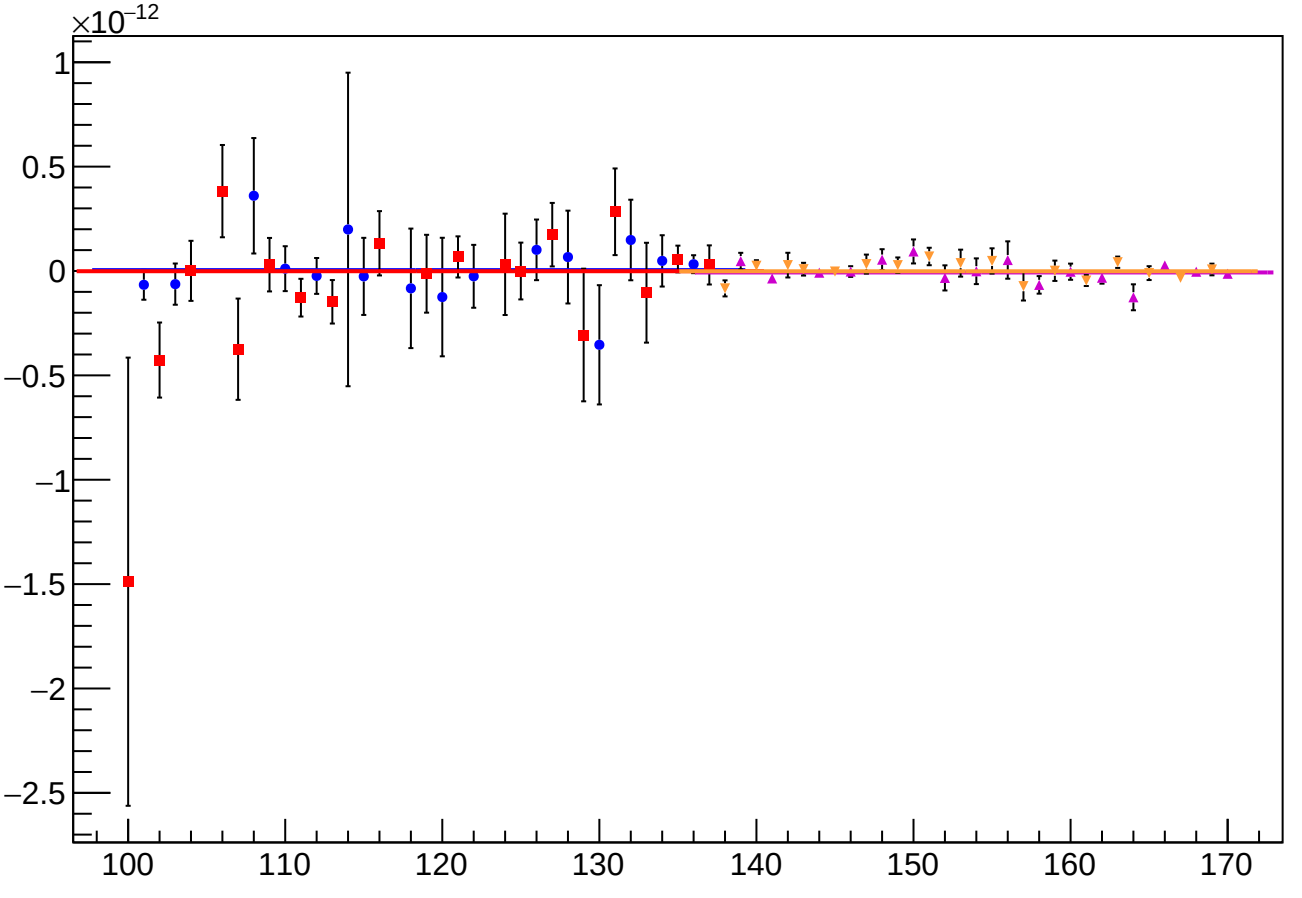
Right Out: 1647.227+/-0.436 $\chi^2$/NDF: 523860.9/18

Left In: 853.139+/-0.173 $\chi^2$/NDF:1698508.9/15

+ sign 990.711+/-0.165 $\chi^2$/NDF: 4758308.3/32

All: 975.312+/-0.115 $\chi^2$/NDF: 9867030.4/67

- sign 960.715+/-0.160 $\chi^2$/NDF: 5091711.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 6.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:20.2/16

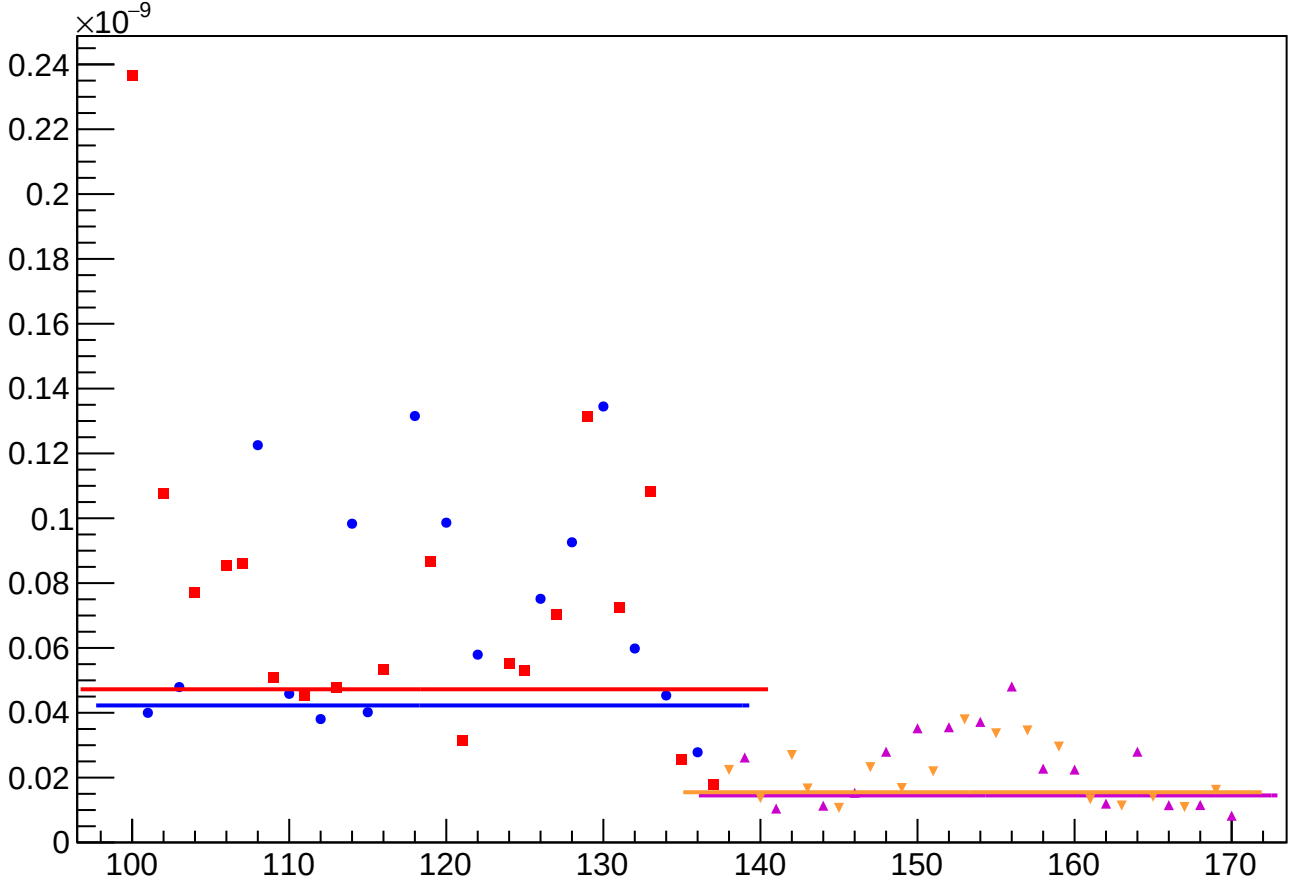
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 23.4/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:17.2/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 27.1/32

All: -0.000+/-0.000 $\chi^2$/NDF: 68.1/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 40.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1147920.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1312551.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1410595.6/18

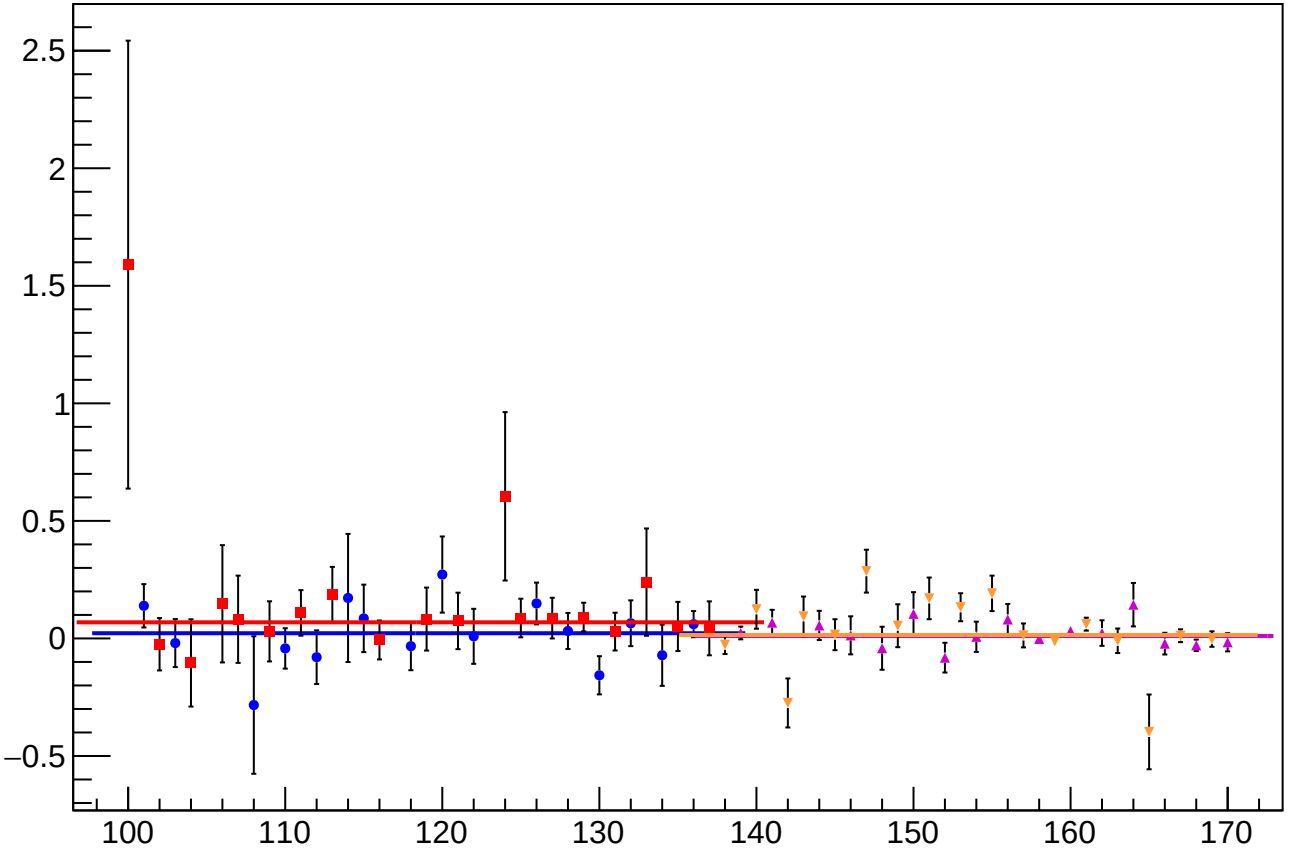
Left In: 0.000+/-0.000 $\chi^2$/NDF:2068888.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4250141.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 9952061.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5680466.8/34

# asym_sam3_dit_vs_cor_diff_mean vs Slug




Right In: 0.022+/-0.025 $\chi^2$/NDF: 15.5/15

Left Out: 0.015+/-0.010 $\chi^2$/NDF:46.0/16

Right Out: 0.069+/-0.025 $\chi^2$/NDF: 9.6/18

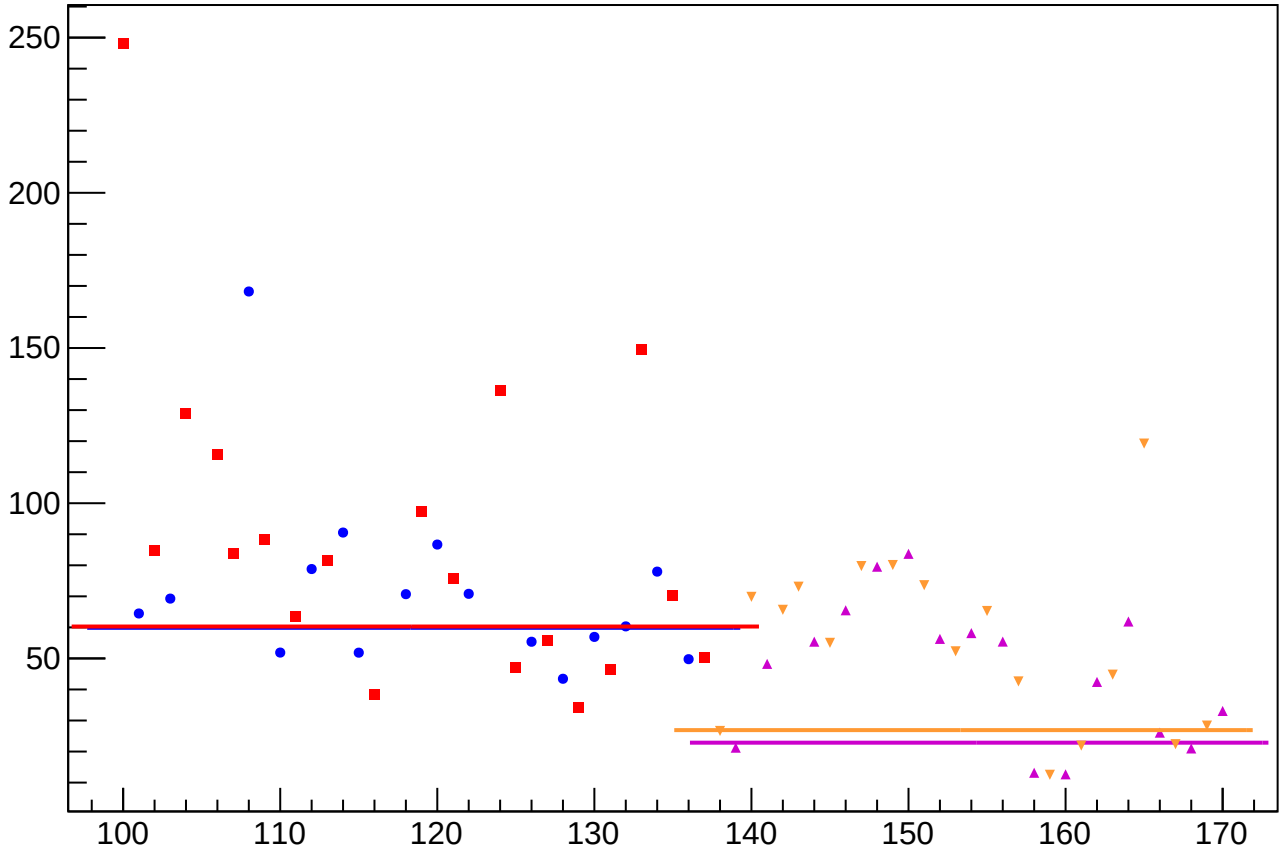
Left In: 0.011+/-0.008 $\chi^2$/NDF:14.5/15

+ sign 0.016+/-0.009 $\chi^2$/NDF: 61.6/32

All: 0.016+/-0.006 $\chi^2$/NDF: 90.5/67

- sign 0.016+/-0.008 $\chi^2$/NDF: 28.9/34

# asym_sam3_dit_vs_cor_diff_rms vs Slug




Right In: 59.867+/-0.017 $\chi^2$/NDF: 698954.5/15

Left Out: 26.905+/-0.007 $\chi^2$/NDF:7525057.9/16

Right Out: 60.278+/-0.018 $\chi^2$/NDF: 1977220.6/18

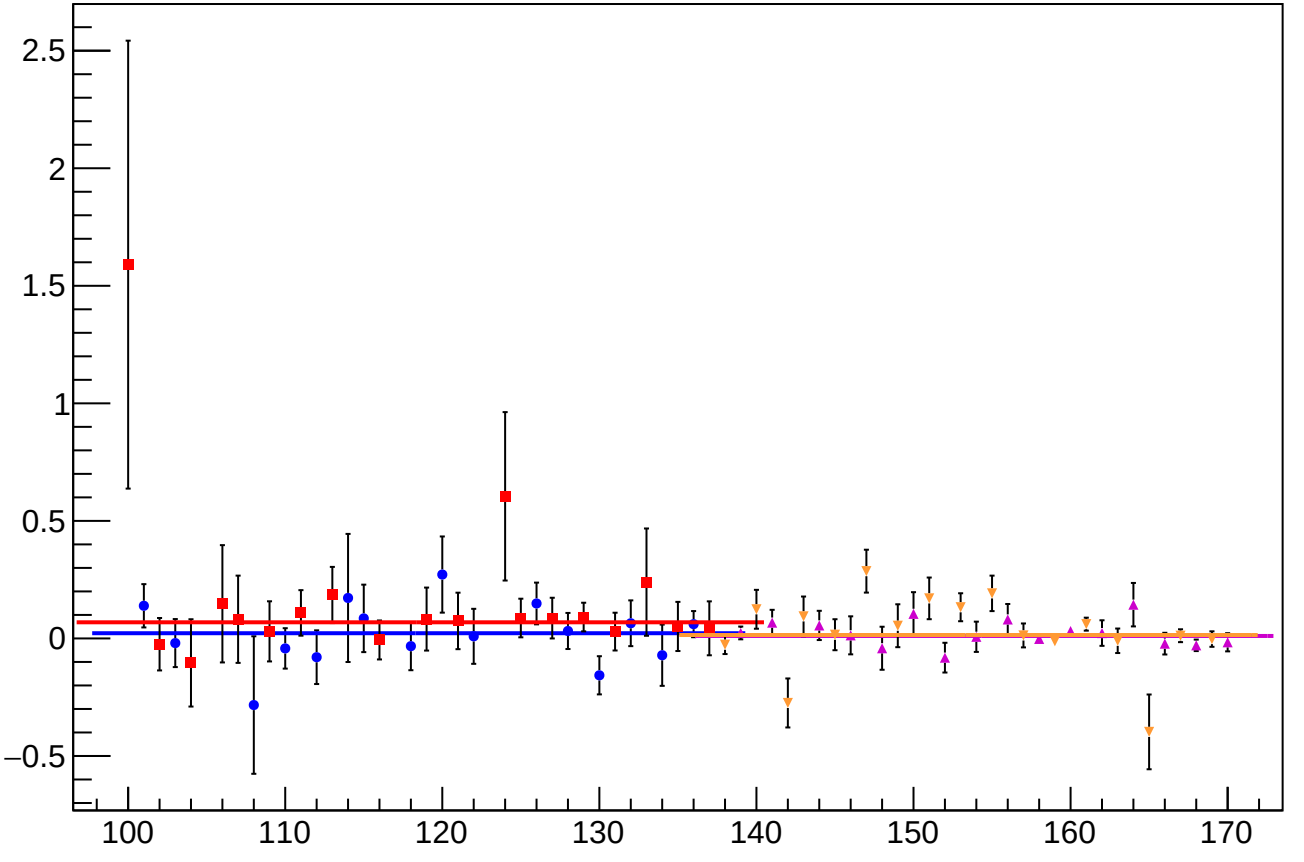
Left In: 22.858+/-0.006 $\chi^2$/NDF:7131271.5/15

+ sign 31.319+/-0.006 $\chi^2$/NDF: 11315260.1/32

All: 28.693+/-0.004 $\chi^2$/NDF: 24668432.6/67

- sign 26.622+/-0.006 $\chi^2$/NDF: 13050541.1/34

# asym_sam3_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.022+/-0.025 $\chi^2$/NDF: 15.5/15

Left Out: 0.015+/-0.010 $\chi^2$/NDF:46.0/16

Right Out: 0.069+/-0.025 $\chi^2$/NDF: 9.6/18

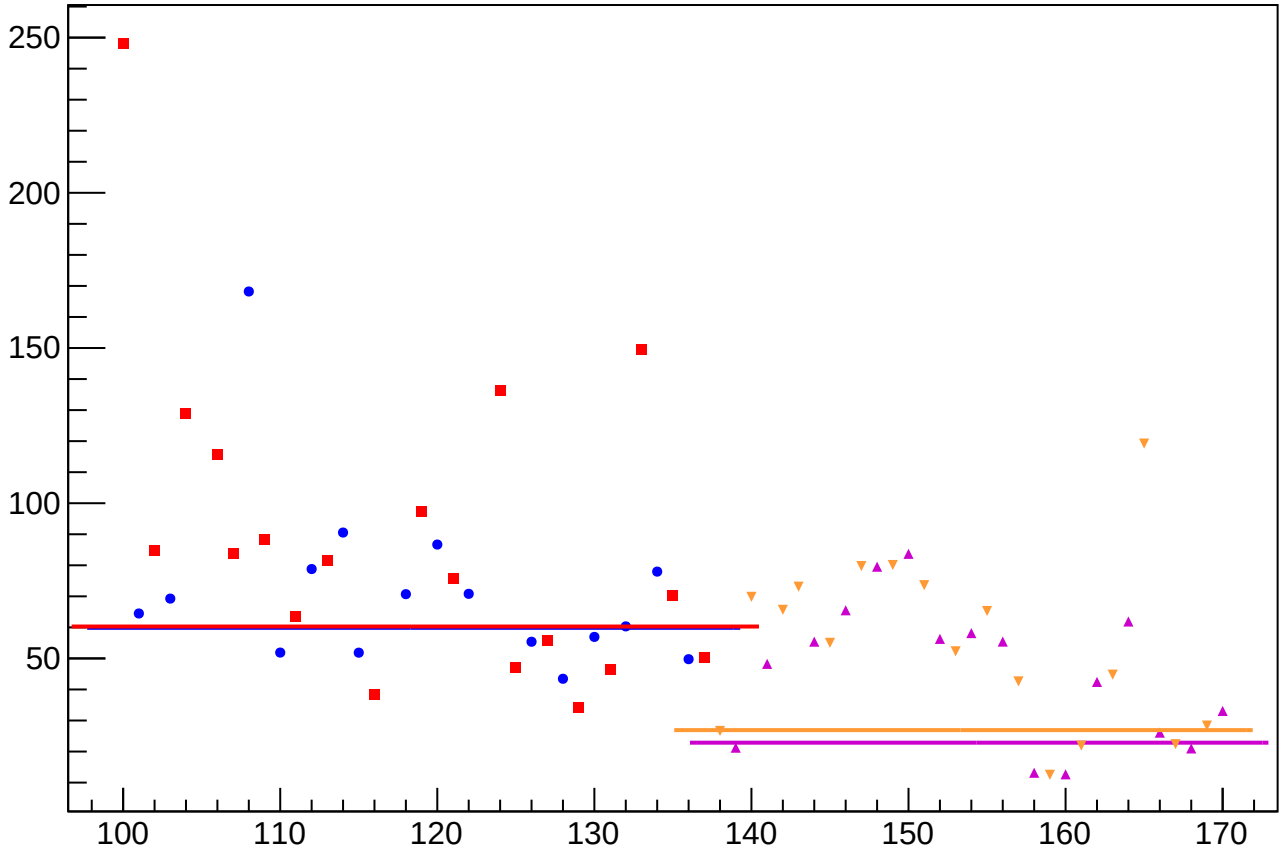
Left In: 0.011+/-0.008 $\chi^2$/NDF:14.5/15

+ sign 0.016+/-0.009 $\chi^2$/NDF: 61.6/32

All: 0.016+/-0.006 $\chi^2$/NDF: 90.5/67

- sign 0.016+/-0.008 $\chi^2$/NDF: 28.9/34

# asym_sam3_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 59.867+/-0.017 $\chi^2$/NDF: 698954.5/15

Left Out: 26.905+/-0.007 $\chi^2$/NDF:7525057.9/16

Right Out: 60.278+/-0.018 $\chi^2$/NDF: 1977220.6/18

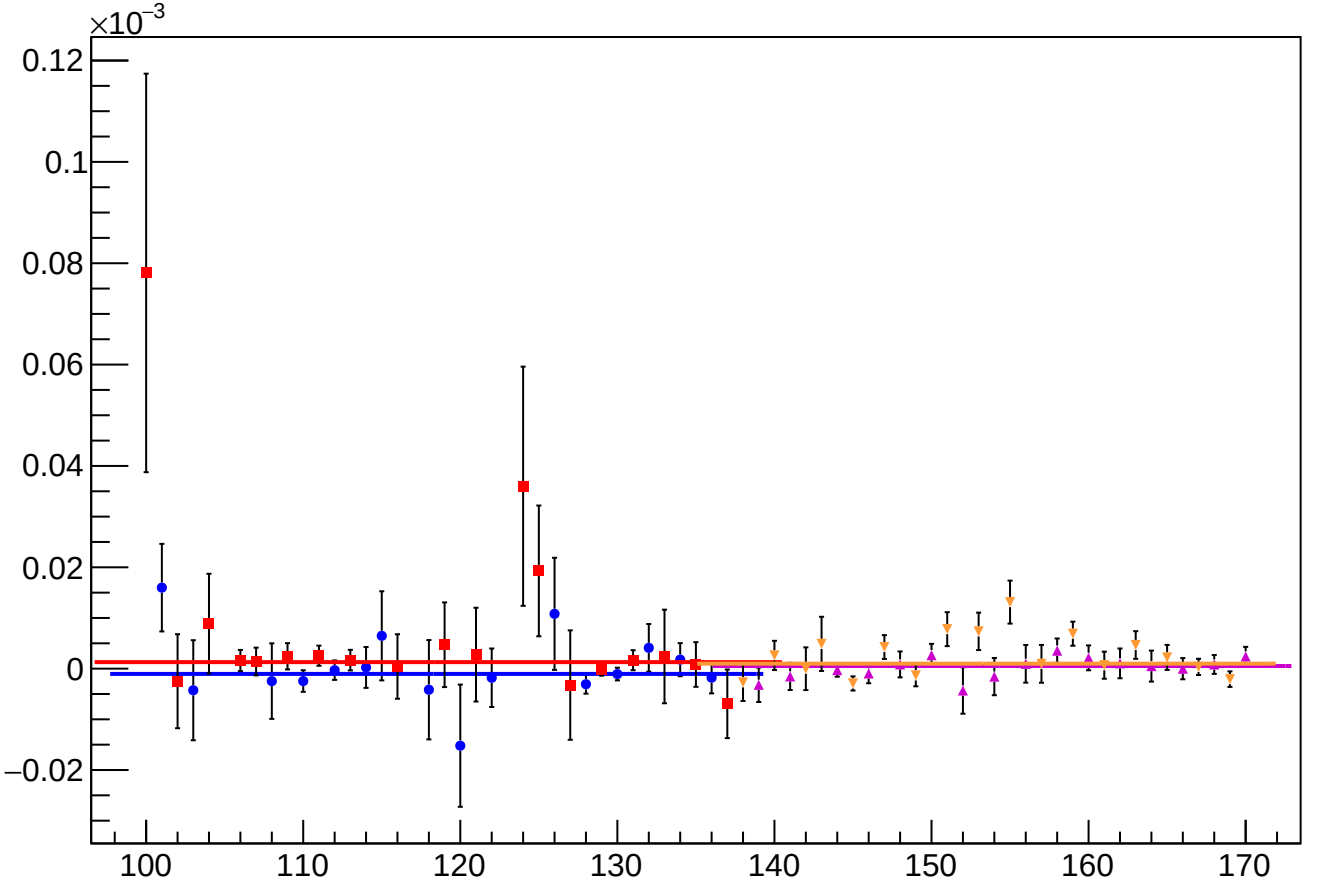
Left In: 22.858+/-0.006 $\chi^2$/NDF:7131271.5/15

+ sign 31.319+/-0.006 $\chi^2$/NDF: 11315260.1/32

All: 28.693+/-0.004 $\chi^2$/NDF: 24668432.6/67

- sign 26.622+/-0.006 $\chi^2$/NDF: 13050541.1/34

# asym_sam3_eigen_dit_vs_dit_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 11.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:40.6/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 12.5/18

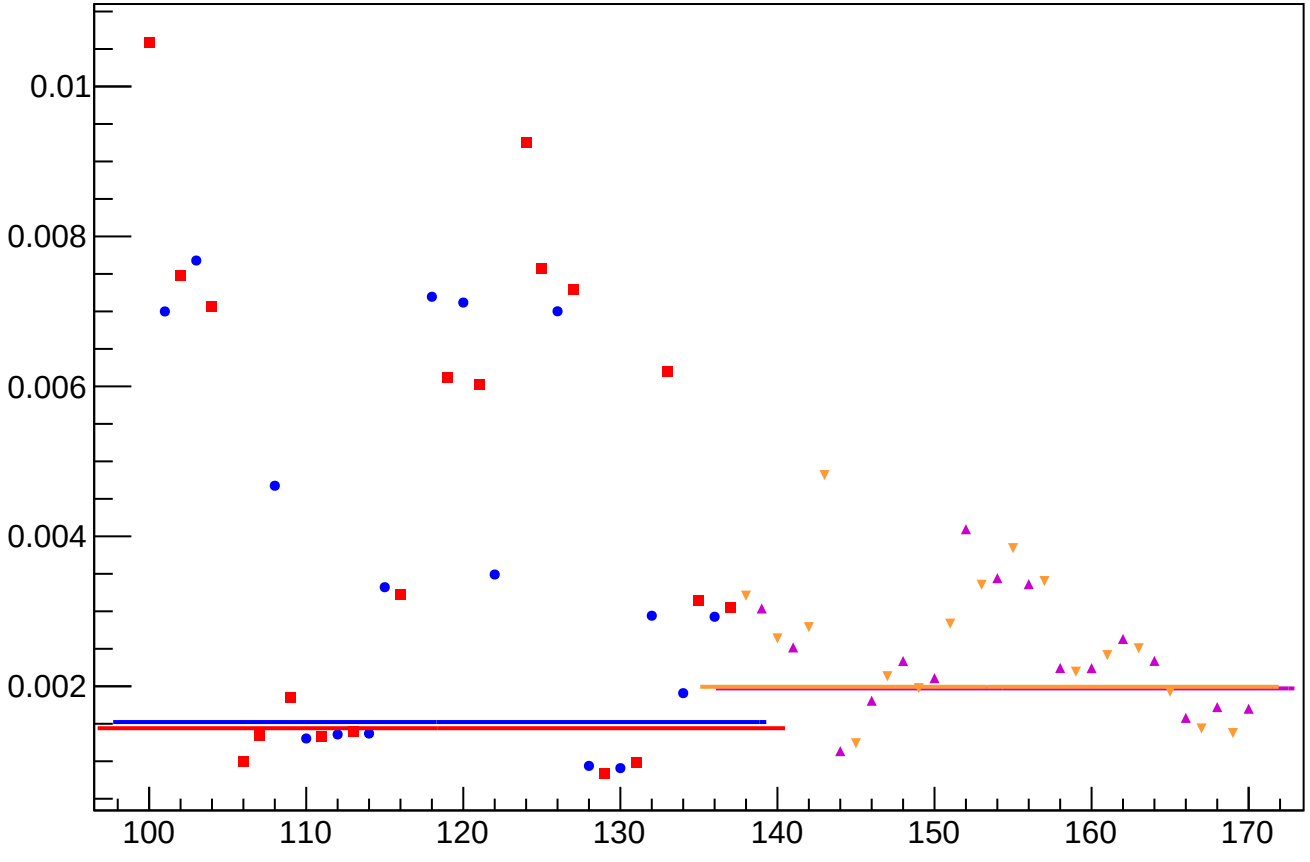
Left In: 0.000+/-0.000 $\chi^2$/NDF:8.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 56.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 78.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 21.4/34

# asym_sam3_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 5182869.7/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:3301062.3/16

Right Out: 0.001+/-0.000 $\chi^2$/NDF: 5789411.1/18

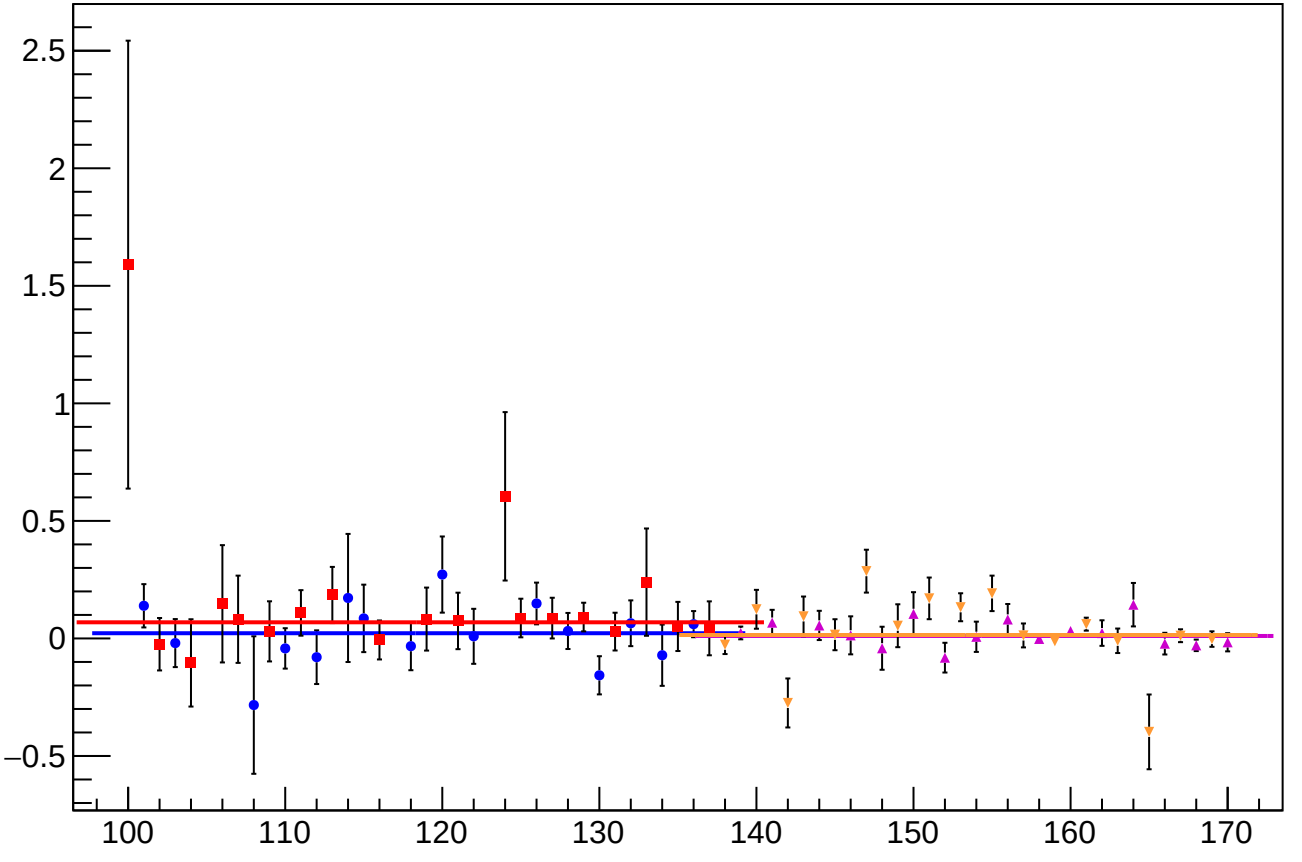
Left In: 0.002+/-0.000 $\chi^2$/NDF:2520285.2/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 8981522.0/32

All: 0.002+/-0.000 $\chi^2$/NDF: 17991119.5/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 8994349.6/34

# asym_sam3_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.022+/-0.025 $\chi^2$/NDF: 15.5/15

Left Out: 0.015+/-0.010 $\chi^2$/NDF:46.0/16

Right Out: 0.069+/-0.025 $\chi^2$/NDF: 9.6/18

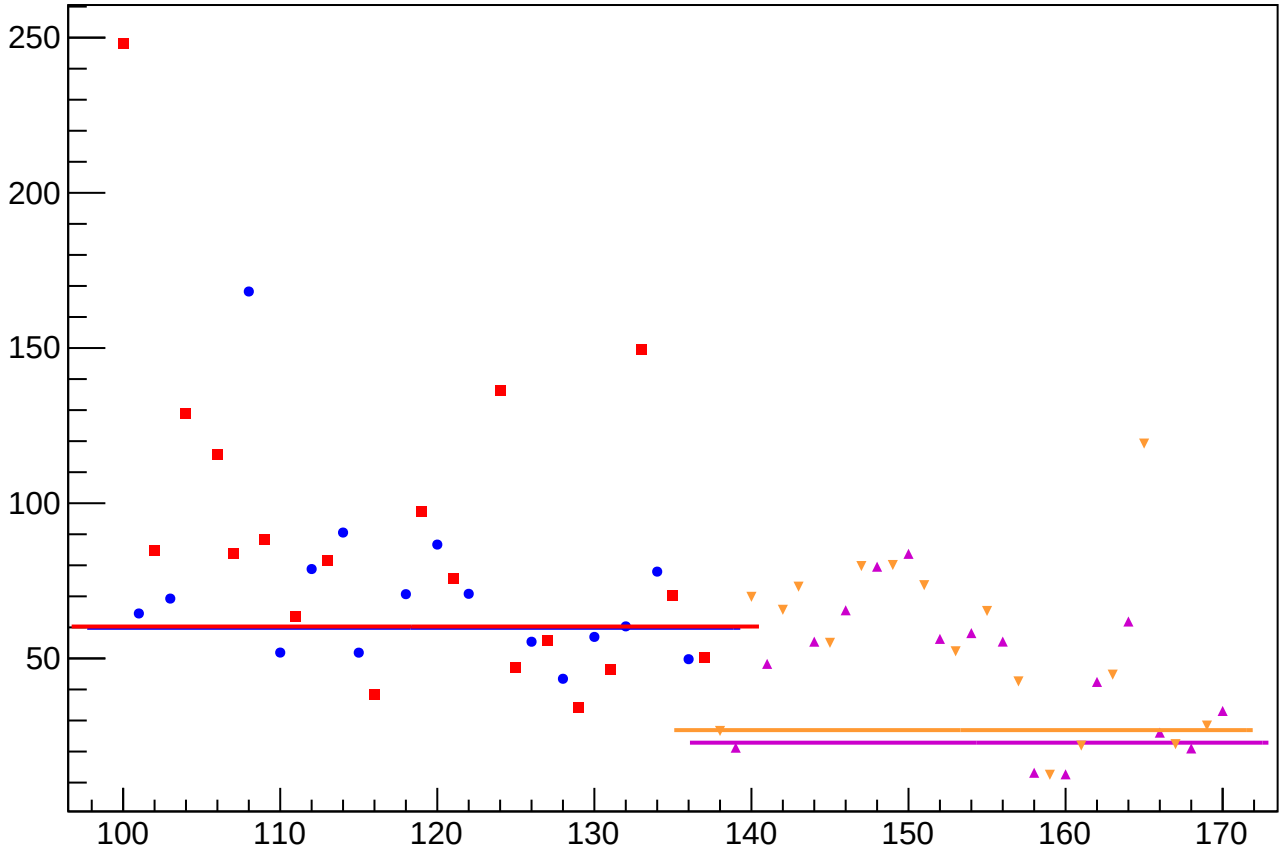
Left In: 0.011+/-0.008 $\chi^2$/NDF:14.5/15

+ sign 0.016+/-0.009 $\chi^2$/NDF: 61.6/32

All: 0.016+/-0.006 $\chi^2$/NDF: 90.5/67

- sign 0.016+/-0.008 $\chi^2$/NDF: 28.9/34

# asym_sam3_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 59.868+/-0.017 $\chi^2$/NDF: 699008.9/15

Left Out: 26.903+/-0.007 $\chi^2$/NDF:7526011.3/16

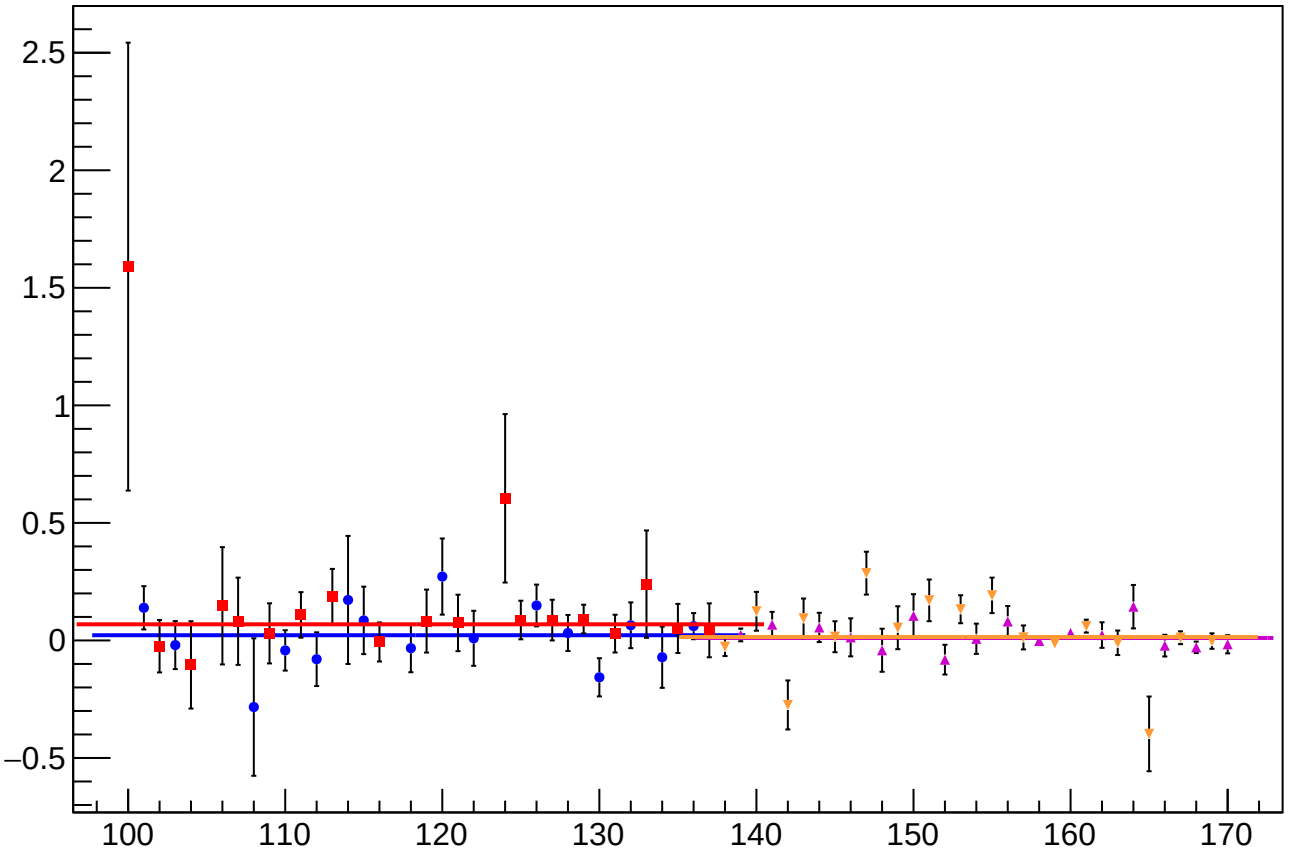
Right Out: 60.278+/-0.018 $\chi^2$/NDF: 1977294.2/18

Left In: 22.857+/-0.006 $\chi^2$/NDF:7131653.3/15

+ sign 31.318+/-0.006 $\chi^2$/NDF: 11316674.3/32

All: 28.692+/-0.004 $\chi^2$/NDF: 24670273.3/67

- sign 26.622+/-0.006 $\chi^2$/NDF: 13051113.2/34




Right In: 0.022+/-0.025 $\chi^2$/NDF: 15.5/15

Left Out: 0.015+/-0.010 $\chi^2$/NDF:46.0/16

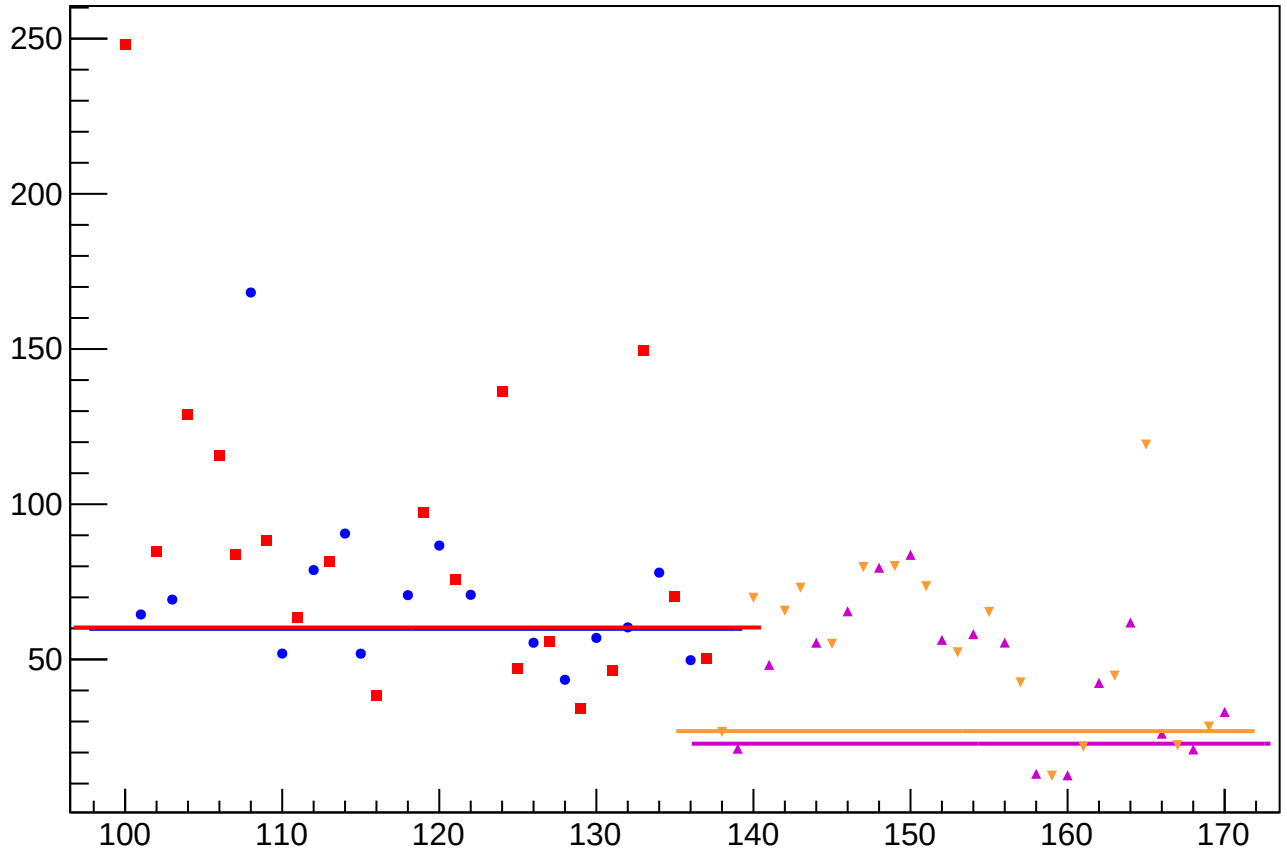
Right Out: 0.069+/-0.025 $\chi^2$/NDF: 9.6/18

Left In: 0.011+/-0.008 $\chi^2$/NDF:14.5/15

+ sign 0.016+/-0.009 $\chi^2$/NDF: 61.6/32

All: 0.016+/-0.006 $\chi^2$/NDF: 90.5/67

- sign 0.016+/-0.008 $\chi^2$/NDF: 28.9/34




Right In: 59.868+/-0.017 $\chi^2$/NDF: 699008.9/15

Left Out: 26.903+/-0.007 $\chi^2$/NDF:7526011.3/16

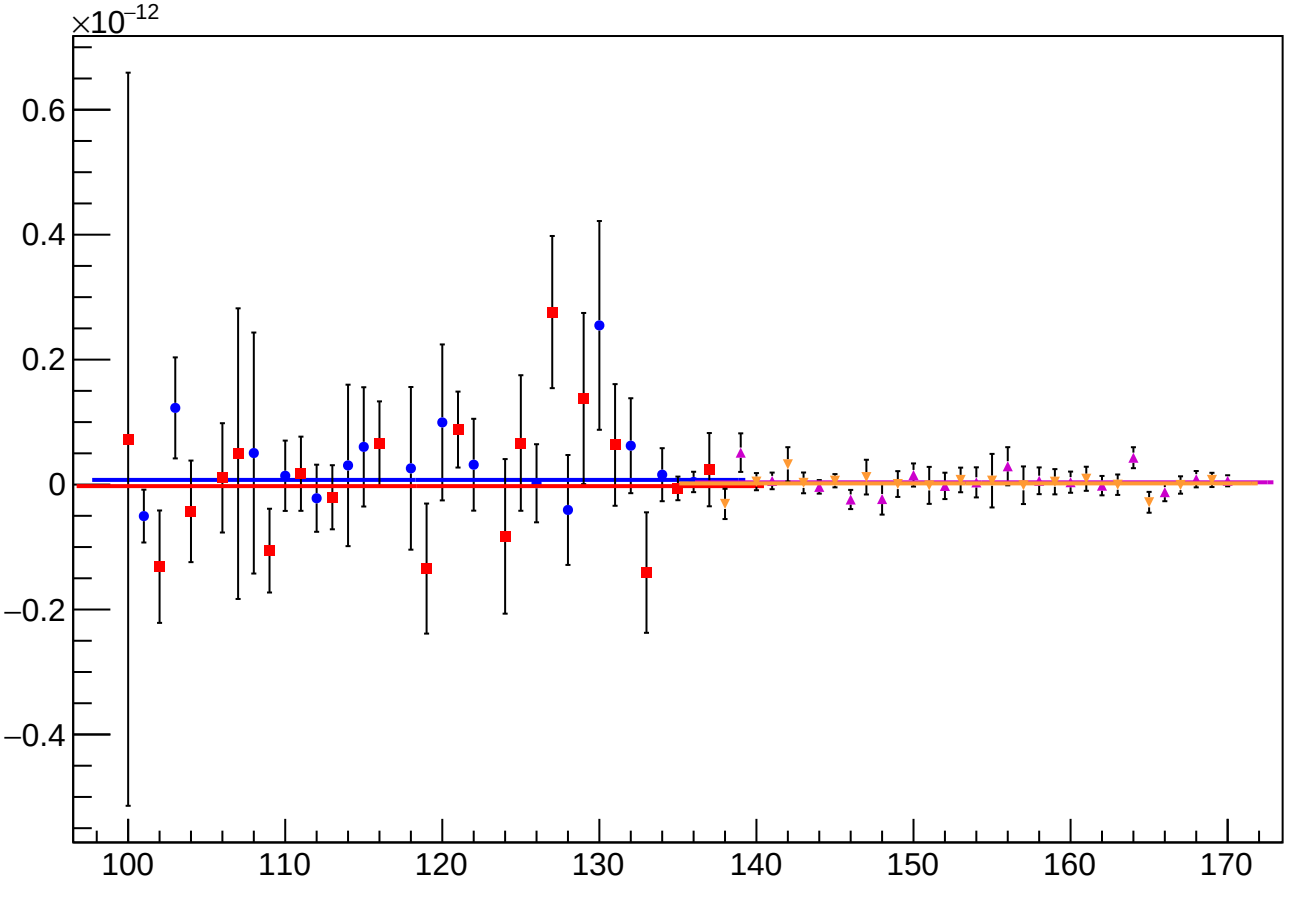
Right Out: 60.278+/-0.018 $\chi^2$/NDF: 1977294.2/18

Left In: 22.857+/-0.006 $\chi^2$/NDF:7131653.3/15

+ sign 31.318+/-0.006 $\chi^2$/NDF: 11316674.3/32

All: 28.692+/-0.004 $\chi^2$/NDF: 24670273.3/67

- sign 26.622+/-0.006 $\chi^2$/NDF: 13051113.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 8.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:7.3/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 19.7/18

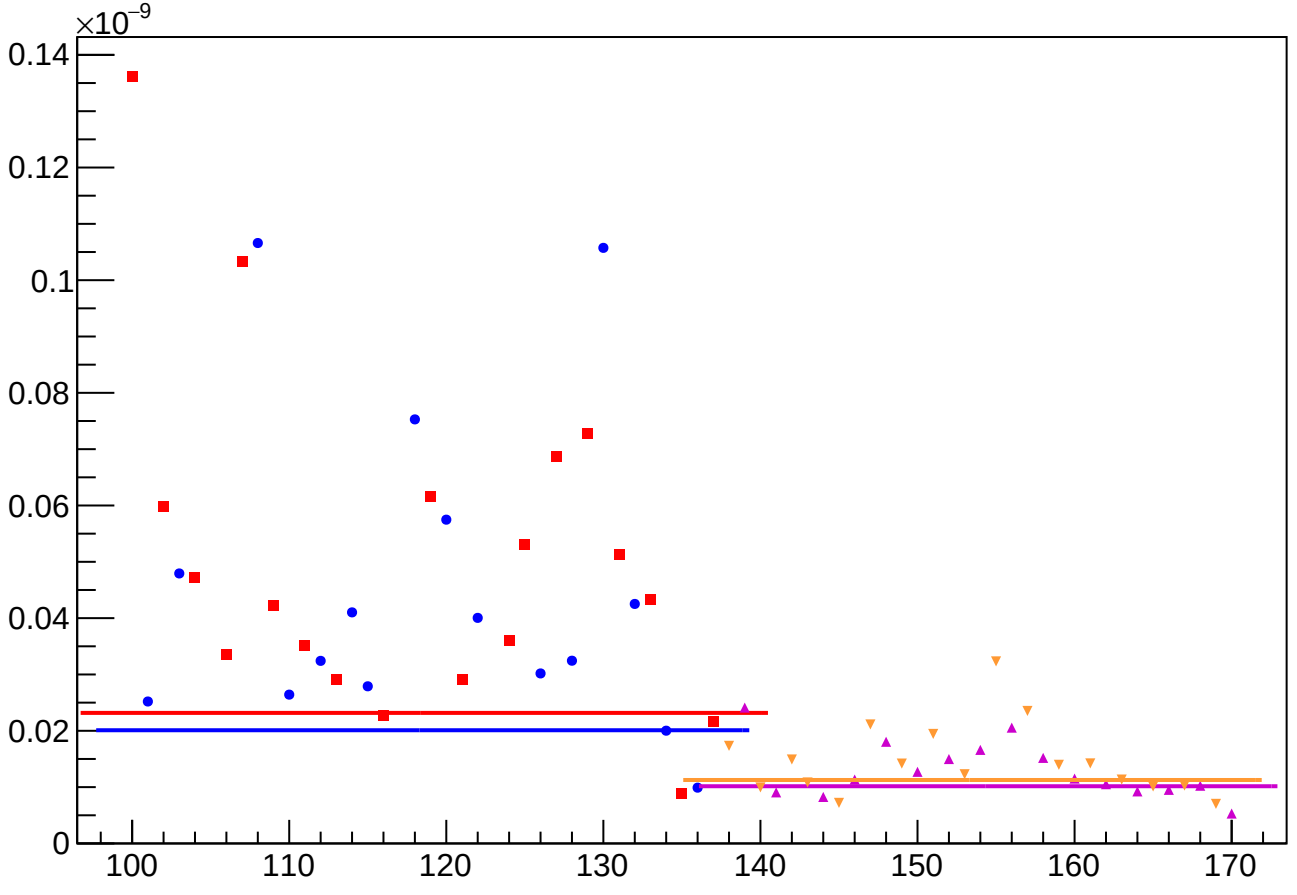
Left In: 0.000+/-0.000 $\chi^2$/NDF:15.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 15.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 51.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 35.3/34

# asym_sam3_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3121422.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2115748.8/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3530677.1/18

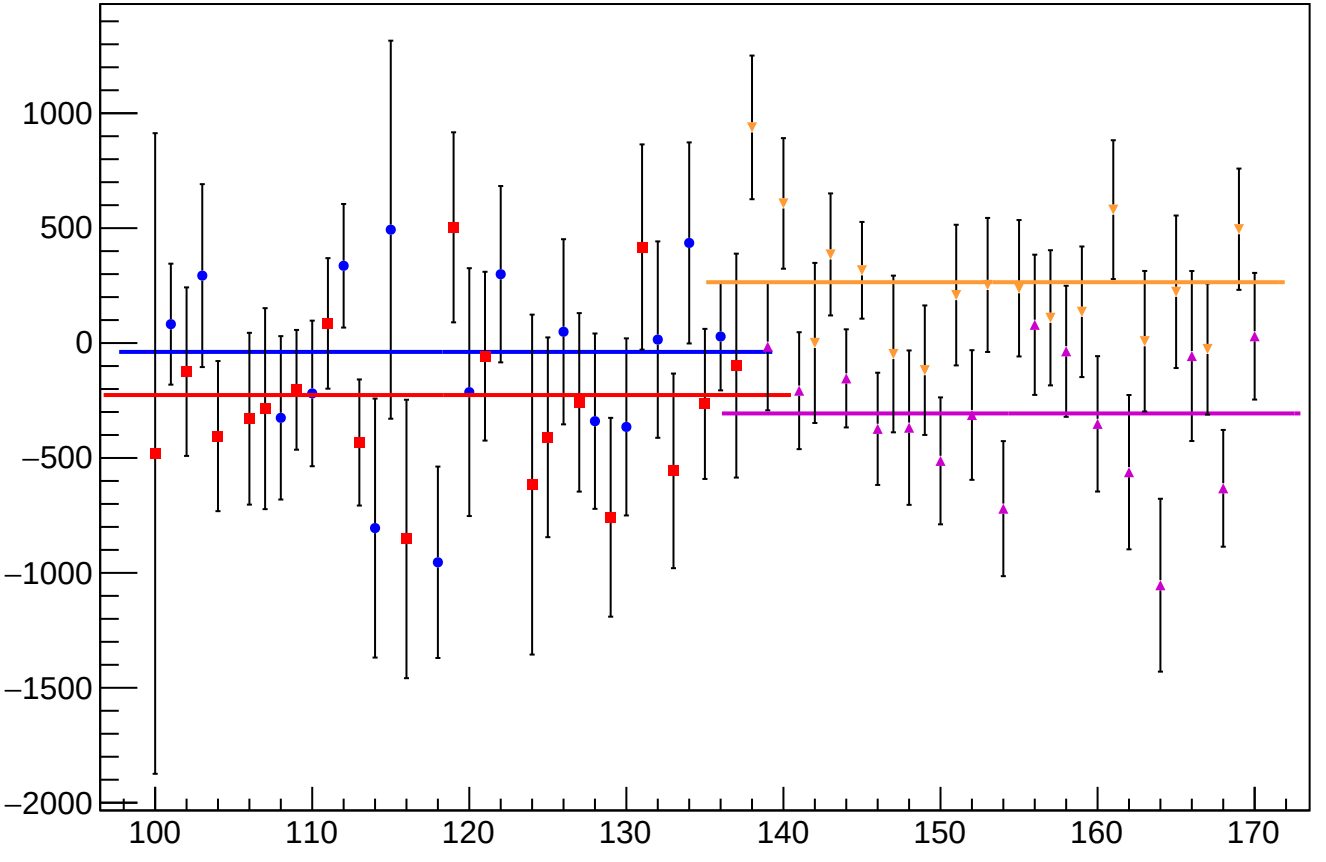
Left In: 0.000+/-0.000 $\chi^2$/NDF:1951309.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 6179008.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 13449253.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 7193524.6/34

# reg_asym_sam4_mean vs Slug




Right In: -38.498+/-90.619 $\chi^2$/NDF: 14.5/15

Left Out: 264.769+/-70.018 $\chi^2$/NDF:13.8/16

Right Out: -226.168+/-87.908 $\chi^2$/NDF: 11.4/18

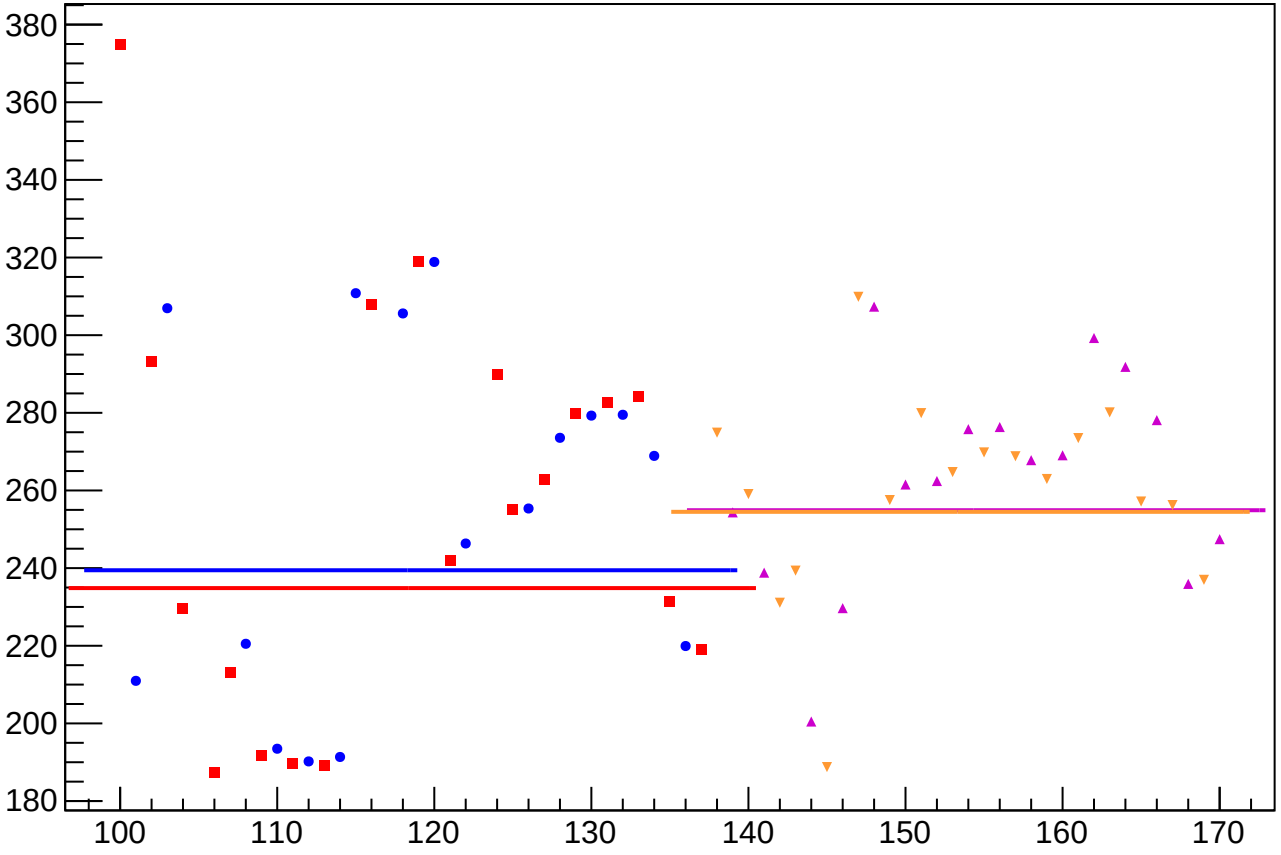
Left In: -306.260+/-70.746 $\chi^2$/NDF:15.1/15

+ sign 151.398+/-55.406 $\chi^2$/NDF: 35.3/32

All: -62.813+/-39.074 $\chi^2$/NDF: 92.0/67

- sign -274.778+/-55.115 $\chi^2$/NDF: 27.0/34

# reg_asym_sam4_rms vs Slug




Right In: 239.449+/-0.064 $\chi^2$/NDF: 400955.7/15

Left Out: 254.500+/-0.050 $\chi^2$/NDF:331849.1/16

Right Out: 234.855+/-0.062 $\chi^2$/NDF: 481715.3/18

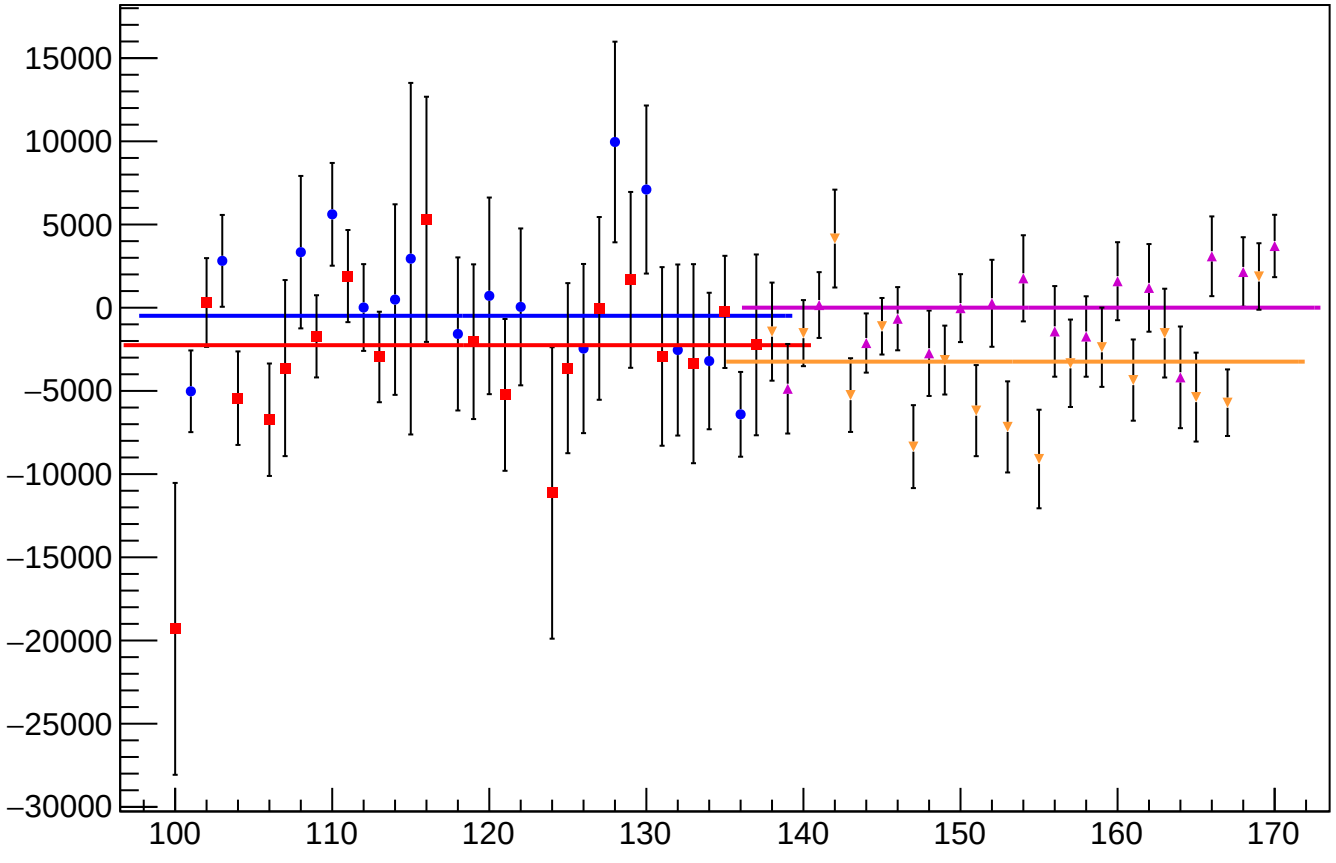
Left In: 254.911+/-0.050 $\chi^2$/NDF:313998.7/15

+ sign 248.873+/-0.039 $\chi^2$/NDF: 767350.1/32

All: 247.945+/-0.028 $\chi^2$/NDF: 1627364.4/67

- sign 247.027+/-0.039 $\chi^2$/NDF: 858898.3/34

# asym_sam4_reg_correction_mean vs Slug




Right In: -485.932+/-947.459 $\chi^2$/NDF: 21.1/15

Left Out: -3240.870+/-569.871 $\chi^2$/NDF:30.6/16

Right Out: -2251.898+/-894.171 $\chi^2$/NDF: 13.9/18

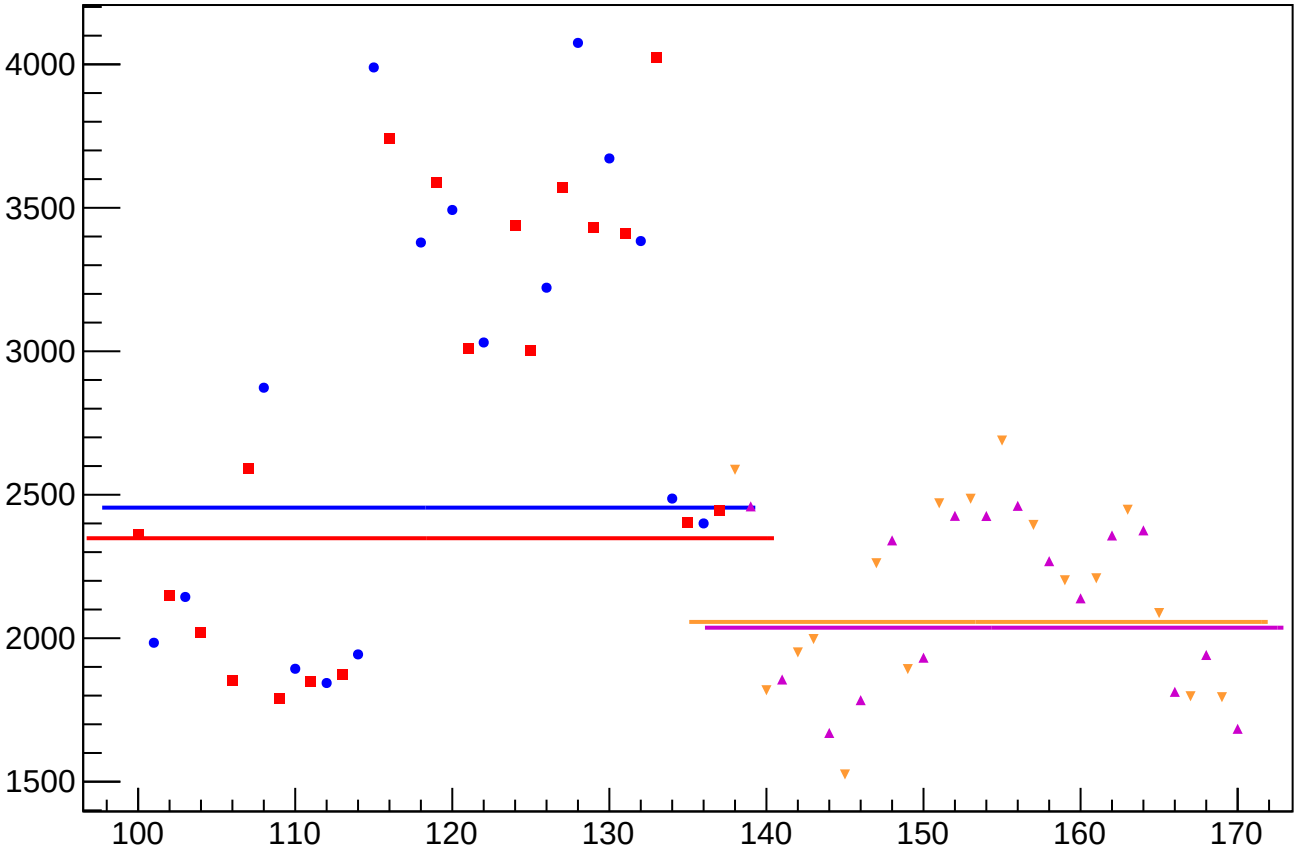
Left In: 2.734+/-567.802 $\chi^2$/NDF:16.4/15

+ sign -2508.989+/-488.343 $\chi^2$/NDF: 58.0/32

All: -1559.709+/-342.079 $\chi^2$/NDF: 100.2/67

- sign -645.153+/-479.328 $\chi^2$/NDF: 34.8/34

# asym_sam4_reg_correction_rms vs Slug




Right In: 2455.103+/-0.670 $\chi^2$/NDF: 894389.6/15

Left Out: 2056.780+/-0.403 $\chi^2$/NDF:664644.3/16

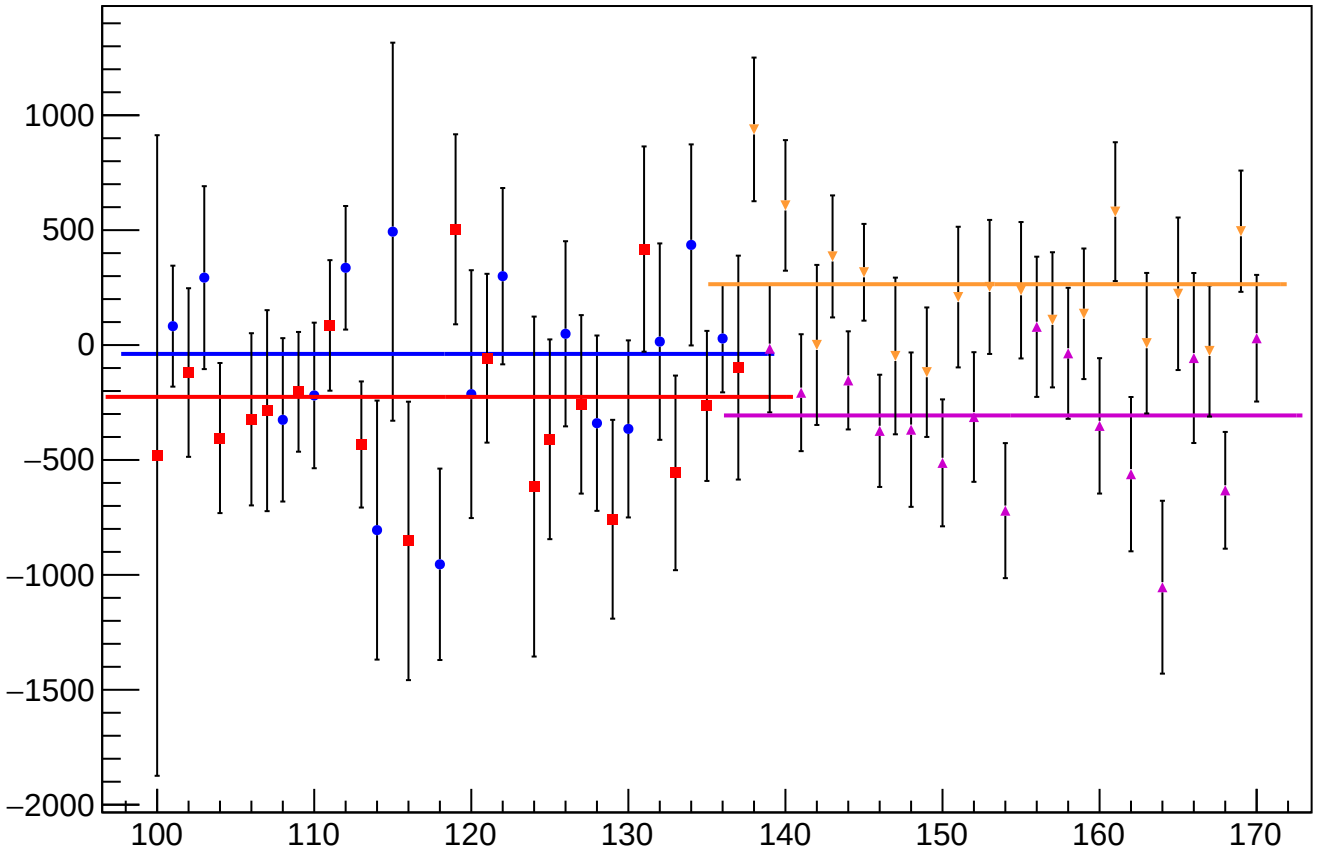
Right Out: 2348.446+/-0.632 $\chi^2$/NDF: 1052421.6/18

Left In: 2036.666+/-0.401 $\chi^2$/NDF:527070.0/15

+ sign 2162.599+/-0.345 $\chi^2$/NDF: 1818616.5/32

All: 2144.090+/-0.242 $\chi^2$/NDF: 3577032.5/67

- sign 2126.259+/-0.339 $\chi^2$/NDF: 1752775.0/34




Right In: -38.519+/-90.619 $\chi^2$/NDF: 14.5/15

Left Out: 264.779+/-70.018 $\chi^2$/NDF:13.8/16

Right Out: -225.515+/-87.922 $\chi^2$/NDF: 11.4/18

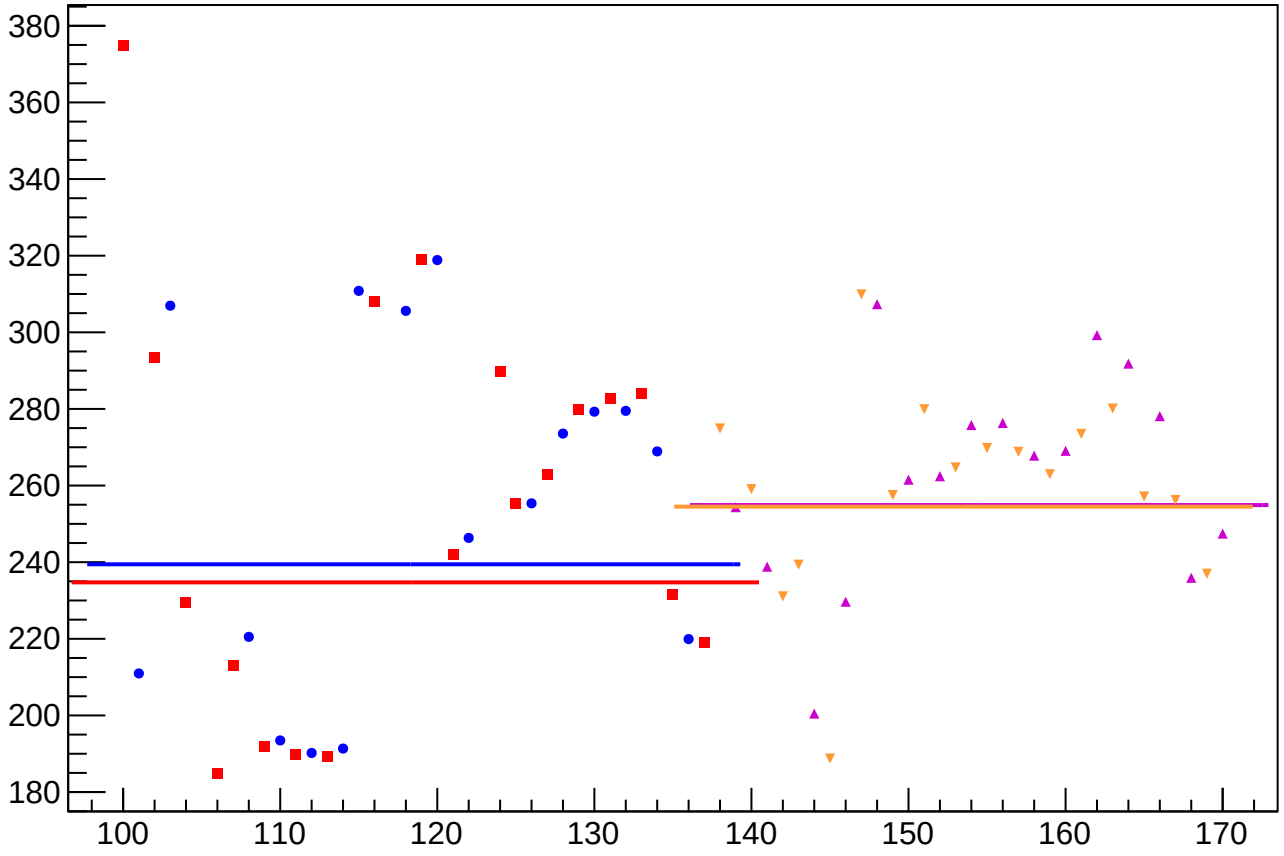
Left In: -306.260+/-70.746 $\chi^2$/NDF:15.1/15

+ sign 151.397+/-55.406 $\chi^2$/NDF: 35.3/32

All: -62.675+/-39.076 $\chi^2$/NDF: 91.9/67

- sign -274.527+/-55.118 $\chi^2$/NDF: 27.0/34

# cor_asym_sam4_rms vs Slug




Right In: 239.449+/-0.064 $\chi^2$/NDF: 400958.1/15

Left Out: 254.500+/-0.050 $\chi^2$/NDF:331849.1/16

Right Out: 234.733+/-0.062 $\chi^2$/NDF: 485238.4/18

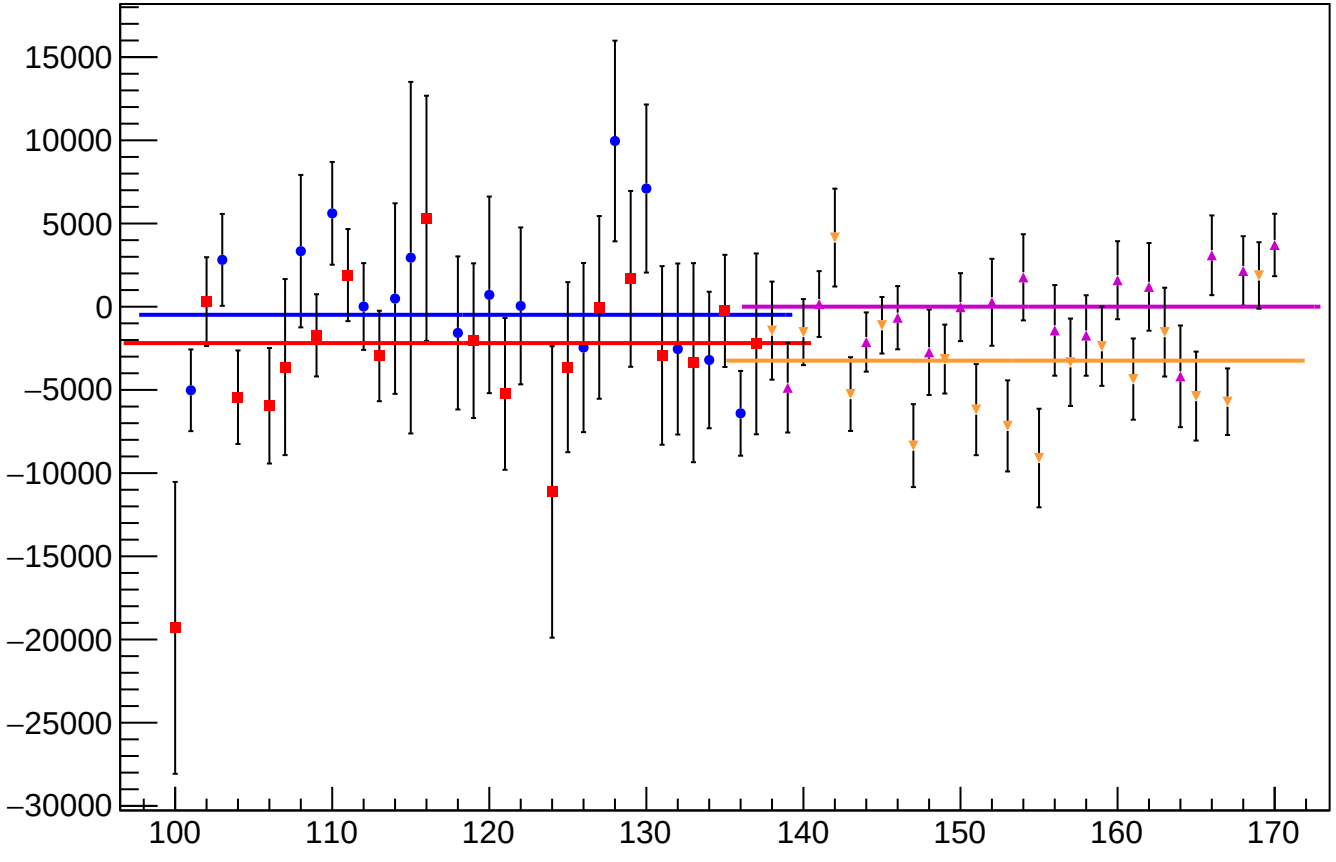
Left In: 254.911+/-0.050 $\chi^2$/NDF:313998.8/15

+ sign 248.873+/-0.039 $\chi^2$/NDF: 767352.3/32

All: 247.922+/-0.028 $\chi^2$/NDF: 1631703.4/67

- sign 246.981+/-0.039 $\chi^2$/NDF: 863178.6/34

# asym_sam4_cor_correction_mean vs Slug




Right In: -486.103+/-947.467 $\chi^2$/NDF: 21.1/15

Left Out: -3240.857+/-569.871 $\chi^2$/NDF:30.6/16

Right Out: -2184.834+/-895.863 $\chi^2$/NDF: 13.3/18

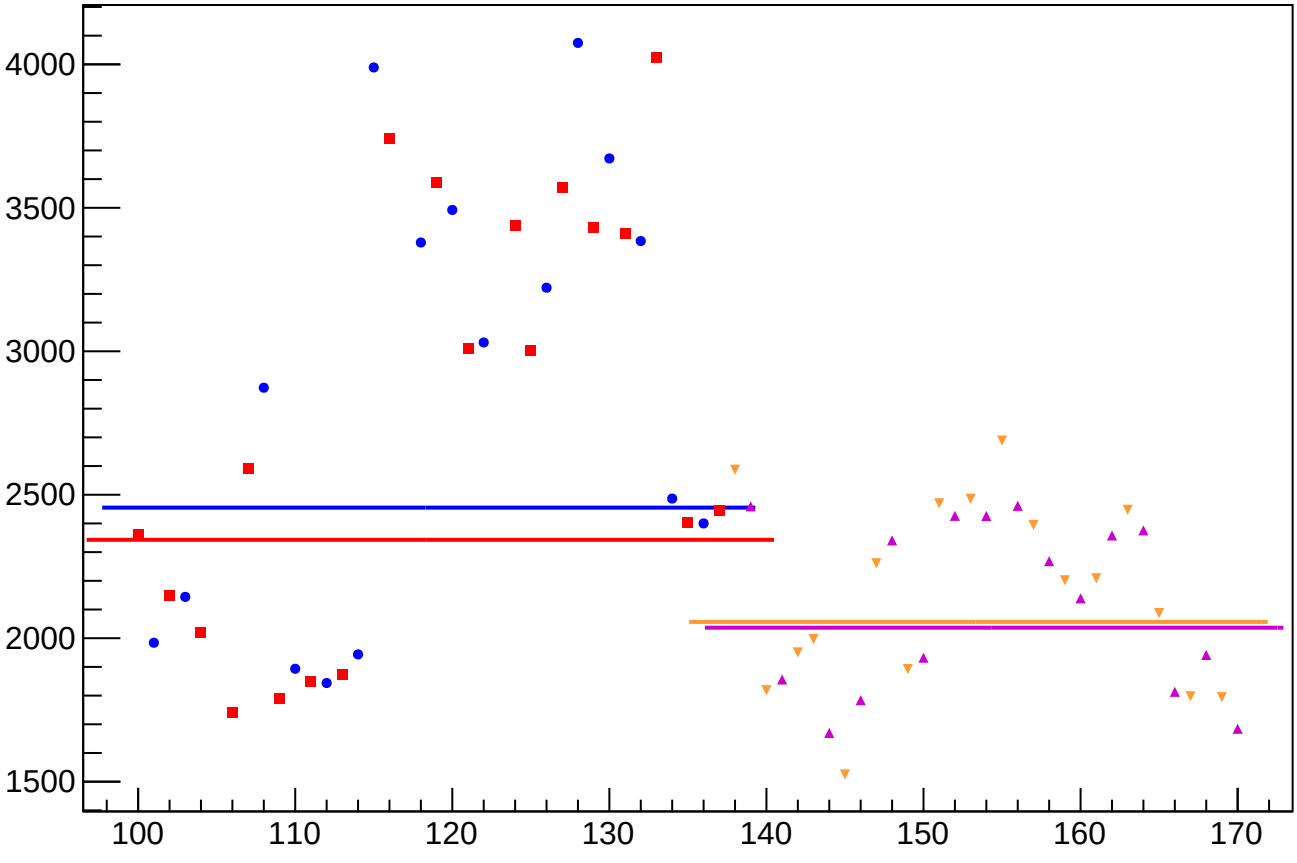
Left In: 2.717+/-567.802 $\chi^2$/NDF:16.4/15

+ sign -2509.035+/-488.344 $\chi^2$/NDF: 58.0/32

All: -1549.569+/-342.173 $\chi^2$/NDF: 99.4/67

- sign -624.202+/-479.588 $\chi^2$/NDF: 33.9/34

# asym_sam4_cor_correction_rms vs Slug




Right In: 2455.127+/-0.670 $\chi^2$/NDF: 894358.3/15

Left Out: 2056.780+/-0.403 $\chi^2$/NDF:664645.5/16

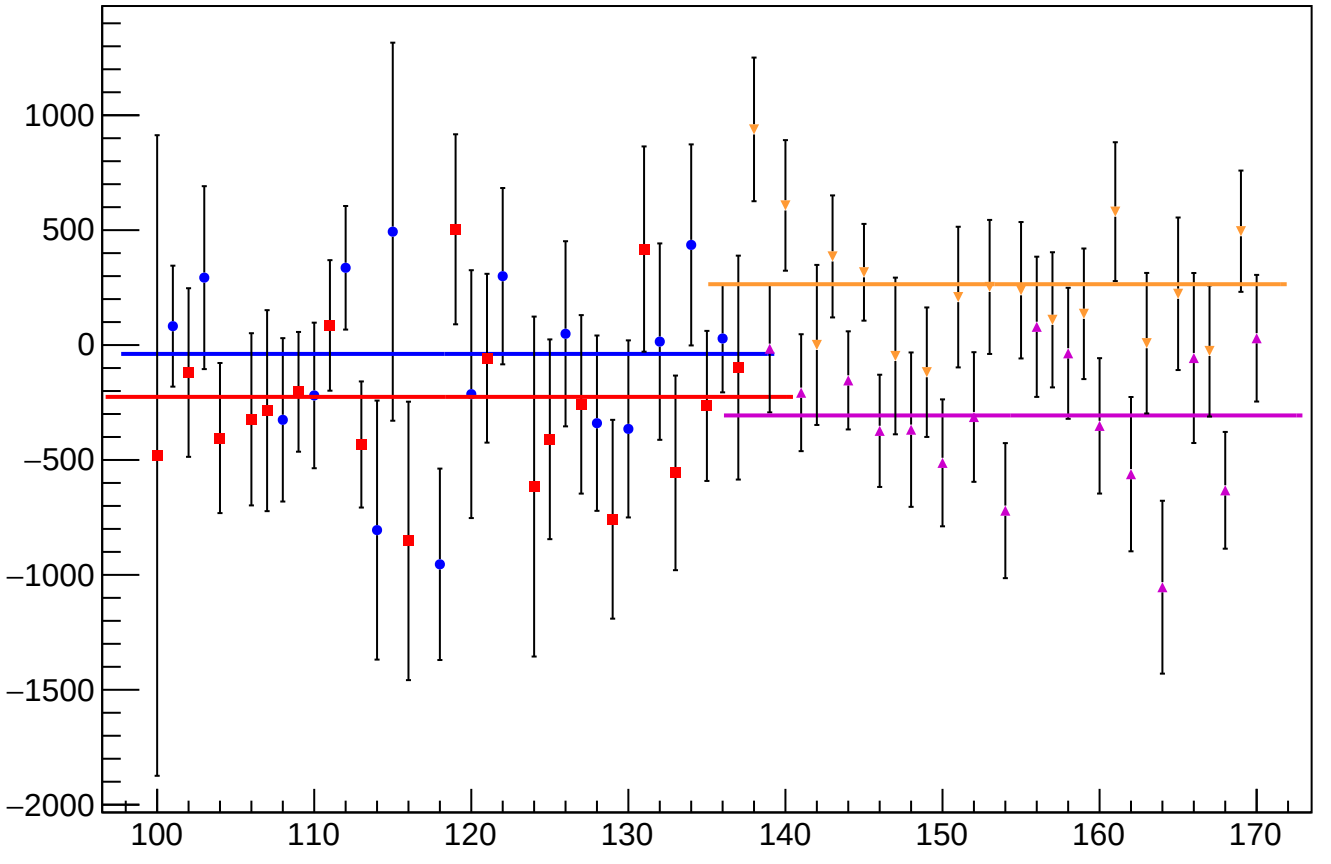
Right Out: 2342.955+/-0.633 $\chi^2$/NDF: 1070387.8/18

Left In: 2036.667+/-0.401 $\chi^2$/NDF:527068.3/15

+ sign 2162.604+/-0.345 $\chi^2$/NDF: 1818615.1/32

All: 2143.179+/-0.242 $\chi^2$/NDF: 3589070.5/67

- sign 2124.444+/-0.339 $\chi^2$/NDF: 1764238.9/34




Right In: -38.519+/-90.619 $\chi^2$/NDF: 14.5/15

Left Out: 264.779+/-70.018 $\chi^2$/NDF:13.8/16

Right Out: -225.515+/-87.922 $\chi^2$/NDF: 11.4/18

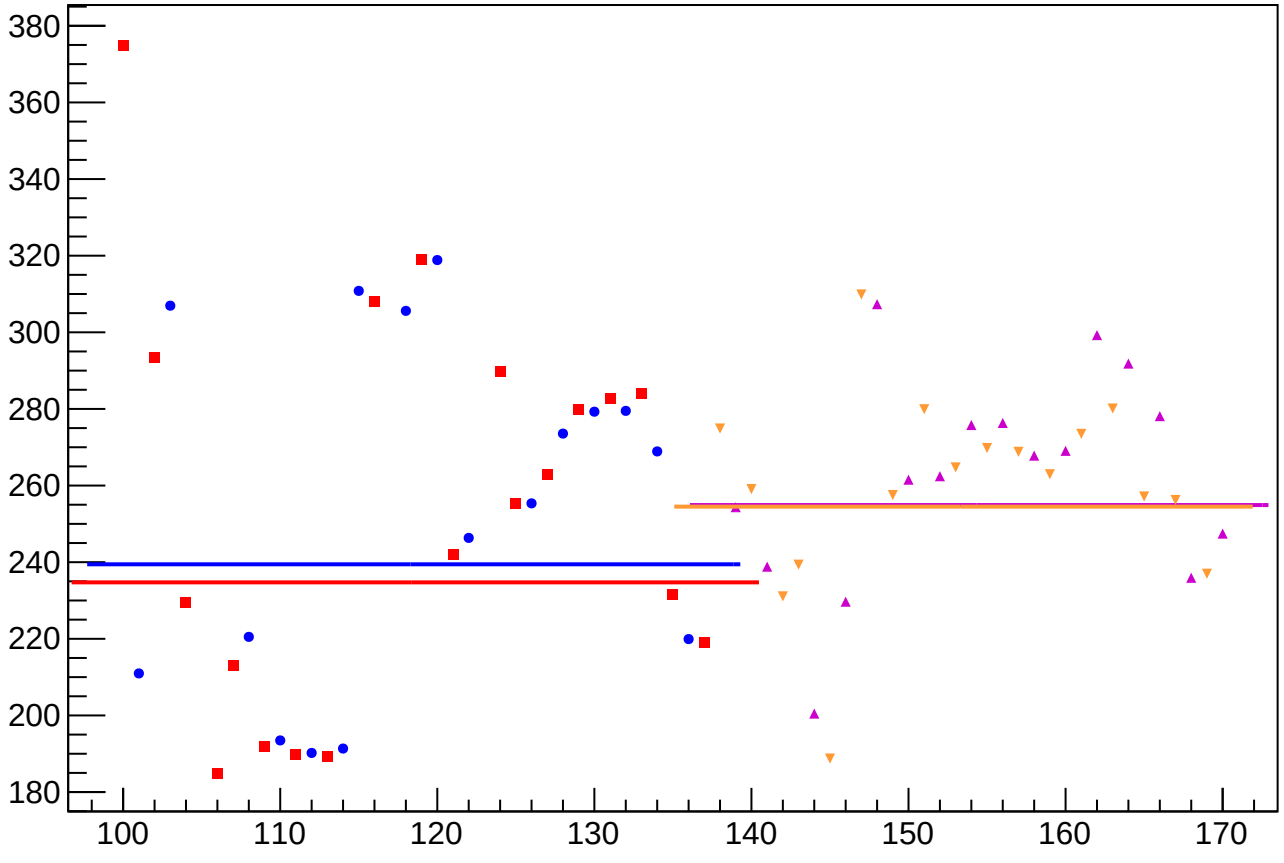
Left In: -306.260+/-70.746 $\chi^2$/NDF:15.1/15

+ sign 151.397+/-55.406 $\chi^2$/NDF: 35.3/32

All: -62.675+/-39.076 $\chi^2$/NDF: 91.9/67

- sign -274.527+/-55.118 $\chi^2$/NDF: 27.0/34

# eigen_cor_asym_sam4_rms vs Slug




Right In: 239.449+/-0.064 $\chi^2$/NDF: 400958.1/15

Left Out: 254.500+/-0.050 $\chi^2$/NDF:331849.1/16

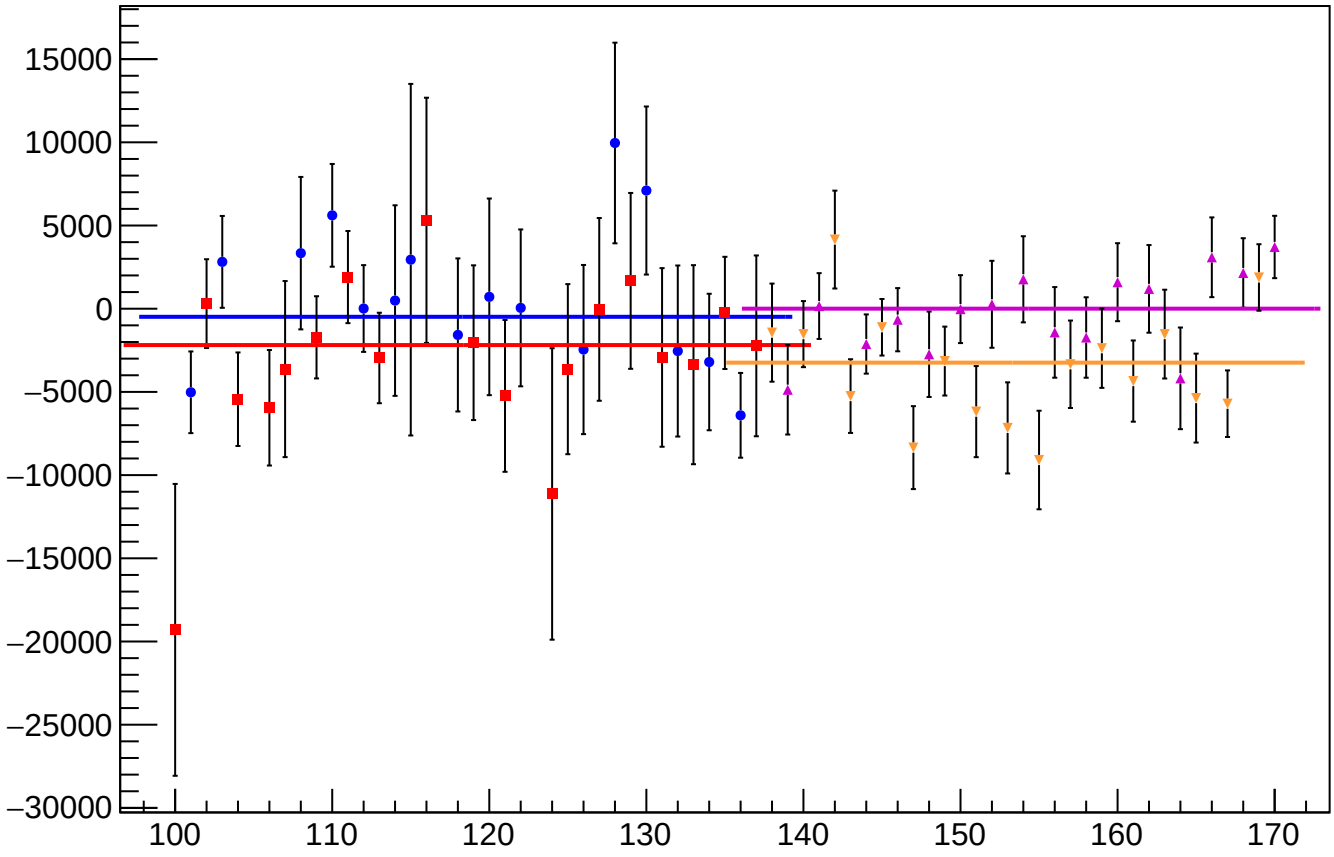
Right Out: 234.733+/-0.062 $\chi^2$/NDF: 485238.4/18

Left In: 254.911+/-0.050 $\chi^2$/NDF:313998.8/15

+ sign 248.873+/-0.039 $\chi^2$/NDF: 767352.3/32

All: 247.922+/-0.028 $\chi^2$/NDF: 1631703.4/67

- sign 246.981+/-0.039 $\chi^2$/NDF: 863178.6/34




Right In: -486.103+/-947.467 $\chi^2$/NDF: 21.1/15

Left Out: -3240.857+/-569.871 $\chi^2$/NDF:30.6/16

Right Out: -2184.834+/-895.863 $\chi^2$/NDF: 13.3/18

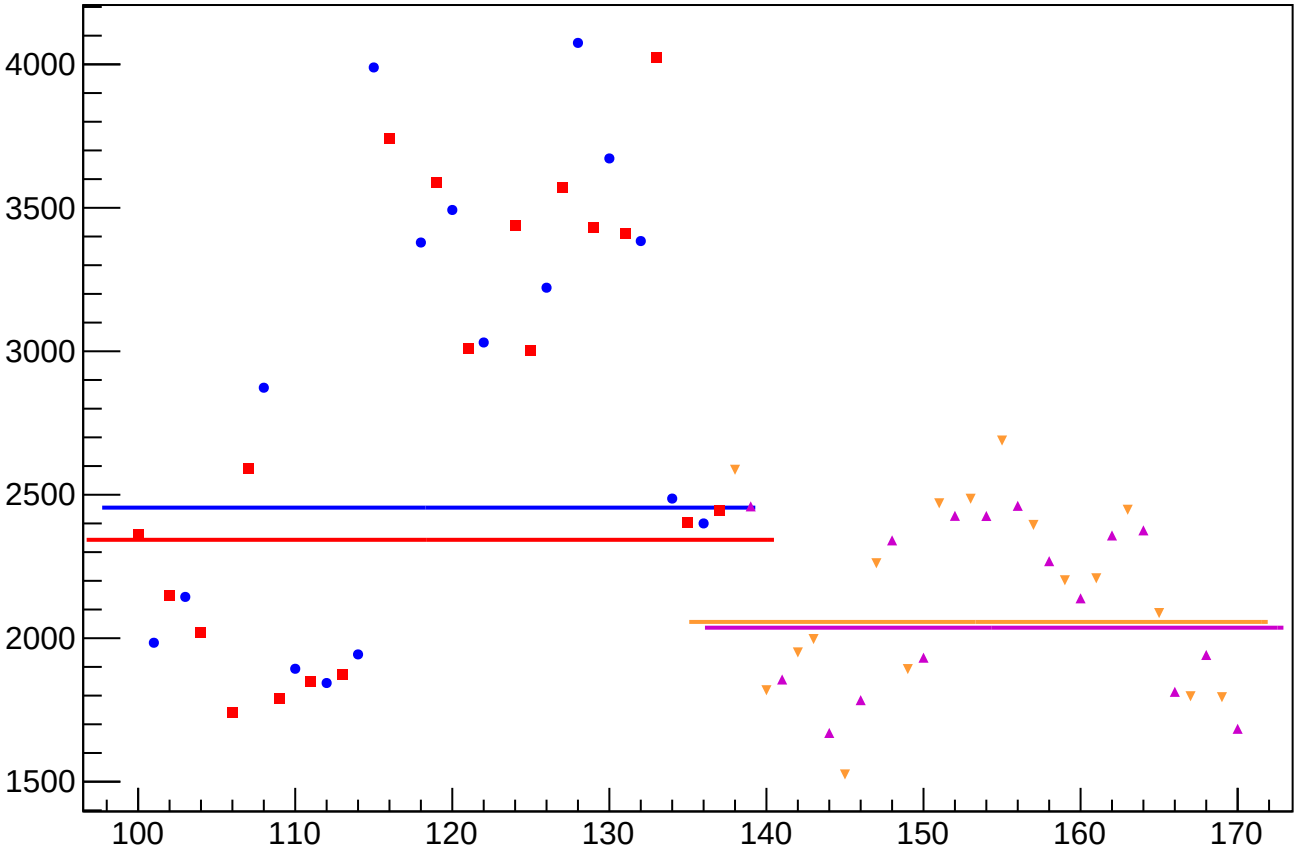
Left In: 2.717+/-567.802 $\chi^2$/NDF:16.4/15

+ sign -2509.035+/-488.344 $\chi^2$/NDF: 58.0/32

All: -1549.569+/-342.173 $\chi^2$/NDF: 99.4/67

- sign -624.202+/-479.588 $\chi^2$/NDF: 33.9/34

# asym_sam4_eigen_cor_correction_rms vs Slug




Right In: 2455.127+/-0.670 $\chi^2$/NDF: 894358.3/15

Left Out: 2056.780+/-0.403 $\chi^2$/NDF:664645.5/16

Right Out: 2342.955+/-0.633 $\chi^2$/NDF: 1070387.8/18

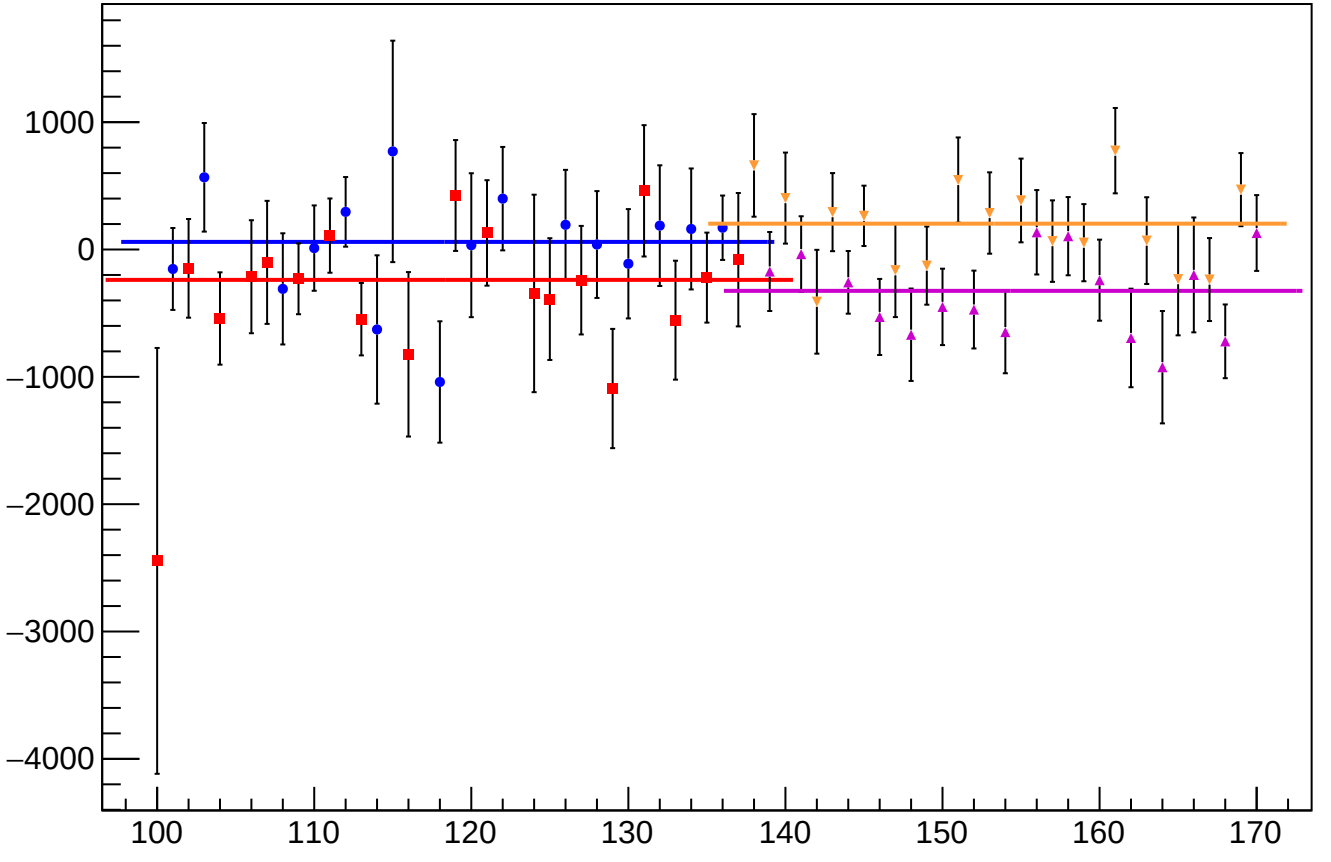
Left In: 2036.667+/-0.401 $\chi^2$/NDF:527068.3/15

+ sign 2162.604+/-0.345 $\chi^2$/NDF: 1818615.1/32

All: 2143.179+/-0.242 $\chi^2$/NDF: 3589070.5/67

- sign 2124.444+/-0.339 $\chi^2$/NDF: 1764238.9/34

# dit_asym_sam4_mean vs Slug




Right In: 59.728+/-99.230 $\chi^2$/NDF: 12.0/15

Left Out: 202.874+/-79.226 $\chi^2$/NDF:14.7/16

Right Out: -238.516+/-95.062 $\chi^2$/NDF: 14.9/18

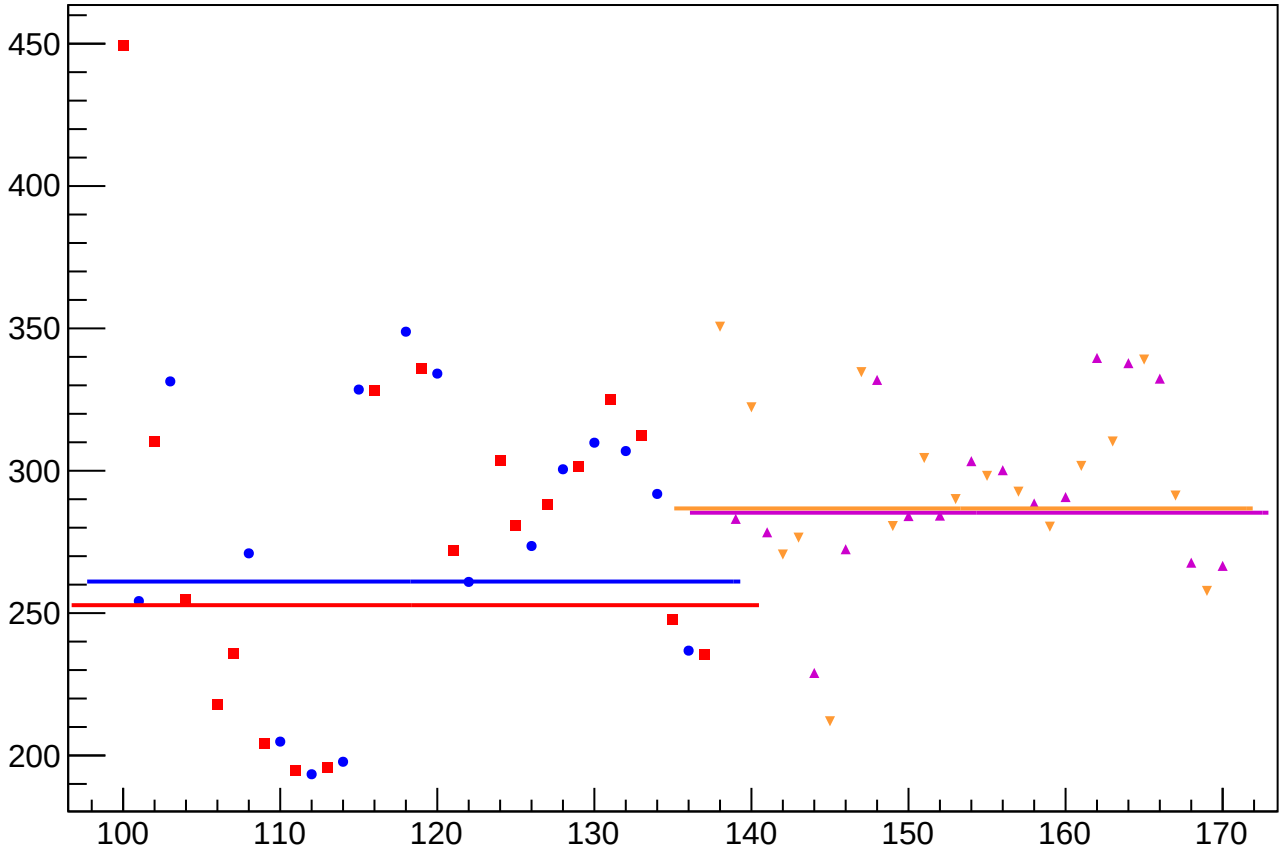
Left In: -324.723+/-79.577 $\chi^2$/NDF:15.0/15

+ sign 147.147+/-61.913 $\chi^2$/NDF: 28.0/32

All: -74.199+/-43.460 $\chi^2$/NDF: 83.7/67

- sign -289.203+/-61.020 $\chi^2$/NDF: 30.5/34

# dit_asym_sam4_rms vs Slug




Right In: 261.089+/-0.070 $\chi^2$/NDF: 462662.2/15

Left Out: 286.768+/-0.056 $\chi^2$/NDF:381221.6/16

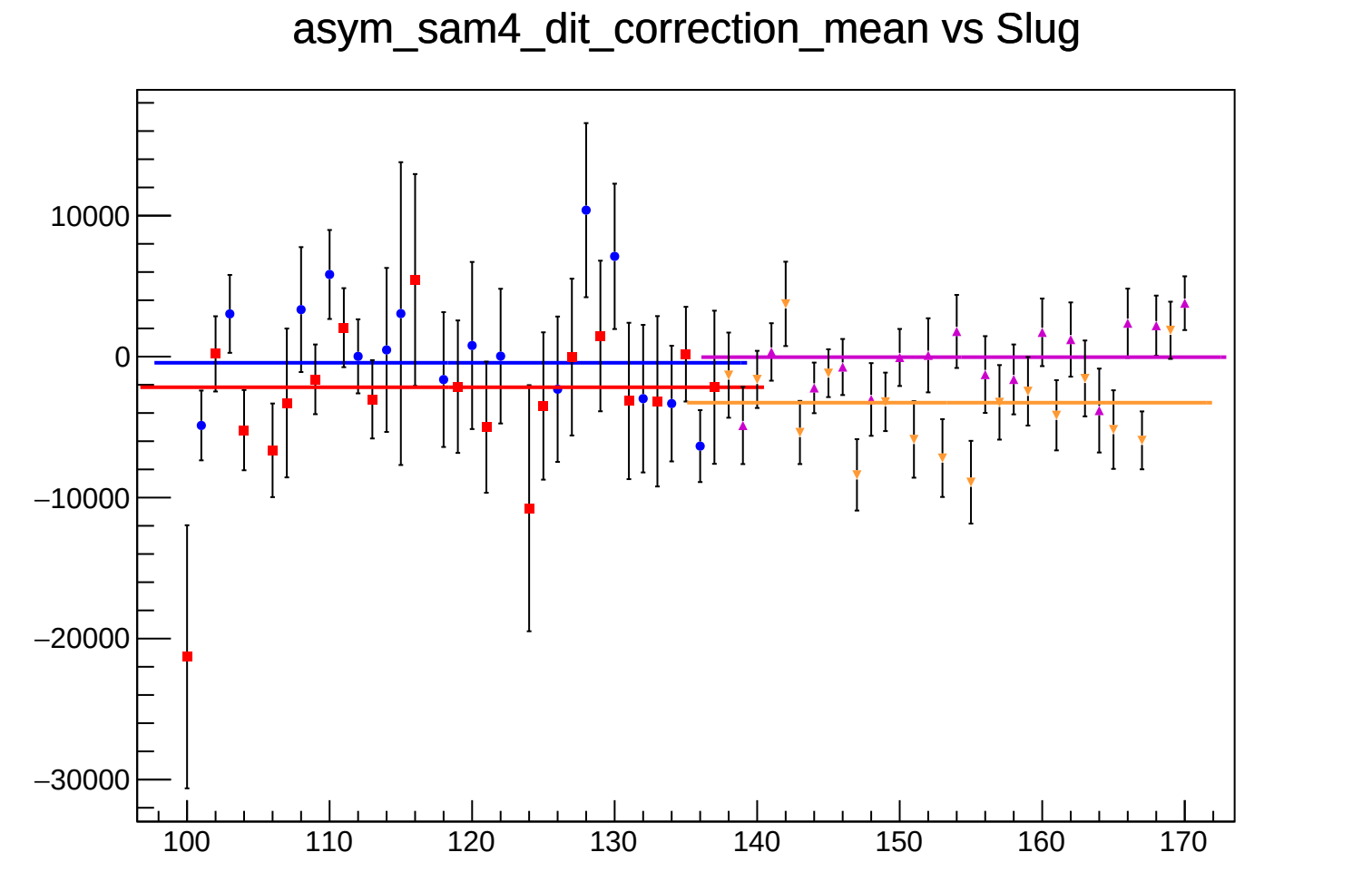
Right Out: 252.787+/-0.067 $\chi^2$/NDF: 537290.6/18

Left In: 285.265+/-0.056 $\chi^2$/NDF:258537.6/15

+ sign 276.771+/-0.044 $\chi^2$/NDF: 925679.6/32

All: 274.291+/-0.031 $\chi^2$/NDF: 1865089.4/67

- sign 271.883+/-0.043 $\chi^2$/NDF: 933086.3/34




Right In: -436.732+/-955.134 $\chi^2$/NDF: 21.2/15

Left Out: -3268.047+/-576.913 $\chi^2$/NDF:28.9/16

Right Out: -2172.091+/-901.102 $\chi^2$/NDF: 14.0/18

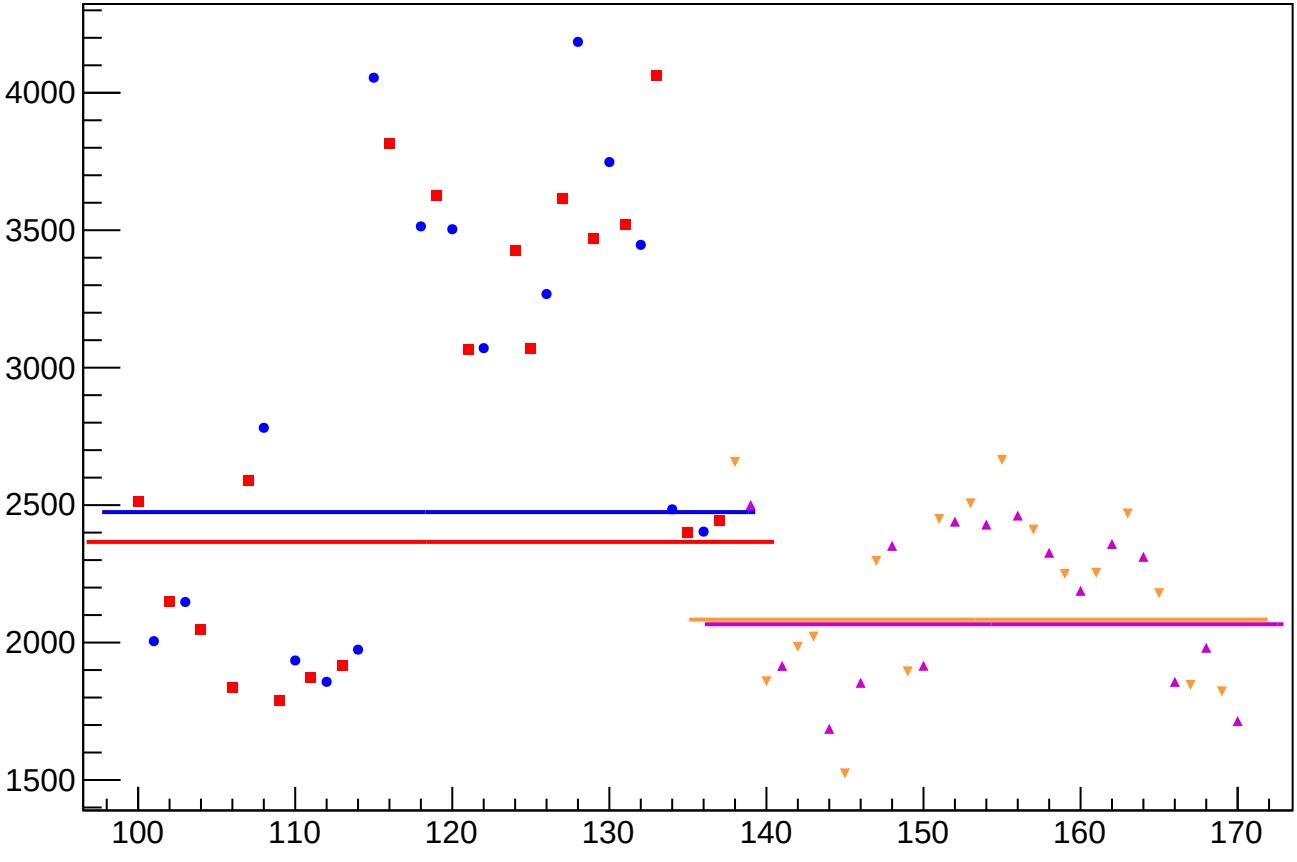
Left In: -37.422+/-575.804 $\chi^2$/NDF:15.7/15

+ sign -2511.212+/-493.822 $\chi^2$/NDF: 56.6/32

All: -1567.446+/-346.098 $\chi^2$/NDF: 97.4/67

- sign -656.336+/-485.203 $\chi^2$/NDF: 33.7/34

# asym_sam4_dit_correction_rms vs Slug




Right In: 2474.622+/-0.675 $\chi^2$/NDF: 916250.9/15

Left Out: 2083.479+/-0.408 $\chi^2$/NDF:663468.1/16

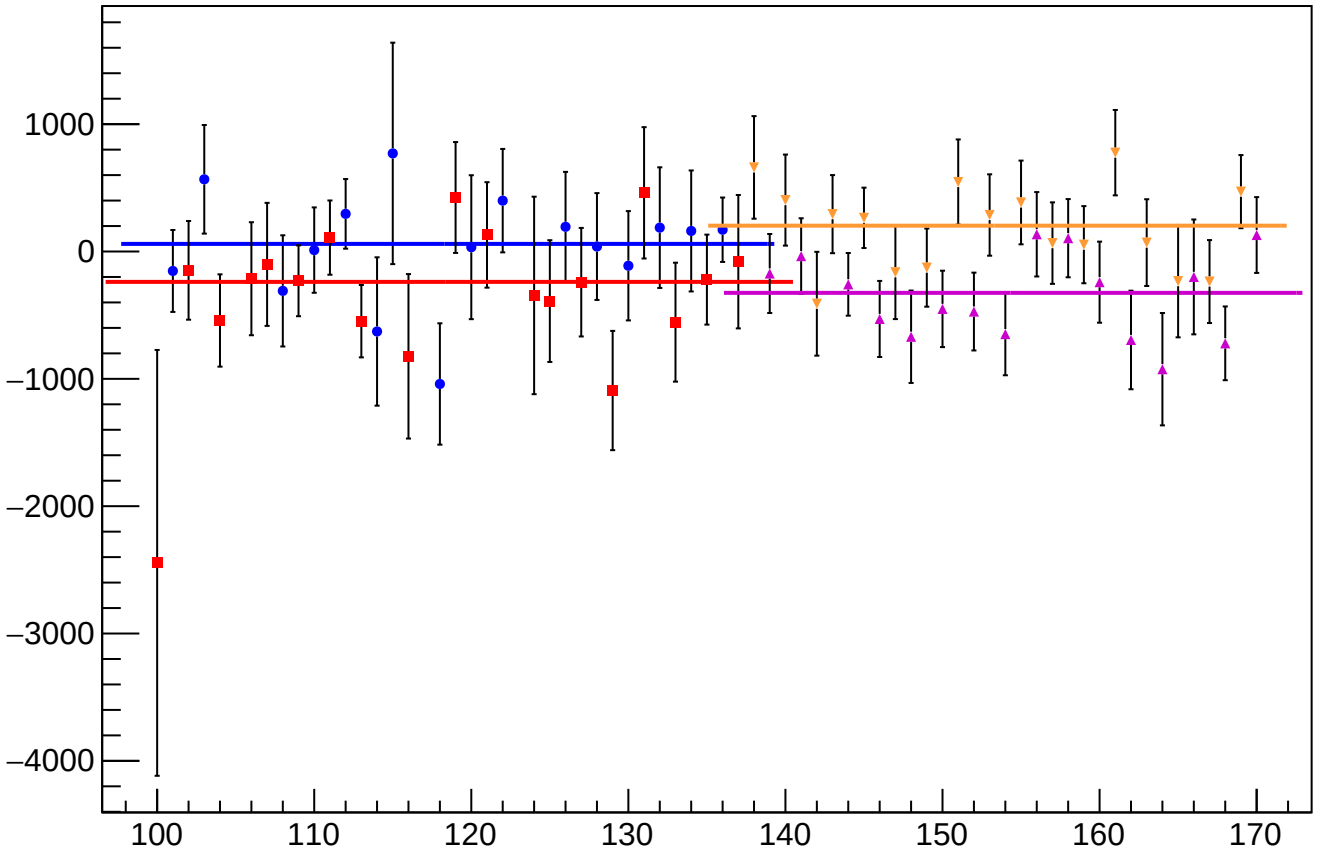
Right Out: 2366.221+/-0.637 $\chi^2$/NDF: 1077175.3/18

Left In: 2066.623+/-0.407 $\chi^2$/NDF:482825.1/15

+ sign 2188.035+/-0.349 $\chi^2$/NDF: 1825468.6/32

All: 2170.457+/-0.245 $\chi^2$/NDF: 3547434.9/67

- sign 2153.487+/-0.343 $\chi^2$/NDF: 1716985.6/34




Right In: 59.734+/-99.230 $\chi^2$/NDF: 12.0/15

Left Out: 202.879+/-79.226 $\chi^2$/NDF:14.7/16

Right Out: -238.515+/-95.062 $\chi^2$/NDF: 14.9/18

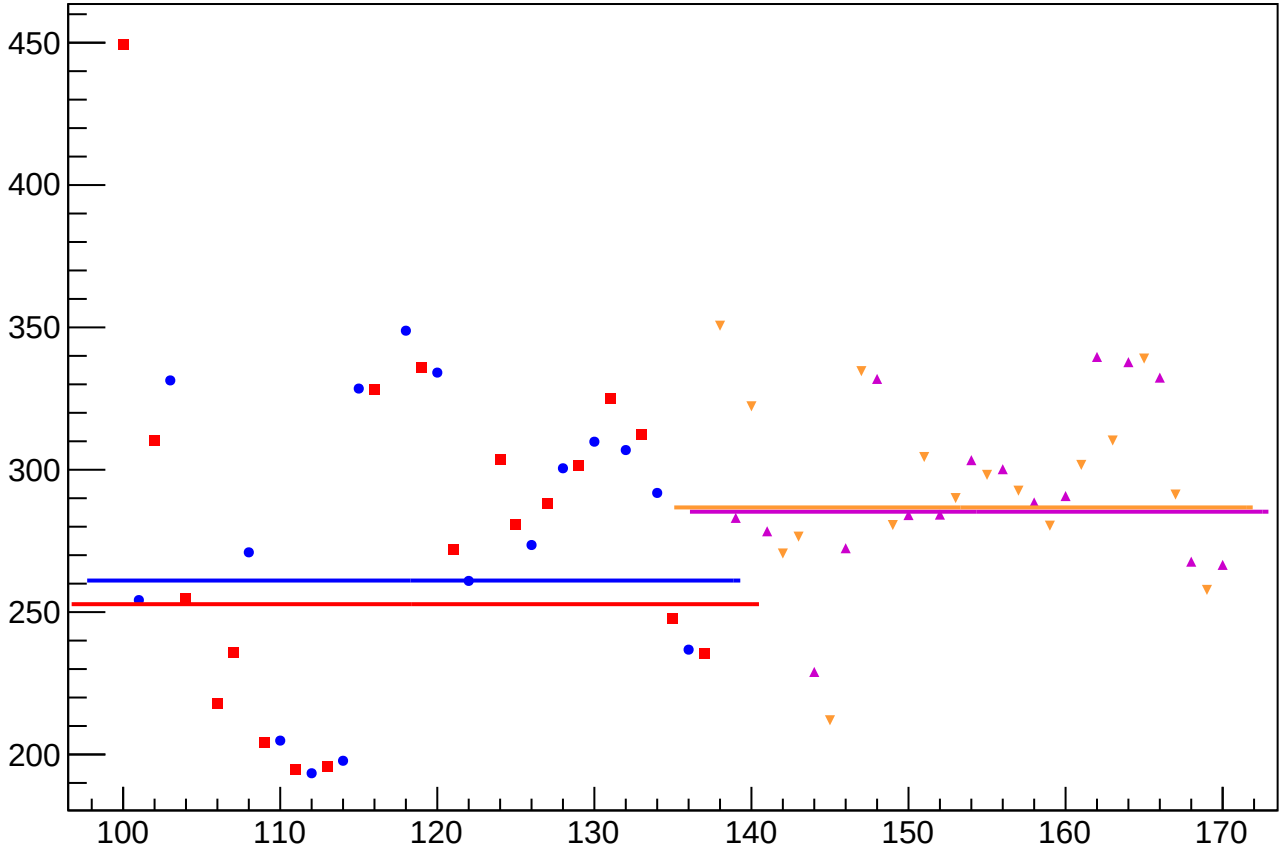
Left In: -324.725+/-79.578 $\chi^2$/NDF:15.0/15

+ sign 147.152+/-61.913 $\chi^2$/NDF: 28.0/32

All: -74.197+/-43.460 $\chi^2$/NDF: 83.7/67

- sign -289.204+/-61.020 $\chi^2$/NDF: 30.5/34

# eigen_dit_asym_sam4_rms vs Slug




Right In: 261.089+/-0.070 $\chi^2$/NDF: 462665.3/15

Left Out: 286.768+/-0.056 $\chi^2$/NDF:381219.1/16

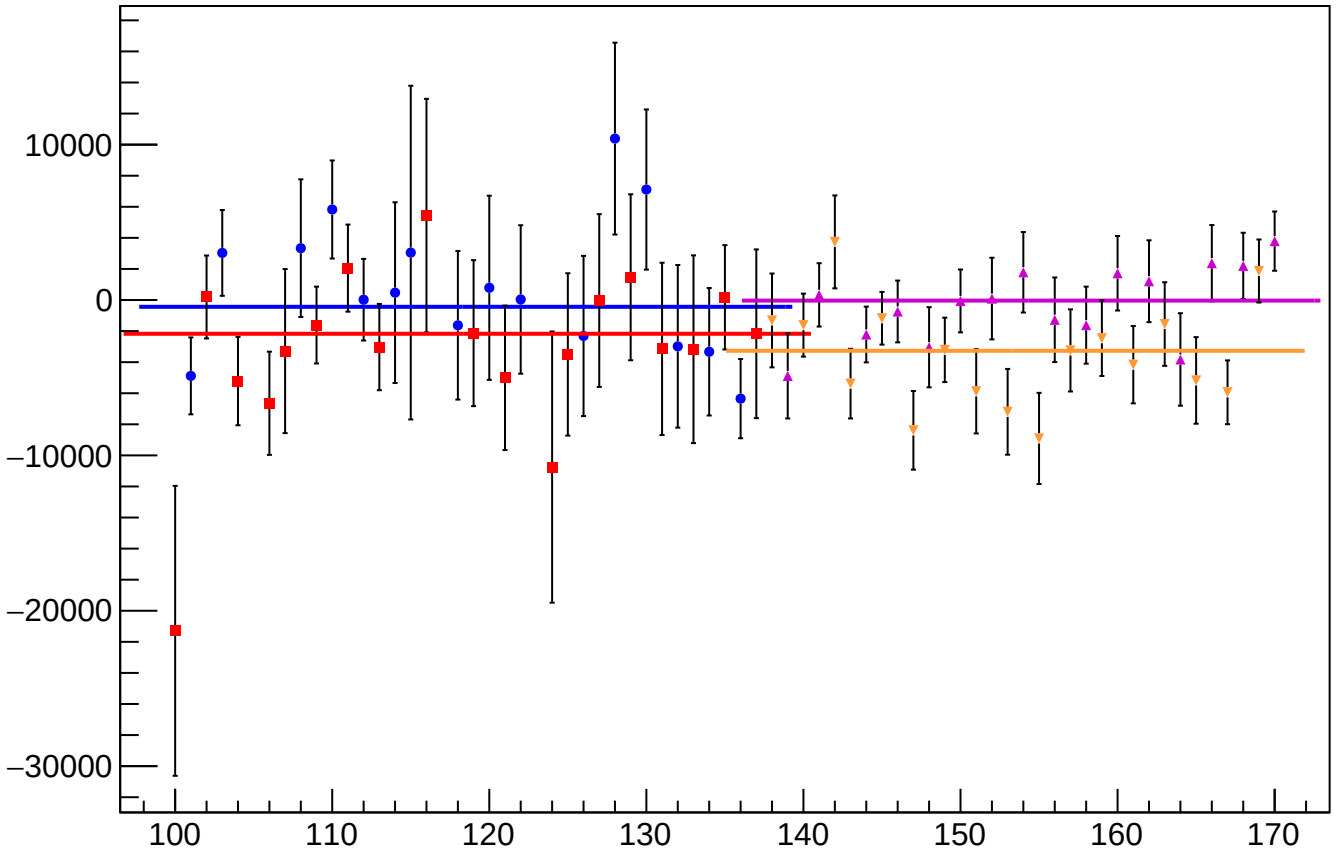
Right Out: 252.787+/-0.067 $\chi^2$/NDF: 537293.8/18

Left In: 285.265+/-0.056 $\chi^2$/NDF:258537.1/15

+ sign 276.771+/-0.044 $\chi^2$/NDF: 925682.2/32

All: 274.292+/-0.031 $\chi^2$/NDF: 1865097.8/67

- sign 271.883+/-0.043 $\chi^2$/NDF: 933091.7/34




Right In: -436.731+/-955.133 $\chi^2$/NDF: 21.2/15

Left Out: -3268.039+/-576.912 $\chi^2$/NDF:28.9/16

Right Out: -2172.089+/-901.101 $\chi^2$/NDF: 14.0/18

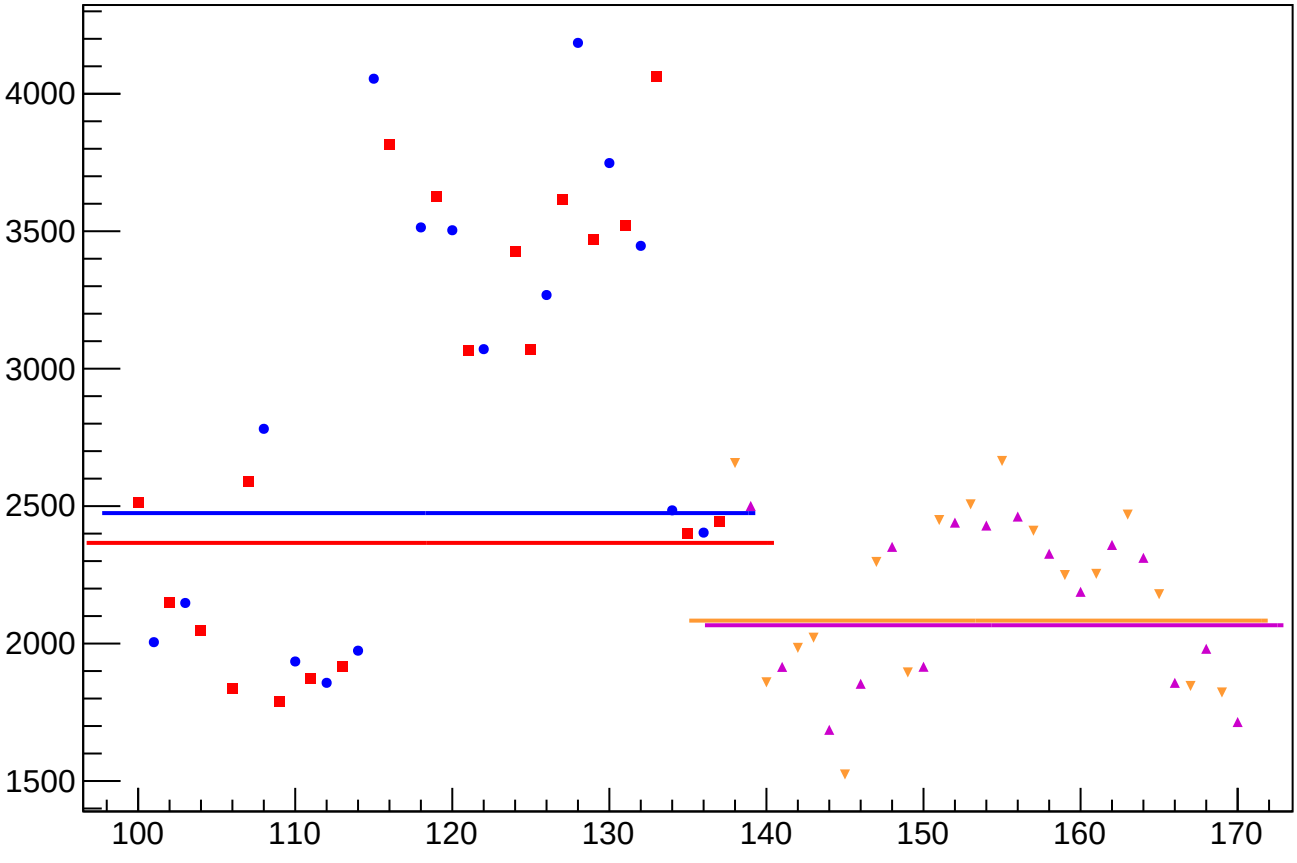
Left In: -37.420+/-575.803 $\chi^2$/NDF:15.7/15

+ sign -2511.206+/-493.822 $\chi^2$/NDF: 56.6/32

All: -1567.442+/-346.097 $\chi^2$/NDF: 97.4/67

- sign -656.334+/-485.203 $\chi^2$/NDF: 33.7/34

# asym_sam4_eigen_dit_correction_rms vs Slug




Right In: 2474.620+/-0.675 $\chi^2$/NDF: 916254.1/15

Left Out: 2083.476+/-0.408 $\chi^2$/NDF:663473.9/16

Right Out: 2366.219+/-0.637 $\chi^2$/NDF: 1077177.7/18

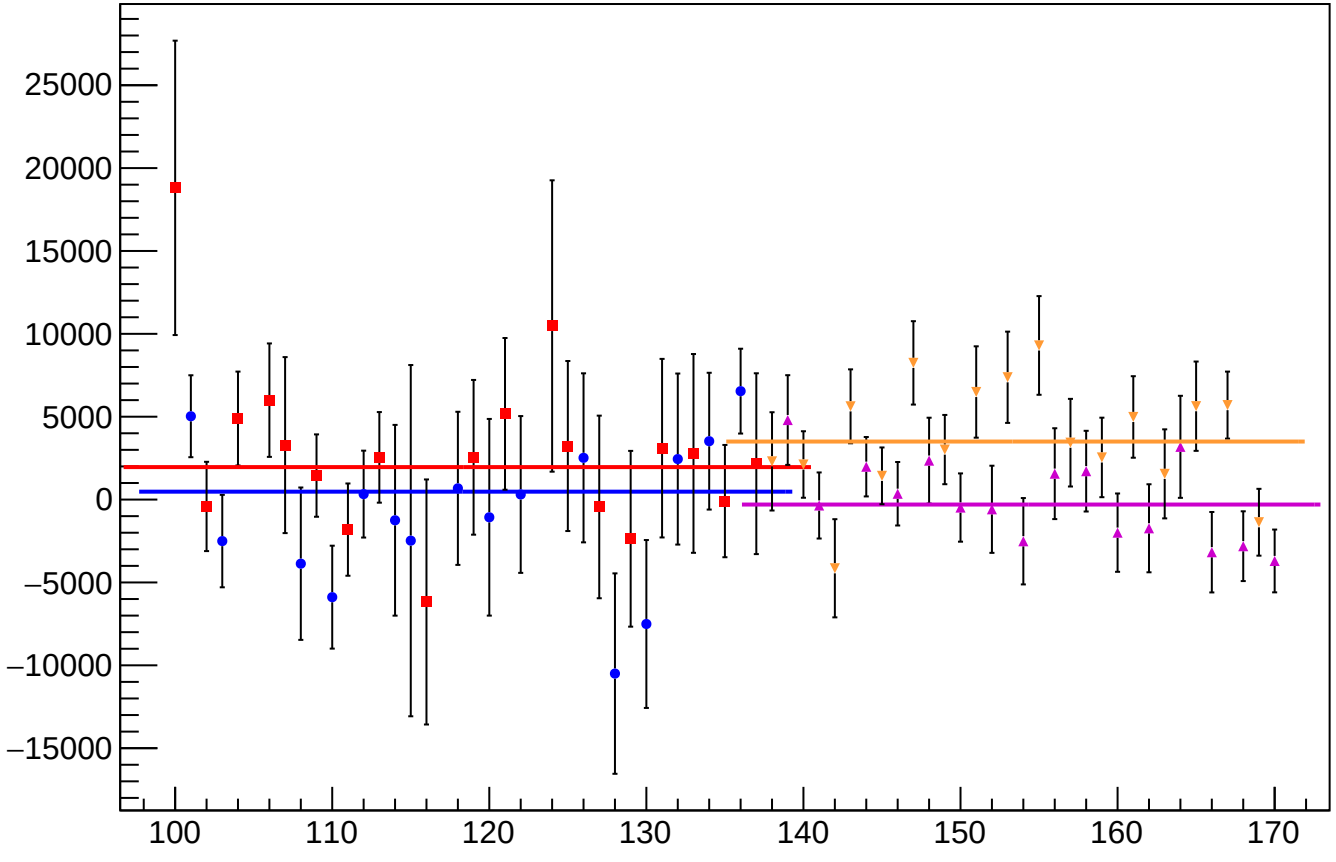
Left In: 2066.621+/-0.407 $\chi^2$/NDF:482826.4/15

+ sign 2188.032+/-0.349 $\chi^2$/NDF: 1825479.9/32

All: 2170.454+/-0.245 $\chi^2$/NDF: 3547450.9/67

- sign 2153.485+/-0.343 $\chi^2$/NDF: 1716990.4/34

# asym_sam4_mean vs Slug




Right In: 477.284+/-952.752 $\chi^2$/NDF: 22.1/15

Left Out: 3501.194+/-574.428 $\chi^2$/NDF:28.9/16

Right Out: 1959.491+/-899.702 $\chi^2$/NDF: 12.8/18

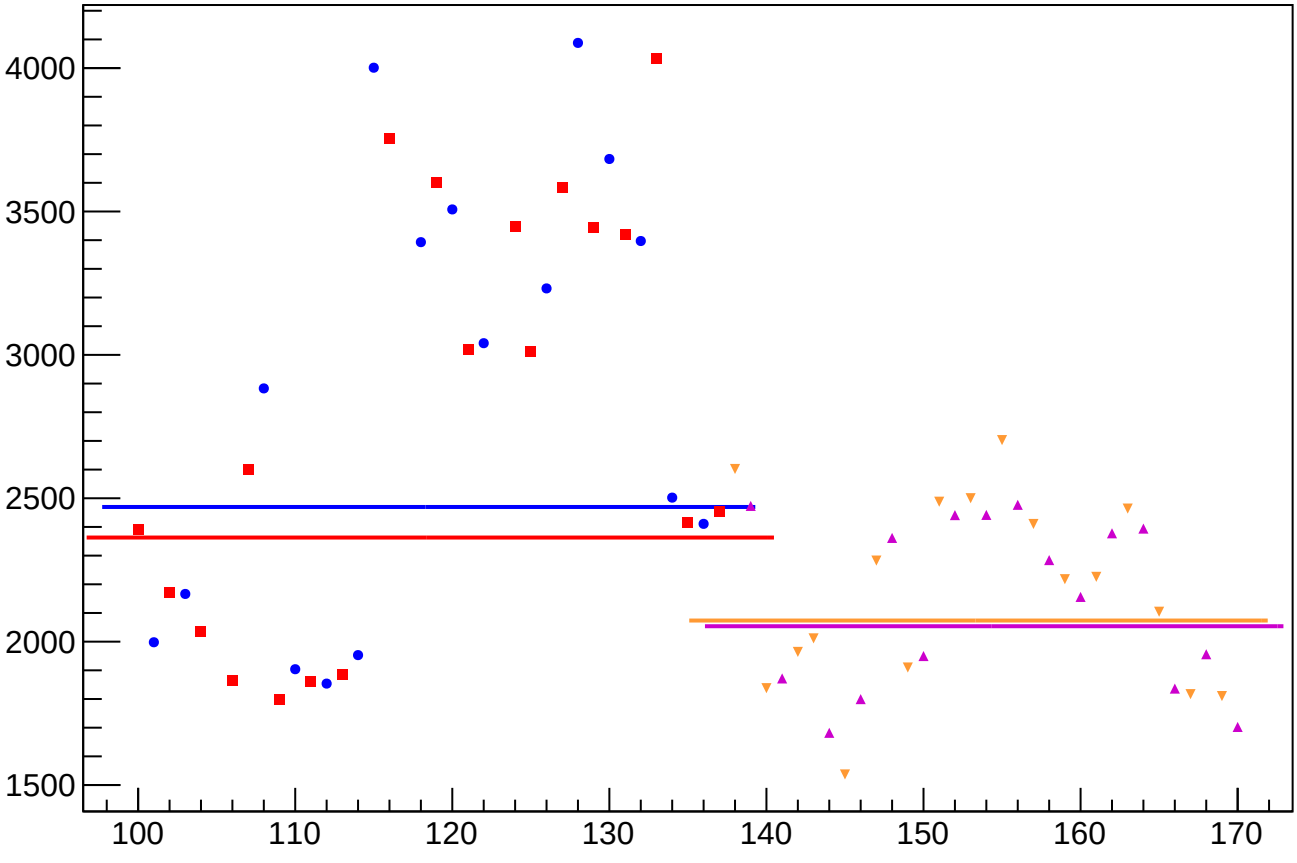
Left In: -299.762+/-572.467 $\chi^2$/NDF:16.4/15

+ sign 2695.030+/-491.934 $\chi^2$/NDF: 58.4/32

All: 1501.663+/-344.643 $\chi^2$/NDF: 103.7/67

- sign 351.320+/-482.985 $\chi^2$/NDF: 33.7/34

# asym_sam4_rms vs Slug




Right In: 2469.639+/-0.674 $\chi^2$/NDF: 886179.0/15

Left Out: 2073.652+/-0.406 $\chi^2$/NDF:656703.5/16

Right Out: 2363.052+/-0.636 $\chi^2$/NDF: 1043344.3/18

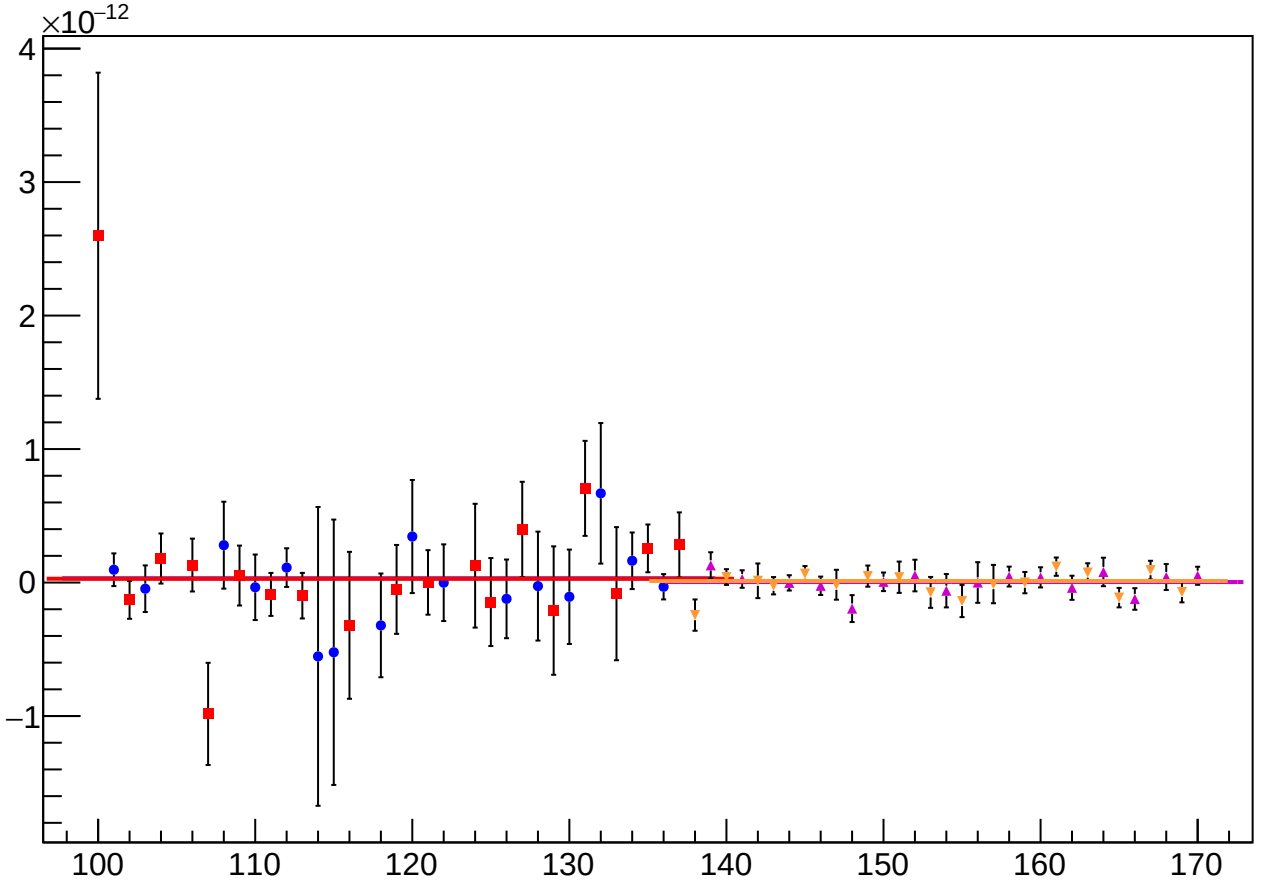
Left In: 2053.768+/-0.405 $\chi^2$/NDF:519994.1/15

+ sign 2179.221+/-0.348 $\chi^2$/NDF: 1796264.3/32

All: 2160.726+/-0.244 $\chi^2$/NDF: 3533389.8/67

- sign 2142.899+/-0.342 $\chi^2$/NDF: 1731573.9/34

# asym_sam4_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 6.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:17.3/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 23.2/18

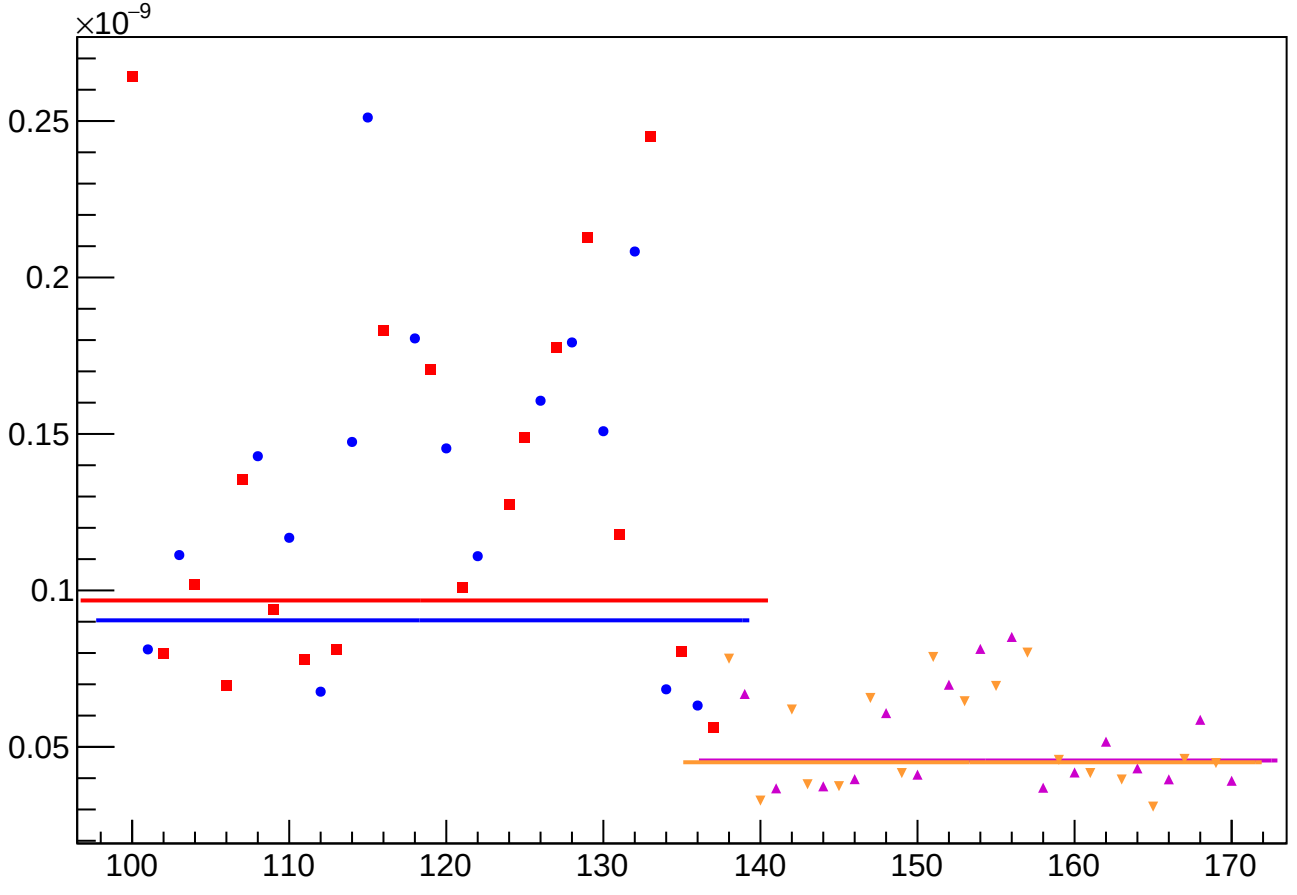
Left In: 0.000+/-0.000 $\chi^2$/NDF:10.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 23.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 57.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 33.9/34

# asym_sam4_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 926723.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:925555.3/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 851500.3/18

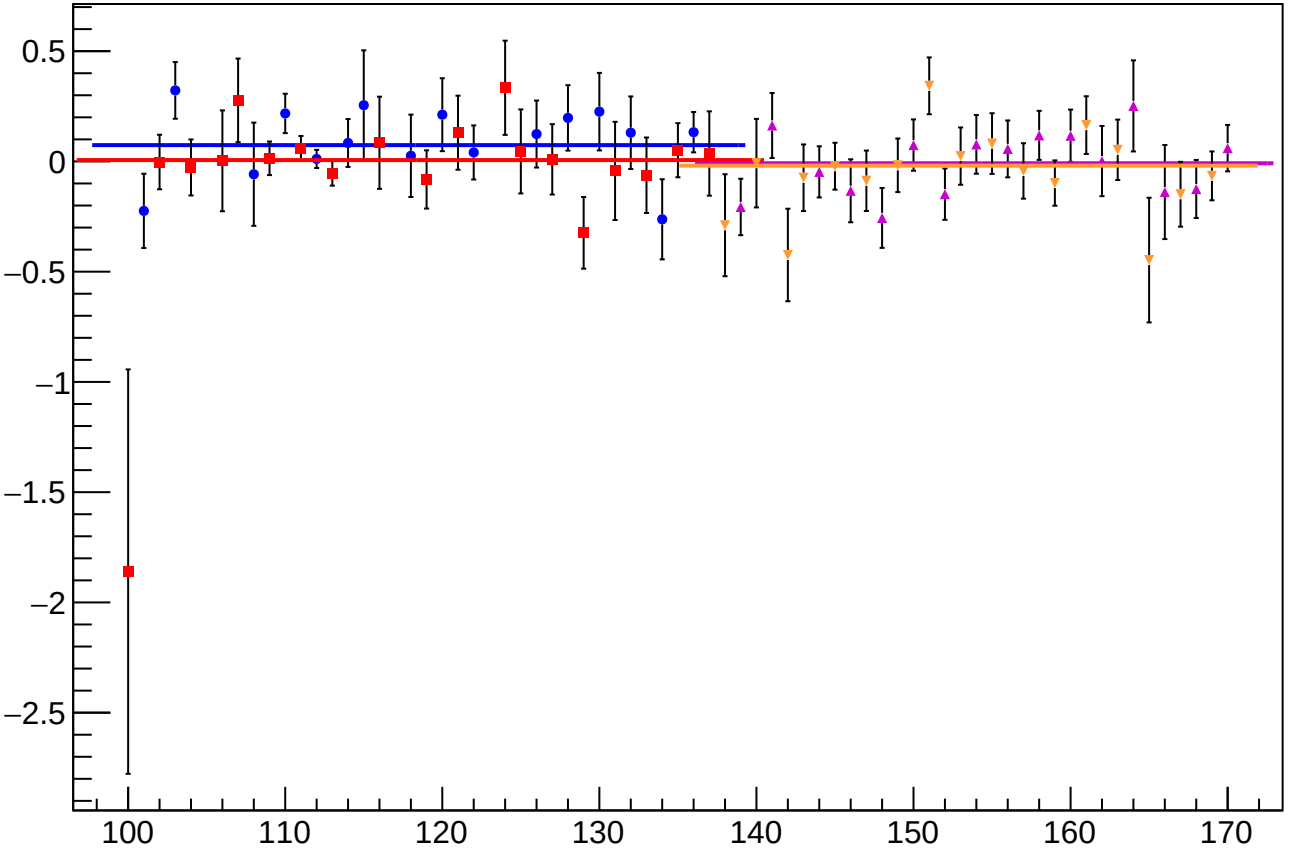
Left In: 0.000+/-0.000 $\chi^2$/NDF:729828.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3159004.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 6217234.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3054933.3/34

# asym_sam4_dit_vs_cor_diff_mean vs Slug




Right In: 0.074+/-0.027 $\chi^2$/NDF: 19.0/15

Left Out: -0.019+/-0.033 $\chi^2$/NDF:20.1/16

Right Out: 0.006+/-0.027 $\chi^2$/NDF: 16.4/18

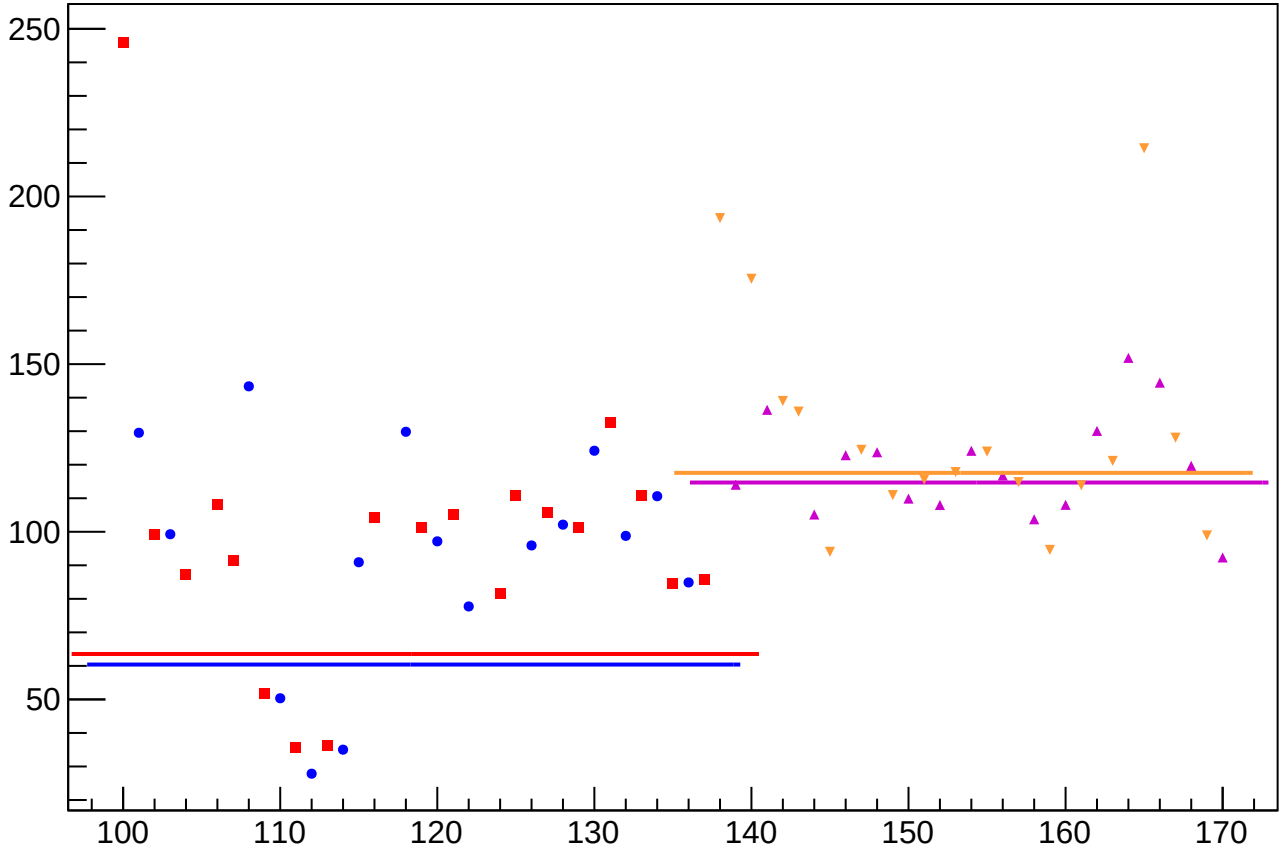
Left In: -0.008+/-0.033 $\chi^2$/NDF:16.2/15

+ sign 0.037+/-0.021 $\chi^2$/NDF: 43.8/32

All: 0.018+/-0.015 $\chi^2$/NDF: 78.1/67

- sign 0.000+/-0.021 $\chi^2$/NDF: 32.7/34

# asym_sam4_dit_vs_cor_diff_rms vs Slug




Right In: 60.401+/-0.019 $\chi^2$/NDF: 3538126.0/15

Left Out: 117.575+/-0.024 $\chi^2$/NDF:951471.9/16

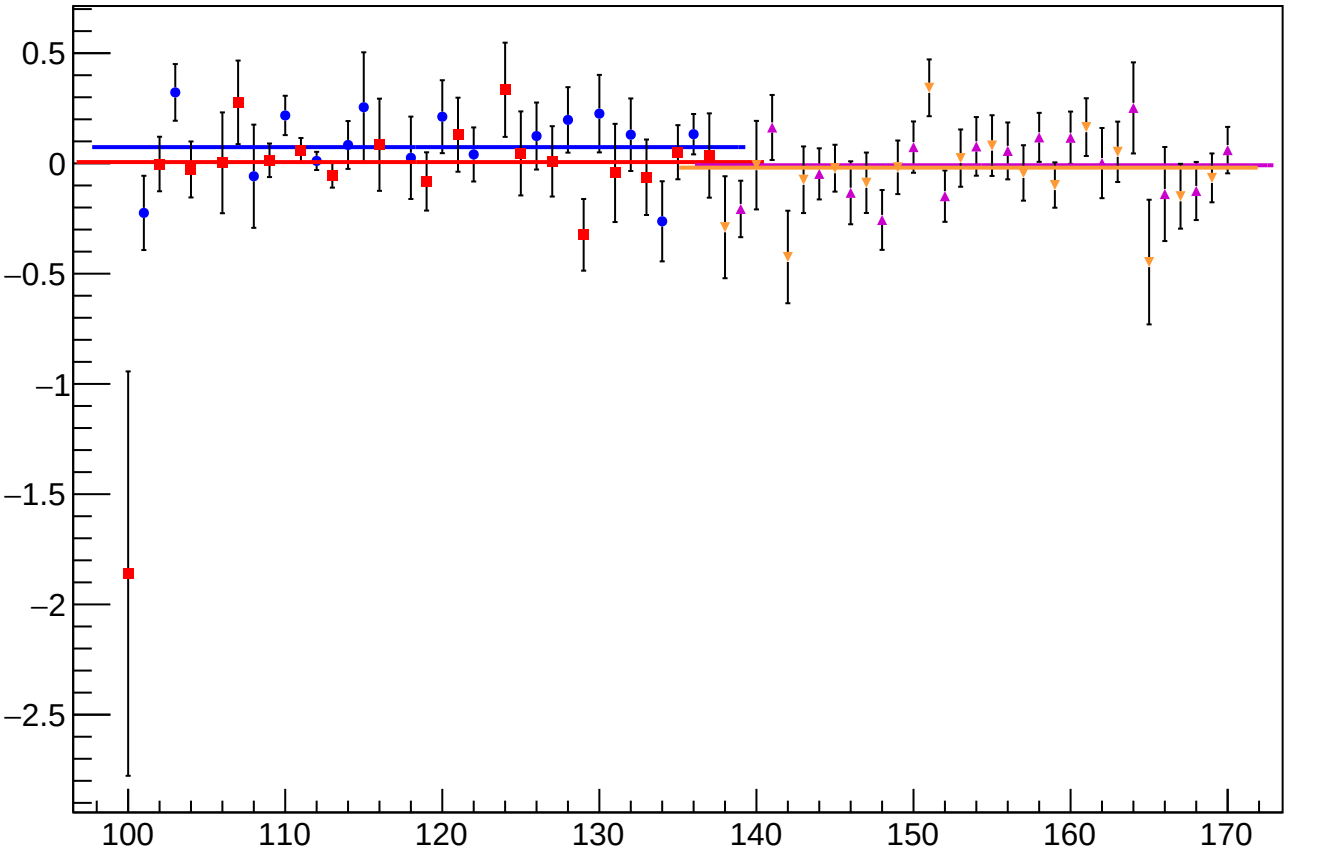
Right Out: 63.553+/-0.019 $\chi^2$/NDF: 2654516.9/18

Left In: 114.690+/-0.023 $\chi^2$/NDF:334128.8/15

+ sign 83.091+/-0.015 $\chi^2$/NDF: 8045419.5/32

All: 83.604+/-0.010 $\chi^2$/NDF: 13956330.6/67

- sign 84.105+/-0.015 $\chi^2$/NDF: 5908545.6/34




Right In: 0.074+/-0.027 $\chi^2$/NDF: 19.0/15

Left Out: -0.019+/-0.033 $\chi^2$/NDF:20.1/16

Right Out: 0.006+/-0.027 $\chi^2$/NDF: 16.4/18

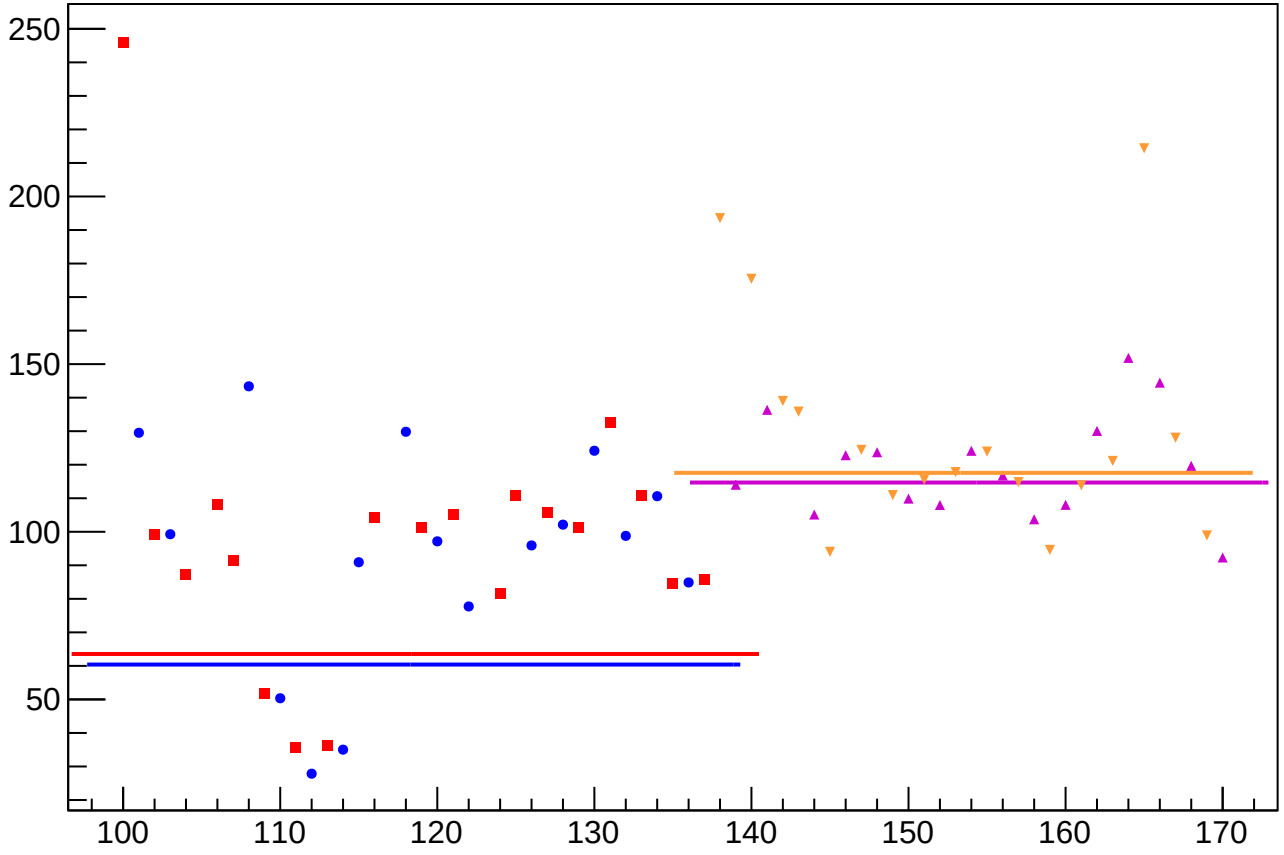
Left In: -0.008+/-0.033 $\chi^2$/NDF:16.2/15

+ sign 0.037+/-0.021 $\chi^2$/NDF: 43.8/32

All: 0.018+/-0.015 $\chi^2$/NDF: 78.1/67

- sign 0.000+/-0.021 $\chi^2$/NDF: 32.7/34

# asym_sam4_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 60.401+/-0.019 $\chi^2$/NDF: 3538126.0/15

Left Out: 117.575+/-0.024 $\chi^2$/NDF:951471.9/16

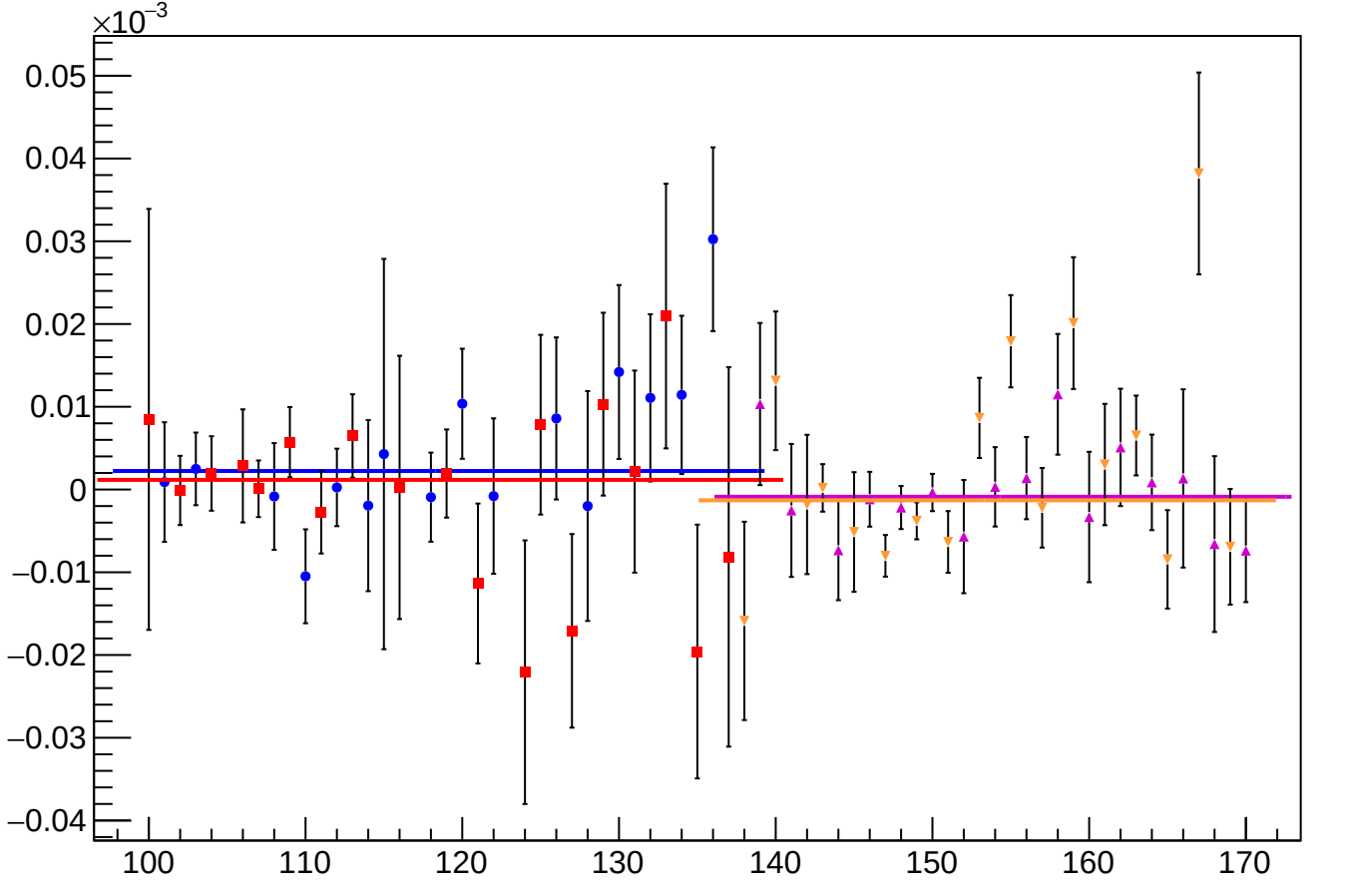
Right Out: 63.553+/-0.019 $\chi^2$/NDF: 2654516.9/18

Left In: 114.690+/-0.023 $\chi^2$/NDF:334128.8/15

+ sign 83.091+/-0.015 $\chi^2$/NDF: 8045419.5/32

All: 83.604+/-0.010 $\chi^2$/NDF: 13956330.6/67

- sign 84.105+/-0.015 $\chi^2$/NDF: 5908545.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 17.4/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:54.1/16

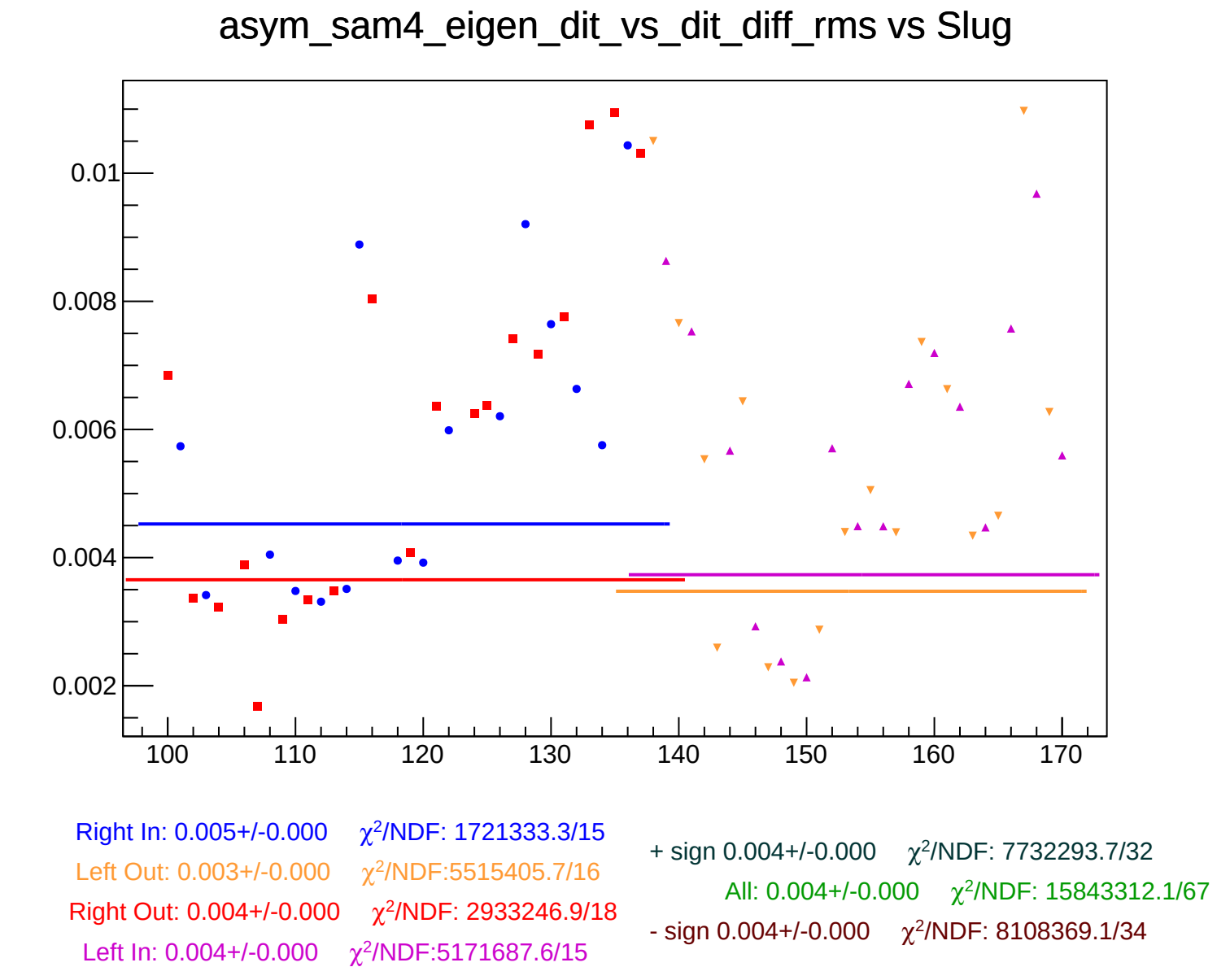
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.1/18

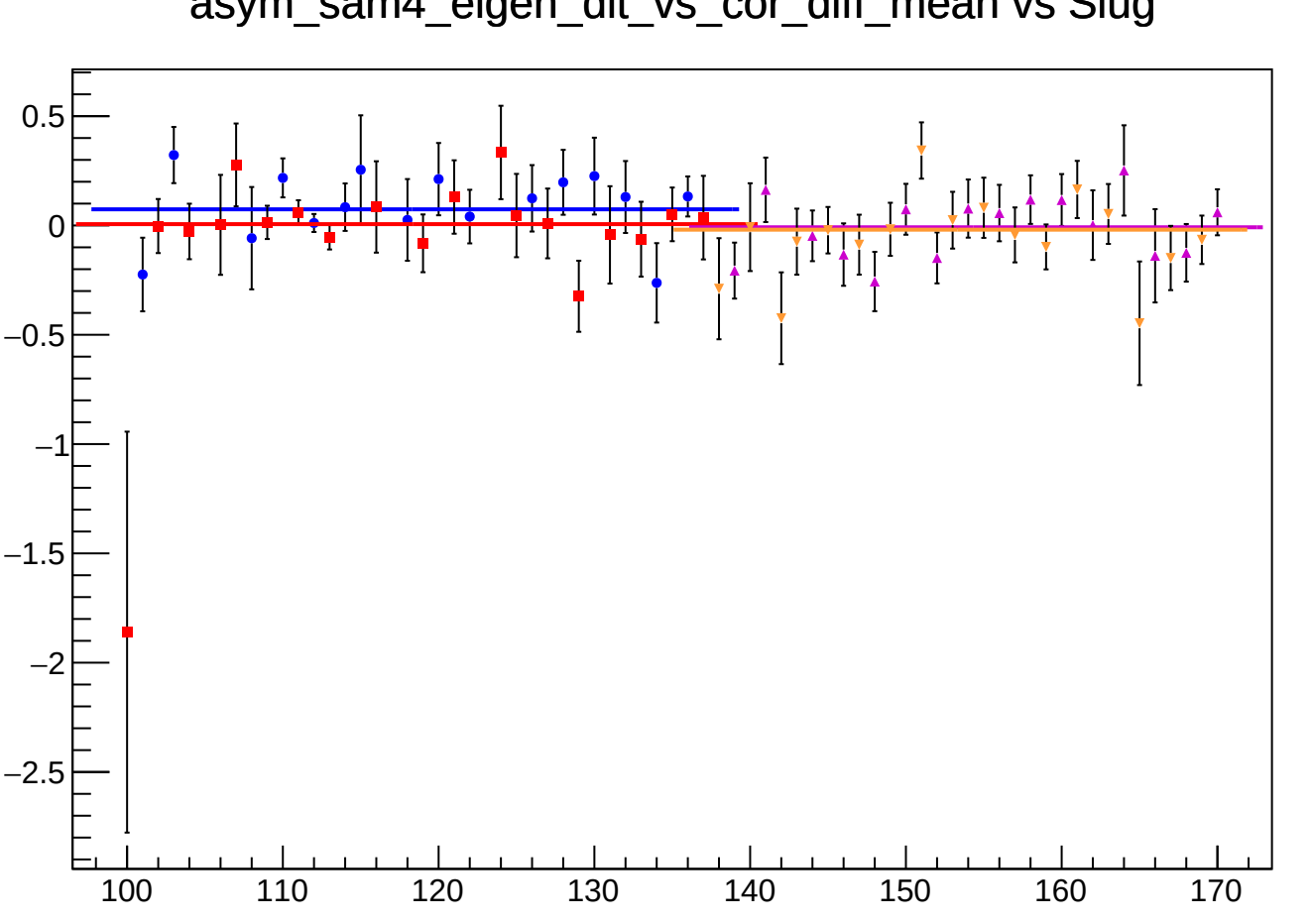
Left In: -0.000+/-0.000 $\chi^2$/NDF:8.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 74.4/32

All: -0.000+/-0.000 $\chi^2$/NDF: 98.4/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 24.0/34


asym_sam4_eigen_dit_vs_dit_diff_rms vs Slug
0.01
0.008
0.006
0.004
0.002
100
110
120
130
140
150
160
170
Right In: 0.005+/-0.000 χ²/NDF: 1721333.3/15
Left Out: 0.003+/-0.000 χ²/NDF:5515405.7/16
Right Out: 0.004+/-0.000 χ²/NDF: 2933246.9/18
Left In: 0.004+/-0.000 χ²/NDF:5171687.6/15
+ sign 0.004+/-0.000 χ²/NDF: 7732293.7/32
All: 0.004+/-0.000 χ²/NDF: 15843312.1/67
- sign 0.004+/-0.000 χ²/NDF: 8108369.1/34




Right In: 0.074+/-0.027 $\chi^2$/NDF: 19.0/15

Left Out: -0.019+/-0.033 $\chi^2$/NDF:20.1/16

Right Out: 0.006+/-0.027 $\chi^2$/NDF: 16.4/18

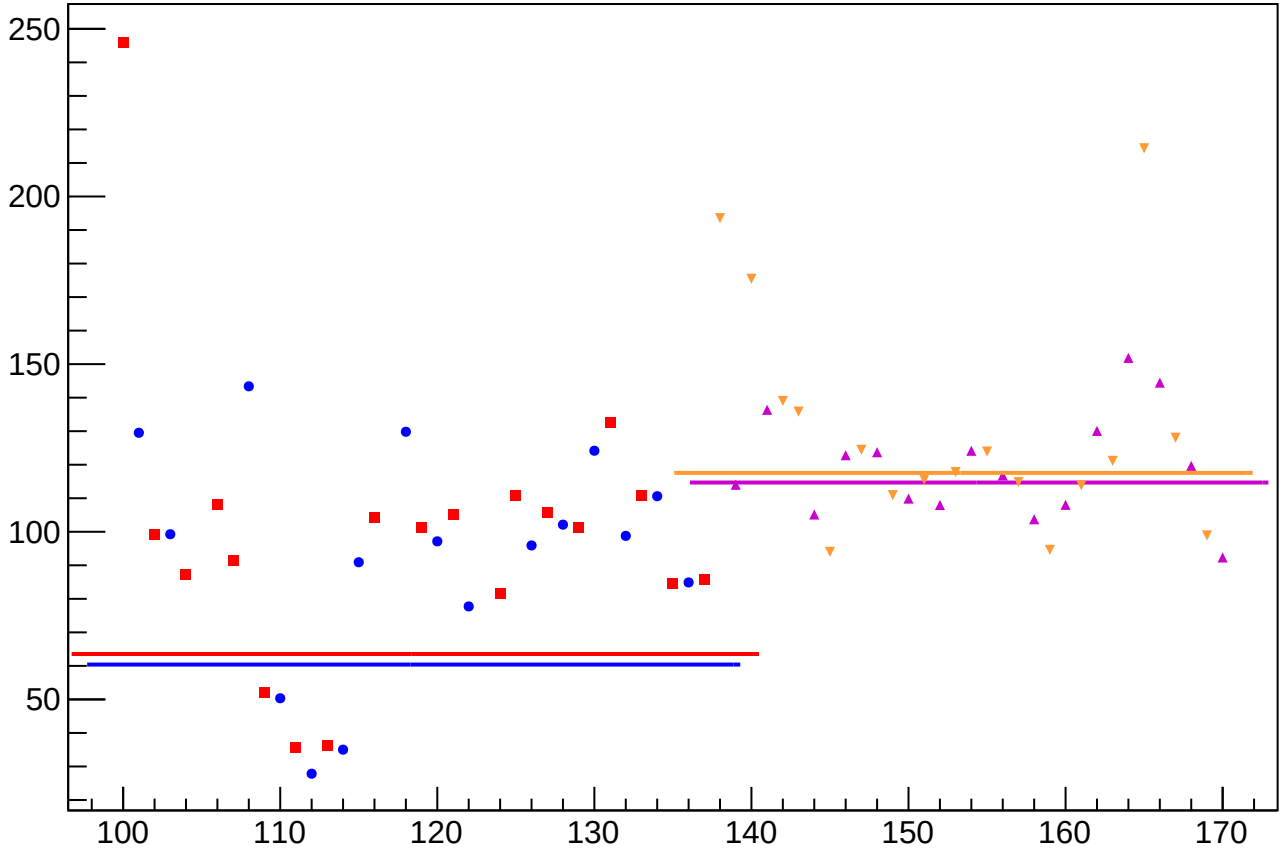
Left In: -0.008+/-0.033 $\chi^2$/NDF:16.2/15

+ sign 0.037+/-0.021 $\chi^2$/NDF: 43.8/32

All: 0.018+/-0.015 $\chi^2$/NDF: 78.1/67

- sign 0.000+/-0.021 $\chi^2$/NDF: 32.7/34

# asym_sam4_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 60.399+/-0.019 $\chi^2$/NDF: 3538382.9/15

Left Out: 117.576+/-0.024 $\chi^2$/NDF:951450.3/16

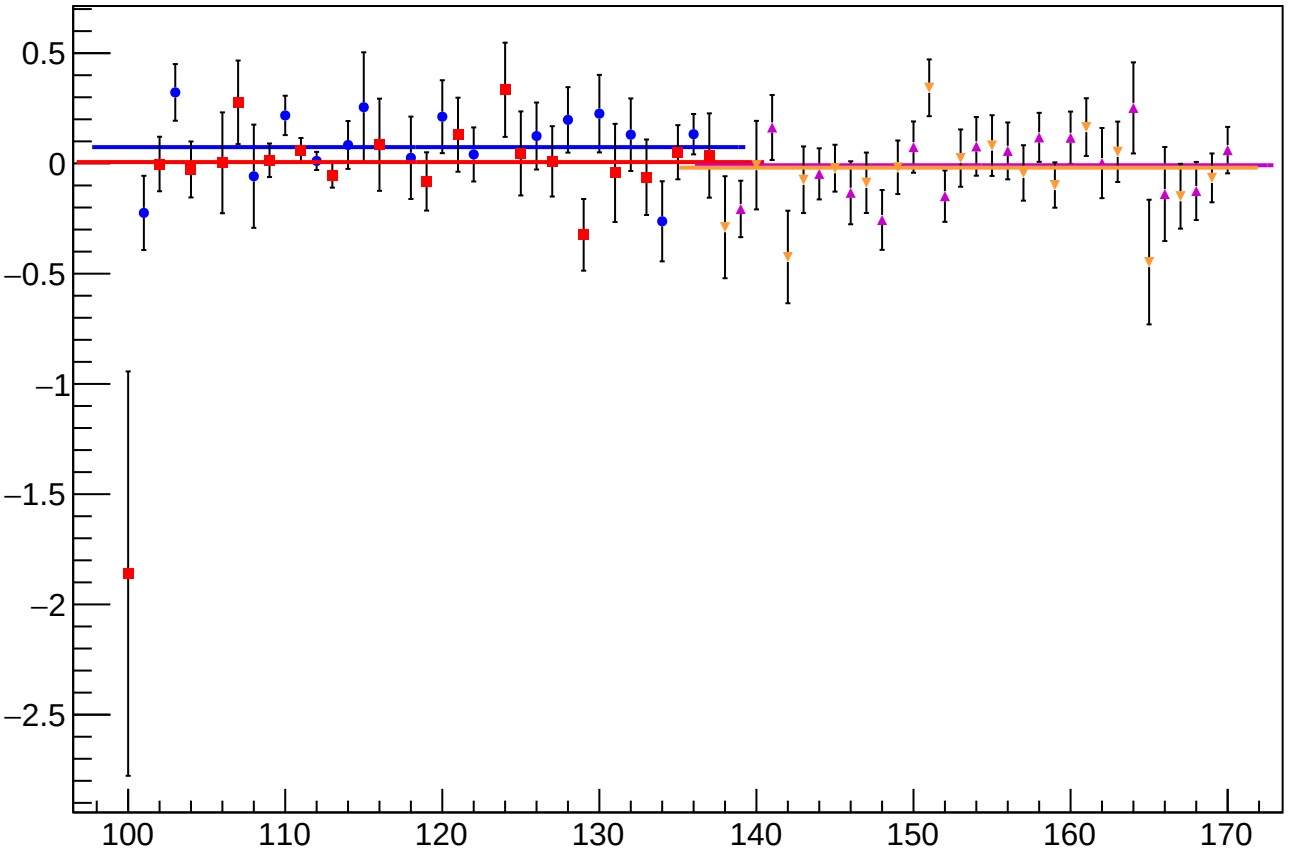
Right Out: 63.551+/-0.019 $\chi^2$/NDF: 2654786.8/18

Left In: 114.690+/-0.023 $\chi^2$/NDF:334133.5/15

\+ sign 83.089+/-0.015 $\chi^2$/NDF: 8046068.4/32

All: 83.602+/-0.010 $\chi^2$/NDF: 13957578.3/67

\- sign 84.104+/-0.015 $\chi^2$/NDF: 5909142.9/34




Right In: 0.074+/-0.027 $\chi^2$/NDF: 19.0/15

Left Out: -0.019+/-0.033 $\chi^2$/NDF:20.1/16

Right Out: 0.006+/-0.027 $\chi^2$/NDF: 16.4/18

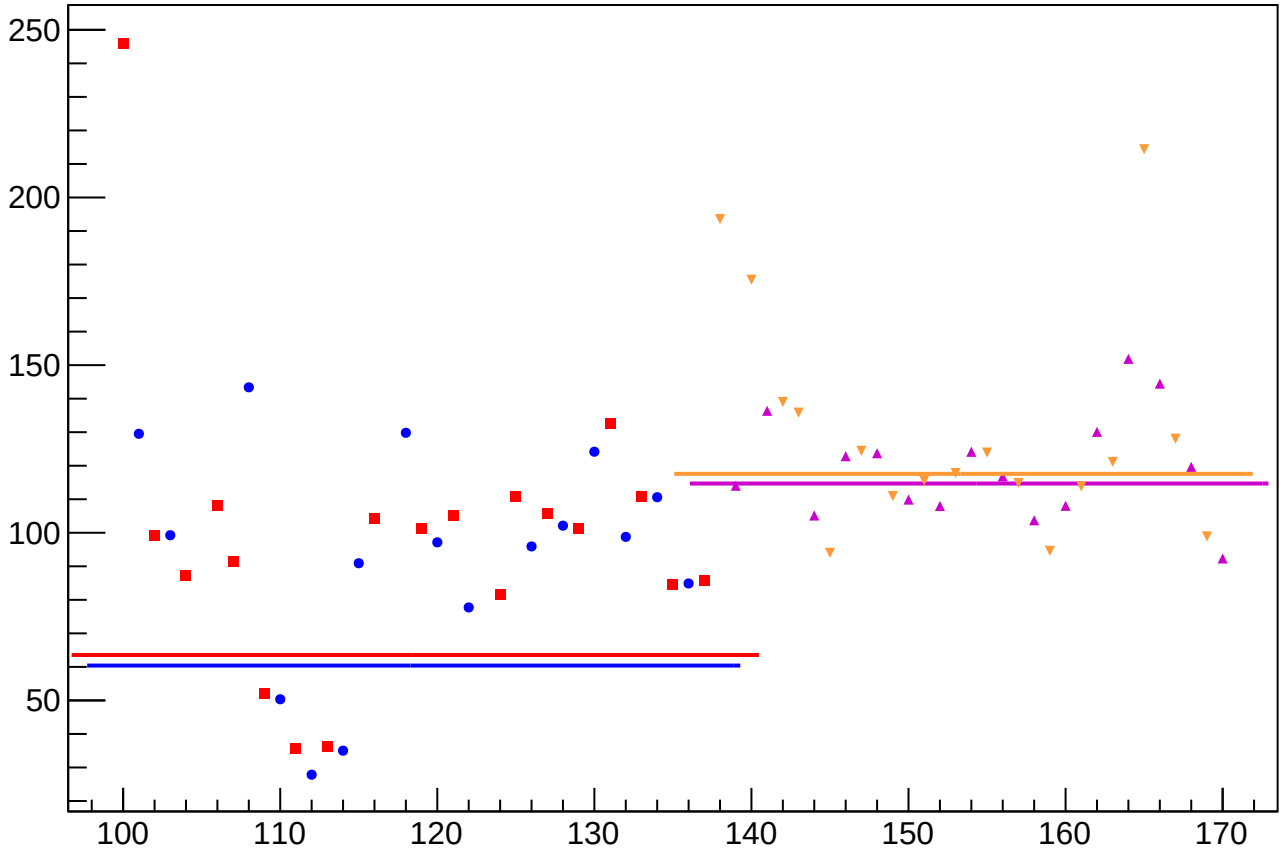
Left In: -0.008+/-0.033 $\chi^2$/NDF:16.2/15

+ sign 0.037+/-0.021 $\chi^2$/NDF: 43.8/32

All: 0.018+/-0.015 $\chi^2$/NDF: 78.1/67

- sign 0.000+/-0.021 $\chi^2$/NDF: 32.7/34

# asym_sam4_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 60.399+/-0.019 $\chi^2$/NDF: 3538382.9/15

Left Out: 117.576+/-0.024 $\chi^2$/NDF:951450.3/16

Right Out: 63.551+/-0.019 $\chi^2$/NDF: 2654786.8/18

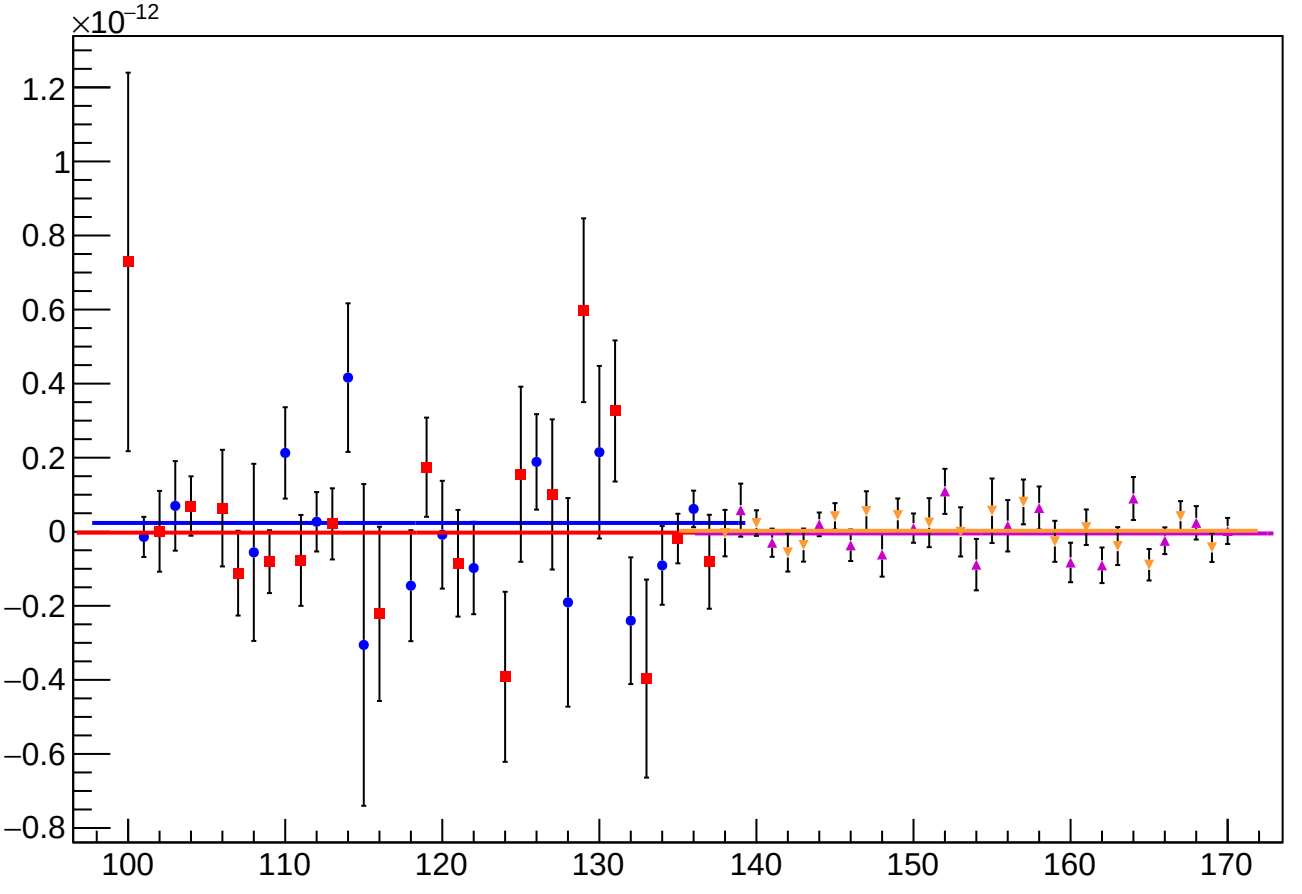
Left In: 114.690+/-0.023 $\chi^2$/NDF:334133.5/15

+ sign 83.089+/-0.015 $\chi^2$/NDF: 8046068.4/32

All: 83.602+/-0.010 $\chi^2$/NDF: 13957578.3/67

- sign 84.104+/-0.015 $\chi^2$/NDF: 5909142.9/34

# asym_sam4_eigen_cor_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 16.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:15.5/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 23.2/18

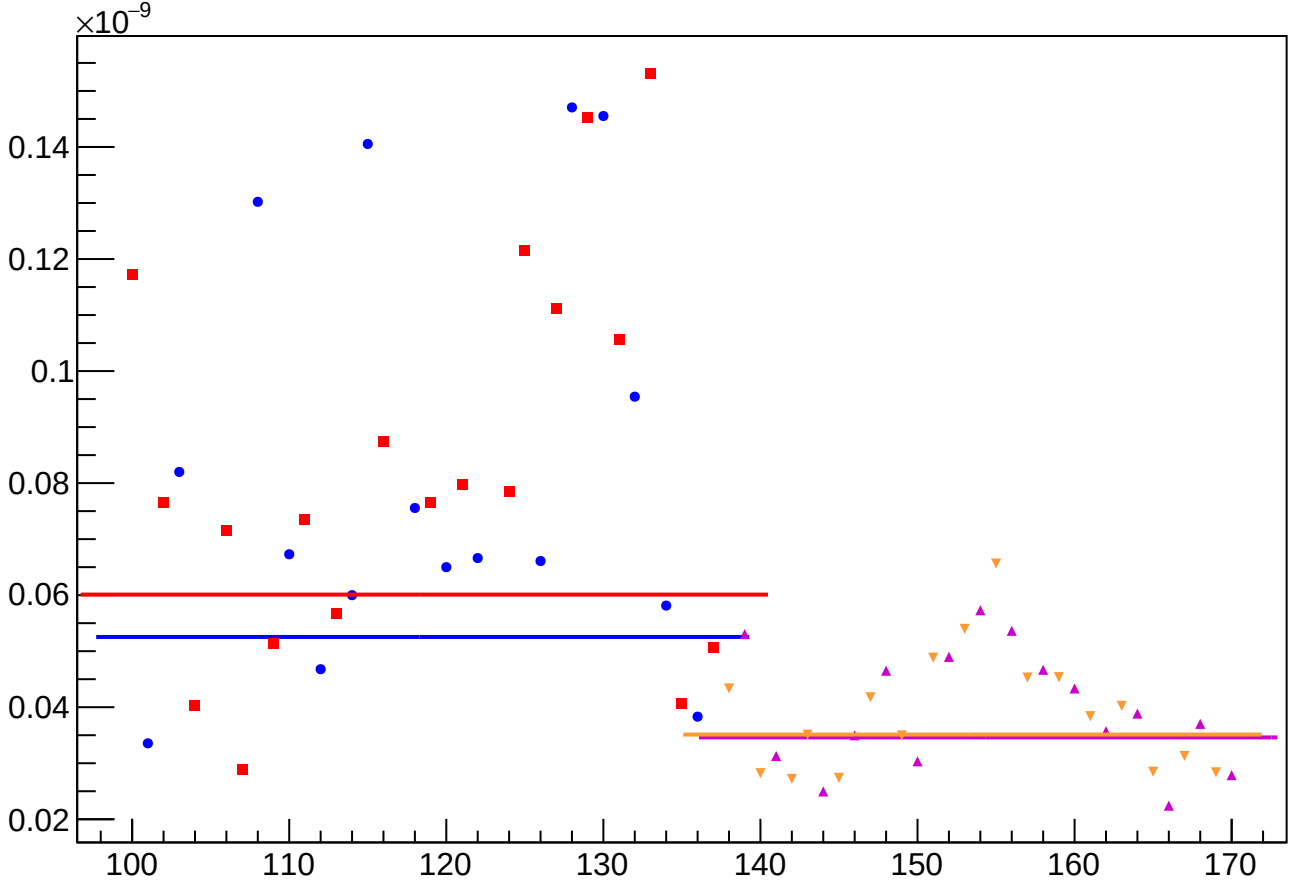
Left In: -0.000+/-0.000 $\chi^2$/NDF:18.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 32.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 75.1/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 41.8/34

# asym_sam4_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1649207.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1059222.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1539049.5/18

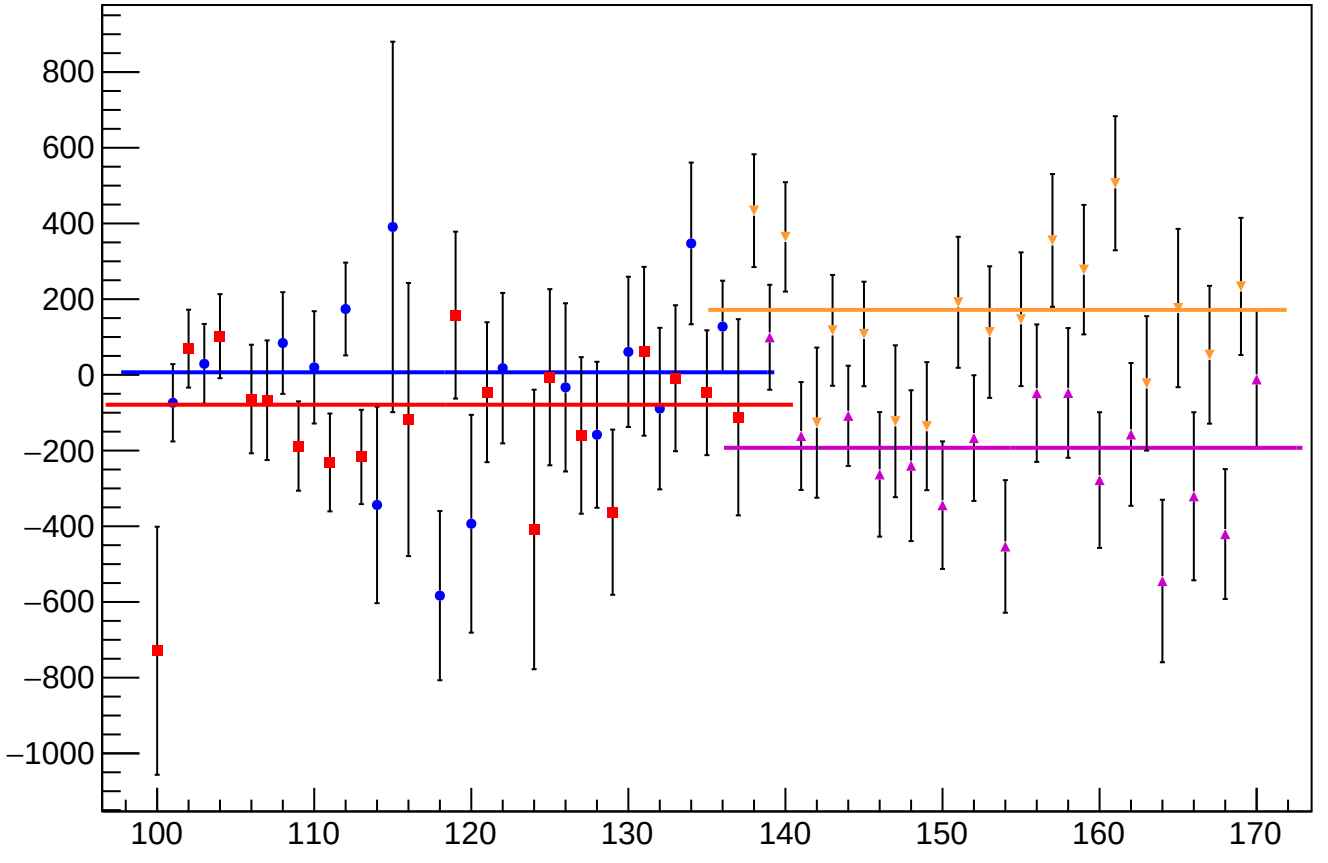
Left In: 0.000+/-0.000 $\chi^2$/NDF:1366857.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3447525.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 7697345.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4249602.5/34

# reg_asym_sam5_mean vs Slug




Right In: 6.811+/-40.353 $\chi^2$/NDF: 18.8/15

Left Out: 171.730+/-41.188 $\chi^2$/NDF:19.9/16

Right Out: -78.883+/-37.906 $\chi^2$/NDF: 16.7/18

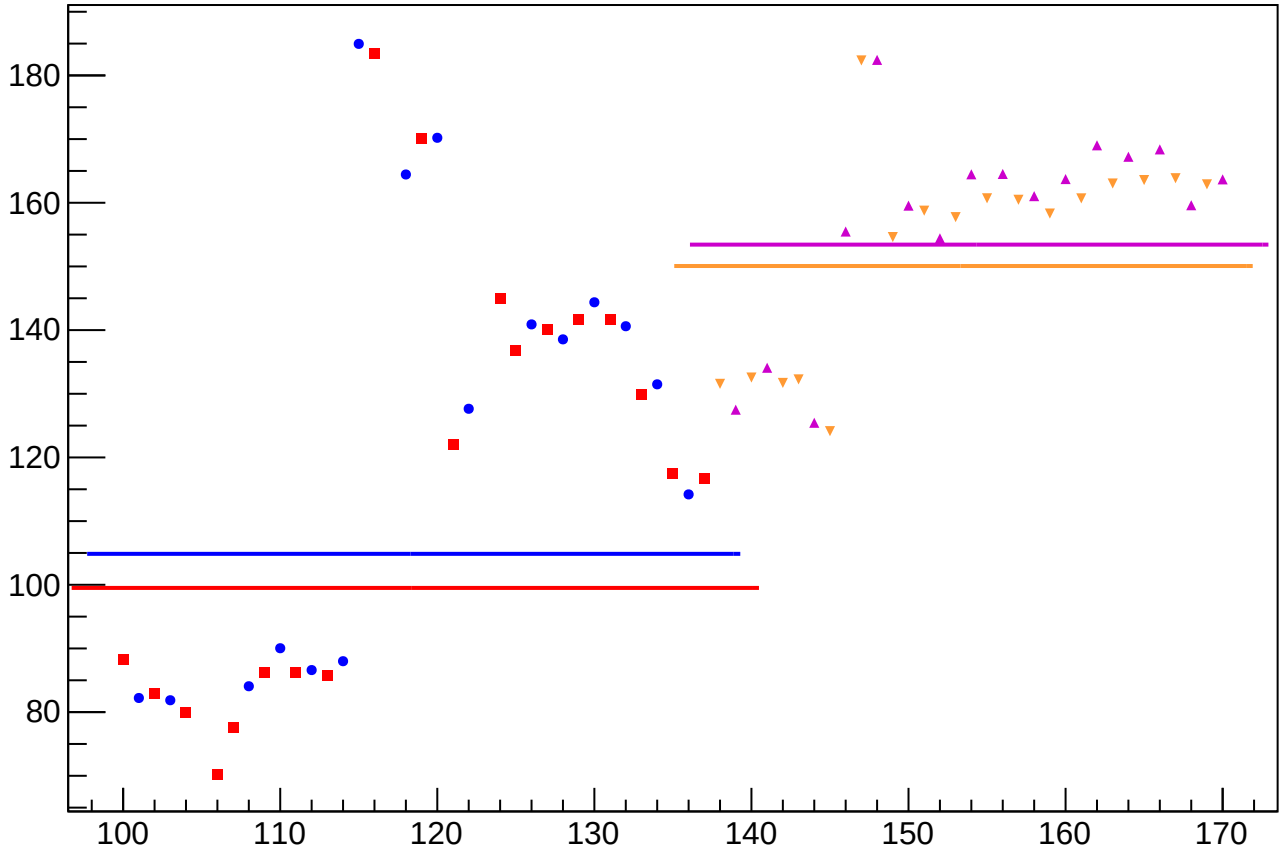
Left In: -192.709+/-42.478 $\chi^2$/NDF:15.6/15

+ sign 87.582+/-28.825 $\chi^2$/NDF: 46.8/32

All: -22.940+/-20.188 $\chi^2$/NDF: 111.9/67

- sign -129.343+/-28.282 $\chi^2$/NDF: 36.2/34

# reg_asym_sam5_rms vs Slug




Right In: 104.860+/-0.029 $\chi^2$/NDF: 931228.4/15

Left Out: 150.066+/-0.029 $\chi^2$/NDF:306284.8/16

Right Out: 99.508+/-0.027 $\chi^2$/NDF: 1039037.0/18

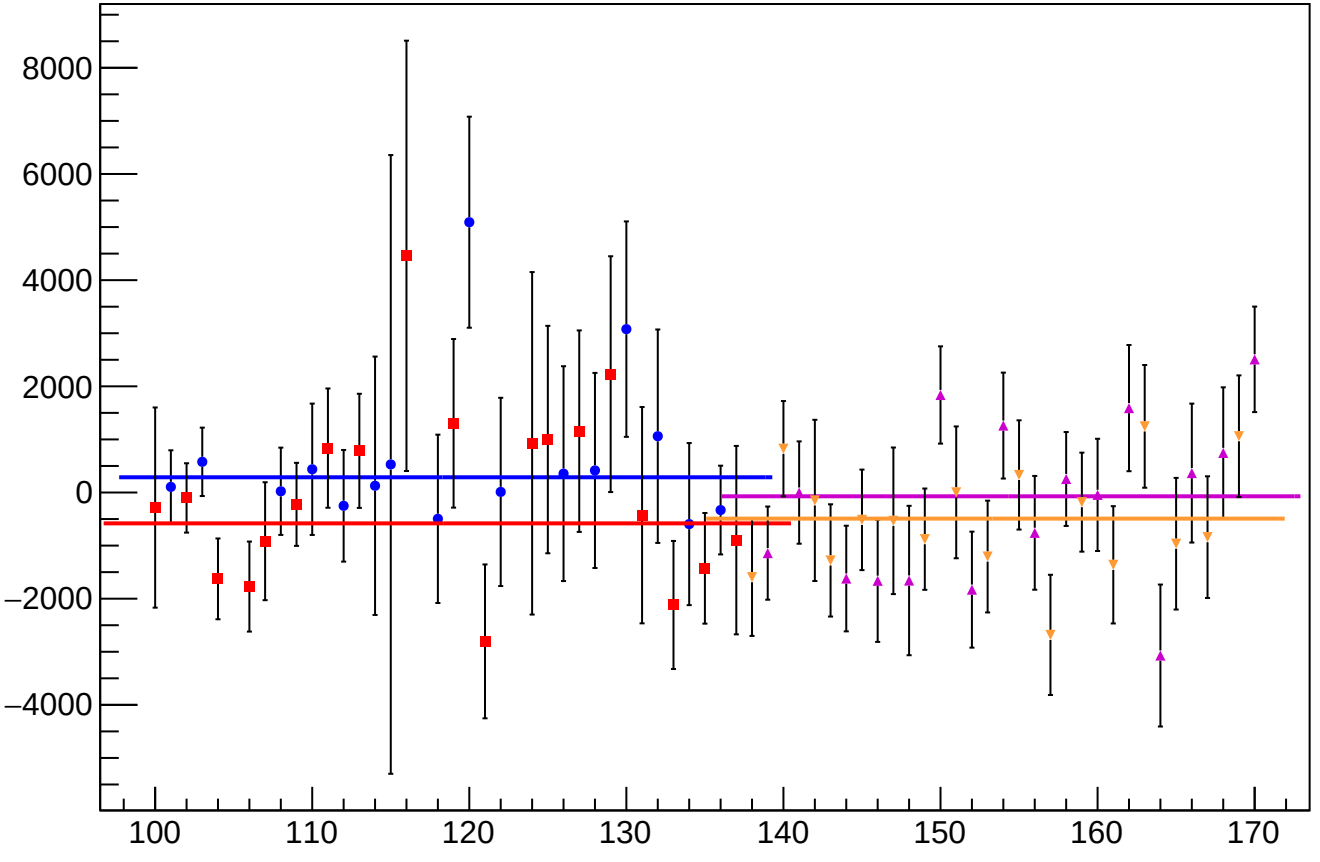
Left In: 153.426+/-0.030 $\chi^2$/NDF:307409.7/15

+ sign 127.000+/-0.020 $\chi^2$/NDF: 2466810.0/32

All: 125.171+/-0.014 $\chi^2$/NDF: 5622945.5/67

- sign 123.410+/-0.020 $\chi^2$/NDF: 3140330.4/34

# asym_sam5_reg_correction_mean vs Slug




Right In: 286.915+/-293.474 $\chi^2$/NDF: 9.7/15

Left Out: -491.848+/-264.535 $\chi^2$/NDF:14.0/16

Right Out: -581.217+/-269.775 $\chi^2$/NDF: 18.8/18

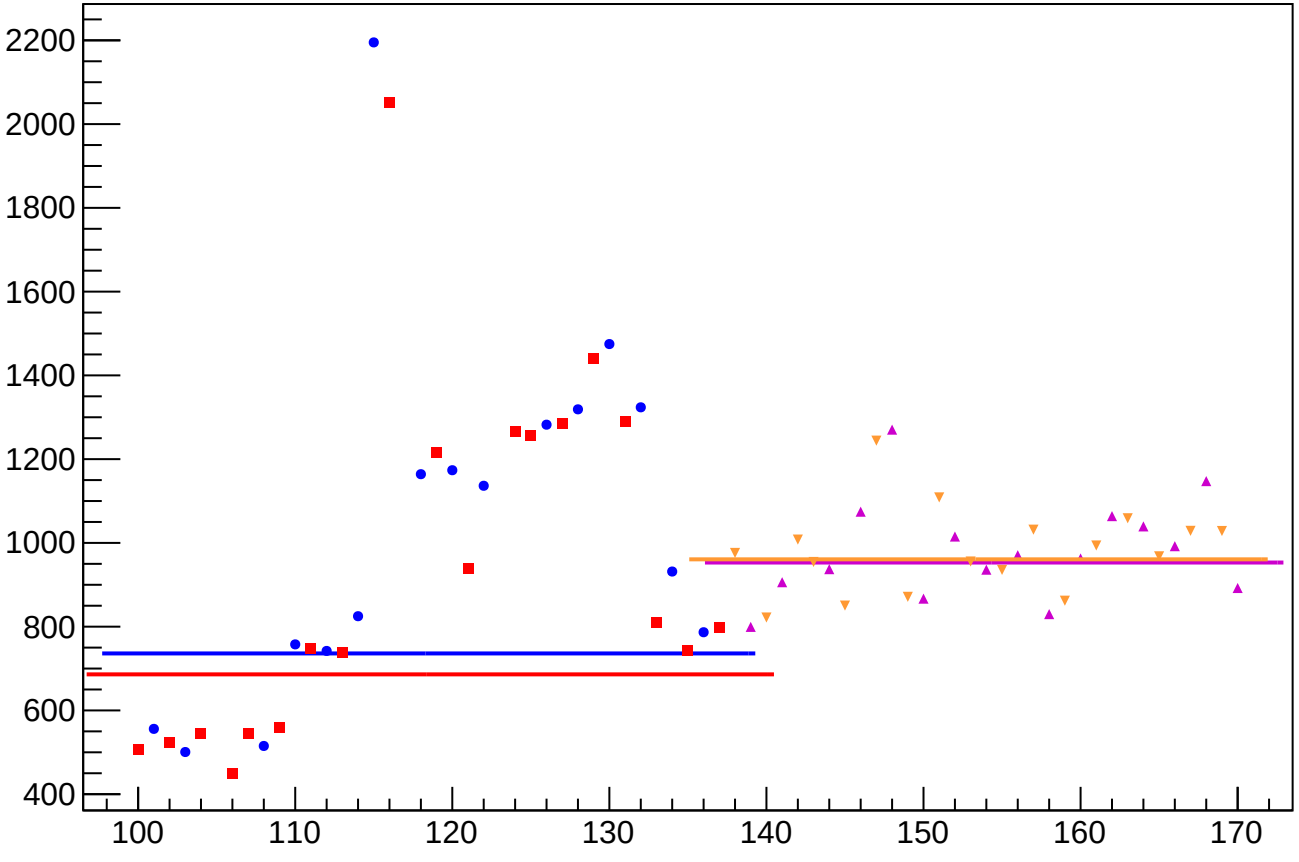
Left In: -71.319+/-264.987 $\chi^2$/NDF:30.6/15

+ sign -142.746+/-196.491 $\chi^2$/NDF: 27.6/32

All: -235.680+/-136.231 $\chi^2$/NDF: 79.2/67

- sign -321.703+/-189.044 $\chi^2$/NDF: 51.2/34

# asym_sam5_reg_correction_rms vs Slug




Right In: 736.084+/-0.208 $\chi^2$/NDF: 1844496.2/15

Left Out: 960.755+/-0.187 $\chi^2$/NDF:269464.0/16

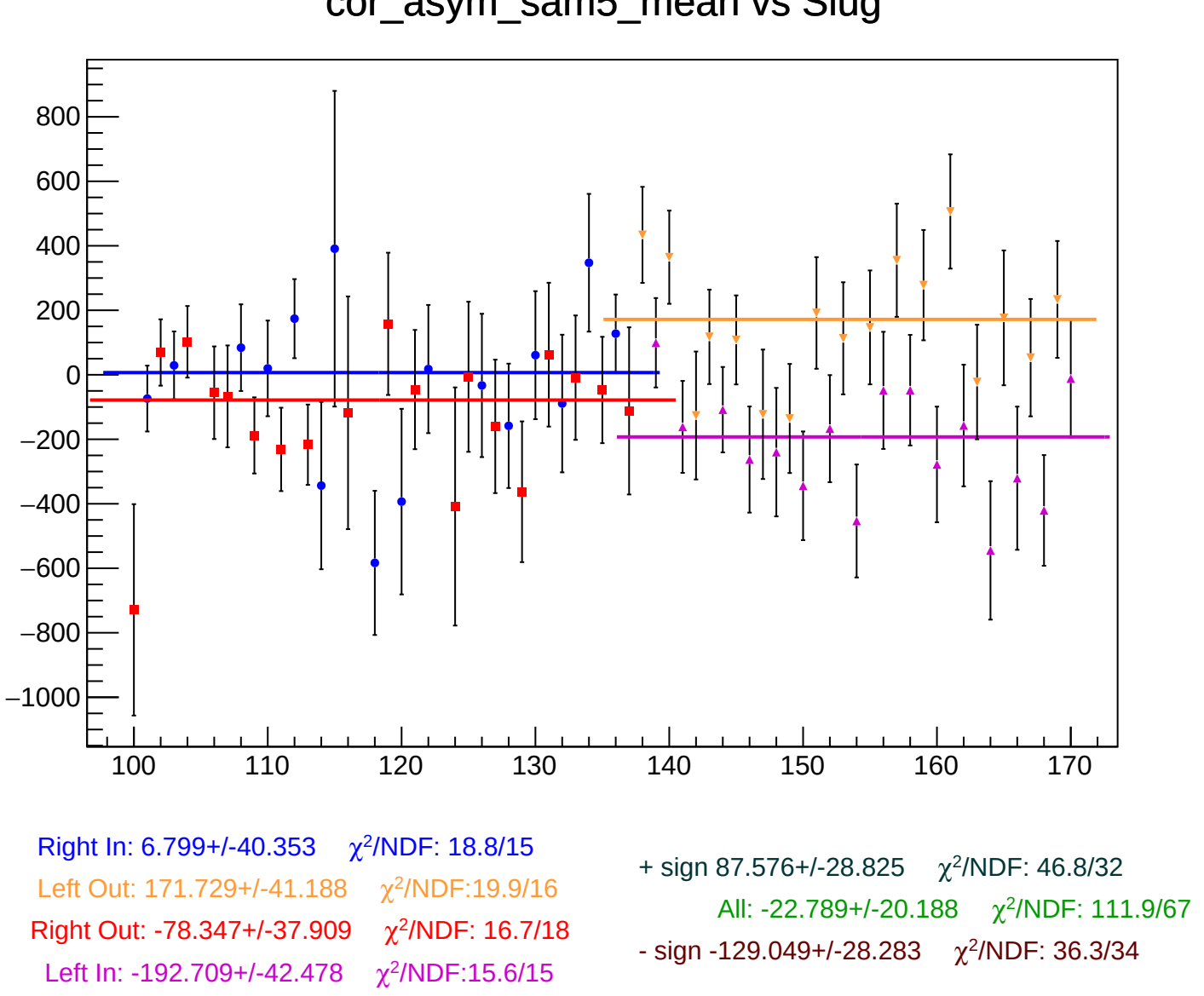
Right Out: 686.108+/-0.191 $\chi^2$/NDF: 1819176.0/18

Left In: 953.138+/-0.187 $\chi^2$/NDF:339199.2/15

+ sign 860.040+/-0.139 $\chi^2$/NDF: 2760667.2/32

All: 840.293+/-0.096 $\chi^2$/NDF: 5955234.0/67

- sign 822.014+/-0.134 $\chi^2$/NDF: 3155667.6/34


cor_asym_sam5_mean vs Slug
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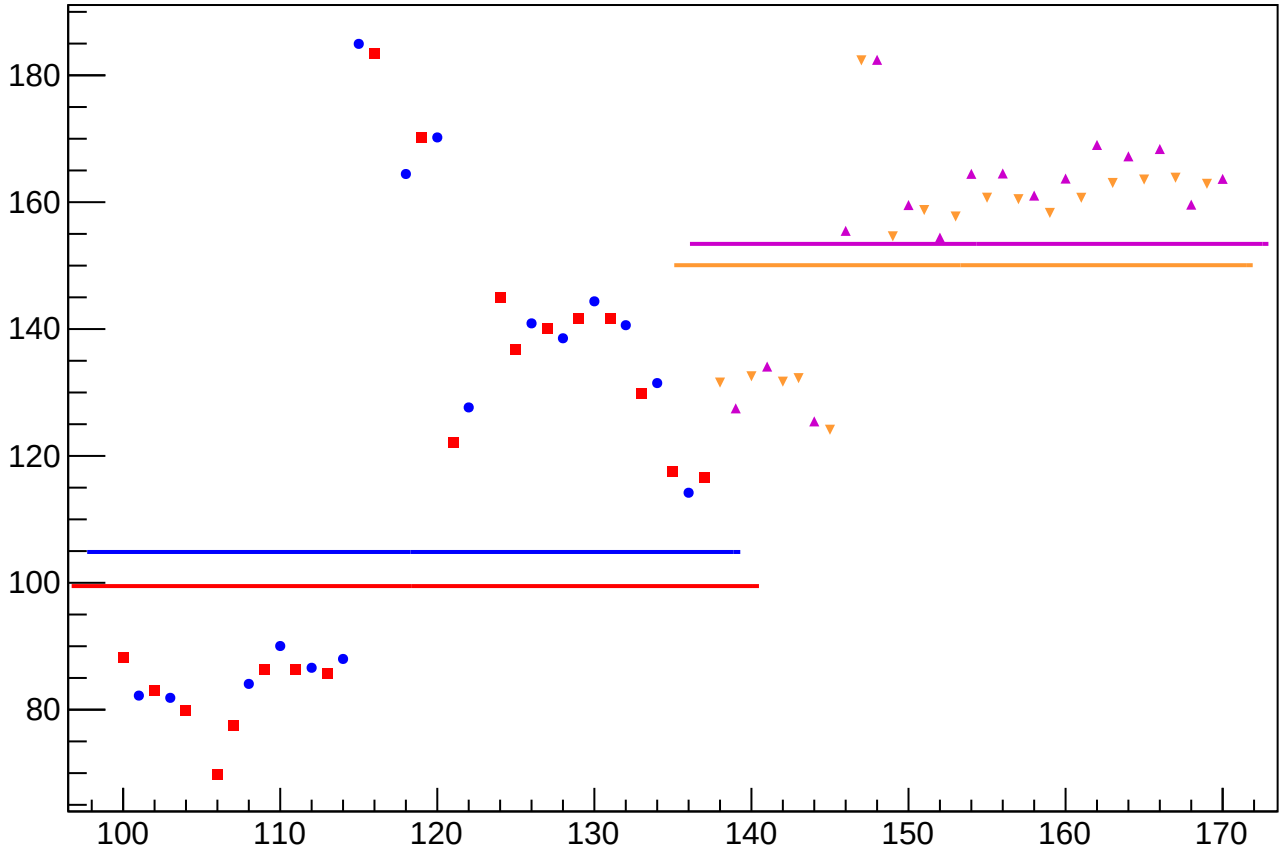
160
170
Right In: 6.799+/-40.353 χ²/NDF: 18.8/15
Left Out: 171.729+/-41.188 χ²/NDF:19.9/16
Right Out: -78.347+/-37.909 χ²/NDF: 16.7/18
Left In: -192.709+/-42.478 χ²/NDF:15.6/15
+ sign 87.576+/-28.825 χ²/NDF: 46.8/32
All: -22.789+/-20.188 χ²/NDF: 111.9/67
- sign -129.049+/-28.283 χ²/NDF: 36.3/34

# cor_asym_sam5_rms vs Slug




Right In: 104.860+/-0.029 $\chi^2$/NDF: 931227.7/15

Left Out: 150.066+/-0.029 $\chi^2$/NDF:306284.8/16

Right Out: 99.484+/-0.027 $\chi^2$/NDF: 1041224.0/18

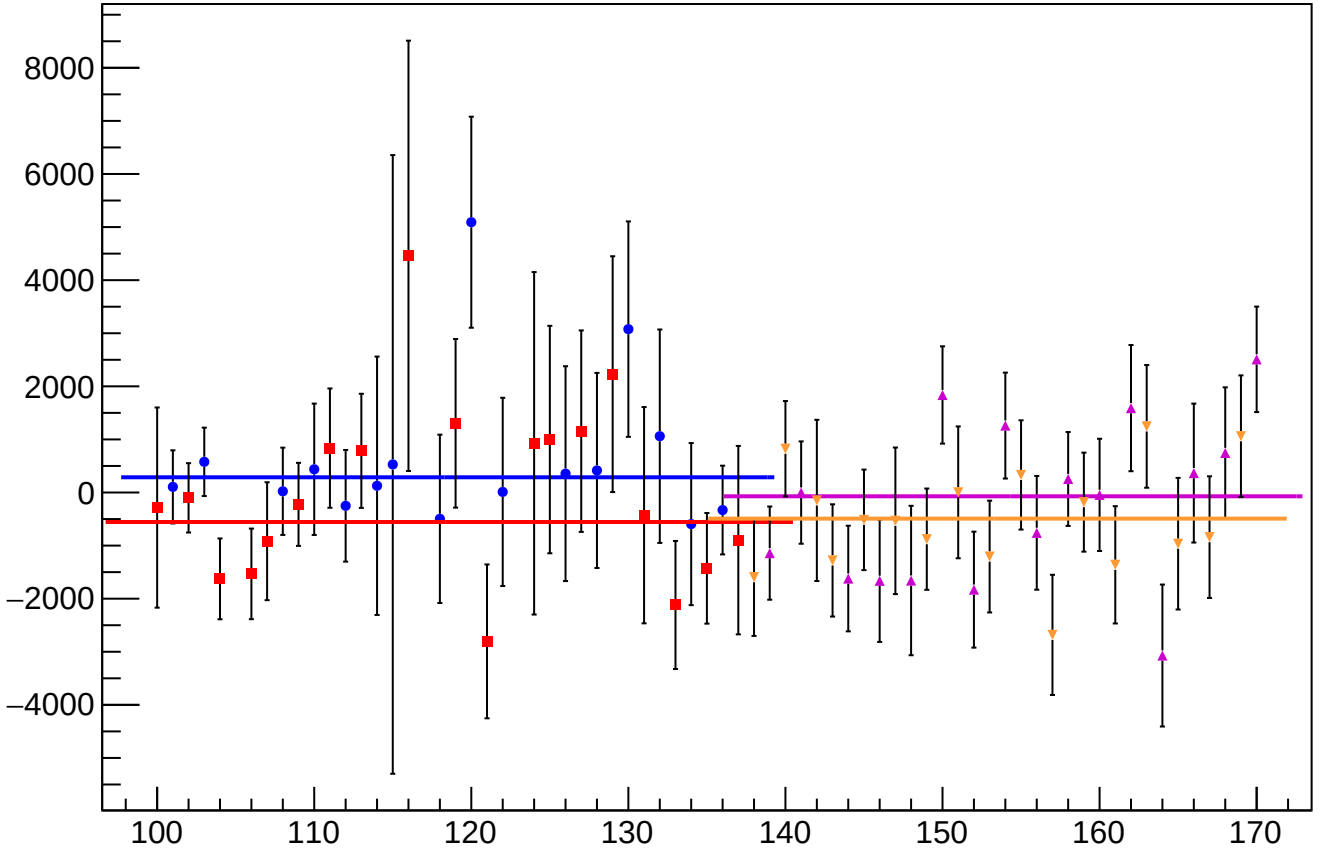
Left In: 153.426+/-0.030 $\chi^2$/NDF:307409.7/15

+ sign 127.000+/-0.020 $\chi^2$/NDF: 2466808.3/32

All: 125.165+/-0.014 $\chi^2$/NDF: 5626708.1/67

- sign 123.399+/-0.020 $\chi^2$/NDF: 3143994.5/34

# asym_sam5_cor_correction_mean vs Slug




Right In: 286.918+/-293.473 $\chi^2$/NDF: 9.7/15

Left Out: -491.846+/-264.535 $\chi^2$/NDF:14.0/16

Right Out: -555.436+/-269.953 $\chi^2$/NDF: 18.0/18

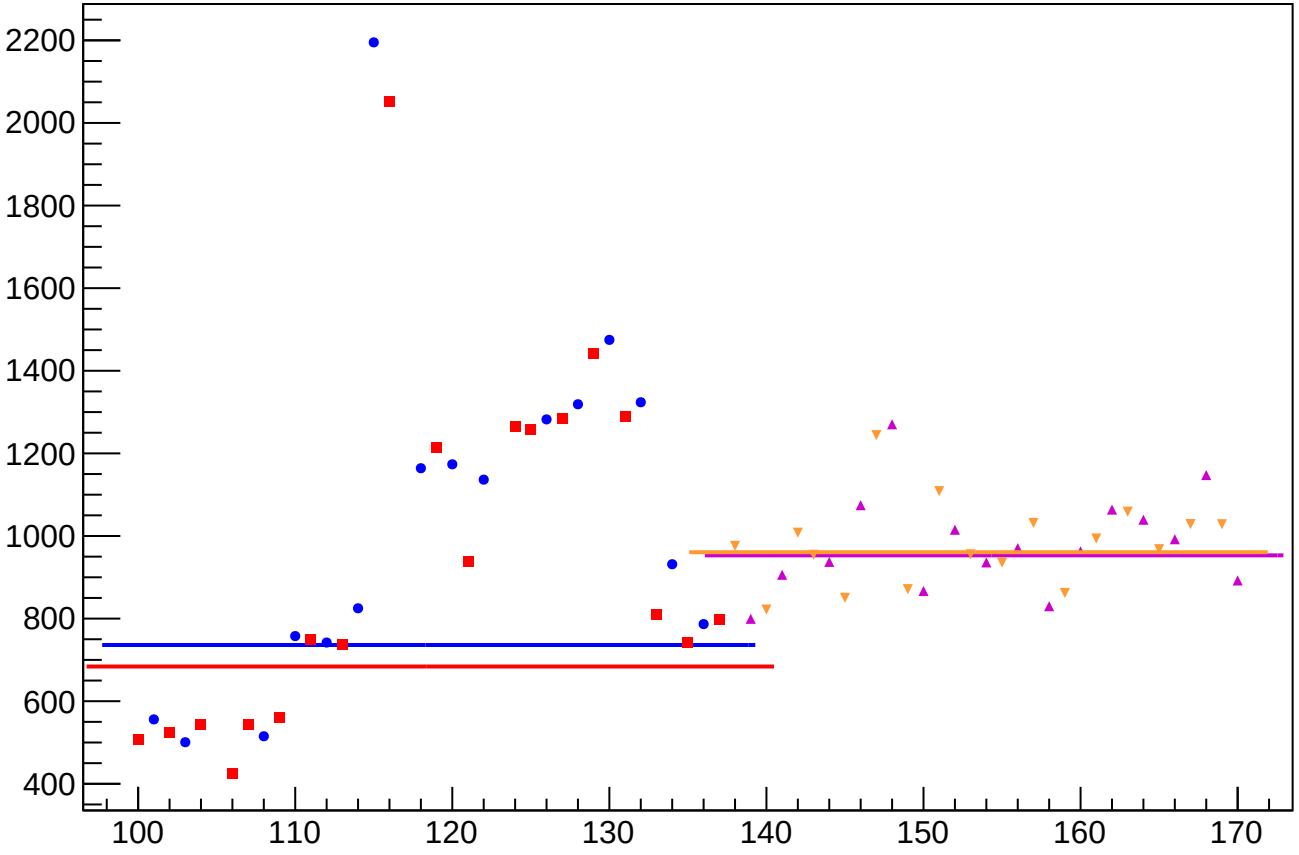
Left In: -71.319+/-264.987 $\chi^2$/NDF:30.6/15

+ sign -142.743+/-196.491 $\chi^2$/NDF: 27.6/32

All: -228.994+/-136.254 $\chi^2$/NDF: 78.2/67

- sign -308.883+/-189.105 $\chi^2$/NDF: 50.3/34

# asym_sam5_cor_correction_rms vs Slug




Right In: 736.083+/-0.208 $\chi^2$/NDF: 1844498.2/15

Left Out: 960.756+/-0.187 $\chi^2$/NDF:269463.6/16

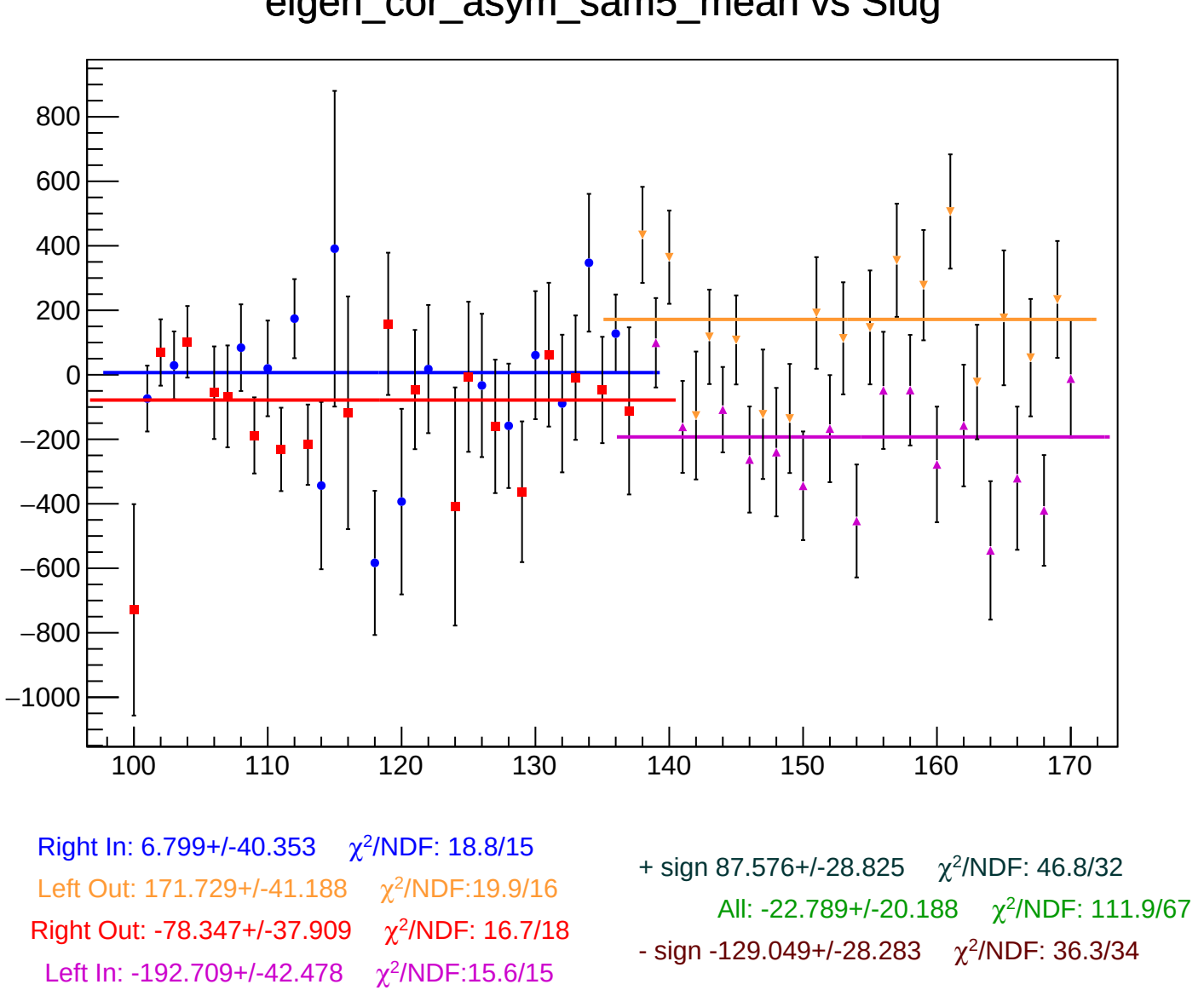
Right Out: 683.981+/-0.191 $\chi^2$/NDF: 1850402.3/18

Left In: 953.138+/-0.187 $\chi^2$/NDF:339201.7/15

+ sign 860.040+/-0.139 $\chi^2$/NDF: 2760674.4/32

All: 839.802+/-0.096 $\chi^2$/NDF: 6003712.3/67

- sign 821.058+/-0.134 $\chi^2$/NDF: 3202171.6/34


eigen_cor_asym_sam5_mean vs Slug
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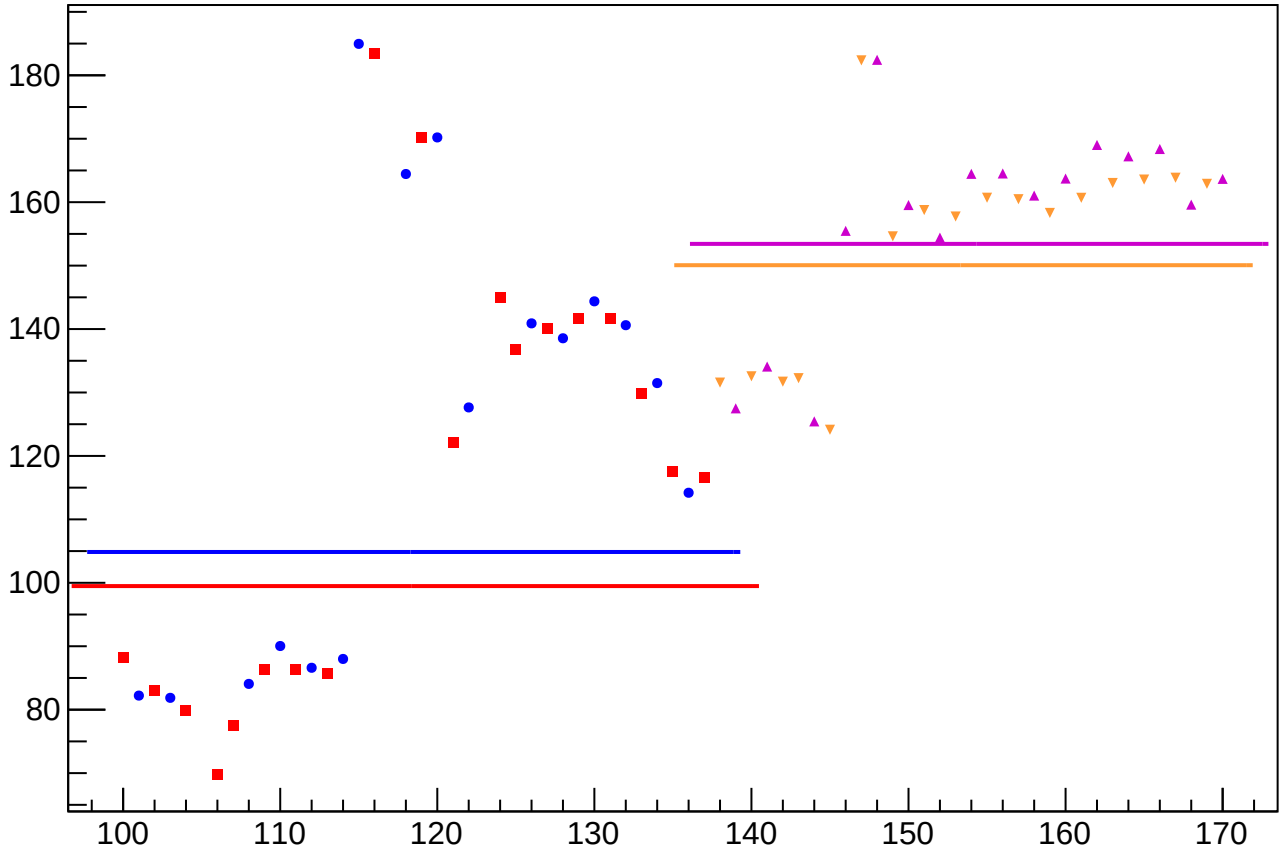
150
160
170
Right In: 6.799+/-40.353 χ²/NDF: 18.8/15
Left Out: 171.729+/-41.188 χ²/NDF:19.9/16
Right Out: -78.347+/-37.909 χ²/NDF: 16.7/18
Left In: -192.709+/-42.478 χ²/NDF:15.6/15
+ sign 87.576+/-28.825 χ²/NDF: 46.8/32
All: -22.789+/-20.188 χ²/NDF: 111.9/67
- sign -129.049+/-28.283 χ²/NDF: 36.3/34

# eigen_cor_asym_sam5_rms vs Slug




Right In: 104.860+/-0.029 $\chi^2$/NDF: 931227.7/15

Left Out: 150.066+/-0.029 $\chi^2$/NDF:306284.8/16

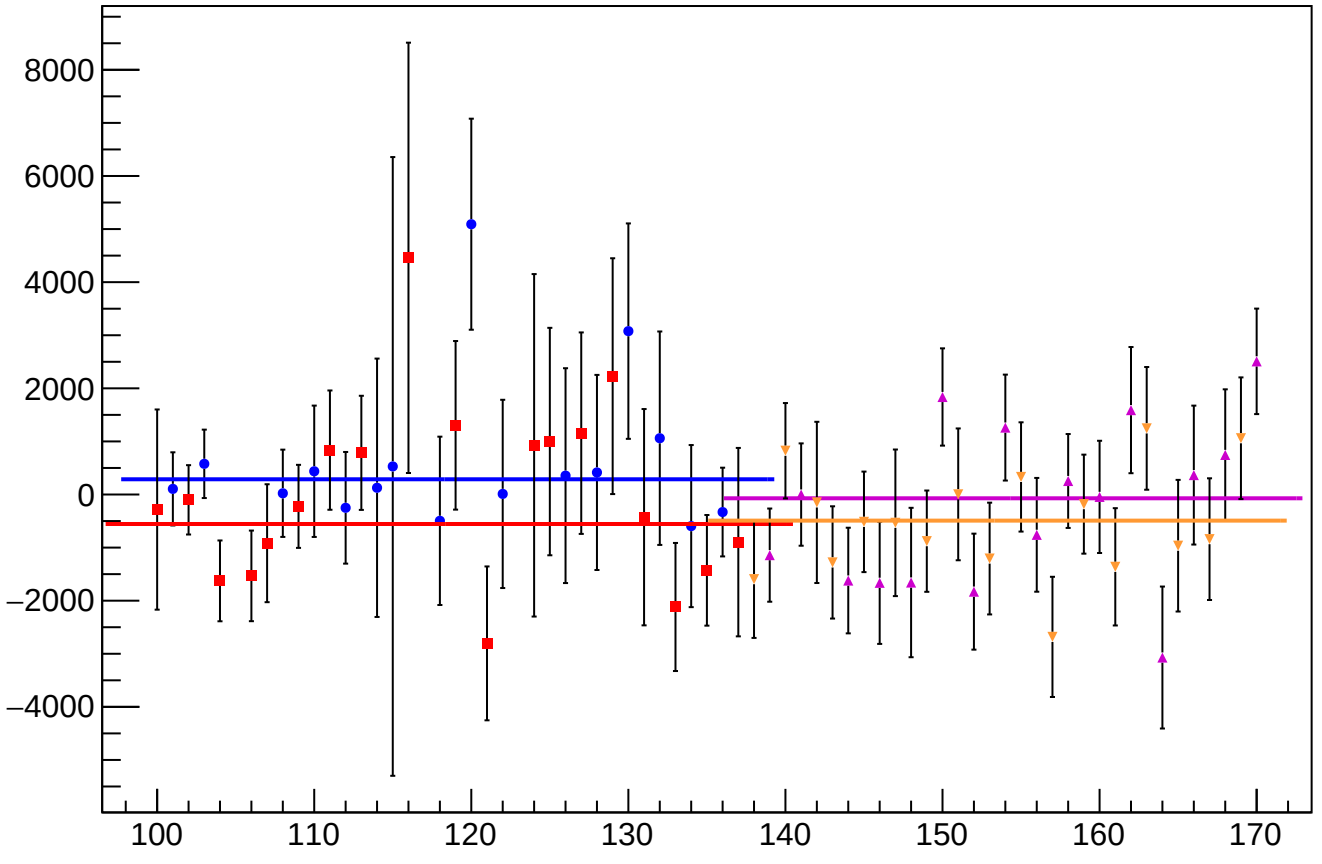
Right Out: 99.484+/-0.027 $\chi^2$/NDF: 1041224.0/18

Left In: 153.426+/-0.030 $\chi^2$/NDF:307409.7/15

+ sign 127.000+/-0.020 $\chi^2$/NDF: 2466808.3/32

All: 125.165+/-0.014 $\chi^2$/NDF: 5626708.1/67

- sign 123.399+/-0.020 $\chi^2$/NDF: 3143994.5/34




Right In: 286.918+/-293.473 $\chi^2$/NDF: 9.7/15

Left Out: -491.846+/-264.535 $\chi^2$/NDF:14.0/16

Right Out: -555.436+/-269.953 $\chi^2$/NDF: 18.0/18

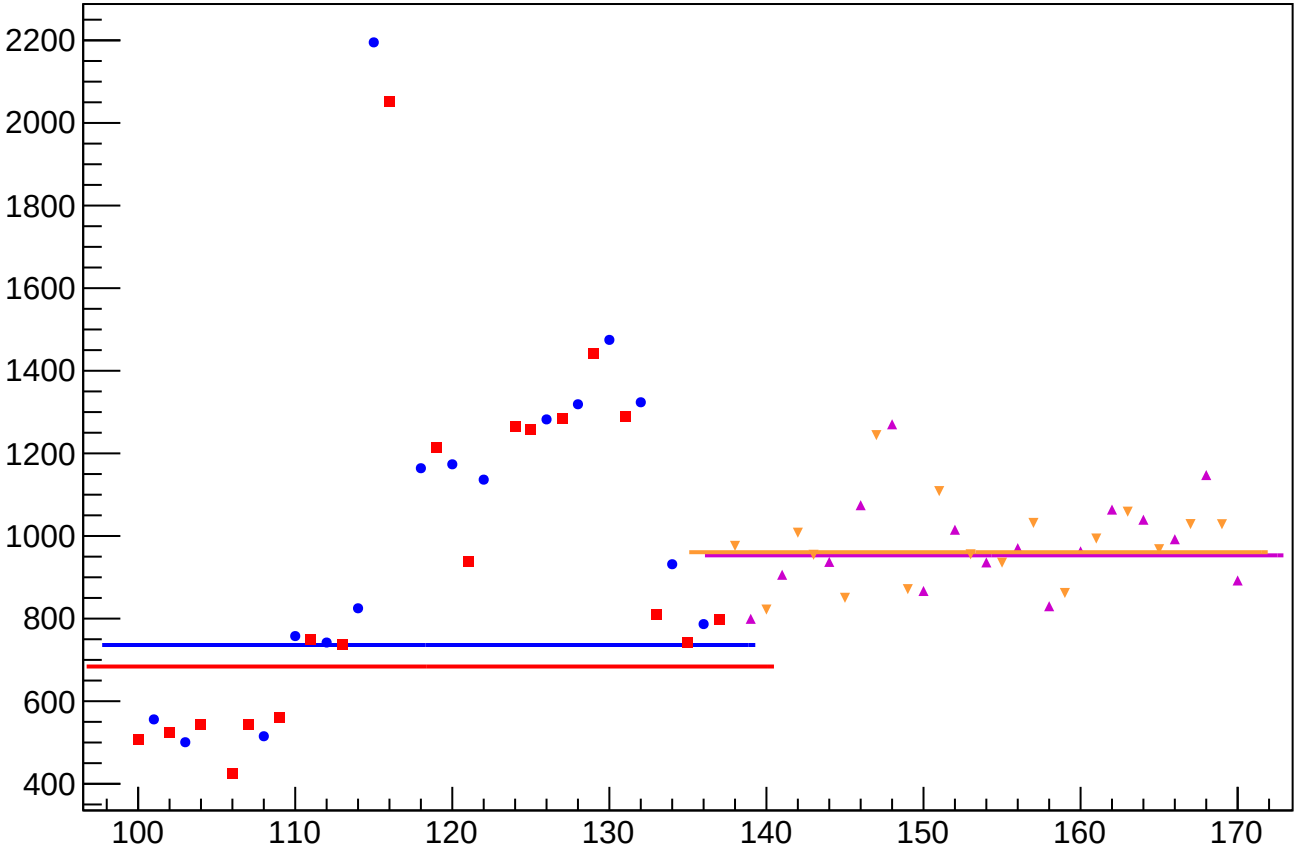
Left In: -71.319+/-264.987 $\chi^2$/NDF:30.6/15

+ sign -142.743+/-196.491 $\chi^2$/NDF: 27.6/32

All: -228.994+/-136.254 $\chi^2$/NDF: 78.2/67

- sign -308.883+/-189.105 $\chi^2$/NDF: 50.3/34

# asym_sam5_eigen_cor_correction_rms vs Slug




Right In: 736.083+/-0.208 $\chi^2$/NDF: 1844498.2/15

Left Out: 960.756+/-0.187 $\chi^2$/NDF:269463.6/16

Right Out: 683.981+/-0.191 $\chi^2$/NDF: 1850402.3/18

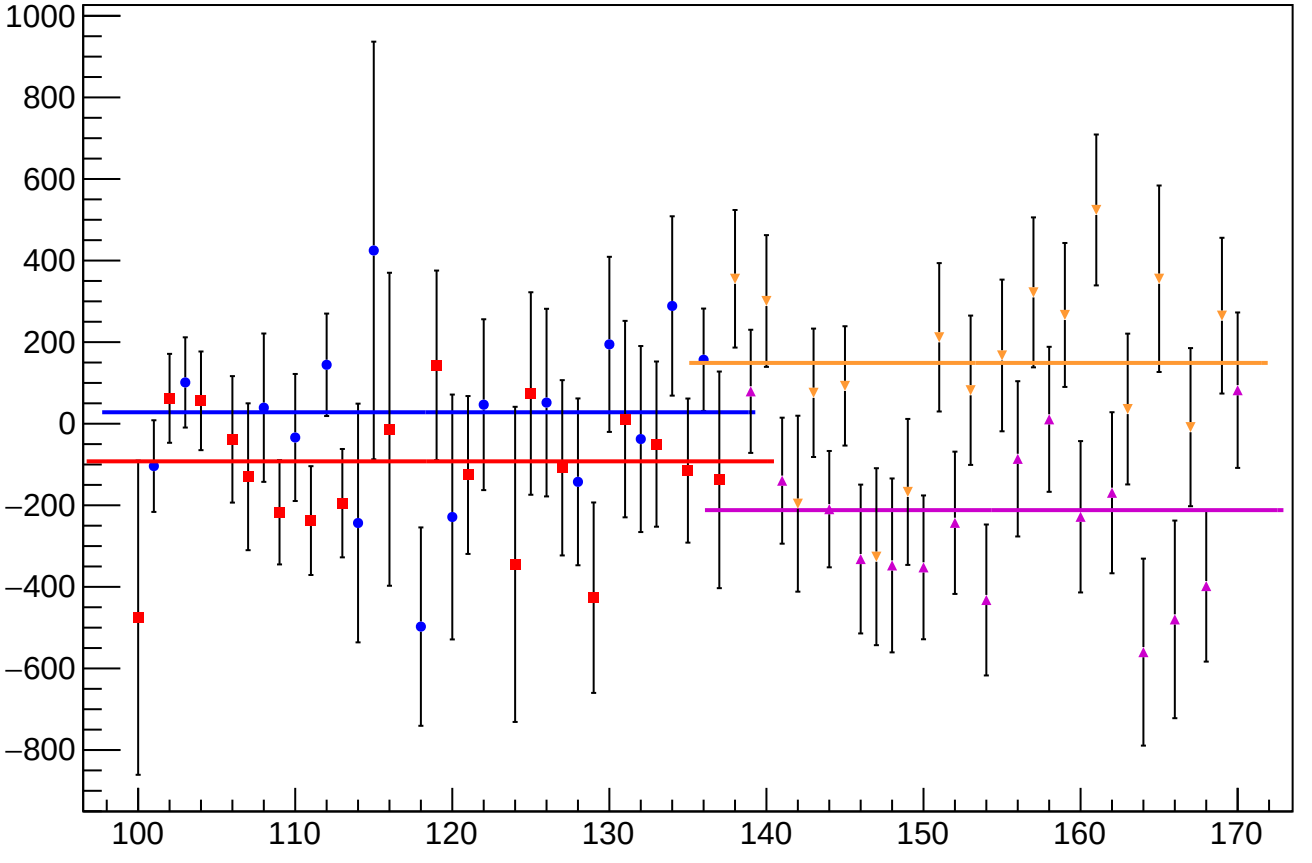
Left In: 953.138+/-0.187 $\chi^2$/NDF:339201.7/15

+ sign 860.040+/-0.139 $\chi^2$/NDF: 2760674.4/32

All: 839.802+/-0.096 $\chi^2$/NDF: 6003712.3/67

- sign 821.058+/-0.134 $\chi^2$/NDF: 3202171.6/34

# dit_asym_sam5_mean vs Slug




Right In: 28.094+/-43.439 $\chi^2$/NDF: 13.6/15

Left Out: 149.055+/-43.985 $\chi^2$/NDF:21.1/16

Right Out: -92.247+/-40.539 $\chi^2$/NDF: 11.7/18

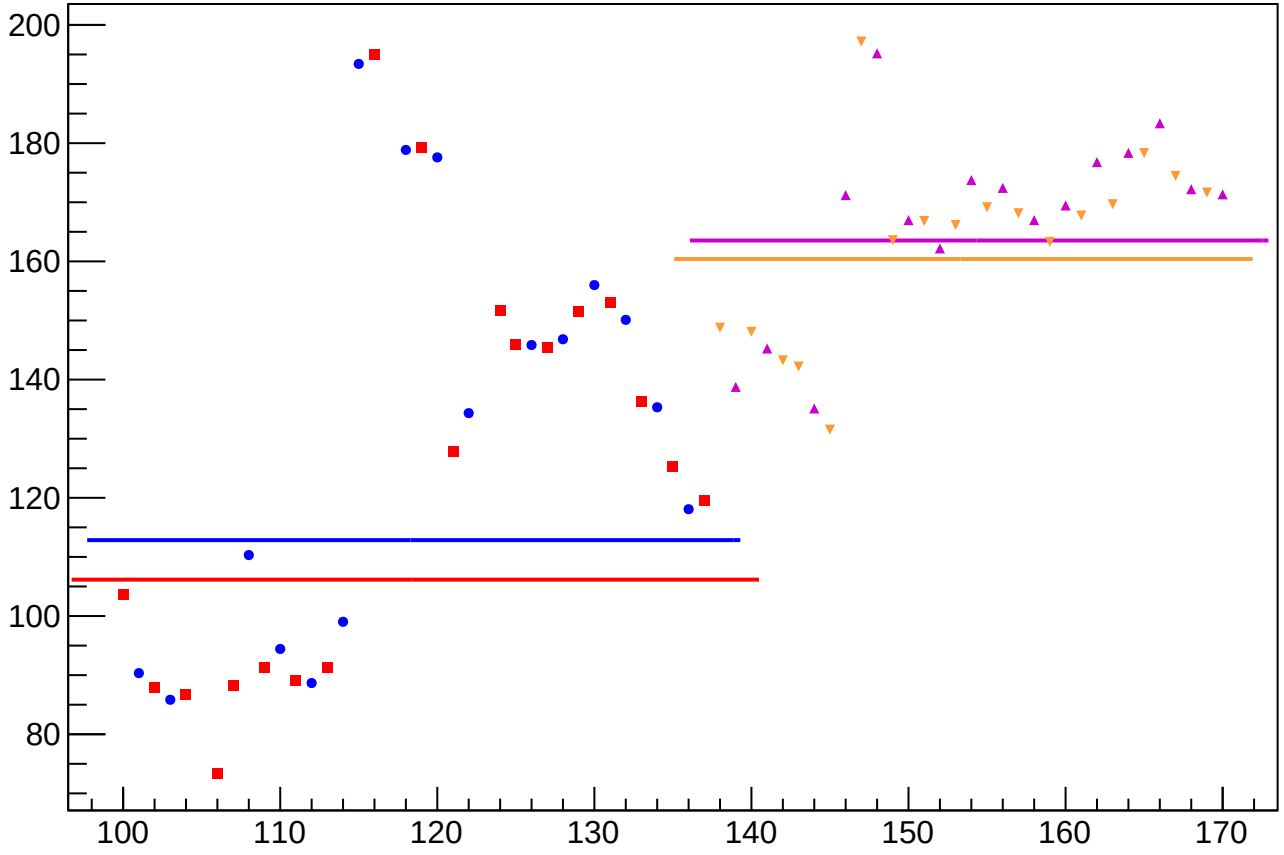
Left In: -211.870+/-45.271 $\chi^2$/NDF:15.8/15

+ sign 87.819+/-30.907 $\chi^2$/NDF: 38.5/32

All: -31.530+/-21.600 $\chi^2$/NDF: 99.1/67

- sign -145.482+/-30.200 $\chi^2$/NDF: 31.4/34

# dit_asym_sam5_rms vs Slug




Right In: 112.843+/-0.031 $\chi^2$/NDF: 872225.9/15

Left Out: 160.401+/-0.031 $\chi^2$/NDF:247403.1/16

Right Out: 106.159+/-0.029 $\chi^2$/NDF: 1002148.0/18

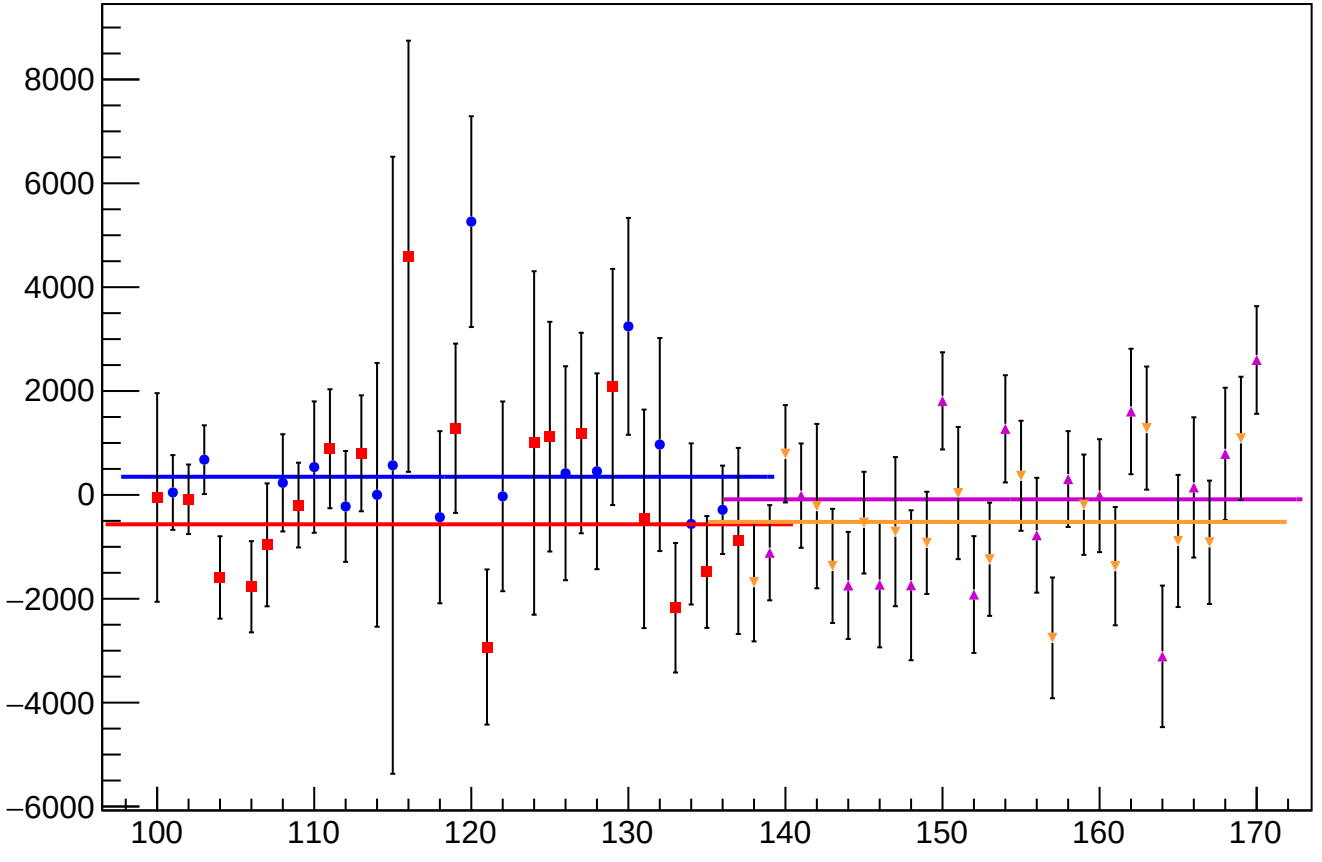
Left In: 163.531+/-0.032 $\chi^2$/NDF:261575.7/15

+ sign 136.325+/-0.022 $\chi^2$/NDF: 2303323.9/32

All: 133.954+/-0.015 $\chi^2$/NDF: 5372761.0/67

- sign 131.691+/-0.021 $\chi^2$/NDF: 3046437.4/34

# asym_sam5_dit_correction_mean vs Slug




Right In: 349.112+/-305.328 $\chi^2$/NDF: 9.8/15

Left Out: -519.709+/-273.435 $\chi^2$/NDF:13.9/16

Right Out: -566.026+/-279.219 $\chi^2$/NDF: 18.3/18

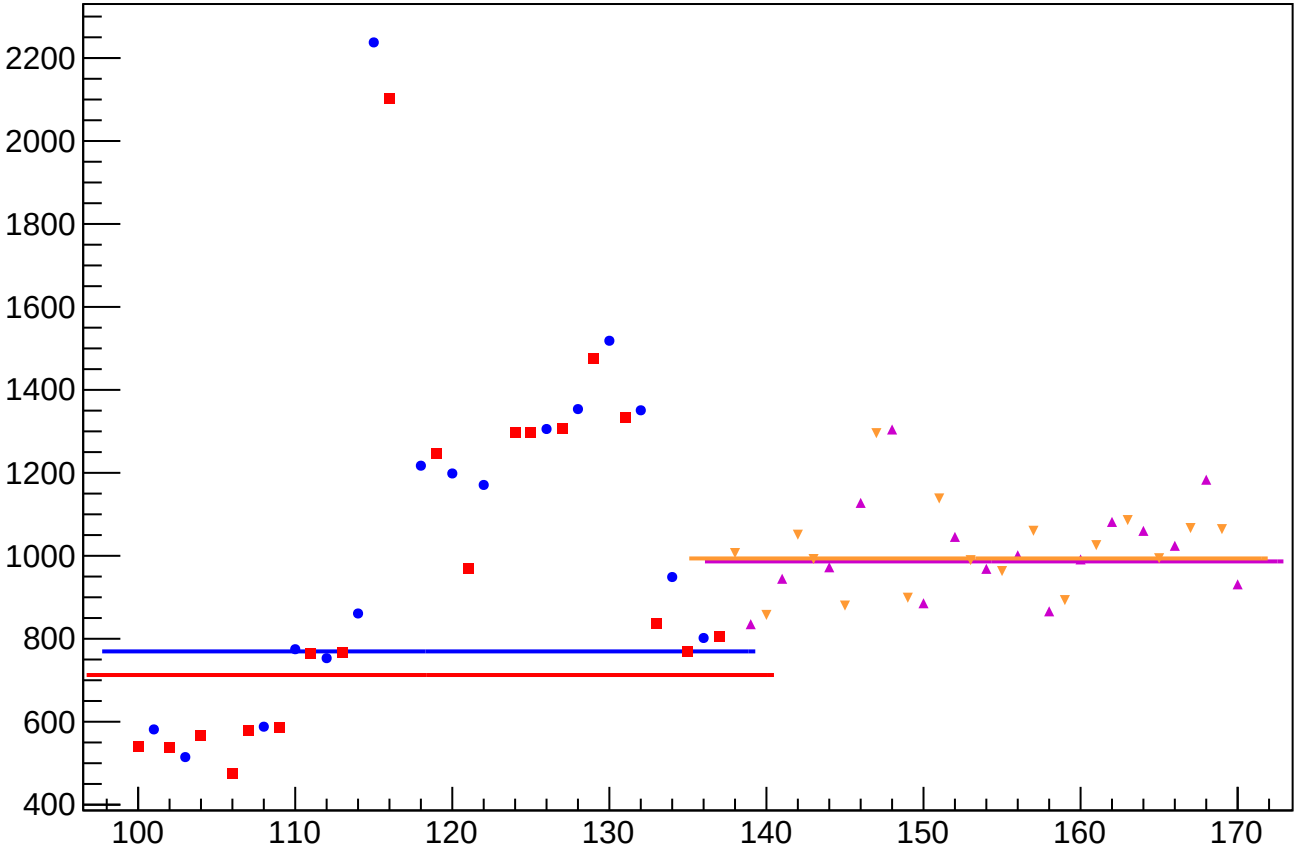
Left In: -85.374+/-274.058 $\chi^2$/NDF:30.2/15

\+ sign -133.030+/-203.693 $\chi^2$/NDF: 28.2/32

All: -230.942+/-141.080 $\chi^2$/NDF: 78.6/67

\- sign -321.217+/-195.587 $\chi^2$/NDF: 50.0/34

# asym_sam5_dit_correction_rms vs Slug




Right In: 769.557+/-0.216 $\chi^2$/NDF: 1739937.3/15

Left Out: 993.647+/-0.193 $\chi^2$/NDF:263172.9/16

Right Out: 712.628+/-0.197 $\chi^2$/NDF: 1767226.6/18

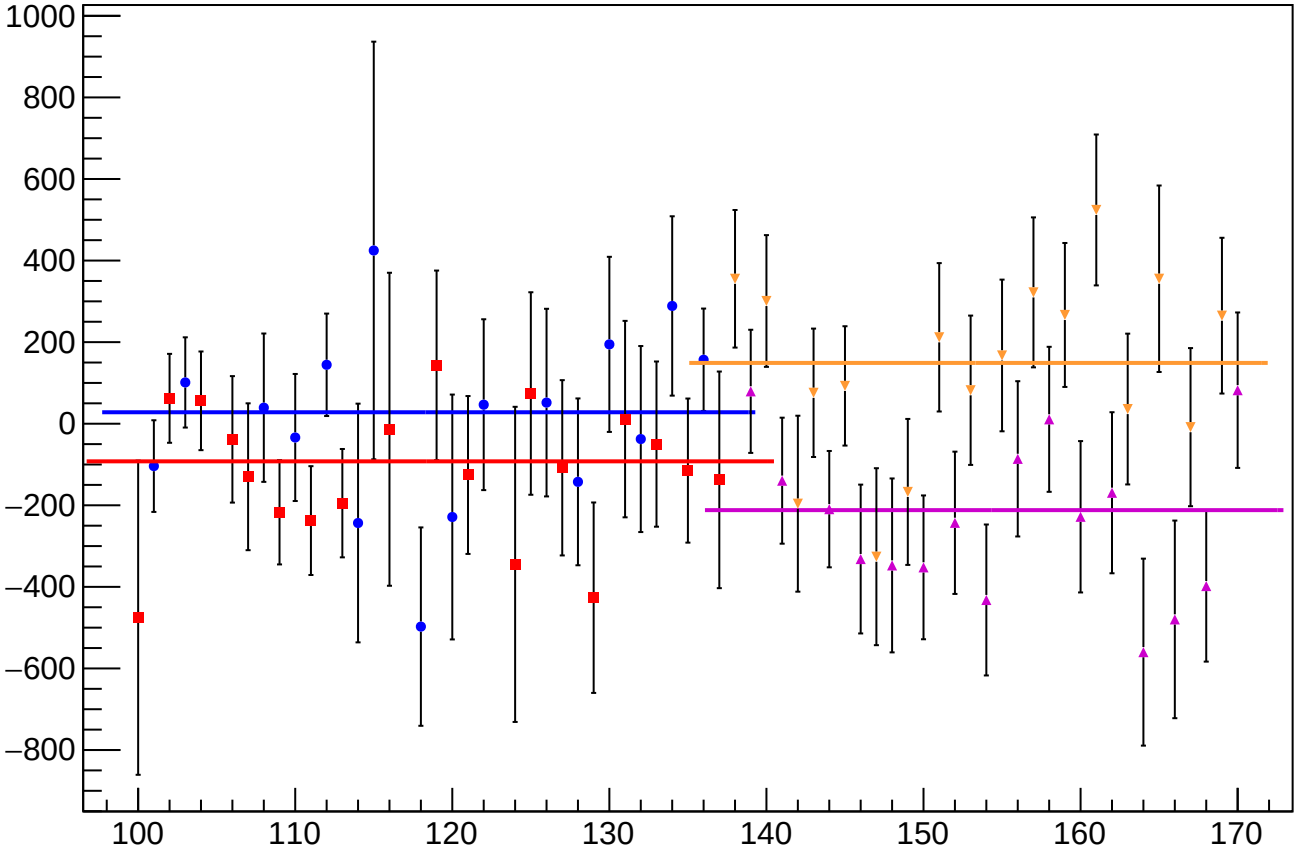
Left In: 986.486+/-0.194 $\chi^2$/NDF:319741.9/15

+ sign 893.913+/-0.144 $\chi^2$/NDF: 2600948.1/32

All: 872.164+/-0.100 $\chi^2$/NDF: 5711654.5/67

- sign 852.112+/-0.138 $\chi^2$/NDF: 3066882.7/34

# eigen_dit_asym_sam5_mean vs Slug




Right In: 28.093+/-43.439 $\chi^2$/NDF: 13.6/15

Left Out: 149.056+/-43.985 $\chi^2$/NDF:21.1/16

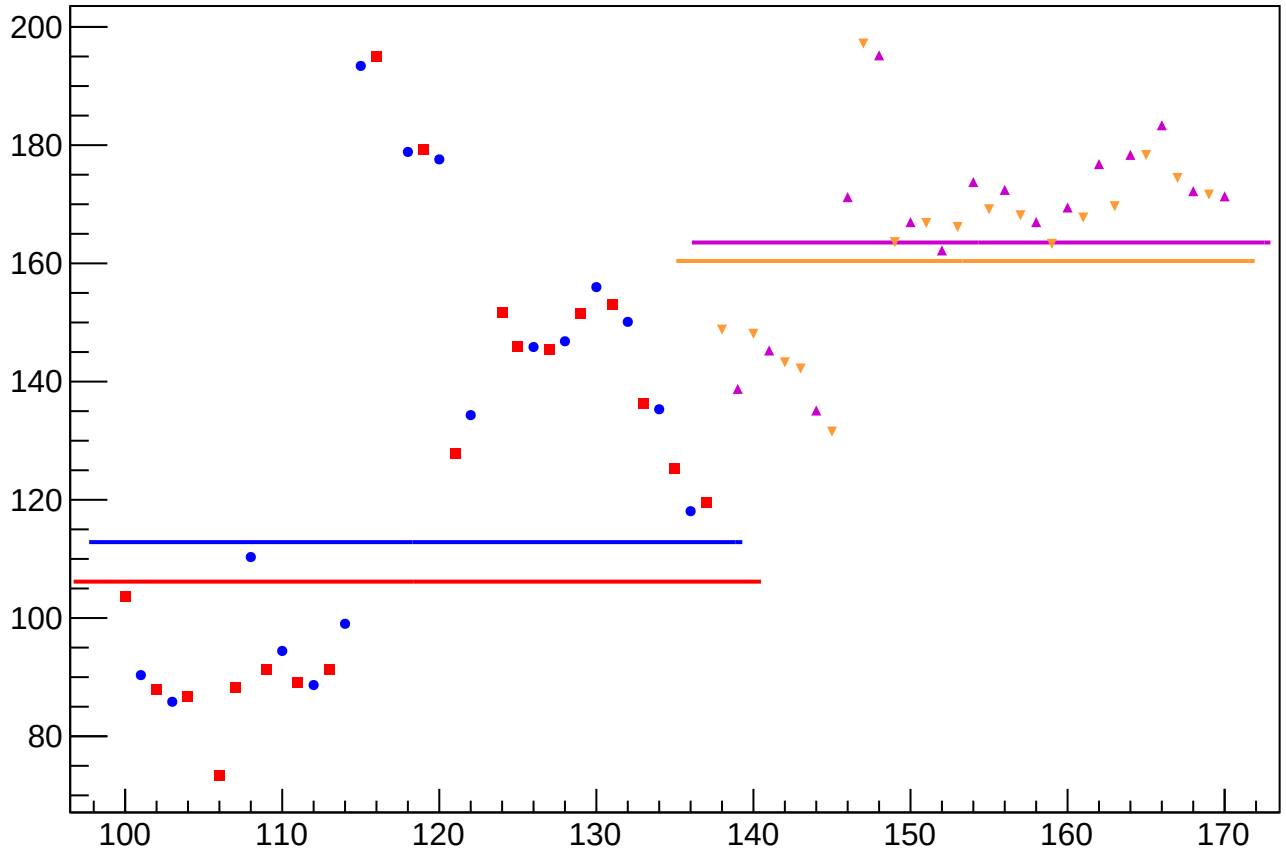
Right Out: -92.247+/-40.539 $\chi^2$/NDF: 11.7/18

Left In: -211.871+/-45.271 $\chi^2$/NDF:15.8/15

+ sign 87.819+/-30.907 $\chi^2$/NDF: 38.5/32

All: -31.531+/-21.600 $\chi^2$/NDF: 99.1/67

- sign -145.482+/-30.200 $\chi^2$/NDF: 31.4/34




Right In: 112.842+/-0.031 $\chi^2$/NDF: 872219.7/15

Left Out: 160.401+/-0.031 $\chi^2$/NDF:247403.5/16

Right Out: 106.158+/-0.029 $\chi^2$/NDF: 1002136.6/18

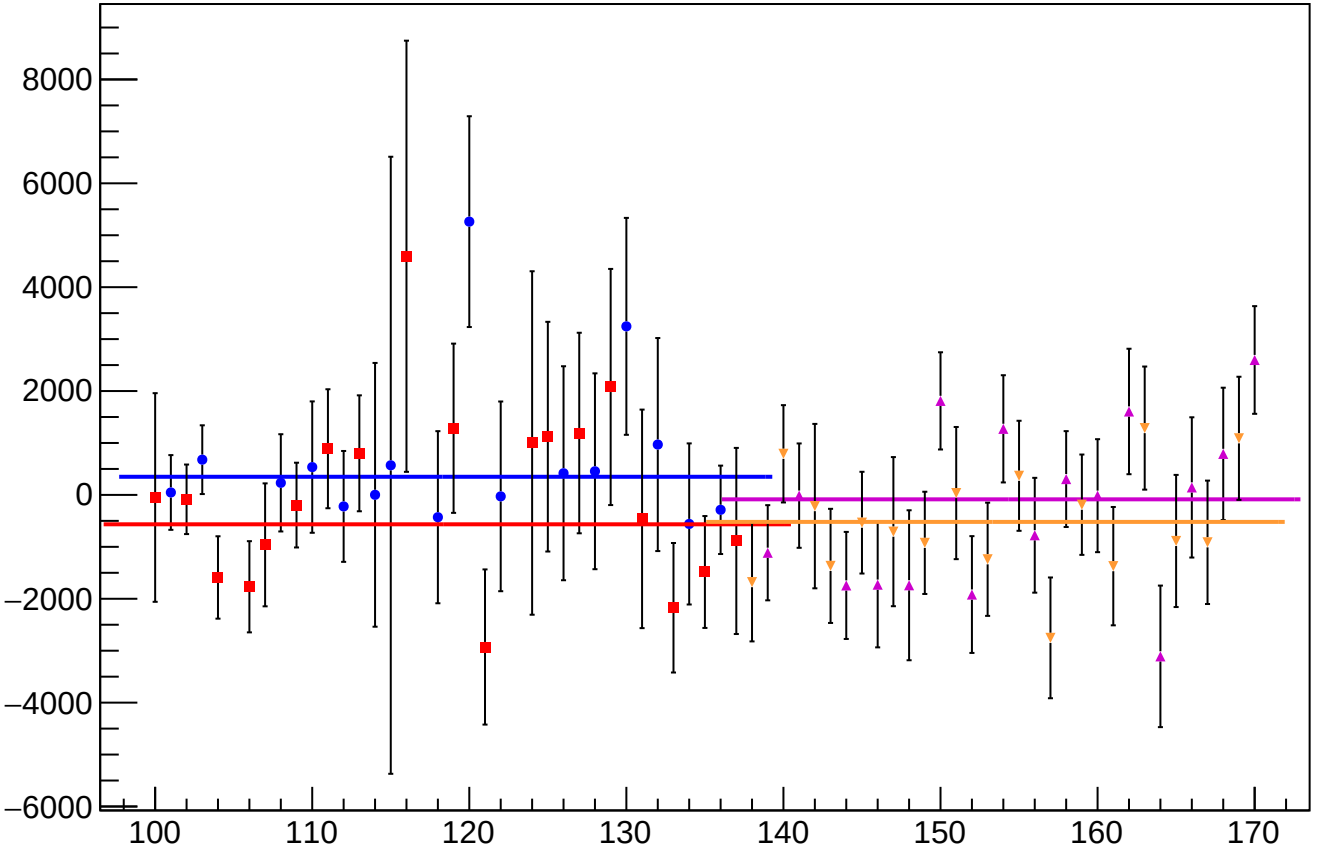
Left In: 163.531+/-0.032 $\chi^2$/NDF:261569.8/15

+ sign 136.325+/-0.022 $\chi^2$/NDF: 2303344.2/32

All: 133.954+/-0.015 $\chi^2$/NDF: 5372793.4/67

- sign 131.691+/-0.021 $\chi^2$/NDF: 3046450.1/34

# asym_sam5_eigen_dit_correction_mean vs Slug




Right In: 349.111+/-305.328 $\chi^2$/NDF: 9.8/15

Left Out: -519.709+/-273.436 $\chi^2$/NDF:13.9/16

Right Out: -566.026+/-279.218 $\chi^2$/NDF: 18.3/18

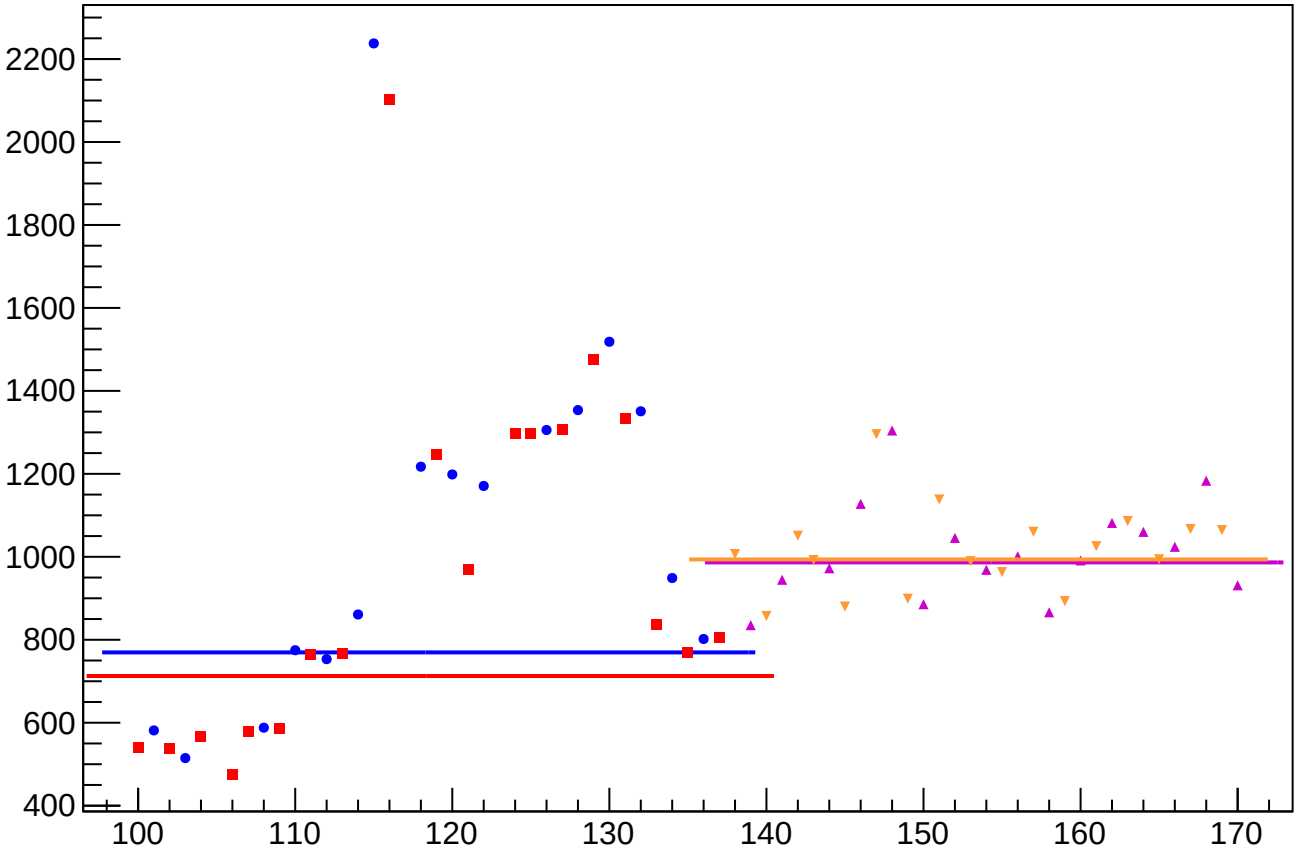
Left In: -85.374+/-274.058 $\chi^2$/NDF:30.2/15

\+ sign -133.029+/-203.693 $\chi^2$/NDF: 28.2/32

All: -230.942+/-141.080 $\chi^2$/NDF: 78.6/67

\- sign -321.218+/-195.587 $\chi^2$/NDF: 50.0/34

# asym_sam5_eigen_dit_correction_rms vs Slug




Right In: 769.556+/-0.216 $\chi^2$/NDF: 1739933.9/15

Left Out: 993.648+/-0.193 $\chi^2$/NDF:263172.9/16

Right Out: 712.627+/-0.197 $\chi^2$/NDF: 1767219.7/18

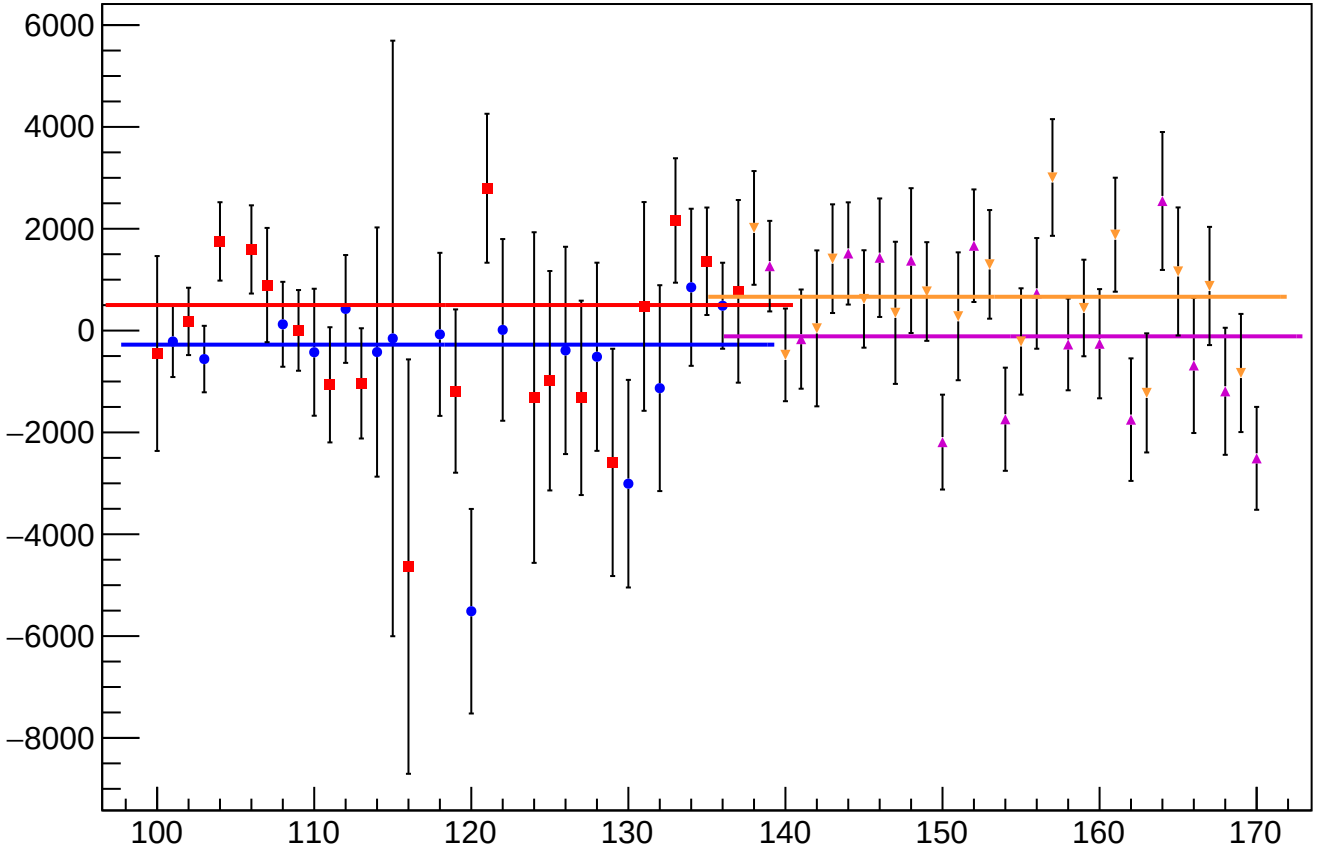
Left In: 986.487+/-0.194 $\chi^2$/NDF:319740.8/15

+ sign 893.913+/-0.144 $\chi^2$/NDF: 2600959.9/32

All: 872.164+/-0.100 $\chi^2$/NDF: 5711676.2/67

- sign 852.111+/-0.138 $\chi^2$/NDF: 3066892.2/34

# asym_sam5_mean vs Slug




Right In: -276.199+/-296.708 $\chi^2$/NDF: 11.1/15

Left Out: 664.257+/-267.909 $\chi^2$/NDF:14.8/16

Right Out: 501.985+/-272.991 $\chi^2$/NDF: 20.5/18

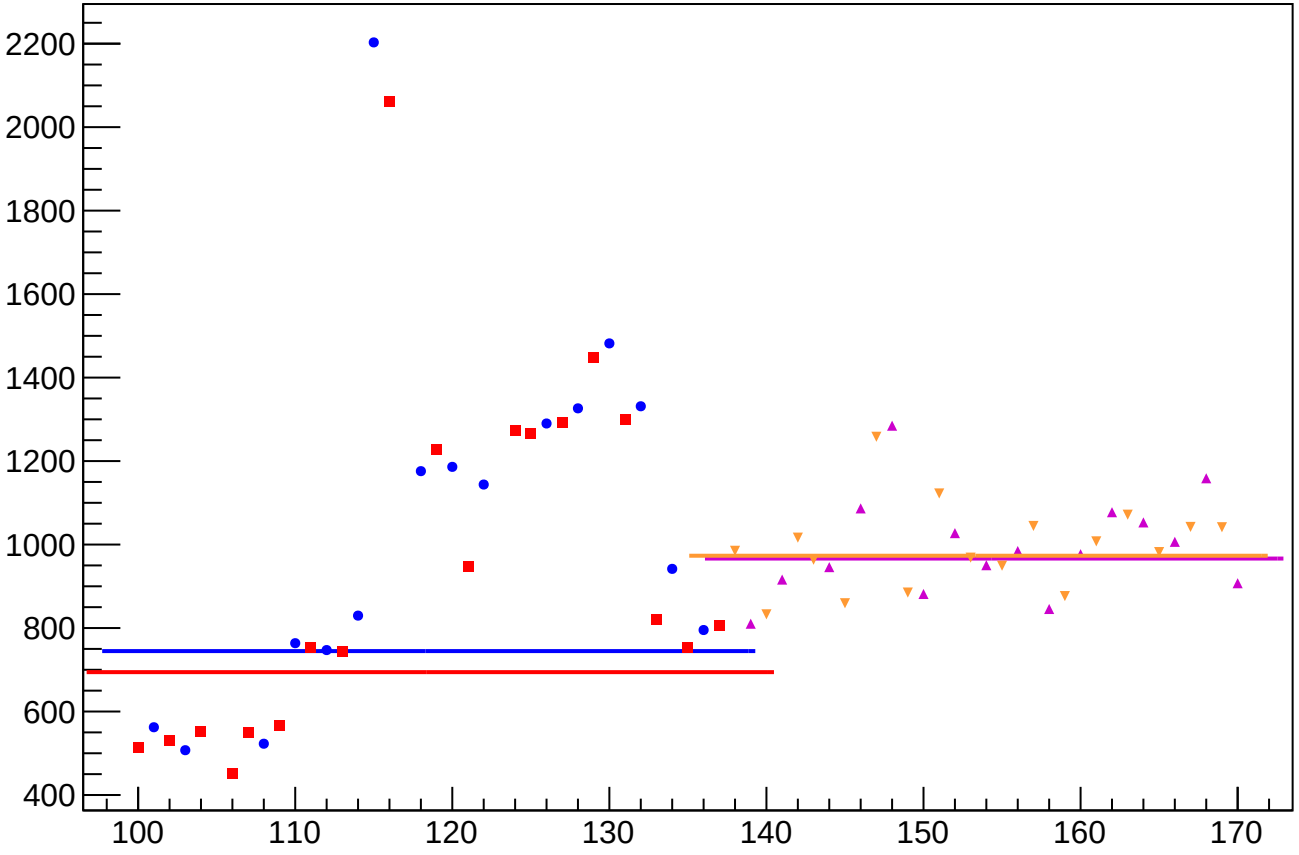
Left In: -112.896+/-268.607 $\chi^2$/NDF:30.9/15

+ sign 241.874+/-198.845 $\chi^2$/NDF: 31.4/32

All: 214.732+/-137.921 $\chi^2$/NDF: 85.4/67

- sign 189.568+/-191.465 $\chi^2$/NDF: 54.0/34

# asym_sam5_rms vs Slug




Right In: 744.783+/-0.210 $\chi^2$/NDF: 1822553.5/15

Left Out: 973.246+/-0.189 $\chi^2$/NDF:265830.8/16

Right Out: 694.348+/-0.193 $\chi^2$/NDF: 1803741.9/18

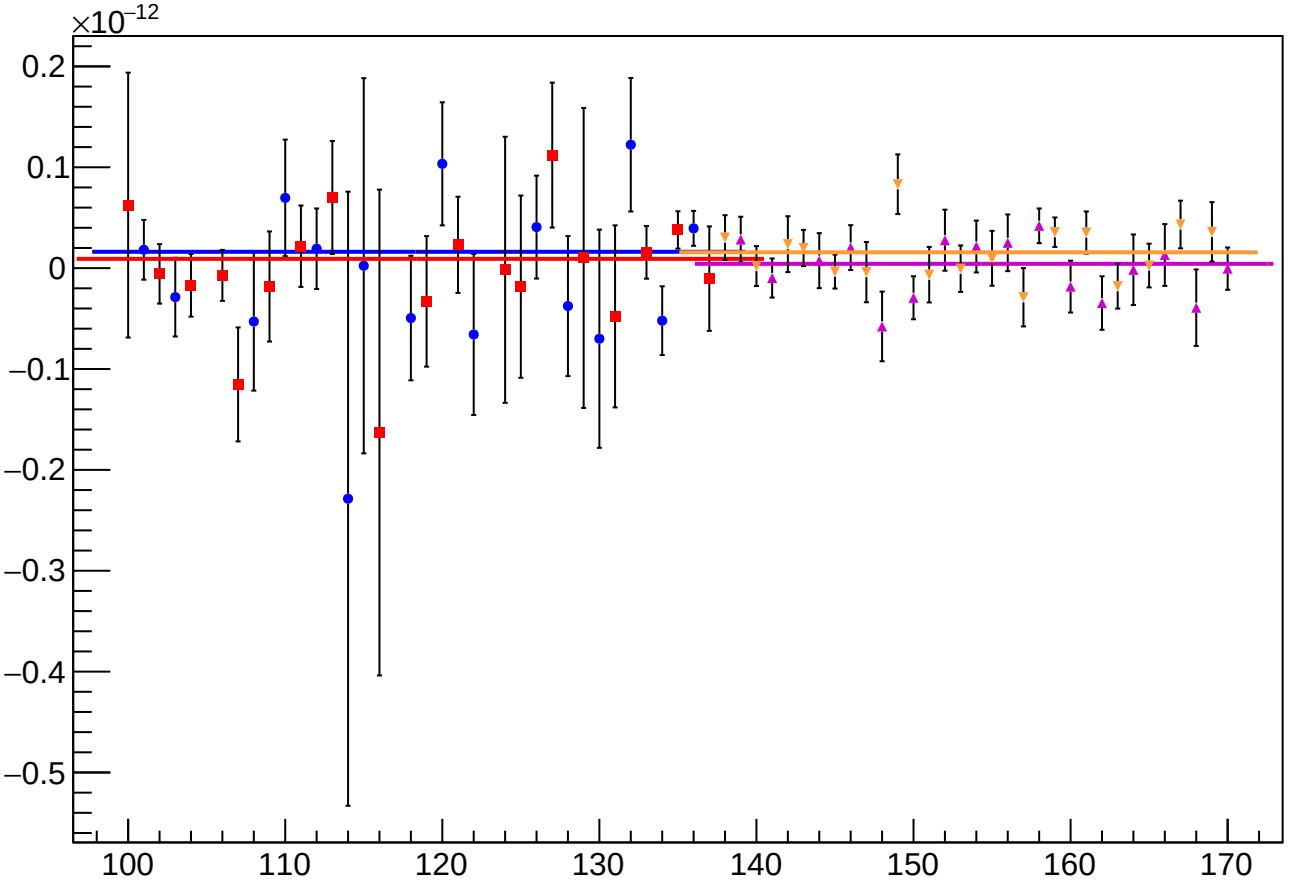
Left In: 966.462+/-0.190 $\chi^2$/NDF:330513.4/15

+ sign 870.637+/-0.141 $\chi^2$/NDF: 2741600.9/32

All: 850.904+/-0.098 $\chi^2$/NDF: 5923486.5/67

- sign 832.607+/-0.135 $\chi^2$/NDF: 3143924.3/34

# asym_sam5_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 18.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:18.8/16

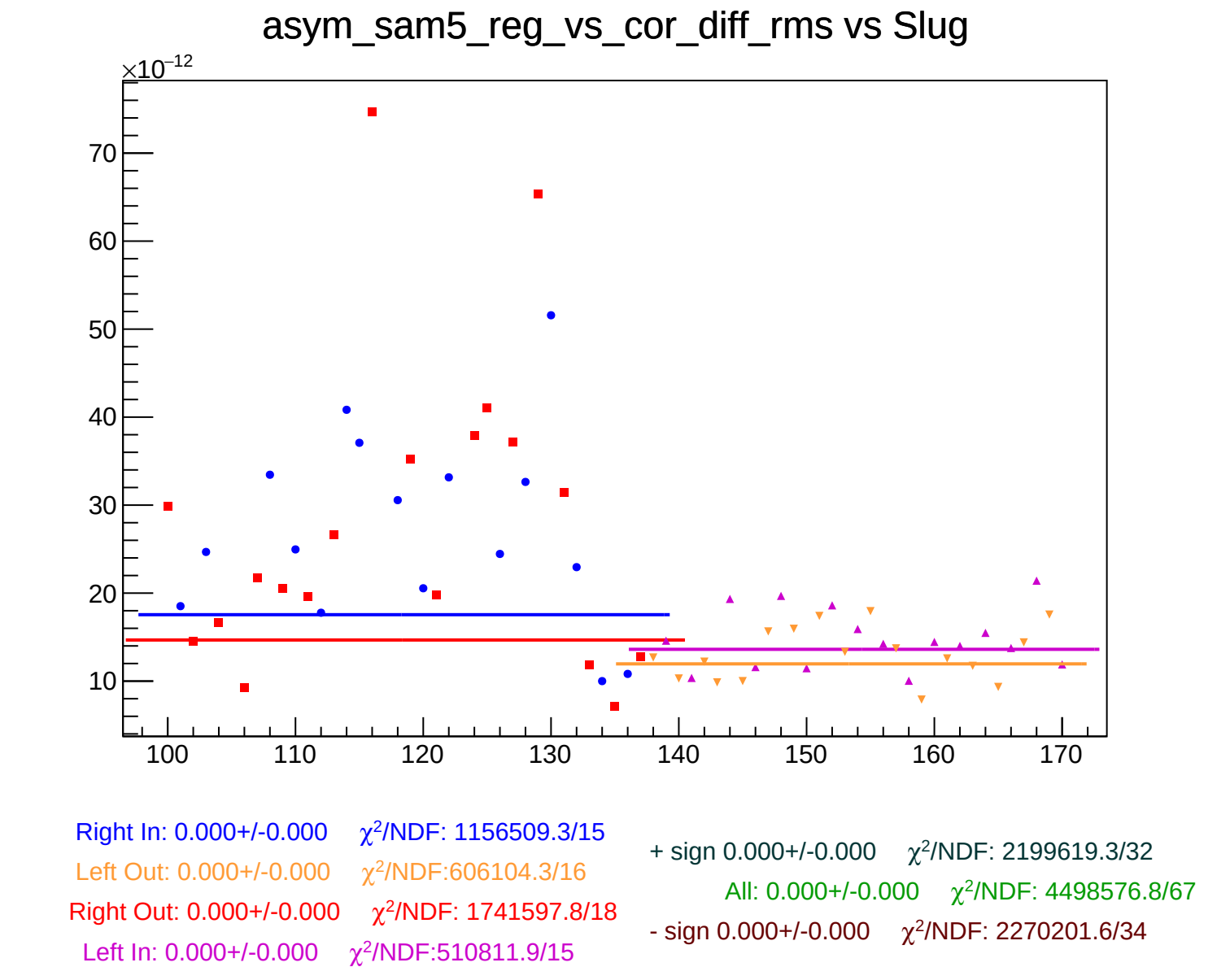
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.1/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:18.7/15

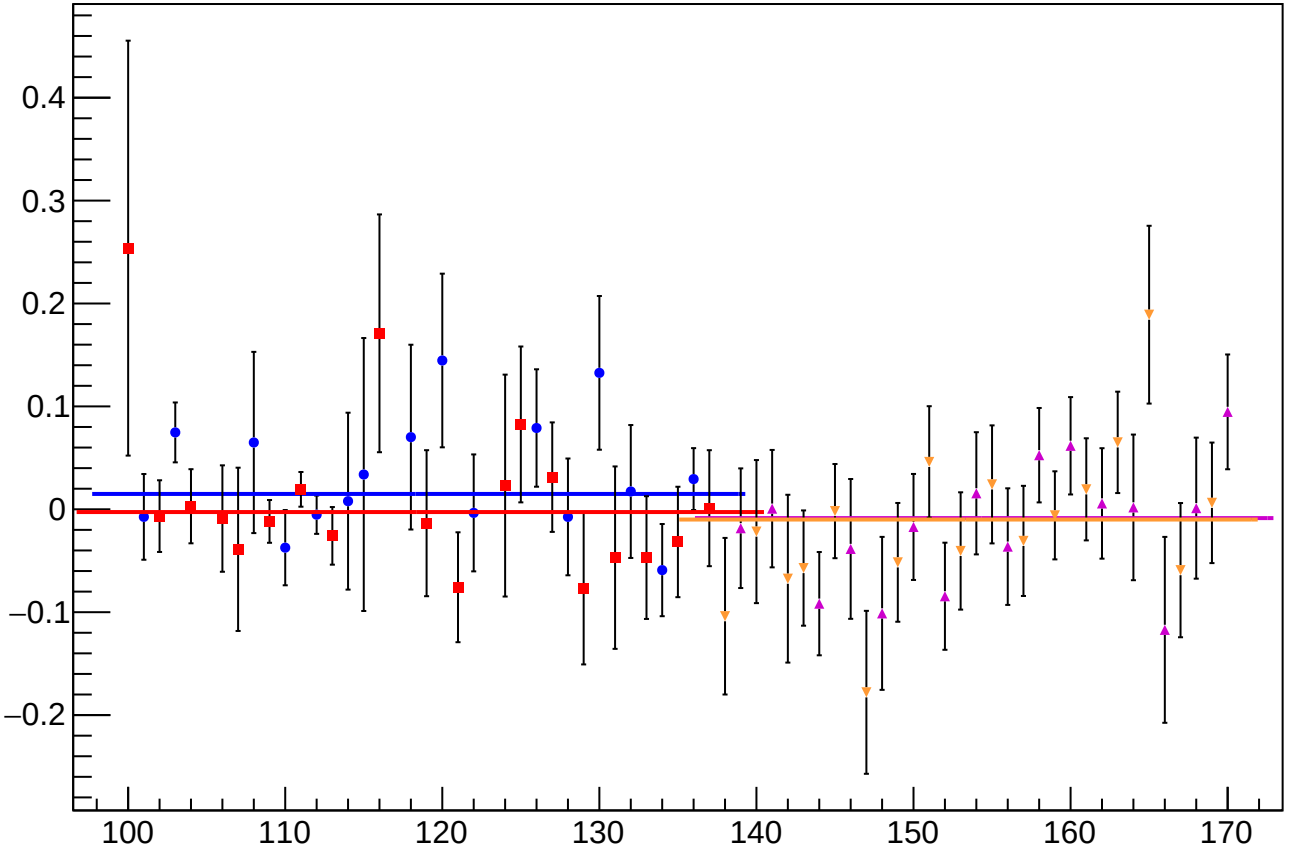
+ sign 0.000+/-0.000 $\chi^2$/NDF: 36.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 71.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 33.0/34


asym_sam5_reg_vs_cor_diff_rms vs Slug
×10^−12
70
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1156509.3/15
Left Out: 0.000+/-0.000 χ²/NDF:606104.3/16
Right Out: 0.000+/-0.000 χ²/NDF: 1741597.8/18
Left In: 0.000+/-0.000 χ²/NDF:510811.9/15
+ sign 0.000+/-0.000 χ²/NDF: 2199619.3/32
All: 0.000+/-0.000 χ²/NDF: 4498576.8/67
- sign 0.000+/-0.000 χ²/NDF: 2270201.6/34

# asym_sam5_dit_vs_cor_diff_mean vs Slug




Right In: 0.015+/-0.011 $\chi^2$/NDF: 17.8/15

Left Out: -0.010+/-0.014 $\chi^2$/NDF:18.3/16

Right Out: -0.003+/-0.009 $\chi^2$/NDF: 12.5/18

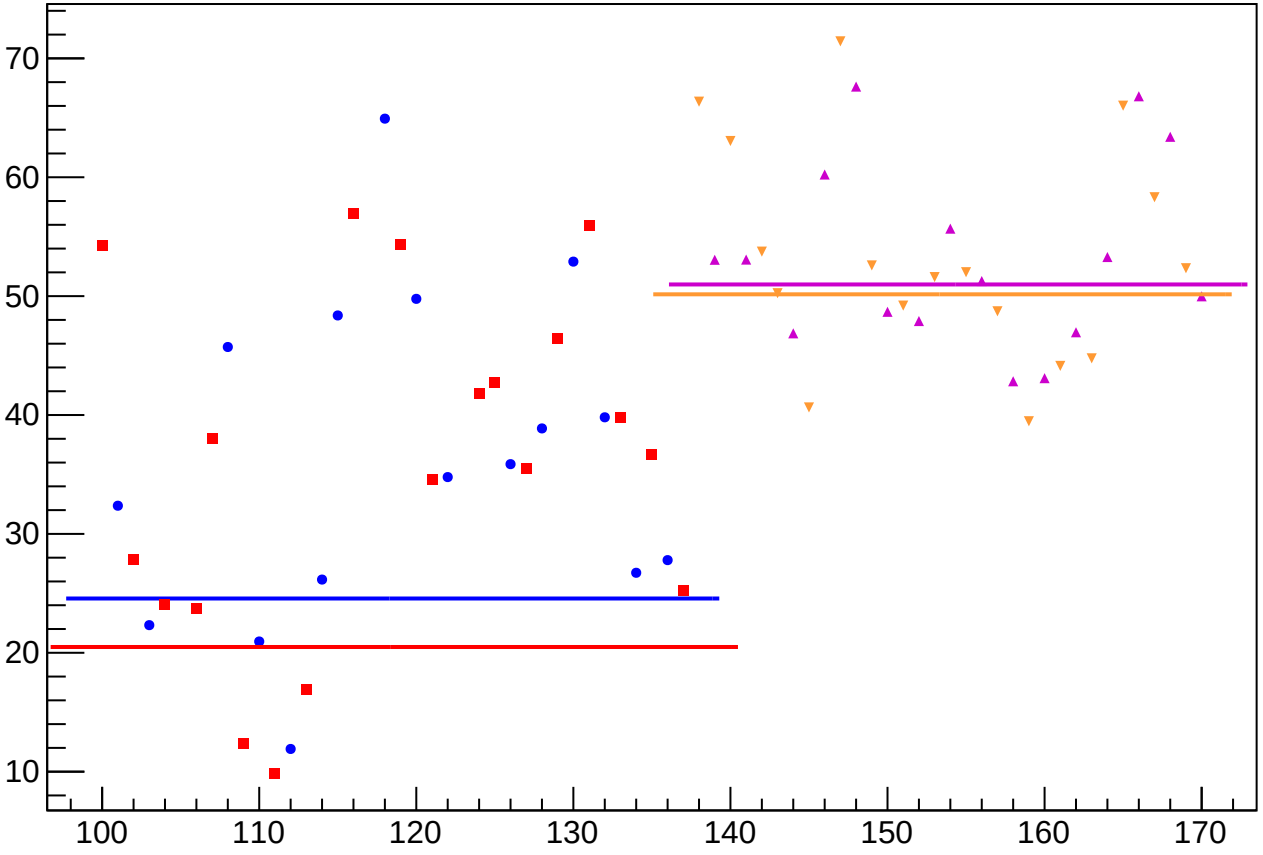
Left In: -0.009+/-0.014 $\chi^2$/NDF:16.1/15

+ sign 0.006+/-0.008 $\chi^2$/NDF: 38.1/32

All: 0.000+/-0.006 $\chi^2$/NDF: 67.5/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 28.6/34

# asym_sam5_dit_vs_cor_diff_rms vs Slug




Right In: 24.566+/-0.007 $\chi^2$/NDF: 2484530.5/15

Left Out: 50.153+/-0.010 $\chi^2$/NDF:682695.6/16

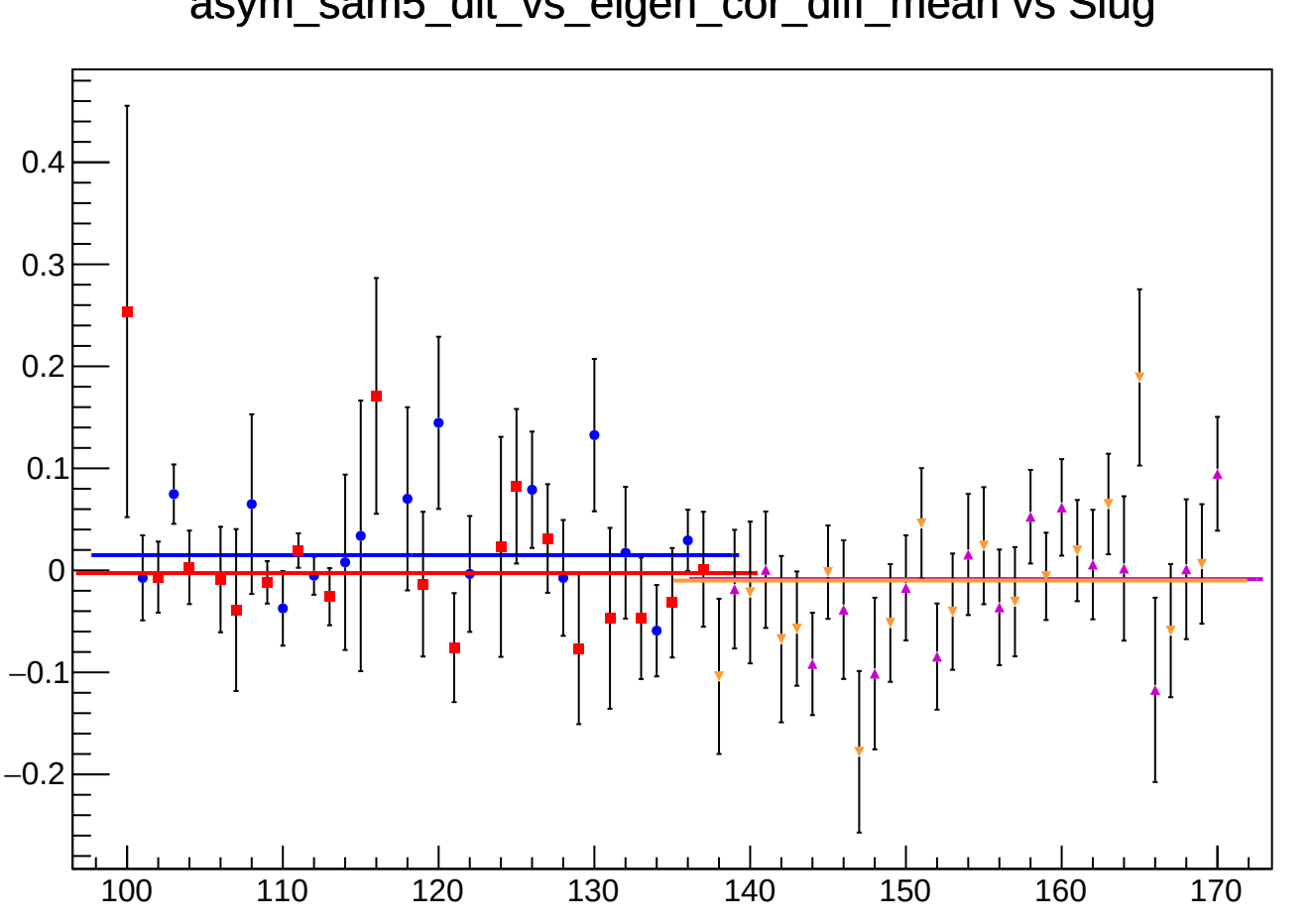
Right Out: 20.488+/-0.007 $\chi^2$/NDF: 3583938.4/18

Left In: 50.983+/-0.010 $\chi^2$/NDF:439165.3/15

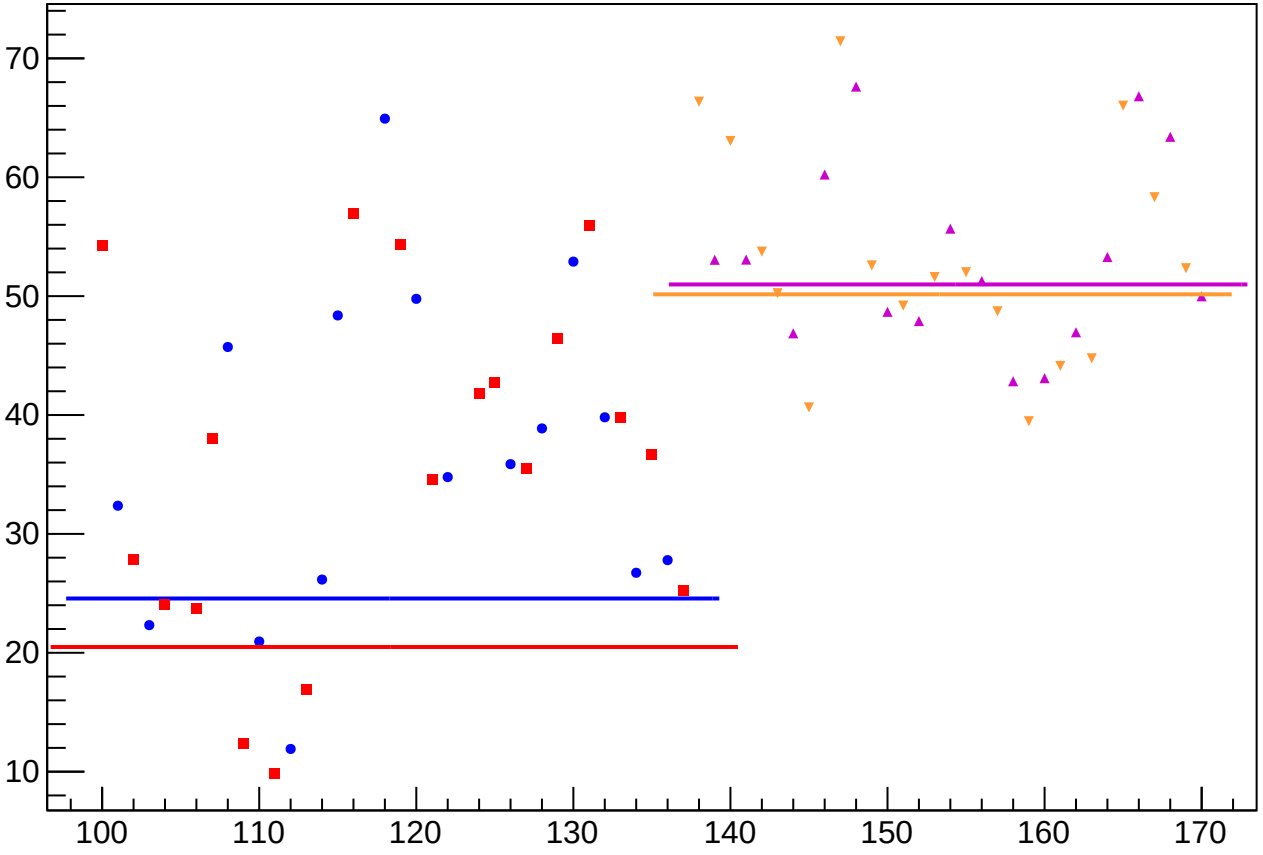
+ sign 33.887+/-0.006 $\chi^2$/NDF: 7422637.5/32

All: 31.464+/-0.004 $\chi^2$/NDF: 18147603.3/67

- sign 29.417+/-0.005 $\chi^2$/NDF: 10420976.1/34


asym_sam5_dit_vs_eigen_cor_diff_mean vs Slug
0.4
0.3
0.2
0.1
0
−0.1
−0.2
100
110
120
130
140
150
160
170
Right In: 0.015+/-0.011 χ²/NDF: 17.8/15
Left Out: -0.010+/-0.014 χ²/NDF:18.3/16
Right Out: -0.003+/-0.009 χ²/NDF: 12.5/18
Left In: -0.009+/-0.014 χ²/NDF:16.1/15
+ sign 0.006+/-0.008 χ²/NDF: 38.1/32
All: 0.000+/-0.006 χ²/NDF: 67.5/67
- sign -0.004+/-0.008 χ²/NDF: 28.6/34

# asym_sam5_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 24.566+/-0.007 $\chi^2$/NDF: 2484530.5/15

Left Out: 50.153+/-0.010 $\chi^2$/NDF:682695.6/16

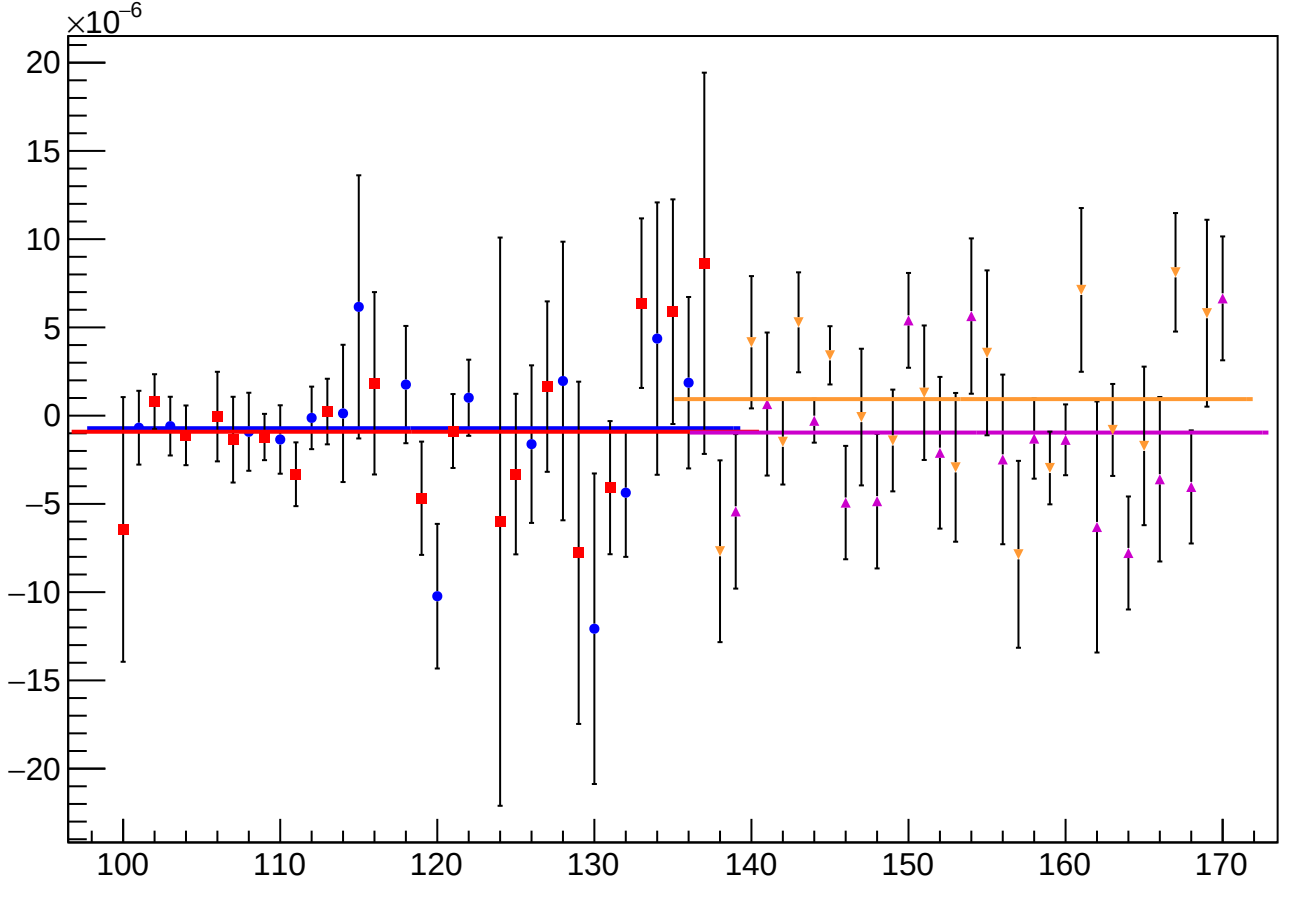
Right Out: 20.488+/-0.007 $\chi^2$/NDF: 3583938.4/18

Left In: 50.983+/-0.010 $\chi^2$/NDF:439165.3/15

+ sign 33.887+/-0.006 $\chi^2$/NDF: 7422637.5/32

All: 31.464+/-0.004 $\chi^2$/NDF: 18147603.3/67

- sign 29.417+/-0.005 $\chi^2$/NDF: 10420976.1/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 11.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:25.4/16

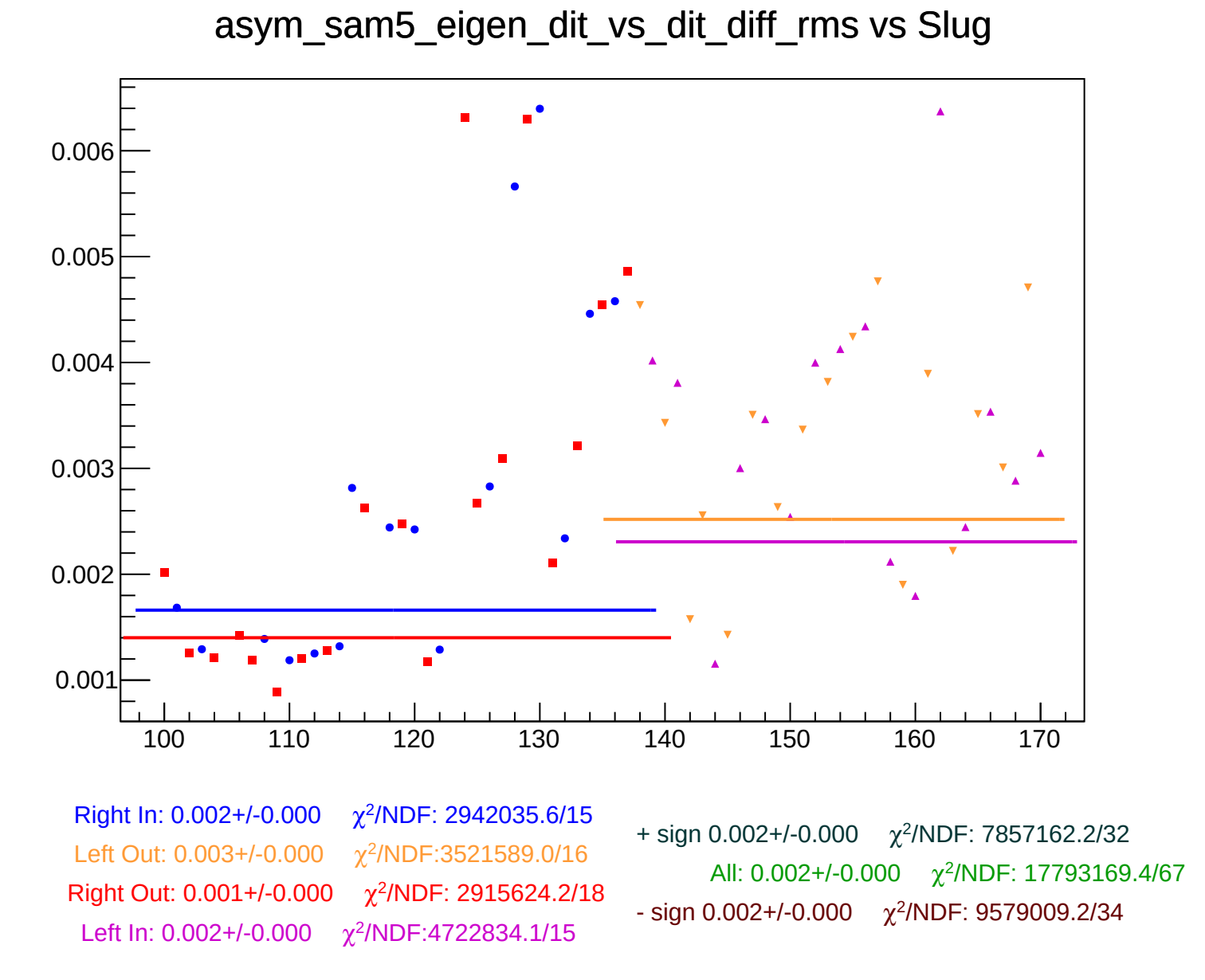
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 11.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:23.2/15

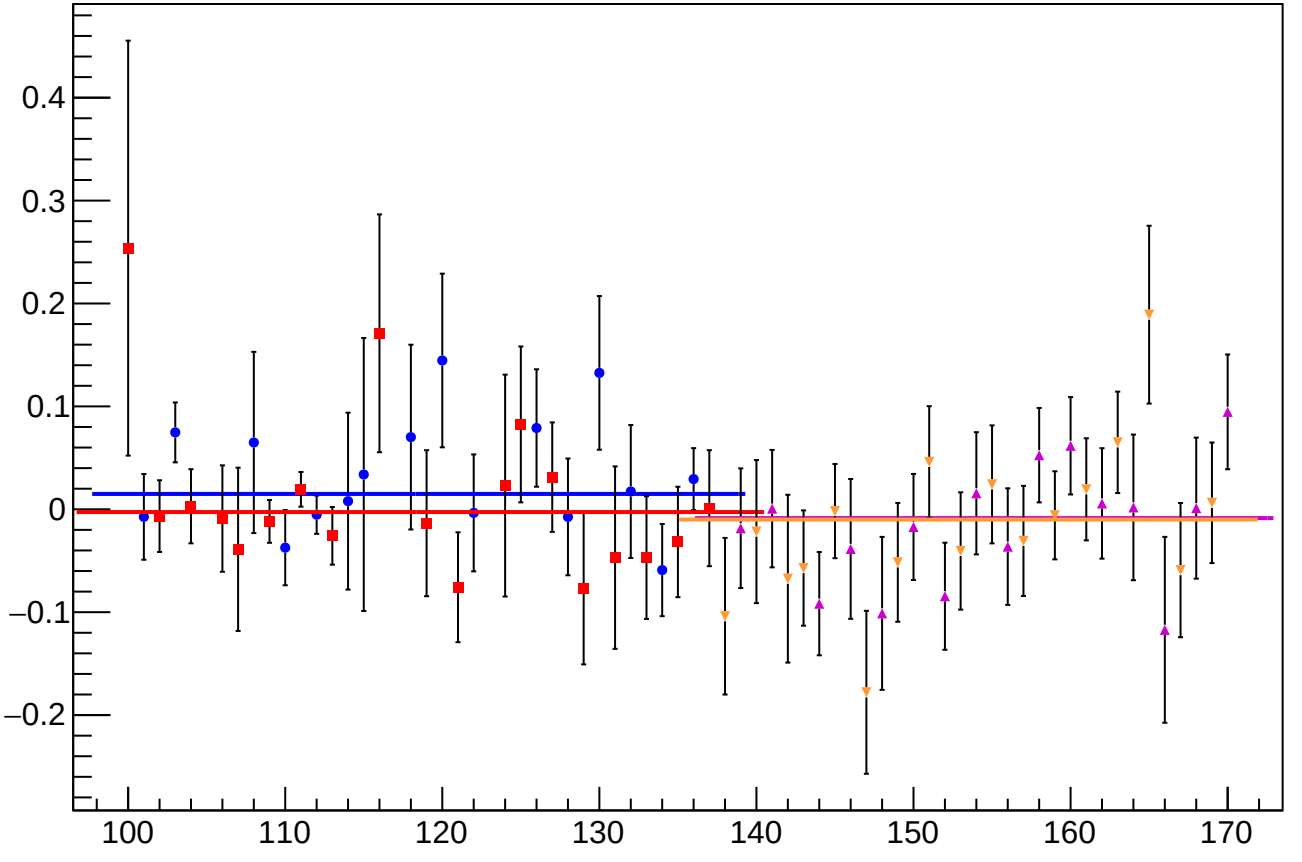
+ sign 0.000+/-0.000 $\chi^2$/NDF: 39.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 76.4/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 35.0/34


asym_sam5_eigen_dit_vs_dit_diff_rms vs Slug
0.006
0.005
0.004
0.003
0.002
0.001
100
110
120
130
140
150
160
170
Right In: 0.002+/-0.000 χ²/NDF: 2942035.6/15
Left Out: 0.003+/-0.000 χ²/NDF:3521589.0/16
Right Out: 0.001+/-0.000 χ²/NDF: 2915624.2/18
Left In: 0.002+/-0.000 χ²/NDF:4722834.1/15
+ sign 0.002+/-0.000 χ²/NDF: 7857162.2/32
All: 0.002+/-0.000 χ²/NDF: 17793169.4/67
- sign 0.002+/-0.000 χ²/NDF: 9579009.2/34

# asym_sam5_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.015+/-0.011 $\chi^2$/NDF: 17.8/15

Left Out: -0.010+/-0.014 $\chi^2$/NDF:18.3/16

Right Out: -0.003+/-0.009 $\chi^2$/NDF: 12.5/18

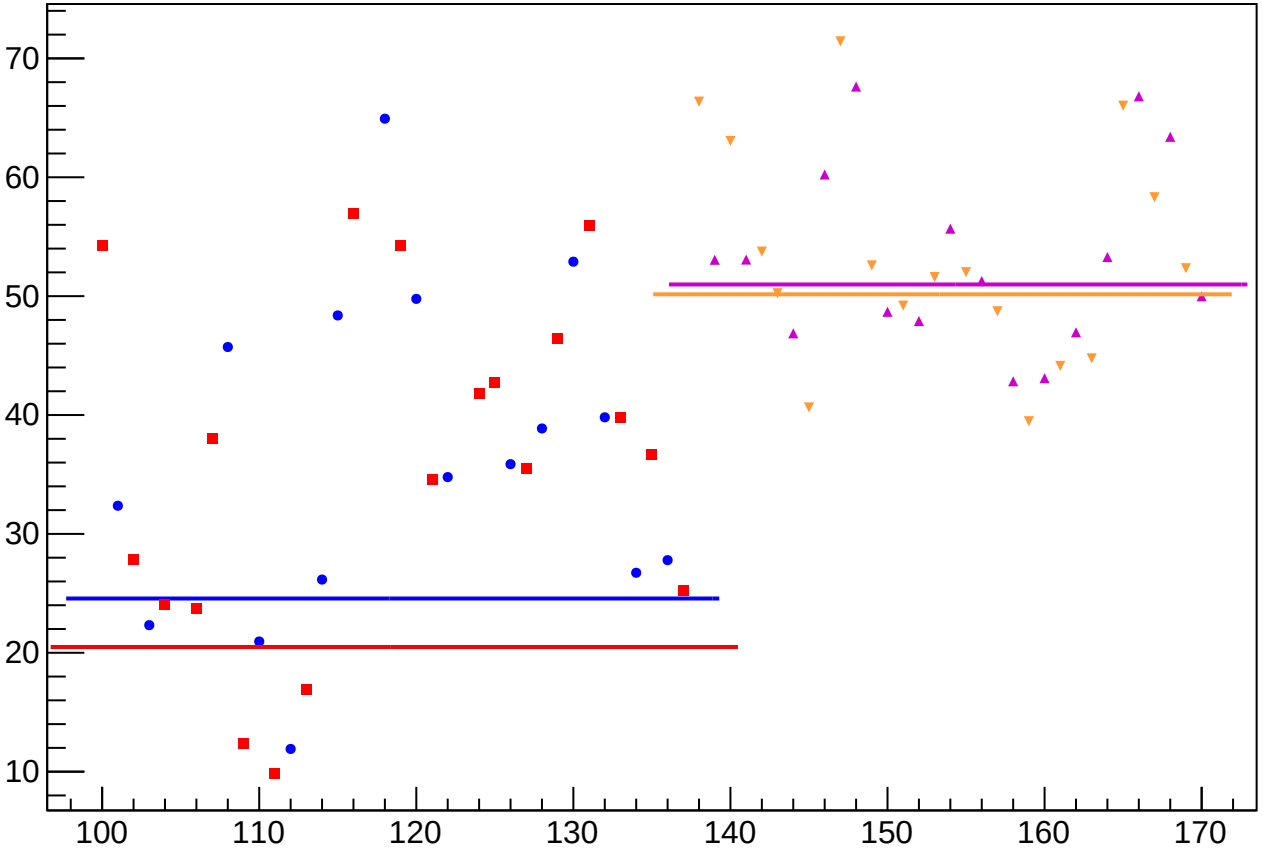
Left In: -0.009+/-0.014 $\chi^2$/NDF:16.1/15

+ sign 0.006+/-0.008 $\chi^2$/NDF: 38.1/32

All: 0.000+/-0.006 $\chi^2$/NDF: 67.5/67

- sign -0.004+/-0.008 $\chi^2$/NDF: 28.6/34

# asym_sam5_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 24.566+/-0.007 $\chi^2$/NDF: 2484434.5/15

Left Out: 50.153+/-0.010 $\chi^2$/NDF:682826.8/16

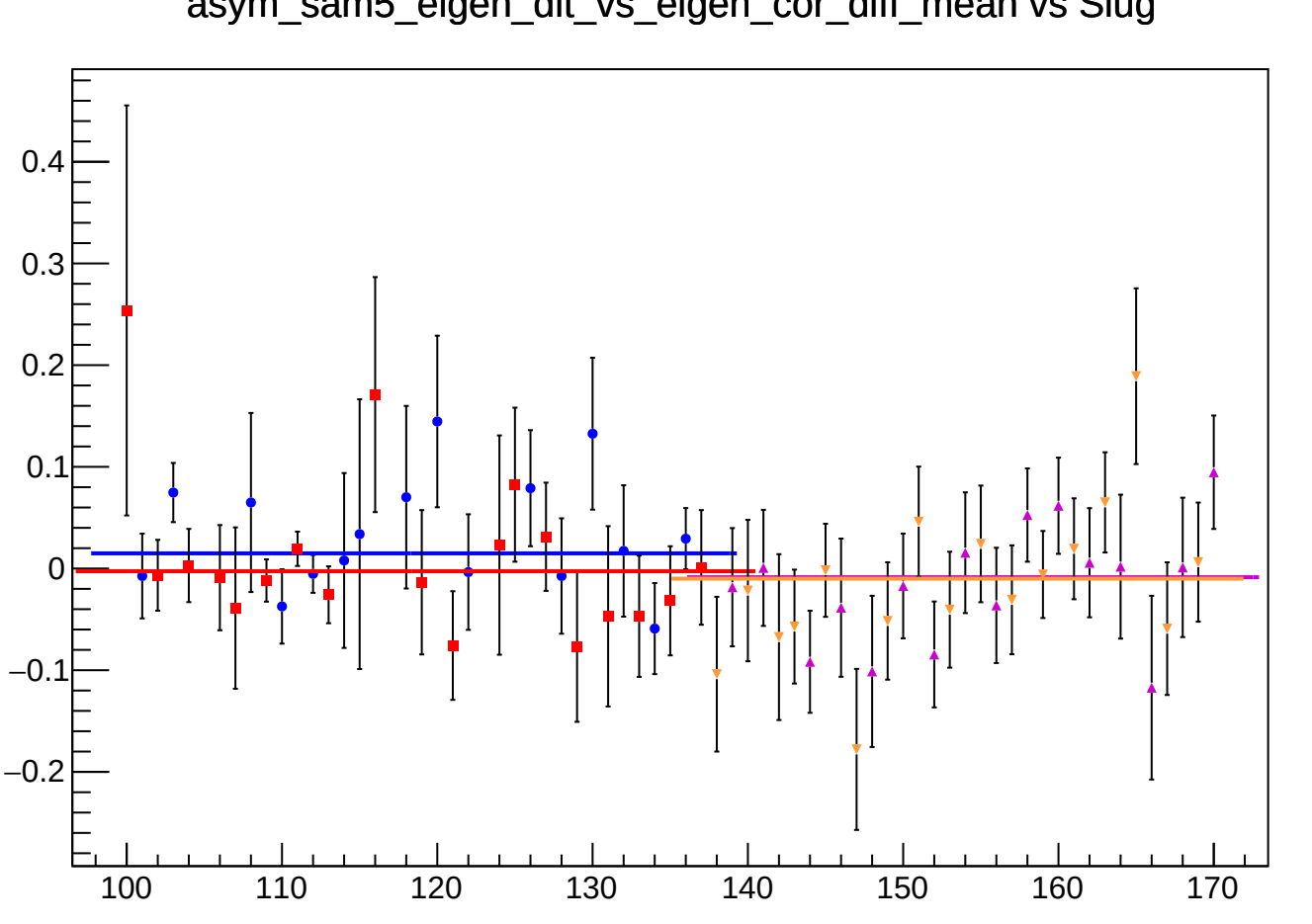
Right Out: 20.487+/-0.007 $\chi^2$/NDF: 3583888.1/18

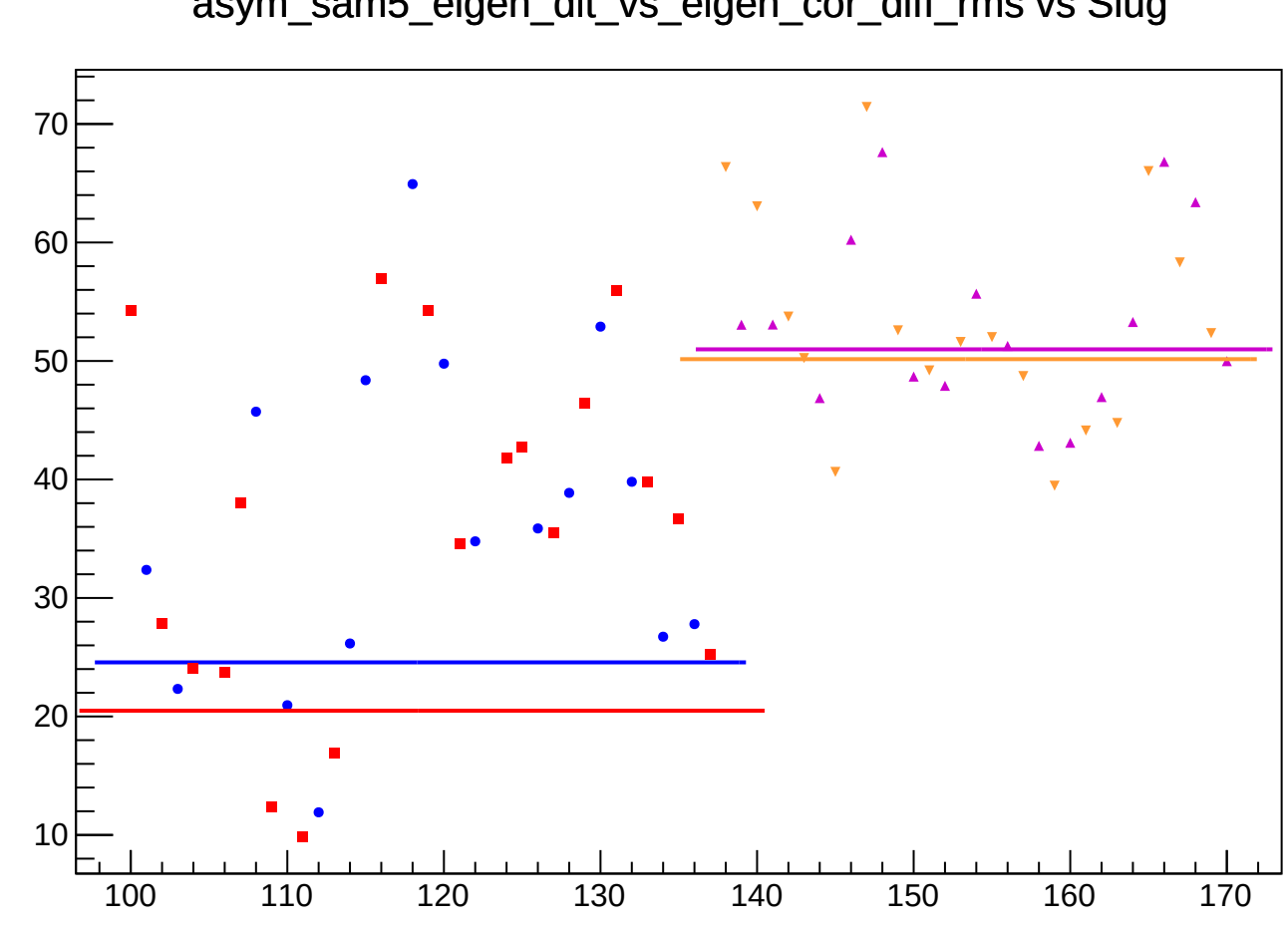
Left In: 50.983+/-0.010 $\chi^2$/NDF:439259.1/15

+ sign 33.886+/-0.006 $\chi^2$/NDF: 7422910.5/32

All: 31.463+/-0.004 $\chi^2$/NDF: 18148234.9/67

- sign 29.416+/-0.005 $\chi^2$/NDF: 10421312.4/34


asym_sam5_eigen_dit_vs_eigen_cor_diff_mean vs Slug
0.4
0.3
0.2
0.1
0
−0.1
−0.2
100
110
120
130
140
150
160
170
Right In: 0.015+/-0.011 χ²/NDF: 17.8/15
Left Out: -0.010+/-0.014 χ²/NDF:18.3/16
Right Out: -0.003+/-0.009 χ²/NDF: 12.5/18
Left In: -0.009+/-0.014 χ²/NDF:16.1/15
+ sign 0.006+/-0.008 χ²/NDF: 38.1/32
All: 0.000+/-0.006 χ²/NDF: 67.5/67
- sign -0.004+/-0.008 χ²/NDF: 28.6/34




Right In: 24.566+/-0.007 $\chi^2$/NDF: 2484434.5/15

Left Out: 50.153+/-0.010 $\chi^2$/NDF:682826.8/16

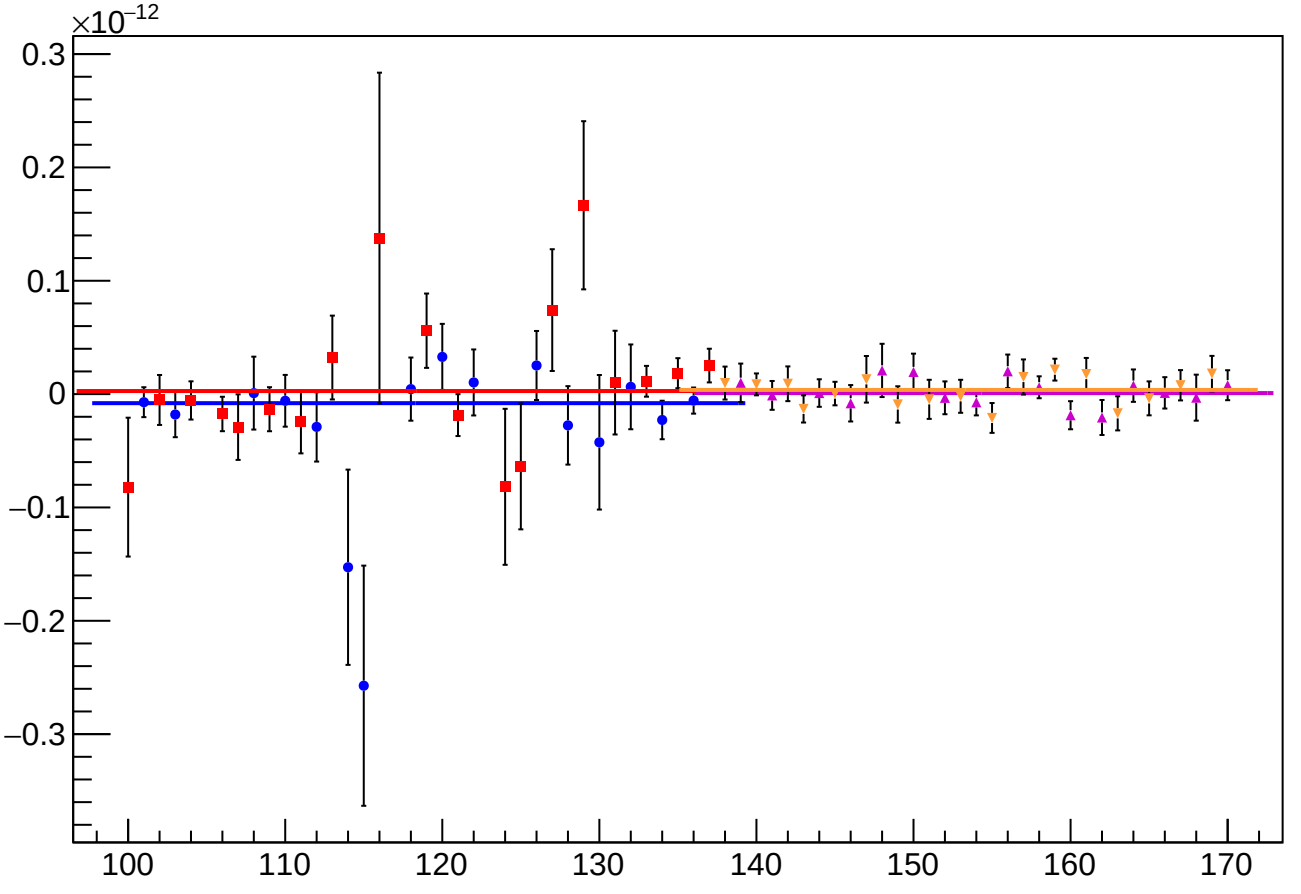
Right Out: 20.487+/-0.007 $\chi^2$/NDF: 3583888.1/18

Left In: 50.983+/-0.010 $\chi^2$/NDF:439259.1/15

+ sign 33.886+/-0.006 $\chi^2$/NDF: 7422910.5/32

All: 31.463+/-0.004 $\chi^2$/NDF: 18148234.9/67

- sign 29.416+/-0.005 $\chi^2$/NDF: 10421312.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:15.4/16

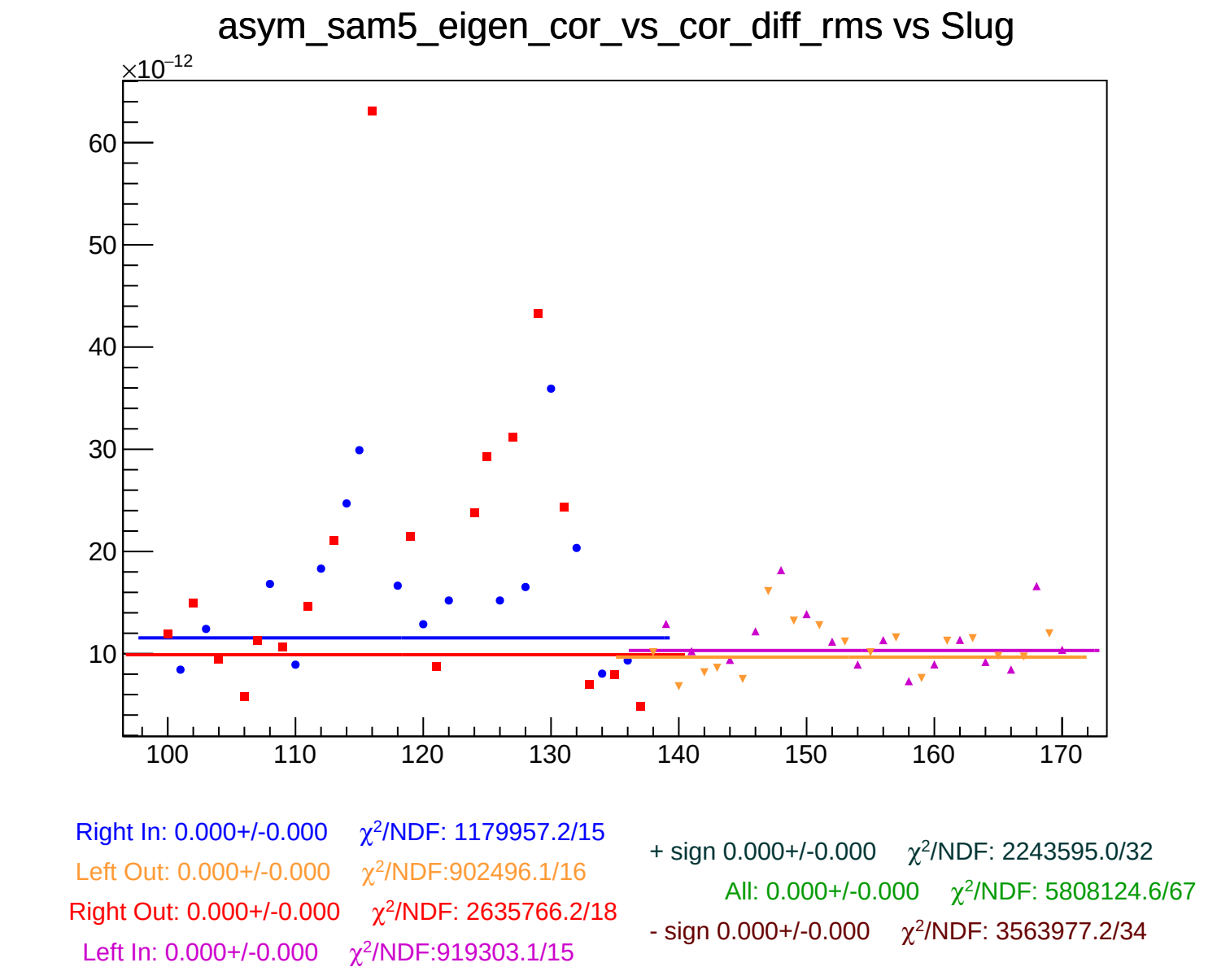
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 26.1/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:10.2/15

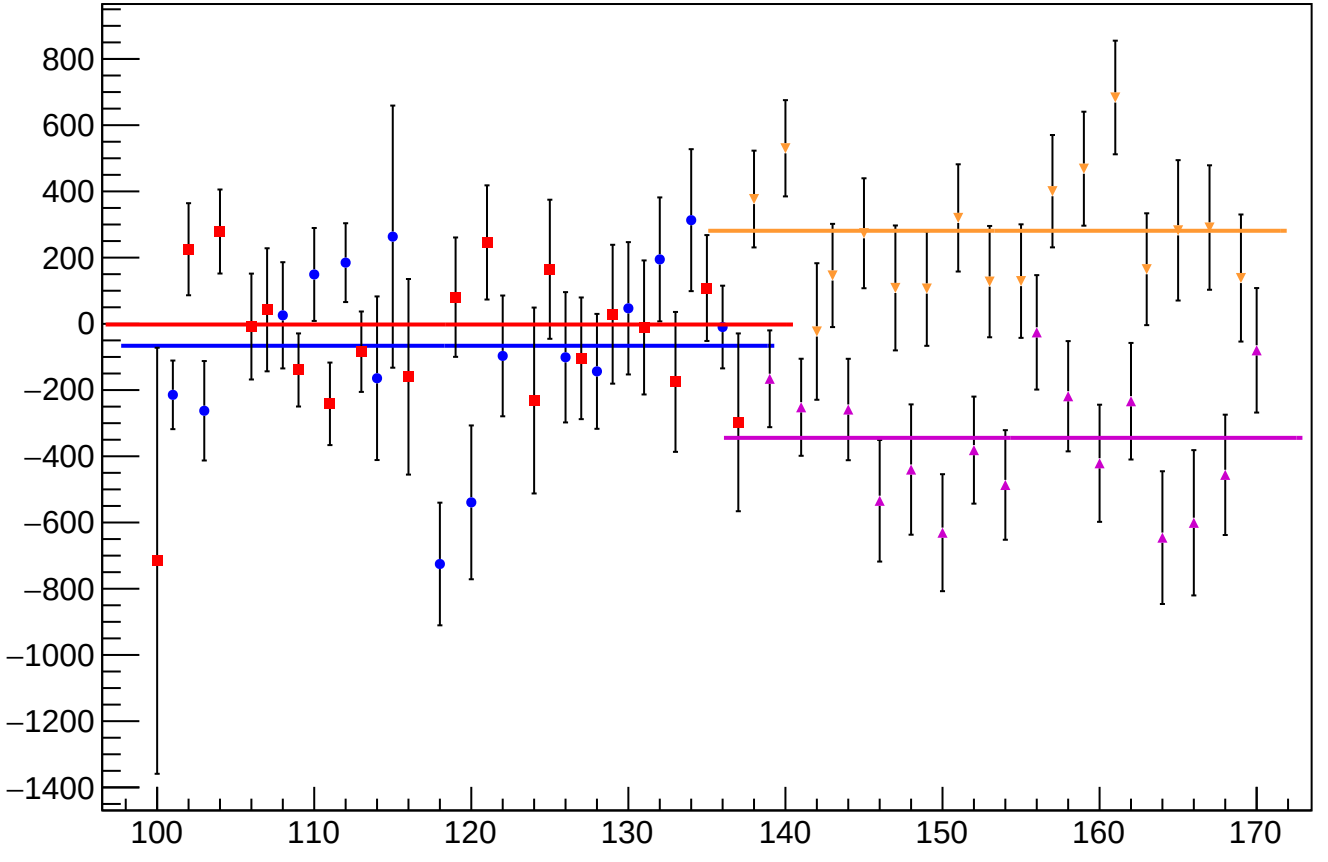
+ sign 0.000+/-0.000 $\chi^2$/NDF: 33.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 69.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 36.4/34


asym_sam5_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1179957.2/15
Left Out: 0.000+/-0.000 χ²/NDF:902496.1/16
Right Out: 0.000+/-0.000 χ²/NDF: 2635766.2/18
Left In: 0.000+/-0.000 χ²/NDF:919303.1/15
+ sign 0.000+/-0.000 χ²/NDF: 2243595.0/32
All: 0.000+/-0.000 χ²/NDF: 5808124.6/67
- sign 0.000+/-0.000 χ²/NDF: 3563977.2/34

# reg_asym_sam6_mean vs Slug




Right In: -66.230+/-40.937 $\chi^2$/NDF: 34.4/15

Left Out: 281.085+/-41.544 $\chi^2$/NDF:18.0/16

Right Out: -2.017+/-38.866 $\chi^2$/NDF: 21.1/18

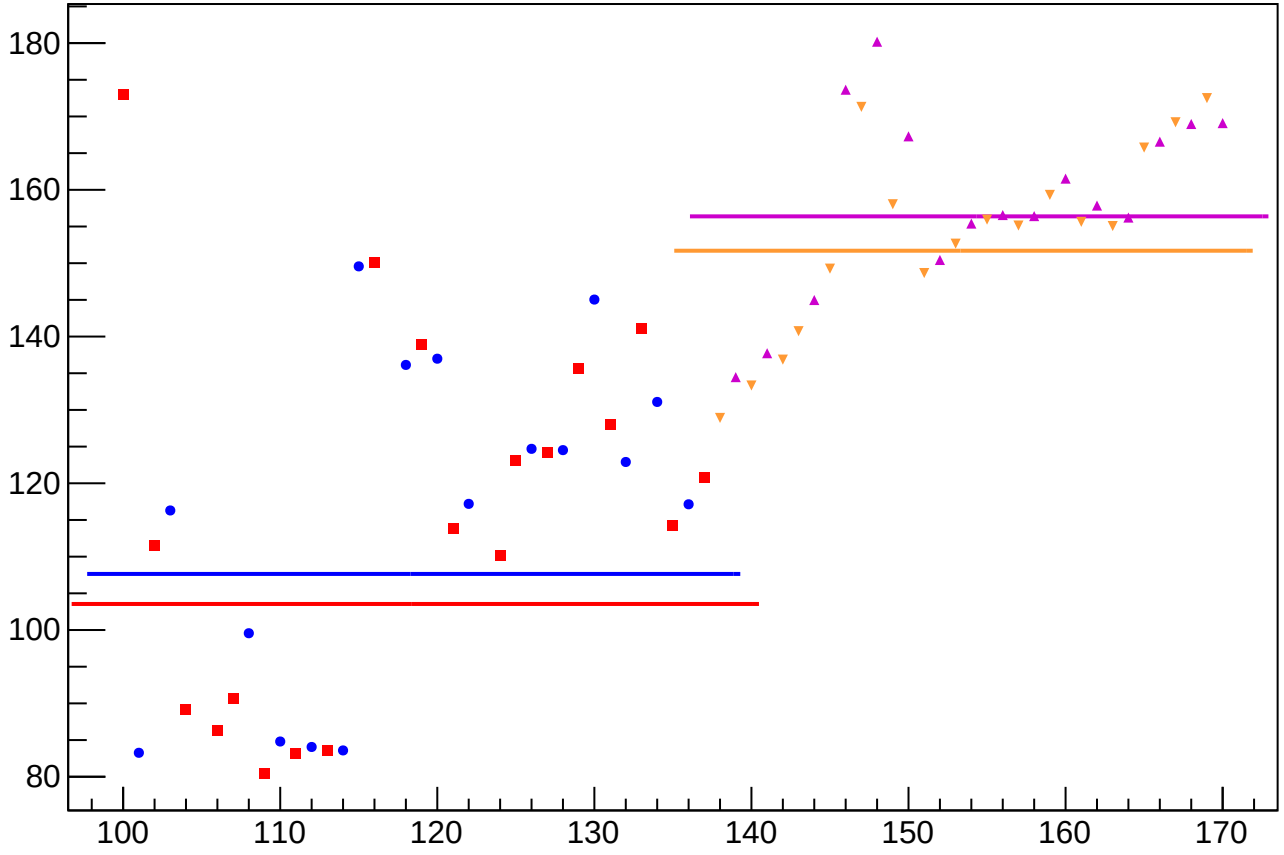
Left In: -344.340+/-43.181 $\chi^2$/NDF:17.5/15

+ sign 104.872+/-29.159 $\chi^2$/NDF: 87.9/32

All: -26.390+/-20.522 $\chi^2$/NDF: 201.4/67

- sign -155.224+/-28.888 $\chi^2$/NDF: 73.3/34

# reg_asym_sam6_rms vs Slug




Right In: 107.644+/-0.029 $\chi^2$/NDF: 532821.7/15

Left Out: 151.700+/-0.029 $\chi^2$/NDF:183792.2/16

Right Out: 103.550+/-0.027 $\chi^2$/NDF: 617345.0/18

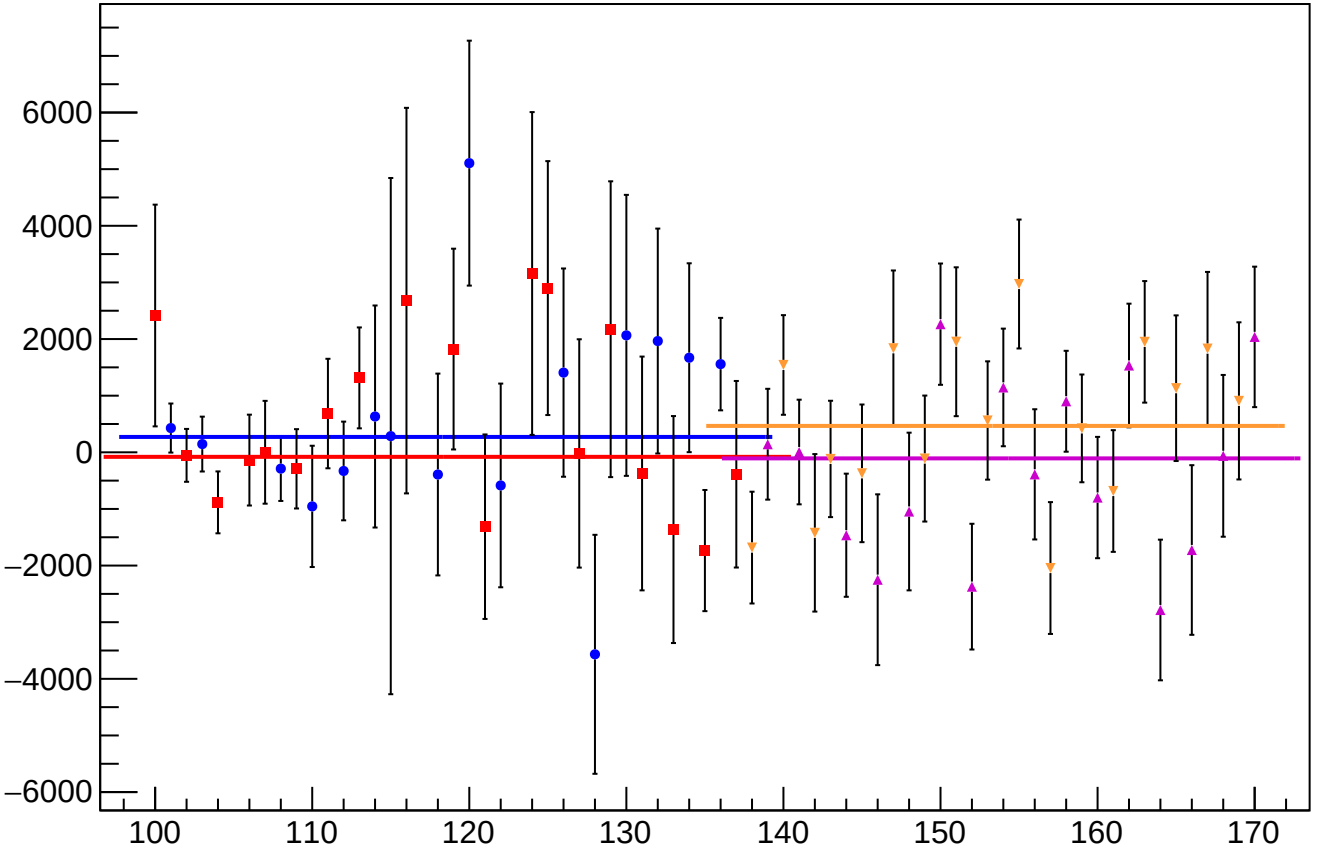
Left In: 156.384+/-0.031 $\chi^2$/NDF:170680.2/15

+ sign 129.348+/-0.021 $\chi^2$/NDF: 1857759.5/32

All: 128.262+/-0.015 $\chi^2$/NDF: 4305349.5/67

- sign 127.196+/-0.020 $\chi^2$/NDF: 2442091.1/34

# asym_sam6_reg_correction_mean vs Slug




Right In: 271.505+/-230.663 $\chi^2$/NDF: 16.5/15

Left Out: 466.154+/-274.086 $\chi^2$/NDF:25.4/16

Right Out: -80.094+/-232.154 $\chi^2$/NDF: 16.0/18

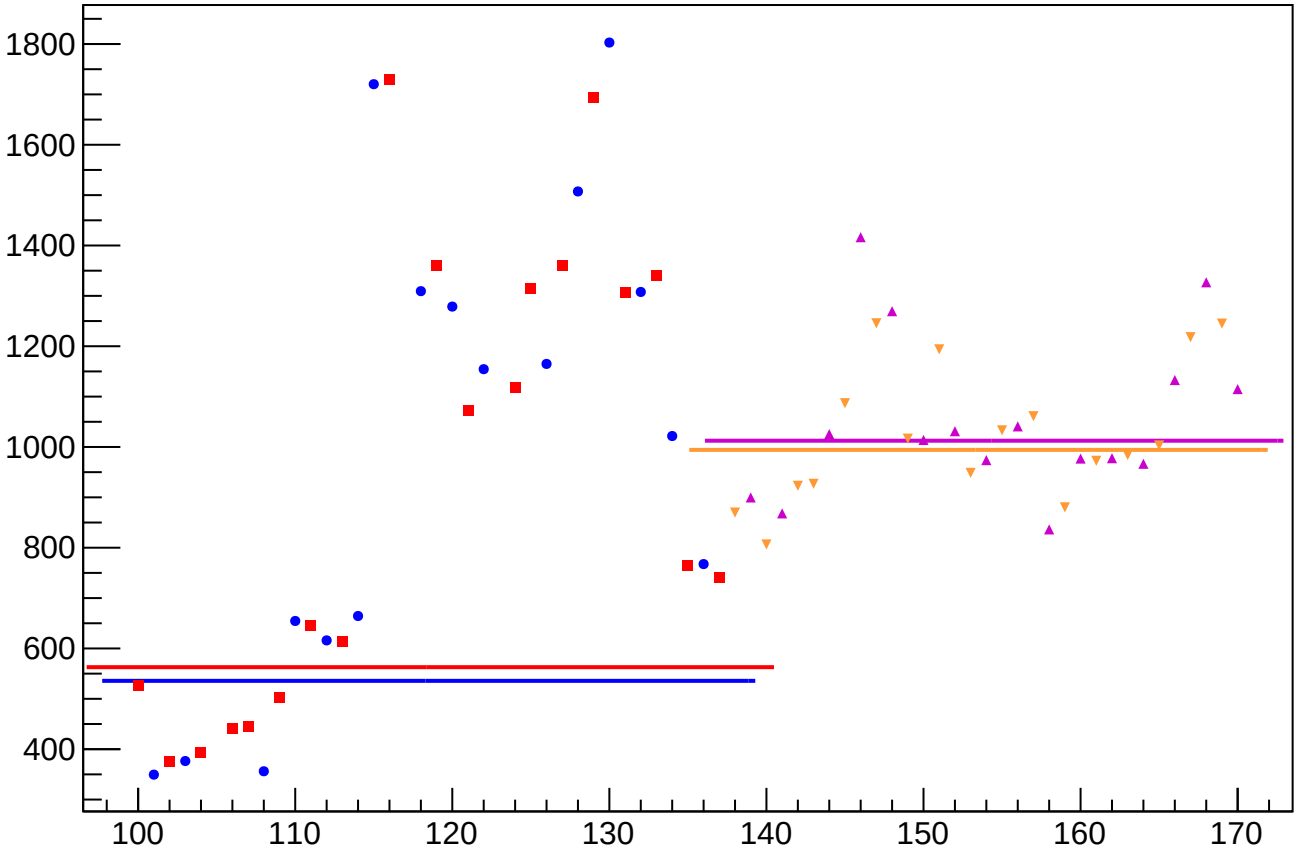
Left In: -107.240+/-281.841 $\chi^2$/NDF:27.4/15

+ sign 352.207+/-176.483 $\chi^2$/NDF: 42.1/32

All: 133.945+/-125.739 $\chi^2$/NDF: 88.7/67

- sign -91.068+/-179.191 $\chi^2$/NDF: 43.5/34

# asym_sam6_reg_correction_rms vs Slug




Right In: 535.683+/-0.163 $\chi^2$/NDF: 3632390.5/15

Left Out: 994.235+/-0.194 $\chi^2$/NDF:424690.9/16

Right Out: 562.845+/-0.164 $\chi^2$/NDF: 3111031.5/18

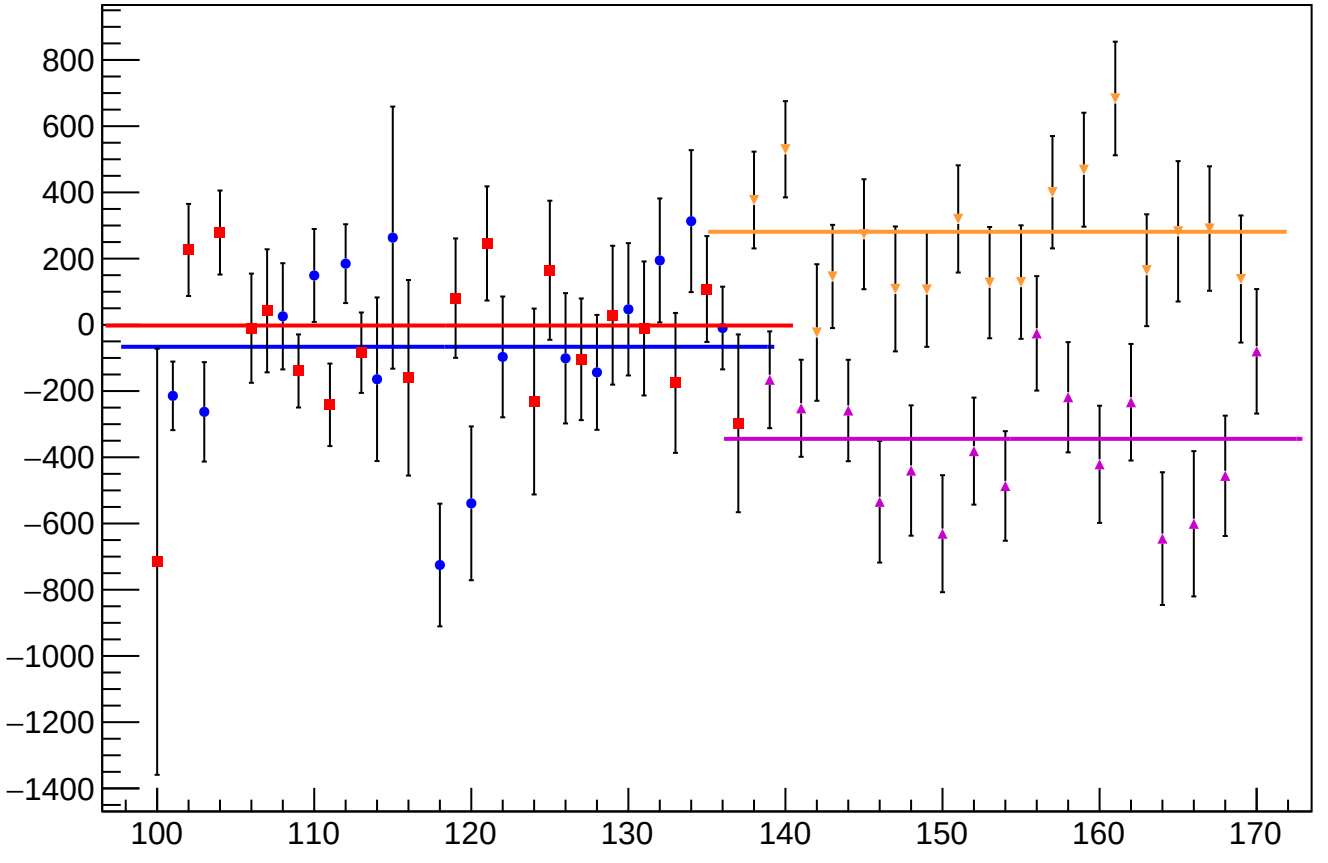
Left In: 1012.442+/-0.199 $\chi^2$/NDF:500480.3/15

+ sign 725.800+/-0.125 $\chi^2$/NDF: 7334143.8/32

All: 735.049+/-0.089 $\chi^2$/NDF: 13988948.2/67

- sign 744.584+/-0.127 $\chi^2$/NDF: 6643648.1/34

# cor_asym_sam6_mean vs Slug




Right In: -66.256+/-40.937 $\chi^2$/NDF: 34.4/15

Left Out: 281.083+/-41.544 $\chi^2$/NDF:18.0/16

Right Out: -2.062+/-38.937 $\chi^2$/NDF: 21.1/18

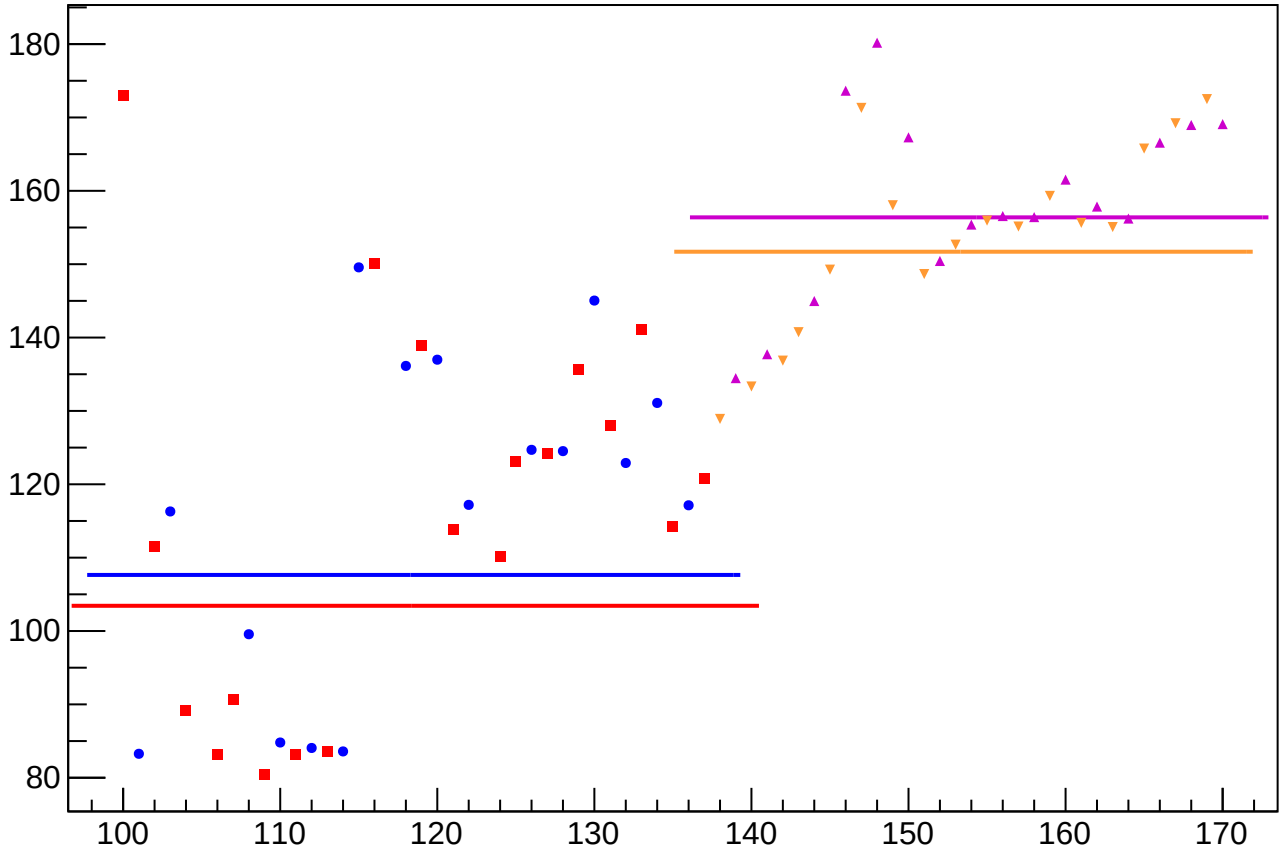
Left In: -344.344+/-43.181 $\chi^2$/NDF:17.5/15

+ sign 104.858+/-29.159 $\chi^2$/NDF: 87.9/32

All: -26.436+/-20.532 $\chi^2$/NDF: 201.4/67

- sign -155.557+/-28.917 $\chi^2$/NDF: 73.2/34

# cor_asym_sam6_rms vs Slug




Right In: 107.644+/-0.029 $\chi^2$/NDF: 532822.8/15

Left Out: 151.700+/-0.029 $\chi^2$/NDF:183792.2/16

Right Out: 103.438+/-0.028 $\chi^2$/NDF: 624750.2/18

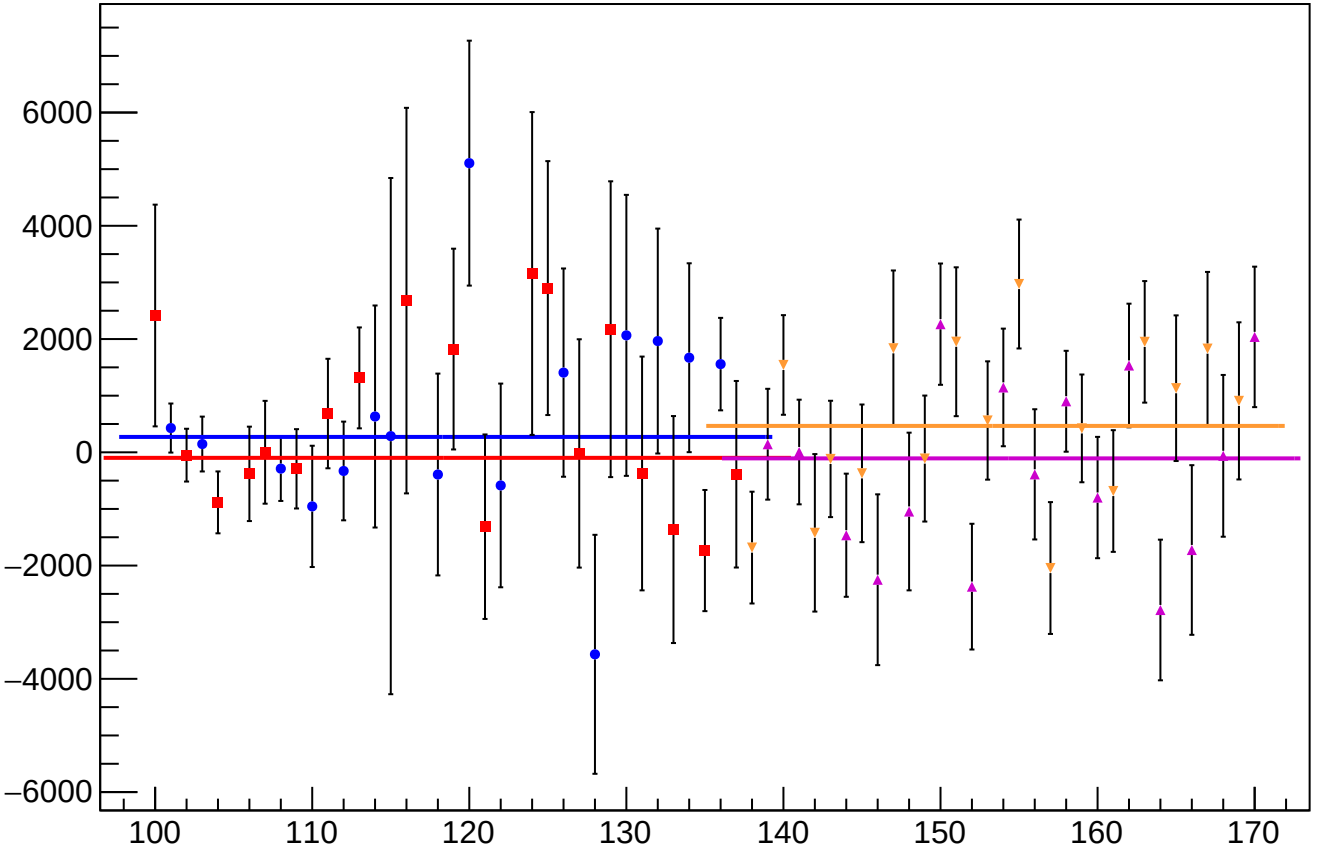
Left In: 156.384+/-0.031 $\chi^2$/NDF:170680.3/15

+ sign 129.348+/-0.021 $\chi^2$/NDF: 1857757.5/32

All: 128.255+/-0.015 $\chi^2$/NDF: 4317164.7/67

- sign 127.181+/-0.020 $\chi^2$/NDF: 2453838.3/34

# asym_sam6_cor_correction_mean vs Slug




Right In: 271.645+/-230.655 $\chi^2$/NDF: 16.5/15

Left Out: 466.158+/-274.086 $\chi^2$/NDF:25.4/16

Right Out: -97.847+/-232.781 $\chi^2$/NDF: 16.1/18

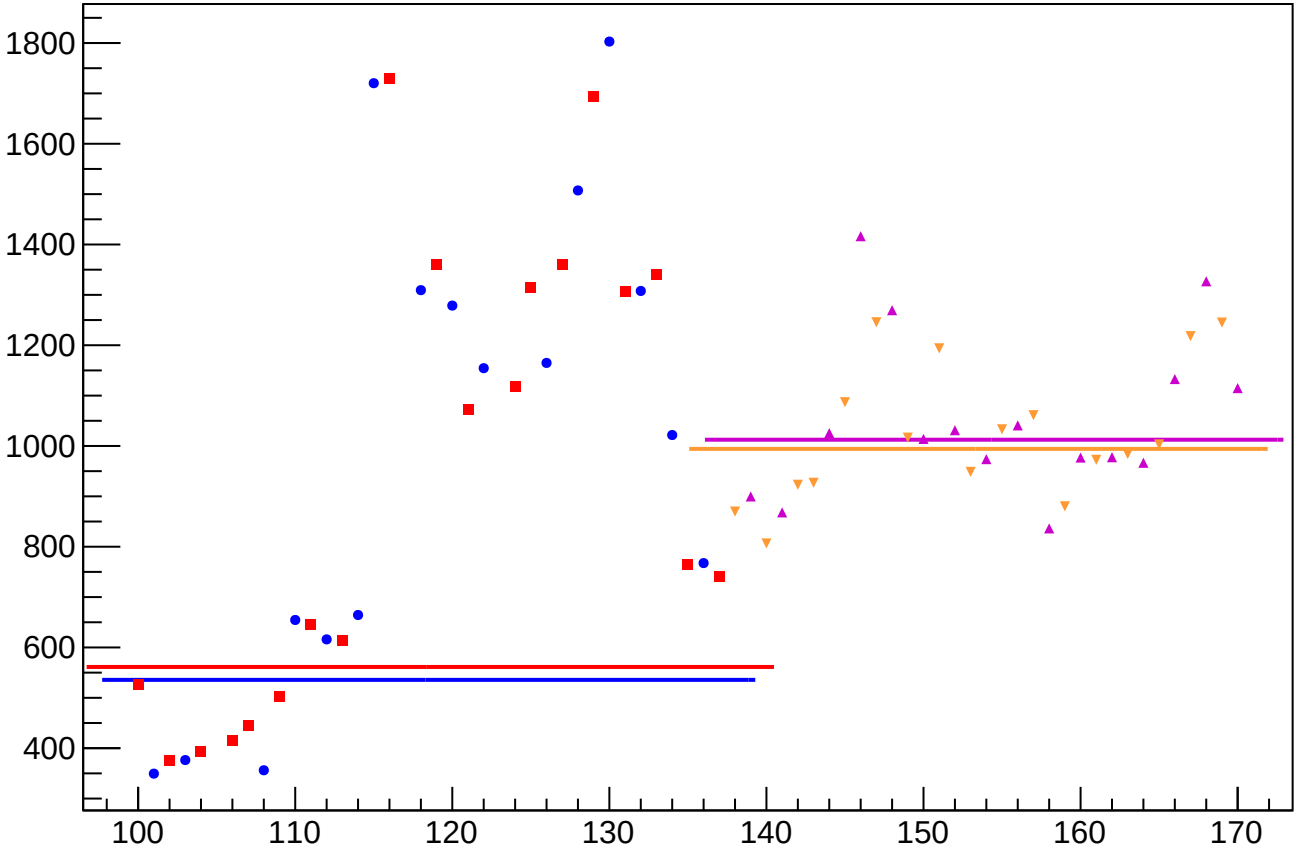
Left In: -107.240+/-281.841 $\chi^2$/NDF:27.4/15

+ sign 352.288+/-176.480 $\chi^2$/NDF: 42.1/32

All: 129.141+/-125.837 $\chi^2$/NDF: 89.0/67

- sign -101.656+/-179.479 $\chi^2$/NDF: 43.6/34

# asym_sam6_cor_correction_rms vs Slug




Right In: 535.661+/-0.163 $\chi^2$/NDF: 3632591.0/15

Left Out: 994.236+/-0.194 $\chi^2$/NDF:424690.5/16

Right Out: 561.270+/-0.165 $\chi^2$/NDF: 3130760.7/18

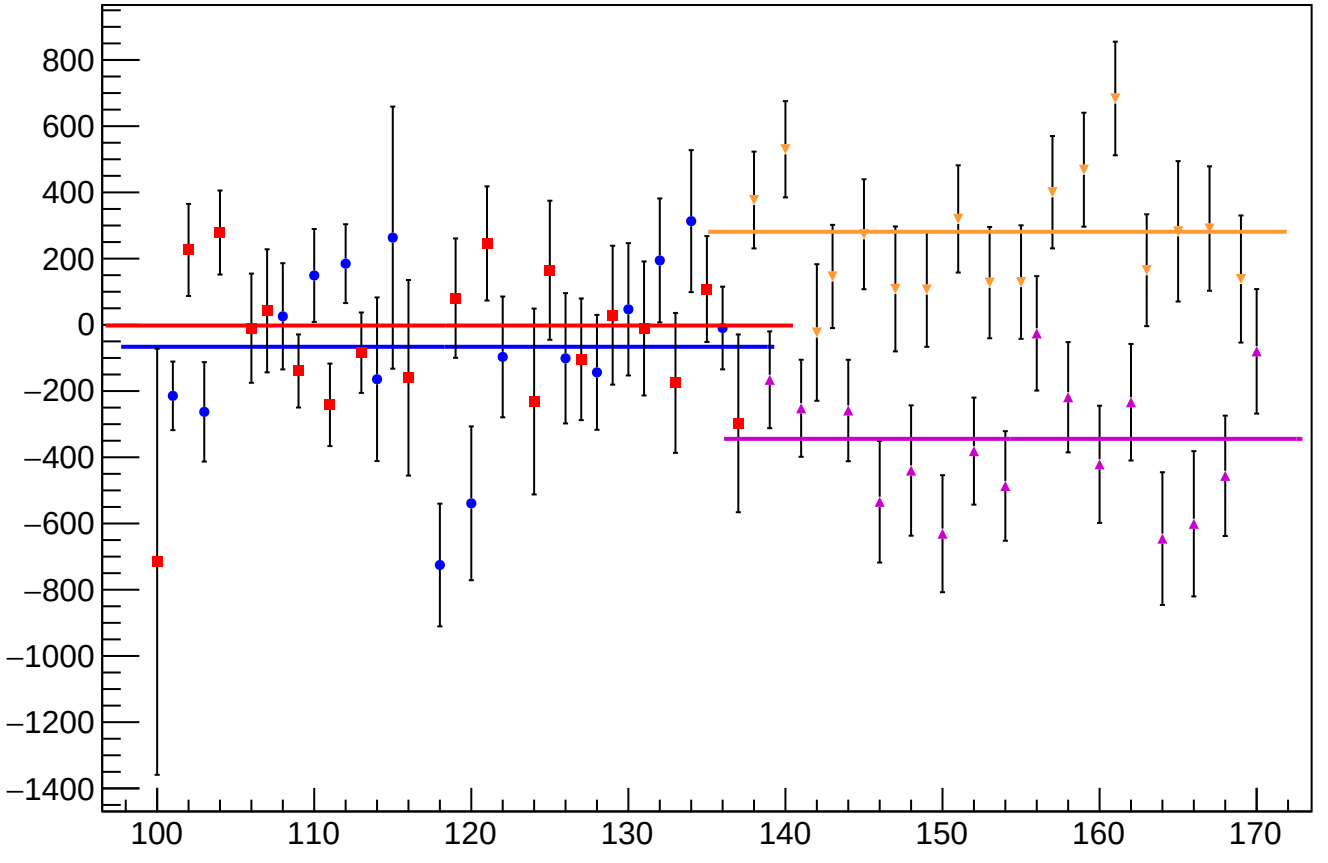
Left In: 1012.442+/-0.199 $\chi^2$/NDF:500479.6/15

+ sign 725.780+/-0.125 $\chi^2$/NDF: 7334741.4/32

All: 734.851+/-0.089 $\chi^2$/NDF: 14023496.1/67

- sign 744.232+/-0.127 $\chi^2$/NDF: 6678007.6/34

# eigen_cor_asym_sam6_mean vs Slug




Right In: -66.256+/-40.937 $\chi^2$/NDF: 34.4/15

Left Out: 281.083+/-41.544 $\chi^2$/NDF:18.0/16

Right Out: -2.062+/-38.937 $\chi^2$/NDF: 21.1/18

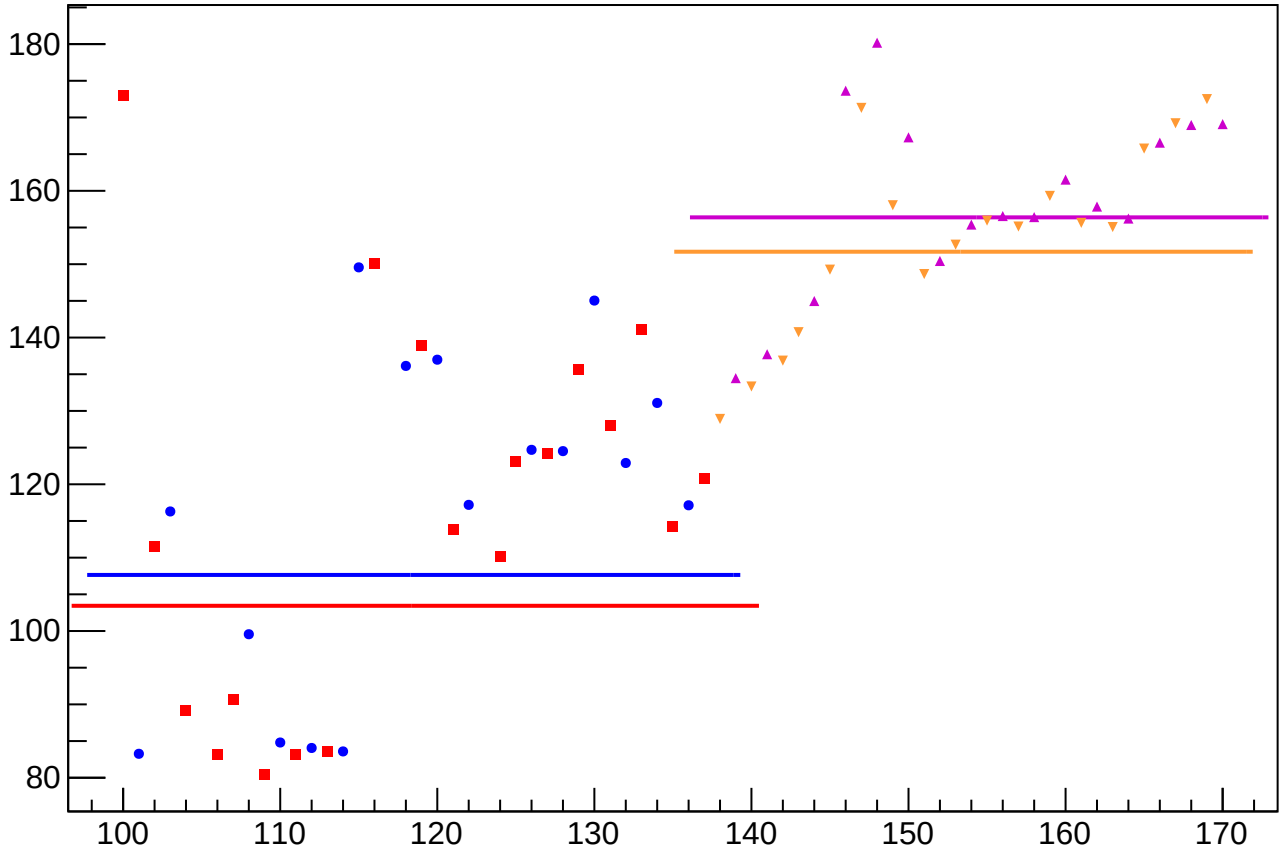
Left In: -344.344+/-43.181 $\chi^2$/NDF:17.5/15

+ sign 104.858+/-29.159 $\chi^2$/NDF: 87.9/32

All: -26.436+/-20.532 $\chi^2$/NDF: 201.4/67

- sign -155.557+/-28.917 $\chi^2$/NDF: 73.2/34

# eigen_cor_asym_sam6_rms vs Slug




Right In: 107.644+/-0.029 $\chi^2$/NDF: 532822.8/15

Left Out: 151.700+/-0.029 $\chi^2$/NDF:183792.2/16

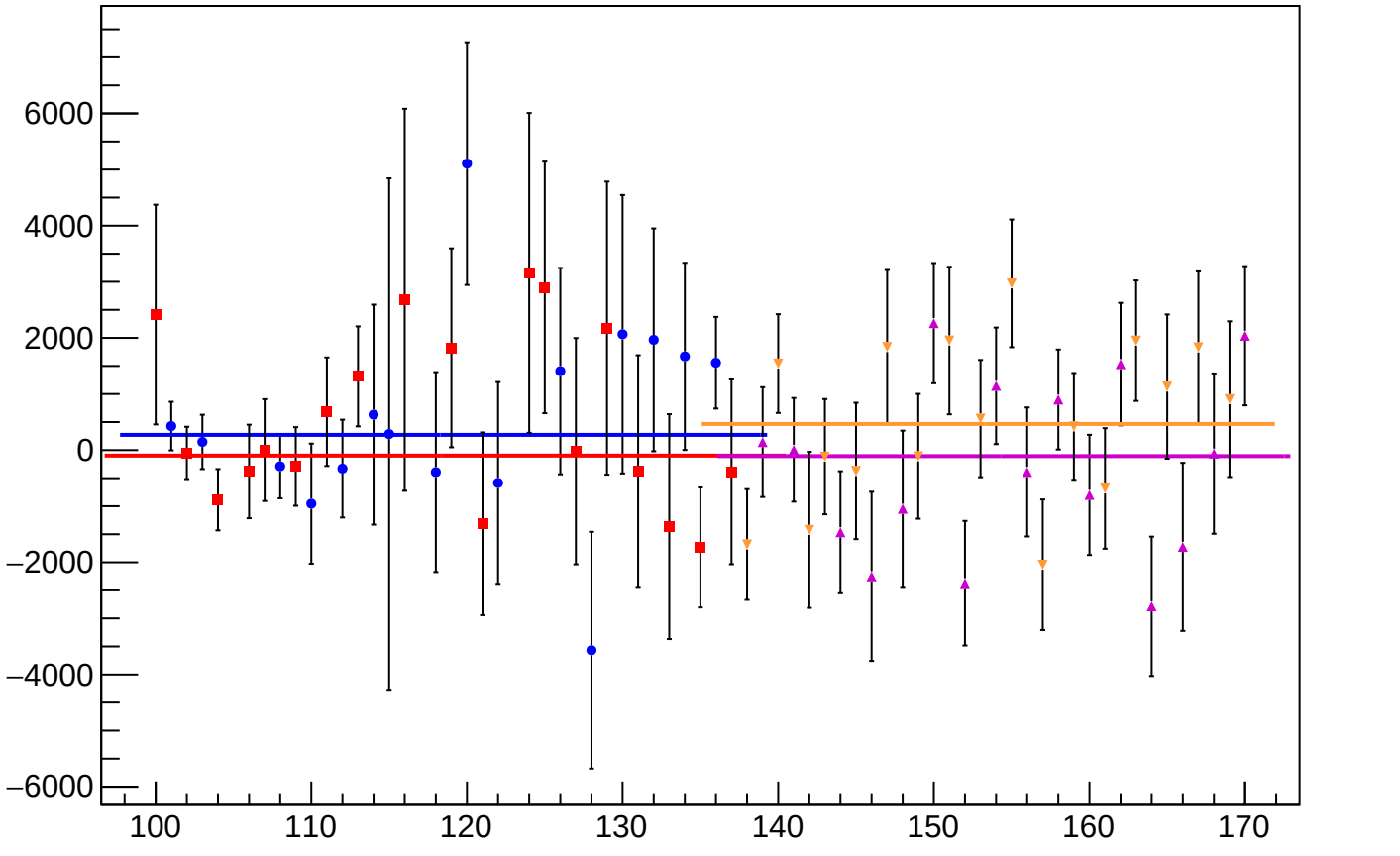
Right Out: 103.438+/-0.028 $\chi^2$/NDF: 624750.2/18

Left In: 156.384+/-0.031 $\chi^2$/NDF:170680.3/15

+ sign 129.348+/-0.021 $\chi^2$/NDF: 1857757.5/32

All: 128.255+/-0.015 $\chi^2$/NDF: 4317164.7/67

- sign 127.181+/-0.020 $\chi^2$/NDF: 2453838.3/34




Right In: 271.645+/-230.655 $\chi^2$/NDF: 16.5/15

Left Out: 466.158+/-274.086 $\chi^2$/NDF:25.4/16

Right Out: -97.847+/-232.781 $\chi^2$/NDF: 16.1/18

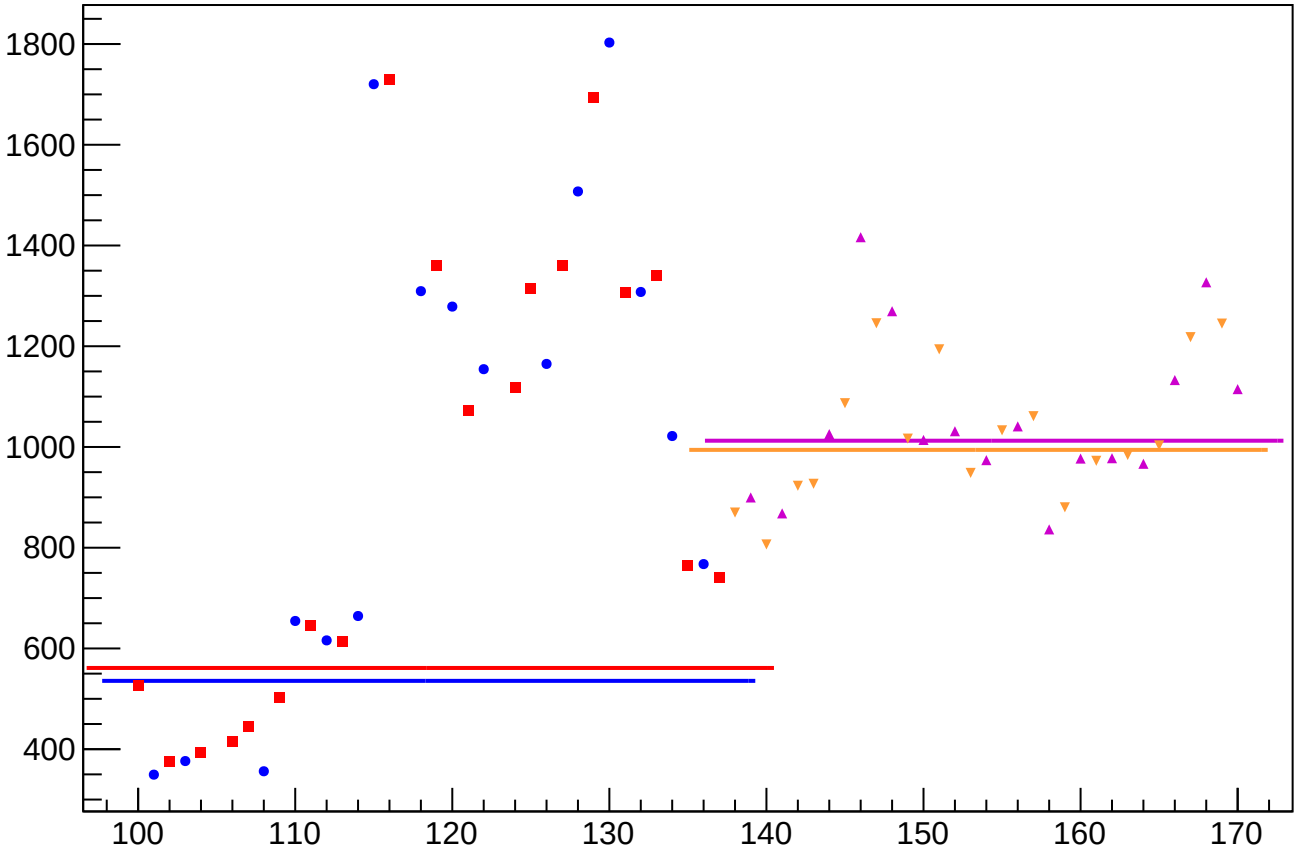
Left In: -107.240+/-281.841 $\chi^2$/NDF:27.4/15

+ sign 352.288+/-176.480 $\chi^2$/NDF: 42.1/32

All: 129.141+/-125.837 $\chi^2$/NDF: 89.0/67

- sign -101.656+/-179.479 $\chi^2$/NDF: 43.6/34

# asym_sam6_eigen_cor_correction_rms vs Slug




Right In: 535.661+/-0.163 $\chi^2$/NDF: 3632591.0/15

Left Out: 994.236+/-0.194 $\chi^2$/NDF:424690.5/16

Right Out: 561.270+/-0.165 $\chi^2$/NDF: 3130760.7/18

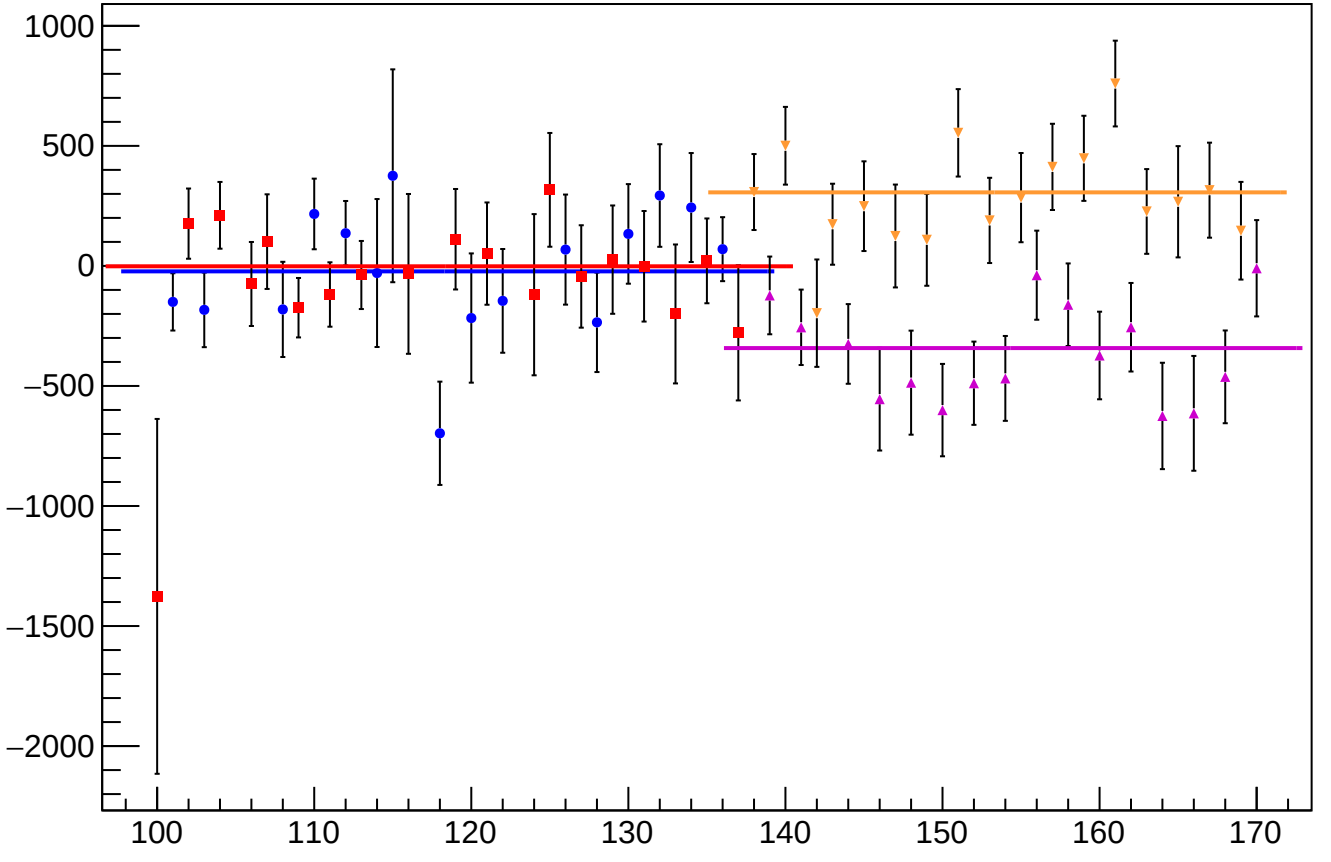
Left In: 1012.442+/-0.199 $\chi^2$/NDF:500479.6/15

+ sign 725.780+/-0.125 $\chi^2$/NDF: 7334741.4/32

All: 734.851+/-0.089 $\chi^2$/NDF: 14023496.1/67

- sign 744.232+/-0.127 $\chi^2$/NDF: 6678007.6/34

# dit_asym_sam6_mean vs Slug




Right In: -22.678+/-45.908 $\chi^2$/NDF: 24.2/15

Left Out: 306.356+/-44.885 $\chi^2$/NDF:19.6/16

Right Out: -1.600+/-43.563 $\chi^2$/NDF: 14.3/18

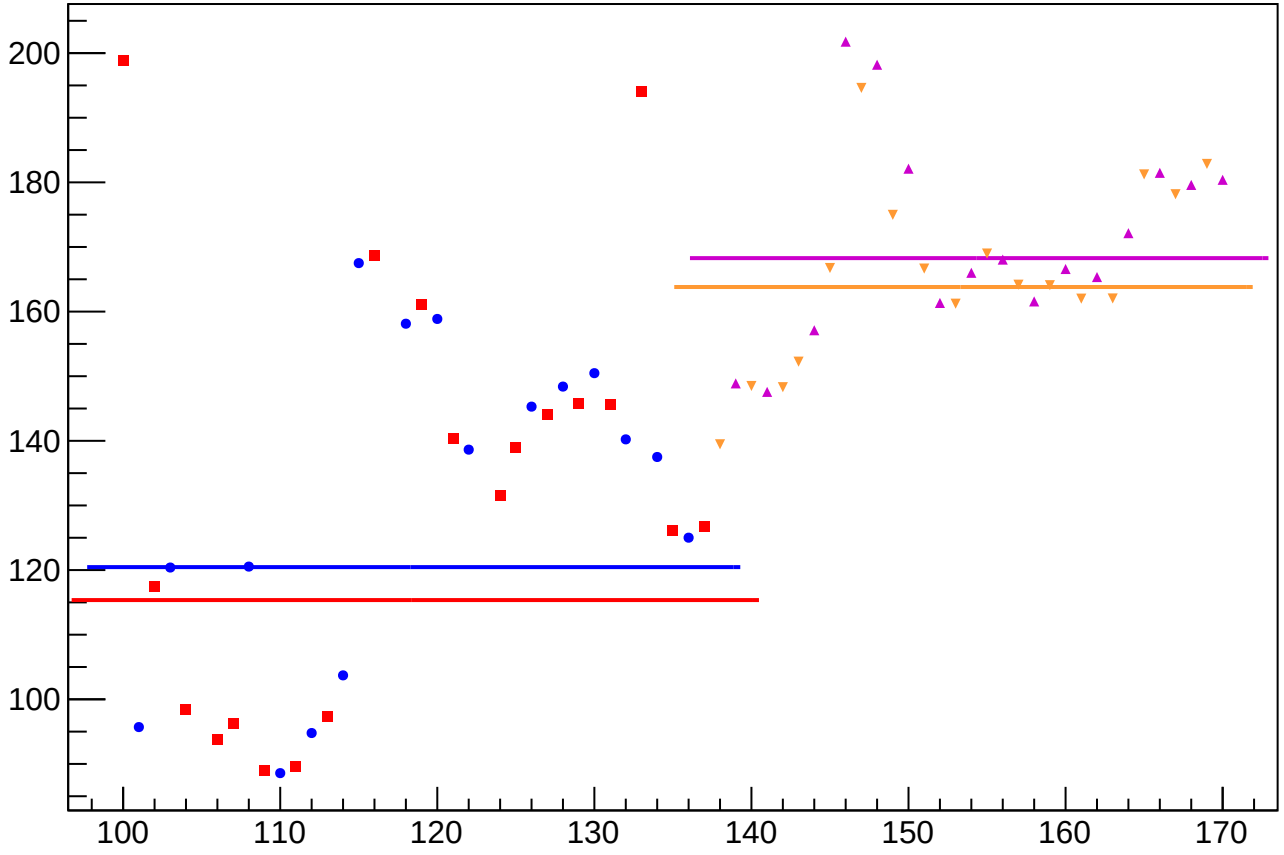
Left In: -342.246+/-46.513 $\chi^2$/NDF:16.7/15

\+ sign 145.546+/-32.094 $\chi^2$/NDF: 70.0/32

All: -9.049+/-22.588 $\chi^2$/NDF: 175.6/67

\- sign -160.779+/-31.796 $\chi^2$/NDF: 59.6/34

# dit_asym_sam6_rms vs Slug




Right In: 120.458+/-0.032 $\chi^2$/NDF: 530331.6/15

Left Out: 163.804+/-0.032 $\chi^2$/NDF:175130.0/16

Right Out: 115.357+/-0.031 $\chi^2$/NDF: 767236.0/18

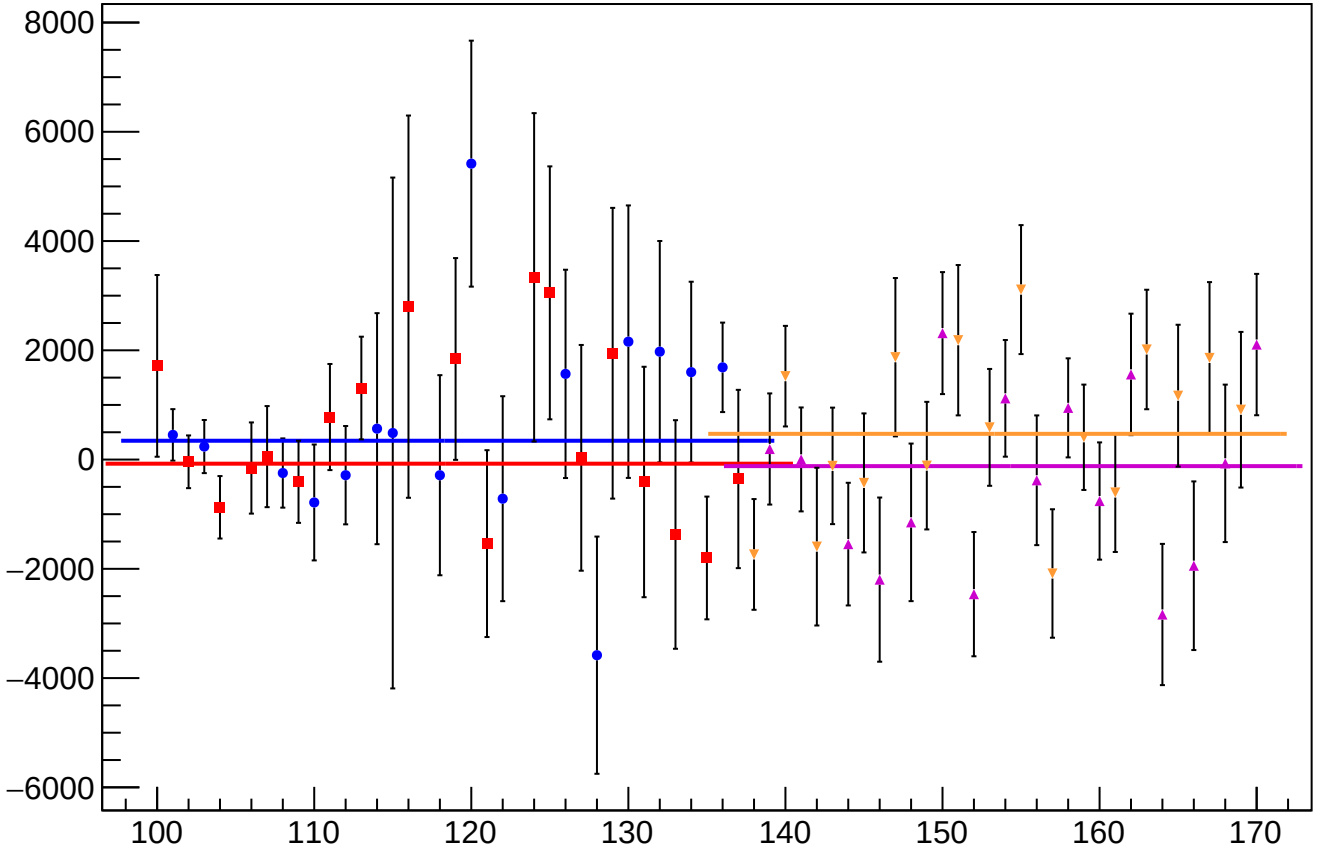
Left In: 168.275+/-0.033 $\chi^2$/NDF:198097.7/15

+ sign 142.620+/-0.023 $\chi^2$/NDF: 1617038.5/32

All: 141.340+/-0.016 $\chi^2$/NDF: 3967725.6/67

- sign 140.085+/-0.022 $\chi^2$/NDF: 2344390.4/34

# asym_sam6_dit_correction_mean vs Slug




Right In: 344.437+/-241.532 $\chi^2$/NDF: 16.2/15

Left Out: 470.874+/-282.363 $\chi^2$/NDF:25.7/16

Right Out: -75.434+/-240.479 $\chi^2$/NDF: 15.3/18

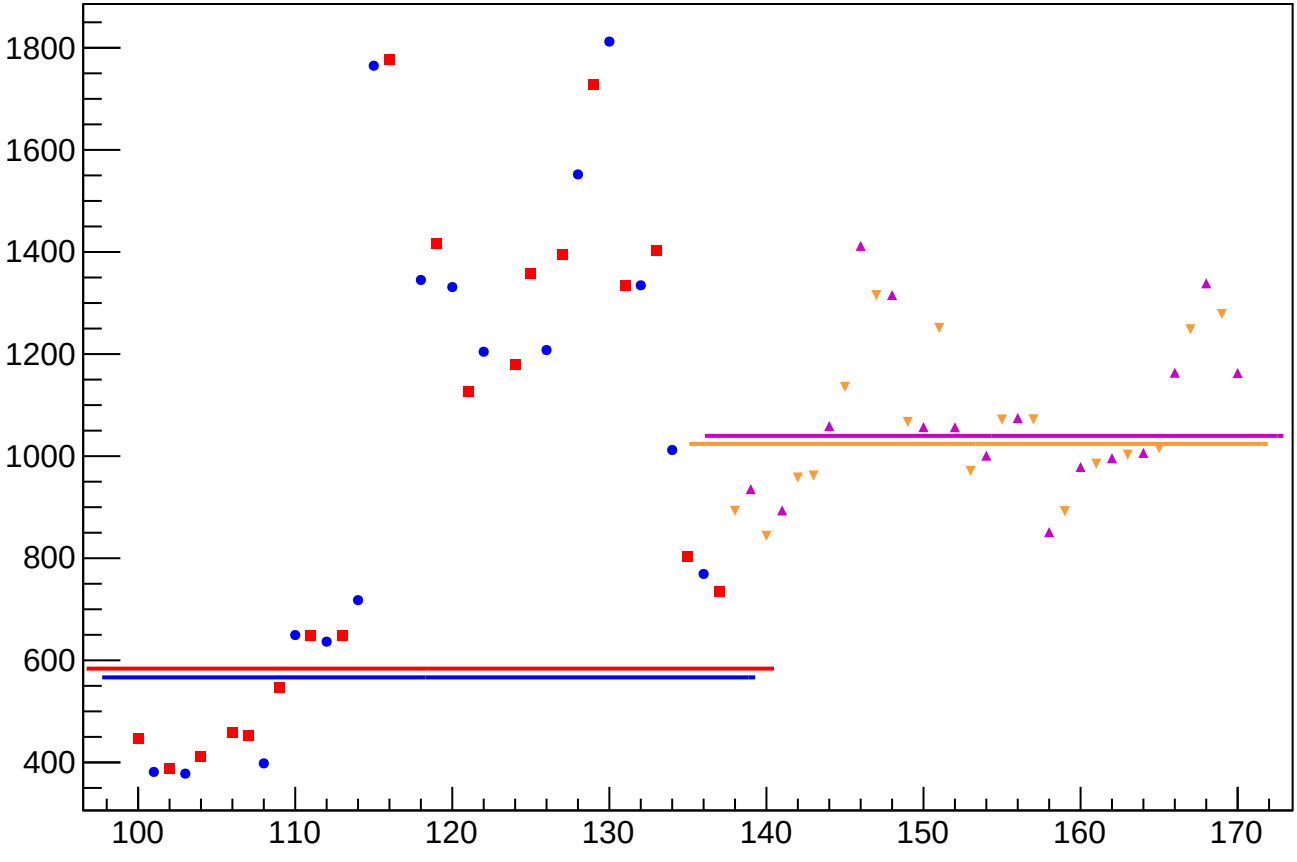
Left In: -120.153+/-289.400 $\chi^2$/NDF:27.3/15

+ sign 397.861+/-183.543 $\chi^2$/NDF: 42.1/32

All: 153.967+/-130.282 $\chi^2$/NDF: 88.3/67

- sign -93.700+/-184.957 $\chi^2$/NDF: 42.6/34

# asym_sam6_dit_correction_rms vs Slug




Right In: 566.603+/-0.171 $\chi^2$/NDF: 3432440.2/15

Left Out: 1024.046+/-0.200 $\chi^2$/NDF:442879.8/16

Right Out: 583.794+/-0.170 $\chi^2$/NDF: 3107513.6/18

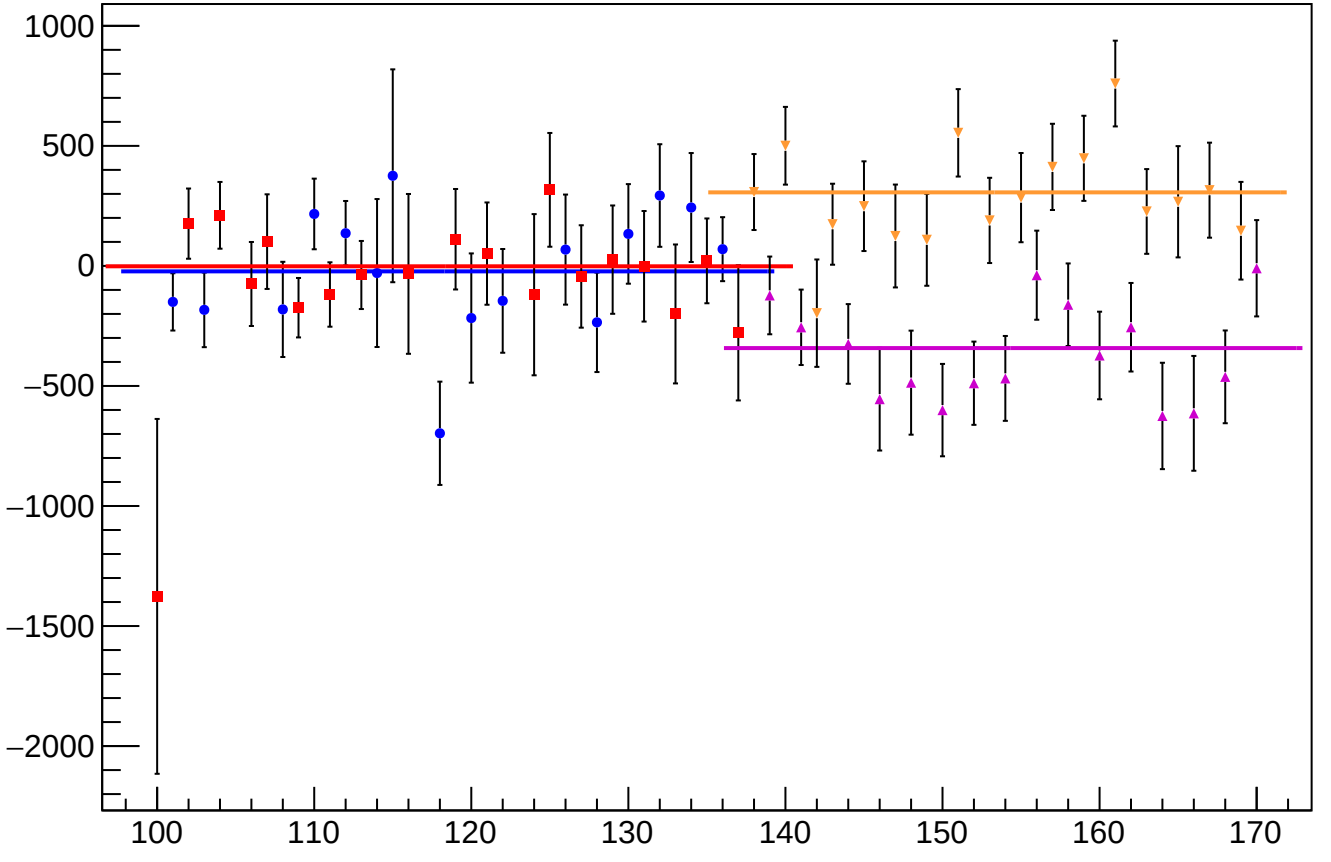
Left In: 1039.790+/-0.205 $\chi^2$/NDF:484237.5/15

+ sign 759.888+/-0.130 $\chi^2$/NDF: 6906535.6/32

All: 764.929+/-0.092 $\chi^2$/NDF: 13438592.6/67

- sign 770.049+/-0.131 $\chi^2$/NDF: 6529016.3/34

# eigen_dit_asym_sam6_mean vs Slug




Right In: -22.680+/-45.908 $\chi^2$/NDF: 24.2/15

Left Out: 306.357+/-44.885 $\chi^2$/NDF:19.6/16

Right Out: -1.601+/-43.563 $\chi^2$/NDF: 14.3/18

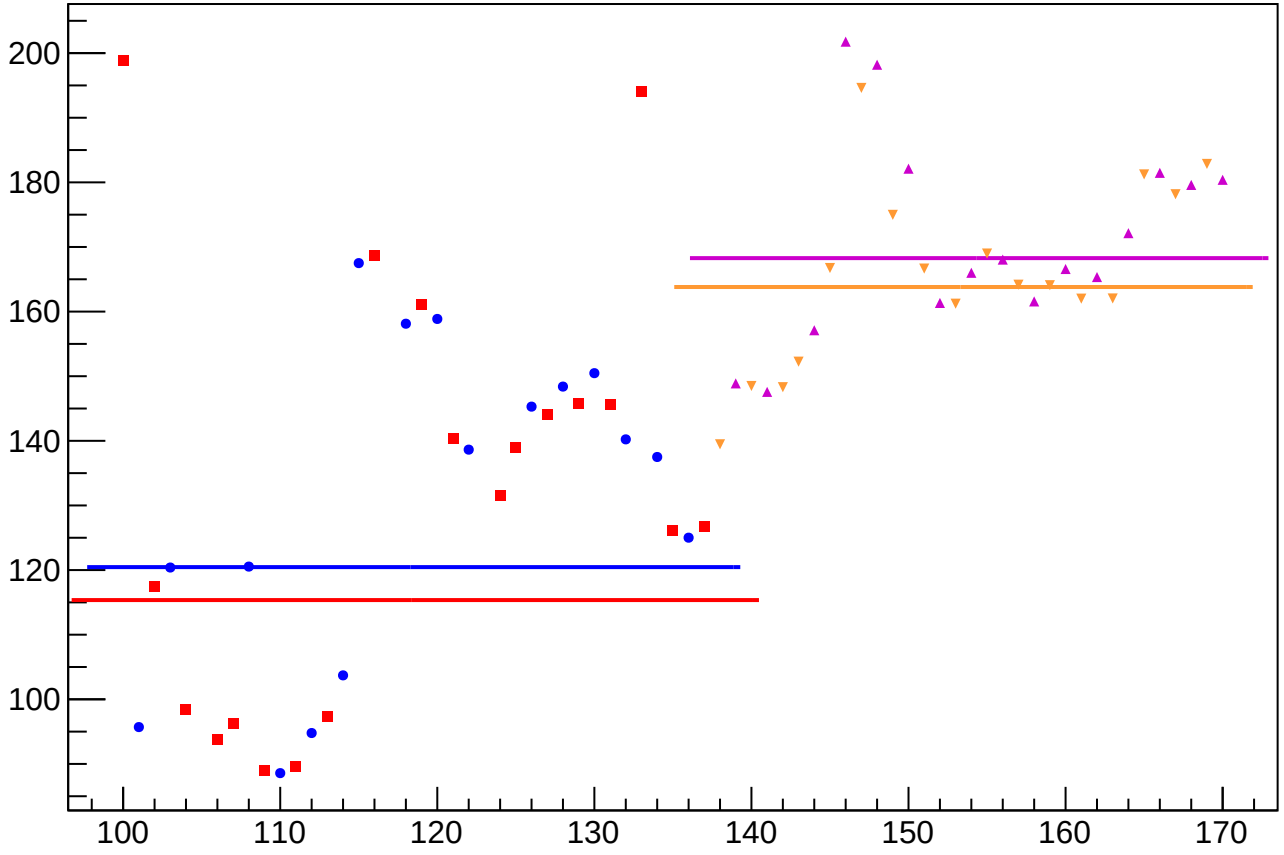
Left In: -342.247+/-46.513 $\chi^2$/NDF:16.7/15

+ sign 145.545+/-32.094 $\chi^2$/NDF: 70.0/32

All: -9.049+/-22.588 $\chi^2$/NDF: 175.6/67

- sign -160.780+/-31.795 $\chi^2$/NDF: 59.6/34

# eigen_dit_asym_sam6_rms vs Slug




Right In: 120.458+/-0.032 $\chi^2$/NDF: 530335.0/15

Left Out: 163.804+/-0.032 $\chi^2$/NDF:175128.7/16

Right Out: 115.357+/-0.031 $\chi^2$/NDF: 767234.8/18

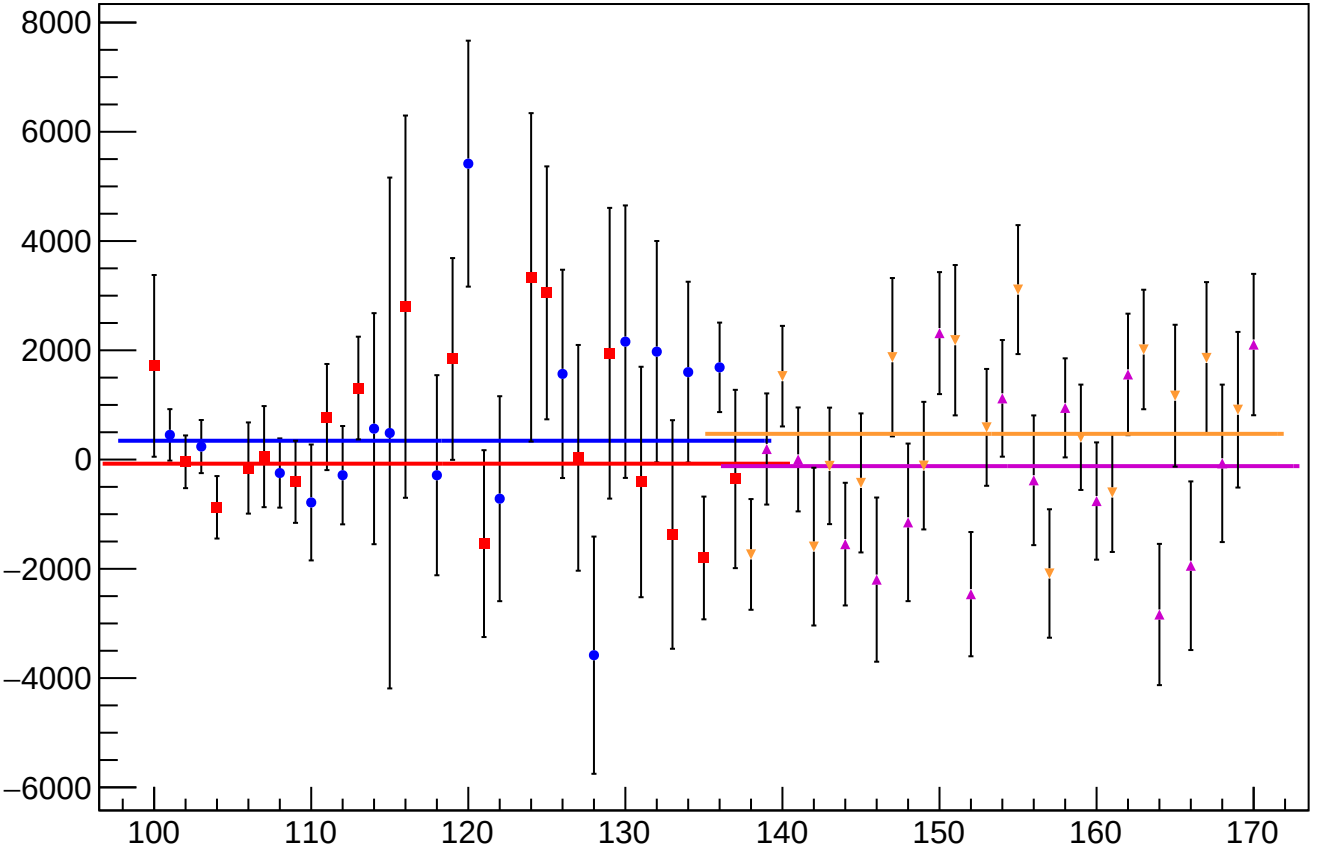
Left In: 168.275+/-0.033 $\chi^2$/NDF:198097.1/15

+ sign 142.619+/-0.023 $\chi^2$/NDF: 1617045.4/32

All: 141.340+/-0.016 $\chi^2$/NDF: 3967734.1/67

- sign 140.084+/-0.022 $\chi^2$/NDF: 2344392.1/34

# asym_sam6_eigen_dit_correction_mean vs Slug




Right In: 344.436+/-241.531 $\chi^2$/NDF: 16.2/15

Left Out: 470.875+/-282.363 $\chi^2$/NDF:25.7/16

Right Out: -75.435+/-240.479 $\chi^2$/NDF: 15.3/18

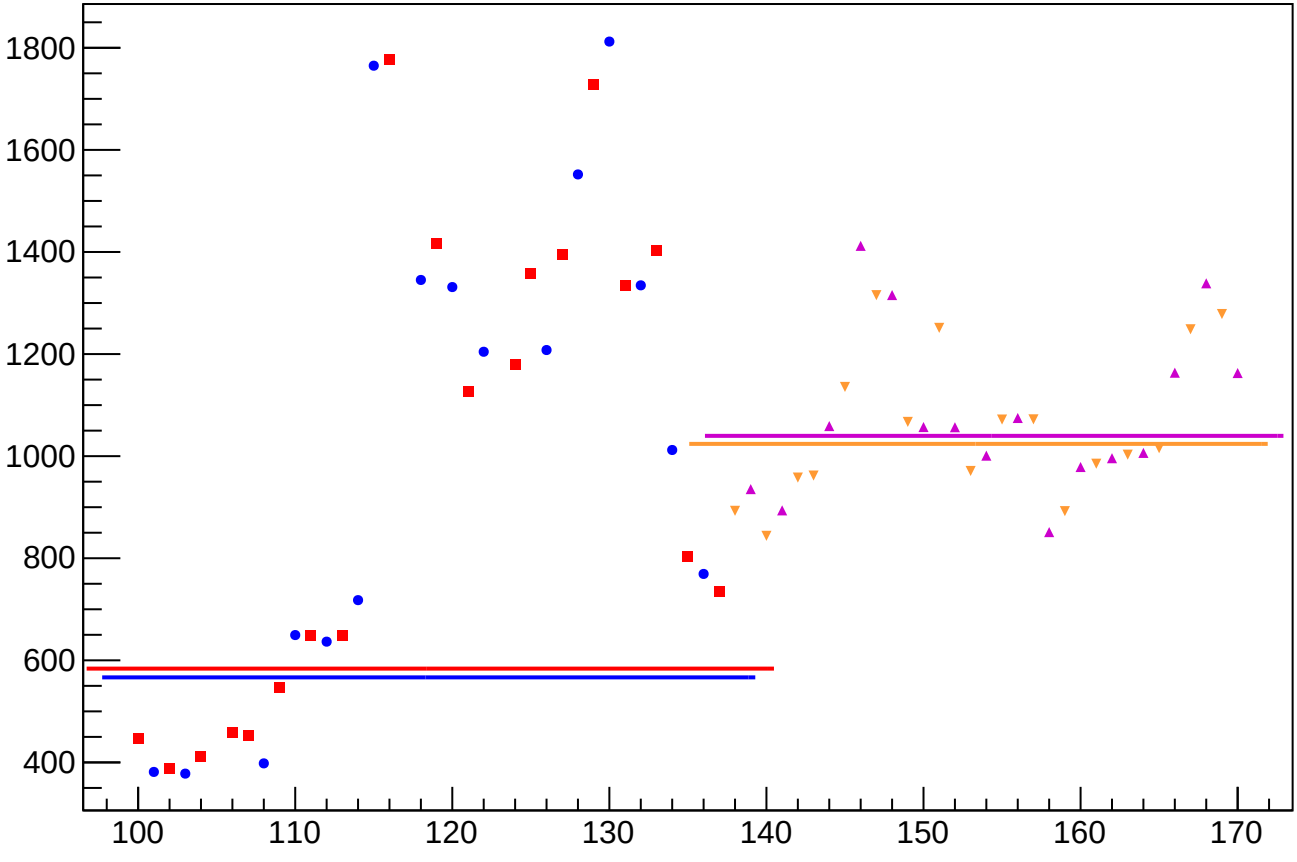
Left In: -120.153+/-289.400 $\chi^2$/NDF:27.3/15

+ sign 397.861+/-183.543 $\chi^2$/NDF: 42.1/32

All: 153.966+/-130.281 $\chi^2$/NDF: 88.3/67

- sign -93.701+/-184.957 $\chi^2$/NDF: 42.6/34

# asym_sam6_eigen_dit_correction_rms vs Slug




Right In: 566.603+/-0.171 $\chi^2$/NDF: 3432444.7/15

Left Out: 1024.046+/-0.200 $\chi^2$/NDF:442882.1/16

Right Out: 583.794+/-0.170 $\chi^2$/NDF: 3107513.8/18

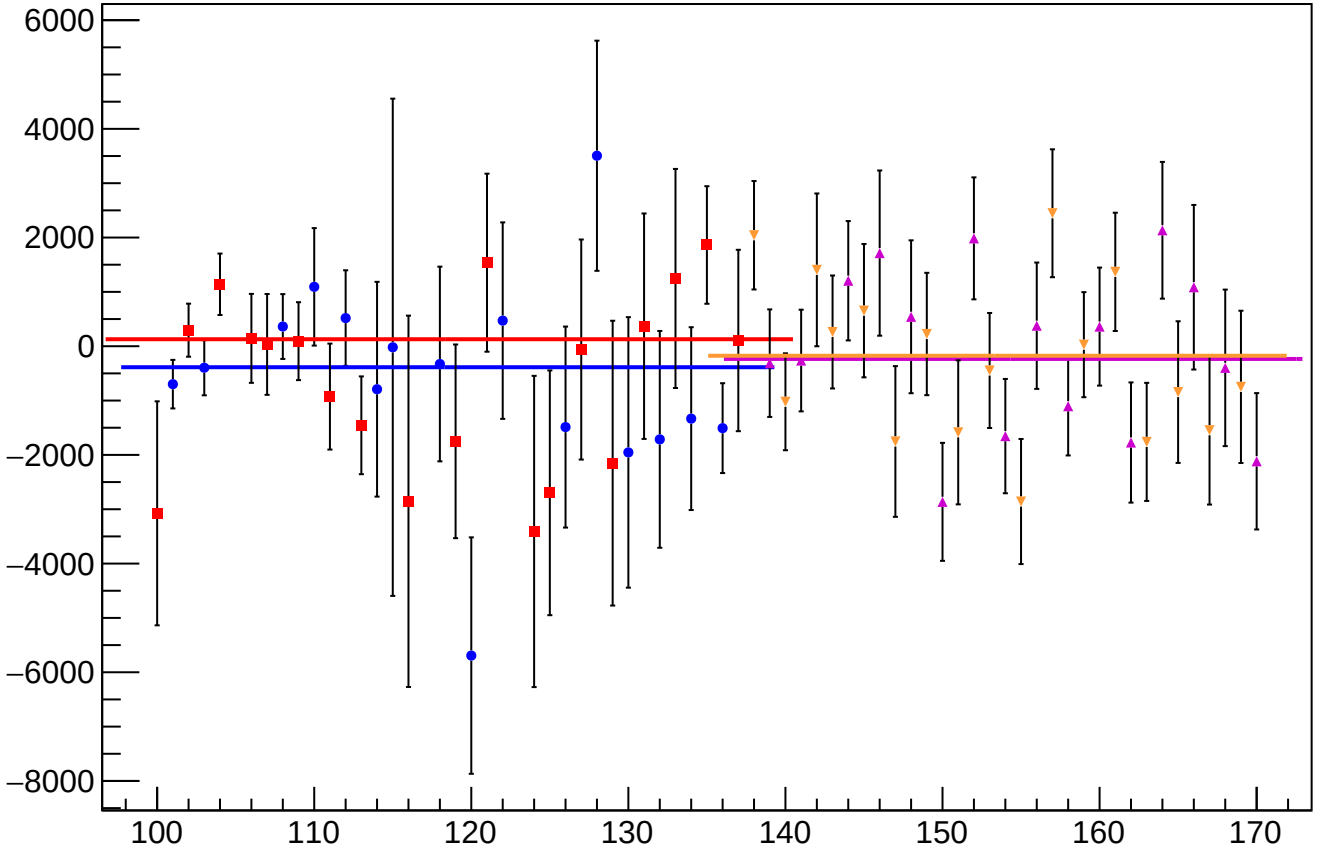
Left In: 1039.790+/-0.205 $\chi^2$/NDF:484240.5/15

+ sign 759.888+/-0.130 $\chi^2$/NDF: 6906554.2/32

All: 764.929+/-0.092 $\chi^2$/NDF: 13438620.2/67

- sign 770.048+/-0.131 $\chi^2$/NDF: 6529025.1/34

# asym_sam6_mean vs Slug




Right In: -386.522+/-237.525 $\chi^2$/NDF: 17.9/15

Left Out: -175.492+/-277.358 $\chi^2$/NDF:26.4/16

Right Out: 128.583+/-238.241 $\chi^2$/NDF: 19.4/18

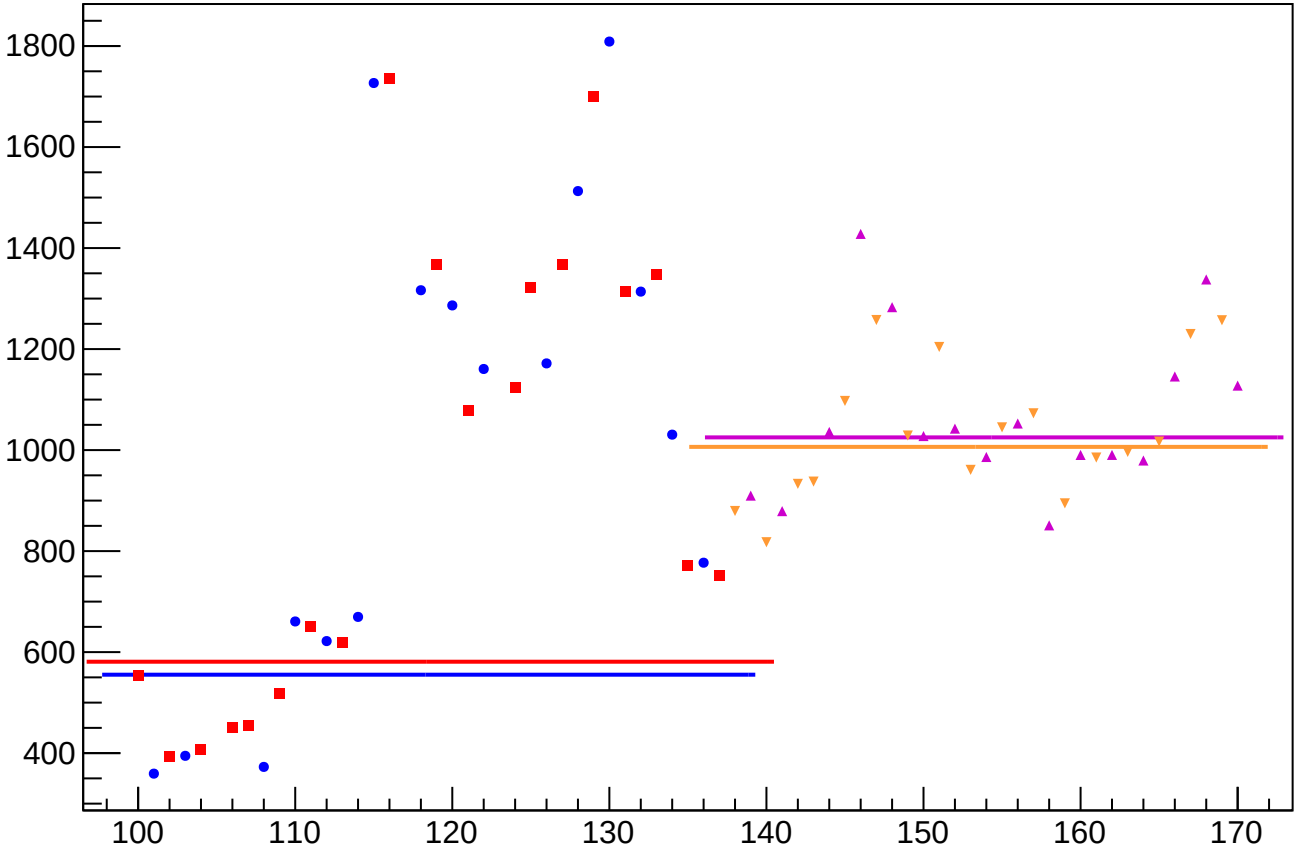
Left In: -234.187+/-285.297 $\chi^2$/NDF:25.3/15

+ sign -297.236+/-180.410 $\chi^2$/NDF: 44.6/32

All: -160.718+/-128.429 $\chi^2$/NDF: 91.4/67

- sign -20.457+/-182.866 $\chi^2$/NDF: 45.6/34

# asym_sam6_rms vs Slug




Right In: 555.292+/-0.168 $\chi^2$/NDF: 3482531.0/15

Left Out: 1006.363+/-0.196 $\chi^2$/NDF:415710.8/16

Right Out: 580.996+/-0.168 $\chi^2$/NDF: 2983560.8/18

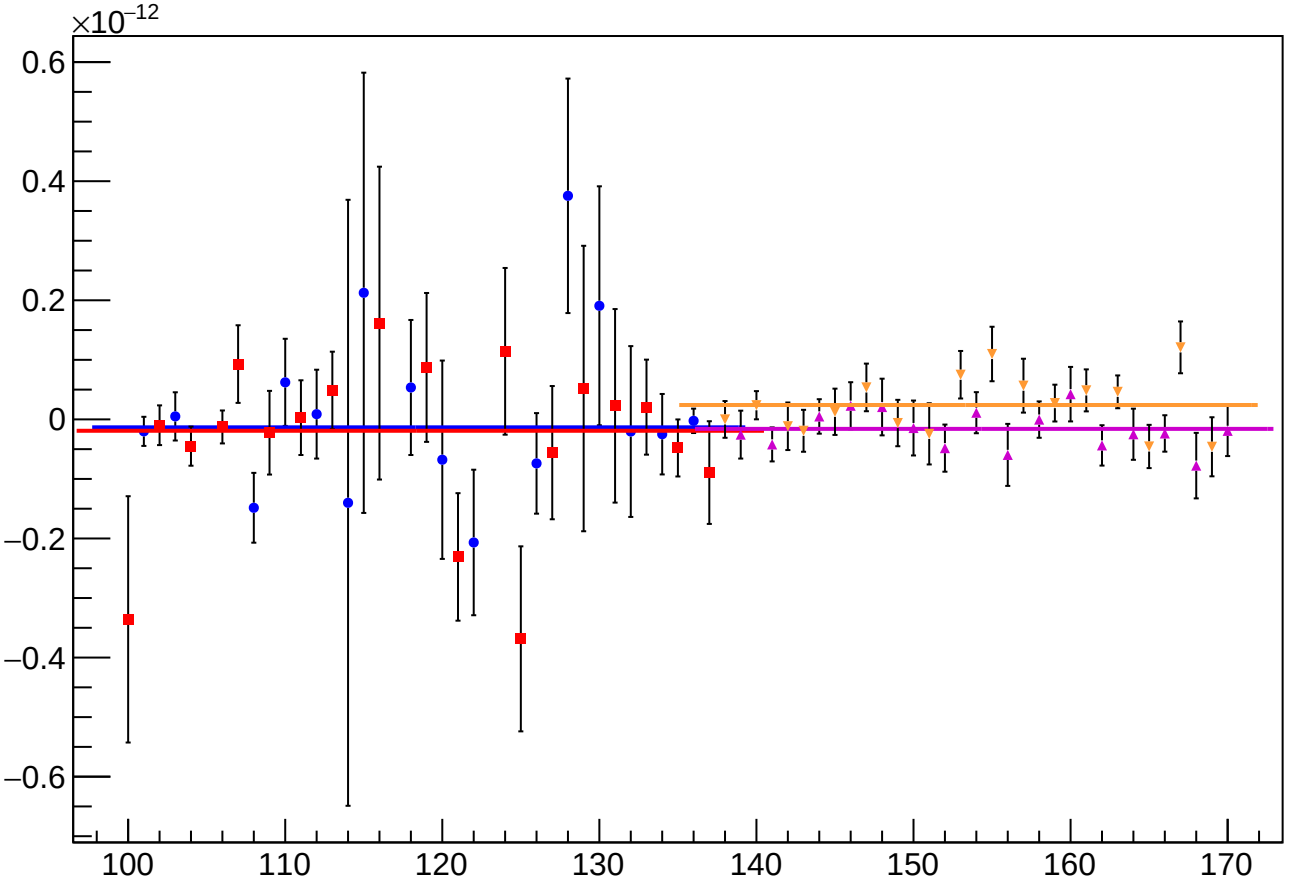
Left In: 1025.167+/-0.202 $\chi^2$/NDF:488937.7/15

+ sign 746.139+/-0.128 $\chi^2$/NDF: 6949942.6/32

All: 754.691+/-0.091 $\chi^2$/NDF: 13287633.0/67

- sign 763.479+/-0.129 $\chi^2$/NDF: 6328577.3/34

# asym_sam6_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 15.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:22.5/16

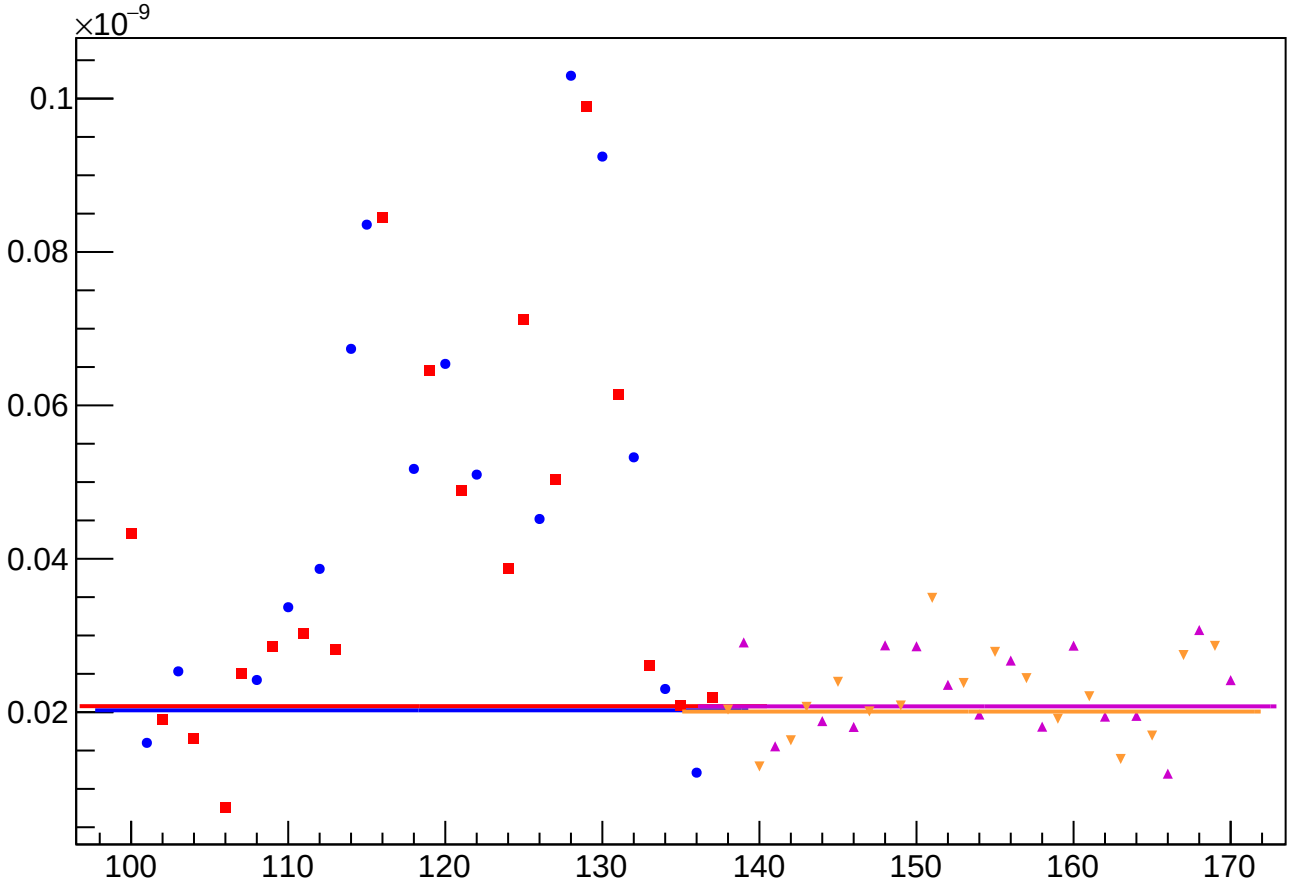
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 19.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:8.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.1/32

All: -0.000+/-0.000 $\chi^2$/NDF: 80.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 28.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2004678.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:722503.3/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1855885.9/18

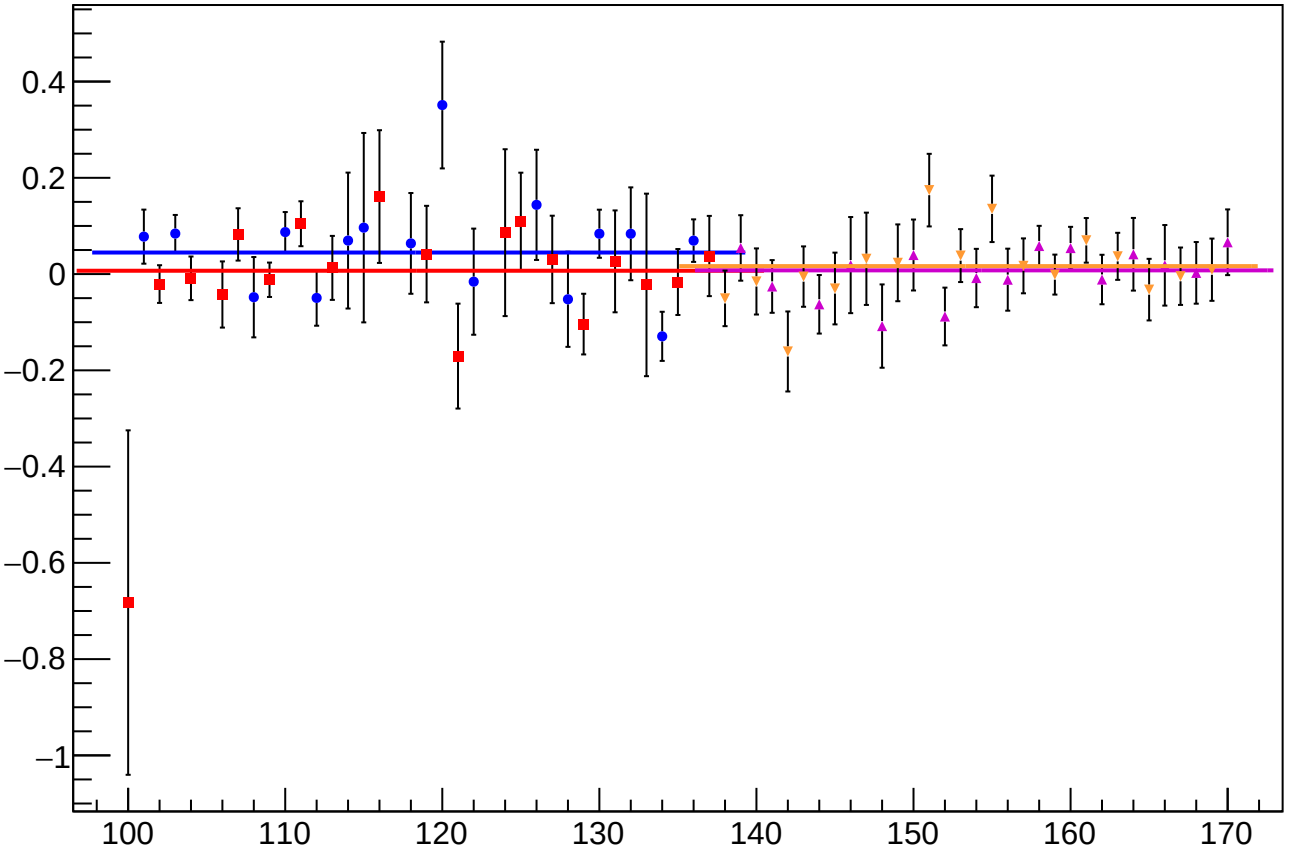
Left In: 0.000+/-0.000 $\chi^2$/NDF:645042.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2727397.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 5235435.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 2500933.1/34

# asym_sam6_dit_vs_cor_diff_mean vs Slug




Right In: 0.045+/-0.016 $\chi^2$/NDF: 26.6/15

Left Out: 0.017+/-0.015 $\chi^2$/NDF:16.6/16

Right Out: 0.007+/-0.015 $\chi^2$/NDF: 20.2/18

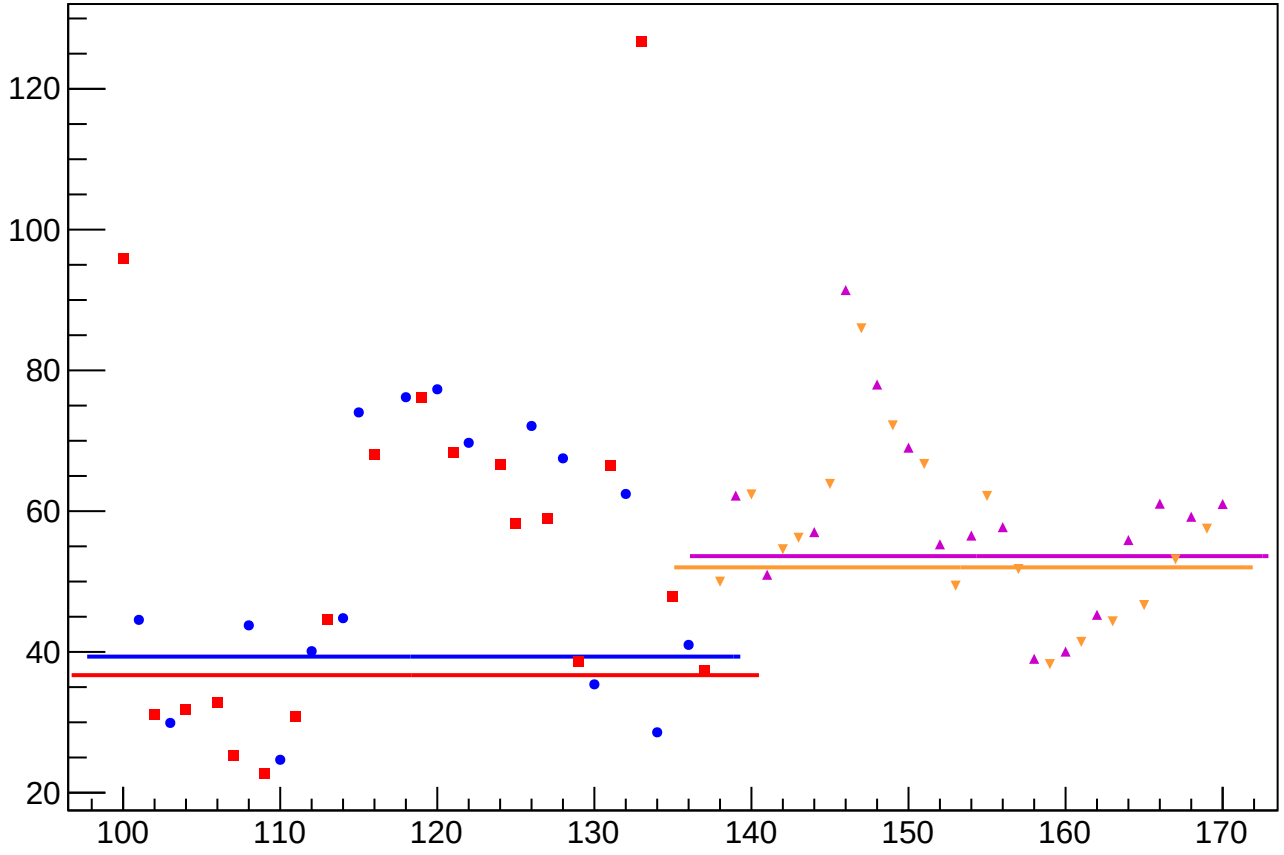
Left In: 0.008+/-0.015 $\chi^2$/NDF:10.5/15

+ sign 0.029+/-0.011 $\chi^2$/NDF: 44.9/32

All: 0.018+/-0.008 $\chi^2$/NDF: 77.7/67

- sign 0.007+/-0.011 $\chi^2$/NDF: 30.7/34

# asym_sam6_dit_vs_cor_diff_rms vs Slug




Right In: 39.335+/-0.011 $\chi^2$/NDF: 1566525.1/15

Left Out: 52.017+/-0.010 $\chi^2$/NDF:1013736.5/16

Right Out: 36.700+/-0.011 $\chi^2$/NDF: 2096756.0/18

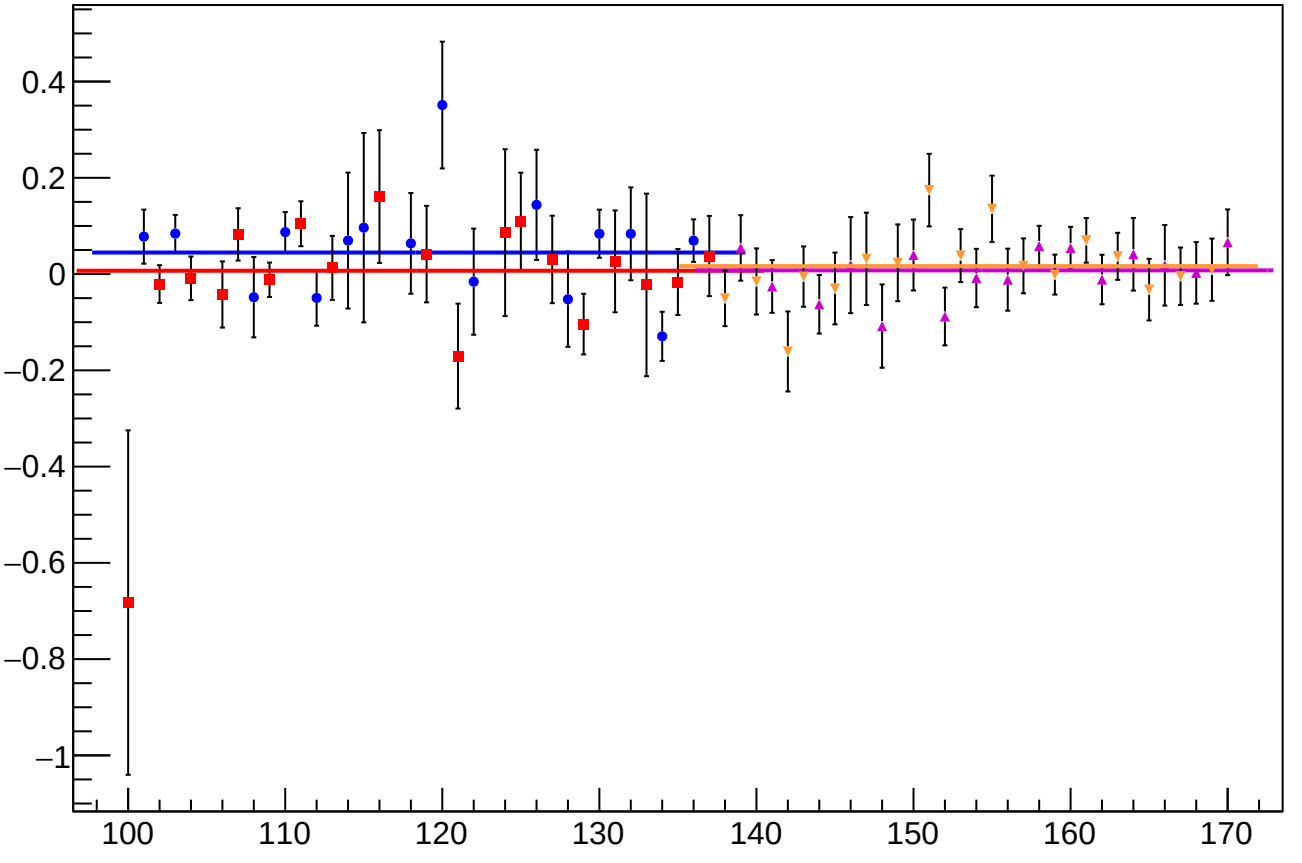
Left In: 53.610+/-0.011 $\chi^2$/NDF:1131317.9/15

\+ sign 46.208+/-0.008 $\chi^2$/NDF: 3259418.2/32

All: 45.623+/-0.005 $\chi^2$/NDF: 7735445.4/67

\- sign 45.047+/-0.008 $\chi^2$/NDF: 4464479.0/34

# asym_sam6_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.045+/-0.016 $\chi^2$/NDF: 26.6/15

Left Out: 0.017+/-0.015 $\chi^2$/NDF:16.6/16

Right Out: 0.007+/-0.015 $\chi^2$/NDF: 20.2/18

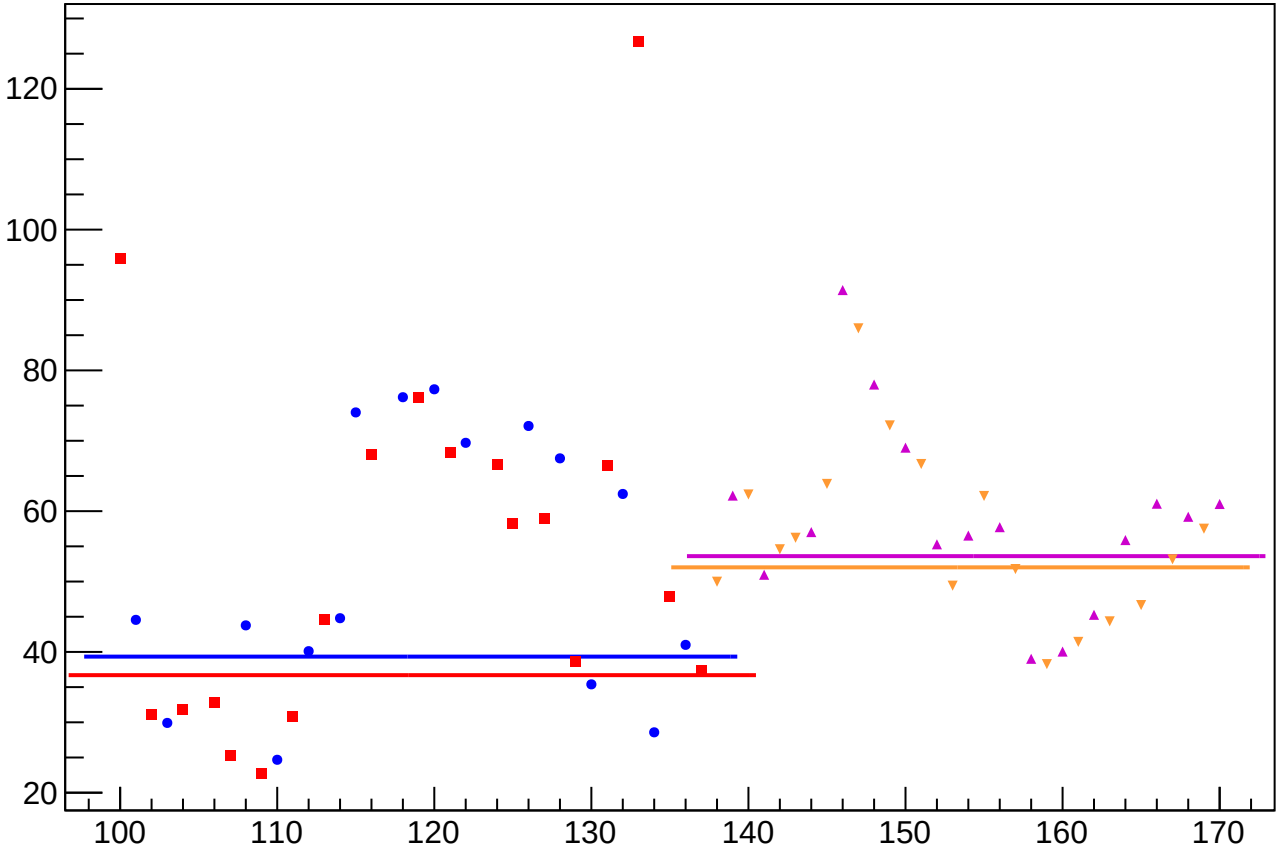
Left In: 0.008+/-0.015 $\chi^2$/NDF:10.5/15

+ sign 0.029+/-0.011 $\chi^2$/NDF: 44.9/32

All: 0.018+/-0.008 $\chi^2$/NDF: 77.7/67

- sign 0.007+/-0.011 $\chi^2$/NDF: 30.7/34

# asym_sam6_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 39.335+/-0.011 $\chi^2$/NDF: 1566525.1/15

Left Out: 52.017+/-0.010 $\chi^2$/NDF:1013736.5/16

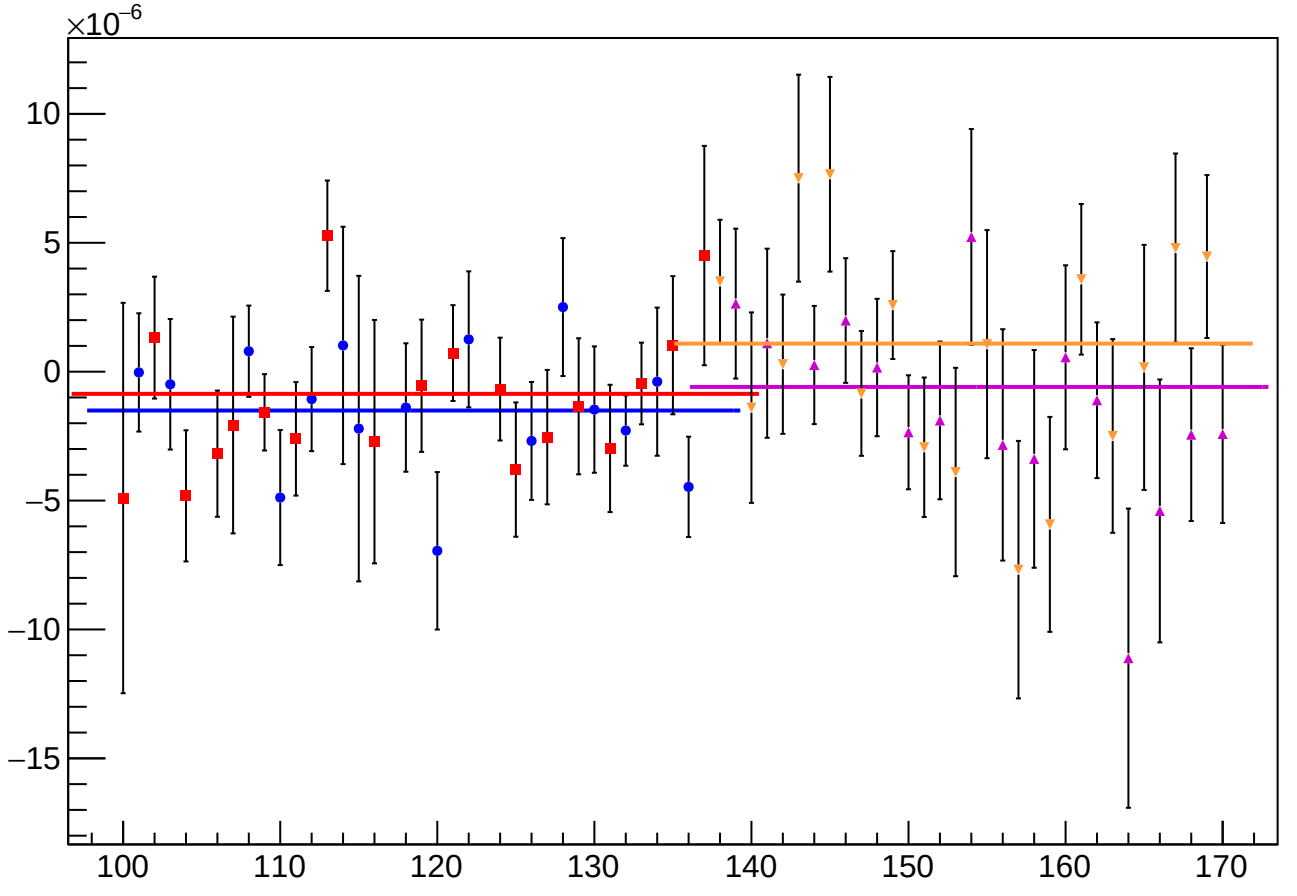
Right Out: 36.700+/-0.011 $\chi^2$/NDF: 2096756.0/18

Left In: 53.610+/-0.011 $\chi^2$/NDF:1131317.9/15

\+ sign 46.208+/-0.008 $\chi^2$/NDF: 3259418.2/32

All: 45.623+/-0.005 $\chi^2$/NDF: 7735445.4/67

\- sign 45.047+/-0.008 $\chi^2$/NDF: 4464479.0/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 13.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:21.8/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 19.1/18

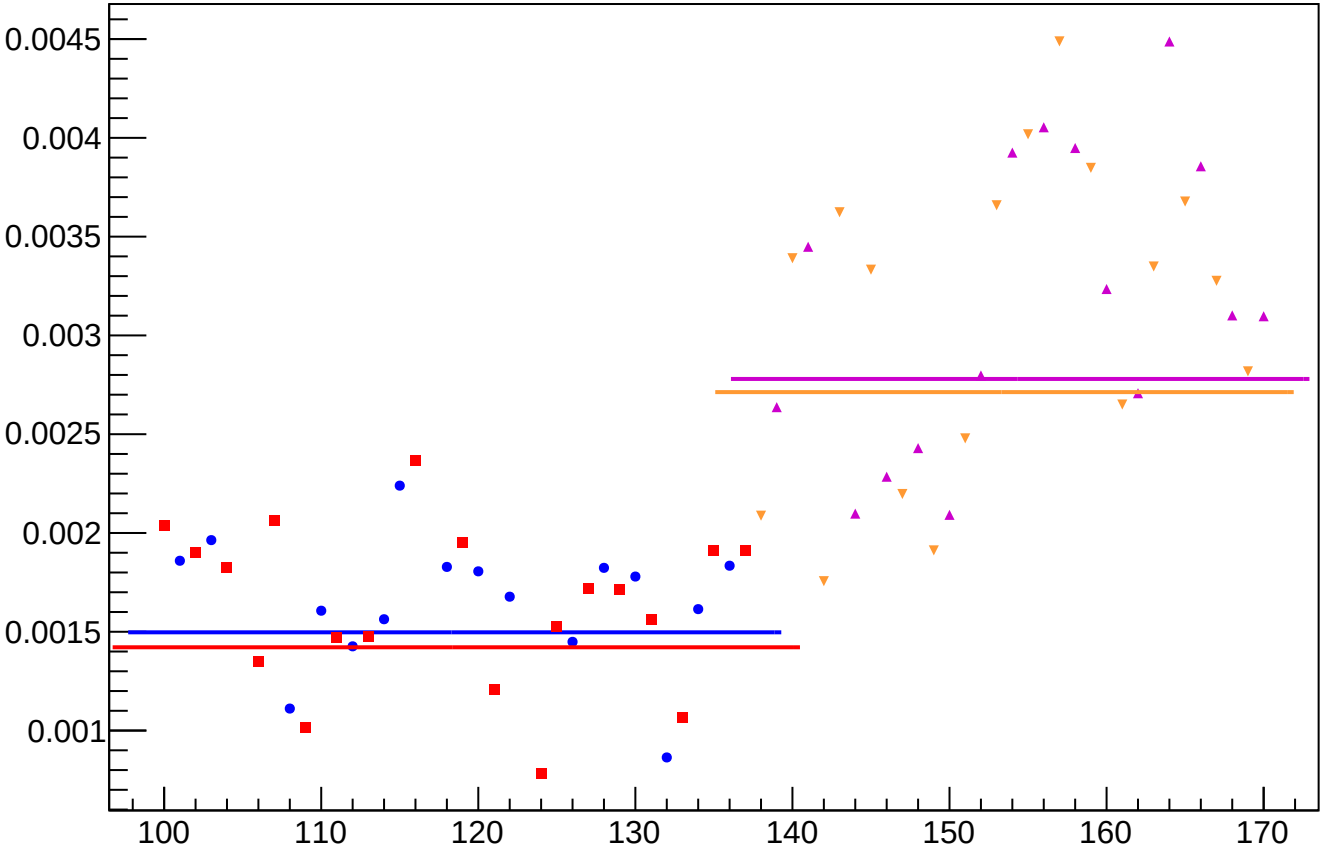
Left In: -0.000+/-0.000 $\chi^2$/NDF:11.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 42.8/32

All: -0.000+/-0.000 $\chi^2$/NDF: 73.3/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 30.3/34

# asym_sam6_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.001+/-0.000 $\chi^2$/NDF: 867330.7/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:1884831.0/16

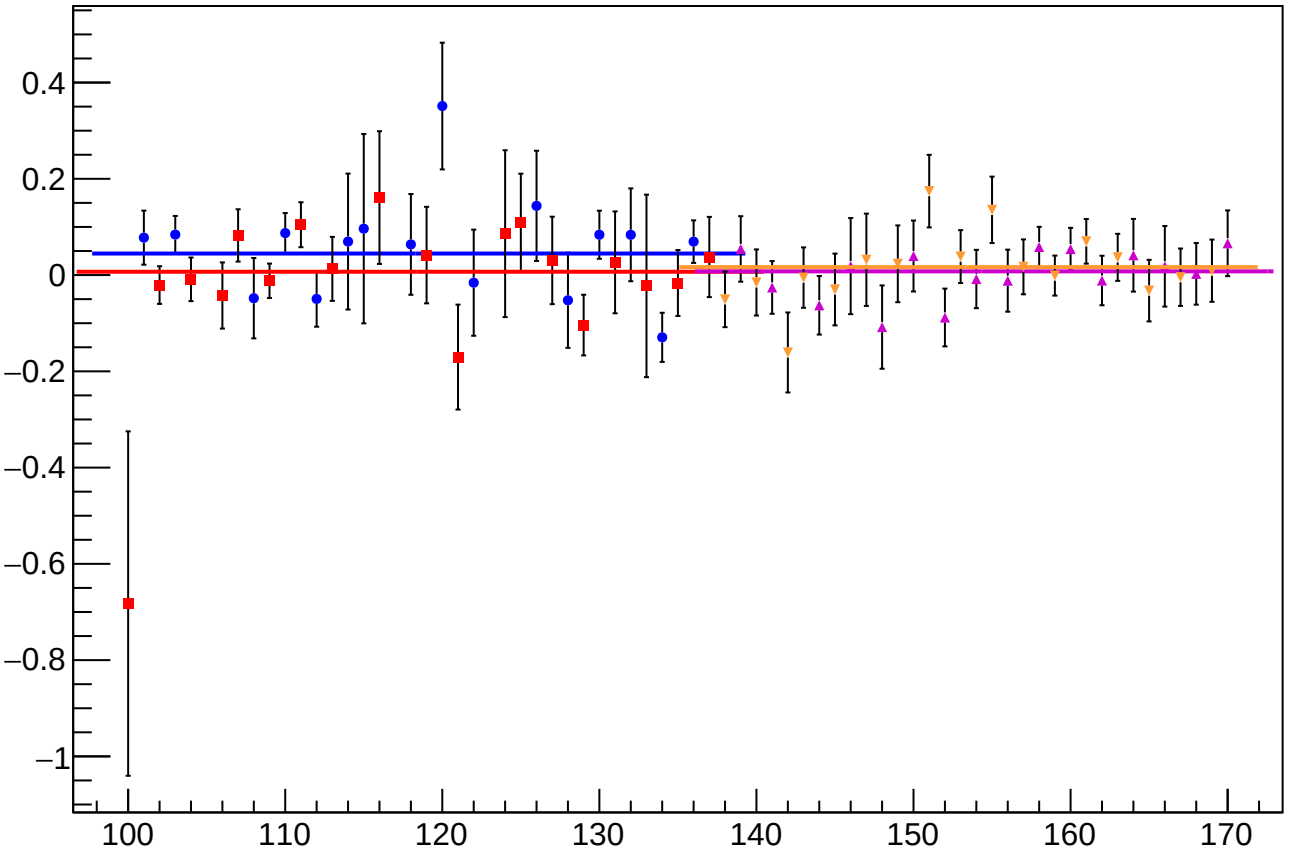
Right Out: 0.001+/-0.000 $\chi^2$/NDF: 998047.4/18

Left In: 0.003+/-0.000 $\chi^2$/NDF:1355352.1/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 5909467.1/32

All: 0.002+/-0.000 $\chi^2$/NDF: 12298112.7/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 6359031.6/34




Right In: 0.045+/-0.016 $\chi^2$/NDF: 26.6/15

Left Out: 0.017+/-0.015 $\chi^2$/NDF:16.6/16

Right Out: 0.007+/-0.015 $\chi^2$/NDF: 20.2/18

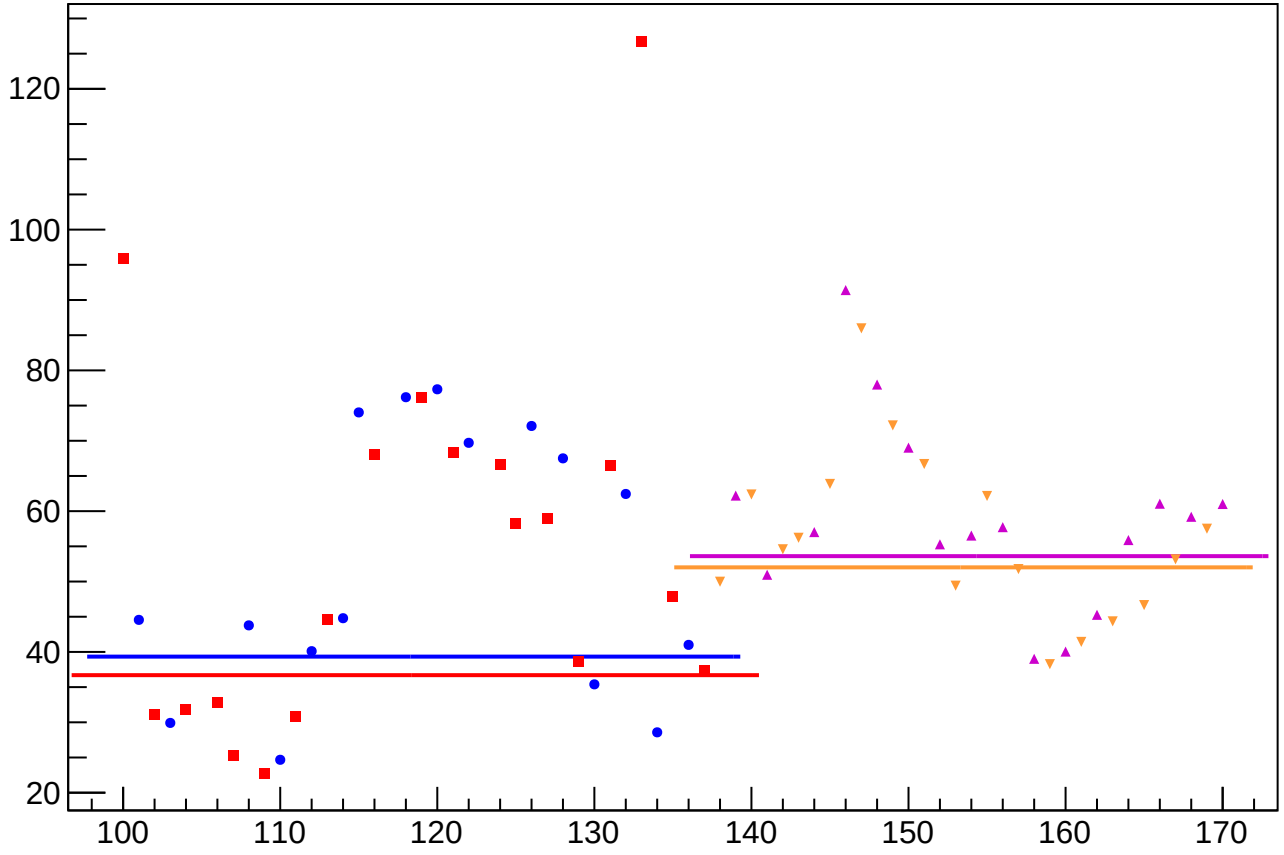
Left In: 0.008+/-0.015 $\chi^2$/NDF:10.5/15

+ sign 0.029+/-0.011 $\chi^2$/NDF: 44.9/32

All: 0.018+/-0.008 $\chi^2$/NDF: 77.7/67

- sign 0.007+/-0.011 $\chi^2$/NDF: 30.7/34

# asym_sam6_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 39.334+/-0.011 $\chi^2$/NDF: 1566545.4/15

Left Out: 52.016+/-0.010 $\chi^2$/NDF:1013811.2/16

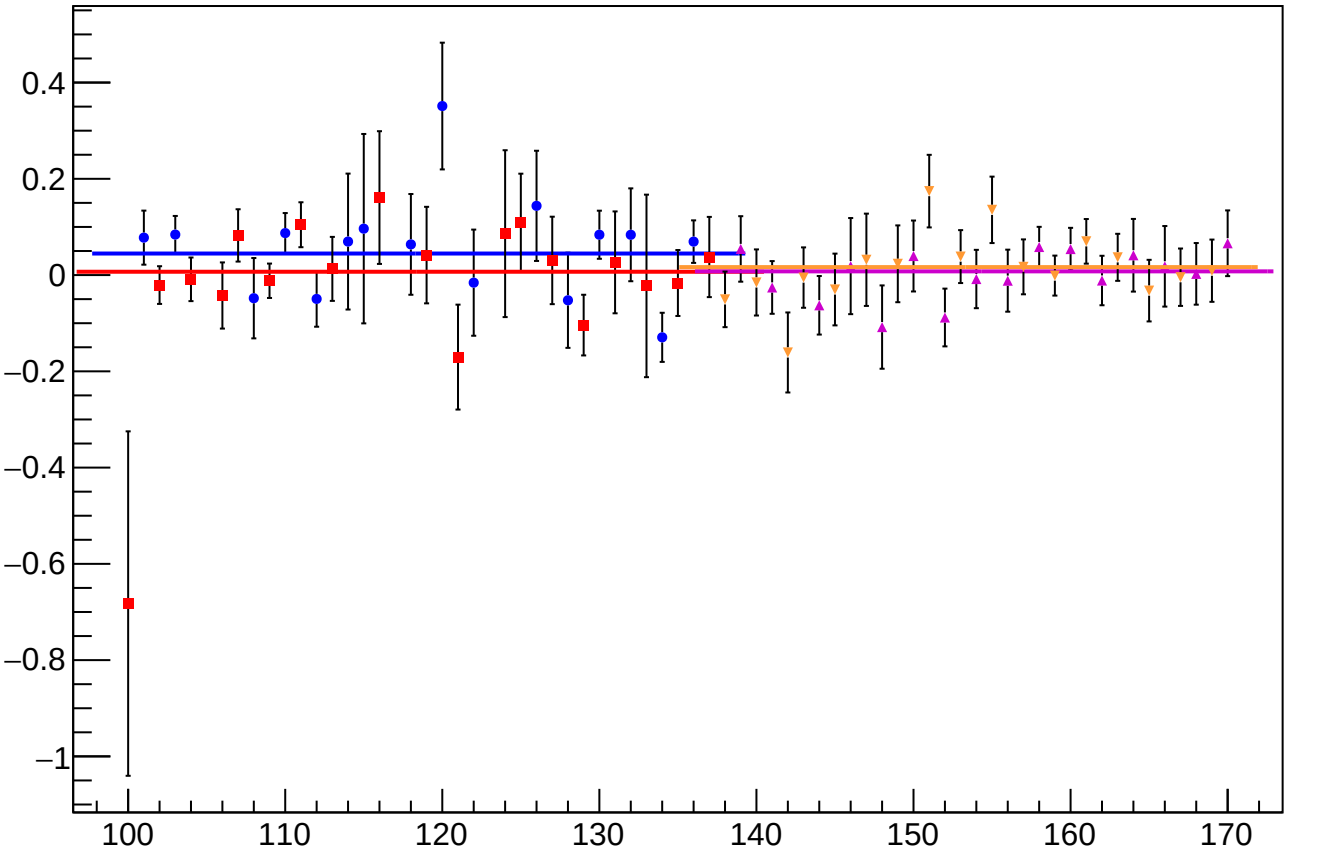
Right Out: 36.699+/-0.011 $\chi^2$/NDF: 2096748.4/18

Left In: 53.608+/-0.011 $\chi^2$/NDF:1131441.9/15

+ sign 46.207+/-0.008 $\chi^2$/NDF: 3259474.8/32

All: 45.622+/-0.005 $\chi^2$/NDF: 7735502.6/67

- sign 45.047+/-0.008 $\chi^2$/NDF: 4464482.2/34




Right In: 0.045+/-0.016 $\chi^2$/NDF: 26.6/15

Left Out: 0.017+/-0.015 $\chi^2$/NDF:16.6/16

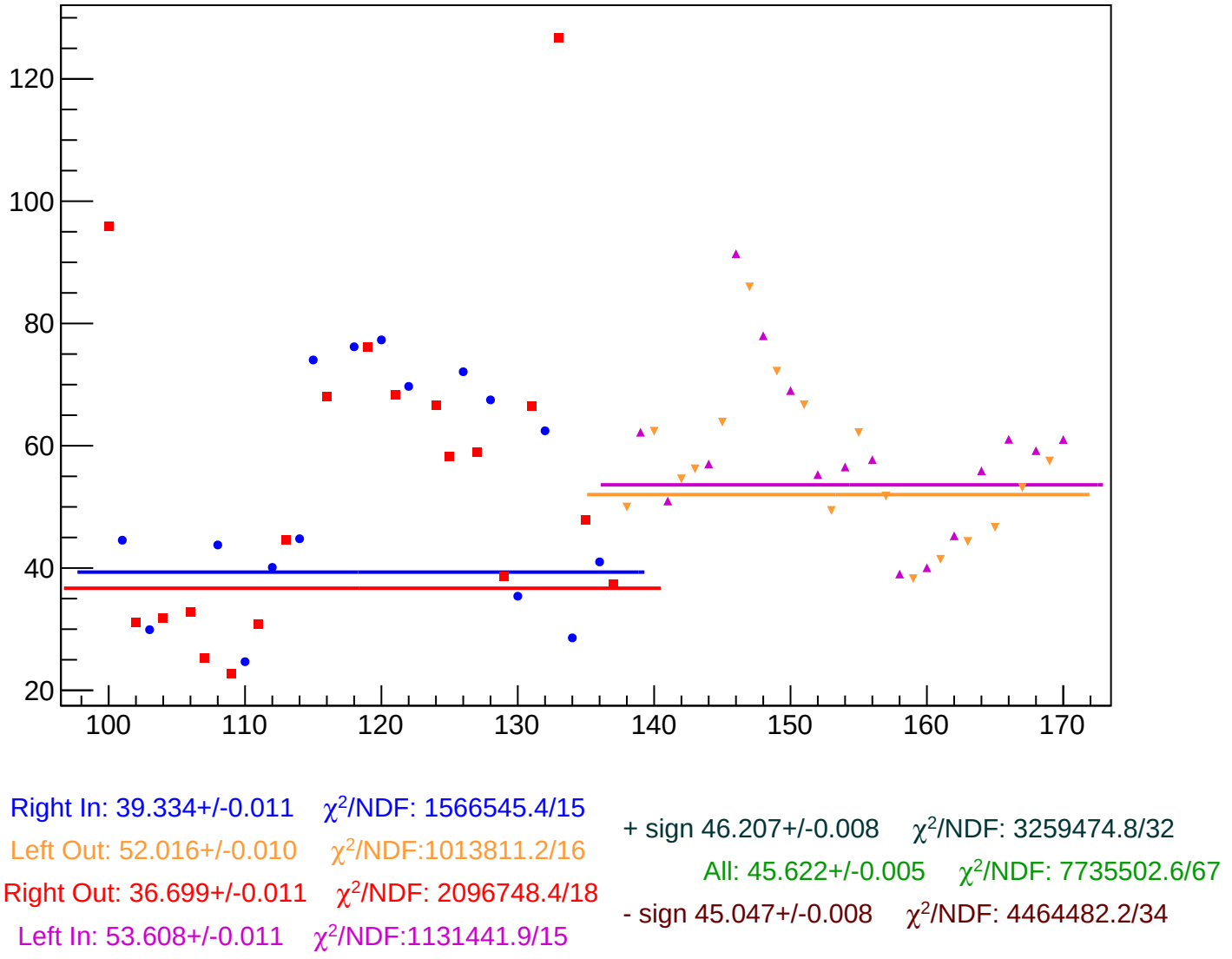
Right Out: 0.007+/-0.015 $\chi^2$/NDF: 20.2/18

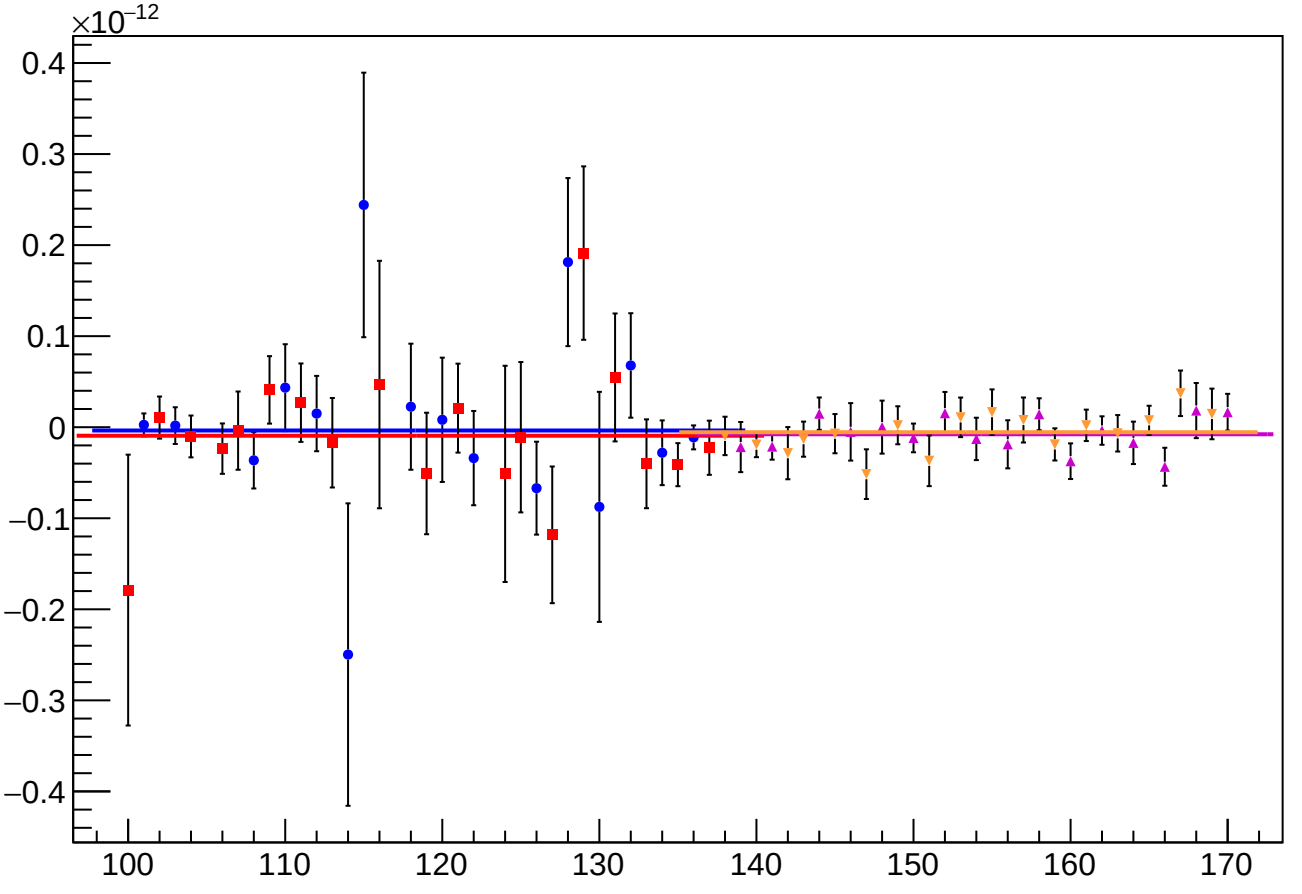
Left In: 0.008+/-0.015 $\chi^2$/NDF:10.5/15

+ sign 0.029+/-0.011 $\chi^2$/NDF: 44.9/32

All: 0.018+/-0.008 $\chi^2$/NDF: 77.7/67

- sign 0.007+/-0.011 $\chi^2$/NDF: 30.7/34


asym_sam6_eigen_dit_vs_eigen_cor_diff_rms vs Slug
120
100
80
60
40
20
100
110
120
130
140
150
160
170
Right In: 39.334+/-0.011 χ²/NDF: 1566545.4/15
Left Out: 52.016+/-0.010 χ²/NDF:1013811.2/16
Right Out: 36.699+/-0.011 χ²/NDF: 2096748.4/18
Left In: 53.608+/-0.011 χ²/NDF:1131441.9/15
+ sign 46.207+/-0.008 χ²/NDF: 3259474.8/32
All: 45.622+/-0.005 χ²/NDF: 7735502.6/67
- sign 45.047+/-0.008 χ²/NDF: 4464482.2/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:12.6/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.7/18

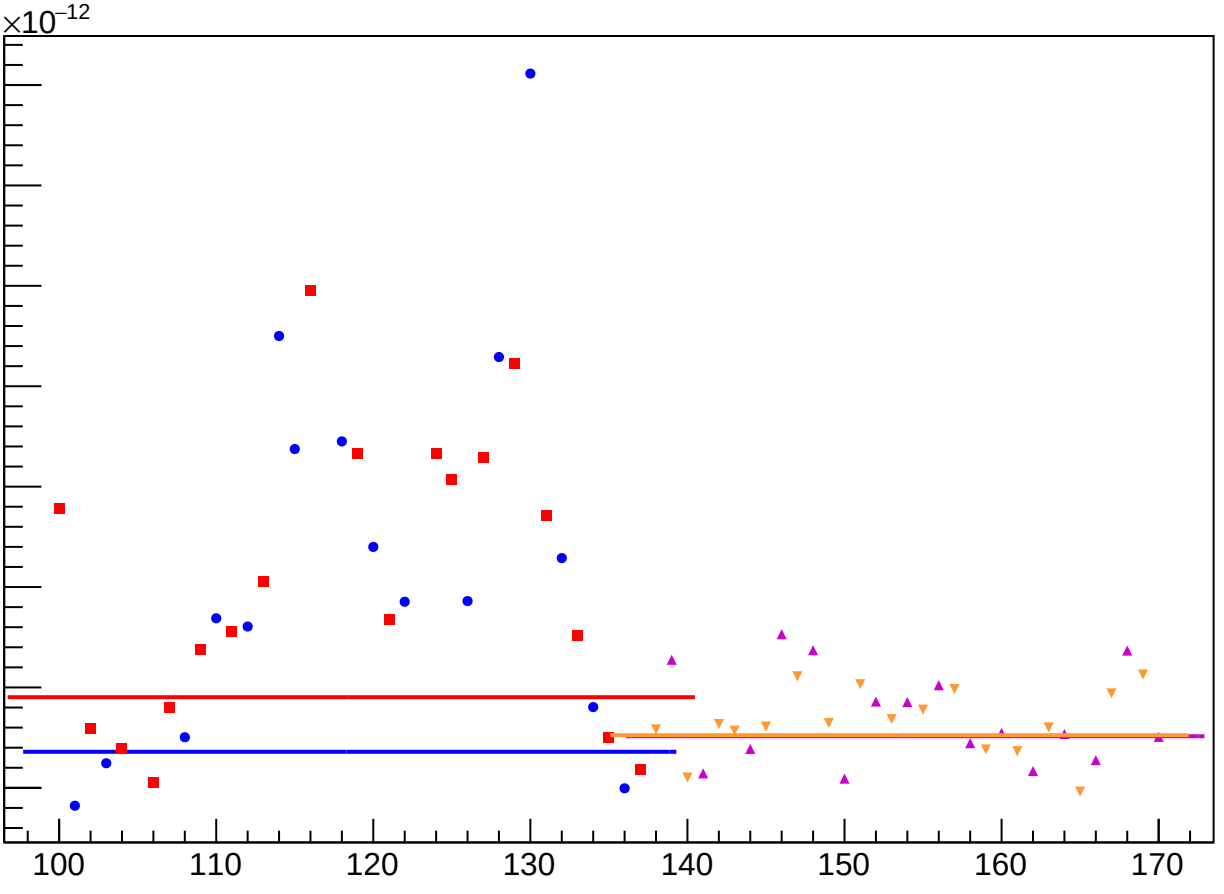
Left In: -0.000+/-0.000 $\chi^2$/NDF:13.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 29.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 58.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 29.1/34

# asym_sam6_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3187097.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:892748.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2049385.6/18

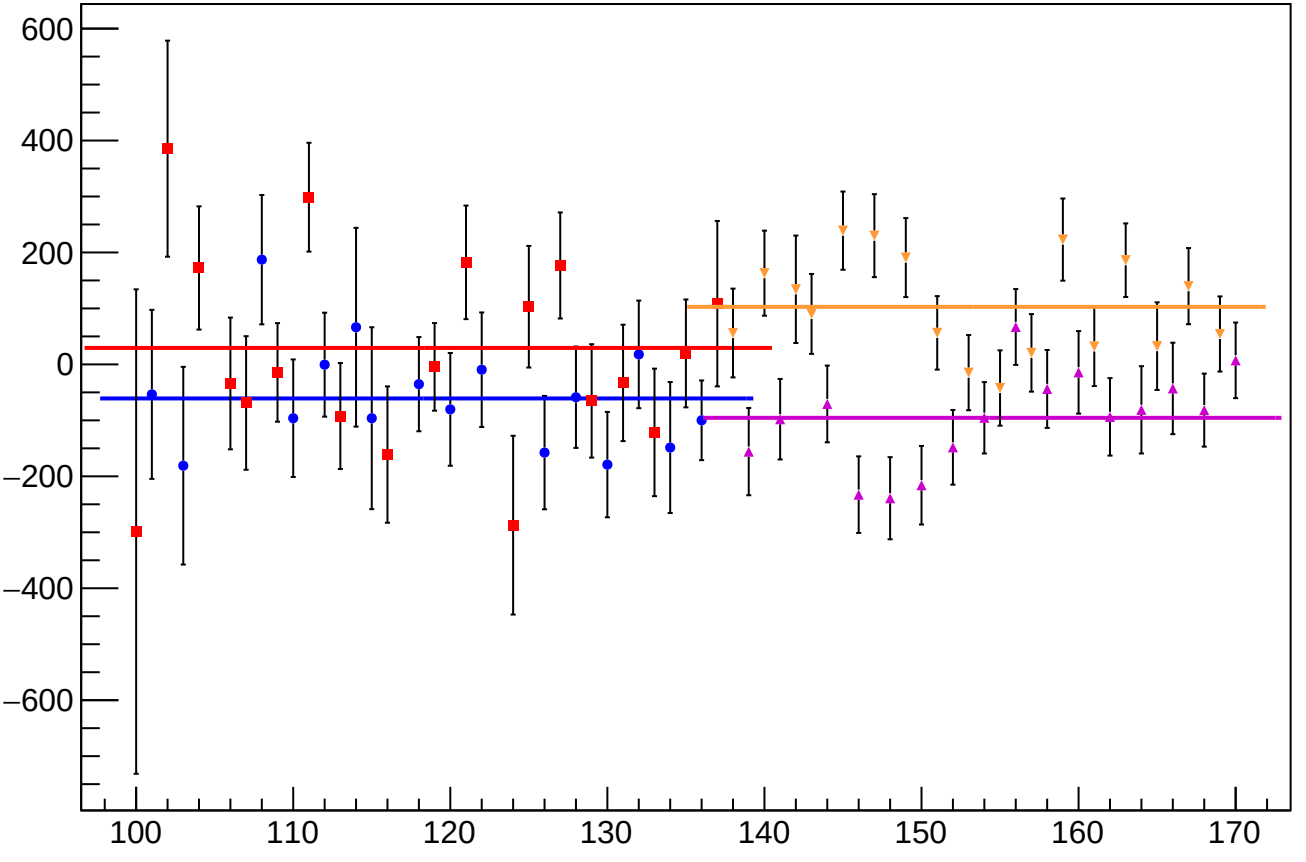
Left In: 0.000+/-0.000 $\chi^2$/NDF:1267701.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4150614.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 7846827.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3594989.1/34

# reg_asym_sam7_mean vs Slug




Right In: -60.846+/-26.054 $\chi^2$/NDF: 10.6/15

Left Out: 102.814+/-17.343 $\chi^2$/NDF:25.9/16

Right Out: 29.453+/-25.105 $\chi^2$/NDF: 31.2/18

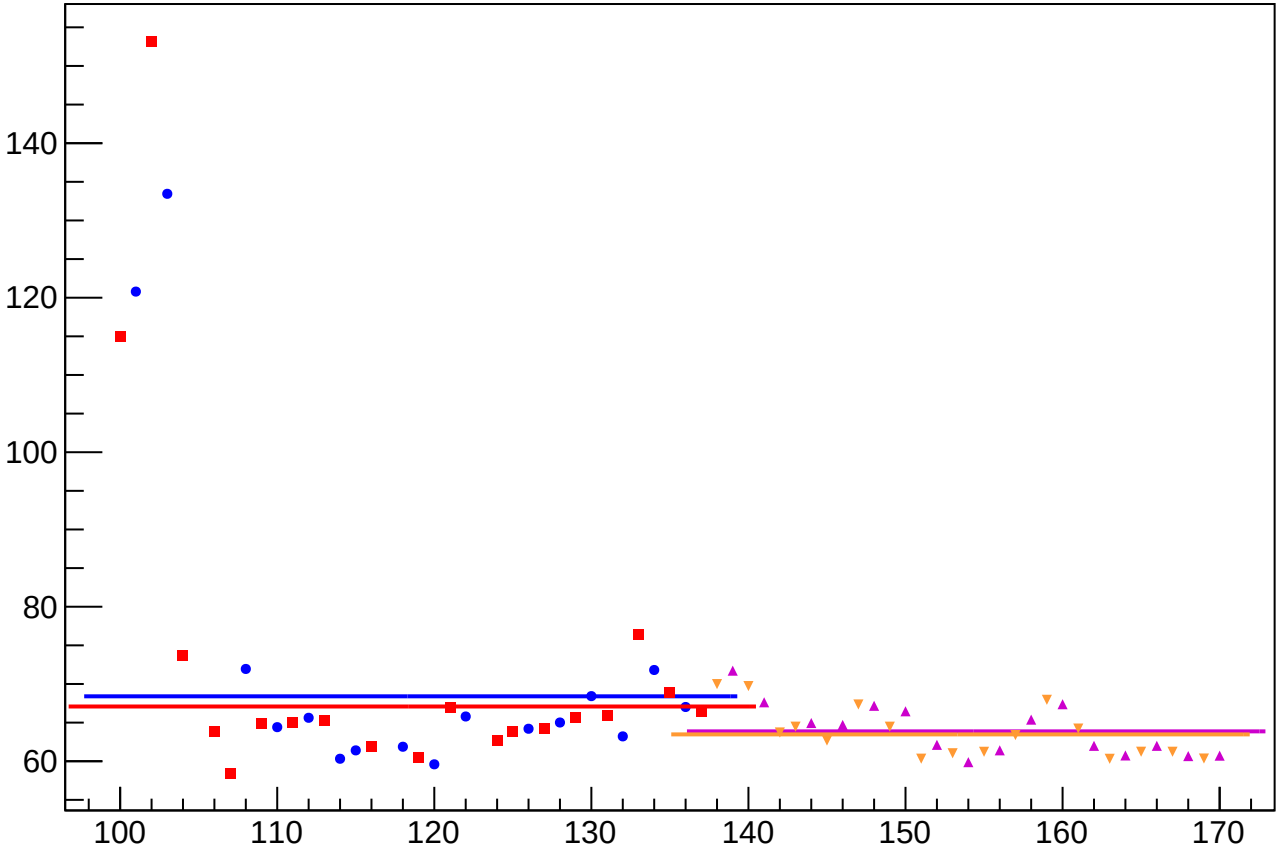
Left In: -95.491+/-17.602 $\chi^2$/NDF:22.5/15

+ sign 52.561+/-14.437 $\chi^2$/NDF: 63.8/32

All: -0.969+/-10.200 $\chi^2$/NDF: 161.6/67

- sign -54.315+/-14.412 $\chi^2$/NDF: 70.3/34

# reg_asym_sam7_rms vs Slug




Right In: 68.403+/-0.018 $\chi^2$/NDF: 569557.5/15

Left Out: 63.475+/-0.012 $\chi^2$/NDF:63459.3/16

Right Out: 67.086+/-0.018 $\chi^2$/NDF: 481815.1/18

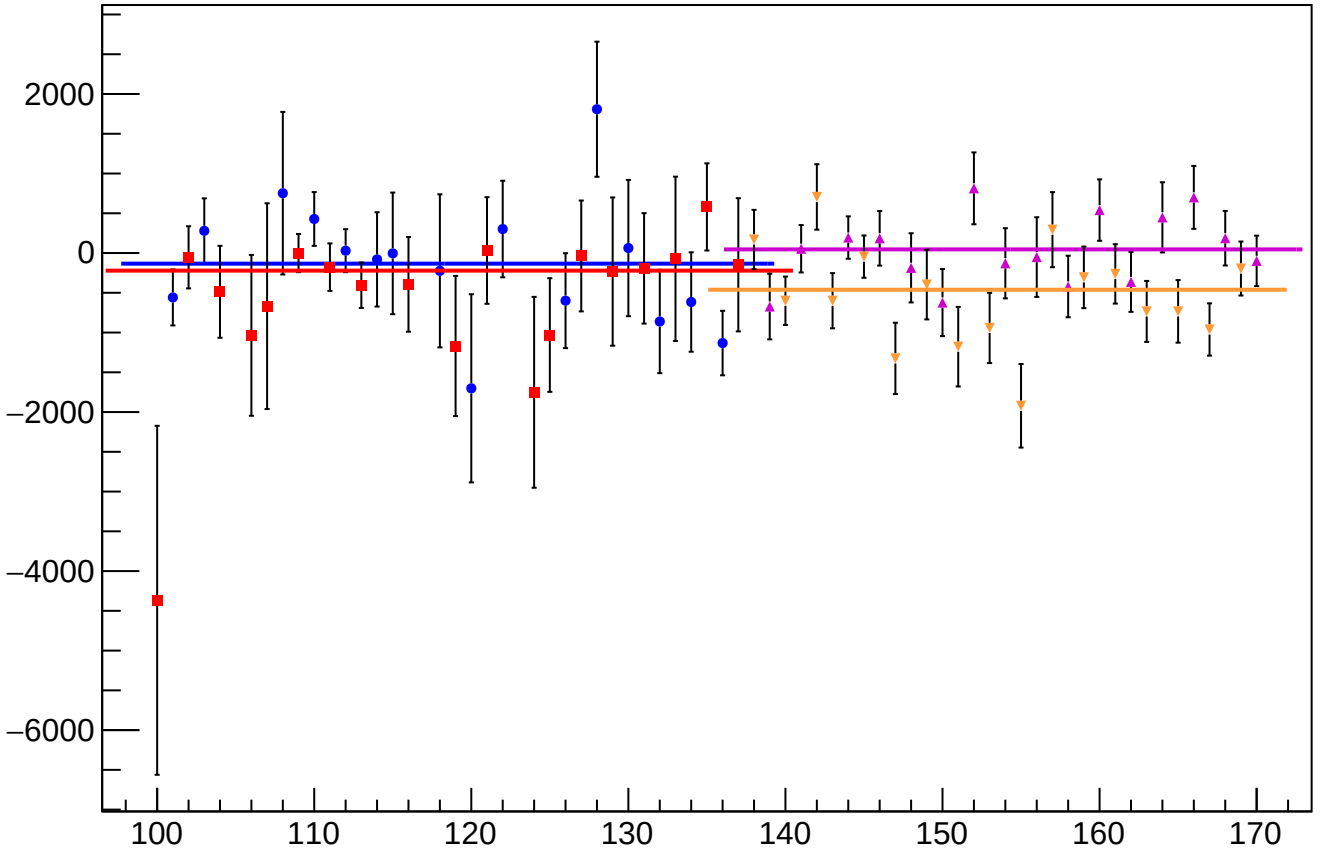
Left In: 63.867+/-0.012 $\chi^2$/NDF:65534.8/15

+ sign 64.988+/-0.010 $\chi^2$/NDF: 682602.9/32

All: 64.958+/-0.007 $\chi^2$/NDF: 1252010.9/67

- sign 64.928+/-0.010 $\chi^2$/NDF: 569390.4/34

# asym_sam7_reg_correction_mean vs Slug




Right In: -133.590+/-125.904 $\chi^2$/NDF: 22.5/15

Left Out: -461.407+/-91.766 $\chi^2$/NDF:35.3/16

Right Out: -221.324+/-117.783 $\chi^2$/NDF: 12.5/18

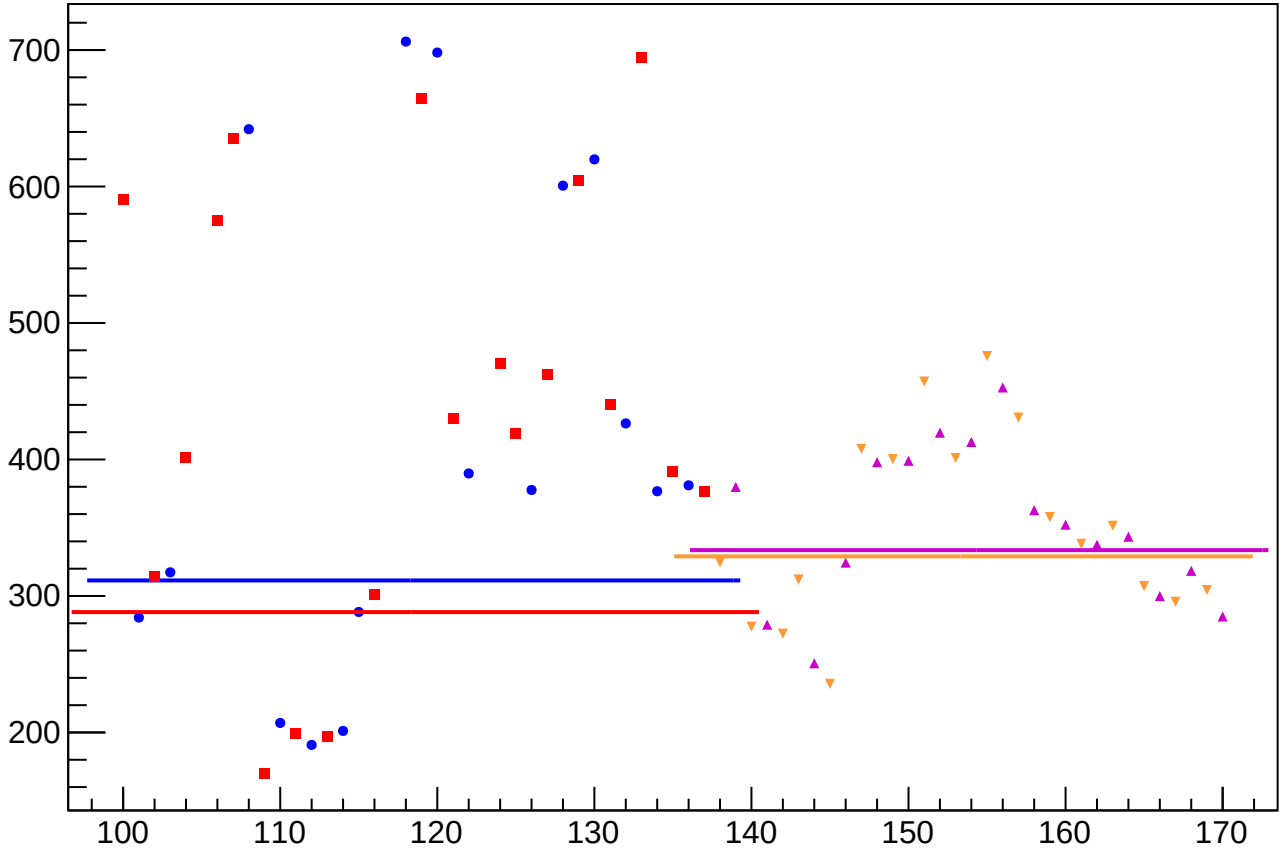
Left In: 45.559+/-93.268 $\chi^2$/NDF:17.6/15

+ sign -347.676+/-74.159 $\chi^2$/NDF: 62.2/32

All: -200.436+/-52.067 $\chi^2$/NDF: 103.3/67

- sign -57.295+/-73.119 $\chi^2$/NDF: 33.3/34

# asym_sam7_reg_correction_rms vs Slug




Right In: 311.386+/-0.089 $\chi^2$/NDF: 2123797.6/15

Left Out: 329.013+/-0.065 $\chi^2$/NDF:949956.4/16

Right Out: 288.205+/-0.083 $\chi^2$/NDF: 2715380.6/18

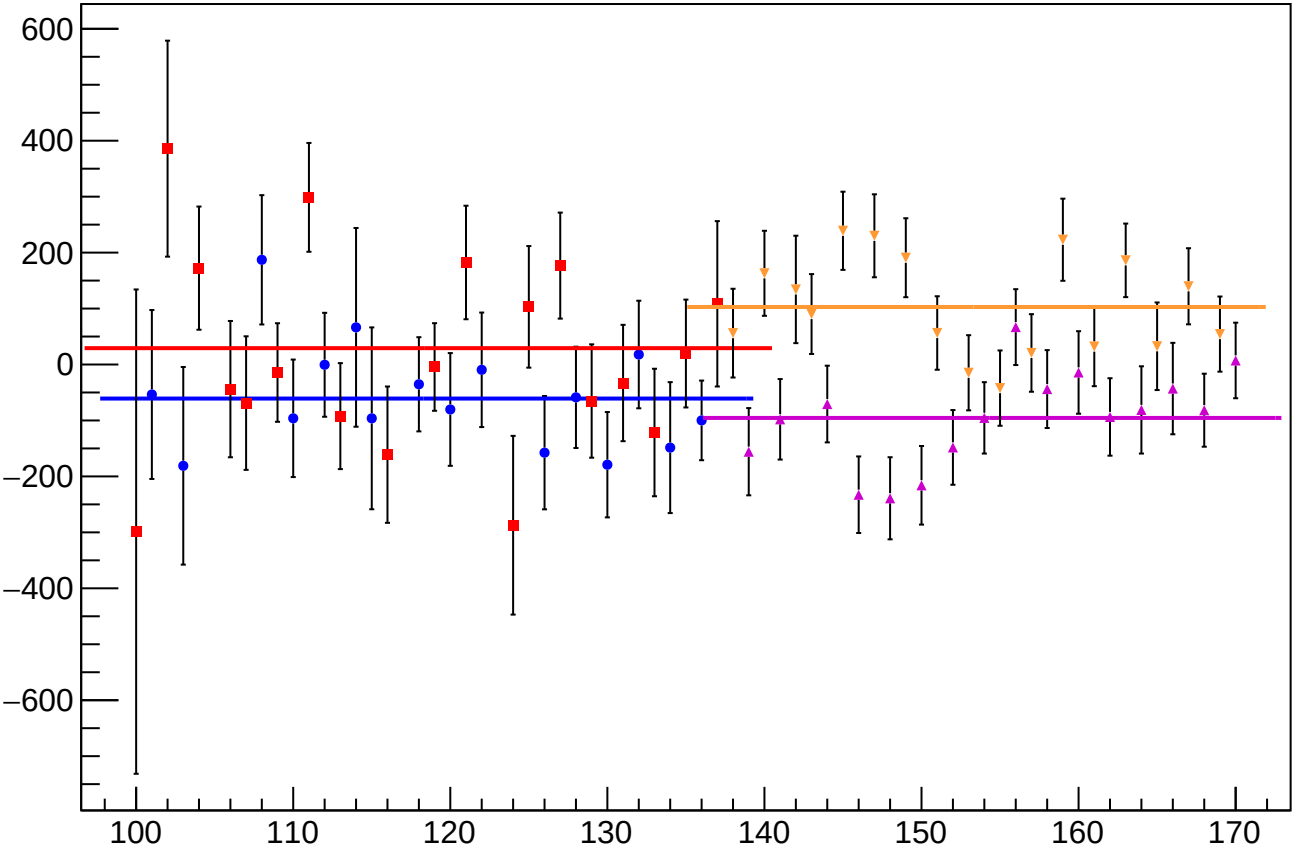
Left In: 333.580+/-0.066 $\chi^2$/NDF:711826.8/15

+ sign 322.897+/-0.052 $\chi^2$/NDF: 3099354.5/32

All: 319.447+/-0.037 $\chi^2$/NDF: 6717534.1/67

- sign 316.093+/-0.052 $\chi^2$/NDF: 3609641.4/34

# cor_asym_sam7_mean vs Slug




Right In: -60.848+/-26.054 $\chi^2$/NDF: 10.6/15

Left Out: 102.815+/-17.343 $\chi^2$/NDF:25.9/16

Right Out: 29.221+/-25.143 $\chi^2$/NDF: 31.3/18

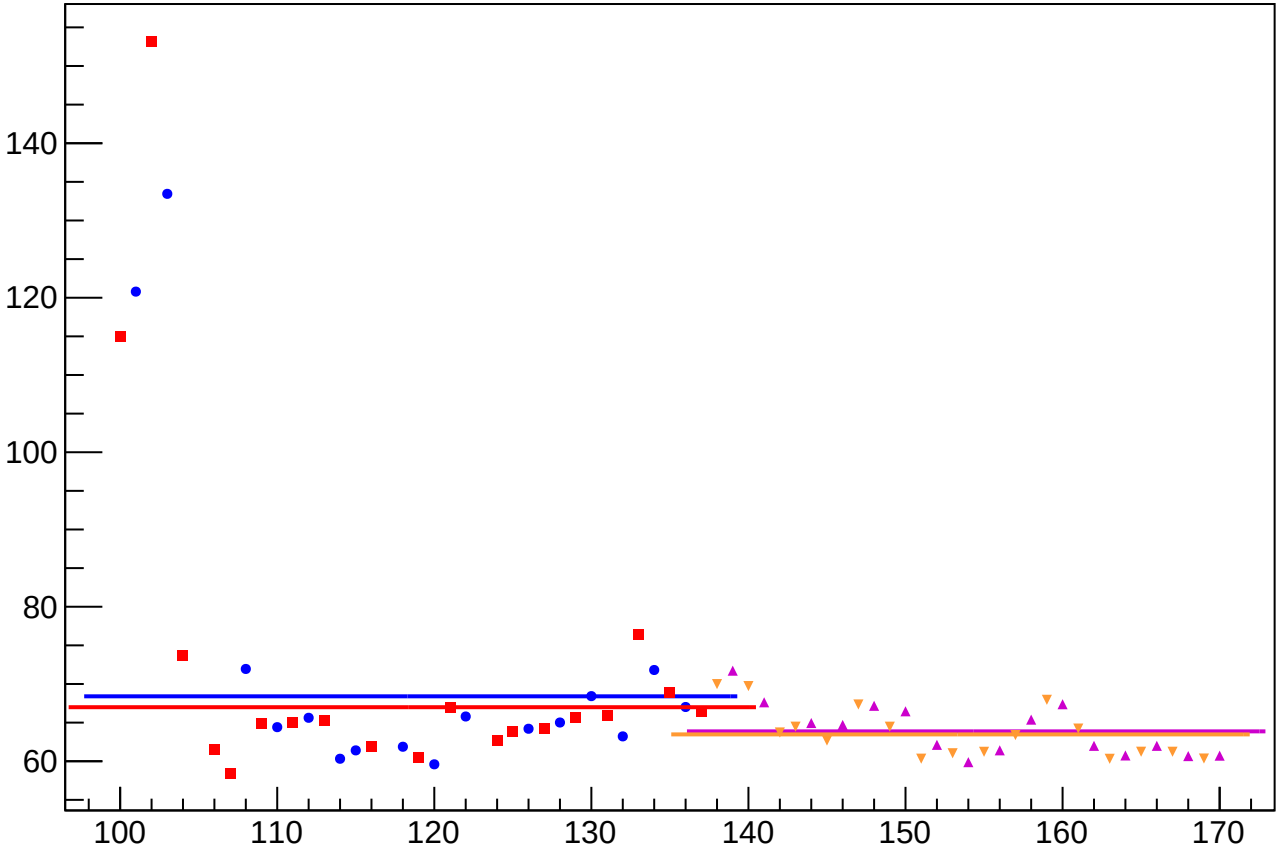
Left In: -95.489+/-17.602 $\chi^2$/NDF:22.5/15

+ sign 52.561+/-14.437 $\chi^2$/NDF: 63.9/32

All: -1.021+/-10.202 $\chi^2$/NDF: 161.6/67

- sign -54.473+/-14.419 $\chi^2$/NDF: 70.2/34

# cor_asym_sam7_rms vs Slug




Right In: 68.403+/-0.018 $\chi^2$/NDF: 569557.9/15

Left Out: 63.475+/-0.012 $\chi^2$/NDF:63459.3/16

Right Out: 66.995+/-0.018 $\chi^2$/NDF: 484487.7/18

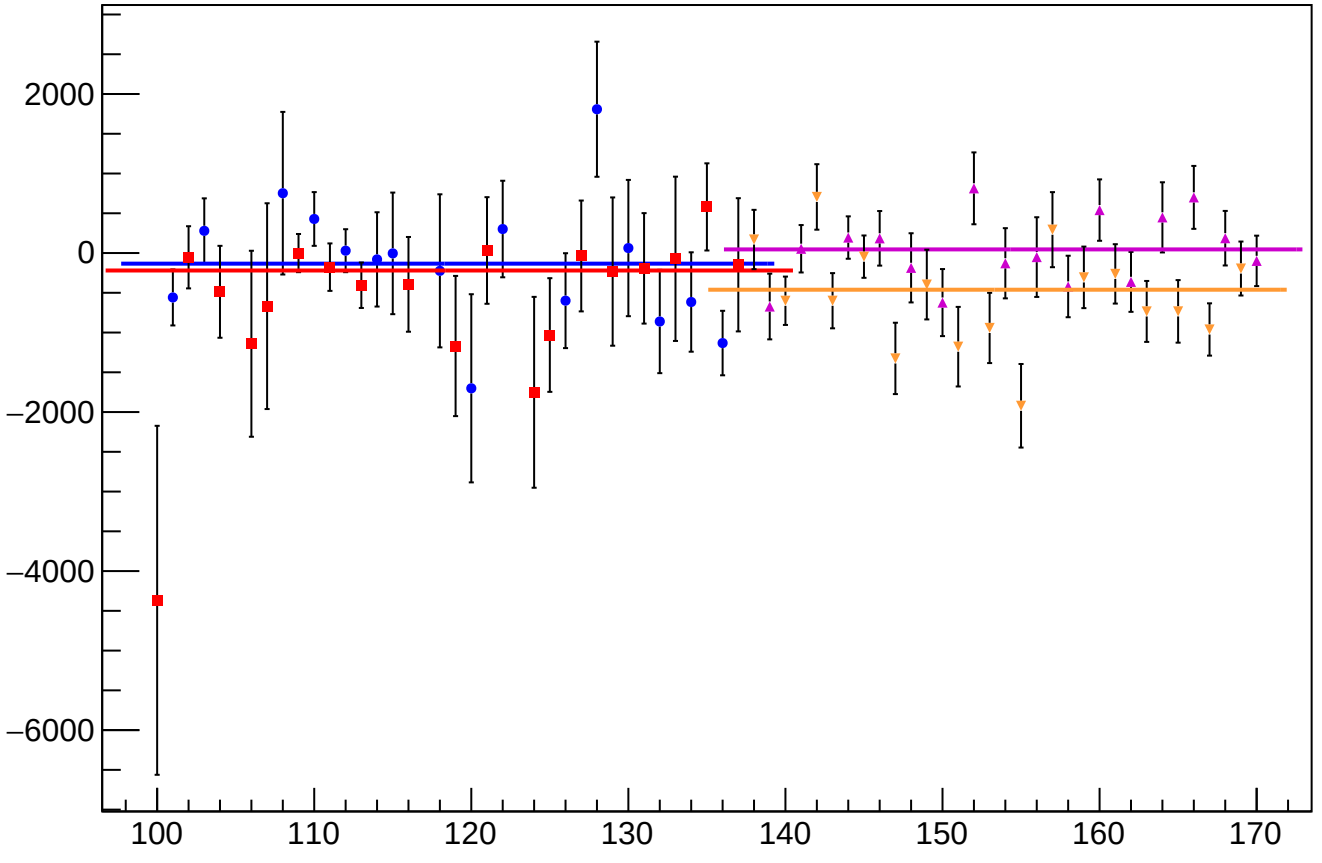
Left In: 63.867+/-0.012 $\chi^2$/NDF:65534.8/15

+ sign 64.988+/-0.010 $\chi^2$/NDF: 682603.2/32

All: 64.942+/-0.007 $\chi^2$/NDF: 1253435.6/67

- sign 64.896+/-0.010 $\chi^2$/NDF: 570791.1/34

# asym_sam7_cor_correction_mean vs Slug




Right In: -133.587+/-125.904 $\chi^2$/NDF: 22.5/15

Left Out: -461.407+/-91.766 $\chi^2$/NDF:35.3/16

Right Out: -219.615+/-117.989 $\chi^2$/NDF: 12.5/18

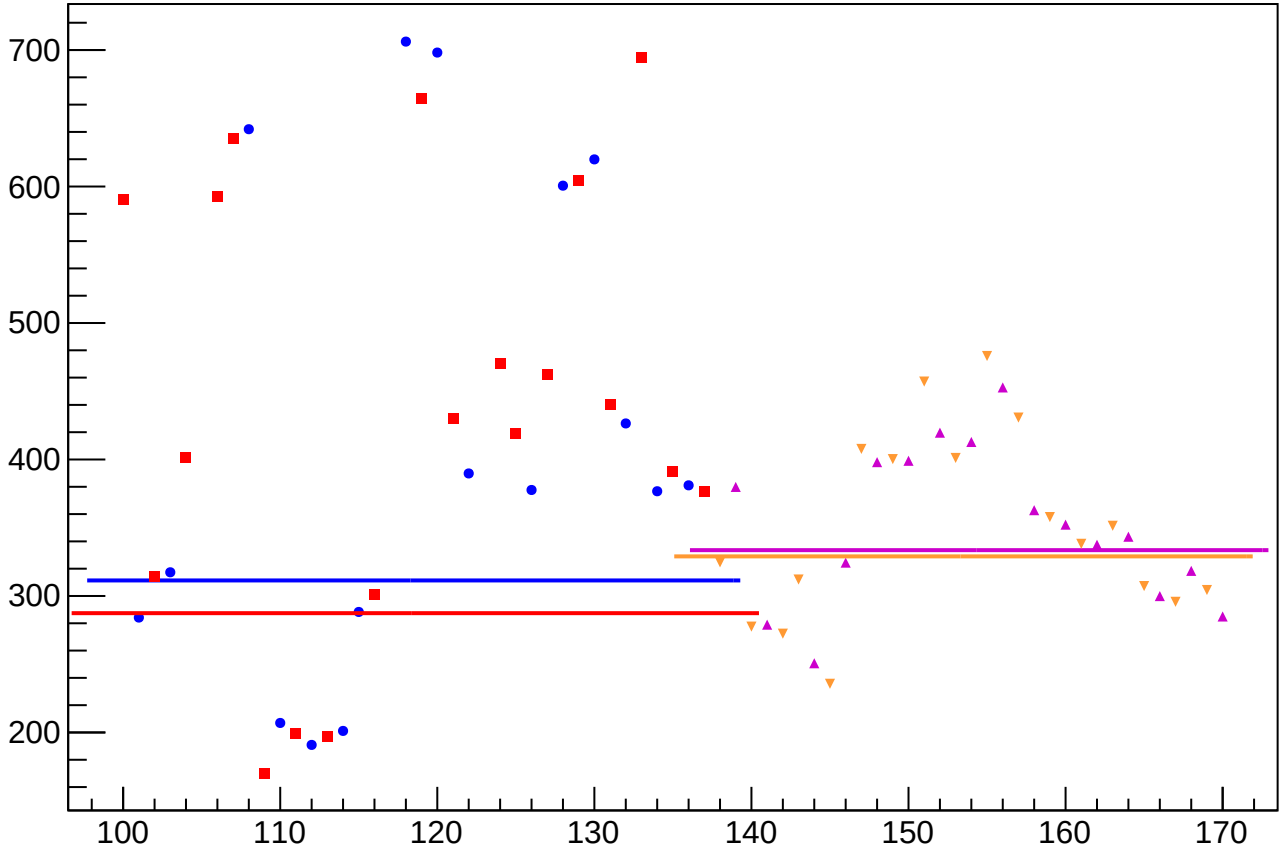
Left In: 45.564+/-93.268 $\chi^2$/NDF:17.6/15

+ sign -347.676+/-74.159 $\chi^2$/NDF: 62.2/32

All: -200.087+/-52.085 $\chi^2$/NDF: 103.2/67

- sign -56.413+/-73.169 $\chi^2$/NDF: 33.2/34

# asym_sam7_cor_correction_rms vs Slug




Right In: 311.388+/-0.089 $\chi^2$/NDF: 2123799.0/15

Left Out: 329.013+/-0.065 $\chi^2$/NDF:949960.6/16

Right Out: 287.413+/-0.083 $\chi^2$/NDF: 2690258.0/18

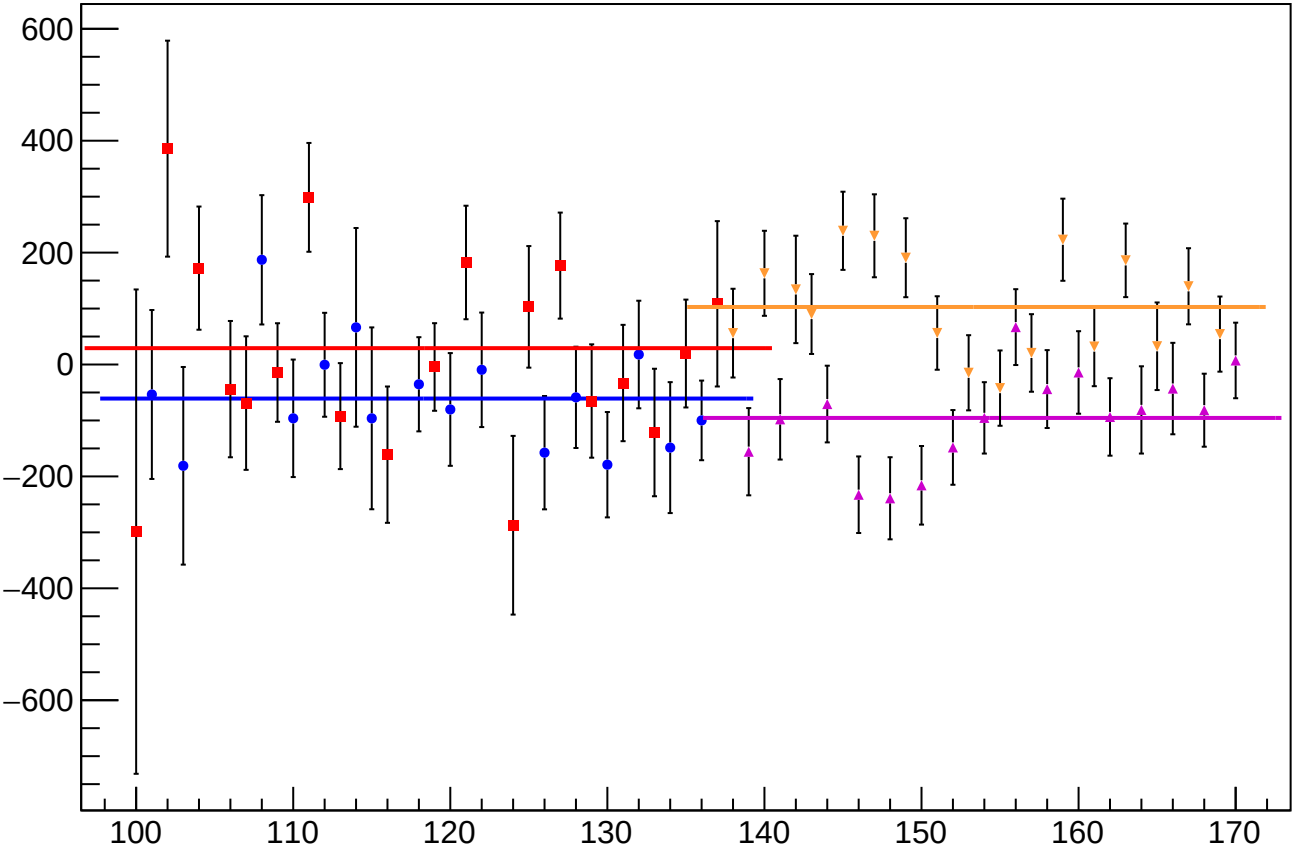
Left In: 333.580+/-0.066 $\chi^2$/NDF:711826.4/15

+ sign 322.898+/-0.052 $\chi^2$/NDF: 3099353.8/32

All: 319.315+/-0.037 $\chi^2$/NDF: 6699104.0/67

- sign 315.826+/-0.052 $\chi^2$/NDF: 3590534.2/34

# eigen_cor_asym_sam7_mean vs Slug




Right In: -60.848+/-26.054 $\chi^2$/NDF: 10.6/15

Left Out: 102.815+/-17.343 $\chi^2$/NDF:25.9/16

Right Out: 29.221+/-25.143 $\chi^2$/NDF: 31.3/18

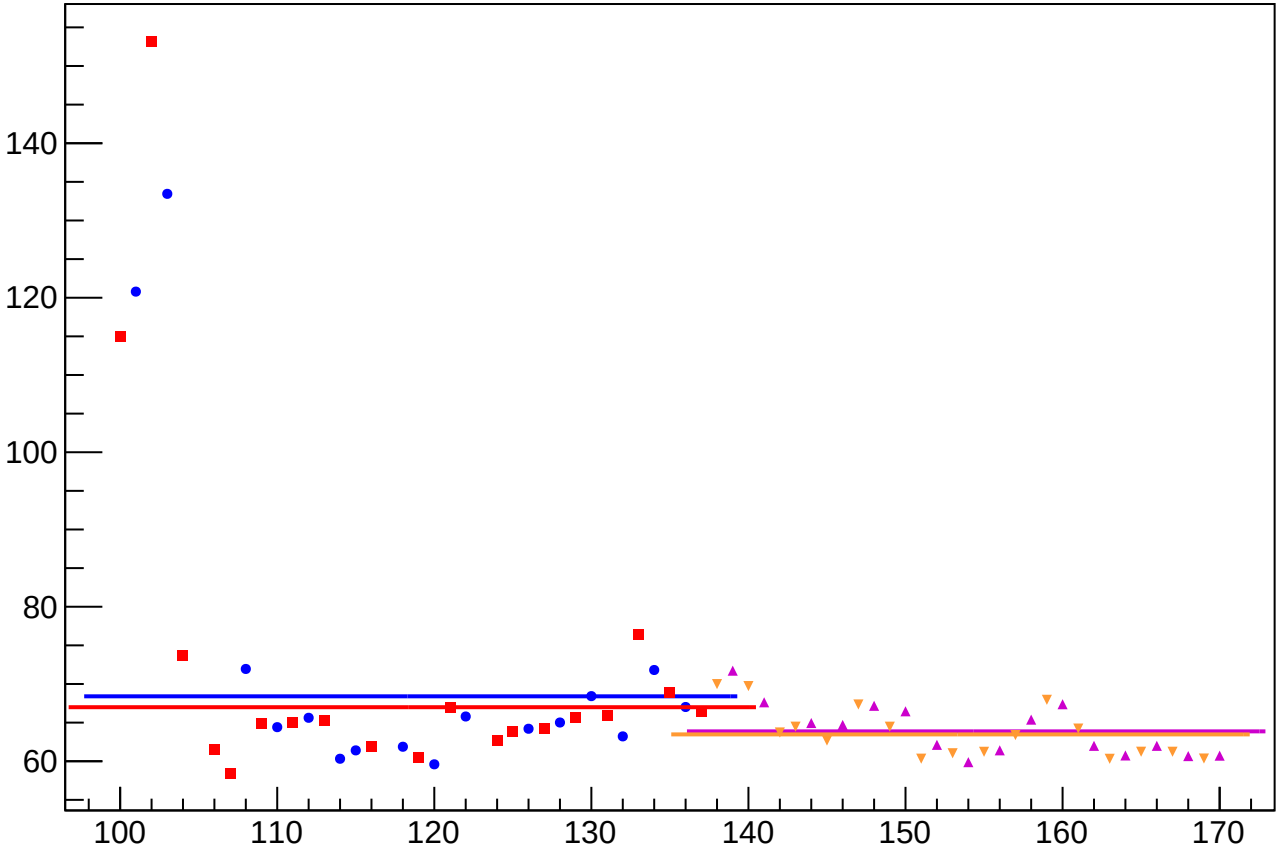
Left In: -95.489+/-17.602 $\chi^2$/NDF:22.5/15

+ sign 52.561+/-14.437 $\chi^2$/NDF: 63.9/32

All: -1.021+/-10.202 $\chi^2$/NDF: 161.6/67

- sign -54.473+/-14.419 $\chi^2$/NDF: 70.2/34

# eigen_cor_asym_sam7_rms vs Slug




Right In: 68.403+/-0.018 $\chi^2$/NDF: 569557.9/15

Left Out: 63.475+/-0.012 $\chi^2$/NDF:63459.3/16

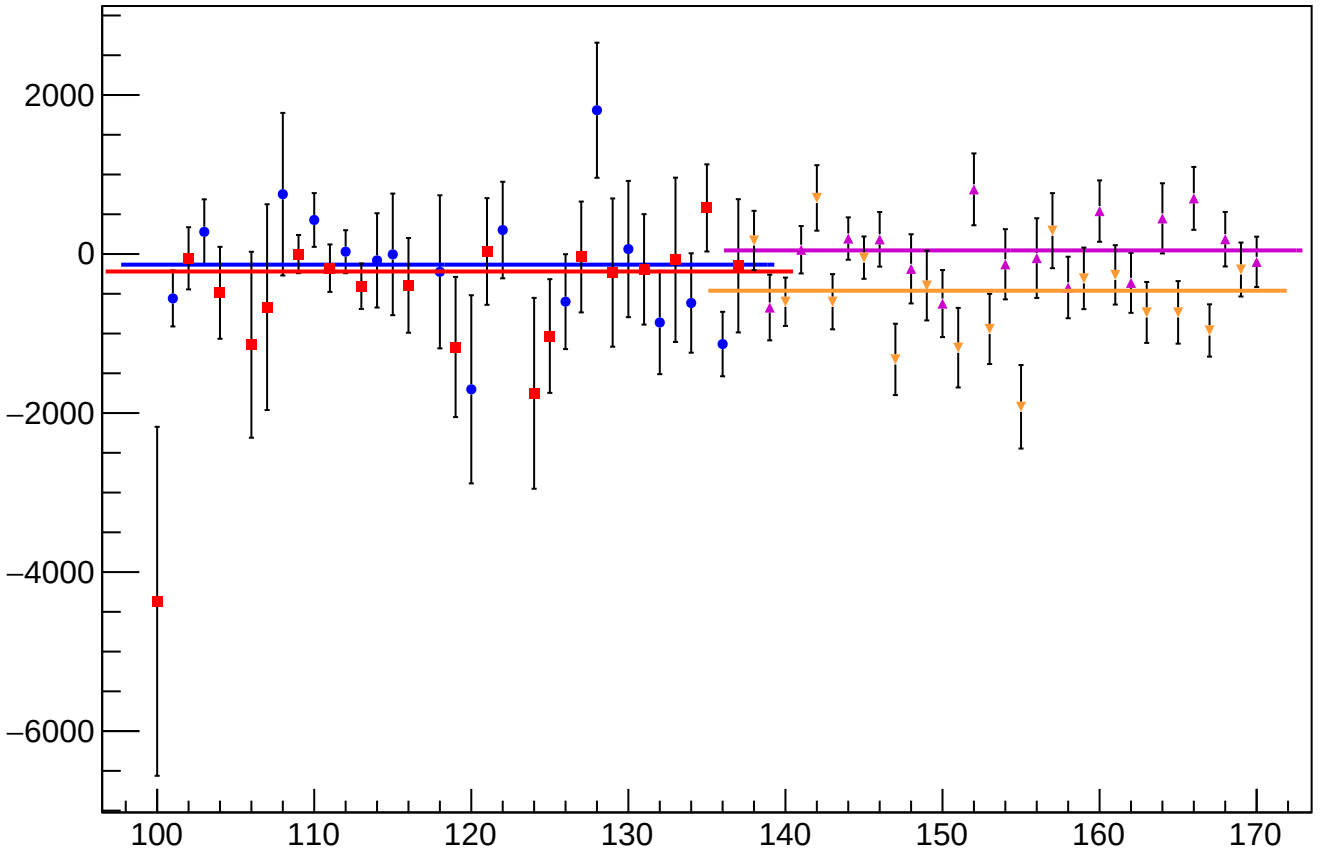
Right Out: 66.995+/-0.018 $\chi^2$/NDF: 484487.7/18

Left In: 63.867+/-0.012 $\chi^2$/NDF:65534.8/15

+ sign 64.988+/-0.010 $\chi^2$/NDF: 682603.2/32

All: 64.942+/-0.007 $\chi^2$/NDF: 1253435.6/67

- sign 64.896+/-0.010 $\chi^2$/NDF: 570791.1/34




Right In: -133.587+/-125.904 $\chi^2$/NDF: 22.5/15

Left Out: -461.407+/-91.766 $\chi^2$/NDF:35.3/16

Right Out: -219.615+/-117.989 $\chi^2$/NDF: 12.5/18

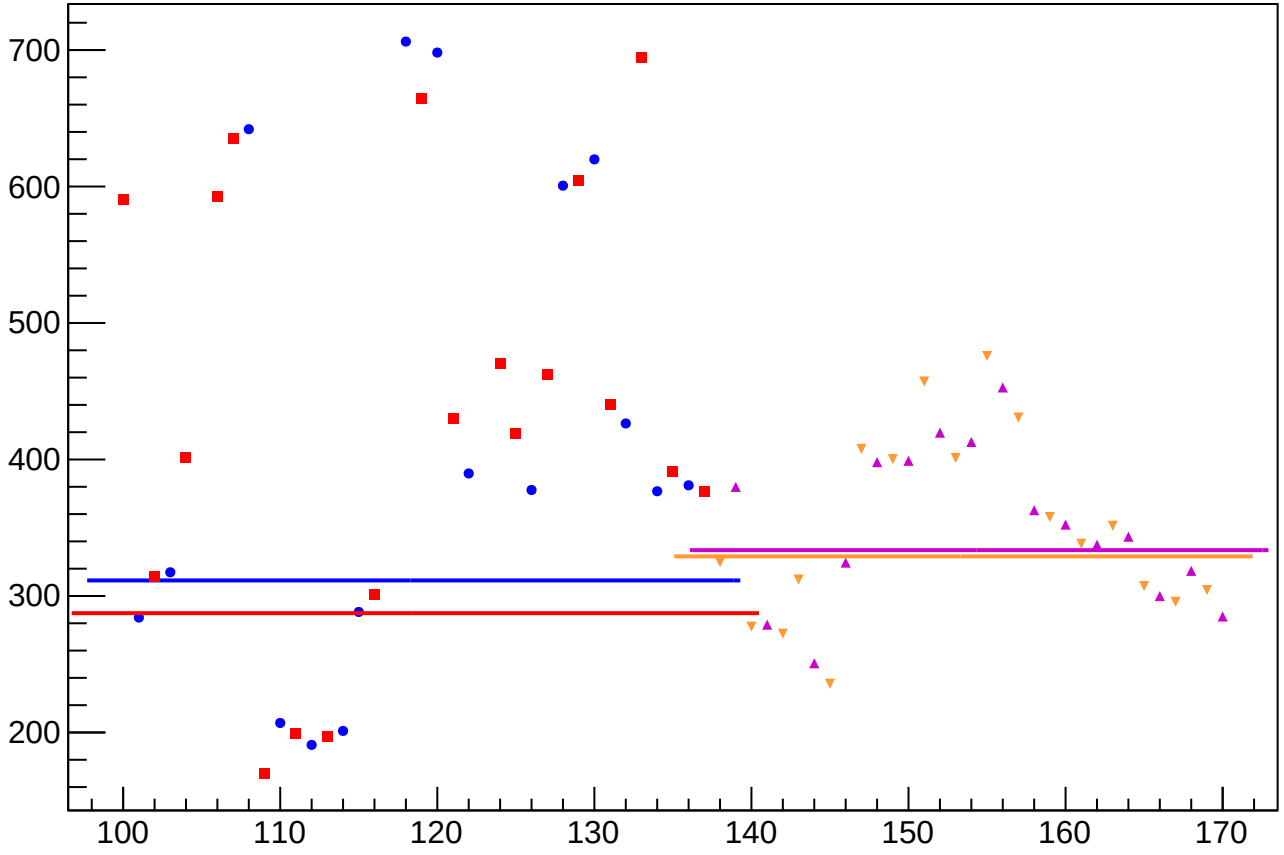
Left In: 45.564+/-93.268 $\chi^2$/NDF:17.6/15

+ sign -347.676+/-74.159 $\chi^2$/NDF: 62.2/32

All: -200.087+/-52.085 $\chi^2$/NDF: 103.2/67

- sign -56.413+/-73.169 $\chi^2$/NDF: 33.2/34

# asym_sam7_eigen_cor_correction_rms vs Slug




Right In: 311.388+/-0.089 $\chi^2$/NDF: 2123799.0/15

Left Out: 329.013+/-0.065 $\chi^2$/NDF:949960.6/16

Right Out: 287.413+/-0.083 $\chi^2$/NDF: 2690258.0/18

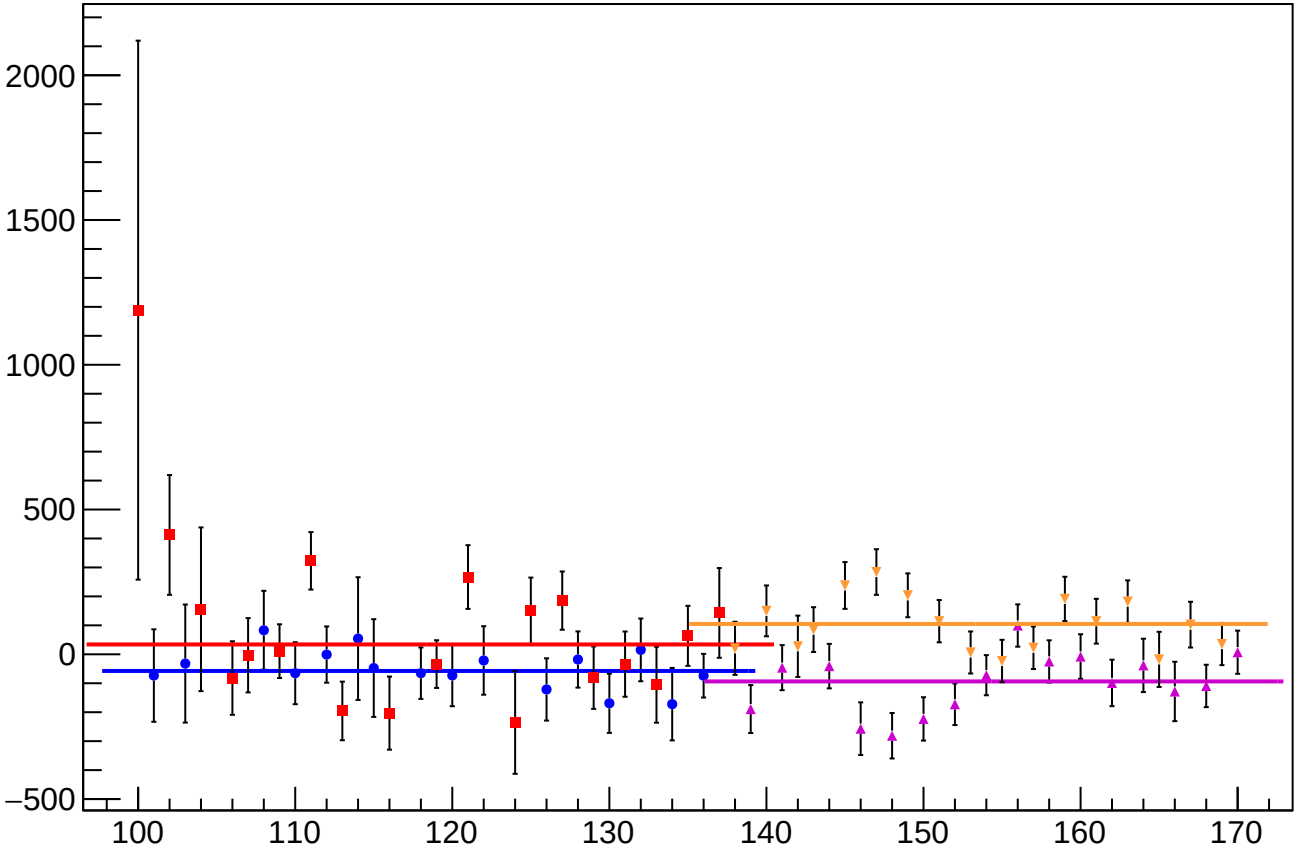
Left In: 333.580+/-0.066 $\chi^2$/NDF:711826.4/15

+ sign 322.898+/-0.052 $\chi^2$/NDF: 3099353.8/32

All: 319.315+/-0.037 $\chi^2$/NDF: 6699104.0/67

- sign 315.826+/-0.052 $\chi^2$/NDF: 3590534.2/34

# dit_asym_sam7_mean vs Slug




Right In: -57.533+/-28.087 $\chi^2$/NDF: 4.9/15

Left Out: 104.827+/-19.153 $\chi^2$/NDF:22.4/16

Right Out: 34.033+/-27.398 $\chi^2$/NDF: 37.1/18

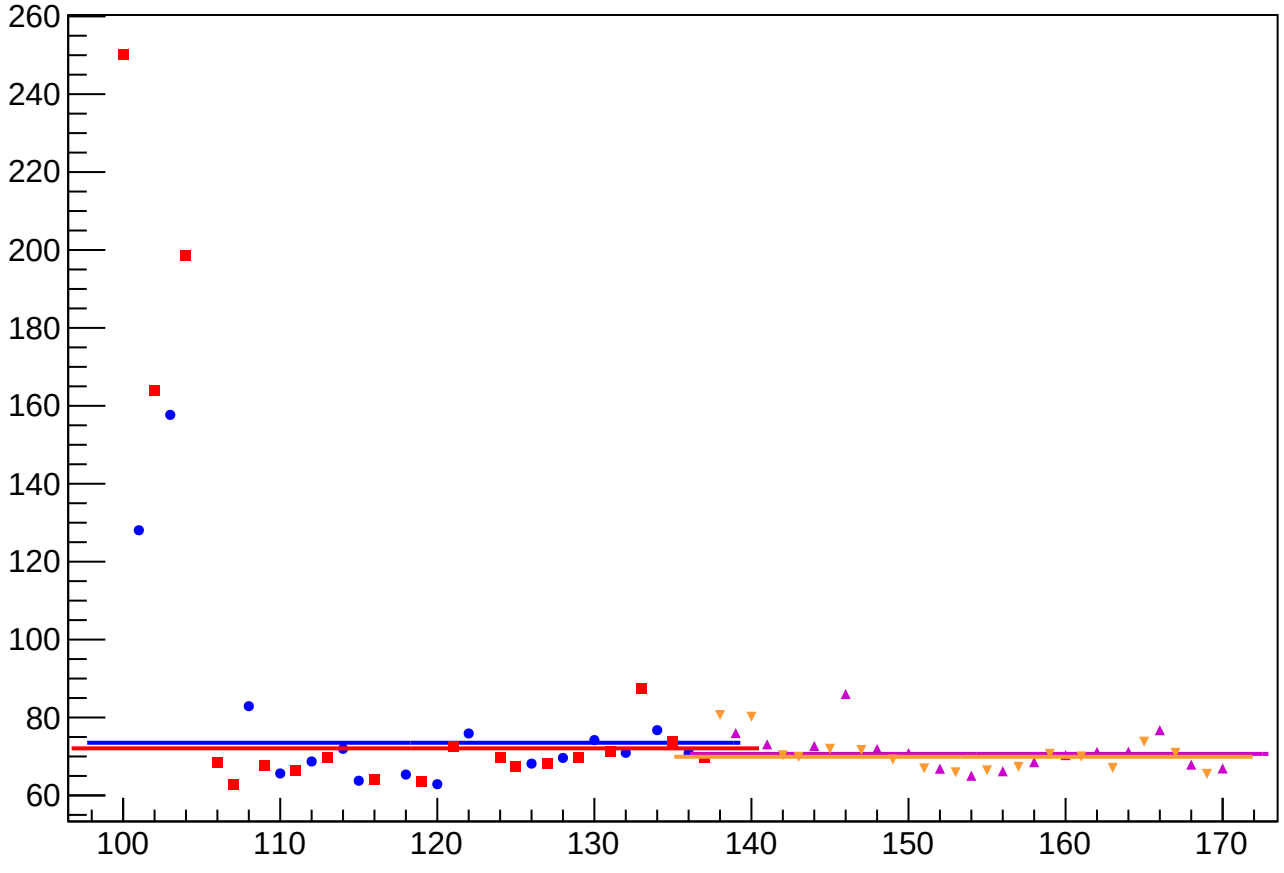
Left In: -93.653+/-19.529 $\chi^2$/NDF:26.9/15

+ sign 53.290+/-15.824 $\chi^2$/NDF: 50.1/32

All: 1.583+/-11.217 $\chi^2$/NDF: 150.0/67

- sign -50.637+/-15.902 $\chi^2$/NDF: 78.4/34

# dit_asym_sam7_rms vs Slug




Right In: 73.519+/-0.020 $\chi^2$/NDF: 656847.5/15

Left Out: 69.923+/-0.014 $\chi^2$/NDF:87627.9/16

Right Out: 72.074+/-0.019 $\chi^2$/NDF: 958495.0/18

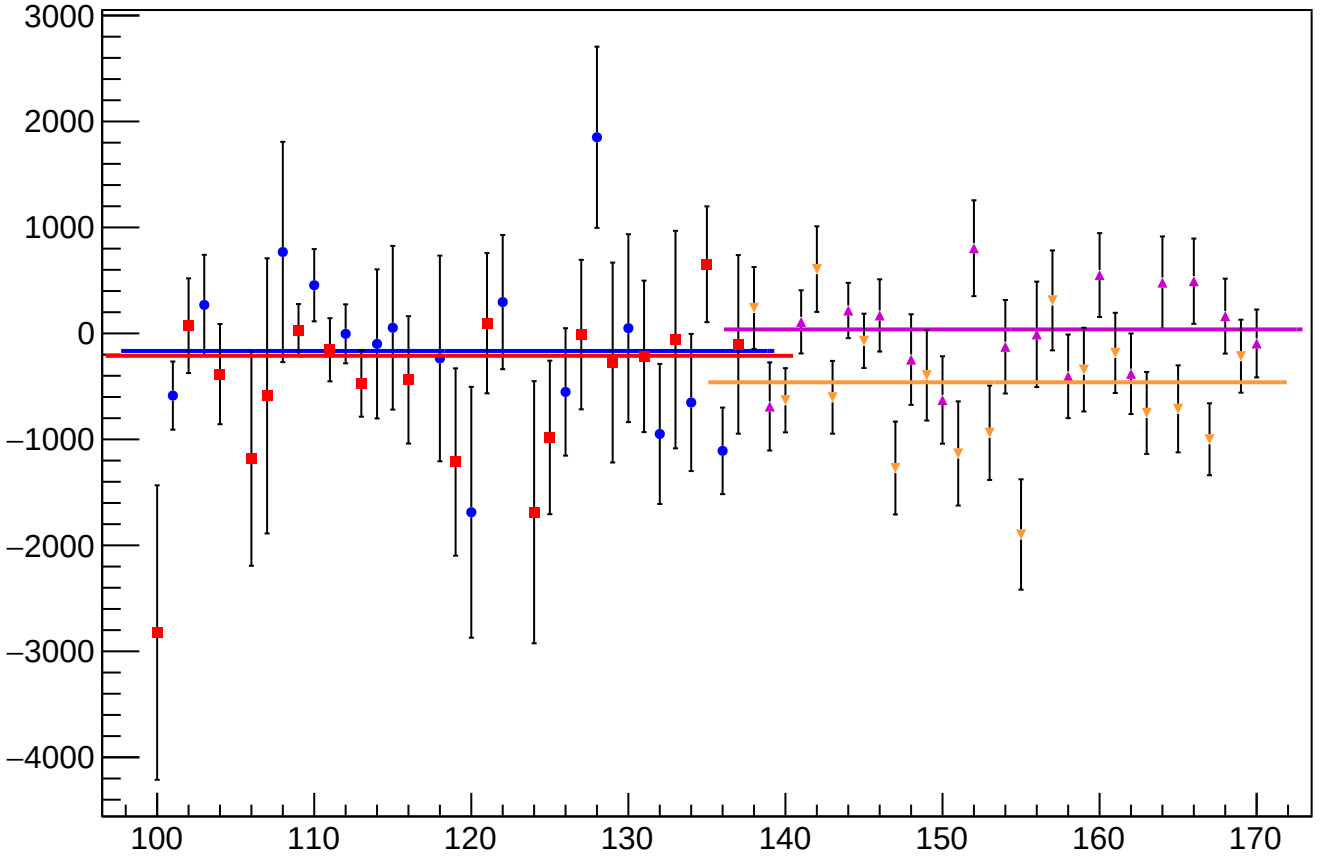
Left In: 70.655+/-0.014 $\chi^2$/NDF:112287.0/15

+ sign 71.064+/-0.011 $\chi^2$/NDF: 766854.4/32

All: 71.099+/-0.008 $\chi^2$/NDF: 1841211.2/67

- sign 71.133+/-0.011 $\chi^2$/NDF: 1074338.0/34

# asym_sam7_dit_correction_mean vs Slug




Right In: -165.500+/-128.438 $\chi^2$/NDF: 22.6/15

Left Out: -461.238+/-91.805 $\chi^2$/NDF:34.4/16

Right Out: -211.347+/-120.122 $\chi^2$/NDF: 13.6/18

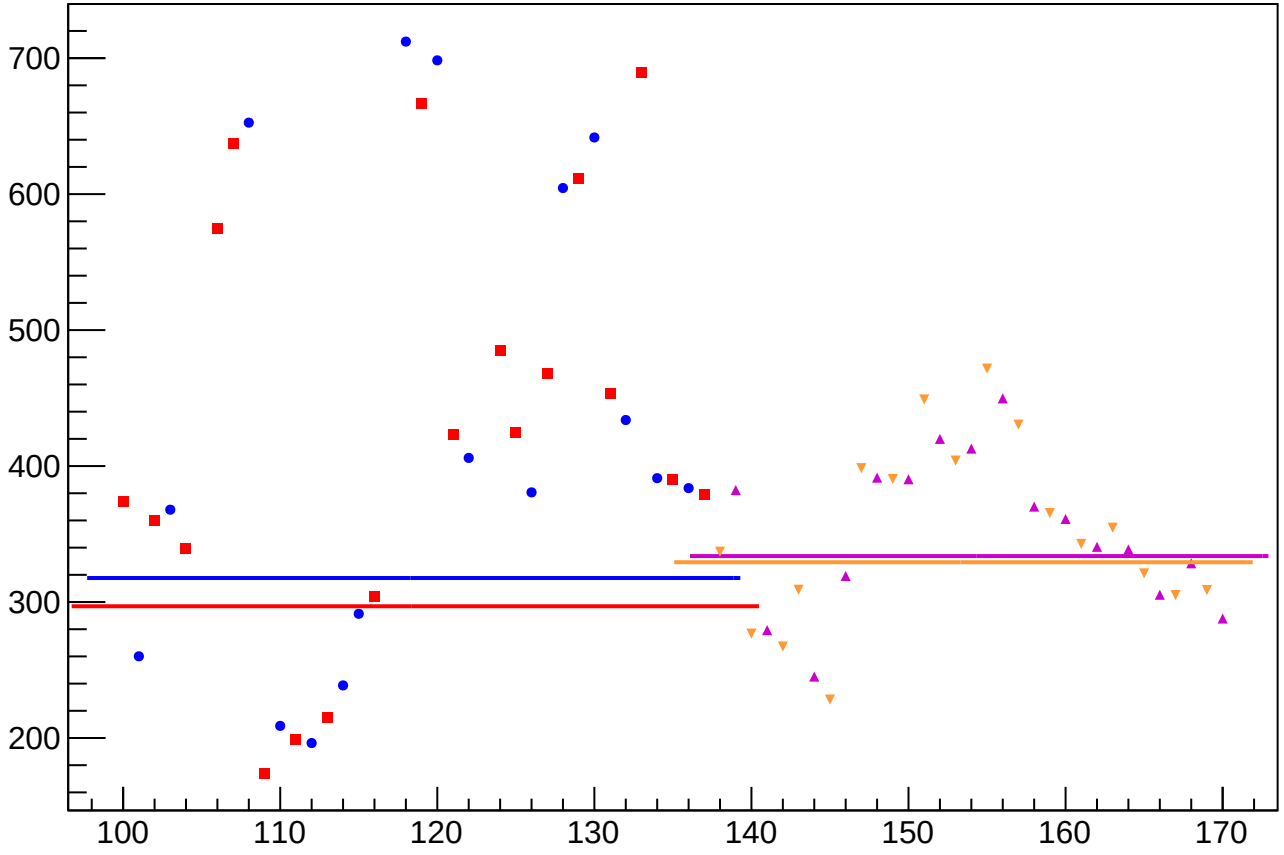
Left In: 37.681+/-93.380 $\chi^2$/NDF:16.6/15

+ sign -361.234+/-74.687 $\chi^2$/NDF: 60.6/32

All: -206.699+/-52.468 $\chi^2$/NDF: 101.9/67

- sign -56.124+/-73.724 $\chi^2$/NDF: 32.9/34

# asym_sam7_dit_correction_rms vs Slug




Right In: 317.664+/-0.091 $\chi^2$/NDF: 2136192.8/15

Left Out: 329.279+/-0.065 $\chi^2$/NDF:979023.8/16

Right Out: 296.888+/-0.085 $\chi^2$/NDF: 2541040.3/18

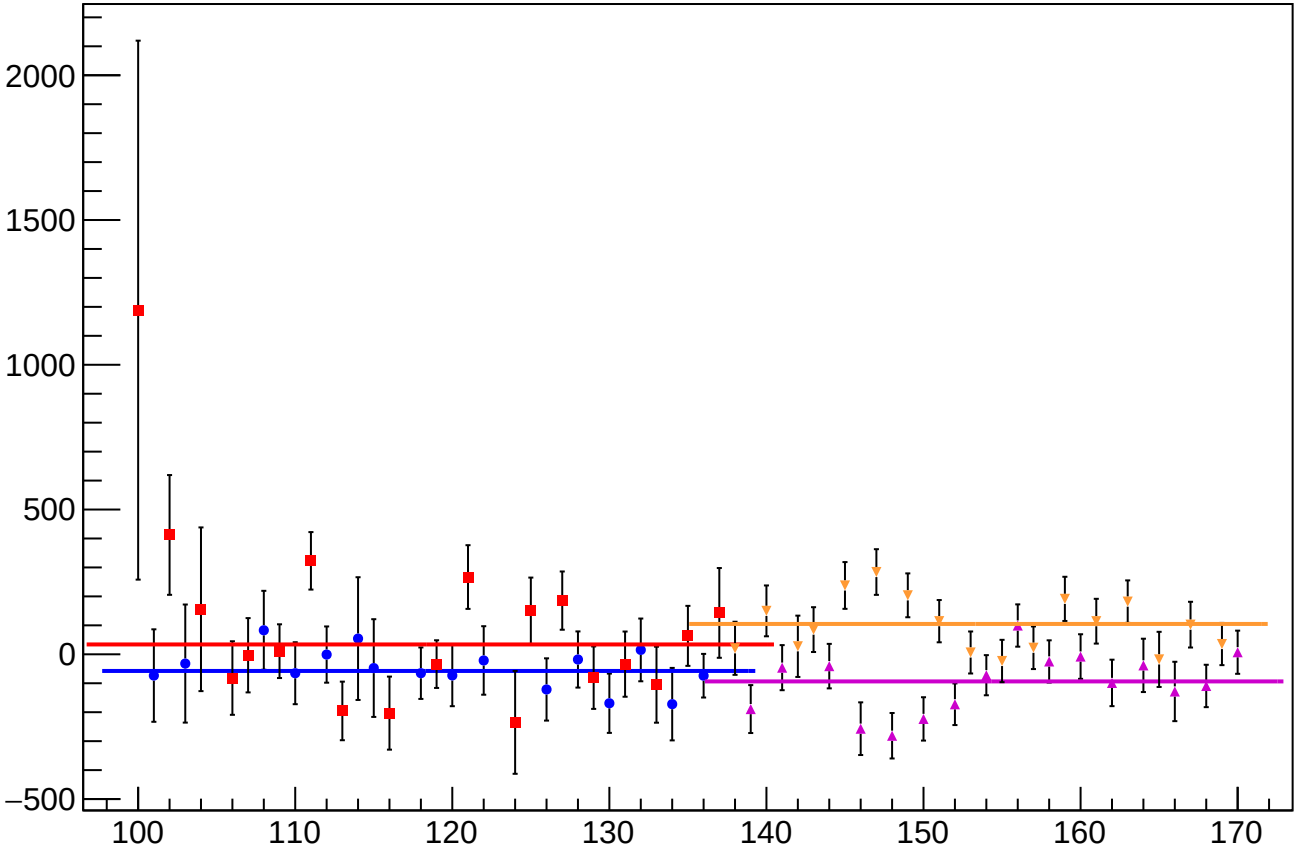
Left In: 333.794+/-0.066 $\chi^2$/NDF:727198.6/15

+ sign 325.351+/-0.053 $\chi^2$/NDF: 3126042.6/32

All: 322.586+/-0.037 $\chi^2$/NDF: 6517369.8/67

- sign 319.892+/-0.052 $\chi^2$/NDF: 3385914.8/34

# eigen_dit_asym_sam7_mean vs Slug




Right In: -57.532+/-28.087 $\chi^2$/NDF: 4.9/15

Left Out: 104.827+/-19.153 $\chi^2$/NDF:22.4/16

Right Out: 34.034+/-27.398 $\chi^2$/NDF: 37.1/18

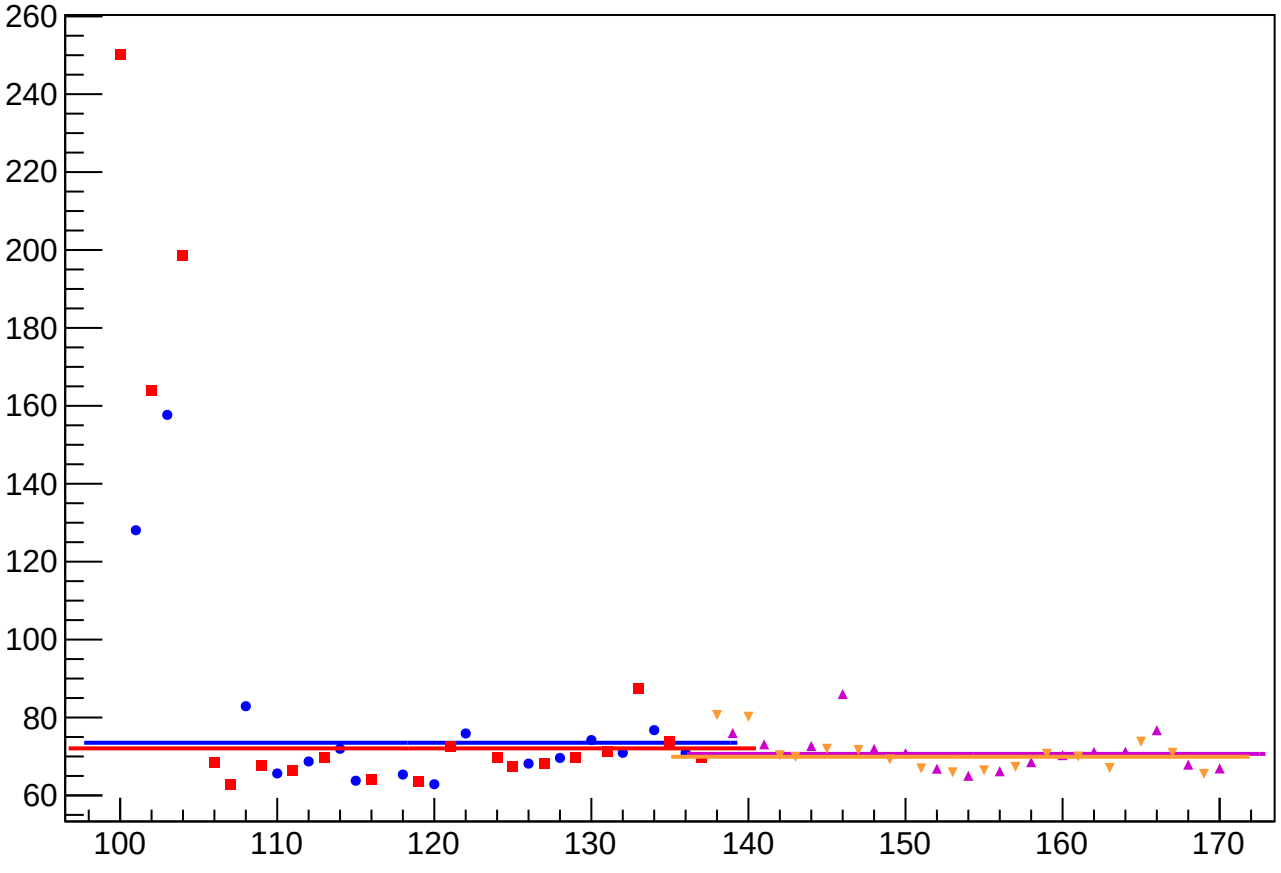
Left In: -93.653+/-19.529 $\chi^2$/NDF:26.9/15

+ sign 53.291+/-15.824 $\chi^2$/NDF: 50.1/32

All: 1.584+/-11.217 $\chi^2$/NDF: 150.0/67

- sign -50.636+/-15.902 $\chi^2$/NDF: 78.4/34

# eigen_dit_asym_sam7_rms vs Slug




Right In: 73.519+/-0.020 $\chi^2$/NDF: 656849.2/15

Left Out: 69.923+/-0.014 $\chi^2$/NDF:87626.9/16

Right Out: 72.074+/-0.019 $\chi^2$/NDF: 958496.3/18

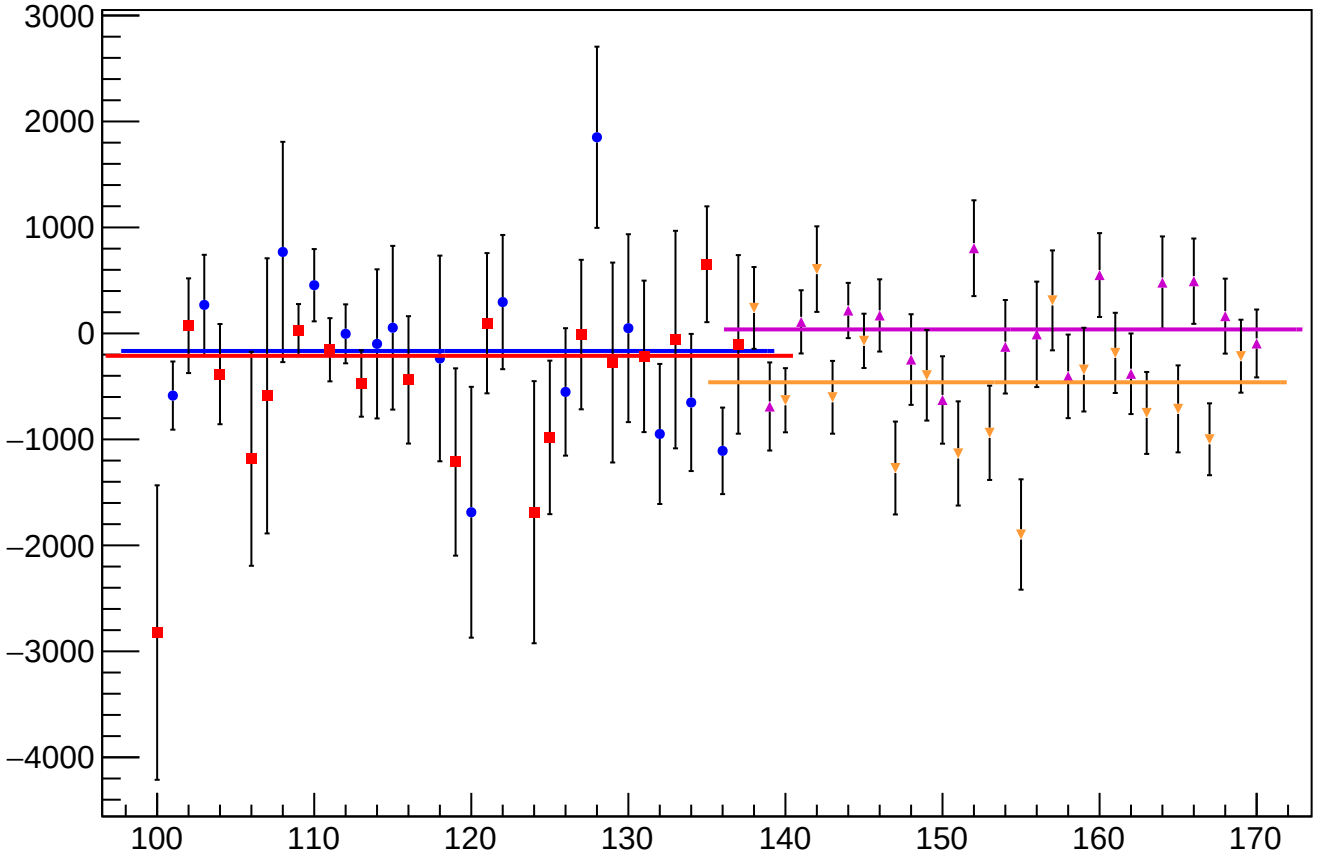
Left In: 70.655+/-0.014 $\chi^2$/NDF:112286.7/15

+ sign 71.064+/-0.011 $\chi^2$/NDF: 766853.3/32

All: 71.099+/-0.008 $\chi^2$/NDF: 1841210.5/67

- sign 71.133+/-0.011 $\chi^2$/NDF: 1074338.4/34

# asym_sam7_eigen_dit_correction_mean vs Slug




Right In: -165.498+/-128.437 $\chi^2$/NDF: 22.6/15

Left Out: -461.238+/-91.805 $\chi^2$/NDF:34.4/16

Right Out: -211.347+/-120.121 $\chi^2$/NDF: 13.6/18

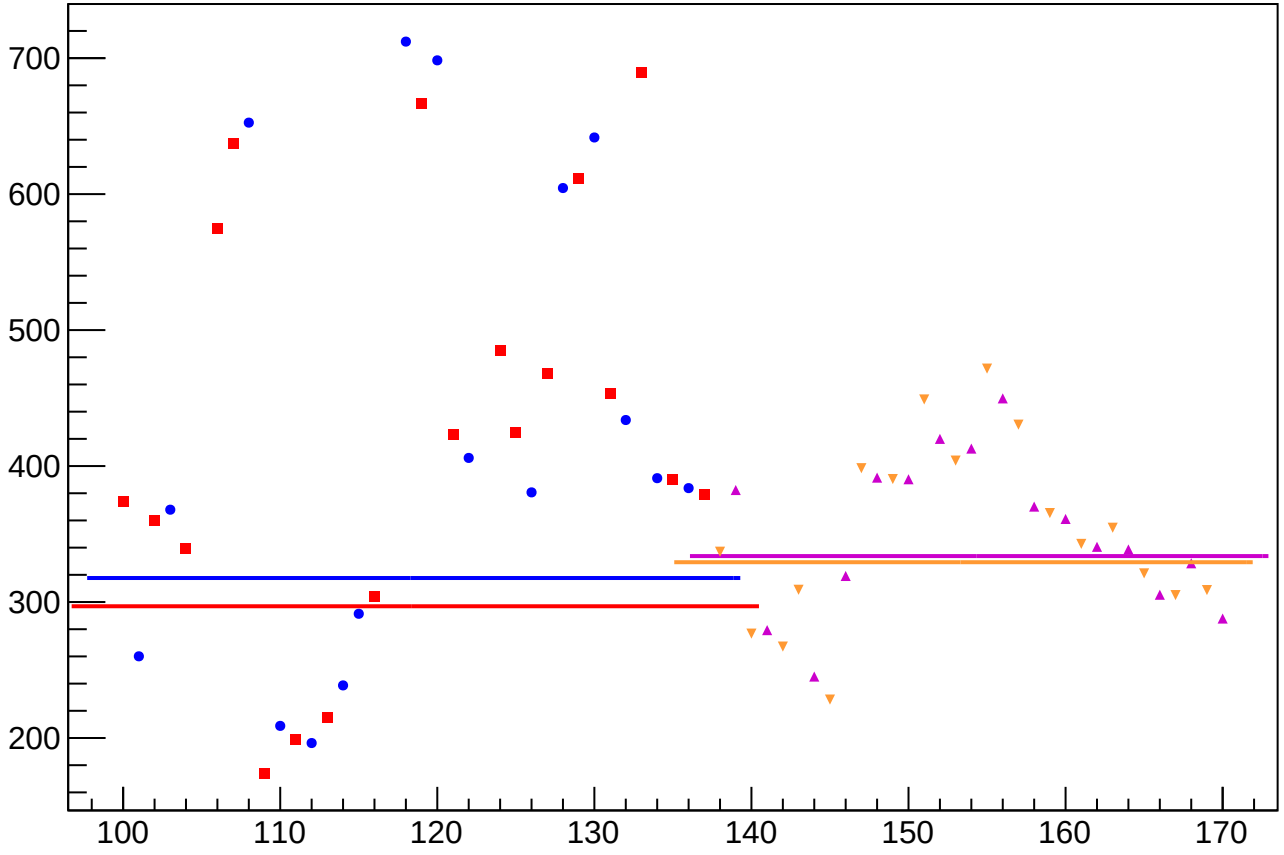
Left In: 37.681+/-93.380 $\chi^2$/NDF:16.6/15

+ sign -361.233+/-74.687 $\chi^2$/NDF: 60.6/32

All: -206.699+/-52.468 $\chi^2$/NDF: 101.9/67

- sign -56.124+/-73.724 $\chi^2$/NDF: 32.9/34

# asym_sam7_eigen_dit_correction_rms vs Slug




Right In: 317.661+/-0.091 $\chi^2$/NDF: 2136224.4/15

Left Out: 329.279+/-0.065 $\chi^2$/NDF:979033.2/16

Right Out: 296.887+/-0.085 $\chi^2$/NDF: 2541051.2/18

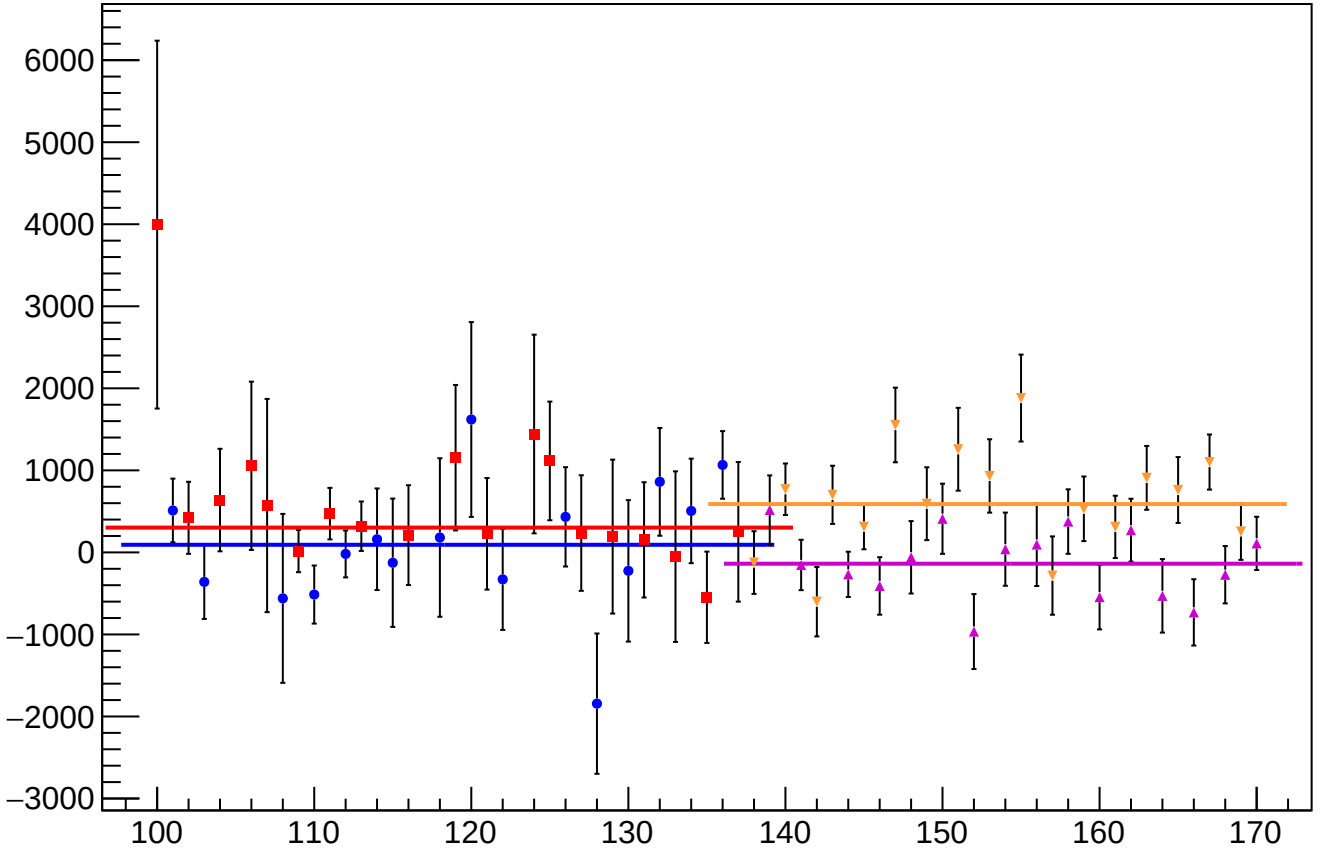
Left In: 333.794+/-0.066 $\chi^2$/NDF:727203.9/15

+ sign 325.350+/-0.053 $\chi^2$/NDF: 3126087.8/32

All: 322.586+/-0.037 $\chi^2$/NDF: 6517440.5/67

- sign 319.891+/-0.052 $\chi^2$/NDF: 3385941.0/34

# asym_sam7_mean vs Slug




Right In: 92.803+/-131.927 $\chi^2$/NDF: 20.8/15

Left Out: 589.057+/-93.707 $\chi^2$/NDF:33.6/16

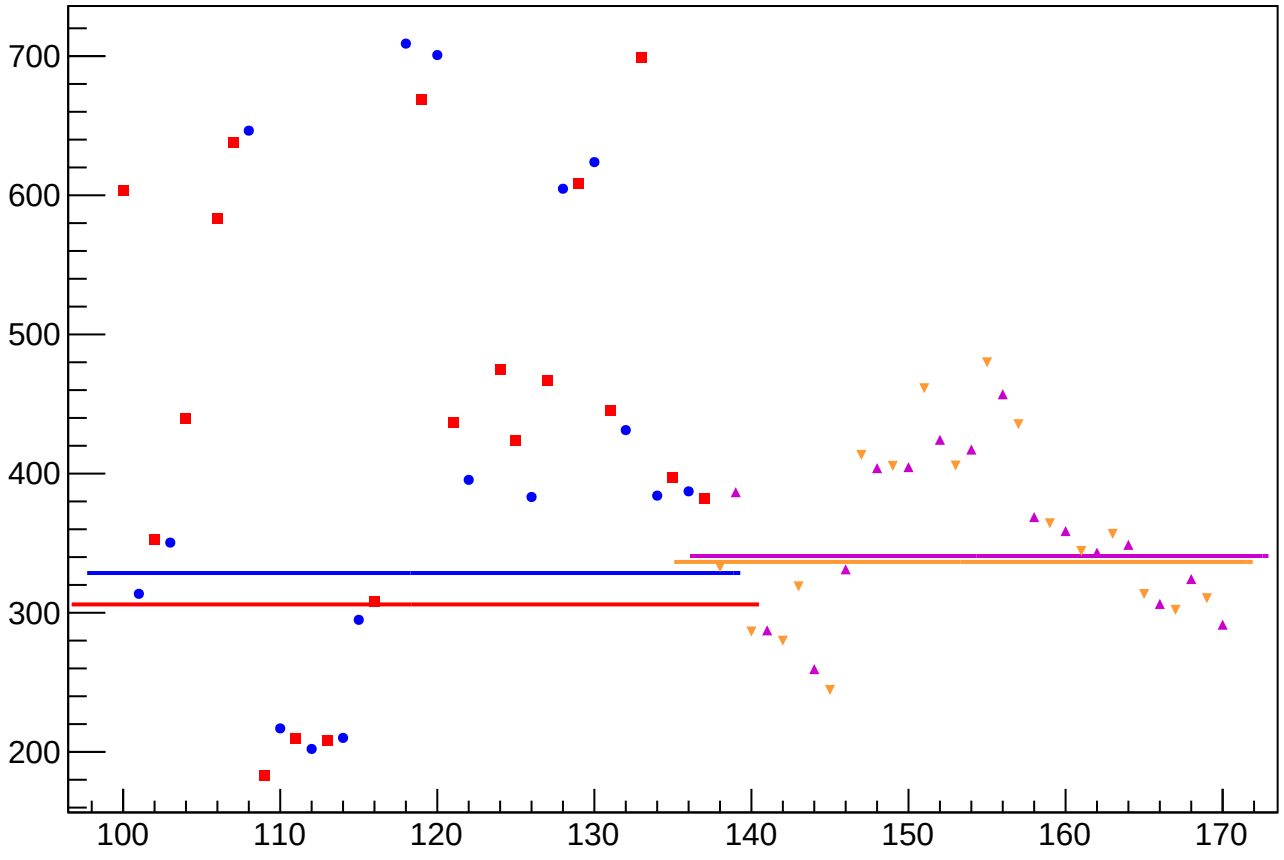
Right Out: 302.273+/-123.916 $\chi^2$/NDF: 10.8/18

Left In: -137.828+/-95.160 $\chi^2$/NDF:16.1/15

+ sign 422.645+/-76.397 $\chi^2$/NDF: 63.8/32

All: 221.624+/-53.691 $\chi^2$/NDF: 112.4/67

- sign 25.432+/-75.473 $\chi^2$/NDF: 34.9/34




Right In: 328.567+/-0.093 $\chi^2$/NDF: 1958873.4/15

Left Out: 336.539+/-0.066 $\chi^2$/NDF:877630.2/16

Right Out: 305.988+/-0.088 $\chi^2$/NDF: 2527463.5/18

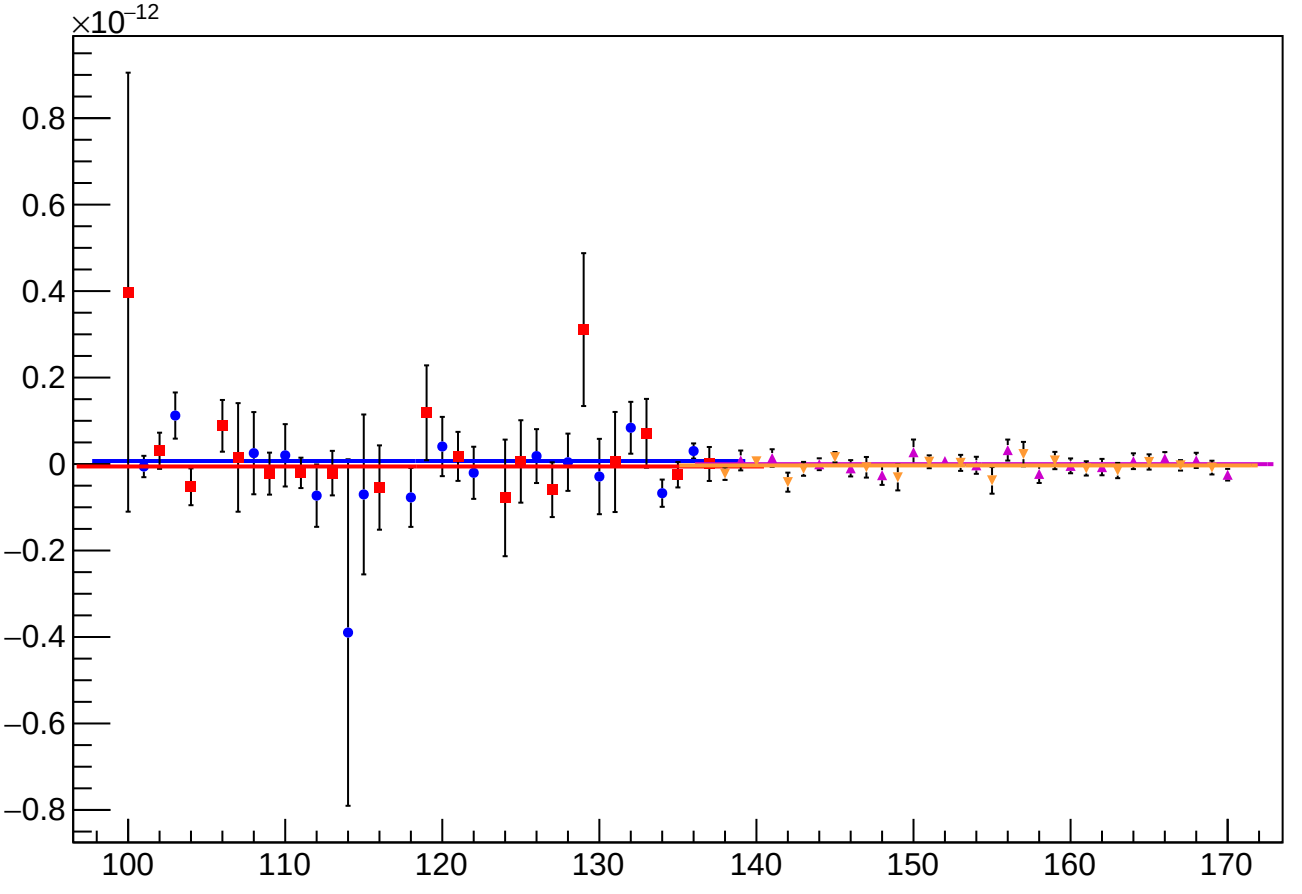
Left In: 340.777+/-0.067 $\chi^2$/NDF:656554.3/15

+ sign 333.865+/-0.054 $\chi^2$/NDF: 2841357.7/32

All: 330.832+/-0.038 $\chi^2$/NDF: 6130762.6/67

- sign 327.872+/-0.053 $\chi^2$/NDF: 3283174.7/34

# asym_sam7_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 17.7/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:13.0/16

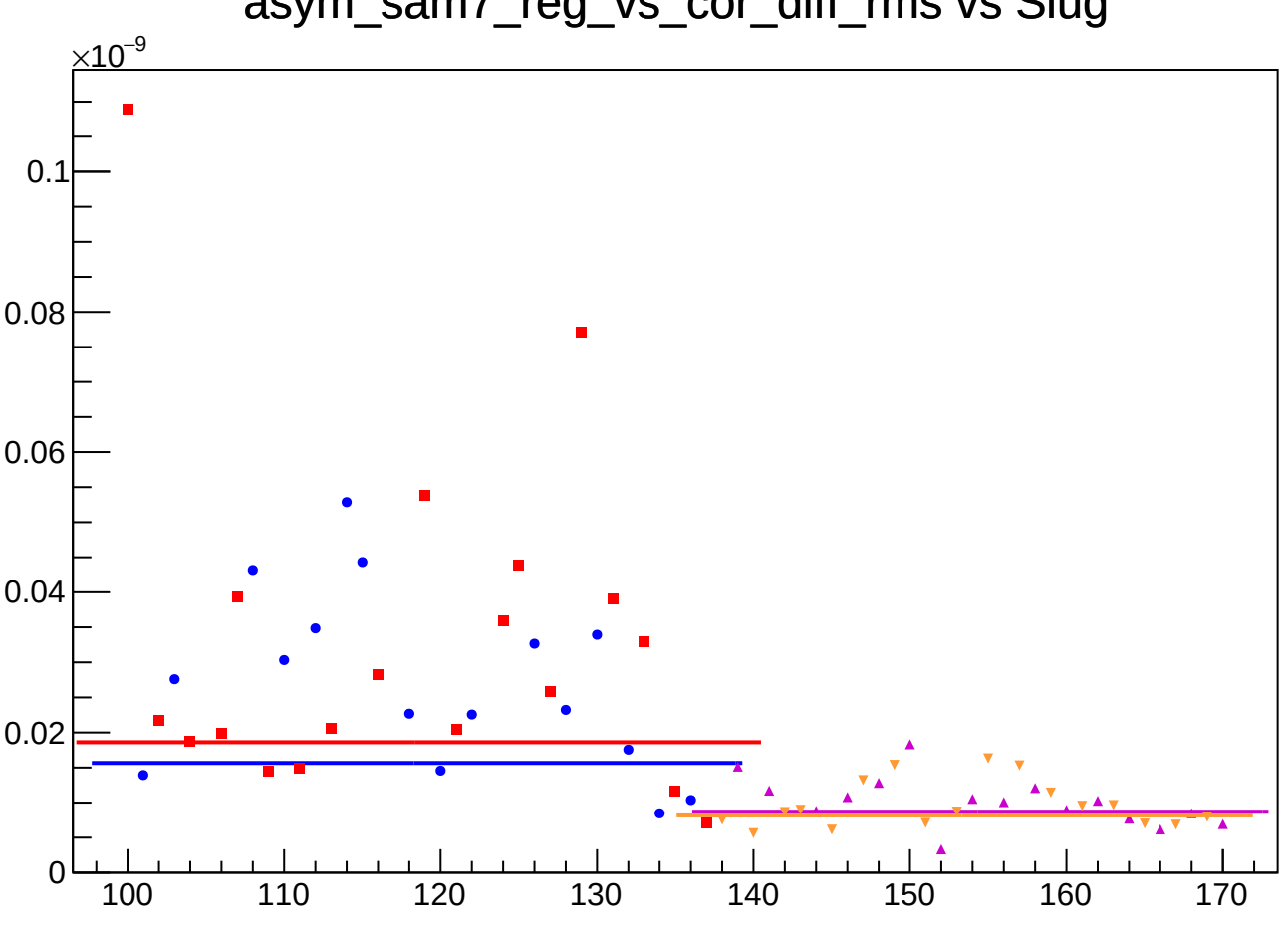
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 12.8/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:11.0/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 31.5/32

All: -0.000+/-0.000 $\chi^2$/NDF: 55.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 24.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1164380.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:779761.8/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1228542.0/18

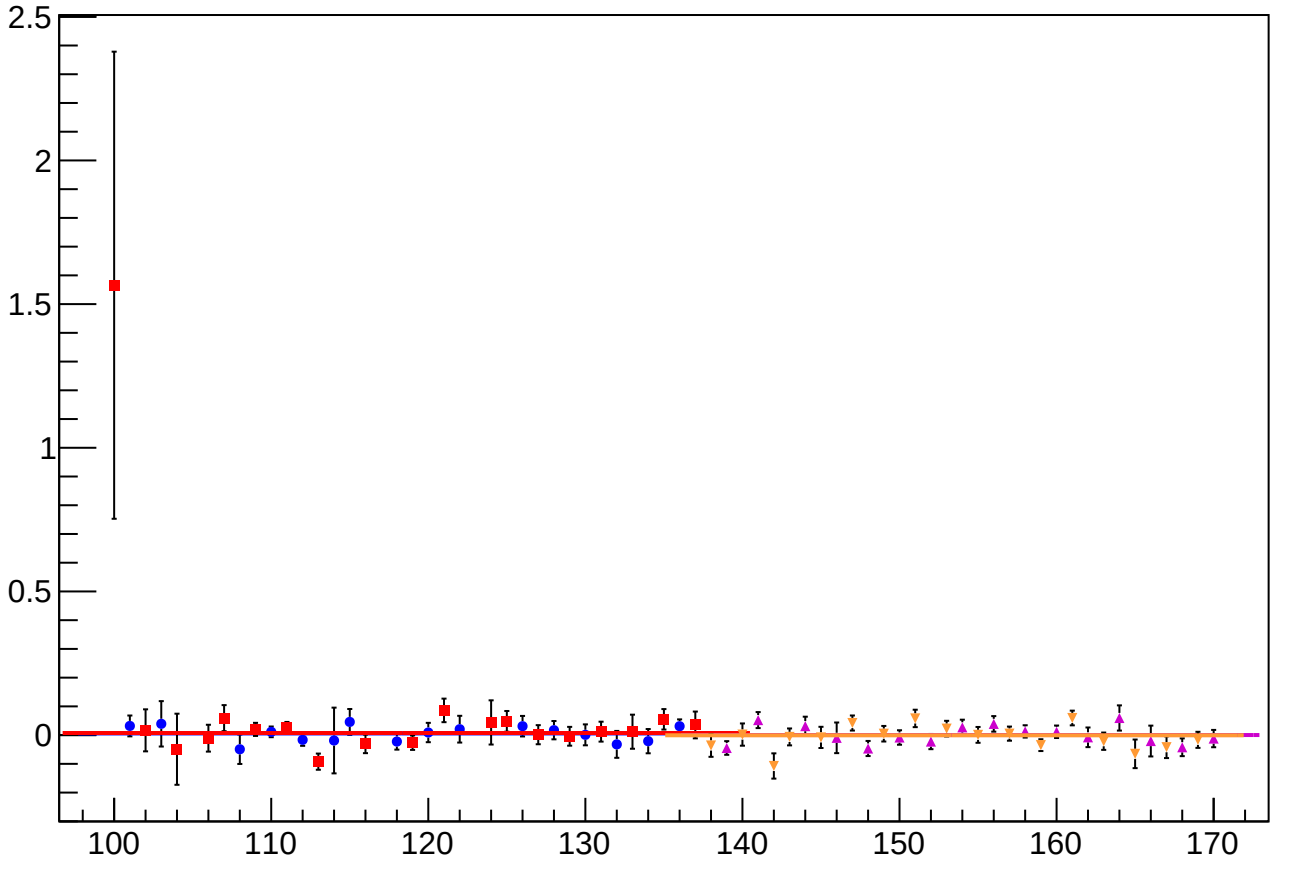
Left In: 0.000+/-0.000 $\chi^2$/NDF:1130857.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2768714.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 6226528.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3427699.9/34

# asym_sam7_dit_vs_cor_diff_mean vs Slug




Right In: 0.006+/-0.008 $\chi^2$/NDF: 7.9/15

Left Out: -0.001+/-0.007 $\chi^2$/NDF:26.0/16

Right Out: 0.007+/-0.008 $\chi^2$/NDF: 29.8/18

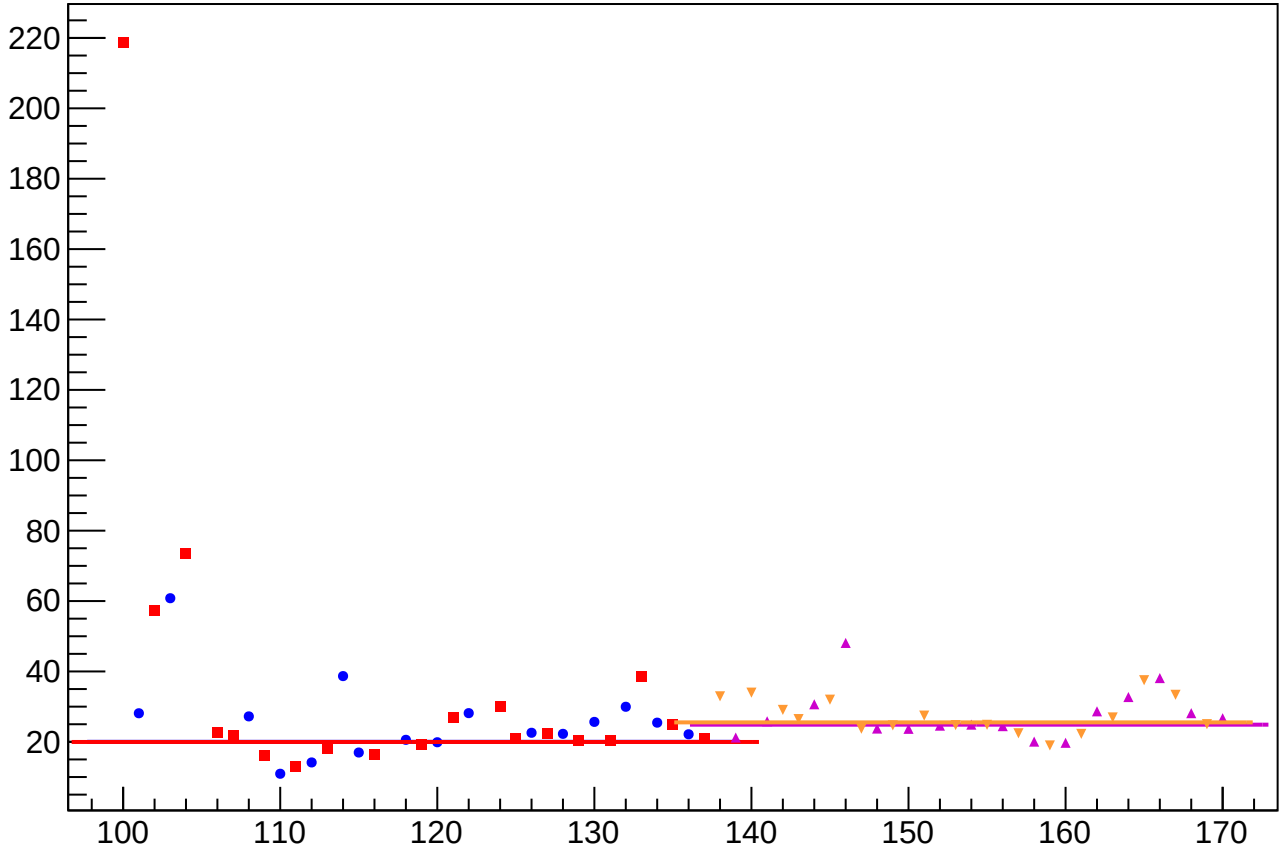
Left In: 0.000+/-0.007 $\chi^2$/NDF:19.8/15

+ sign 0.002+/-0.005 $\chi^2$/NDF: 34.2/32

All: 0.003+/-0.004 $\chi^2$/NDF: 84.3/67

- sign 0.003+/-0.005 $\chi^2$/NDF: 50.0/34

# asym_sam7_dit_vs_cor_diff_rms vs Slug




Right In: 20.000+/-0.006 $\chi^2$/NDF: 1641371.9/15

Left Out: 25.530+/-0.005 $\chi^2$/NDF:737919.7/16

Right Out: 19.963+/-0.006 $\chi^2$/NDF: 1716895.2/18

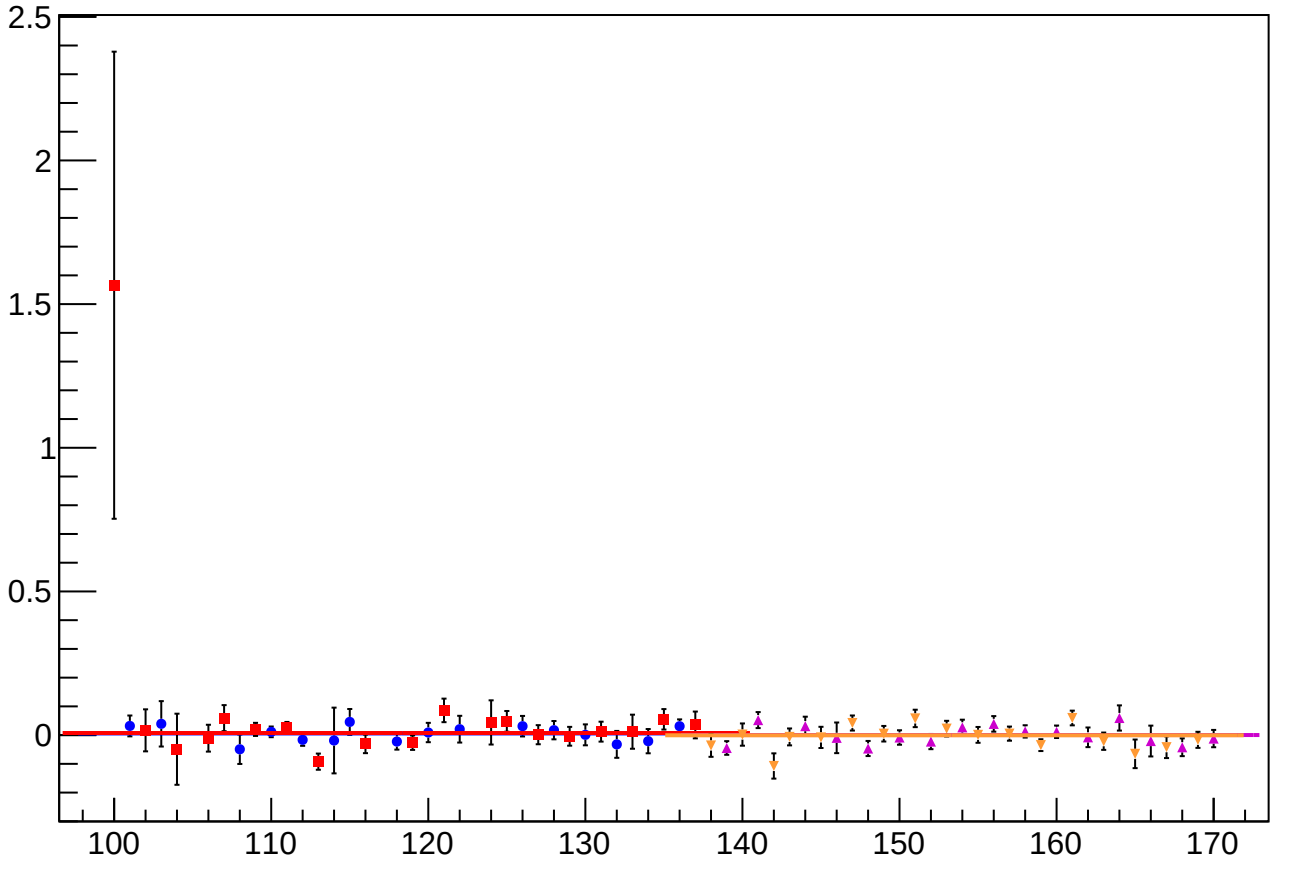
Left In: 24.875+/-0.005 $\chi^2$/NDF:953423.9/15

+ sign 23.113+/-0.004 $\chi^2$/NDF: 2895324.1/32

All: 22.921+/-0.003 $\chi^2$/NDF: 5985918.4/67

- sign 22.732+/-0.004 $\chi^2$/NDF: 3085570.1/34

# asym_sam7_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.006+/-0.008 $\chi^2$/NDF: 7.9/15

Left Out: -0.001+/-0.007 $\chi^2$/NDF:26.0/16

Right Out: 0.007+/-0.008 $\chi^2$/NDF: 29.8/18

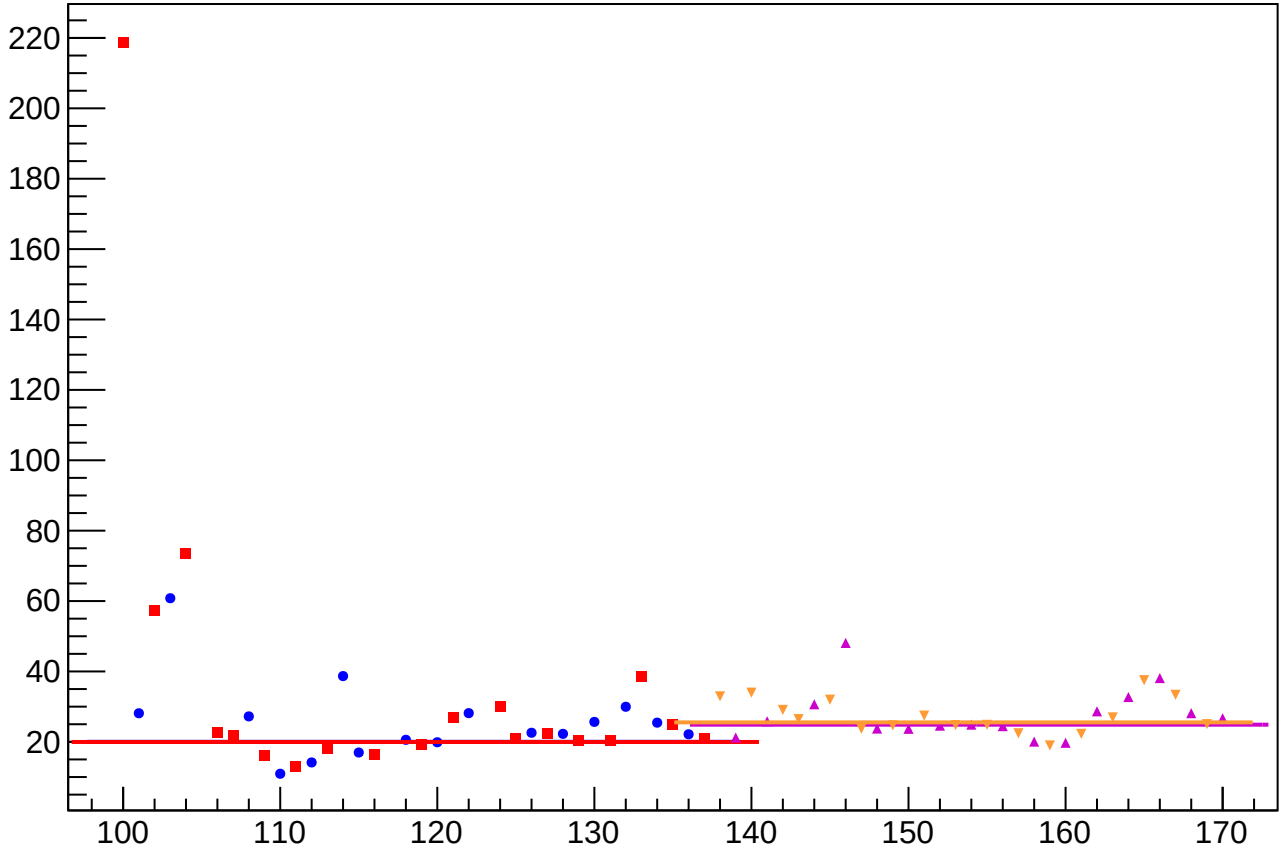
Left In: 0.000+/-0.007 $\chi^2$/NDF:19.8/15

+ sign 0.002+/-0.005 $\chi^2$/NDF: 34.2/32

All: 0.003+/-0.004 $\chi^2$/NDF: 84.3/67

- sign 0.003+/-0.005 $\chi^2$/NDF: 50.0/34

# asym_sam7_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 20.000+/-0.006 $\chi^2$/NDF: 1641371.9/15

Left Out: 25.530+/-0.005 $\chi^2$/NDF:737919.7/16

Right Out: 19.963+/-0.006 $\chi^2$/NDF: 1716895.2/18

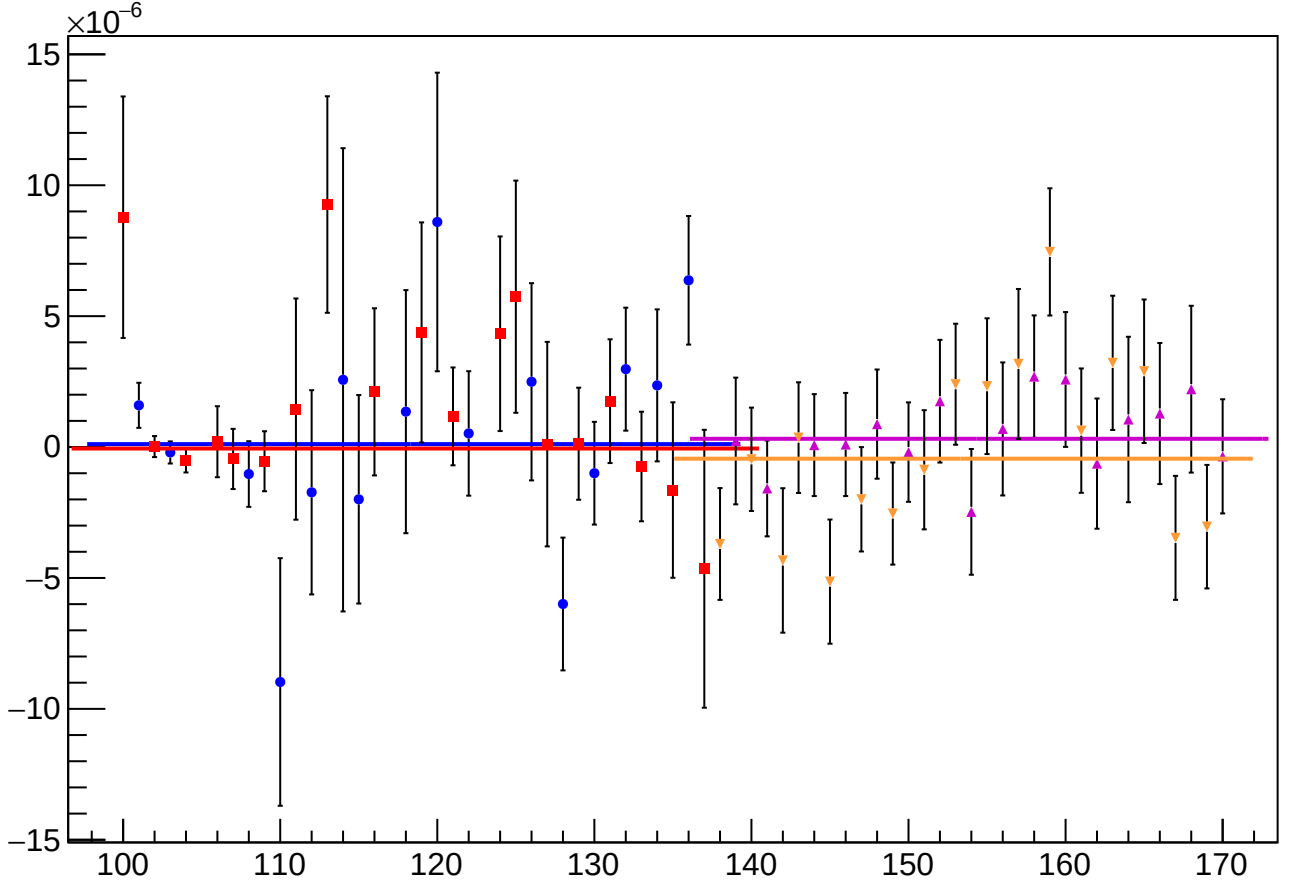
Left In: 24.875+/-0.005 $\chi^2$/NDF:953423.9/15

\+ sign 23.113+/-0.004 $\chi^2$/NDF: 2895324.1/32

All: 22.921+/-0.003 $\chi^2$/NDF: 5985918.4/67

\- sign 22.732+/-0.004 $\chi^2$/NDF: 3085570.1/34

# asym_sam7_eigen_dit_vs_dit_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 26.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:31.6/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 17.1/18

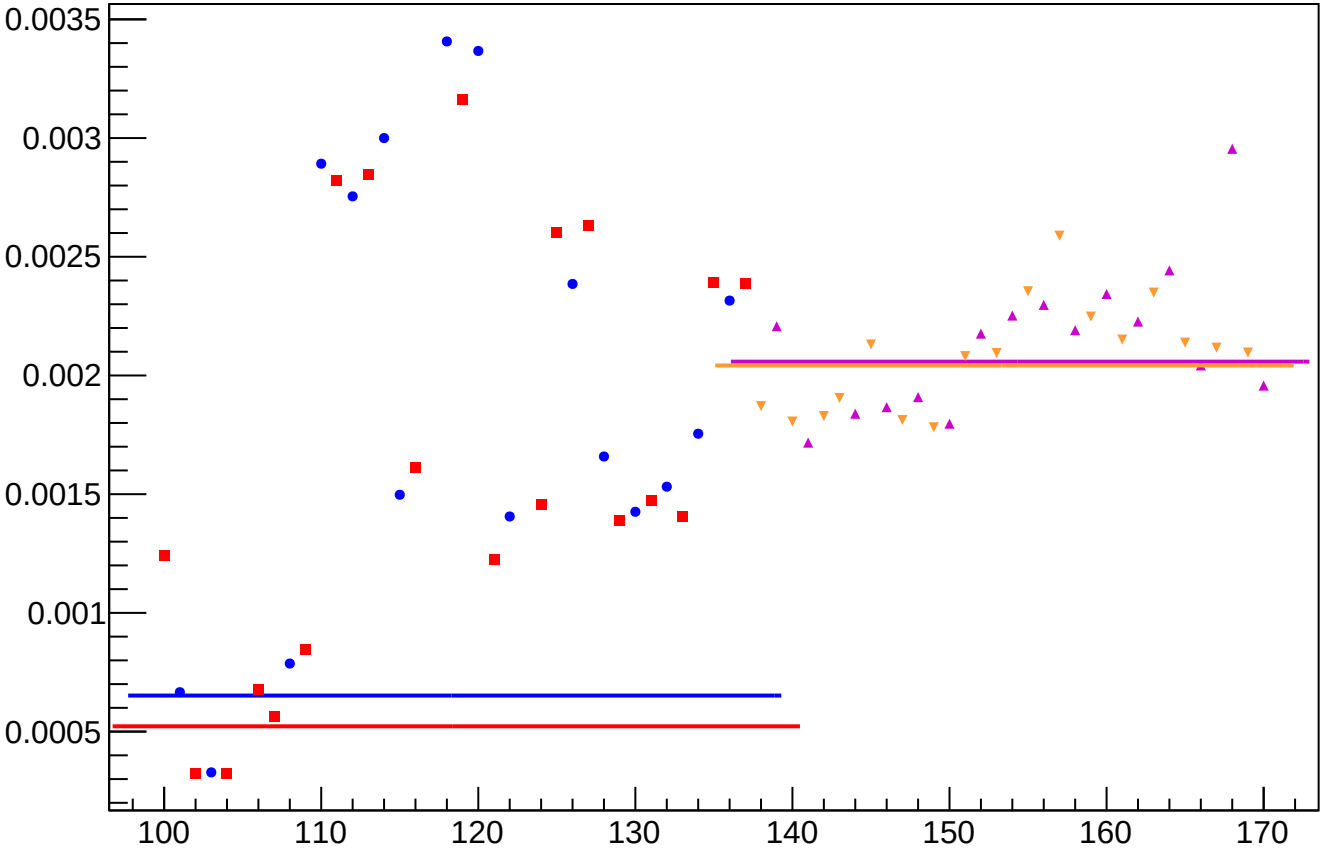
Left In: 0.000+/-0.000 $\chi^2$/NDF:5.6/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 58.3/32

All: -0.000+/-0.000 $\chi^2$/NDF: 81.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 23.0/34

# asym_sam7_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.001+/-0.000 $\chi^2$/NDF: 6357494.9/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:283413.6/16

Right Out: 0.001+/-0.000 $\chi^2$/NDF: 6676790.5/18

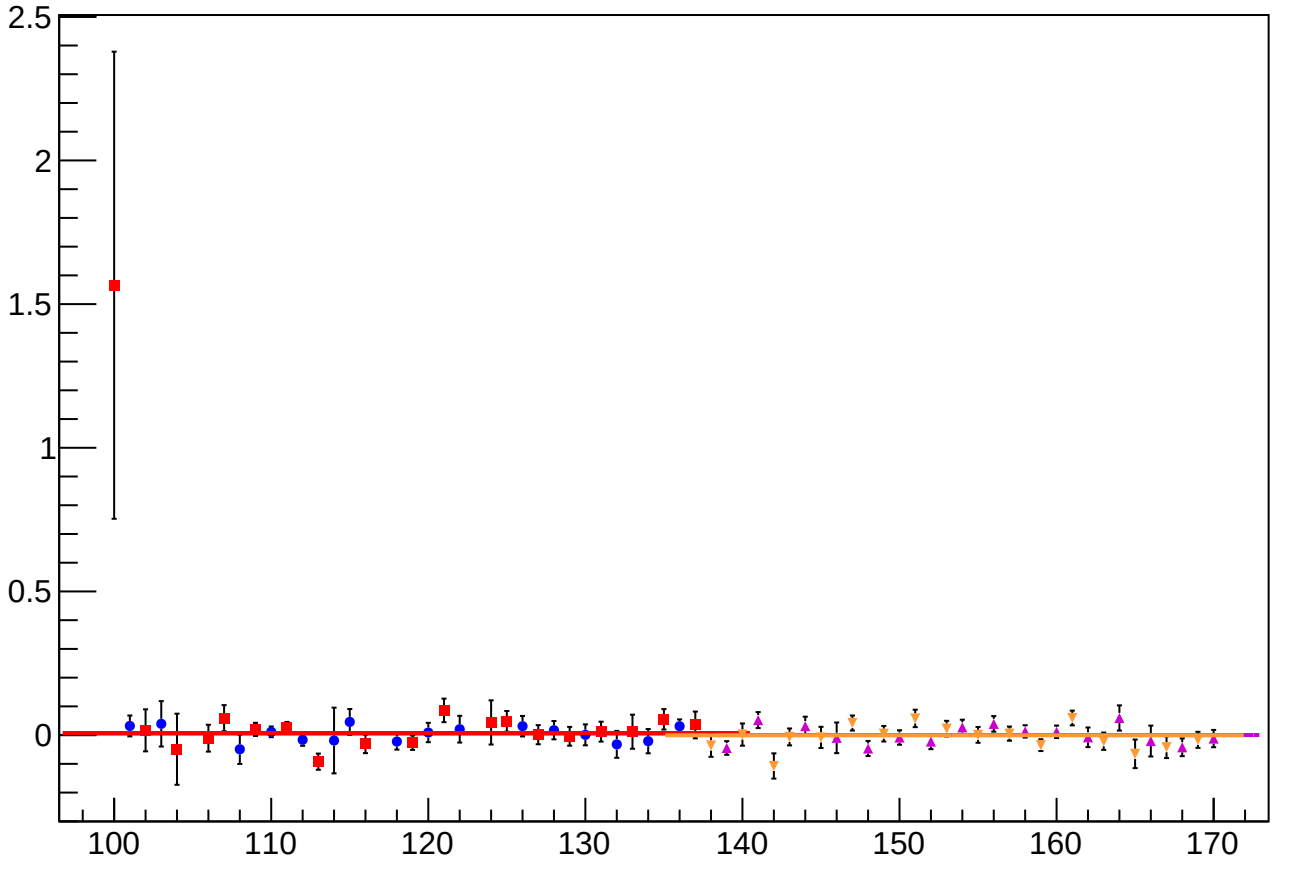
Left In: 0.002+/-0.000 $\chi^2$/NDF:437732.9/15

+ sign 0.001+/-0.000 $\chi^2$/NDF: 15690490.8/32

All: 0.001+/-0.000 $\chi^2$/NDF: 35487770.2/67

- sign 0.001+/-0.000 $\chi^2$/NDF: 19044259.4/34

# asym_sam7_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.006+/-0.008 $\chi^2$/NDF: 7.9/15

Left Out: -0.001+/-0.007 $\chi^2$/NDF:26.0/16

Right Out: 0.007+/-0.008 $\chi^2$/NDF: 29.8/18

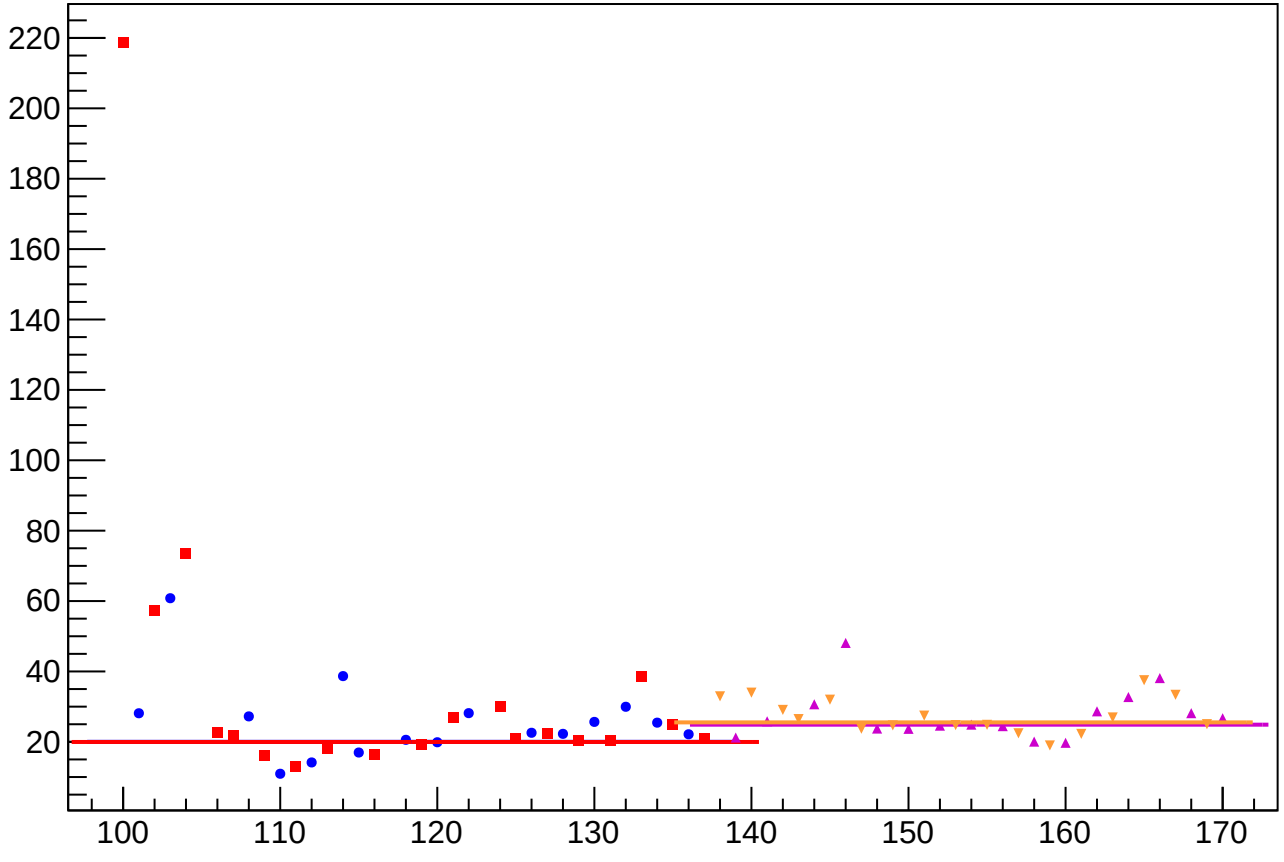
Left In: 0.000+/-0.007 $\chi^2$/NDF:19.8/15

+ sign 0.002+/-0.005 $\chi^2$/NDF: 34.2/32

All: 0.003+/-0.004 $\chi^2$/NDF: 84.3/67

- sign 0.003+/-0.005 $\chi^2$/NDF: 50.0/34

# asym_sam7_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 20.000+/-0.006 $\chi^2$/NDF: 1641197.3/15

Left Out: 25.530+/-0.005 $\chi^2$/NDF:737962.8/16

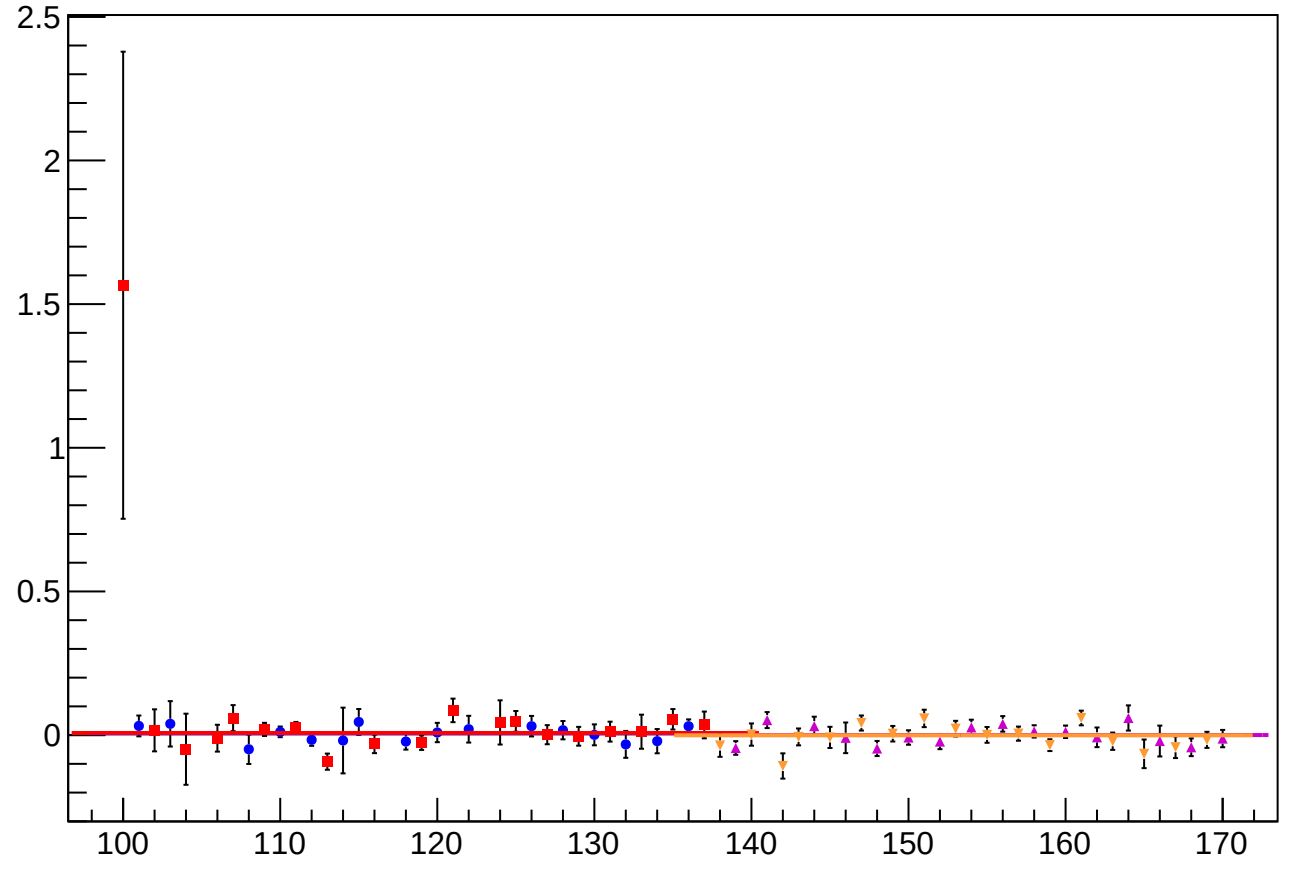
Right Out: 19.963+/-0.006 $\chi^2$/NDF: 1716830.0/18

Left In: 24.875+/-0.005 $\chi^2$/NDF:953478.0/15

+ sign 23.113+/-0.004 $\chi^2$/NDF: 2895092.3/32

All: 22.921+/-0.003 $\chi^2$/NDF: 5985650.7/67

- sign 22.732+/-0.004 $\chi^2$/NDF: 3085529.1/34




Right In: 0.006+/-0.008 $\chi^2$/NDF: 7.9/15

Left Out: -0.001+/-0.007 $\chi^2$/NDF:26.0/16

Right Out: 0.007+/-0.008 $\chi^2$/NDF: 29.8/18

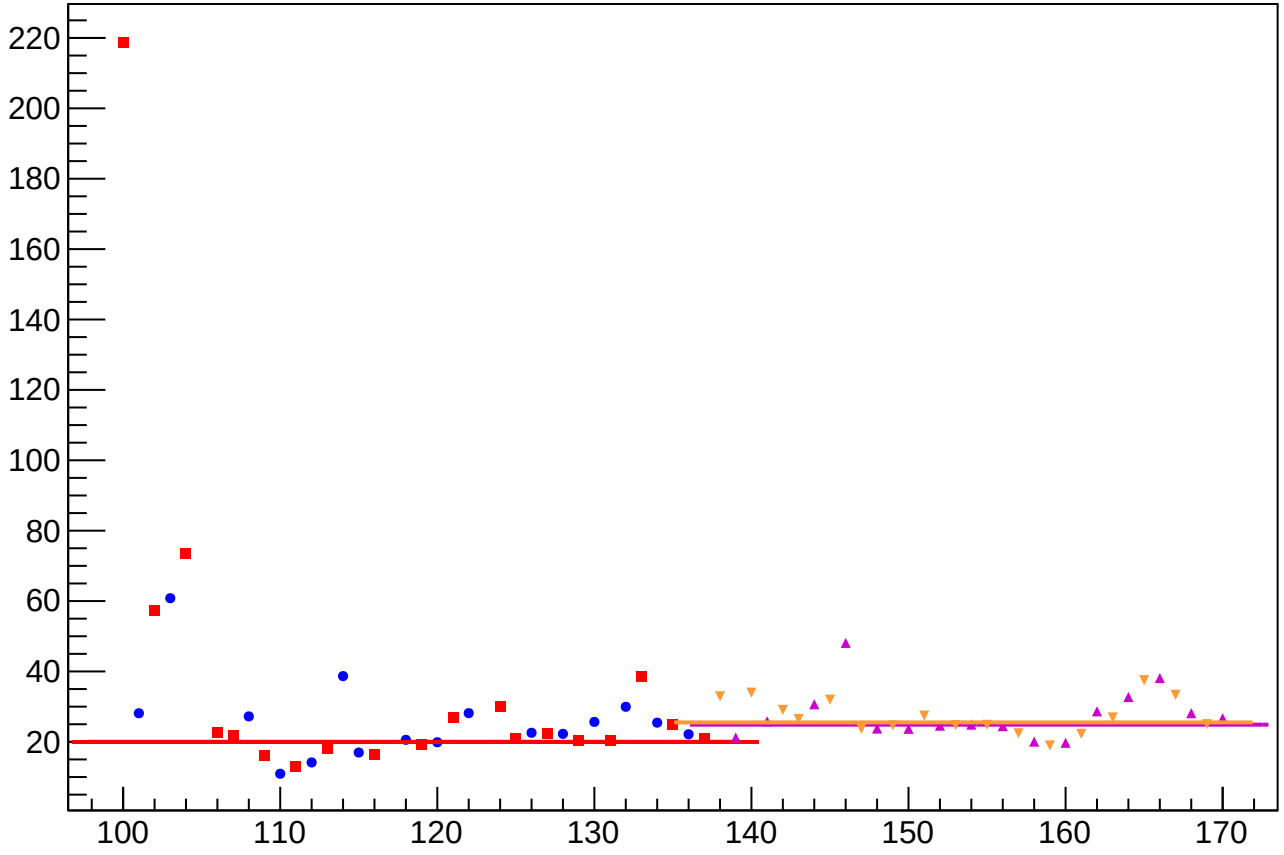
Left In: 0.000+/-0.007 $\chi^2$/NDF:19.8/15

+ sign 0.002+/-0.005 $\chi^2$/NDF: 34.2/32

All: 0.003+/-0.004 $\chi^2$/NDF: 84.3/67

- sign 0.003+/-0.005 $\chi^2$/NDF: 50.0/34

# asym_sam7_eigen_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 20.000+/-0.006 $\chi^2$/NDF: 1641197.3/15

Left Out: 25.530+/-0.005 $\chi^2$/NDF:737962.8/16

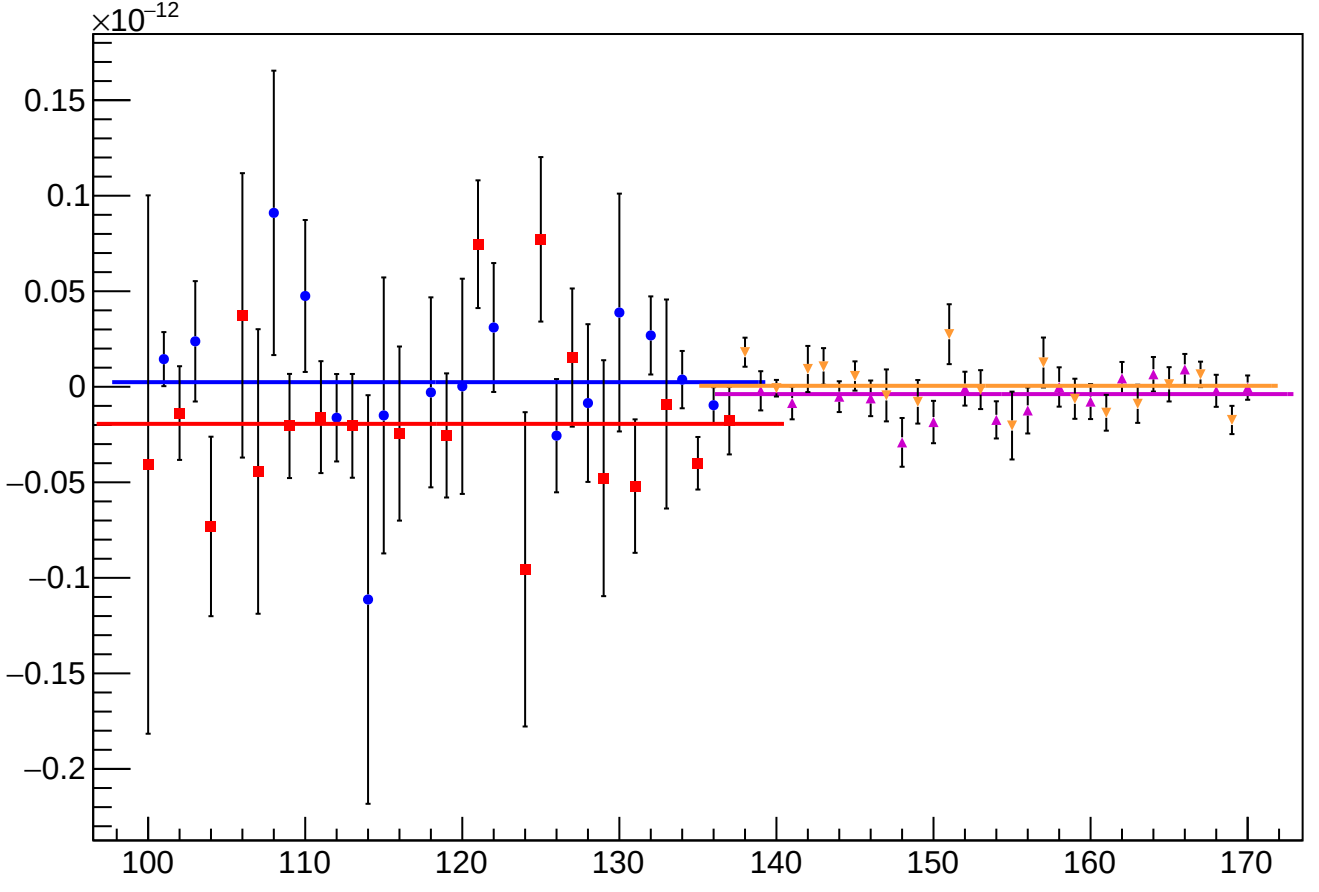
Right Out: 19.963+/-0.006 $\chi^2$/NDF: 1716830.0/18

Left In: 24.875+/-0.005 $\chi^2$/NDF:953478.0/15

+ sign 23.113+/-0.004 $\chi^2$/NDF: 2895092.3/32

All: 22.921+/-0.003 $\chi^2$/NDF: 5985650.7/67

- sign 22.732+/-0.004 $\chi^2$/NDF: 3085529.1/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 10.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:23.7/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 20.2/18

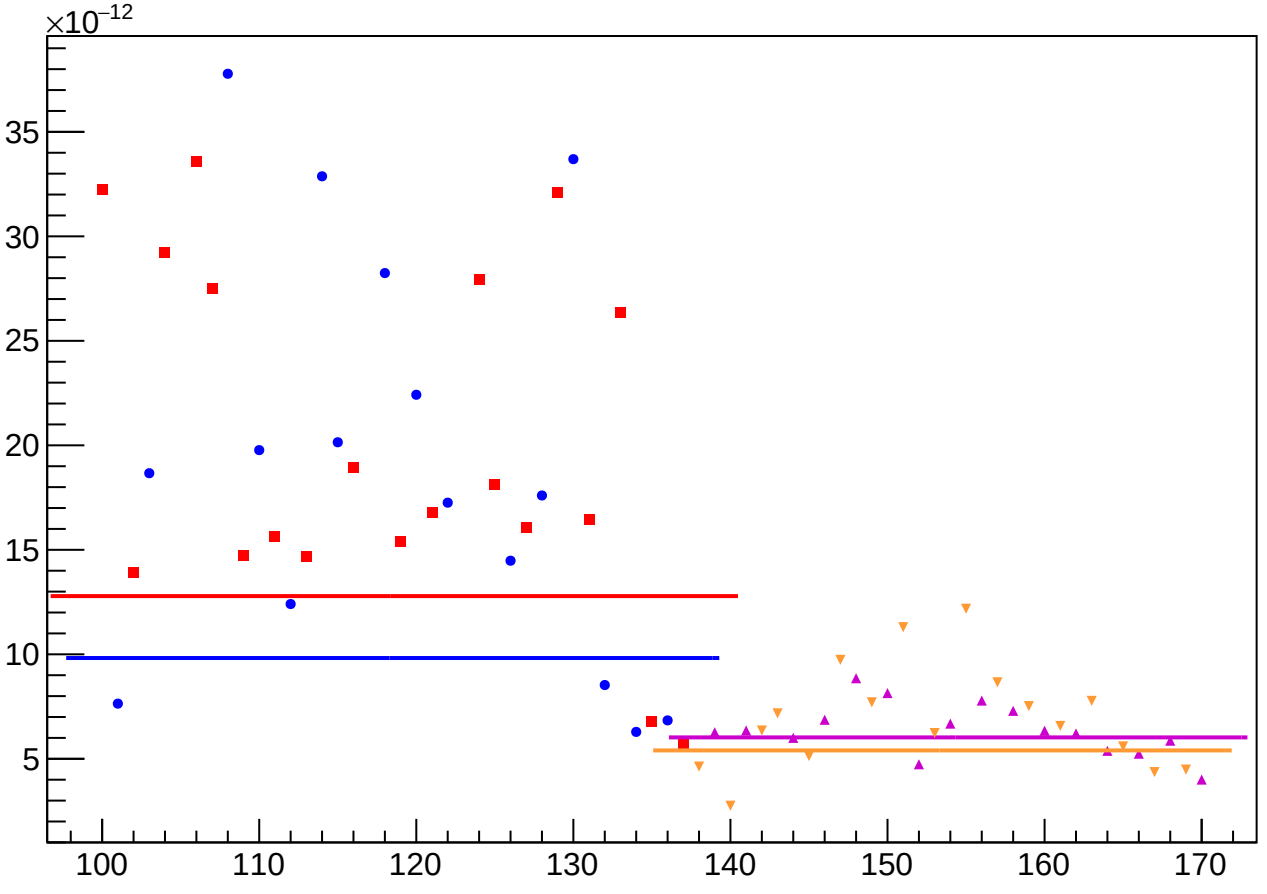
Left In: -0.000+/-0.000 $\chi^2$/NDF:14.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 34.7/32

All: -0.000+/-0.000 $\chi^2$/NDF: 77.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 38.7/34

# asym_sam7_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1977074.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2149803.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1798852.4/18

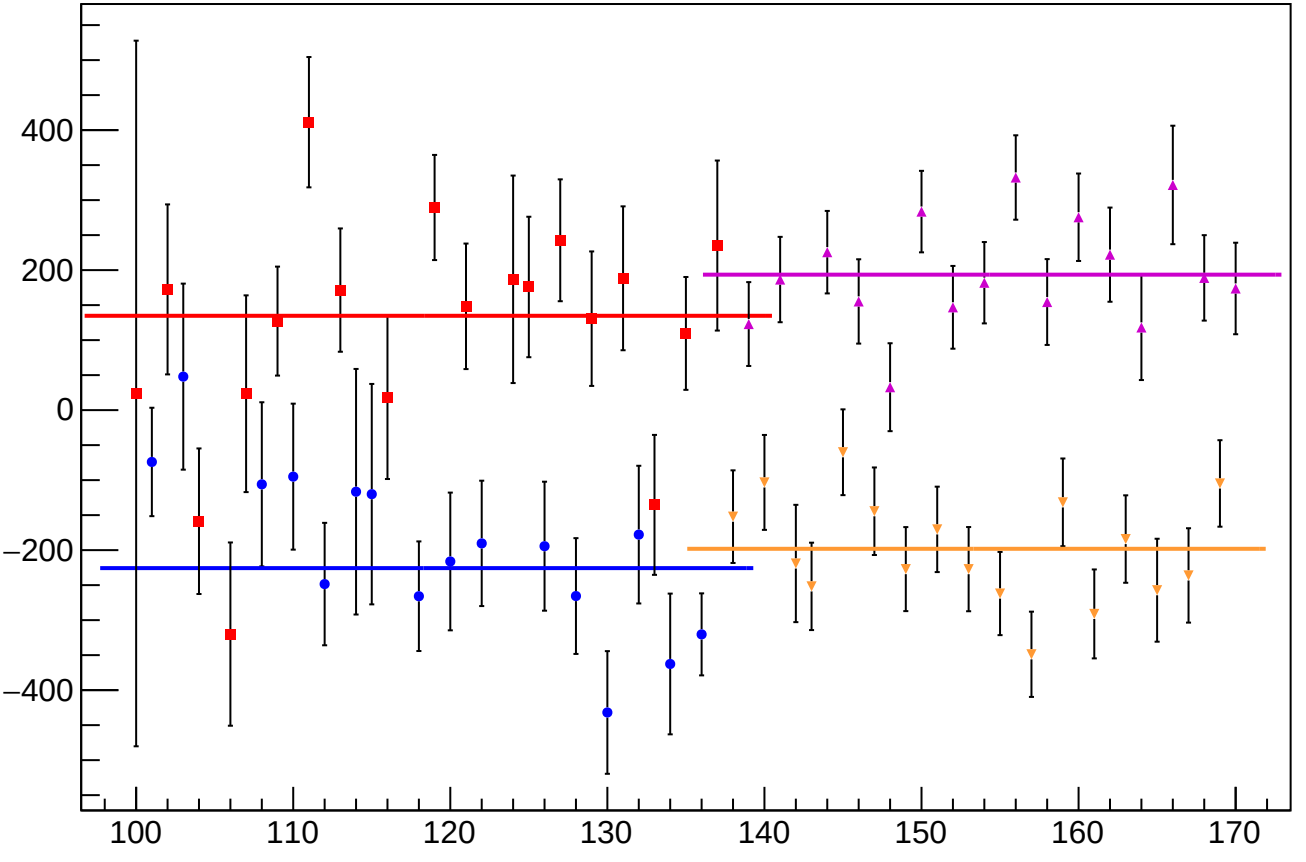
Left In: 0.000+/-0.000 $\chi^2$/NDF:550688.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5180889.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 9316905.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4014260.6/34

# reg_asym_sam8_mean vs Slug




Right In: -225.692+/-23.118 $\chi^2$/NDF: 22.6/15

Left Out: -198.091+/-15.488 $\chi^2$/NDF:23.6/16

Right Out: 134.762+/-23.192 $\chi^2$/NDF: 45.3/18

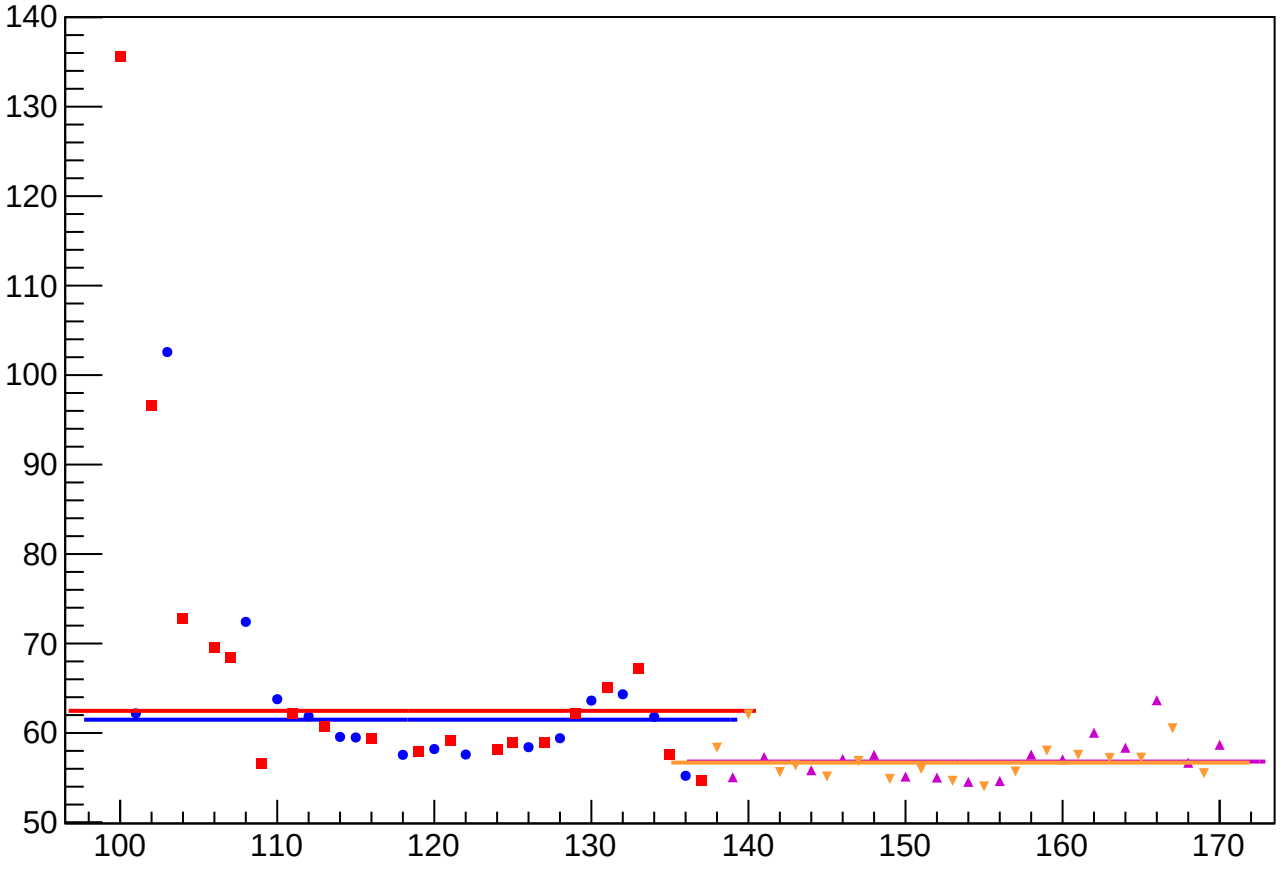
Left In: 193.514+/-15.655 $\chi^2$/NDF:22.7/15

+ sign -206.641+/-12.868 $\chi^2$/NDF: 47.2/32

All: -17.355+/-9.137 $\chi^2$/NDF: 556.0/67

- sign 175.123+/-12.976 $\chi^2$/NDF: 72.4/34

# reg_asym_sam8_rms vs Slug




Right In: 61.486+/-0.016 $\chi^2$/NDF: 250669.2/15

Left Out: 56.688+/-0.011 $\chi^2$/NDF:33318.9/16

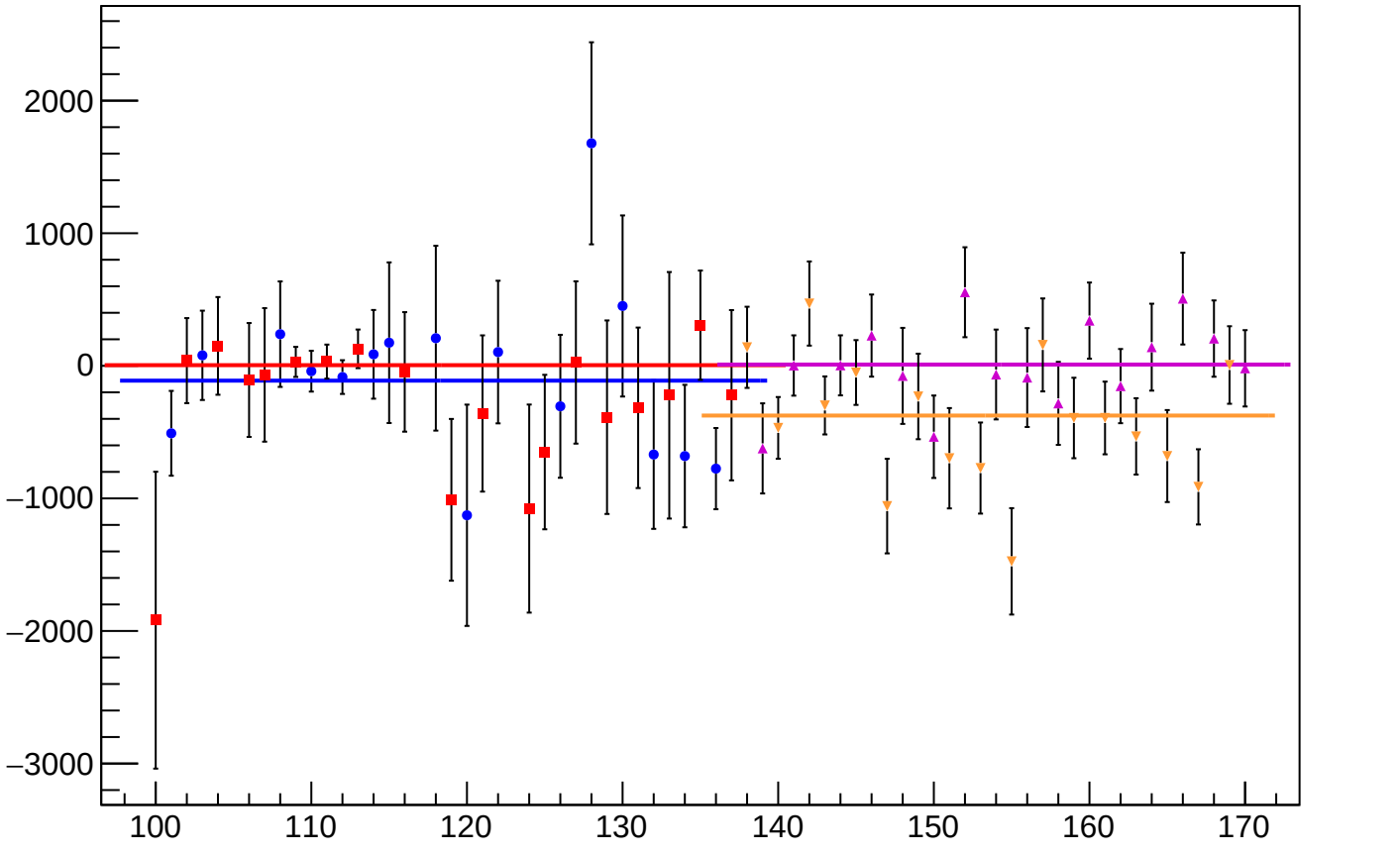
Right Out: 62.476+/-0.016 $\chi^2$/NDF: 281148.3/18

Left In: 56.805+/-0.011 $\chi^2$/NDF:32419.3/15

+ sign 58.174+/-0.009 $\chi^2$/NDF: 343453.0/32

All: 58.375+/-0.006 $\chi^2$/NDF: 740156.3/67

- sign 58.580+/-0.009 $\chi^2$/NDF: 395716.3/34




Right In: -111.885+/-76.212 $\chi^2$/NDF: 18.5/15

Left Out: -375.088+/-72.056 $\chi^2$/NDF:34.1/16

Right Out: 4.893+/-63.933 $\chi^2$/NDF: 11.6/18

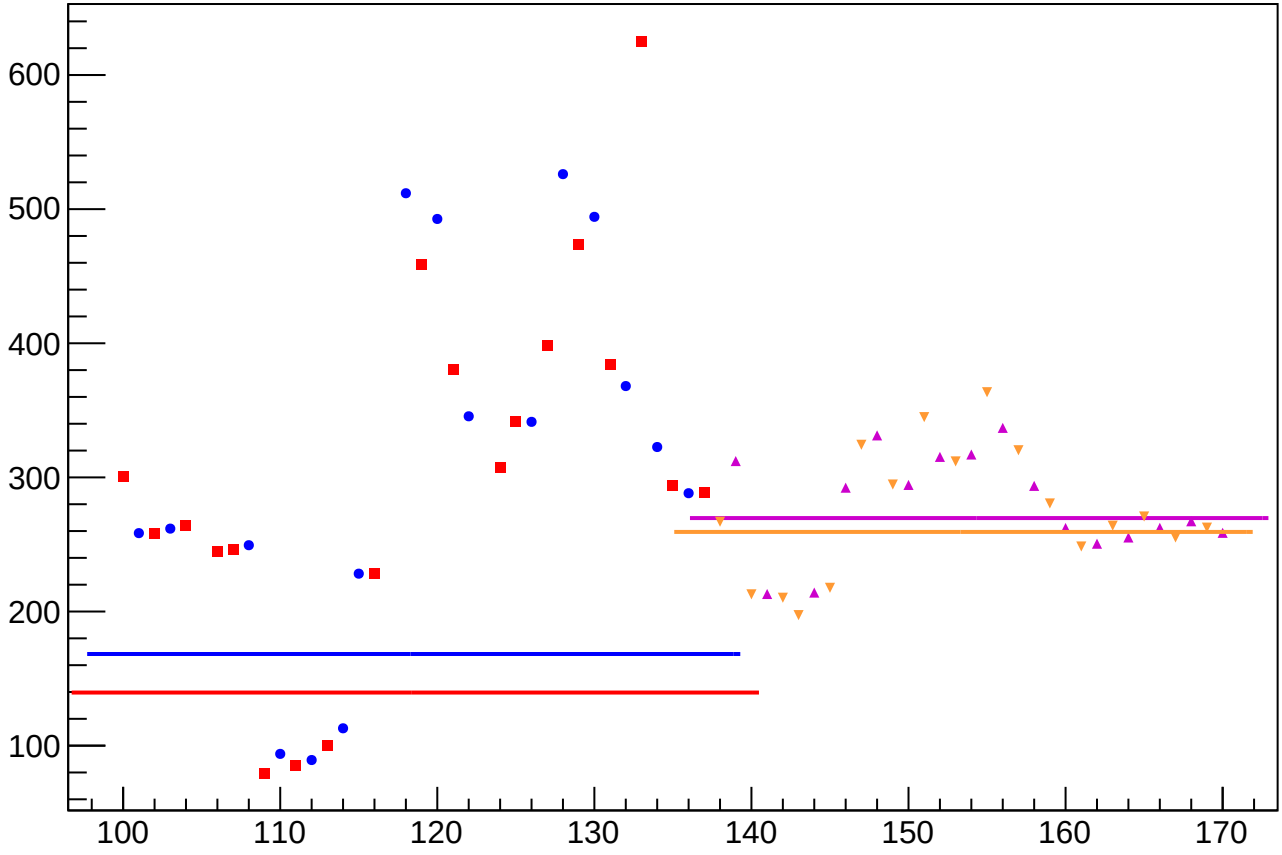
Left In: 9.422+/-75.090 $\chi^2$/NDF:15.0/15

+ sign -250.858+/-52.359 $\chi^2$/NDF: 58.8/32

All: -112.658+/-35.651 $\chi^2$/NDF: 98.5/67

- sign 6.796+/-48.679 $\chi^2$/NDF: 26.7/34

# asym_sam8_reg_correction_rms vs Slug




Right In: 168.330+/-0.054 $\chi^2$/NDF: 4544046.8/15

Left Out: 259.351+/-0.051 $\chi^2$/NDF:798614.5/16

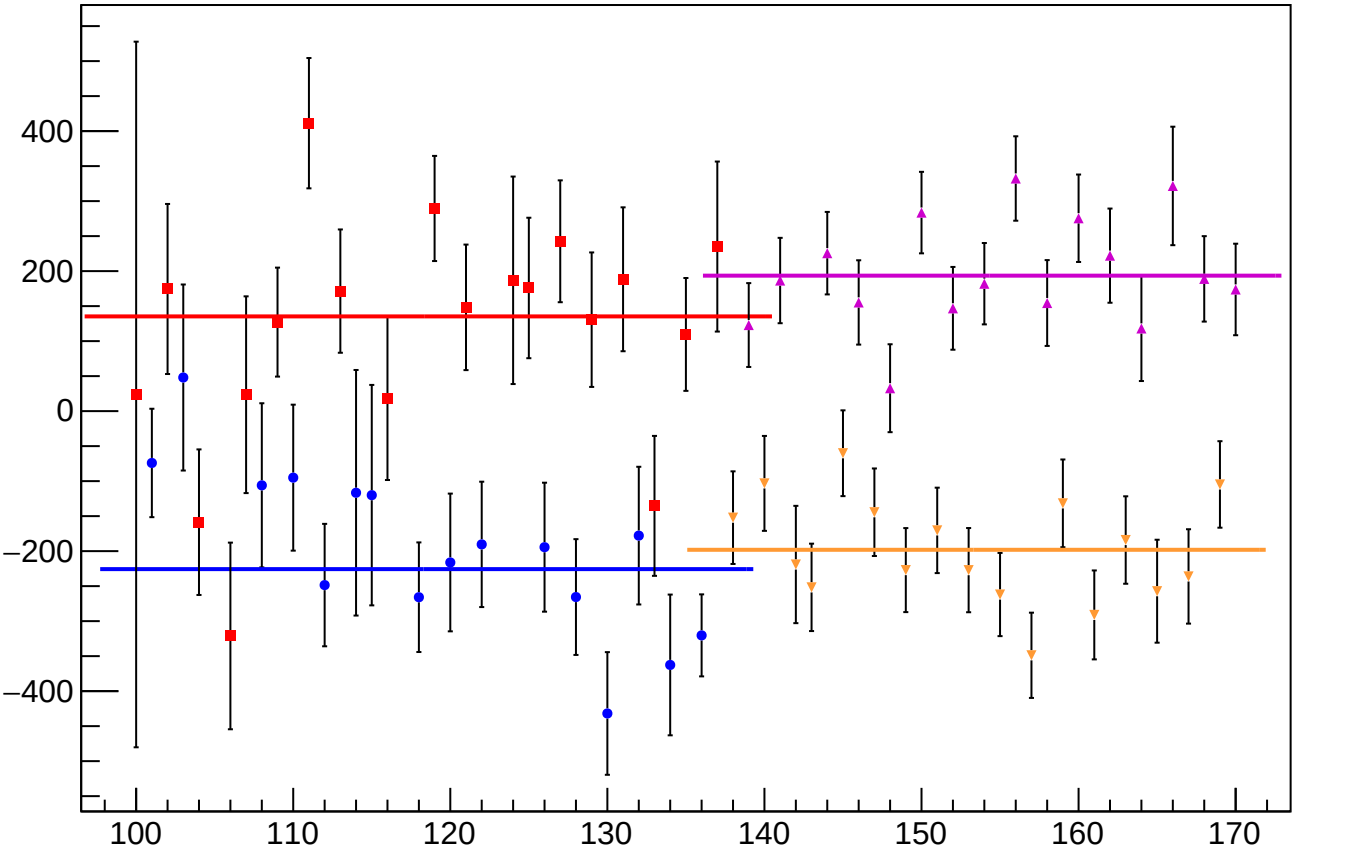
Right Out: 139.594+/-0.045 $\chi^2$/NDF: 5154153.5/18

Left In: 269.678+/-0.053 $\chi^2$/NDF:527403.8/15

+ sign 216.389+/-0.037 $\chi^2$/NDF: 6848929.2/32

All: 204.521+/-0.025 $\chi^2$/NDF: 16201882.6/67

- sign 194.263+/-0.034 $\chi^2$/NDF: 9161379.3/34




Right In: -225.692+/-23.118 $\chi^2$/NDF: 22.6/15

Left Out: -198.088+/-15.488 $\chi^2$/NDF:23.6/16

Right Out: 135.311+/-23.205 $\chi^2$/NDF: 44.9/18

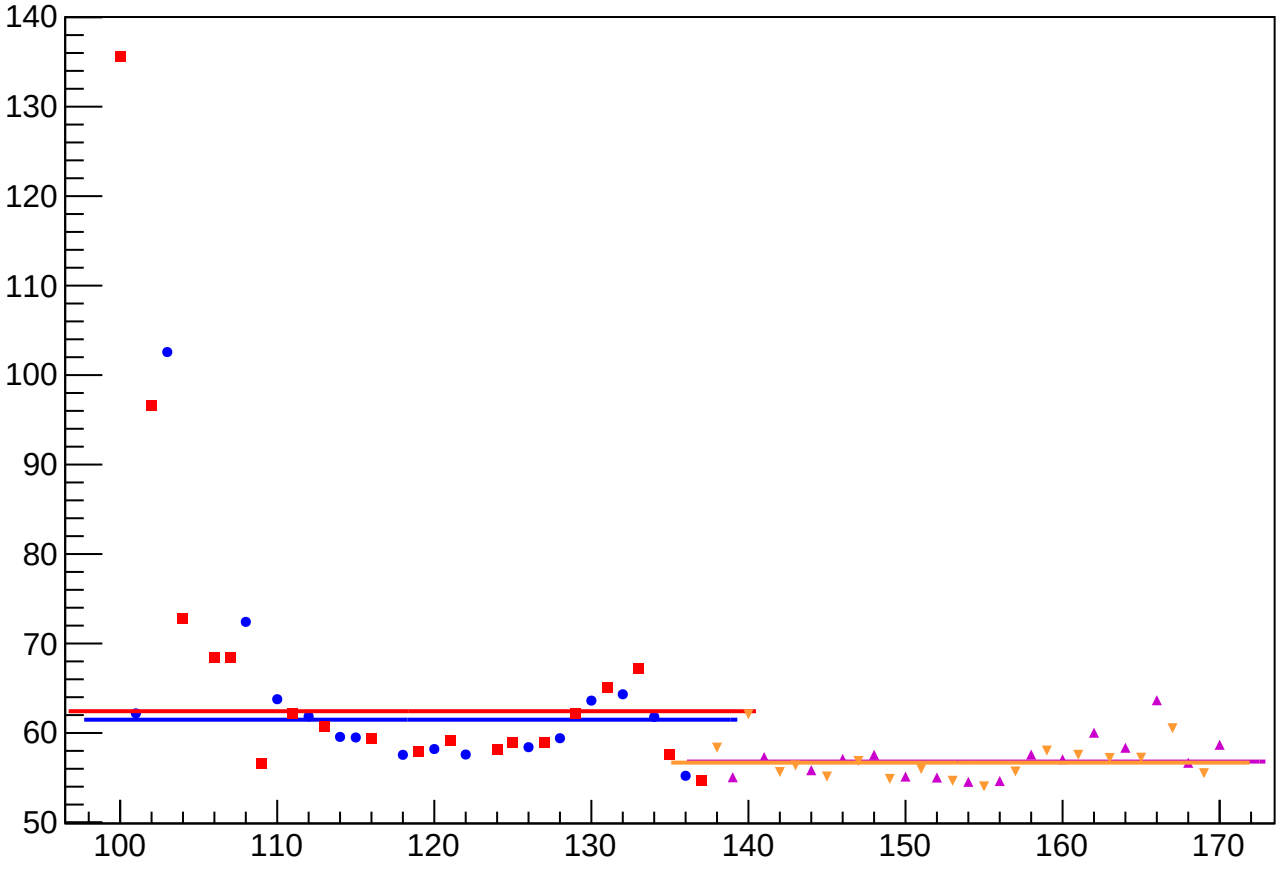
Left In: 193.517+/-15.655 $\chi^2$/NDF:22.7/15

+ sign -206.640+/-12.868 $\chi^2$/NDF: 47.2/32

All: -17.295+/-9.138 $\chi^2$/NDF: 555.9/67

- sign 175.311+/-12.978 $\chi^2$/NDF: 71.9/34

# cor_asym_sam8_rms vs Slug




Right In: 61.486+/-0.016 $\chi^2$/NDF: 250671.7/15

Left Out: 56.688+/-0.011 $\chi^2$/NDF:33318.9/16

Right Out: 62.433+/-0.016 $\chi^2$/NDF: 279408.8/18

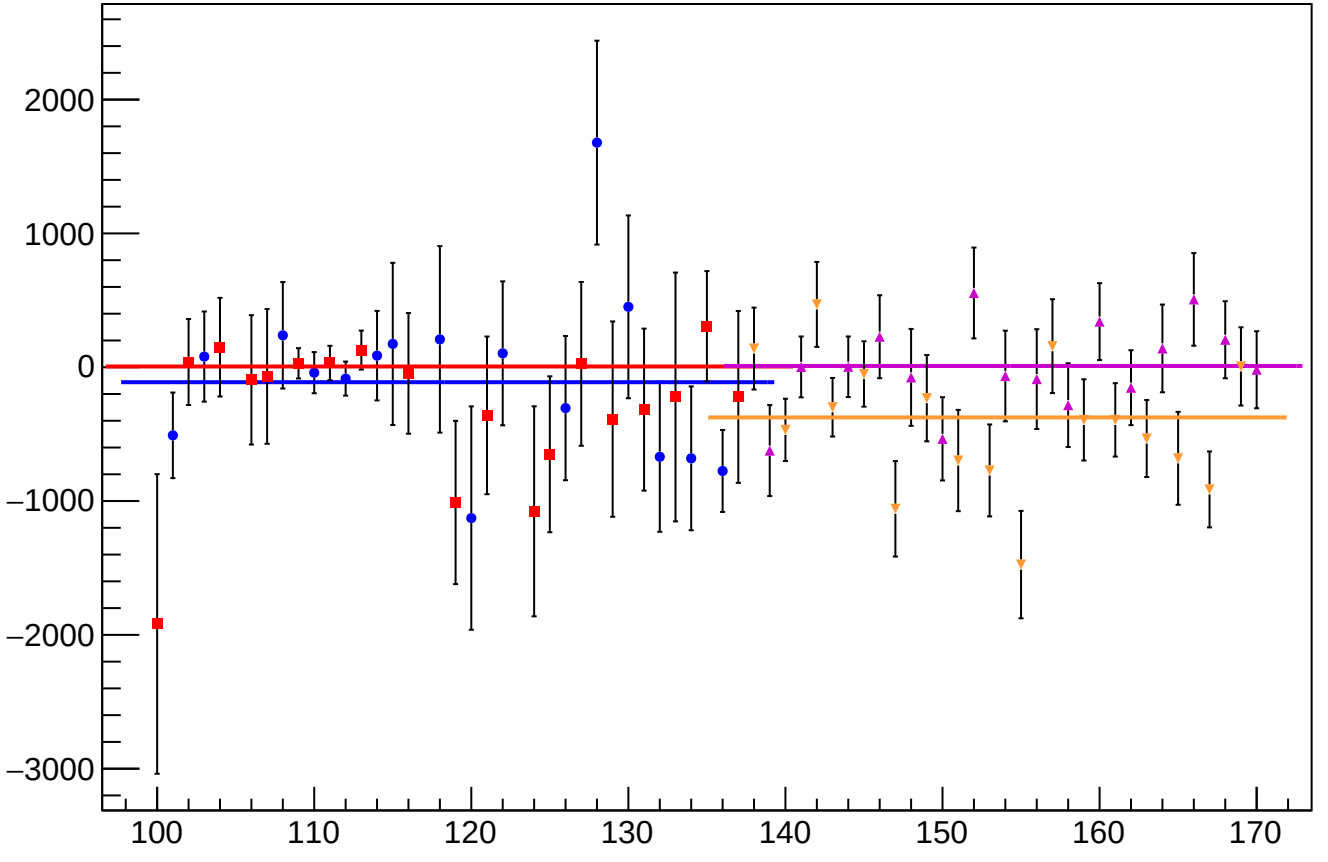
Left In: 56.805+/-0.011 $\chi^2$/NDF:32419.3/15

+ sign 58.174+/-0.009 $\chi^2$/NDF: 343455.6/32

All: 58.368+/-0.006 $\chi^2$/NDF: 737040.6/67

- sign 58.565+/-0.009 $\chi^2$/NDF: 392669.2/34

# asym_sam8_cor_correction_mean vs Slug




Right In: -111.866+/-76.213 $\chi^2$/NDF: 18.5/15

Left Out: -375.084+/-72.056 $\chi^2$/NDF:34.1/16

Right Out: 5.616+/-64.085 $\chi^2$/NDF: 11.6/18

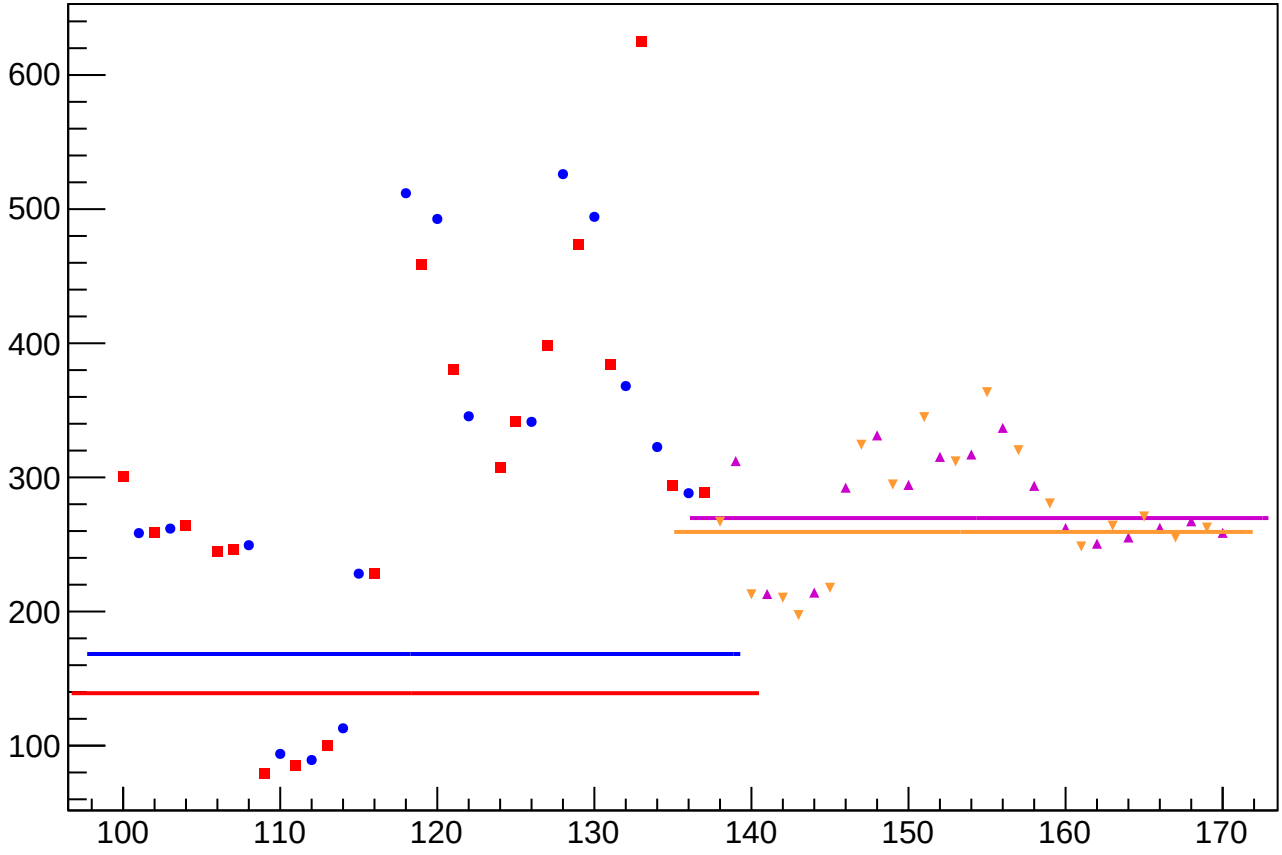
Left In: 9.426+/-75.090 $\chi^2$/NDF:15.0/15

+ sign -250.848+/-52.359 $\chi^2$/NDF: 58.8/32

All: -112.601+/-35.678 $\chi^2$/NDF: 98.5/67

- sign 7.222+/-48.746 $\chi^2$/NDF: 26.6/34

# asym_sam8_cor_correction_rms vs Slug




Right In: 168.330+/-0.054 $\chi^2$/NDF: 4544100.8/15

Left Out: 259.350+/-0.051 $\chi^2$/NDF:798619.1/16

Right Out: 139.105+/-0.045 $\chi^2$/NDF: 5130011.5/18

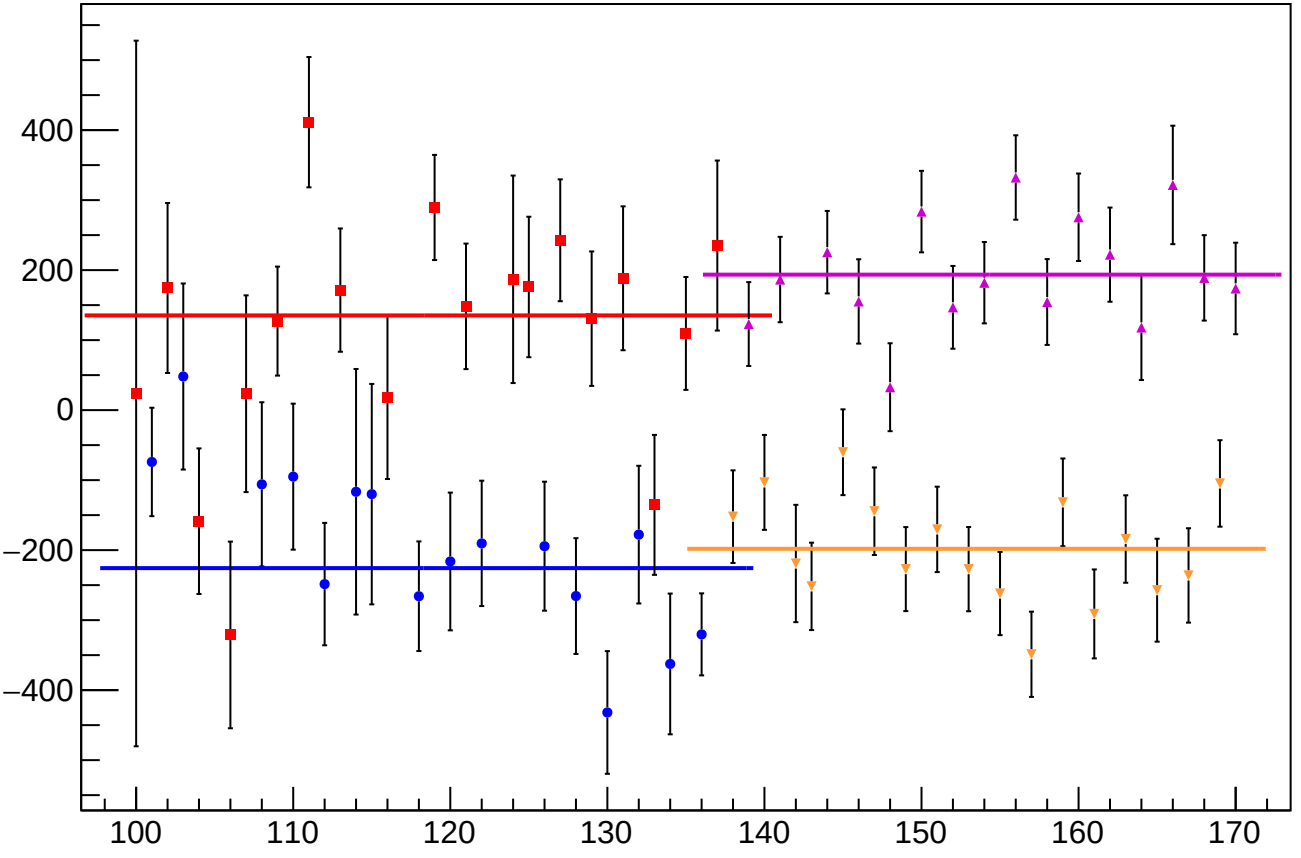
Left In: 269.678+/-0.053 $\chi^2$/NDF:527402.6/15

+ sign 216.390+/-0.037 $\chi^2$/NDF: 6848965.0/32

All: 204.466+/-0.025 $\chi^2$/NDF: 16199017.8/67

- sign 194.131+/-0.034 $\chi^2$/NDF: 9156427.7/34

# eigen_cor_asym_sam8_mean vs Slug




Right In: -225.692+/-23.118 $\chi^2$/NDF: 22.6/15

Left Out: -198.088+/-15.488 $\chi^2$/NDF:23.6/16

Right Out: 135.311+/-23.205 $\chi^2$/NDF: 44.9/18

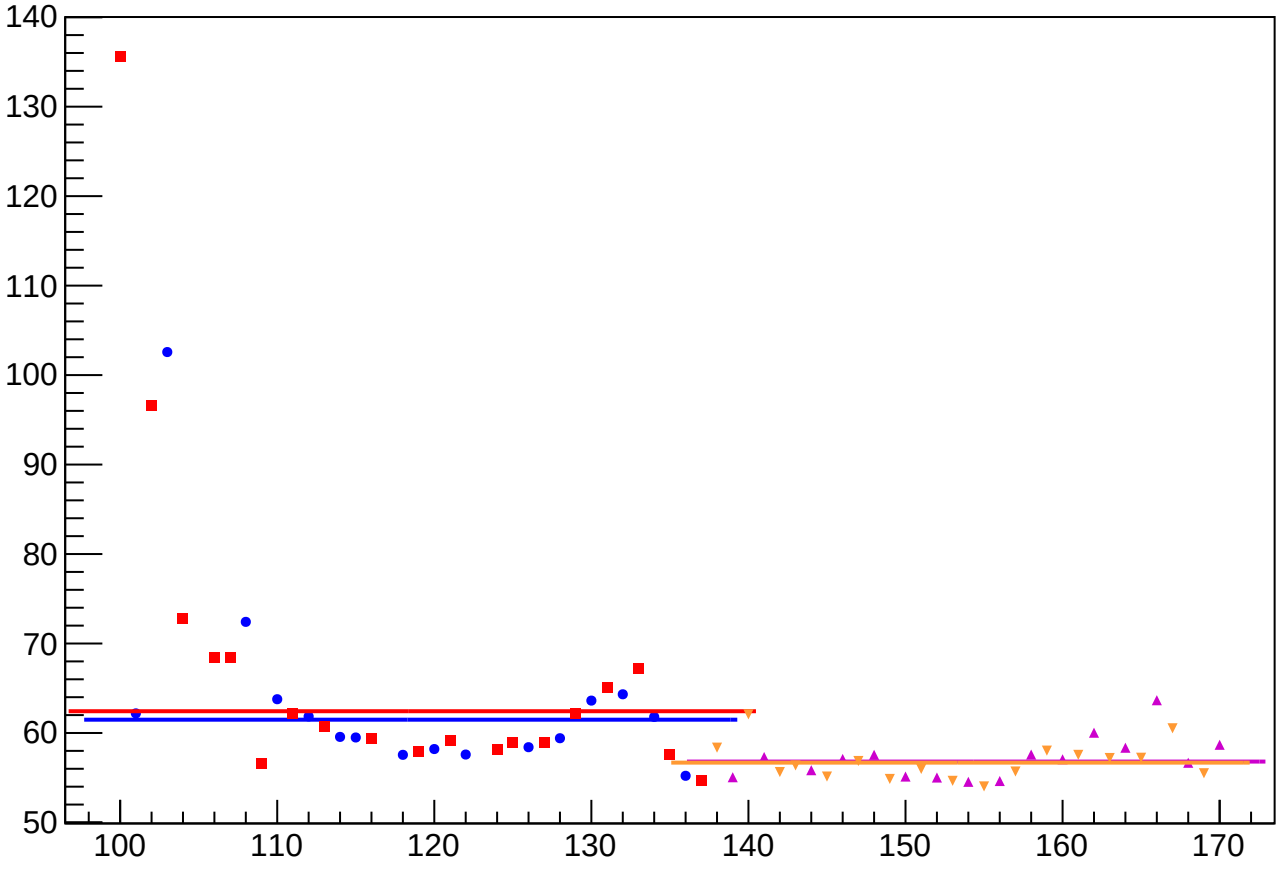
Left In: 193.517+/-15.655 $\chi^2$/NDF:22.7/15

+ sign -206.640+/-12.868 $\chi^2$/NDF: 47.2/32

All: -17.295+/-9.138 $\chi^2$/NDF: 555.9/67

- sign 175.311+/-12.978 $\chi^2$/NDF: 71.9/34

# eigen_cor_asym_sam8_rms vs Slug




Right In: 61.486+/-0.016 $\chi^2$/NDF: 250671.7/15

Left Out: 56.688+/-0.011 $\chi^2$/NDF:33318.9/16

Right Out: 62.433+/-0.016 $\chi^2$/NDF: 279408.8/18

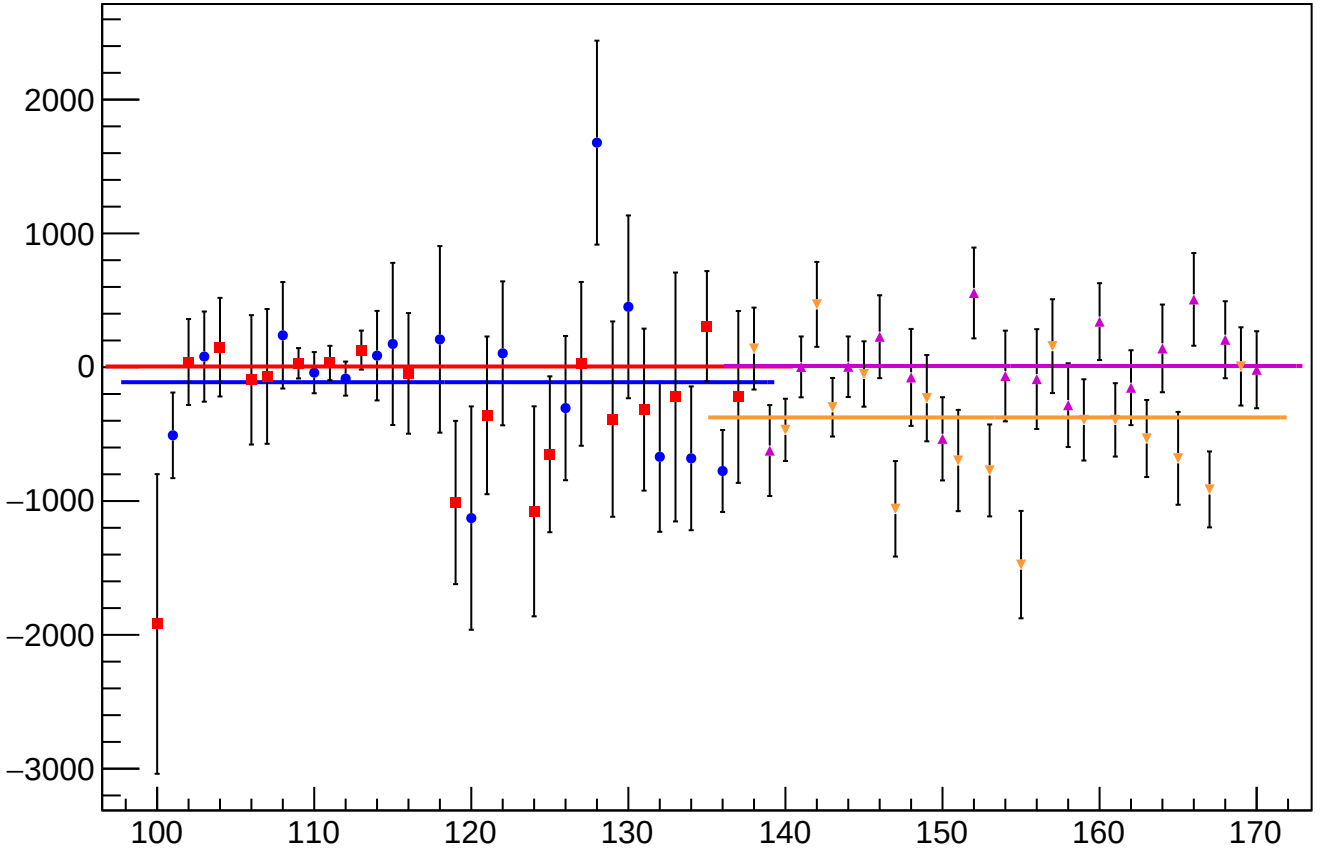
Left In: 56.805+/-0.011 $\chi^2$/NDF:32419.3/15

+ sign 58.174+/-0.009 $\chi^2$/NDF: 343455.6/32

All: 58.368+/-0.006 $\chi^2$/NDF: 737040.6/67

- sign 58.565+/-0.009 $\chi^2$/NDF: 392669.2/34

# asym_sam8_eigen_cor_correction_mean vs Slug




Right In: -111.866+/-76.213 $\chi^2$/NDF: 18.5/15

Left Out: -375.084+/-72.056 $\chi^2$/NDF:34.1/16

Right Out: 5.616+/-64.085 $\chi^2$/NDF: 11.6/18

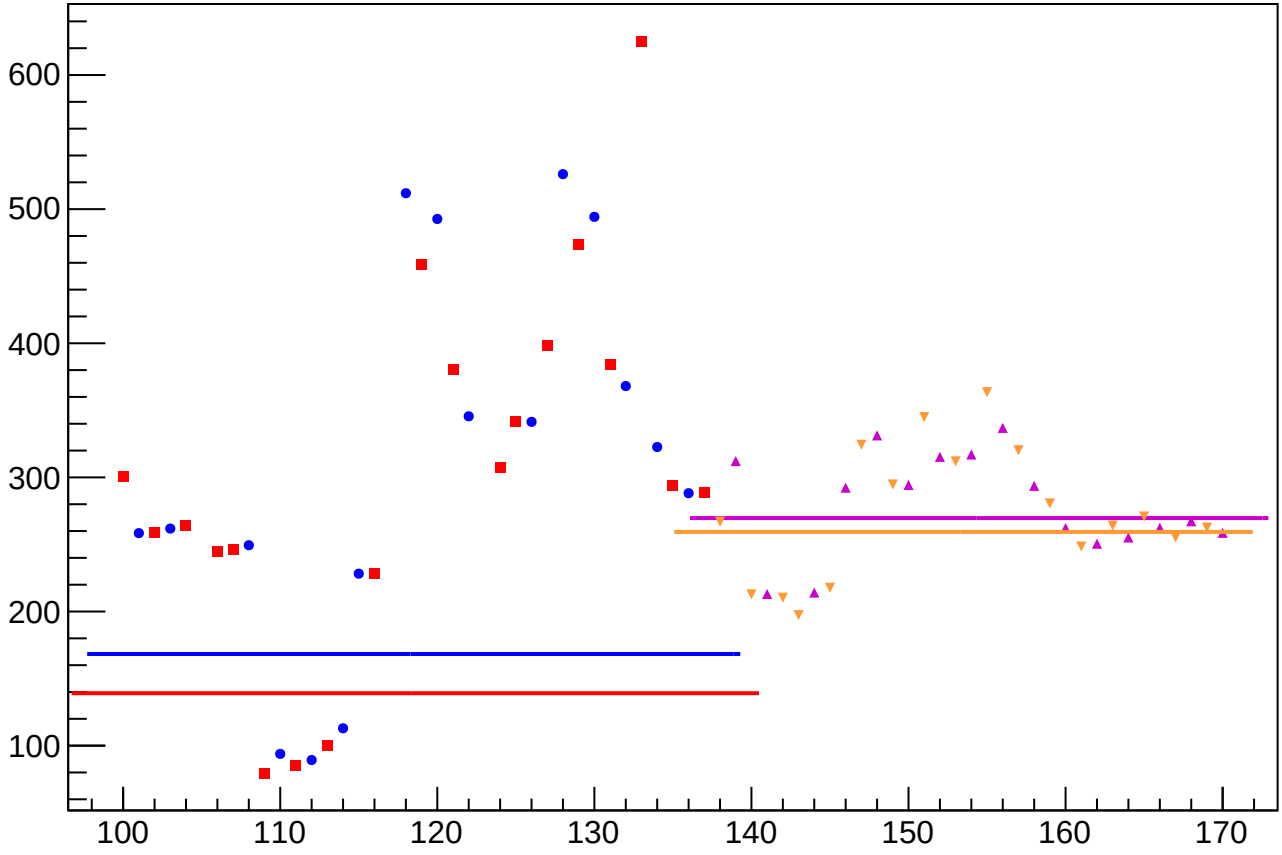
Left In: 9.426+/-75.090 $\chi^2$/NDF:15.0/15

+ sign -250.848+/-52.359 $\chi^2$/NDF: 58.8/32

All: -112.601+/-35.678 $\chi^2$/NDF: 98.5/67

- sign 7.222+/-48.746 $\chi^2$/NDF: 26.6/34

# asym_sam8_eigen_cor_correction_rms vs Slug




Right In: 168.330+/-0.054 $\chi^2$/NDF: 4544100.8/15

Left Out: 259.350+/-0.051 $\chi^2$/NDF:798619.1/16

Right Out: 139.105+/-0.045 $\chi^2$/NDF: 5130011.5/18

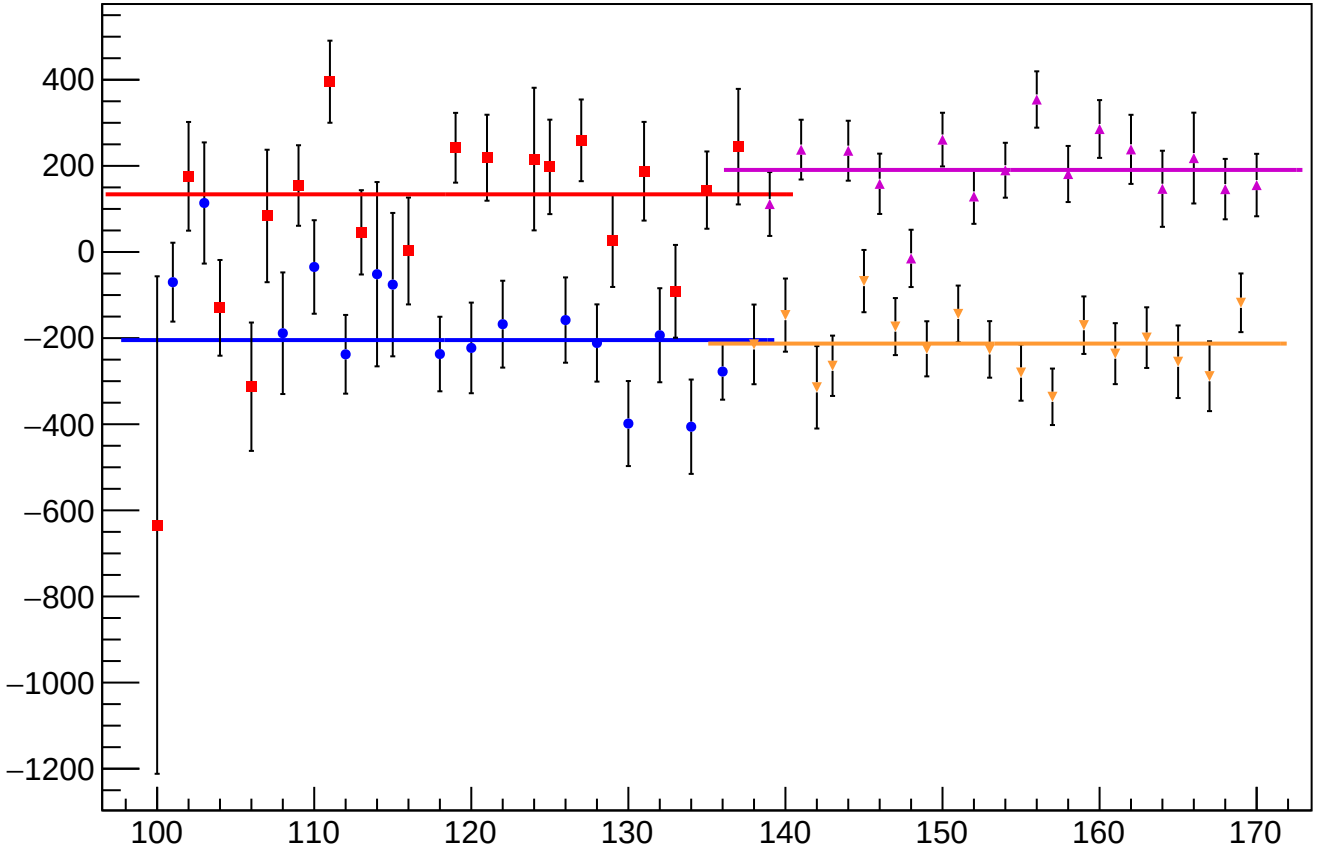
Left In: 269.678+/-0.053 $\chi^2$/NDF:527402.6/15

+ sign 216.390+/-0.037 $\chi^2$/NDF: 6848965.0/32

All: 204.466+/-0.025 $\chi^2$/NDF: 16199017.8/67

- sign 194.131+/-0.034 $\chi^2$/NDF: 9156427.7/34

# dit_asym_sam8_mean vs Slug




Right In: -204.577+/-25.523 $\chi^2$/NDF: 20.0/15

Left Out: -212.717+/-17.422 $\chi^2$/NDF:16.1/16

Right Out: 133.924+/-25.484 $\chi^2$/NDF: 37.2/18

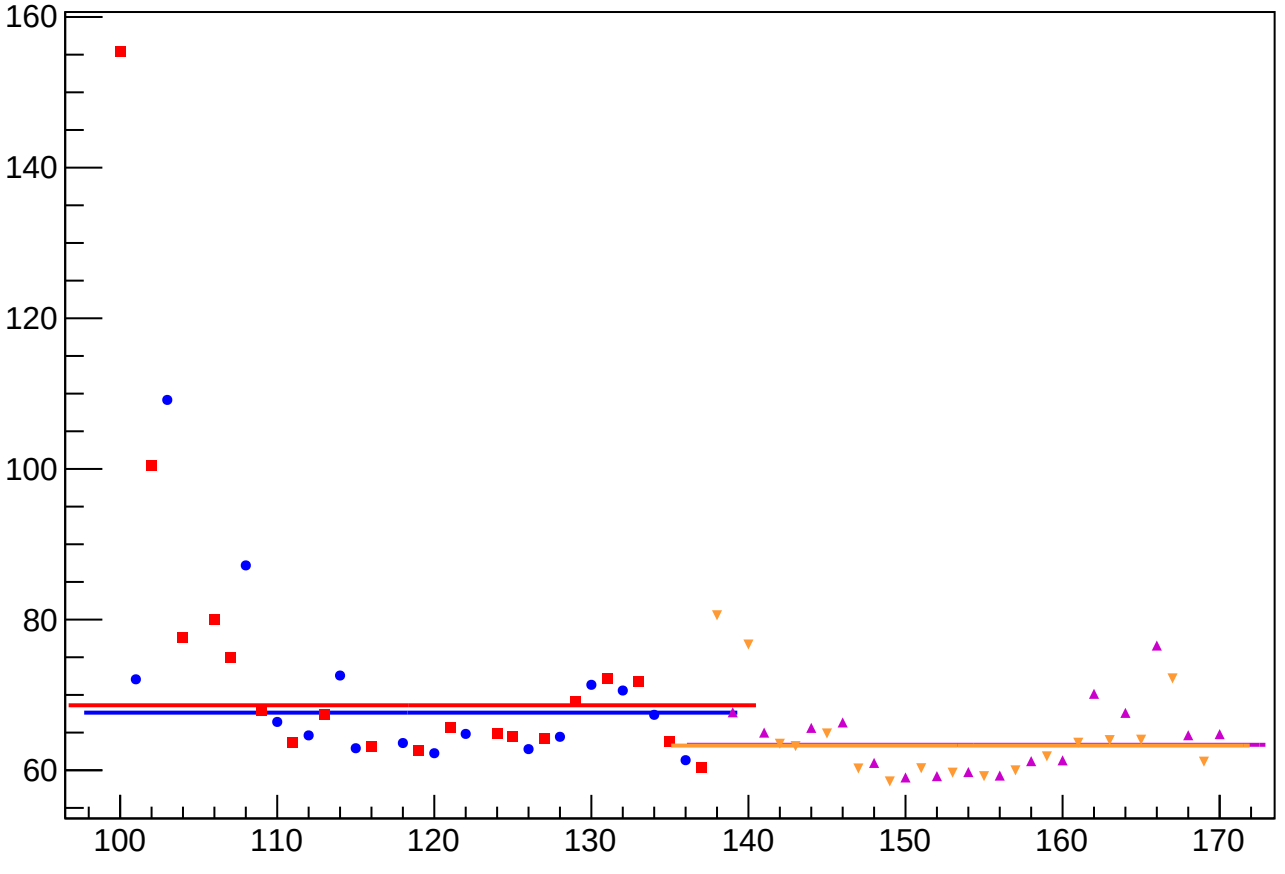
Left In: 190.586+/-17.585 $\chi^2$/NDF:23.6/15

+ sign -210.130+/-14.389 $\chi^2$/NDF: 36.1/32

All: -20.027+/-10.205 $\chi^2$/NDF: 451.4/67

- sign 172.308+/-14.474 $\chi^2$/NDF: 64.1/34

# dit_asym_sam8_rms vs Slug




Right In: 67.647+/-0.018 $\chi^2$/NDF: 263669.9/15

Left Out: 63.274+/-0.012 $\chi^2$/NDF:186579.4/16

Right Out: 68.624+/-0.018 $\chi^2$/NDF: 248164.6/18

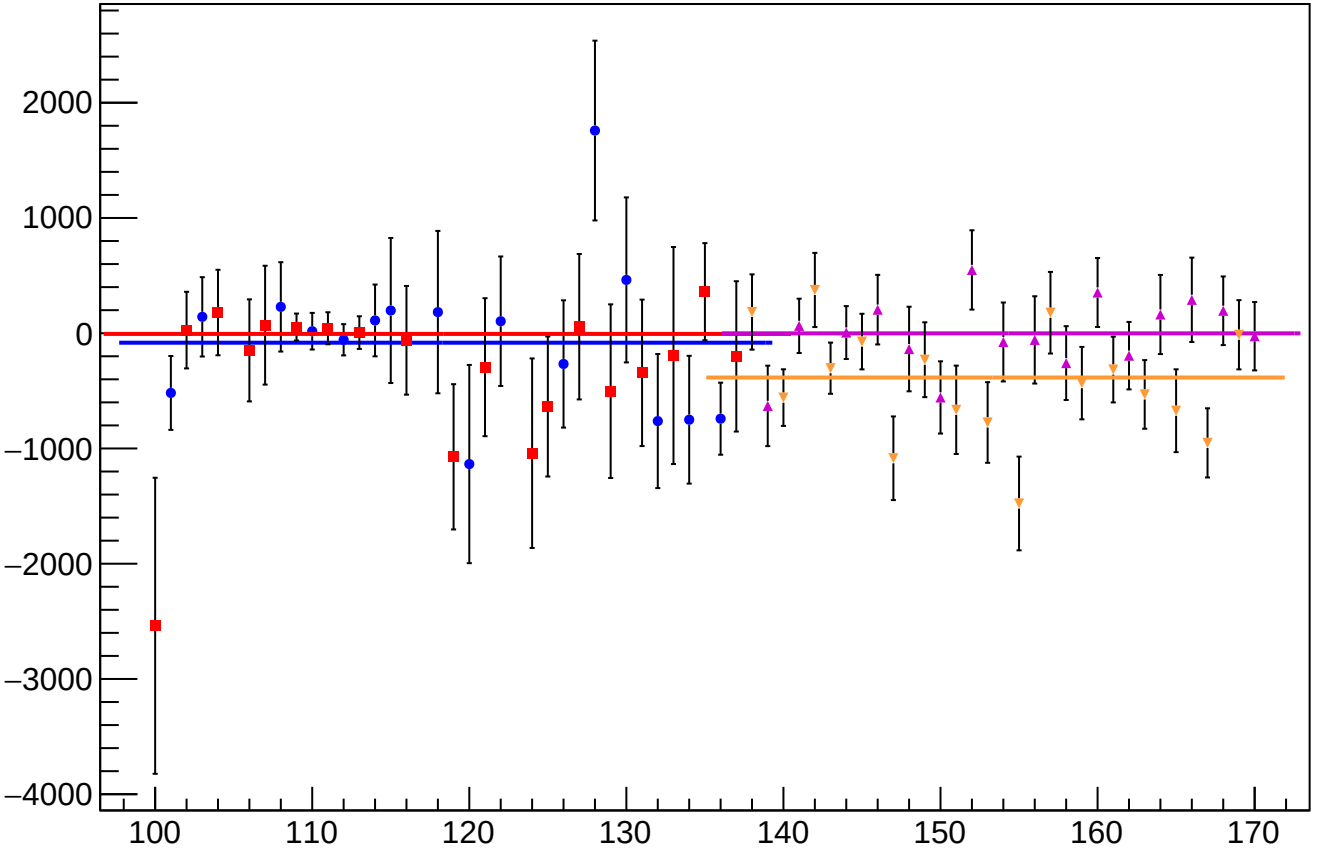
Left In: 63.379+/-0.012 $\chi^2$/NDF:104174.6/15

+ sign 64.664+/-0.010 $\chi^2$/NDF: 490297.8/32

All: 64.866+/-0.007 $\chi^2$/NDF: 900824.2/67

- sign 65.071+/-0.010 $\chi^2$/NDF: 409733.2/34

# asym_sam8_dit_correction_mean vs Slug




Right In: -82.228+/-78.676 $\chi^2$/NDF: 19.2/15

Left Out: -384.458+/-73.969 $\chi^2$/NDF:32.5/16

Right Out: -6.063+/-65.910 $\chi^2$/NDF: 12.0/18

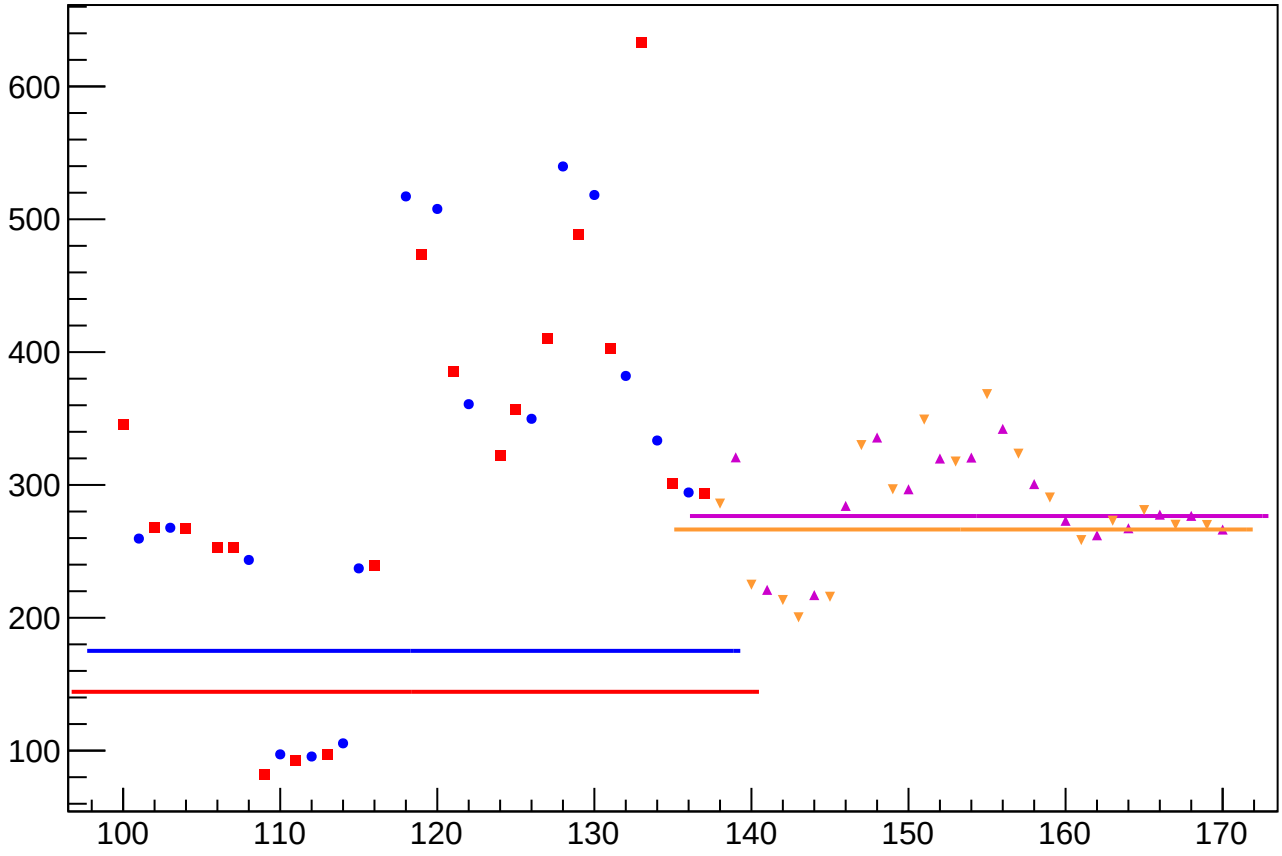
Left In: -1.087+/-76.944 $\chi^2$/NDF:13.5/15

+ sign -242.654+/-53.891 $\chi^2$/NDF: 59.5/32

All: -114.512+/-36.676 $\chi^2$/NDF: 95.6/67

- sign -3.957+/-50.056 $\chi^2$/NDF: 25.5/34

# asym_sam8_dit_correction_rms vs Slug




Right In: 175.099+/-0.056 $\chi^2$/NDF: 4429076.5/15

Left Out: 266.473+/-0.052 $\chi^2$/NDF:794531.8/16

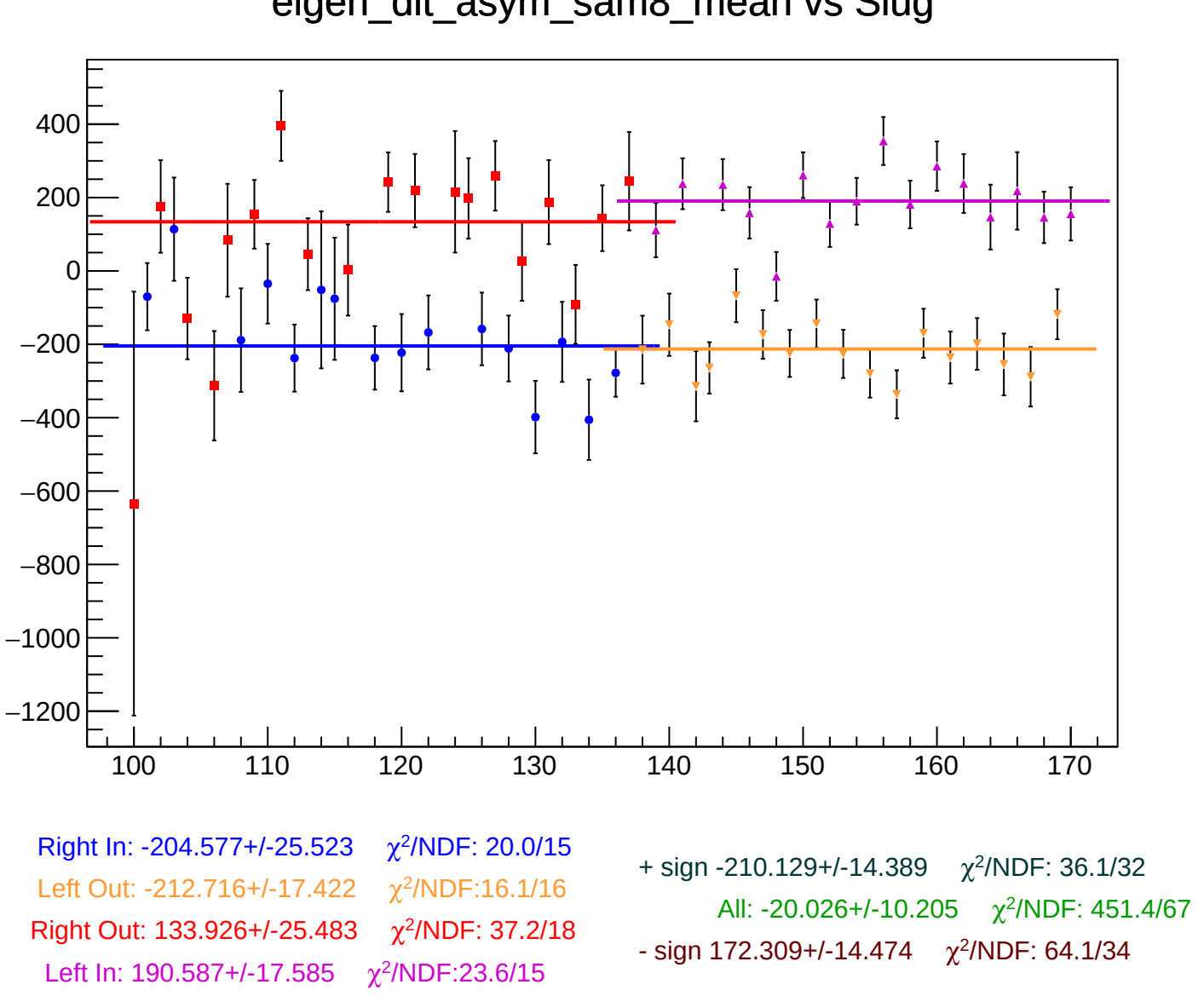
Right Out: 144.276+/-0.047 $\chi^2$/NDF: 5132432.2/18

Left In: 276.606+/-0.054 $\chi^2$/NDF:484188.8/15

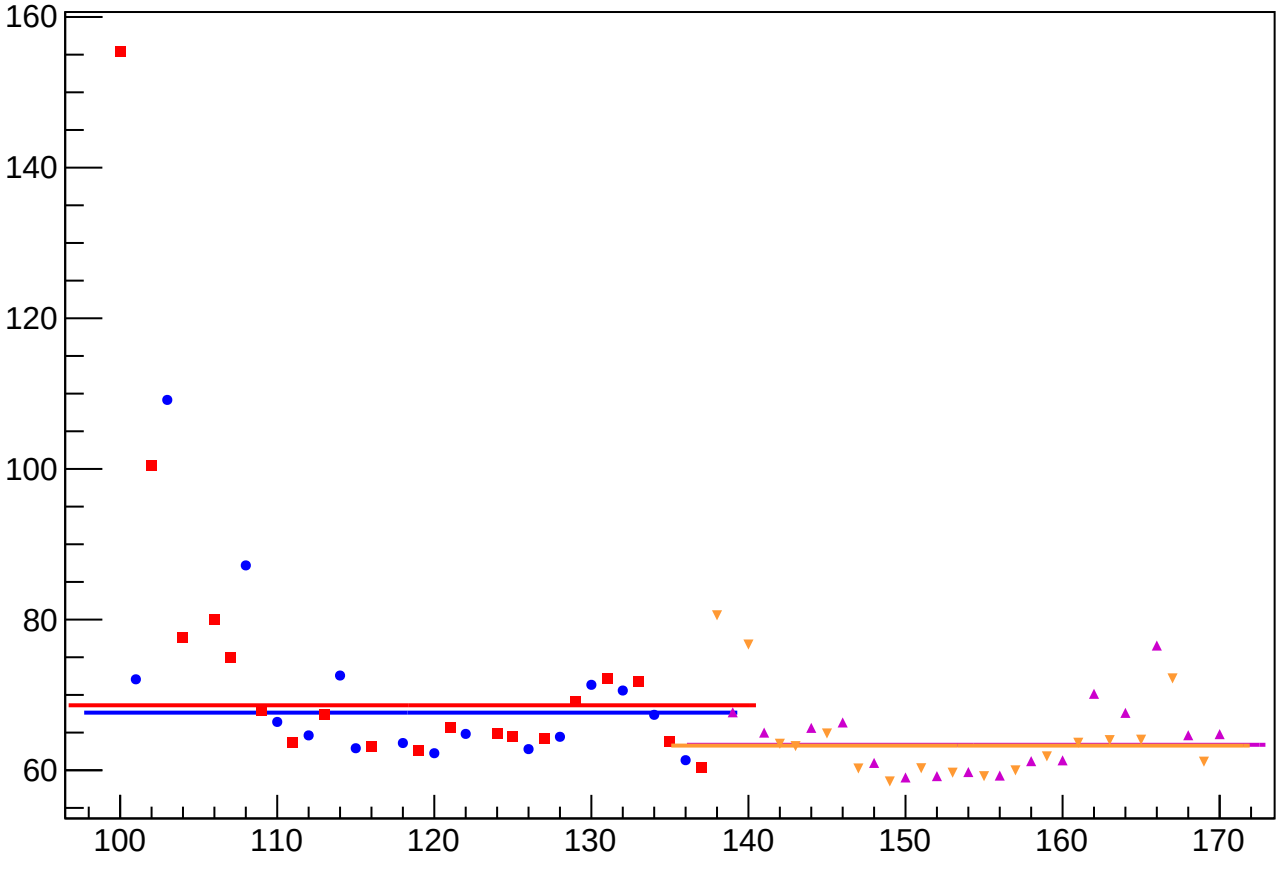
+ sign 223.602+/-0.038 $\chi^2$/NDF: 6655563.7/32

All: 211.082+/-0.026 $\chi^2$/NDF: 15885220.5/67

- sign 200.281+/-0.035 $\chi^2$/NDF: 9028591.7/34


eigen_dit_asym_sam8_mean vs Slug
400
200
0
−200
−400
−600
−800
−1000
−1200
100
110
120
130
140
150
160
170
Right In: -204.577+/-25.523 χ²/NDF: 20.0/15
Left Out: -212.716+/-17.422 χ²/NDF:16.1/16
Right Out: 133.926+/-25.483 χ²/NDF: 37.2/18
Left In: 190.587+/-17.585 χ²/NDF:23.6/15
+ sign -210.129+/-14.389 χ²/NDF: 36.1/32
All: -20.026+/-10.205 χ²/NDF: 451.4/67
- sign 172.309+/-14.474 χ²/NDF: 64.1/34

# eigen_dit_asym_sam8_rms vs Slug




Right In: 67.647+/-0.018 $\chi^2$/NDF: 263668.9/15

Left Out: 63.275+/-0.012 $\chi^2$/NDF:186578.4/16

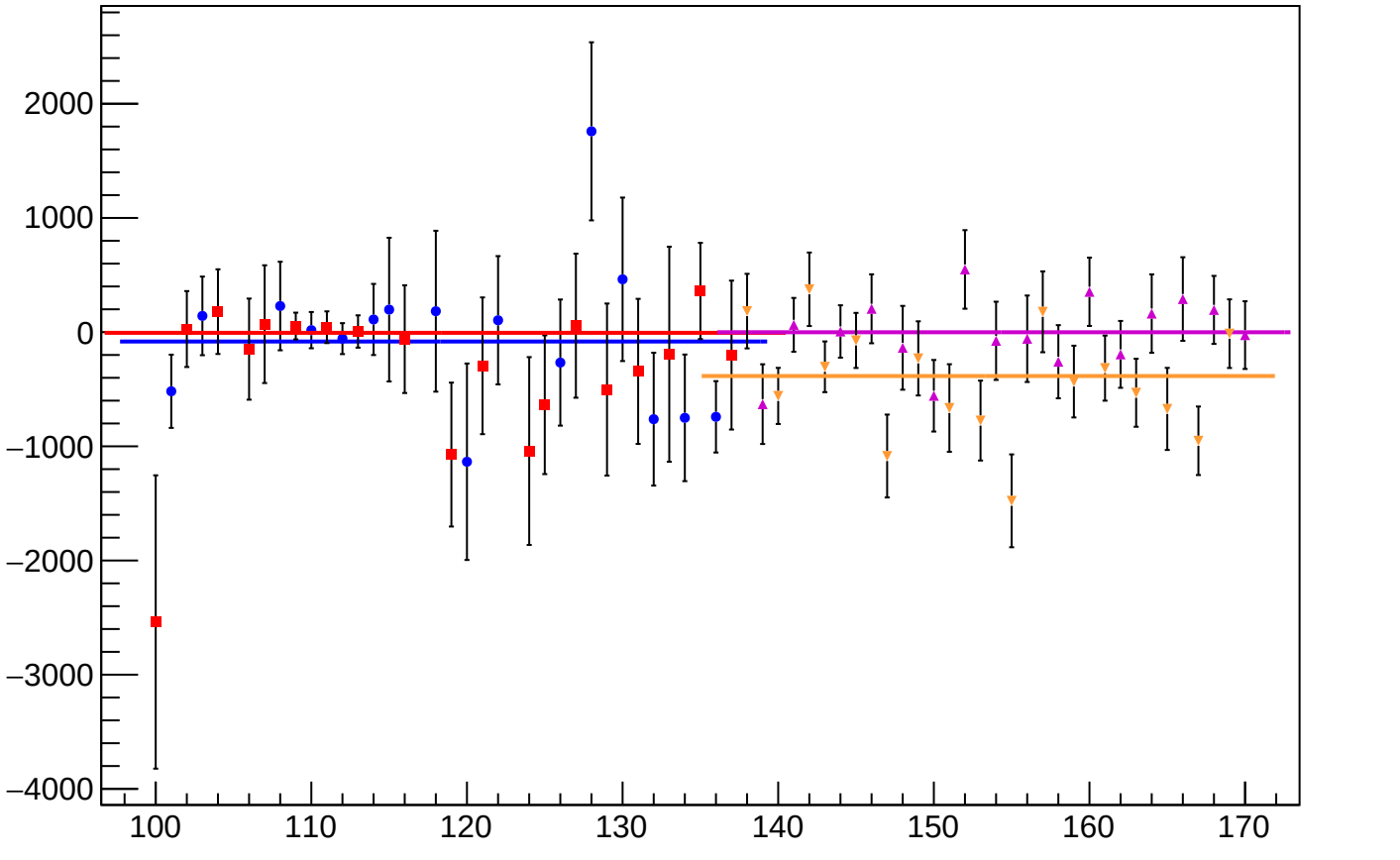
Right Out: 68.624+/-0.018 $\chi^2$/NDF: 248166.1/18

Left In: 63.379+/-0.012 $\chi^2$/NDF:104174.8/15

+ sign 64.664+/-0.010 $\chi^2$/NDF: 490292.2/32

All: 64.866+/-0.007 $\chi^2$/NDF: 900814.9/67

- sign 65.071+/-0.010 $\chi^2$/NDF: 409729.5/34




Right In: -82.226+/-78.675 $\chi^2$/NDF: 19.2/15

Left Out: -384.457+/-73.968 $\chi^2$/NDF:32.5/16

Right Out: -6.062+/-65.910 $\chi^2$/NDF: 12.0/18

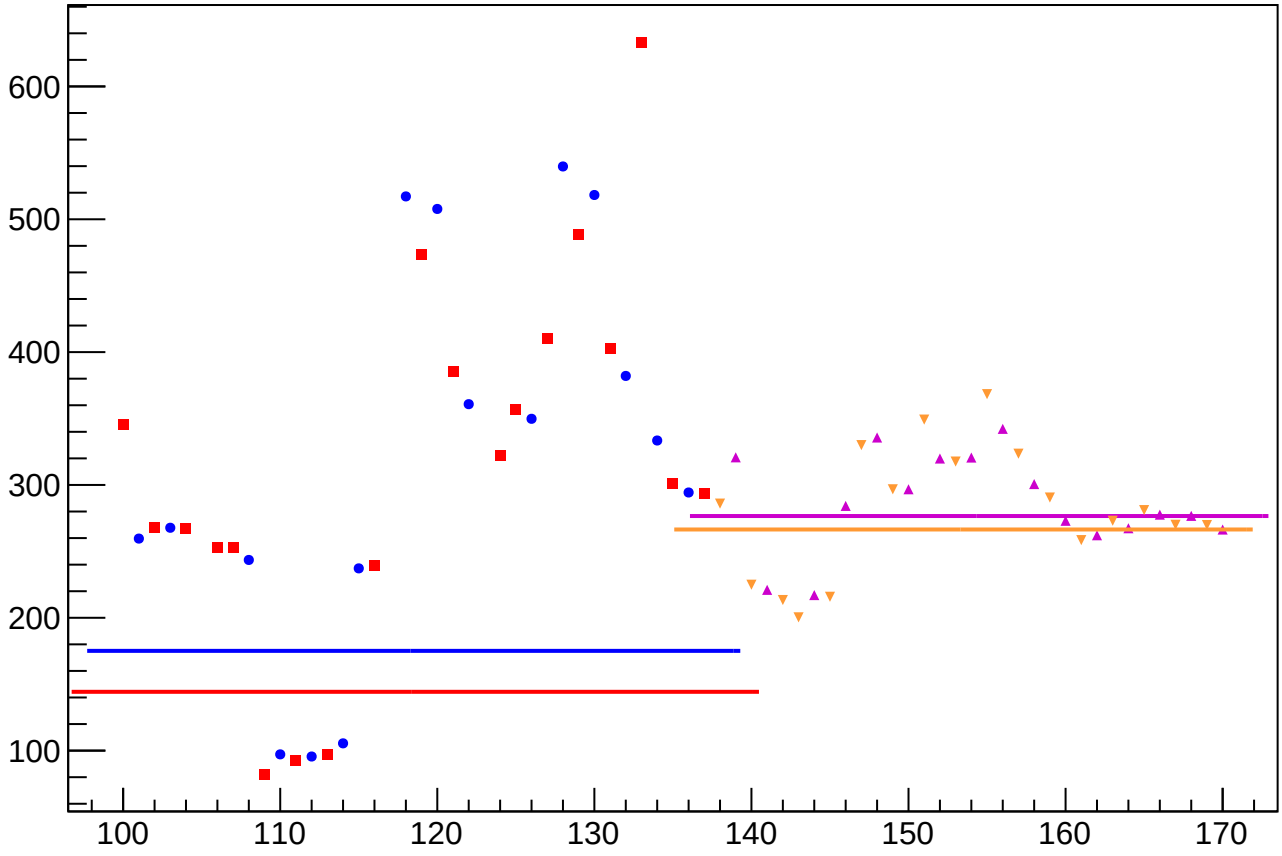
Left In: -1.086+/-76.944 $\chi^2$/NDF:13.5/15

+ sign -242.653+/-53.891 $\chi^2$/NDF: 59.5/32

All: -114.511+/-36.676 $\chi^2$/NDF: 95.6/67

- sign -3.956+/-50.056 $\chi^2$/NDF: 25.5/34

# asym_sam8_eigen_dit_correction_rms vs Slug




Right In: 175.098+/-0.056 $\chi^2$/NDF: 4429098.4/15

Left Out: 266.472+/-0.052 $\chi^2$/NDF:794540.5/16

Right Out: 144.276+/-0.047 $\chi^2$/NDF: 5132412.3/18

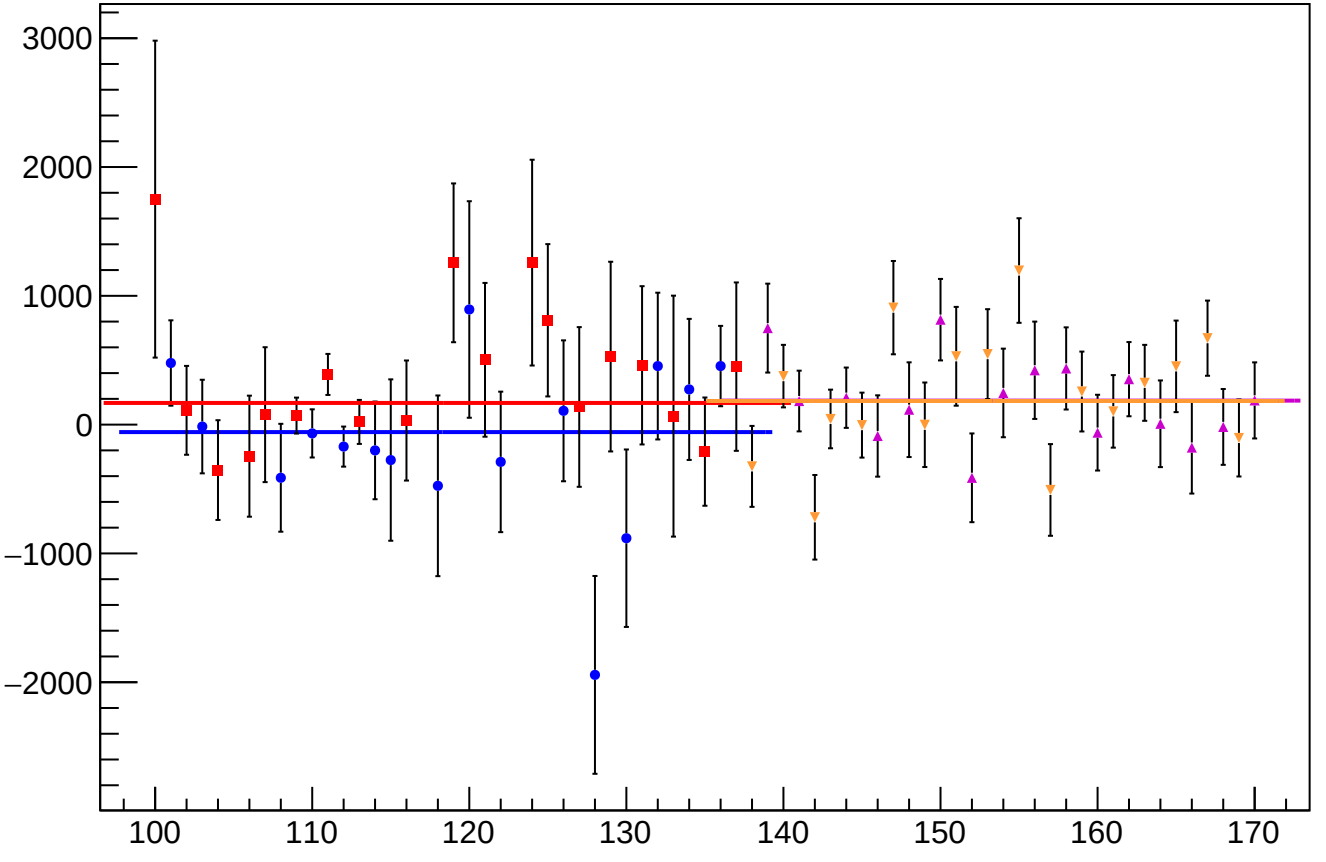
Left In: 276.605+/-0.054 $\chi^2$/NDF:484190.6/15

+ sign 223.600+/-0.038 $\chi^2$/NDF: 6655619.7/32

All: 211.081+/-0.026 $\chi^2$/NDF: 15885235.4/67

- sign 200.280+/-0.035 $\chi^2$/NDF: 9028562.5/34

# asym_sam8_mean vs Slug




Right In: -57.970+/-86.890 $\chi^2$/NDF: 17.4/15

Left Out: 183.452+/-73.995 $\chi^2$/NDF:32.6/16

Right Out: 168.322+/-74.598 $\chi^2$/NDF: 15.5/18

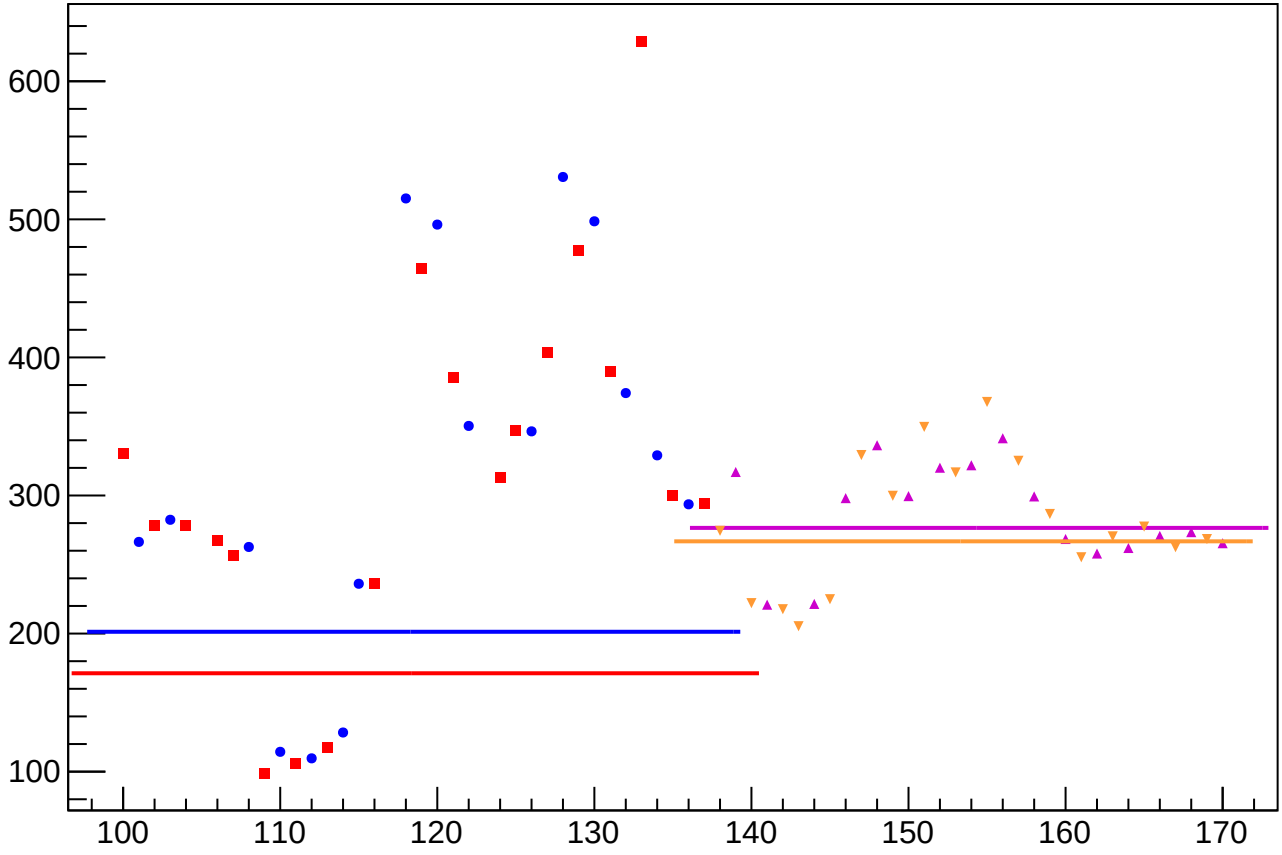
Left In: 186.332+/-76.912 $\chi^2$/NDF:14.3/15

+ sign 81.968+/-56.336 $\chi^2$/NDF: 54.5/32

All: 131.920+/-38.812 $\chi^2$/NDF: 85.8/67

- sign 177.052+/-53.548 $\chi^2$/NDF: 29.8/34

# asym_sam8_rms vs Slug




Right In: 201.301+/-0.061 $\chi^2$/NDF: 3572199.4/15

Left Out: 266.805+/-0.052 $\chi^2$/NDF:720656.7/16

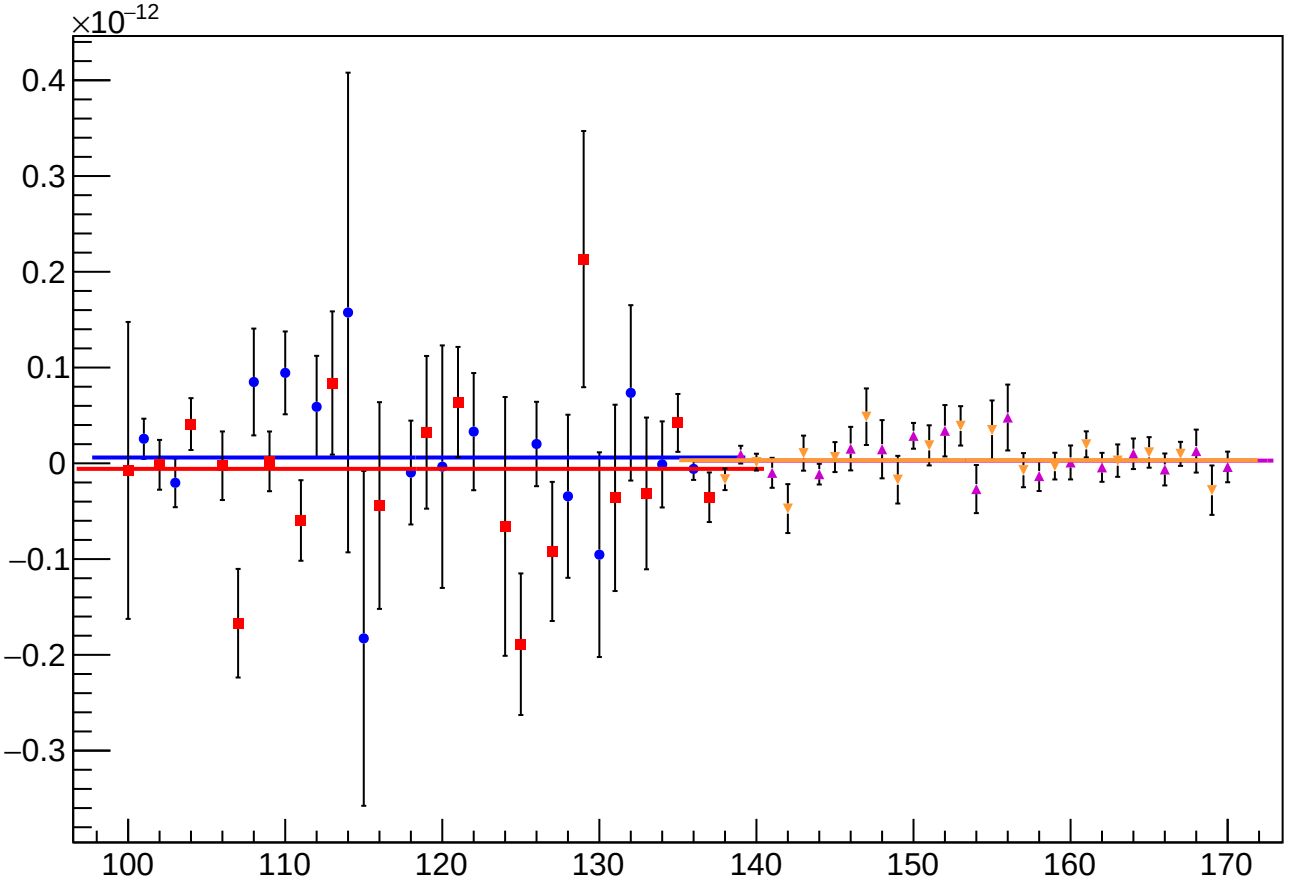
Right Out: 171.252+/-0.053 $\chi^2$/NDF: 4192554.2/18

Left In: 276.540+/-0.054 $\chi^2$/NDF:475560.4/15

+ sign 239.270+/-0.040 $\chi^2$/NDF: 4951682.9/32

All: 230.348+/-0.027 $\chi^2$/NDF: 11646511.1/67

- sign 222.288+/-0.038 $\chi^2$/NDF: 6599355.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 13.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:19.0/16

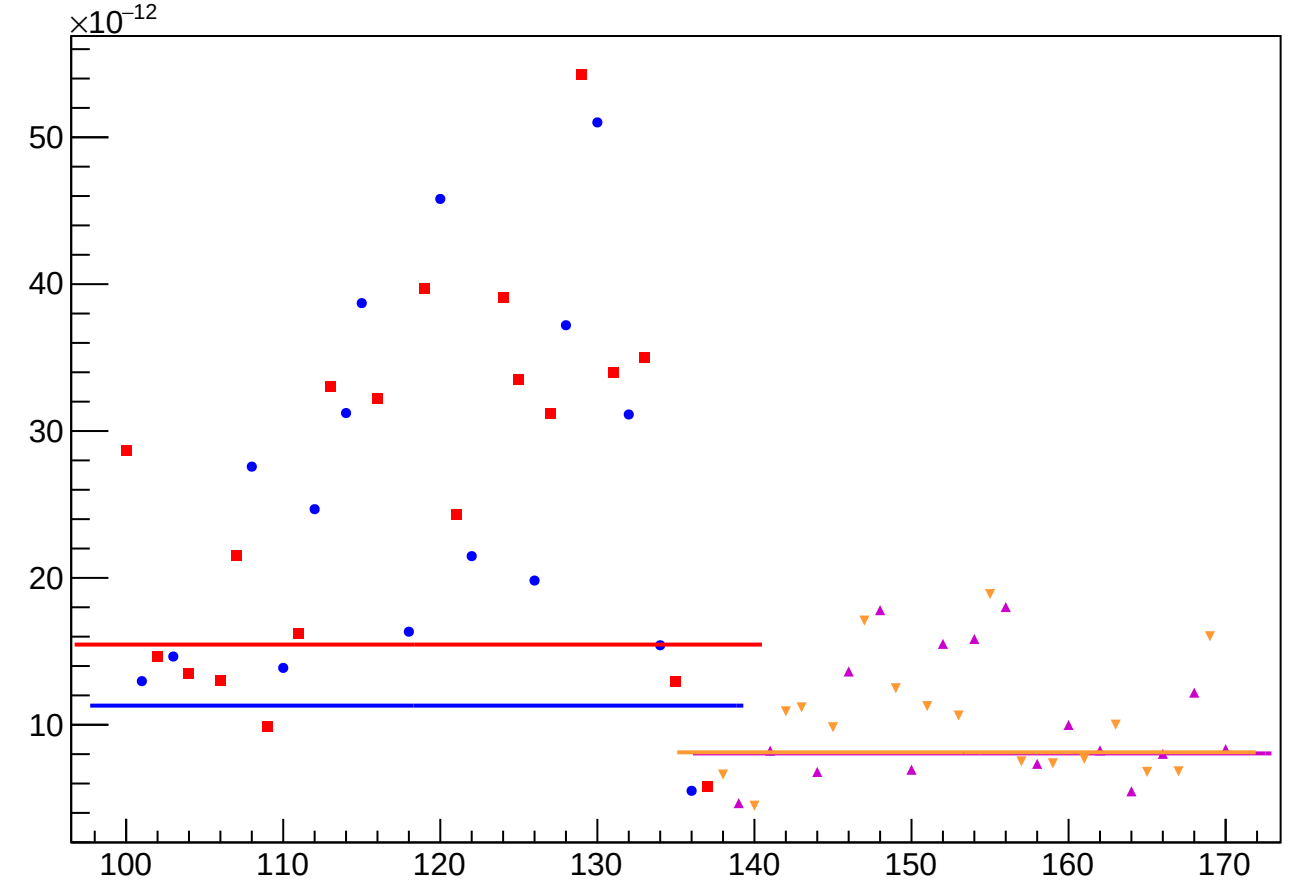
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 30.5/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:13.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 32.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 77.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 44.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1788731.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1302110.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1442096.6/18

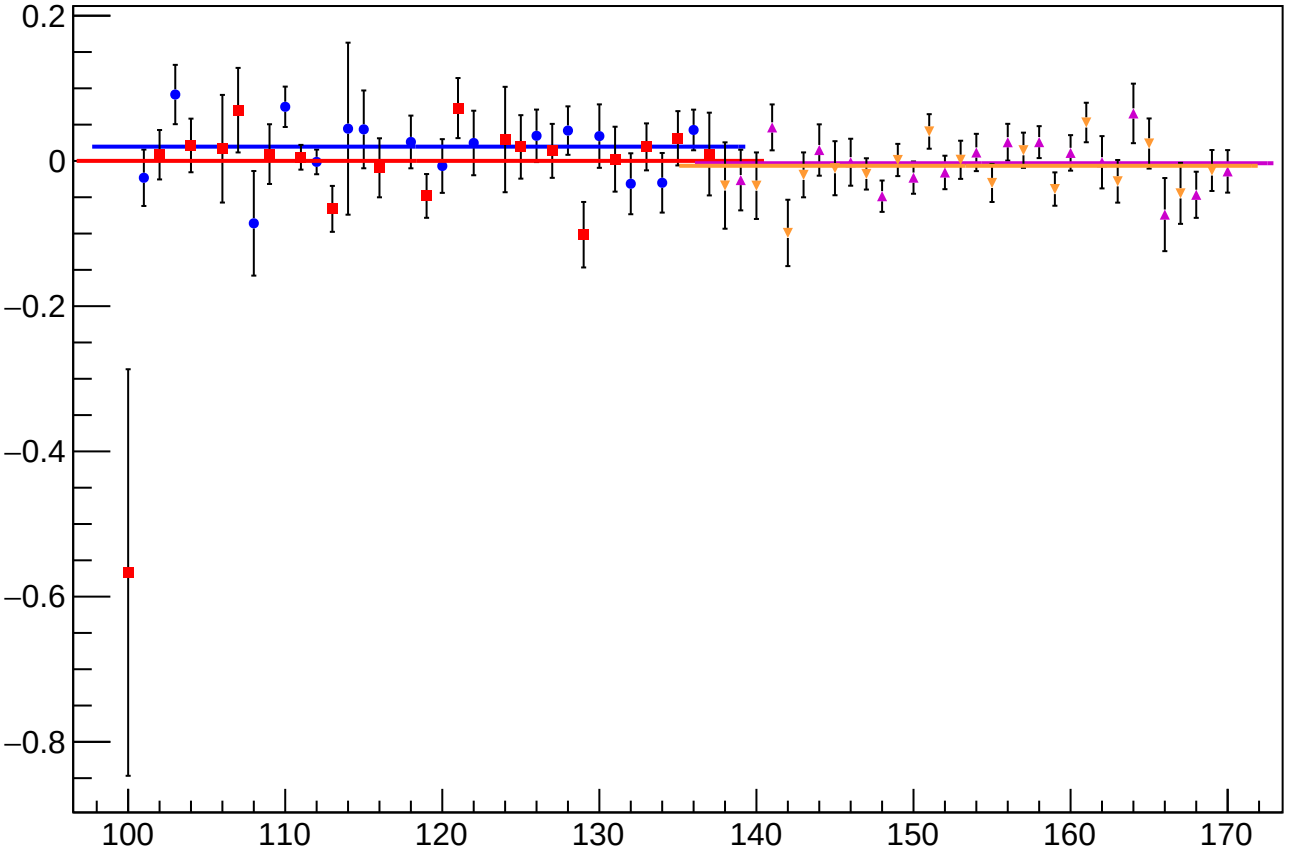
Left In: 0.000+/-0.000 $\chi^2$/NDF:1300677.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3333864.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 7000700.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3657344.4/34

# asym_sam8_dit_vs_cor_diff_mean vs Slug




Right In: 0.020+/-0.009 $\chi^2$/NDF: 17.0/15

Left Out: -0.007+/-0.007 $\chi^2$/NDF:19.8/16

Right Out: 0.000+/-0.009 $\chi^2$/NDF: 22.8/18

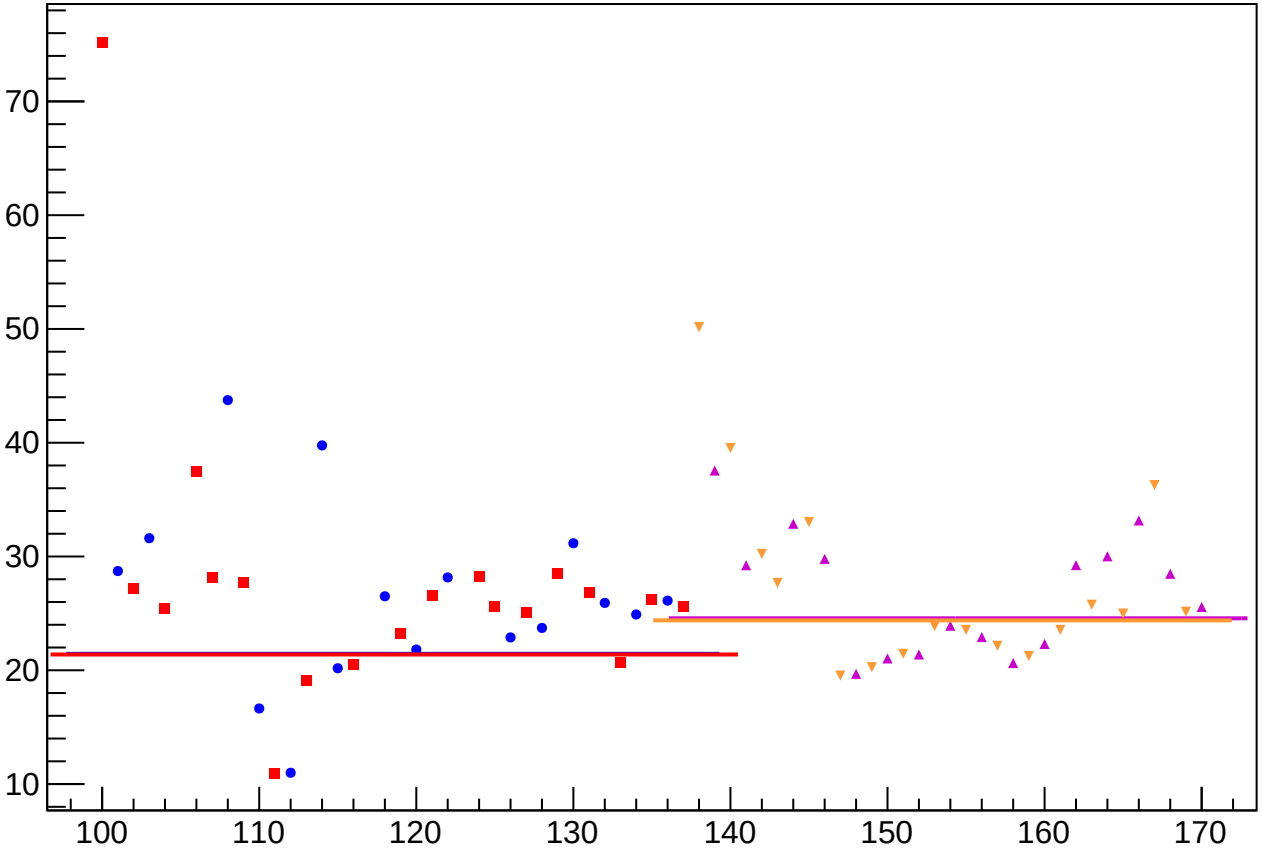
Left In: -0.003+/-0.007 $\chi^2$/NDF:19.1/15

+ sign 0.004+/-0.005 $\chi^2$/NDF: 42.5/32

All: 0.001+/-0.004 $\chi^2$/NDF: 85.0/67

- sign -0.002+/-0.005 $\chi^2$/NDF: 42.0/34

# asym_sam8_dit_vs_cor_diff_rms vs Slug




Right In: 21.444+/-0.006 $\chi^2$/NDF: 1540713.8/15

Left Out: 24.383+/-0.005 $\chi^2$/NDF:1183599.3/16

Right Out: 21.389+/-0.006 $\chi^2$/NDF: 1311934.3/18

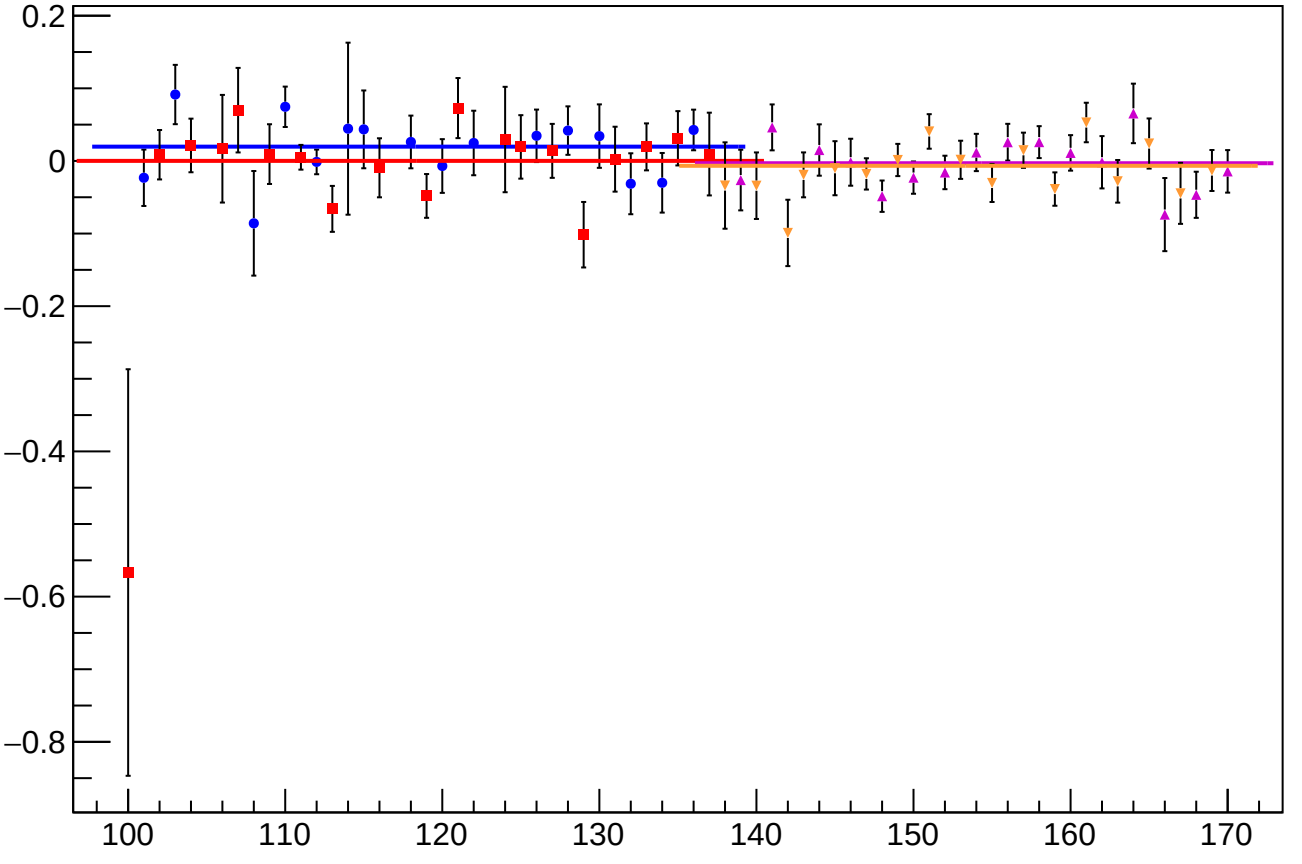
Left In: 24.567+/-0.005 $\chi^2$/NDF:841121.8/15

+ sign 23.234+/-0.004 $\chi^2$/NDF: 2863826.4/32

All: 23.253+/-0.003 $\chi^2$/NDF: 5182402.1/67

- sign 23.273+/-0.004 $\chi^2$/NDF: 2318522.2/34

# asym_sam8_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.020+/-0.009 $\chi^2$/NDF: 17.0/15

Left Out: -0.007+/-0.007 $\chi^2$/NDF:19.8/16

Right Out: 0.000+/-0.009 $\chi^2$/NDF: 22.8/18

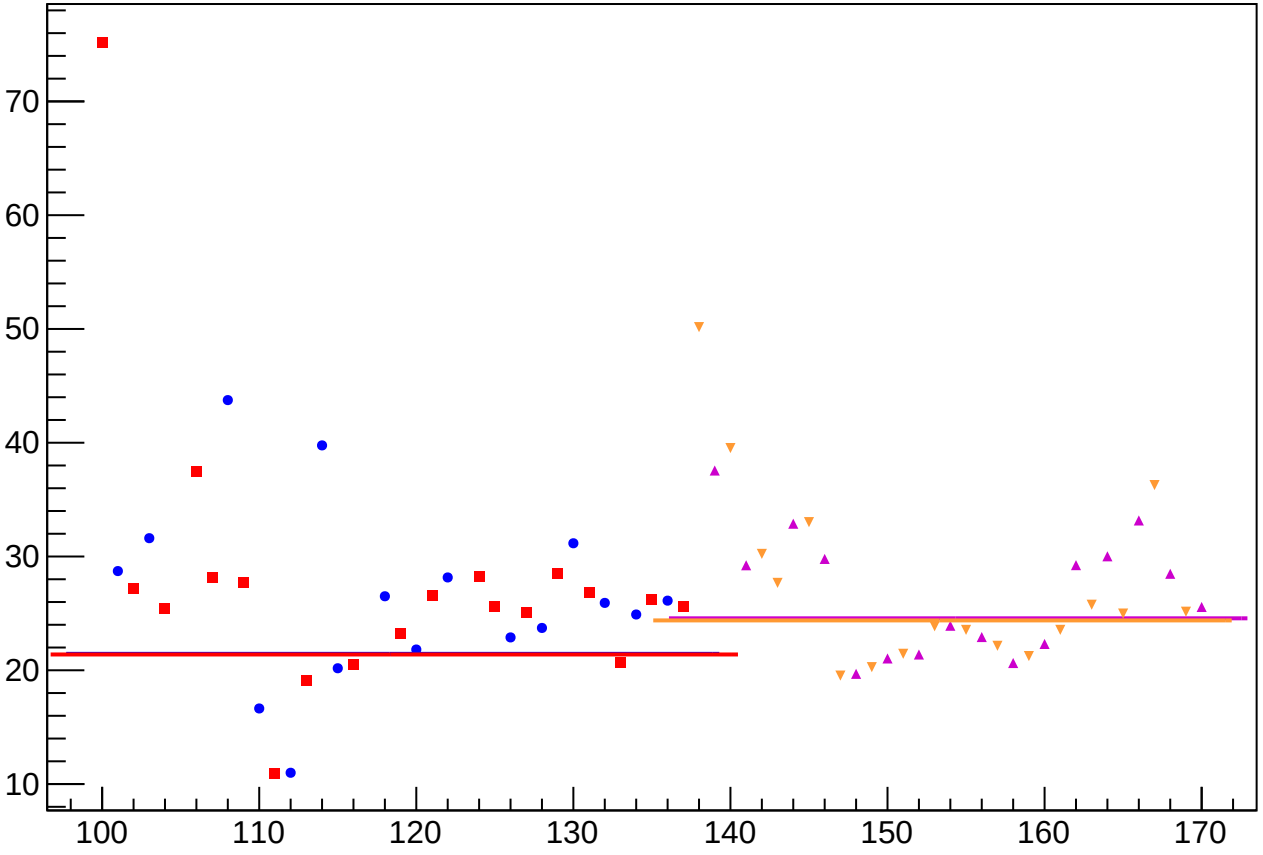
Left In: -0.003+/-0.007 $\chi^2$/NDF:19.1/15

+ sign 0.004+/-0.005 $\chi^2$/NDF: 42.5/32

All: 0.001+/-0.004 $\chi^2$/NDF: 85.0/67

- sign -0.002+/-0.005 $\chi^2$/NDF: 42.0/34

# asym_sam8_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 21.444+/-0.006 $\chi^2$/NDF: 1540713.8/15

Left Out: 24.383+/-0.005 $\chi^2$/NDF:1183599.3/16

Right Out: 21.389+/-0.006 $\chi^2$/NDF: 1311934.3/18

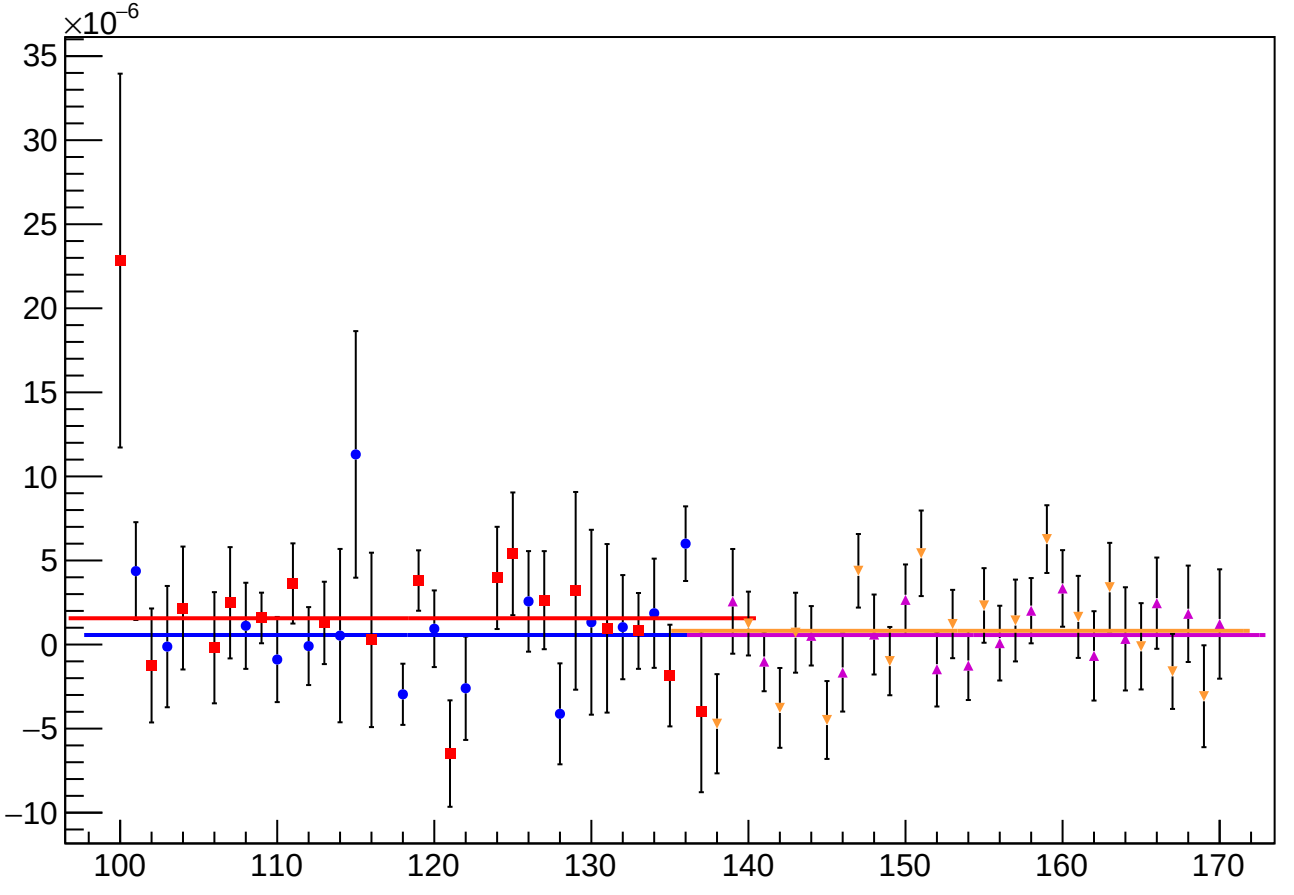
Left In: 24.567+/-0.005 $\chi^2$/NDF:841121.8/15

+ sign 23.234+/-0.004 $\chi^2$/NDF: 2863826.4/32

All: 23.253+/-0.003 $\chi^2$/NDF: 5182402.1/67

- sign 23.273+/-0.004 $\chi^2$/NDF: 2318522.2/34

# asym_sam8_eigen_dit_vs_dit_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 18.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:31.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.3/18

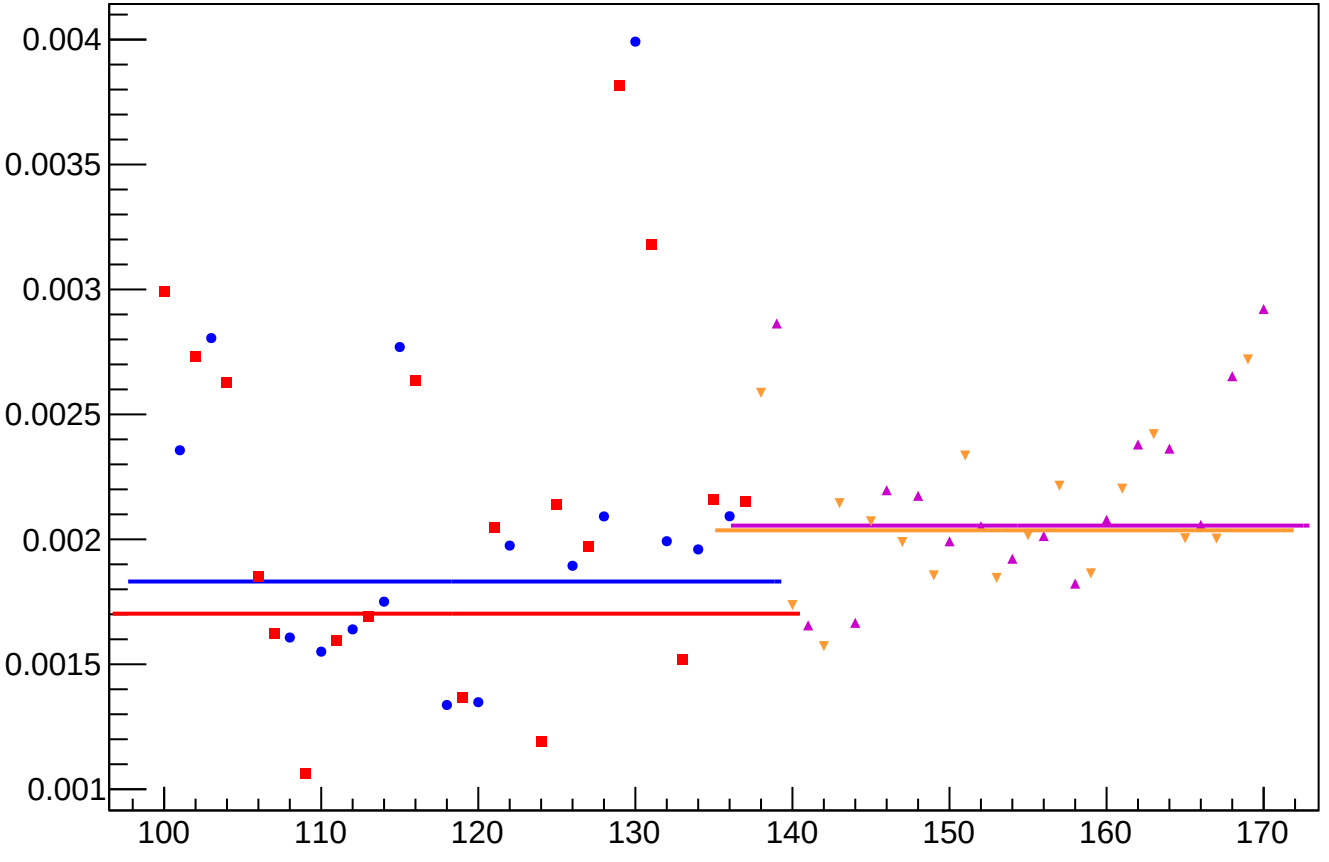
Left In: 0.000+/-0.000 $\chi^2$/NDF:7.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 49.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 77.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 27.4/34

# asym_sam8_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.002+/-0.000 $\chi^2$/NDF: 900406.1/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:442101.2/16

Right Out: 0.002+/-0.000 $\chi^2$/NDF: 1478057.9/18

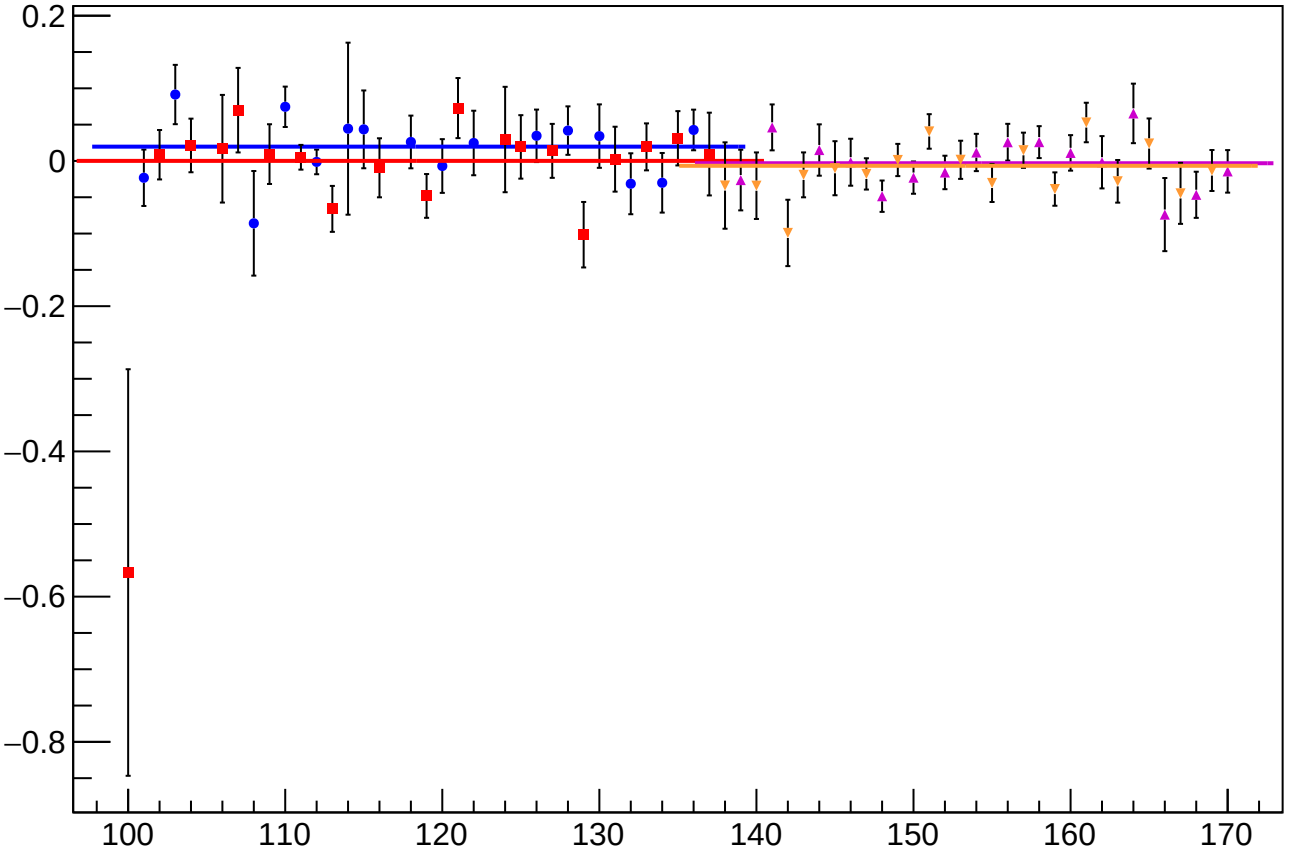
Left In: 0.002+/-0.000 $\chi^2$/NDF:665353.0/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 1445621.4/32

All: 0.002+/-0.000 $\chi^2$/NDF: 3929531.2/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 2468633.5/34

# asym_sam8_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.020+/-0.009 $\chi^2$/NDF: 17.0/15

Left Out: -0.007+/-0.007 $\chi^2$/NDF:19.8/16

Right Out: 0.000+/-0.009 $\chi^2$/NDF: 22.8/18

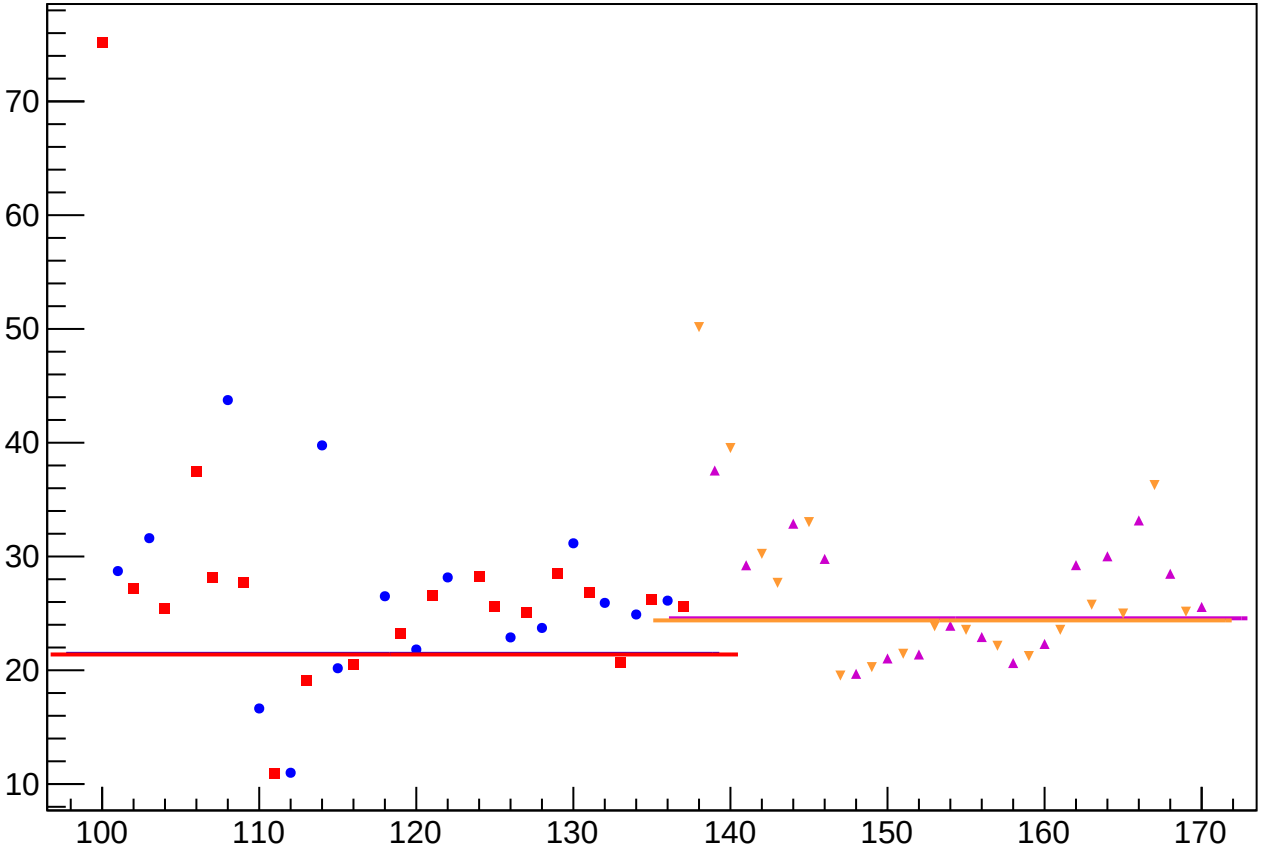
Left In: -0.003+/-0.007 $\chi^2$/NDF:19.1/15

+ sign 0.004+/-0.005 $\chi^2$/NDF: 42.5/32

All: 0.001+/-0.004 $\chi^2$/NDF: 85.0/67

- sign -0.002+/-0.005 $\chi^2$/NDF: 42.0/34

# asym_sam8_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 21.443+/-0.006 $\chi^2$/NDF: 1540859.8/15

Left Out: 24.383+/-0.005 $\chi^2$/NDF:1183599.3/16

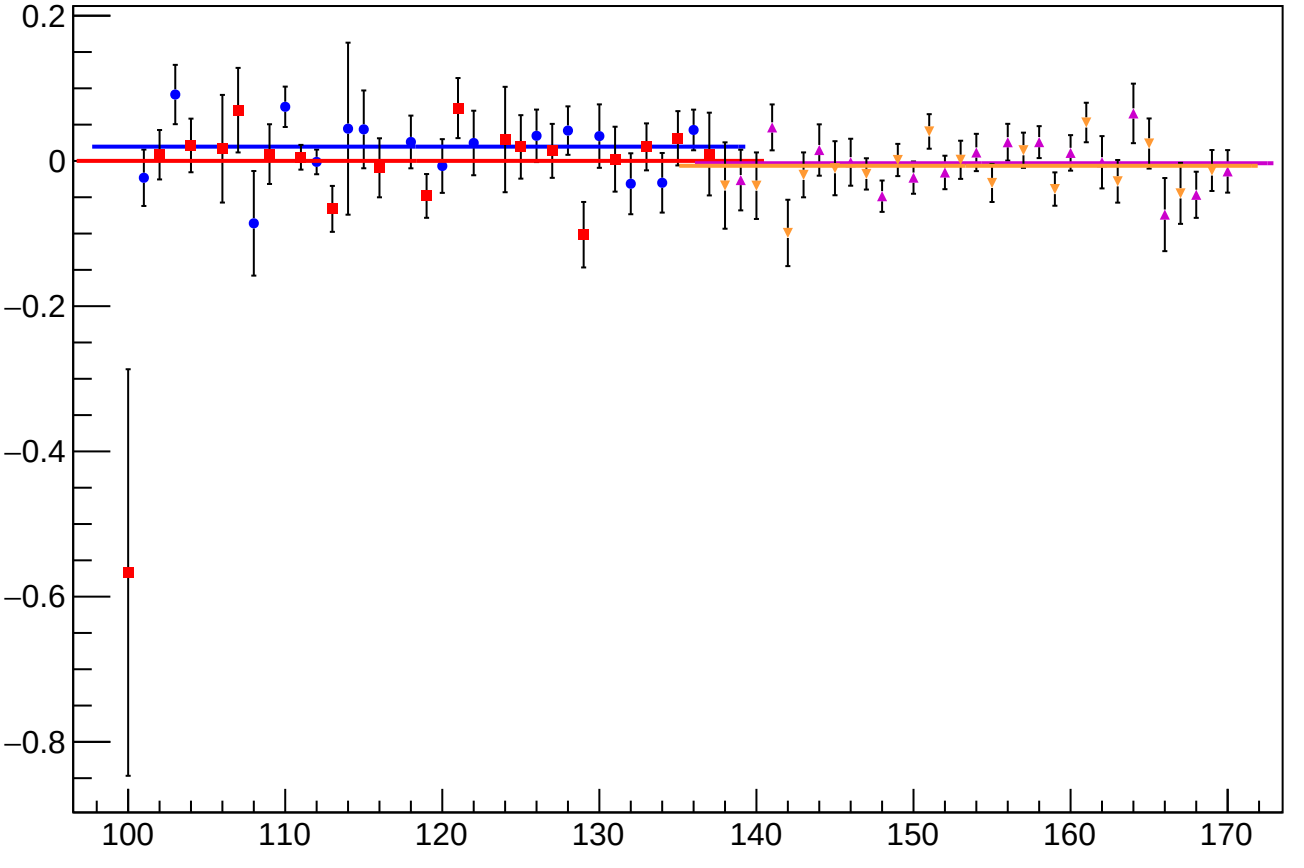
Right Out: 21.389+/-0.006 $\chi^2$/NDF: 1312055.7/18

Left In: 24.567+/-0.005 $\chi^2$/NDF:841124.7/15

+ sign 23.233+/-0.004 $\chi^2$/NDF: 2864050.0/32

All: 23.253+/-0.003 $\chi^2$/NDF: 5182835.3/67

- sign 23.273+/-0.004 $\chi^2$/NDF: 2318731.7/34




Right In: 0.020+/-0.009 $\chi^2$/NDF: 17.0/15

Left Out: -0.007+/-0.007 $\chi^2$/NDF:19.8/16

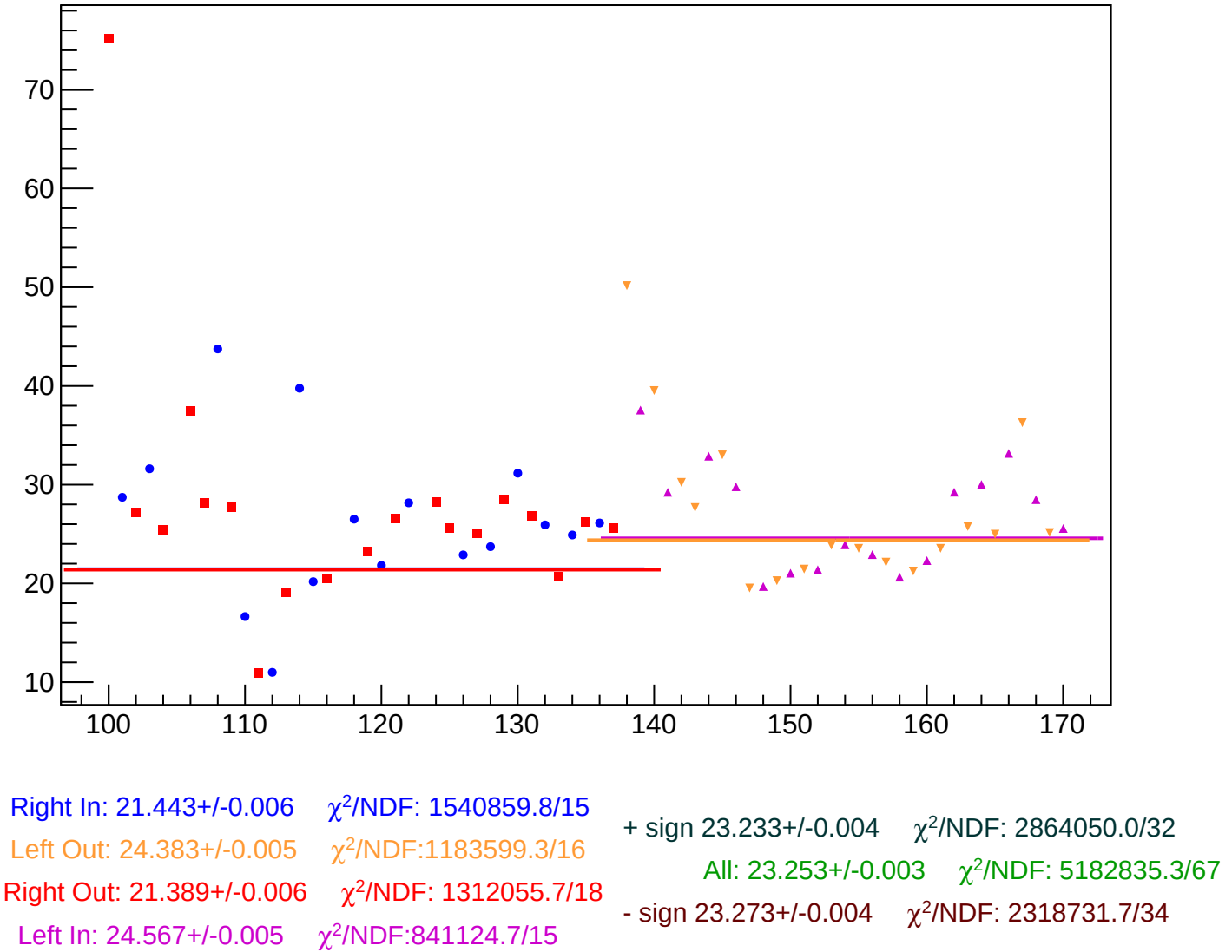
Right Out: 0.000+/-0.009 $\chi^2$/NDF: 22.8/18

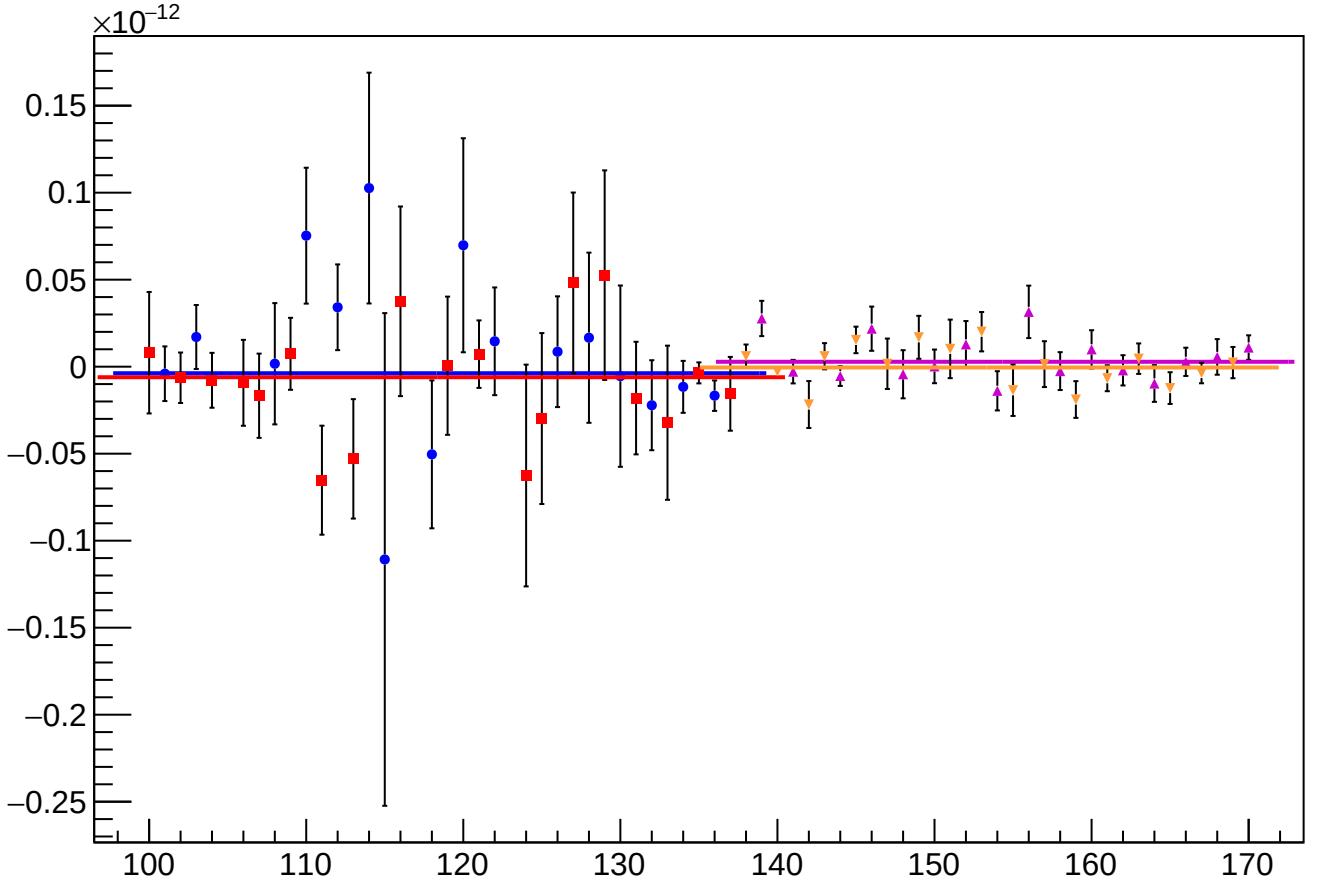
Left In: -0.003+/-0.007 $\chi^2$/NDF:19.1/15

+ sign 0.004+/-0.005 $\chi^2$/NDF: 42.5/32

All: 0.001+/-0.004 $\chi^2$/NDF: 85.0/67

- sign -0.002+/-0.005 $\chi^2$/NDF: 42.0/34


asym_sam8_eigen_dit_vs_eigen_cor_diff_rms vs Slug
70
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 21.443+/-0.006 χ²/NDF: 1540859.8/15
Left Out: 24.383+/-0.005 χ²/NDF:1183599.3/16
Right Out: 21.389+/-0.006 χ²/NDF: 1312055.7/18
Left In: 24.567+/-0.005 χ²/NDF:841124.7/15
+ sign 23.233+/-0.004 χ²/NDF: 2864050.0/32
All: 23.253+/-0.003 χ²/NDF: 5182835.3/67
- sign 23.273+/-0.004 χ²/NDF: 2318731.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 17.2/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:21.8/16

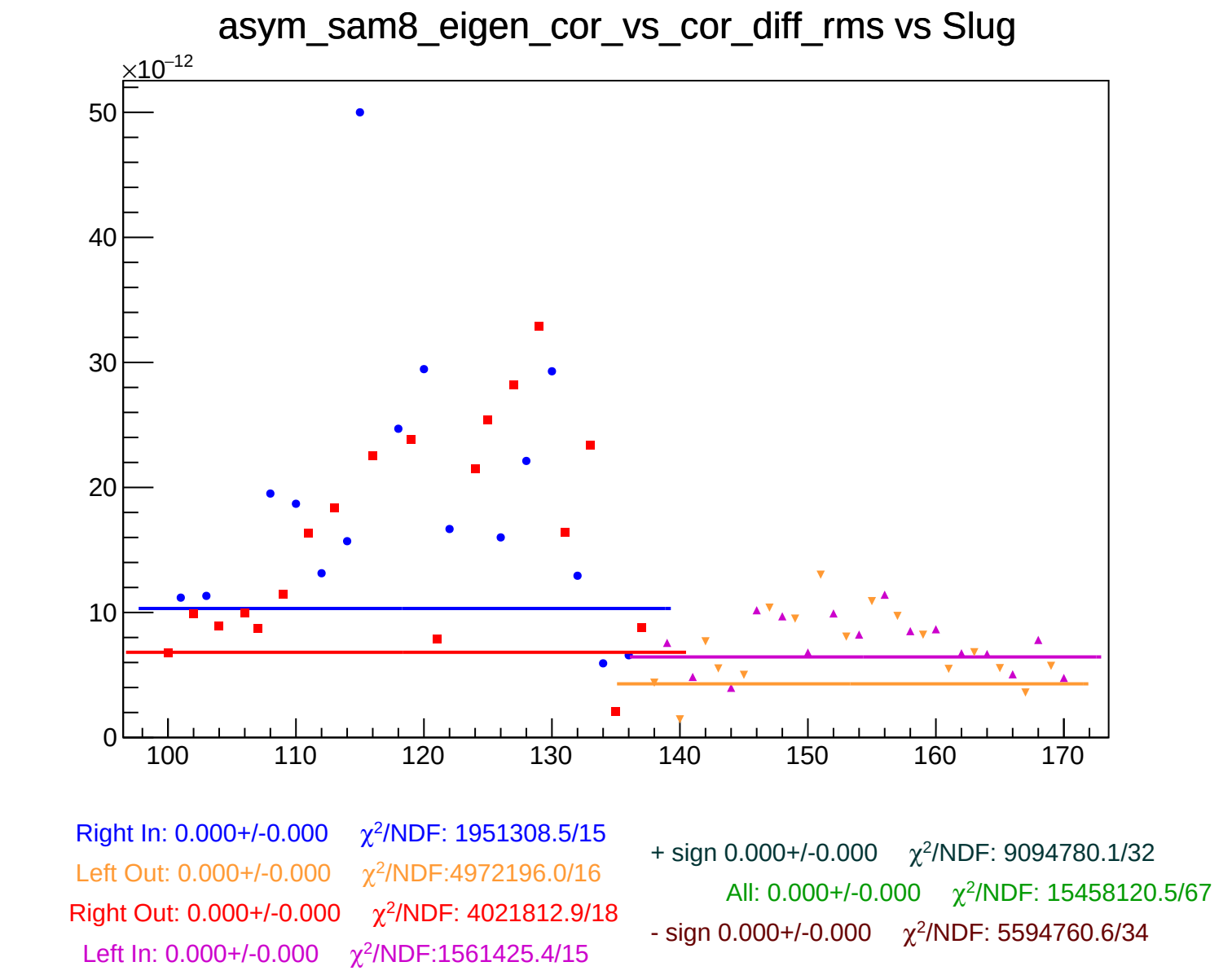
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 11.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:21.5/15

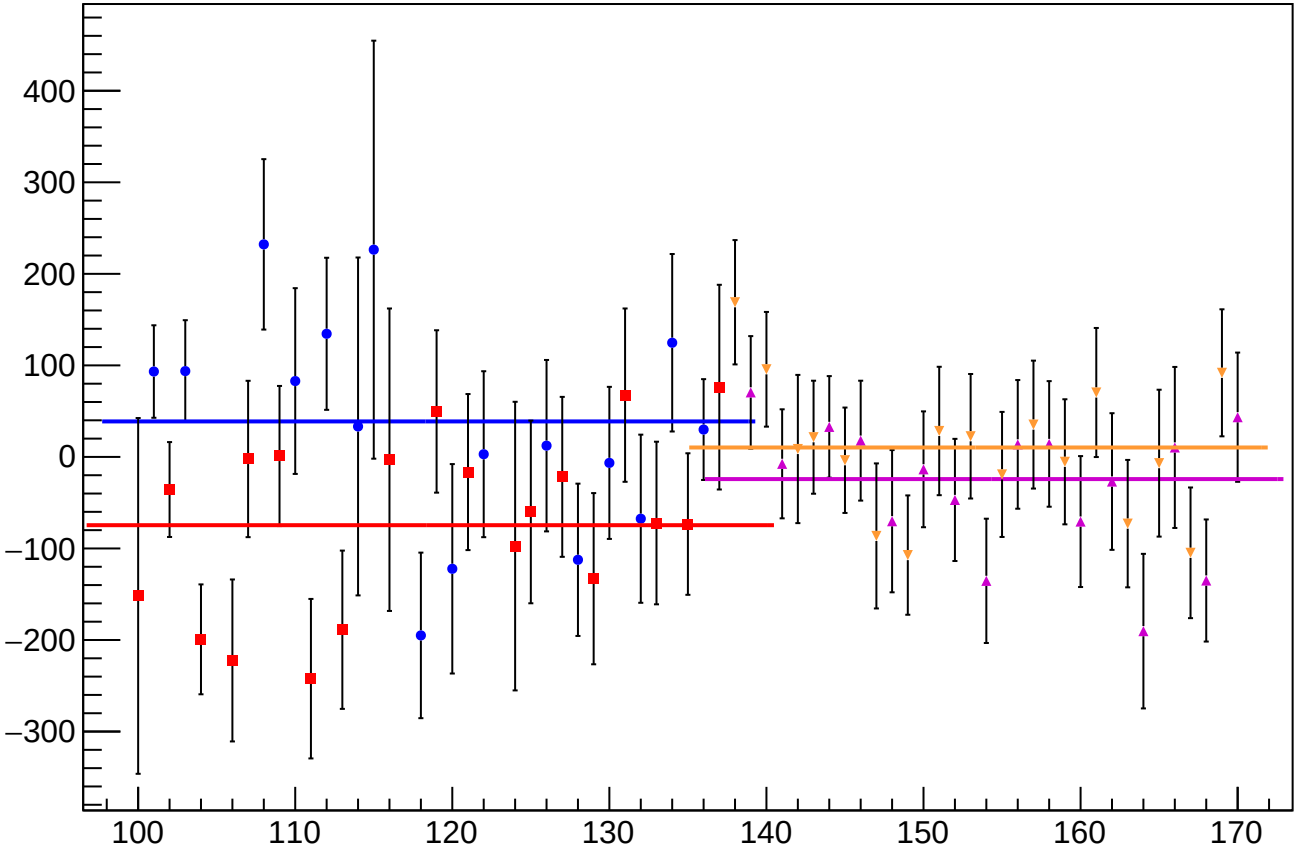
+ sign -0.000+/-0.000 $\chi^2$/NDF: 39.3/32

All: -0.000+/-0.000 $\chi^2$/NDF: 75.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 36.1/34


asym_sam8_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1951308.5/15
Left Out: 0.000+/-0.000 χ²/NDF:4972196.0/16
Right Out: 0.000+/-0.000 χ²/NDF: 4021812.9/18
Left In: 0.000+/-0.000 χ²/NDF:1561425.4/15
+ sign 0.000+/-0.000 χ²/NDF: 9094780.1/32
All: 0.000+/-0.000 χ²/NDF: 15458120.5/67
- sign 0.000+/-0.000 χ²/NDF: 5594760.6/34

# reg_asym_sam_15_avg_mean vs Slug




Right In: 38.782+/-20.413 $\chi^2$/NDF: 23.3/15

Left Out: 10.303+/-16.660 $\chi^2$/NDF:18.8/16

Right Out: -74.578+/-19.802 $\chi^2$/NDF: 22.5/18

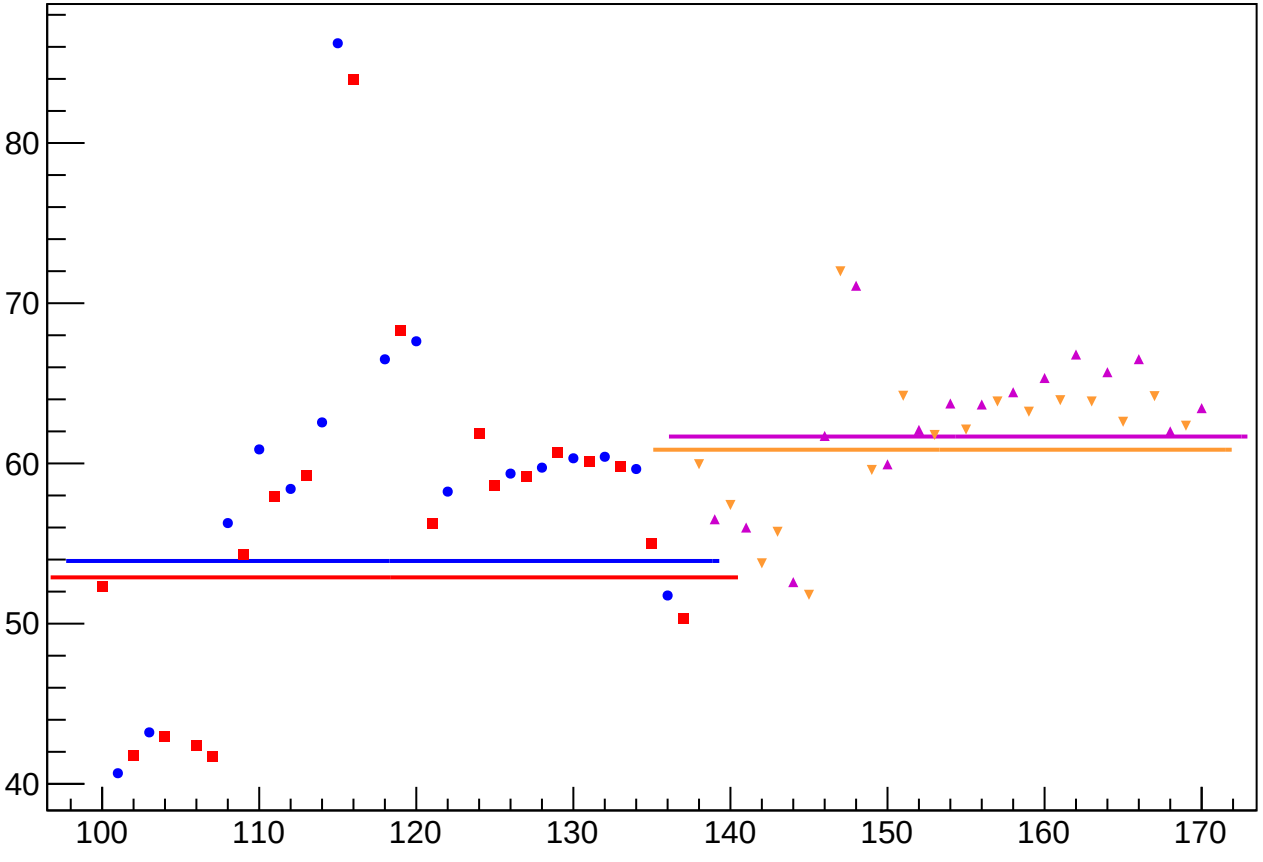
Left In: -24.208+/-17.033 $\chi^2$/NDF:15.8/15

+ sign 21.689+/-12.907 $\chi^2$/NDF: 43.3/32

All: -11.954+/-9.129 $\chi^2$/NDF: 98.9/67

- sign -45.629+/-12.913 $\chi^2$/NDF: 42.0/34

# reg_asym_sam_15_avg_rms vs Slug




Right In: 53.912+/-0.014 $\chi^2$/NDF: 393261.4/15

Left Out: 60.856+/-0.012 $\chi^2$/NDF:150903.9/16

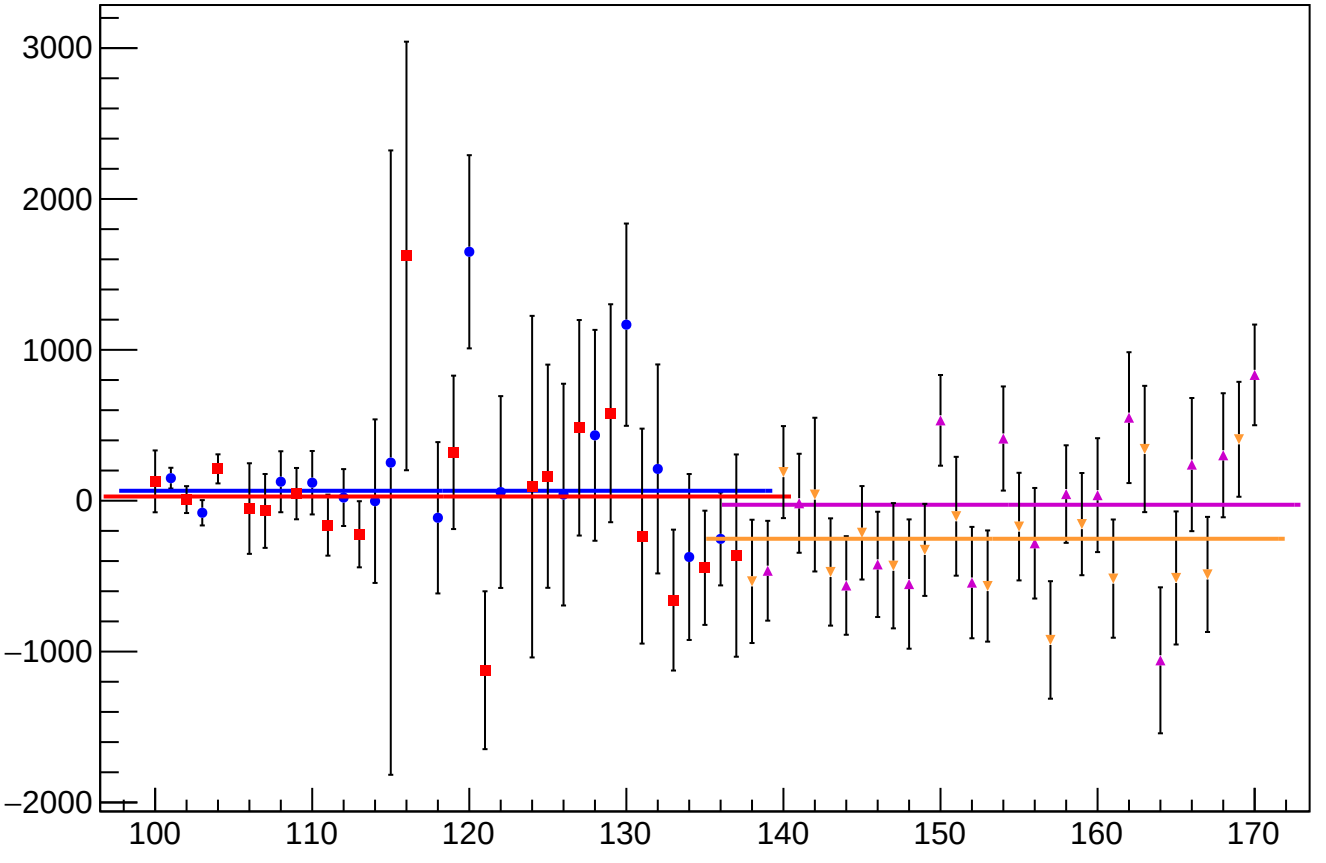
Right Out: 52.889+/-0.014 $\chi^2$/NDF: 425226.7/18

Left In: 61.679+/-0.012 $\chi^2$/NDF:150079.0/15

+ sign 58.080+/-0.009 $\chi^2$/NDF: 683078.2/32

All: 58.010+/-0.006 $\chi^2$/NDF: 1484989.0/67

- sign 57.941+/-0.009 $\chi^2$/NDF: 801794.3/34




Right In: 65.853+/-46.478 $\chi^2$/NDF: 15.7/15

Left Out: -252.226+/-89.956 $\chi^2$/NDF:13.7/16

Right Out: 27.850+/-50.291 $\chi^2$/NDF: 18.0/18

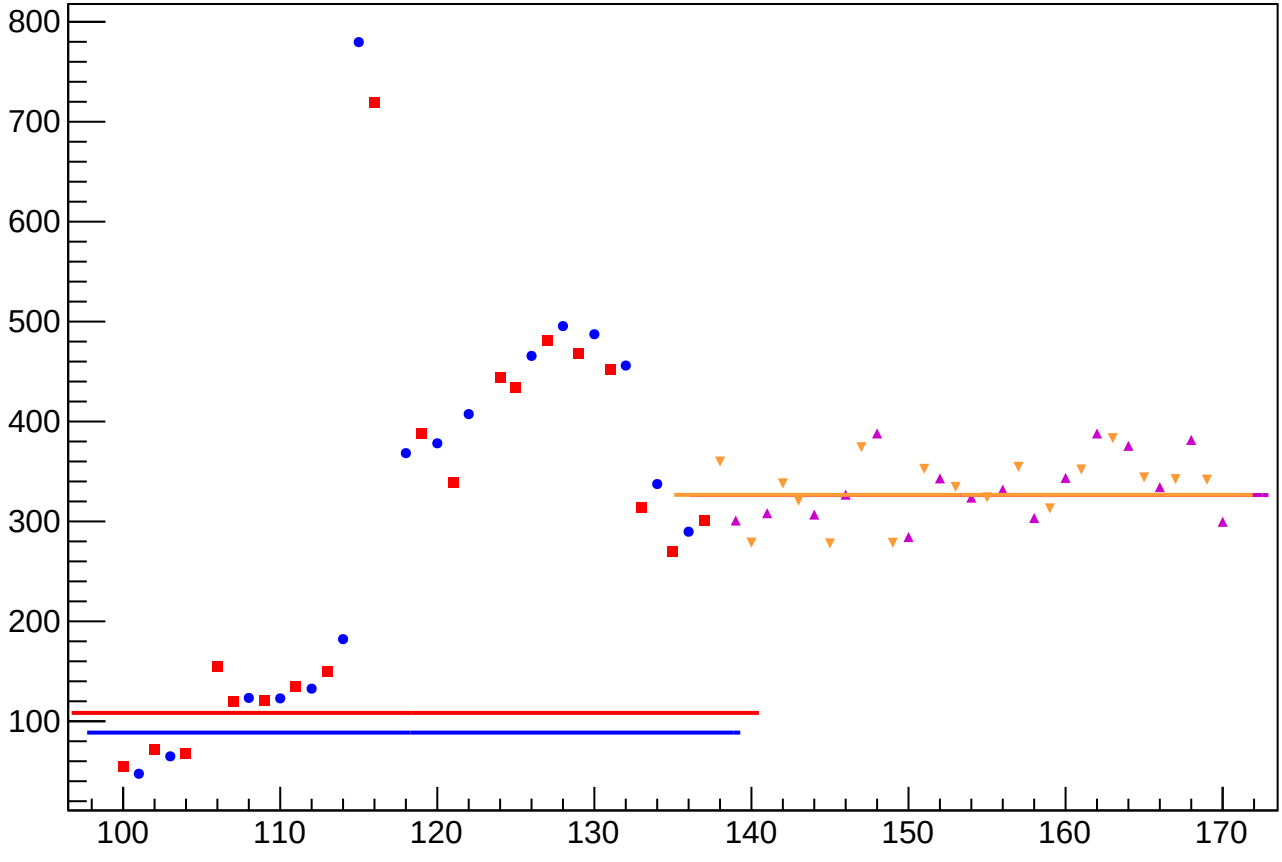
Left In: -26.846+/-90.573 $\chi^2$/NDF:28.8/15

+ sign -1.169+/-41.292 $\chi^2$/NDF: 39.3/32

All: 6.390+/-30.100 $\chi^2$/NDF: 86.4/67

- sign 14.961+/-43.968 $\chi^2$/NDF: 47.1/34

# asym_sam_15_avg_reg_correction_rms vs Slug




Right In: 88.658+/-0.033 $\chi^2$/NDF: 6648055.6/15

Left Out: 326.606+/-0.064 $\chi^2$/NDF:267246.6/16

Right Out: 108.385+/-0.036 $\chi^2$/NDF: 5362841.6/18

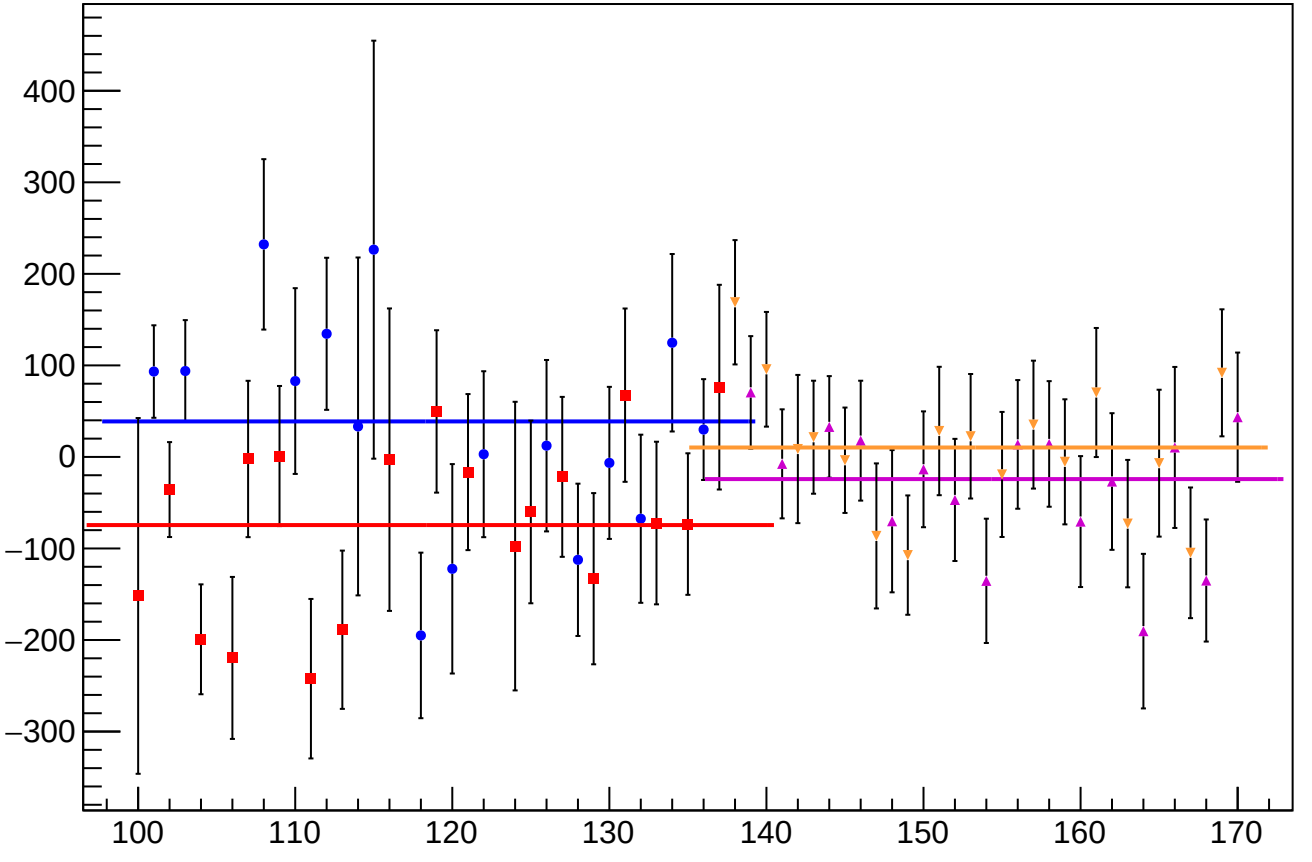
Left In: 326.392+/-0.064 $\chi^2$/NDF:235161.4/15

+ sign 138.795+/-0.029 $\chi^2$/NDF: 17960505.7/32

All: 148.620+/-0.021 $\chi^2$/NDF: 32656574.6/67

- sign 159.760+/-0.031 $\chi^2$/NDF: 14454471.0/34

# cor_asym_sam_15_avg_mean vs Slug




Right In: 38.794+/-20.413 $\chi^2$/NDF: 23.3/15

Left Out: 10.305+/-16.660 $\chi^2$/NDF:18.8/16

Right Out: -74.442+/-19.803 $\chi^2$/NDF: 22.3/18

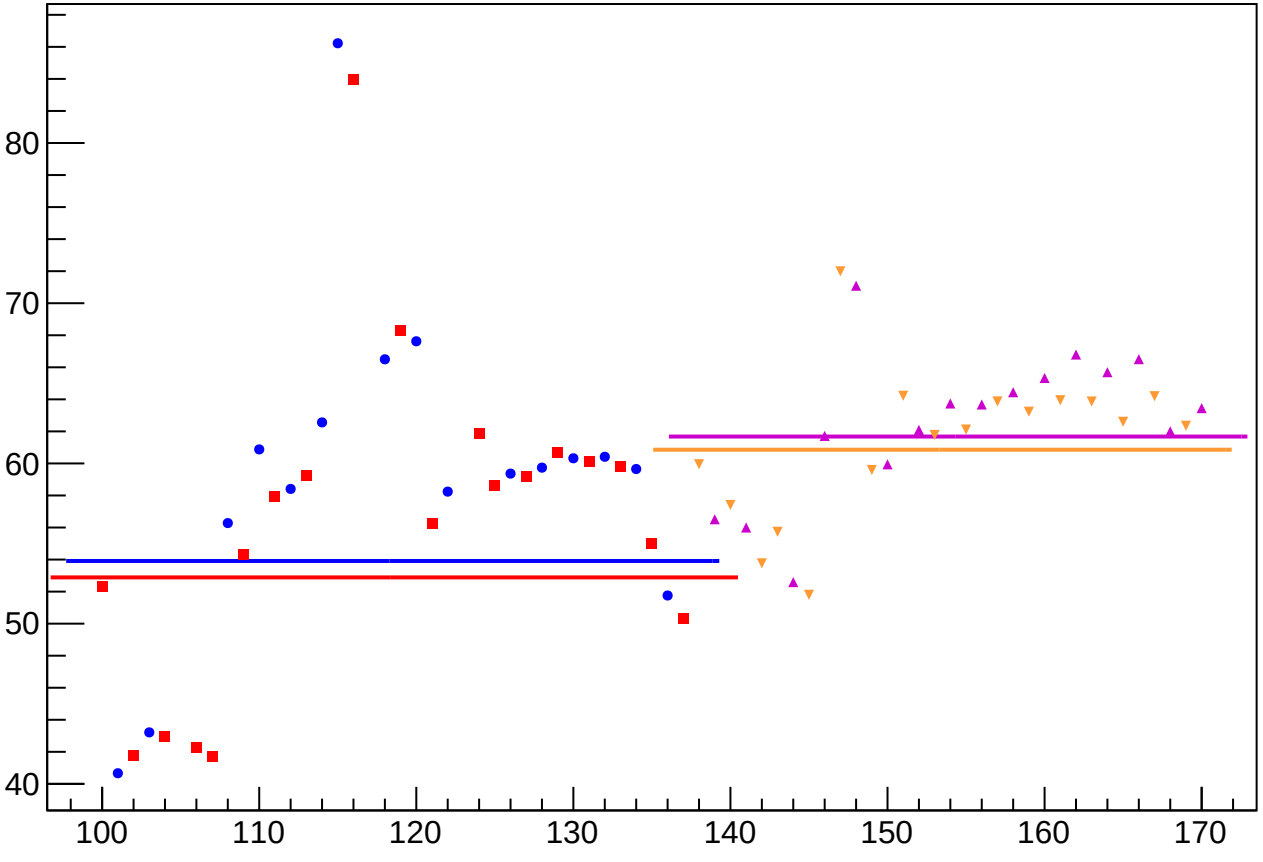
Left In: -24.205+/-17.033 $\chi^2$/NDF:15.8/15

+ sign 21.695+/-12.907 $\chi^2$/NDF: 43.3/32

All: -11.920+/-9.129 $\chi^2$/NDF: 98.7/67

- sign -45.568+/-12.914 $\chi^2$/NDF: 41.9/34

# cor_asym_sam_15_avg_rms vs Slug




Right In: 53.912+/-0.014 $\chi^2$/NDF: 393260.8/15

Left Out: 60.856+/-0.012 $\chi^2$/NDF:150903.9/16

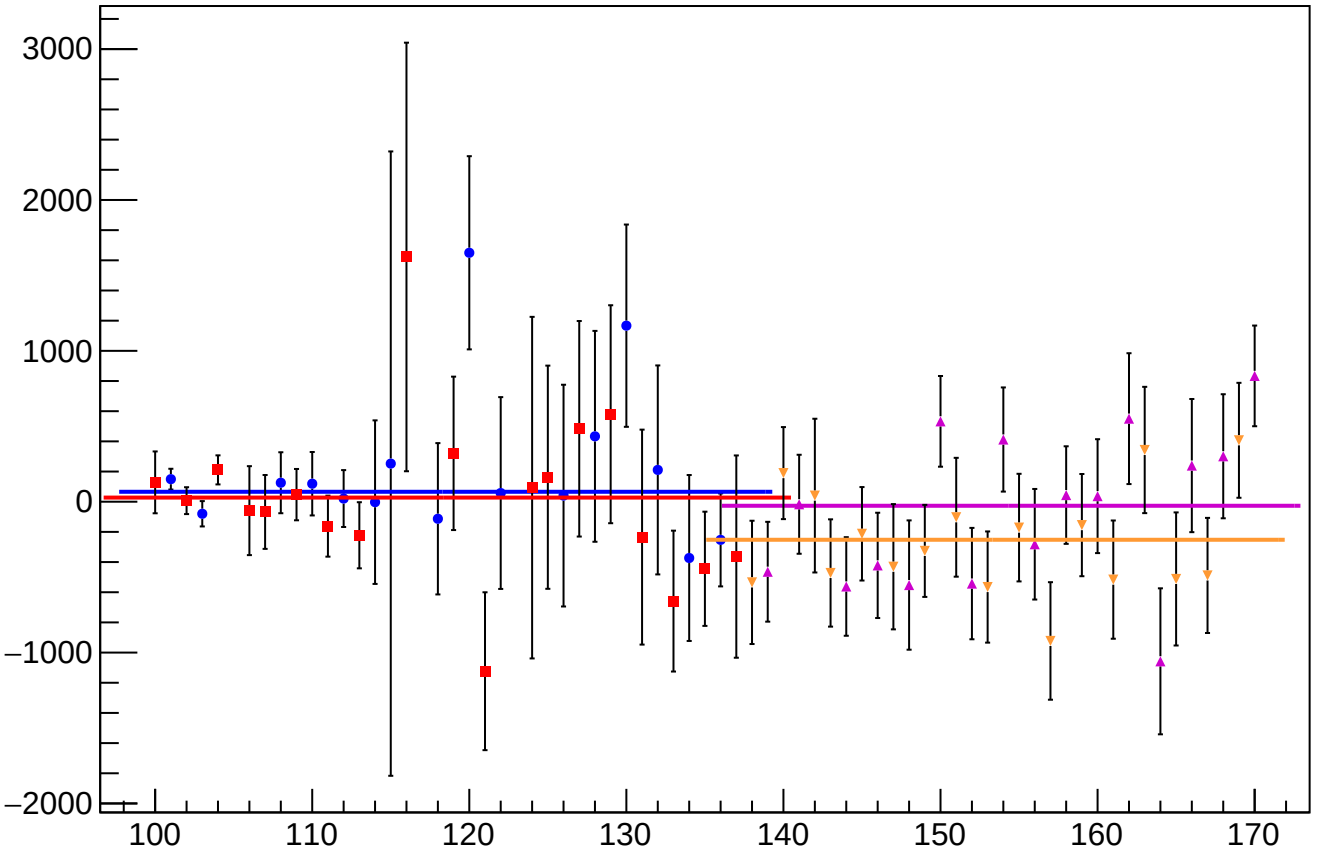
Right Out: 52.887+/-0.014 $\chi^2$/NDF: 425534.3/18

Left In: 61.679+/-0.012 $\chi^2$/NDF:150079.0/15

+ sign 58.080+/-0.009 $\chi^2$/NDF: 683077.3/32

All: 58.010+/-0.006 $\chi^2$/NDF: 1485394.0/67

- sign 57.940+/-0.009 $\chi^2$/NDF: 802199.1/34




Right In: 65.857+/-46.477 $\chi^2$/NDF: 15.7/15

Left Out: -252.225+/-89.956 $\chi^2$/NDF:13.7/16

Right Out: 27.406+/-50.249 $\chi^2$/NDF: 18.0/18

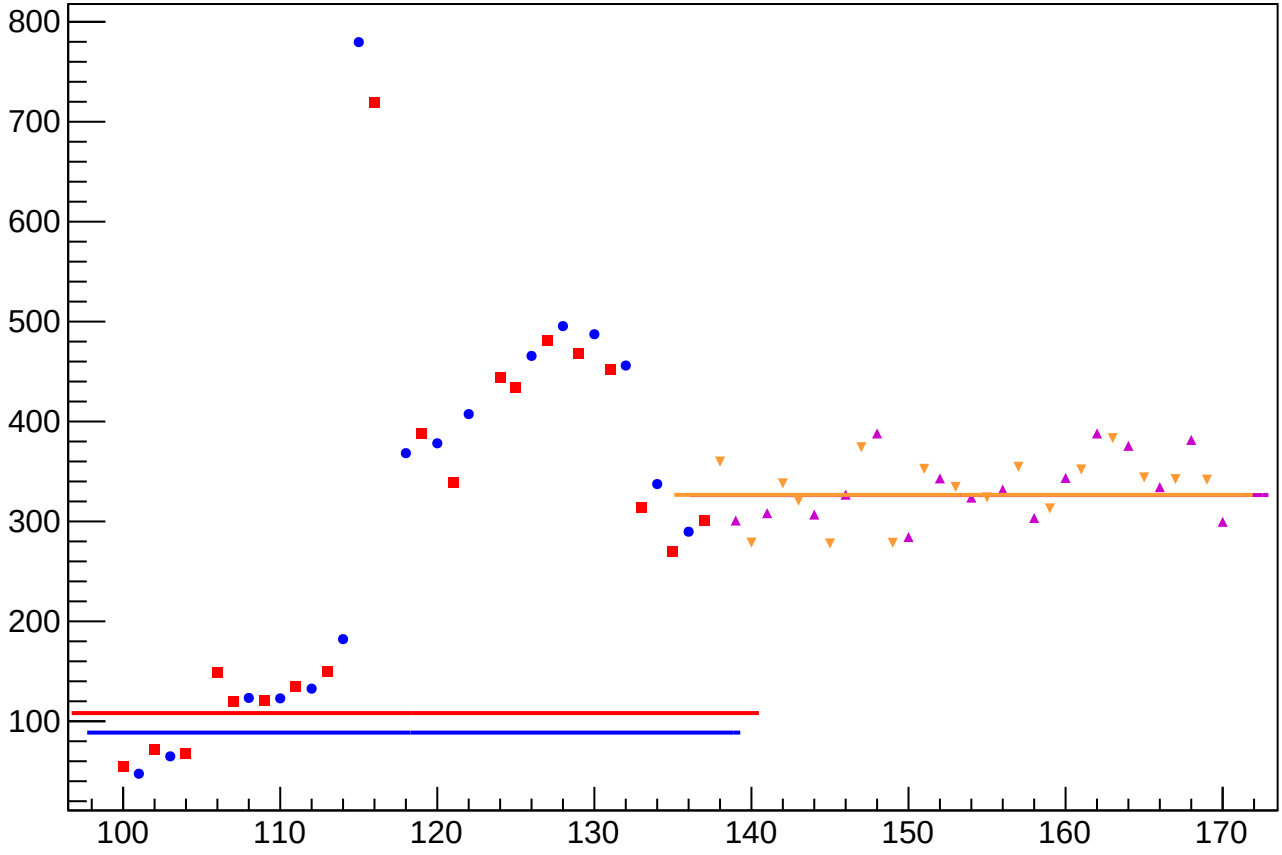
Left In: -26.844+/-90.573 $\chi^2$/NDF:28.8/15

+ sign -1.163+/-41.292 $\chi^2$/NDF: 39.3/32

All: 6.247+/-30.090 $\chi^2$/NDF: 86.4/67

- sign 14.638+/-43.939 $\chi^2$/NDF: 47.1/34

# asym_sam_15_avg_cor_correction_rms vs Slug




Right In: 88.655+/-0.033 $\chi^2$/NDF: 6648135.5/15

Left Out: 326.607+/-0.064 $\chi^2$/NDF:267245.5/16

Right Out: 108.207+/-0.036 $\chi^2$/NDF: 5354864.8/18

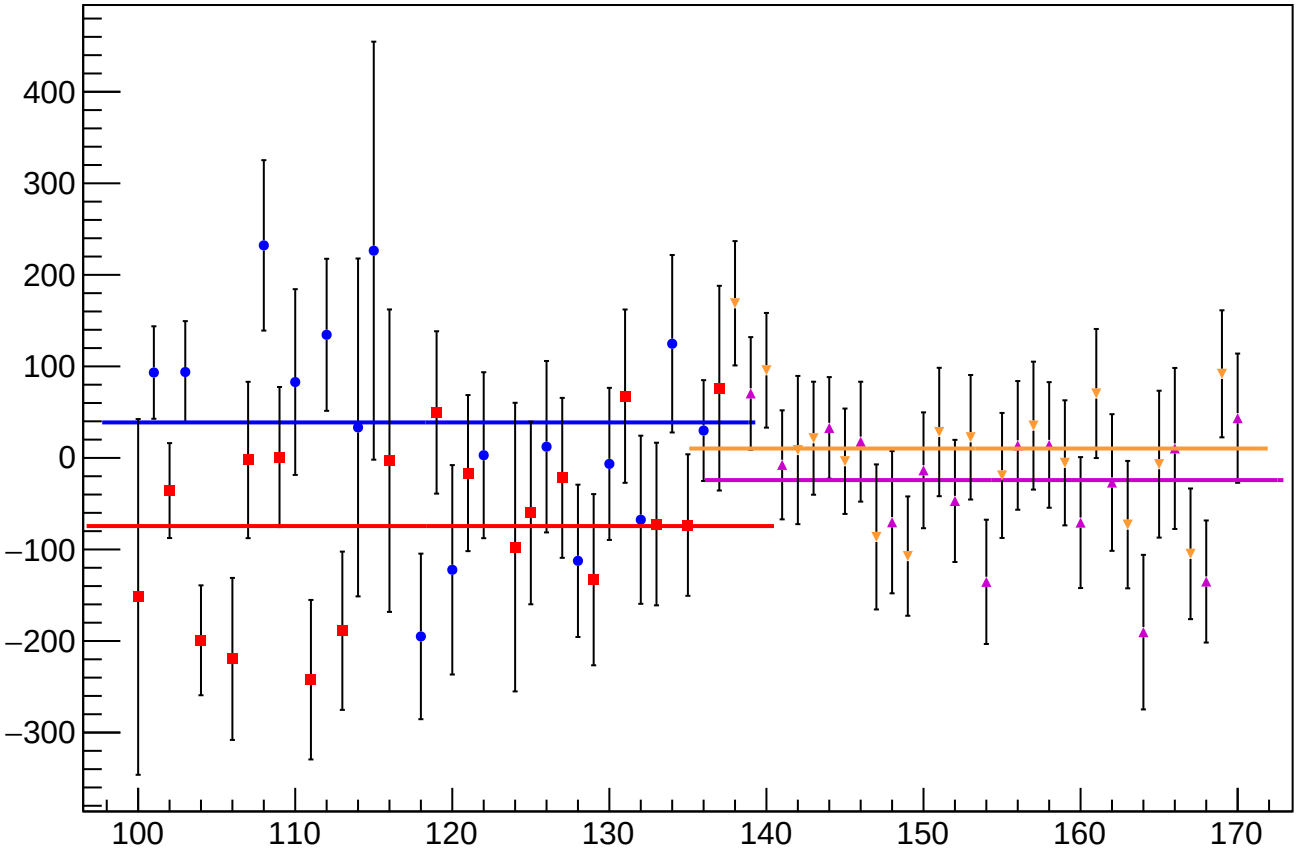
Left In: 326.392+/-0.064 $\chi^2$/NDF:235166.7/15

+ sign 138.792+/-0.029 $\chi^2$/NDF: 17960926.4/32

All: 148.530+/-0.021 $\chi^2$/NDF: 32662676.3/67

- sign 159.556+/-0.031 $\chi^2$/NDF: 14464562.8/34

# eigen_cor_asym_sam_15_avg_mean vs Slug




Right In: 38.794+/-20.413 $\chi^2$/NDF: 23.3/15

Left Out: 10.305+/-16.660 $\chi^2$/NDF:18.8/16

Right Out: -74.442+/-19.803 $\chi^2$/NDF: 22.3/18

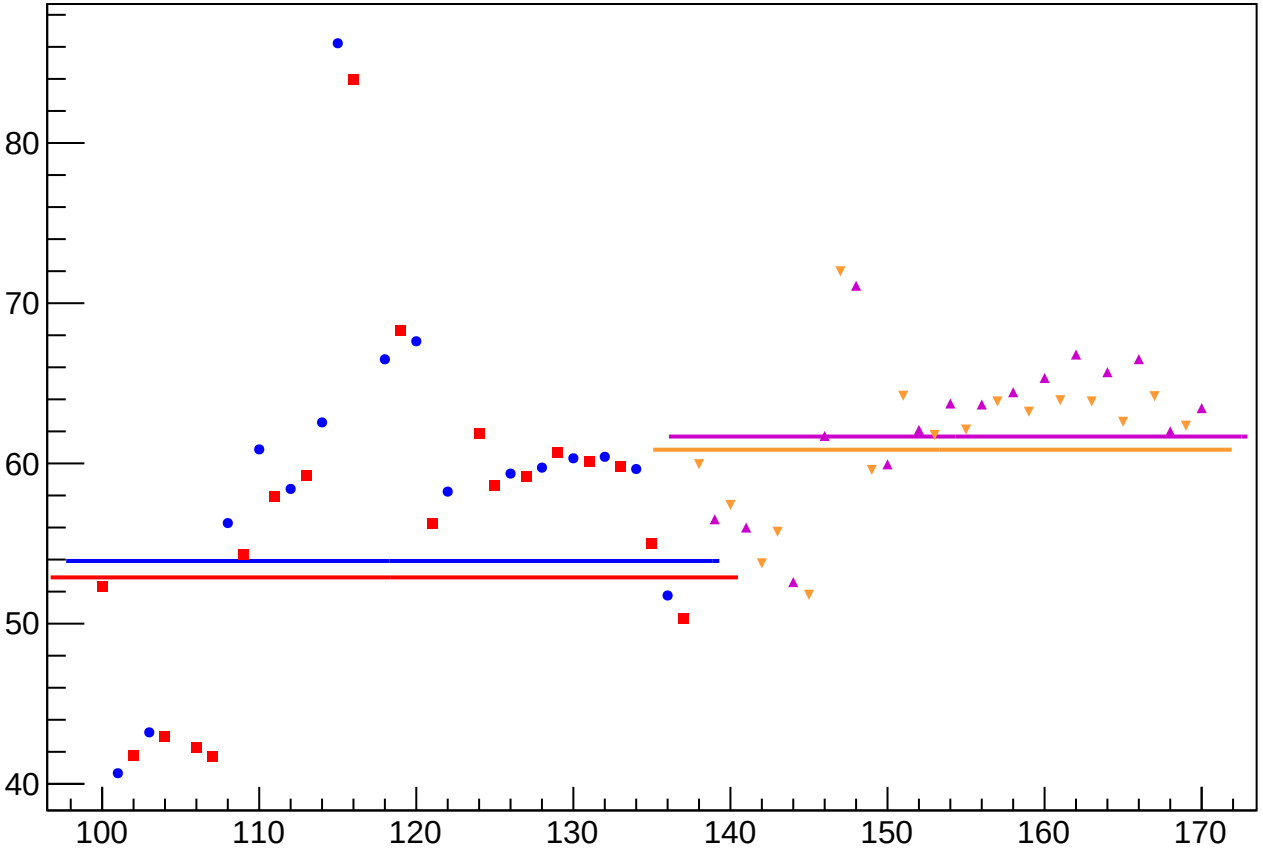
Left In: -24.205+/-17.033 $\chi^2$/NDF:15.8/15

+ sign 21.695+/-12.907 $\chi^2$/NDF: 43.3/32

All: -11.920+/-9.129 $\chi^2$/NDF: 98.7/67

- sign -45.568+/-12.914 $\chi^2$/NDF: 41.9/34

# eigen_cor_asym_sam_15_avg_rms vs Slug




Right In: 53.912+/-0.014 $\chi^2$/NDF: 393260.8/15

Left Out: 60.856+/-0.012 $\chi^2$/NDF:150903.9/16

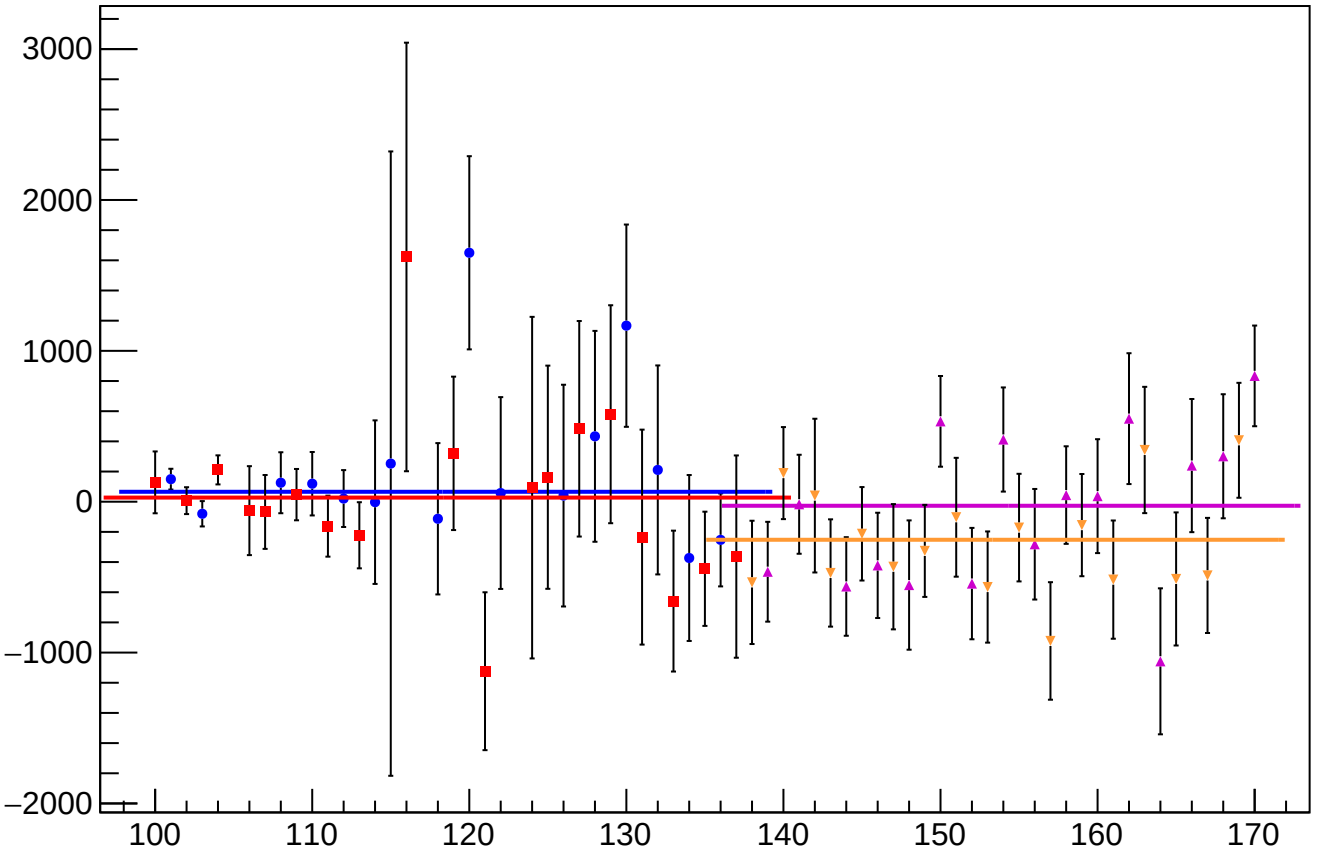
Right Out: 52.887+/-0.014 $\chi^2$/NDF: 425534.3/18

Left In: 61.679+/-0.012 $\chi^2$/NDF:150079.0/15

+ sign 58.080+/-0.009 $\chi^2$/NDF: 683077.3/32

All: 58.010+/-0.006 $\chi^2$/NDF: 1485394.0/67

- sign 57.940+/-0.009 $\chi^2$/NDF: 802199.1/34




Right In: 65.857+/-46.477 $\chi^2$/NDF: 15.7/15

Left Out: -252.225+/-89.956 $\chi^2$/NDF:13.7/16

Right Out: 27.406+/-50.249 $\chi^2$/NDF: 18.0/18

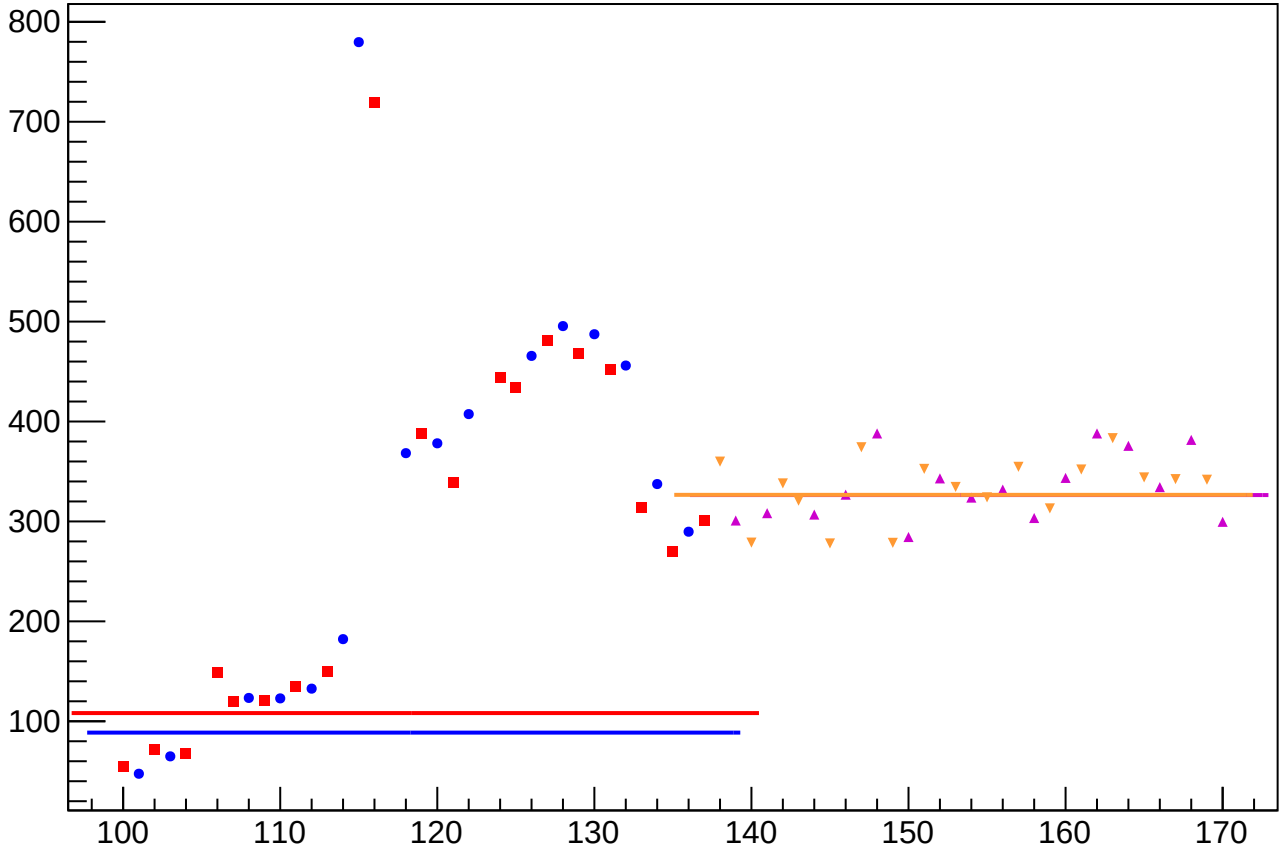
Left In: -26.844+/-90.573 $\chi^2$/NDF:28.8/15

+ sign -1.163+/-41.292 $\chi^2$/NDF: 39.3/32

All: 6.247+/-30.090 $\chi^2$/NDF: 86.4/67

- sign 14.638+/-43.939 $\chi^2$/NDF: 47.1/34

# asym_sam_15_avg_eigen_cor_correction_rms vs Slug




Right In: 88.655+/-0.033 $\chi^2$/NDF: 6648135.5/15

Left Out: 326.607+/-0.064 $\chi^2$/NDF:267245.5/16

Right Out: 108.207+/-0.036 $\chi^2$/NDF: 5354864.8/18

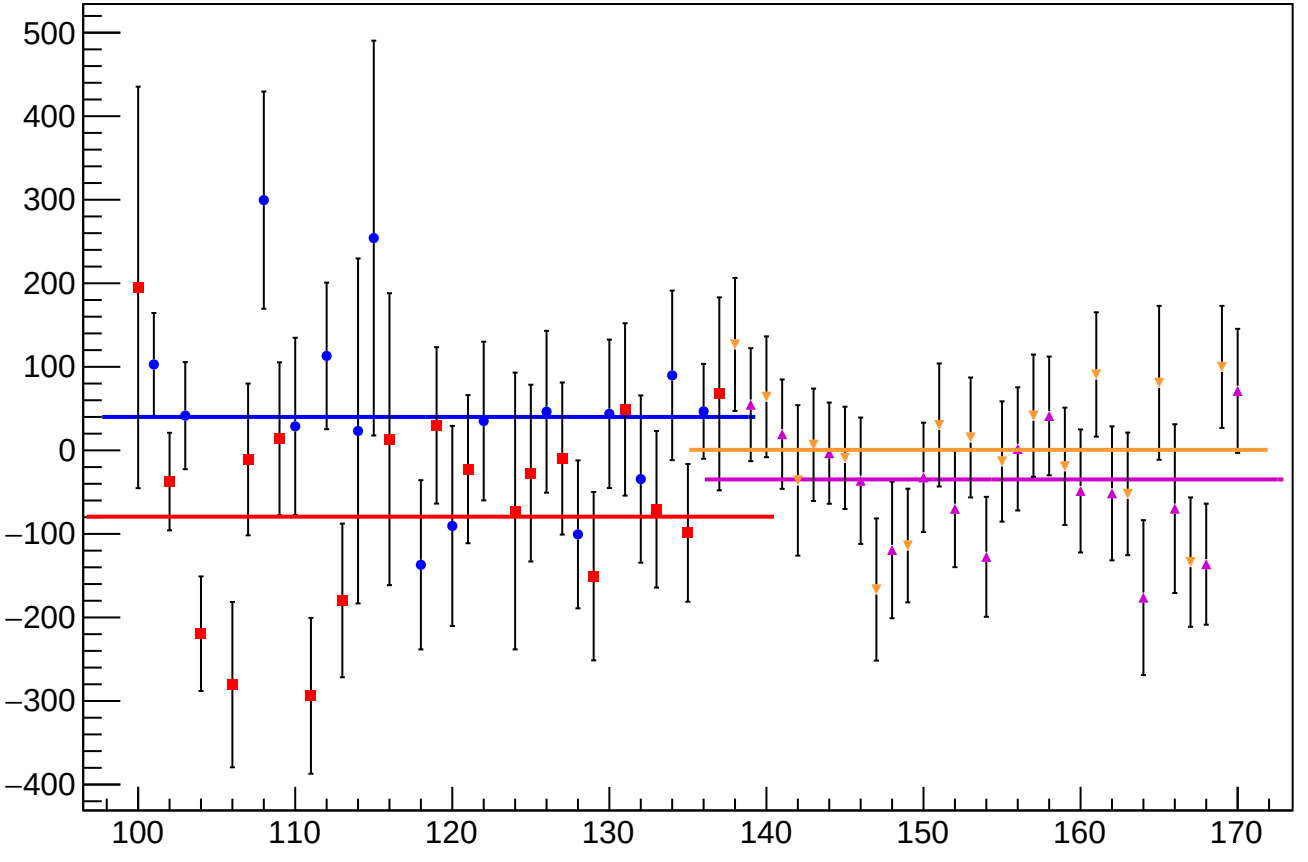
Left In: 326.392+/-0.064 $\chi^2$/NDF:235166.7/15

+ sign 138.792+/-0.029 $\chi^2$/NDF: 17960926.4/32

All: 148.530+/-0.021 $\chi^2$/NDF: 32662676.3/67

- sign 159.556+/-0.031 $\chi^2$/NDF: 14464562.8/34

# dit_asym_sam_15_avg_mean vs Slug




Right In: 40.030+/-22.515 $\chi^2$/NDF: 14.1/15

Left Out: 0.619+/-17.923 $\chi^2$/NDF:18.4/16

Right Out: -79.378+/-21.577 $\chi^2$/NDF: 24.8/18

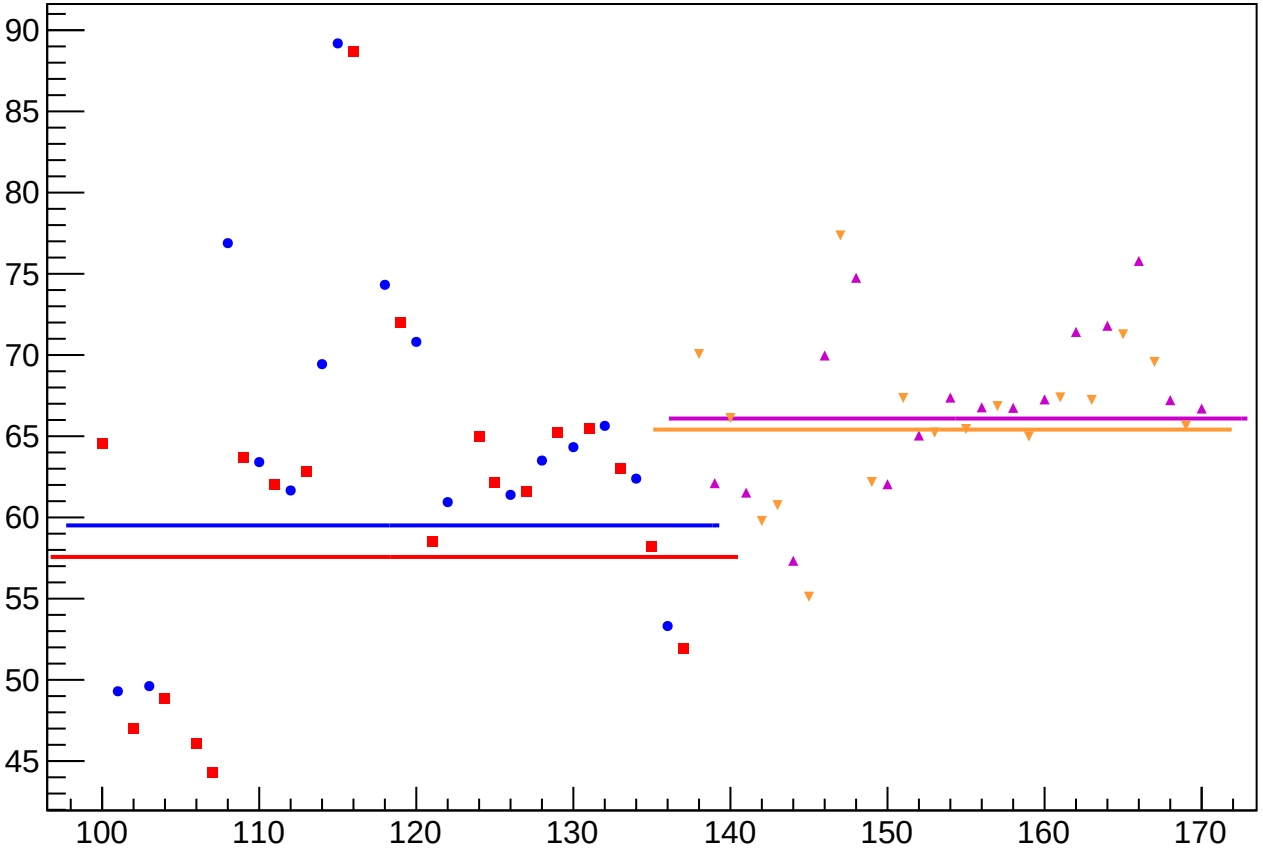
Left In: -34.802+/-18.291 $\chi^2$/NDF:13.6/15

+ sign 15.906+/-14.022 $\chi^2$/NDF: 34.4/32

All: -18.940+/-9.890 $\chi^2$/NDF: 87.6/67

- sign -53.441+/-13.952 $\chi^2$/NDF: 40.9/34

# dit_asym_sam_15_avg_rms vs Slug




Right In: 59.509+/-0.016 $\chi^2$/NDF: 283192.7/15

Left Out: 65.409+/-0.013 $\chi^2$/NDF:143651.5/16

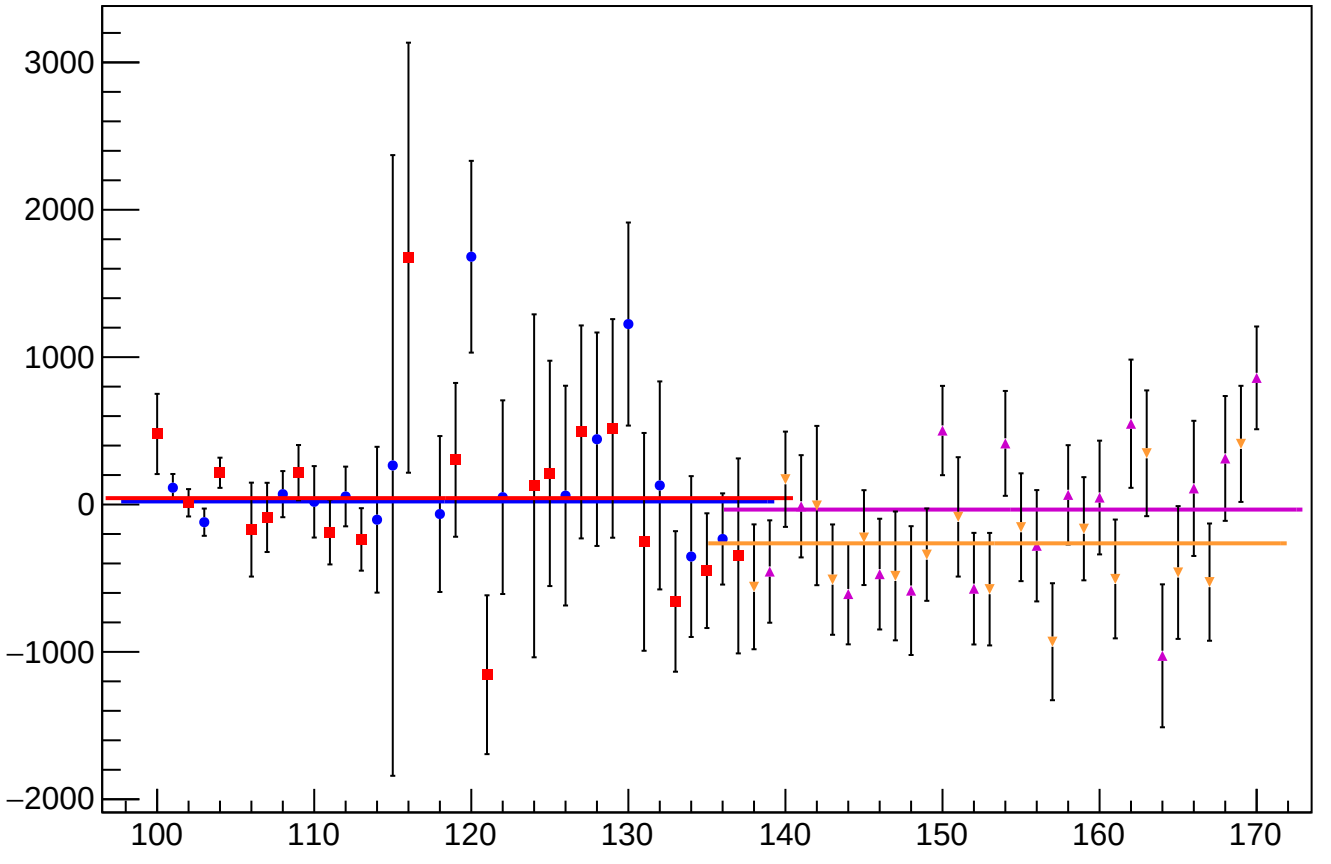
Right Out: 57.567+/-0.015 $\chi^2$/NDF: 347377.8/18

Left In: 66.089+/-0.013 $\chi^2$/NDF:131257.3/15

+ sign 63.120+/-0.010 $\chi^2$/NDF: 510910.5/32

All: 62.821+/-0.007 $\chi^2$/NDF: 1172903.1/67

- sign 62.526+/-0.010 $\chi^2$/NDF: 660186.8/34




Right In: 20.840+/-53.585 $\chi^2$/NDF: 14.6/15

Left Out: -263.406+/-93.233 $\chi^2$/NDF:13.1/16

Right Out: 43.262+/-53.210 $\chi^2$/NDF: 21.5/18

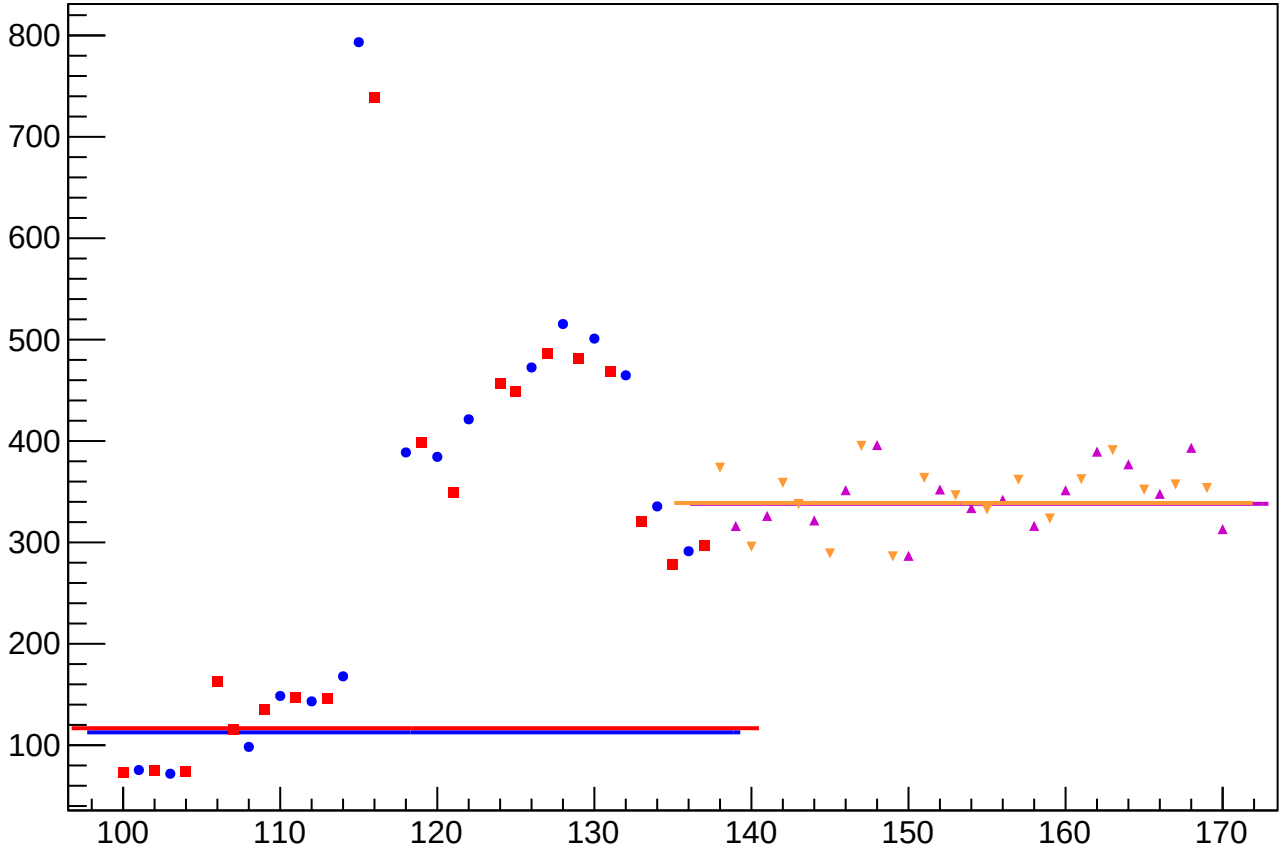
Left In: -34.354+/-93.718 $\chi^2$/NDF:27.8/15

+ sign -49.740+/-46.458 $\chi^2$/NDF: 34.7/32

All: -12.551+/-32.785 $\chi^2$/NDF: 85.9/67

- sign 24.341+/-46.272 $\chi^2$/NDF: 49.9/34

# asym_sam_15_avg_dit_correction_rms vs Slug




Right In: 112.668+/-0.038 $\chi^2$/NDF: 5599655.1/15

Left Out: 338.900+/-0.066 $\chi^2$/NDF:253709.2/16

Right Out: 116.733+/-0.038 $\chi^2$/NDF: 5141387.7/18

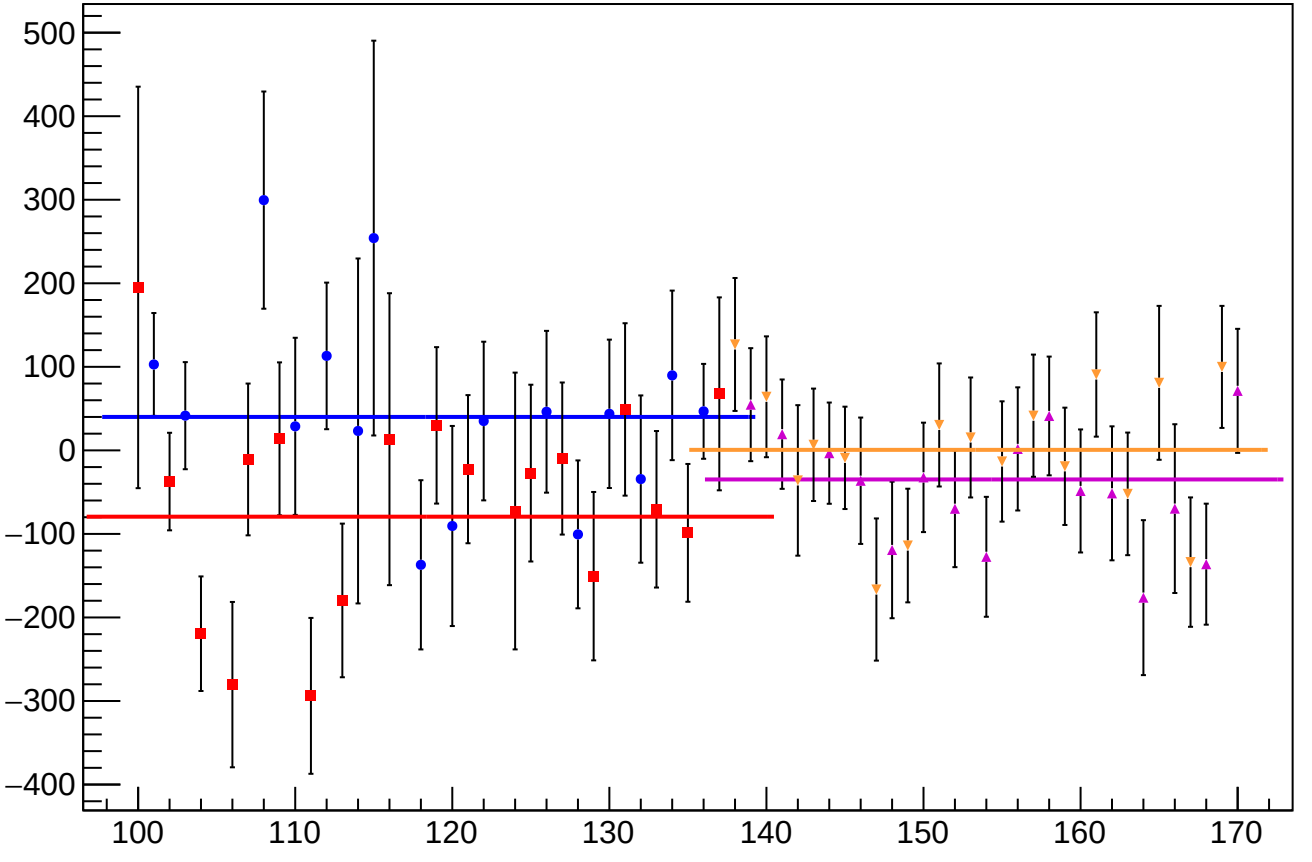
Left In: 338.068+/-0.066 $\chi^2$/NDF:210115.5/15

\+ sign 168.843+/-0.033 $\chi^2$/NDF: 14705295.3/32

All: 169.770+/-0.023 $\chi^2$/NDF: 28494378.3/67

\- sign 170.689+/-0.033 $\chi^2$/NDF: 13787497.5/34

# eigen_dit_asym_sam_15_avg_mean vs Slug




Right In: 40.030+/-22.515 $\chi^2$/NDF: 14.1/15

Left Out: 0.620+/-17.923 $\chi^2$/NDF:18.4/16

Right Out: -79.378+/-21.577 $\chi^2$/NDF: 24.8/18

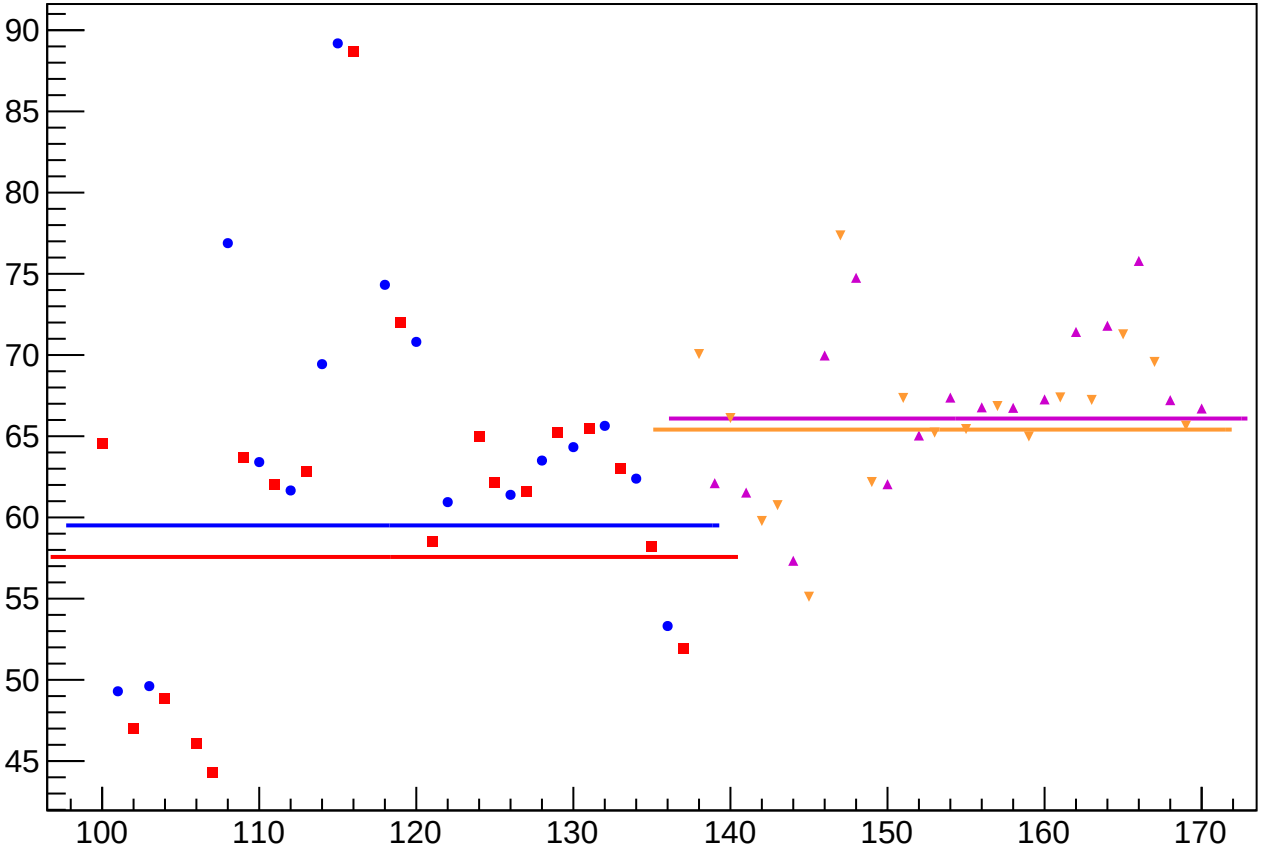
Left In: -34.803+/-18.291 $\chi^2$/NDF:13.6/15

+ sign 15.906+/-14.022 $\chi^2$/NDF: 34.4/32

All: -18.940+/-9.890 $\chi^2$/NDF: 87.6/67

- sign -53.441+/-13.952 $\chi^2$/NDF: 40.9/34

# eigen_dit_asym_sam_15_avg_rms vs Slug




Right In: 59.509+/-0.016 $\chi^2$/NDF: 283190.4/15

Left Out: 65.409+/-0.013 $\chi^2$/NDF:143654.0/16

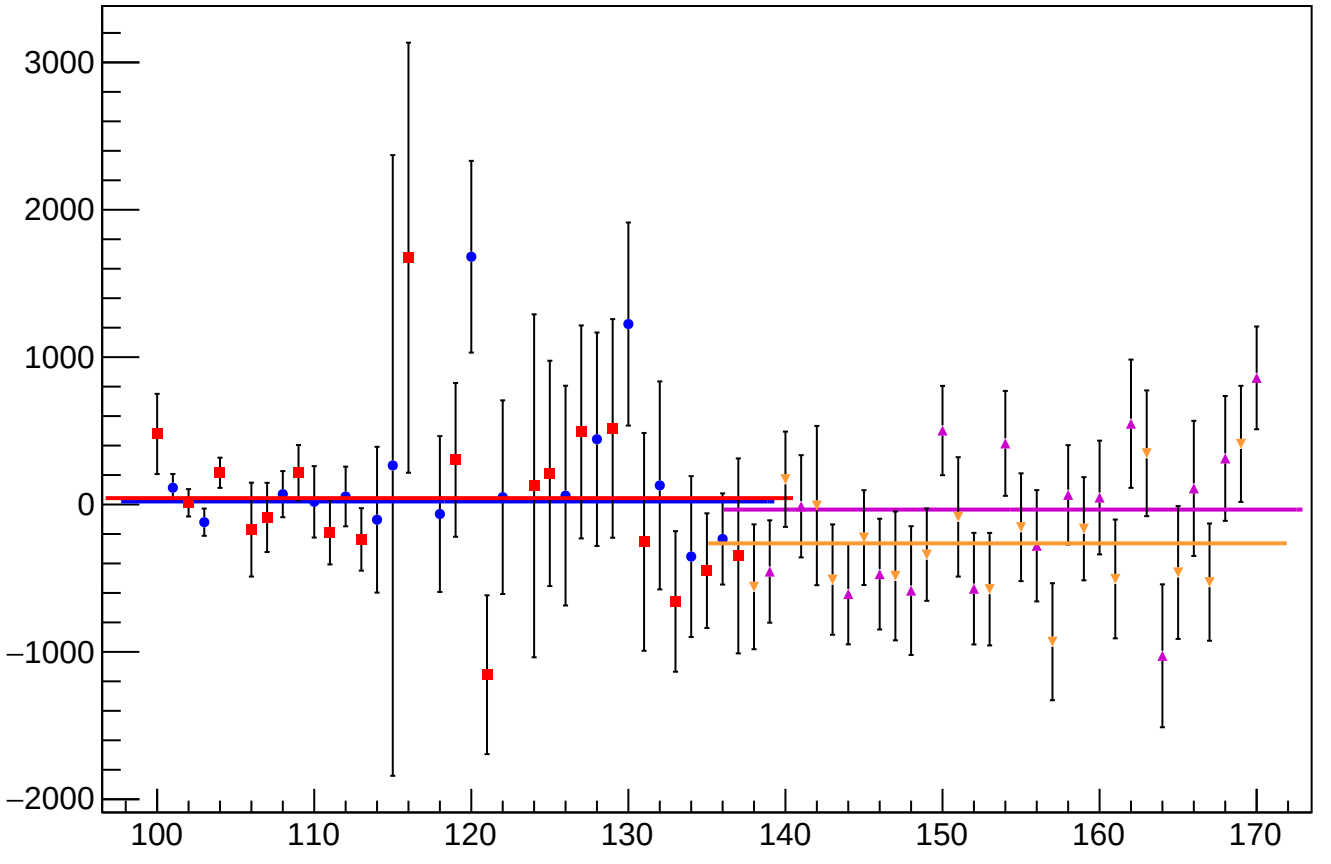
Right Out: 57.567+/-0.015 $\chi^2$/NDF: 347374.2/18

Left In: 66.089+/-0.013 $\chi^2$/NDF:131253.4/15

+ sign 63.120+/-0.010 $\chi^2$/NDF: 510916.5/32

All: 62.821+/-0.007 $\chi^2$/NDF: 1172910.7/67

- sign 62.526+/-0.010 $\chi^2$/NDF: 660188.4/34




Right In: 20.840+/-53.585 $\chi^2$/NDF: 14.6/15

Left Out: -263.406+/-93.233 $\chi^2$/NDF:13.1/16

Right Out: 43.262+/-53.210 $\chi^2$/NDF: 21.5/18

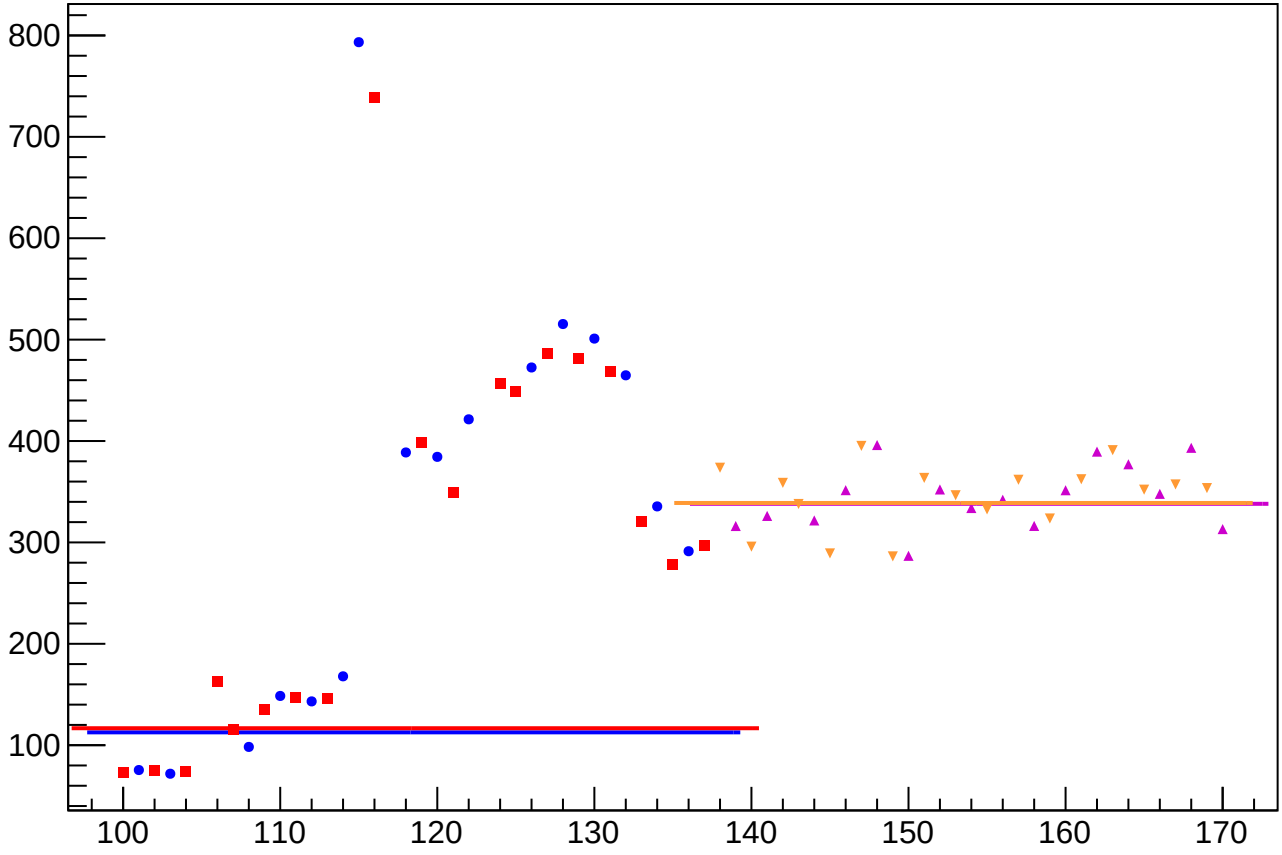
Left In: -34.354+/-93.718 $\chi^2$/NDF:27.8/15

+ sign -49.740+/-46.458 $\chi^2$/NDF: 34.7/32

All: -12.551+/-32.785 $\chi^2$/NDF: 85.9/67

- sign 24.341+/-46.272 $\chi^2$/NDF: 49.9/34

# asym_sam_15_avg_eigen_dit_correction_rms vs Slug




Right In: 112.668+/-0.038 $\chi^2$/NDF: 5599653.6/15

Left Out: 338.901+/-0.066 $\chi^2$/NDF:253707.6/16

Right Out: 116.732+/-0.038 $\chi^2$/NDF: 5141390.3/18

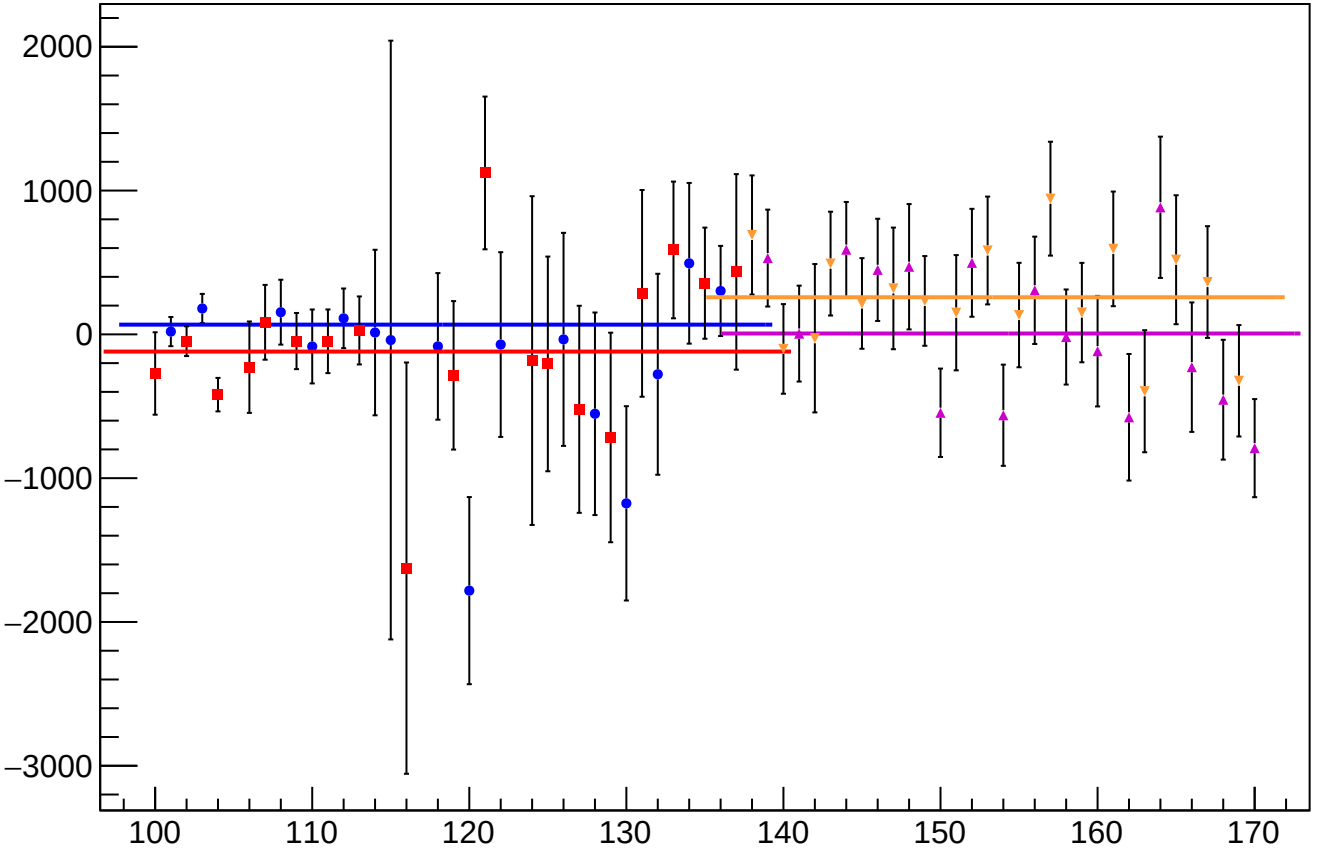
Left In: 338.069+/-0.066 $\chi^2$/NDF:210110.2/15

+ sign 168.843+/-0.033 $\chi^2$/NDF: 14705347.3/32

All: 169.770+/-0.023 $\chi^2$/NDF: 28494490.0/67

- sign 170.689+/-0.033 $\chi^2$/NDF: 13787557.4/34

# asym_sam_15_avg_mean vs Slug




Right In: 67.621+/-59.169 $\chi^2$/NDF: 15.8/15

Left Out: 258.096+/-91.560 $\chi^2$/NDF:13.0/16

Right Out: -119.635+/-57.941 $\chi^2$/NDF: 21.1/18

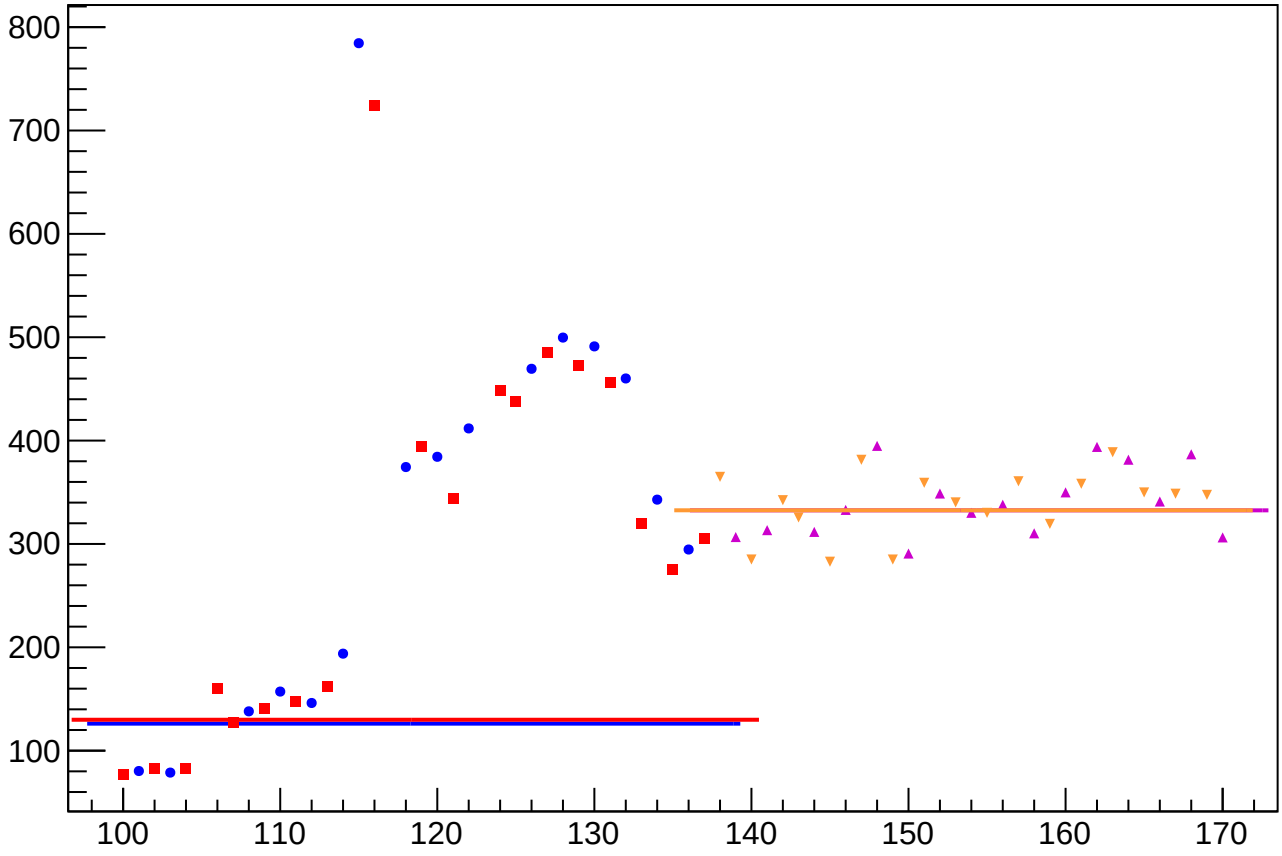
Left In: 6.008+/-92.238 $\chi^2$/NDF:28.4/15

+ sign 123.733+/-49.695 $\chi^2$/NDF: 31.8/32

All: 18.496+/-34.915 $\chi^2$/NDF: 91.5/67

- sign -84.085+/-49.064 $\chi^2$/NDF: 50.9/34

# asym_sam_15_avg_rms vs Slug




Right In: 126.154+/-0.042 $\chi^2$/NDF: 5220128.2/15

Left Out: 332.565+/-0.065 $\chi^2$/NDF:258815.0/16

Right Out: 129.914+/-0.041 $\chi^2$/NDF: 4647677.8/18

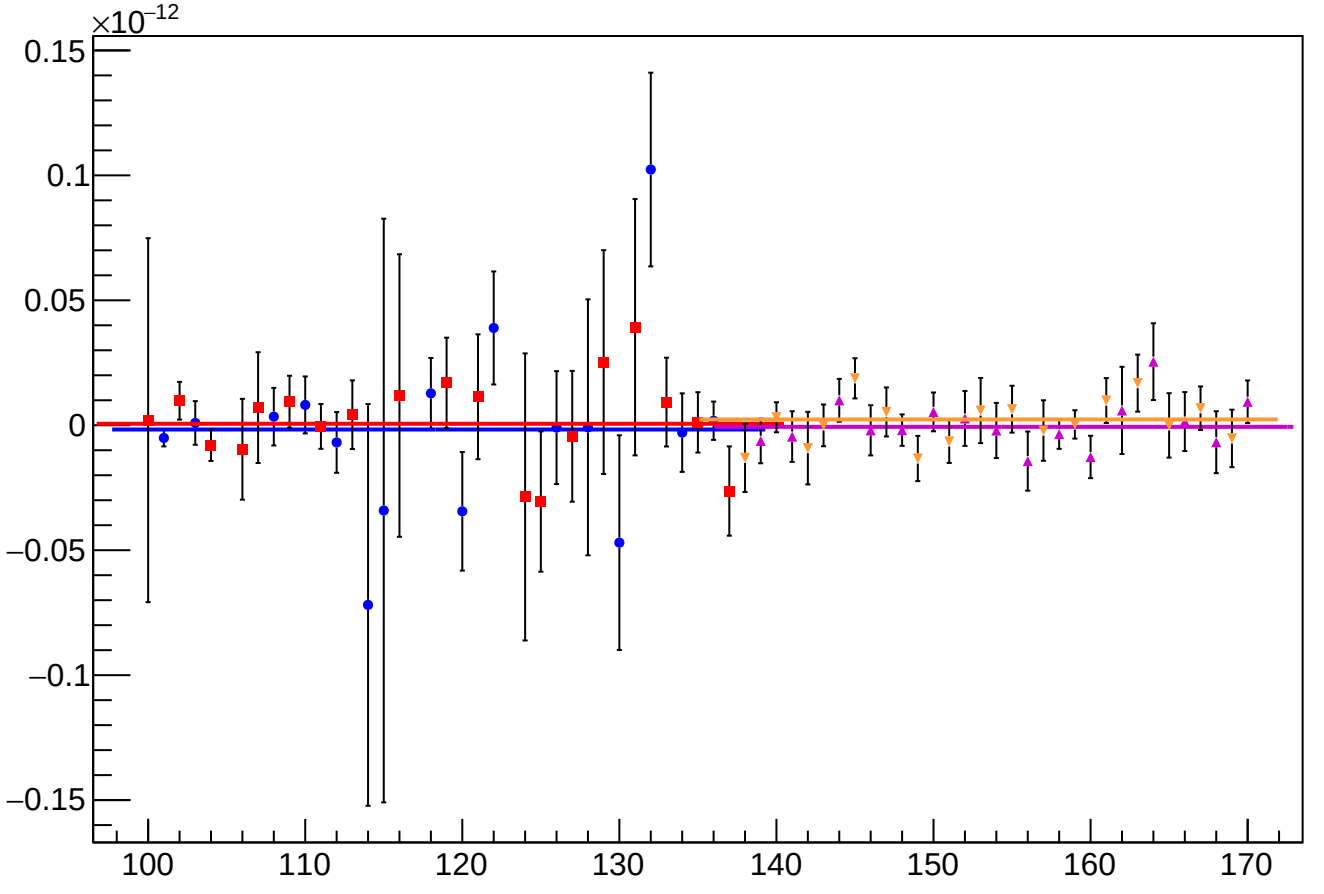
Left In: 332.516+/-0.065 $\chi^2$/NDF:226797.1/15

+ sign 186.960+/-0.035 $\chi^2$/NDF: 12649051.5/32

All: 187.102+/-0.025 $\chi^2$/NDF: 24442612.1/67

- sign 187.240+/-0.035 $\chi^2$/NDF: 11793528.5/34

# asym_sam_15_avg_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 17.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13.9/16

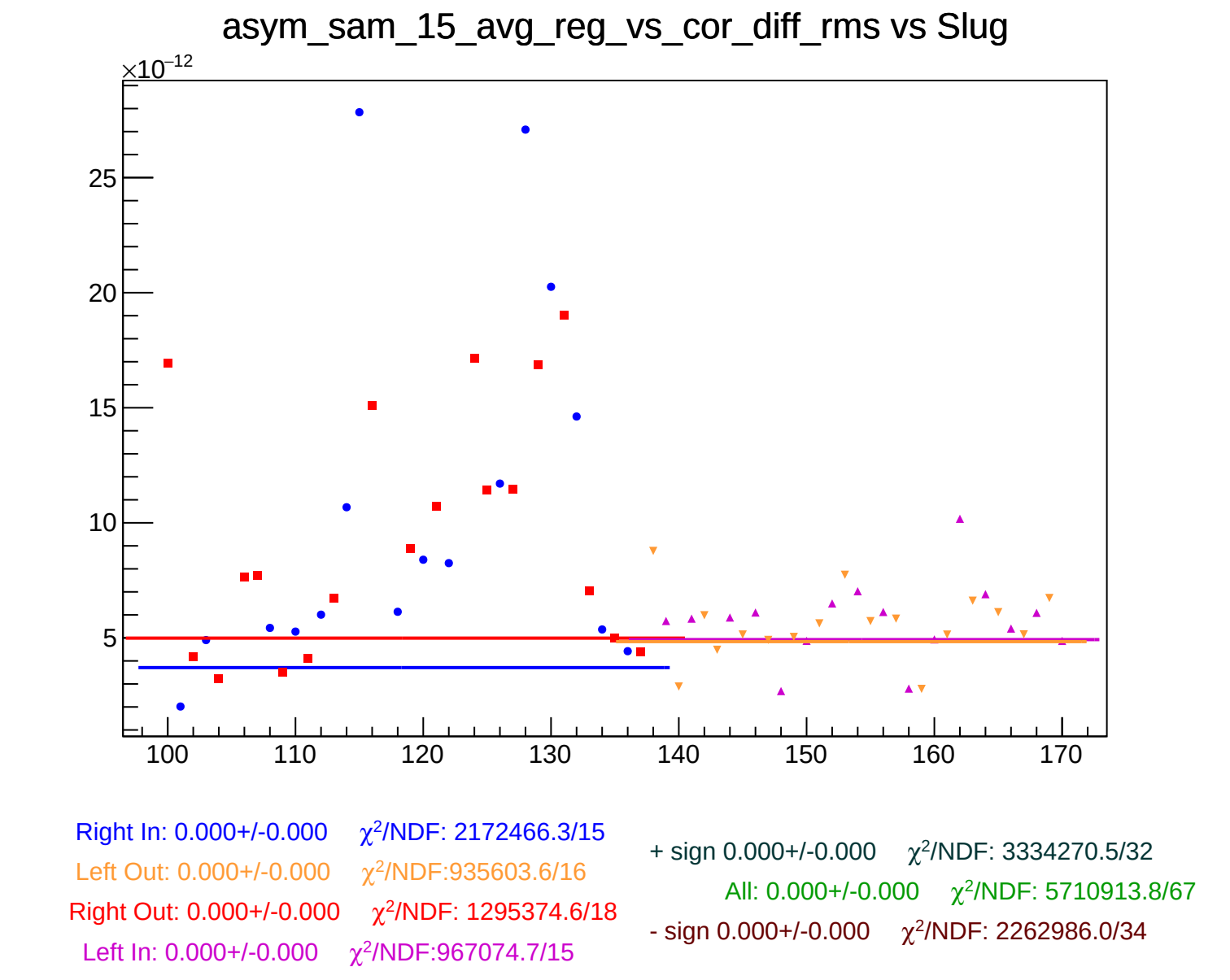
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 10.5/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:11.1/15

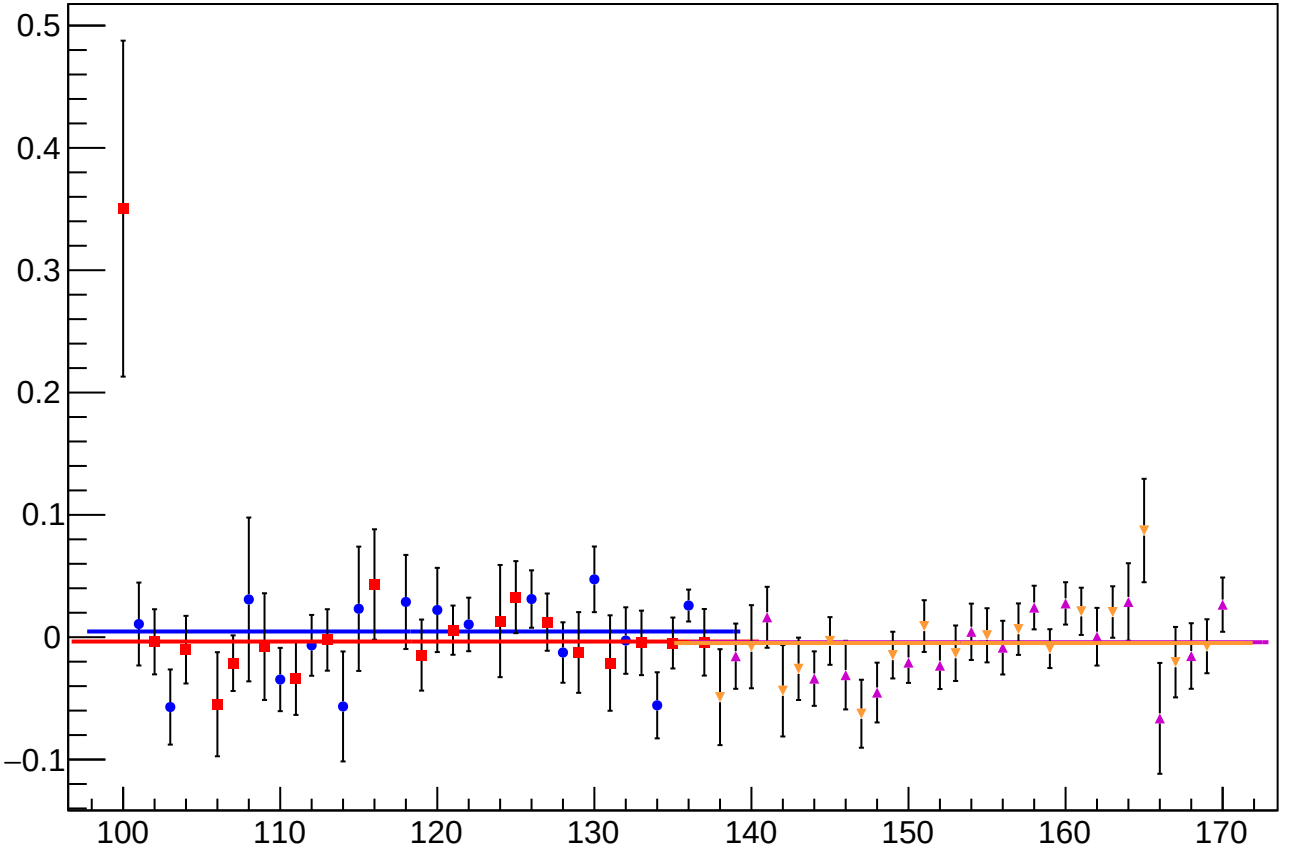
+ sign 0.000+/-0.000 $\chi^2$/NDF: 33.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 54.9/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 21.8/34


asym_sam_15_avg_reg_vs_cor_diff_rms vs Slug
×10^−12
25
20
15
10
5
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2172466.3/15
Left Out: 0.000+/-0.000 χ²/NDF:935603.6/16
Right Out: 0.000+/-0.000 χ²/NDF: 1295374.6/18
Left In: 0.000+/-0.000 χ²/NDF:967074.7/15
+ sign 0.000+/-0.000 χ²/NDF: 3334270.5/32
All: 0.000+/-0.000 χ²/NDF: 5710913.8/67
- sign 0.000+/-0.000 χ²/NDF: 2262986.0/34

# asym_sam_15_avg_dit_vs_cor_diff_mean vs Slug




Right In: 0.005+/-0.007 $\chi^2$/NDF: 21.5/15

Left Out: -0.005+/-0.006 $\chi^2$/NDF:17.0/16

Right Out: -0.004+/-0.007 $\chi^2$/NDF: 13.6/18

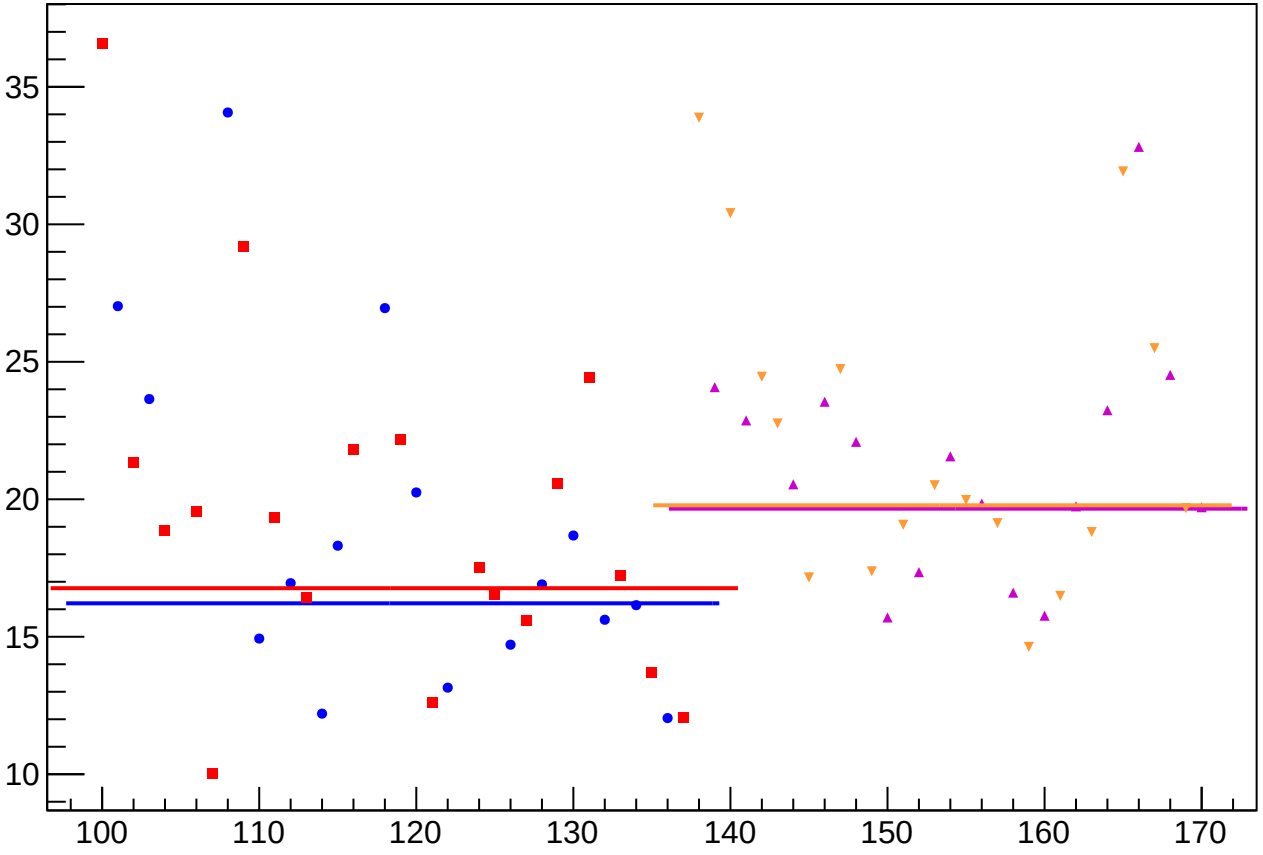
Left In: -0.004+/-0.006 $\chi^2$/NDF:19.5/15

+ sign -0.001+/-0.004 $\chi^2$/NDF: 39.6/32

All: -0.002+/-0.003 $\chi^2$/NDF: 73.0/67

- sign -0.004+/-0.004 $\chi^2$/NDF: 33.2/34

# asym_sam_15_avg_dit_vs_cor_diff_rms vs Slug




Right In: 16.217+/-0.005 $\chi^2$/NDF: 943864.9/15

Left Out: 19.781+/-0.004 $\chi^2$/NDF:1166841.9/16

Right Out: 16.766+/-0.005 $\chi^2$/NDF: 866715.7/18

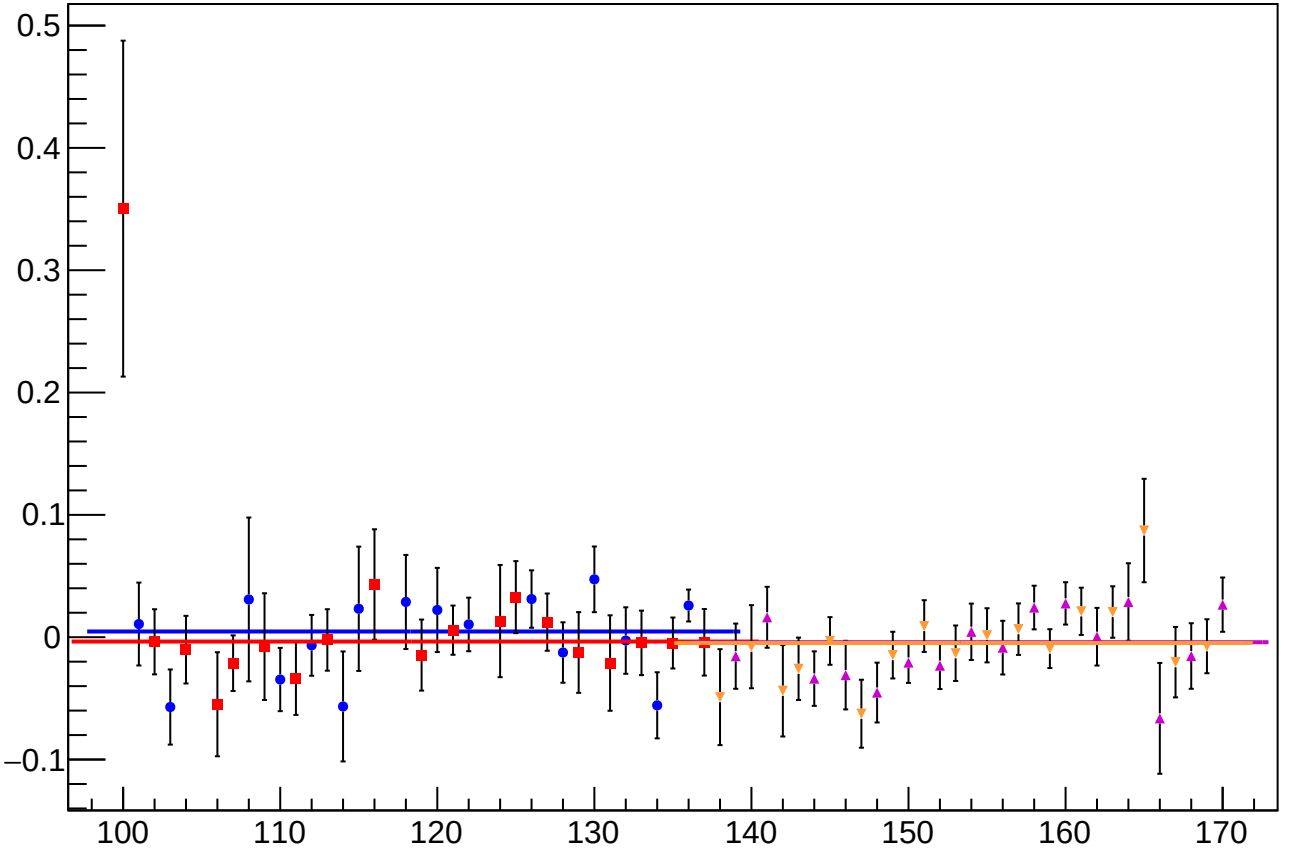
Left In: 19.658+/-0.004 $\chi^2$/NDF:725479.6/15

+ sign 18.273+/-0.003 $\chi^2$/NDF: 2450881.5/32

All: 18.358+/-0.002 $\chi^2$/NDF: 4265671.0/67

- sign 18.444+/-0.003 $\chi^2$/NDF: 1813199.0/34

# asym_sam_15_avg_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.005+/-0.007 $\chi^2$/NDF: 21.5/15

Left Out: -0.005+/-0.006 $\chi^2$/NDF:17.0/16

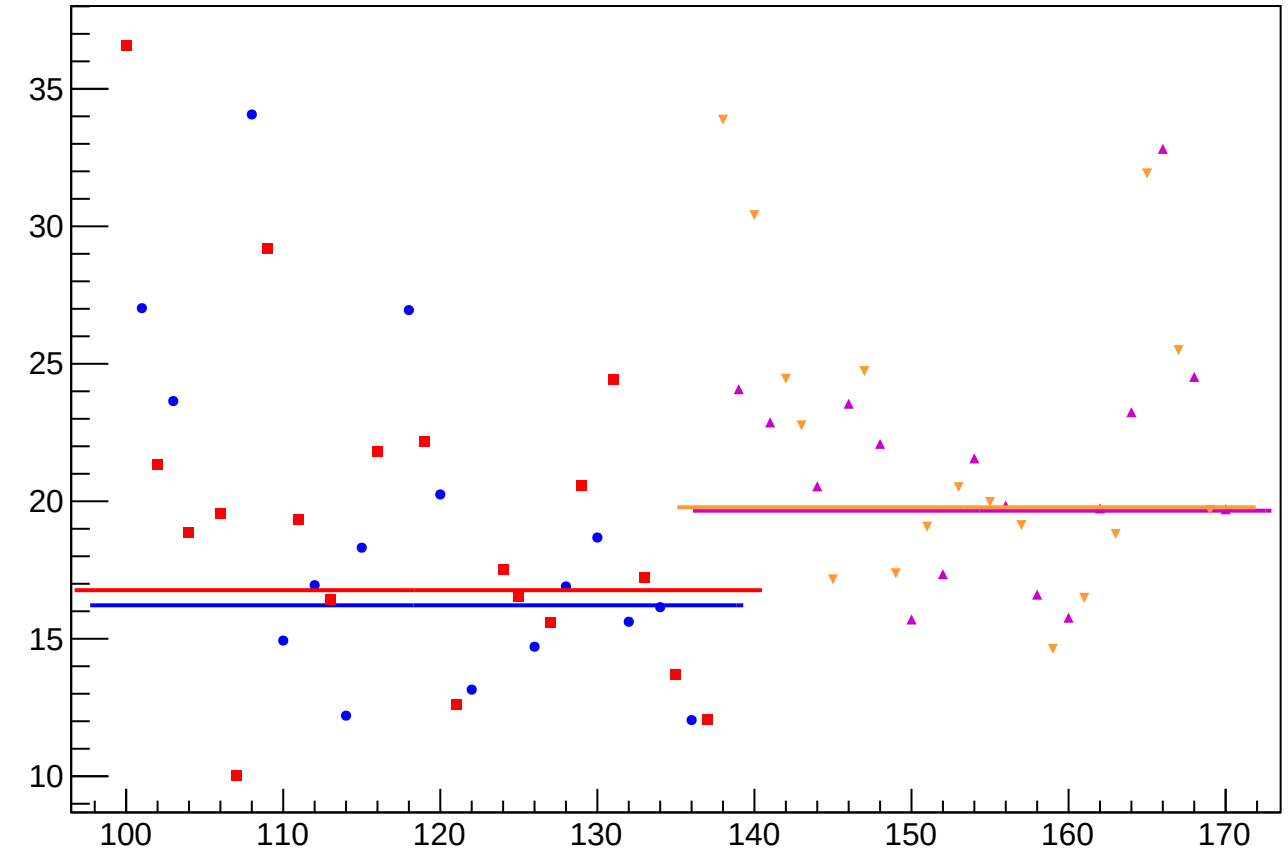
Right Out: -0.004+/-0.007 $\chi^2$/NDF: 13.6/18

Left In: -0.004+/-0.006 $\chi^2$/NDF:19.5/15

+ sign -0.001+/-0.004 $\chi^2$/NDF: 39.6/32

All: -0.002+/-0.003 $\chi^2$/NDF: 73.0/67

- sign -0.004+/-0.004 $\chi^2$/NDF: 33.2/34




Right In: 16.217+/-0.005 $\chi^2$/NDF: 943864.9/15

Left Out: 19.781+/-0.004 $\chi^2$/NDF:1166841.9/16

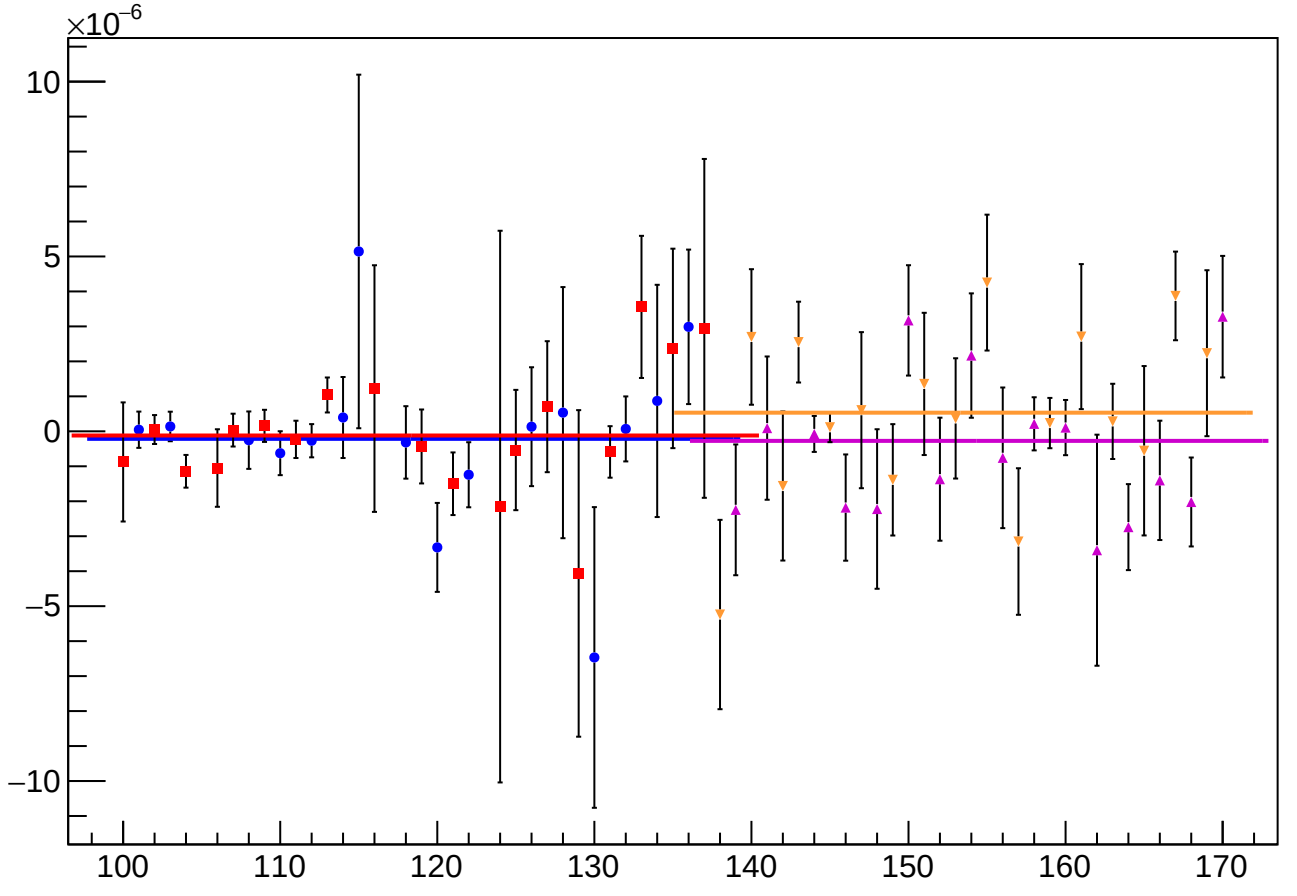
Right Out: 16.766+/-0.005 $\chi^2$/NDF: 866715.7/18

Left In: 19.658+/-0.004 $\chi^2$/NDF:725479.6/15

+ sign 18.273+/-0.003 $\chi^2$/NDF: 2450881.5/32

All: 18.358+/-0.002 $\chi^2$/NDF: 4265671.0/67

- sign 18.444+/-0.003 $\chi^2$/NDF: 1813199.0/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:28.1/16

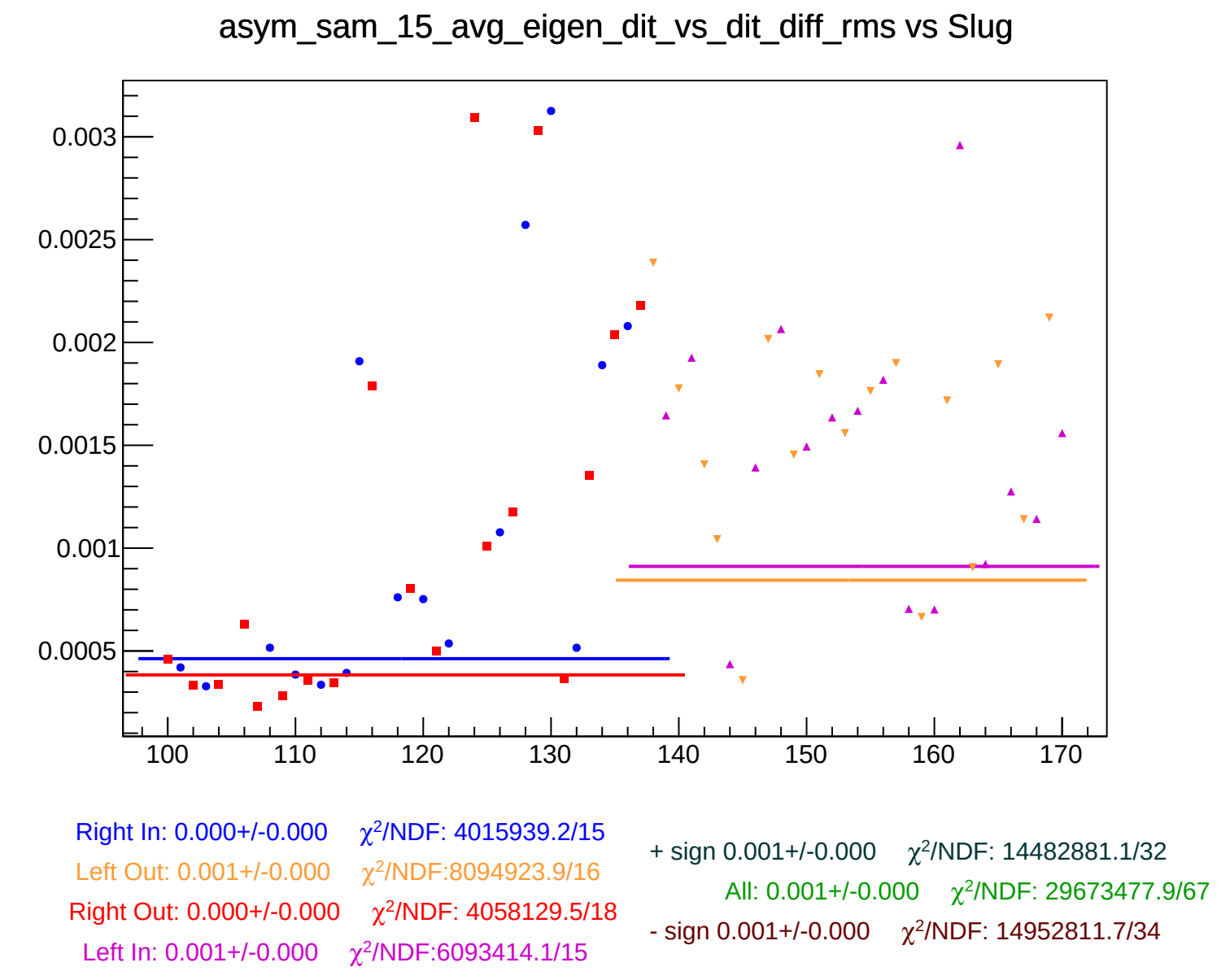
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 20.2/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:22.8/15

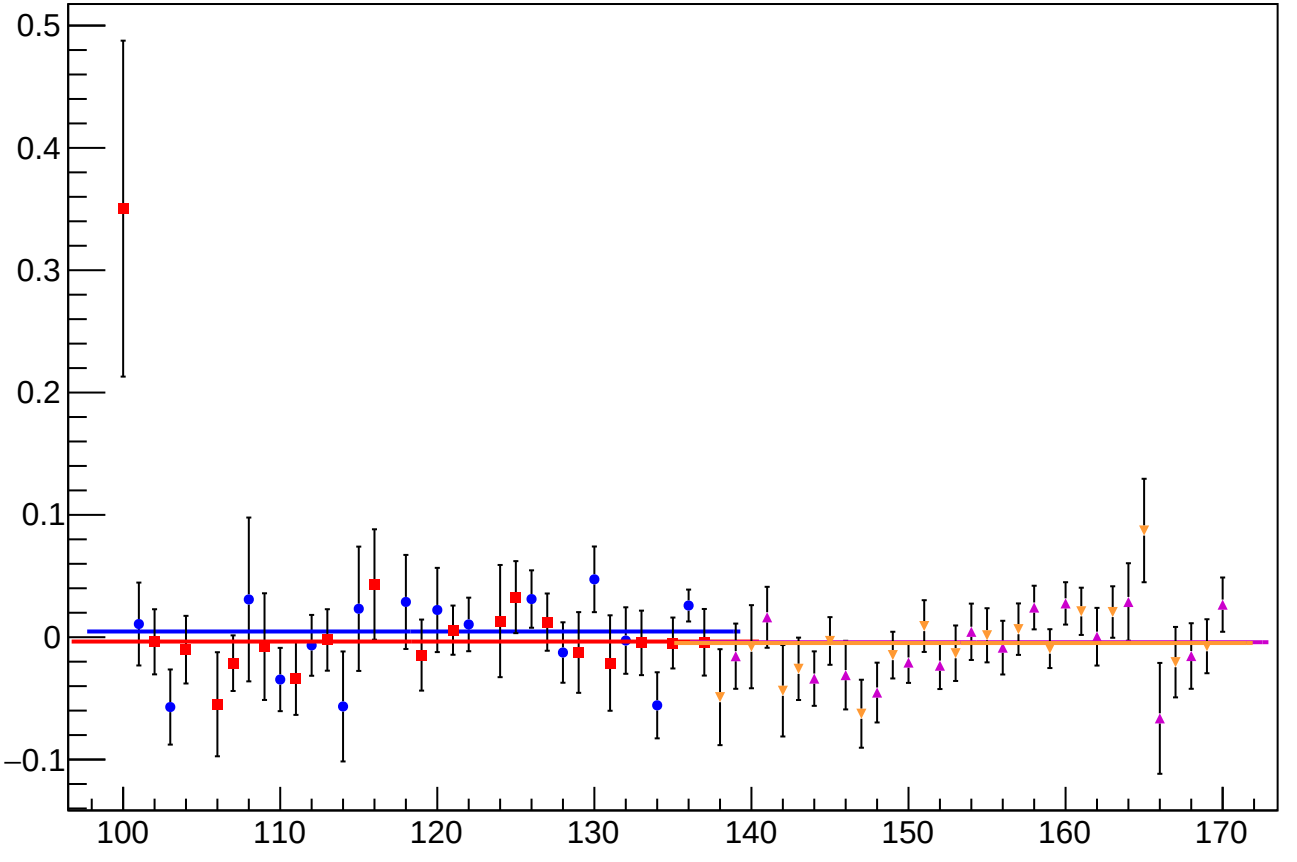
+ sign 0.000+/-0.000 $\chi^2$/NDF: 47.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 91.2/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 43.2/34


asym_sam_15_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.003
0.0025
0.002
0.0015
0.001
0.0005
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 4015939.2/15
Left Out: 0.001+/-0.000 χ²/NDF:8094923.9/16
Right Out: 0.000+/-0.000 χ²/NDF: 4058129.5/18
Left In: 0.001+/-0.000 χ²/NDF:6093414.1/15
+ sign 0.001+/-0.000 χ²/NDF: 14482881.1/32
All: 0.001+/-0.000 χ²/NDF: 29673477.9/67
- sign 0.001+/-0.000 χ²/NDF: 14952811.7/34

# asym_sam_15_avg_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.005+/-0.007 $\chi^2$/NDF: 21.5/15

Left Out: -0.005+/-0.006 $\chi^2$/NDF:17.0/16

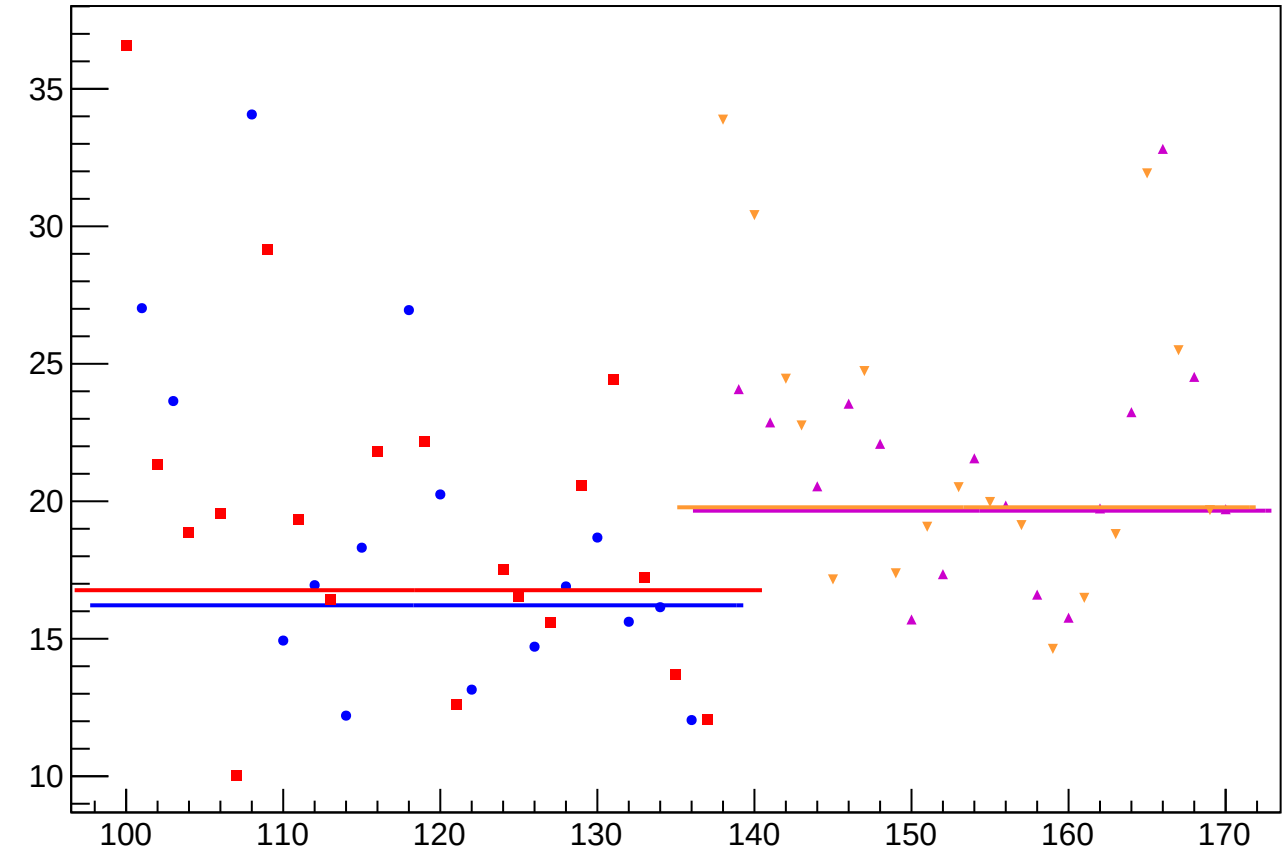
Right Out: -0.004+/-0.007 $\chi^2$/NDF: 13.6/18

Left In: -0.004+/-0.006 $\chi^2$/NDF:19.5/15

+ sign -0.001+/-0.004 $\chi^2$/NDF: 39.6/32

All: -0.002+/-0.003 $\chi^2$/NDF: 73.0/67

- sign -0.004+/-0.004 $\chi^2$/NDF: 33.2/34




Right In: 16.216+/-0.005 $\chi^2$/NDF: 943830.6/15

Left Out: 19.781+/-0.004 $\chi^2$/NDF:1166953.0/16

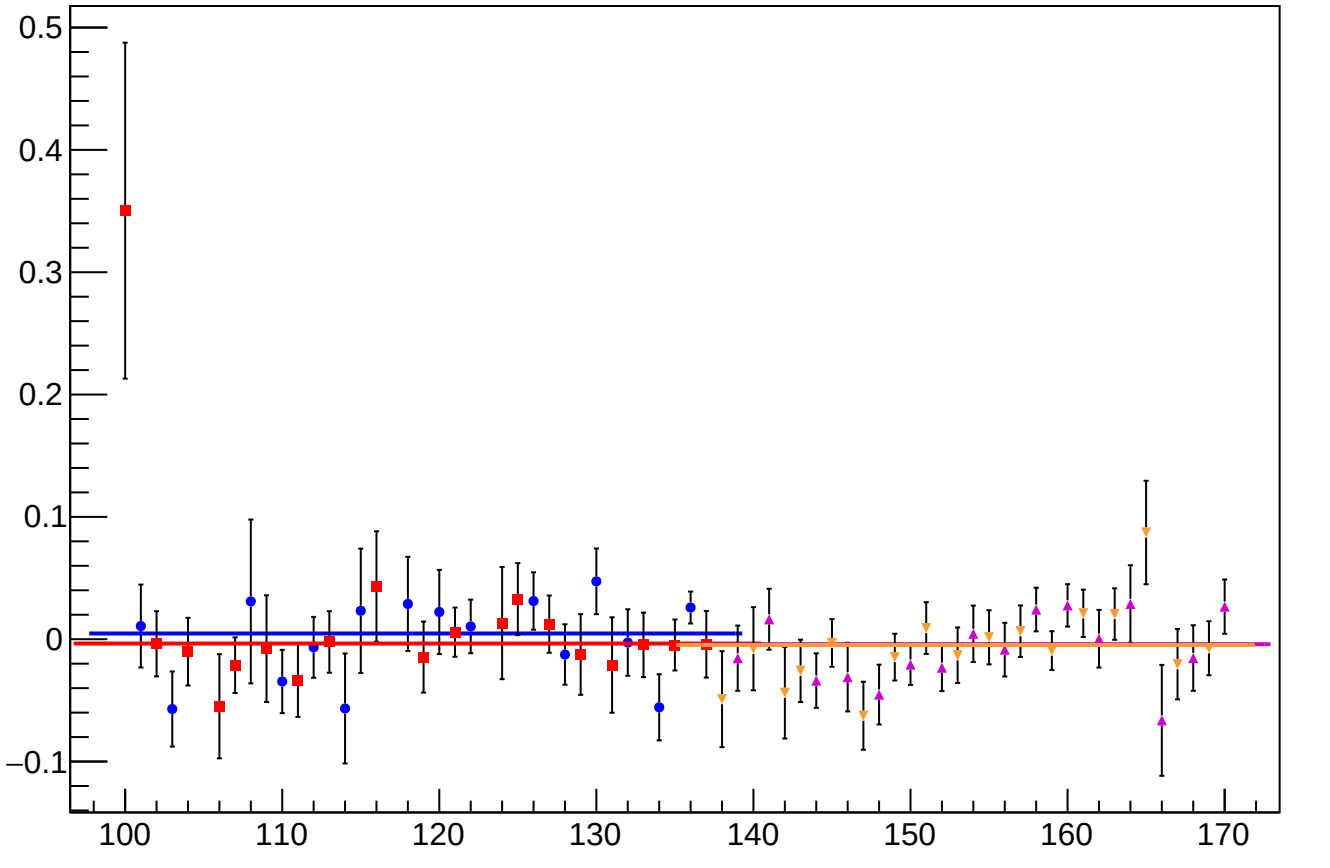
Right Out: 16.766+/-0.005 $\chi^2$/NDF: 866705.3/18

Left In: 19.658+/-0.004 $\chi^2$/NDF:725578.1/15

\+ sign 18.273+/-0.003 $\chi^2$/NDF: 2451002.4/32

All: 18.358+/-0.002 $\chi^2$/NDF: 4265909.2/67

\- sign 18.444+/-0.003 $\chi^2$/NDF: 1813317.2/34




Right In: 0.005+/-0.007 $\chi^2$/NDF: 21.5/15

Left Out: -0.005+/-0.006 $\chi^2$/NDF:17.0/16

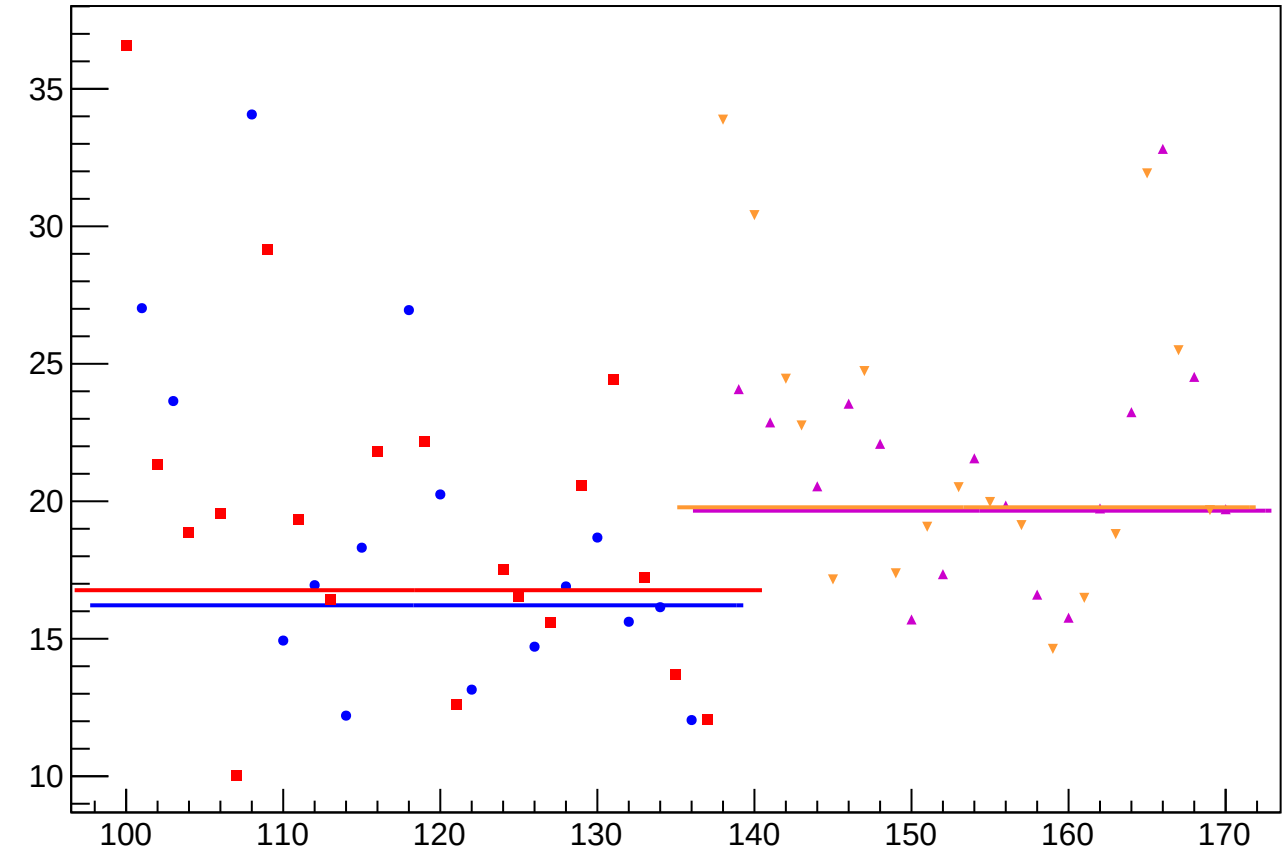
Right Out: -0.004+/-0.007 $\chi^2$/NDF: 13.6/18

Left In: -0.004+/-0.006 $\chi^2$/NDF:19.5/15

+ sign -0.001+/-0.004 $\chi^2$/NDF: 39.6/32

All: -0.002+/-0.003 $\chi^2$/NDF: 73.0/67

- sign -0.004+/-0.004 $\chi^2$/NDF: 33.2/34




Right In: 16.216+/-0.005 $\chi^2$/NDF: 943830.6/15

Left Out: 19.781+/-0.004 $\chi^2$/NDF:1166953.0/16

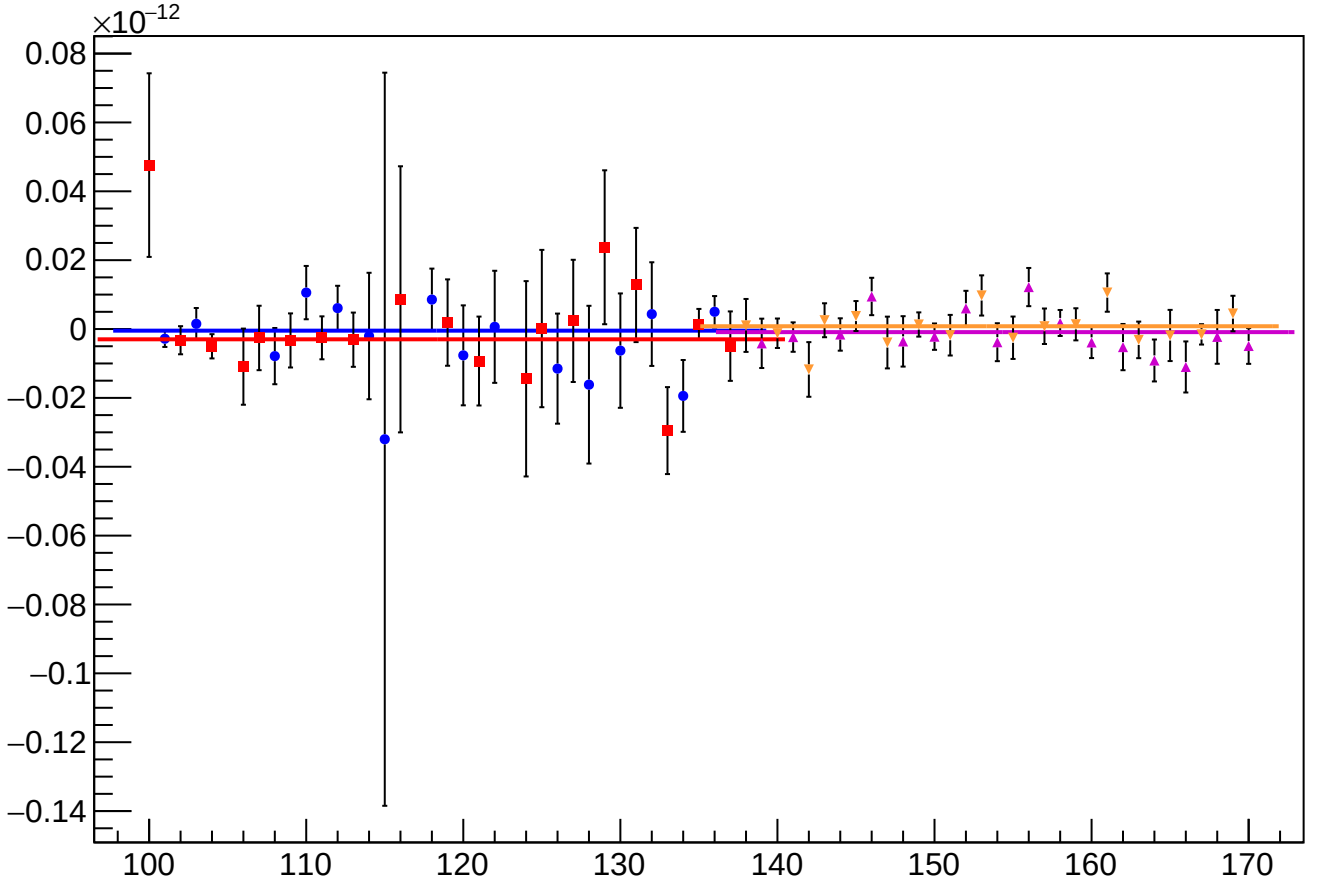
Right Out: 16.766+/-0.005 $\chi^2$/NDF: 866705.3/18

Left In: 19.658+/-0.004 $\chi^2$/NDF:725578.1/15

+ sign 18.273+/-0.003 $\chi^2$/NDF: 2451002.4/32

All: 18.358+/-0.002 $\chi^2$/NDF: 4265909.2/67

- sign 18.444+/-0.003 $\chi^2$/NDF: 1813317.2/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 12.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11.5/16

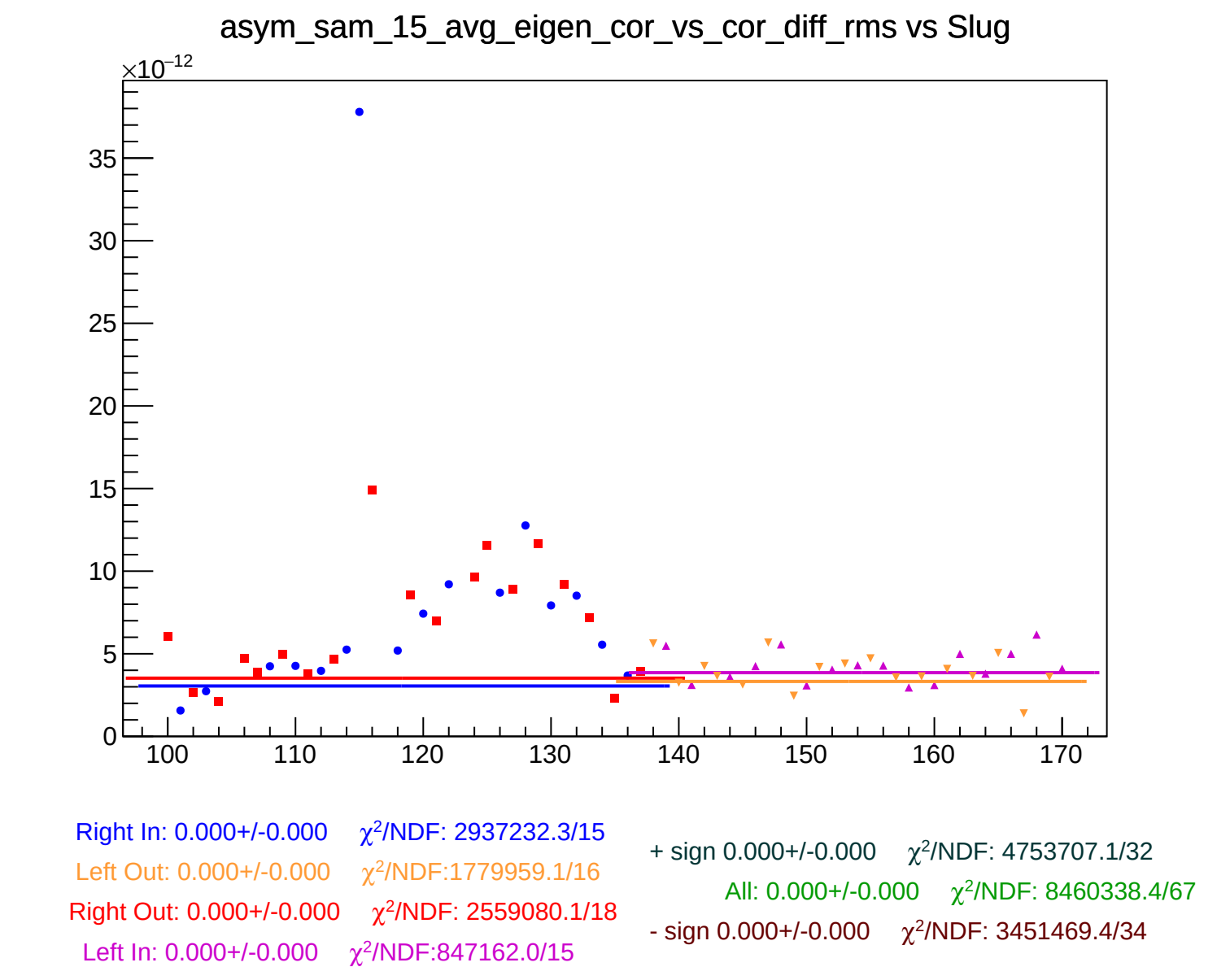
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 13.0/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:17.6/15

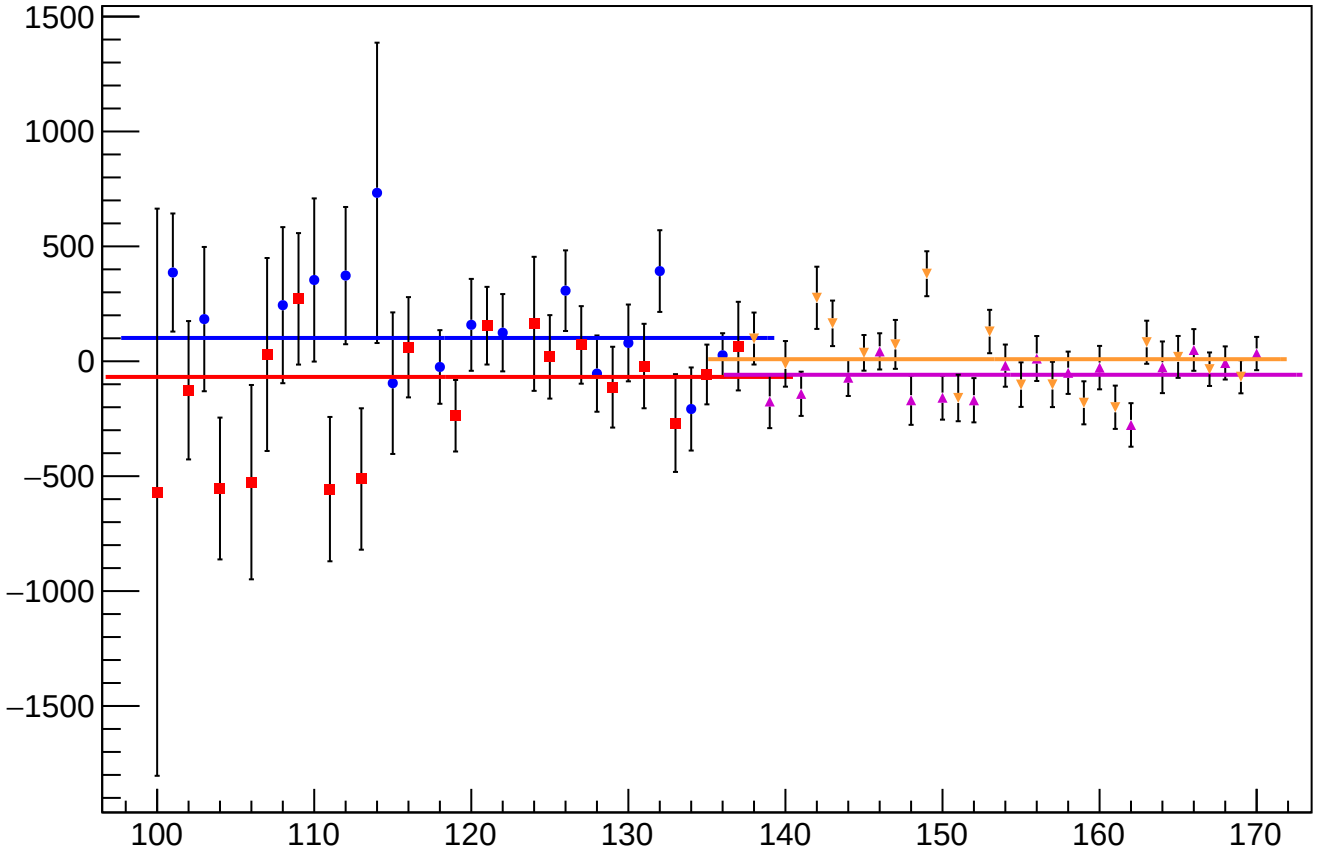
+ sign 0.000+/-0.000 $\chi^2$/NDF: 24.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 57.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 31.5/34


asym_sam_15_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
35
30
25
20
15
10
5
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2937232.3/15
Left Out: 0.000+/-0.000 χ²/NDF:1779959.1/16
Right Out: 0.000+/-0.000 χ²/NDF: 2559080.1/18
Left In: 0.000+/-0.000 χ²/NDF:847162.0/15
+ sign 0.000+/-0.000 χ²/NDF: 4753707.1/32
All: 0.000+/-0.000 χ²/NDF: 8460338.4/67
- sign 0.000+/-0.000 χ²/NDF: 3451469.4/34

# reg_asym_sam_26_avg_mean vs Slug




Right In: 101.460+/-47.631 $\chi^2$/NDF: 13.4/15

Left Out: 9.074+/-22.612 $\chi^2$/NDF:40.1/16

Right Out: -68.108+/-49.327 $\chi^2$/NDF: 16.1/18

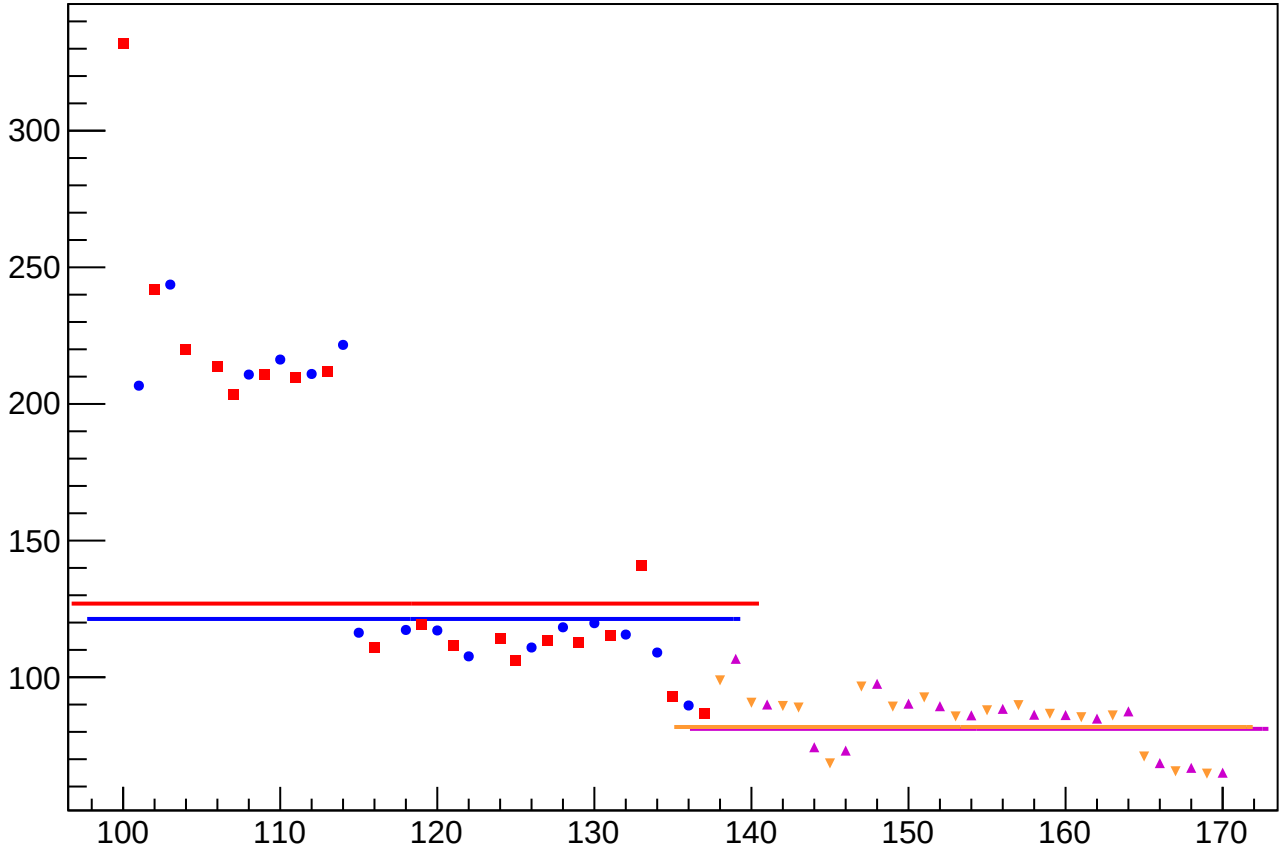
Left In: -58.771+/-22.627 $\chi^2$/NDF:16.7/15

+ sign 26.066+/-20.427 $\chi^2$/NDF: 56.5/32

All: -16.871+/-14.493 $\chi^2$/NDF: 98.3/67

- sign -60.394+/-20.566 $\chi^2$/NDF: 32.8/34

# reg_asym_sam_26_avg_rms vs Slug




Right In: 121.325+/-0.034 $\chi^2$/NDF: 1286651.5/15

Left Out: 81.789+/-0.016 $\chi^2$/NDF:486311.5/16

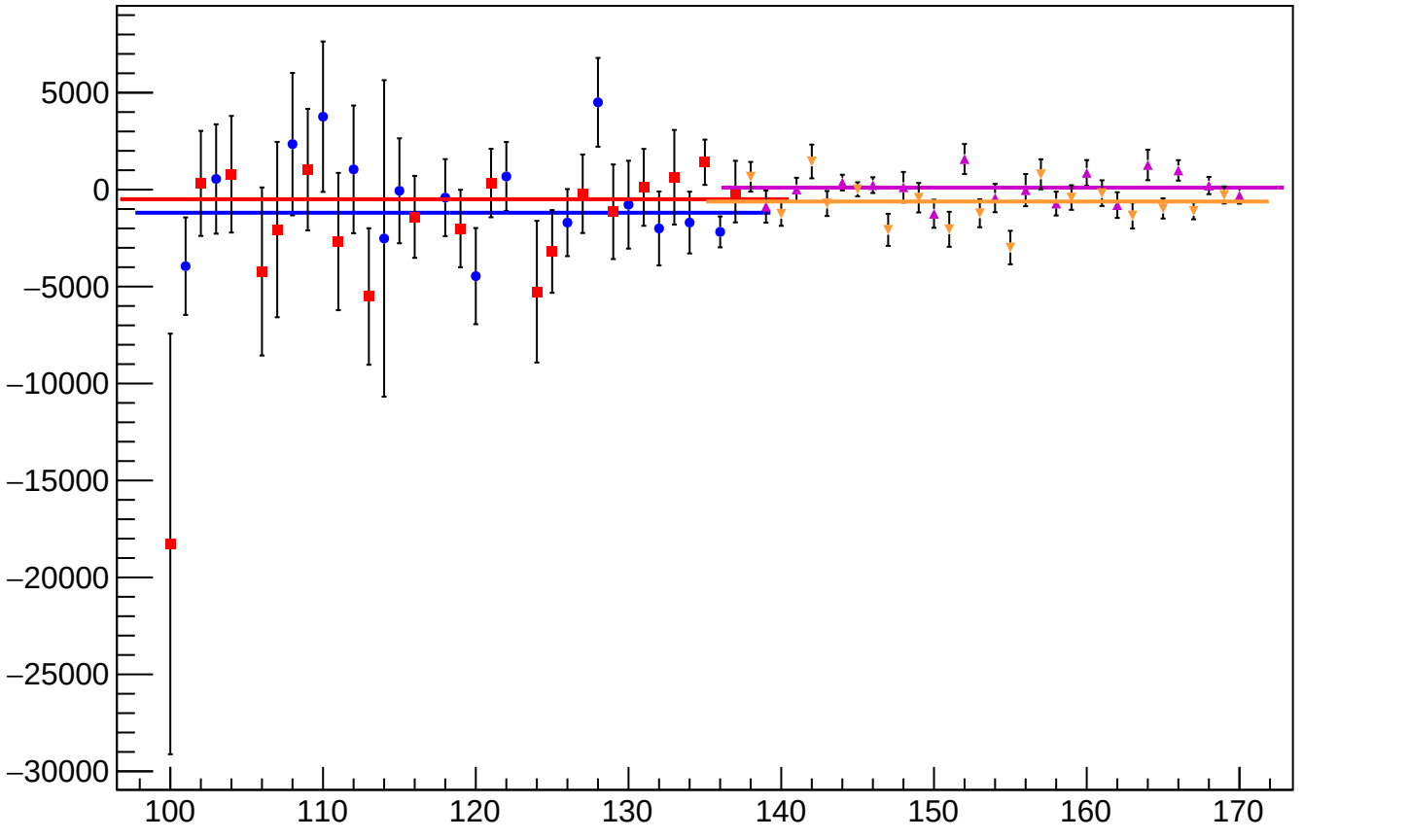
Right Out: 126.945+/-0.035 $\chi^2$/NDF: 1471592.1/18

Left In: 81.107+/-0.016 $\chi^2$/NDF:483087.4/15

+ sign 89.060+/-0.014 $\chi^2$/NDF: 2897539.9/32

All: 89.068+/-0.010 $\chi^2$/NDF: 6279064.6/67

- sign 89.075+/-0.015 $\chi^2$/NDF: 3381524.2/34




Right In: -1192.168+/-478.908 $\chi^2$/NDF: 15.9/15

Left Out: -612.209+/-147.183 $\chi^2$/NDF:33.7/16

Right Out: -494.627+/-521.756 $\chi^2$/NDF: 13.9/18

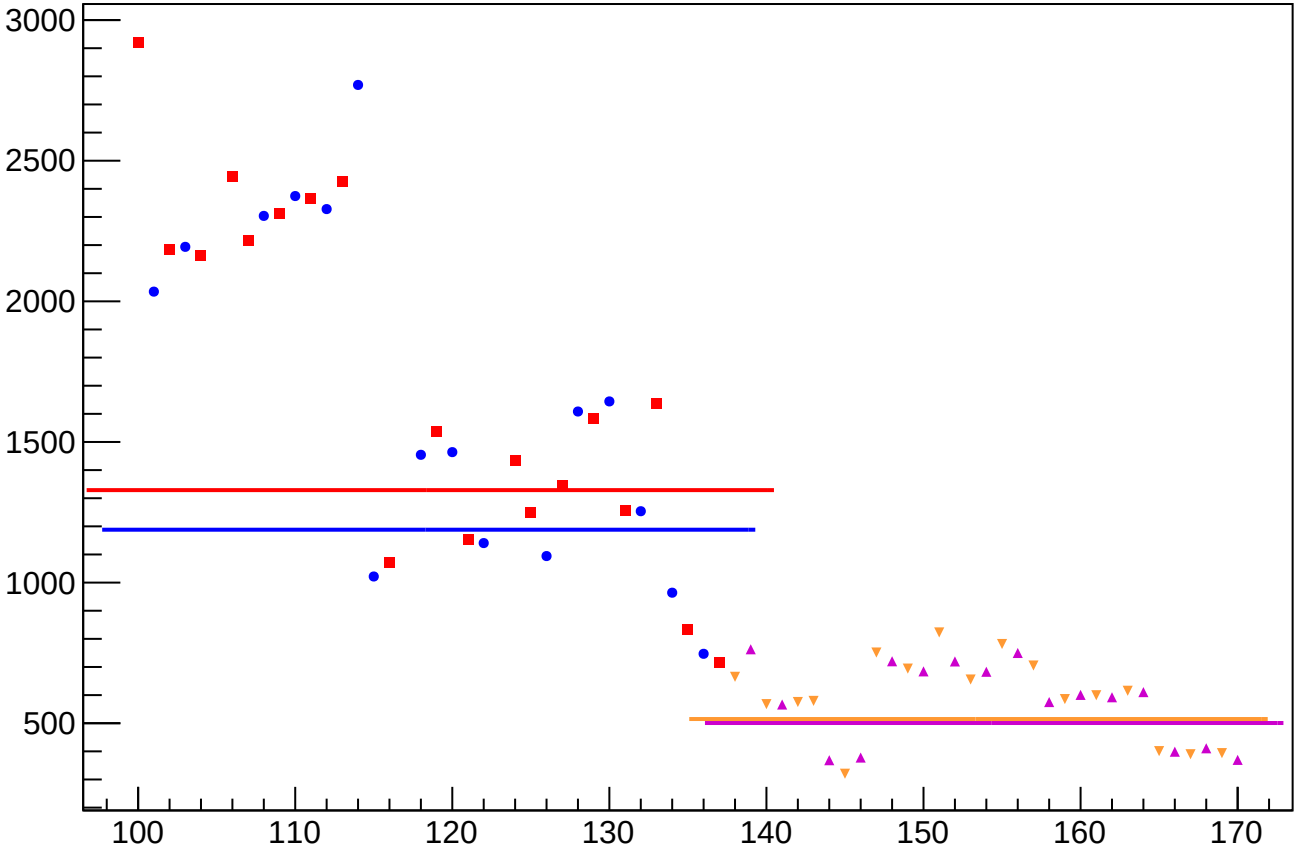
Left In: 105.359+/-143.950 $\chi^2$/NDF:20.7/15

+ sign -662.260+/-140.689 $\chi^2$/NDF: 51.0/32

All: -294.678+/-98.795 $\chi^2$/NDF: 100.3/67

- sign 62.919+/-138.765 $\chi^2$/NDF: 35.8/34

# asym_sam_26_avg_reg_correction_rms vs Slug




Right In: 1188.069+/-0.339 $\chi^2$/NDF: 2044635.7/15

Left Out: 514.960+/-0.104 $\chi^2$/NDF:2110171.0/16

Right Out: 1328.816+/-0.369 $\chi^2$/NDF: 1957758.3/18

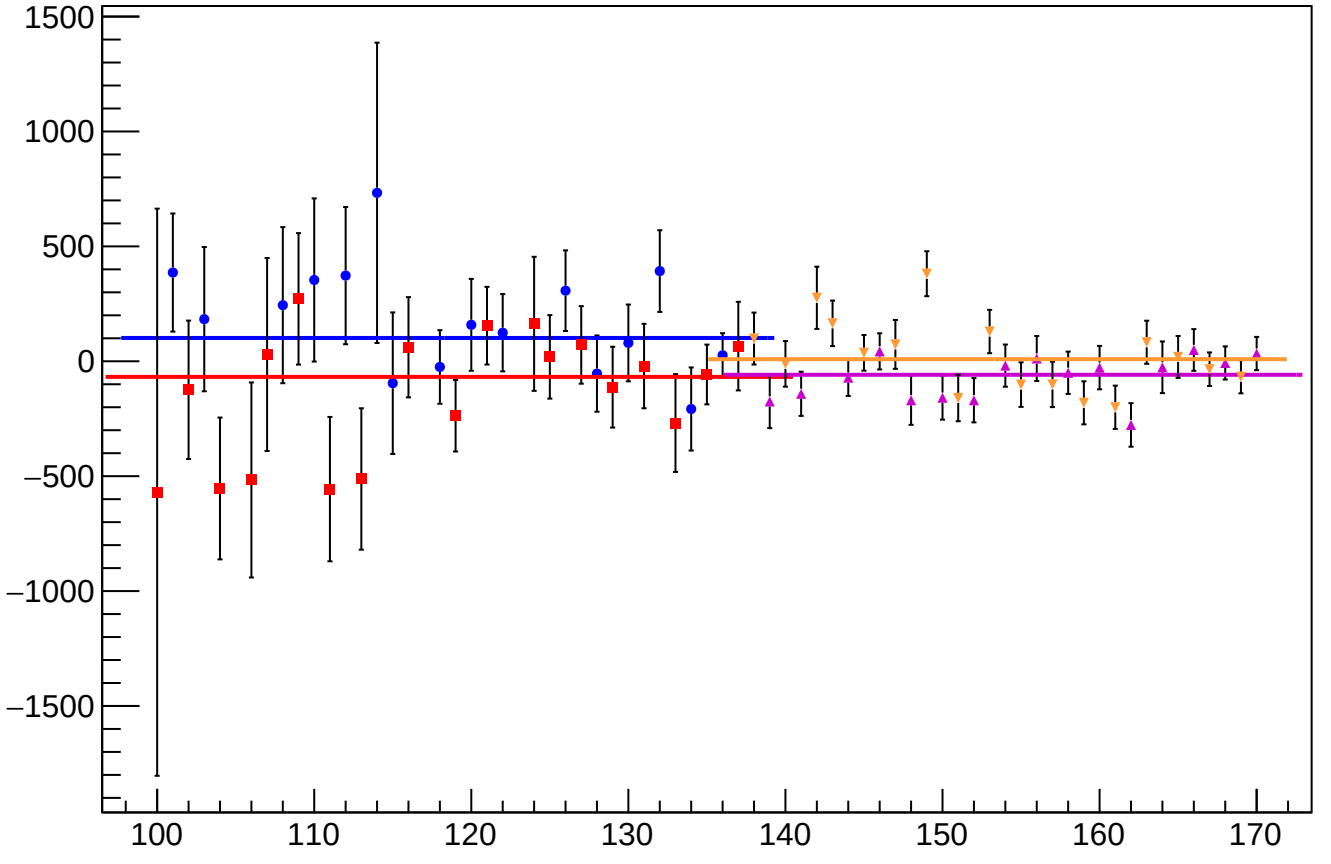
Left In: 500.802+/-0.102 $\chi^2$/NDF:1878487.8/15

\+ sign 573.050+/-0.099 $\chi^2$/NDF: 7764748.4/32

All: 566.117+/-0.070 $\chi^2$/NDF: 16291280.3/67

\- sign 559.371+/-0.098 $\chi^2$/NDF: 8516948.2/34

# cor_asym_sam_26_avg_mean vs Slug




Right In: 101.446+/-47.631 $\chi^2$/NDF: 13.3/15

Left Out: 9.076+/-22.612 $\chi^2$/NDF:40.1/16

Right Out: -67.881+/-49.331 $\chi^2$/NDF: 16.1/18

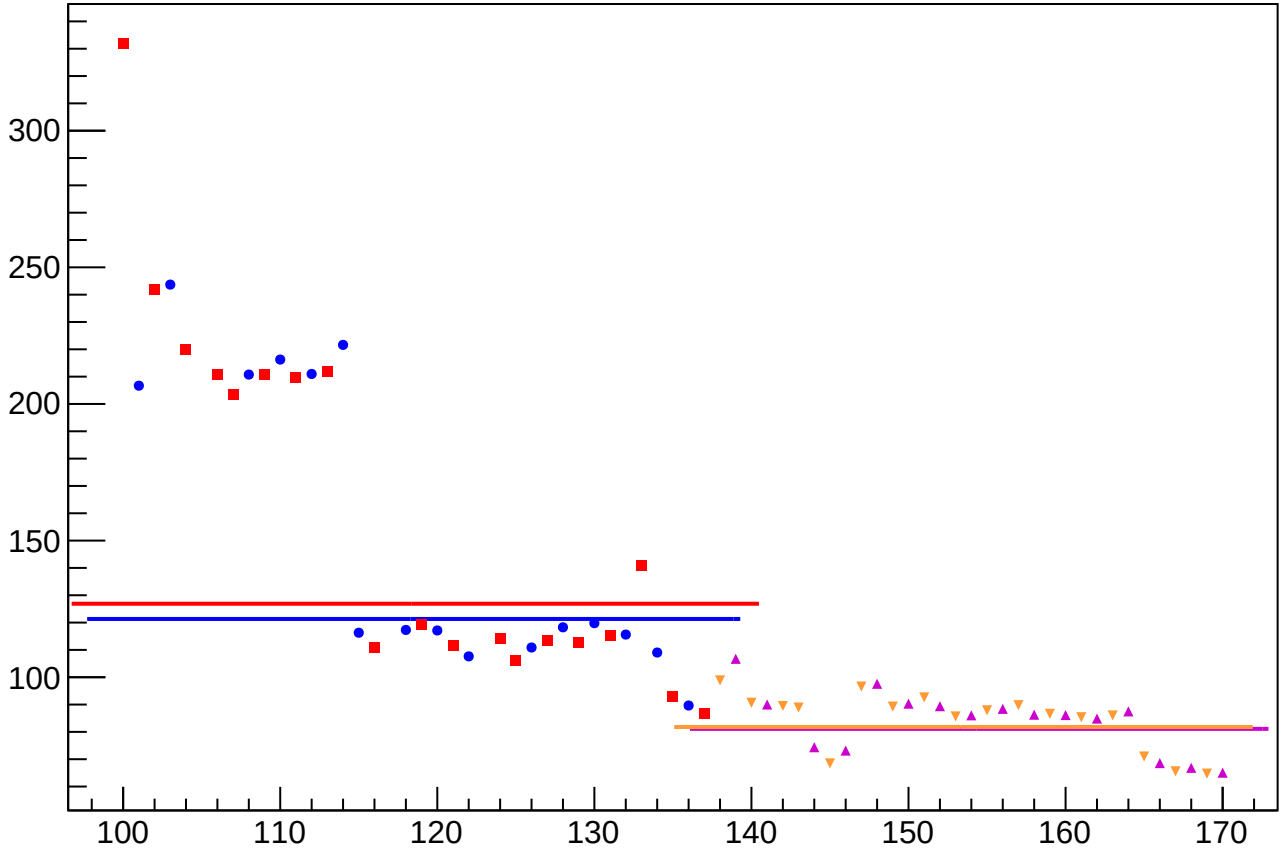
Left In: -58.771+/-22.627 $\chi^2$/NDF:16.7/15

+ sign 26.065+/-20.427 $\chi^2$/NDF: 56.5/32

All: -16.851+/-14.493 $\chi^2$/NDF: 98.2/67

- sign -60.355+/-20.566 $\chi^2$/NDF: 32.8/34

# cor_asym_sam_26_avg_rms vs Slug




Right In: 121.325+/-0.034 $\chi^2$/NDF: 1286654.0/15

Left Out: 81.789+/-0.016 $\chi^2$/NDF:486311.5/16

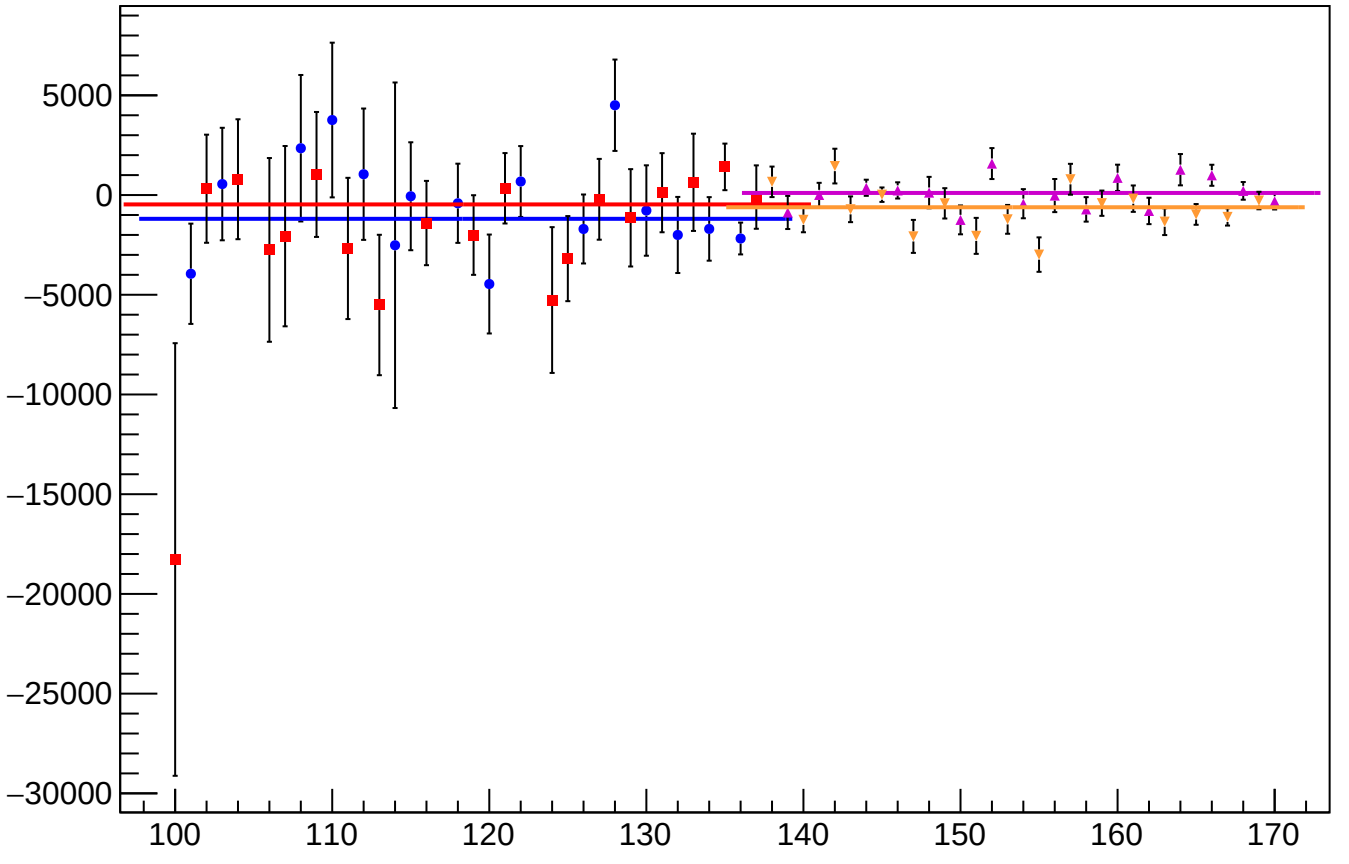
Right Out: 126.895+/-0.035 $\chi^2$/NDF: 1465478.6/18

Left In: 81.107+/-0.016 $\chi^2$/NDF:483087.4/15

+ sign 89.060+/-0.014 $\chi^2$/NDF: 2897542.0/32

All: 89.063+/-0.010 $\chi^2$/NDF: 6269693.8/67

- sign 89.065+/-0.015 $\chi^2$/NDF: 3372151.7/34




Right In: -1192.145+/-478.909 $\chi^2$/NDF: 15.9/15

Left Out: -612.204+/-147.183 $\chi^2$/NDF:33.8/16

Right Out: -469.736+/-522.203 $\chi^2$/NDF: 13.4/18

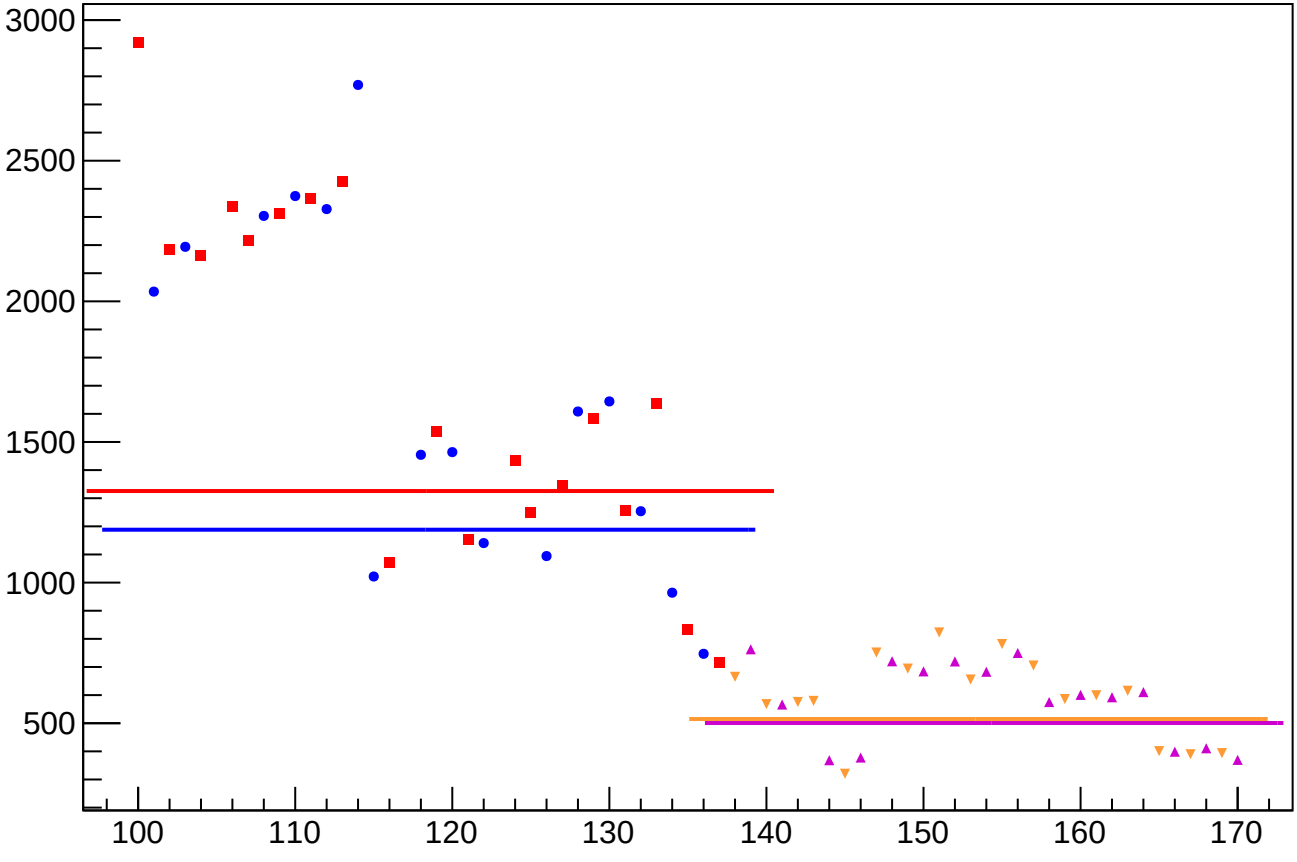
Left In: 105.355+/-143.950 $\chi^2$/NDF:20.7/15

+ sign -662.254+/-140.689 $\chi^2$/NDF: 51.0/32

All: -293.774+/-98.798 $\chi^2$/NDF: 99.7/67

- sign 64.742+/-138.774 $\chi^2$/NDF: 35.2/34

# asym_sam_26_avg_cor_correction_rms vs Slug




Right In: 1188.069+/-0.339 $\chi^2$/NDF: 2044666.3/15

Left Out: 514.960+/-0.104 $\chi^2$/NDF:2110180.6/16

Right Out: 1325.564+/-0.369 $\chi^2$/NDF: 1920986.7/18

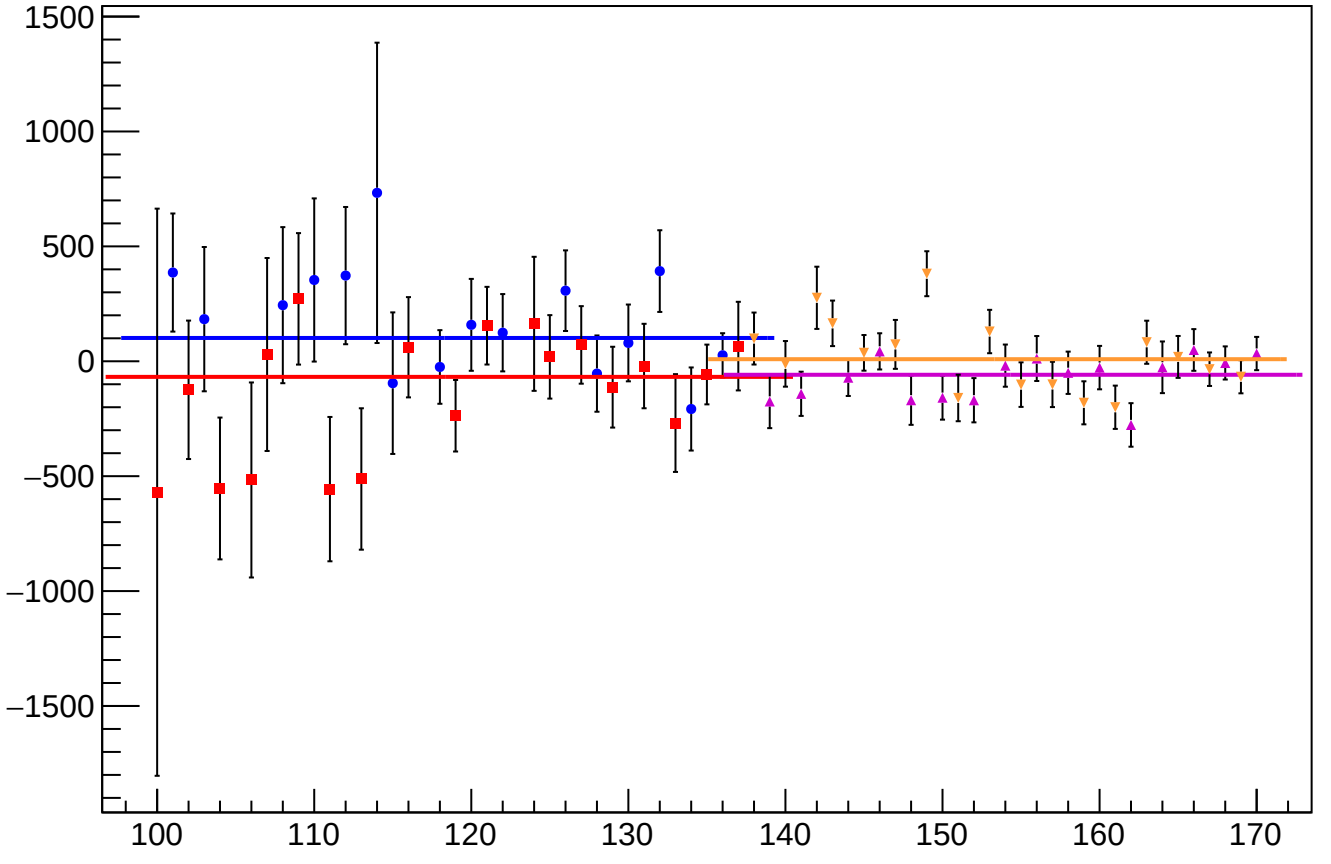
Left In: 500.803+/-0.102 $\chi^2$/NDF:1878489.9/15

+ sign 573.050+/-0.099 $\chi^2$/NDF: 7764782.2/32

All: 565.953+/-0.070 $\chi^2$/NDF: 16210907.5/67

- sign 559.048+/-0.098 $\chi^2$/NDF: 8436085.5/34

# eigen_cor_asym_sam_26_avg_mean vs Slug




Right In: 101.446+/-47.631 $\chi^2$/NDF: 13.3/15

Left Out: 9.076+/-22.612 $\chi^2$/NDF:40.1/16

Right Out: -67.881+/-49.331 $\chi^2$/NDF: 16.1/18

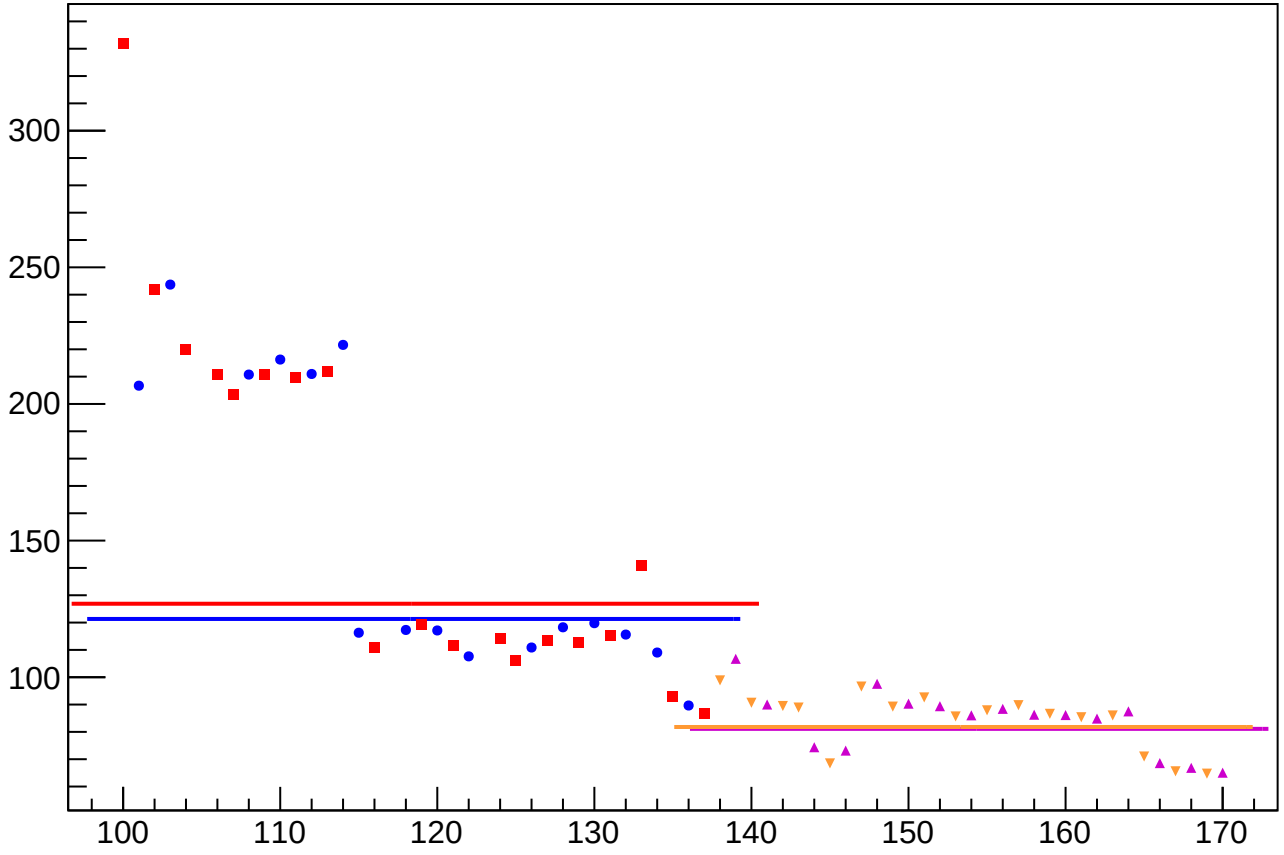
Left In: -58.771+/-22.627 $\chi^2$/NDF:16.7/15

+ sign 26.065+/-20.427 $\chi^2$/NDF: 56.5/32

All: -16.851+/-14.493 $\chi^2$/NDF: 98.2/67

- sign -60.355+/-20.566 $\chi^2$/NDF: 32.8/34

# eigen_cor_asym_sam_26_avg_rms vs Slug




Right In: 121.325+/-0.034 $\chi^2$/NDF: 1286654.0/15

Left Out: 81.789+/-0.016 $\chi^2$/NDF:486311.5/16

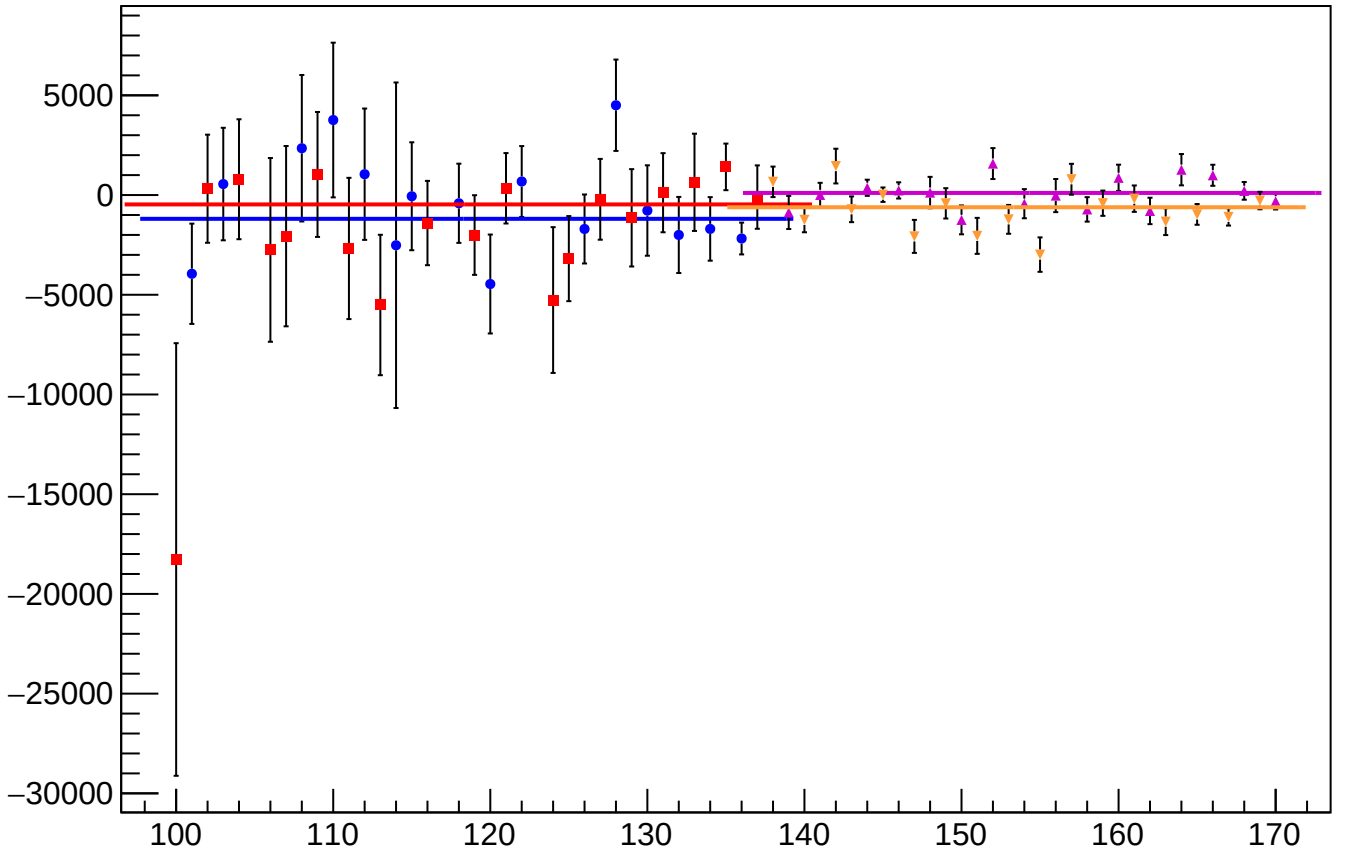
Right Out: 126.895+/-0.035 $\chi^2$/NDF: 1465478.6/18

Left In: 81.107+/-0.016 $\chi^2$/NDF:483087.4/15

+ sign 89.060+/-0.014 $\chi^2$/NDF: 2897542.0/32

All: 89.063+/-0.010 $\chi^2$/NDF: 6269693.8/67

- sign 89.065+/-0.015 $\chi^2$/NDF: 3372151.7/34




Right In: -1192.145+/-478.909 $\chi^2$/NDF: 15.9/15

Left Out: -612.204+/-147.183 $\chi^2$/NDF:33.8/16

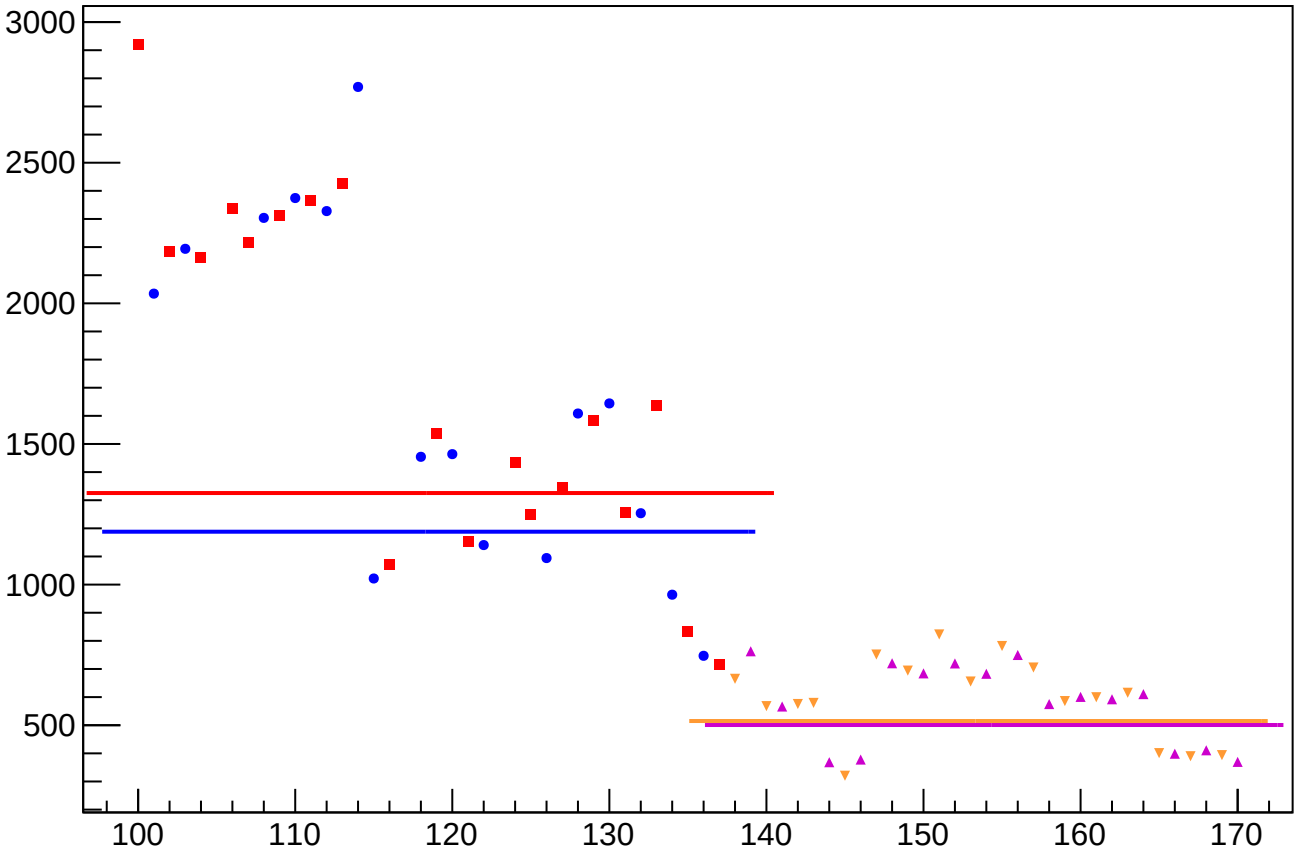
Right Out: -469.736+/-522.203 $\chi^2$/NDF: 13.4/18

Left In: 105.355+/-143.950 $\chi^2$/NDF:20.7/15

+ sign -662.254+/-140.689 $\chi^2$/NDF: 51.0/32

All: -293.774+/-98.798 $\chi^2$/NDF: 99.7/67

- sign 64.742+/-138.774 $\chi^2$/NDF: 35.2/34




Right In: 1188.069+/-0.339 $\chi^2$/NDF: 2044666.3/15

Left Out: 514.960+/-0.104 $\chi^2$/NDF:2110180.6/16

Right Out: 1325.564+/-0.369 $\chi^2$/NDF: 1920986.7/18

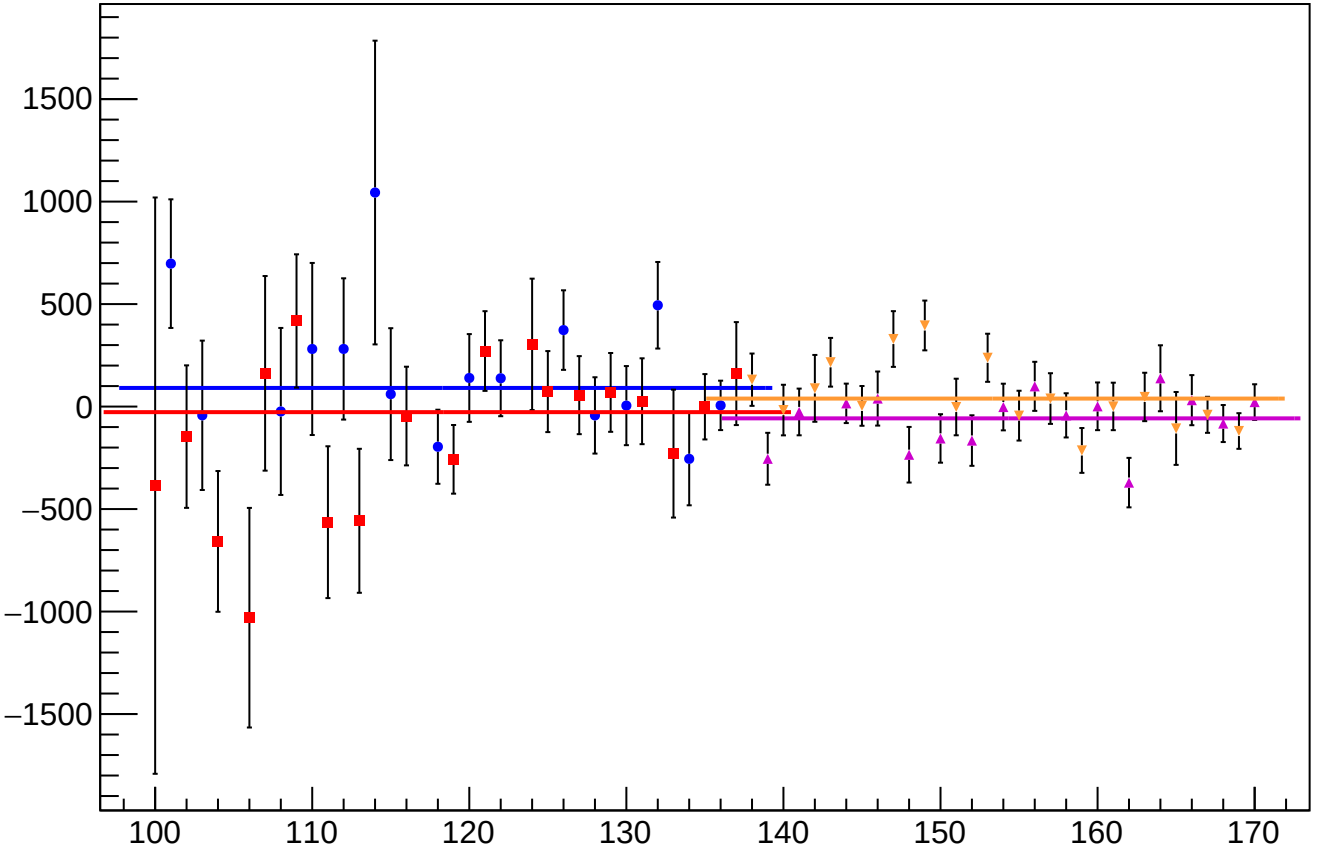
Left In: 500.803+/-0.102 $\chi^2$/NDF:1878489.9/15

+ sign 573.050+/-0.099 $\chi^2$/NDF: 7764782.2/32

All: 565.953+/-0.070 $\chi^2$/NDF: 16210907.5/67

- sign 559.048+/-0.098 $\chi^2$/NDF: 8436085.5/34

# dit_asym_sam_26_avg_mean vs Slug




Right In: 90.908+/-55.565 $\chi^2$/NDF: 18.1/15

Left Out: 38.993+/-28.339 $\chi^2$/NDF:30.1/16

Right Out: -27.170+/-57.015 $\chi^2$/NDF: 20.6/18

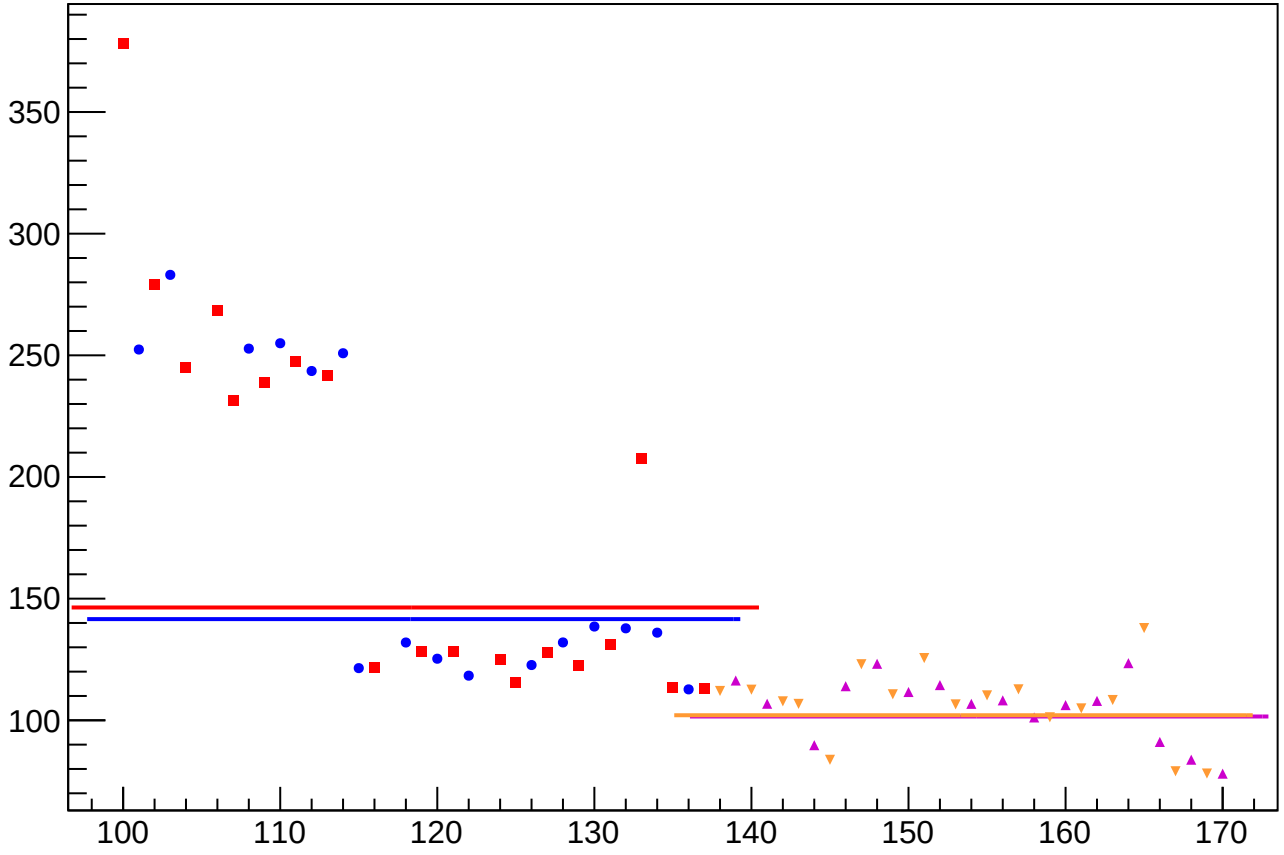
Left In: -57.525+/-28.483 $\chi^2$/NDF:18.7/15

+ sign 49.710+/-25.245 $\chi^2$/NDF: 48.8/32

All: -0.408+/-17.933 $\chi^2$/NDF: 96.2/67

- sign -51.463+/-25.480 $\chi^2$/NDF: 39.4/34

# dit_asym_sam_26_avg_rms vs Slug




Right In: 141.586+/-0.039 $\chi^2$/NDF: 1262366.8/15

Left Out: 102.080+/-0.020 $\chi^2$/NDF:623012.0/16

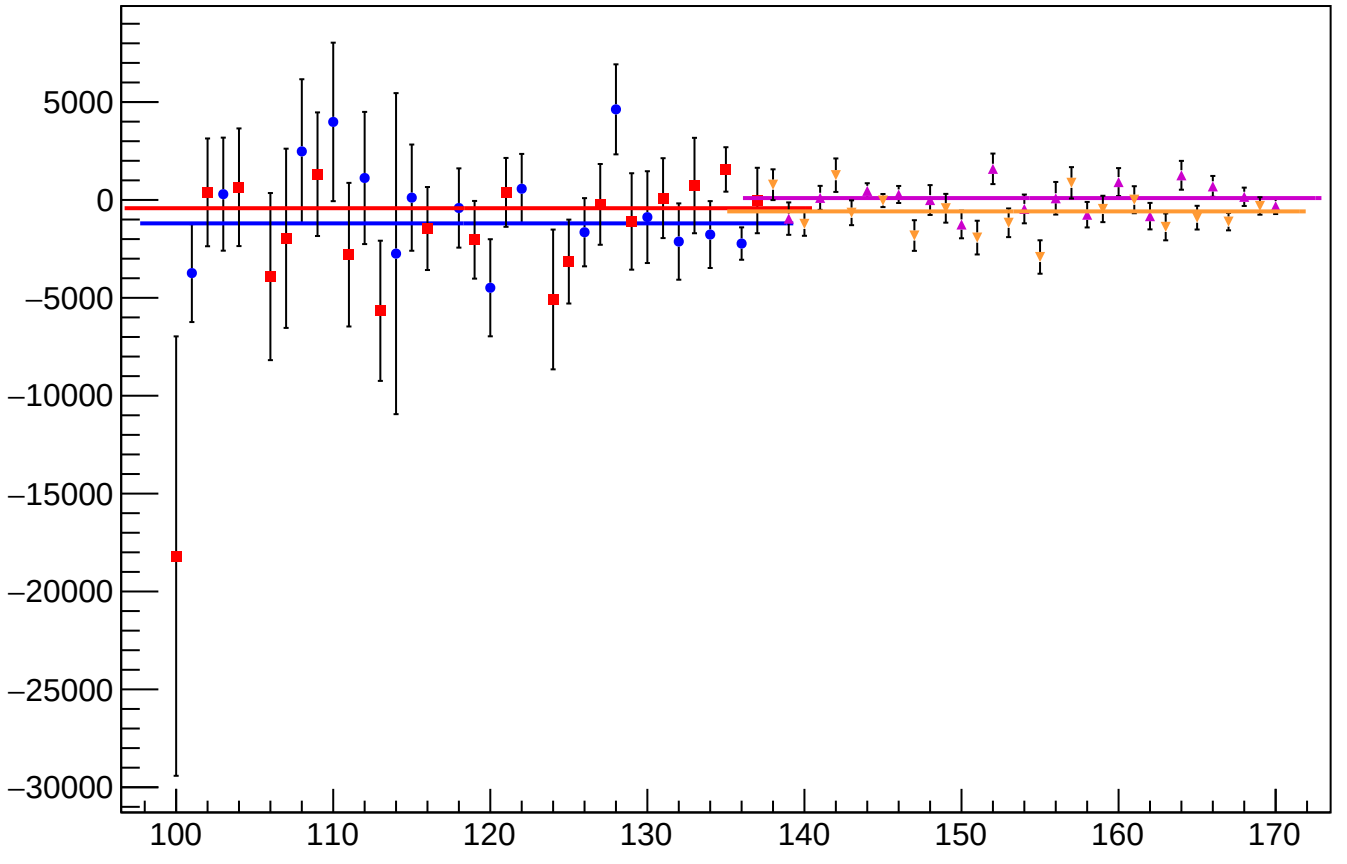
Right Out: 146.368+/-0.040 $\chi^2$/NDF: 1513656.0/18

Left In: 101.563+/-0.020 $\chi^2$/NDF:461117.3/15

+ sign 110.235+/-0.018 $\chi^2$/NDF: 2687715.9/32

All: 110.372+/-0.013 $\chi^2$/NDF: 5651032.8/67

- sign 110.512+/-0.018 $\chi^2$/NDF: 2963197.7/34




Right In: -1196.663+/-491.384 $\chi^2$/NDF: 16.0/15

Left Out: -584.417+/-147.449 $\chi^2$/NDF:32.0/16

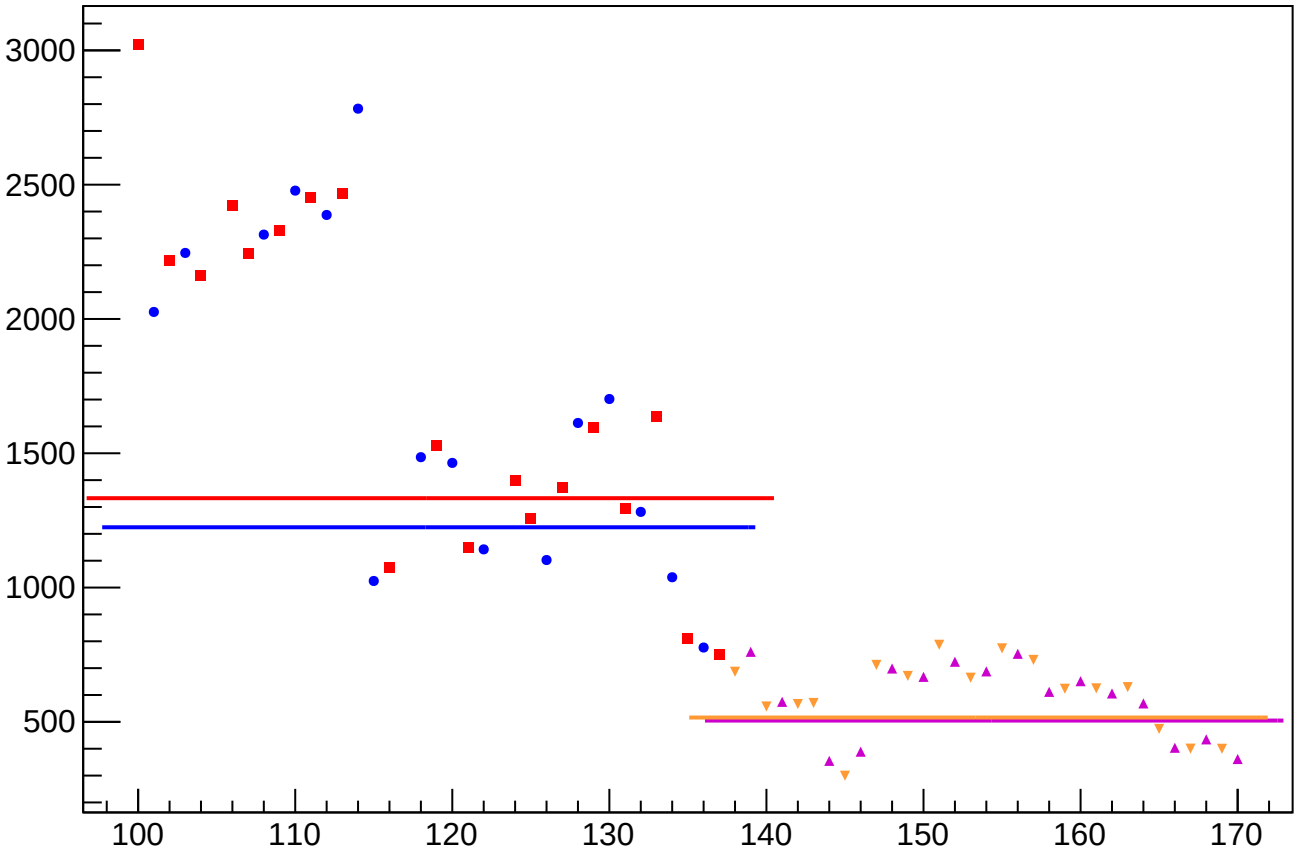
Right Out: -422.161+/-523.834 $\chi^2$/NDF: 14.3/18

Left In: 95.350+/-145.537 $\chi^2$/NDF:20.3/15

+ sign -634.990+/-141.228 $\chi^2$/NDF: 49.4/32

All: -285.892+/-99.507 $\chi^2$/NDF: 97.0/67

- sign 58.267+/-140.225 $\chi^2$/NDF: 35.5/34




Right In: 1224.470+/-0.347 $\chi^2$/NDF: 1959362.3/15

Left Out: 516.165+/-0.104 $\chi^2$/NDF:2221769.3/16

Right Out: 1332.785+/-0.370 $\chi^2$/NDF: 1994811.5/18

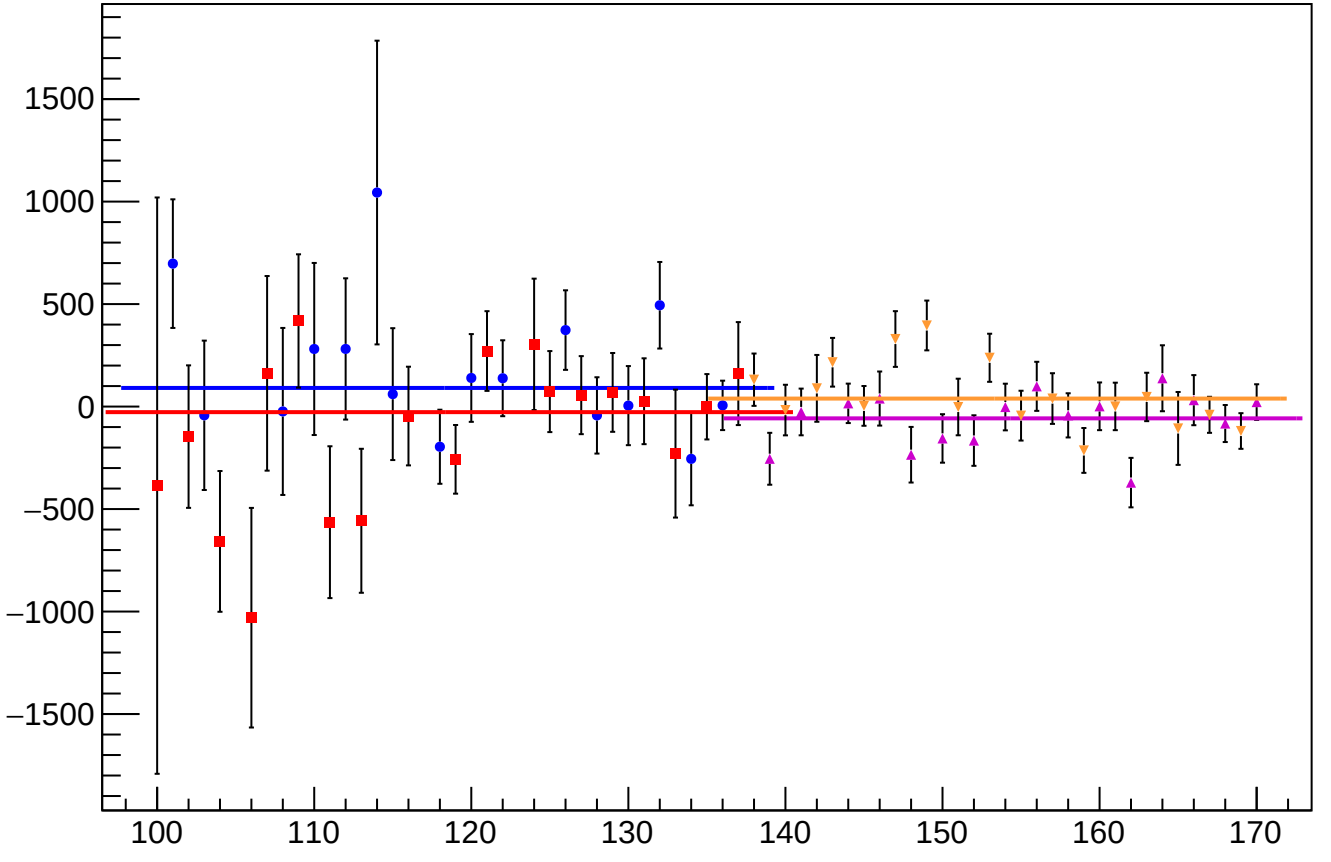
Left In: 504.859+/-0.103 $\chi^2$/NDF:1916703.3/15

+ sign 574.674+/-0.100 $\chi^2$/NDF: 7993419.2/32

All: 569.393+/-0.070 $\chi^2$/NDF: 16548509.4/67

- sign 564.187+/-0.099 $\chi^2$/NDF: 8549537.3/34

# eigen_dit_asym_sam_26_avg_mean vs Slug




Right In: 90.910+/-55.564 $\chi^2$/NDF: 18.1/15

Left Out: 38.993+/-28.339 $\chi^2$/NDF:30.1/16

Right Out: -27.170+/-57.015 $\chi^2$/NDF: 20.6/18

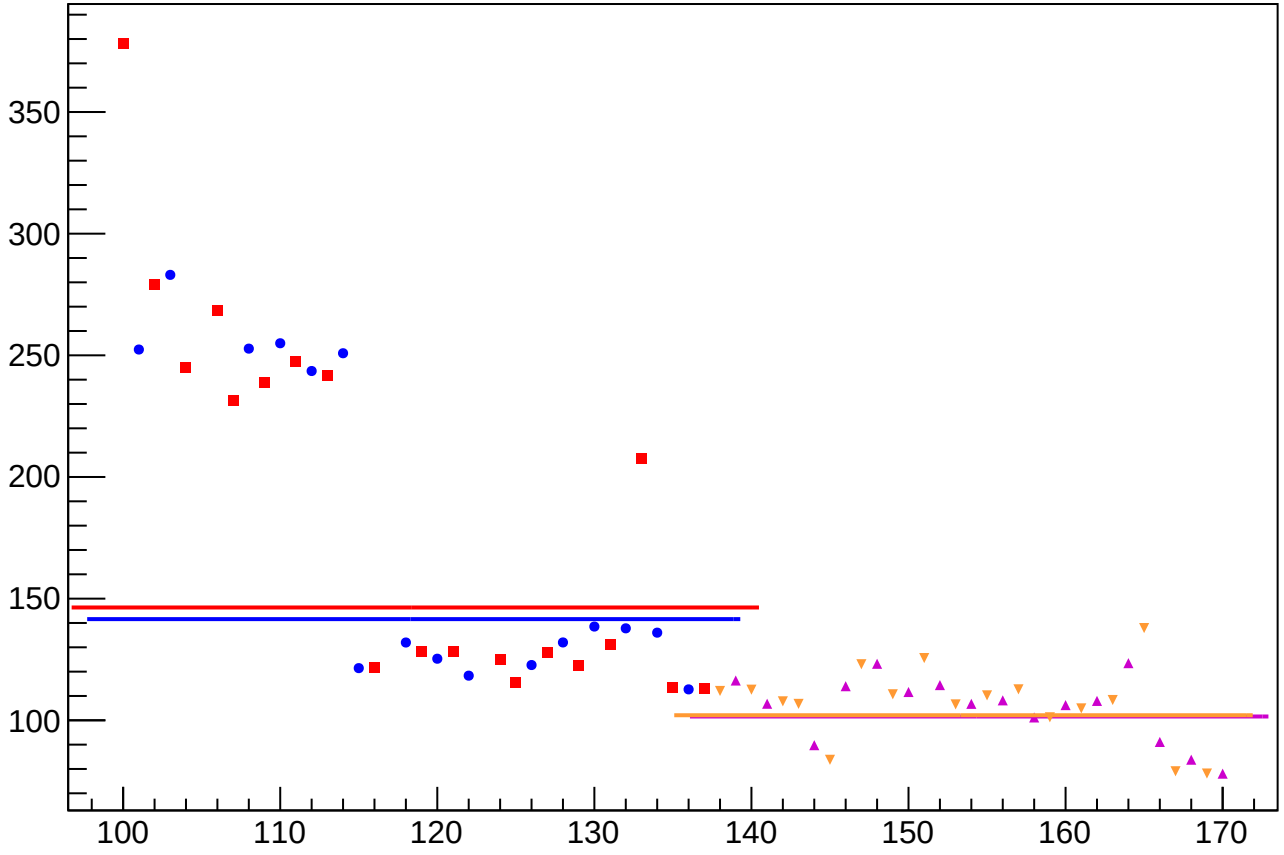
Left In: -57.523+/-28.483 $\chi^2$/NDF:18.7/15

+ sign 49.710+/-25.245 $\chi^2$/NDF: 48.8/32

All: -0.407+/-17.934 $\chi^2$/NDF: 96.2/67

- sign -51.461+/-25.480 $\chi^2$/NDF: 39.4/34

# eigen_dit_asym_sam_26_avg_rms vs Slug




Right In: 141.586+/-0.039 $\chi^2$/NDF: 1262350.2/15

Left Out: 102.080+/-0.020 $\chi^2$/NDF:623000.3/16

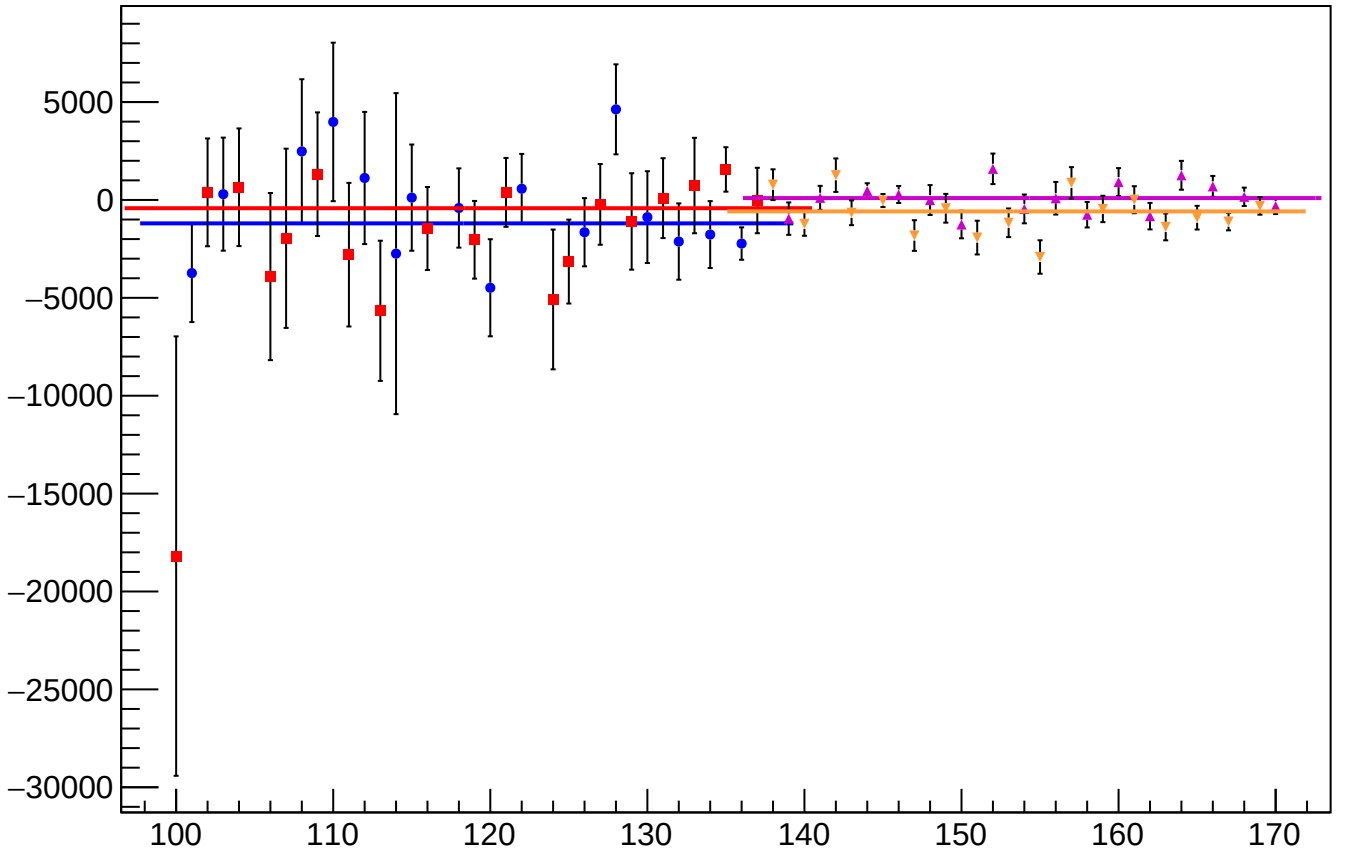
Right Out: 146.368+/-0.040 $\chi^2$/NDF: 1513641.5/18

Left In: 101.564+/-0.020 $\chi^2$/NDF:461103.3/15

+ sign 110.235+/-0.018 $\chi^2$/NDF: 2687651.6/32

All: 110.372+/-0.013 $\chi^2$/NDF: 5650906.6/67

- sign 110.512+/-0.018 $\chi^2$/NDF: 2963135.6/34




Right In: -1196.659+/-491.383 $\chi^2$/NDF: 16.0/15

Left Out: -584.415+/-147.449 $\chi^2$/NDF:32.0/16

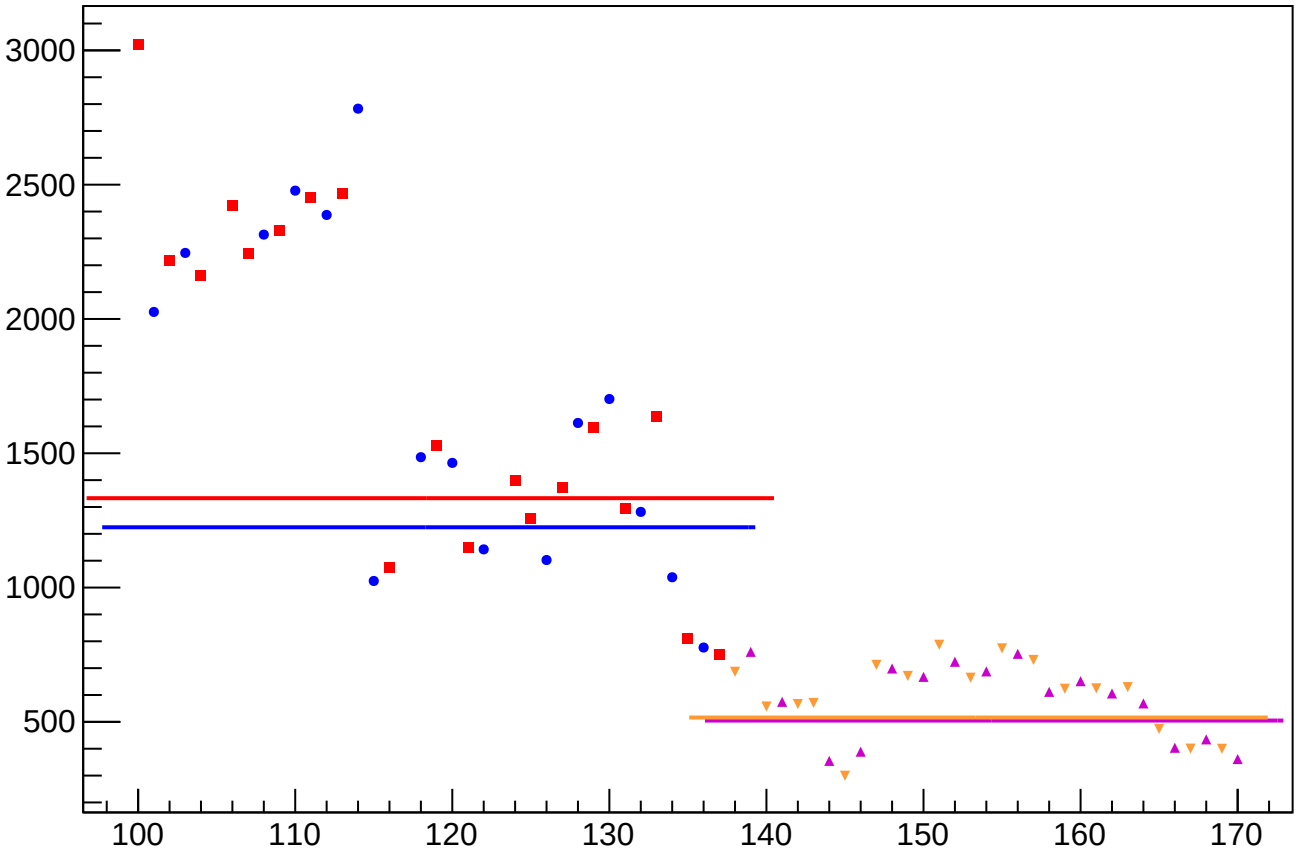
Right Out: -422.163+/-523.833 $\chi^2$/NDF: 14.3/18

Left In: 95.350+/-145.536 $\chi^2$/NDF:20.3/15

+ sign -634.989+/-141.228 $\chi^2$/NDF: 49.4/32

All: -285.891+/-99.507 $\chi^2$/NDF: 97.0/67

- sign 58.266+/-140.225 $\chi^2$/NDF: 35.5/34




Right In: 1224.470+/-0.347 $\chi^2$/NDF: 1959341.1/15

Left Out: 516.163+/-0.104 $\chi^2$/NDF:2221816.0/16

Right Out: 1332.784+/-0.370 $\chi^2$/NDF: 1994794.3/18

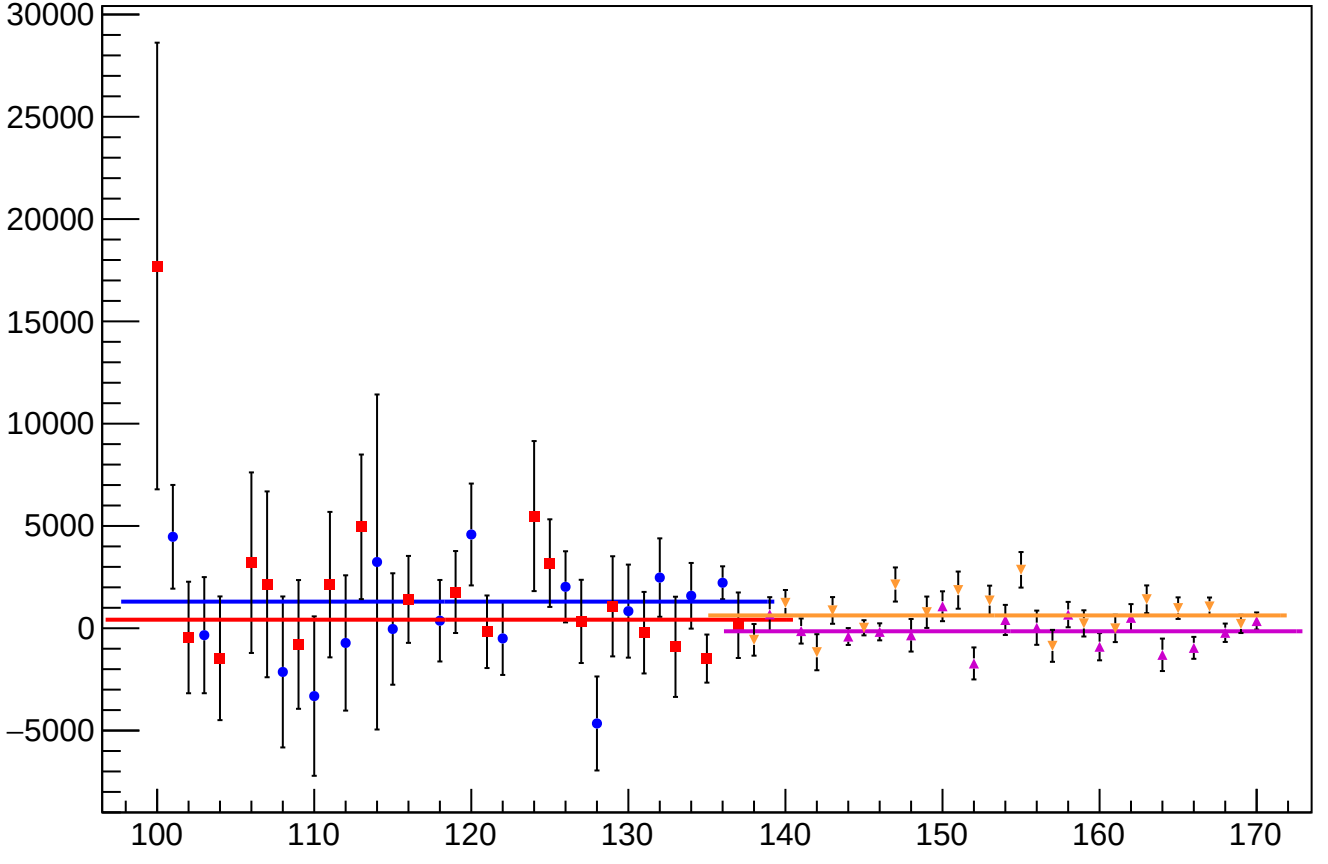
Left In: 504.858+/-0.103 $\chi^2$/NDF:1916732.5/15

+ sign 574.672+/-0.100 $\chi^2$/NDF: 7993466.5/32

All: 569.392+/-0.070 $\chi^2$/NDF: 16548586.7/67

- sign 564.186+/-0.099 $\chi^2$/NDF: 8549567.6/34

# asym_sam_26_avg_mean vs Slug




Right In: 1301.623+/-481.959 $\chi^2$/NDF: 16.5/15

Left Out: 627.125+/-149.189 $\chi^2$/NDF:31.6/16

Right Out: 418.283+/-524.515 $\chi^2$/NDF: 13.0/18

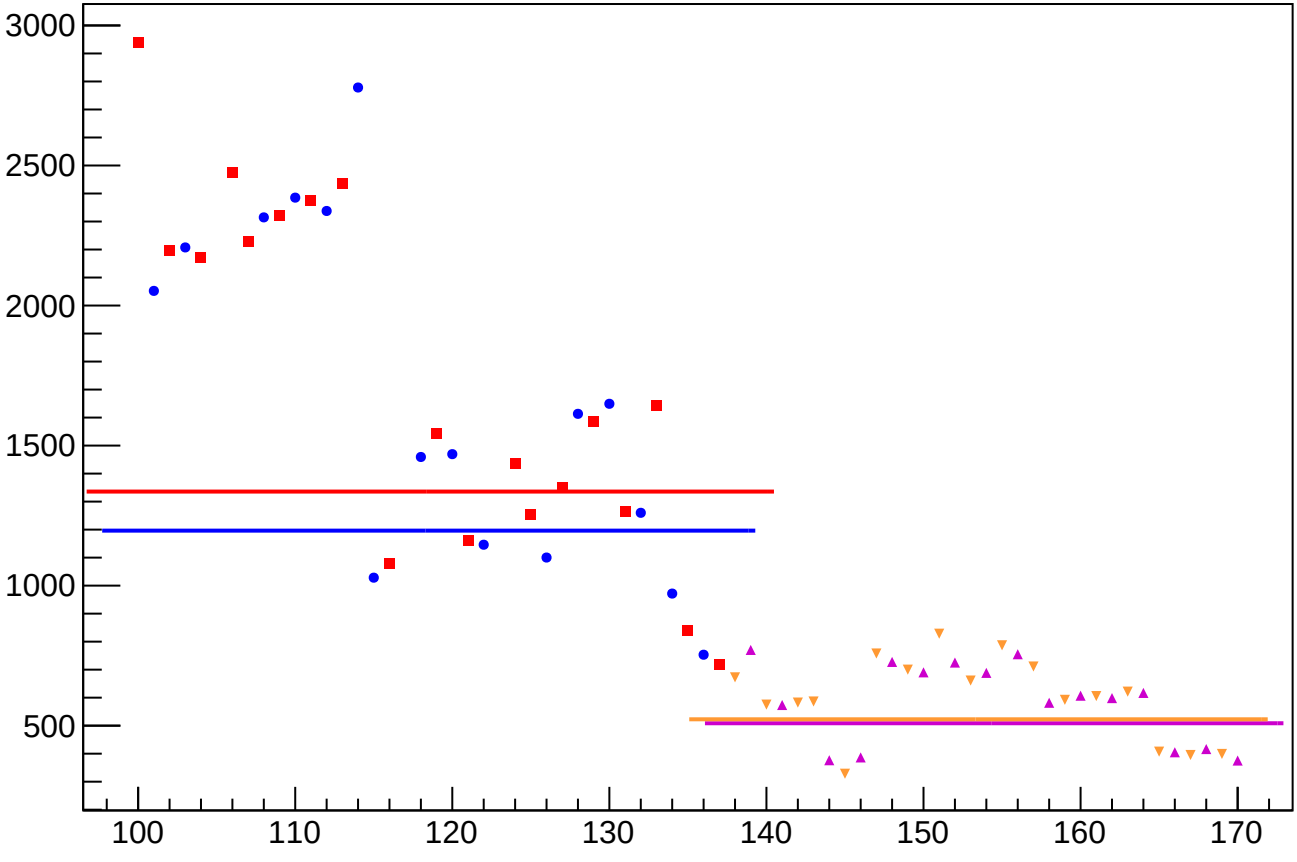
Left In: -147.962+/-146.008 $\chi^2$/NDF:18.7/15

+ sign 686.104+/-142.517 $\chi^2$/NDF: 49.8/32

All: 284.229+/-100.112 $\chi^2$/NDF: 98.4/67

- sign -107.240+/-140.660 $\chi^2$/NDF: 32.8/34

# asym_sam_26_avg_rms vs Slug




Right In: 1196.353+/-0.341 $\chi^2$/NDF: 2031710.2/15

Left Out: 522.707+/-0.105 $\chi^2$/NDF:2045560.1/16

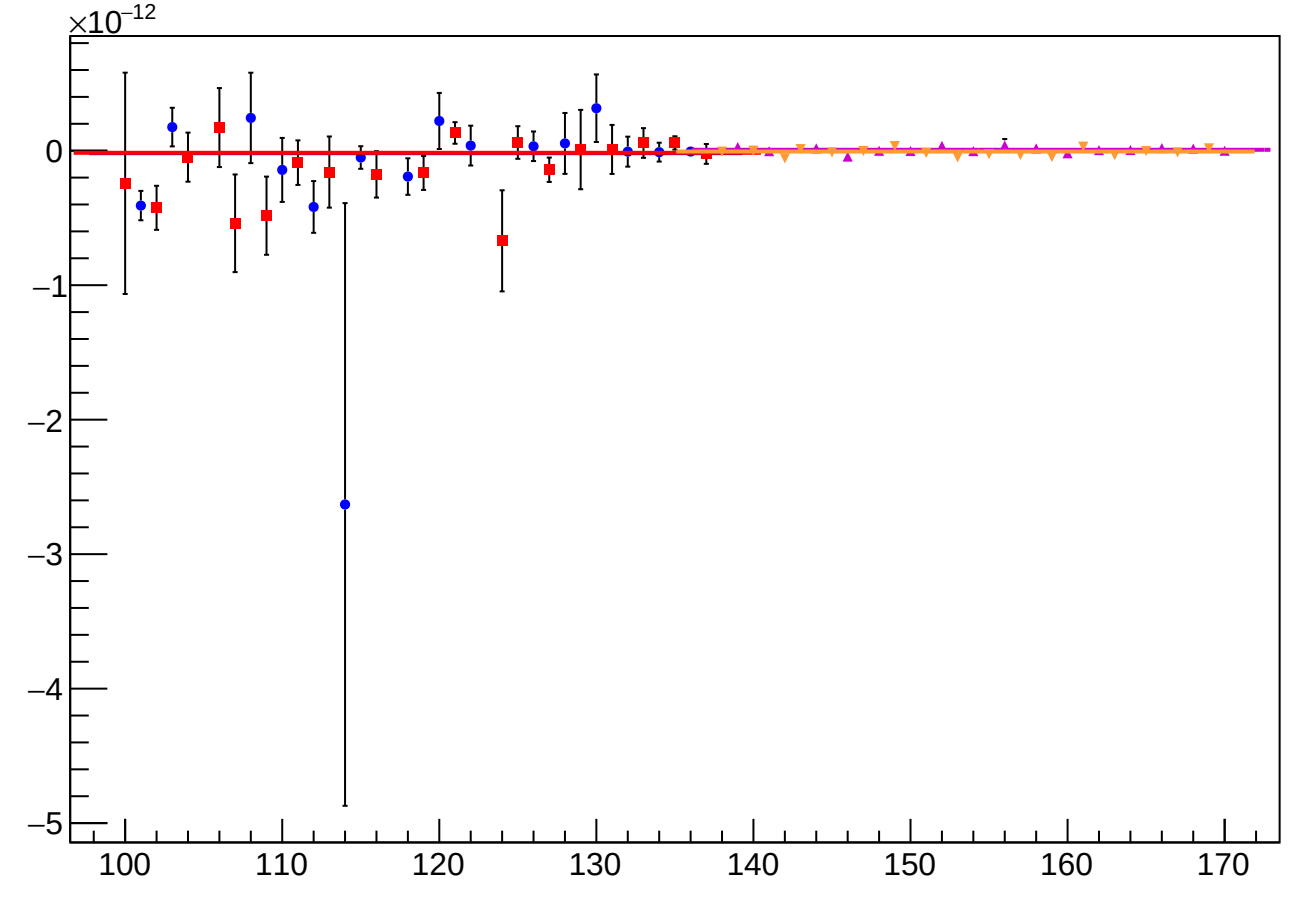
Right Out: 1335.809+/-0.371 $\chi^2$/NDF: 1951472.1/18

Left In: 508.611+/-0.103 $\chi^2$/NDF:1822195.4/15

+ sign 581.612+/-0.101 $\chi^2$/NDF: 7642881.7/32

All: 574.767+/-0.071 $\chi^2$/NDF: 16042229.2/67

- sign 568.100+/-0.099 $\chi^2$/NDF: 8390241.0/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 26.8/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:16.6/16

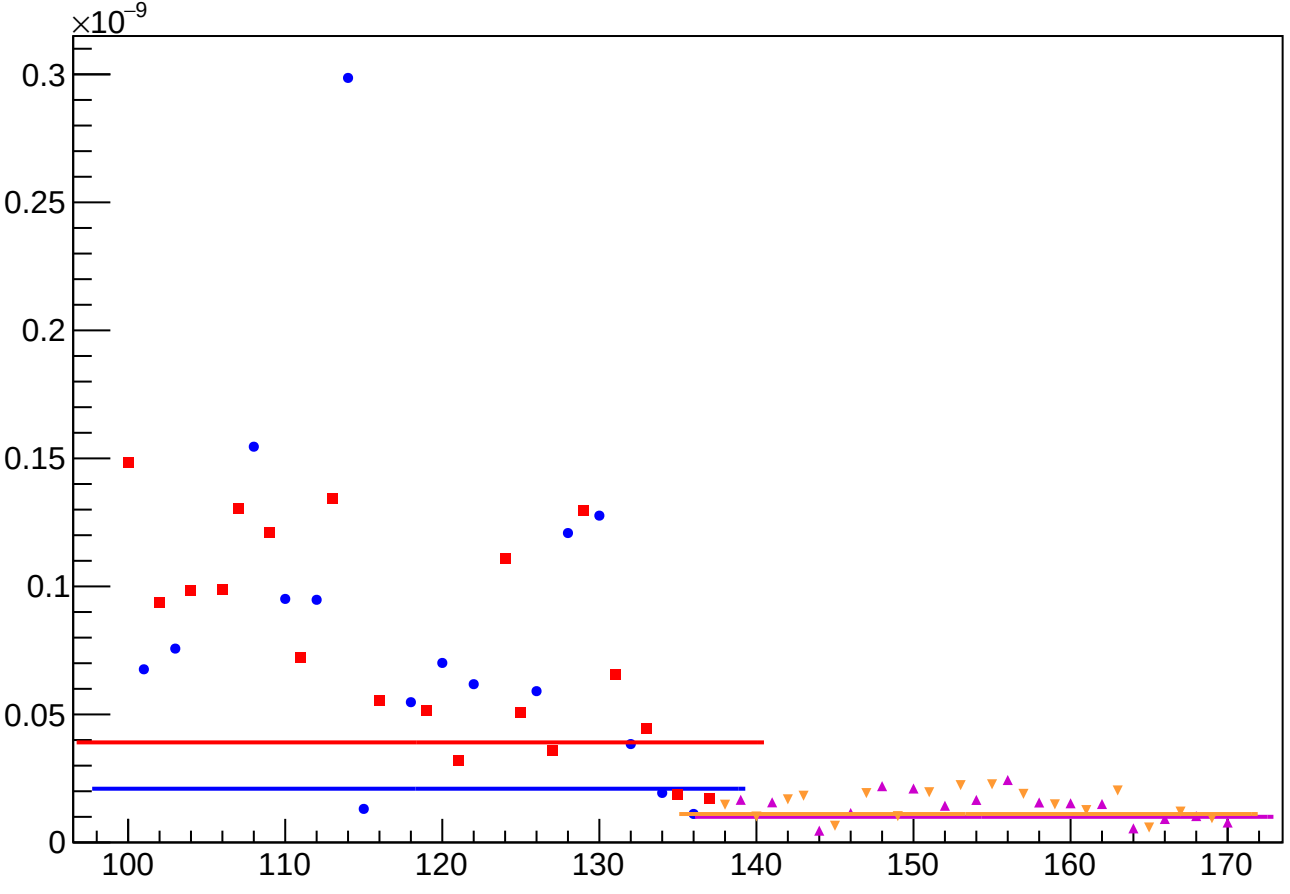
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 25.6/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:13.4/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 43.8/32

All: -0.000+/-0.000 $\chi^2$/NDF: 86.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 39.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3380958.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1826516.5/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2073862.3/18

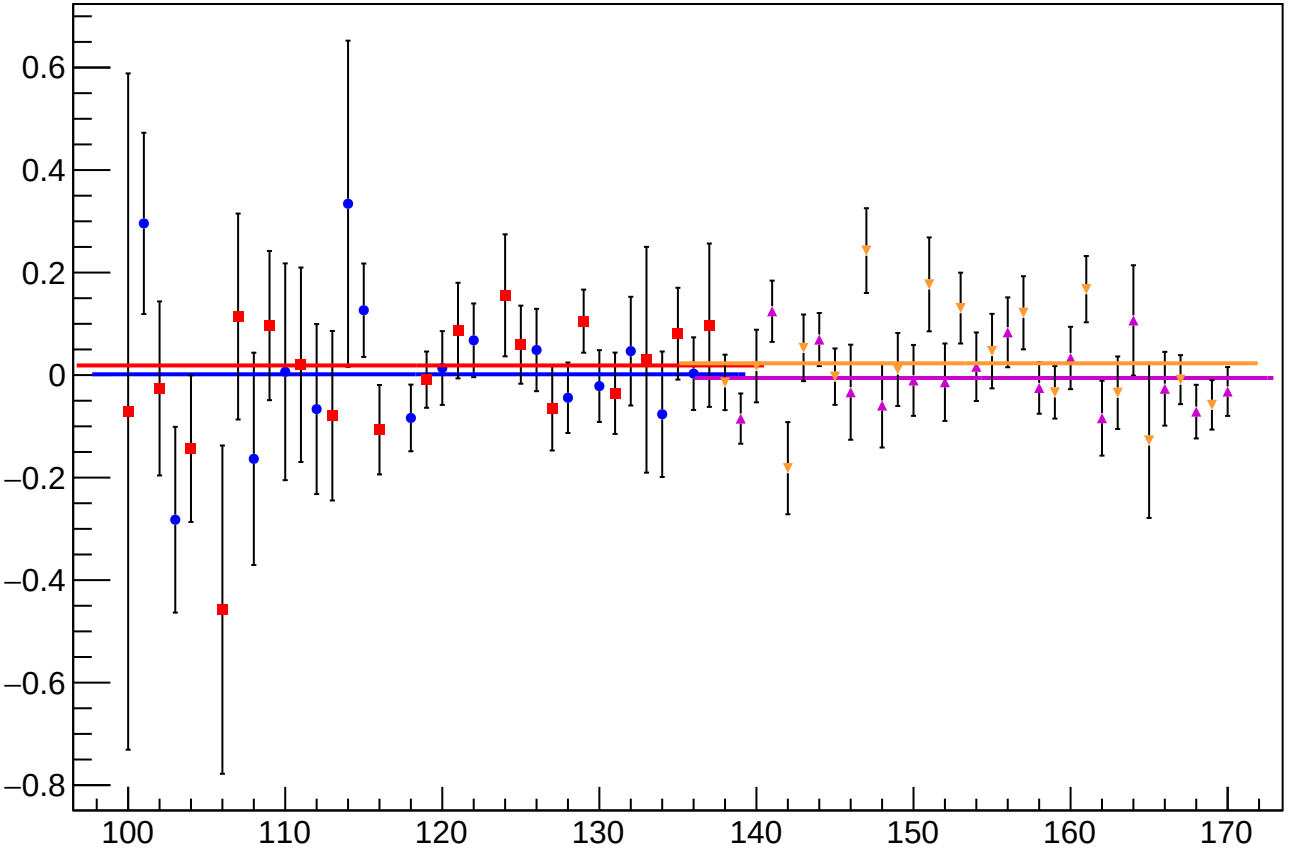
Left In: 0.000+/-0.000 $\chi^2$/NDF:2067998.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5775540.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 12099607.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 6290749.8/34

# asym_sam_26_avg_dit_vs_cor_diff_mean vs Slug




Right In: 0.002+/-0.023 $\chi^2$/NDF: 13.1/15

Left Out: 0.023+/-0.016 $\chi^2$/NDF:31.6/16

Right Out: 0.019+/-0.024 $\chi^2$/NDF: 13.1/18

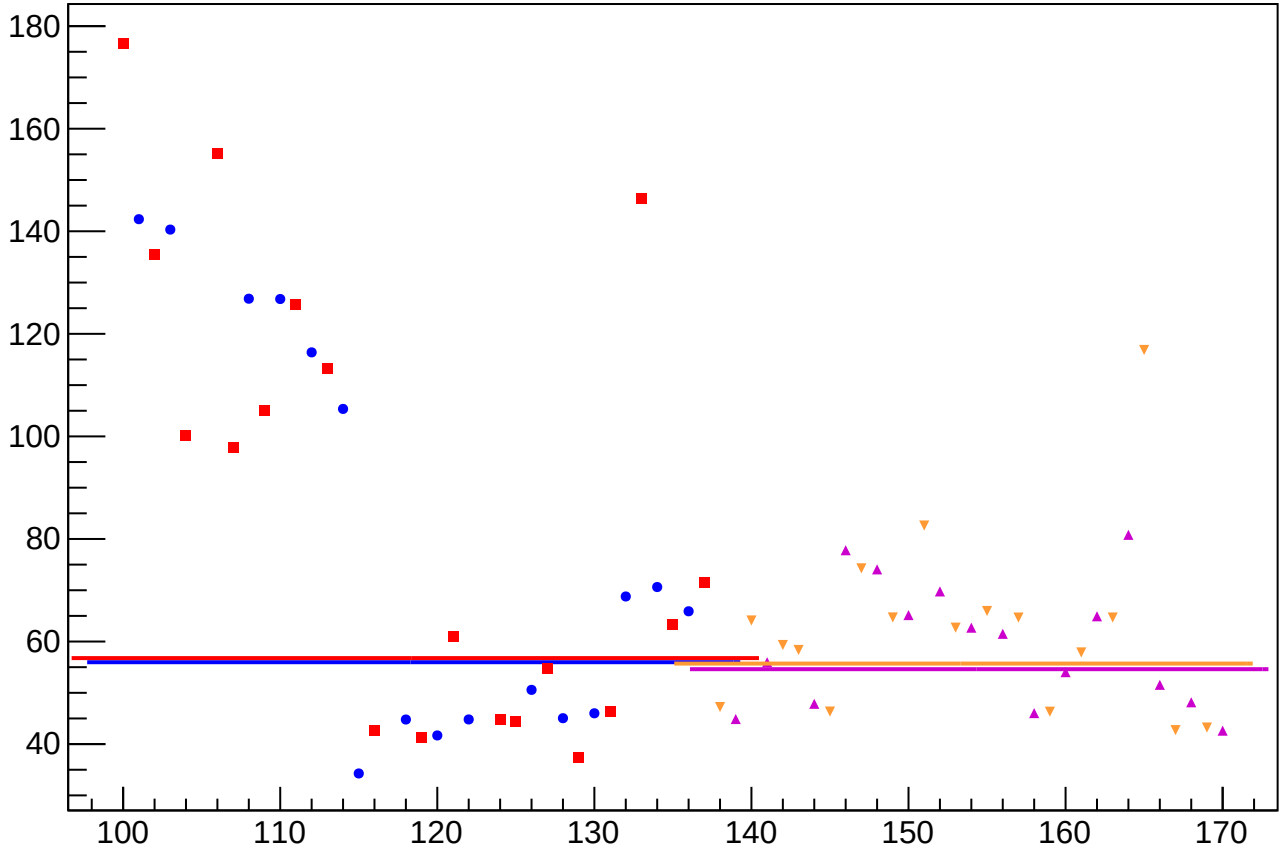
Left In: -0.006+/-0.016 $\chi^2$/NDF:16.6/15

+ sign 0.016+/-0.013 $\chi^2$/NDF: 45.3/32

All: 0.009+/-0.009 $\chi^2$/NDF: 76.3/67

- sign 0.002+/-0.013 $\chi^2$/NDF: 30.4/34

# asym_sam_26_avg_dit_vs_cor_diff_rms vs Slug




Right In: 55.968+/-0.017 $\chi^2$/NDF: 2179829.3/15

Left Out: 55.703+/-0.011 $\chi^2$/NDF:1248968.9/16

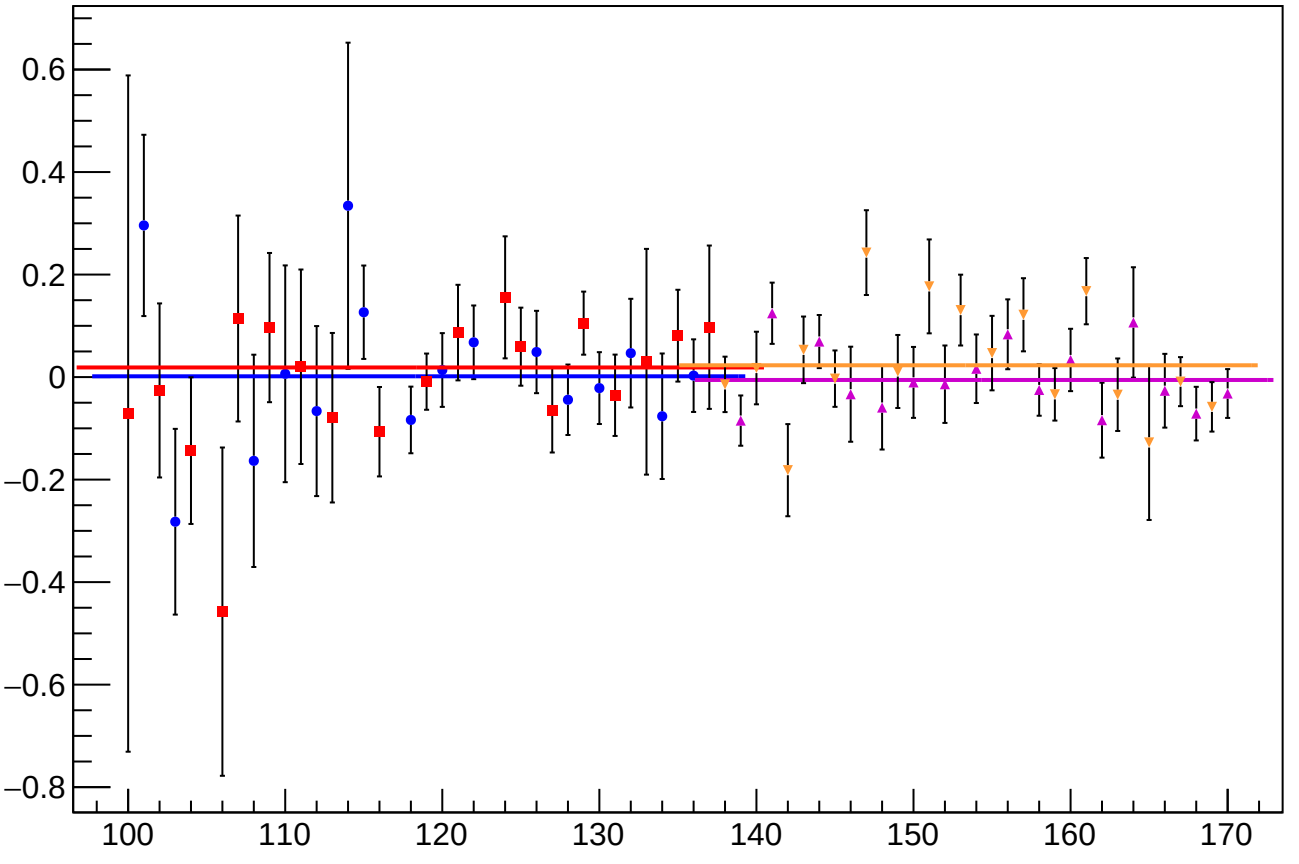
Right Out: 56.770+/-0.017 $\chi^2$/NDF: 2553223.5/18

Left In: 54.608+/-0.011 $\chi^2$/NDF:905663.6/15

+ sign 55.785+/-0.009 $\chi^2$/NDF: 3428975.3/32

All: 55.527+/-0.007 $\chi^2$/NDF: 6901146.1/67

- sign 55.271+/-0.009 $\chi^2$/NDF: 3470613.3/34




Right In: 0.002+/-0.023 $\chi^2$/NDF: 13.1/15

Left Out: 0.023+/-0.016 $\chi^2$/NDF:31.6/16

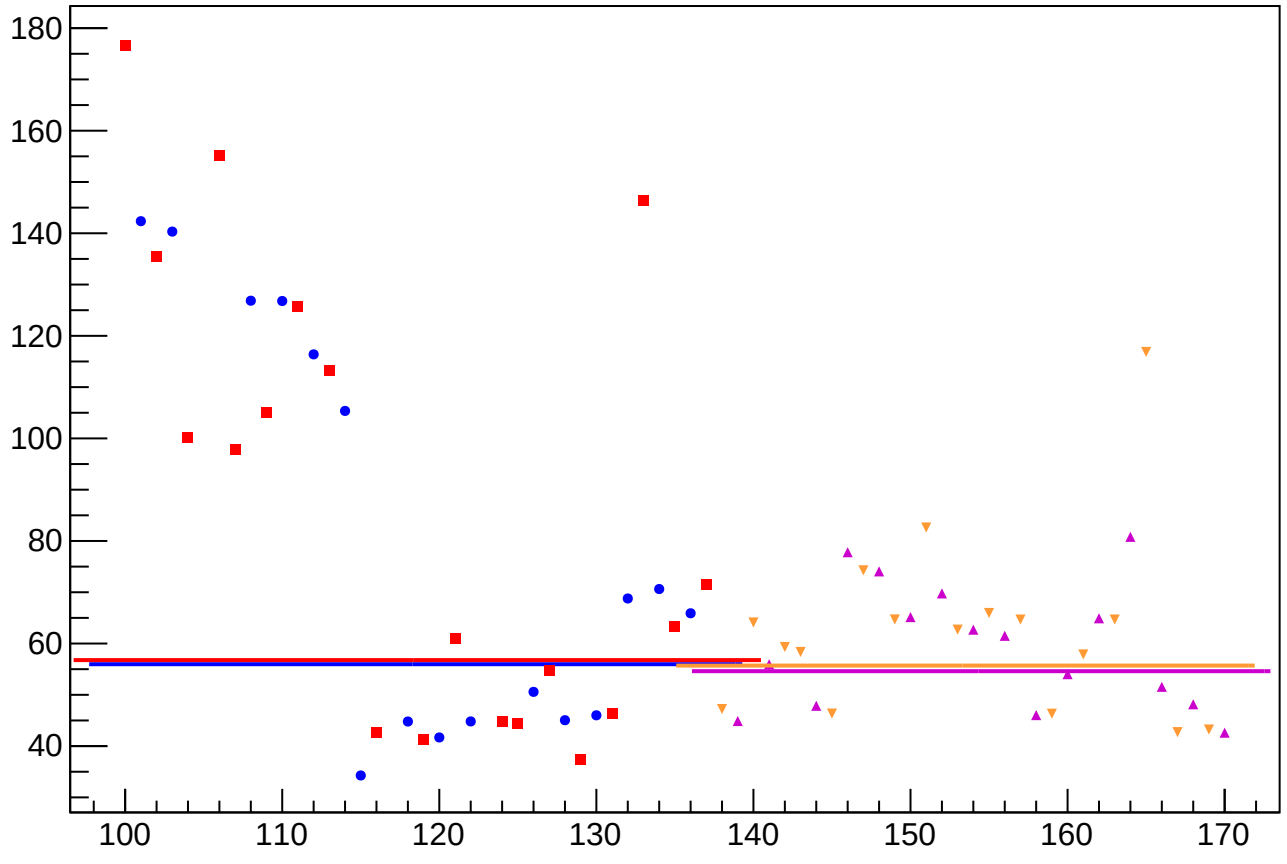
Right Out: 0.019+/-0.024 $\chi^2$/NDF: 13.1/18

Left In: -0.006+/-0.016 $\chi^2$/NDF:16.6/15

+ sign 0.016+/-0.013 $\chi^2$/NDF: 45.3/32

All: 0.009+/-0.009 $\chi^2$/NDF: 76.3/67

- sign 0.002+/-0.013 $\chi^2$/NDF: 30.4/34




Right In: 55.968+/-0.017 $\chi^2$/NDF: 2179829.3/15

Left Out: 55.703+/-0.011 $\chi^2$/NDF:1248968.9/16

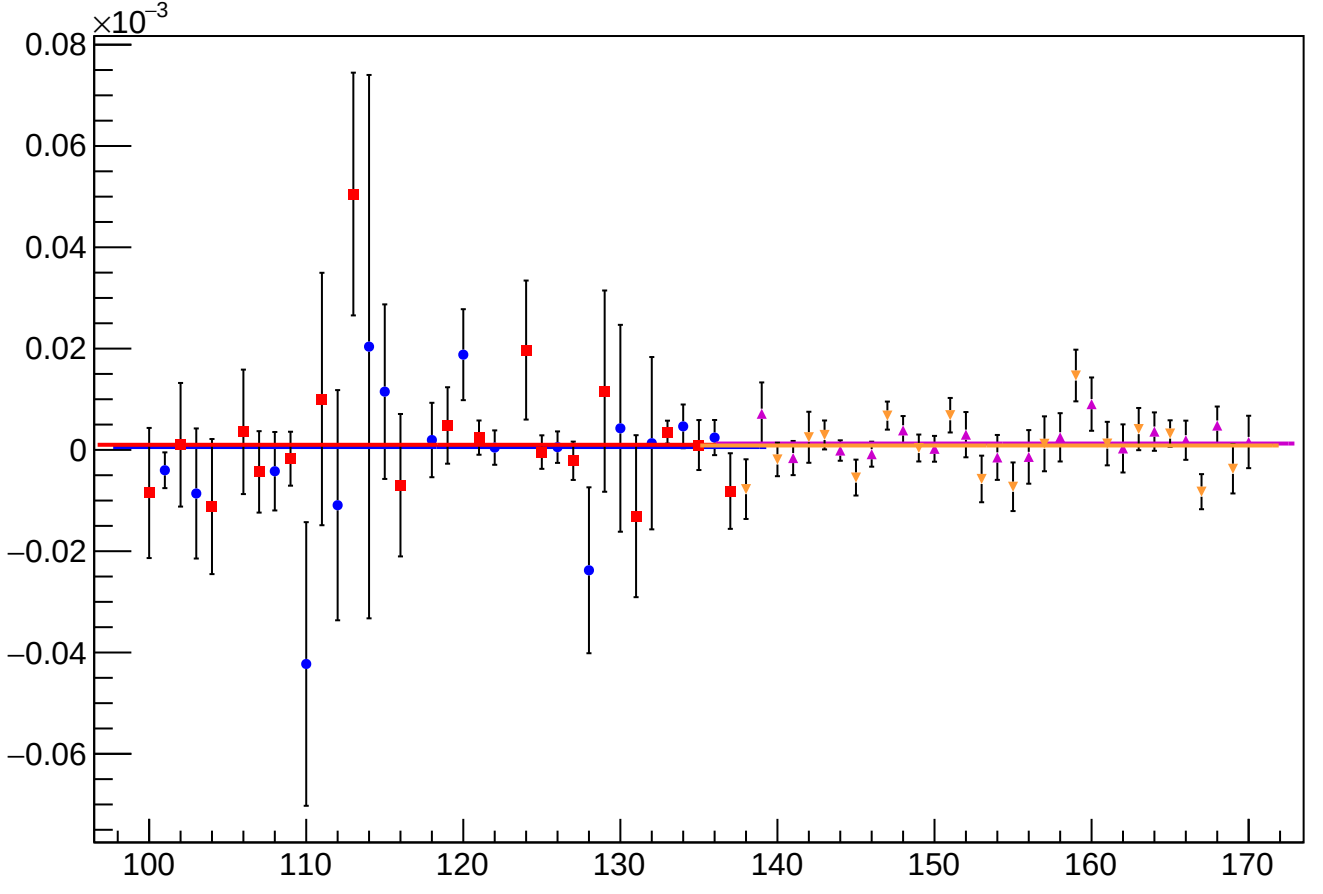
Right Out: 56.770+/-0.017 $\chi^2$/NDF: 2553223.5/18

Left In: 54.608+/-0.011 $\chi^2$/NDF:905663.6/15

+ sign 55.785+/-0.009 $\chi^2$/NDF: 3428975.3/32

All: 55.527+/-0.007 $\chi^2$/NDF: 6901146.1/67

- sign 55.271+/-0.009 $\chi^2$/NDF: 3470613.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 13.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:35.8/16

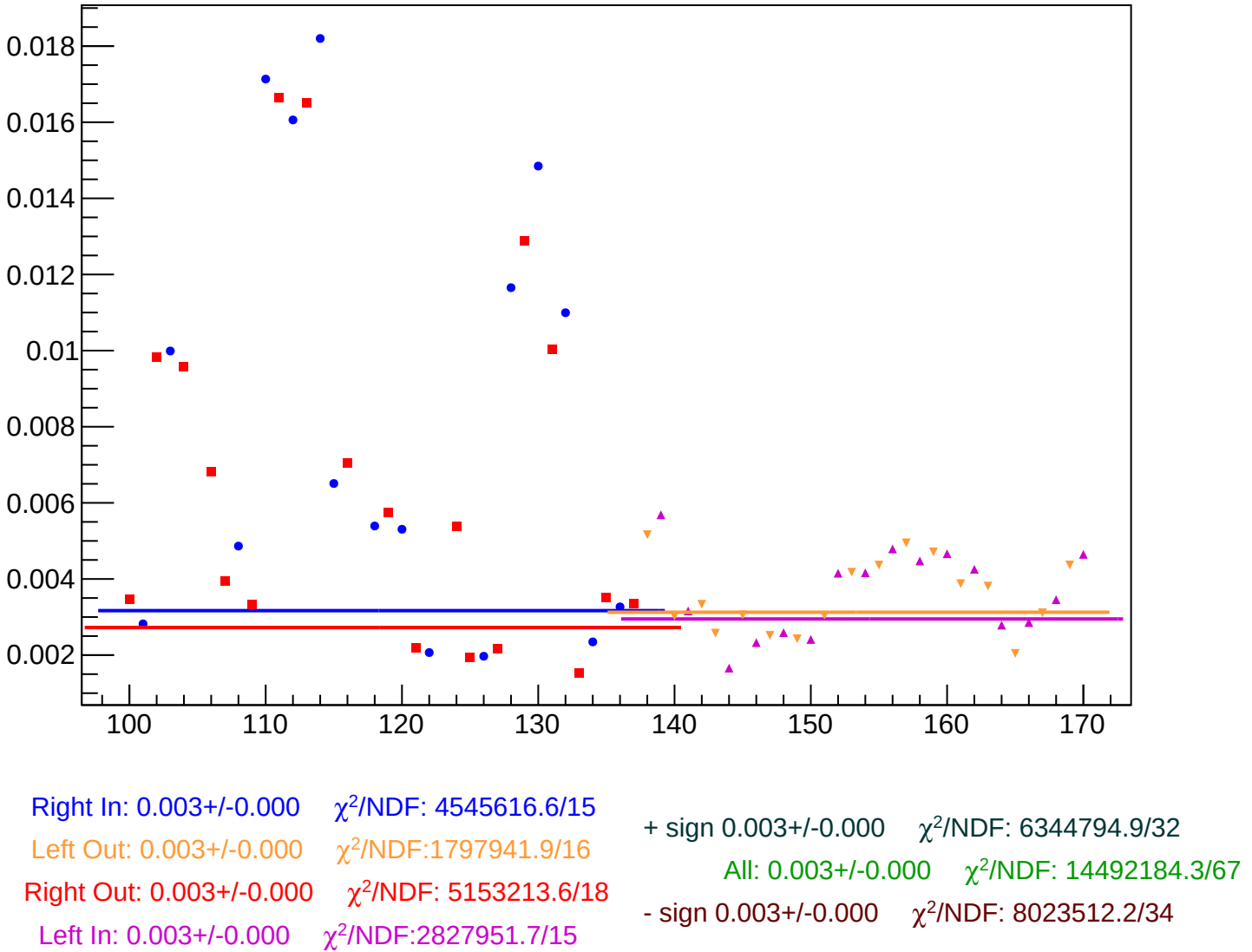
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 13.8/18

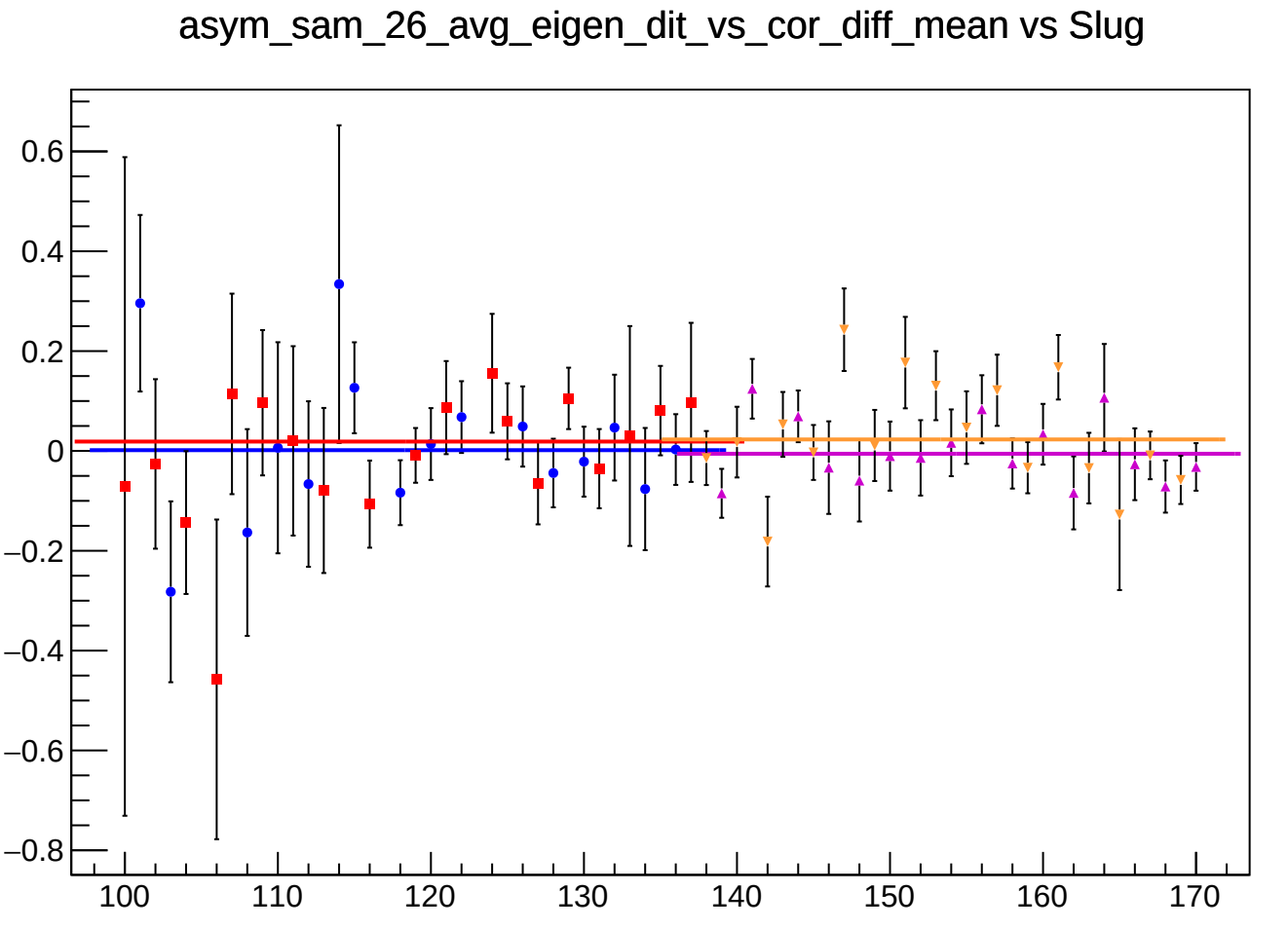
Left In: 0.000+/-0.000 $\chi^2$/NDF:8.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 49.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 71.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 22.0/34


asym_sam_26_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
100
110
120
130
140
150
160
170
Right In: 0.003+/-0.000 χ²/NDF: 4545616.6/15
Left Out: 0.003+/-0.000 χ²/NDF:1797941.9/16
Right Out: 0.003+/-0.000 χ²/NDF: 5153213.6/18
Left In: 0.003+/-0.000 χ²/NDF:2827951.7/15
+ sign 0.003+/-0.000 χ²/NDF: 6344794.9/32
All: 0.003+/-0.000 χ²/NDF: 14492184.3/67
- sign 0.003+/-0.000 χ²/NDF: 8023512.2/34




Right In: 0.002+/-0.023 $\chi^2$/NDF: 13.1/15

Left Out: 0.023+/-0.016 $\chi^2$/NDF:31.6/16

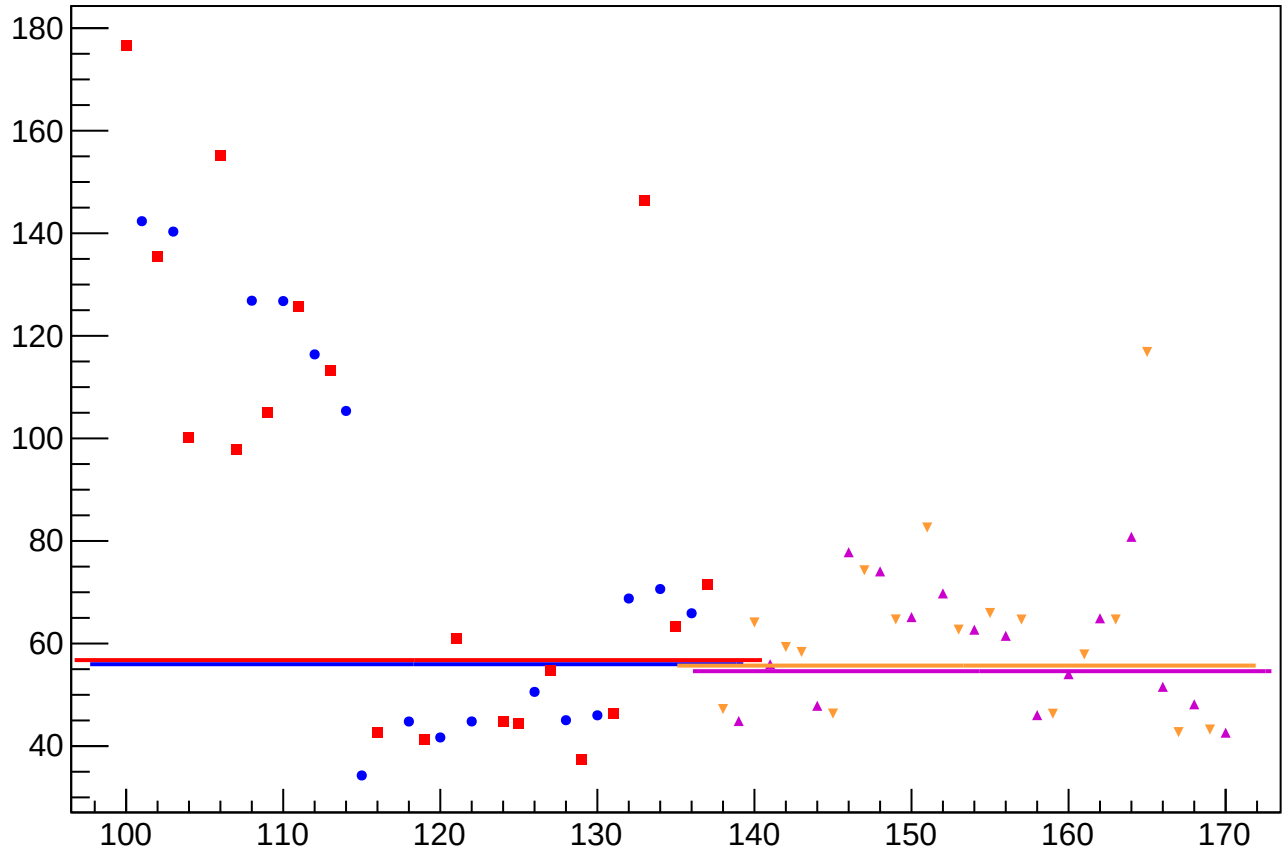
Right Out: 0.019+/-0.024 $\chi^2$/NDF: 13.1/18

Left In: -0.006+/-0.016 $\chi^2$/NDF:16.6/15

+ sign 0.016+/-0.013 $\chi^2$/NDF: 45.3/32

All: 0.009+/-0.009 $\chi^2$/NDF: 76.3/67

- sign 0.002+/-0.013 $\chi^2$/NDF: 30.4/34




Right In: 55.968+/-0.017 $\chi^2$/NDF: 2179757.6/15

Left Out: 55.703+/-0.011 $\chi^2$/NDF:1248946.8/16

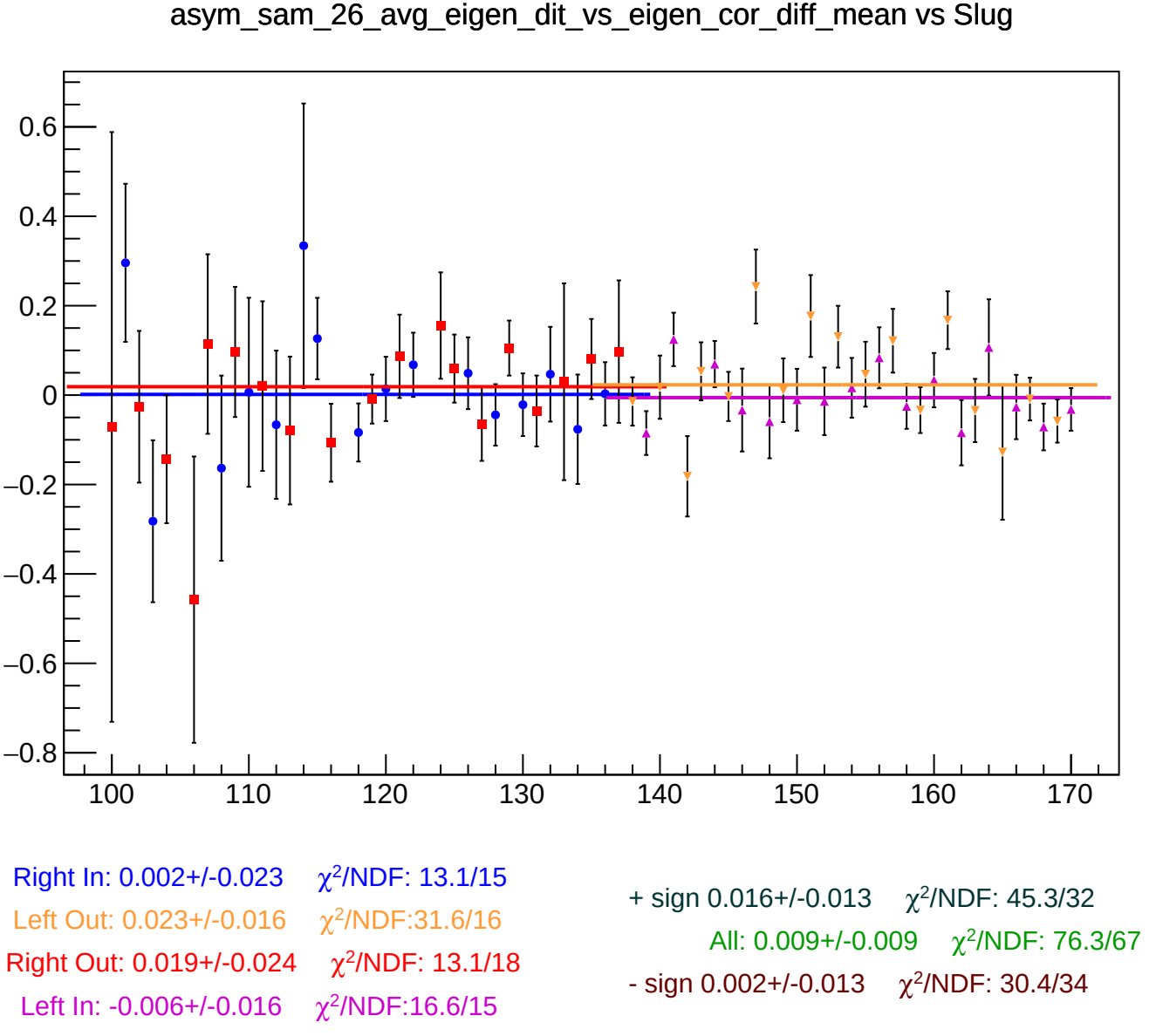
Right Out: 56.770+/-0.017 $\chi^2$/NDF: 2553168.3/18

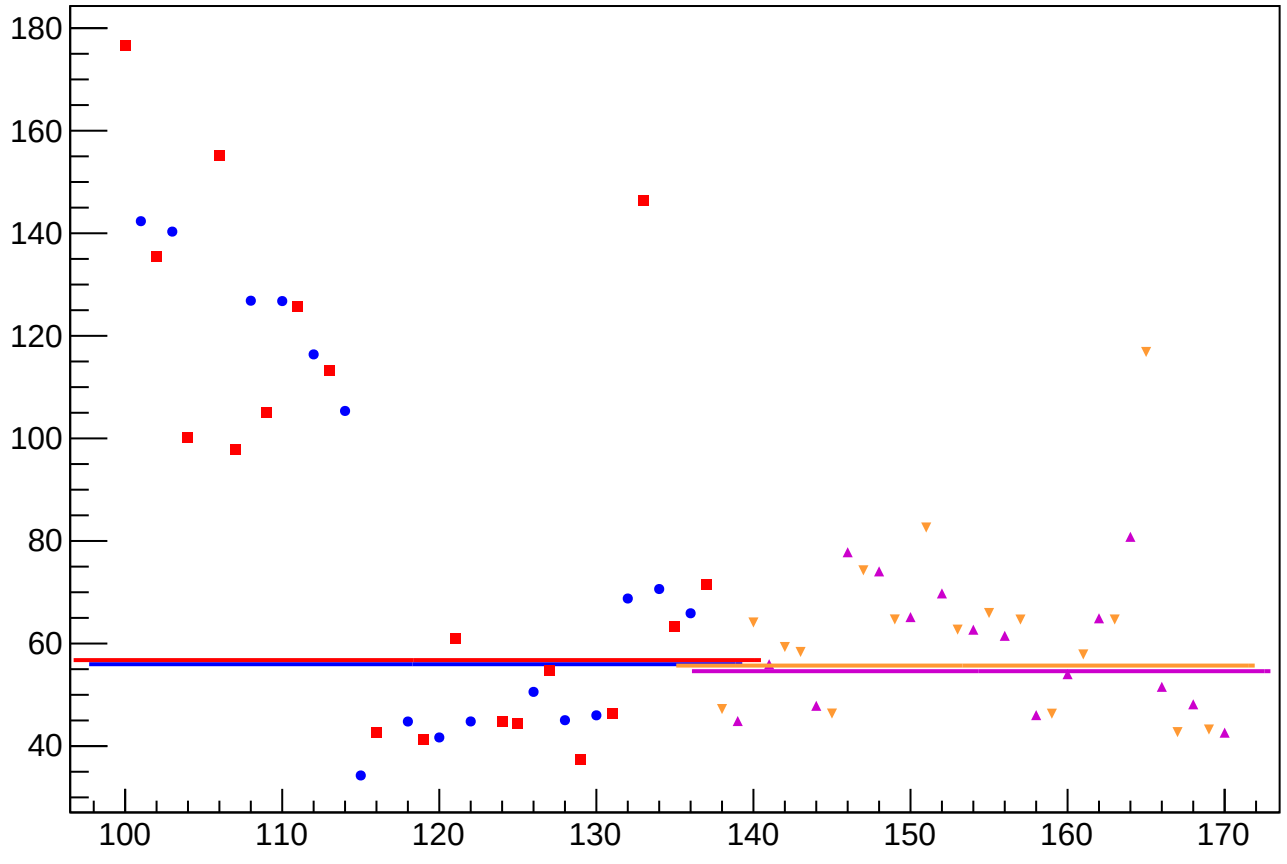
Left In: 54.609+/-0.011 $\chi^2$/NDF:905628.4/15

+ sign 55.786+/-0.009 $\chi^2$/NDF: 3428880.3/32

All: 55.527+/-0.007 $\chi^2$/NDF: 6900946.2/67

- sign 55.271+/-0.009 $\chi^2$/NDF: 3470508.9/34


asym_sam_26_avg_eigen_dit_vs_eigen_cor_diff_mean vs Slug
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
100
110
120
130
140
150
160
170
Right In: 0.002+/-0.023 χ²/NDF: 13.1/15
Left Out: 0.023+/-0.016 χ²/NDF:31.6/16
Right Out: 0.019+/-0.024 χ²/NDF: 13.1/18
Left In: -0.006+/-0.016 χ²/NDF:16.6/15
+ sign 0.016+/-0.013 χ²/NDF: 45.3/32
All: 0.009+/-0.009 χ²/NDF: 76.3/67
- sign 0.002+/-0.013 χ²/NDF: 30.4/34




Right In: 55.968+/-0.017 $\chi^2$/NDF: 2179757.6/15

Left Out: 55.703+/-0.011 $\chi^2$/NDF:1248946.8/16

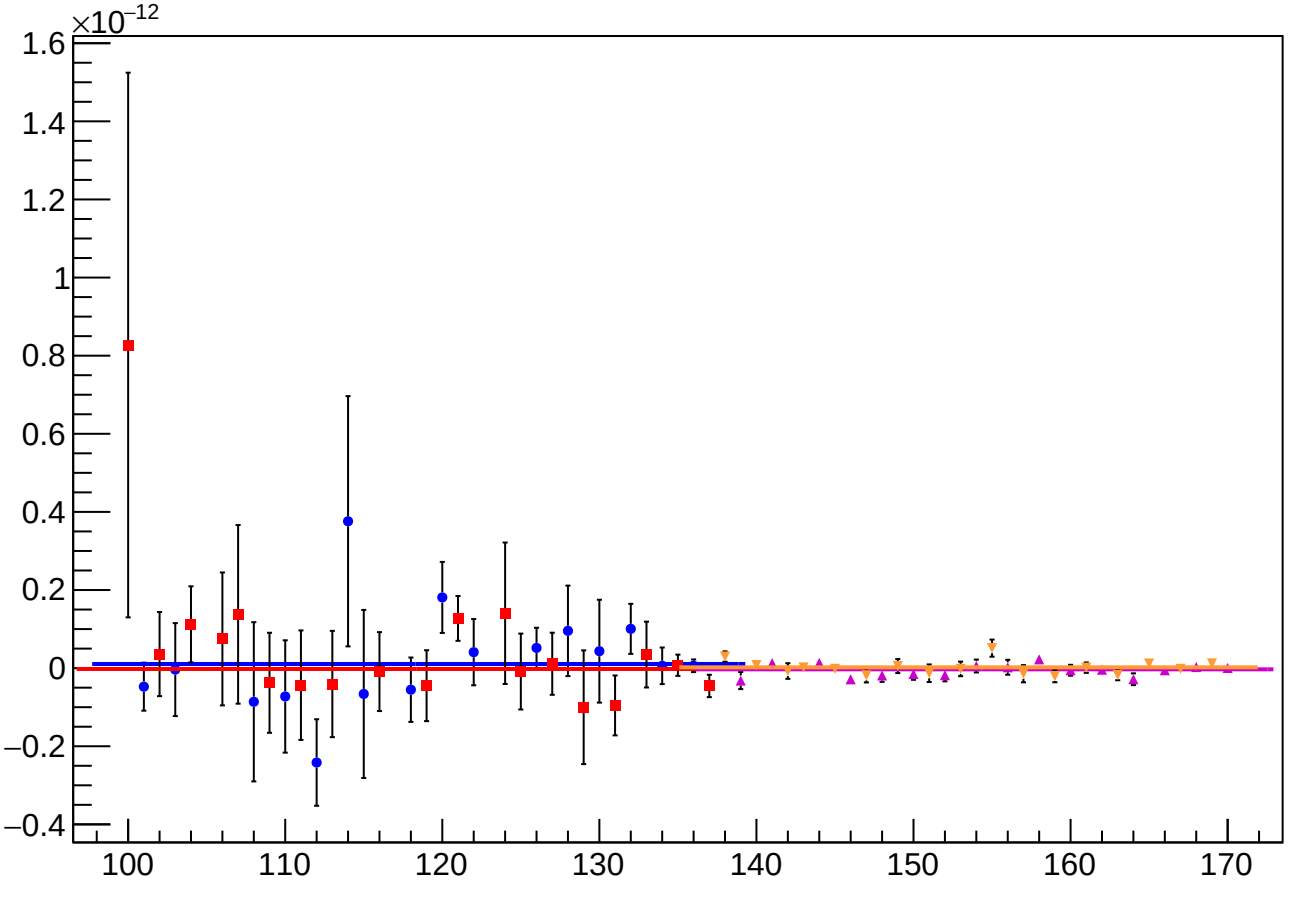
Right Out: 56.770+/-0.017 $\chi^2$/NDF: 2553168.3/18

Left In: 54.609+/-0.011 $\chi^2$/NDF:905628.4/15

\+ sign 55.786+/-0.009 $\chi^2$/NDF: 3428880.3/32

All: 55.527+/-0.007 $\chi^2$/NDF: 6900946.2/67

\- sign 55.271+/-0.009 $\chi^2$/NDF: 3470508.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 15.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:19.5/16

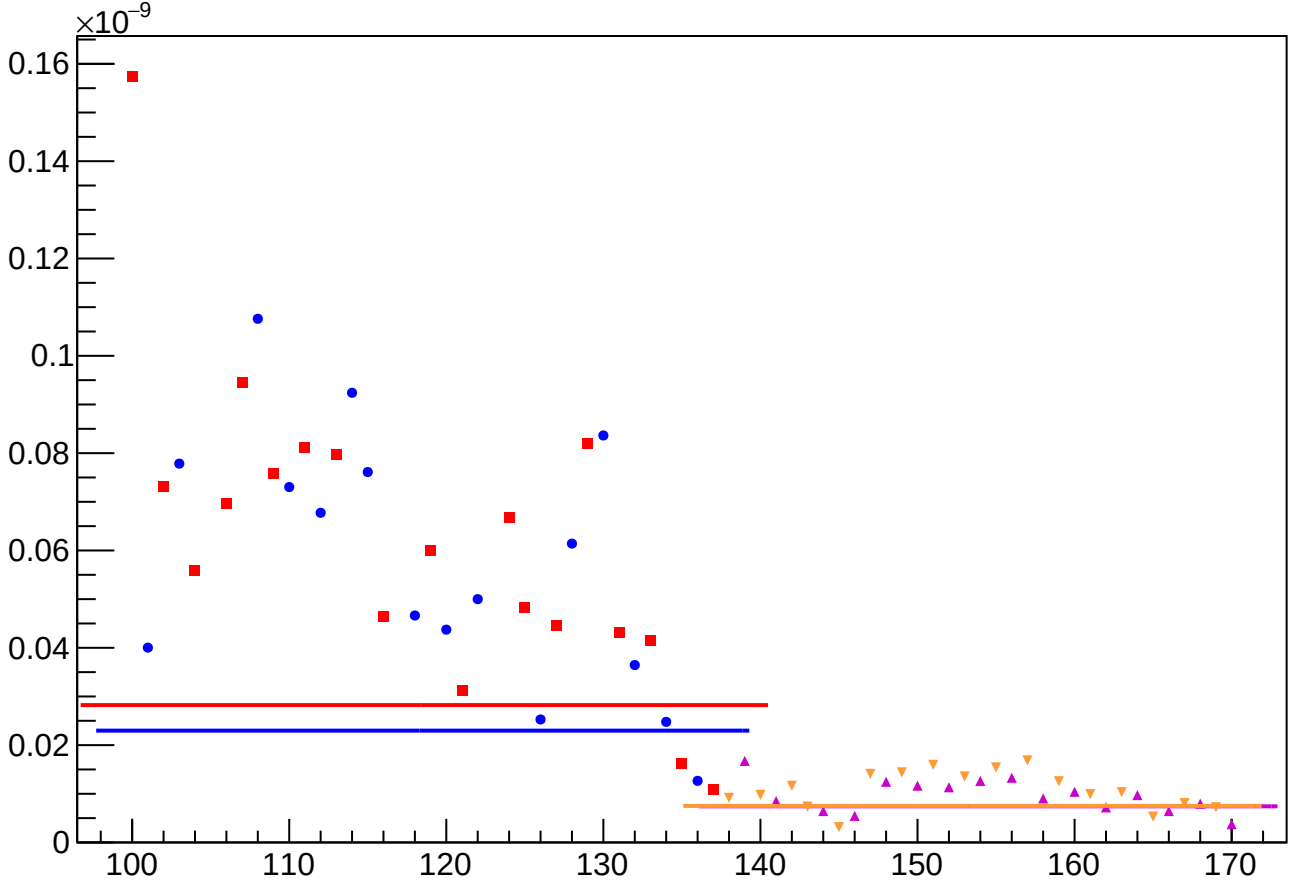
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 14.3/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:28.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 35.5/32

All: -0.000+/-0.000 $\chi^2$/NDF: 80.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 42.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3731982.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:3819860.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3820523.4/18

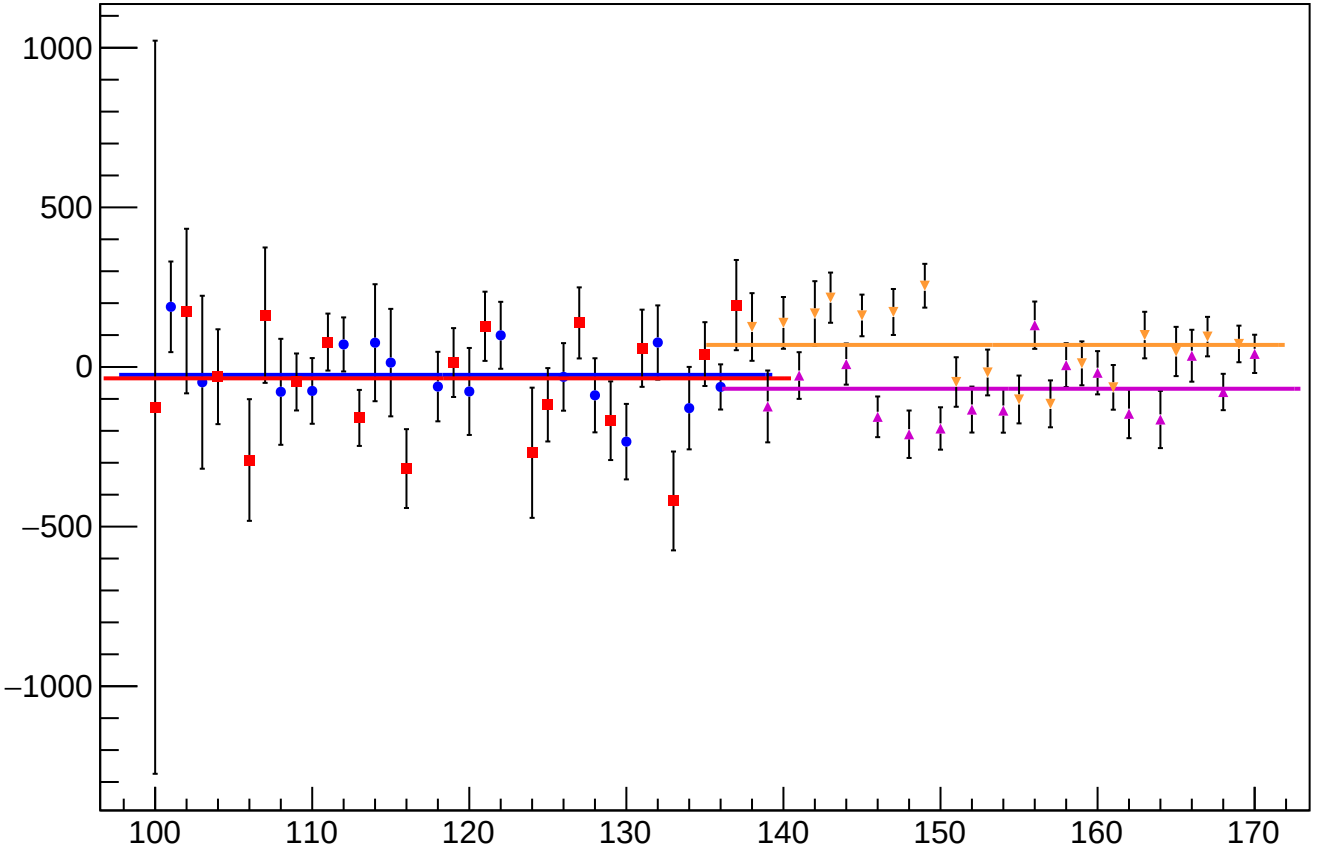
Left In: 0.000+/-0.000 $\chi^2$/NDF:2350569.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 10274753.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 19940500.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 9663110.1/34

# reg_asym_sam_37_avg_mean vs Slug




Right In: -24.632+/-28.913 $\chi^2$/NDF: 11.0/15

Left Out: 69.171+/-17.670 $\chi^2$/NDF:36.8/16

Right Out: -35.582+/-28.454 $\chi^2$/NDF: 30.1/18

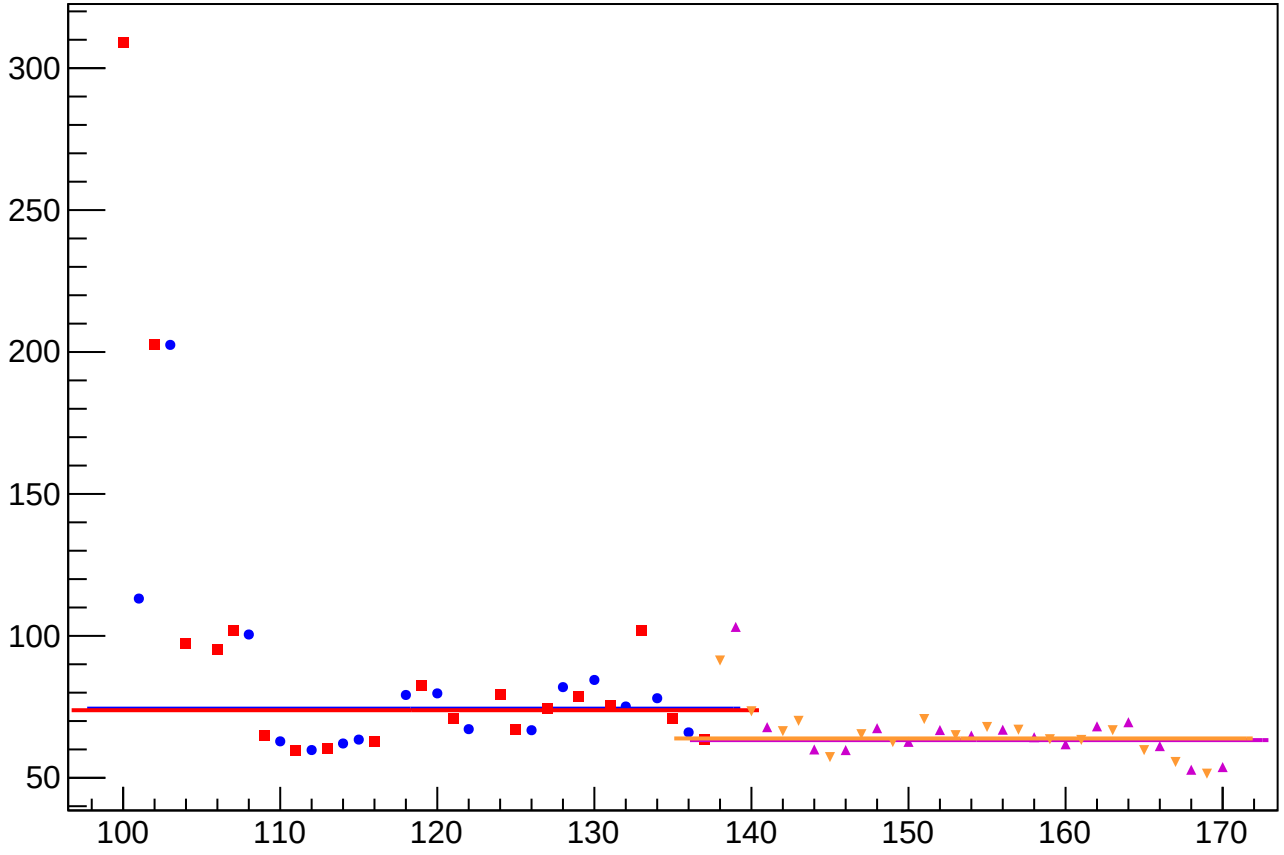
Left In: -68.151+/-17.655 $\chi^2$/NDF:29.0/15

+ sign 43.662+/-15.077 $\chi^2$/NDF: 55.5/32

All: -7.976+/-10.635 $\chi^2$/NDF: 138.9/67

- sign -59.098+/-15.002 $\chi^2$/NDF: 60.0/34

# reg_asym_sam_37_avg_rms vs Slug




Right In: 74.369+/-0.020 $\chi^2$/NDF: 827583.1/15

Left Out: 63.870+/-0.012 $\chi^2$/NDF:361798.8/16

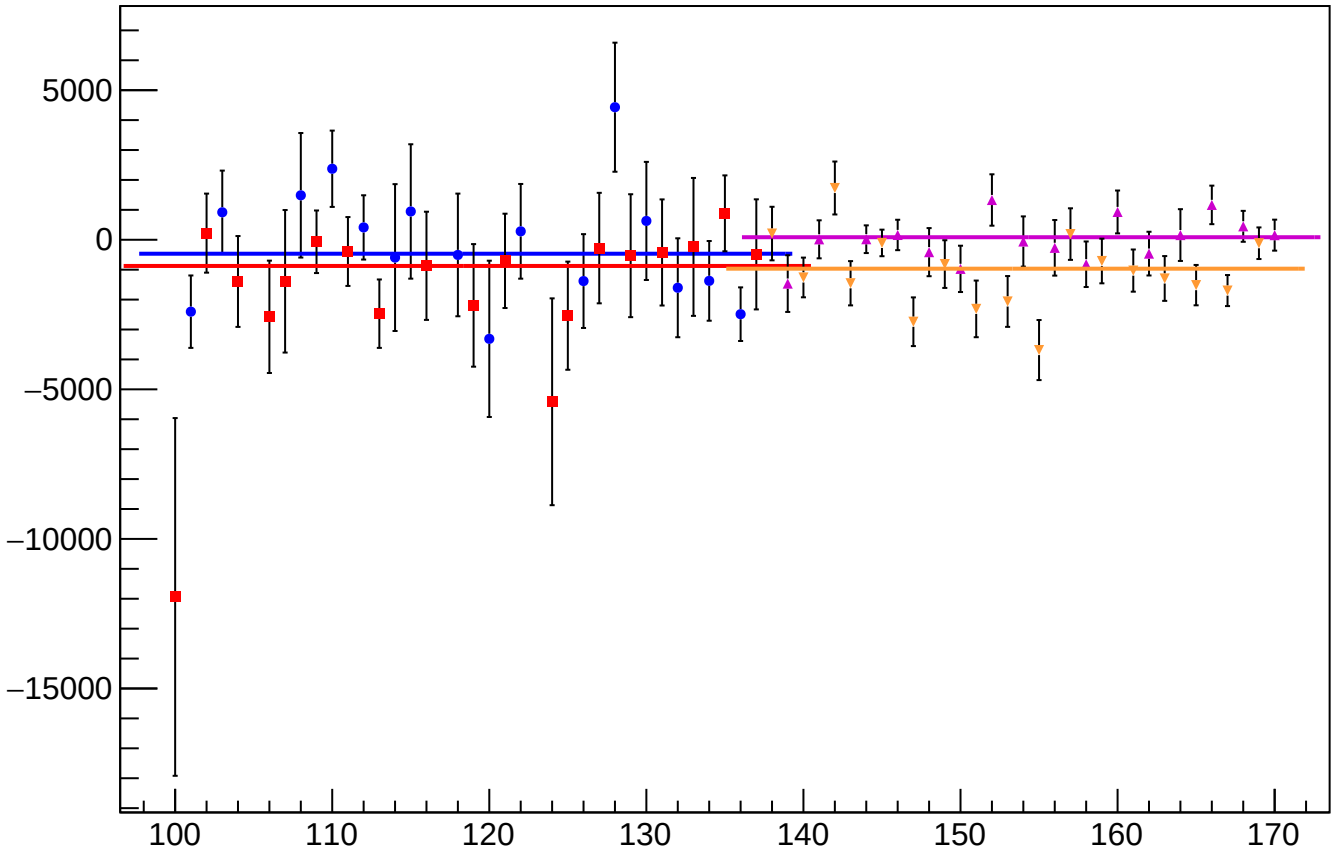
Right Out: 73.815+/-0.020 $\chi^2$/NDF: 931949.0/18

Left In: 63.282+/-0.012 $\chi^2$/NDF:425822.3/15

+ sign 66.726+/-0.011 $\chi^2$/NDF: 1381369.0/32

All: 66.466+/-0.008 $\chi^2$/NDF: 2938196.6/67

- sign 66.210+/-0.011 $\chi^2$/NDF: 1555651.1/34




Right In: -466.524+/-375.030 $\chi^2$/NDF: 23.7/15

Left Out: -966.688+/-169.729 $\chi^2$/NDF:38.6/16

Right Out: -875.351+/-372.239 $\chi^2$/NDF: 13.1/18

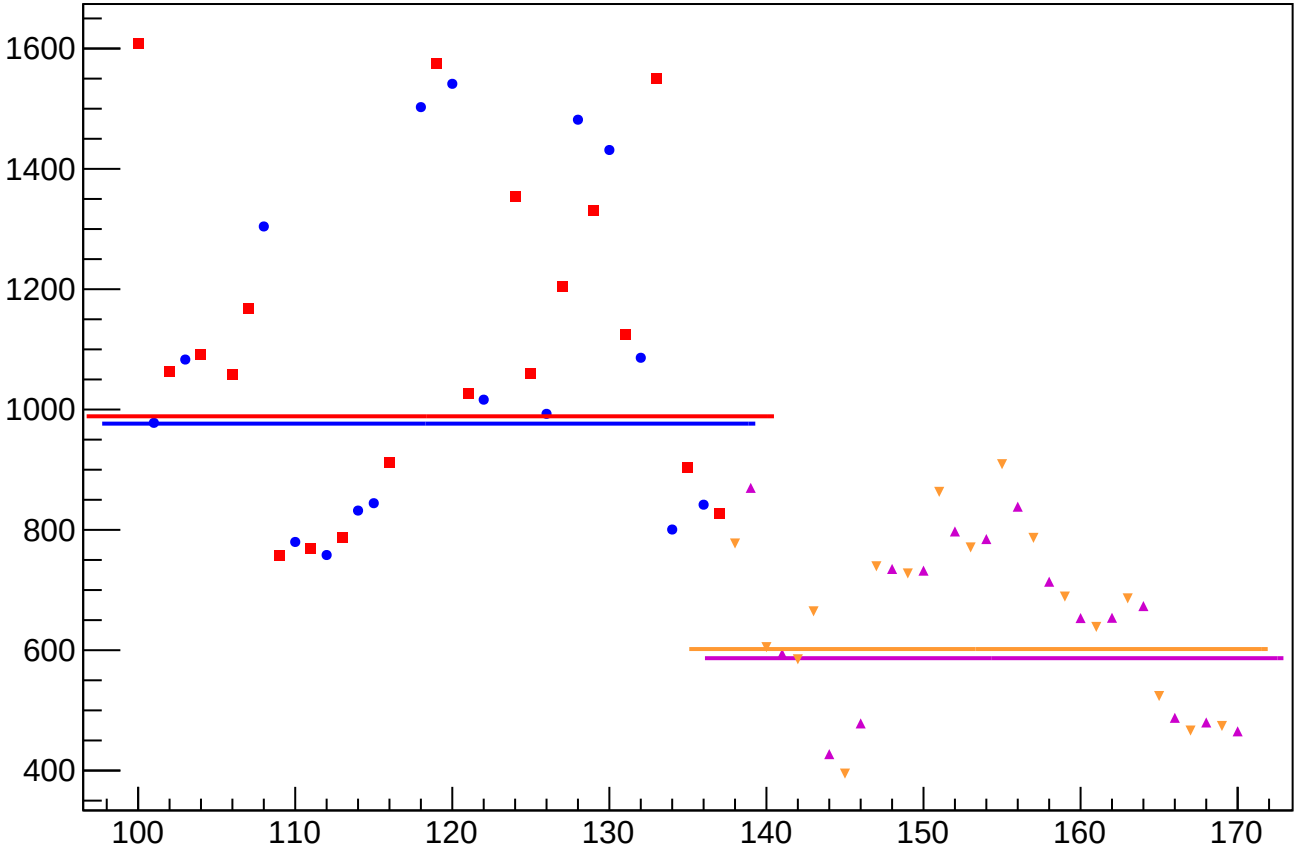
Left In: 85.101+/-166.581 $\chi^2$/NDF:14.0/15

+ sign -881.659+/-154.630 $\chi^2$/NDF: 63.7/32

All: -471.620+/-108.416 $\chi^2$/NDF: 110.1/67

- sign -75.152+/-152.050 $\chi^2$/NDF: 32.6/34

# asym_sam_37_avg_reg_correction_rms vs Slug




Right In: 976.583+/-0.265 $\chi^2$/NDF: 736605.1/15

Left Out: 601.942+/-0.120 $\chi^2$/NDF:1482675.5/16

Right Out: 988.763+/-0.263 $\chi^2$/NDF: 715703.4/18

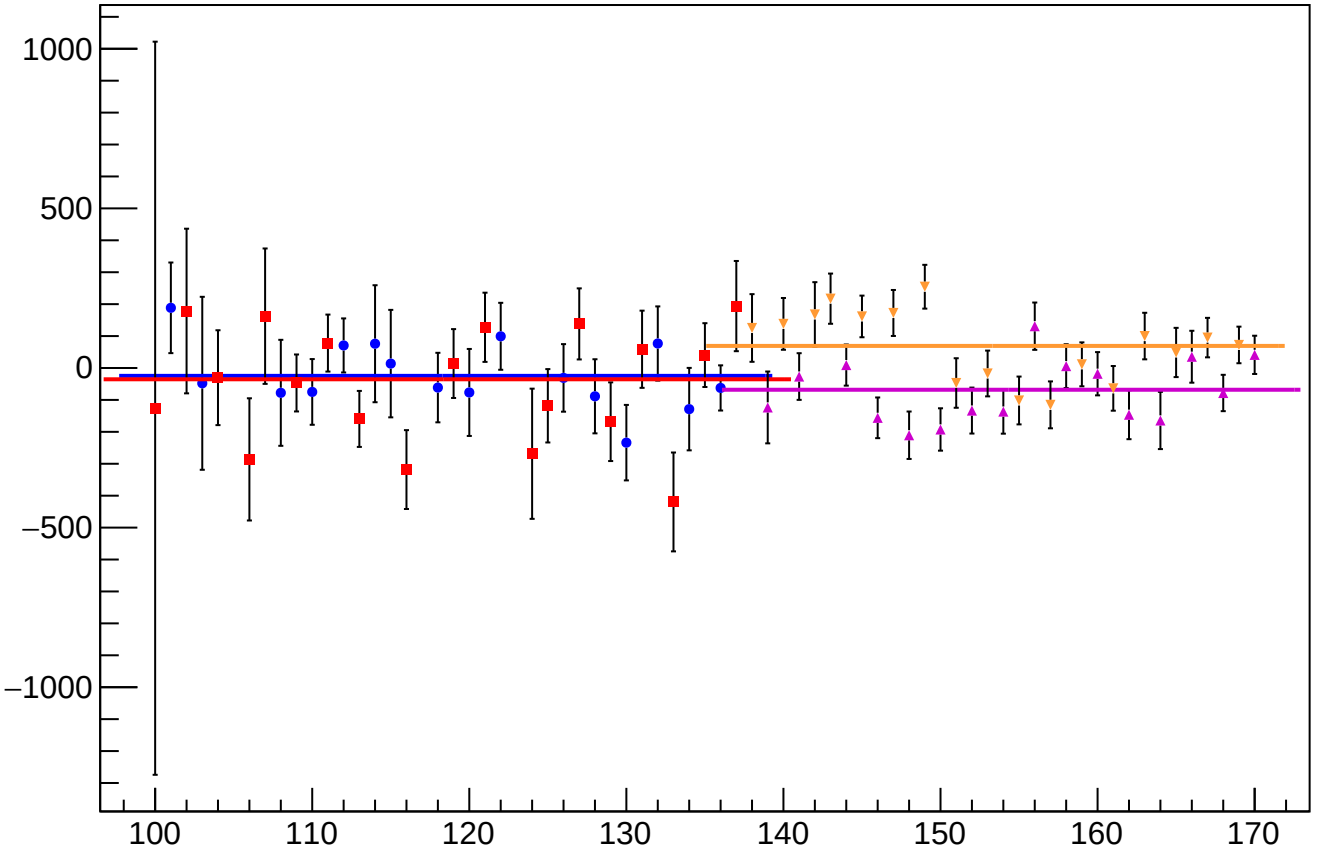
Left In: 586.743+/-0.118 $\chi^2$/NDF:1377112.5/15

+ sign 665.632+/-0.109 $\chi^2$/NDF: 3875830.5/32

All: 659.627+/-0.077 $\chi^2$/NDF: 7918167.3/67

- sign 653.821+/-0.108 $\chi^2$/NDF: 4036404.4/34

# cor_asym_sam_37_avg_mean vs Slug




Right In: -24.640+/-28.913 $\chi^2$/NDF: 11.0/15

Left Out: 69.176+/-17.670 $\chi^2$/NDF:36.8/16

Right Out: -35.383+/-28.457 $\chi^2$/NDF: 30.0/18

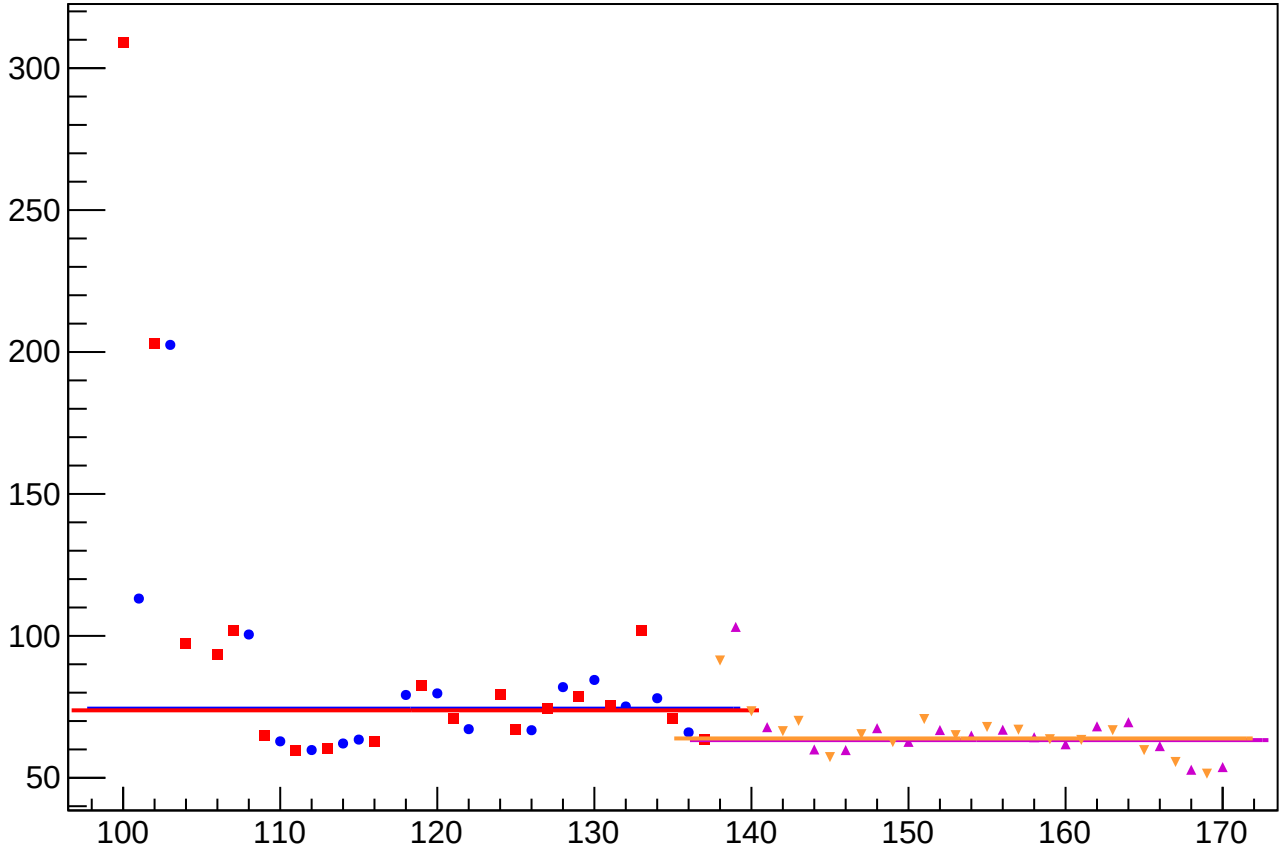
Left In: -68.150+/-17.655 $\chi^2$/NDF:29.0/15

+ sign 43.663+/-15.077 $\chi^2$/NDF: 55.5/32

All: -7.946+/-10.635 $\chi^2$/NDF: 138.8/67

- sign -59.043+/-15.002 $\chi^2$/NDF: 60.0/34

# cor_asym_sam_37_avg_rms vs Slug




Right In: 74.369+/-0.020 $\chi^2$/NDF: 827585.2/15

Left Out: 63.870+/-0.012 $\chi^2$/NDF:361798.8/16

Right Out: 73.773+/-0.020 $\chi^2$/NDF: 928163.8/18

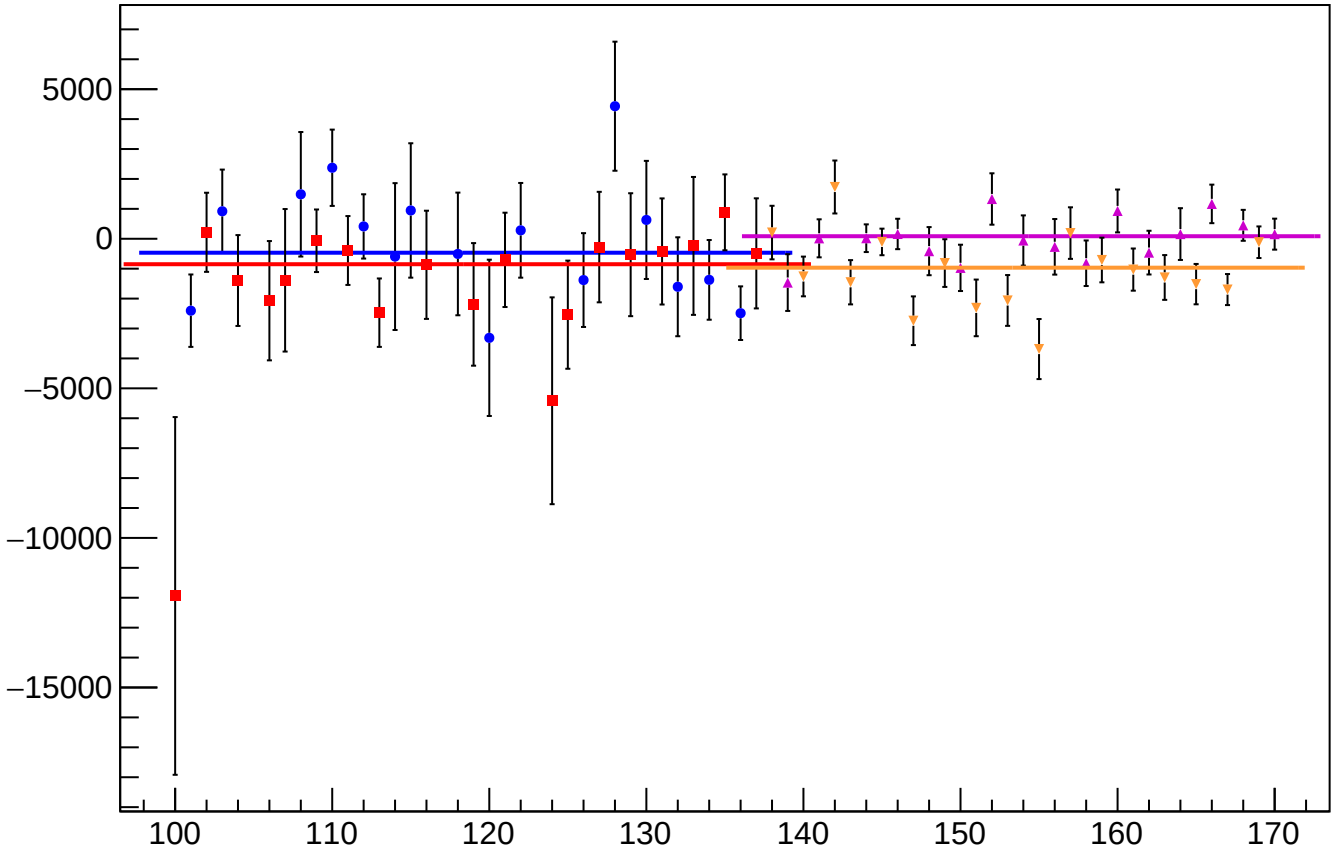
Left In: 63.282+/-0.012 $\chi^2$/NDF:425822.3/15

+ sign 66.726+/-0.011 $\chi^2$/NDF: 1381370.9/32

All: 66.460+/-0.008 $\chi^2$/NDF: 2932870.5/67

- sign 66.198+/-0.011 $\chi^2$/NDF: 1550267.5/34

# asym_sam_37_avg_cor_correction_mean vs Slug




Right In: -466.511+/-375.033 $\chi^2$/NDF: 23.7/15

Left Out: -966.682+/-169.729 $\chi^2$/NDF:38.6/16

Right Out: -850.757+/-373.092 $\chi^2$/NDF: 12.6/18

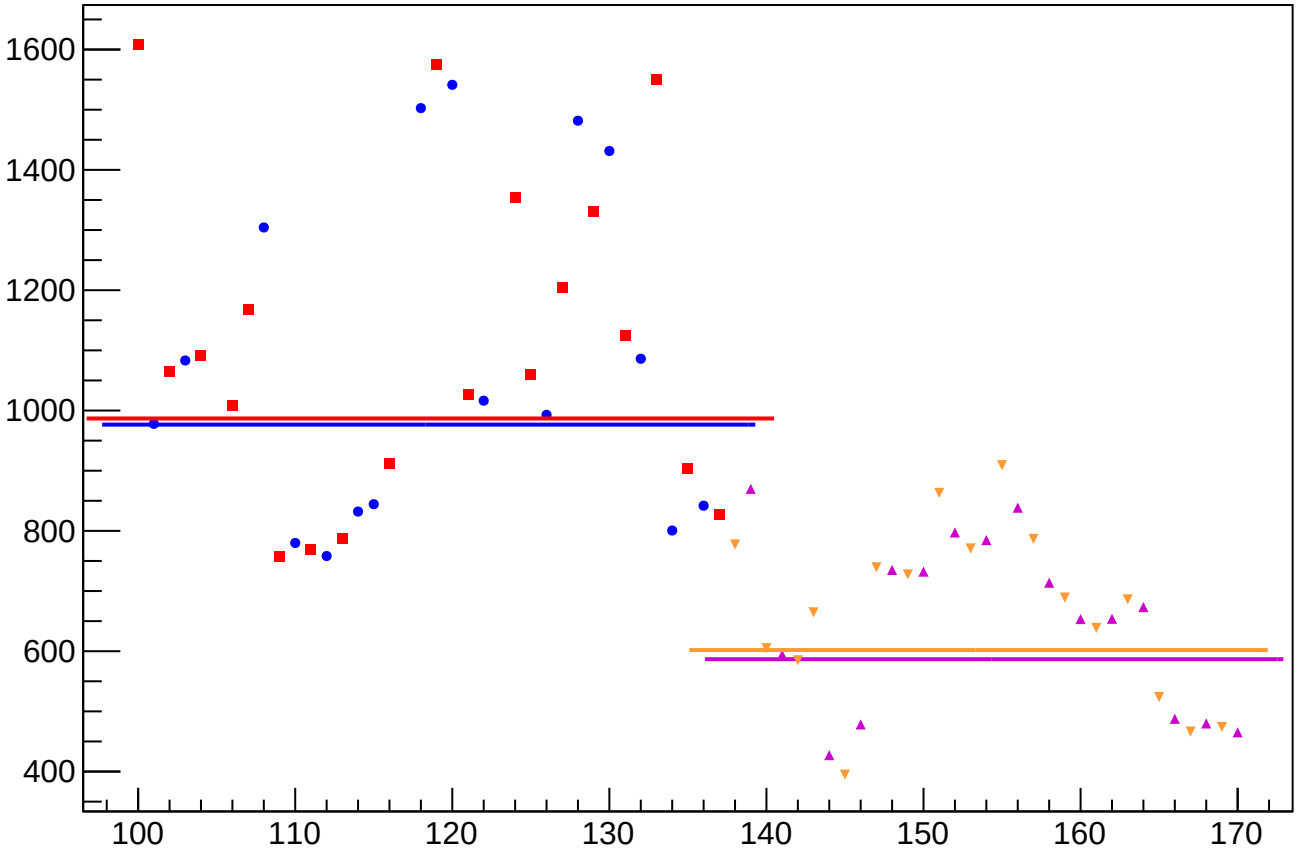
Left In: 85.101+/-166.581 $\chi^2$/NDF:14.0/15

+ sign -881.653+/-154.630 $\chi^2$/NDF: 63.7/32

All: -469.383+/-108.437 $\chi^2$/NDF: 109.5/67

- sign -70.453+/-152.108 $\chi^2$/NDF: 31.8/34

# asym_sam_37_avg_cor_correction_rms vs Slug




Right In: 976.589+/-0.265 $\chi^2$/NDF: 736628.5/15

Left Out: 601.942+/-0.120 $\chi^2$/NDF:1482677.0/16

Right Out: 986.823+/-0.264 $\chi^2$/NDF: 713316.0/18

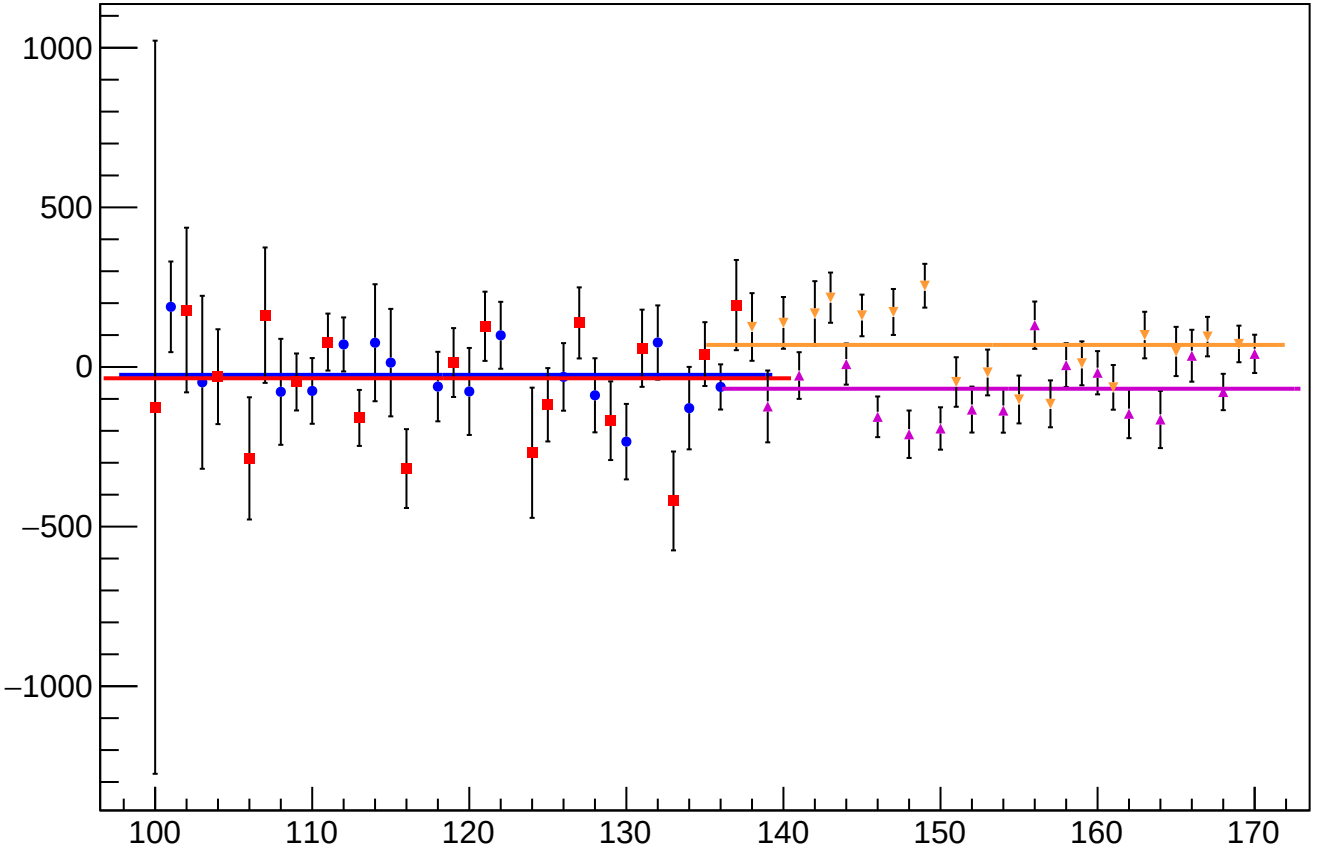
Left In: 586.743+/-0.118 $\chi^2$/NDF:1377112.9/15

+ sign 665.632+/-0.109 $\chi^2$/NDF: 3875891.0/32

All: 659.335+/-0.077 $\chi^2$/NDF: 7890388.9/67

- sign 653.243+/-0.108 $\chi^2$/NDF: 4007973.2/34

# eigen_cor_asym_sam_37_avg_mean vs Slug




Right In: -24.640+/-28.913 $\chi^2$/NDF: 11.0/15

Left Out: 69.176+/-17.670 $\chi^2$/NDF:36.8/16

Right Out: -35.383+/-28.457 $\chi^2$/NDF: 30.0/18

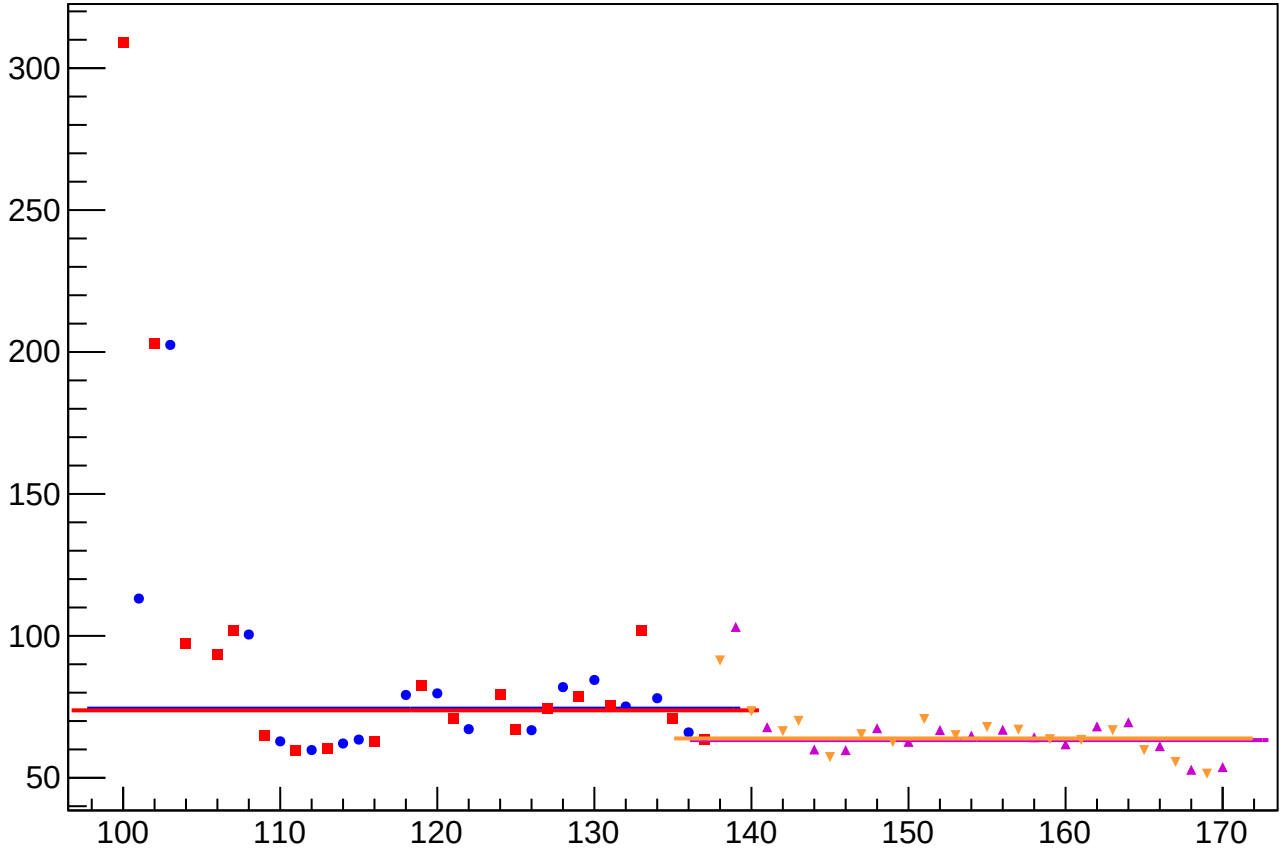
Left In: -68.150+/-17.655 $\chi^2$/NDF:29.0/15

+ sign 43.663+/-15.077 $\chi^2$/NDF: 55.5/32

All: -7.946+/-10.635 $\chi^2$/NDF: 138.8/67

- sign -59.043+/-15.002 $\chi^2$/NDF: 60.0/34

# eigen_cor_asym_sam_37_avg_rms vs Slug




Right In: 74.369+/-0.020 $\chi^2$/NDF: 827585.2/15

Left Out: 63.870+/-0.012 $\chi^2$/NDF:361798.8/16

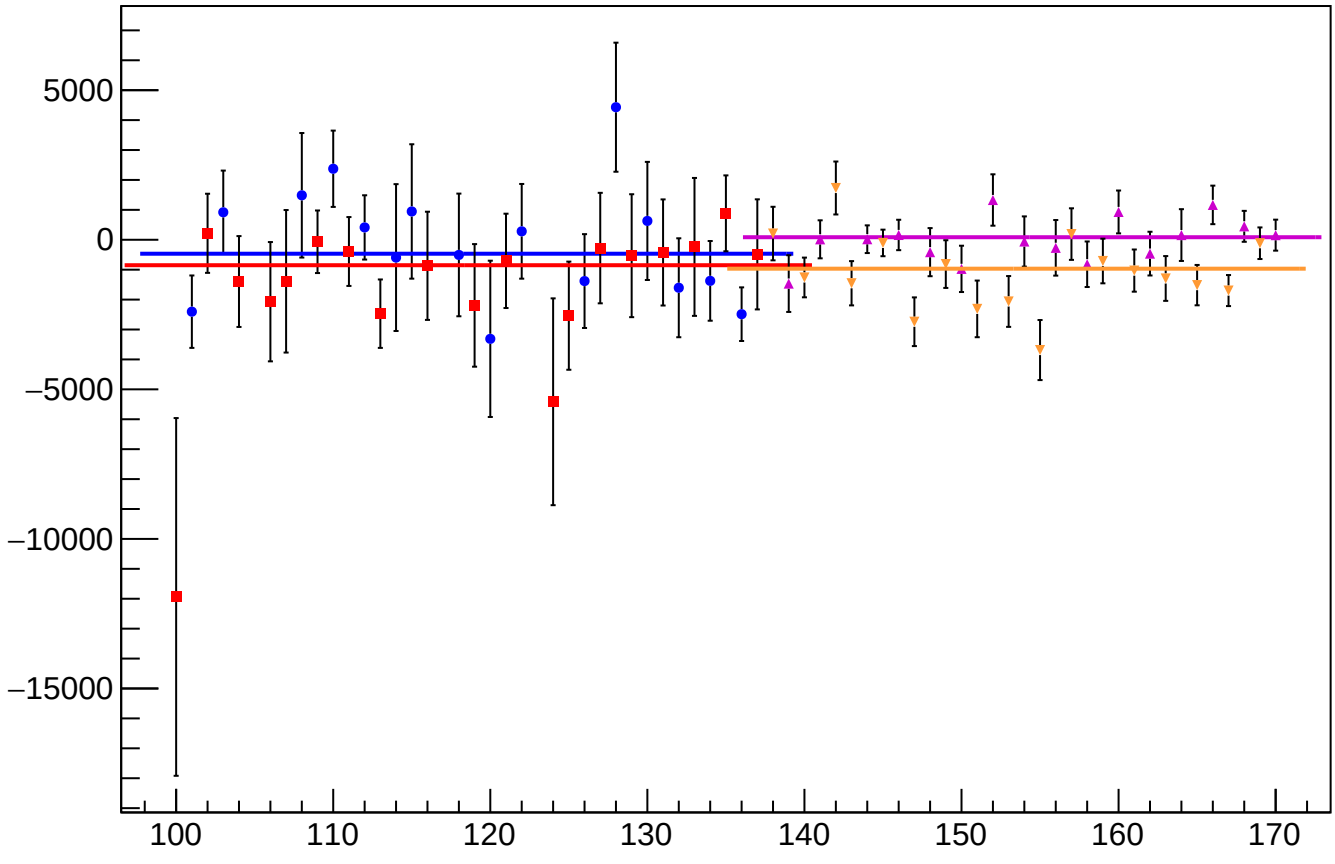
Right Out: 73.773+/-0.020 $\chi^2$/NDF: 928163.8/18

Left In: 63.282+/-0.012 $\chi^2$/NDF:425822.3/15

+ sign 66.726+/-0.011 $\chi^2$/NDF: 1381370.9/32

All: 66.460+/-0.008 $\chi^2$/NDF: 2932870.5/67

- sign 66.198+/-0.011 $\chi^2$/NDF: 1550267.5/34




Right In: -466.511+/-375.033 $\chi^2$/NDF: 23.7/15

Left Out: -966.682+/-169.729 $\chi^2$/NDF:38.6/16

Right Out: -850.757+/-373.092 $\chi^2$/NDF: 12.6/18

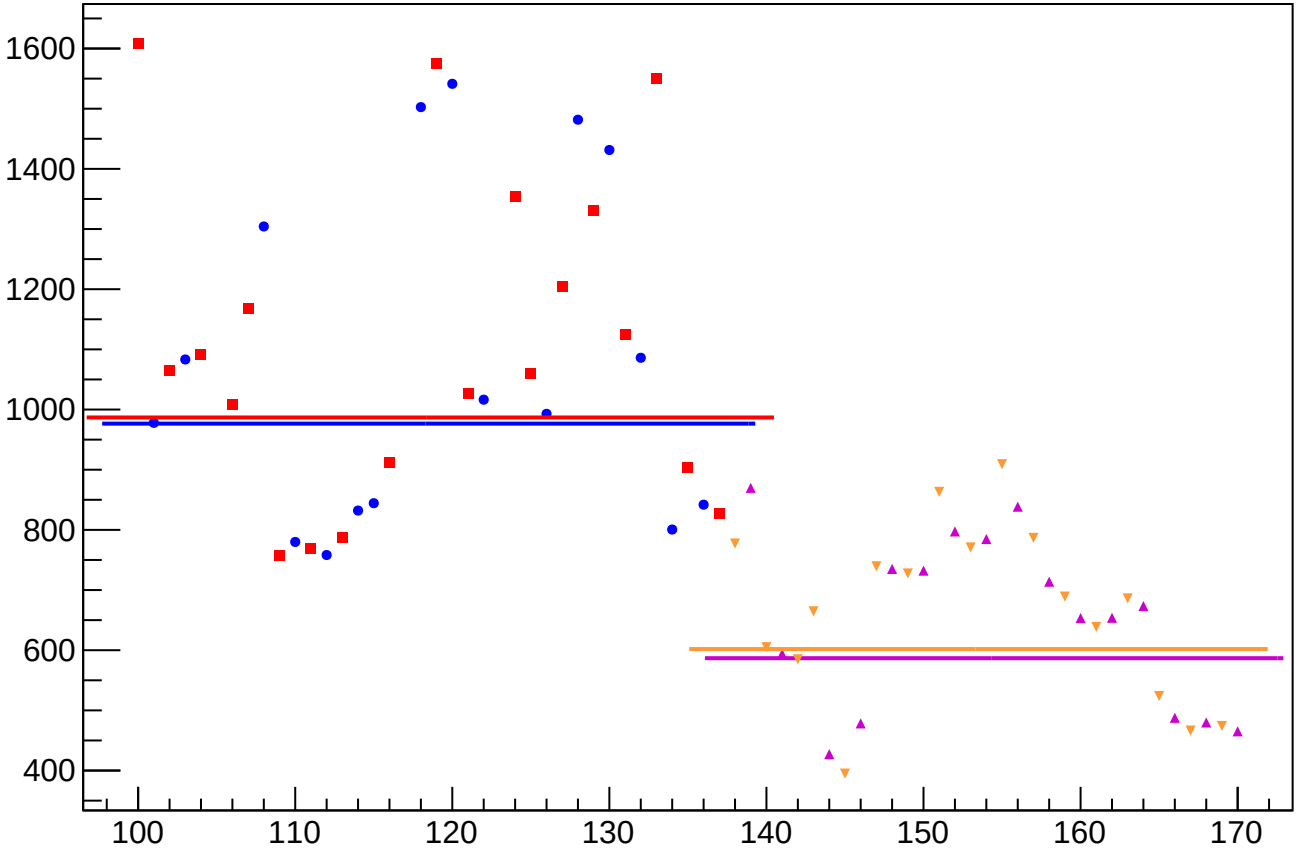
Left In: 85.101+/-166.581 $\chi^2$/NDF:14.0/15

+ sign -881.653+/-154.630 $\chi^2$/NDF: 63.7/32

All: -469.383+/-108.437 $\chi^2$/NDF: 109.5/67

- sign -70.453+/-152.108 $\chi^2$/NDF: 31.8/34

# asym_sam_37_avg_eigen_cor_correction_rms vs Slug




Right In: 976.589+/-0.265 $\chi^2$/NDF: 736628.5/15

Left Out: 601.942+/-0.120 $\chi^2$/NDF:1482677.0/16

Right Out: 986.823+/-0.264 $\chi^2$/NDF: 713316.0/18

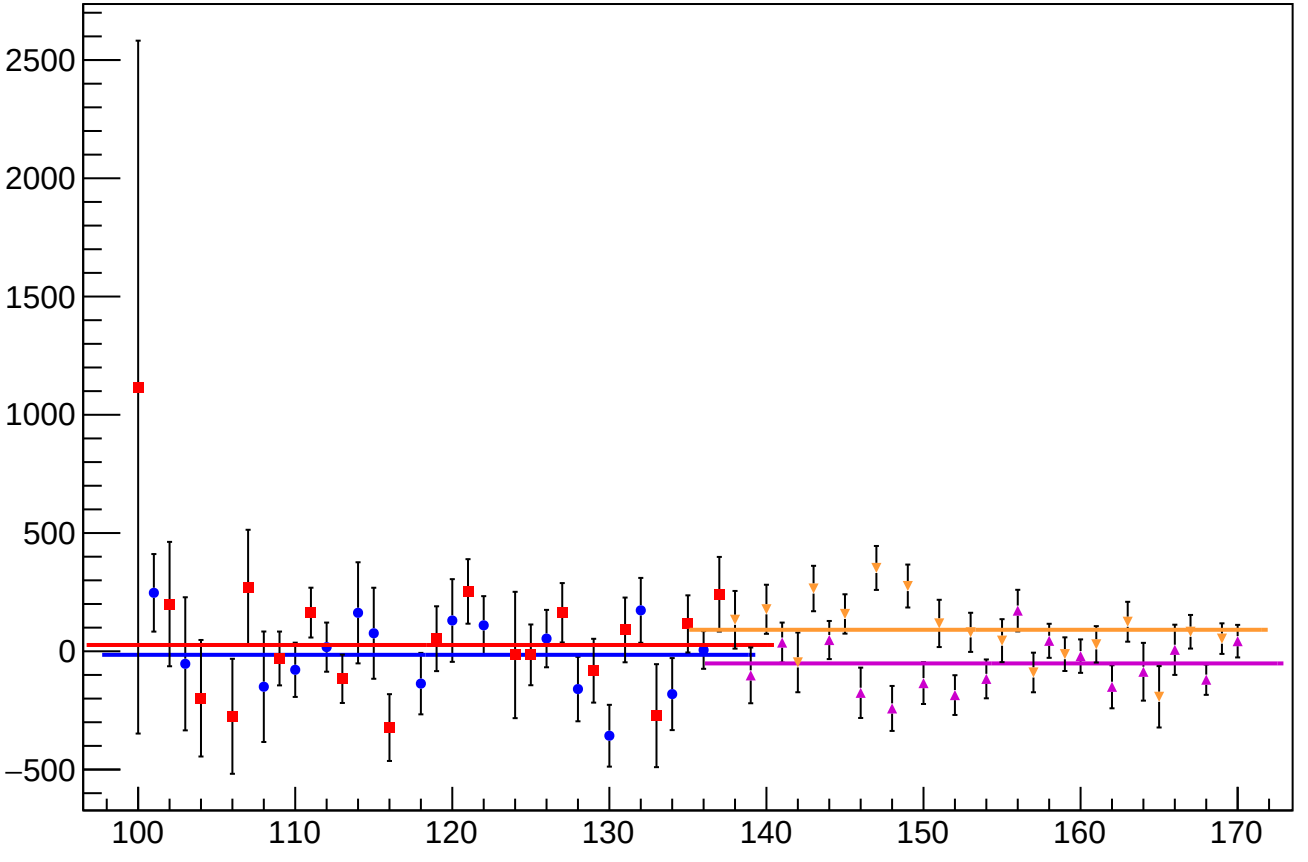
Left In: 586.743+/-0.118 $\chi^2$/NDF:1377112.9/15

+ sign 665.632+/-0.109 $\chi^2$/NDF: 3875891.0/32

All: 659.335+/-0.077 $\chi^2$/NDF: 7890388.9/67

- sign 653.243+/-0.108 $\chi^2$/NDF: 4007973.2/34

# dit_asym_sam_37_avg_mean vs Slug




Right In: -14.953+/-33.761 $\chi^2$/NDF: 18.3/15

Left Out: 90.925+/-21.193 $\chi^2$/NDF:31.0/16

Right Out: 26.654+/-34.073 $\chi^2$/NDF: 23.6/18

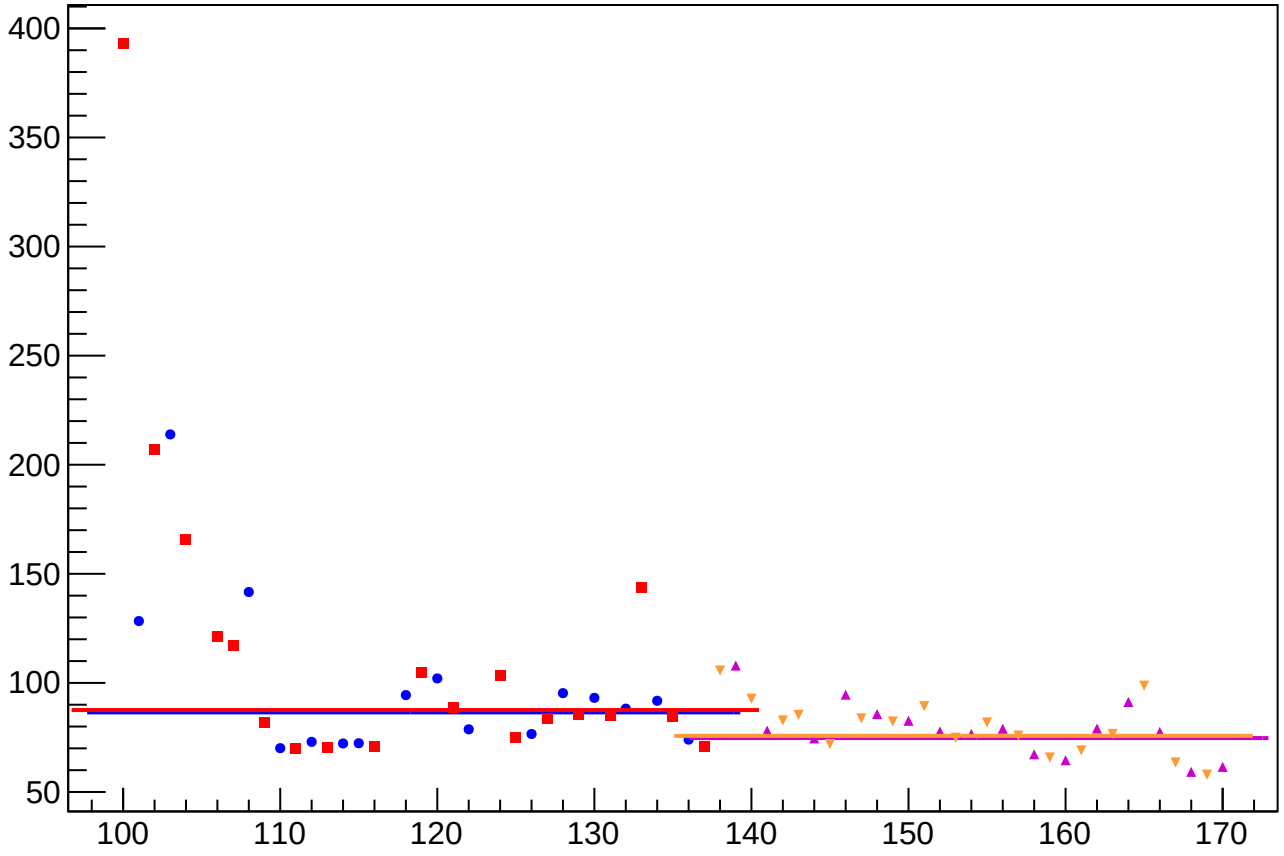
Left In: -51.301+/-21.149 $\chi^2$/NDF:25.2/15

+ sign 60.998+/-17.949 $\chi^2$/NDF: 56.4/32

All: 15.738+/-12.699 $\chi^2$/NDF: 121.7/67

- sign -29.621+/-17.969 $\chi^2$/NDF: 52.6/34

# dit_asym_sam_37_avg_rms vs Slug




Right In: 86.489+/-0.024 $\chi^2$/NDF: 856257.9/15

Left Out: 75.720+/-0.015 $\chi^2$/NDF:603793.7/16

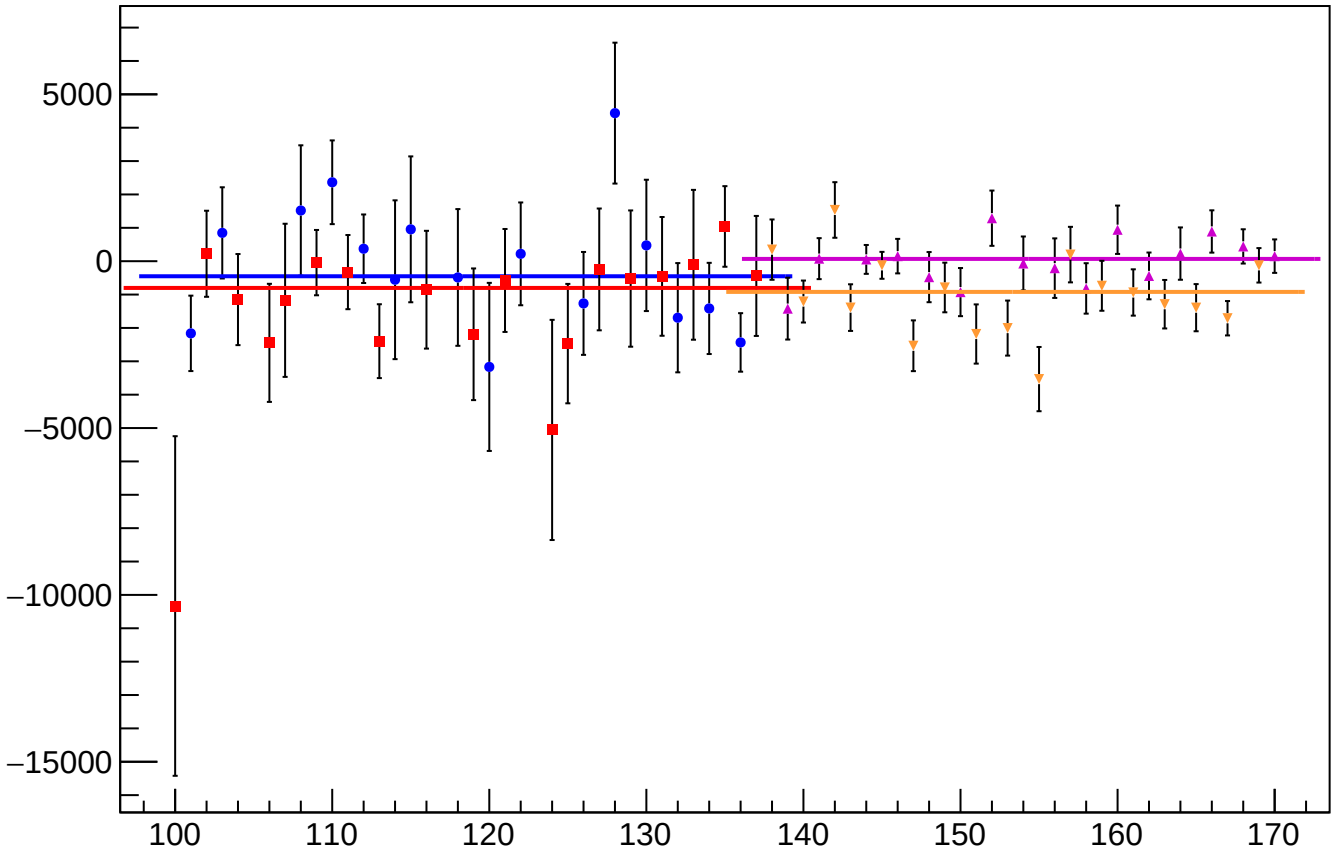
Right Out: 87.555+/-0.024 $\chi^2$/NDF: 1129794.0/18

Left In: 74.715+/-0.015 $\chi^2$/NDF:578672.6/15

+ sign 78.764+/-0.013 $\chi^2$/NDF: 1606033.9/32

All: 78.525+/-0.009 $\chi^2$/NDF: 3520231.1/67

- sign 78.286+/-0.013 $\chi^2$/NDF: 1913488.4/34




Right In: -451.380+/-365.605 $\chi^2$/NDF: 23.7/15

Left Out: -920.062+/-163.355 $\chi^2$/NDF:38.2/16

Right Out: -801.206+/-357.866 $\chi^2$/NDF: 13.6/18

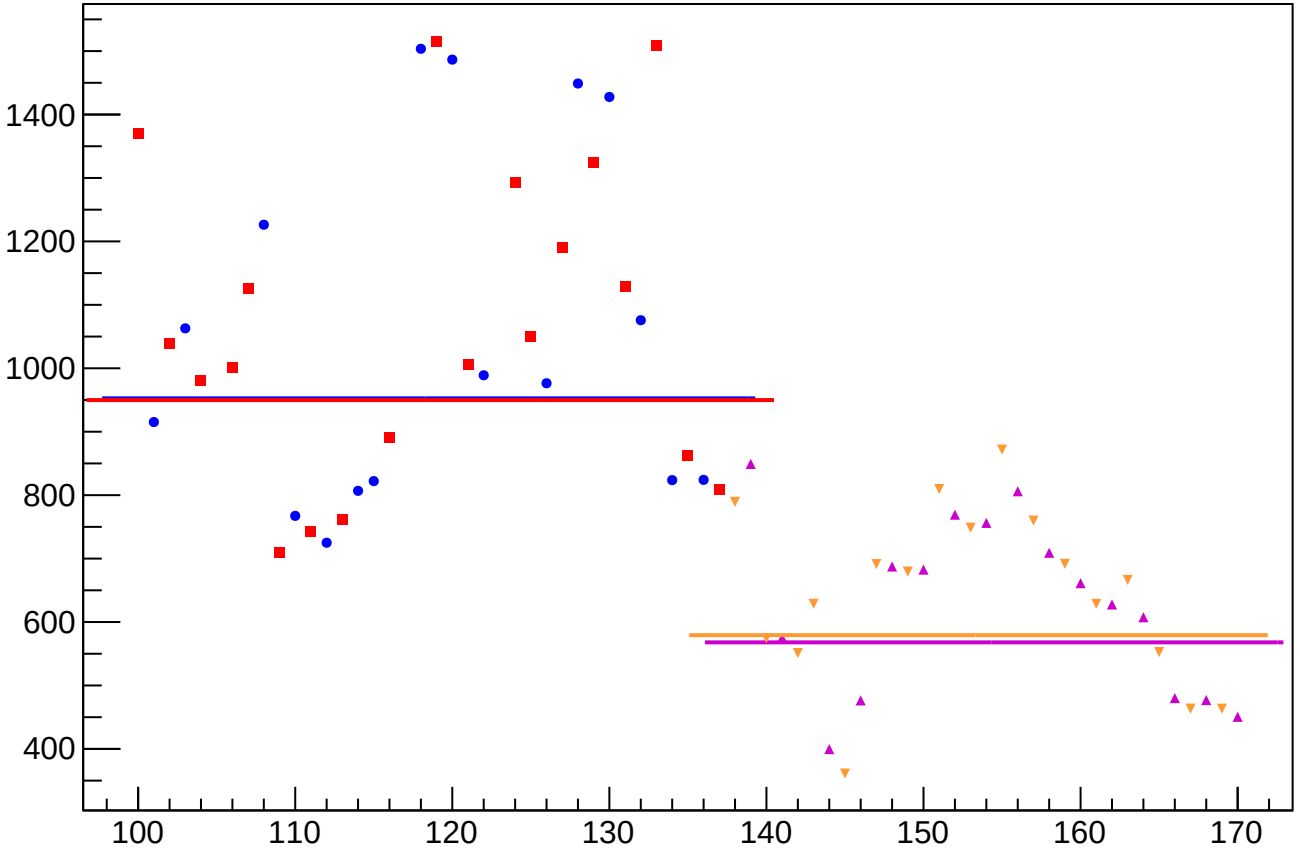
Left In: 68.352+/-161.341 $\chi^2$/NDF:13.0/15

+ sign -842.067+/-149.145 $\chi^2$/NDF: 63.3/32

All: -454.991+/-104.725 $\chi^2$/NDF: 108.0/67

- sign -78.537+/-147.084 $\chi^2$/NDF: 31.5/34

# asym_sam_37_avg_dit_correction_rms vs Slug




Right In: 952.551+/-0.259 $\chi^2$/NDF: 746346.9/15

Left Out: 579.297+/-0.116 $\chi^2$/NDF:1572789.5/16

Right Out: 949.891+/-0.253 $\chi^2$/NDF: 751675.2/18

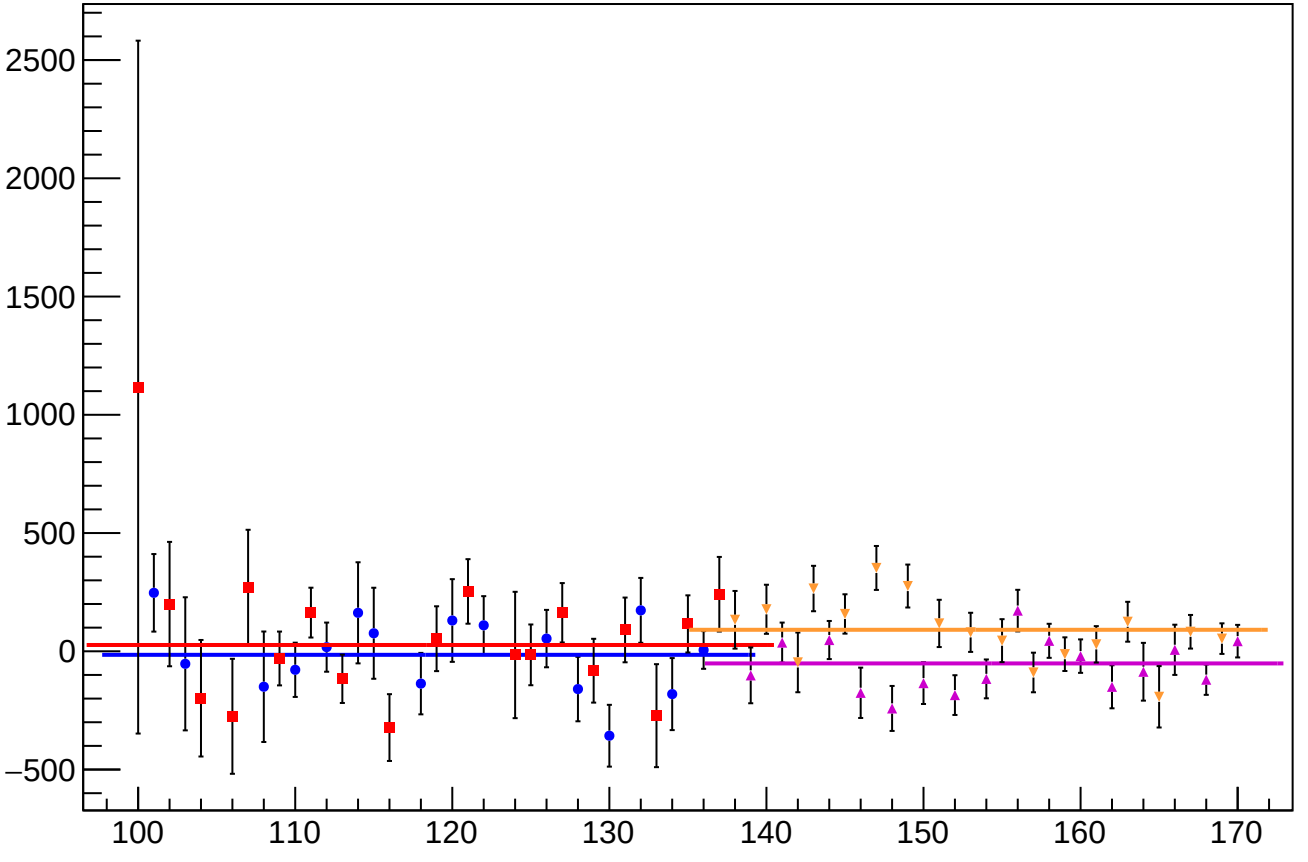
Left In: 567.954+/-0.114 $\chi^2$/NDF:1353607.8/15

+ sign 641.412+/-0.105 $\chi^2$/NDF: 4056795.7/32

All: 636.880+/-0.074 $\chi^2$/NDF: 8059000.5/67

- sign 632.472+/-0.104 $\chi^2$/NDF: 3998562.5/34

# eigen_dit_asym_sam_37_avg_mean vs Slug




Right In: -14.954+/-33.761 $\chi^2$/NDF: 18.3/15

Left Out: 90.926+/-21.193 $\chi^2$/NDF:31.0/16

Right Out: 26.658+/-34.073 $\chi^2$/NDF: 23.6/18

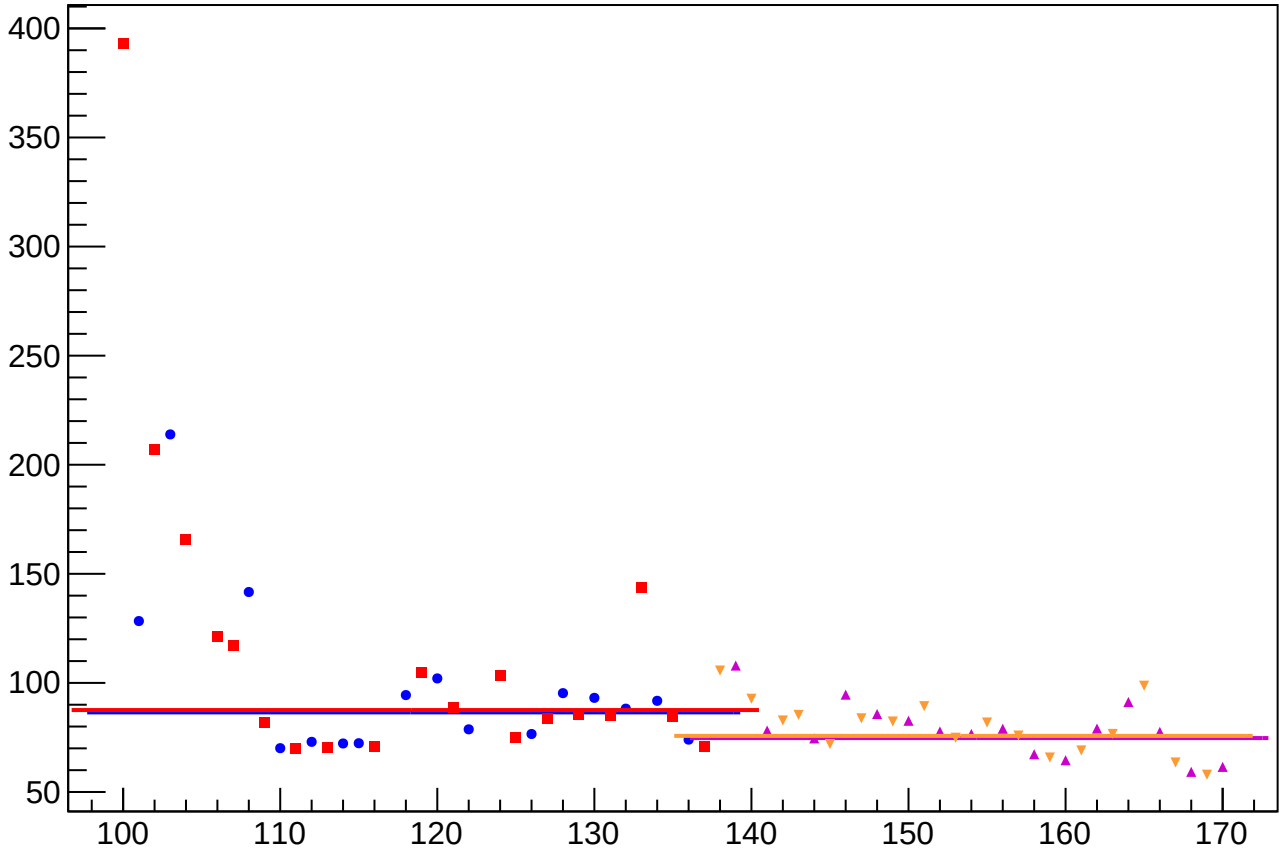
Left In: -51.300+/-21.149 $\chi^2$/NDF:25.2/15

+ sign 60.998+/-17.949 $\chi^2$/NDF: 56.4/32

All: 15.739+/-12.699 $\chi^2$/NDF: 121.7/67

- sign -29.619+/-17.969 $\chi^2$/NDF: 52.6/34

# eigen_dit_asym_sam_37_avg_rms vs Slug




Right In: 86.489+/-0.024 $\chi^2$/NDF: 856249.6/15

Left Out: 75.720+/-0.015 $\chi^2$/NDF:603800.1/16

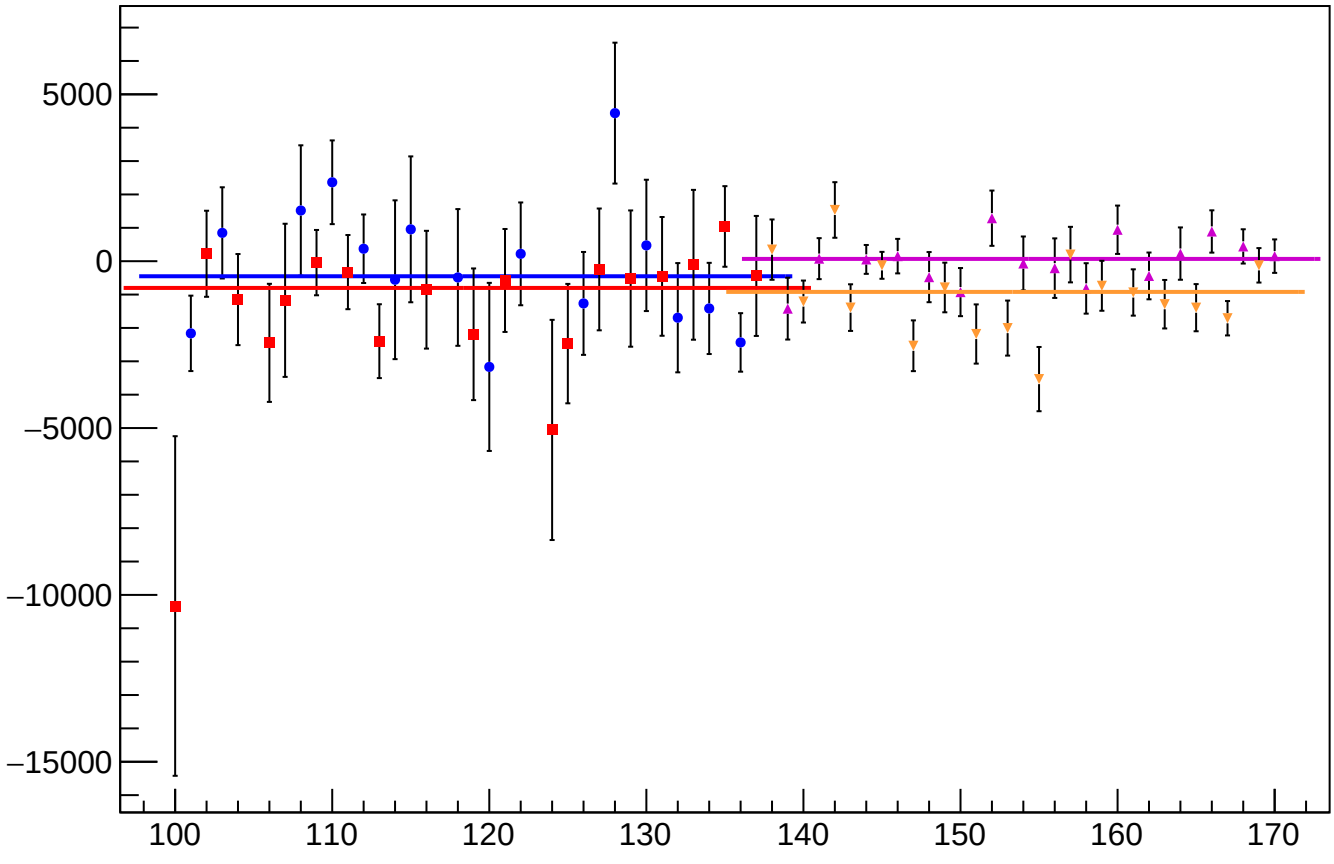
Right Out: 87.555+/-0.024 $\chi^2$/NDF: 1129791.7/18

Left In: 74.715+/-0.015 $\chi^2$/NDF:578677.9/15

+ sign 78.764+/-0.013 $\chi^2$/NDF: 1606033.4/32

All: 78.525+/-0.009 $\chi^2$/NDF: 3520238.7/67

- sign 78.286+/-0.013 $\chi^2$/NDF: 1913496.5/34




Right In: -451.378+/-365.605 $\chi^2$/NDF: 23.7/15

Left Out: -920.062+/-163.355 $\chi^2$/NDF:38.2/16

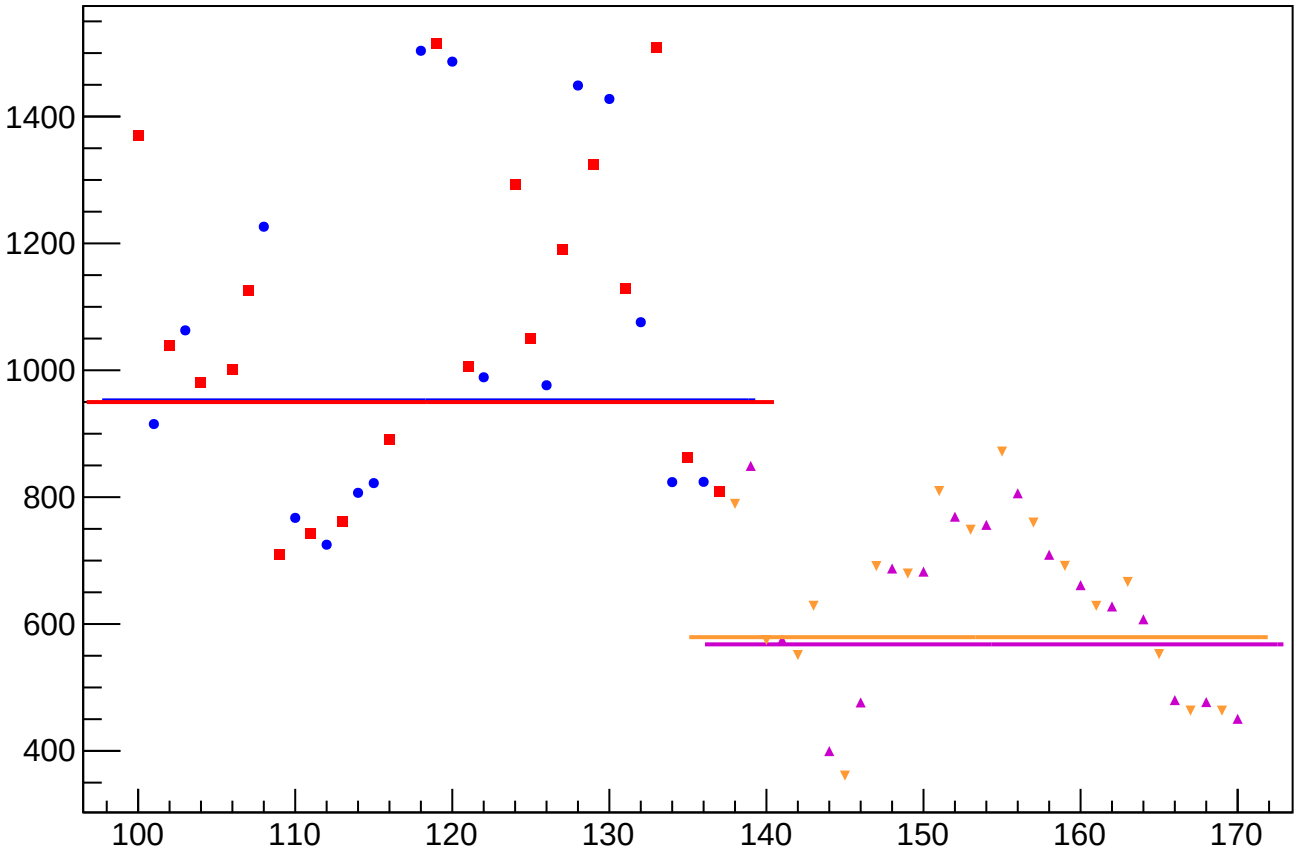
Right Out: -801.205+/-357.865 $\chi^2$/NDF: 13.6/18

Left In: 68.353+/-161.341 $\chi^2$/NDF:13.0/15

+ sign -842.066+/-149.145 $\chi^2$/NDF: 63.3/32

All: -454.990+/-104.725 $\chi^2$/NDF: 108.0/67

- sign -78.537+/-147.084 $\chi^2$/NDF: 31.5/34




Right In: 952.549+/-0.259 $\chi^2$/NDF: 746349.8/15

Left Out: 579.296+/-0.116 $\chi^2$/NDF:1572787.6/16

Right Out: 949.890+/-0.253 $\chi^2$/NDF: 751674.5/18

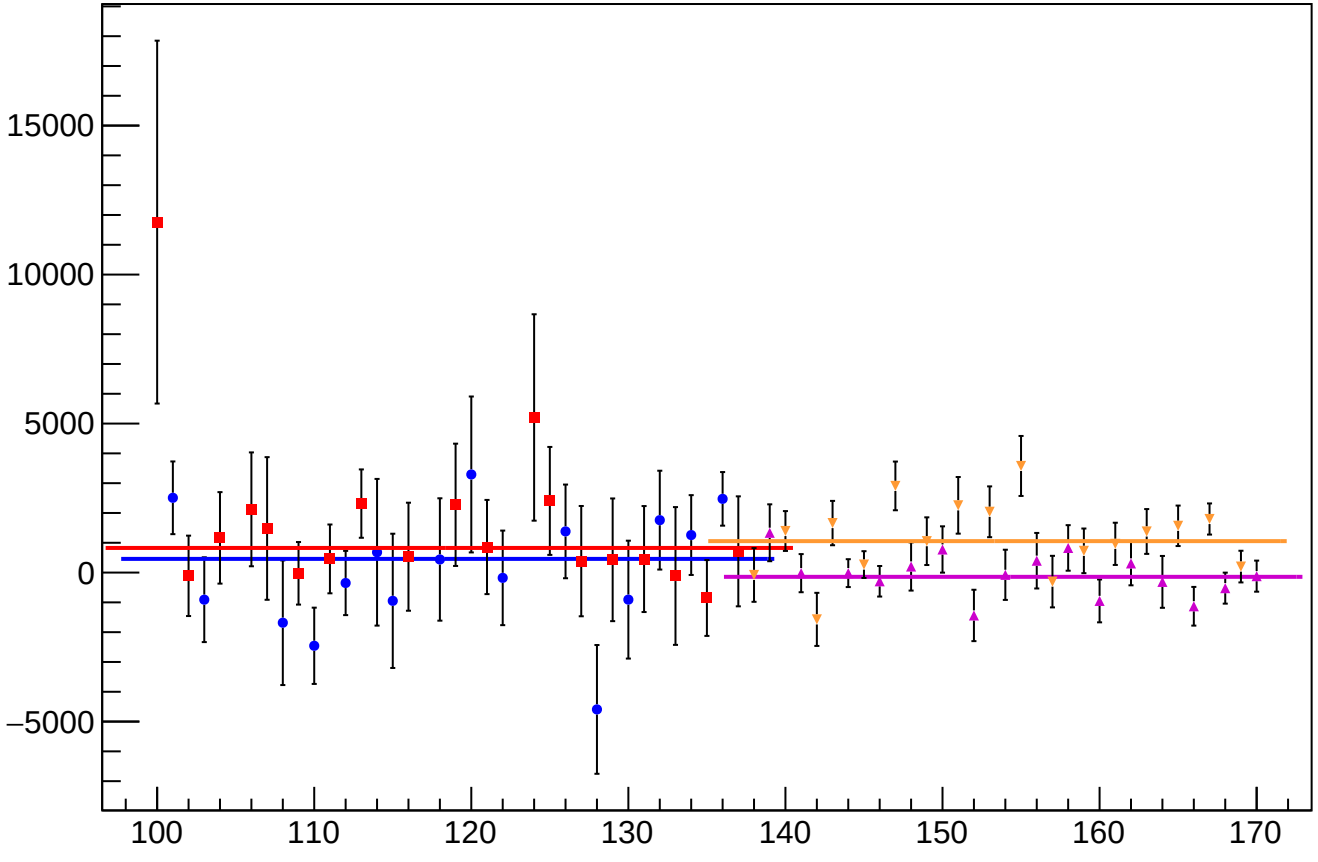
Left In: 567.954+/-0.114 $\chi^2$/NDF:1353604.5/15

+ sign 641.411+/-0.105 $\chi^2$/NDF: 4056790.5/32

All: 636.879+/-0.074 $\chi^2$/NDF: 8058983.6/67

- sign 632.472+/-0.104 $\chi^2$/NDF: 3998550.9/34

# asym_sam_37_avg_mean vs Slug




Right In: 459.137+/-376.873 $\chi^2$/NDF: 24.6/15

Left Out: 1055.013+/-170.804 $\chi^2$/NDF:36.7/16

Right Out: 826.531+/-374.244 $\chi^2$/NDF: 11.7/18

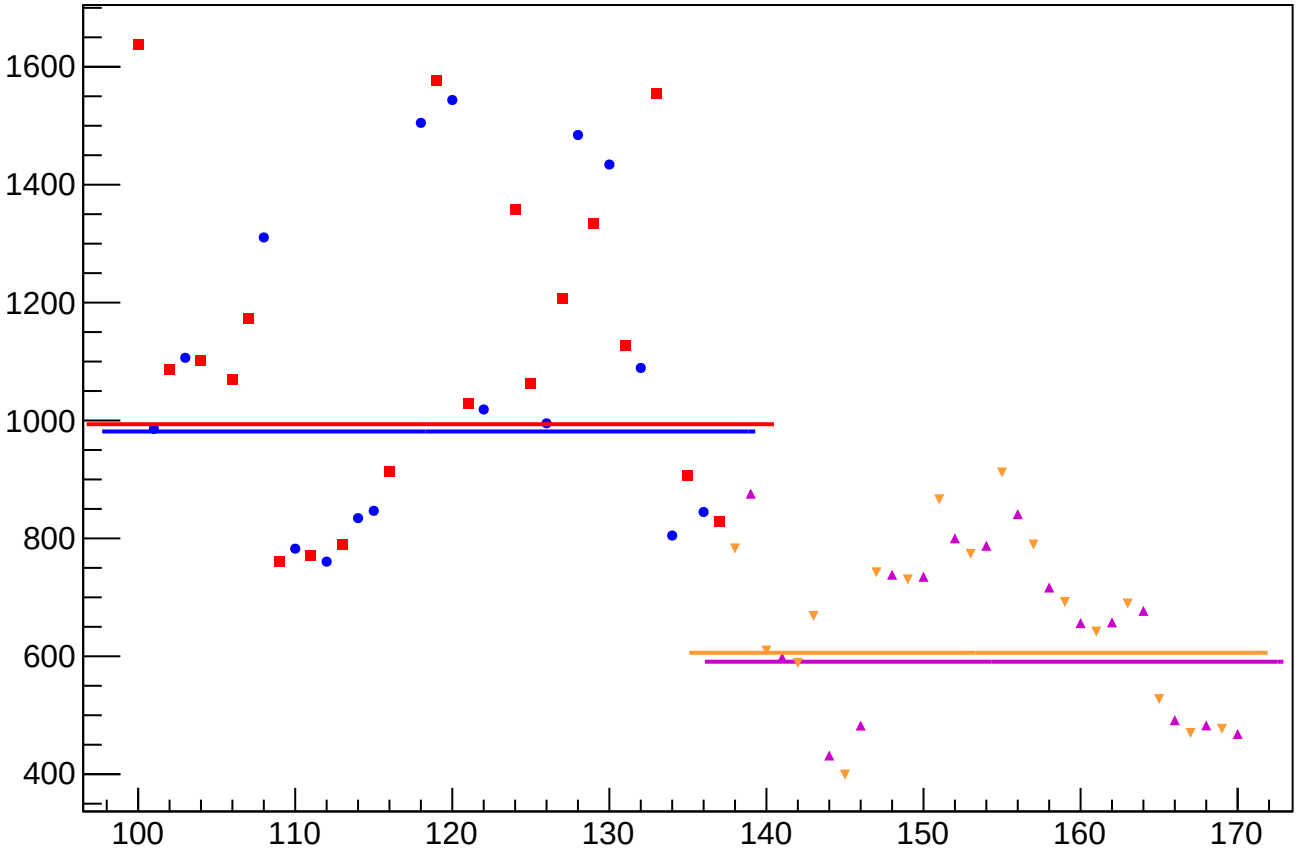
Left In: -142.955+/-167.668 $\chi^2$/NDF:12.9/15

+ sign 953.475+/-155.572 $\chi^2$/NDF: 63.3/32

All: 478.547+/-109.090 $\chi^2$/NDF: 111.8/67

- sign 19.111+/-153.014 $\chi^2$/NDF: 30.2/34

# asym_sam_37_avg_rms vs Slug




Right In: 981.349+/-0.266 $\chi^2$/NDF: 737627.4/15

Left Out: 606.033+/-0.121 $\chi^2$/NDF:1458551.4/16

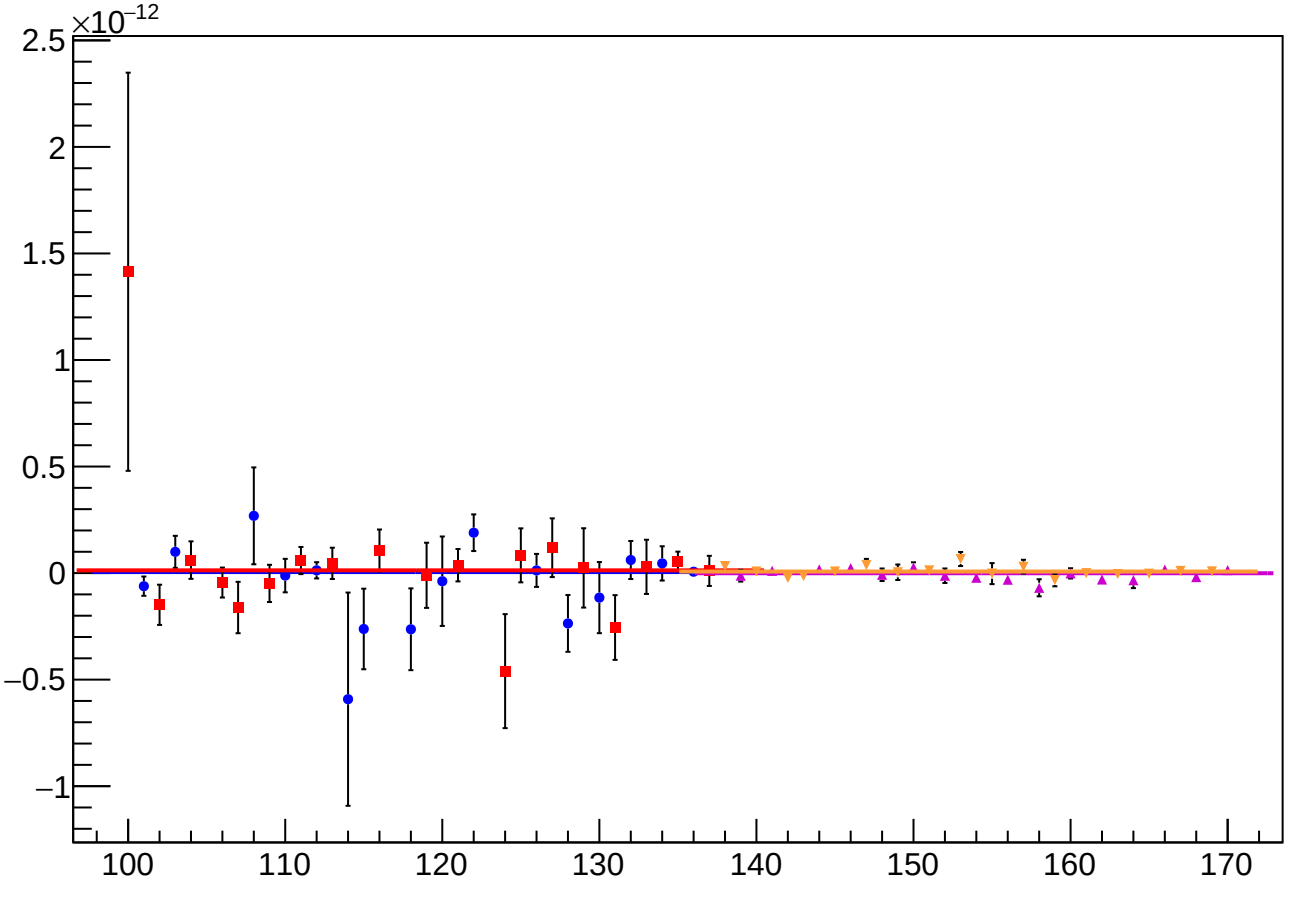
Right Out: 993.684+/-0.265 $\chi^2$/NDF: 719799.0/18

Left In: 590.834+/-0.119 $\chi^2$/NDF:1356314.9/15

+ sign 669.987+/-0.110 $\chi^2$/NDF: 3841695.5/32

All: 663.984+/-0.077 $\chi^2$/NDF: 7853708.2/67

- sign 658.177+/-0.108 $\chi^2$/NDF: 4006154.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 19.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.6/16

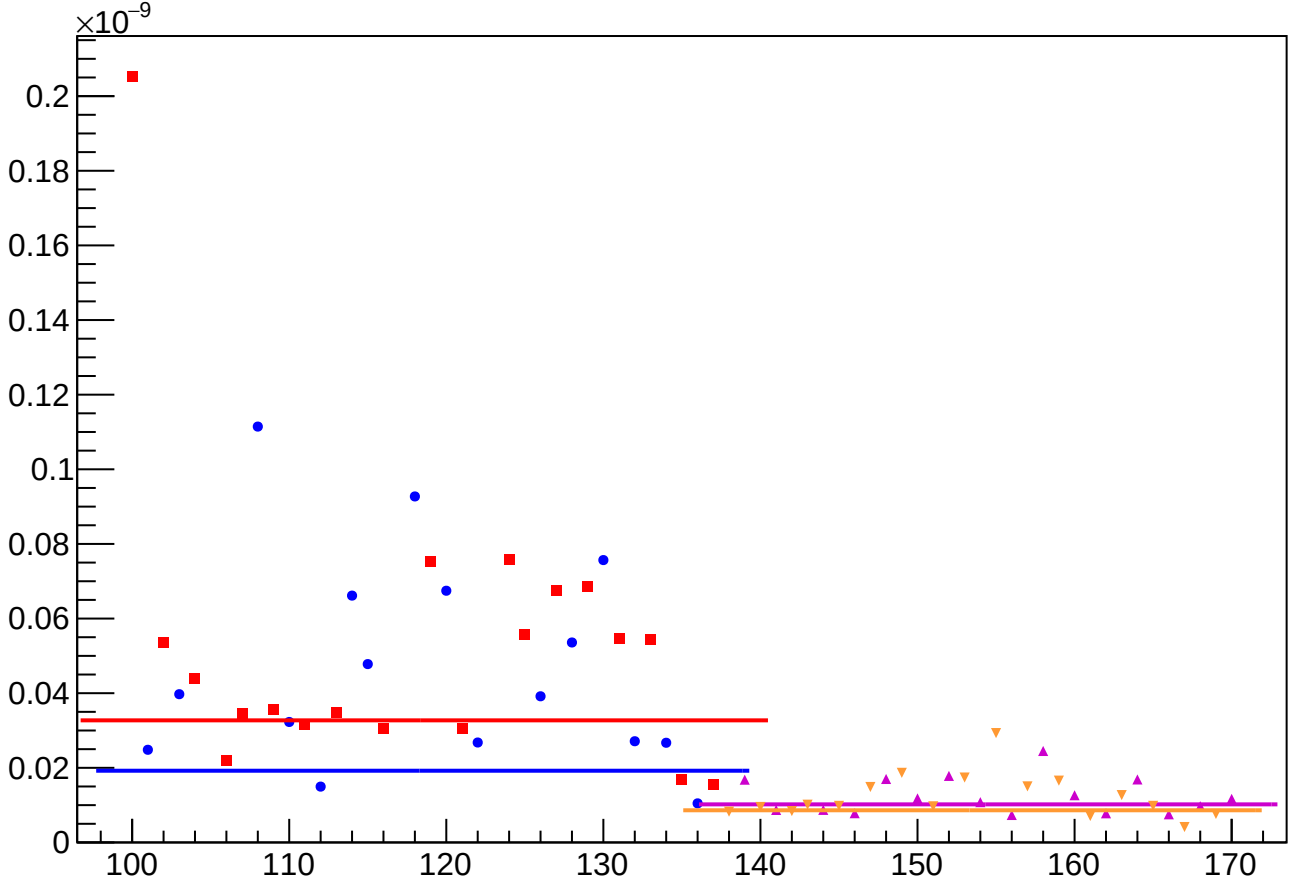
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.4/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:18.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 32.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 70.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 36.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1977908.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1616983.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1181327.3/18

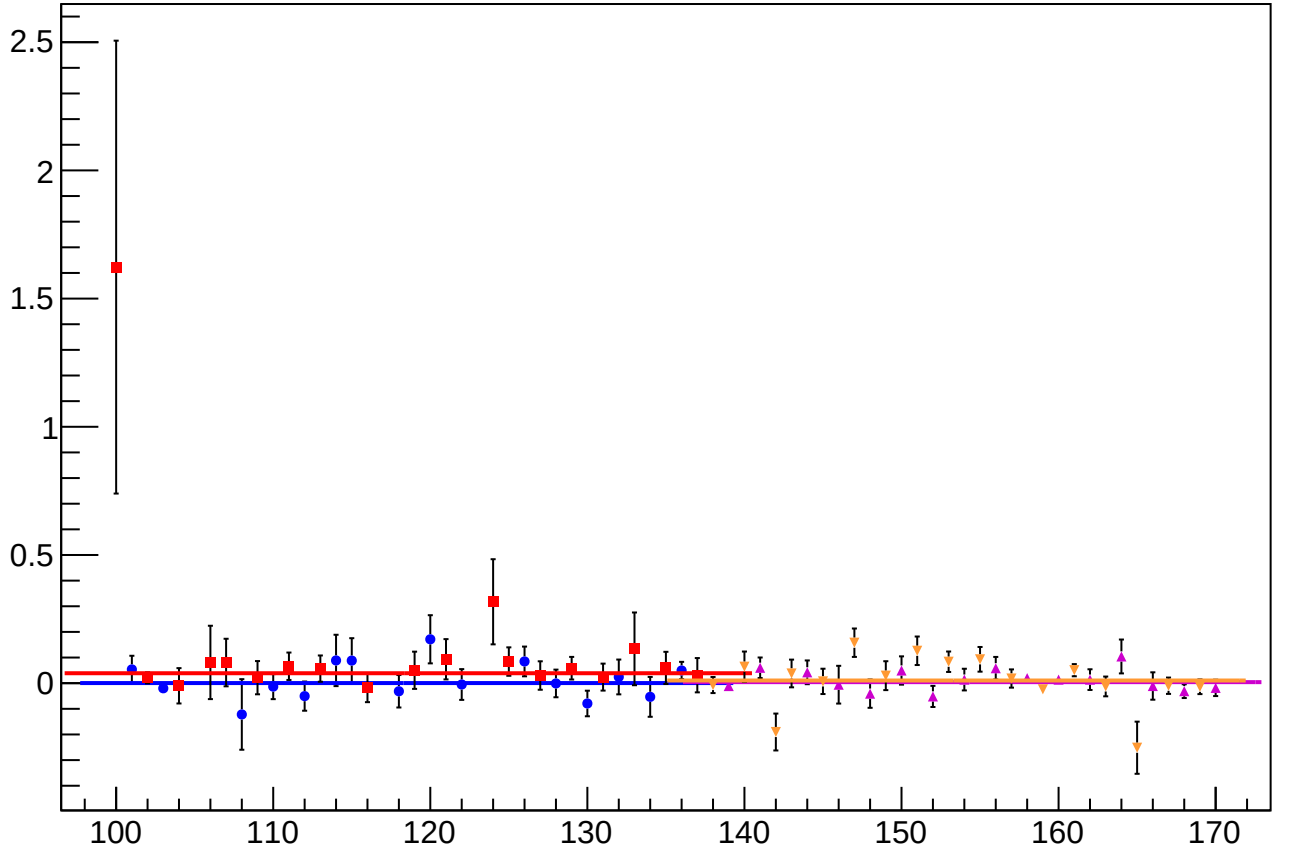
Left In: 0.000+/-0.000 $\chi^2$/NDF:892705.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4574987.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 9039085.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4291260.6/34

# asym_sam_37_avg_dit_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.012 $\chi^2$/NDF: 16.5/15

Left Out: 0.010+/-0.009 $\chi^2$/NDF:42.5/16

Right Out: 0.039+/-0.013 $\chi^2$/NDF: 11.1/18

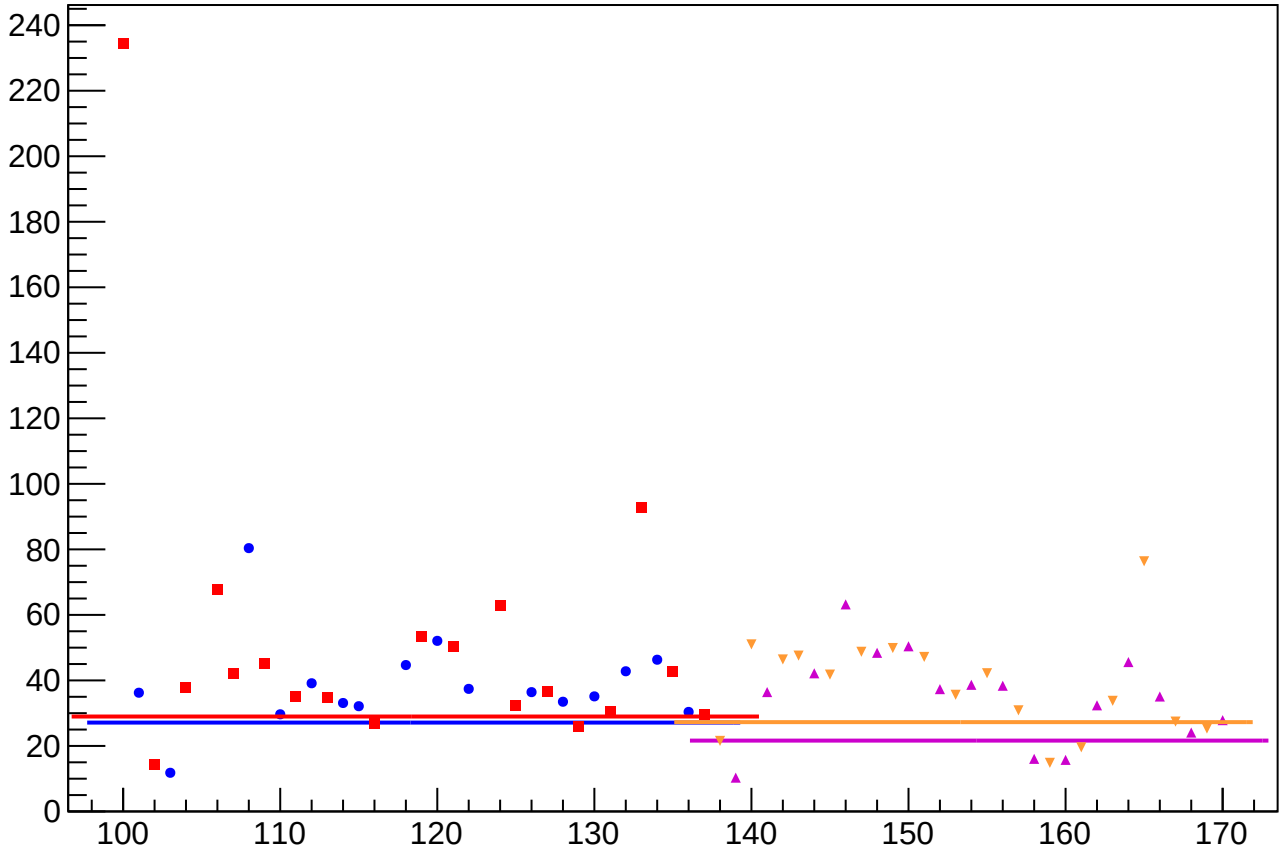
Left In: 0.004+/-0.007 $\chi^2$/NDF:14.4/15

+ sign 0.007+/-0.007 $\chi^2$/NDF: 59.4/32

All: 0.010+/-0.005 $\chi^2$/NDF: 90.9/67

- sign 0.013+/-0.006 $\chi^2$/NDF: 31.2/34

# asym_sam_37_avg_dit_vs_cor_diff_rms vs Slug




Right In: 27.128+/-0.009 $\chi^2$/NDF: 2415316.1/15

Left Out: 27.264+/-0.006 $\chi^2$/NDF:4048162.4/16

Right Out: 28.979+/-0.009 $\chi^2$/NDF: 2456254.0/18

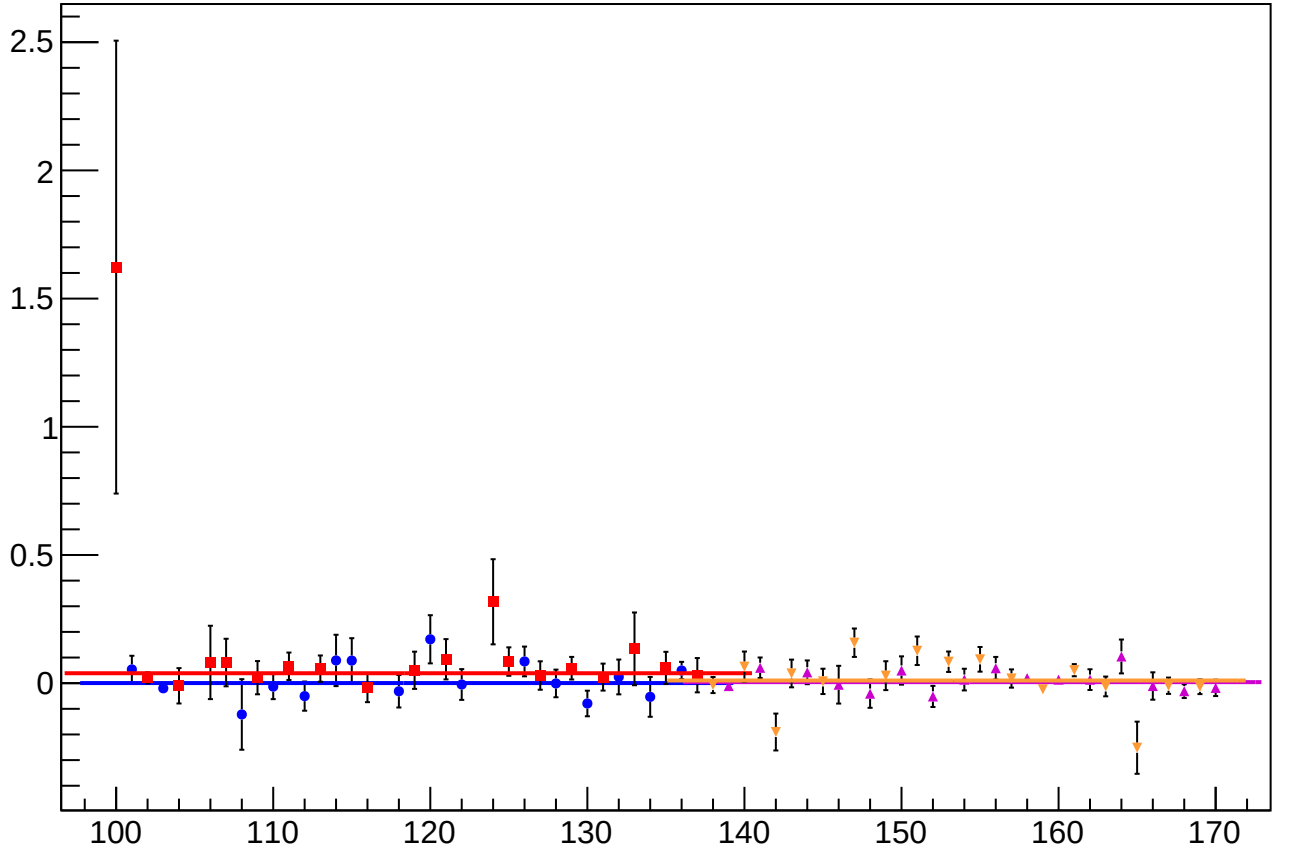
Left In: 21.627+/-0.005 $\chi^2$/NDF:5681111.1/15

+ sign 27.218+/-0.005 $\chi^2$/NDF: 6463648.0/32

All: 25.136+/-0.003 $\chi^2$/NDF: 15430214.2/67

- sign 23.451+/-0.004 $\chi^2$/NDF: 8646320.4/34

# asym_sam_37_avg_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.000+/-0.012 $\chi^2$/NDF: 16.5/15

Left Out: 0.010+/-0.009 $\chi^2$/NDF:42.5/16

Right Out: 0.039+/-0.013 $\chi^2$/NDF: 11.1/18

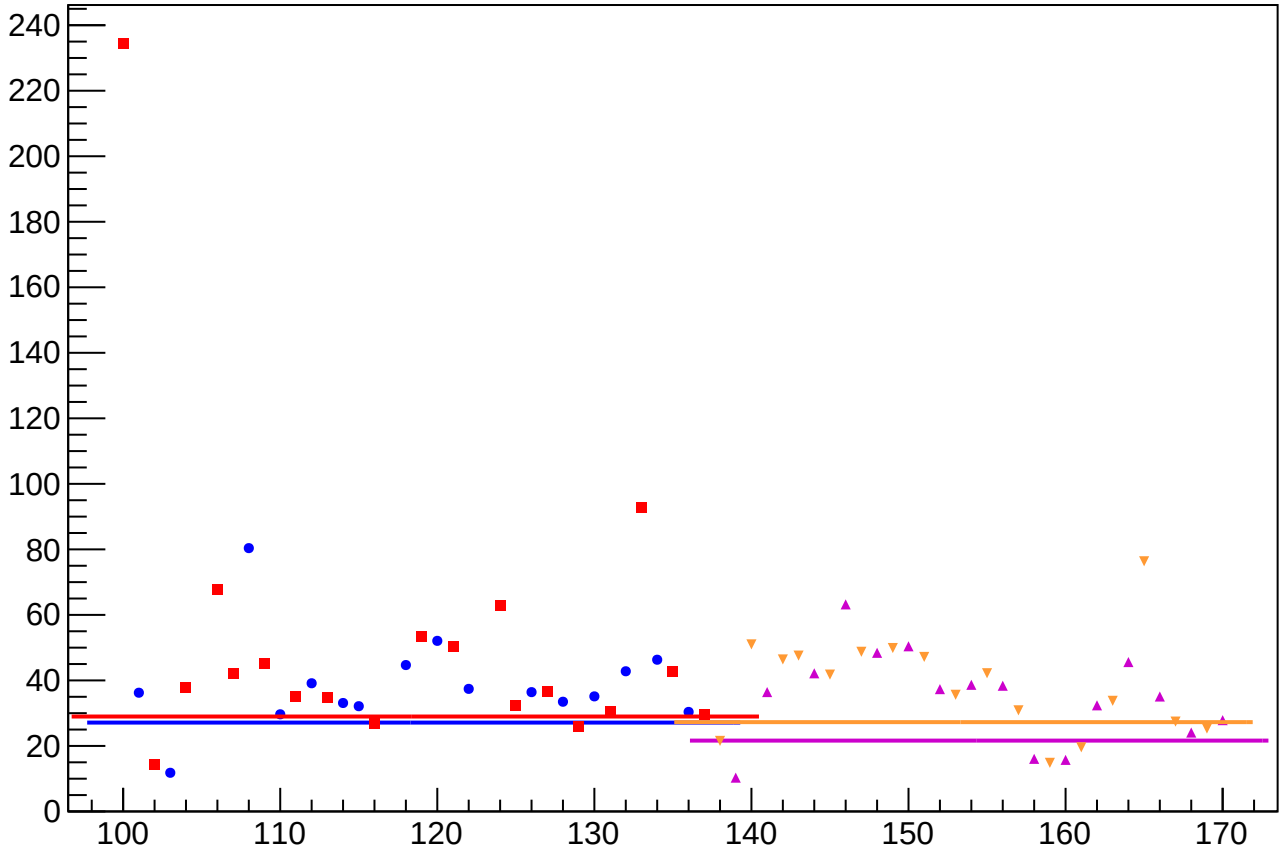
Left In: 0.004+/-0.007 $\chi^2$/NDF:14.4/15

+ sign 0.007+/-0.007 $\chi^2$/NDF: 59.4/32

All: 0.010+/-0.005 $\chi^2$/NDF: 90.9/67

- sign 0.013+/-0.006 $\chi^2$/NDF: 31.2/34

# asym_sam_37_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 27.128+/-0.009 $\chi^2$/NDF: 2415316.1/15

Left Out: 27.264+/-0.006 $\chi^2$/NDF:4048162.4/16

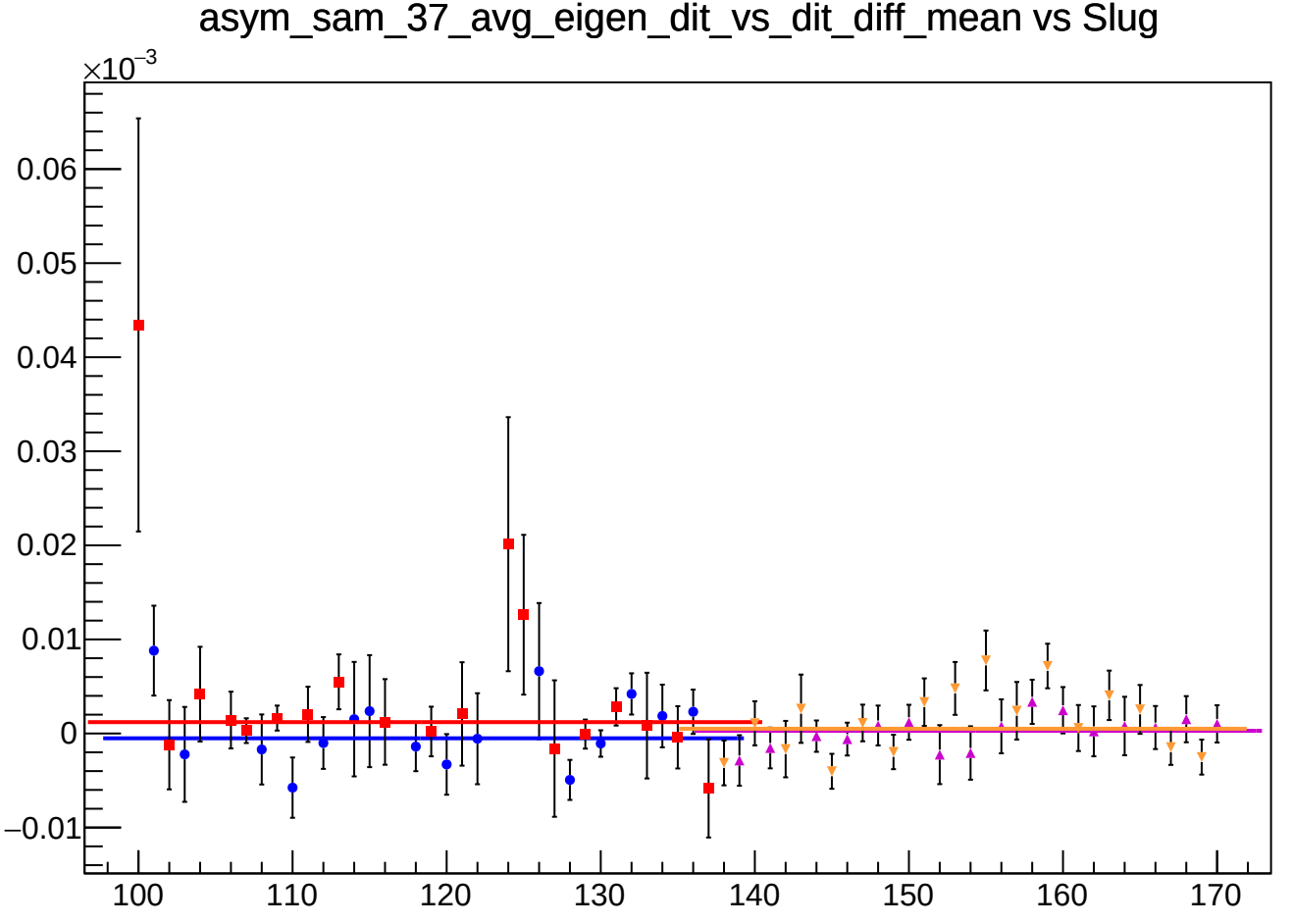
Right Out: 28.979+/-0.009 $\chi^2$/NDF: 2456254.0/18

Left In: 21.627+/-0.005 $\chi^2$/NDF:5681111.1/15

+ sign 27.218+/-0.005 $\chi^2$/NDF: 6463648.0/32

All: 25.136+/-0.003 $\chi^2$/NDF: 15430214.2/67

- sign 23.451+/-0.004 $\chi^2$/NDF: 8646320.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 20.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:34.4/16

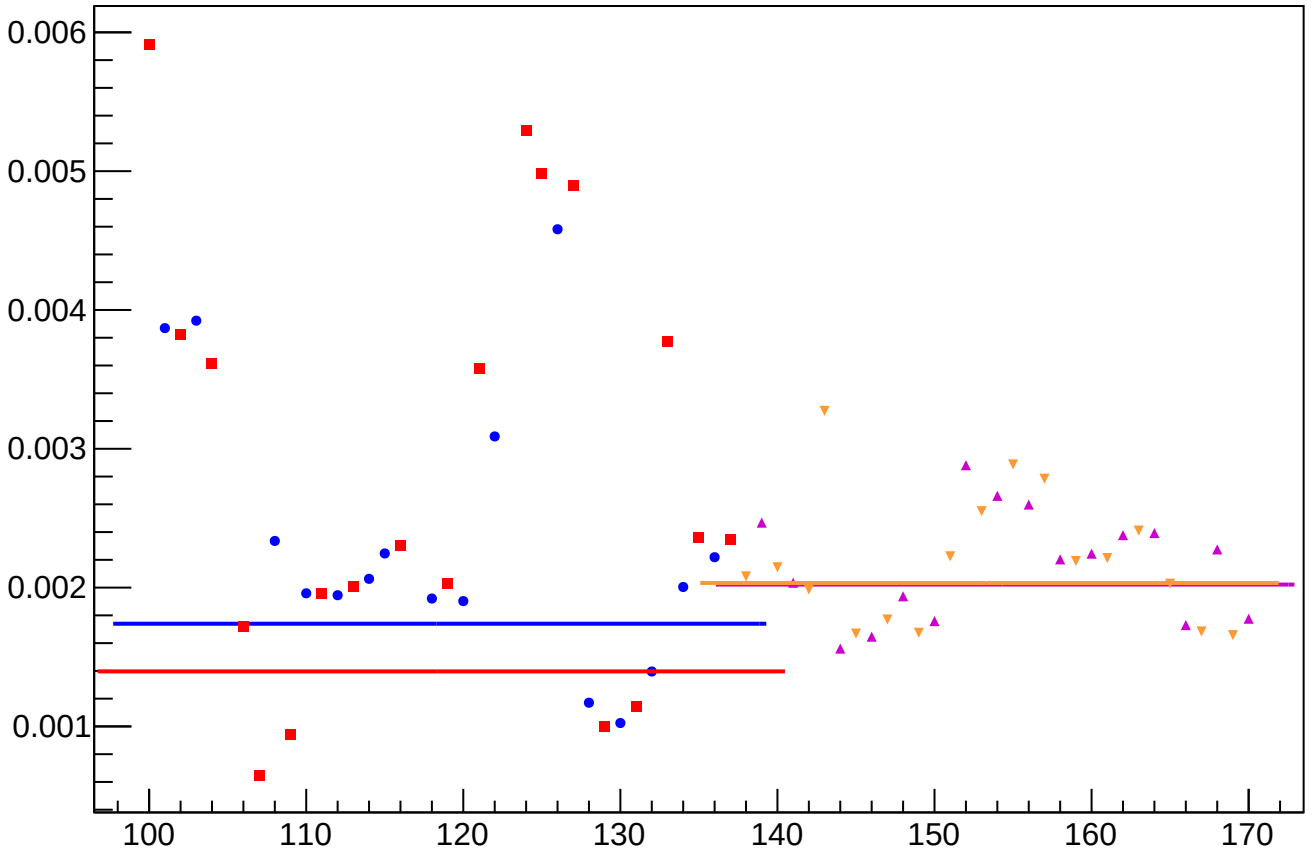
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.6/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:7.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 55.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 79.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 22.9/34




Right In: 0.002+/-0.000 $\chi^2$/NDF: 2146798.7/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:984758.6/16

Right Out: 0.001+/-0.000 $\chi^2$/NDF: 4323193.2/18

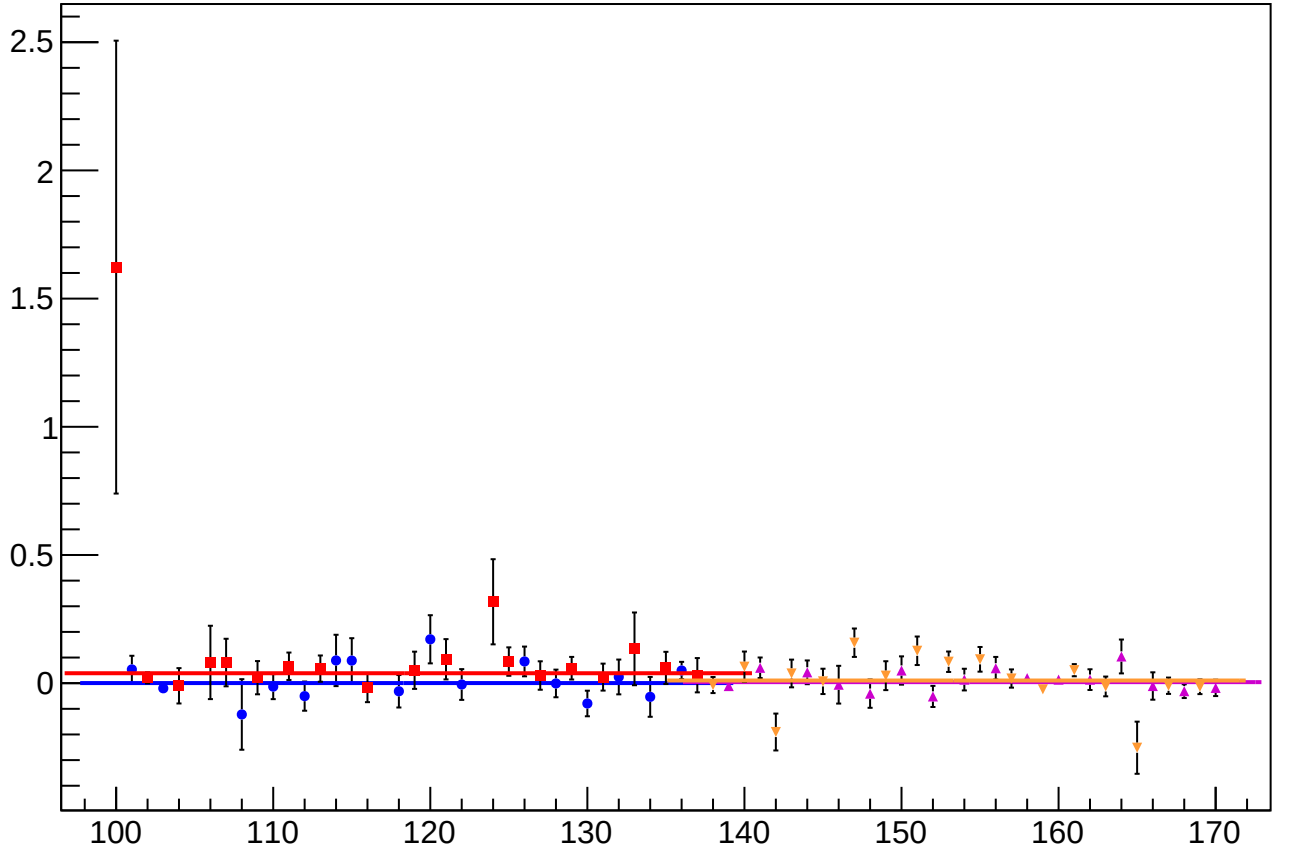
Left In: 0.002+/-0.000 $\chi^2$/NDF:854252.6/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 3337889.4/32

All: 0.002+/-0.000 $\chi^2$/NDF: 9828223.7/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 6300784.3/34

# asym_sam_37_avg_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.012 $\chi^2$/NDF: 16.5/15

Left Out: 0.010+/-0.009 $\chi^2$/NDF:42.5/16

Right Out: 0.039+/-0.013 $\chi^2$/NDF: 11.1/18

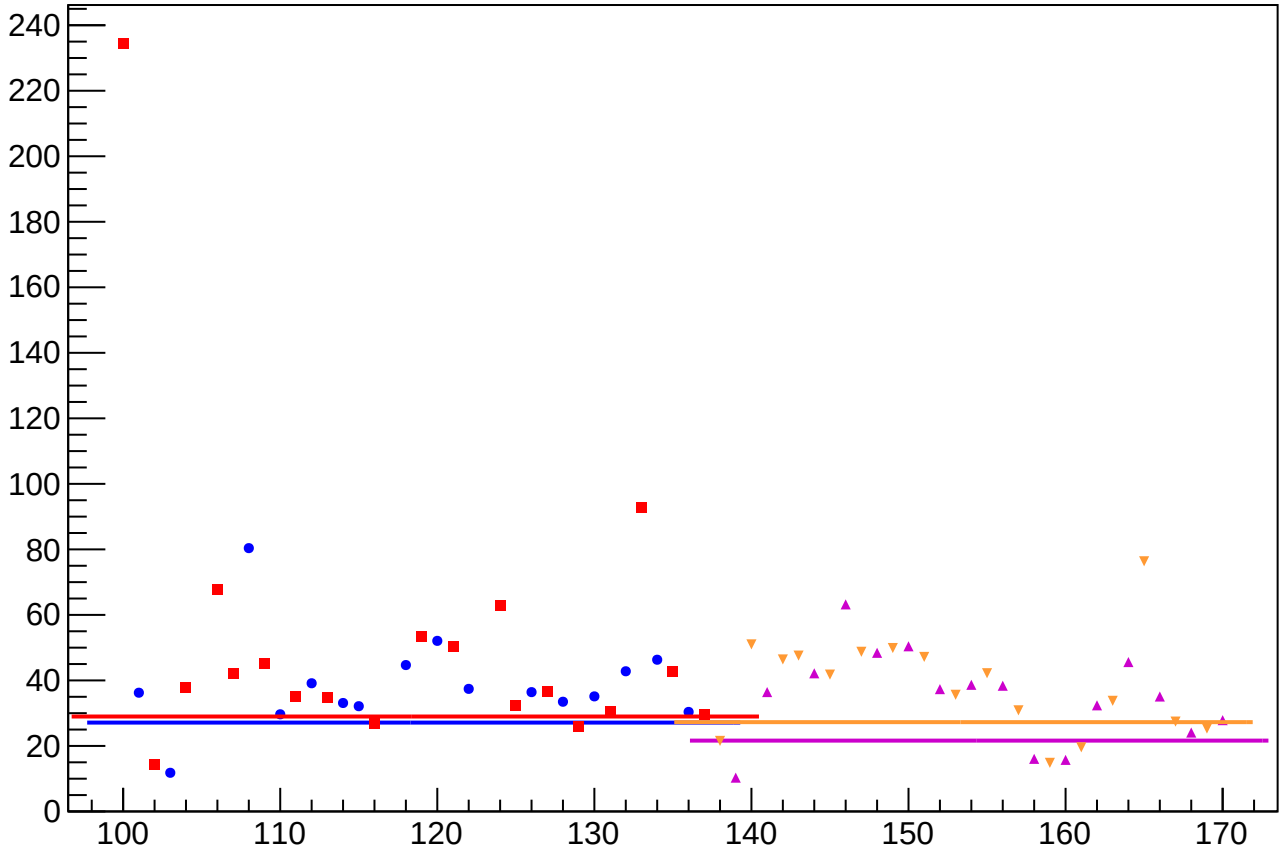
Left In: 0.004+/-0.007 $\chi^2$/NDF:14.4/15

+ sign 0.007+/-0.007 $\chi^2$/NDF: 59.4/32

All: 0.010+/-0.005 $\chi^2$/NDF: 90.9/67

- sign 0.013+/-0.006 $\chi^2$/NDF: 31.2/34

# asym_sam_37_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 27.127+/-0.009 $\chi^2$/NDF: 2415651.3/15

Left Out: 27.264+/-0.006 $\chi^2$/NDF:4048590.2/16

Right Out: 28.982+/-0.009 $\chi^2$/NDF: 2455659.1/18

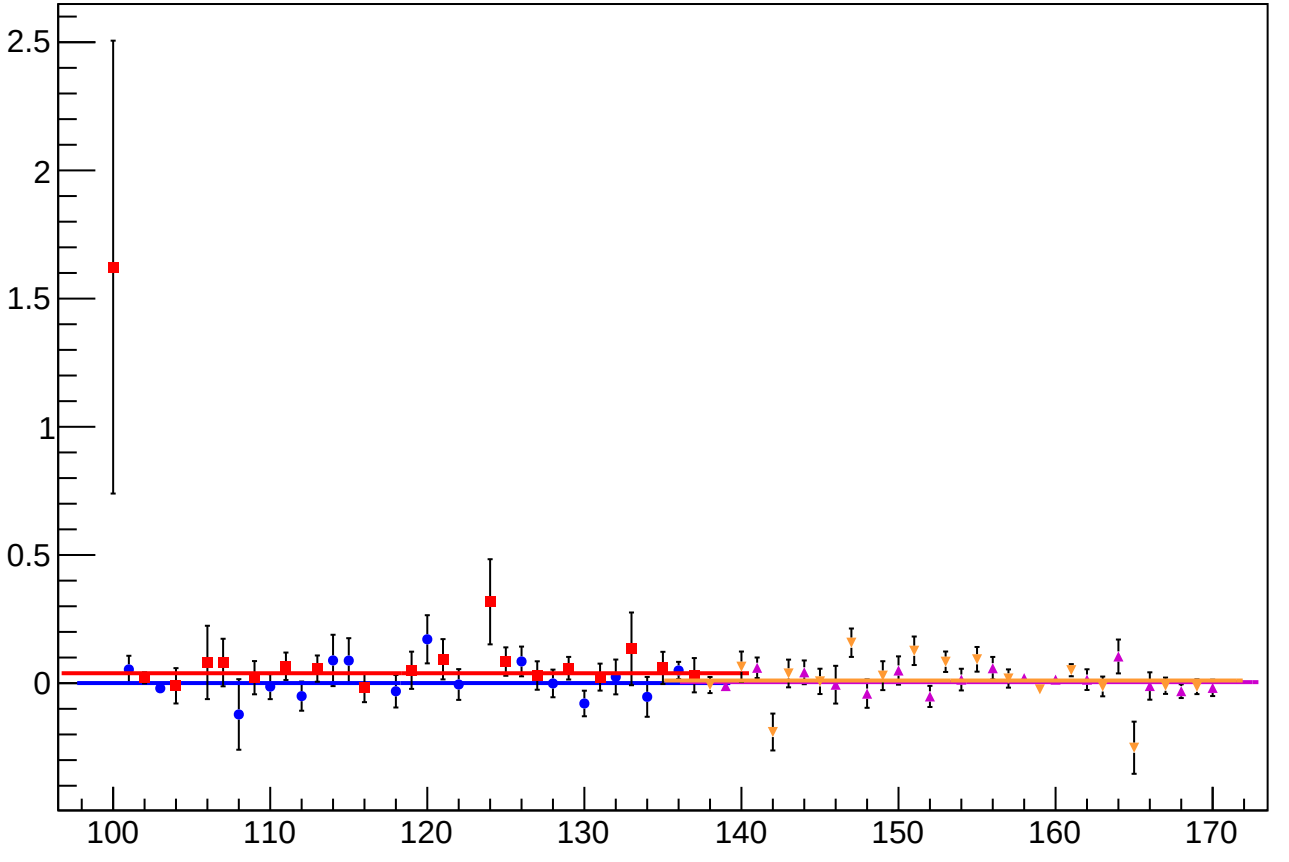
Left In: 21.626+/-0.005 $\chi^2$/NDF:5681952.7/15

+ sign 27.218+/-0.005 $\chi^2$/NDF: 6464411.4/32

All: 25.135+/-0.003 $\chi^2$/NDF: 15431707.0/67

- sign 23.451+/-0.004 $\chi^2$/NDF: 8647066.4/34

asym_sam_37_avg_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.000+/-0.012 $\chi^2$/NDF: 16.5/15

Left Out: 0.010+/-0.009 $\chi^2$/NDF:42.5/16

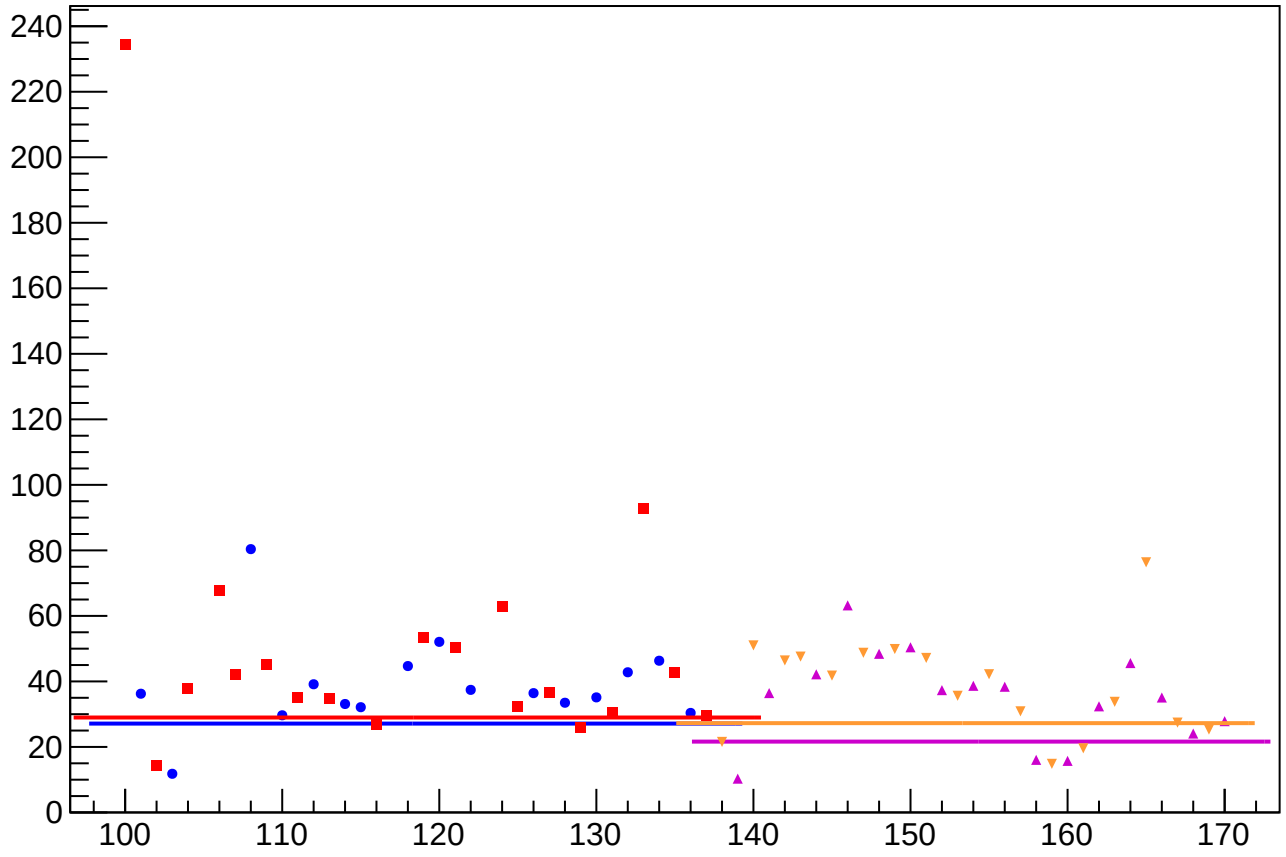
Right Out: 0.039+/-0.013 $\chi^2$/NDF: 11.1/18

Left In: 0.004+/-0.007 $\chi^2$/NDF:14.4/15

+ sign 0.007+/-0.007 $\chi^2$/NDF: 59.4/32

All: 0.010+/-0.005 $\chi^2$/NDF: 90.9/67

- sign 0.013+/-0.006 $\chi^2$/NDF: 31.2/34




Right In: 27.127+/-0.009 $\chi^2$/NDF: 2415651.3/15

Left Out: 27.264+/-0.006 $\chi^2$/NDF:4048590.2/16

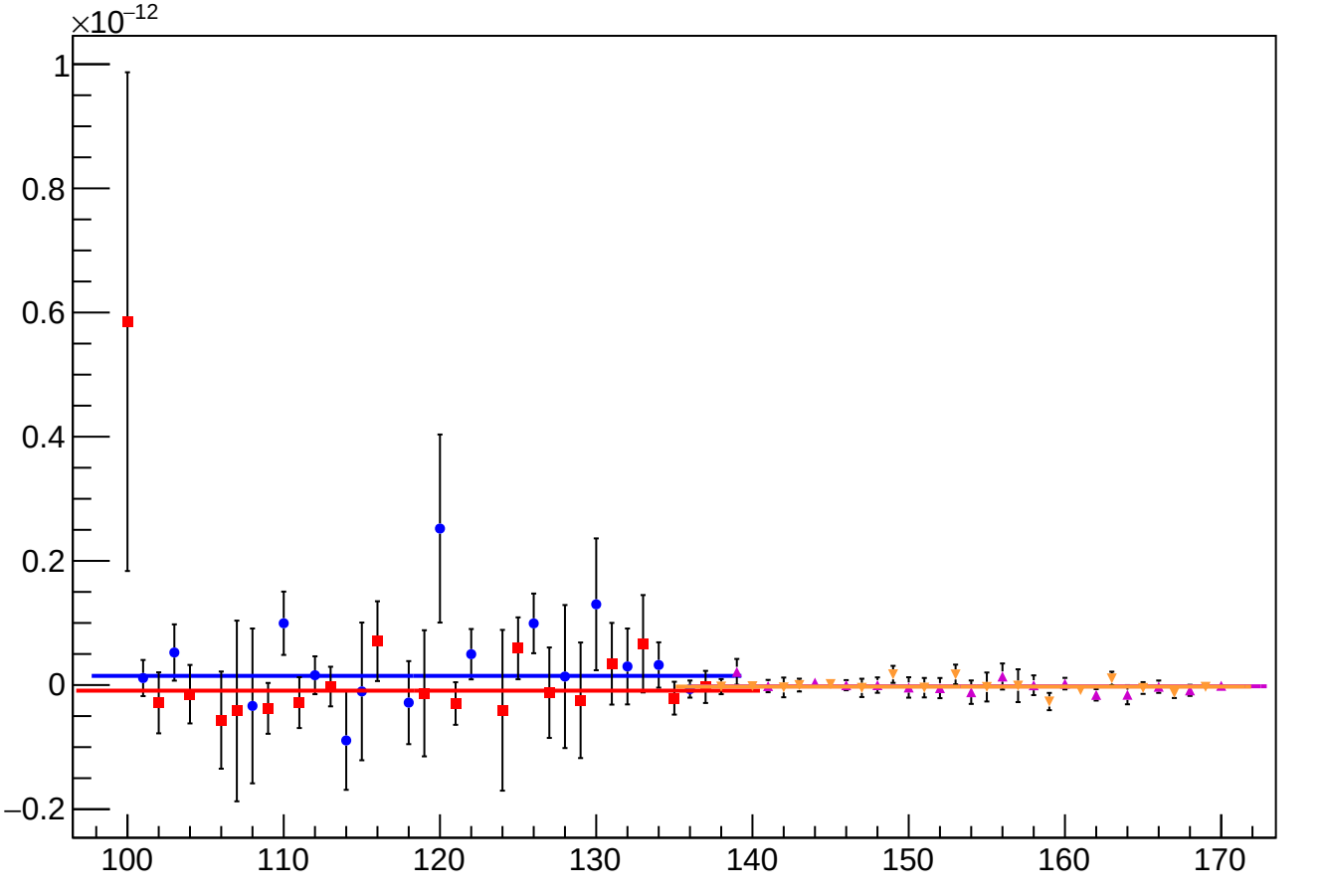
Right Out: 28.982+/-0.009 $\chi^2$/NDF: 2455659.1/18

Left In: 21.626+/-0.005 $\chi^2$/NDF:5681952.7/15

+ sign 27.218+/-0.005 $\chi^2$/NDF: 6464411.4/32

All: 25.135+/-0.003 $\chi^2$/NDF: 15431707.0/67

- sign 23.451+/-0.004 $\chi^2$/NDF: 8647066.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 15.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:10.6/16

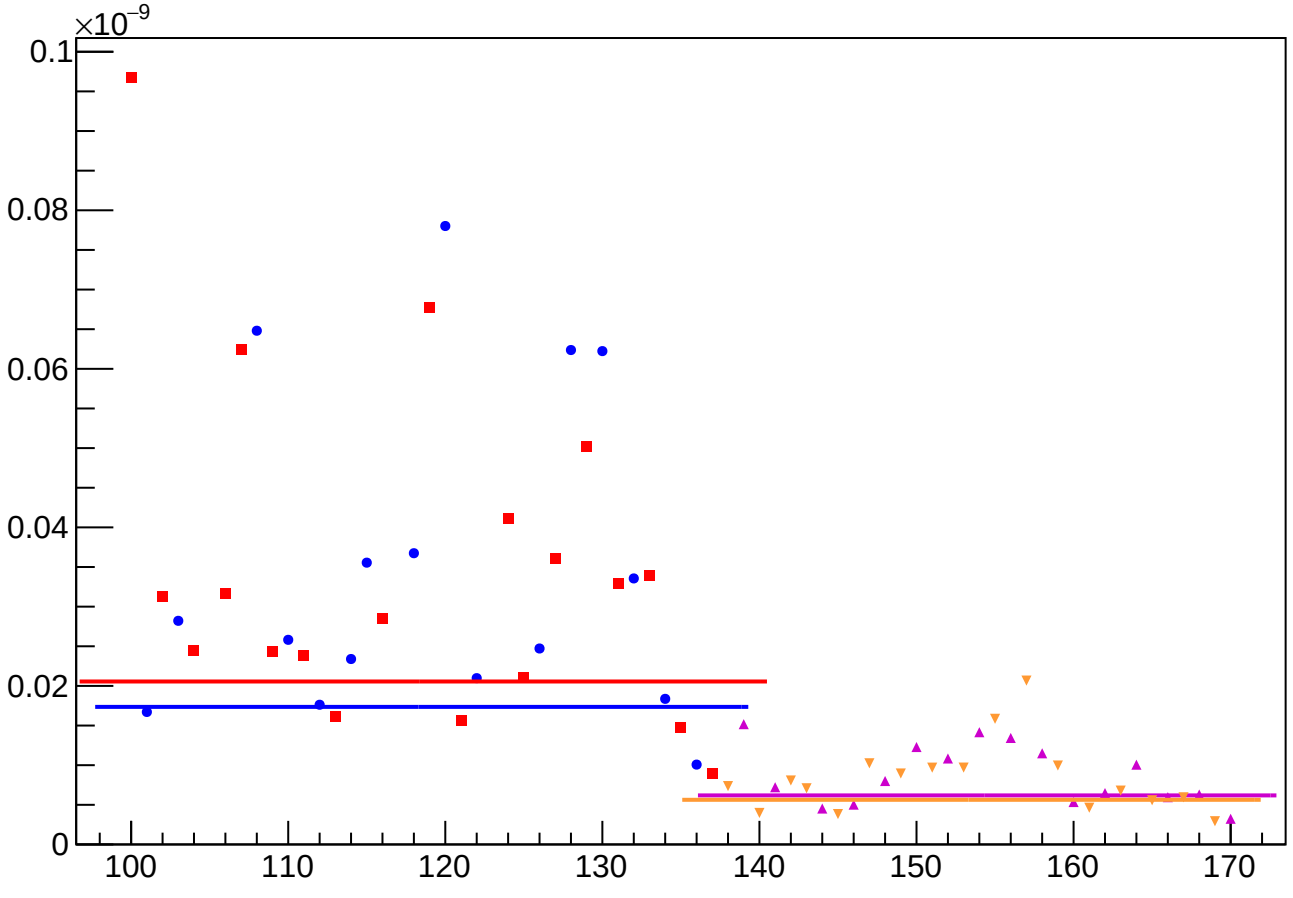
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 9.0/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:6.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 29.7/32

All: -0.000+/-0.000 $\chi^2$/NDF: 46.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 16.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2442014.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2732518.9/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1925673.6/18

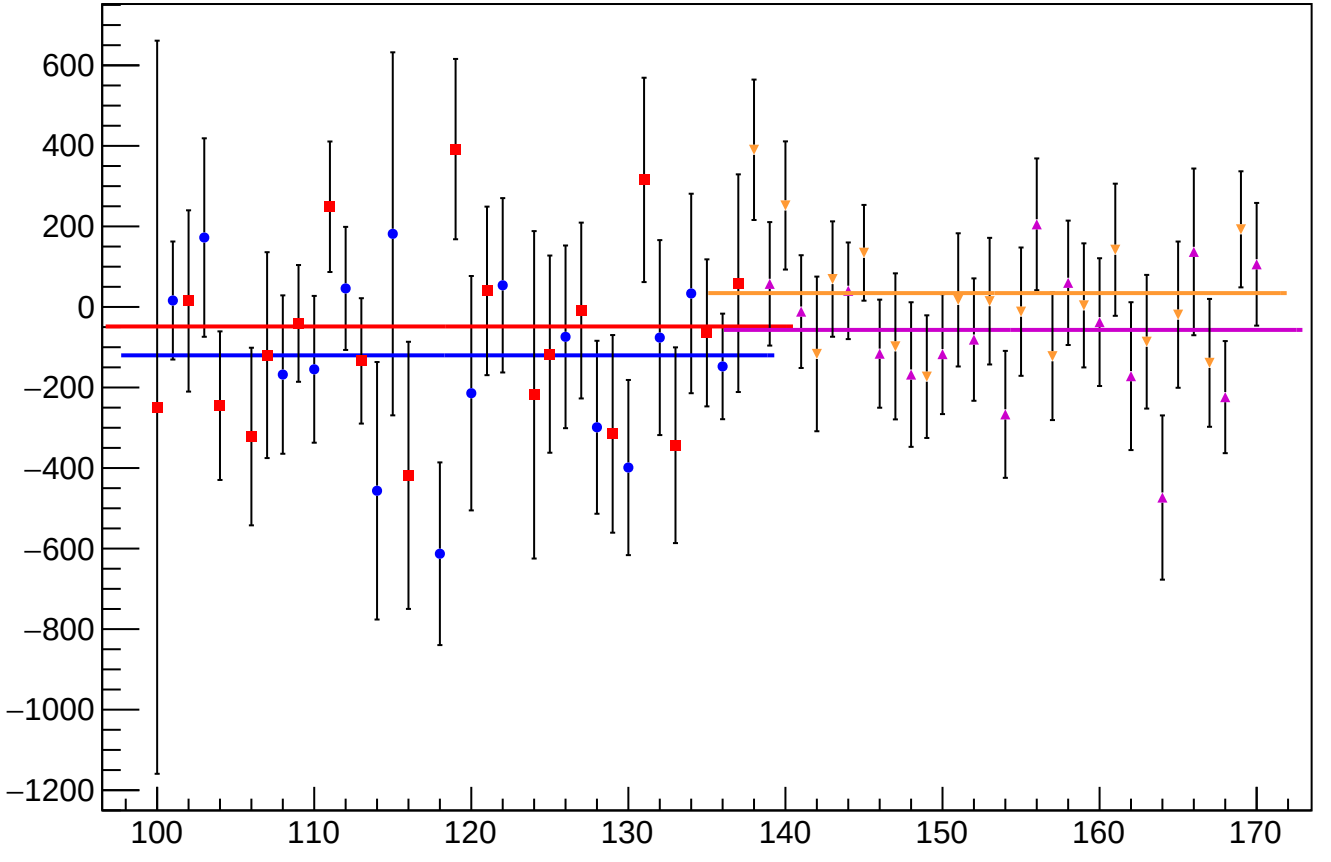
Left In: 0.000+/-0.000 $\chi^2$/NDF:2578022.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 8066720.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 15973808.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 7845111.8/34

# reg_asym_sam_48_avg_mean vs Slug




Right In: -120.159+/-51.103 $\chi^2$/NDF: 13.4/15

Left Out: 34.405+/-38.282 $\chi^2$/NDF:14.4/16

Right Out: -48.449+/-49.910 $\chi^2$/NDF: 17.0/18

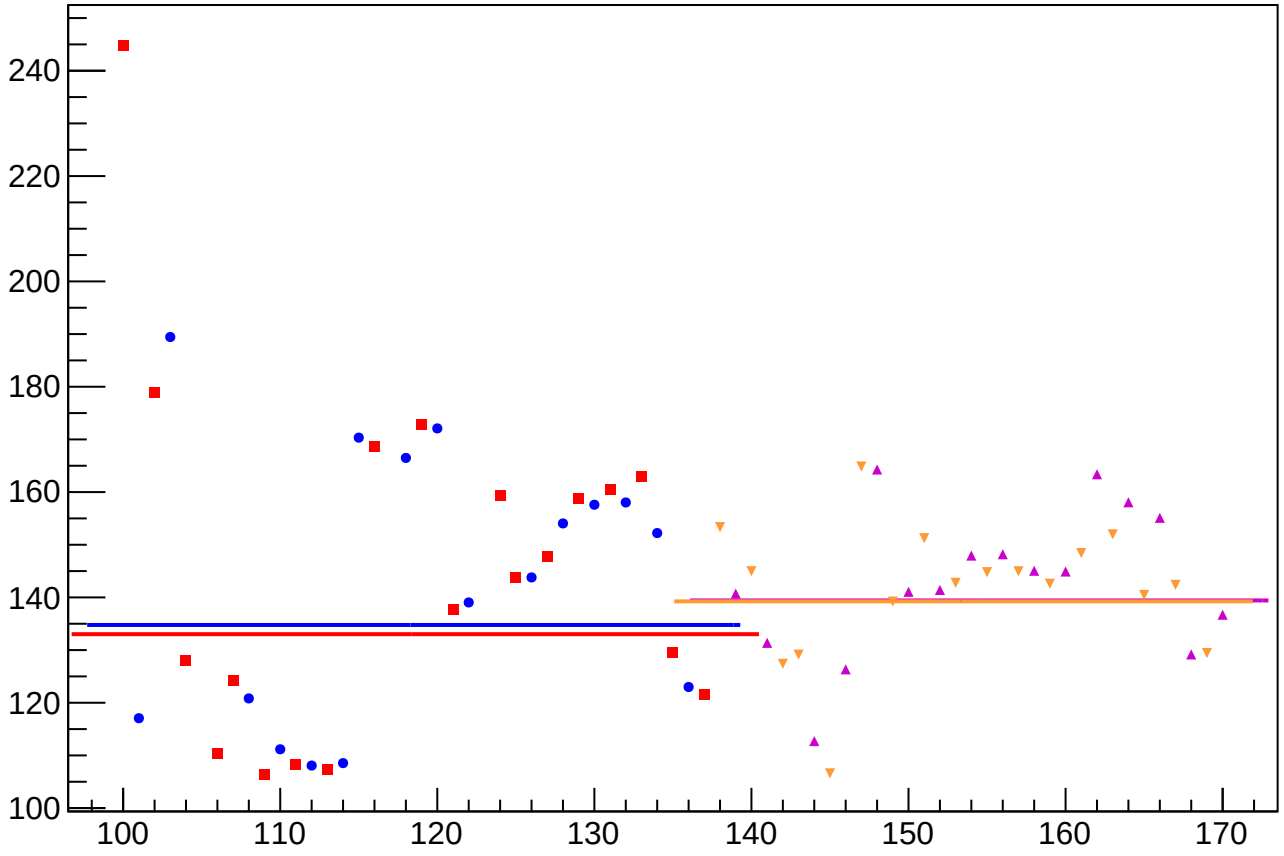
Left In: -56.985+/-38.664 $\chi^2$/NDF:15.0/15

+ sign -21.153+/-30.638 $\chi^2$/NDF: 33.7/32

All: -37.507+/-21.639 $\chi^2$/NDF: 66.3/67

- sign -53.783+/-30.565 $\chi^2$/NDF: 32.0/34

# reg_asym_sam_48_avg_rms vs Slug




Right In: 134.771+/-0.036 $\chi^2$/NDF: 416778.7/15

Left Out: 139.252+/-0.027 $\chi^2$/NDF:269590.9/16

Right Out: 133.019+/-0.035 $\chi^2$/NDF: 495717.0/18

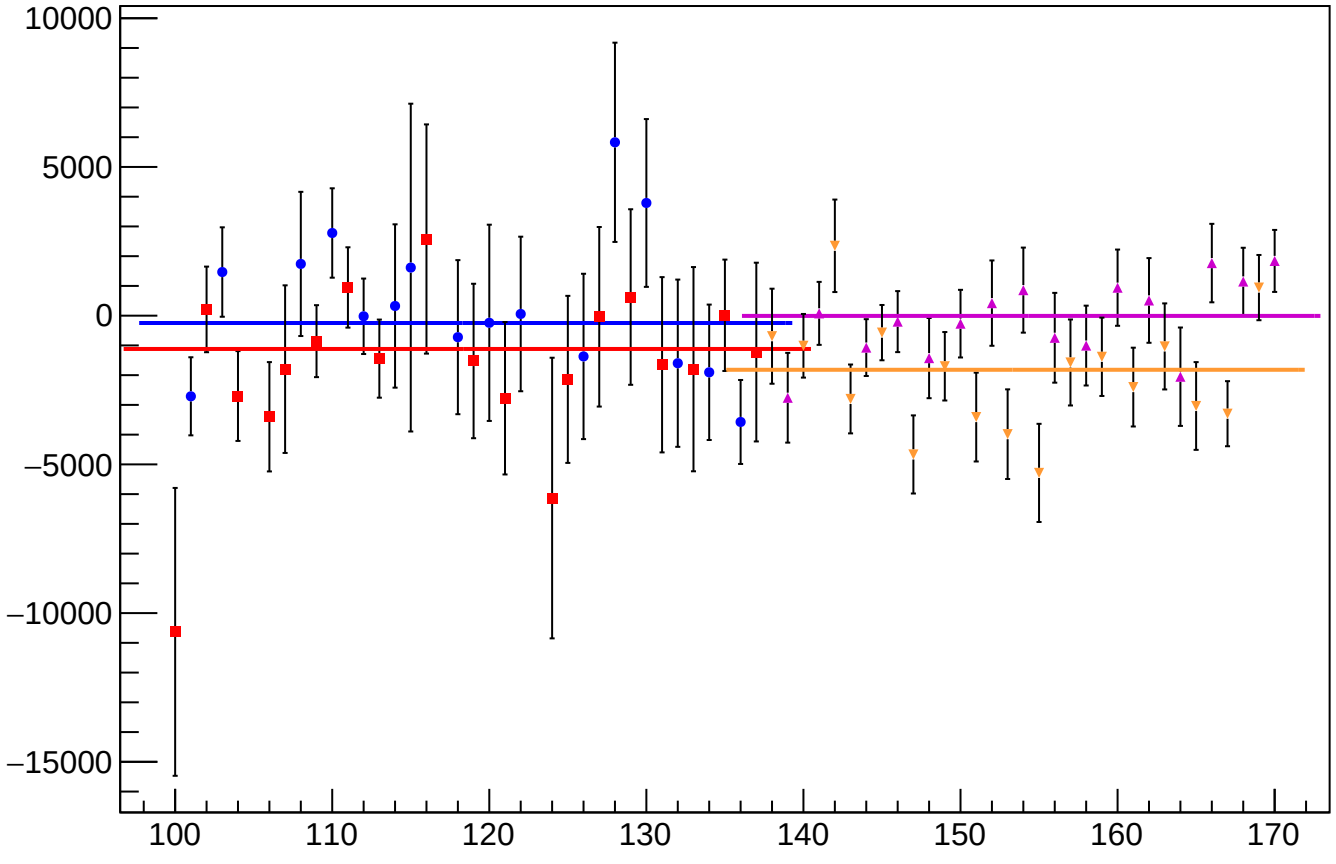
Left In: 139.426+/-0.027 $\chi^2$/NDF:254149.0/15

+ sign 137.641+/-0.022 $\chi^2$/NDF: 696218.0/32

All: 137.332+/-0.015 $\chi^2$/NDF: 1467088.5/67

- sign 137.023+/-0.022 $\chi^2$/NDF: 770462.9/34

# asym_sam_48_avg_reg_correction_mean vs Slug




Right In: -246.357+/-501.413 $\chi^2$/NDF: 21.6/15

Left Out: -1819.266+/-310.049 $\chi^2$/NDF:32.6/16

Right Out: -1119.420+/-468.400 $\chi^2$/NDF: 13.4/18

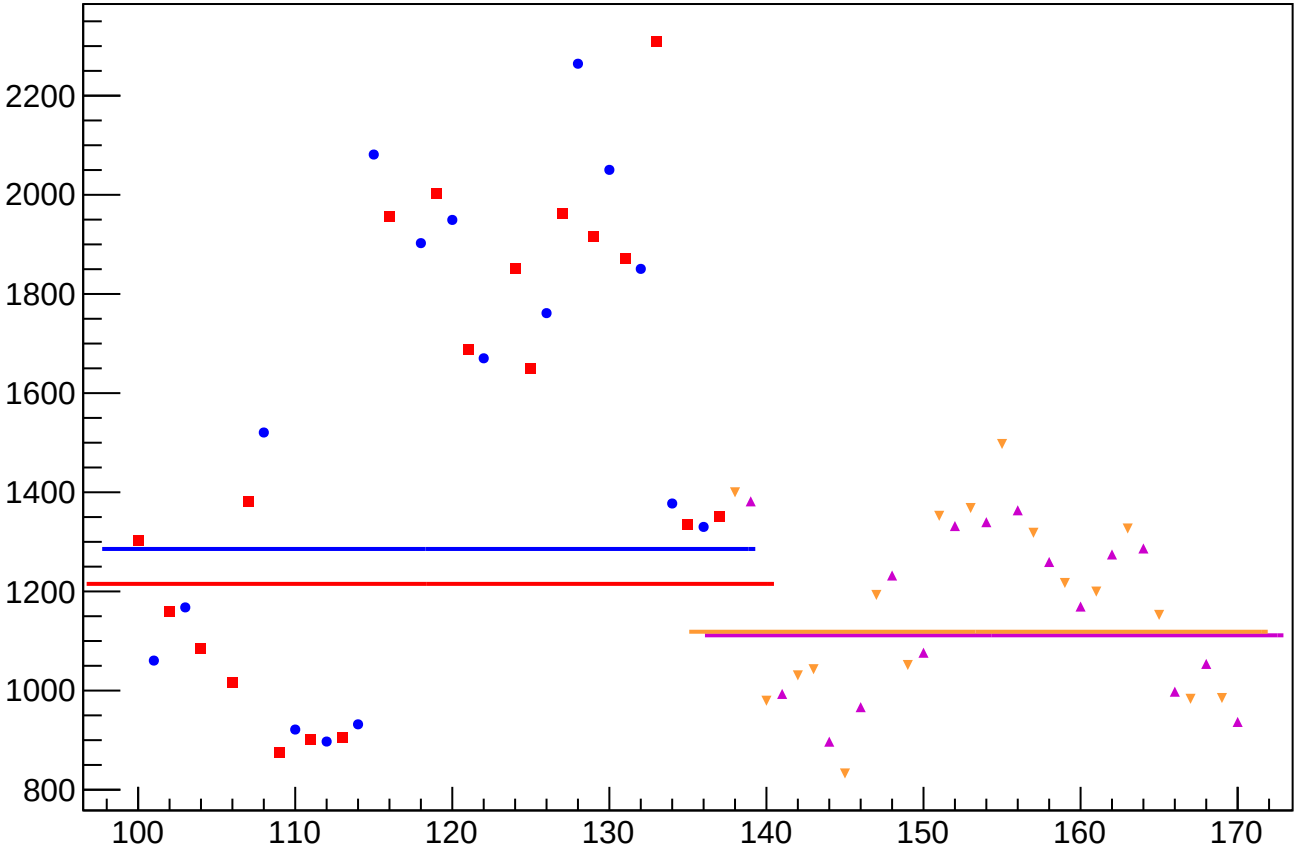
Left In: -7.881+/-309.912 $\chi^2$/NDF:15.2/15

+ sign -1384.203+/-263.706 $\chi^2$/NDF: 61.3/32

All: -854.836+/-184.586 $\chi^2$/NDF: 101.7/67

- sign -346.320+/-258.461 $\chi^2$/NDF: 32.5/34

# asym_sam_48_avg_reg_correction_rms vs Slug




Right In: 1285.668+/-0.355 $\chi^2$/NDF: 1170437.4/15

Left Out: 1118.719+/-0.219 $\chi^2$/NDF:681890.5/16

Right Out: 1215.237+/-0.331 $\chi^2$/NDF: 1386290.4/18

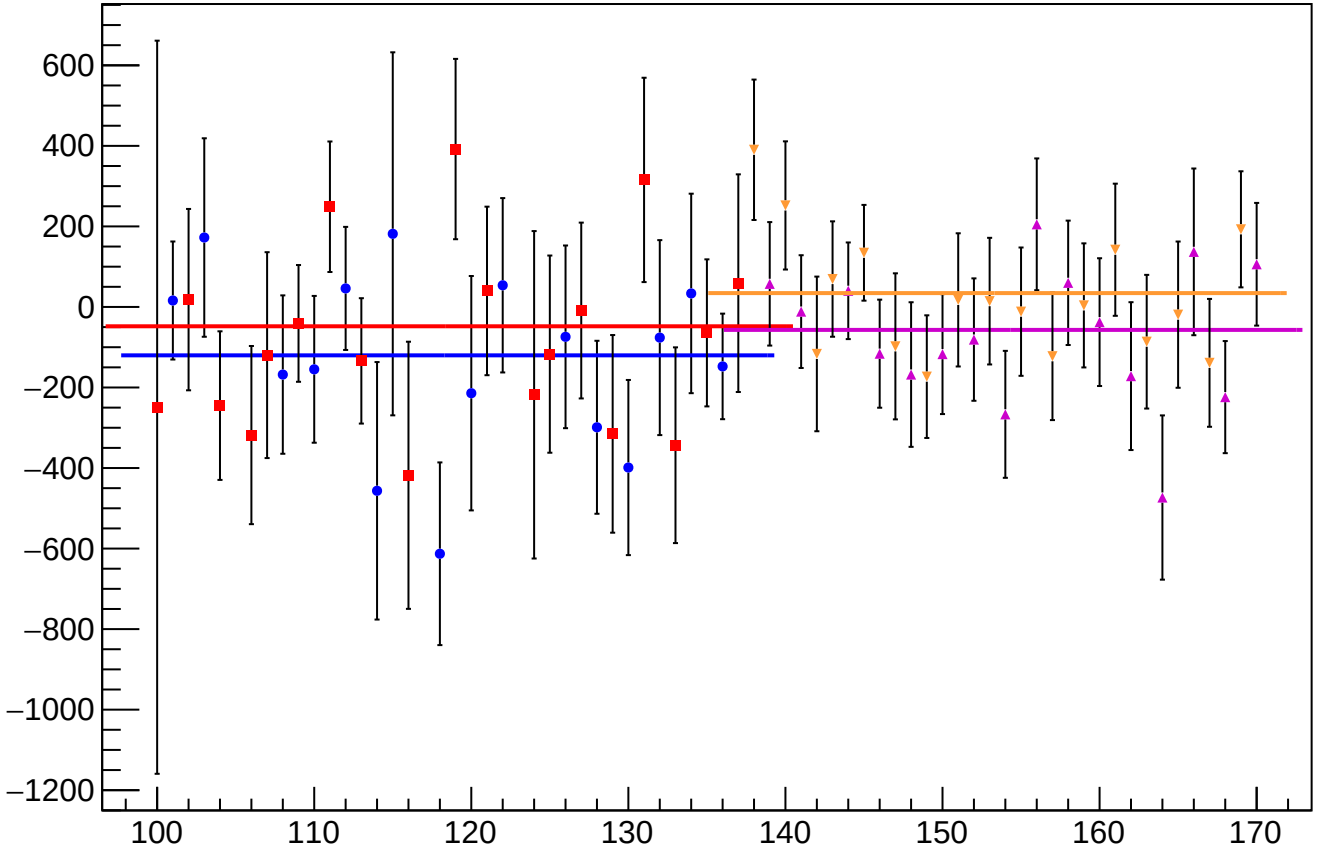
Left In: 1111.486+/-0.219 $\chi^2$/NDF:555153.3/15

+ sign 1164.897+/-0.186 $\chi^2$/NDF: 2012721.3/32

All: 1153.767+/-0.131 $\chi^2$/NDF: 4029397.2/67

- sign 1143.076+/-0.183 $\chi^2$/NDF: 2009691.5/34

# cor_asym_sam_48_avg_mean vs Slug




Right In: -120.169+/-51.103 $\chi^2$/NDF: 13.4/15

Left Out: 34.411+/-38.282 $\chi^2$/NDF:14.4/16

Right Out: -48.013+/-49.919 $\chi^2$/NDF: 17.0/18

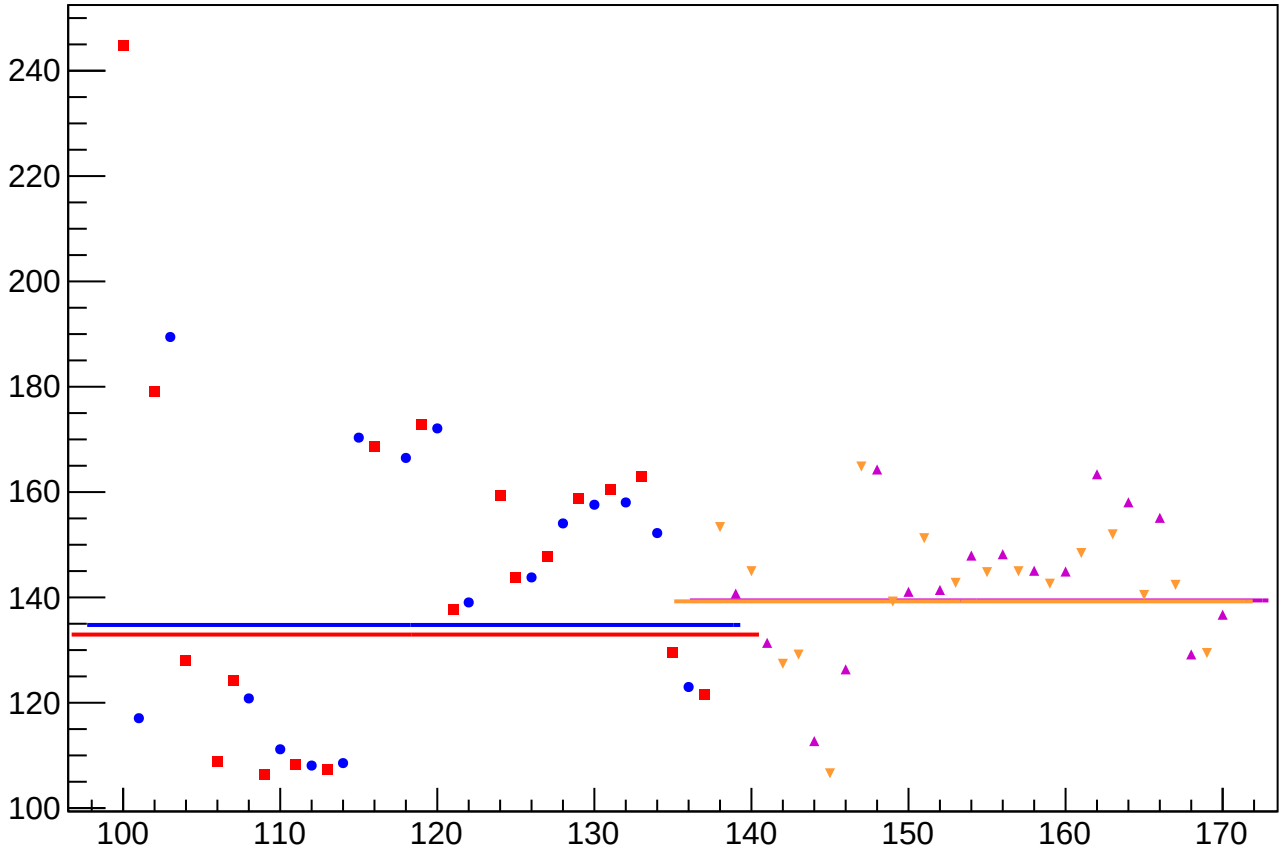
Left In: -56.983+/-38.664 $\chi^2$/NDF:15.0/15

+ sign -21.153+/-30.638 $\chi^2$/NDF: 33.7/32

All: -37.424+/-21.639 $\chi^2$/NDF: 66.2/67

- sign -53.619+/-30.567 $\chi^2$/NDF: 32.0/34

# cor_asym_sam_48_avg_rms vs Slug




Right In: 134.771+/-0.036 $\chi^2$/NDF: 416781.8/15

Left Out: 139.252+/-0.027 $\chi^2$/NDF:269590.9/16

Right Out: 132.947+/-0.035 $\chi^2$/NDF: 498850.6/18

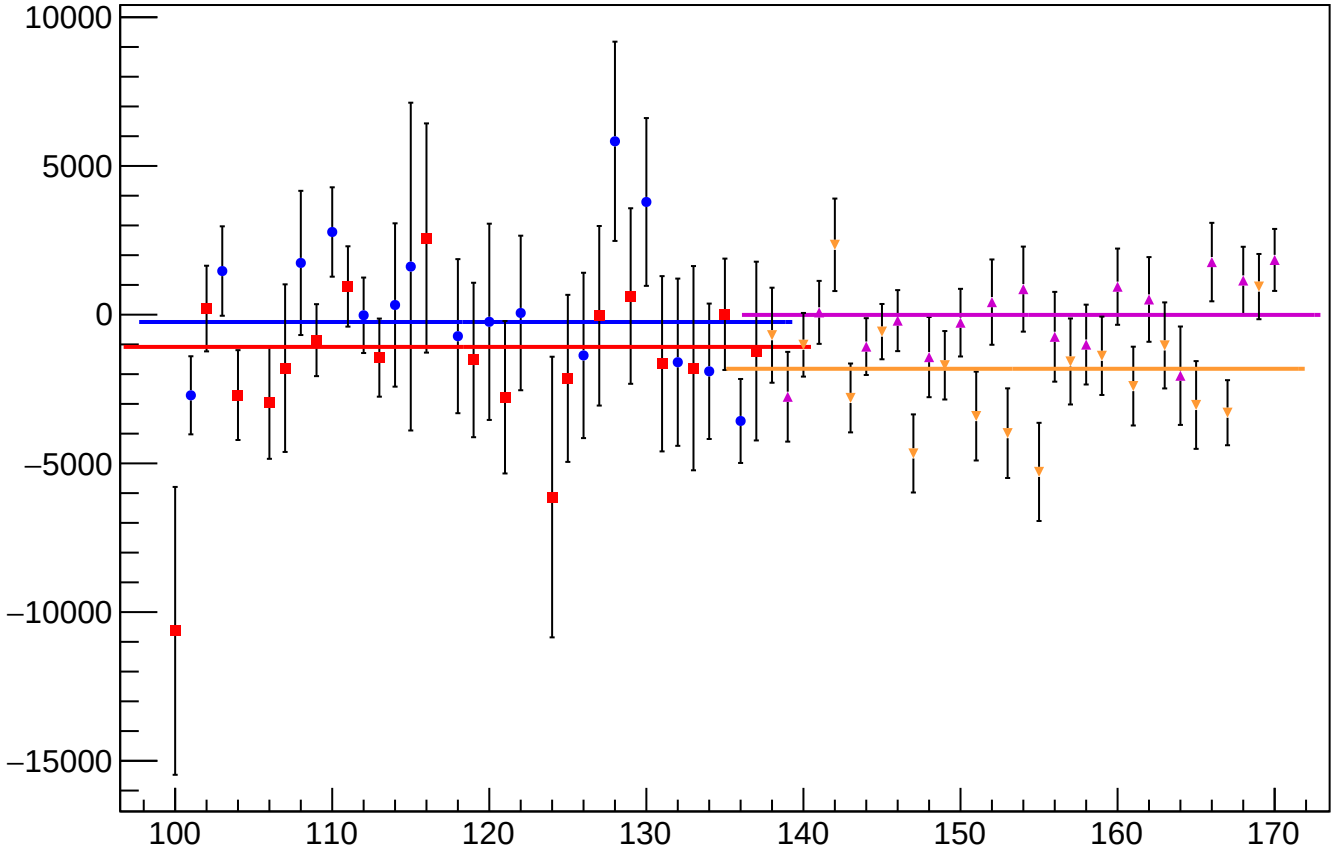
Left In: 139.426+/-0.027 $\chi^2$/NDF:254149.0/15

\+ sign 137.641+/-0.022 $\chi^2$/NDF: 696220.9/32

All: 137.318+/-0.015 $\chi^2$/NDF: 1470724.0/67

\- sign 136.997+/-0.022 $\chi^2$/NDF: 774059.6/34

# asym_sam_48_avg_cor_correction_mean vs Slug




Right In: -246.428+/-501.418 $\chi^2$/NDF: 21.6/15

Left Out: -1819.257+/-310.049 $\chi^2$/NDF:32.6/16

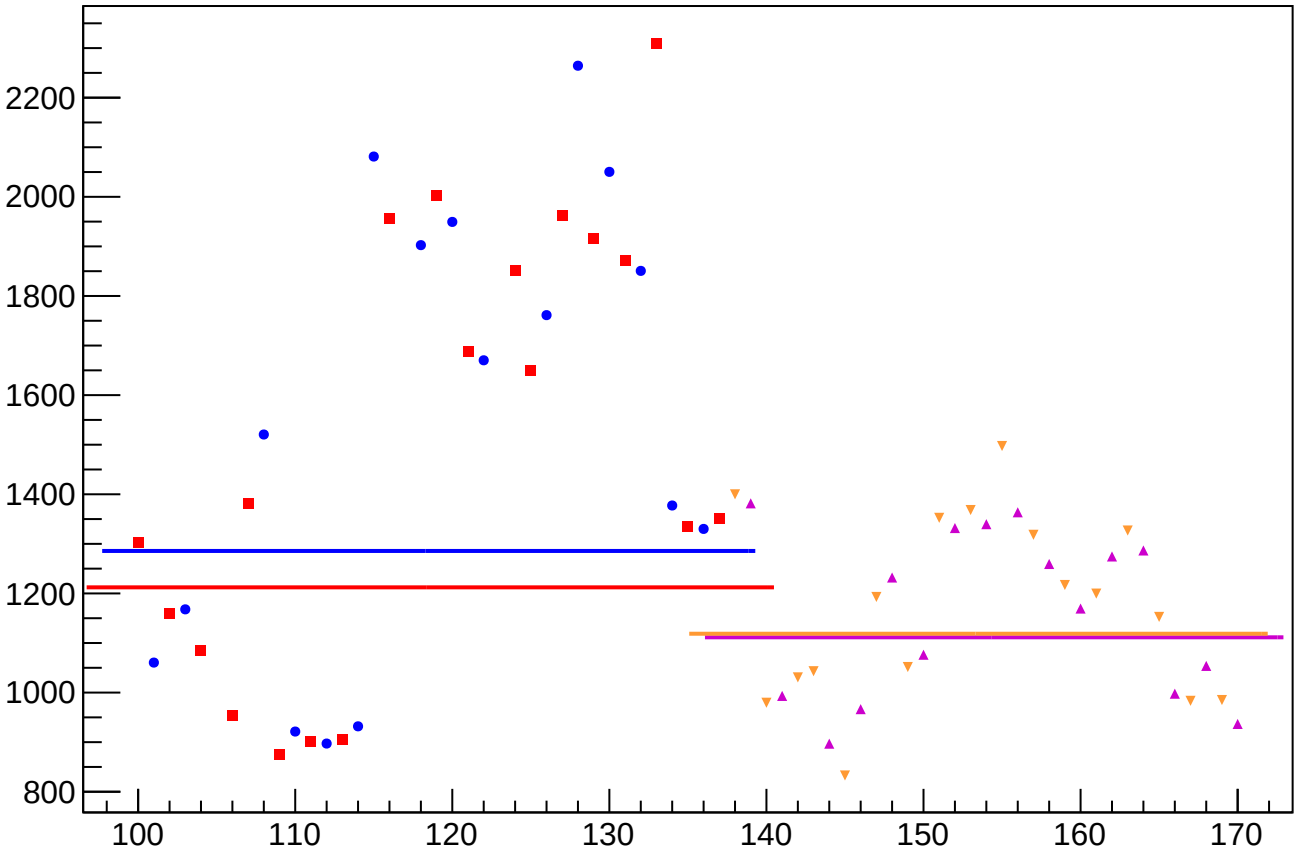
Right Out: -1084.094+/-469.323 $\chi^2$/NDF: 12.8/18

Left In: -7.889+/-309.913 $\chi^2$/NDF:15.2/15

+ sign -1384.222+/-263.707 $\chi^2$/NDF: 61.3/32

All: -849.218+/-184.643 $\chi^2$/NDF: 101.1/67

- sign -334.673+/-258.616 $\chi^2$/NDF: 31.7/34




Right In: 1285.682+/-0.355 $\chi^2$/NDF: 1170412.5/15

Left Out: 1118.719+/-0.219 $\chi^2$/NDF:681891.8/16

Right Out: 1212.276+/-0.332 $\chi^2$/NDF: 1400635.5/18

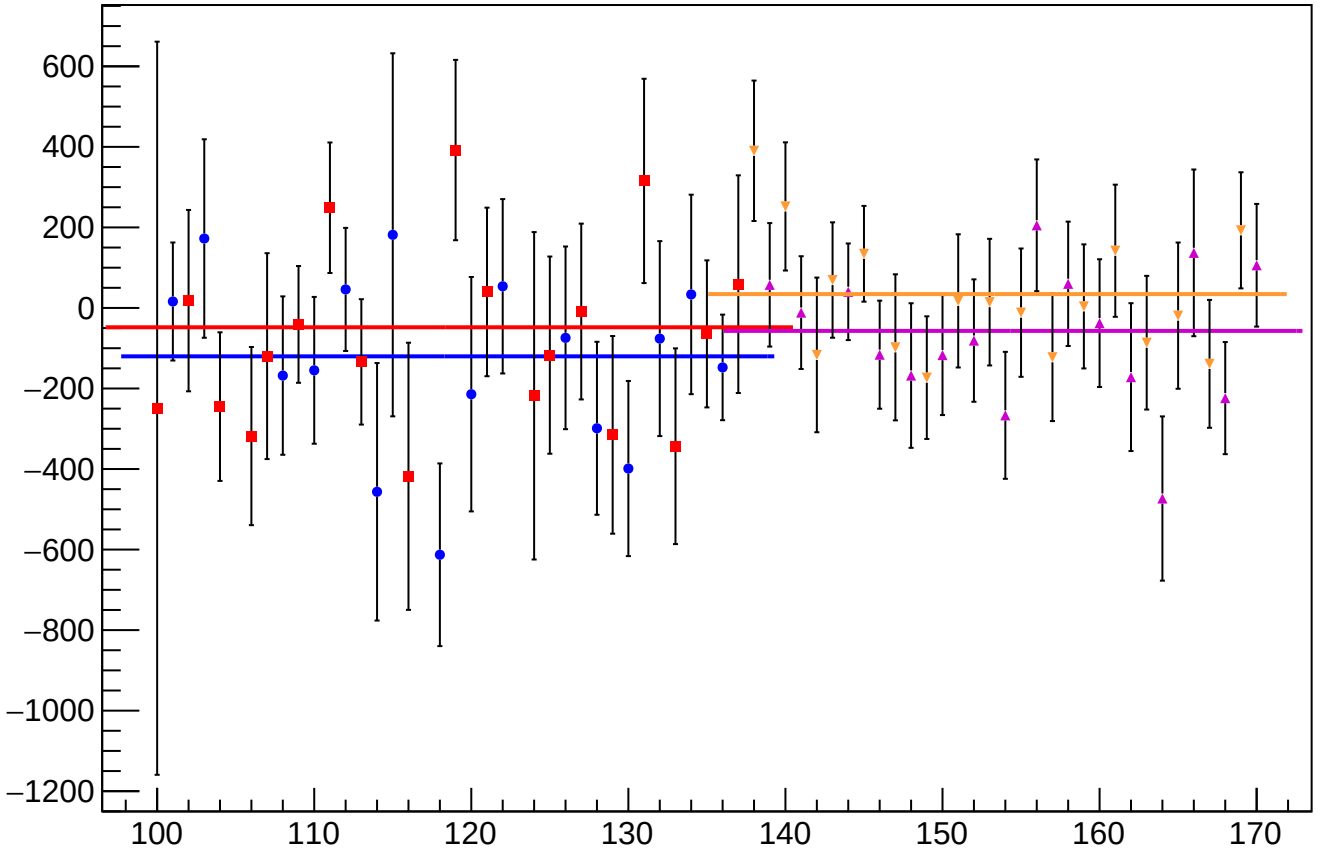
Left In: 1111.487+/-0.219 $\chi^2$/NDF:555151.1/15

+ sign 1164.900+/-0.186 $\chi^2$/NDF: 2012721.8/32

All: 1153.273+/-0.131 $\chi^2$/NDF: 4040365.8/67

- sign 1142.091+/-0.183 $\chi^2$/NDF: 2020017.0/34

# eigen_cor_asym_sam_48_avg_mean vs Slug




Right In: -120.169+/-51.103 $\chi^2$/NDF: 13.4/15

Left Out: 34.411+/-38.282 $\chi^2$/NDF:14.4/16

Right Out: -48.013+/-49.919 $\chi^2$/NDF: 17.0/18

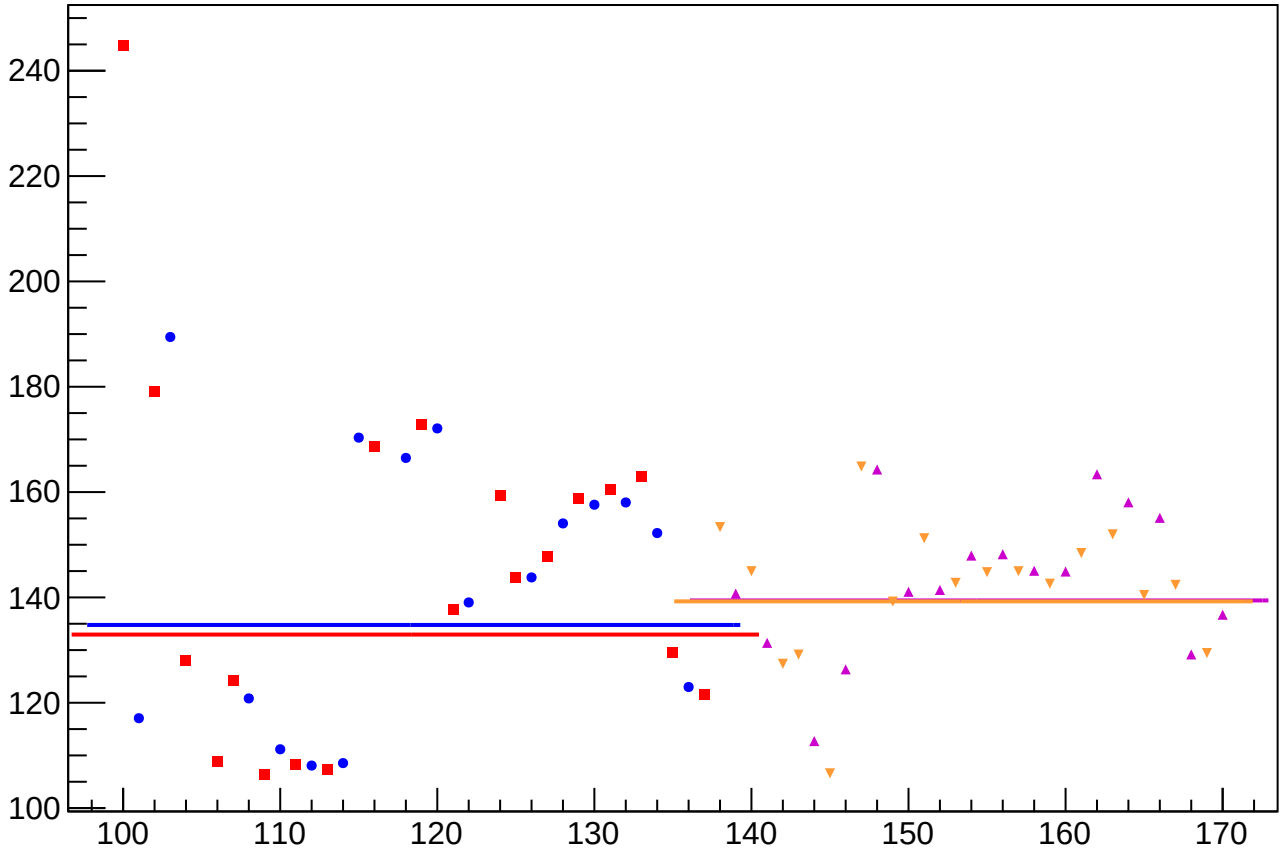
Left In: -56.983+/-38.664 $\chi^2$/NDF:15.0/15

+ sign -21.153+/-30.638 $\chi^2$/NDF: 33.7/32

All: -37.424+/-21.639 $\chi^2$/NDF: 66.2/67

- sign -53.619+/-30.567 $\chi^2$/NDF: 32.0/34

# eigen_cor_asym_sam_48_avg_rms vs Slug




Right In: 134.771+/-0.036 $\chi^2$/NDF: 416781.8/15

Left Out: 139.252+/-0.027 $\chi^2$/NDF:269590.9/16

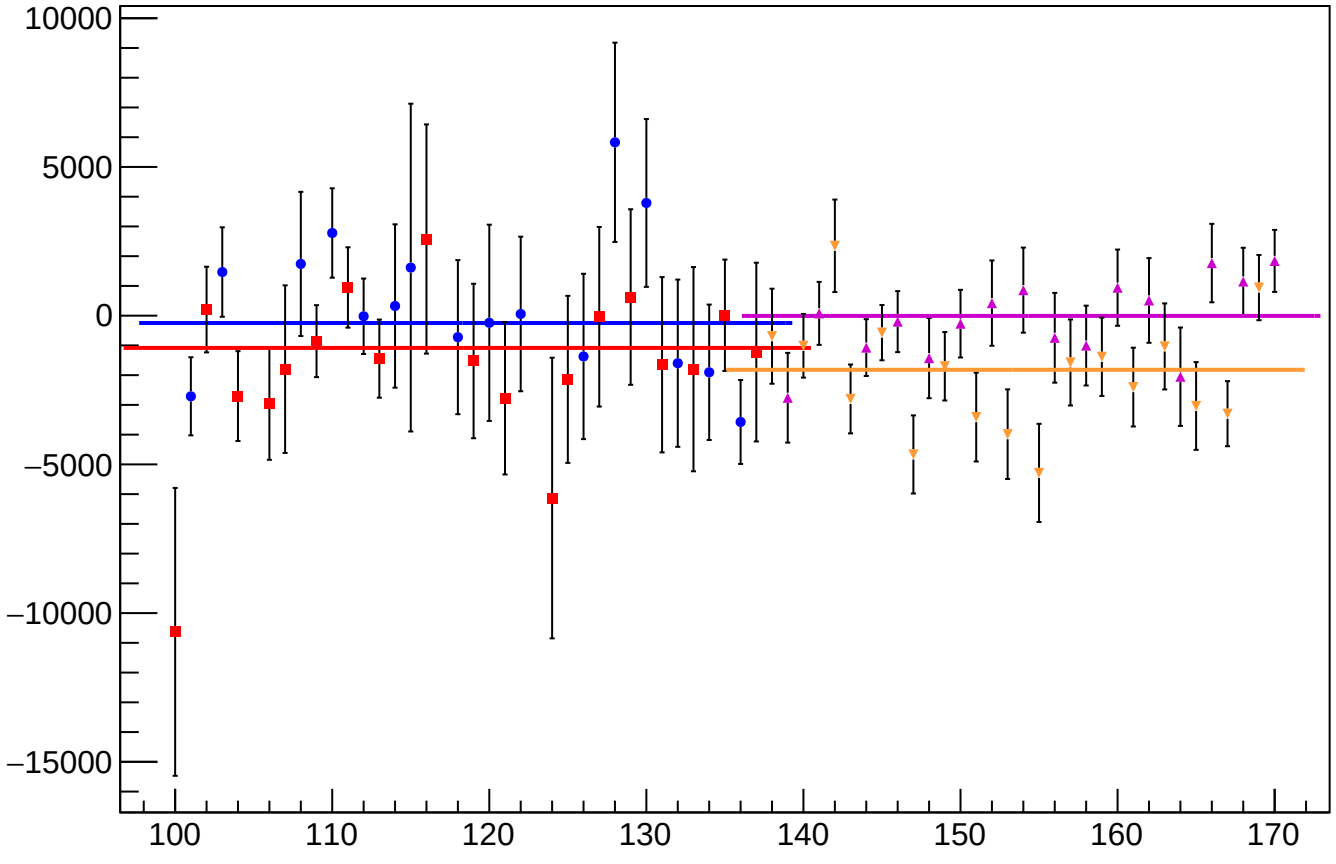
Right Out: 132.947+/-0.035 $\chi^2$/NDF: 498850.6/18

Left In: 139.426+/-0.027 $\chi^2$/NDF:254149.0/15

+ sign 137.641+/-0.022 $\chi^2$/NDF: 696220.9/32

All: 137.318+/-0.015 $\chi^2$/NDF: 1470724.0/67

- sign 136.997+/-0.022 $\chi^2$/NDF: 774059.6/34




Right In: -246.428+/-501.418 $\chi^2$/NDF: 21.6/15

Left Out: -1819.257+/-310.049 $\chi^2$/NDF:32.6/16

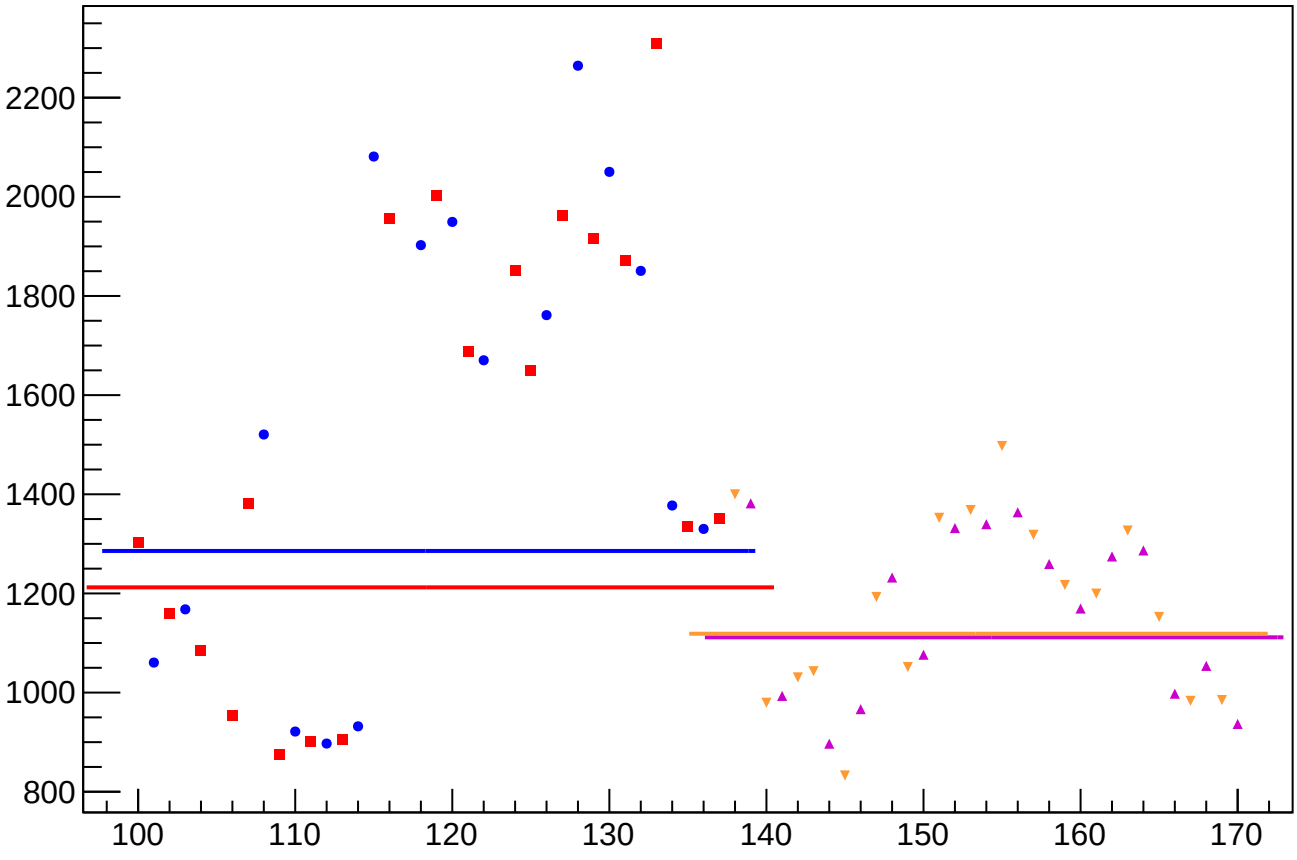
Right Out: -1084.094+/-469.323 $\chi^2$/NDF: 12.8/18

Left In: -7.889+/-309.913 $\chi^2$/NDF:15.2/15

+ sign -1384.222+/-263.707 $\chi^2$/NDF: 61.3/32

All: -849.218+/-184.643 $\chi^2$/NDF: 101.1/67

- sign -334.673+/-258.616 $\chi^2$/NDF: 31.7/34




Right In: 1285.682+/-0.355 $\chi^2$/NDF: 1170412.5/15

Left Out: 1118.719+/-0.219 $\chi^2$/NDF:681891.8/16

Right Out: 1212.276+/-0.332 $\chi^2$/NDF: 1400635.5/18

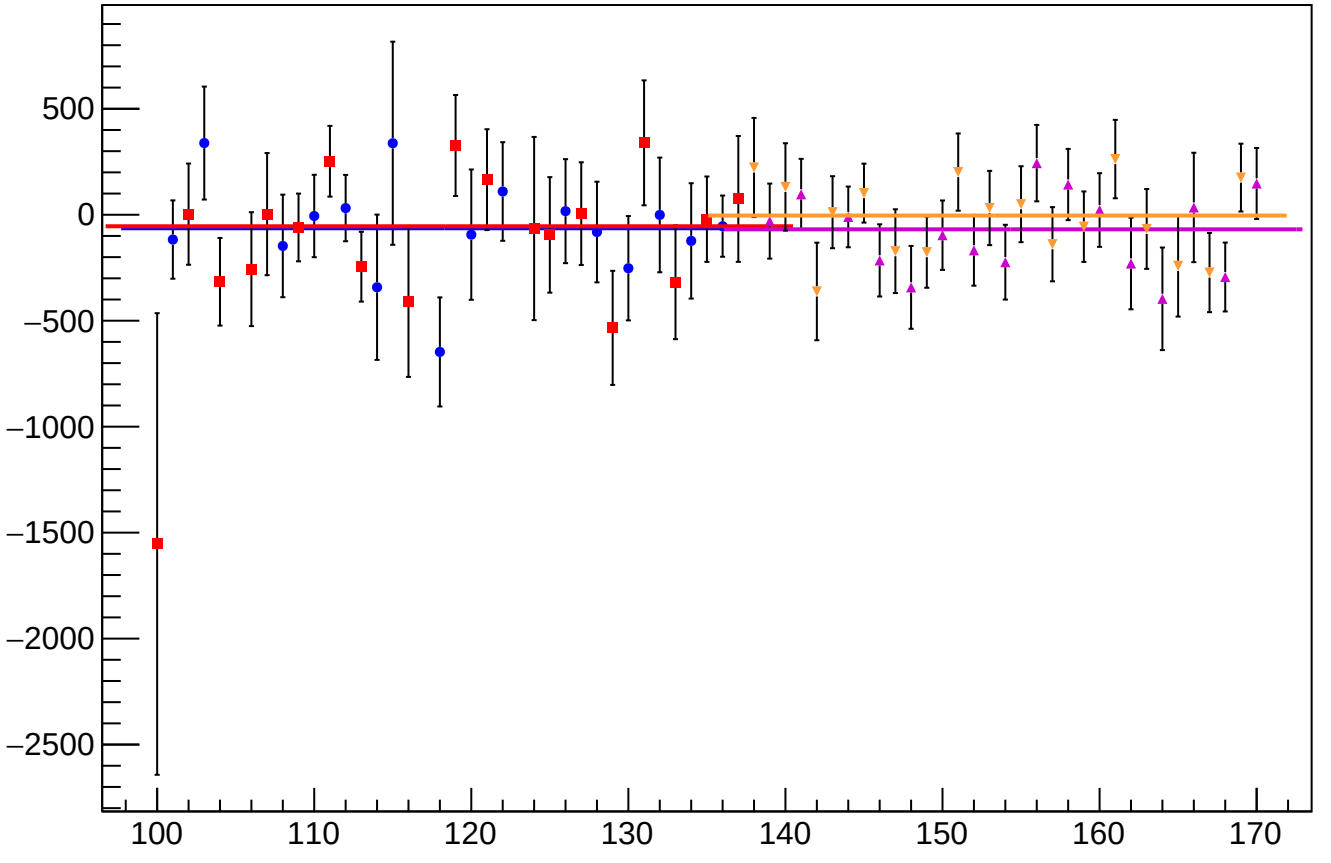
Left In: 1111.487+/-0.219 $\chi^2$/NDF:555151.1/15

+ sign 1164.900+/-0.186 $\chi^2$/NDF: 2012721.8/32

All: 1153.273+/-0.131 $\chi^2$/NDF: 4040365.8/67

- sign 1142.091+/-0.183 $\chi^2$/NDF: 2020017.0/34

# dit_asym_sam_48_avg_mean vs Slug




Right In: -63.781+/-56.734 $\chi^2$/NDF: 10.8/15

Left Out: -3.741+/-44.139 $\chi^2$/NDF:14.7/16

Right Out: -54.305+/-54.743 $\chi^2$/NDF: 19.5/18

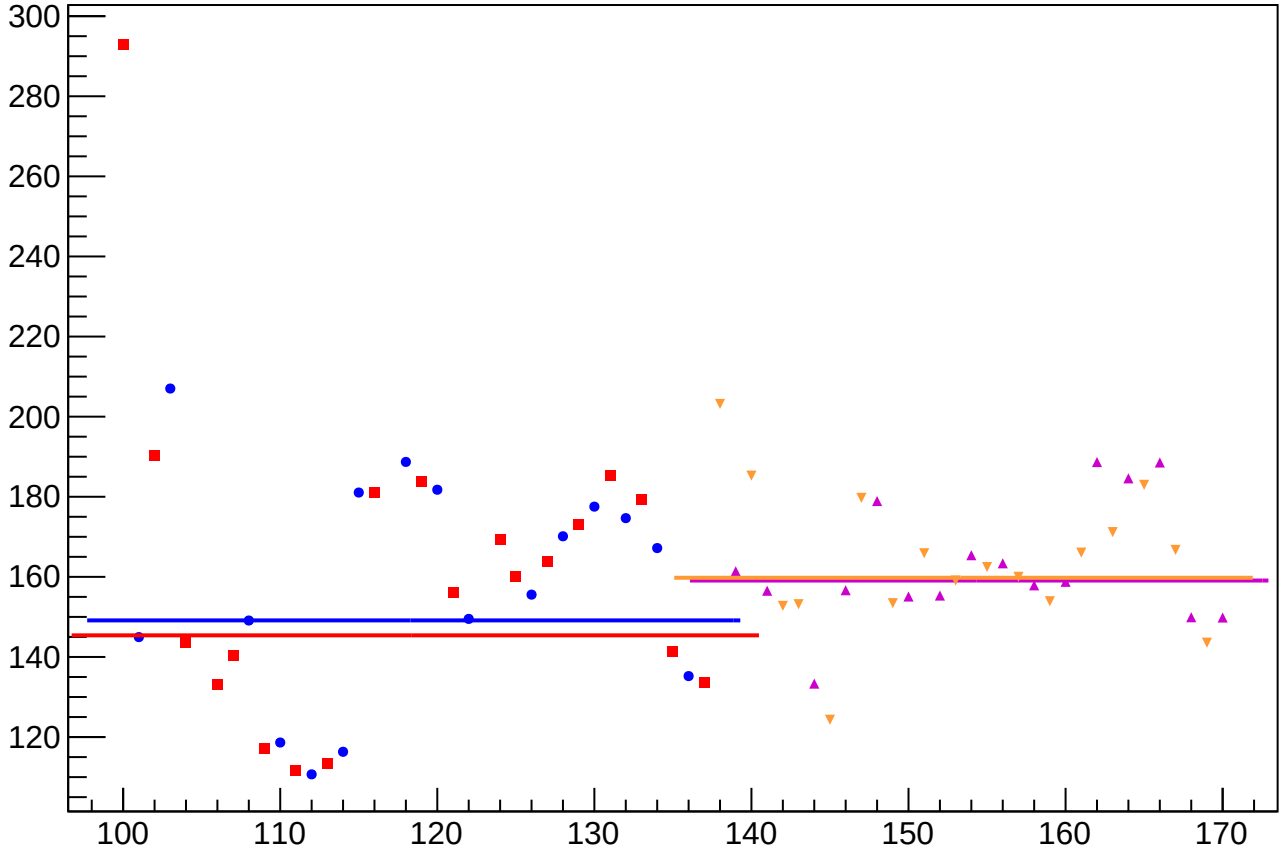
Left In: -68.781+/-44.352 $\chi^2$/NDF:16.0/15

+ sign -26.380+/-34.837 $\chi^2$/NDF: 26.3/32

All: -44.911+/-24.500 $\chi^2$/NDF: 62.4/67

- sign -63.044+/-34.461 $\chi^2$/NDF: 35.6/34

# dit_asym_sam_48_avg_rms vs Slug




Right In: 149.130+/-0.040 $\chi^2$/NDF: 451003.6/15

Left Out: 159.774+/-0.031 $\chi^2$/NDF:314420.2/16

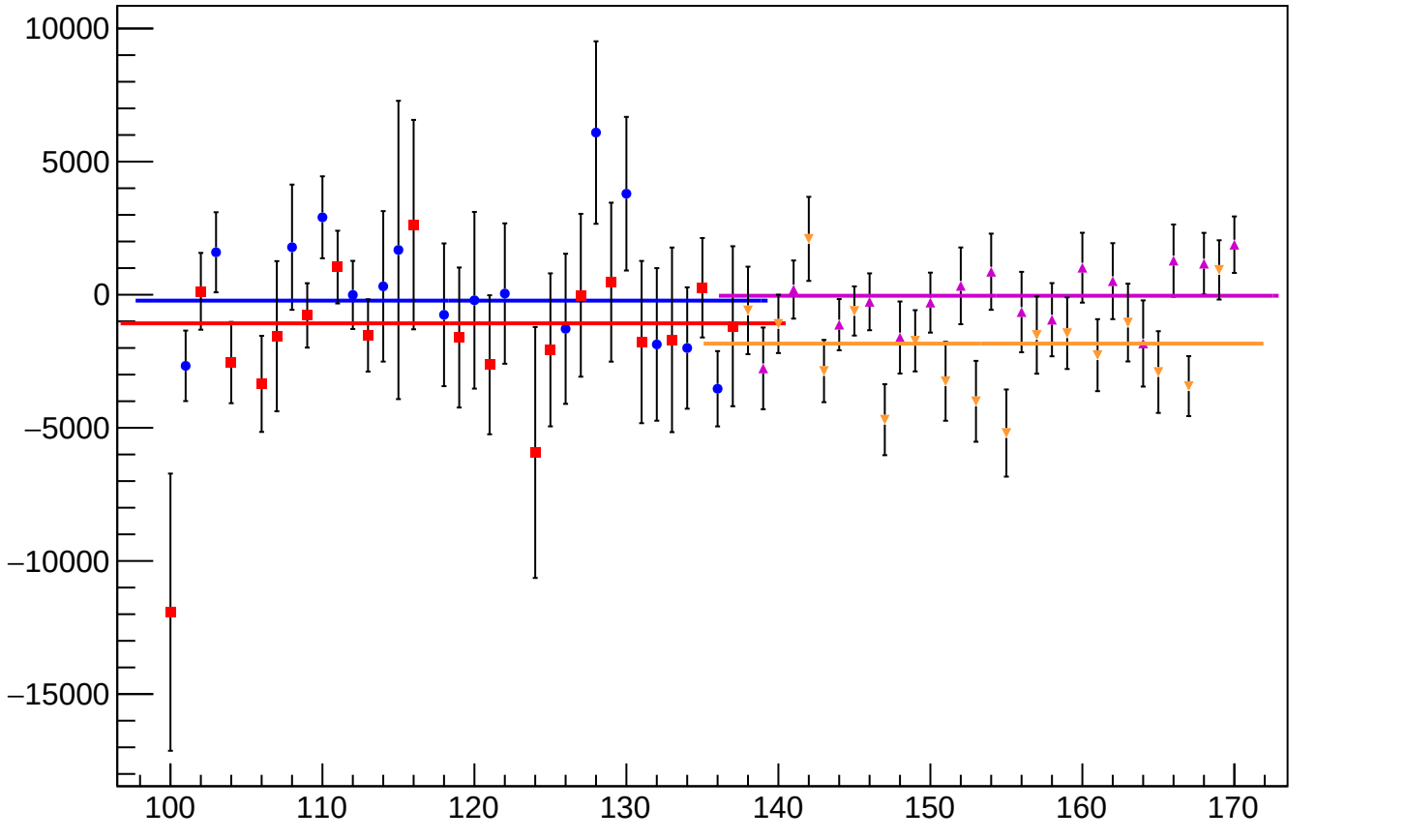
Right Out: 145.399+/-0.039 $\chi^2$/NDF: 525820.0/18

Left In: 159.084+/-0.031 $\chi^2$/NDF:190610.5/15

\+ sign 155.761+/-0.025 $\chi^2$/NDF: 809277.8/32

All: 154.699+/-0.017 $\chi^2$/NDF: 1604835.9/67

\- sign 153.661+/-0.024 $\chi^2$/NDF: 791884.7/34




Right In: -221.240+/-506.202 $\chi^2$/NDF: 21.9/15

Left Out: -1835.765+/-313.845 $\chi^2$/NDF:30.8/16

Right Out: -1074.433+/-472.816 $\chi^2$/NDF: 13.6/18

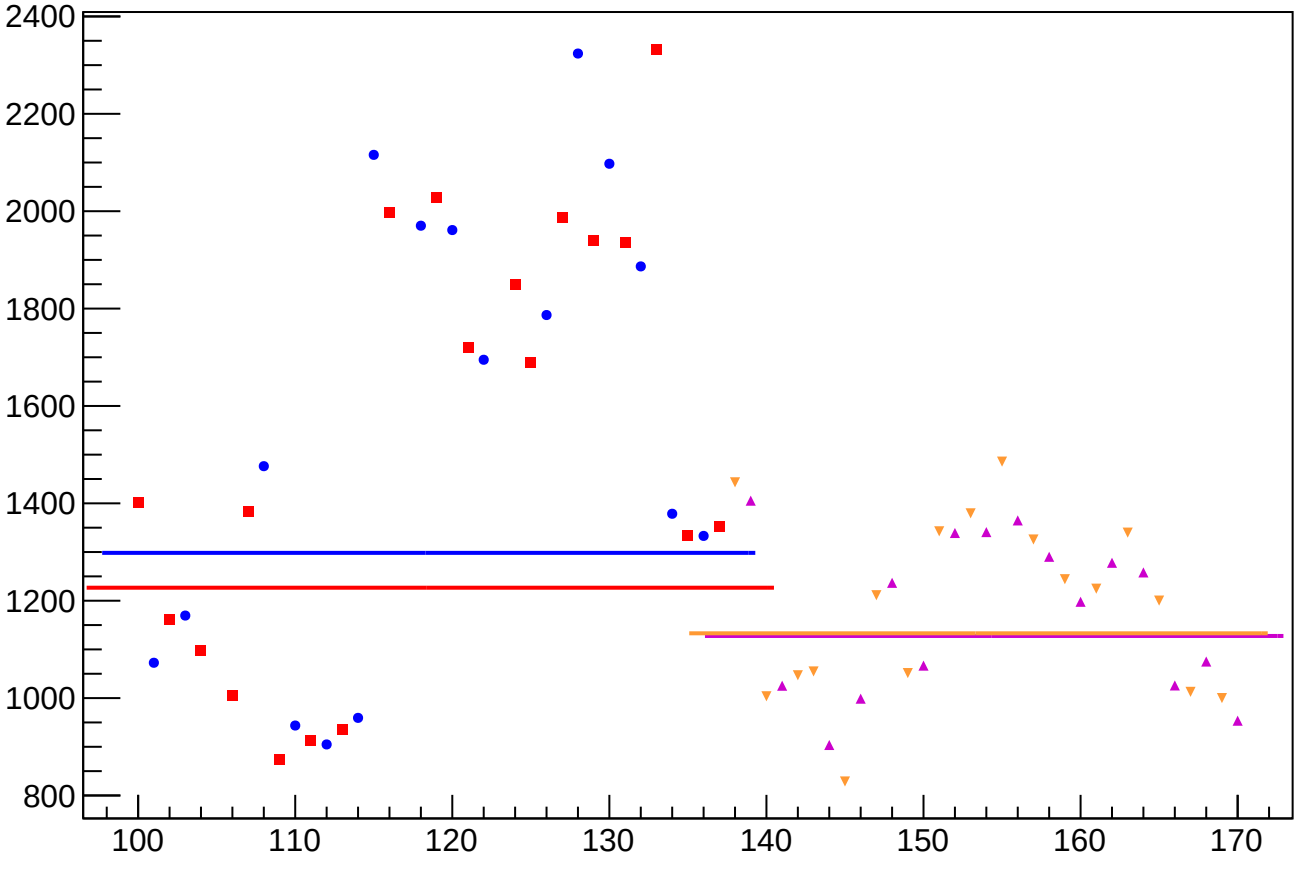
Left In: -38.441+/-314.230 $\chi^2$/NDF:14.3/15

+ sign -1387.467+/-266.738 $\chi^2$/NDF: 60.0/32

All: -861.828+/-186.808 $\chi^2$/NDF: 98.8/67

- sign -355.835+/-261.706 $\chi^2$/NDF: 31.2/34

# asym_sam_48_avg_dit_correction_rms vs Slug




Right In: 1298.293+/-0.358 $\chi^2$/NDF: 1182123.0/15

Left Out: 1133.073+/-0.222 $\chi^2$/NDF:687287.1/16

Right Out: 1226.729+/-0.334 $\chi^2$/NDF: 1404521.7/18

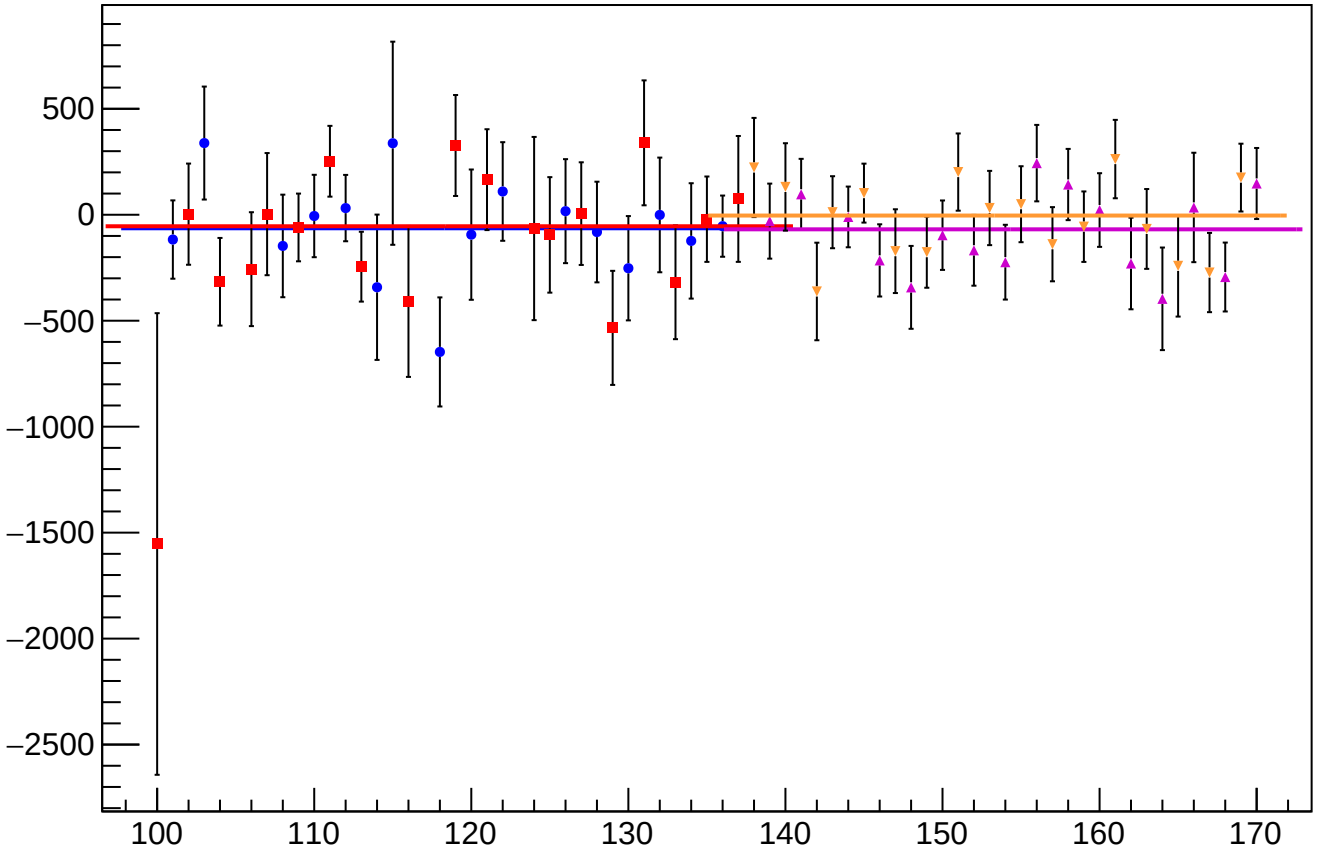
Left In: 1127.617+/-0.222 $\chi^2$/NDF:514544.4/15

+ sign 1178.949+/-0.189 $\chi^2$/NDF: 2023312.9/32

All: 1168.266+/-0.132 $\chi^2$/NDF: 4009632.0/67

- sign 1157.982+/-0.185 $\chi^2$/NDF: 1980022.5/34

# eigen_dit_asym_sam_48_avg_mean vs Slug




Right In: -63.778+/-56.734 $\chi^2$/NDF: 10.8/15

Left Out: -3.738+/-44.139 $\chi^2$/NDF:14.7/16

Right Out: -54.304+/-54.743 $\chi^2$/NDF: 19.5/18

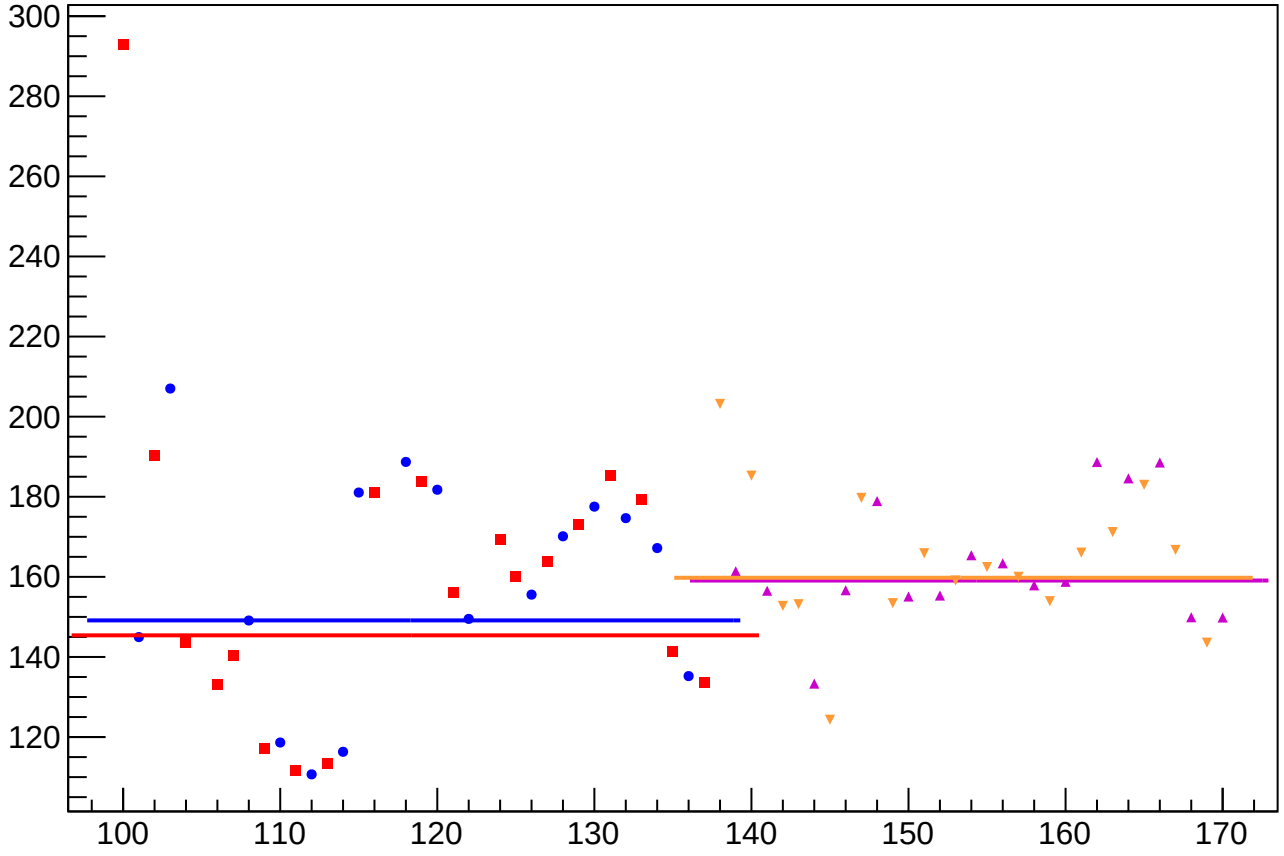
Left In: -68.781+/-44.352 $\chi^2$/NDF:16.0/15

+ sign -26.377+/-34.837 $\chi^2$/NDF: 26.3/32

All: -44.909+/-24.500 $\chi^2$/NDF: 62.4/67

- sign -63.044+/-34.461 $\chi^2$/NDF: 35.6/34

# eigen_dit_asym_sam_48_avg_rms vs Slug




Right In: 149.130+/-0.040 $\chi^2$/NDF: 451005.1/15

Left Out: 159.775+/-0.031 $\chi^2$/NDF:314415.3/16

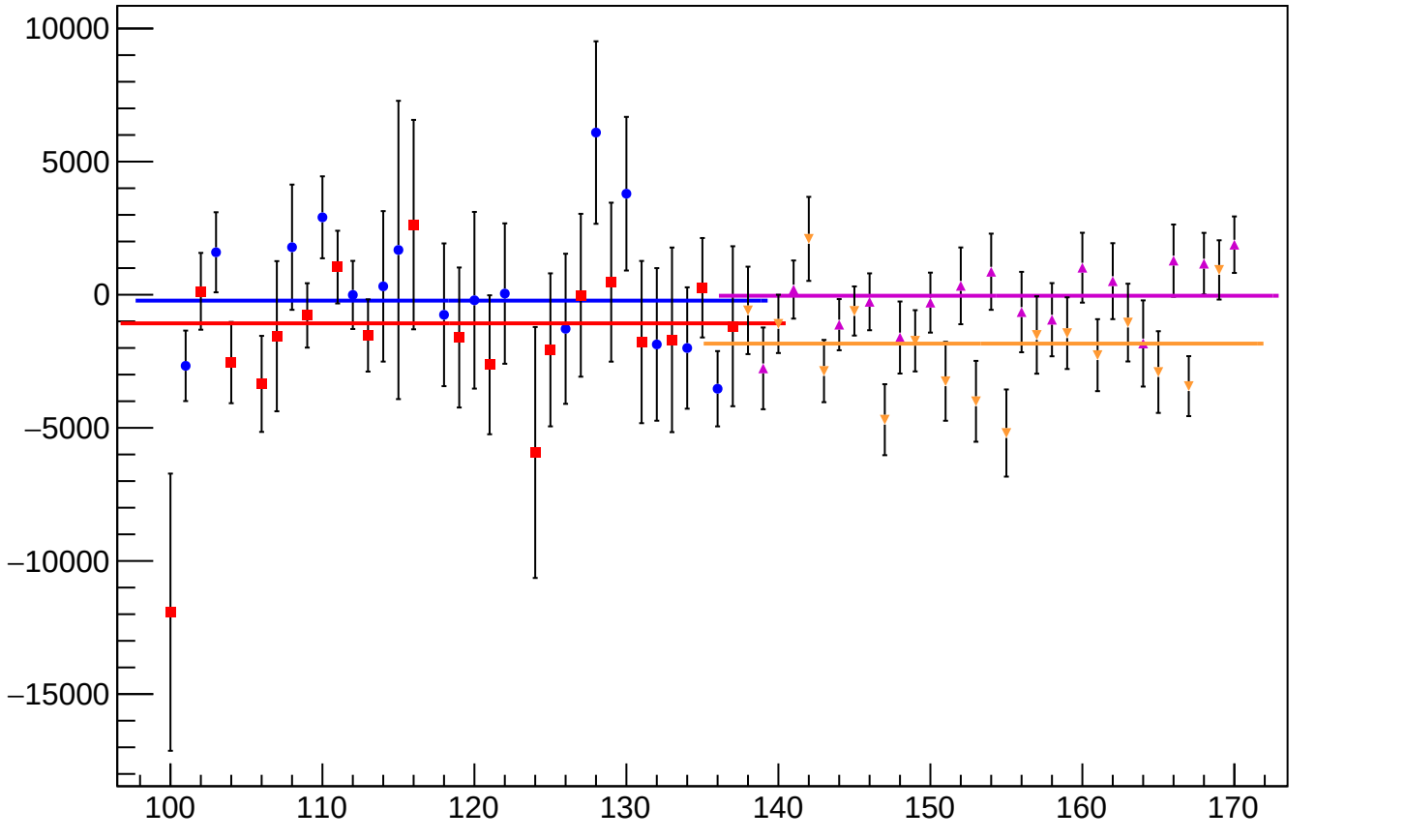
Right Out: 145.399+/-0.039 $\chi^2$/NDF: 525822.2/18

Left In: 159.084+/-0.031 $\chi^2$/NDF:190609.6/15

+ sign 155.761+/-0.025 $\chi^2$/NDF: 809277.1/32

All: 154.700+/-0.017 $\chi^2$/NDF: 1604840.3/67

- sign 153.661+/-0.024 $\chi^2$/NDF: 791889.6/34




Right In: -221.239+/-506.201 $\chi^2$/NDF: 21.9/15

Left Out: -1835.760+/-313.845 $\chi^2$/NDF:30.8/16

Right Out: -1074.432+/-472.816 $\chi^2$/NDF: 13.6/18

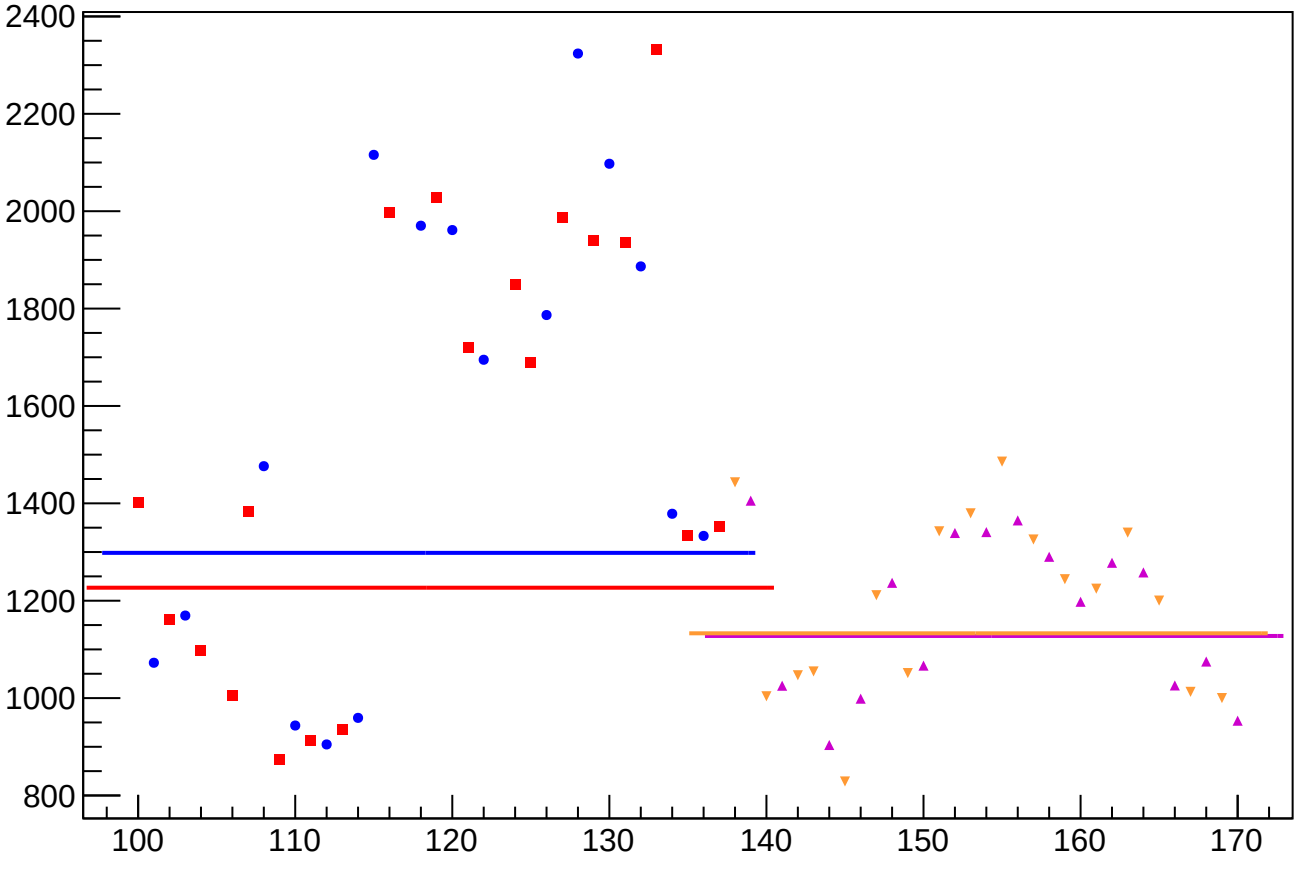
Left In: -38.440+/-314.230 $\chi^2$/NDF:14.3/15

+ sign -1387.464+/-266.737 $\chi^2$/NDF: 60.0/32

All: -861.826+/-186.807 $\chi^2$/NDF: 98.8/67

- sign -355.833+/-261.705 $\chi^2$/NDF: 31.2/34

# asym_sam_48_avg_eigen_dit_correction_rms vs Slug




Right In: 1298.292+/-0.358 $\chi^2$/NDF: 1182127.2/15

Left Out: 1133.071+/-0.222 $\chi^2$/NDF:687292.4/16

Right Out: 1226.727+/-0.334 $\chi^2$/NDF: 1404524.7/18

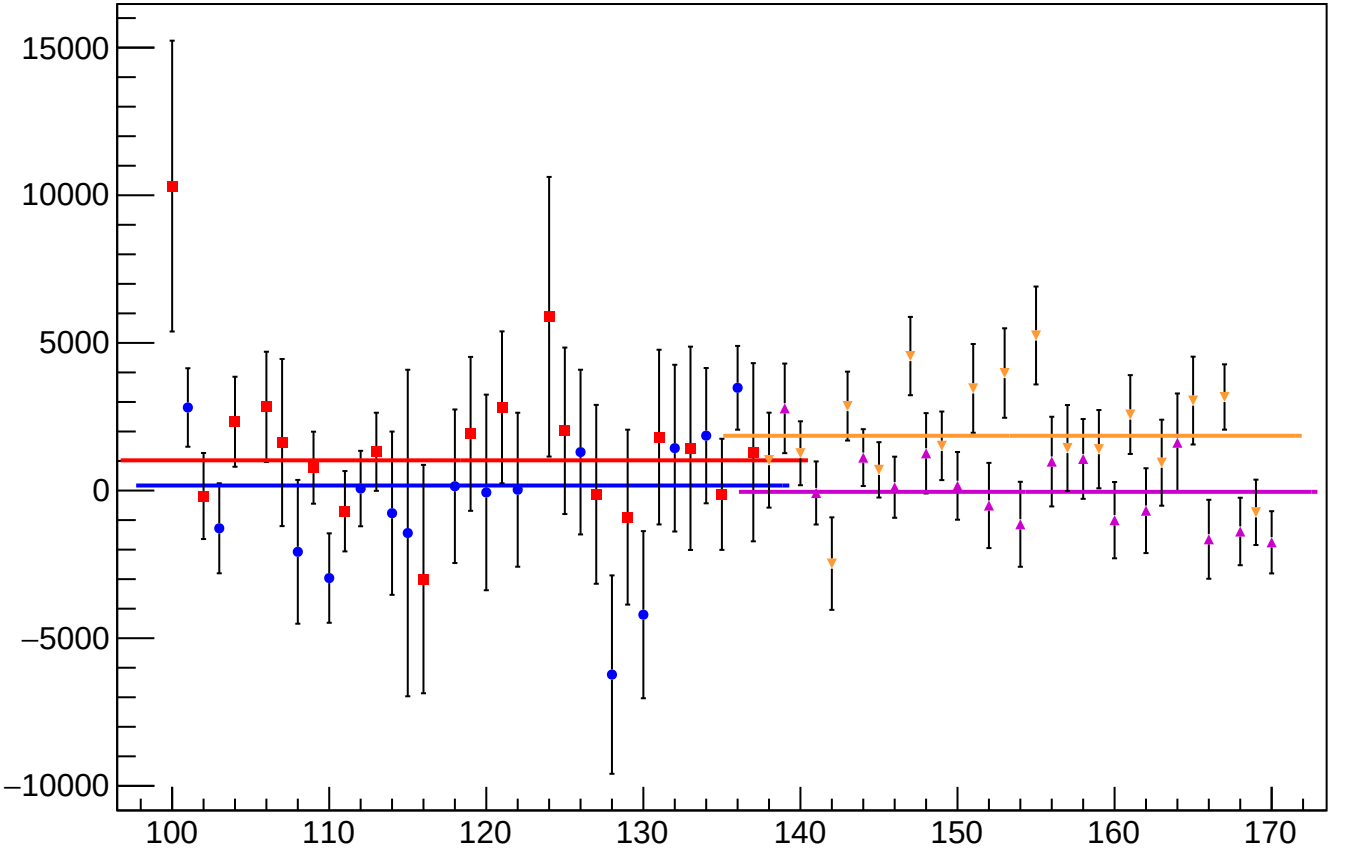
Left In: 1127.616+/-0.222 $\chi^2$/NDF:514545.5/15

+ sign 1178.947+/-0.189 $\chi^2$/NDF: 2023323.7/32

All: 1168.264+/-0.132 $\chi^2$/NDF: 4009647.5/67

- sign 1157.980+/-0.185 $\chi^2$/NDF: 1980027.3/34

# asym_sam_48_avg_mean vs Slug




Right In: 171.056+/-505.136 $\chi^2$/NDF: 22.6/15

Left Out: 1855.874+/-312.579 $\chi^2$/NDF:30.4/16

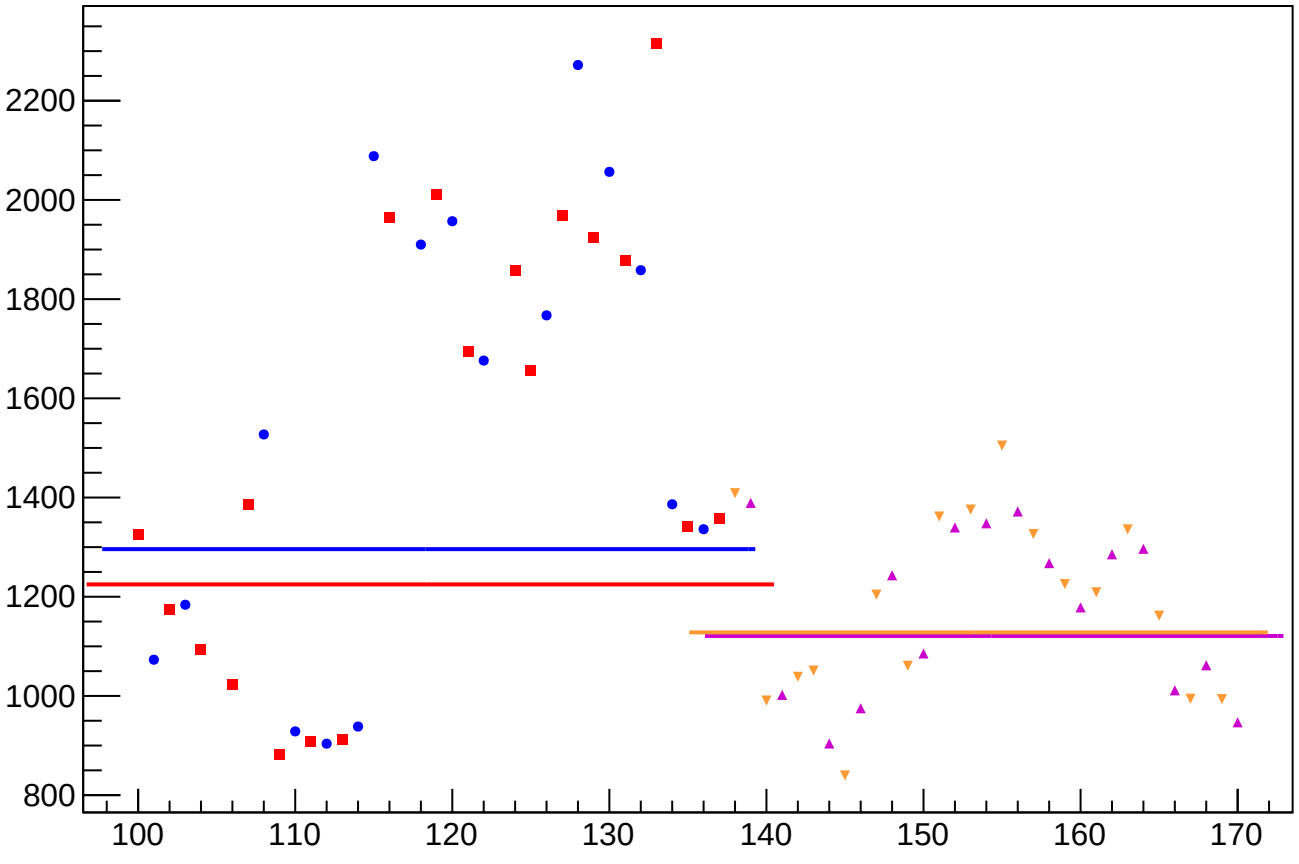
Right Out: 1023.699+/-472.008 $\chi^2$/NDF: 11.6/18

Left In: -43.035+/-312.487 $\chi^2$/NDF:14.9/15

+ sign 1389.365+/-265.804 $\chi^2$/NDF: 61.0/32

All: 824.668+/-186.070 $\chi^2$/NDF: 99.9/67

- sign 282.032+/-260.560 $\chi^2$/NDF: 30.0/34




Right In: 1295.987+/-0.357 $\chi^2$/NDF: 1154185.9/15

Left Out: 1128.116+/-0.221 $\chi^2$/NDF:671926.1/16

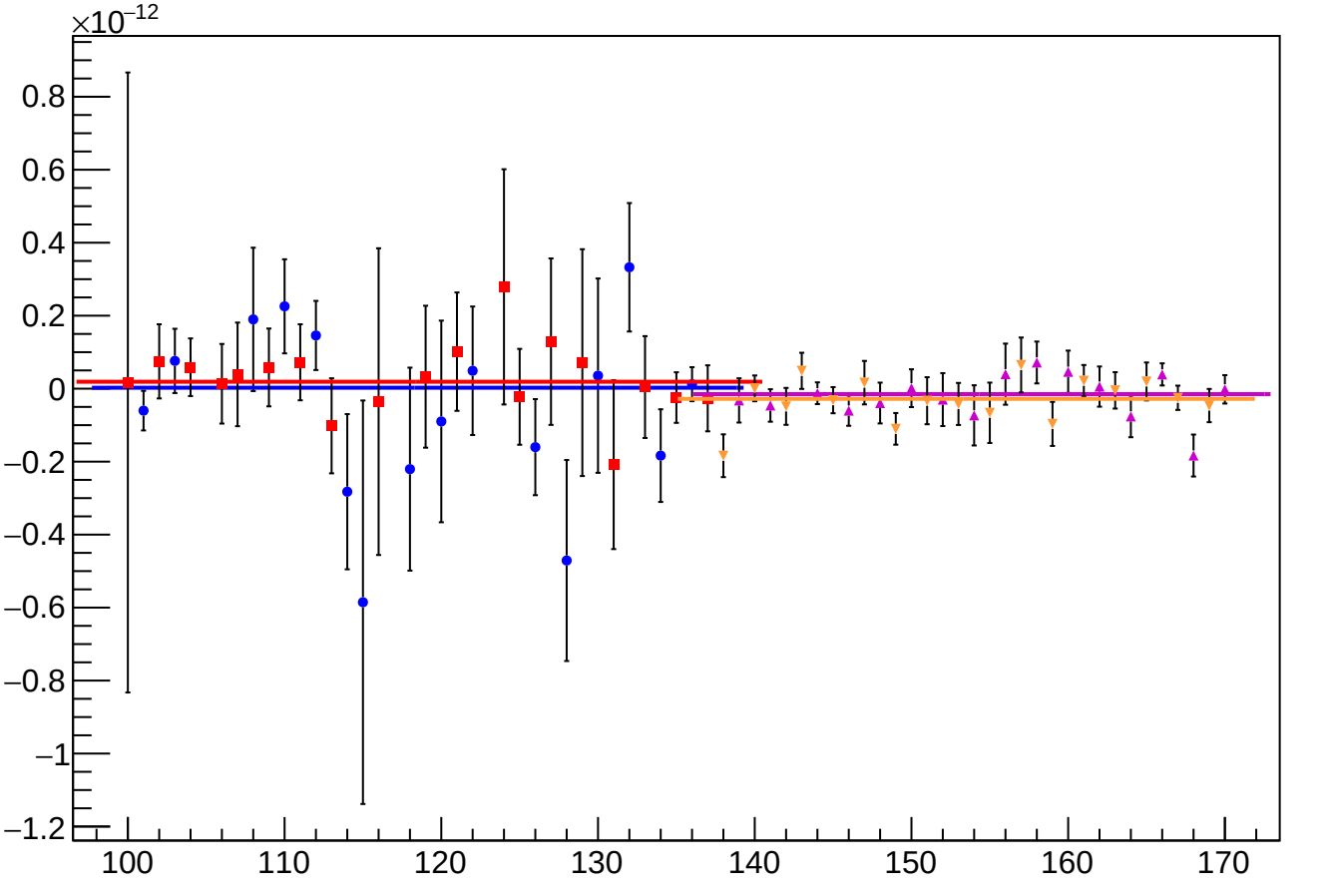
Right Out: 1224.872+/-0.334 $\chi^2$/NDF: 1371285.2/18

Left In: 1120.948+/-0.221 $\chi^2$/NDF:546470.5/15

+ sign 1174.597+/-0.188 $\chi^2$/NDF: 1985836.6/32

All: 1163.388+/-0.132 $\chi^2$/NDF: 3977975.1/67

- sign 1152.617+/-0.184 $\chi^2$/NDF: 1985163.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 22.2/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:20.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 4.7/18

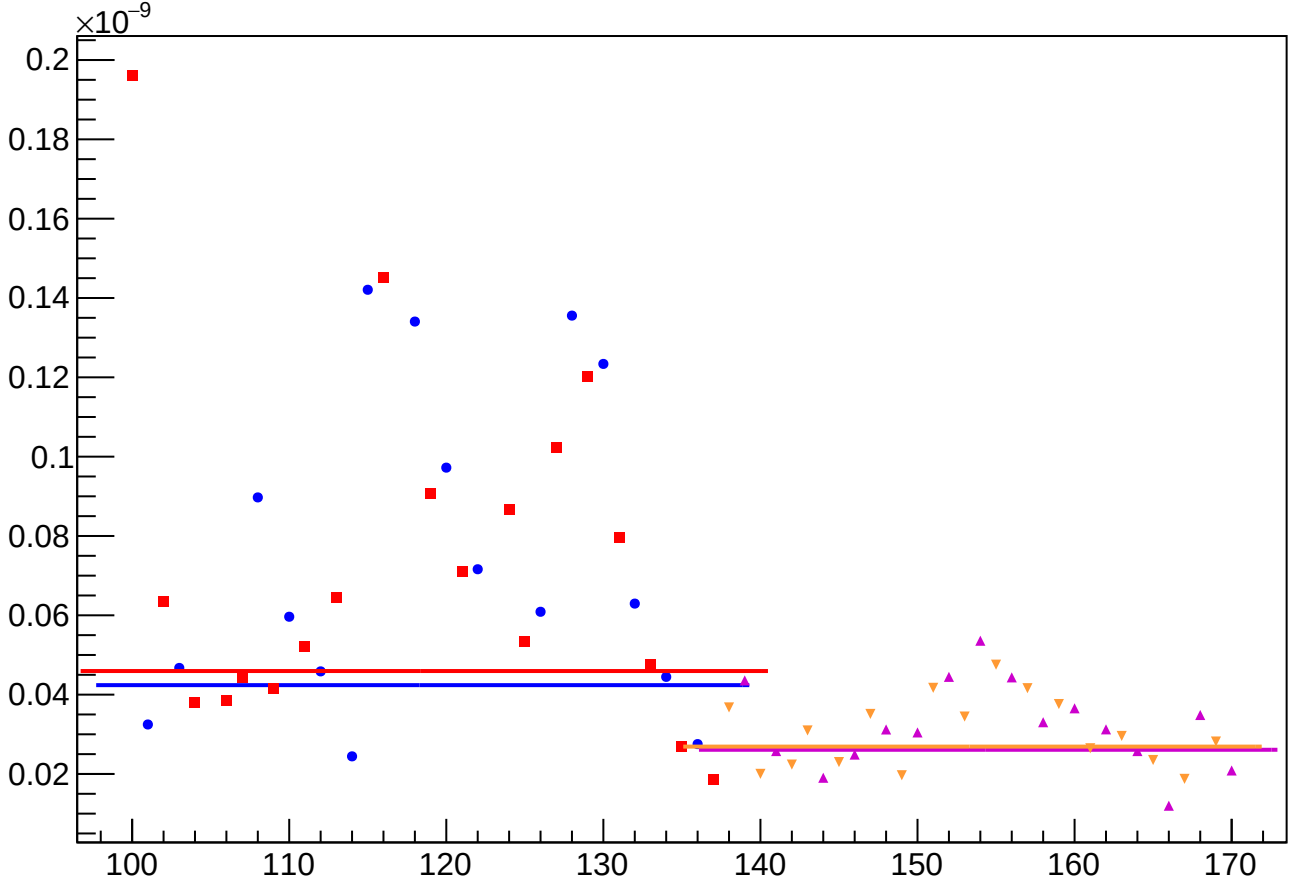
Left In: -0.000+/-0.000 $\chi^2$/NDF:19.6/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 43.3/32

All: -0.000+/-0.000 $\chi^2$/NDF: 69.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 25.5/34

# asym_sam_48_avg_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1341259.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:819541.4/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1118551.4/18

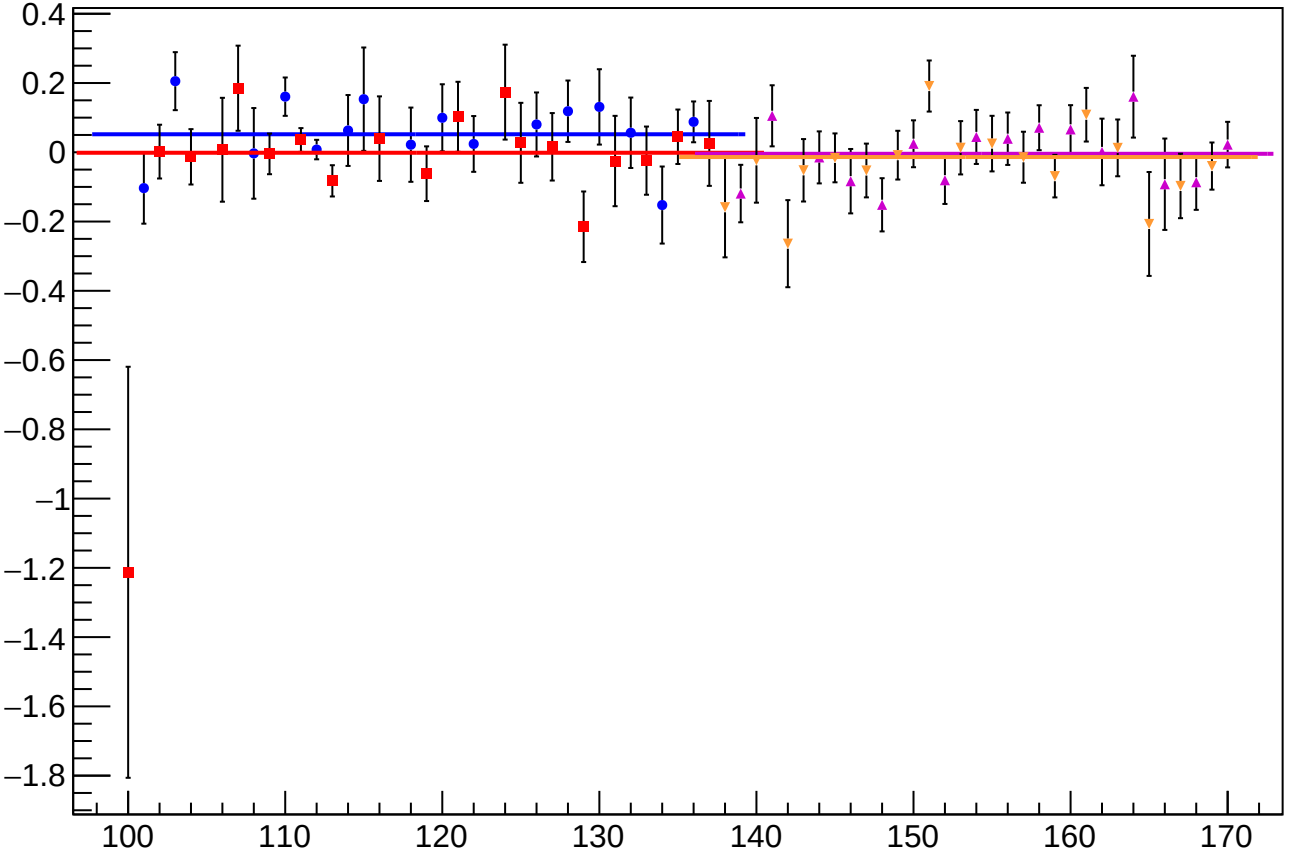
Left In: 0.000+/-0.000 $\chi^2$/NDF:1384488.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2721598.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 6031637.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3309001.8/34

# asym_sam_48_avg_dit_vs_cor_diff_mean vs Slug




Right In: 0.052+/-0.018 $\chi^2$/NDF: 18.0/15

Left Out: -0.014+/-0.020 $\chi^2$/NDF:19.5/16

Right Out: -0.001+/-0.018 $\chi^2$/NDF: 19.2/18

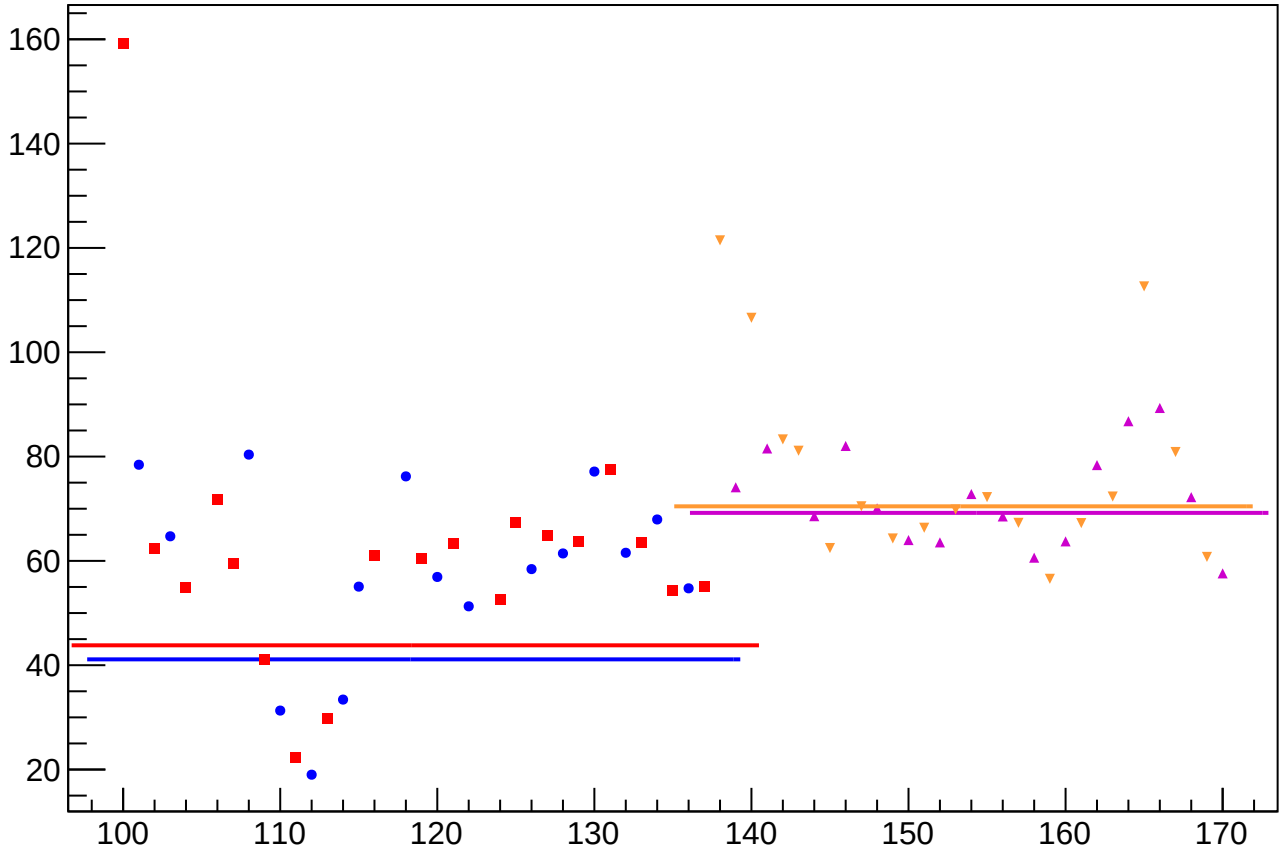
Left In: -0.004+/-0.020 $\chi^2$/NDF:16.0/15

+ sign 0.023+/-0.013 $\chi^2$/NDF: 43.5/32

All: 0.010+/-0.009 $\chi^2$/NDF: 80.6/67

- sign -0.003+/-0.013 $\chi^2$/NDF: 35.3/34

# asym_sam_48_avg_dit_vs_cor_diff_rms vs Slug




Right In: 41.120+/-0.013 $\chi^2$/NDF: 2925302.3/15

Left Out: 70.459+/-0.014 $\chi^2$/NDF:854224.5/16

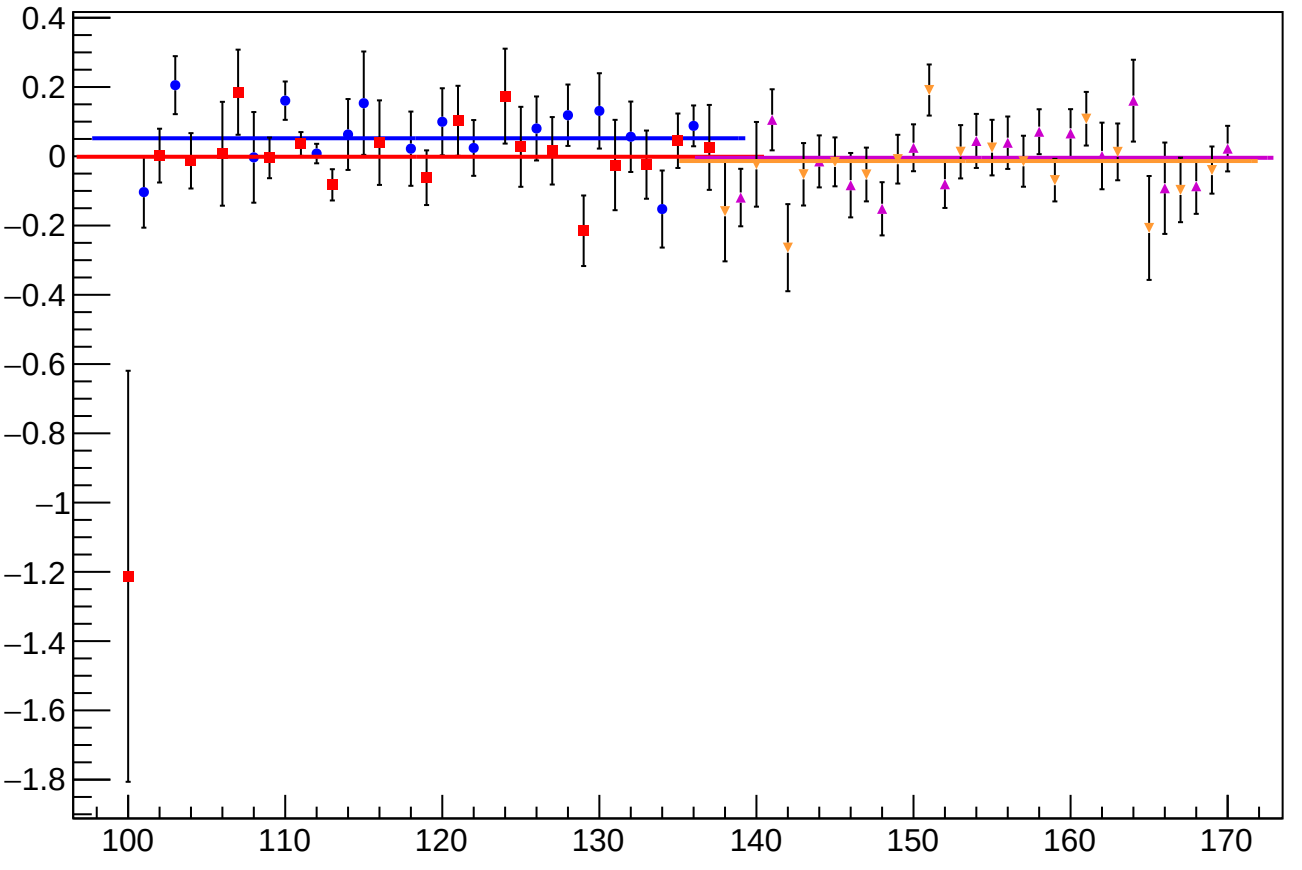
Right Out: 43.813+/-0.013 $\chi^2$/NDF: 2048452.0/18

Left In: 69.204+/-0.014 $\chi^2$/NDF:335707.3/15

+ sign 54.116+/-0.009 $\chi^2$/NDF: 6193871.1/32

All: 54.711+/-0.007 $\chi^2$/NDF: 10401856.6/67

- sign 55.305+/-0.009 $\chi^2$/NDF: 4199943.6/34




Right In: 0.052+/-0.018 $\chi^2$/NDF: 18.0/15

Left Out: -0.014+/-0.020 $\chi^2$/NDF:19.5/16

Right Out: -0.001+/-0.018 $\chi^2$/NDF: 19.2/18

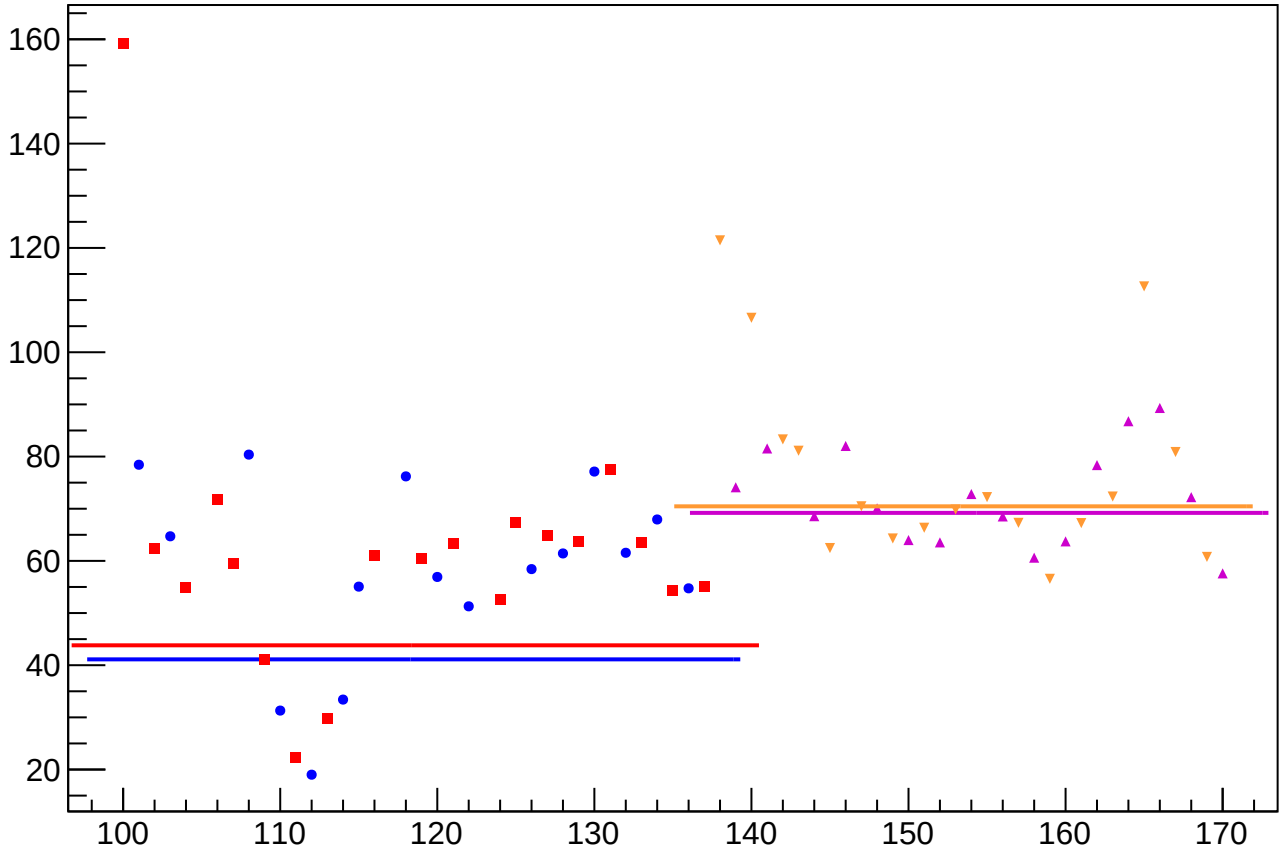
Left In: -0.004+/-0.020 $\chi^2$/NDF:16.0/15

+ sign 0.023+/-0.013 $\chi^2$/NDF: 43.5/32

All: 0.010+/-0.009 $\chi^2$/NDF: 80.6/67

- sign -0.003+/-0.013 $\chi^2$/NDF: 35.3/34

# asym_sam_48_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 41.120+/-0.013 $\chi^2$/NDF: 2925302.3/15

Left Out: 70.459+/-0.014 $\chi^2$/NDF:854224.5/16

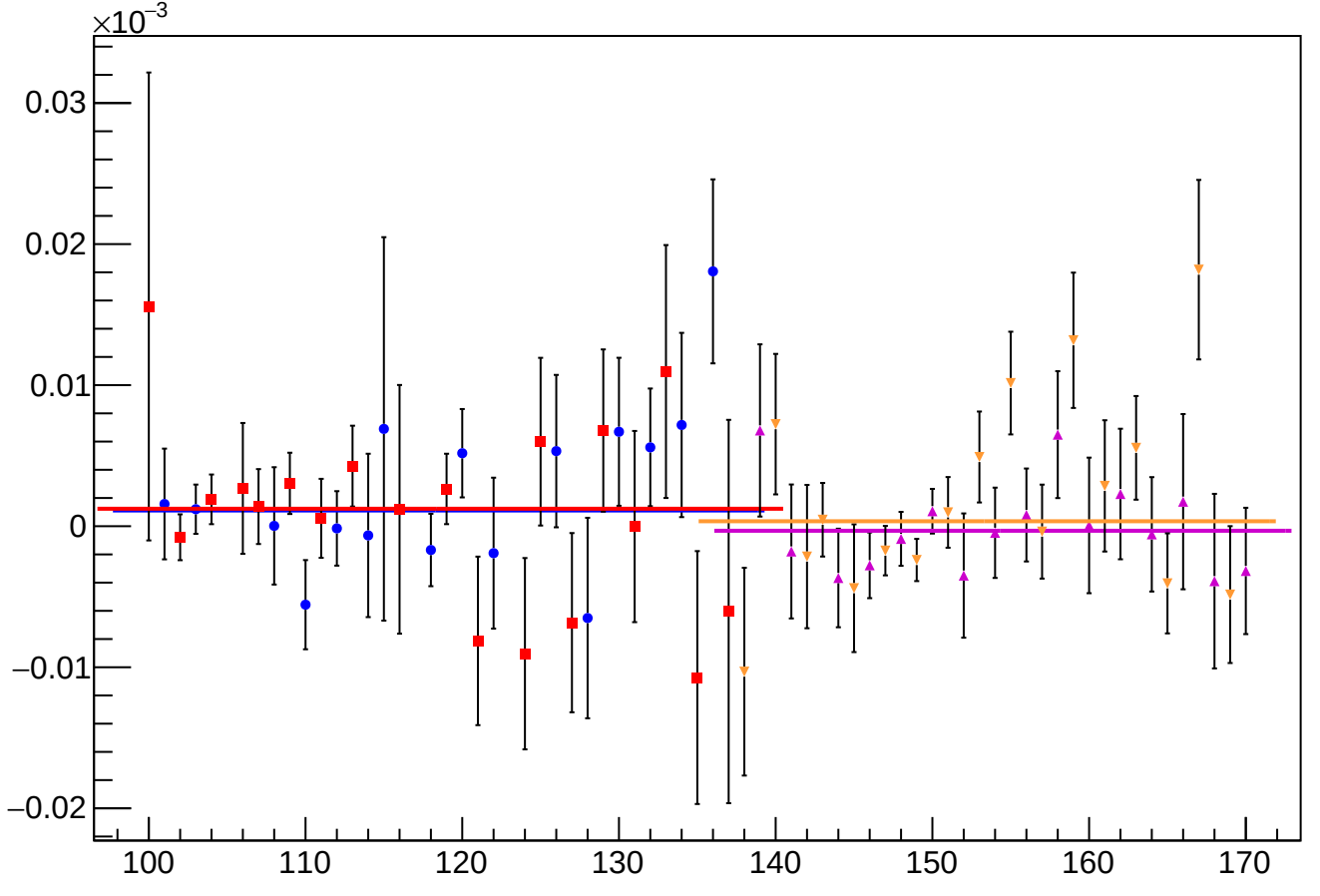
Right Out: 43.813+/-0.013 $\chi^2$/NDF: 2048452.0/18

Left In: 69.204+/-0.014 $\chi^2$/NDF:335707.3/15

+ sign 54.116+/-0.009 $\chi^2$/NDF: 6193871.1/32

All: 54.711+/-0.007 $\chi^2$/NDF: 10401856.6/67

- sign 55.305+/-0.009 $\chi^2$/NDF: 4199943.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 19.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:39.5/16

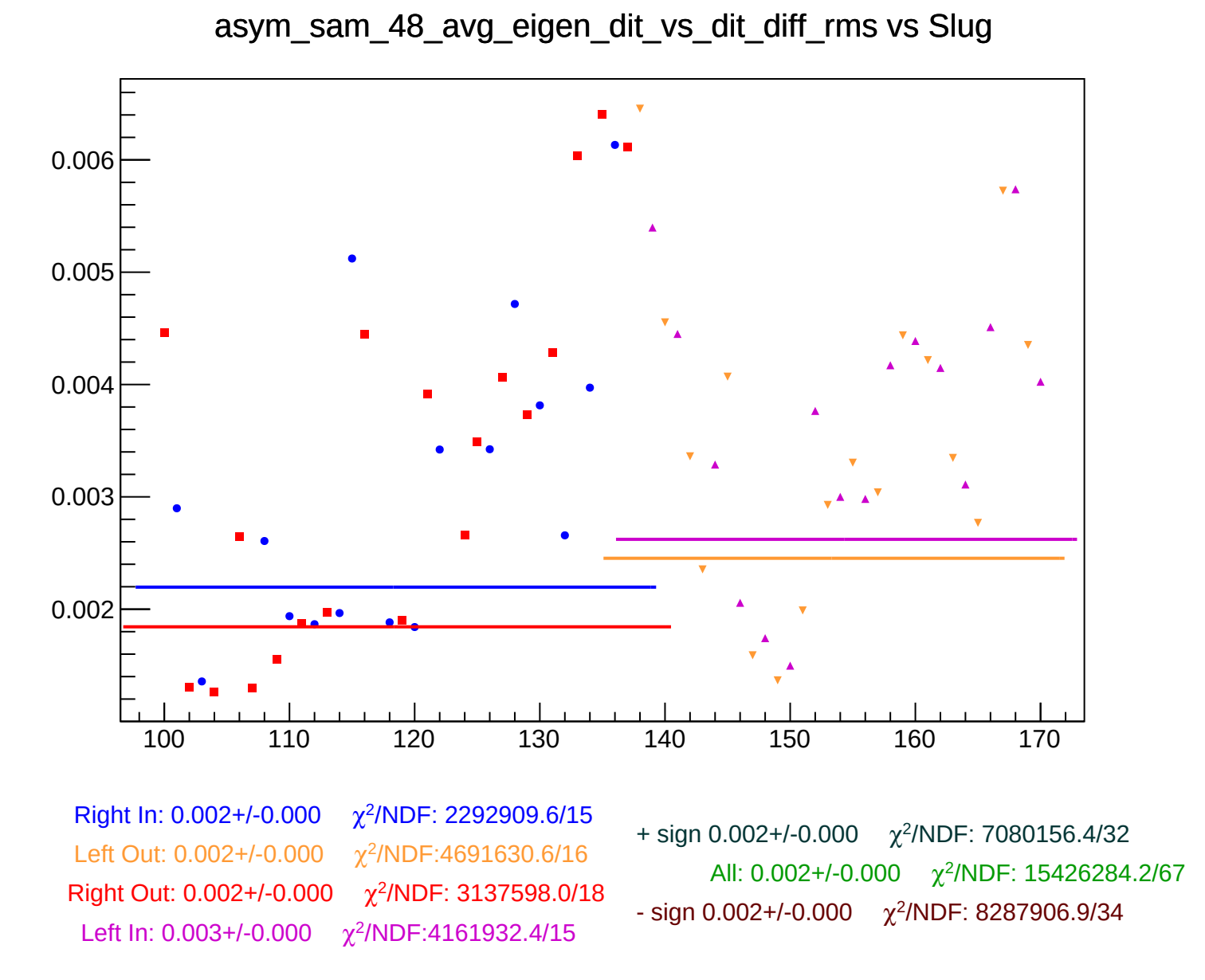
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.9/18

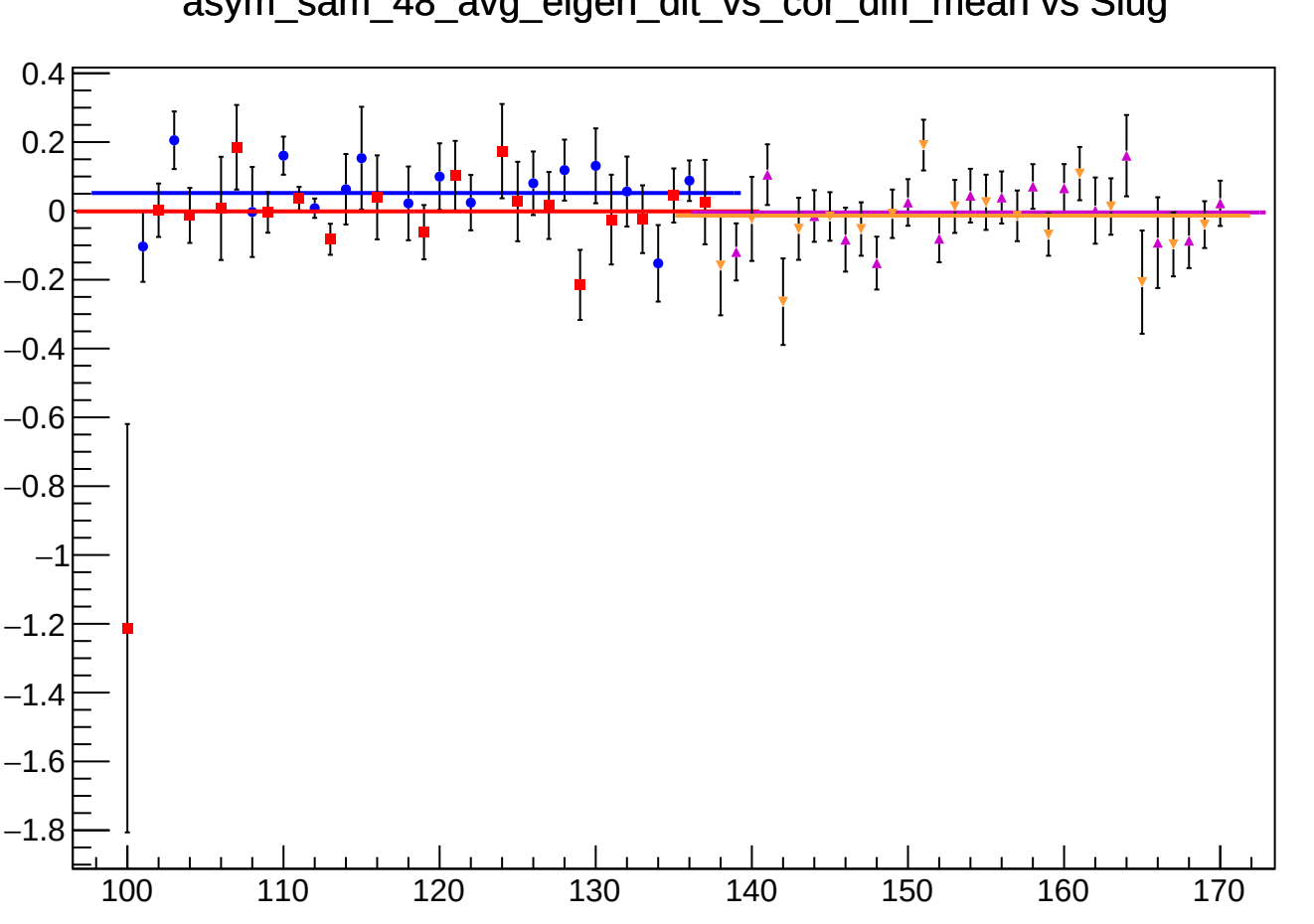
Left In: -0.000+/-0.000 $\chi^2$/NDF:8.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 59.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 86.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 26.4/34


asym_sam_48_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.006
0.005
0.004
0.003
0.002
100
110
120
130
140
150
160
170
Right In: 0.002+/-0.000 χ²/NDF: 2292909.6/15
Left Out: 0.002+/-0.000 χ²/NDF:4691630.6/16
Right Out: 0.002+/-0.000 χ²/NDF: 3137598.0/18
Left In: 0.003+/-0.000 χ²/NDF:4161932.4/15
+ sign 0.002+/-0.000 χ²/NDF: 7080156.4/32
All: 0.002+/-0.000 χ²/NDF: 15426284.2/67
- sign 0.002+/-0.000 χ²/NDF: 8287906.9/34




Right In: 0.052+/-0.018 $\chi^2$/NDF: 18.0/15

Left Out: -0.014+/-0.020 $\chi^2$/NDF:19.5/16

Right Out: -0.001+/-0.018 $\chi^2$/NDF: 19.2/18

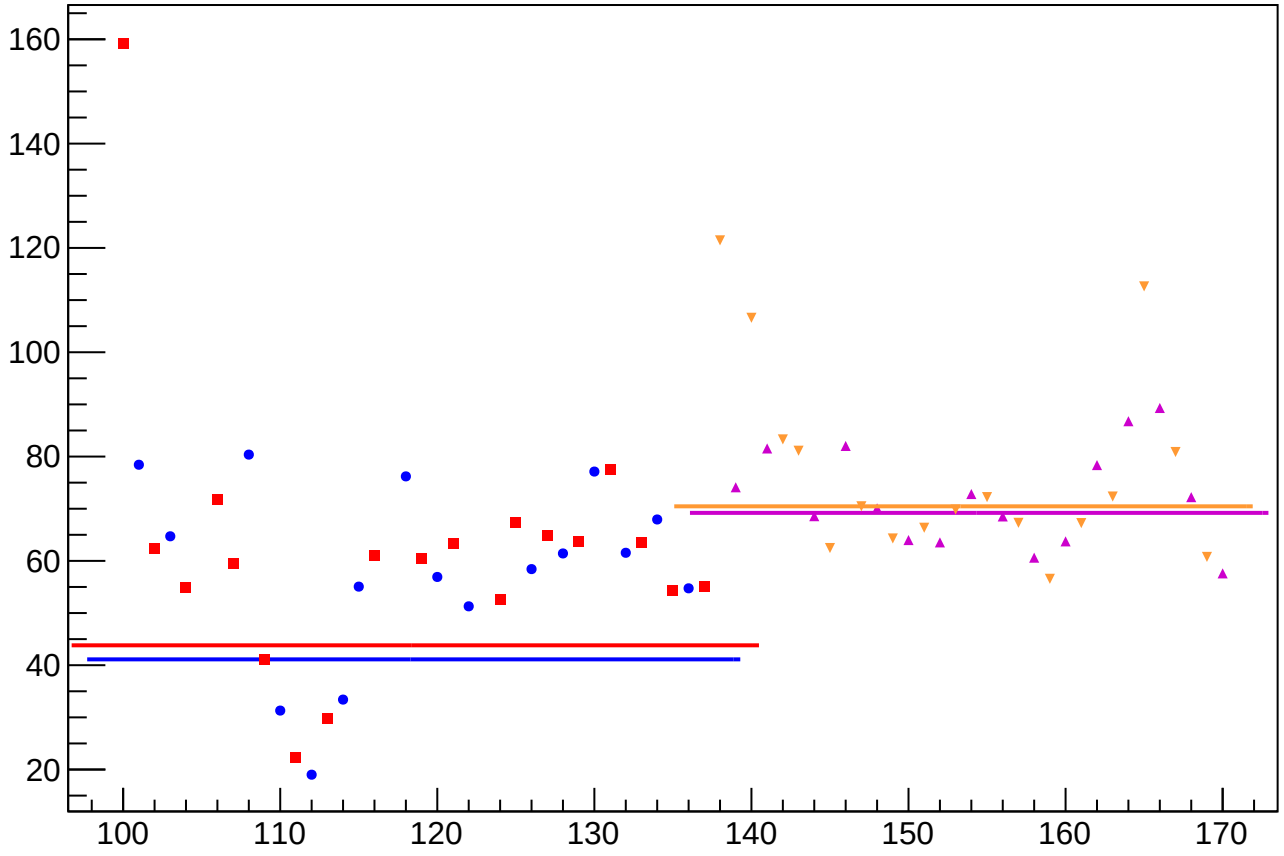
Left In: -0.004+/-0.020 $\chi^2$/NDF:16.0/15

+ sign 0.023+/-0.013 $\chi^2$/NDF: 43.5/32

All: 0.010+/-0.009 $\chi^2$/NDF: 80.6/67

- sign -0.003+/-0.013 $\chi^2$/NDF: 35.3/34

# asym_sam_48_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 41.119+/-0.013 $\chi^2$/NDF: 2925464.8/15

Left Out: 70.459+/-0.014 $\chi^2$/NDF:854205.6/16

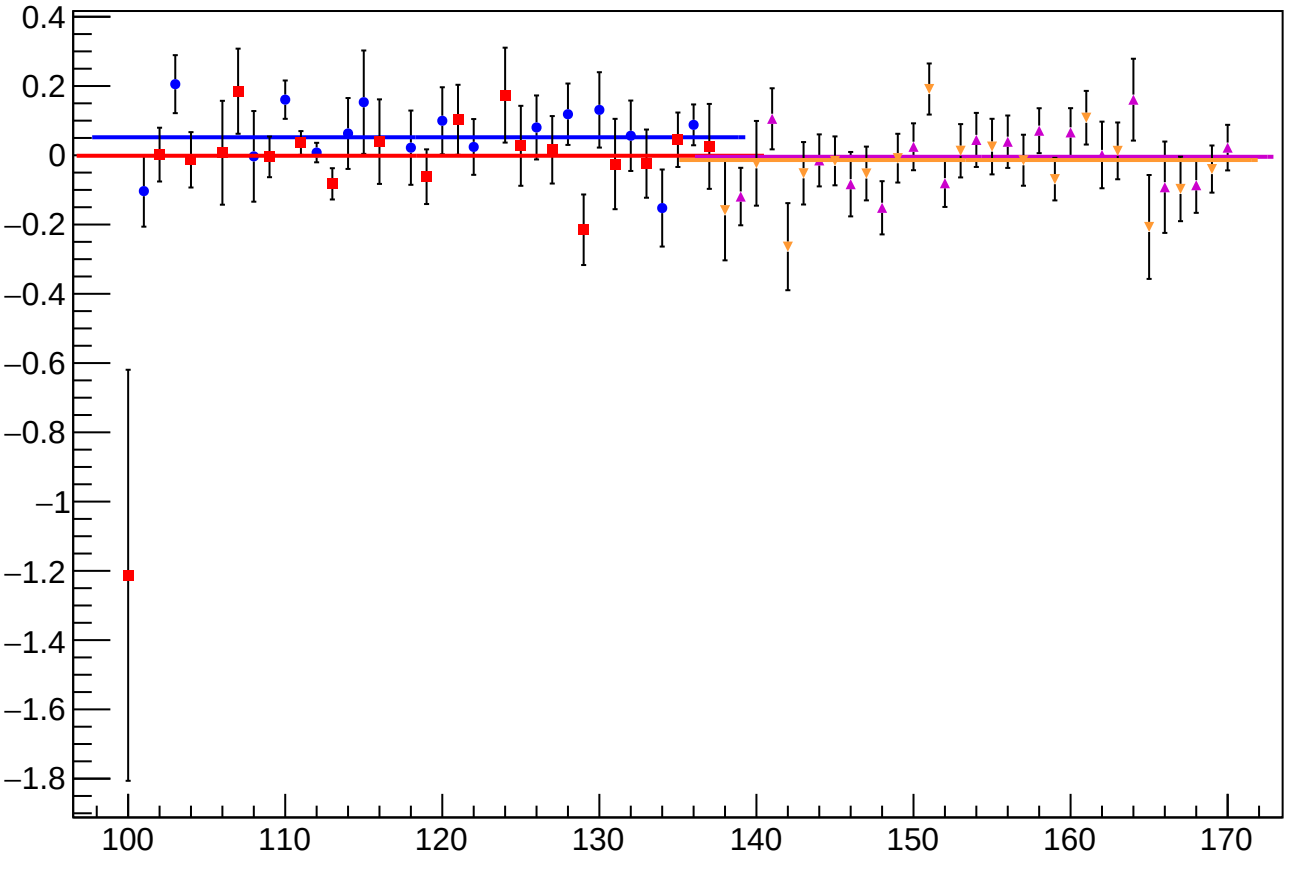
Right Out: 43.813+/-0.013 $\chi^2$/NDF: 2048627.9/18

Left In: 69.205+/-0.014 $\chi^2$/NDF:335706.3/15

+ sign 54.115+/-0.009 $\chi^2$/NDF: 6194277.1/32

All: 54.710+/-0.007 $\chi^2$/NDF: 10402654.8/67

- sign 55.305+/-0.009 $\chi^2$/NDF: 4200334.7/34




Right In: 0.052+/-0.018 $\chi^2$/NDF: 18.0/15

Left Out: -0.014+/-0.020 $\chi^2$/NDF:19.5/16

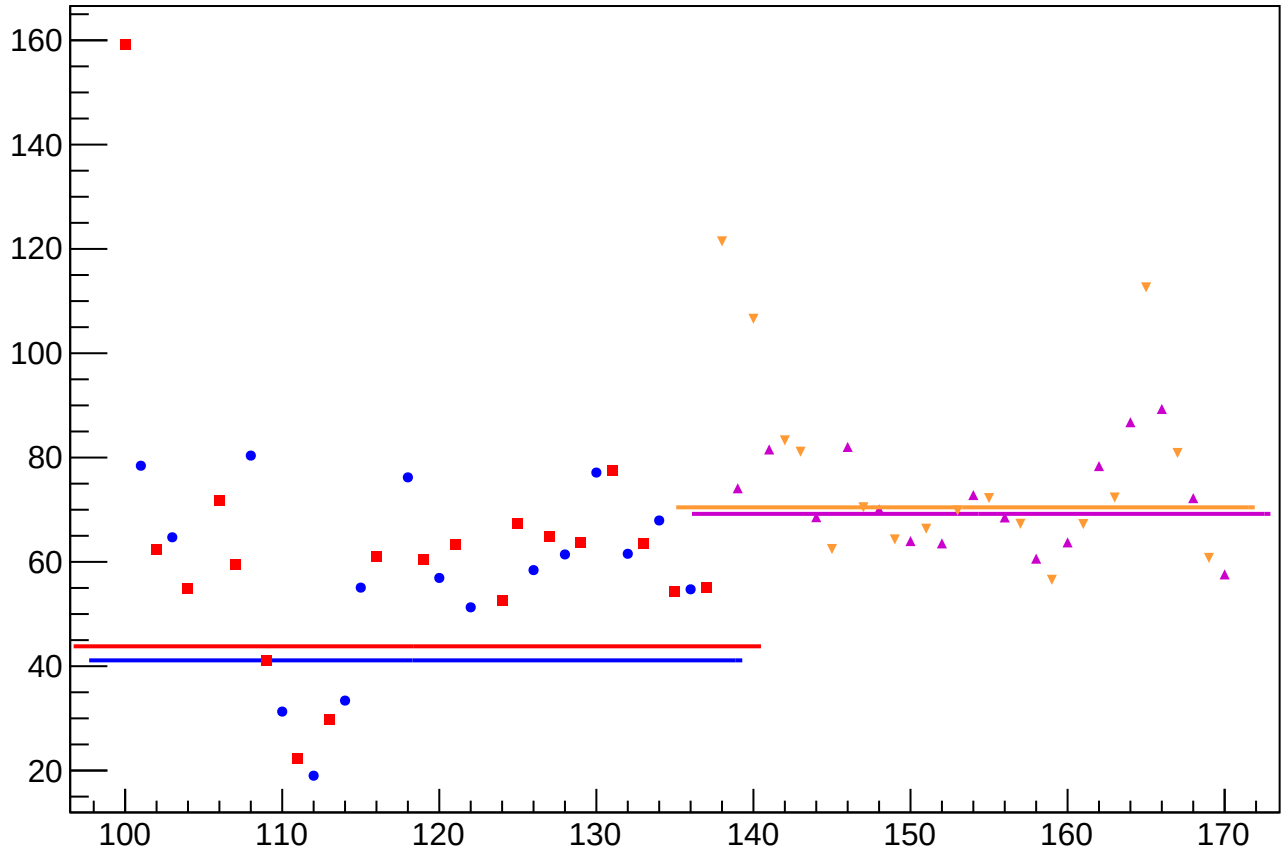
Right Out: -0.001+/-0.018 $\chi^2$/NDF: 19.2/18

Left In: -0.004+/-0.020 $\chi^2$/NDF:16.0/15

+ sign 0.023+/-0.013 $\chi^2$/NDF: 43.5/32

All: 0.010+/-0.009 $\chi^2$/NDF: 80.6/67

- sign -0.003+/-0.013 $\chi^2$/NDF: 35.3/34




Right In: 41.119+/-0.013 $\chi^2$/NDF: 2925464.8/15

Left Out: 70.459+/-0.014 $\chi^2$/NDF:854205.6/16

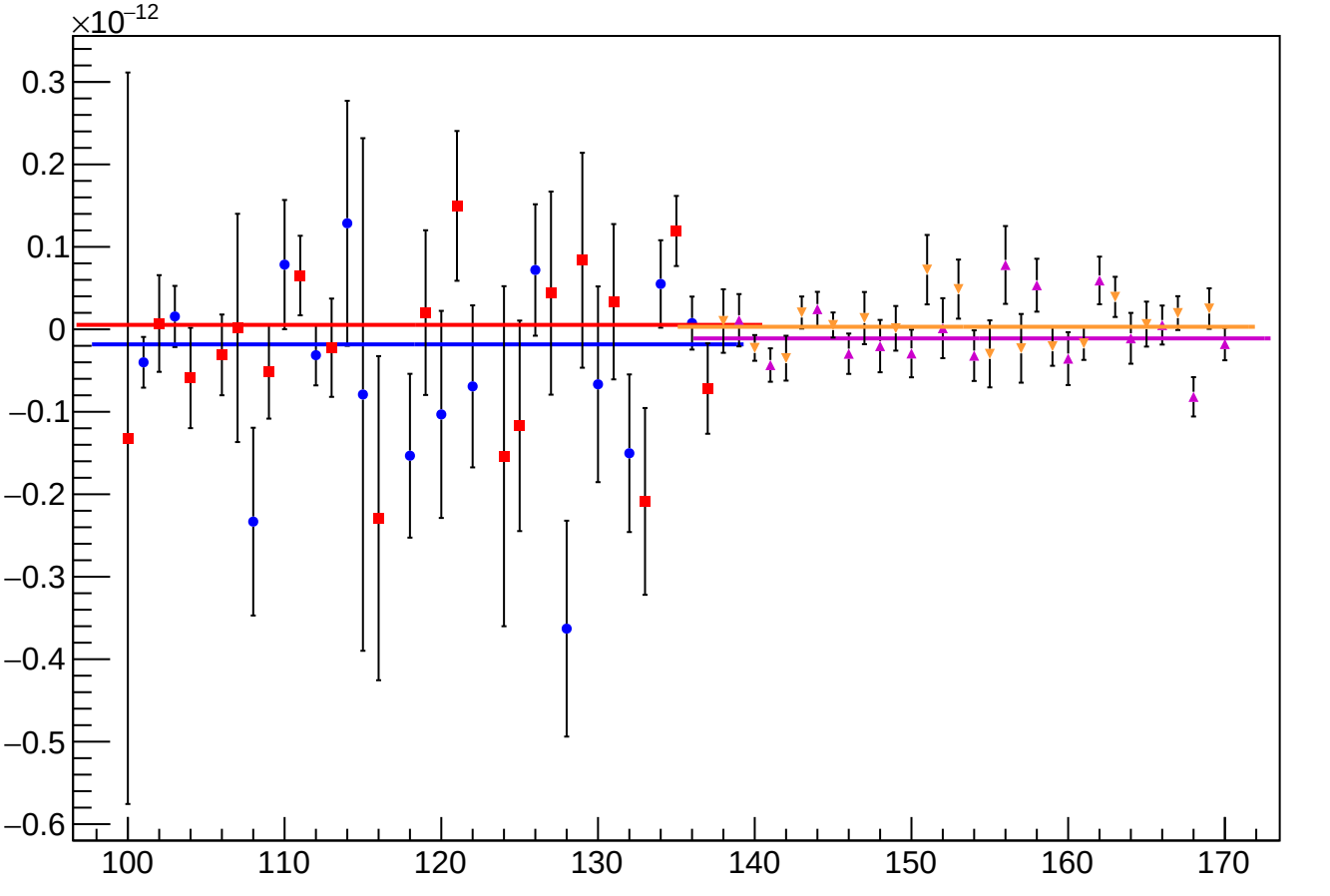
Right Out: 43.813+/-0.013 $\chi^2$/NDF: 2048627.9/18

Left In: 69.205+/-0.014 $\chi^2$/NDF:335706.3/15

+ sign 54.115+/-0.009 $\chi^2$/NDF: 6194277.1/32

All: 54.710+/-0.007 $\chi^2$/NDF: 10402654.8/67

- sign 55.305+/-0.009 $\chi^2$/NDF: 4200334.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 23.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:16.7/16

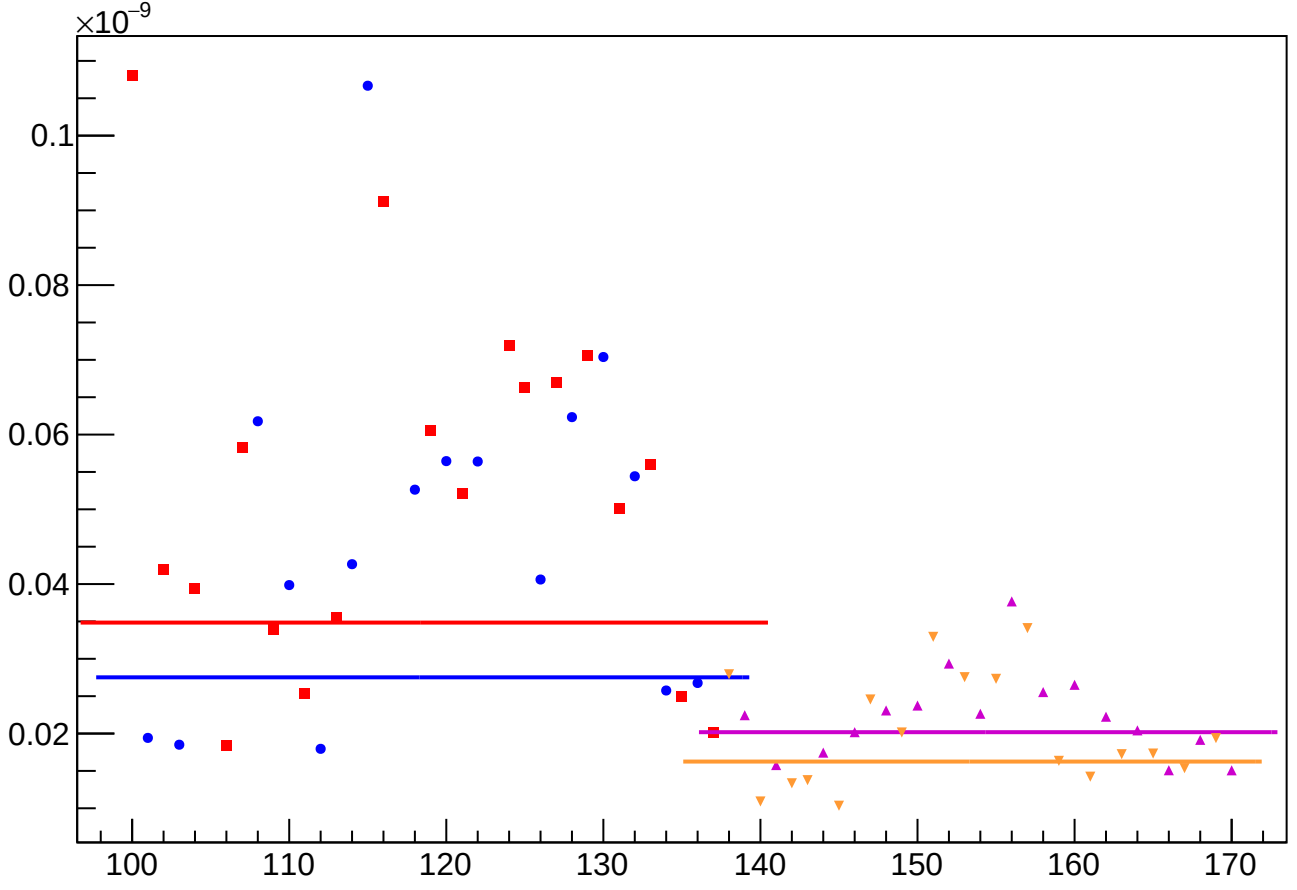
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 23.3/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:31.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 41.6/32

All: -0.000+/-0.000 $\chi^2$/NDF: 97.9/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 55.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1799776.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2046631.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1676246.7/18

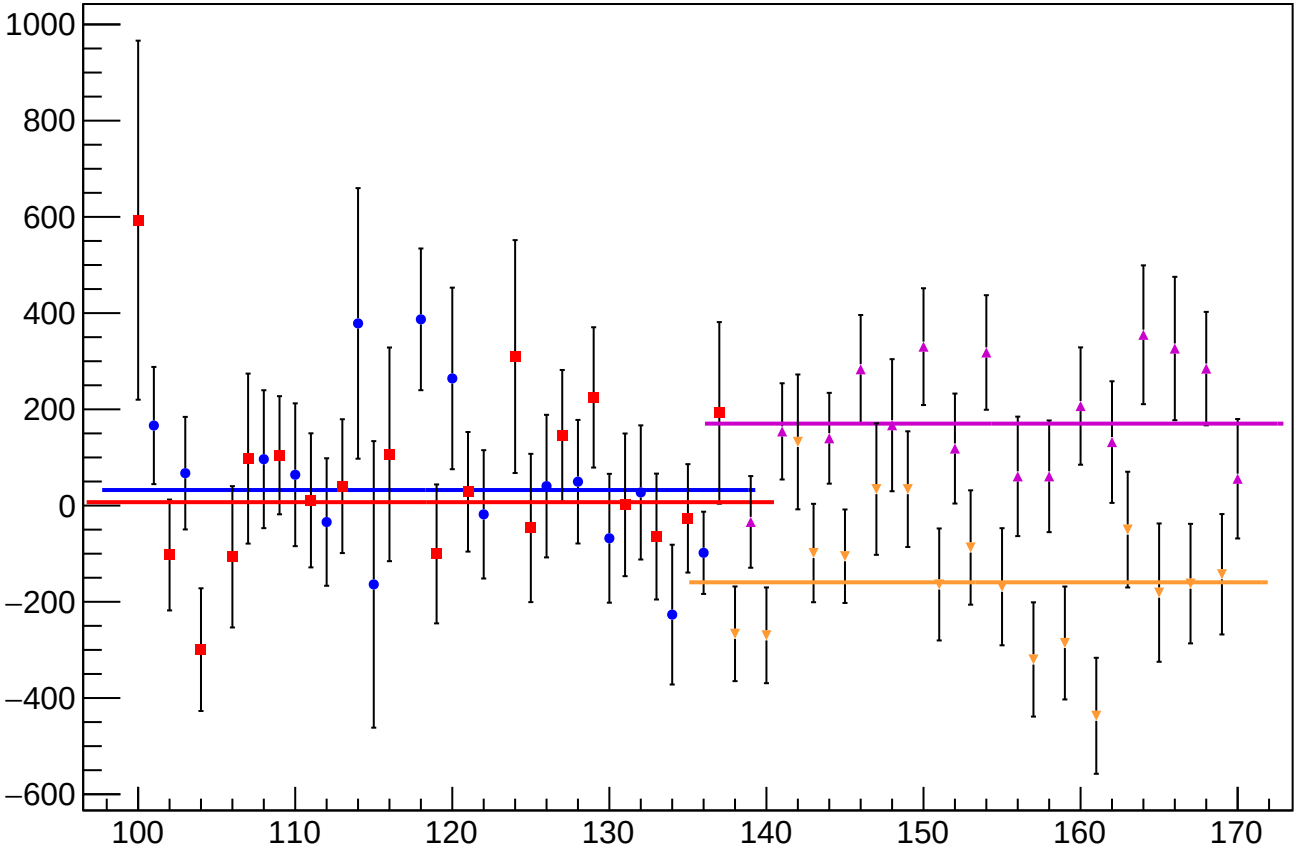
Left In: 0.000+/-0.000 $\chi^2$/NDF:975965.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4897204.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 9443392.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3980893.0/34

# reg_asym_sam_15_dd_mean vs Slug




Right In: 32.297+/-34.429 $\chi^2$/NDF: 17.3/15

Left Out: -159.515+/-28.281 $\chi^2$/NDF:21.5/16

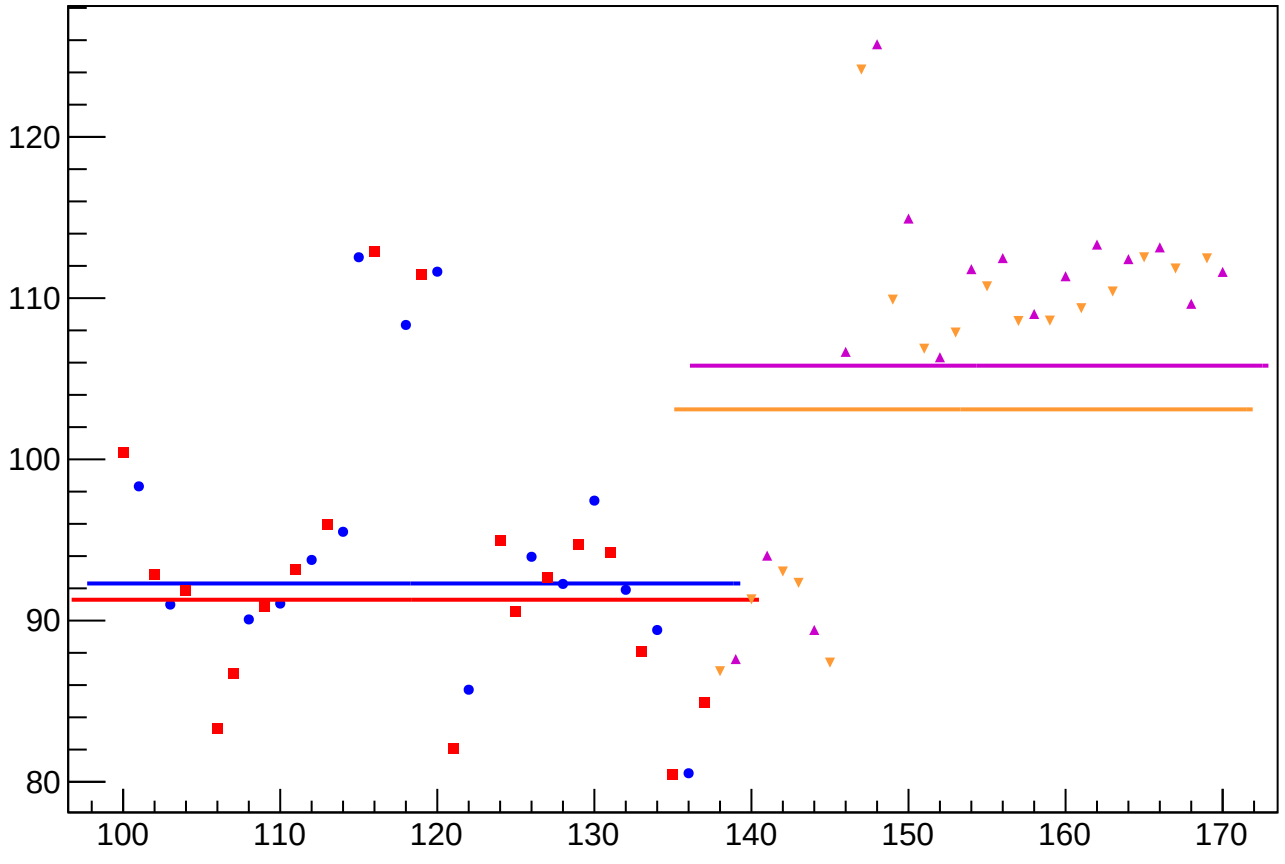
Right Out: 7.070+/-33.420 $\chi^2$/NDF: 17.8/18

Left In: 170.309+/-29.259 $\chi^2$/NDF:15.6/15

+ sign -82.233+/-21.854 $\chi^2$/NDF: 57.4/32

All: 7.957+/-15.509 $\chi^2$/NDF: 138.6/67

- sign 99.478+/-22.014 $\chi^2$/NDF: 46.9/34




Right In: 92.302+/-0.024 $\chi^2$/NDF: 107066.1/15

Left Out: 103.101+/-0.020 $\chi^2$/NDF:285641.0/16

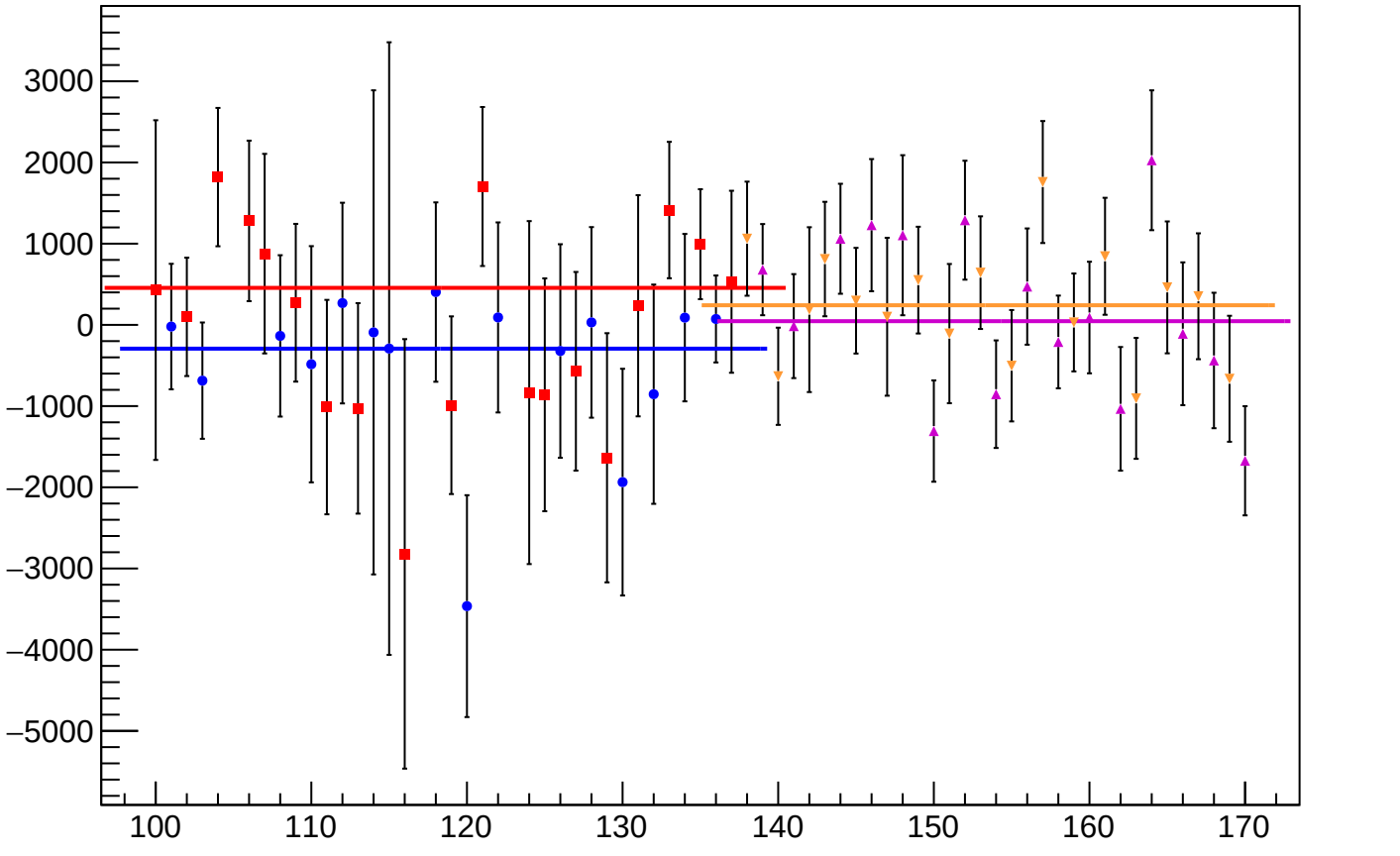
Right Out: 91.294+/-0.024 $\chi^2$/NDF: 105096.6/18

Left In: 105.811+/-0.021 $\chi^2$/NDF:253875.3/15

+ sign 98.750+/-0.015 $\chi^2$/NDF: 510193.7/32

All: 99.128+/-0.011 $\chi^2$/NDF: 1084012.5/67

- sign 99.512+/-0.016 $\chi^2$/NDF: 572613.5/34




Right In: -292.756+/-259.692 $\chi^2$/NDF: 8.8/15

Left Out: 241.743+/-176.233 $\chi^2$/NDF:14.8/16

Right Out: 455.830+/-248.717 $\chi^2$/NDF: 16.9/18

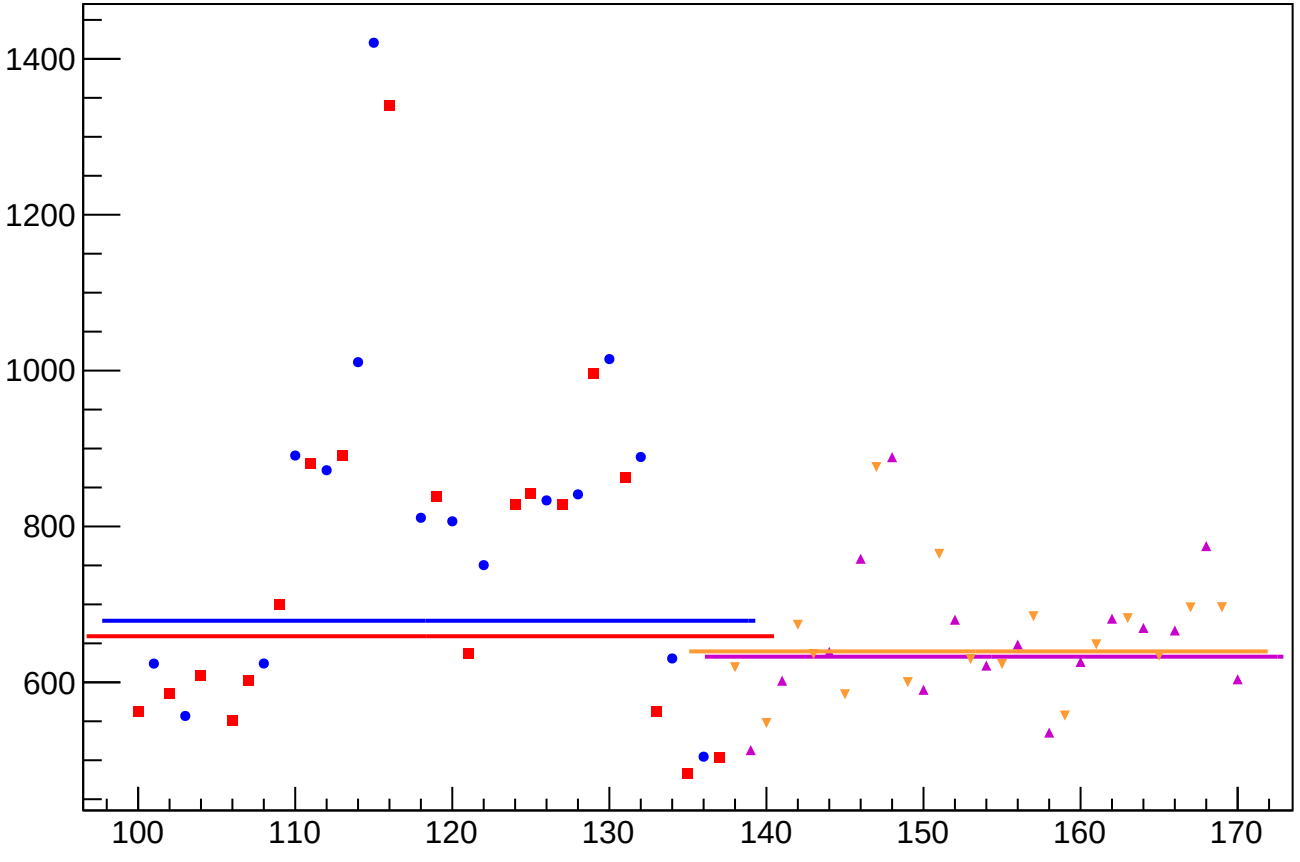
Left In: 45.671+/-176.229 $\chi^2$/NDF:31.0/15

\+ sign 73.208+/-145.825 $\chi^2$/NDF: 26.5/32

All: 128.754+/-102.388 $\chi^2$/NDF: 76.5/67

\- sign 182.763+/-143.792 $\chi^2$/NDF: 49.7/34

# asym_sam_15_dd_reg_correction_rms vs Slug




Right In: 679.003+/-0.184 $\chi^2$/NDF: 767983.3/15

Left Out: 639.684+/-0.125 $\chi^2$/NDF:307857.6/16

Right Out: 659.133+/-0.176 $\chi^2$/NDF: 795877.7/18

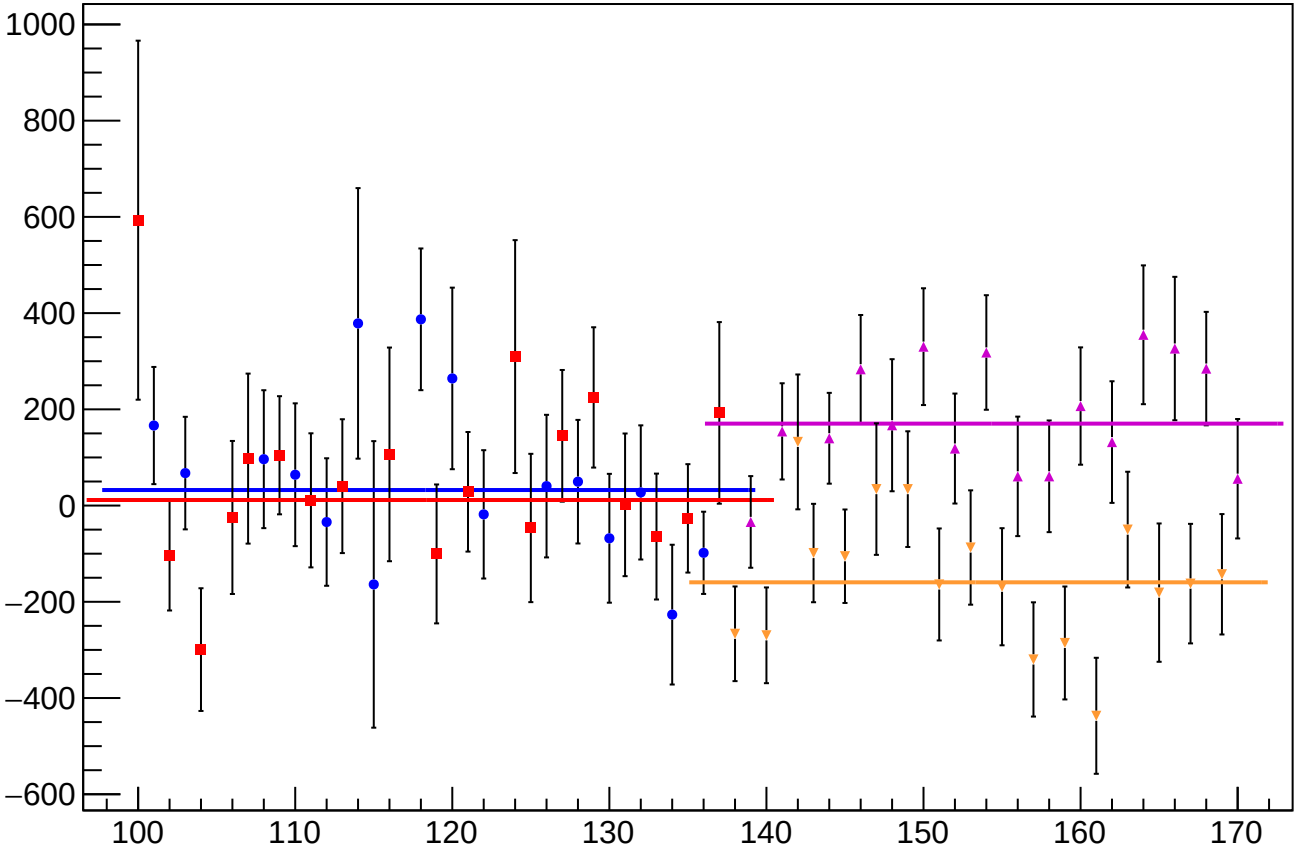
Left In: 632.885+/-0.125 $\chi^2$/NDF:432648.8/15

+ sign 652.082+/-0.103 $\chi^2$/NDF: 1107232.2/32

All: 646.797+/-0.072 $\chi^2$/NDF: 2355769.1/67

- sign 641.659+/-0.102 $\chi^2$/NDF: 1243356.0/34

# cor_asym_sam_15_dd_mean vs Slug




Right In: 32.312+/-34.429 $\chi^2$/NDF: 17.3/15

Left Out: -159.513+/-28.281 $\chi^2$/NDF:21.5/16

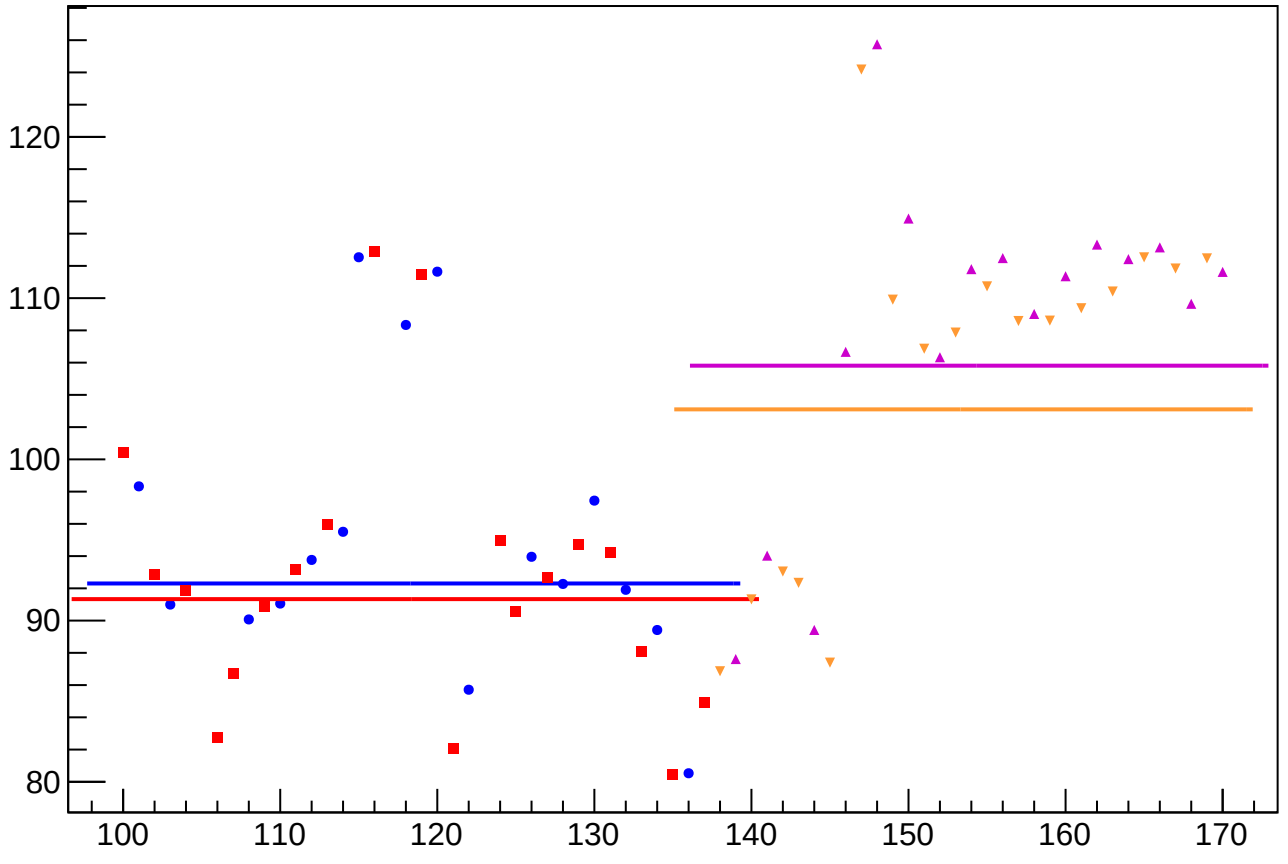
Right Out: 11.576+/-33.548 $\chi^2$/NDF: 17.2/18

Left In: 170.313+/-29.259 $\chi^2$/NDF:15.6/15

\+ sign -82.226+/-21.854 $\chi^2$/NDF: 57.4/32

All: 8.927+/-15.522 $\chi^2$/NDF: 138.0/67

\- sign 101.734+/-22.051 $\chi^2$/NDF: 45.5/34




Right In: 92.302+/-0.024 $\chi^2$/NDF: 107066.1/15

Left Out: 103.101+/-0.020 $\chi^2$/NDF:285641.1/16

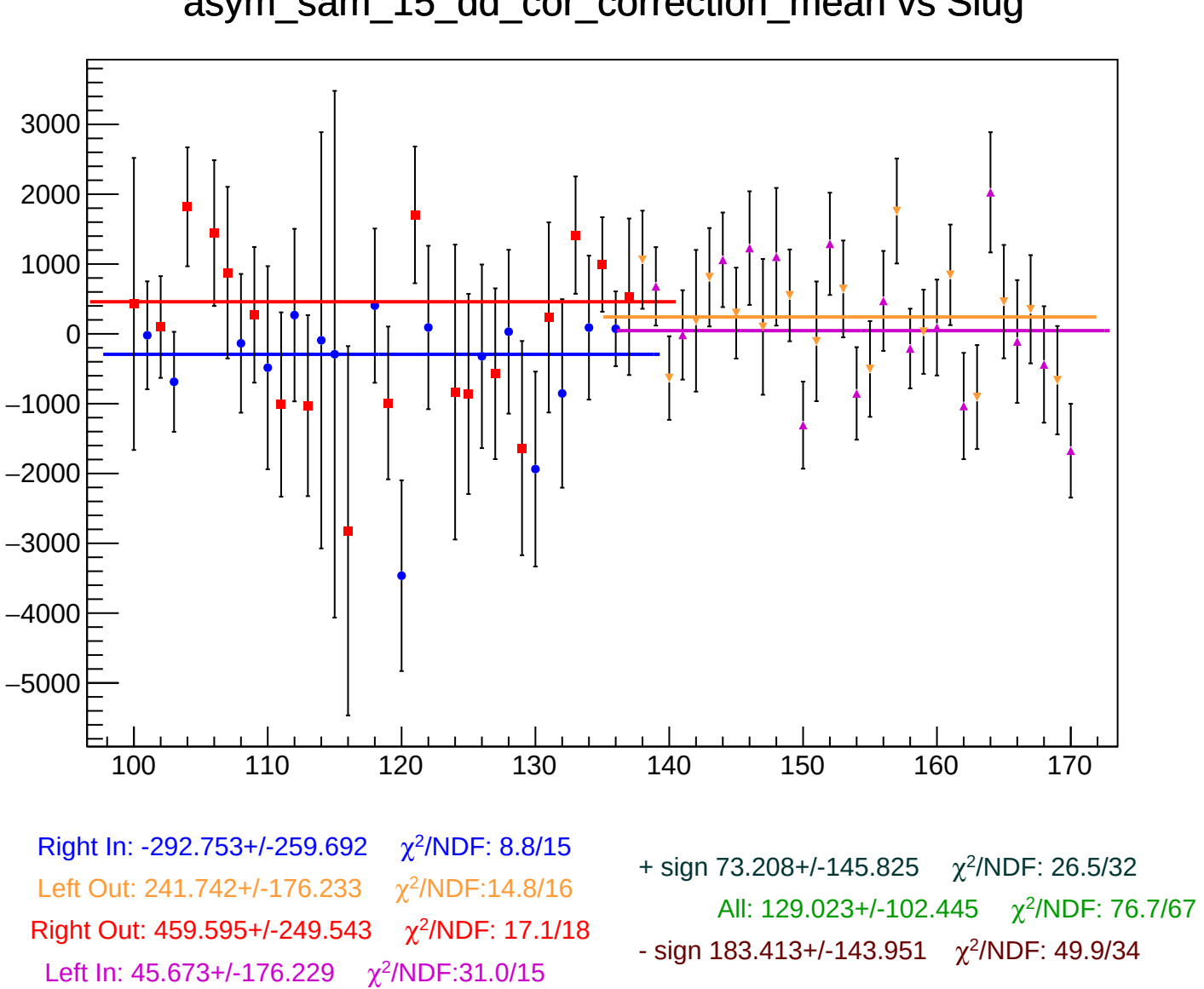
Right Out: 91.332+/-0.024 $\chi^2$/NDF: 104918.3/18

Left In: 105.811+/-0.021 $\chi^2$/NDF:253875.3/15

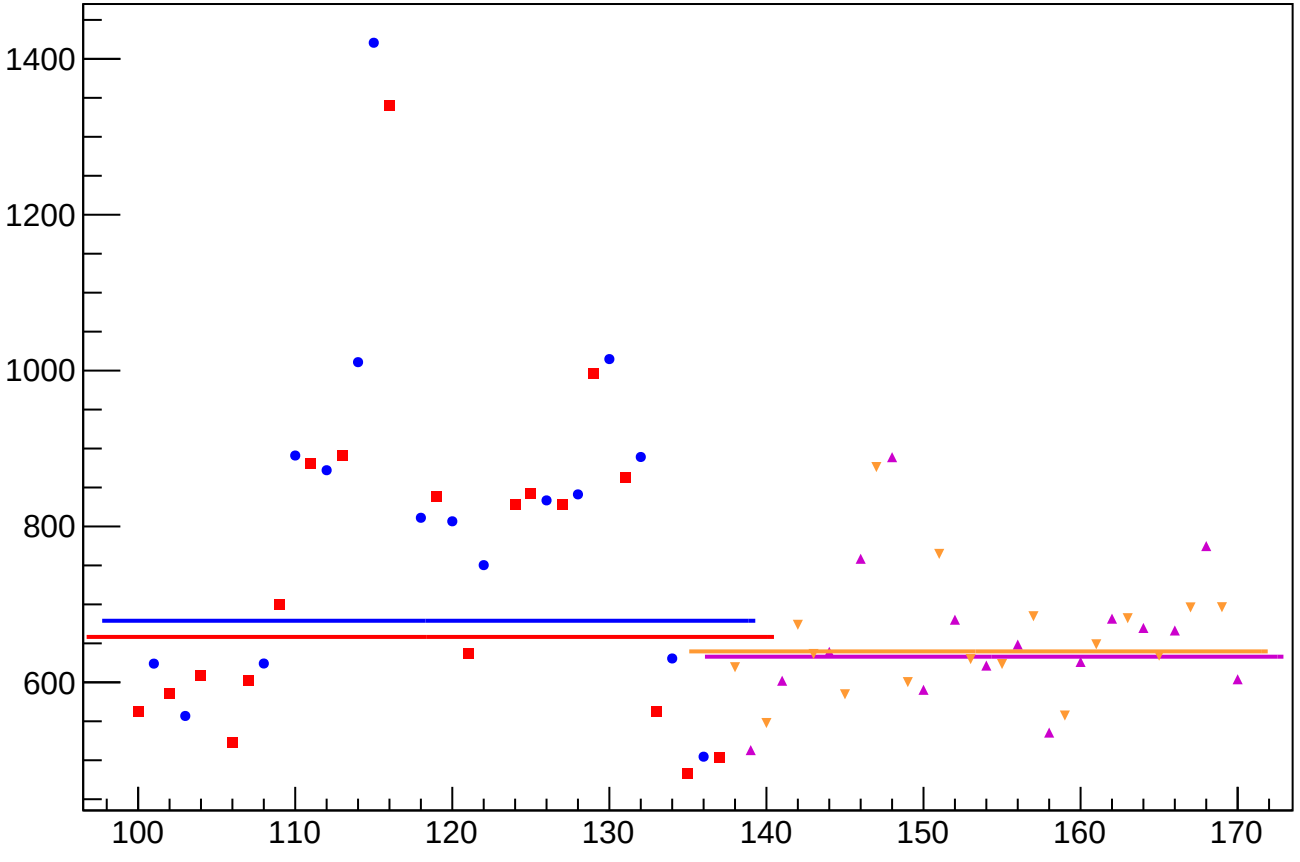
+ sign 98.750+/-0.015 $\chi^2$/NDF: 510193.7/32

All: 99.149+/-0.011 $\chi^2$/NDF: 1081924.5/67

- sign 99.556+/-0.016 $\chi^2$/NDF: 570384.8/34


asym_sam_15_dd_cor_correction_mean vs Slug
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000
100
110
120
130
140
150
160
170
Right In: -292.753+/-259.692 χ²/NDF: 8.8/15
Left Out: 241.742+/-176.233 χ²/NDF:14.8/16
Right Out: 459.595+/-249.543 χ²/NDF: 17.1/18
Left In: 45.673+/-176.229 χ²/NDF:31.0/15
+ sign 73.208+/-145.825 χ²/NDF: 26.5/32
All: 129.023+/-102.445 χ²/NDF: 76.7/67
- sign 183.413+/-143.951 χ²/NDF: 49.9/34

# asym_sam_15_dd_cor_correction_rms vs Slug




Right In: 679.003+/-0.184 $\chi^2$/NDF: 767985.6/15

Left Out: 639.684+/-0.125 $\chi^2$/NDF:307858.6/16

Right Out: 658.262+/-0.176 $\chi^2$/NDF: 805898.2/18

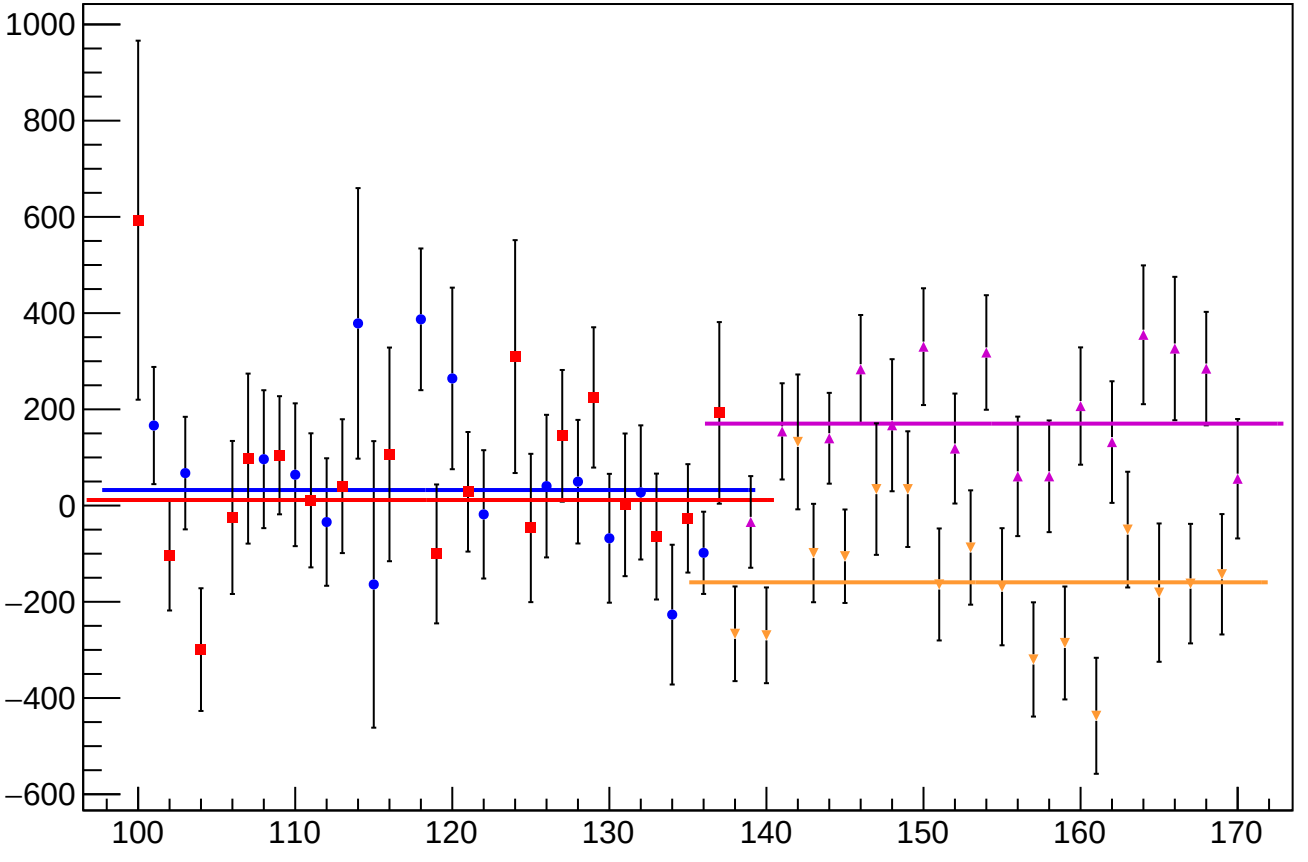
Left In: 632.886+/-0.125 $\chi^2$/NDF:432650.0/15

+ sign 652.082+/-0.103 $\chi^2$/NDF: 1107234.4/32

All: 646.636+/-0.072 $\chi^2$/NDF: 2365088.9/67

- sign 641.330+/-0.102 $\chi^2$/NDF: 1252347.8/34

# eigen_cor_asym_sam_15_dd_mean vs Slug




Right In: 32.312+/-34.429 $\chi^2$/NDF: 17.3/15

Left Out: -159.513+/-28.281 $\chi^2$/NDF:21.5/16

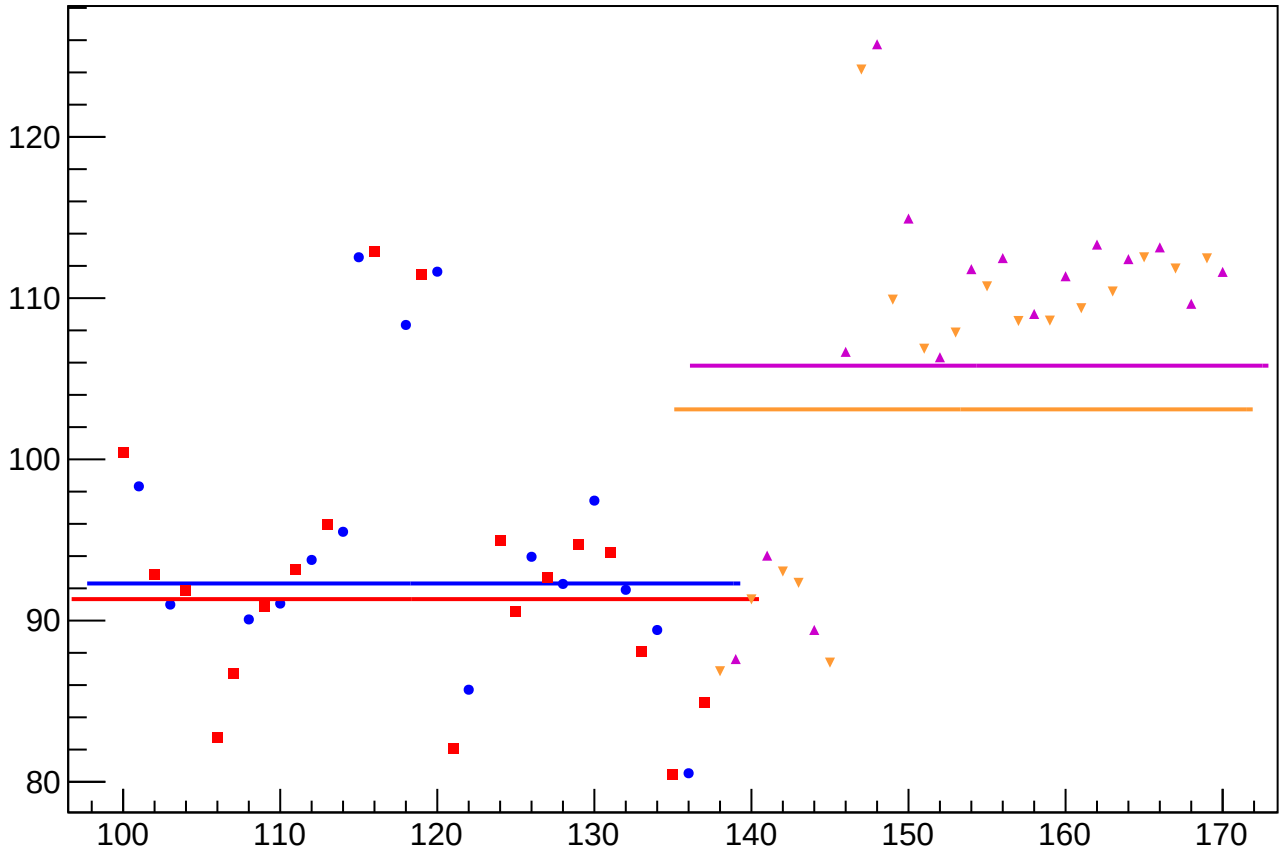
Right Out: 11.576+/-33.548 $\chi^2$/NDF: 17.2/18

Left In: 170.313+/-29.259 $\chi^2$/NDF:15.6/15

\+ sign -82.226+/-21.854 $\chi^2$/NDF: 57.4/32

All: 8.927+/-15.522 $\chi^2$/NDF: 138.0/67

\- sign 101.734+/-22.051 $\chi^2$/NDF: 45.5/34




Right In: 92.302+/-0.024 $\chi^2$/NDF: 107066.1/15

Left Out: 103.101+/-0.020 $\chi^2$/NDF:285641.1/16

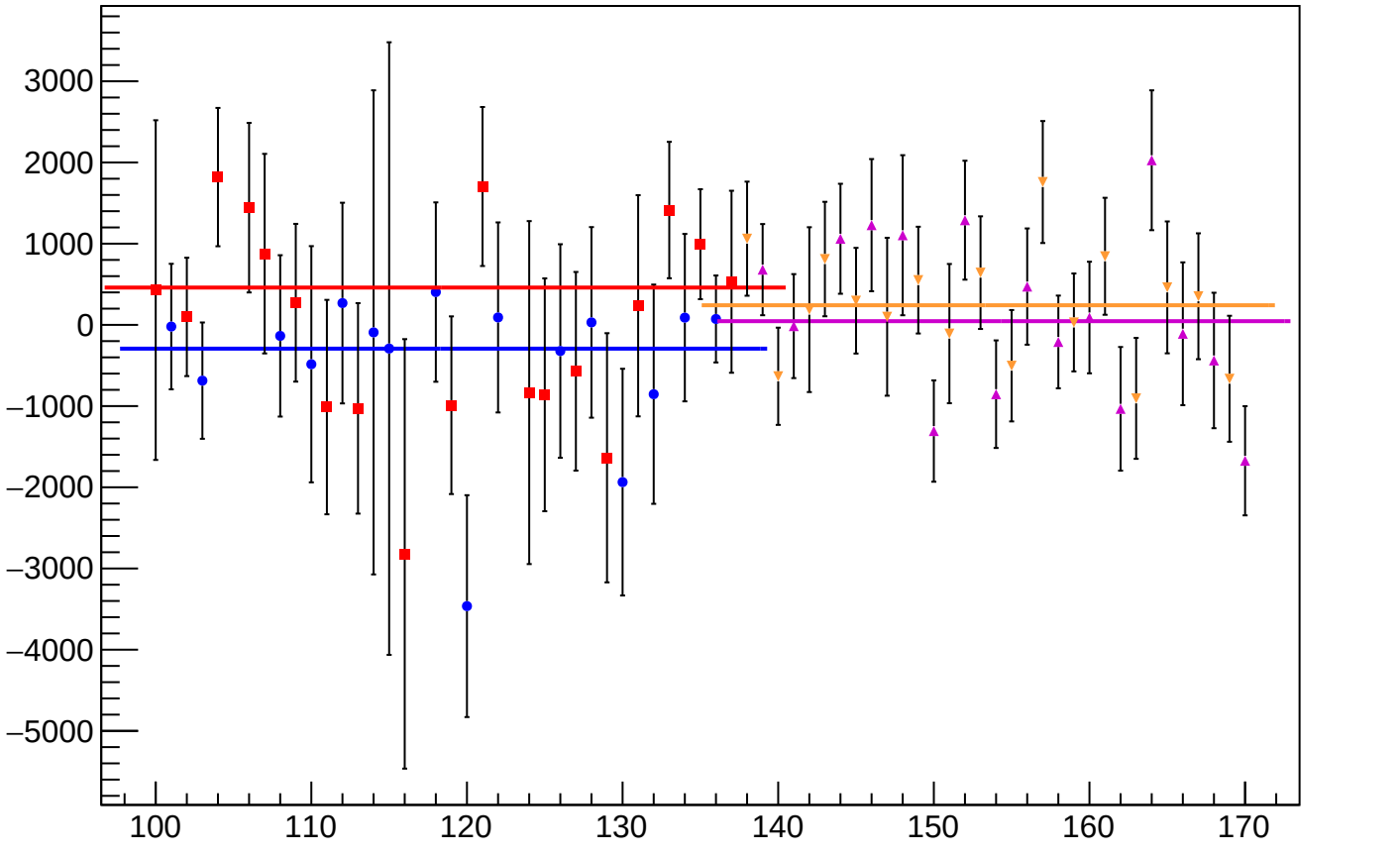
Right Out: 91.332+/-0.024 $\chi^2$/NDF: 104918.3/18

Left In: 105.811+/-0.021 $\chi^2$/NDF:253875.3/15

+ sign 98.750+/-0.015 $\chi^2$/NDF: 510193.7/32

All: 99.149+/-0.011 $\chi^2$/NDF: 1081924.5/67

- sign 99.556+/-0.016 $\chi^2$/NDF: 570384.8/34




Right In: -292.753+/-259.692 $\chi^2$/NDF: 8.8/15

Left Out: 241.742+/-176.233 $\chi^2$/NDF:14.8/16

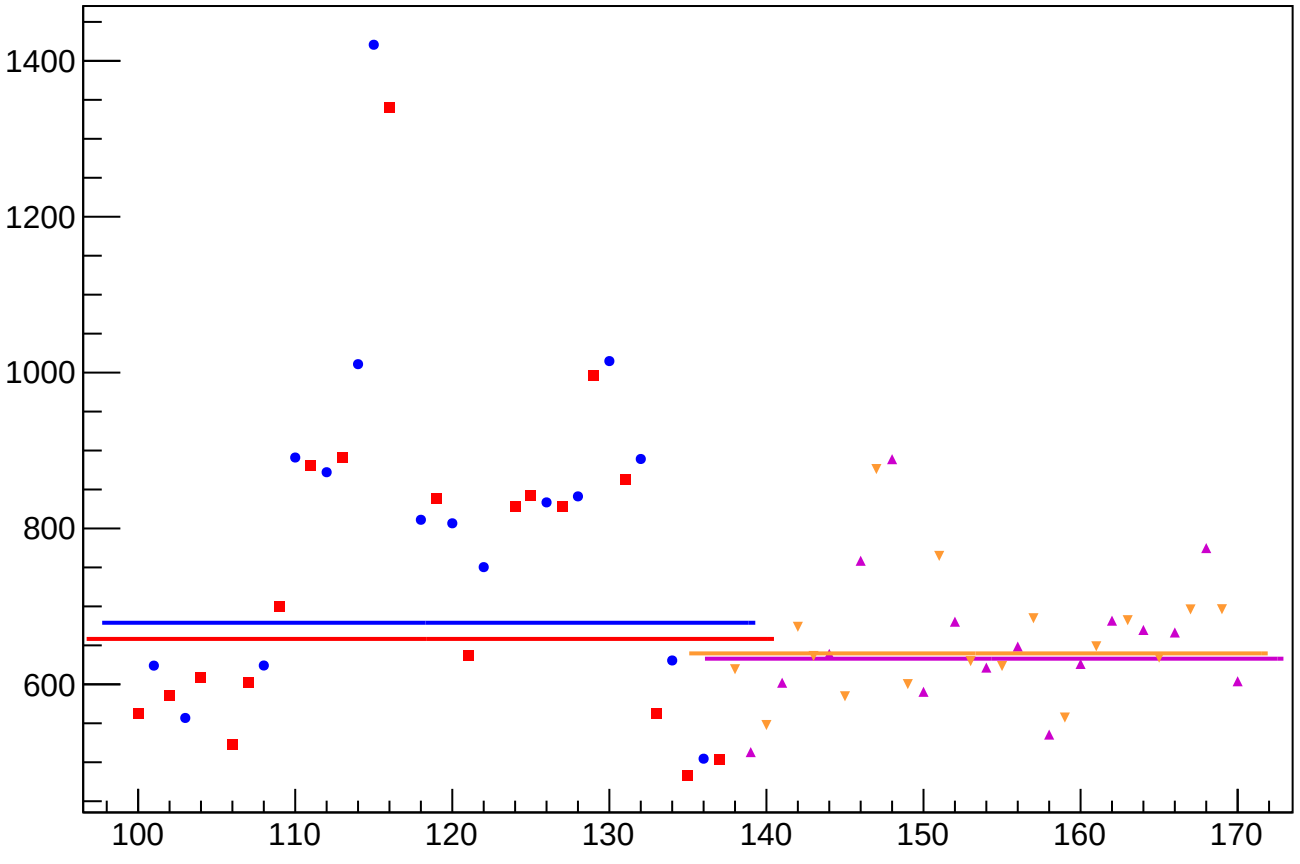
Right Out: 459.595+/-249.543 $\chi^2$/NDF: 17.1/18

Left In: 45.673+/-176.229 $\chi^2$/NDF:31.0/15

+ sign 73.208+/-145.825 $\chi^2$/NDF: 26.5/32

All: 129.023+/-102.445 $\chi^2$/NDF: 76.7/67

- sign 183.413+/-143.951 $\chi^2$/NDF: 49.9/34




Right In: 679.003+/-0.184 $\chi^2$/NDF: 767985.6/15

Left Out: 639.684+/-0.125 $\chi^2$/NDF:307858.6/16

Right Out: 658.262+/-0.176 $\chi^2$/NDF: 805898.2/18

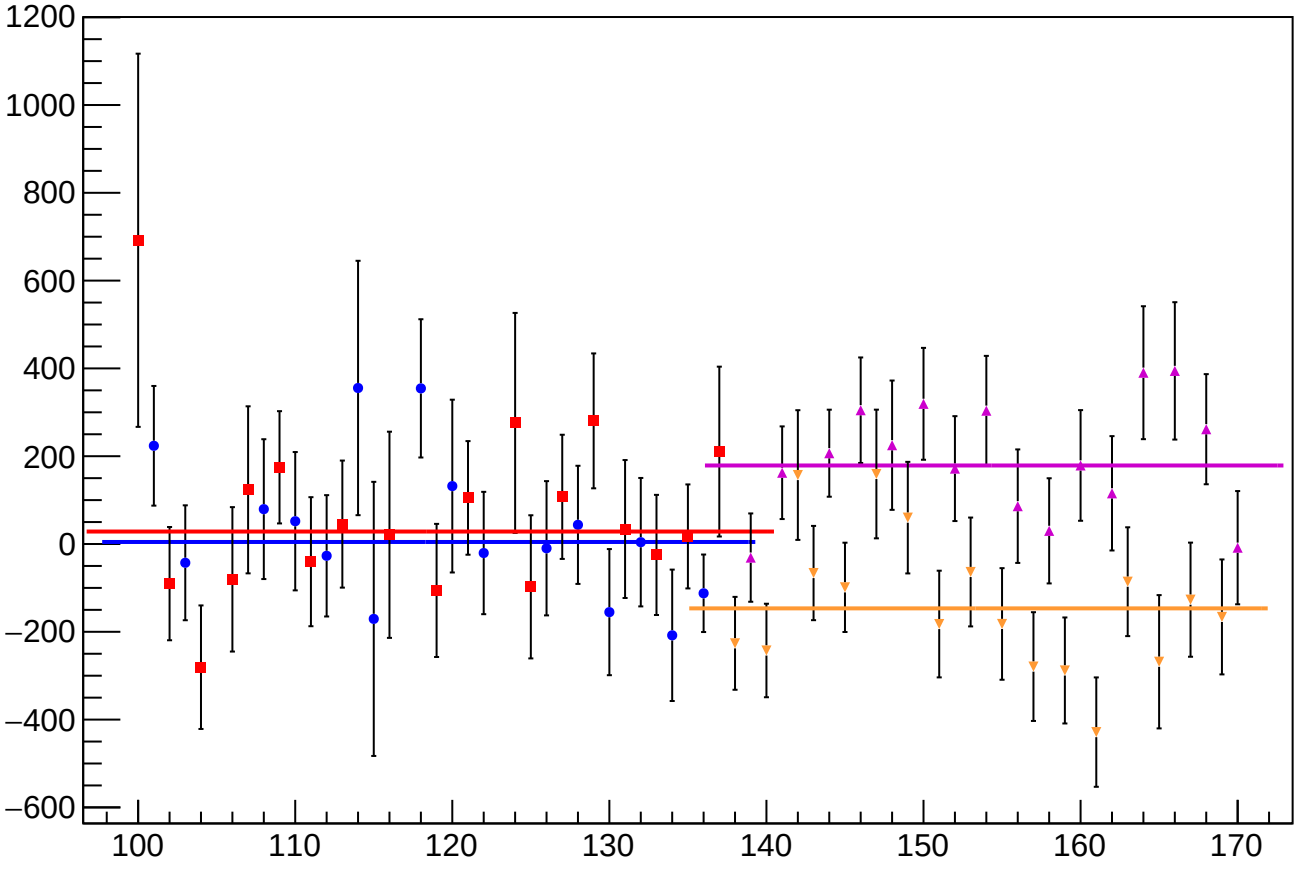
Left In: 632.886+/-0.125 $\chi^2$/NDF:432650.0/15

+ sign 652.082+/-0.103 $\chi^2$/NDF: 1107234.4/32

All: 646.636+/-0.072 $\chi^2$/NDF: 2365088.9/67

- sign 641.330+/-0.102 $\chi^2$/NDF: 1252347.8/34

# dit_asym_sam_15_dd_mean vs Slug




Right In: 4.619+/-36.509 $\chi^2$/NDF: 15.3/15

Left Out: -146.635+/-29.695 $\chi^2$/NDF:22.6/16

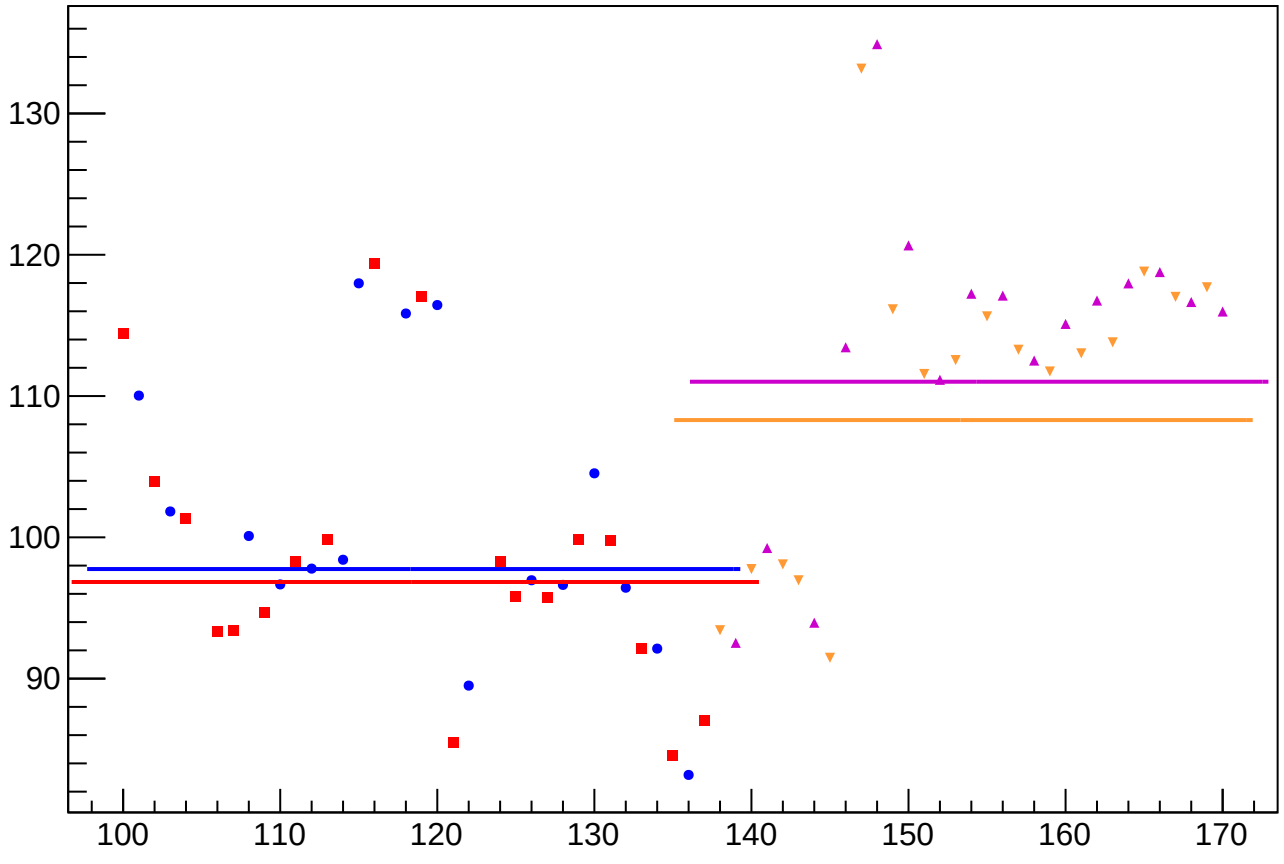
Right Out: 28.407+/-35.465 $\chi^2$/NDF: 17.1/18

Left In: 178.870+/-30.699 $\chi^2$/NDF:16.6/15

+ sign -86.413+/-23.037 $\chi^2$/NDF: 48.2/32

All: 13.248+/-16.351 $\chi^2$/NDF: 129.9/67

- sign 114.420+/-23.211 $\chi^2$/NDF: 43.9/34




Right In: 97.756+/-0.026 $\chi^2$/NDF: 140654.4/15

Left Out: 108.300+/-0.021 $\chi^2$/NDF:261971.2/16

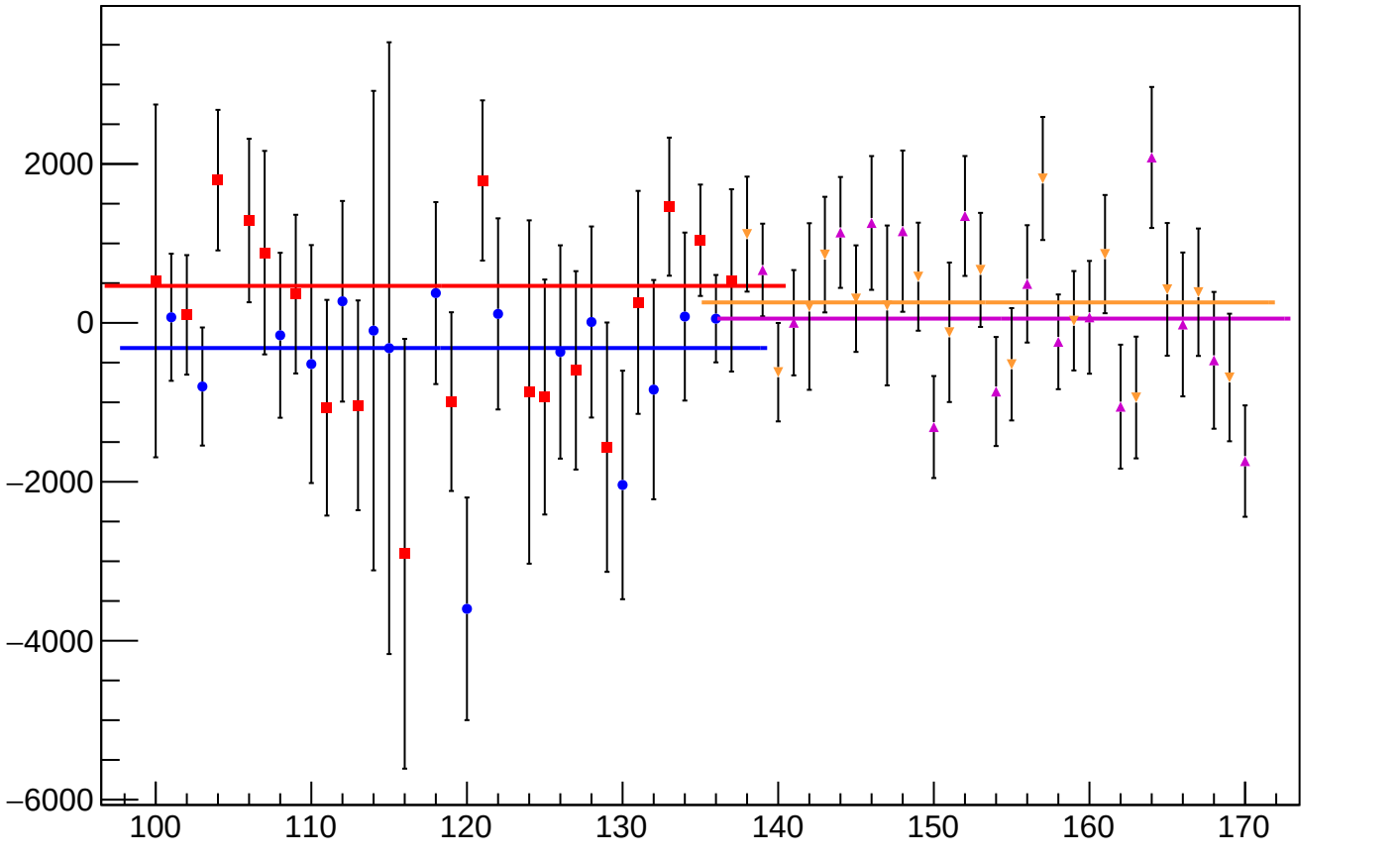
Right Out: 96.840+/-0.025 $\chi^2$/NDF: 115170.9/18

Left In: 111.014+/-0.022 $\chi^2$/NDF:248394.2/15

+ sign 104.102+/-0.016 $\chi^2$/NDF: 503028.5/32

All: 104.519+/-0.012 $\chi^2$/NDF: 1050546.5/67

- sign 104.943+/-0.016 $\chi^2$/NDF: 546196.6/34




Right In: -316.572+/-267.515 $\chi^2$/NDF: 9.2/15

Left Out: 257.443+/-181.942 $\chi^2$/NDF:14.8/16

Right Out: 465.576+/-256.646 $\chi^2$/NDF: 16.5/18

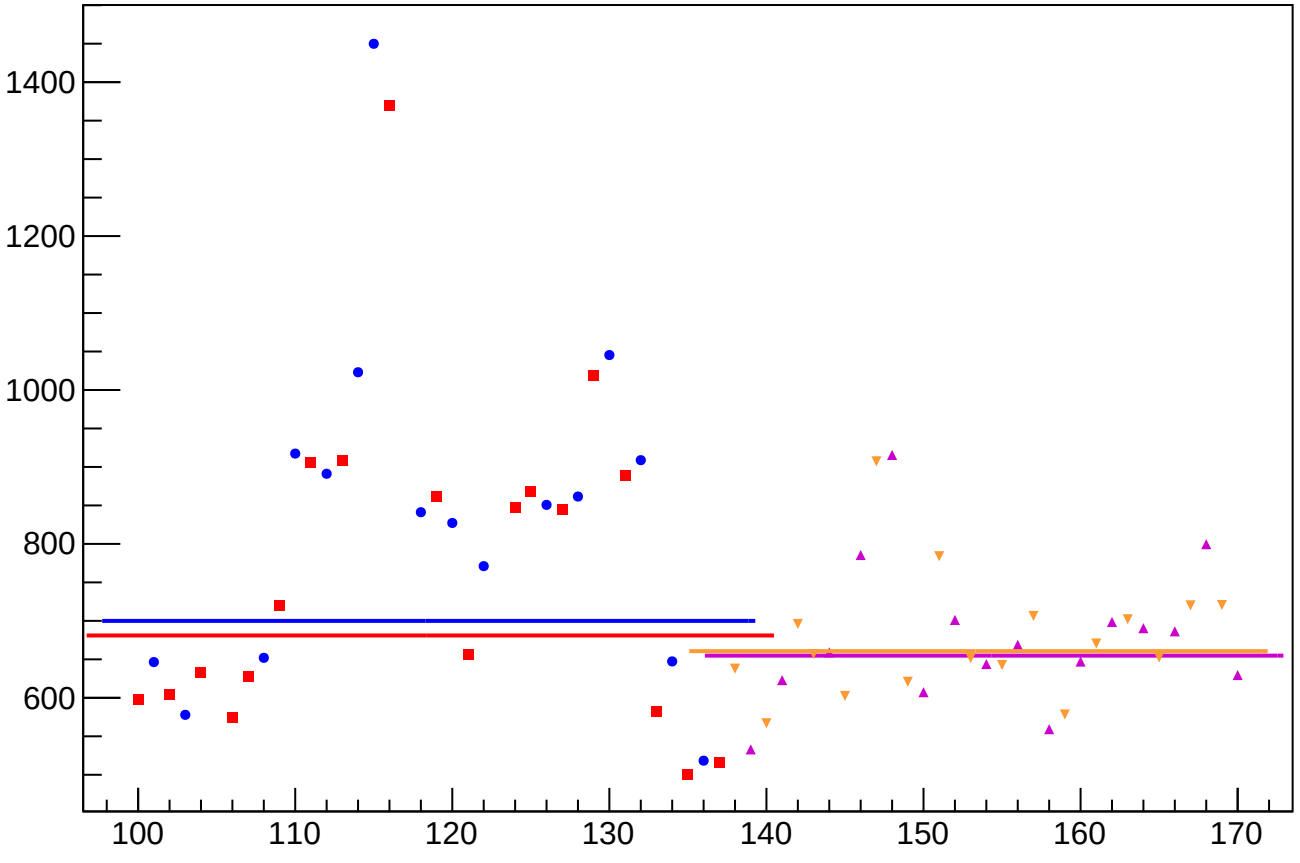
Left In: 53.784+/-182.228 $\chi^2$/NDF:30.7/15

\+ sign 75.900+/-150.445 $\chi^2$/NDF: 27.1/32

All: 134.575+/-105.716 $\chi^2$/NDF: 76.3/67

\- sign 191.806+/-148.583 $\chi^2$/NDF: 48.9/34

# asym_sam_15_dd_dit_correction_rms vs Slug




Right In: 699.973+/-0.189 $\chi^2$/NDF: 753665.4/15

Left Out: 660.655+/-0.129 $\chi^2$/NDF:303512.3/16

Right Out: 681.016+/-0.181 $\chi^2$/NDF: 769397.2/18

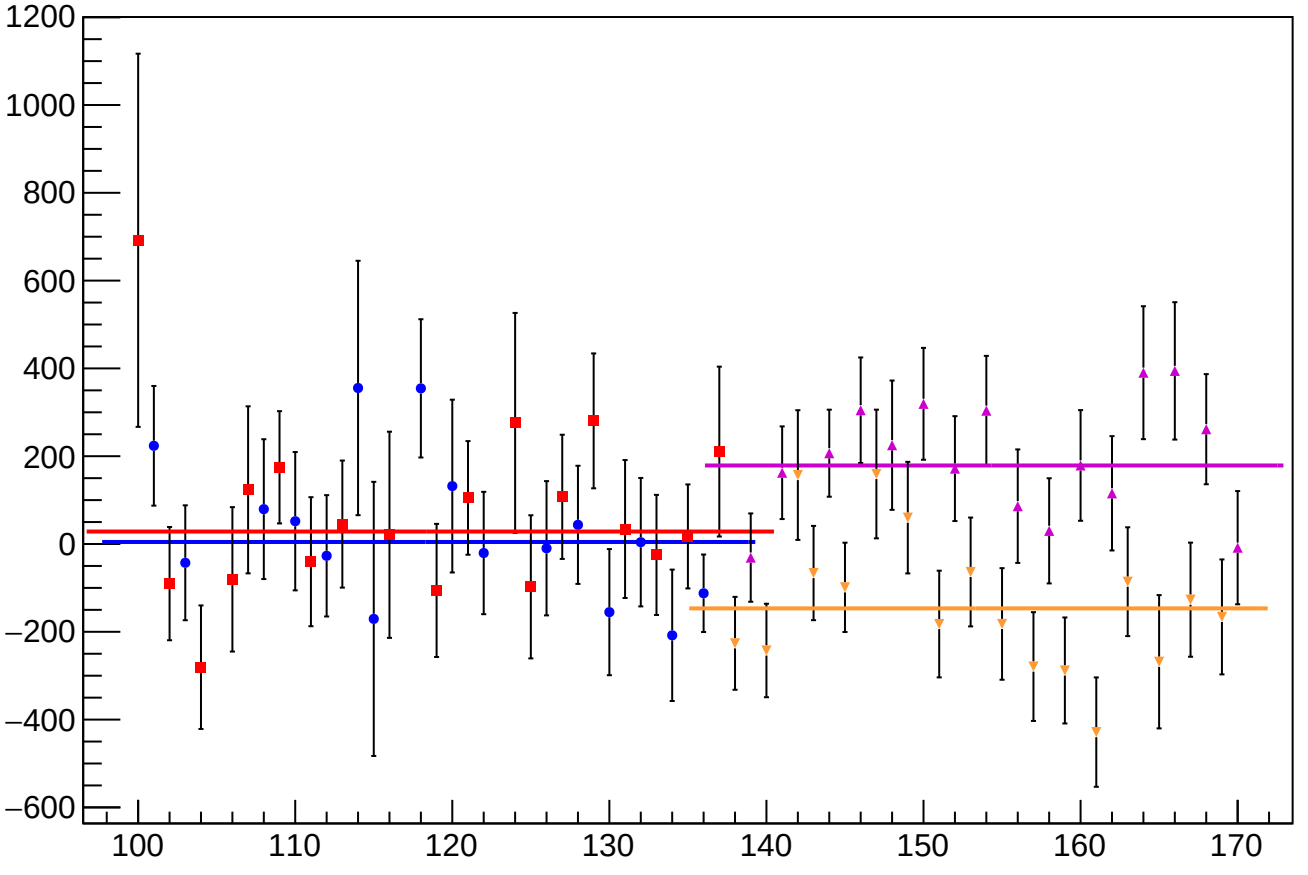
Left In: 654.838+/-0.129 $\chi^2$/NDF:414892.3/15

+ sign 673.090+/-0.106 $\chi^2$/NDF: 1086716.6/32

All: 668.292+/-0.075 $\chi^2$/NDF: 2288858.3/67

- sign 663.612+/-0.105 $\chi^2$/NDF: 1198123.6/34

# eigen_dit_asym_sam_15_dd_mean vs Slug




Right In: 4.620+/-36.509 $\chi^2$/NDF: 15.3/15

Left Out: -146.636+/-29.695 $\chi^2$/NDF:22.6/16

Right Out: 28.407+/-35.465 $\chi^2$/NDF: 17.1/18

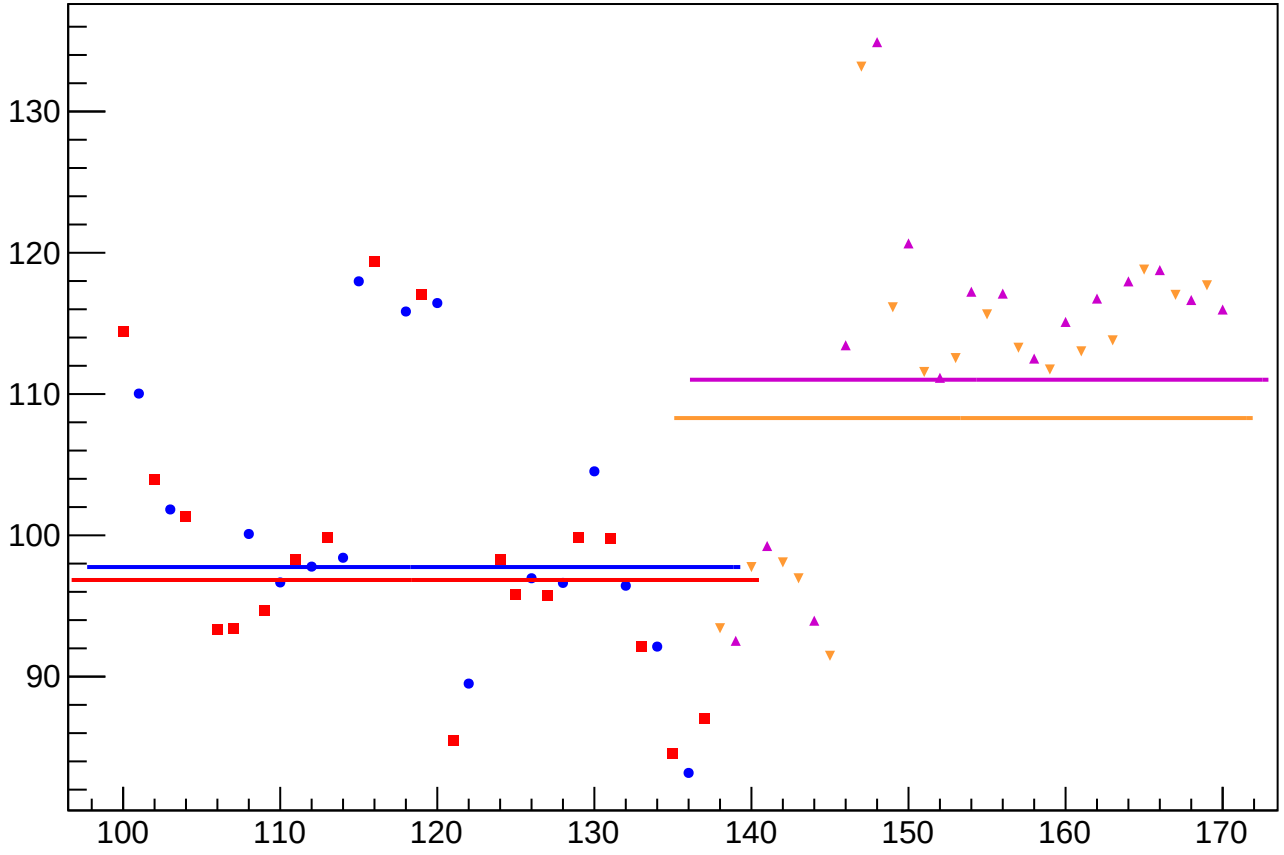
Left In: 178.870+/-30.699 $\chi^2$/NDF:16.6/15

+ sign -86.412+/-23.037 $\chi^2$/NDF: 48.3/32

All: 13.248+/-16.351 $\chi^2$/NDF: 129.9/67

- sign 114.420+/-23.211 $\chi^2$/NDF: 43.9/34

# eigen_dit_asym_sam_15_dd_rms vs Slug




Right In: 97.756+/-0.026 $\chi^2$/NDF: 140654.8/15

Left Out: 108.300+/-0.021 $\chi^2$/NDF:261970.5/16

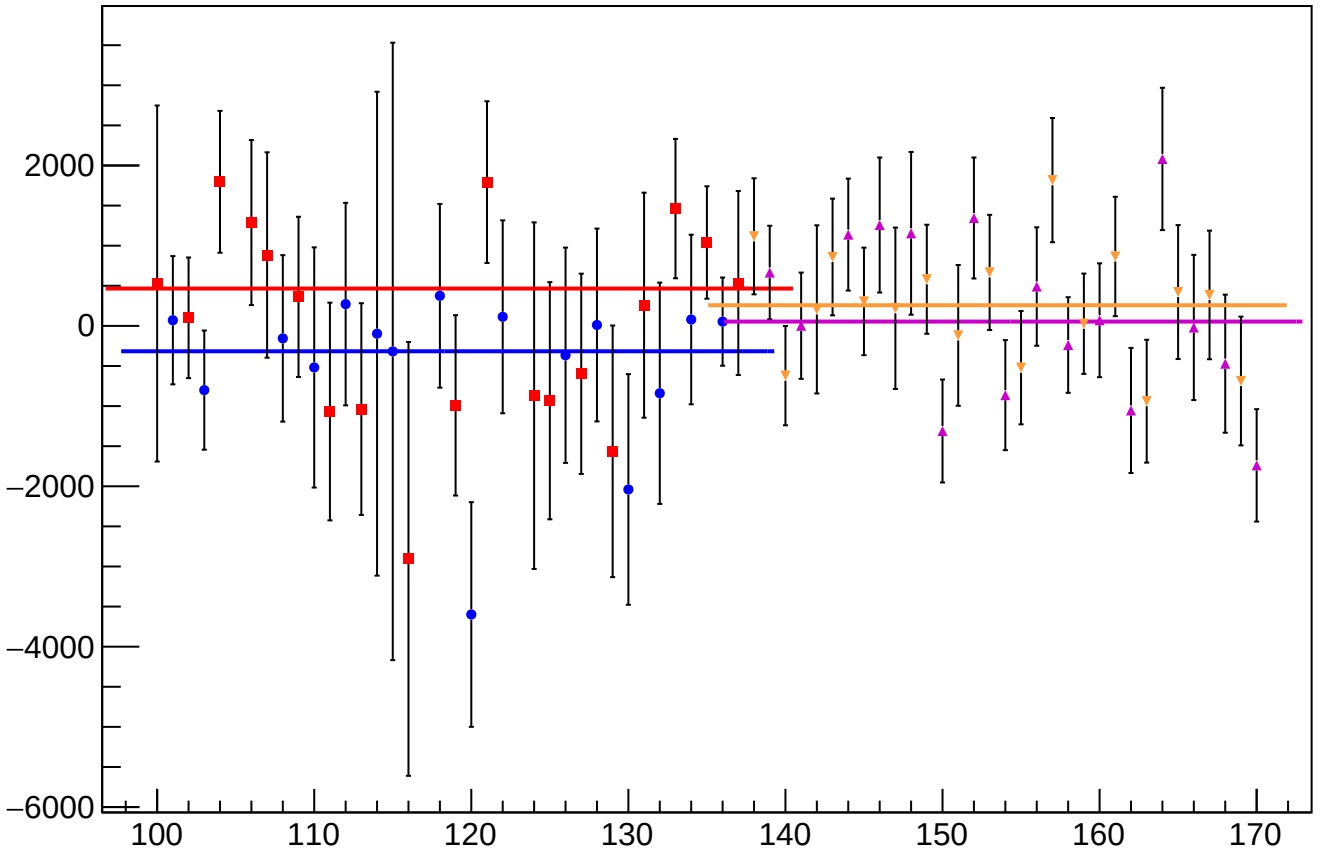
Right Out: 96.839+/-0.025 $\chi^2$/NDF: 115173.1/18

Left In: 111.014+/-0.022 $\chi^2$/NDF:248391.4/15

+ sign 104.102+/-0.016 $\chi^2$/NDF: 503035.2/32

All: 104.519+/-0.012 $\chi^2$/NDF: 1050563.6/67

- sign 104.942+/-0.016 $\chi^2$/NDF: 546207.0/34




Right In: -316.570+/-267.515 $\chi^2$/NDF: 9.2/15

Left Out: 257.444+/-181.942 $\chi^2$/NDF:14.8/16

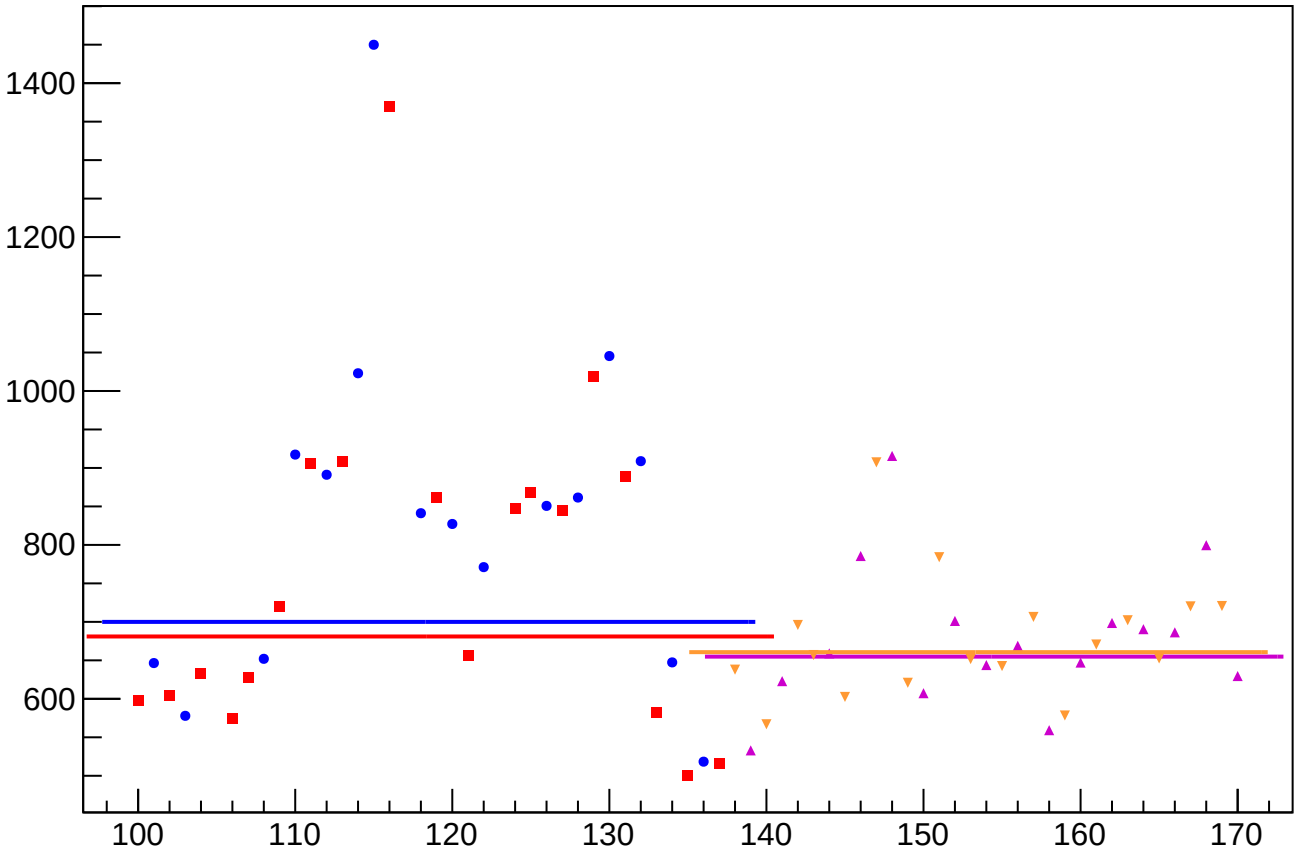
Right Out: 465.576+/-256.645 $\chi^2$/NDF: 16.5/18

Left In: 53.784+/-182.228 $\chi^2$/NDF:30.7/15

\+ sign 75.900+/-150.445 $\chi^2$/NDF: 27.1/32

All: 134.575+/-105.716 $\chi^2$/NDF: 76.3/67

\- sign 191.807+/-148.583 $\chi^2$/NDF: 48.9/34




Right In: 699.971+/-0.189 $\chi^2$/NDF: 753668.1/15

Left Out: 660.656+/-0.129 $\chi^2$/NDF:303512.5/16

Right Out: 681.015+/-0.181 $\chi^2$/NDF: 769400.5/18

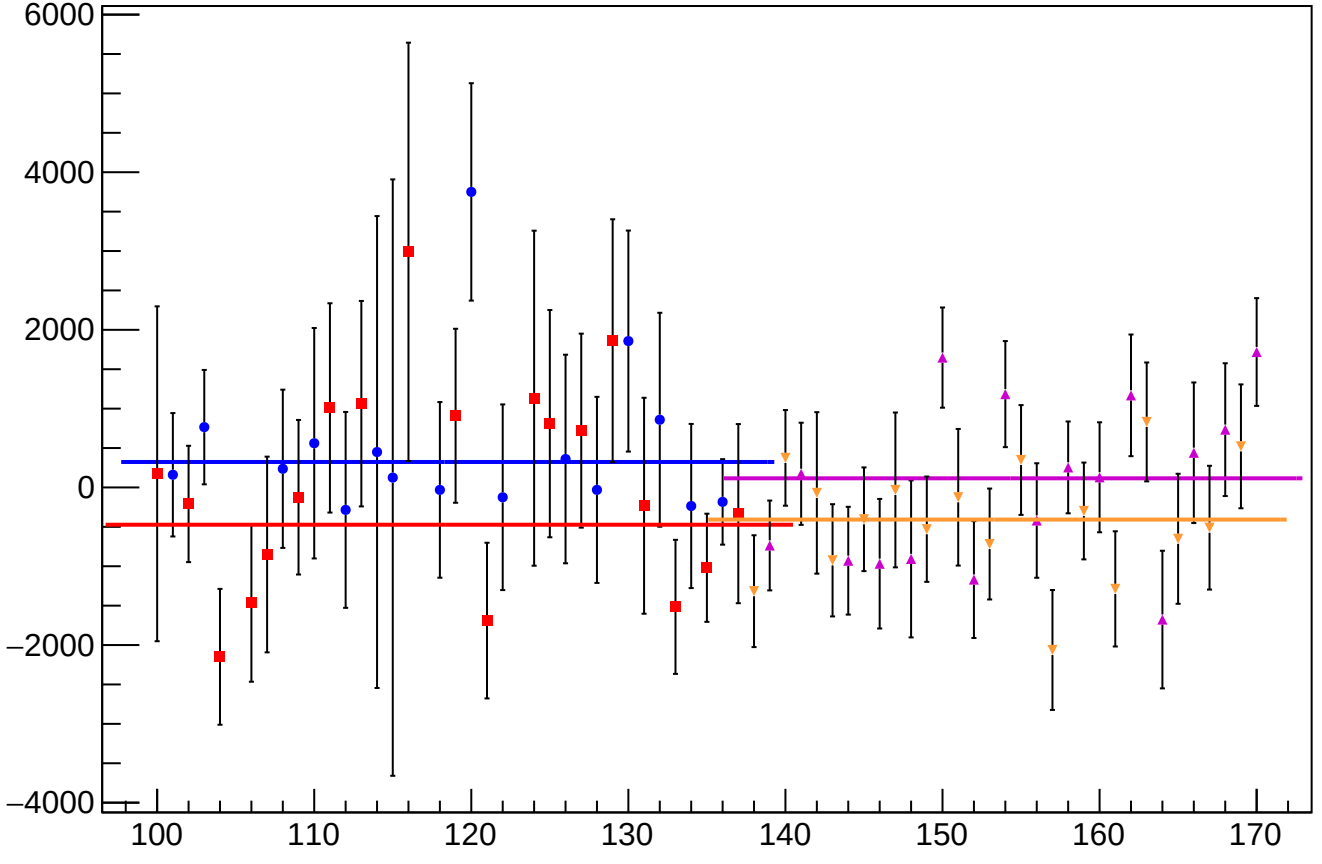
Left In: 654.839+/-0.129 $\chi^2$/NDF:414892.6/15

+ sign 673.090+/-0.106 $\chi^2$/NDF: 1086716.3/32

All: 668.292+/-0.075 $\chi^2$/NDF: 2288859.4/67

- sign 663.612+/-0.105 $\chi^2$/NDF: 1198124.9/34

# asym_sam_15_dd_mean vs Slug




Right In: 323.198+/-262.332 $\chi^2$/NDF: 9.7/15

Left Out: -407.782+/-178.637 $\chi^2$/NDF:16.0/16

Right Out: -473.233+/-251.330 $\chi^2$/NDF: 19.4/18

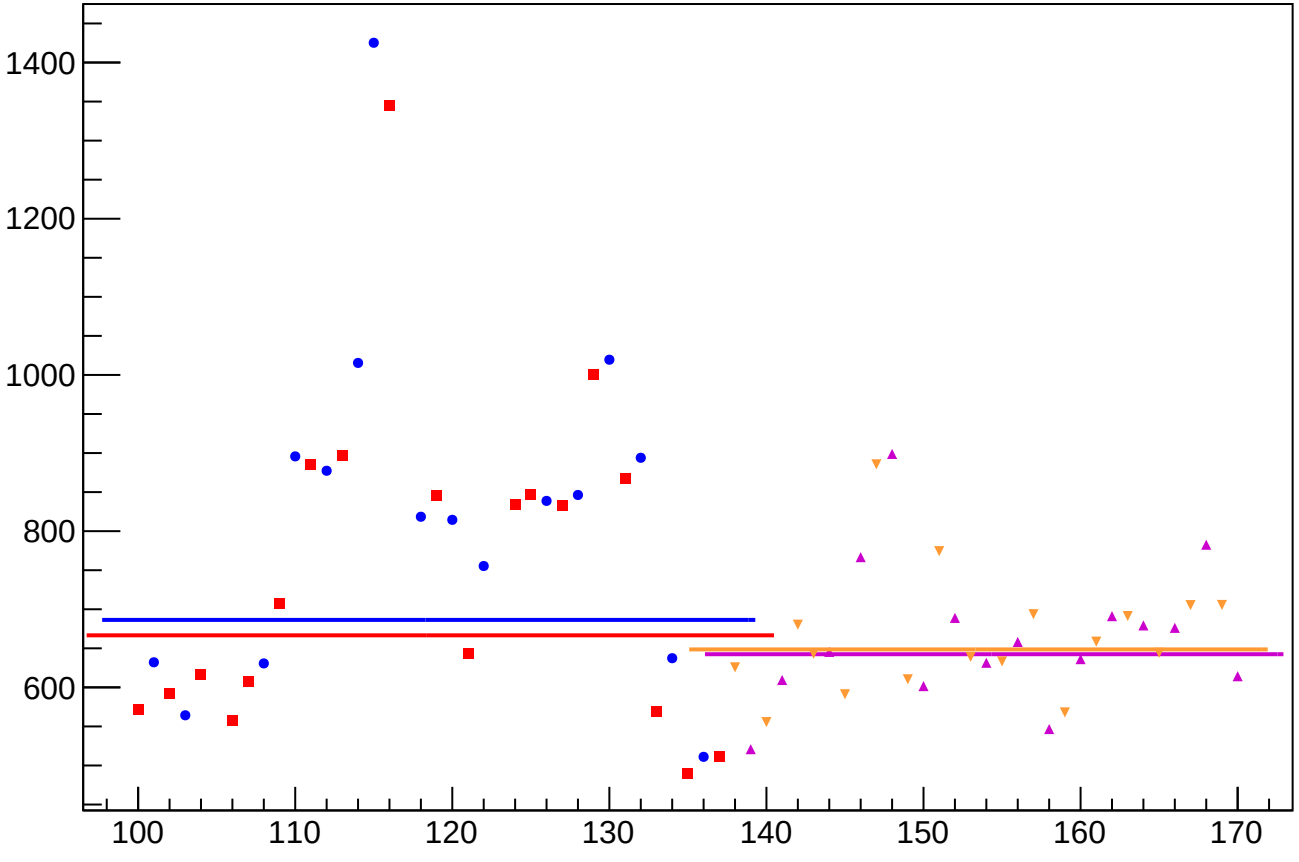
Left In: 115.705+/-178.820 $\chi^2$/NDF:31.5/15

+ sign -176.207+/-147.654 $\chi^2$/NDF: 31.0/32

All: -128.594+/-103.711 $\chi^2$/NDF: 85.8/67

- sign -82.231+/-145.704 $\chi^2$/NDF: 54.6/34

# asym_sam_15_dd_rms vs Slug




Right In: 686.394+/-0.185 $\chi^2$/NDF: 749454.8/15

Left Out: 648.602+/-0.126 $\chi^2$/NDF:302015.9/16

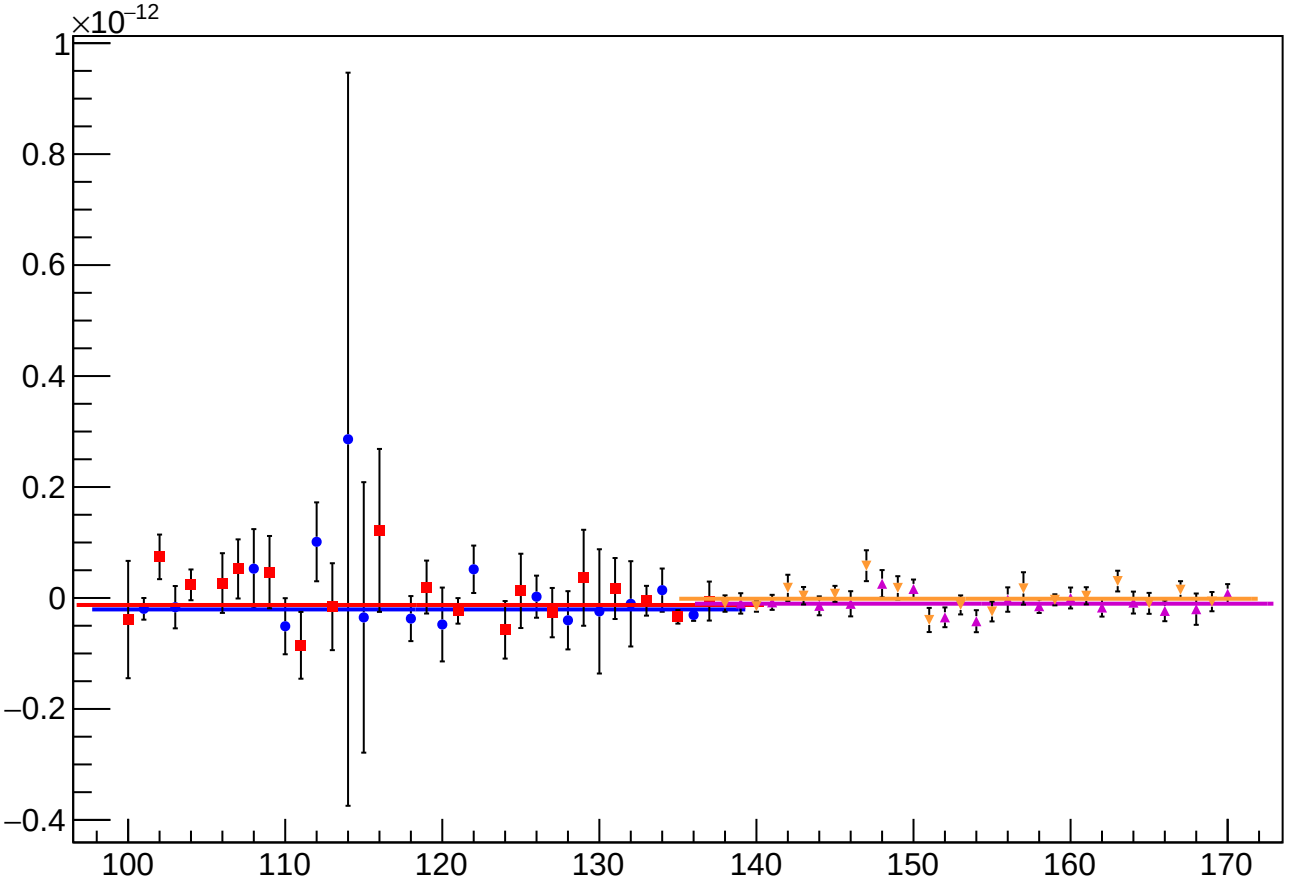
Right Out: 666.634+/-0.178 $\chi^2$/NDF: 777033.6/18

Left In: 642.449+/-0.126 $\chi^2$/NDF:419509.2/15

+ sign 660.575+/-0.104 $\chi^2$/NDF: 1079828.6/32

All: 655.509+/-0.073 $\chi^2$/NDF: 2293313.4/67

- sign 650.577+/-0.103 $\chi^2$/NDF: 1208839.3/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 10.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:18.8/16

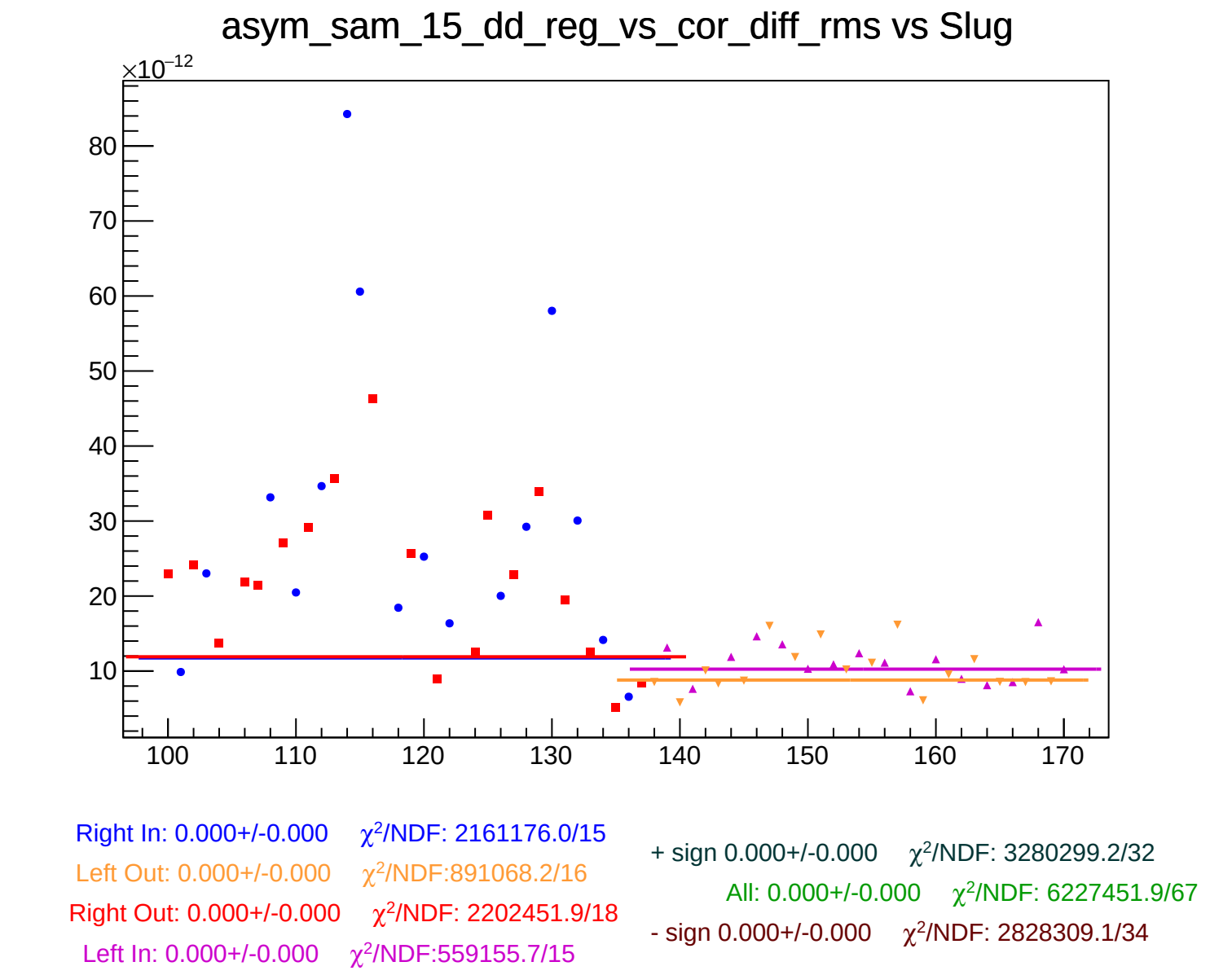
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 17.0/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:11.5/15

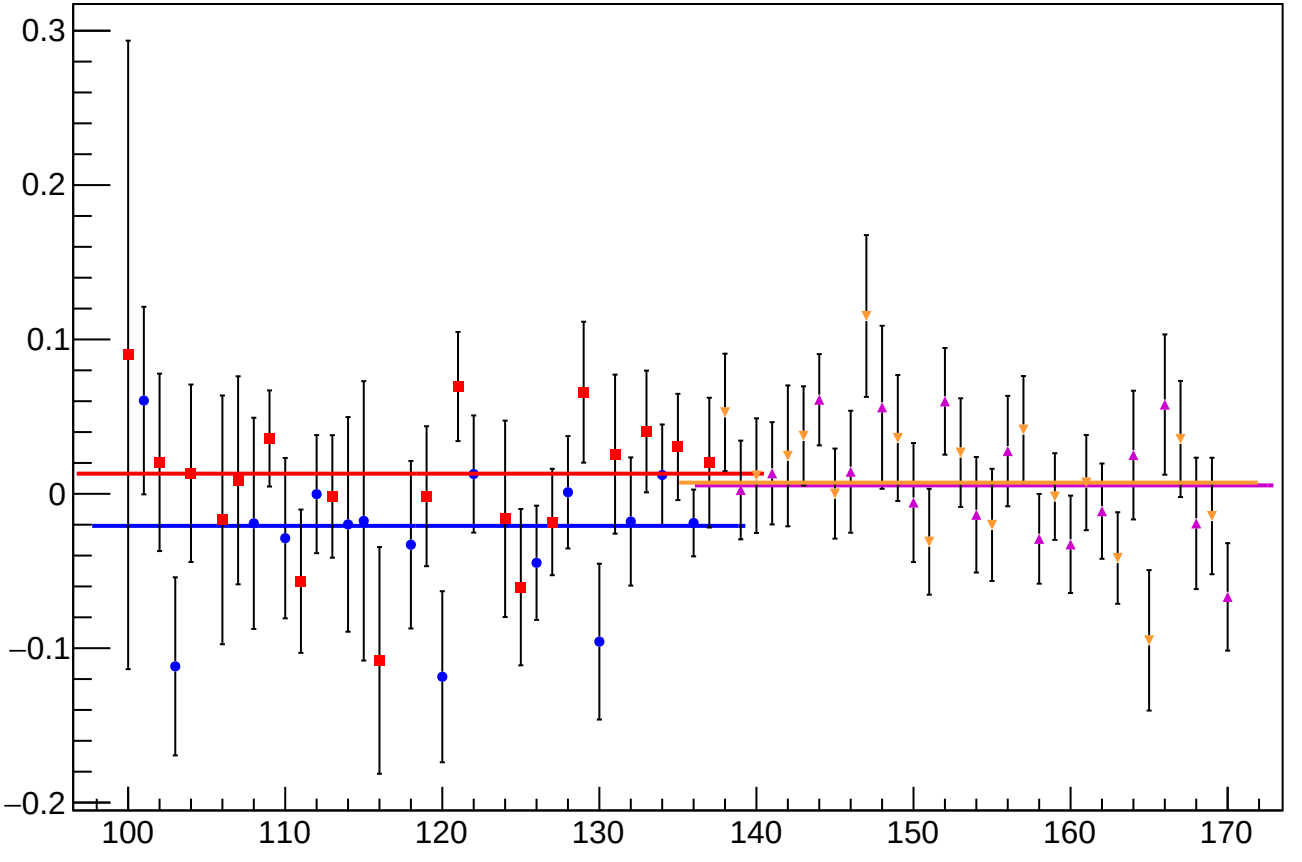
+ sign -0.000+/-0.000 $\chi^2$/NDF: 33.6/32

All: -0.000+/-0.000 $\chi^2$/NDF: 63.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 28.6/34


asym_sam_15_dd_reg_vs_cor_diff_rms vs Slug
×10^−12
80
70
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2161176.0/15
Left Out: 0.000+/-0.000 χ²/NDF:891068.2/16
Right Out: 0.000+/-0.000 χ²/NDF: 2202451.9/18
Left In: 0.000+/-0.000 χ²/NDF:559155.7/15
+ sign 0.000+/-0.000 χ²/NDF: 3280299.2/32
All: 0.000+/-0.000 χ²/NDF: 6227451.9/67
- sign 0.000+/-0.000 χ²/NDF: 2828309.1/34

# asym_sam_15_dd_dit_vs_cor_diff_mean vs Slug




Right In: -0.021+/-0.011 $\chi^2$/NDF: 12.5/15

Left Out: 0.007+/-0.009 $\chi^2$/NDF:19.1/16

Right Out: 0.013+/-0.011 $\chi^2$/NDF: 13.9/18

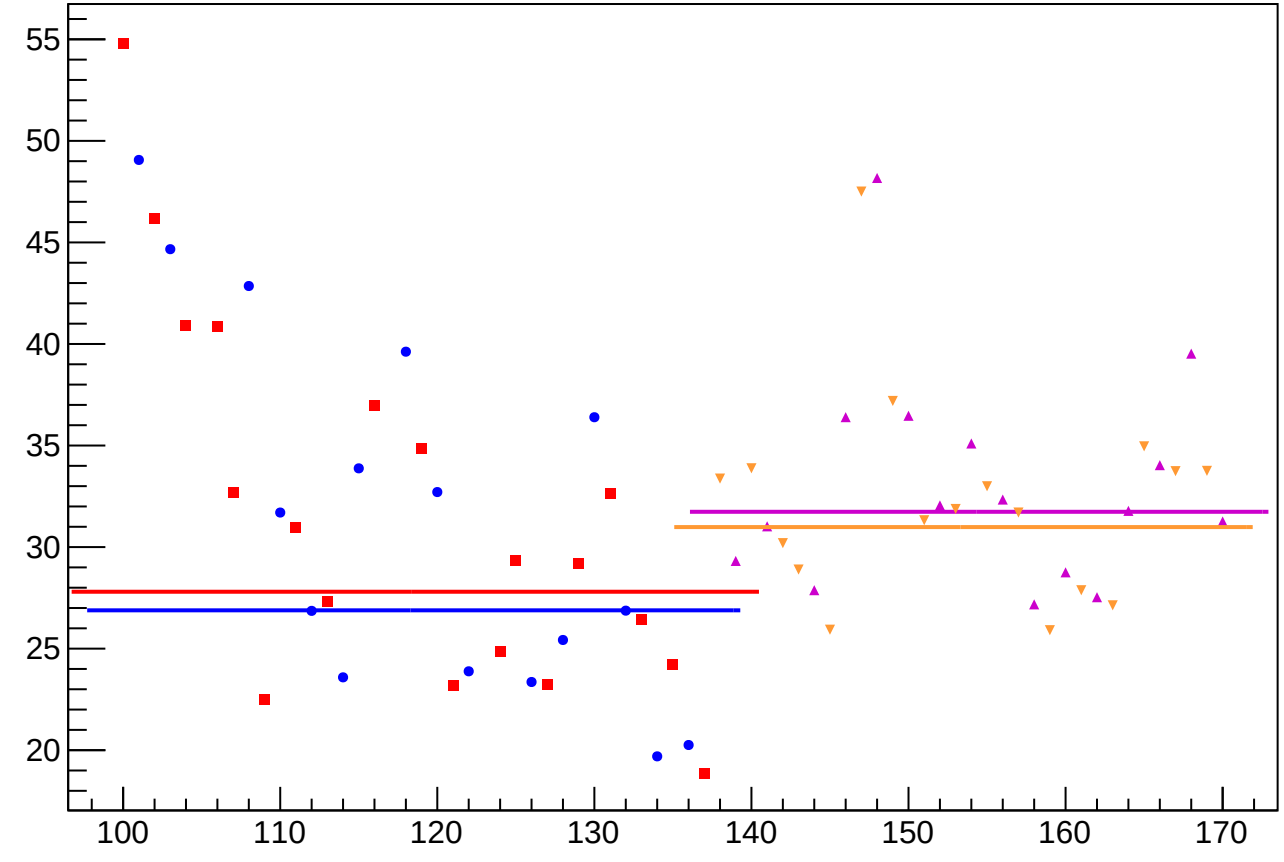
Left In: 0.005+/-0.009 $\chi^2$/NDF:17.1/15

+ sign -0.004+/-0.007 $\chi^2$/NDF: 35.9/32

All: 0.002+/-0.005 $\chi^2$/NDF: 69.0/67

- sign 0.009+/-0.007 $\chi^2$/NDF: 31.3/34

# asym_sam_15_dd_dit_vs_cor_diff_rms vs Slug




Right In: 26.886+/-0.007 $\chi^2$/NDF: 1120557.7/15

Left Out: 30.985+/-0.006 $\chi^2$/NDF:498795.4/16

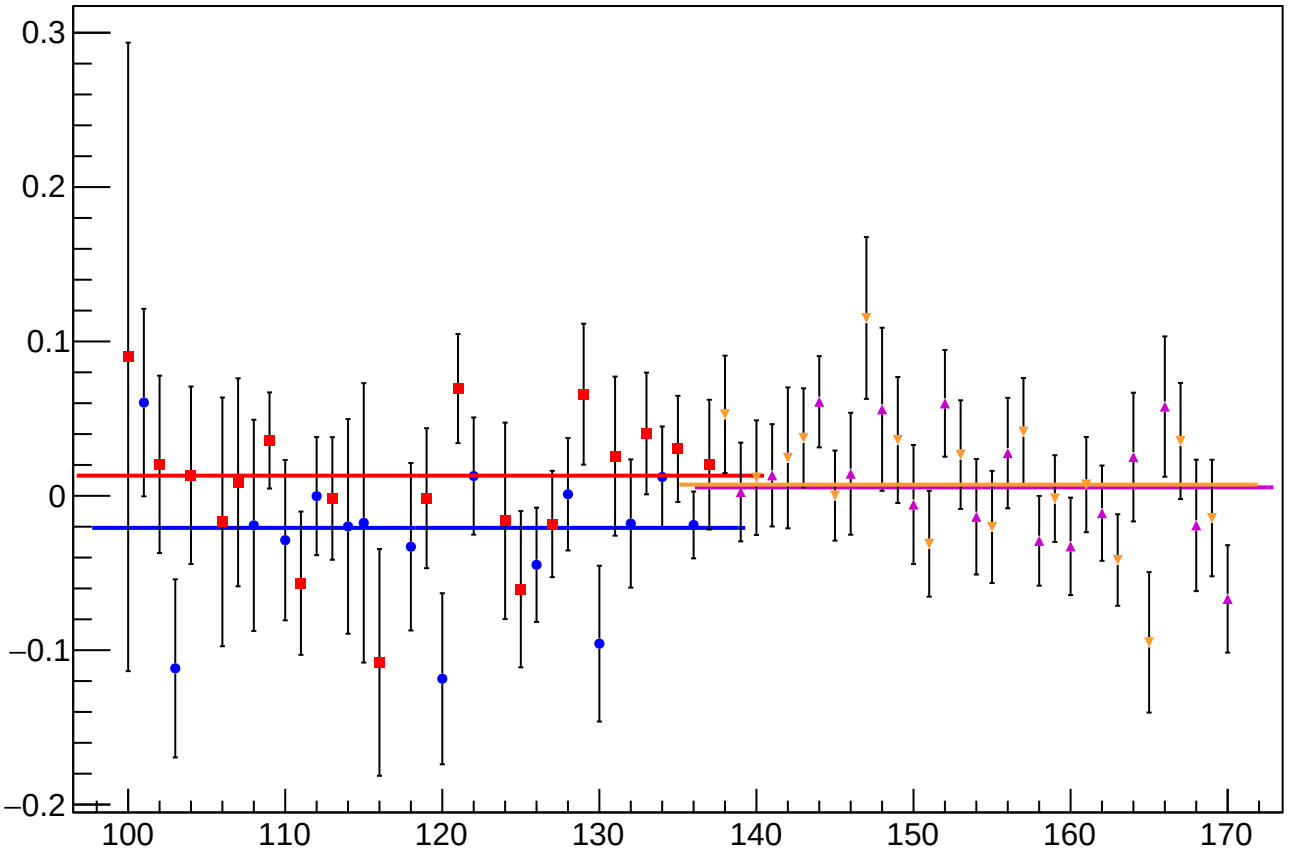
Right Out: 27.802+/-0.007 $\chi^2$/NDF: 763106.1/18

Left In: 31.738+/-0.006 $\chi^2$/NDF:491648.6/15

+ sign 29.346+/-0.005 $\chi^2$/NDF: 1801984.3/32

All: 29.719+/-0.003 $\chi^2$/NDF: 3232814.5/67

- sign 30.107+/-0.005 $\chi^2$/NDF: 1418016.3/34




Right In: -0.021+/-0.011 $\chi^2$/NDF: 12.5/15

Left Out: 0.007+/-0.009 $\chi^2$/NDF:19.1/16

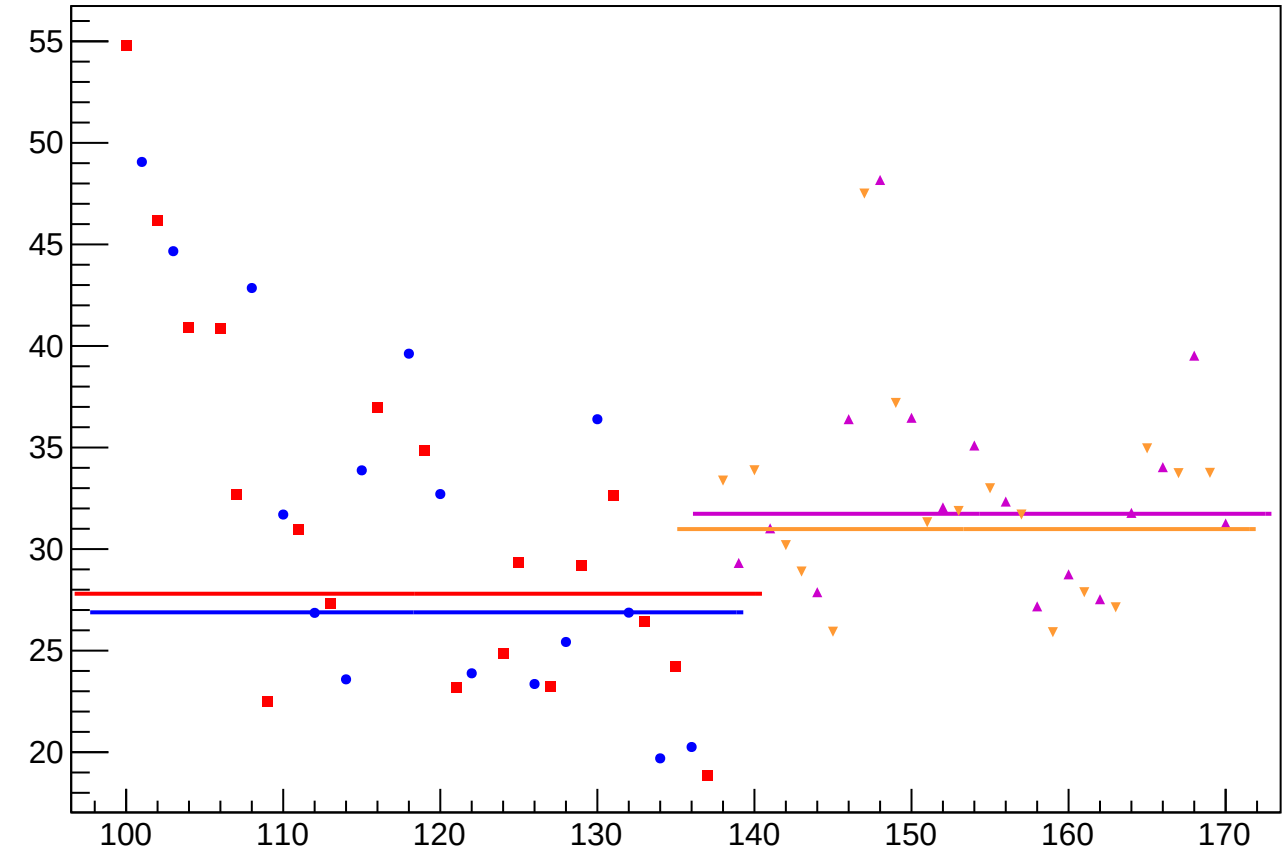
Right Out: 0.013+/-0.011 $\chi^2$/NDF: 13.9/18

Left In: 0.005+/-0.009 $\chi^2$/NDF:17.1/15

+ sign -0.004+/-0.007 $\chi^2$/NDF: 35.9/32

All: 0.002+/-0.005 $\chi^2$/NDF: 69.0/67

- sign 0.009+/-0.007 $\chi^2$/NDF: 31.3/34




Right In: 26.886+/-0.007 $\chi^2$/NDF: 1120557.7/15

Left Out: 30.985+/-0.006 $\chi^2$/NDF:498795.4/16

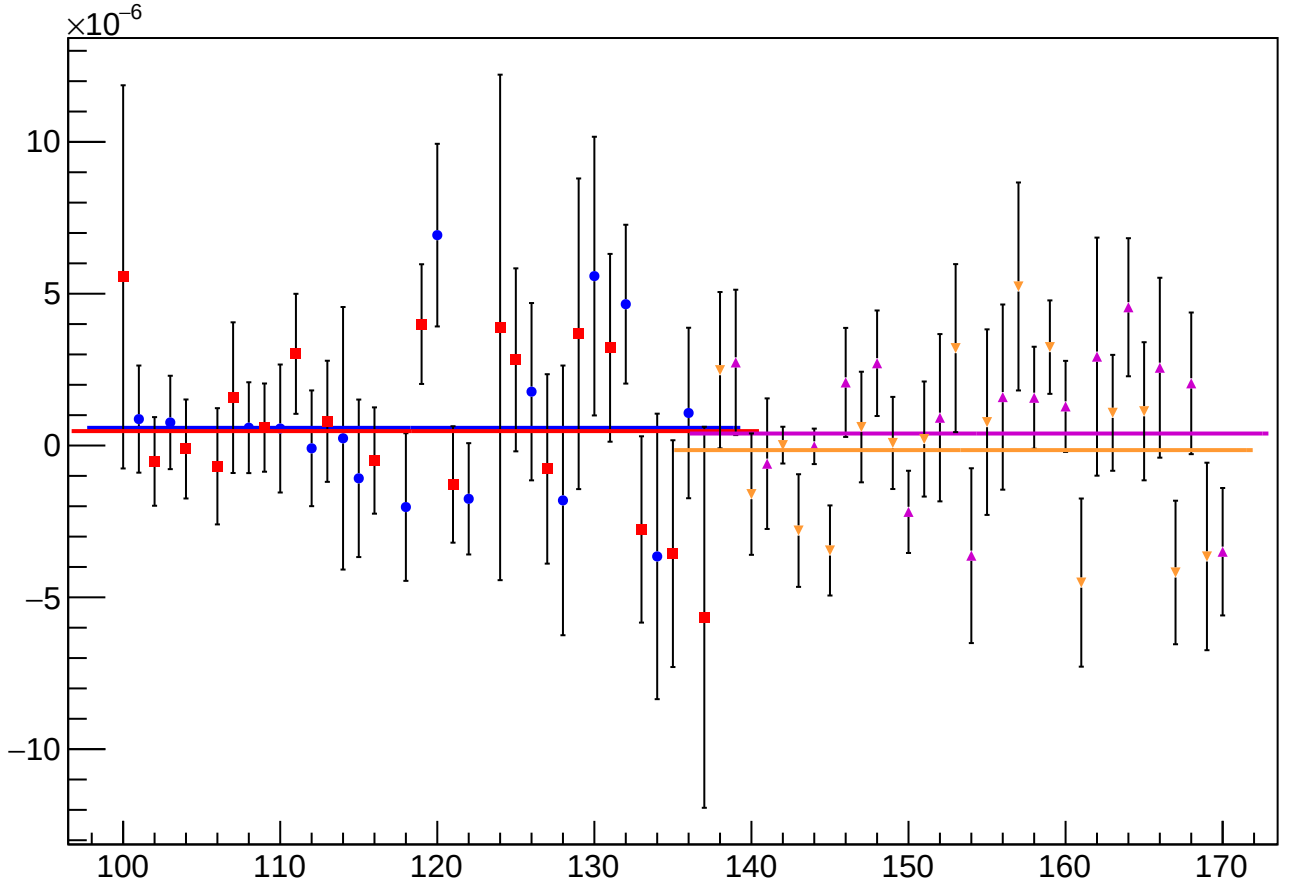
Right Out: 27.802+/-0.007 $\chi^2$/NDF: 763106.1/18

Left In: 31.738+/-0.006 $\chi^2$/NDF:491648.6/15

+ sign 29.346+/-0.005 $\chi^2$/NDF: 1801984.3/32

All: 29.719+/-0.003 $\chi^2$/NDF: 3232814.5/67

- sign 30.107+/-0.005 $\chi^2$/NDF: 1418016.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 12.7/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:25.2/16

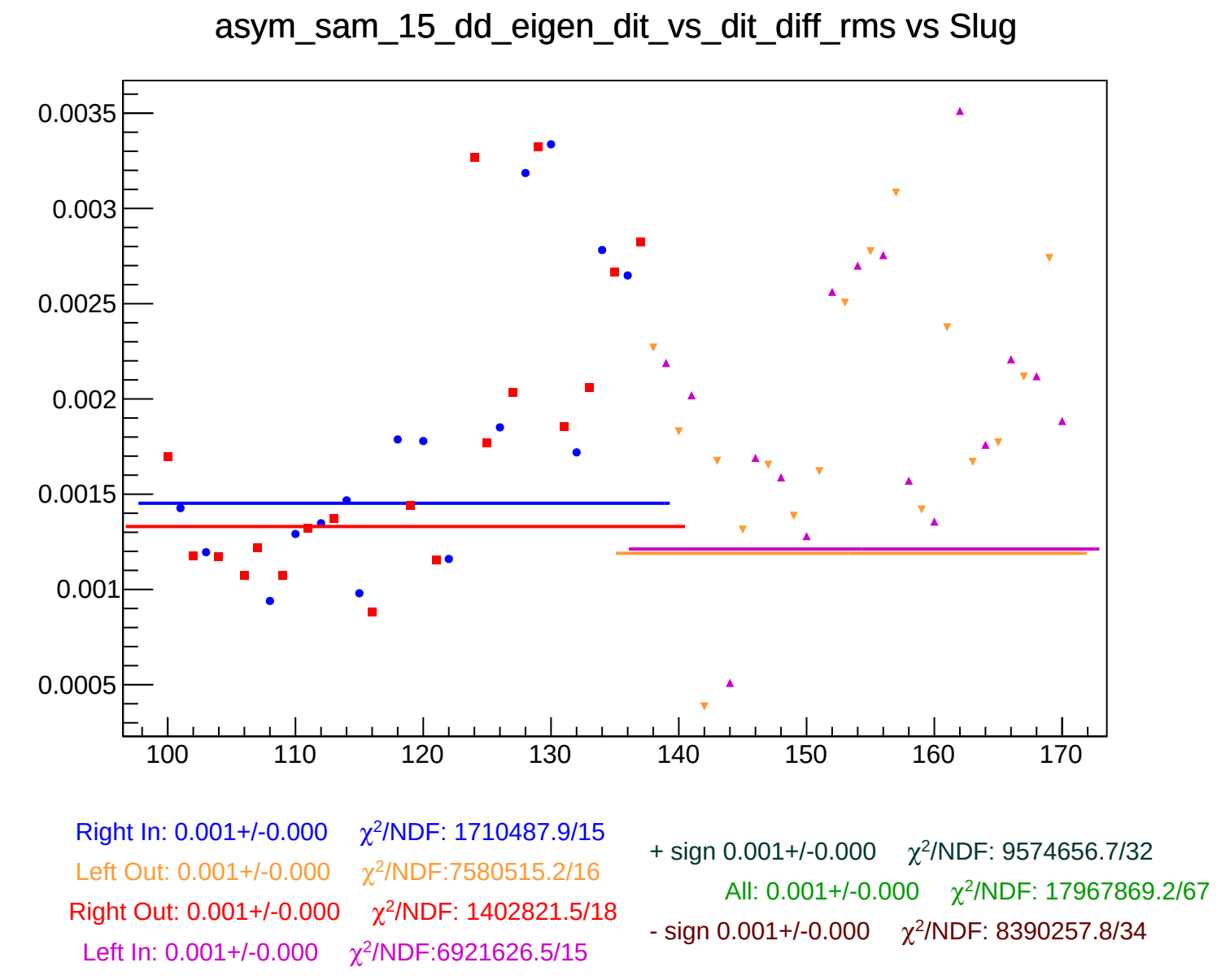
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 13.2/18

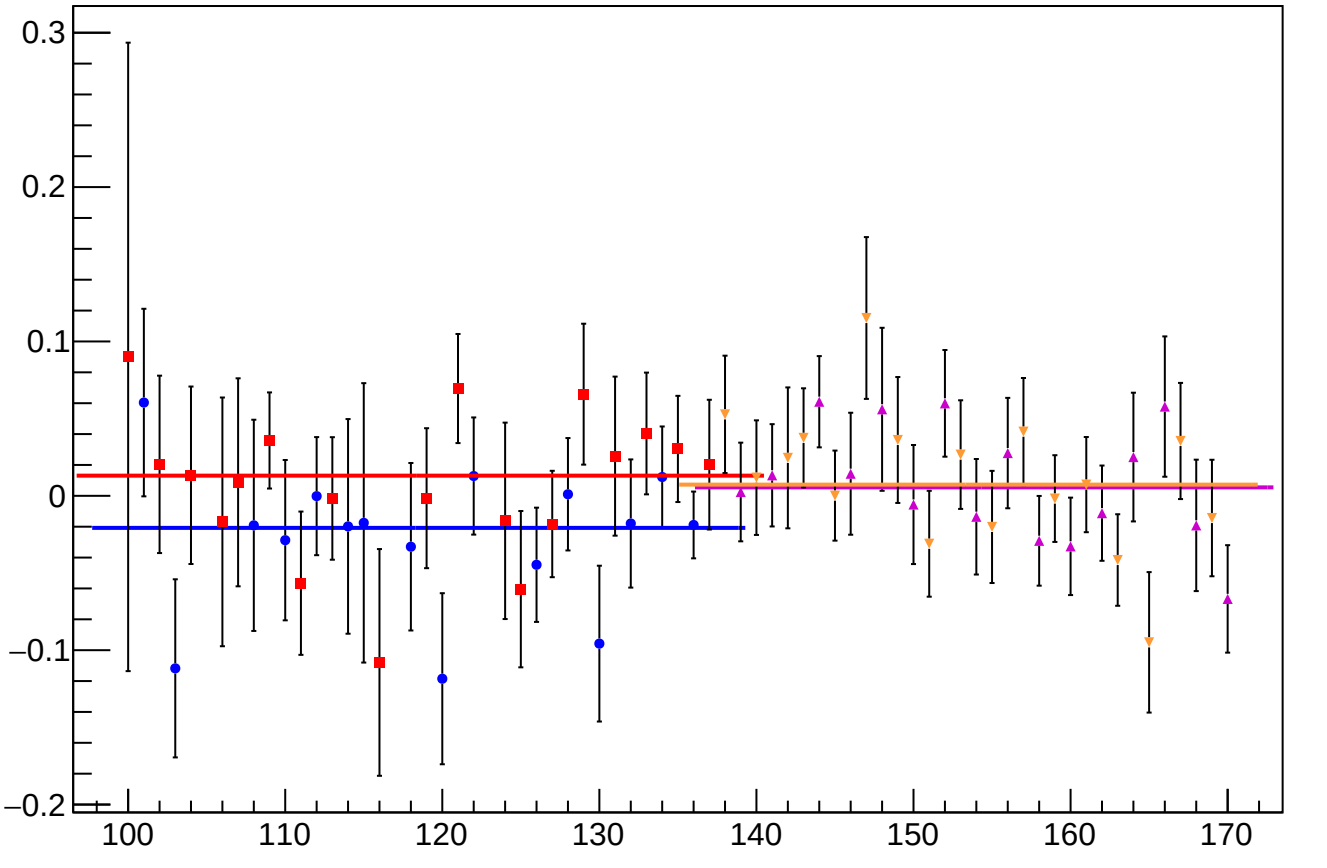
Left In: 0.000+/-0.000 $\chi^2$/NDF:19.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 39.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 72.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 32.4/34


asym_sam_15_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 1710487.9/15
Left Out: 0.001+/-0.000 χ²/NDF:7580515.2/16
Right Out: 0.001+/-0.000 χ²/NDF: 1402821.5/18
Left In: 0.001+/-0.000 χ²/NDF:6921626.5/15
+ sign 0.001+/-0.000 χ²/NDF: 9574656.7/32
All: 0.001+/-0.000 χ²/NDF: 17967869.2/67
- sign 0.001+/-0.000 χ²/NDF: 8390257.8/34




Right In: -0.021+/-0.011 $\chi^2$/NDF: 12.5/15

Left Out: 0.007+/-0.009 $\chi^2$/NDF:19.1/16

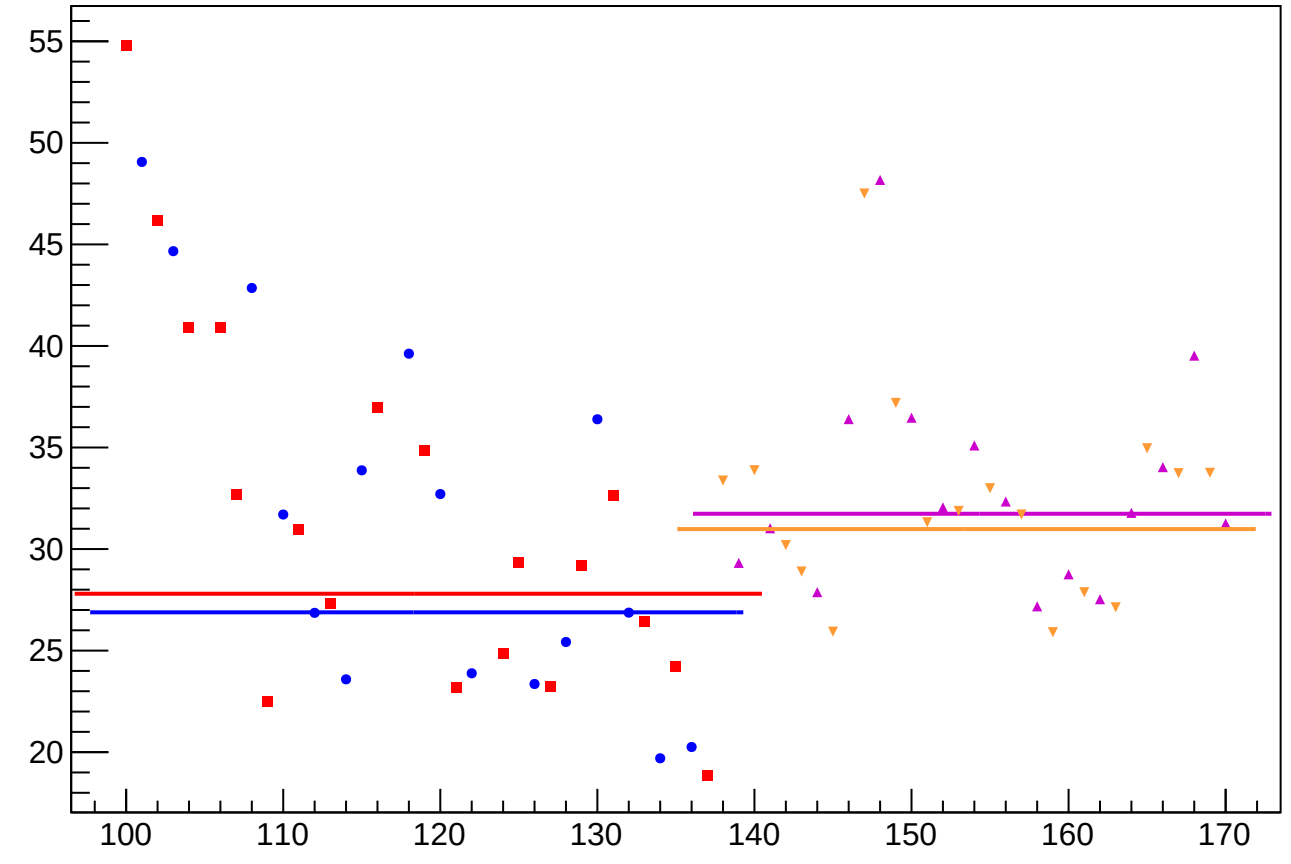
Right Out: 0.013+/-0.011 $\chi^2$/NDF: 13.9/18

Left In: 0.005+/-0.009 $\chi^2$/NDF:17.1/15

+ sign -0.004+/-0.007 $\chi^2$/NDF: 35.9/32

All: 0.002+/-0.005 $\chi^2$/NDF: 69.0/67

- sign 0.009+/-0.007 $\chi^2$/NDF: 31.3/34




Right In: 26.885+/-0.007 $\chi^2$/NDF: 1120567.7/15

Left Out: 30.985+/-0.006 $\chi^2$/NDF:498919.5/16

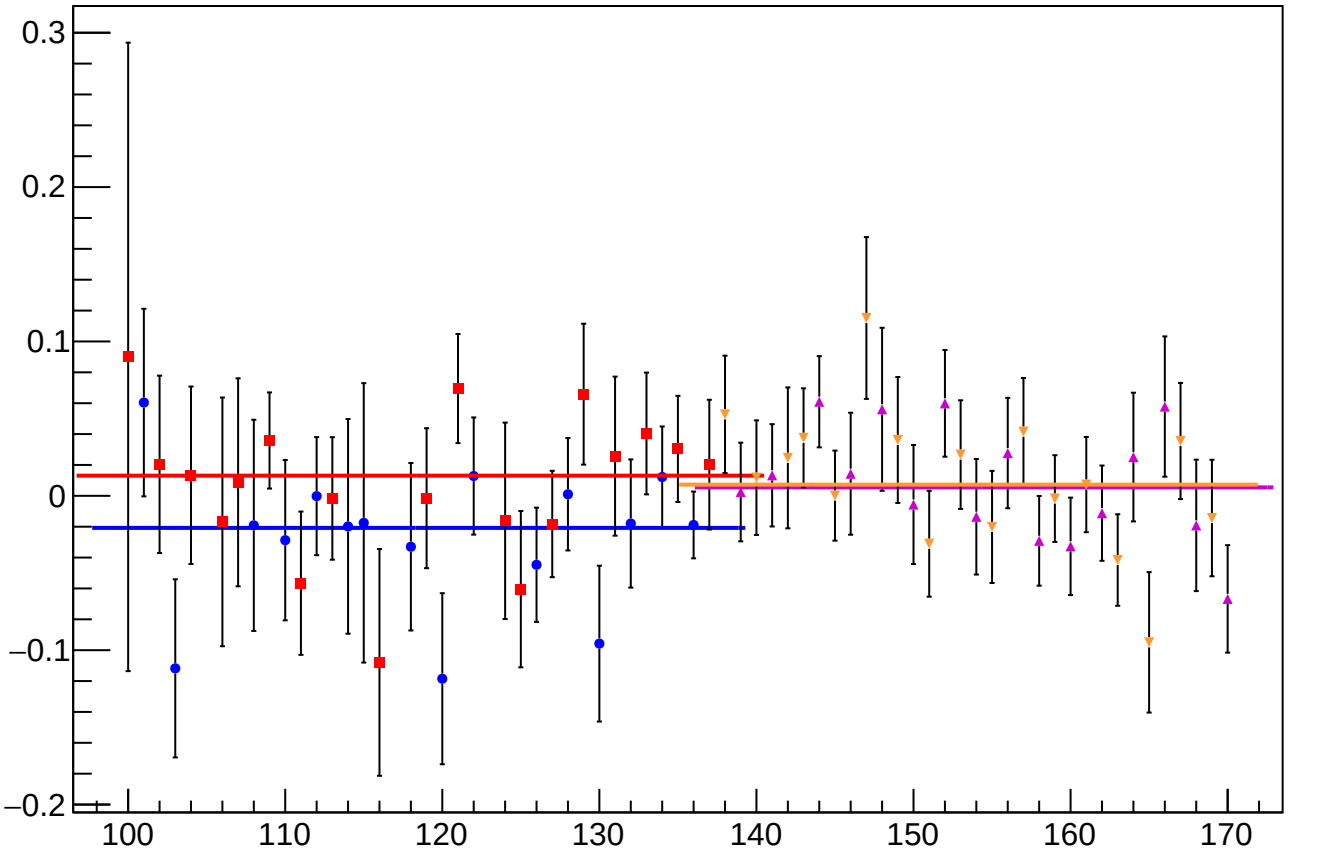
Right Out: 27.800+/-0.007 $\chi^2$/NDF: 763213.5/18

Left In: 31.738+/-0.006 $\chi^2$/NDF:491744.4/15

+ sign 29.346+/-0.005 $\chi^2$/NDF: 1802193.3/32

All: 29.718+/-0.003 $\chi^2$/NDF: 3233333.7/67

- sign 30.106+/-0.005 $\chi^2$/NDF: 1418333.3/34




Right In: -0.021+/-0.011 $\chi^2$/NDF: 12.5/15

Left Out: 0.007+/-0.009 $\chi^2$/NDF:19.1/16

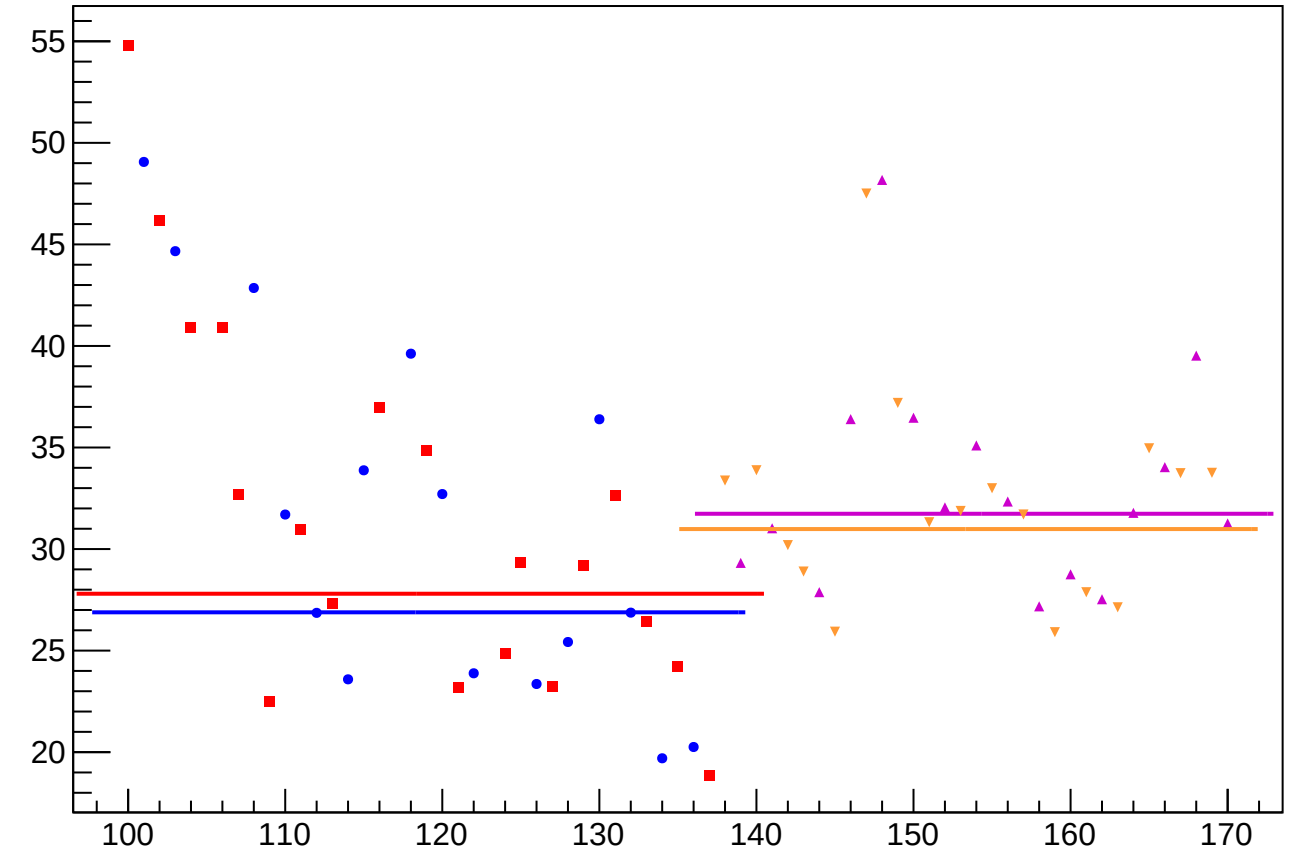
Right Out: 0.013+/-0.011 $\chi^2$/NDF: 13.9/18

Left In: 0.005+/-0.009 $\chi^2$/NDF:17.1/15

+ sign -0.004+/-0.007 $\chi^2$/NDF: 35.9/32

All: 0.002+/-0.005 $\chi^2$/NDF: 69.0/67

- sign 0.009+/-0.007 $\chi^2$/NDF: 31.3/34




Right In: 26.885+/-0.007 $\chi^2$/NDF: 1120567.7/15

Left Out: 30.985+/-0.006 $\chi^2$/NDF:498919.5/16

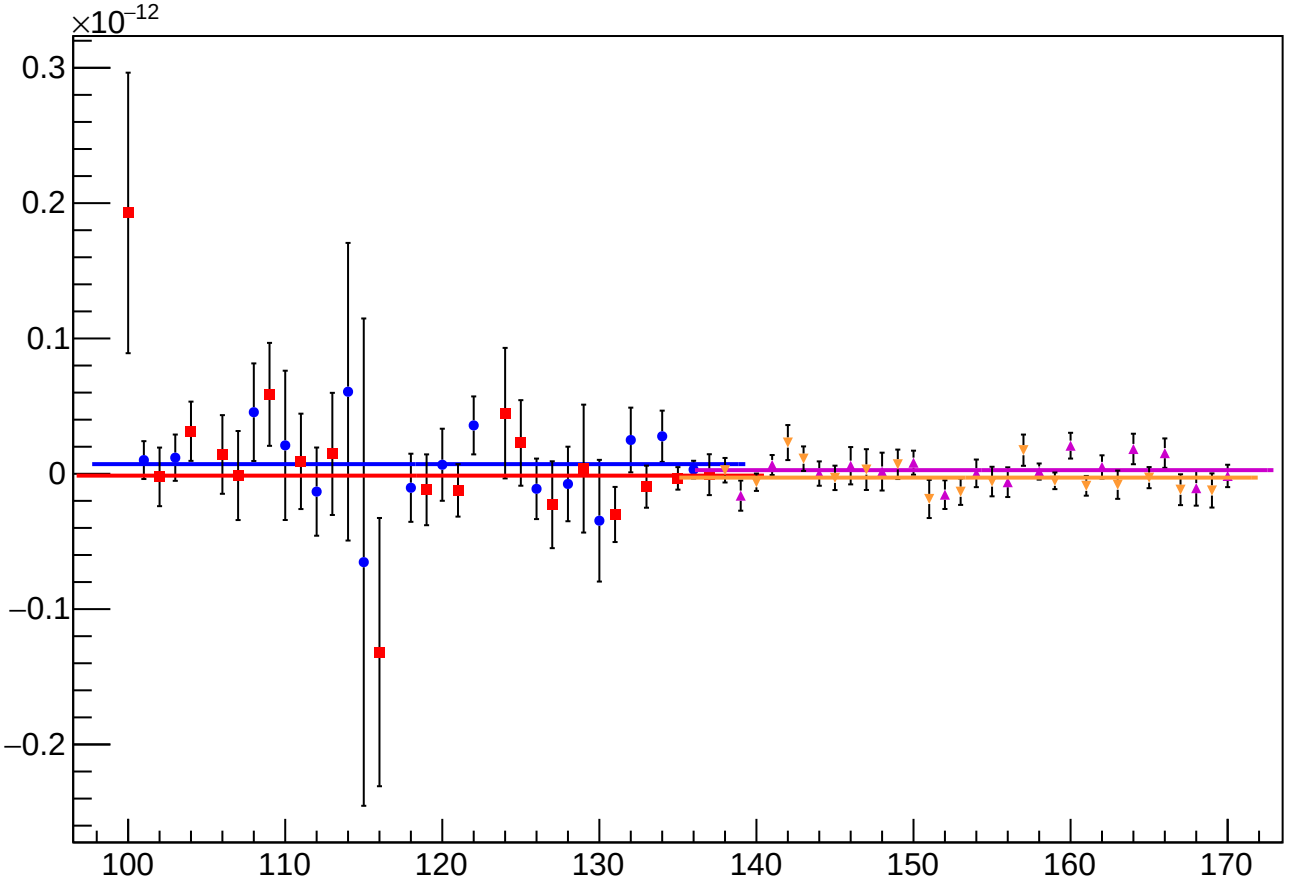
Right Out: 27.800+/-0.007 $\chi^2$/NDF: 763213.5/18

Left In: 31.738+/-0.006 $\chi^2$/NDF:491744.4/15

+ sign 29.346+/-0.005 $\chi^2$/NDF: 1802193.3/32

All: 29.718+/-0.003 $\chi^2$/NDF: 3233333.7/67

- sign 30.106+/-0.005 $\chi^2$/NDF: 1418333.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 8.3/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:15.8/16

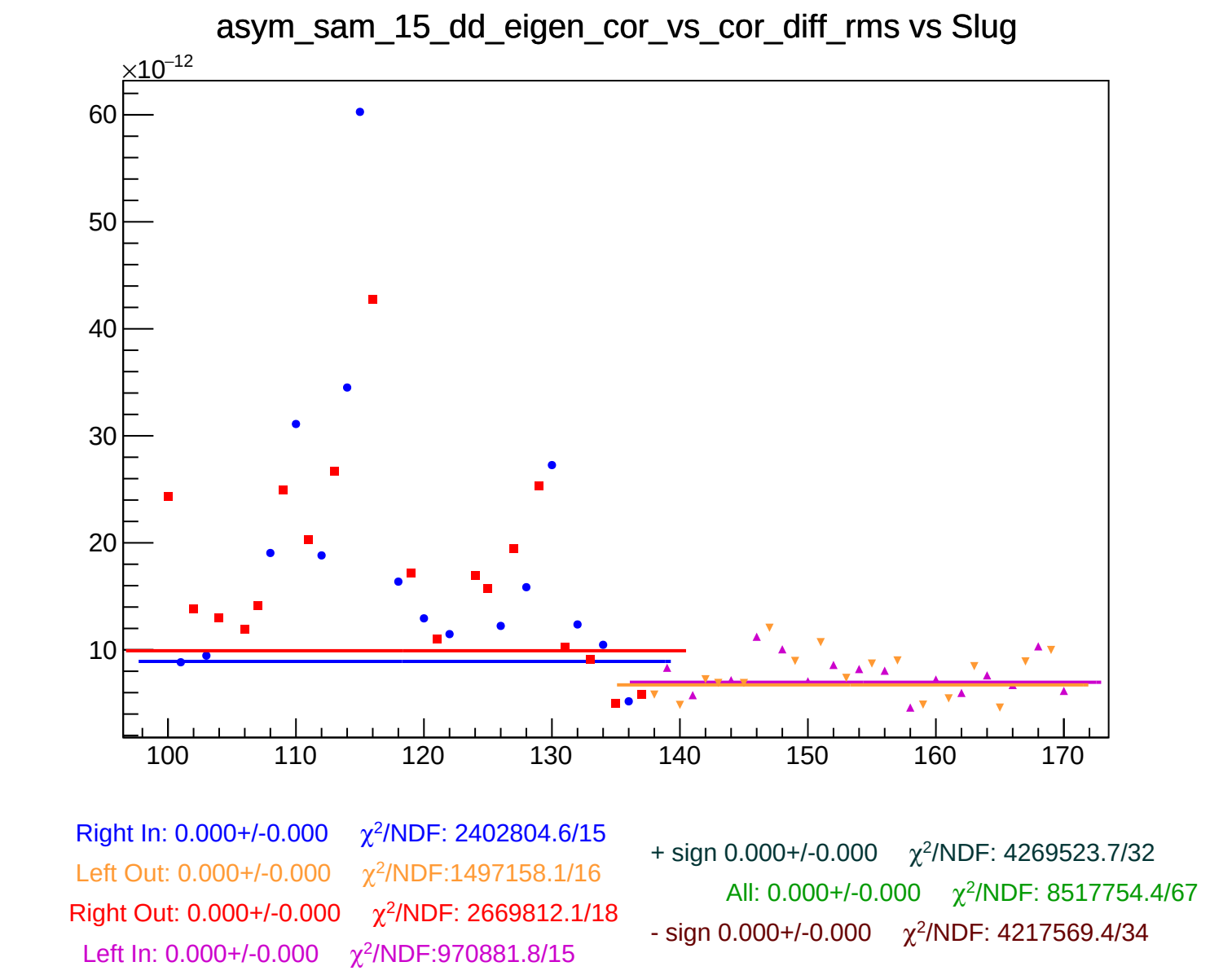
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:15.6/15

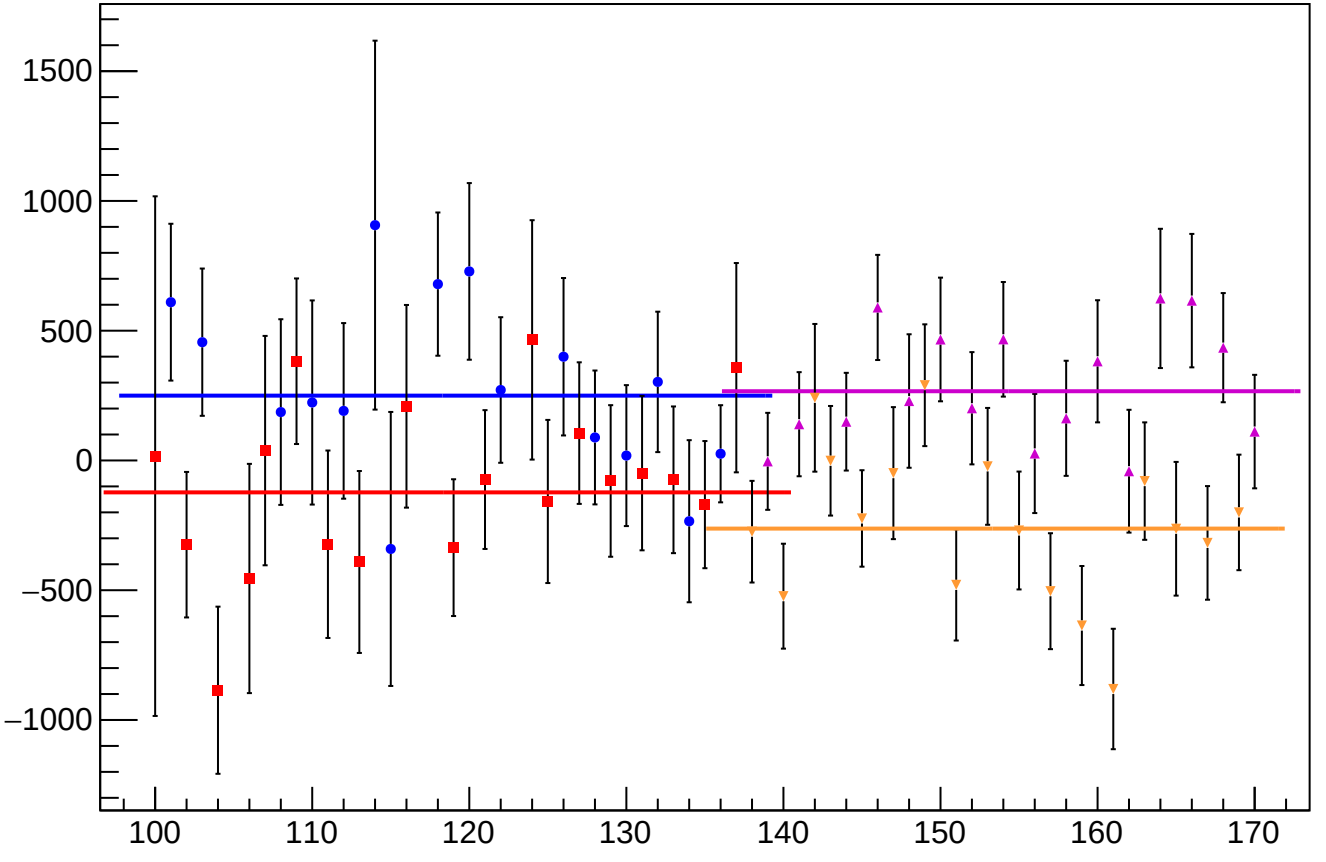
+ sign -0.000+/-0.000 $\chi^2$/NDF: 28.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 60.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 31.4/34


asym_sam_15_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2402804.6/15
Left Out: 0.000+/-0.000 χ²/NDF:1497158.1/16
Right Out: 0.000+/-0.000 χ²/NDF: 2669812.1/18
Left In: 0.000+/-0.000 χ²/NDF:970881.8/15
+ sign 0.000+/-0.000 χ²/NDF: 4269523.7/32
All: 0.000+/-0.000 χ²/NDF: 8517754.4/67
- sign 0.000+/-0.000 χ²/NDF: 4217569.4/34

# reg_asym_sam_26_dd_mean vs Slug




Right In: 249.761+/-74.877 $\chi^2$/NDF: 13.8/15

Left Out: -262.562+/-54.069 $\chi^2$/NDF:26.5/16

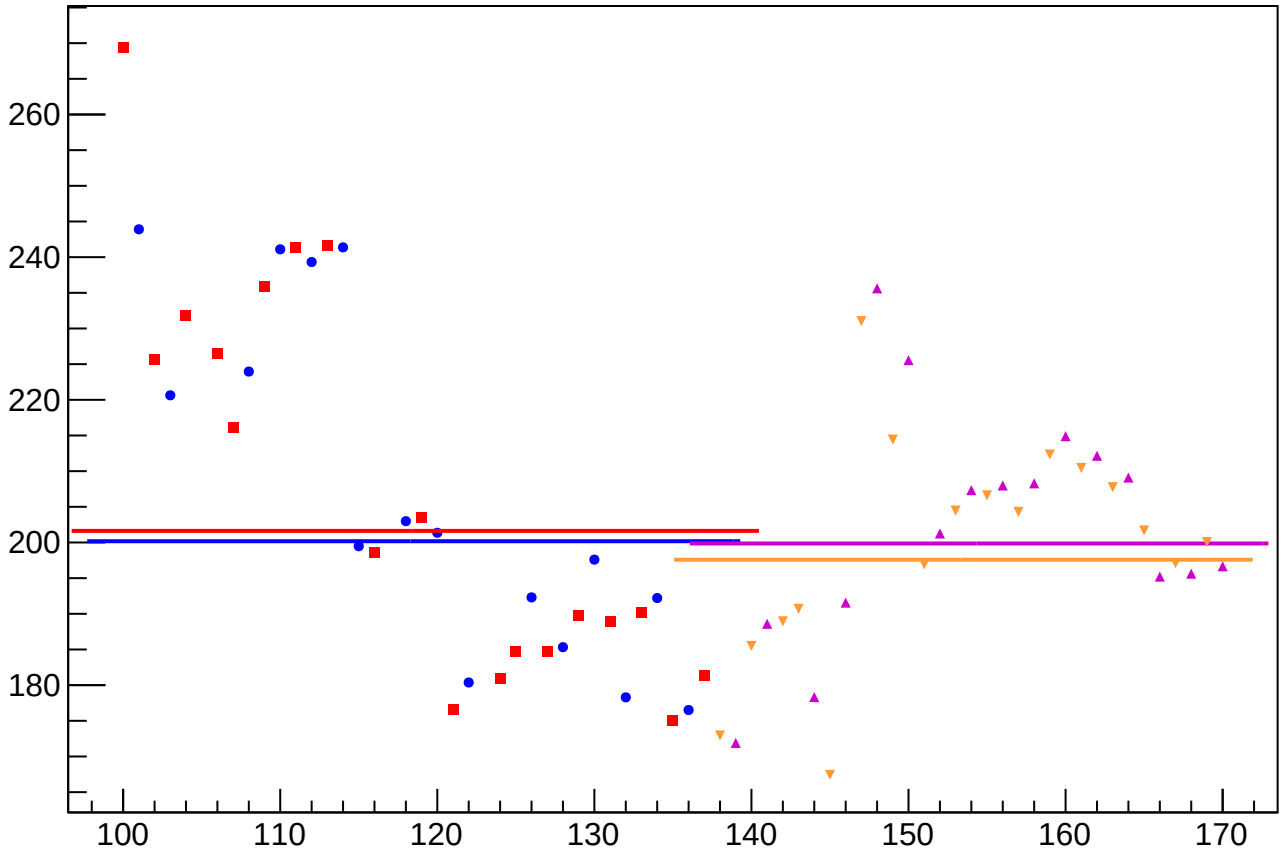
Right Out: -122.993+/-74.370 $\chi^2$/NDF: 15.6/18

Left In: 266.744+/-55.177 $\chi^2$/NDF:15.1/15

+ sign -86.976+/-43.835 $\chi^2$/NDF: 71.0/32

All: 19.532+/-31.164 $\chi^2$/NDF: 131.3/67

- sign 128.375+/-44.313 $\chi^2$/NDF: 48.3/34




Right In: 200.177+/-0.053 $\chi^2$/NDF: 181001.3/15

Left Out: 197.584+/-0.038 $\chi^2$/NDF:166431.3/16

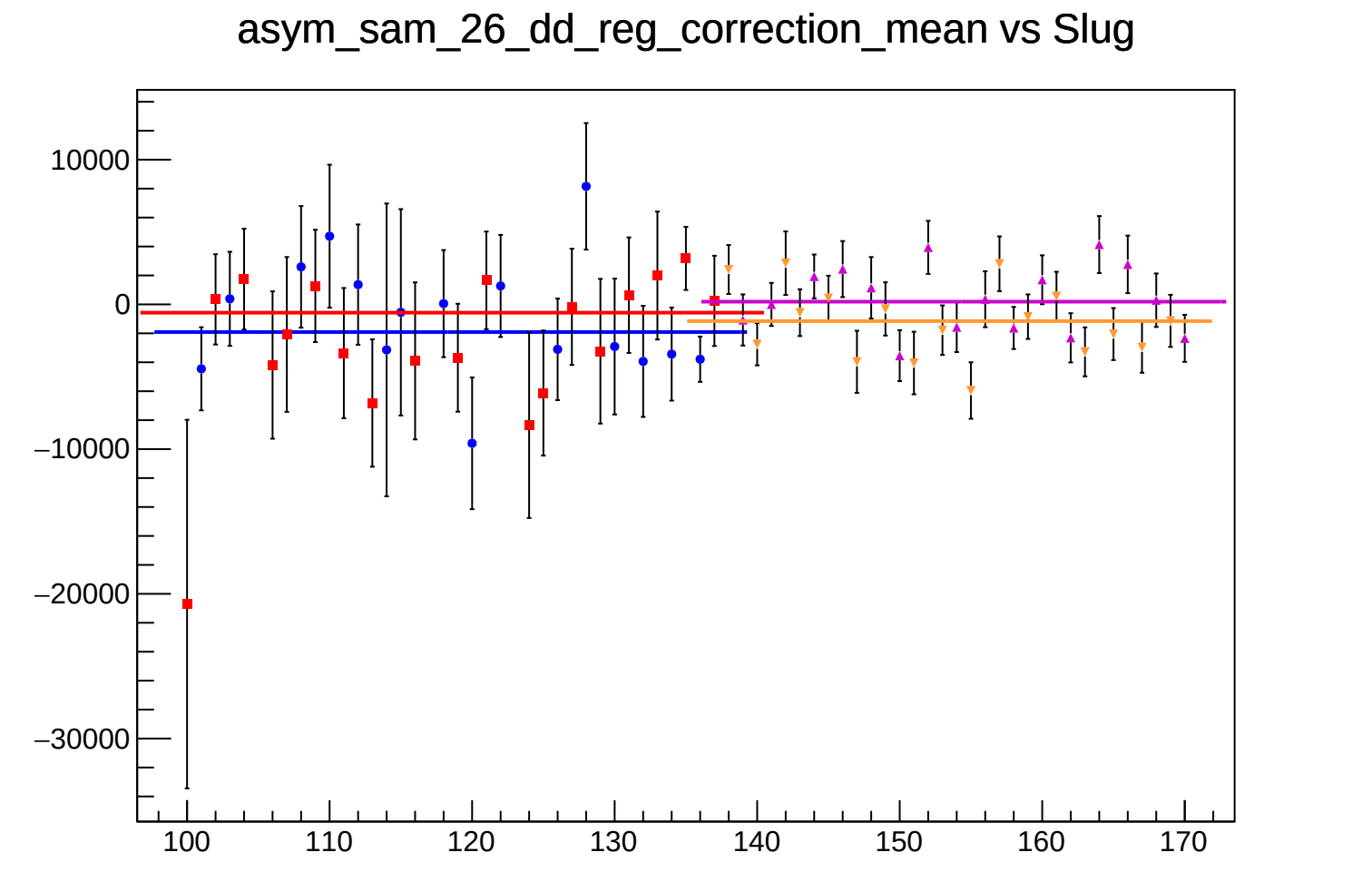
Right Out: 201.627+/-0.053 $\chi^2$/NDF: 197245.7/18

Left In: 199.861+/-0.039 $\chi^2$/NDF:168165.9/15

+ sign 198.473+/-0.031 $\chi^2$/NDF: 349009.1/32

All: 199.469+/-0.022 $\chi^2$/NDF: 717239.5/67

- sign 200.488+/-0.031 $\chi^2$/NDF: 366138.7/34




Right In: -1910.348+/-859.088 $\chi^2$/NDF: 16.3/15

Left Out: -1154.776+/-426.539 $\chi^2$/NDF:28.4/16

Right Out: -570.946+/-900.451 $\chi^2$/NDF: 14.6/18

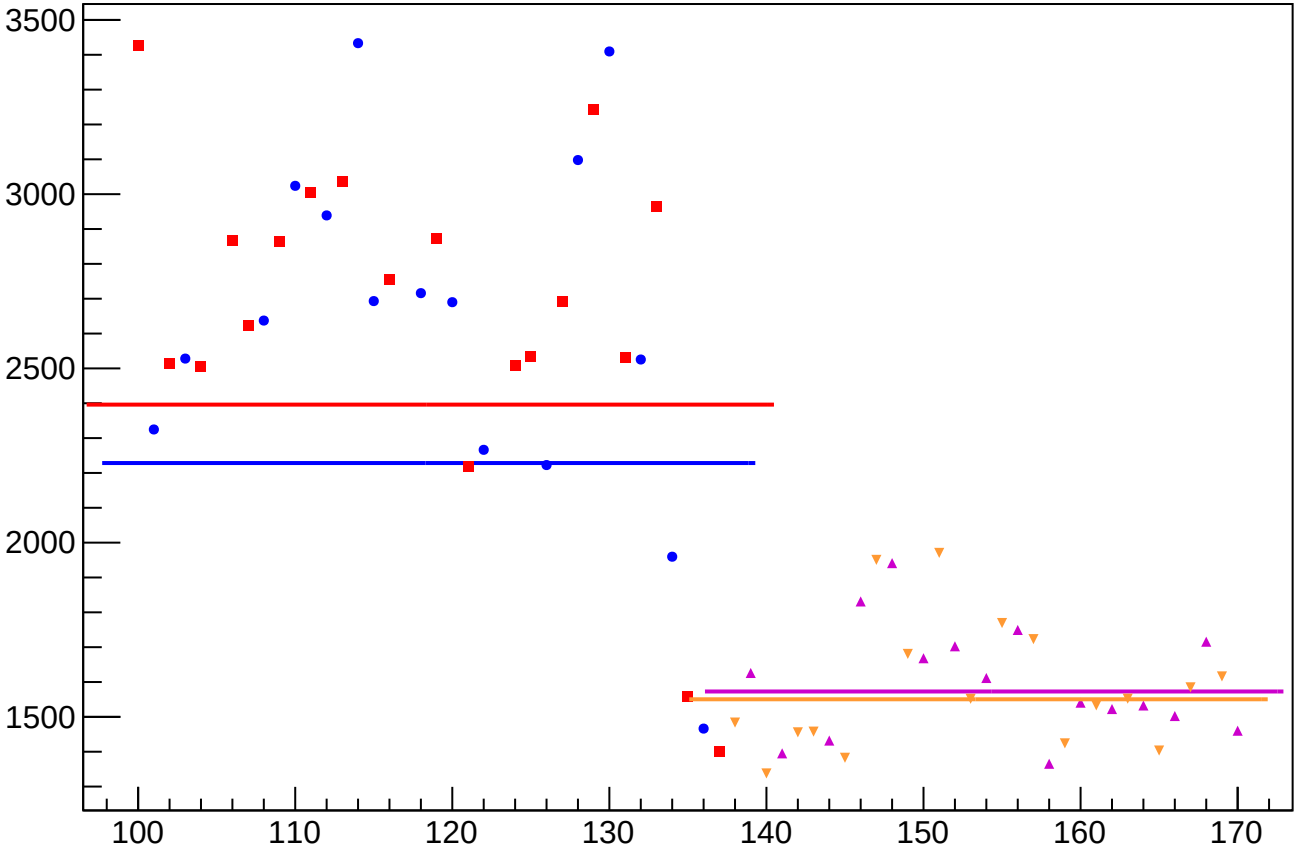
Left In: 186.837+/-435.503 $\chi^2$/NDF:25.8/15

+ sign -1304.201+/-382.041 $\chi^2$/NDF: 45.3/32

All: -647.937+/-273.616 $\chi^2$/NDF: 92.3/67

- sign 43.183+/-392.056 $\chi^2$/NDF: 41.0/34

# asym_sam_26_dd_reg_correction_rms vs Slug




Right In: 2228.431+/-0.607 $\chi^2$/NDF: 947654.8/15

Left Out: 1550.460+/-0.302 $\chi^2$/NDF:306731.1/16

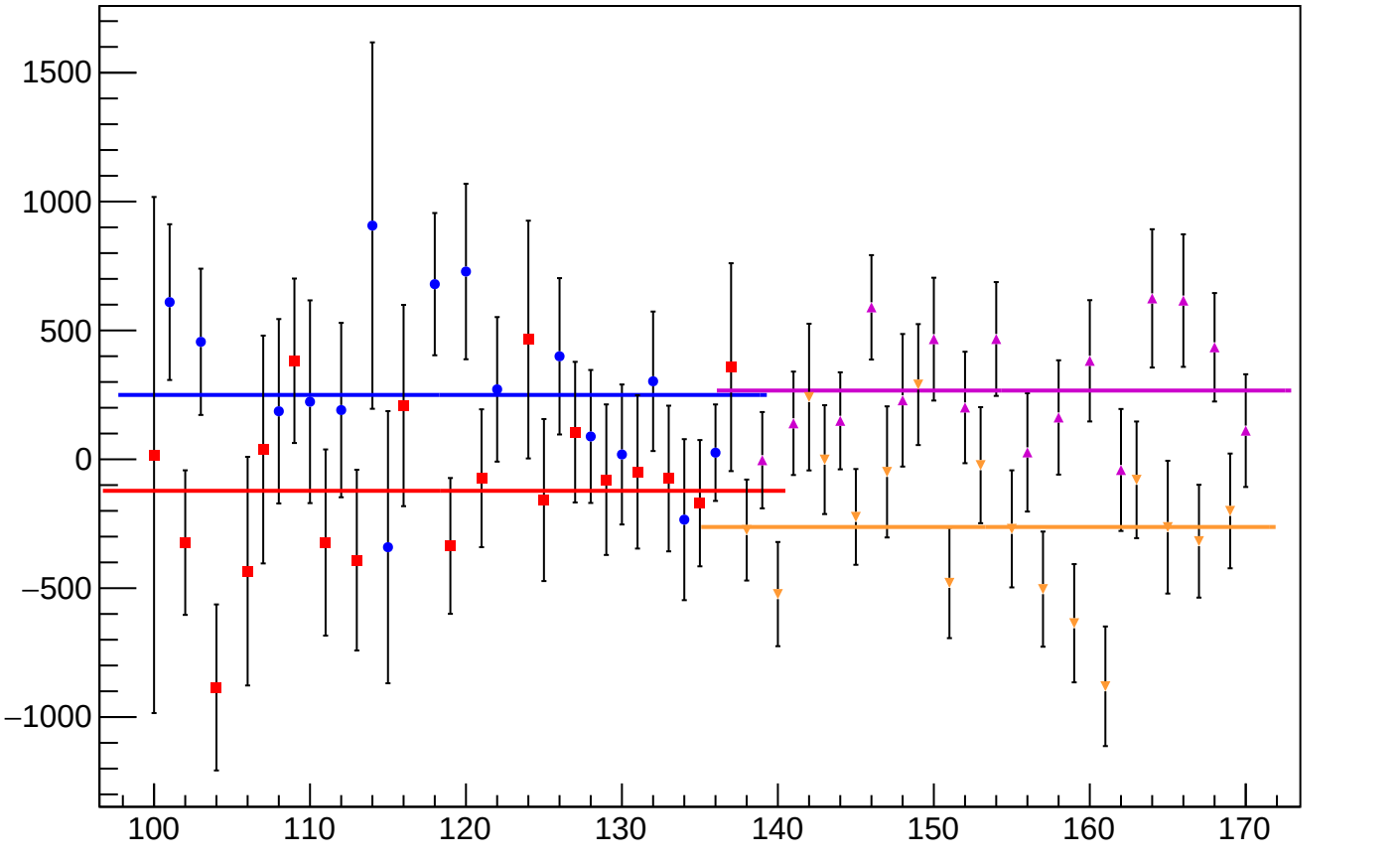
Right Out: 2396.080+/-0.637 $\chi^2$/NDF: 799442.5/18

Left In: 1572.850+/-0.308 $\chi^2$/NDF:244964.3/15

+ sign 1684.538+/-0.270 $\chi^2$/NDF: 2253649.1/32

All: 1706.151+/-0.193 $\chi^2$/NDF: 4665968.7/67

- sign 1728.912+/-0.277 $\chi^2$/NDF: 2399178.1/34




Right In: 249.764+/-74.877 $\chi^2$/NDF: 13.8/15

Left Out: -262.559+/-54.069 $\chi^2$/NDF:26.5/16

Right Out: -122.210+/-74.380 $\chi^2$/NDF: 15.5/18

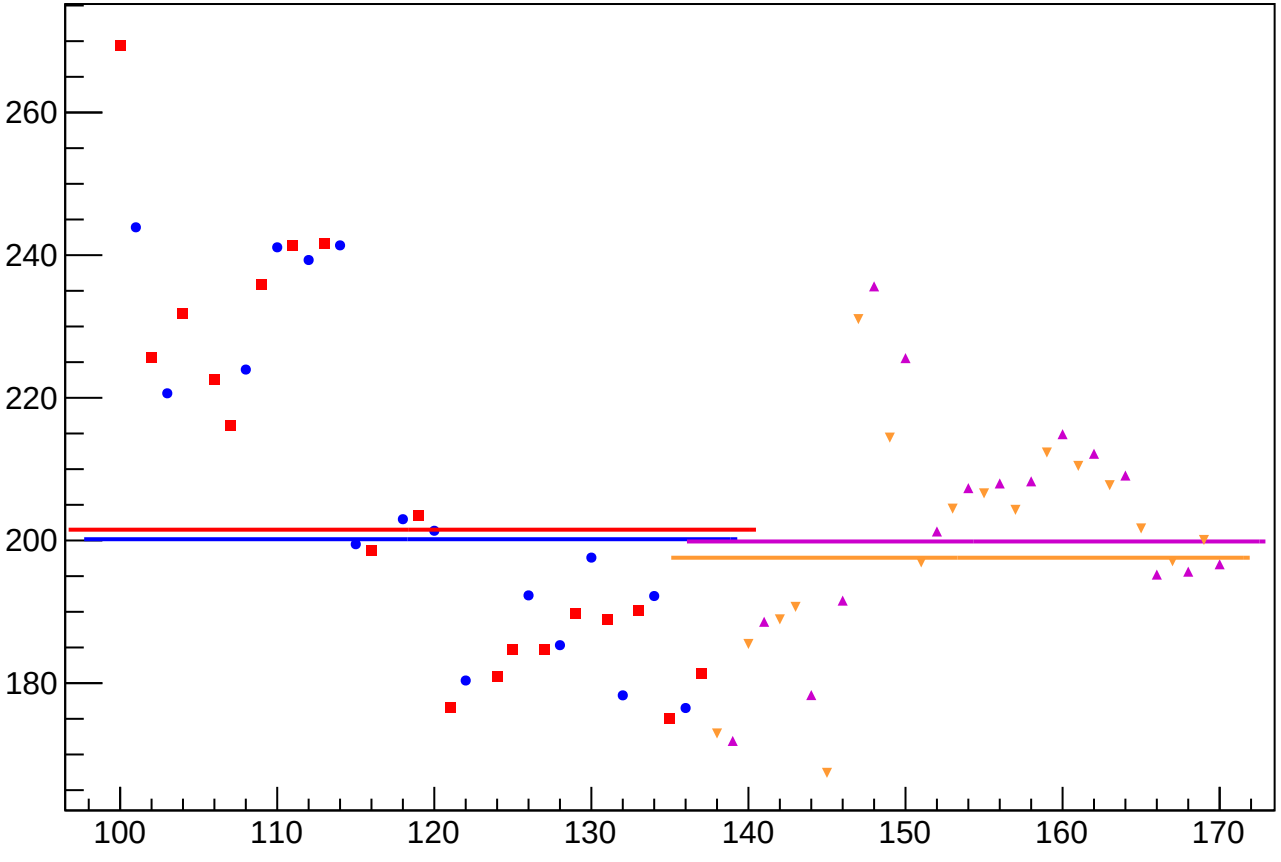
Left In: 266.748+/-55.177 $\chi^2$/NDF:15.1/15

+ sign -86.973+/-43.835 $\chi^2$/NDF: 71.0/32

All: 19.680+/-31.164 $\chi^2$/NDF: 131.2/67

- sign 128.680+/-44.315 $\chi^2$/NDF: 48.2/34

# cor_asym_sam_26_dd_rms vs Slug




Right In: 200.177+/-0.053 $\chi^2$/NDF: 181001.6/15

Left Out: 197.584+/-0.038 $\chi^2$/NDF:166431.3/16

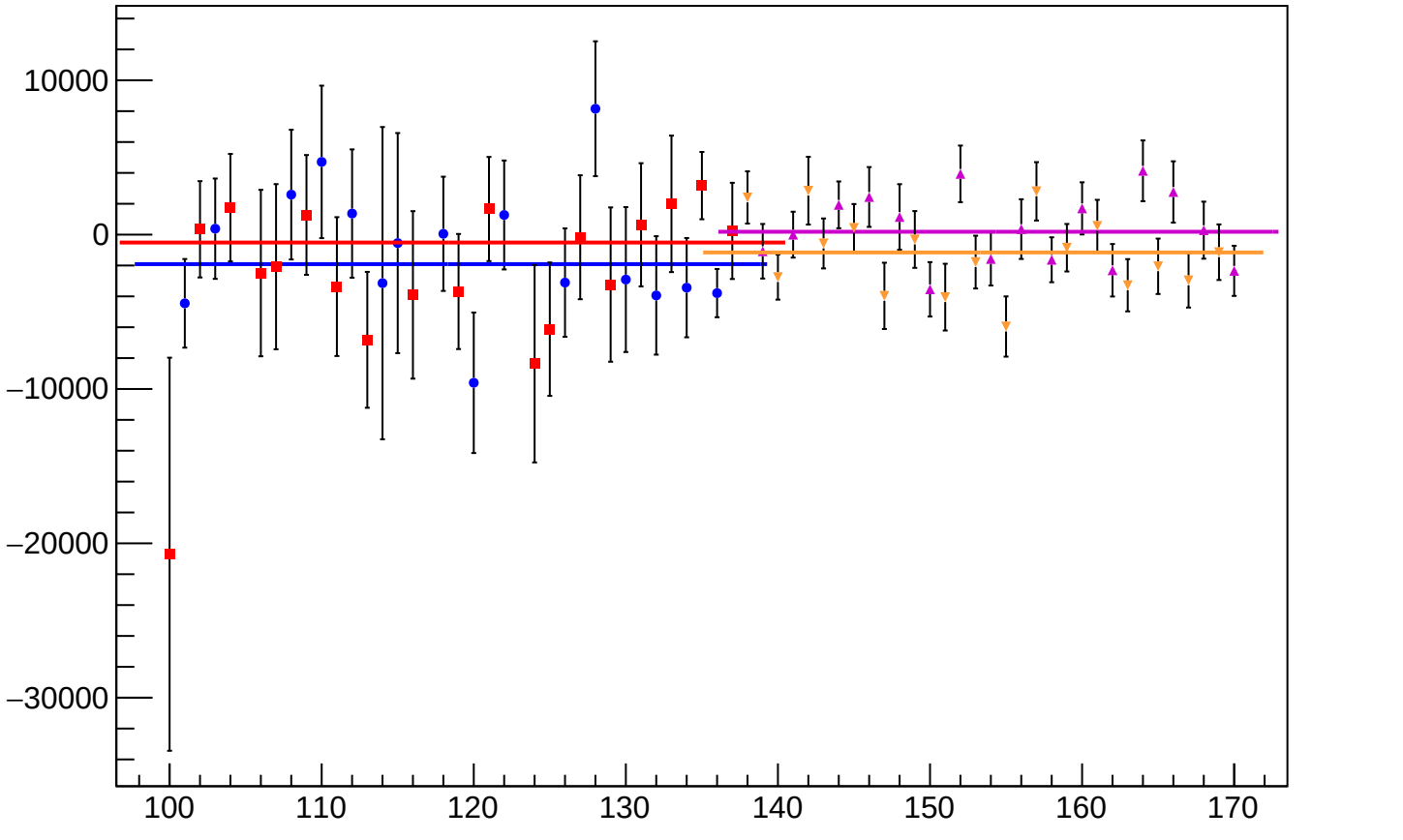
Right Out: 201.514+/-0.053 $\chi^2$/NDF: 195431.2/18

Left In: 199.861+/-0.039 $\chi^2$/NDF:168165.9/15

+ sign 198.473+/-0.031 $\chi^2$/NDF: 349009.4/32

All: 199.450+/-0.022 $\chi^2$/NDF: 715252.6/67

- sign 200.448+/-0.031 $\chi^2$/NDF: 364234.2/34




Right In: -1910.310+/-859.089 $\chi^2$/NDF: 16.3/15

Left Out: -1154.775+/-426.540 $\chi^2$/NDF:28.4/16

Right Out: -511.276+/-902.014 $\chi^2$/NDF: 14.2/18

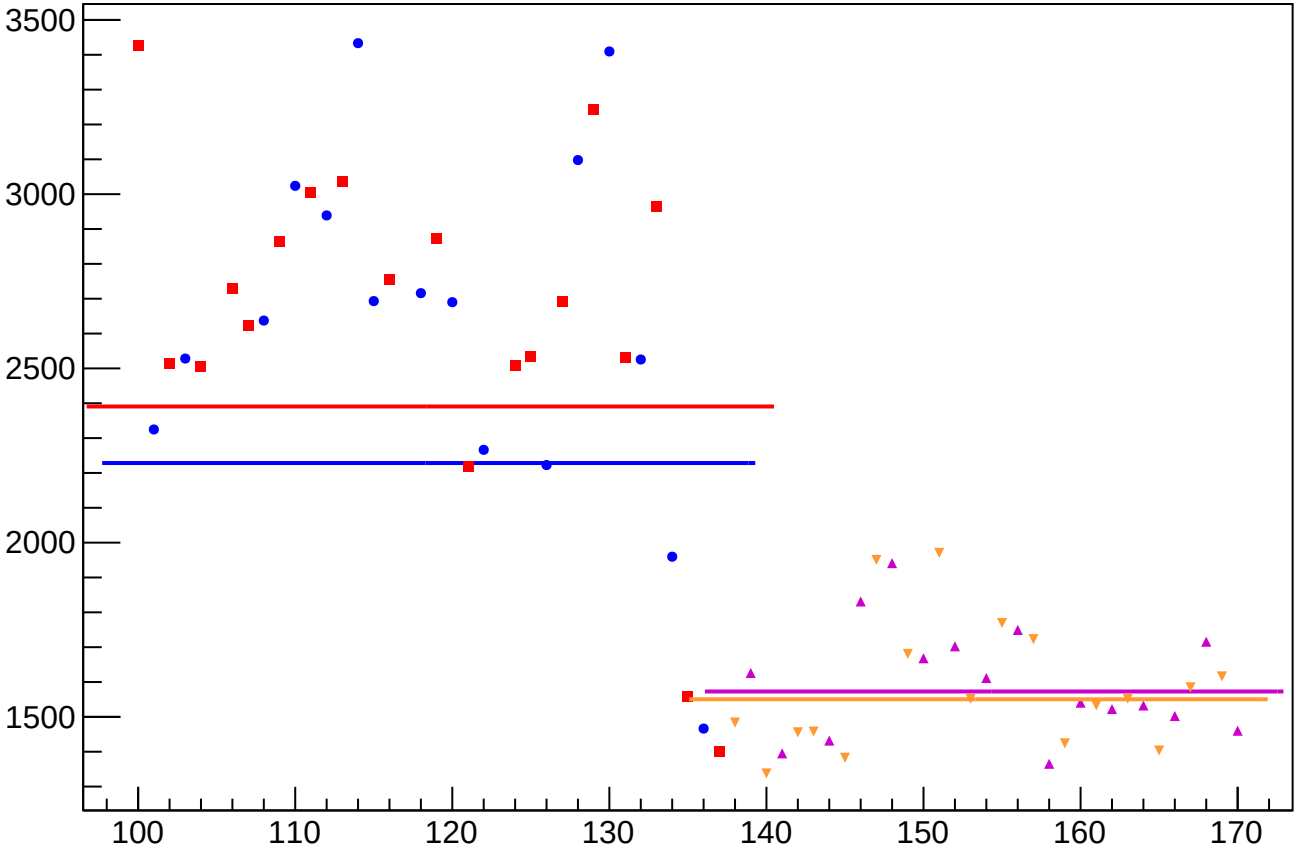
Left In: 186.833+/-435.503 $\chi^2$/NDF:25.8/15

+ sign -1304.192+/-382.042 $\chi^2$/NDF: 45.3/32

All: -642.467+/-273.660 $\chi^2$/NDF: 91.9/67

- sign 54.862+/-392.185 $\chi^2$/NDF: 40.5/34

# asym_sam_26_dd_cor_correction_rms vs Slug




Right In: 2228.435+/-0.607 $\chi^2$/NDF: 947659.2/15

Left Out: 1550.460+/-0.302 $\chi^2$/NDF:306731.1/16

Right Out: 2390.731+/-0.638 $\chi^2$/NDF: 790004.4/18

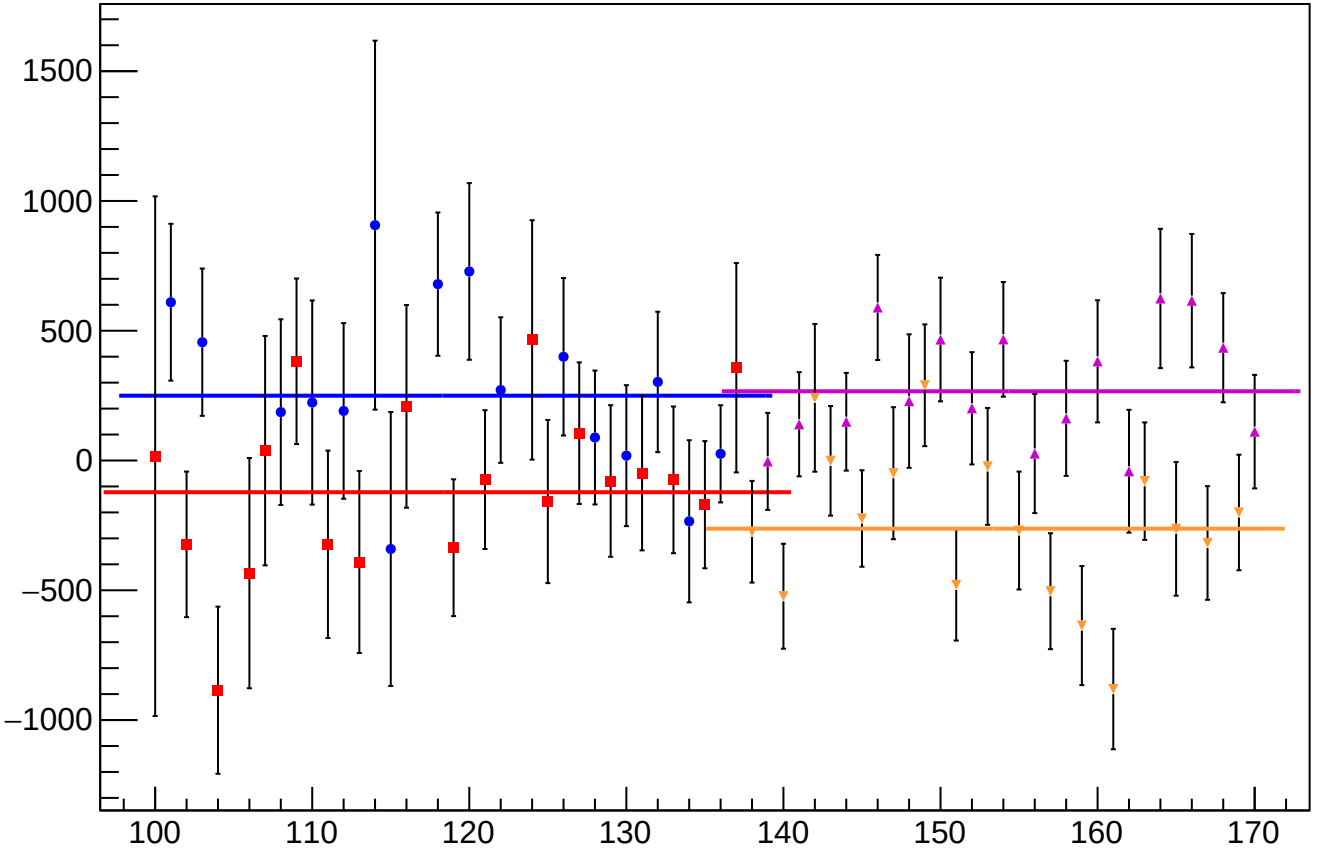
Left In: 1572.850+/-0.308 $\chi^2$/NDF:244965.1/15

+ sign 1684.539+/-0.270 $\chi^2$/NDF: 2253660.5/32

All: 1705.439+/-0.194 $\chi^2$/NDF: 4634389.6/67

- sign 1727.463+/-0.277 $\chi^2$/NDF: 2368436.3/34

# eigen_cor_asym_sam_26_dd_mean vs Slug




Right In: 249.764+/-74.877 $\chi^2$/NDF: 13.8/15

Left Out: -262.559+/-54.069 $\chi^2$/NDF:26.5/16

Right Out: -122.210+/-74.380 $\chi^2$/NDF: 15.5/18

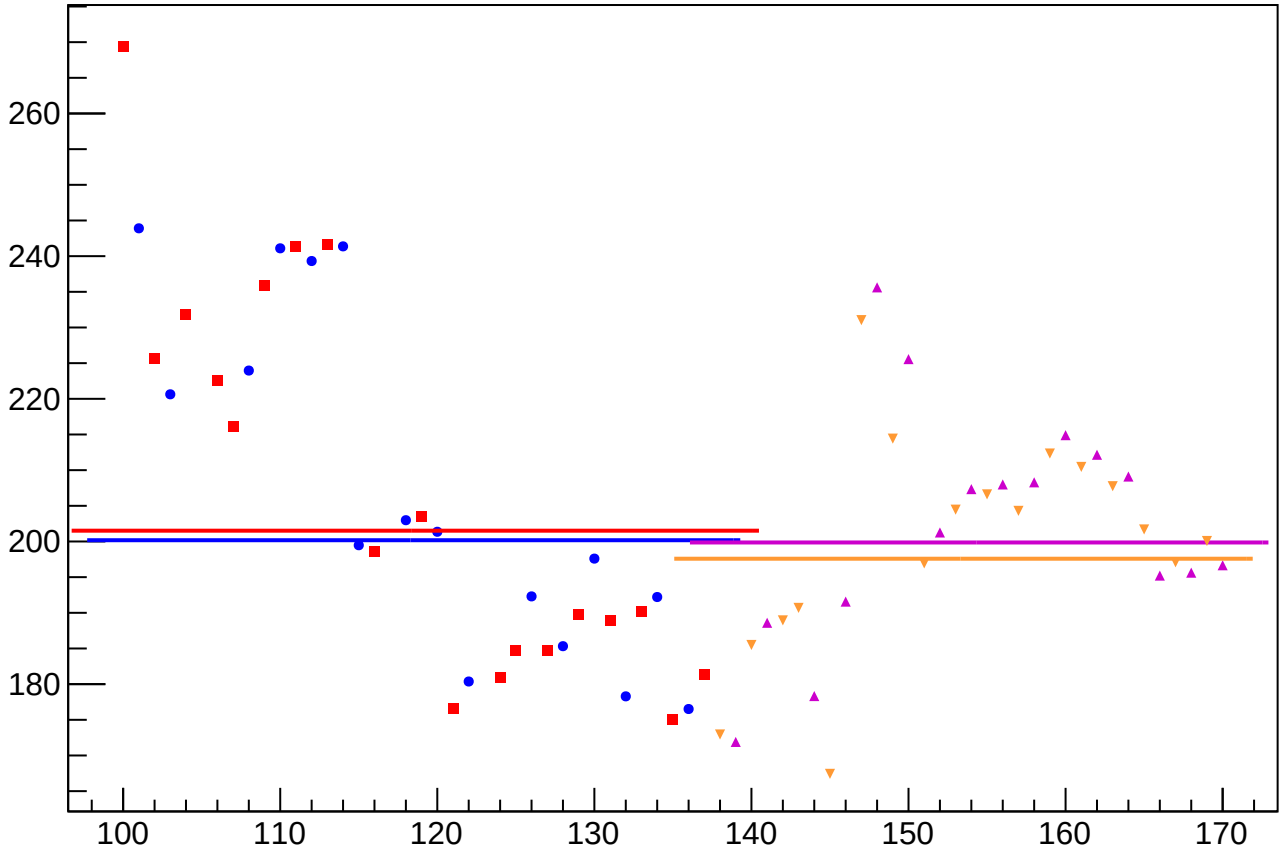
Left In: 266.748+/-55.177 $\chi^2$/NDF:15.1/15

+ sign -86.973+/-43.835 $\chi^2$/NDF: 71.0/32

All: 19.680+/-31.164 $\chi^2$/NDF: 131.2/67

- sign 128.680+/-44.315 $\chi^2$/NDF: 48.2/34

# eigen_cor_asym_sam_26_dd_rms vs Slug




Right In: 200.177+/-0.053 $\chi^2$/NDF: 181001.6/15

Left Out: 197.584+/-0.038 $\chi^2$/NDF:166431.3/16

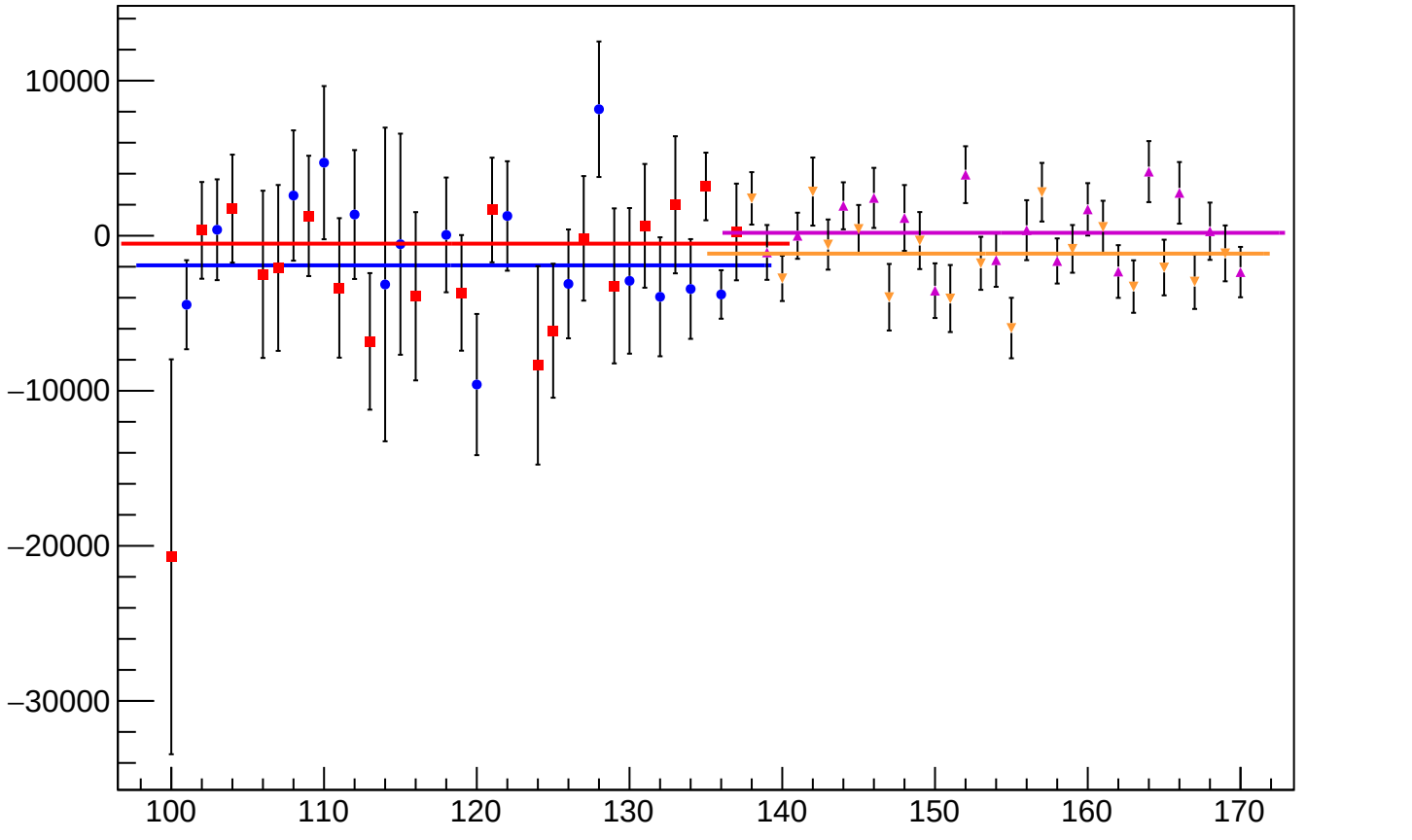
Right Out: 201.514+/-0.053 $\chi^2$/NDF: 195431.2/18

Left In: 199.861+/-0.039 $\chi^2$/NDF:168165.9/15

+ sign 198.473+/-0.031 $\chi^2$/NDF: 349009.4/32

All: 199.450+/-0.022 $\chi^2$/NDF: 715252.6/67

- sign 200.448+/-0.031 $\chi^2$/NDF: 364234.2/34




Right In: -1910.310+/-859.089 $\chi^2$/NDF: 16.3/15

Left Out: -1154.775+/-426.540 $\chi^2$/NDF:28.4/16

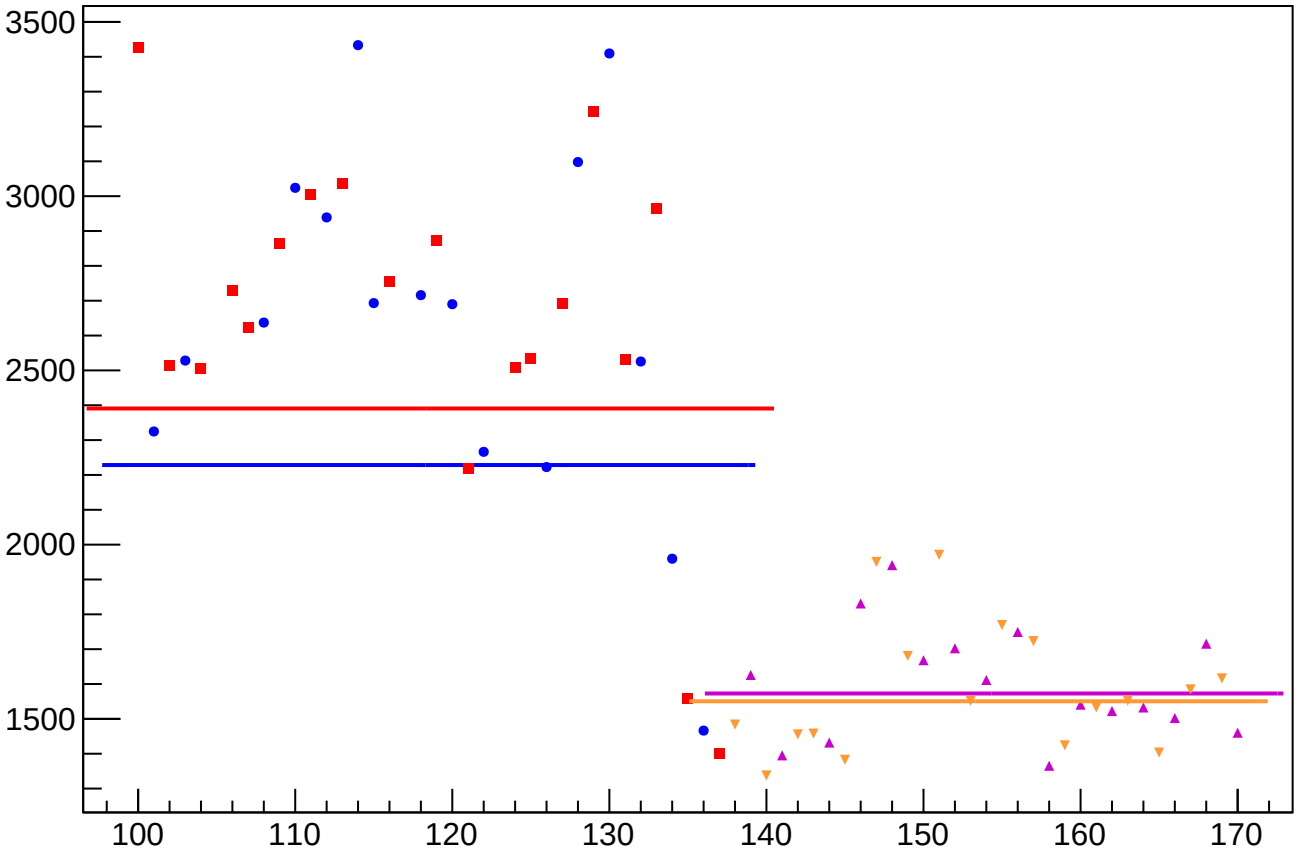
Right Out: -511.276+/-902.014 $\chi^2$/NDF: 14.2/18

Left In: 186.833+/-435.503 $\chi^2$/NDF:25.8/15

+ sign -1304.192+/-382.042 $\chi^2$/NDF: 45.3/32

All: -642.467+/-273.660 $\chi^2$/NDF: 91.9/67

- sign 54.862+/-392.185 $\chi^2$/NDF: 40.5/34




Right In: 2228.435+/-0.607 $\chi^2$/NDF: 947659.2/15

Left Out: 1550.460+/-0.302 $\chi^2$/NDF:306731.1/16

Right Out: 2390.731+/-0.638 $\chi^2$/NDF: 790004.4/18

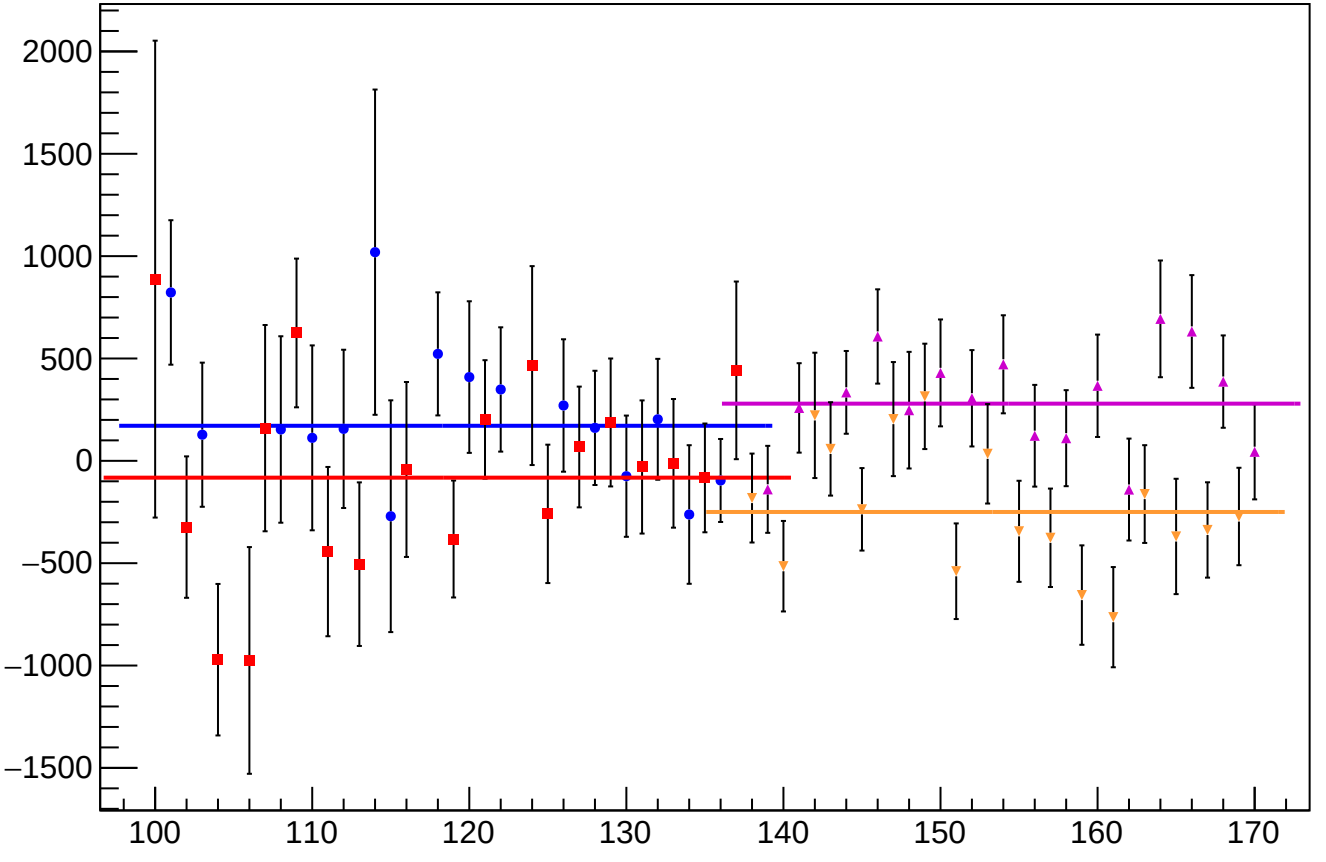
Left In: 1572.850+/-0.308 $\chi^2$/NDF:244965.1/15

+ sign 1684.539+/-0.270 $\chi^2$/NDF: 2253660.5/32

All: 1705.439+/-0.194 $\chi^2$/NDF: 4634389.6/67

- sign 1727.463+/-0.277 $\chi^2$/NDF: 2368436.3/34

# dit_asym_sam_26_dd_mean vs Slug




Right In: 171.258+/-83.116 $\chi^2$/NDF: 11.5/15

Left Out: -249.792+/-58.422 $\chi^2$/NDF:24.2/16

Right Out: -82.152+/-82.545 $\chi^2$/NDF: 21.6/18

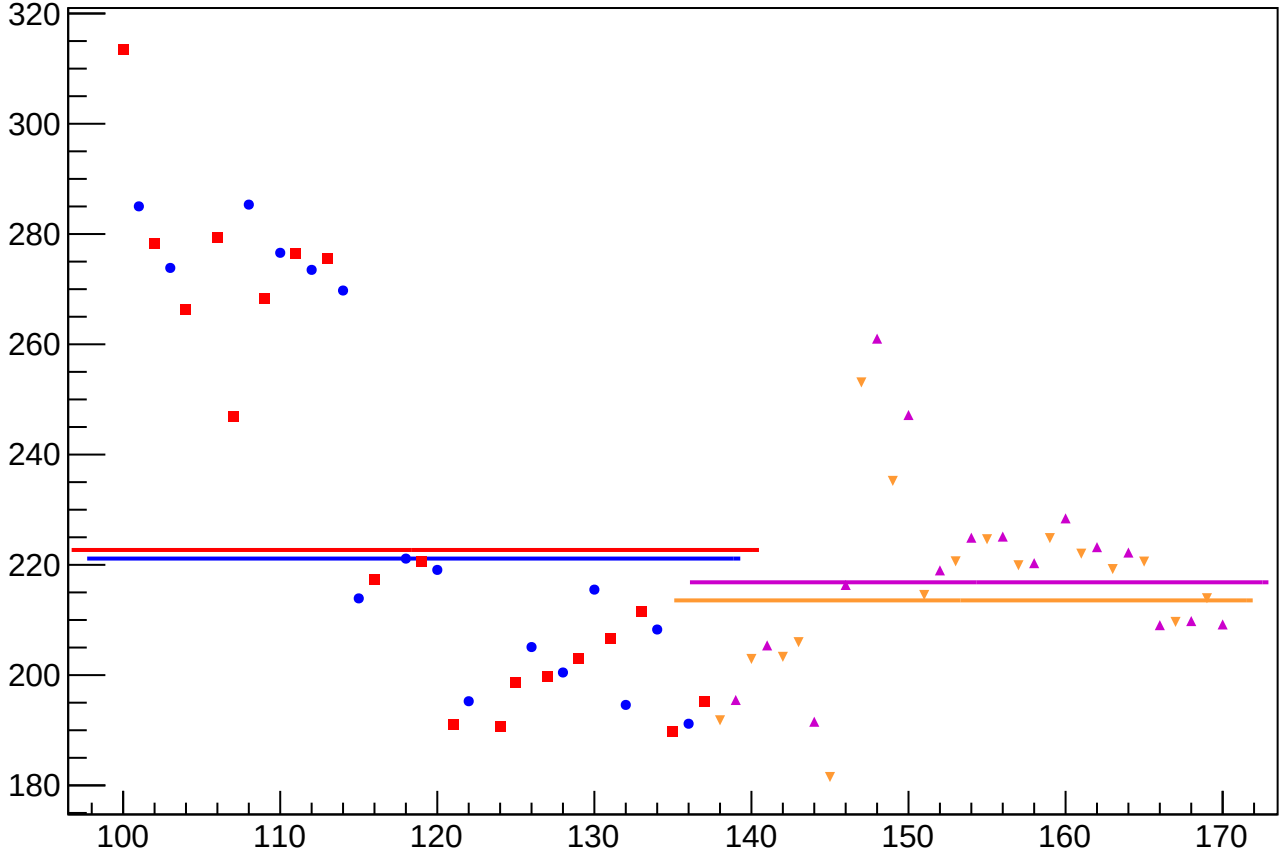
Left In: 279.362+/-59.867 $\chi^2$/NDF:15.9/15

+ sign -110.556+/-47.796 $\chi^2$/NDF: 52.9/32

All: 20.258+/-34.030 $\chi^2$/NDF: 118.1/67

- sign 154.748+/-48.463 $\chi^2$/NDF: 50.1/34

# dit_asym_sam_26_dd_rms vs Slug




Right In: 221.139+/-0.059 $\chi^2$/NDF: 318702.0/15

Left Out: 213.552+/-0.041 $\chi^2$/NDF:150936.6/16

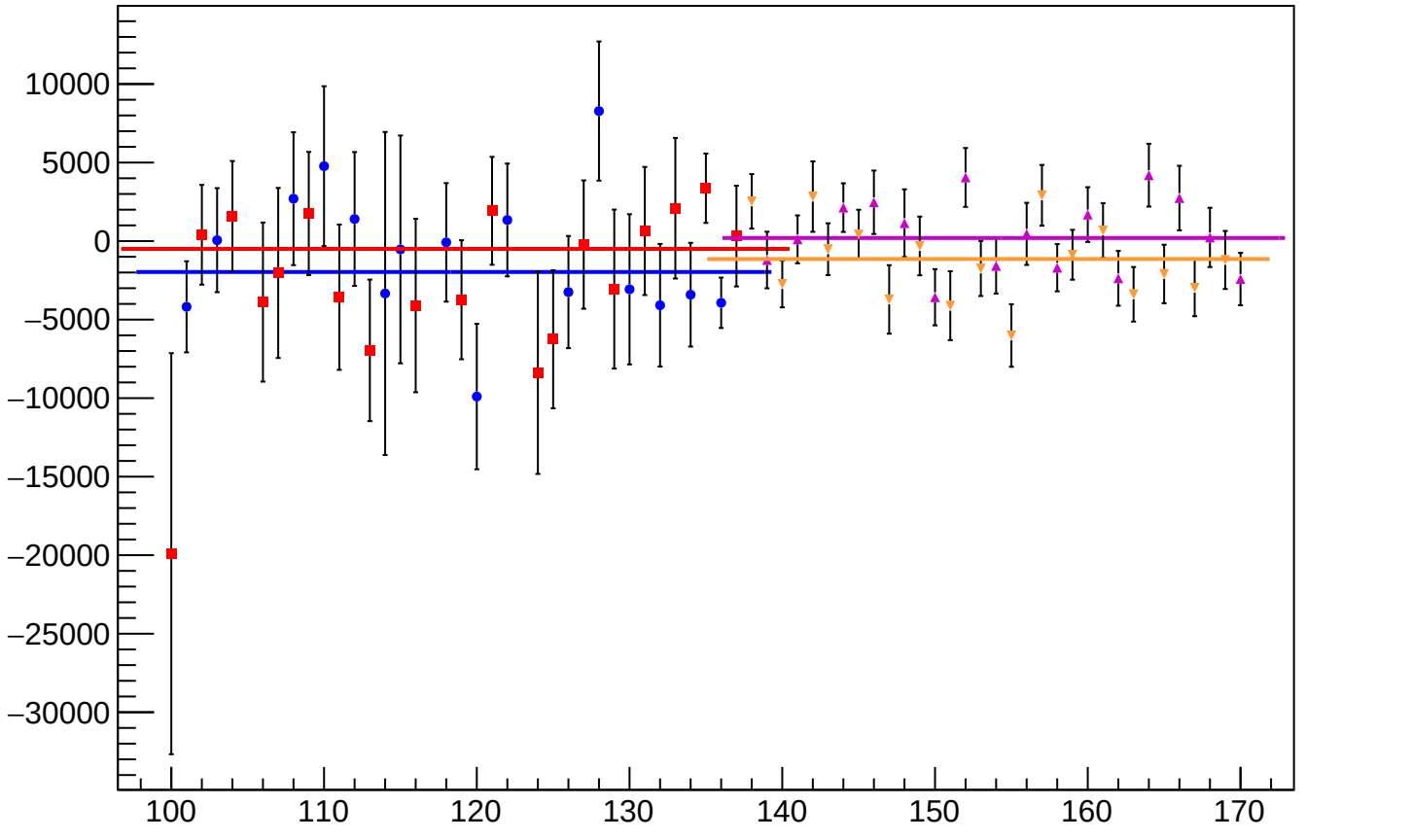
Right Out: 222.697+/-0.058 $\chi^2$/NDF: 327032.3/18

Left In: 216.835+/-0.042 $\chi^2$/NDF:149239.0/15

+ sign 216.061+/-0.034 $\chi^2$/NDF: 480792.0/32

All: 217.439+/-0.024 $\chi^2$/NDF: 967045.4/67

- sign 218.855+/-0.034 $\chi^2$/NDF: 482882.9/34




Right In: -1967.414+/-876.610 $\chi^2$/NDF: 16.2/15

Left Out: -1142.793+/-436.732 $\chi^2$/NDF:27.9/16

Right Out: -497.281+/-914.759 $\chi^2$/NDF: 14.8/18

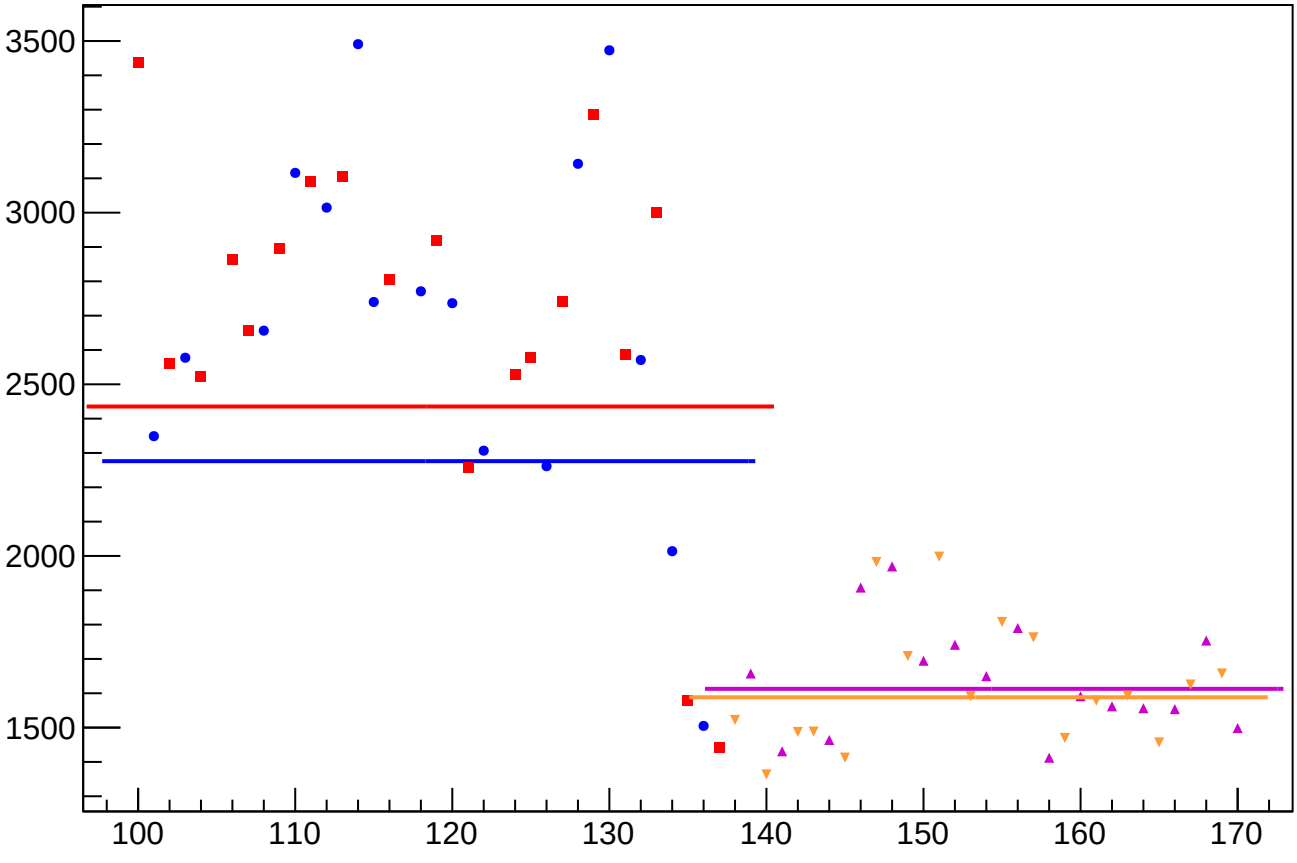
Left In: 196.198+/-446.466 $\chi^2$/NDF:25.8/15

+ sign -1306.771+/-390.905 $\chi^2$/NDF: 44.7/32

All: -639.837+/-279.990 $\chi^2$/NDF: 91.7/67

- sign 62.784+/-401.228 $\chi^2$/NDF: 41.0/34

# asym_sam_26_dd_dit_correction_rms vs Slug




Right In: 2276.134+/-0.620 $\chi^2$/NDF: 926982.8/15

Left Out: 1588.316+/-0.309 $\chi^2$/NDF:293403.9/16

Right Out: 2435.354+/-0.647 $\chi^2$/NDF: 791515.5/18

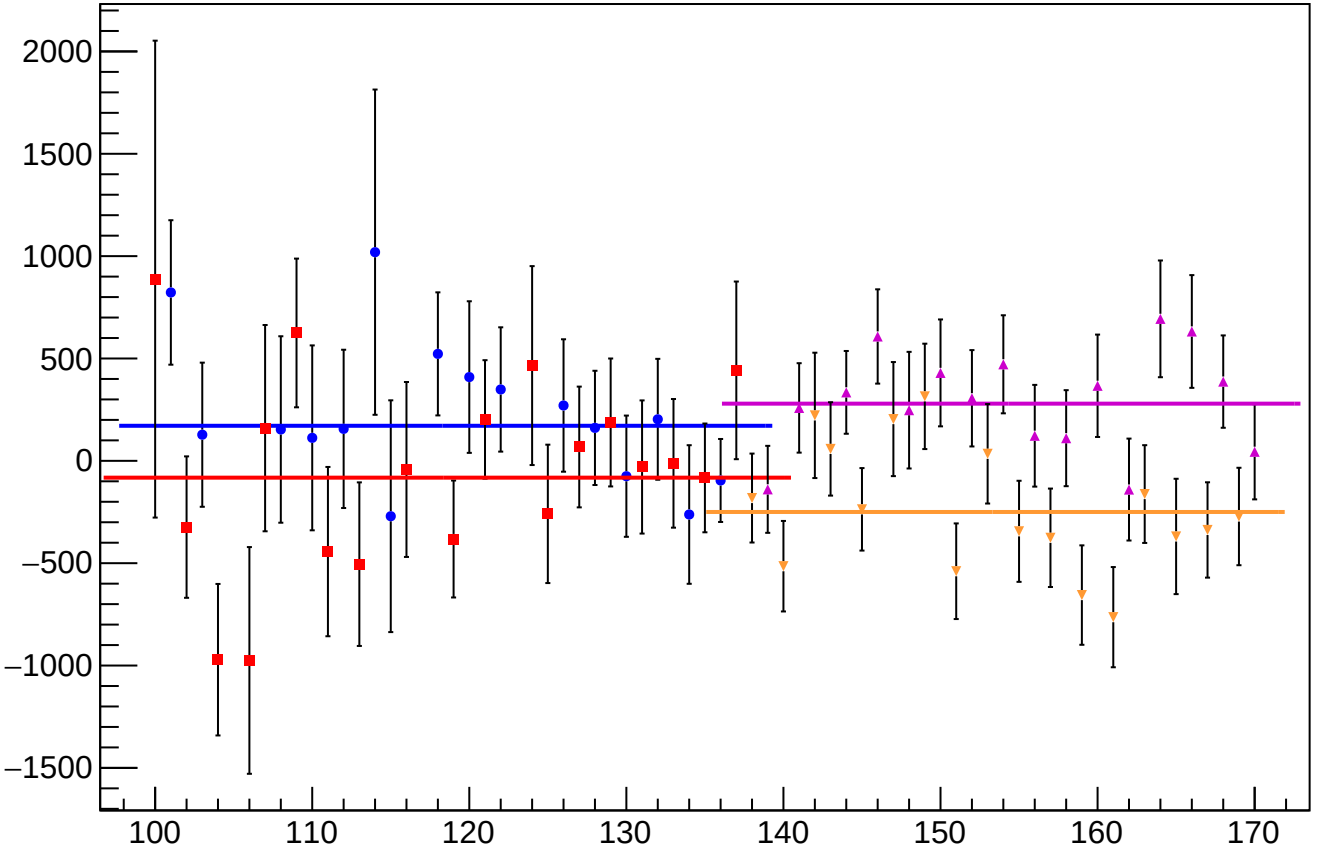
Left In: 1612.901+/-0.316 $\chi^2$/NDF:237477.3/15

+ sign 1725.090+/-0.276 $\chi^2$/NDF: 2206842.4/32

All: 1747.509+/-0.198 $\chi^2$/NDF: 4555046.8/67

- sign 1771.128+/-0.284 $\chi^2$/NDF: 2334695.8/34

# eigen_dit_asym_sam_26_dd_mean vs Slug




Right In: 171.260+/-83.115 $\chi^2$/NDF: 11.5/15

Left Out: -249.793+/-58.422 $\chi^2$/NDF:24.2/16

Right Out: -82.150+/-82.545 $\chi^2$/NDF: 21.6/18

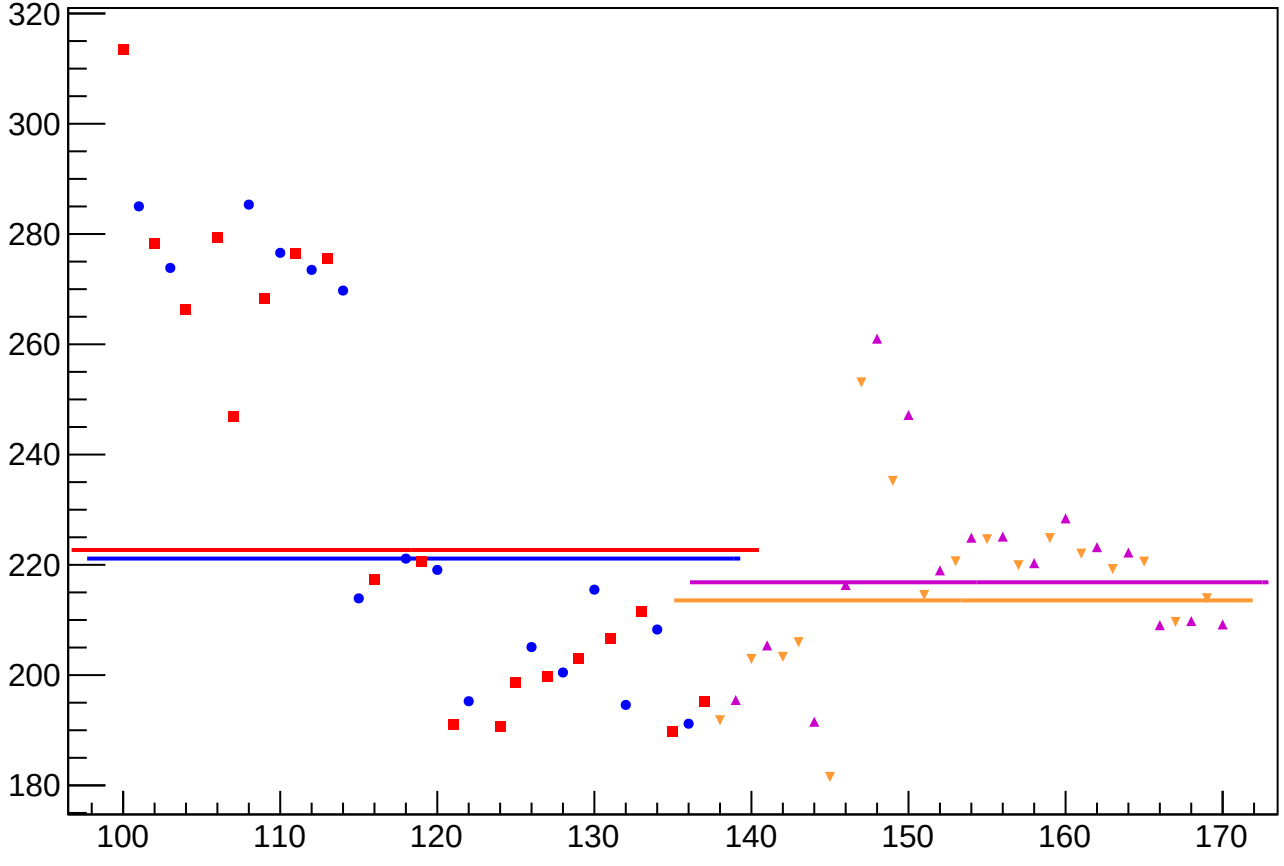
Left In: 279.364+/-59.867 $\chi^2$/NDF:15.9/15

+ sign -110.556+/-47.796 $\chi^2$/NDF: 52.9/32

All: 20.259+/-34.030 $\chi^2$/NDF: 118.1/67

- sign 154.751+/-48.463 $\chi^2$/NDF: 50.1/34

# eigen_dit_asym_sam_26_dd_rms vs Slug




Right In: 221.138+/-0.059 $\chi^2$/NDF: 318696.9/15

Left Out: 213.552+/-0.041 $\chi^2$/NDF:150940.7/16

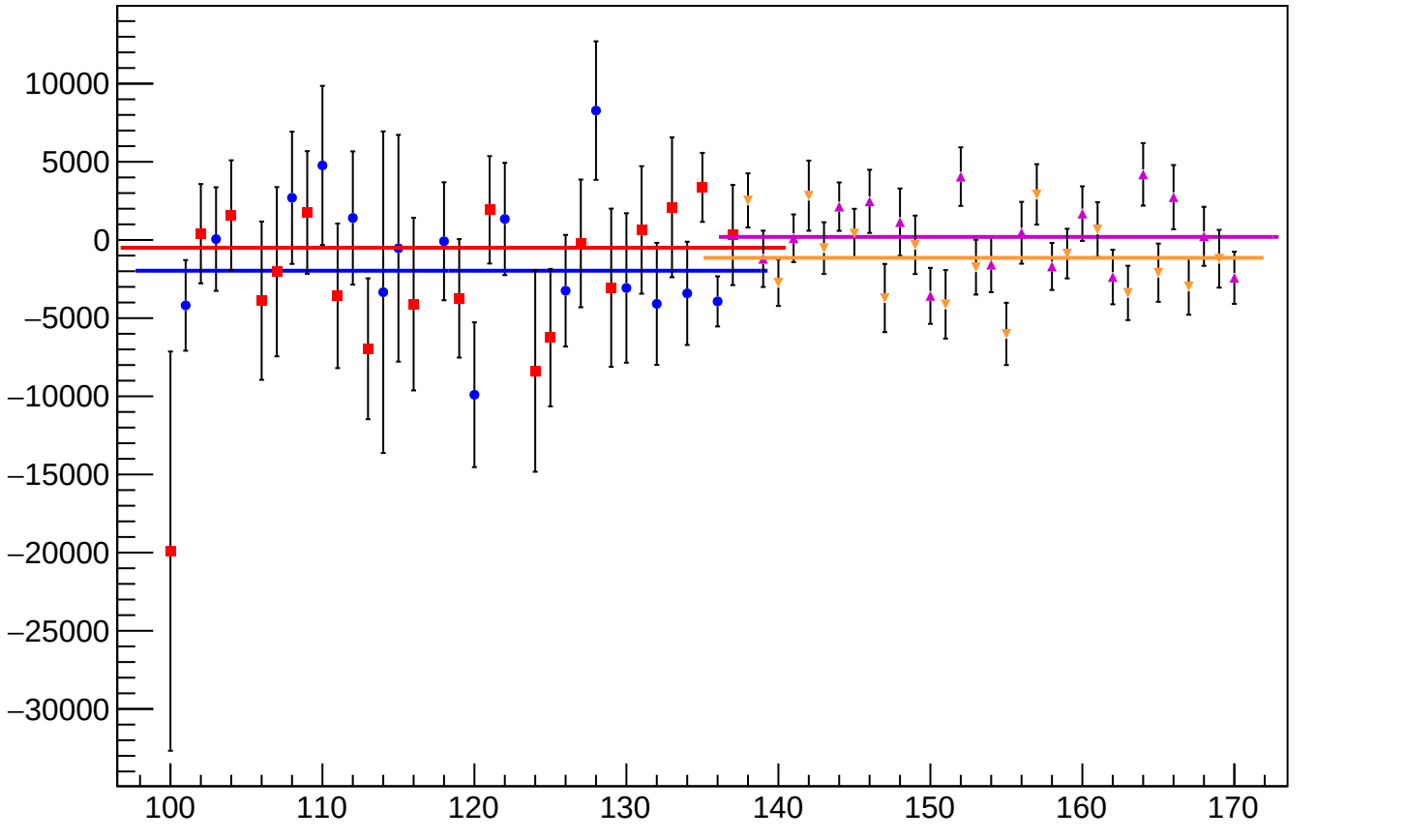
Right Out: 222.696+/-0.058 $\chi^2$/NDF: 327025.2/18

Left In: 216.834+/-0.042 $\chi^2$/NDF:149241.7/15

+ sign 216.061+/-0.034 $\chi^2$/NDF: 480788.1/32

All: 217.438+/-0.024 $\chi^2$/NDF: 967035.7/67

- sign 218.855+/-0.034 $\chi^2$/NDF: 482877.0/34




Right In: -1967.409+/-876.608 $\chi^2$/NDF: 16.2/15

Left Out: -1142.793+/-436.732 $\chi^2$/NDF:27.9/16

Right Out: -497.282+/-914.757 $\chi^2$/NDF: 14.8/18

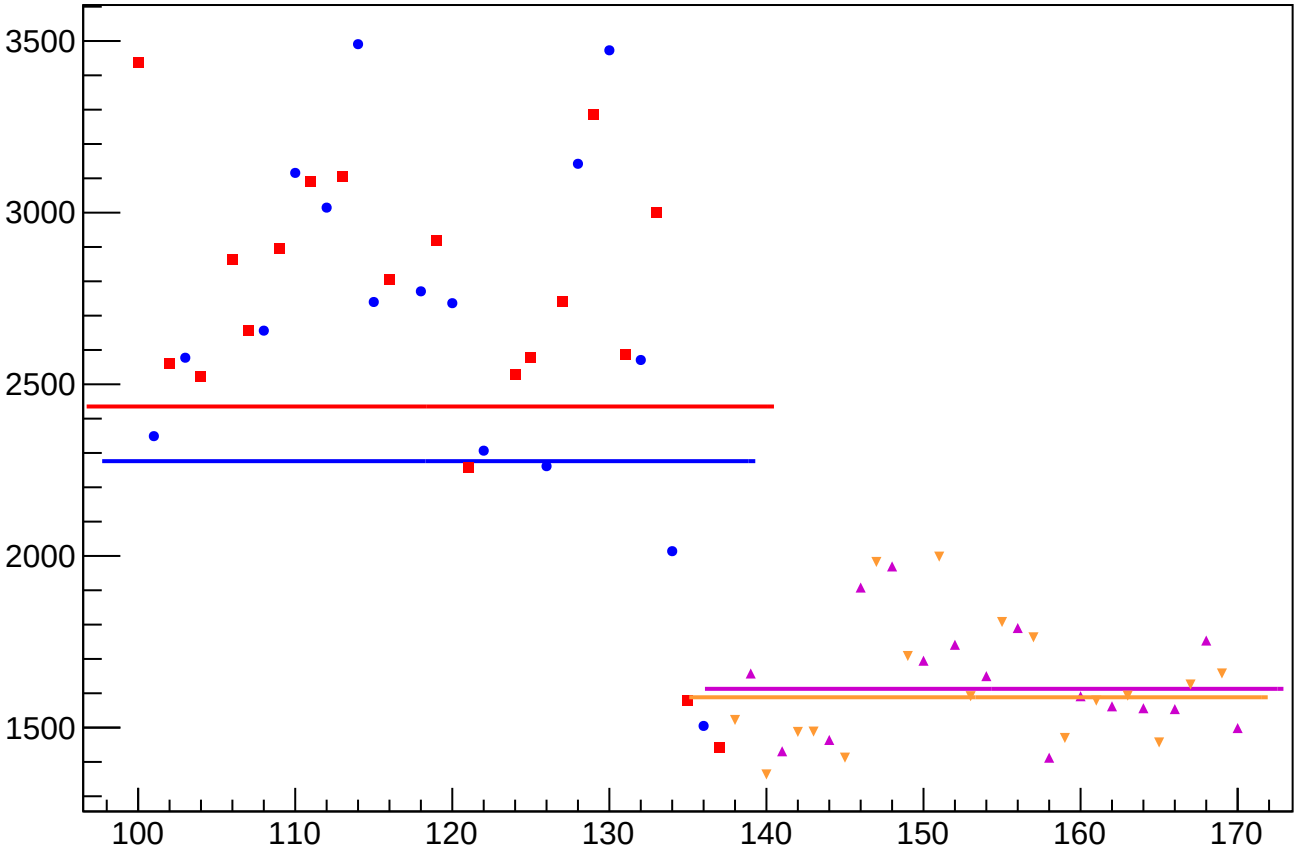
Left In: 196.197+/-446.466 $\chi^2$/NDF:25.8/15

+ sign -1306.770+/-390.905 $\chi^2$/NDF: 44.7/32

All: -639.837+/-279.990 $\chi^2$/NDF: 91.7/67

- sign 62.783+/-401.227 $\chi^2$/NDF: 41.0/34

# asym_sam_26_dd_eigen_dit_correction_rms vs Slug




Right In: 2276.132+/-0.620 $\chi^2$/NDF: 926973.2/15

Left Out: 1588.316+/-0.309 $\chi^2$/NDF:293406.9/16

Right Out: 2435.351+/-0.647 $\chi^2$/NDF: 791509.5/18

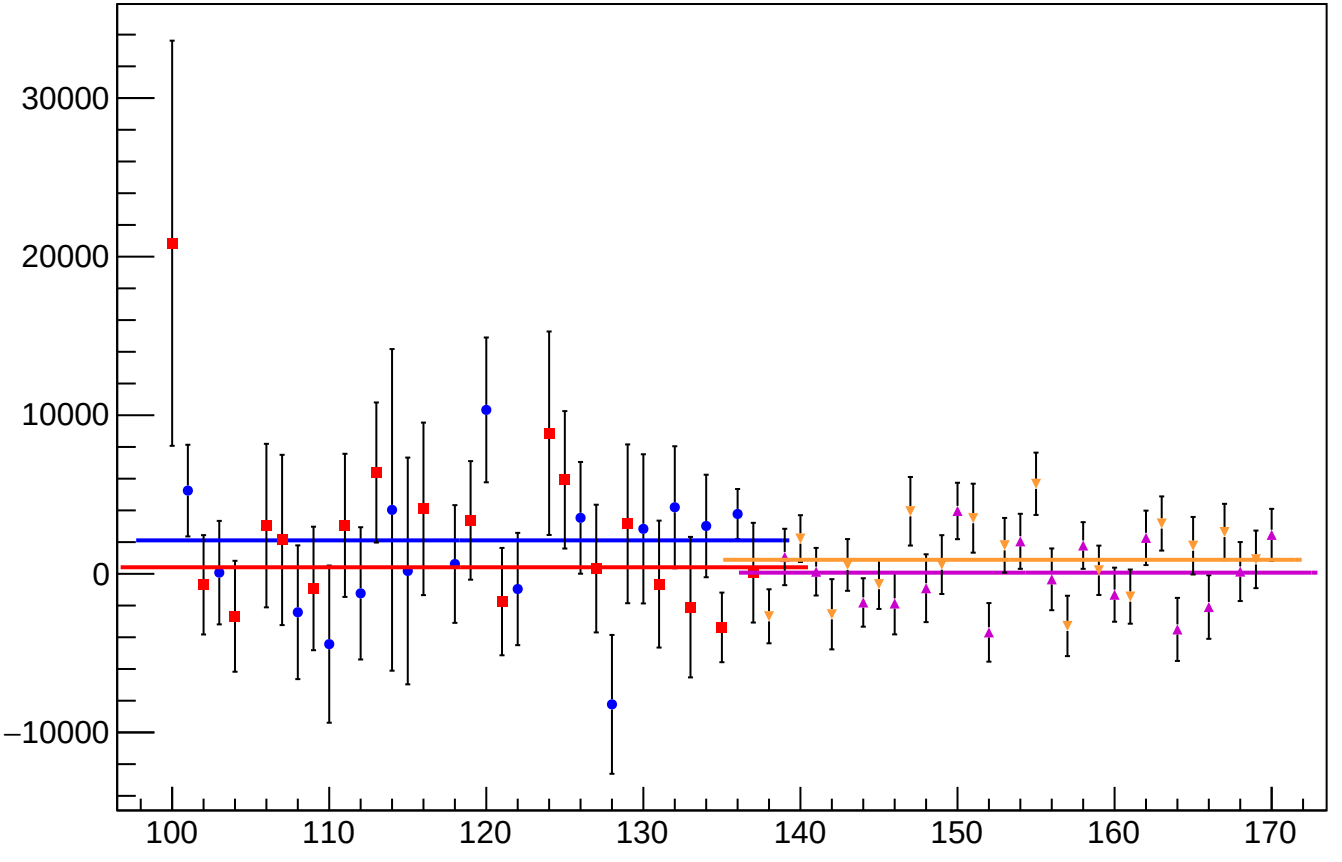
Left In: 1612.901+/-0.316 $\chi^2$/NDF:237479.5/15

+ sign 1725.090+/-0.276 $\chi^2$/NDF: 2206831.3/32

All: 1747.508+/-0.198 $\chi^2$/NDF: 4555025.4/67

- sign 1771.127+/-0.284 $\chi^2$/NDF: 2334685.7/34

# asym_sam_26_dd_mean vs Slug




Right In: 2109.537+/-863.291 $\chi^2$/NDF: 16.6/15

Left Out: 885.646+/-430.135 $\chi^2$/NDF:28.2/16

Right Out: 414.095+/-904.414 $\chi^2$/NDF: 14.7/18

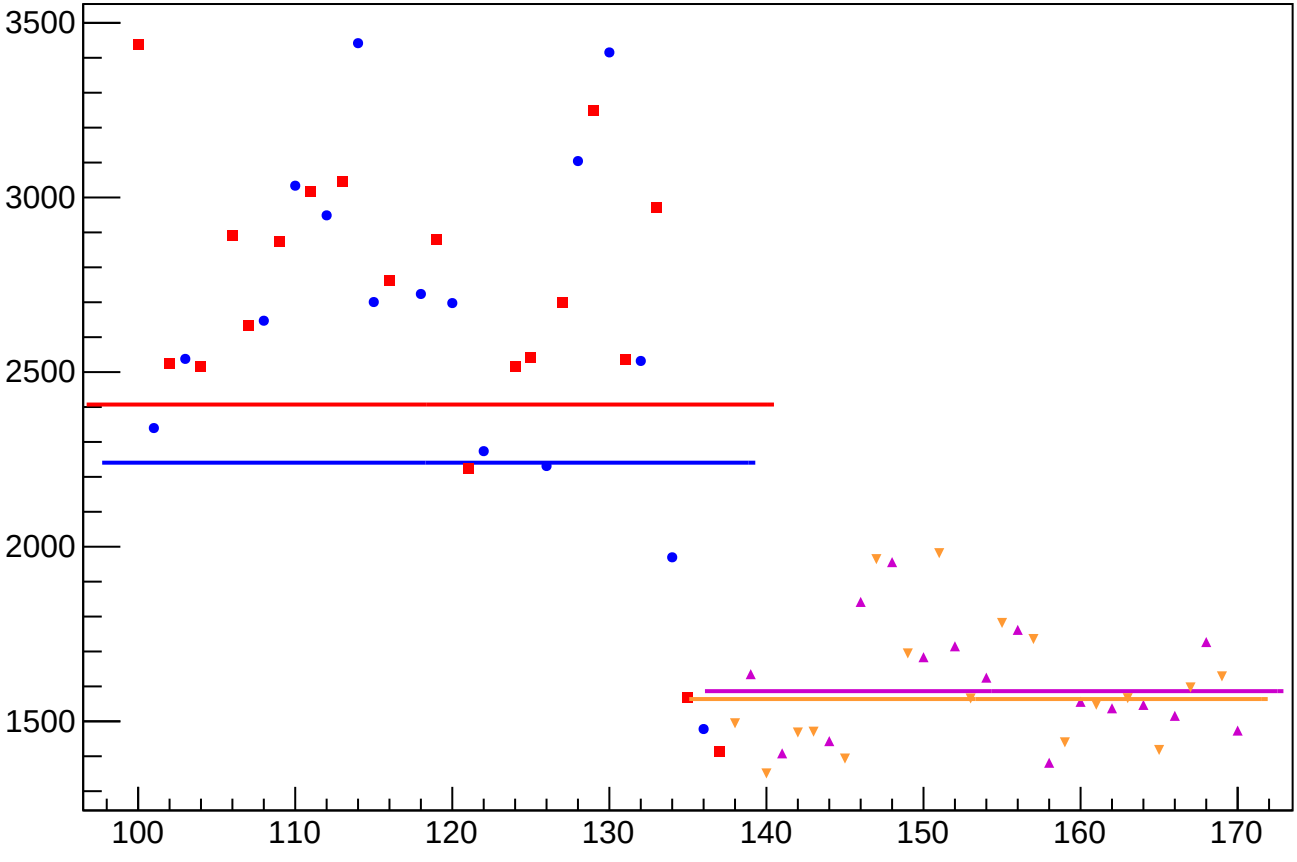
Left In: 73.527+/-439.187 $\chi^2$/NDF:23.5/15

+ sign 1129.054+/-384.994 $\chi^2$/NDF: 46.4/32

All: 646.576+/-275.725 $\chi^2$/NDF: 87.9/67

- sign 138.512+/-395.069 $\chi^2$/NDF: 38.3/34

# asym_sam_26_dd_rms vs Slug




Right In: 2240.626+/-0.610 $\chi^2$/NDF: 933590.8/15

Left Out: 1563.807+/-0.304 $\chi^2$/NDF:301544.0/16

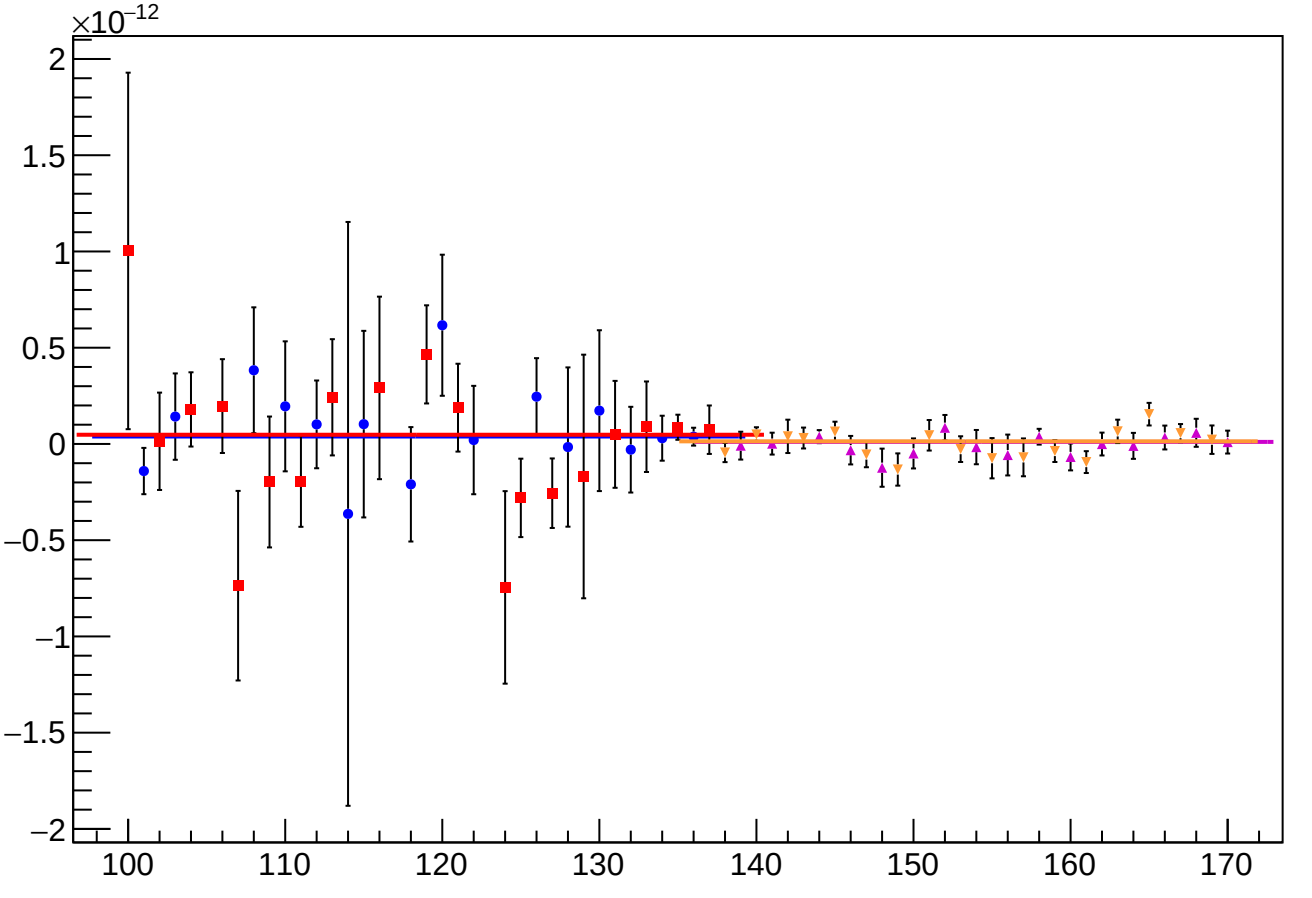
Right Out: 2407.124+/-0.640 $\chi^2$/NDF: 788976.1/18

Left In: 1586.413+/-0.311 $\chi^2$/NDF:239445.7/15

+ sign 1698.413+/-0.272 $\chi^2$/NDF: 2219957.5/32

All: 1720.139+/-0.195 $\chi^2$/NDF: 4594128.9/67

- sign 1743.017+/-0.279 $\chi^2$/NDF: 2361095.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 8.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:21.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.2/18

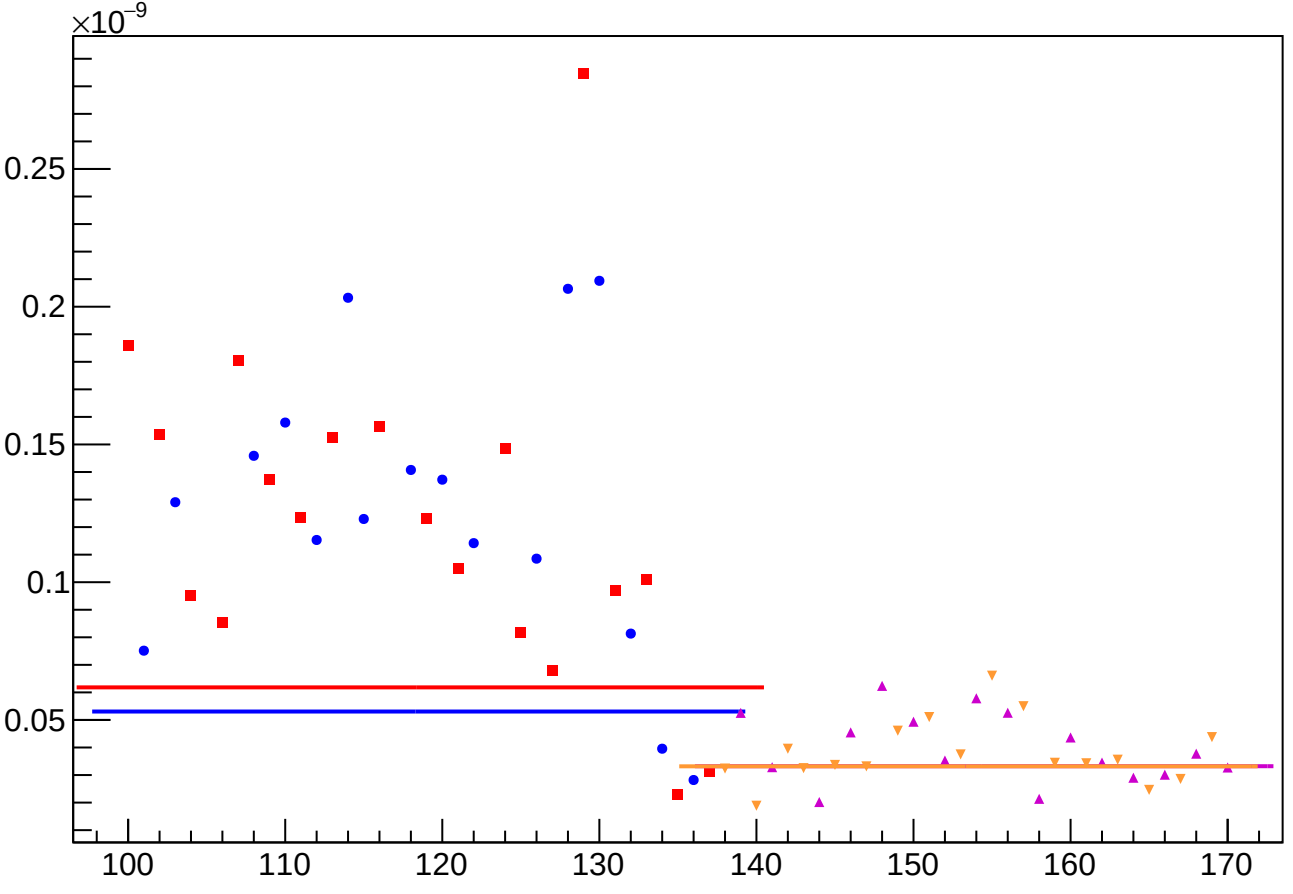
Left In: 0.000+/-0.000 $\chi^2$/NDF:7.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 30.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 56.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 26.5/34

# asym_sam_26_dd_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2576481.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:864720.5/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2416437.9/18

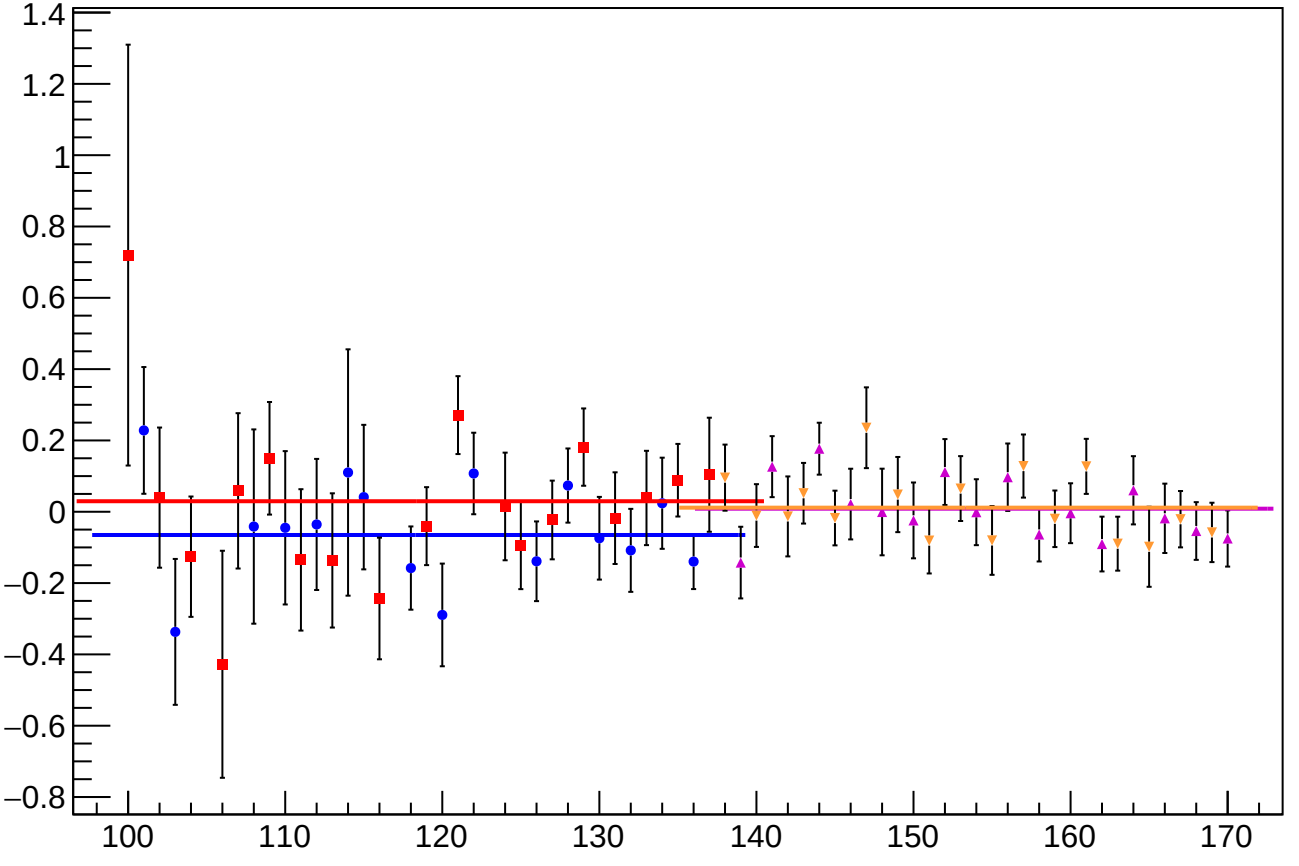
Left In: 0.000+/-0.000 $\chi^2$/NDF:1203993.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3957044.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 8353595.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4395506.5/34

# asym_sam_26_dd_dit_vs_cor_diff_mean vs Slug




Right In: -0.065+/-0.033 $\chi^2$/NDF: 14.2/15

Left Out: 0.011+/-0.022 $\chi^2$/NDF:15.3/16

Right Out: 0.030+/-0.033 $\chi^2$/NDF: 18.1/18

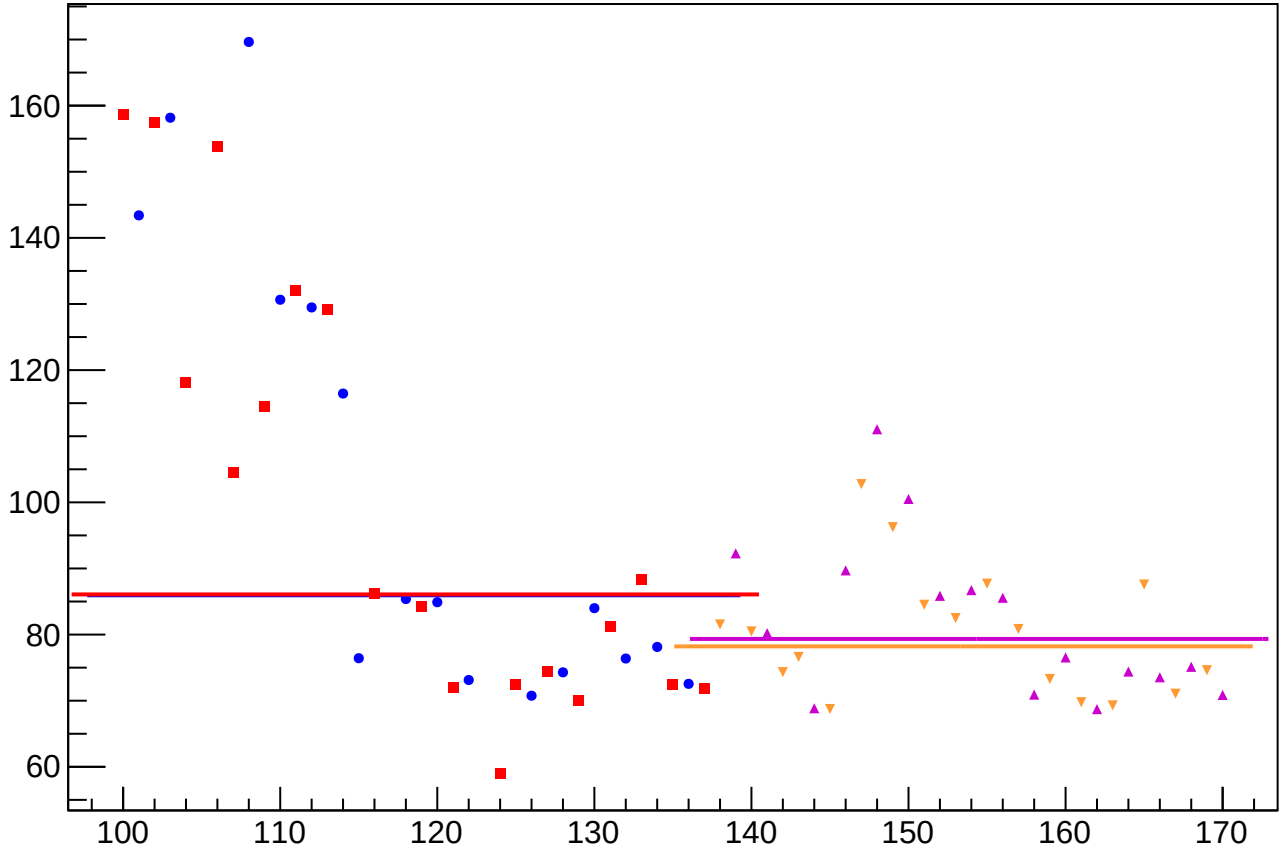
Left In: 0.009+/-0.022 $\chi^2$/NDF:16.4/15

+ sign -0.011+/-0.018 $\chi^2$/NDF: 33.2/32

All: 0.002+/-0.013 $\chi^2$/NDF: 69.1/67

- sign 0.015+/-0.018 $\chi^2$/NDF: 34.8/34

# asym_sam_26_dd_dit_vs_cor_diff_rms vs Slug




Right In: 85.946+/-0.024 $\chi^2$/NDF: 1035004.5/15

Left Out: 78.216+/-0.015 $\chi^2$/NDF:318265.0/16

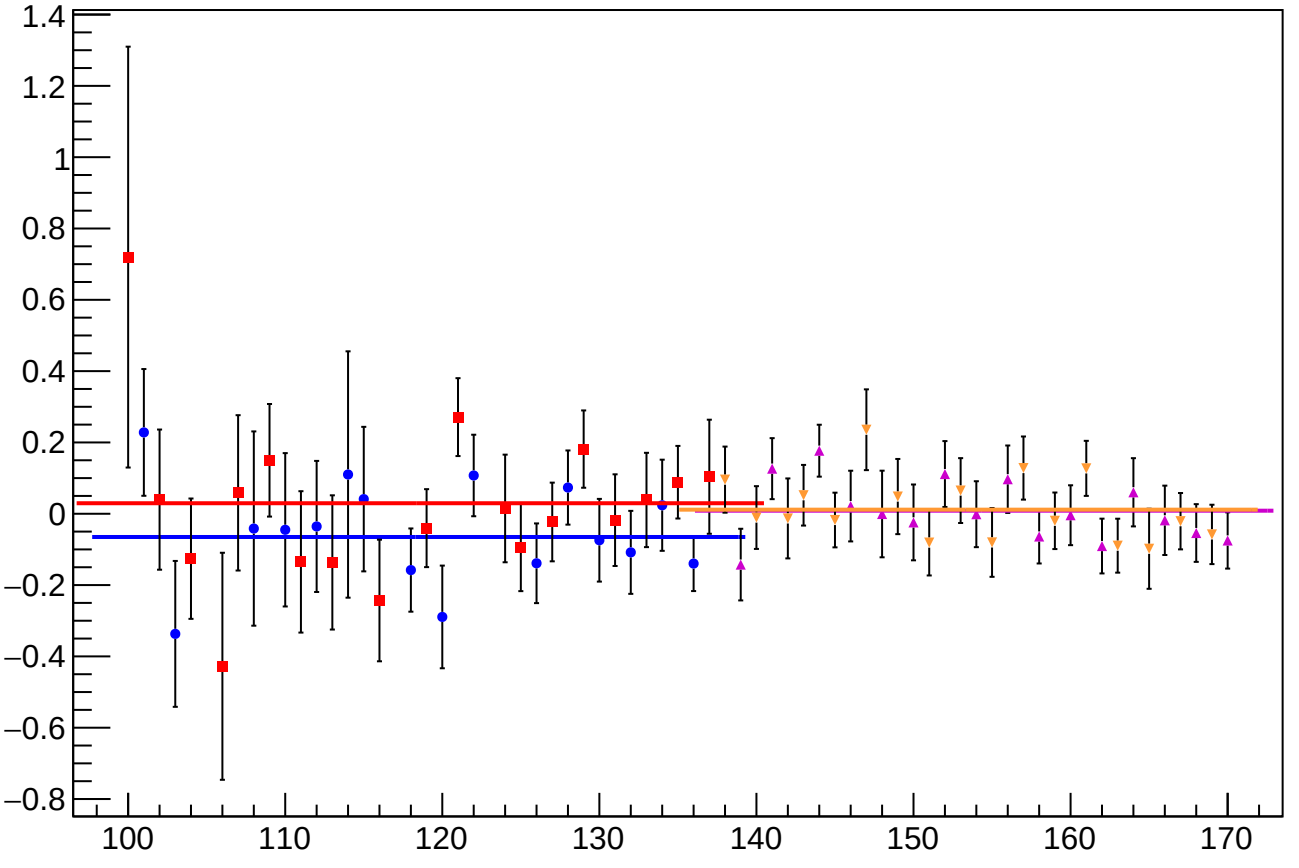
Right Out: 86.073+/-0.023 $\chi^2$/NDF: 991371.4/18

Left In: 79.343+/-0.016 $\chi^2$/NDF:449967.6/15

+ sign 80.492+/-0.013 $\chi^2$/NDF: 1429260.4/32

All: 80.955+/-0.009 $\chi^2$/NDF: 2930736.1/67

- sign 81.433+/-0.013 $\chi^2$/NDF: 1498806.6/34




Right In: -0.065+/-0.033 $\chi^2$/NDF: 14.2/15

Left Out: 0.011+/-0.022 $\chi^2$/NDF:15.3/16

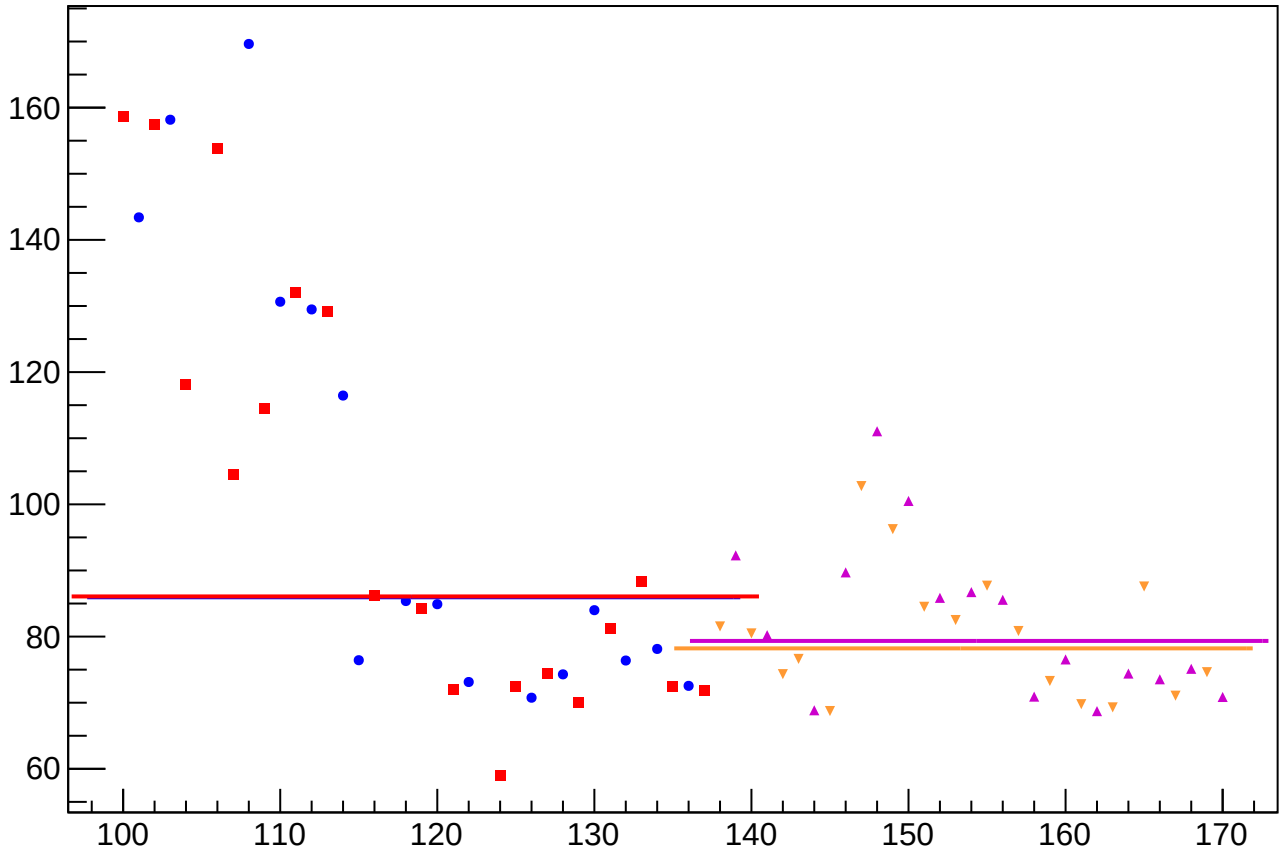
Right Out: 0.030+/-0.033 $\chi^2$/NDF: 18.1/18

Left In: 0.009+/-0.022 $\chi^2$/NDF:16.4/15

+ sign -0.011+/-0.018 $\chi^2$/NDF: 33.2/32

All: 0.002+/-0.013 $\chi^2$/NDF: 69.1/67

- sign 0.015+/-0.018 $\chi^2$/NDF: 34.8/34




Right In: 85.946+/-0.024 $\chi^2$/NDF: 1035004.5/15

Left Out: 78.216+/-0.015 $\chi^2$/NDF:318265.0/16

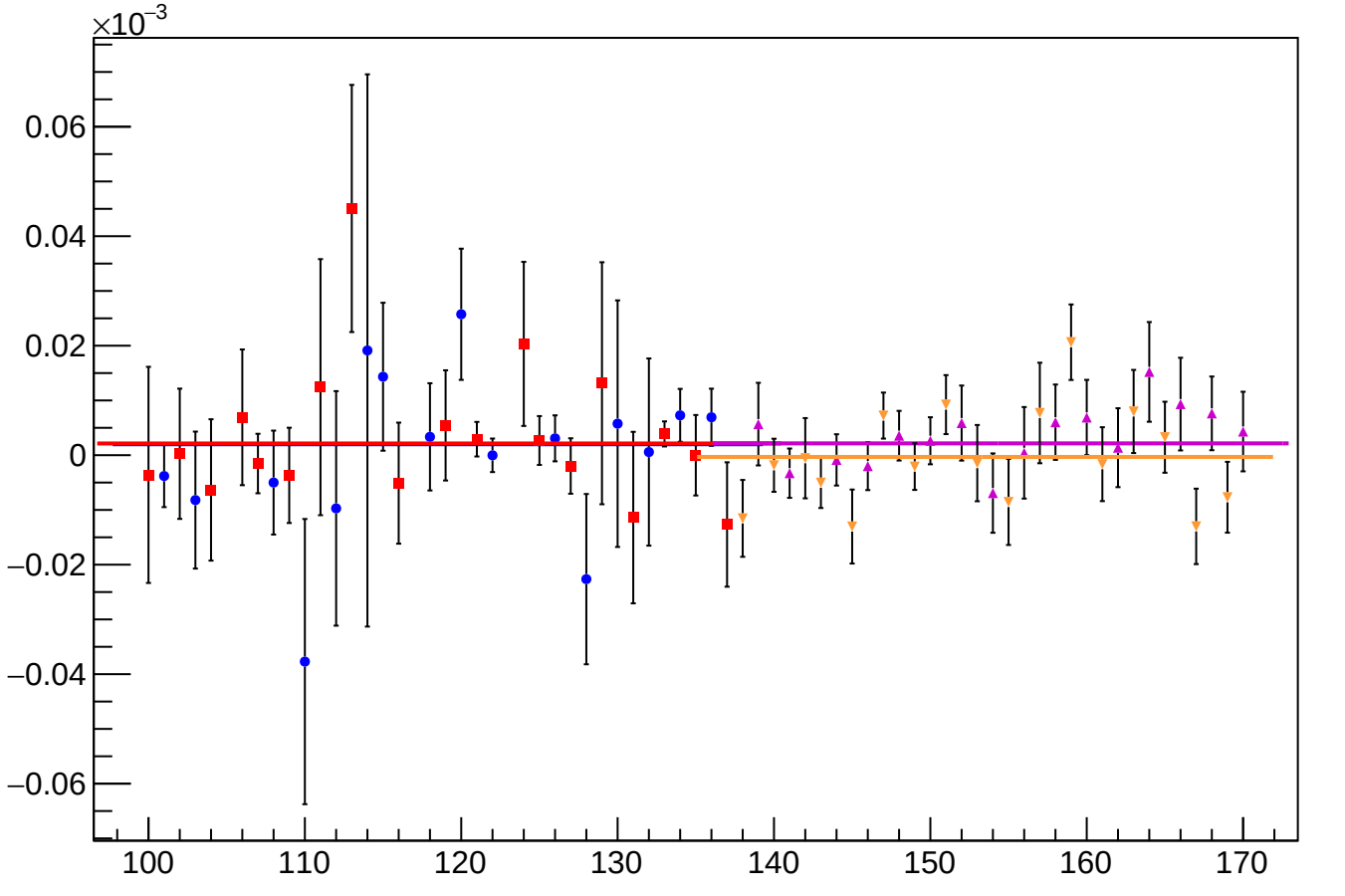
Right Out: 86.073+/-0.023 $\chi^2$/NDF: 991371.4/18

Left In: 79.343+/-0.016 $\chi^2$/NDF:449967.6/15

+ sign 80.492+/-0.013 $\chi^2$/NDF: 1429260.4/32

All: 80.955+/-0.009 $\chi^2$/NDF: 2930736.1/67

- sign 81.433+/-0.013 $\chi^2$/NDF: 1498806.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:31.1/16

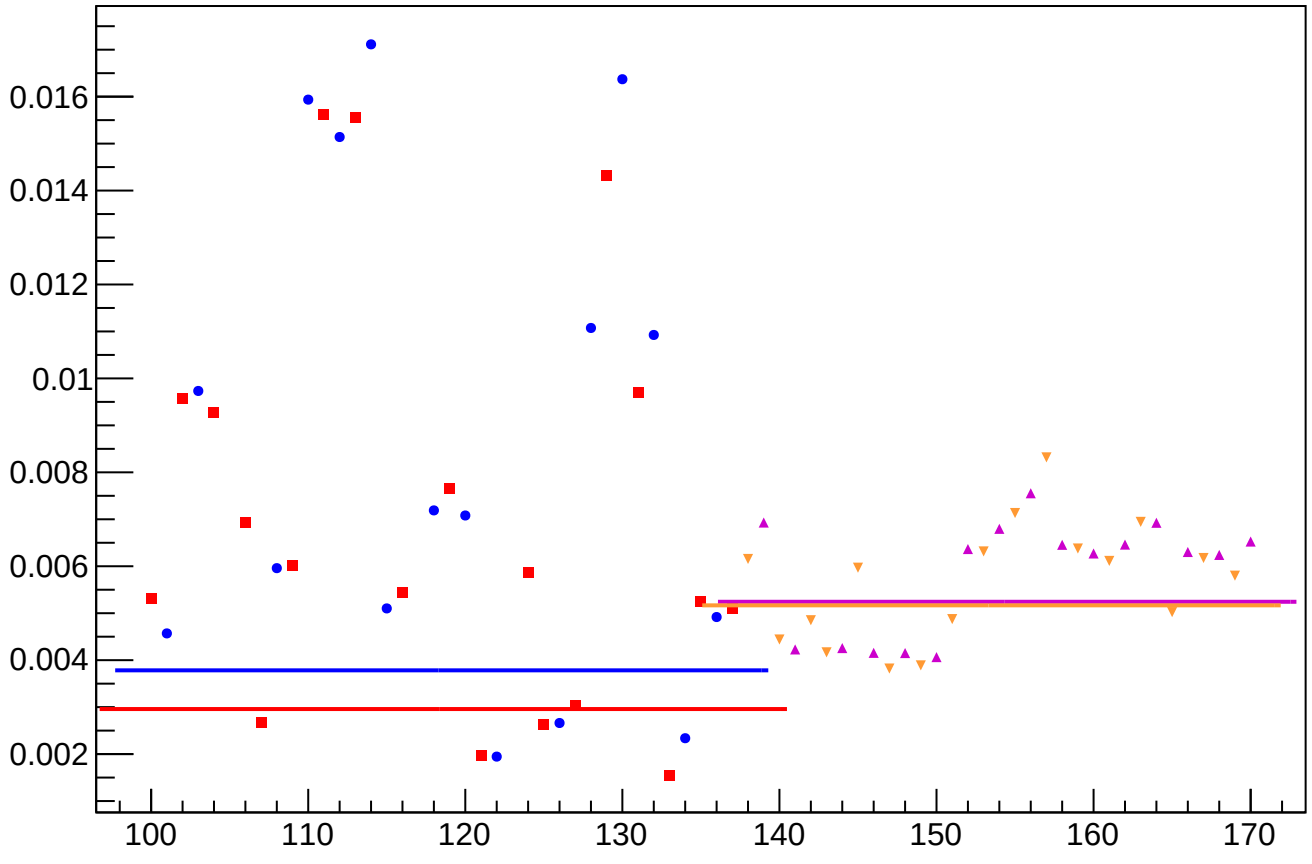
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 11.5/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:9.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 47.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 68.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 20.8/34




Right In: 0.004+/-0.000 $\chi^2$/NDF: 4694299.9/15

Left Out: 0.005+/-0.000 $\chi^2$/NDF:1289971.6/16

Right Out: 0.003+/-0.000 $\chi^2$/NDF: 5548113.4/18

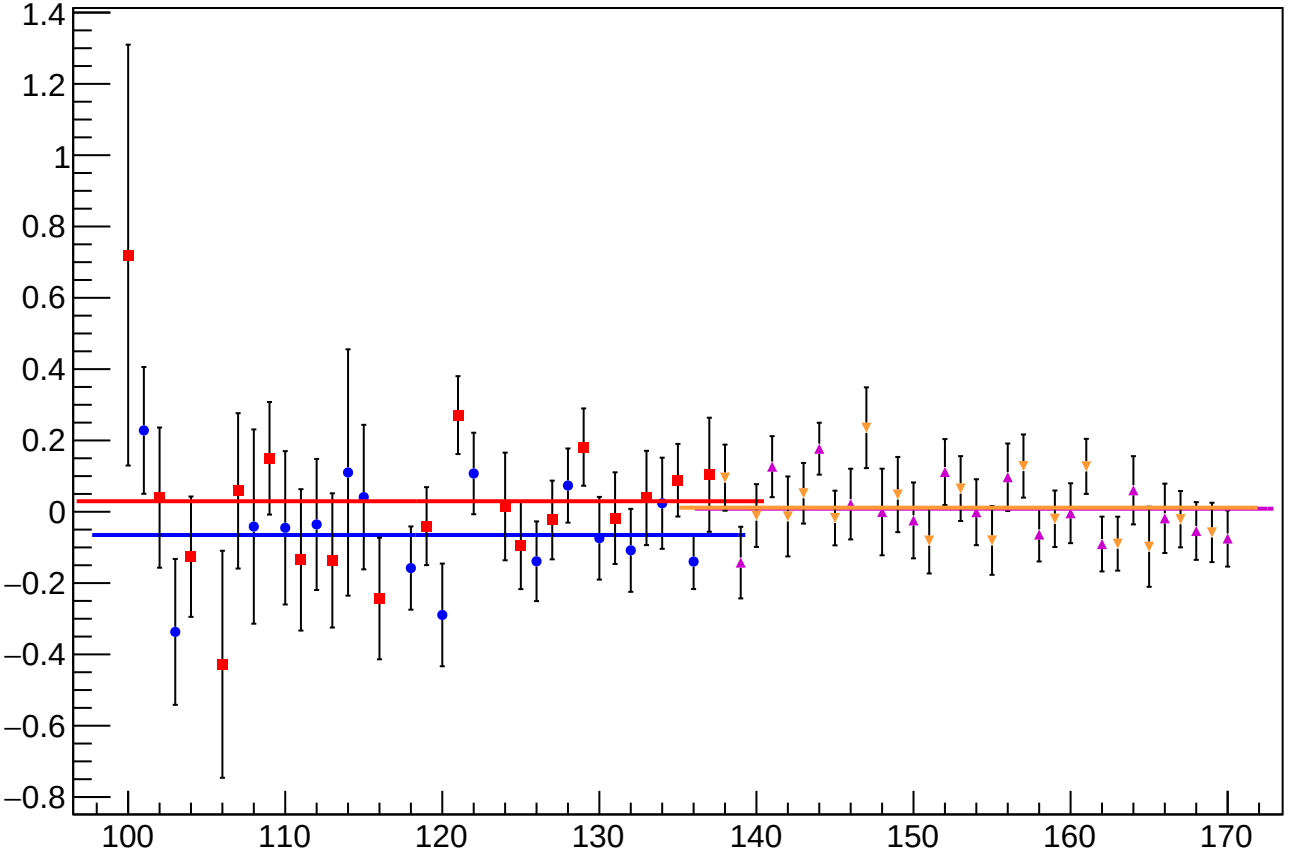
Left In: 0.005+/-0.000 $\chi^2$/NDF:1347352.0/15

+ sign 0.005+/-0.000 $\chi^2$/NDF: 6726641.1/32

All: 0.004+/-0.000 $\chi^2$/NDF: 16398004.1/67

- sign 0.004+/-0.000 $\chi^2$/NDF: 9387749.8/34

# asym_sam_26_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.065+/-0.033 $\chi^2$/NDF: 14.2/15

Left Out: 0.011+/-0.022 $\chi^2$/NDF:15.3/16

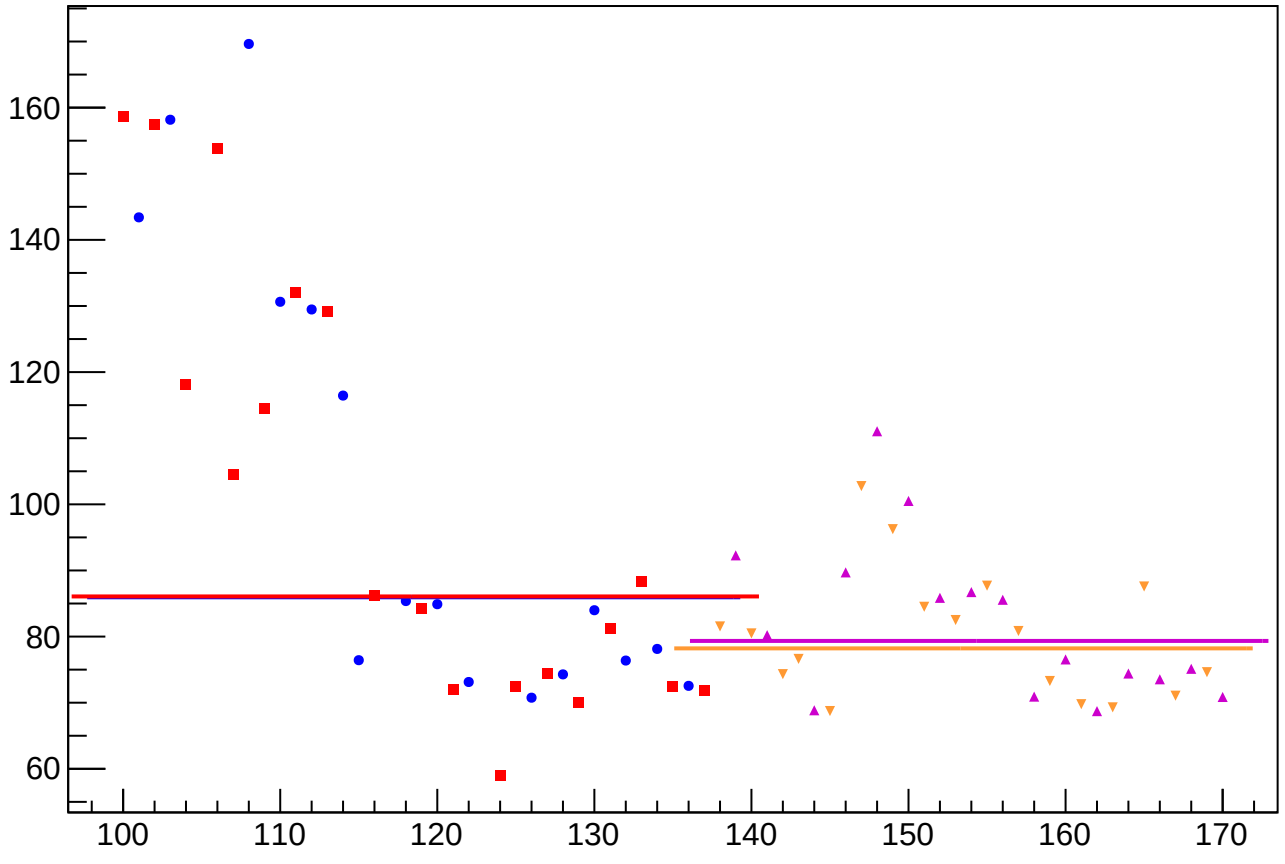
Right Out: 0.030+/-0.033 $\chi^2$/NDF: 18.1/18

Left In: 0.009+/-0.022 $\chi^2$/NDF:16.4/15

+ sign -0.011+/-0.018 $\chi^2$/NDF: 33.2/32

All: 0.002+/-0.013 $\chi^2$/NDF: 69.1/67

- sign 0.015+/-0.018 $\chi^2$/NDF: 34.8/34




Right In: 85.943+/-0.024 $\chi^2$/NDF: 1034986.7/15

Left Out: 78.216+/-0.015 $\chi^2$/NDF:318312.7/16

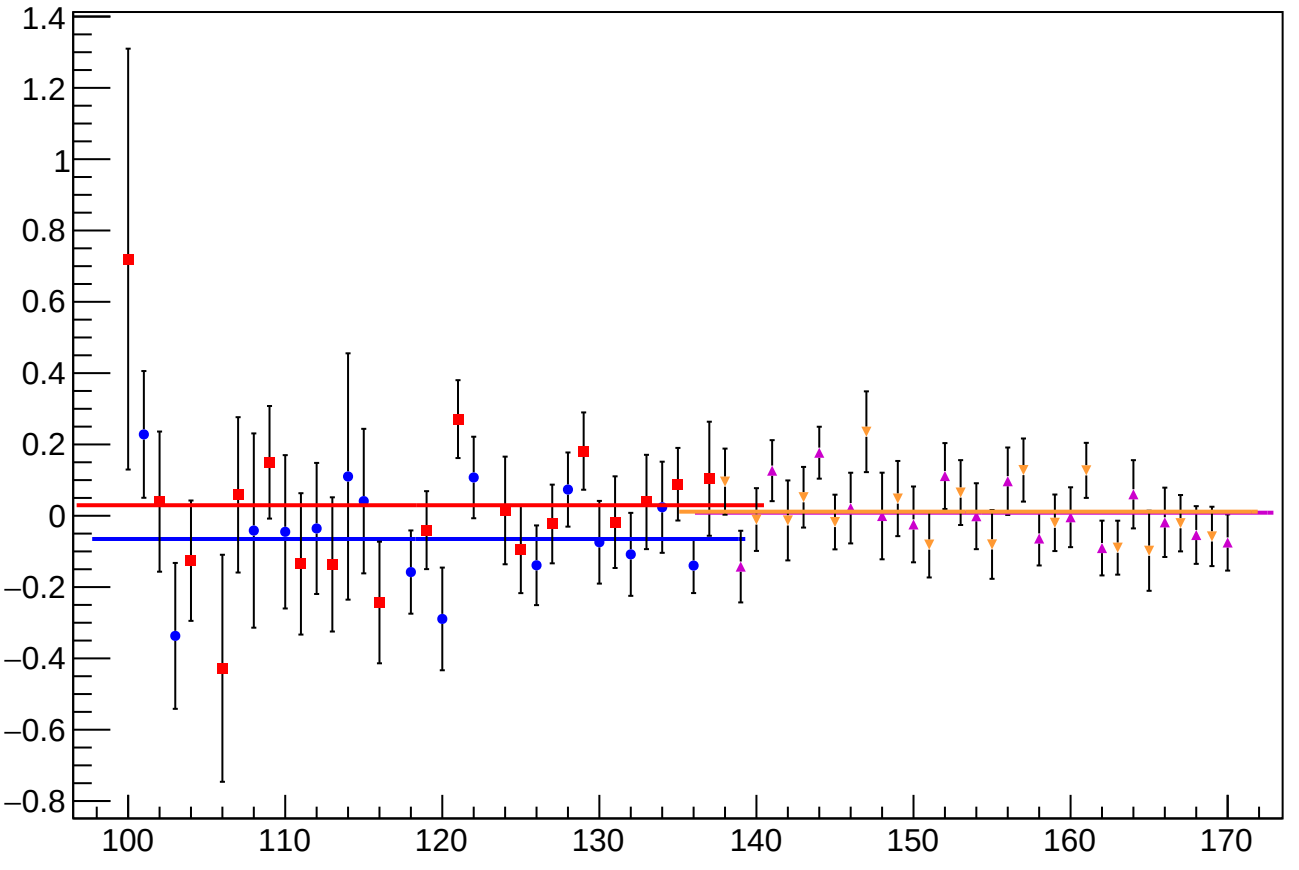
Right Out: 86.070+/-0.023 $\chi^2$/NDF: 991365.2/18

Left In: 79.342+/-0.016 $\chi^2$/NDF:450016.3/15

+ sign 80.491+/-0.013 $\chi^2$/NDF: 1429257.6/32

All: 80.954+/-0.009 $\chi^2$/NDF: 2930757.1/67

- sign 81.432+/-0.013 $\chi^2$/NDF: 1498831.3/34




Right In: -0.065+/-0.033 $\chi^2$/NDF: 14.2/15

Left Out: 0.011+/-0.022 $\chi^2$/NDF:15.3/16

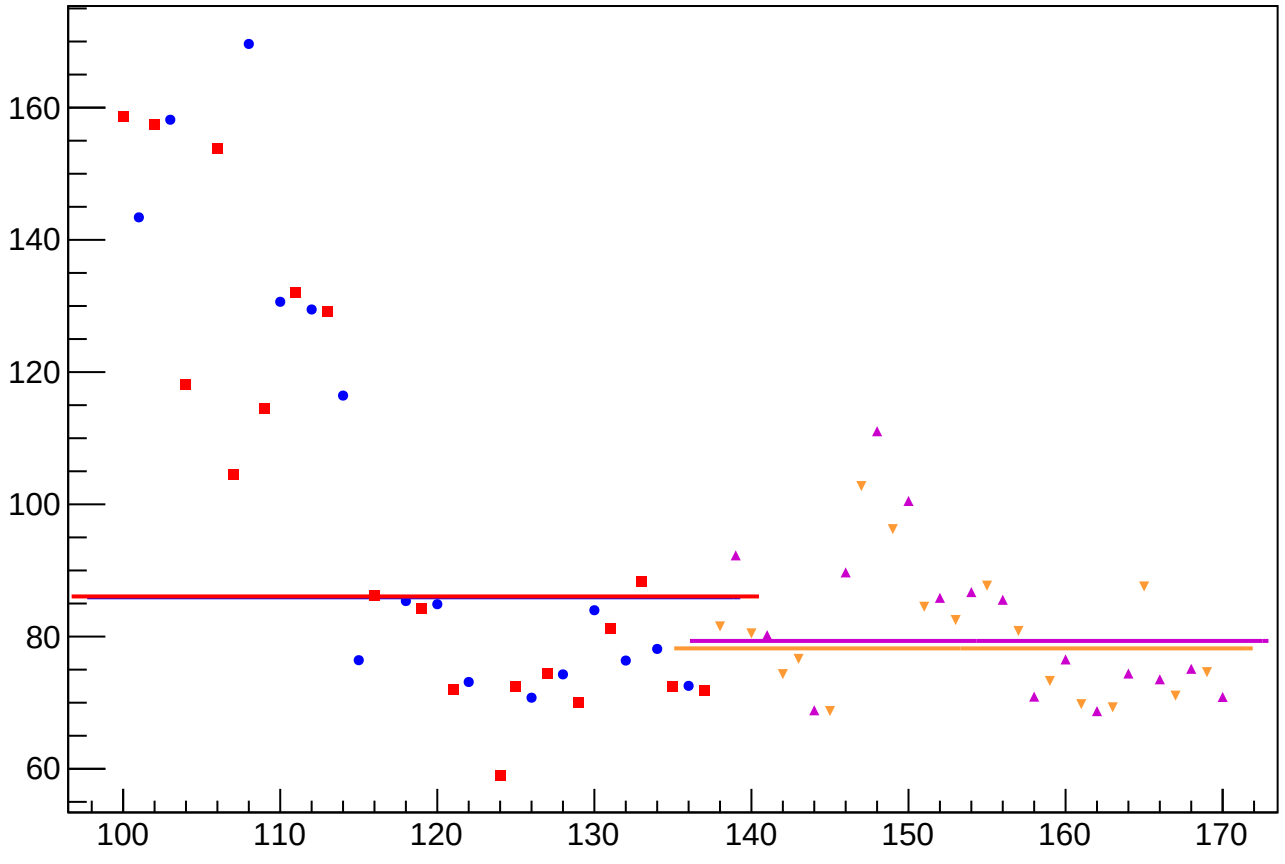
Right Out: 0.030+/-0.033 $\chi^2$/NDF: 18.1/18

Left In: 0.009+/-0.022 $\chi^2$/NDF:16.4/15

+ sign -0.011+/-0.018 $\chi^2$/NDF: 33.2/32

All: 0.002+/-0.013 $\chi^2$/NDF: 69.1/67

- sign 0.015+/-0.018 $\chi^2$/NDF: 34.8/34




Right In: 85.943+/-0.024 $\chi^2$/NDF: 1034986.7/15

Left Out: 78.216+/-0.015 $\chi^2$/NDF:318312.7/16

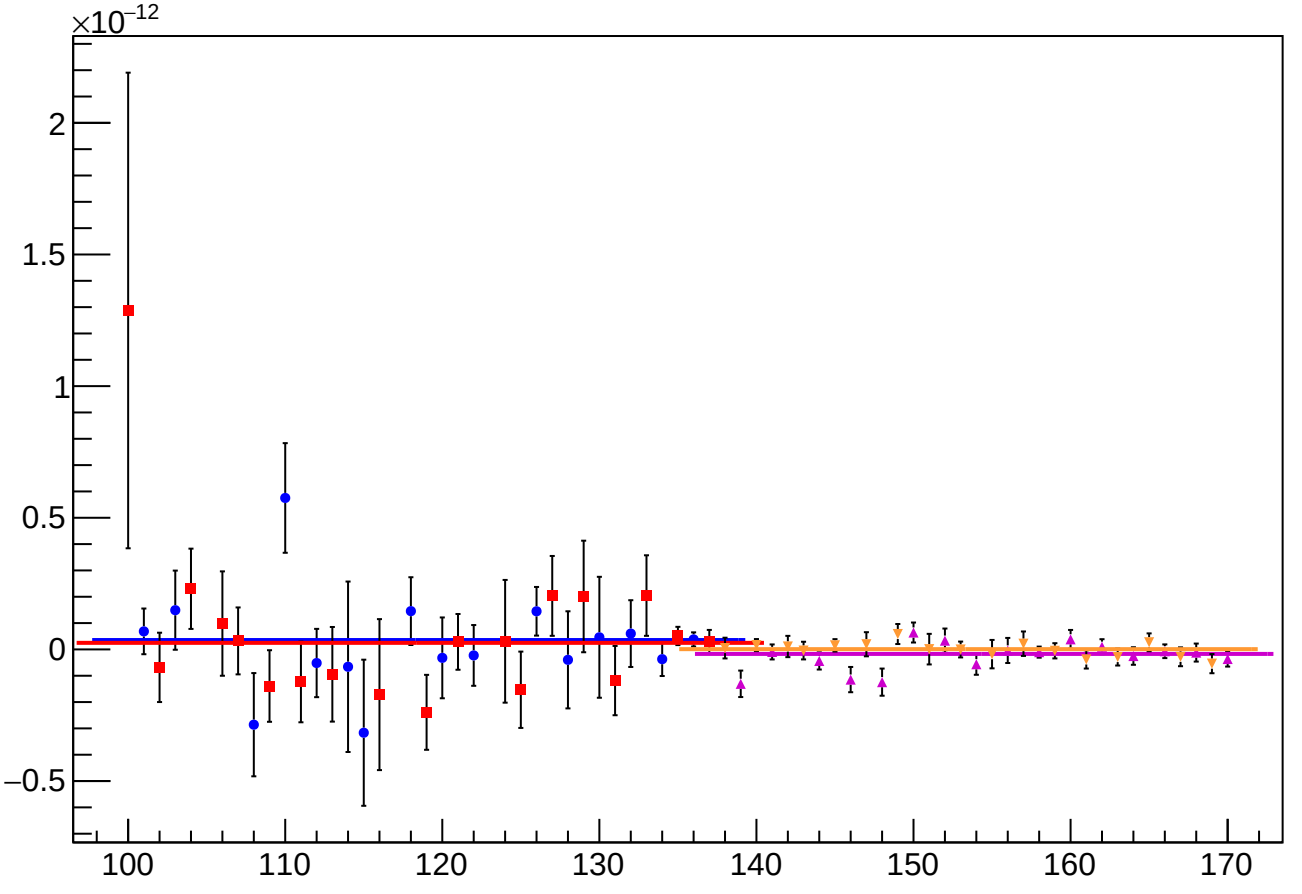
Right Out: 86.070+/-0.023 $\chi^2$/NDF: 991365.2/18

Left In: 79.342+/-0.016 $\chi^2$/NDF:450016.3/15

+ sign 80.491+/-0.013 $\chi^2$/NDF: 1429257.6/32

All: 80.954+/-0.009 $\chi^2$/NDF: 2930757.1/67

- sign 81.432+/-0.013 $\chi^2$/NDF: 1498831.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 16.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:9.4/16

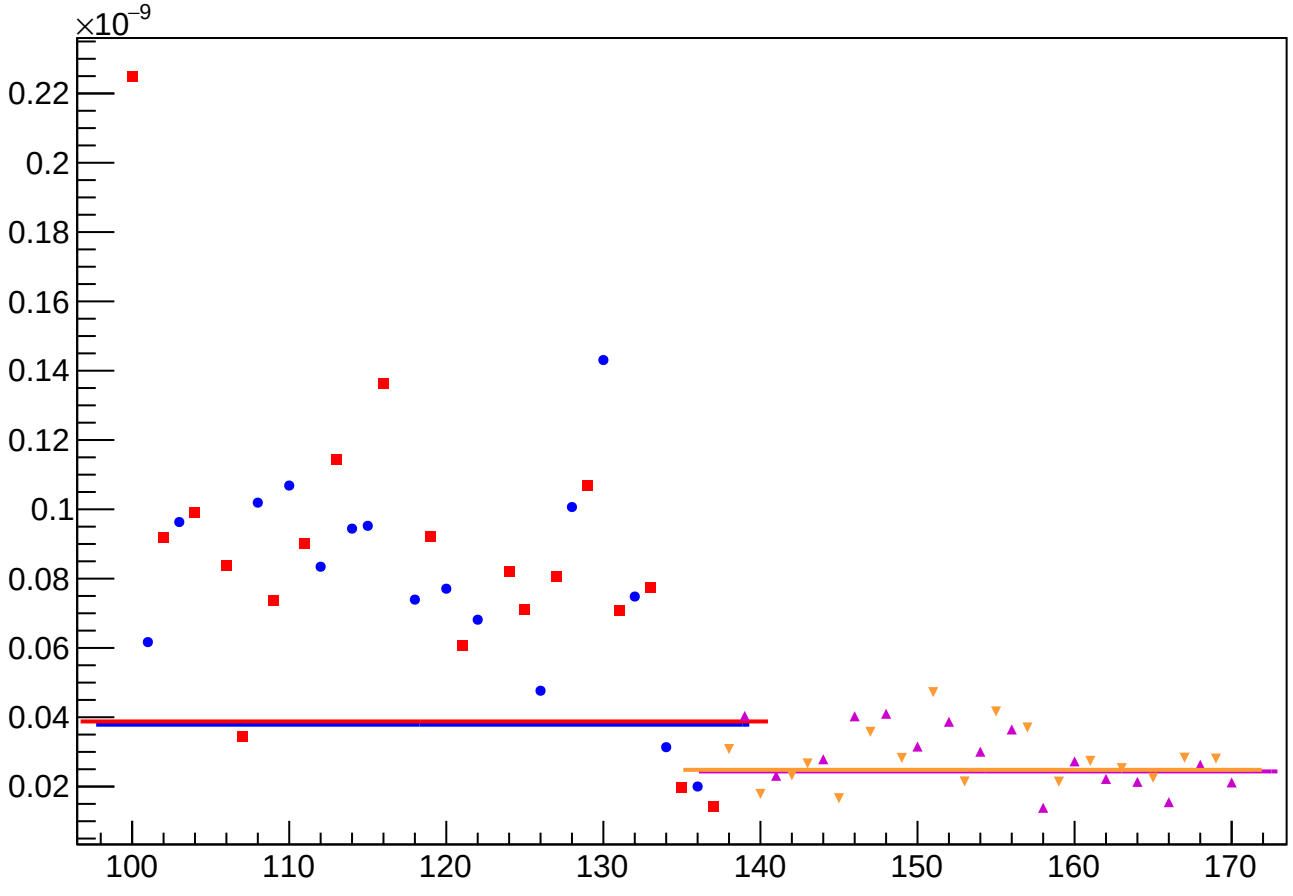
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.9/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:25.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 28.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 77.1/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 46.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3456922.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1355397.7/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 4121603.1/18

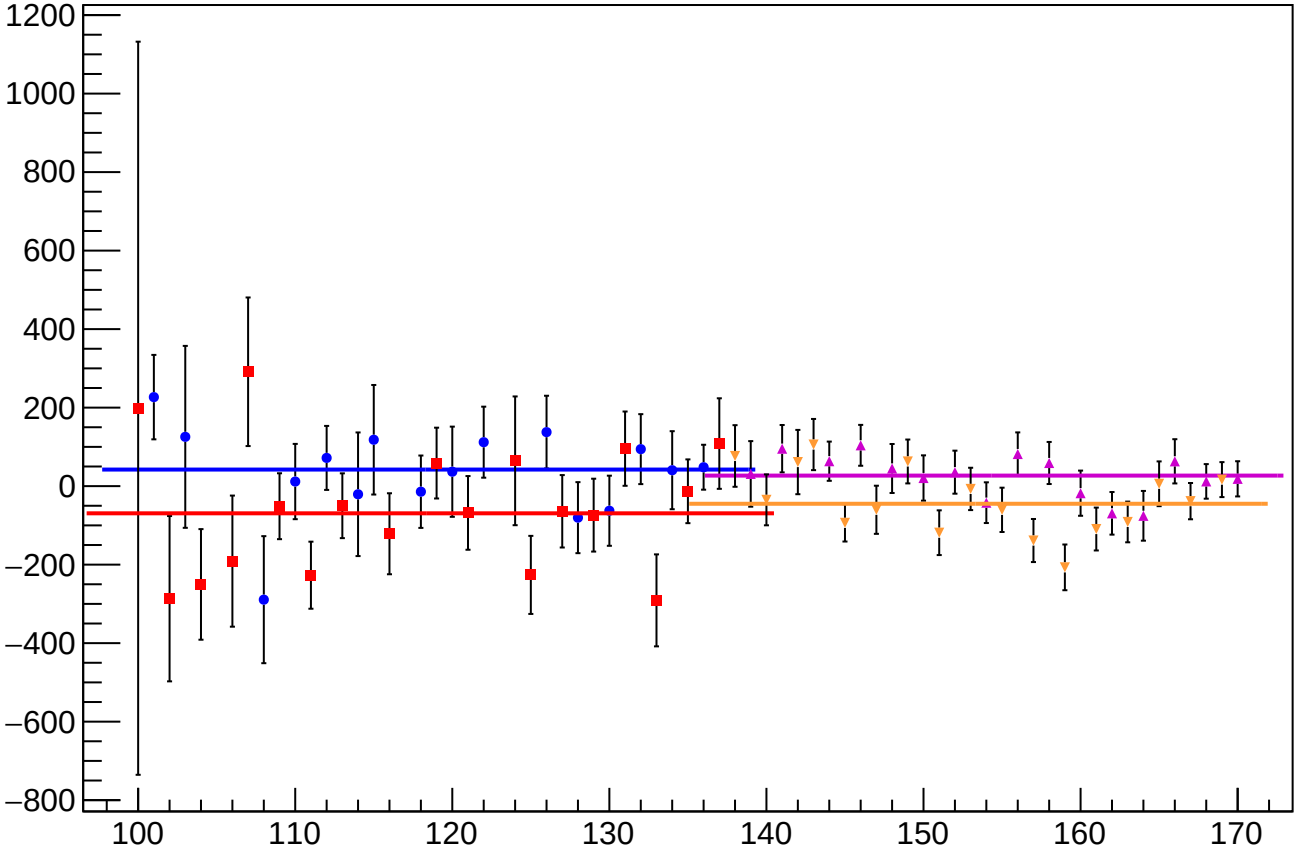
Left In: 0.000+/-0.000 $\chi^2$/NDF:1895725.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5499829.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 12261643.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 6758135.6/34

# reg_asym_sam_37_dd_mean vs Slug




Right In: 42.220+/-24.207 $\chi^2$/NDF: 13.6/15

Left Out: -44.930+/-13.618 $\chi^2$/NDF:32.1/16

Right Out: -69.249+/-24.418 $\chi^2$/NDF: 25.4/18

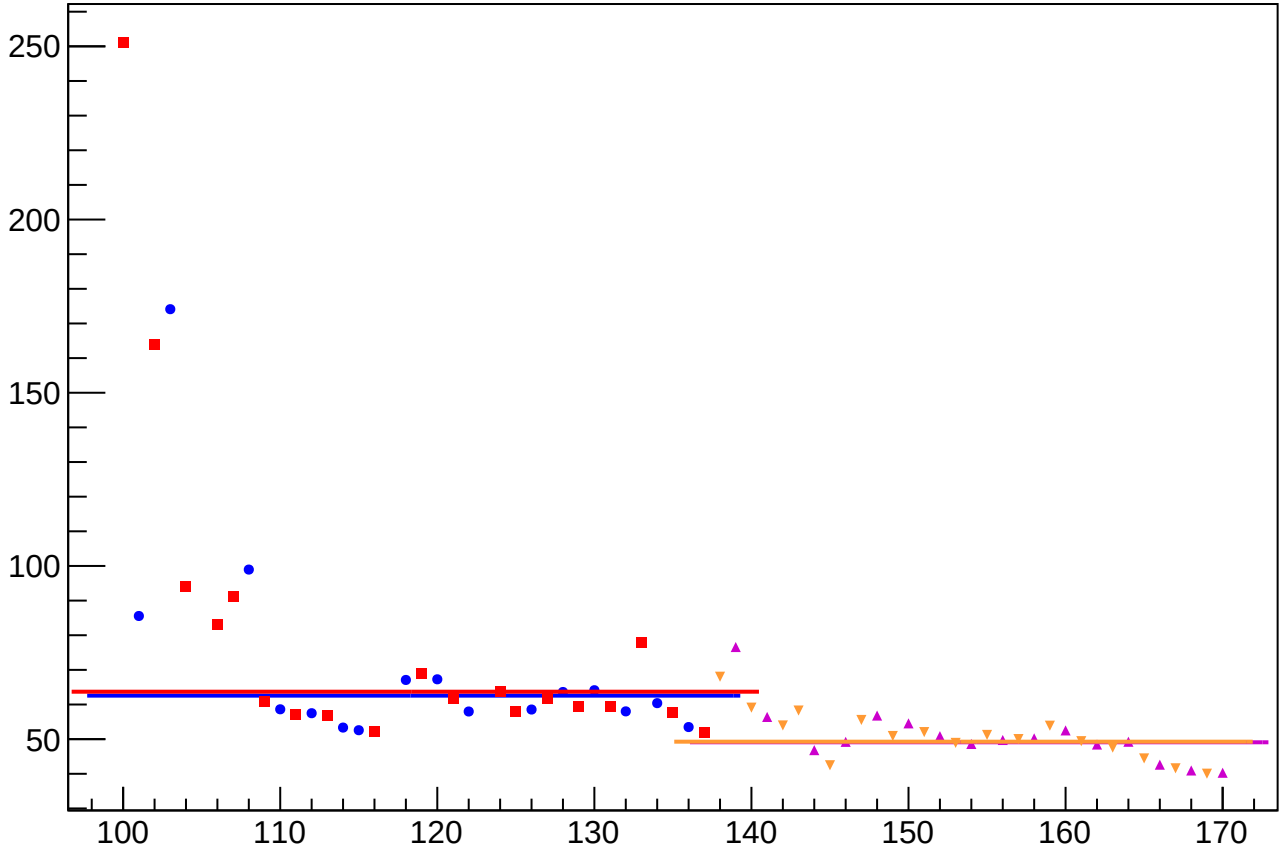
Left In: 26.839+/-13.678 $\chi^2$/NDF:14.2/15

+ sign -23.979+/-11.869 $\chi^2$/NDF: 55.5/32

All: -10.120+/-8.415 $\chi^2$/NDF: 109.6/67

- sign 3.890+/-11.933 $\chi^2$/NDF: 51.3/34

# reg_asym_sam_37_dd_rms vs Slug




Right In: 62.566+/-0.017 $\chi^2$/NDF: 758603.5/15

Left Out: 49.271+/-0.010 $\chi^2$/NDF:446224.5/16

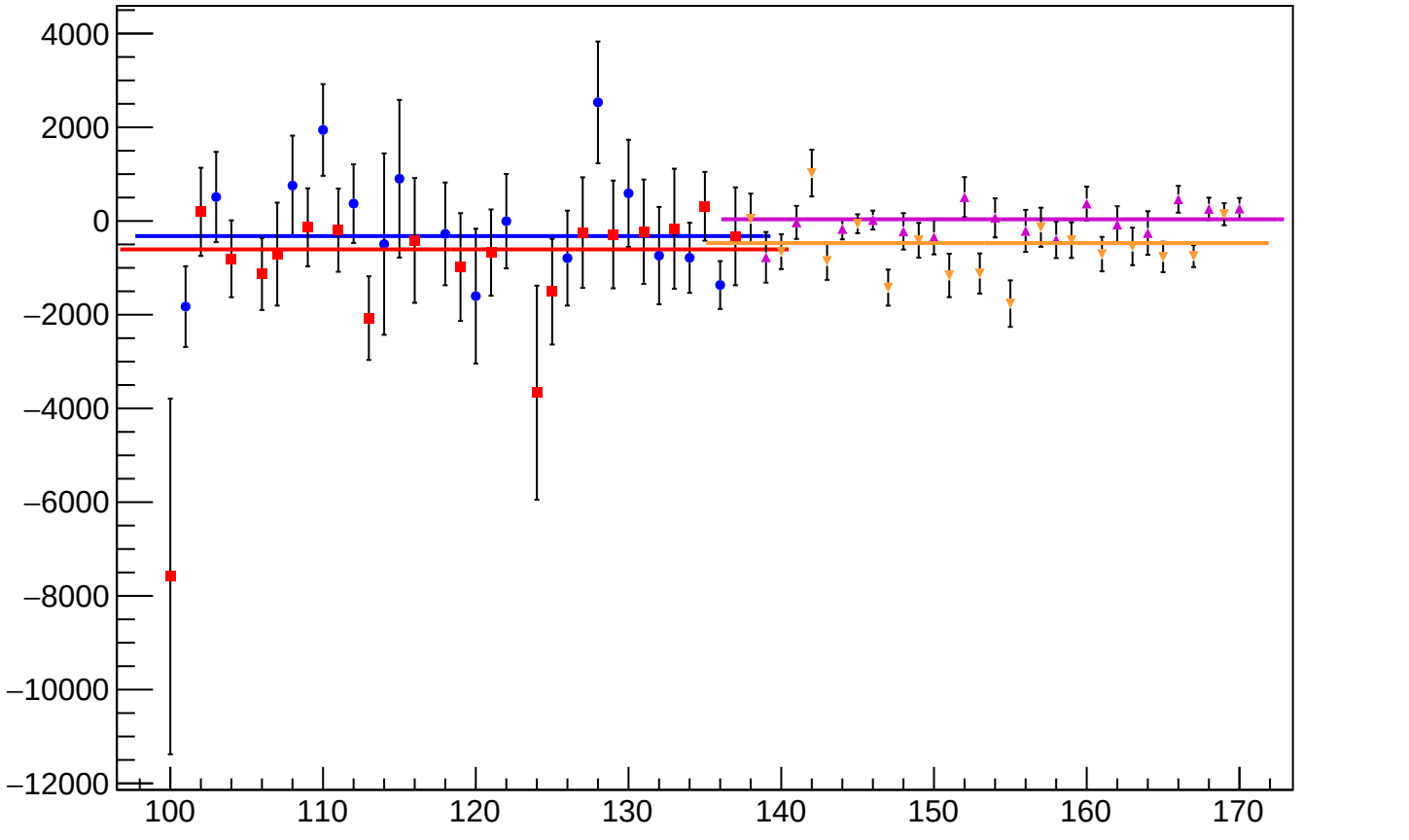
Right Out: 63.699+/-0.017 $\chi^2$/NDF: 834180.2/18

Left In: 49.097+/-0.010 $\chi^2$/NDF:481212.4/15

+ sign 52.467+/-0.008 $\chi^2$/NDF: 1663043.9/32

All: 52.525+/-0.006 $\chi^2$/NDF: 3522955.4/67

- sign 52.584+/-0.008 $\chi^2$/NDF: 1859814.6/34




Right In: -321.663+/-238.482 $\chi^2$/NDF: 22.7/15

Left Out: -471.386+/-82.735 $\chi^2$/NDF:43.0/16

Right Out: -605.859+/-233.643 $\chi^2$/NDF: 12.5/18

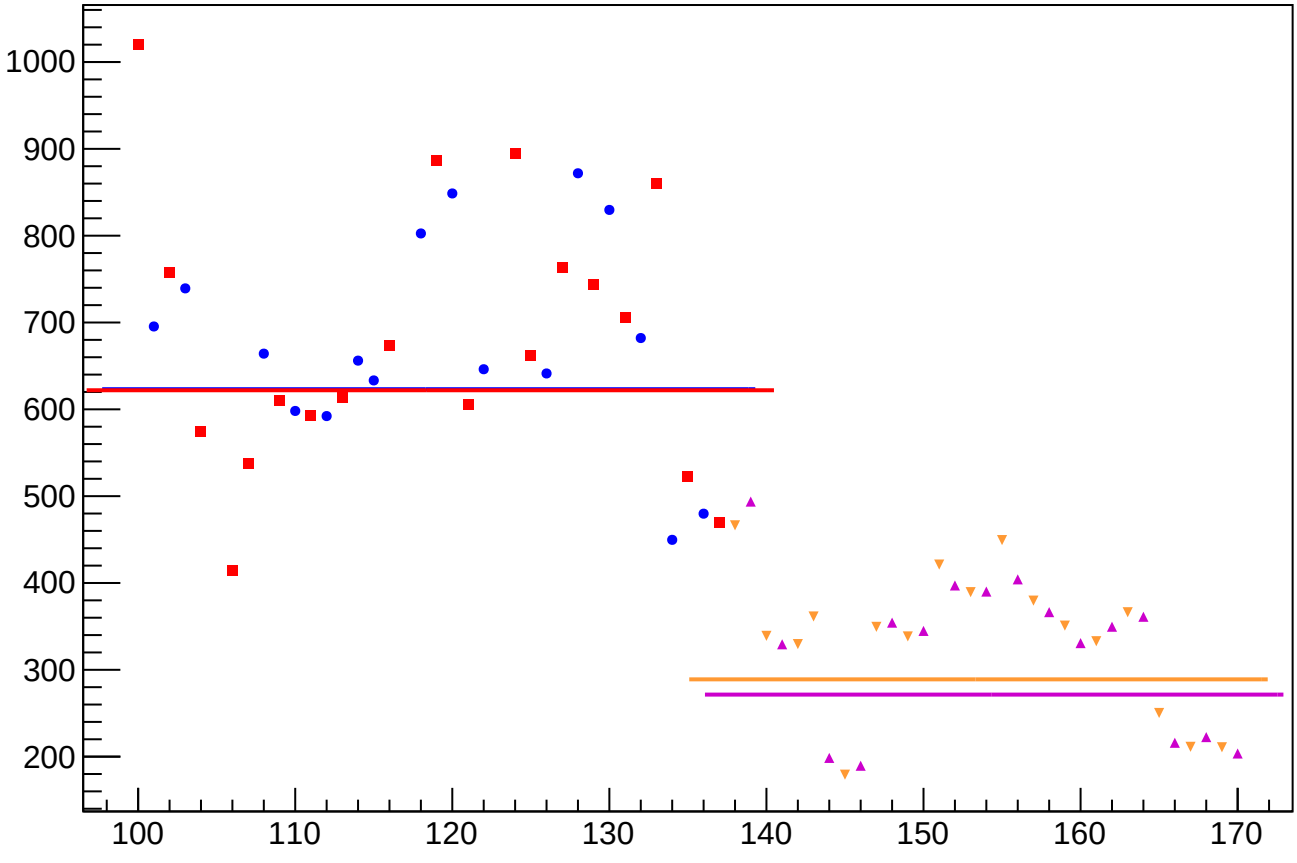
Left In: 36.302+/-78.717 $\chi^2$/NDF:13.0/15

+ sign -455.302+/-78.165 $\chi^2$/NDF: 66.0/32

All: -232.284+/-53.965 $\chi^2$/NDF: 113.8/67

- sign -29.159+/-74.597 $\chi^2$/NDF: 32.2/34

# asym_sam_37_dd_reg_correction_rms vs Slug




Right In: 623.181+/-0.169 $\chi^2$/NDF: 565524.7/15

Left Out: 289.011+/-0.059 $\chi^2$/NDF:2219756.1/16

Right Out: 621.975+/-0.165 $\chi^2$/NDF: 582591.9/18

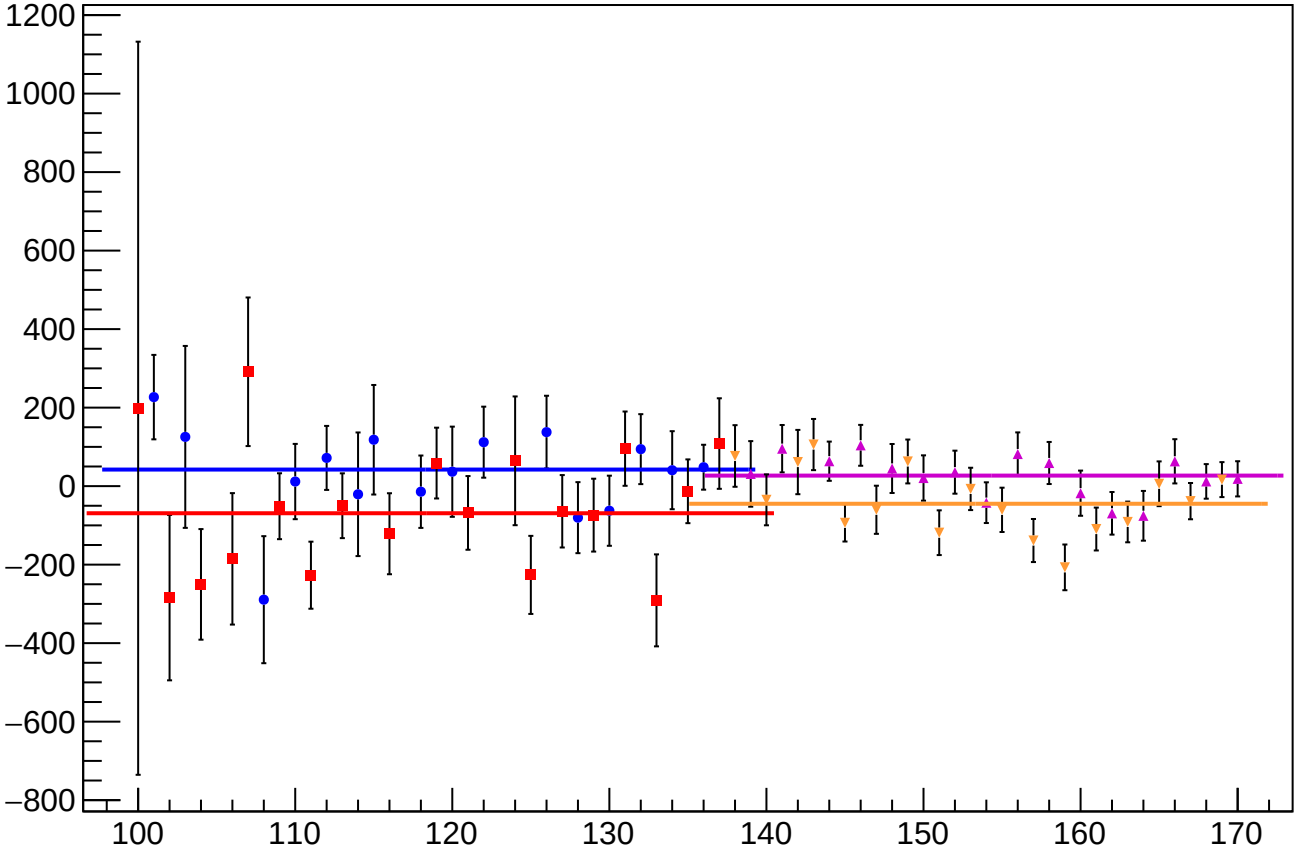
Left In: 271.452+/-0.056 $\chi^2$/NDF:2285879.3/15

+ sign 324.910+/-0.055 $\chi^2$/NDF: 6290345.2/32

All: 315.633+/-0.038 $\chi^2$/NDF: 13255256.2/67

- sign 307.184+/-0.053 $\chi^2$/NDF: 6911083.4/34

# cor_asym_sam_37_dd_mean vs Slug




Right In: 42.213+/-24.207 $\chi^2$/NDF: 13.6/15

Left Out: -44.927+/-13.618 $\chi^2$/NDF:32.1/16

Right Out: -69.068+/-24.420 $\chi^2$/NDF: 25.3/18

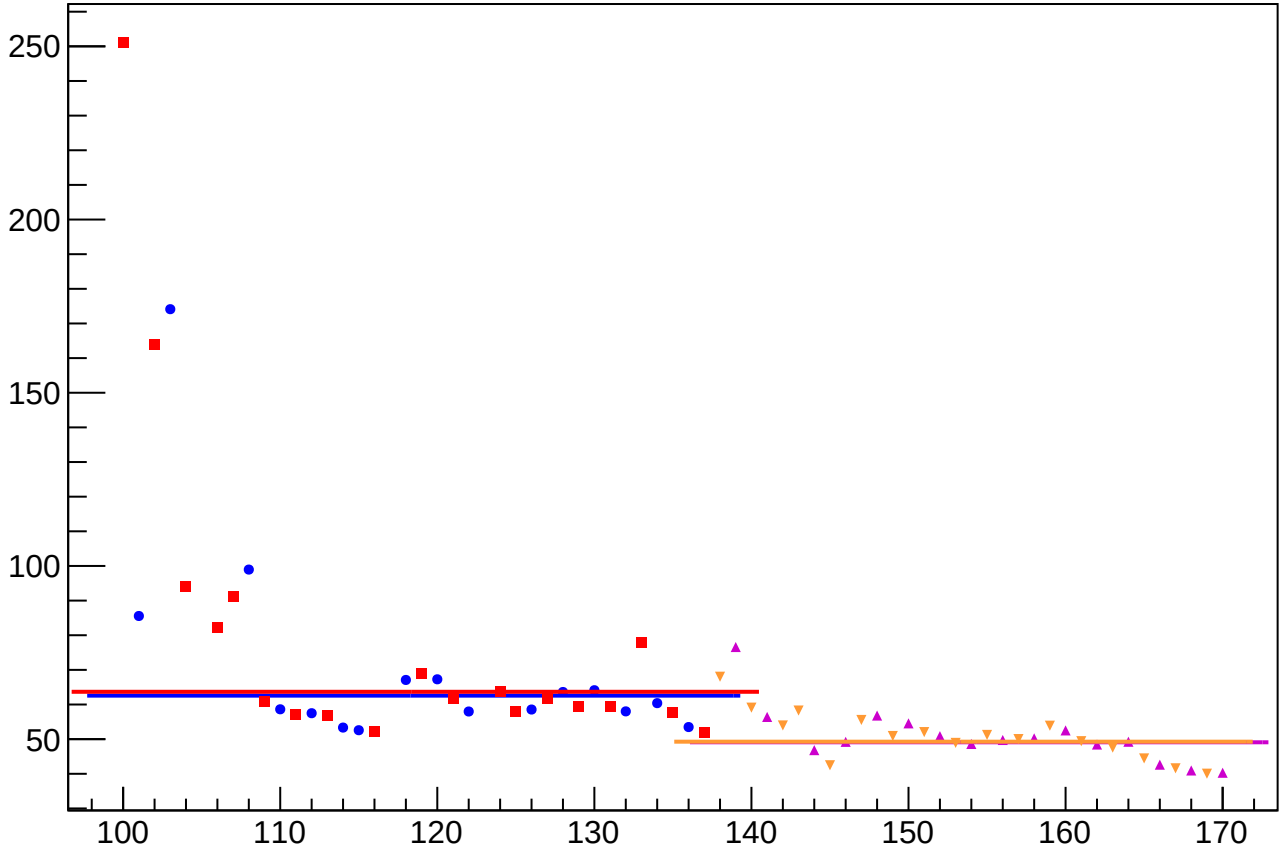
Left In: 26.839+/-13.678 $\chi^2$/NDF:14.2/15

+ sign -23.979+/-11.869 $\chi^2$/NDF: 55.5/32

All: -10.097+/-8.415 $\chi^2$/NDF: 109.5/67

- sign 3.936+/-11.933 $\chi^2$/NDF: 51.2/34

# cor_asym_sam_37_dd_rms vs Slug




Right In: 62.566+/-0.017 $\chi^2$/NDF: 758605.6/15

Left Out: 49.271+/-0.010 $\chi^2$/NDF:446224.4/16

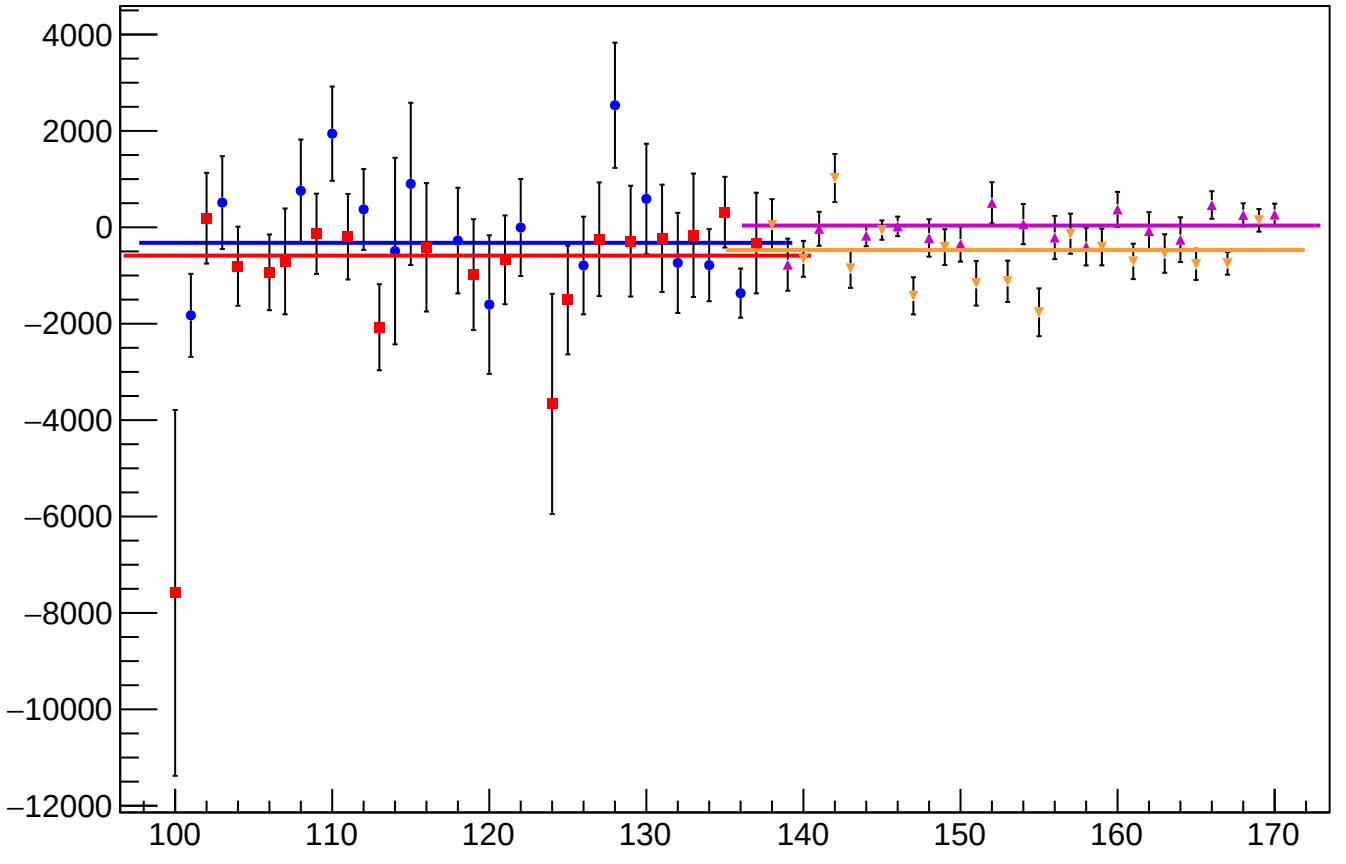
Right Out: 63.675+/-0.017 $\chi^2$/NDF: 831432.5/18

Left In: 49.097+/-0.010 $\chi^2$/NDF:481212.4/15

+ sign 52.467+/-0.008 $\chi^2$/NDF: 1663045.7/32

All: 52.522+/-0.006 $\chi^2$/NDF: 3518351.0/67

- sign 52.578+/-0.008 $\chi^2$/NDF: 1855218.2/34




Right In: -321.660+/-238.484 $\chi^2$/NDF: 22.7/15

Left Out: -471.380+/-82.735 $\chi^2$/NDF:43.0/16

Right Out: -587.224+/-234.080 $\chi^2$/NDF: 12.2/18

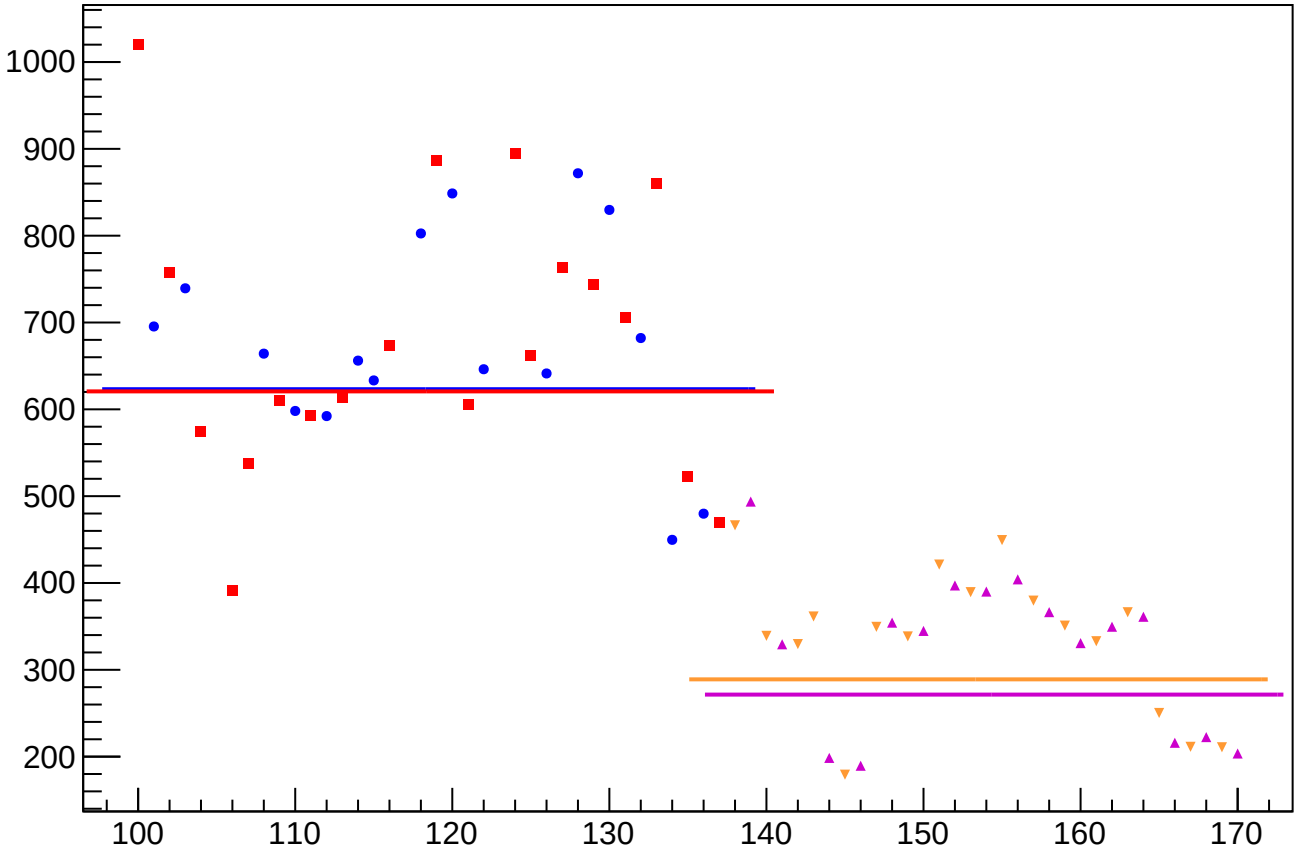
Left In: 36.298+/-78.717 $\chi^2$/NDF:13.0/15

+ sign -455.297+/-78.165 $\chi^2$/NDF: 66.0/32

All: -231.218+/-53.971 $\chi^2$/NDF: 113.2/67

- sign -27.050+/-74.611 $\chi^2$/NDF: 31.5/34

# asym_sam_37_dd_cor_correction_rms vs Slug




Right In: 623.184+/-0.169 $\chi^2$/NDF: 565557.0/15

Left Out: 289.011+/-0.059 $\chi^2$/NDF:2219770.6/16

Right Out: 620.673+/-0.166 $\chi^2$/NDF: 610523.8/18

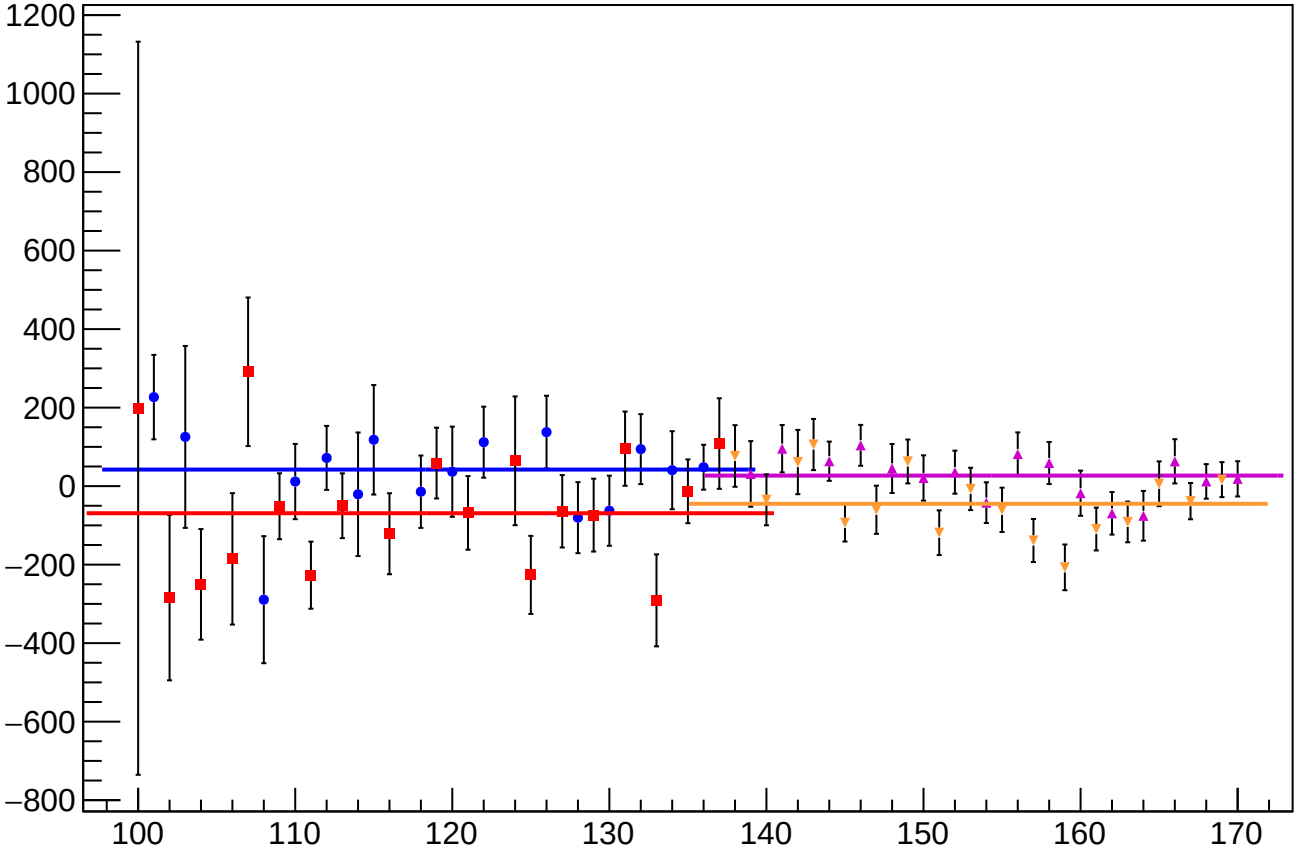
Left In: 271.452+/-0.056 $\chi^2$/NDF:2285880.0/15

+ sign 324.909+/-0.055 $\chi^2$/NDF: 6290423.7/32

All: 315.503+/-0.038 $\chi^2$/NDF: 13241382.8/67

- sign 306.932+/-0.053 $\chi^2$/NDF: 6895603.2/34

# eigen_cor_asym_sam_37_dd_mean vs Slug




Right In: 42.213+/-24.207 $\chi^2$/NDF: 13.6/15

Left Out: -44.927+/-13.618 $\chi^2$/NDF:32.1/16

Right Out: -69.068+/-24.420 $\chi^2$/NDF: 25.3/18

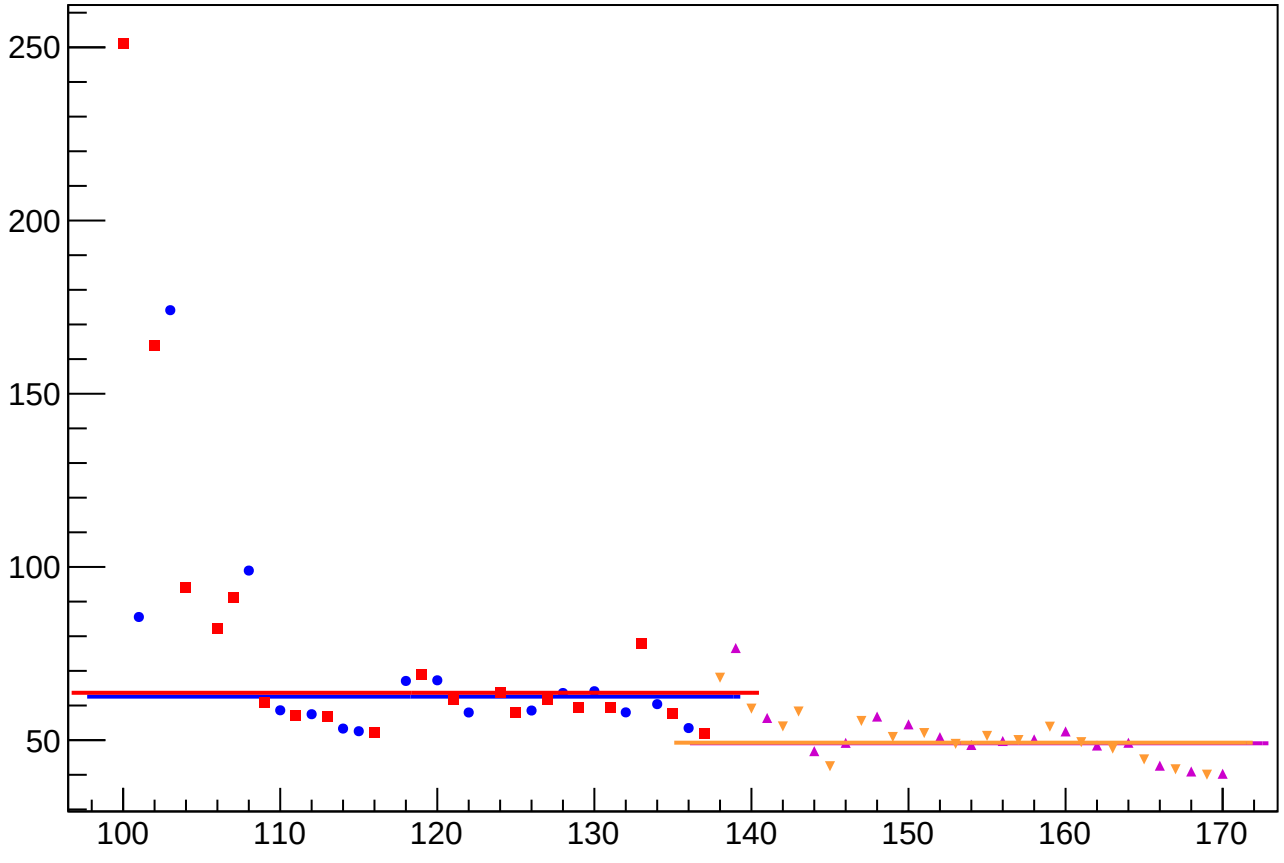
Left In: 26.839+/-13.678 $\chi^2$/NDF:14.2/15

+ sign -23.979+/-11.869 $\chi^2$/NDF: 55.5/32

All: -10.097+/-8.415 $\chi^2$/NDF: 109.5/67

- sign 3.936+/-11.933 $\chi^2$/NDF: 51.2/34

# eigen_cor_asym_sam_37_dd_rms vs Slug




Right In: 62.566+/-0.017 $\chi^2$/NDF: 758605.6/15

Left Out: 49.271+/-0.010 $\chi^2$/NDF:446224.4/16

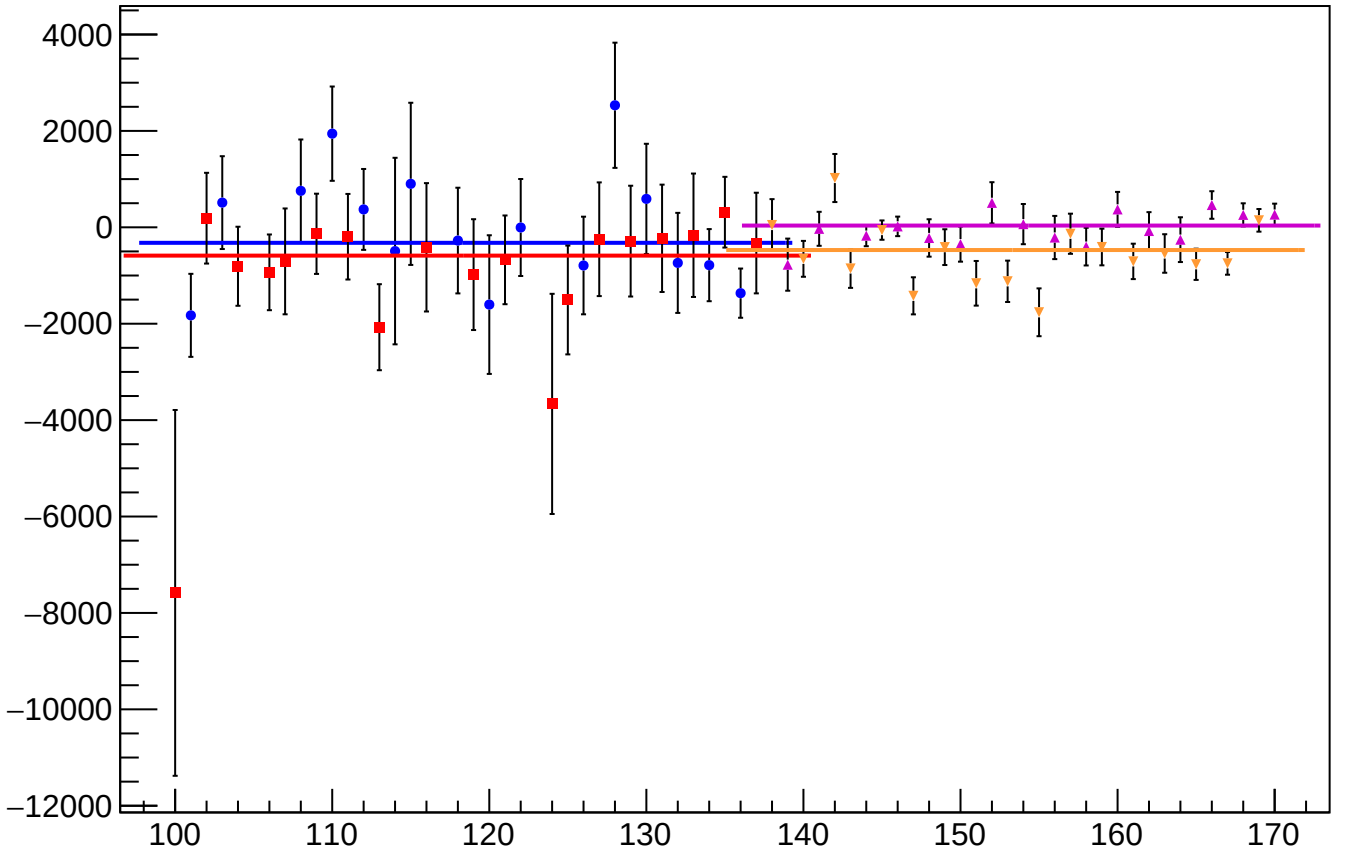
Right Out: 63.675+/-0.017 $\chi^2$/NDF: 831432.5/18

Left In: 49.097+/-0.010 $\chi^2$/NDF:481212.4/15

+ sign 52.467+/-0.008 $\chi^2$/NDF: 1663045.7/32

All: 52.522+/-0.006 $\chi^2$/NDF: 3518351.0/67

- sign 52.578+/-0.008 $\chi^2$/NDF: 1855218.2/34




Right In: -321.660+/-238.484 $\chi^2$/NDF: 22.7/15

Left Out: -471.380+/-82.735 $\chi^2$/NDF:43.0/16

Right Out: -587.224+/-234.080 $\chi^2$/NDF: 12.2/18

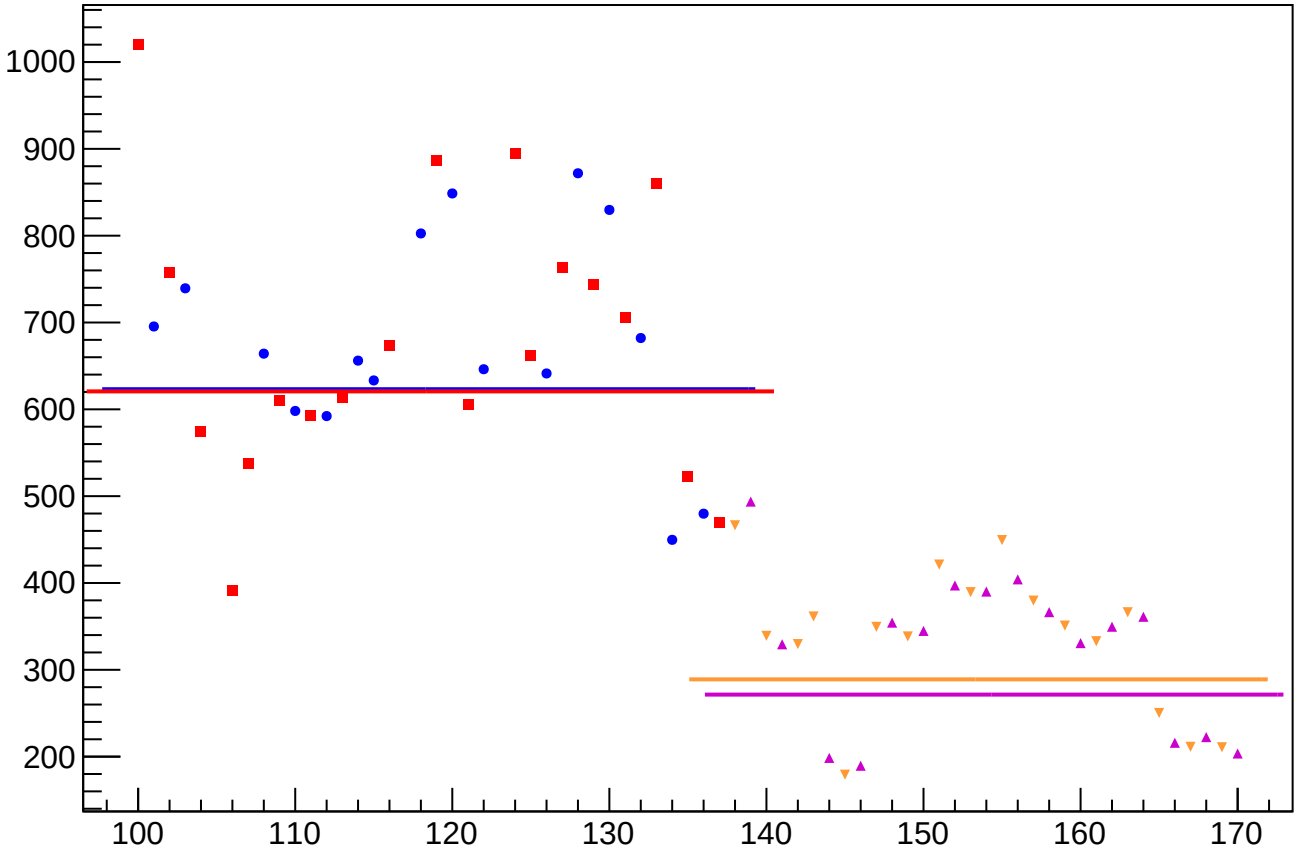
Left In: 36.298+/-78.717 $\chi^2$/NDF:13.0/15

+ sign -455.297+/-78.165 $\chi^2$/NDF: 66.0/32

All: -231.218+/-53.971 $\chi^2$/NDF: 113.2/67

- sign -27.050+/-74.611 $\chi^2$/NDF: 31.5/34

# asym_sam_37_dd_eigen_cor_correction_rms vs Slug




Right In: 623.184+/-0.169 $\chi^2$/NDF: 565557.0/15

Left Out: 289.011+/-0.059 $\chi^2$/NDF:2219770.6/16

Right Out: 620.673+/-0.166 $\chi^2$/NDF: 610523.8/18

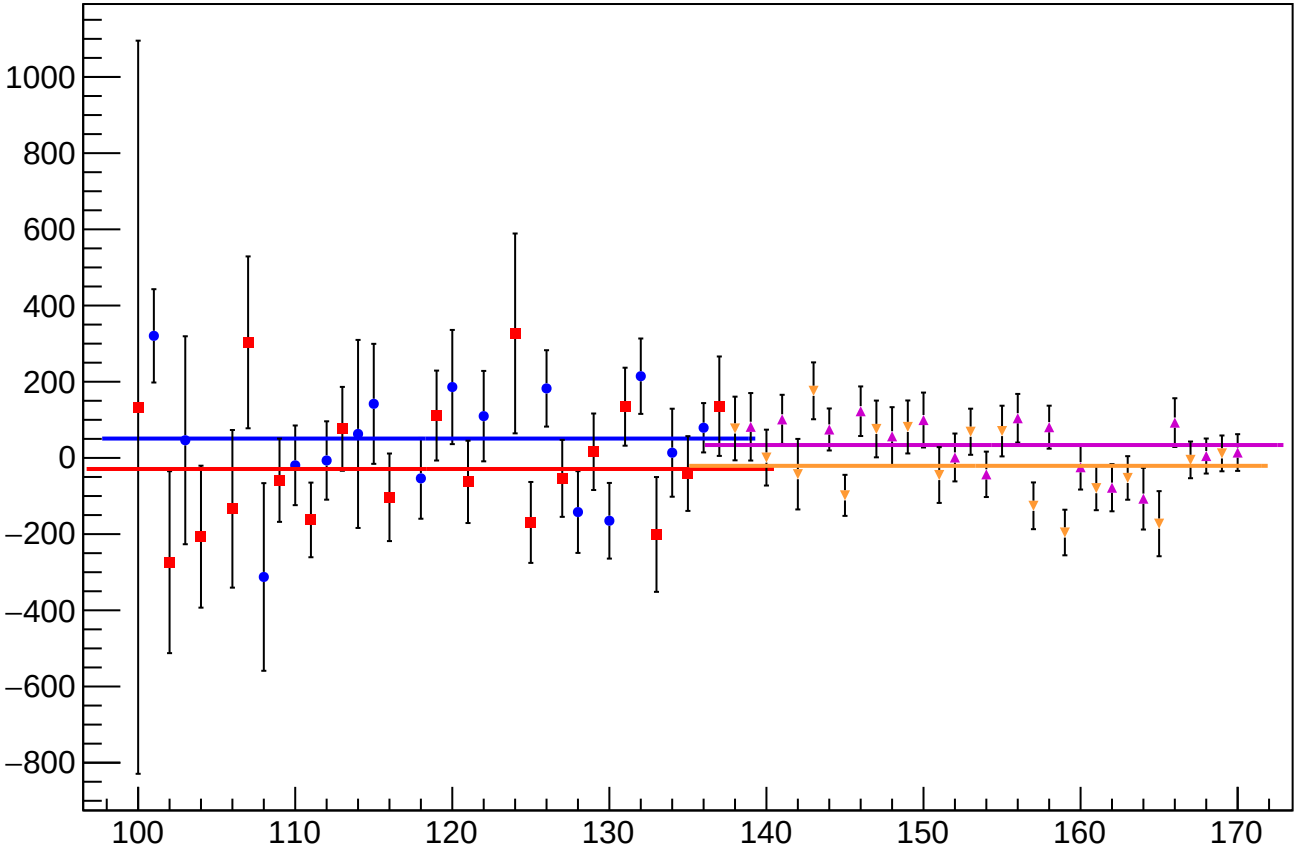
Left In: 271.452+/-0.056 $\chi^2$/NDF:2285880.0/15

+ sign 324.909+/-0.055 $\chi^2$/NDF: 6290423.7/32

All: 315.503+/-0.038 $\chi^2$/NDF: 13241382.8/67

- sign 306.932+/-0.053 $\chi^2$/NDF: 6895603.2/34

# dit_asym_sam_37_dd_mean vs Slug




Right In: 50.840+/-28.316 $\chi^2$/NDF: 22.9/15

Left Out: -20.770+/-15.405 $\chi^2$/NDF:35.1/16

Right Out: -29.040+/-28.910 $\chi^2$/NDF: 18.5/18

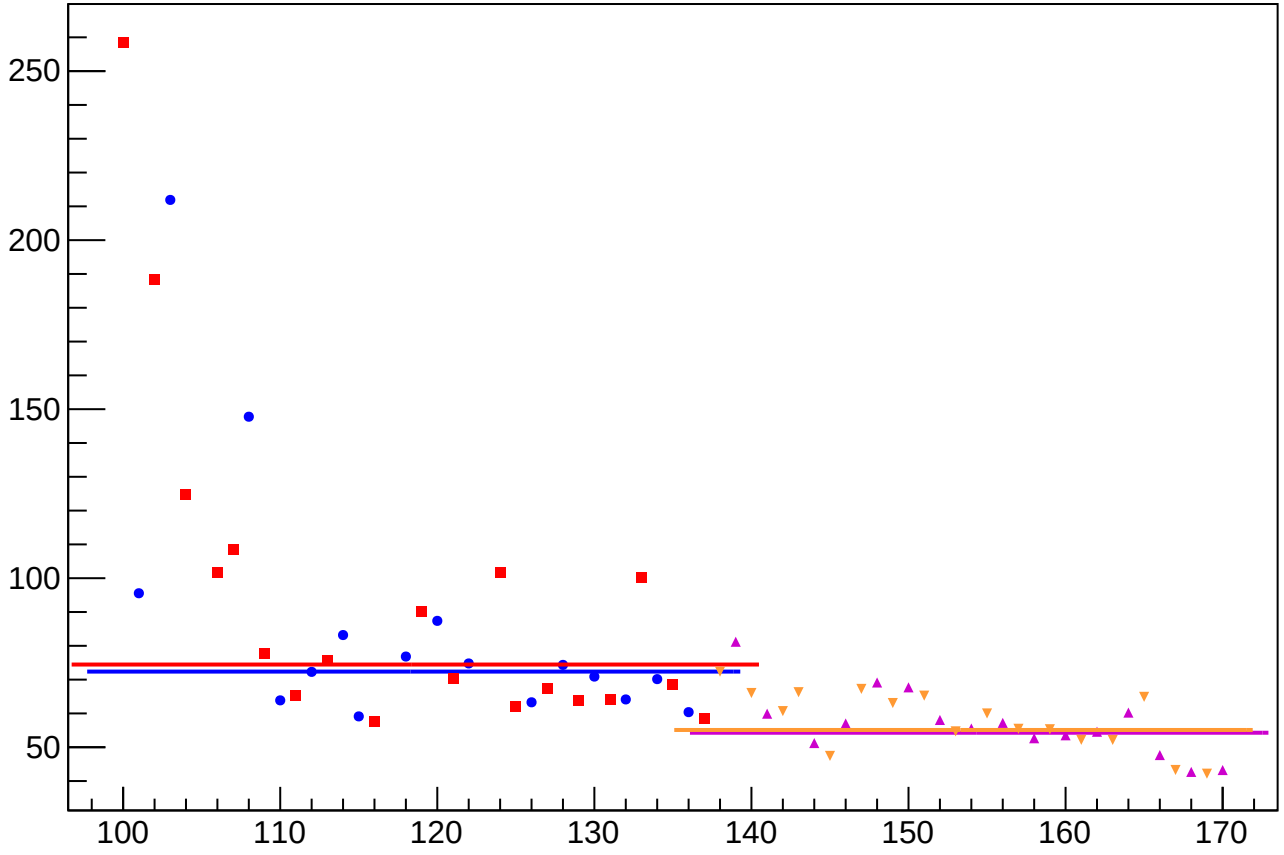
Left In: 33.857+/-15.352 $\chi^2$/NDF:17.2/15

+ sign -4.417+/-13.532 $\chi^2$/NDF: 62.9/32

All: 7.779+/-9.578 $\chi^2$/NDF: 104.0/67

- sign 20.022+/-13.559 $\chi^2$/NDF: 39.4/34

# dit_asym_sam_37_dd_rms vs Slug




Right In: 72.378+/-0.020 $\chi^2$/NDF: 938175.3/15

Left Out: 55.106+/-0.011 $\chi^2$/NDF:660386.4/16

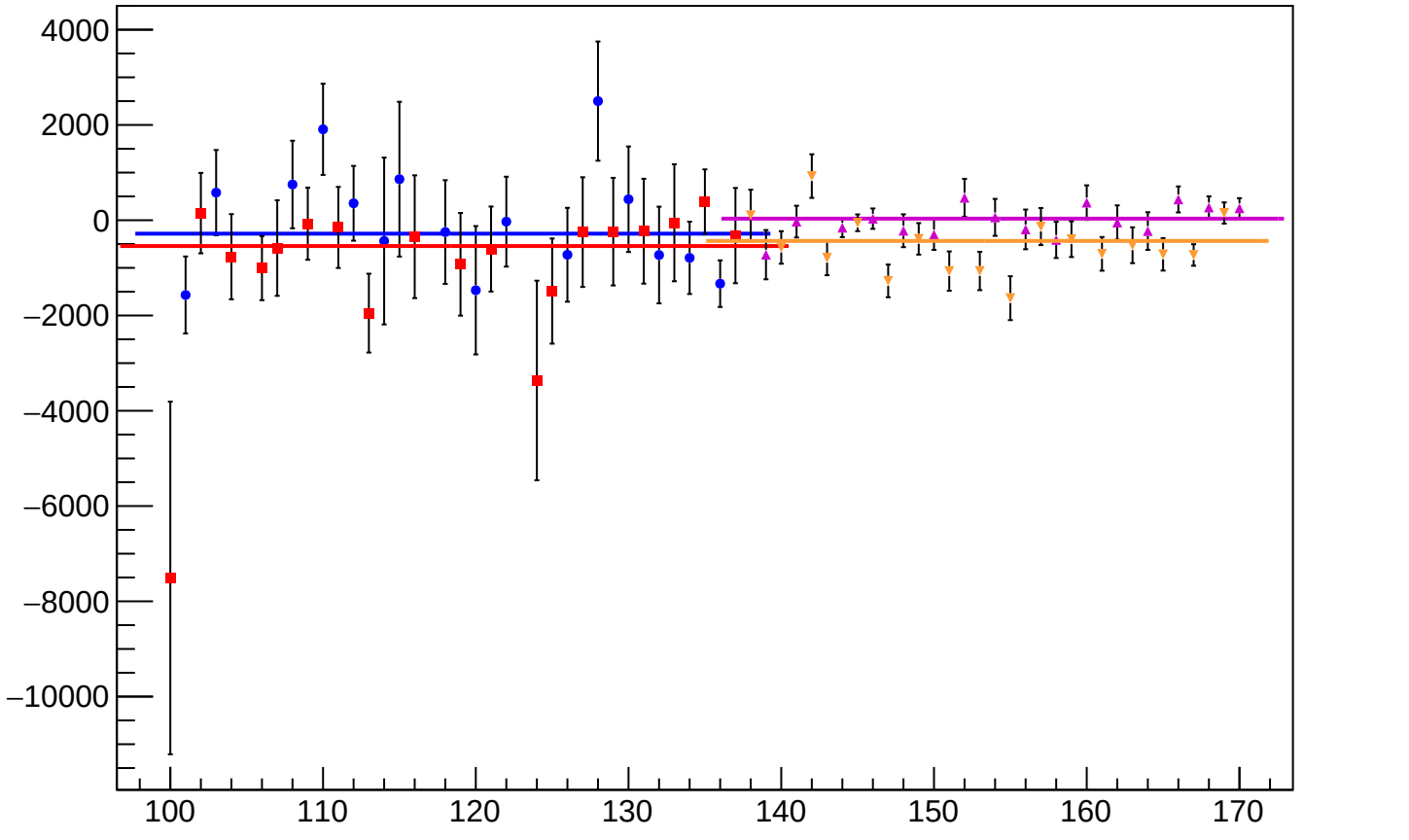
Right Out: 74.463+/-0.020 $\chi^2$/NDF: 1052296.6/18

Left In: 54.289+/-0.011 $\chi^2$/NDF:633065.5/15

+ sign 59.051+/-0.010 $\chi^2$/NDF: 2172713.4/32

All: 58.889+/-0.007 $\chi^2$/NDF: 4618418.9/67

- sign 58.726+/-0.010 $\chi^2$/NDF: 2445131.9/34




Right In: -282.039+/-227.789 $\chi^2$/NDF: 22.8/15

Left Out: -434.333+/-77.074 $\chi^2$/NDF:43.9/16

Right Out: -542.028+/-220.904 $\chi^2$/NDF: 13.3/18

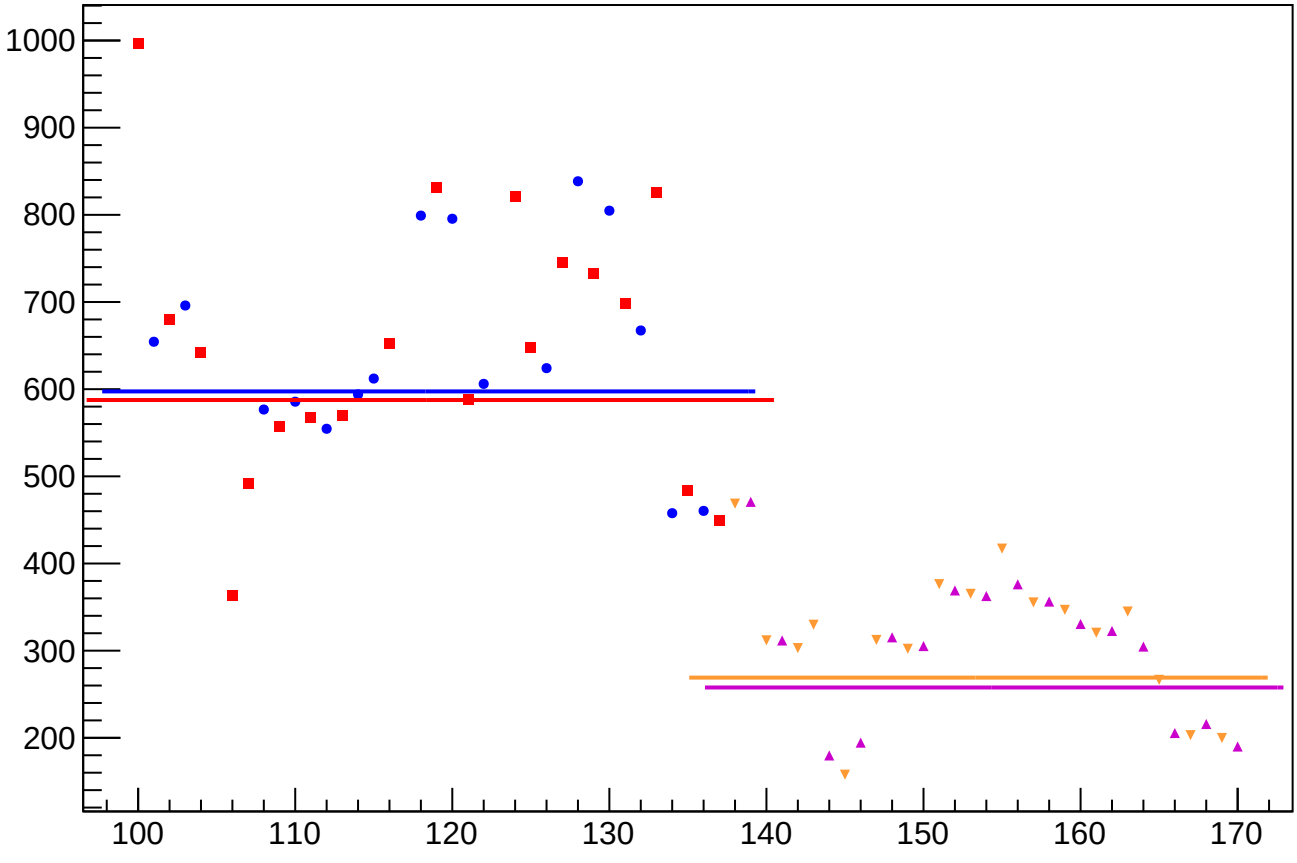
Left In: 33.156+/-74.575 $\chi^2$/NDF:13.2/15

+ sign -418.688+/-73.008 $\chi^2$/NDF: 67.1/32

All: -215.759+/-50.773 $\chi^2$/NDF: 114.6/67

- sign -25.689+/-70.657 $\chi^2$/NDF: 32.6/34

# asym_sam_37_dd_dit_correction_rms vs Slug




Right In: 597.438+/-0.161 $\chi^2$/NDF: 533791.9/15

Left Out: 269.089+/-0.054 $\chi^2$/NDF:2360092.2/16

Right Out: 587.565+/-0.156 $\chi^2$/NDF: 689035.8/18

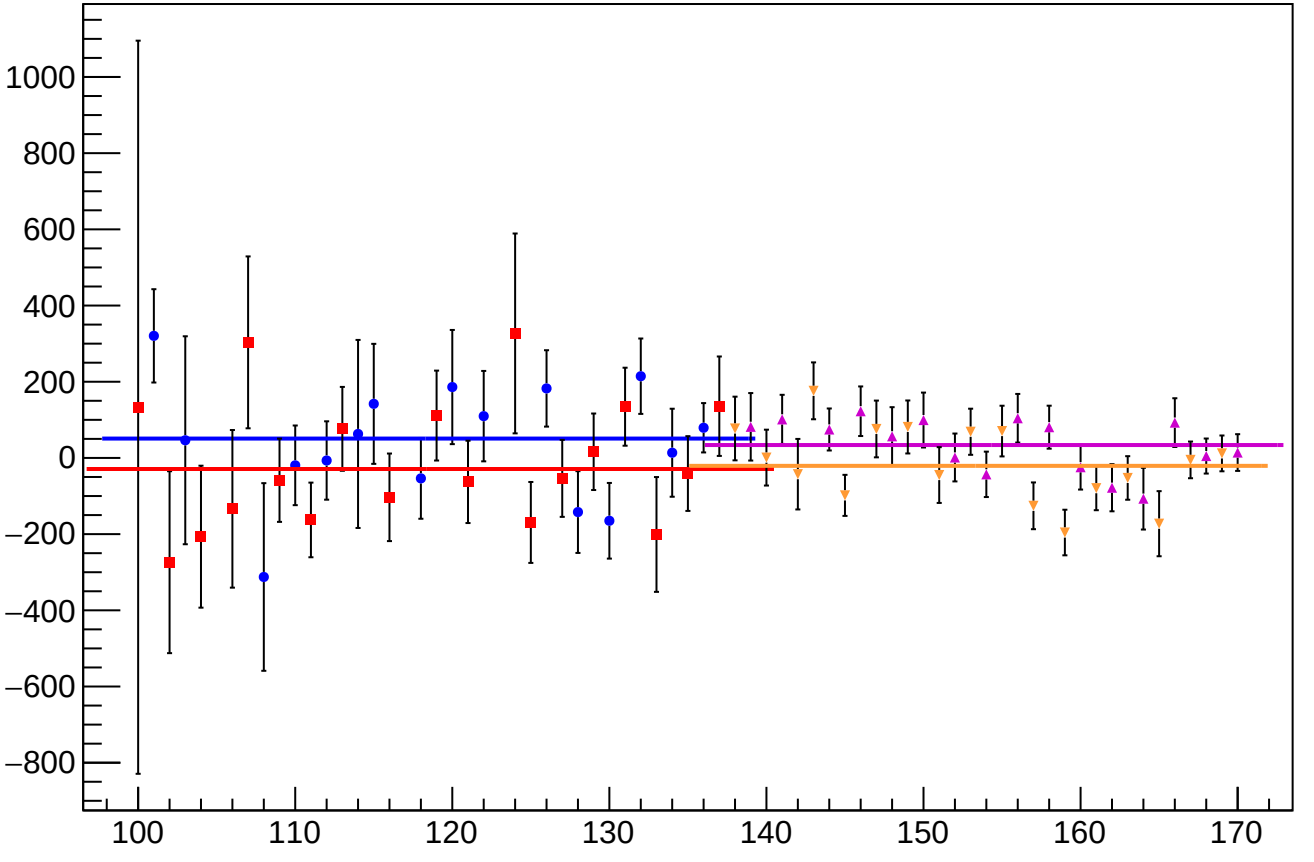
Left In: 257.756+/-0.053 $\chi^2$/NDF:2091642.3/15

+ sign 302.819+/-0.052 $\chi^2$/NDF: 6622613.5/32

All: 296.973+/-0.036 $\chi^2$/NDF: 13430121.1/67

- sign 291.497+/-0.050 $\chi^2$/NDF: 6782674.0/34

# eigen_dit_asym_sam_37_dd_mean vs Slug




Right In: 50.840+/-28.316 $\chi^2$/NDF: 22.9/15

Left Out: -20.769+/-15.405 $\chi^2$/NDF:35.1/16

Right Out: -29.038+/-28.910 $\chi^2$/NDF: 18.5/18

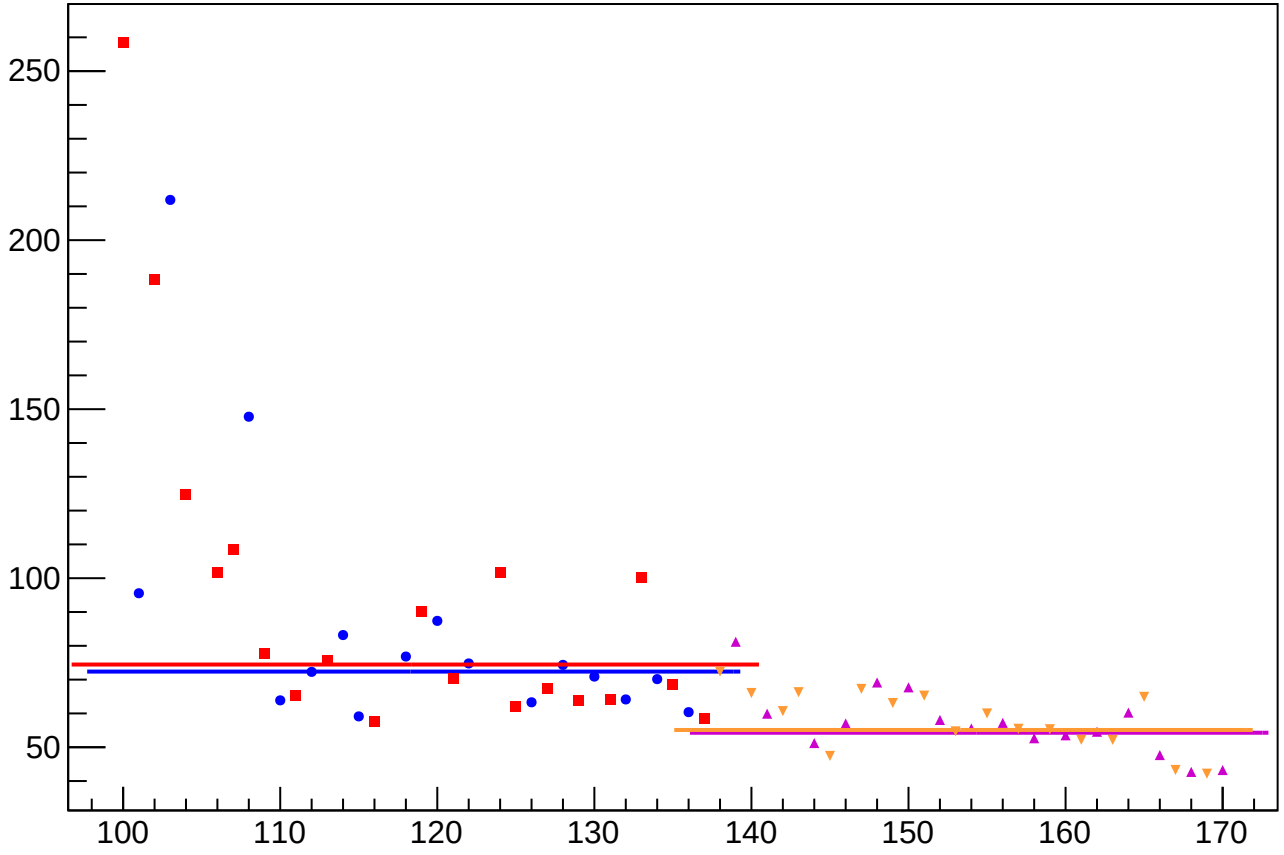
Left In: 33.857+/-15.352 $\chi^2$/NDF:17.2/15

+ sign -4.416+/-13.532 $\chi^2$/NDF: 62.9/32

All: 7.779+/-9.578 $\chi^2$/NDF: 104.0/67

- sign 20.023+/-13.559 $\chi^2$/NDF: 39.4/34

# eigen_dit_asym_sam_37_dd_rms vs Slug




Right In: 72.378+/-0.020 $\chi^2$/NDF: 938180.0/15

Left Out: 55.106+/-0.011 $\chi^2$/NDF:660408.1/16

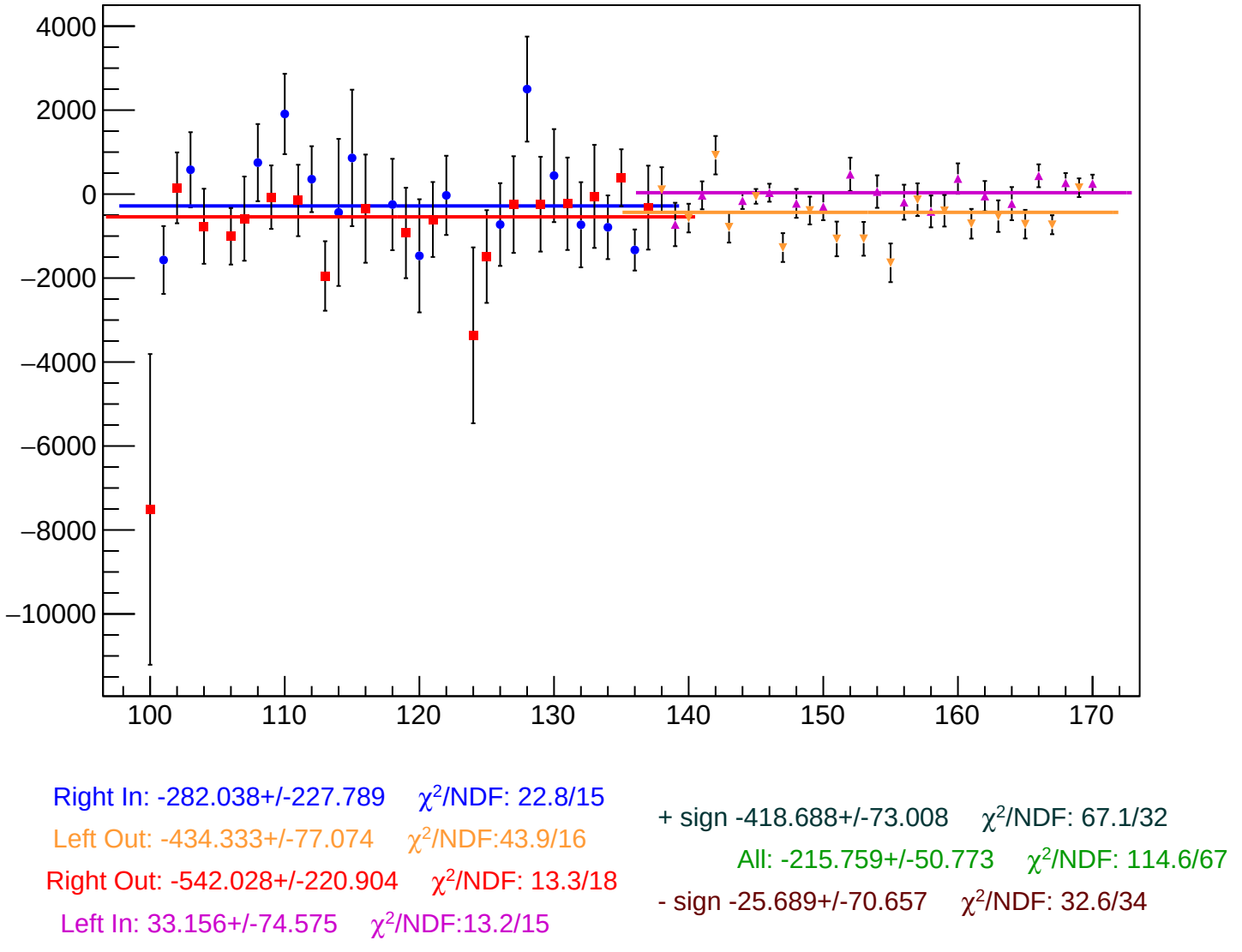
Right Out: 74.463+/-0.020 $\chi^2$/NDF: 1052290.0/18

Left In: 54.289+/-0.011 $\chi^2$/NDF:633076.0/15

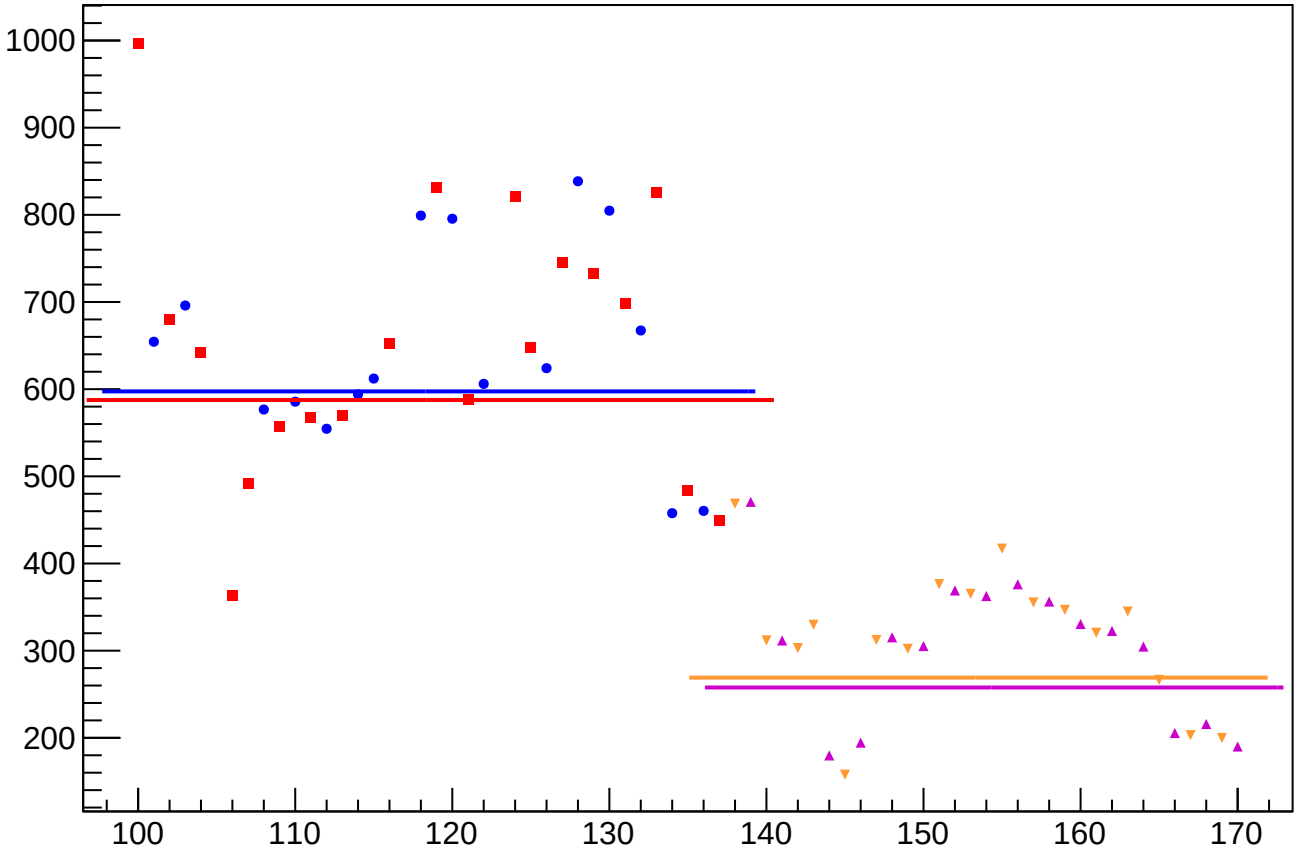
+ sign 59.051+/-0.010 $\chi^2$/NDF: 2172723.7/32

All: 58.889+/-0.007 $\chi^2$/NDF: 4618421.6/67

- sign 58.726+/-0.010 $\chi^2$/NDF: 2445124.4/34


asym_sam_37_dd_eigen_dit_correction_mean vs Slug
4000
2000
0
−2000
−4000
−6000
−8000
−10000
100
110
120
130
140
150
160
170
Right In: -282.038+/-227.789 χ²/NDF: 22.8/15
Left Out: -434.333+/-77.074 χ²/NDF:43.9/16
Right Out: -542.028+/-220.904 χ²/NDF: 13.3/18
Left In: 33.156+/-74.575 χ²/NDF:13.2/15
+ sign -418.688+/-73.008 χ²/NDF: 67.1/32
All: -215.759+/-50.773 χ²/NDF: 114.6/67
- sign -25.689+/-70.657 χ²/NDF: 32.6/34

# asym_sam_37_dd_eigen_dit_correction_rms vs Slug




Right In: 597.439+/-0.161 $\chi^2$/NDF: 533790.1/15

Left Out: 269.089+/-0.054 $\chi^2$/NDF:2360079.3/16

Right Out: 587.565+/-0.156 $\chi^2$/NDF: 689033.6/18

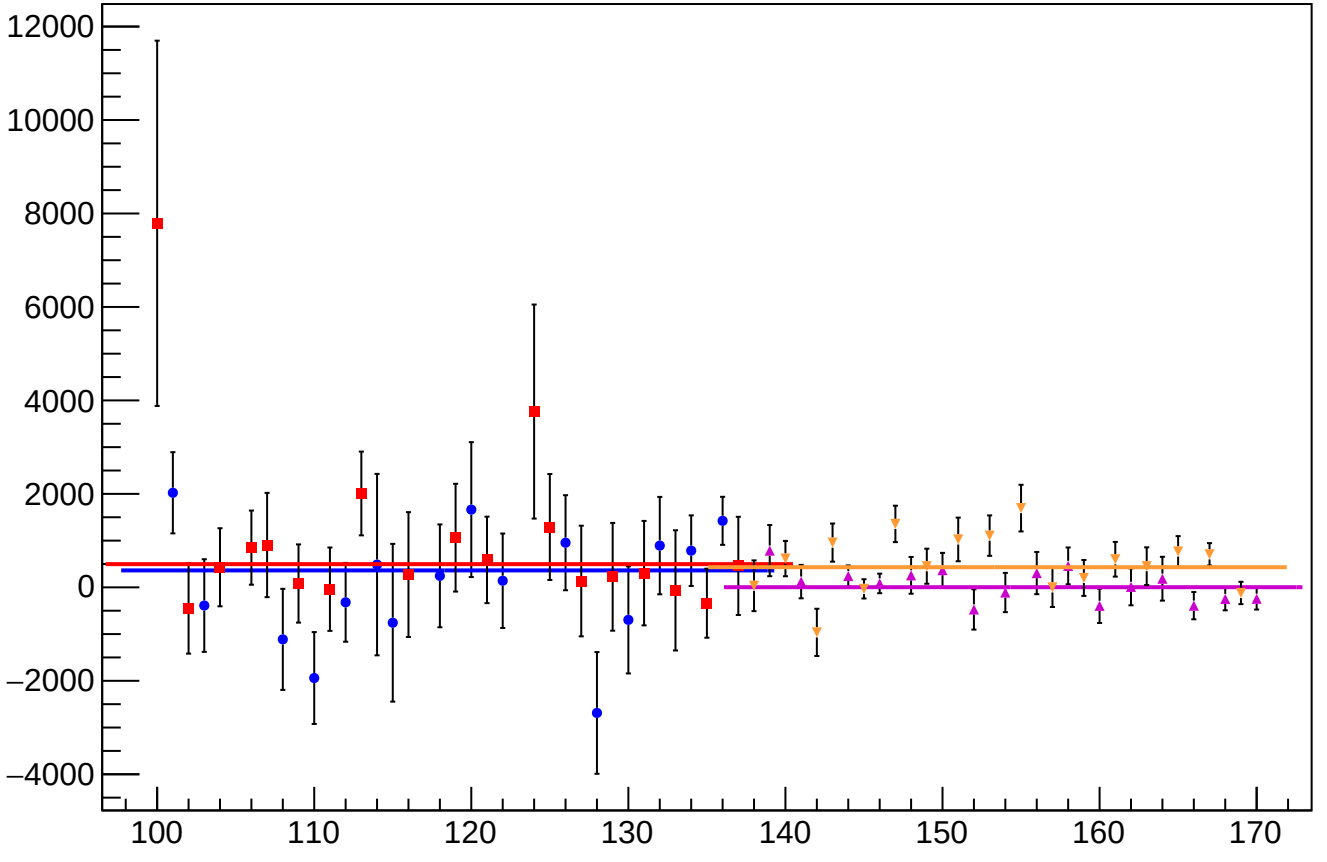
Left In: 257.755+/-0.053 $\chi^2$/NDF:2091632.6/15

+ sign 302.818+/-0.052 $\chi^2$/NDF: 6622605.8/32

All: 296.973+/-0.036 $\chi^2$/NDF: 13430103.1/67

- sign 291.497+/-0.050 $\chi^2$/NDF: 6782663.5/34

# asym_sam_37_dd_mean vs Slug




Right In: 362.384+/-240.303 $\chi^2$/NDF: 25.1/15

Left Out: 431.098+/-84.069 $\chi^2$/NDF:40.5/16

Right Out: 496.639+/-236.029 $\chi^2$/NDF: 12.7/18

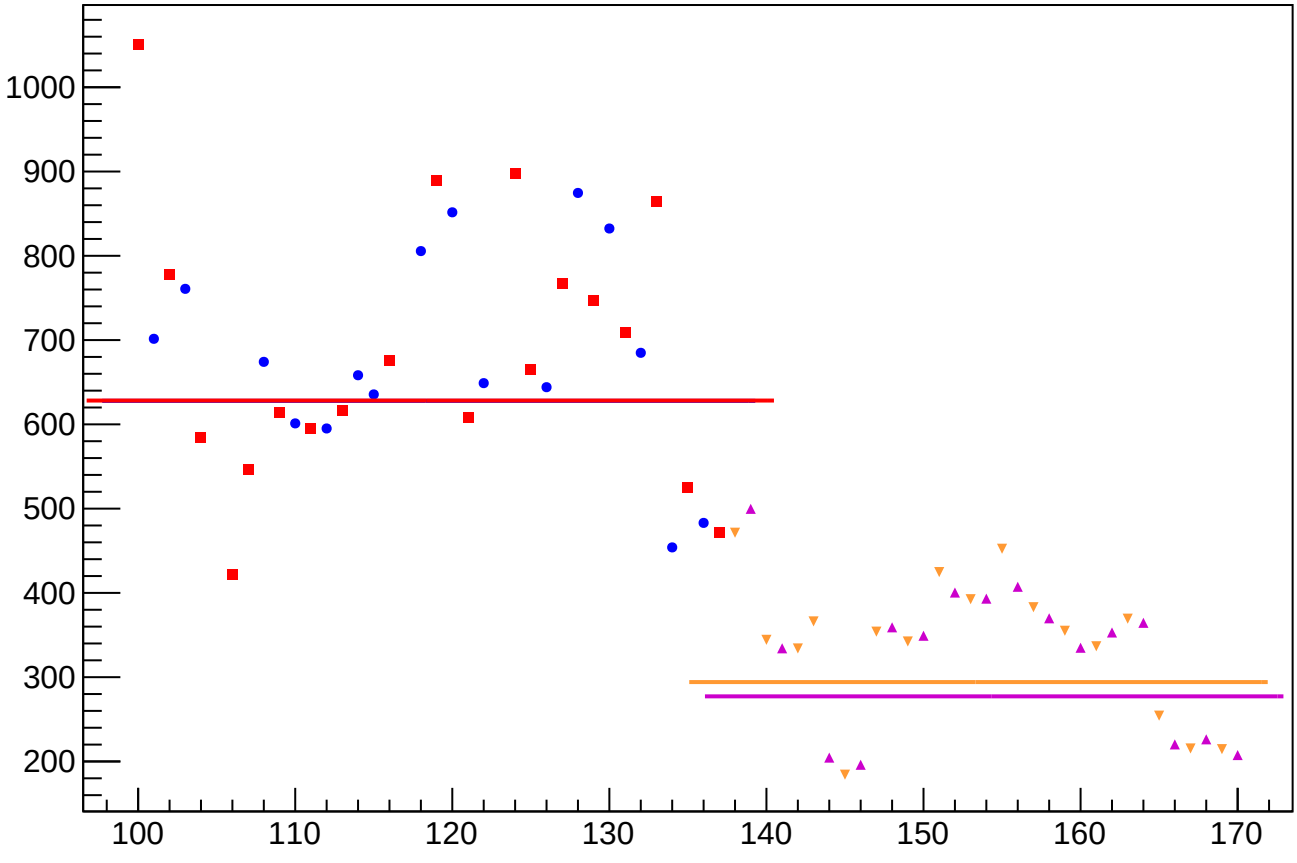
Left In: 3.305+/-80.202 $\chi^2$/NDF:13.3/15

+ sign 423.605+/-79.353 $\chi^2$/NDF: 65.7/32

All: 230.873+/-54.864 $\chi^2$/NDF: 106.9/67

- sign 54.370+/-75.938 $\chi^2$/NDF: 29.9/34

# asym_sam_37_dd_rms vs Slug




Right In: 627.896+/-0.170 $\chi^2$/NDF: 566795.7/15

Left Out: 294.194+/-0.059 $\chi^2$/NDF:2135071.0/16

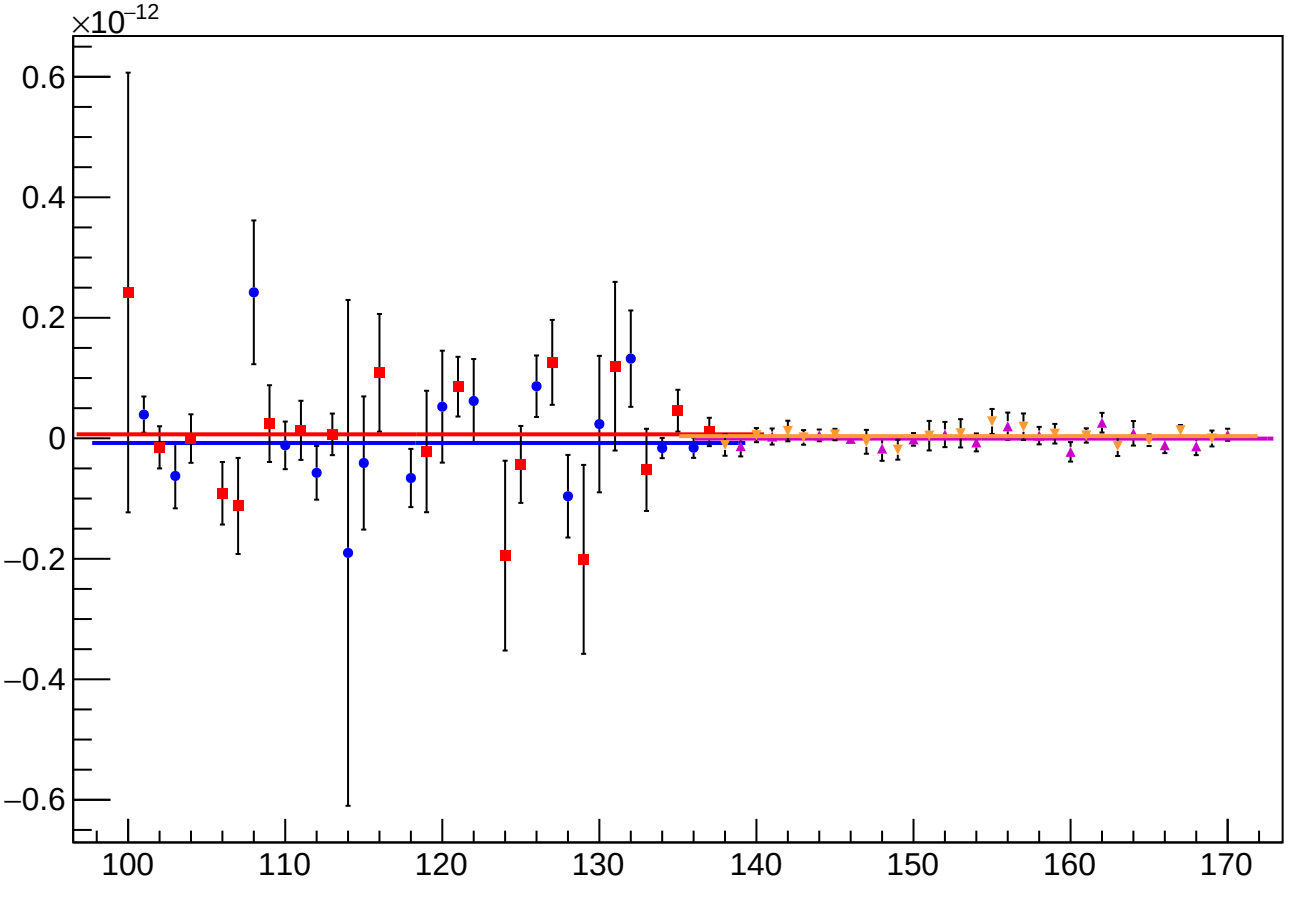
Right Out: 628.250+/-0.167 $\chi^2$/NDF: 570979.3/18

Left In: 277.246+/-0.057 $\chi^2$/NDF:2181294.9/15

+ sign 330.582+/-0.056 $\chi^2$/NDF: 6138125.9/32

All: 321.707+/-0.039 $\chi^2$/NDF: 12903575.6/67

- sign 313.579+/-0.054 $\chi^2$/NDF: 6717516.8/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 21.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:7.9/16

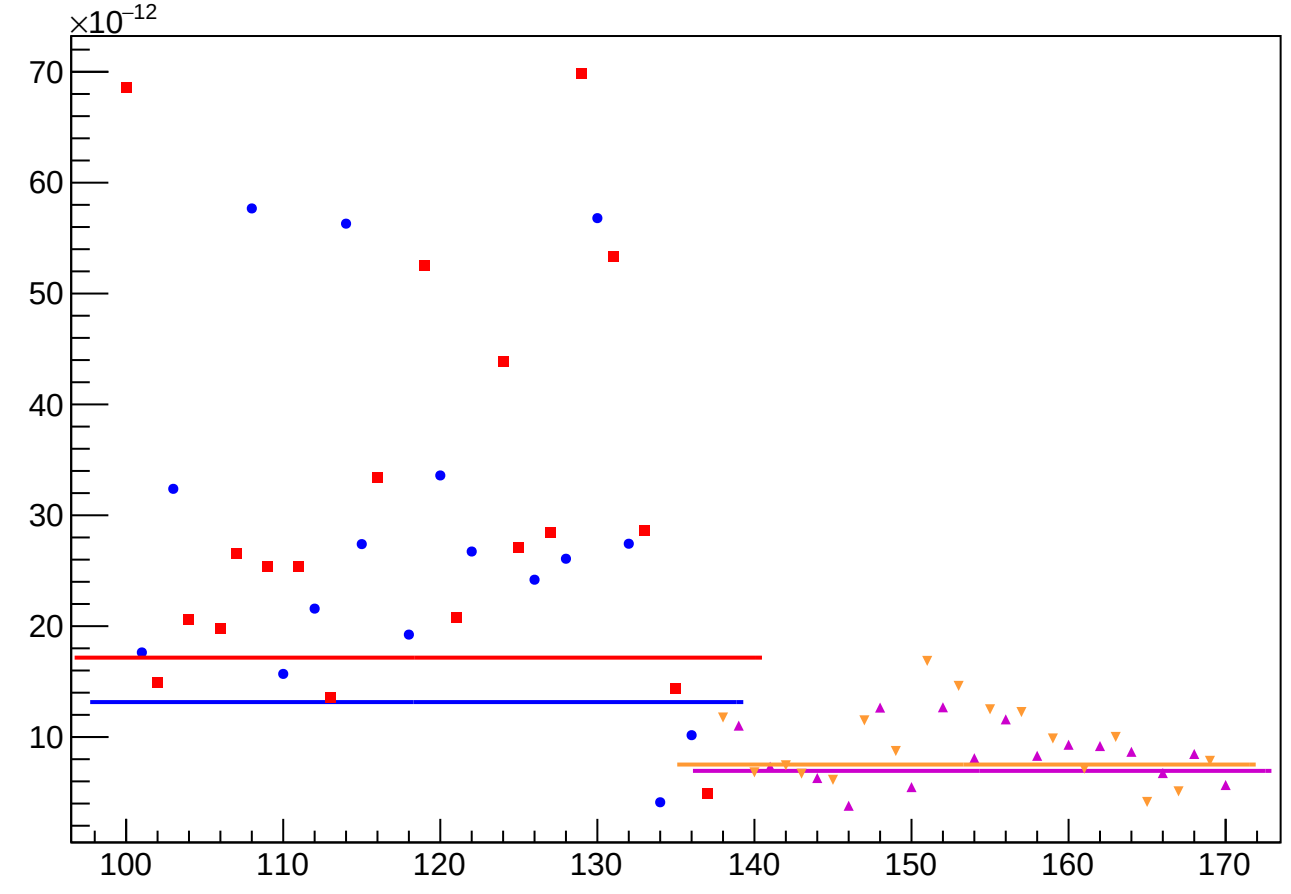
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 20.0/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:9.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 30.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 60.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 29.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2082875.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1435346.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1646197.6/18

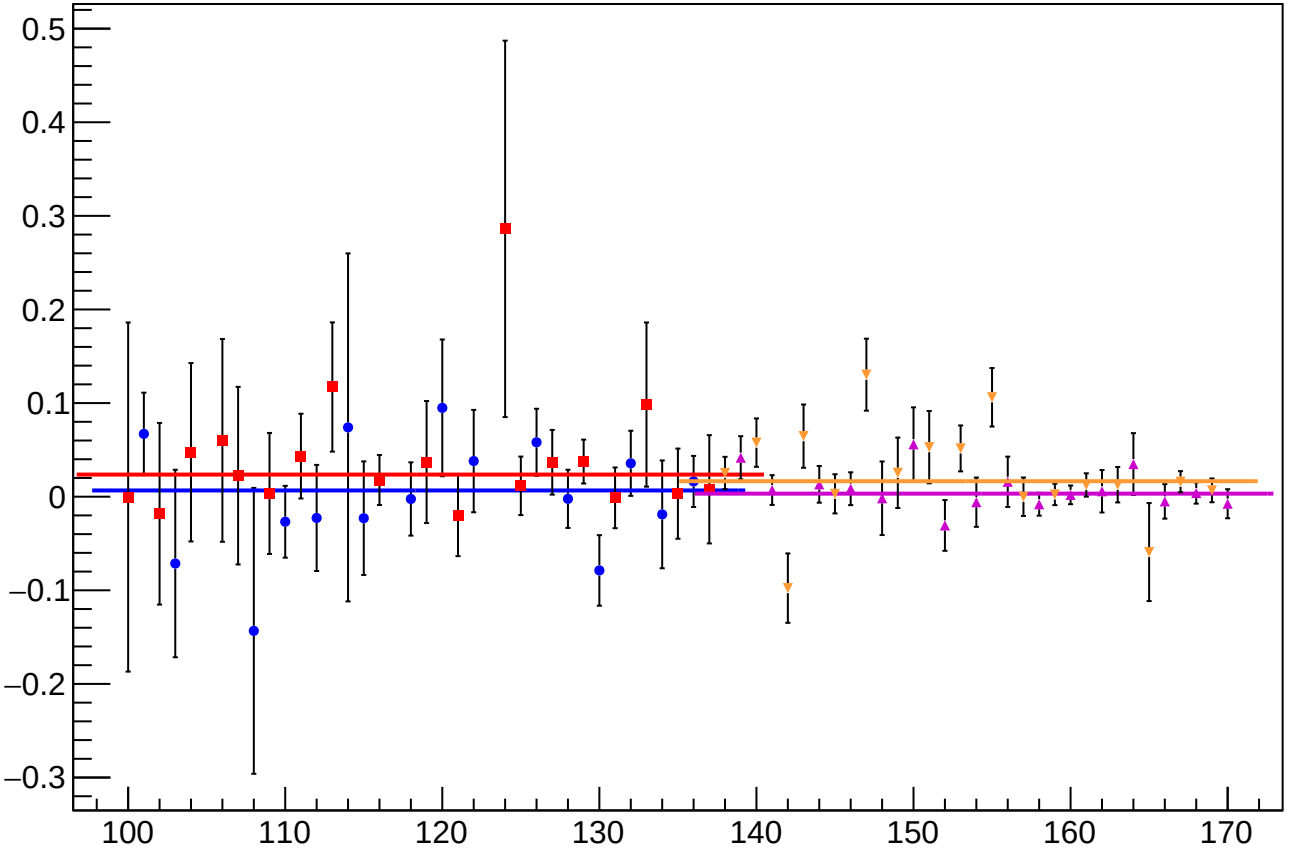
Left In: 0.000+/-0.000 $\chi^2$/NDF:1098422.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4160225.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 8376238.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4196016.8/34

# asym_sam_37_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.007+/-0.011 $\chi^2$/NDF: 15.0/15

Left Out: 0.017+/-0.005 $\chi^2$/NDF:39.7/16

Right Out: 0.024+/-0.011 $\chi^2$/NDF: 7.5/18

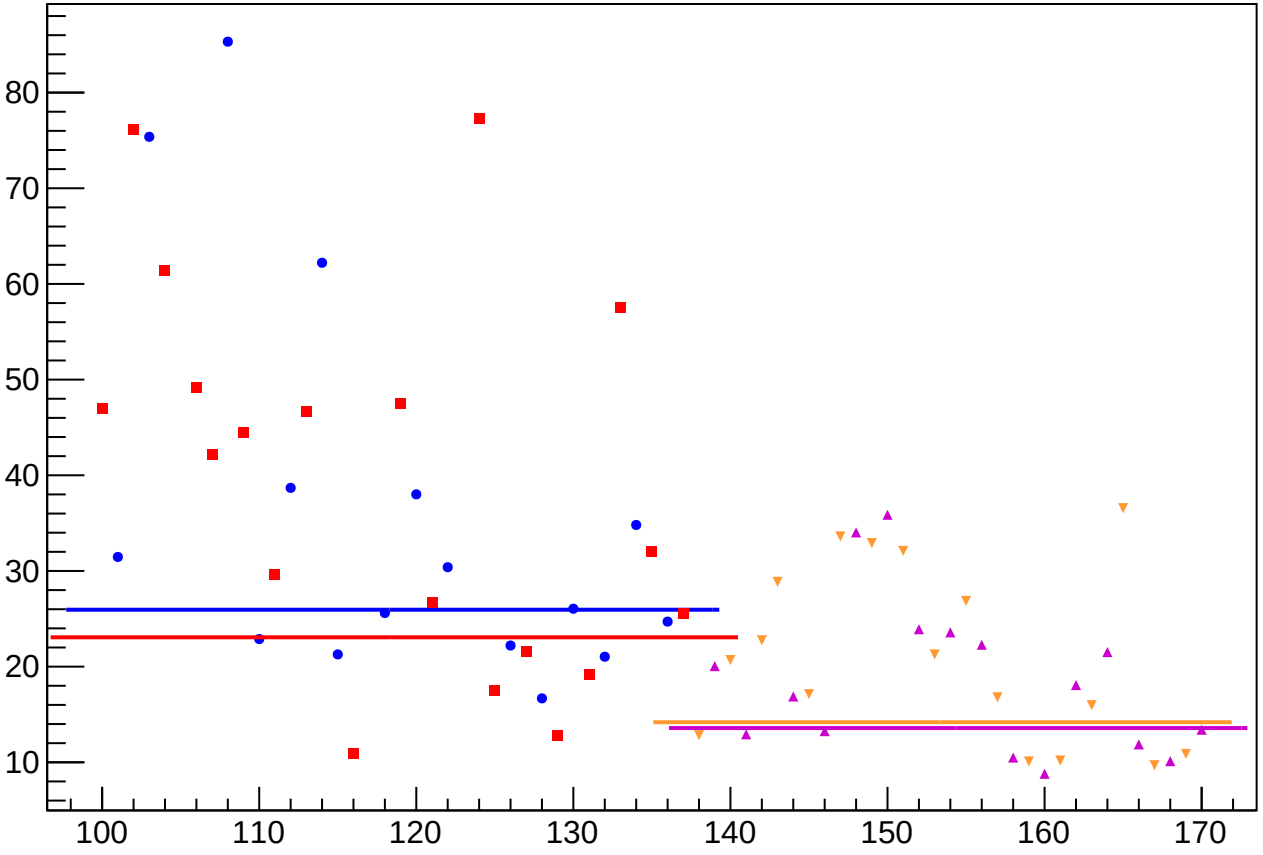
Left In: 0.003+/-0.004 $\chi^2$/NDF:9.4/15

+ sign 0.015+/-0.004 $\chi^2$/NDF: 55.4/32

All: 0.010+/-0.003 $\chi^2$/NDF: 77.8/67

- sign 0.006+/-0.004 $\chi^2$/NDF: 20.1/34

# asym_sam_37_dd_dit_vs_cor_diff_rms vs Slug




Right In: 25.949+/-0.008 $\chi^2$/NDF: 1381638.3/15

Left Out: 14.191+/-0.003 $\chi^2$/NDF:3928495.7/16

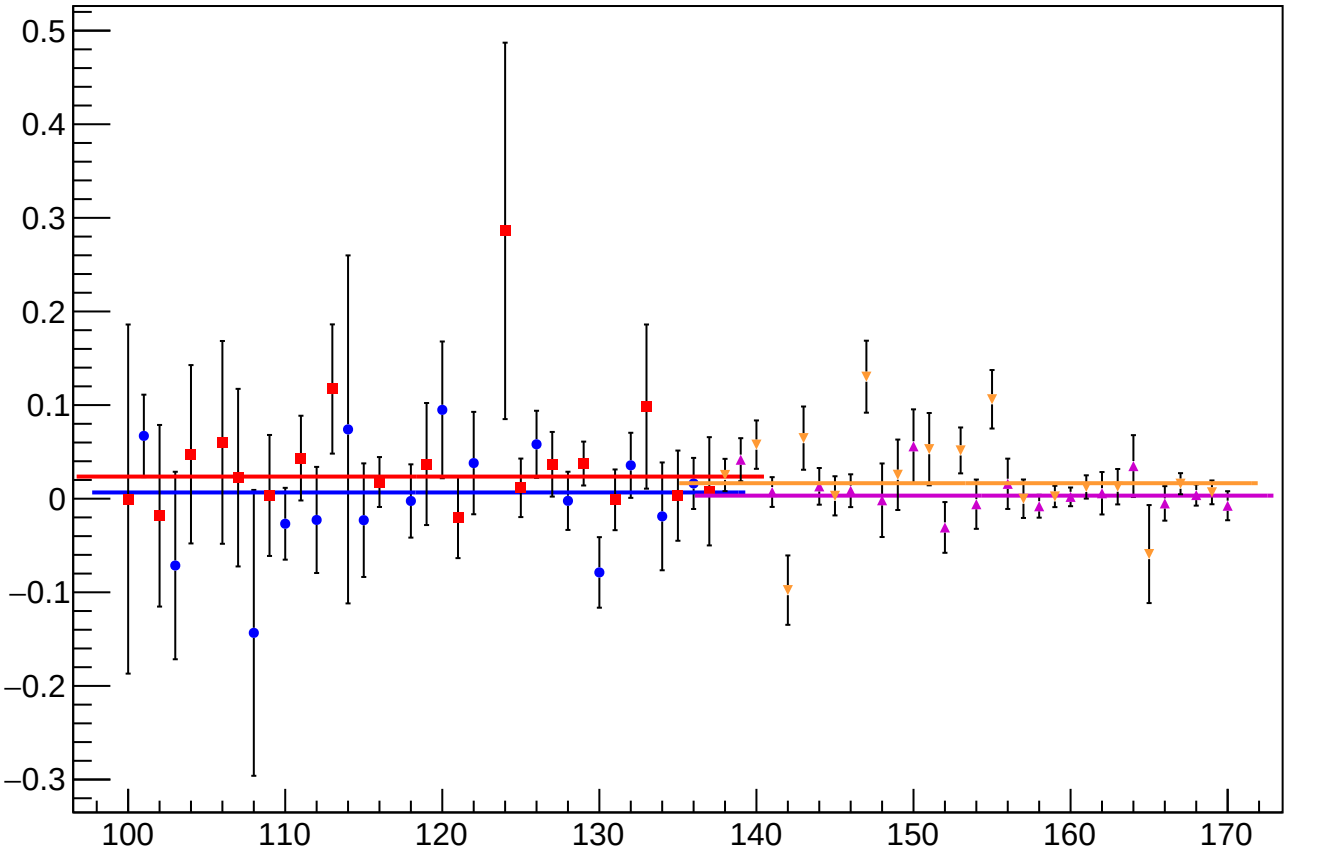
Right Out: 23.065+/-0.007 $\chi^2$/NDF: 3360857.8/18

Left In: 13.581+/-0.003 $\chi^2$/NDF:3171505.9/15

+ sign 15.915+/-0.003 $\chi^2$/NDF: 7225337.7/32

All: 15.435+/-0.002 $\chi^2$/NDF: 15194331.9/67

- sign 14.997+/-0.003 $\chi^2$/NDF: 7920085.9/34




Right In: 0.007+/-0.011 $\chi^2$/NDF: 15.0/15

Left Out: 0.017+/-0.005 $\chi^2$/NDF:39.7/16

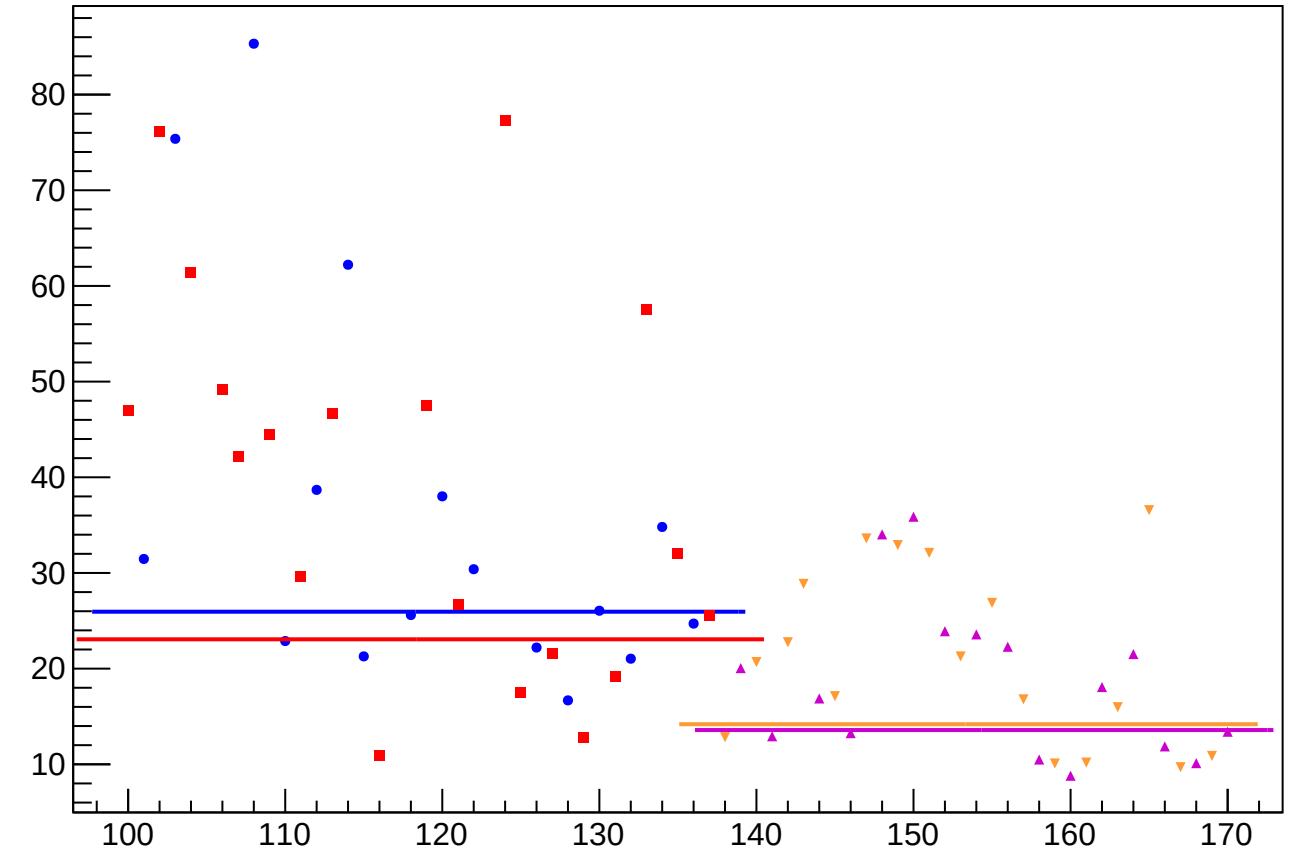
Right Out: 0.024+/-0.011 $\chi^2$/NDF: 7.5/18

Left In: 0.003+/-0.004 $\chi^2$/NDF:9.4/15

+ sign 0.015+/-0.004 $\chi^2$/NDF: 55.4/32

All: 0.010+/-0.003 $\chi^2$/NDF: 77.8/67

- sign 0.006+/-0.004 $\chi^2$/NDF: 20.1/34




Right In: 25.949+/-0.008 $\chi^2$/NDF: 1381638.3/15

Left Out: 14.191+/-0.003 $\chi^2$/NDF:3928495.7/16

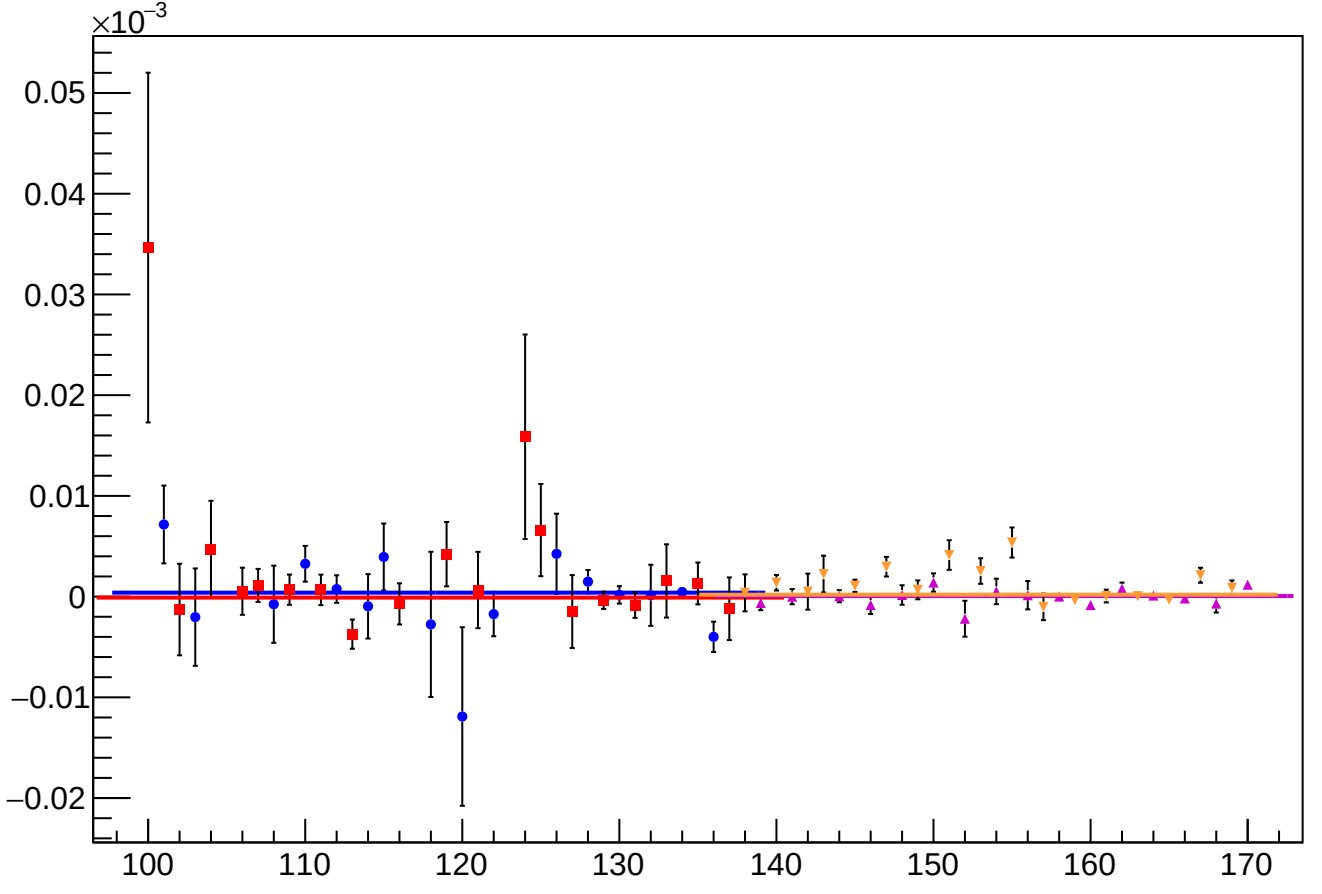
Right Out: 23.065+/-0.007 $\chi^2$/NDF: 3360857.8/18

Left In: 13.581+/-0.003 $\chi^2$/NDF:3171505.9/15

+ sign 15.915+/-0.003 $\chi^2$/NDF: 7225337.7/32

All: 15.435+/-0.002 $\chi^2$/NDF: 15194331.9/67

- sign 14.997+/-0.003 $\chi^2$/NDF: 7920085.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 20.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:52.9/16

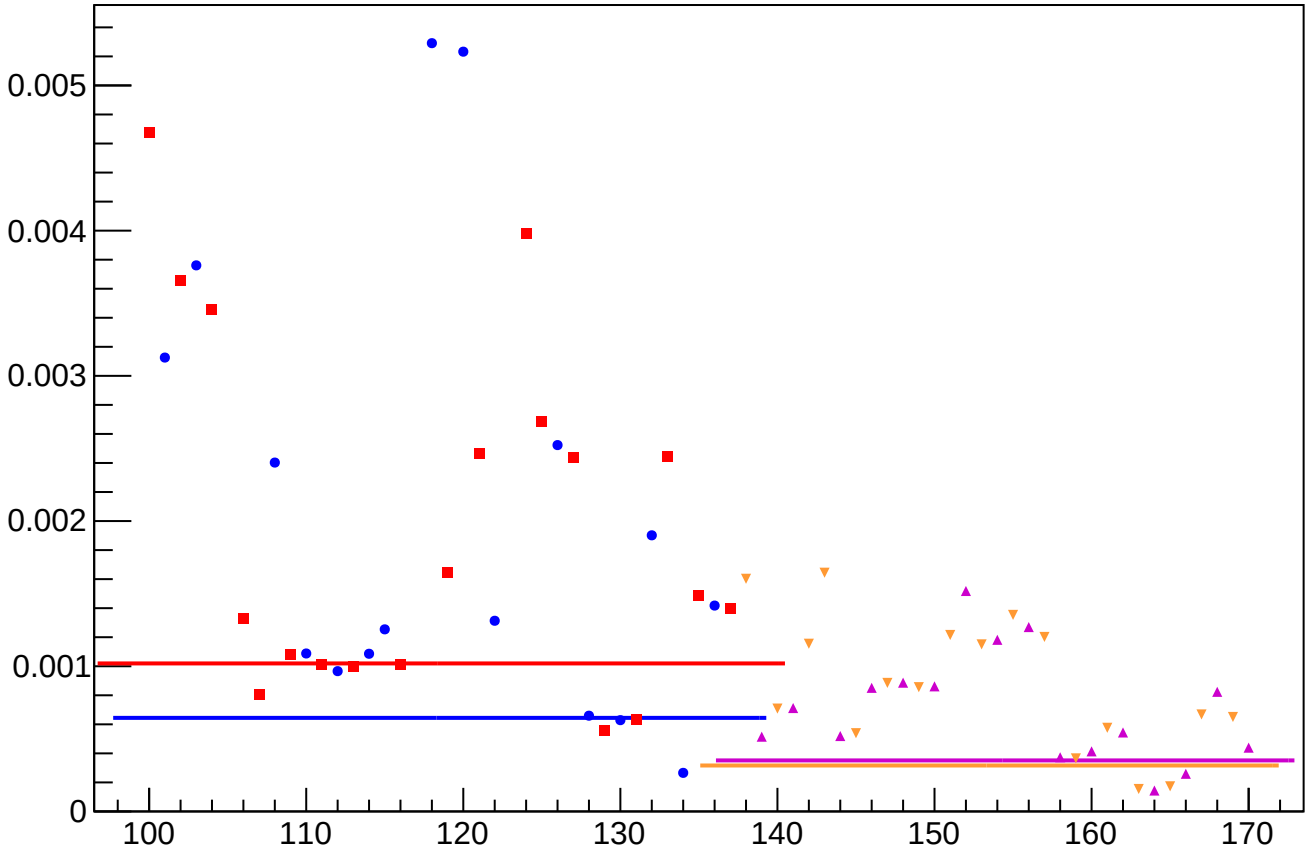
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 20.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:17.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 74.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 113.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 38.0/34




Right In: 0.001+/-0.000 $\chi^2$/NDF: 6575652.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:11675856.2/16

Right Out: 0.001+/-0.000 $\chi^2$/NDF: 3662501.2/18

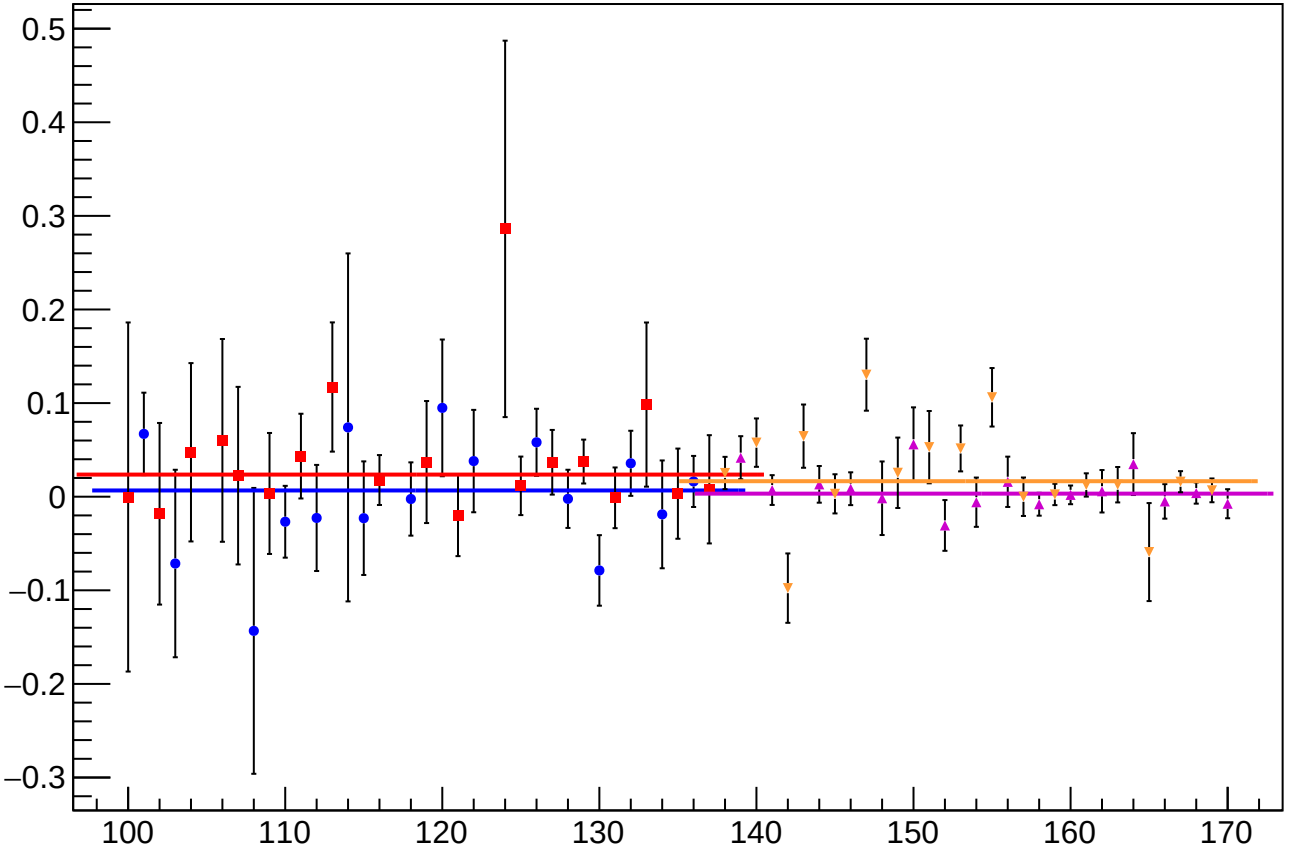
Left In: 0.000+/-0.000 $\chi^2$/NDF:8585767.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 19911265.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 36415989.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 16340144.9/34

# asym_sam_37_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.007+/-0.011 $\chi^2$/NDF: 15.0/15

Left Out: 0.017+/-0.005 $\chi^2$/NDF:39.7/16

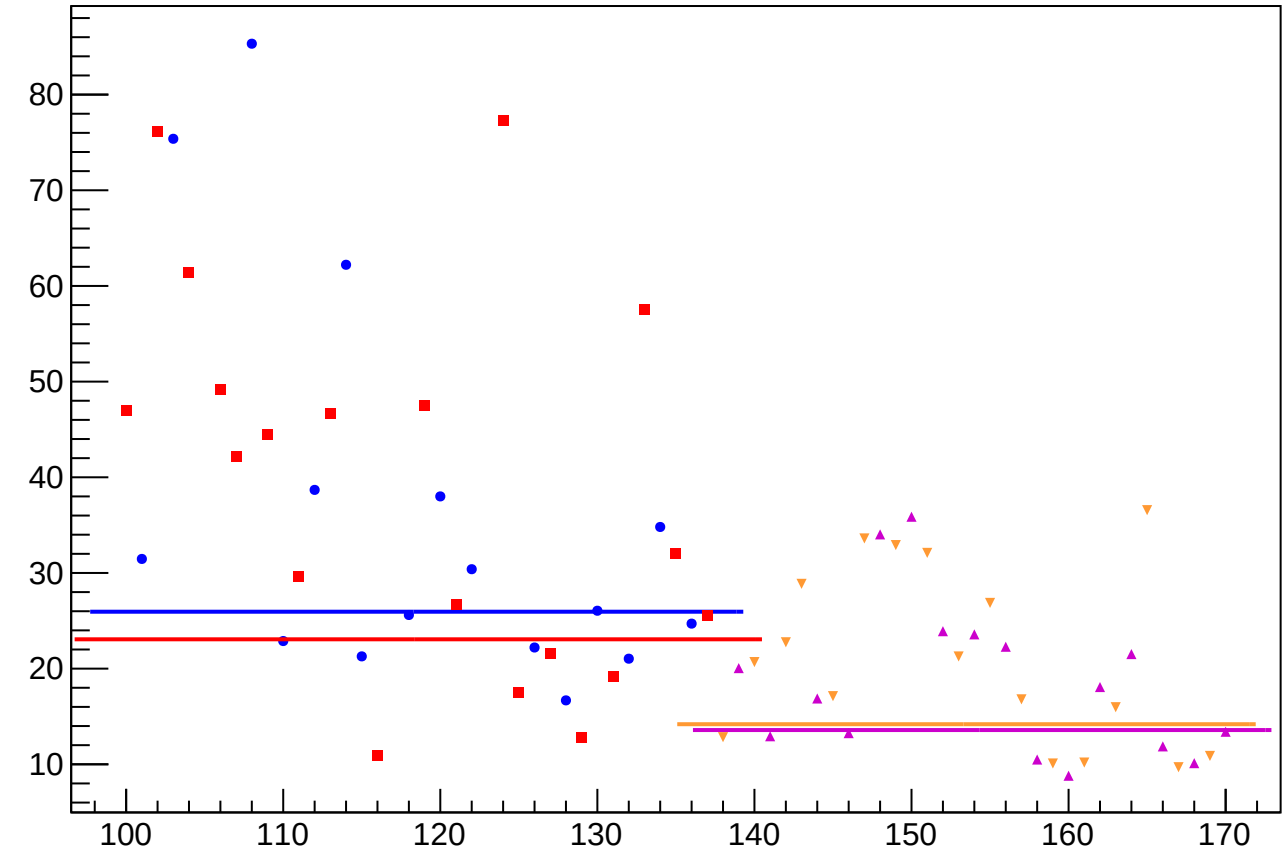
Right Out: 0.024+/-0.011 $\chi^2$/NDF: 7.5/18

Left In: 0.003+/-0.004 $\chi^2$/NDF:9.4/15

+ sign 0.015+/-0.004 $\chi^2$/NDF: 55.4/32

All: 0.010+/-0.003 $\chi^2$/NDF: 77.8/67

- sign 0.006+/-0.004 $\chi^2$/NDF: 20.1/34




Right In: 25.950+/-0.008 $\chi^2$/NDF: 1381591.4/15

Left Out: 14.191+/-0.003 $\chi^2$/NDF:3928709.8/16

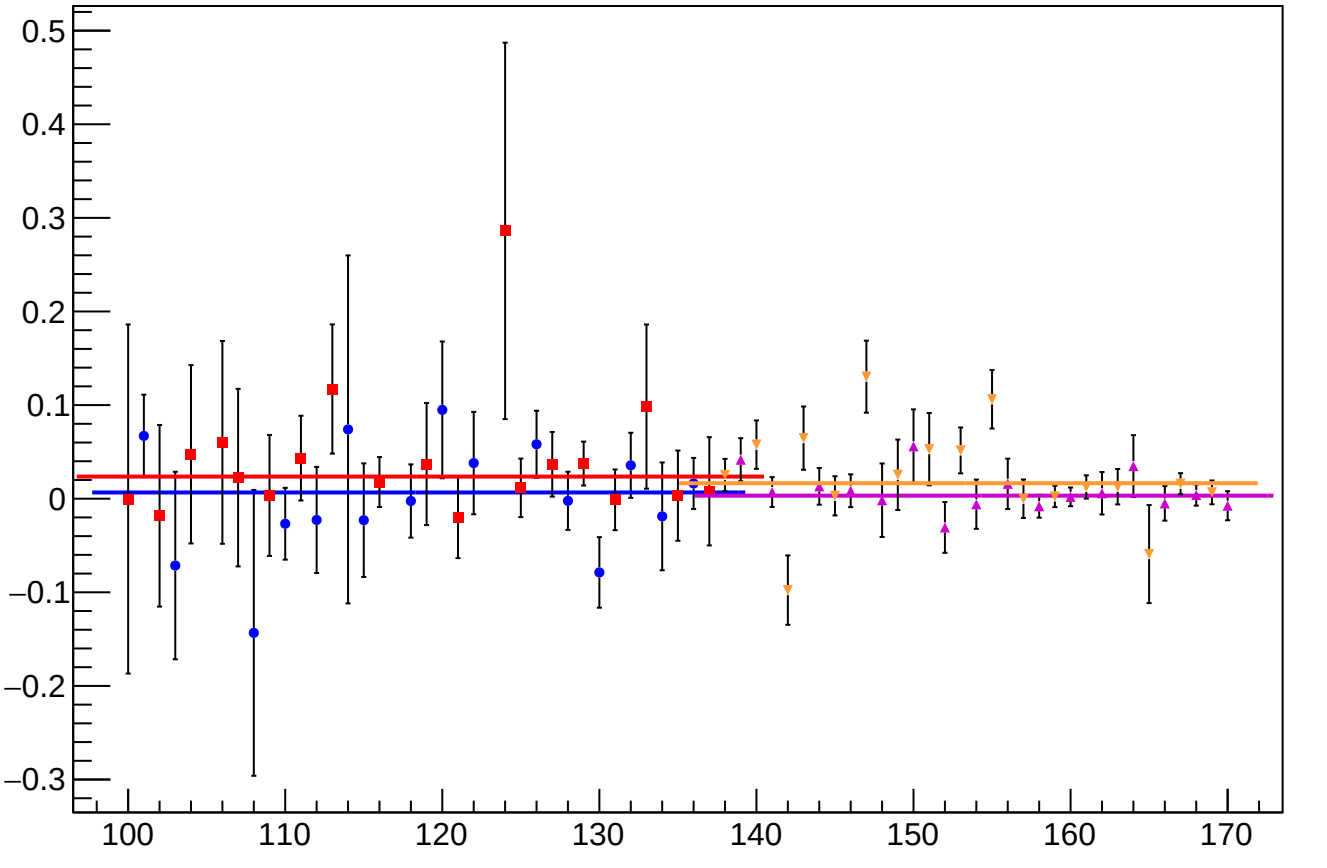
Right Out: 23.066+/-0.007 $\chi^2$/NDF: 3360688.5/18

Left In: 13.581+/-0.003 $\chi^2$/NDF:3171658.2/15

+ sign 15.916+/-0.003 $\chi^2$/NDF: 7225543.4/32

All: 15.435+/-0.002 $\chi^2$/NDF: 15194619.3/67

- sign 14.997+/-0.003 $\chi^2$/NDF: 7920162.5/34




Right In: 0.007+/-0.011 $\chi^2$/NDF: 15.0/15

Left Out: 0.017+/-0.005 $\chi^2$/NDF:39.7/16

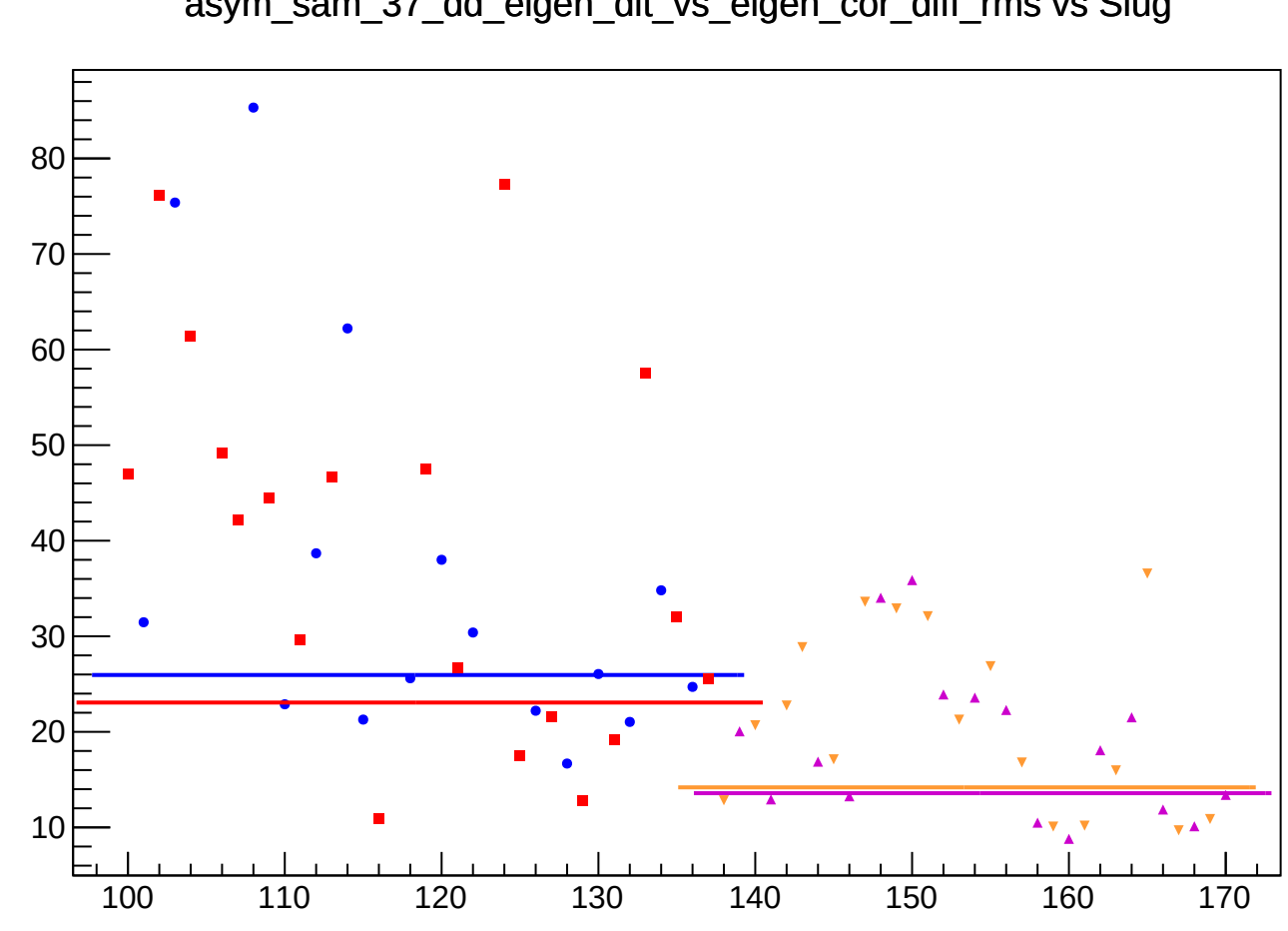
Right Out: 0.024+/-0.011 $\chi^2$/NDF: 7.5/18

Left In: 0.003+/-0.004 $\chi^2$/NDF:9.4/15

+ sign 0.015+/-0.004 $\chi^2$/NDF: 55.4/32

All: 0.010+/-0.003 $\chi^2$/NDF: 77.8/67

- sign 0.006+/-0.004 $\chi^2$/NDF: 20.1/34




Right In: 25.950+/-0.008 $\chi^2$/NDF: 1381591.4/15

Left Out: 14.191+/-0.003 $\chi^2$/NDF:3928709.8/16

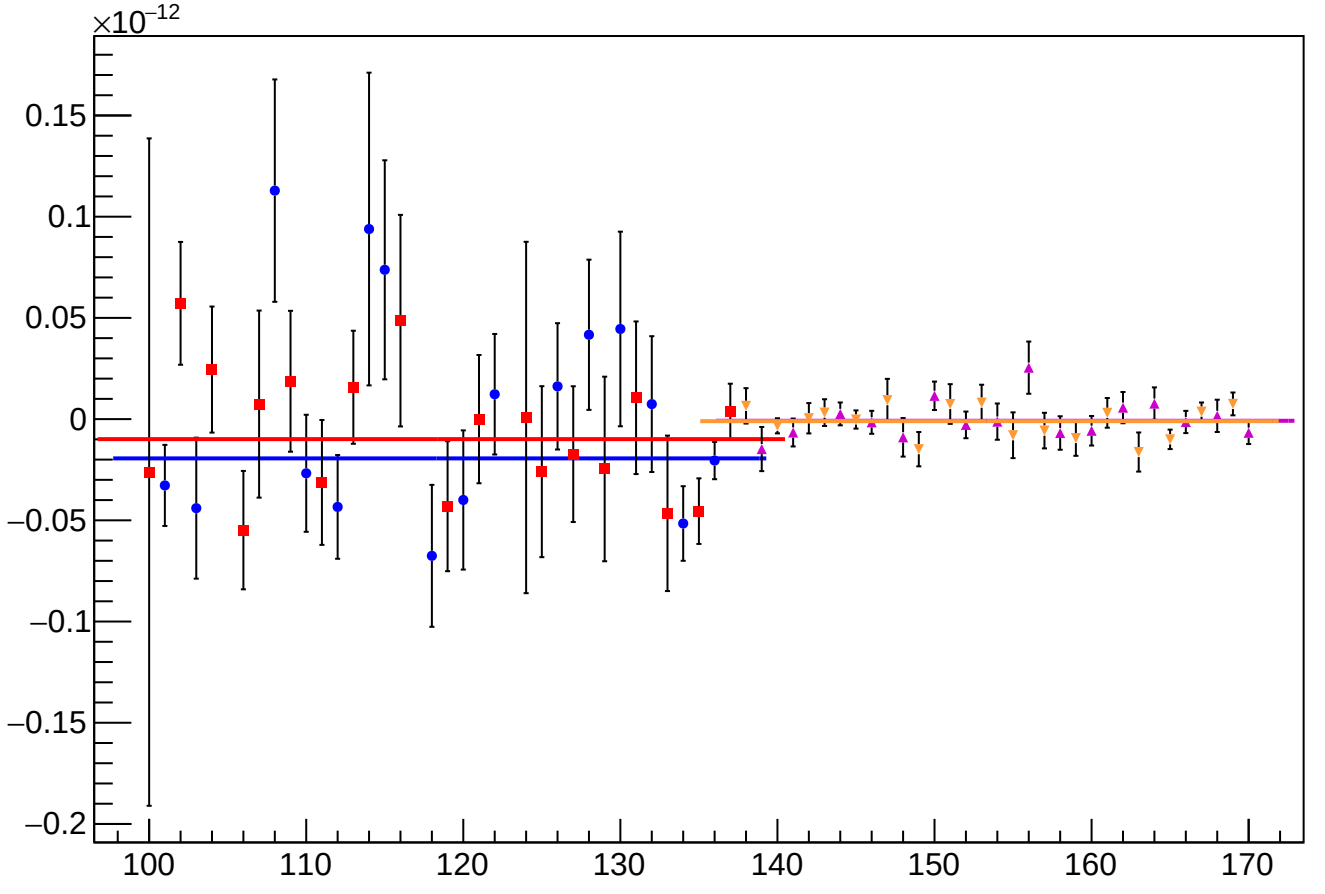
Right Out: 23.066+/-0.007 $\chi^2$/NDF: 3360688.5/18

Left In: 13.581+/-0.003 $\chi^2$/NDF:3171658.2/15

\+ sign 15.916+/-0.003 $\chi^2$/NDF: 7225543.4/32

All: 15.435+/-0.002 $\chi^2$/NDF: 15194619.3/67

\- sign 14.997+/-0.003 $\chi^2$/NDF: 7920162.5/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 25.7/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:18.3/16

Right Out: -0.000+/-0.000 $\chi^2$/NDF: 20.3/18

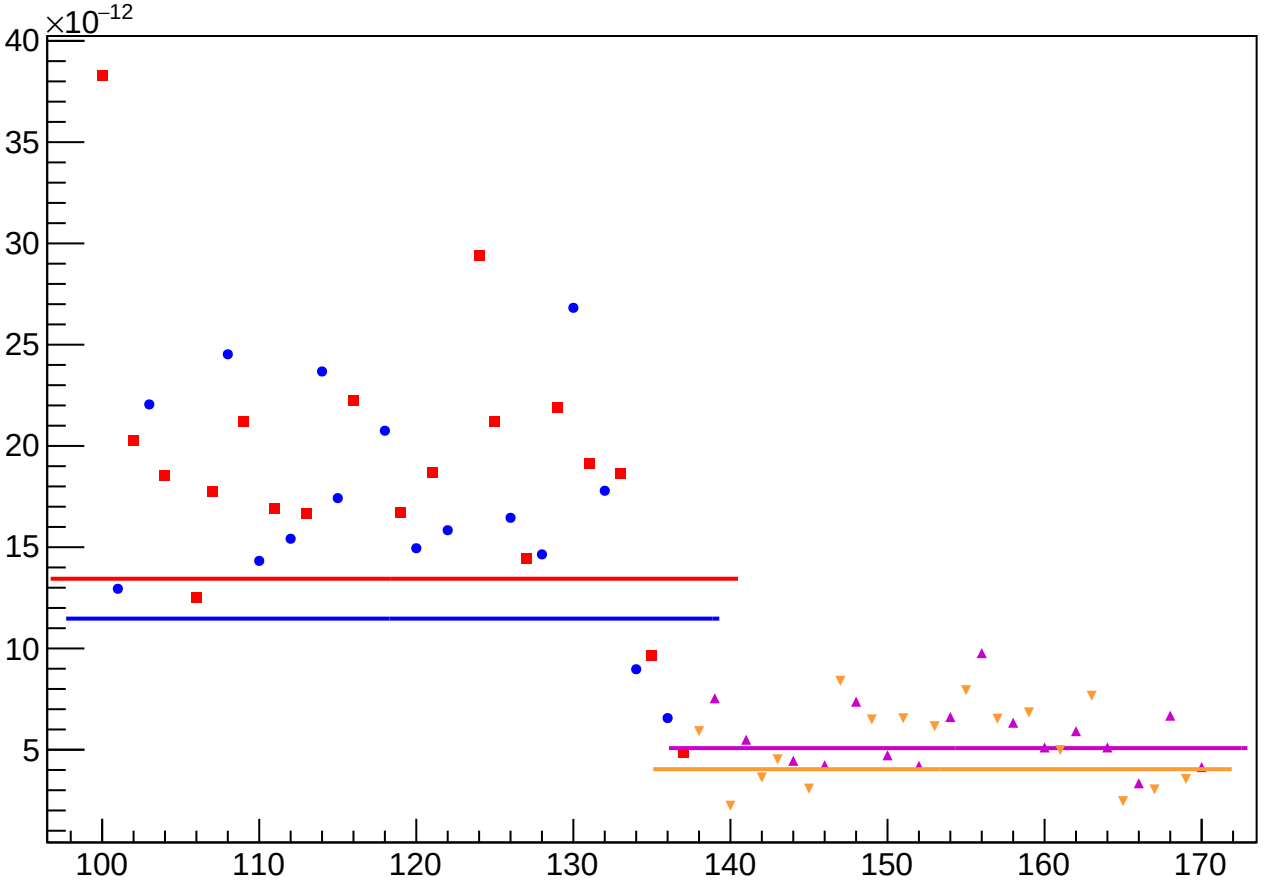
Left In: -0.000+/-0.000 $\chi^2$/NDF:14.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 52.6/32

All: -0.000+/-0.000 $\chi^2$/NDF: 89.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 36.8/34

# asym_sam_37_dd_eigen_cor_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1598593.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2669853.2/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1672848.8/18

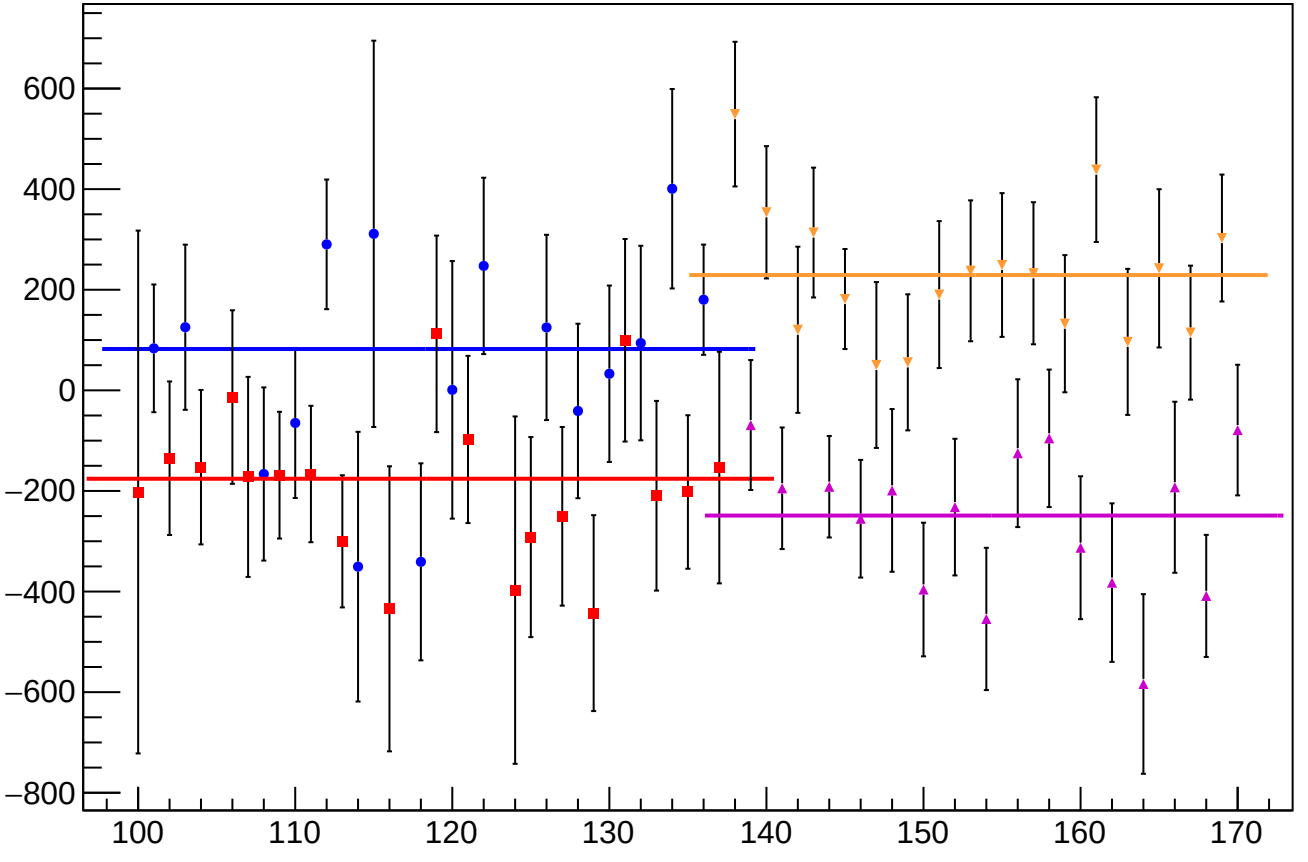
Left In: 0.000+/-0.000 $\chi^2$/NDF:1064502.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 7114193.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 13168074.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5583548.4/34

# reg_asym_sam_48_dd_mean vs Slug




Right In: 82.196+/-42.133 $\chi^2$/NDF: 18.4/15

Left Out: 229.201+/-33.304 $\chi^2$/NDF:14.4/16

Right Out: -175.732+/-40.673 $\chi^2$/NDF: 9.9/18

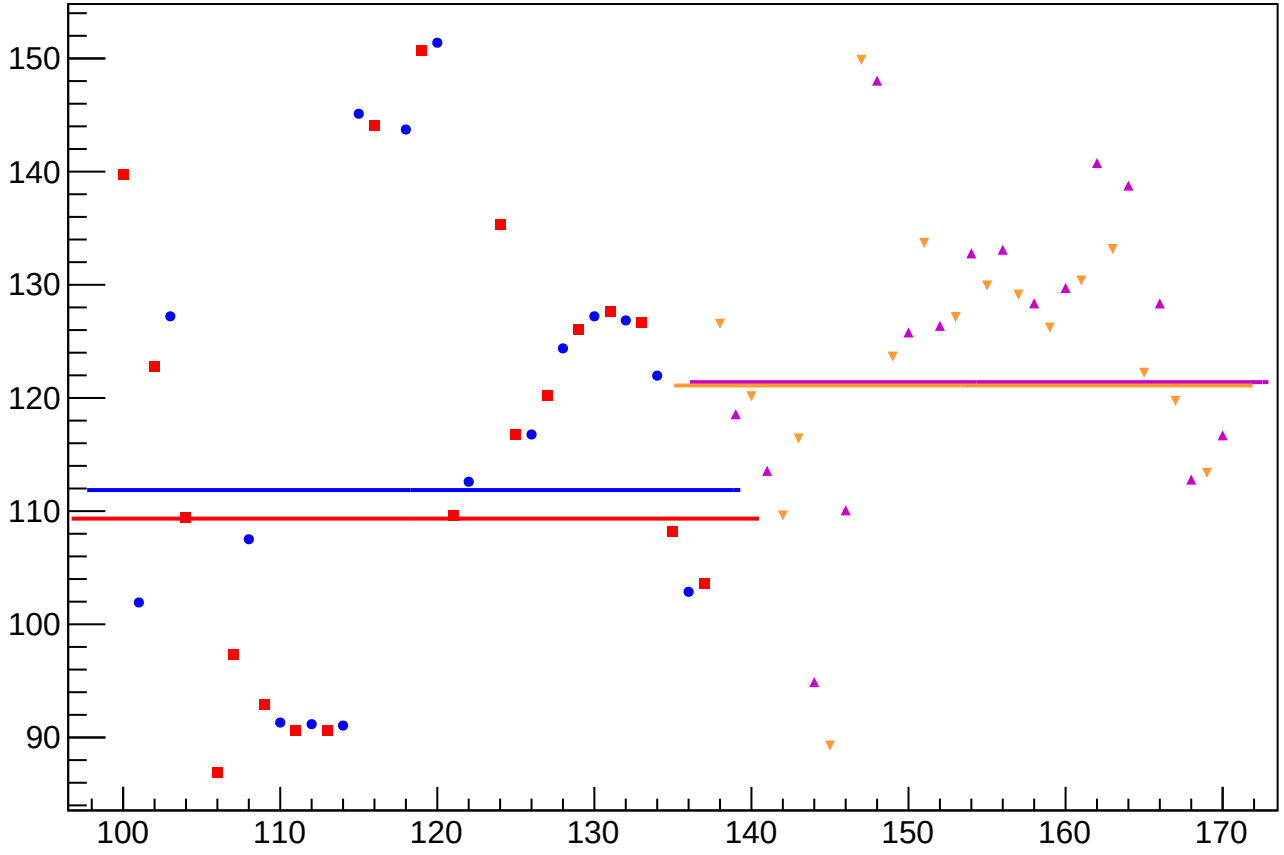
Left In: -248.939+/-33.678 $\chi^2$/NDF:15.9/15

+ sign 172.670+/-26.128 $\chi^2$/NDF: 40.3/32

All: -24.661+/-18.408 $\chi^2$/NDF: 181.2/67

- sign -219.163+/-25.940 $\chi^2$/NDF: 27.7/34

# reg_asym_sam_48_dd_rms vs Slug




Right In: 111.862+/-0.030 $\chi^2$/NDF: 306023.8/15

Left Out: 121.102+/-0.024 $\chi^2$/NDF:346989.8/16

Right Out: 109.340+/-0.029 $\chi^2$/NDF: 367219.9/18

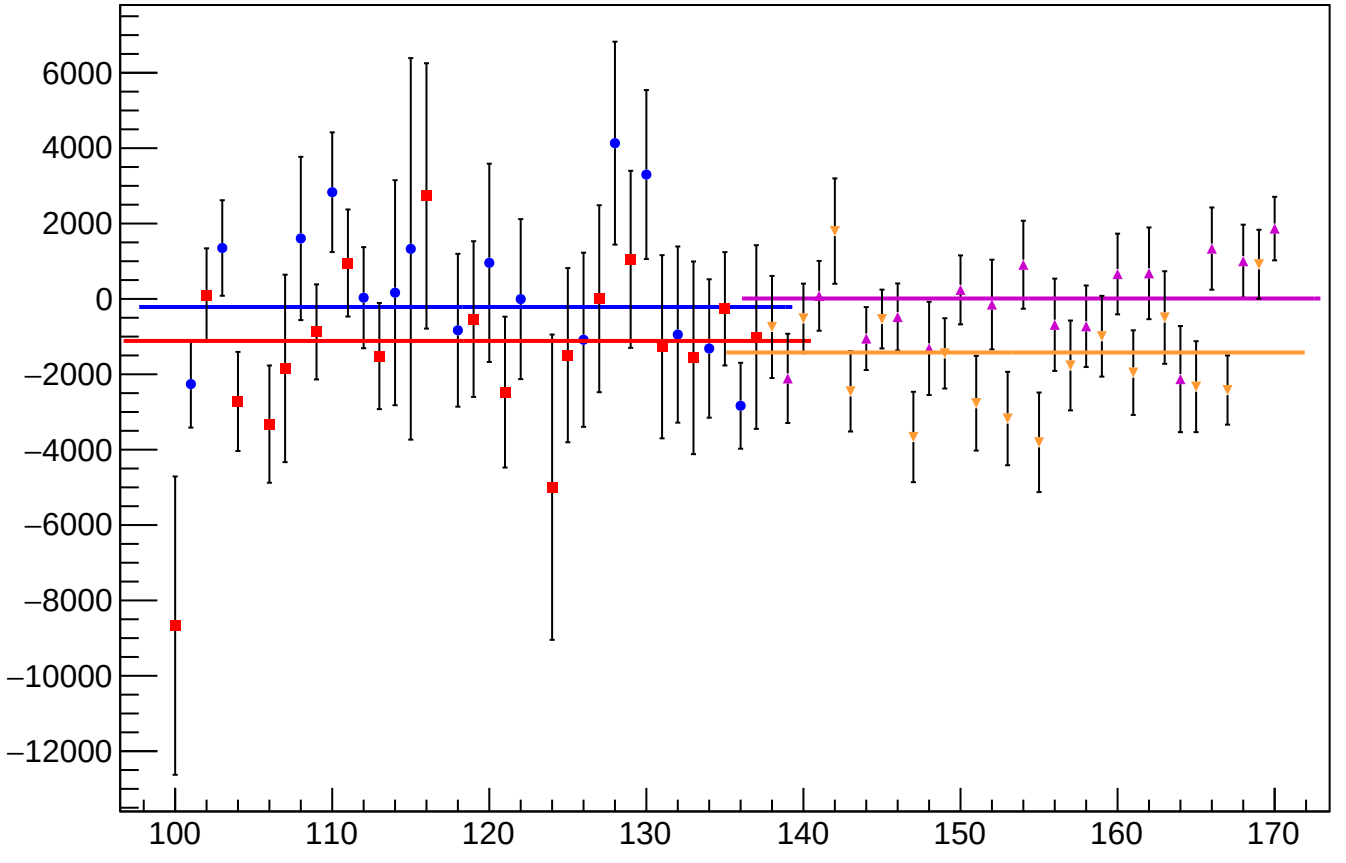
Left In: 121.397+/-0.024 $\chi^2$/NDF:327993.9/15

+ sign 117.549+/-0.018 $\chi^2$/NDF: 712218.7/32

All: 117.017+/-0.013 $\chi^2$/NDF: 1513342.6/67

- sign 116.493+/-0.018 $\chi^2$/NDF: 799478.9/34

# asym_sam_48_dd_reg_correction_mean vs Slug




Right In: -214.187+/-443.962 $\chi^2$/NDF: 20.4/15

Left Out: -1421.306+/-262.130 $\chi^2$/NDF:28.0/16

Right Out: -1114.700+/-423.039 $\chi^2$/NDF: 14.5/18

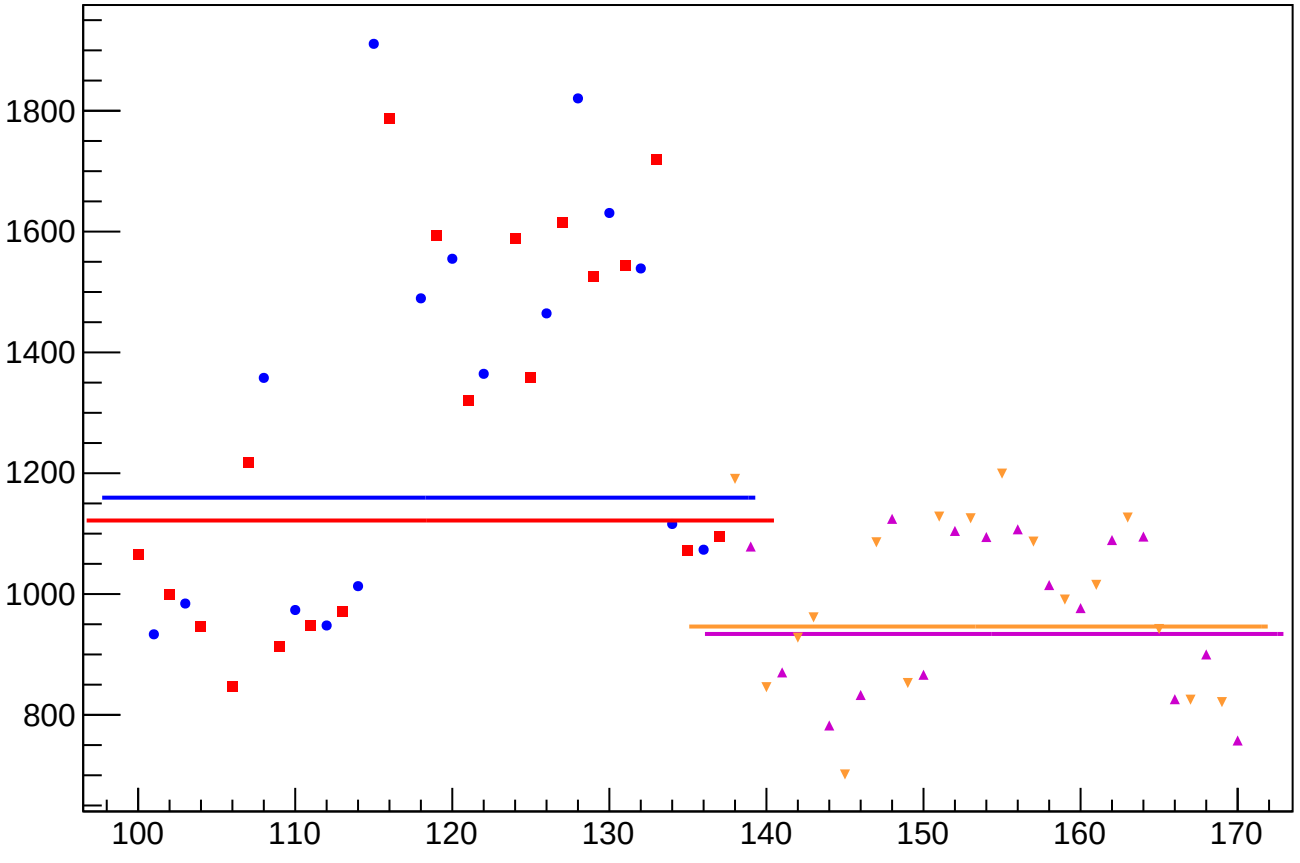
Left In: 11.035+/-260.351 $\chi^2$/NDF:18.1/15

+ sign -1109.269+/-225.722 $\chi^2$/NDF: 53.9/32

All: -696.498+/-158.178 $\chi^2$/NDF: 98.2/67

- sign -298.213+/-221.725 $\chi^2$/NDF: 37.7/34

# asym_sam_48_dd_reg_correction_rms vs Slug




Right In: 1159.567+/-0.314 $\chi^2$/NDF: 683693.3/15

Left Out: 946.225+/-0.185 $\chi^2$/NDF:645023.7/16

Right Out: 1121.752+/-0.299 $\chi^2$/NDF: 782273.3/18

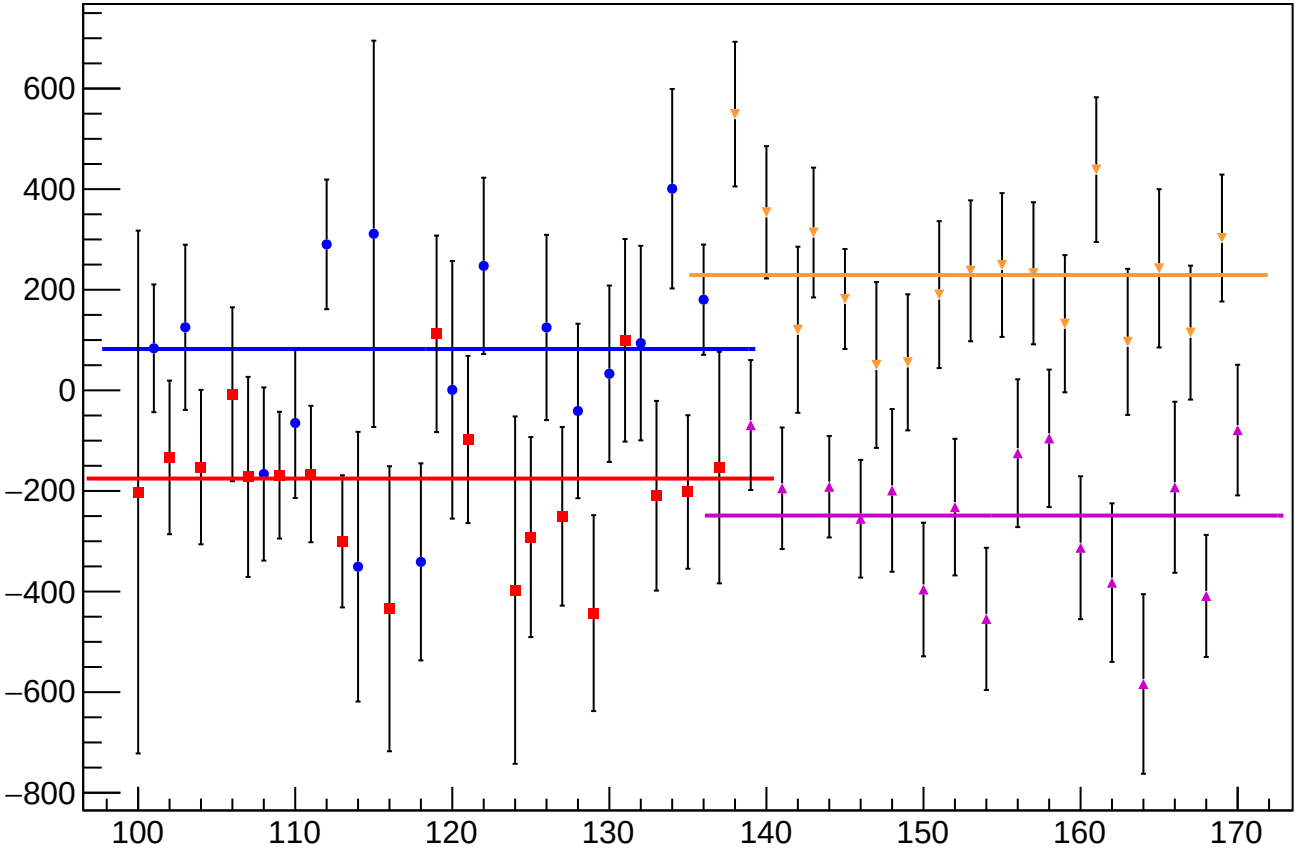
Left In: 933.942+/-0.184 $\chi^2$/NDF:491201.9/15

+ sign 1001.373+/-0.160 $\chi^2$/NDF: 1671171.8/32

All: 993.312+/-0.112 $\chi^2$/NDF: 3235561.7/67

- sign 985.535+/-0.157 $\chi^2$/NDF: 1559378.3/34

# cor_asym_sam_48_dd_mean vs Slug




Right In: 82.185+/-42.133 $\chi^2$/NDF: 18.4/15

Left Out: 229.205+/-33.304 $\chi^2$/NDF:14.4/16

Right Out: -175.338+/-40.678 $\chi^2$/NDF: 9.9/18

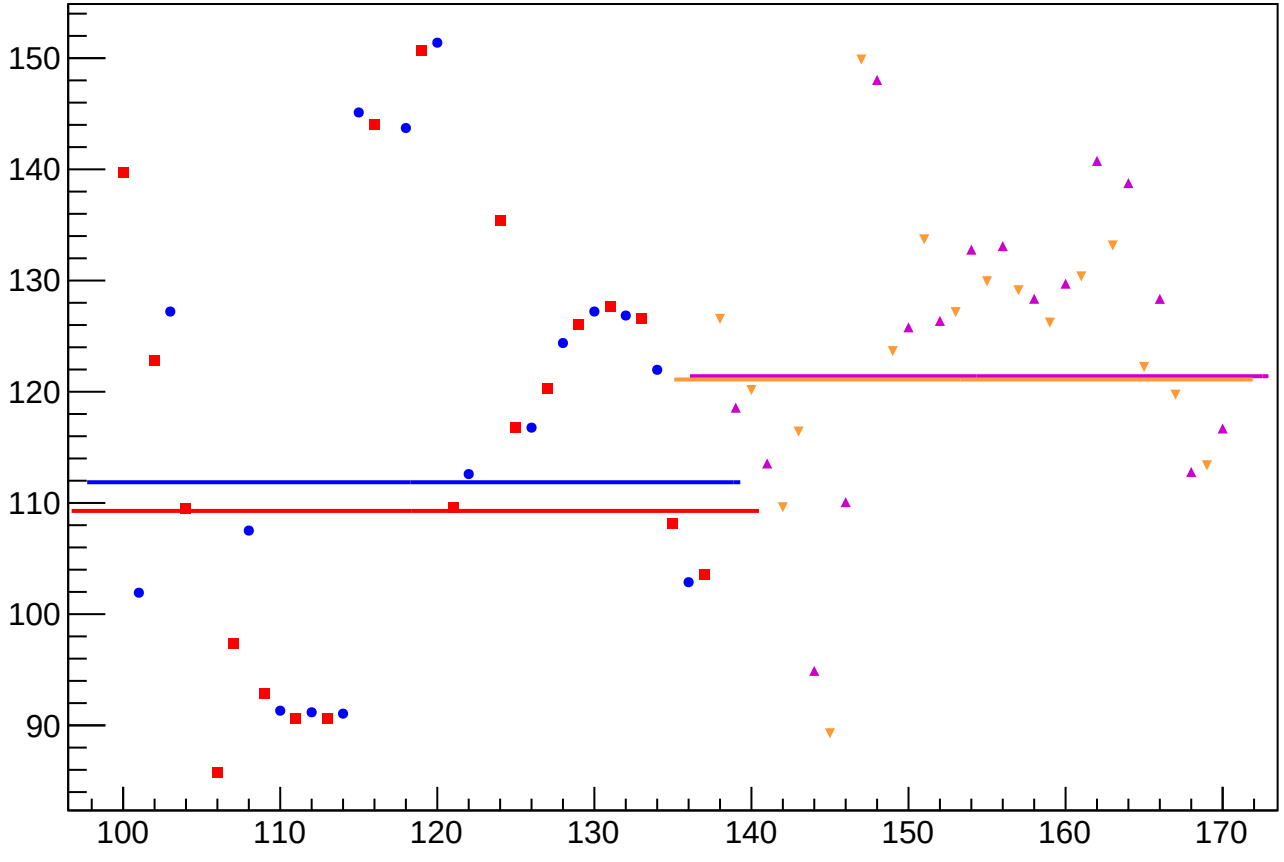
Left In: -248.940+/-33.678 $\chi^2$/NDF:15.9/15

+ sign 172.668+/-26.128 $\chi^2$/NDF: 40.3/32

All: -24.574+/-18.409 $\chi^2$/NDF: 181.2/67

- sign -219.008+/-25.941 $\chi^2$/NDF: 27.8/34

# cor_asym_sam_48_dd_rms vs Slug




Right In: 111.862+/-0.030 $\chi^2$/NDF: 306025.0/15

Left Out: 121.102+/-0.024 $\chi^2$/NDF:346989.8/16

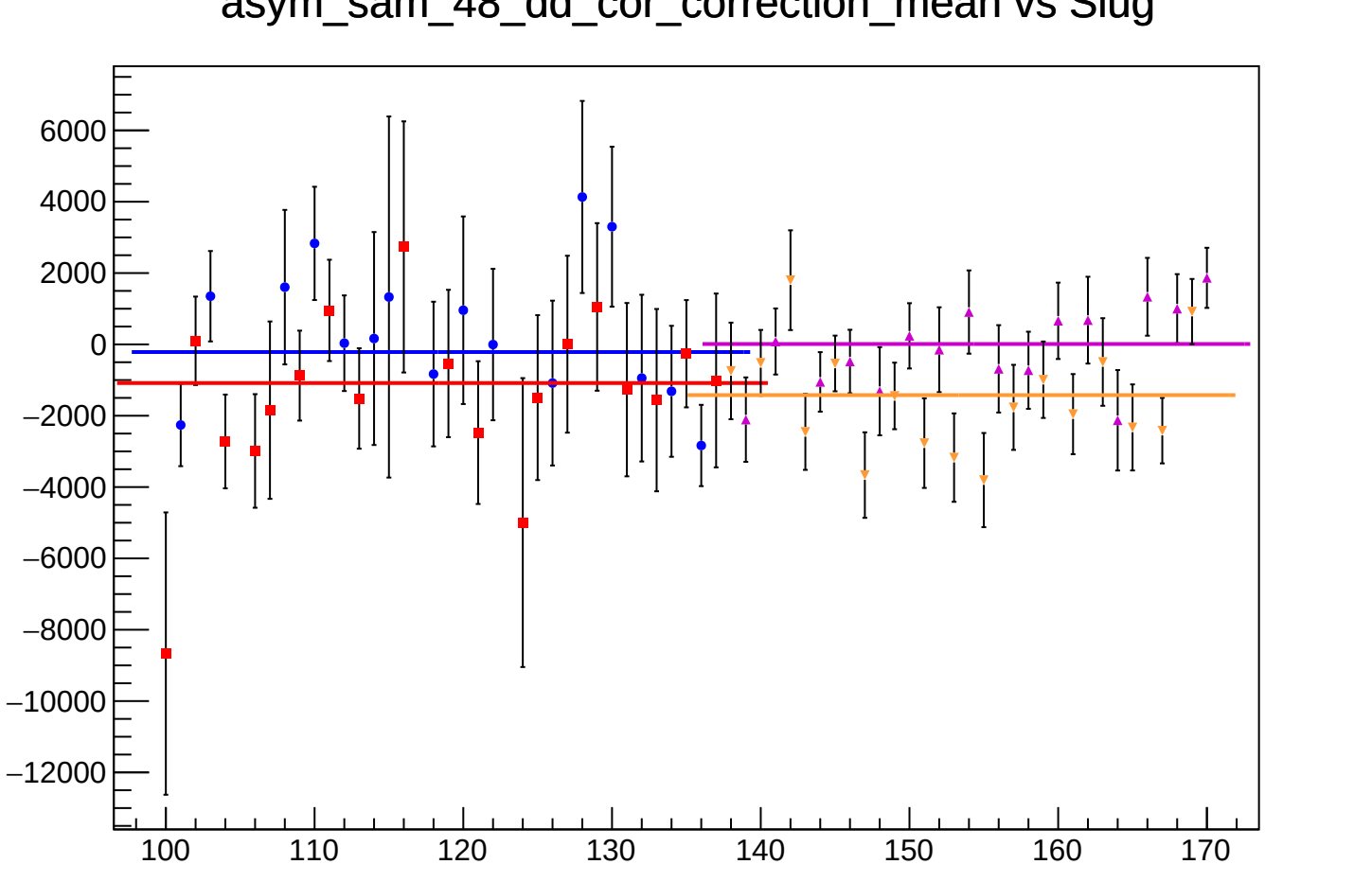
Right Out: 109.284+/-0.029 $\chi^2$/NDF: 370711.7/18

Left In: 121.397+/-0.024 $\chi^2$/NDF:327993.9/15

+ sign 117.549+/-0.018 $\chi^2$/NDF: 712219.4/32

All: 117.006+/-0.013 $\chi^2$/NDF: 1517860.4/67

- sign 116.471+/-0.018 $\chi^2$/NDF: 803926.6/34




Right In: -214.278+/-443.965 $\chi^2$/NDF: 20.4/15

Left Out: -1421.302+/-262.130 $\chi^2$/NDF:28.0/16

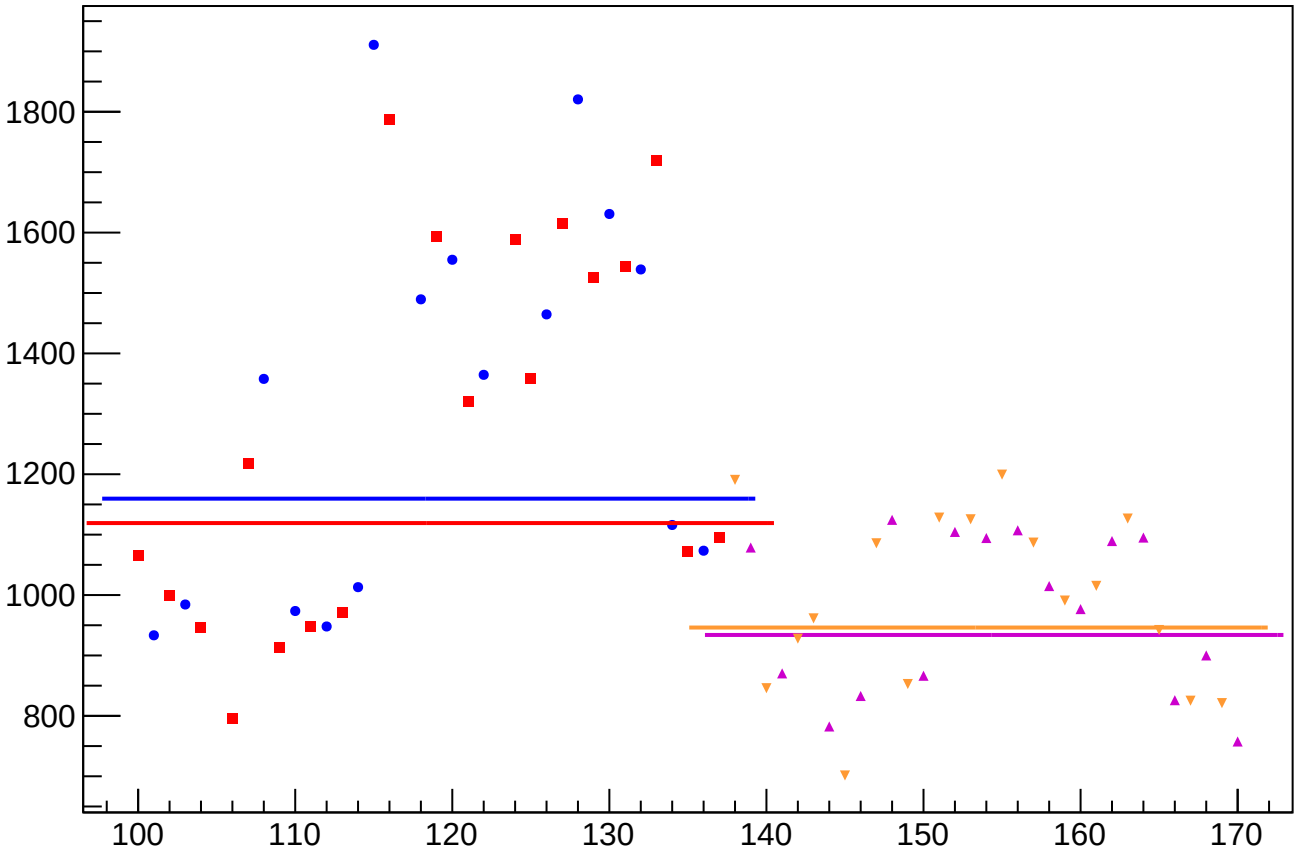
Right Out: -1083.943+/-423.774 $\chi^2$/NDF: 13.9/18

Left In: 11.027+/-260.351 $\chi^2$/NDF:18.1/15

+ sign -1109.293+/-225.722 $\chi^2$/NDF: 53.9/32

All: -692.022+/-158.216 $\chi^2$/NDF: 97.4/67

- sign -289.012+/-221.831 $\chi^2$/NDF: 36.8/34




Right In: 1159.576+/-0.314 $\chi^2$/NDF: 683662.2/15

Left Out: 946.225+/-0.185 $\chi^2$/NDF:645024.4/16

Right Out: 1119.156+/-0.300 $\chi^2$/NDF: 803154.6/18

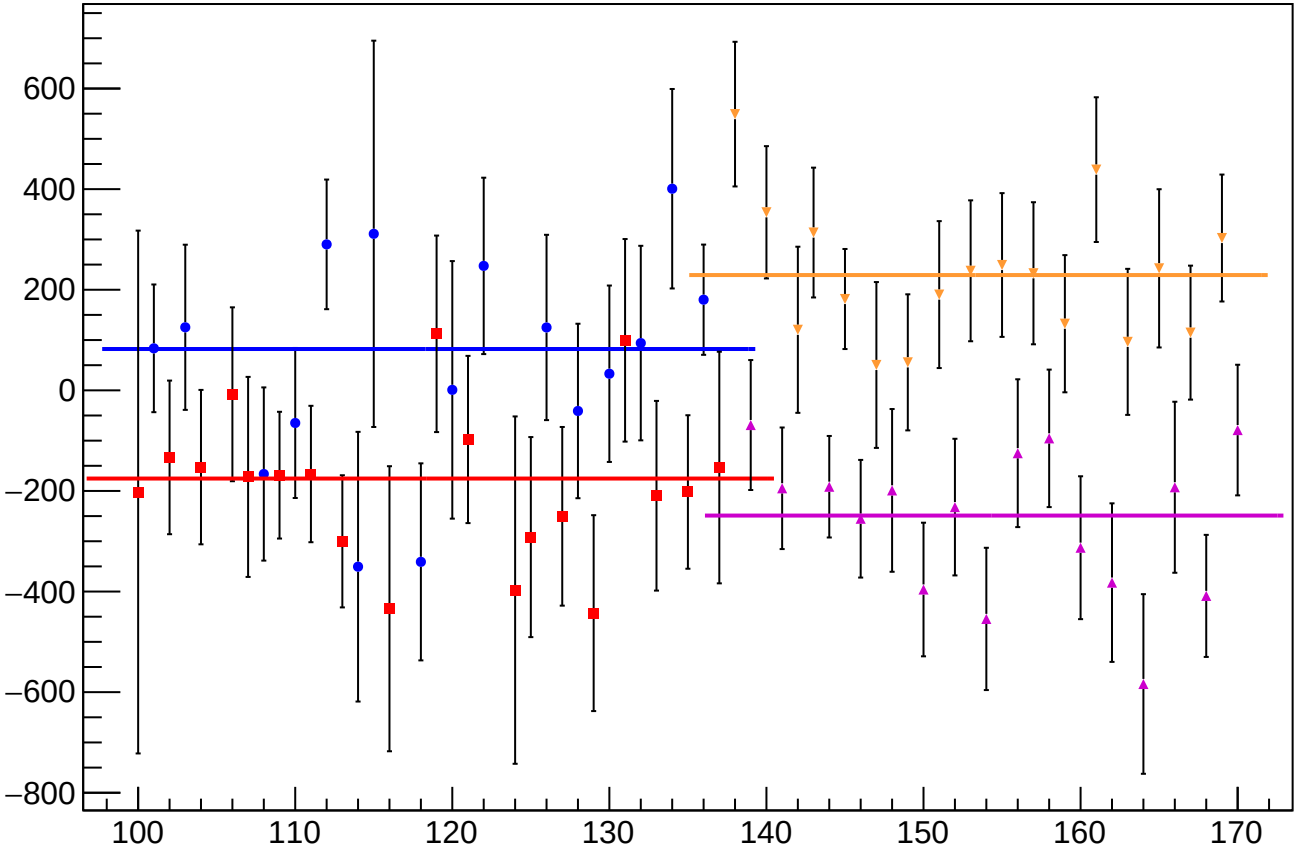
Left In: 933.942+/-0.184 $\chi^2$/NDF:491201.0/15

+ sign 1001.375+/-0.160 $\chi^2$/NDF: 1671169.0/32

All: 992.889+/-0.112 $\chi^2$/NDF: 3248433.9/67

- sign 984.694+/-0.157 $\chi^2$/NDF: 1571708.3/34

# eigen_cor_asym_sam_48_dd_mean vs Slug




Right In: 82.185+/-42.133 $\chi^2$/NDF: 18.4/15

Left Out: 229.205+/-33.304 $\chi^2$/NDF:14.4/16

Right Out: -175.338+/-40.678 $\chi^2$/NDF: 9.9/18

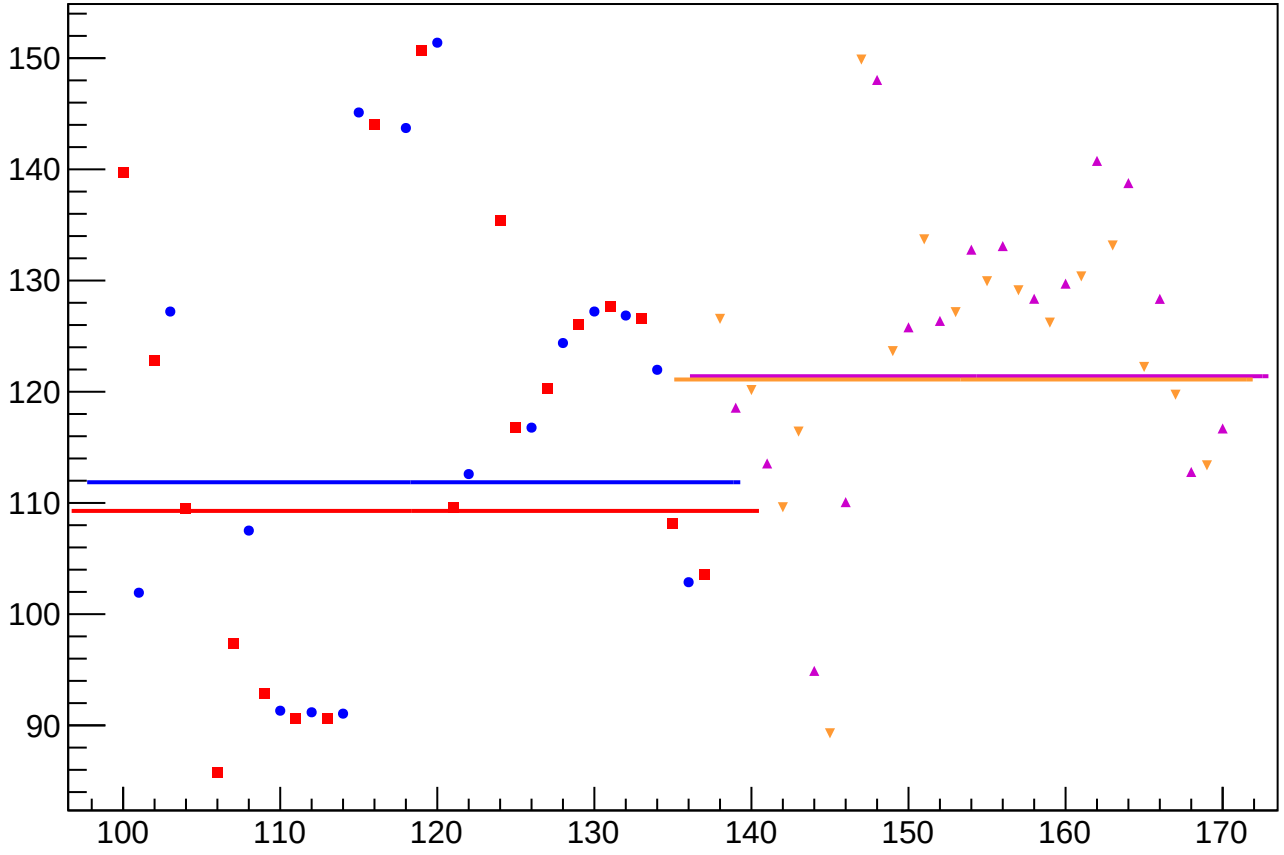
Left In: -248.940+/-33.678 $\chi^2$/NDF:15.9/15

+ sign 172.668+/-26.128 $\chi^2$/NDF: 40.3/32

All: -24.574+/-18.409 $\chi^2$/NDF: 181.2/67

- sign -219.008+/-25.941 $\chi^2$/NDF: 27.8/34

# eigen_cor_asym_sam_48_dd_rms vs Slug




Right In: 111.862+/-0.030 $\chi^2$/NDF: 306025.0/15

Left Out: 121.102+/-0.024 $\chi^2$/NDF:346989.8/16

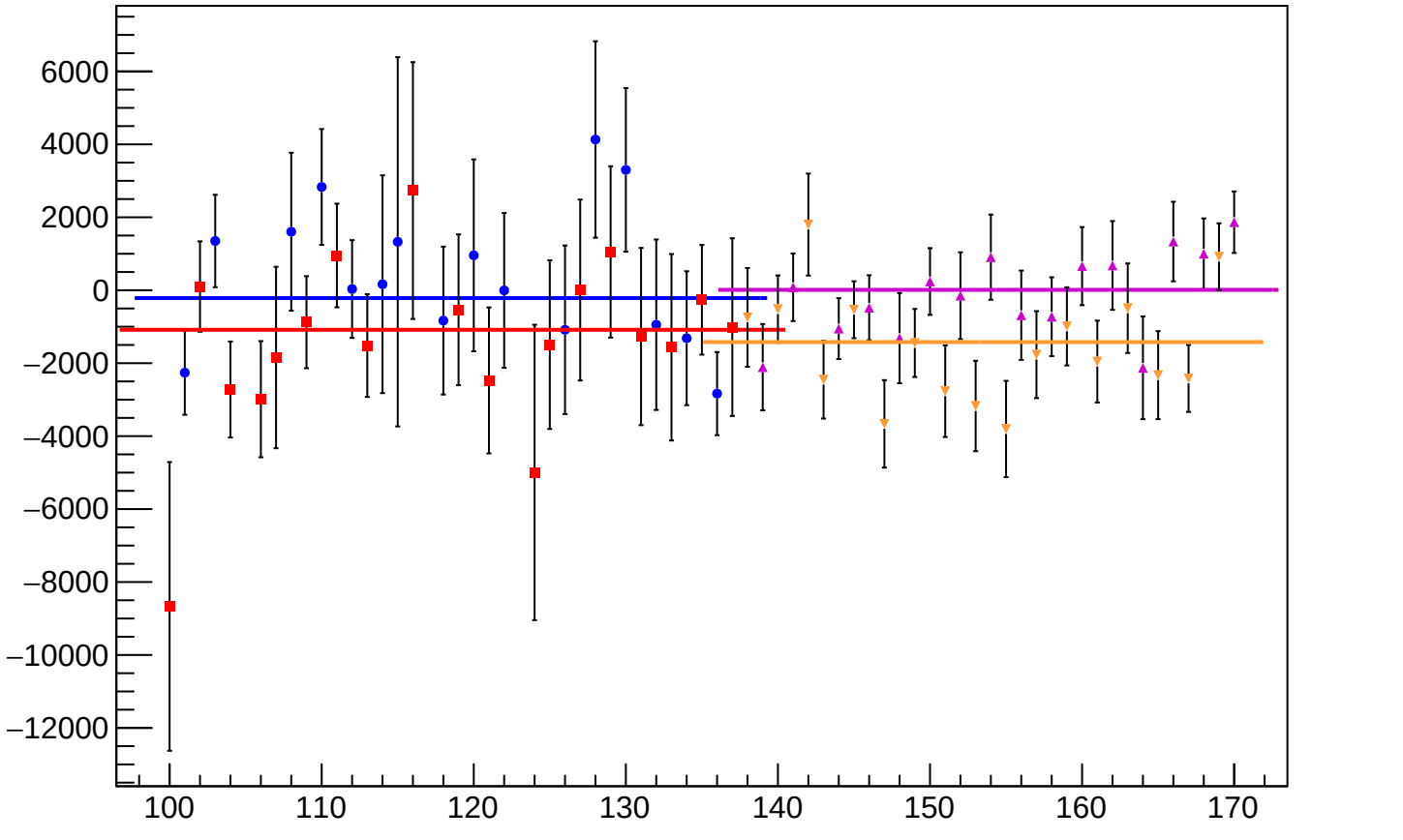
Right Out: 109.284+/-0.029 $\chi^2$/NDF: 370711.7/18

Left In: 121.397+/-0.024 $\chi^2$/NDF:327993.9/15

+ sign 117.549+/-0.018 $\chi^2$/NDF: 712219.4/32

All: 117.006+/-0.013 $\chi^2$/NDF: 1517860.4/67

- sign 116.471+/-0.018 $\chi^2$/NDF: 803926.6/34




Right In: -214.278+/-443.965 $\chi^2$/NDF: 20.4/15

Left Out: -1421.302+/-262.130 $\chi^2$/NDF:28.0/16

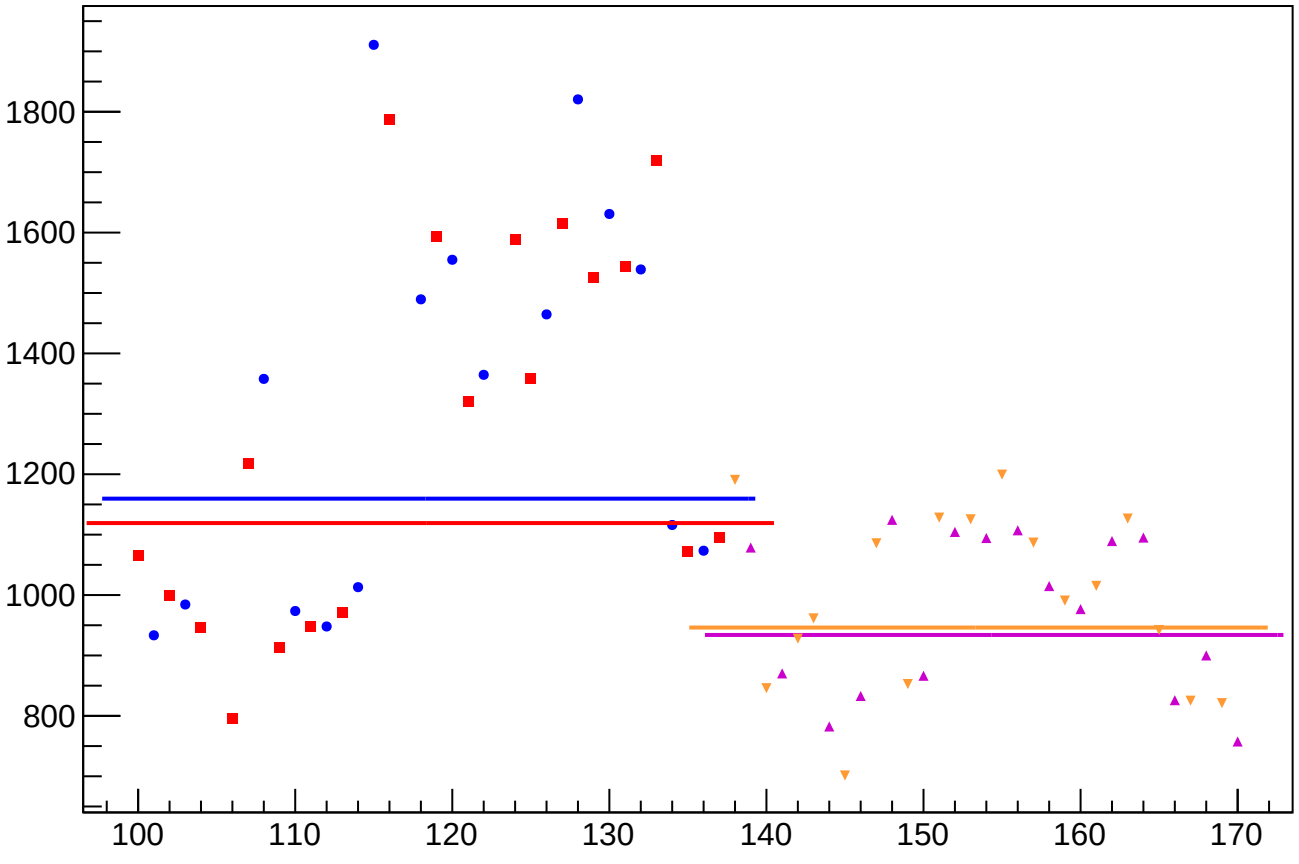
Right Out: -1083.943+/-423.774 $\chi^2$/NDF: 13.9/18

Left In: 11.027+/-260.351 $\chi^2$/NDF:18.1/15

+ sign -1109.293+/-225.722 $\chi^2$/NDF: 53.9/32

All: -692.022+/-158.216 $\chi^2$/NDF: 97.4/67

- sign -289.012+/-221.831 $\chi^2$/NDF: 36.8/34




Right In: 1159.576+/-0.314 $\chi^2$/NDF: 683662.2/15

Left Out: 946.225+/-0.185 $\chi^2$/NDF:645024.4/16

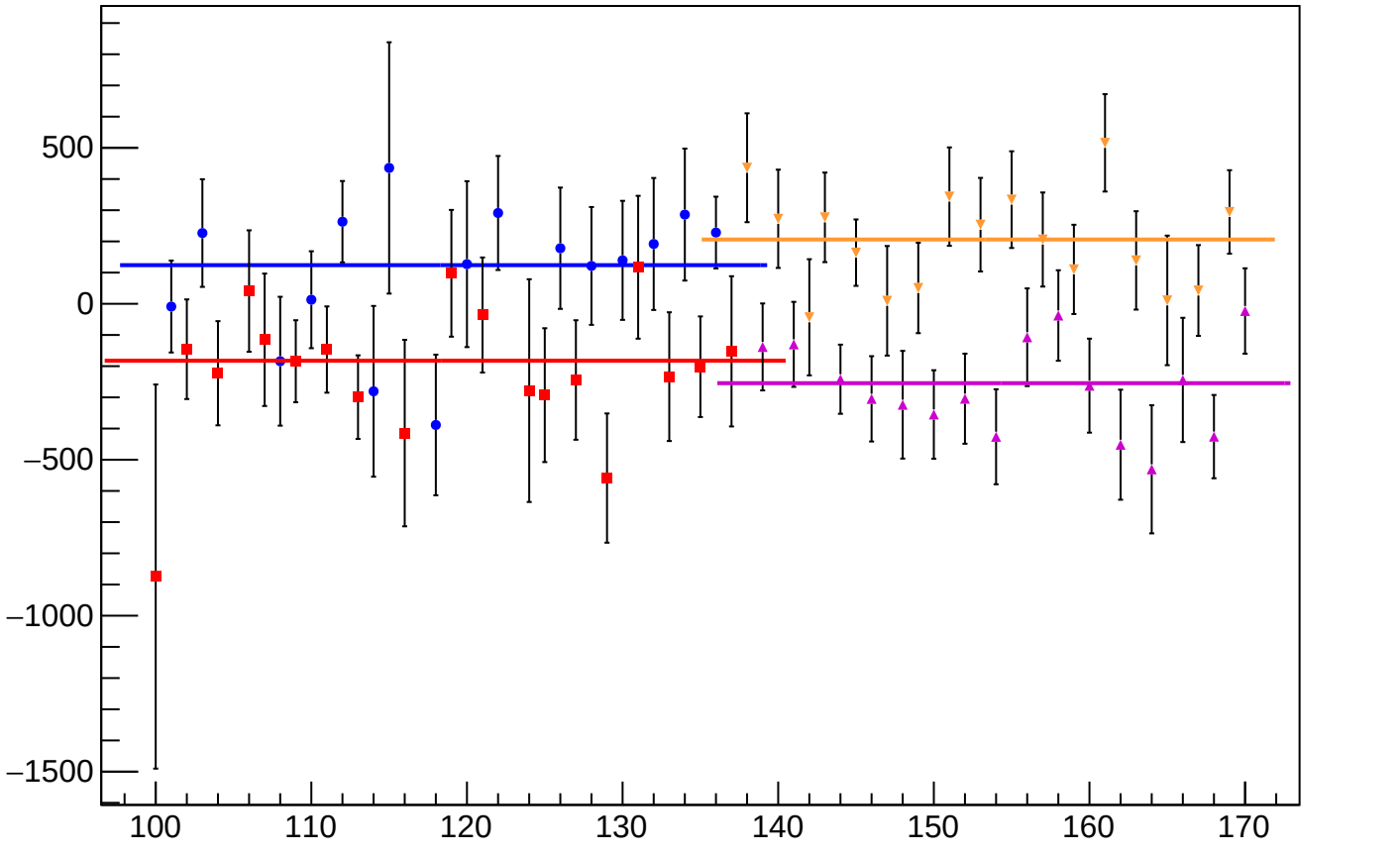
Right Out: 1119.156+/-0.300 $\chi^2$/NDF: 803154.6/18

Left In: 933.942+/-0.184 $\chi^2$/NDF:491201.0/15

+ sign 1001.375+/-0.160 $\chi^2$/NDF: 1671169.0/32

All: 992.889+/-0.112 $\chi^2$/NDF: 3248433.9/67

- sign 984.694+/-0.157 $\chi^2$/NDF: 1571708.3/34




Right In: 123.892+/-45.238 $\chi^2$/NDF: 15.4/15

Left Out: 206.082+/-36.632 $\chi^2$/NDF:15.2/16

Right Out: -182.467+/-43.224 $\chi^2$/NDF: 12.3/18

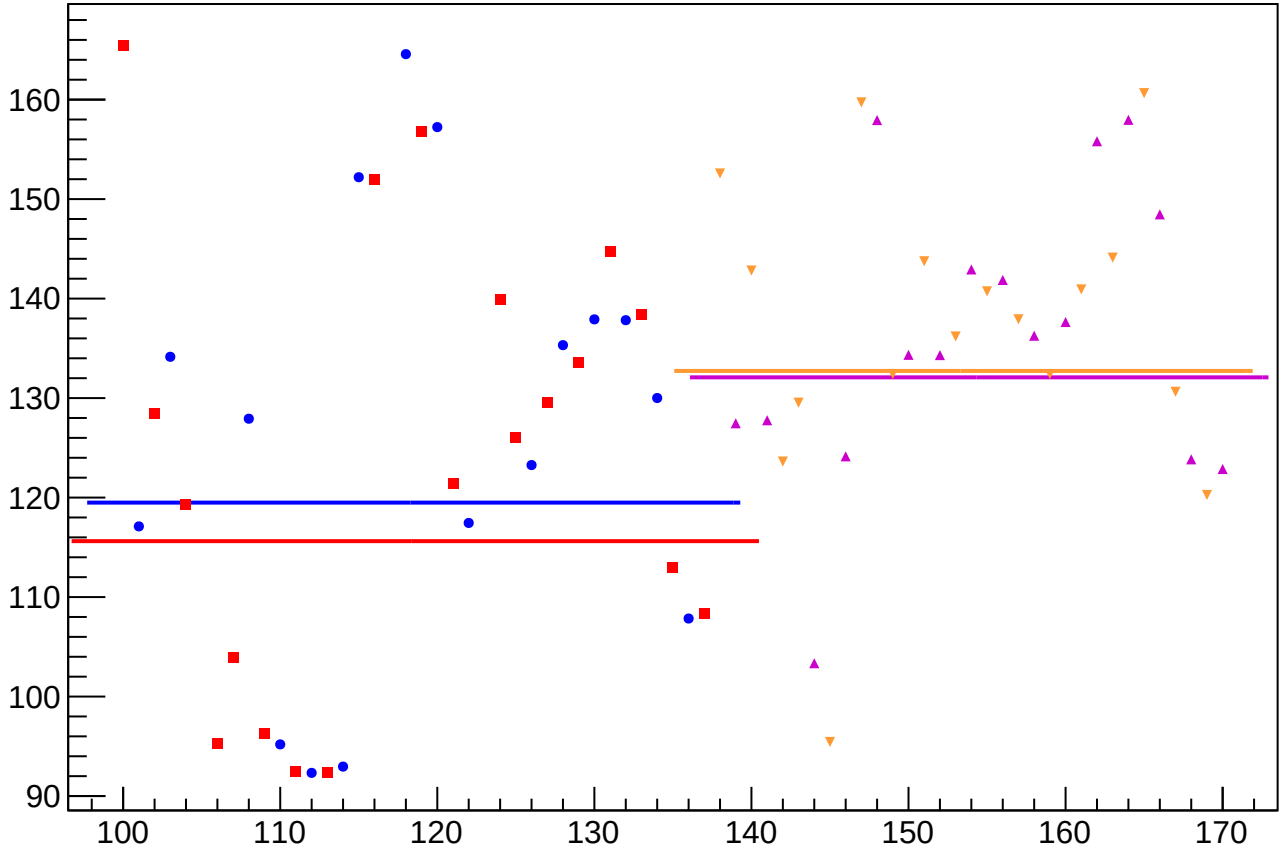
Left In: -254.498+/-36.826 $\chi^2$/NDF:14.4/15

+ sign 173.533+/-28.469 $\chi^2$/NDF: 32.6/32

All: -28.411+/-19.974 $\chi^2$/NDF: 160.0/67

- sign -224.204+/-28.032 $\chi^2$/NDF: 28.3/34

# dit_asym_sam_48_dd_rms vs Slug




Right In: 119.495+/-0.032 $\chi^2$/NDF: 380250.8/15

Left Out: 132.729+/-0.026 $\chi^2$/NDF:420762.1/16

Right Out: 115.622+/-0.031 $\chi^2$/NDF: 426961.7/18

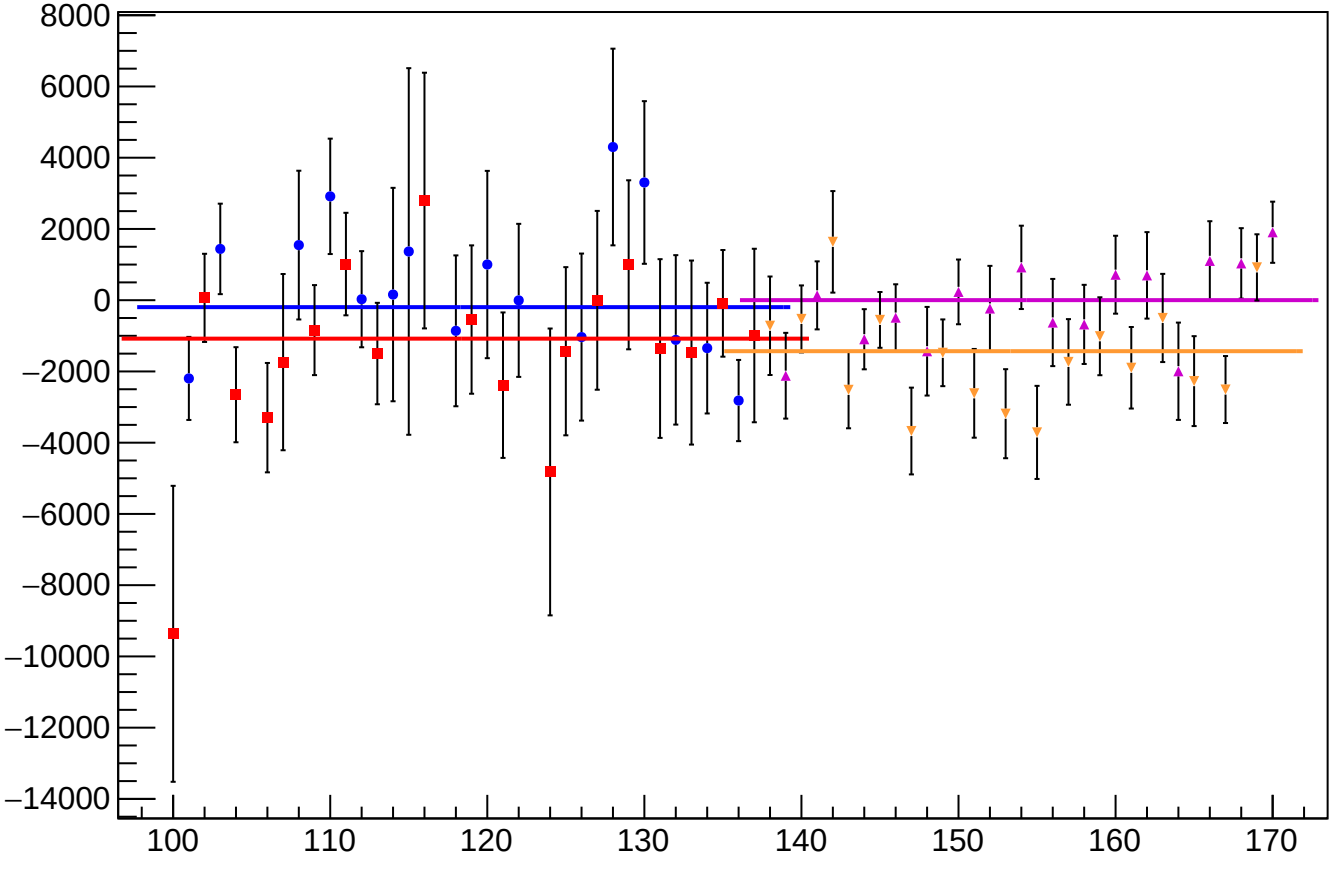
Left In: 132.084+/-0.026 $\chi^2$/NDF:311791.1/15

+ sign 127.488+/-0.020 $\chi^2$/NDF: 904393.1/32

All: 126.306+/-0.014 $\chi^2$/NDF: 1818026.0/67

- sign 125.160+/-0.020 $\chi^2$/NDF: 906846.6/34

# asym_sam_48_dd_dit_correction_mean vs Slug




Right In: -195.086+/-447.334 $\chi^2$/NDF: 20.4/15

Left Out: -1431.421+/-265.556 $\chi^2$/NDF:26.5/16

Right Out: -1079.393+/-425.950 $\chi^2$/NDF: 14.6/18

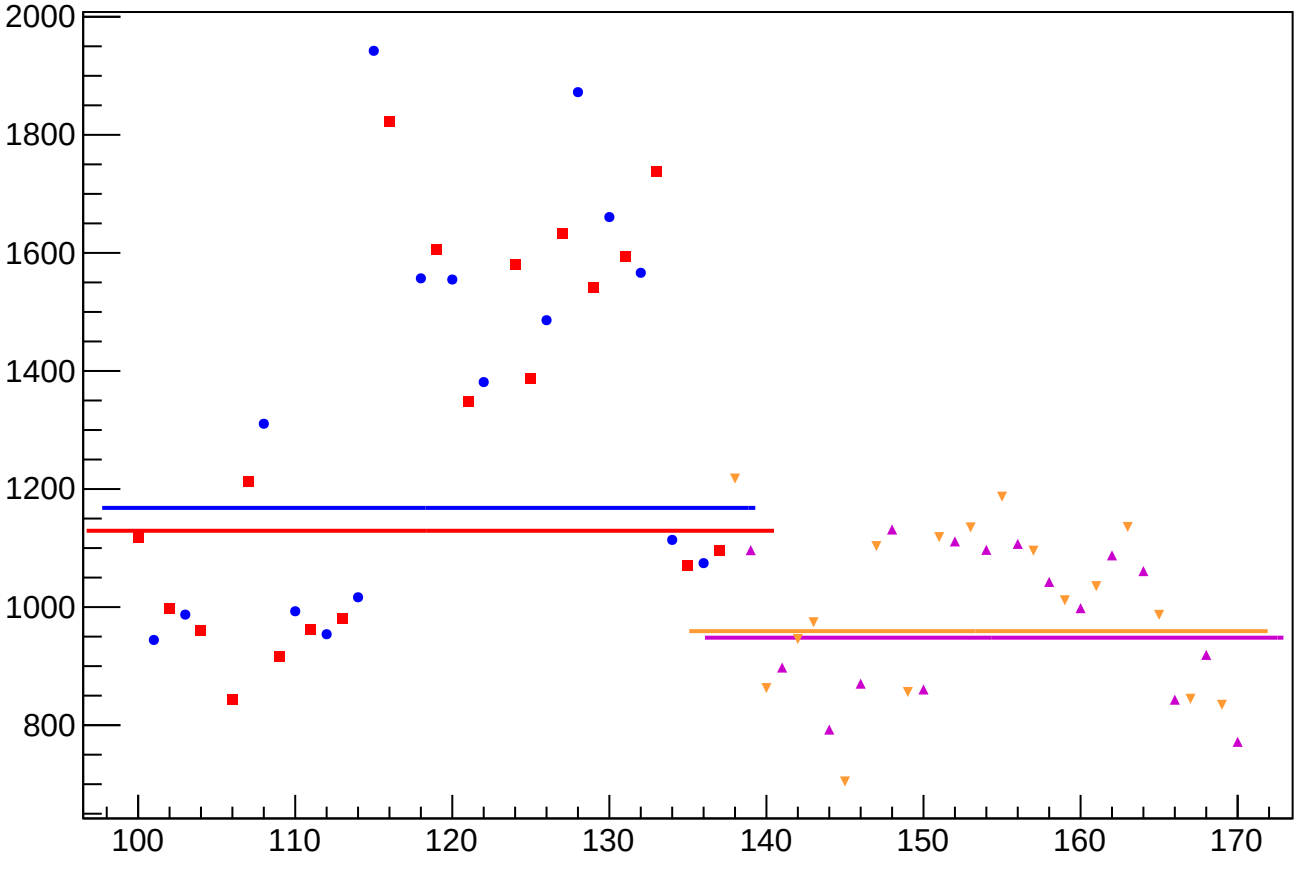
Left In: 1.621+/-264.161 $\chi^2$/NDF:17.7/15

+ sign -1109.257+/-228.350 $\chi^2$/NDF: 52.6/32

All: -697.054+/-160.087 $\chi^2$/NDF: 95.9/67

- sign -298.657+/-224.494 $\chi^2$/NDF: 36.9/34

# asym_sam_48_dd_dit_correction_rms vs Slug




Right In: 1168.063+/-0.316 $\chi^2$/NDF: 709363.8/15

Left Out: 959.254+/-0.188 $\chi^2$/NDF:634668.6/16

Right Out: 1129.316+/-0.301 $\chi^2$/NDF: 807222.5/18

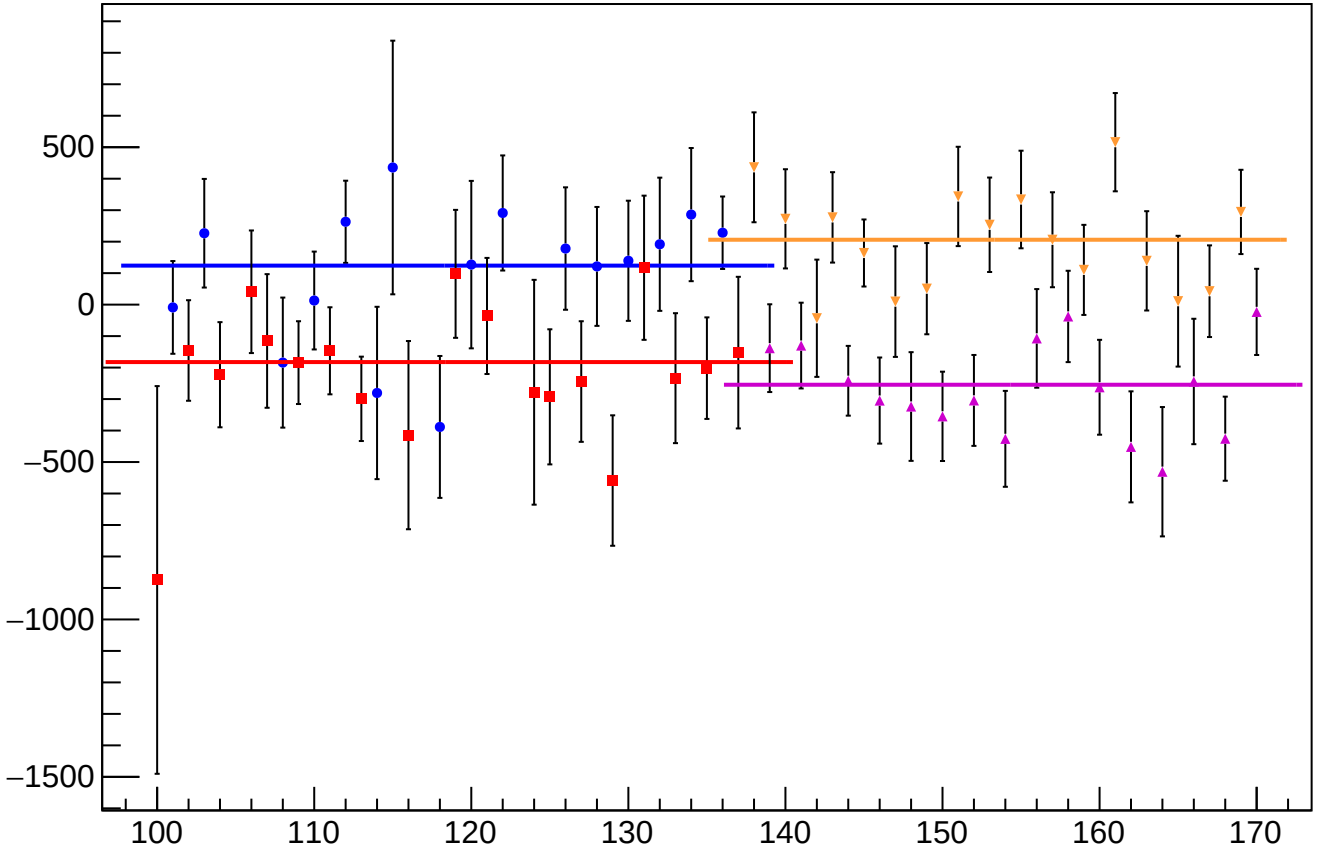
Left In: 948.201+/-0.187 $\chi^2$/NDF:445702.9/15

+ sign 1013.665+/-0.161 $\chi^2$/NDF: 1666254.2/32

All: 1005.959+/-0.113 $\chi^2$/NDF: 3184812.3/67

- sign 998.511+/-0.159 $\chi^2$/NDF: 1514078.5/34

# eigen_dit_asym_sam_48_dd_mean vs Slug




Right In: 123.895+/-45.238 $\chi^2$/NDF: 15.4/15

Left Out: 206.085+/-36.632 $\chi^2$/NDF:15.2/16

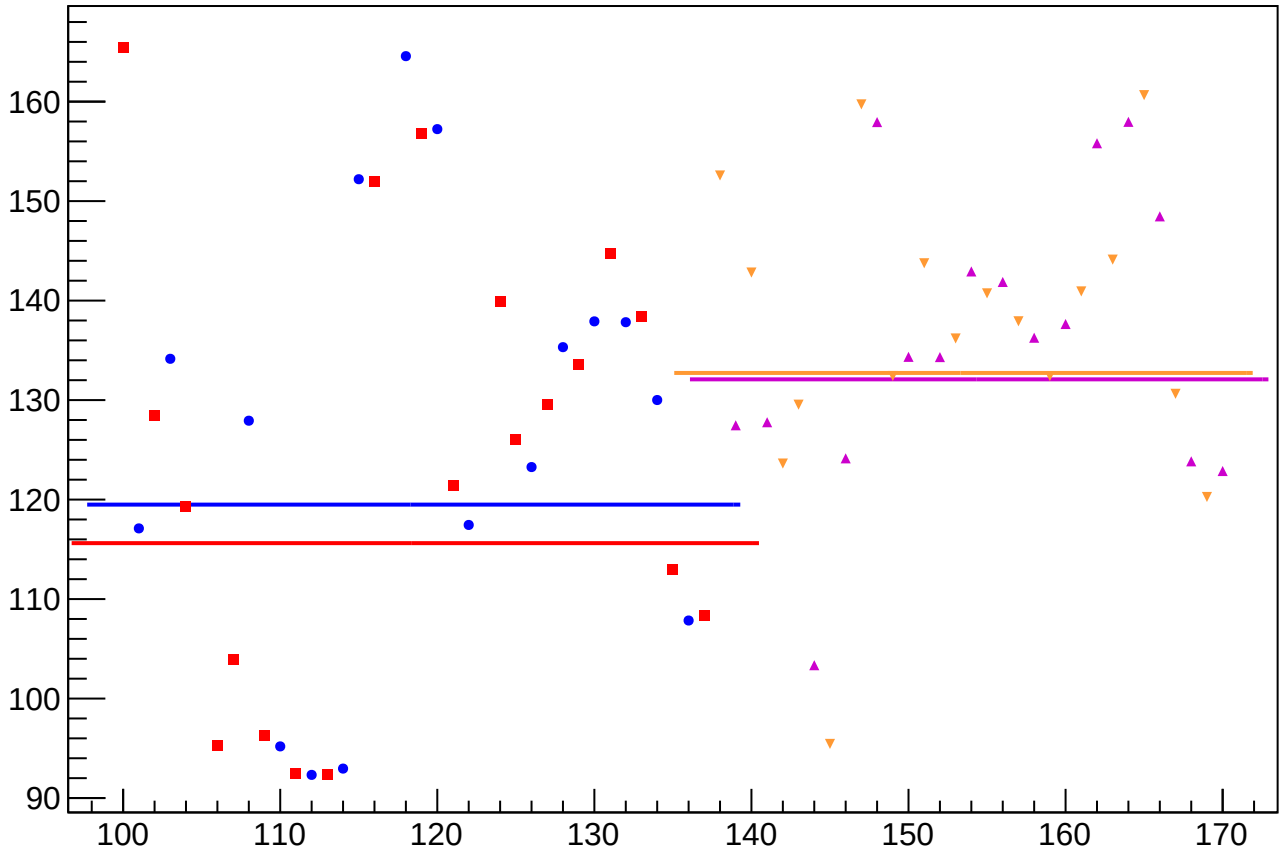
Right Out: -182.468+/-43.224 $\chi^2$/NDF: 12.3/18

Left In: -254.500+/-36.826 $\chi^2$/NDF:14.4/15

+ sign 173.535+/-28.469 $\chi^2$/NDF: 32.6/32

All: -28.411+/-19.974 $\chi^2$/NDF: 160.1/67

- sign -224.205+/-28.032 $\chi^2$/NDF: 28.3/34




Right In: 119.495+/-0.032 $\chi^2$/NDF: 380254.2/15

Left Out: 132.729+/-0.026 $\chi^2$/NDF:420763.5/16

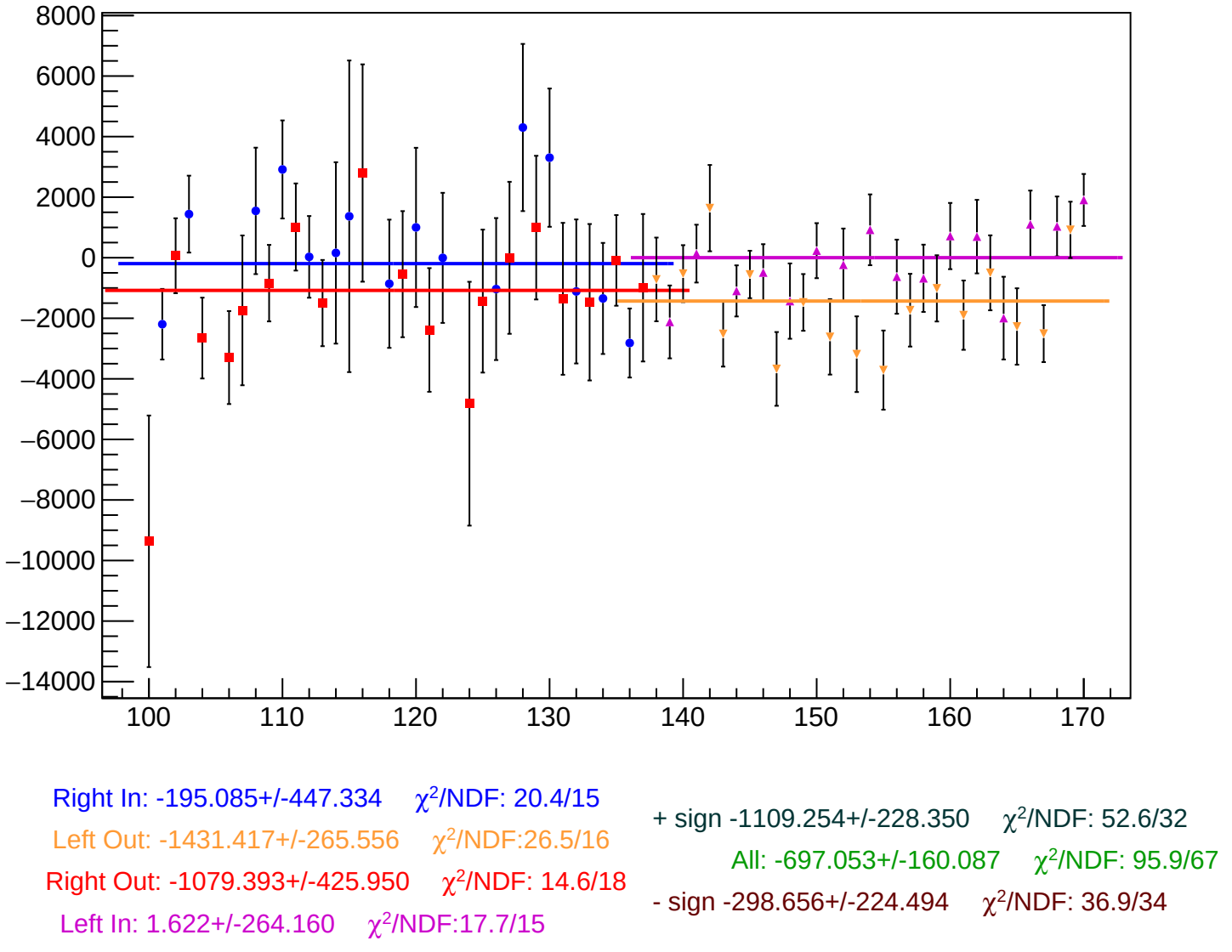
Right Out: 115.622+/-0.031 $\chi^2$/NDF: 426966.4/18

Left In: 132.084+/-0.026 $\chi^2$/NDF:311791.6/15

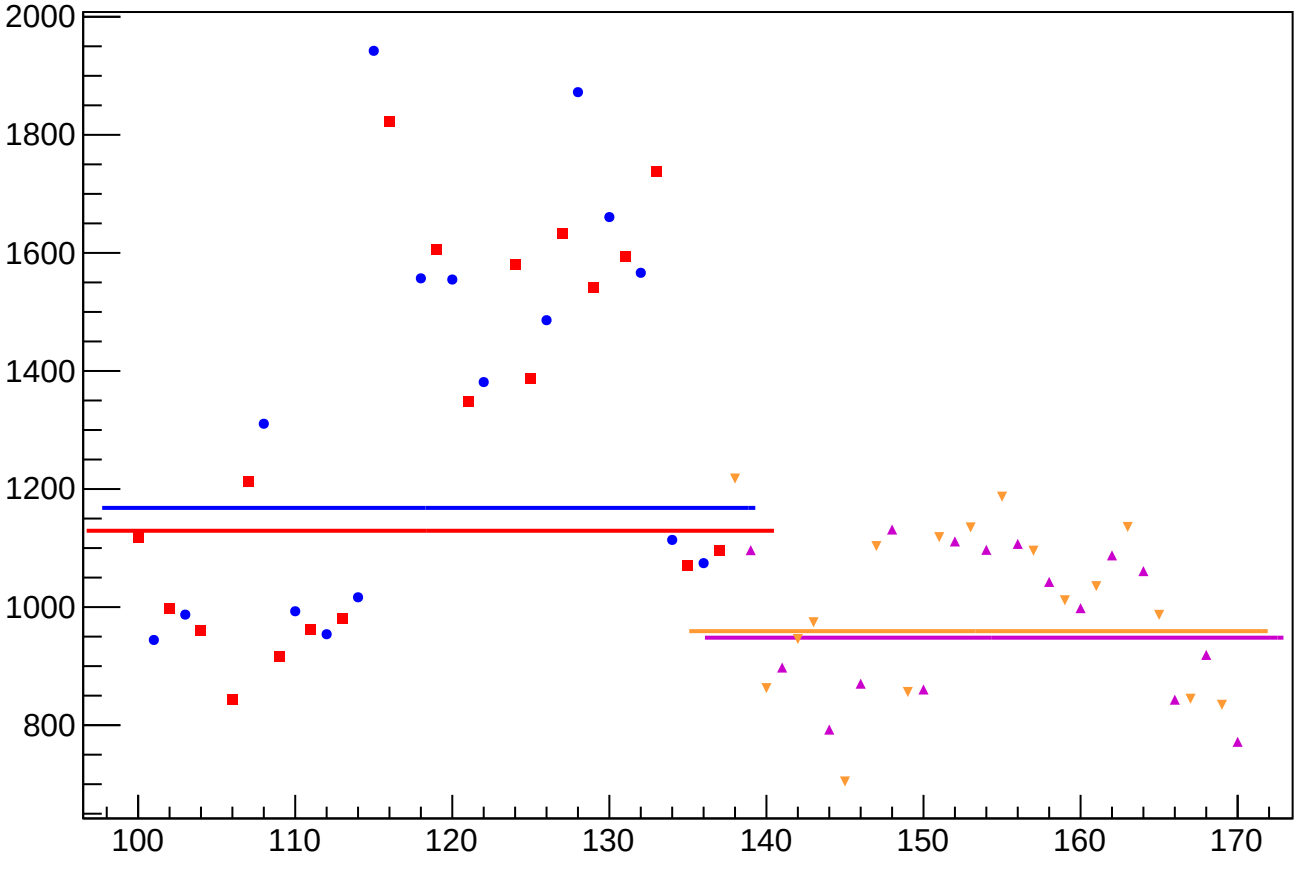
+ sign 127.488+/-0.020 $\chi^2$/NDF: 904398.2/32

All: 126.306+/-0.014 $\chi^2$/NDF: 1818037.9/67

- sign 125.160+/-0.020 $\chi^2$/NDF: 906853.1/34


asym_sam_48_dd_eigen_dit_correction_mean vs Slug
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
−12000
−14000
100
110
120
130
140
150
160
170
Right In: -195.085+/-447.334 χ²/NDF: 20.4/15
Left Out: -1431.417+/-265.556 χ²/NDF:26.5/16
Right Out: -1079.393+/-425.950 χ²/NDF: 14.6/18
Left In: 1.622+/-264.160 χ²/NDF:17.7/15
+ sign -1109.254+/-228.350 χ²/NDF: 52.6/32
All: -697.053+/-160.087 χ²/NDF: 95.9/67
- sign -298.656+/-224.494 χ²/NDF: 36.9/34

# asym_sam_48_dd_eigen_dit_correction_rms vs Slug




Right In: 1168.063+/-0.316 $\chi^2$/NDF: 709365.6/15

Left Out: 959.253+/-0.188 $\chi^2$/NDF:634674.8/16

Right Out: 1129.316+/-0.301 $\chi^2$/NDF: 807224.0/18

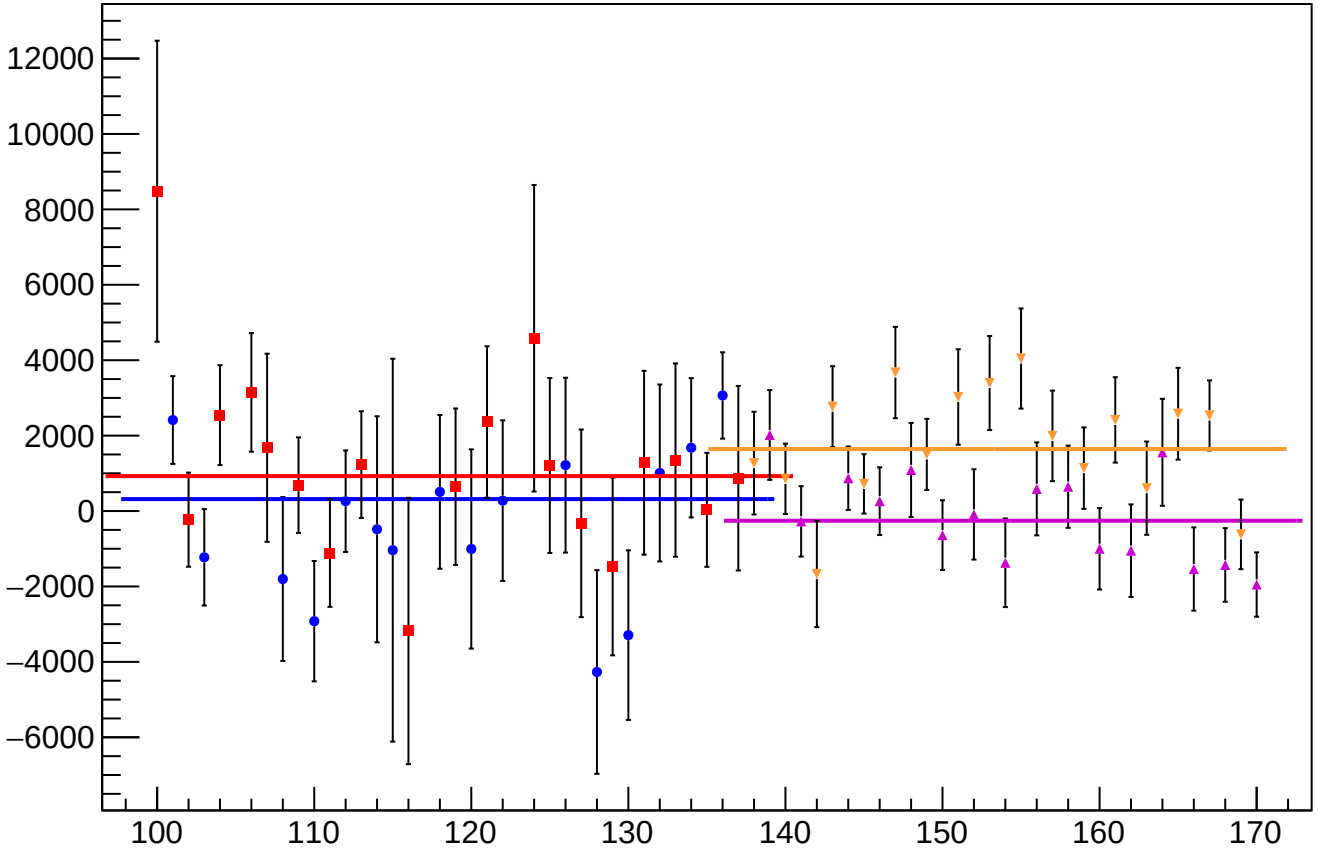
Left In: 948.201+/-0.187 $\chi^2$/NDF:445704.6/15

+ sign 1013.664+/-0.161 $\chi^2$/NDF: 1666265.5/32

All: 1005.958+/-0.113 $\chi^2$/NDF: 3184828.3/67

- sign 998.510+/-0.159 $\chi^2$/NDF: 1514083.3/34

# asym_sam_48_dd_mean vs Slug




Right In: 317.365+/-446.341 $\chi^2$/NDF: 22.2/15

Left Out: 1645.507+/-264.356 $\chi^2$/NDF:27.1/16

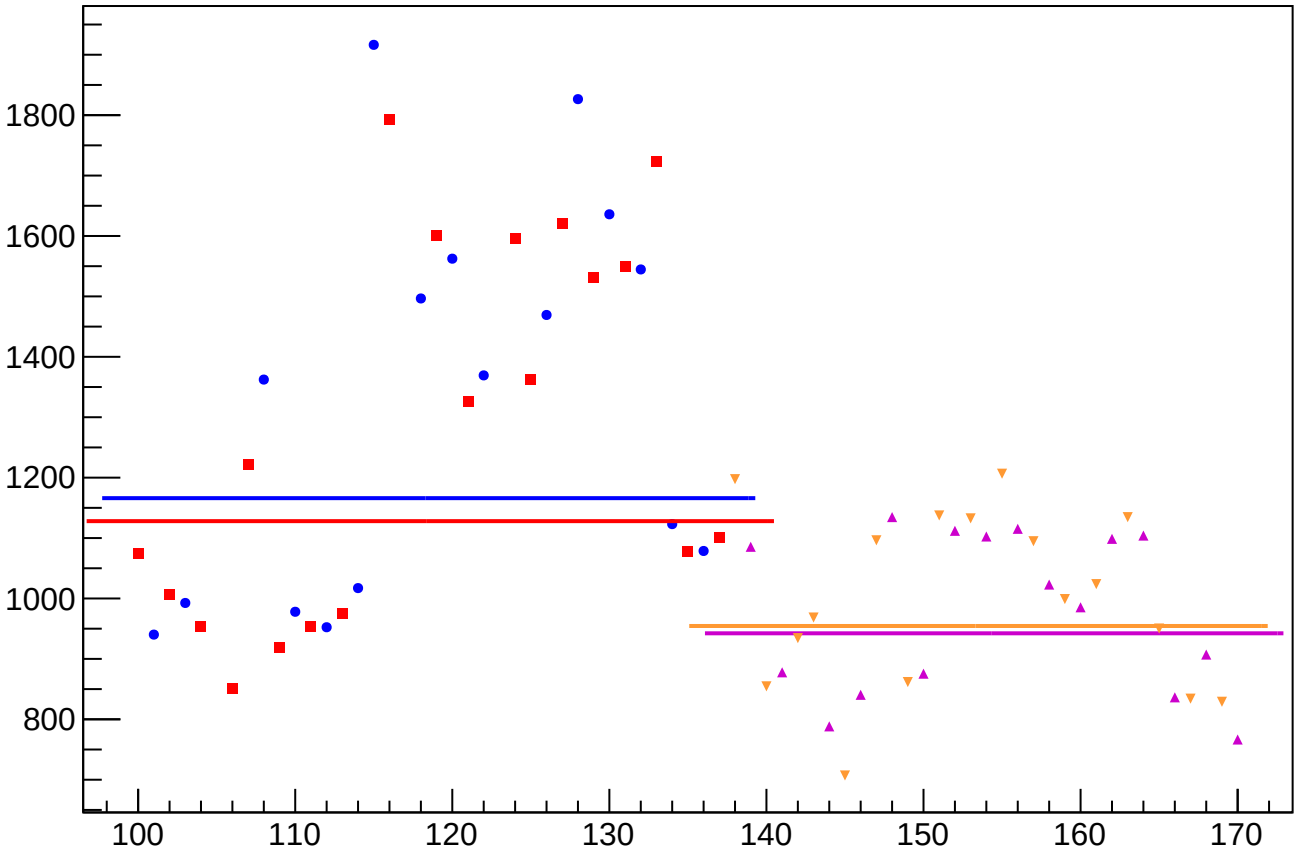
Right Out: 926.036+/-425.405 $\chi^2$/NDF: 14.5/18

Left In: -257.279+/-262.643 $\chi^2$/NDF:18.4/15

+ sign 1300.600+/-227.455 $\chi^2$/NDF: 55.8/32

All: 674.096+/-159.411 $\chi^2$/NDF: 109.3/67

- sign 69.292+/-223.481 $\chi^2$/NDF: 38.6/34




Right In: 1166.056+/-0.316 $\chi^2$/NDF: 677063.1/15

Left Out: 954.462+/-0.187 $\chi^2$/NDF:637644.8/16

Right Out: 1128.006+/-0.301 $\chi^2$/NDF: 775766.7/18

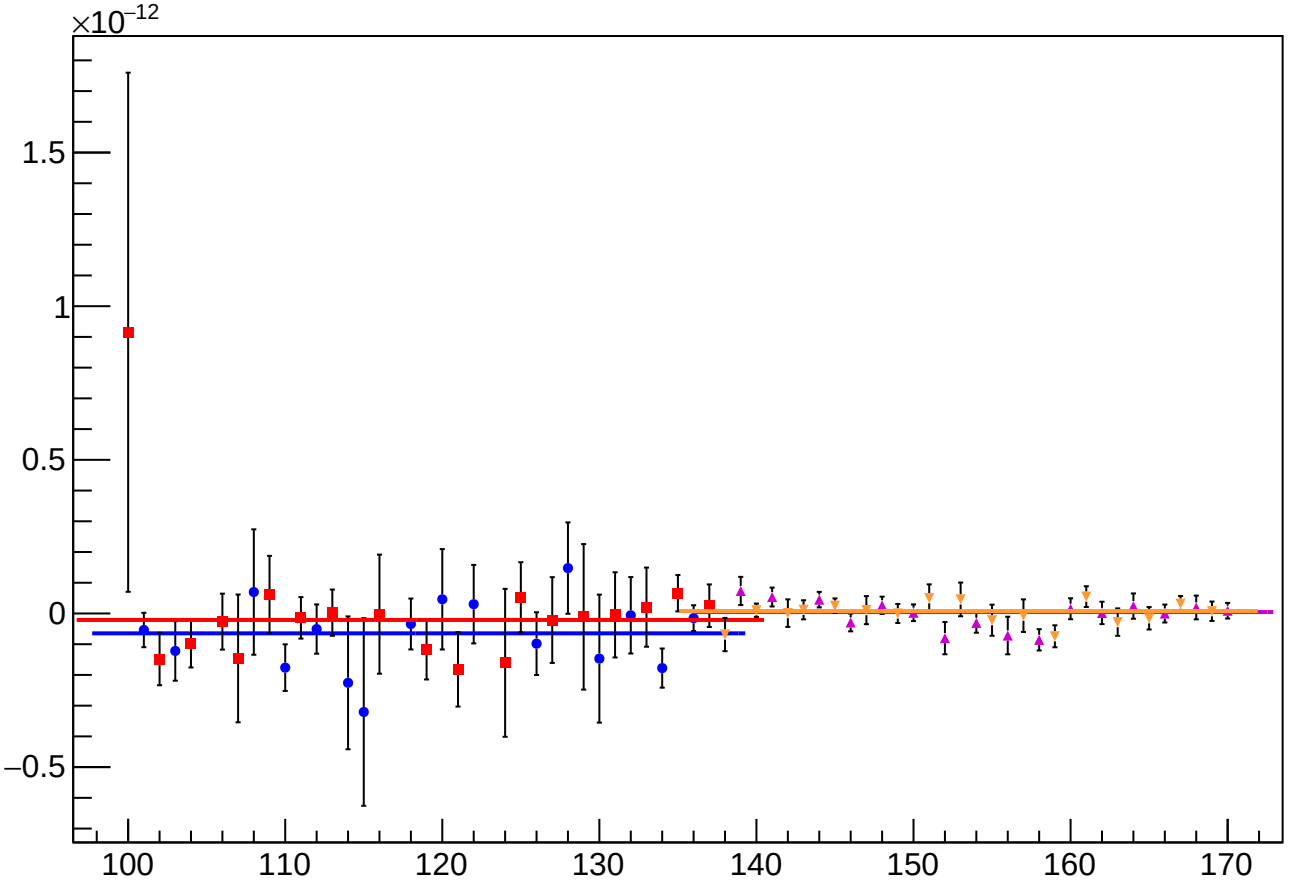
Left In: 942.345+/-0.186 $\chi^2$/NDF:484422.7/15

+ sign 1009.412+/-0.161 $\chi^2$/NDF: 1647457.0/32

All: 1001.358+/-0.113 $\chi^2$/NDF: 3188388.4/67

- sign 993.584+/-0.158 $\chi^2$/NDF: 1536004.0/34

# asym_sam_48_dd_reg_vs_cor_diff_mean vs Slug




Right In: -0.000+/-0.000 $\chi^2$/NDF: 12.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13.6/16

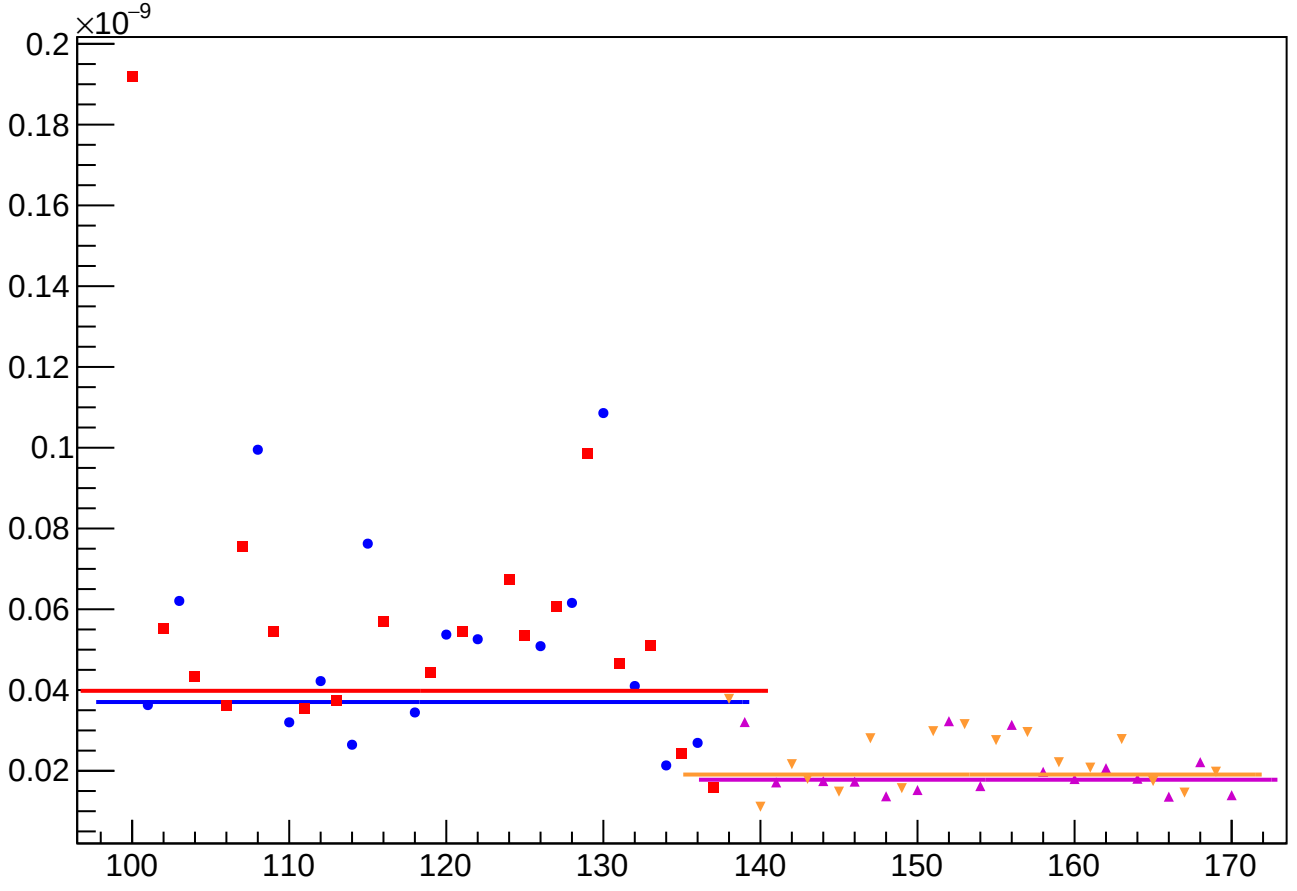
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 11.5/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:22.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 35.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 70.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 34.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 995390.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1201278.4/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 903728.0/18

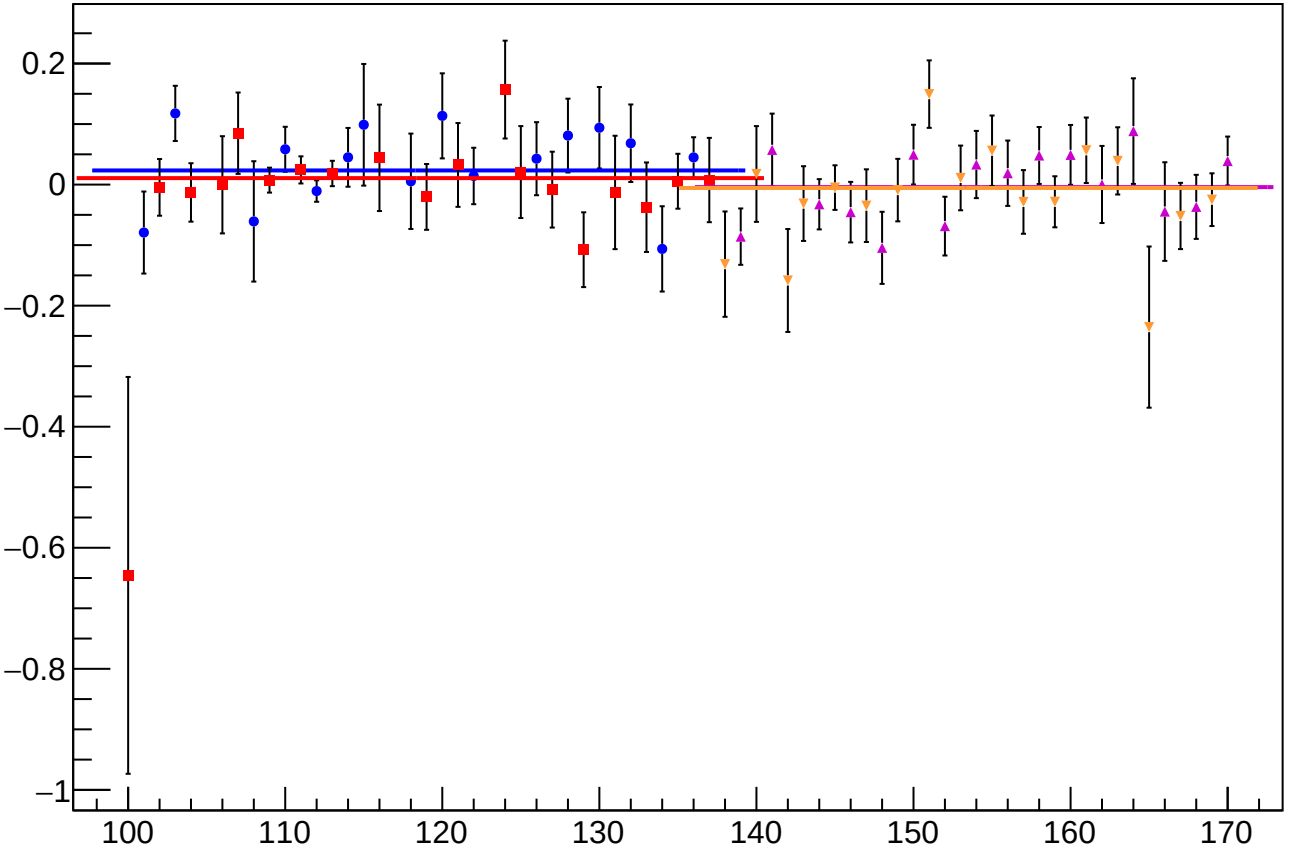
Left In: 0.000+/-0.000 $\chi^2$/NDF:643789.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3377200.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 6558530.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3160360.3/34

# asym_sam_48_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.023+/-0.011 $\chi^2$/NDF: 20.7/15

Left Out: -0.006+/-0.013 $\chi^2$/NDF:21.1/16

Right Out: 0.011+/-0.010 $\chi^2$/NDF: 14.2/18

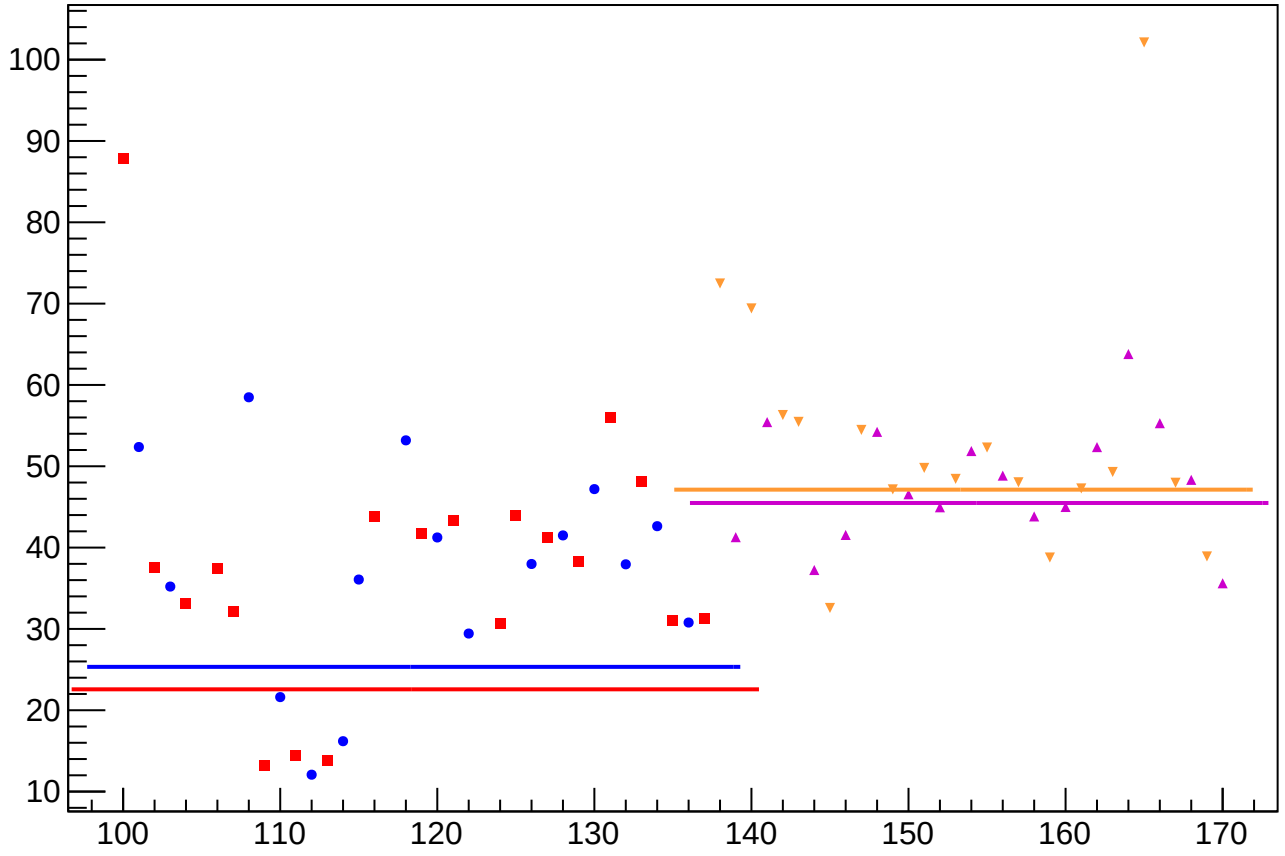
Left In: -0.004+/-0.013 $\chi^2$/NDF:17.0/15

+ sign 0.012+/-0.009 $\chi^2$/NDF: 44.6/32

All: 0.008+/-0.006 $\chi^2$/NDF: 77.0/67

- sign 0.005+/-0.008 $\chi^2$/NDF: 32.1/34

# asym_sam_48_dd_dit_vs_cor_diff_rms vs Slug




Right In: 25.334+/-0.008 $\chi^2$/NDF: 2925132.2/15

Left Out: 47.126+/-0.009 $\chi^2$/NDF:1246639.0/16

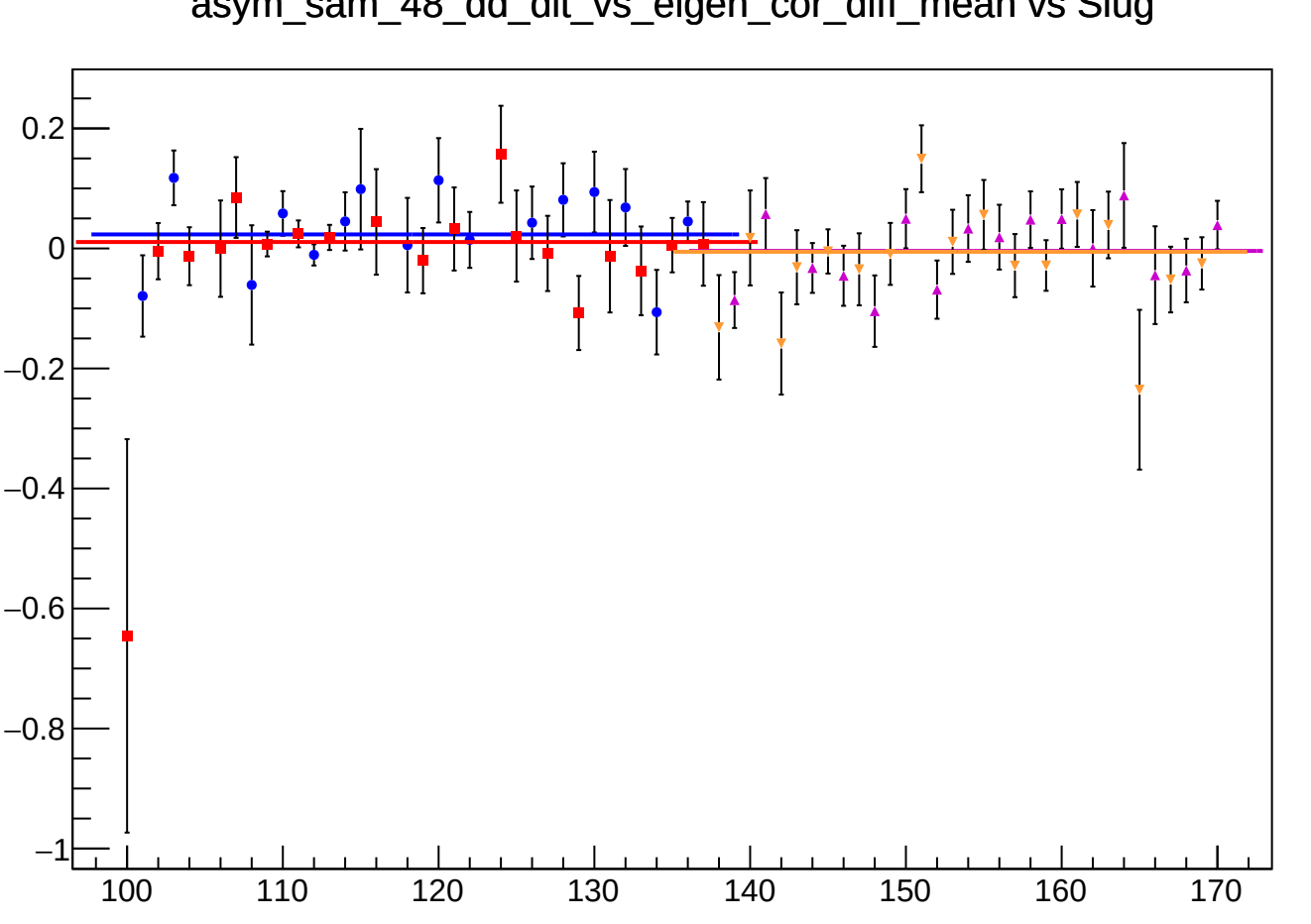
Right Out: 22.571+/-0.007 $\chi^2$/NDF: 3139937.1/18

Left In: 45.486+/-0.009 $\chi^2$/NDF:509328.0/15

+ sign 34.160+/-0.006 $\chi^2$/NDF: 7311536.5/32

All: 32.352+/-0.004 $\chi^2$/NDF: 15064225.4/67

- sign 30.828+/-0.006 $\chi^2$/NDF: 7587371.5/34




Right In: 0.023+/-0.011 $\chi^2$/NDF: 20.7/15

Left Out: -0.006+/-0.013 $\chi^2$/NDF:21.1/16

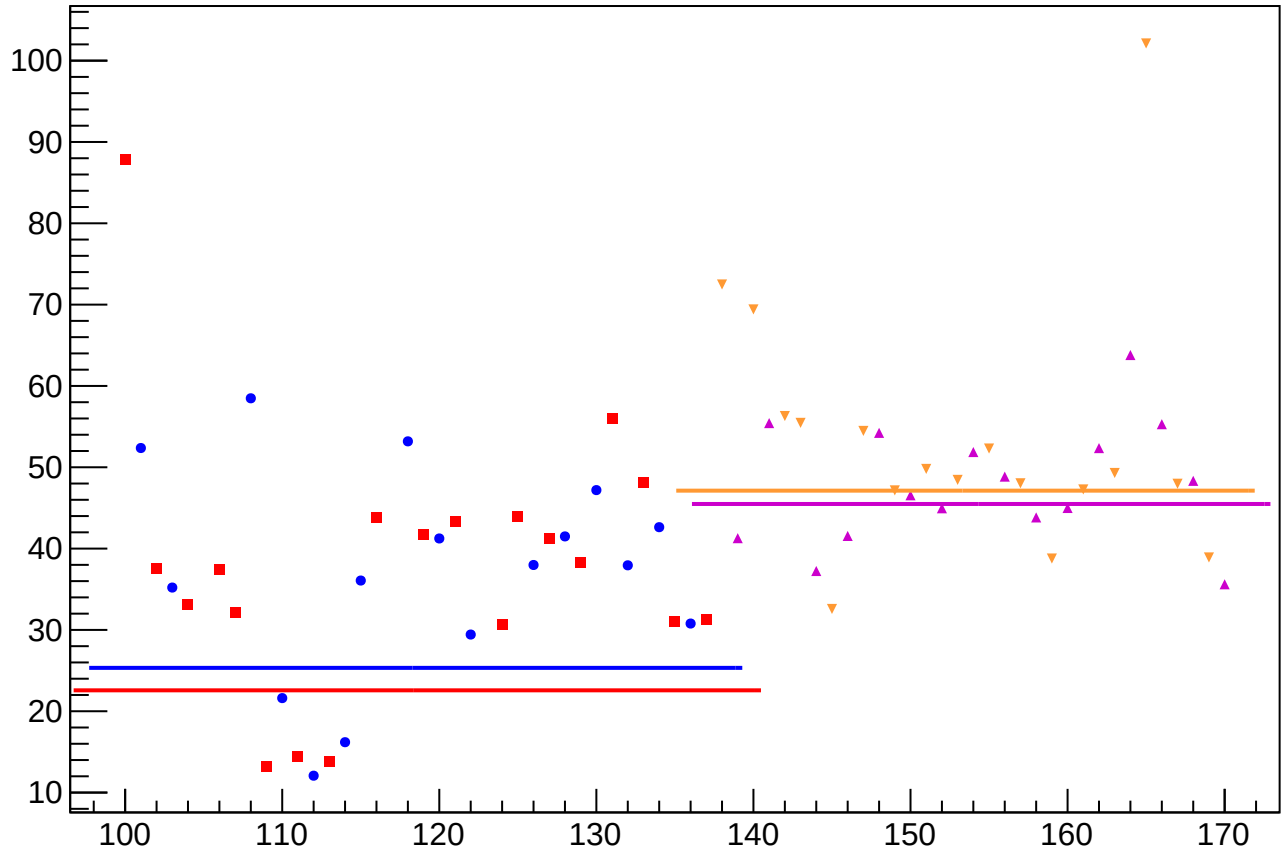
Right Out: 0.011+/-0.010 $\chi^2$/NDF: 14.2/18

Left In: -0.004+/-0.013 $\chi^2$/NDF:17.0/15

+ sign 0.012+/-0.009 $\chi^2$/NDF: 44.6/32

All: 0.008+/-0.006 $\chi^2$/NDF: 77.0/67

- sign 0.005+/-0.008 $\chi^2$/NDF: 32.1/34




Right In: 25.334+/-0.008 $\chi^2$/NDF: 2925132.2/15

Left Out: 47.126+/-0.009 $\chi^2$/NDF:1246639.0/16

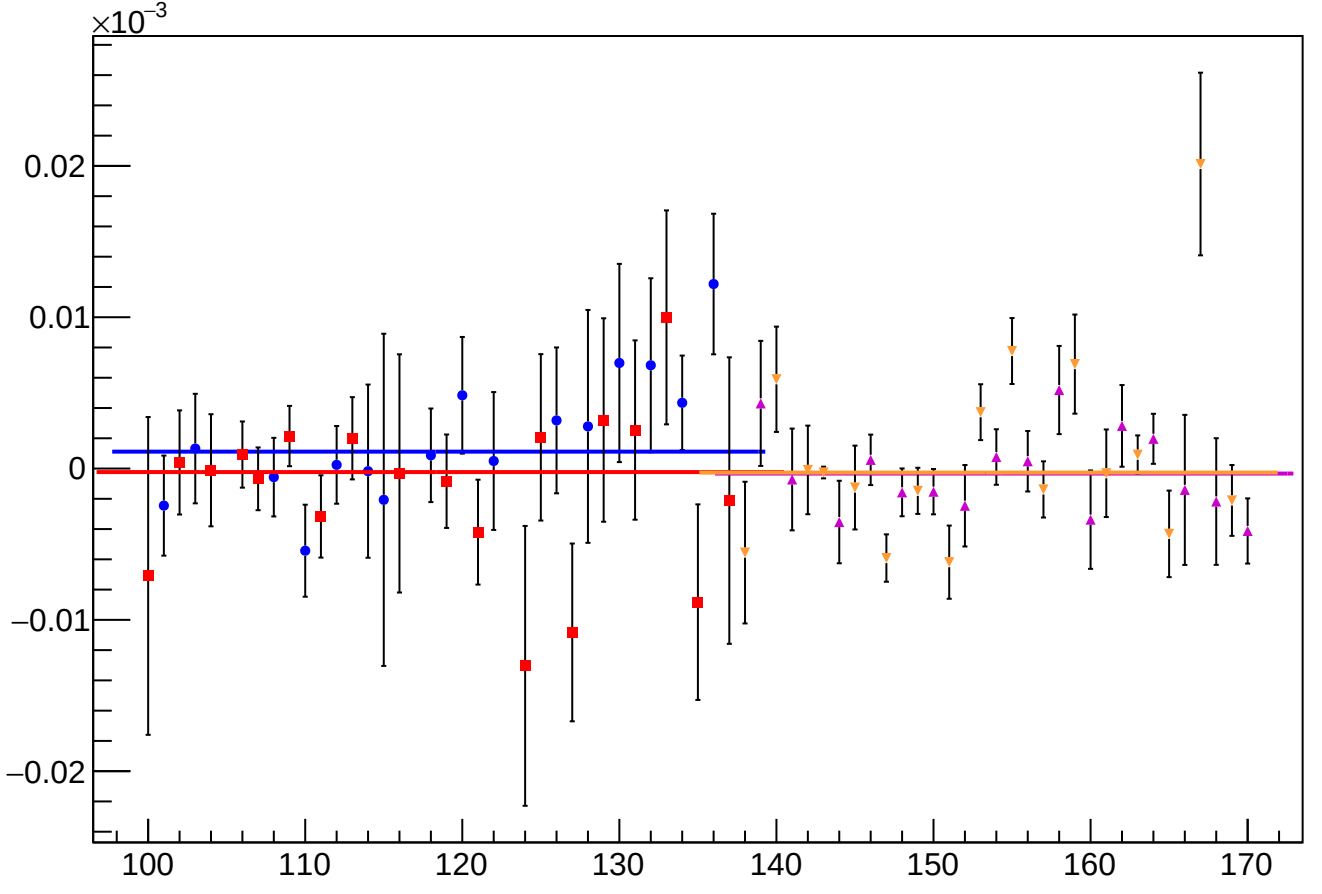
Right Out: 22.571+/-0.007 $\chi^2$/NDF: 3139937.1/18

Left In: 45.486+/-0.009 $\chi^2$/NDF:509328.0/15

+ sign 34.160+/-0.006 $\chi^2$/NDF: 7311536.5/32

All: 32.352+/-0.004 $\chi^2$/NDF: 15064225.4/67

- sign 30.828+/-0.006 $\chi^2$/NDF: 7587371.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 16.2/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:62.5/16

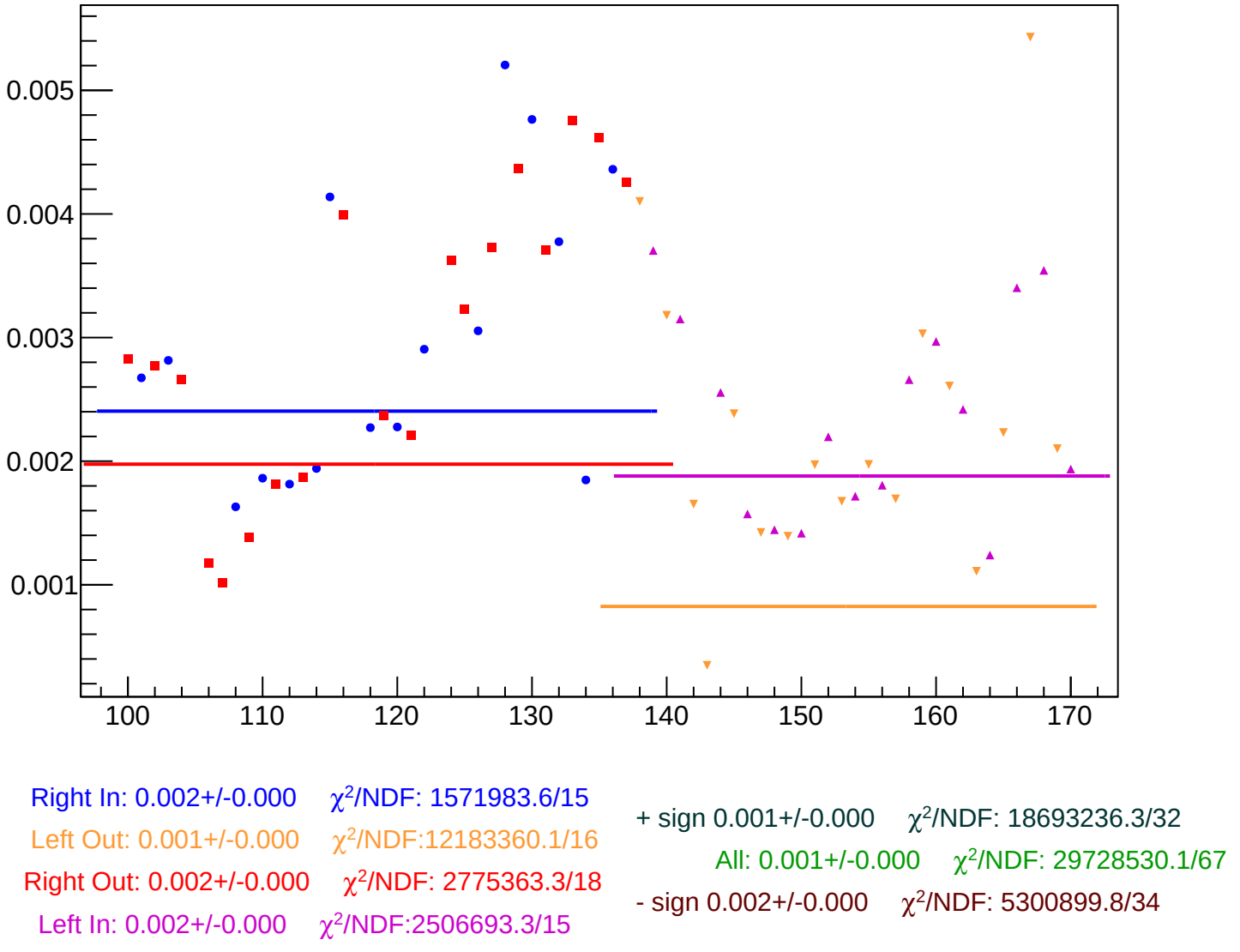
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.1/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:16.5/15

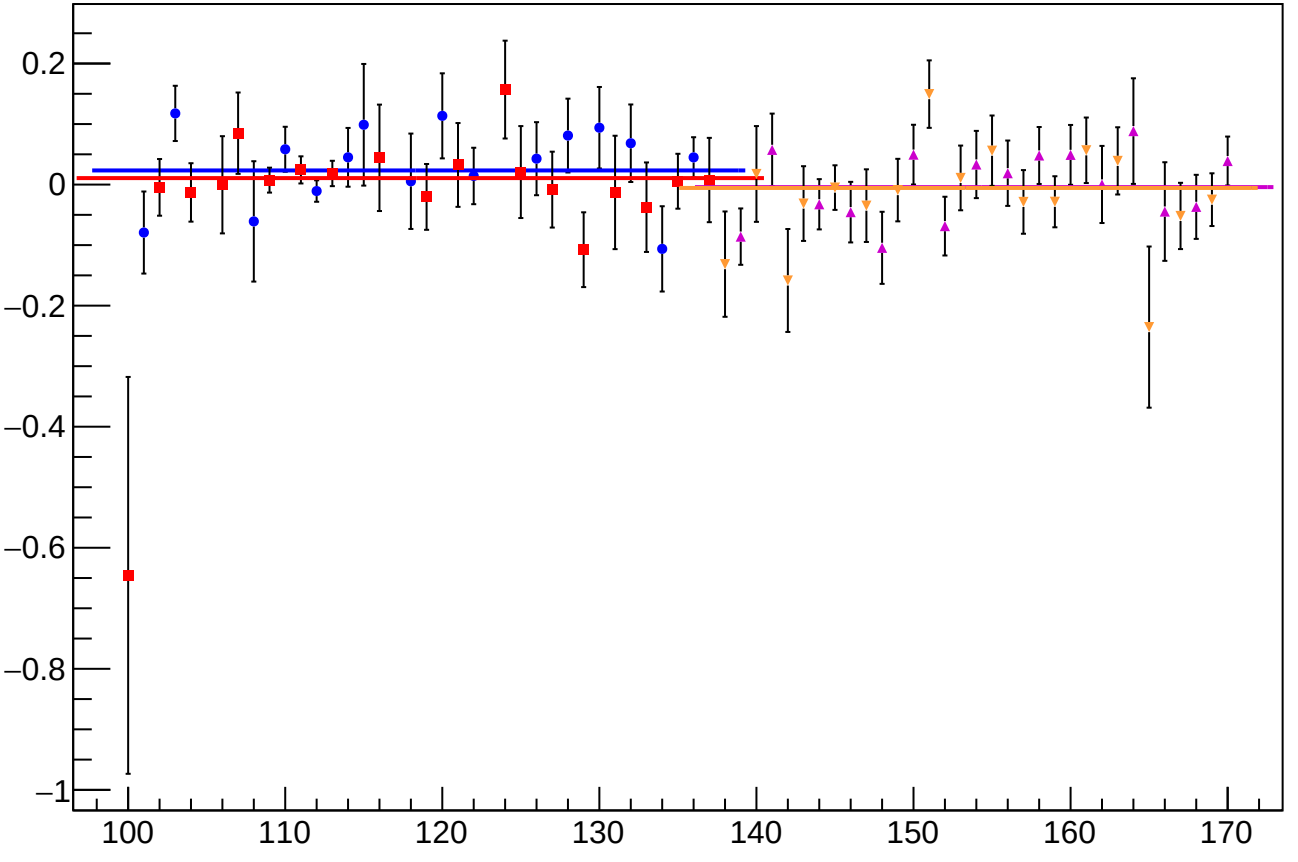
+ sign -0.000+/-0.000 $\chi^2$/NDF: 80.6/32

All: -0.000+/-0.000 $\chi^2$/NDF: 112.3/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 31.6/34


asym_sam_48_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.005
0.004
0.003
0.002
0.001
100
110
120
130
140
150
160
170
Right In: 0.002+/-0.000 χ²/NDF: 1571983.6/15
Left Out: 0.001+/-0.000 χ²/NDF:12183360.1/16
Right Out: 0.002+/-0.000 χ²/NDF: 2775363.3/18
Left In: 0.002+/-0.000 χ²/NDF:2506693.3/15
+ sign 0.001+/-0.000 χ²/NDF: 18693236.3/32
All: 0.001+/-0.000 χ²/NDF: 29728530.1/67
- sign 0.002+/-0.000 χ²/NDF: 5300899.8/34

# asym_sam_48_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: 0.023+/-0.011 $\chi^2$/NDF: 20.7/15

Left Out: -0.006+/-0.013 $\chi^2$/NDF:21.1/16

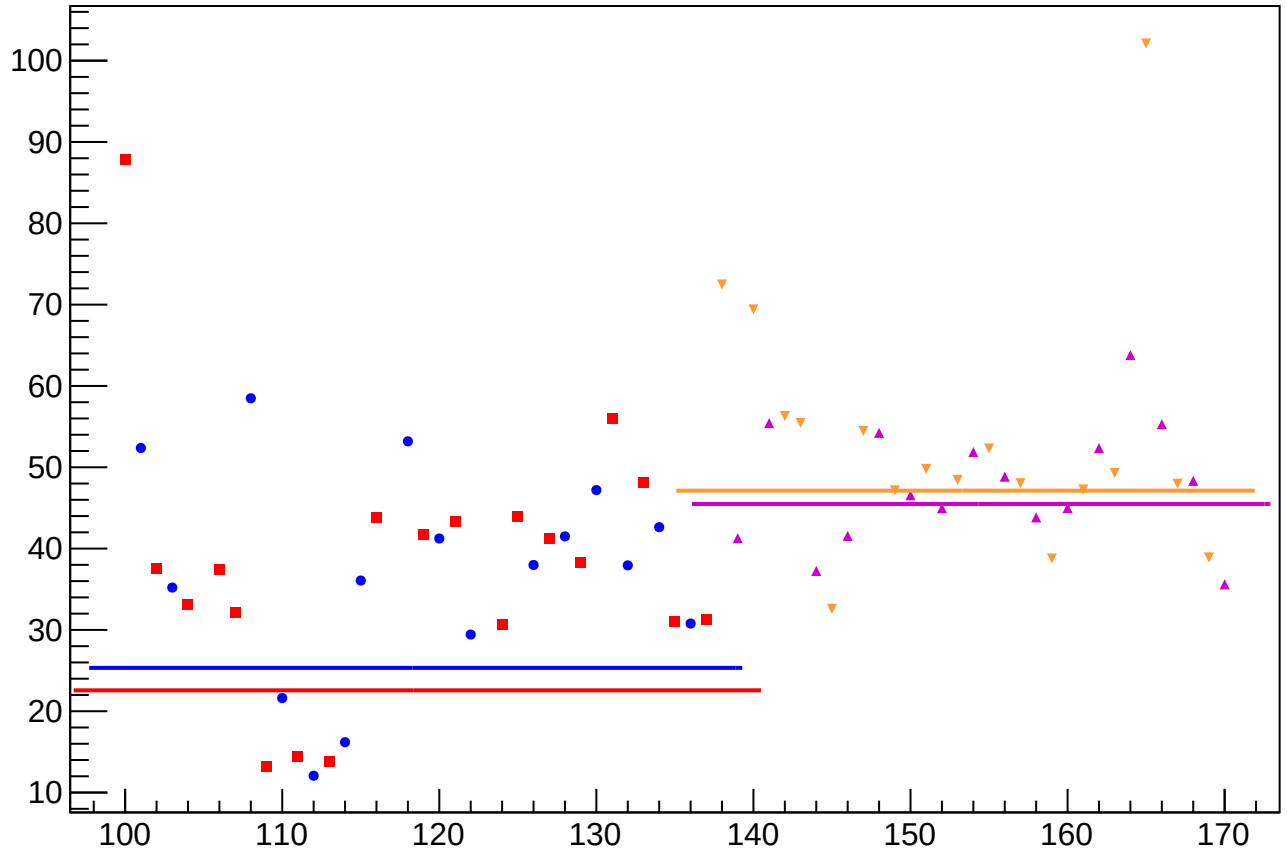
Right Out: 0.011+/-0.010 $\chi^2$/NDF: 14.2/18

Left In: -0.004+/-0.013 $\chi^2$/NDF:17.0/15

+ sign 0.012+/-0.009 $\chi^2$/NDF: 44.6/32

All: 0.008+/-0.006 $\chi^2$/NDF: 77.0/67

- sign 0.005+/-0.008 $\chi^2$/NDF: 32.1/34




Right In: 25.332+/-0.008 $\chi^2$/NDF: 2925549.0/15

Left Out: 47.126+/-0.009 $\chi^2$/NDF:1246617.1/16

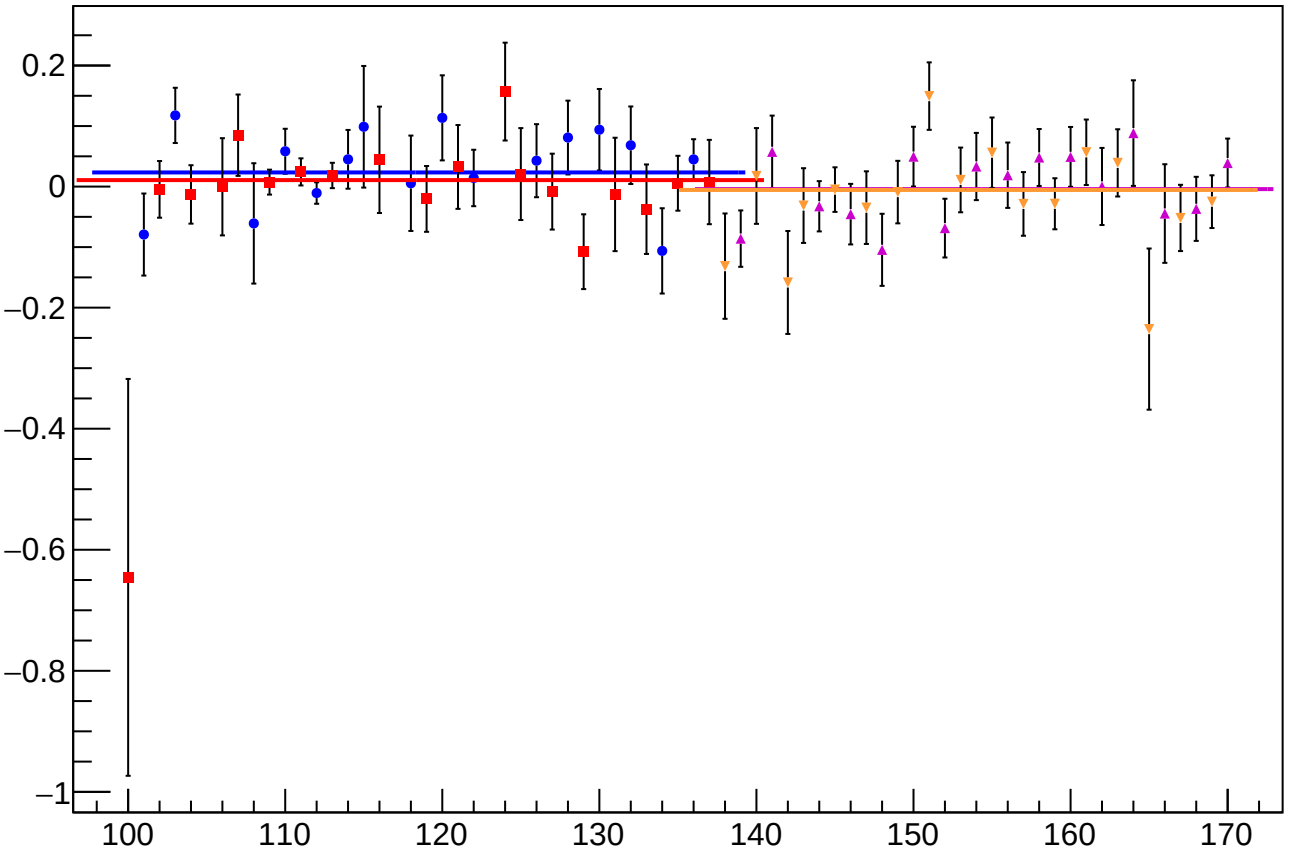
Right Out: 22.571+/-0.007 $\chi^2$/NDF: 3140082.3/18

Left In: 45.486+/-0.009 $\chi^2$/NDF:509342.2/15

+ sign 34.159+/-0.006 $\chi^2$/NDF: 7312457.9/32

All: 32.351+/-0.004 $\chi^2$/NDF: 15065421.6/67

- sign 30.827+/-0.006 $\chi^2$/NDF: 7587721.7/34




Right In: 0.023+/-0.011 $\chi^2$/NDF: 20.7/15

Left Out: -0.006+/-0.013 $\chi^2$/NDF:21.1/16

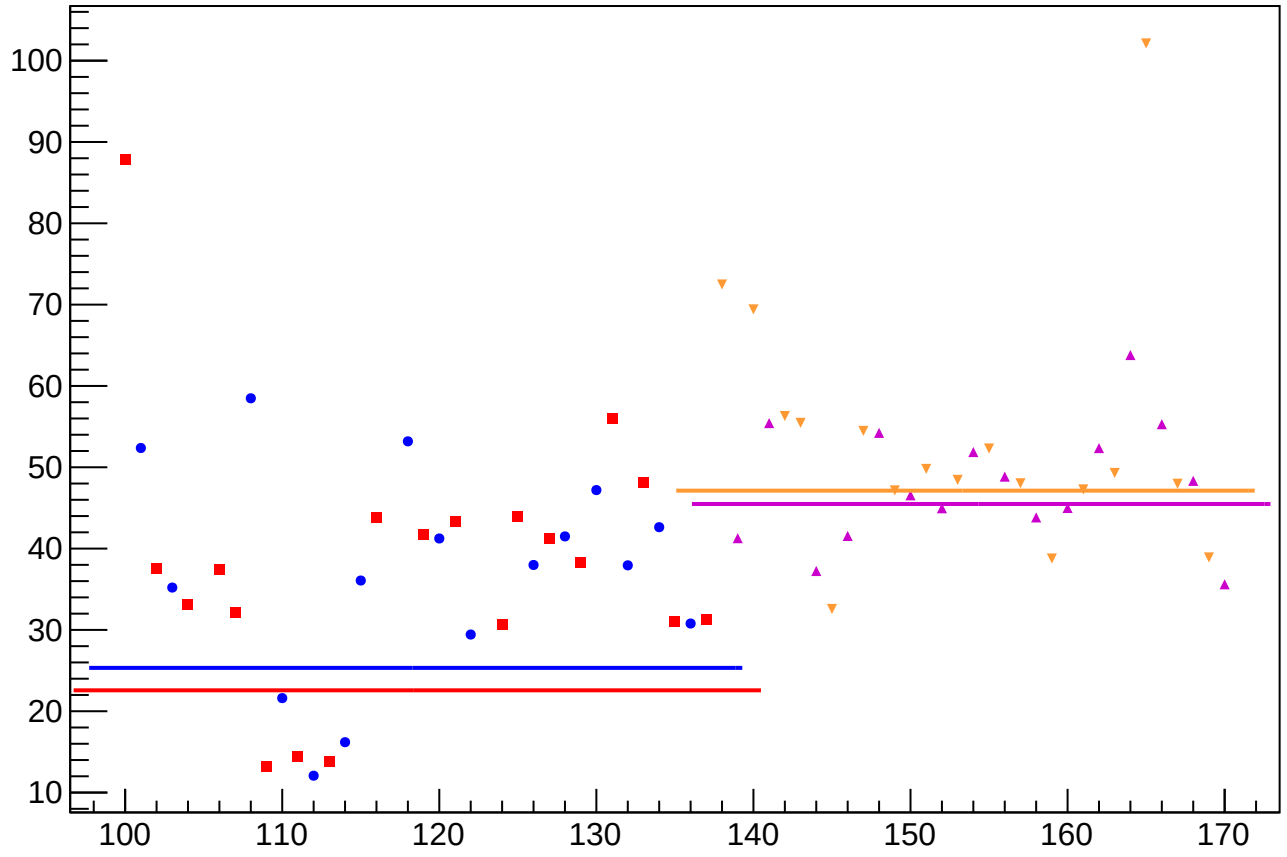
Right Out: 0.011+/-0.010 $\chi^2$/NDF: 14.2/18

Left In: -0.004+/-0.013 $\chi^2$/NDF:17.0/15

+ sign 0.012+/-0.009 $\chi^2$/NDF: 44.6/32

All: 0.008+/-0.006 $\chi^2$/NDF: 77.0/67

- sign 0.005+/-0.008 $\chi^2$/NDF: 32.1/34




Right In: 25.332+/-0.008 $\chi^2$/NDF: 2925549.0/15

Left Out: 47.126+/-0.009 $\chi^2$/NDF:1246617.1/16

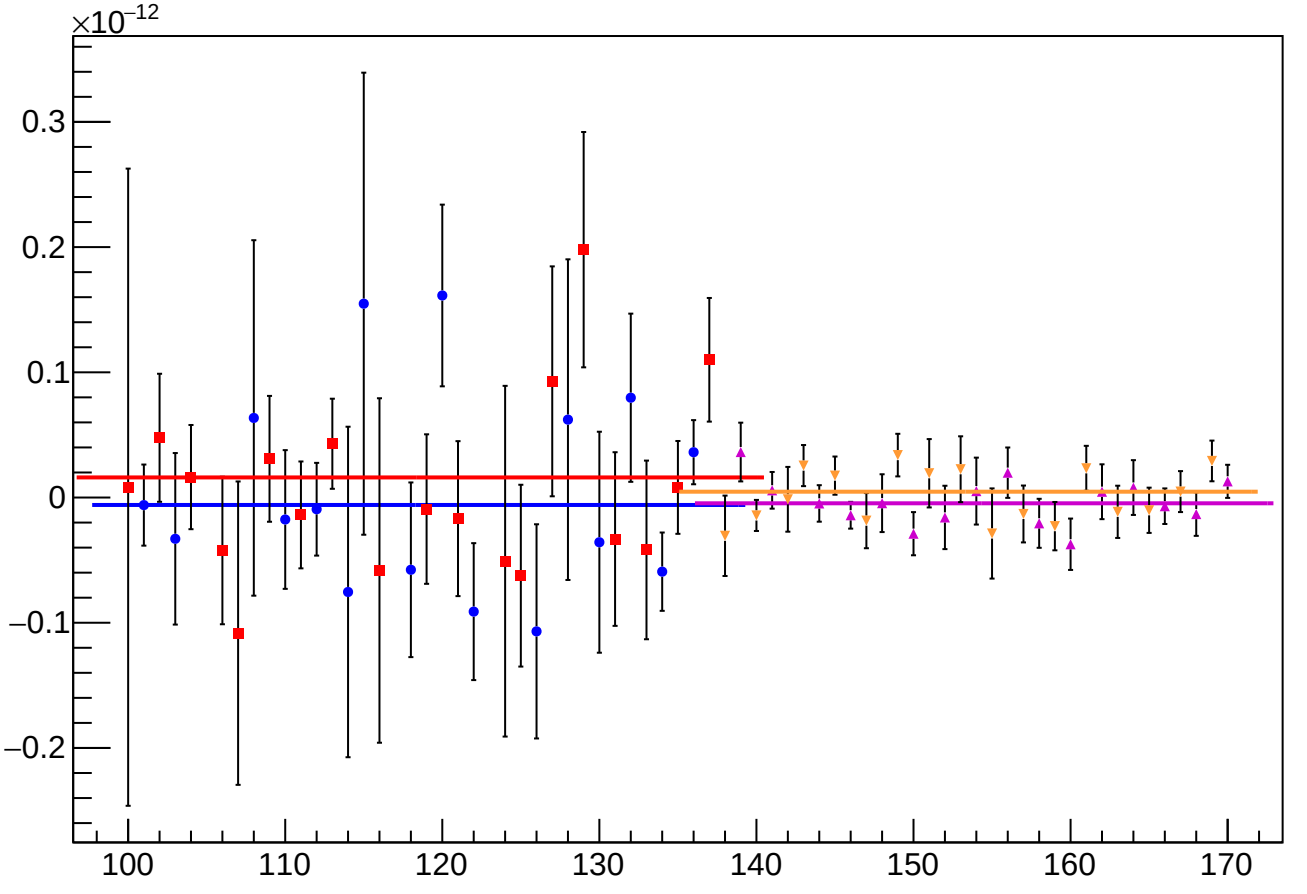
Right Out: 22.571+/-0.007 $\chi^2$/NDF: 3140082.3/18

Left In: 45.486+/-0.009 $\chi^2$/NDF:509342.2/15

+ sign 34.159+/-0.006 $\chi^2$/NDF: 7312457.9/32

All: 32.351+/-0.004 $\chi^2$/NDF: 15065421.6/67

- sign 30.827+/-0.006 $\chi^2$/NDF: 7587721.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 18.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:18.9/16

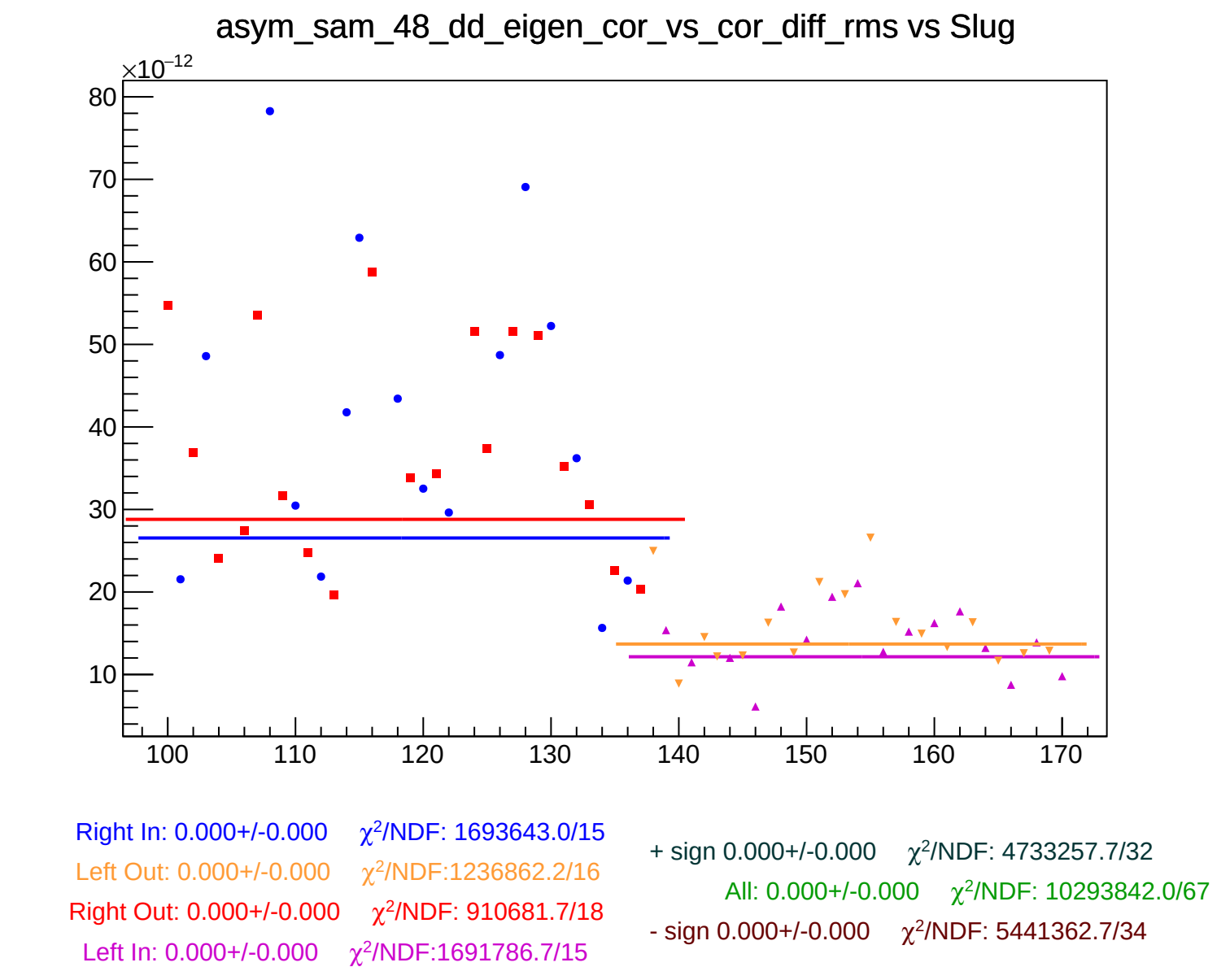
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.0/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:13.9/15

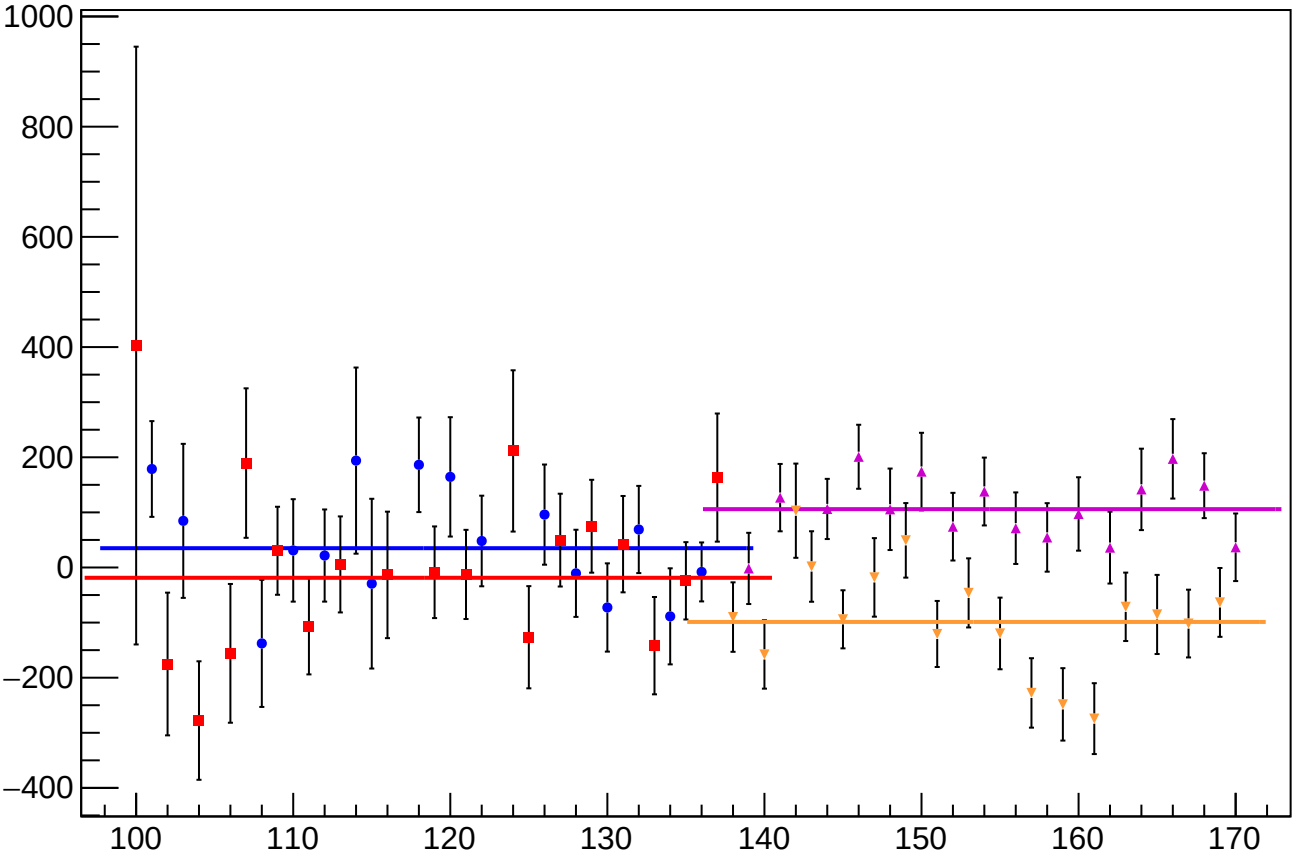
+ sign 0.000+/-0.000 $\chi^2$/NDF: 38.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 70.4/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 31.0/34


asym_sam_48_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
80
70
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1693643.0/15
Left Out: 0.000+/-0.000 χ²/NDF:1236862.2/16
Right Out: 0.000+/-0.000 χ²/NDF: 910681.7/18
Left In: 0.000+/-0.000 χ²/NDF:1691786.7/15
+ sign 0.000+/-0.000 χ²/NDF: 4733257.7/32
All: 0.000+/-0.000 χ²/NDF: 10293842.0/67
- sign 0.000+/-0.000 χ²/NDF: 5441362.7/34

# reg_asym_sam_13_57_dd_mean vs Slug




Right In: 35.018+/-22.134 $\chi^2$/NDF: 16.2/15

Left Out: -98.818+/-15.549 $\chi^2$/NDF:33.4/16

Right Out: -18.690+/-22.137 $\chi^2$/NDF: 23.5/18

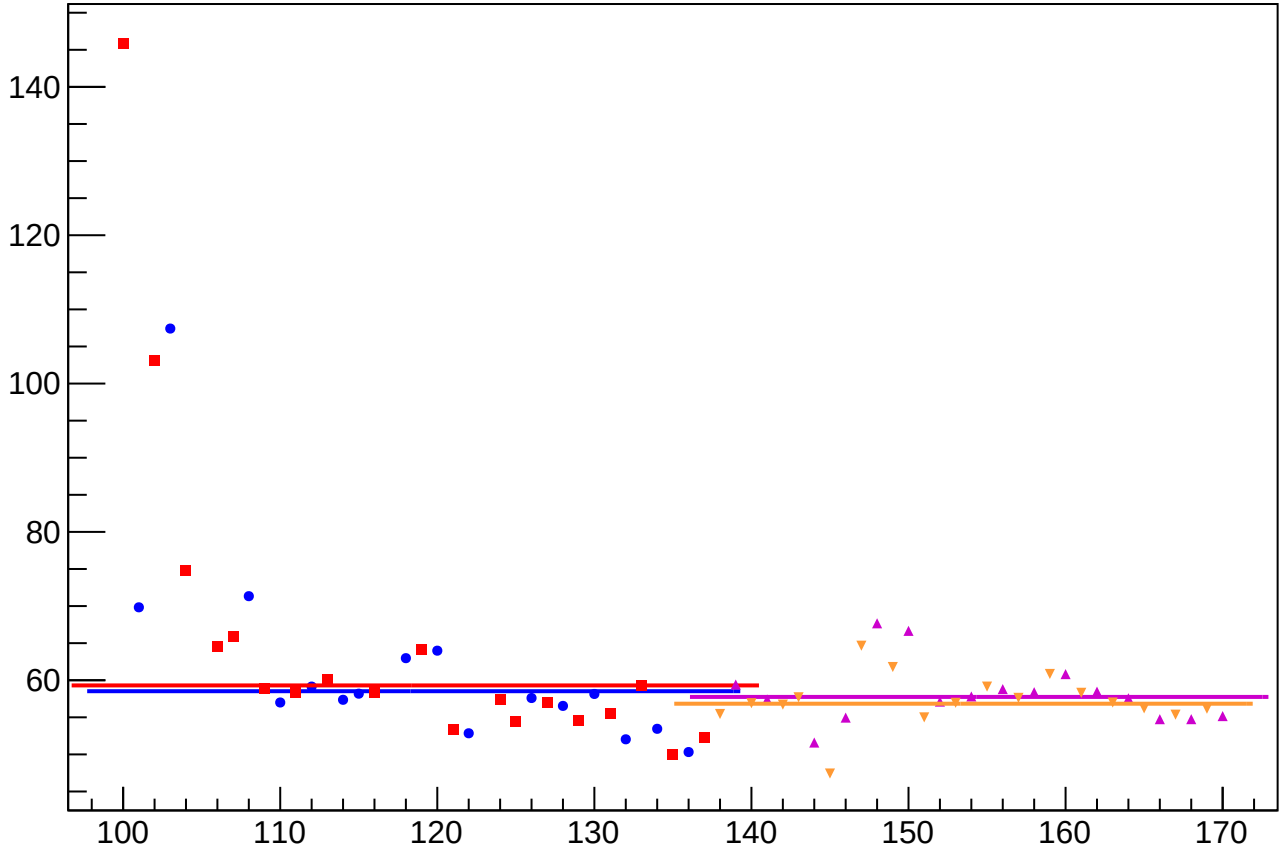
Left In: 105.879+/-15.934 $\chi^2$/NDF:12.8/15

+ sign -54.595+/-12.723 $\chi^2$/NDF: 74.0/32

All: 3.424+/-9.070 $\chi^2$/NDF: 173.5/67

- sign 63.365+/-12.932 $\chi^2$/NDF: 57.2/34

# reg_asym_sam_13_57_dd_rms vs Slug




Right In: 58.522+/-0.016 $\chi^2$/NDF: 392742.4/15

Left Out: 56.835+/-0.011 $\chi^2$/NDF:114683.6/16

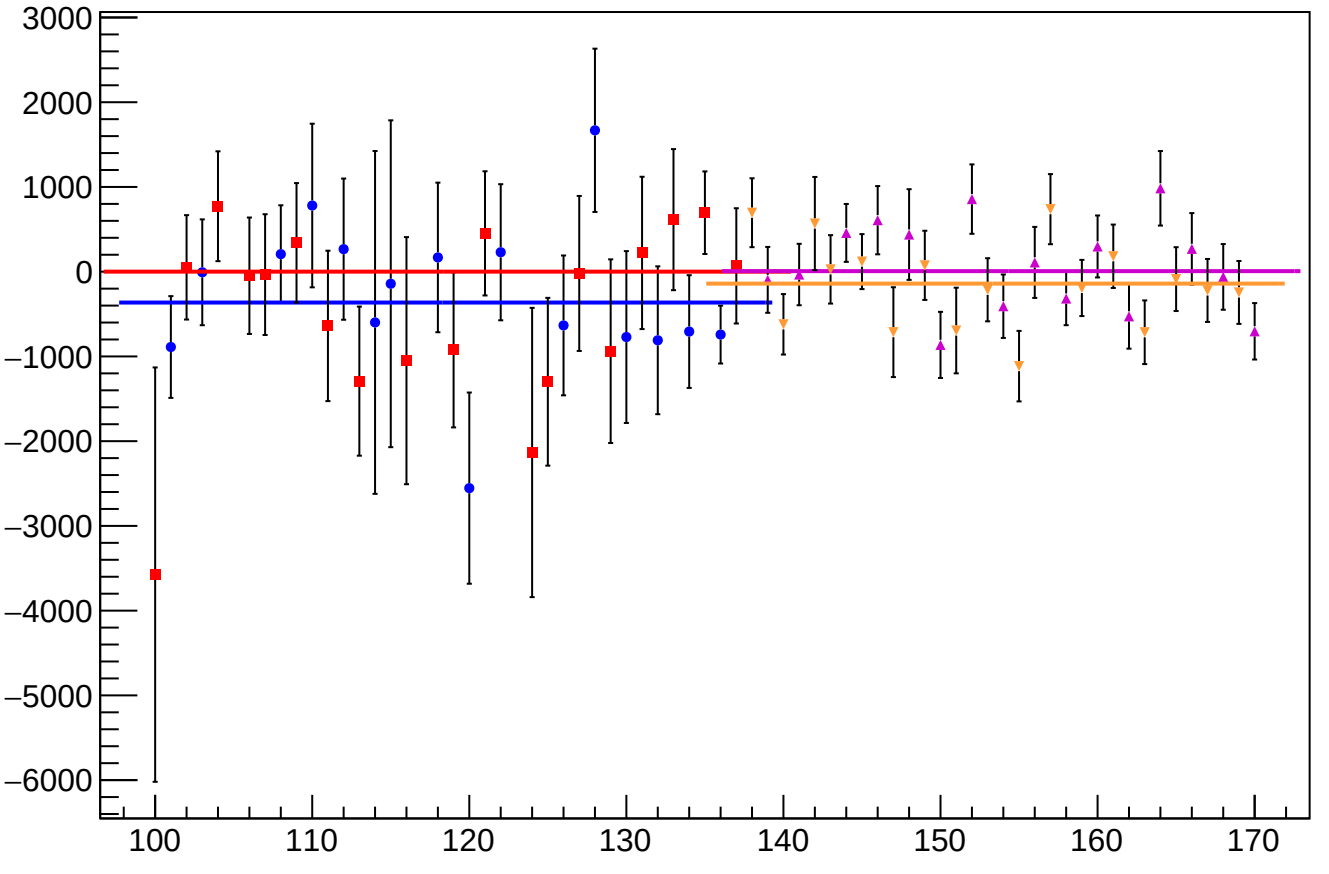
Right Out: 59.301+/-0.016 $\chi^2$/NDF: 406611.5/18

Left In: 57.751+/-0.011 $\chi^2$/NDF:117089.0/15

+ sign 57.392+/-0.009 $\chi^2$/NDF: 515200.2/32

All: 57.829+/-0.006 $\chi^2$/NDF: 1050150.0/67

- sign 58.280+/-0.009 $\chi^2$/NDF: 530163.5/34




Right In: -364.076+/-180.601 $\chi^2$/NDF: 15.2/15

Left Out: -140.593+/-95.332 $\chi^2$/NDF:24.4/16

Right Out: 0.570+/-183.085 $\chi^2$/NDF: 15.1/18

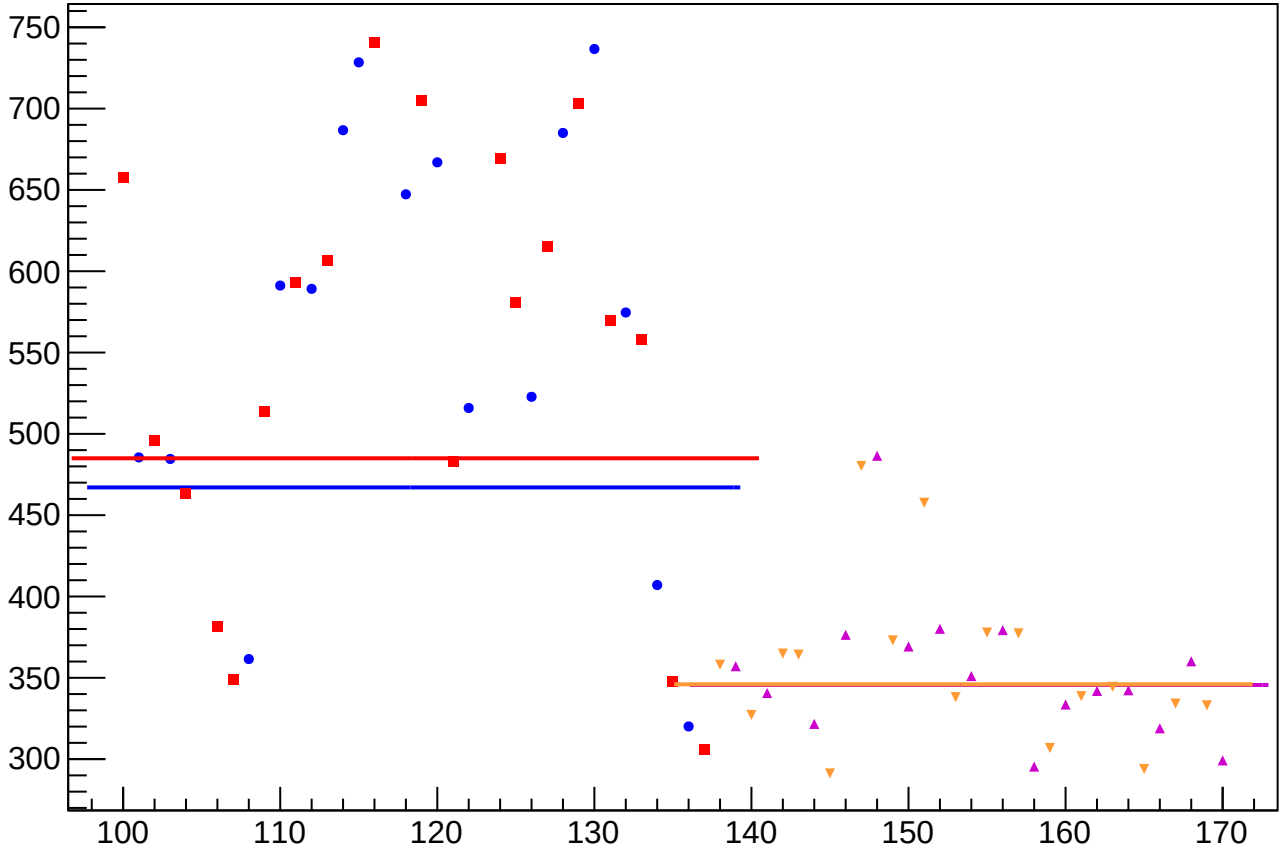
Left In: 6.662+/-95.907 $\chi^2$/NDF:28.8/15

+ sign -189.294+/-84.307 $\chi^2$/NDF: 40.9/32

All: -92.718+/-59.842 $\chi^2$/NDF: 87.4/67

- sign 5.351+/-84.956 $\chi^2$/NDF: 43.9/34

# asym_sam_13_57_dd_reg_correction_rms vs Slug




Right In: 467.068+/-0.128 $\chi^2$/NDF: 1030279.0/15

Left Out: 345.994+/-0.067 $\chi^2$/NDF:400898.9/16

Right Out: 484.982+/-0.129 $\chi^2$/NDF: 874102.2/18

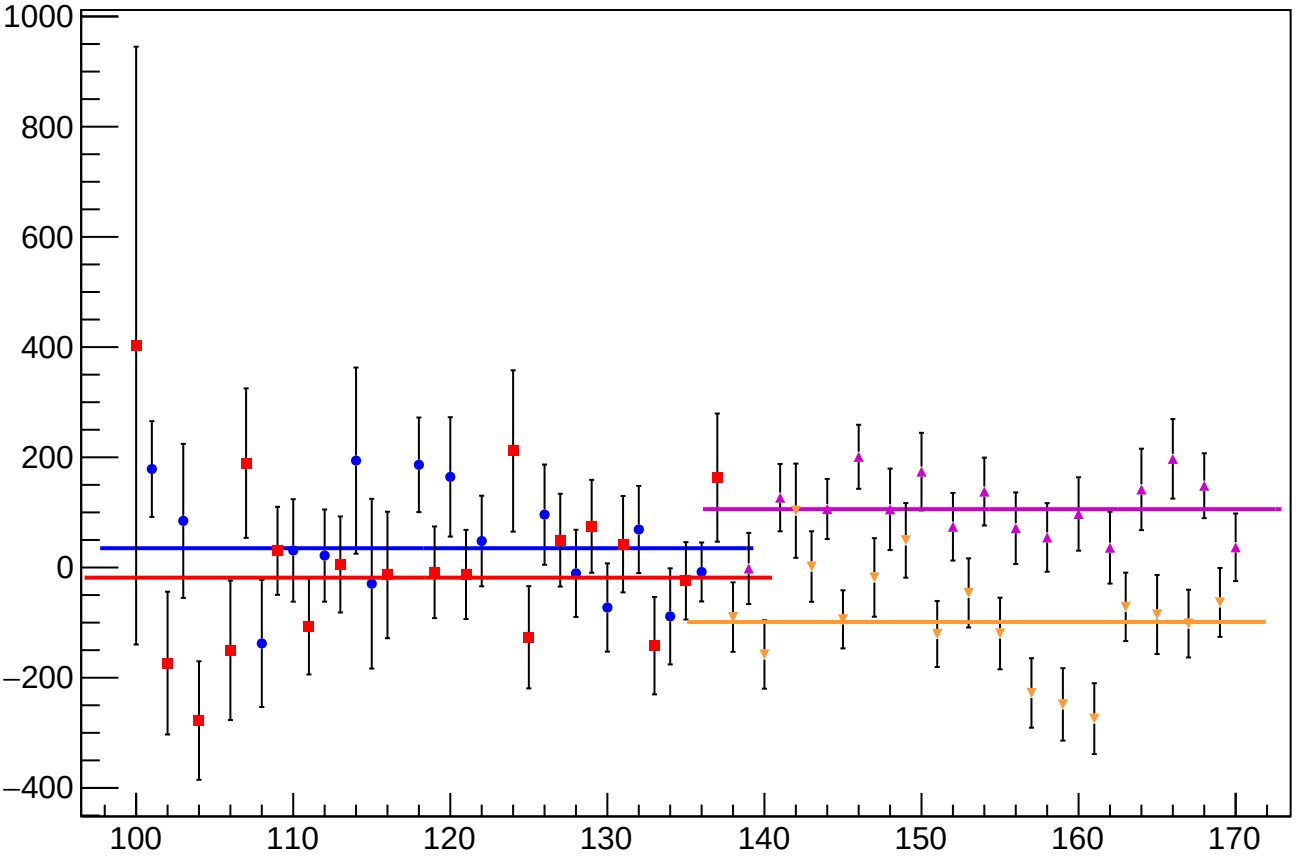
Left In: 345.596+/-0.068 $\chi^2$/NDF:300319.2/15

+ sign 372.378+/-0.060 $\chi^2$/NDF: 2134161.5/32

All: 373.981+/-0.042 $\chi^2$/NDF: 4219639.8/67

- sign 375.609+/-0.060 $\chi^2$/NDF: 2084021.1/34

# cor_asym_sam_13_57_dd_mean vs Slug




Right In: 35.017+/-22.134 $\chi^2$/NDF: 16.2/15

Left Out: -98.816+/-15.549 $\chi^2$/NDF:33.4/16

Right Out: -18.417+/-22.141 $\chi^2$/NDF: 23.4/18

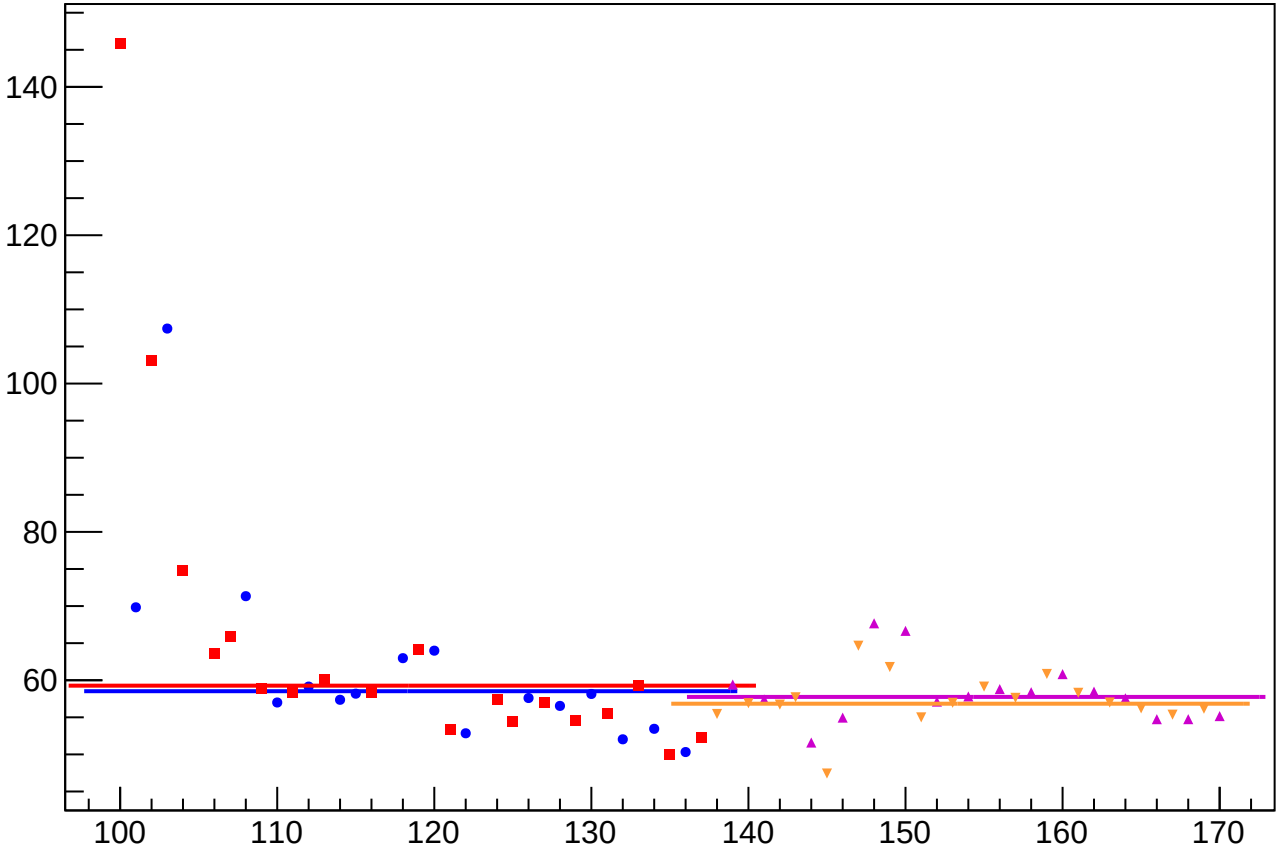
Left In: 105.880+/-15.934 $\chi^2$/NDF:12.8/15

+ sign -54.594+/-12.723 $\chi^2$/NDF: 74.0/32

All: 3.472+/-9.070 $\chi^2$/NDF: 173.3/67

- sign 63.469+/-12.933 $\chi^2$/NDF: 56.9/34

# cor_asym_sam_13_57_dd_rms vs Slug




Right In: 58.522+/-0.016 $\chi^2$/NDF: 392744.5/15

Left Out: 56.835+/-0.011 $\chi^2$/NDF:114683.6/16

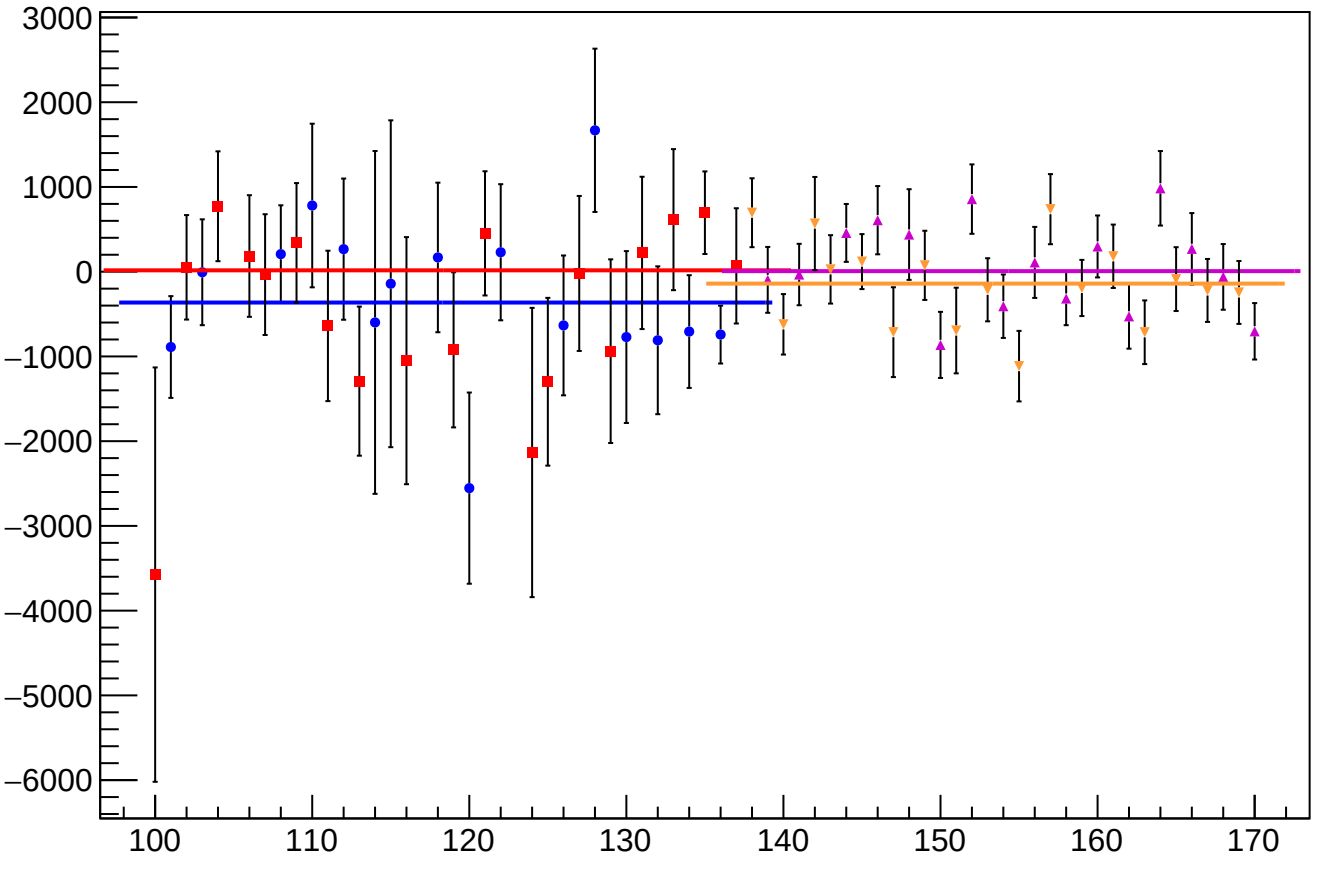
Right Out: 59.269+/-0.016 $\chi^2$/NDF: 405616.3/18

Left In: 57.751+/-0.011 $\chi^2$/NDF:117089.0/15

+ sign 57.392+/-0.009 $\chi^2$/NDF: 515202.3/32

All: 57.824+/-0.006 $\chi^2$/NDF: 1048774.7/67

- sign 58.269+/-0.009 $\chi^2$/NDF: 528904.2/34




Right In: -364.040+/-180.602 $\chi^2$/NDF: 15.2/15

Left Out: -140.593+/-95.332 $\chi^2$/NDF:24.4/16

Right Out: 16.087+/-183.650 $\chi^2$/NDF: 15.1/18

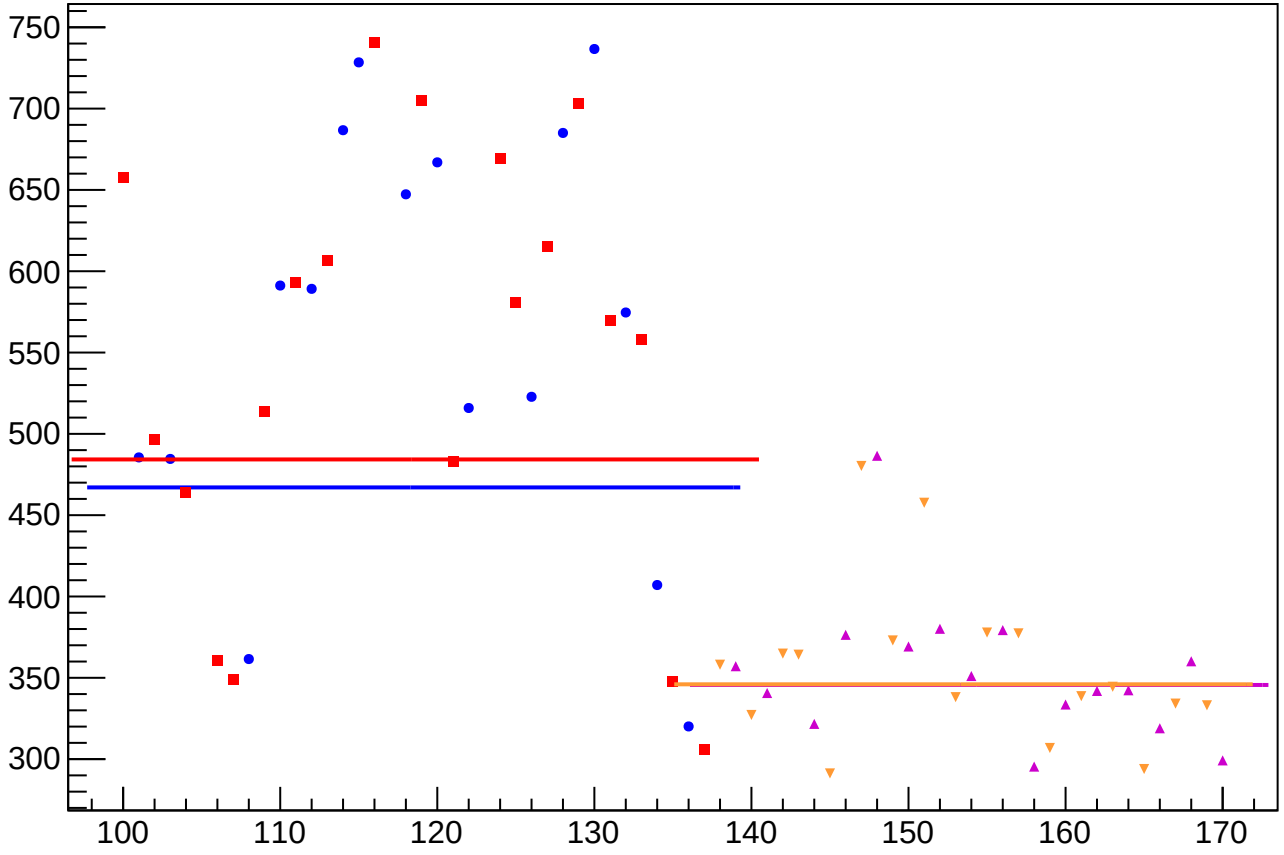
Left In: 6.663+/-95.907 $\chi^2$/NDF:28.8/15

+ sign -189.285+/-84.307 $\chi^2$/NDF: 40.9/32

All: -91.126+/-59.862 $\chi^2$/NDF: 87.6/67

- sign 8.683+/-85.013 $\chi^2$/NDF: 44.0/34

# asym_sam_13_57_dd_cor_correction_rms vs Slug




Right In: 467.071+/-0.128 $\chi^2$/NDF: 1030281.3/15

Left Out: 345.994+/-0.067 $\chi^2$/NDF:400898.6/16

Right Out: 484.274+/-0.130 $\chi^2$/NDF: 888797.2/18

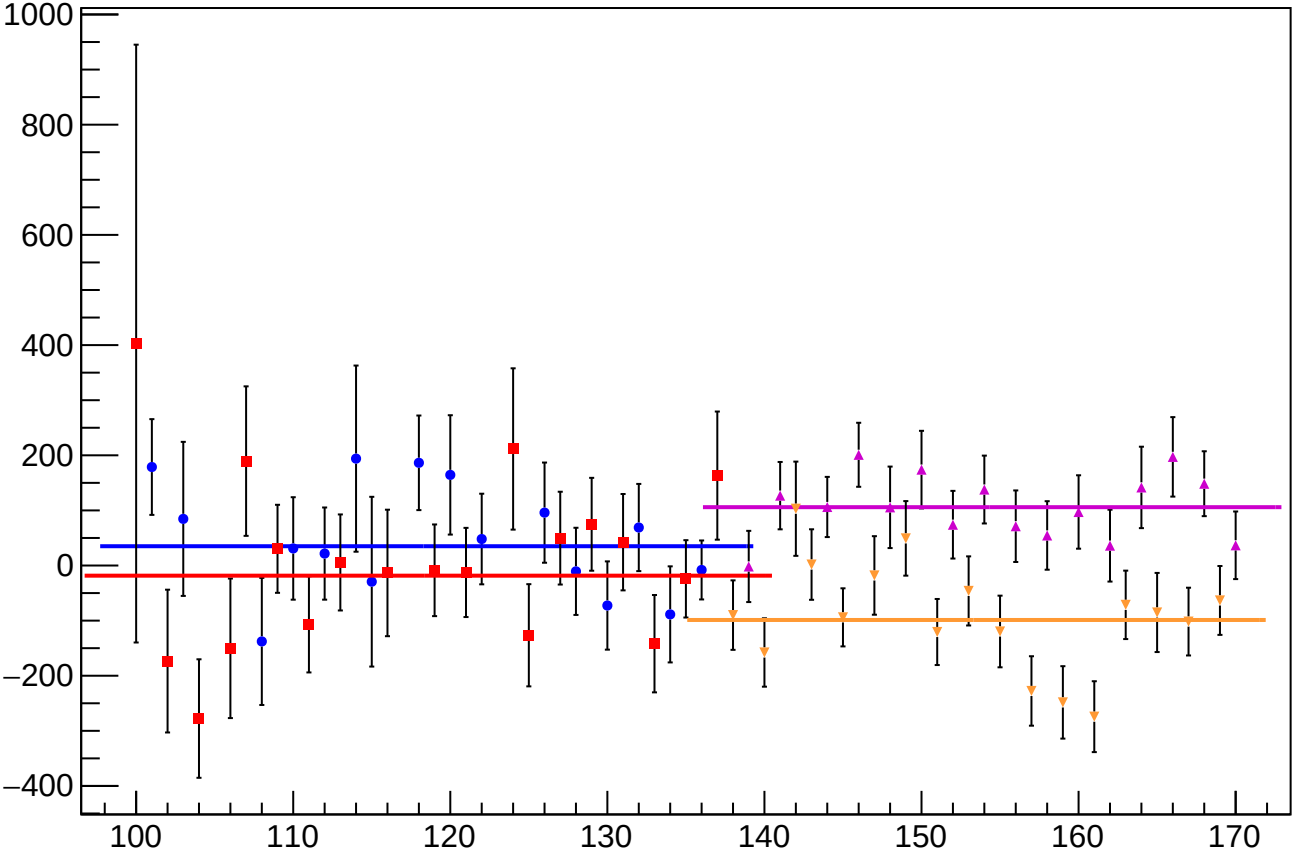
Left In: 345.596+/-0.068 $\chi^2$/NDF:300320.8/15

+ sign 372.378+/-0.060 $\chi^2$/NDF: 2134186.5/32

All: 373.833+/-0.042 $\chi^2$/NDF: 4220539.2/67

- sign 375.312+/-0.060 $\chi^2$/NDF: 2085151.9/34

# eigen_cor_asym_sam_13_57_dd_mean vs Slug




Right In: 35.017+/-22.134 $\chi^2$/NDF: 16.2/15

Left Out: -98.816+/-15.549 $\chi^2$/NDF:33.4/16

Right Out: -18.417+/-22.141 $\chi^2$/NDF: 23.4/18

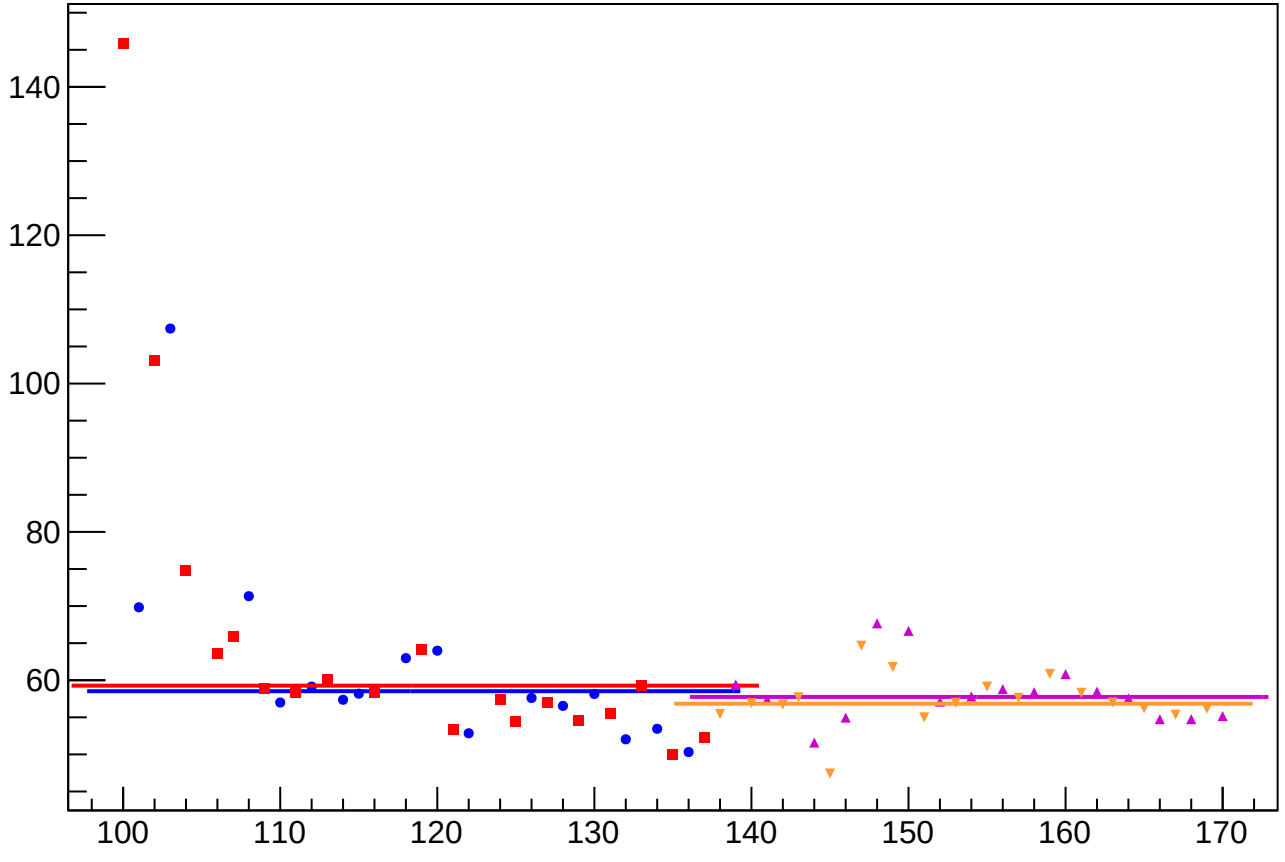
Left In: 105.880+/-15.934 $\chi^2$/NDF:12.8/15

+ sign -54.594+/-12.723 $\chi^2$/NDF: 74.0/32

All: 3.472+/-9.070 $\chi^2$/NDF: 173.3/67

- sign 63.469+/-12.933 $\chi^2$/NDF: 56.9/34

# eigen_cor_asym_sam_13_57_dd_rms vs Slug




Right In: 58.522+/-0.016 $\chi^2$/NDF: 392744.5/15

Left Out: 56.835+/-0.011 $\chi^2$/NDF:114683.6/16

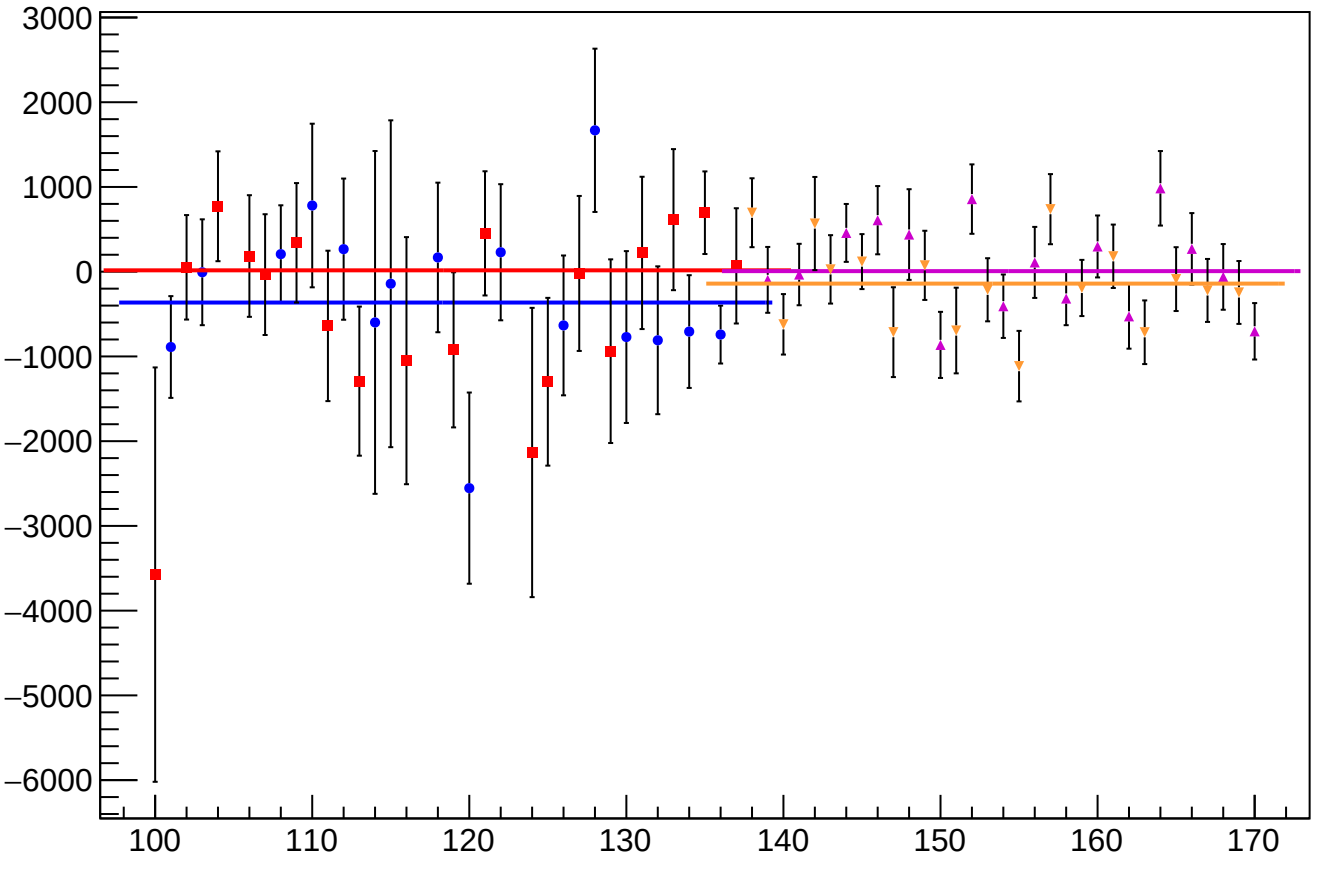
Right Out: 59.269+/-0.016 $\chi^2$/NDF: 405616.3/18

Left In: 57.751+/-0.011 $\chi^2$/NDF:117089.0/15

+ sign 57.392+/-0.009 $\chi^2$/NDF: 515202.3/32

All: 57.824+/-0.006 $\chi^2$/NDF: 1048774.7/67

- sign 58.269+/-0.009 $\chi^2$/NDF: 528904.2/34




Right In: -364.040+/-180.602 $\chi^2$/NDF: 15.2/15

Left Out: -140.593+/-95.332 $\chi^2$/NDF:24.4/16

Right Out: 16.087+/-183.650 $\chi^2$/NDF: 15.1/18

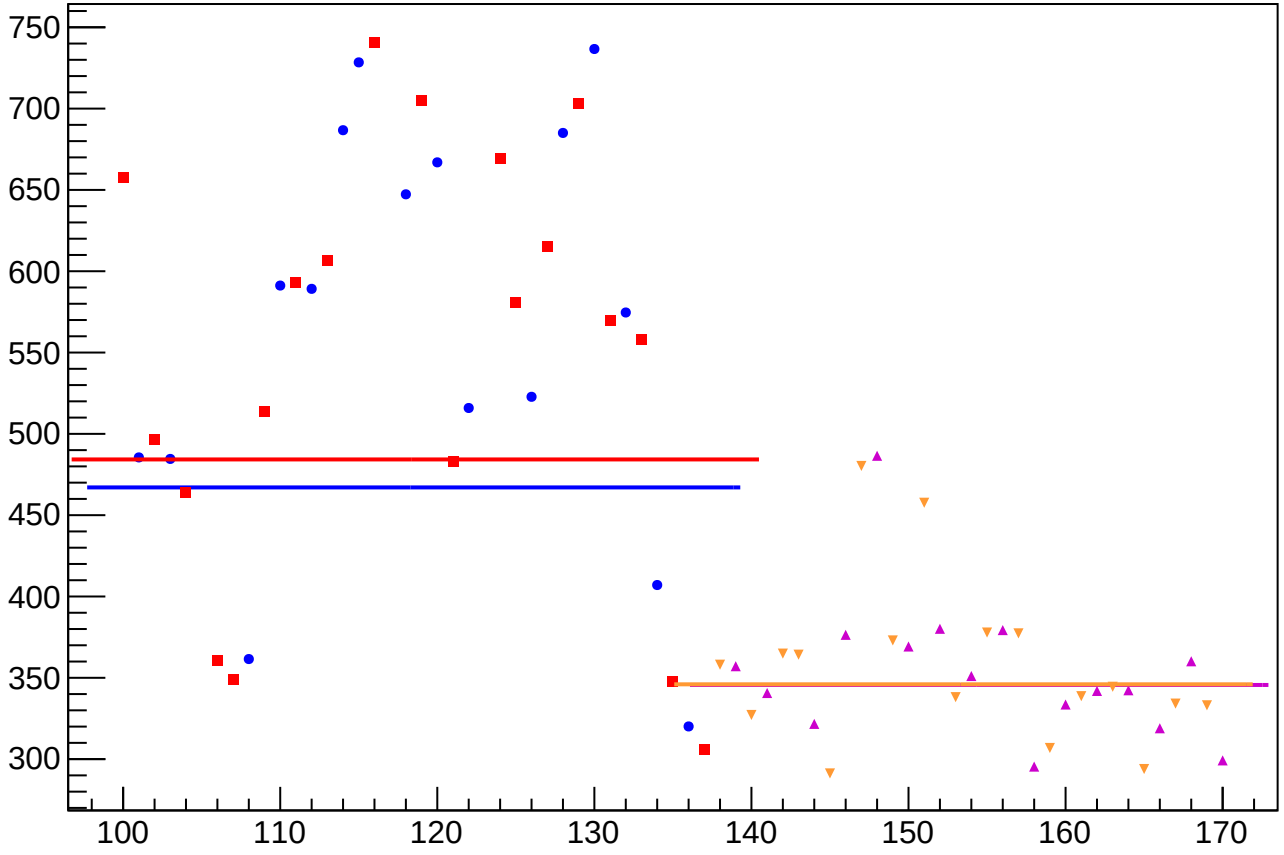
Left In: 6.663+/-95.907 $\chi^2$/NDF:28.8/15

+ sign -189.285+/-84.307 $\chi^2$/NDF: 40.9/32

All: -91.126+/-59.862 $\chi^2$/NDF: 87.6/67

- sign 8.683+/-85.013 $\chi^2$/NDF: 44.0/34

# asym_sam_13_57_dd_eigen_cor_correction_rms vs Slug




Right In: 467.071+/-0.128 $\chi^2$/NDF: 1030281.3/15

Left Out: 345.994+/-0.067 $\chi^2$/NDF:400898.6/16

Right Out: 484.274+/-0.130 $\chi^2$/NDF: 888797.2/18

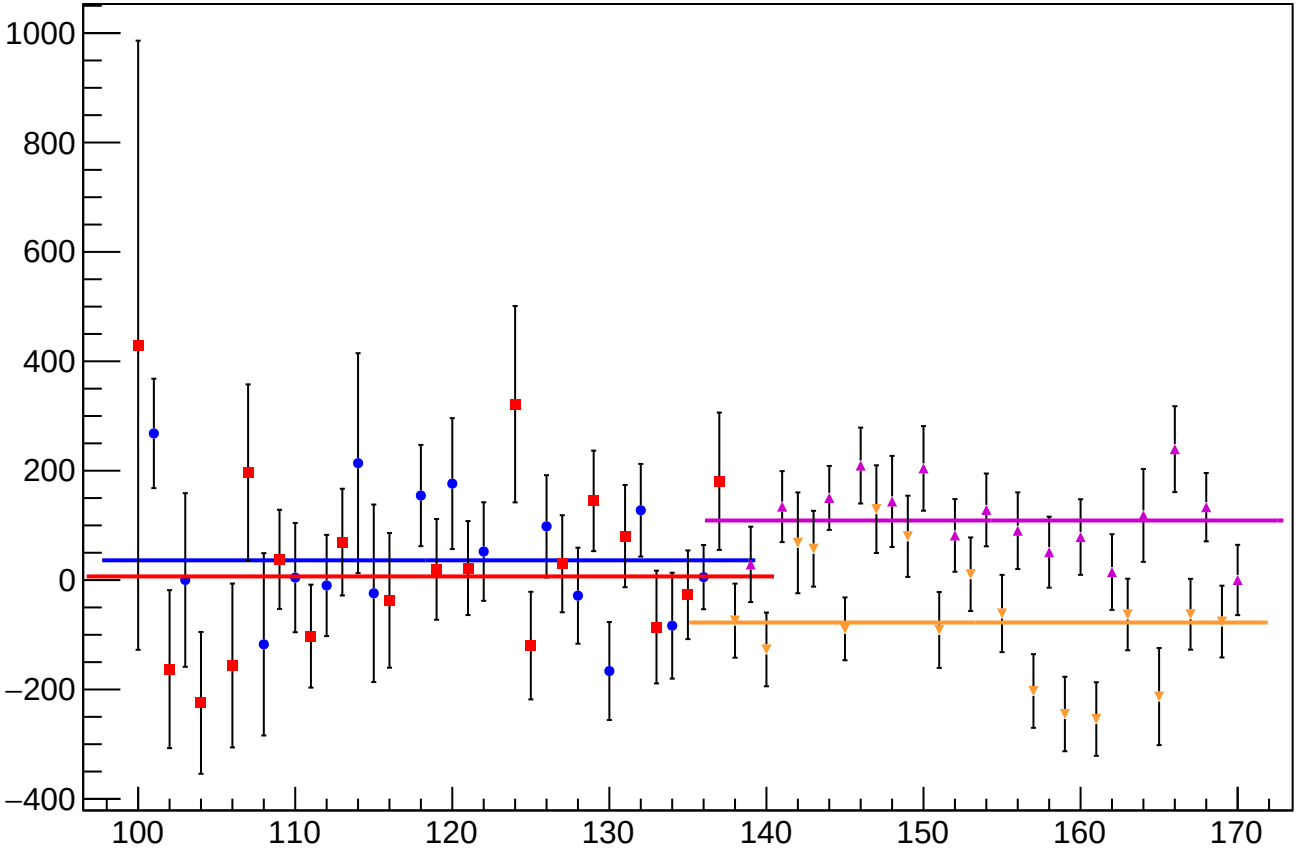
Left In: 345.596+/-0.068 $\chi^2$/NDF:300320.8/15

+ sign 372.378+/-0.060 $\chi^2$/NDF: 2134186.5/32

All: 373.833+/-0.042 $\chi^2$/NDF: 4220539.2/67

- sign 375.312+/-0.060 $\chi^2$/NDF: 2085151.9/34

# dit_asym_sam_13_57_dd_mean vs Slug




Right In: 36.157+/-24.471 $\chi^2$/NDF: 19.6/15

Left Out: -77.548+/-16.850 $\chi^2$/NDF:38.7/16

Right Out: 6.734+/-24.565 $\chi^2$/NDF: 20.3/18

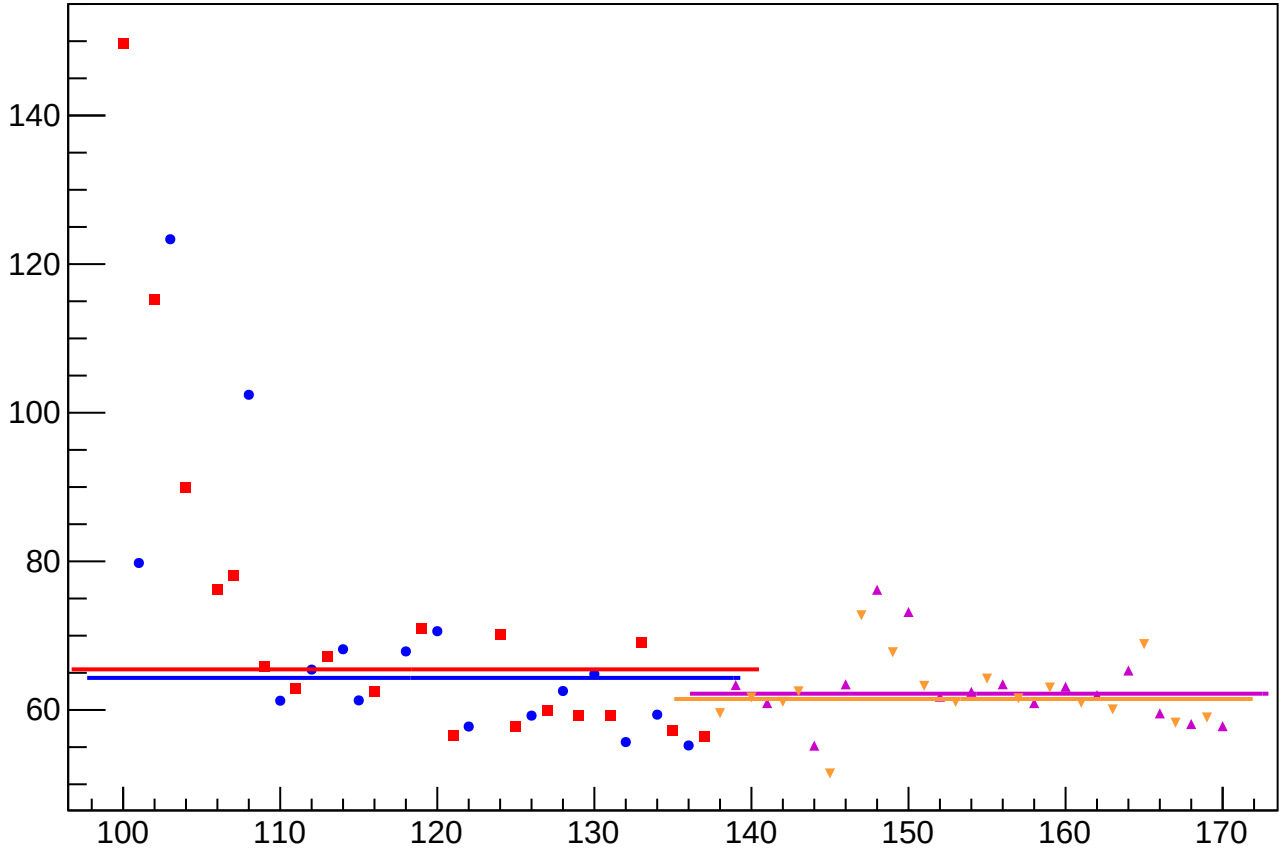
Left In: 108.969+/-17.227 $\chi^2$/NDF:14.7/15

+ sign -40.976+/-13.878 $\chi^2$/NDF: 73.0/32

All: 16.207+/-9.892 $\chi^2$/NDF: 154.2/67

- sign 75.267+/-14.104 $\chi^2$/NDF: 46.7/34

# dit_asym_sam_13_57_dd_rms vs Slug




Right In: 64.316+/-0.017 $\chi^2$/NDF: 532065.0/15

Left Out: 61.477+/-0.012 $\chi^2$/NDF:144831.4/16

Right Out: 65.466+/-0.017 $\chi^2$/NDF: 482361.0/18

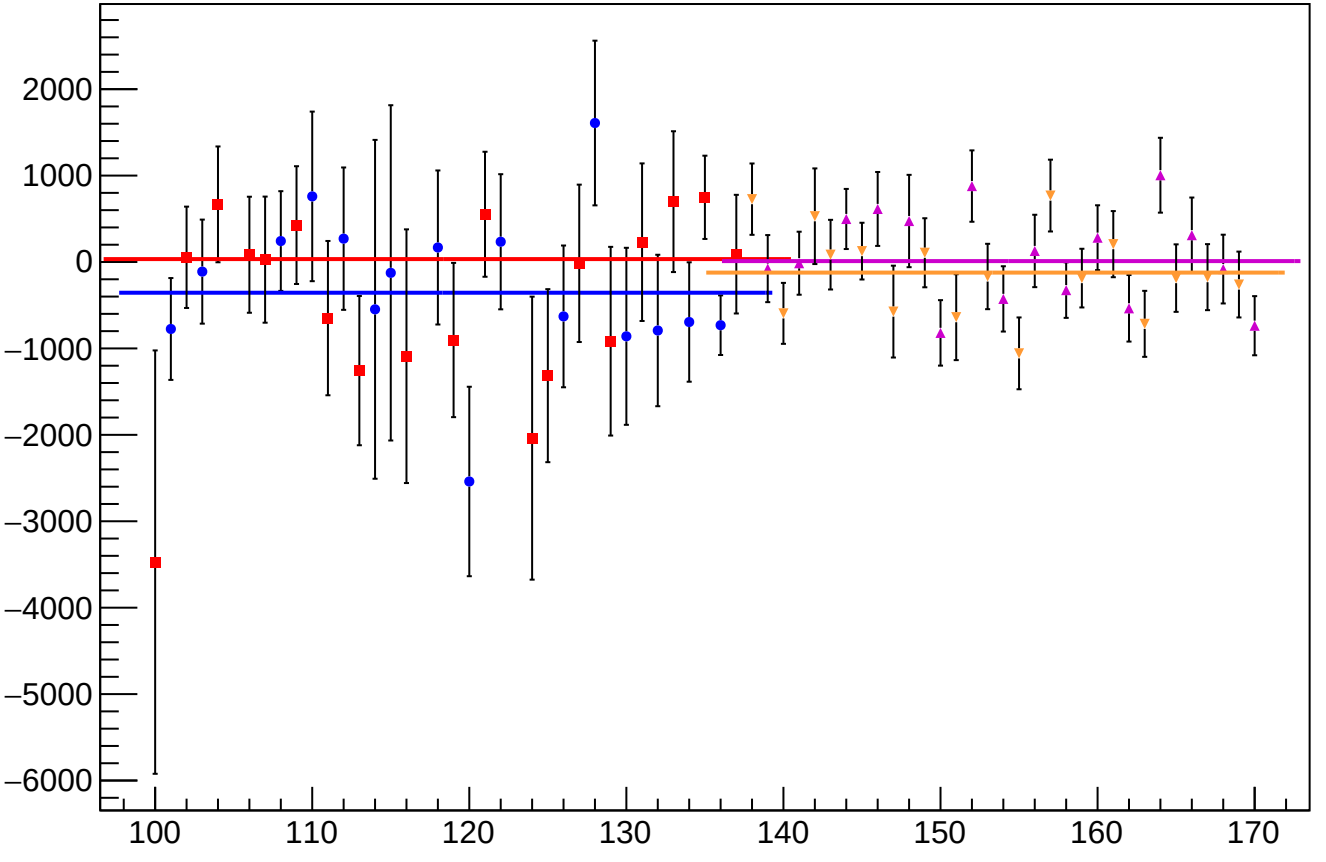
Left In: 62.192+/-0.012 $\chi^2$/NDF:152052.6/15

+ sign 62.390+/-0.010 $\chi^2$/NDF: 695163.7/32

All: 62.824+/-0.007 $\chi^2$/NDF: 1357361.4/67

- sign 63.271+/-0.010 $\chi^2$/NDF: 658231.4/34

# asym_sam_13_57_dd_dit_correction_mean vs Slug




Right In: -355.529+/-180.335 $\chi^2$/NDF: 14.8/15

Left Out: -122.585+/-96.358 $\chi^2$/NDF:23.4/16

Right Out: 33.786+/-181.561 $\chi^2$/NDF: 15.4/18

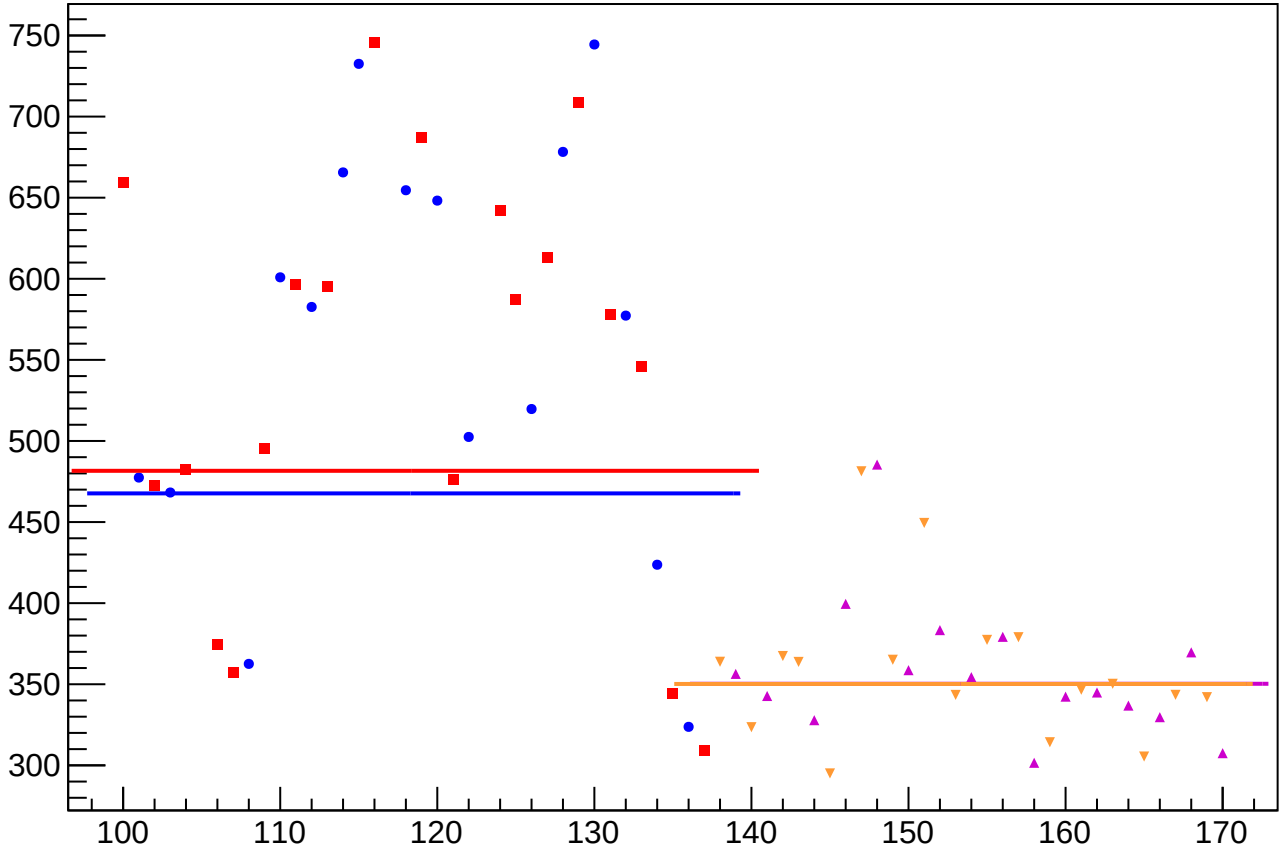
Left In: 10.472+/-97.155 $\chi^2$/NDF:29.6/15

+ sign -174.321+/-84.986 $\chi^2$/NDF: 39.5/32

All: -80.081+/-60.332 $\chi^2$/NDF: 87.0/67

- sign 15.662+/-85.662 $\chi^2$/NDF: 45.0/34

# asym_sam_13_57_dd_dit_correction_rms vs Slug




Right In: 467.674+/-0.128 $\chi^2$/NDF: 985943.7/15

Left Out: 350.180+/-0.068 $\chi^2$/NDF:347832.7/16

Right Out: 481.599+/-0.128 $\chi^2$/NDF: 854281.1/18

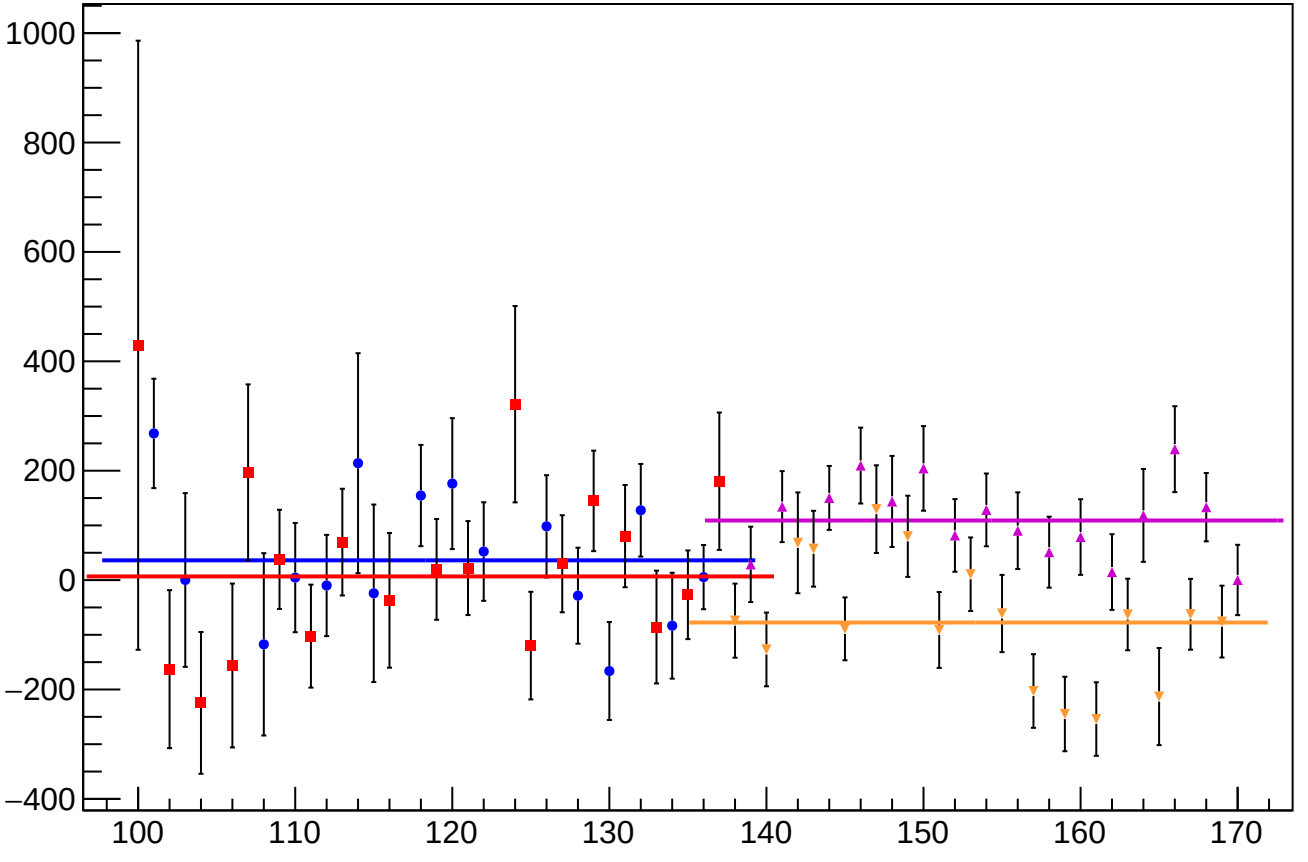
Left In: 350.291+/-0.069 $\chi^2$/NDF:277531.5/15

+ sign 376.275+/-0.060 $\chi^2$/NDF: 1994219.1/32

All: 377.885+/-0.043 $\chi^2$/NDF: 3940714.5/67

- sign 379.520+/-0.061 $\chi^2$/NDF: 1945048.5/34

# eigen_dit_asym_sam_13_57_dd_mean vs Slug




Right In: 36.157+/-24.471 $\chi^2$/NDF: 19.6/15

Left Out: -77.547+/-16.850 $\chi^2$/NDF:38.7/16

Right Out: 6.735+/-24.565 $\chi^2$/NDF: 20.3/18

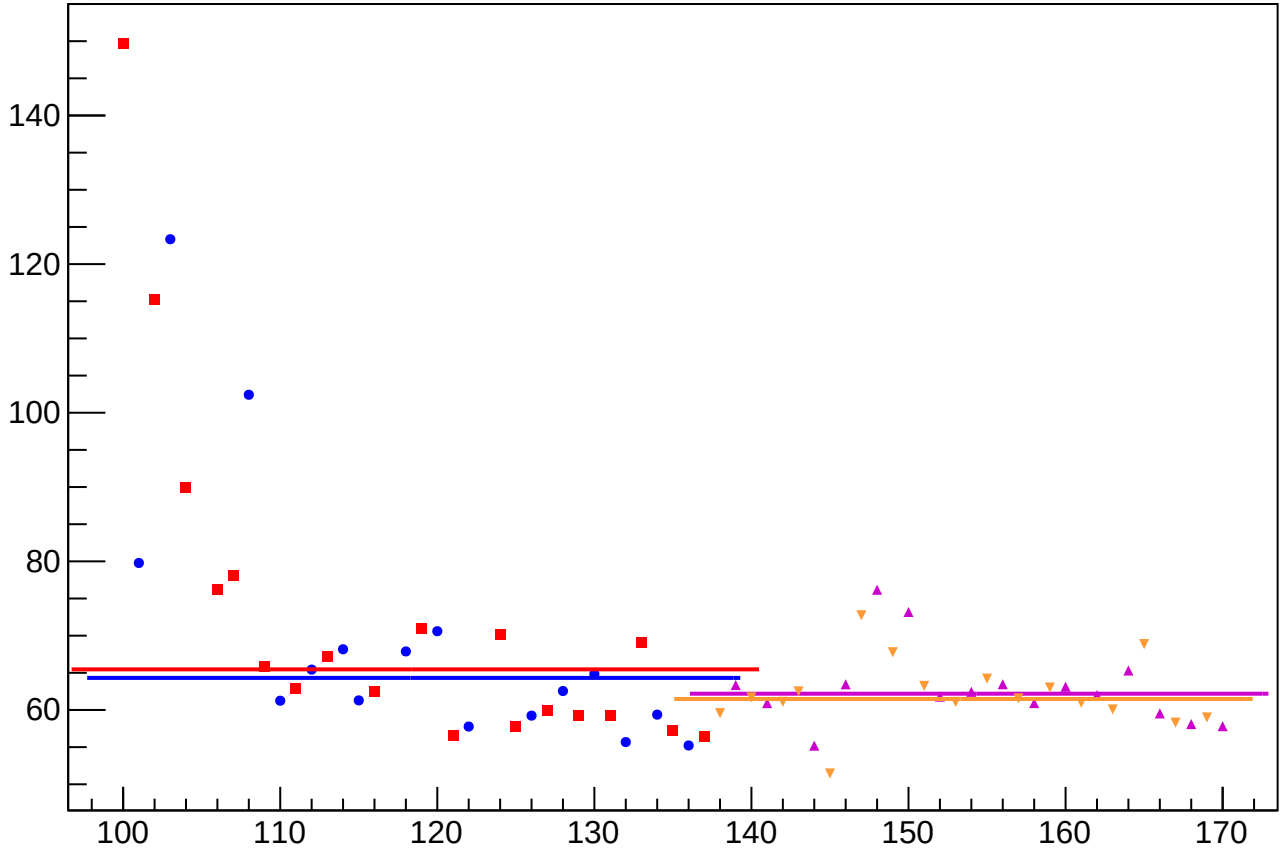
Left In: 108.969+/-17.227 $\chi^2$/NDF:14.7/15

+ sign -40.976+/-13.878 $\chi^2$/NDF: 73.0/32

All: 16.208+/-9.892 $\chi^2$/NDF: 154.2/67

- sign 75.267+/-14.104 $\chi^2$/NDF: 46.7/34

# eigen_dit_asym_sam_13_57_dd_rms vs Slug




Right In: 64.316+/-0.017 $\chi^2$/NDF: 532073.4/15

Left Out: 61.477+/-0.012 $\chi^2$/NDF:144835.6/16

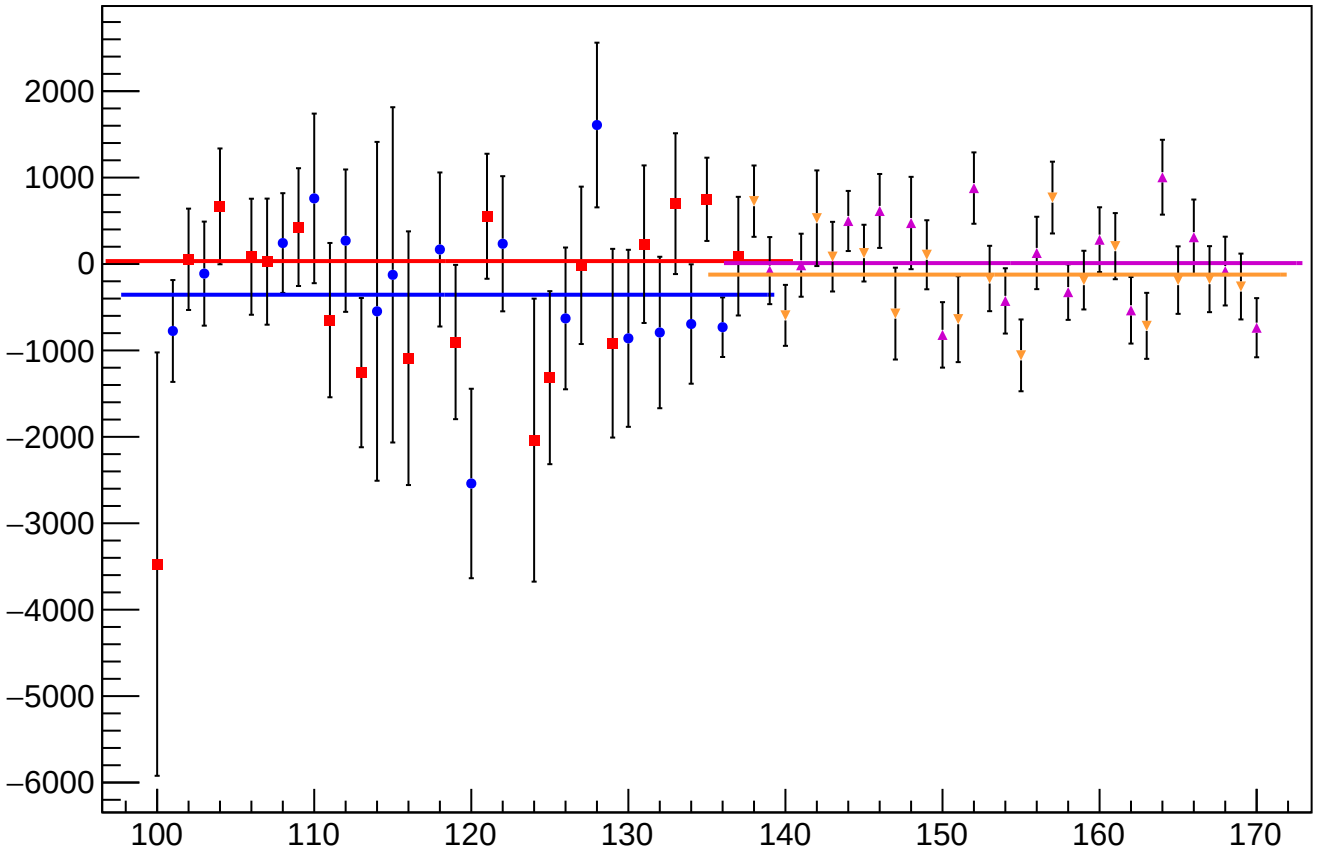
Right Out: 65.466+/-0.017 $\chi^2$/NDF: 482367.1/18

Left In: 62.192+/-0.012 $\chi^2$/NDF:152056.3/15

+ sign 62.390+/-0.010 $\chi^2$/NDF: 695174.3/32

All: 62.824+/-0.007 $\chi^2$/NDF: 1357379.9/67

- sign 63.271+/-0.010 $\chi^2$/NDF: 658239.5/34




Right In: -355.529+/-180.334 $\chi^2$/NDF: 14.8/15

Left Out: -122.585+/-96.358 $\chi^2$/NDF:23.4/16

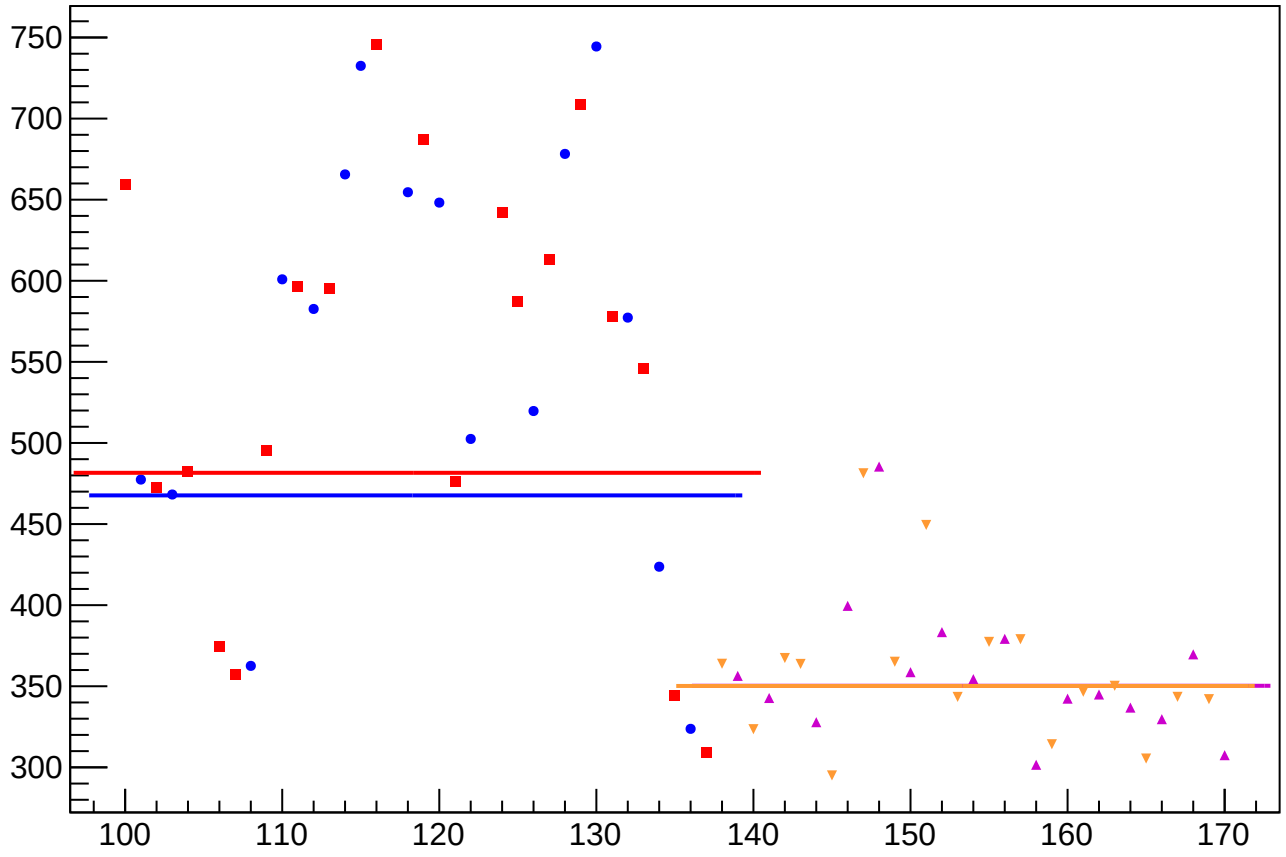
Right Out: 33.787+/-181.560 $\chi^2$/NDF: 15.4/18

Left In: 10.472+/-97.155 $\chi^2$/NDF:29.6/15

+ sign -174.321+/-84.986 $\chi^2$/NDF: 39.5/32

All: -80.081+/-60.332 $\chi^2$/NDF: 87.0/67

- sign 15.662+/-85.662 $\chi^2$/NDF: 45.0/34




Right In: 467.674+/-0.128 $\chi^2$/NDF: 985945.4/15

Left Out: 350.180+/-0.068 $\chi^2$/NDF:347832.2/16

Right Out: 481.599+/-0.128 $\chi^2$/NDF: 854281.0/18

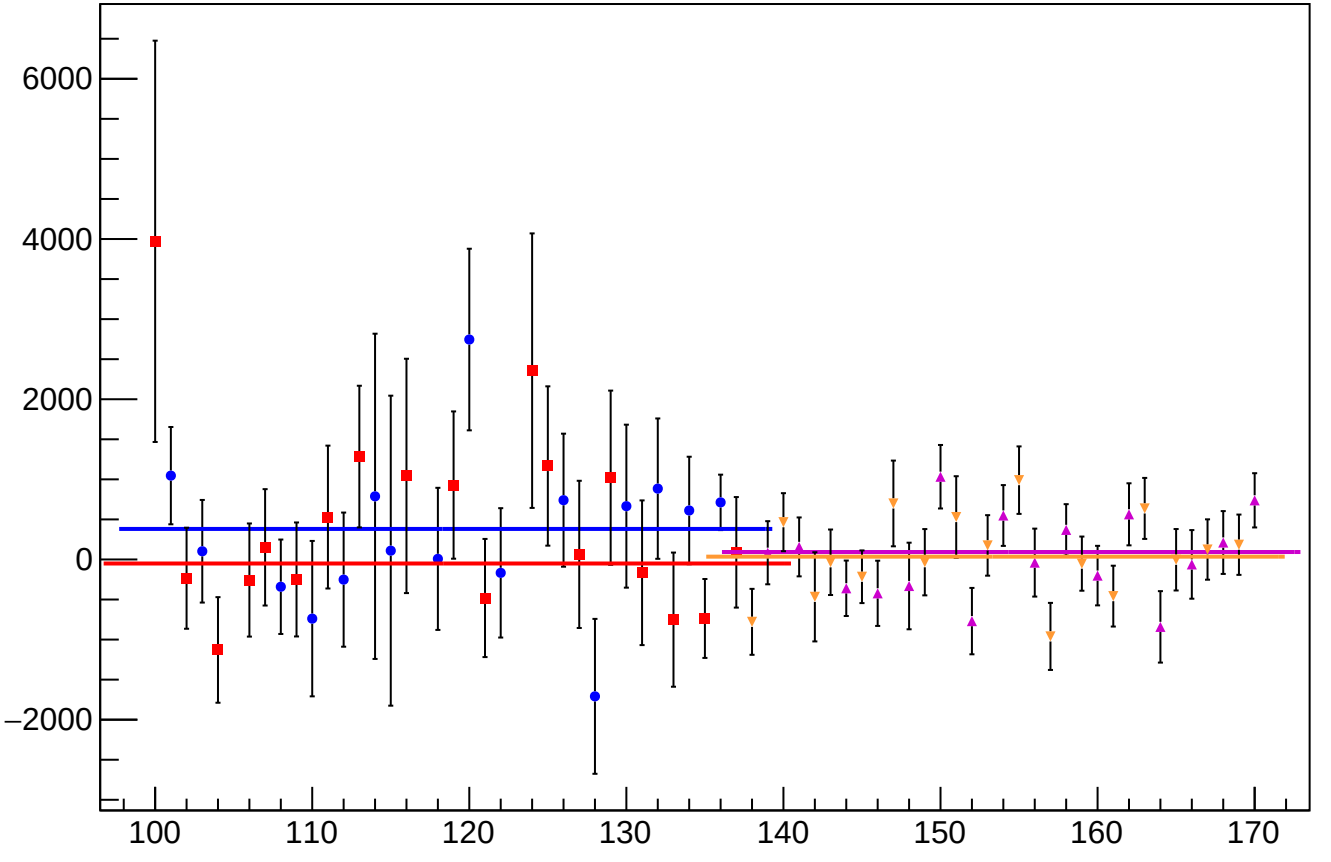
Left In: 350.291+/-0.069 $\chi^2$/NDF:277532.7/15

+ sign 376.275+/-0.060 $\chi^2$/NDF: 1994213.5/32

All: 377.885+/-0.043 $\chi^2$/NDF: 3940701.3/67

- sign 379.520+/-0.061 $\chi^2$/NDF: 1945041.0/34

# asym_sam_13_57_dd_mean vs Slug




Right In: 381.086+/-182.655 $\chi^2$/NDF: 16.1/15

Left Out: 35.129+/-96.666 $\chi^2$/NDF:24.7/16

Right Out: -50.392+/-185.262 $\chi^2$/NDF: 17.5/18

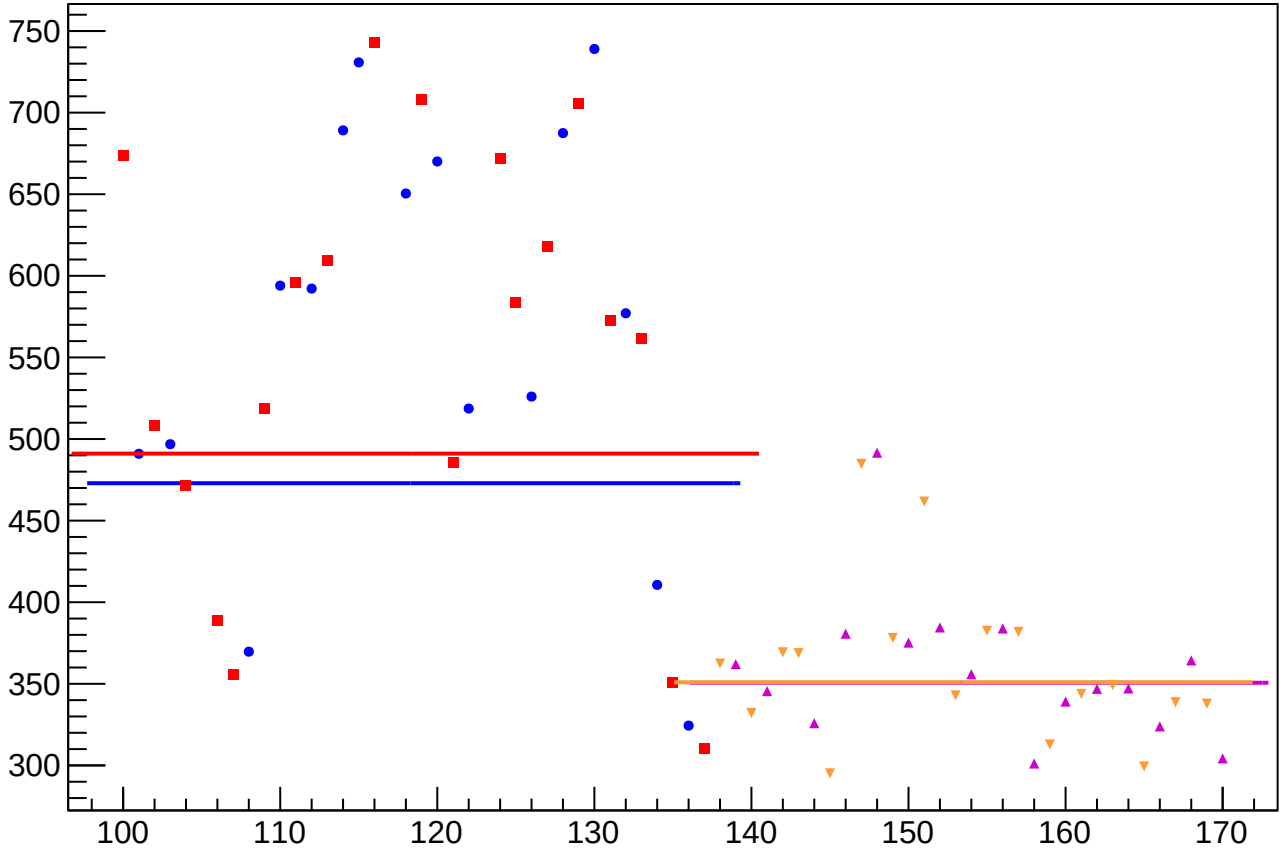
Left In: 93.025+/-97.284 $\chi^2$/NDF:26.5/15

+ sign 110.823+/-85.439 $\chi^2$/NDF: 43.6/32

All: 86.622+/-60.657 $\chi^2$/NDF: 88.3/67

- sign 62.026+/-86.131 $\chi^2$/NDF: 44.5/34

# asym_sam_13_57_dd_rms vs Slug




Right In: 472.924+/-0.129 $\chi^2$/NDF: 1000274.3/15

Left Out: 350.952+/-0.068 $\chi^2$/NDF:388634.5/16

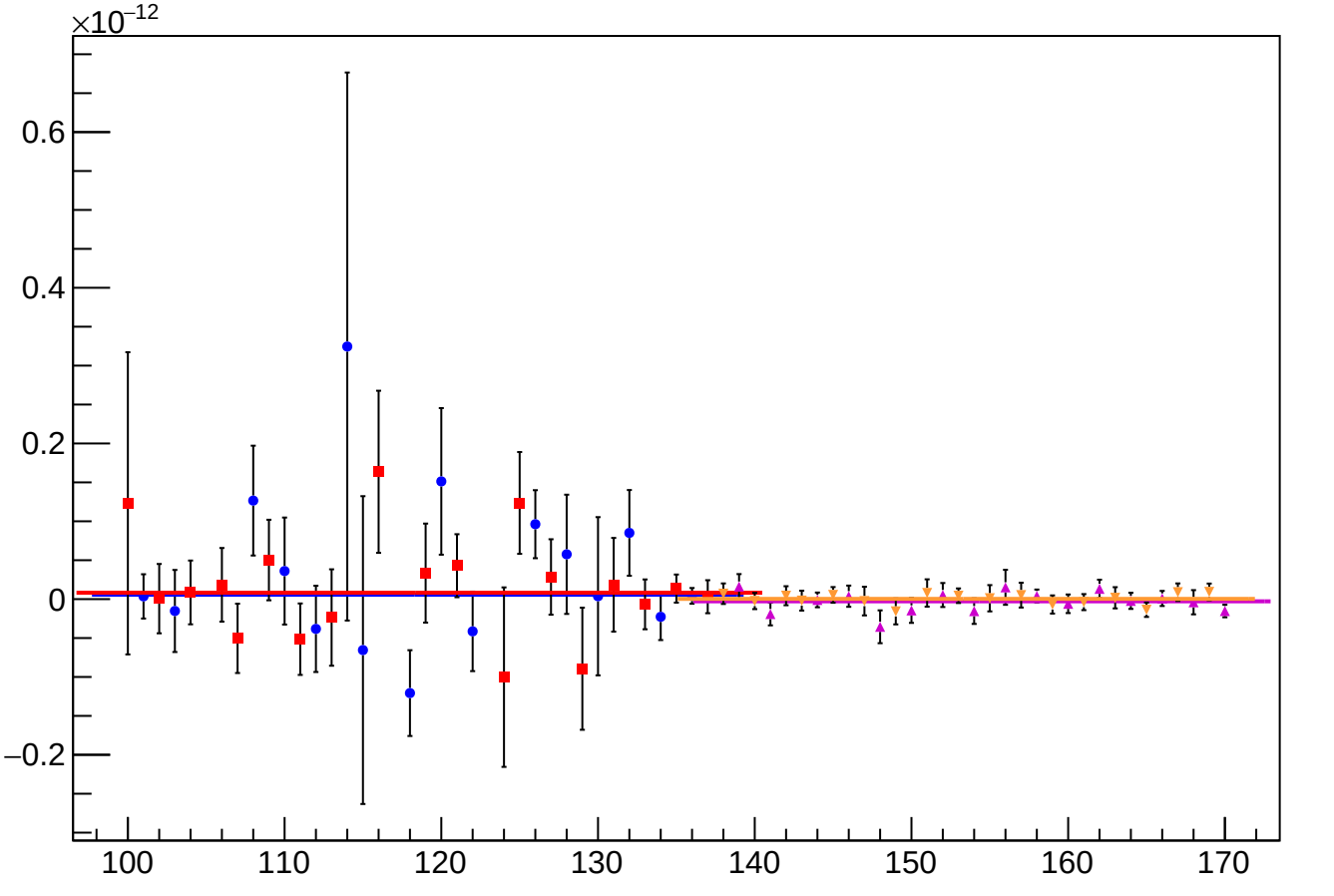
Right Out: 491.063+/-0.131 $\chi^2$/NDF: 847493.6/18

Left In: 350.659+/-0.069 $\chi^2$/NDF:290597.3/15

+ sign 377.639+/-0.060 $\chi^2$/NDF: 2085618.4/32

All: 379.309+/-0.043 $\chi^2$/NDF: 4125684.8/67

- sign 381.007+/-0.061 $\chi^2$/NDF: 2038525.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 21.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:6.2/16

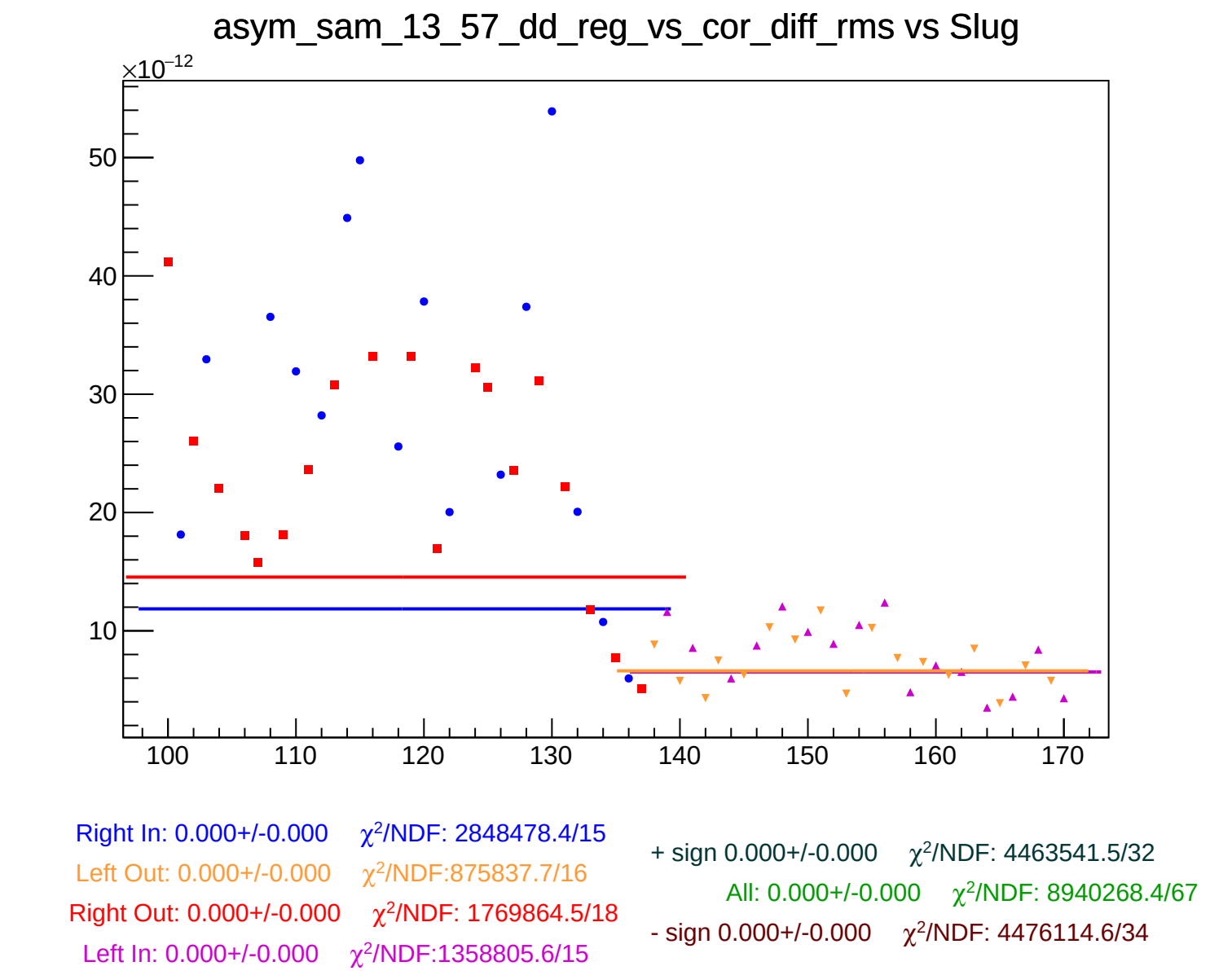
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.0/18

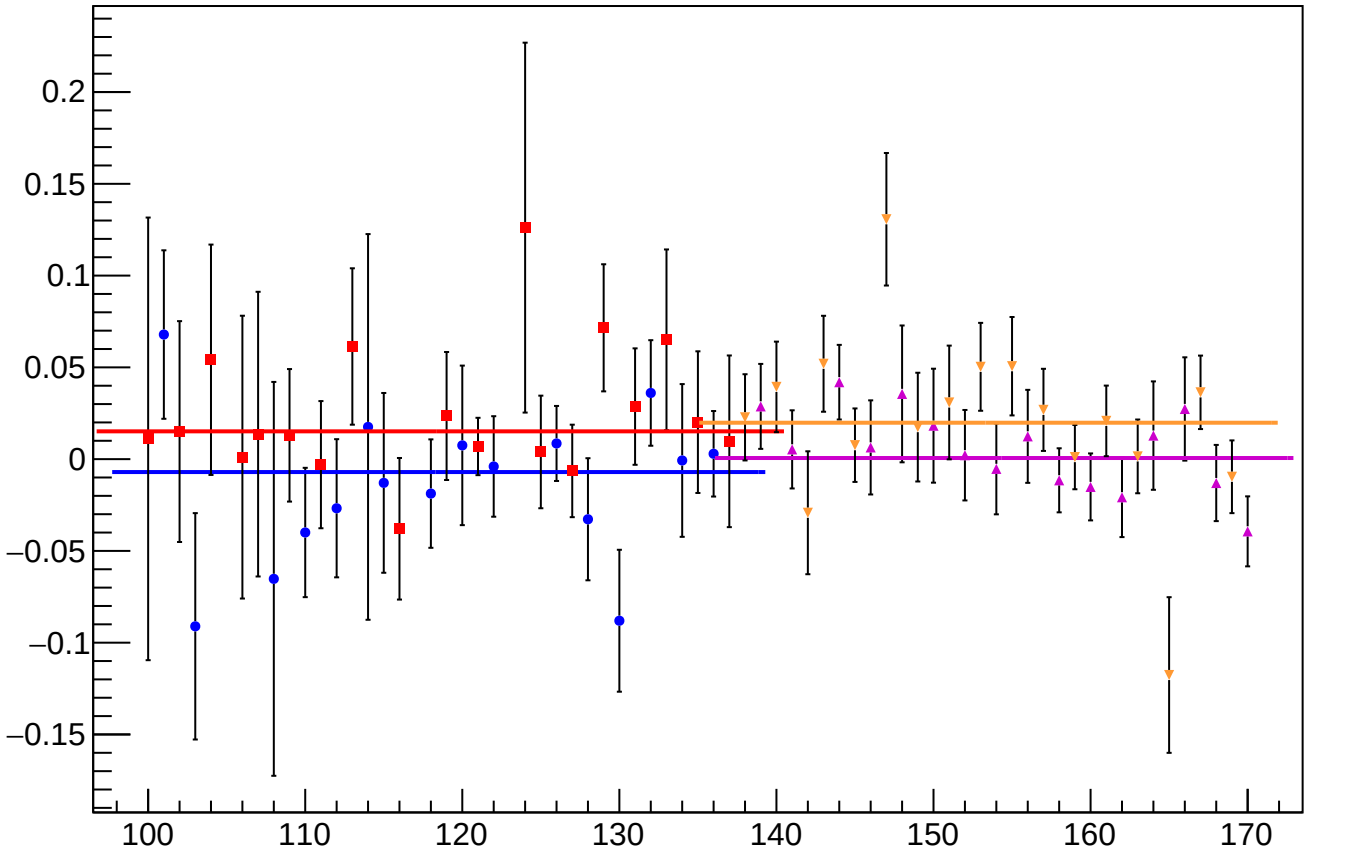
Left In: -0.000+/-0.000 $\chi^2$/NDF:12.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 27.8/32

All: -0.000+/-0.000 $\chi^2$/NDF: 56.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.8/34


asym_sam_13_57_dd_reg_vs_cor_diff_rms vs Slug
×10^−12
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2848478.4/15
Left Out: 0.000+/-0.000 χ²/NDF:875837.7/16
Right Out: 0.000+/-0.000 χ²/NDF: 1769864.5/18
Left In: 0.000+/-0.000 χ²/NDF:1358805.6/15
+ sign 0.000+/-0.000 χ²/NDF: 4463541.5/32
All: 0.000+/-0.000 χ²/NDF: 8940268.4/67
- sign 0.000+/-0.000 χ²/NDF: 4476114.6/34




Right In: -0.007+/-0.009 $\chi^2$/NDF: 14.3/15

Left Out: 0.020+/-0.006 $\chi^2$/NDF:32.6/16

Right Out: 0.015+/-0.008 $\chi^2$/NDF: 10.1/18

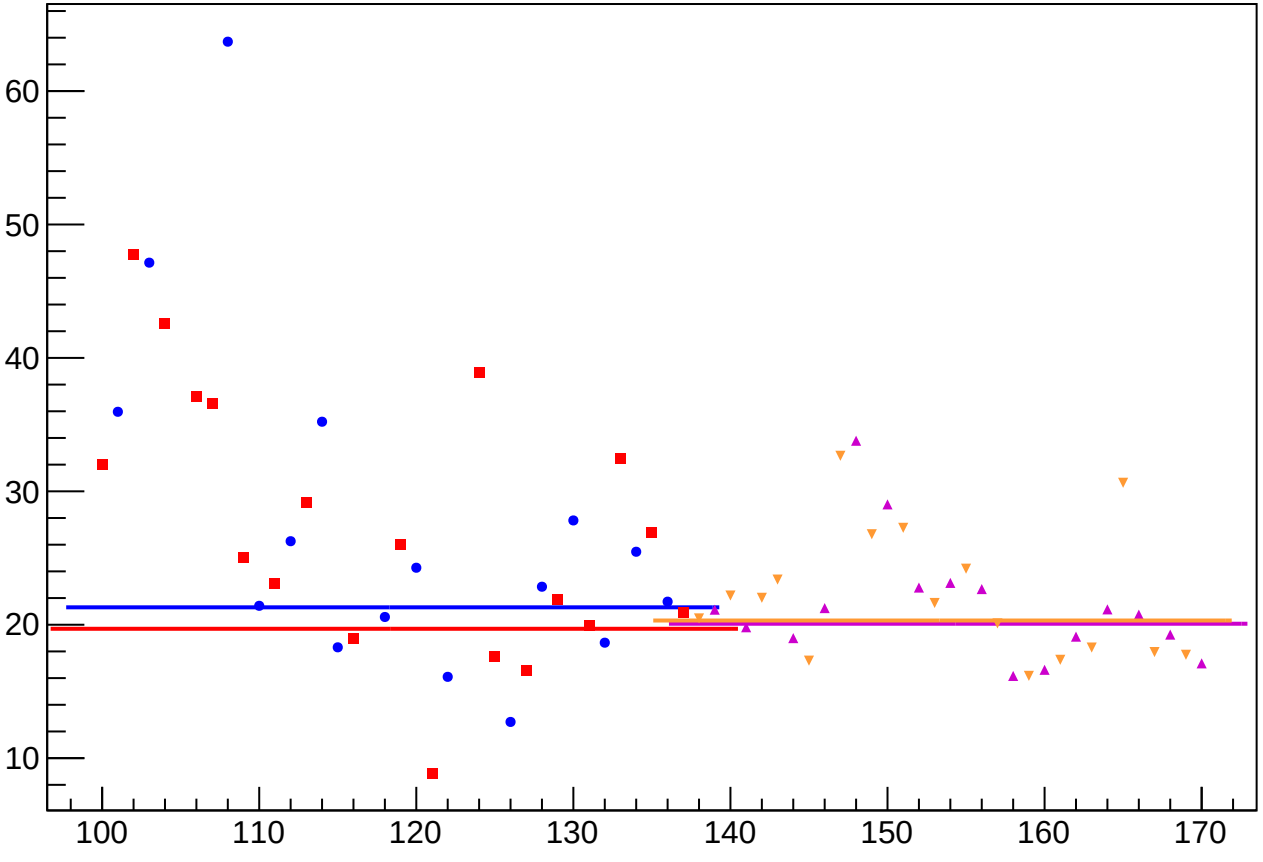
Left In: 0.001+/-0.006 $\chi^2$/NDF:15.3/15

+ sign 0.012+/-0.005 $\chi^2$/NDF: 53.7/32

All: 0.008+/-0.003 $\chi^2$/NDF: 82.0/67

- sign 0.005+/-0.005 $\chi^2$/NDF: 27.5/34

# asym_sam_13_57_dd_dit_vs_cor_diff_rms vs Slug




Right In: 21.305+/-0.006 $\chi^2$/NDF: 1479398.3/15

Left Out: 20.317+/-0.004 $\chi^2$/NDF:926893.9/16

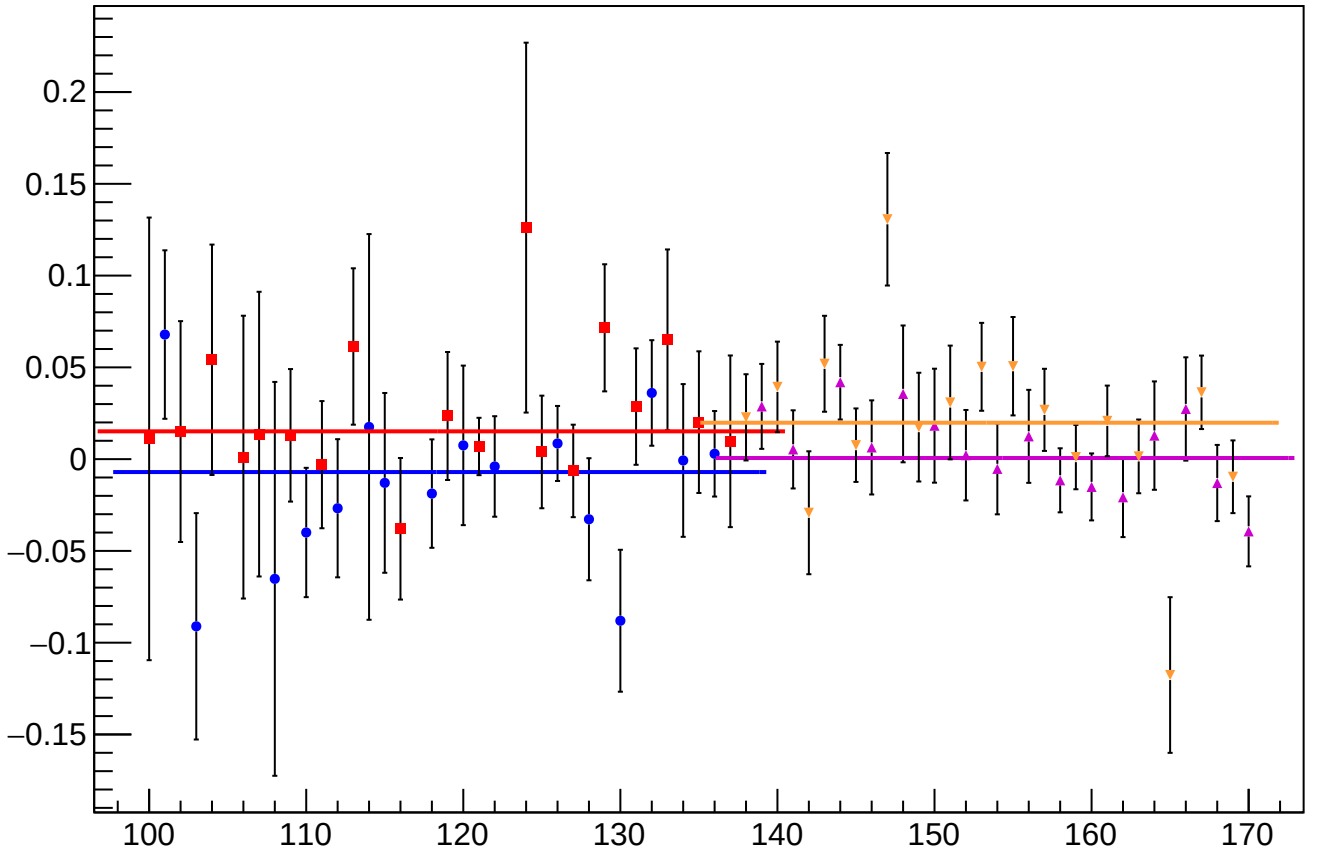
Right Out: 19.697+/-0.006 $\chi^2$/NDF: 2438979.3/18

Left In: 20.075+/-0.004 $\chi^2$/NDF:758537.9/15

+ sign 20.620+/-0.003 $\chi^2$/NDF: 2424524.7/32

All: 20.280+/-0.002 $\chi^2$/NDF: 5644776.8/67

- sign 19.952+/-0.003 $\chi^2$/NDF: 3200366.8/34




Right In: -0.007+/-0.009 $\chi^2$/NDF: 14.3/15

Left Out: 0.020+/-0.006 $\chi^2$/NDF:32.6/16

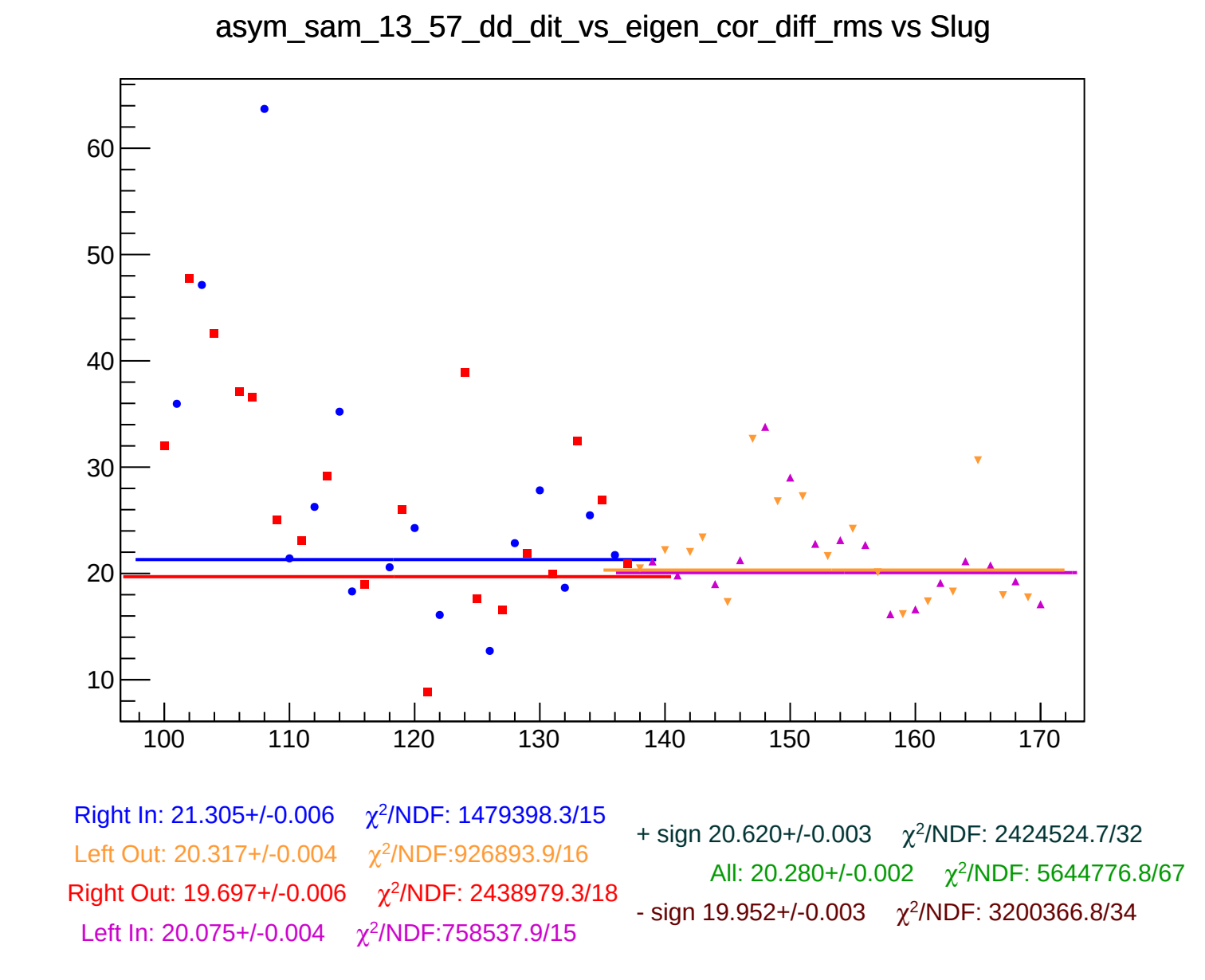
Right Out: 0.015+/-0.008 $\chi^2$/NDF: 10.1/18

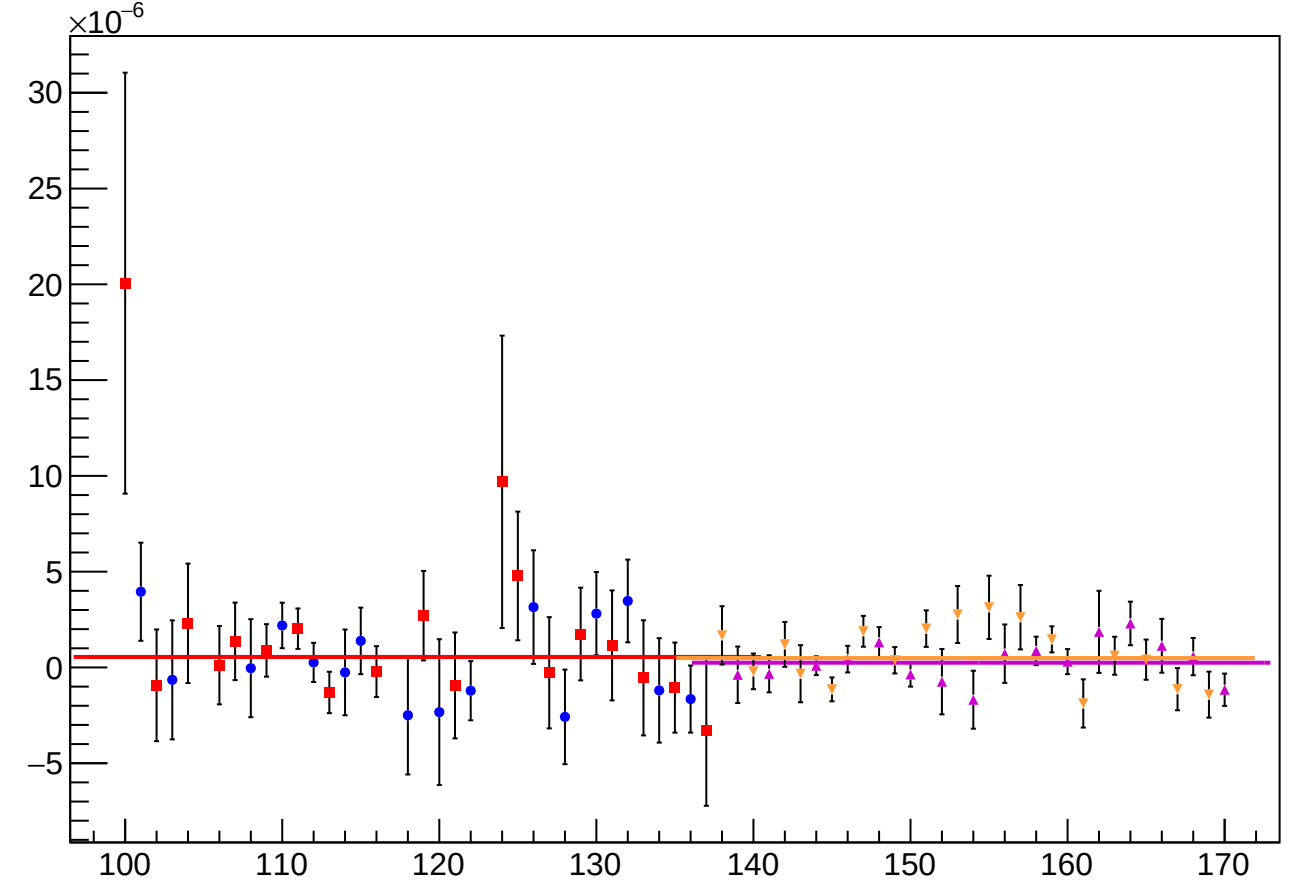
Left In: 0.001+/-0.006 $\chi^2$/NDF:15.3/15

+ sign 0.012+/-0.005 $\chi^2$/NDF: 53.7/32

All: 0.008+/-0.003 $\chi^2$/NDF: 82.0/67

- sign 0.005+/-0.005 $\chi^2$/NDF: 27.5/34


asym_sam_13_57_dd_dit_vs_eigen_cor_diff_rms vs Slug
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 21.305+/-0.006 χ²/NDF: 1479398.3/15
Left Out: 20.317+/-0.004 χ²/NDF:926893.9/16
Right Out: 19.697+/-0.006 χ²/NDF: 2438979.3/18
Left In: 20.075+/-0.004 χ²/NDF:758537.9/15
+ sign 20.620+/-0.003 χ²/NDF: 2424524.7/32
All: 20.280+/-0.002 χ²/NDF: 5644776.8/67
- sign 19.952+/-0.003 χ²/NDF: 3200366.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:31.2/16

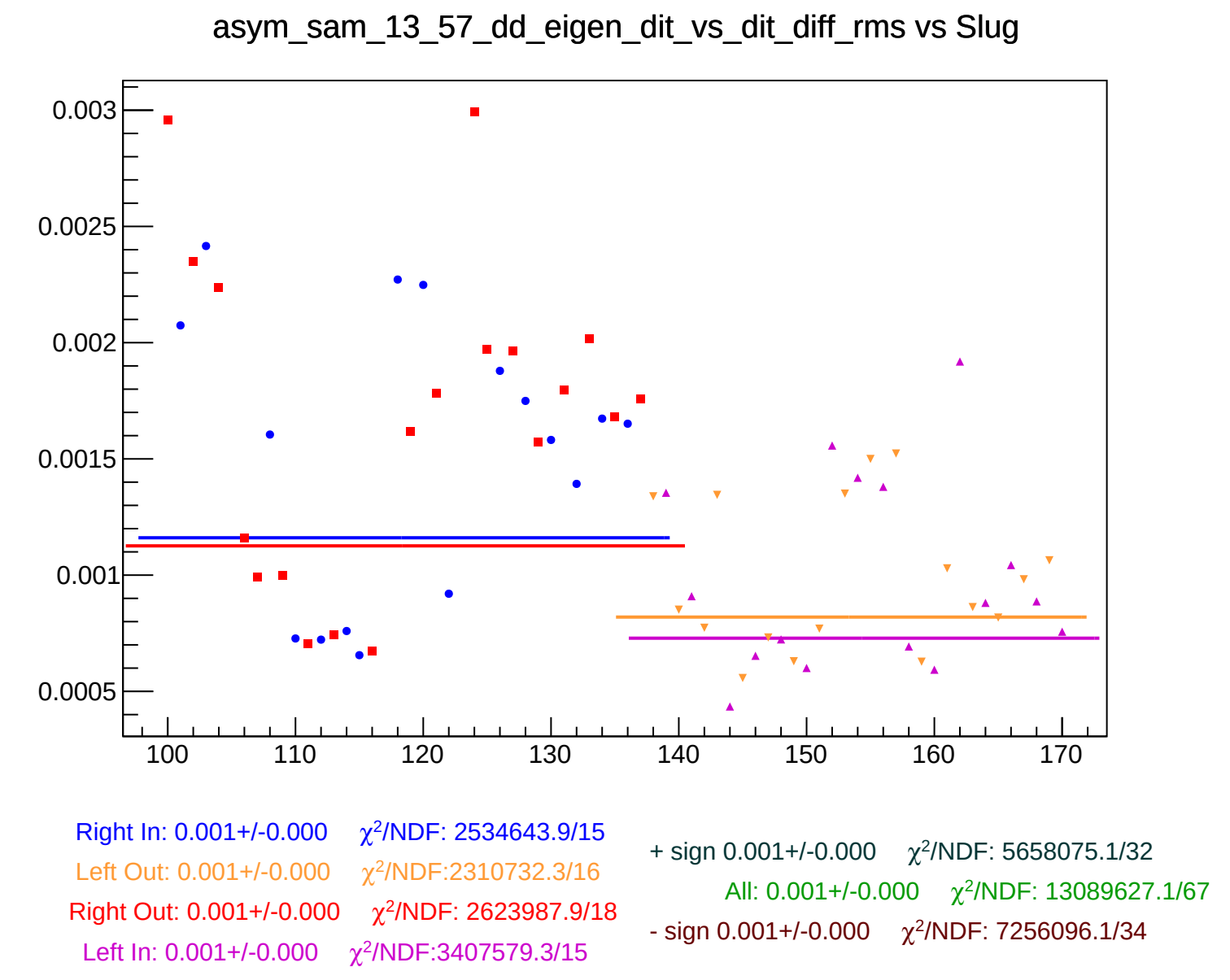
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.3/18

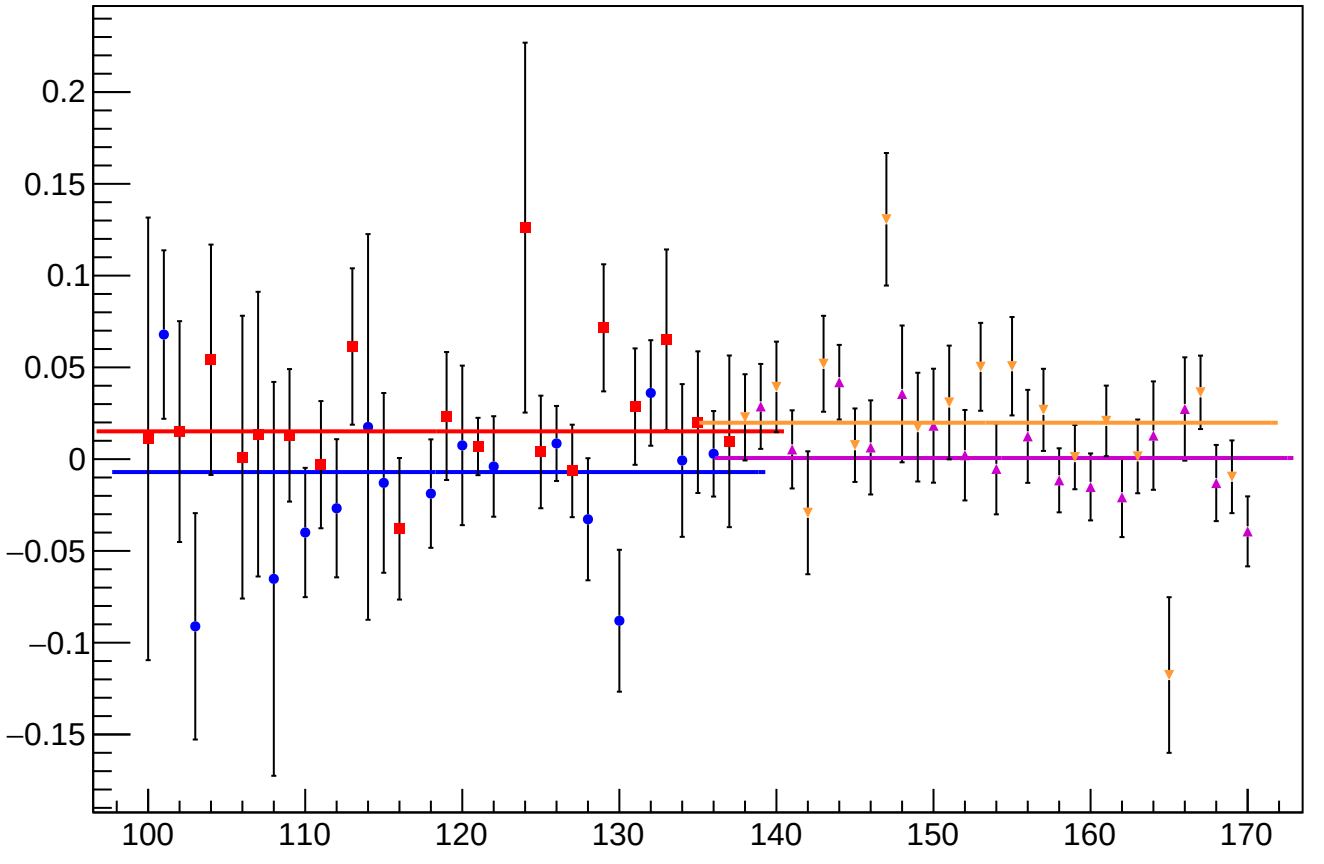
Left In: 0.000+/-0.000 $\chi^2$/NDF:13.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 45.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 75.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 29.0/34


asym_sam_13_57_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.003
0.0025
0.002
0.0015
0.001
0.0005
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 2534643.9/15
Left Out: 0.001+/-0.000 χ²/NDF:2310732.3/16
Right Out: 0.001+/-0.000 χ²/NDF: 2623987.9/18
Left In: 0.001+/-0.000 χ²/NDF:3407579.3/15
+ sign 0.001+/-0.000 χ²/NDF: 5658075.1/32
All: 0.001+/-0.000 χ²/NDF: 13089627.1/67
- sign 0.001+/-0.000 χ²/NDF: 7256096.1/34




Right In: -0.007+/-0.009 $\chi^2$/NDF: 14.3/15

Left Out: 0.020+/-0.006 $\chi^2$/NDF:32.6/16

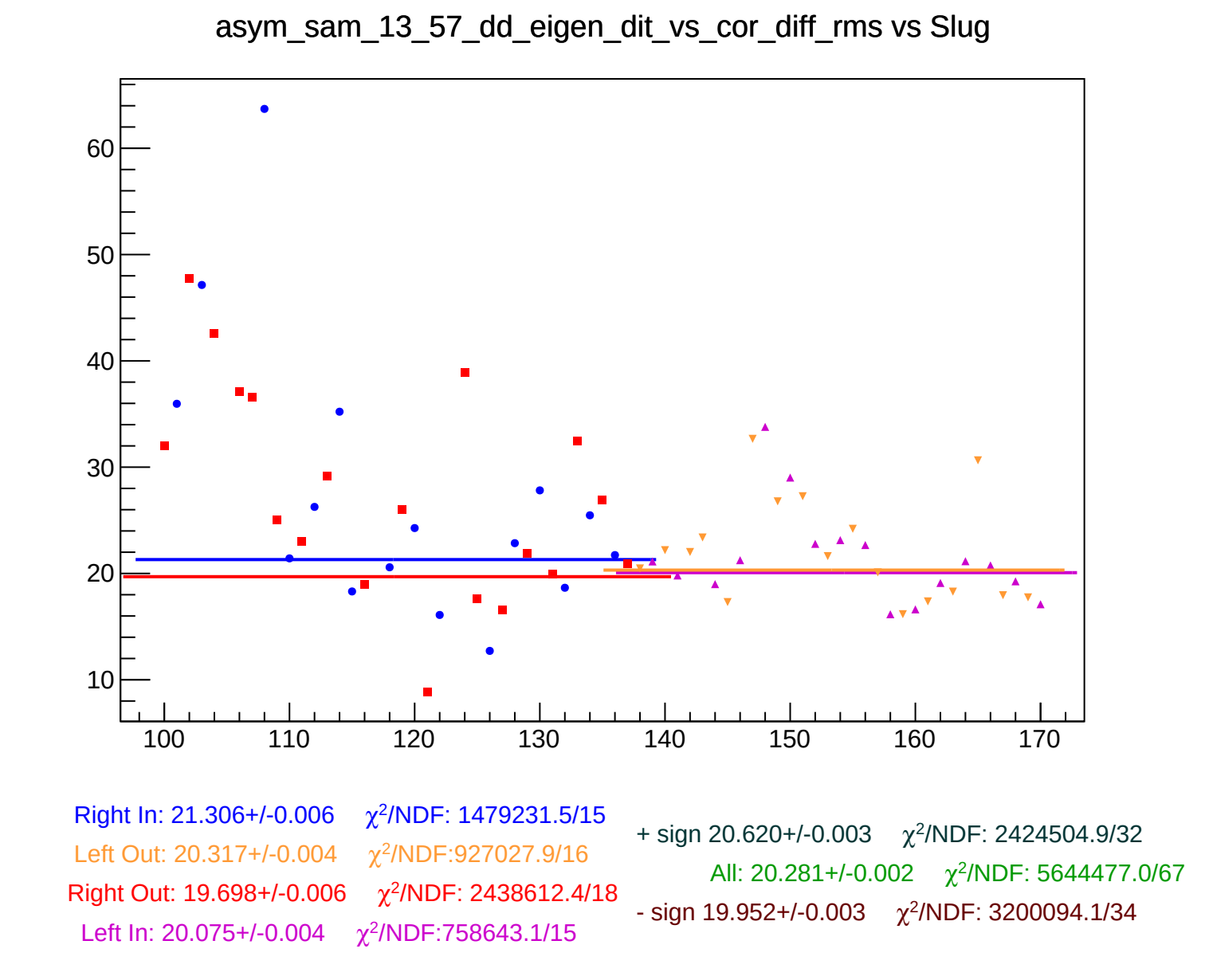
Right Out: 0.015+/-0.008 $\chi^2$/NDF: 10.1/18

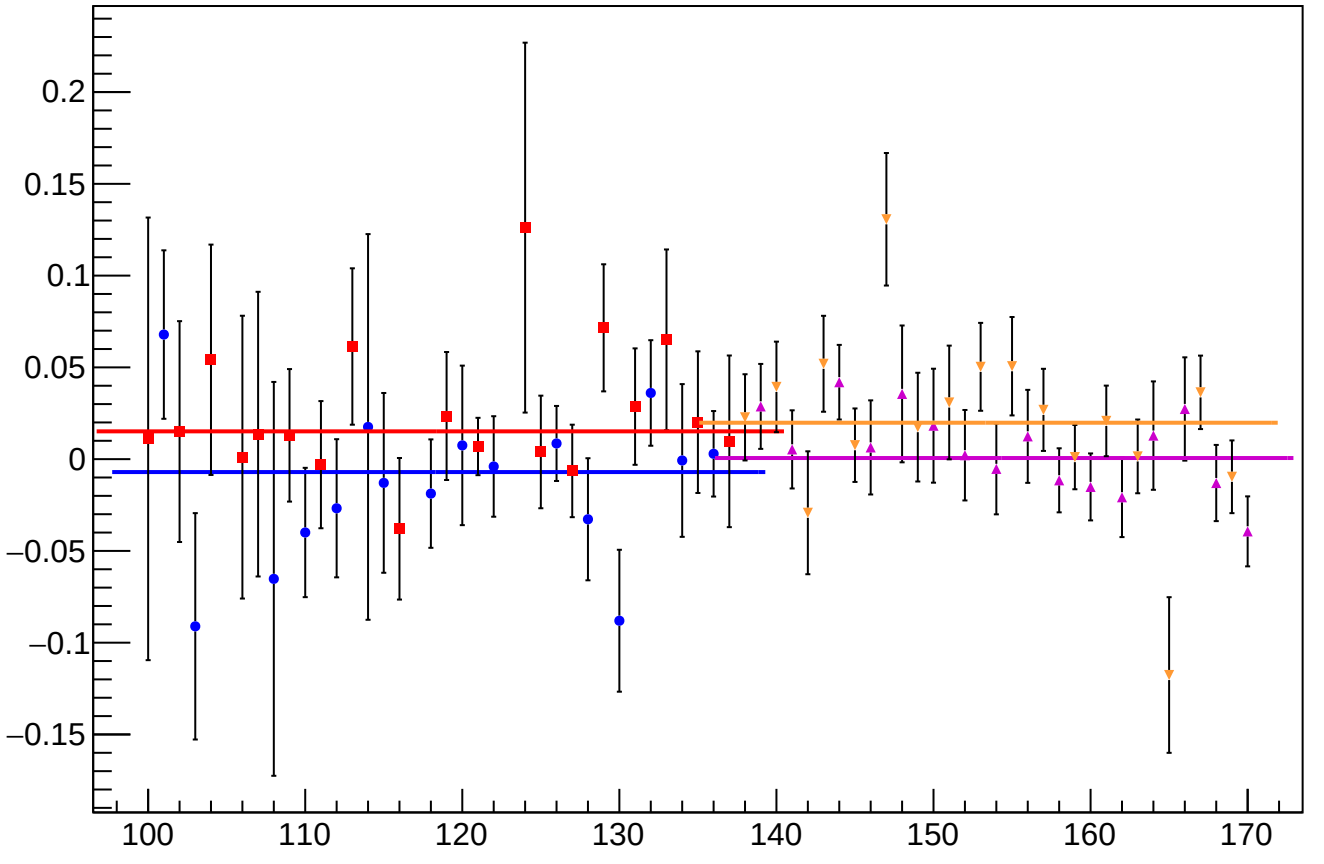
Left In: 0.001+/-0.006 $\chi^2$/NDF:15.3/15

+ sign 0.012+/-0.005 $\chi^2$/NDF: 53.7/32

All: 0.008+/-0.003 $\chi^2$/NDF: 82.0/67

- sign 0.005+/-0.005 $\chi^2$/NDF: 27.5/34


asym_sam_13_57_dd_eigen_dit_vs_cor_diff_rms vs Slug
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 21.306+/-0.006 χ²/NDF: 1479231.5/15
Left Out: 20.317+/-0.004 χ²/NDF:927027.9/16
Right Out: 19.698+/-0.006 χ²/NDF: 2438612.4/18
Left In: 20.075+/-0.004 χ²/NDF:758643.1/15
+ sign 20.620+/-0.003 χ²/NDF: 2424504.9/32
All: 20.281+/-0.002 χ²/NDF: 5644477.0/67
- sign 19.952+/-0.003 χ²/NDF: 3200094.1/34




Right In: -0.007+/-0.009 $\chi^2$/NDF: 14.3/15

Left Out: 0.020+/-0.006 $\chi^2$/NDF:32.6/16

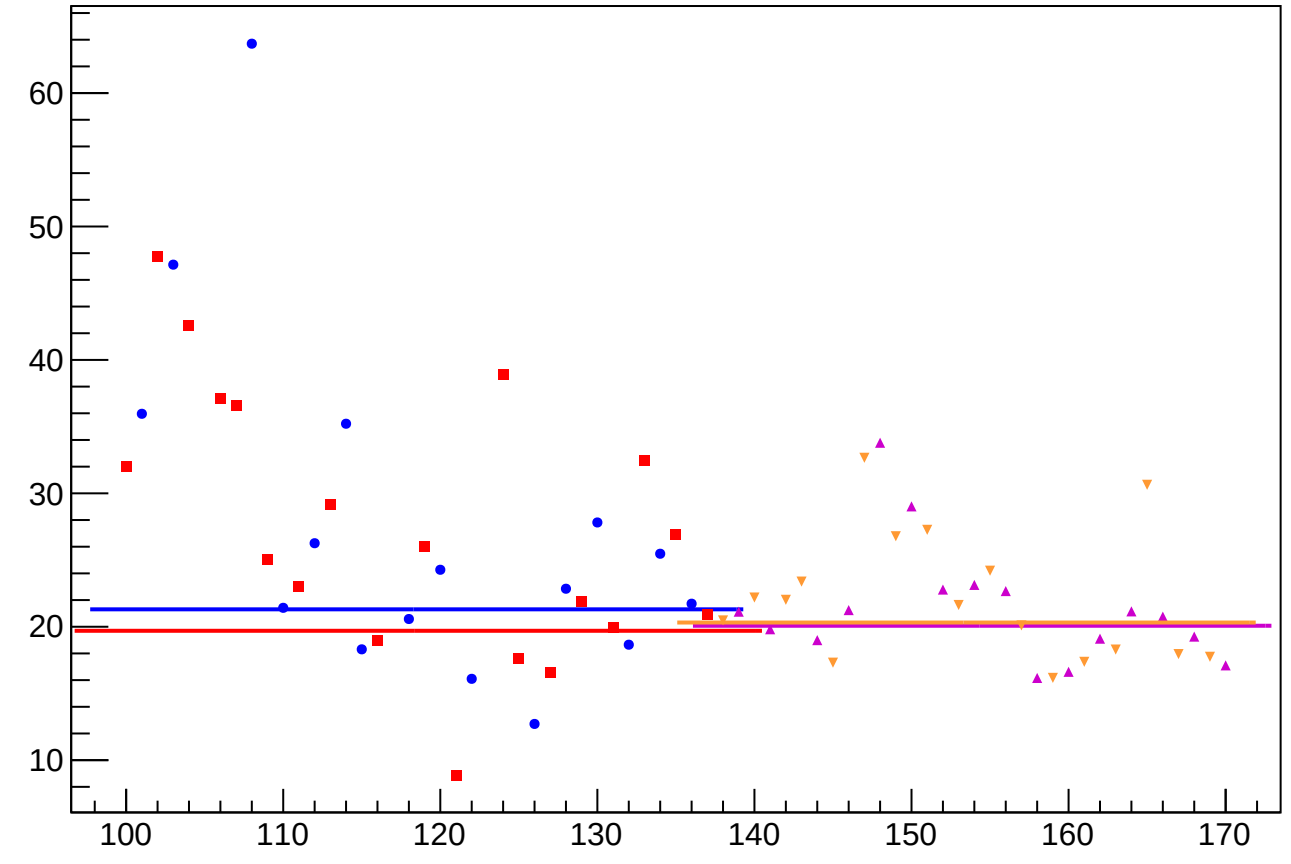
Right Out: 0.015+/-0.008 $\chi^2$/NDF: 10.1/18

Left In: 0.001+/-0.006 $\chi^2$/NDF:15.3/15

+ sign 0.012+/-0.005 $\chi^2$/NDF: 53.7/32

All: 0.008+/-0.003 $\chi^2$/NDF: 82.0/67

- sign 0.005+/-0.005 $\chi^2$/NDF: 27.5/34




Right In: 21.306+/-0.006 $\chi^2$/NDF: 1479231.5/15

Left Out: 20.317+/-0.004 $\chi^2$/NDF:927027.9/16

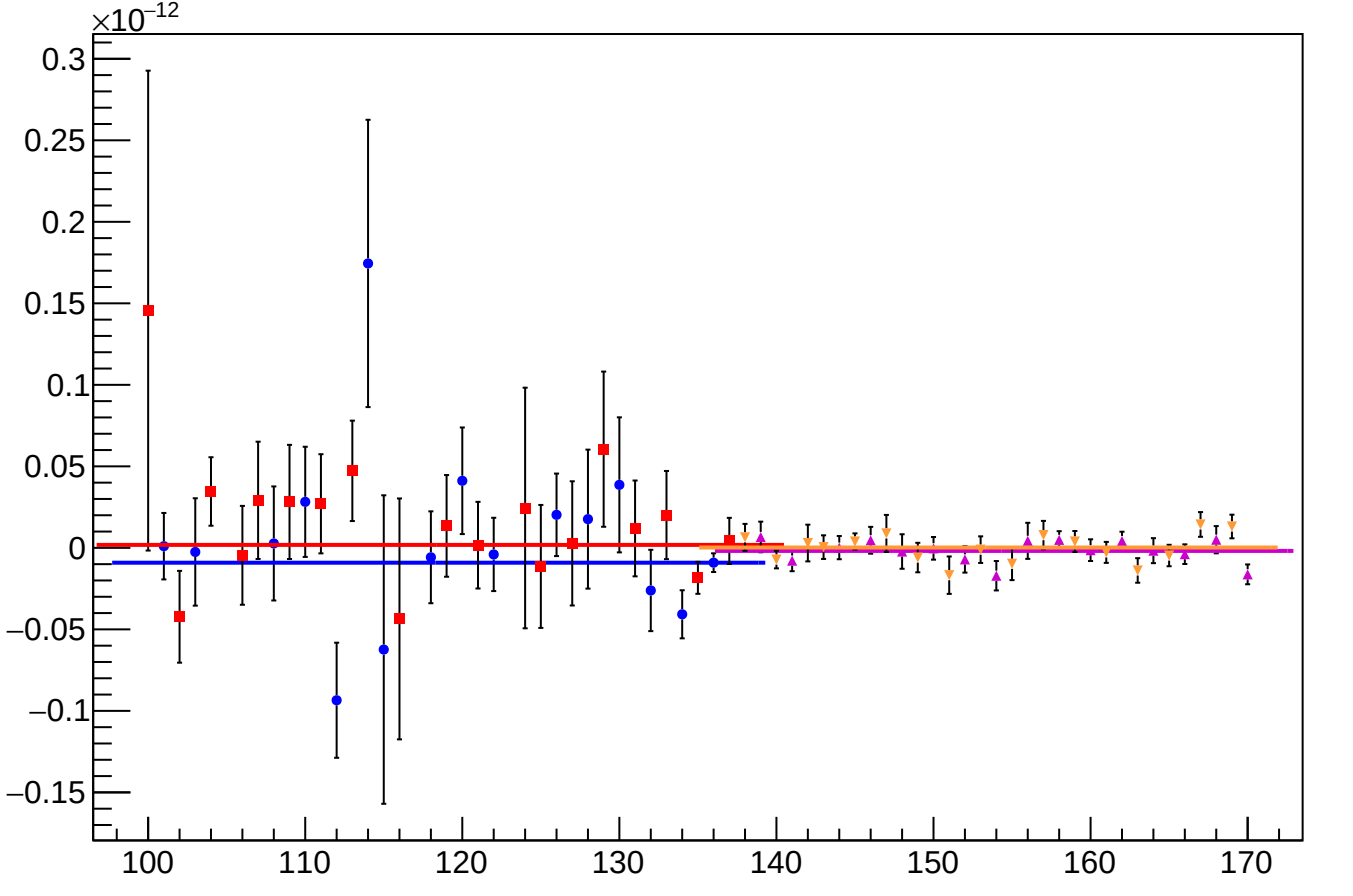
Right Out: 19.698+/-0.006 $\chi^2$/NDF: 2438612.4/18

Left In: 20.075+/-0.004 $\chi^2$/NDF:758643.1/15

+ sign 20.620+/-0.003 $\chi^2$/NDF: 2424504.9/32

All: 20.281+/-0.002 $\chi^2$/NDF: 5644477.0/67

- sign 19.952+/-0.003 $\chi^2$/NDF: 3200094.1/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 22.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:19.3/16

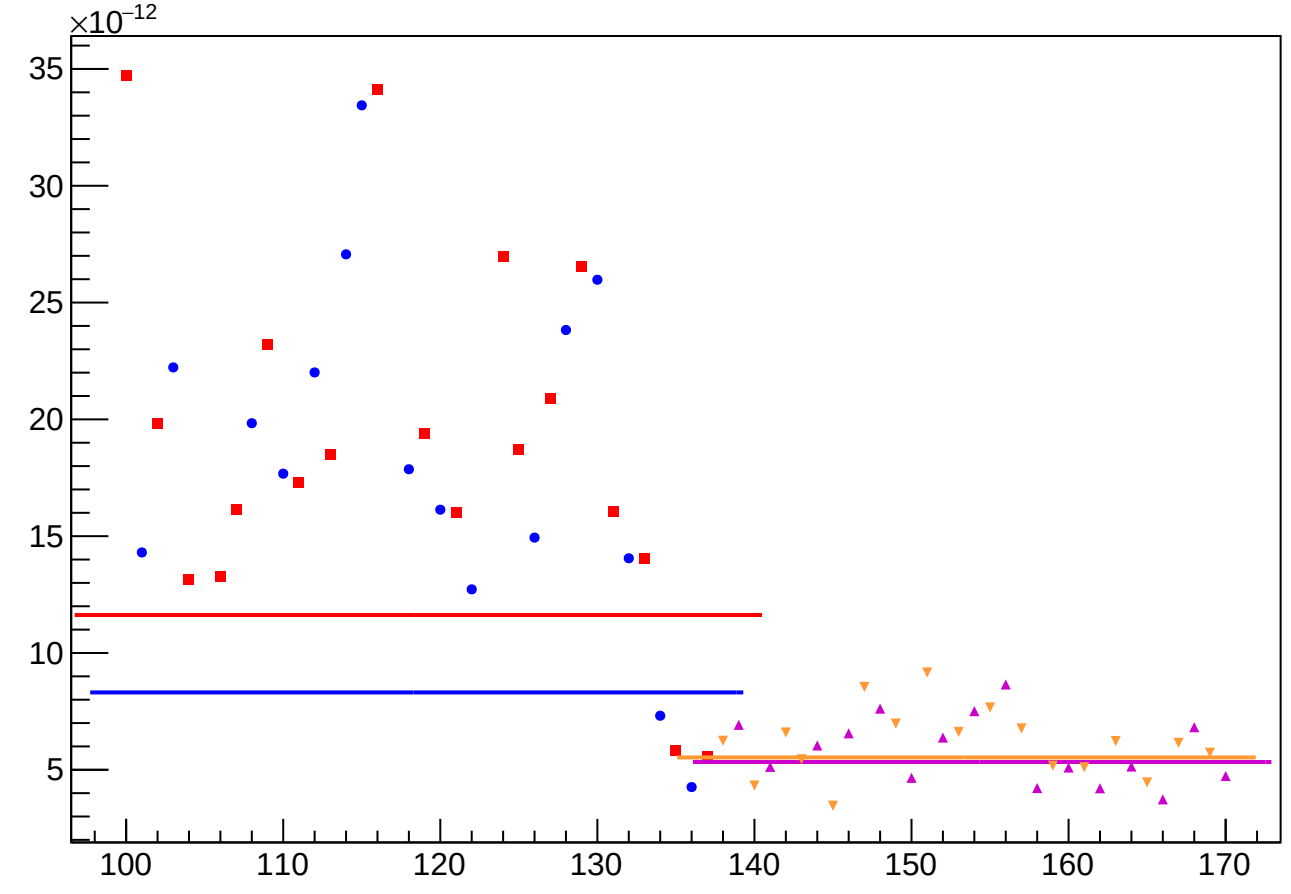
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.0/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:15.2/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 45.6/32

All: -0.000+/-0.000 $\chi^2$/NDF: 78.1/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 32.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 3731754.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1134813.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2610908.4/18

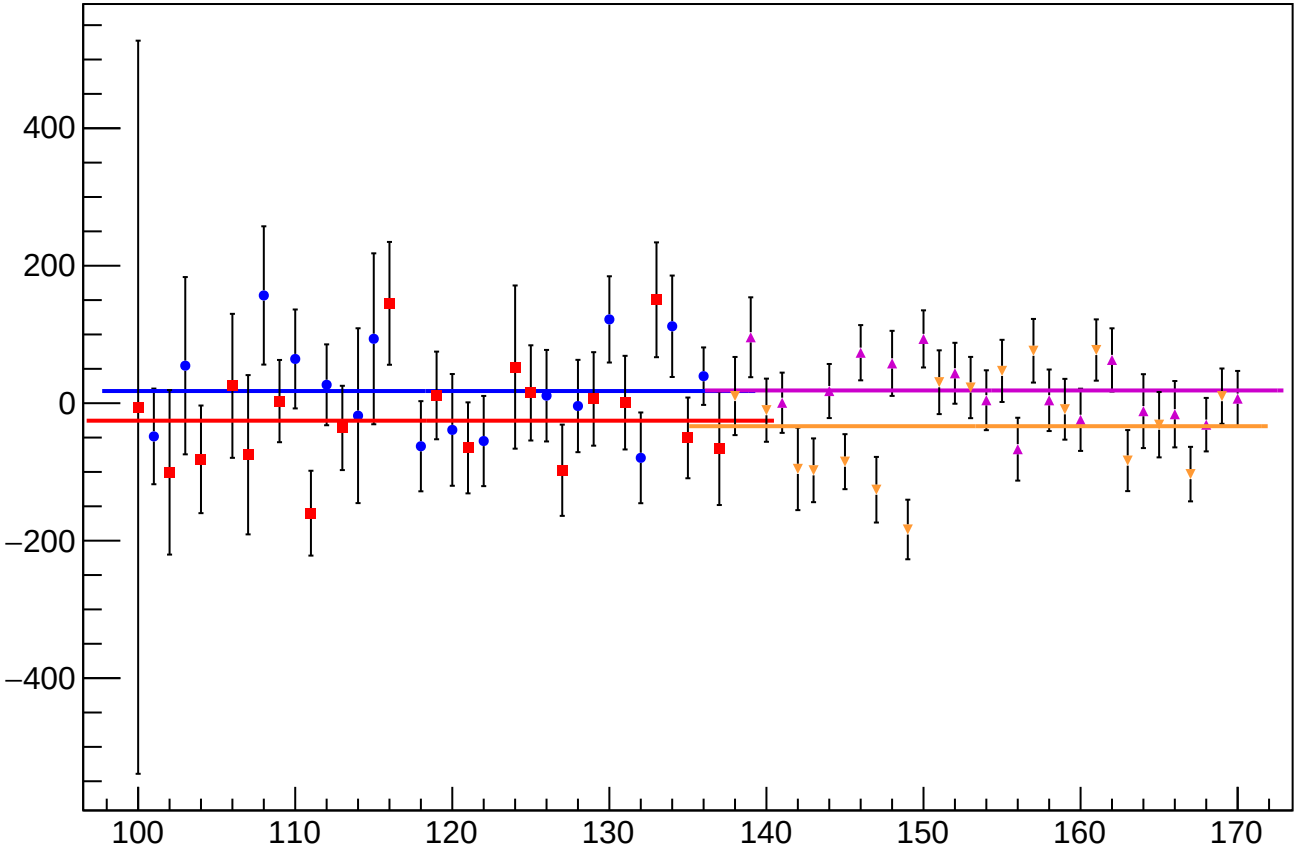
Left In: 0.000+/-0.000 $\chi^2$/NDF:959202.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 5526467.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 11324434.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5797924.3/34

# reg_asym_sam_15_37_dd_mean vs Slug




Right In: 17.701+/-17.470 $\chi^2$/NDF: 13.9/15

Left Out: -33.459+/-11.001 $\chi^2$/NDF:45.6/16

Right Out: -25.440+/-17.337 $\chi^2$/NDF: 17.8/18

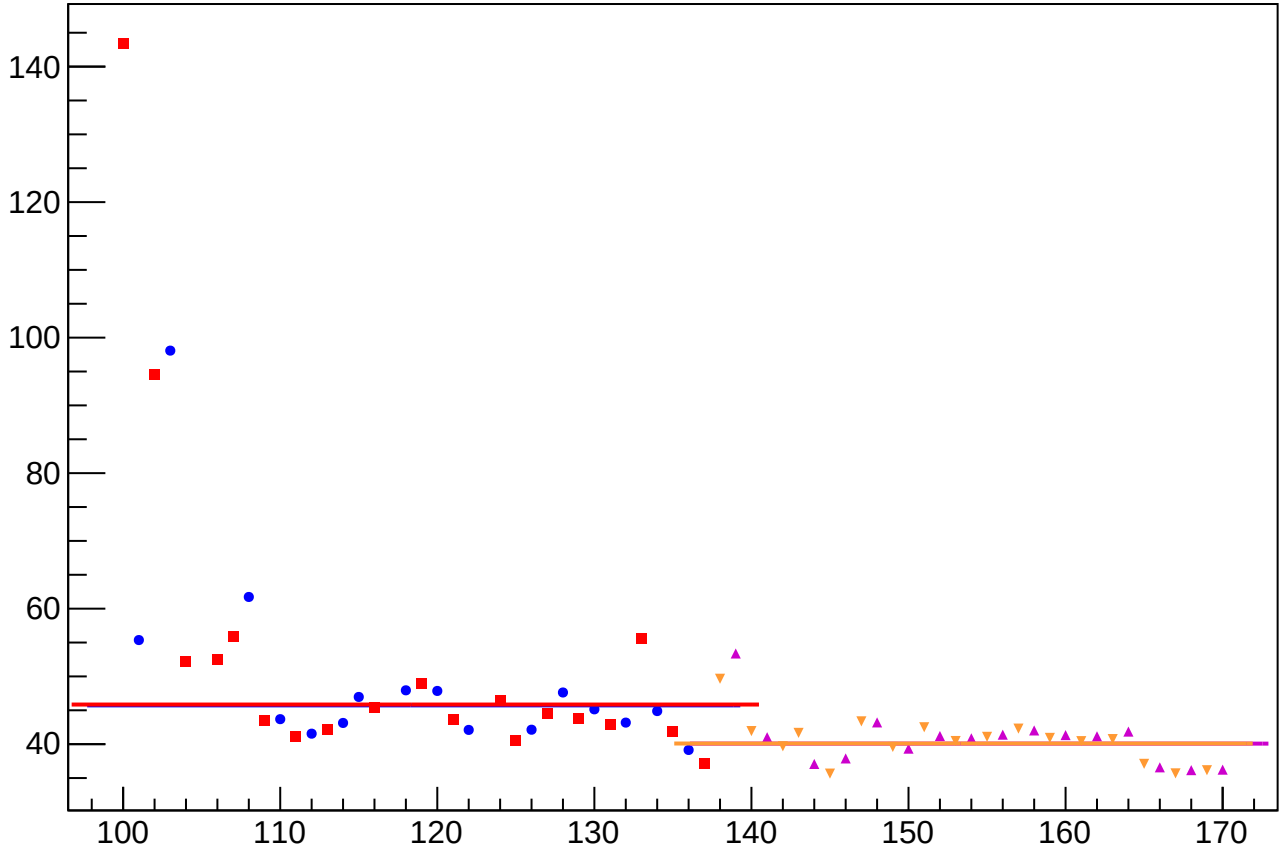
Left In: 18.545+/-11.088 $\chi^2$/NDF:16.1/15

+ sign -18.933+/-9.309 $\chi^2$/NDF: 65.7/32

All: -6.622+/-6.594 $\chi^2$/NDF: 107.7/67

- sign 5.775+/-9.341 $\chi^2$/NDF: 38.6/34

# reg_asym_sam_15_37_dd_rms vs Slug




Right In: 45.727+/-0.012 $\chi^2$/NDF: 501460.7/15

Left Out: 40.098+/-0.008 $\chi^2$/NDF:160483.8/16

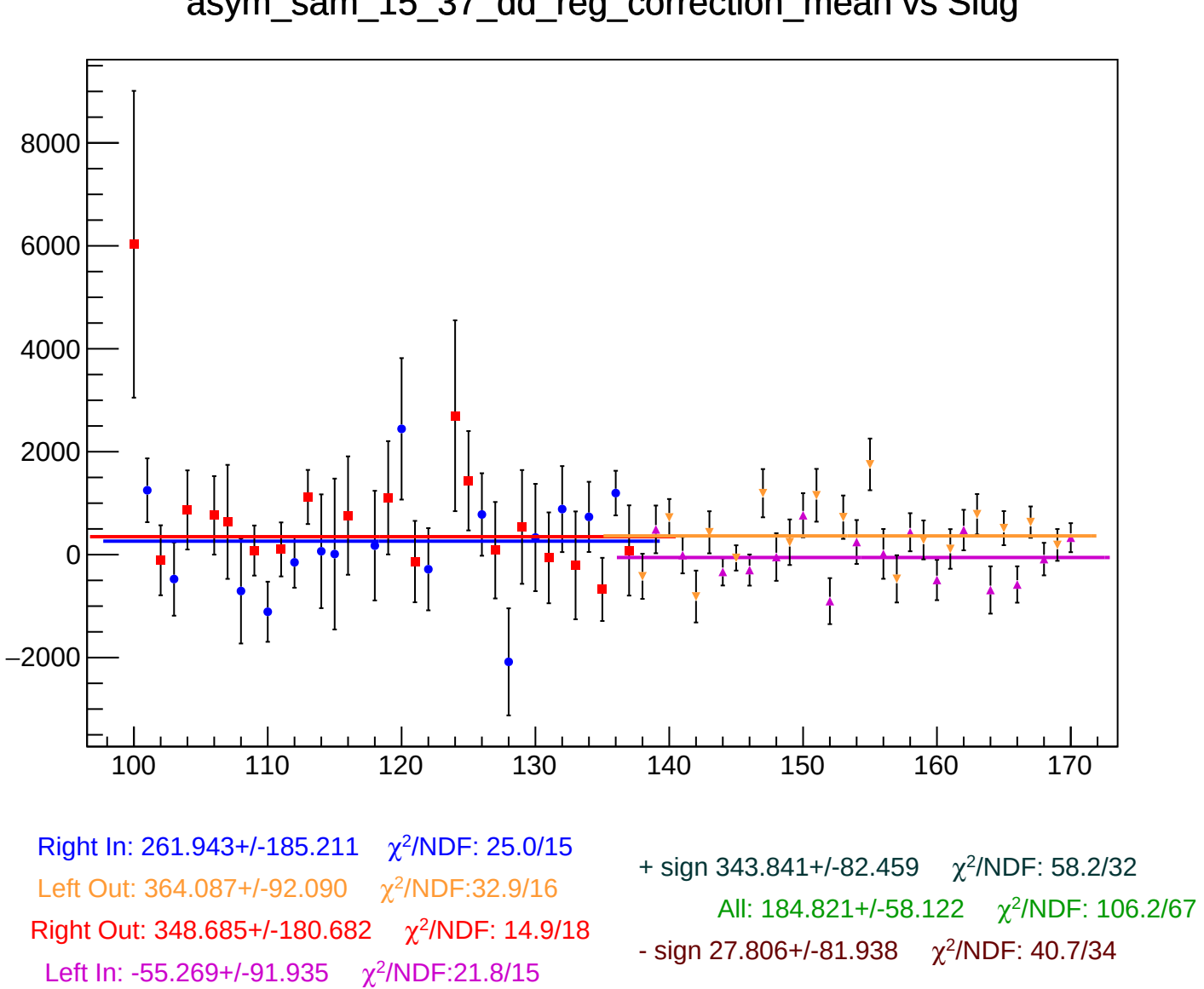
Right Out: 45.849+/-0.012 $\chi^2$/NDF: 540156.7/18

Left In: 40.081+/-0.008 $\chi^2$/NDF:193810.2/15

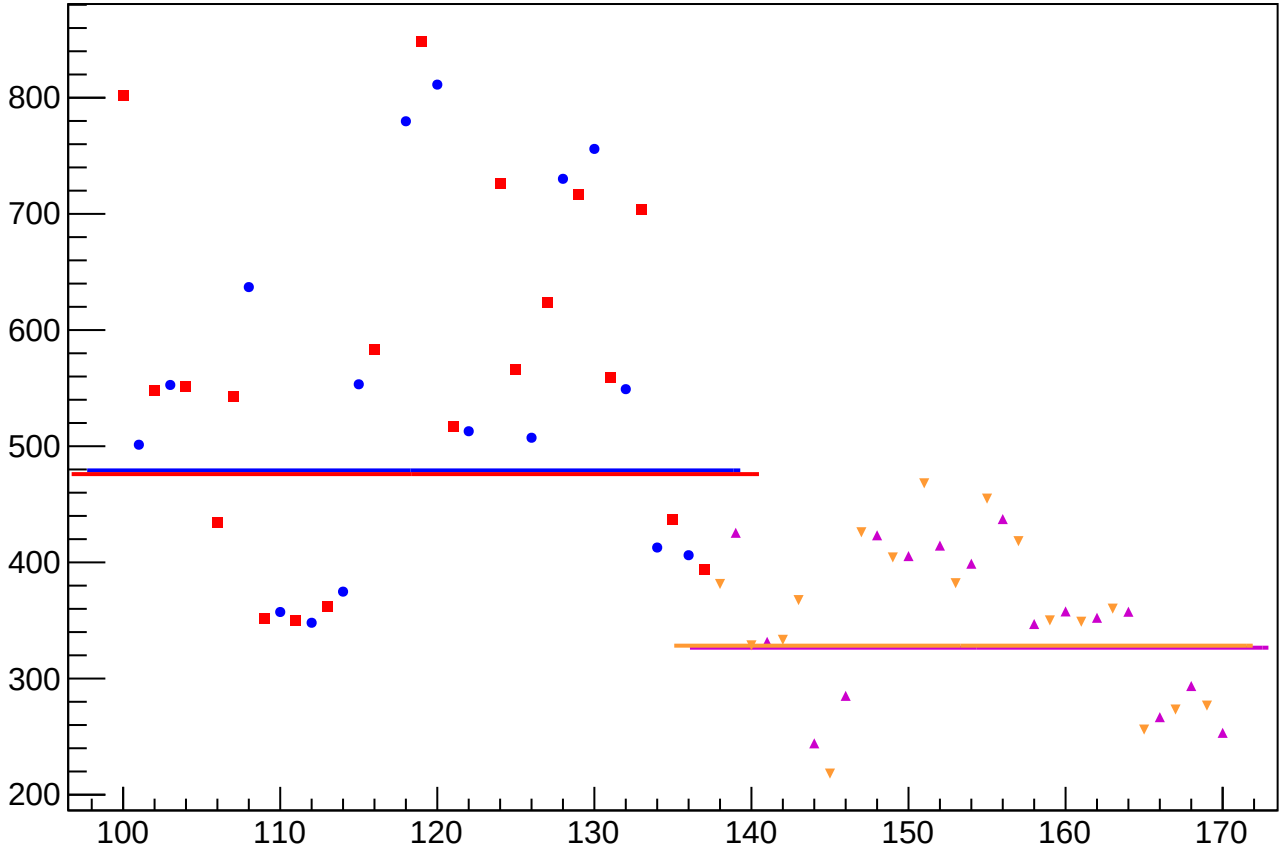
+ sign 41.696+/-0.007 $\chi^2$/NDF: 810632.1/32

All: 41.726+/-0.005 $\chi^2$/NDF: 1701773.2/67

- sign 41.755+/-0.007 $\chi^2$/NDF: 891100.2/34


asym_sam_15_37_dd_reg_correction_mean vs Slug
8000
6000
4000
2000
0
−2000
100
110
120
130
140
150
160
170
Right In: 261.943+/-185.211 χ²/NDF: 25.0/15
Left Out: 364.087+/-92.090 χ²/NDF:32.9/16
Right Out: 348.685+/-180.682 χ²/NDF: 14.9/18
Left In: -55.269+/-91.935 χ²/NDF:21.8/15
+ sign 343.841+/-82.459 χ²/NDF: 58.2/32
All: 184.821+/-58.122 χ²/NDF: 106.2/67
- sign 27.806+/-81.938 χ²/NDF: 40.7/34

# asym_sam_15_37_dd_reg_correction_rms vs Slug




Right In: 479.178+/-0.131 $\chi^2$/NDF: 952693.7/15

Left Out: 328.314+/-0.065 $\chi^2$/NDF:1223383.7/16

Right Out: 475.992+/-0.128 $\chi^2$/NDF: 1006487.7/18

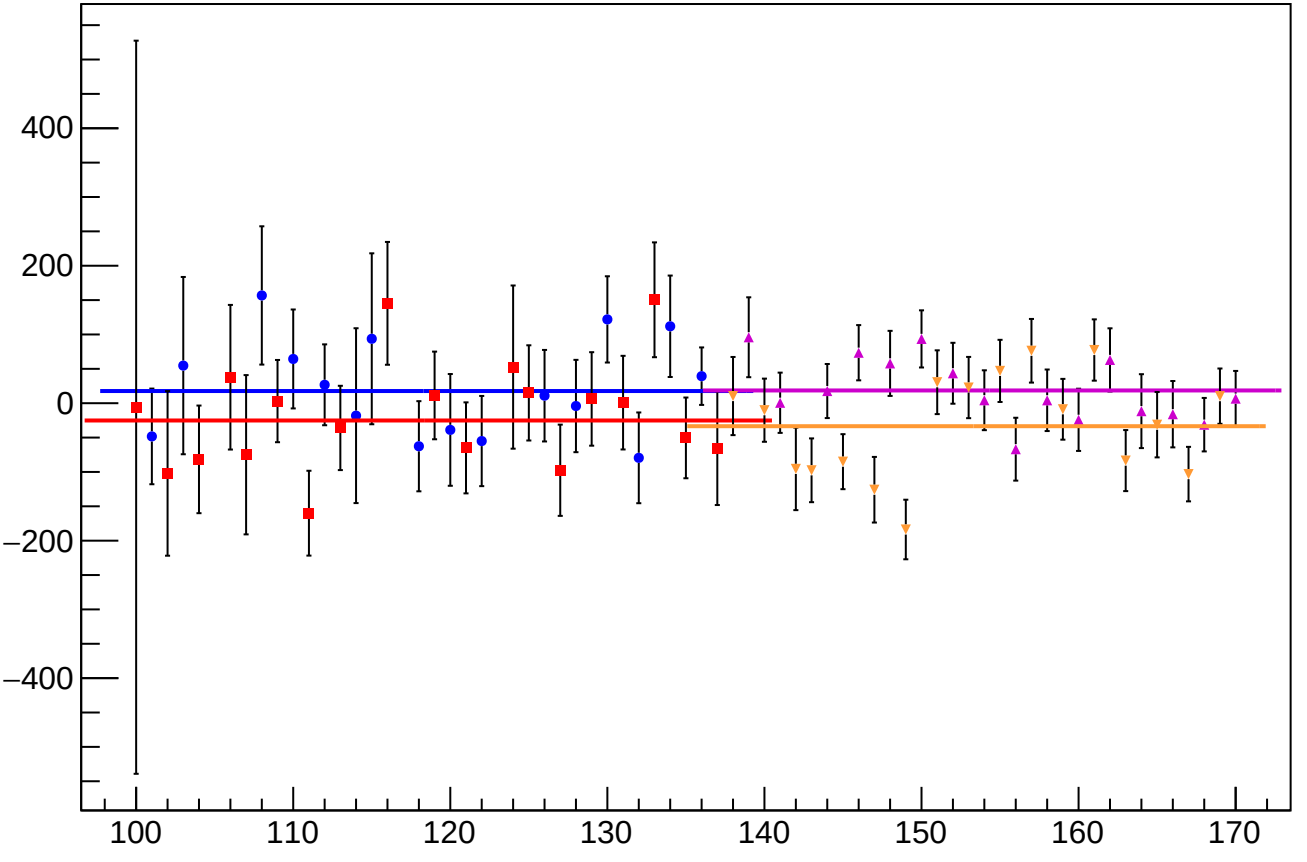
Left In: 326.568+/-0.065 $\chi^2$/NDF:968131.1/15

+ sign 358.218+/-0.058 $\chi^2$/NDF: 3240036.7/32

All: 357.755+/-0.041 $\chi^2$/NDF: 6301327.8/67

- sign 357.298+/-0.058 $\chi^2$/NDF: 3061165.9/34

# cor_asym_sam_15_37_dd_mean vs Slug




Right In: 17.706+/-17.470 $\chi^2$/NDF: 13.9/15

Left Out: -33.460+/-11.001 $\chi^2$/NDF:45.6/16

Right Out: -25.145+/-17.339 $\chi^2$/NDF: 18.0/18

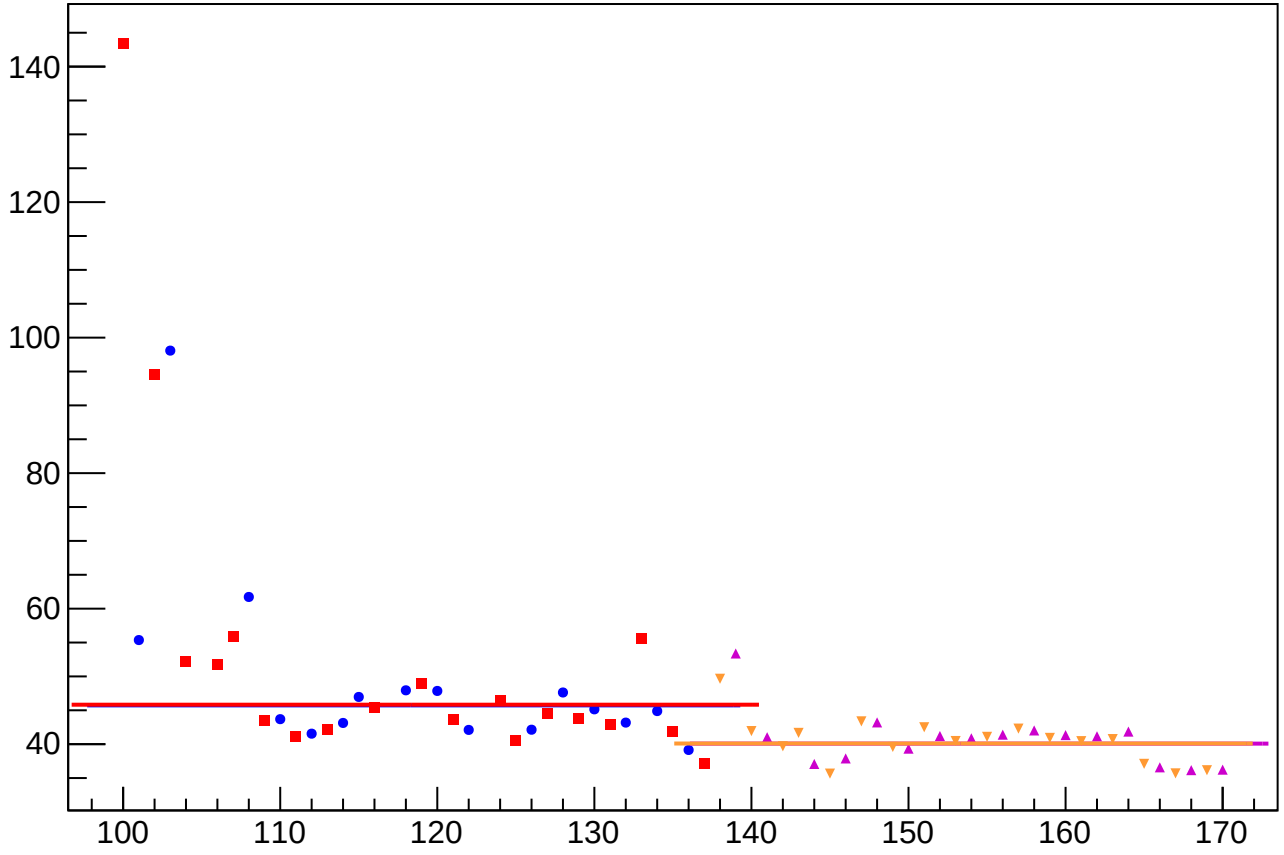
Left In: 18.546+/-11.088 $\chi^2$/NDF:16.1/15

+ sign -18.933+/-9.309 $\chi^2$/NDF: 65.7/32

All: -6.578+/-6.594 $\chi^2$/NDF: 107.8/67

- sign 5.864+/-9.341 $\chi^2$/NDF: 38.6/34

# cor_asym_sam_15_37_dd_rms vs Slug




Right In: 45.727+/-0.012 $\chi^2$/NDF: 501463.8/15

Left Out: 40.098+/-0.008 $\chi^2$/NDF:160483.8/16

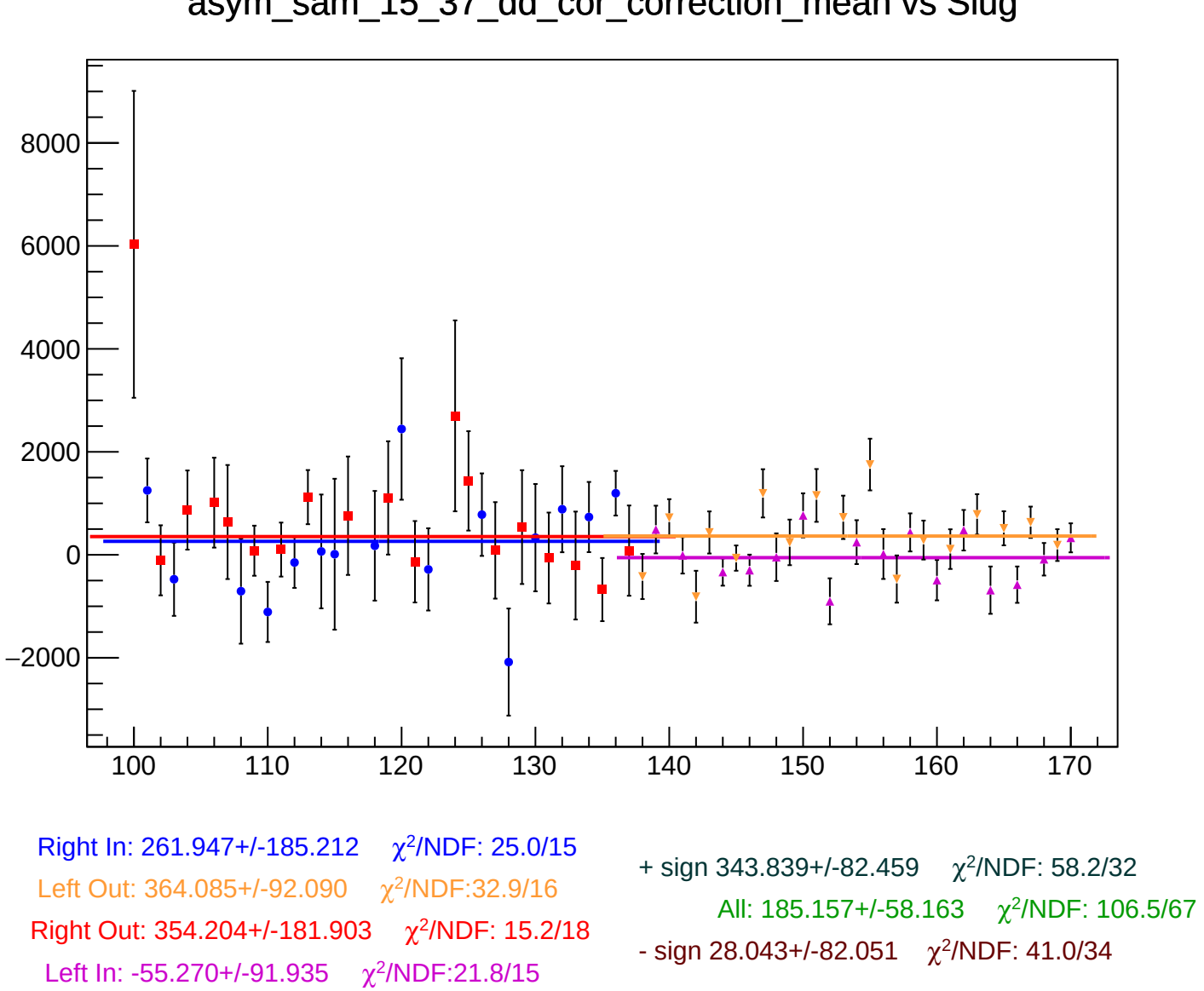
Right Out: 45.825+/-0.012 $\chi^2$/NDF: 538470.5/18

Left In: 40.081+/-0.008 $\chi^2$/NDF:193810.2/15

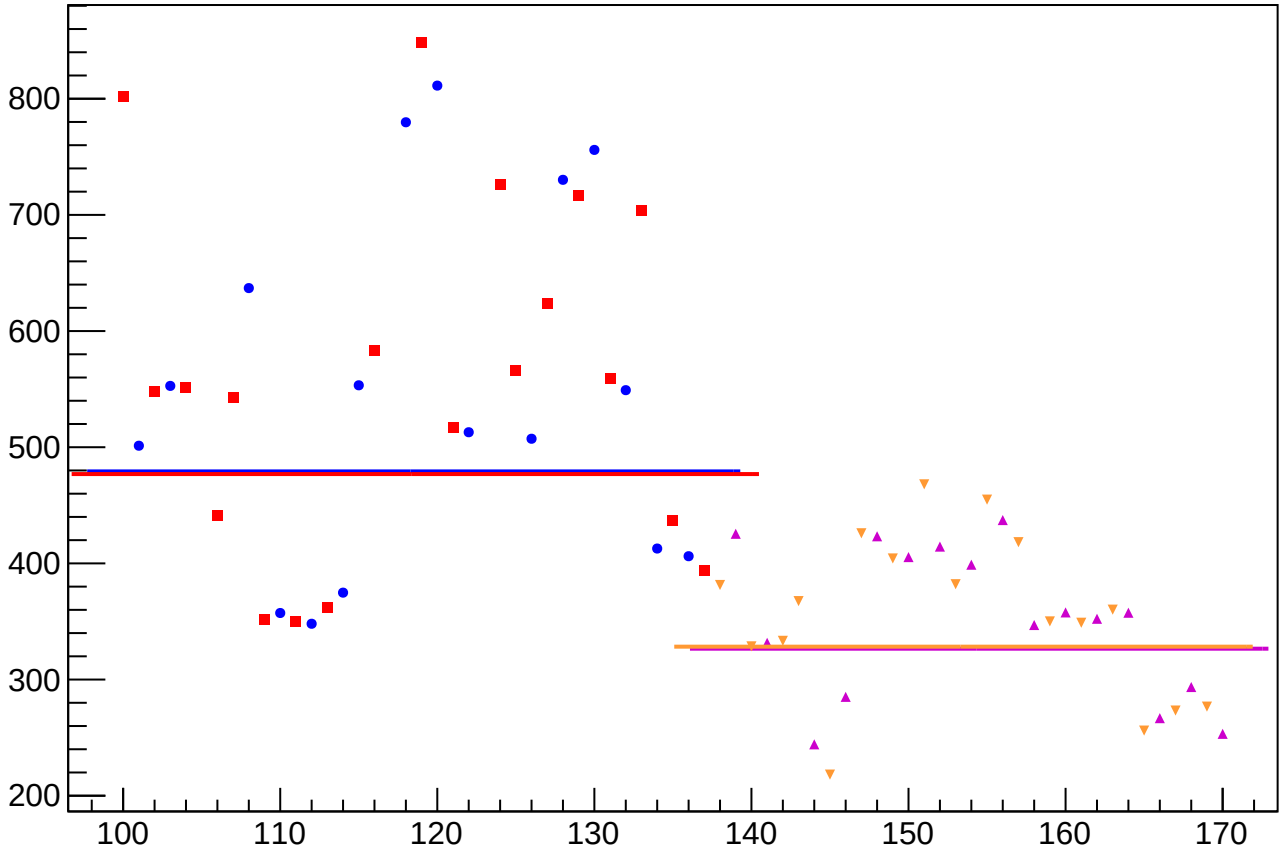
+ sign 41.696+/-0.007 $\chi^2$/NDF: 810635.0/32

All: 41.722+/-0.005 $\chi^2$/NDF: 1698754.4/67

- sign 41.748+/-0.007 $\chi^2$/NDF: 888087.8/34


asym_sam_15_37_dd_cor_correction_mean vs Slug
8000
6000
4000
2000
0
−2000
100
110
120
130
140
150
160
170
Right In: 261.947+/-185.212 χ²/NDF: 25.0/15
Left Out: 364.085+/-92.090 χ²/NDF:32.9/16
Right Out: 354.204+/-181.903 χ²/NDF: 15.2/18
Left In: -55.270+/-91.935 χ²/NDF:21.8/15
+ sign 343.839+/-82.459 χ²/NDF: 58.2/32
All: 185.157+/-58.163 χ²/NDF: 106.5/67
- sign 28.043+/-82.051 χ²/NDF: 41.0/34

# asym_sam_15_37_dd_cor_correction_rms vs Slug




Right In: 479.180+/-0.131 $\chi^2$/NDF: 952722.6/15

Left Out: 328.313+/-0.065 $\chi^2$/NDF:1223383.2/16

Right Out: 476.893+/-0.129 $\chi^2$/NDF: 1003767.4/18

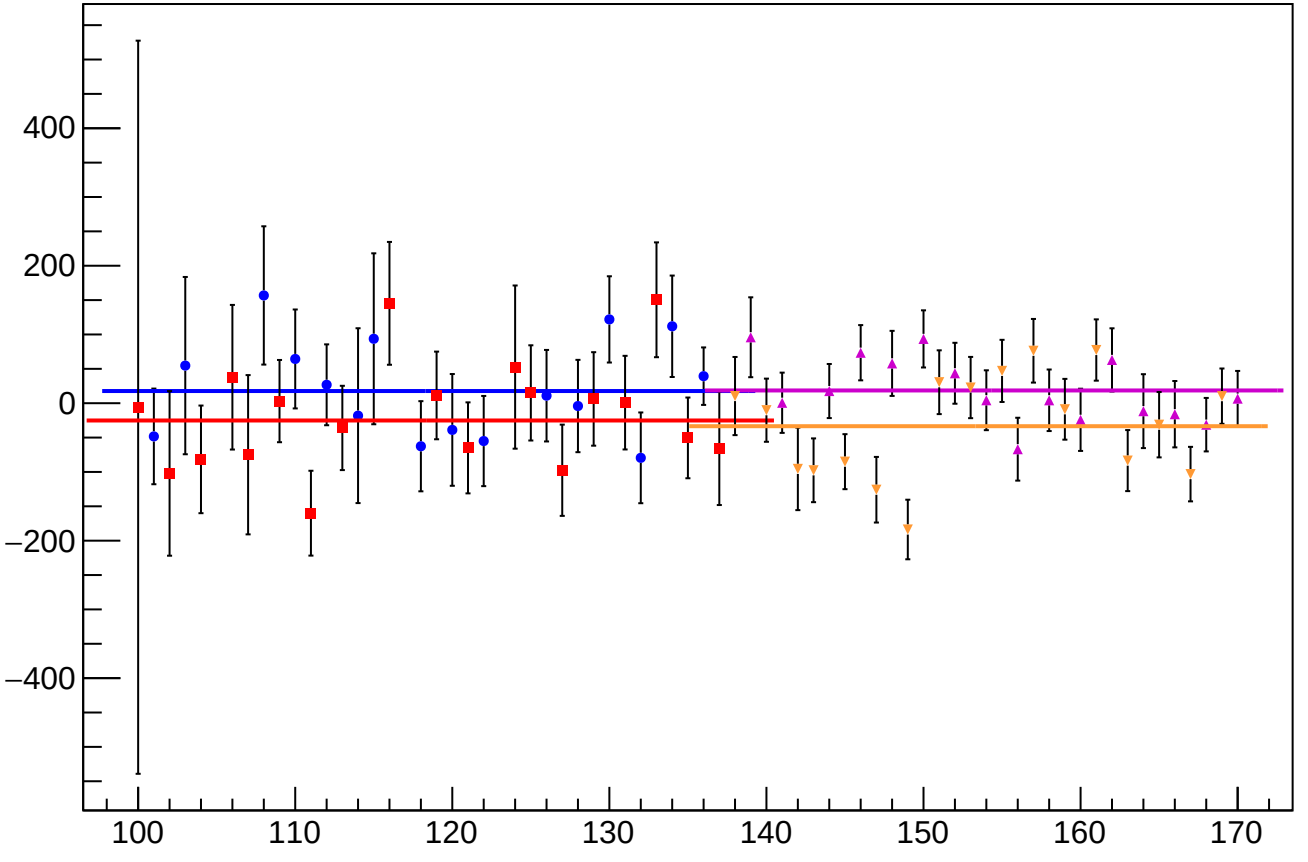
Left In: 326.568+/-0.065 $\chi^2$/NDF:968134.1/15

+ sign 358.218+/-0.058 $\chi^2$/NDF: 3240086.6/32

All: 357.683+/-0.041 $\chi^2$/NDF: 6300127.3/67

- sign 357.154+/-0.058 $\chi^2$/NDF: 3059873.4/34

# eigen_cor_asym_sam_15_37_dd_mean vs Slug




Right In: 17.706+/-17.470 $\chi^2$/NDF: 13.9/15

Left Out: -33.460+/-11.001 $\chi^2$/NDF:45.6/16

Right Out: -25.145+/-17.339 $\chi^2$/NDF: 18.0/18

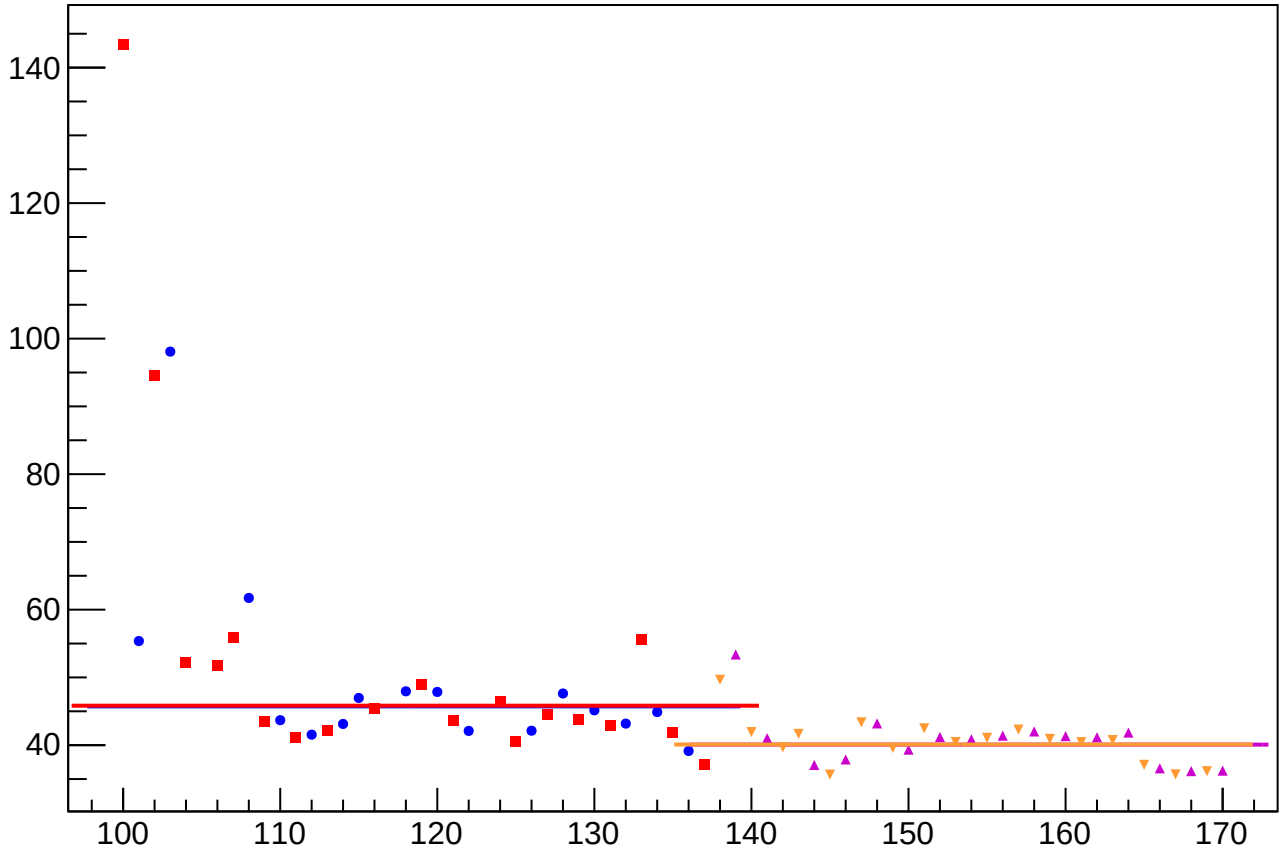
Left In: 18.546+/-11.088 $\chi^2$/NDF:16.1/15

+ sign -18.933+/-9.309 $\chi^2$/NDF: 65.7/32

All: -6.578+/-6.594 $\chi^2$/NDF: 107.8/67

- sign 5.864+/-9.341 $\chi^2$/NDF: 38.6/34

# eigen_cor_asym_sam_15_37_dd_rms vs Slug




Right In: 45.727+/-0.012 $\chi^2$/NDF: 501463.8/15

Left Out: 40.098+/-0.008 $\chi^2$/NDF:160483.8/16

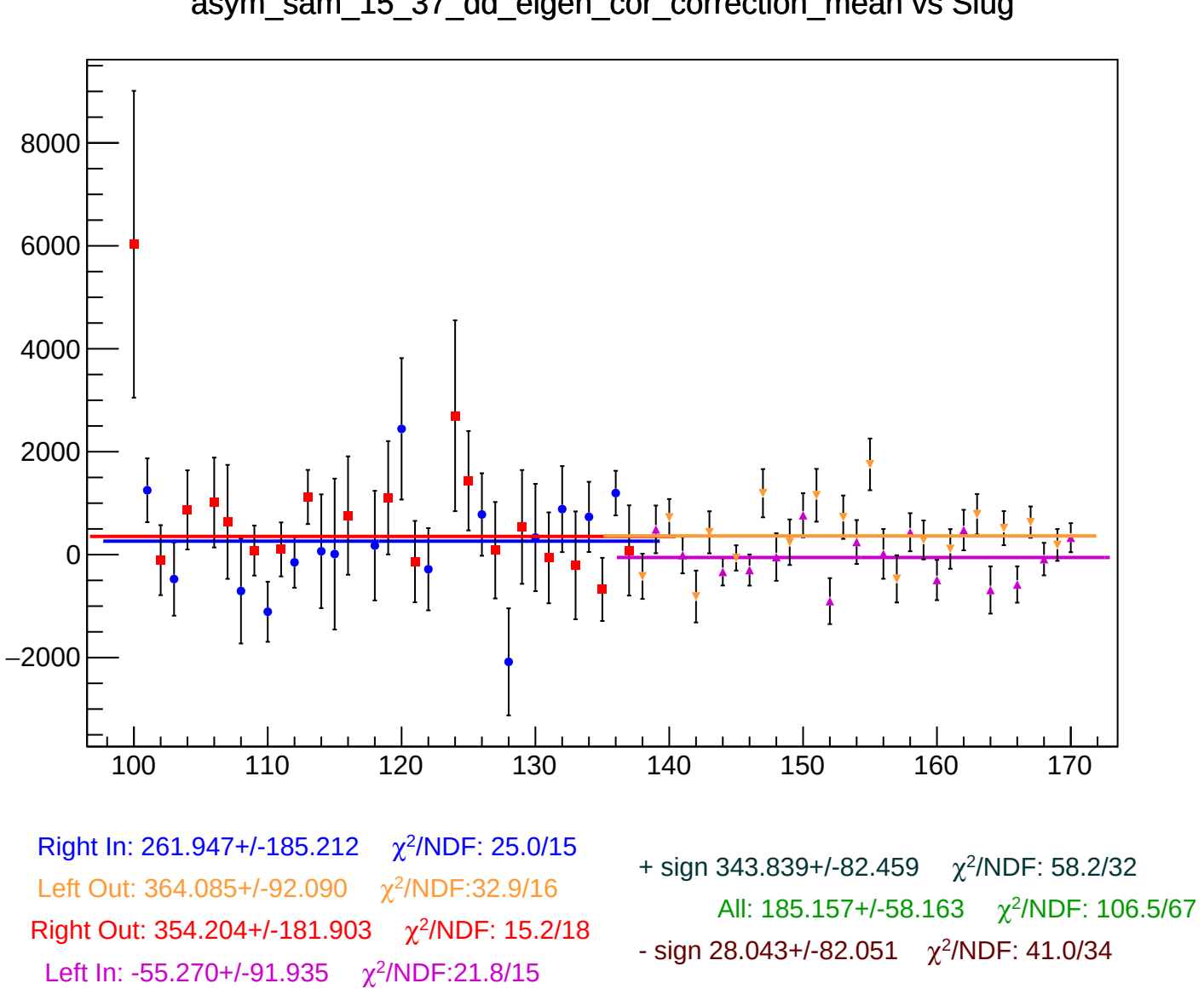
Right Out: 45.825+/-0.012 $\chi^2$/NDF: 538470.5/18

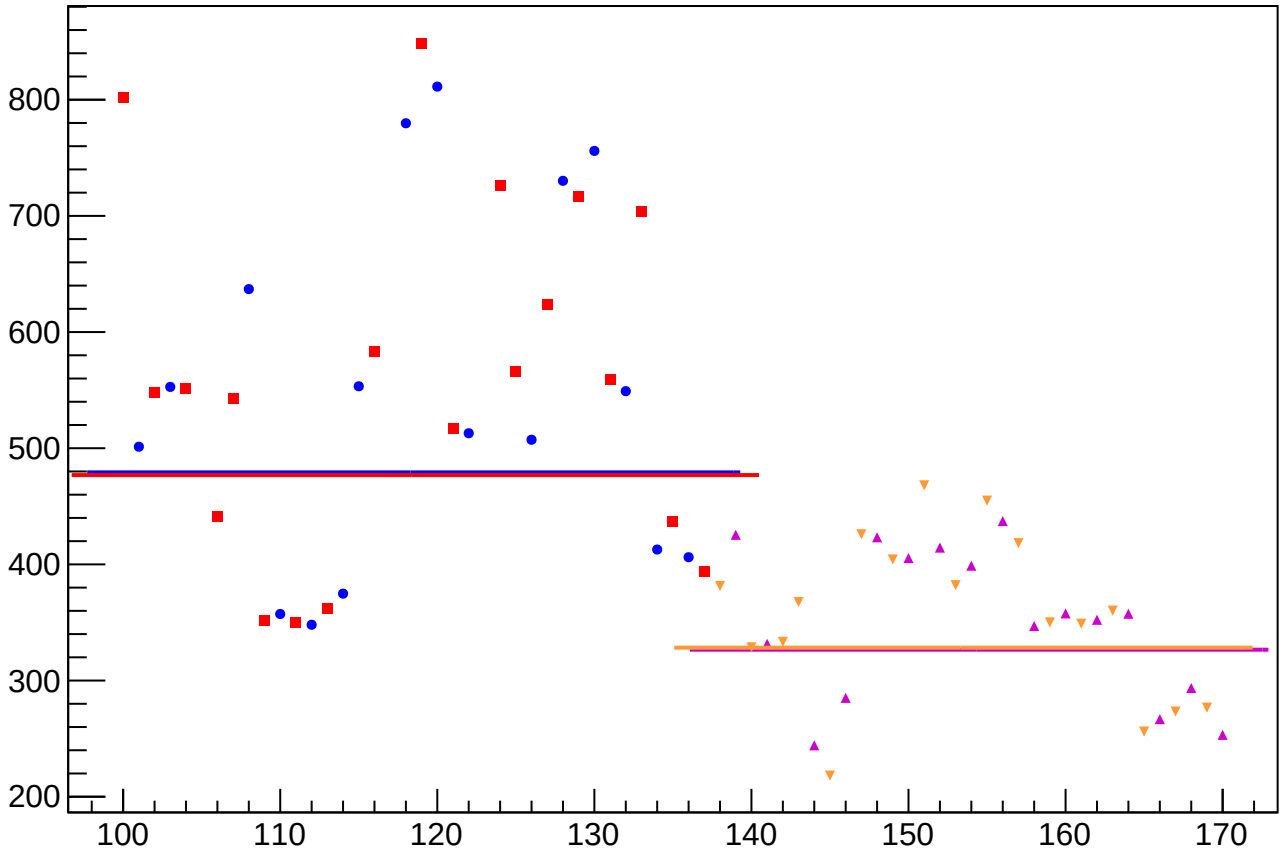
Left In: 40.081+/-0.008 $\chi^2$/NDF:193810.2/15

\+ sign 41.696+/-0.007 $\chi^2$/NDF: 810635.0/32

All: 41.722+/-0.005 $\chi^2$/NDF: 1698754.4/67

\- sign 41.748+/-0.007 $\chi^2$/NDF: 888087.8/34


asym_sam_15_37_dd_eigen_cor_correction_mean vs Slug
8000
6000
4000
2000
0
−2000
100
110
120
130
140
150
160
170
Right In: 261.947+/-185.212 χ²/NDF: 25.0/15
Left Out: 364.085+/-92.090 χ²/NDF:32.9/16
Right Out: 354.204+/-181.903 χ²/NDF: 15.2/18
Left In: -55.270+/-91.935 χ²/NDF:21.8/15
+ sign 343.839+/-82.459 χ²/NDF: 58.2/32
All: 185.157+/-58.163 χ²/NDF: 106.5/67
- sign 28.043+/-82.051 χ²/NDF: 41.0/34




Right In: 479.180+/-0.131 $\chi^2$/NDF: 952722.6/15

Left Out: 328.313+/-0.065 $\chi^2$/NDF:1223383.2/16

Right Out: 476.893+/-0.129 $\chi^2$/NDF: 1003767.4/18

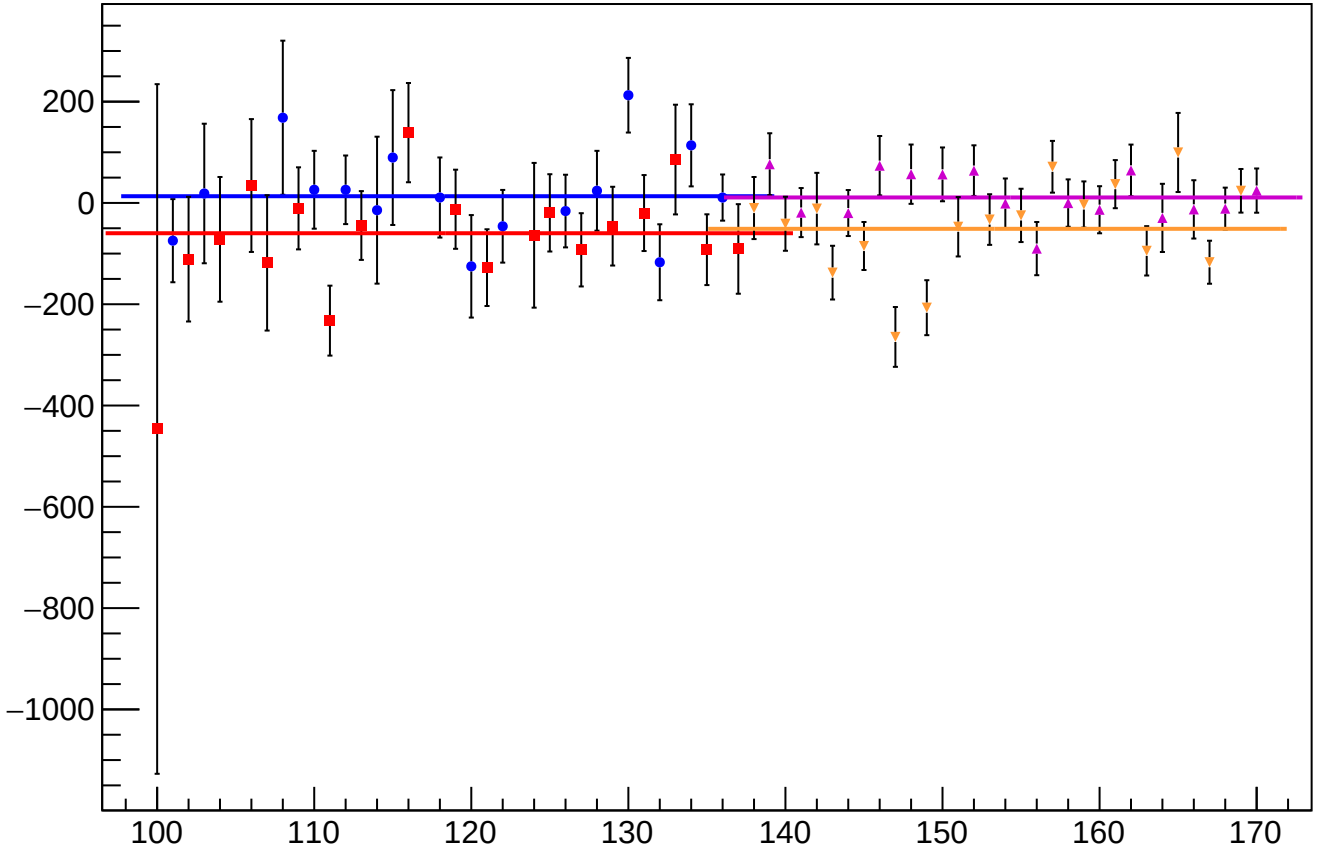
Left In: 326.568+/-0.065 $\chi^2$/NDF:968134.1/15

+ sign 358.218+/-0.058 $\chi^2$/NDF: 3240086.6/32

All: 357.683+/-0.041 $\chi^2$/NDF: 6300127.3/67

- sign 357.154+/-0.058 $\chi^2$/NDF: 3059873.4/34

# dit_asym_sam_15_37_dd_mean vs Slug




Right In: 13.266+/-19.849 $\chi^2$/NDF: 17.2/15

Left Out: -51.098+/-12.615 $\chi^2$/NDF:45.9/16

Right Out: -59.810+/-20.234 $\chi^2$/NDF: 16.1/18

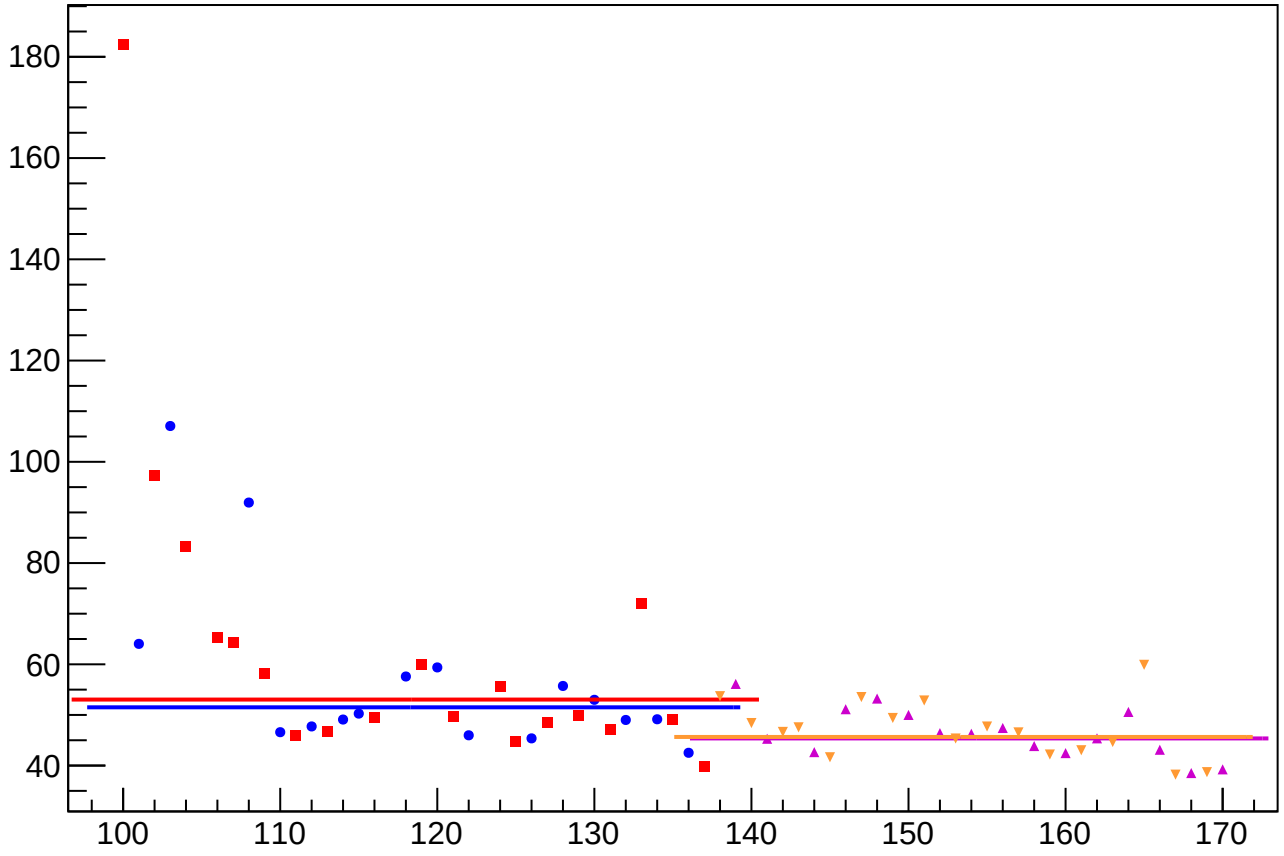
Left In: 10.818+/-12.678 $\chi^2$/NDF:11.7/15

+ sign -32.580+/-10.647 $\chi^2$/NDF: 70.7/32

All: -20.943+/-7.562 $\chi^2$/NDF: 109.6/67

- sign -9.093+/-10.743 $\chi^2$/NDF: 36.5/34

# dit_asym_sam_15_37_dd_rms vs Slug




Right In: 51.506+/-0.014 $\chi^2$/NDF: 667059.0/15

Left Out: 45.651+/-0.009 $\chi^2$/NDF:334970.3/16

Right Out: 53.037+/-0.014 $\chi^2$/NDF: 712908.4/18

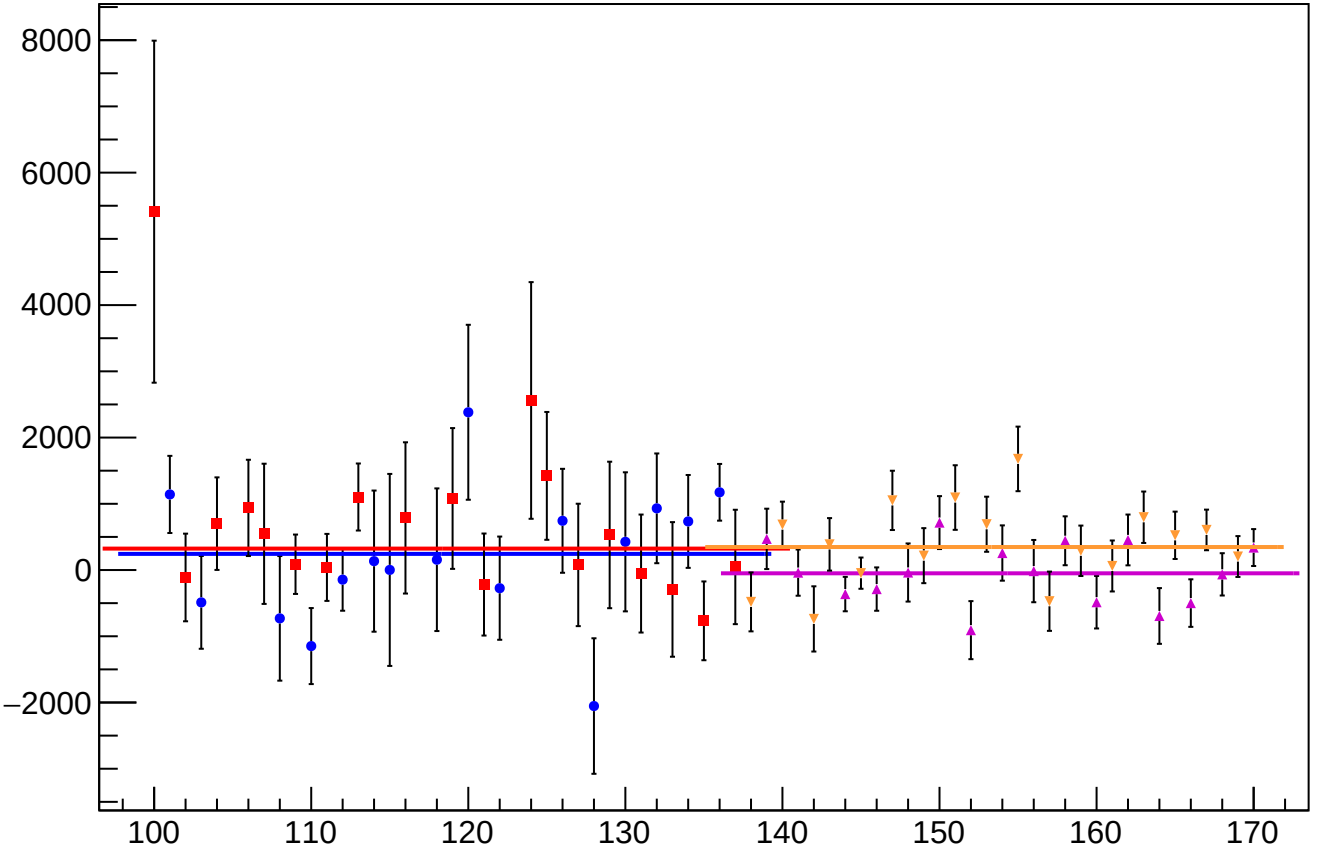
Left In: 45.359+/-0.009 $\chi^2$/NDF:263180.1/15

+ sign 47.335+/-0.008 $\chi^2$/NDF: 1125975.5/32

All: 47.429+/-0.005 $\chi^2$/NDF: 2309196.4/67

- sign 47.524+/-0.008 $\chi^2$/NDF: 1182910.5/34

# asym_sam_15_37_dd_dit_correction_mean vs Slug




Right In: 243.828+/-180.872 $\chi^2$/NDF: 25.6/15

Left Out: 347.343+/-90.876 $\chi^2$/NDF:31.6/16

Right Out: 323.628+/-173.632 $\chi^2$/NDF: 16.5/18

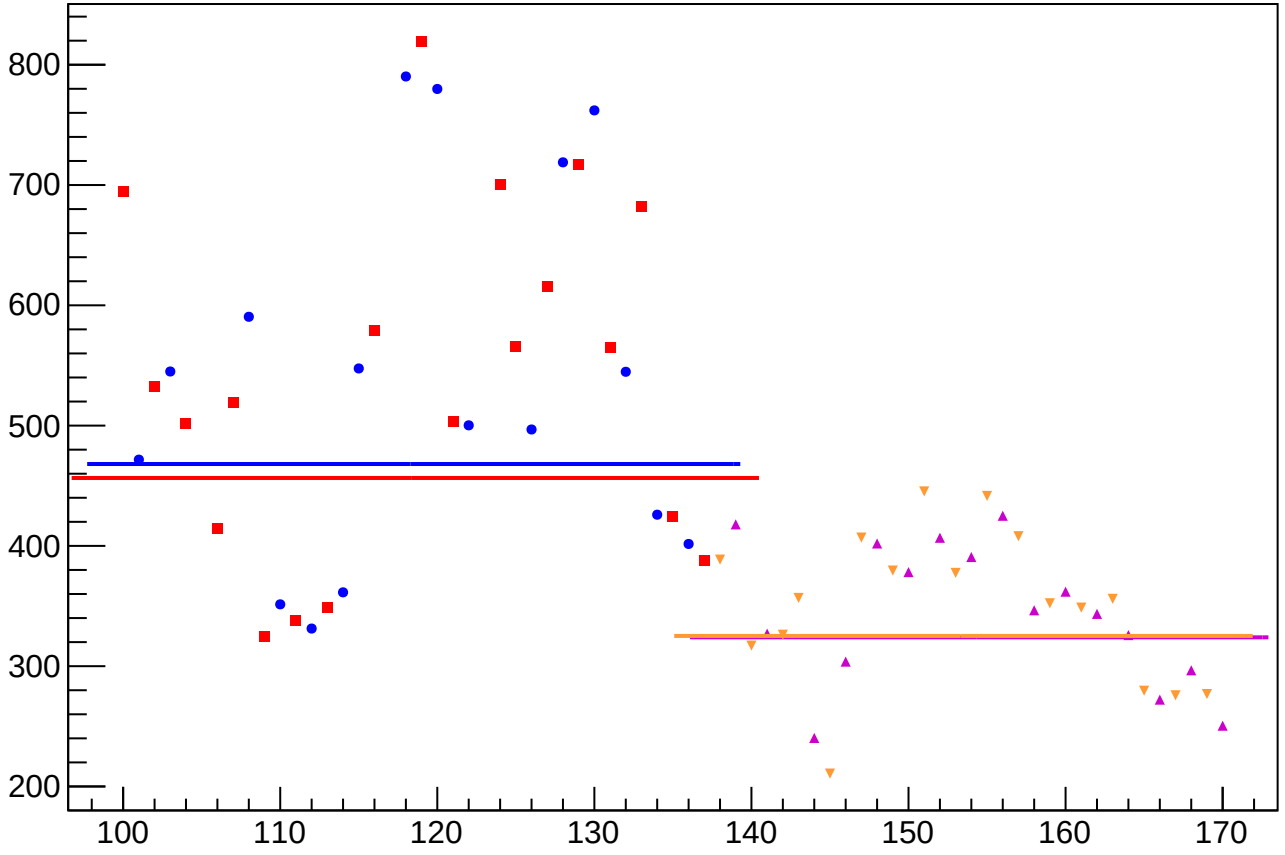
Left In: -49.464+/-91.026 $\chi^2$/NDF:21.9/15

+ sign 326.479+/-81.203 $\chi^2$/NDF: 57.4/32

All: 177.659+/-57.212 $\chi^2$/NDF: 106.1/67

- sign 30.969+/-80.619 $\chi^2$/NDF: 42.0/34

# asym_sam_15_37_dd_dit_correction_rms vs Slug




Right In: 468.066+/-0.128 $\chi^2$/NDF: 982915.0/15

Left Out: 325.145+/-0.064 $\chi^2$/NDF:1125967.9/16

Right Out: 456.468+/-0.123 $\chi^2$/NDF: 1082568.2/18

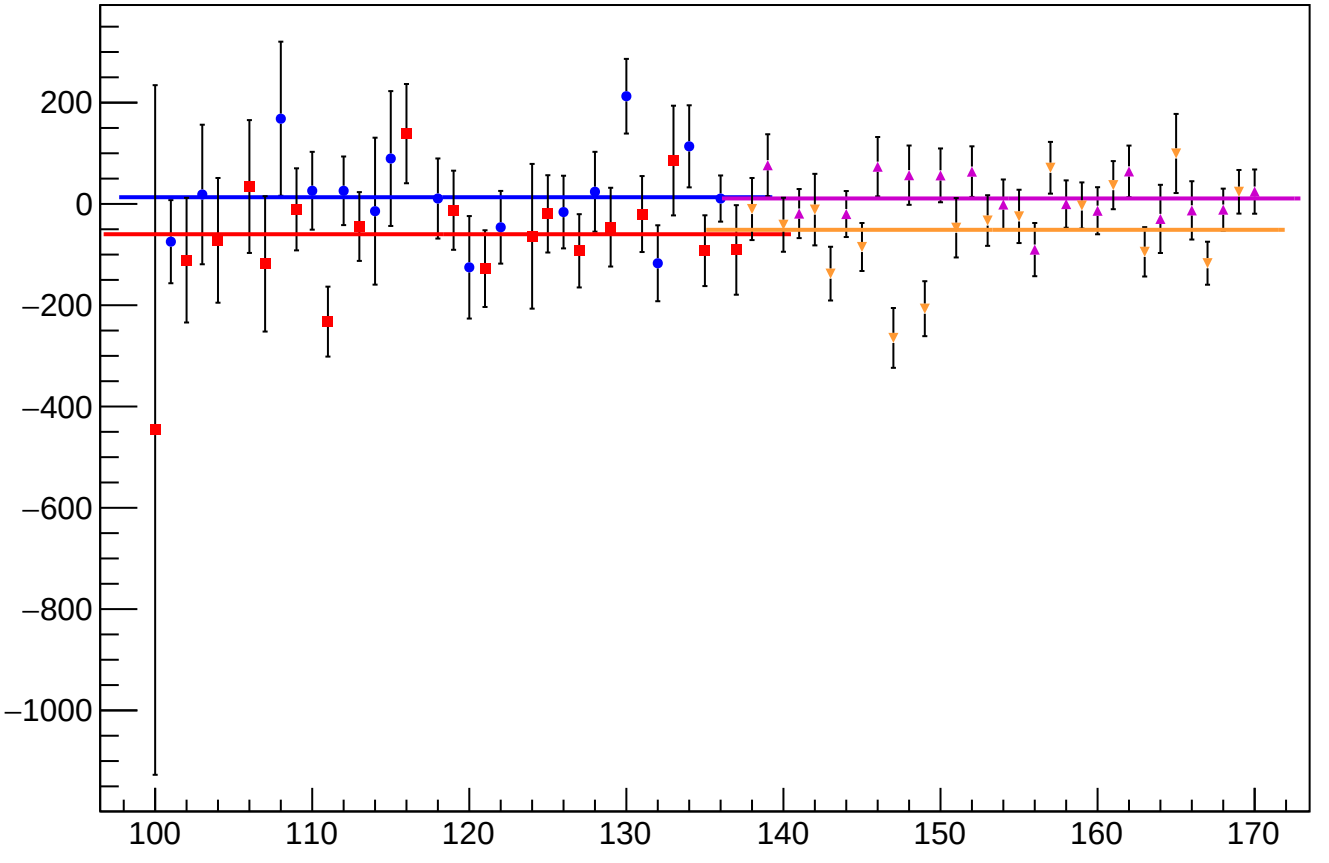
Left In: 323.986+/-0.064 $\chi^2$/NDF:841154.1/15

\+ sign 353.952+/-0.057 $\chi^2$/NDF: 3105939.1/32

All: 353.245+/-0.040 $\chi^2$/NDF: 5943294.7/67

\- sign 352.548+/-0.057 $\chi^2$/NDF: 2837054.4/34

# eigen_dit_asym_sam_15_37_dd_mean vs Slug




Right In: 13.266+/-19.849 $\chi^2$/NDF: 17.2/15

Left Out: -51.098+/-12.615 $\chi^2$/NDF:45.9/16

Right Out: -59.811+/-20.234 $\chi^2$/NDF: 16.1/18

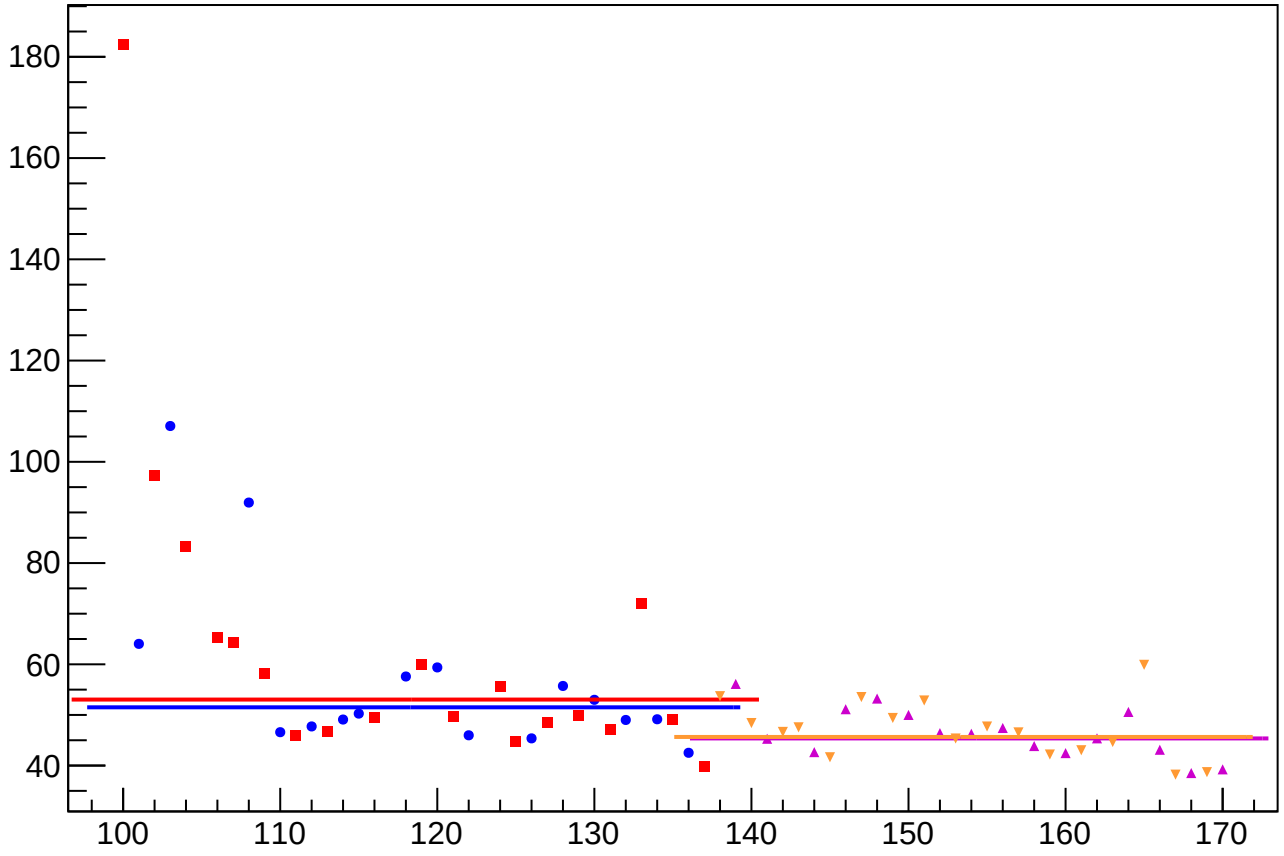
Left In: 10.818+/-12.678 $\chi^2$/NDF:11.7/15

+ sign -32.580+/-10.647 $\chi^2$/NDF: 70.7/32

All: -20.943+/-7.562 $\chi^2$/NDF: 109.6/67

- sign -9.094+/-10.743 $\chi^2$/NDF: 36.5/34

# eigen_dit_asym_sam_15_37_dd_rms vs Slug




Right In: 51.506+/-0.014 $\chi^2$/NDF: 667064.6/15

Left Out: 45.651+/-0.009 $\chi^2$/NDF:334973.4/16

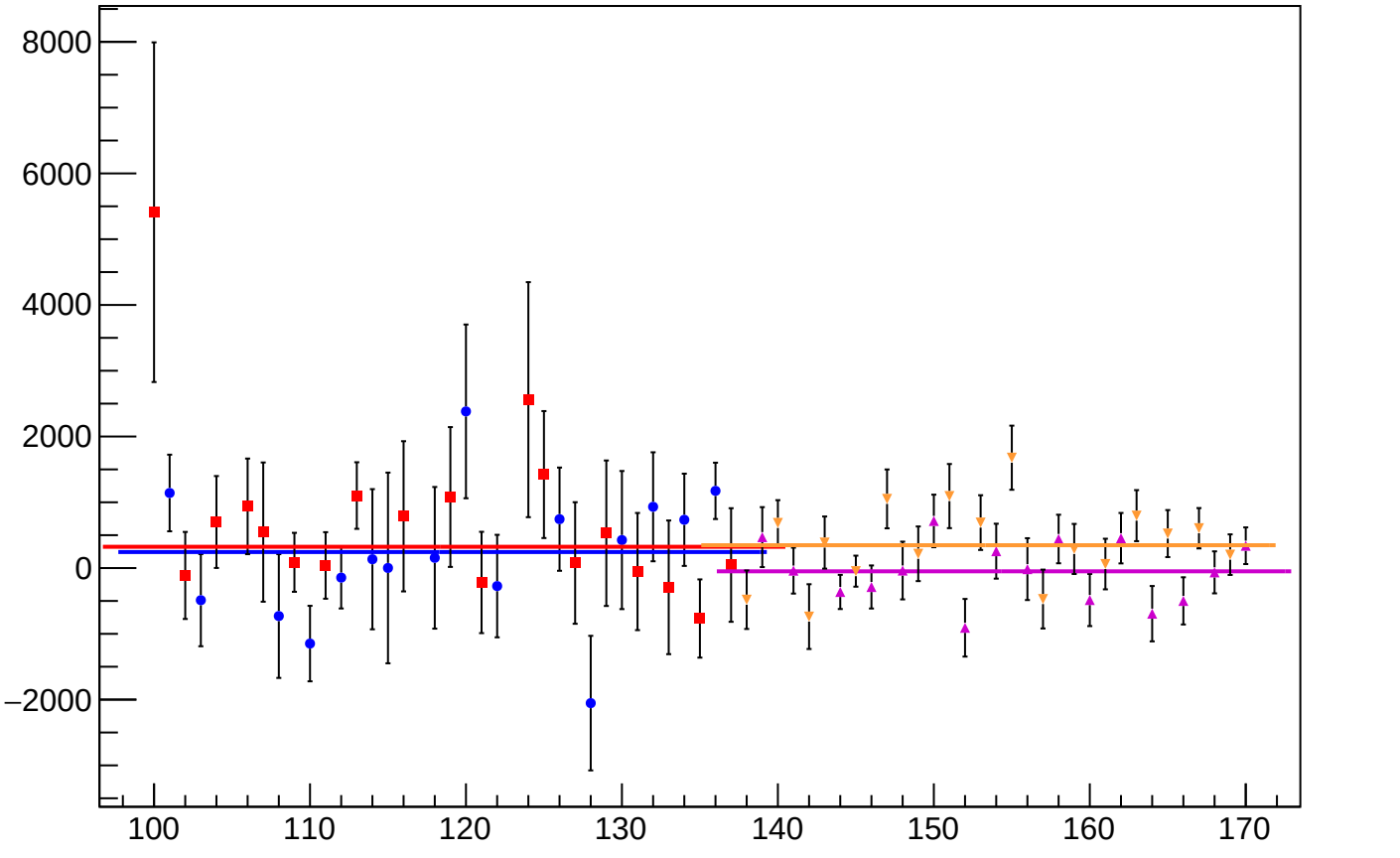
Right Out: 53.037+/-0.014 $\chi^2$/NDF: 712918.4/18

Left In: 45.359+/-0.009 $\chi^2$/NDF:263182.1/15

+ sign 47.335+/-0.008 $\chi^2$/NDF: 1125983.1/32

All: 47.429+/-0.005 $\chi^2$/NDF: 2309217.0/67

- sign 47.524+/-0.008 $\chi^2$/NDF: 1182923.6/34




Right In: 243.826+/-180.872 $\chi^2$/NDF: 25.6/15

Left Out: 347.344+/-90.876 $\chi^2$/NDF:31.6/16

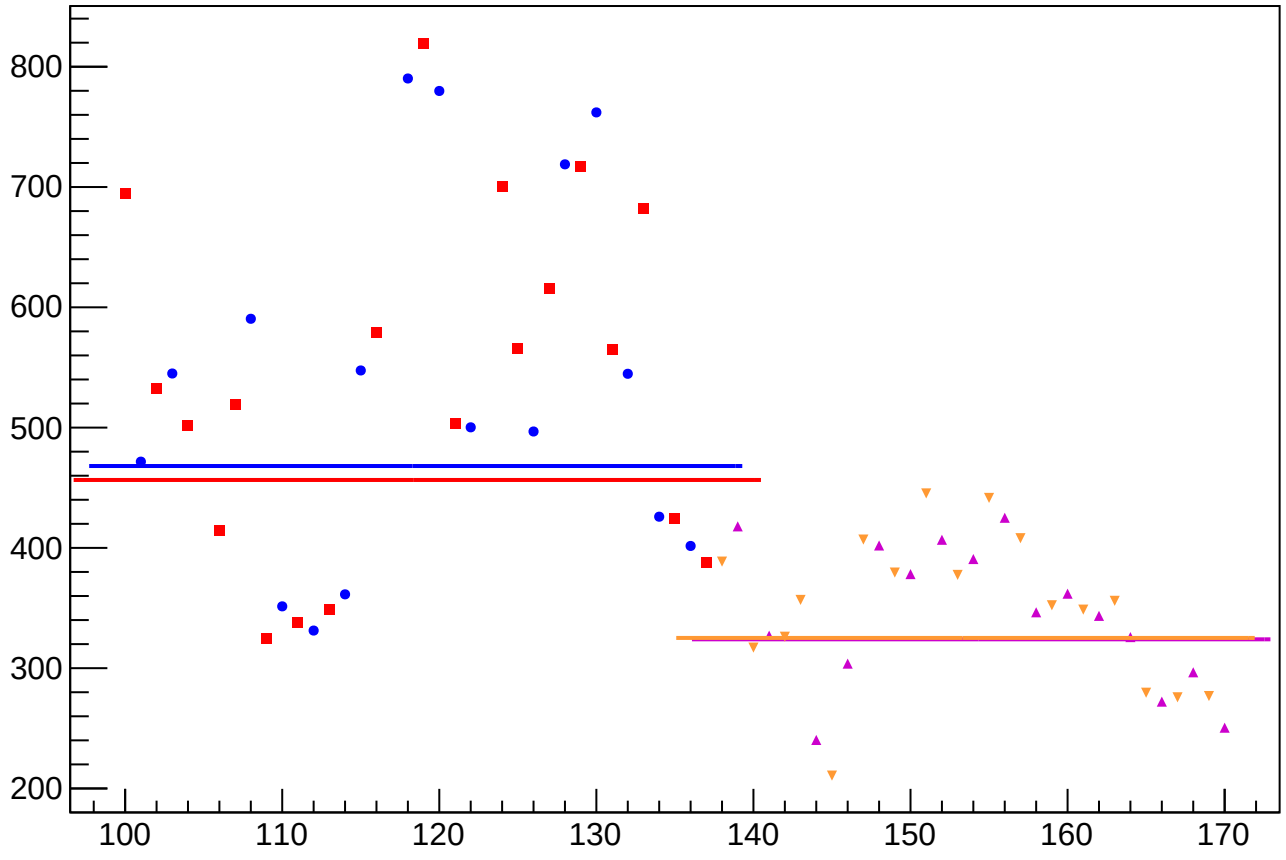
Right Out: 323.628+/-173.631 $\chi^2$/NDF: 16.5/18

Left In: -49.465+/-91.026 $\chi^2$/NDF:21.9/15

+ sign 326.479+/-81.203 $\chi^2$/NDF: 57.4/32

All: 177.659+/-57.212 $\chi^2$/NDF: 106.1/67

- sign 30.969+/-80.619 $\chi^2$/NDF: 42.0/34




Right In: 468.065+/-0.128 $\chi^2$/NDF: 982915.8/15

Left Out: 325.145+/-0.064 $\chi^2$/NDF:1125968.3/16

Right Out: 456.467+/-0.123 $\chi^2$/NDF: 1082565.2/18

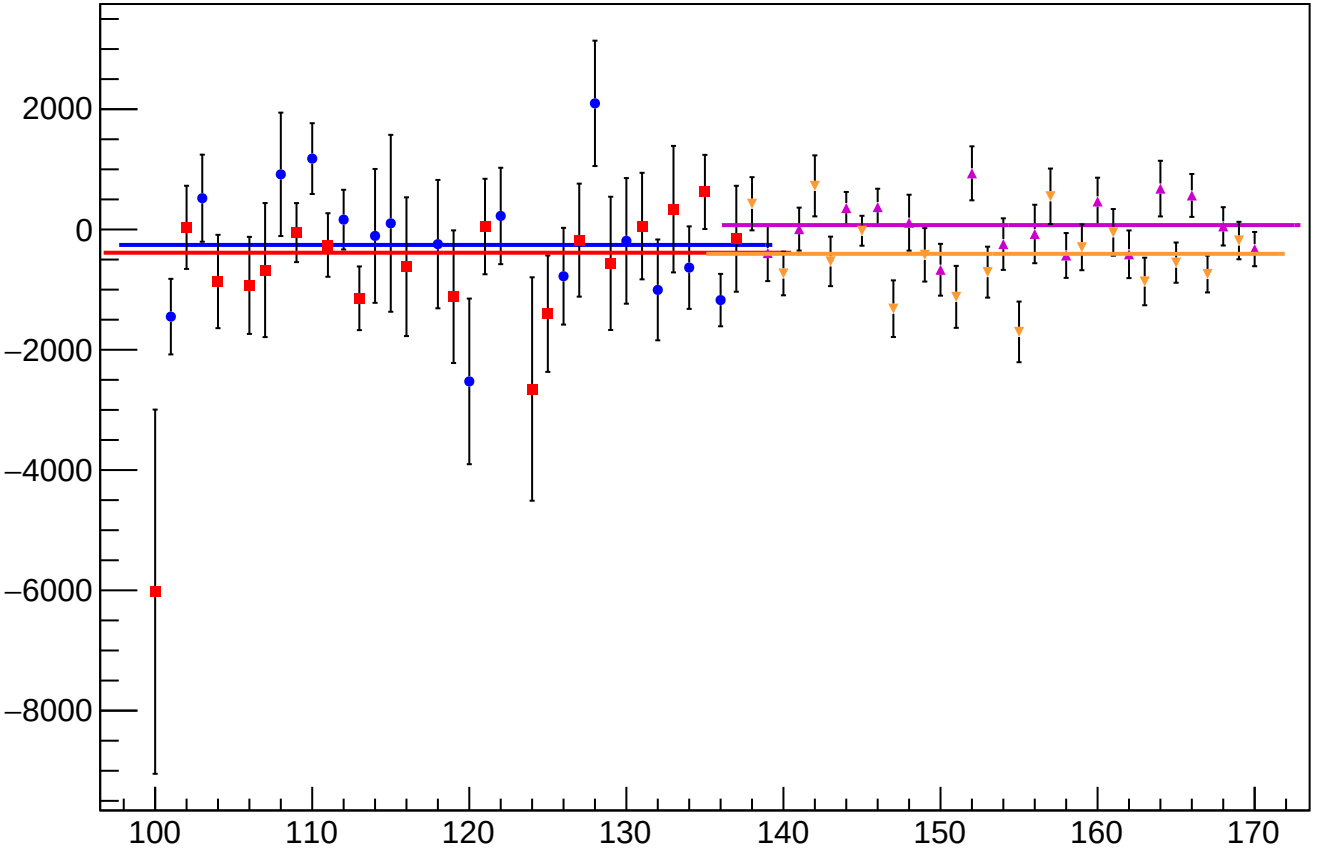
Left In: 323.987+/-0.064 $\chi^2$/NDF:841152.9/15

+ sign 353.952+/-0.057 $\chi^2$/NDF: 3105929.6/32

All: 353.245+/-0.040 $\chi^2$/NDF: 5943269.6/67

- sign 352.548+/-0.057 $\chi^2$/NDF: 2837038.9/34

# asym_sam_15_37_dd_mean vs Slug




Right In: -256.748+/-186.462 $\chi^2$/NDF: 26.9/15

Left Out: -404.721+/-92.829 $\chi^2$/NDF:33.1/16

Right Out: -386.449+/-182.363 $\chi^2$/NDF: 14.2/18

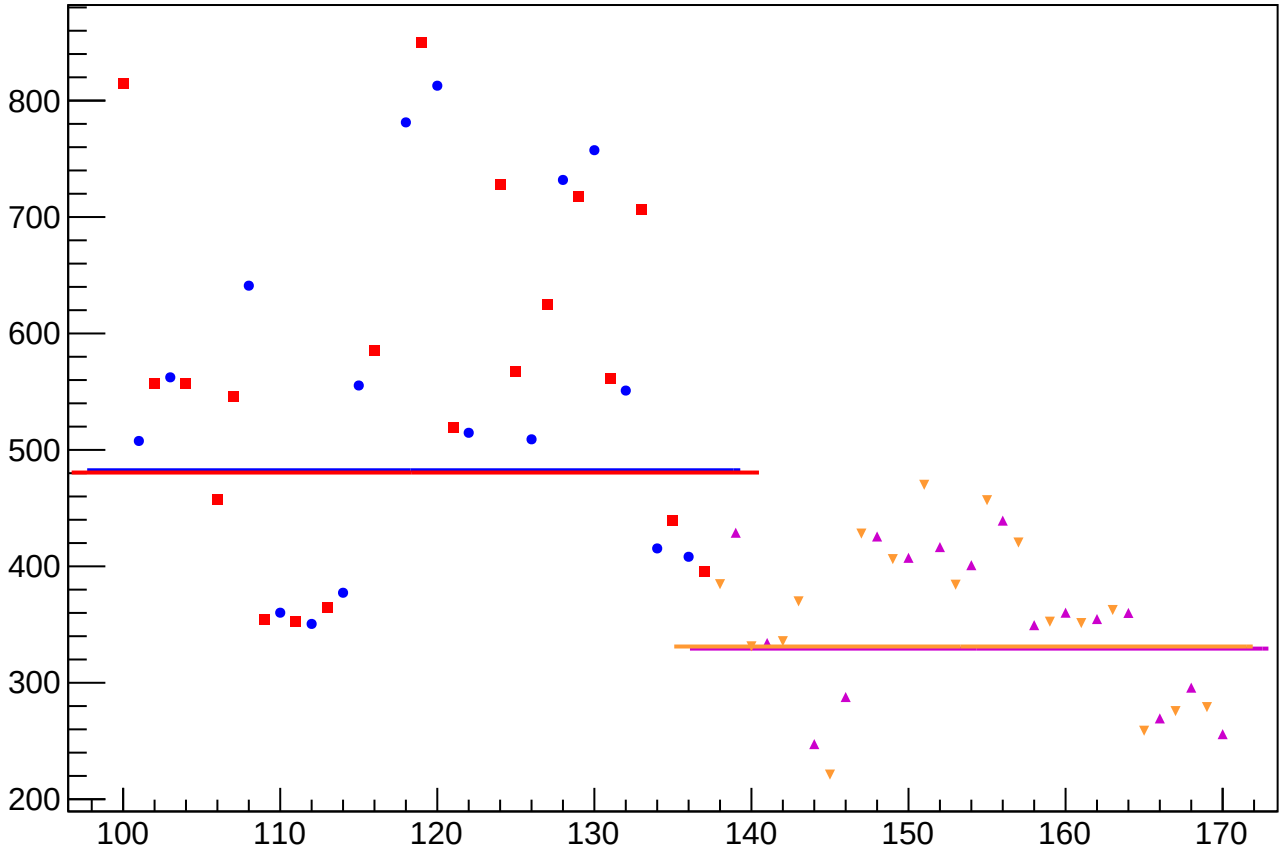
Left In: 72.872+/-92.674 $\chi^2$/NDF:20.3/15

+ sign -375.330+/-83.101 $\chi^2$/NDF: 60.5/32

All: -197.335+/-58.590 $\chi^2$/NDF: 109.2/67

- sign -21.402+/-82.618 $\chi^2$/NDF: 39.6/34

# asym_sam_15_37_dd_rms vs Slug




Right In: 482.512+/-0.132 $\chi^2$/NDF: 946526.1/15

Left Out: 331.150+/-0.066 $\chi^2$/NDF:1195273.2/16

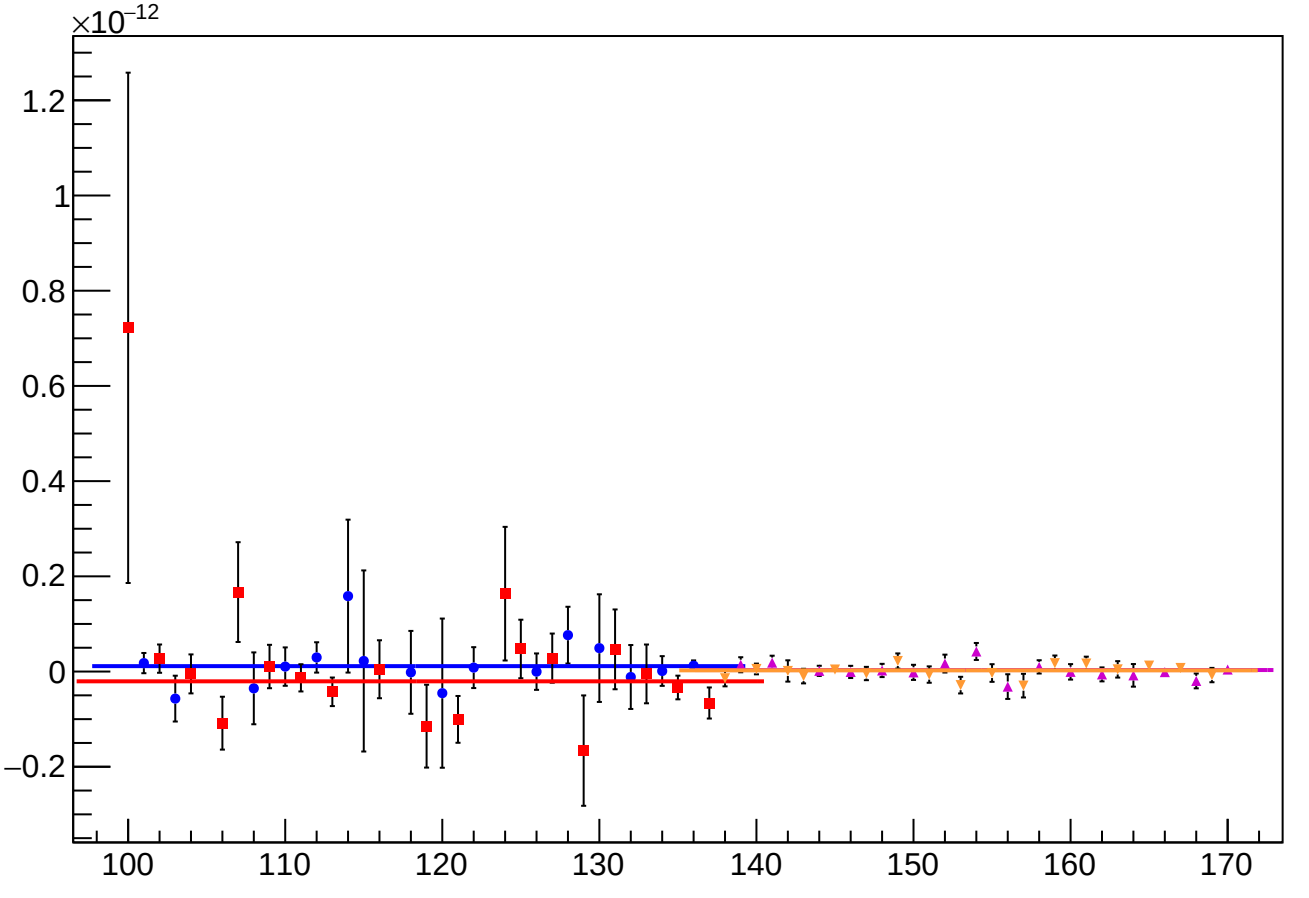
Right Out: 480.559+/-0.129 $\chi^2$/NDF: 993796.3/18

Left In: 329.354+/-0.066 $\chi^2$/NDF:947467.8/15

+ sign 361.214+/-0.059 $\chi^2$/NDF: 3197944.5/32

All: 360.799+/-0.041 $\chi^2$/NDF: 6232059.3/67

- sign 360.388+/-0.058 $\chi^2$/NDF: 3034015.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 5.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.0/16

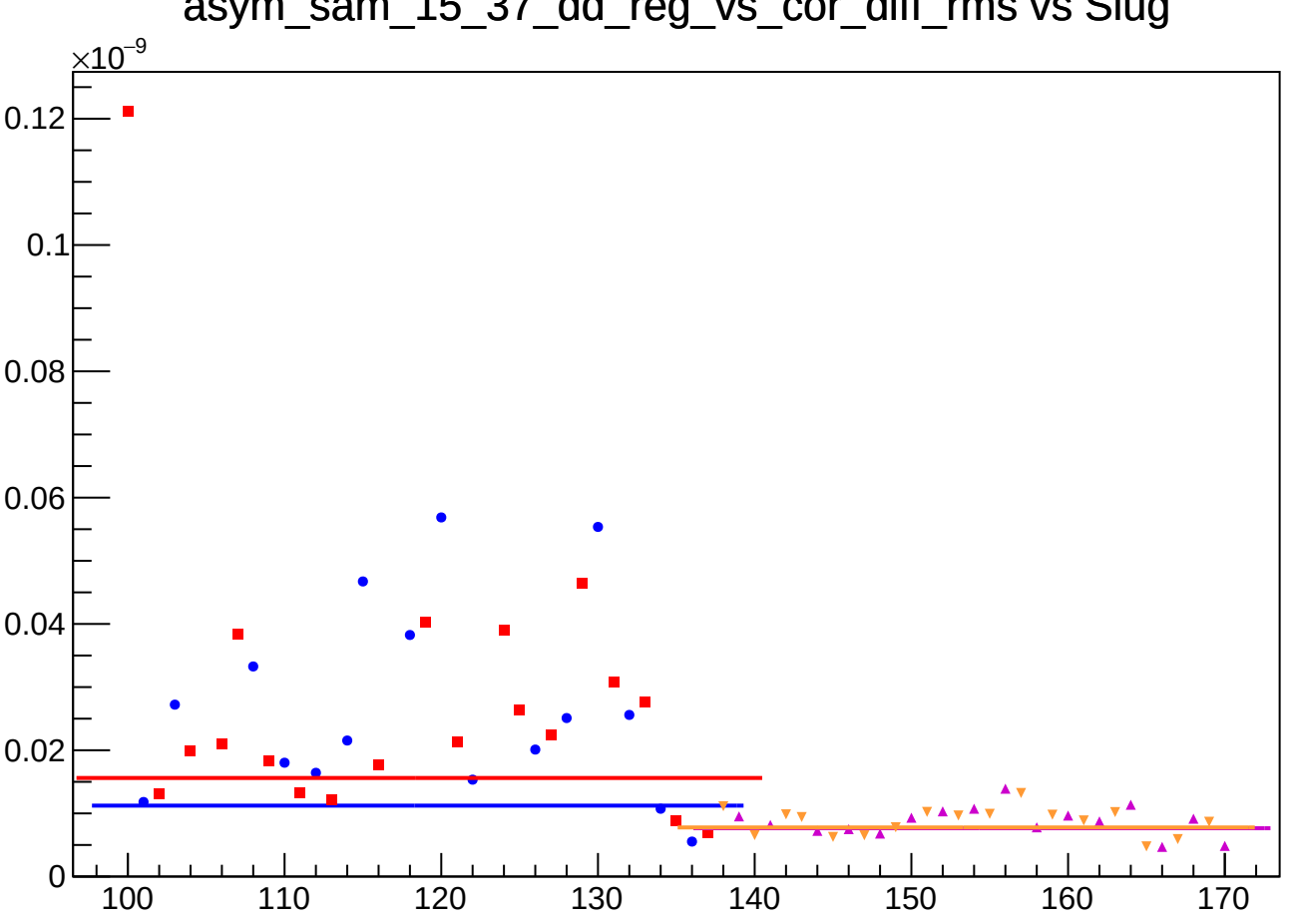
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 23.7/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:12.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 18.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 59.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 40.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2103068.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:714018.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1184320.2/18

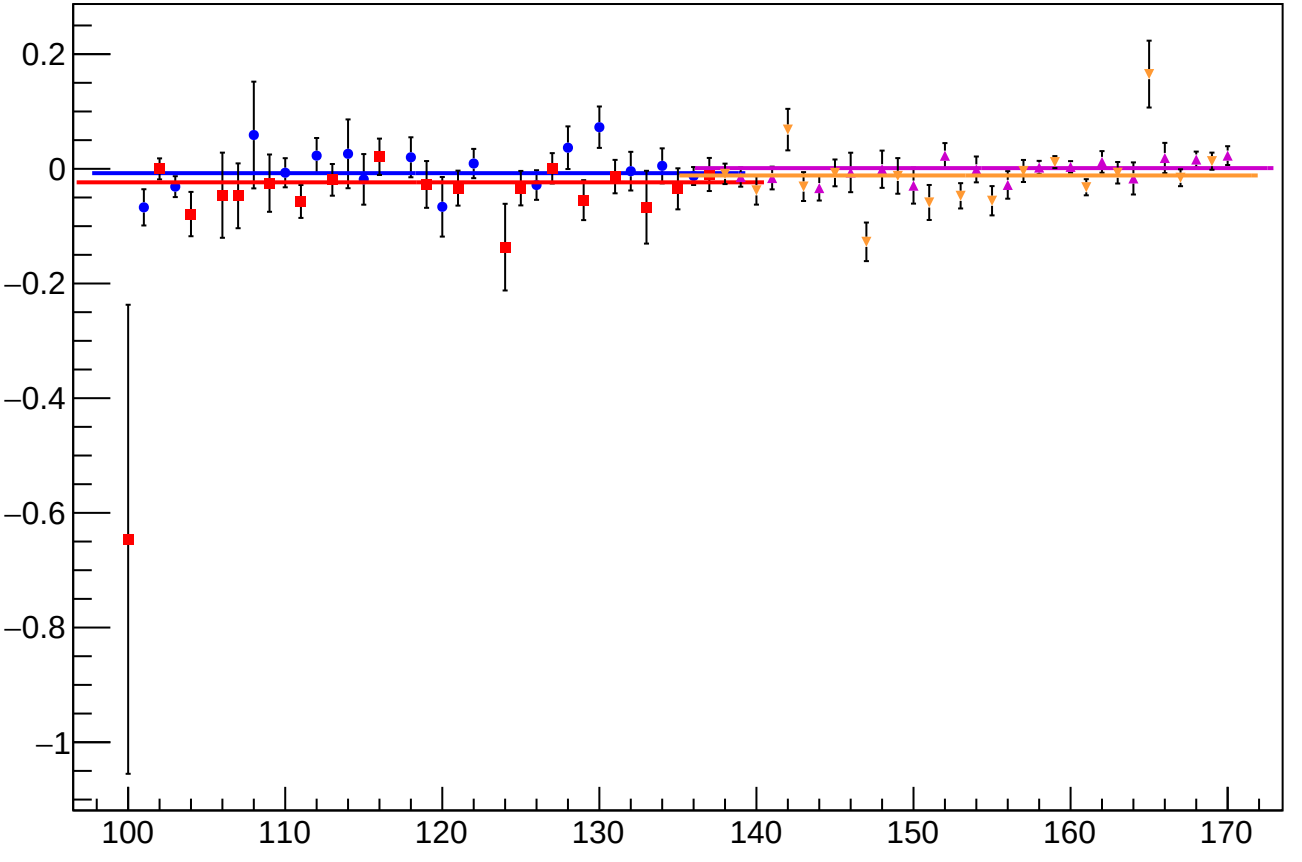
Left In: 0.000+/-0.000 $\chi^2$/NDF:737501.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3132186.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 6134541.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 2999652.1/34

# asym_sam_15_37_dd_dit_vs_cor_diff_mean vs Slug




Right In: -0.008+/-0.007 $\chi^2$/NDF: 16.7/15

Left Out: -0.012+/-0.005 $\chi^2$/NDF:45.7/16

Right Out: -0.024+/-0.008 $\chi^2$/NDF: 14.6/18

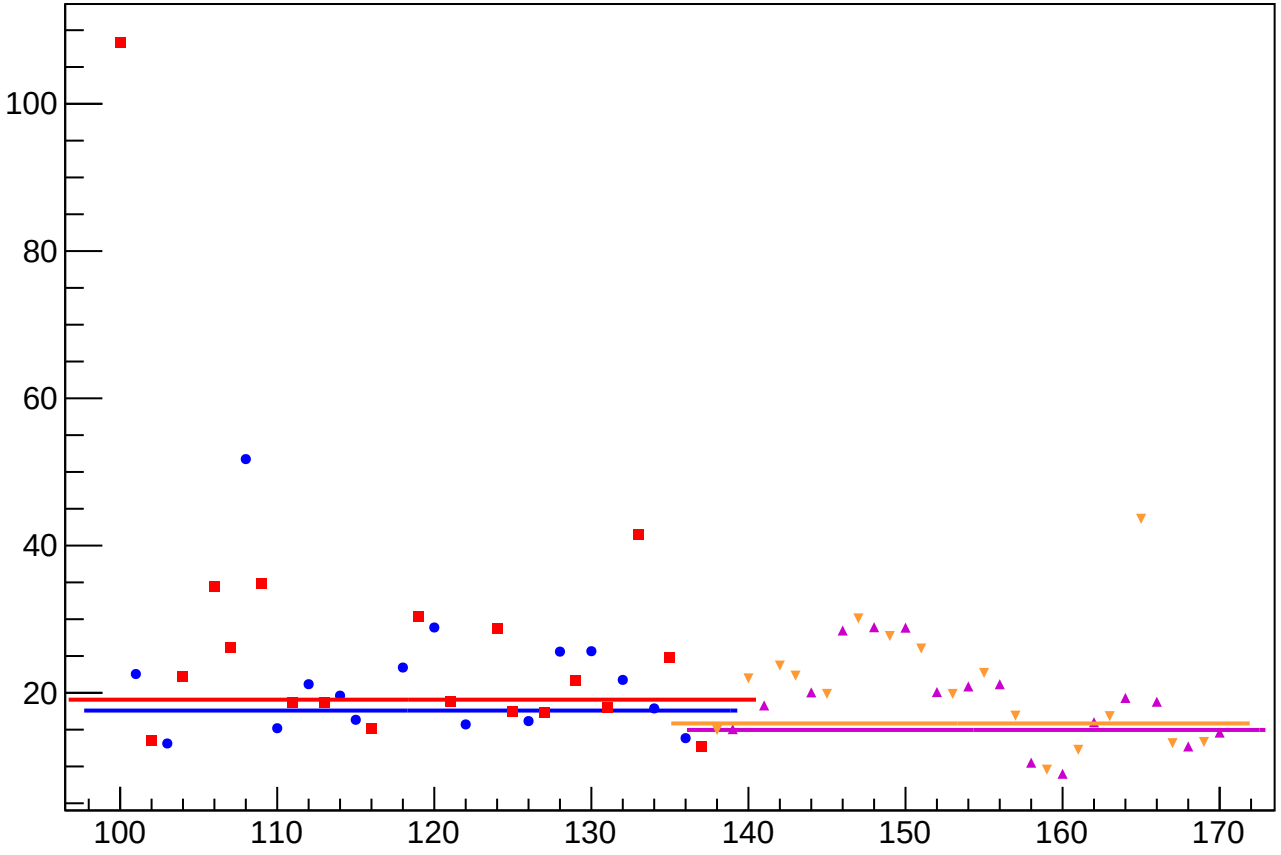
Left In: 0.001+/-0.005 $\chi^2$/NDF:11.8/15

+ sign -0.010+/-0.004 $\chi^2$/NDF: 62.7/32

All: -0.008+/-0.003 $\chi^2$/NDF: 97.7/67

- sign -0.005+/-0.004 $\chi^2$/NDF: 34.1/34

# asym_sam_15_37_dd_dit_vs_cor_diff_rms vs Slug




Right In: 17.591+/-0.005 $\chi^2$/NDF: 993249.5/15

Left Out: 15.843+/-0.003 $\chi^2$/NDF:2933301.6/16

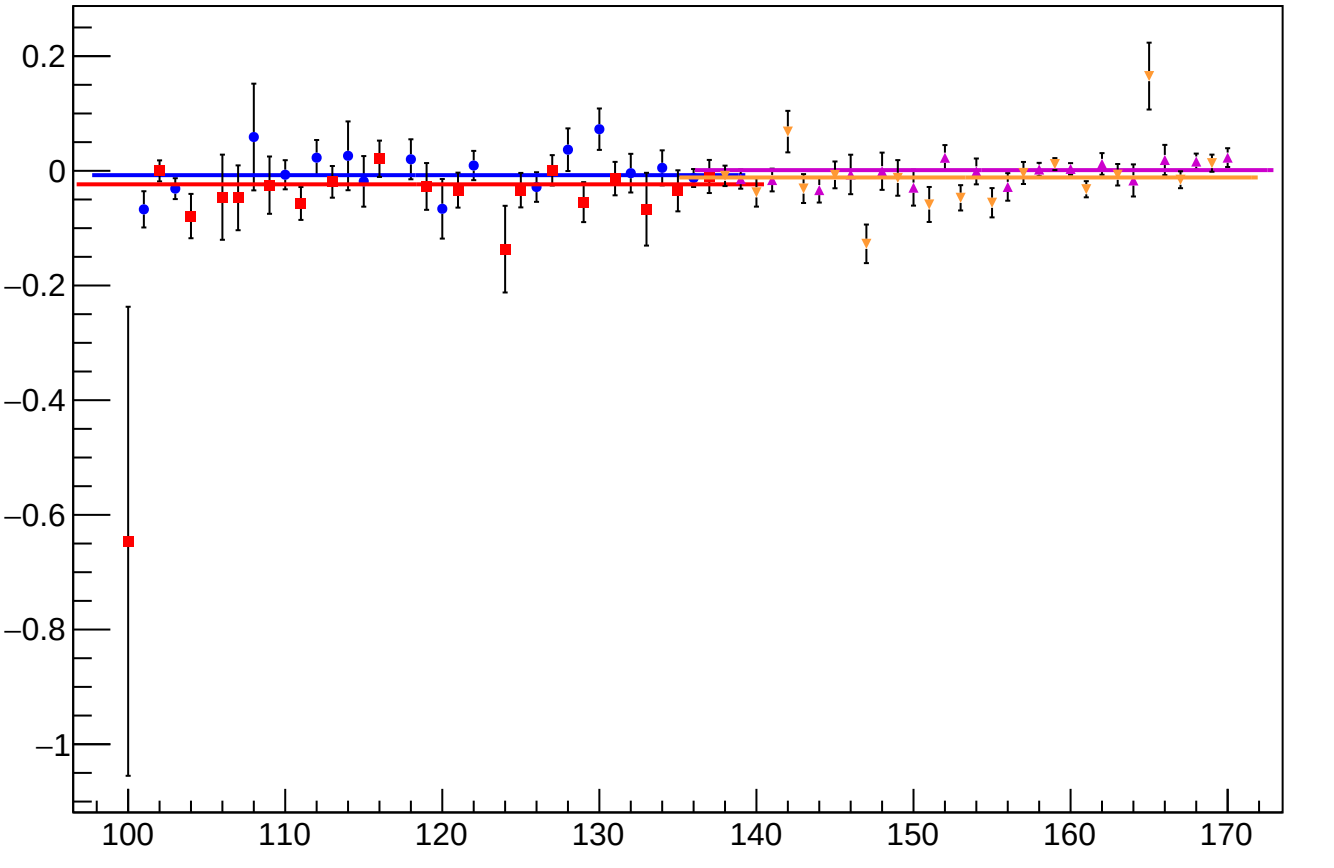
Right Out: 19.072+/-0.005 $\chi^2$/NDF: 1247983.1/18

Left In: 14.961+/-0.003 $\chi^2$/NDF:2766117.8/15

+ sign 16.371+/-0.003 $\chi^2$/NDF: 4008820.8/32

All: 16.189+/-0.002 $\chi^2$/NDF: 8451269.1/67

- sign 16.010+/-0.003 $\chi^2$/NDF: 4434022.7/34




Right In: -0.008+/-0.007 $\chi^2$/NDF: 16.7/15

Left Out: -0.012+/-0.005 $\chi^2$/NDF:45.7/16

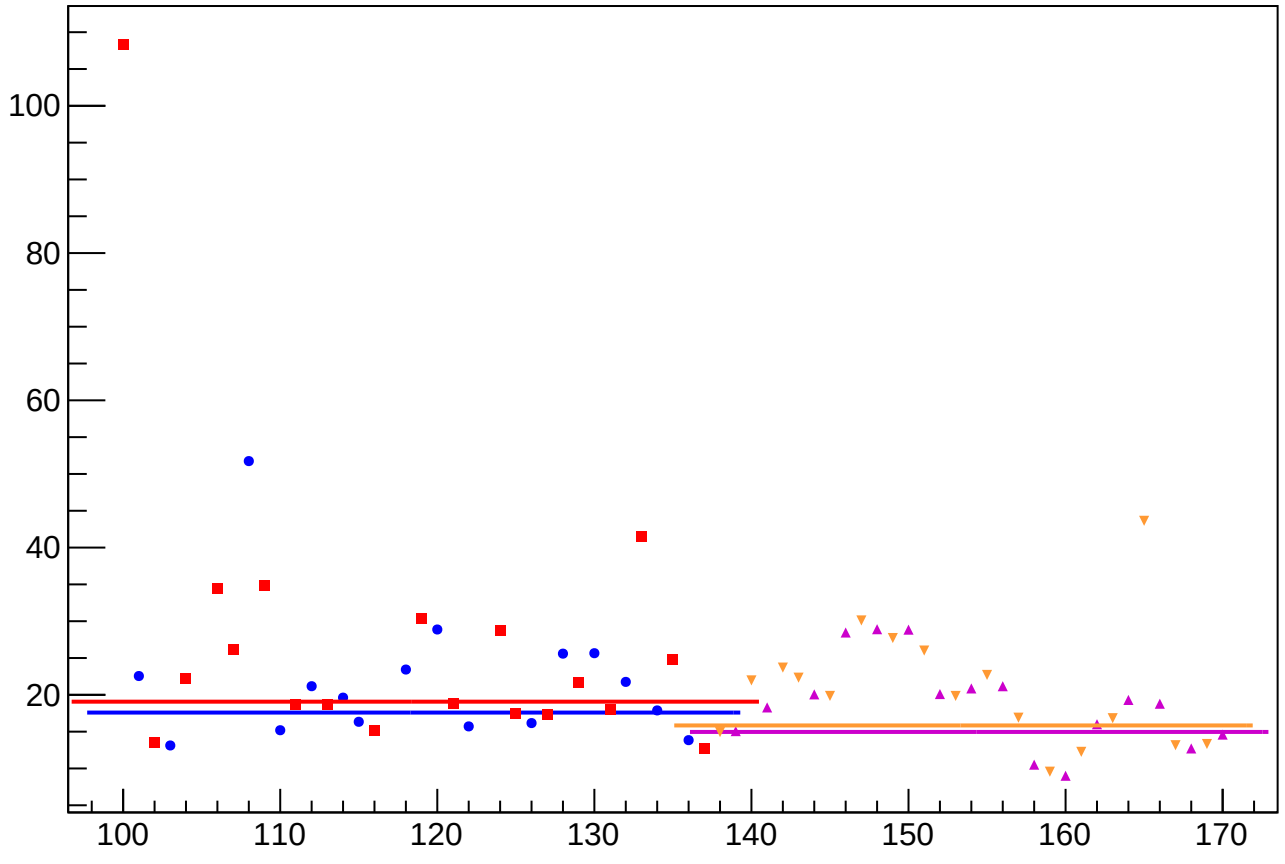
Right Out: -0.024+/-0.008 $\chi^2$/NDF: 14.6/18

Left In: 0.001+/-0.005 $\chi^2$/NDF:11.8/15

+ sign -0.010+/-0.004 $\chi^2$/NDF: 62.7/32

All: -0.008+/-0.003 $\chi^2$/NDF: 97.7/67

- sign -0.005+/-0.004 $\chi^2$/NDF: 34.1/34




Right In: 17.591+/-0.005 $\chi^2$/NDF: 993249.5/15

Left Out: 15.843+/-0.003 $\chi^2$/NDF:2933301.6/16

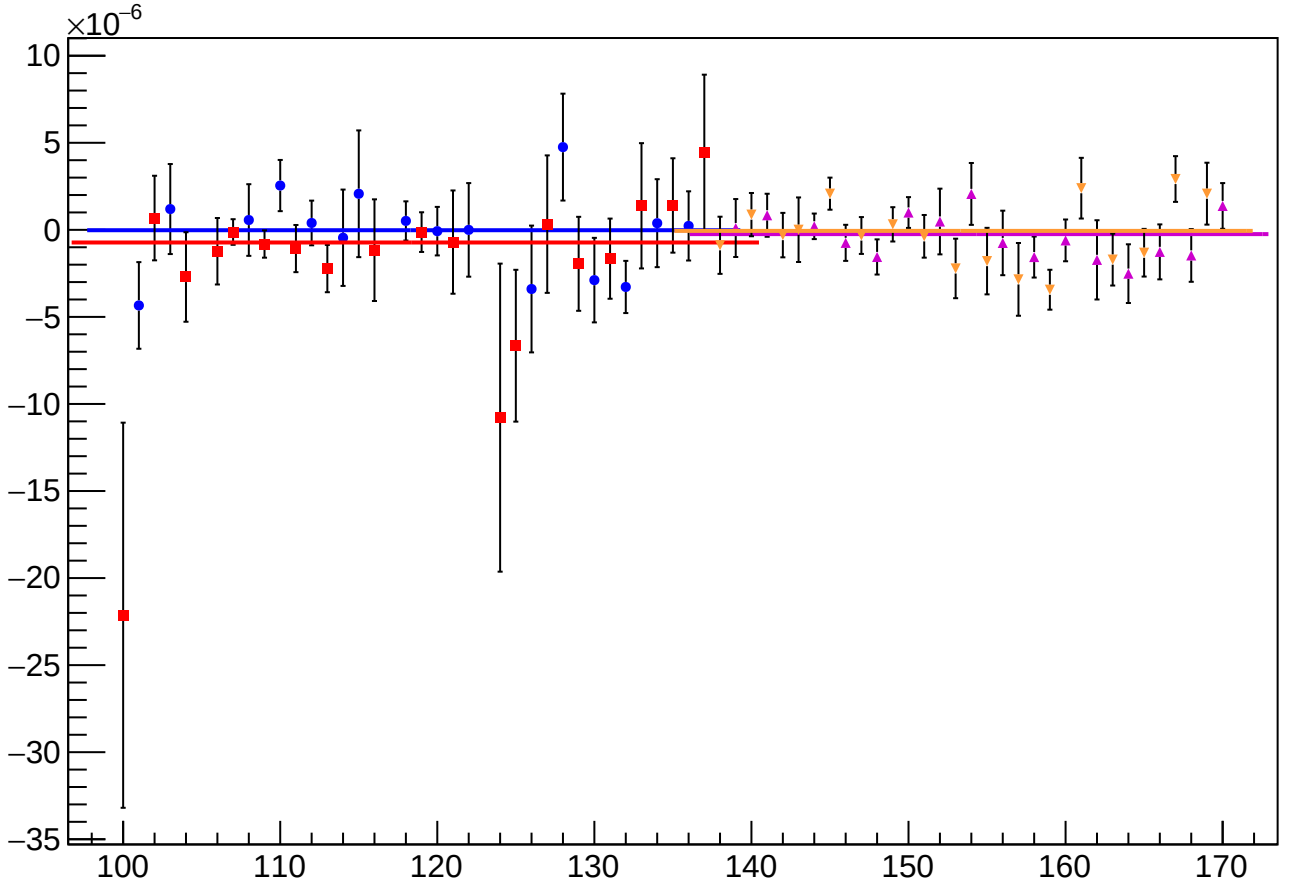
Right Out: 19.072+/-0.005 $\chi^2$/NDF: 1247983.1/18

Left In: 14.961+/-0.003 $\chi^2$/NDF:2766117.8/15

+ sign 16.371+/-0.003 $\chi^2$/NDF: 4008820.8/32

All: 16.189+/-0.002 $\chi^2$/NDF: 8451269.1/67

- sign 16.010+/-0.003 $\chi^2$/NDF: 4434022.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.5/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:30.0/16

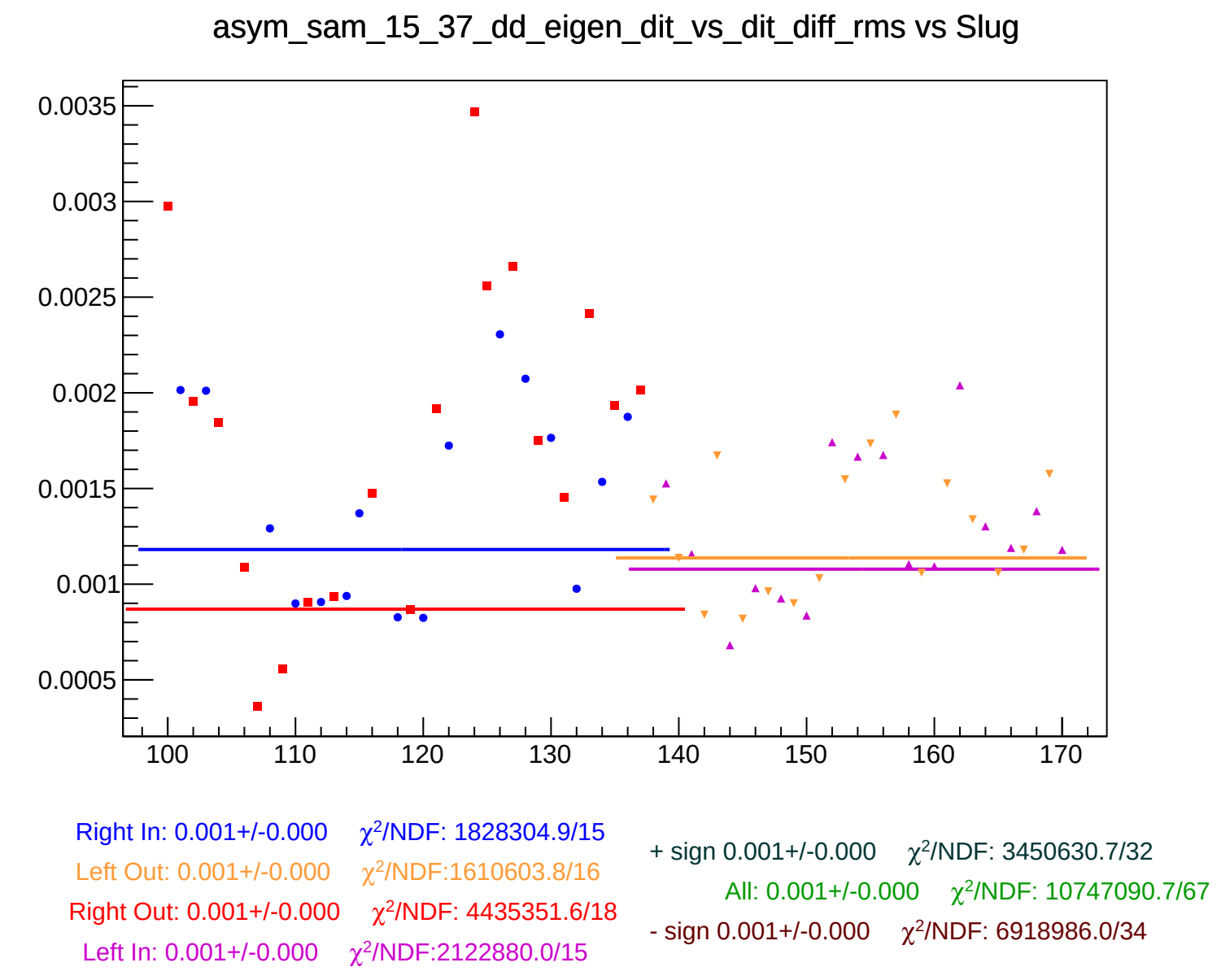
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 12.9/18

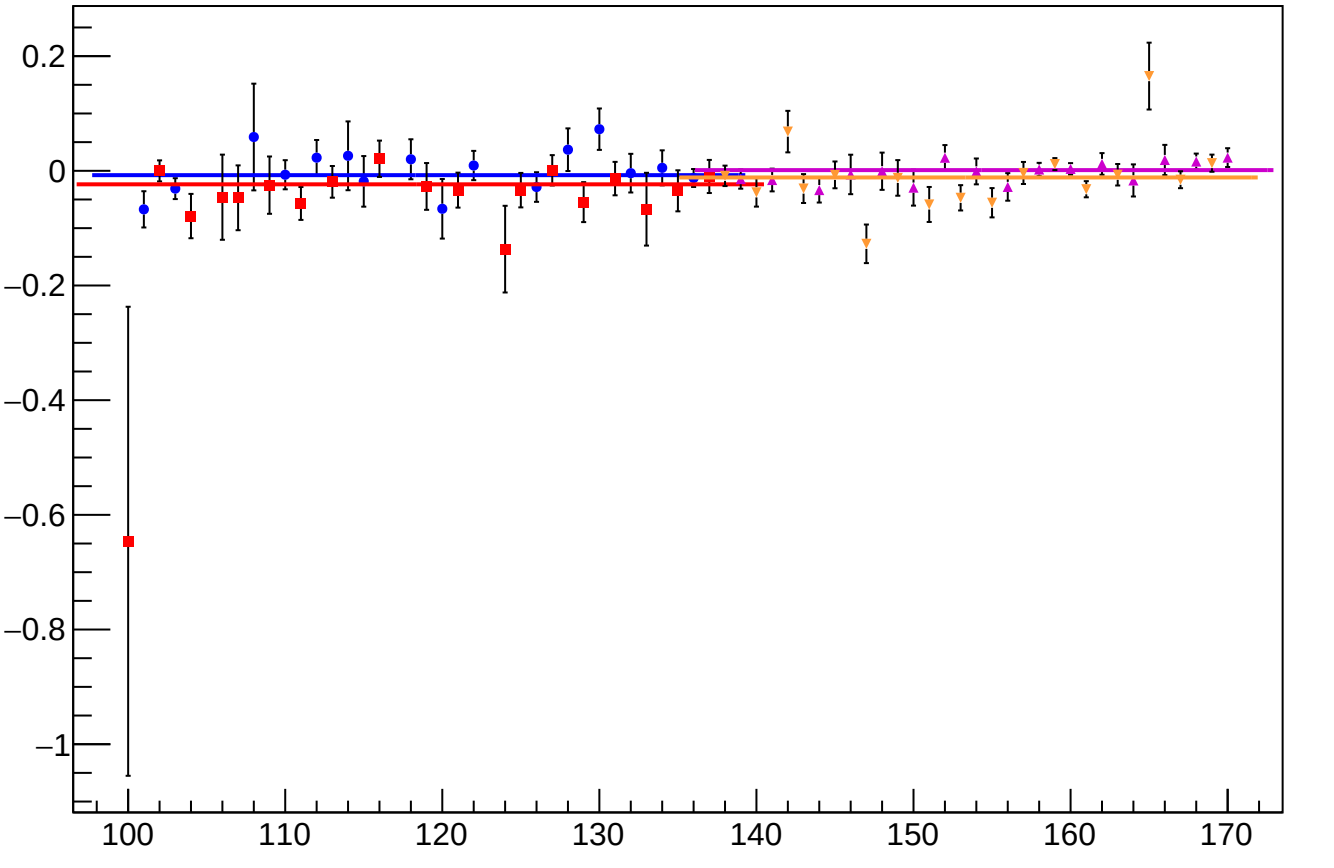
Left In: -0.000+/-0.000 $\chi^2$/NDF:13.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 46.5/32

All: -0.000+/-0.000 $\chi^2$/NDF: 74.7/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.0/34


asym_sam_15_37_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 1828304.9/15
Left Out: 0.001+/-0.000 χ²/NDF:1610603.8/16
Right Out: 0.001+/-0.000 χ²/NDF: 4435351.6/18
Left In: 0.001+/-0.000 χ²/NDF:2122880.0/15
+ sign 0.001+/-0.000 χ²/NDF: 3450630.7/32
All: 0.001+/-0.000 χ²/NDF: 10747090.7/67
- sign 0.001+/-0.000 χ²/NDF: 6918986.0/34




Right In: -0.008+/-0.007 $\chi^2$/NDF: 16.7/15

Left Out: -0.012+/-0.005 $\chi^2$/NDF:45.7/16

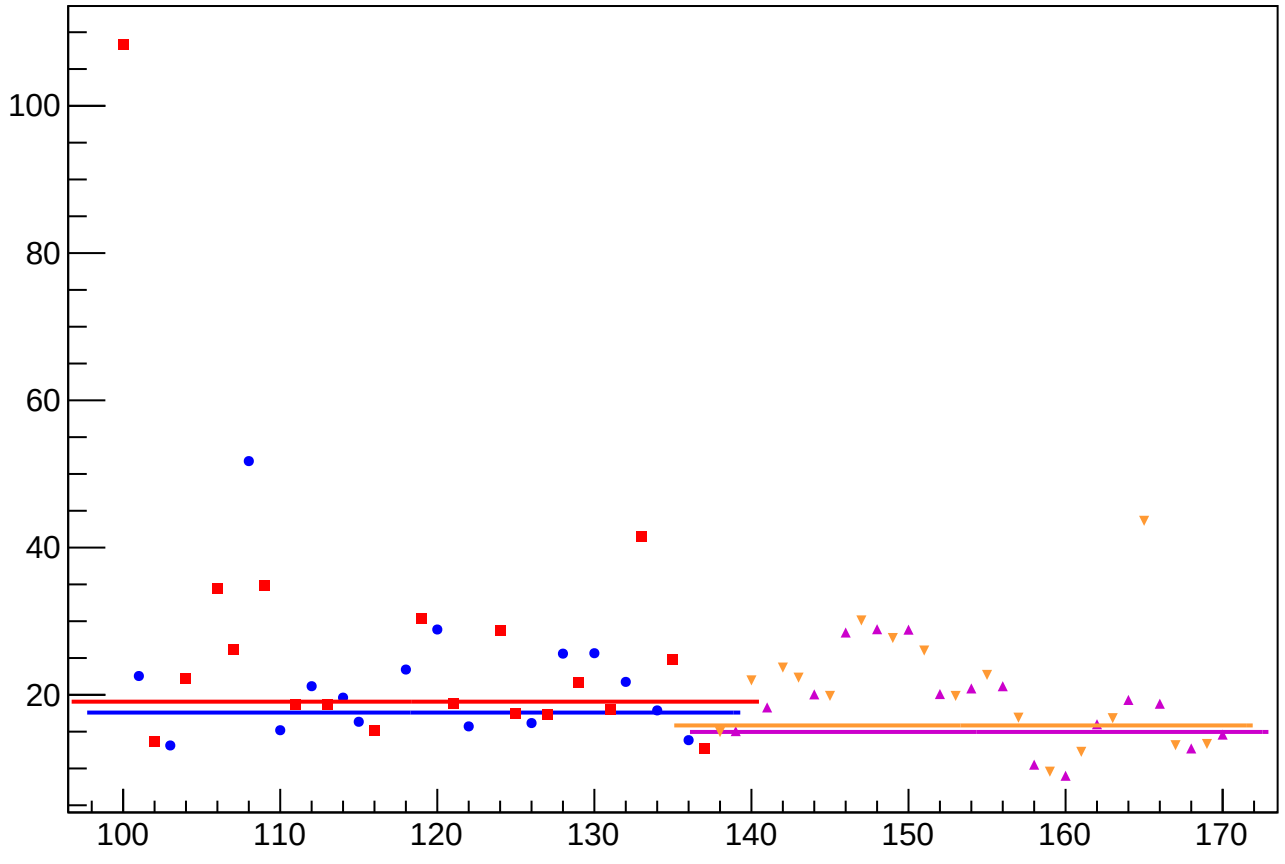
Right Out: -0.024+/-0.008 $\chi^2$/NDF: 14.6/18

Left In: 0.001+/-0.005 $\chi^2$/NDF:11.8/15

+ sign -0.010+/-0.004 $\chi^2$/NDF: 62.7/32

All: -0.008+/-0.003 $\chi^2$/NDF: 97.7/67

- sign -0.005+/-0.004 $\chi^2$/NDF: 34.1/34




Right In: 17.591+/-0.005 $\chi^2$/NDF: 993288.6/15

Left Out: 15.843+/-0.003 $\chi^2$/NDF:2933563.7/16

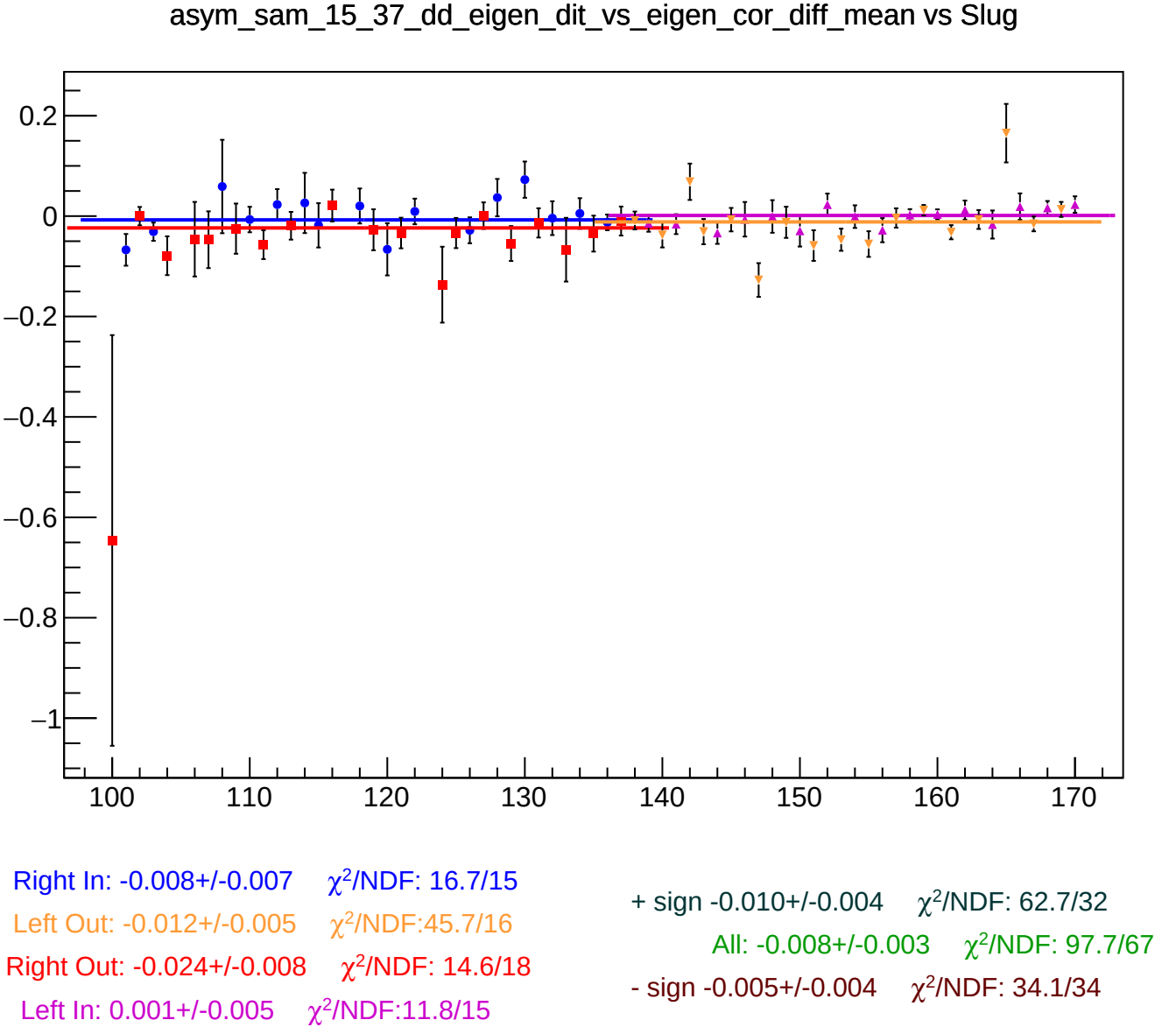
Right Out: 19.072+/-0.005 $\chi^2$/NDF: 1247904.7/18

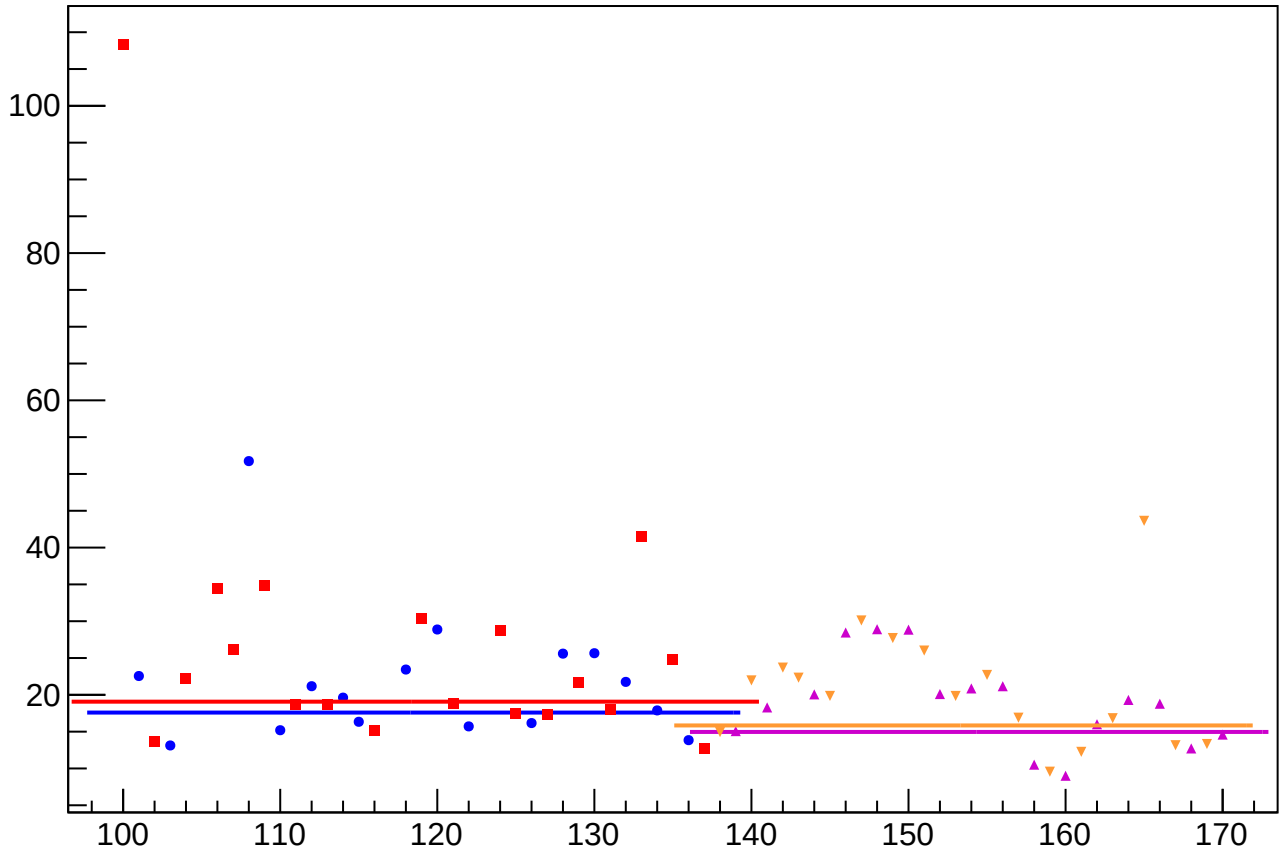
Left In: 14.960+/-0.003 $\chi^2$/NDF:2766429.6/15

+ sign 16.371+/-0.003 $\chi^2$/NDF: 4009150.4/32

All: 16.188+/-0.002 $\chi^2$/NDF: 8451974.7/67

- sign 16.010+/-0.003 $\chi^2$/NDF: 4434395.6/34


asym_sam_15_37_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
100
110
120
130
140
150
160
170
Right In: -0.008+/-0.007 χ²/NDF: 16.7/15
Left Out: -0.012+/-0.005 χ²/NDF:45.7/16
Right Out: -0.024+/-0.008 χ²/NDF: 14.6/18
Left In: 0.001+/-0.005 χ²/NDF:11.8/15
+ sign -0.010+/-0.004 χ²/NDF: 62.7/32
All: -0.008+/-0.003 χ²/NDF: 97.7/67
- sign -0.005+/-0.004 χ²/NDF: 34.1/34




Right In: 17.591+/-0.005 $\chi^2$/NDF: 993288.6/15

Left Out: 15.843+/-0.003 $\chi^2$/NDF:2933563.7/16

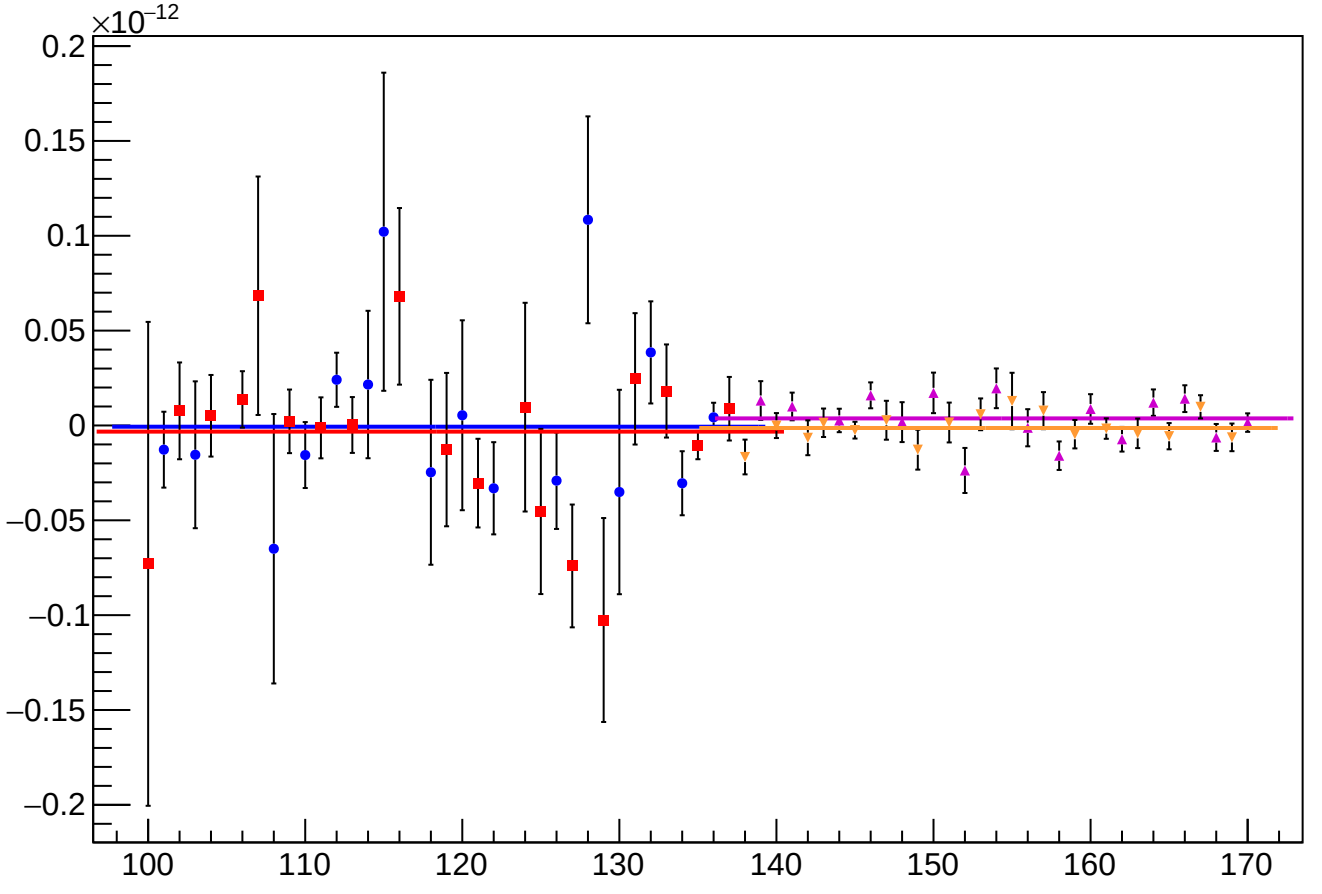
Right Out: 19.072+/-0.005 $\chi^2$/NDF: 1247904.7/18

Left In: 14.960+/-0.003 $\chi^2$/NDF:2766429.6/15

+ sign 16.371+/-0.003 $\chi^2$/NDF: 4009150.4/32

All: 16.188+/-0.002 $\chi^2$/NDF: 8451974.7/67

- sign 16.010+/-0.003 $\chi^2$/NDF: 4434395.6/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 20.3/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:11.8/16

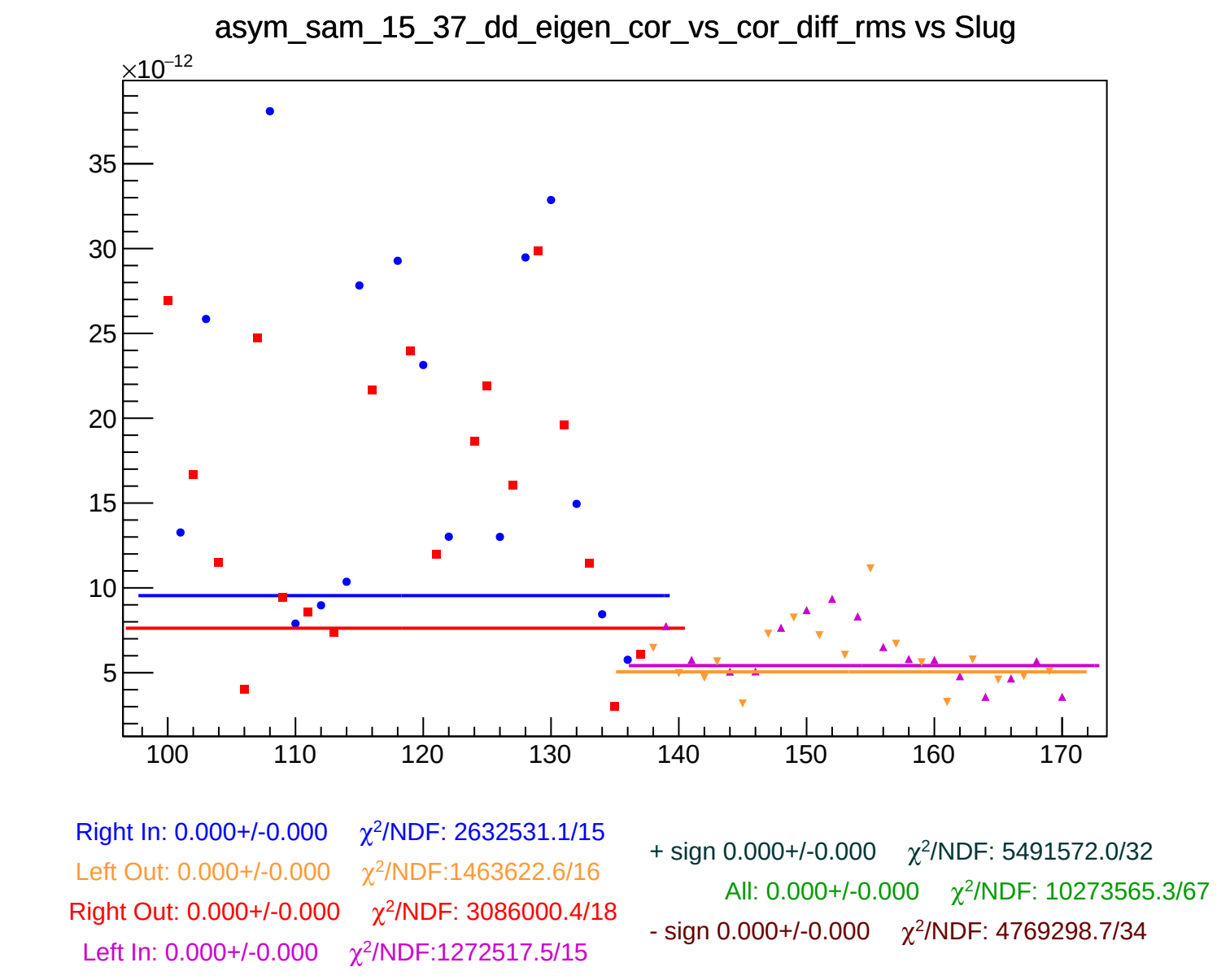
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 19.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:30.2/15

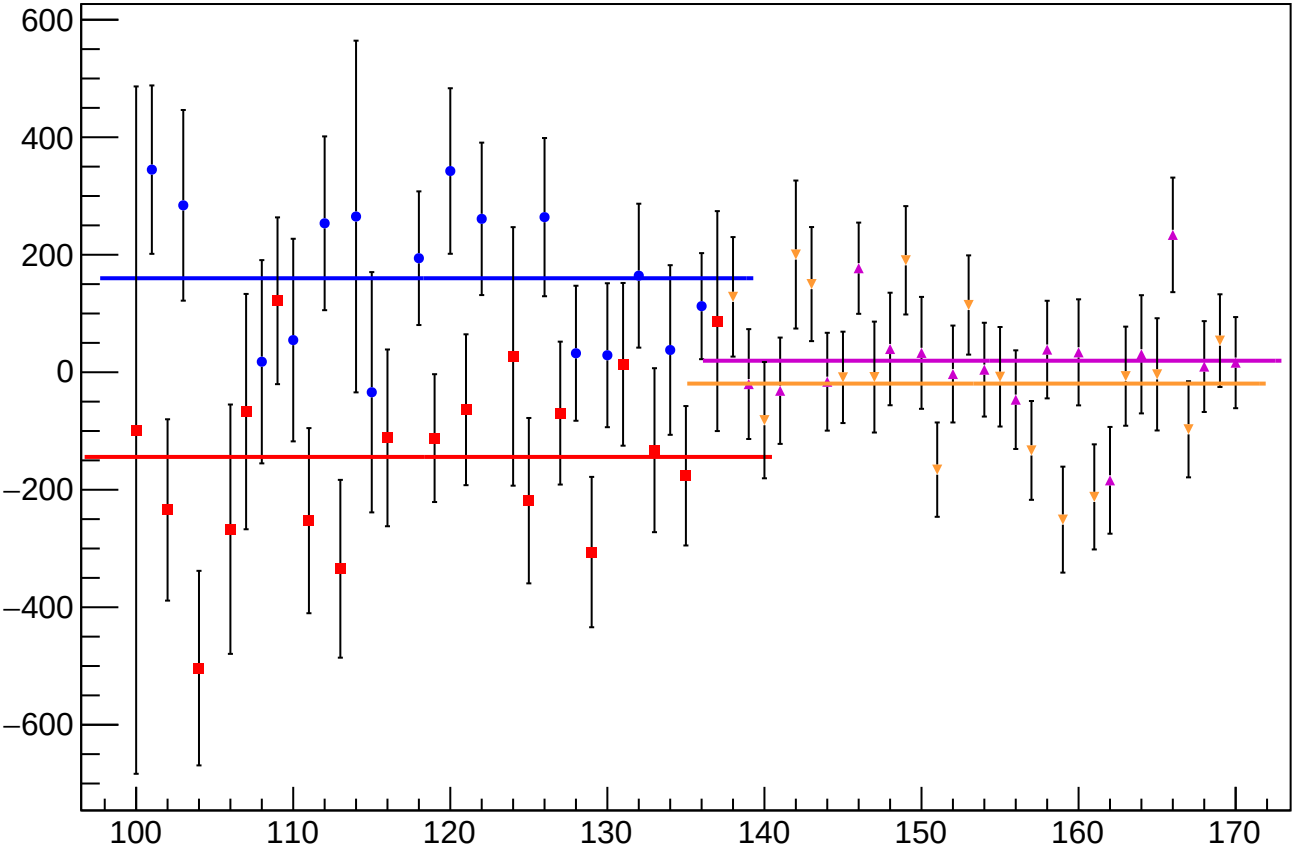
+ sign -0.000+/-0.000 $\chi^2$/NDF: 32.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 86.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 51.5/34


asym_sam_15_37_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
35
30
25
20
15
10
5
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2632531.1/15
Left Out: 0.000+/-0.000 χ²/NDF:1463622.6/16
Right Out: 0.000+/-0.000 χ²/NDF: 3086000.4/18
Left In: 0.000+/-0.000 χ²/NDF:1272517.5/15
+ sign 0.000+/-0.000 χ²/NDF: 5491572.0/32
All: 0.000+/-0.000 χ²/NDF: 10273565.3/67
- sign 0.000+/-0.000 χ²/NDF: 4769298.7/34

# reg_asym_sam_24_68_dd_mean vs Slug




Right In: 160.024+/-34.170 $\chi^2$/NDF: 11.1/15

Left Out: -19.297+/-21.581 $\chi^2$/NDF:34.5/16

Right Out: -144.117+/-34.213 $\chi^2$/NDF: 17.4/18

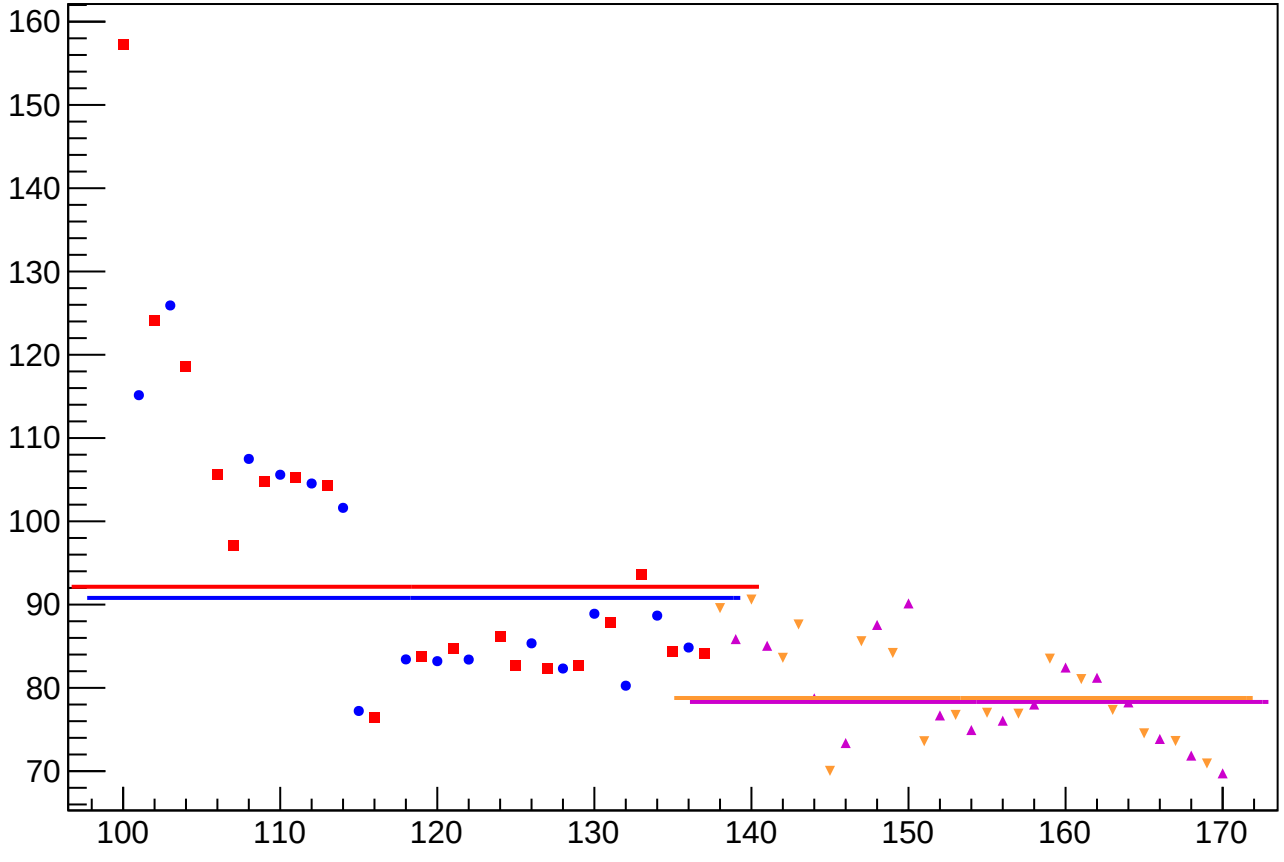
Left In: 19.621+/-21.628 $\chi^2$/NDF:15.5/15

+ sign 31.835+/-18.246 $\chi^2$/NDF: 65.3/32

All: 2.410+/-12.914 $\chi^2$/NDF: 119.8/67

- sign -27.128+/-18.281 $\chi^2$/NDF: 49.3/34

# reg_asym_sam_24_68_dd_rms vs Slug




Right In: 90.802+/-0.024 $\chi^2$/NDF: 272755.2/15

Left Out: 78.785+/-0.015 $\chi^2$/NDF:163678.1/16

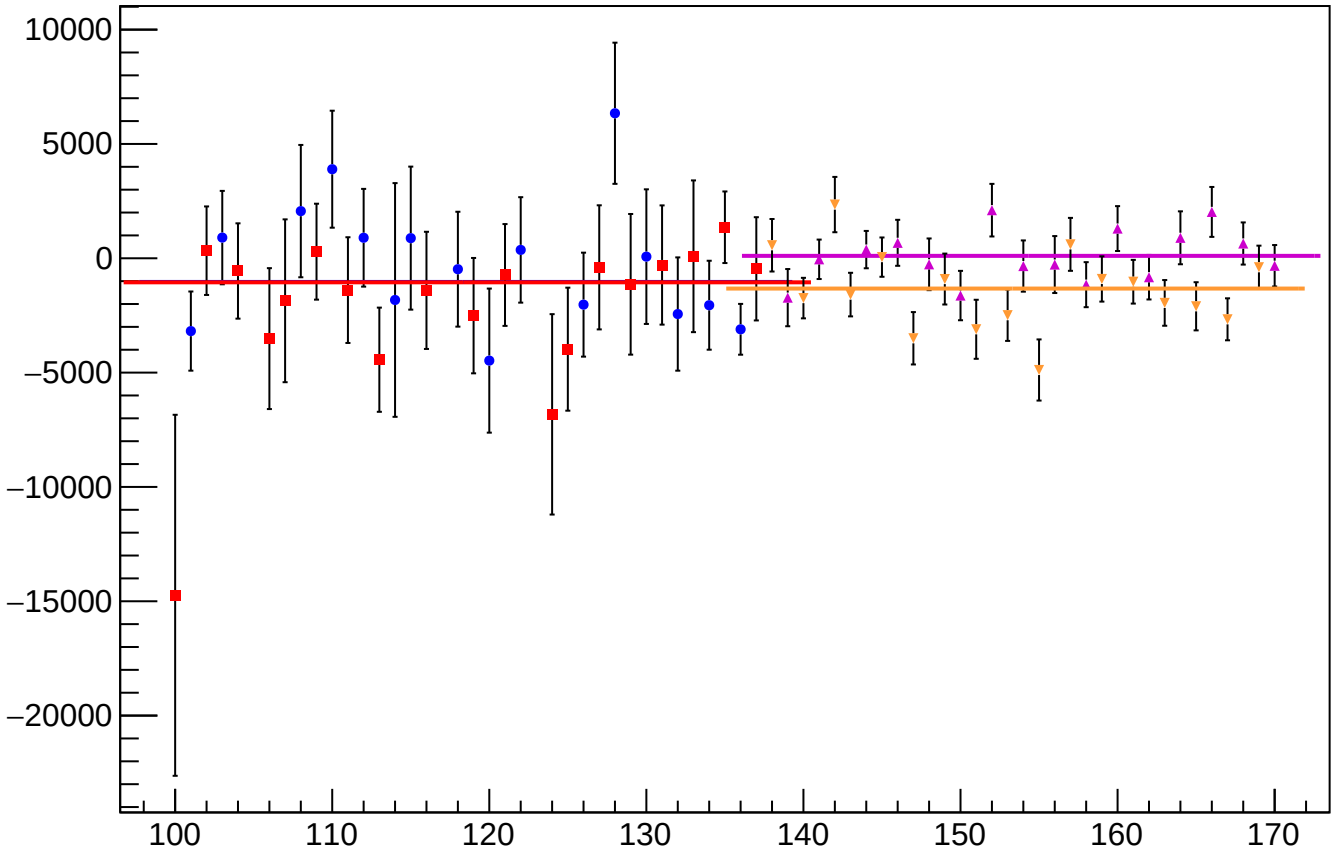
Right Out: 92.141+/-0.024 $\chi^2$/NDF: 302032.4/18

Left In: 78.310+/-0.015 $\chi^2$/NDF:136299.0/15

+ sign 82.211+/-0.013 $\chi^2$/NDF: 613262.1/32

All: 82.235+/-0.009 $\chi^2$/NDF: 1285145.3/67

- sign 82.259+/-0.013 $\chi^2$/NDF: 671876.5/34




Right In: -1035.032+/-550.207 $\chi^2$/NDF: 20.2/15

Left Out: -1324.251+/-251.882 $\chi^2$/NDF:35.7/16

Right Out: -1051.517+/-568.935 $\chi^2$/NDF: 12.9/18

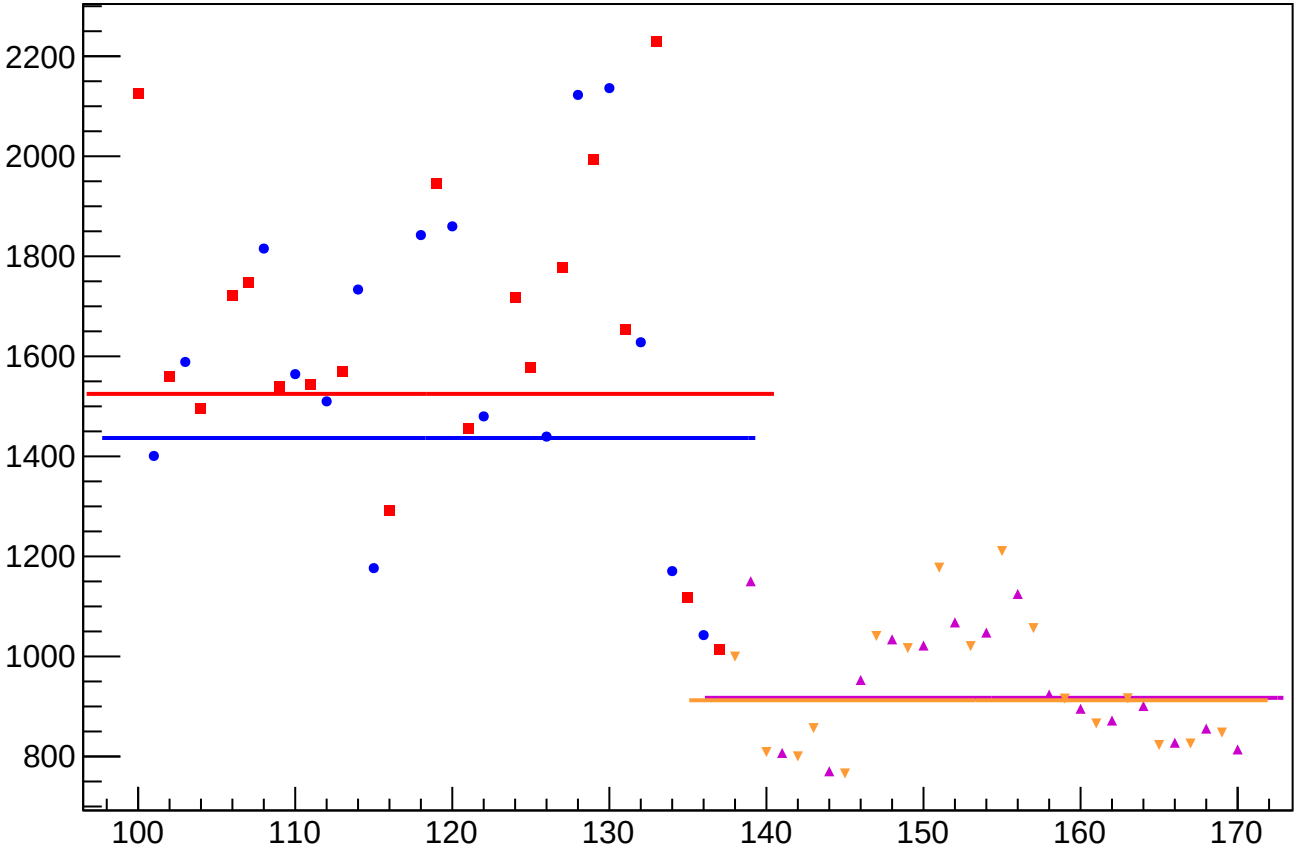
Left In: 105.938+/-254.701 $\chi^2$/NDF:16.7/15

+ sign -1274.140+/-229.024 $\chi^2$/NDF: 56.2/32

All: -689.582+/-163.149 $\chi^2$/NDF: 102.5/67

- sign -87.307+/-232.469 $\chi^2$/NDF: 33.1/34

# asym_sam_24_68_dd_reg_correction_rms vs Slug




Right In: 1436.734+/-0.389 $\chi^2$/NDF: 675672.3/15

Left Out: 912.388+/-0.178 $\chi^2$/NDF:443435.5/16

Right Out: 1524.955+/-0.402 $\chi^2$/NDF: 504563.9/18

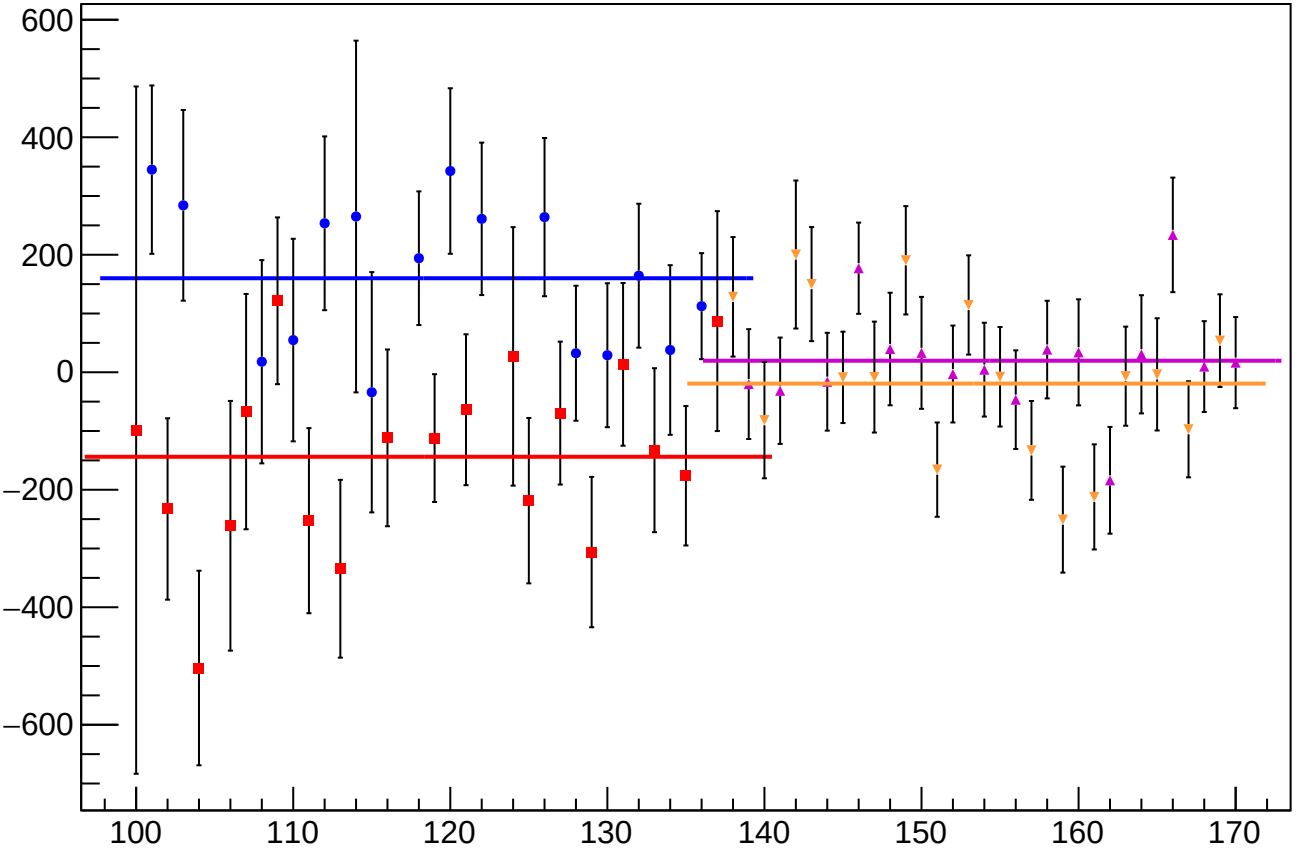
Left In: 917.267+/-0.180 $\chi^2$/NDF:380648.6/15

+ sign 1003.238+/-0.162 $\chi^2$/NDF: 2620800.7/32

All: 1010.866+/-0.115 $\chi^2$/NDF: 5411308.8/67

- sign 1018.725+/-0.164 $\chi^2$/NDF: 2786004.0/34

# cor_asym_sam_24_68_dd_mean vs Slug




Right In: 160.020+/-34.170 $\chi^2$/NDF: 11.1/15

Left Out: -19.295+/-21.581 $\chi^2$/NDF:34.5/16

Right Out: -143.862+/-34.216 $\chi^2$/NDF: 17.3/18

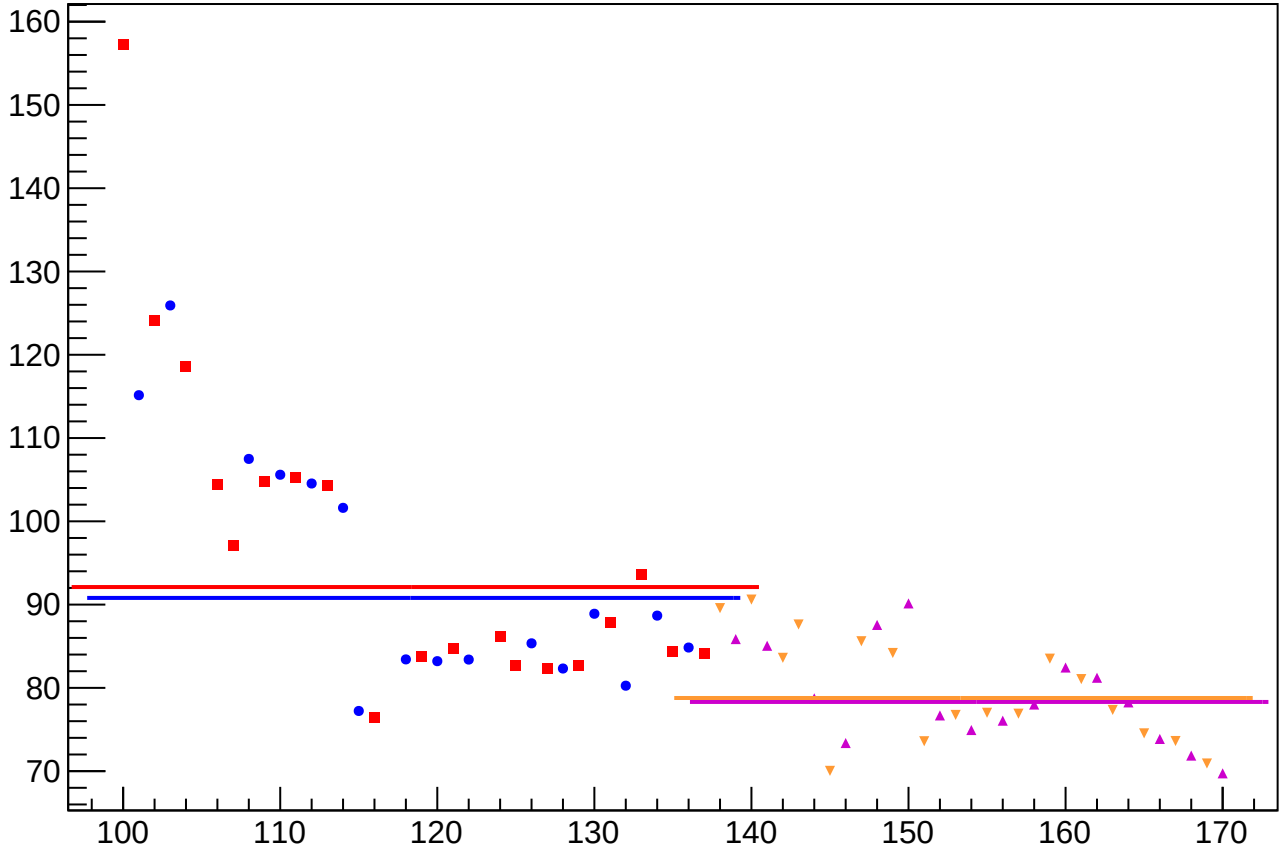
Left In: 19.623+/-21.628 $\chi^2$/NDF:15.5/15

+ sign 31.836+/-18.246 $\chi^2$/NDF: 65.3/32

All: 2.450+/-12.915 $\chi^2$/NDF: 119.7/67

- sign -27.049+/-18.282 $\chi^2$/NDF: 49.2/34

# cor_asym_sam_24_68_dd_rms vs Slug




Right In: 90.802+/-0.024 $\chi^2$/NDF: 272757.0/15

Left Out: 78.785+/-0.015 $\chi^2$/NDF:163678.1/16

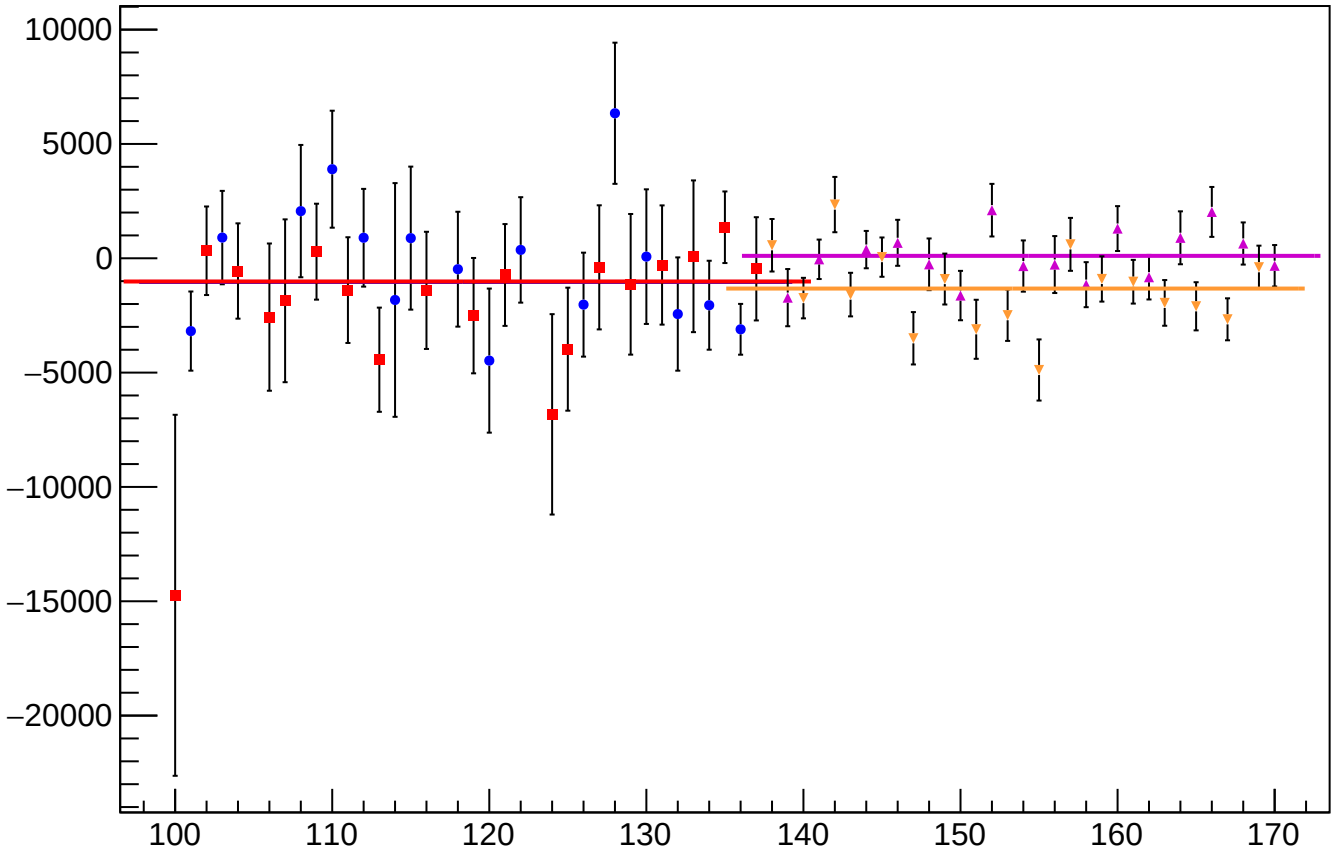
Right Out: 92.108+/-0.024 $\chi^2$/NDF: 300768.0/18

Left In: 78.310+/-0.015 $\chi^2$/NDF:136299.0/15

+ sign 82.211+/-0.013 $\chi^2$/NDF: 613264.1/32

All: 82.230+/-0.009 $\chi^2$/NDF: 1282743.8/67

- sign 82.249+/-0.013 $\chi^2$/NDF: 669475.5/34




Right In: -1035.009+/-550.208 $\chi^2$/NDF: 20.2/15

Left Out: -1324.247+/-251.882 $\chi^2$/NDF:35.7/16

Right Out: -1015.387+/-569.773 $\chi^2$/NDF: 12.5/18

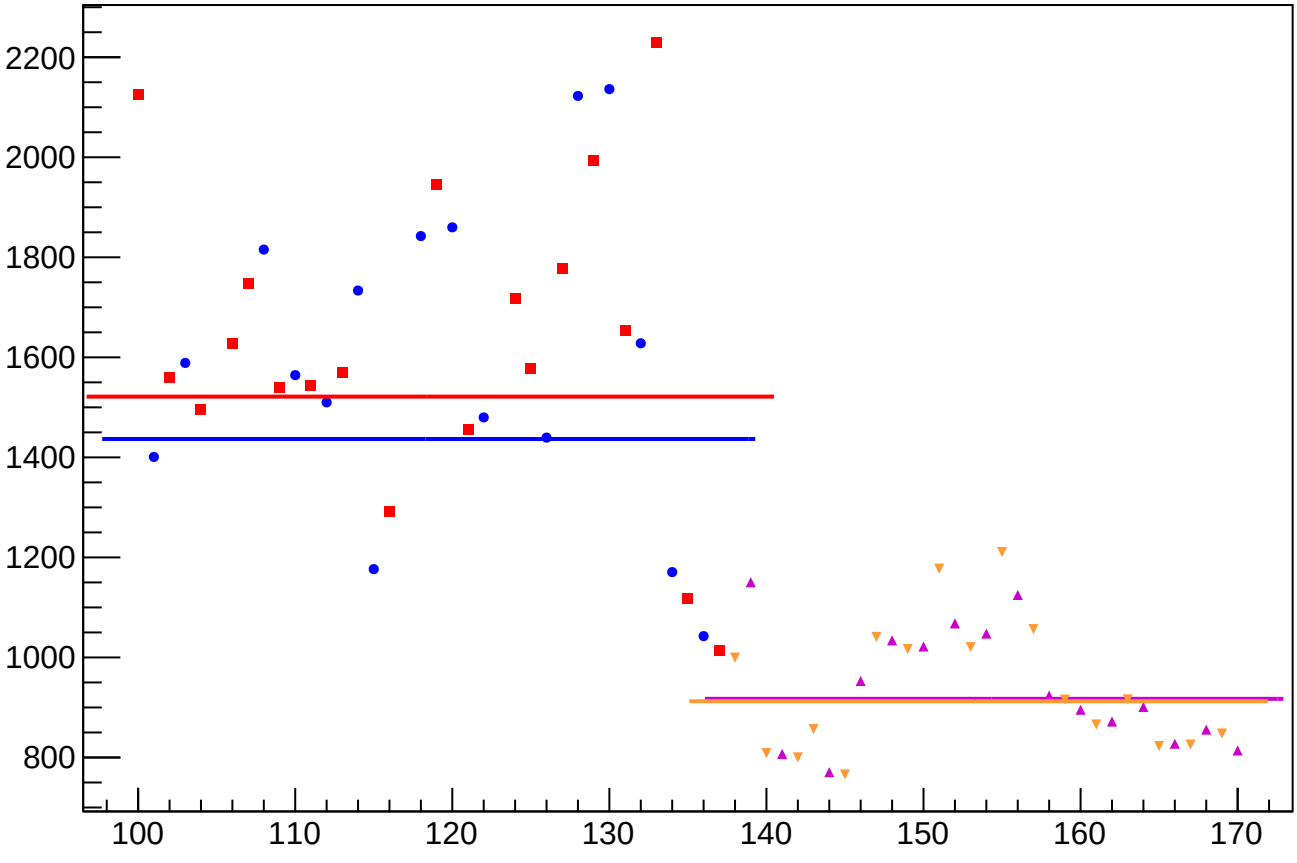
Left In: 105.935+/-254.701 $\chi^2$/NDF:16.7/15

+ sign -1274.133+/-229.024 $\chi^2$/NDF: 56.2/32

All: -686.529+/-163.168 $\chi^2$/NDF: 102.0/67

- sign -80.818+/-232.526 $\chi^2$/NDF: 32.4/34

# asym_sam_24_68_dd_cor_correction_rms vs Slug




Right In: 1436.738+/-0.389 $\chi^2$/NDF: 675680.8/15

Left Out: 912.388+/-0.178 $\chi^2$/NDF:443436.8/16

Right Out: 1521.496+/-0.403 $\chi^2$/NDF: 498363.4/18

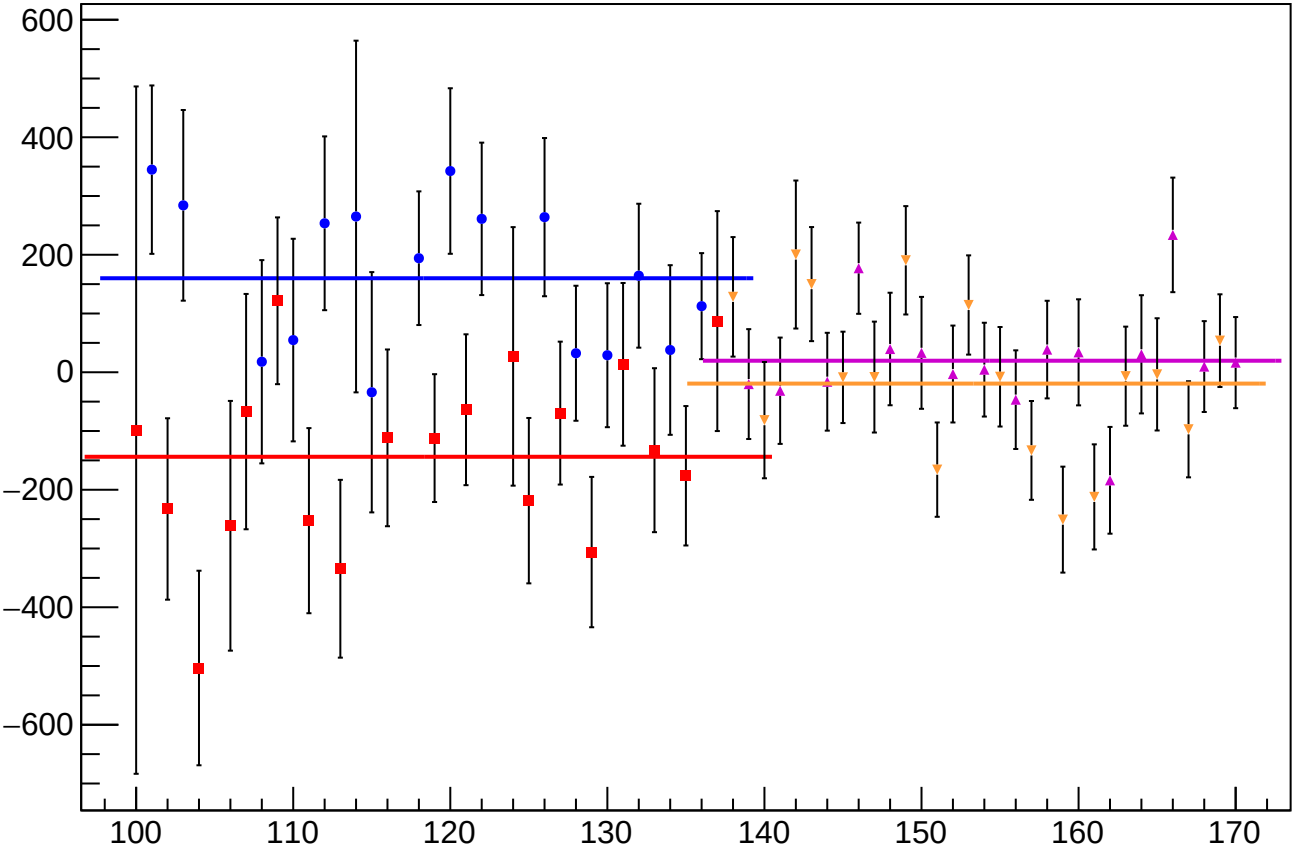
Left In: 917.267+/-0.180 $\chi^2$/NDF:380648.1/15

+ sign 1003.238+/-0.162 $\chi^2$/NDF: 2620825.4/32

All: 1010.458+/-0.115 $\chi^2$/NDF: 5378481.2/67

- sign 1017.900+/-0.164 $\chi^2$/NDF: 2753619.4/34

# eigen_cor_asym_sam_24_68_dd_mean vs Slug




Right In: 160.020+/-34.170 $\chi^2$/NDF: 11.1/15

Left Out: -19.295+/-21.581 $\chi^2$/NDF:34.5/16

Right Out: -143.862+/-34.216 $\chi^2$/NDF: 17.3/18

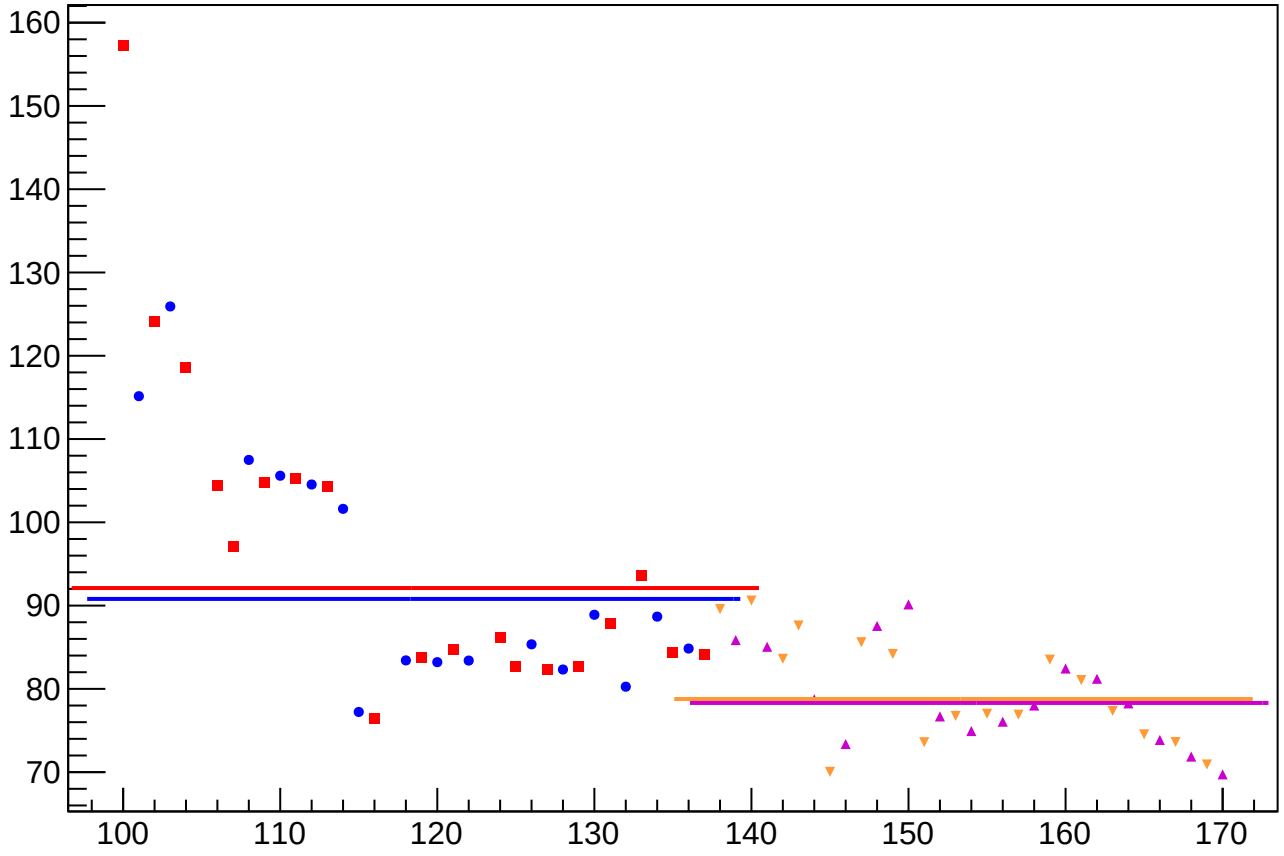
Left In: 19.623+/-21.628 $\chi^2$/NDF:15.5/15

+ sign 31.836+/-18.246 $\chi^2$/NDF: 65.3/32

All: 2.450+/-12.915 $\chi^2$/NDF: 119.7/67

- sign -27.049+/-18.282 $\chi^2$/NDF: 49.2/34

# eigen_cor_asym_sam_24_68_dd_rms vs Slug




Right In: 90.802+/-0.024 $\chi^2$/NDF: 272757.0/15

Left Out: 78.785+/-0.015 $\chi^2$/NDF:163678.1/16

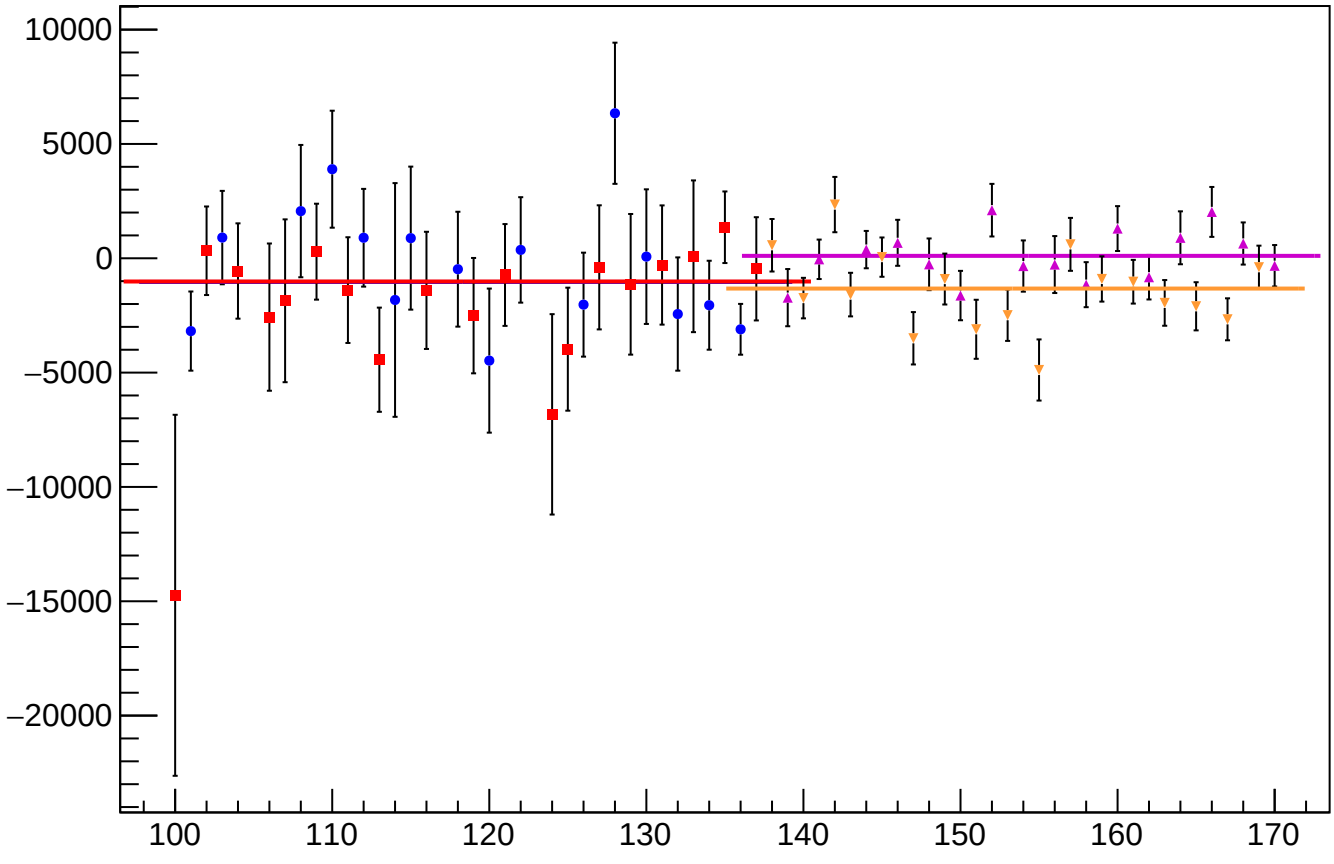
Right Out: 92.108+/-0.024 $\chi^2$/NDF: 300768.0/18

Left In: 78.310+/-0.015 $\chi^2$/NDF:136299.0/15

+ sign 82.211+/-0.013 $\chi^2$/NDF: 613264.1/32

All: 82.230+/-0.009 $\chi^2$/NDF: 1282743.8/67

- sign 82.249+/-0.013 $\chi^2$/NDF: 669475.5/34




Right In: -1035.009+/-550.208 $\chi^2$/NDF: 20.2/15

Left Out: -1324.247+/-251.882 $\chi^2$/NDF:35.7/16

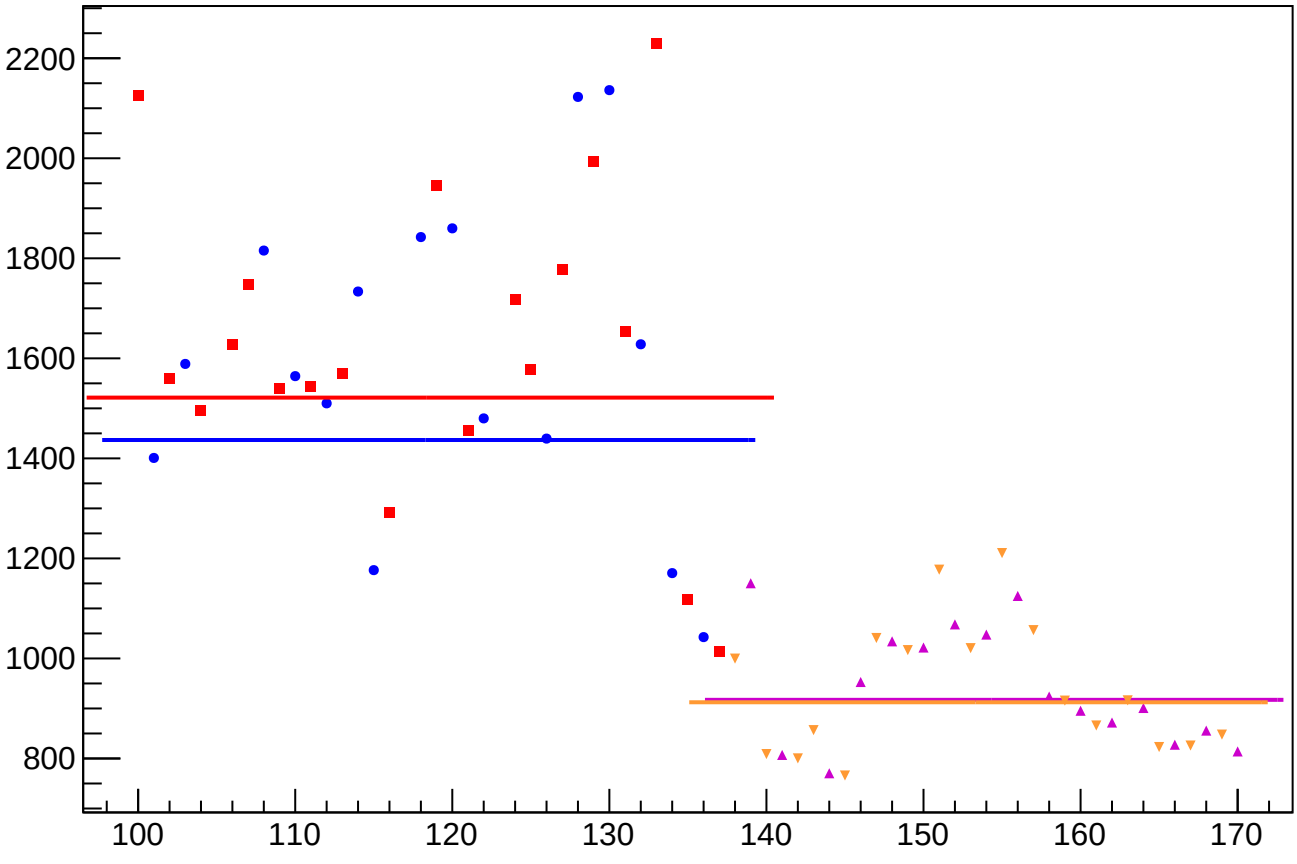
Right Out: -1015.387+/-569.773 $\chi^2$/NDF: 12.5/18

Left In: 105.935+/-254.701 $\chi^2$/NDF:16.7/15

+ sign -1274.133+/-229.024 $\chi^2$/NDF: 56.2/32

All: -686.529+/-163.168 $\chi^2$/NDF: 102.0/67

- sign -80.818+/-232.526 $\chi^2$/NDF: 32.4/34




Right In: 1436.738+/-0.389 $\chi^2$/NDF: 675680.8/15

Left Out: 912.388+/-0.178 $\chi^2$/NDF:443436.8/16

Right Out: 1521.496+/-0.403 $\chi^2$/NDF: 498363.4/18

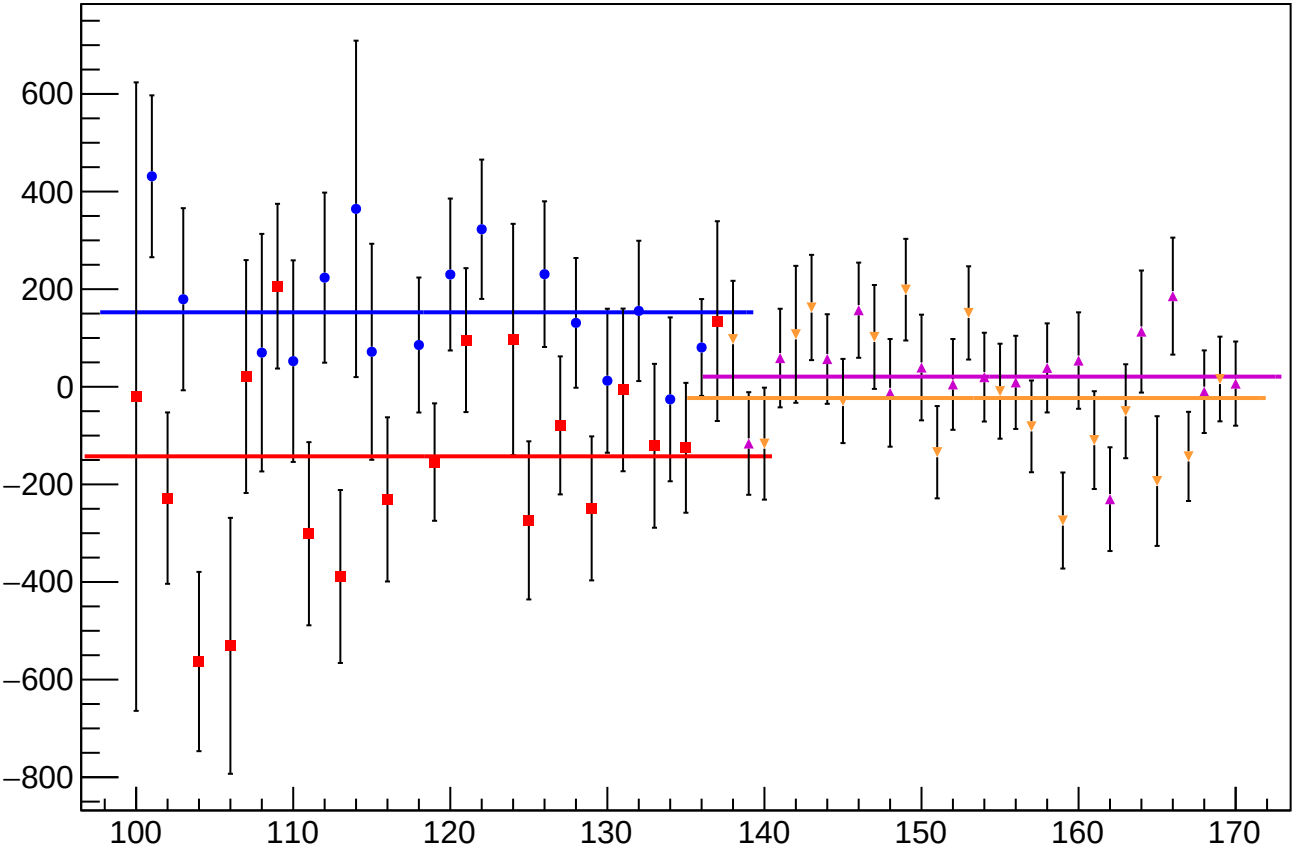
Left In: 917.267+/-0.180 $\chi^2$/NDF:380648.1/15

+ sign 1003.238+/-0.162 $\chi^2$/NDF: 2620825.4/32

All: 1010.458+/-0.115 $\chi^2$/NDF: 5378481.2/67

- sign 1017.900+/-0.164 $\chi^2$/NDF: 2753619.4/34

# dit_asym_sam_24_68_dd_mean vs Slug




Right In: 152.626+/-39.446 $\chi^2$/NDF: 8.6/15

Left Out: -23.049+/-24.560 $\chi^2$/NDF:27.4/16

Right Out: -142.496+/-39.340 $\chi^2$/NDF: 22.9/18

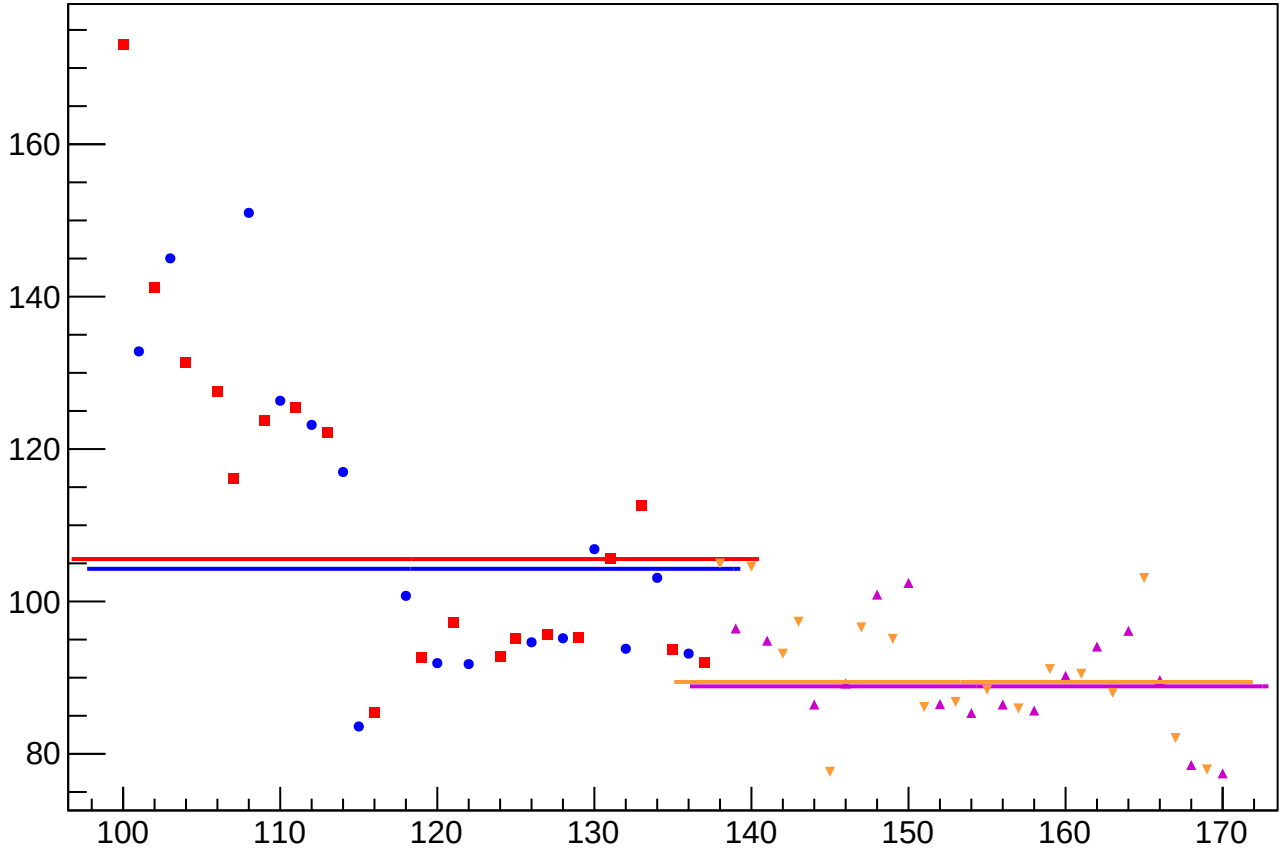
Left In: 20.800+/-24.659 $\chi^2$/NDF:12.4/15

+ sign 26.027+/-20.849 $\chi^2$/NDF: 50.4/32

All: 0.438+/-14.758 $\chi^2$/NDF: 101.1/67

- sign -25.261+/-20.894 $\chi^2$/NDF: 47.7/34

# dit_asym_sam_24_68_dd_rms vs Slug




Right In: 104.286+/-0.028 $\chi^2$/NDF: 378310.9/15

Left Out: 89.439+/-0.017 $\chi^2$/NDF:210160.2/16

Right Out: 105.568+/-0.028 $\chi^2$/NDF: 344605.9/18

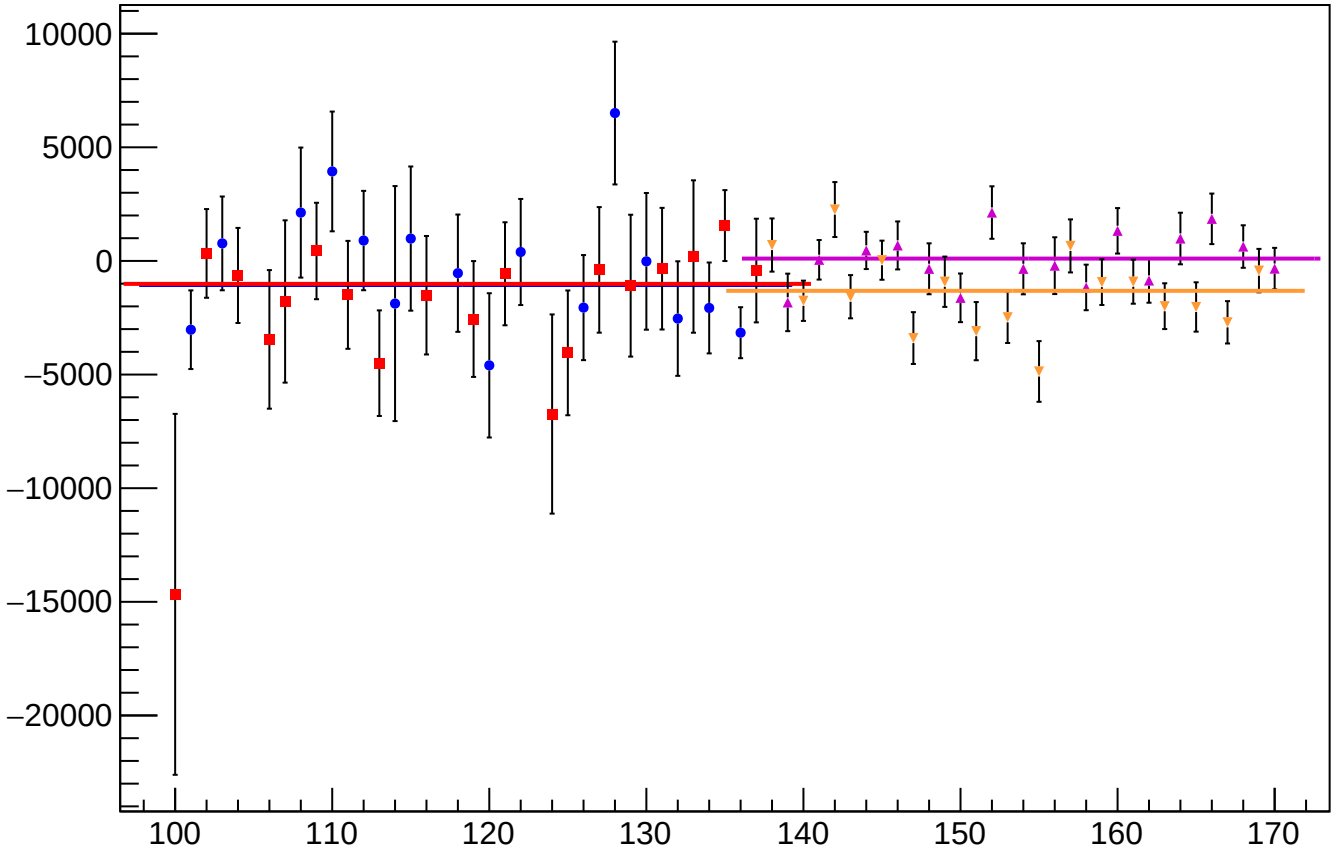
Left In: 88.861+/-0.017 $\chi^2$/NDF:158877.1/15

+ sign 93.586+/-0.015 $\chi^2$/NDF: 792666.4/32

All: 93.580+/-0.010 $\chi^2$/NDF: 1555103.0/67

- sign 93.574+/-0.015 $\chi^2$/NDF: 762436.3/34

# asym_sam_24_68_dd_dit_correction_mean vs Slug




Right In: -1059.357+/-557.645 $\chi^2$/NDF: 20.0/15

Left Out: -1315.085+/-253.616 $\chi^2$/NDF:35.1/16

Right Out: -1009.907+/-575.100 $\chi^2$/NDF: 13.3/18

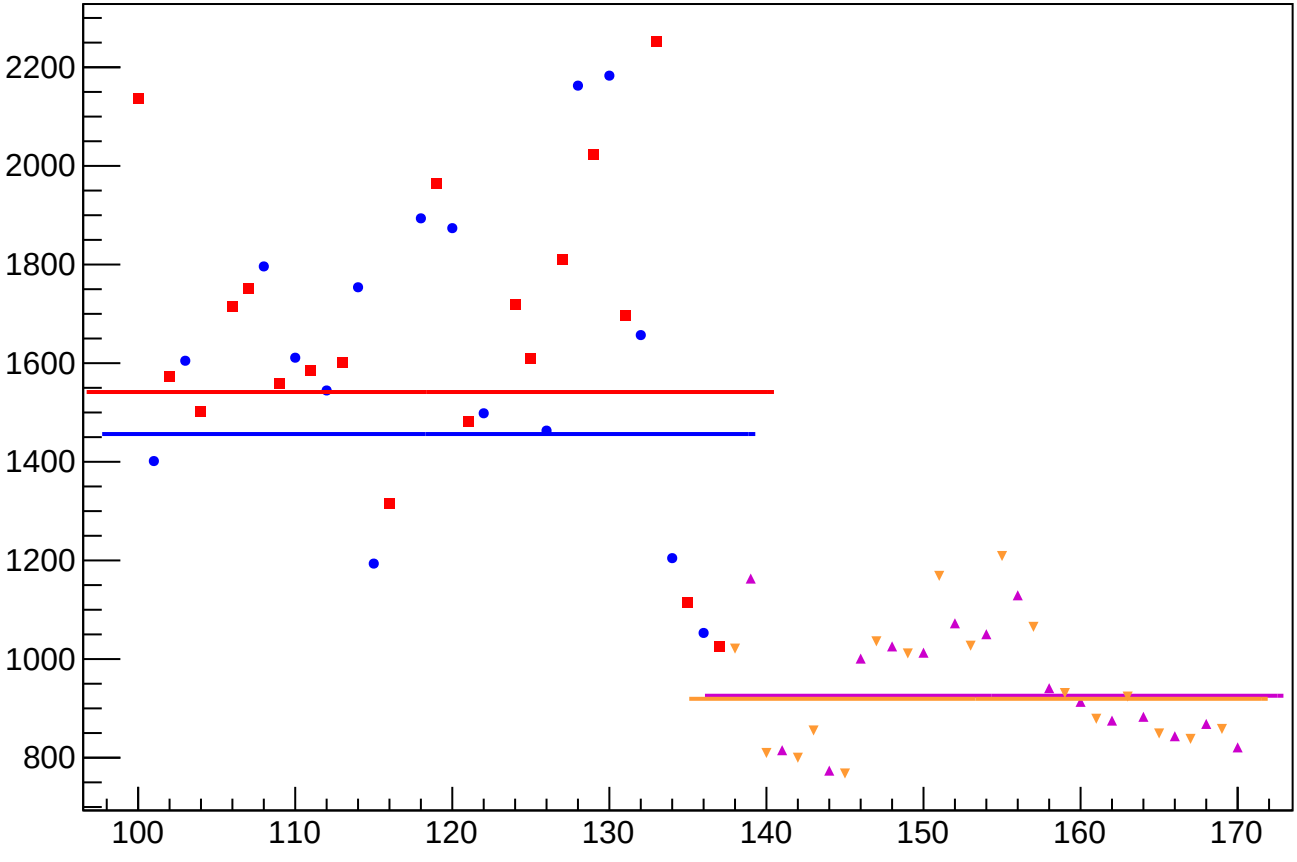
Left In: 103.191+/-256.930 $\chi^2$/NDF:16.6/15

+ sign -1271.255+/-230.861 $\chi^2$/NDF: 55.3/32

All: -686.143+/-164.544 $\chi^2$/NDF: 101.4/67

- sign -82.010+/-234.584 $\chi^2$/NDF: 33.0/34

# asym_sam_24_68_dd_dit_correction_rms vs Slug




Right In: 1456.303+/-0.394 $\chi^2$/NDF: 684806.5/15

Left Out: 919.435+/-0.179 $\chi^2$/NDF:426029.0/16

Right Out: 1541.522+/-0.407 $\chi^2$/NDF: 519336.6/18

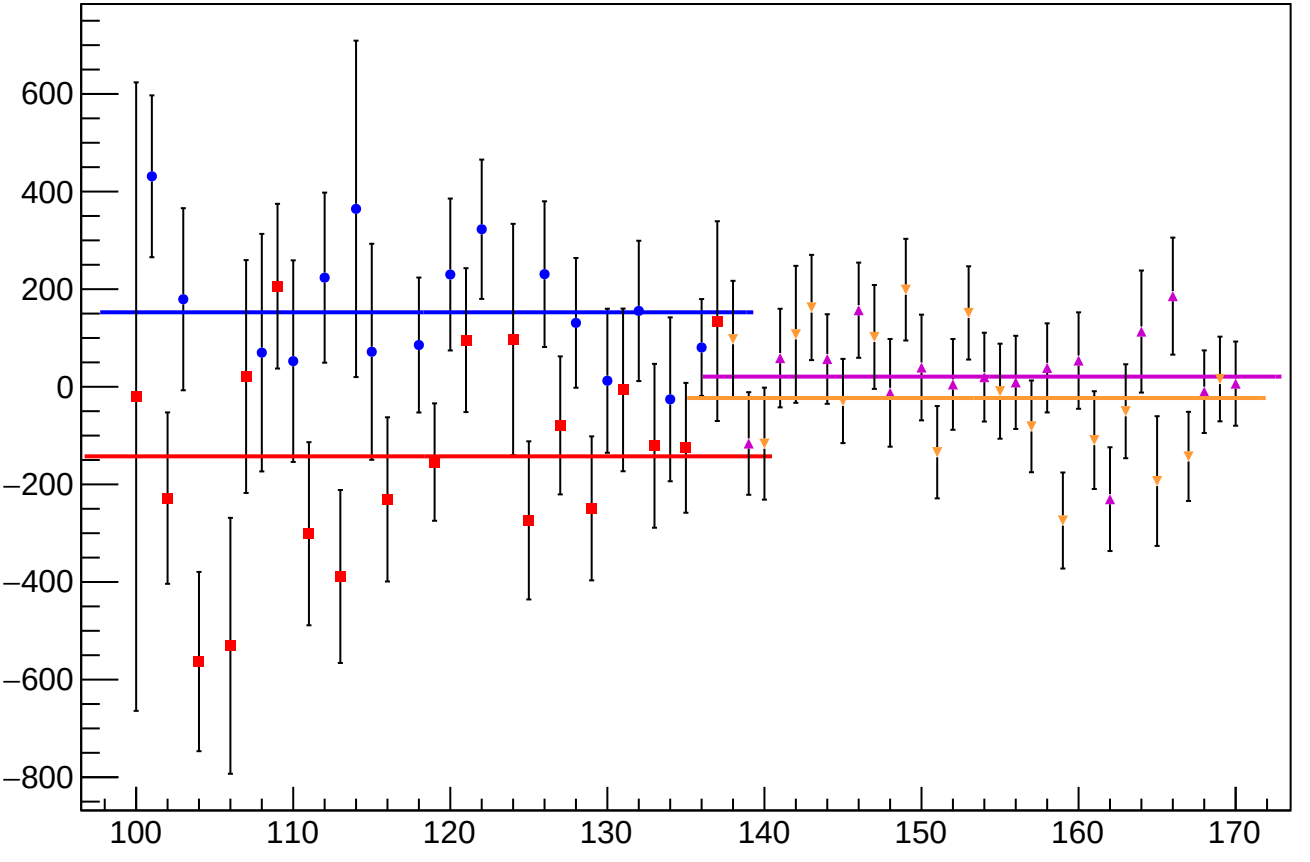
Left In: 925.641+/-0.182 $\chi^2$/NDF:374526.2/15

+ sign 1011.449+/-0.163 $\chi^2$/NDF: 2646865.6/32

All: 1019.648+/-0.116 $\chi^2$/NDF: 5457927.8/67

- sign 1028.113+/-0.166 $\chi^2$/NDF: 2805935.4/34

# eigen_dit_asym_sam_24_68_dd_mean vs Slug




Right In: 152.628+/-39.446 $\chi^2$/NDF: 8.6/15

Left Out: -23.048+/-24.560 $\chi^2$/NDF:27.4/16

Right Out: -142.494+/-39.340 $\chi^2$/NDF: 22.9/18

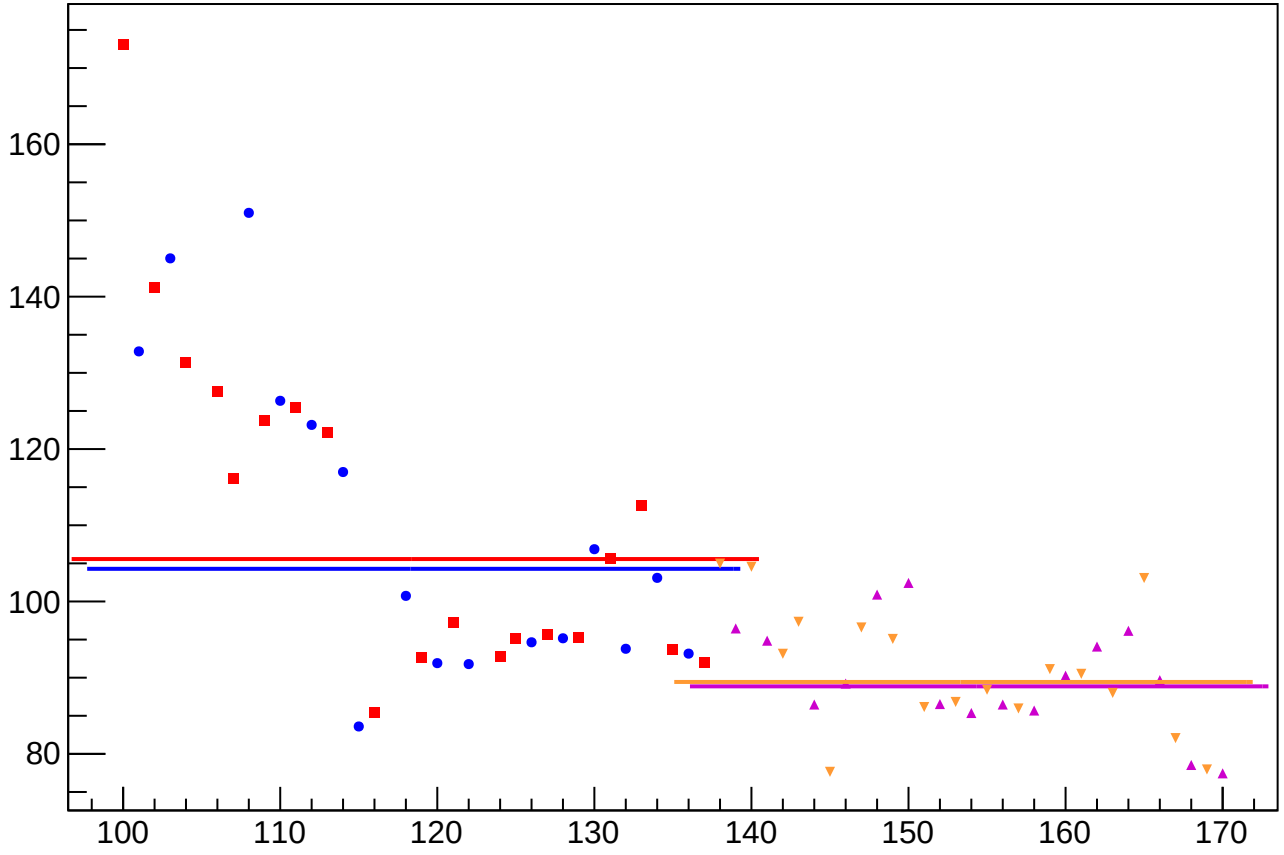
Left In: 20.800+/-24.659 $\chi^2$/NDF:12.4/15

+ sign 26.029+/-20.849 $\chi^2$/NDF: 50.4/32

All: 0.439+/-14.758 $\chi^2$/NDF: 101.1/67

- sign -25.260+/-20.894 $\chi^2$/NDF: 47.7/34

# eigen_dit_asym_sam_24_68_dd_rms vs Slug




Right In: 104.285+/-0.028 $\chi^2$/NDF: 378313.2/15

Left Out: 89.439+/-0.017 $\chi^2$/NDF:210158.5/16

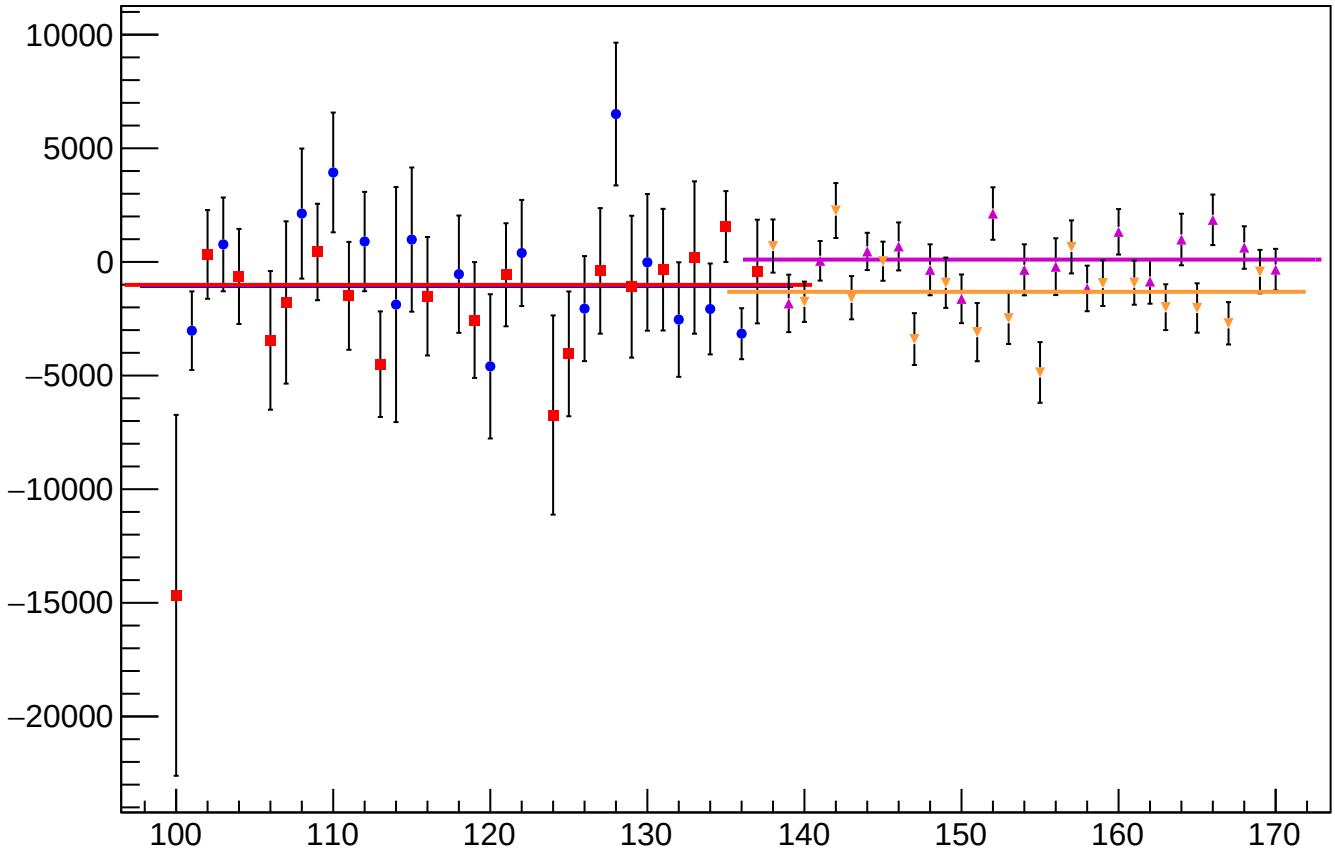
Right Out: 105.567+/-0.028 $\chi^2$/NDF: 344605.1/18

Left In: 88.861+/-0.017 $\chi^2$/NDF:158878.8/15

+ sign 93.586+/-0.015 $\chi^2$/NDF: 792639.7/32

All: 93.580+/-0.010 $\chi^2$/NDF: 1555058.2/67

- sign 93.574+/-0.015 $\chi^2$/NDF: 762418.1/34




Right In: -1059.353+/-557.644 $\chi^2$/NDF: 20.0/15

Left Out: -1315.084+/-253.615 $\chi^2$/NDF:35.1/16

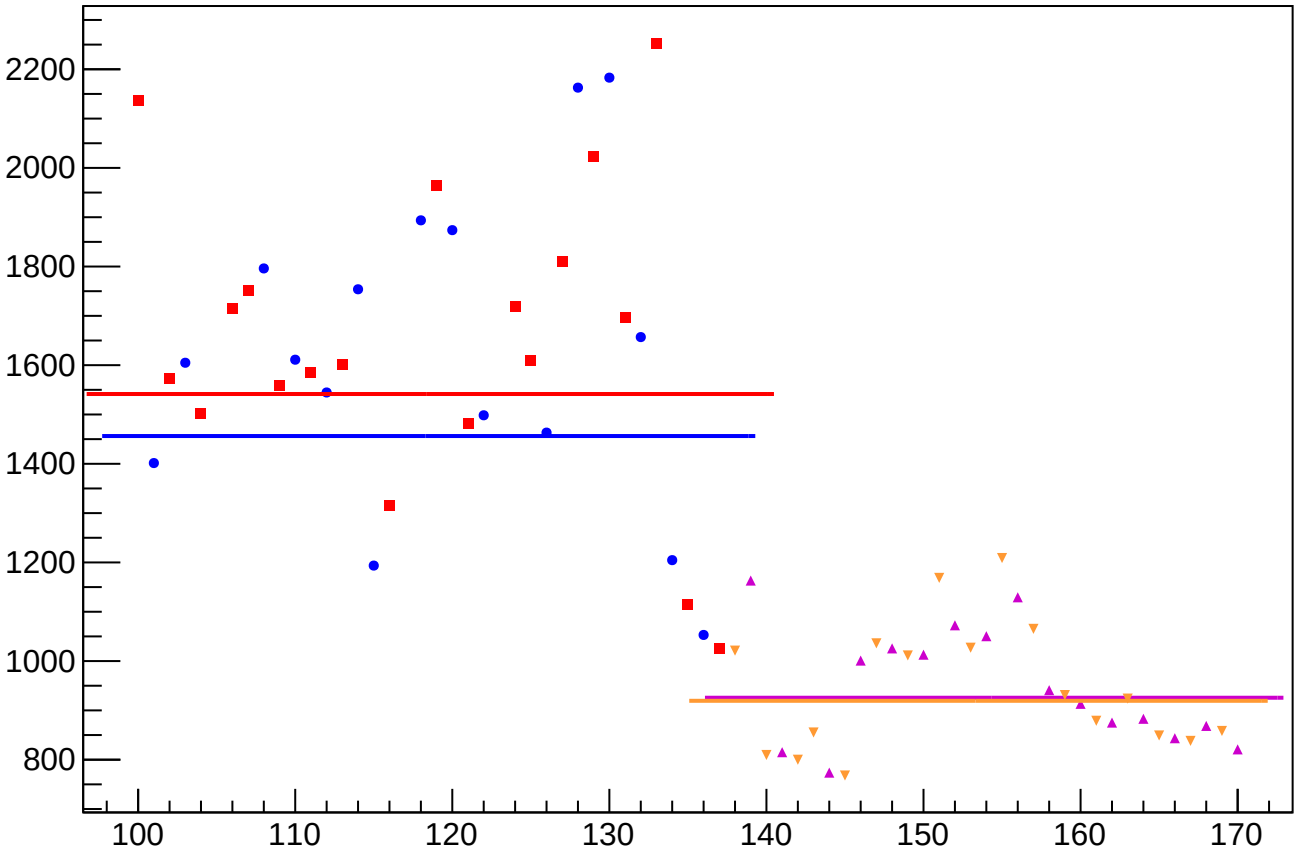
Right Out: -1009.907+/-575.099 $\chi^2$/NDF: 13.3/18

Left In: 103.191+/-256.930 $\chi^2$/NDF:16.6/15

+ sign -1271.254+/-230.861 $\chi^2$/NDF: 55.3/32

All: -686.142+/-164.544 $\chi^2$/NDF: 101.4/67

- sign -82.010+/-234.583 $\chi^2$/NDF: 33.0/34




Right In: 1456.301+/-0.394 $\chi^2$/NDF: 684803.6/15

Left Out: 919.434+/-0.179 $\chi^2$/NDF:426032.7/16

Right Out: 1541.520+/-0.407 $\chi^2$/NDF: 519336.6/18

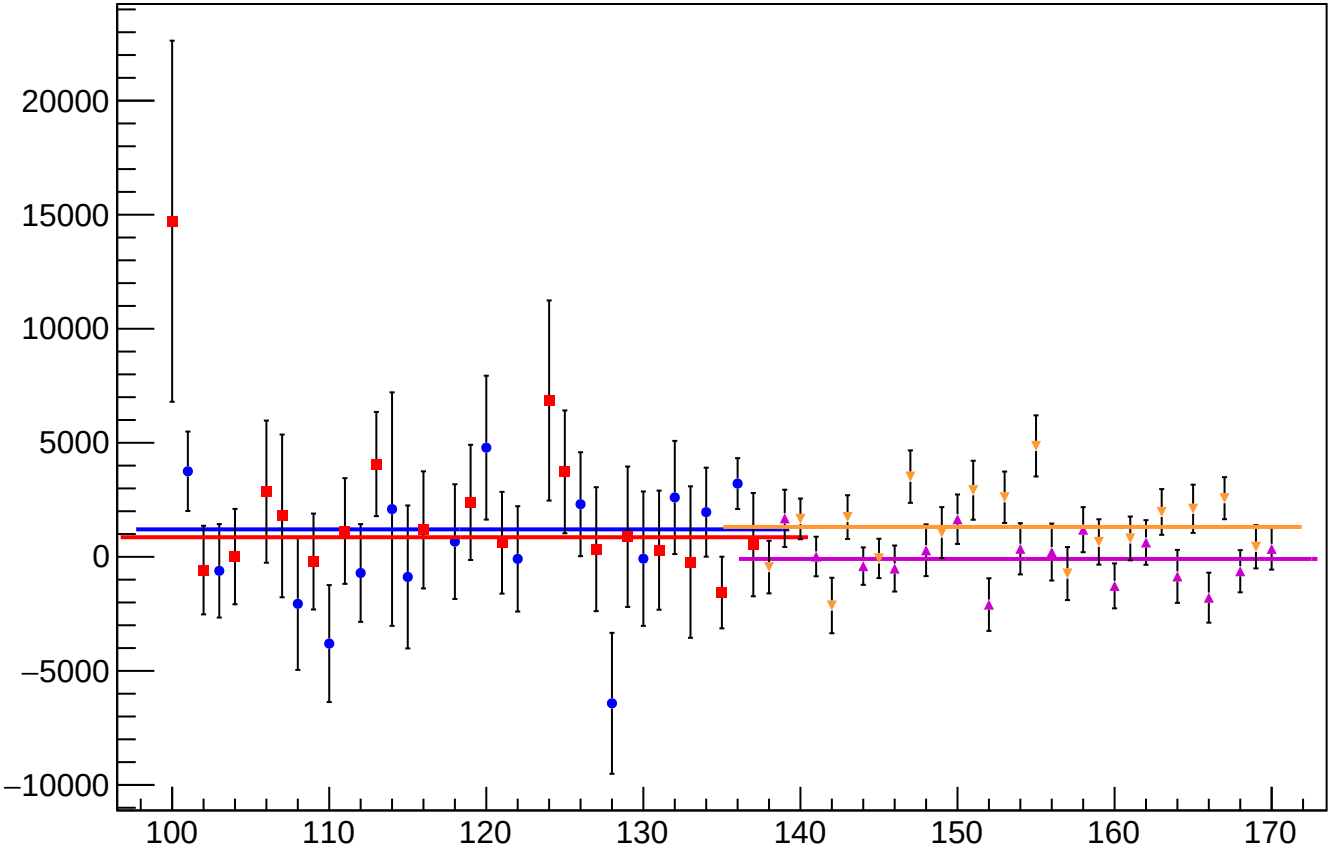
Left In: 925.640+/-0.182 $\chi^2$/NDF:374528.7/15

+ sign 1011.448+/-0.163 $\chi^2$/NDF: 2646863.0/32

All: 1019.647+/-0.116 $\chi^2$/NDF: 5457923.2/67

- sign 1028.112+/-0.166 $\chi^2$/NDF: 2805933.5/34

# asym_sam_24_68_dd_mean vs Slug




Right In: 1204.691+/-551.729 $\chi^2$/NDF: 21.1/15

Left Out: 1310.657+/-252.911 $\chi^2$/NDF:34.4/16

Right Out: 859.290+/-570.391 $\chi^2$/NDF: 12.5/18

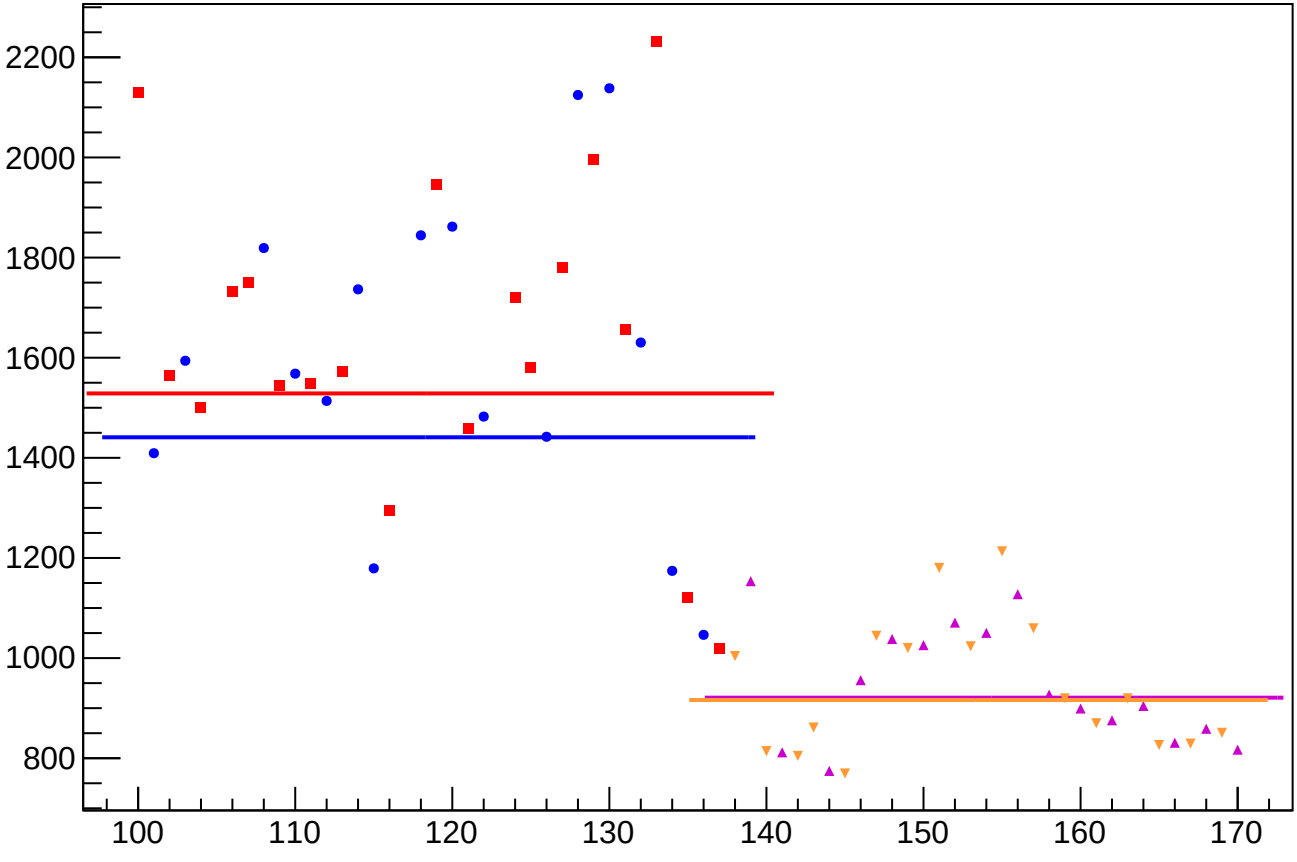
Left In: -92.475+/-255.697 $\chi^2$/NDF:15.3/15

+ sign 1292.257+/-229.907 $\chi^2$/NDF: 55.6/32

All: 688.564+/-163.764 $\chi^2$/NDF: 99.8/67

- sign 66.786+/-233.325 $\chi^2$/NDF: 30.2/34

# asym_sam_24_68_dd_rms vs Slug




Right In: 1441.025+/-0.390 $\chi^2$/NDF: 670674.6/15

Left Out: 916.258+/-0.179 $\chi^2$/NDF:437772.5/16

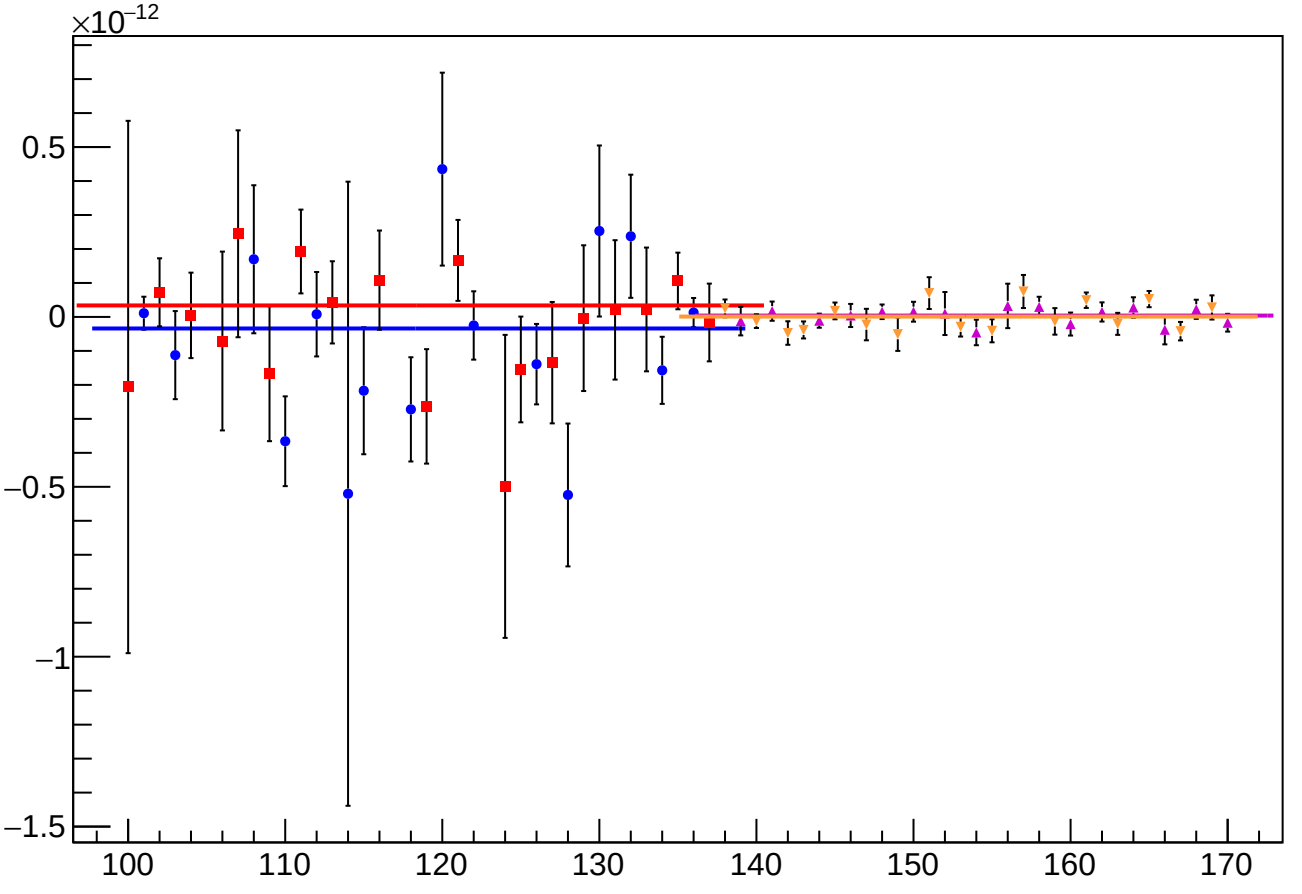
Right Out: 1528.652+/-0.403 $\chi^2$/NDF: 501717.6/18

Left In: 920.965+/-0.181 $\chi^2$/NDF:375935.2/15

+ sign 1007.380+/-0.163 $\chi^2$/NDF: 2603578.6/32

All: 1014.902+/-0.116 $\chi^2$/NDF: 5375814.4/67

- sign 1022.650+/-0.165 $\chi^2$/NDF: 2767889.2/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 27.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:27.4/16

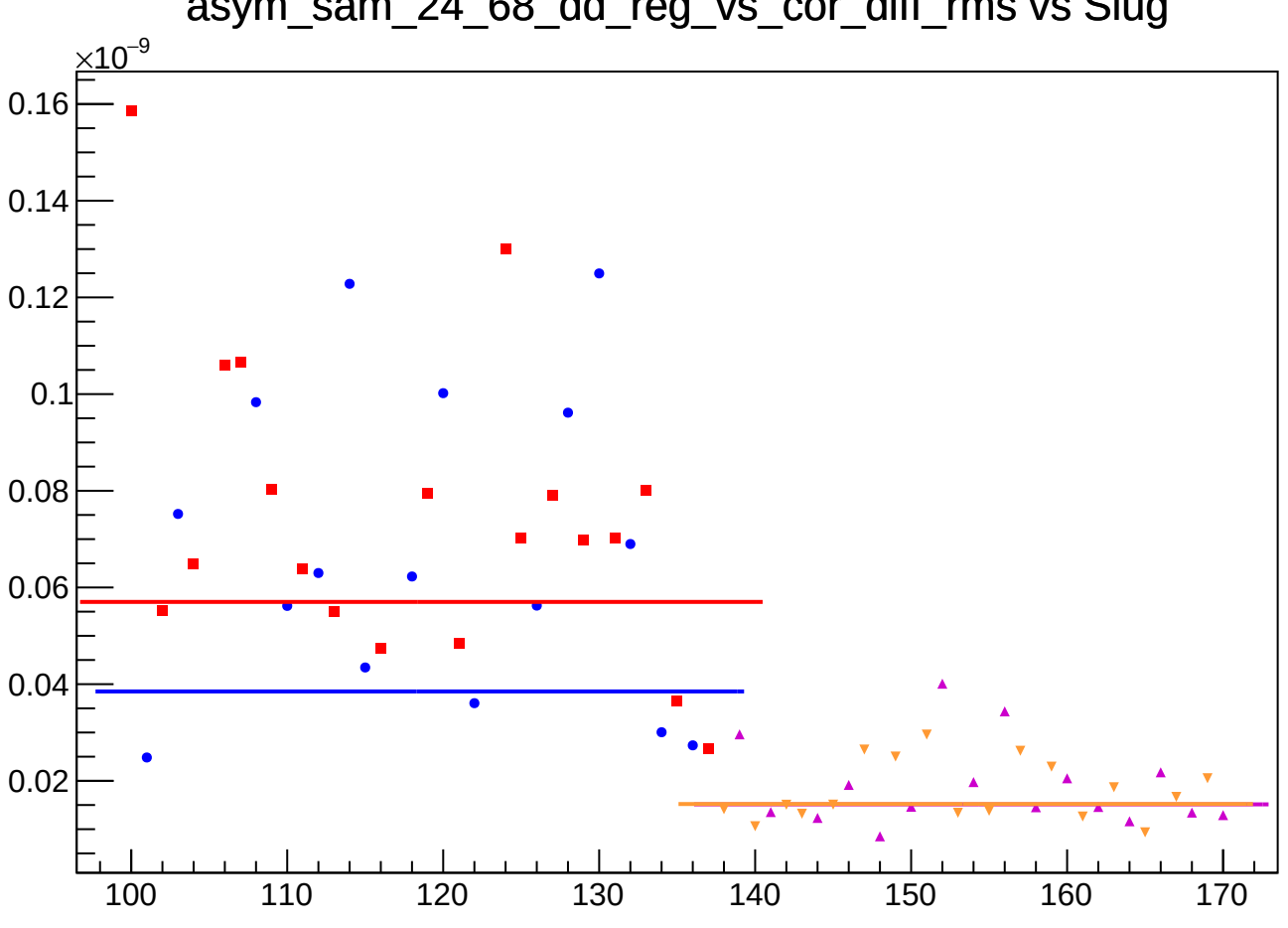
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 13.0/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:7.3/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 56.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 78.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 21.0/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1382311.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:918407.9/16

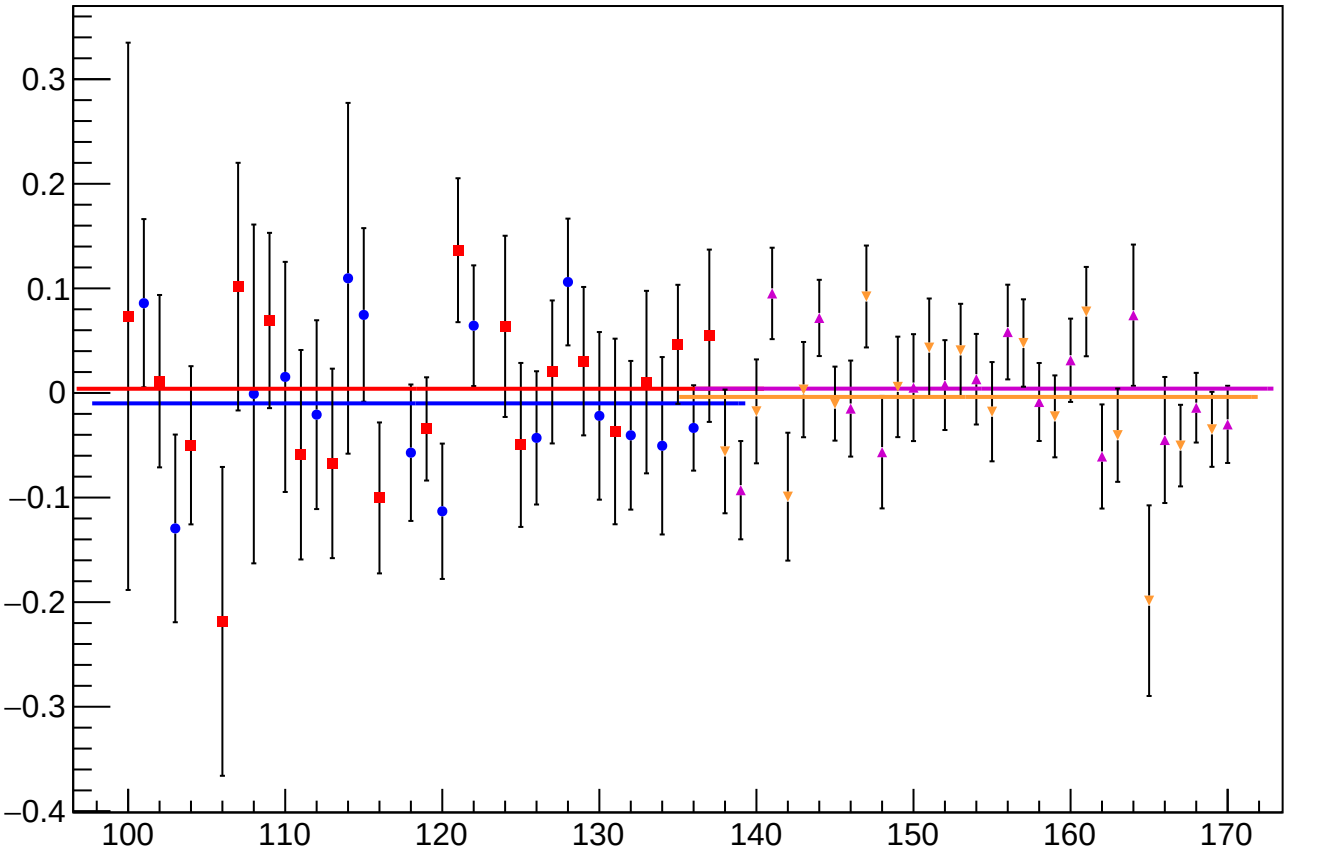
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 660994.1/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:1161088.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3897217.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 8641793.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4743927.8/34




Right In: -0.010+/-0.018 $\chi^2$/NDF: 14.2/15

Left Out: -0.004+/-0.011 $\chi^2$/NDF:22.2/16

Right Out: 0.004+/-0.018 $\chi^2$/NDF: 13.9/18

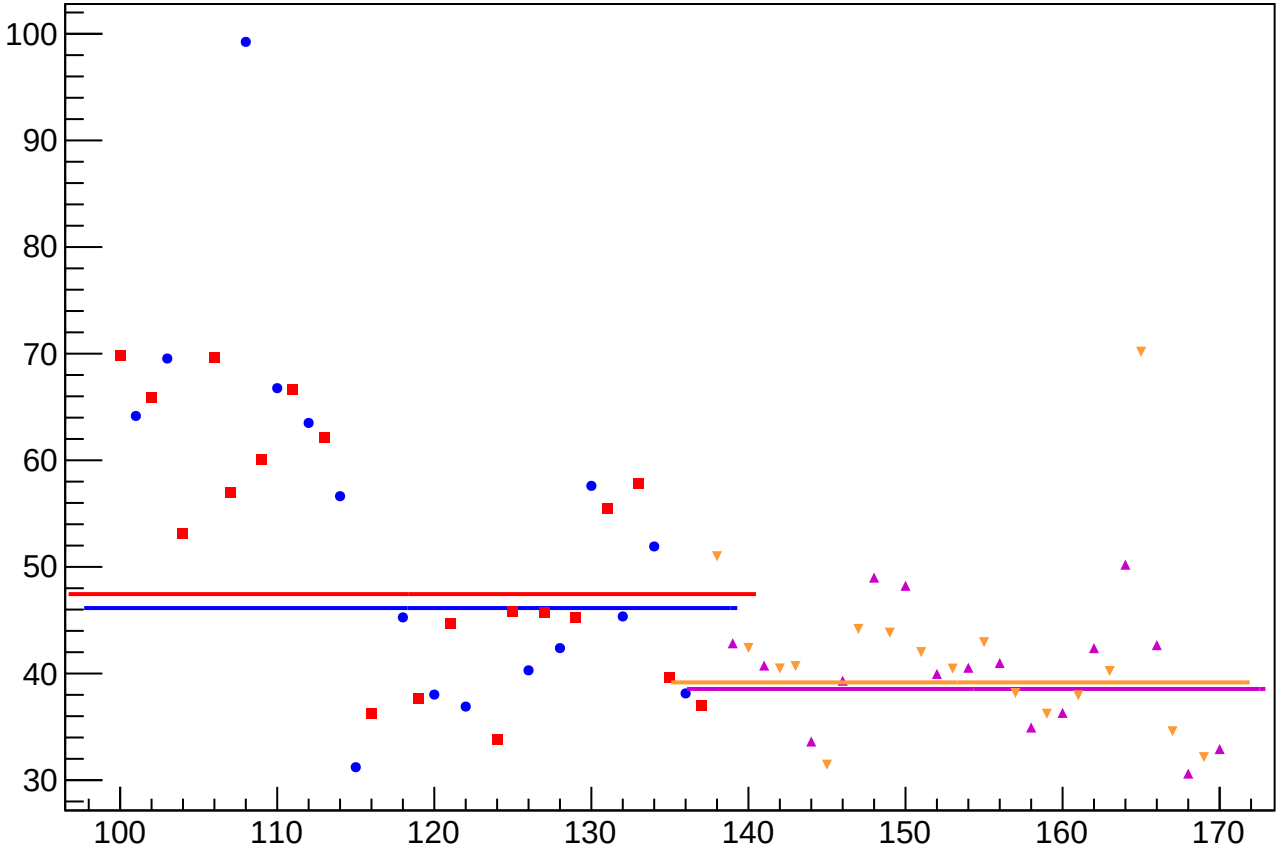
Left In: 0.004+/-0.011 $\chi^2$/NDF:20.2/15

+ sign -0.005+/-0.009 $\chi^2$/NDF: 36.5/32

All: -0.001+/-0.007 $\chi^2$/NDF: 71.0/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 34.0/34

# asym_sam_24_68_dd_dit_vs_cor_diff_rms vs Slug




Right In: 46.141+/-0.013 $\chi^2$/NDF: 903280.2/15

Left Out: 39.168+/-0.008 $\chi^2$/NDF:599423.6/16

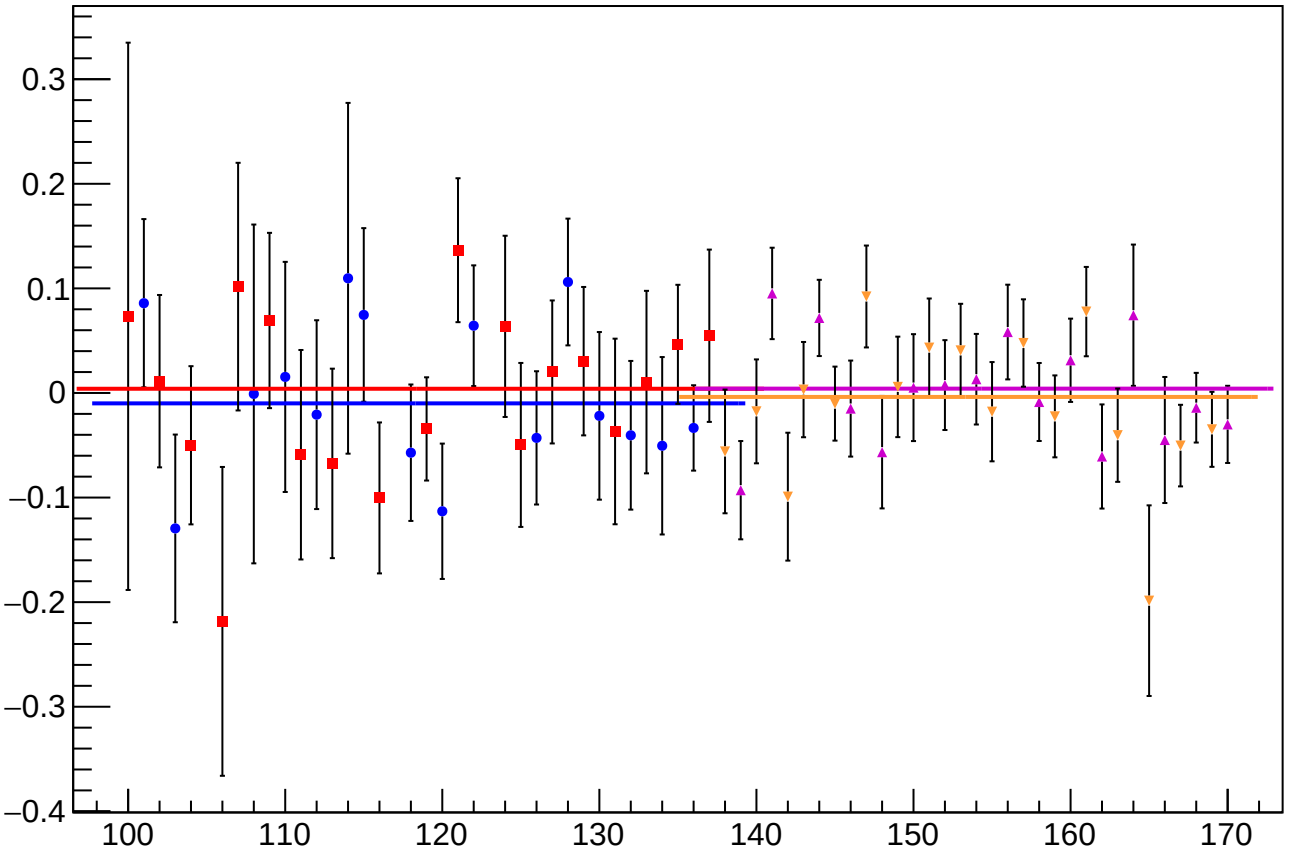
Right Out: 47.450+/-0.013 $\chi^2$/NDF: 654693.6/18

Left In: 38.554+/-0.008 $\chi^2$/NDF:484060.0/15

+ sign 41.055+/-0.007 $\chi^2$/NDF: 1721814.9/32

All: 40.993+/-0.005 $\chi^2$/NDF: 3215015.9/67

- sign 40.931+/-0.007 $\chi^2$/NDF: 1493025.1/34




Right In: -0.010+/-0.018 $\chi^2$/NDF: 14.2/15

Left Out: -0.004+/-0.011 $\chi^2$/NDF:22.2/16

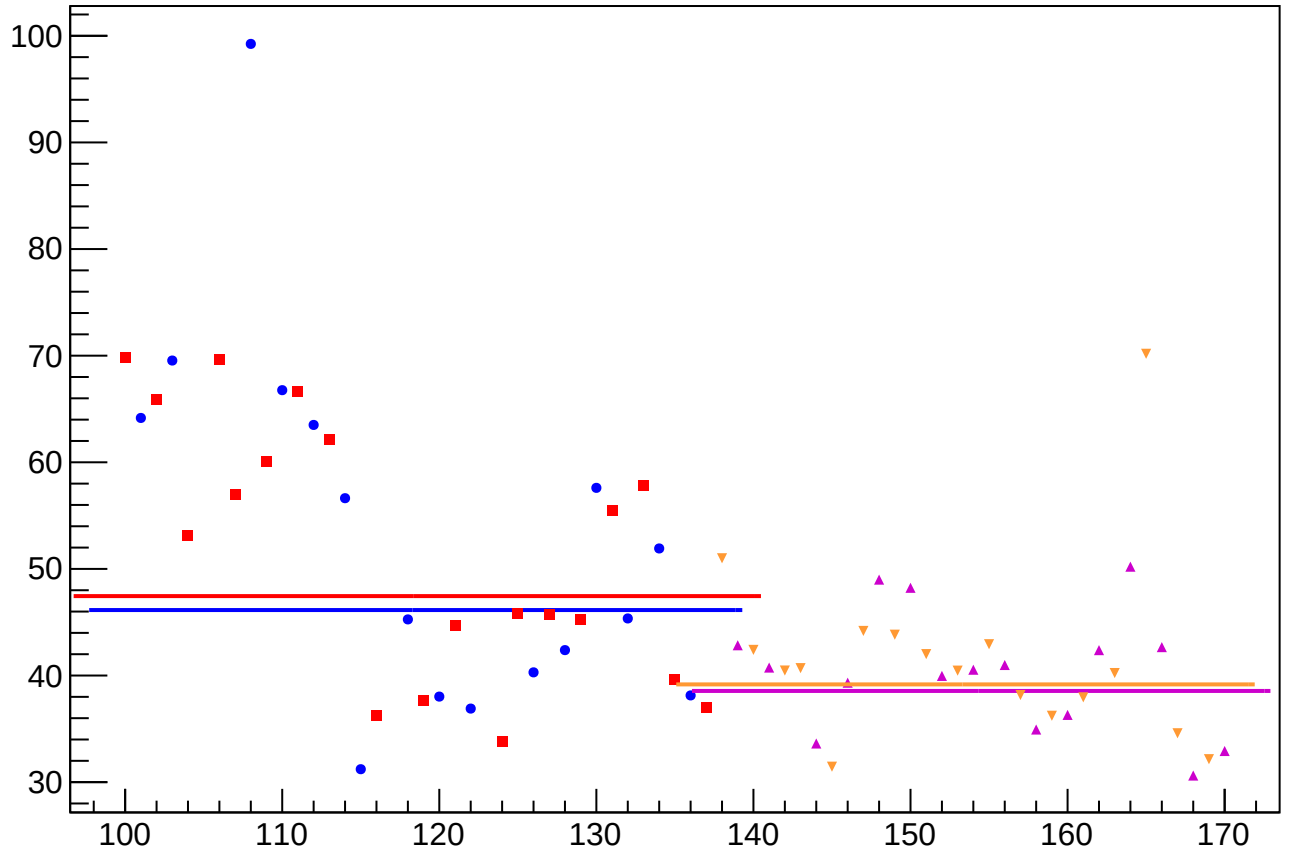
Right Out: 0.004+/-0.018 $\chi^2$/NDF: 13.9/18

Left In: 0.004+/-0.011 $\chi^2$/NDF:20.2/15

+ sign -0.005+/-0.009 $\chi^2$/NDF: 36.5/32

All: -0.001+/-0.007 $\chi^2$/NDF: 71.0/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 34.0/34




Right In: 46.141+/-0.013 $\chi^2$/NDF: 903280.2/15

Left Out: 39.168+/-0.008 $\chi^2$/NDF:599423.6/16

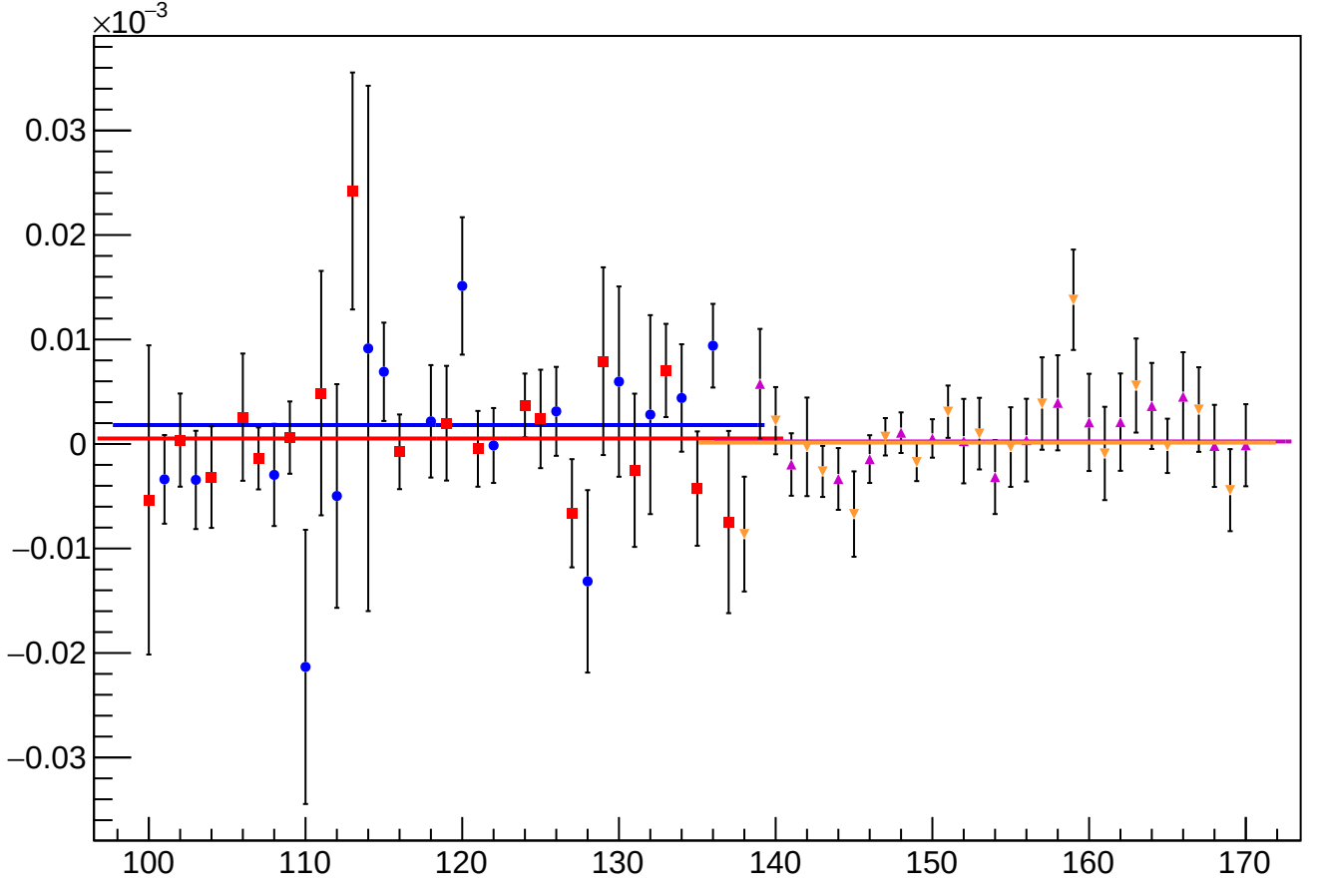
Right Out: 47.450+/-0.013 $\chi^2$/NDF: 654693.6/18

Left In: 38.554+/-0.008 $\chi^2$/NDF:484060.0/15

\+ sign 41.055+/-0.007 $\chi^2$/NDF: 1721814.9/32

All: 40.993+/-0.005 $\chi^2$/NDF: 3215015.9/67

\- sign 40.931+/-0.007 $\chi^2$/NDF: 1493025.1/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 20.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:22.0/16

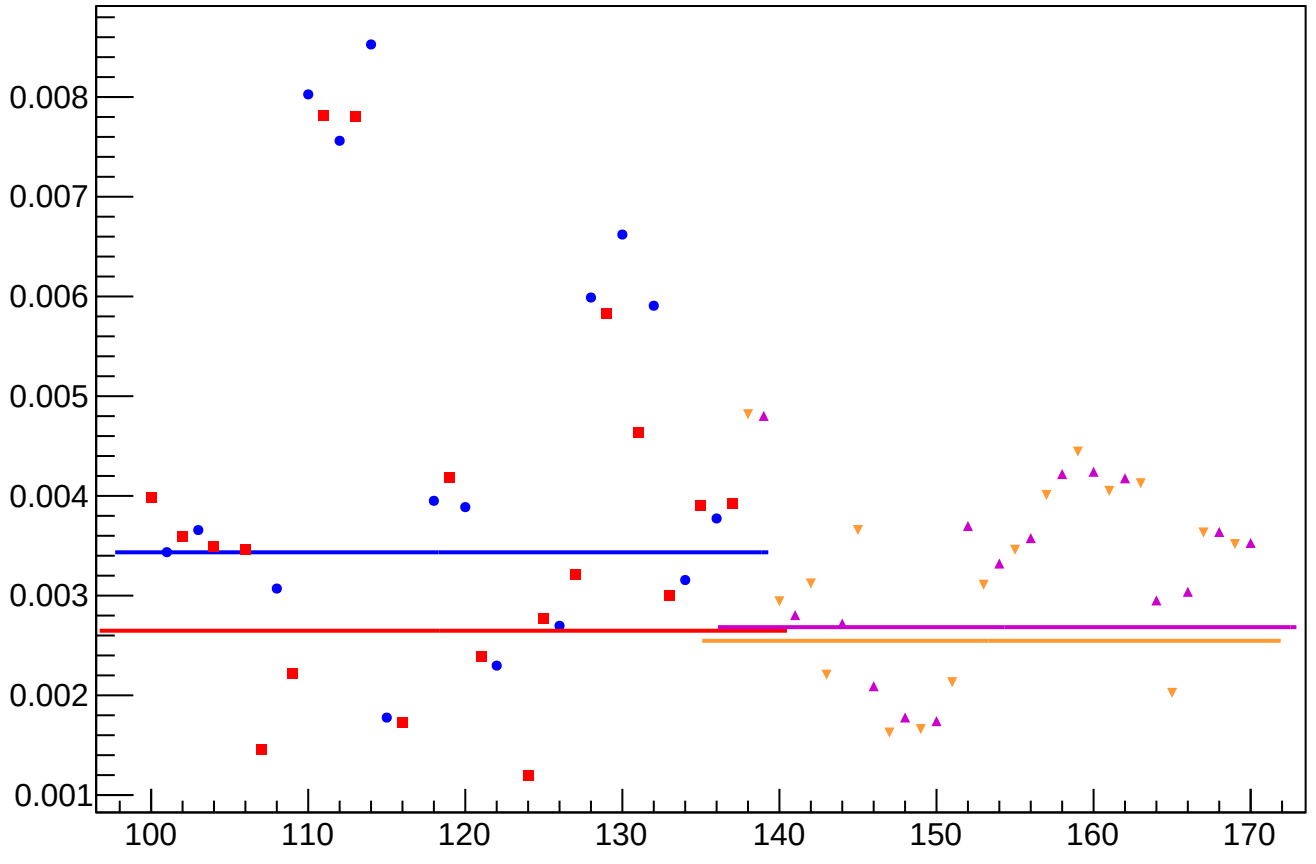
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 13.8/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:7.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 43.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 64.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 21.3/34




Right In: 0.003+/-0.000 $\chi^2$/NDF: 1748561.6/15

Left Out: 0.003+/-0.000 $\chi^2$/NDF:3166789.1/16

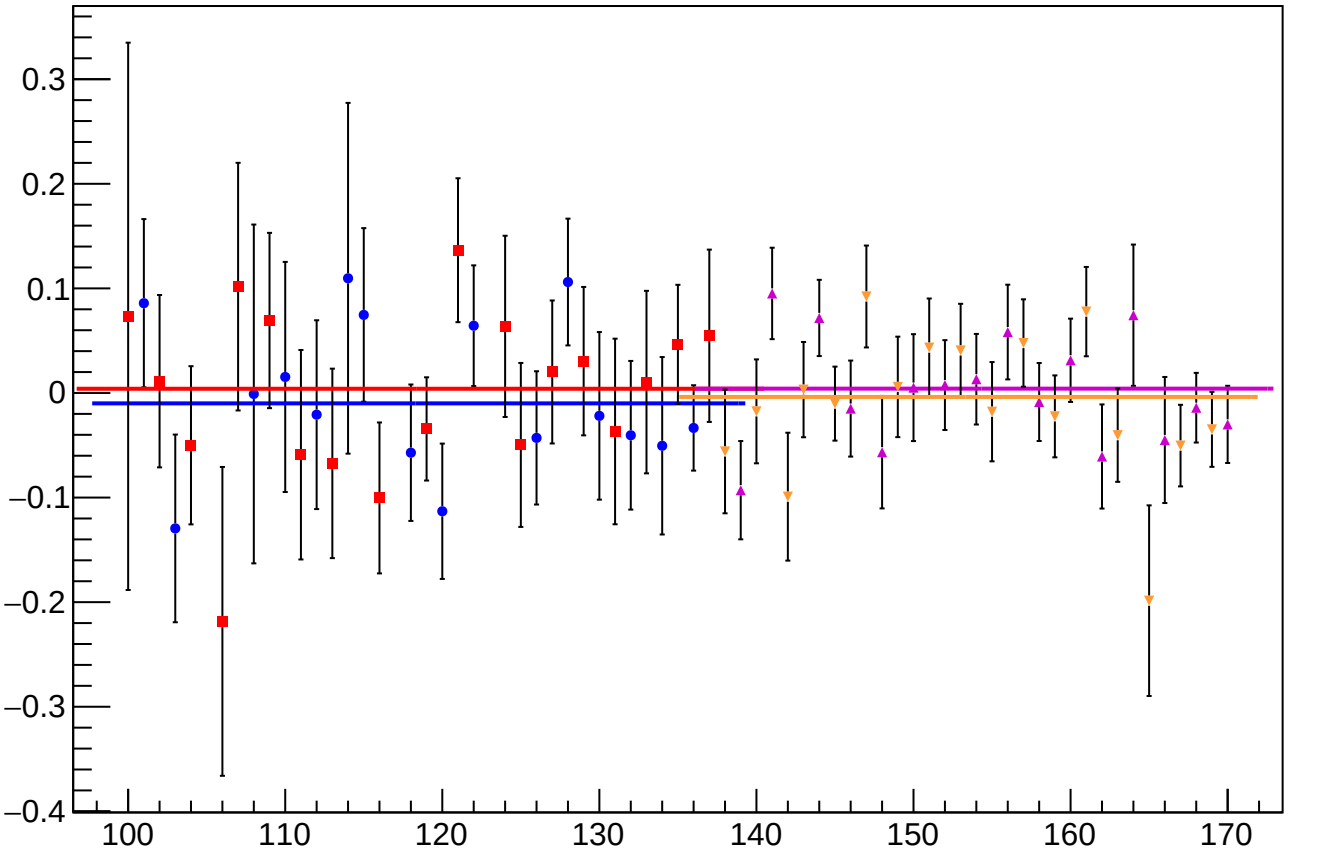
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 2696872.6/18

Left In: 0.003+/-0.000 $\chi^2$/NDF:2603949.7/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 5560762.0/32

All: 0.003+/-0.000 $\chi^2$/NDF: 10877454.2/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 5302241.9/34




Right In: -0.010+/-0.018 $\chi^2$/NDF: 14.2/15

Left Out: -0.004+/-0.011 $\chi^2$/NDF:22.2/16

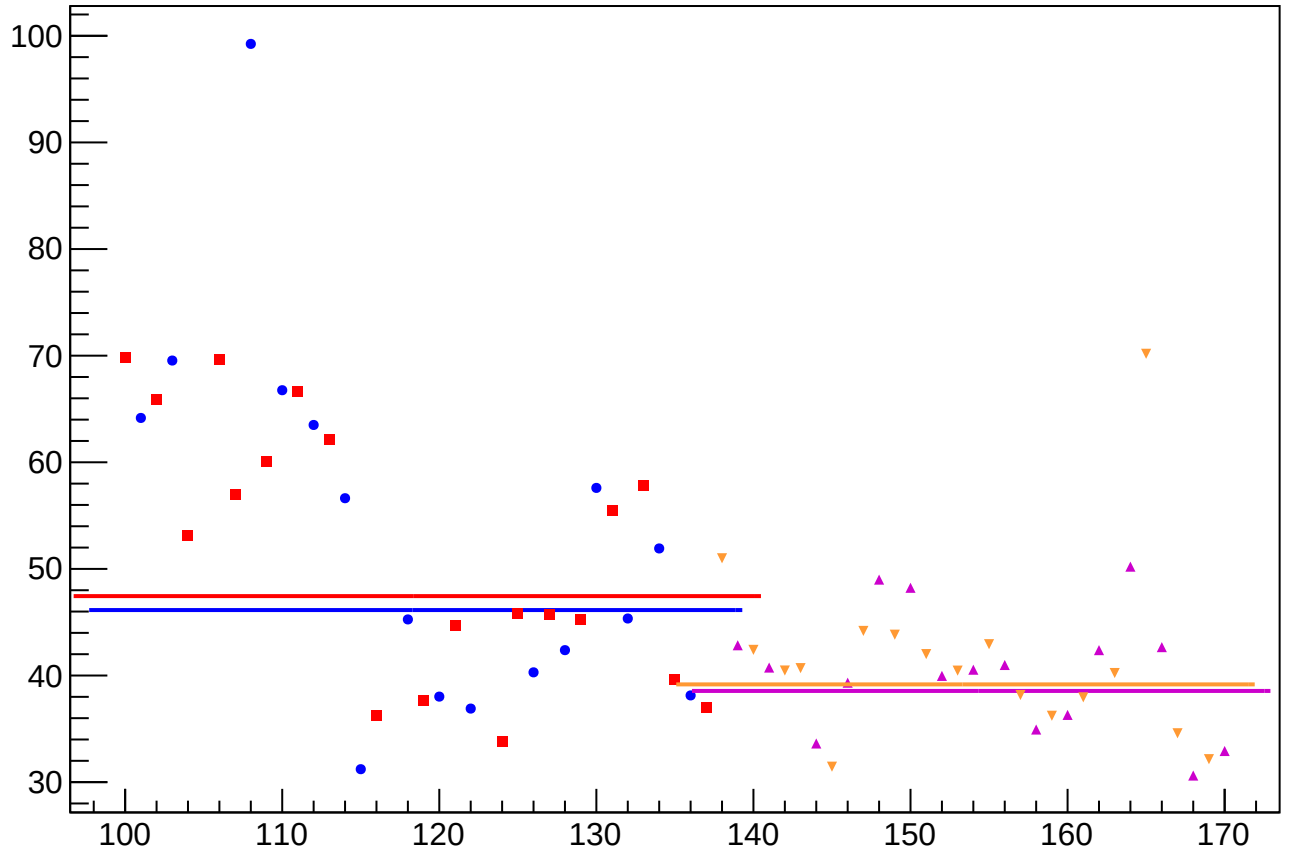
Right Out: 0.004+/-0.018 $\chi^2$/NDF: 13.9/18

Left In: 0.004+/-0.011 $\chi^2$/NDF:20.2/15

+ sign -0.005+/-0.009 $\chi^2$/NDF: 36.5/32

All: -0.001+/-0.007 $\chi^2$/NDF: 71.0/67

- sign 0.004+/-0.009 $\chi^2$/NDF: 34.0/34




Right In: 46.140+/-0.013 $\chi^2$/NDF: 903251.1/15

Left Out: 39.168+/-0.008 $\chi^2$/NDF:599460.6/16

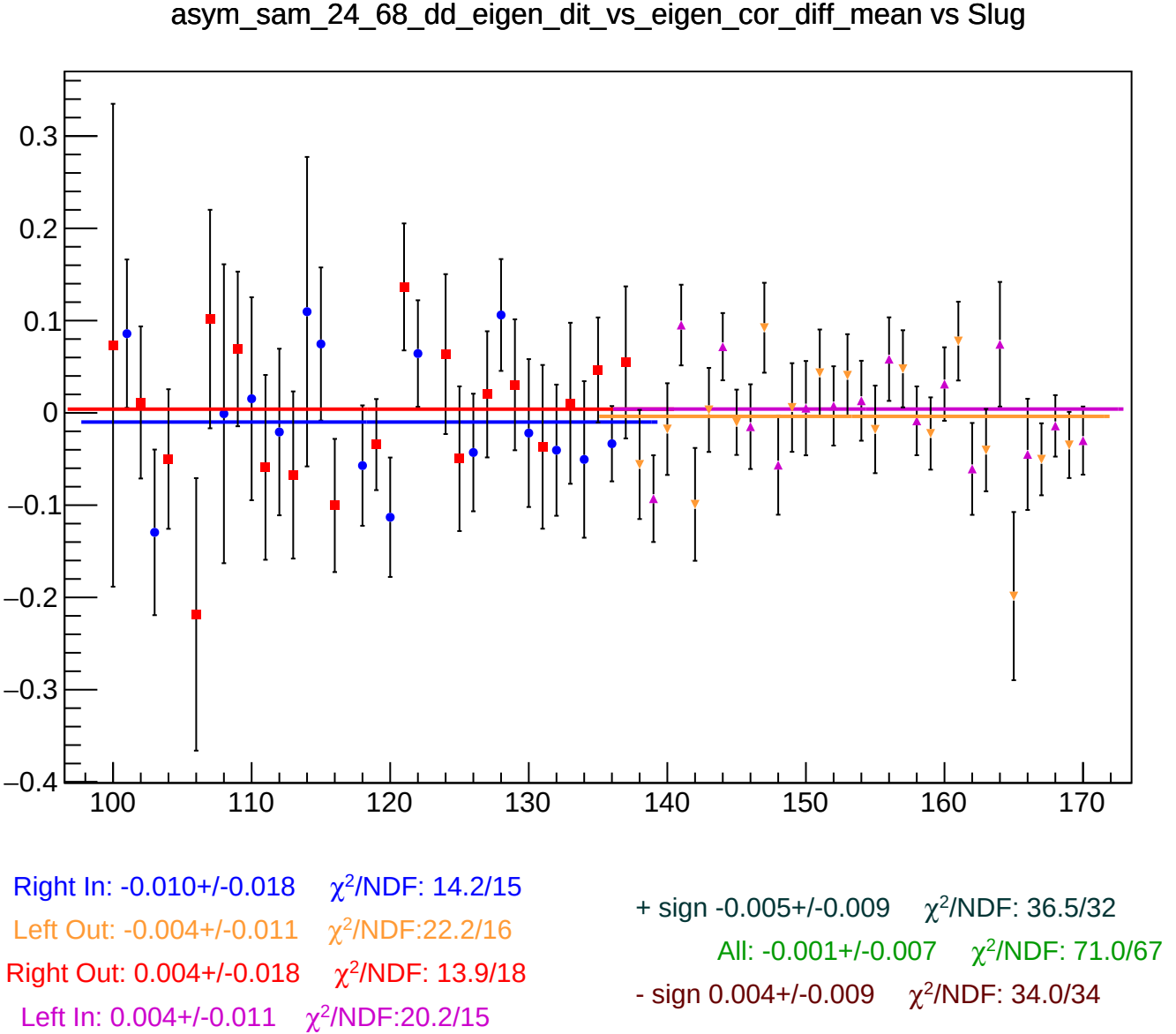
Right Out: 47.448+/-0.013 $\chi^2$/NDF: 654687.8/18

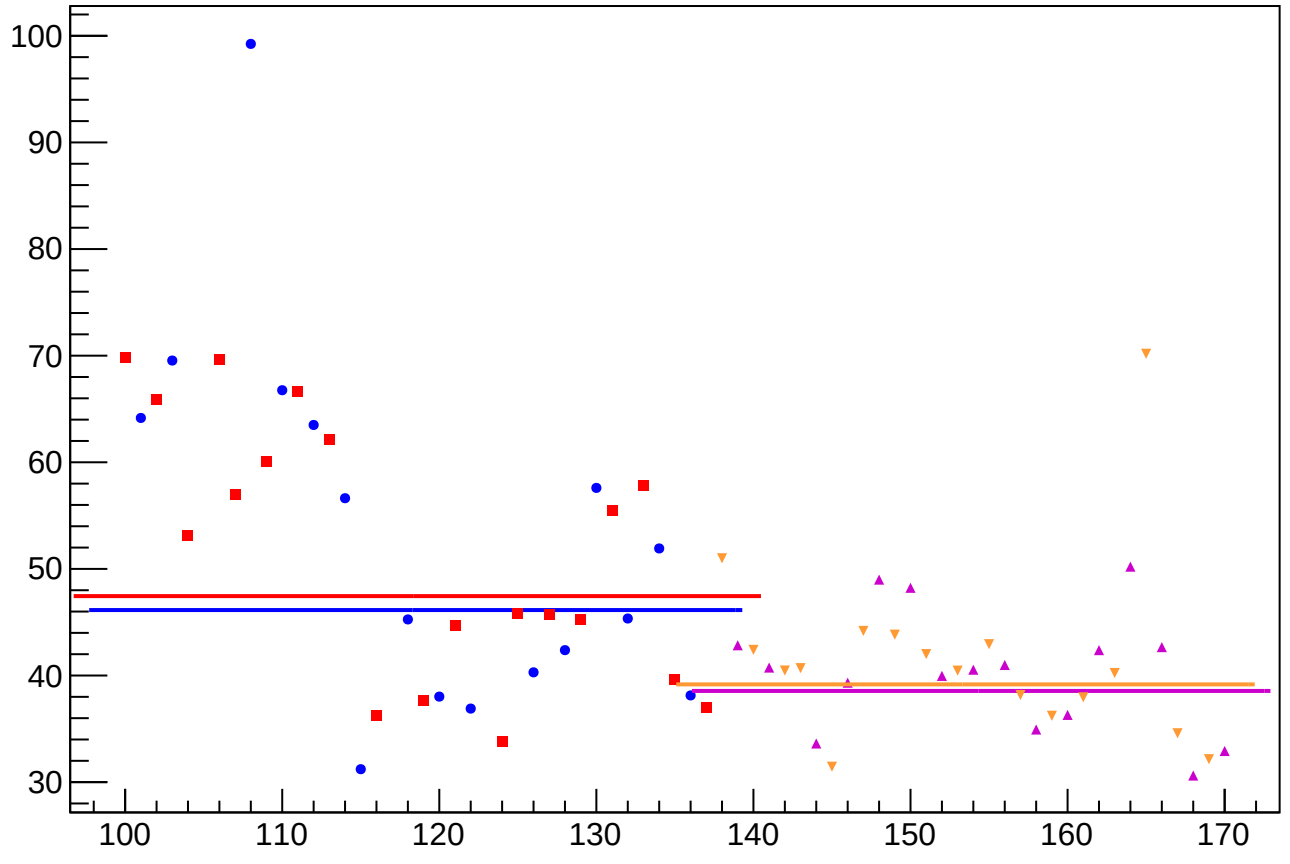
Left In: 38.554+/-0.008 $\chi^2$/NDF:484128.8/15

+ sign 41.055+/-0.007 $\chi^2$/NDF: 1721730.9/32

All: 40.993+/-0.005 $\chi^2$/NDF: 3214936.5/67

- sign 40.930+/-0.007 $\chi^2$/NDF: 1493029.2/34


asym_sam_24_68_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
100
110
120
130
140
150
160
170
Right In: -0.010+/-0.018 χ²/NDF: 14.2/15
Left Out: -0.004+/-0.011 χ²/NDF:22.2/16
Right Out: 0.004+/-0.018 χ²/NDF: 13.9/18
Left In: 0.004+/-0.011 χ²/NDF:20.2/15
+ sign -0.005+/-0.009 χ²/NDF: 36.5/32
All: -0.001+/-0.007 χ²/NDF: 71.0/67
- sign 0.004+/-0.009 χ²/NDF: 34.0/34




Right In: 46.140+/-0.013 $\chi^2$/NDF: 903251.1/15

Left Out: 39.168+/-0.008 $\chi^2$/NDF:599460.6/16

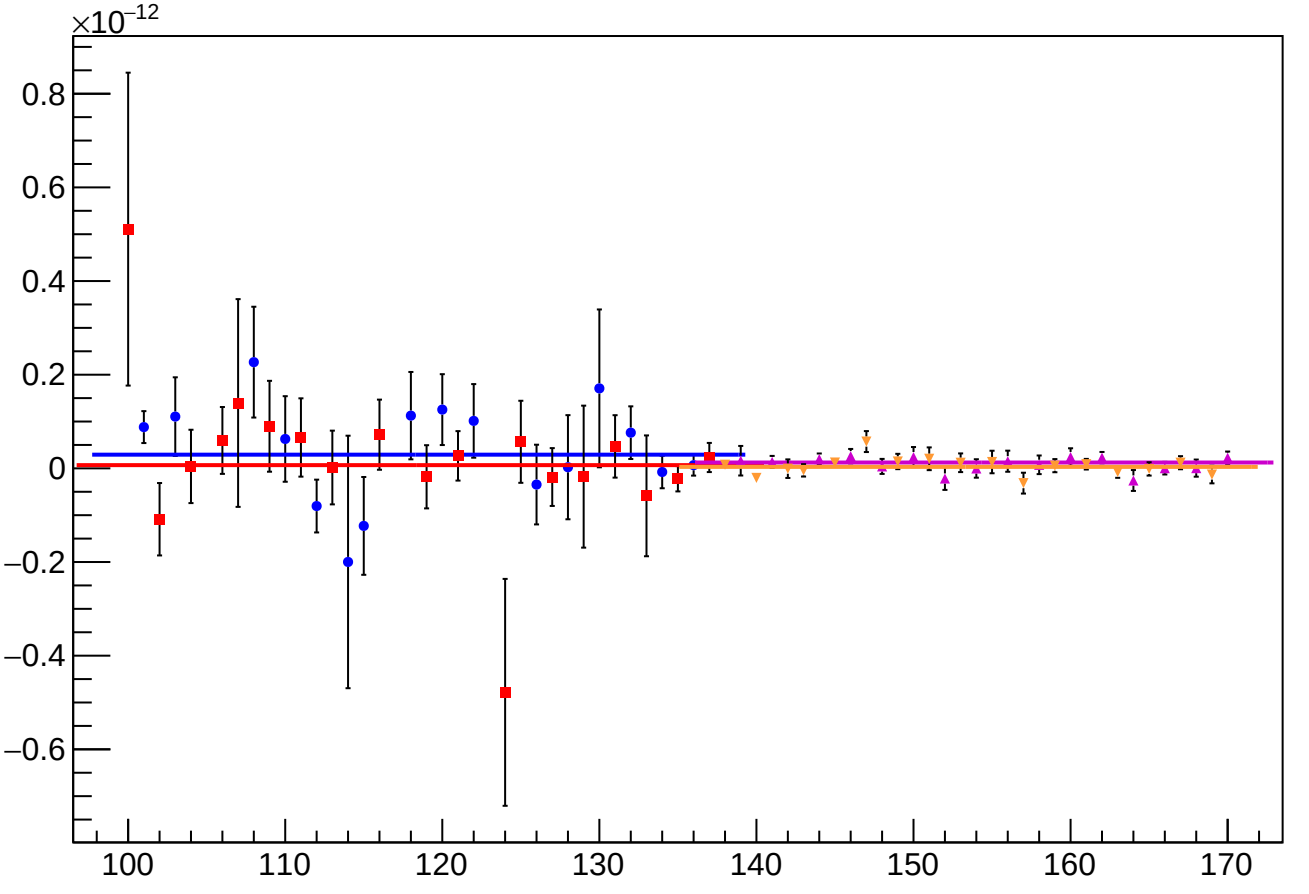
Right Out: 47.448+/-0.013 $\chi^2$/NDF: 654687.8/18

Left In: 38.554+/-0.008 $\chi^2$/NDF:484128.8/15

+ sign 41.055+/-0.007 $\chi^2$/NDF: 1721730.9/32

All: 40.993+/-0.005 $\chi^2$/NDF: 3214936.5/67

- sign 40.930+/-0.007 $\chi^2$/NDF: 1493029.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 20.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:18.4/16

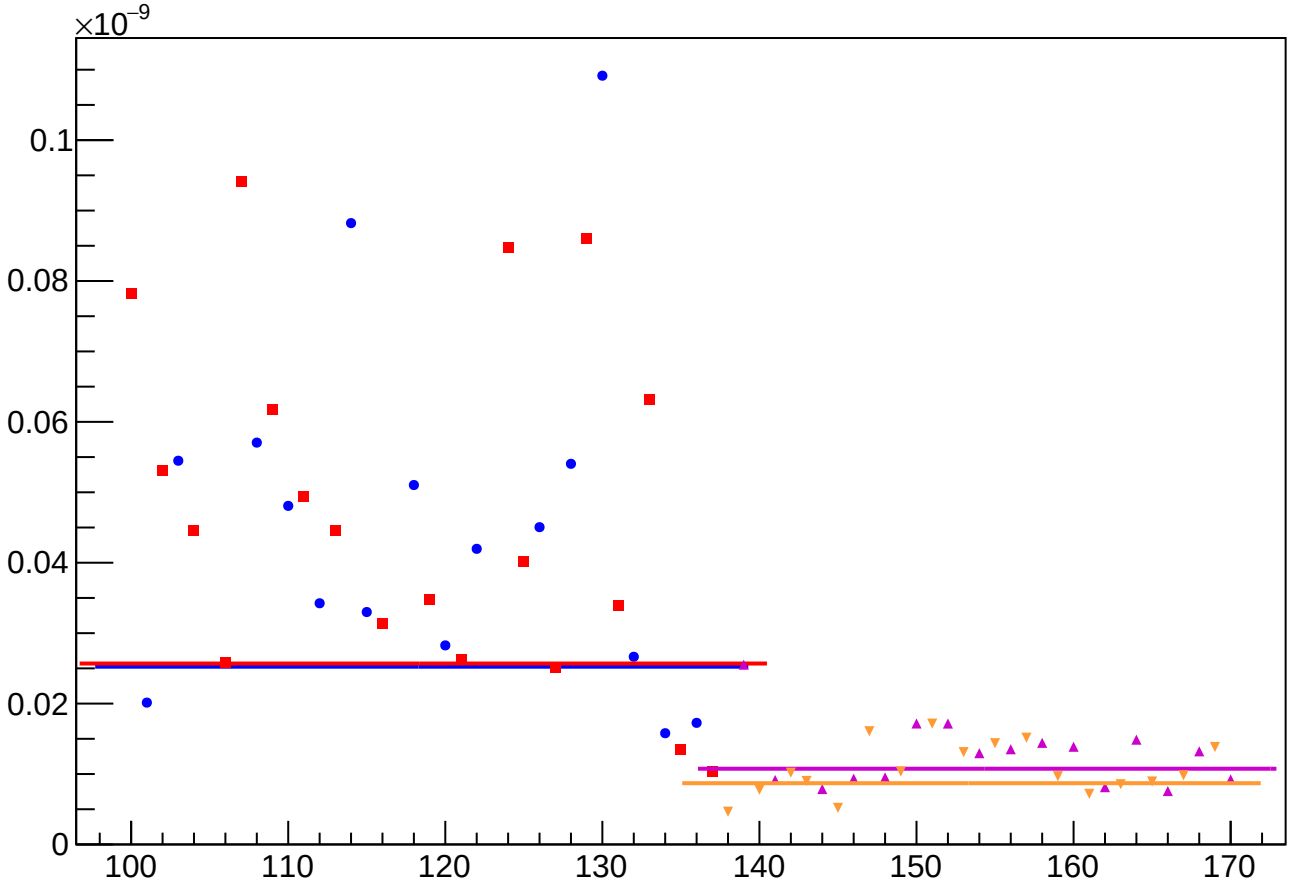
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:10.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 42.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 69.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 24.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2117960.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1704281.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2790840.2/18

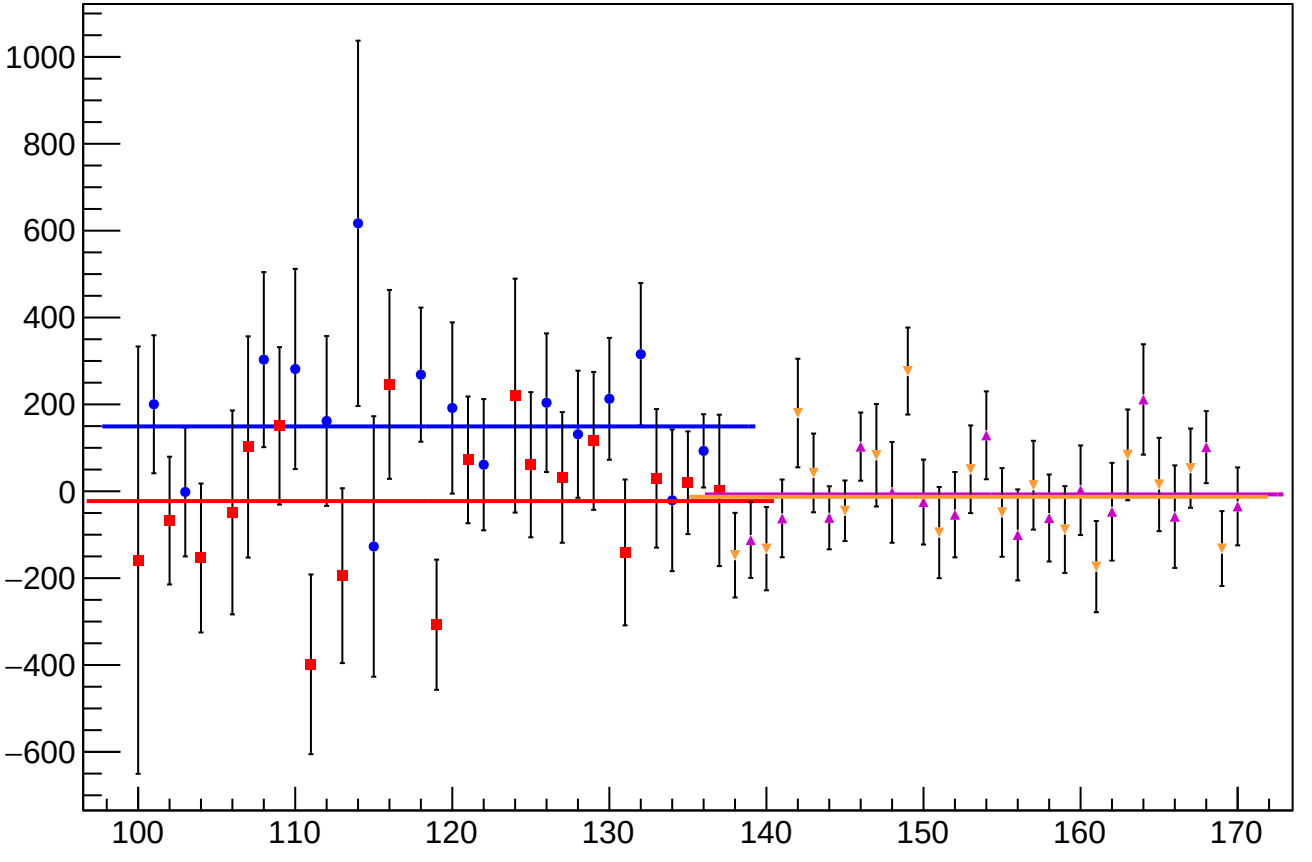
Left In: 0.000+/-0.000 $\chi^2$/NDF:1449036.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 6635788.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 13236604.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 6244143.7/34

# reg_asym_sam_26_48_dd_mean vs Slug




Right In: 149.303+/-39.687 $\chi^2$/NDF: 8.0/15

Left Out: -12.800+/-23.694 $\chi^2$/NDF:22.9/16

Right Out: -22.549+/-40.100 $\chi^2$/NDF: 14.2/18

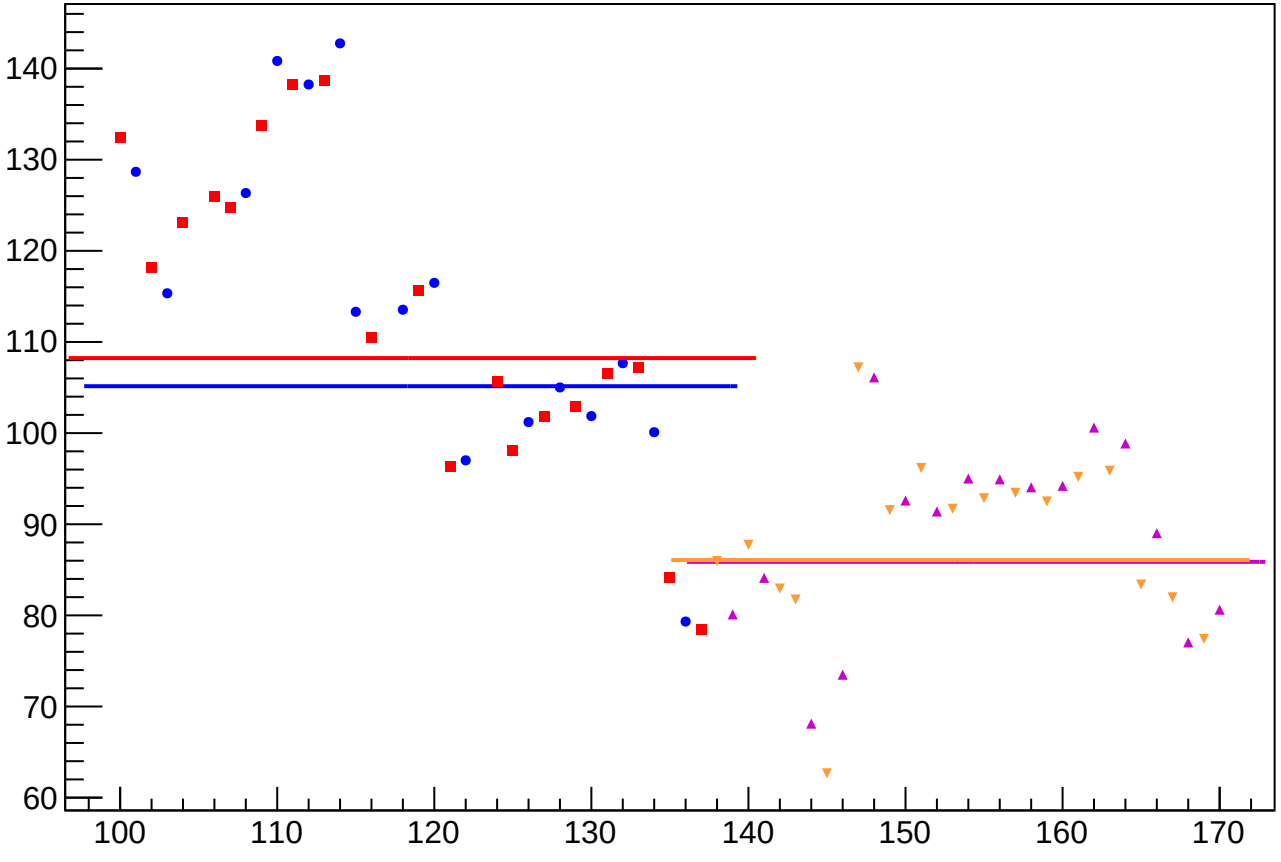
Left In: -7.244+/-23.867 $\chi^2$/NDF:12.6/15

\+ sign 29.795+/-20.344 $\chi^2$/NDF: 43.2/32

All: 9.440+/-14.443 $\chi^2$/NDF: 72.2/67

\- sign -11.247+/-20.509 $\chi^2$/NDF: 26.9/34

# reg_asym_sam_26_48_dd_rms vs Slug




Right In: 105.146+/-0.028 $\chi^2$/NDF: 408406.3/15

Left Out: 86.071+/-0.017 $\chi^2$/NDF:412072.5/16

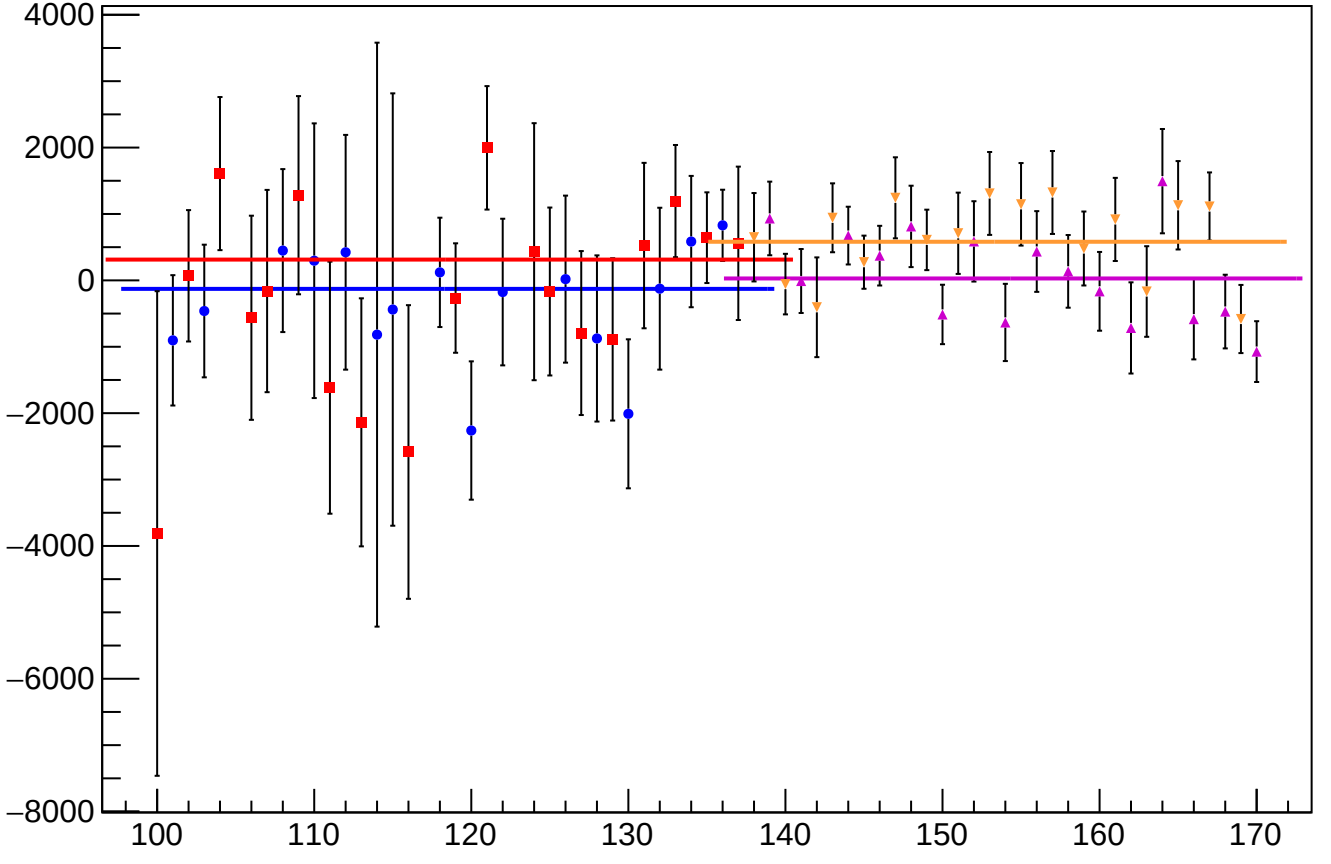
Right Out: 108.233+/-0.028 $\chi^2$/NDF: 349936.1/18

Left In: 85.873+/-0.017 $\chi^2$/NDF:399320.6/15

\+ sign 91.083+/-0.014 $\chi^2$/NDF: 1161111.3/32

All: 91.400+/-0.010 $\chi^2$/NDF: 2370512.6/67

\- sign 91.722+/-0.015 $\chi^2$/NDF: 1208423.6/34




Right In: -128.056+/-268.611 $\chi^2$/NDF: 12.3/15

Left Out: 581.491+/-135.503 $\chi^2$/NDF:18.0/16

Right Out: 313.031+/-270.131 $\chi^2$/NDF: 15.0/18

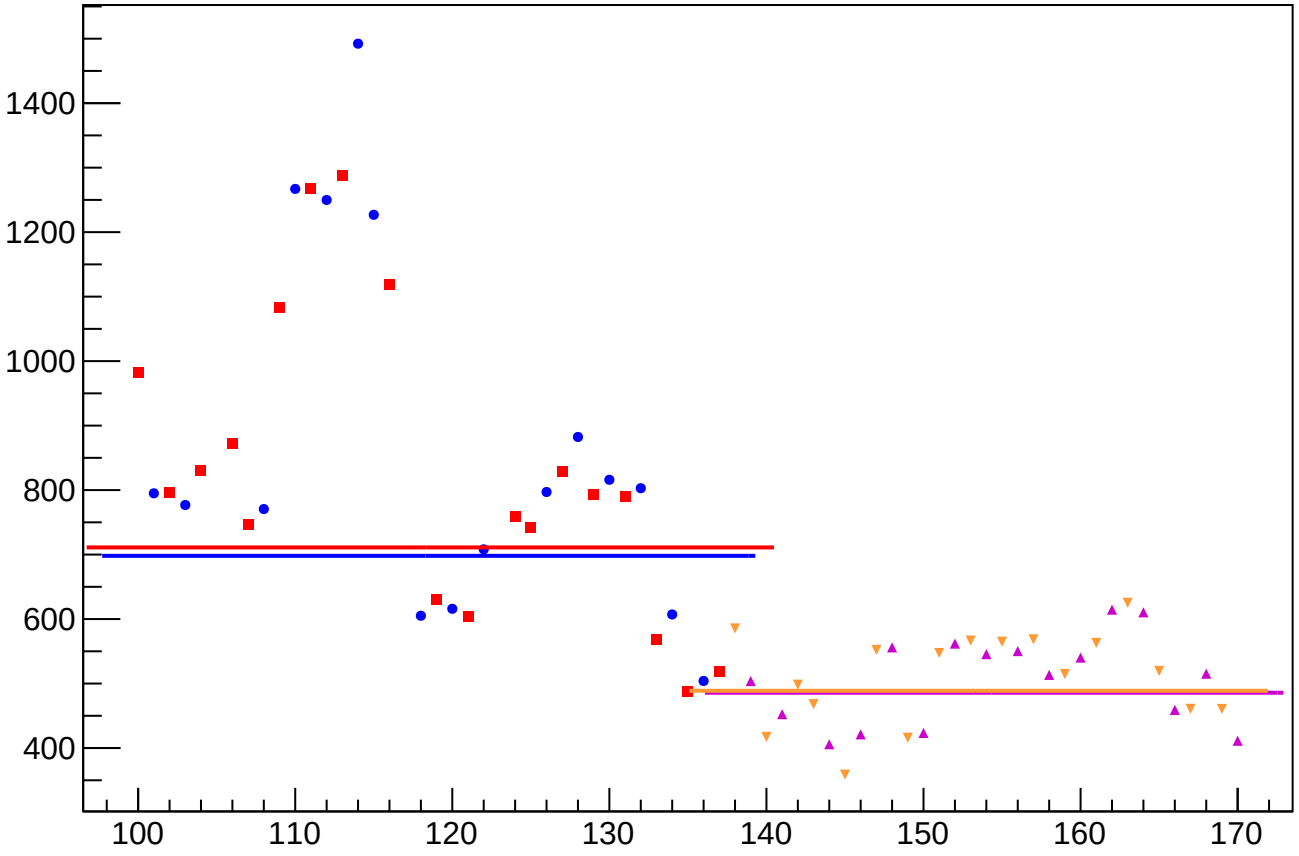
Left In: 28.705+/-135.445 $\chi^2$/NDF:23.6/15

\+ sign 437.555+/-120.981 $\chi^2$/NDF: 35.9/32

All: 261.830+/-85.581 $\chi^2$/NDF: 79.5/67

\- sign 85.826+/-121.077 $\chi^2$/NDF: 39.5/34

# asym_sam_26_48_dd_reg_correction_rms vs Slug




Right In: 698.055+/-0.190 $\chi^2$/NDF: 912851.5/15

Left Out: 488.793+/-0.096 $\chi^2$/NDF:619605.2/16

Right Out: 711.088+/-0.191 $\chi^2$/NDF: 1035118.4/18

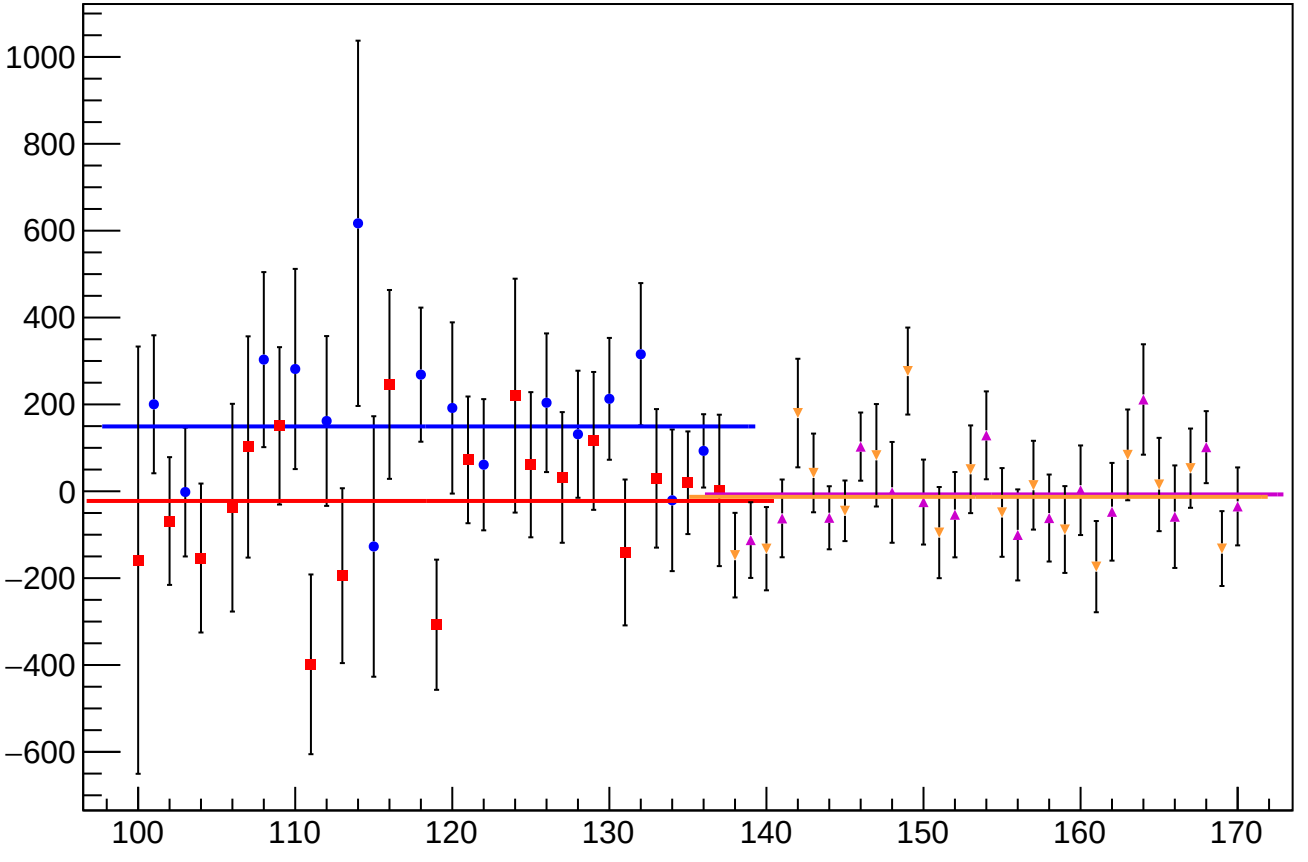
Left In: 485.764+/-0.096 $\chi^2$/NDF:466210.1/15

+ sign 531.243+/-0.086 $\chi^2$/NDF: 2500063.7/32

All: 531.137+/-0.061 $\chi^2$/NDF: 5113370.3/67

- sign 531.032+/-0.086 $\chi^2$/NDF: 2613303.5/34

# cor_asym_sam_26_48_dd_mean vs Slug




Right In: 149.294+/-39.687 $\chi^2$/NDF: 8.0/15

Left Out: -12.802+/-23.694 $\chi^2$/NDF:22.9/16

Right Out: -22.297+/-40.123 $\chi^2$/NDF: 14.2/18

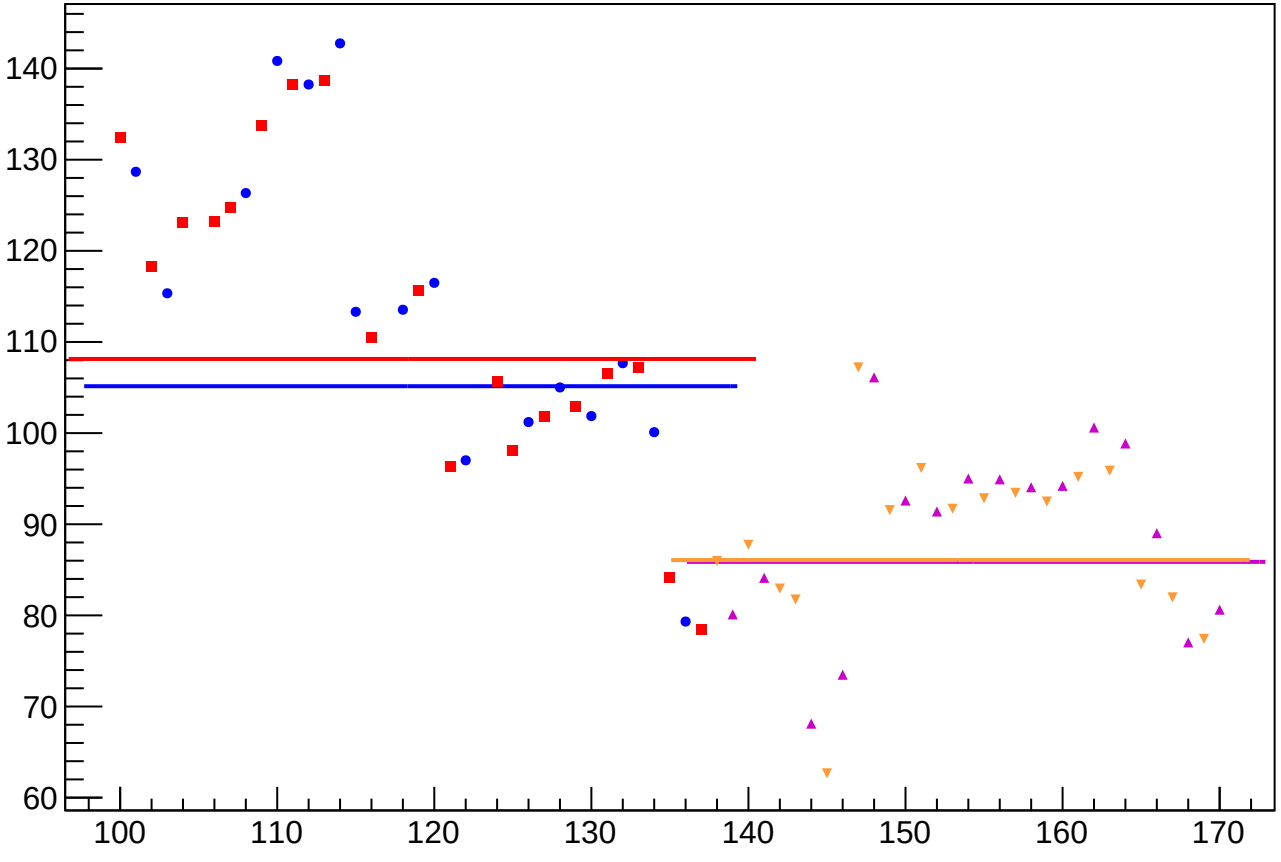
Left In: -7.245+/-23.867 $\chi^2$/NDF:12.6/15

+ sign 29.791+/-20.344 $\chi^2$/NDF: 43.2/32

All: 9.475+/-14.445 $\chi^2$/NDF: 72.1/67

- sign -11.179+/-20.512 $\chi^2$/NDF: 26.9/34

# cor_asym_sam_26_48_dd_rms vs Slug




Right In: 105.146+/-0.028 $\chi^2$/NDF: 408406.5/15

Left Out: 86.071+/-0.017 $\chi^2$/NDF:412072.5/16

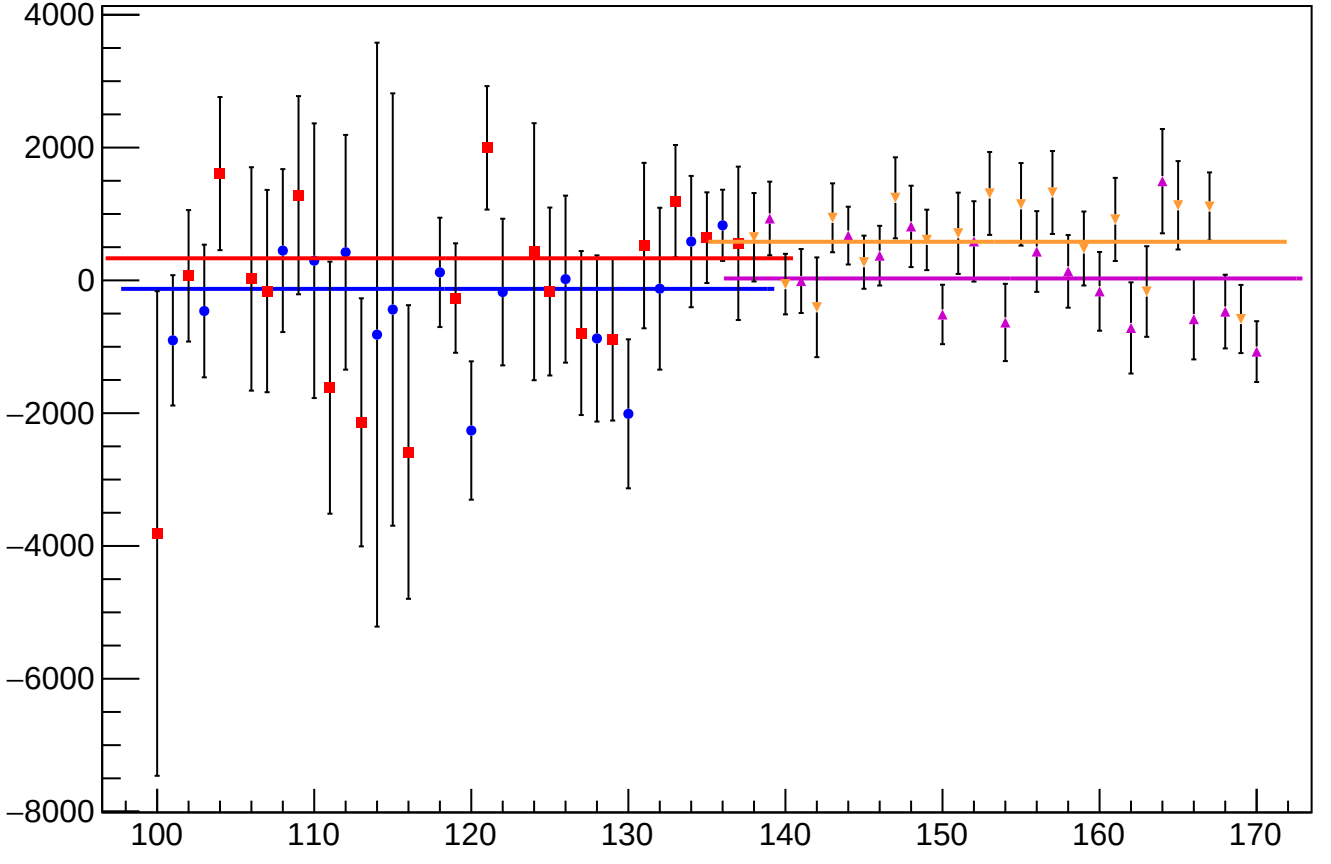
Right Out: 108.136+/-0.028 $\chi^2$/NDF: 346321.9/18

Left In: 85.873+/-0.017 $\chi^2$/NDF:399320.7/15

+ sign 91.083+/-0.014 $\chi^2$/NDF: 1161111.6/32

All: 91.385+/-0.010 $\chi^2$/NDF: 2362488.8/67

- sign 91.692+/-0.015 $\chi^2$/NDF: 1200489.1/34




Right In: -128.047+/-268.611 $\chi^2$/NDF: 12.3/15

Left Out: 581.492+/-135.504 $\chi^2$/NDF:18.0/16

Right Out: 332.665+/-270.835 $\chi^2$/NDF: 14.7/18

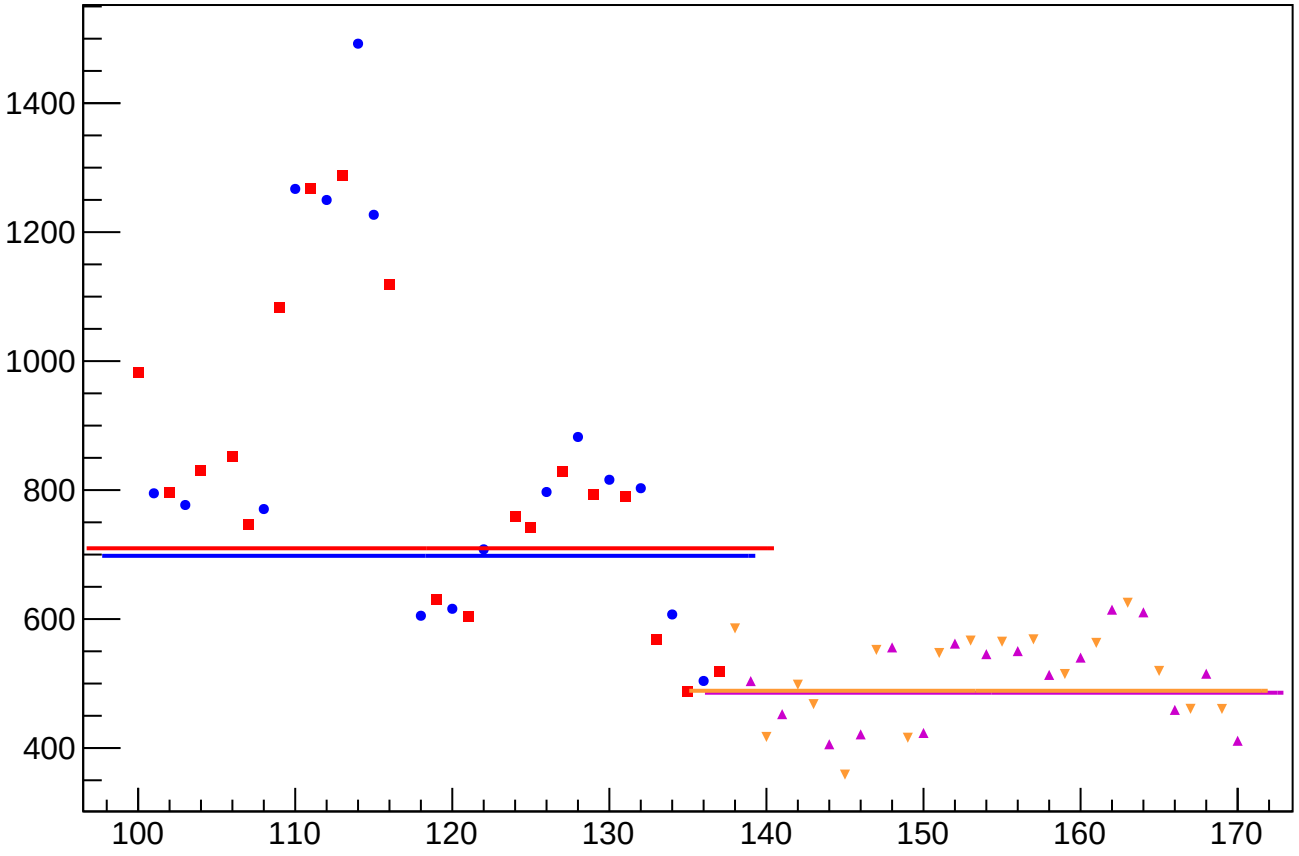
Left In: 28.706+/-135.445 $\chi^2$/NDF:23.6/15

+ sign 437.557+/-120.981 $\chi^2$/NDF: 35.9/32

All: 263.766+/-85.603 $\chi^2$/NDF: 79.3/67

- sign 89.517+/-121.141 $\chi^2$/NDF: 39.3/34

# asym_sam_26_48_dd_cor_correction_rms vs Slug




Right In: 698.055+/-0.190 $\chi^2$/NDF: 912861.2/15

Left Out: 488.793+/-0.096 $\chi^2$/NDF:619604.9/16

Right Out: 709.748+/-0.192 $\chi^2$/NDF: 1027114.2/18

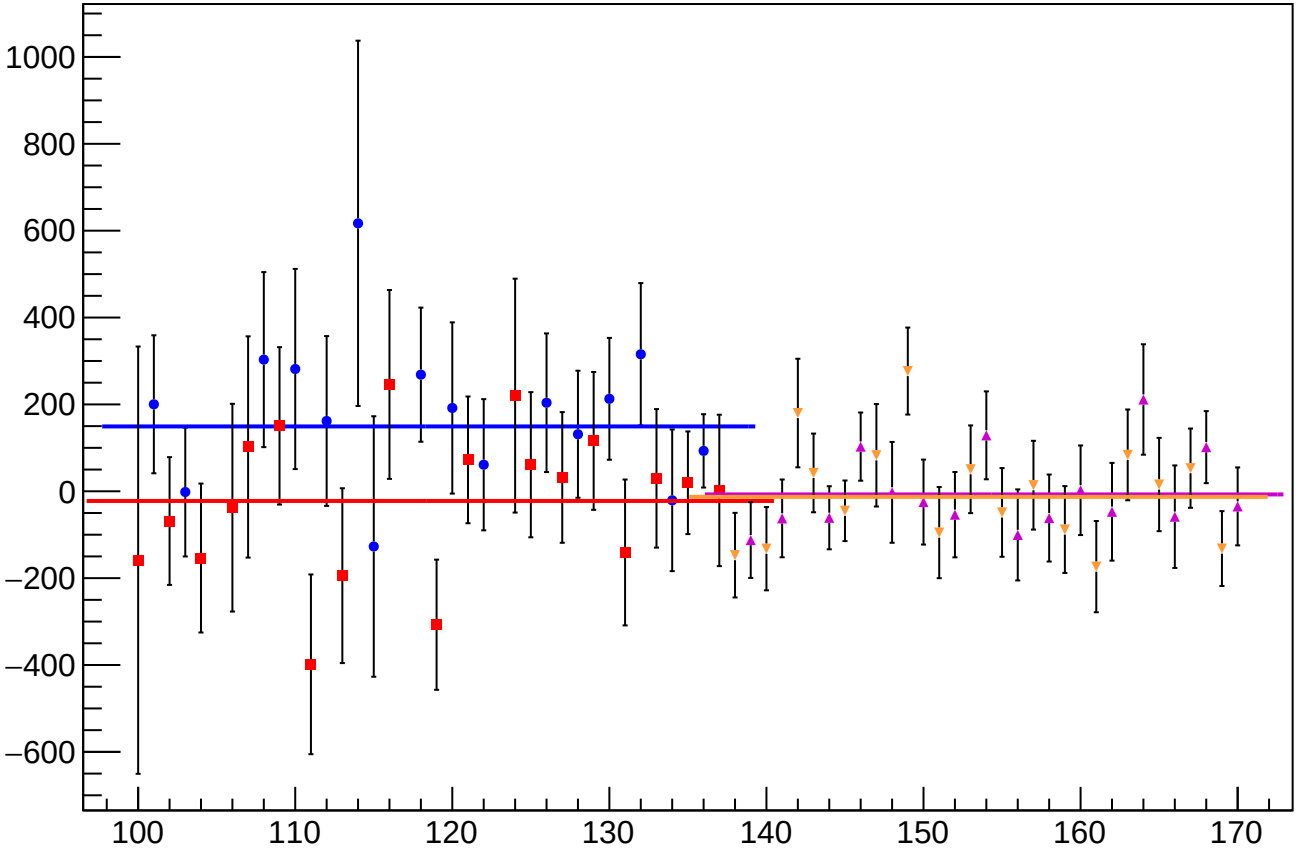
Left In: 485.765+/-0.096 $\chi^2$/NDF:466211.6/15

+ sign 531.243+/-0.086 $\chi^2$/NDF: 2500075.2/32

All: 530.910+/-0.061 $\chi^2$/NDF: 5087658.6/67

- sign 530.576+/-0.086 $\chi^2$/NDF: 2587553.0/34

# eigen_cor_asym_sam_26_48_dd_mean vs Slug




Right In: 149.294+/-39.687 $\chi^2$/NDF: 8.0/15

Left Out: -12.802+/-23.694 $\chi^2$/NDF:22.9/16

Right Out: -22.297+/-40.123 $\chi^2$/NDF: 14.2/18

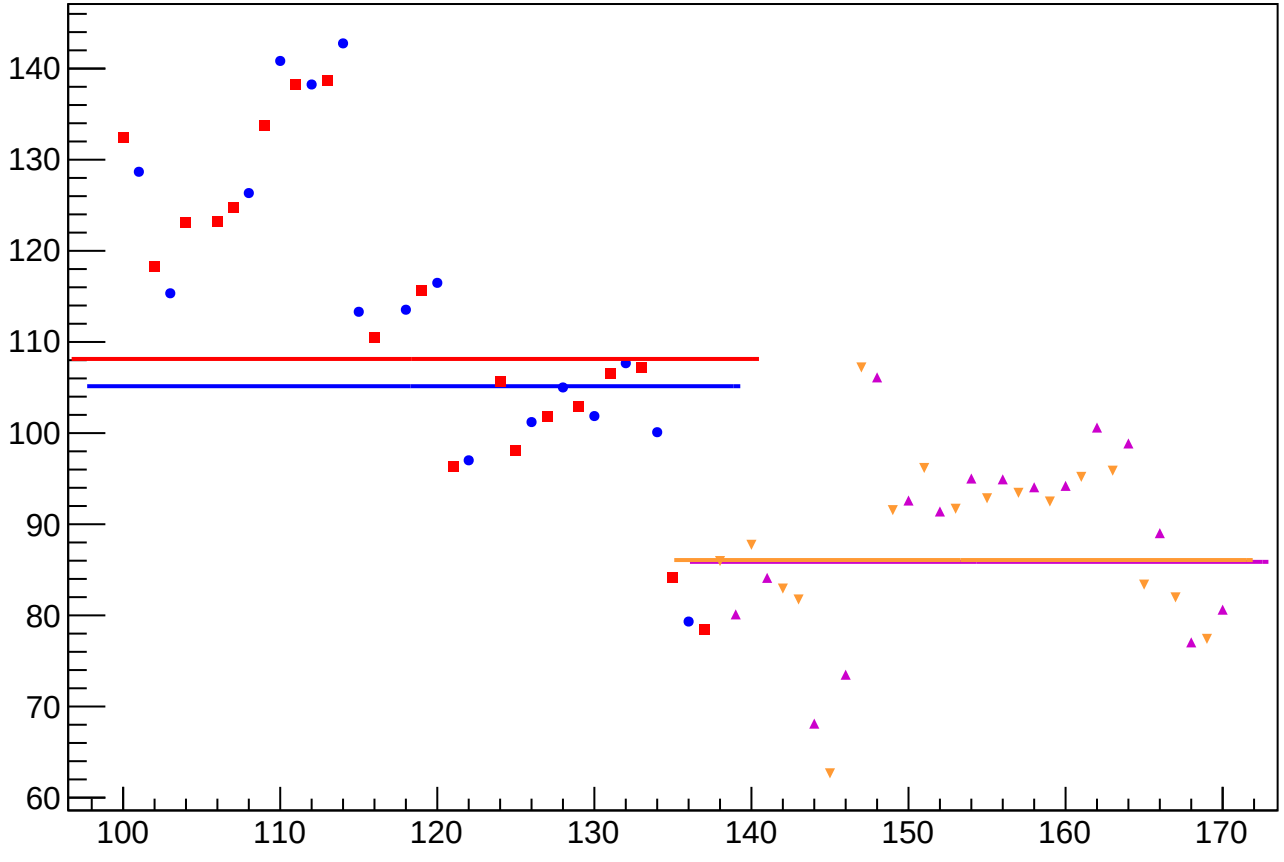
Left In: -7.245+/-23.867 $\chi^2$/NDF:12.6/15

+ sign 29.791+/-20.344 $\chi^2$/NDF: 43.2/32

All: 9.475+/-14.445 $\chi^2$/NDF: 72.1/67

- sign -11.179+/-20.512 $\chi^2$/NDF: 26.9/34

# eigen_cor_asym_sam_26_48_dd_rms vs Slug




Right In: 105.146+/-0.028 $\chi^2$/NDF: 408406.5/15

Left Out: 86.071+/-0.017 $\chi^2$/NDF:412072.5/16

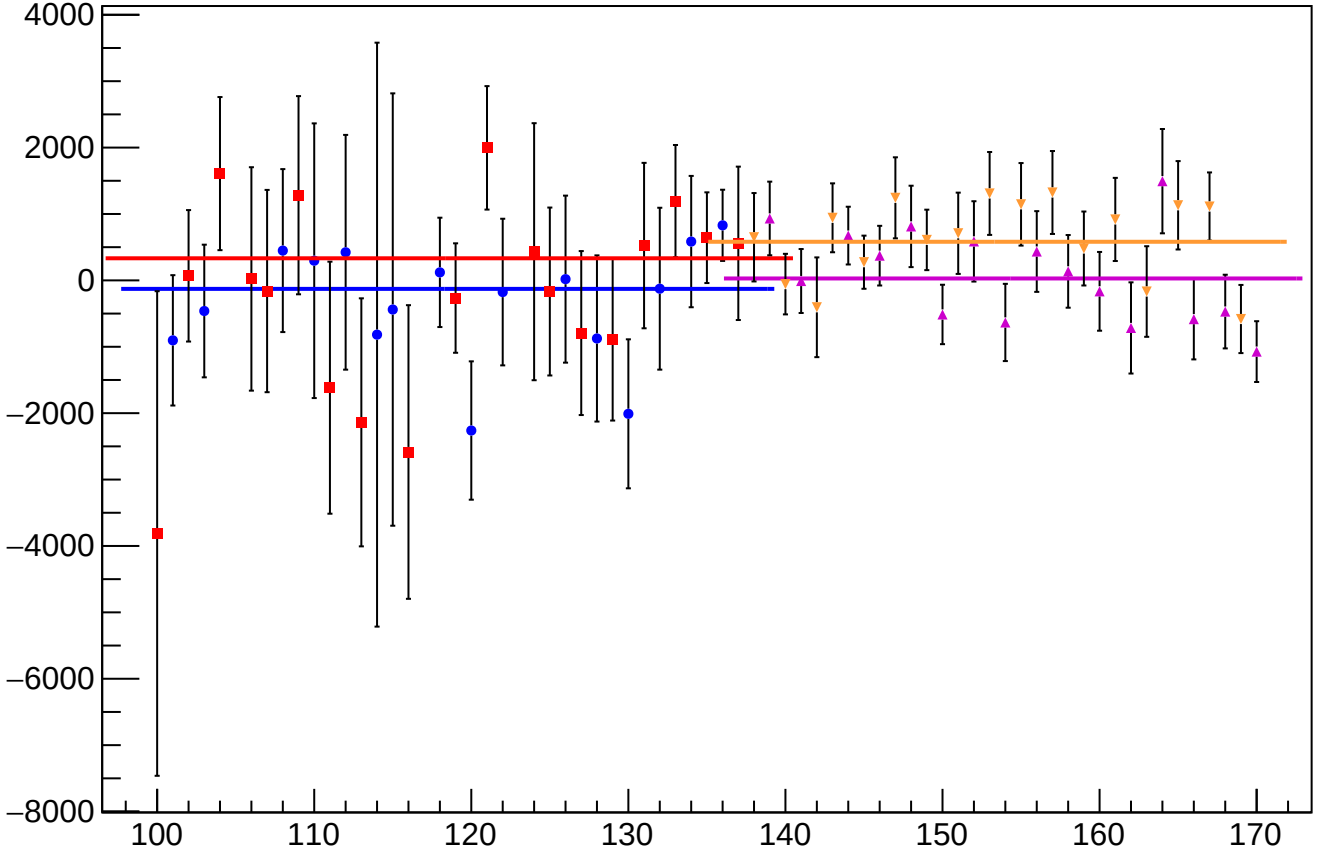
Right Out: 108.136+/-0.028 $\chi^2$/NDF: 346321.9/18

Left In: 85.873+/-0.017 $\chi^2$/NDF:399320.7/15

+ sign 91.083+/-0.014 $\chi^2$/NDF: 1161111.6/32

All: 91.385+/-0.010 $\chi^2$/NDF: 2362488.8/67

- sign 91.692+/-0.015 $\chi^2$/NDF: 1200489.1/34




Right In: -128.047+/-268.611 $\chi^2$/NDF: 12.3/15

Left Out: 581.492+/-135.504 $\chi^2$/NDF:18.0/16

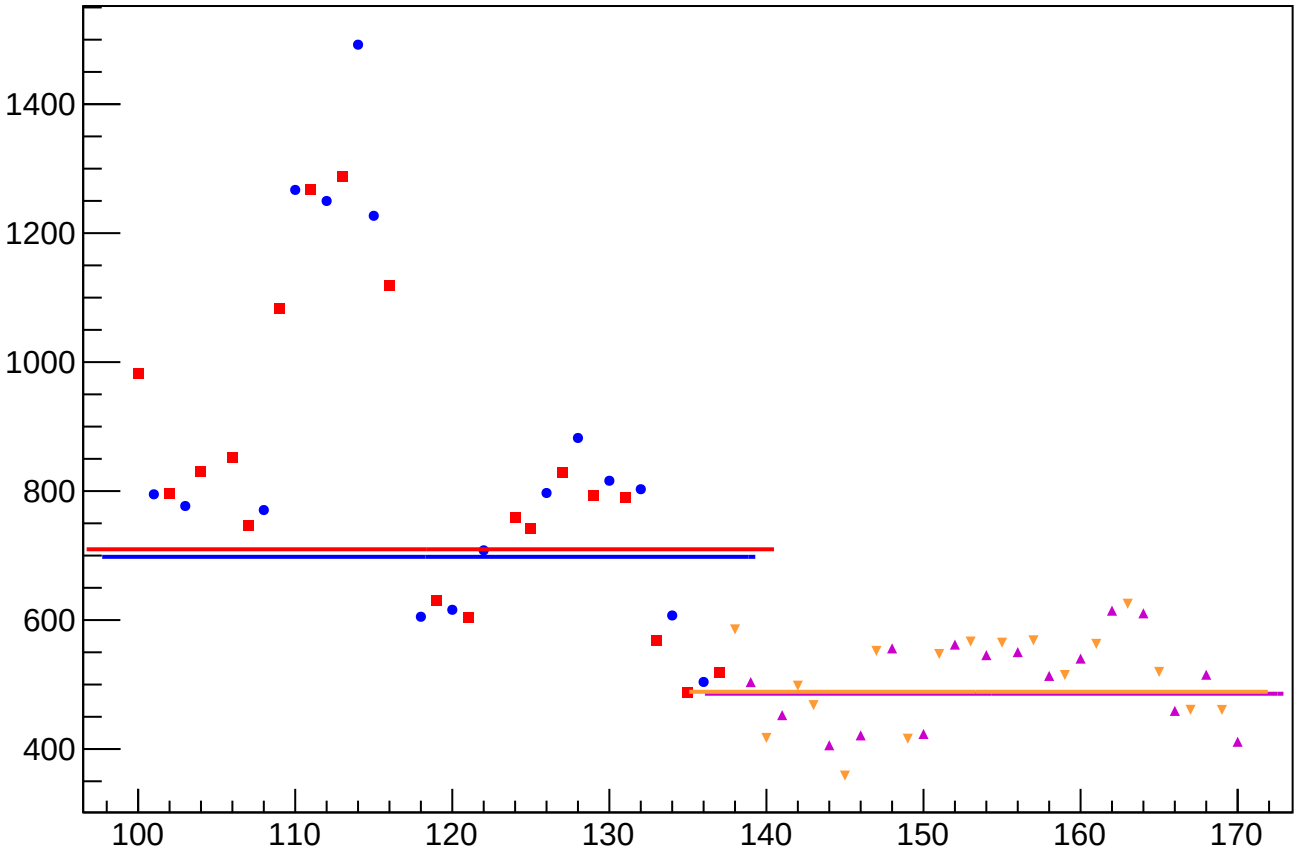
Right Out: 332.665+/-270.835 $\chi^2$/NDF: 14.7/18

Left In: 28.706+/-135.445 $\chi^2$/NDF:23.6/15

+ sign 437.557+/-120.981 $\chi^2$/NDF: 35.9/32

All: 263.766+/-85.603 $\chi^2$/NDF: 79.3/67

- sign 89.517+/-121.141 $\chi^2$/NDF: 39.3/34




Right In: 698.055+/-0.190 $\chi^2$/NDF: 912861.2/15

Left Out: 488.793+/-0.096 $\chi^2$/NDF:619604.9/16

Right Out: 709.748+/-0.192 $\chi^2$/NDF: 1027114.2/18

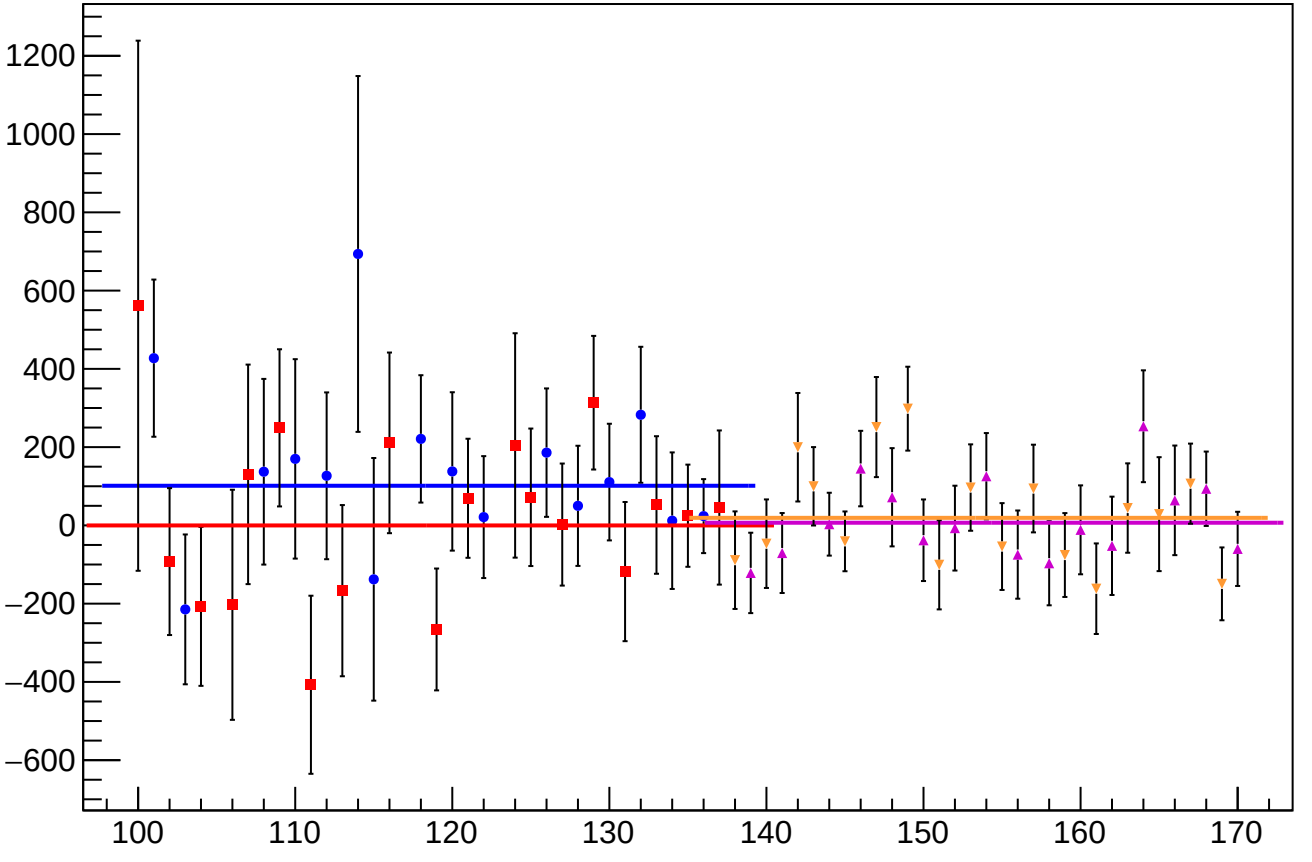
Left In: 485.765+/-0.096 $\chi^2$/NDF:466211.6/15

+ sign 531.243+/-0.086 $\chi^2$/NDF: 2500075.2/32

All: 530.910+/-0.061 $\chi^2$/NDF: 5087658.6/67

- sign 530.576+/-0.086 $\chi^2$/NDF: 2587553.0/34

# dit_asym_sam_26_48_dd_mean vs Slug




Right In: 101.281+/-43.510 $\chi^2$/NDF: 11.0/15

Left Out: 19.293+/-26.445 $\chi^2$/NDF:23.9/16

Right Out: -0.125+/-44.035 $\chi^2$/NDF: 16.6/18

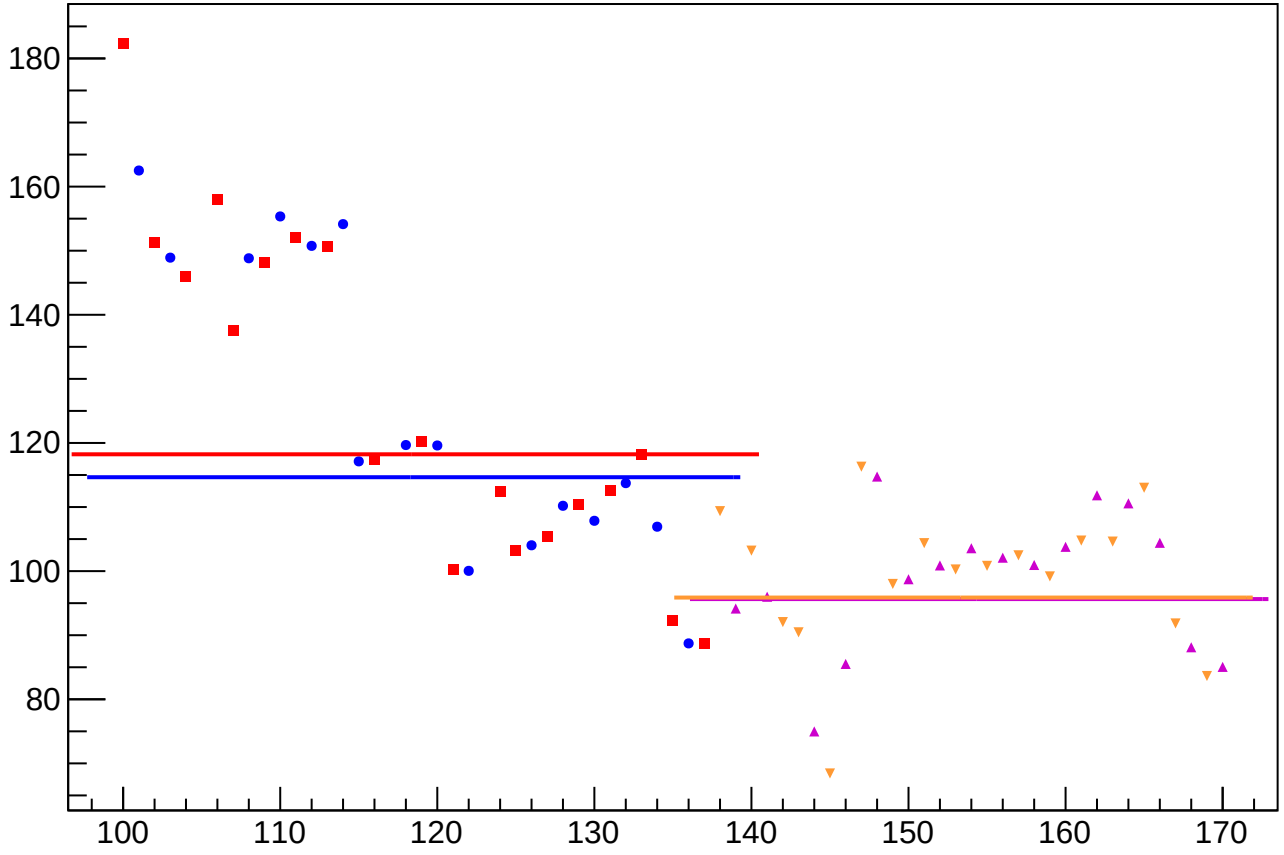
Left In: 6.781+/-26.690 $\chi^2$/NDF:12.0/15

+ sign 41.410+/-22.598 $\chi^2$/NDF: 37.5/32

All: 23.350+/-16.059 $\chi^2$/NDF: 67.4/67

- sign 4.925+/-22.825 $\chi^2$/NDF: 28.6/34

# dit_asym_sam_26_48_dd_rms vs Slug




Right In: 114.655+/-0.031 $\chi^2$/NDF: 531976.2/15

Left Out: 95.875+/-0.019 $\chi^2$/NDF:465094.5/16

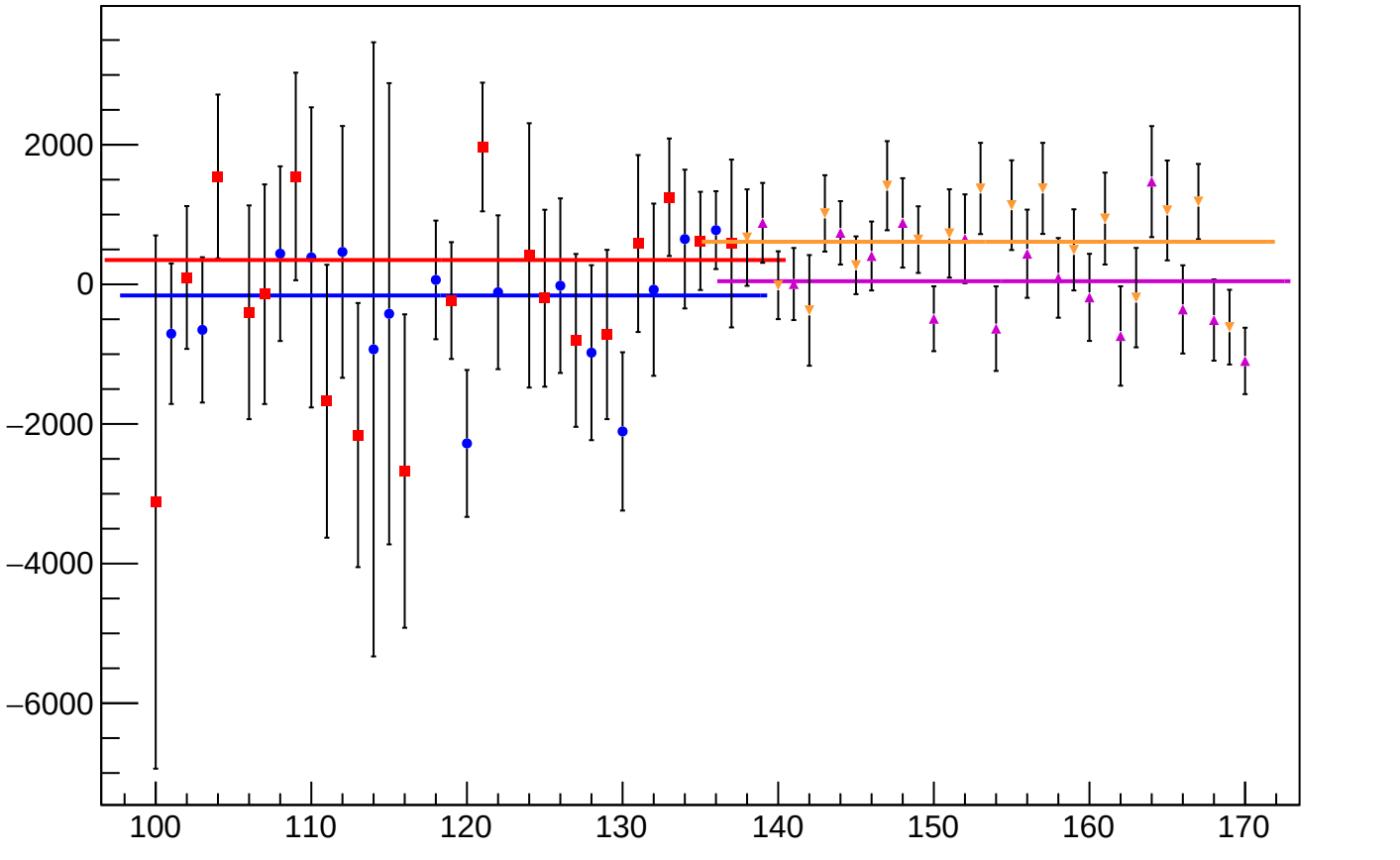
Right Out: 118.230+/-0.031 $\chi^2$/NDF: 483407.4/18

Left In: 95.638+/-0.019 $\chi^2$/NDF:340008.7/15

+ sign 100.941+/-0.016 $\chi^2$/NDF: 1269146.4/32

All: 101.321+/-0.011 $\chi^2$/NDF: 2478703.9/67

- sign 101.708+/-0.016 $\chi^2$/NDF: 1208416.7/34




Right In: -159.110+/-274.558 $\chi^2$/NDF: 12.0/15

Left Out: 610.279+/-141.876 $\chi^2$/NDF:17.7/16

Right Out: 348.528+/-273.595 $\chi^2$/NDF: 14.3/18

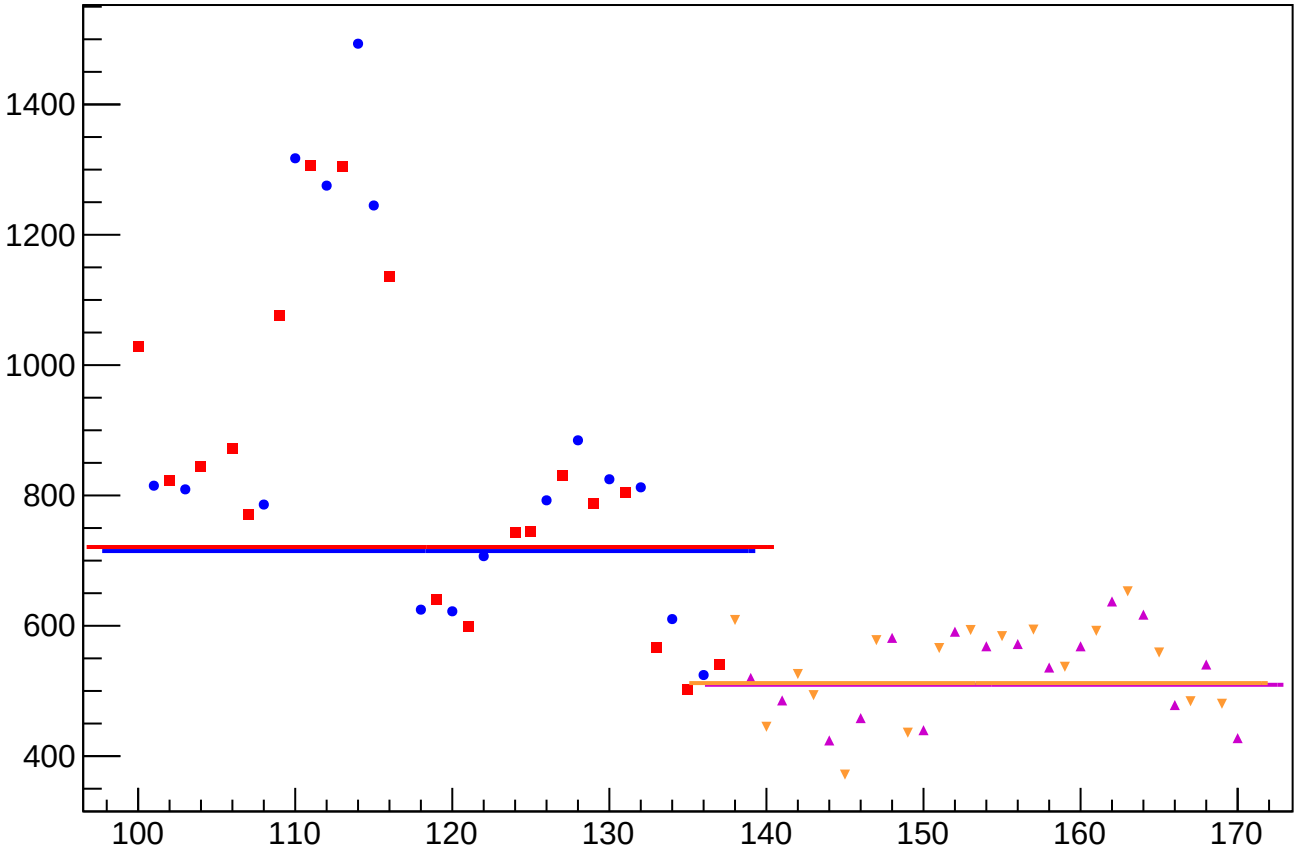
Left In: 45.015+/-142.015 $\chi^2$/NDF:22.3/15

\+ sign 448.131+/-126.042 $\chi^2$/NDF: 35.9/32

All: 278.789+/-89.127 $\chi^2$/NDF: 77.1/67

\- sign 109.435+/-126.046 $\chi^2$/NDF: 37.5/34

# asym_sam_26_48_dd_dit_correction_rms vs Slug




Right In: 714.666+/-0.194 $\chi^2$/NDF: 876217.1/15

Left Out: 512.078+/-0.100 $\chi^2$/NDF:617532.7/16

Right Out: 720.885+/-0.193 $\chi^2$/NDF: 1018435.1/18

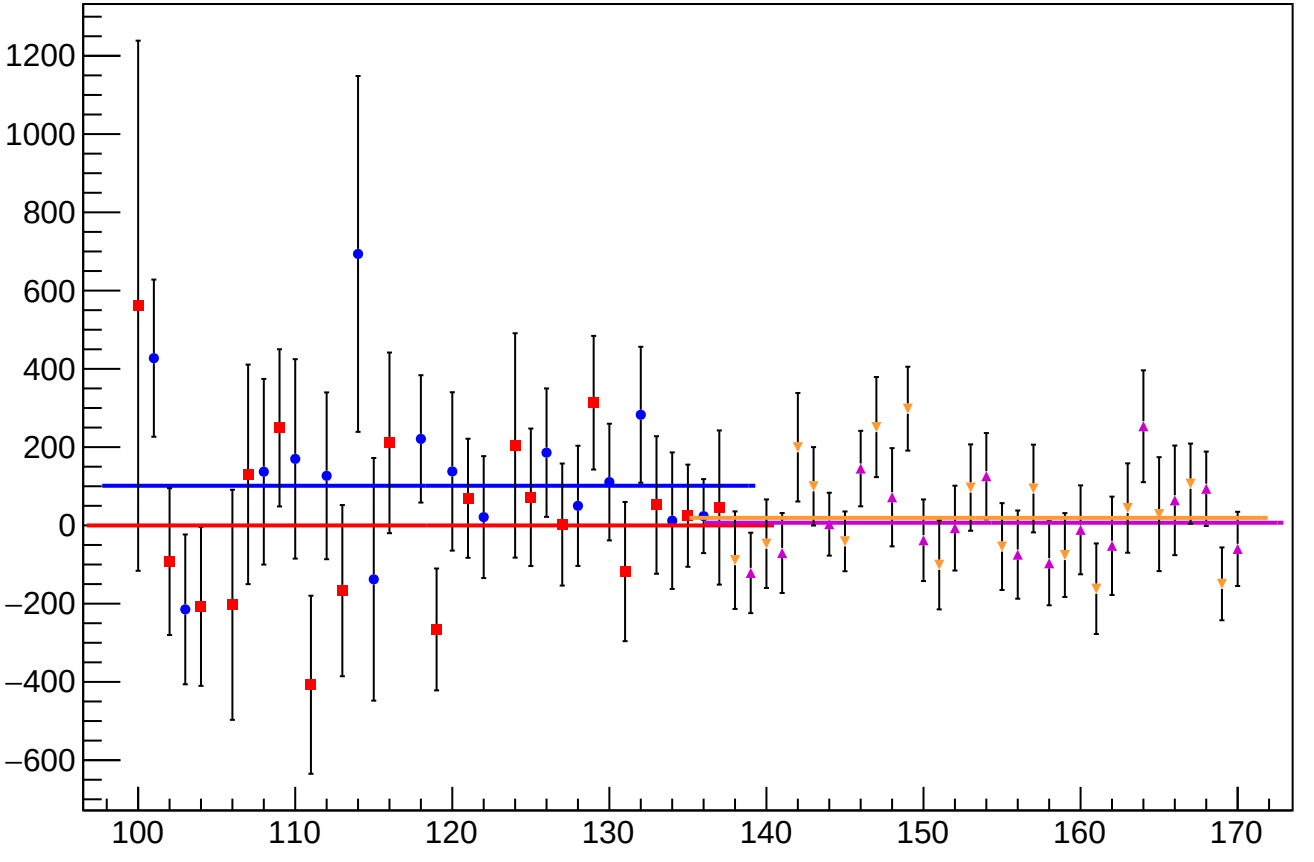
Left In: 509.463+/-0.100 $\chi^2$/NDF:431922.8/15

+ sign 554.774+/-0.089 $\chi^2$/NDF: 2353168.7/32

All: 554.555+/-0.063 $\chi^2$/NDF: 4744347.9/67

- sign 554.337+/-0.089 $\chi^2$/NDF: 2391167.3/34

# eigen_dit_asym_sam_26_48_dd_mean vs Slug




Right In: 101.278+/-43.510 $\chi^2$/NDF: 11.0/15

Left Out: 19.291+/-26.445 $\chi^2$/NDF:23.9/16

Right Out: -0.125+/-44.035 $\chi^2$/NDF: 16.6/18

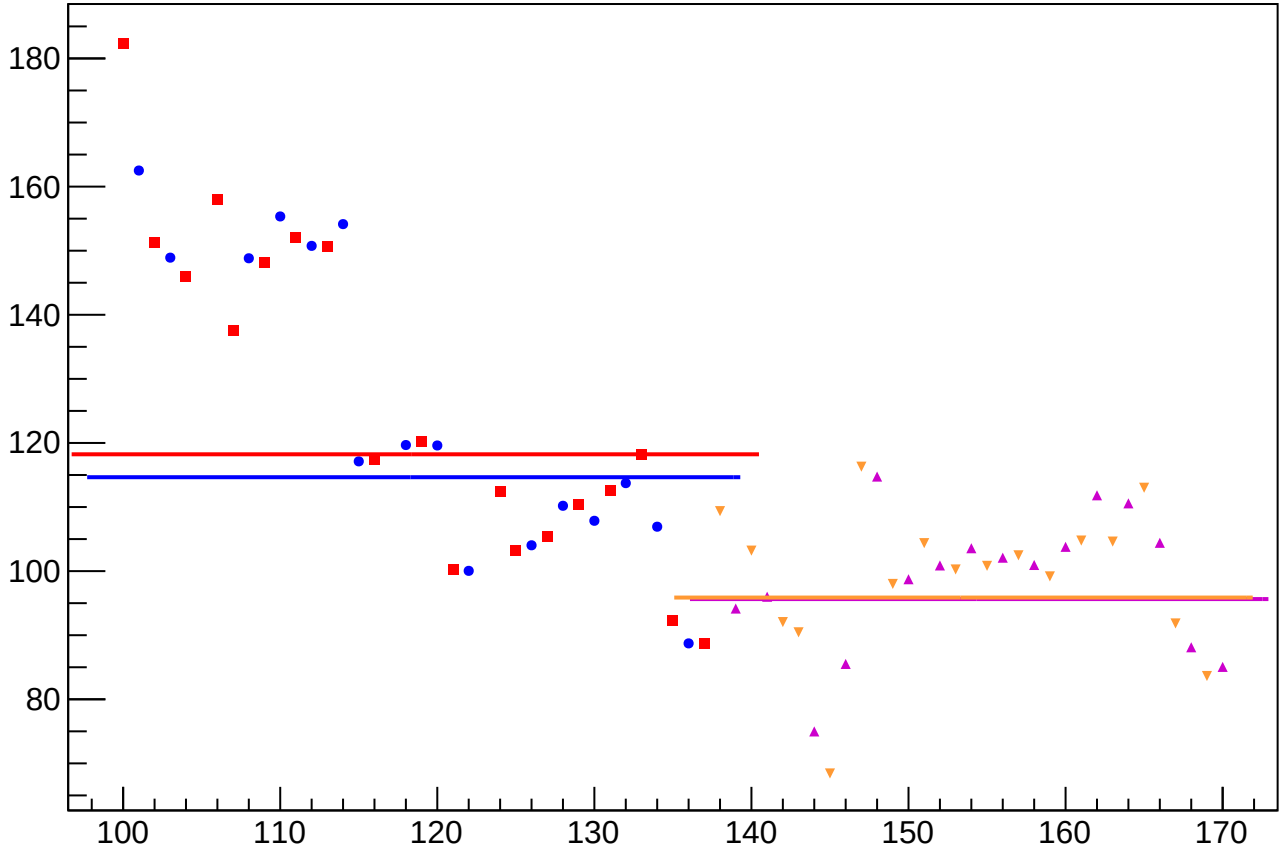
Left In: 6.782+/-26.690 $\chi^2$/NDF:12.0/15

+ sign 41.409+/-22.598 $\chi^2$/NDF: 37.5/32

All: 23.349+/-16.059 $\chi^2$/NDF: 67.4/67

- sign 4.926+/-22.825 $\chi^2$/NDF: 28.6/34

# eigen_dit_asym_sam_26_48_dd_rms vs Slug




Right In: 114.655+/-0.031 $\chi^2$/NDF: 531962.9/15

Left Out: 95.875+/-0.019 $\chi^2$/NDF:465103.0/16

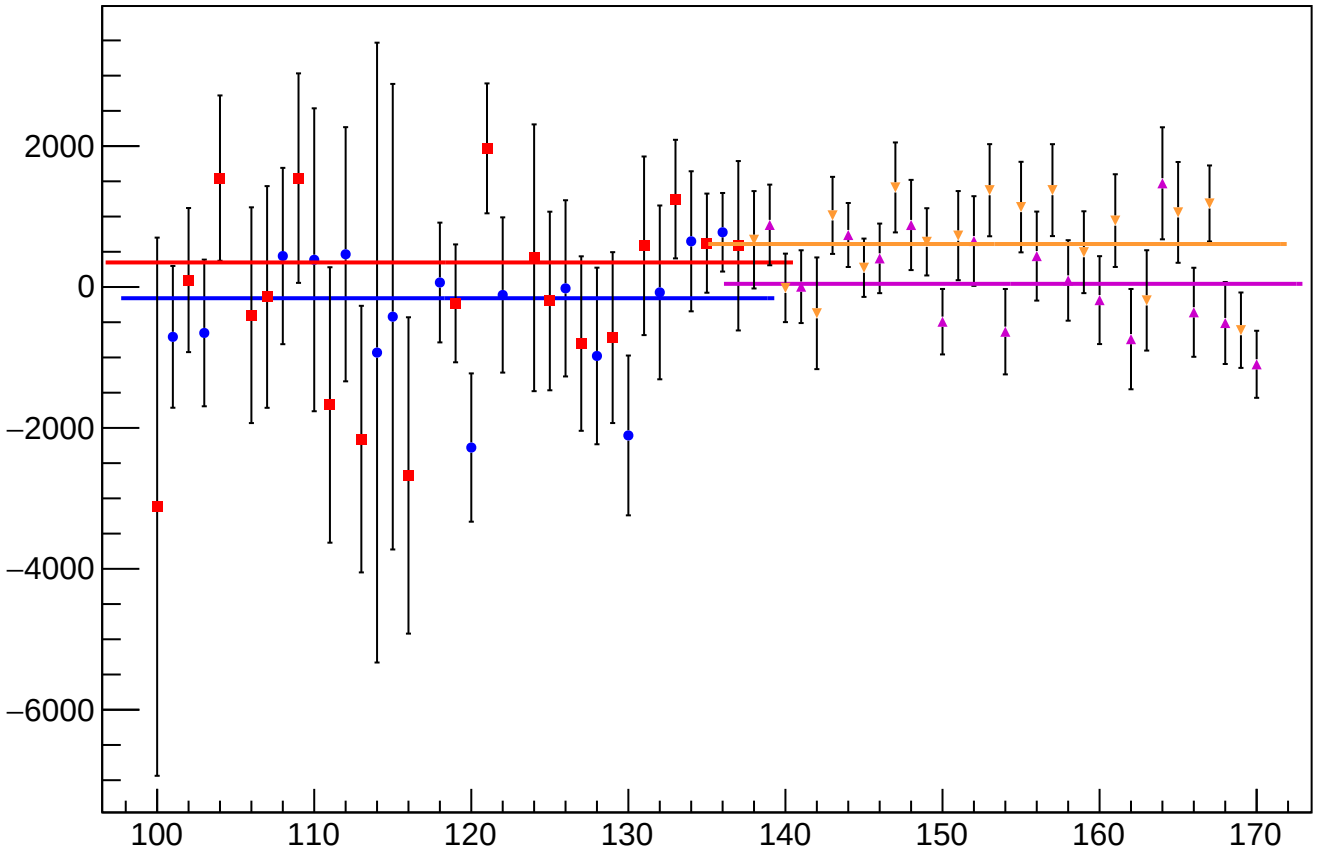
Right Out: 118.230+/-0.031 $\chi^2$/NDF: 483401.1/18

Left In: 95.638+/-0.019 $\chi^2$/NDF:340011.0/15

+ sign 100.941+/-0.016 $\chi^2$/NDF: 1269146.5/32

All: 101.321+/-0.011 $\chi^2$/NDF: 2478699.2/67

- sign 101.708+/-0.016 $\chi^2$/NDF: 1208411.9/34




Right In: -159.112+/-274.558 $\chi^2$/NDF: 12.0/15

Left Out: 610.277+/-141.876 $\chi^2$/NDF:17.7/16

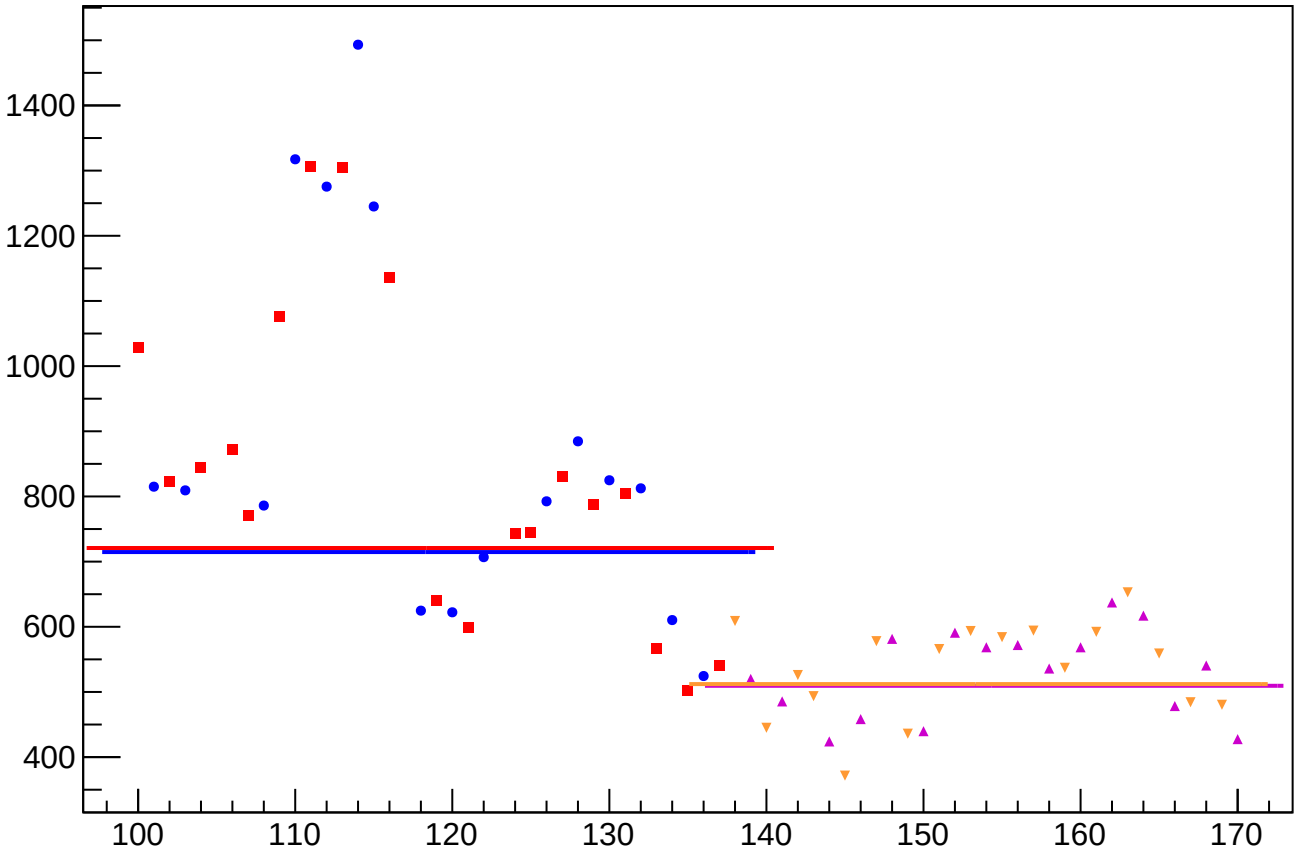
Right Out: 348.528+/-273.595 $\chi^2$/NDF: 14.3/18

Left In: 45.015+/-142.015 $\chi^2$/NDF:22.3/15

+ sign 448.130+/-126.042 $\chi^2$/NDF: 35.9/32

All: 278.788+/-89.127 $\chi^2$/NDF: 77.1/67

- sign 109.435+/-126.046 $\chi^2$/NDF: 37.5/34




Right In: 714.666+/-0.194 $\chi^2$/NDF: 876211.4/15

Left Out: 512.078+/-0.100 $\chi^2$/NDF:617535.4/16

Right Out: 720.884+/-0.193 $\chi^2$/NDF: 1018428.9/18

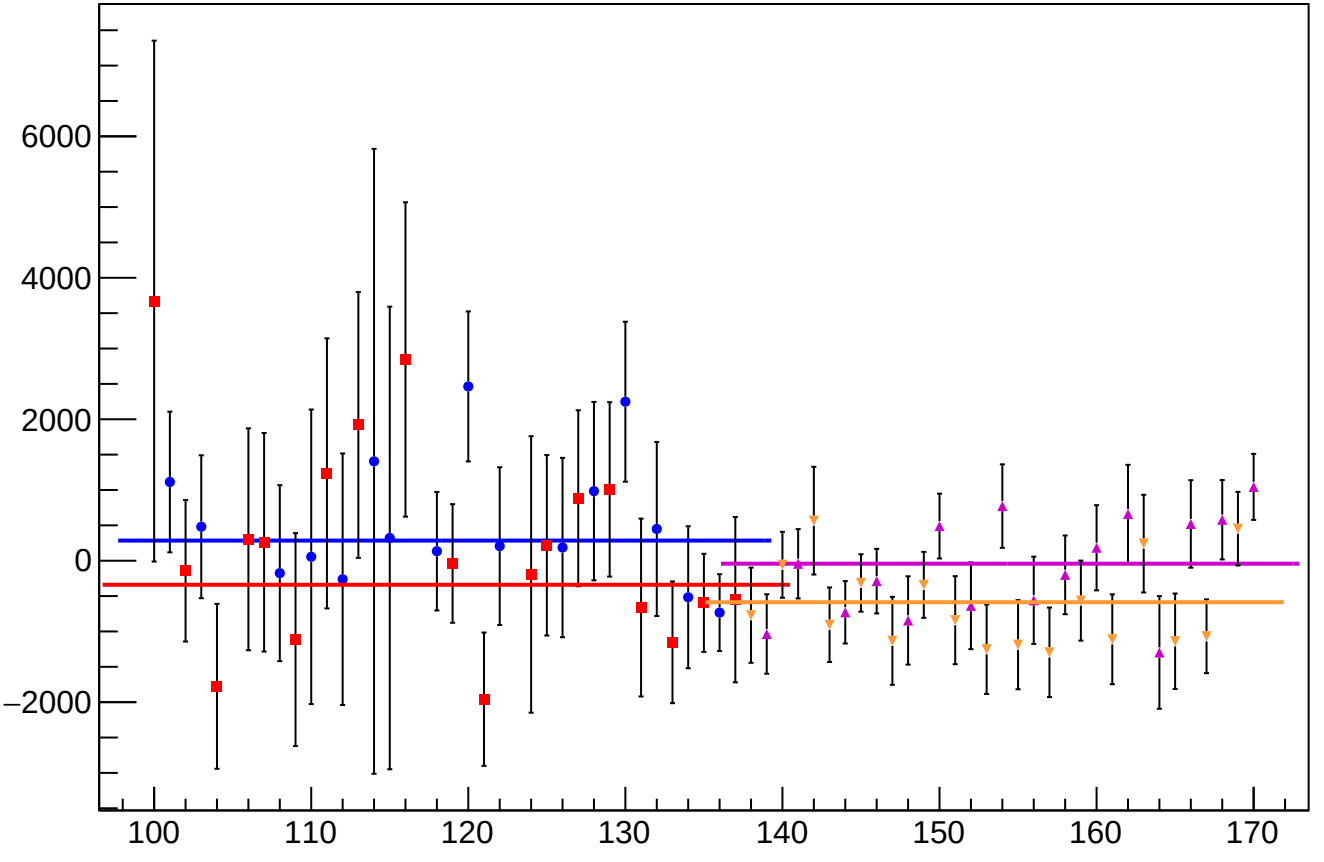
Left In: 509.463+/-0.100 $\chi^2$/NDF:431922.5/15

+ sign 554.773+/-0.089 $\chi^2$/NDF: 2353166.8/32

All: 554.555+/-0.063 $\chi^2$/NDF: 4744338.2/67

- sign 554.337+/-0.089 $\chi^2$/NDF: 2391159.3/34

# asym_sam_26_48_dd_mean vs Slug




Right In: 284.780+/-271.944 $\chi^2$/NDF: 12.8/15

Left Out: -586.699+/-137.715 $\chi^2$/NDF:16.6/16

Right Out: -340.018+/-273.601 $\chi^2$/NDF: 14.1/18

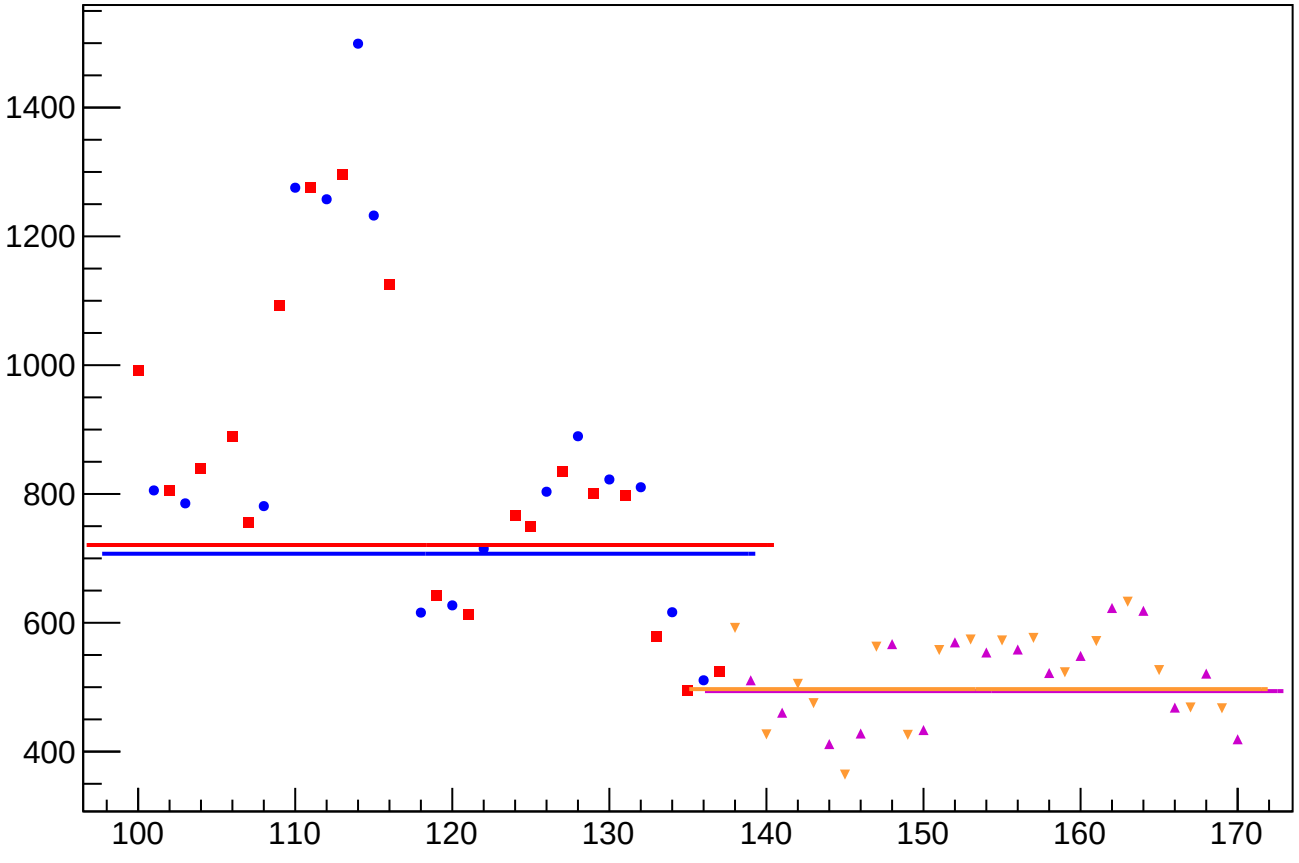
Left In: -41.903+/-137.667 $\chi^2$/NDF:23.6/15

+ sign -408.826+/-122.859 $\chi^2$/NDF: 37.5/32

All: -255.626+/-86.916 $\chi^2$/NDF: 79.3/67

- sign -102.131+/-122.977 $\chi^2$/NDF: 38.6/34

# asym_sam_26_48_dd_rms vs Slug




Right In: 707.209+/-0.192 $\chi^2$/NDF: 896689.9/15

Left Out: 497.010+/-0.097 $\chi^2$/NDF:605790.4/16

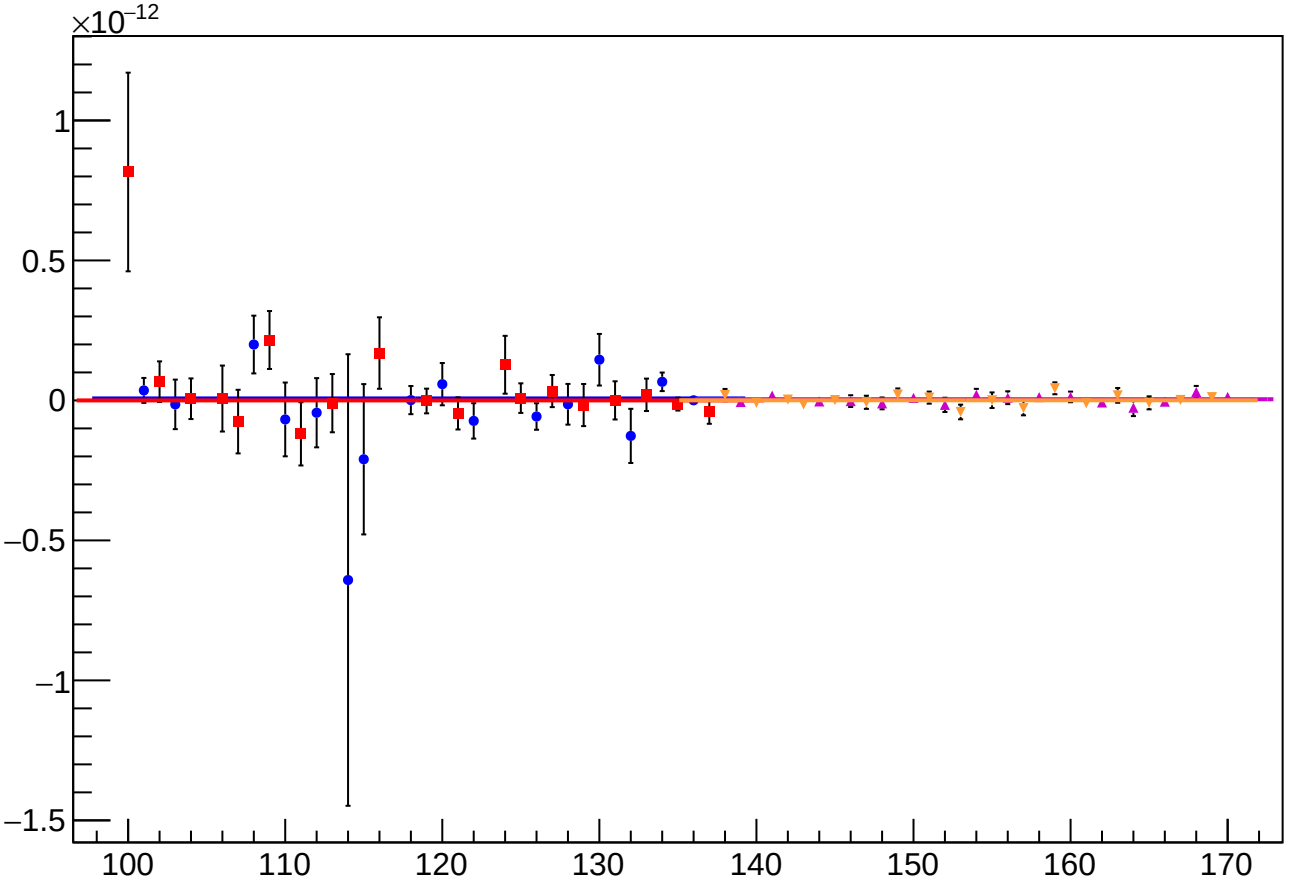
Right Out: 720.778+/-0.193 $\chi^2$/NDF: 1015277.9/18

Left In: 493.902+/-0.097 $\chi^2$/NDF:456277.1/15

+ sign 539.913+/-0.087 $\chi^2$/NDF: 2453496.8/32

All: 539.825+/-0.061 $\chi^2$/NDF: 5022431.6/67

- sign 539.738+/-0.087 $\chi^2$/NDF: 2568932.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 17.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.5/16

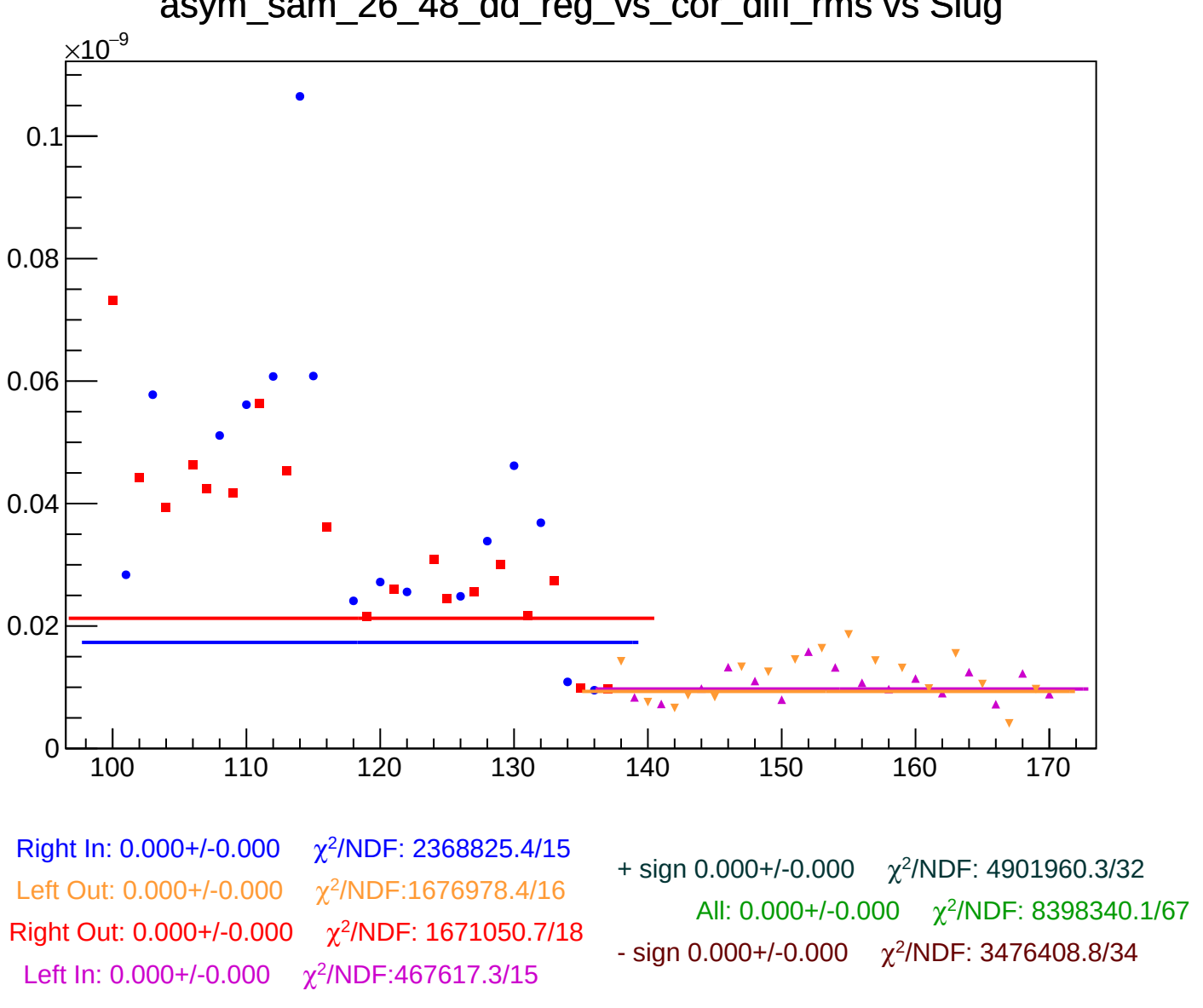
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.8/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:7.4/15

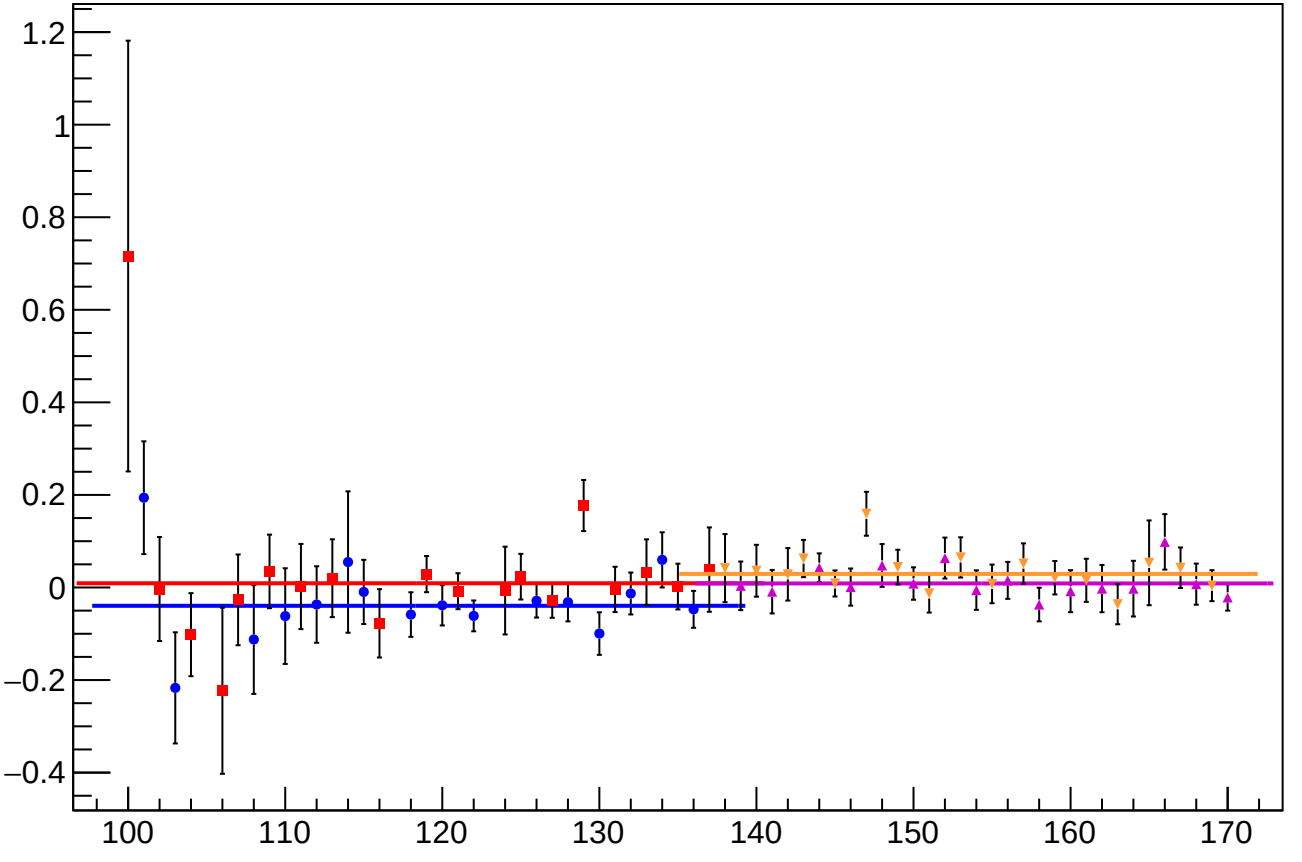
+ sign 0.000+/-0.000 $\chi^2$/NDF: 30.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 55.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 25.3/34


asym_sam_26_48_dd_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.1
0.08
0.06
0.04
0.02
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2368825.4/15
Left Out: 0.000+/-0.000 χ²/NDF:1676978.4/16
Right Out: 0.000+/-0.000 χ²/NDF: 1671050.7/18
Left In: 0.000+/-0.000 χ²/NDF:467617.3/15
+ sign 0.000+/-0.000 χ²/NDF: 4901960.3/32
All: 0.000+/-0.000 χ²/NDF: 8398340.1/67
- sign 0.000+/-0.000 χ²/NDF: 3476408.8/34

# asym_sam_26_48_dd_dit_vs_cor_diff_mean vs Slug




Right In: -0.040+/-0.013 $\chi^2$/NDF: 12.4/15

Left Out: 0.029+/-0.010 $\chi^2$/NDF:14.3/16

Right Out: 0.009+/-0.014 $\chi^2$/NDF: 18.3/18

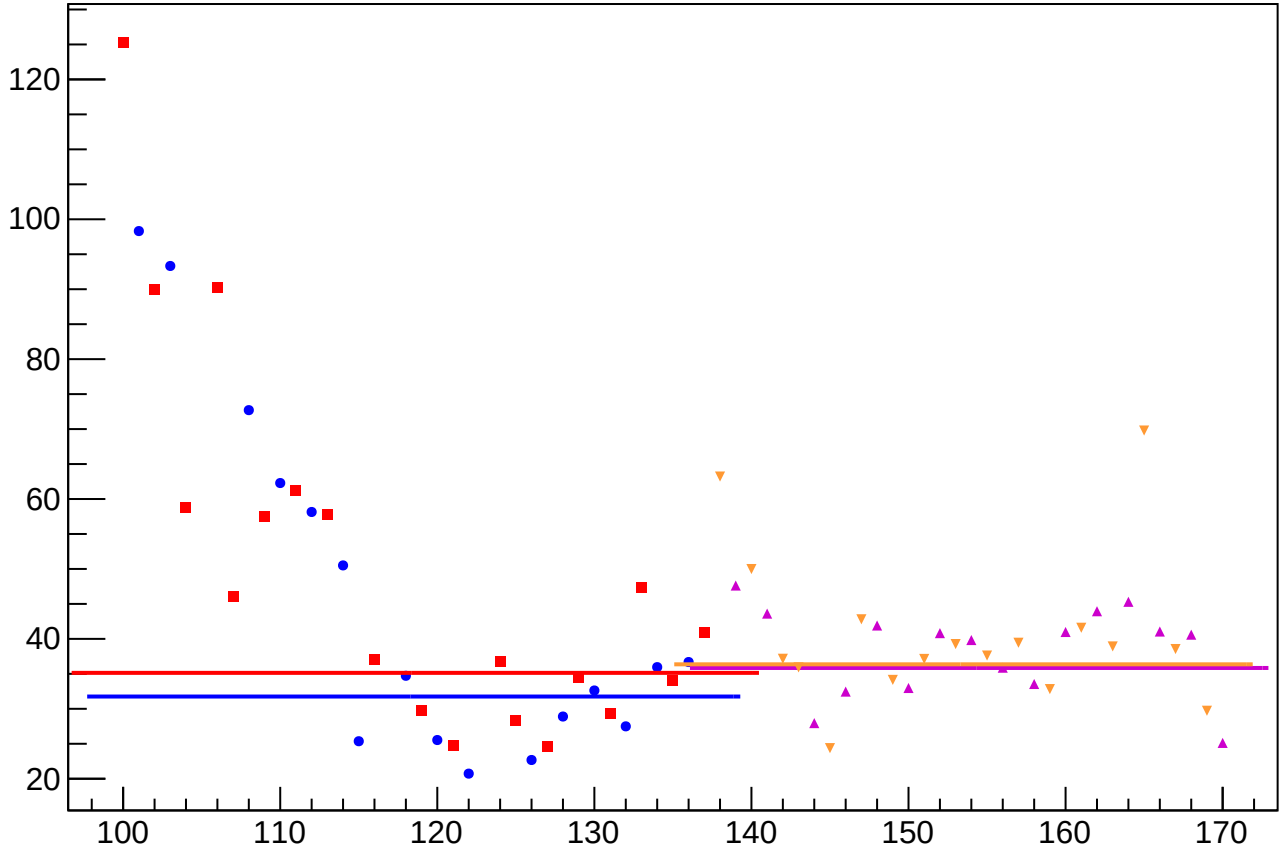
Left In: 0.009+/-0.010 $\chi^2$/NDF:8.9/15

+ sign 0.003+/-0.008 $\chi^2$/NDF: 43.7/32

All: 0.006+/-0.006 $\chi^2$/NDF: 71.1/67

- sign 0.009+/-0.008 $\chi^2$/NDF: 27.2/34

# asym_sam_26_48_dd_dit_vs_cor_diff_rms vs Slug




Right In: 31.755+/-0.009 $\chi^2$/NDF: 2252399.3/15

Left Out: 36.361+/-0.007 $\chi^2$/NDF:1214321.4/16

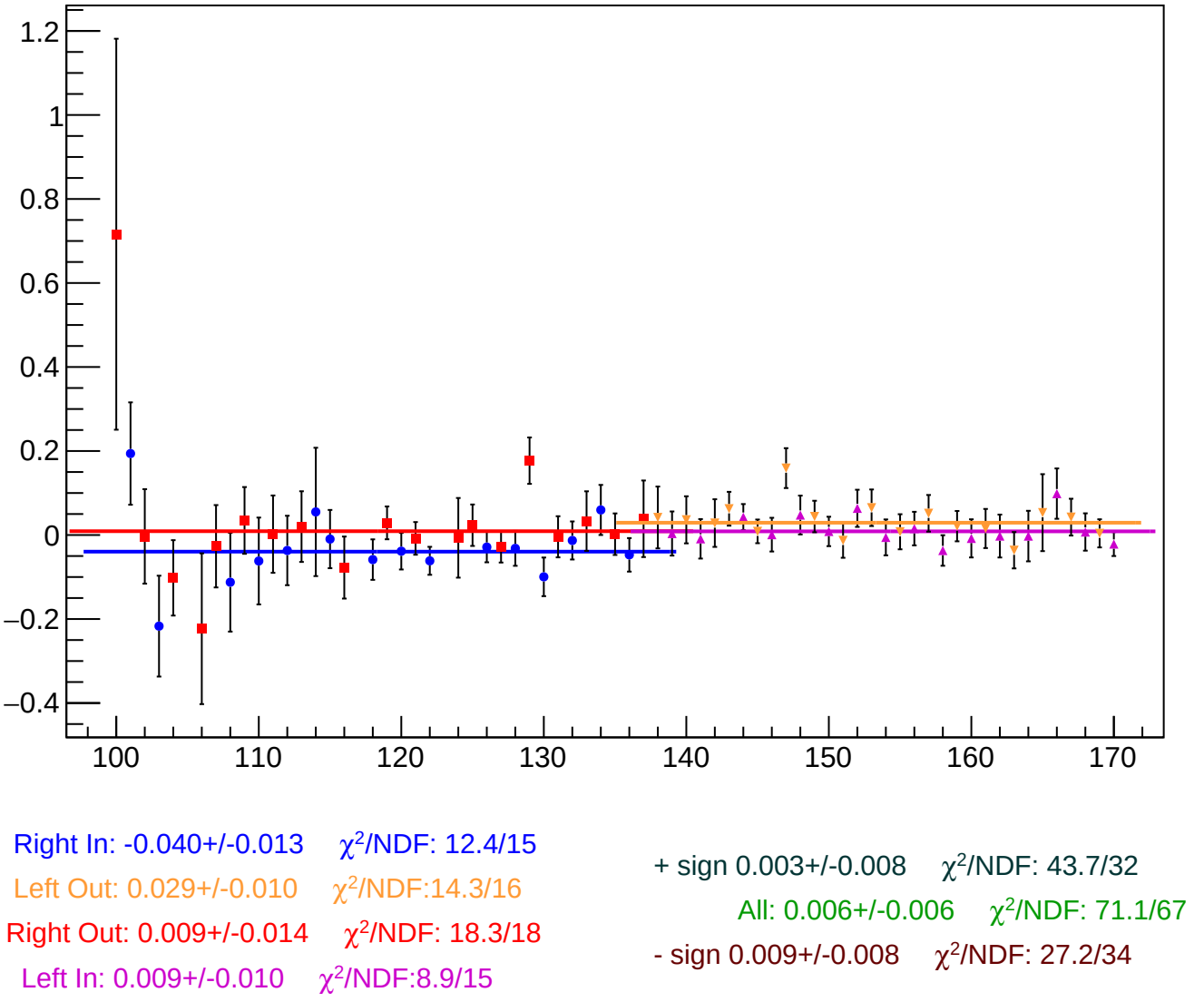
Right Out: 35.140+/-0.010 $\chi^2$/NDF: 1844676.3/18

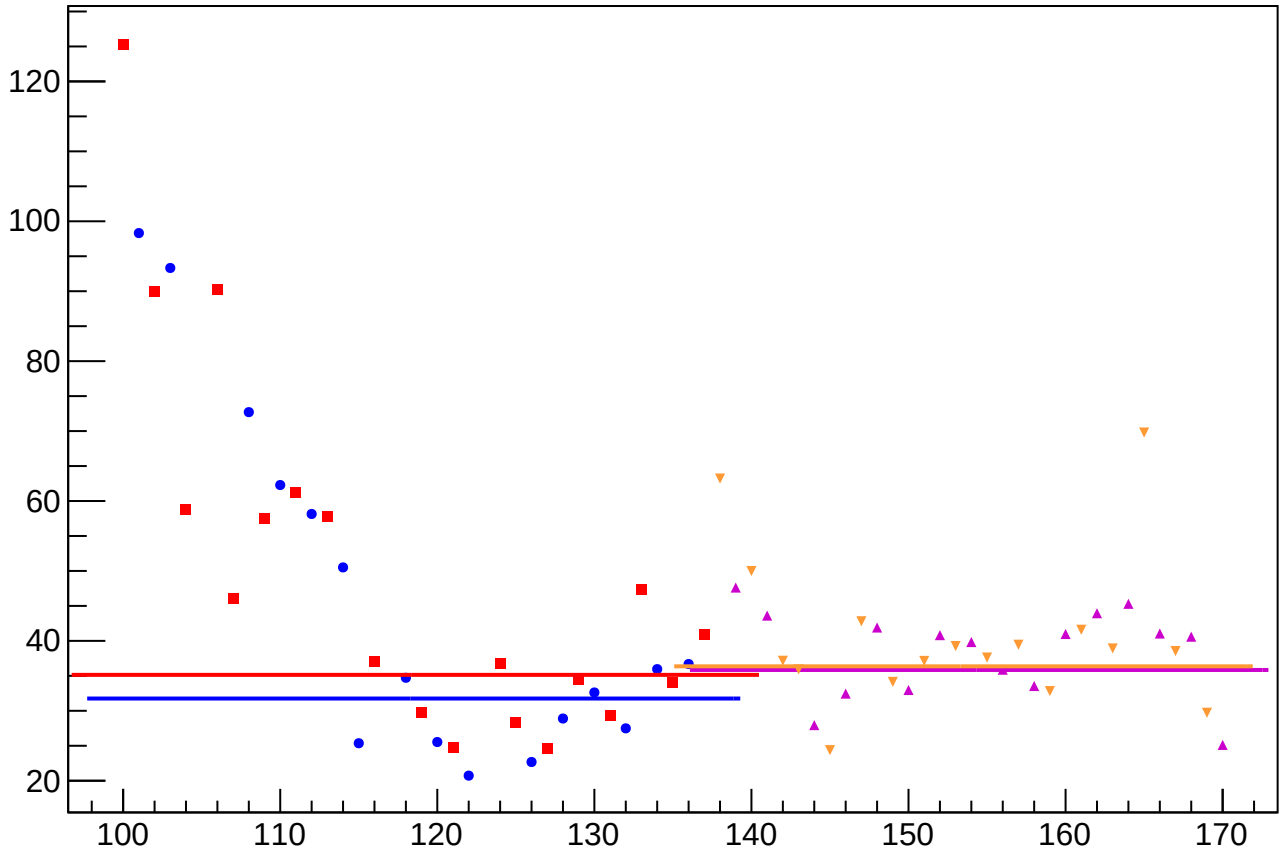
Left In: 35.840+/-0.007 $\chi^2$/NDF:842757.4/15

+ sign 34.603+/-0.006 $\chi^2$/NDF: 3618141.7/32

All: 35.087+/-0.004 $\chi^2$/NDF: 6323277.0/67

- sign 35.596+/-0.006 $\chi^2$/NDF: 2690619.7/34


asym_sam_26_48_dd_dit_vs_eigen_cor_diff_mean vs Slug
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
100
110
120
130
140
150
160
170
Right In: -0.040+/-0.013 χ²/NDF: 12.4/15
Left Out: 0.029+/-0.010 χ²/NDF:14.3/16
Right Out: 0.009+/-0.014 χ²/NDF: 18.3/18
Left In: 0.009+/-0.010 χ²/NDF:8.9/15
+ sign 0.003+/-0.008 χ²/NDF: 43.7/32
All: 0.006+/-0.006 χ²/NDF: 71.1/67
- sign 0.009+/-0.008 χ²/NDF: 27.2/34




Right In: 31.755+/-0.009 $\chi^2$/NDF: 2252399.3/15

Left Out: 36.361+/-0.007 $\chi^2$/NDF:1214321.4/16

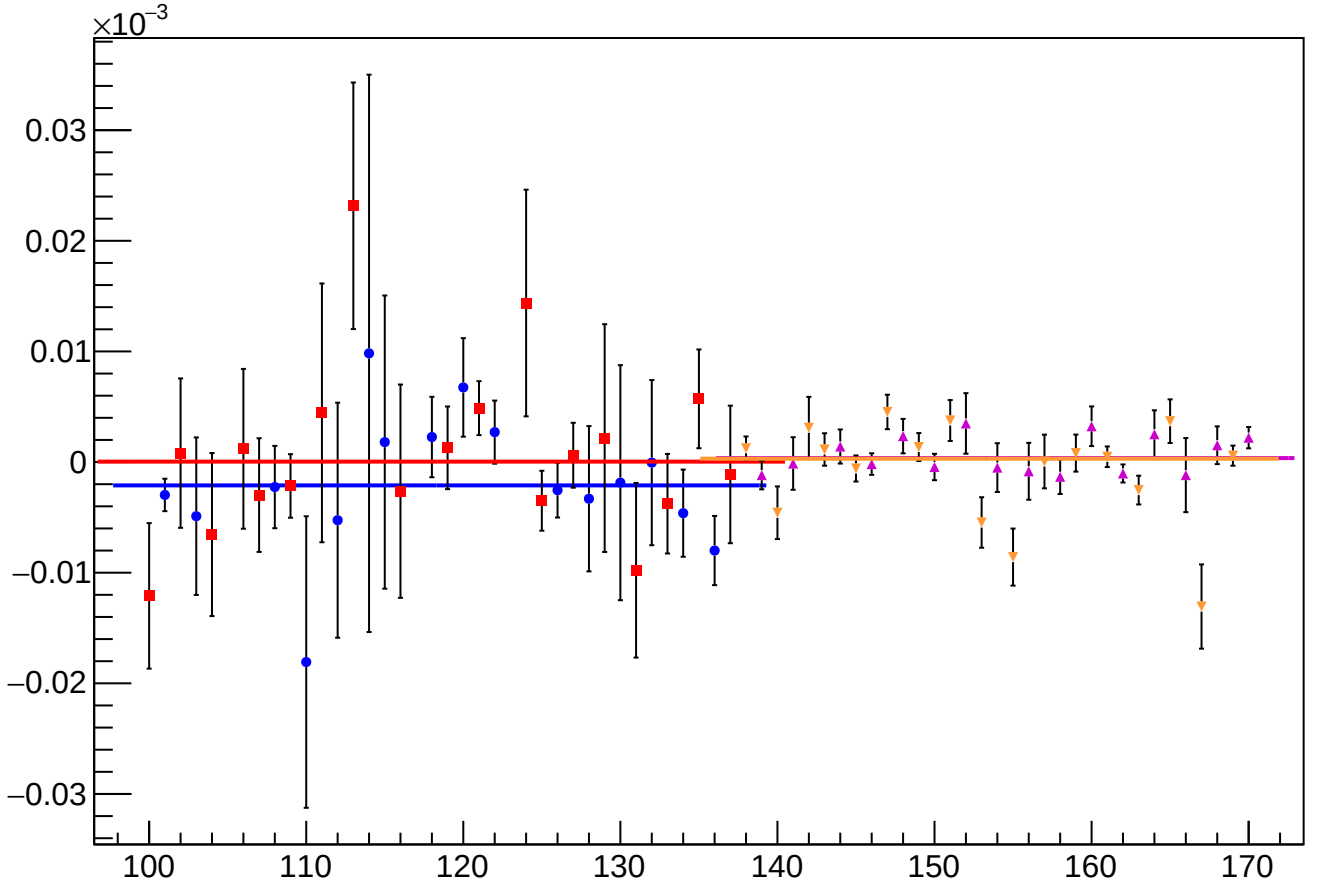
Right Out: 35.140+/-0.010 $\chi^2$/NDF: 1844676.3/18

Left In: 35.840+/-0.007 $\chi^2$/NDF:842757.4/15

+ sign 34.603+/-0.006 $\chi^2$/NDF: 3618141.7/32

All: 35.087+/-0.004 $\chi^2$/NDF: 6323277.0/67

- sign 35.596+/-0.006 $\chi^2$/NDF: 2690619.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 14.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:57.0/16

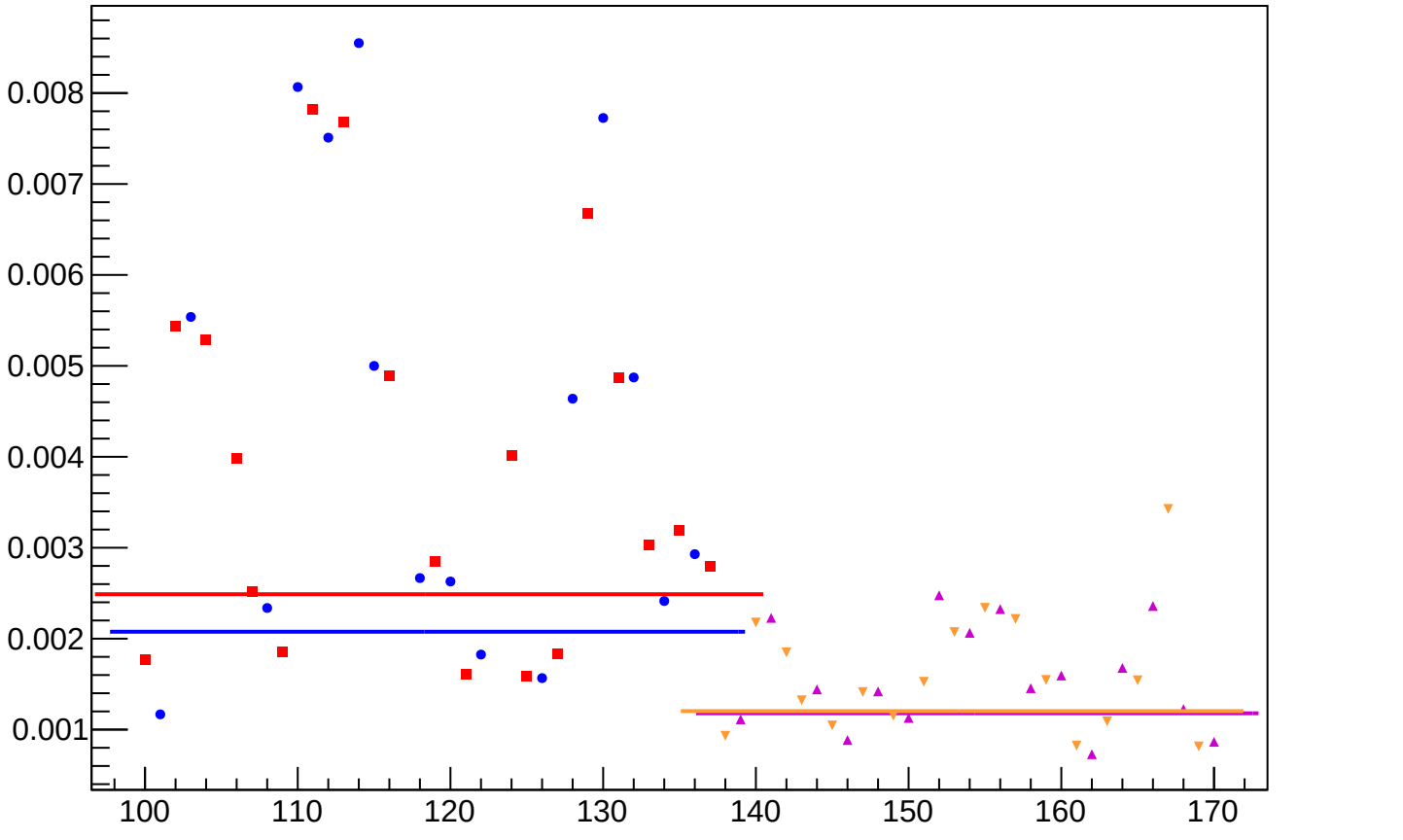
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:18.0/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 77.8/32

All: 0.000+/-0.000 $\chi^2$/NDF: 117.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 39.5/34




Right In: 0.002+/-0.000 $\chi^2$/NDF: 3916668.9/15

Left Out: 0.001+/-0.000 $\chi^2$/NDF:3286598.1/16

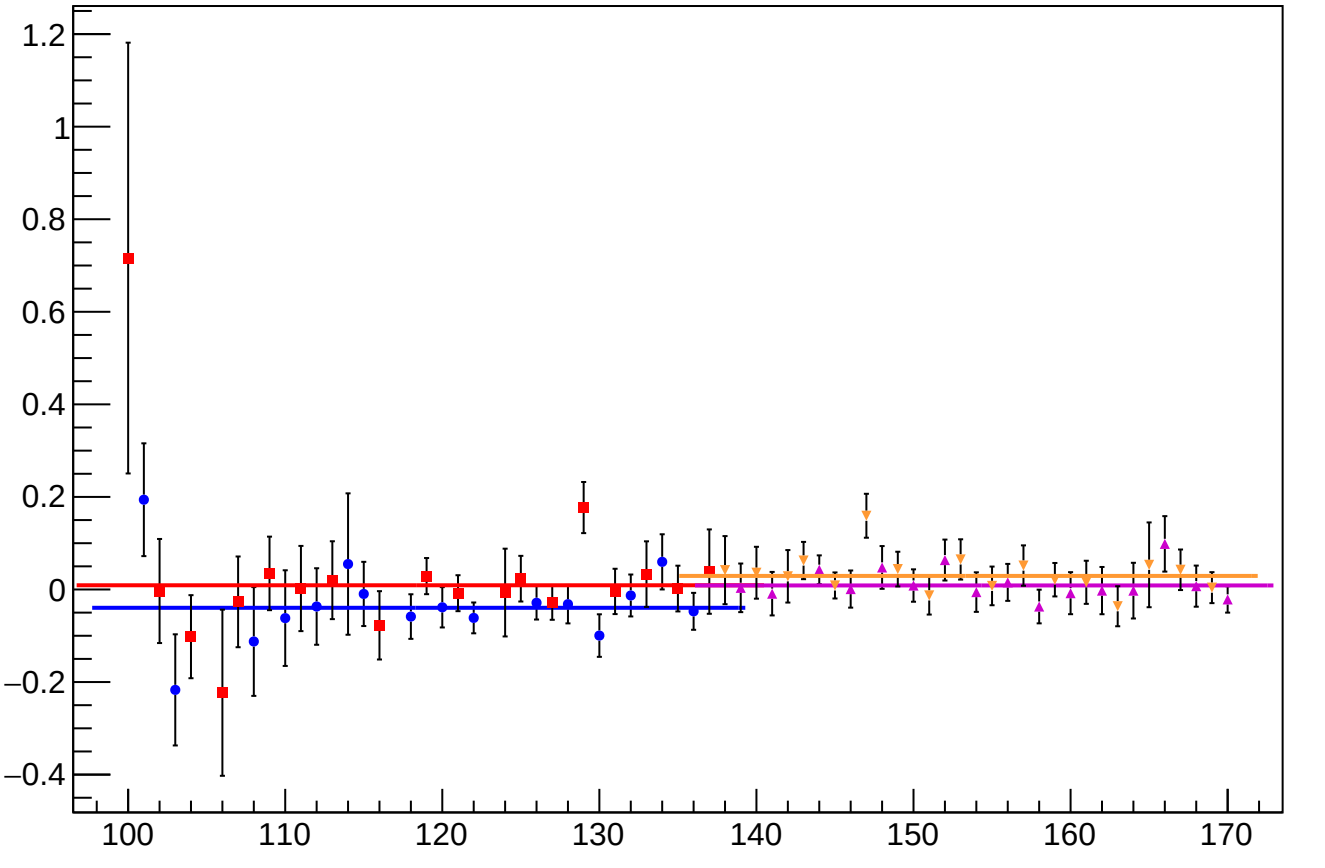
Right Out: 0.002+/-0.000 $\chi^2$/NDF: 3092230.7/18

Left In: 0.001+/-0.000 $\chi^2$/NDF:3201411.0/15

+ sign 0.001+/-0.000 $\chi^2$/NDF: 8800597.6/32

All: 0.001+/-0.000 $\chi^2$/NDF: 17918851.5/67

- sign 0.001+/-0.000 $\chi^2$/NDF: 9118210.8/34




Right In: -0.040+/-0.013 $\chi^2$/NDF: 12.4/15

Left Out: 0.029+/-0.010 $\chi^2$/NDF:14.3/16

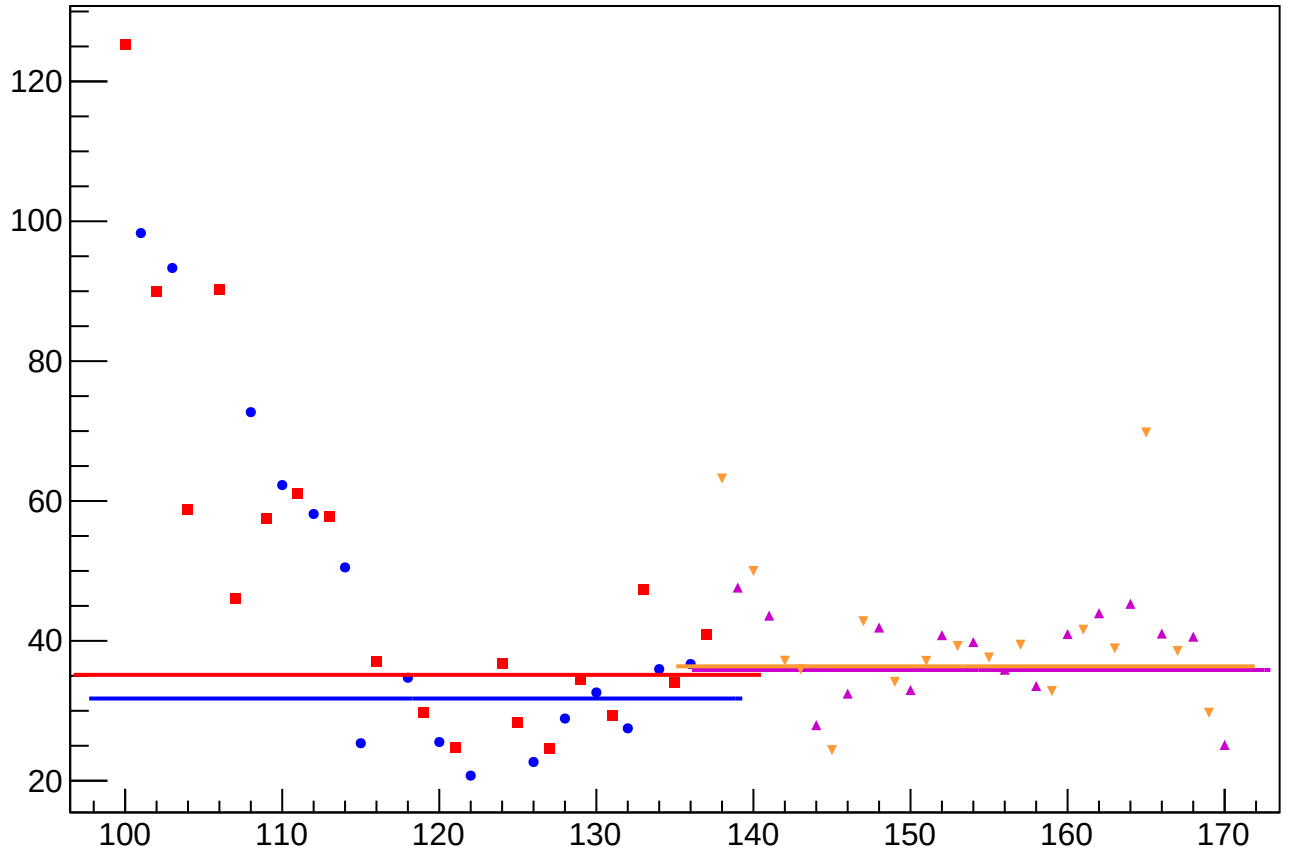
Right Out: 0.009+/-0.014 $\chi^2$/NDF: 18.3/18

Left In: 0.009+/-0.010 $\chi^2$/NDF:8.9/15

+ sign 0.003+/-0.008 $\chi^2$/NDF: 43.7/32

All: 0.006+/-0.006 $\chi^2$/NDF: 71.1/67

- sign 0.009+/-0.008 $\chi^2$/NDF: 27.2/34




Right In: 31.756+/-0.009 $\chi^2$/NDF: 2252373.4/15

Left Out: 36.361+/-0.007 $\chi^2$/NDF:1214360.6/16

Right Out: 35.140+/-0.010 $\chi^2$/NDF: 1844572.3/18

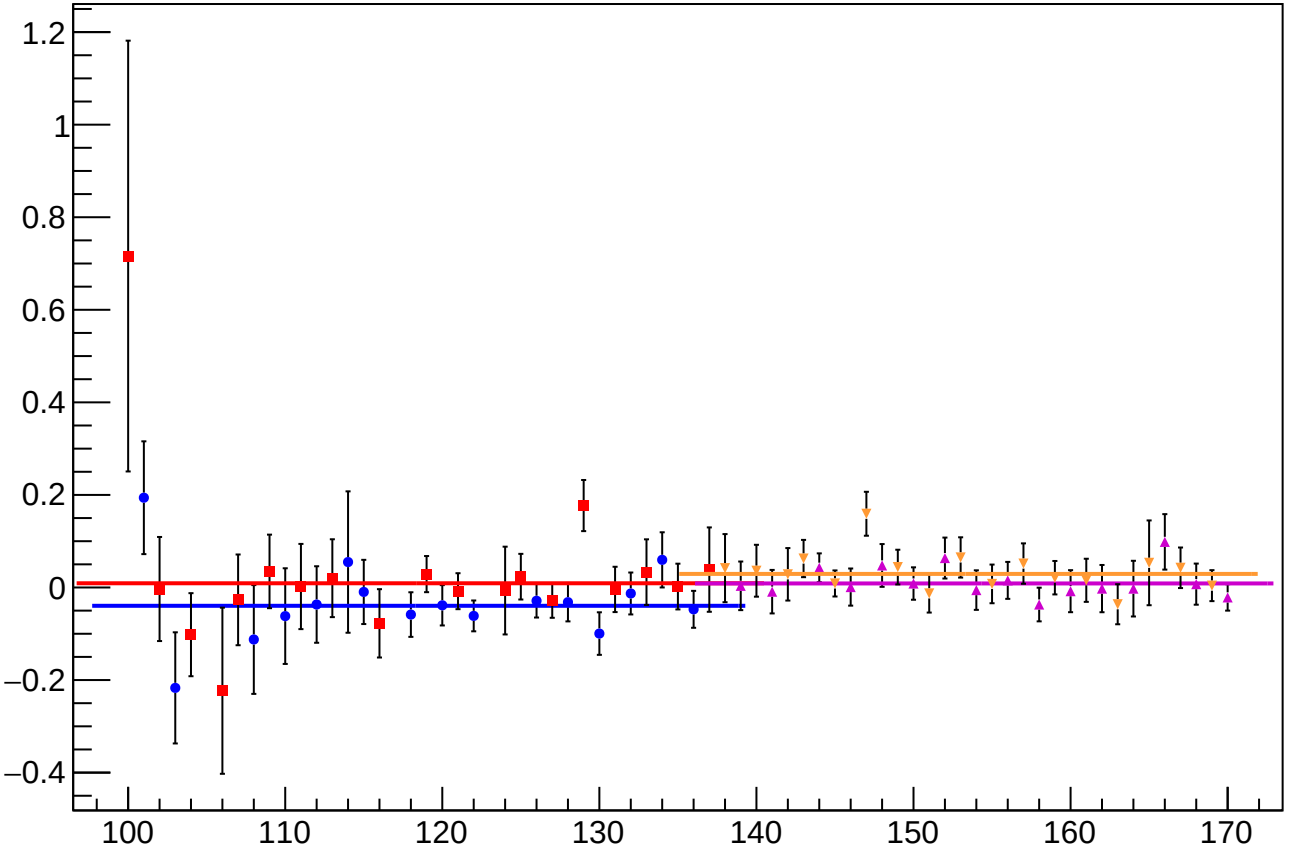
Left In: 35.839+/-0.007 $\chi^2$/NDF:842775.1/15

+ sign 34.603+/-0.006 $\chi^2$/NDF: 3618125.5/32

All: 35.087+/-0.004 $\chi^2$/NDF: 6323170.0/67

- sign 35.596+/-0.006 $\chi^2$/NDF: 2690528.7/34

asym_sam_26_48_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: -0.040+/-0.013 $\chi^2$/NDF: 12.4/15

Left Out: 0.029+/-0.010 $\chi^2$/NDF:14.3/16

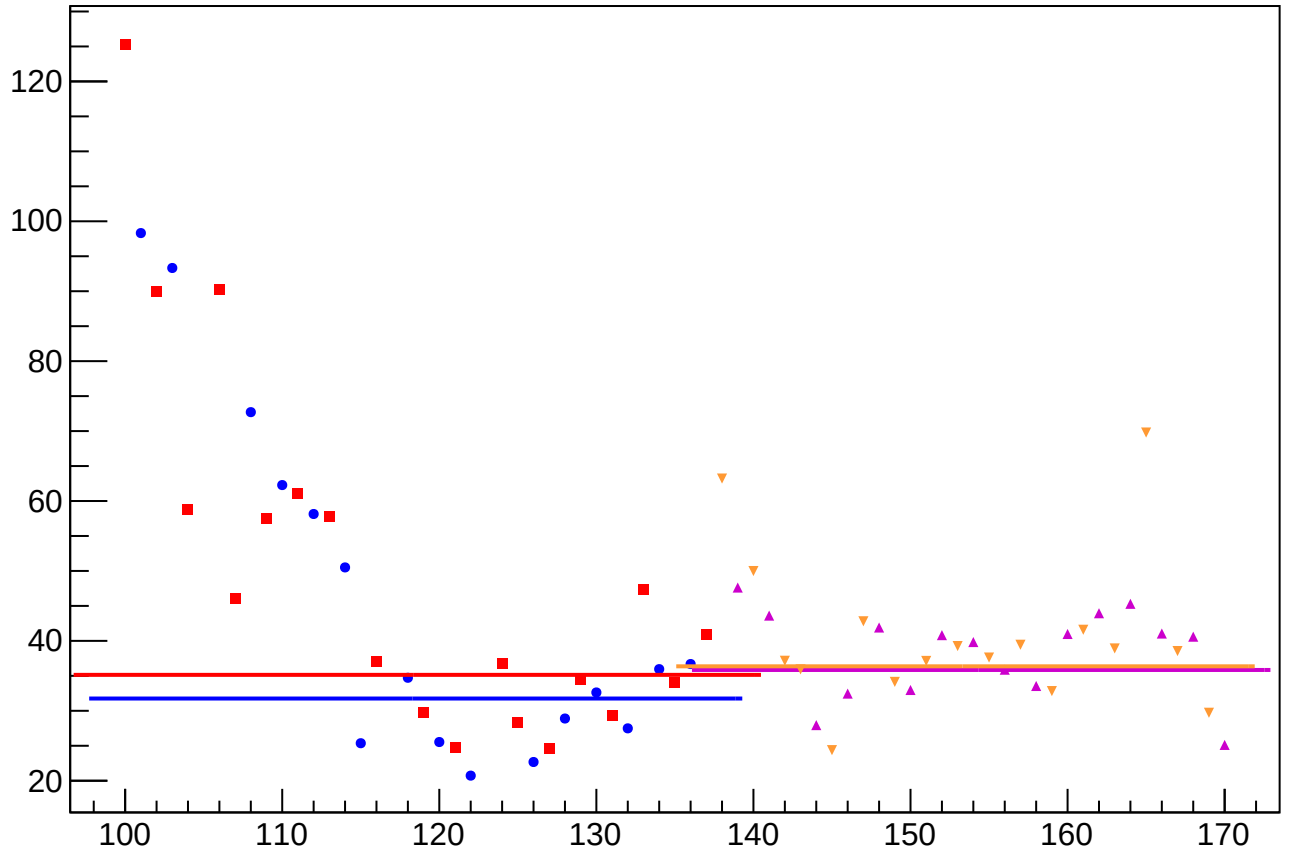
Right Out: 0.009+/-0.014 $\chi^2$/NDF: 18.3/18

Left In: 0.009+/-0.010 $\chi^2$/NDF:8.9/15

+ sign 0.003+/-0.008 $\chi^2$/NDF: 43.7/32

All: 0.006+/-0.006 $\chi^2$/NDF: 71.1/67

- sign 0.009+/-0.008 $\chi^2$/NDF: 27.2/34




Right In: 31.756+/-0.009 $\chi^2$/NDF: 2252373.4/15

Left Out: 36.361+/-0.007 $\chi^2$/NDF:1214360.6/16

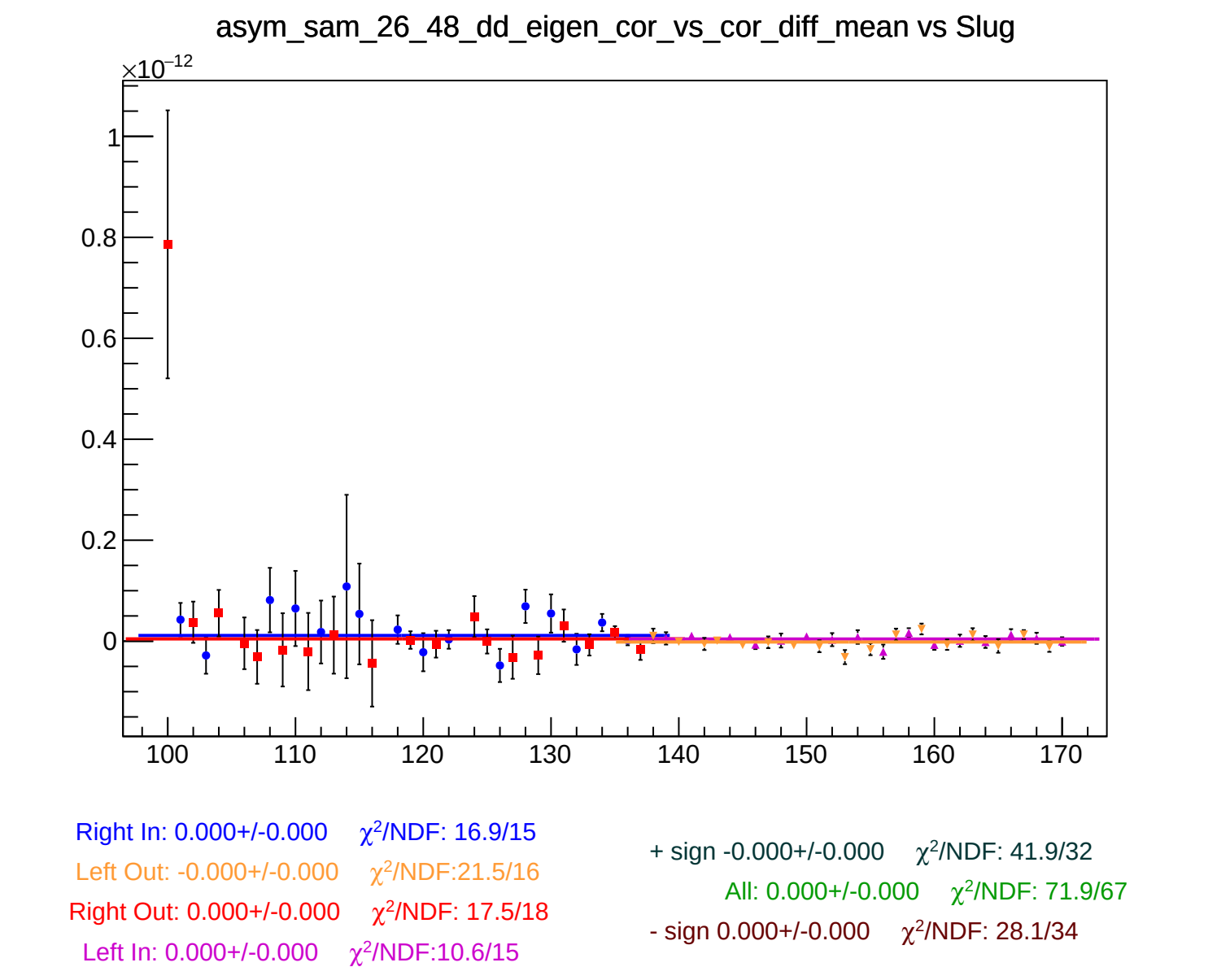
Right Out: 35.140+/-0.010 $\chi^2$/NDF: 1844572.3/18

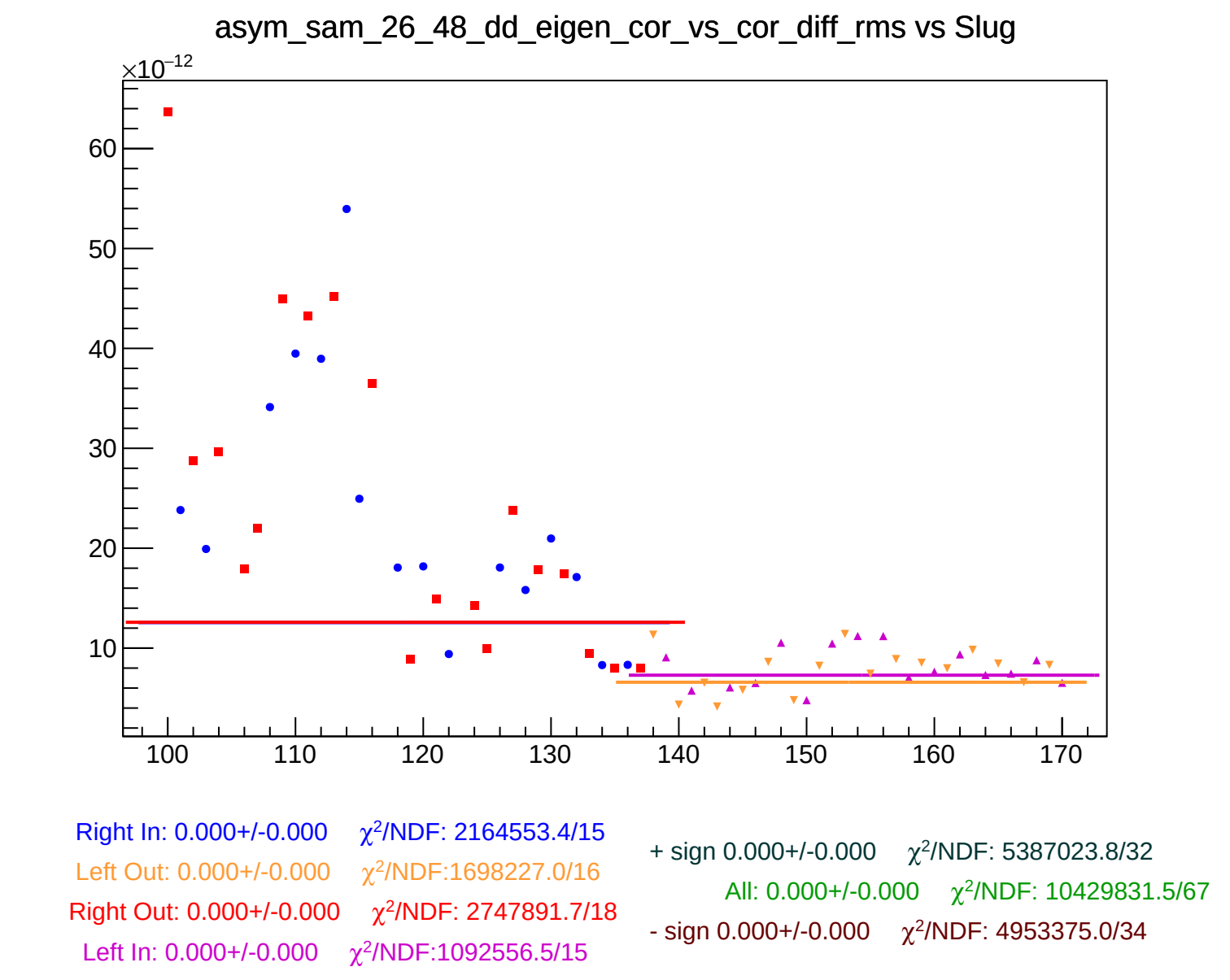
Left In: 35.839+/-0.007 $\chi^2$/NDF:842775.1/15

+ sign 34.603+/-0.006 $\chi^2$/NDF: 3618125.5/32

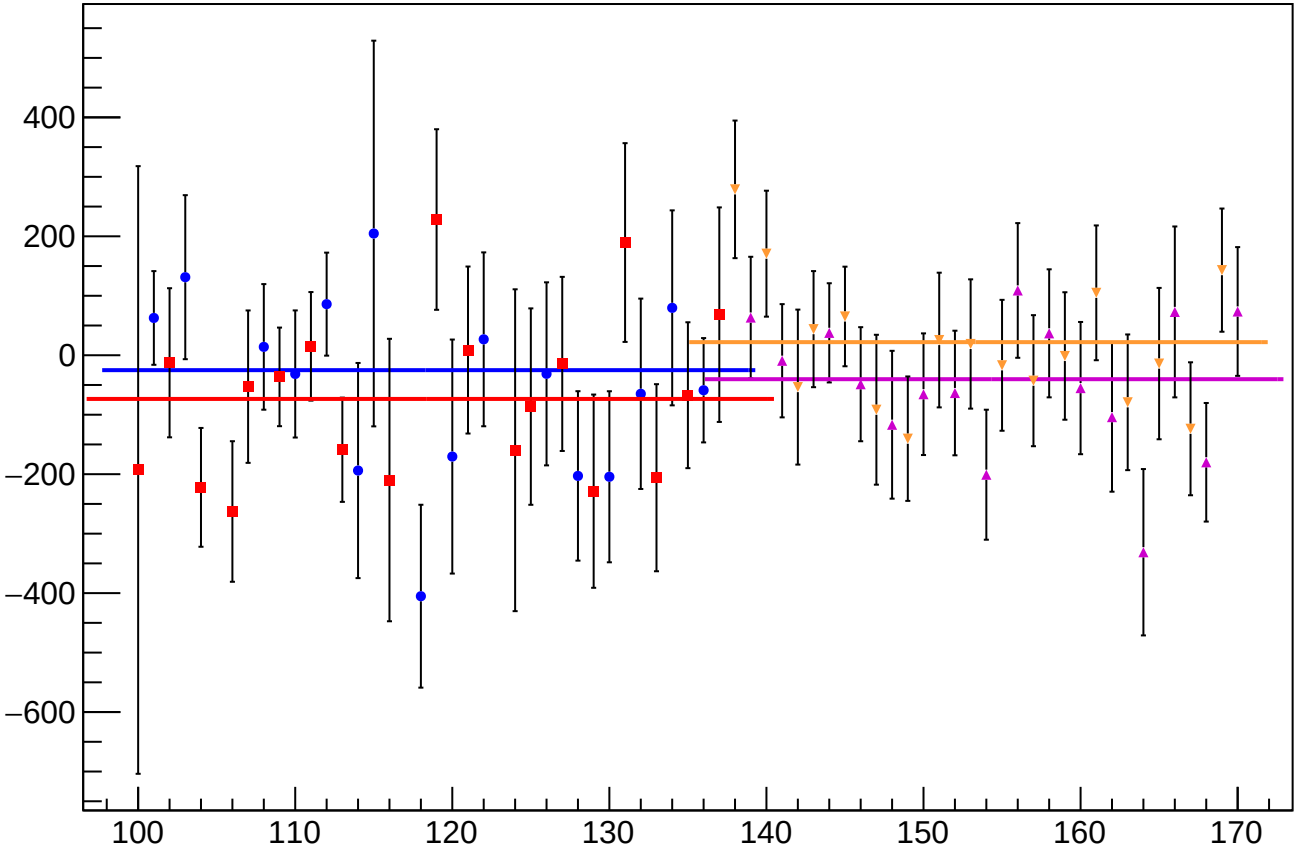
All: 35.087+/-0.004 $\chi^2$/NDF: 6323170.0/67

- sign 35.596+/-0.006 $\chi^2$/NDF: 2690528.7/34


asym_sam_26_48_dd_eigen_cor_vs_cor_diff_mean vs Slug
×10^−12
1
0.8
0.6
0.4
0.2
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 16.9/15
Left Out: -0.000+/-0.000 χ²/NDF:21.5/16
Right Out: 0.000+/-0.000 χ²/NDF: 17.5/18
Left In: 0.000+/-0.000 χ²/NDF:10.6/15
+ sign -0.000+/-0.000 χ²/NDF: 41.9/32
All: 0.000+/-0.000 χ²/NDF: 71.9/67
- sign 0.000+/-0.000 χ²/NDF: 28.1/34


asym_sam_26_48_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2164553.4/15
Left Out: 0.000+/-0.000 χ²/NDF:1698227.0/16
Right Out: 0.000+/-0.000 χ²/NDF: 2747891.7/18
Left In: 0.000+/-0.000 χ²/NDF:1092556.5/15
+ sign 0.000+/-0.000 χ²/NDF: 5387023.8/32
All: 0.000+/-0.000 χ²/NDF: 10429831.5/67
- sign 0.000+/-0.000 χ²/NDF: 4953375.0/34

# reg_asym_sam_1548_avg_mean vs Slug




Right In: -25.072+/-31.230 $\chi^2$/NDF: 16.2/15

Left Out: 22.031+/-26.454 $\chi^2$/NDF:15.8/16

Right Out: -73.458+/-29.935 $\chi^2$/NDF: 16.8/18

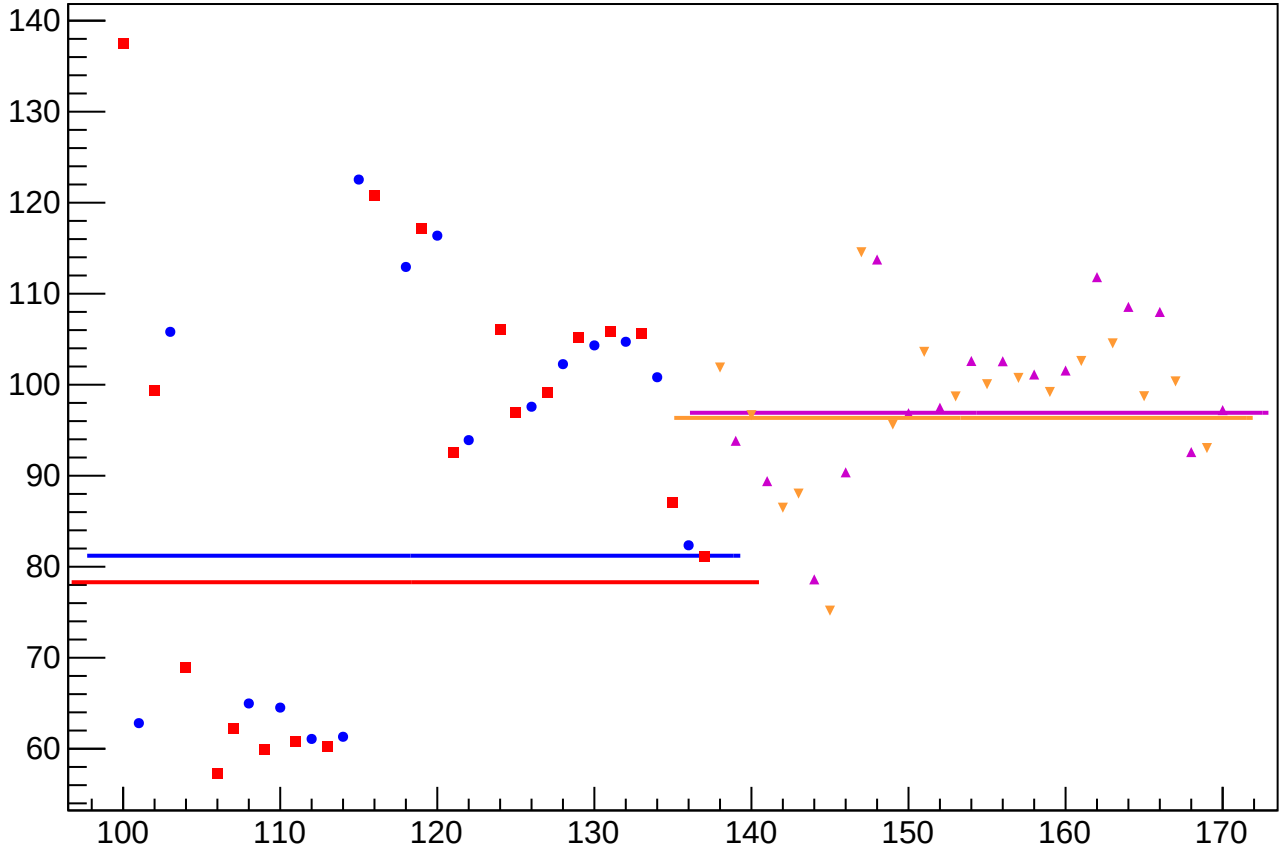
Left In: -40.269+/-26.842 $\chi^2$/NDF:15.2/15

+ sign 2.352+/-20.186 $\chi^2$/NDF: 33.3/32

All: -26.642+/-14.202 $\chi^2$/NDF: 70.1/67

- sign -55.061+/-19.985 $\chi^2$/NDF: 32.7/34

# reg_asym_sam_1548_avg_rms vs Slug




Right In: 81.210+/-0.022 $\chi^2$/NDF: 787676.9/15

Left Out: 96.353+/-0.019 $\chi^2$/NDF:238049.3/16

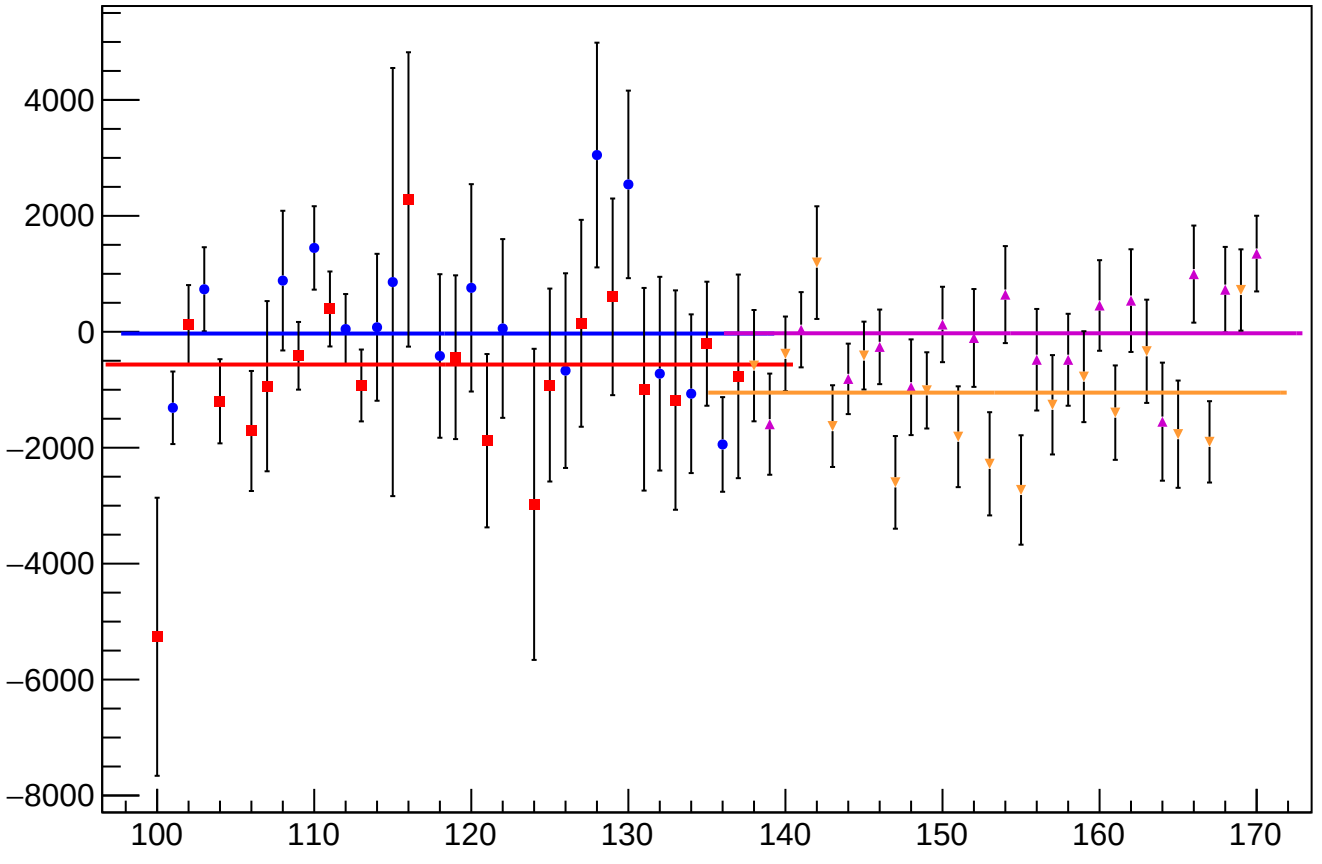
Right Out: 78.298+/-0.021 $\chi^2$/NDF: 934673.9/18

Left In: 96.916+/-0.019 $\chi^2$/NDF:231377.3/15

+ sign 90.027+/-0.014 $\chi^2$/NDF: 1299532.1/32

All: 89.315+/-0.010 $\chi^2$/NDF: 2899334.9/67

- sign 88.618+/-0.014 $\chi^2$/NDF: 1594884.1/34




Right In: -30.407+/-256.999 $\chi^2$/NDF: 21.9/15

Left Out: -1049.687+/-188.802 $\chi^2$/NDF:27.5/16

Right Out: -564.890+/-238.492 $\chi^2$/NDF: 13.3/18

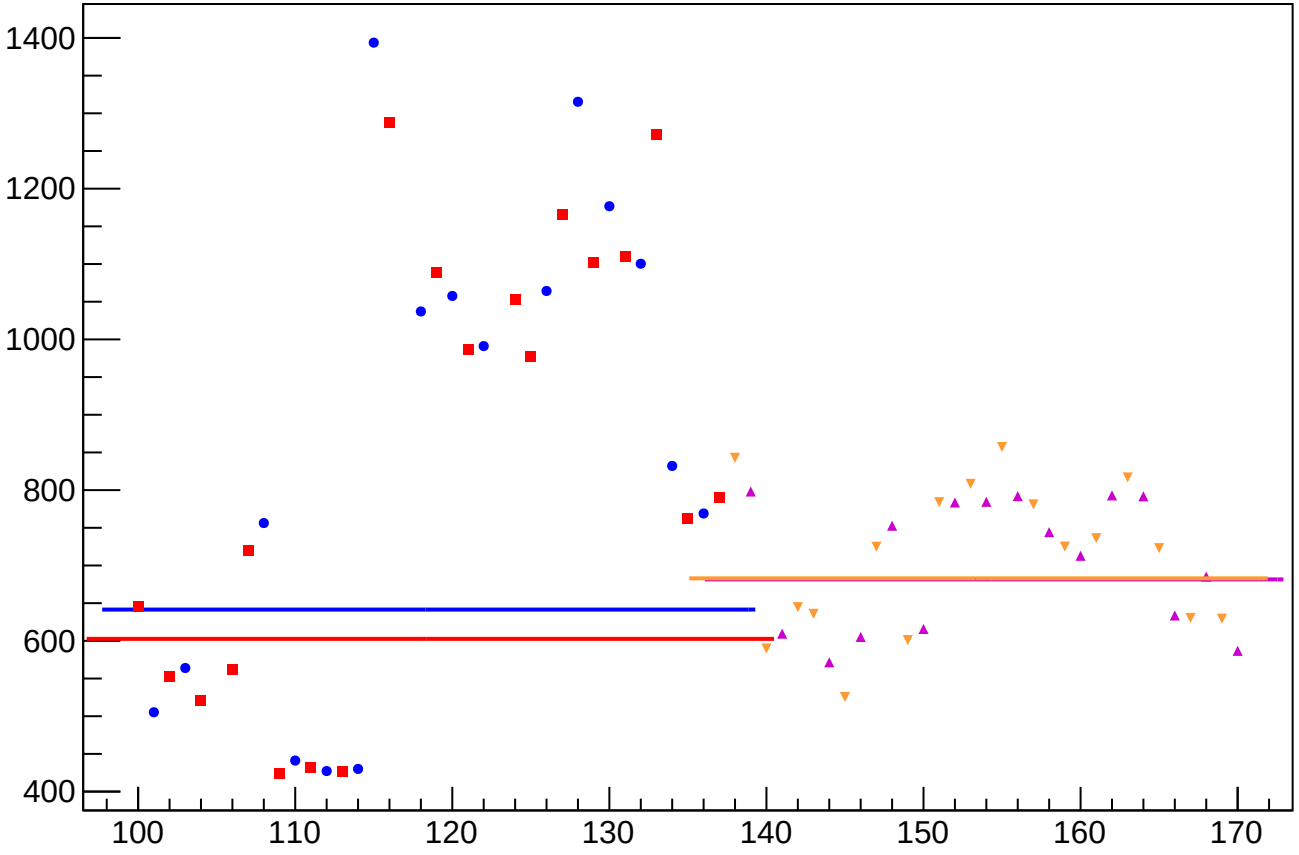
Left In: -25.783+/-189.496 $\chi^2$/NDF:17.6/15

+ sign -692.407+/-152.156 $\chi^2$/NDF: 59.6/32

All: -457.635+/-106.225 $\chi^2$/NDF: 98.3/67

- sign -234.418+/-148.364 $\chi^2$/NDF: 34.0/34

# asym_sam_1548_avg_reg_correction_rms vs Slug




Right In: 641.499+/-0.182 $\chi^2$/NDF: 1874990.8/15

Left Out: 682.928+/-0.134 $\chi^2$/NDF:537716.2/16

Right Out: 602.654+/-0.169 $\chi^2$/NDF: 2070307.7/18

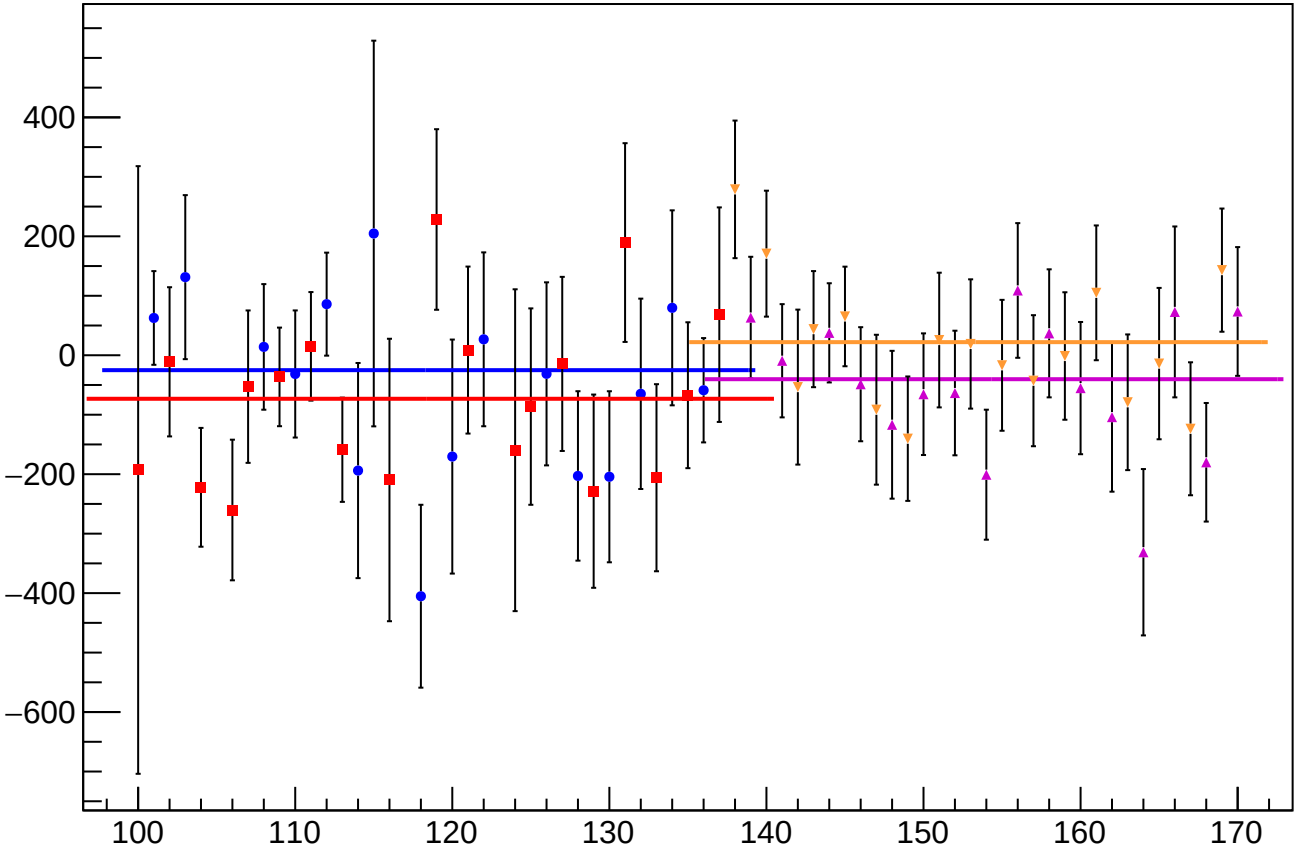
Left In: 681.515+/-0.134 $\chi^2$/NDF:400259.7/15

+ sign 668.406+/-0.108 $\chi^2$/NDF: 2446462.7/32

All: 659.481+/-0.075 $\chi^2$/NDF: 5064505.7/67

- sign 650.996+/-0.105 $\chi^2$/NDF: 2604620.0/34

# cor_asym_sam_1548_avg_mean vs Slug




Right In: -25.075+/-31.230 $\chi^2$/NDF: 16.2/15

Left Out: 22.035+/-26.454 $\chi^2$/NDF:15.8/16

Right Out: -73.193+/-29.937 $\chi^2$/NDF: 16.7/18

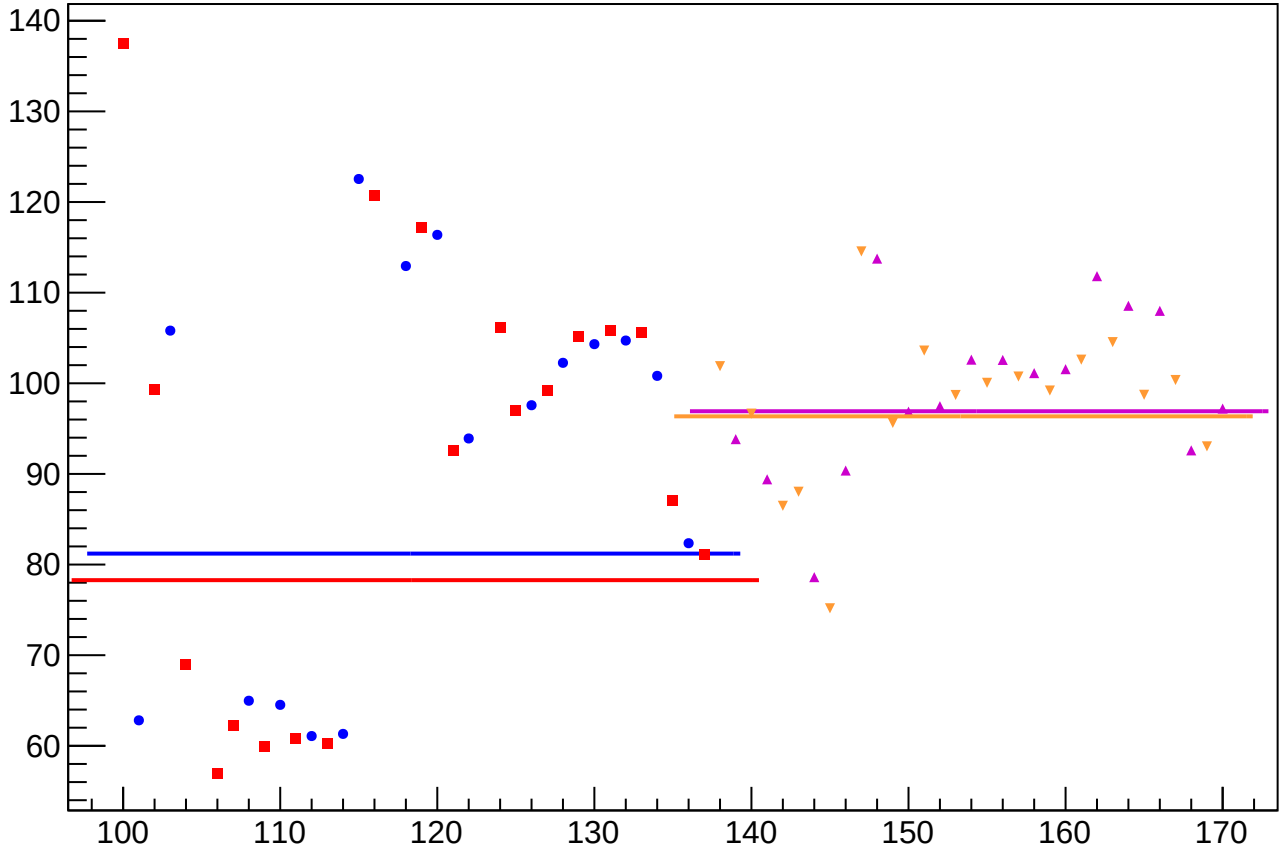
Left In: -40.267+/-26.842 $\chi^2$/NDF:15.2/15

+ sign 2.353+/-20.186 $\chi^2$/NDF: 33.3/32

All: -26.580+/-14.202 $\chi^2$/NDF: 70.0/67

- sign -54.941+/-19.985 $\chi^2$/NDF: 32.6/34

# cor_asym_sam_1548_avg_rms vs Slug




Right In: 81.210+/-0.022 $\chi^2$/NDF: 787679.3/15

Left Out: 96.353+/-0.019 $\chi^2$/NDF:238049.3/16

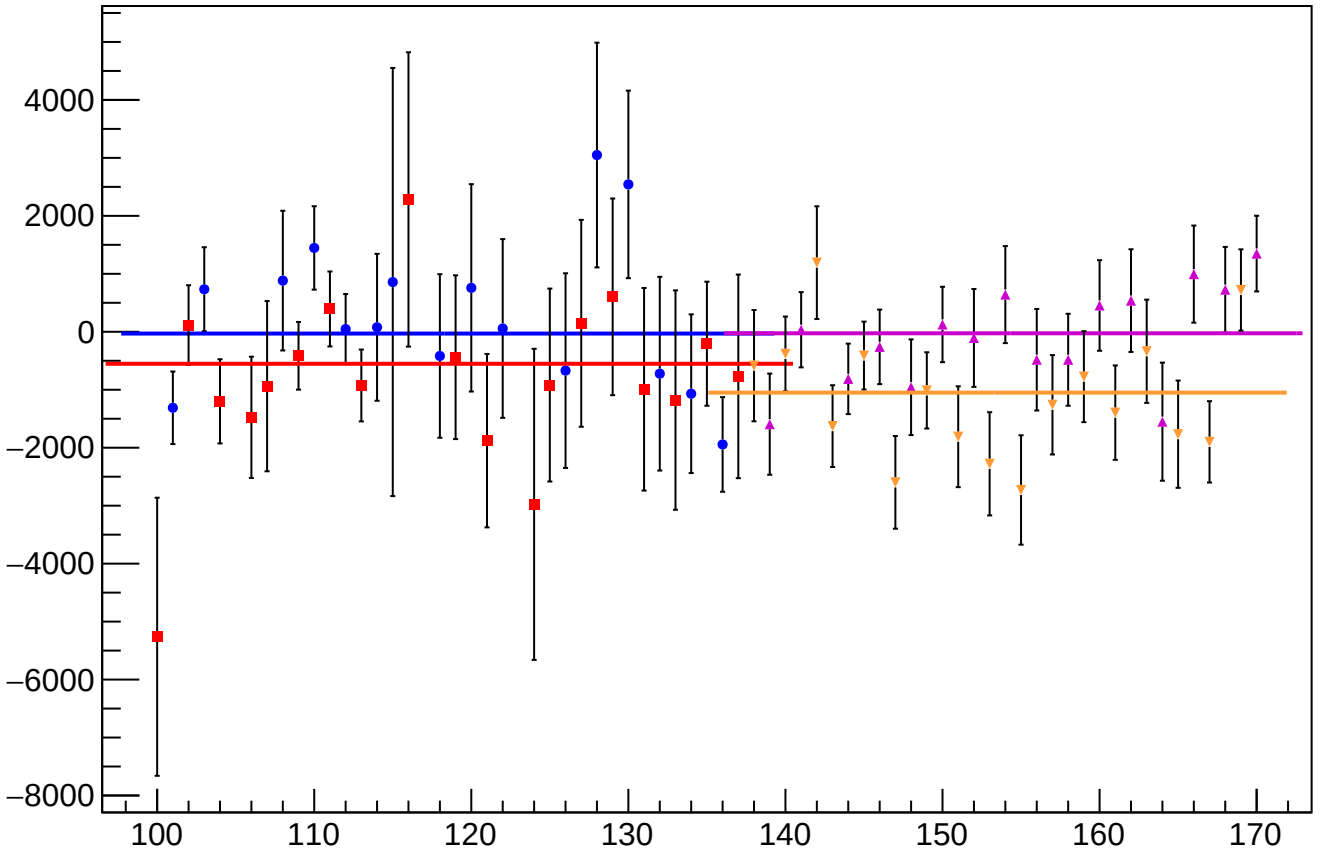
Right Out: 78.279+/-0.021 $\chi^2$/NDF: 936812.2/18

Left In: 96.916+/-0.019 $\chi^2$/NDF:231377.3/15

+ sign 90.027+/-0.014 $\chi^2$/NDF: 1299533.8/32

All: 89.311+/-0.010 $\chi^2$/NDF: 2902359.2/67

- sign 88.610+/-0.014 $\chi^2$/NDF: 1597852.6/34




Right In: -30.434+/-257.002 $\chi^2$/NDF: 21.9/15

Left Out: -1049.682+/-188.802 $\chi^2$/NDF:27.5/16

Right Out: -551.948+/-238.640 $\chi^2$/NDF: 12.8/18

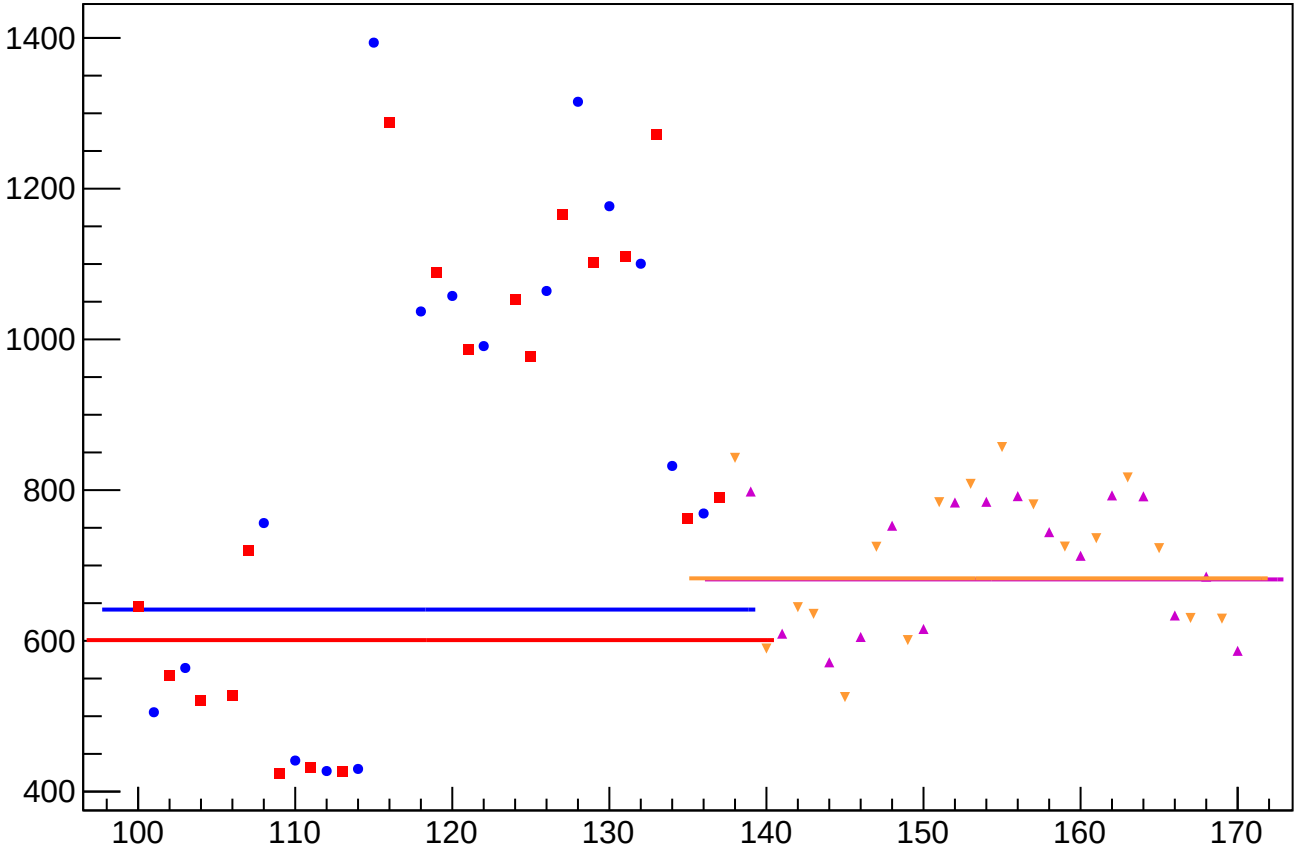
Left In: -25.787+/-189.496 $\chi^2$/NDF:17.6/15

+ sign -692.419+/-152.157 $\chi^2$/NDF: 59.6/32

All: -455.050+/-106.238 $\chi^2$/NDF: 97.8/67

- sign -229.257+/-148.400 $\chi^2$/NDF: 33.4/34

# asym_sam_1548_avg_cor_correction_rms vs Slug




Right In: 641.507+/-0.182 $\chi^2$/NDF: 1874950.0/15

Left Out: 682.928+/-0.134 $\chi^2$/NDF:537717.0/16

Right Out: 600.975+/-0.169 $\chi^2$/NDF: 2077232.5/18

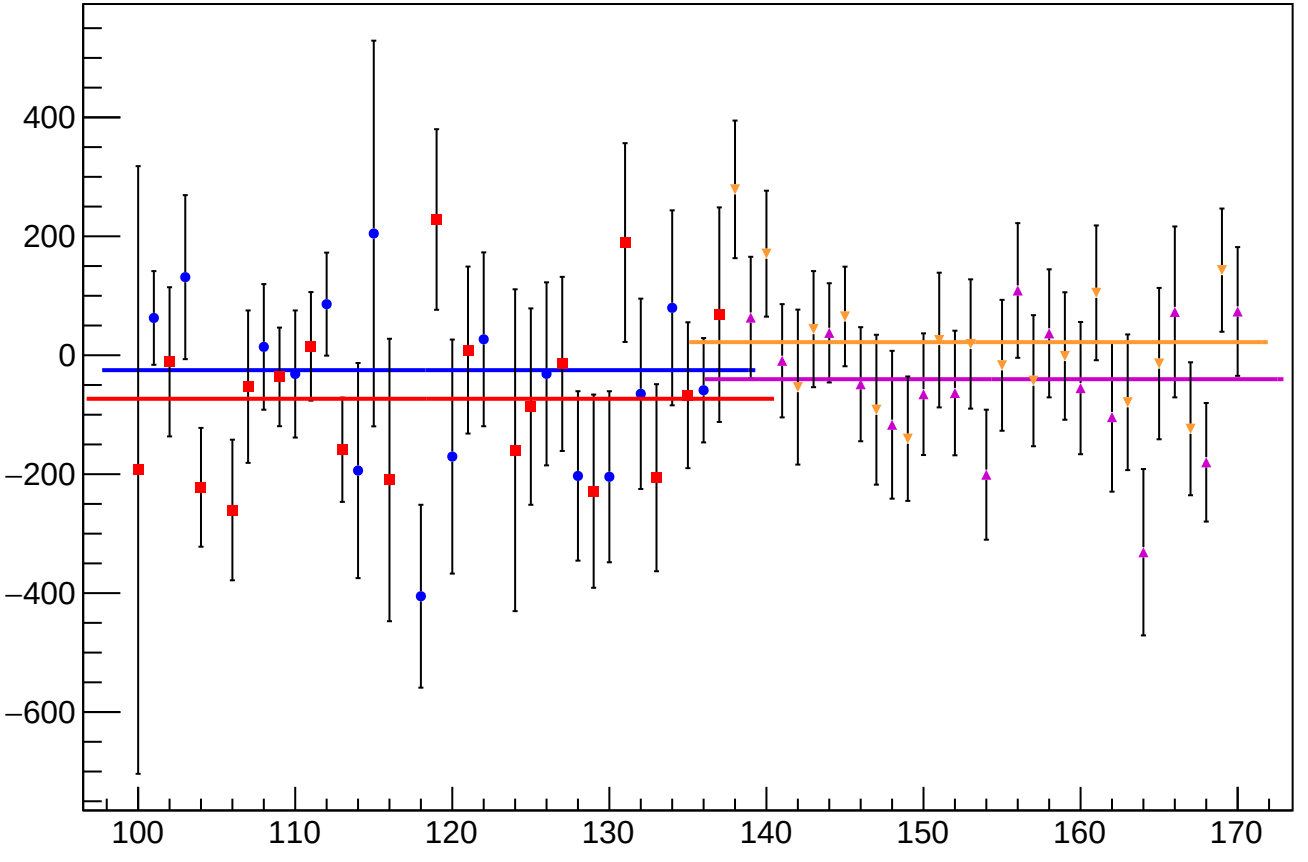
Left In: 681.515+/-0.134 $\chi^2$/NDF:400258.6/15

+ sign 668.409+/-0.108 $\chi^2$/NDF: 2446407.6/32

All: 659.164+/-0.075 $\chi^2$/NDF: 5078018.6/67

- sign 650.370+/-0.105 $\chi^2$/NDF: 2617204.0/34

# eigen_cor_asym_sam_1548_avg_mean vs Slug




Right In: -25.075+/-31.230 $\chi^2$/NDF: 16.2/15

Left Out: 22.035+/-26.454 $\chi^2$/NDF:15.8/16

Right Out: -73.193+/-29.937 $\chi^2$/NDF: 16.7/18

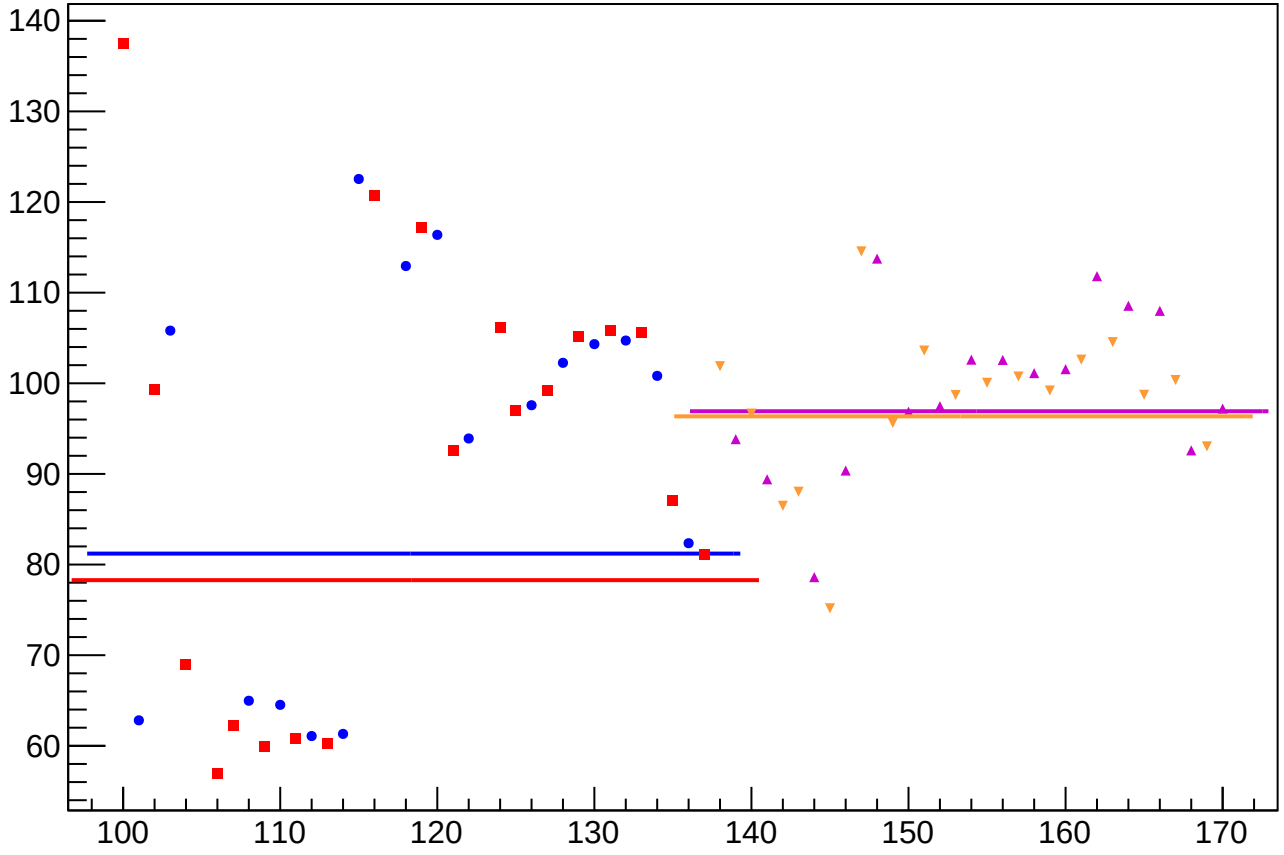
Left In: -40.267+/-26.842 $\chi^2$/NDF:15.2/15

+ sign 2.353+/-20.186 $\chi^2$/NDF: 33.3/32

All: -26.580+/-14.202 $\chi^2$/NDF: 70.0/67

- sign -54.941+/-19.985 $\chi^2$/NDF: 32.6/34

# eigen_cor_asym_sam_1548_avg_rms vs Slug




Right In: 81.210+/-0.022 $\chi^2$/NDF: 787679.3/15

Left Out: 96.353+/-0.019 $\chi^2$/NDF:238049.3/16

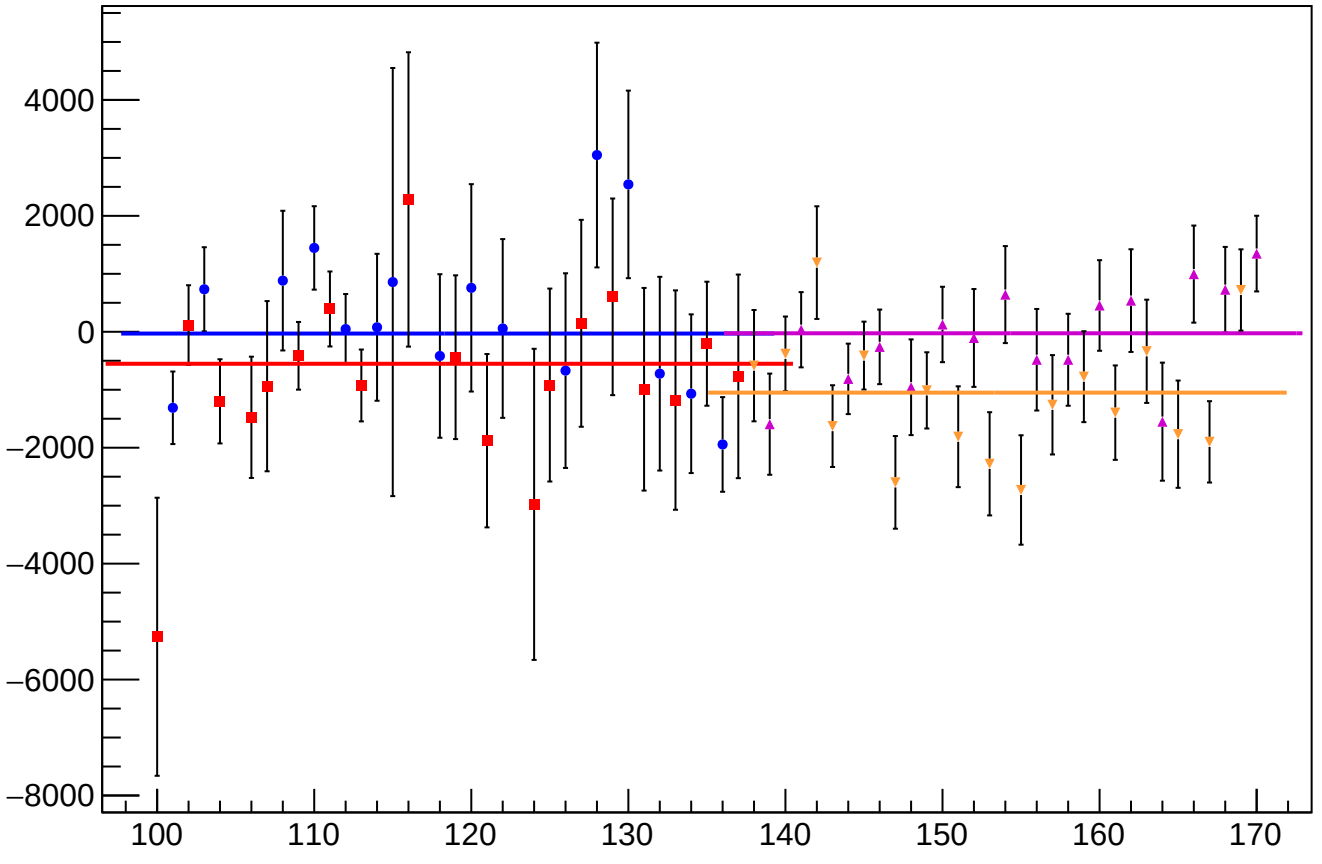
Right Out: 78.279+/-0.021 $\chi^2$/NDF: 936812.2/18

Left In: 96.916+/-0.019 $\chi^2$/NDF:231377.3/15

+ sign 90.027+/-0.014 $\chi^2$/NDF: 1299533.8/32

All: 89.311+/-0.010 $\chi^2$/NDF: 2902359.2/67

- sign 88.610+/-0.014 $\chi^2$/NDF: 1597852.6/34




Right In: -30.434+/-257.002 $\chi^2$/NDF: 21.9/15

Left Out: -1049.682+/-188.802 $\chi^2$/NDF:27.5/16

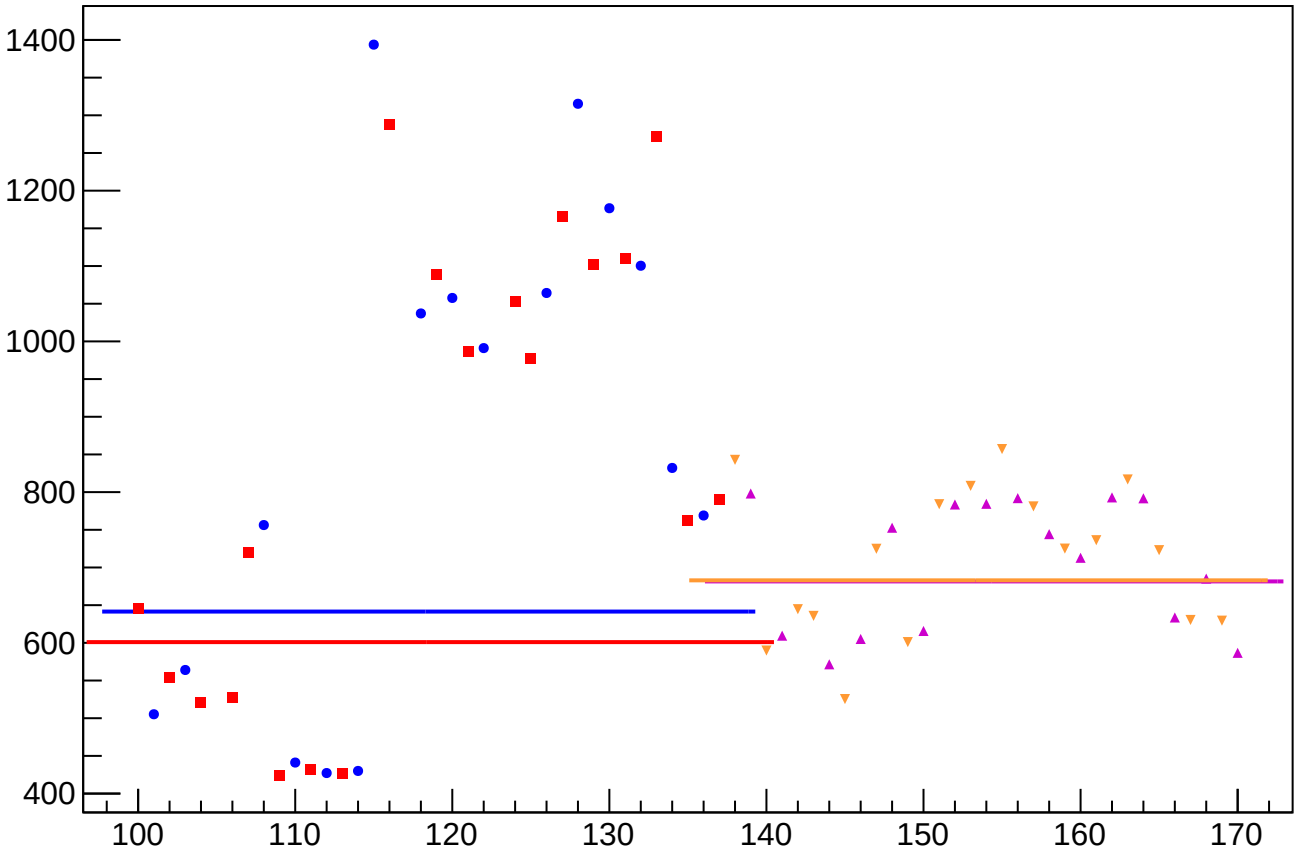
Right Out: -551.948+/-238.640 $\chi^2$/NDF: 12.8/18

Left In: -25.787+/-189.496 $\chi^2$/NDF:17.6/15

+ sign -692.419+/-152.157 $\chi^2$/NDF: 59.6/32

All: -455.050+/-106.238 $\chi^2$/NDF: 97.8/67

- sign -229.257+/-148.400 $\chi^2$/NDF: 33.4/34




Right In: 641.507+/-0.182 $\chi^2$/NDF: 1874950.0/15

Left Out: 682.928+/-0.134 $\chi^2$/NDF:537717.0/16

Right Out: 600.975+/-0.169 $\chi^2$/NDF: 2077232.5/18

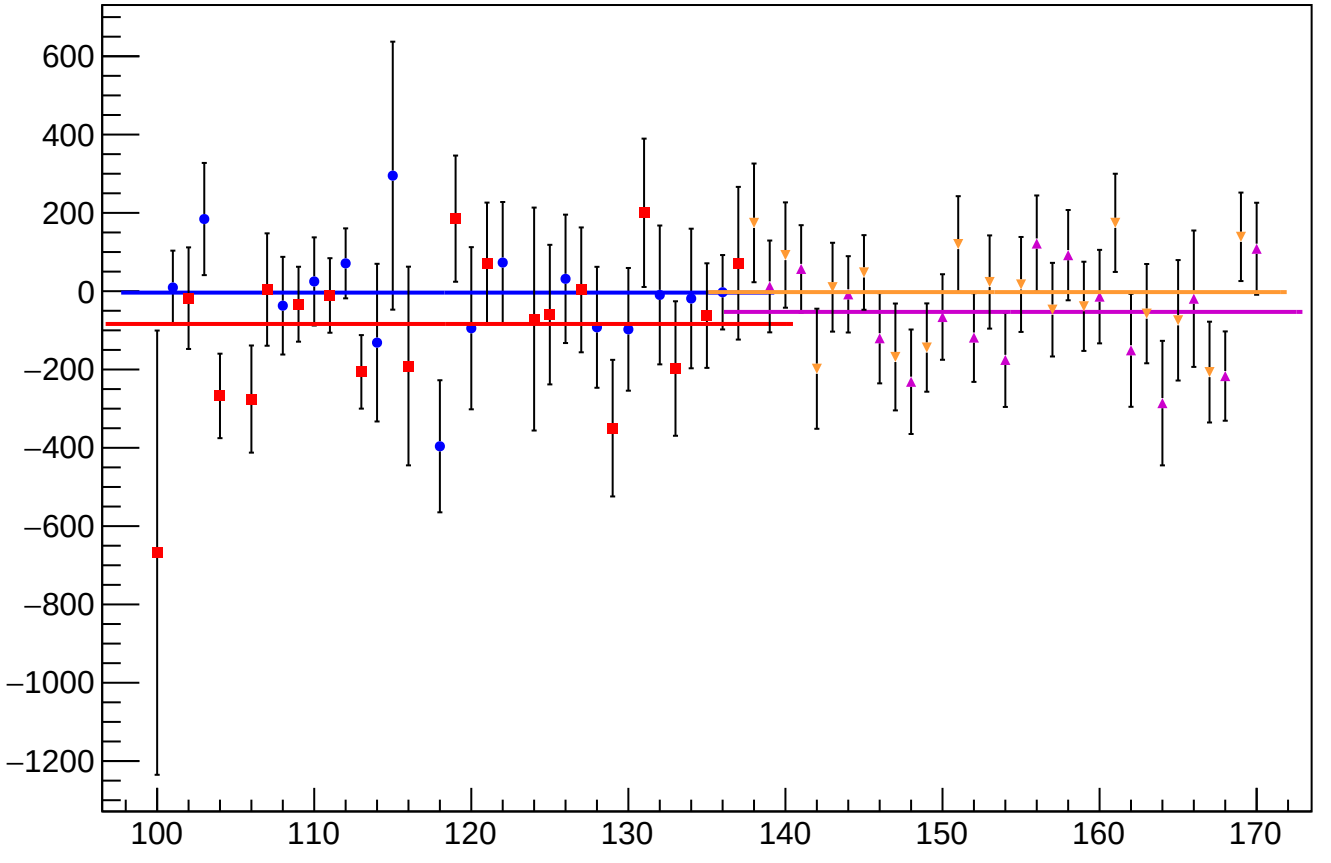
Left In: 681.515+/-0.134 $\chi^2$/NDF:400258.6/15

+ sign 668.409+/-0.108 $\chi^2$/NDF: 2446407.6/32

All: 659.164+/-0.075 $\chi^2$/NDF: 5078018.6/67

- sign 650.370+/-0.105 $\chi^2$/NDF: 2617204.0/34

# dit_asym_sam_1548_avg_mean vs Slug




Right In: -3.635+/-34.152 $\chi^2$/NDF: 10.3/15

Left Out: -2.313+/-29.872 $\chi^2$/NDF:14.6/16

Right Out: -83.676+/-32.633 $\chi^2$/NDF: 19.1/18

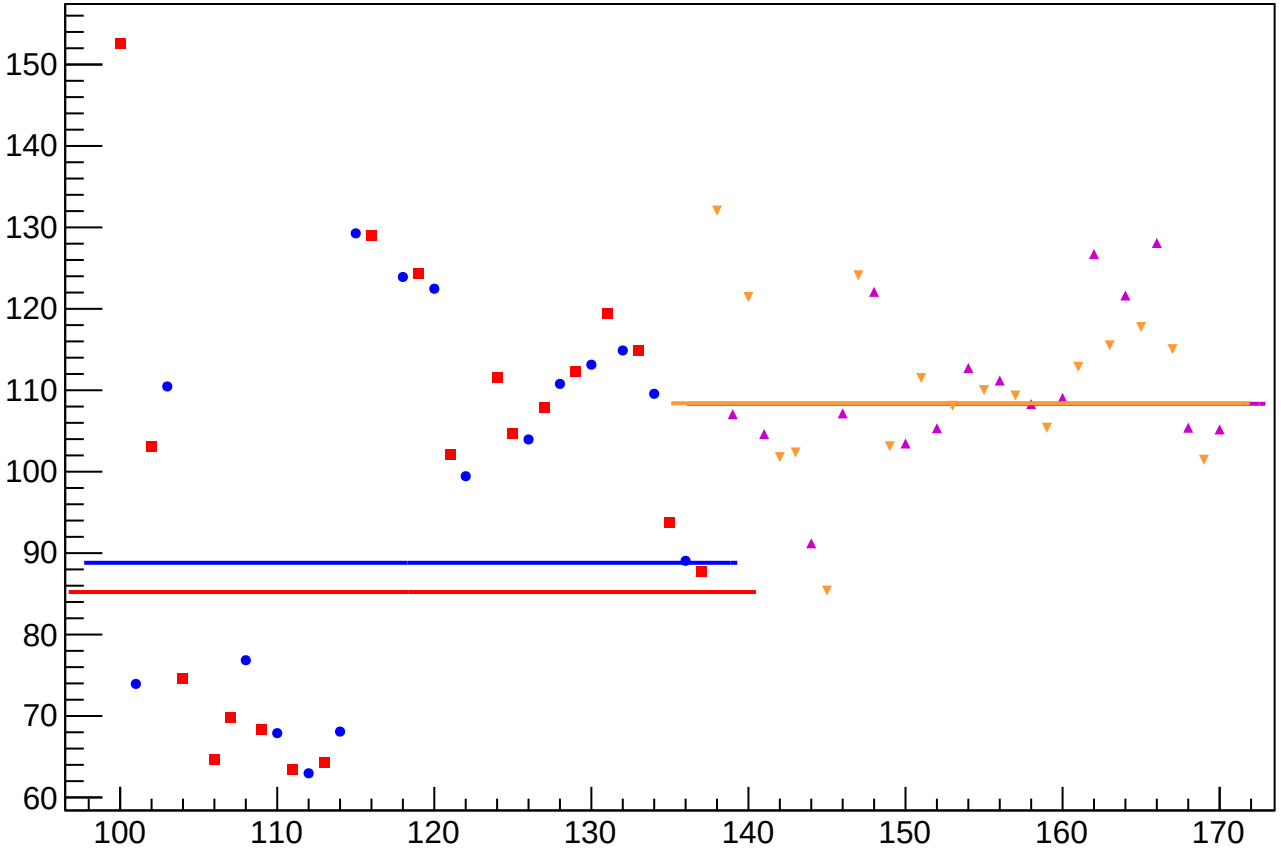
Left In: -52.890+/-30.122 $\chi^2$/NDF:15.3/15

+ sign -2.886+/-22.484 $\chi^2$/NDF: 25.0/32

All: -35.474+/-15.773 $\chi^2$/NDF: 63.9/67

- sign -67.053+/-22.134 $\chi^2$/NDF: 34.9/34

# dit_asym_sam_1548_avg_rms vs Slug




Right In: 88.813+/-0.024 $\chi^2$/NDF: 724609.8/15

Left Out: 108.403+/-0.021 $\chi^2$/NDF:256665.6/16

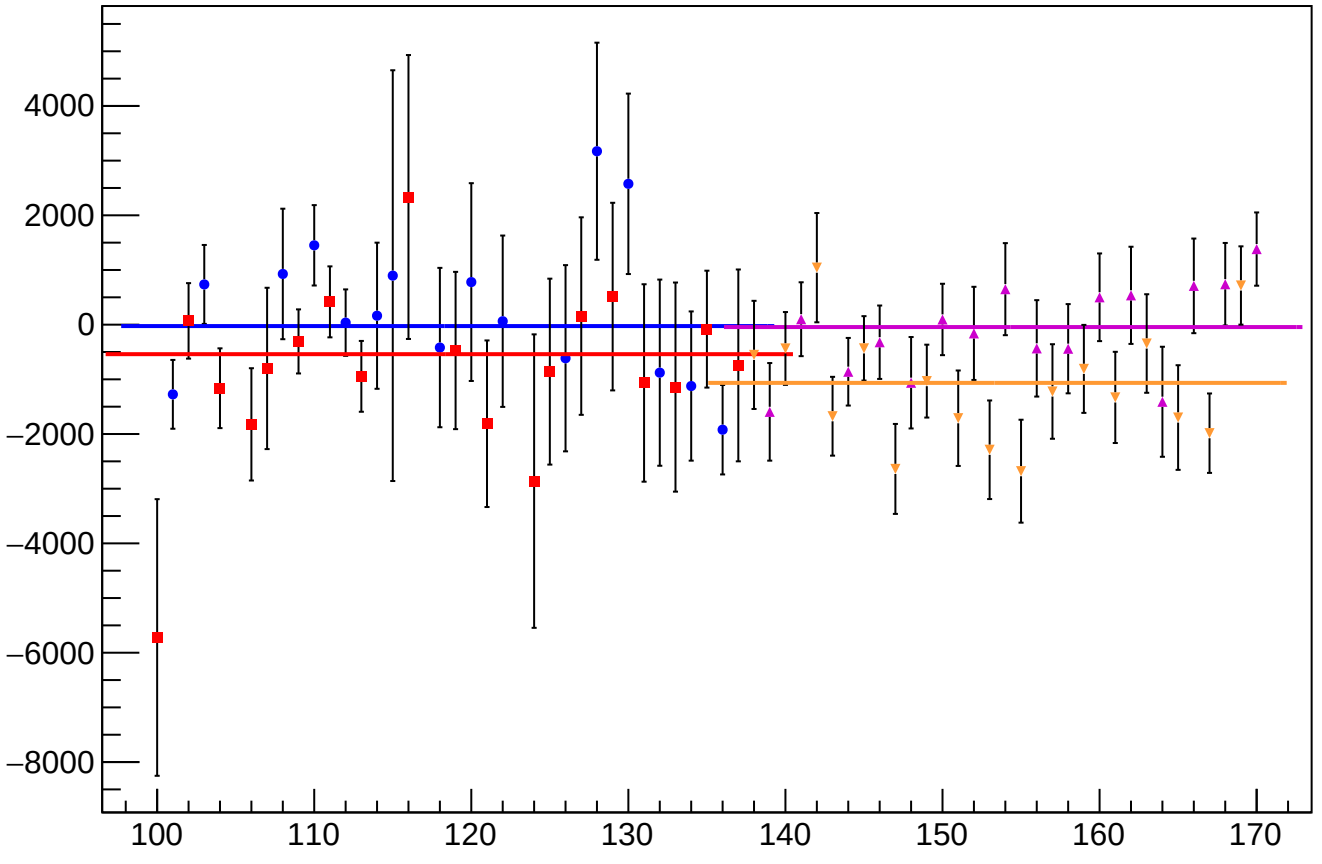
Right Out: 85.225+/-0.023 $\chi^2$/NDF: 884071.4/18

Left In: 108.339+/-0.021 $\chi^2$/NDF:169826.9/15

+ sign 99.912+/-0.016 $\chi^2$/NDF: 1354094.6/32

All: 98.791+/-0.011 $\chi^2$/NDF: 2959566.0/67

- sign 97.705+/-0.016 $\chi^2$/NDF: 1595682.7/34




Right In: -25.770+/-259.401 $\chi^2$/NDF: 21.6/15

Left Out: -1064.783+/-192.528 $\chi^2$/NDF:25.6/16

Right Out: -539.635+/-241.238 $\chi^2$/NDF: 13.6/18

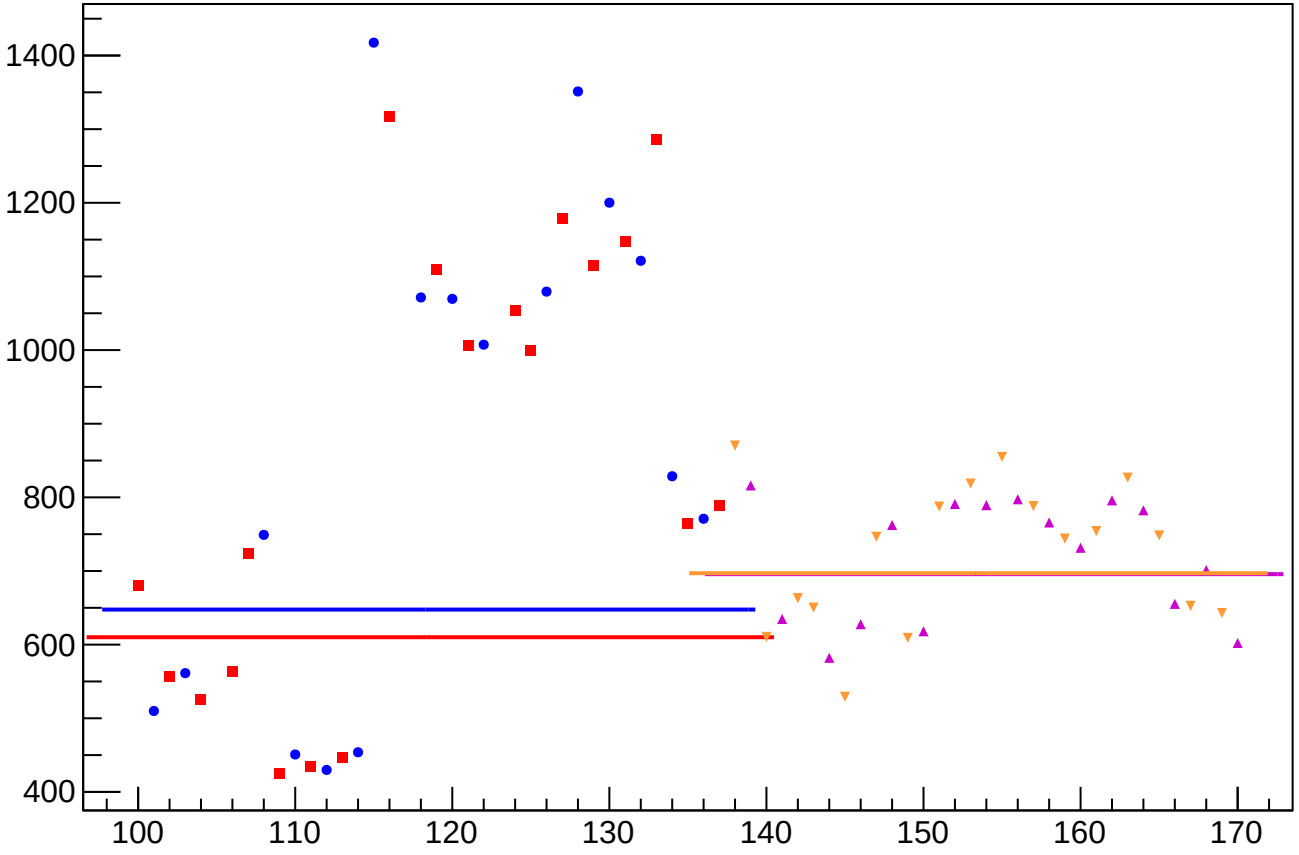
Left In: -43.821+/-193.301 $\chi^2$/NDF:16.7/15

+ sign -695.728+/-154.599 $\chi^2$/NDF: 57.5/32

All: -461.084+/-107.967 $\chi^2$/NDF: 94.9/67

- sign -237.689+/-150.848 $\chi^2$/NDF: 32.9/34

# asym_sam_1548_avg_dit_correction_rms vs Slug




Right In: 647.641+/-0.183 $\chi^2$/NDF: 1887815.9/15

Left Out: 696.989+/-0.136 $\chi^2$/NDF:529055.7/16

Right Out: 610.061+/-0.171 $\chi^2$/NDF: 2074248.2/18

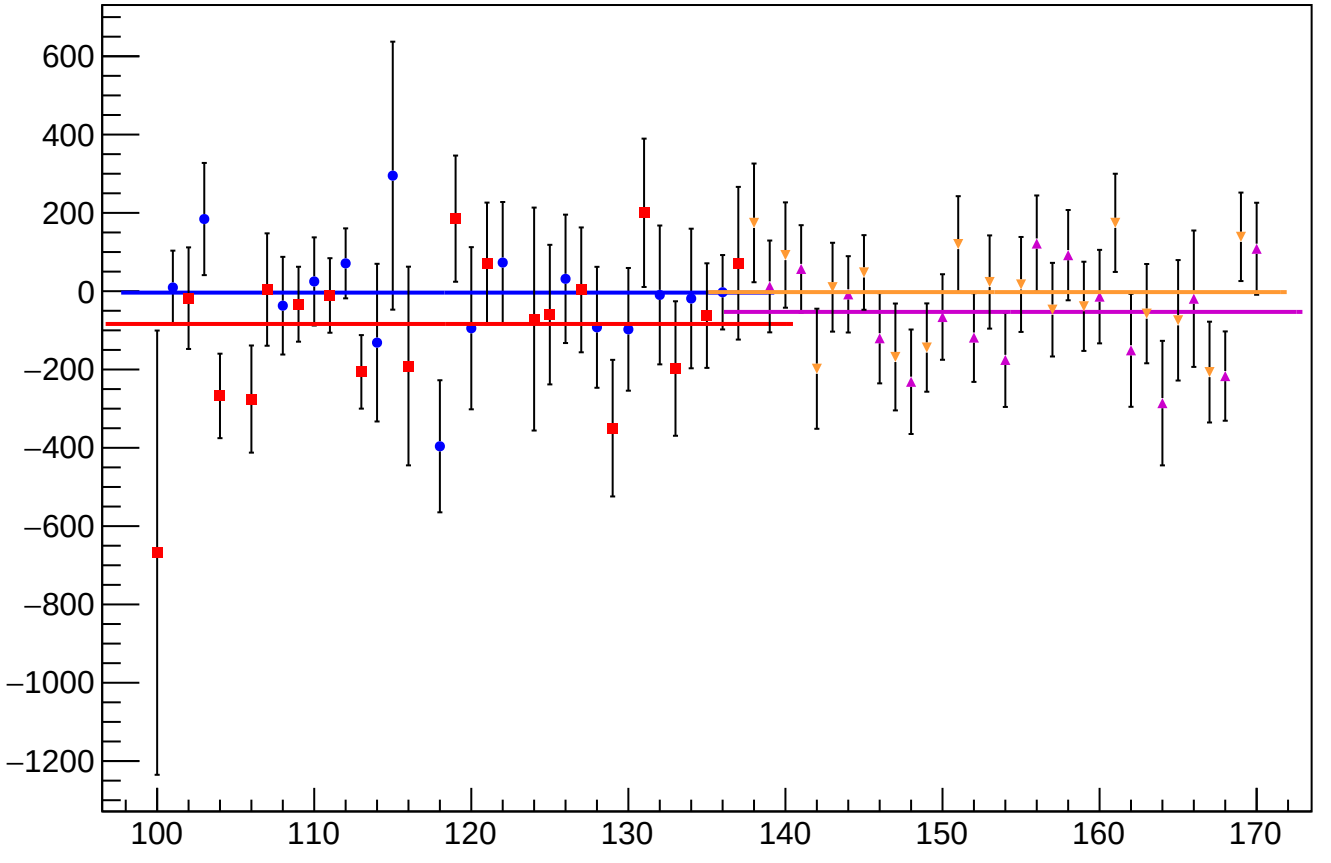
Left In: 695.715+/-0.137 $\chi^2$/NDF:360452.2/15

+ sign 679.461+/-0.109 $\chi^2$/NDF: 2463544.6/32

All: 670.631+/-0.076 $\chi^2$/NDF: 5064532.2/67

- sign 662.224+/-0.107 $\chi^2$/NDF: 2588250.9/34

# eigen_dit_asym_sam_1548_avg_mean vs Slug




Right In: -3.633+/-34.152 $\chi^2$/NDF: 10.3/15

Left Out: -2.311+/-29.872 $\chi^2$/NDF:14.6/16

Right Out: -83.676+/-32.633 $\chi^2$/NDF: 19.1/18

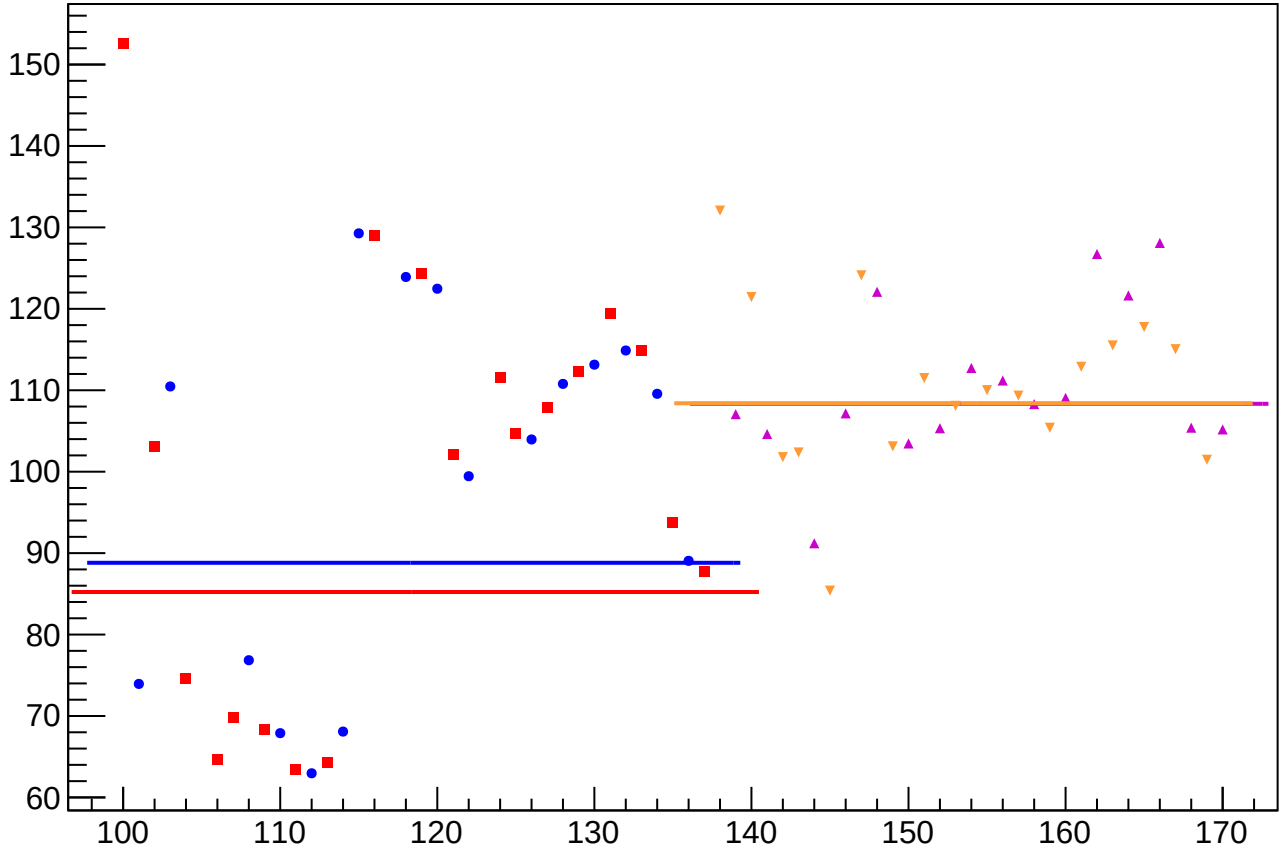
Left In: -52.890+/-30.122 $\chi^2$/NDF:15.3/15

+ sign -2.884+/-22.484 $\chi^2$/NDF: 25.0/32

All: -35.473+/-15.773 $\chi^2$/NDF: 63.9/67

- sign -67.053+/-22.134 $\chi^2$/NDF: 34.9/34

# eigen_dit_asym_sam_1548_avg_rms vs Slug




Right In: 88.813+/-0.024 $\chi^2$/NDF: 724609.7/15

Left Out: 108.403+/-0.021 $\chi^2$/NDF:256663.9/16

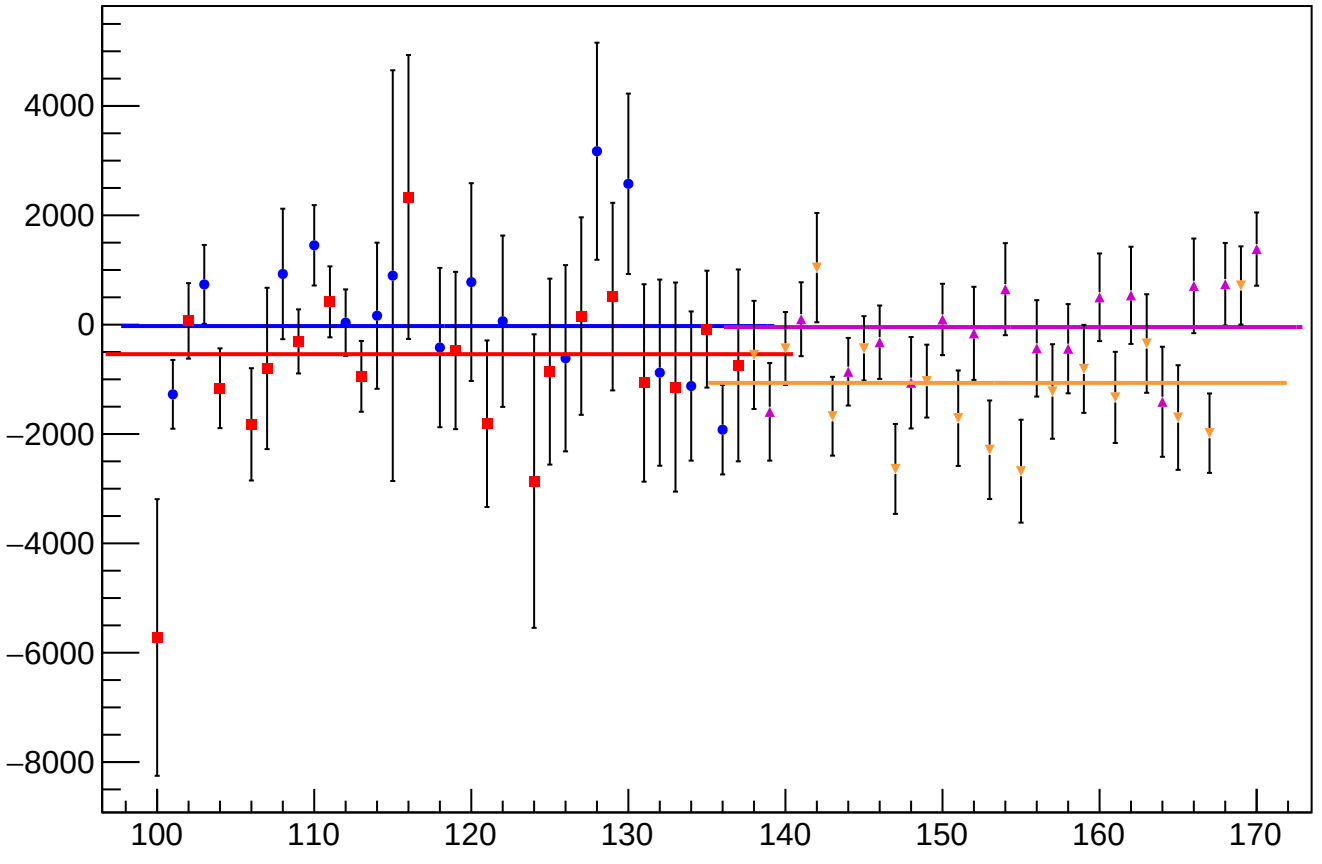
Right Out: 85.225+/-0.023 $\chi^2$/NDF: 884073.3/18

Left In: 108.339+/-0.021 $\chi^2$/NDF:169825.2/15

+ sign 99.912+/-0.016 $\chi^2$/NDF: 1354099.6/32

All: 98.791+/-0.011 $\chi^2$/NDF: 2959580.3/67

- sign 97.705+/-0.016 $\chi^2$/NDF: 1595691.8/34




Right In: -25.770+/-259.401 $\chi^2$/NDF: 21.6/15

Left Out: -1064.781+/-192.528 $\chi^2$/NDF:25.6/16

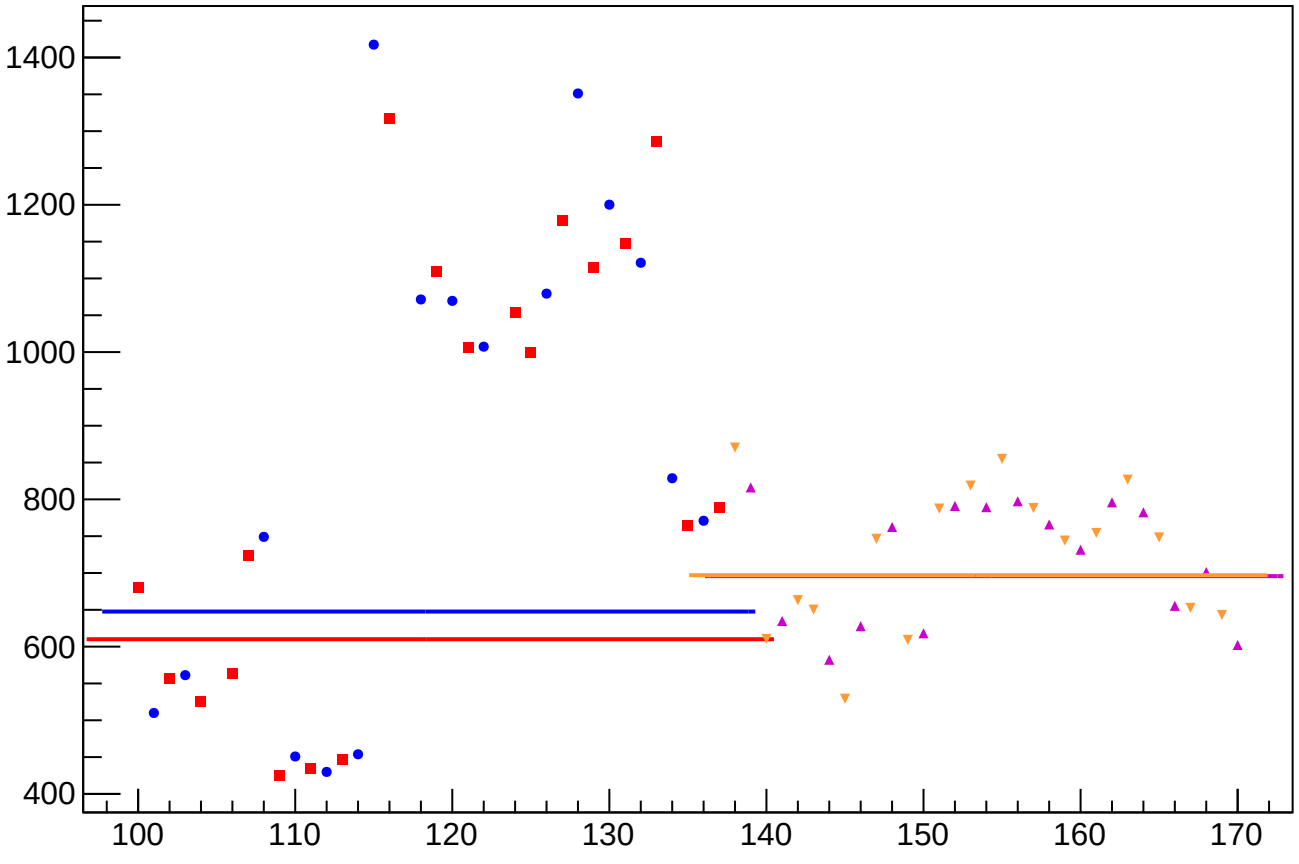
Right Out: -539.635+/-241.238 $\chi^2$/NDF: 13.6/18

Left In: -43.821+/-193.301 $\chi^2$/NDF:16.7/15

+ sign -695.726+/-154.599 $\chi^2$/NDF: 57.5/32

All: -461.083+/-107.967 $\chi^2$/NDF: 94.9/67

- sign -237.688+/-150.848 $\chi^2$/NDF: 32.9/34




Right In: 647.640+/-0.183 $\chi^2$/NDF: 1887820.6/15

Left Out: 696.989+/-0.136 $\chi^2$/NDF:529057.6/16

Right Out: 610.060+/-0.171 $\chi^2$/NDF: 2074251.1/18

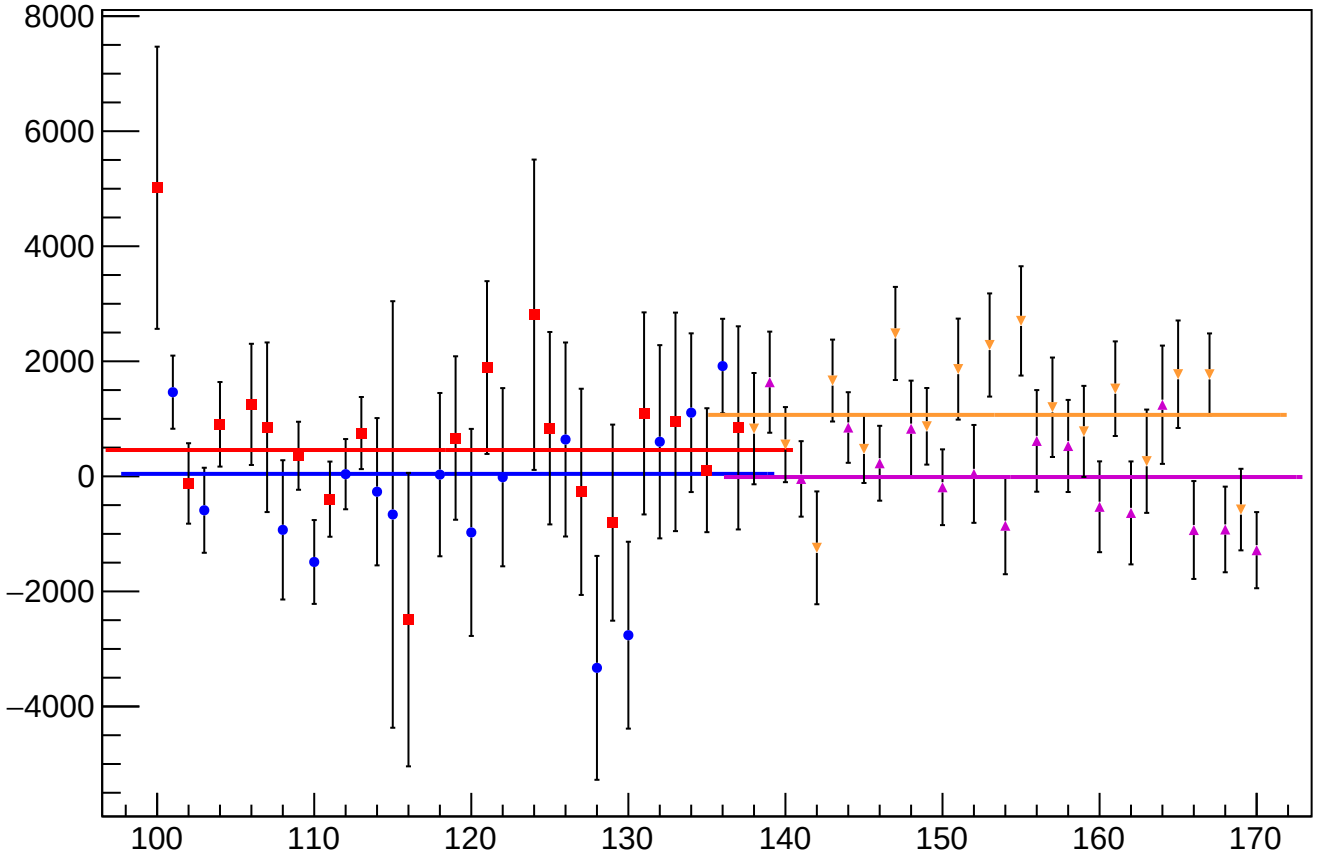
Left In: 695.715+/-0.137 $\chi^2$/NDF:360450.6/15

+ sign 679.460+/-0.109 $\chi^2$/NDF: 2463551.5/32

All: 670.630+/-0.076 $\chi^2$/NDF: 5064541.1/67

- sign 662.223+/-0.107 $\chi^2$/NDF: 2588252.8/34

# asym_sam_1548_avg_mean vs Slug




Right In: 43.152+/-259.796 $\chi^2$/NDF: 23.2/15

Left Out: 1068.630+/-190.764 $\chi^2$/NDF:24.9/16

Right Out: 458.111+/-241.118 $\chi^2$/NDF: 11.3/18

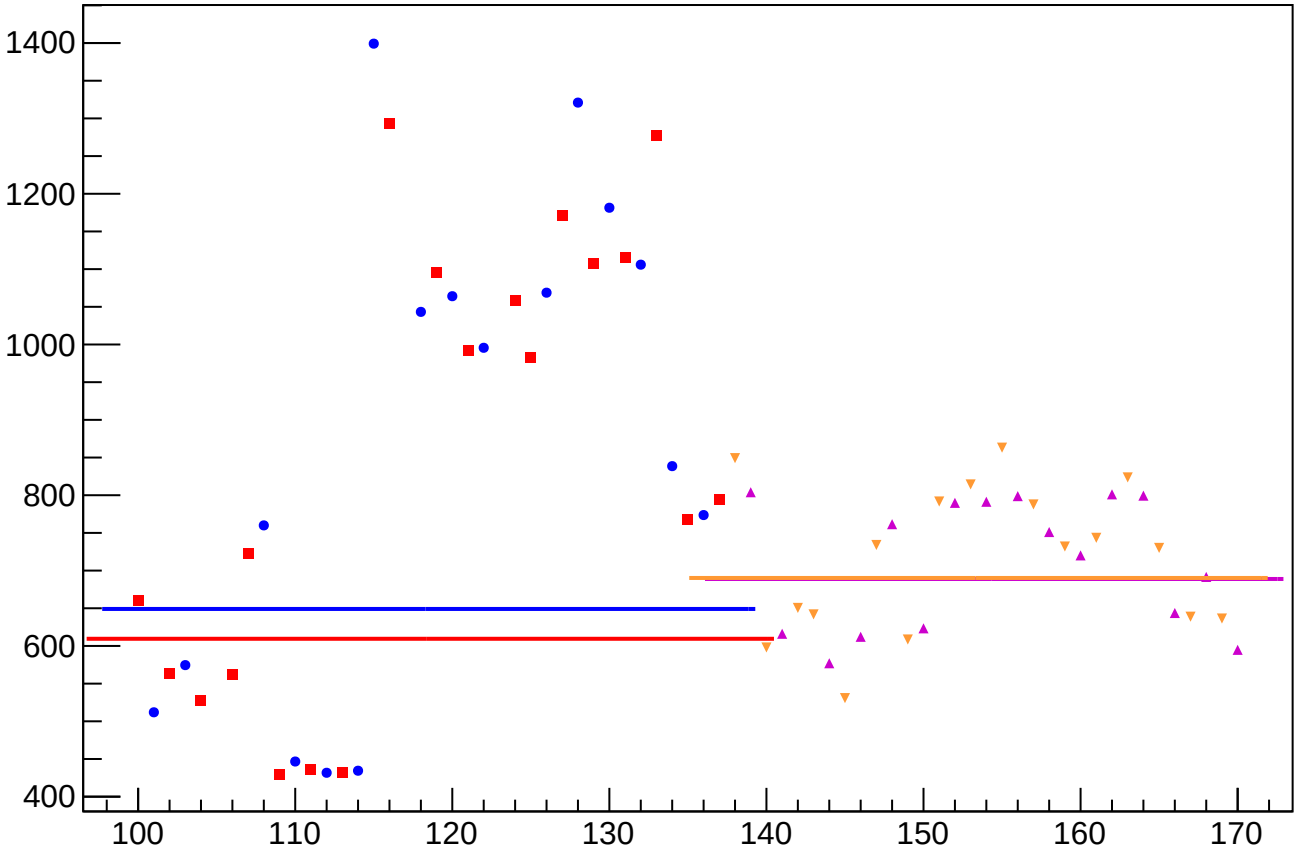
Left In: -11.529+/-191.499 $\chi^2$/NDF:17.4/15

+ sign 709.405+/-153.763 $\chi^2$/NDF: 58.3/32

All: 433.010+/-107.356 $\chi^2$/NDF: 95.6/67

- sign 170.126+/-149.958 $\chi^2$/NDF: 31.0/34

# asym_sam_1548_avg_rms vs Slug




Right In: 649.091+/-0.184 $\chi^2$/NDF: 1845815.6/15

Left Out: 690.208+/-0.135 $\chi^2$/NDF:527956.8/16

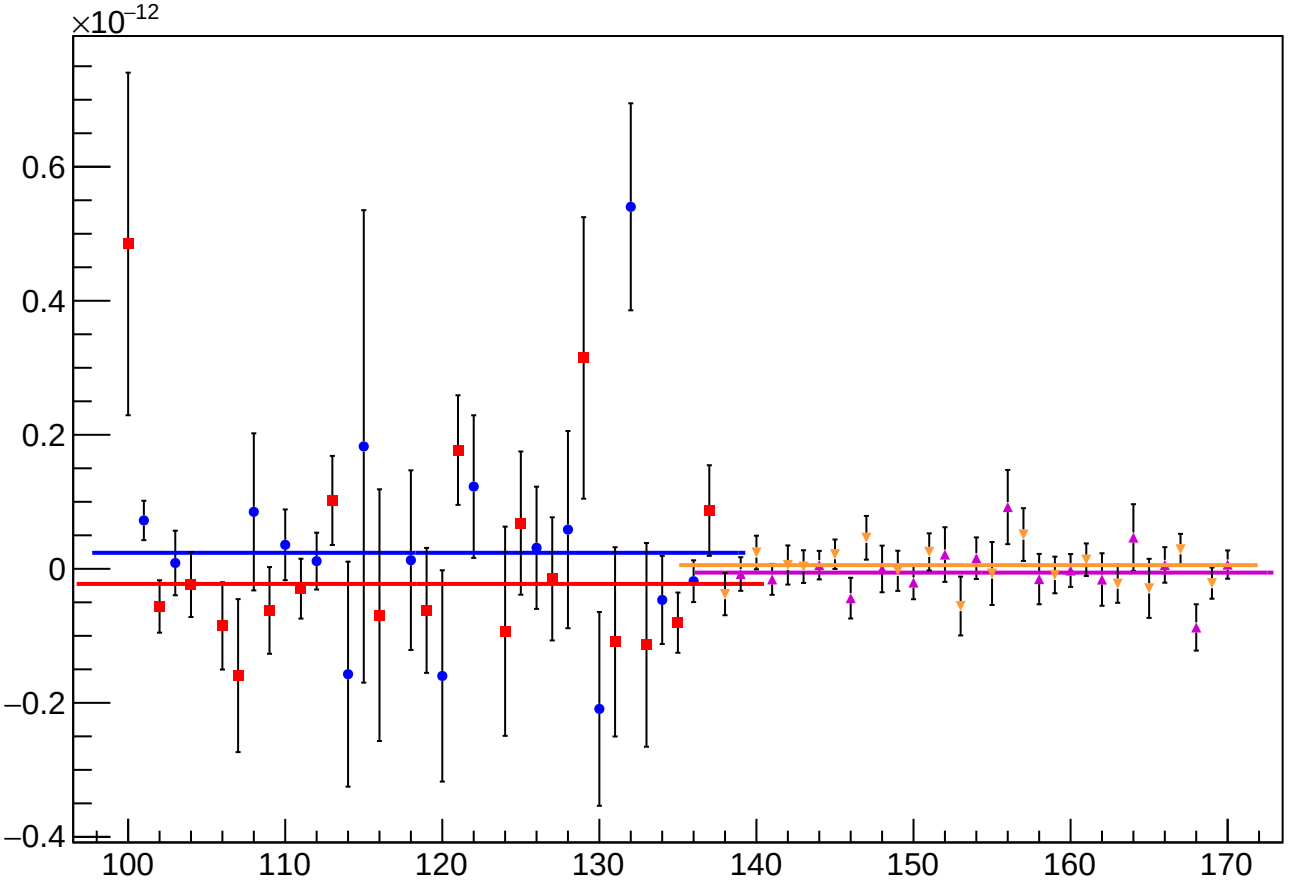
Right Out: 609.516+/-0.170 $\chi^2$/NDF: 2043591.1/18

Left In: 688.865+/-0.135 $\chi^2$/NDF:392527.4/15

+ sign 675.805+/-0.109 $\chi^2$/NDF: 2406321.1/32

All: 666.768+/-0.076 $\chi^2$/NDF: 4988735.2/67

- sign 658.173+/-0.106 $\chi^2$/NDF: 2568936.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 23.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:12.8/16

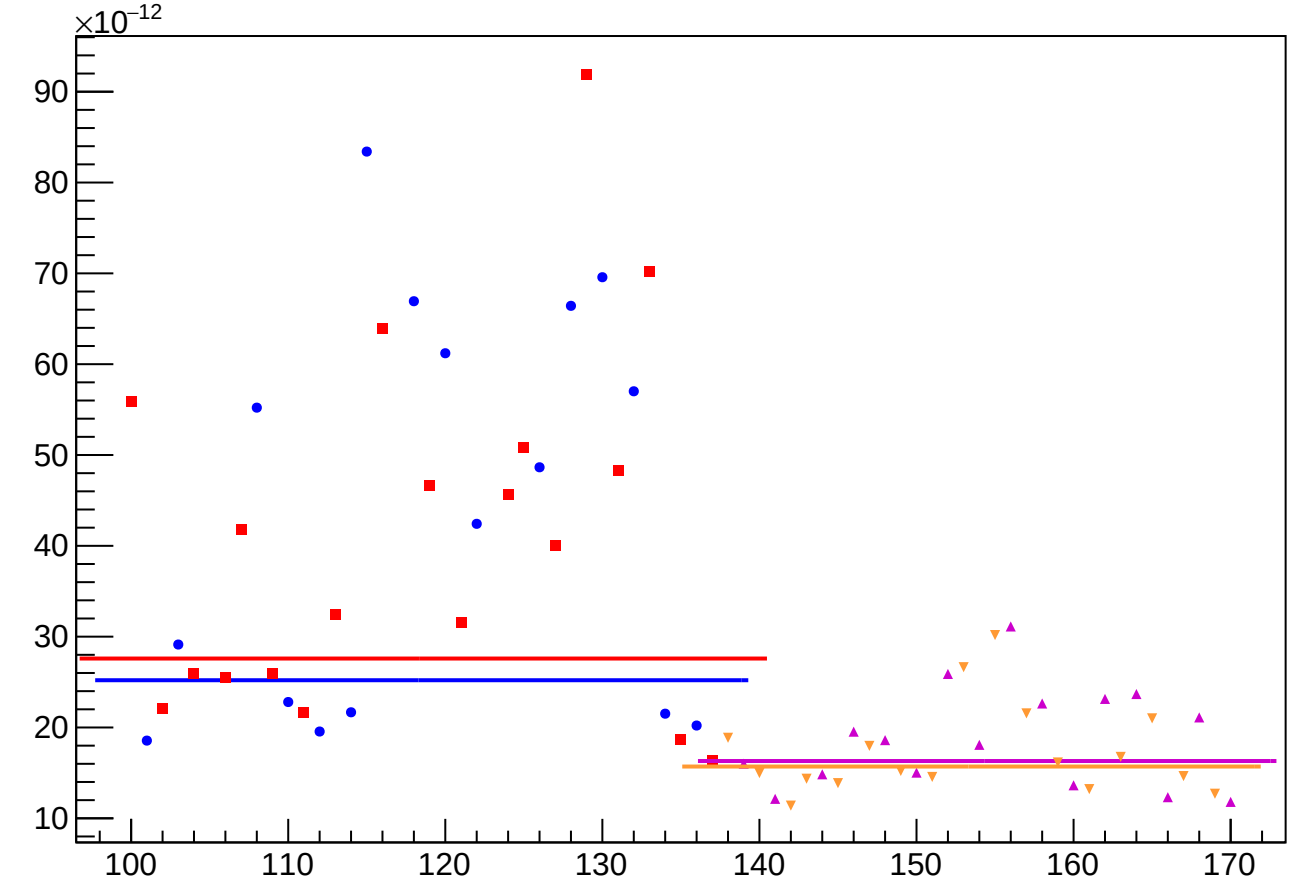
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 25.7/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:13.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 37.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 81.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 40.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1312245.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:547040.1/16

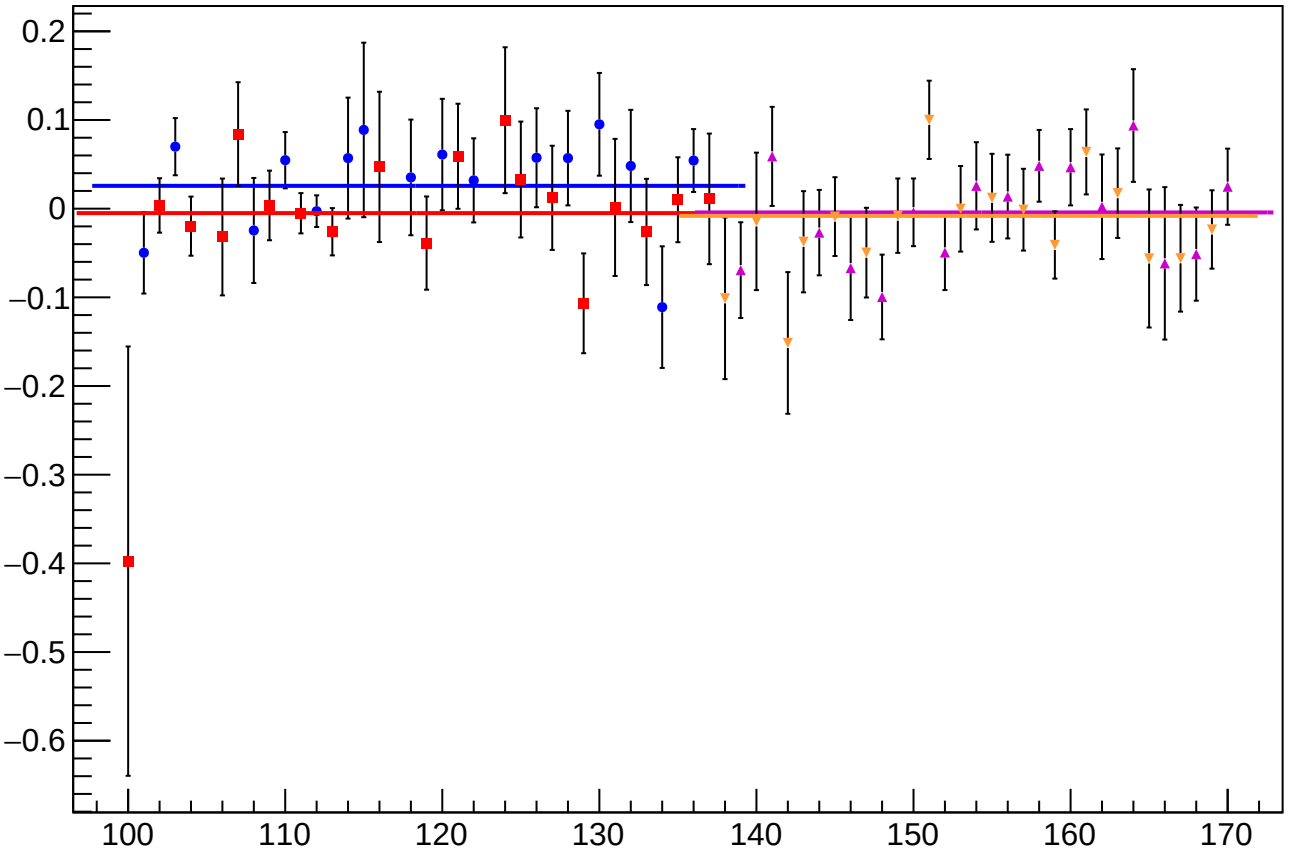
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 988490.8/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:731768.0/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2506502.5/32

All: 0.000+/-0.000 $\chi^2$/NDF: 5040414.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 2517211.3/34




Right In: 0.026+/-0.010 $\chi^2$/NDF: 16.5/15

Left Out: -0.008+/-0.012 $\chi^2$/NDF:15.8/16

Right Out: -0.005+/-0.010 $\chi^2$/NDF: 13.6/18

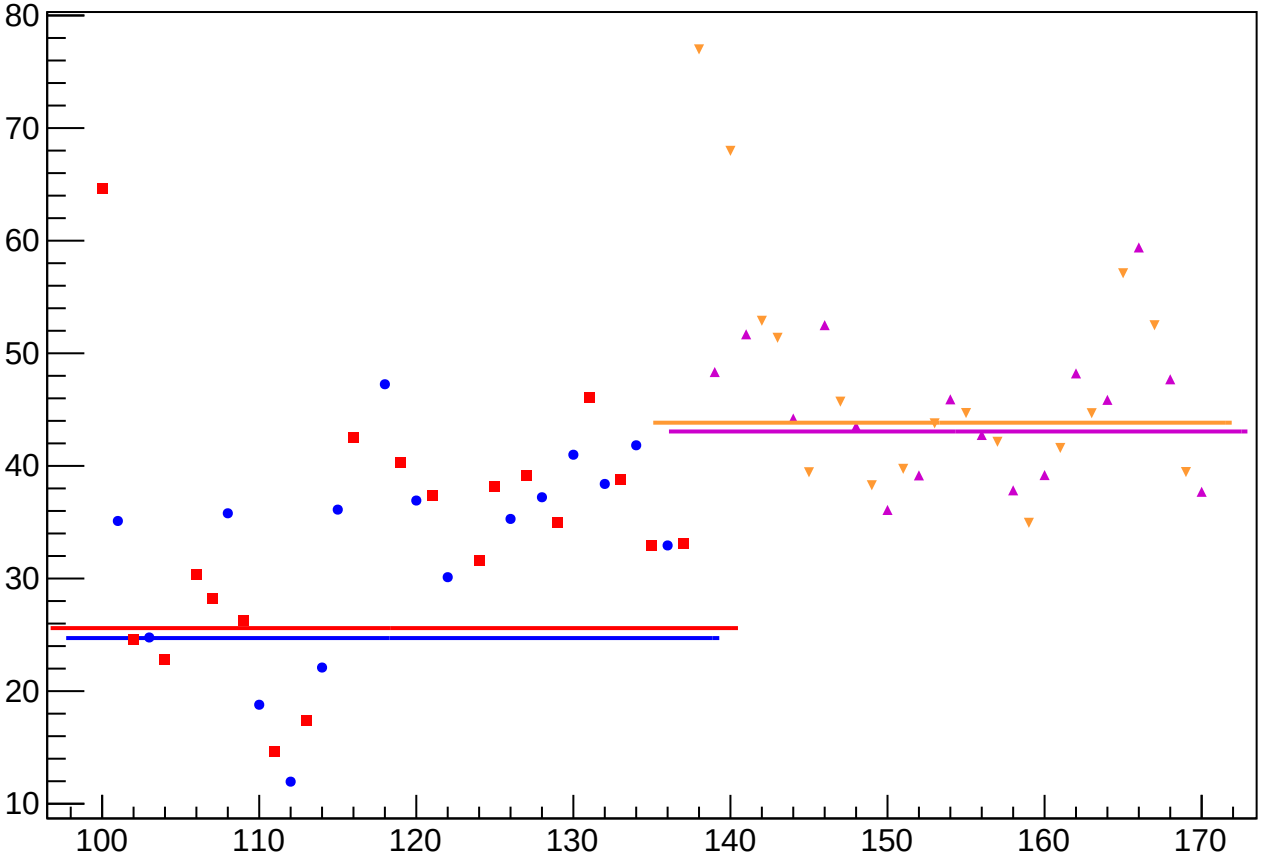
Left In: -0.004+/-0.012 $\chi^2$/NDF:16.9/15

+ sign 0.012+/-0.008 $\chi^2$/NDF: 36.7/32

All: 0.004+/-0.006 $\chi^2$/NDF: 69.5/67

- sign -0.005+/-0.008 $\chi^2$/NDF: 30.5/34

# asym_sam_1548_avg_dit_vs_cor_diff_rms vs Slug




Right In: 24.712+/-0.007 $\chi^2$/NDF: 2295174.7/15

Left Out: 43.838+/-0.009 $\chi^2$/NDF:831348.5/16

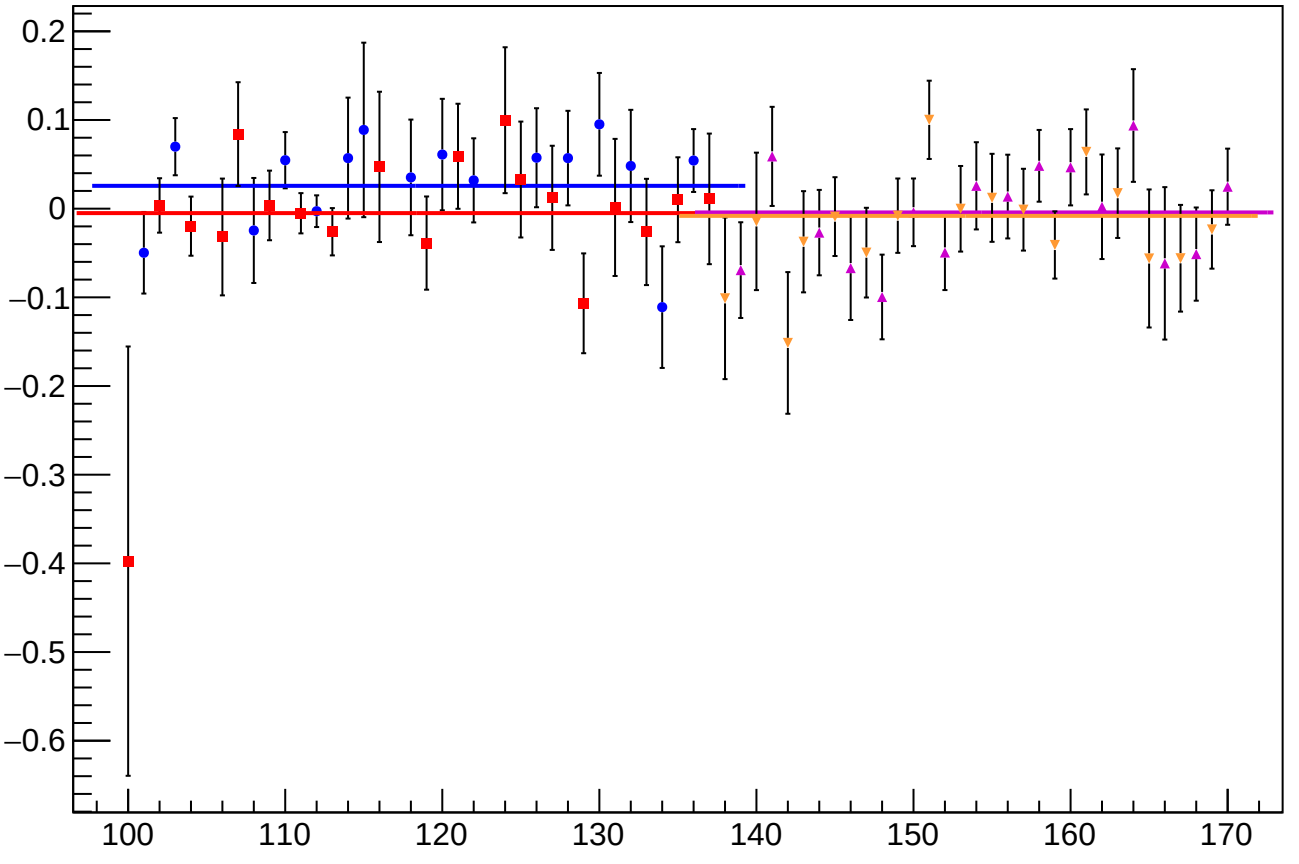
Right Out: 25.597+/-0.007 $\chi^2$/NDF: 1605235.8/18

Left In: 43.057+/-0.009 $\chi^2$/NDF:398376.0/15

+ sign 32.578+/-0.006 $\chi^2$/NDF: 5931508.9/32

All: 32.721+/-0.004 $\chi^2$/NDF: 10305982.0/67

- sign 32.864+/-0.006 $\chi^2$/NDF: 4373172.3/34




Right In: 0.026+/-0.010 $\chi^2$/NDF: 16.5/15

Left Out: -0.008+/-0.012 $\chi^2$/NDF:15.8/16

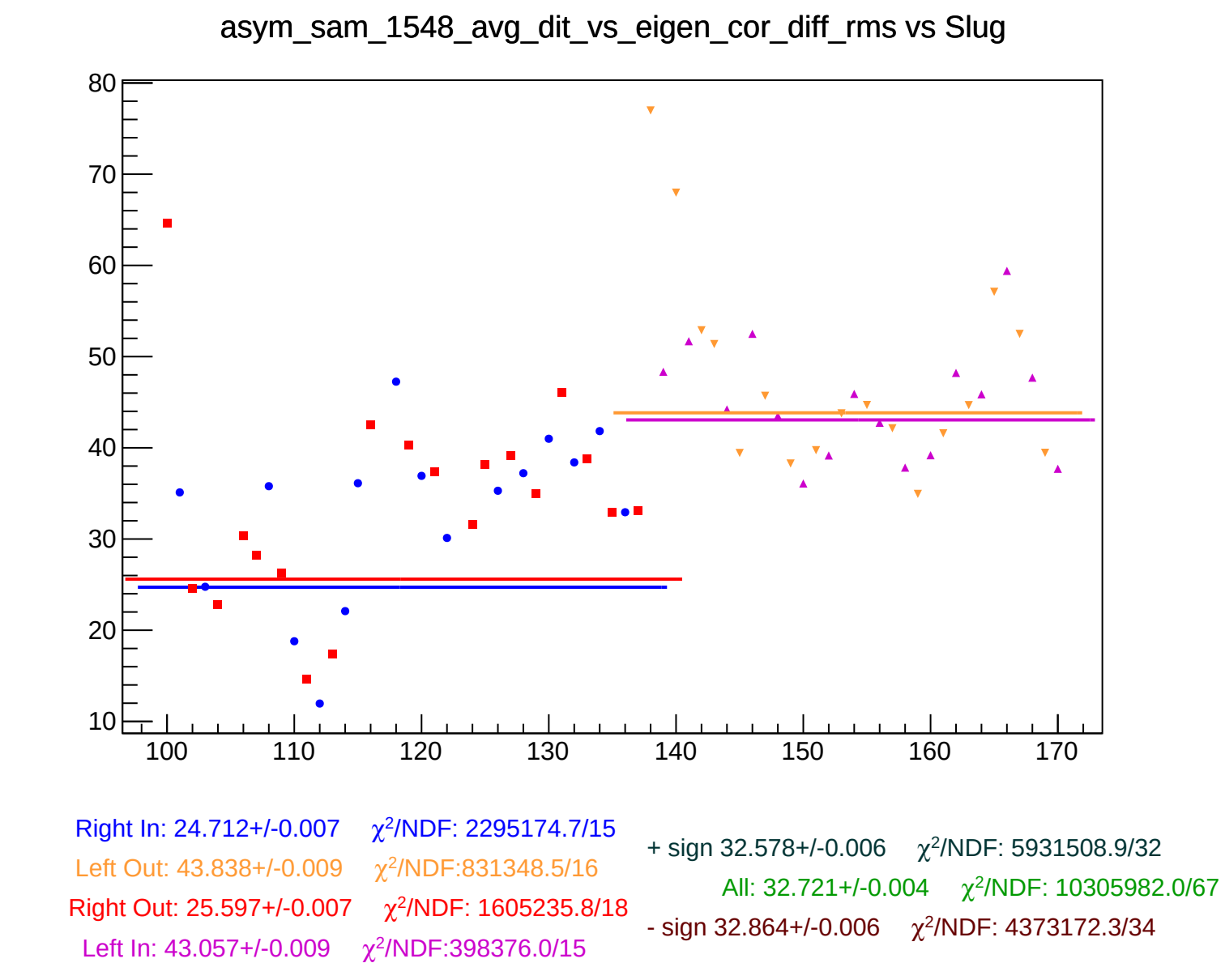
Right Out: -0.005+/-0.010 $\chi^2$/NDF: 13.6/18

Left In: -0.004+/-0.012 $\chi^2$/NDF:16.9/15

+ sign 0.012+/-0.008 $\chi^2$/NDF: 36.7/32

All: 0.004+/-0.006 $\chi^2$/NDF: 69.5/67

- sign -0.005+/-0.008 $\chi^2$/NDF: 30.5/34


asym_sam_1548_avg_dit_vs_eigen_cor_diff_rms vs Slug
80
70
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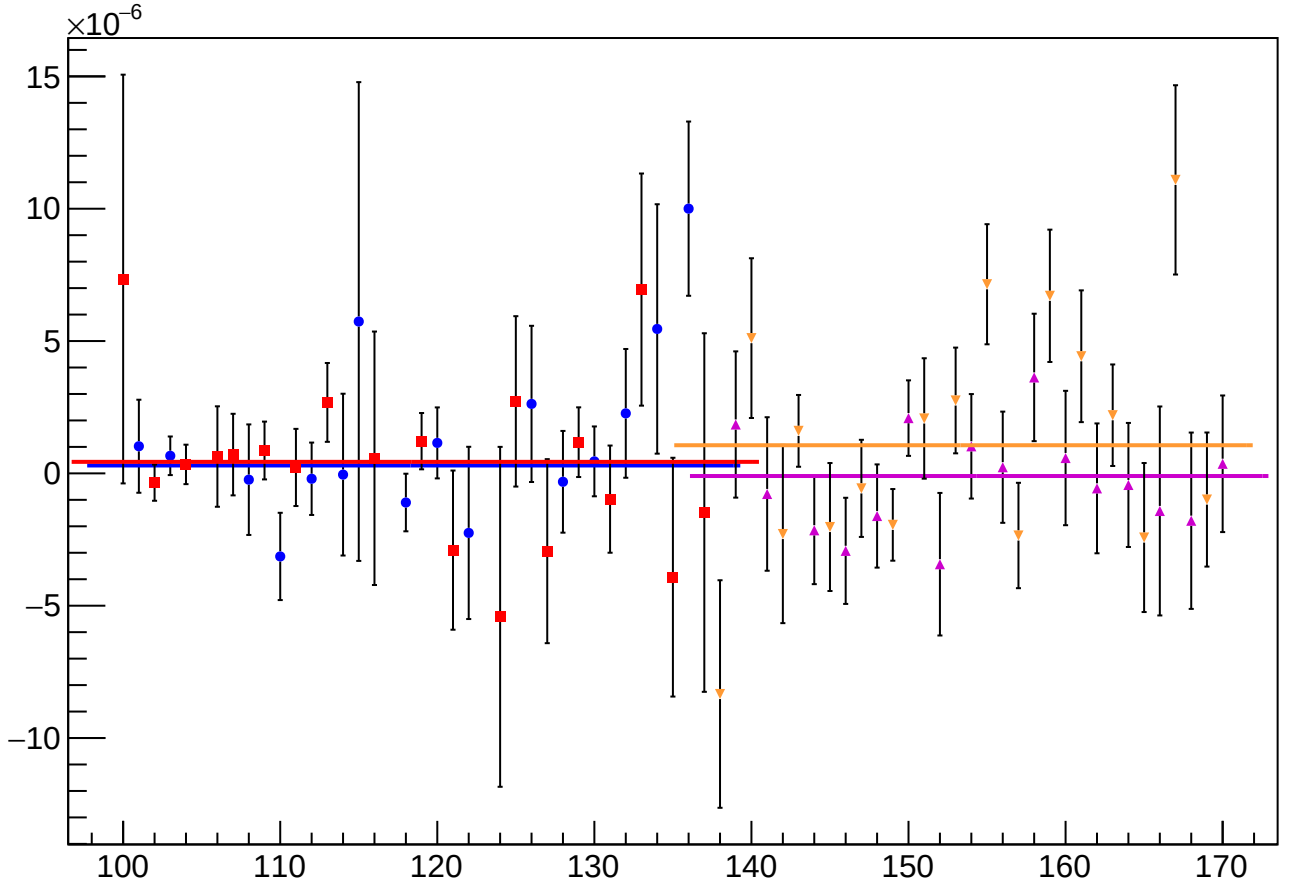
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 24.712+/-0.007 χ²/NDF: 2295174.7/15
Left Out: 43.838+/-0.009 χ²/NDF:831348.5/16
Right Out: 25.597+/-0.007 χ²/NDF: 1605235.8/18
Left In: 43.057+/-0.009 χ²/NDF:398376.0/15
+ sign 32.578+/-0.006 χ²/NDF: 5931508.9/32
All: 32.721+/-0.004 χ²/NDF: 10305982.0/67
- sign 32.864+/-0.006 χ²/NDF: 4373172.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 19.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:43.5/16

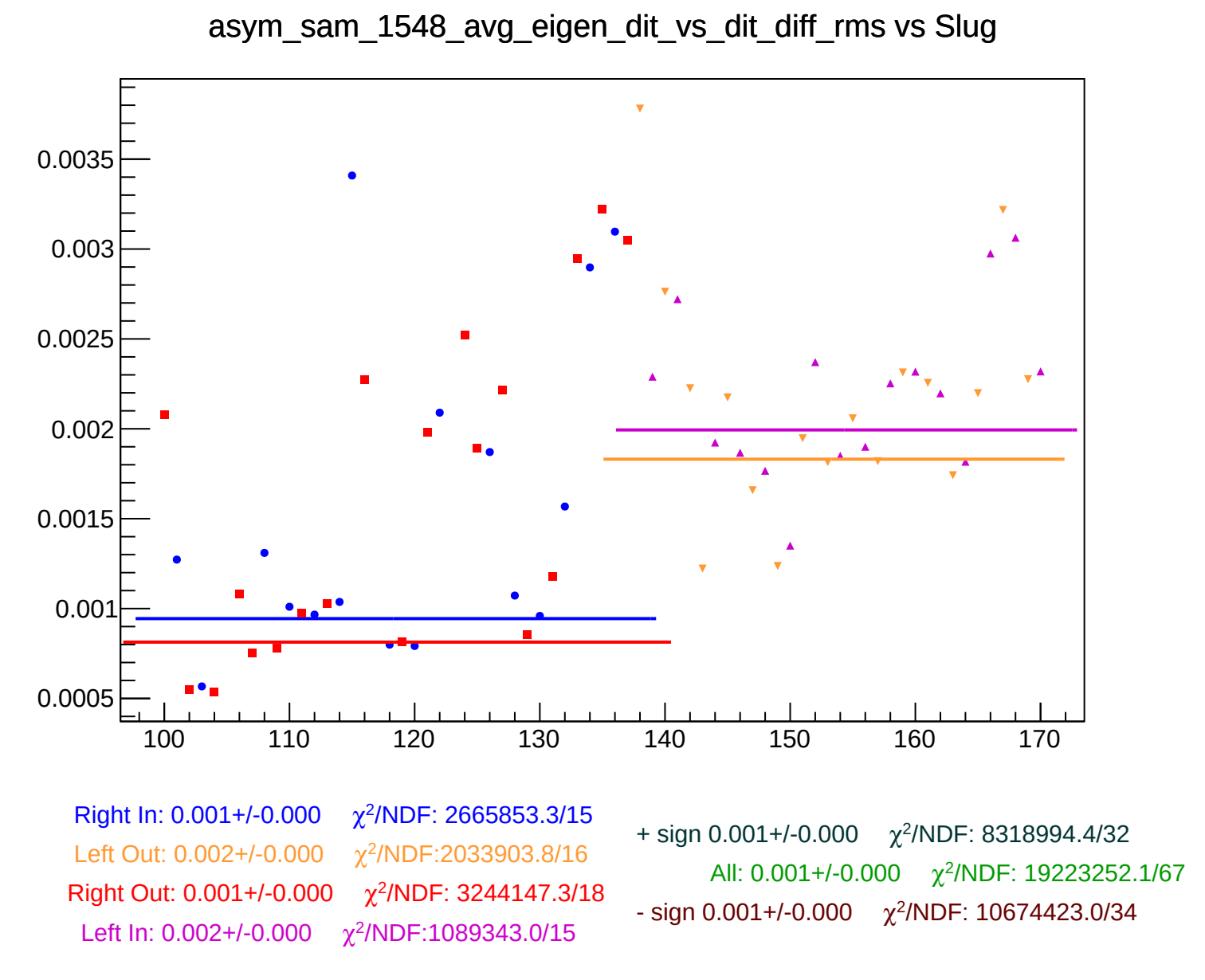
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 12.7/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:11.3/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 64.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 89.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 24.7/34


asym_sam_1548_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.0035
0.003
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0.0015
0.001
0.0005
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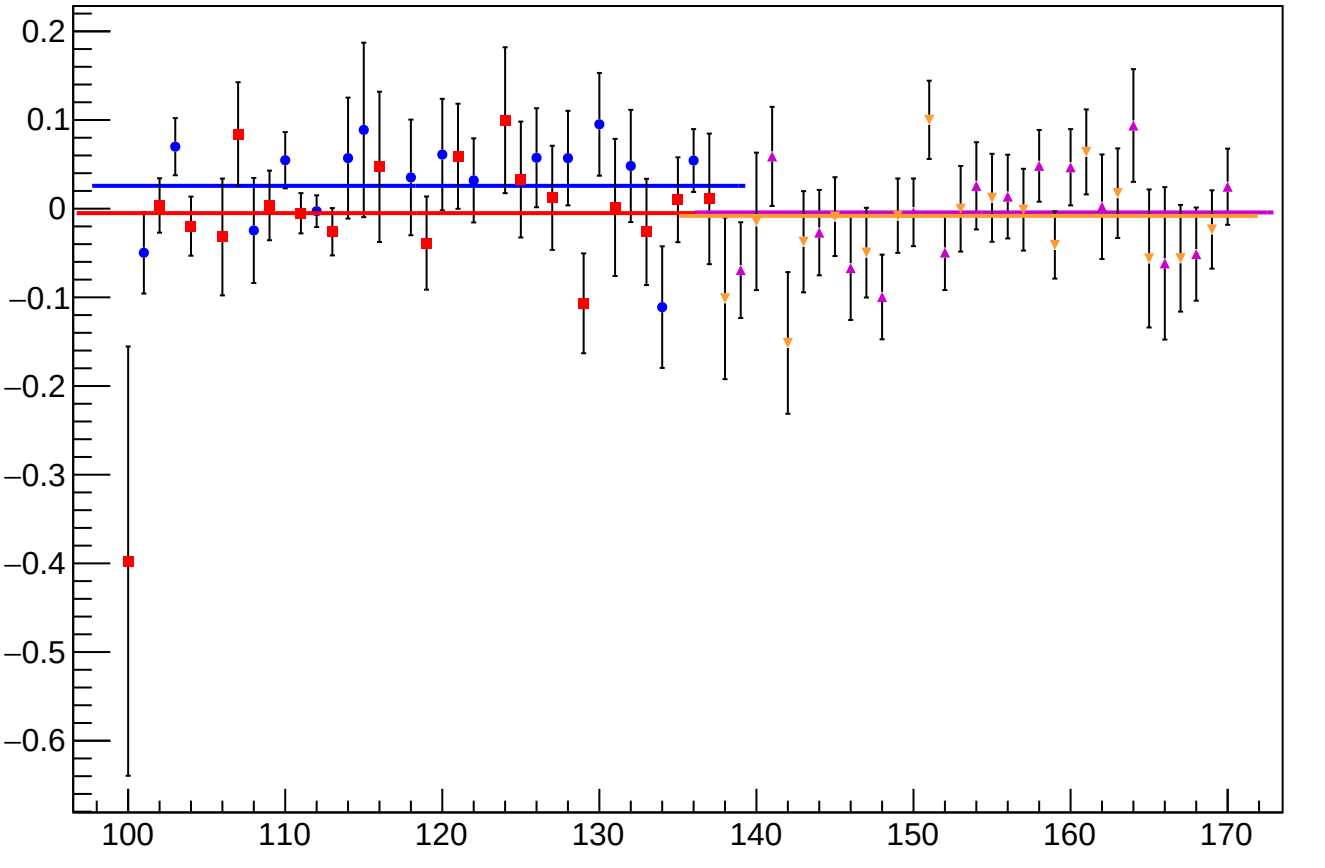
Right In: 0.001+/-0.000 χ²/NDF: 2665853.3/15
Left Out: 0.002+/-0.000 χ²/NDF:2033903.8/16
Right Out: 0.001+/-0.000 χ²/NDF: 3244147.3/18
Left In: 0.002+/-0.000 χ²/NDF:1089343.0/15
+ sign 0.001+/-0.000 χ²/NDF: 8318994.4/32
All: 0.001+/-0.000 χ²/NDF: 19223252.1/67
- sign 0.001+/-0.000 χ²/NDF: 10674423.0/34




Right In: 0.026+/-0.010 $\chi^2$/NDF: 16.5/15

Left Out: -0.008+/-0.012 $\chi^2$/NDF:15.8/16

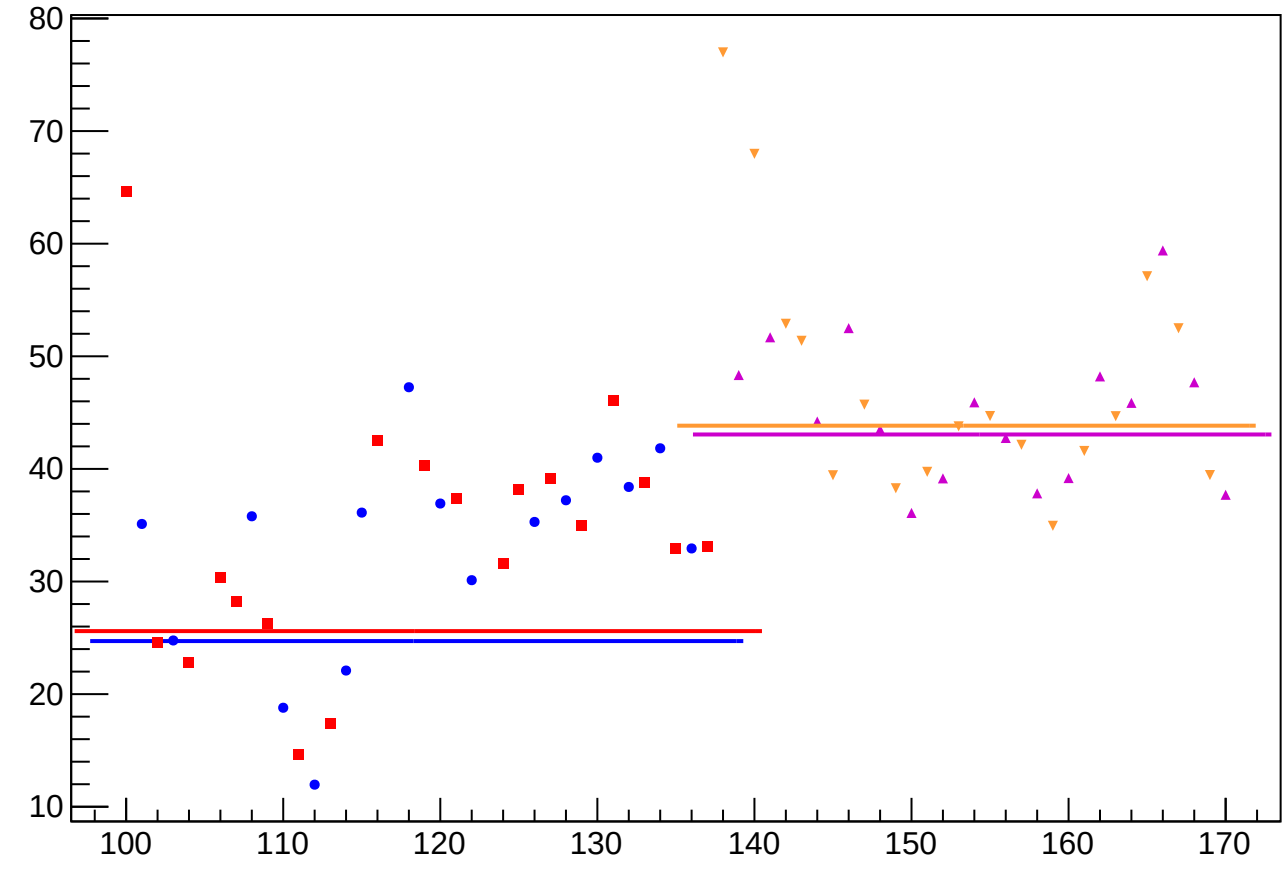
Right Out: -0.005+/-0.010 $\chi^2$/NDF: 13.6/18

Left In: -0.004+/-0.012 $\chi^2$/NDF:16.9/15

+ sign 0.012+/-0.008 $\chi^2$/NDF: 36.7/32

All: 0.004+/-0.006 $\chi^2$/NDF: 69.5/67

- sign -0.005+/-0.008 $\chi^2$/NDF: 30.5/34




Right In: 24.712+/-0.007 $\chi^2$/NDF: 2295351.2/15

Left Out: 43.839+/-0.009 $\chi^2$/NDF:831340.5/16

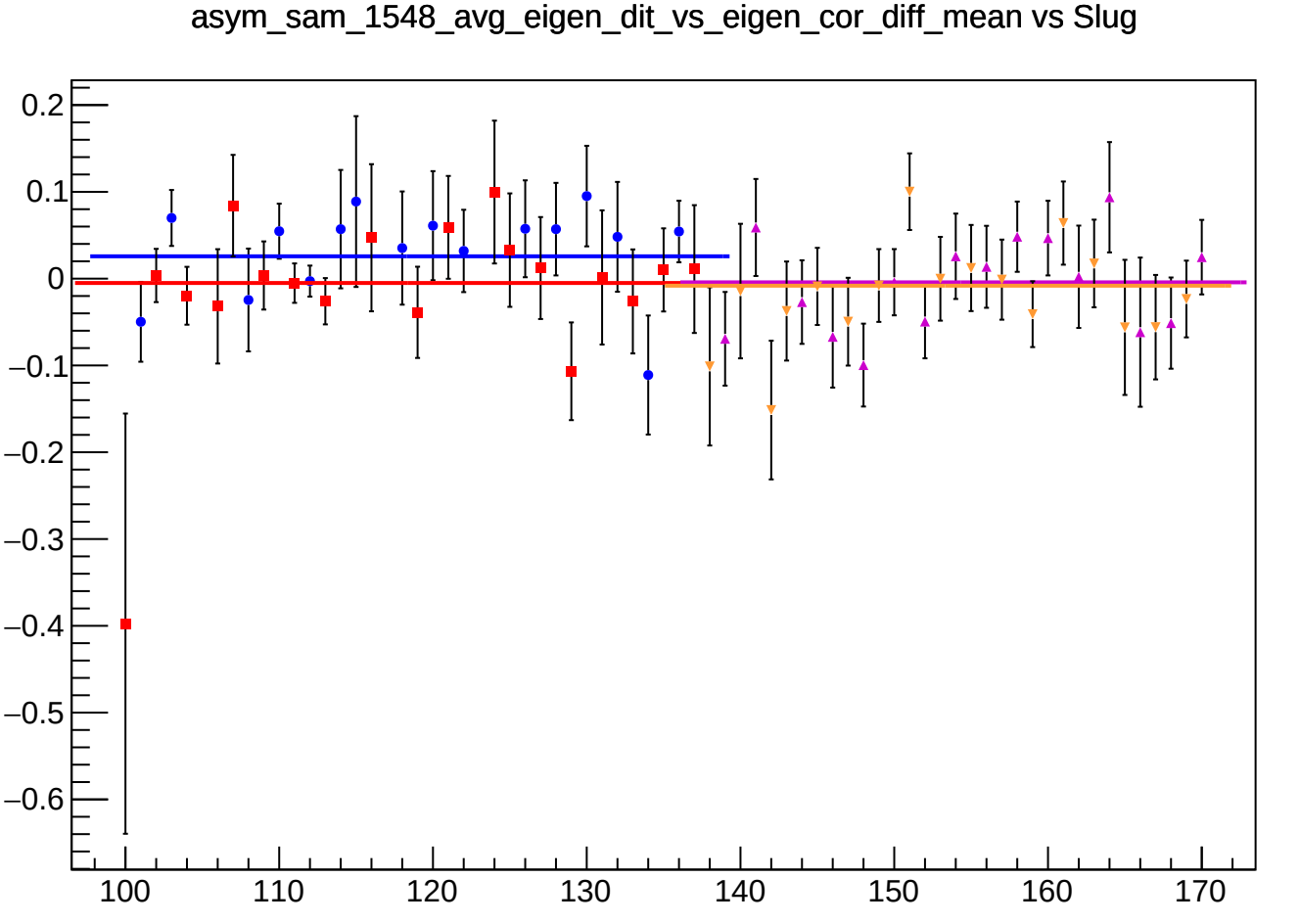
Right Out: 25.597+/-0.007 $\chi^2$/NDF: 1605387.3/18

Left In: 43.057+/-0.009 $\chi^2$/NDF:398372.8/15

+ sign 32.577+/-0.006 $\chi^2$/NDF: 5931955.1/32

All: 32.721+/-0.004 $\chi^2$/NDF: 10306787.1/67

- sign 32.864+/-0.006 $\chi^2$/NDF: 4373529.8/34




Right In: 0.026+/-0.010 $\chi^2$/NDF: 16.5/15

Left Out: -0.008+/-0.012 $\chi^2$/NDF:15.8/16

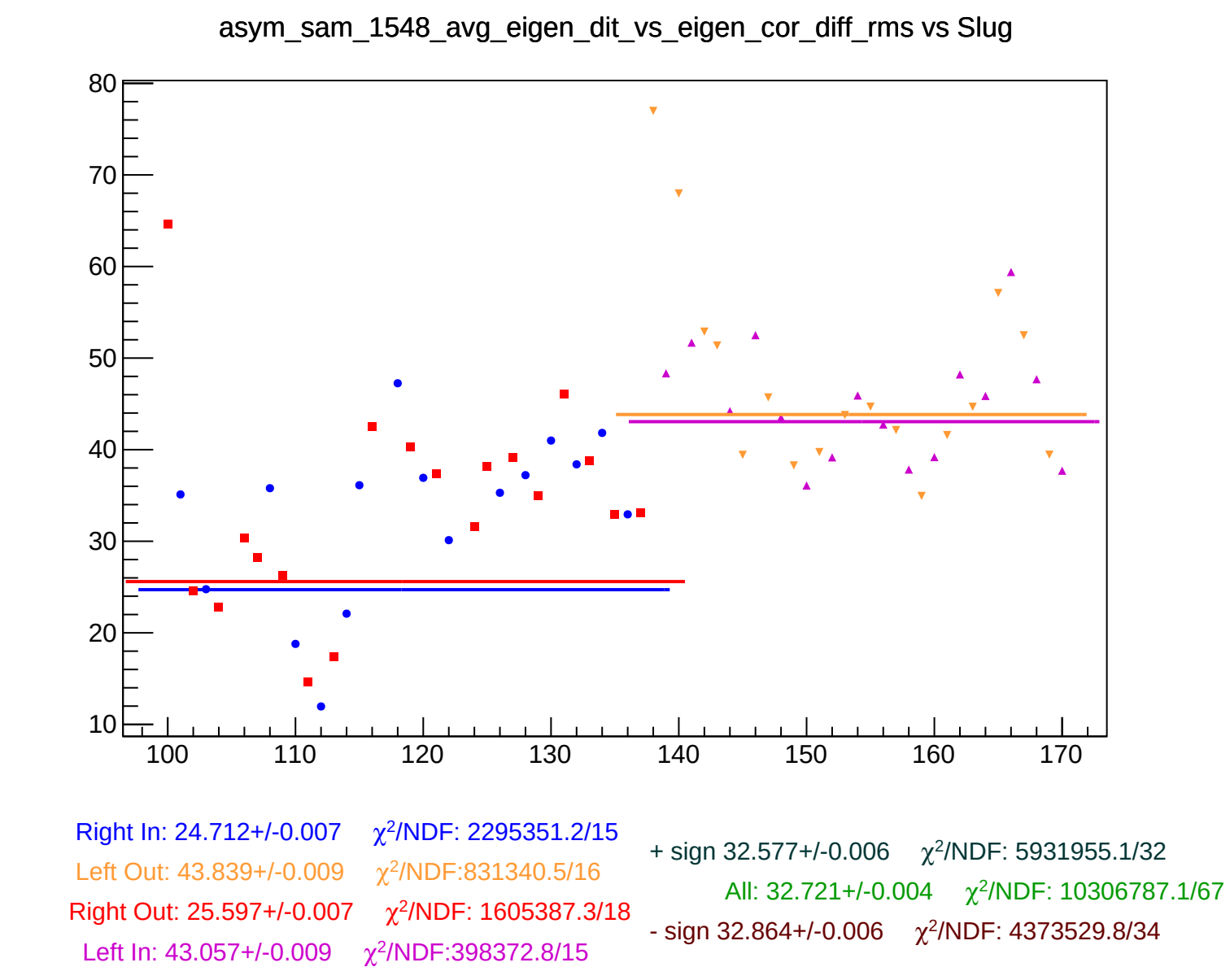
Right Out: -0.005+/-0.010 $\chi^2$/NDF: 13.6/18

Left In: -0.004+/-0.012 $\chi^2$/NDF:16.9/15

+ sign 0.012+/-0.008 $\chi^2$/NDF: 36.7/32

All: 0.004+/-0.006 $\chi^2$/NDF: 69.5/67

- sign -0.005+/-0.008 $\chi^2$/NDF: 30.5/34


asym_sam_1548_avg_eigen_dit_vs_eigen_cor_diff_rms vs Slug
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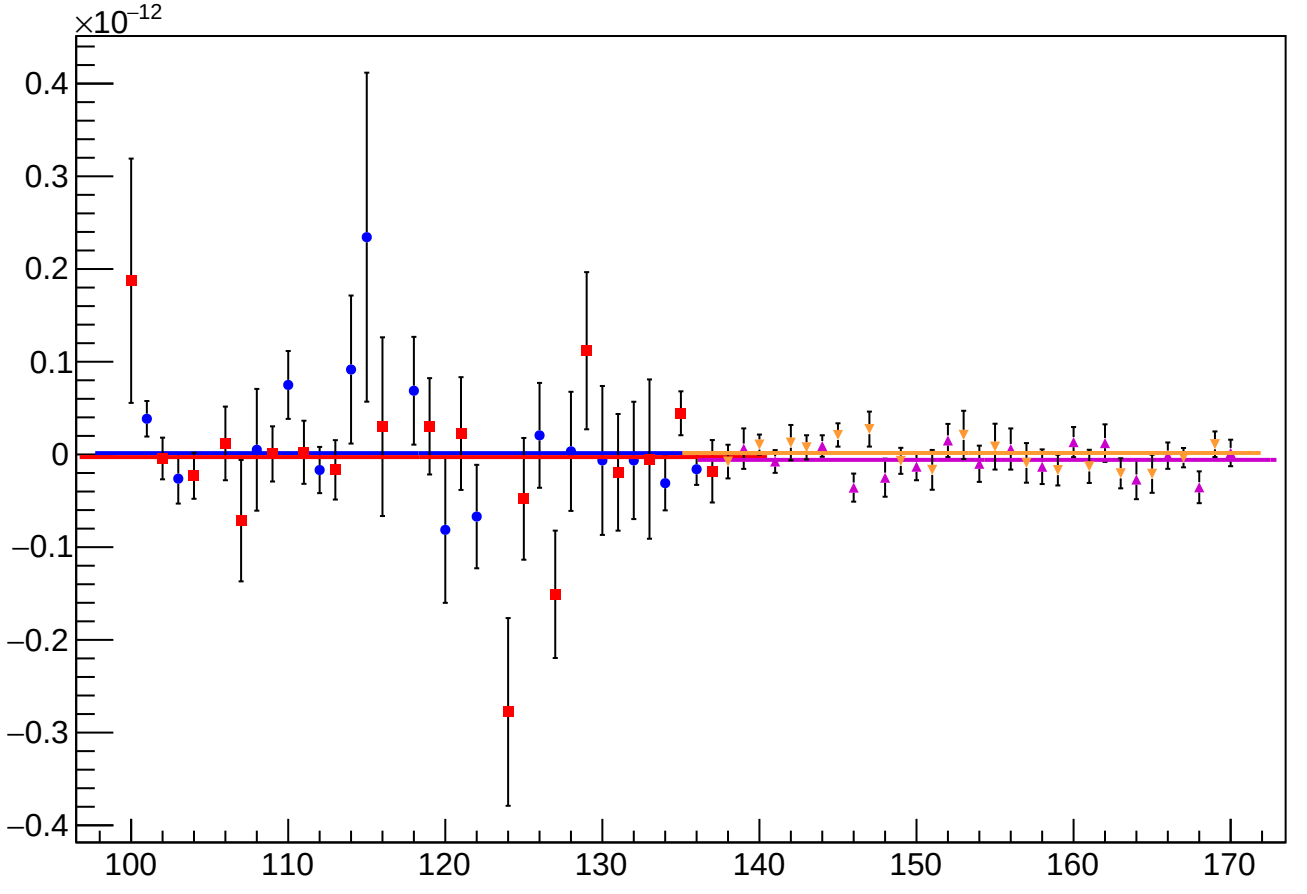
170
Right In: 24.712+/-0.007 χ²/NDF: 2295351.2/15
Left Out: 43.839+/-0.009 χ²/NDF:831340.5/16
Right Out: 25.597+/-0.007 χ²/NDF: 1605387.3/18
Left In: 43.057+/-0.009 χ²/NDF:398372.8/15
+ sign 32.577+/-0.006 χ²/NDF: 5931955.1/32
All: 32.721+/-0.004 χ²/NDF: 10306787.1/67
- sign 32.864+/-0.006 χ²/NDF: 4373529.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 18.7/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13.4/16

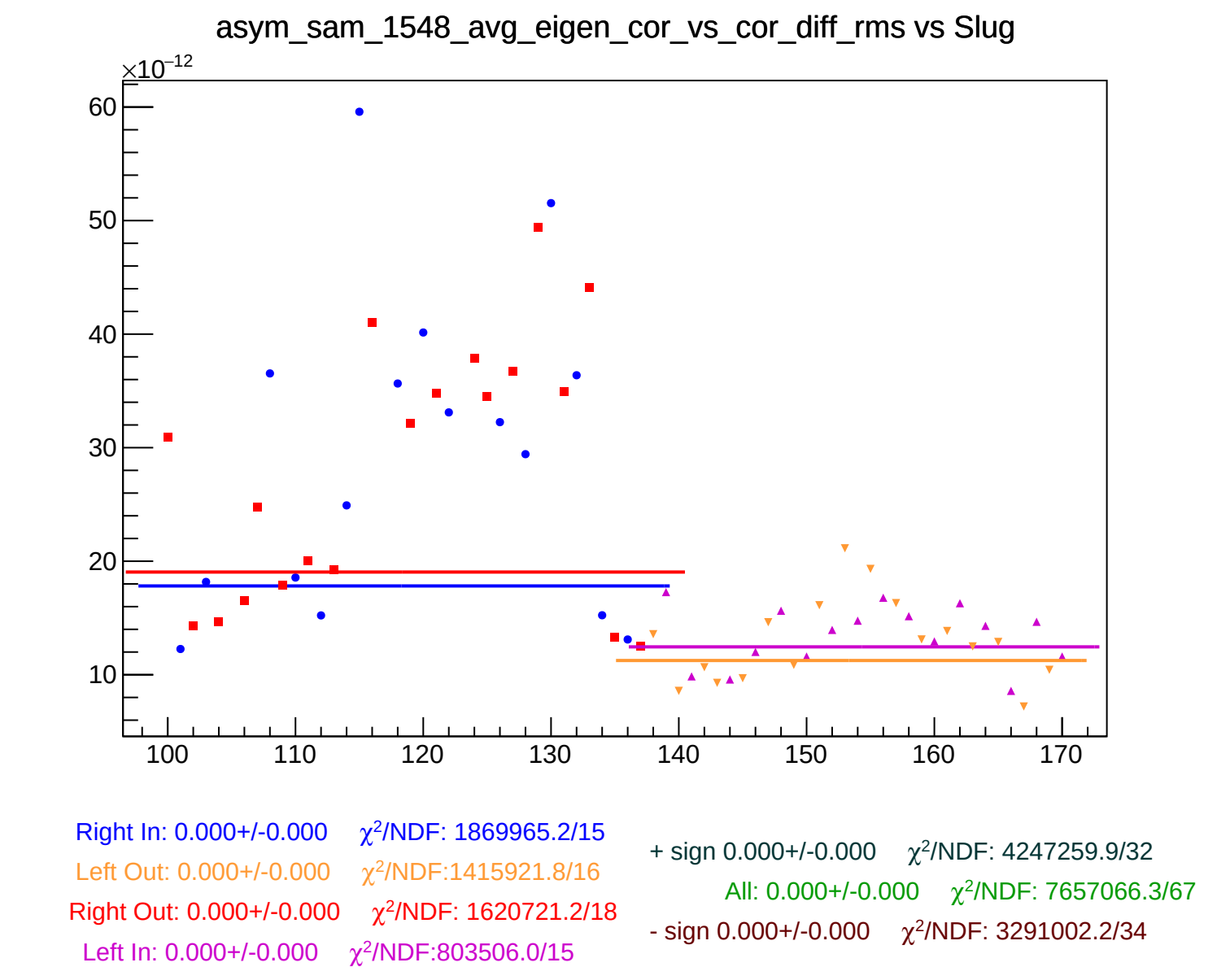
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 23.5/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:15.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 32.1/32

All: -0.000+/-0.000 $\chi^2$/NDF: 72.9/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 39.0/34


asym_sam_1548_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
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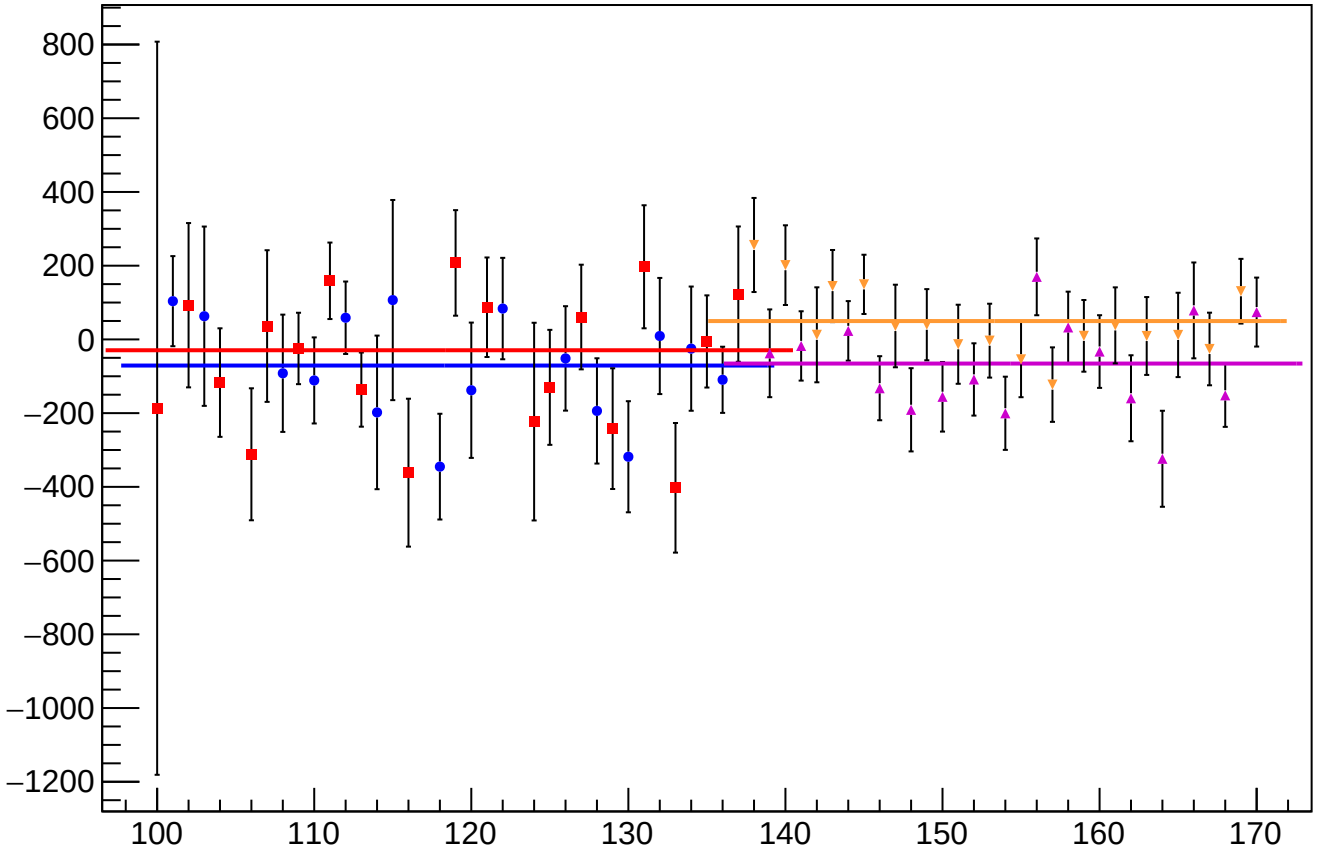
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1869965.2/15
Left Out: 0.000+/-0.000 χ²/NDF:1415921.8/16
Right Out: 0.000+/-0.000 χ²/NDF: 1620721.2/18
Left In: 0.000+/-0.000 χ²/NDF:803506.0/15
+ sign 0.000+/-0.000 χ²/NDF: 4247259.9/32
All: 0.000+/-0.000 χ²/NDF: 7657066.3/67
- sign 0.000+/-0.000 χ²/NDF: 3291002.2/34

# reg_asym_sam_3748_avg_mean vs Slug




Right In: -70.892+/-35.122 $\chi^2$/NDF: 14.1/15

Left Out: 49.761+/-24.756 $\chi^2$/NDF:13.6/16

Right Out: -29.410+/-34.243 $\chi^2$/NDF: 24.0/18

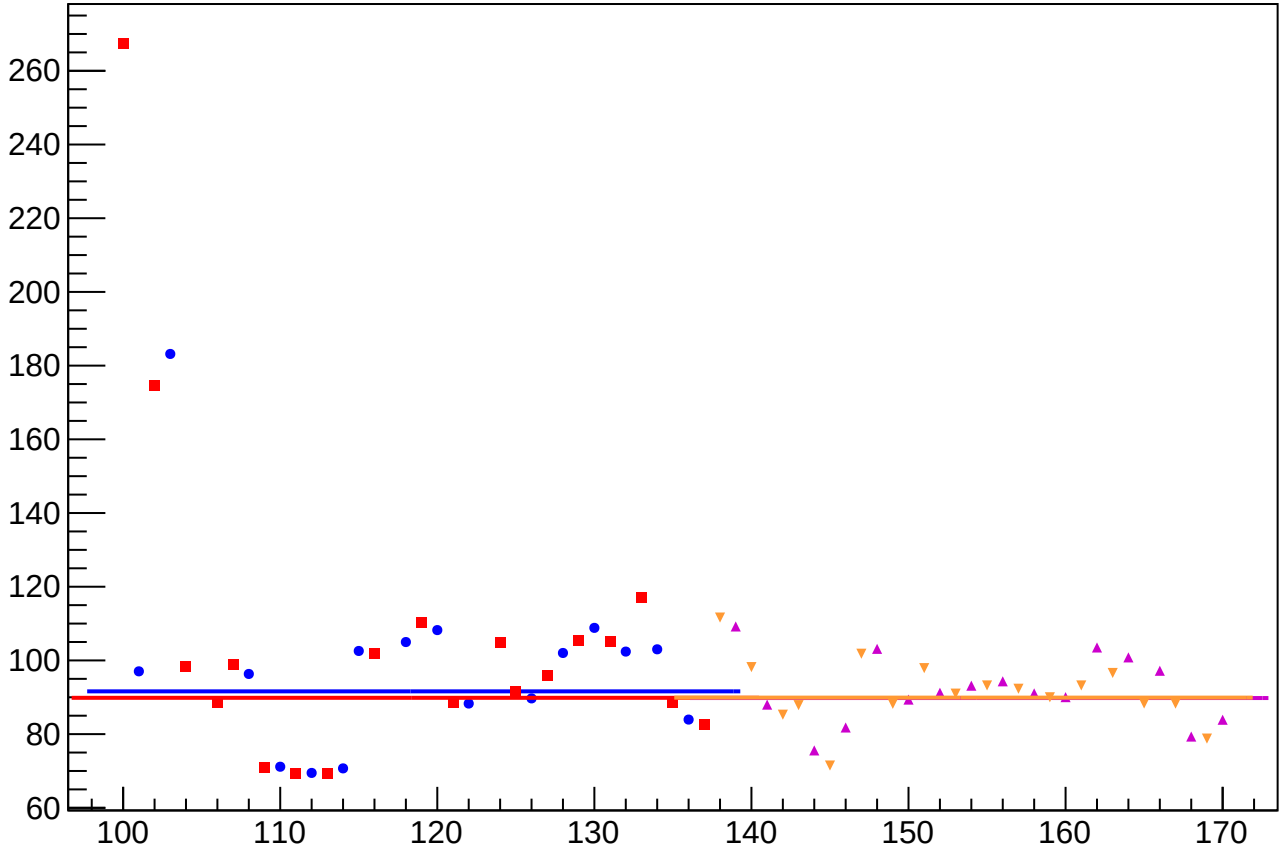
Left In: -65.507+/-24.928 $\chi^2$/NDF:21.6/15

+ sign 9.715+/-20.234 $\chi^2$/NDF: 35.5/32

All: -21.770+/-14.279 $\chi^2$/NDF: 86.7/67

- sign -53.003+/-20.154 $\chi^2$/NDF: 46.3/34

# reg_asym_sam_3748_avg_rms vs Slug




Right In: 91.608+/-0.025 $\chi^2$/NDF: 580672.8/15

Left Out: 89.907+/-0.018 $\chi^2$/NDF:259267.3/16

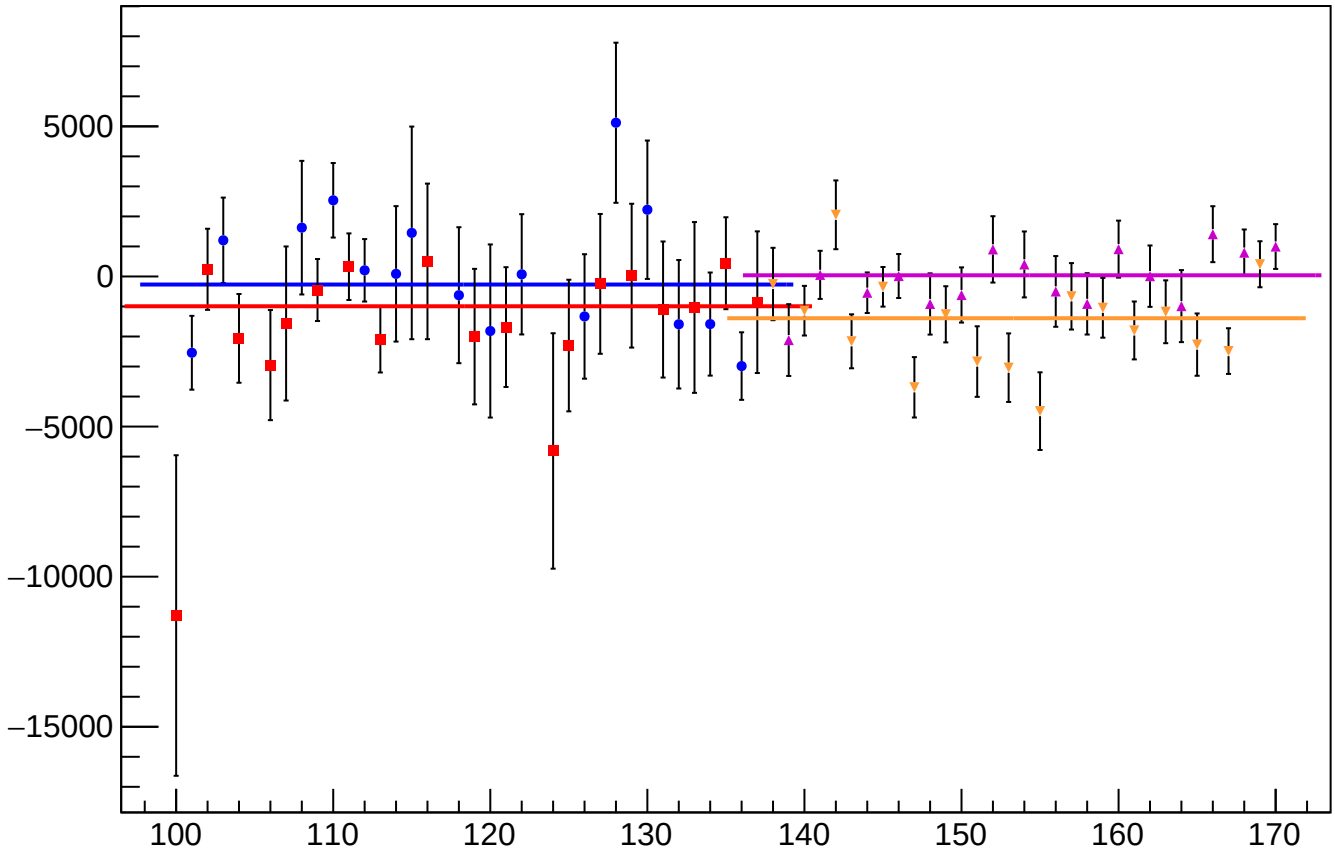
Right Out: 89.854+/-0.024 $\chi^2$/NDF: 746289.1/18

Left In: 89.792+/-0.018 $\chi^2$/NDF:253972.7/15

+ sign 90.471+/-0.014 $\chi^2$/NDF: 843074.8/32

All: 90.141+/-0.010 $\chi^2$/NDF: 1844401.7/67

- sign 89.814+/-0.014 $\chi^2$/NDF: 1000266.0/34




Right In: -268.485+/-419.578 $\chi^2$/NDF: 23.4/15

Left Out: -1390.926+/-230.408 $\chi^2$/NDF:36.9/16

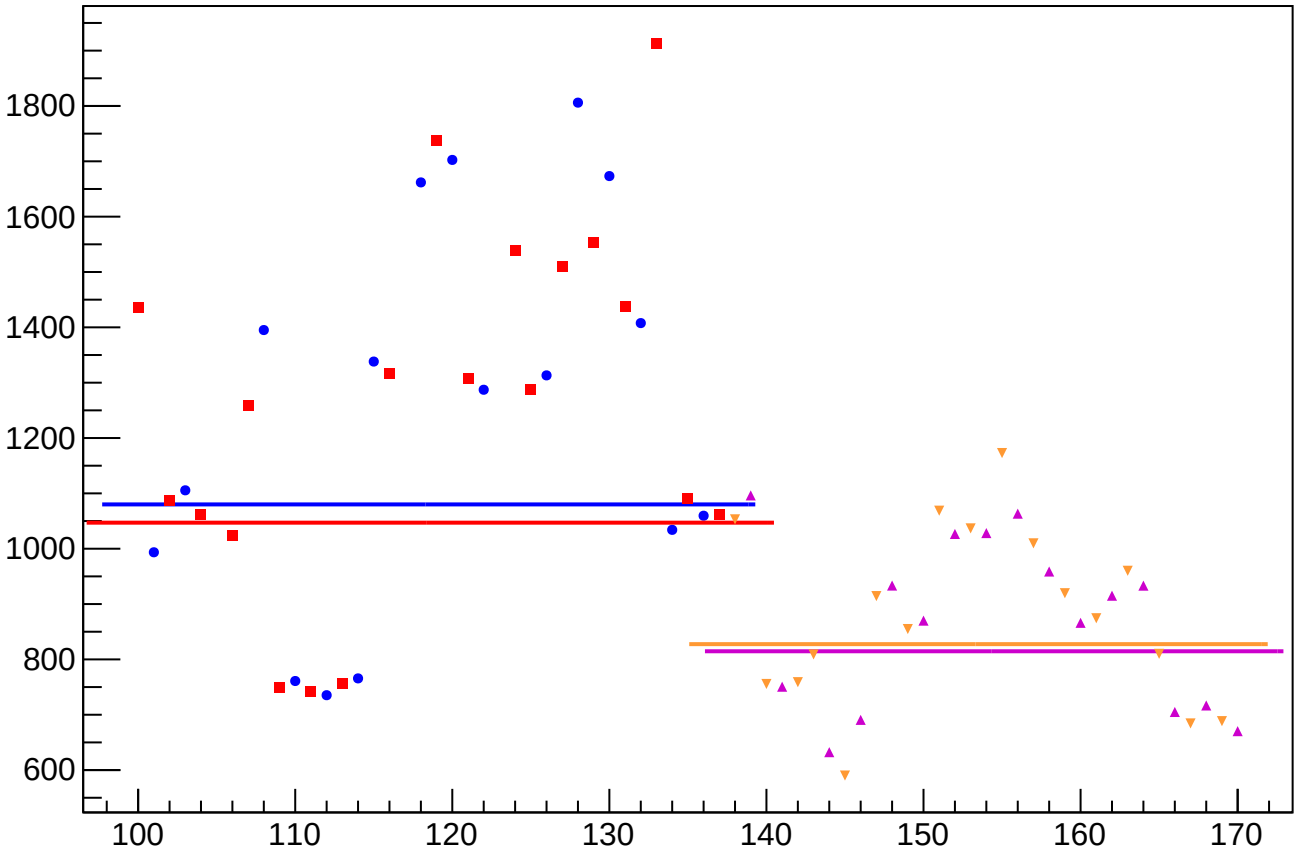
Right Out: -992.670+/-400.824 $\chi^2$/NDF: 12.7/18

Left In: 39.309+/-228.391 $\chi^2$/NDF:13.5/15

\+ sign -1130.868+/-201.960 $\chi^2$/NDF: 65.8/32

All: -664.180+/-141.546 $\chi^2$/NDF: 107.5/67

\- sign -213.628+/-198.438 $\chi^2$/NDF: 31.2/34




Right In: 1080.045+/-0.297 $\chi^2$/NDF: 1053468.5/15

Left Out: 827.568+/-0.163 $\chi^2$/NDF:907898.3/16

Right Out: 1047.068+/-0.283 $\chi^2$/NDF: 1198646.2/18

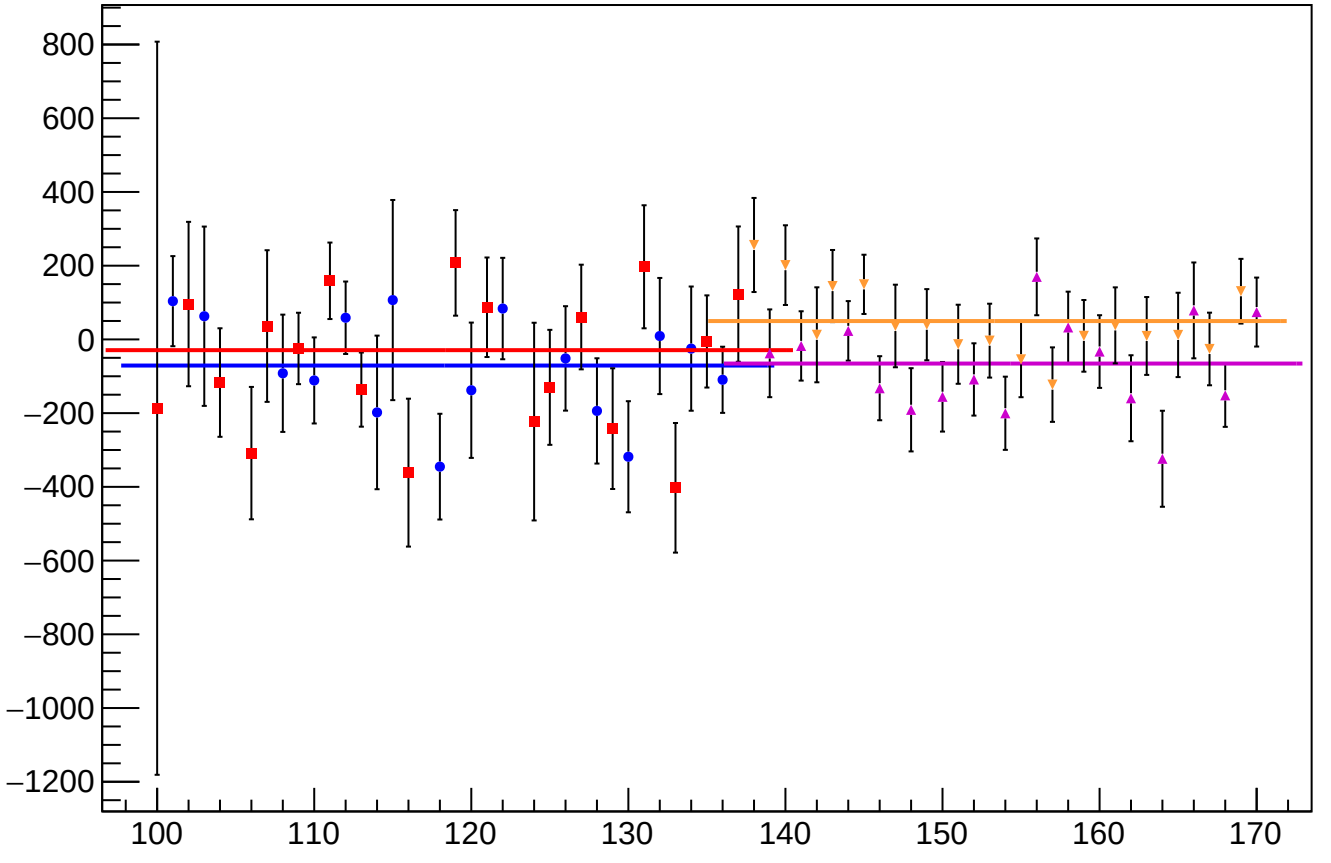
Left In: 814.685+/-0.161 $\chi^2$/NDF:818473.0/15

+ sign 886.064+/-0.143 $\chi^2$/NDF: 2517765.0/32

All: 878.726+/-0.100 $\chi^2$/NDF: 5047555.3/67

- sign 871.642+/-0.140 $\chi^2$/NDF: 2524600.6/34

# cor_asym_sam_3748_avg_mean vs Slug




Right In: -70.903+/-35.122 $\chi^2$/NDF: 14.1/15

Left Out: 49.766+/-24.756 $\chi^2$/NDF:13.6/16

Right Out: -29.159+/-34.247 $\chi^2$/NDF: 24.0/18

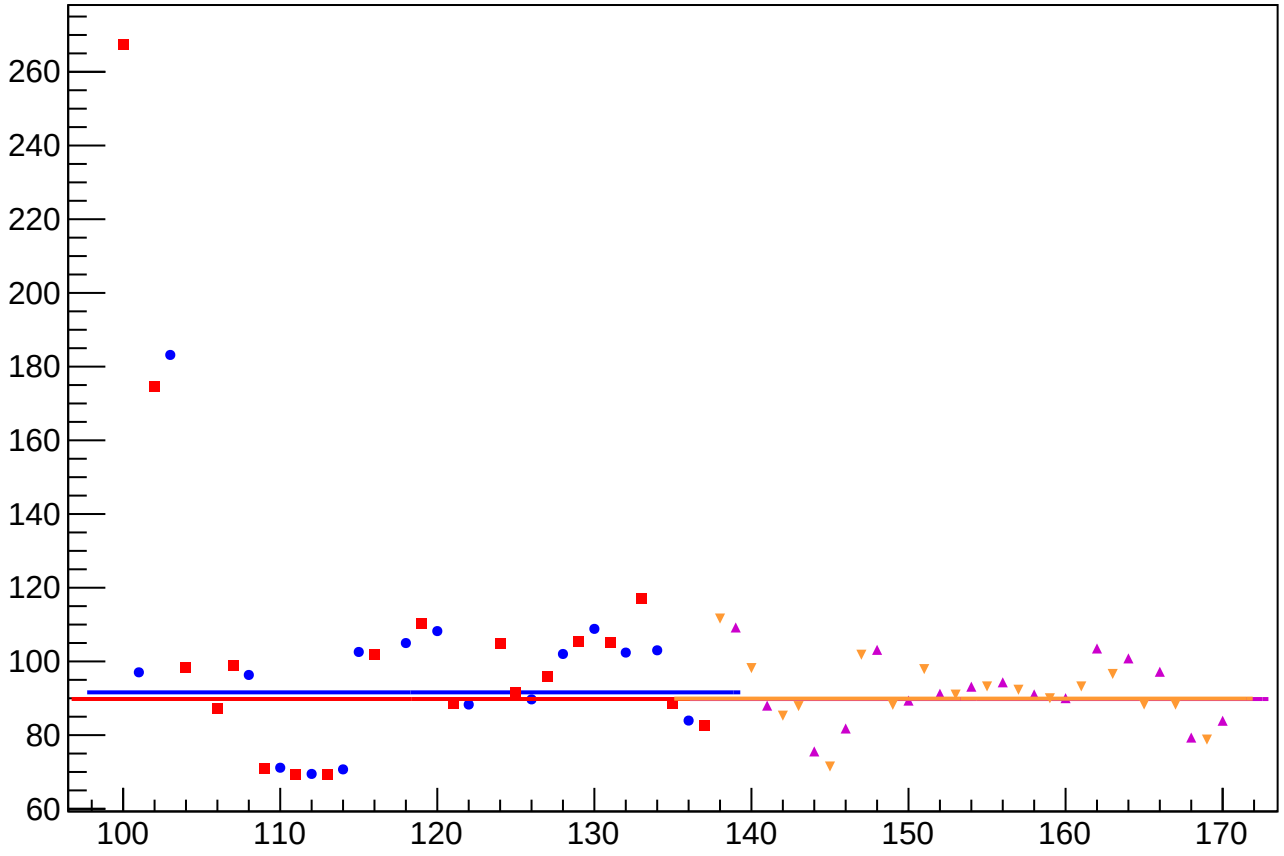
Left In: -65.505+/-24.928 $\chi^2$/NDF:21.6/15

+ sign 9.714+/-20.234 $\chi^2$/NDF: 35.6/32

All: -21.726+/-14.280 $\chi^2$/NDF: 86.6/67

- sign -52.917+/-20.154 $\chi^2$/NDF: 46.3/34

# cor_asym_sam_3748_avg_rms vs Slug




Right In: 91.608+/-0.025 $\chi^2$/NDF: 580675.9/15

Left Out: 89.907+/-0.018 $\chi^2$/NDF:259267.3/16

Right Out: 89.807+/-0.024 $\chi^2$/NDF: 746833.4/18

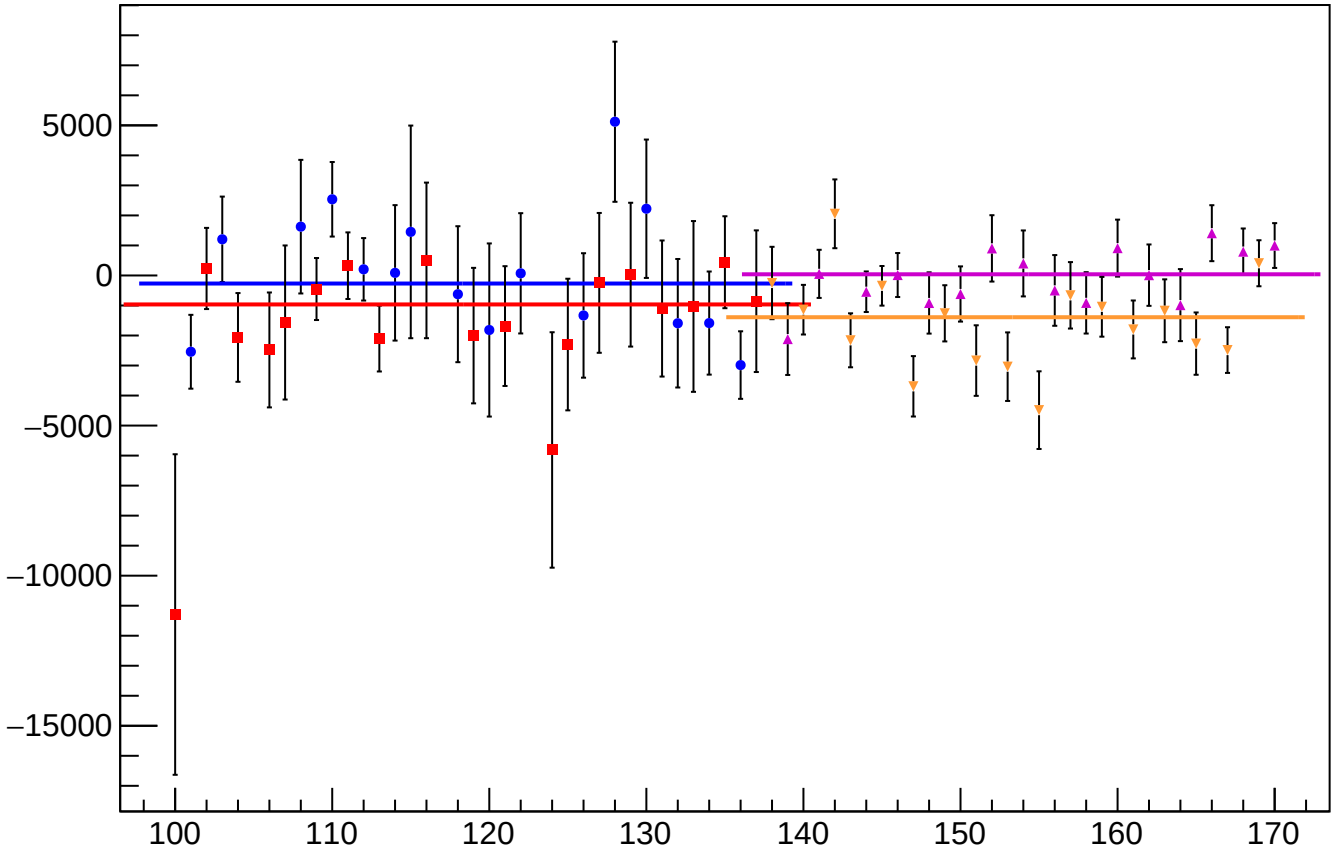
Left In: 89.792+/-0.018 $\chi^2$/NDF:253972.7/15

+ sign 90.471+/-0.014 $\chi^2$/NDF: 843077.9/32

All: 90.133+/-0.010 $\chi^2$/NDF: 1844998.7/67

- sign 89.797+/-0.014 $\chi^2$/NDF: 1000806.3/34

# asym_sam_3748_avg_cor_correction_mean vs Slug




Right In: -268.506+/-419.581 $\chi^2$/NDF: 23.4/15

Left Out: -1390.918+/-230.408 $\chi^2$/NDF:36.9/16

Right Out: -964.986+/-401.633 $\chi^2$/NDF: 12.1/18

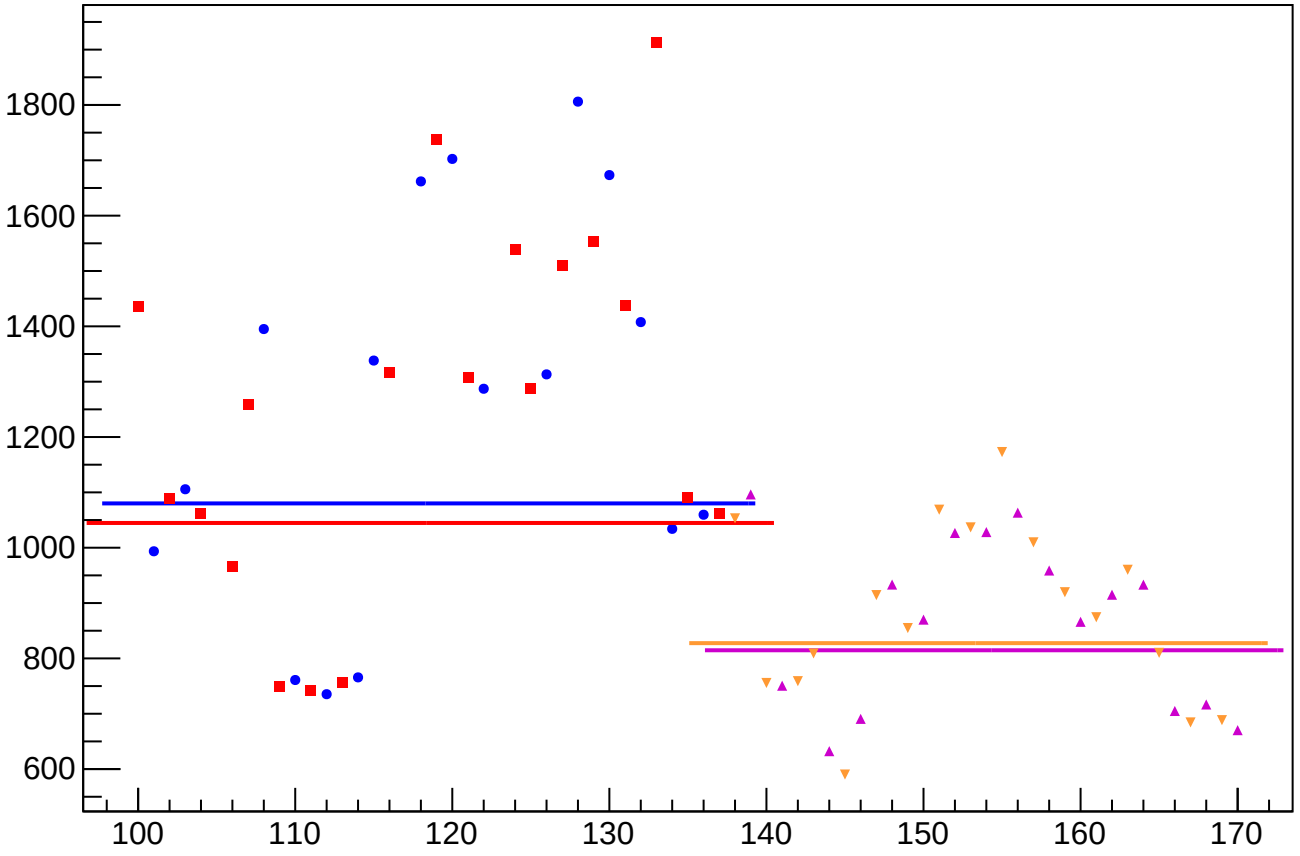
Left In: 39.304+/-228.391 $\chi^2$/NDF:13.5/15

+ sign -1130.871+/-201.960 $\chi^2$/NDF: 65.8/32

All: -660.578+/-141.581 $\chi^2$/NDF: 106.9/67

- sign -206.099+/-198.536 $\chi^2$/NDF: 30.4/34

# asym_sam_3748_avg_cor_correction_rms vs Slug




Right In: 1080.054+/-0.297 $\chi^2$/NDF: 1053475.0/15

Left Out: 827.568+/-0.163 $\chi^2$/NDF:907900.2/16

Right Out: 1044.717+/-0.284 $\chi^2$/NDF: 1201825.8/18

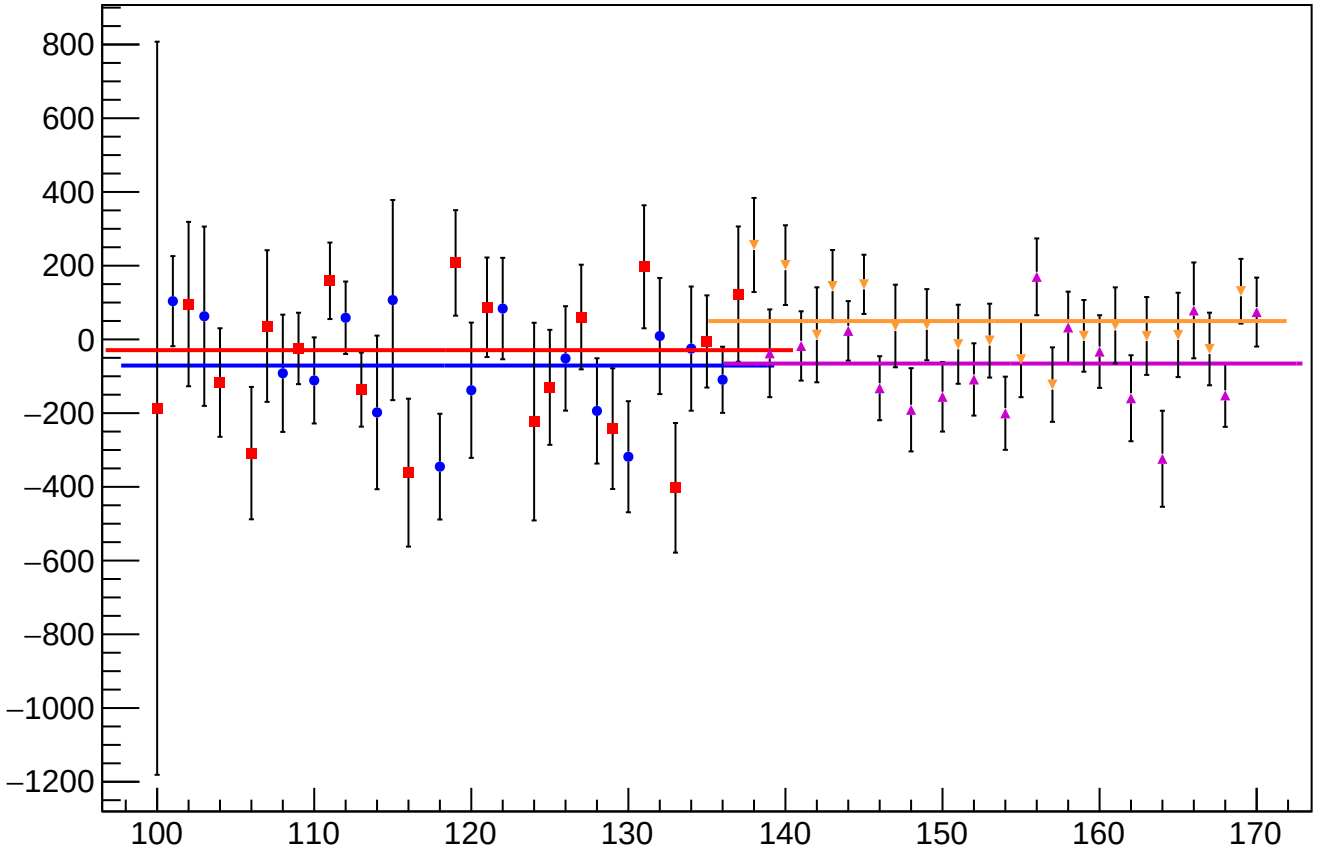
Left In: 814.685+/-0.161 $\chi^2$/NDF:818470.9/15

\+ sign 886.065+/-0.143 $\chi^2$/NDF: 2517805.3/32

All: 878.350+/-0.100 $\chi^2$/NDF: 5039594.2/67

\- sign 870.894+/-0.140 $\chi^2$/NDF: 2516049.3/34

# eigen_cor_asym_sam_3748_avg_mean vs Slug




Right In: -70.903+/-35.122 $\chi^2$/NDF: 14.1/15

Left Out: 49.766+/-24.756 $\chi^2$/NDF:13.6/16

Right Out: -29.159+/-34.247 $\chi^2$/NDF: 24.0/18

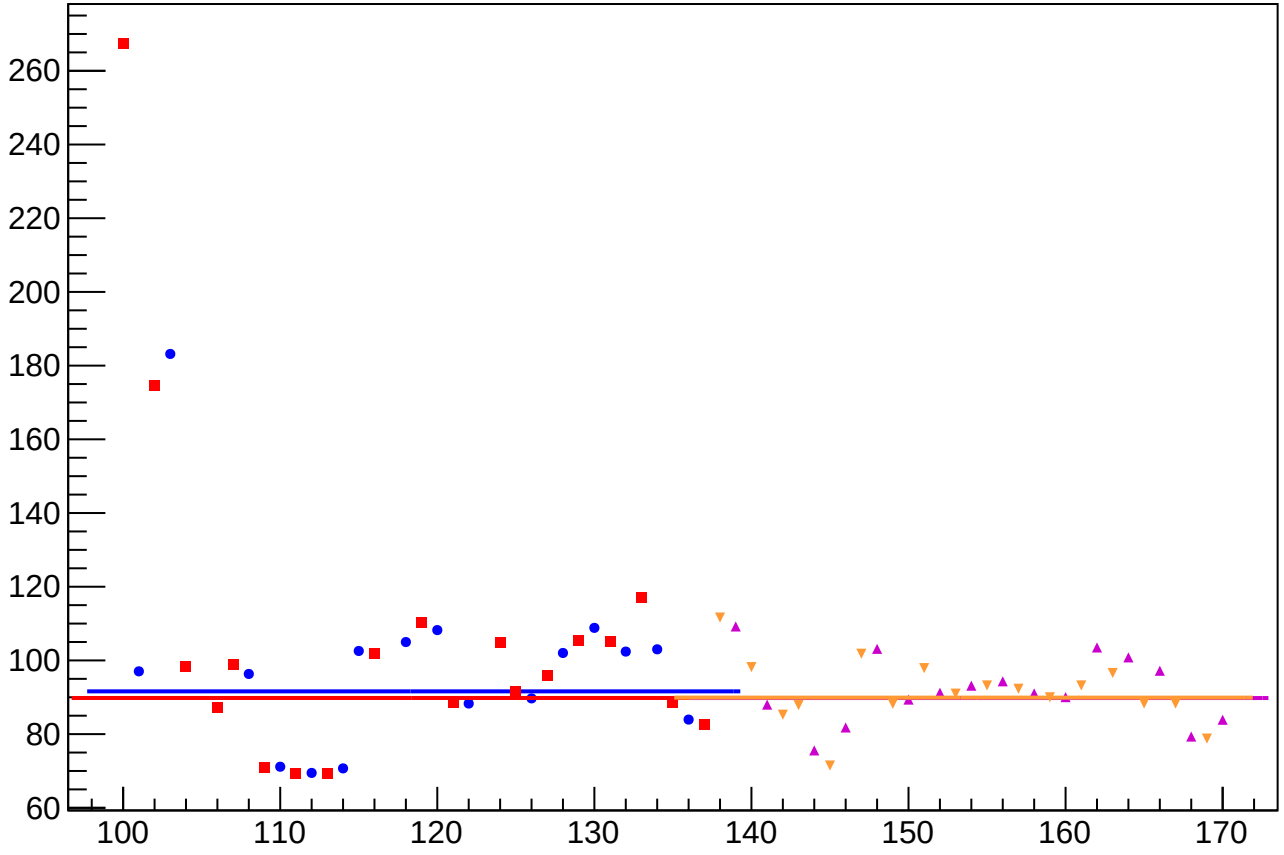
Left In: -65.505+/-24.928 $\chi^2$/NDF:21.6/15

+ sign 9.714+/-20.234 $\chi^2$/NDF: 35.6/32

All: -21.726+/-14.280 $\chi^2$/NDF: 86.6/67

- sign -52.917+/-20.154 $\chi^2$/NDF: 46.3/34

# eigen_cor_asym_sam_3748_avg_rms vs Slug




Right In: 91.608+/-0.025 $\chi^2$/NDF: 580675.9/15

Left Out: 89.907+/-0.018 $\chi^2$/NDF:259267.3/16

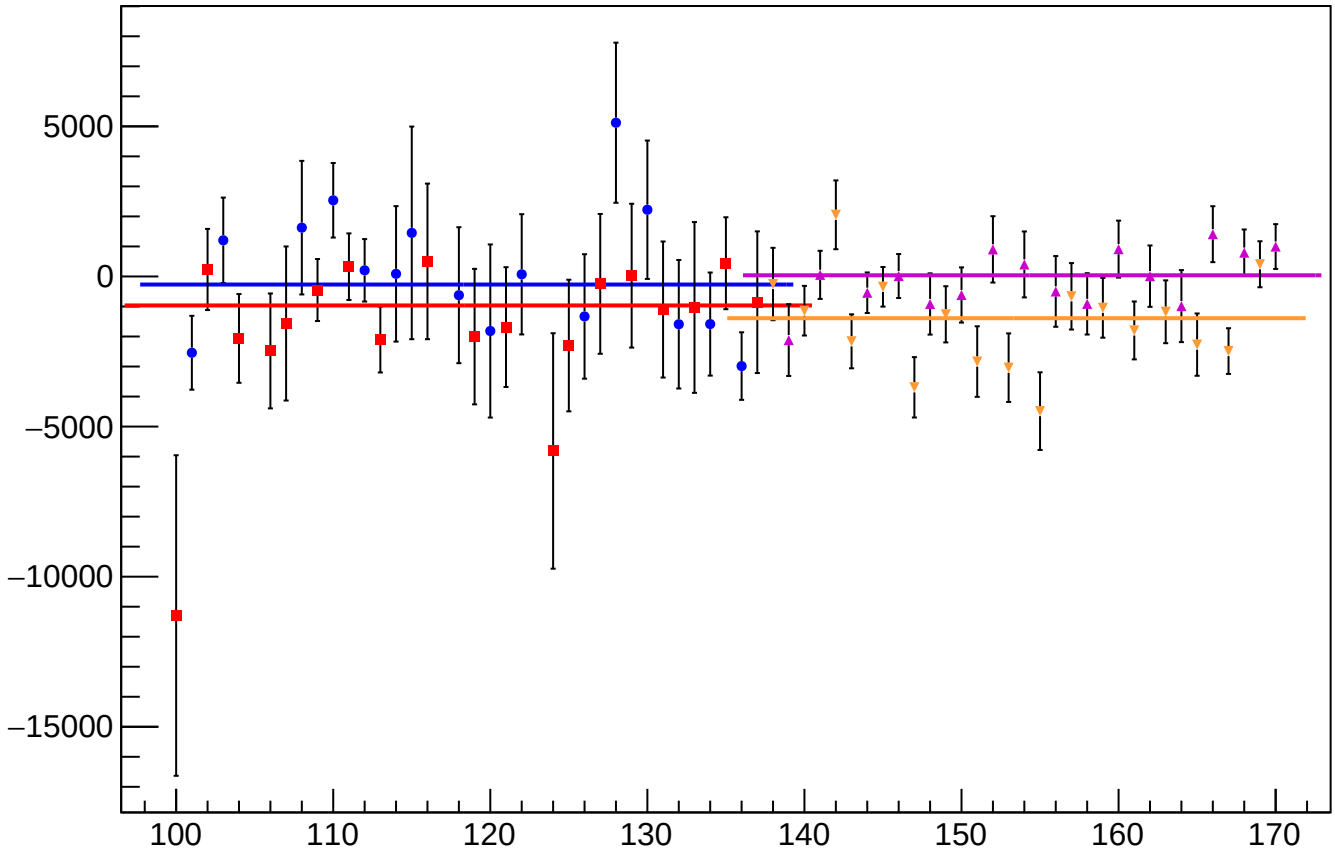
Right Out: 89.807+/-0.024 $\chi^2$/NDF: 746833.4/18

Left In: 89.792+/-0.018 $\chi^2$/NDF:253972.7/15

+ sign 90.471+/-0.014 $\chi^2$/NDF: 843077.9/32

All: 90.133+/-0.010 $\chi^2$/NDF: 1844998.7/67

- sign 89.797+/-0.014 $\chi^2$/NDF: 1000806.3/34




Right In: -268.506+/-419.581 $\chi^2$/NDF: 23.4/15

Left Out: -1390.918+/-230.408 $\chi^2$/NDF:36.9/16

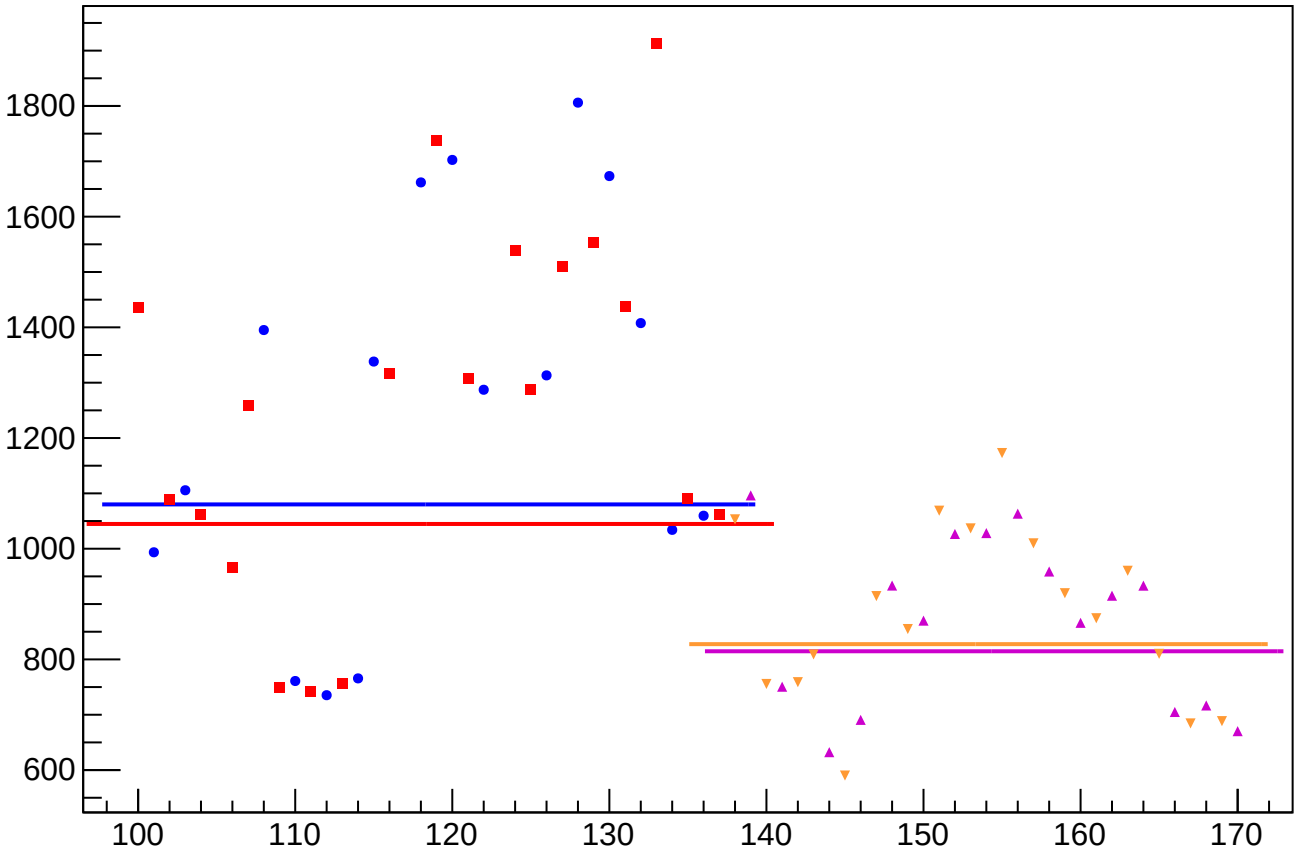
Right Out: -964.986+/-401.633 $\chi^2$/NDF: 12.1/18

Left In: 39.304+/-228.391 $\chi^2$/NDF:13.5/15

\+ sign -1130.871+/-201.960 $\chi^2$/NDF: 65.8/32

All: -660.578+/-141.581 $\chi^2$/NDF: 106.9/67

\- sign -206.099+/-198.536 $\chi^2$/NDF: 30.4/34




Right In: 1080.054+/-0.297 $\chi^2$/NDF: 1053475.0/15

Left Out: 827.568+/-0.163 $\chi^2$/NDF:907900.2/16

Right Out: 1044.717+/-0.284 $\chi^2$/NDF: 1201825.8/18

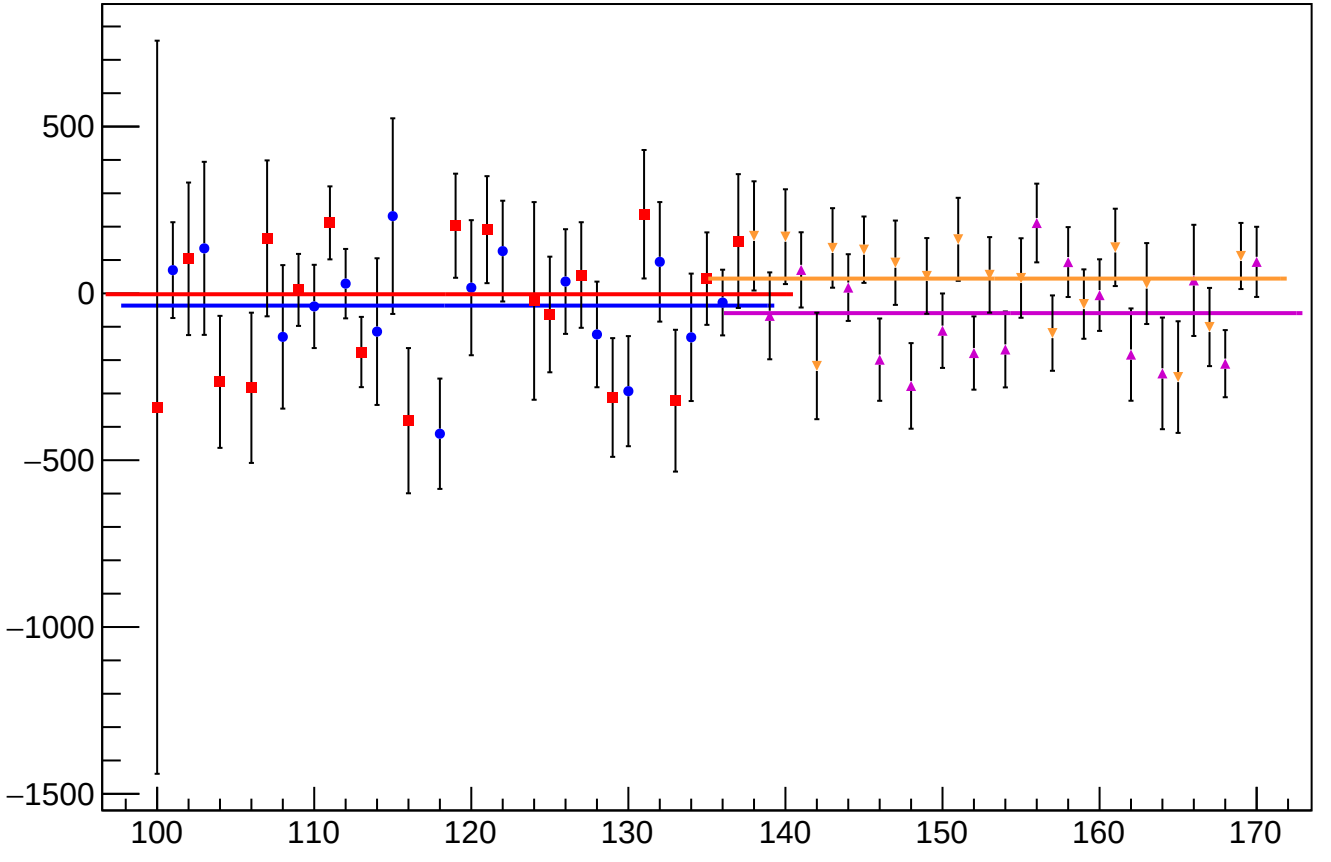
Left In: 814.685+/-0.161 $\chi^2$/NDF:818470.9/15

\+ sign 886.065+/-0.143 $\chi^2$/NDF: 2517805.3/32

All: 878.350+/-0.100 $\chi^2$/NDF: 5039594.2/67

\- sign 870.894+/-0.140 $\chi^2$/NDF: 2516049.3/34

# dit_asym_sam_3748_avg_mean vs Slug




Right In: -36.590+/-38.991 $\chi^2$/NDF: 12.9/15

Left Out: 44.346+/-29.182 $\chi^2$/NDF:14.9/16

Right Out: -2.568+/-38.165 $\chi^2$/NDF: 24.7/18

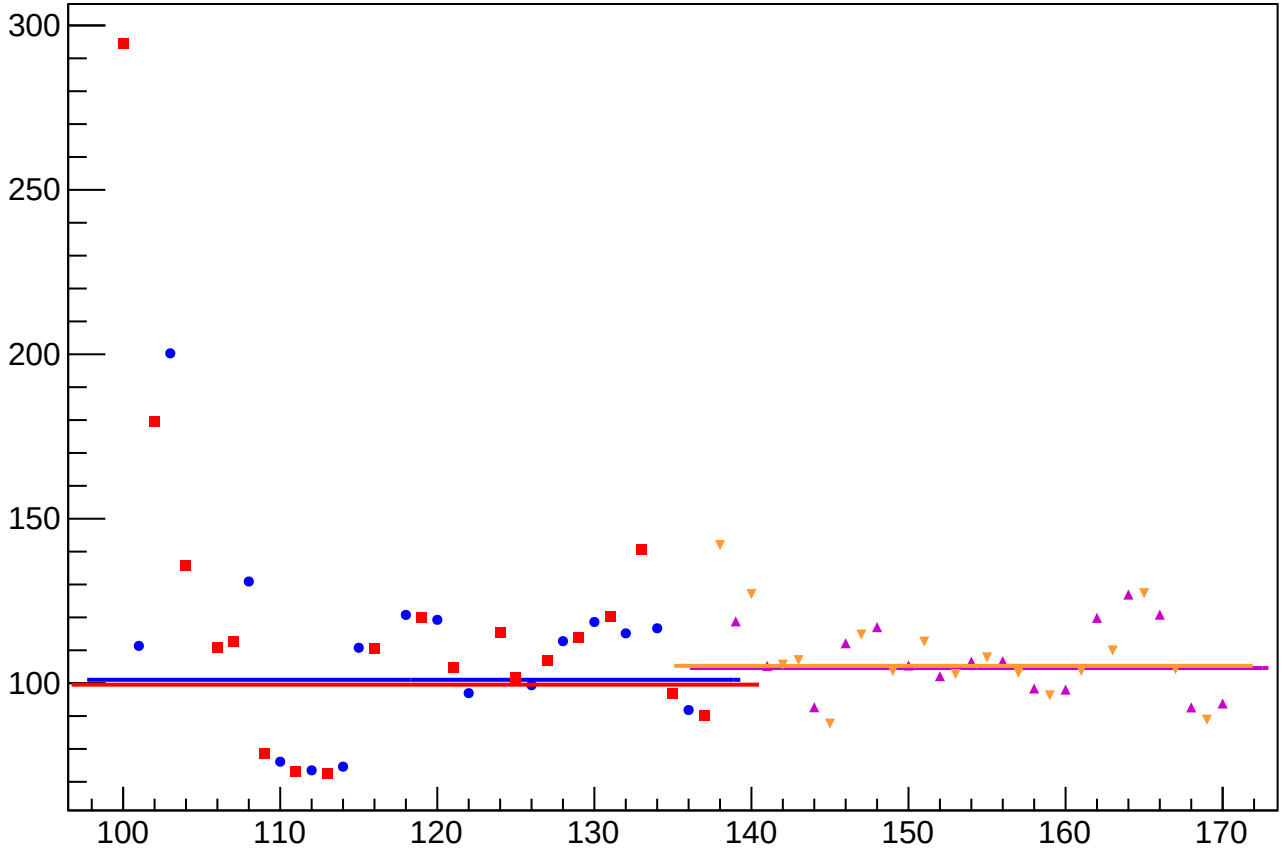
Left In: -59.176+/-29.266 $\chi^2$/NDF:22.8/15

+ sign 15.287+/-23.363 $\chi^2$/NDF: 30.6/32

All: -11.623+/-16.471 $\chi^2$/NDF: 82.1/67

- sign -38.214+/-23.224 $\chi^2$/NDF: 48.9/34

# dit_asym_sam_3748_avg_rms vs Slug




Right In: 101.031+/-0.028 $\chi^2$/NDF: 716095.9/15

Left Out: 105.262+/-0.021 $\chi^2$/NDF:339830.9/16

Right Out: 99.547+/-0.027 $\chi^2$/NDF: 880497.8/18

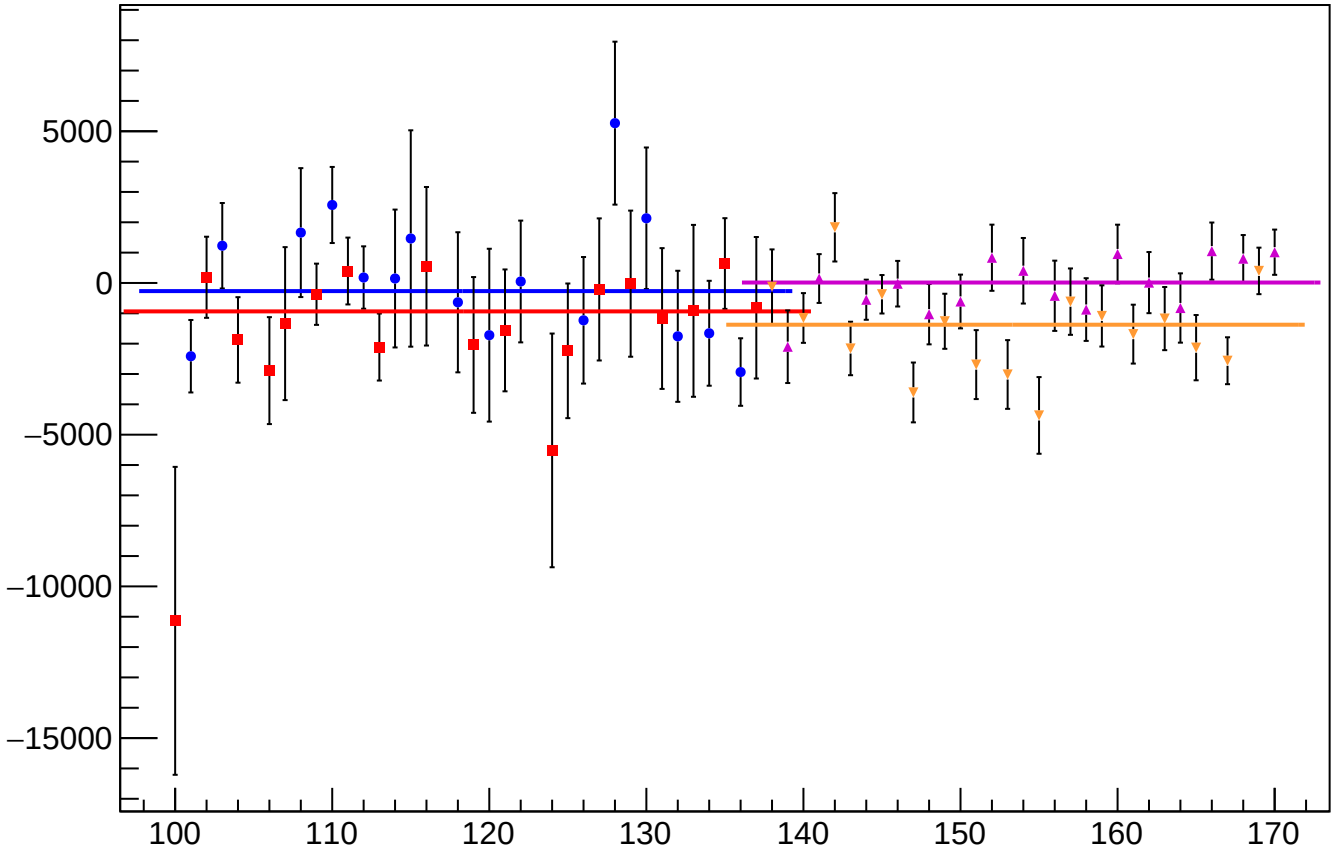
Left In: 104.595+/-0.021 $\chi^2$/NDF:223712.7/15

+ sign 103.743+/-0.017 $\chi^2$/NDF: 1071021.5/32

All: 103.231+/-0.012 $\chi^2$/NDF: 2199173.1/67

- sign 102.726+/-0.016 $\chi^2$/NDF: 1126244.8/34

# asym_sam_3748_avg_dit_correction_mean vs Slug




Right In: -267.886+/-417.061 $\chi^2$/NDF: 23.5/15

Left Out: -1375.819+/-228.322 $\chi^2$/NDF:35.6/16

Right Out: -936.734+/-396.234 $\chi^2$/NDF: 13.1/18

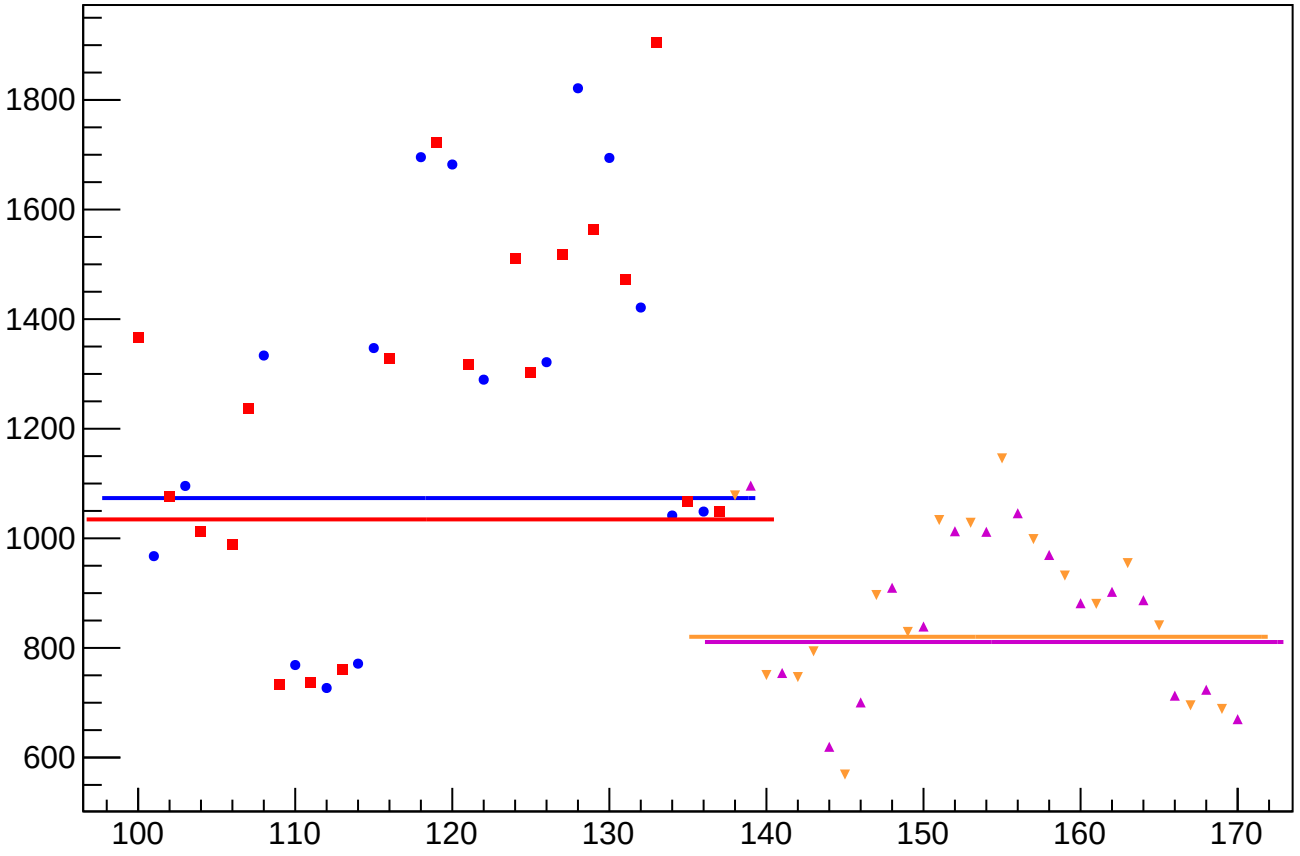
Left In: 14.246+/-227.217 $\chi^2$/NDF:12.6/15

+ sign -1120.335+/-200.274 $\chi^2$/NDF: 64.5/32

All: -663.546+/-140.483 $\chi^2$/NDF: 104.8/67

- sign -221.084+/-197.108 $\chi^2$/NDF: 30.1/34

# asym_sam_3748_avg_dit_correction_rms vs Slug




Right In: 1073.456+/-0.295 $\chi^2$/NDF: 1077055.9/15

Left Out: 820.331+/-0.161 $\chi^2$/NDF:941015.5/16

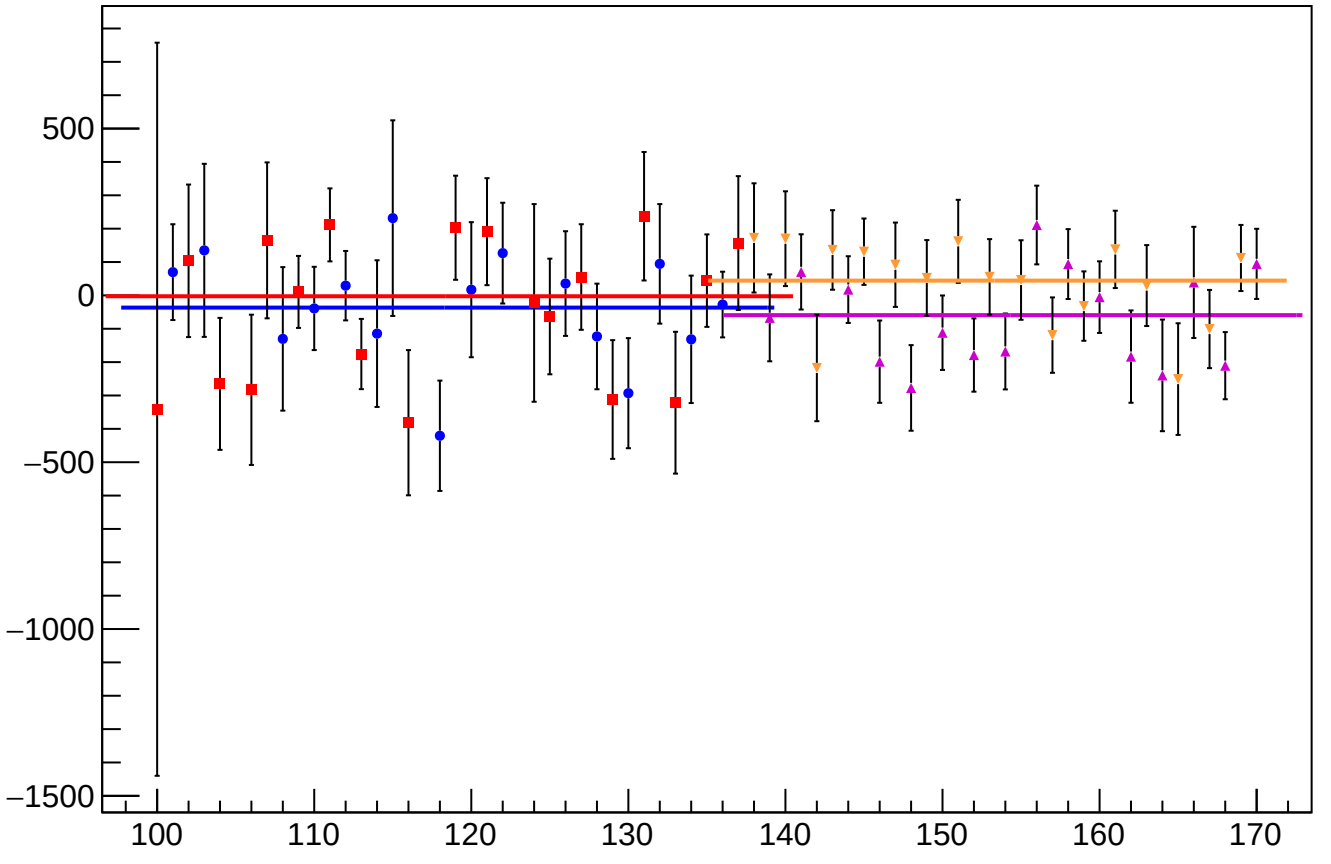
Right Out: 1034.535+/-0.280 $\chi^2$/NDF: 1229344.1/18

Left In: 810.785+/-0.161 $\chi^2$/NDF:777795.8/15

+ sign 878.701+/-0.142 $\chi^2$/NDF: 2584901.3/32

All: 872.327+/-0.099 $\chi^2$/NDF: 5075963.5/67

- sign 866.154+/-0.139 $\chi^2$/NDF: 2487075.0/34




Right In: -36.589+/-38.991 $\chi^2$/NDF: 12.9/15

Left Out: 44.348+/-29.182 $\chi^2$/NDF:14.9/16

Right Out: -2.566+/-38.165 $\chi^2$/NDF: 24.7/18

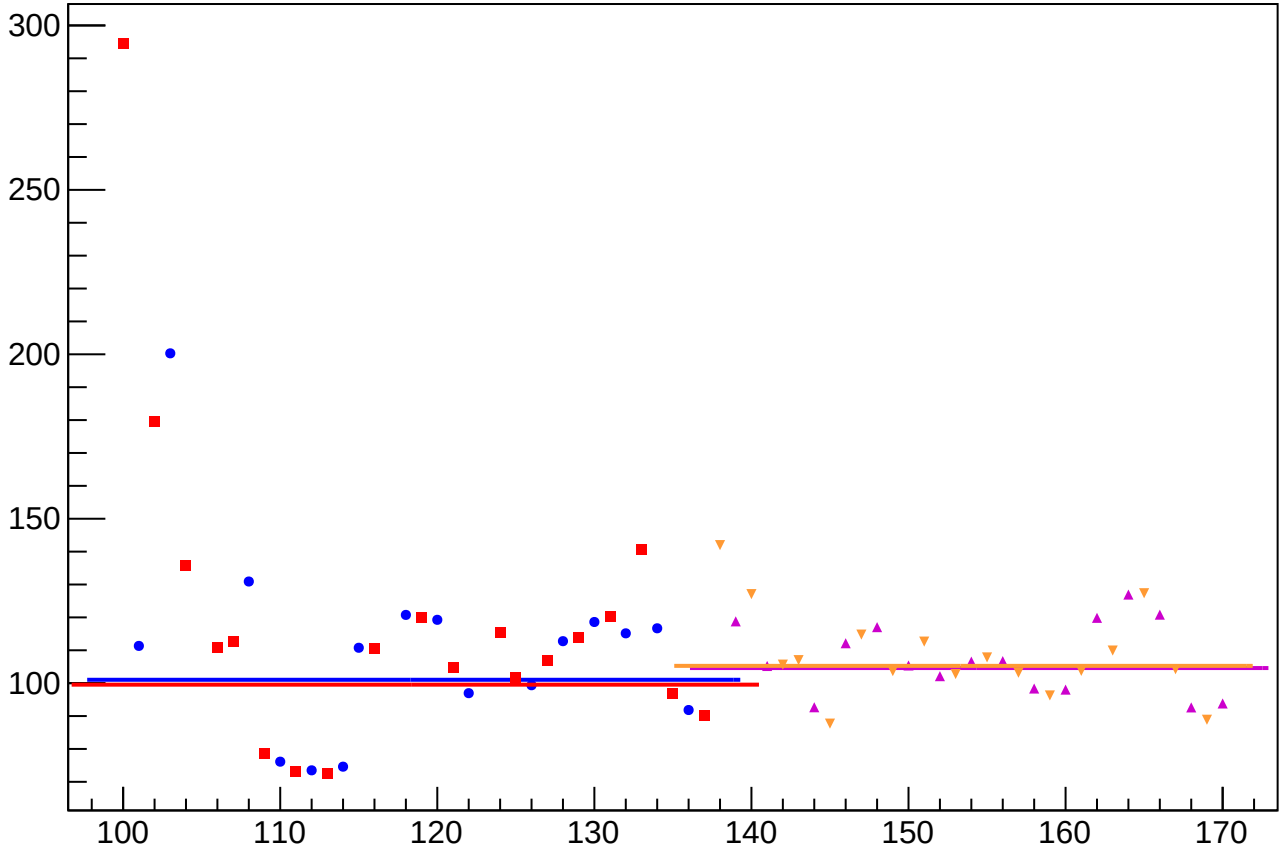
Left In: -59.176+/-29.267 $\chi^2$/NDF:22.8/15

+ sign 15.289+/-23.363 $\chi^2$/NDF: 30.6/32

All: -11.622+/-16.471 $\chi^2$/NDF: 82.1/67

- sign -38.213+/-23.224 $\chi^2$/NDF: 48.9/34

# eigen_dit_asym_sam_3748_avg_rms vs Slug




Right In: 101.031+/-0.028 $\chi^2$/NDF: 716094.5/15

Left Out: 105.263+/-0.021 $\chi^2$/NDF:339826.8/16

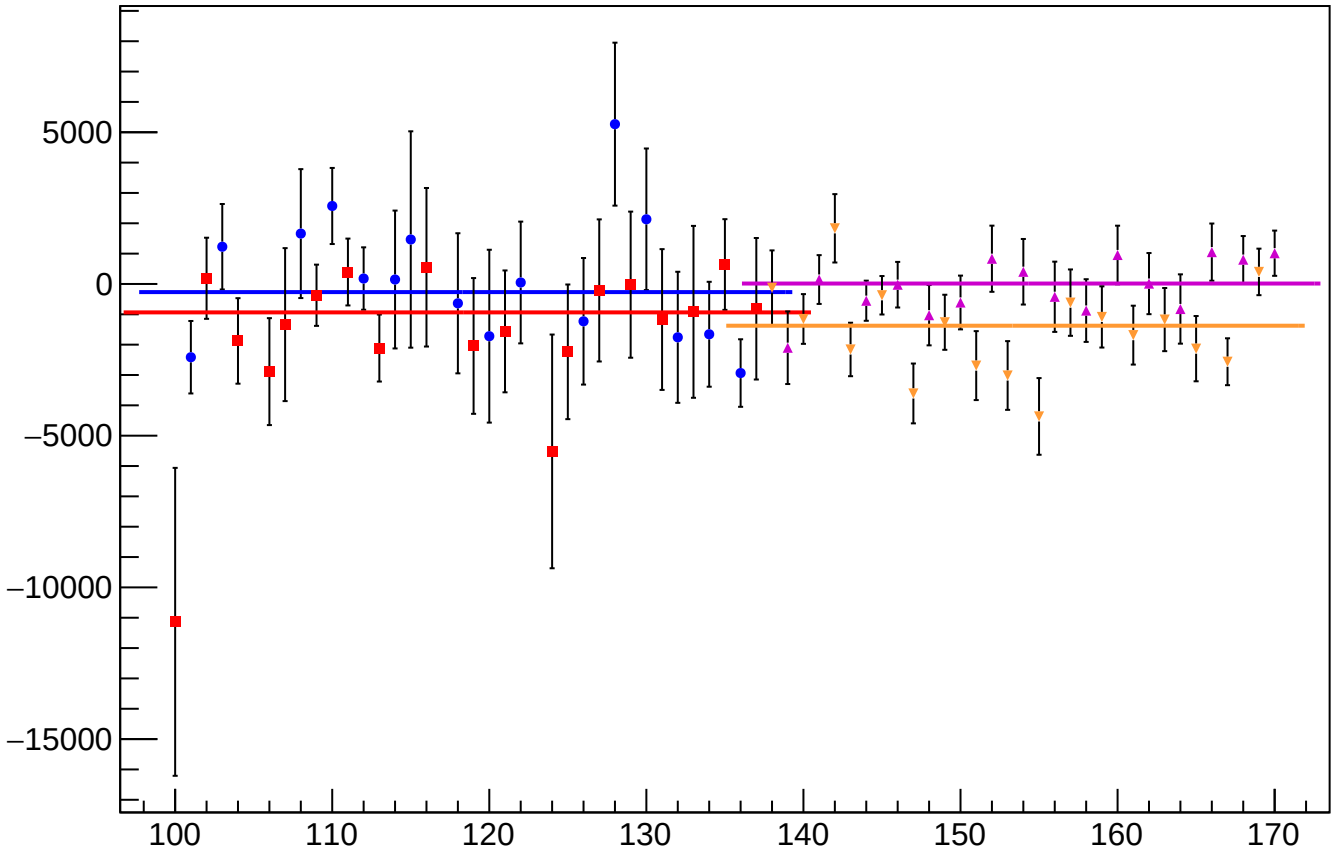
Right Out: 99.547+/-0.027 $\chi^2$/NDF: 880499.8/18

Left In: 104.596+/-0.021 $\chi^2$/NDF:223713.1/15

+ sign 103.743+/-0.017 $\chi^2$/NDF: 1071017.6/32

All: 103.232+/-0.012 $\chi^2$/NDF: 2199173.4/67

- sign 102.726+/-0.016 $\chi^2$/NDF: 1126248.8/34




Right In: -267.885+/-417.061 $\chi^2$/NDF: 23.5/15

Left Out: -1375.817+/-228.322 $\chi^2$/NDF:35.6/16

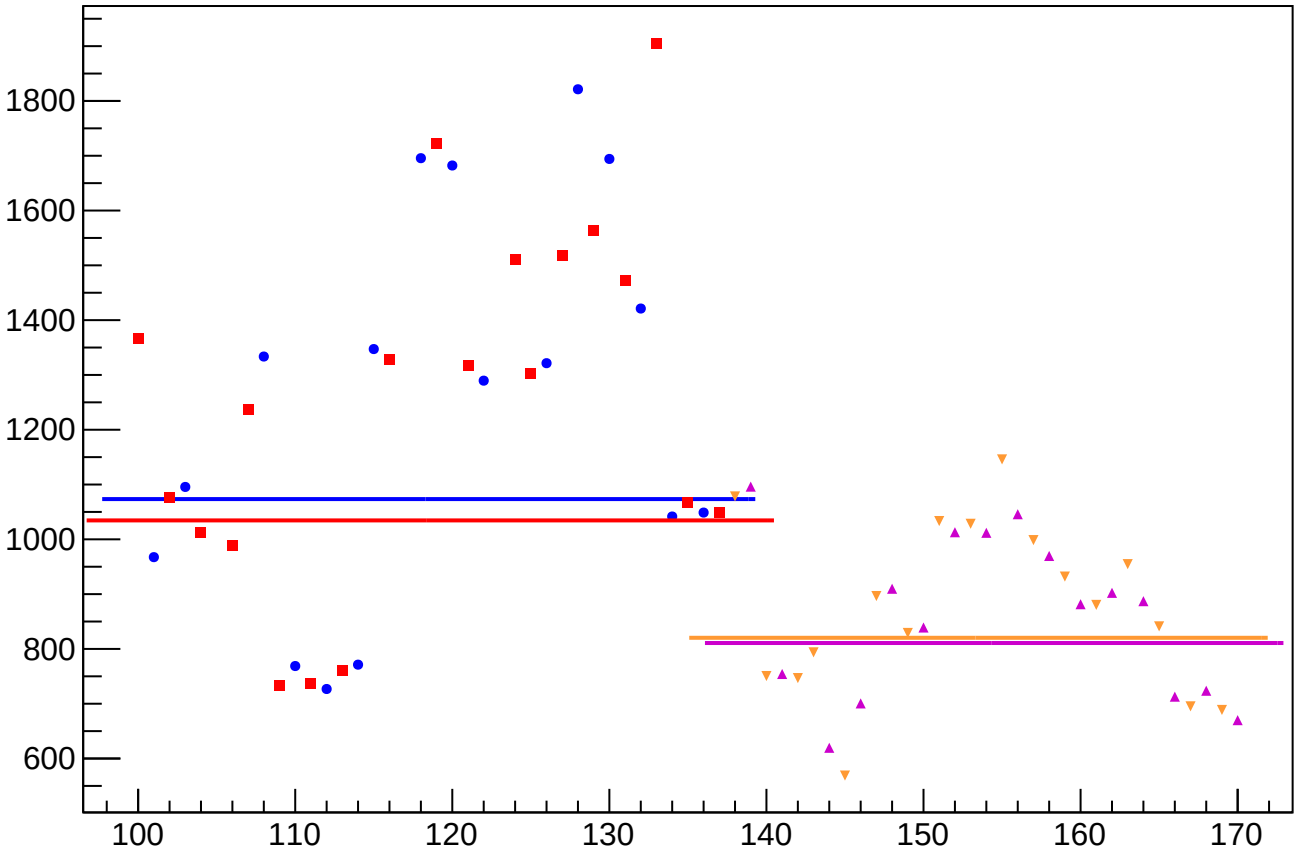
Right Out: -936.732+/-396.234 $\chi^2$/NDF: 13.1/18

Left In: 14.247+/-227.217 $\chi^2$/NDF:12.6/15

+ sign -1120.333+/-200.274 $\chi^2$/NDF: 64.5/32

All: -663.545+/-140.482 $\chi^2$/NDF: 104.8/67

- sign -221.083+/-197.108 $\chi^2$/NDF: 30.1/34




Right In: 1073.454+/-0.295 $\chi^2$/NDF: 1077061.8/15

Left Out: 820.330+/-0.161 $\chi^2$/NDF:941020.9/16

Right Out: 1034.533+/-0.280 $\chi^2$/NDF: 1229346.7/18

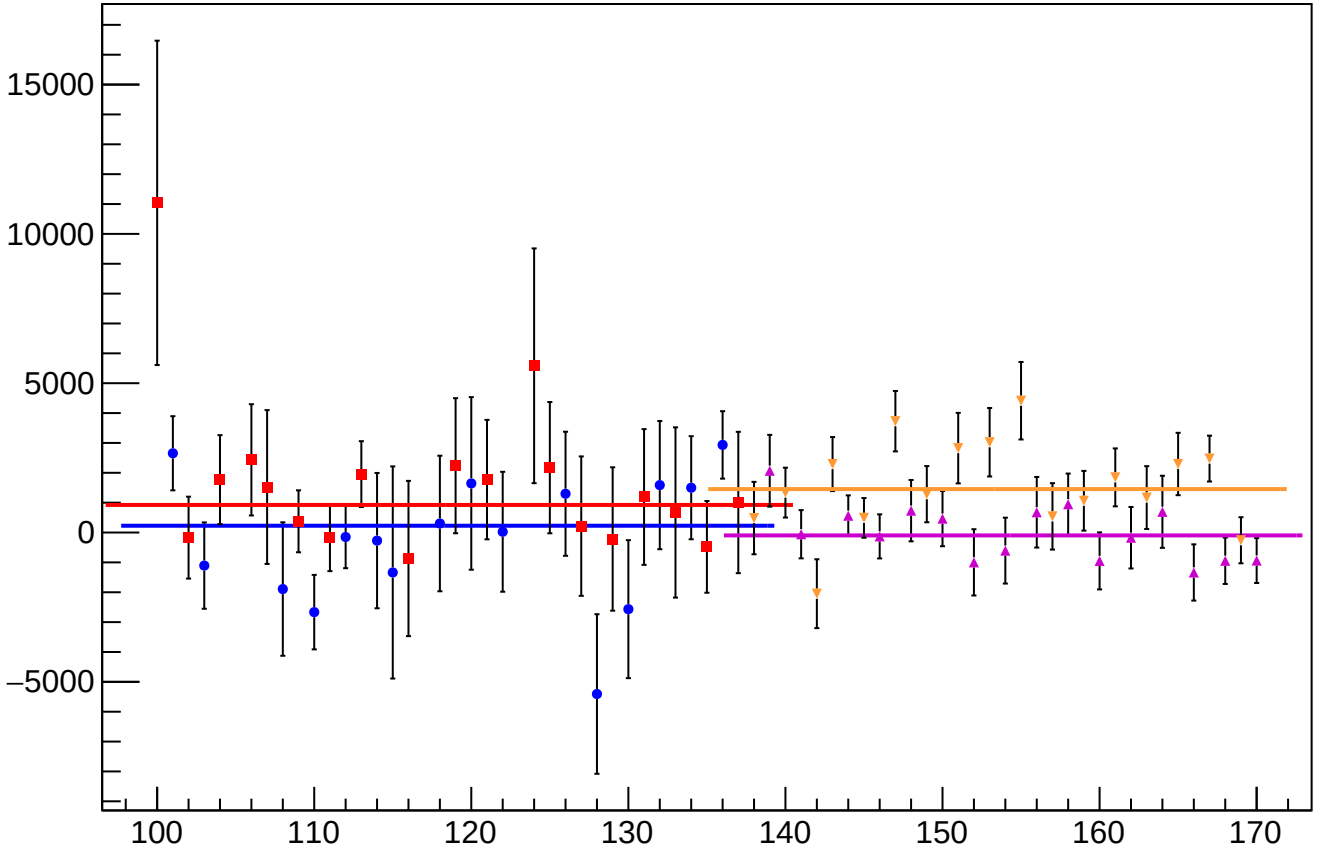
Left In: 810.783+/-0.161 $\chi^2$/NDF:777797.2/15

\+ sign 878.699+/-0.142 $\chi^2$/NDF: 2584912.2/32

All: 872.326+/-0.099 $\chi^2$/NDF: 5075978.1/67

\- sign 866.153+/-0.139 $\chi^2$/NDF: 2487078.9/34

# asym_sam_3748_avg_mean vs Slug




Right In: 227.502+/-421.838 $\chi^2$/NDF: 24.4/15

Left Out: 1454.583+/-231.860 $\chi^2$/NDF:34.8/16

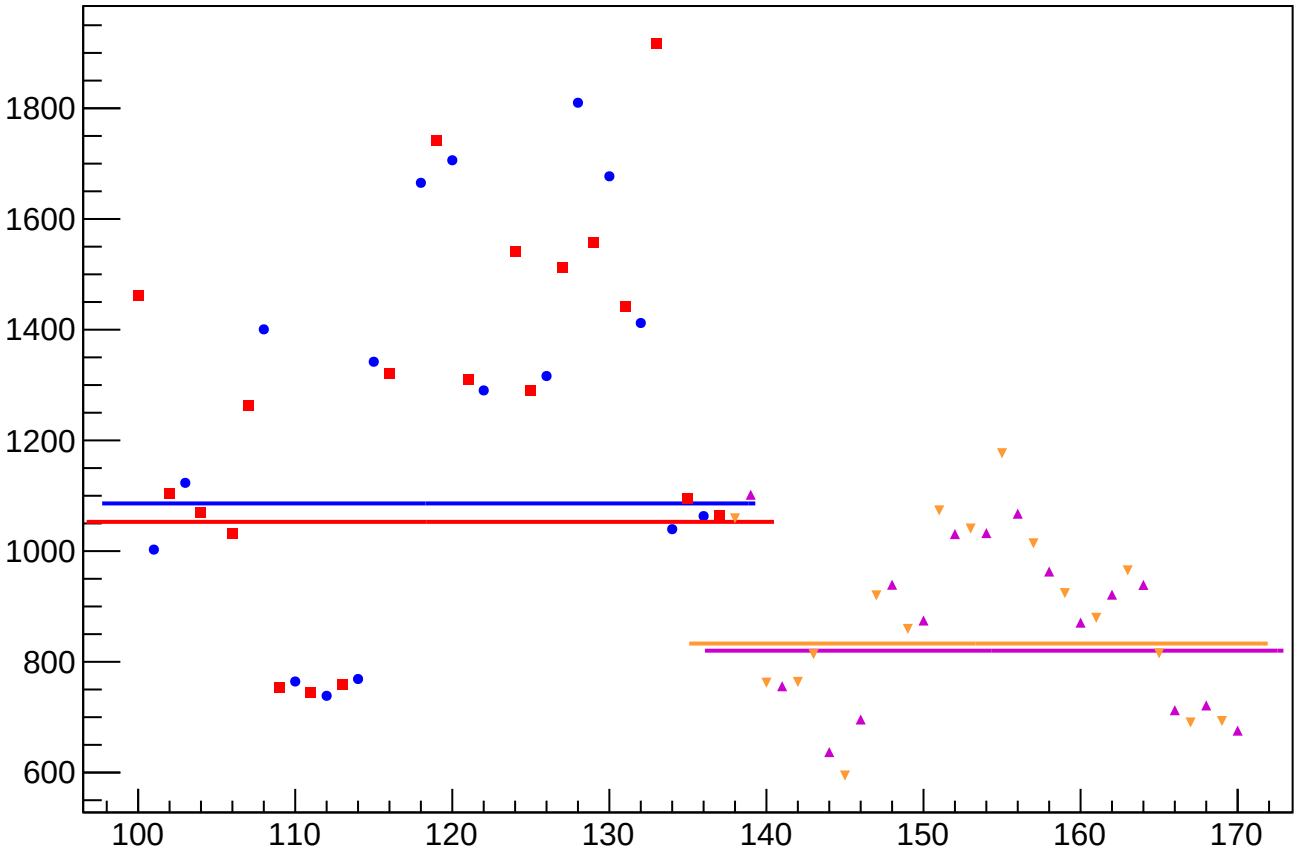
Right Out: 923.649+/-403.102 $\chi^2$/NDF: 11.2/18

Left In: -96.667+/-229.871 $\chi^2$/NDF:13.0/15

+ sign 1169.884+/-203.190 $\chi^2$/NDF: 65.7/32

All: 652.958+/-142.422 $\chi^2$/NDF: 107.4/67

- sign 153.711+/-199.685 $\chi^2$/NDF: 29.0/34




Right In: 1086.137+/-0.298 $\chi^2$/NDF: 1047479.6/15

Left Out: 832.987+/-0.164 $\chi^2$/NDF:895899.7/16

Right Out: 1052.831+/-0.285 $\chi^2$/NDF: 1194420.8/18

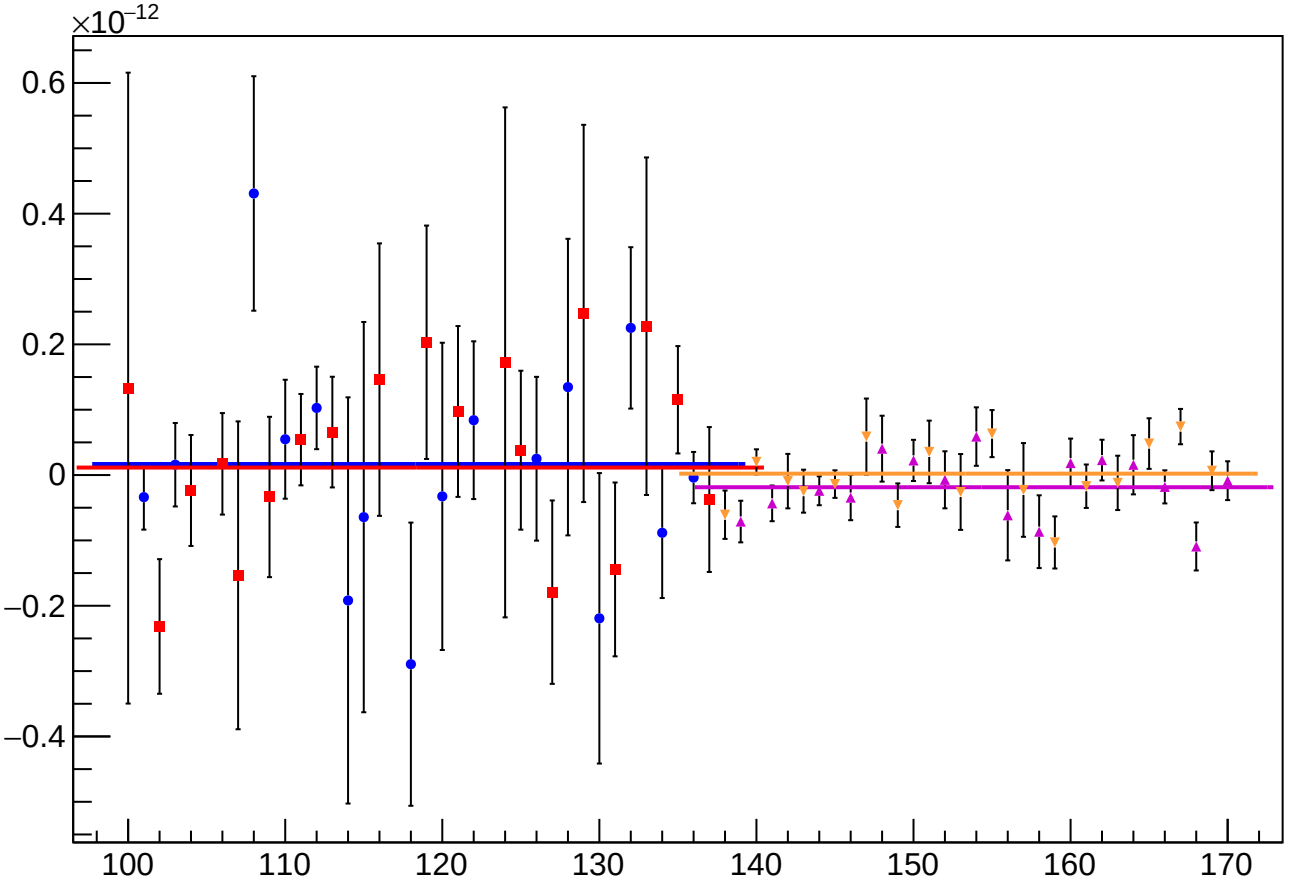
Left In: 820.156+/-0.163 $\chi^2$/NDF:807374.6/15

\+ sign 891.721+/-0.144 $\chi^2$/NDF: 2496538.3/32

All: 884.361+/-0.101 $\chi^2$/NDF: 5006319.0/67

\- sign 877.253+/-0.141 $\chi^2$/NDF: 2504622.2/34

# asym_sam_3748_avg_reg_vs_cor_diff_mean vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 16.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:27.8/16

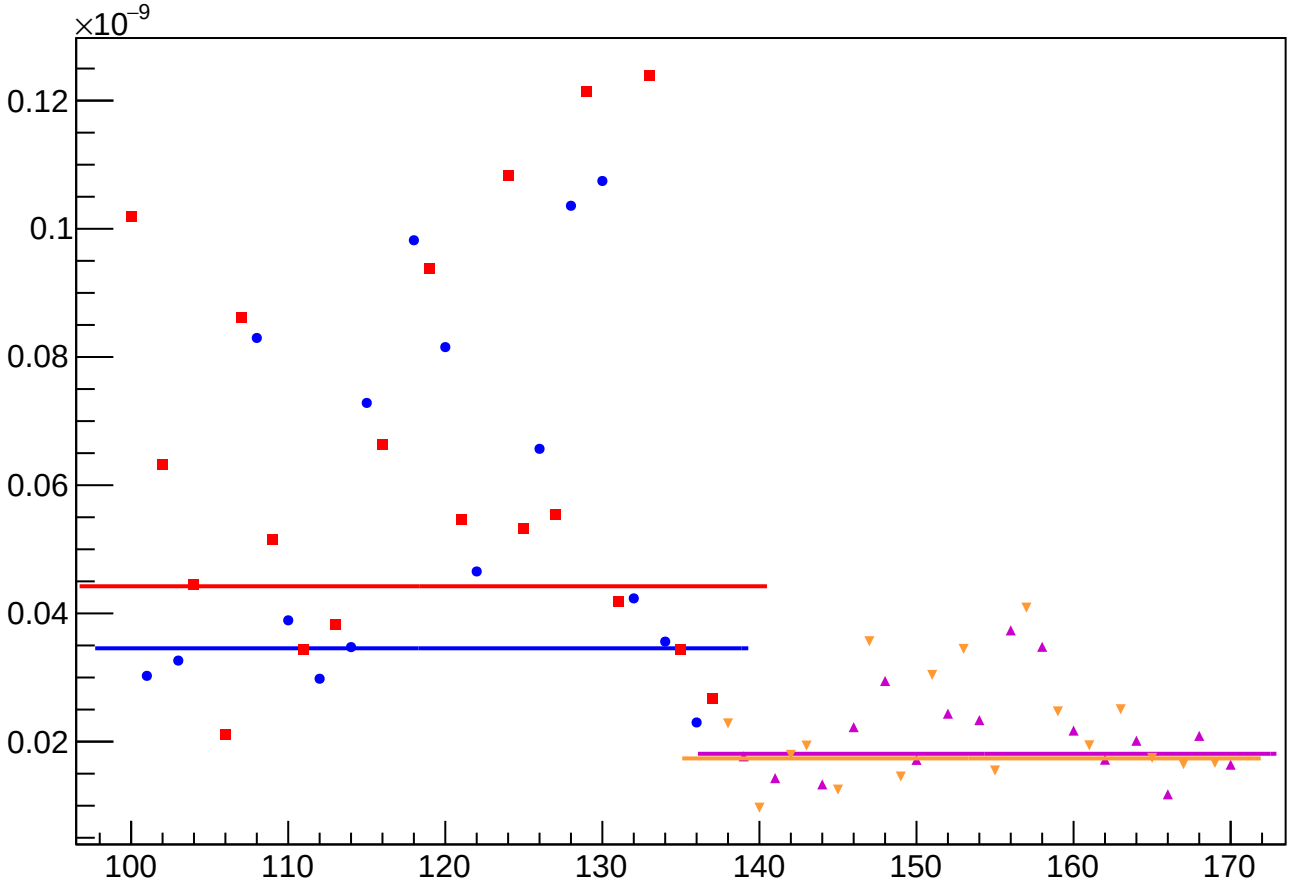
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.8/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:21.4/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 45.1/32

All: -0.000+/-0.000 $\chi^2$/NDF: 86.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 38.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1188815.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1378161.9/16

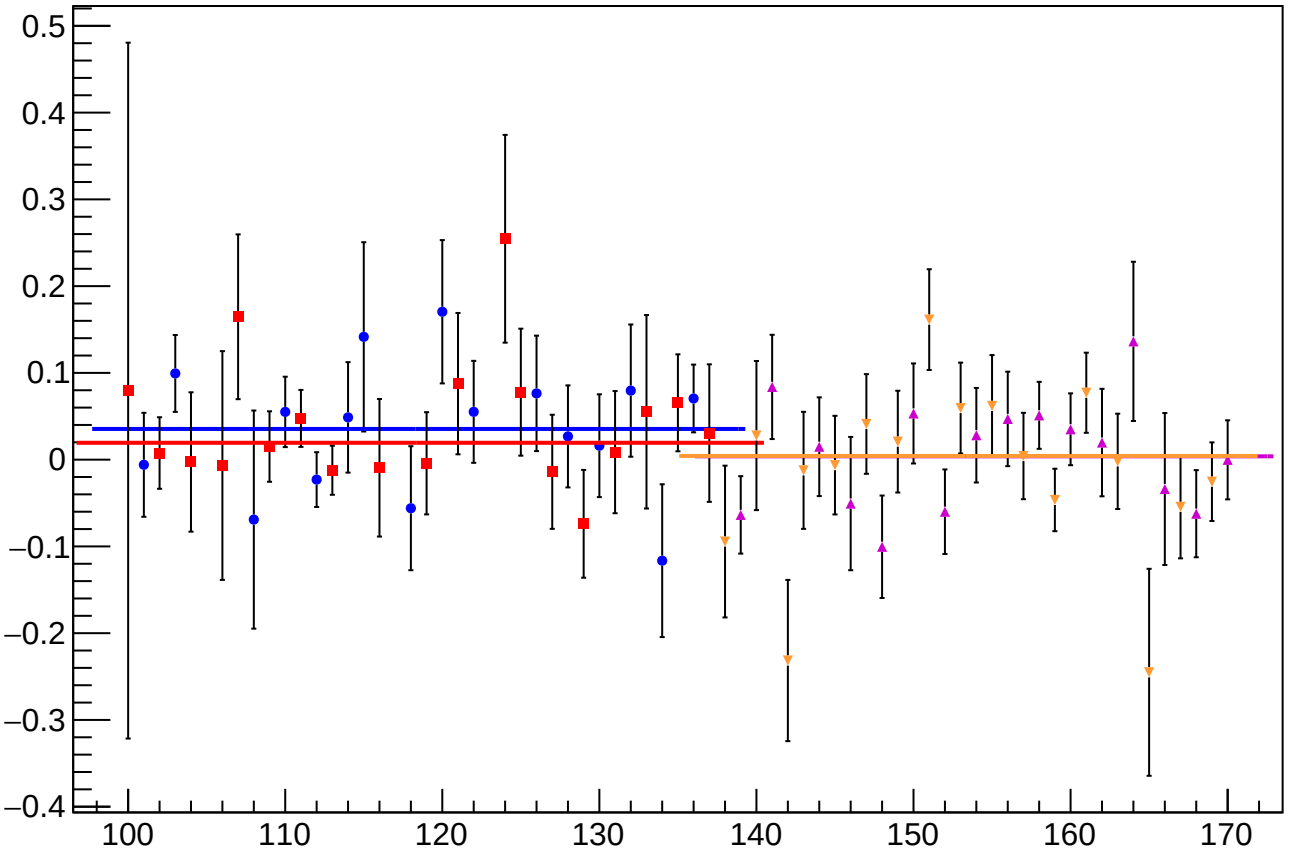
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1073061.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:835266.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3657349.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 7299585.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3624908.6/34




Right In: 0.035+/-0.014 $\chi^2$/NDF: 16.9/15

Left Out: 0.004+/-0.014 $\chi^2$/NDF:28.0/16

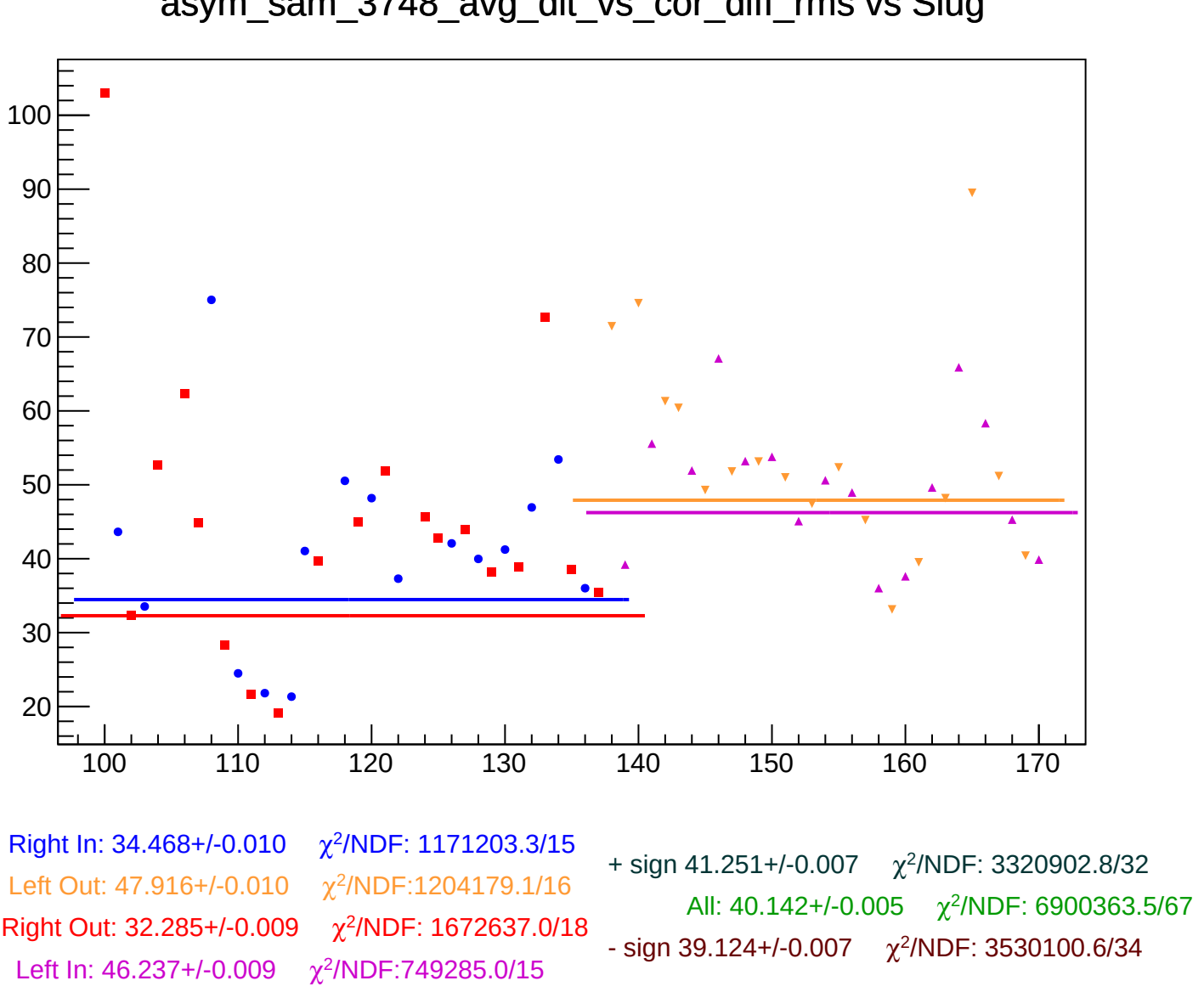
Right Out: 0.019+/-0.013 $\chi^2$/NDF: 13.4/18

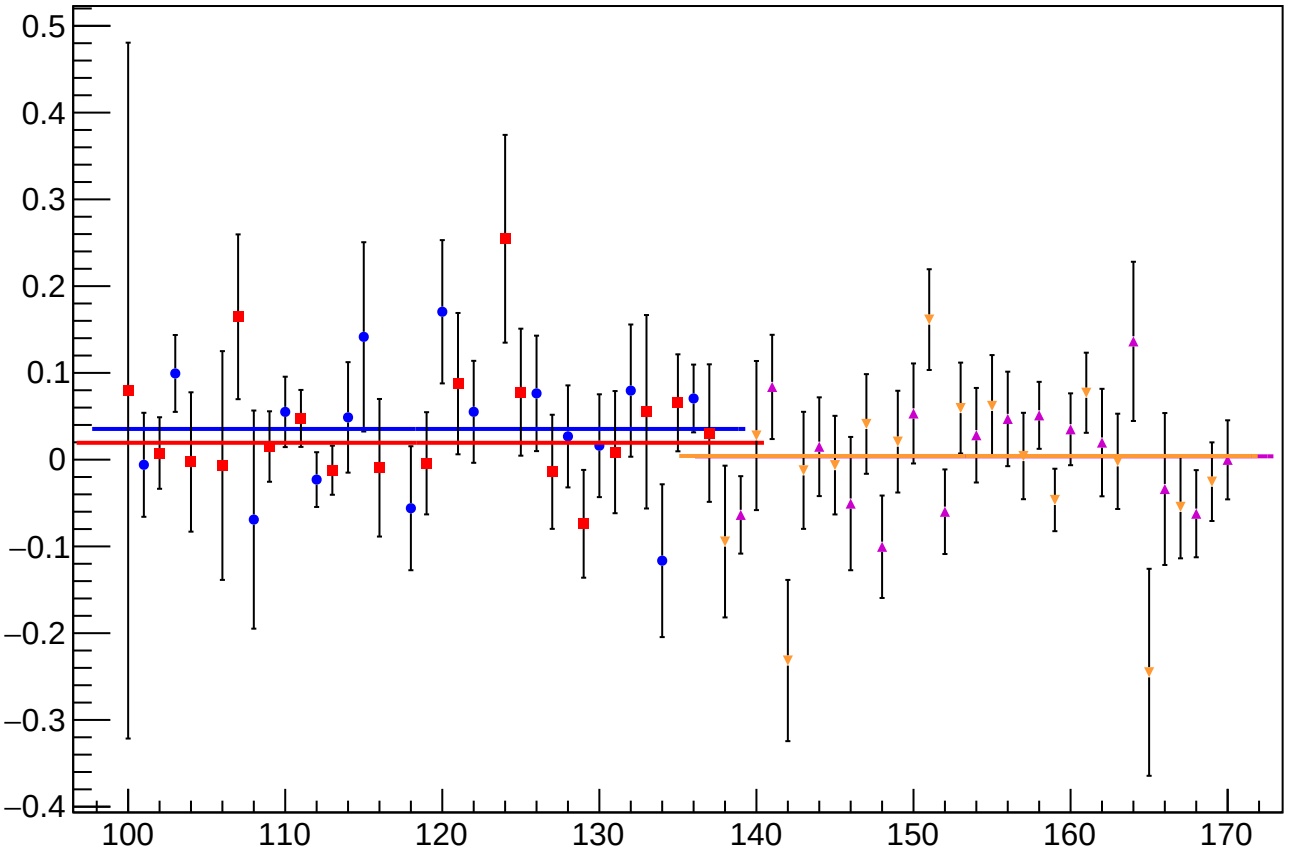
Left In: 0.004+/-0.013 $\chi^2$/NDF:17.1/15

+ sign 0.020+/-0.010 $\chi^2$/NDF: 47.5/32

All: 0.016+/-0.007 $\chi^2$/NDF: 79.1/67

- sign 0.012+/-0.009 $\chi^2$/NDF: 31.2/34


asym_sam_3748_avg_dit_vs_cor_diff_rms vs Slug
100
90
80
70
60
50
40
30
20
100
110
120
130
140
150
160
170
Right In: 34.468+/-0.010 χ²/NDF: 1171203.3/15
Left Out: 47.916+/-0.010 χ²/NDF:1204179.1/16
Right Out: 32.285+/-0.009 χ²/NDF: 1672637.0/18
Left In: 46.237+/-0.009 χ²/NDF:749285.0/15
+ sign 41.251+/-0.007 χ²/NDF: 3320902.8/32
All: 40.142+/-0.005 χ²/NDF: 6900363.5/67
- sign 39.124+/-0.007 χ²/NDF: 3530100.6/34




Right In: 0.035+/-0.014 $\chi^2$/NDF: 16.9/15

Left Out: 0.004+/-0.014 $\chi^2$/NDF:28.0/16

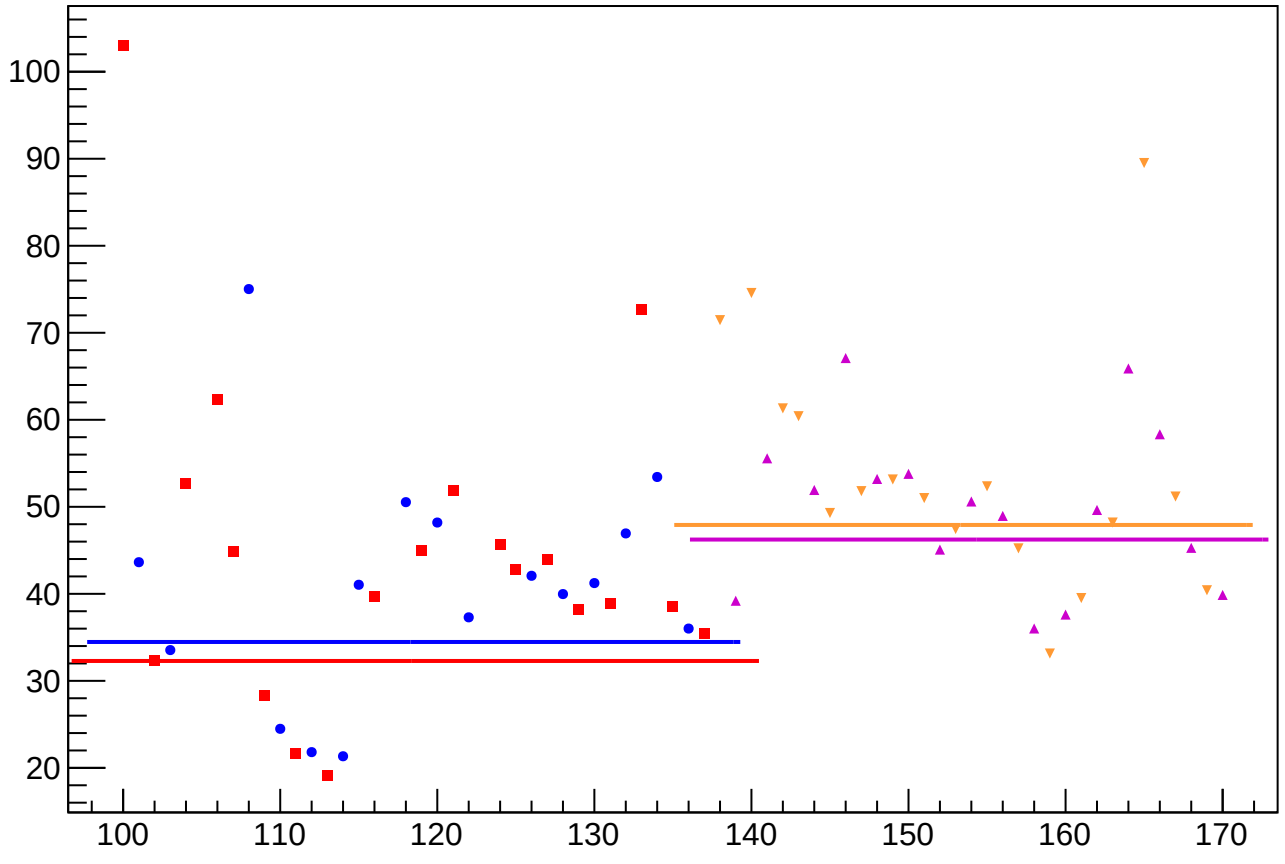
Right Out: 0.019+/-0.013 $\chi^2$/NDF: 13.4/18

Left In: 0.004+/-0.013 $\chi^2$/NDF:17.1/15

+ sign 0.020+/-0.010 $\chi^2$/NDF: 47.5/32

All: 0.016+/-0.007 $\chi^2$/NDF: 79.1/67

- sign 0.012+/-0.009 $\chi^2$/NDF: 31.2/34




Right In: 34.468+/-0.010 $\chi^2$/NDF: 1171203.3/15

Left Out: 47.916+/-0.010 $\chi^2$/NDF:1204179.1/16

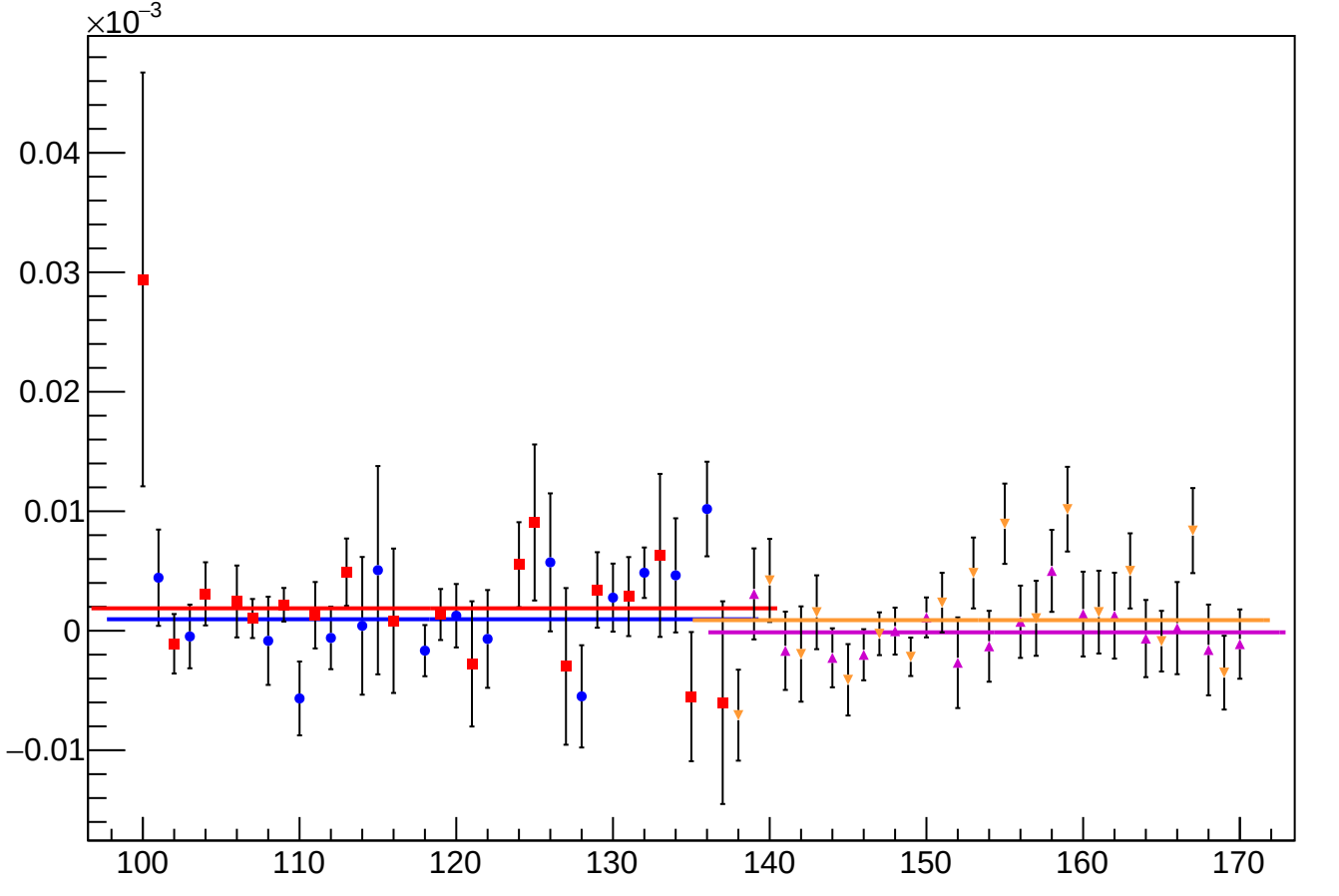
Right Out: 32.285+/-0.009 $\chi^2$/NDF: 1672637.0/18

Left In: 46.237+/-0.009 $\chi^2$/NDF:749285.0/15

+ sign 41.251+/-0.007 $\chi^2$/NDF: 3320902.8/32

All: 40.142+/-0.005 $\chi^2$/NDF: 6900363.5/67

- sign 39.124+/-0.007 $\chi^2$/NDF: 3530100.6/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 20.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:36.1/16

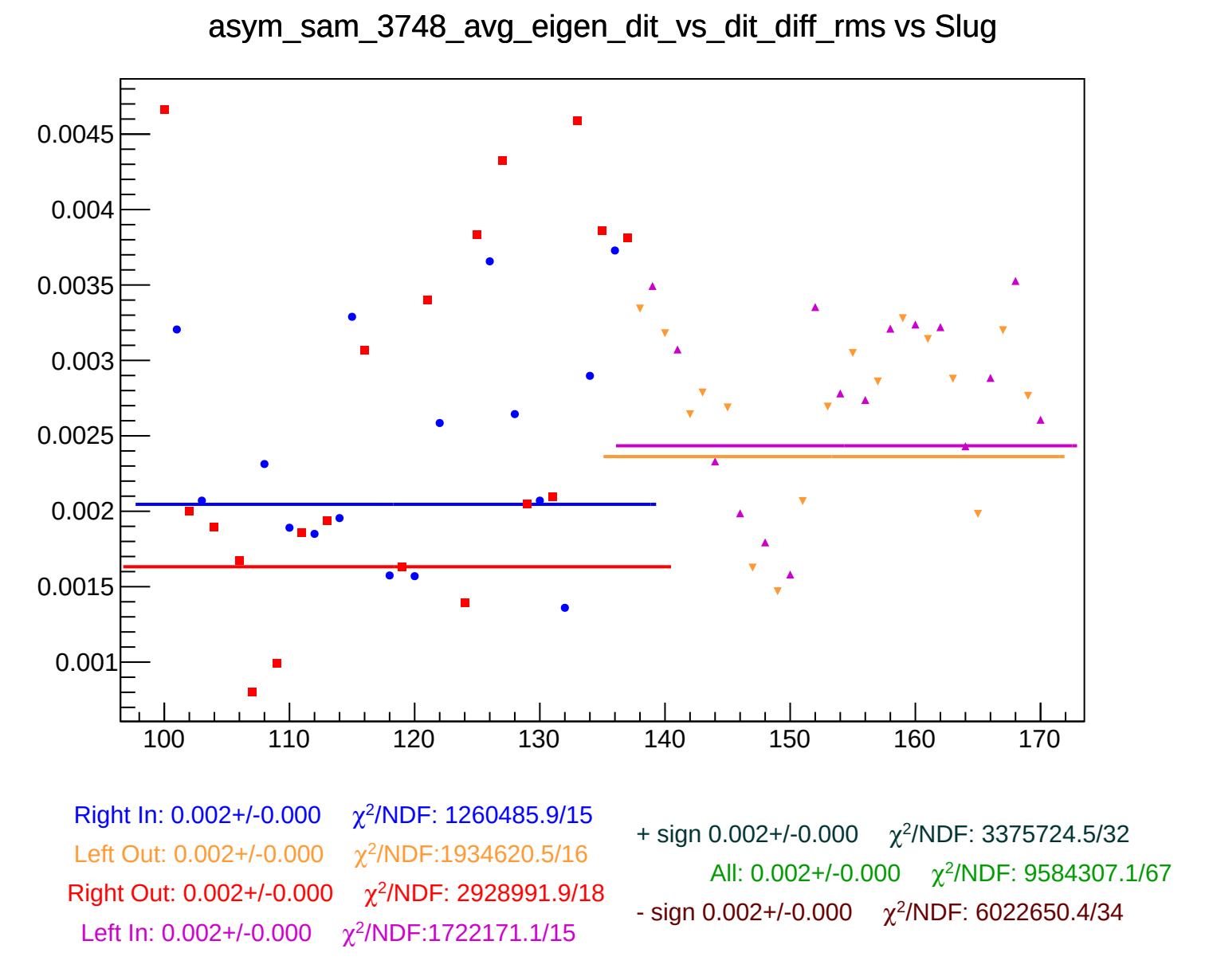
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 12.9/18

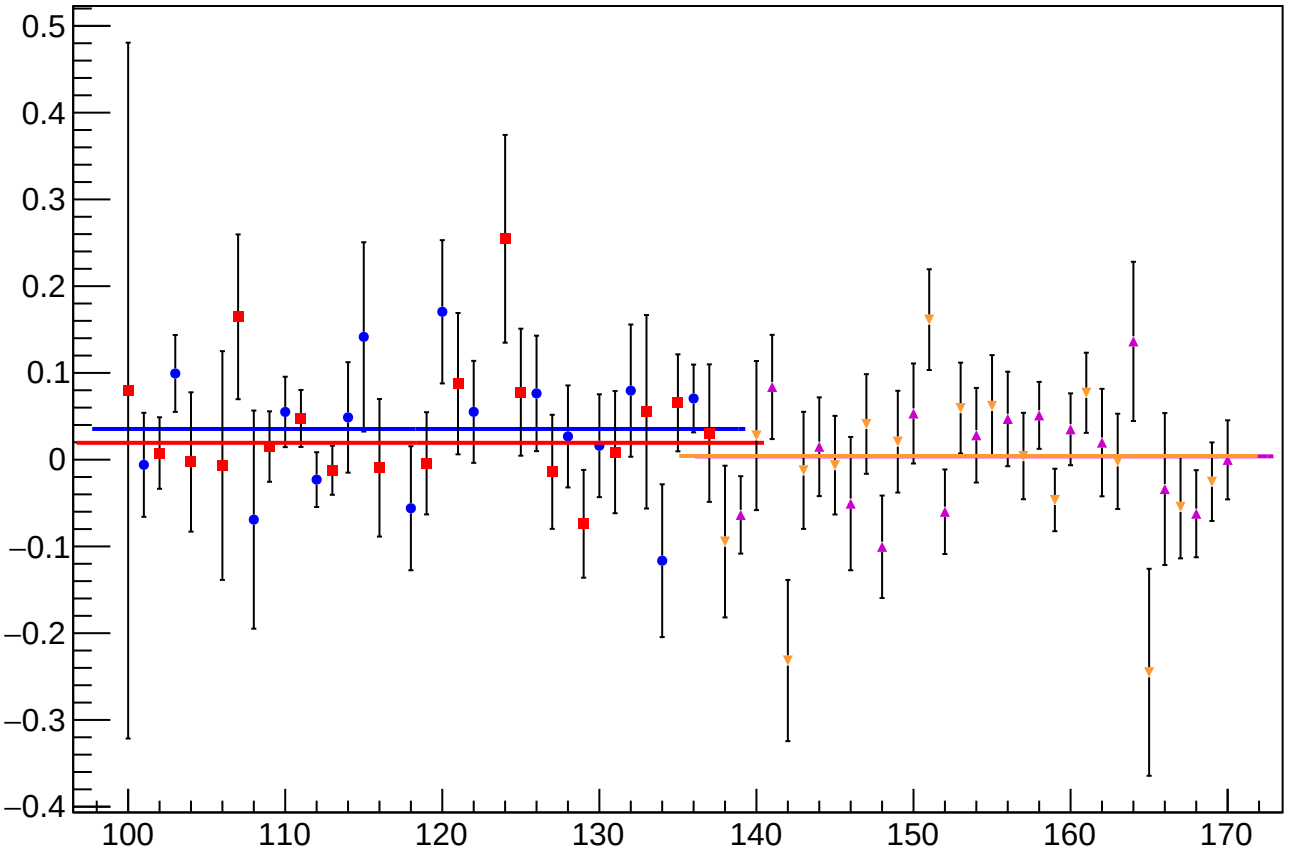
Left In: -0.000+/-0.000 $\chi^2$/NDF:6.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 57.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 80.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 23.8/34


asym_sam_3748_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
100
110
120
130
140
150
160
170
Right In: 0.002+/-0.000 χ²/NDF: 1260485.9/15
Left Out: 0.002+/-0.000 χ²/NDF:1934620.5/16
Right Out: 0.002+/-0.000 χ²/NDF: 2928991.9/18
Left In: 0.002+/-0.000 χ²/NDF:1722171.1/15
+ sign 0.002+/-0.000 χ²/NDF: 3375724.5/32
All: 0.002+/-0.000 χ²/NDF: 9584307.1/67
- sign 0.002+/-0.000 χ²/NDF: 6022650.4/34




Right In: 0.035+/-0.014 $\chi^2$/NDF: 16.9/15

Left Out: 0.004+/-0.014 $\chi^2$/NDF:28.0/16

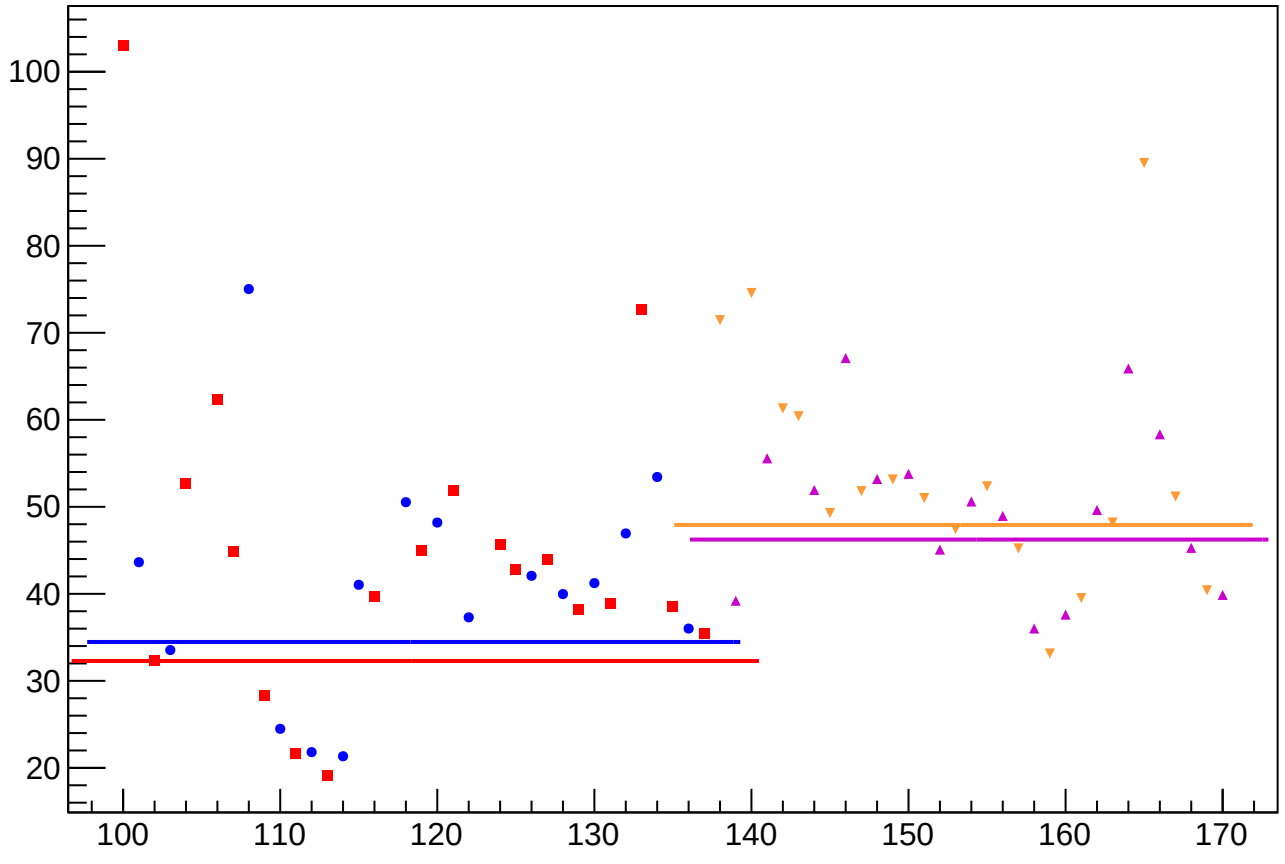
Right Out: 0.019+/-0.013 $\chi^2$/NDF: 13.4/18

Left In: 0.004+/-0.013 $\chi^2$/NDF:17.1/15

+ sign 0.020+/-0.010 $\chi^2$/NDF: 47.5/32

All: 0.016+/-0.007 $\chi^2$/NDF: 79.1/67

- sign 0.012+/-0.009 $\chi^2$/NDF: 31.2/34




Right In: 34.469+/-0.010 $\chi^2$/NDF: 1171158.4/15

Left Out: 47.917+/-0.010 $\chi^2$/NDF:1204189.4/16

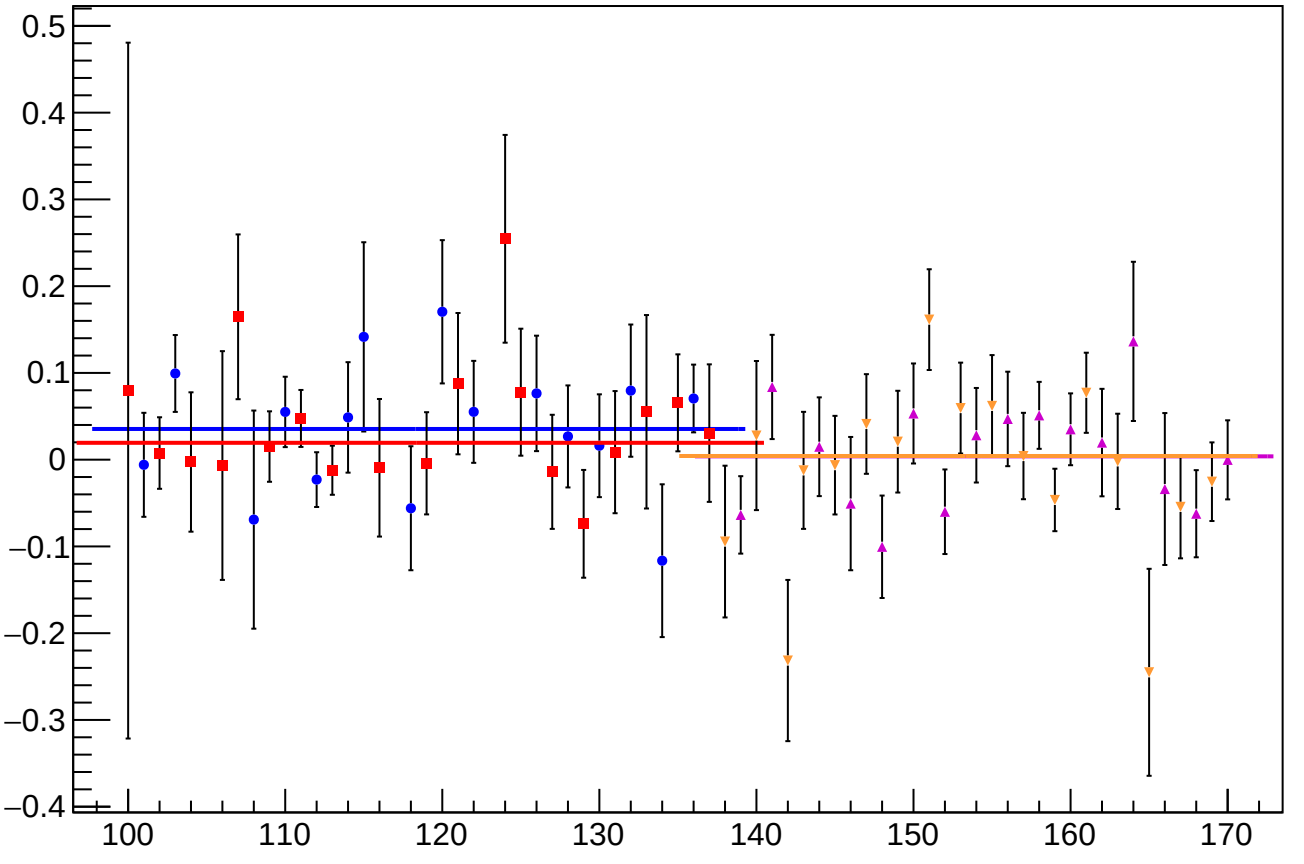
Right Out: 32.285+/-0.009 $\chi^2$/NDF: 1672606.5/18

Left In: 46.238+/-0.009 $\chi^2$/NDF:749319.6/15

+ sign 41.252+/-0.007 $\chi^2$/NDF: 3320887.2/32

All: 40.143+/-0.005 $\chi^2$/NDF: 6900353.5/67

- sign 39.124+/-0.007 $\chi^2$/NDF: 3530106.5/34




Right In: 0.035+/-0.014 $\chi^2$/NDF: 16.9/15

Left Out: 0.004+/-0.014 $\chi^2$/NDF:28.0/16

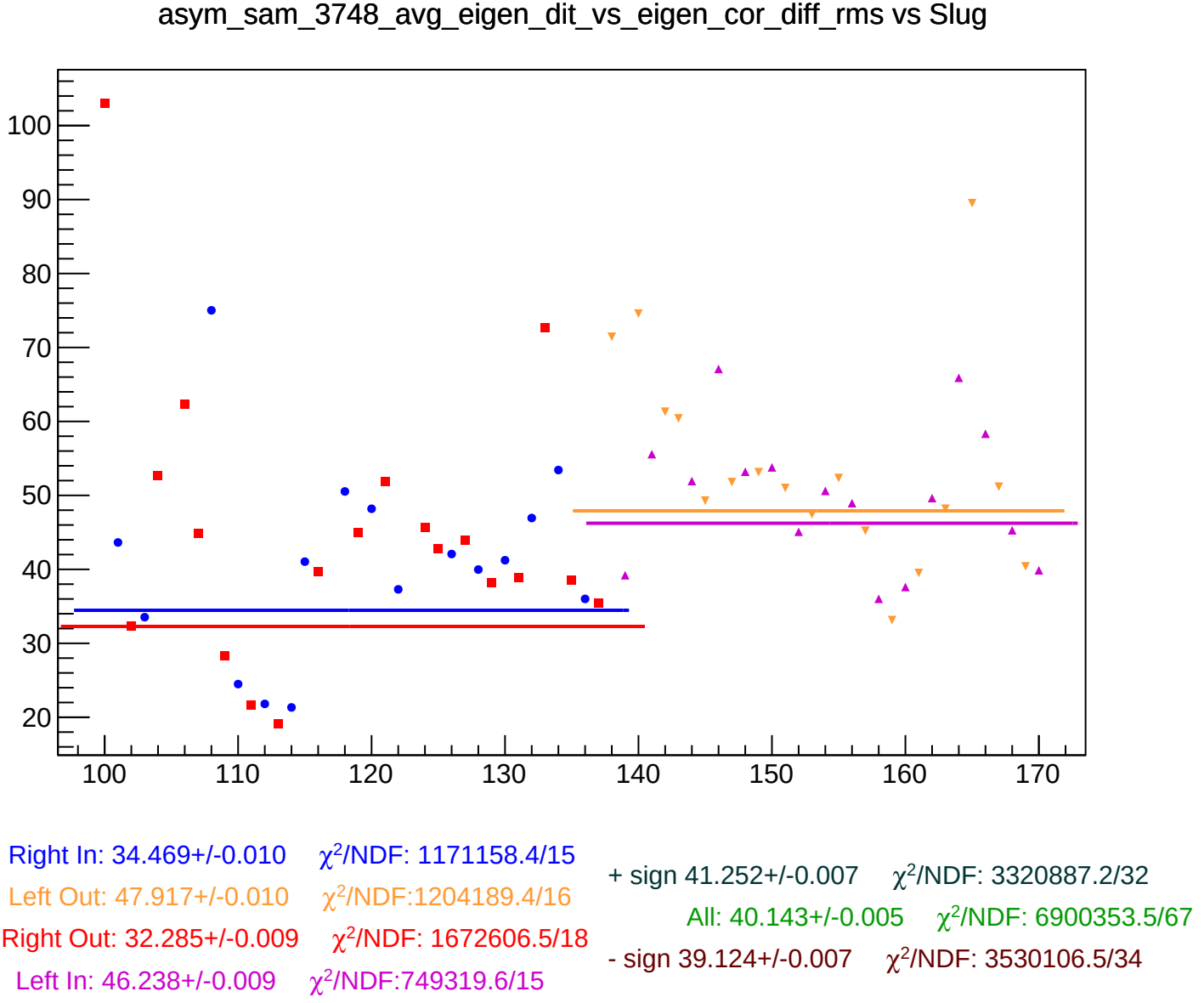
Right Out: 0.019+/-0.013 $\chi^2$/NDF: 13.4/18

Left In: 0.004+/-0.013 $\chi^2$/NDF:17.1/15

+ sign 0.020+/-0.010 $\chi^2$/NDF: 47.5/32

All: 0.016+/-0.007 $\chi^2$/NDF: 79.1/67

- sign 0.012+/-0.009 $\chi^2$/NDF: 31.2/34


asym_sam_3748_avg_eigen_dit_vs_eigen_cor_diff_rms vs Slug
100
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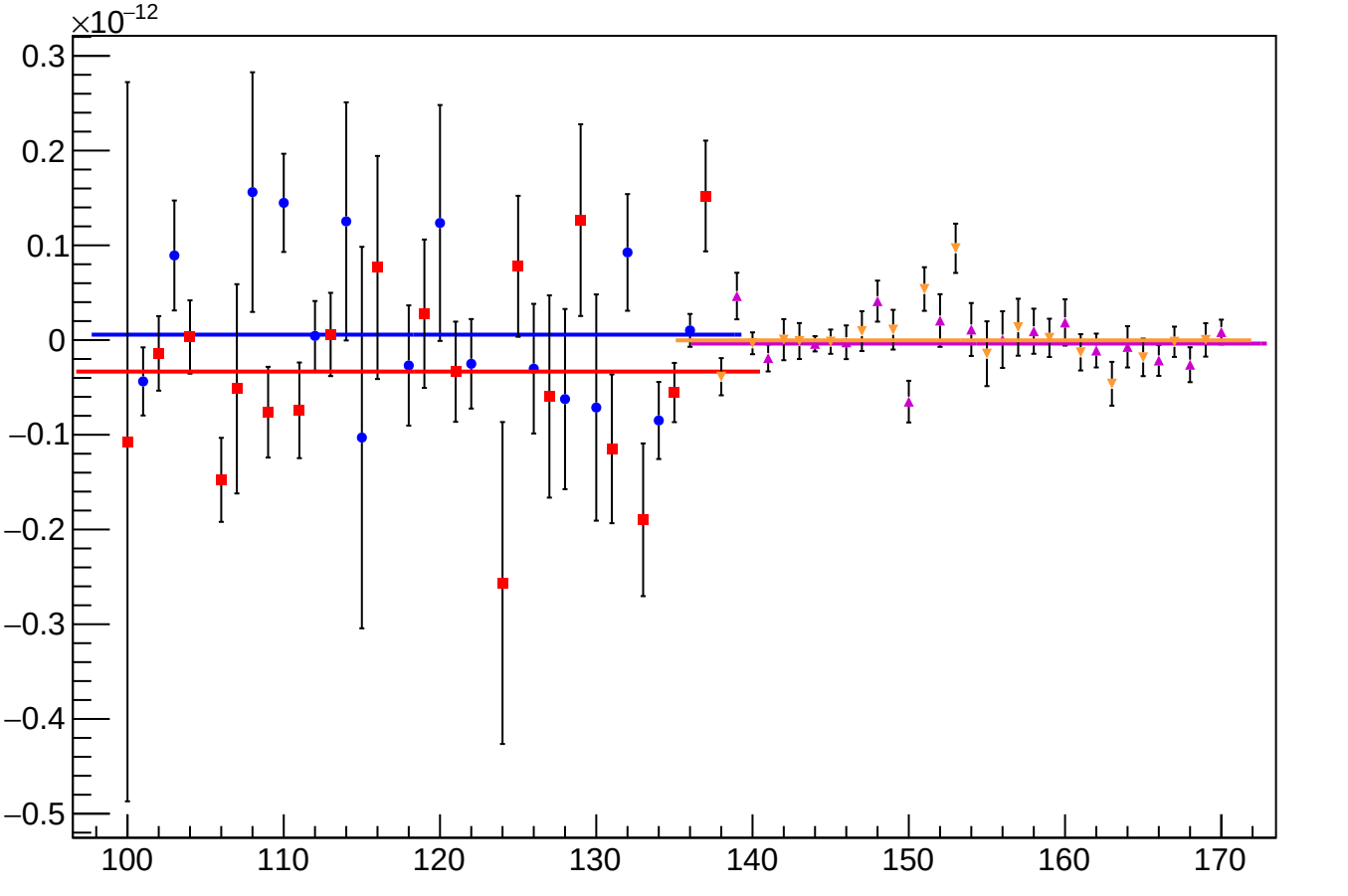
170
Right In: 34.469+/-0.010 χ²/NDF: 1171158.4/15
Left Out: 47.917+/-0.010 χ²/NDF:1204189.4/16
Right Out: 32.285+/-0.009 χ²/NDF: 1672606.5/18
Left In: 46.238+/-0.009 χ²/NDF:749319.6/15
+ sign 41.252+/-0.007 χ²/NDF: 3320887.2/32
All: 40.143+/-0.005 χ²/NDF: 6900353.5/67
- sign 39.124+/-0.007 χ²/NDF: 3530106.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 23.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:29.5/16

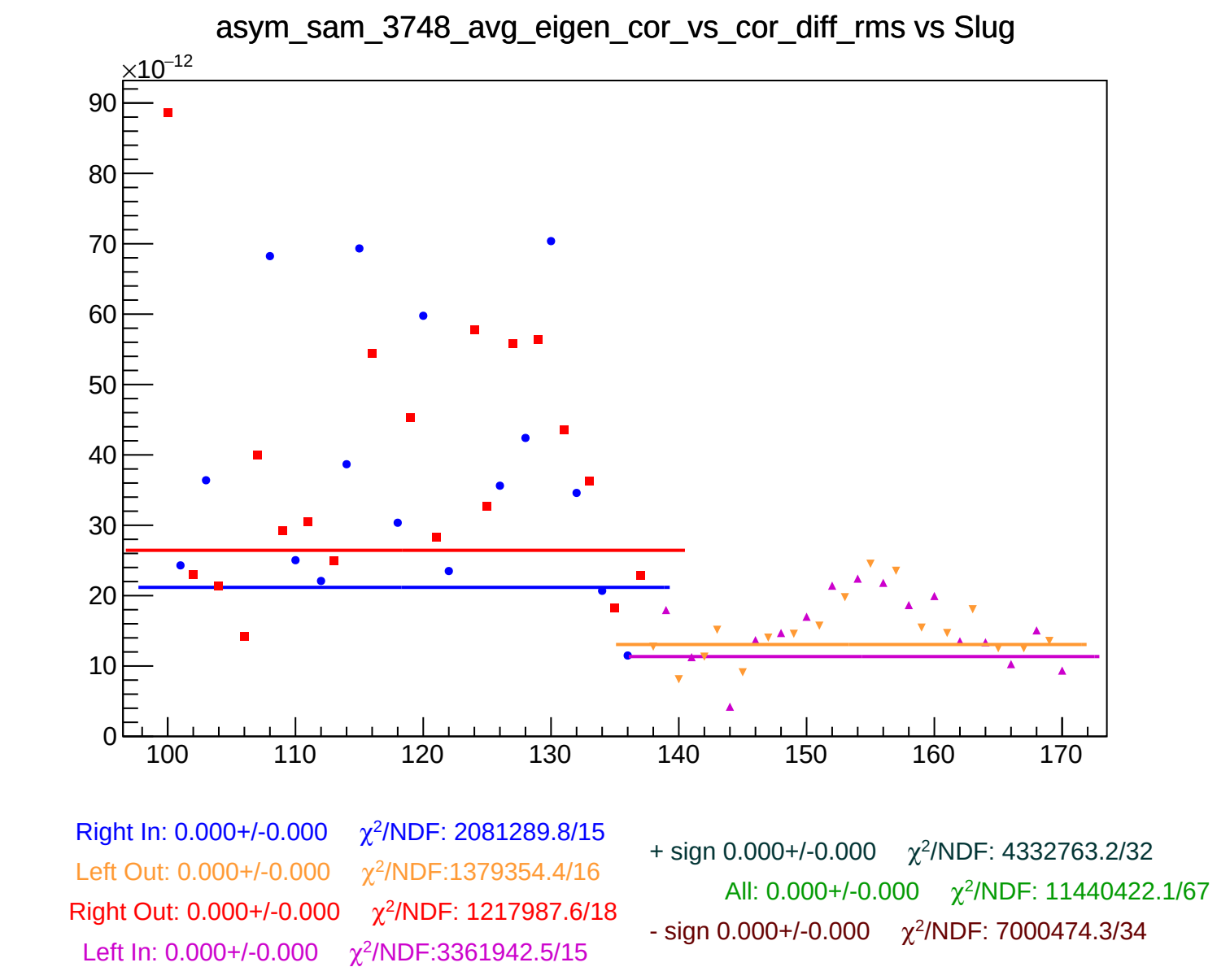
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 33.5/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:23.3/15

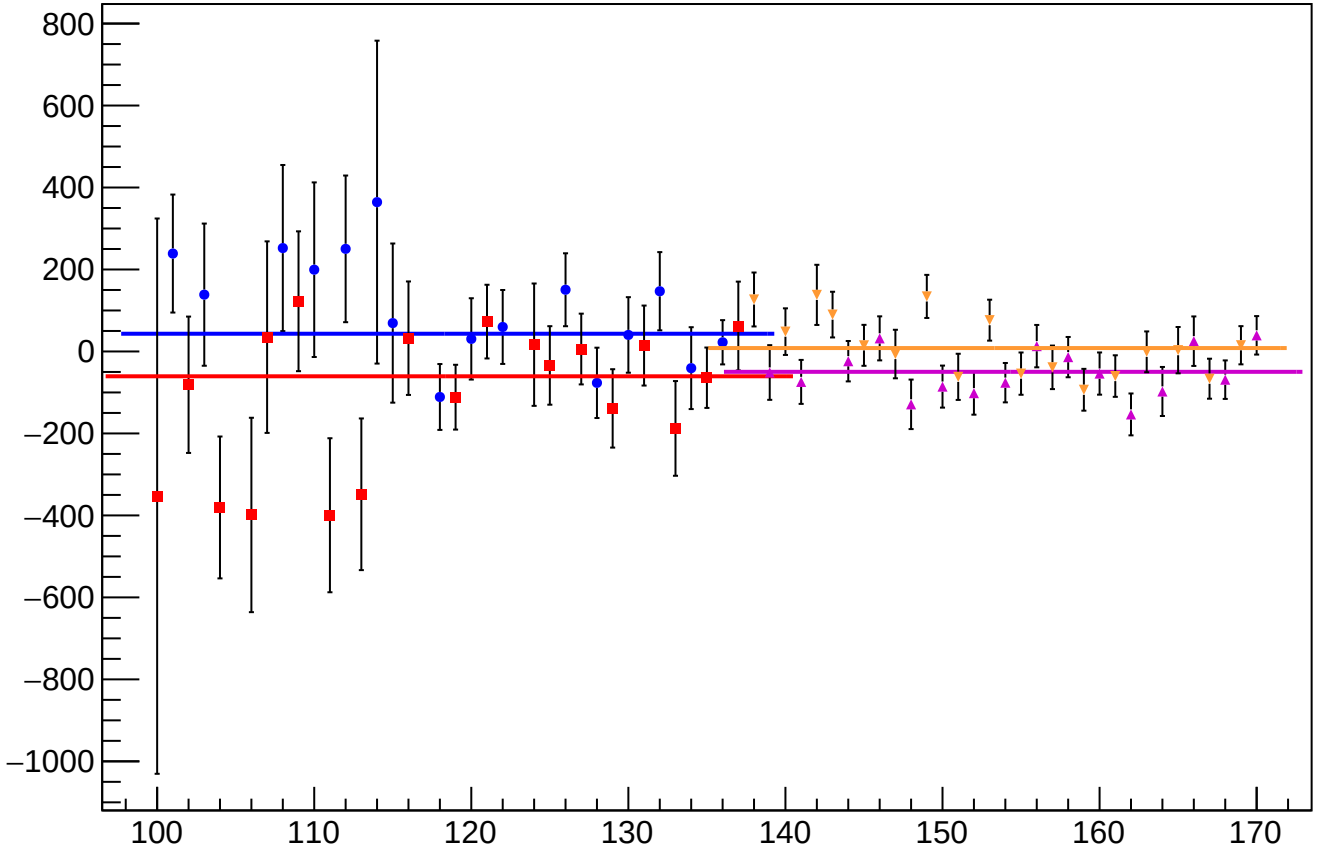
+ sign 0.000+/-0.000 $\chi^2$/NDF: 53.3/32

All: -0.000+/-0.000 $\chi^2$/NDF: 116.2/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 61.4/34


asym_sam_3748_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
90
80
70
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2081289.8/15
Left Out: 0.000+/-0.000 χ²/NDF:1379354.4/16
Right Out: 0.000+/-0.000 χ²/NDF: 1217987.6/18
Left In: 0.000+/-0.000 χ²/NDF:3361942.5/15
+ sign 0.000+/-0.000 χ²/NDF: 4332763.2/32
All: 0.000+/-0.000 χ²/NDF: 11440422.1/67
- sign 0.000+/-0.000 χ²/NDF: 7000474.3/34

# reg_asym_sam_1526_avg_mean vs Slug




Right In: 43.247+/-25.781 $\chi^2$/NDF: 15.0/15

Left Out: 8.306+/-13.004 $\chi^2$/NDF:28.7/16

Right Out: -60.582+/-26.894 $\chi^2$/NDF: 20.4/18

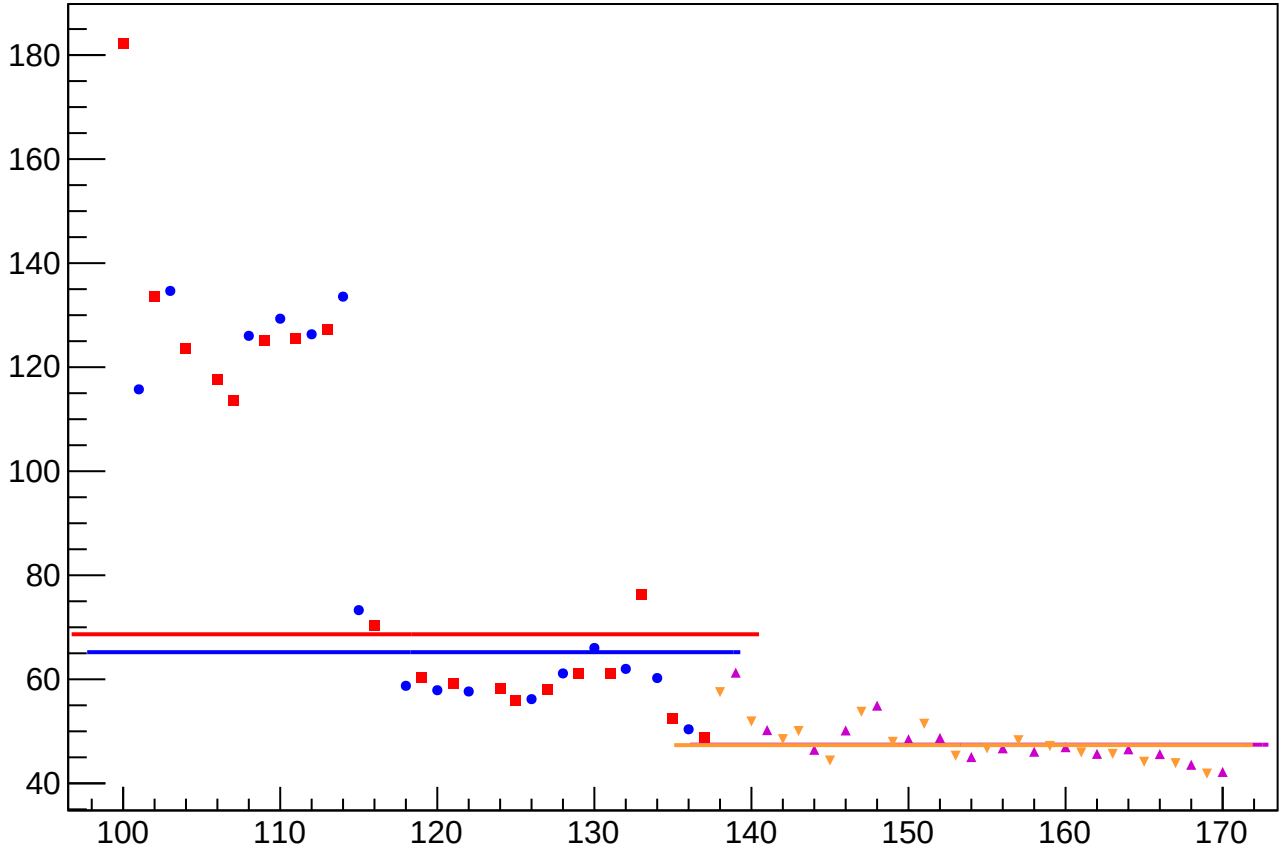
Left In: -49.676+/-13.142 $\chi^2$/NDF:18.4/15

+ sign 15.393+/-11.611 $\chi^2$/NDF: 45.1/32

All: -17.629+/-8.279 $\chi^2$/NDF: 100.5/67

- sign -51.778+/-11.808 $\chi^2$/NDF: 38.9/34

# reg_asym_sam_1526_avg_rms vs Slug




Right In: 65.212+/-0.018 $\chi^2$/NDF: 1446504.6/15

Left Out: 47.348+/-0.009 $\chi^2$/NDF:159631.2/16

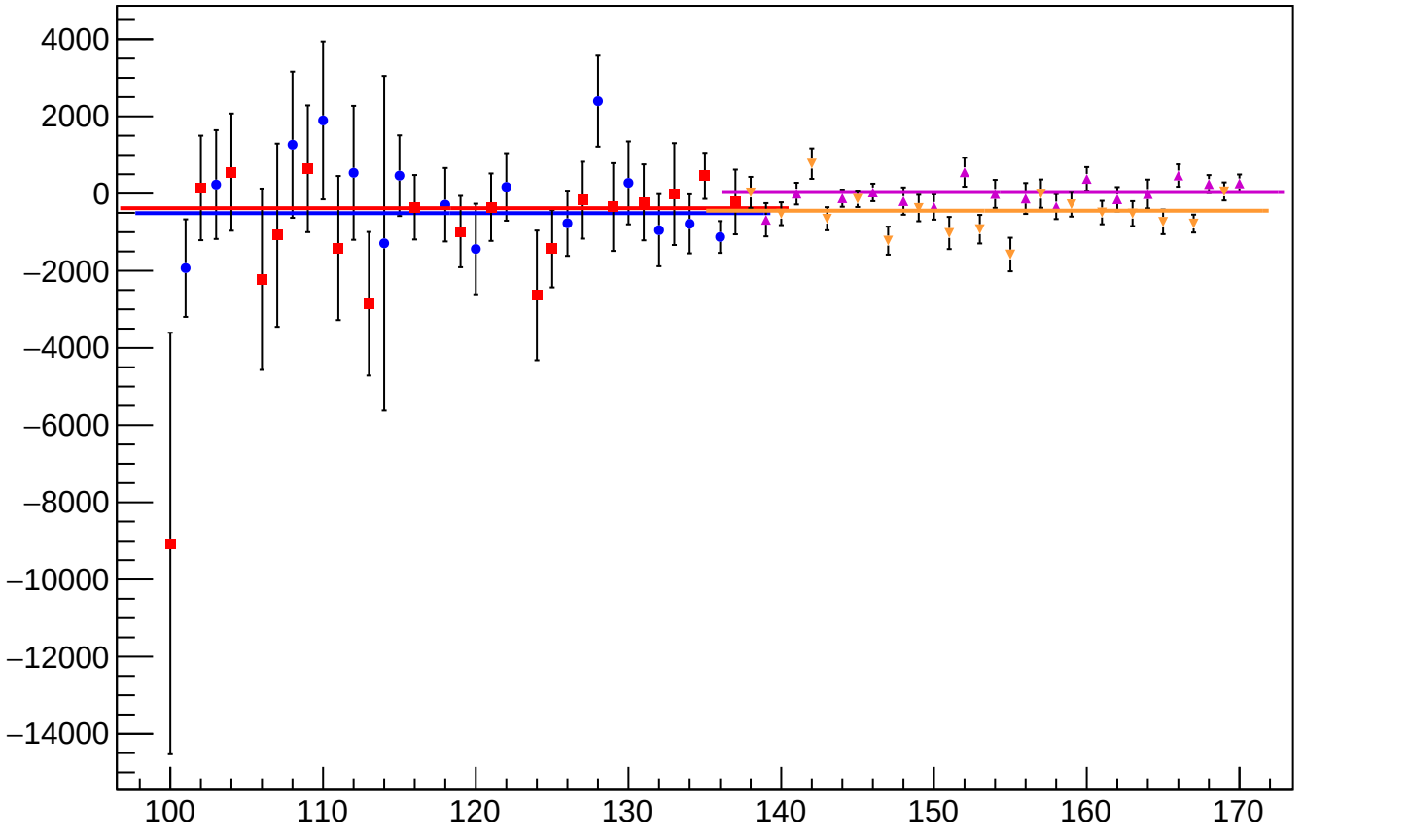
Right Out: 68.656+/-0.019 $\chi^2$/NDF: 1640900.1/18

Left In: 47.432+/-0.009 $\chi^2$/NDF:180530.4/15

+ sign 50.971+/-0.008 $\chi^2$/NDF: 2371721.6/32

All: 51.242+/-0.006 $\chi^2$/NDF: 5200899.1/67

- sign 51.523+/-0.008 $\chi^2$/NDF: 2826958.1/34




Right In: -507.928+/-236.945 $\chi^2$/NDF: 15.6/15

Left Out: -444.474+/-75.373 $\chi^2$/NDF:37.8/16

Right Out: -378.892+/-256.407 $\chi^2$/NDF: 11.7/18

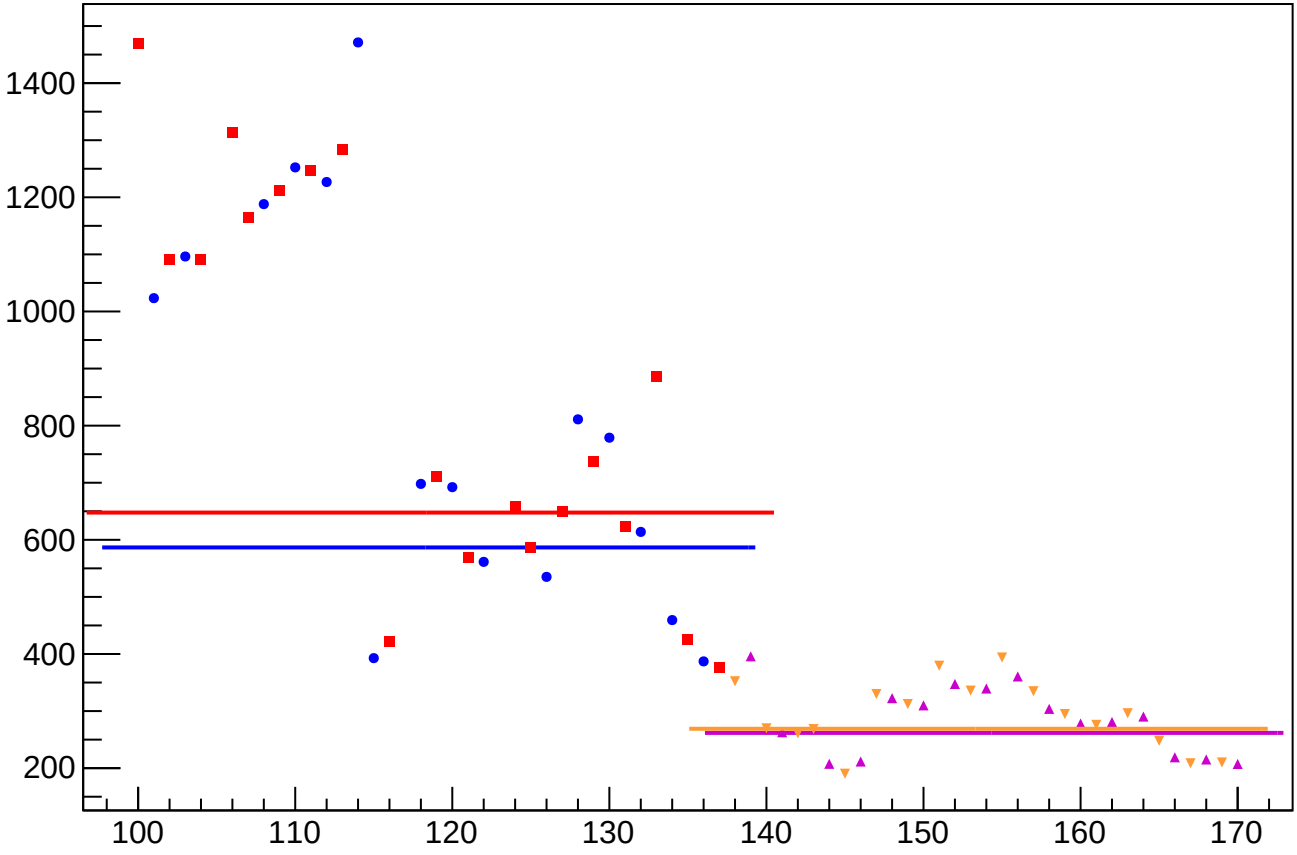
Left In: 39.509+/-73.939 $\chi^2$/NDF:14.1/15

+ sign -450.305+/-71.826 $\chi^2$/NDF: 53.5/32

All: -218.953+/-50.510 $\chi^2$/NDF: 102.3/67

- sign 7.388+/-71.044 $\chi^2$/NDF: 28.3/34

# asym_sam_1526_avg_reg_correction_rms vs Slug




Right In: 586.645+/-0.168 $\chi^2$/NDF: 2053133.2/15

Left Out: 269.030+/-0.053 $\chi^2$/NDF:1182156.0/16

Right Out: 647.736+/-0.181 $\chi^2$/NDF: 2105638.0/18

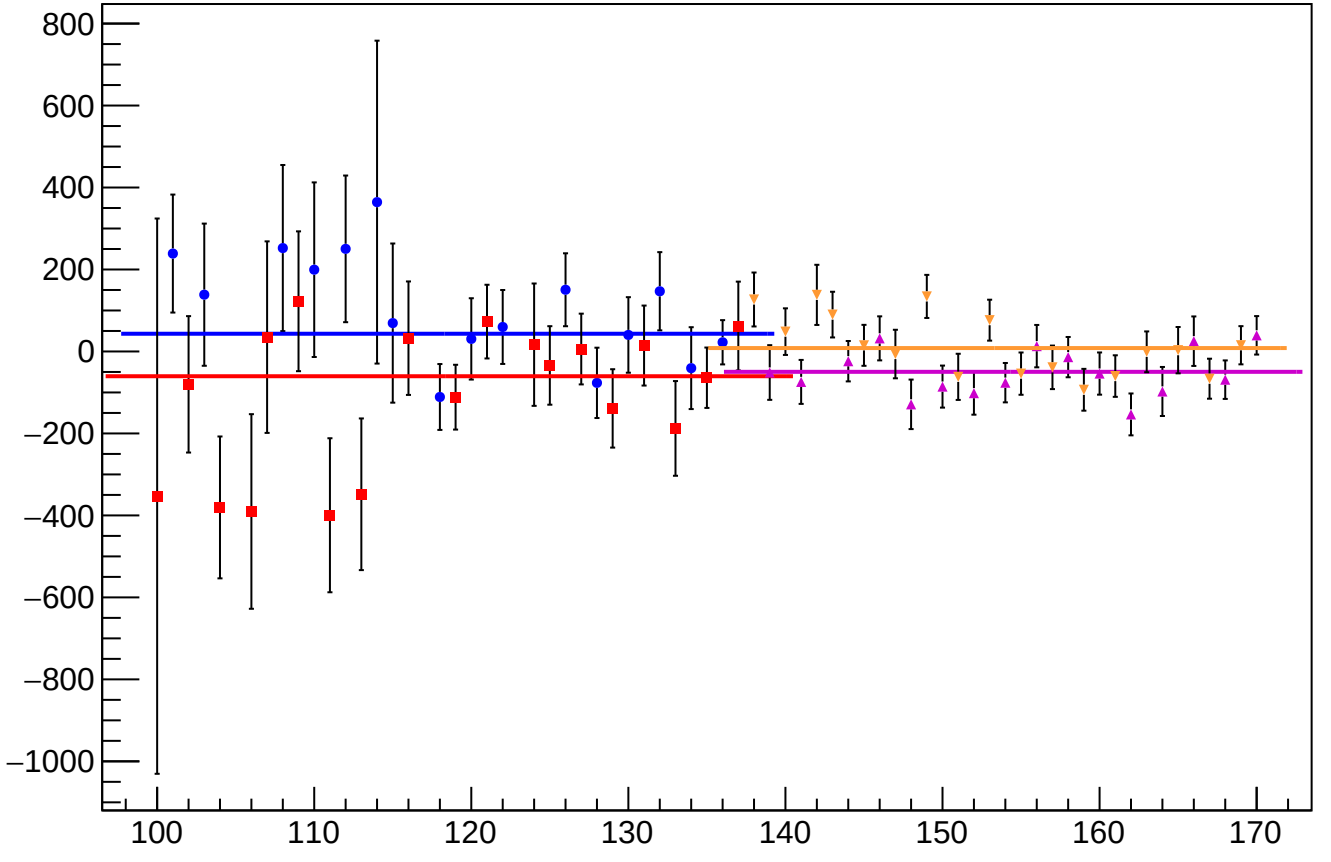
Left In: 261.802+/-0.052 $\chi^2$/NDF:1125826.6/15

+ sign 298.216+/-0.051 $\chi^2$/NDF: 6498733.2/32

All: 294.786+/-0.036 $\chi^2$/NDF: 13922380.7/67

- sign 291.431+/-0.050 $\chi^2$/NDF: 7414625.7/34

# cor_asym_sam_1526_avg_mean vs Slug




Right In: 43.239+/-25.781 $\chi^2$/NDF: 15.0/15

Left Out: 8.307+/-13.004 $\chi^2$/NDF:28.7/16

Right Out: -60.432+/-26.895 $\chi^2$/NDF: 20.3/18

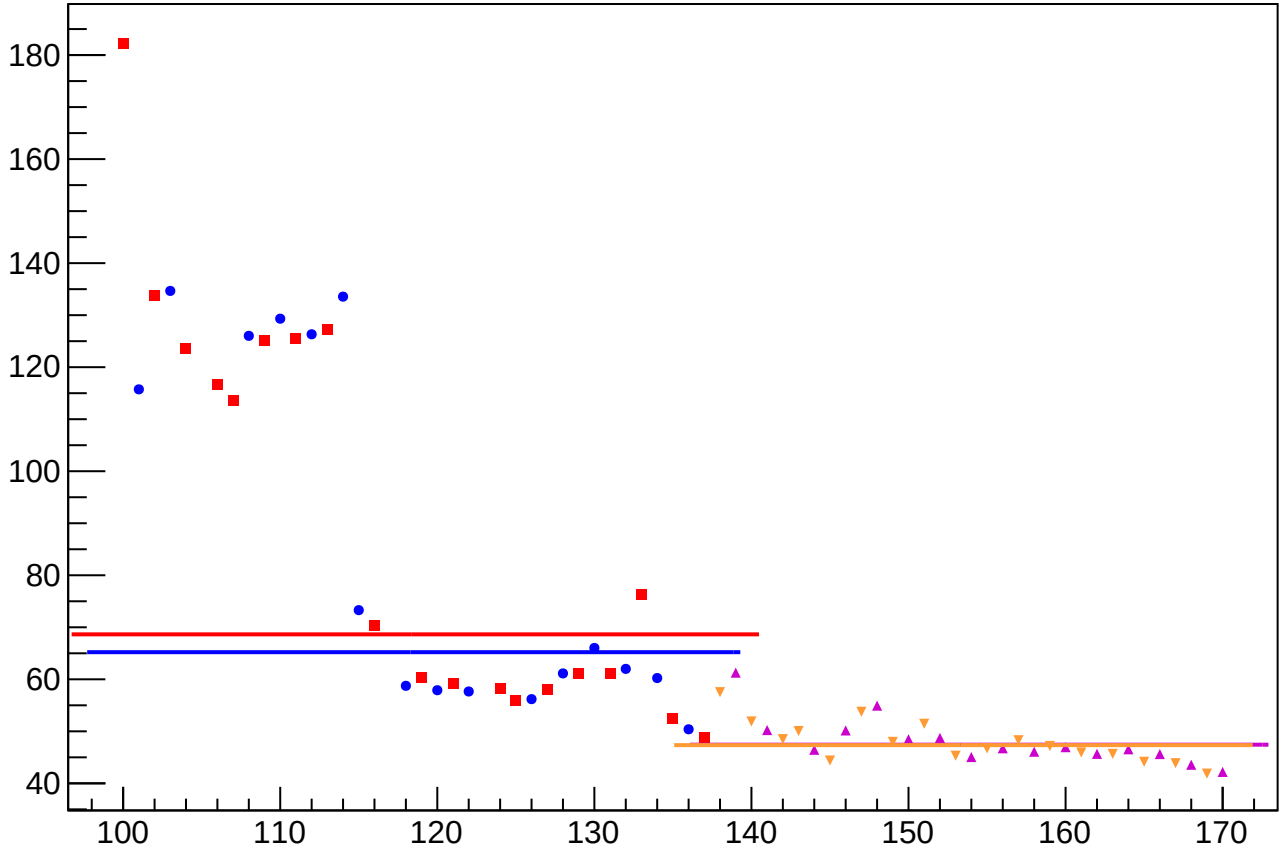
Left In: -49.674+/-13.142 $\chi^2$/NDF:18.4/15

+ sign 15.393+/-11.611 $\chi^2$/NDF: 45.1/32

All: -17.614+/-8.279 $\chi^2$/NDF: 100.4/67

- sign -51.748+/-11.808 $\chi^2$/NDF: 38.8/34

# cor_asym_sam_1526_avg_rms vs Slug




Right In: 65.212+/-0.018 $\chi^2$/NDF: 1446506.9/15

Left Out: 47.348+/-0.009 $\chi^2$/NDF:159631.2/16

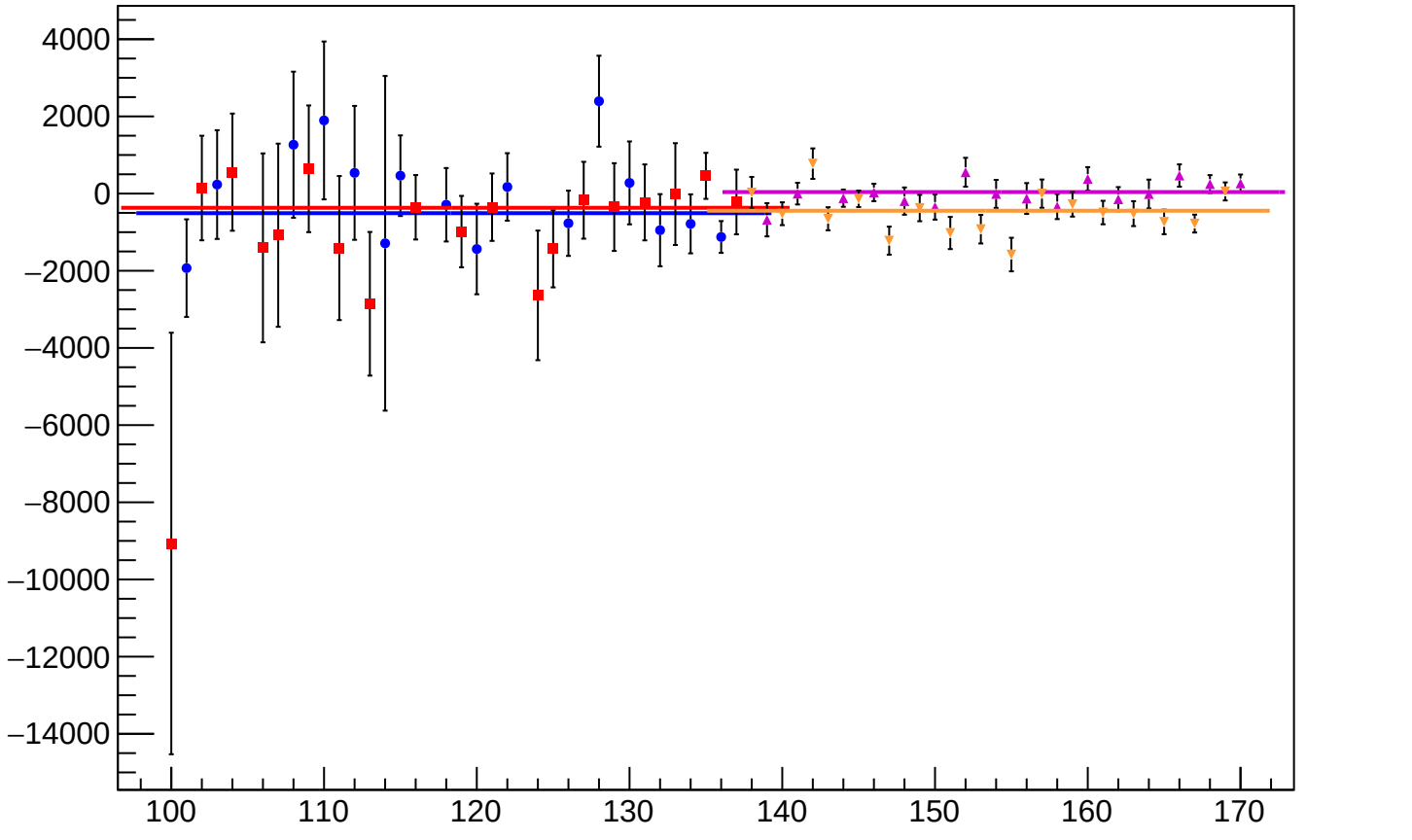
Right Out: 68.642+/-0.019 $\chi^2$/NDF: 1637558.1/18

Left In: 47.432+/-0.009 $\chi^2$/NDF:180530.3/15

+ sign 50.971+/-0.008 $\chi^2$/NDF: 2371723.7/32

All: 51.241+/-0.006 $\chi^2$/NDF: 5196122.4/67

- sign 51.520+/-0.008 $\chi^2$/NDF: 2822203.2/34




Right In: -507.911+/-236.945 $\chi^2$/NDF: 15.6/15

Left Out: -444.470+/-75.373 $\chi^2$/NDF:37.8/16

Right Out: -368.334+/-256.534 $\chi^2$/NDF: 11.3/18

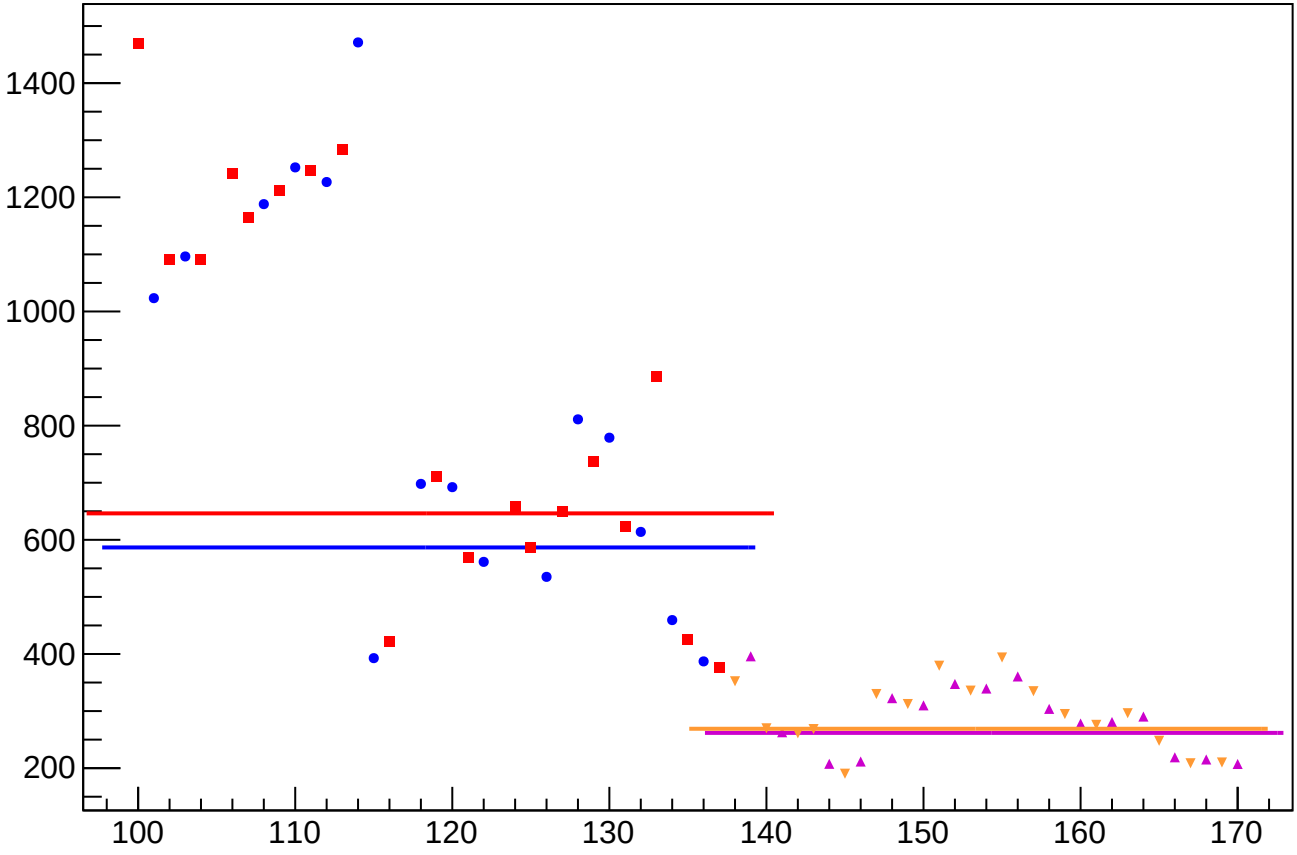
Left In: 39.512+/-73.939 $\chi^2$/NDF:14.1/15

+ sign -450.300+/-71.826 $\chi^2$/NDF: 53.5/32

All: -218.534+/-50.511 $\chi^2$/NDF: 101.9/67

- sign 8.230+/-71.047 $\chi^2$/NDF: 27.7/34

# asym_sam_1526_avg_cor_correction_rms vs Slug




Right In: 586.645+/-0.168 $\chi^2$/NDF: 2053169.7/15

Left Out: 269.030+/-0.053 $\chi^2$/NDF:1182161.8/16

Right Out: 646.328+/-0.181 $\chi^2$/NDF: 2063185.3/18

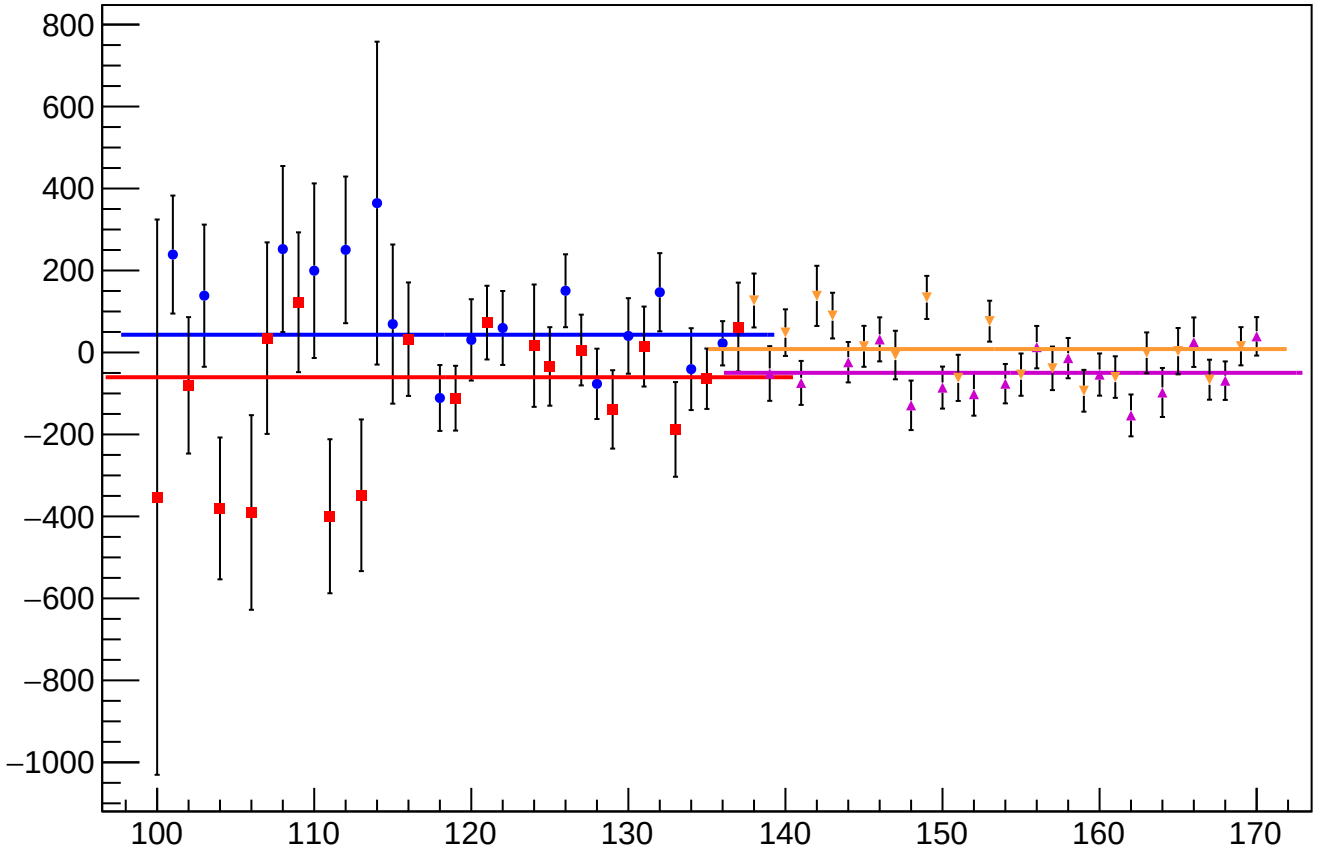
Left In: 261.802+/-0.052 $\chi^2$/NDF:1125824.3/15

+ sign 298.216+/-0.051 $\chi^2$/NDF: 6498765.0/32

All: 294.718+/-0.036 $\chi^2$/NDF: 13846057.3/67

- sign 291.296+/-0.050 $\chi^2$/NDF: 7337908.9/34

# eigen_cor_asym_sam_1526_avg_mean vs Slug




Right In: 43.239+/-25.781 $\chi^2$/NDF: 15.0/15

Left Out: 8.307+/-13.004 $\chi^2$/NDF:28.7/16

Right Out: -60.432+/-26.895 $\chi^2$/NDF: 20.3/18

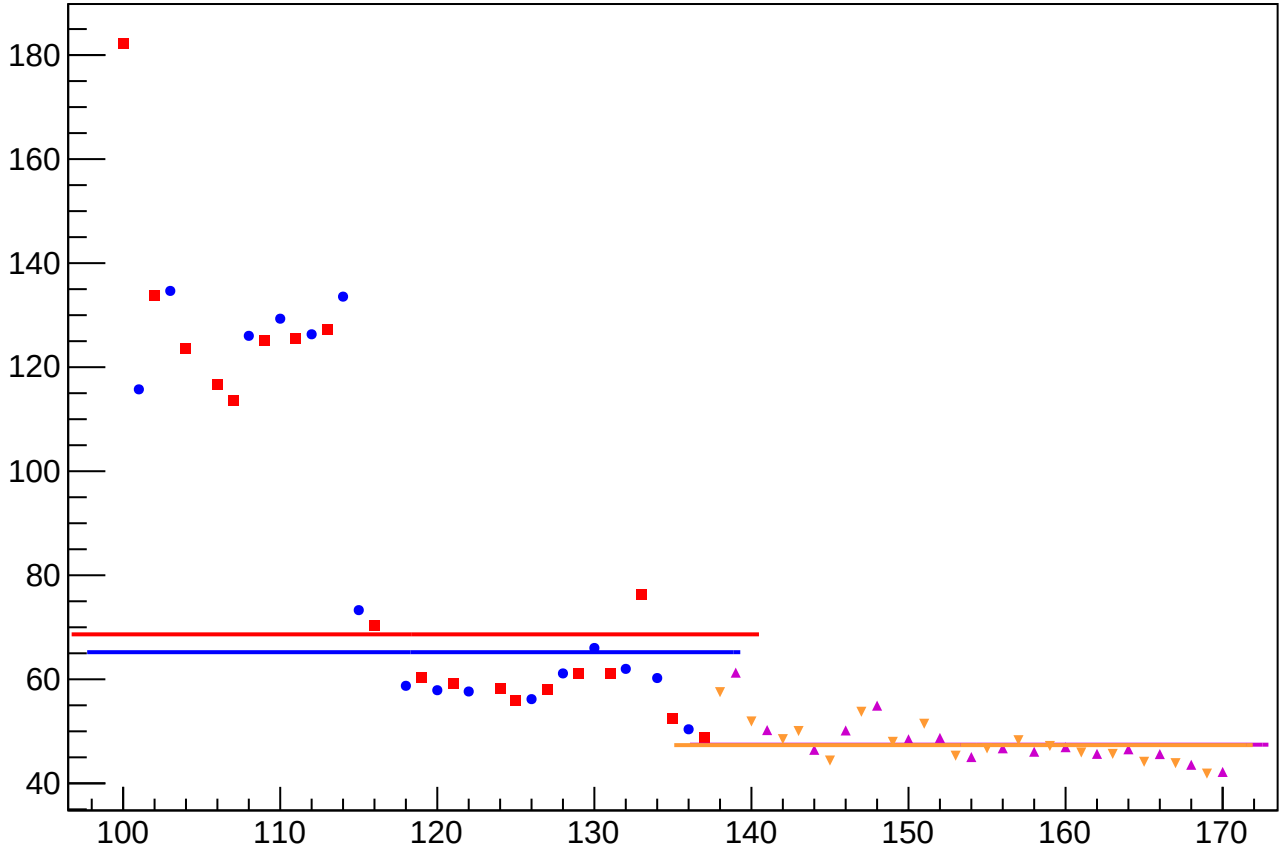
Left In: -49.674+/-13.142 $\chi^2$/NDF:18.4/15

+ sign 15.393+/-11.611 $\chi^2$/NDF: 45.1/32

All: -17.614+/-8.279 $\chi^2$/NDF: 100.4/67

- sign -51.748+/-11.808 $\chi^2$/NDF: 38.8/34

# eigen_cor_asym_sam_1526_avg_rms vs Slug




Right In: 65.212+/-0.018 $\chi^2$/NDF: 1446506.9/15

Left Out: 47.348+/-0.009 $\chi^2$/NDF:159631.2/16

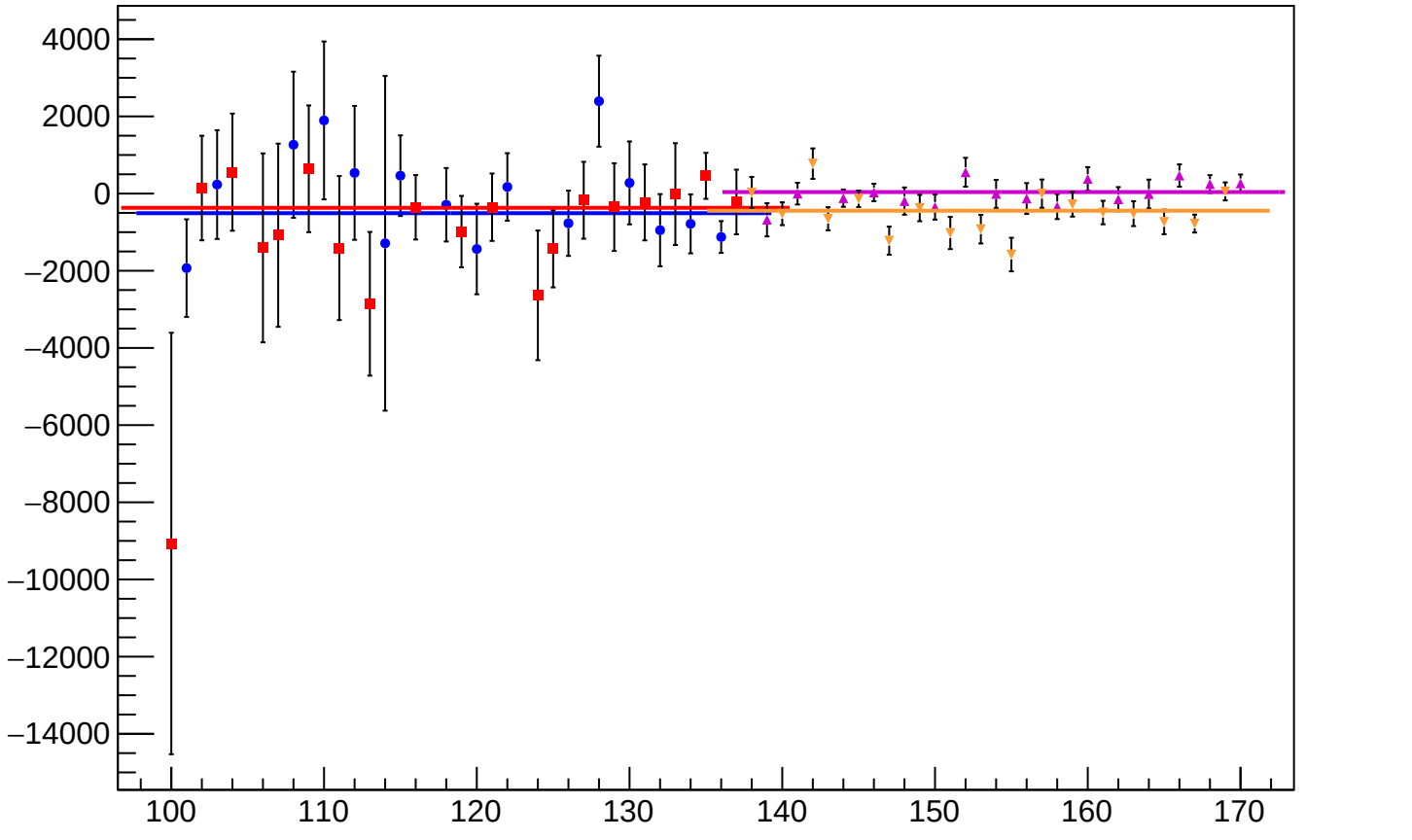
Right Out: 68.642+/-0.019 $\chi^2$/NDF: 1637558.1/18

Left In: 47.432+/-0.009 $\chi^2$/NDF:180530.3/15

+ sign 50.971+/-0.008 $\chi^2$/NDF: 2371723.7/32

All: 51.241+/-0.006 $\chi^2$/NDF: 5196122.4/67

- sign 51.520+/-0.008 $\chi^2$/NDF: 2822203.2/34




Right In: -507.911+/-236.945 $\chi^2$/NDF: 15.6/15

Left Out: -444.470+/-75.373 $\chi^2$/NDF:37.8/16

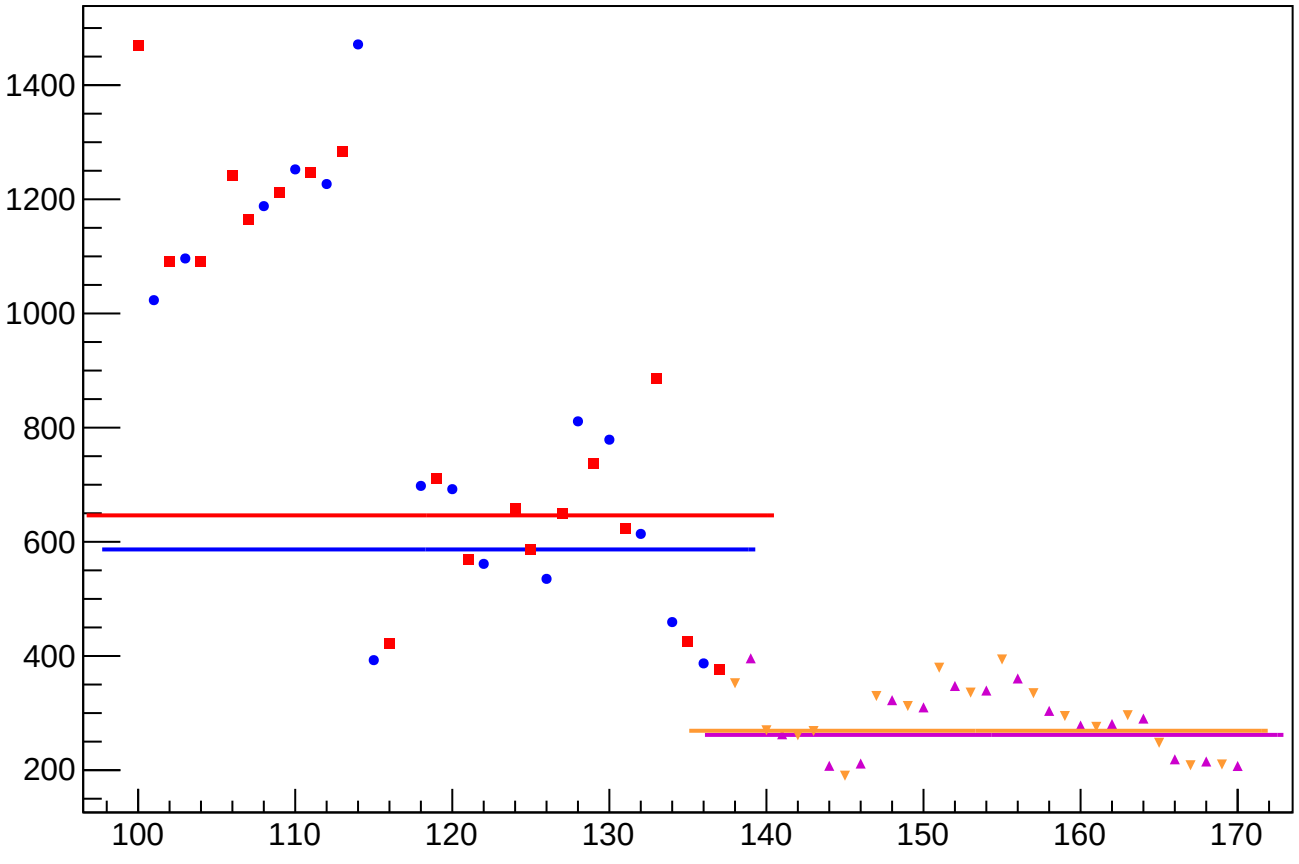
Right Out: -368.334+/-256.534 $\chi^2$/NDF: 11.3/18

Left In: 39.512+/-73.939 $\chi^2$/NDF:14.1/15

+ sign -450.300+/-71.826 $\chi^2$/NDF: 53.5/32

All: -218.534+/-50.511 $\chi^2$/NDF: 101.9/67

- sign 8.230+/-71.047 $\chi^2$/NDF: 27.7/34




Right In: 586.645+/-0.168 $\chi^2$/NDF: 2053169.7/15

Left Out: 269.030+/-0.053 $\chi^2$/NDF:1182161.8/16

Right Out: 646.328+/-0.181 $\chi^2$/NDF: 2063185.3/18

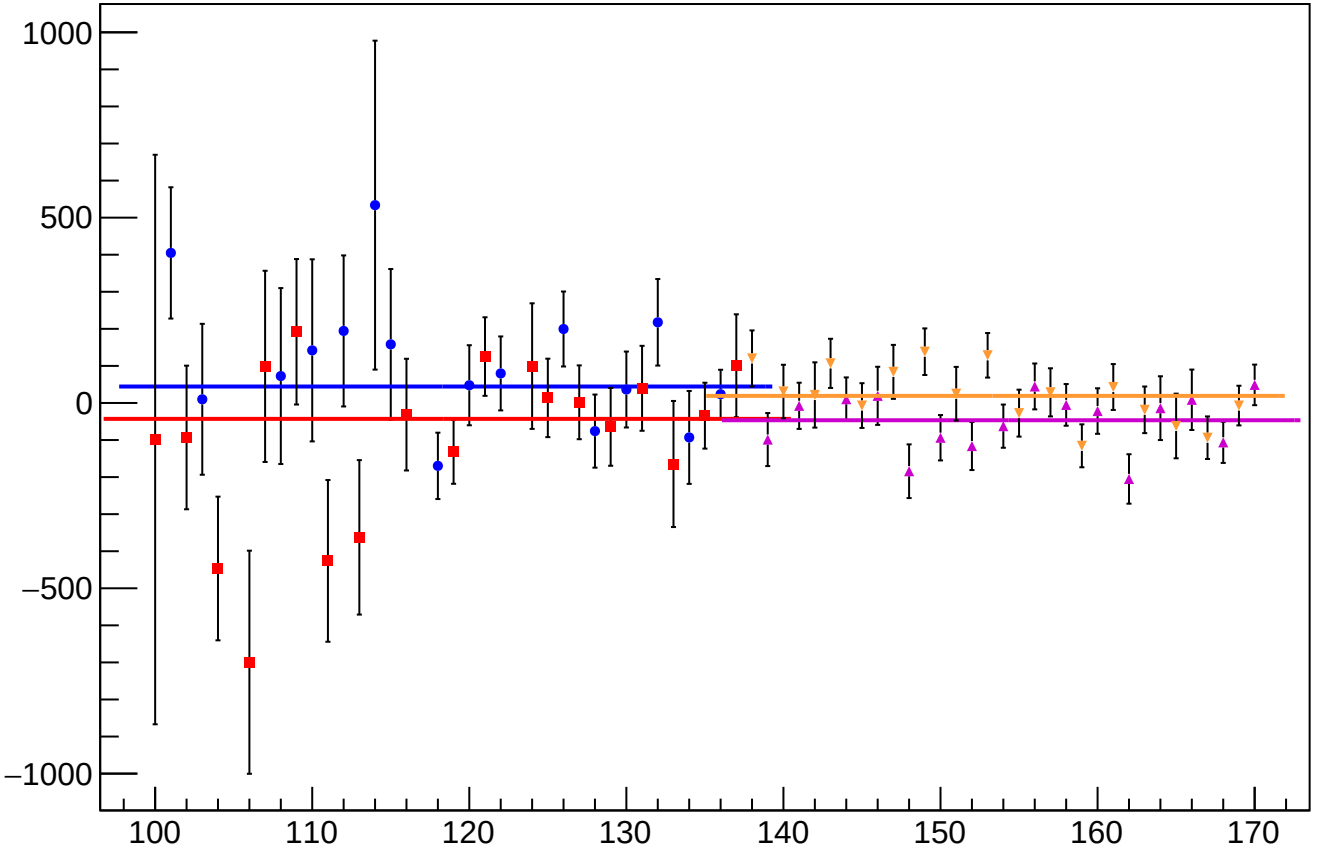
Left In: 261.802+/-0.052 $\chi^2$/NDF:1125824.3/15

+ sign 298.216+/-0.051 $\chi^2$/NDF: 6498765.0/32

All: 294.718+/-0.036 $\chi^2$/NDF: 13846057.3/67

- sign 291.296+/-0.050 $\chi^2$/NDF: 7337908.9/34

# dit_asym_sam_1526_avg_mean vs Slug




Right In: 44.387+/-29.909 $\chi^2$/NDF: 19.6/15

Left Out: 19.123+/-15.830 $\chi^2$/NDF:22.9/16

Right Out: -42.901+/-31.248 $\chi^2$/NDF: 23.3/18

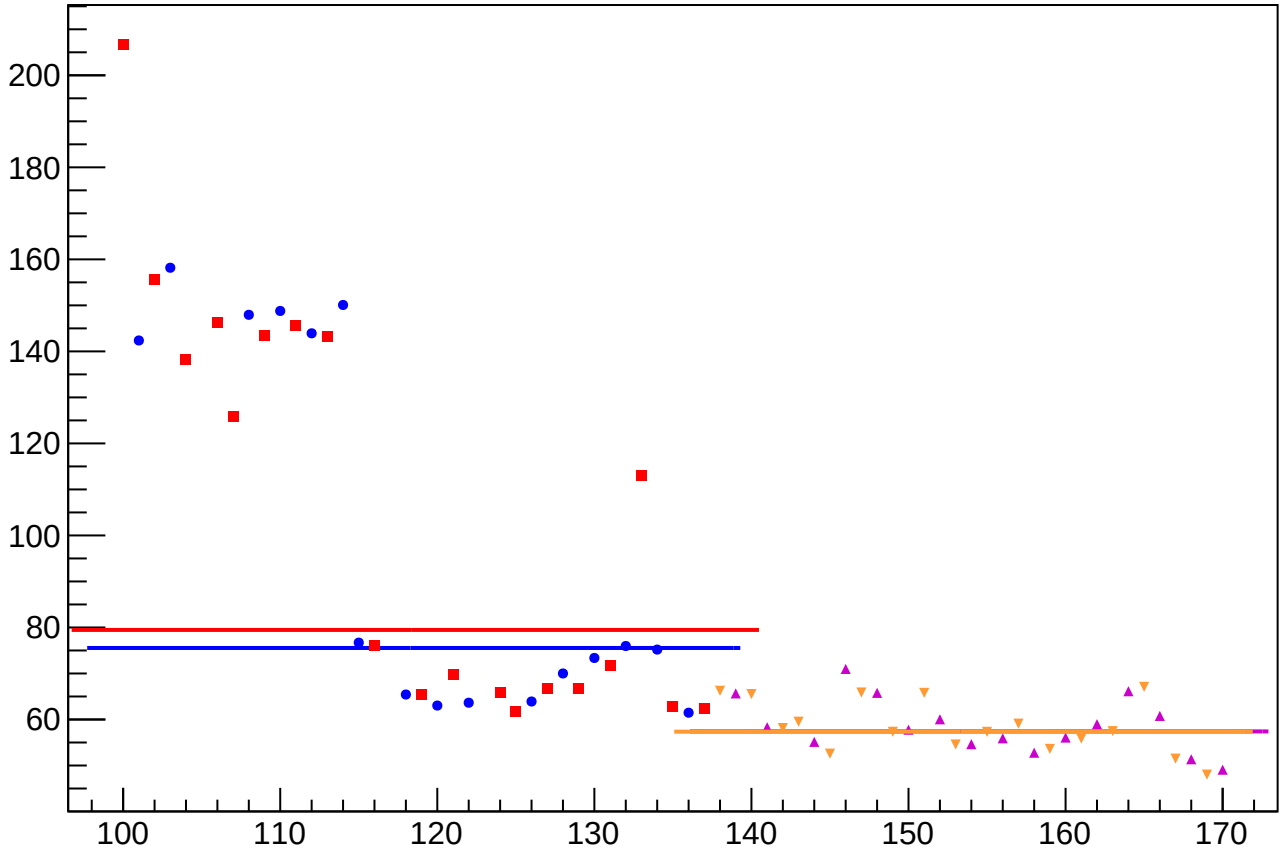
Left In: -46.597+/-15.996 $\chi^2$/NDF:21.3/15

+ sign 24.651+/-13.991 $\chi^2$/NDF: 43.1/32

All: -9.970+/-9.980 $\chi^2$/NDF: 100.2/67

- sign -45.829+/-14.239 $\chi^2$/NDF: 44.6/34

# dit_asym_sam_1526_avg_rms vs Slug




Right In: 75.544+/-0.021 $\chi^2$/NDF: 1465550.9/15

Left Out: 57.355+/-0.011 $\chi^2$/NDF:244570.1/16

Right Out: 79.465+/-0.022 $\chi^2$/NDF: 1683634.3/18

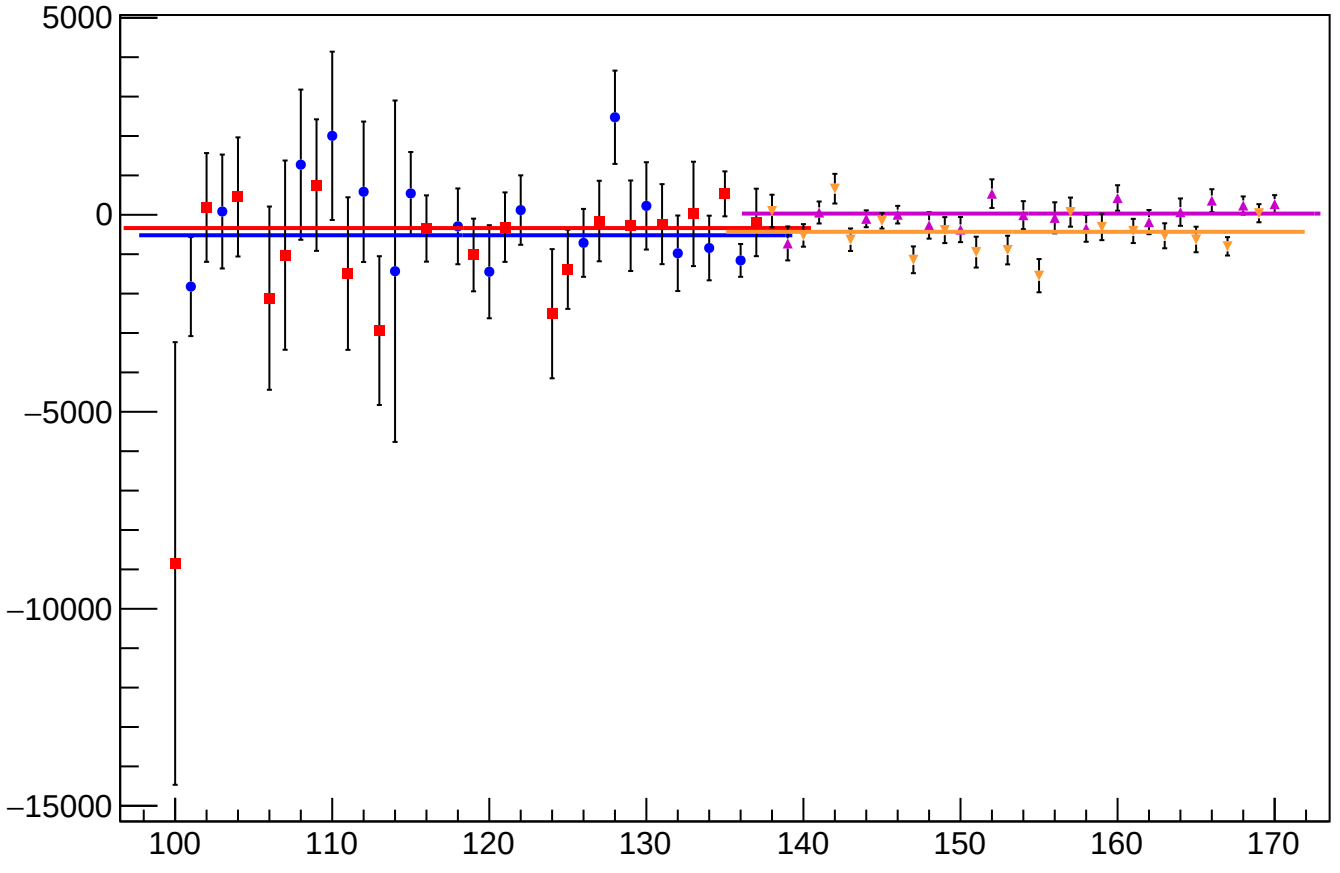
Left In: 57.411+/-0.011 $\chi^2$/NDF:235506.0/15

+ sign 61.336+/-0.010 $\chi^2$/NDF: 2287954.0/32

All: 61.657+/-0.007 $\chi^2$/NDF: 4998612.1/67

- sign 61.991+/-0.010 $\chi^2$/NDF: 2708504.9/34

# asym_sam_1526_avg_dit_correction_mean vs Slug




Right In: -519.250+/-241.317 $\chi^2$/NDF: 15.8/15

Left Out: -432.389+/-73.636 $\chi^2$/NDF:36.5/16

Right Out: -336.731+/-256.618 $\chi^2$/NDF: 11.9/18

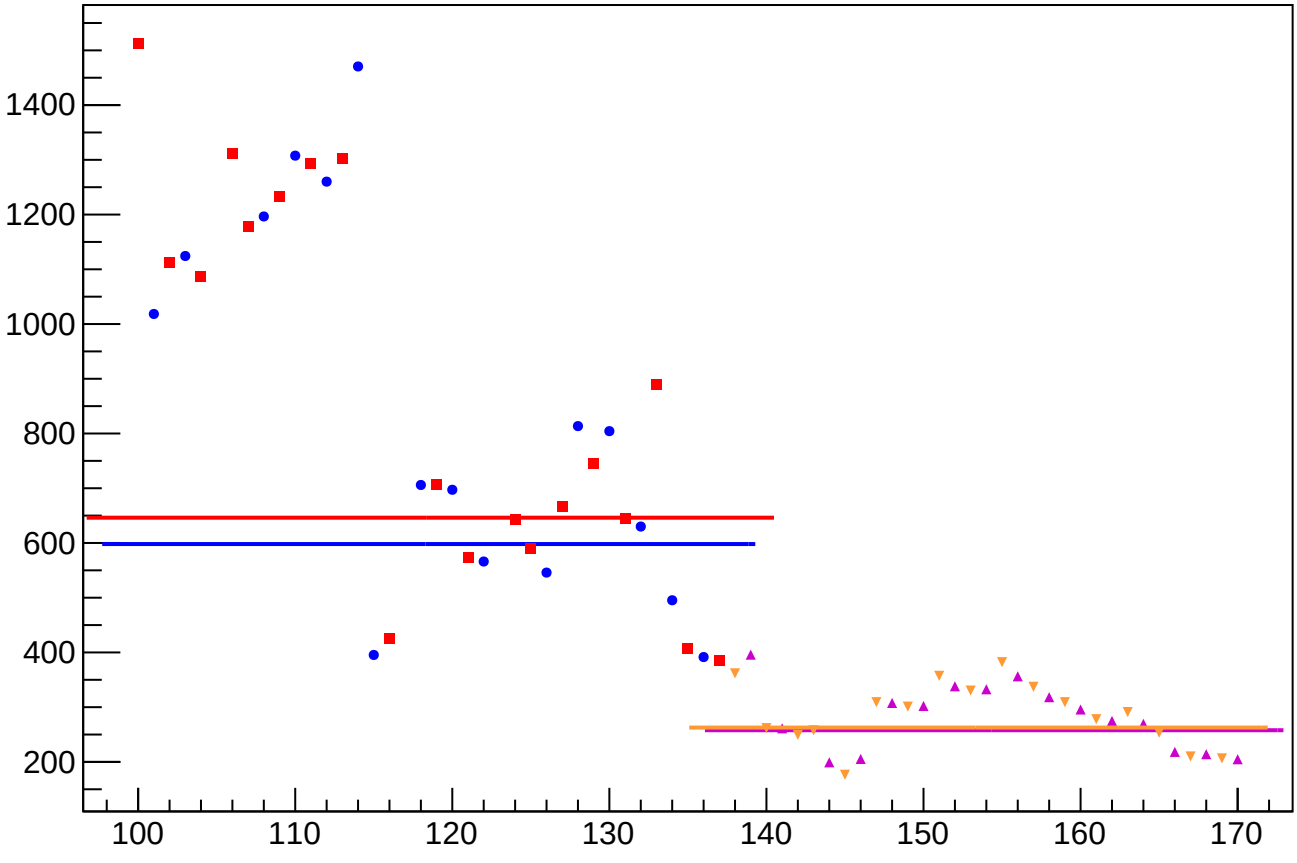
Left In: 30.687+/-72.946 $\chi^2$/NDF:14.4/15

+ sign -439.788+/-70.430 $\chi^2$/NDF: 52.4/32

All: -217.452+/-49.708 $\chi^2$/NDF: 100.5/67

- sign 3.218+/-70.166 $\chi^2$/NDF: 28.2/34

# asym_sam_1526_avg_dit_correction_rms vs Slug




Right In: 598.044+/-0.171 $\chi^2$/NDF: 2047825.1/15

Left Out: 262.770+/-0.052 $\chi^2$/NDF:1277815.5/16

Right Out: 646.190+/-0.181 $\chi^2$/NDF: 2205437.4/18

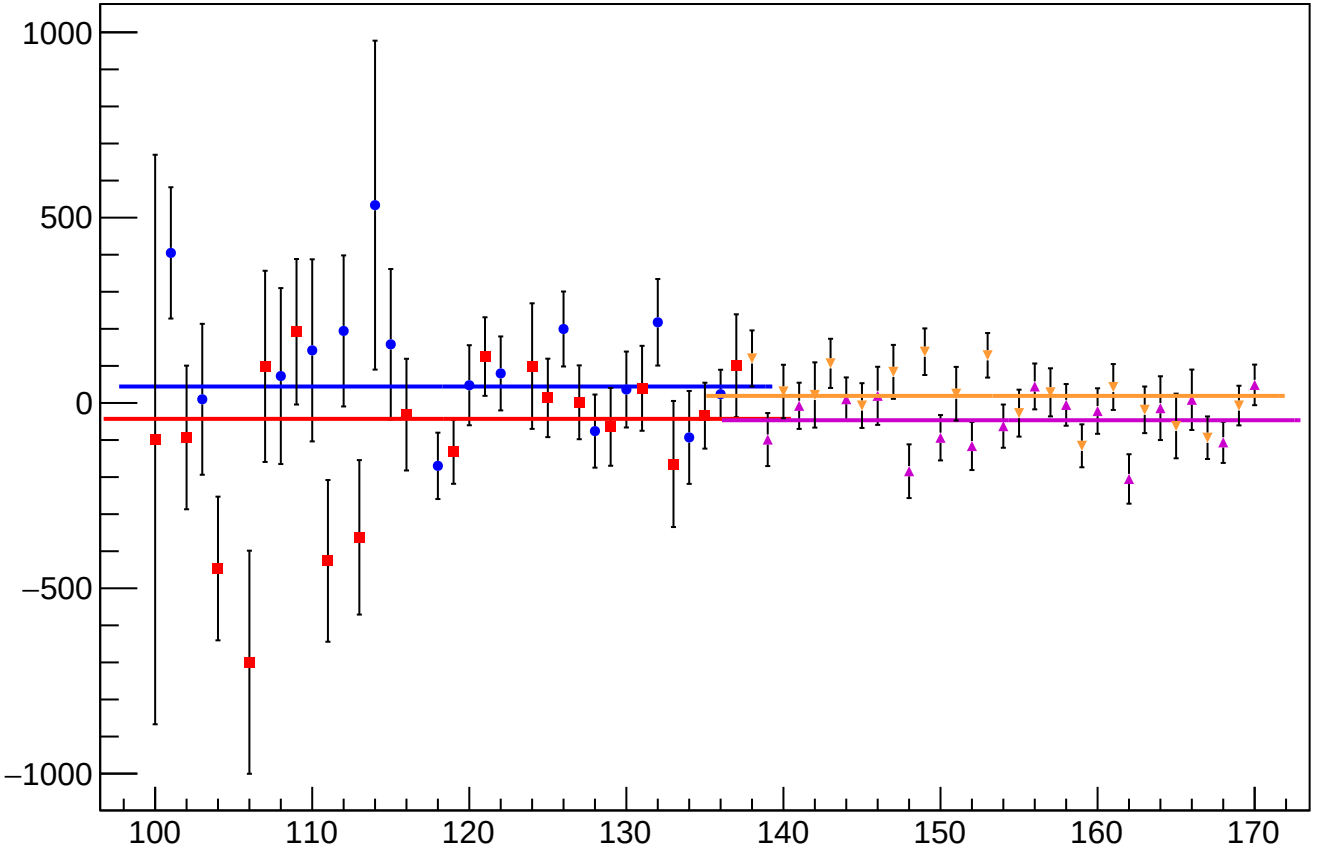
Left In: 257.890+/-0.052 $\chi^2$/NDF:1177079.5/15

+ sign 291.329+/-0.050 $\chi^2$/NDF: 6857395.7/32

All: 289.116+/-0.035 $\chi^2$/NDF: 14480714.7/67

- sign 286.920+/-0.050 $\chi^2$/NDF: 7619385.4/34

# eigen_dit_asym_sam_1526_avg_mean vs Slug




Right In: 44.389+/-29.908 $\chi^2$/NDF: 19.6/15

Left Out: 19.123+/-15.830 $\chi^2$/NDF:22.9/16

Right Out: -42.900+/-31.248 $\chi^2$/NDF: 23.3/18

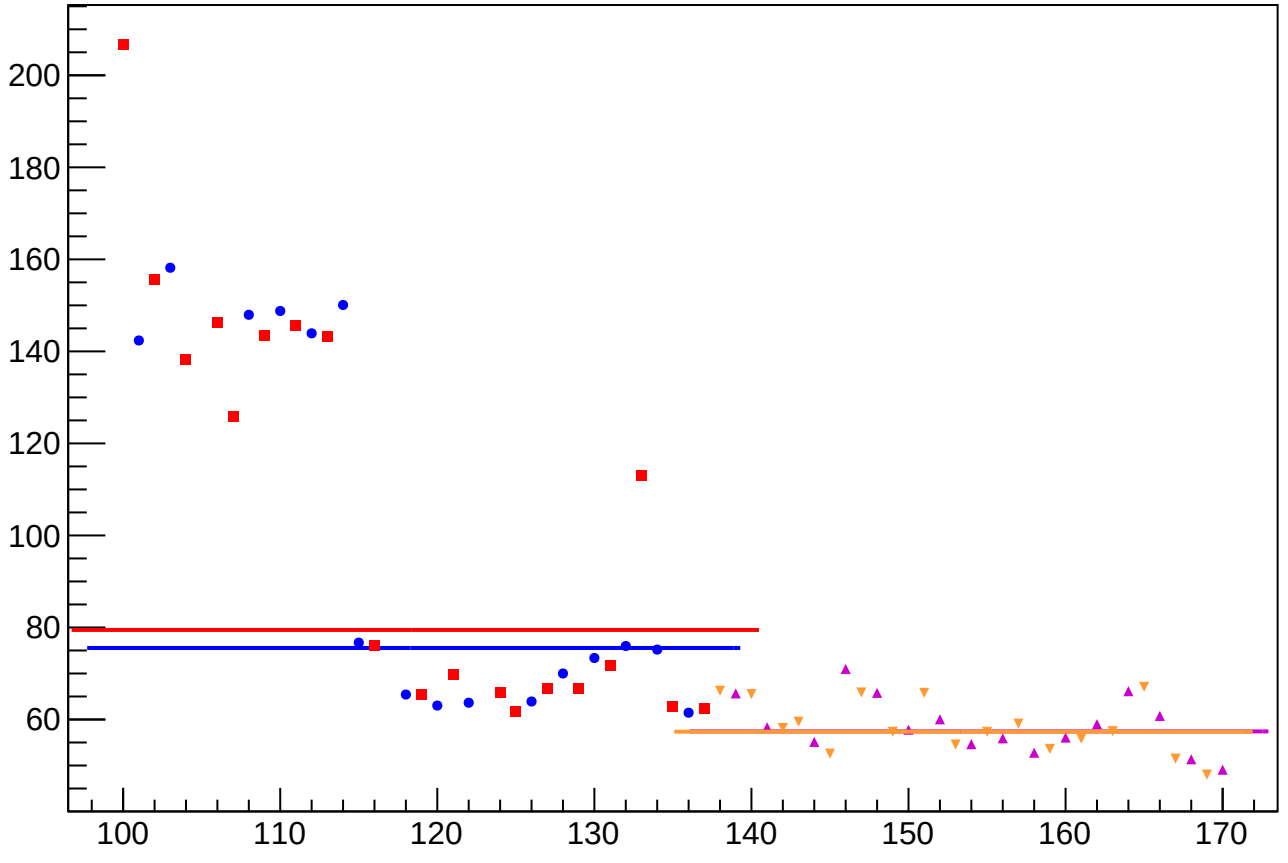
Left In: -46.595+/-15.996 $\chi^2$/NDF:21.3/15

+ sign 24.652+/-13.991 $\chi^2$/NDF: 43.1/32

All: -9.969+/-9.980 $\chi^2$/NDF: 100.2/67

- sign -45.828+/-14.239 $\chi^2$/NDF: 44.6/34

# eigen_dit_asym_sam_1526_avg_rms vs Slug




Right In: 75.544+/-0.021 $\chi^2$/NDF: 1465535.8/15

Left Out: 57.356+/-0.011 $\chi^2$/NDF:244566.8/16

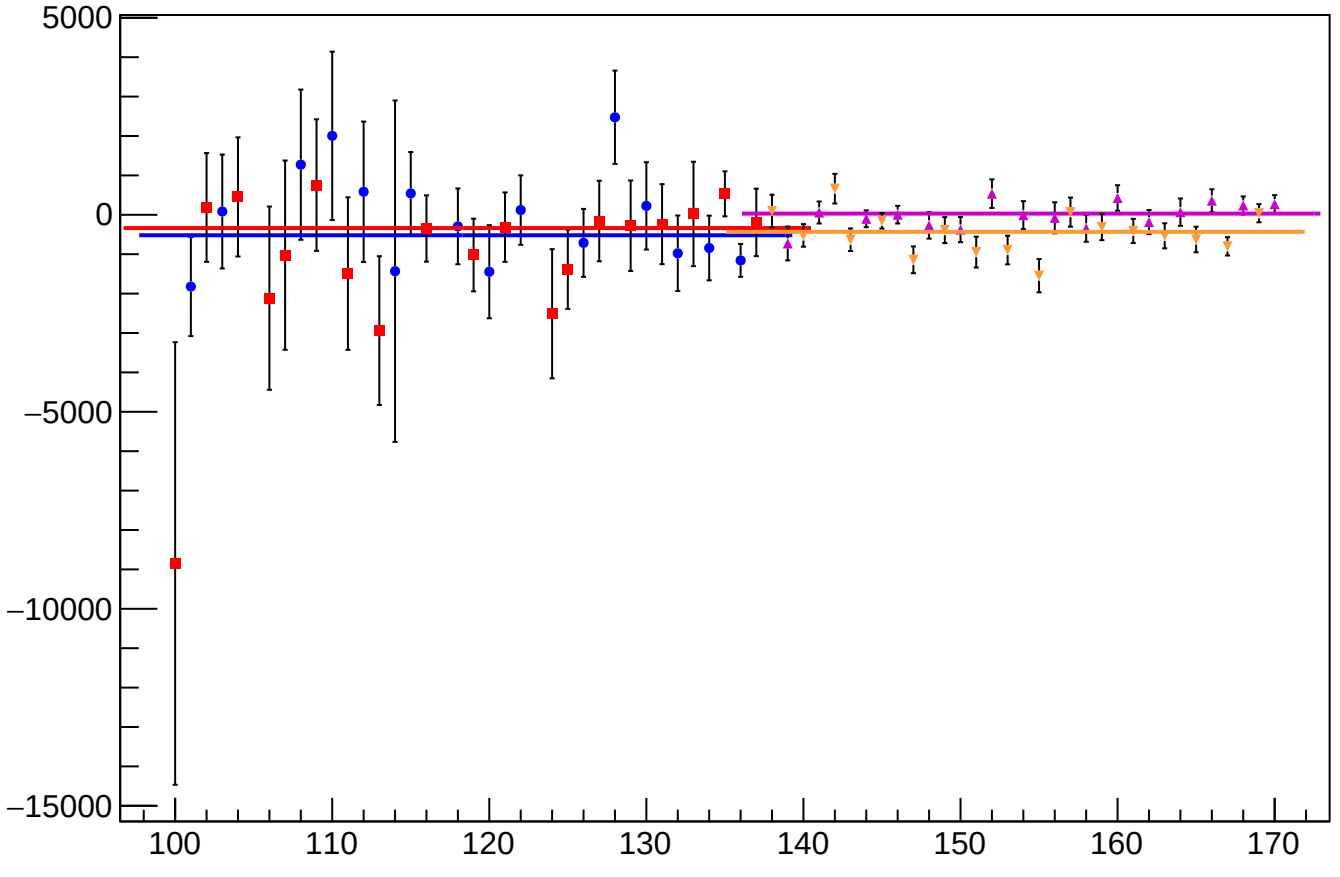
Right Out: 79.465+/-0.022 $\chi^2$/NDF: 1683627.3/18

Left In: 57.412+/-0.011 $\chi^2$/NDF:235504.7/15

+ sign 61.336+/-0.010 $\chi^2$/NDF: 2287910.7/32

All: 61.658+/-0.007 $\chi^2$/NDF: 4998528.5/67

- sign 61.991+/-0.010 $\chi^2$/NDF: 2708464.0/34




Right In: -519.247+/-241.316 $\chi^2$/NDF: 15.8/15

Left Out: -432.388+/-73.636 $\chi^2$/NDF:36.5/16

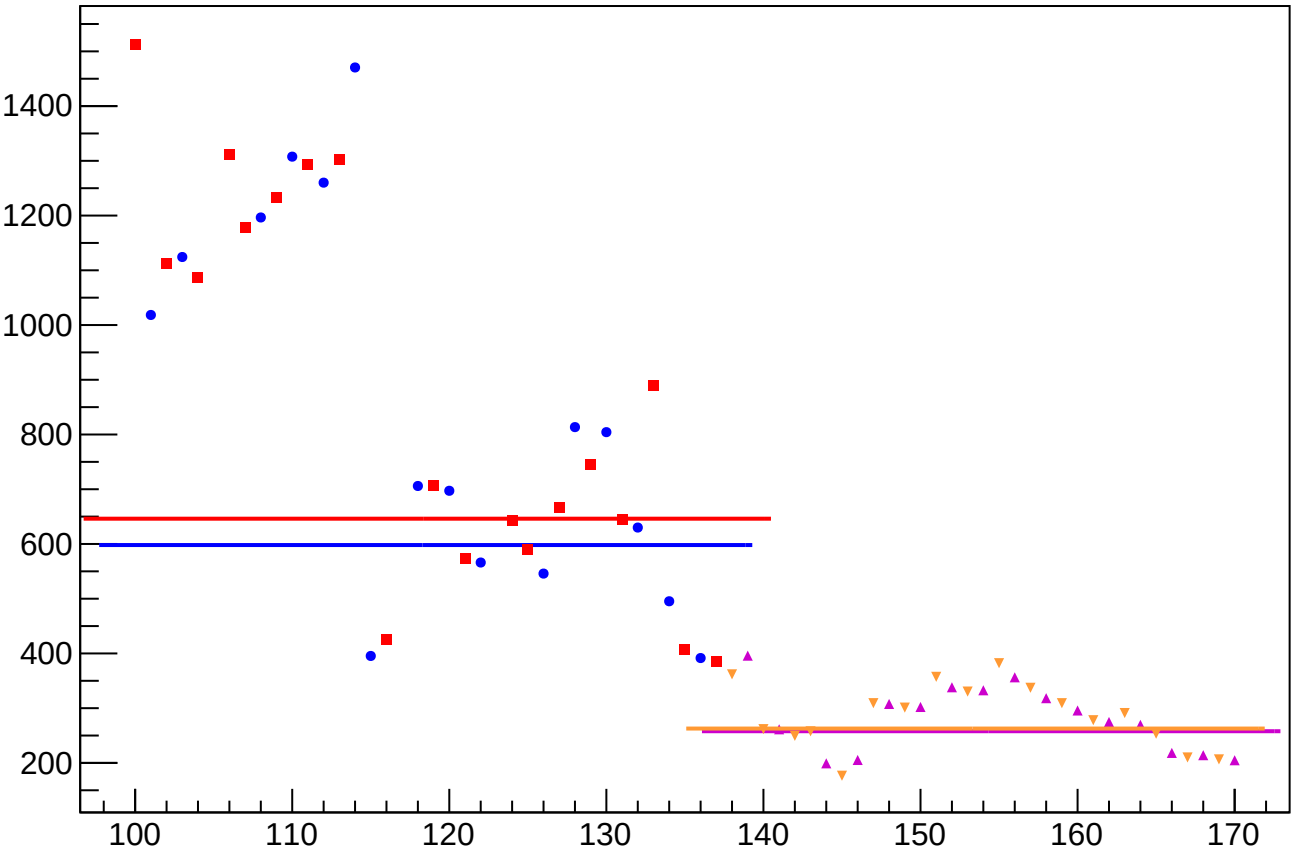
Right Out: -336.731+/-256.617 $\chi^2$/NDF: 11.9/18

Left In: 30.688+/-72.946 $\chi^2$/NDF:14.4/15

+ sign -439.787+/-70.430 $\chi^2$/NDF: 52.4/32

All: -217.452+/-49.708 $\chi^2$/NDF: 100.5/67

- sign 3.219+/-70.166 $\chi^2$/NDF: 28.2/34




Right In: 598.044+/-0.171 $\chi^2$/NDF: 2047806.5/15

Left Out: 262.770+/-0.052 $\chi^2$/NDF:1277826.9/16

Right Out: 646.190+/-0.181 $\chi^2$/NDF: 2205421.4/18

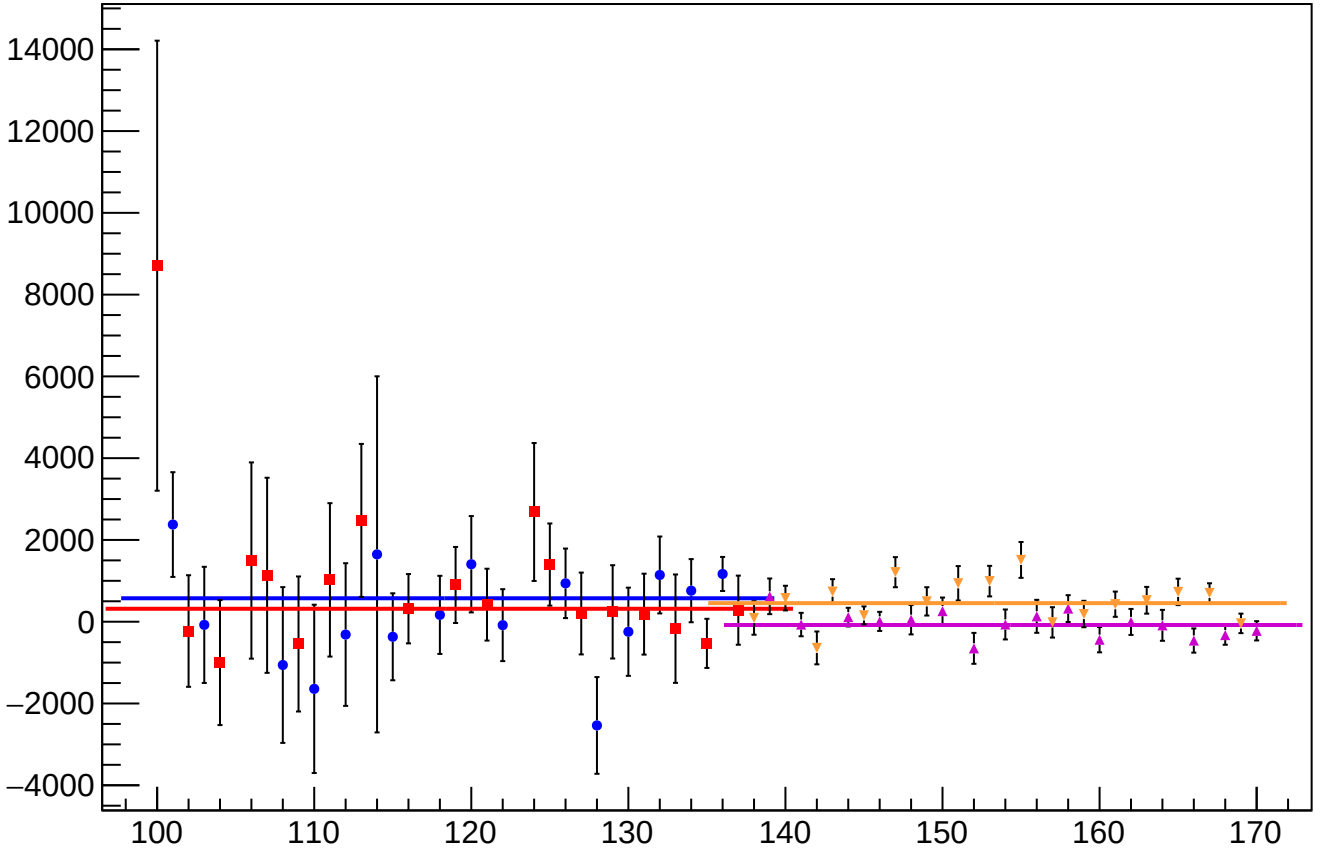
Left In: 257.890+/-0.052 $\chi^2$/NDF:1177081.2/15

+ sign 291.328+/-0.050 $\chi^2$/NDF: 6857401.7/32

All: 289.116+/-0.035 $\chi^2$/NDF: 14480717.5/67

- sign 286.920+/-0.050 $\chi^2$/NDF: 7619382.5/34

# asym_sam_1526_avg_mean vs Slug




Right In: 573.374+/-238.921 $\chi^2$/NDF: 16.6/15

Left Out: 454.634+/-76.650 $\chi^2$/NDF:33.1/16

Right Out: 316.830+/-258.239 $\chi^2$/NDF: 11.0/18

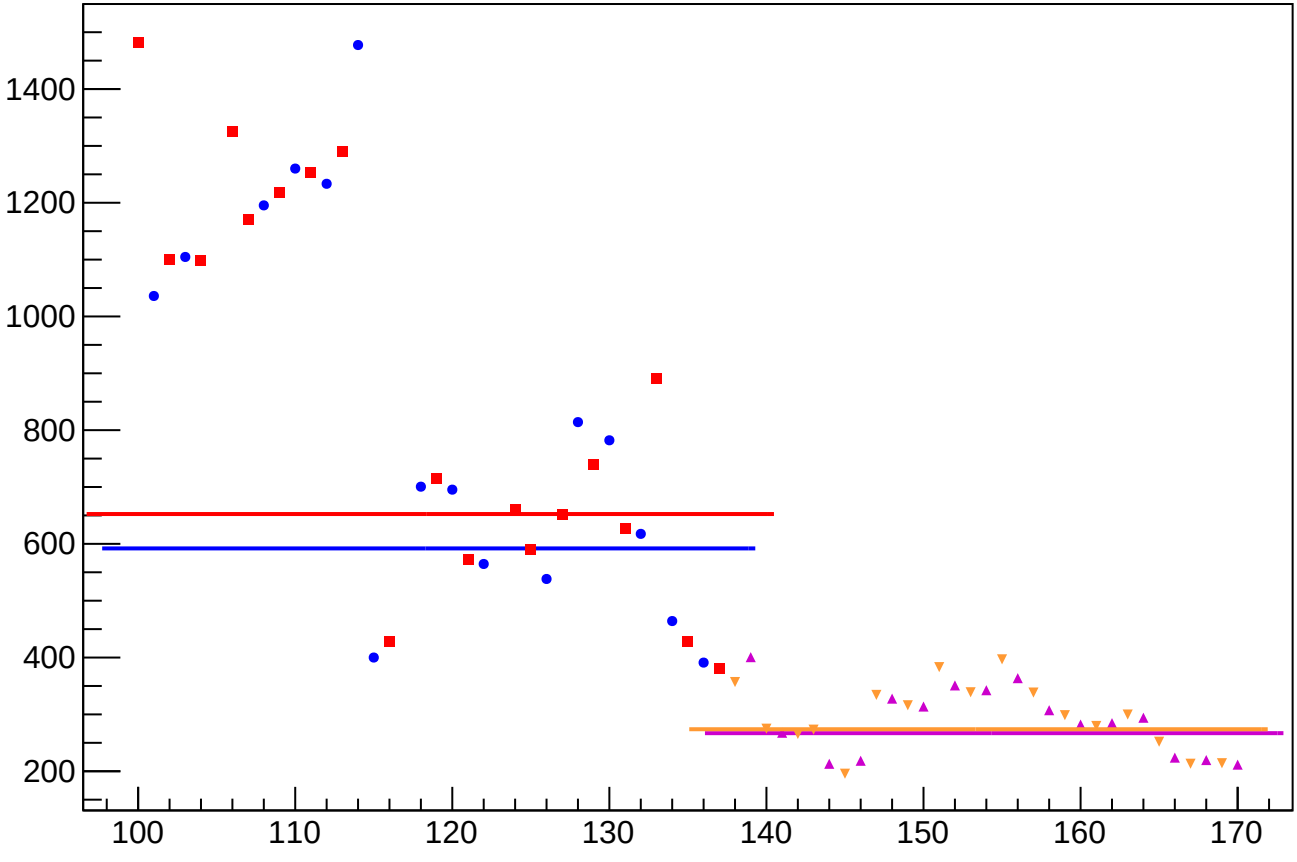
Left In: -80.452+/-75.310 $\chi^2$/NDF:13.2/15

+ sign 465.715+/-72.986 $\chi^2$/NDF: 49.8/32

All: 205.763+/-51.364 $\chi^2$/NDF: 101.4/67

- sign -49.312+/-72.298 $\chi^2$/NDF: 26.4/34

# asym_sam_1526_avg_rms vs Slug




Right In: 591.974+/-0.169 $\chi^2$/NDF: 2035700.6/15

Left Out: 273.905+/-0.054 $\chi^2$/NDF:1125896.2/16

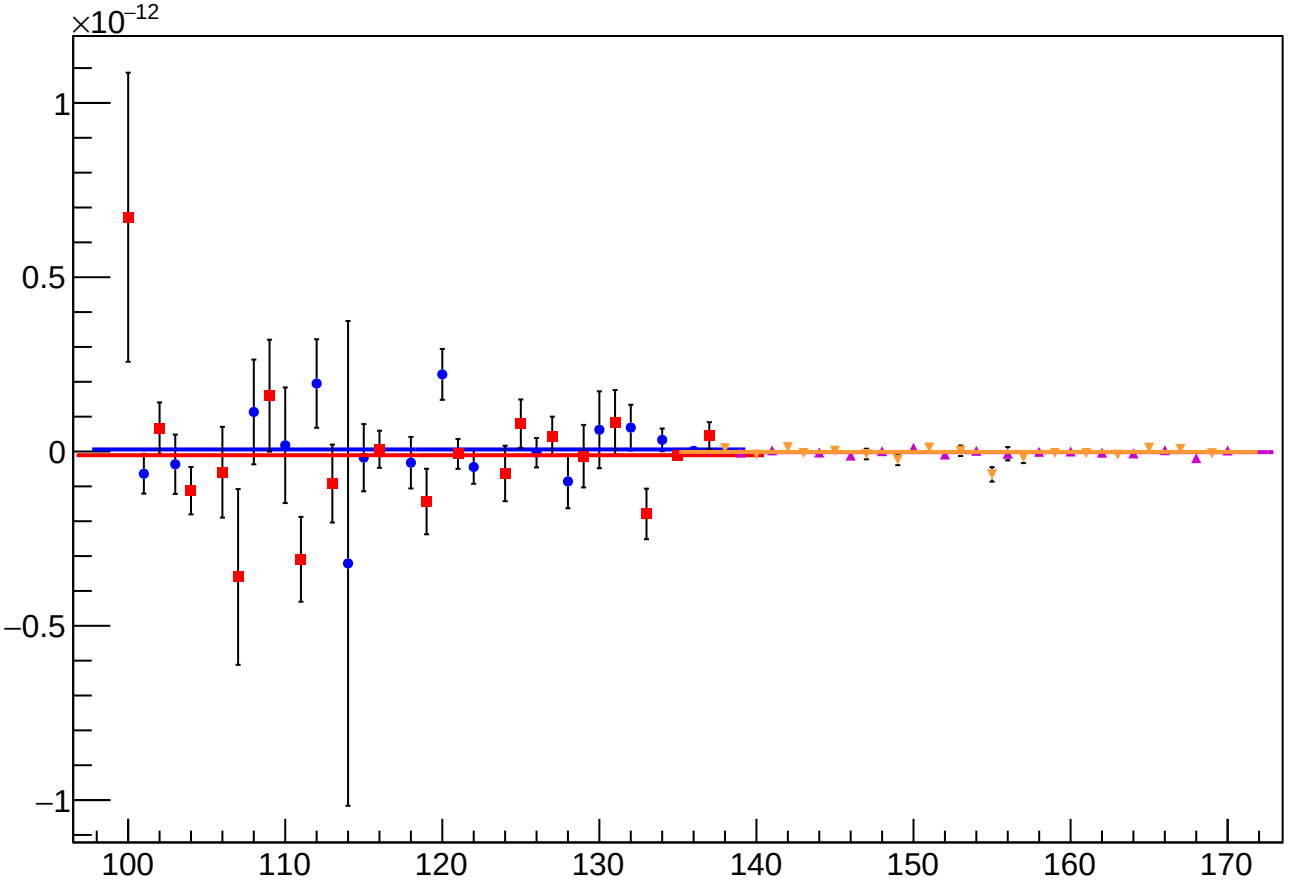
Right Out: 652.459+/-0.183 $\chi^2$/NDF: 2089983.3/18

Left In: 267.000+/-0.053 $\chi^2$/NDF:1065650.9/15

+ sign 303.587+/-0.052 $\chi^2$/NDF: 6375394.4/32

All: 300.369+/-0.036 $\chi^2$/NDF: 13645457.0/67

- sign 297.213+/-0.051 $\chi^2$/NDF: 7262363.3/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 18.2/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:21.6/16

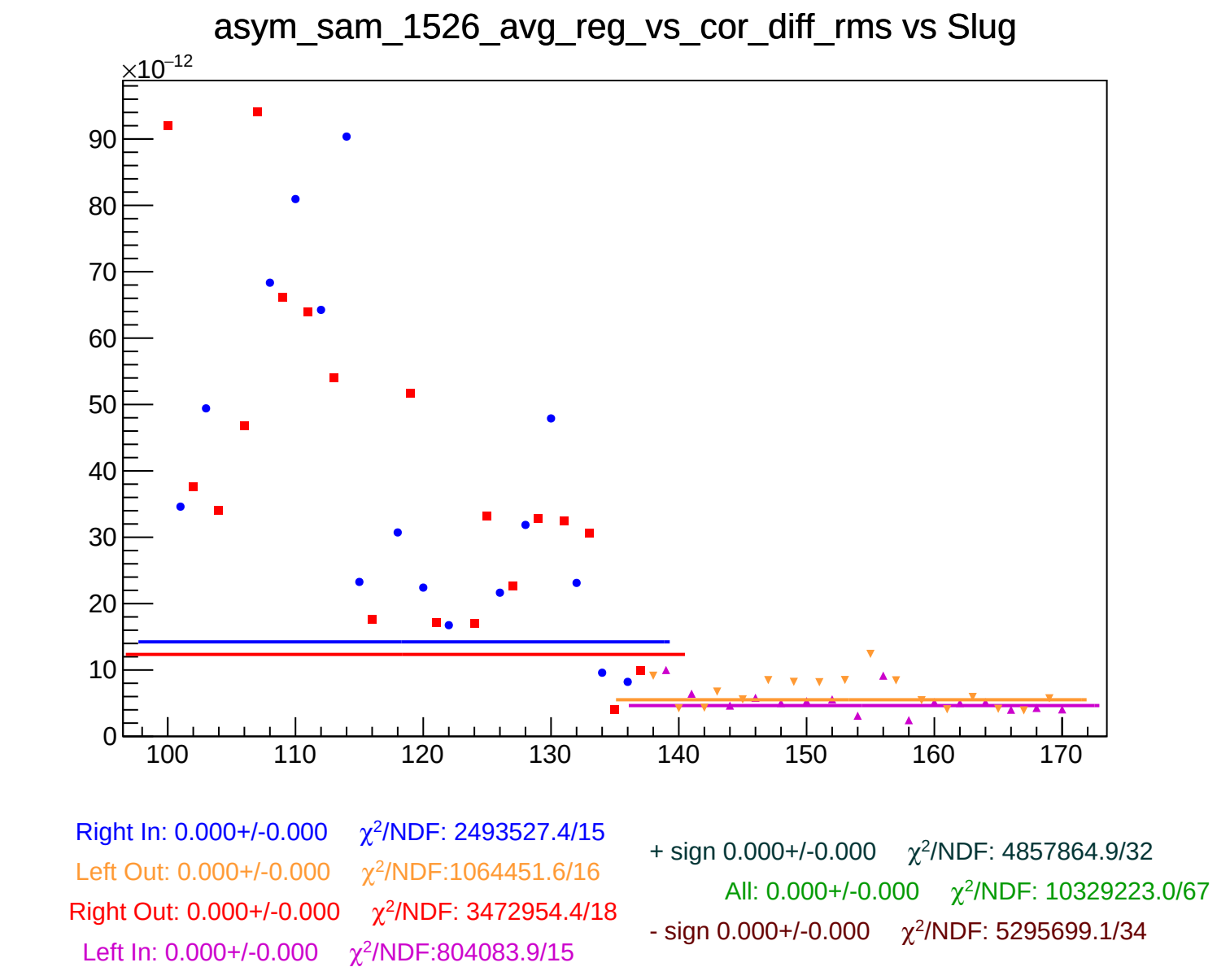
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 29.5/18

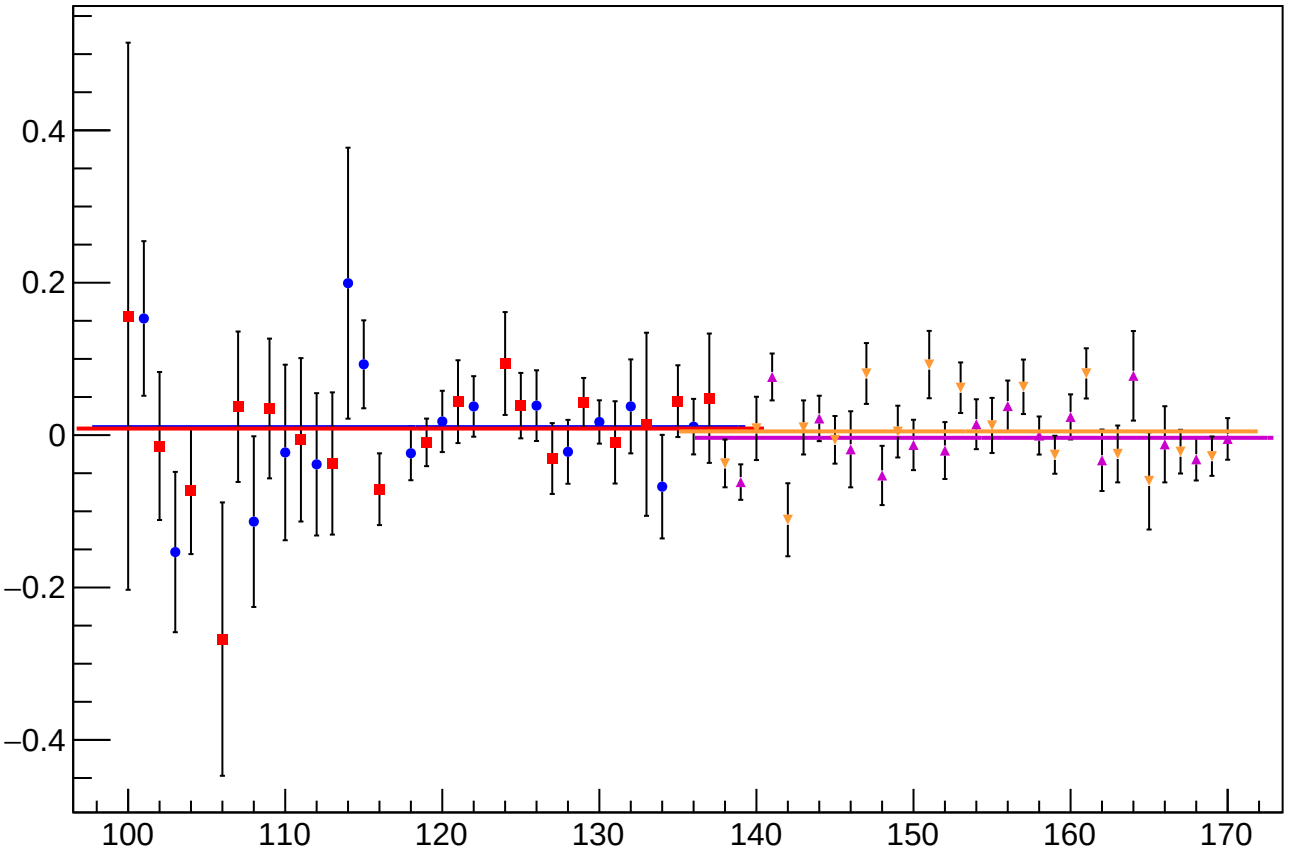
Left In: -0.000+/-0.000 $\chi^2$/NDF:9.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 40.3/32

All: -0.000+/-0.000 $\chi^2$/NDF: 79.7/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 39.2/34


asym_sam_1526_avg_reg_vs_cor_diff_rms vs Slug
×10^−12
90
80
70
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2493527.4/15
Left Out: 0.000+/-0.000 χ²/NDF:1064451.6/16
Right Out: 0.000+/-0.000 χ²/NDF: 3472954.4/18
Left In: 0.000+/-0.000 χ²/NDF:804083.9/15
+ sign 0.000+/-0.000 χ²/NDF: 4857864.9/32
All: 0.000+/-0.000 χ²/NDF: 10329223.0/67
- sign 0.000+/-0.000 χ²/NDF: 5295699.1/34




Right In: 0.010+/-0.013 $\chi^2$/NDF: 13.1/15

Left Out: 0.005+/-0.008 $\chi^2$/NDF:32.0/16

Right Out: 0.009+/-0.013 $\chi^2$/NDF: 12.4/18

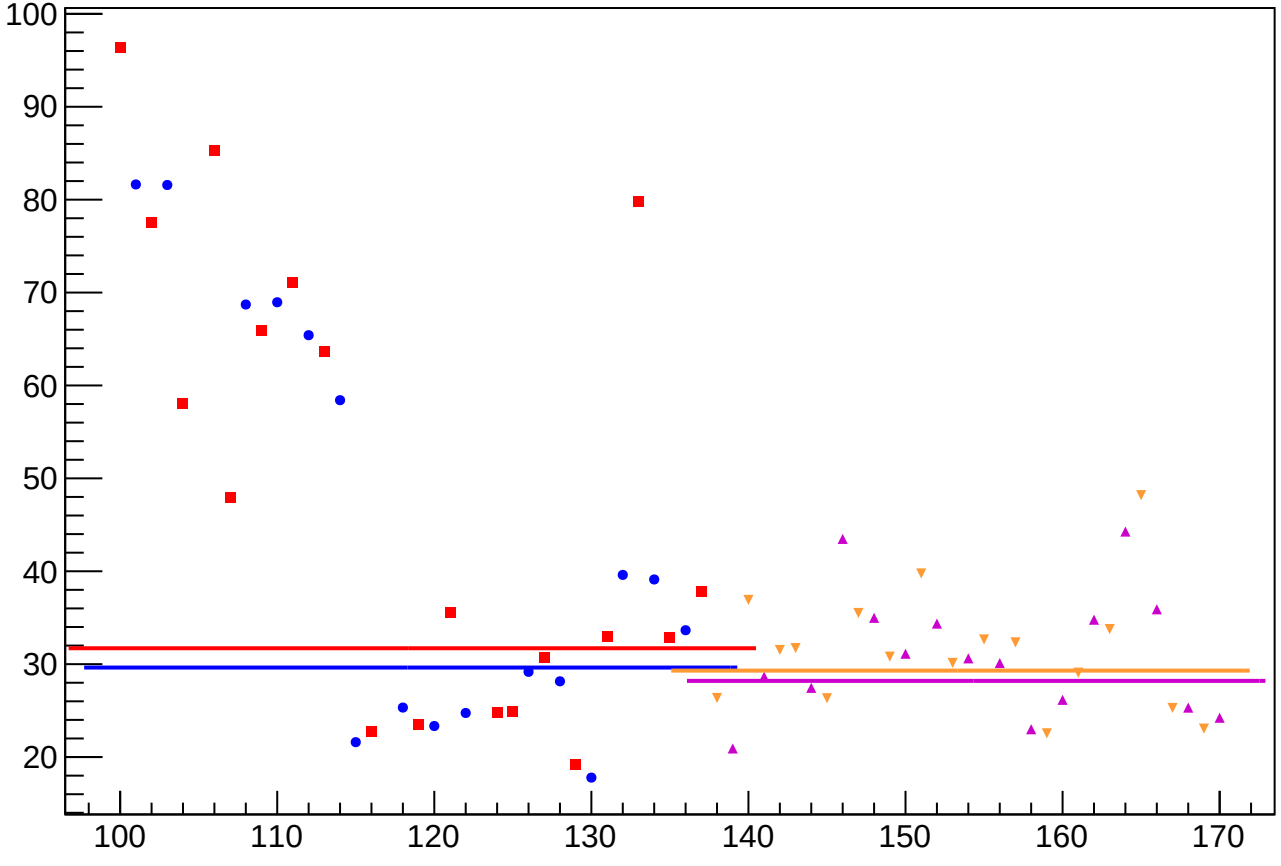
Left In: -0.004+/-0.008 $\chi^2$/NDF:21.9/15

+ sign 0.007+/-0.007 $\chi^2$/NDF: 45.3/32

All: 0.003+/-0.005 $\chi^2$/NDF: 80.8/67

- sign -0.000+/-0.007 $\chi^2$/NDF: 35.0/34

# asym_sam_1526_avg_dit_vs_cor_diff_rms vs Slug




Right In: 29.635+/-0.009 $\chi^2$/NDF: 2448468.0/15

Left Out: 29.306+/-0.006 $\chi^2$/NDF:821151.4/16

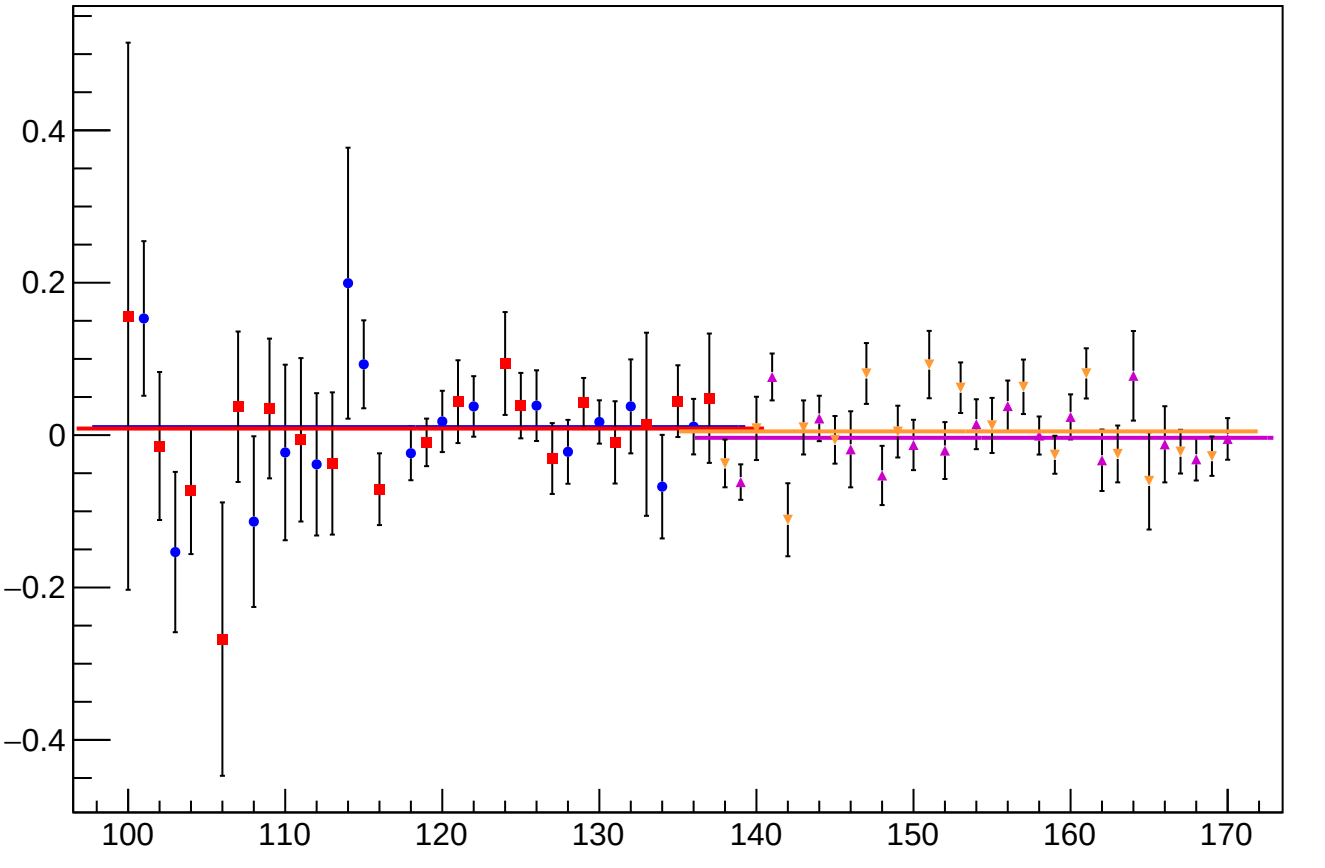
Right Out: 31.712+/-0.009 $\chi^2$/NDF: 2651470.3/18

Left In: 28.201+/-0.006 $\chi^2$/NDF:943718.0/15

+ sign 29.406+/-0.005 $\chi^2$/NDF: 3270569.9/32

All: 29.282+/-0.003 $\chi^2$/NDF: 6969345.7/67

- sign 29.158+/-0.005 $\chi^2$/NDF: 3697487.8/34




Right In: 0.010+/-0.013 $\chi^2$/NDF: 13.1/15

Left Out: 0.005+/-0.008 $\chi^2$/NDF:32.0/16

Right Out: 0.009+/-0.013 $\chi^2$/NDF: 12.4/18

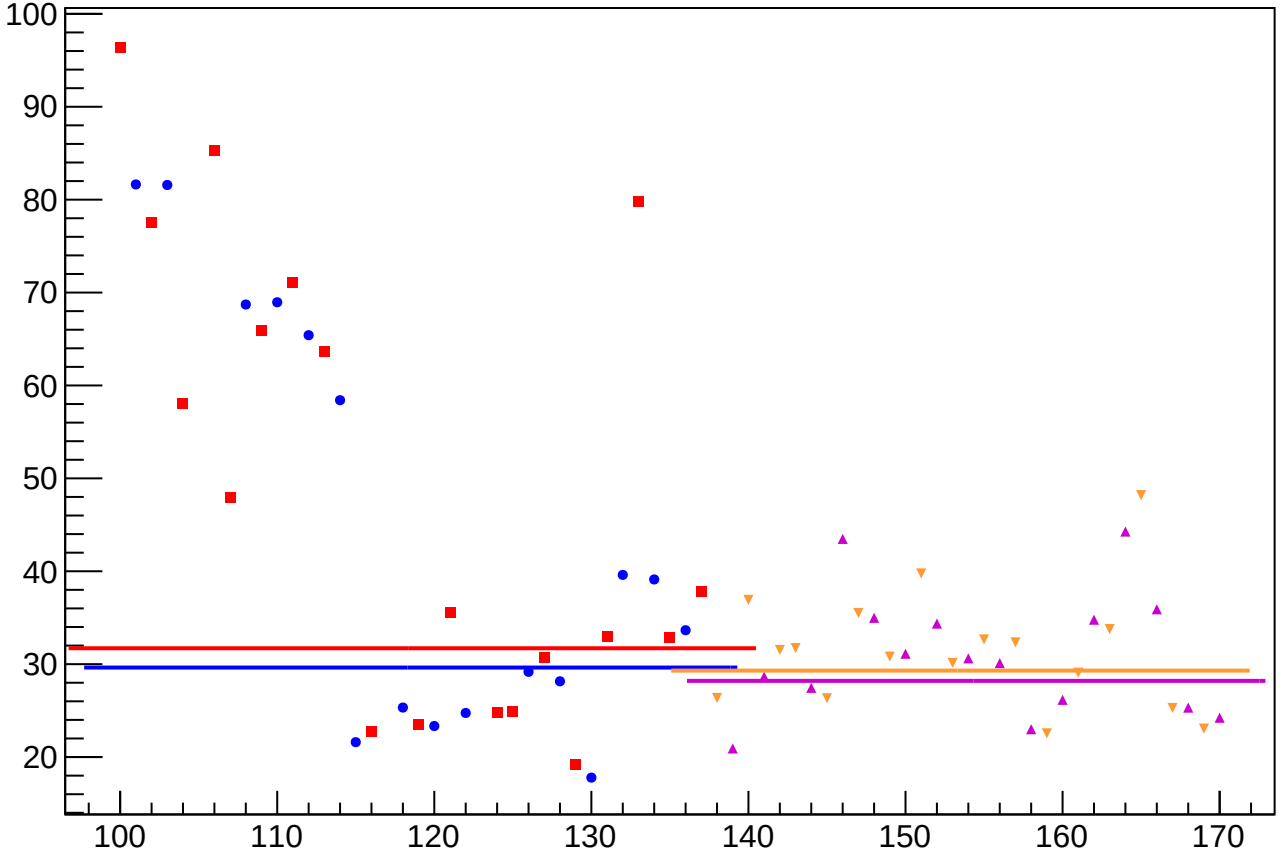
Left In: -0.004+/-0.008 $\chi^2$/NDF:21.9/15

+ sign 0.007+/-0.007 $\chi^2$/NDF: 45.3/32

All: 0.003+/-0.005 $\chi^2$/NDF: 80.8/67

- sign -0.000+/-0.007 $\chi^2$/NDF: 35.0/34

# asym_sam_1526_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 29.635+/-0.009 $\chi^2$/NDF: 2448468.0/15

Left Out: 29.306+/-0.006 $\chi^2$/NDF:821151.4/16

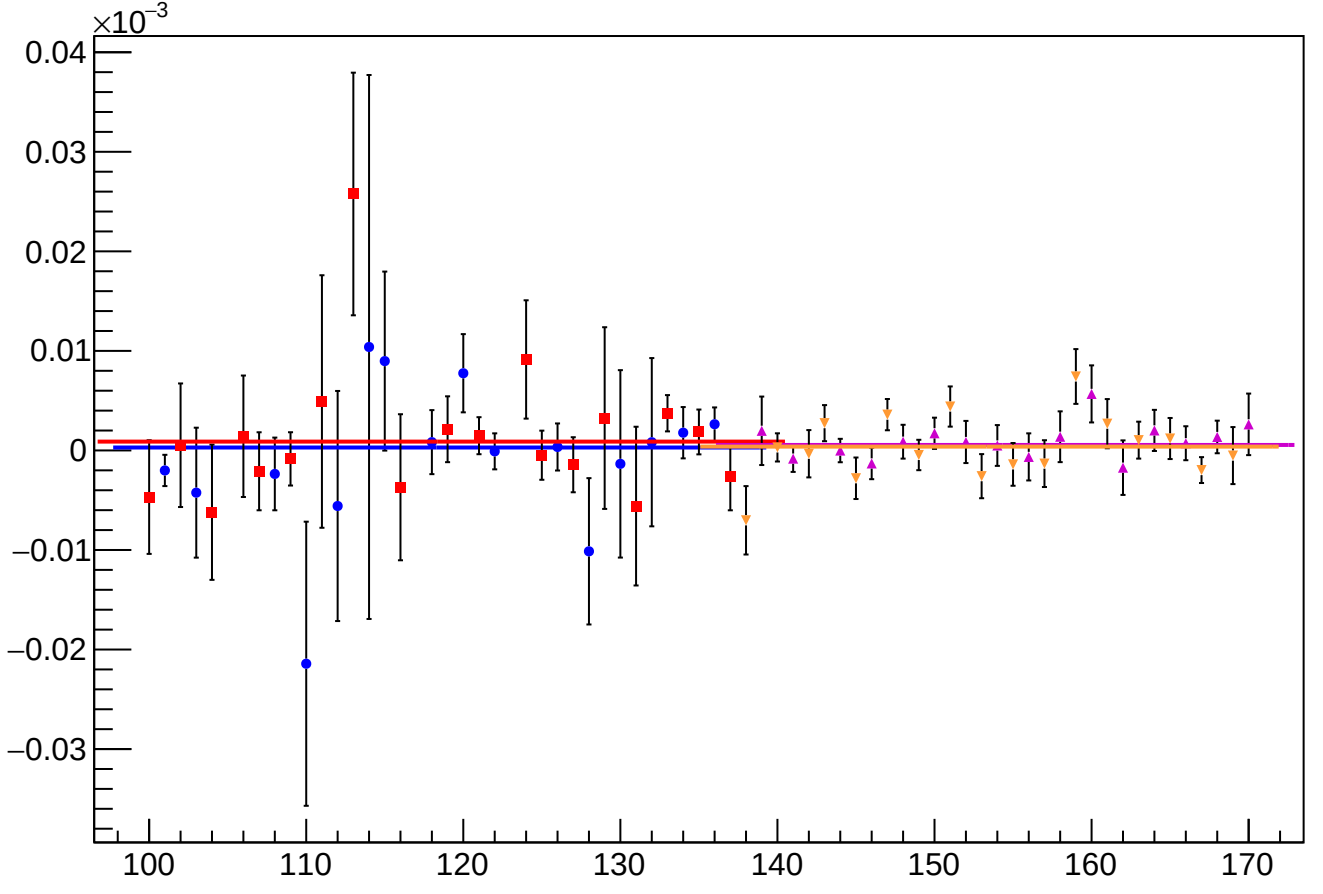
Right Out: 31.712+/-0.009 $\chi^2$/NDF: 2651470.3/18

Left In: 28.201+/-0.006 $\chi^2$/NDF:943718.0/15

\+ sign 29.406+/-0.005 $\chi^2$/NDF: 3270569.9/32

All: 29.282+/-0.003 $\chi^2$/NDF: 6969345.7/67

\- sign 29.158+/-0.005 $\chi^2$/NDF: 3697487.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:31.3/16

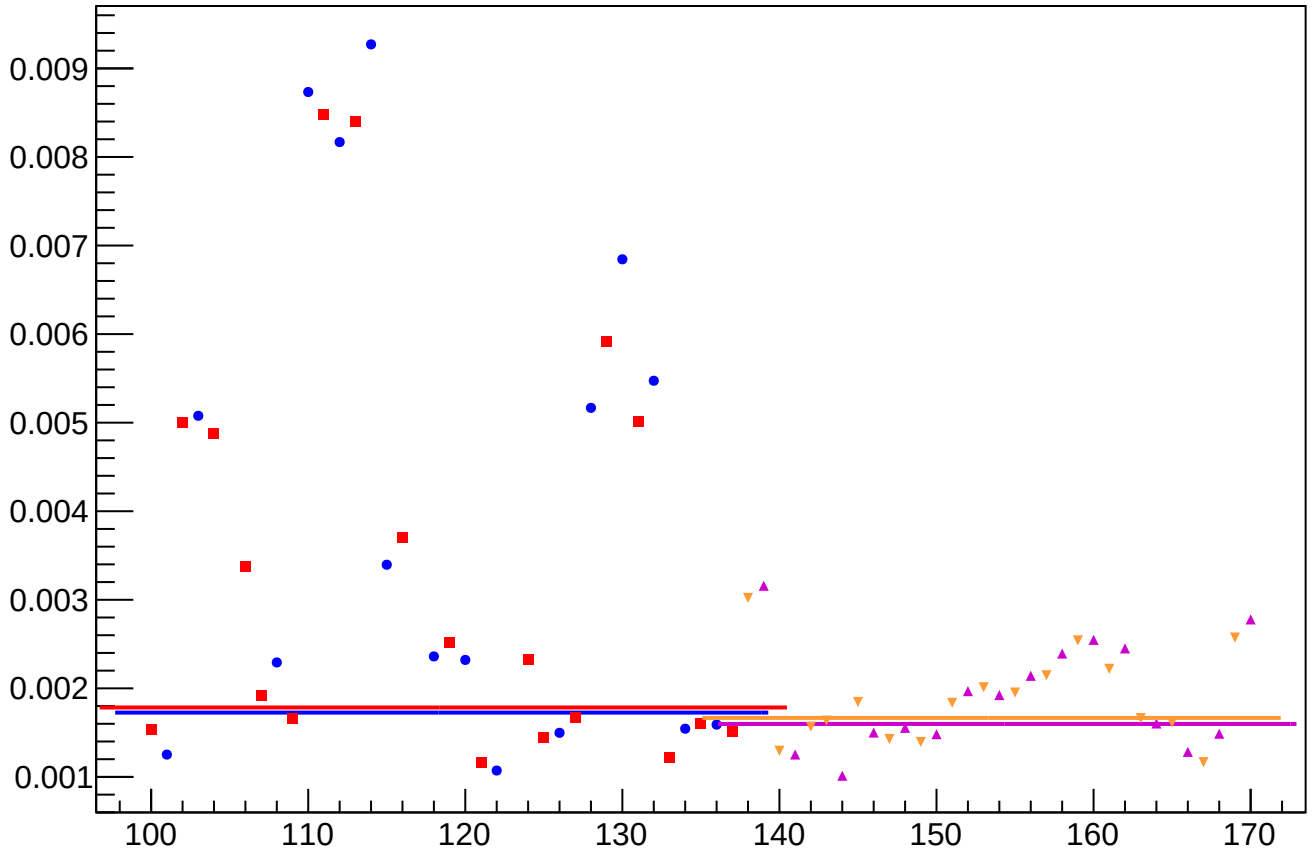
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:8.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 46.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 70.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 24.4/34




Right In: 0.002+/-0.000 $\chi^2$/NDF: 3932244.6/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:1559467.1/16

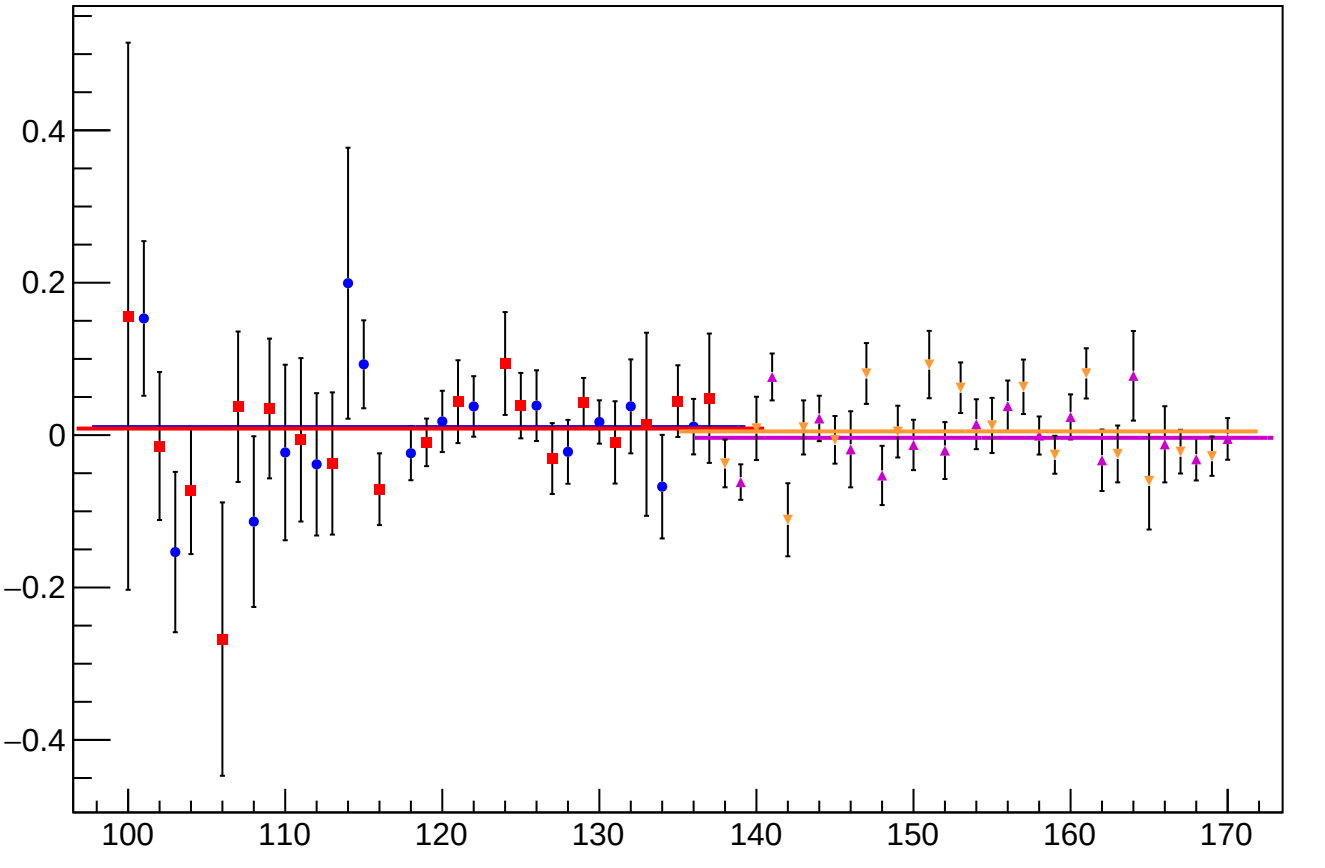
Right Out: 0.002+/-0.000 $\chi^2$/NDF: 3718778.6/18

Left In: 0.002+/-0.000 $\chi^2$/NDF:2252847.8/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 5500649.3/32

All: 0.002+/-0.000 $\chi^2$/NDF: 11564752.8/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 6056072.1/34




Right In: 0.010+/-0.013 $\chi^2$/NDF: 13.1/15

Left Out: 0.005+/-0.008 $\chi^2$/NDF:32.0/16

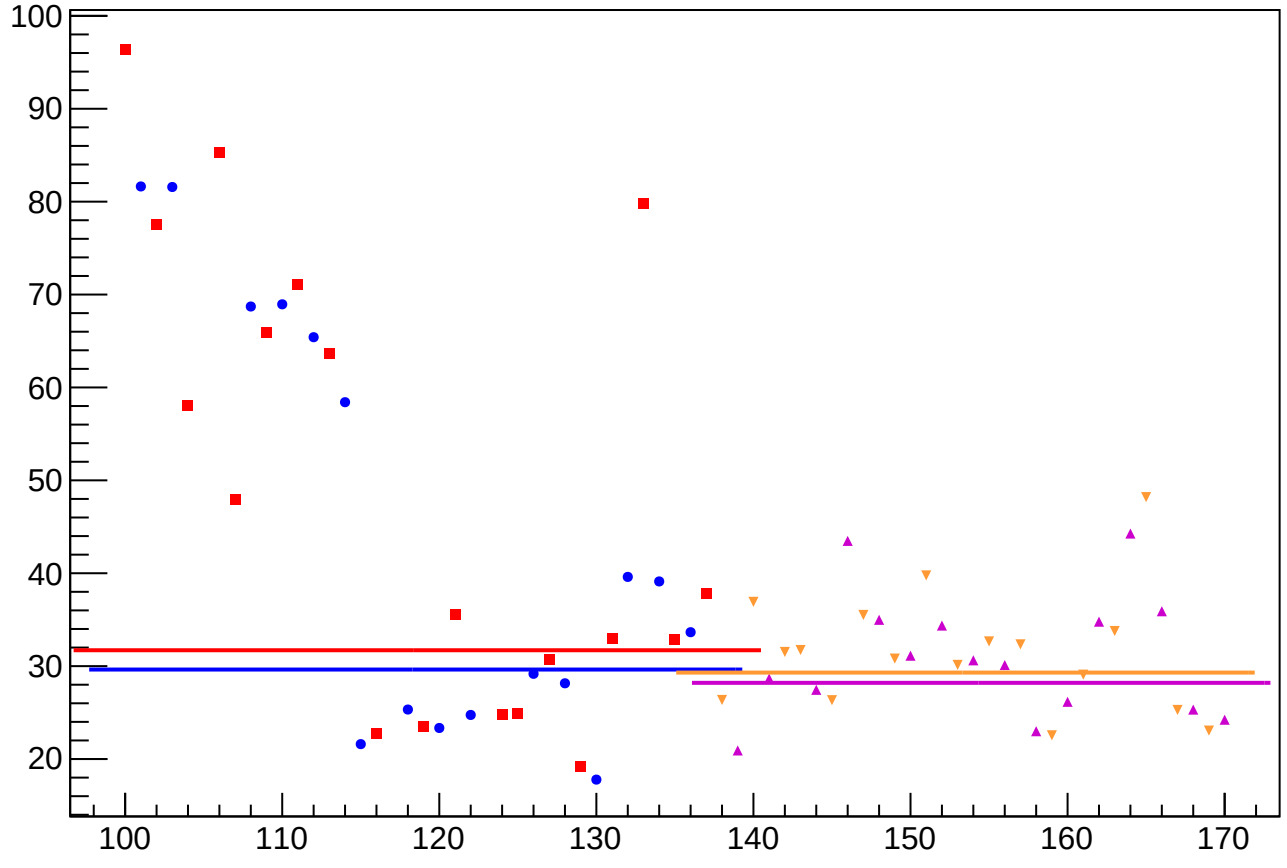
Right Out: 0.009+/-0.013 $\chi^2$/NDF: 12.4/18

Left In: -0.004+/-0.008 $\chi^2$/NDF:21.9/15

+ sign 0.007+/-0.007 $\chi^2$/NDF: 45.3/32

All: 0.003+/-0.005 $\chi^2$/NDF: 80.8/67

- sign -0.000+/-0.007 $\chi^2$/NDF: 35.0/34




Right In: 29.633+/-0.009 $\chi^2$/NDF: 2448670.6/15

Left Out: 29.307+/-0.006 $\chi^2$/NDF:821152.1/16

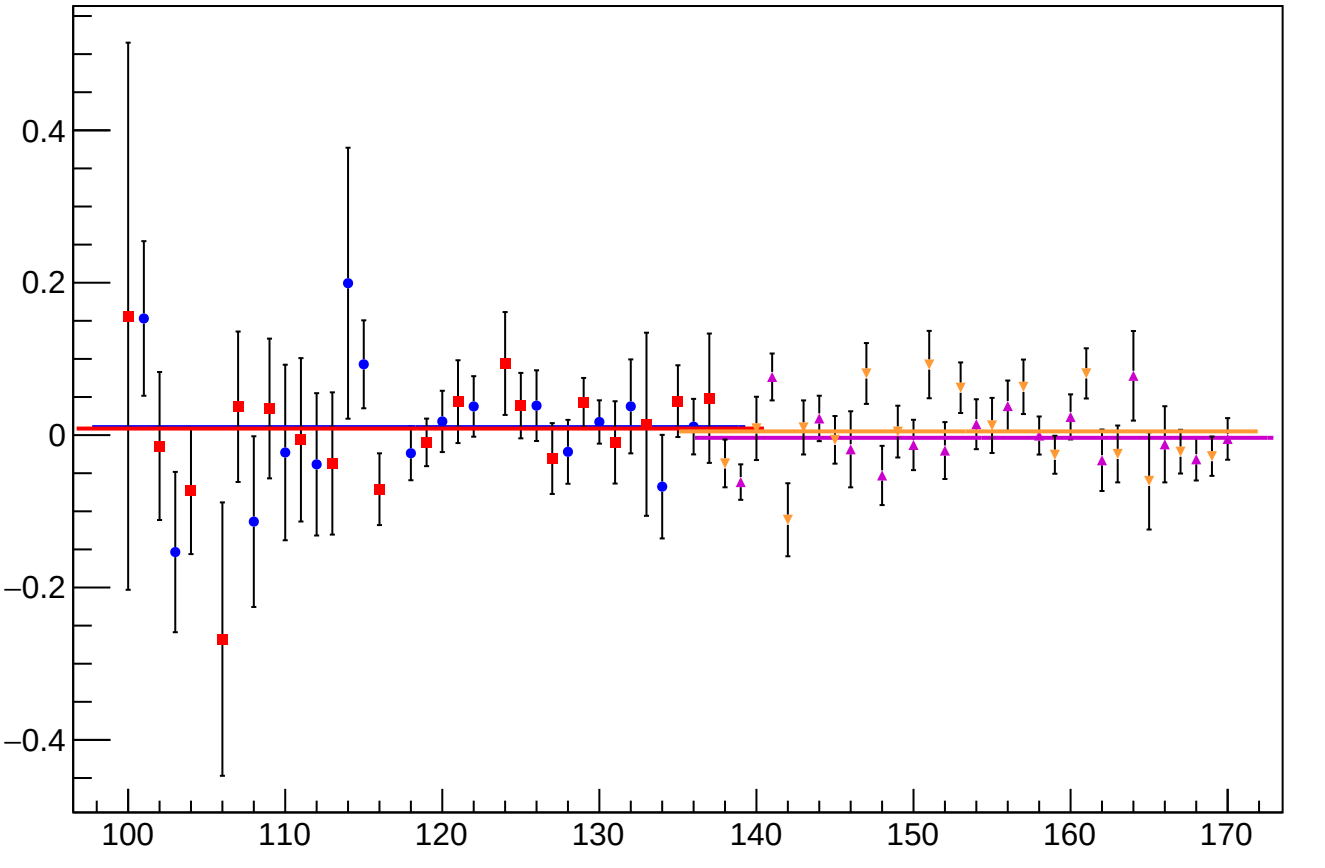
Right Out: 31.711+/-0.009 $\chi^2$/NDF: 2651638.6/18

Left In: 28.202+/-0.006 $\chi^2$/NDF:943722.0/15

+ sign 29.406+/-0.005 $\chi^2$/NDF: 3270764.3/32

All: 29.282+/-0.003 $\chi^2$/NDF: 6969614.5/67

- sign 29.158+/-0.005 $\chi^2$/NDF: 3697564.4/34




Right In: 0.010+/-0.013 $\chi^2$/NDF: 13.1/15

Left Out: 0.005+/-0.008 $\chi^2$/NDF:32.0/16

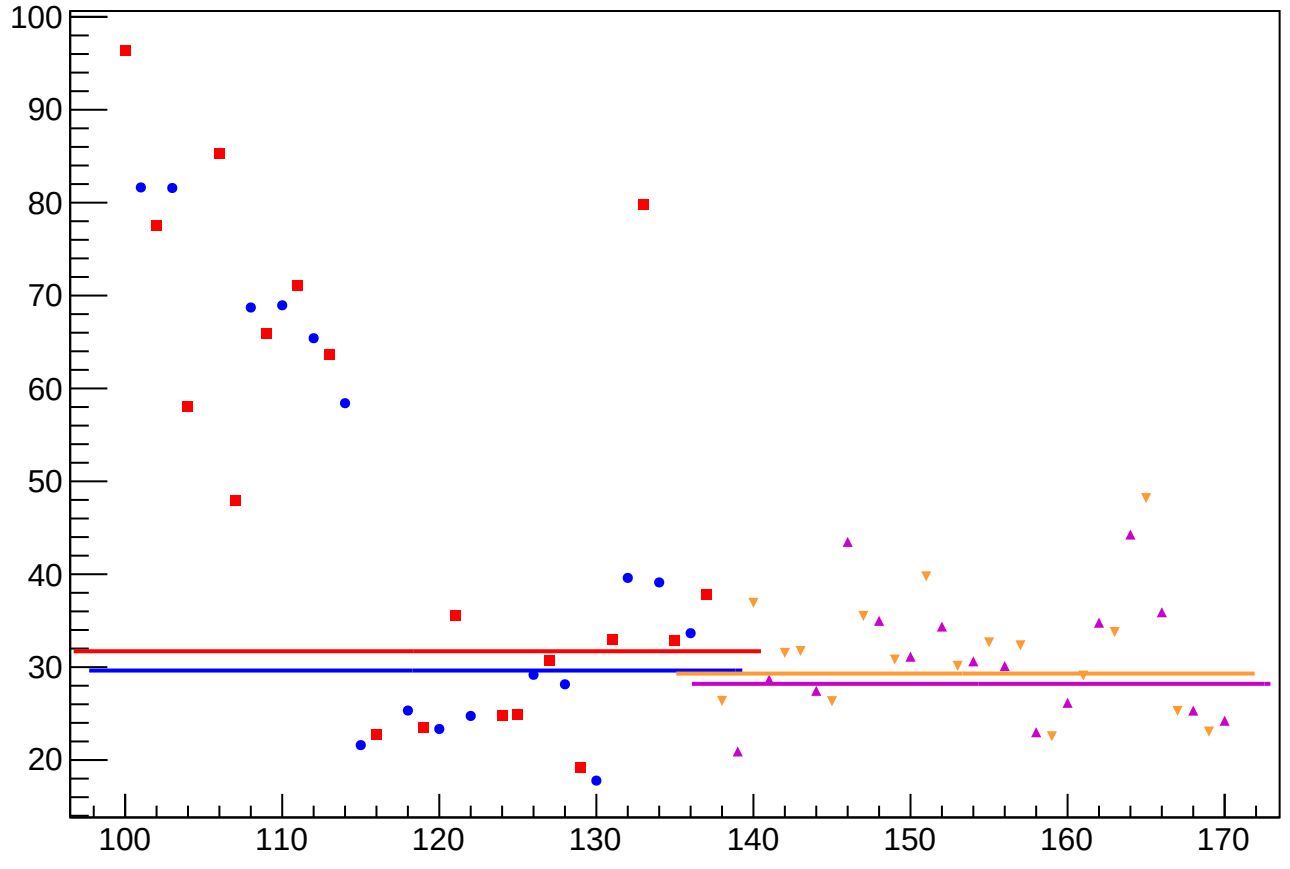
Right Out: 0.009+/-0.013 $\chi^2$/NDF: 12.4/18

Left In: -0.004+/-0.008 $\chi^2$/NDF:21.9/15

+ sign 0.007+/-0.007 $\chi^2$/NDF: 45.3/32

All: 0.003+/-0.005 $\chi^2$/NDF: 80.8/67

- sign -0.000+/-0.007 $\chi^2$/NDF: 35.0/34




Right In: 29.633+/-0.009 $\chi^2$/NDF: 2448670.6/15

Left Out: 29.307+/-0.006 $\chi^2$/NDF:821152.1/16

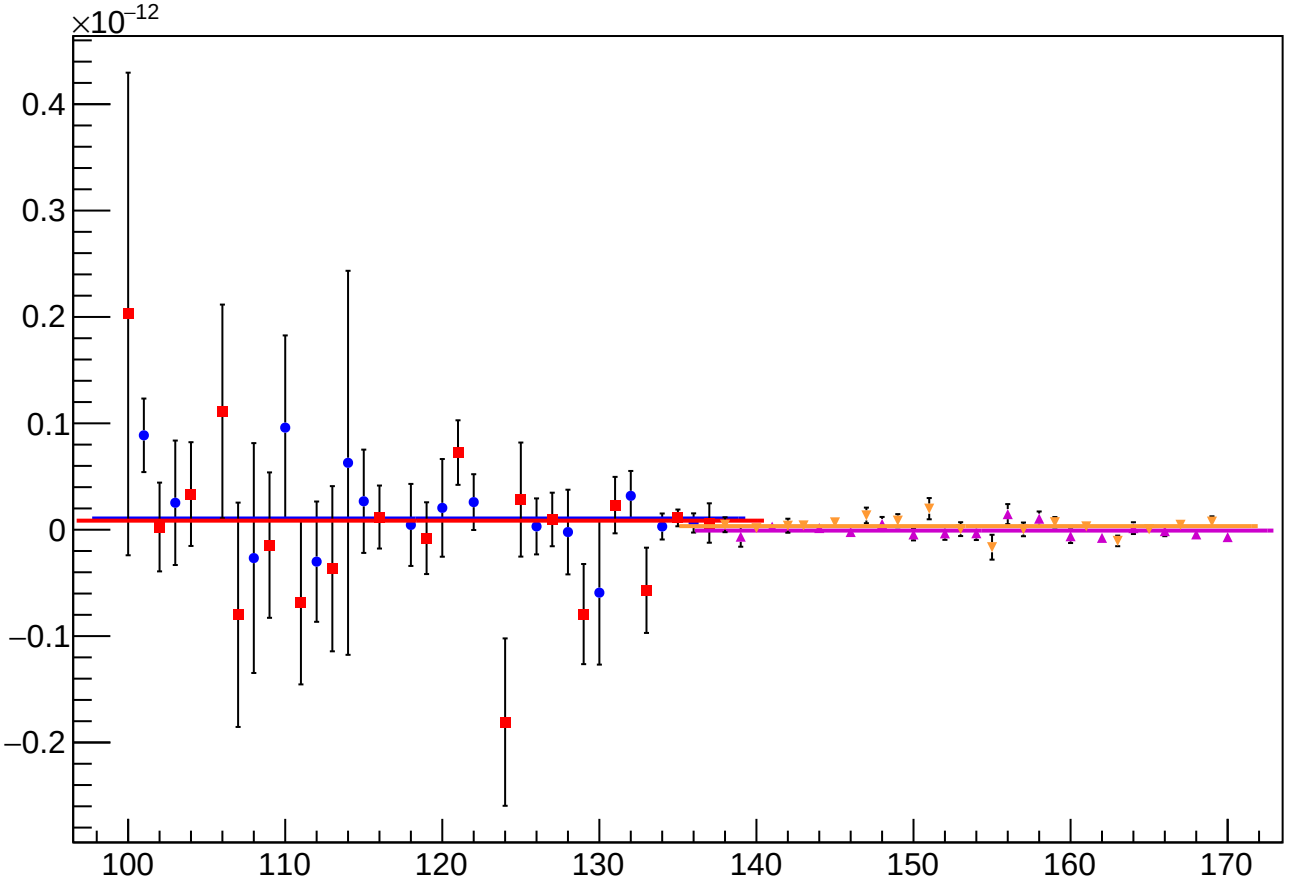
Right Out: 31.711+/-0.009 $\chi^2$/NDF: 2651638.6/18

Left In: 28.202+/-0.006 $\chi^2$/NDF:943722.0/15

+ sign 29.406+/-0.005 $\chi^2$/NDF: 3270764.3/32

All: 29.282+/-0.003 $\chi^2$/NDF: 6969614.5/67

- sign 29.158+/-0.005 $\chi^2$/NDF: 3697564.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 10.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:19.3/16

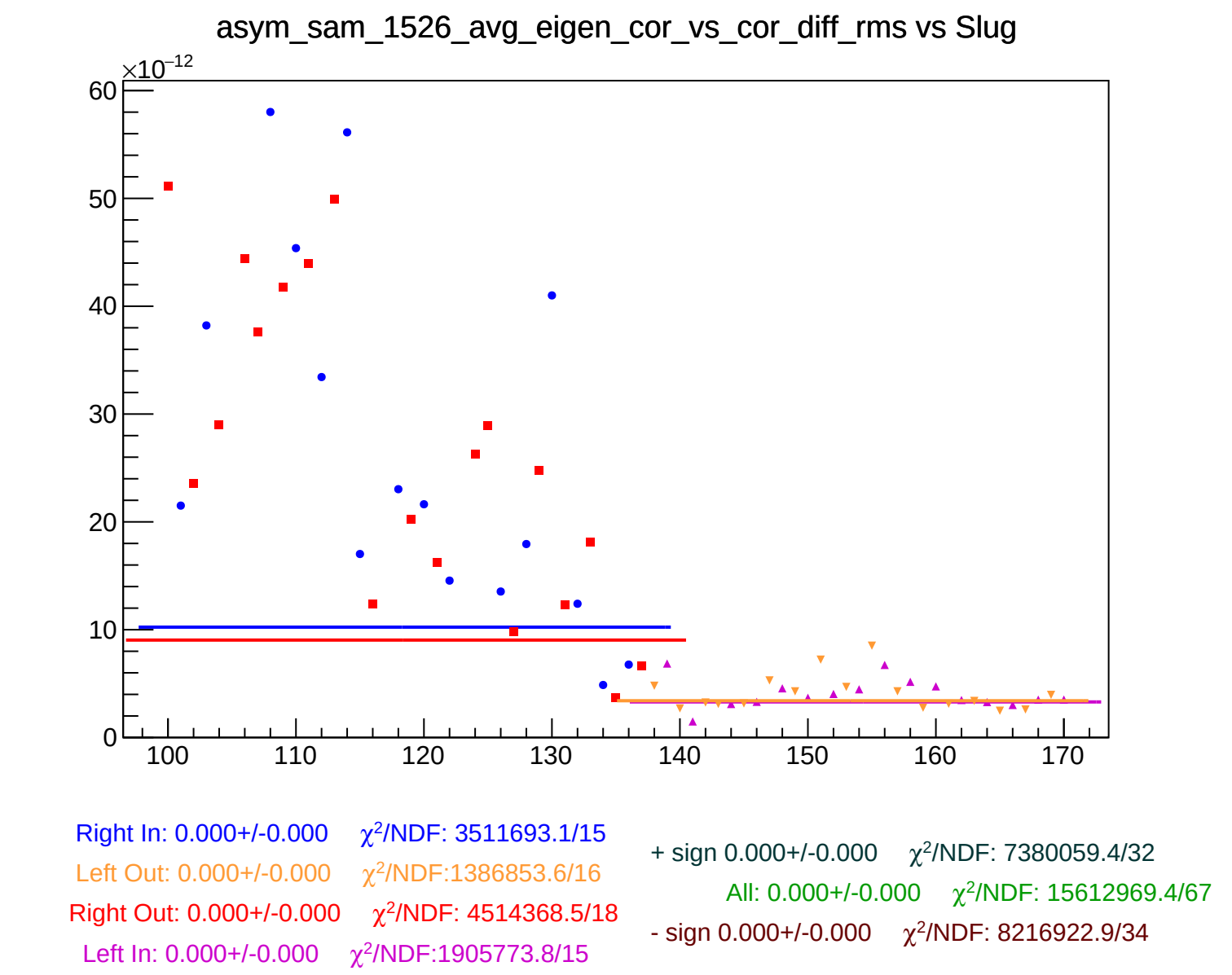
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.4/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:15.1/15

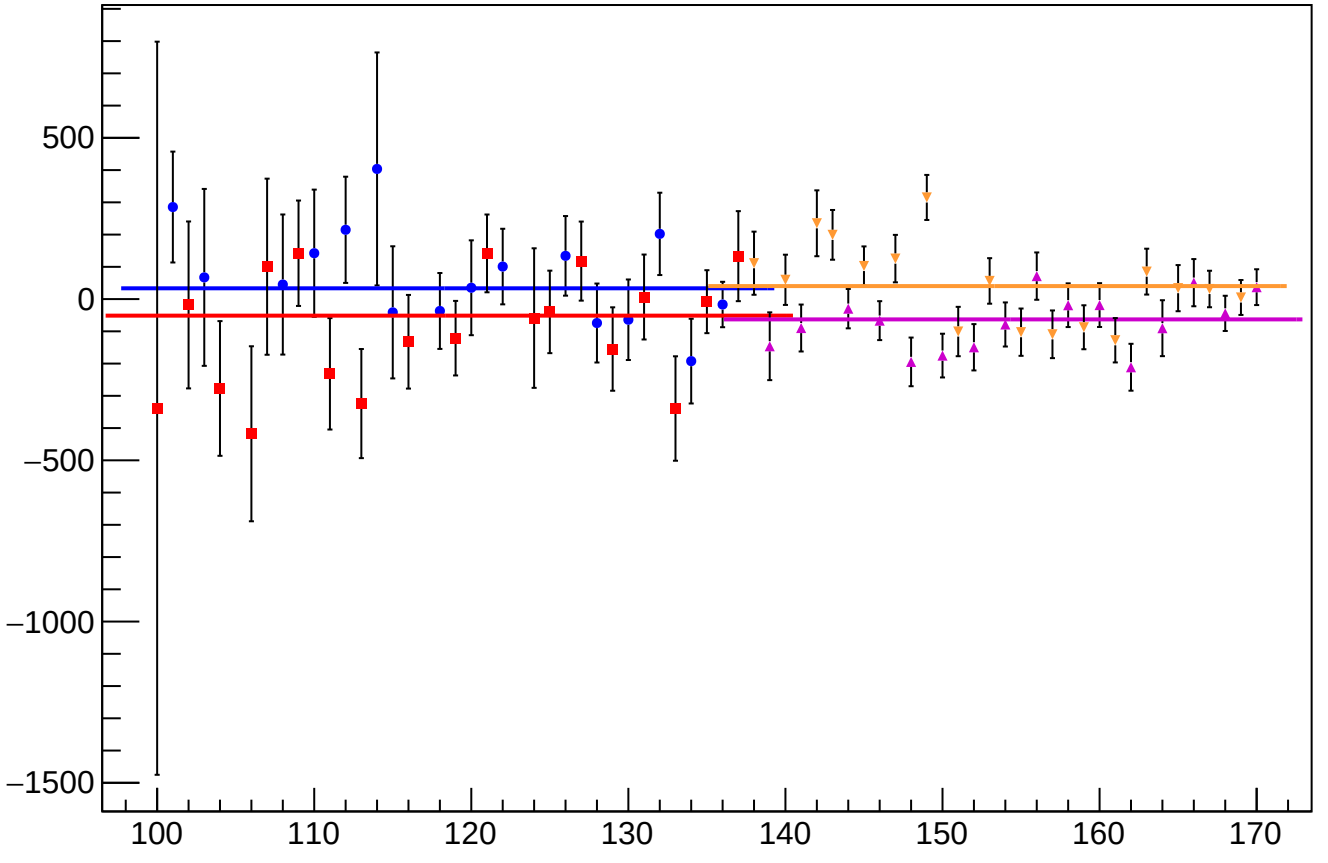
+ sign 0.000+/-0.000 $\chi^2$/NDF: 30.7/32

All: 0.000+/-0.000 $\chi^2$/NDF: 75.3/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 39.0/34


asym_sam_1526_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3511693.1/15
Left Out: 0.000+/-0.000 χ²/NDF:1386853.6/16
Right Out: 0.000+/-0.000 χ²/NDF: 4514368.5/18
Left In: 0.000+/-0.000 χ²/NDF:1905773.8/15
+ sign 0.000+/-0.000 χ²/NDF: 7380059.4/32
All: 0.000+/-0.000 χ²/NDF: 15612969.4/67
- sign 0.000+/-0.000 χ²/NDF: 8216922.9/34

# reg_asym_sam_3726_avg_mean vs Slug




Right In: 33.431+/-33.881 $\chi^2$/NDF: 12.8/15

Left Out: 40.305+/-17.131 $\chi^2$/NDF:48.0/16

Right Out: -51.335+/-34.851 $\chi^2$/NDF: 19.6/18

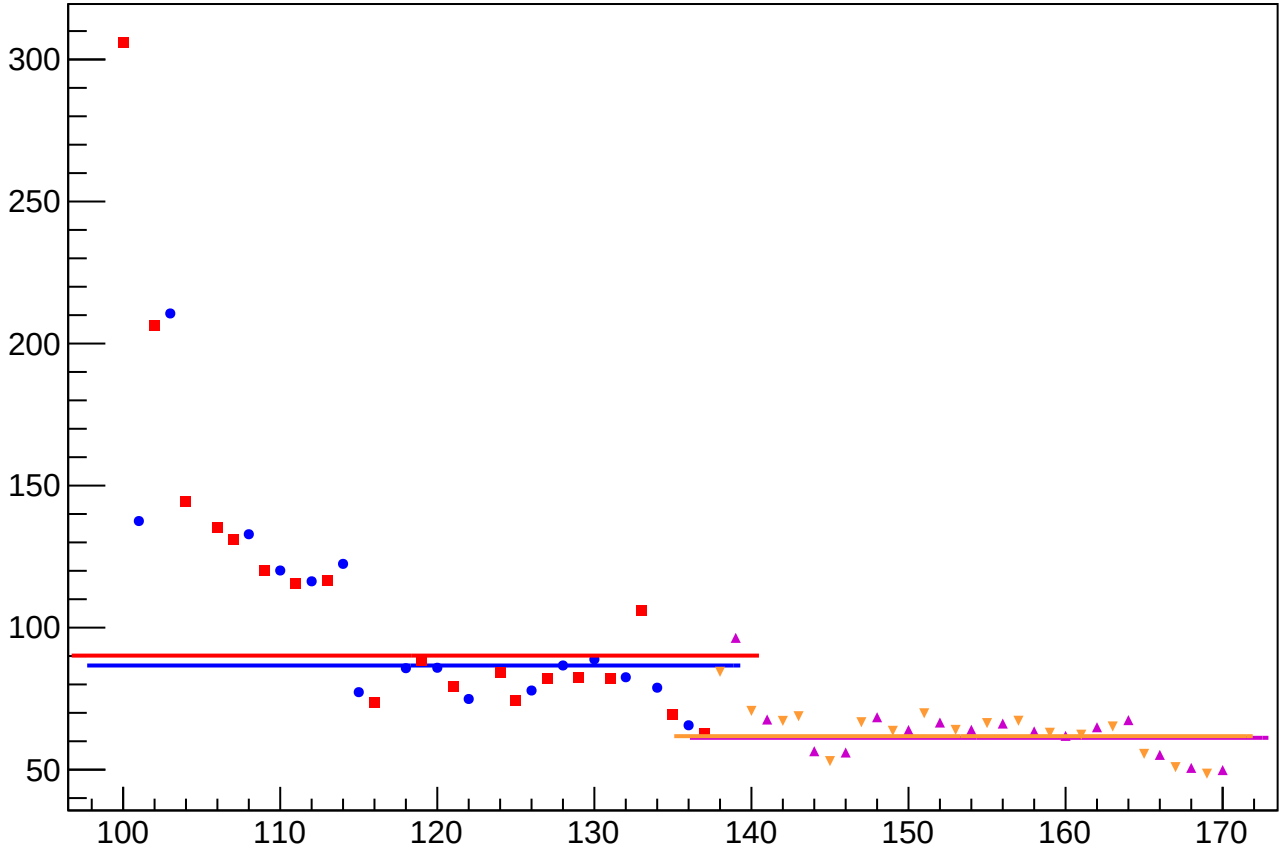
Left In: -62.979+/-17.119 $\chi^2$/NDF:22.6/15

+ sign 38.905+/-15.288 $\chi^2$/NDF: 60.8/32

All: -10.655+/-10.837 $\chi^2$/NDF: 124.2/67

- sign -60.716+/-15.365 $\chi^2$/NDF: 42.2/34

# reg_asym_sam_3726_avg_rms vs Slug




Right In: 86.666+/-0.024 $\chi^2$/NDF: 1038813.4/15

Left Out: 61.792+/-0.012 $\chi^2$/NDF:464039.6/16

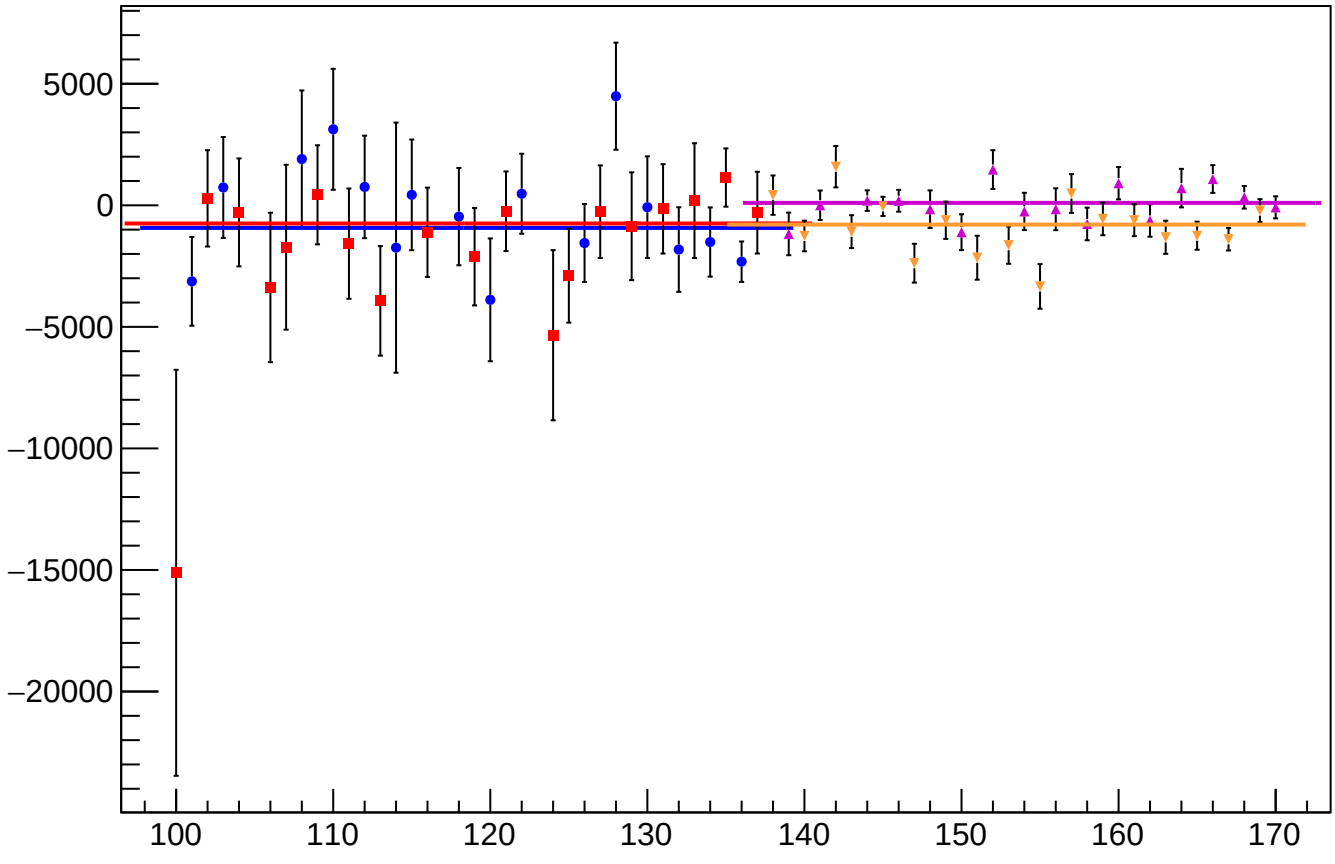
Right Out: 90.153+/-0.025 $\chi^2$/NDF: 1149976.9/18

Left In: 61.215+/-0.012 $\chi^2$/NDF:502676.0/15

+ sign 66.857+/-0.011 $\chi^2$/NDF: 2361351.6/32

All: 66.848+/-0.008 $\chi^2$/NDF: 5124926.5/67

- sign 66.839+/-0.011 $\chi^2$/NDF: 2763573.6/34




Right In: -929.821+/-440.893 $\chi^2$/NDF: 18.5/15

Left Out: -792.187+/-154.496 $\chi^2$/NDF:36.8/16

Right Out: -747.199+/-467.902 $\chi^2$/NDF: 13.0/18

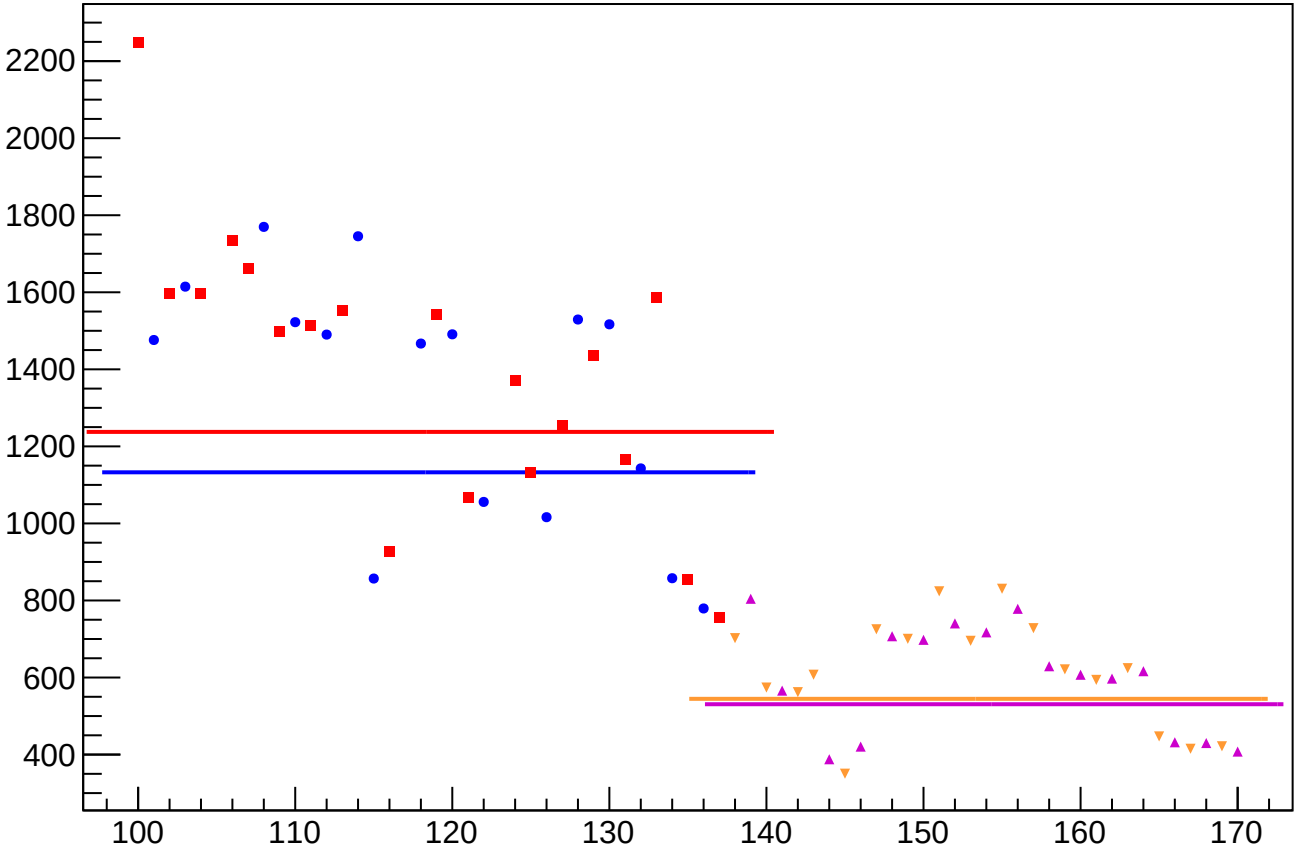
Left In: 100.062+/-151.450 $\chi^2$/NDF:16.5/15

+ sign -807.239+/-145.803 $\chi^2$/NDF: 55.4/32

All: -388.875+/-102.487 $\chi^2$/NDF: 104.2/67

- sign 19.714+/-144.090 $\chi^2$/NDF: 32.5/34

# asym_sam_3726_avg_reg_correction_rms vs Slug




Right In: 1132.688+/-0.312 $\chi^2$/NDF: 1124151.1/15

Left Out: 544.691+/-0.109 $\chi^2$/NDF:1751356.1/16

Right Out: 1237.591+/-0.331 $\chi^2$/NDF: 895314.3/18

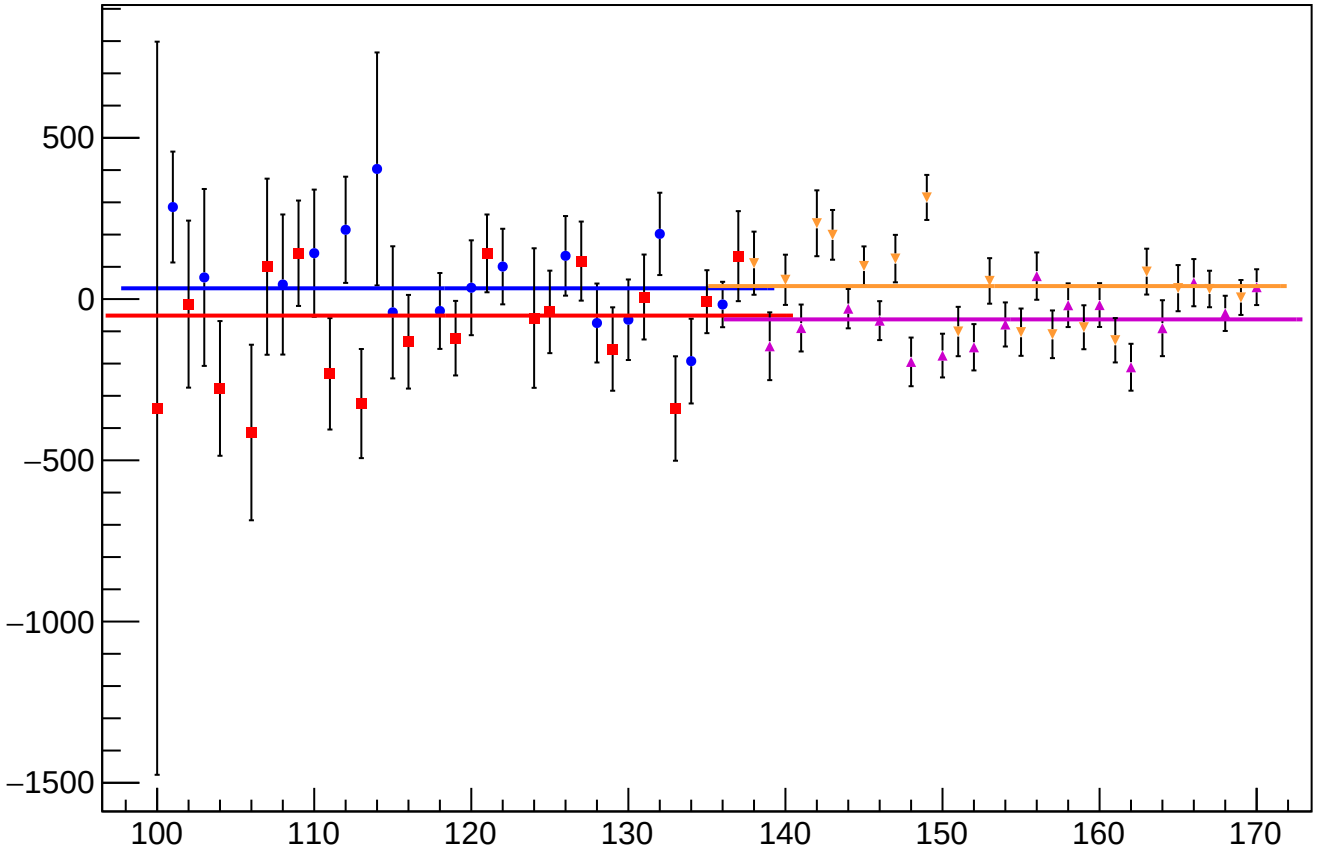
Left In: 530.679+/-0.107 $\chi^2$/NDF:1592568.9/15

+ sign 608.996+/-0.103 $\chi^2$/NDF: 6043723.8/32

All: 603.290+/-0.072 $\chi^2$/NDF: 12669846.4/67

- sign 597.717+/-0.102 $\chi^2$/NDF: 6620067.8/34

# cor_asym_sam_3726_avg_mean vs Slug




Right In: 33.422+/-33.881 $\chi^2$/NDF: 12.8/15

Left Out: 40.308+/-17.131 $\chi^2$/NDF:48.0/16

Right Out: -51.188+/-34.853 $\chi^2$/NDF: 19.5/18

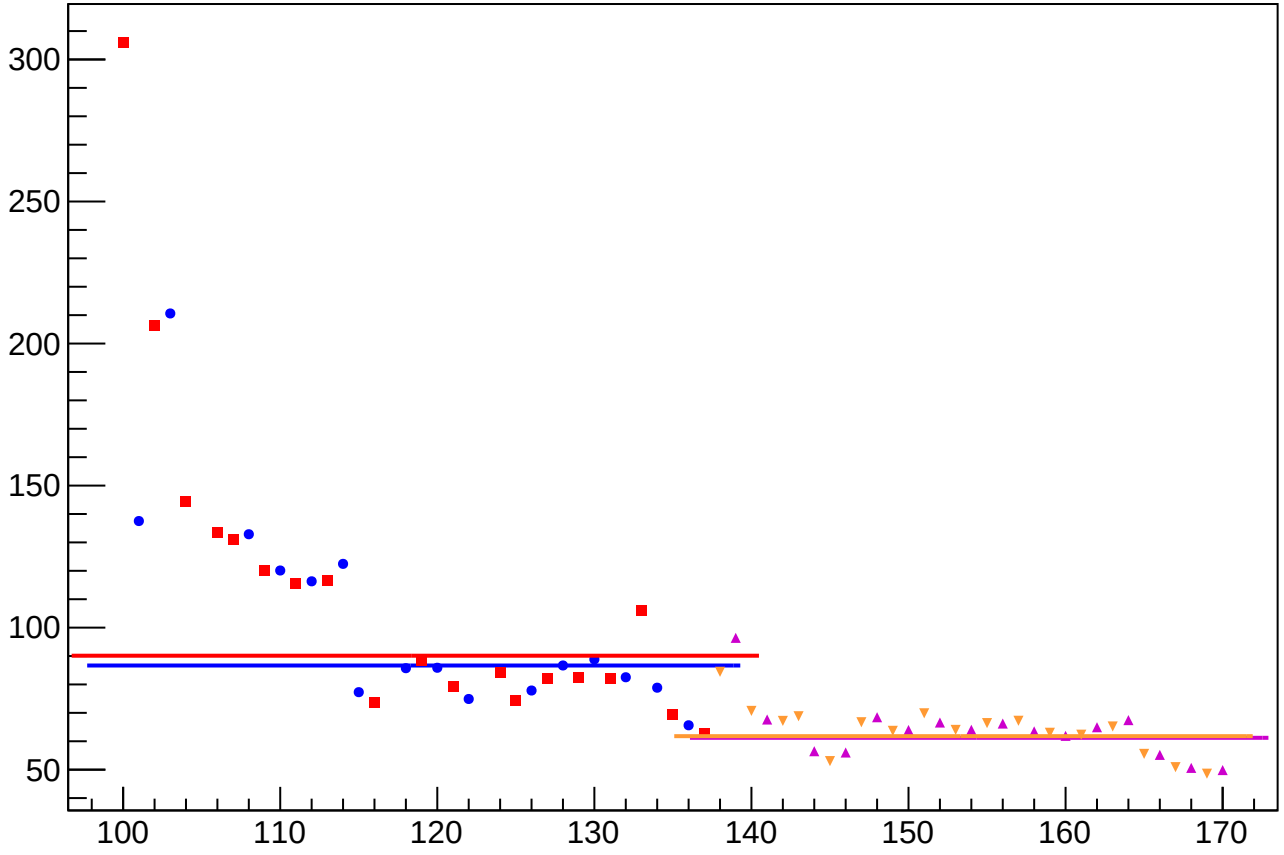
Left In: -62.977+/-17.119 $\chi^2$/NDF:22.6/15

+ sign 38.906+/-15.288 $\chi^2$/NDF: 60.8/32

All: -10.639+/-10.837 $\chi^2$/NDF: 124.2/67

- sign -60.686+/-15.365 $\chi^2$/NDF: 42.2/34

# cor_asym_sam_3726_avg_rms vs Slug




Right In: 86.666+/-0.024 $\chi^2$/NDF: 1038816.2/15

Left Out: 61.792+/-0.012 $\chi^2$/NDF:464039.5/16

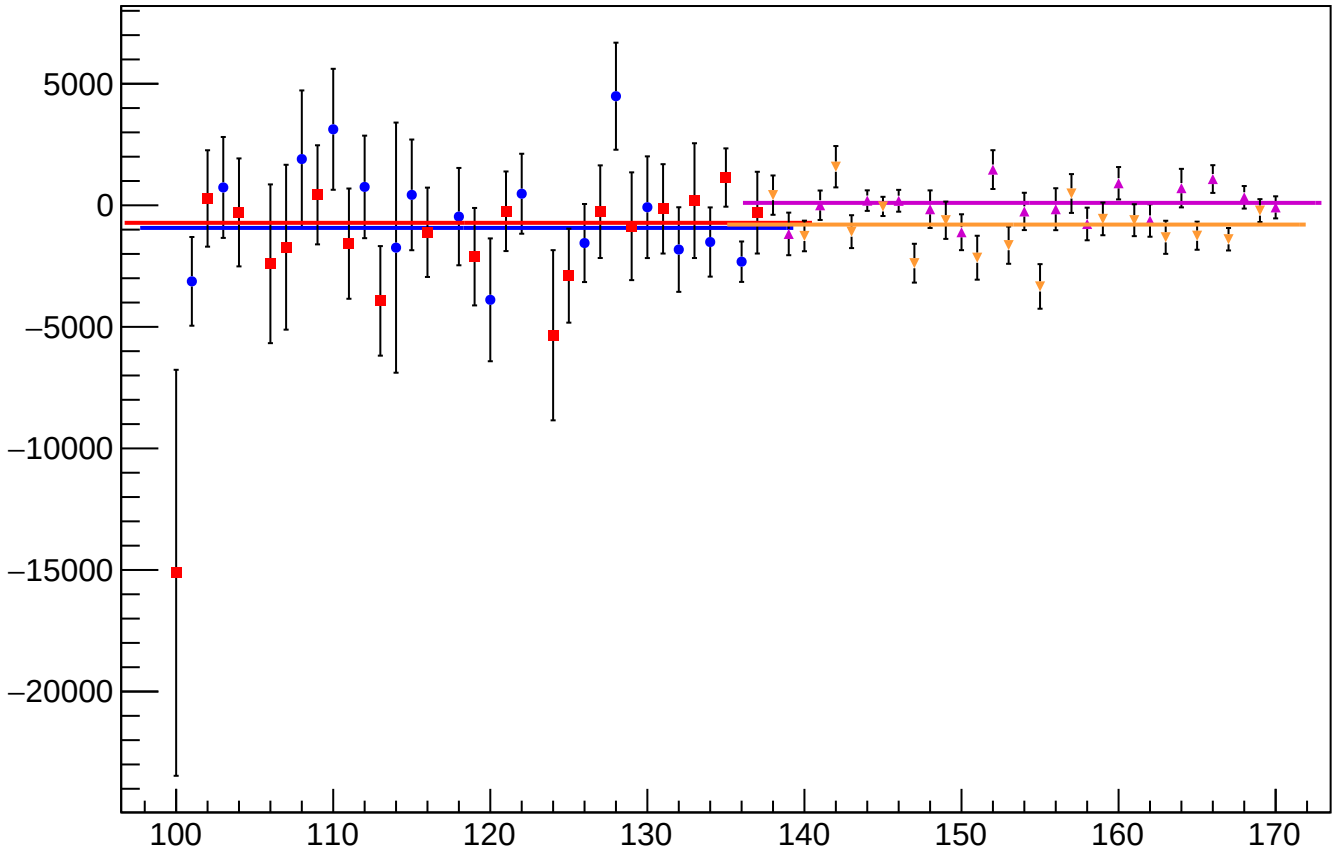
Right Out: 90.116+/-0.025 $\chi^2$/NDF: 1145283.2/18

Left In: 61.215+/-0.012 $\chi^2$/NDF:502676.0/15

+ sign 66.857+/-0.011 $\chi^2$/NDF: 2361353.9/32

All: 66.844+/-0.008 $\chi^2$/NDF: 5117282.0/67

- sign 66.832+/-0.011 $\chi^2$/NDF: 2755925.4/34




Right In: -929.788+/-440.894 $\chi^2$/NDF: 18.5/15

Left Out: -792.182+/-154.495 $\chi^2$/NDF:36.8/16

Right Out: -720.600+/-468.540 $\chi^2$/NDF: 12.5/18

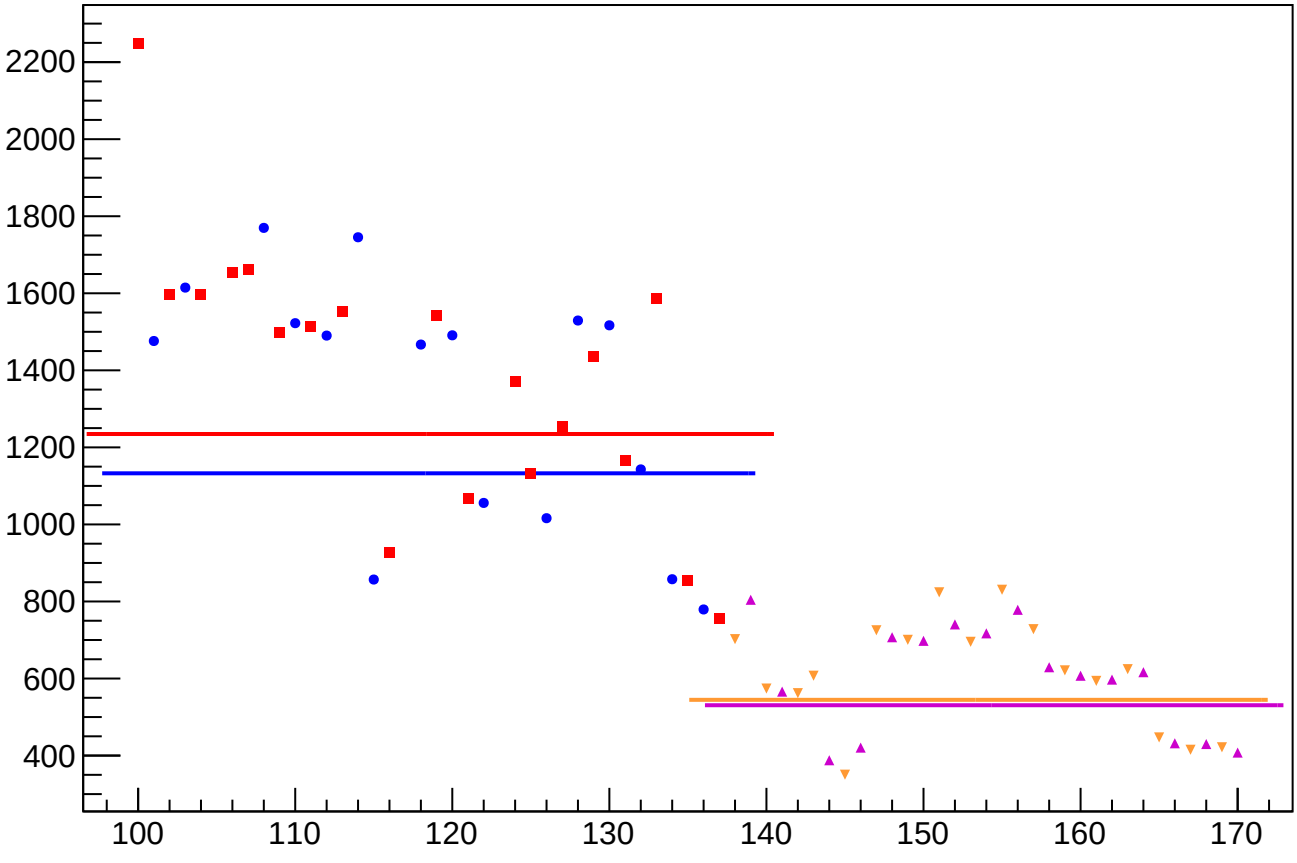
Left In: 100.062+/-151.450 $\chi^2$/NDF:16.5/15

+ sign -807.230+/-145.803 $\chi^2$/NDF: 55.4/32

All: -387.551+/-102.494 $\chi^2$/NDF: 103.6/67

- sign 22.428+/-144.108 $\chi^2$/NDF: 31.8/34

# asym_sam_3726_avg_cor_correction_rms vs Slug




Right In: 1132.689+/-0.312 $\chi^2$/NDF: 1124187.2/15

Left Out: 544.691+/-0.109 $\chi^2$/NDF:1751360.3/16

Right Out: 1234.709+/-0.331 $\chi^2$/NDF: 876272.4/18

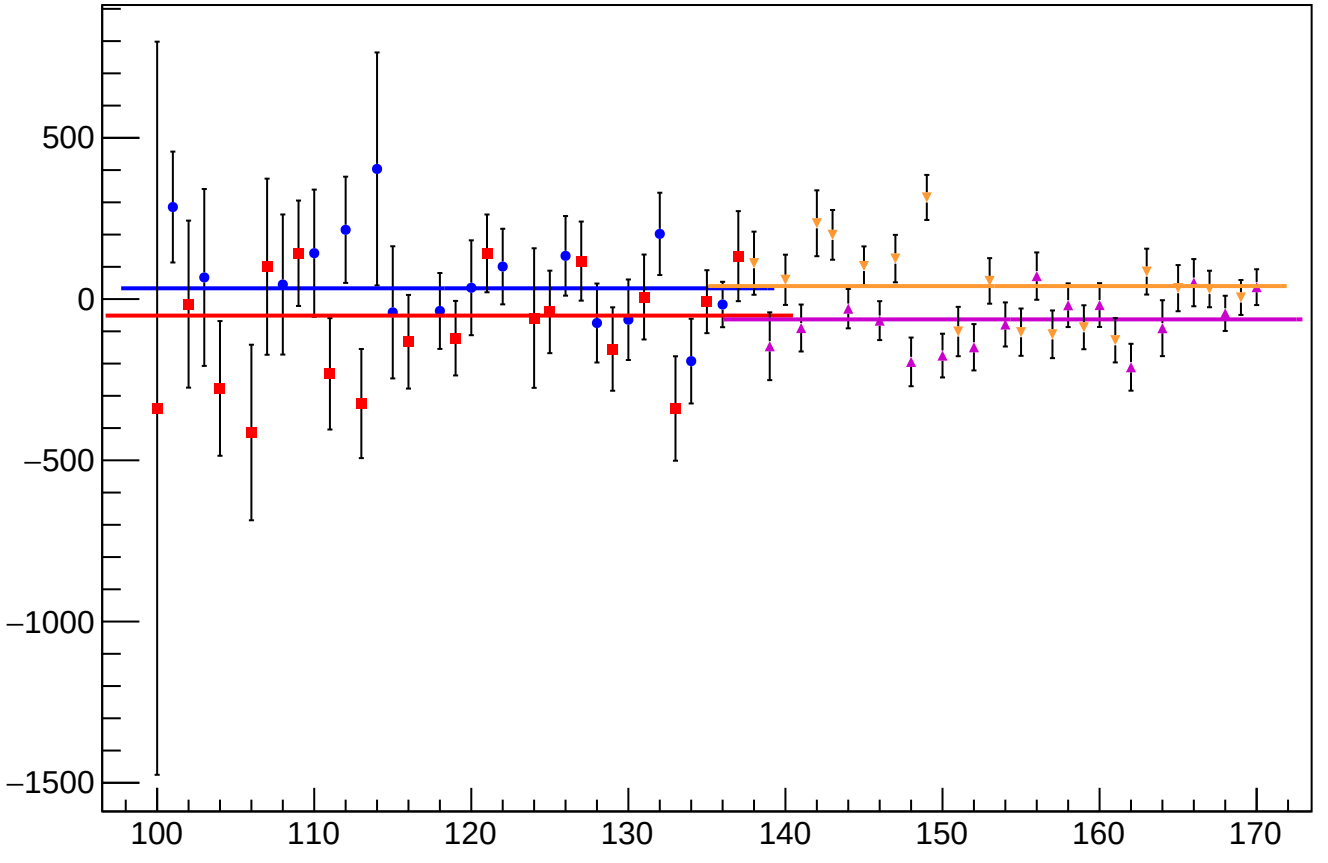
Left In: 530.679+/-0.107 $\chi^2$/NDF:1592569.4/15

+ sign 608.995+/-0.103 $\chi^2$/NDF: 6043766.5/32

All: 603.069+/-0.072 $\chi^2$/NDF: 12607604.7/67

- sign 597.279+/-0.102 $\chi^2$/NDF: 6557305.8/34

# eigen_cor_asym_sam_3726_avg_mean vs Slug




Right In: 33.422+/-33.881 $\chi^2$/NDF: 12.8/15

Left Out: 40.308+/-17.131 $\chi^2$/NDF:48.0/16

Right Out: -51.188+/-34.853 $\chi^2$/NDF: 19.5/18

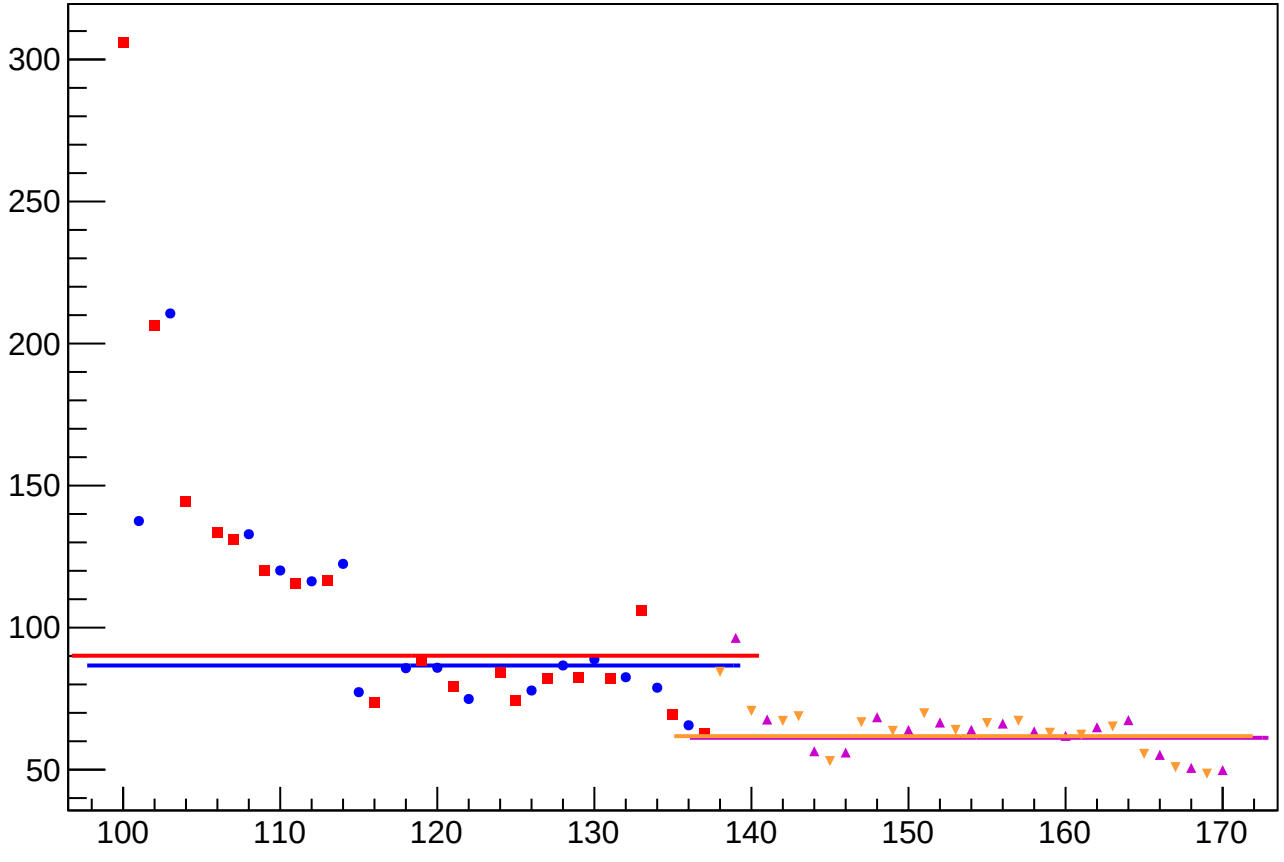
Left In: -62.977+/-17.119 $\chi^2$/NDF:22.6/15

+ sign 38.906+/-15.288 $\chi^2$/NDF: 60.8/32

All: -10.639+/-10.837 $\chi^2$/NDF: 124.2/67

- sign -60.686+/-15.365 $\chi^2$/NDF: 42.2/34

# eigen_cor_asym_sam_3726_avg_rms vs Slug




Right In: 86.666+/-0.024 $\chi^2$/NDF: 1038816.2/15

Left Out: 61.792+/-0.012 $\chi^2$/NDF:464039.5/16

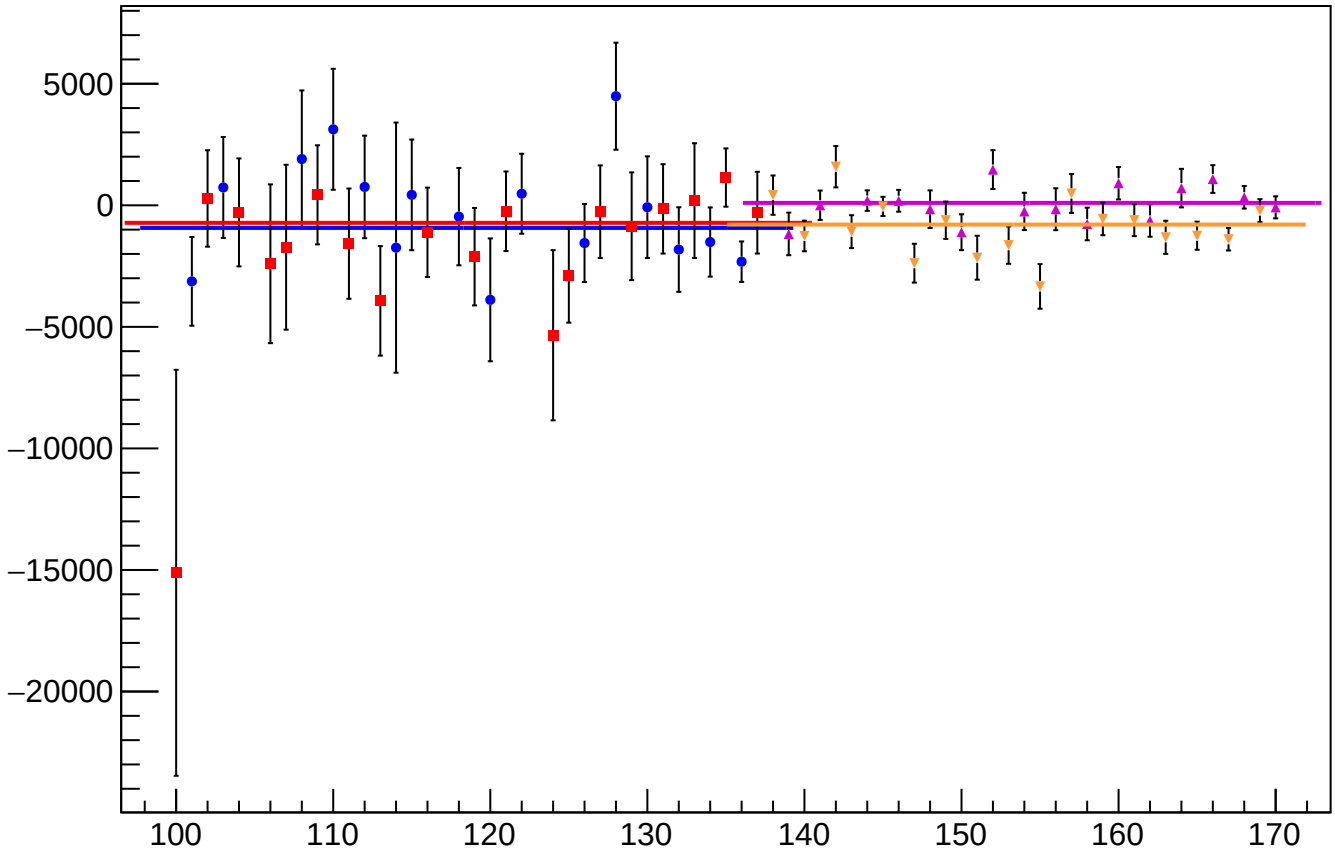
Right Out: 90.116+/-0.025 $\chi^2$/NDF: 1145283.2/18

Left In: 61.215+/-0.012 $\chi^2$/NDF:502676.0/15

+ sign 66.857+/-0.011 $\chi^2$/NDF: 2361353.9/32

All: 66.844+/-0.008 $\chi^2$/NDF: 5117282.0/67

- sign 66.832+/-0.011 $\chi^2$/NDF: 2755925.4/34




Right In: -929.788+/-440.894 $\chi^2$/NDF: 18.5/15

Left Out: -792.182+/-154.495 $\chi^2$/NDF:36.8/16

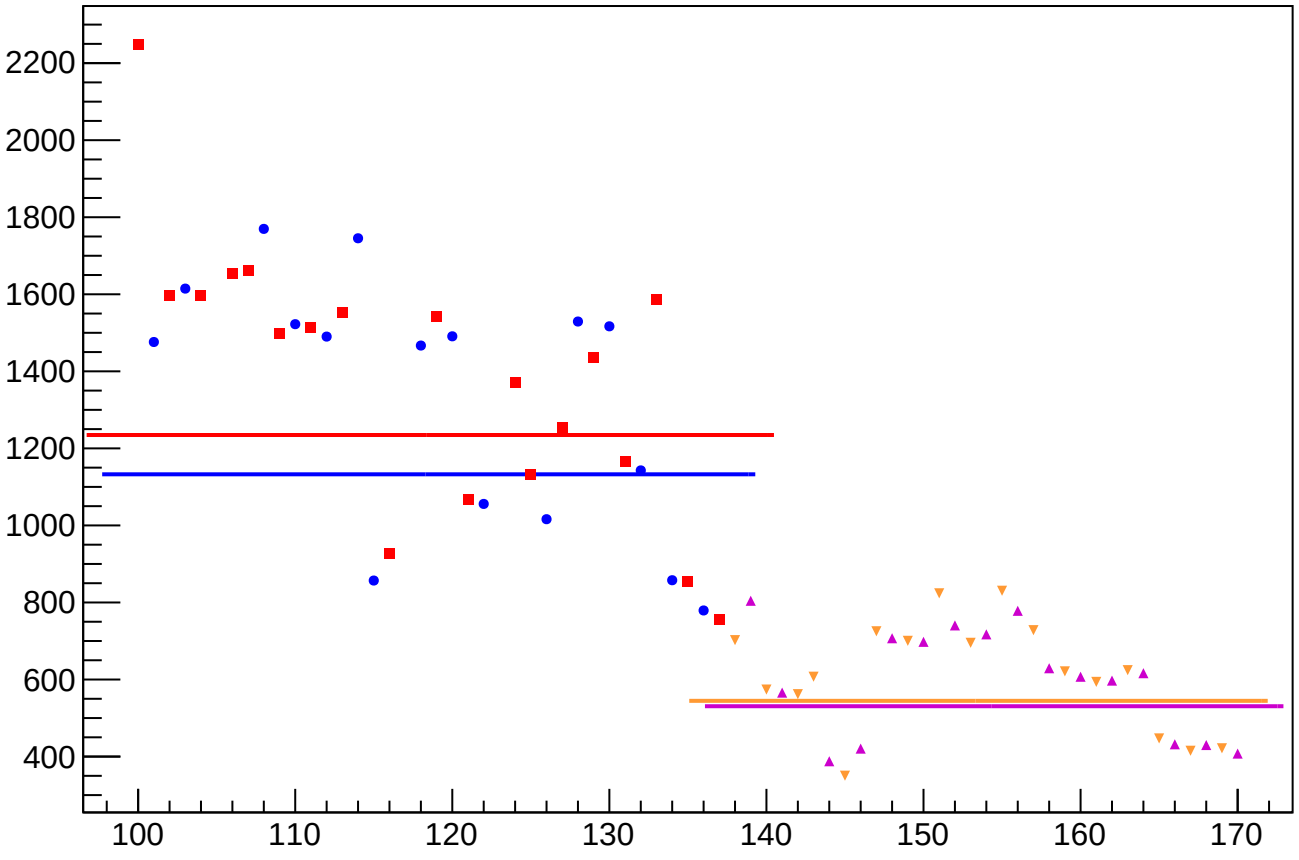
Right Out: -720.600+/-468.540 $\chi^2$/NDF: 12.5/18

Left In: 100.062+/-151.450 $\chi^2$/NDF:16.5/15

+ sign -807.230+/-145.803 $\chi^2$/NDF: 55.4/32

All: -387.551+/-102.494 $\chi^2$/NDF: 103.6/67

- sign 22.428+/-144.108 $\chi^2$/NDF: 31.8/34




Right In: 1132.689+/-0.312 $\chi^2$/NDF: 1124187.2/15

Left Out: 544.691+/-0.109 $\chi^2$/NDF:1751360.3/16

Right Out: 1234.709+/-0.331 $\chi^2$/NDF: 876272.4/18

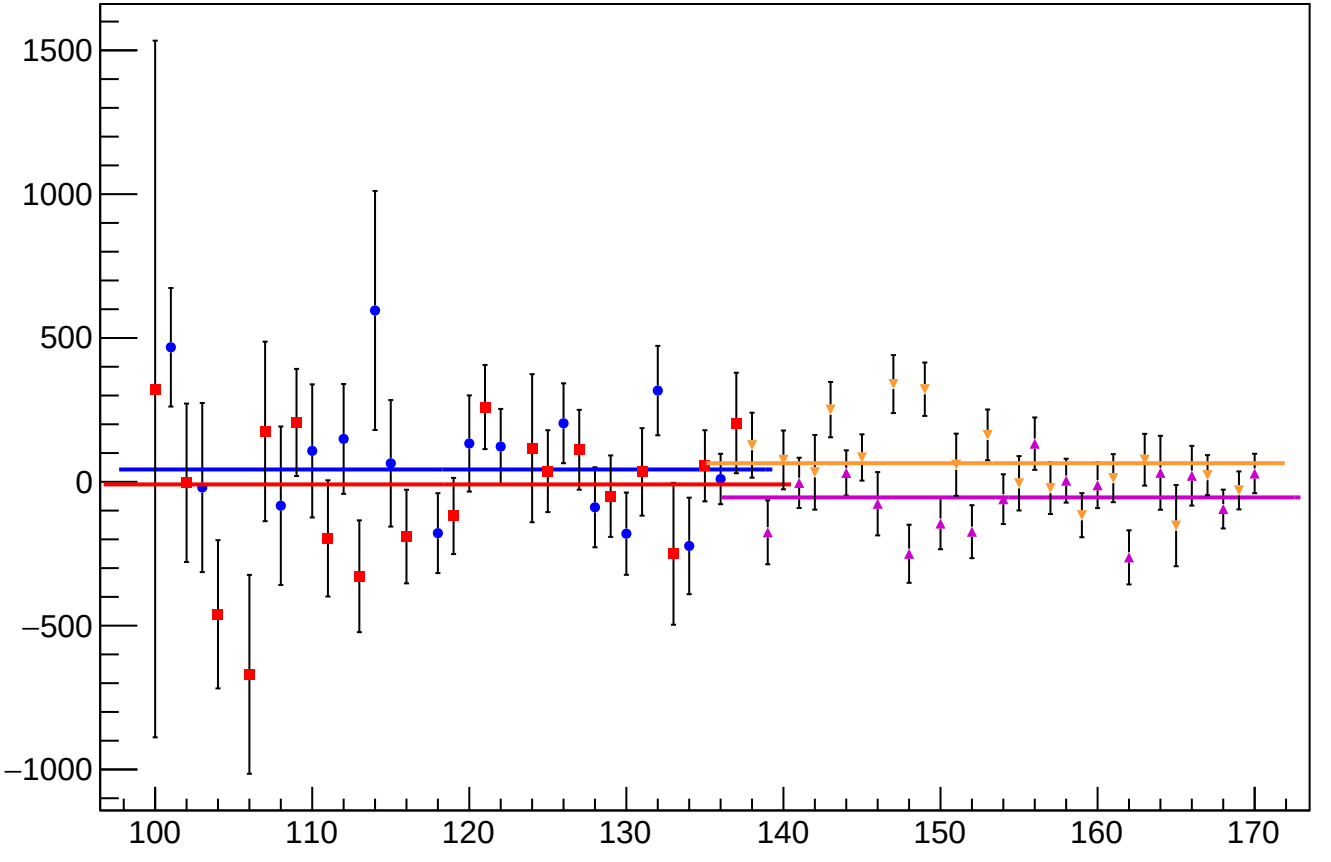
Left In: 530.679+/-0.107 $\chi^2$/NDF:1592569.4/15

\+ sign 608.995+/-0.103 $\chi^2$/NDF: 6043766.5/32

All: 603.069+/-0.072 $\chi^2$/NDF: 12607604.7/67

\- sign 597.279+/-0.102 $\chi^2$/NDF: 6557305.8/34

# dit_asym_sam_3726_avg_mean vs Slug




Right In: 42.914+/-39.948 $\chi^2$/NDF: 20.3/15

Left Out: 64.722+/-21.918 $\chi^2$/NDF:32.8/16

Right Out: -8.989+/-41.060 $\chi^2$/NDF: 21.3/18

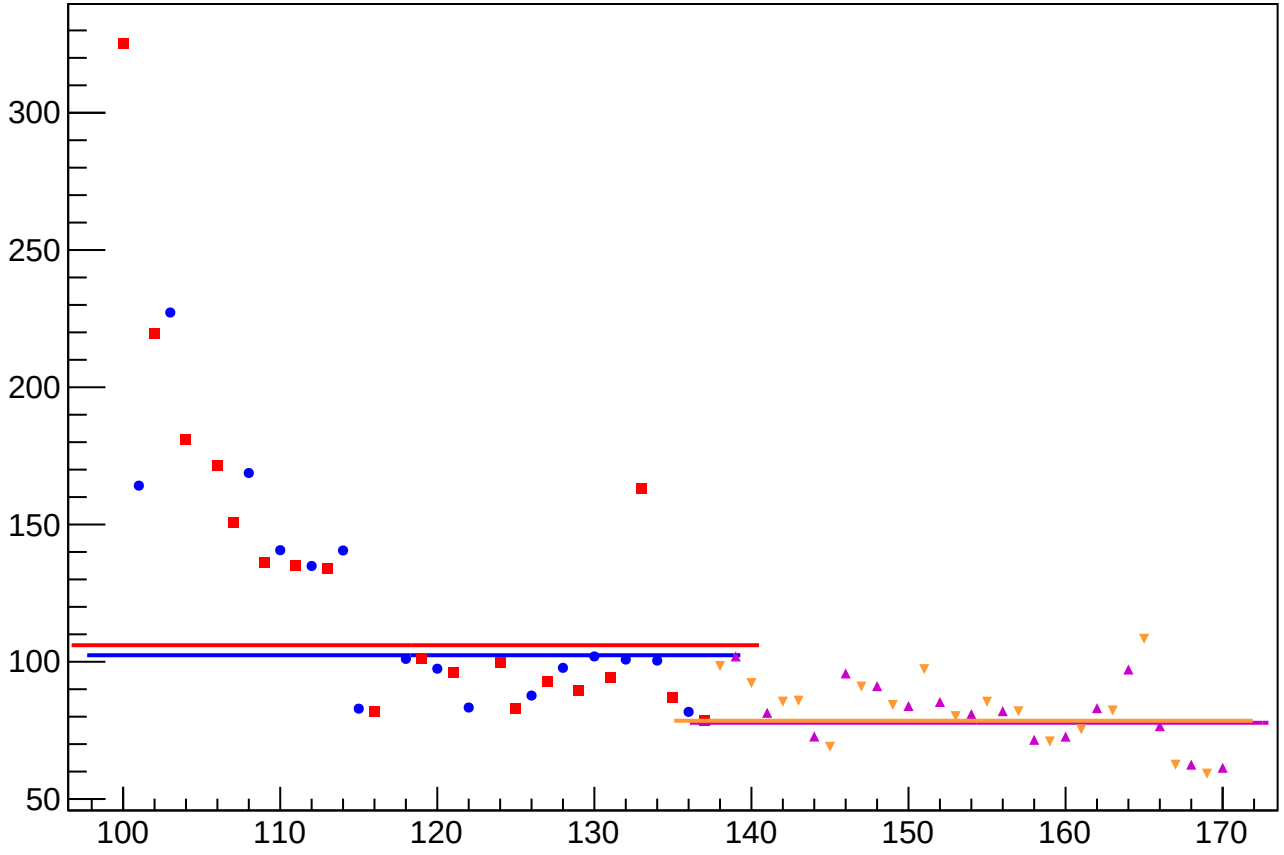
Left In: -54.236+/-21.931 $\chi^2$/NDF:22.0/15

+ sign 59.676+/-19.216 $\chi^2$/NDF: 53.3/32

All: 8.089+/-13.633 $\chi^2$/NDF: 112.1/67

- sign -44.192+/-19.345 $\chi^2$/NDF: 44.3/34

# dit_asym_sam_3726_avg_rms vs Slug




Right In: 102.378+/-0.028 $\chi^2$/NDF: 982311.5/15

Left Out: 78.518+/-0.015 $\chi^2$/NDF:647420.0/16

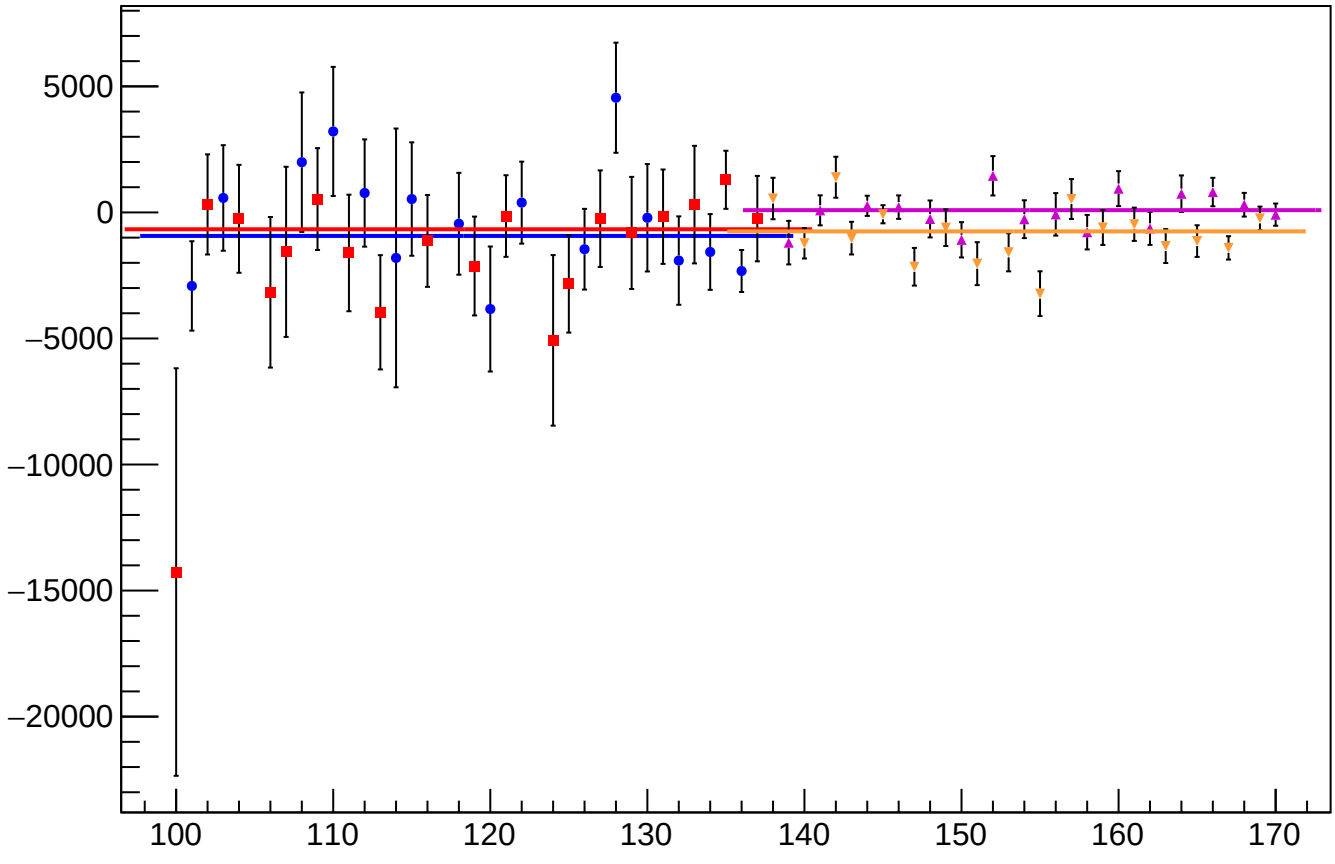
Right Out: 106.032+/-0.029 $\chi^2$/NDF: 1191294.0/18

Left In: 77.773+/-0.016 $\chi^2$/NDF:513924.4/15

+ sign 84.039+/-0.014 $\chi^2$/NDF: 2178148.1/32

All: 84.042+/-0.010 $\chi^2$/NDF: 4620438.2/67

- sign 84.046+/-0.014 $\chi^2$/NDF: 2442289.9/34




Right In: -932.381+/-442.724 $\chi^2$/NDF: 18.5/15

Left Out: -751.612+/-150.773 $\chi^2$/NDF:35.8/16

Right Out: -668.521+/-463.213 $\chi^2$/NDF: 13.5/18

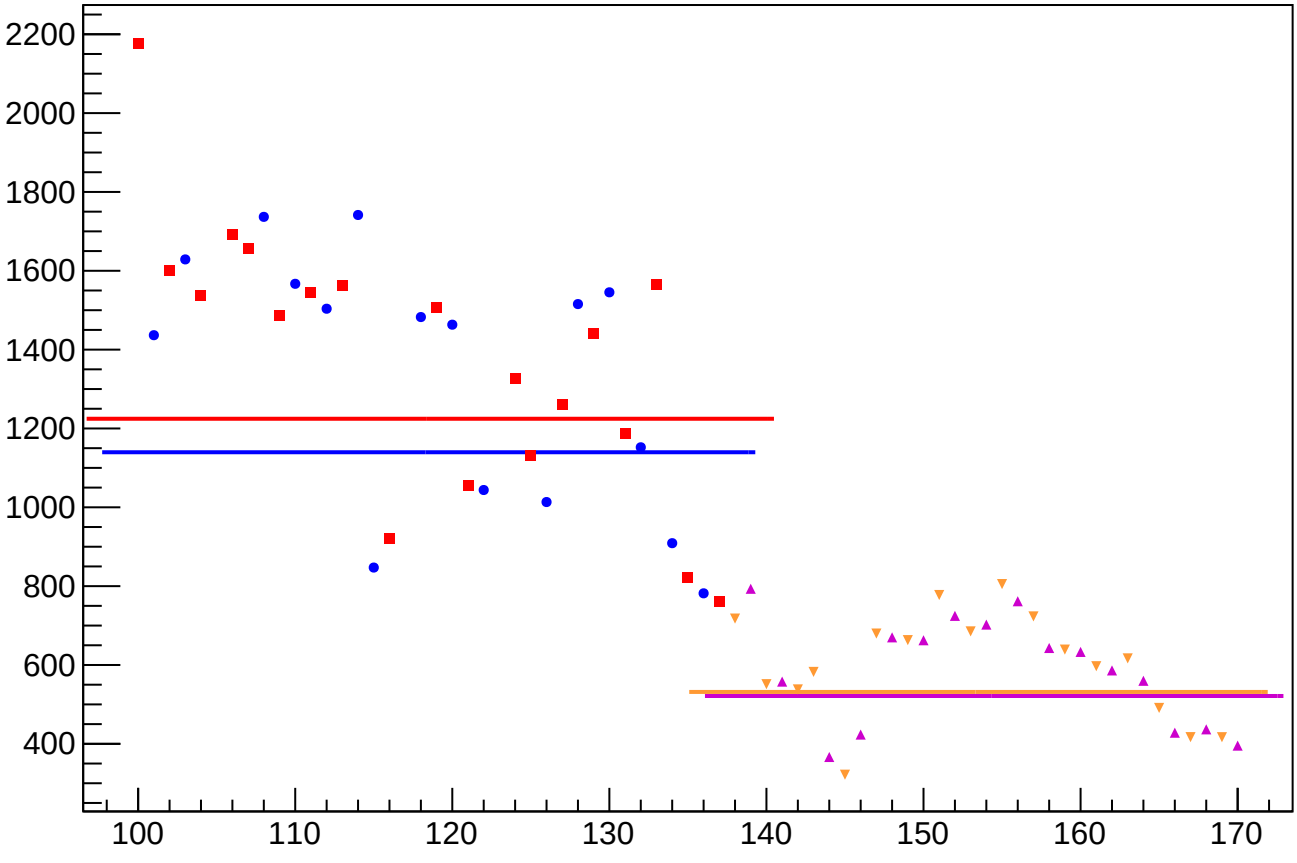
Left In: 89.264+/-149.024 $\chi^2$/NDF:16.0/15

+ sign -770.398+/-142.723 $\chi^2$/NDF: 54.5/32

All: -373.722+/-100.615 $\chi^2$/NDF: 101.7/67

- sign 18.188+/-141.863 $\chi^2$/NDF: 31.9/34

# asym_sam_3726_avg_dit_correction_rms vs Slug




Right In: 1139.658+/-0.313 $\chi^2$/NDF: 1093410.3/15

Left Out: 531.647+/-0.107 $\chi^2$/NDF:1853402.3/16

Right Out: 1224.637+/-0.328 $\chi^2$/NDF: 922388.4/18

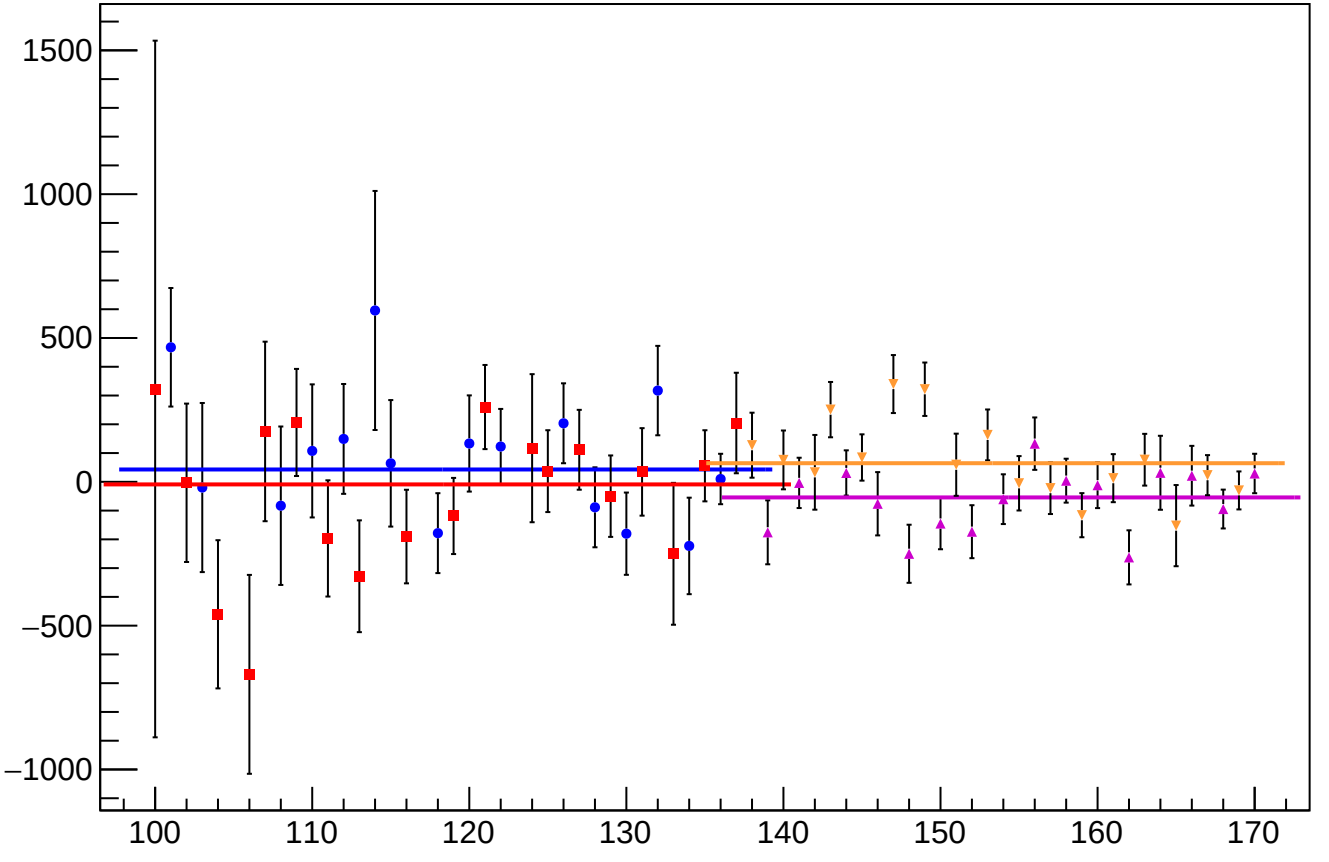
Left In: 521.350+/-0.105 $\chi^2$/NDF:1595742.7/15

+ sign 594.835+/-0.101 $\chi^2$/NDF: 6326904.7/32

All: 591.052+/-0.071 $\chi^2$/NDF: 13025750.3/67

- sign 587.315+/-0.100 $\chi^2$/NDF: 6696052.5/34

# eigen_dit_asym_sam_3726_avg_mean vs Slug




Right In: 42.914+/-39.948 $\chi^2$/NDF: 20.3/15

Left Out: 64.723+/-21.918 $\chi^2$/NDF:32.8/16

Right Out: -8.986+/-41.060 $\chi^2$/NDF: 21.3/18

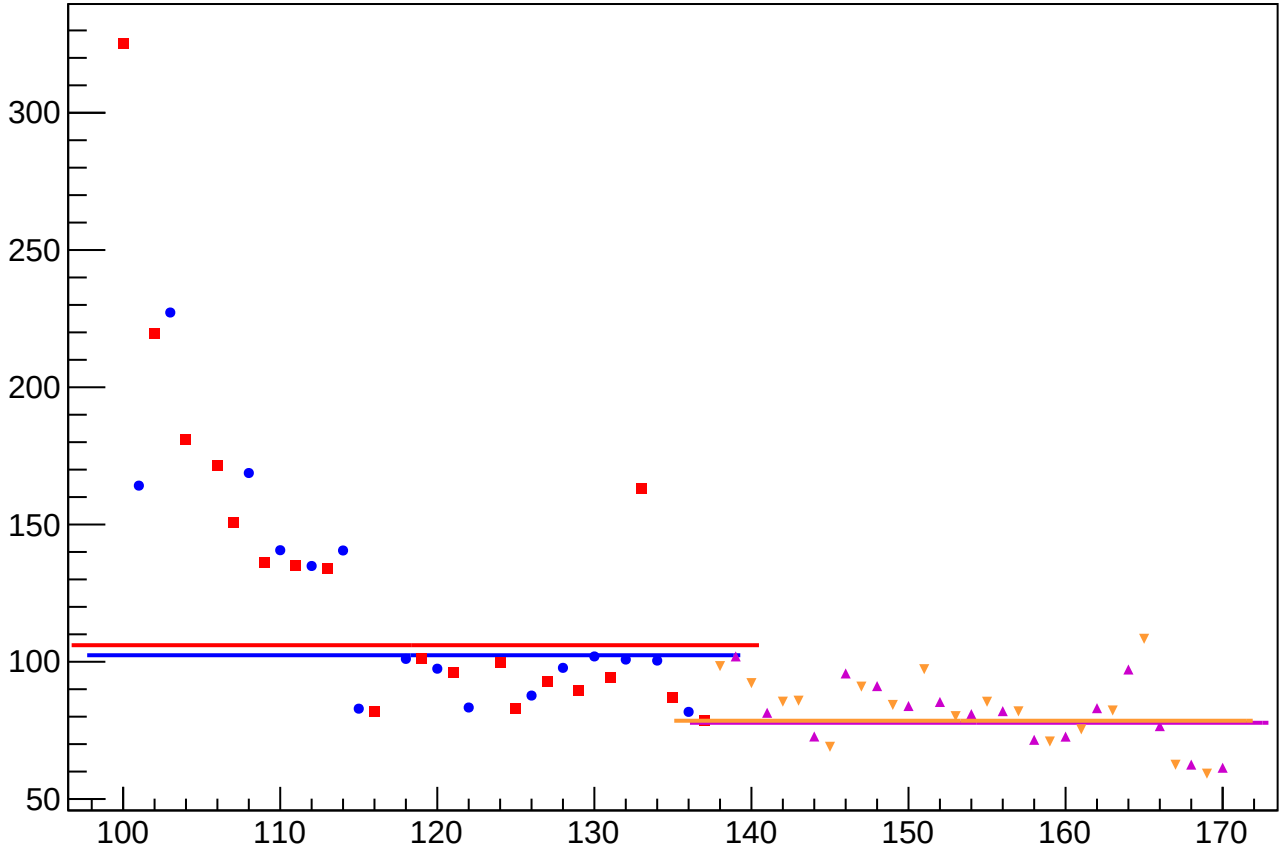
Left In: -54.234+/-21.931 $\chi^2$/NDF:22.0/15

+ sign 59.676+/-19.216 $\chi^2$/NDF: 53.3/32

All: 8.090+/-13.633 $\chi^2$/NDF: 112.1/67

- sign -44.190+/-19.345 $\chi^2$/NDF: 44.3/34

# eigen_dit_asym_sam_3726_avg_rms vs Slug




Right In: 102.378+/-0.028 $\chi^2$/NDF: 982307.0/15

Left Out: 78.518+/-0.015 $\chi^2$/NDF:647409.2/16

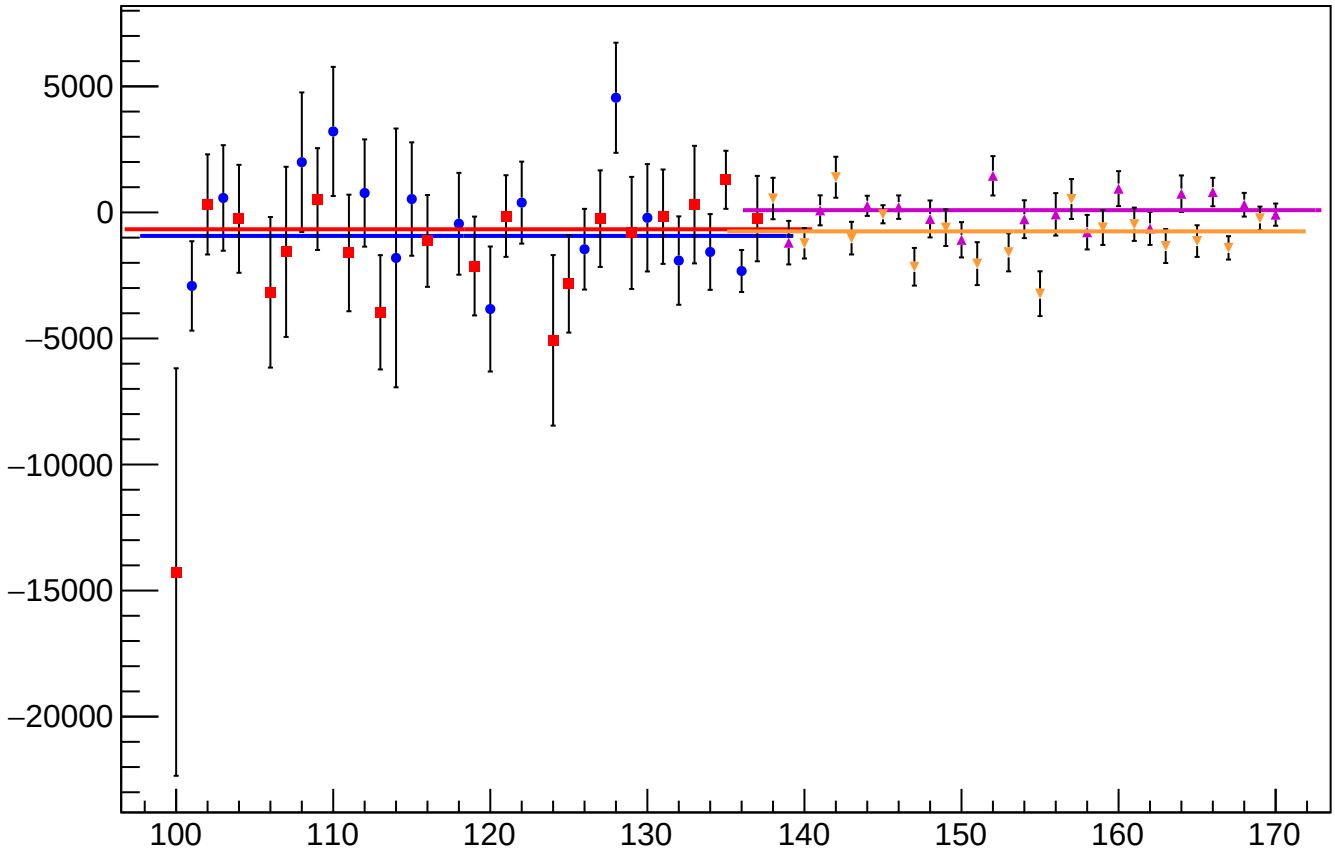
Right Out: 106.032+/-0.029 $\chi^2$/NDF: 1191296.9/18

Left In: 77.774+/-0.016 $\chi^2$/NDF:513916.4/15

+ sign 84.039+/-0.014 $\chi^2$/NDF: 2178108.7/32

All: 84.043+/-0.010 $\chi^2$/NDF: 4620369.3/67

- sign 84.046+/-0.014 $\chi^2$/NDF: 2442260.4/34




Right In: -932.377+/-442.724 $\chi^2$/NDF: 18.5/15

Left Out: -751.611+/-150.773 $\chi^2$/NDF:35.8/16

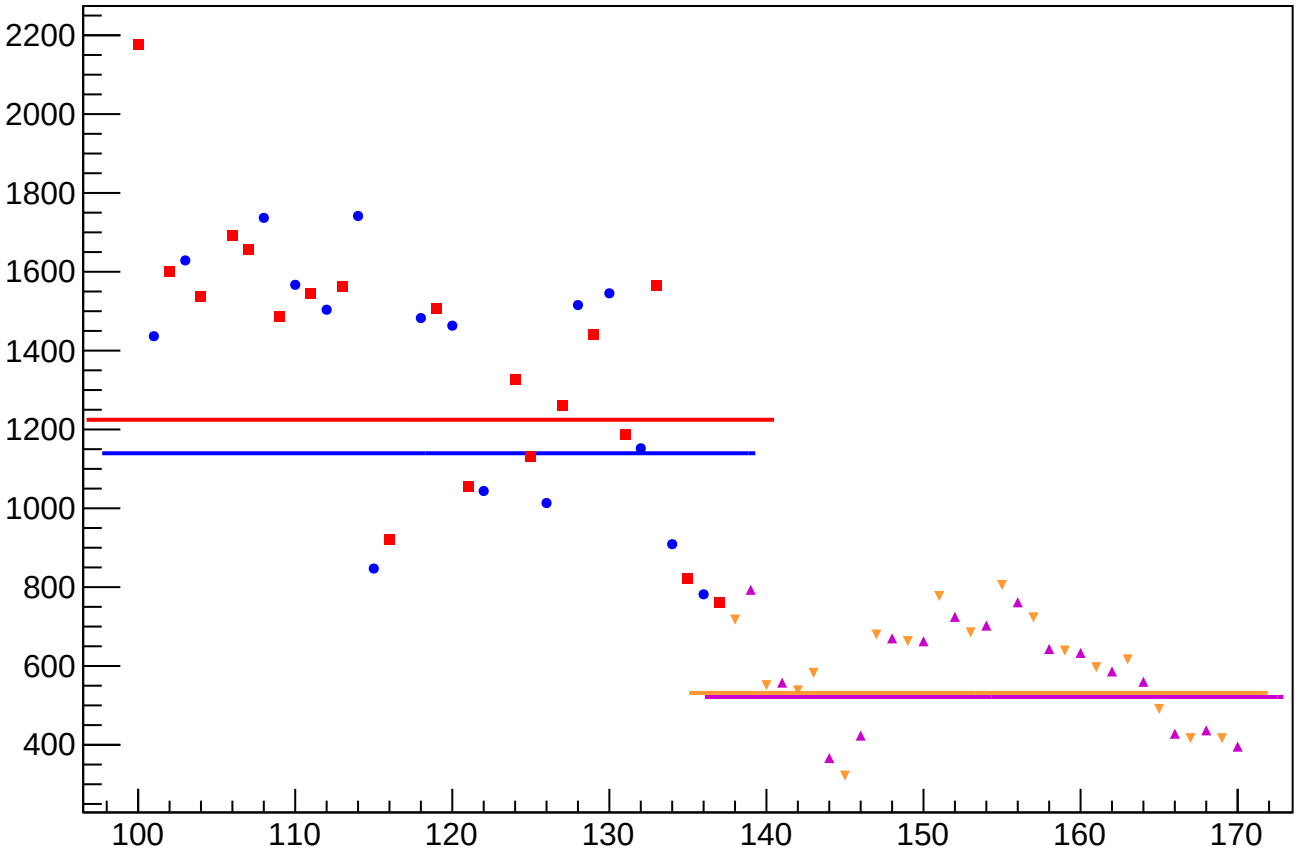
Right Out: -668.522+/-463.212 $\chi^2$/NDF: 13.5/18

Left In: 89.265+/-149.024 $\chi^2$/NDF:16.0/15

+ sign -770.397+/-142.723 $\chi^2$/NDF: 54.5/32

All: -373.721+/-100.615 $\chi^2$/NDF: 101.7/67

- sign 18.188+/-141.863 $\chi^2$/NDF: 31.9/34




Right In: 1139.656+/-0.313 $\chi^2$/NDF: 1093397.5/15

Left Out: 531.646+/-0.107 $\chi^2$/NDF:1853419.6/16

Right Out: 1224.635+/-0.328 $\chi^2$/NDF: 922378.0/18

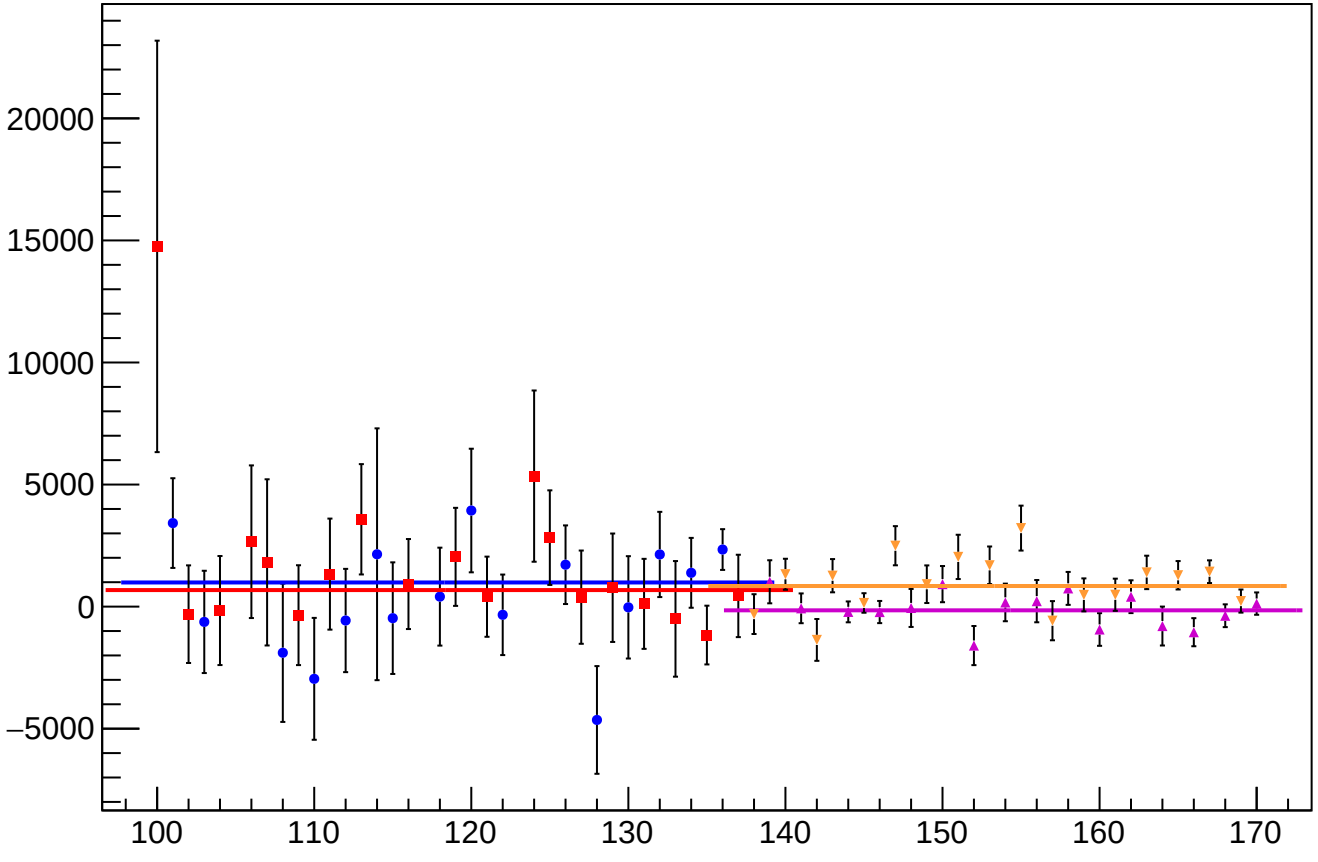
Left In: 521.350+/-0.105 $\chi^2$/NDF:1595749.7/15

+ sign 594.834+/-0.101 $\chi^2$/NDF: 6326917.0/32

All: 591.052+/-0.071 $\chi^2$/NDF: 13025761.0/67

- sign 587.314+/-0.100 $\chi^2$/NDF: 6696051.0/34

# asym_sam_3726_avg_mean vs Slug




Right In: 989.322+/-442.634 $\chi^2$/NDF: 19.0/15

Left Out: 844.236+/-155.599 $\chi^2$/NDF:34.7/16

Right Out: 677.628+/-469.652 $\chi^2$/NDF: 11.9/18

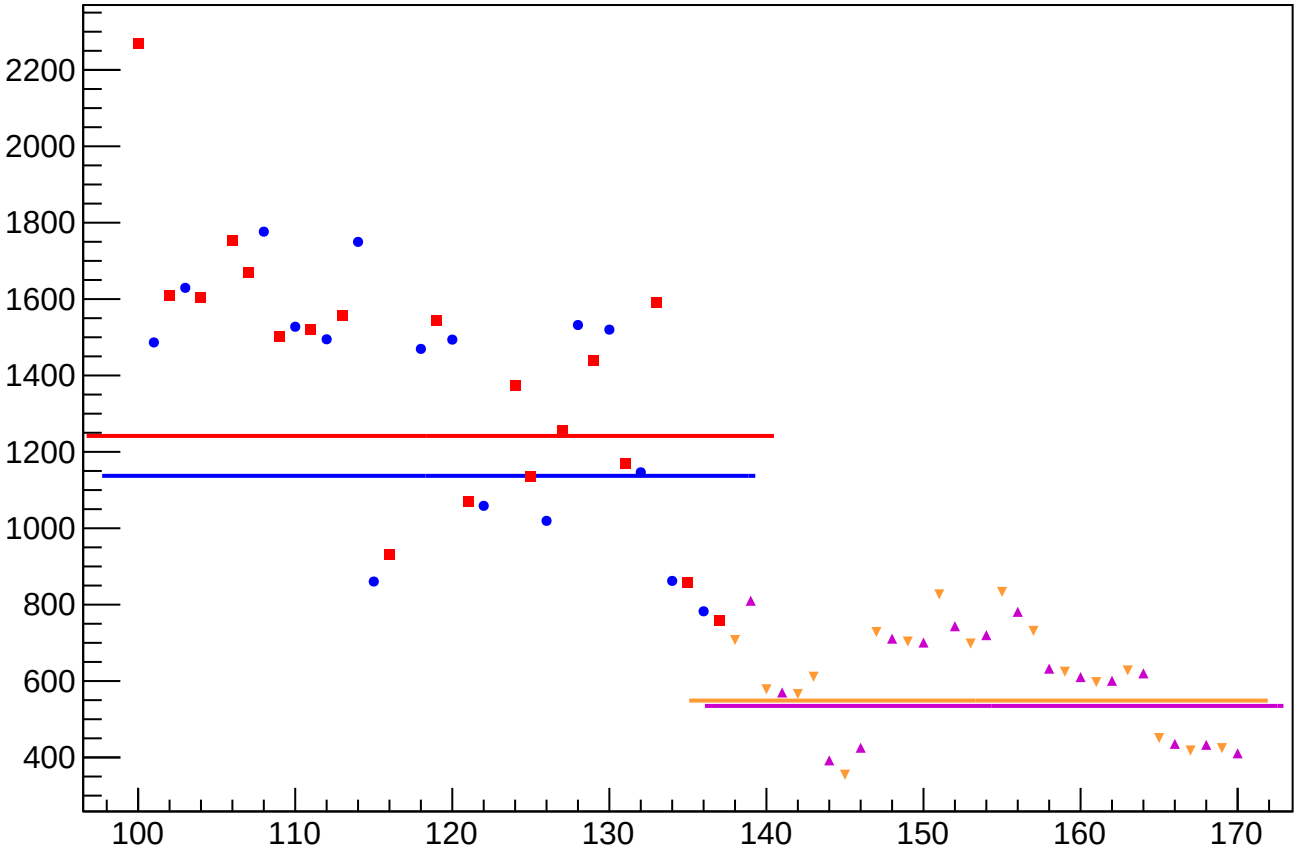
Left In: -152.127+/-152.577 $\chi^2$/NDF:15.0/15

+ sign 860.193+/-146.793 $\chi^2$/NDF: 53.8/32

All: 388.263+/-103.199 $\chi^2$/NDF: 104.1/67

- sign -72.914+/-145.111 $\chi^2$/NDF: 29.8/34

# asym_sam_3726_avg_rms vs Slug




Right In: 1137.220+/-0.313 $\chi^2$/NDF: 1123685.6/15

Left Out: 548.891+/-0.110 $\chi^2$/NDF:1722372.8/16

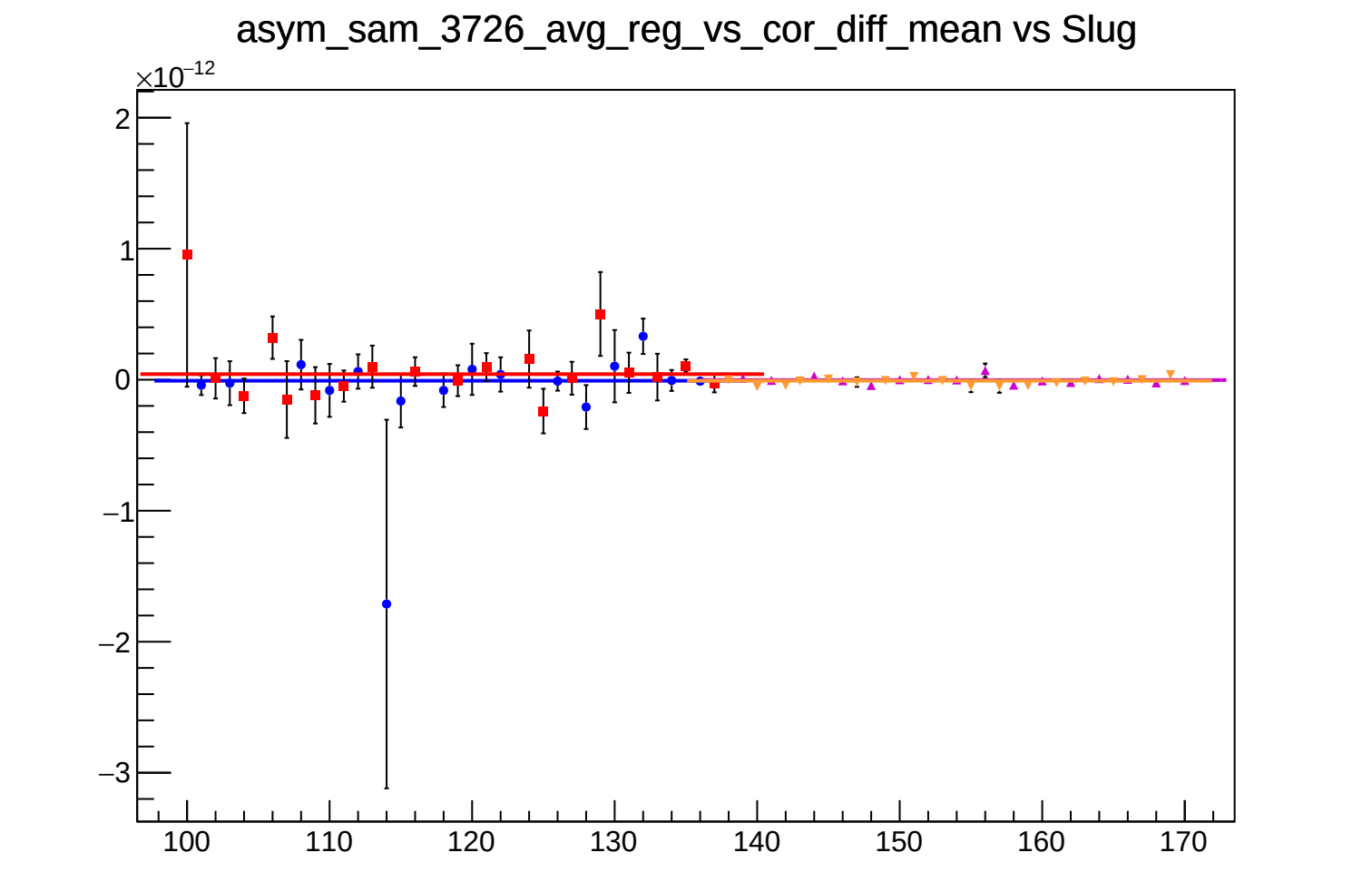
Right Out: 1241.709+/-0.332 $\chi^2$/NDF: 899417.9/18

Left In: 534.909+/-0.108 $\chi^2$/NDF:1567616.2/15

+ sign 613.597+/-0.104 $\chi^2$/NDF: 5990754.6/32

All: 607.926+/-0.073 $\chi^2$/NDF: 12560980.0/67

- sign 602.384+/-0.103 $\chi^2$/NDF: 6564323.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 11.7/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:22.9/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.5/18

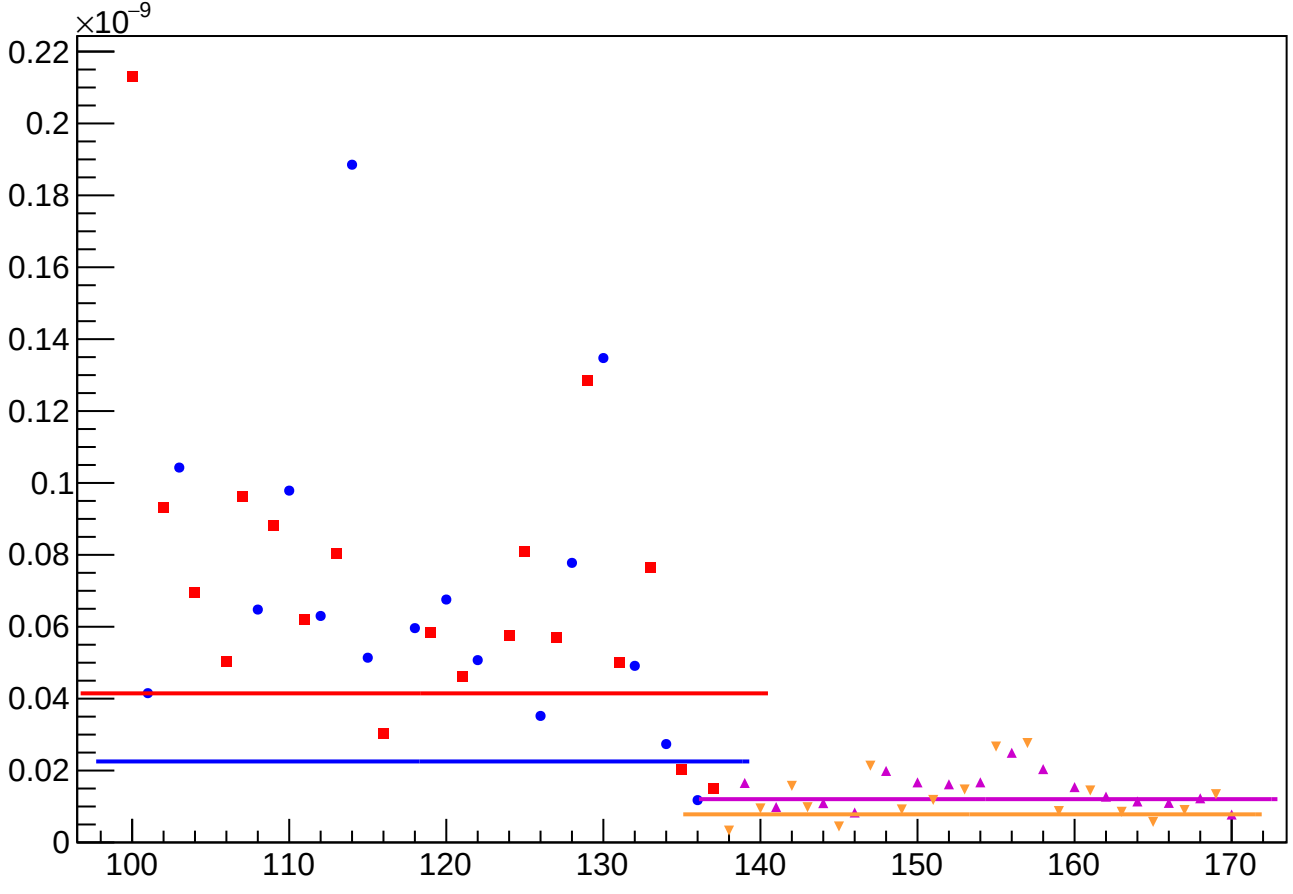
Left In: -0.000+/-0.000 $\chi^2$/NDF:10.4/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 34.6/32

All: -0.000+/-0.000 $\chi^2$/NDF: 64.4/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 28.6/34

# asym_sam_3726_avg_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2852766.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2303945.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1847735.6/18

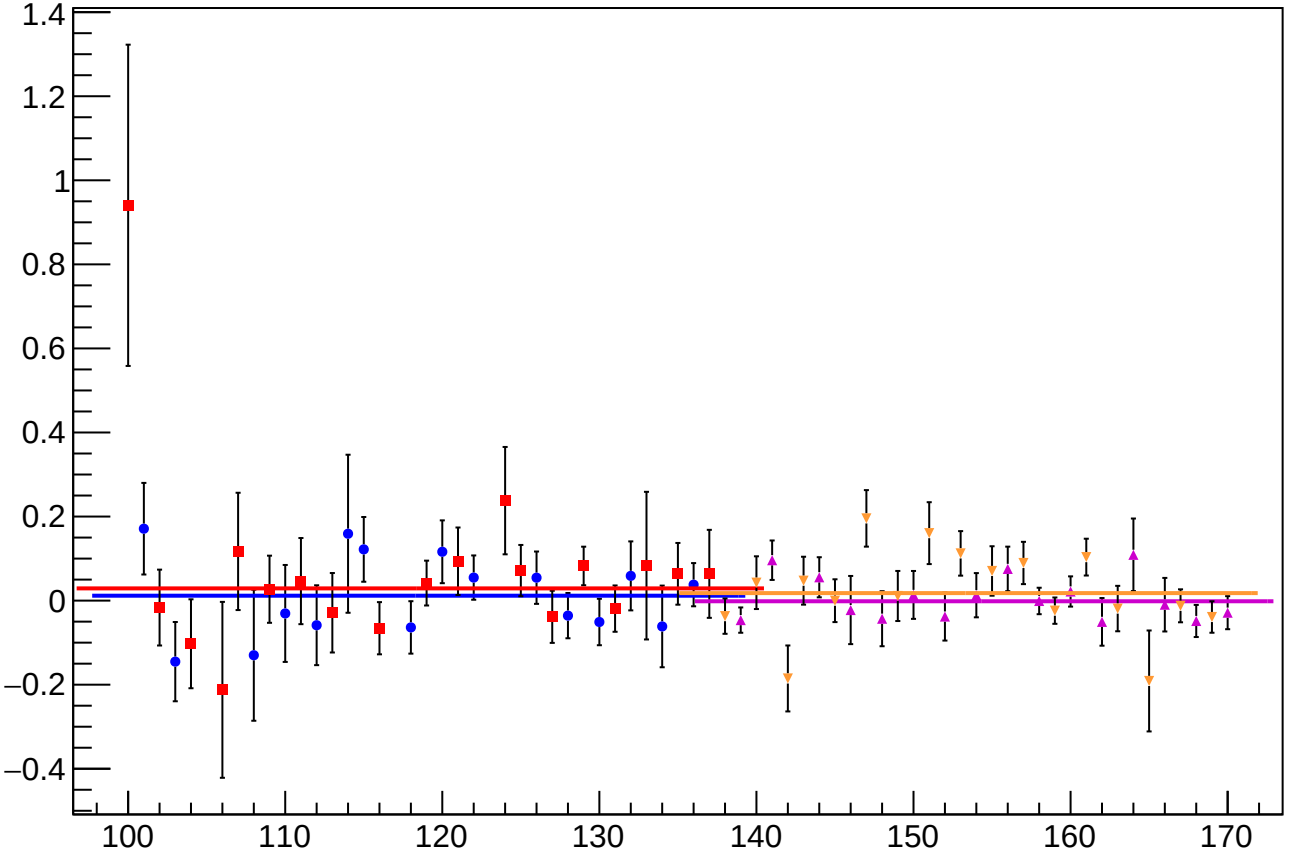
Left In: 0.000+/-0.000 $\chi^2$/NDF:903113.7/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 6514423.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 12430870.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5013474.2/34

# asym_sam_3726_avg_dit_vs_cor_diff_mean vs Slug




Right In: 0.012+/-0.018 $\chi^2$/NDF: 16.9/15

Left Out: 0.018+/-0.012 $\chi^2$/NDF:37.7/16

Right Out: 0.029+/-0.018 $\chi^2$/NDF: 19.5/18

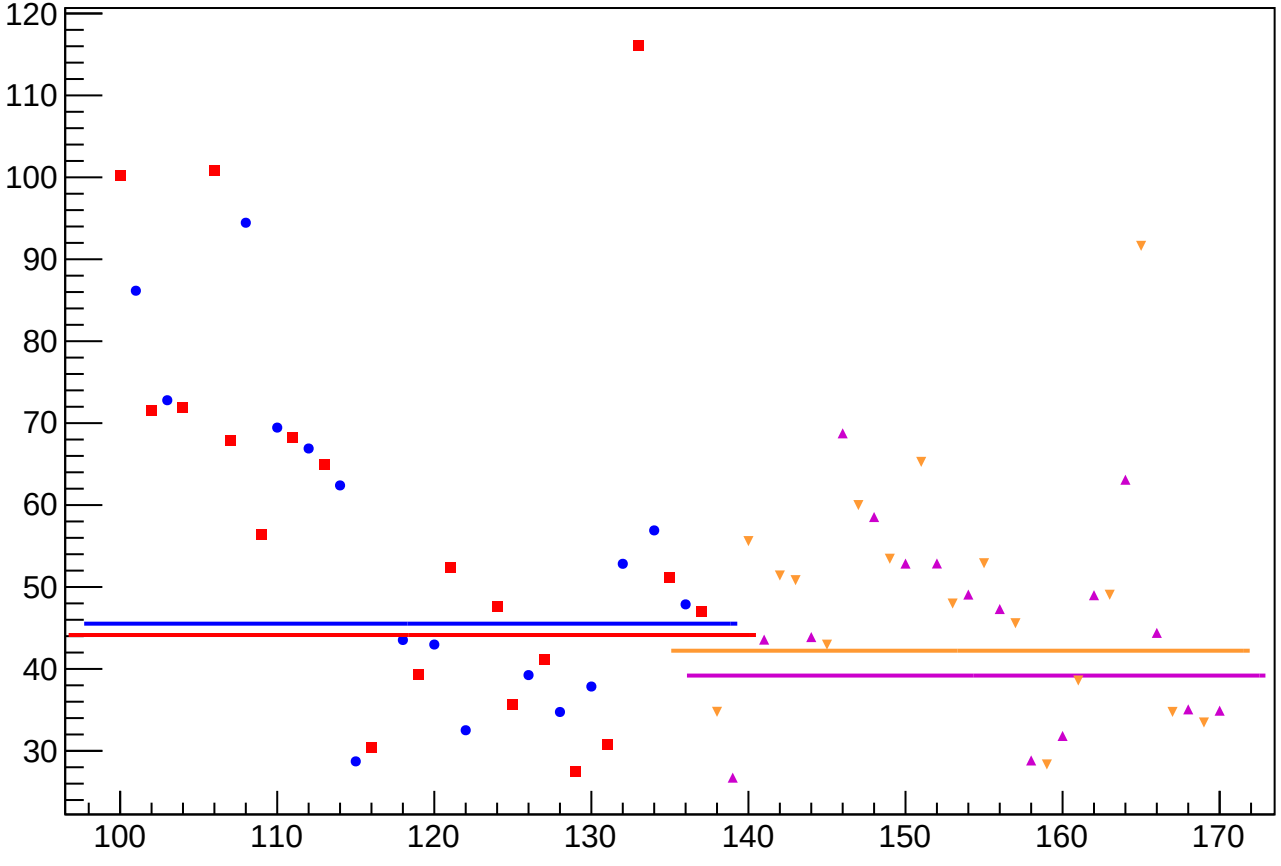
Left In: -0.002+/-0.012 $\chi^2$/NDF:15.9/15

+ sign 0.016+/-0.010 $\chi^2$/NDF: 54.6/32

All: 0.012+/-0.007 $\chi^2$/NDF: 92.6/67

- sign 0.007+/-0.010 $\chi^2$/NDF: 37.5/34

# asym_sam_3726_avg_dit_vs_cor_diff_rms vs Slug




Right In: 45.525+/-0.013 $\chi^2$/NDF: 1253967.4/15

Left Out: 42.225+/-0.009 $\chi^2$/NDF:1692191.1/16

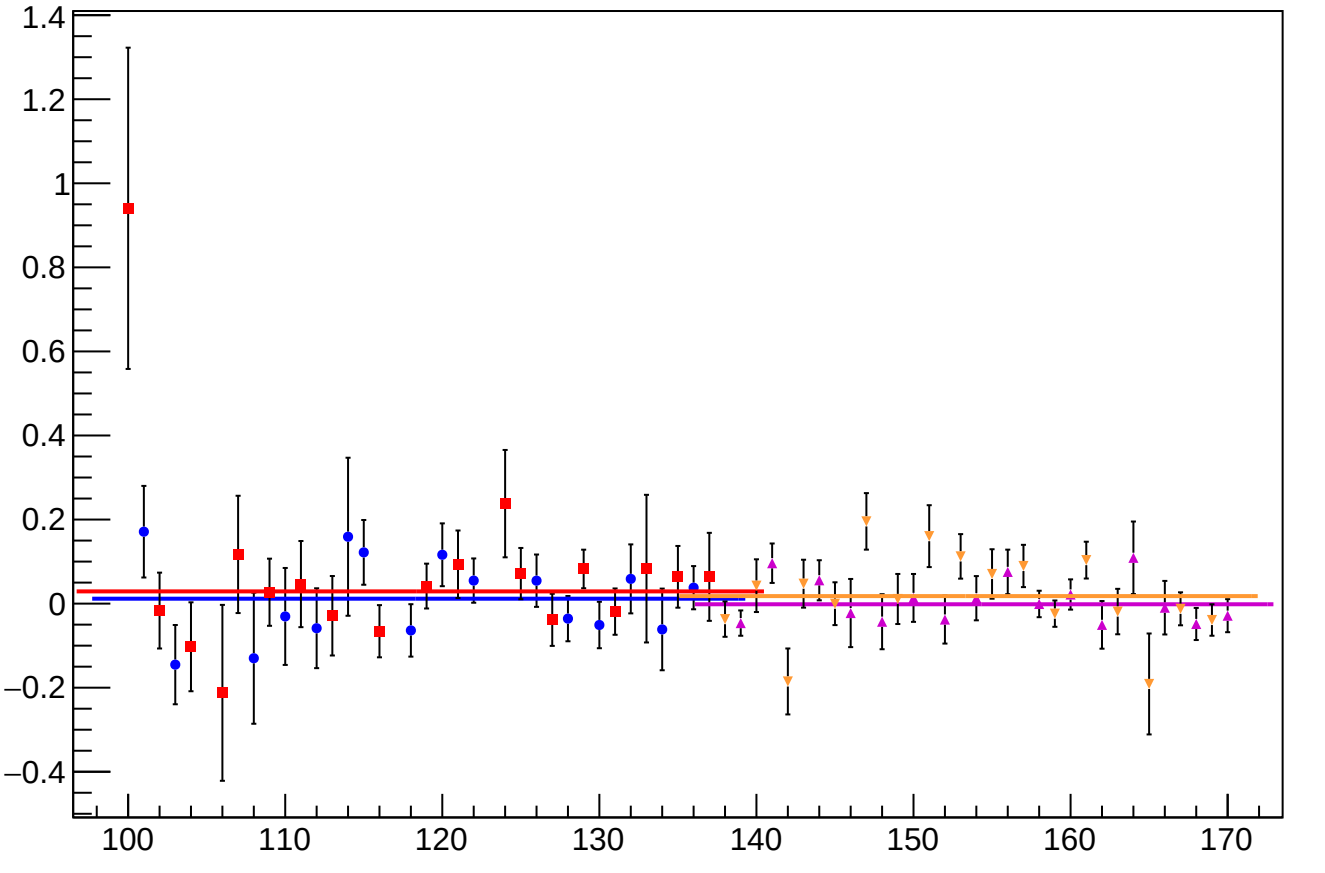
Right Out: 44.141+/-0.013 $\chi^2$/NDF: 1743430.9/18

Left In: 39.190+/-0.008 $\chi^2$/NDF:1741226.3/15

+ sign 43.238+/-0.007 $\chi^2$/NDF: 2991130.2/32

All: 41.881+/-0.005 $\chi^2$/NDF: 6652328.0/67

- sign 40.645+/-0.007 $\chi^2$/NDF: 3592904.9/34




Right In: 0.012+/-0.018 $\chi^2$/NDF: 16.9/15

Left Out: 0.018+/-0.012 $\chi^2$/NDF:37.7/16

Right Out: 0.029+/-0.018 $\chi^2$/NDF: 19.5/18

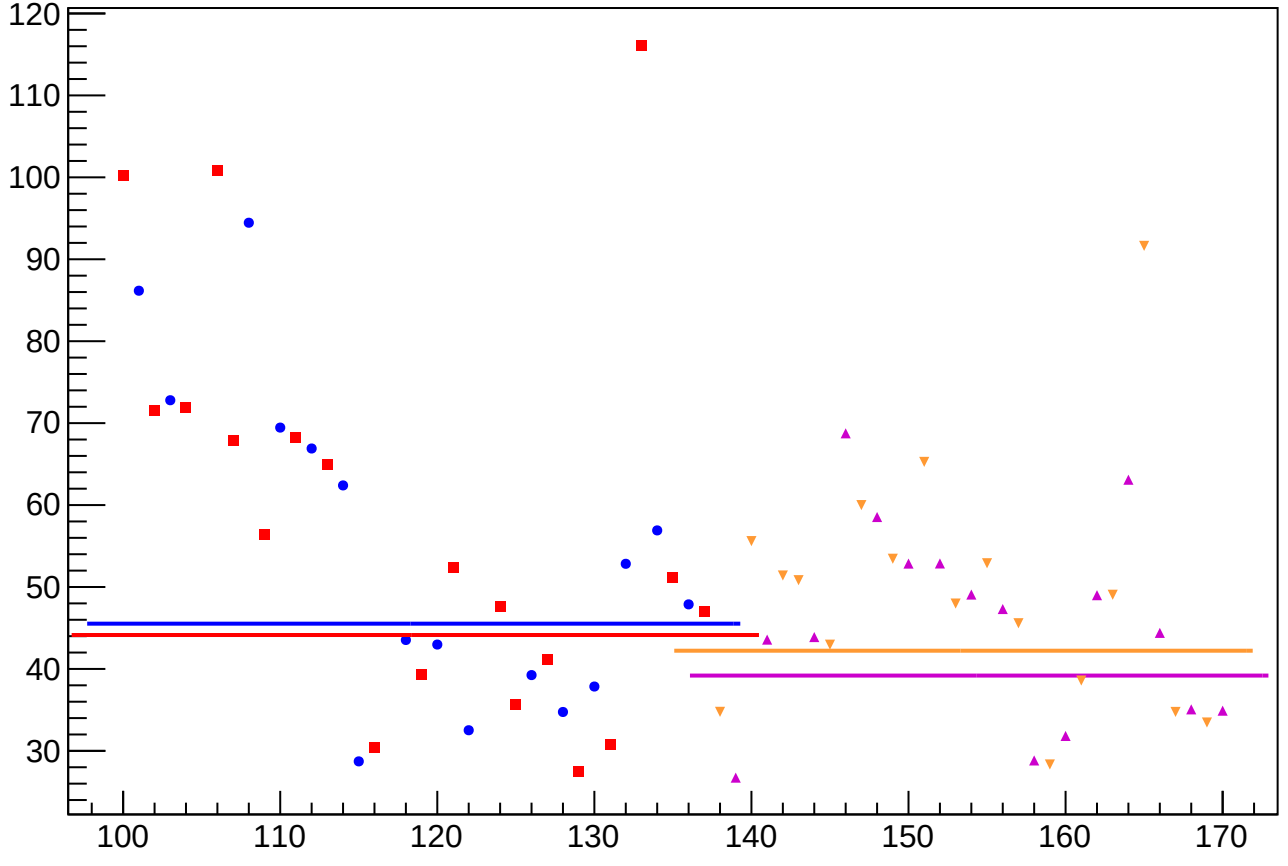
Left In: -0.002+/-0.012 $\chi^2$/NDF:15.9/15

+ sign 0.016+/-0.010 $\chi^2$/NDF: 54.6/32

All: 0.012+/-0.007 $\chi^2$/NDF: 92.6/67

- sign 0.007+/-0.010 $\chi^2$/NDF: 37.5/34

# asym_sam_3726_avg_dit_vs_eigen_cor_diff_rms vs Slug




Right In: 45.525+/-0.013 $\chi^2$/NDF: 1253967.4/15

Left Out: 42.225+/-0.009 $\chi^2$/NDF:1692191.1/16

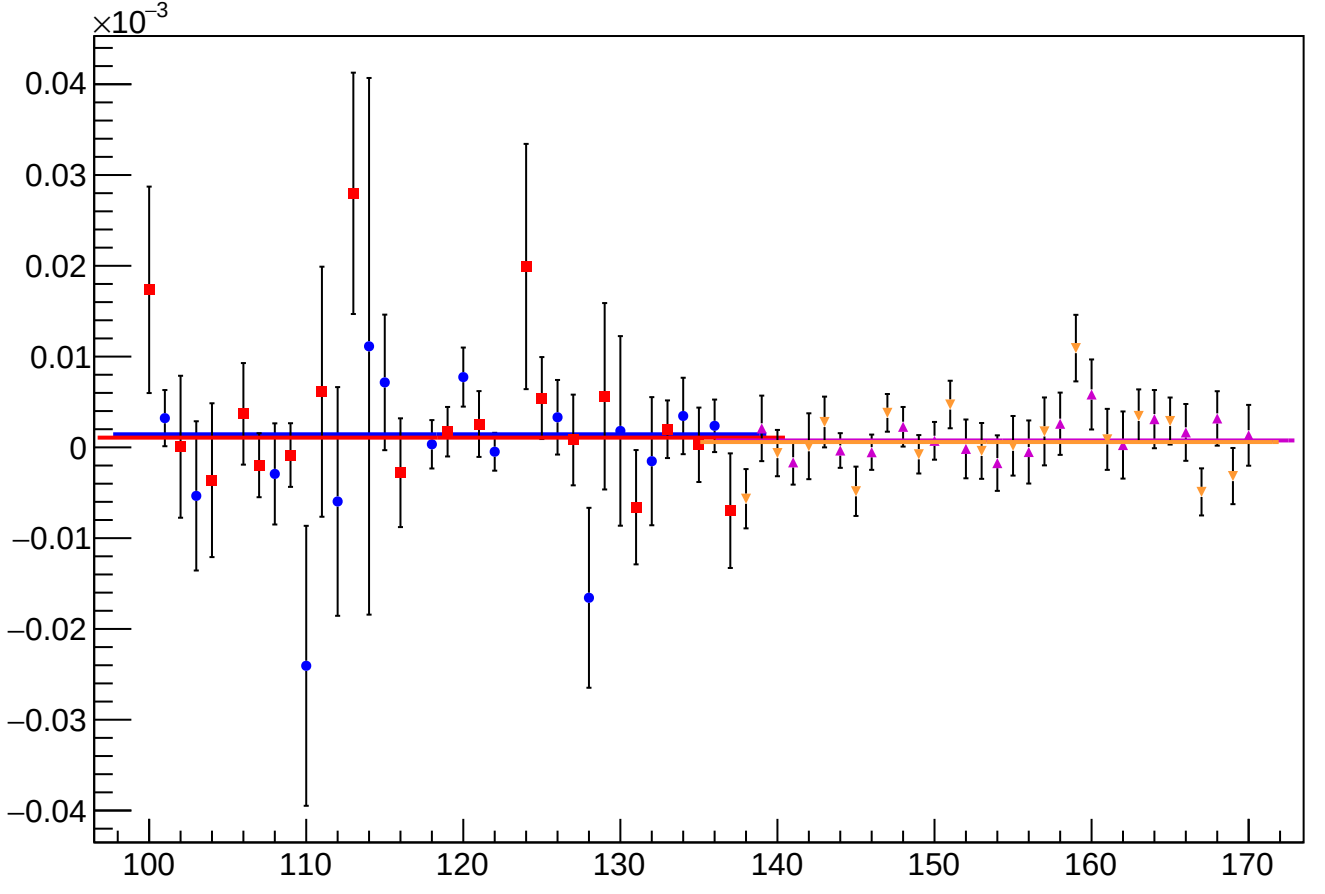
Right Out: 44.141+/-0.013 $\chi^2$/NDF: 1743430.9/18

Left In: 39.190+/-0.008 $\chi^2$/NDF:1741226.3/15

+ sign 43.238+/-0.007 $\chi^2$/NDF: 2991130.2/32

All: 41.881+/-0.005 $\chi^2$/NDF: 6652328.0/67

- sign 40.645+/-0.007 $\chi^2$/NDF: 3592904.9/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 14.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:29.7/16

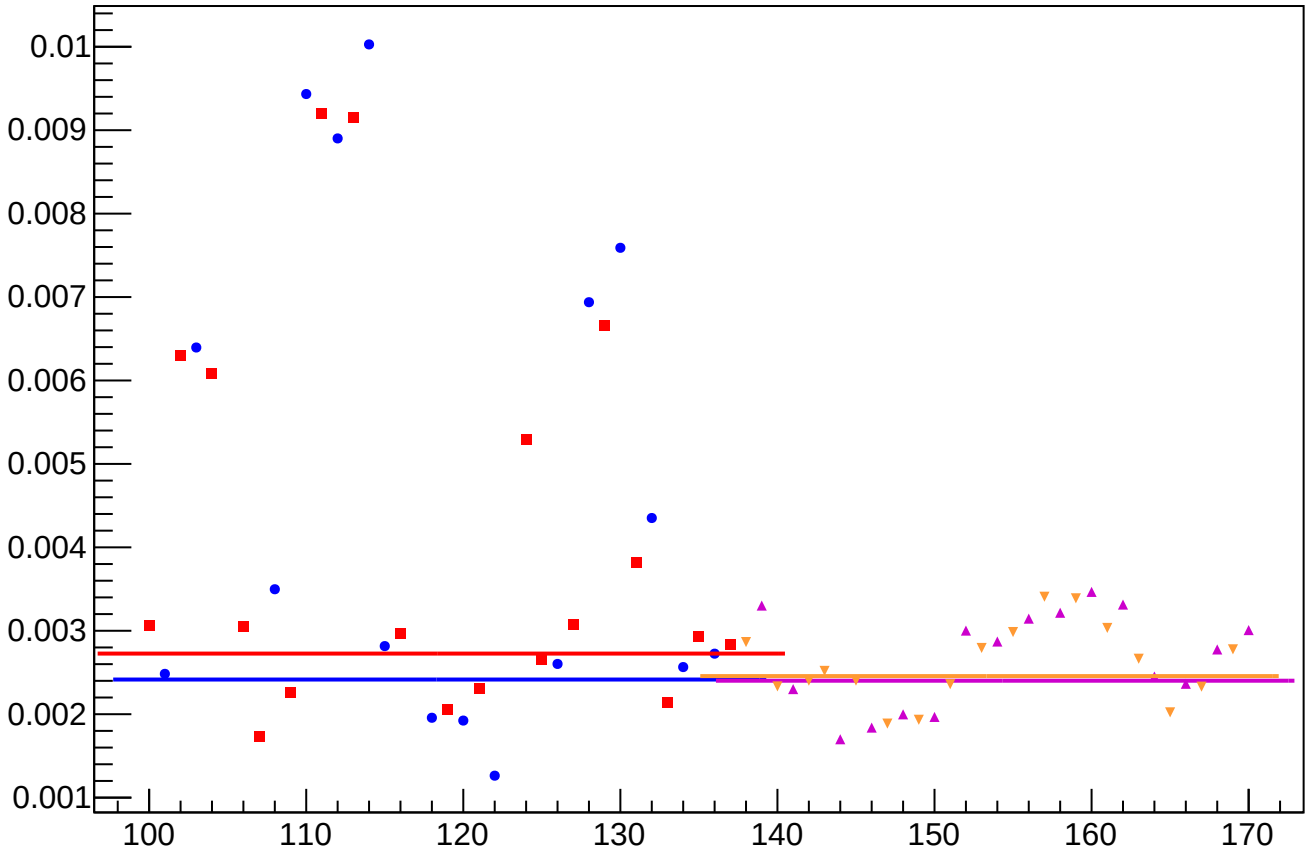
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.8/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:6.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 44.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 65.8/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 21.4/34




Right In: 0.002+/-0.000 $\chi^2$/NDF: 3432108.8/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:799904.5/16

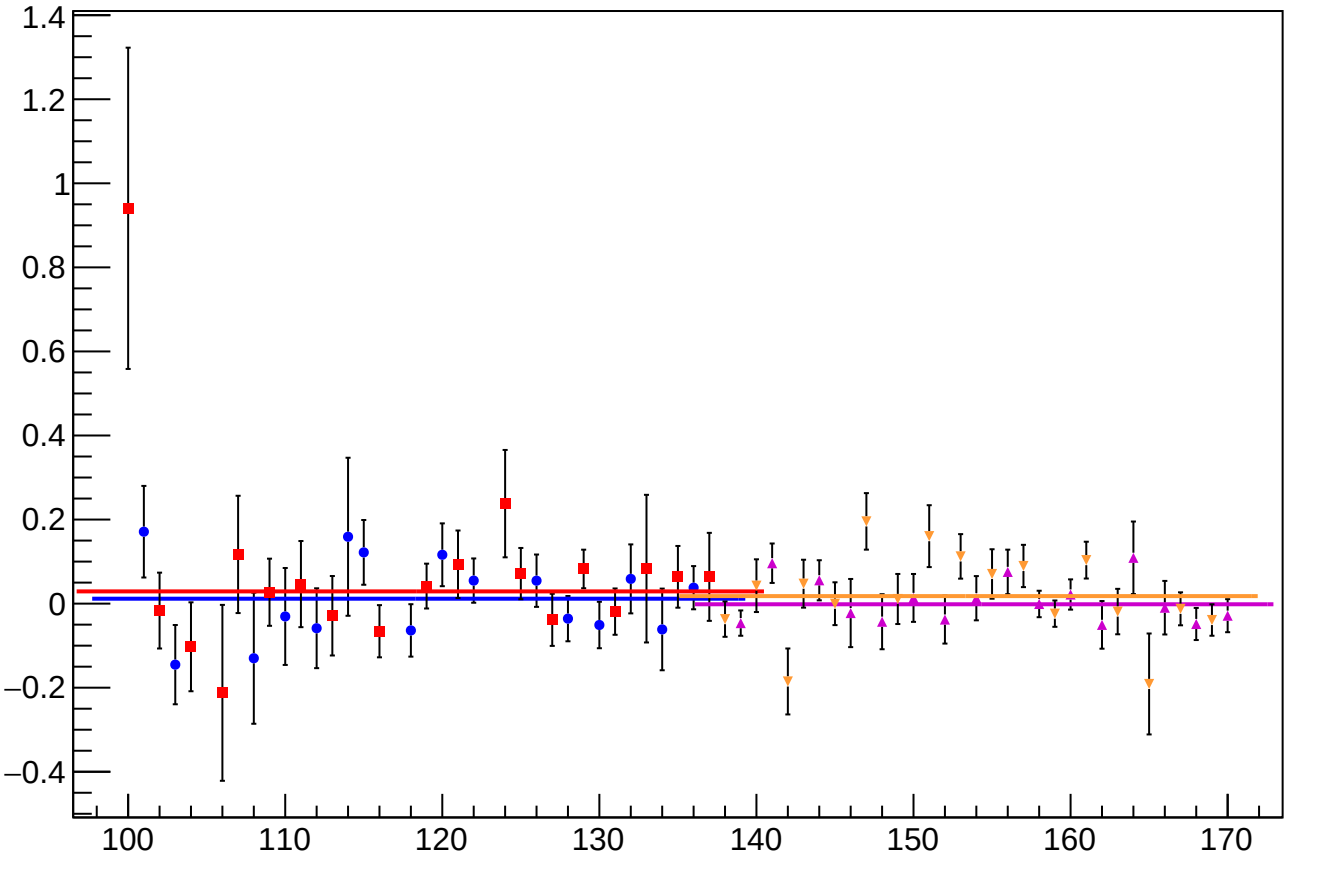
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 2505080.1/18

Left In: 0.002+/-0.000 $\chi^2$/NDF:1412906.6/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 4234194.5/32

All: 0.002+/-0.000 $\chi^2$/NDF: 8280798.9/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 4040469.0/34




Right In: 0.012+/-0.018 $\chi^2$/NDF: 16.9/15

Left Out: 0.018+/-0.012 $\chi^2$/NDF:37.7/16

Right Out: 0.029+/-0.018 $\chi^2$/NDF: 19.5/18

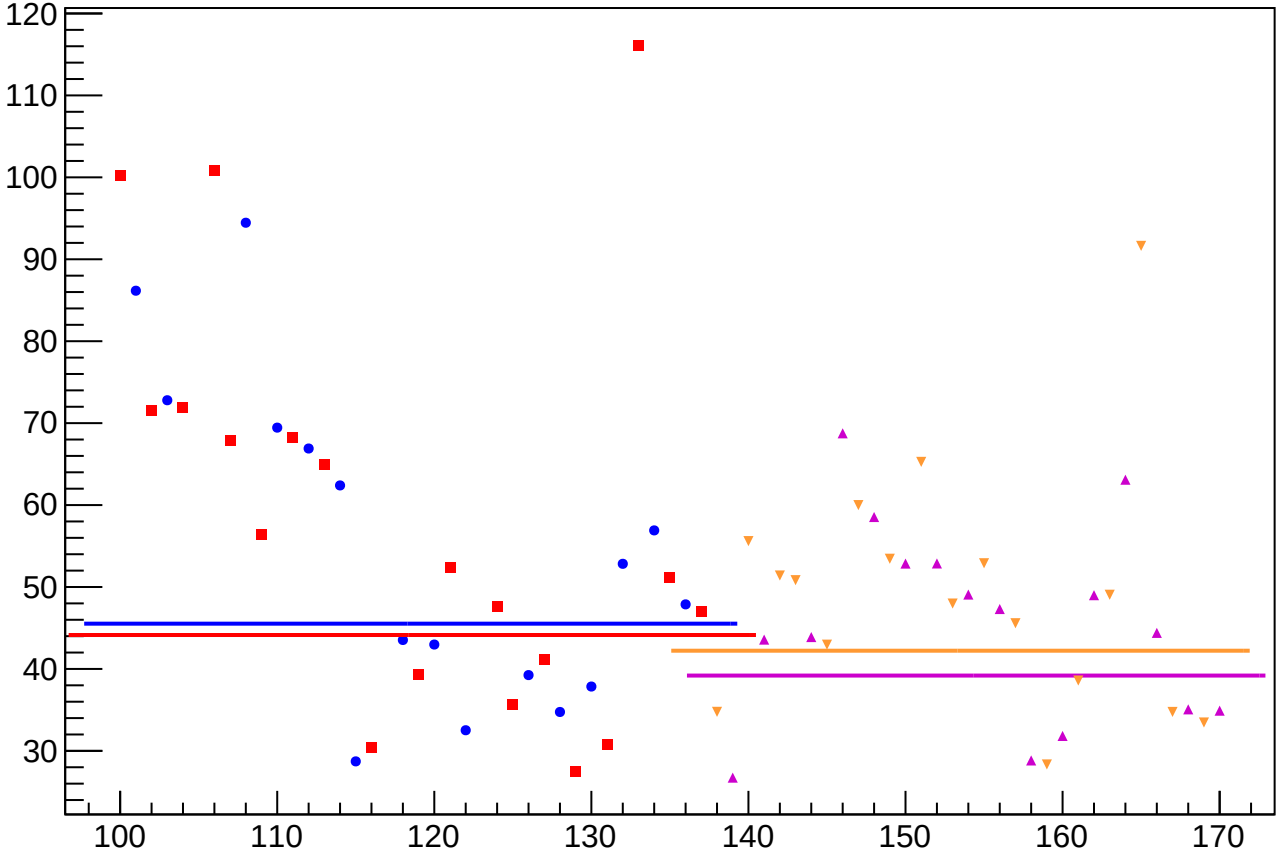
Left In: -0.002+/-0.012 $\chi^2$/NDF:15.9/15

+ sign 0.016+/-0.010 $\chi^2$/NDF: 54.7/32

All: 0.012+/-0.007 $\chi^2$/NDF: 92.6/67

- sign 0.007+/-0.010 $\chi^2$/NDF: 37.5/34

# asym_sam_3726_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 45.525+/-0.013 $\chi^2$/NDF: 1253922.0/15

Left Out: 42.225+/-0.009 $\chi^2$/NDF:1692215.9/16

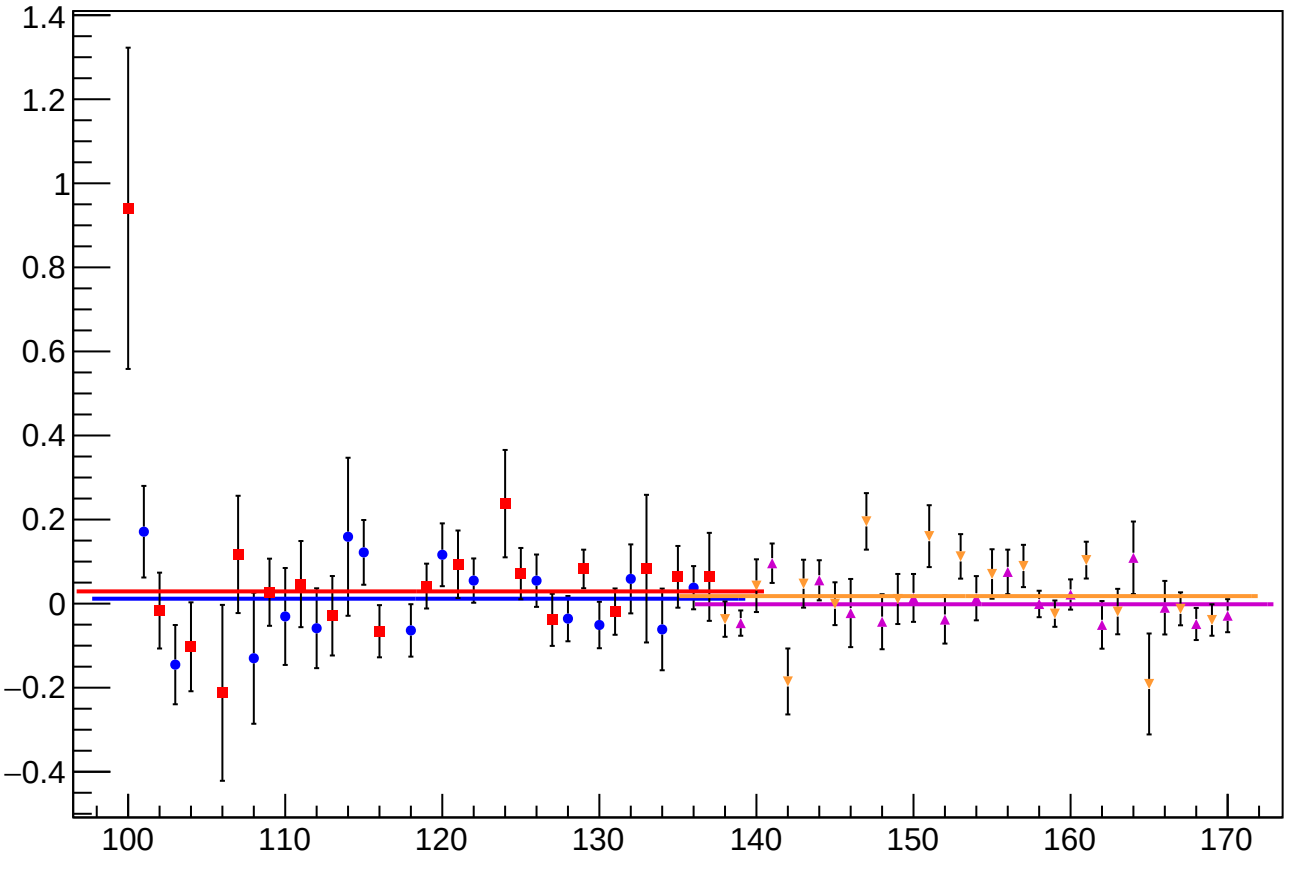
Right Out: 44.141+/-0.013 $\chi^2$/NDF: 1743351.0/18

Left In: 39.191+/-0.008 $\chi^2$/NDF:1741264.8/15

+ sign 43.239+/-0.007 $\chi^2$/NDF: 2991101.1/32

All: 41.882+/-0.005 $\chi^2$/NDF: 6652247.6/67

- sign 40.645+/-0.007 $\chi^2$/NDF: 3592862.2/34




Right In: 0.012+/-0.018 $\chi^2$/NDF: 16.9/15

Left Out: 0.018+/-0.012 $\chi^2$/NDF:37.7/16

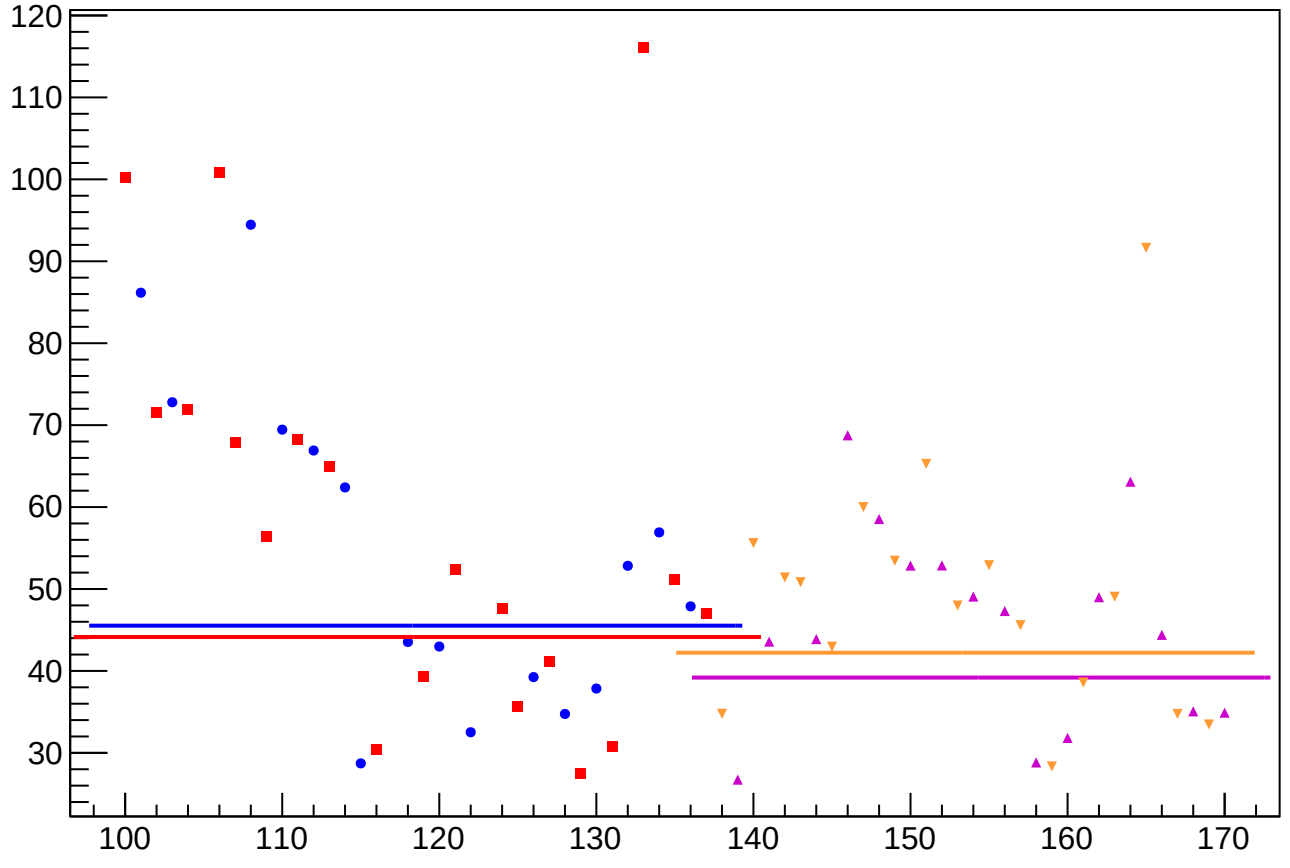
Right Out: 0.029+/-0.018 $\chi^2$/NDF: 19.5/18

Left In: -0.002+/-0.012 $\chi^2$/NDF:15.9/15

+ sign 0.016+/-0.010 $\chi^2$/NDF: 54.7/32

All: 0.012+/-0.007 $\chi^2$/NDF: 92.6/67

- sign 0.007+/-0.010 $\chi^2$/NDF: 37.5/34




Right In: 45.525+/-0.013 $\chi^2$/NDF: 1253922.0/15

Left Out: 42.225+/-0.009 $\chi^2$/NDF:1692215.9/16

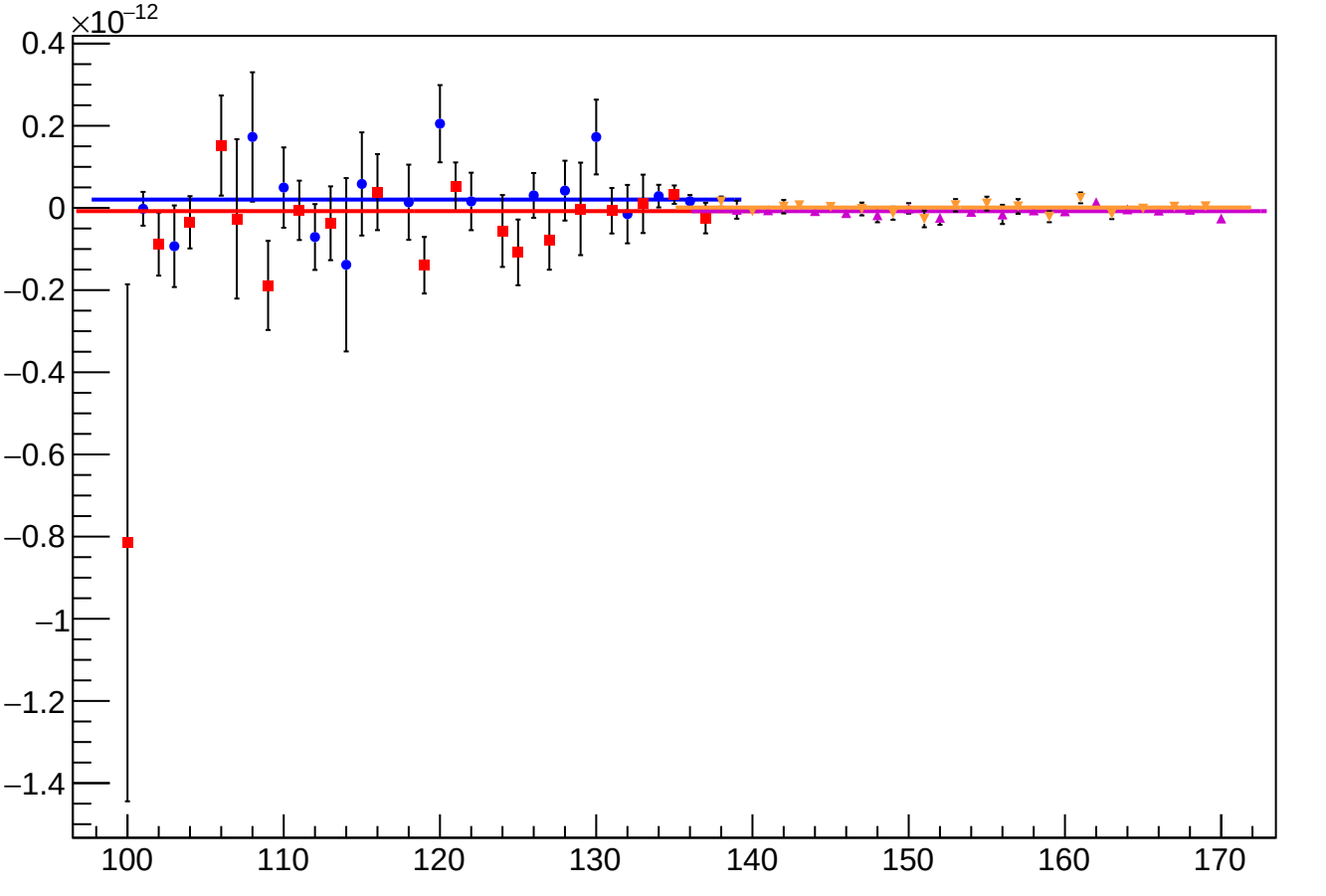
Right Out: 44.141+/-0.013 $\chi^2$/NDF: 1743351.0/18

Left In: 39.191+/-0.008 $\chi^2$/NDF:1741264.8/15

+ sign 43.239+/-0.007 $\chi^2$/NDF: 2991101.1/32

All: 41.882+/-0.005 $\chi^2$/NDF: 6652247.6/67

- sign 40.645+/-0.007 $\chi^2$/NDF: 3592862.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 11.8/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:13.5/16

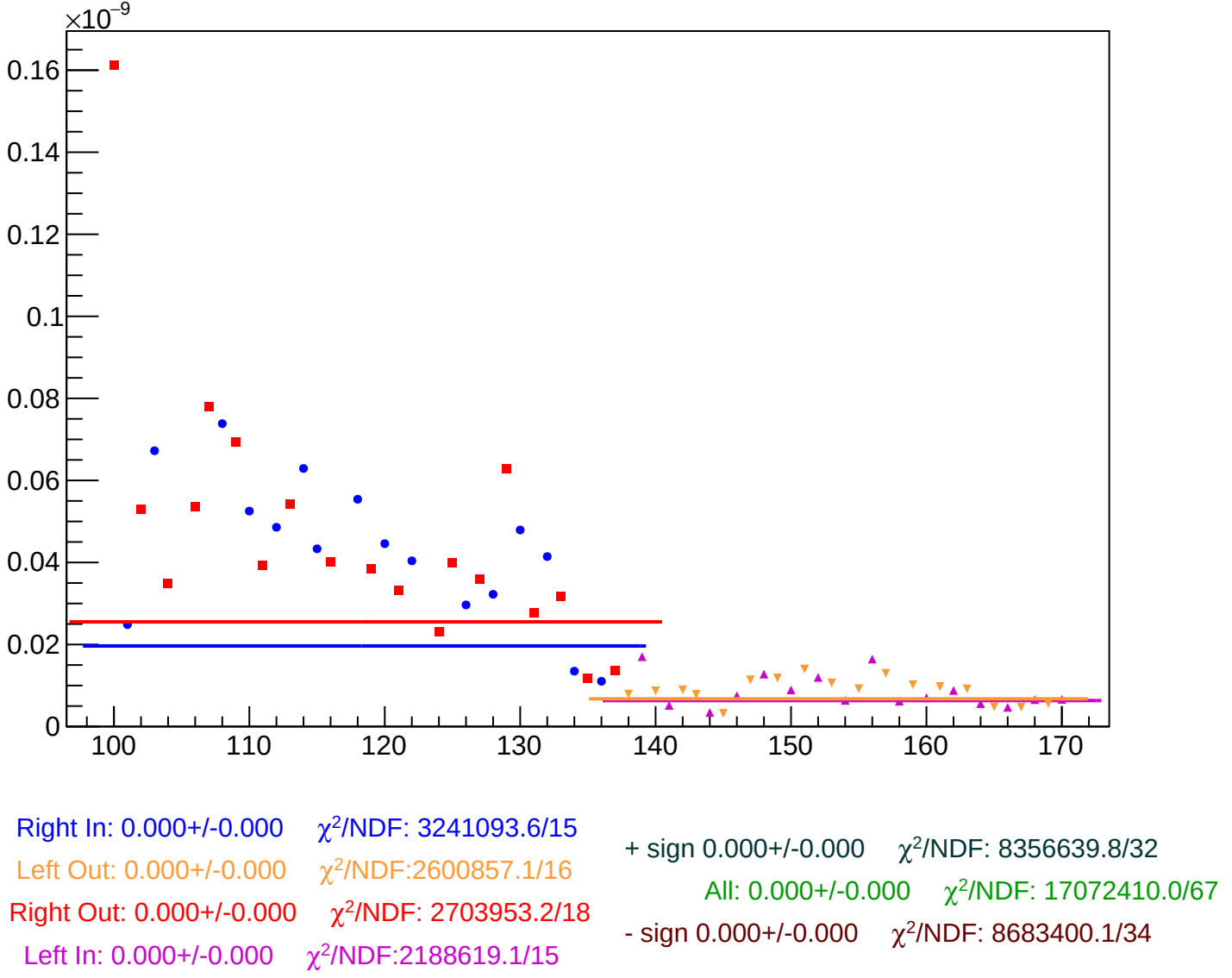
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.8/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:9.4/15

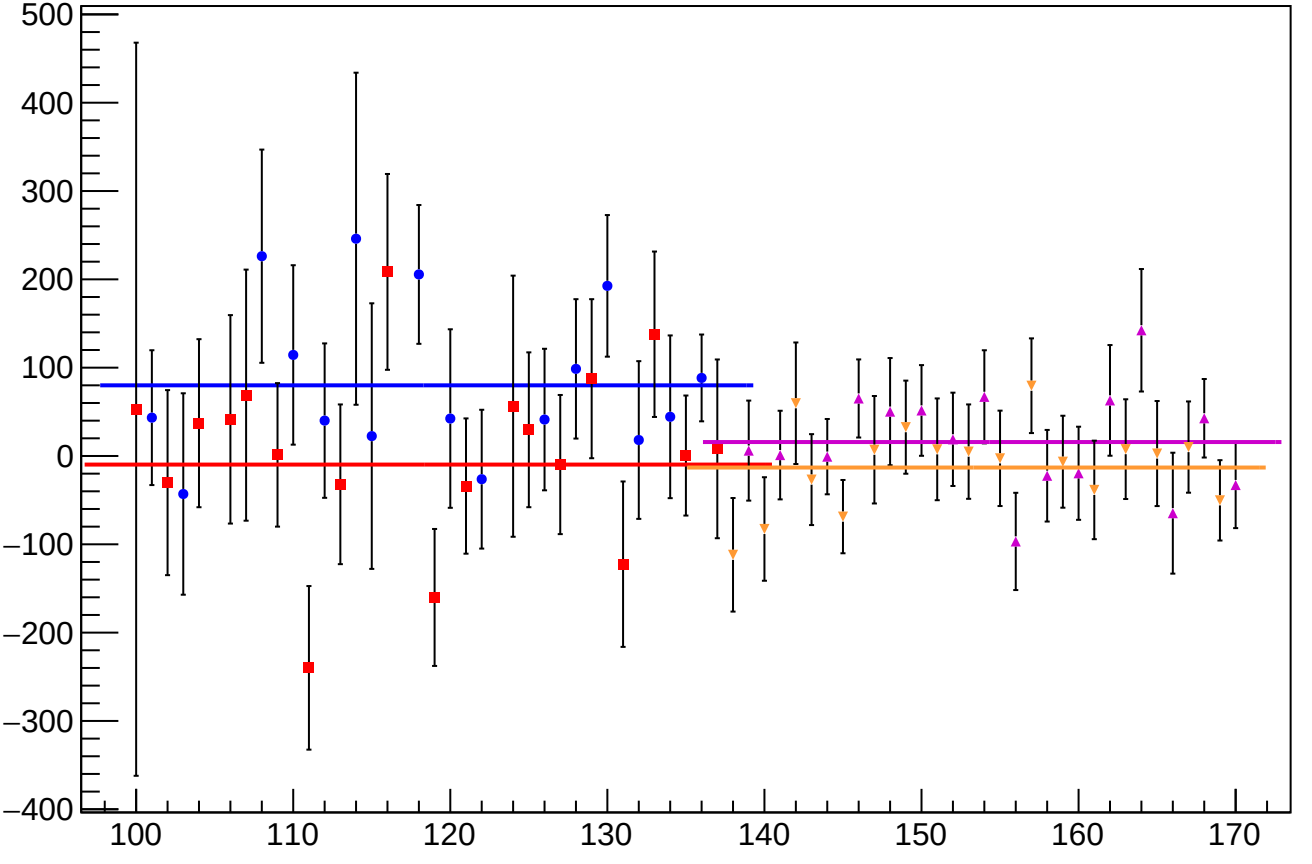
+ sign 0.000+/-0.000 $\chi^2$/NDF: 28.1/32

All: -0.000+/-0.000 $\chi^2$/NDF: 64.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 28.2/34


asym_sam_3726_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10⁻⁹
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3241093.6/15
Left Out: 0.000+/-0.000 χ²/NDF:2600857.1/16
Right Out: 0.000+/-0.000 χ²/NDF: 2703953.2/18
Left In: 0.000+/-0.000 χ²/NDF:2188619.1/15
+ sign 0.000+/-0.000 χ²/NDF: 8356639.8/32
All: 0.000+/-0.000 χ²/NDF: 17072410.0/67
- sign 0.000+/-0.000 χ²/NDF: 8683400.1/34

# reg_asym_sam_15_48_dd_mean vs Slug




Right In: 79.993+/-21.474 $\chi^2$/NDF: 11.6/15

Left Out: -13.077+/-13.109 $\chi^2$/NDF:12.2/16

Right Out: -9.730+/-21.617 $\chi^2$/NDF: 20.3/18

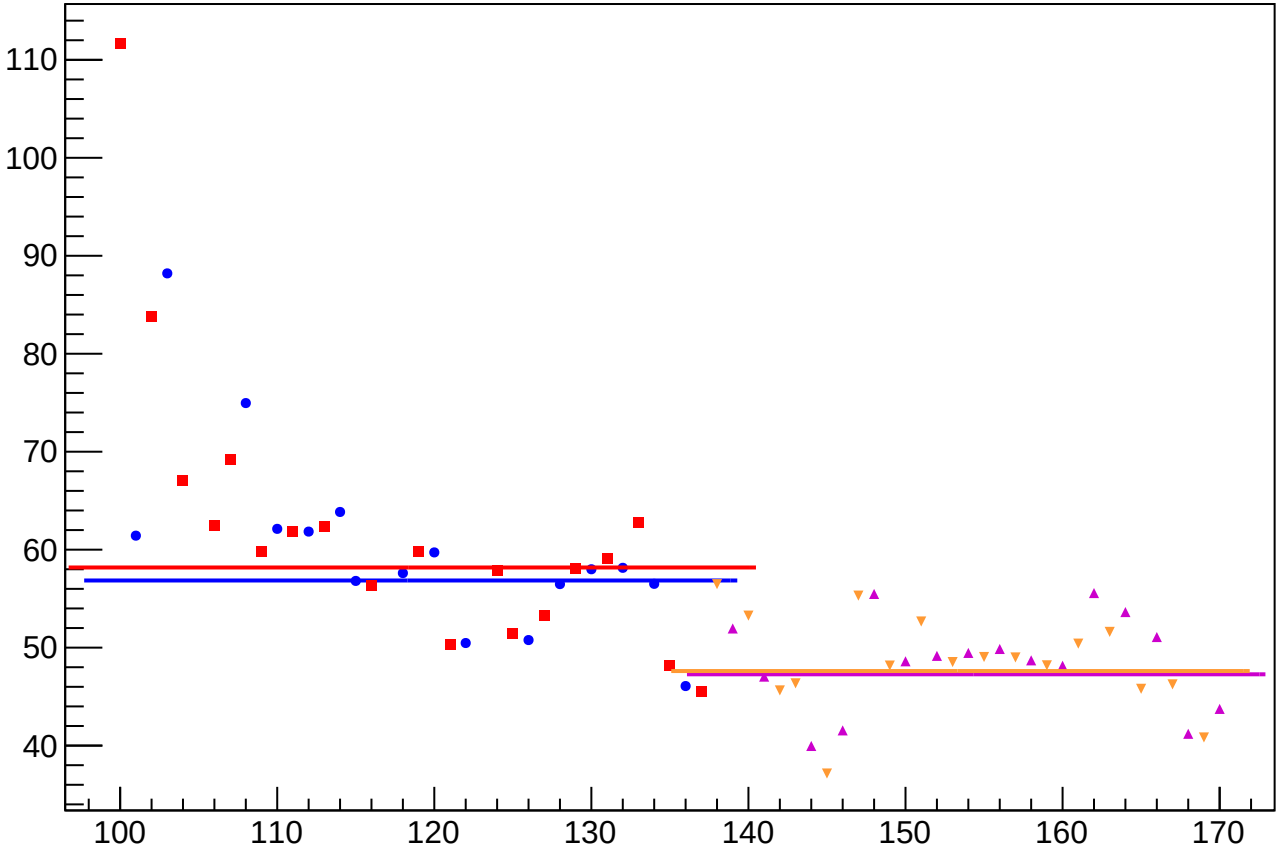
Left In: 15.785+/-13.127 $\chi^2$/NDF:15.1/15

+ sign 12.188+/-11.189 $\chi^2$/NDF: 37.4/32

All: 10.554+/-7.923 $\chi^2$/NDF: 73.9/67

- sign 8.911+/-11.220 $\chi^2$/NDF: 36.4/34

# reg_asym_sam_15_48_dd_rms vs Slug




Right In: 56.854+/-0.015 $\chi^2$/NDF: 341601.2/15

Left Out: 47.610+/-0.009 $\chi^2$/NDF:300623.8/16

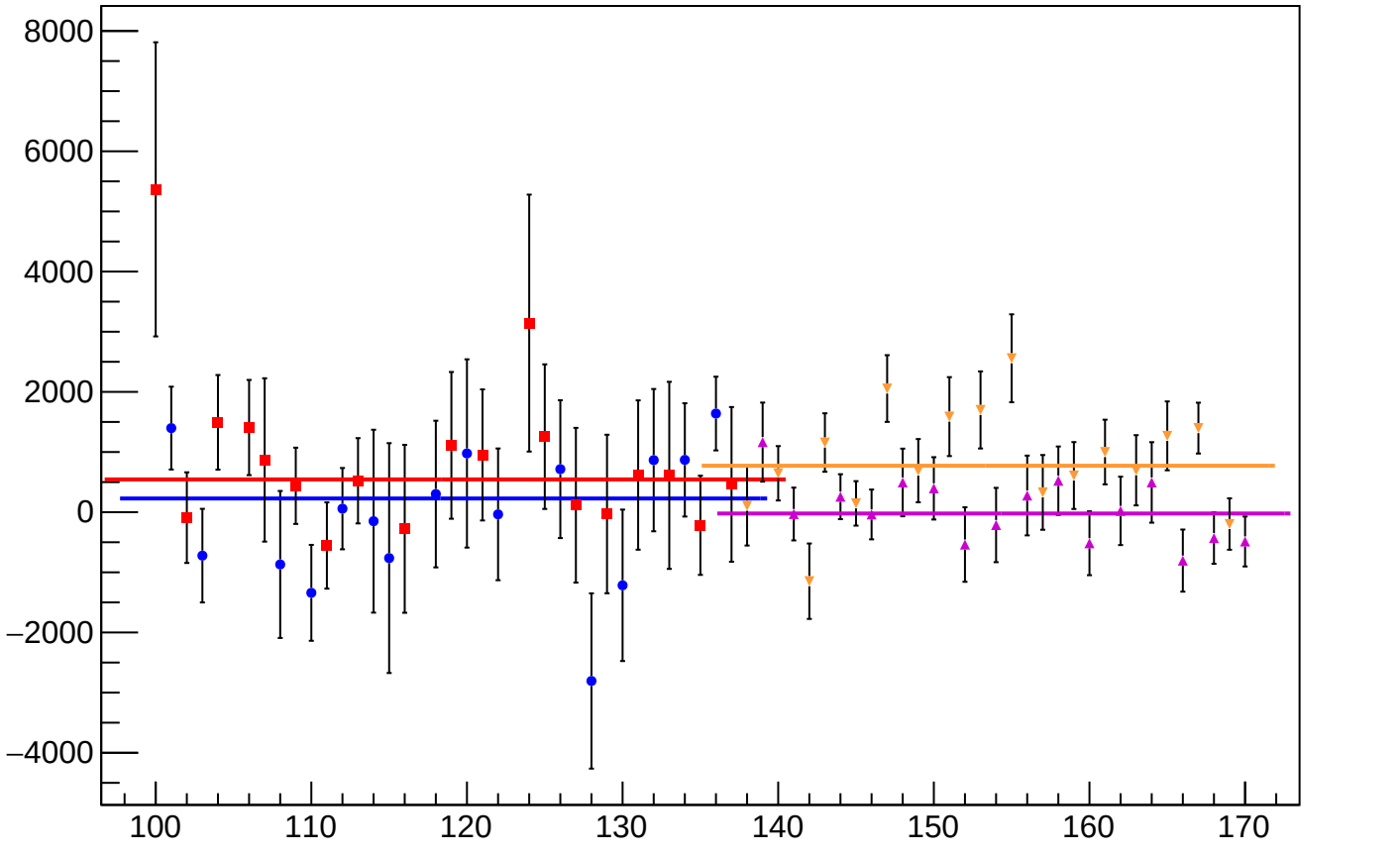
Right Out: 58.181+/-0.015 $\chi^2$/NDF: 314660.6/18

Left In: 47.277+/-0.009 $\chi^2$/NDF:262178.2/15

+ sign 50.119+/-0.008 $\chi^2$/NDF: 912244.3/32

All: 50.167+/-0.006 $\chi^2$/NDF: 1860942.5/67

- sign 50.215+/-0.008 $\chi^2$/NDF: 948625.6/34




Right In: 227.508+/-241.225 $\chi^2$/NDF: 21.6/15

Left Out: 772.088+/-127.895 $\chi^2$/NDF:37.9/16

Right Out: 544.769+/-227.243 $\chi^2$/NDF: 13.4/18

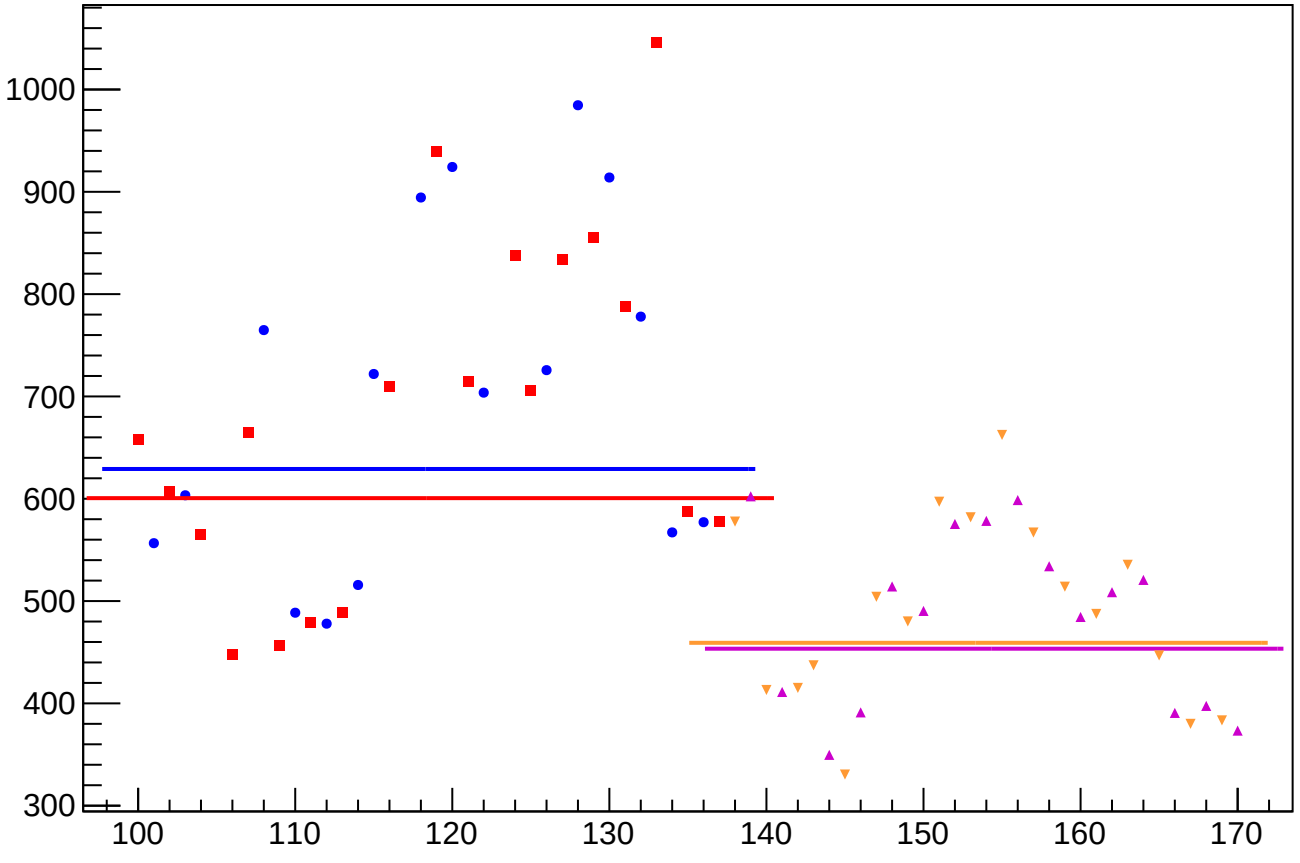
Left In: -22.178+/-127.125 $\chi^2$/NDF:13.2/15

+ sign 652.596+/-112.996 $\chi^2$/NDF: 63.5/32

All: 377.835+/-79.165 $\chi^2$/NDF: 106.4/67

- sign 112.959+/-110.945 $\chi^2$/NDF: 31.3/34

# asym_sam_15_48_dd_reg_correction_rms vs Slug




Right In: 629.096+/-0.171 $\chi^2$/NDF: 692724.2/15

Left Out: 459.197+/-0.090 $\chi^2$/NDF:927634.1/16

Right Out: 600.593+/-0.161 $\chi^2$/NDF: 874614.2/18

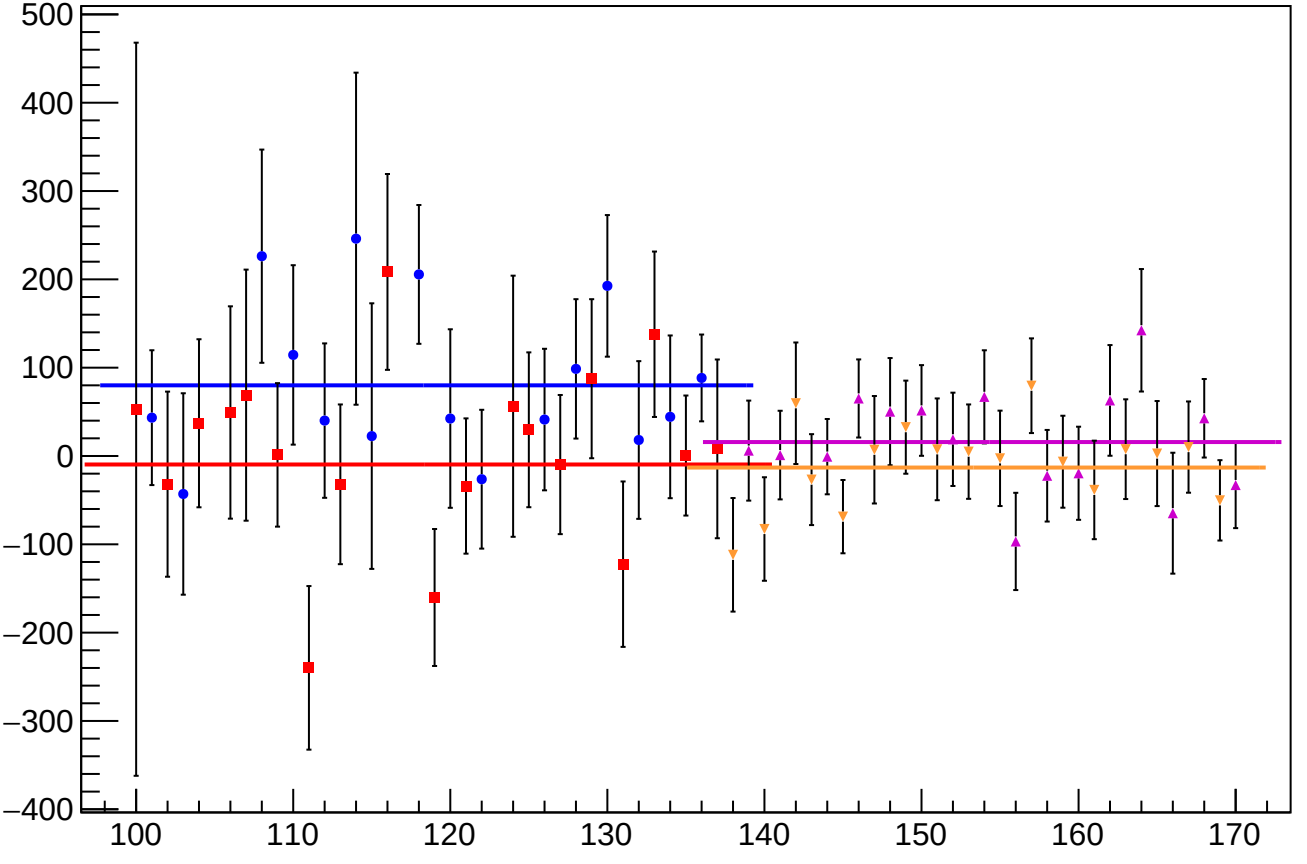
Left In: 453.436+/-0.090 $\chi^2$/NDF:833778.4/15

+ sign 496.477+/-0.080 $\chi^2$/NDF: 2394787.5/32

All: 492.422+/-0.056 $\chi^2$/NDF: 4747033.9/67

- sign 488.512+/-0.078 $\chi^2$/NDF: 2347187.8/34

# cor_asym_sam_15_48_dd_mean vs Slug




Right In: 79.998+/-21.474 $\chi^2$/NDF: 11.6/15

Left Out: -13.080+/-13.109 $\chi^2$/NDF:12.2/16

Right Out: -9.619+/-21.631 $\chi^2$/NDF: 20.4/18

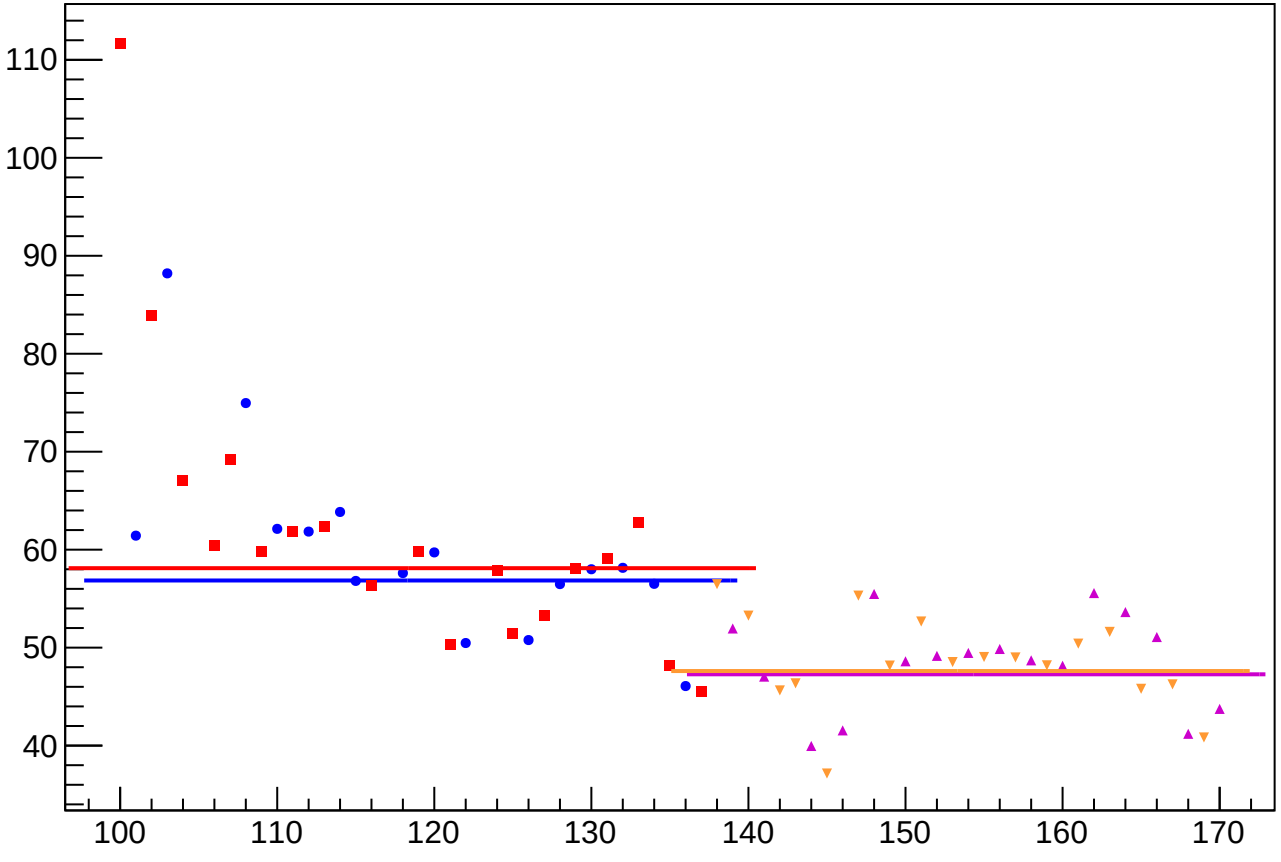
Left In: 15.786+/-13.127 $\chi^2$/NDF:15.1/15

+ sign 12.188+/-11.189 $\chi^2$/NDF: 37.4/32

All: 10.573+/-7.923 $\chi^2$/NDF: 73.9/67

- sign 8.948+/-11.222 $\chi^2$/NDF: 36.5/34

# cor_asym_sam_15_48_dd_rms vs Slug




Right In: 56.854+/-0.015 $\chi^2$/NDF: 341605.0/15

Left Out: 47.610+/-0.009 $\chi^2$/NDF:300623.8/16

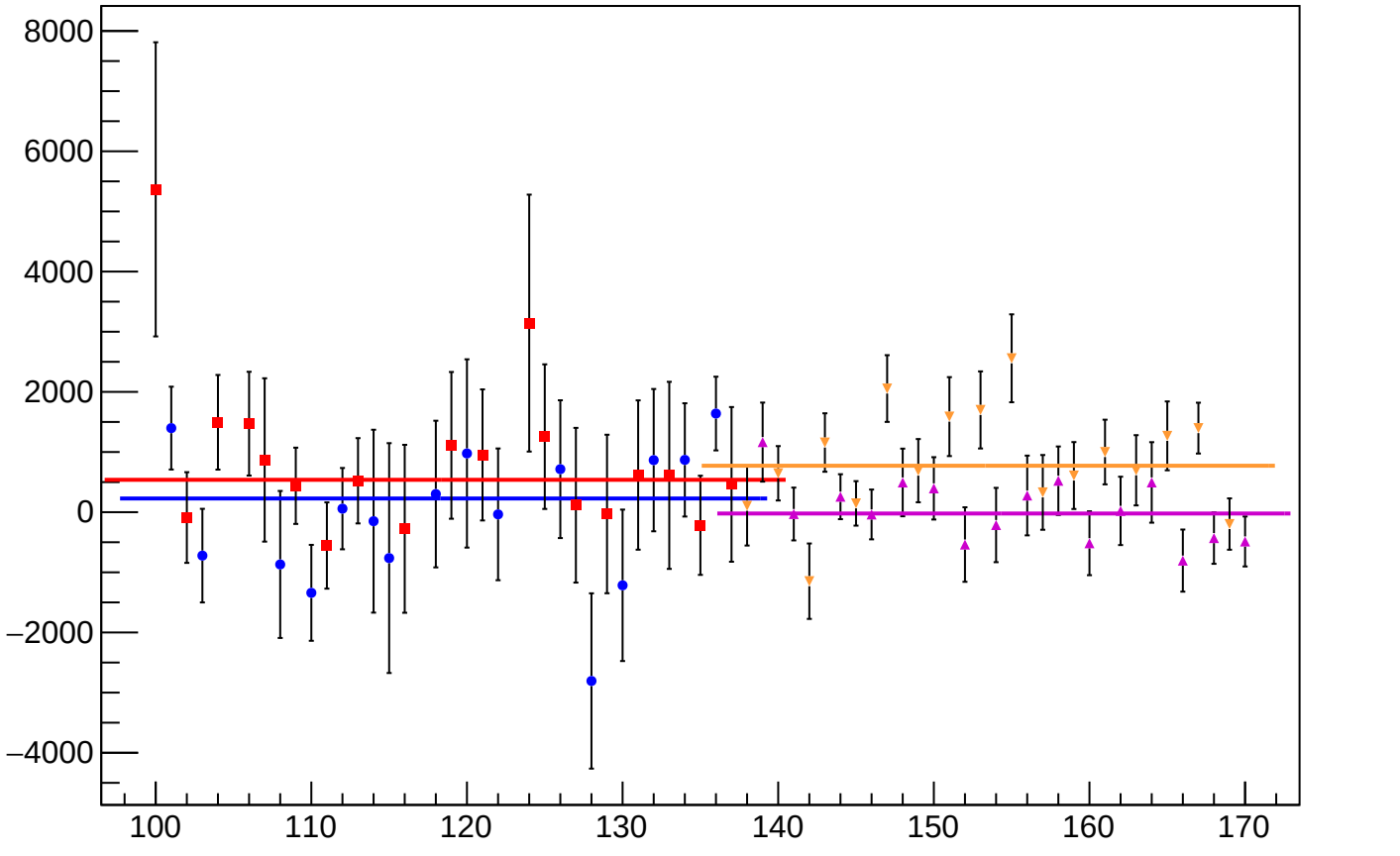
Right Out: 58.111+/-0.015 $\chi^2$/NDF: 312938.5/18

Left In: 47.277+/-0.009 $\chi^2$/NDF:262178.2/15

+ sign 50.119+/-0.008 $\chi^2$/NDF: 912248.3/32

All: 50.156+/-0.006 $\chi^2$/NDF: 1854051.2/67

- sign 50.193+/-0.008 $\chi^2$/NDF: 941759.6/34




Right In: 227.547+/-241.227 $\chi^2$/NDF: 21.6/15

Left Out: 772.085+/-127.895 $\chi^2$/NDF:37.9/16

Right Out: 538.117+/-228.754 $\chi^2$/NDF: 13.3/18

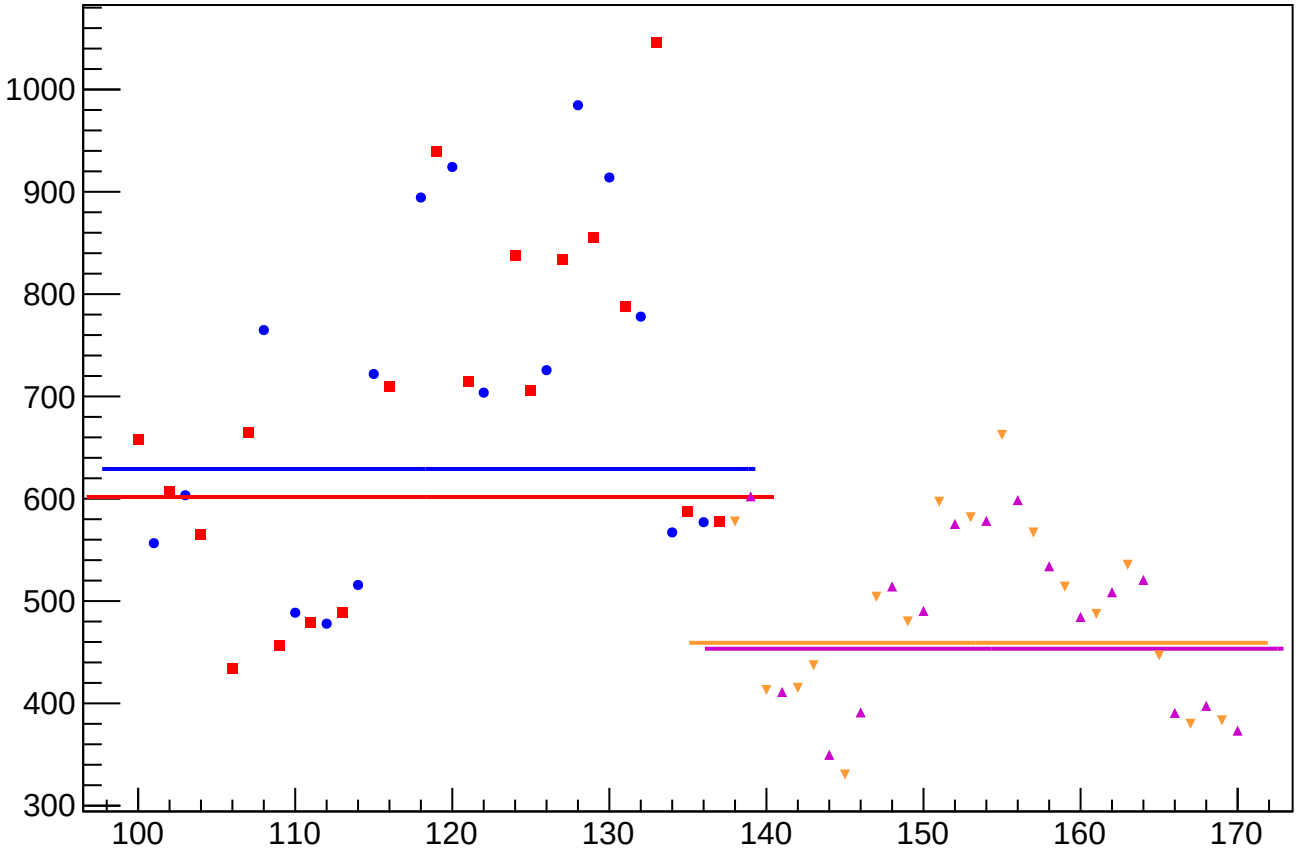
Left In: -22.174+/-127.125 $\chi^2$/NDF:13.2/15

+ sign 652.603+/-112.996 $\chi^2$/NDF: 63.5/32

All: 376.775+/-79.228 $\chi^2$/NDF: 106.3/67

- sign 110.033+/-111.119 $\chi^2$/NDF: 31.1/34

# asym_sam_15_48_dd_cor_correction_rms vs Slug




Right In: 629.101+/-0.171 $\chi^2$/NDF: 692716.0/15

Left Out: 459.197+/-0.090 $\chi^2$/NDF:927634.7/16

Right Out: 601.721+/-0.162 $\chi^2$/NDF: 874042.1/18

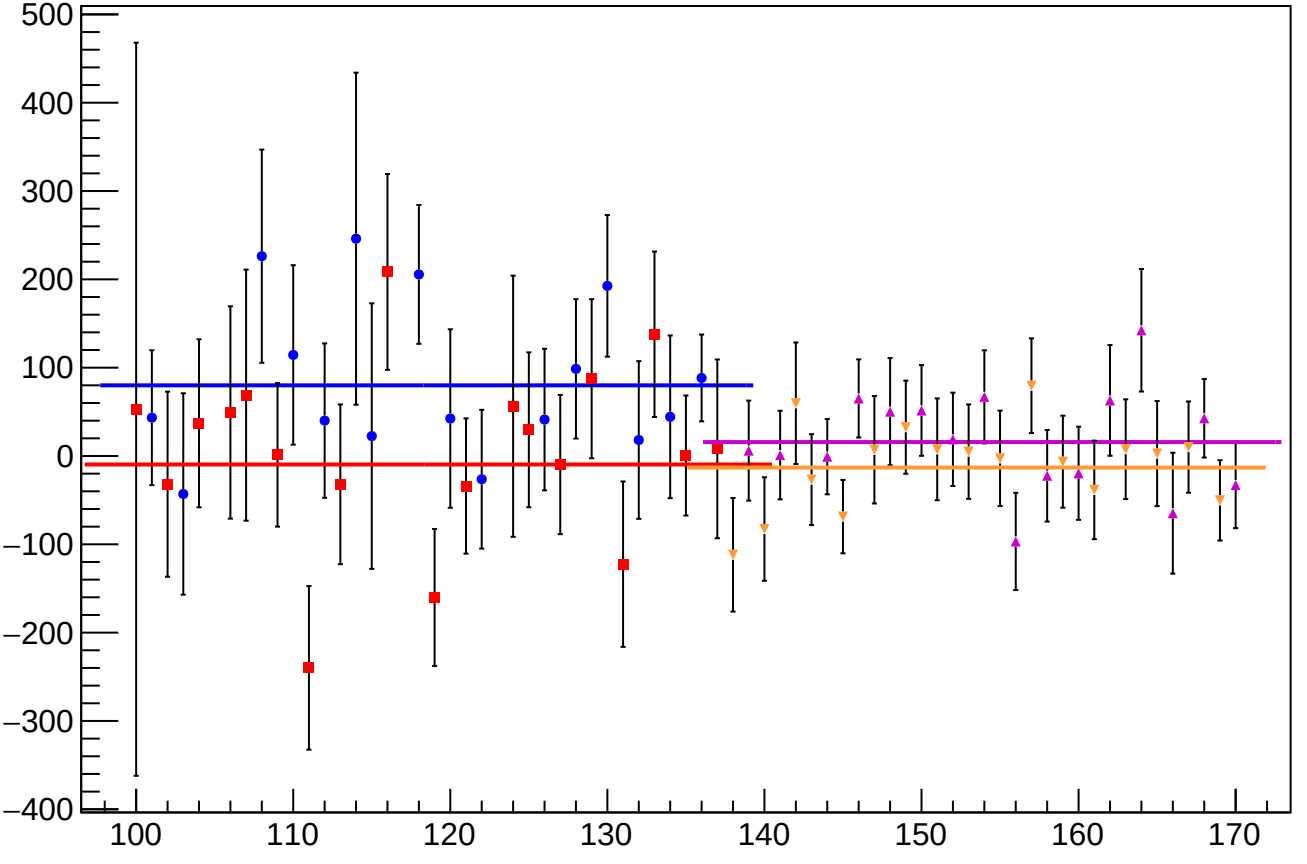
Left In: 453.436+/-0.090 $\chi^2$/NDF:833775.7/15

+ sign 496.477+/-0.080 $\chi^2$/NDF: 2394815.2/32

All: 492.384+/-0.056 $\chi^2$/NDF: 4749886.7/67

- sign 488.426+/-0.079 $\chi^2$/NDF: 2349909.3/34

# eigen_cor_asym_sam_15_48_dd_mean vs Slug




Right In: 79.998+/-21.474 $\chi^2$/NDF: 11.6/15

Left Out: -13.080+/-13.109 $\chi^2$/NDF:12.2/16

Right Out: -9.619+/-21.631 $\chi^2$/NDF: 20.4/18

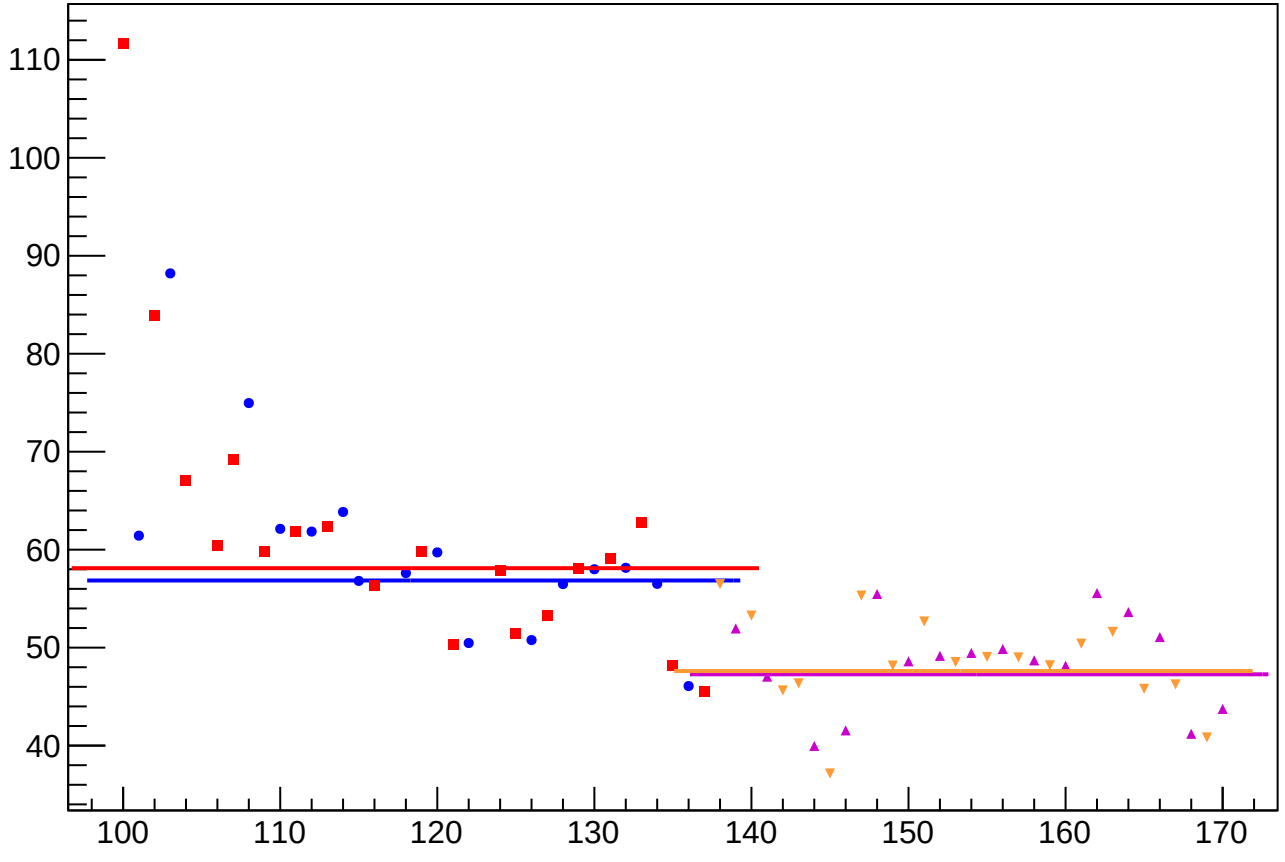
Left In: 15.786+/-13.127 $\chi^2$/NDF:15.1/15

+ sign 12.188+/-11.189 $\chi^2$/NDF: 37.4/32

All: 10.573+/-7.923 $\chi^2$/NDF: 73.9/67

- sign 8.948+/-11.222 $\chi^2$/NDF: 36.5/34

# eigen_cor_asym_sam_15_48_dd_rms vs Slug




Right In: 56.854+/-0.015 $\chi^2$/NDF: 341605.0/15

Left Out: 47.610+/-0.009 $\chi^2$/NDF:300623.8/16

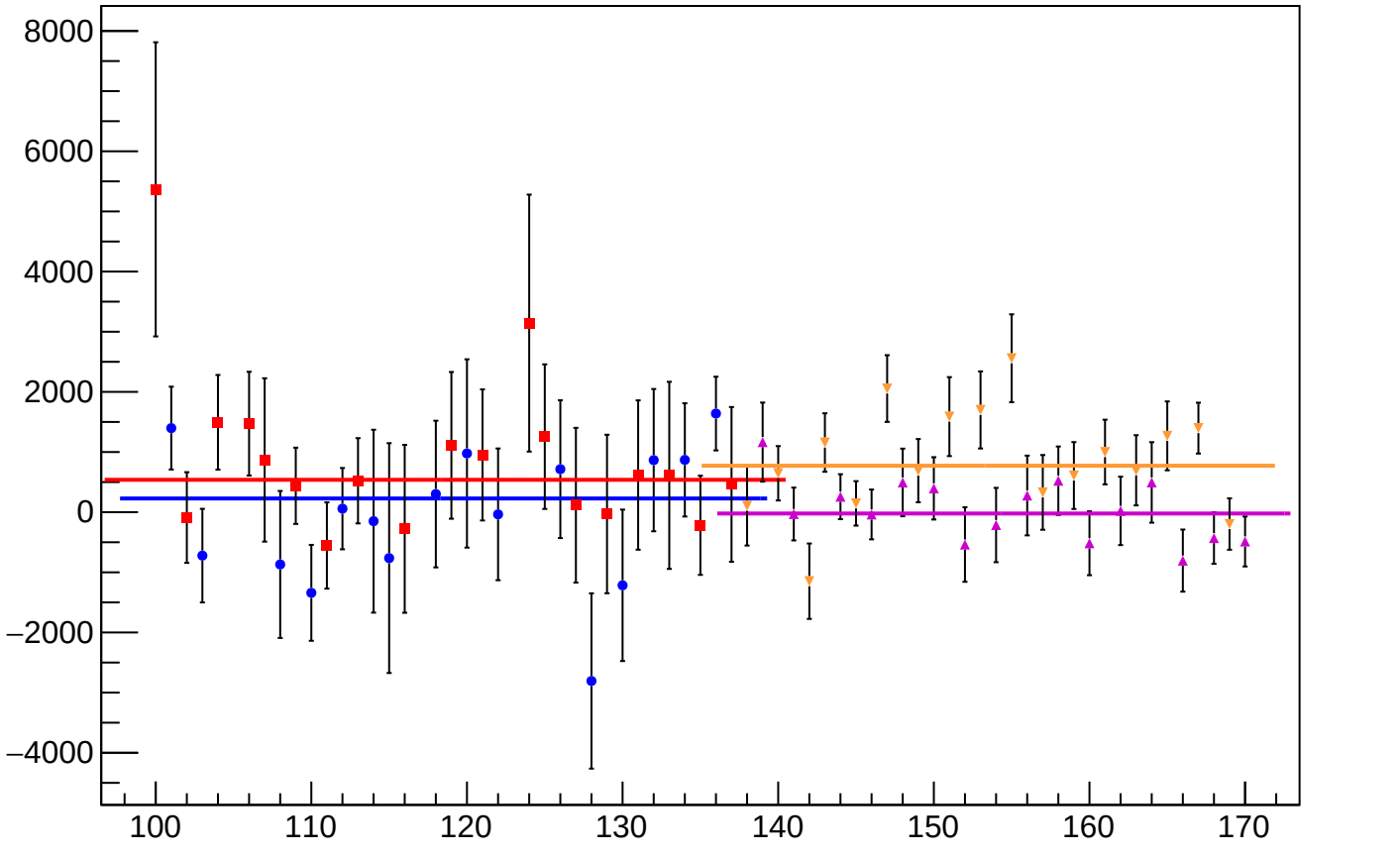
Right Out: 58.111+/-0.015 $\chi^2$/NDF: 312938.5/18

Left In: 47.277+/-0.009 $\chi^2$/NDF:262178.2/15

+ sign 50.119+/-0.008 $\chi^2$/NDF: 912248.3/32

All: 50.156+/-0.006 $\chi^2$/NDF: 1854051.2/67

- sign 50.193+/-0.008 $\chi^2$/NDF: 941759.6/34




Right In: 227.547+/-241.227 $\chi^2$/NDF: 21.6/15

Left Out: 772.085+/-127.895 $\chi^2$/NDF:37.9/16

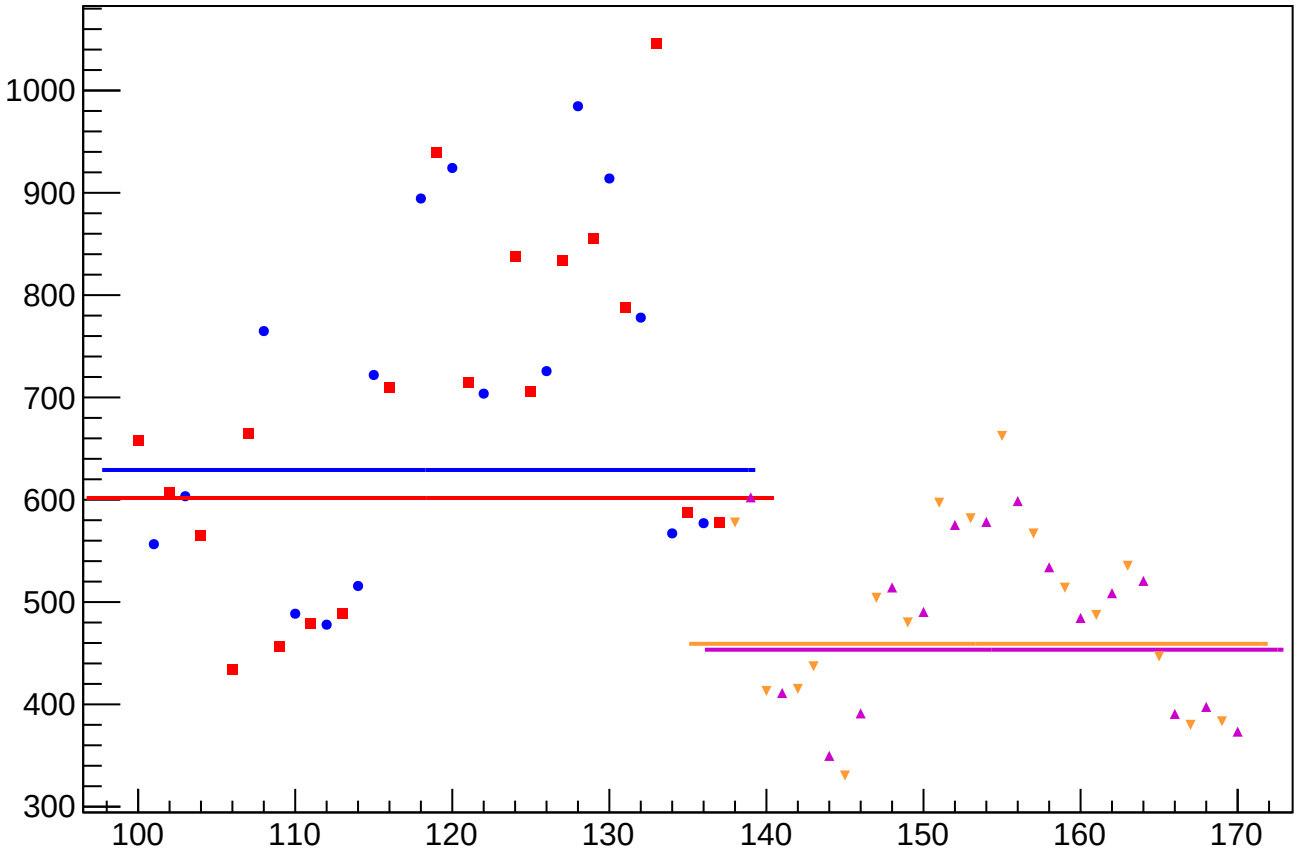
Right Out: 538.117+/-228.754 $\chi^2$/NDF: 13.3/18

Left In: -22.174+/-127.125 $\chi^2$/NDF:13.2/15

+ sign 652.603+/-112.996 $\chi^2$/NDF: 63.5/32

All: 376.775+/-79.228 $\chi^2$/NDF: 106.3/67

- sign 110.033+/-111.119 $\chi^2$/NDF: 31.1/34




Right In: 629.101+/-0.171 $\chi^2$/NDF: 692716.0/15

Left Out: 459.197+/-0.090 $\chi^2$/NDF:927634.7/16

Right Out: 601.721+/-0.162 $\chi^2$/NDF: 874042.1/18

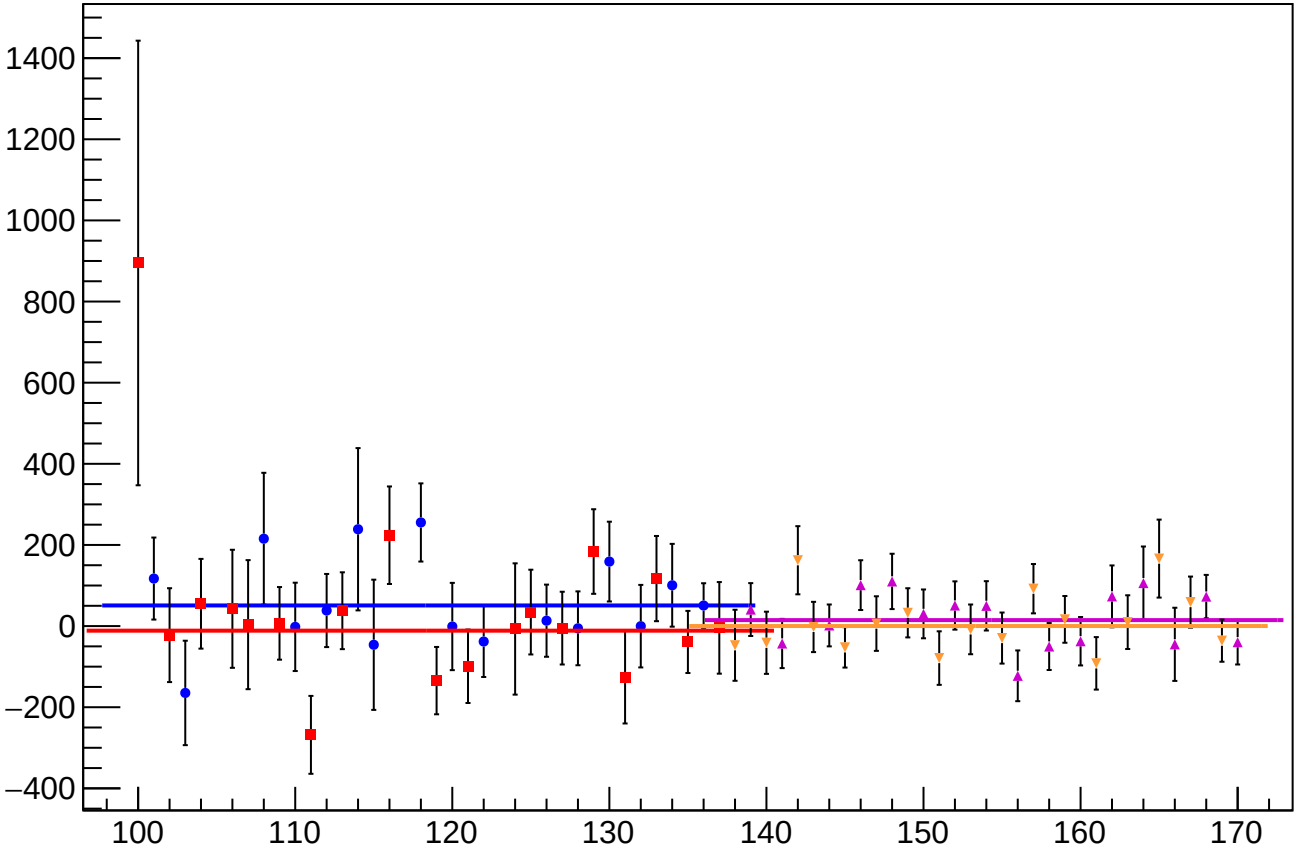
Left In: 453.436+/-0.090 $\chi^2$/NDF:833775.7/15

+ sign 496.477+/-0.080 $\chi^2$/NDF: 2394815.2/32

All: 492.384+/-0.056 $\chi^2$/NDF: 4749886.7/67

- sign 488.426+/-0.079 $\chi^2$/NDF: 2349909.3/34

# dit_asym_sam_15_48_dd_mean vs Slug




Right In: 50.861+/-24.492 $\chi^2$/NDF: 13.8/15

Left Out: 0.120+/-15.583 $\chi^2$/NDF:16.2/16

Right Out: -11.261+/-24.324 $\chi^2$/NDF: 24.0/18

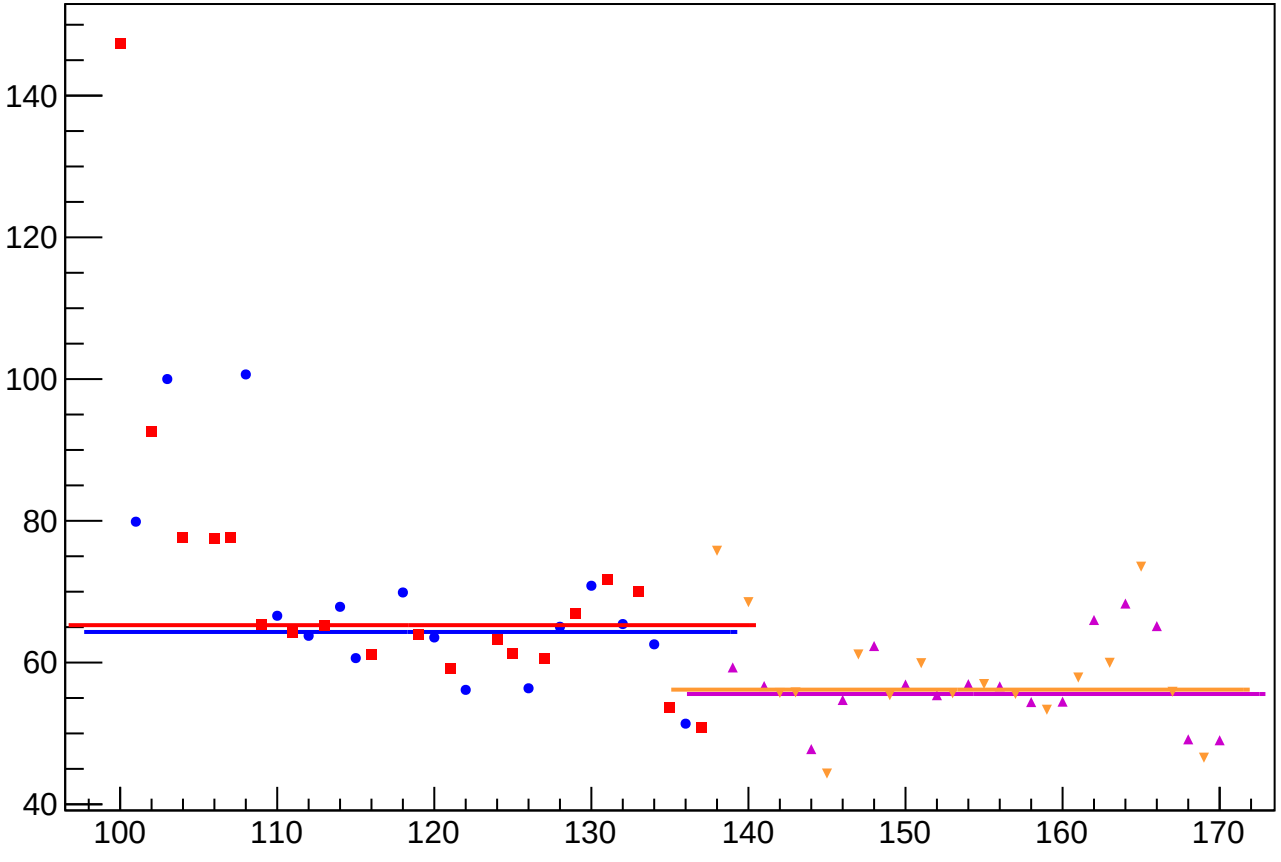
Left In: 14.742+/-15.570 $\chi^2$/NDF:16.9/15

+ sign 14.741+/-13.148 $\chi^2$/NDF: 33.0/32

All: 10.953+/-9.285 $\chi^2$/NDF: 74.9/67

- sign 7.185+/-13.113 $\chi^2$/NDF: 41.7/34

# dit_asym_sam_15_48_dd_rms vs Slug




Right In: 64.317+/-0.017 $\chi^2$/NDF: 464952.4/15

Left Out: 56.180+/-0.011 $\chi^2$/NDF:429849.4/16

Right Out: 65.277+/-0.017 $\chi^2$/NDF: 319136.6/18

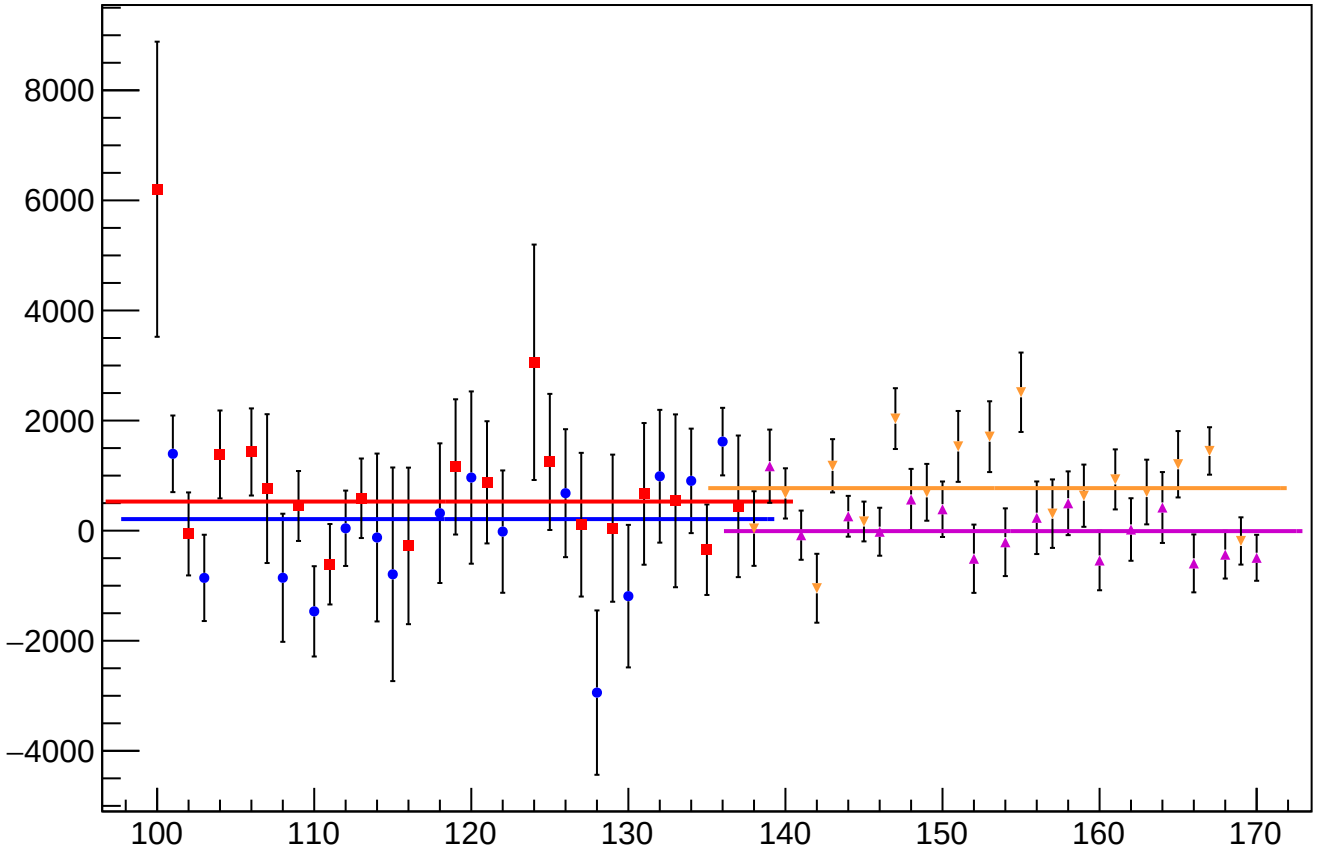
Left In: 55.562+/-0.011 $\chi^2$/NDF:233817.1/15

+ sign 58.525+/-0.009 $\chi^2$/NDF: 1051928.3/32

All: 58.455+/-0.007 $\chi^2$/NDF: 1831324.9/67

- sign 58.386+/-0.009 $\chi^2$/NDF: 779284.1/34

# asym_sam_15_48_dd_dit_correction_mean vs Slug




Right In: 210.018+/-243.798 $\chi^2$/NDF: 22.4/15

Left Out: 772.643+/-128.292 $\chi^2$/NDF:36.4/16

Right Out: 528.675+/-229.679 $\chi^2$/NDF: 13.8/18

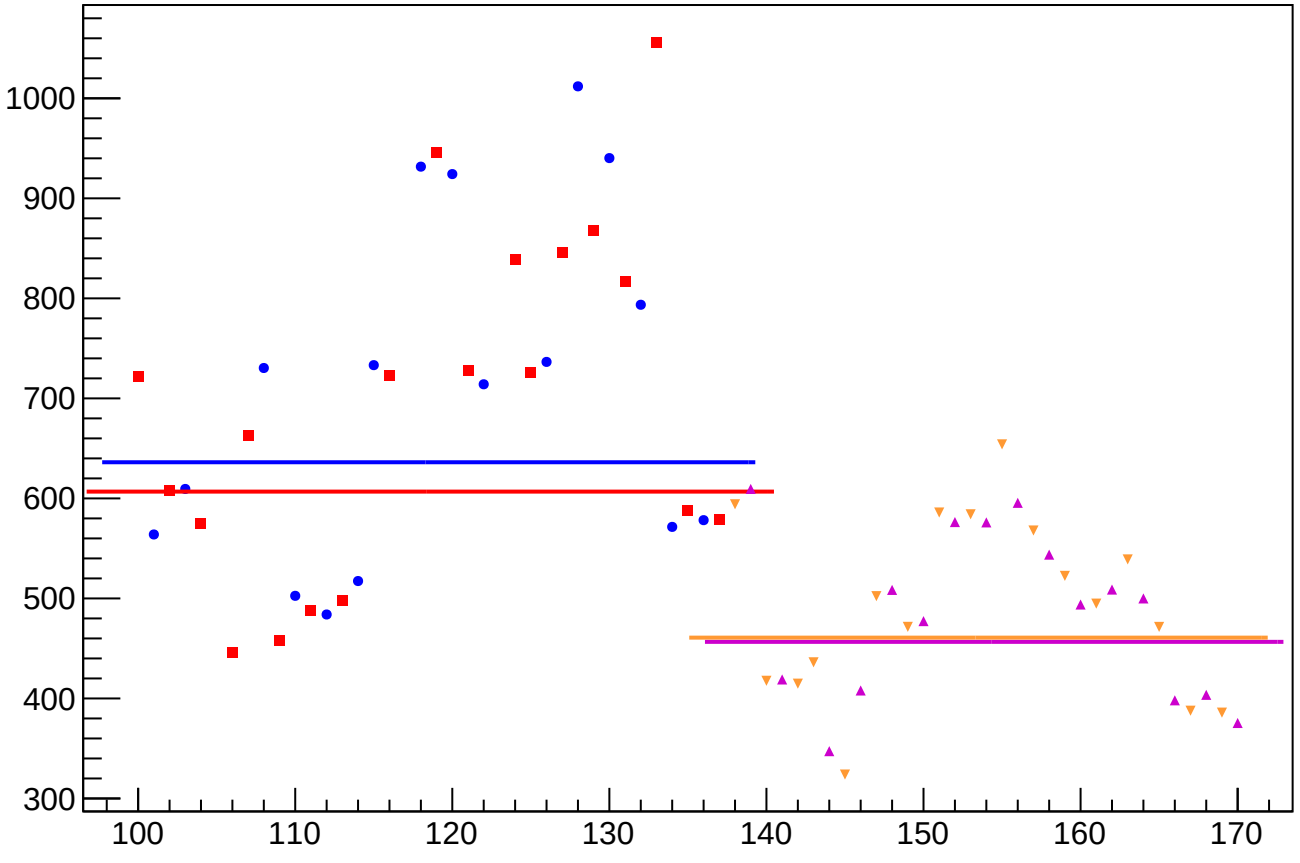
Left In: -8.356+/-127.948 $\chi^2$/NDF:12.0/15

+ sign 650.632+/-113.533 $\chi^2$/NDF: 63.0/32

All: 380.583+/-79.651 $\chi^2$/NDF: 104.2/67

- sign 118.831+/-111.775 $\chi^2$/NDF: 30.0/34

# asym_sam_15_48_dd_dit_correction_rms vs Slug




Right In: 636.144+/-0.172 $\chi^2$/NDF: 705237.7/15

Left Out: 460.810+/-0.091 $\chi^2$/NDF:948097.6/16

Right Out: 606.803+/-0.162 $\chi^2$/NDF: 893878.7/18

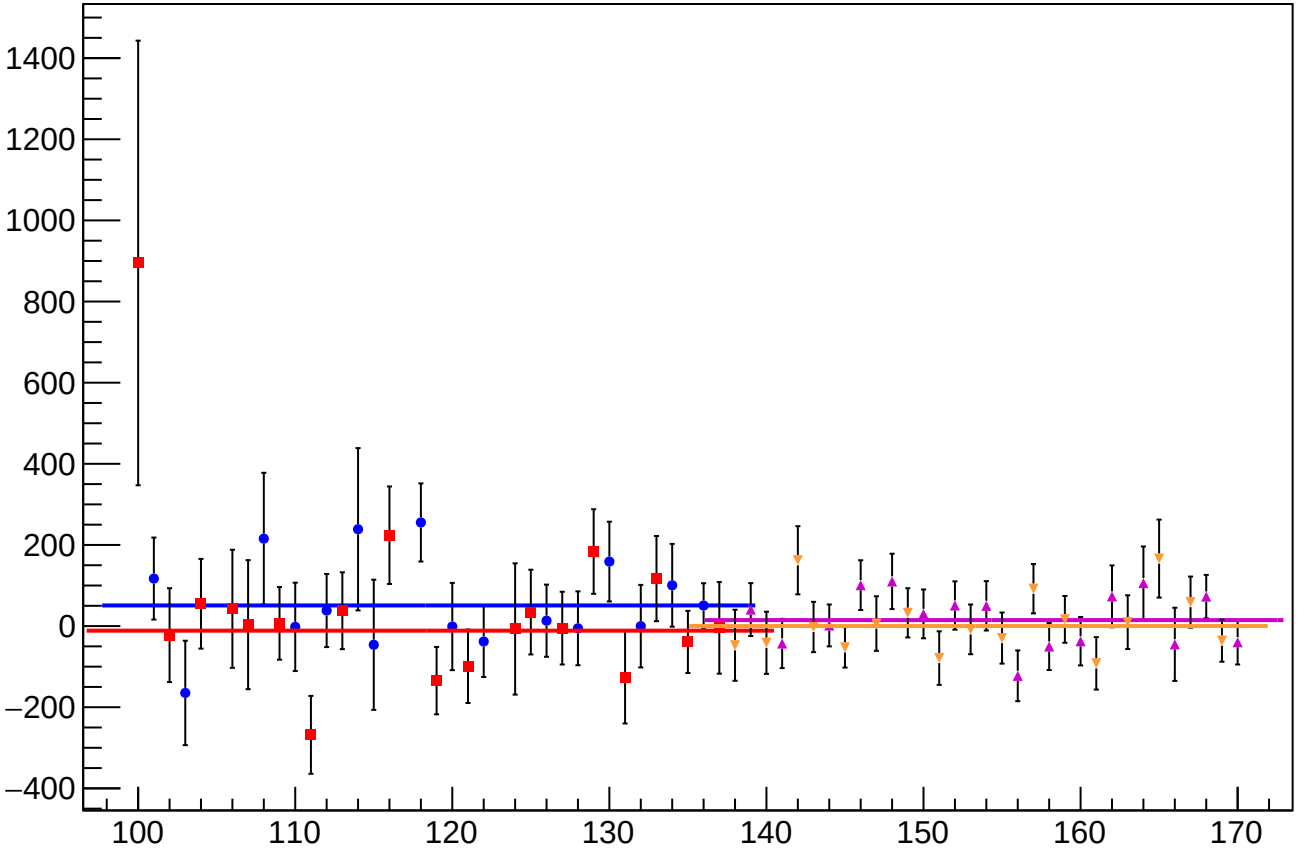
Left In: 456.583+/-0.090 $\chi^2$/NDF:789194.2/15

+ sign 498.833+/-0.080 $\chi^2$/NDF: 2463442.8/32

All: 495.445+/-0.056 $\chi^2$/NDF: 4802952.2/67

- sign 492.160+/-0.079 $\chi^2$/NDF: 2336000.5/34

# eigen_dit_asym_sam_15_48_dd_mean vs Slug




Right In: 50.859+/-24.492 $\chi^2$/NDF: 13.8/15

Left Out: 0.119+/-15.583 $\chi^2$/NDF:16.2/16

Right Out: -11.261+/-24.324 $\chi^2$/NDF: 24.0/18

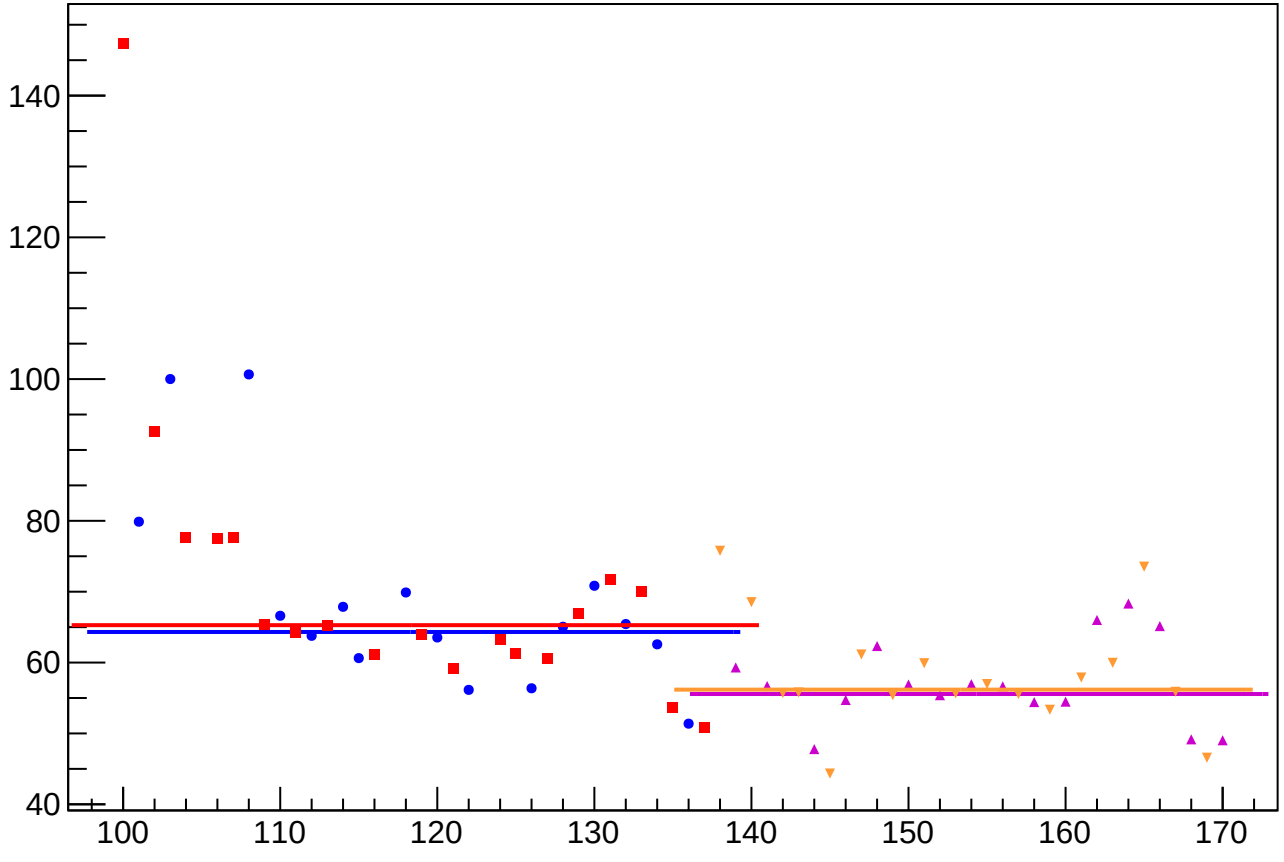
Left In: 14.742+/-15.570 $\chi^2$/NDF:16.9/15

+ sign 14.740+/-13.148 $\chi^2$/NDF: 33.0/32

All: 10.953+/-9.285 $\chi^2$/NDF: 74.9/67

- sign 7.185+/-13.114 $\chi^2$/NDF: 41.7/34

# eigen_dit_asym_sam_15_48_dd_rms vs Slug




Right In: 64.317+/-0.017 $\chi^2$/NDF: 464950.5/15

Left Out: 56.180+/-0.011 $\chi^2$/NDF:429839.2/16

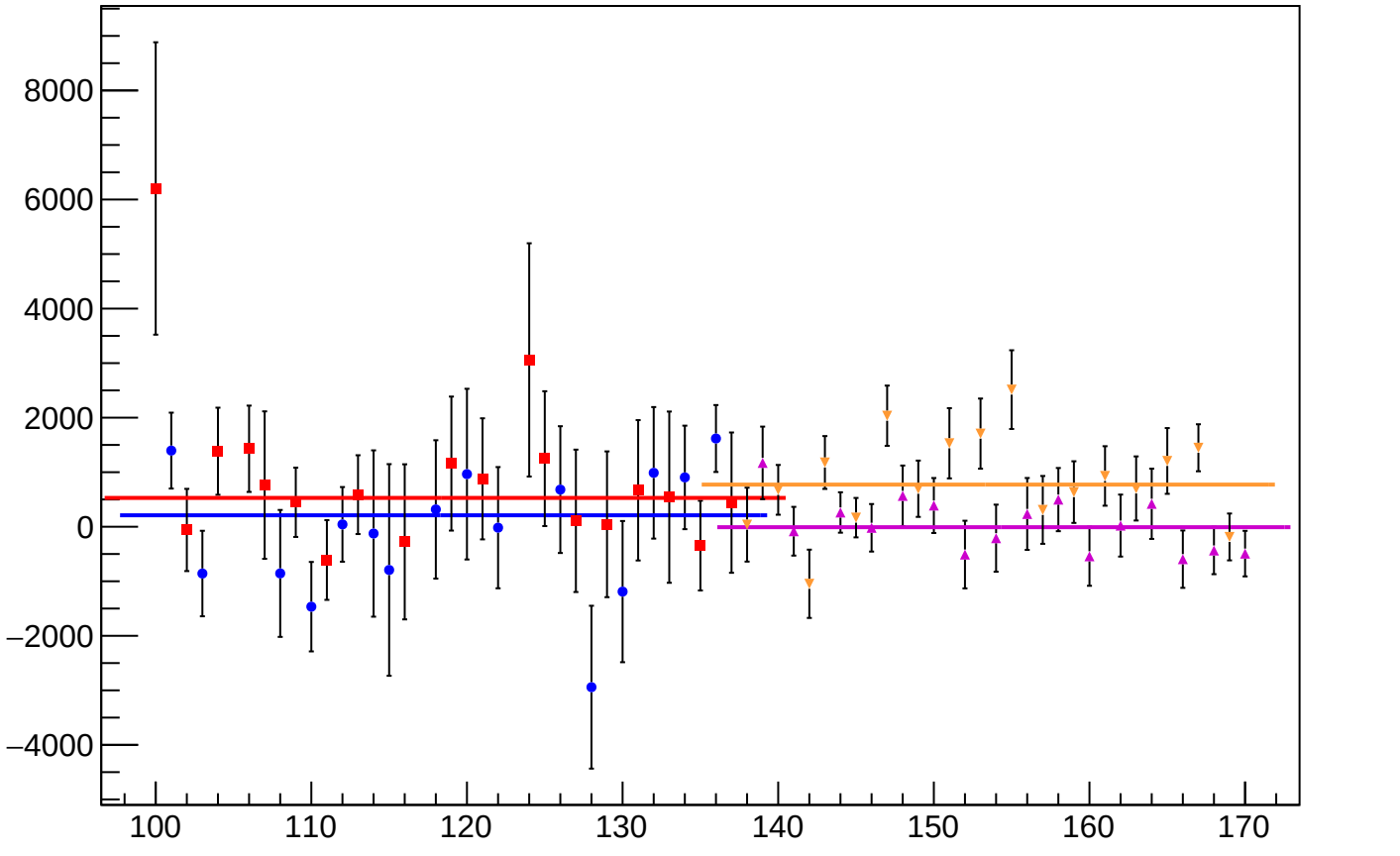
Right Out: 65.277+/-0.017 $\chi^2$/NDF: 319140.2/18

Left In: 55.562+/-0.011 $\chi^2$/NDF:233816.1/15

+ sign 58.525+/-0.009 $\chi^2$/NDF: 1051908.1/32

All: 58.455+/-0.007 $\chi^2$/NDF: 1831297.6/67

- sign 58.386+/-0.009 $\chi^2$/NDF: 779276.9/34




Right In: 210.017+/-243.798 $\chi^2$/NDF: 22.4/15

Left Out: 772.641+/-128.292 $\chi^2$/NDF:36.4/16

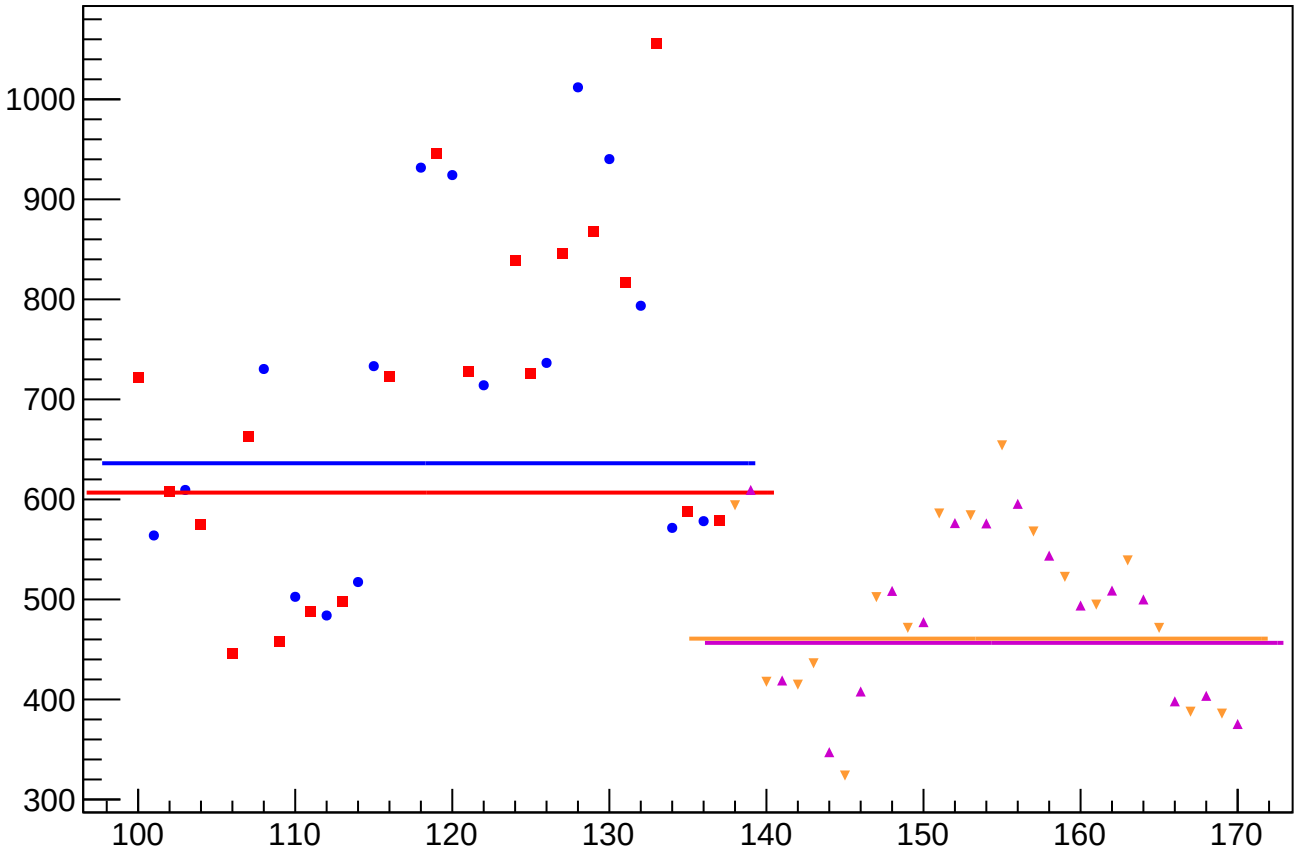
Right Out: 528.674+/-229.678 $\chi^2$/NDF: 13.8/18

Left In: -8.357+/-127.948 $\chi^2$/NDF:12.0/15

+ sign 650.630+/-113.532 $\chi^2$/NDF: 63.0/32

All: 380.581+/-79.651 $\chi^2$/NDF: 104.2/67

- sign 118.831+/-111.774 $\chi^2$/NDF: 30.0/34




Right In: 636.144+/-0.172 $\chi^2$/NDF: 705241.1/15

Left Out: 460.809+/-0.091 $\chi^2$/NDF:948109.7/16

Right Out: 606.802+/-0.162 $\chi^2$/NDF: 893880.8/18

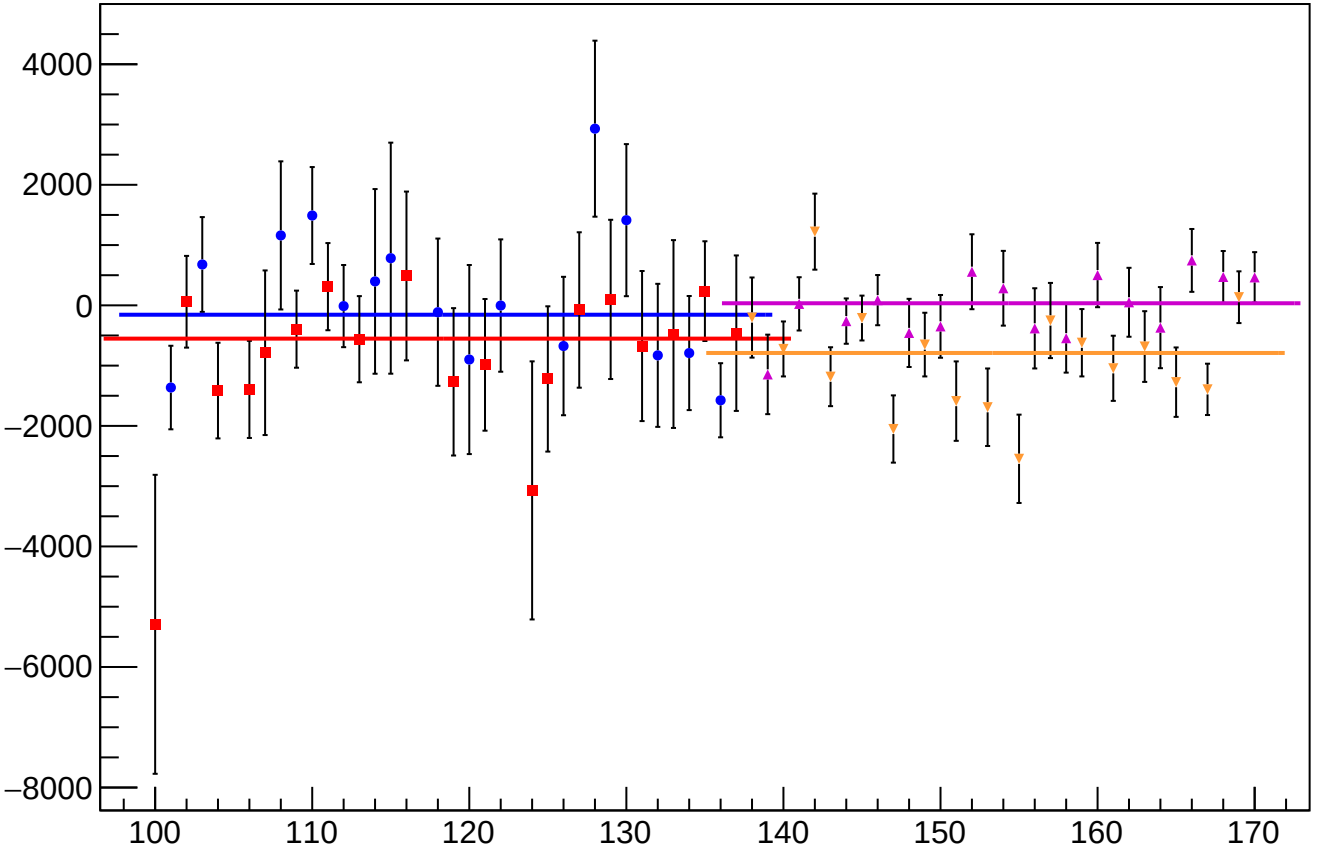
Left In: 456.581+/-0.090 $\chi^2$/NDF:789200.4/15

+ sign 498.832+/-0.080 $\chi^2$/NDF: 2463464.1/32

All: 495.443+/-0.056 $\chi^2$/NDF: 4802986.4/67

- sign 492.159+/-0.079 $\chi^2$/NDF: 2336013.5/34

# asym_sam_15_48_dd_mean vs Slug




Right In: -155.651+/-242.595 $\chi^2$/NDF: 22.5/15

Left Out: -790.062+/-128.633 $\chi^2$/NDF:36.9/16

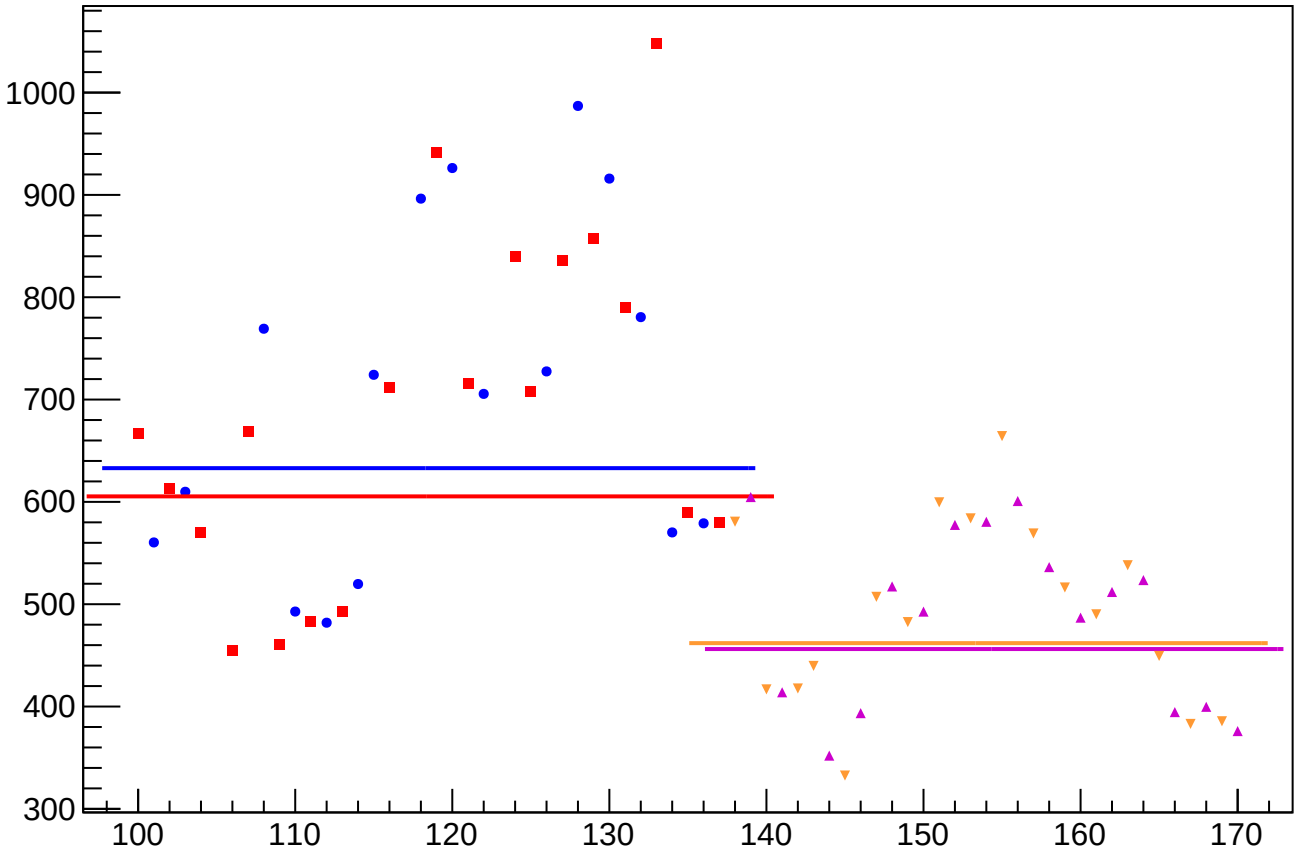
Right Out: -552.176+/-228.890 $\chi^2$/NDF: 12.1/18

Left In: 34.675+/-127.869 $\chi^2$/NDF:12.5/15

+ sign -650.839+/-113.646 $\chi^2$/NDF: 64.7/32

All: -372.992+/-79.638 $\chi^2$/NDF: 106.1/67

- sign -104.911+/-111.631 $\chi^2$/NDF: 29.6/34




Right In: 632.966+/-0.172 $\chi^2$/NDF: 681138.4/15

Left Out: 461.955+/-0.091 $\chi^2$/NDF:917140.8/16

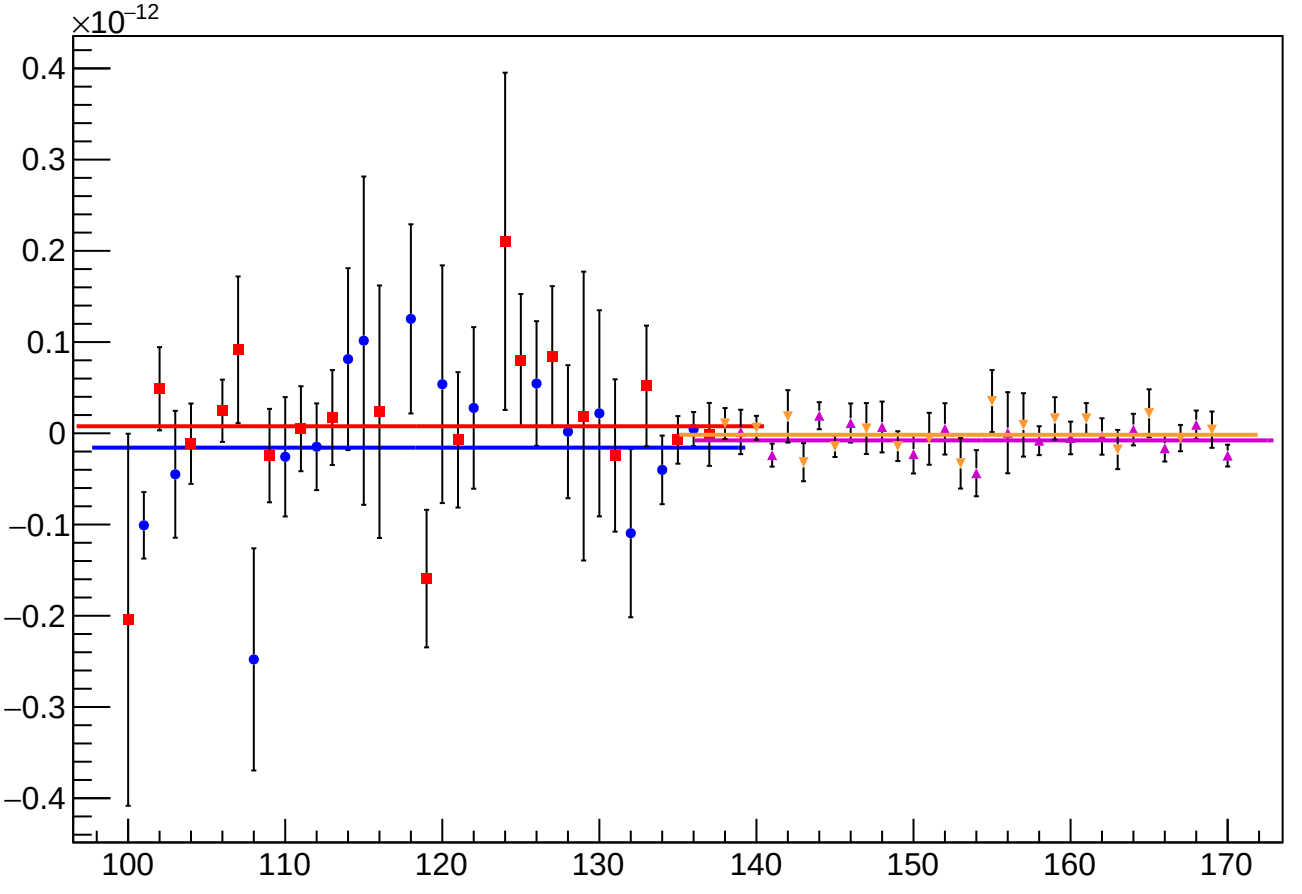
Right Out: 605.373+/-0.162 $\chi^2$/NDF: 853994.0/18

Left In: 456.188+/-0.090 $\chi^2$/NDF:823703.4/15

+ sign 499.484+/-0.080 $\chi^2$/NDF: 2374012.6/32

All: 495.508+/-0.056 $\chi^2$/NDF: 4704062.3/67

- sign 491.672+/-0.079 $\chi^2$/NDF: 2325239.8/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:11.1/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 13.0/18

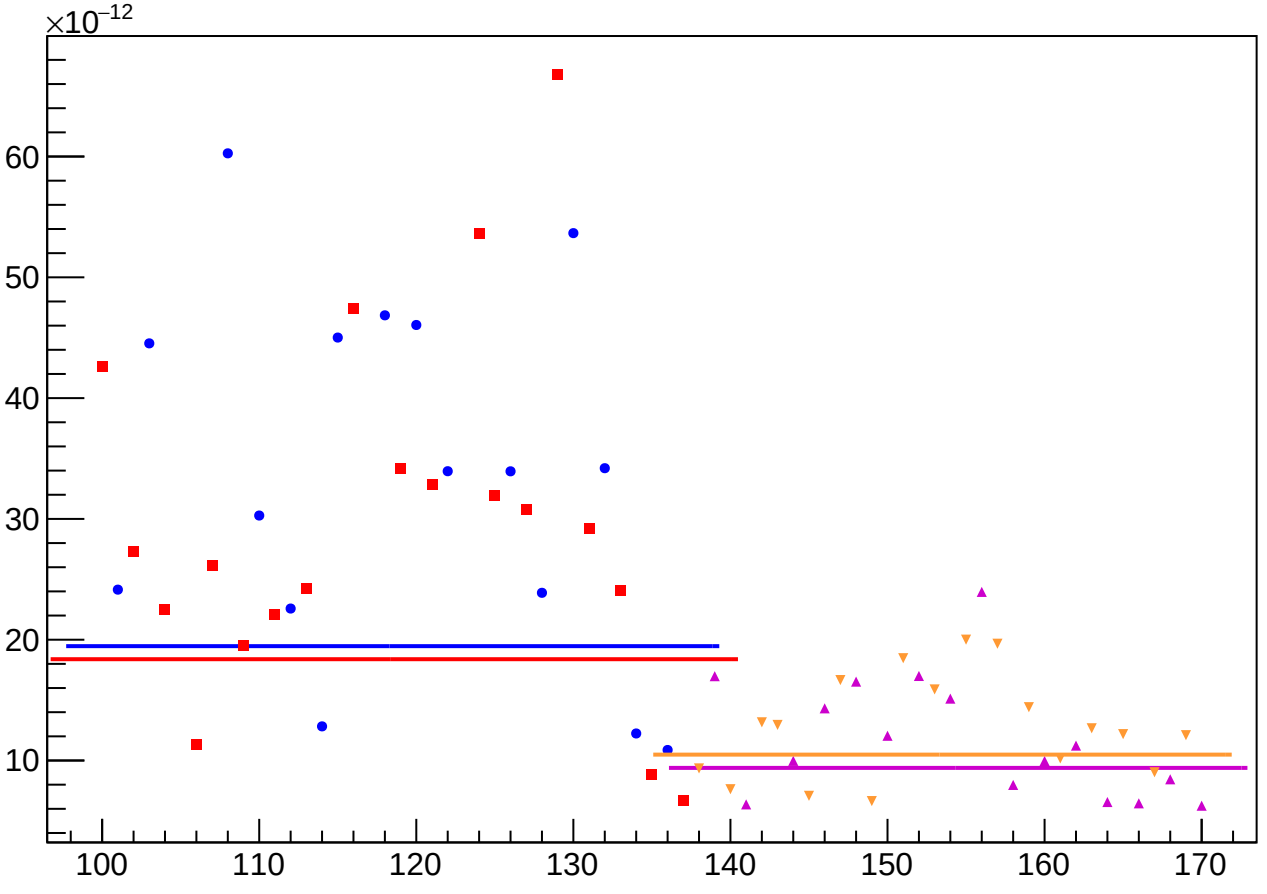
Left In: -0.000+/-0.000 $\chi^2$/NDF:13.0/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 29.1/32

All: -0.000+/-0.000 $\chi^2$/NDF: 56.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.4/34

# asym_sam_15_48_dd_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1735565.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1178305.4/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1444777.6/18

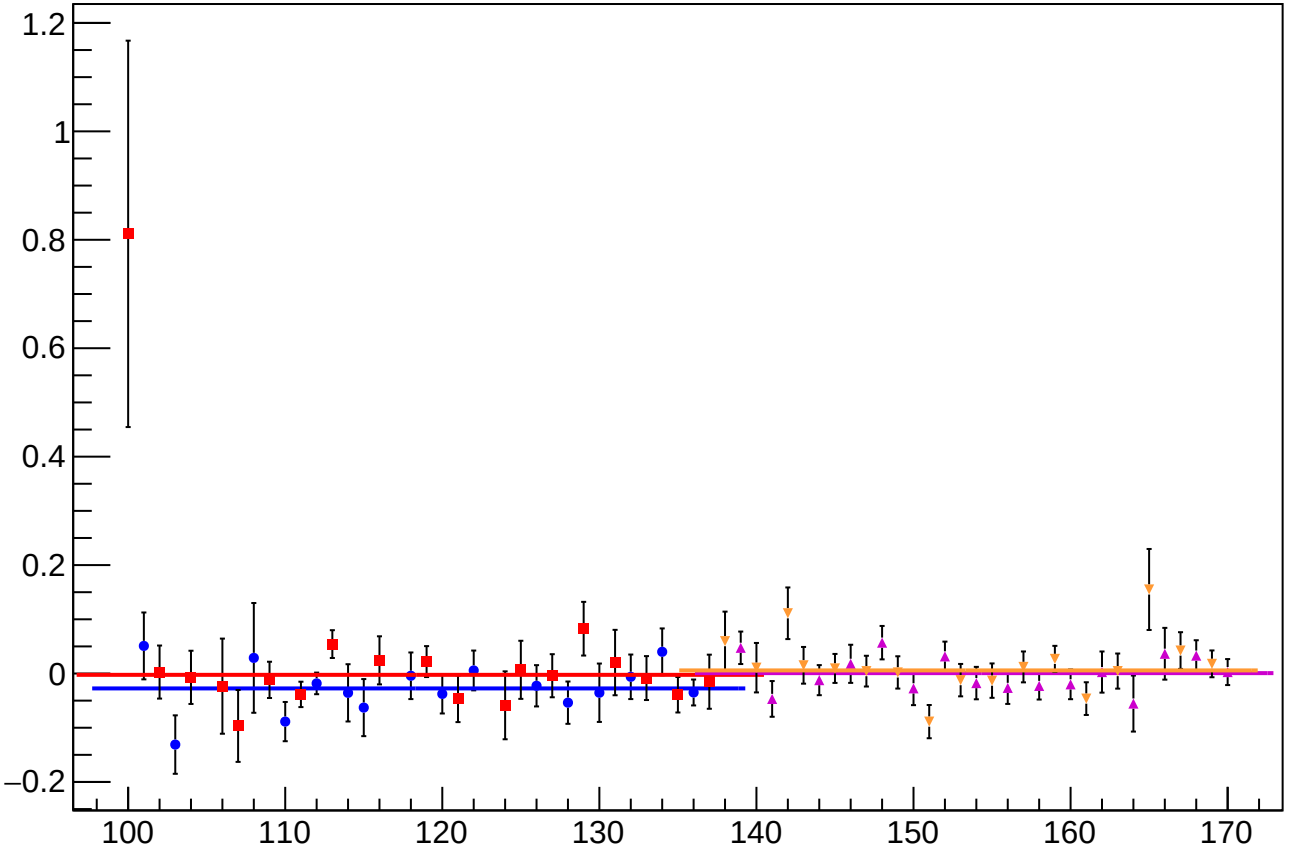
Left In: 0.000+/-0.000 $\chi^2$/NDF:1358004.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 3805459.6/32

All: 0.000+/-0.000 $\chi^2$/NDF: 7641430.7/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3767860.6/34

# asym_sam_15_48_dd_dit_vs_cor_diff_mean vs Slug




Right In: -0.027+/-0.009 $\chi^2$/NDF: 13.7/15

Left Out: 0.006+/-0.008 $\chi^2$/NDF:25.4/16

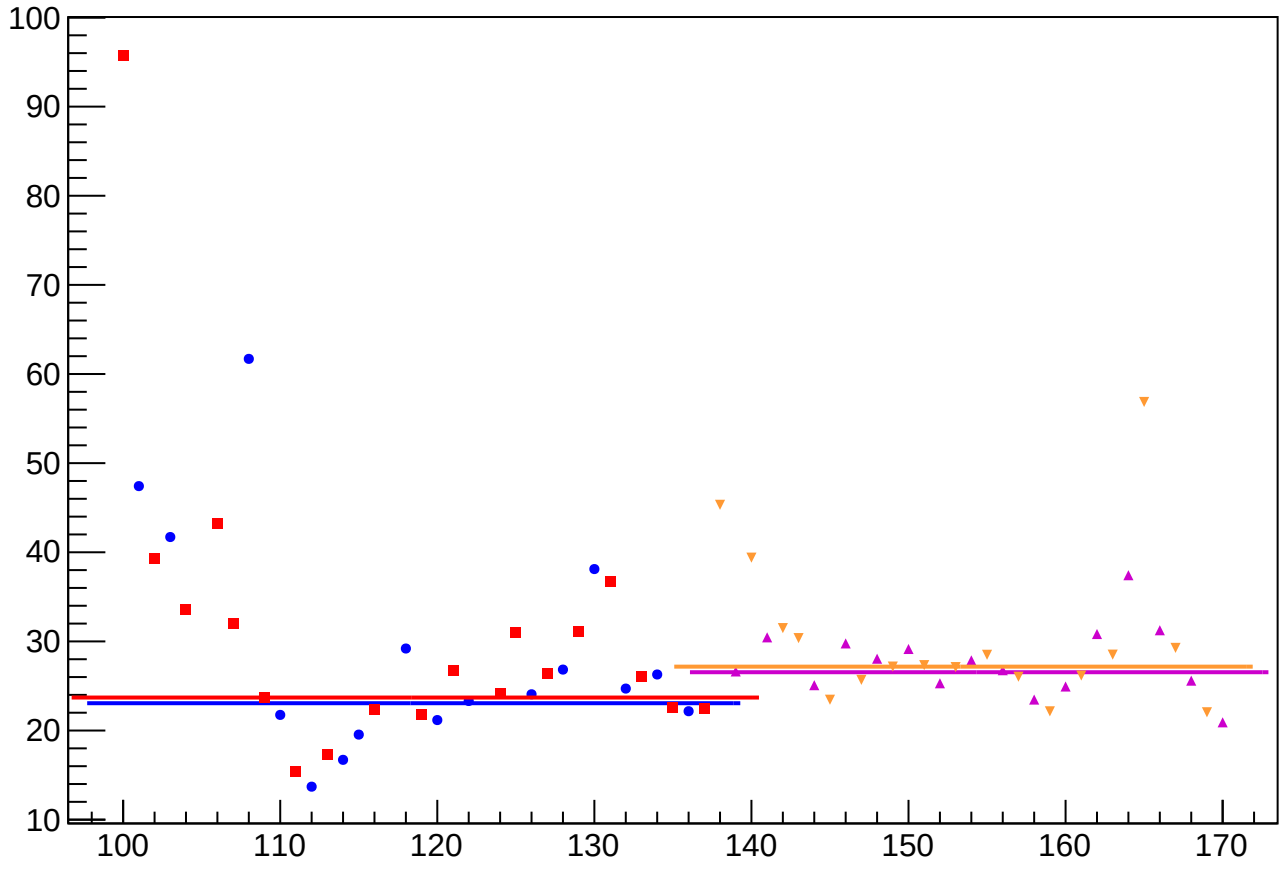
Right Out: -0.002+/-0.009 $\chi^2$/NDF: 22.1/18

Left In: 0.001+/-0.008 $\chi^2$/NDF:16.1/15

+ sign -0.008+/-0.006 $\chi^2$/NDF: 46.5/32

All: -0.004+/-0.004 $\chi^2$/NDF: 85.6/67

- sign -0.001+/-0.006 $\chi^2$/NDF: 38.3/34




Right In: 23.066+/-0.007 $\chi^2$/NDF: 1564478.6/15

Left Out: 27.169+/-0.005 $\chi^2$/NDF:952888.8/16

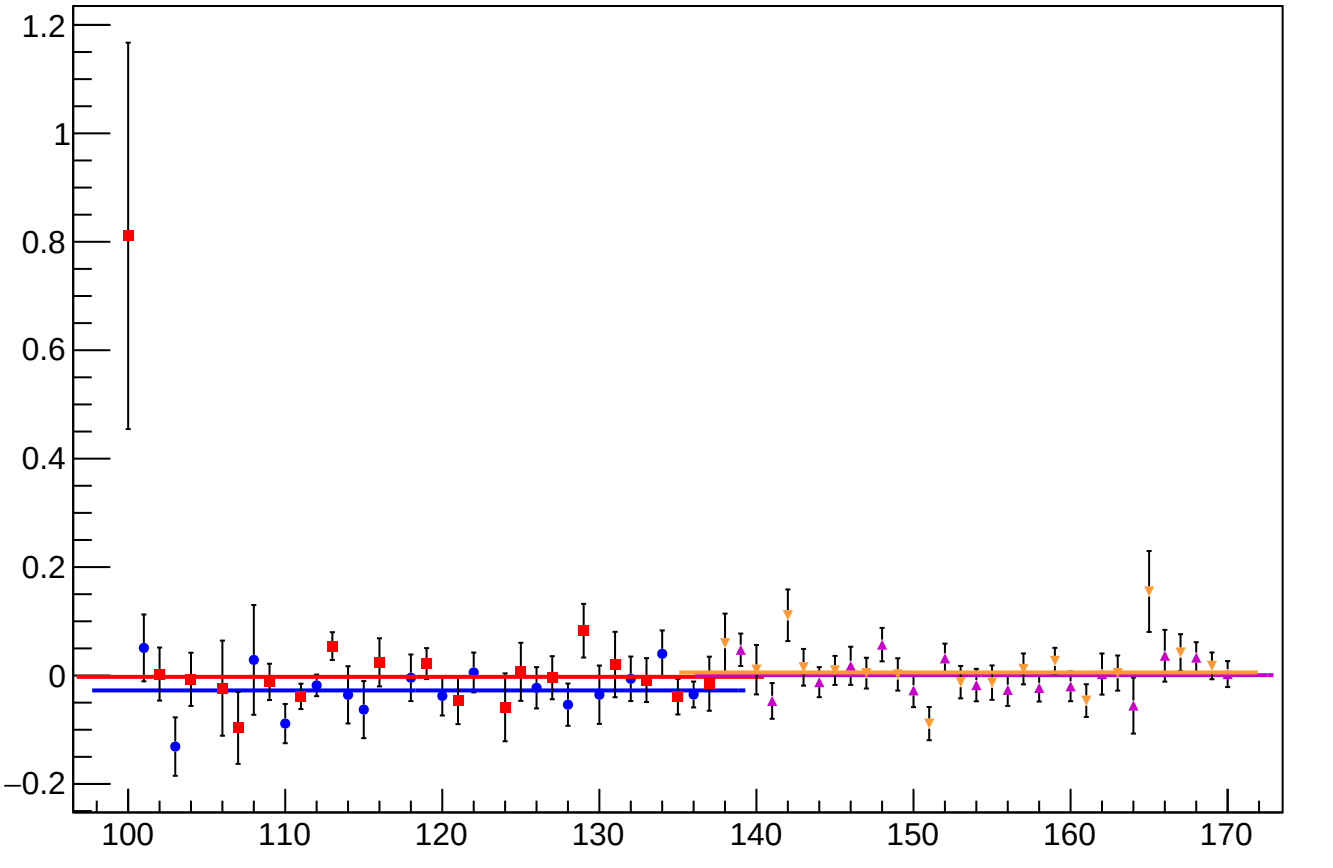
Right Out: 23.702+/-0.007 $\chi^2$/NDF: 1088494.2/18

Left In: 26.543+/-0.005 $\chi^2$/NDF:360268.4/15

+ sign 25.515+/-0.004 $\chi^2$/NDF: 2745150.8/32

All: 25.458+/-0.003 $\chi^2$/NDF: 4306137.0/67

- sign 25.402+/-0.004 $\chi^2$/NDF: 1560623.8/34




Right In: -0.027+/-0.009 $\chi^2$/NDF: 13.7/15

Left Out: 0.006+/-0.008 $\chi^2$/NDF:25.4/16

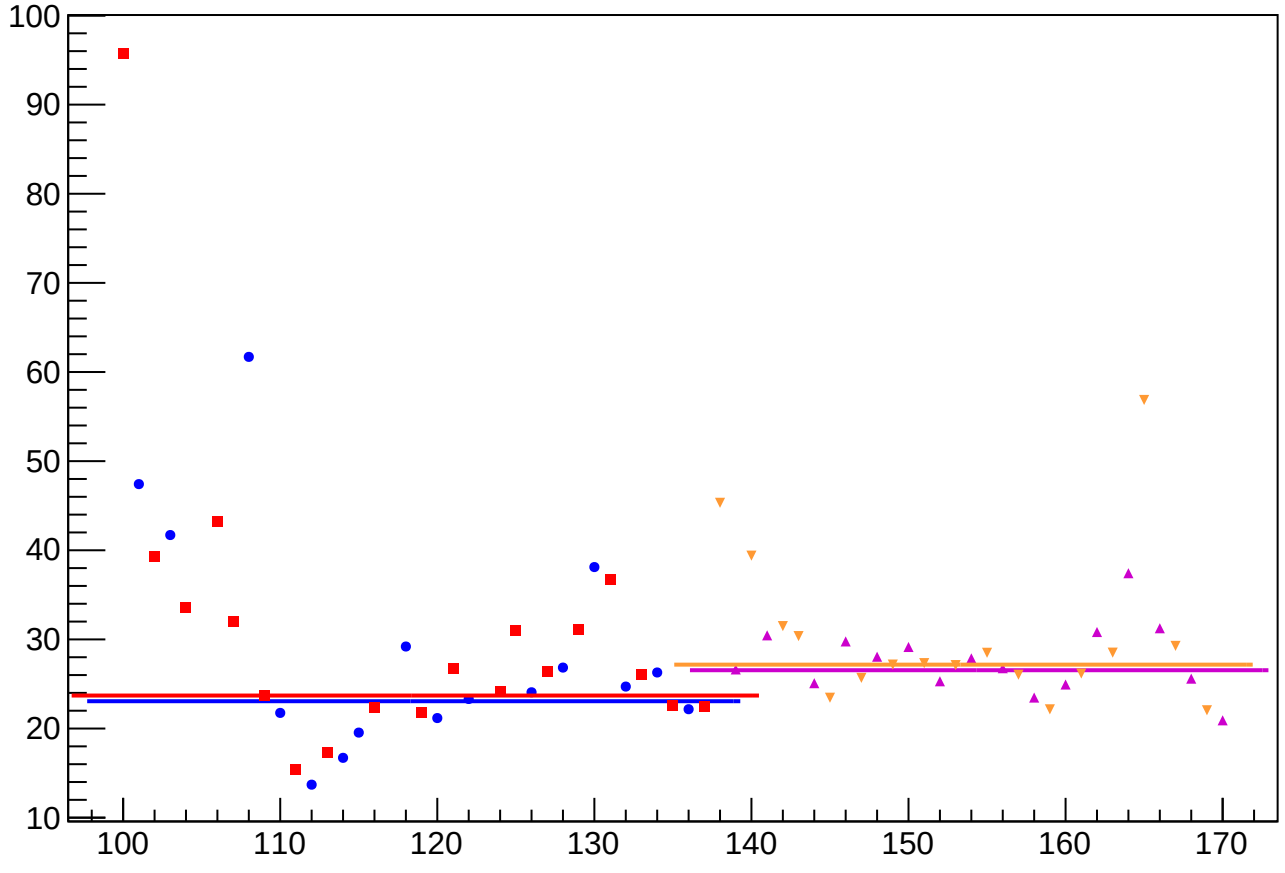
Right Out: -0.002+/-0.009 $\chi^2$/NDF: 22.1/18

Left In: 0.001+/-0.008 $\chi^2$/NDF:16.1/15

+ sign -0.008+/-0.006 $\chi^2$/NDF: 46.5/32

All: -0.004+/-0.004 $\chi^2$/NDF: 85.6/67

- sign -0.001+/-0.006 $\chi^2$/NDF: 38.3/34




Right In: 23.066+/-0.007 $\chi^2$/NDF: 1564478.6/15

Left Out: 27.169+/-0.005 $\chi^2$/NDF:952888.8/16

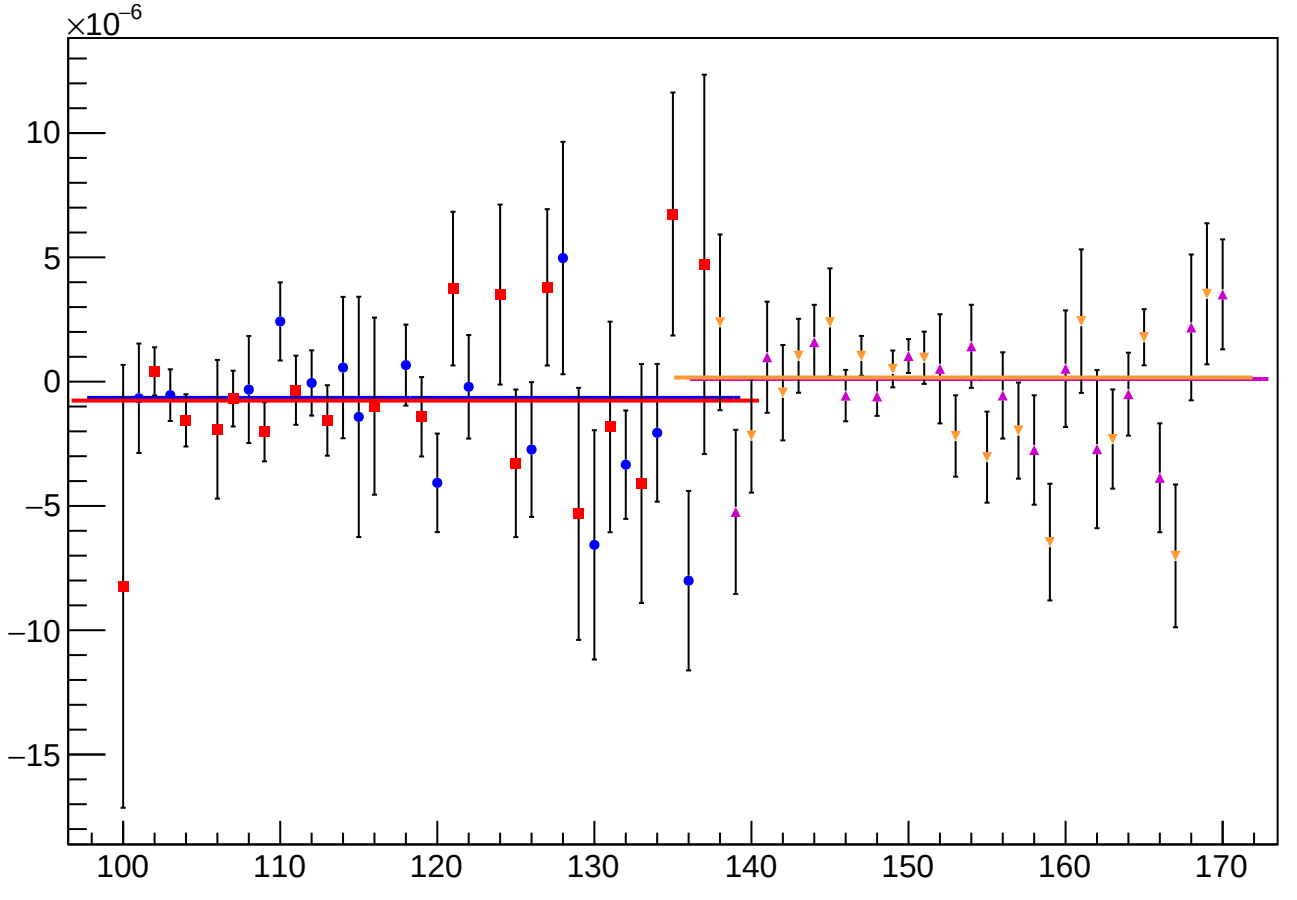
Right Out: 23.702+/-0.007 $\chi^2$/NDF: 1088494.2/18

Left In: 26.543+/-0.005 $\chi^2$/NDF:360268.4/15

+ sign 25.515+/-0.004 $\chi^2$/NDF: 2745150.8/32

All: 25.458+/-0.003 $\chi^2$/NDF: 4306137.0/67

- sign 25.402+/-0.004 $\chi^2$/NDF: 1560623.8/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 17.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:31.1/16

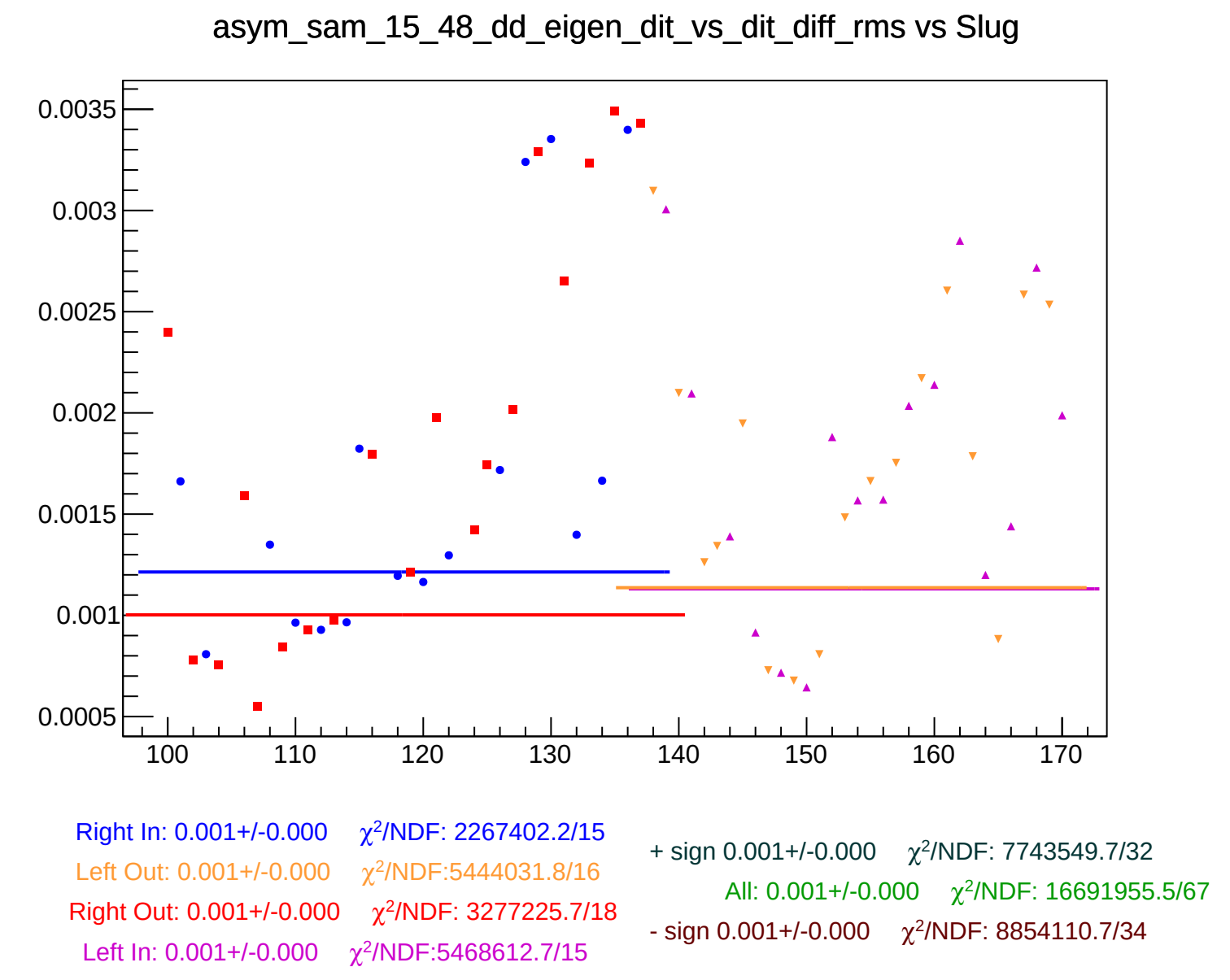
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 15.2/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:16.4/15

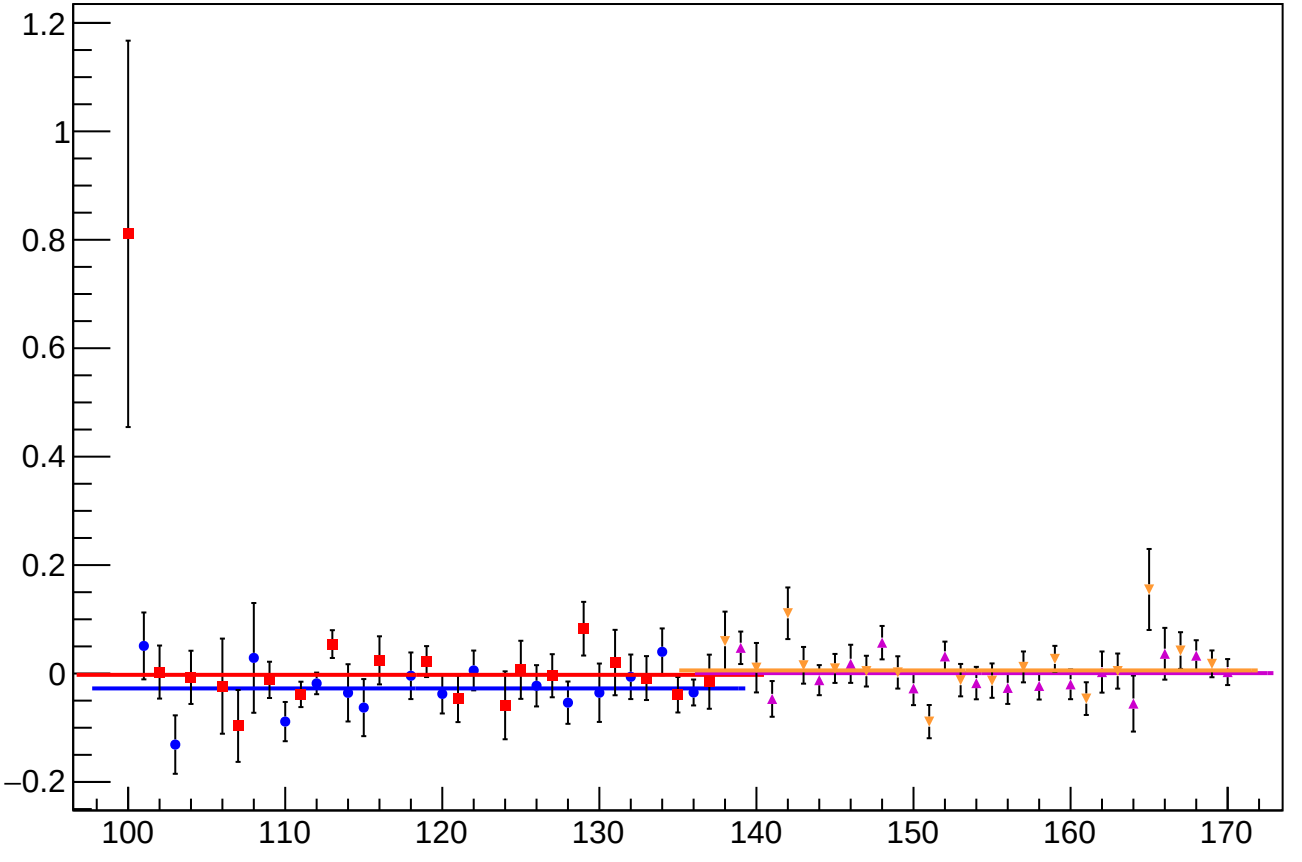
+ sign -0.000+/-0.000 $\chi^2$/NDF: 50.4/32

All: -0.000+/-0.000 $\chi^2$/NDF: 84.7/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 34.1/34


asym_sam_15_48_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 2267402.2/15
Left Out: 0.001+/-0.000 χ²/NDF:5444031.8/16
Right Out: 0.001+/-0.000 χ²/NDF: 3277225.7/18
Left In: 0.001+/-0.000 χ²/NDF:5468612.7/15
+ sign 0.001+/-0.000 χ²/NDF: 7743549.7/32
All: 0.001+/-0.000 χ²/NDF: 16691955.5/67
- sign 0.001+/-0.000 χ²/NDF: 8854110.7/34

# asym_sam_15_48_dd_eigen_dit_vs_cor_diff_mean vs Slug




Right In: -0.027+/-0.009 $\chi^2$/NDF: 13.7/15

Left Out: 0.006+/-0.008 $\chi^2$/NDF:25.4/16

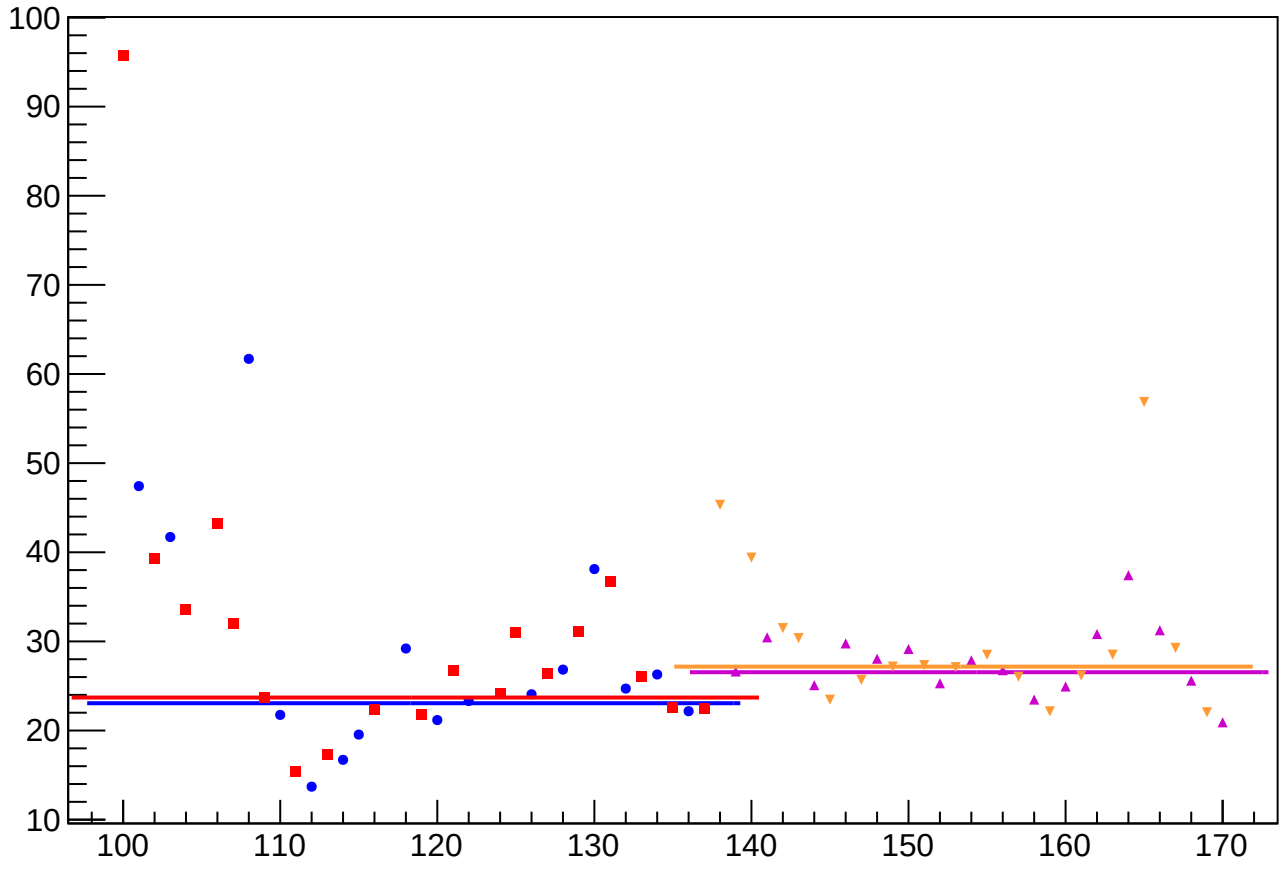
Right Out: -0.002+/-0.009 $\chi^2$/NDF: 22.1/18

Left In: 0.001+/-0.008 $\chi^2$/NDF:16.1/15

+ sign -0.008+/-0.006 $\chi^2$/NDF: 46.5/32

All: -0.004+/-0.004 $\chi^2$/NDF: 85.6/67

- sign -0.001+/-0.006 $\chi^2$/NDF: 38.3/34




Right In: 23.065+/-0.007 $\chi^2$/NDF: 1564493.0/15

Left Out: 27.169+/-0.005 $\chi^2$/NDF:952849.7/16

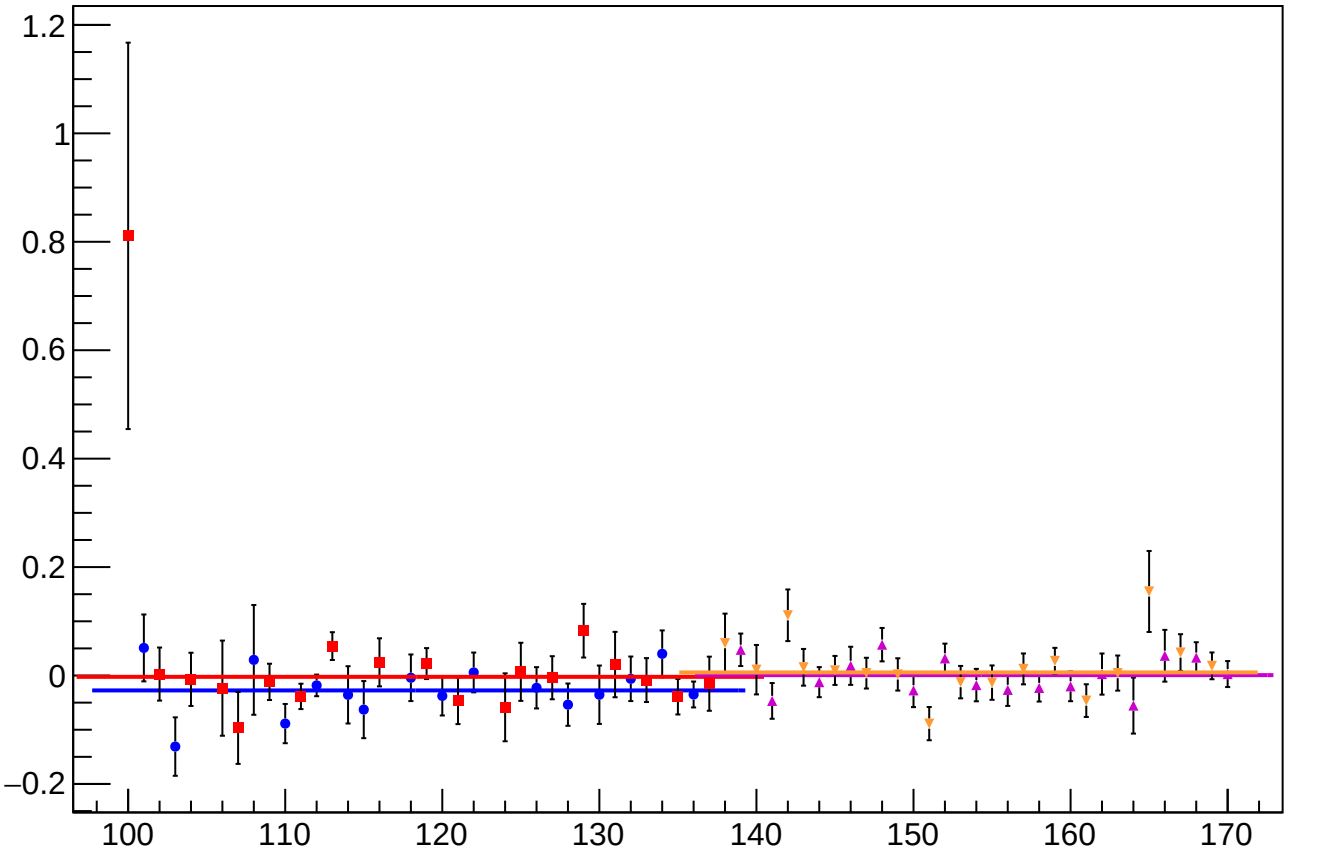
Right Out: 23.702+/-0.007 $\chi^2$/NDF: 1088531.8/18

Left In: 26.543+/-0.005 $\chi^2$/NDF:360270.1/15

+ sign 25.515+/-0.004 $\chi^2$/NDF: 2745182.8/32

All: 25.458+/-0.003 $\chi^2$/NDF: 4306244.9/67

- sign 25.402+/-0.004 $\chi^2$/NDF: 1560699.3/34




Right In: -0.027+/-0.009 $\chi^2$/NDF: 13.7/15

Left Out: 0.006+/-0.008 $\chi^2$/NDF:25.4/16

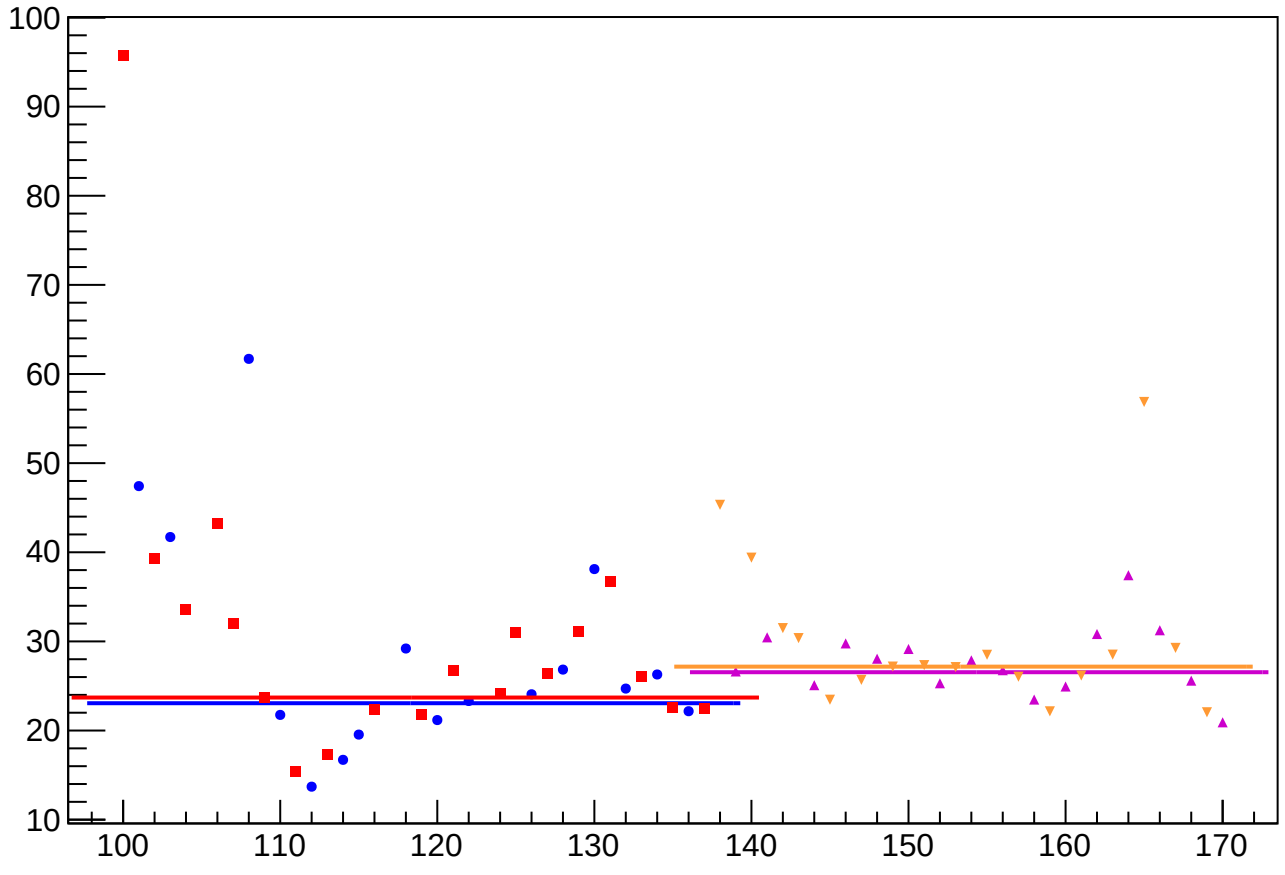
Right Out: -0.002+/-0.009 $\chi^2$/NDF: 22.1/18

Left In: 0.001+/-0.008 $\chi^2$/NDF:16.1/15

+ sign -0.008+/-0.006 $\chi^2$/NDF: 46.5/32

All: -0.004+/-0.004 $\chi^2$/NDF: 85.6/67

- sign -0.001+/-0.006 $\chi^2$/NDF: 38.3/34




Right In: 23.065+/-0.007 $\chi^2$/NDF: 1564493.0/15

Left Out: 27.169+/-0.005 $\chi^2$/NDF:952849.7/16

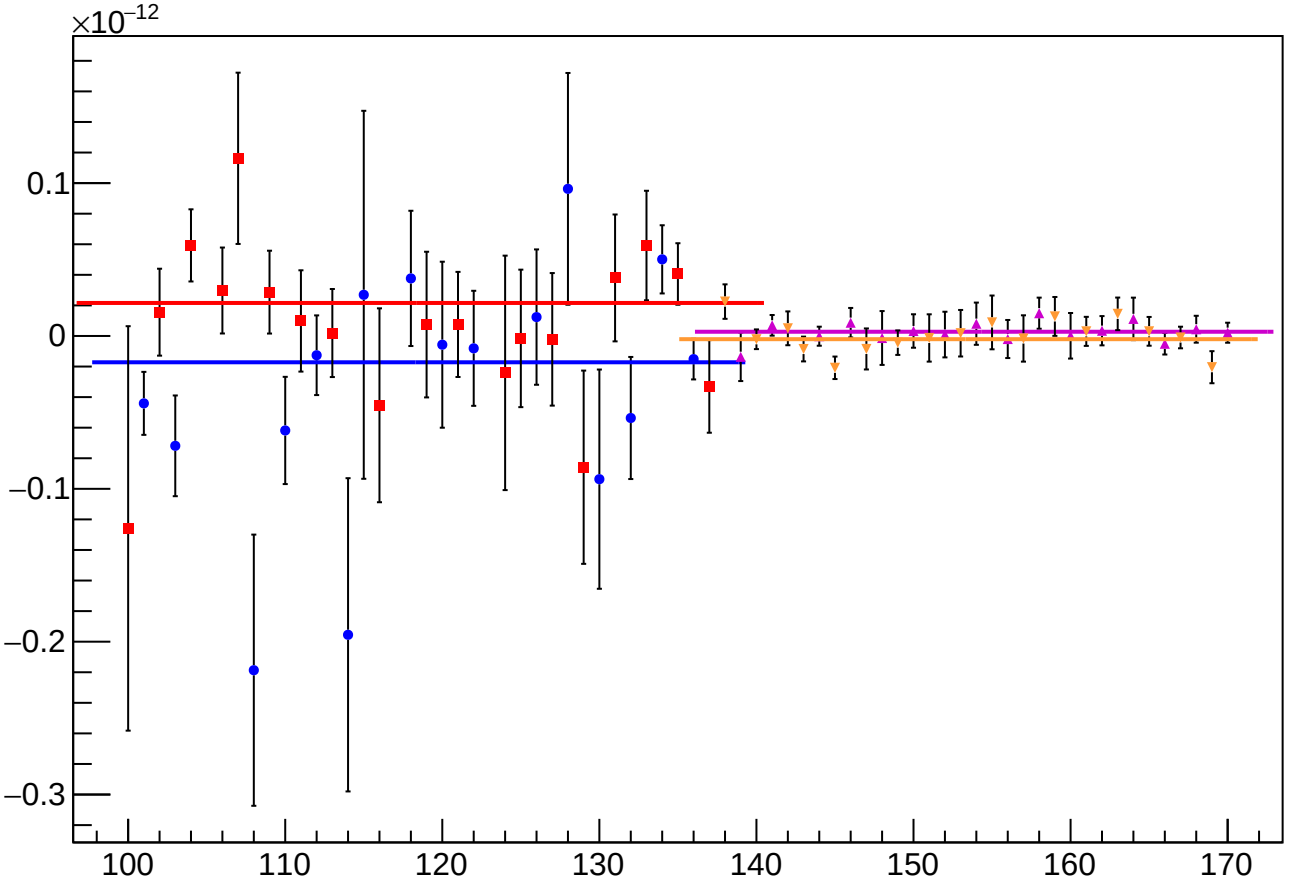
Right Out: 23.702+/-0.007 $\chi^2$/NDF: 1088531.8/18

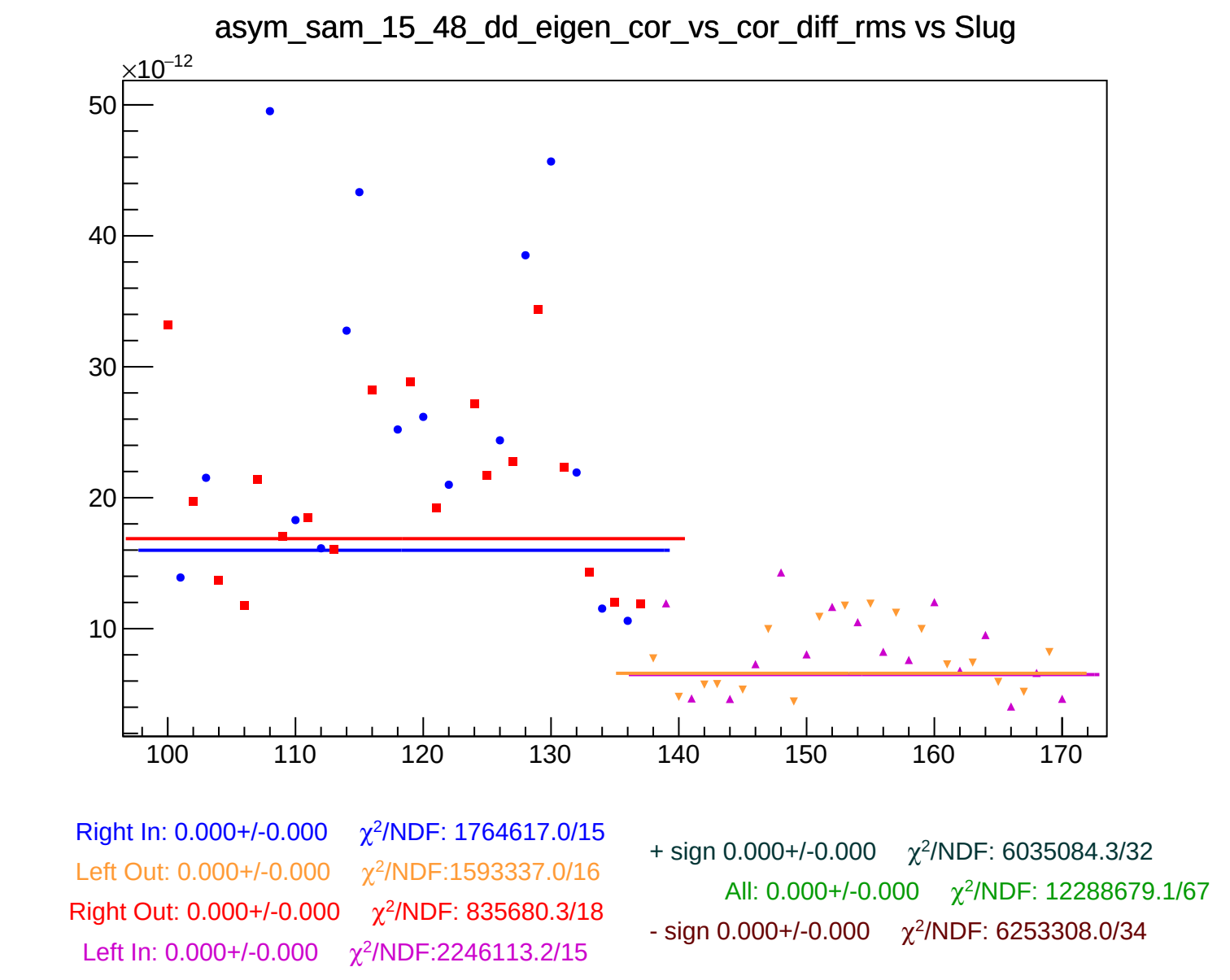
Left In: 26.543+/-0.005 $\chi^2$/NDF:360270.1/15

+ sign 25.515+/-0.004 $\chi^2$/NDF: 2745182.8/32

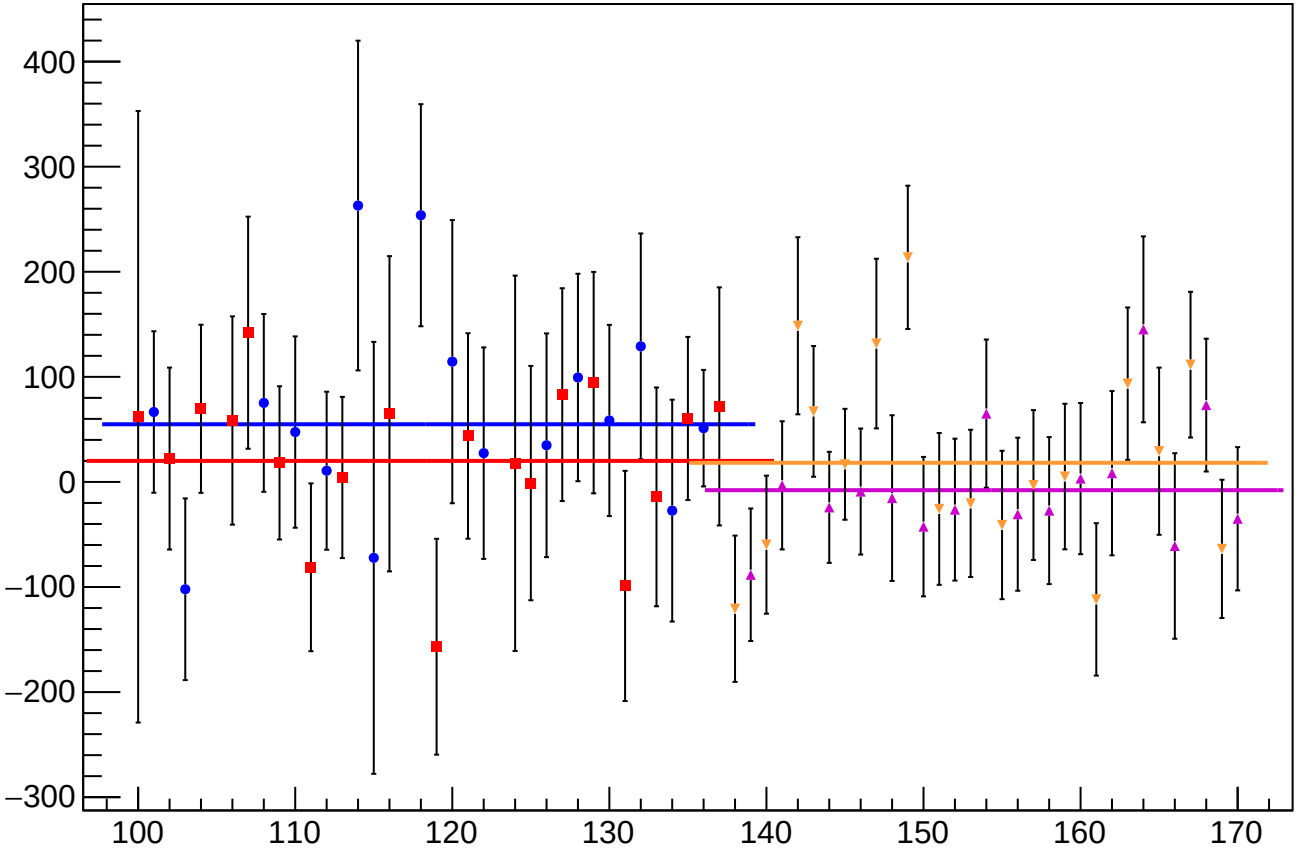
All: 25.458+/-0.003 $\chi^2$/NDF: 4306244.9/67

- sign 25.402+/-0.004 $\chi^2$/NDF: 1560699.3/34


asym_sam_15_48_dd_eigen_cor_vs_cor_diff_mean vs Slug
×10^−12
0.1
0
−0.1
−0.2
−0.3
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 29.9/15
Left Out: -0.000+/-0.000 χ²/NDF:20.5/16
Right Out: 0.000+/-0.000 χ²/NDF: 18.0/18
Left In: 0.000+/-0.000 χ²/NDF:5.5/15
+ sign -0.000+/-0.000 χ²/NDF: 53.8/32
All: 0.000+/-0.000 χ²/NDF: 88.3/67
- sign 0.000+/-0.000 χ²/NDF: 28.7/34


asym_sam_15_48_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1764617.0/15
Left Out: 0.000+/-0.000 χ²/NDF:1593337.0/16
Right Out: 0.000+/-0.000 χ²/NDF: 835680.3/18
Left In: 0.000+/-0.000 χ²/NDF:2246113.2/15
+ sign 0.000+/-0.000 χ²/NDF: 6035084.3/32
All: 0.000+/-0.000 χ²/NDF: 12288679.1/67
- sign 0.000+/-0.000 χ²/NDF: 6253308.0/34

# reg_asym_sam_37_48_dd_mean vs Slug




Right In: 54.883+/-23.179 $\chi^2$/NDF: 11.0/15

Left Out: 18.223+/-16.799 $\chi^2$/NDF:27.8/16

Right Out: 20.020+/-22.571 $\chi^2$/NDF: 9.2/18

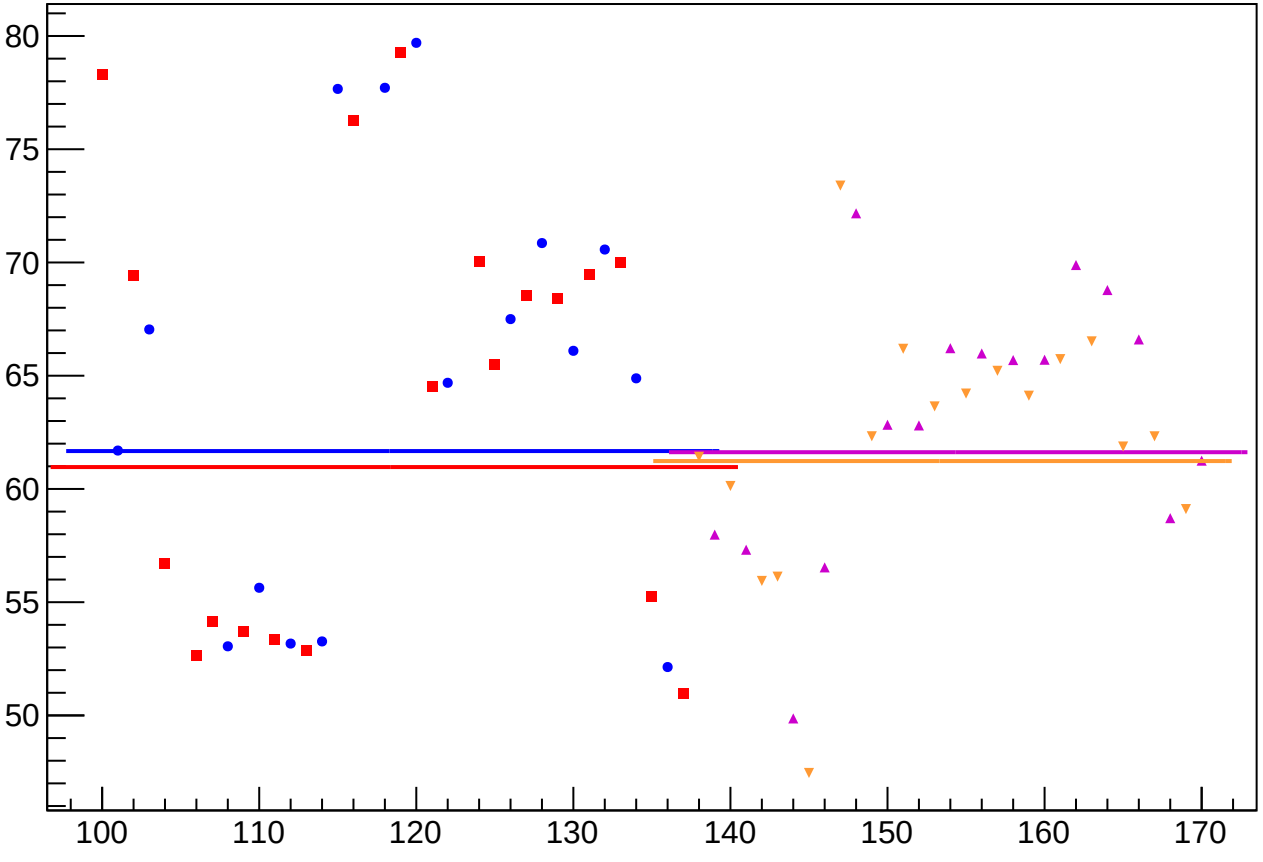
Left In: -7.858+/-17.059 $\chi^2$/NDF:8.6/15

+ sign 30.848+/-13.602 $\chi^2$/NDF: 40.4/32

All: 16.569+/-9.621 $\chi^2$/NDF: 61.4/67

- sign 2.277+/-13.609 $\chi^2$/NDF: 18.8/34

# reg_asym_sam_37_48_dd_rms vs Slug




Right In: 61.673+/-0.016 $\chi^2$/NDF: 267108.1/15

Left Out: 61.231+/-0.012 $\chi^2$/NDF:250114.5/16

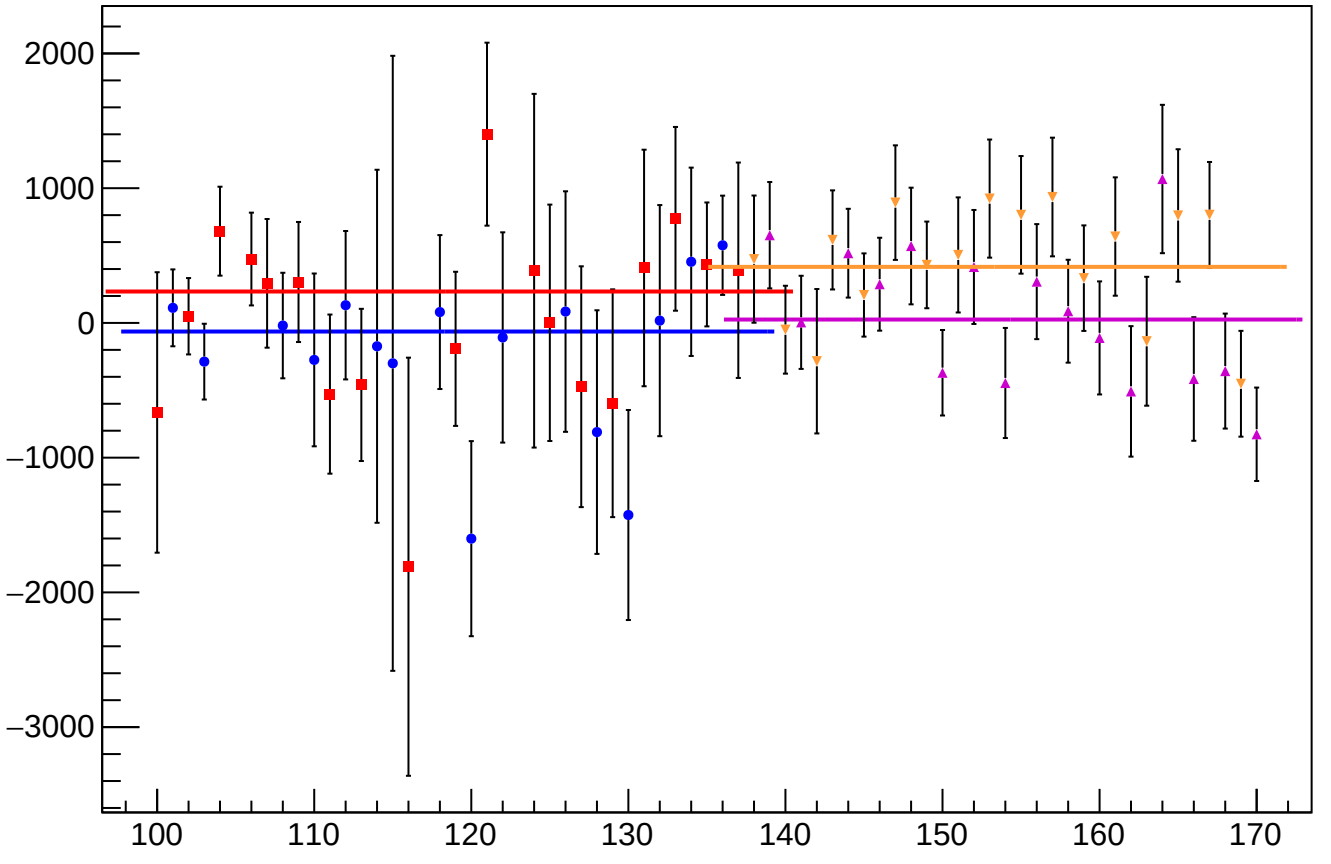
Right Out: 60.967+/-0.016 $\chi^2$/NDF: 284183.4/18

Left In: 61.623+/-0.012 $\chi^2$/NDF:242041.0/15

+ sign 61.383+/-0.010 $\chi^2$/NDF: 517698.8/32

All: 61.384+/-0.007 $\chi^2$/NDF: 1044998.6/67

- sign 61.384+/-0.010 $\chi^2$/NDF: 527299.8/34




Right In: -63.834+/-129.674 $\chi^2$/NDF: 13.2/15

Left Out: 416.109+/-97.711 $\chi^2$/NDF:17.4/16

Right Out: 233.206+/-122.791 $\chi^2$/NDF: 14.5/18

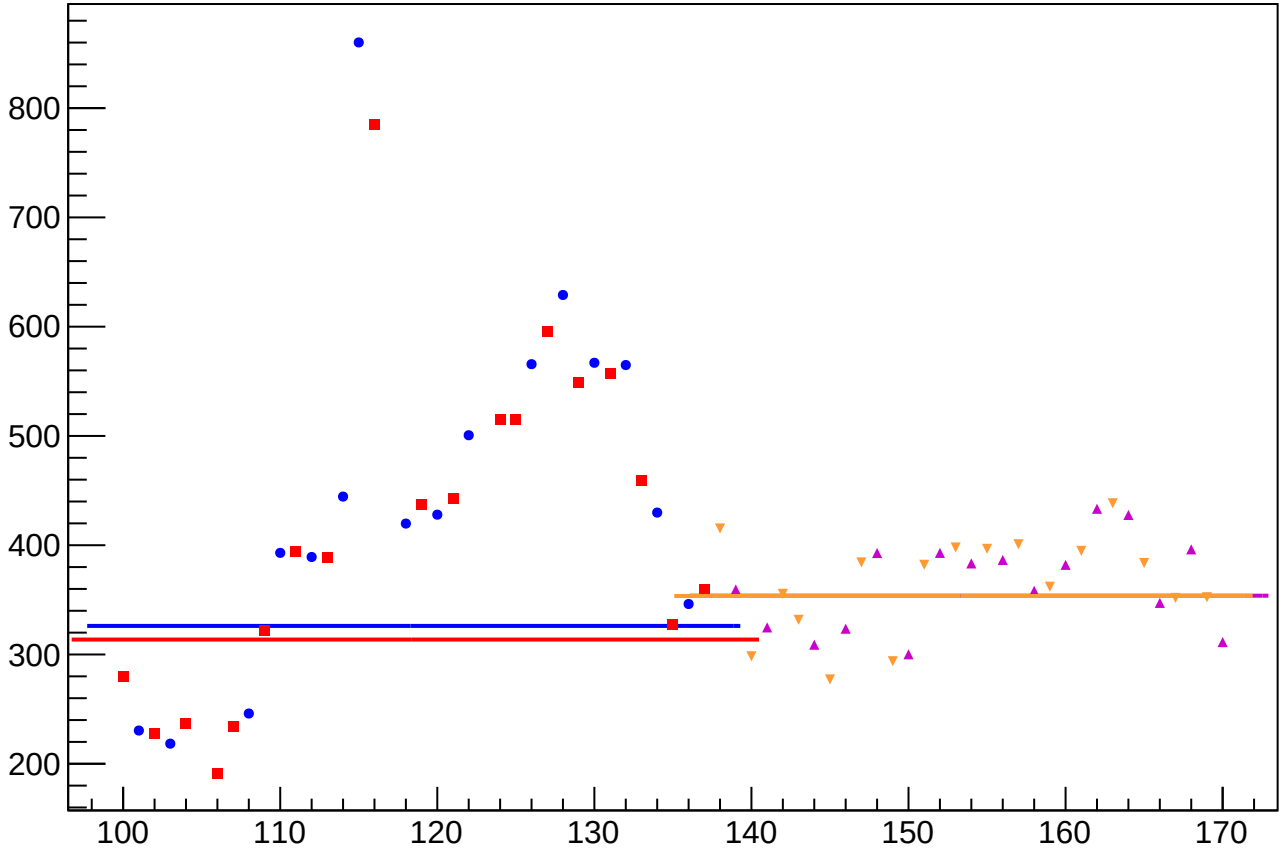
Left In: 25.195+/-98.337 $\chi^2$/NDF:23.8/15

+ sign 242.295+/-78.037 $\chi^2$/NDF: 39.4/32

All: 173.262+/-54.722 $\chi^2$/NDF: 80.9/67

- sign 106.475+/-76.757 $\chi^2$/NDF: 40.0/34

# asym_sam_37_48_dd_reg_correction_rms vs Slug




Right In: 326.147+/-0.092 $\chi^2$/NDF: 1733995.5/15

Left Out: 353.536+/-0.069 $\chi^2$/NDF:461419.6/16

Right Out: 313.672+/-0.087 $\chi^2$/NDF: 1787347.3/18

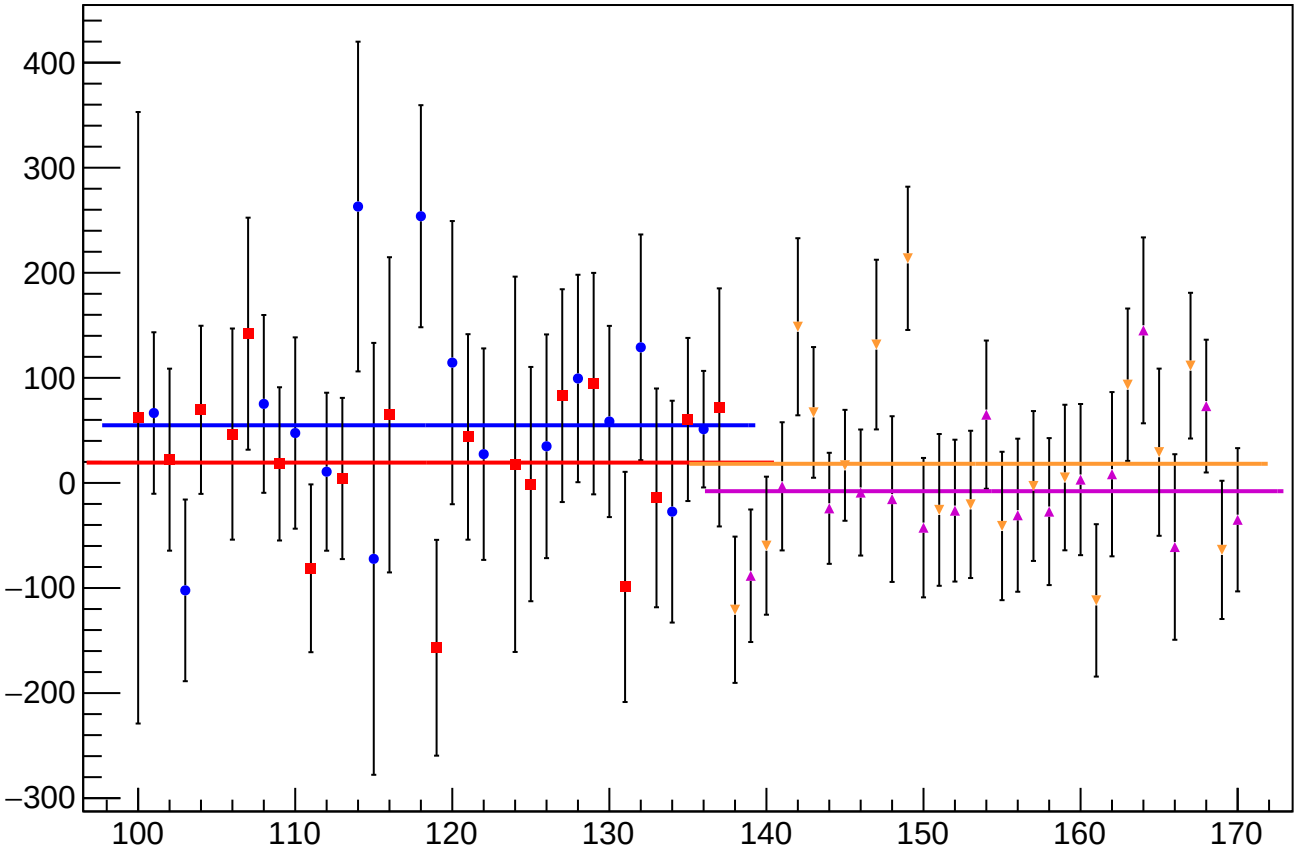
Left In: 353.814+/-0.070 $\chi^2$/NDF:329093.2/15

\+ sign 343.617+/-0.055 $\chi^2$/NDF: 2252325.0/32

All: 340.827+/-0.039 $\chi^2$/NDF: 4504016.6/67

\- sign 338.128+/-0.054 $\chi^2$/NDF: 2246662.6/34

# cor_asym_sam_37_48_dd_mean vs Slug




Right In: 54.877+/-23.179 $\chi^2$/NDF: 11.0/15

Left Out: 18.221+/-16.799 $\chi^2$/NDF:27.8/16

Right Out: 19.352+/-22.588 $\chi^2$/NDF: 9.2/18

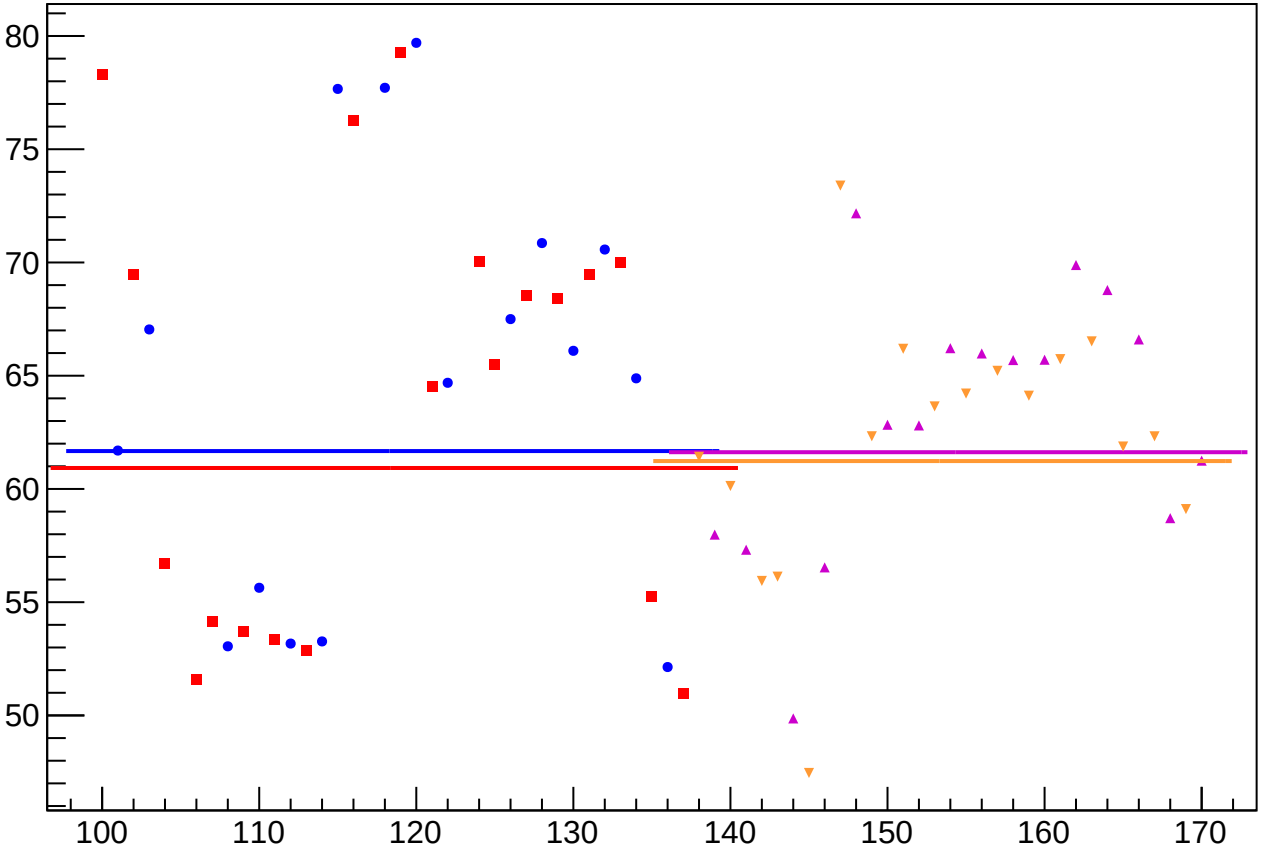
Left In: -7.858+/-17.059 $\chi^2$/NDF:8.6/15

+ sign 30.845+/-13.602 $\chi^2$/NDF: 40.4/32

All: 16.446+/-9.622 $\chi^2$/NDF: 61.3/67

- sign 2.025+/-13.613 $\chi^2$/NDF: 18.6/34

# cor_asym_sam_37_48_dd_rms vs Slug




Right In: 61.673+/-0.016 $\chi^2$/NDF: 267108.3/15

Left Out: 61.231+/-0.012 $\chi^2$/NDF:250114.5/16

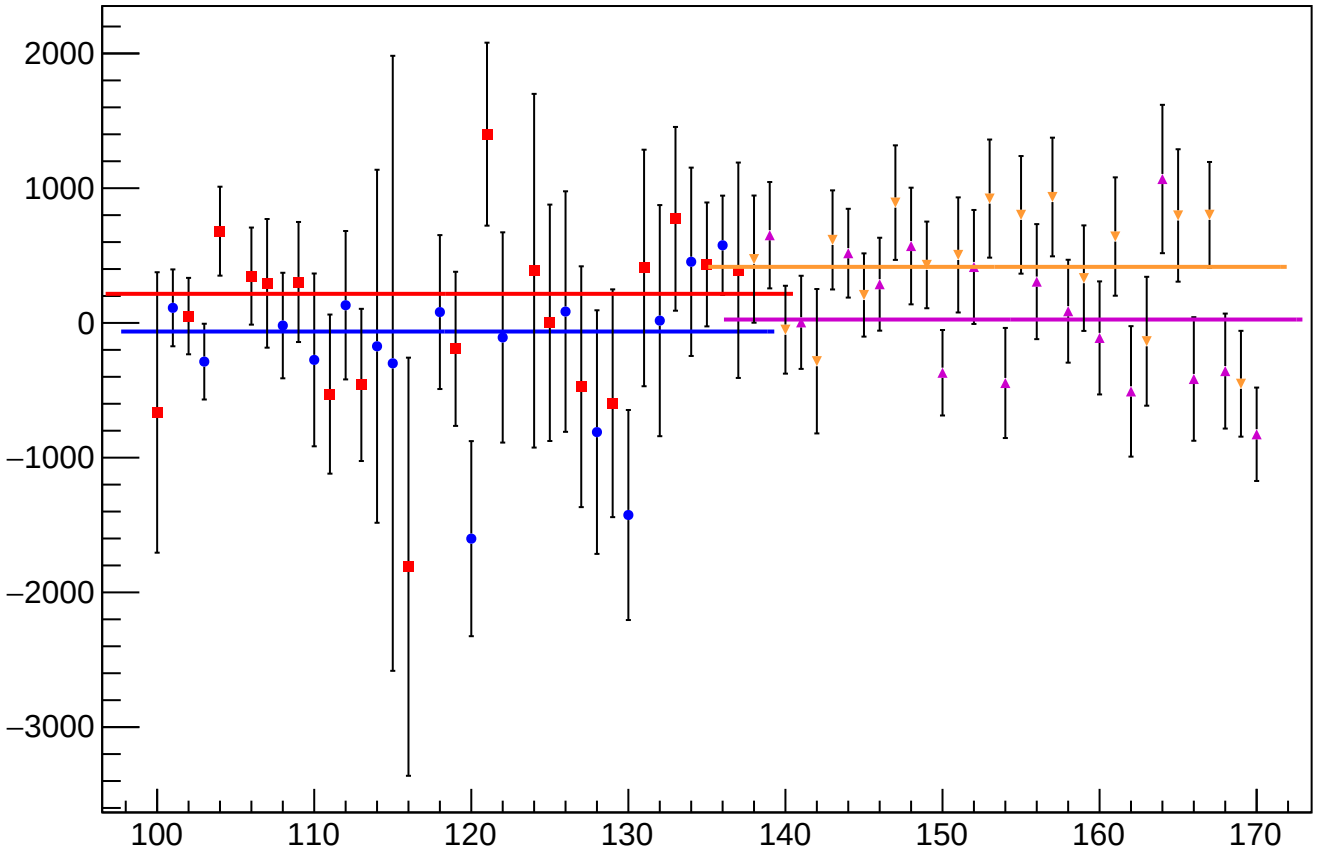
Right Out: 60.926+/-0.016 $\chi^2$/NDF: 287579.6/18

Left In: 61.623+/-0.012 $\chi^2$/NDF:242041.0/15

+ sign 61.383+/-0.010 $\chi^2$/NDF: 517699.0/32

All: 61.376+/-0.007 $\chi^2$/NDF: 1048533.0/67

- sign 61.369+/-0.010 $\chi^2$/NDF: 530833.0/34




Right In: -63.820+/-129.675 $\chi^2$/NDF: 13.2/15

Left Out: 416.109+/-97.711 $\chi^2$/NDF:17.4/16

Right Out: 215.911+/-123.491 $\chi^2$/NDF: 14.1/18

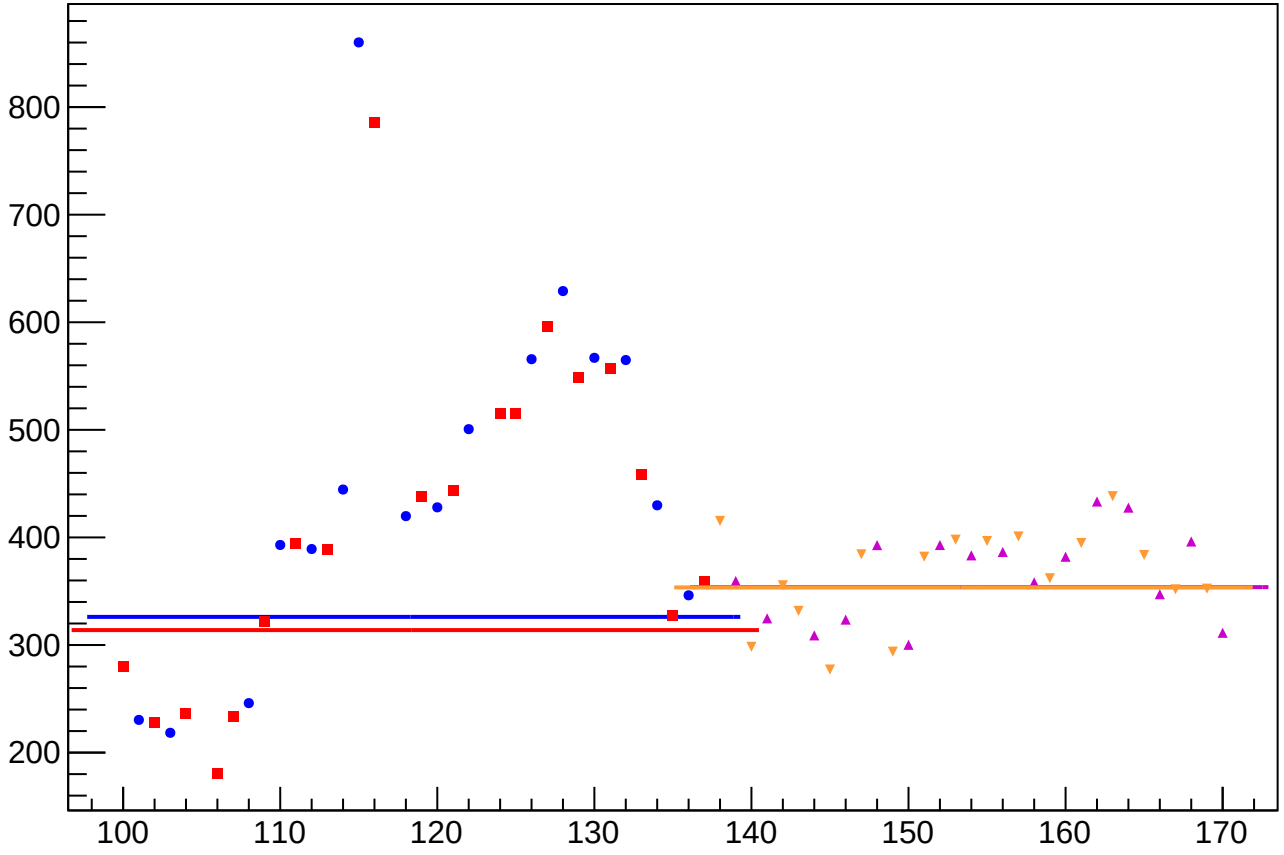
Left In: 25.195+/-98.337 $\chi^2$/NDF:23.8/15

+ sign 242.302+/-78.037 $\chi^2$/NDF: 39.3/32

All: 169.726+/-54.784 $\chi^2$/NDF: 80.4/67

- sign 99.202+/-76.927 $\chi^2$/NDF: 39.3/34

# asym_sam_37_48_dd_cor_correction_rms vs Slug




Right In: 326.150+/-0.092 $\chi^2$/NDF: 1733934.7/15

Left Out: 353.536+/-0.069 $\chi^2$/NDF:461418.8/16

Right Out: 313.861+/-0.087 $\chi^2$/NDF: 1805779.4/18

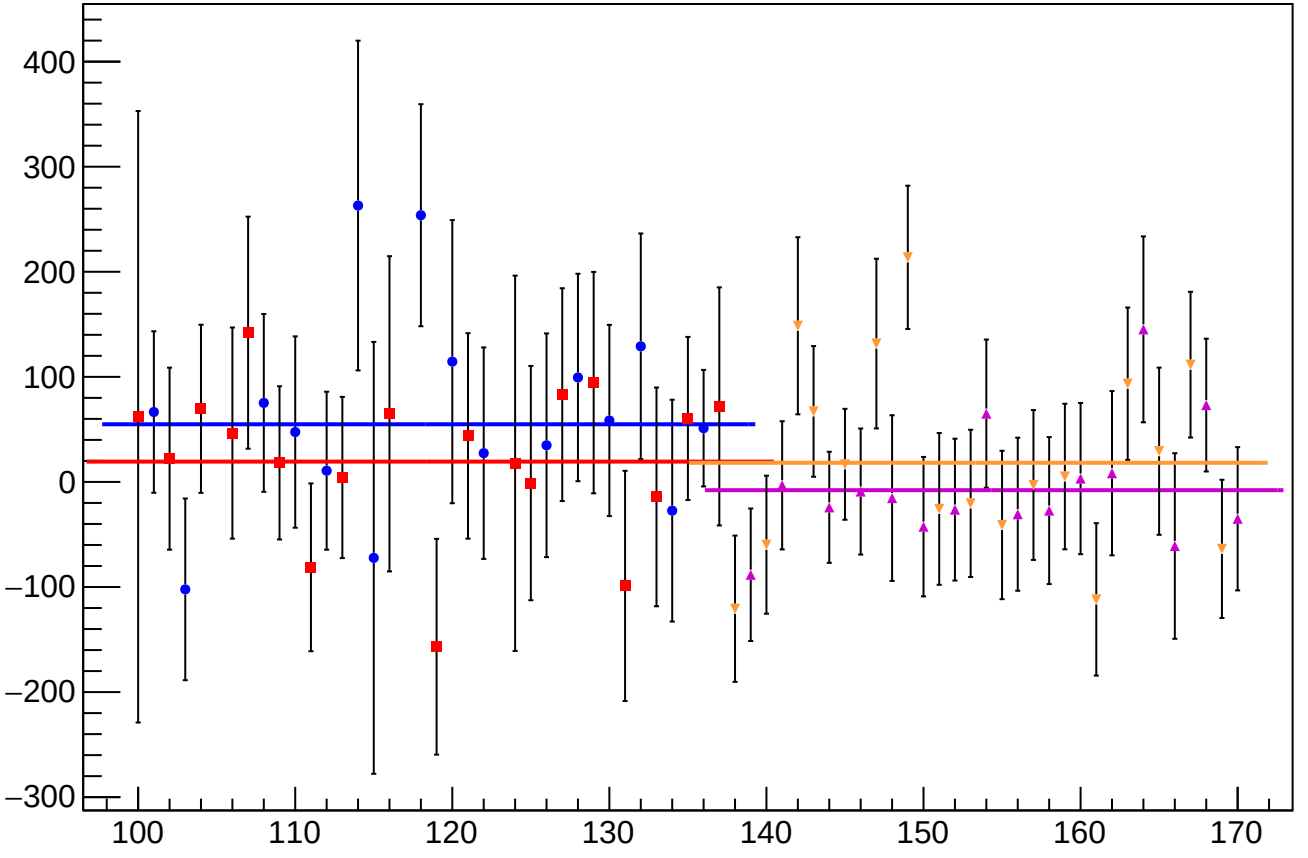
Left In: 353.814+/-0.070 $\chi^2$/NDF:329094.0/15

+ sign 343.618+/-0.055 $\chi^2$/NDF: 2252251.2/32

All: 340.926+/-0.039 $\chi^2$/NDF: 4519925.8/67

- sign 338.310+/-0.054 $\chi^2$/NDF: 2262981.5/34

# eigen_cor_asym_sam_37_48_dd_mean vs Slug




Right In: 54.877+/-23.179 $\chi^2$/NDF: 11.0/15

Left Out: 18.221+/-16.799 $\chi^2$/NDF:27.8/16

Right Out: 19.352+/-22.588 $\chi^2$/NDF: 9.2/18

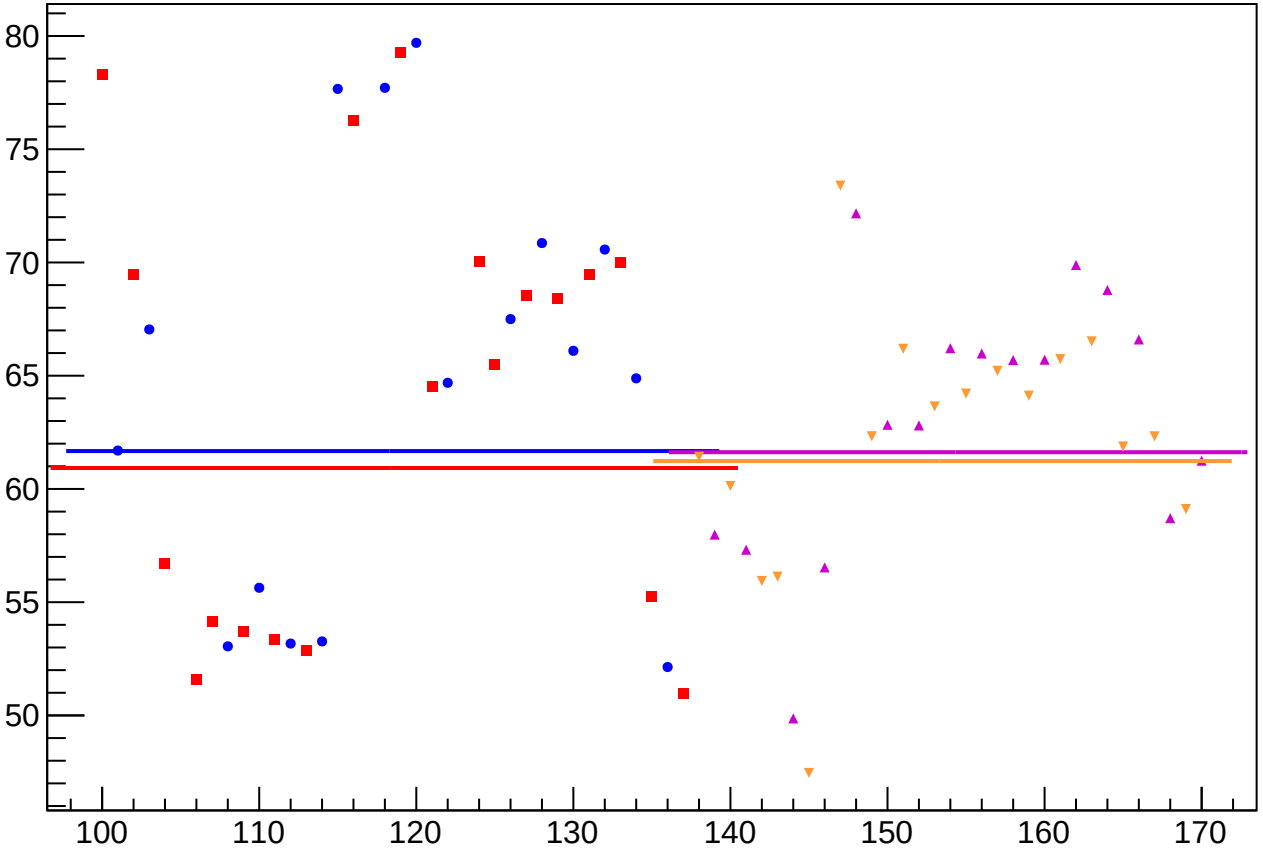
Left In: -7.858+/-17.059 $\chi^2$/NDF:8.6/15

+ sign 30.845+/-13.602 $\chi^2$/NDF: 40.4/32

All: 16.446+/-9.622 $\chi^2$/NDF: 61.3/67

- sign 2.025+/-13.613 $\chi^2$/NDF: 18.6/34

# eigen_cor_asym_sam_37_48_dd_rms vs Slug




Right In: 61.673+/-0.016 $\chi^2$/NDF: 267108.3/15

Left Out: 61.231+/-0.012 $\chi^2$/NDF:250114.5/16

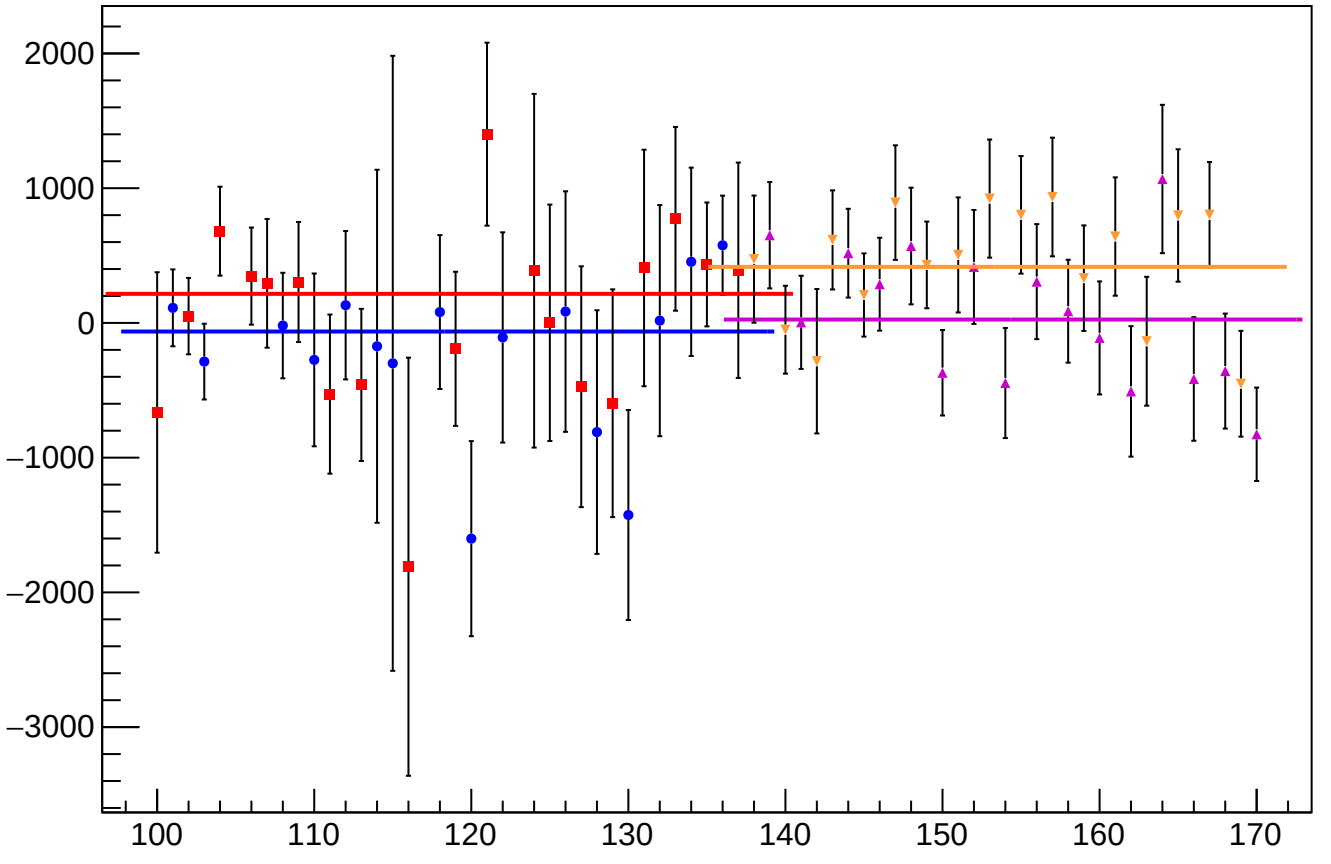
Right Out: 60.926+/-0.016 $\chi^2$/NDF: 287579.6/18

Left In: 61.623+/-0.012 $\chi^2$/NDF:242041.0/15

+ sign 61.383+/-0.010 $\chi^2$/NDF: 517699.0/32

All: 61.376+/-0.007 $\chi^2$/NDF: 1048533.0/67

- sign 61.369+/-0.010 $\chi^2$/NDF: 530833.0/34




Right In: -63.820+/-129.675 $\chi^2$/NDF: 13.2/15

Left Out: 416.109+/-97.711 $\chi^2$/NDF:17.4/16

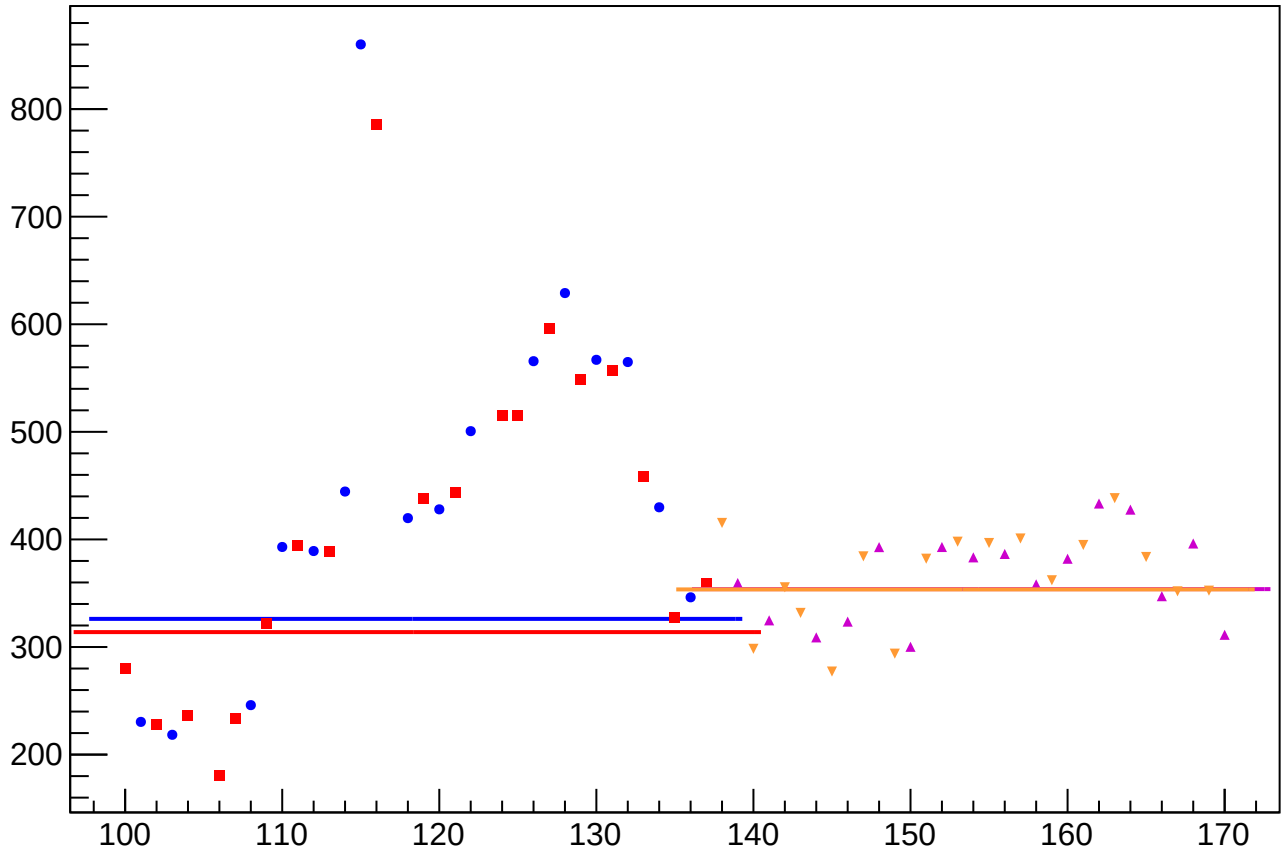
Right Out: 215.911+/-123.491 $\chi^2$/NDF: 14.1/18

Left In: 25.195+/-98.337 $\chi^2$/NDF:23.8/15

+ sign 242.302+/-78.037 $\chi^2$/NDF: 39.3/32

All: 169.726+/-54.784 $\chi^2$/NDF: 80.4/67

- sign 99.202+/-76.927 $\chi^2$/NDF: 39.3/34




Right In: 326.150+/-0.092 $\chi^2$/NDF: 1733934.7/15

Left Out: 353.536+/-0.069 $\chi^2$/NDF:461418.8/16

Right Out: 313.861+/-0.087 $\chi^2$/NDF: 1805779.4/18

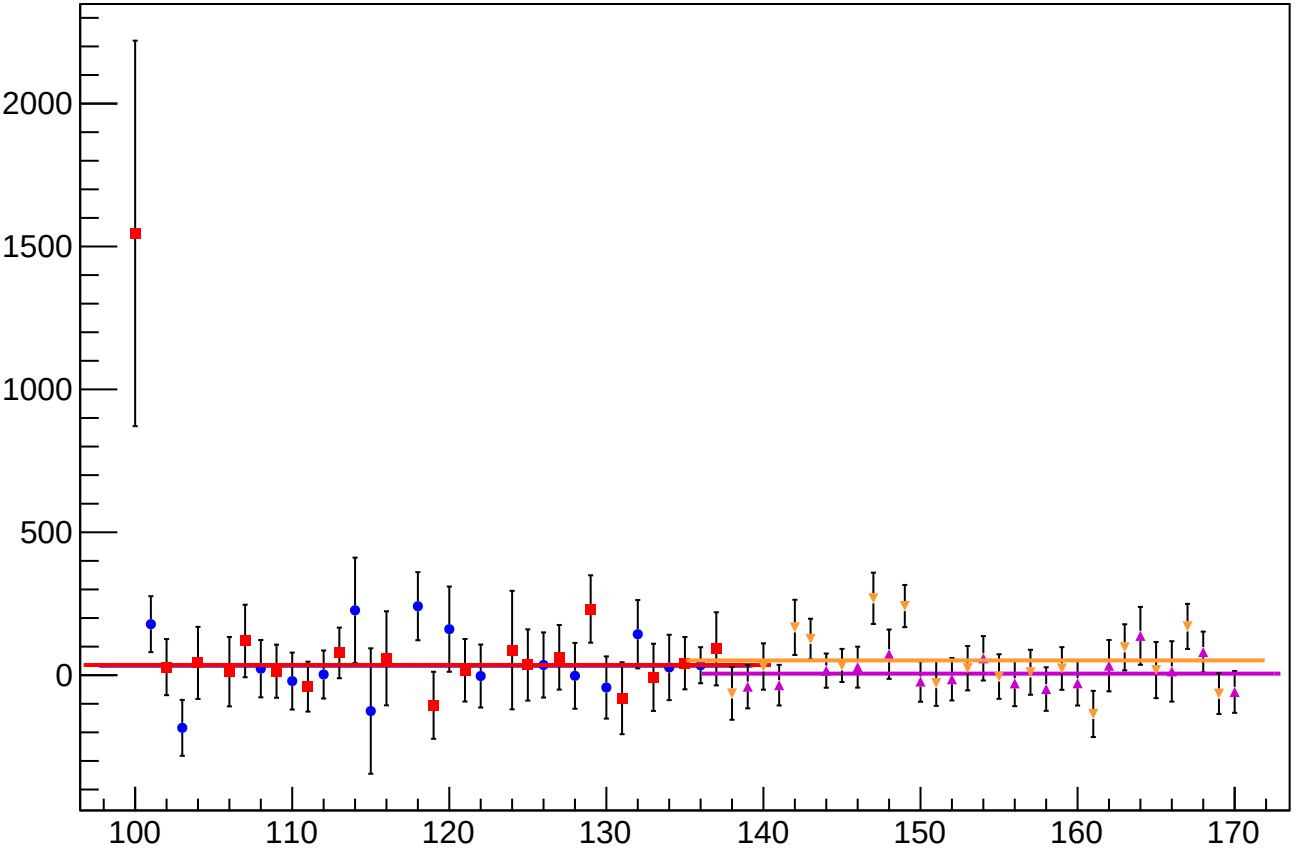
Left In: 353.814+/-0.070 $\chi^2$/NDF:329094.0/15

+ sign 343.618+/-0.055 $\chi^2$/NDF: 2252251.2/32

All: 340.926+/-0.039 $\chi^2$/NDF: 4519925.8/67

- sign 338.310+/-0.054 $\chi^2$/NDF: 2262981.5/34

# dit_asym_sam_37_48_dd_mean vs Slug




Right In: 33.399+/-26.415 $\chi^2$/NDF: 14.5/15

Left Out: 51.719+/-18.968 $\chi^2$/NDF:29.6/16

Right Out: 35.576+/-26.536 $\chi^2$/NDF: 12.1/18

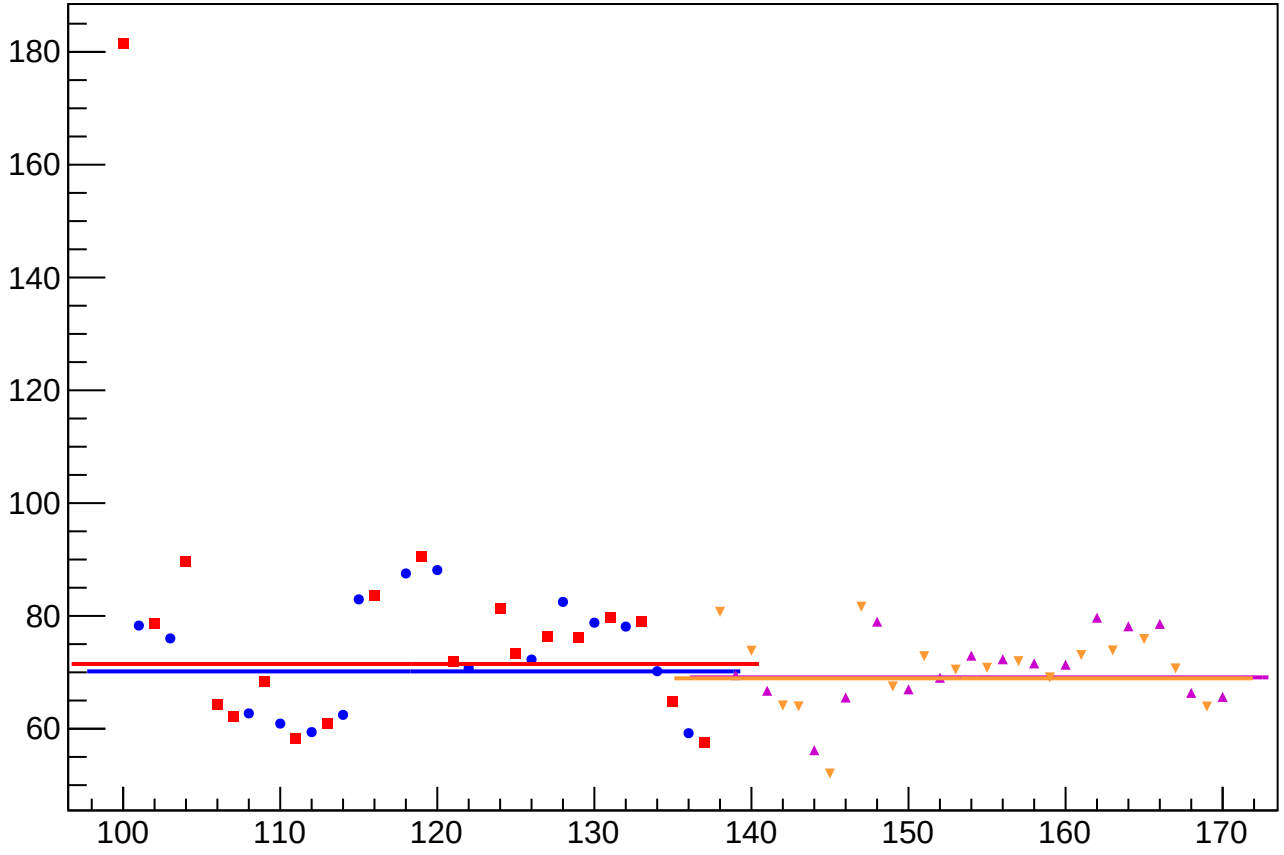
Left In: 5.481+/-19.203 $\chi^2$/NDF:6.7/15

+ sign 45.486+/-15.407 $\chi^2$/NDF: 44.5/32

All: 30.799+/-10.947 $\chi^2$/NDF: 65.9/67

- sign 15.824+/-15.557 $\chi^2$/NDF: 19.6/34

# dit_asym_sam_37_48_dd_rms vs Slug




Right In: 70.167+/-0.019 $\chi^2$/NDF: 269249.9/15

Left Out: 68.937+/-0.013 $\chi^2$/NDF:308953.3/16

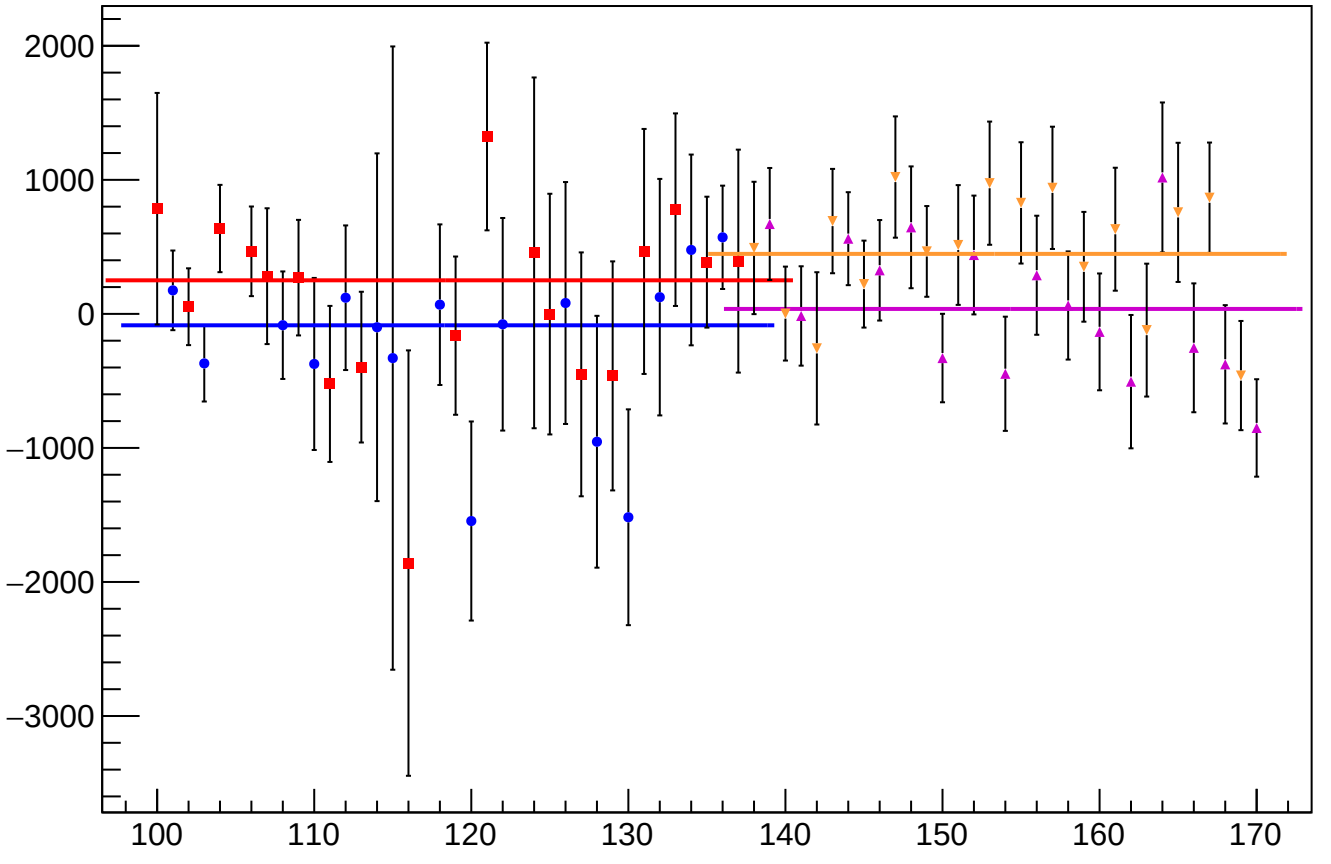
Right Out: 71.483+/-0.019 $\chi^2$/NDF: 325715.0/18

Left In: 69.108+/-0.014 $\chi^2$/NDF:207319.7/15

+ sign 69.356+/-0.011 $\chi^2$/NDF: 581065.1/32

All: 69.637+/-0.008 $\chi^2$/NDF: 1125966.8/67

- sign 69.924+/-0.011 $\chi^2$/NDF: 543554.2/34




Right In: -85.184+/-132.877 $\chi^2$/NDF: 13.7/15

Left Out: 447.631+/-102.642 $\chi^2$/NDF:16.8/16

Right Out: 250.440+/-123.302 $\chi^2$/NDF: 12.5/18

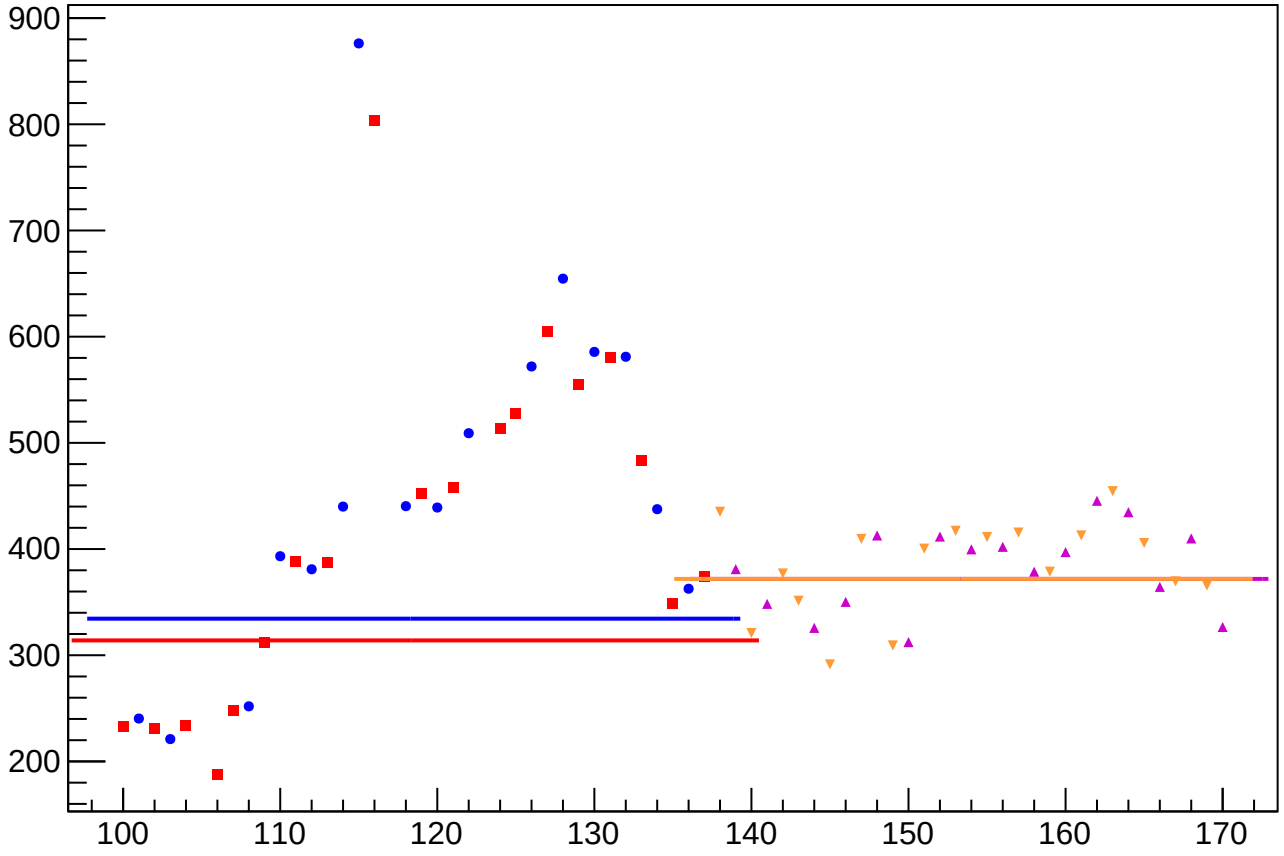
Left In: 36.971+/-103.254 $\chi^2$/NDF:22.3/15

+ sign 248.516+/-81.229 $\chi^2$/NDF: 40.5/32

All: 185.147+/-56.693 $\chi^2$/NDF: 78.2/67

- sign 124.962+/-79.163 $\chi^2$/NDF: 36.5/34

# asym_sam_37_48_dd_dit_correction_rms vs Slug




Right In: 334.431+/-0.094 $\chi^2$/NDF: 1730610.2/15

Left Out: 371.888+/-0.073 $\chi^2$/NDF:428573.2/16

Right Out: 313.971+/-0.087 $\chi^2$/NDF: 1904605.9/18

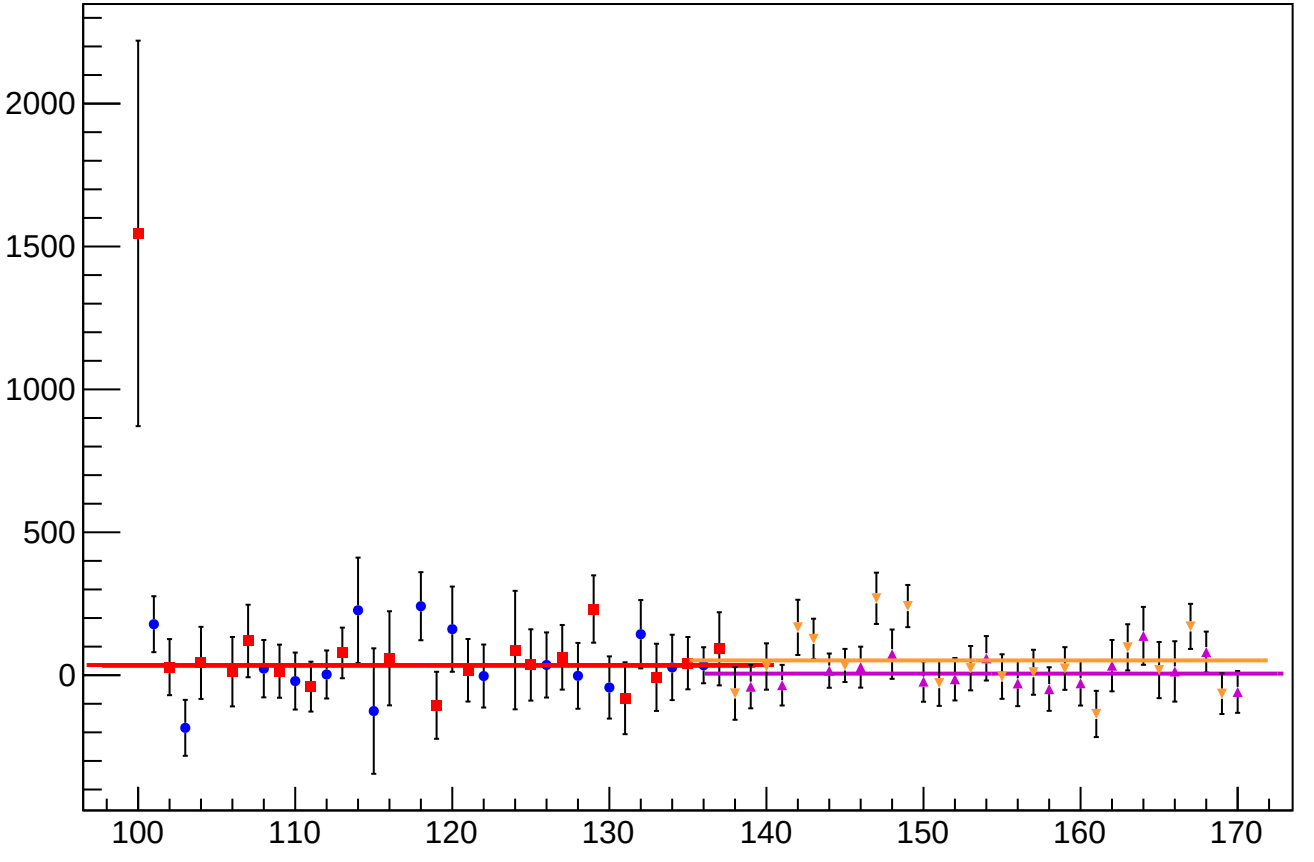
Left In: 371.880+/-0.073 $\chi^2$/NDF:288914.9/15

+ sign 357.890+/-0.057 $\chi^2$/NDF: 2258722.0/32

All: 352.823+/-0.040 $\chi^2$/NDF: 4726727.4/67

- sign 348.010+/-0.056 $\chi^2$/NDF: 2452829.4/34

# eigen_dit_asym_sam_37_48_dd_mean vs Slug




Right In: 33.397+/-26.415 $\chi^2$/NDF: 14.5/15

Left Out: 51.719+/-18.968 $\chi^2$/NDF:29.6/16

Right Out: 35.577+/-26.536 $\chi^2$/NDF: 12.1/18

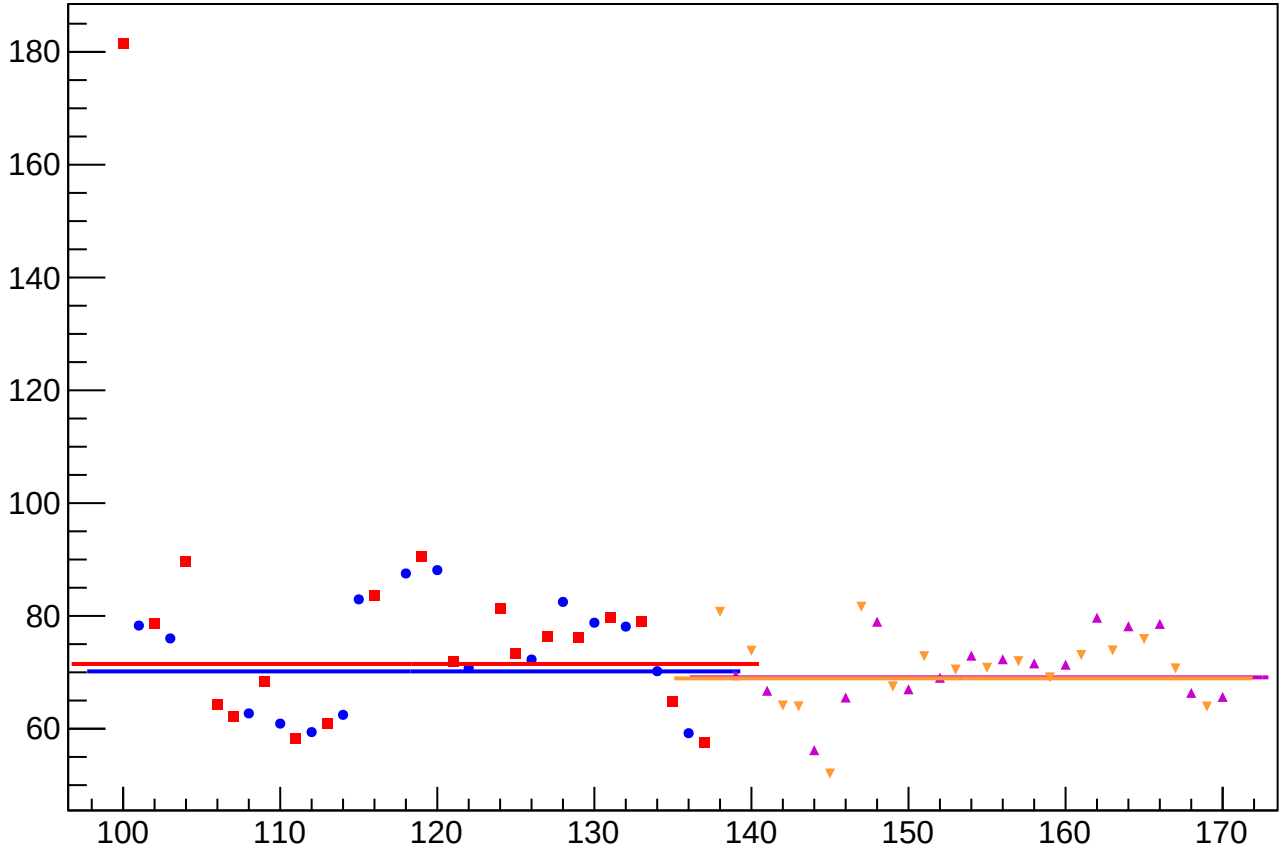
Left In: 5.481+/-19.203 $\chi^2$/NDF:6.7/15

+ sign 45.485+/-15.407 $\chi^2$/NDF: 44.5/32

All: 30.798+/-10.947 $\chi^2$/NDF: 65.9/67

- sign 15.825+/-15.557 $\chi^2$/NDF: 19.6/34

# eigen_dit_asym_sam_37_48_dd_rms vs Slug




Right In: 70.167+/-0.019 $\chi^2$/NDF: 269253.0/15

Left Out: 68.937+/-0.013 $\chi^2$/NDF:308960.1/16

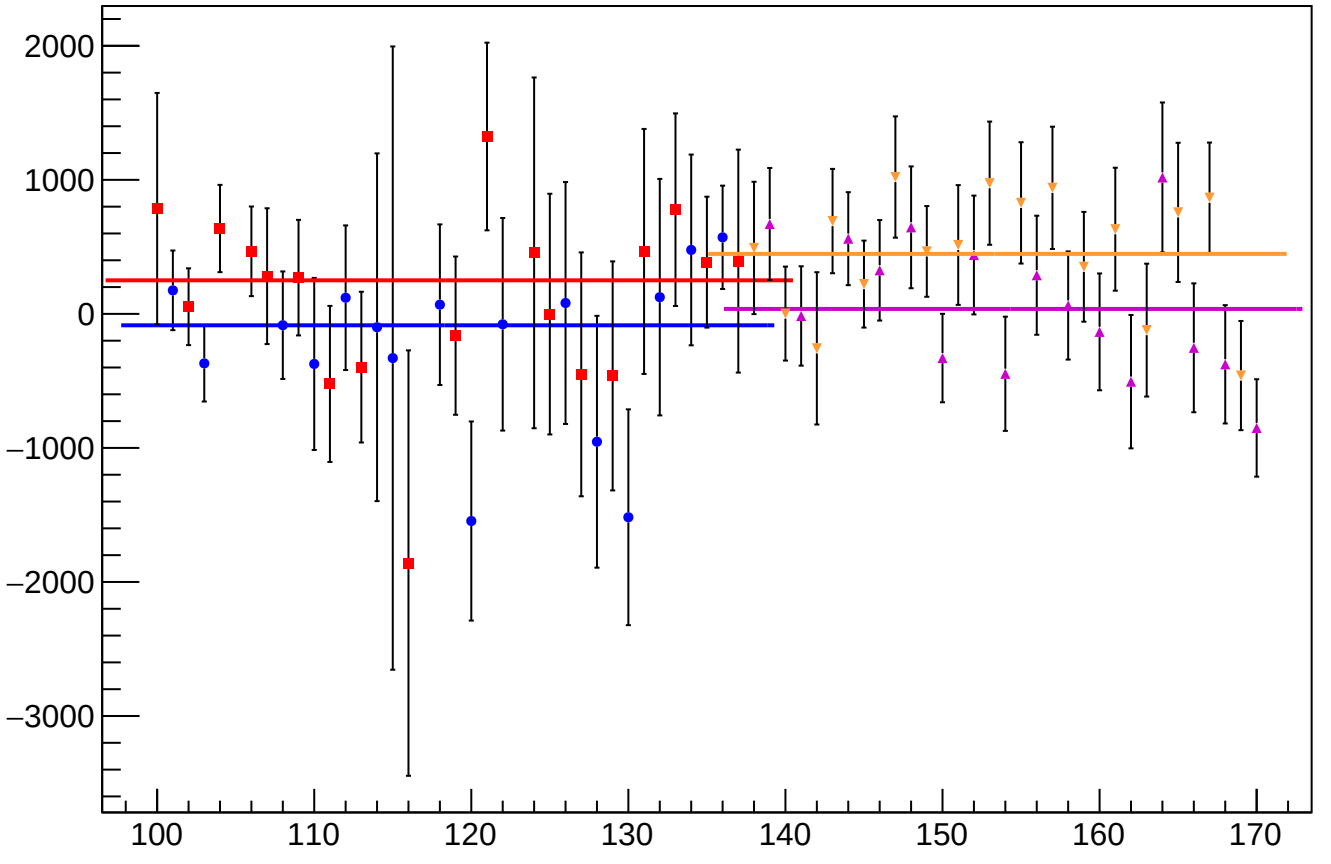
Right Out: 71.483+/-0.019 $\chi^2$/NDF: 325721.5/18

Left In: 69.107+/-0.014 $\chi^2$/NDF:207322.6/15

+ sign 69.356+/-0.011 $\chi^2$/NDF: 581075.7/32

All: 69.637+/-0.008 $\chi^2$/NDF: 1125987.8/67

- sign 69.924+/-0.011 $\chi^2$/NDF: 543564.7/34




Right In: -85.185+/-132.877 $\chi^2$/NDF: 13.7/15

Left Out: 447.630+/-102.641 $\chi^2$/NDF:16.8/16

Right Out: 250.440+/-123.302 $\chi^2$/NDF: 12.5/18

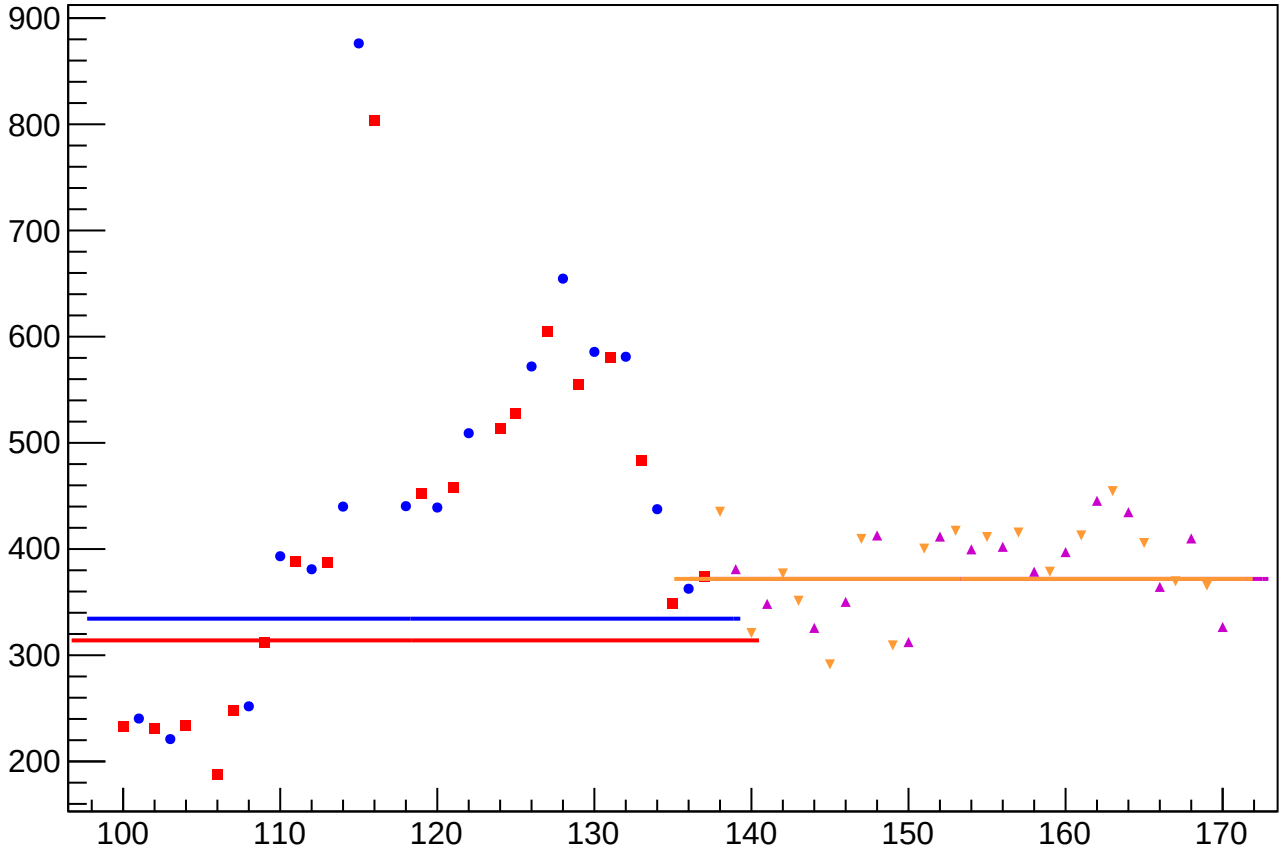
Left In: 36.970+/-103.254 $\chi^2$/NDF:22.3/15

+ sign 248.515+/-81.229 $\chi^2$/NDF: 40.5/32

All: 185.147+/-56.693 $\chi^2$/NDF: 78.2/67

- sign 124.962+/-79.163 $\chi^2$/NDF: 36.5/34

# asym_sam_37_48_dd_eigen_dit_correction_rms vs Slug




Right In: 334.431+/-0.094 $\chi^2$/NDF: 1730609.3/15

Left Out: 371.888+/-0.073 $\chi^2$/NDF:428577.5/16

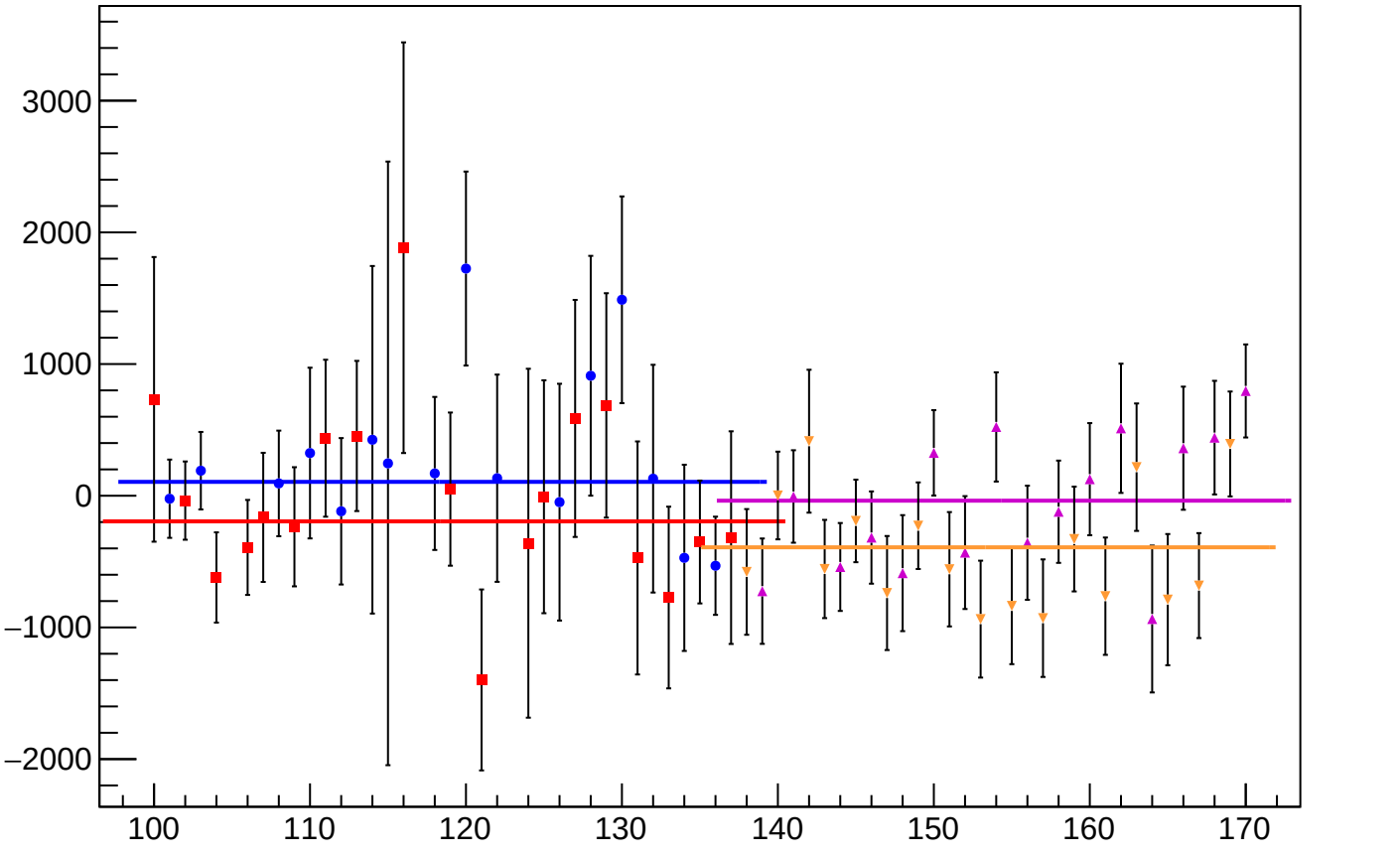
Right Out: 313.971+/-0.087 $\chi^2$/NDF: 1904604.3/18

Left In: 371.880+/-0.073 $\chi^2$/NDF:288915.7/15

+ sign 357.890+/-0.057 $\chi^2$/NDF: 2258722.9/32

All: 352.823+/-0.040 $\chi^2$/NDF: 4726726.1/67

- sign 348.010+/-0.056 $\chi^2$/NDF: 2452827.1/34




Right In: 105.390+/-133.046 $\chi^2$/NDF: 13.0/15

Left Out: -391.627+/-99.242 $\chi^2$/NDF:16.7/16

Right Out: -194.712+/-126.198 $\chi^2$/NDF: 13.1/18

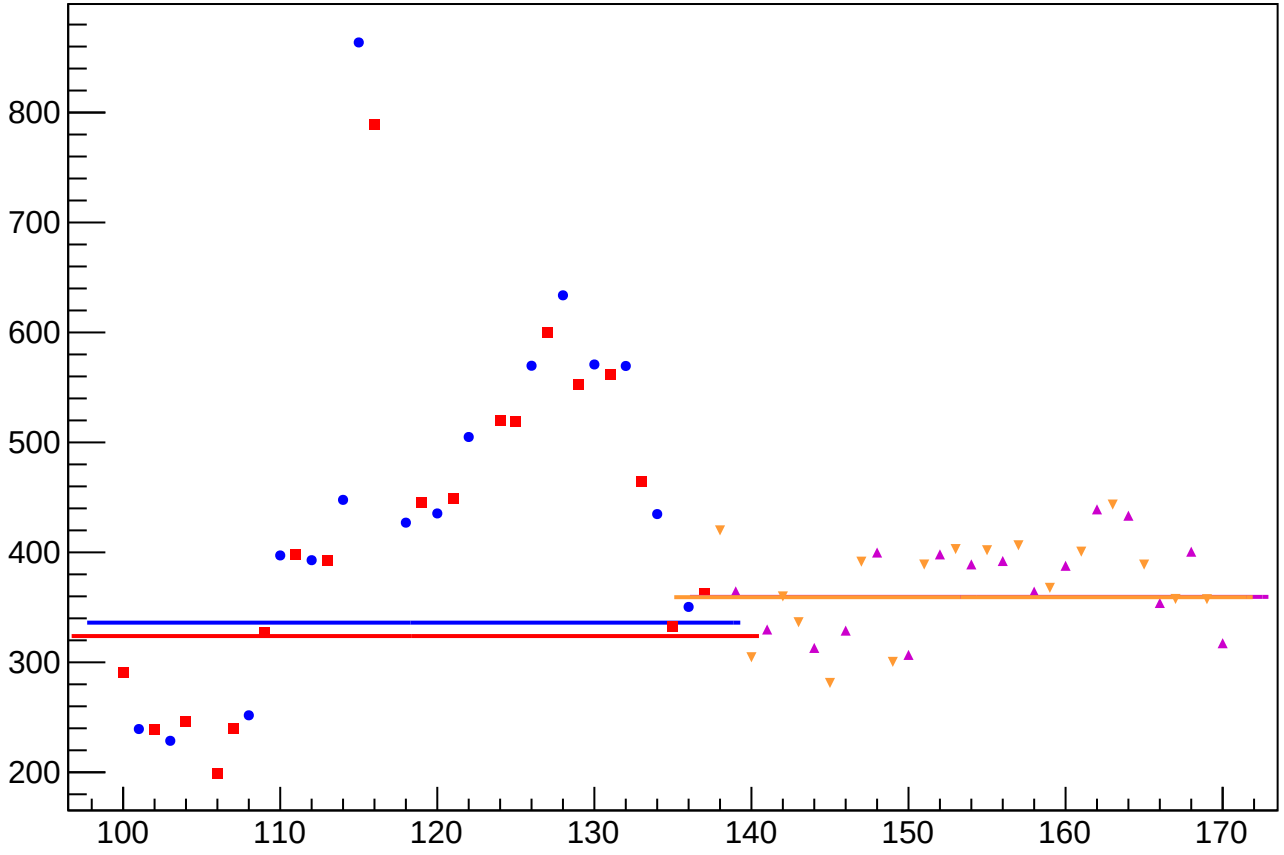
Left In: -37.519+/-99.891 $\chi^2$/NDF:23.5/15

+ sign -213.946+/-79.549 $\chi^2$/NDF: 38.7/32

All: -155.109+/-55.812 $\chi^2$/NDF: 77.3/67

- sign -98.069+/-78.324 $\chi^2$/NDF: 37.6/34

# asym_sam_37_48_dd_rms vs Slug




Right In: 336.092+/-0.094 $\chi^2$/NDF: 1618997.2/15

Left Out: 359.244+/-0.070 $\chi^2$/NDF:448397.6/16

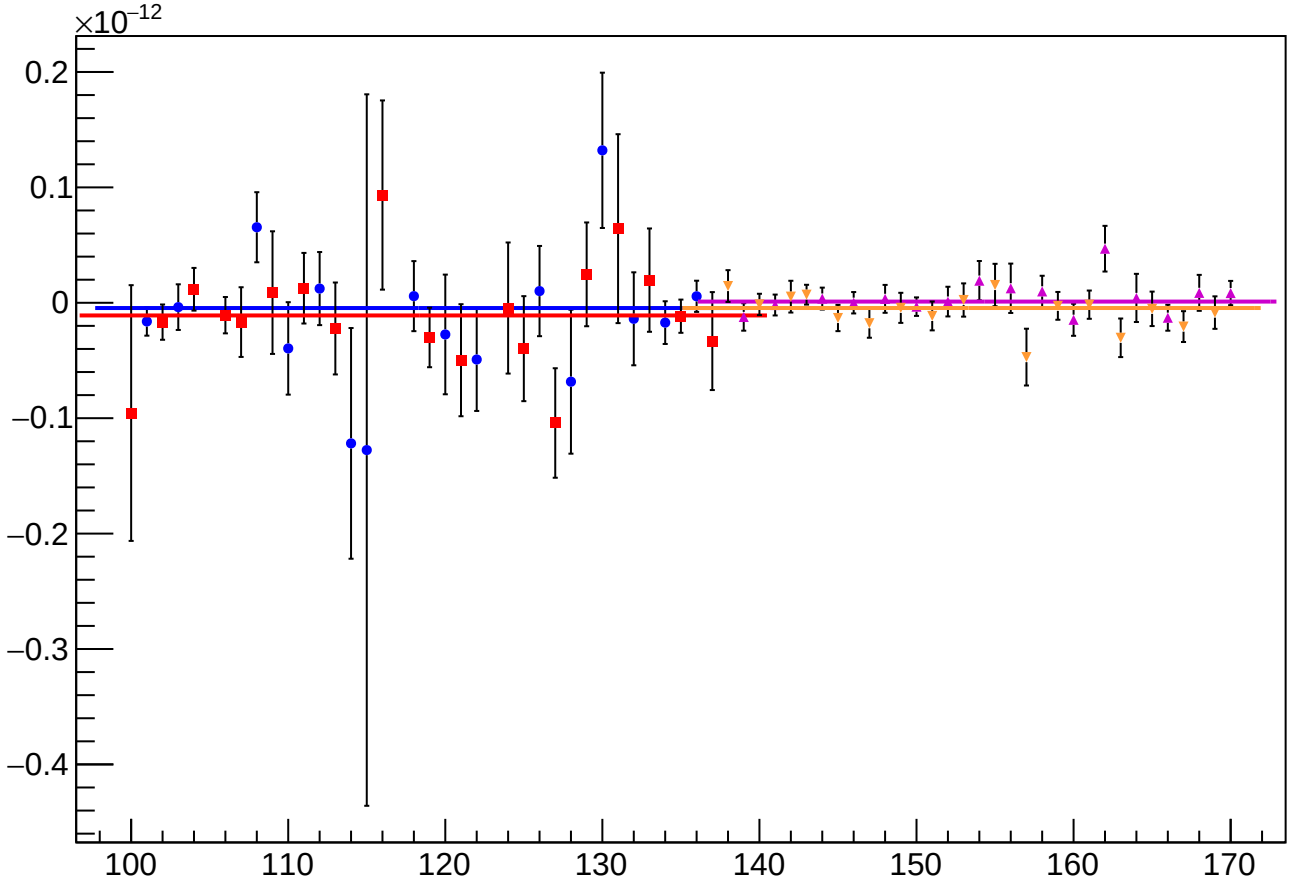
Right Out: 323.885+/-0.089 $\chi^2$/NDF: 1665420.8/18

Left In: 359.527+/-0.071 $\chi^2$/NDF:319795.3/15

+ sign 350.968+/-0.056 $\chi^2$/NDF: 2106307.7/32

All: 348.342+/-0.039 $\chi^2$/NDF: 4193889.5/67

- sign 345.798+/-0.055 $\chi^2$/NDF: 2083292.6/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.5/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:14.7/16

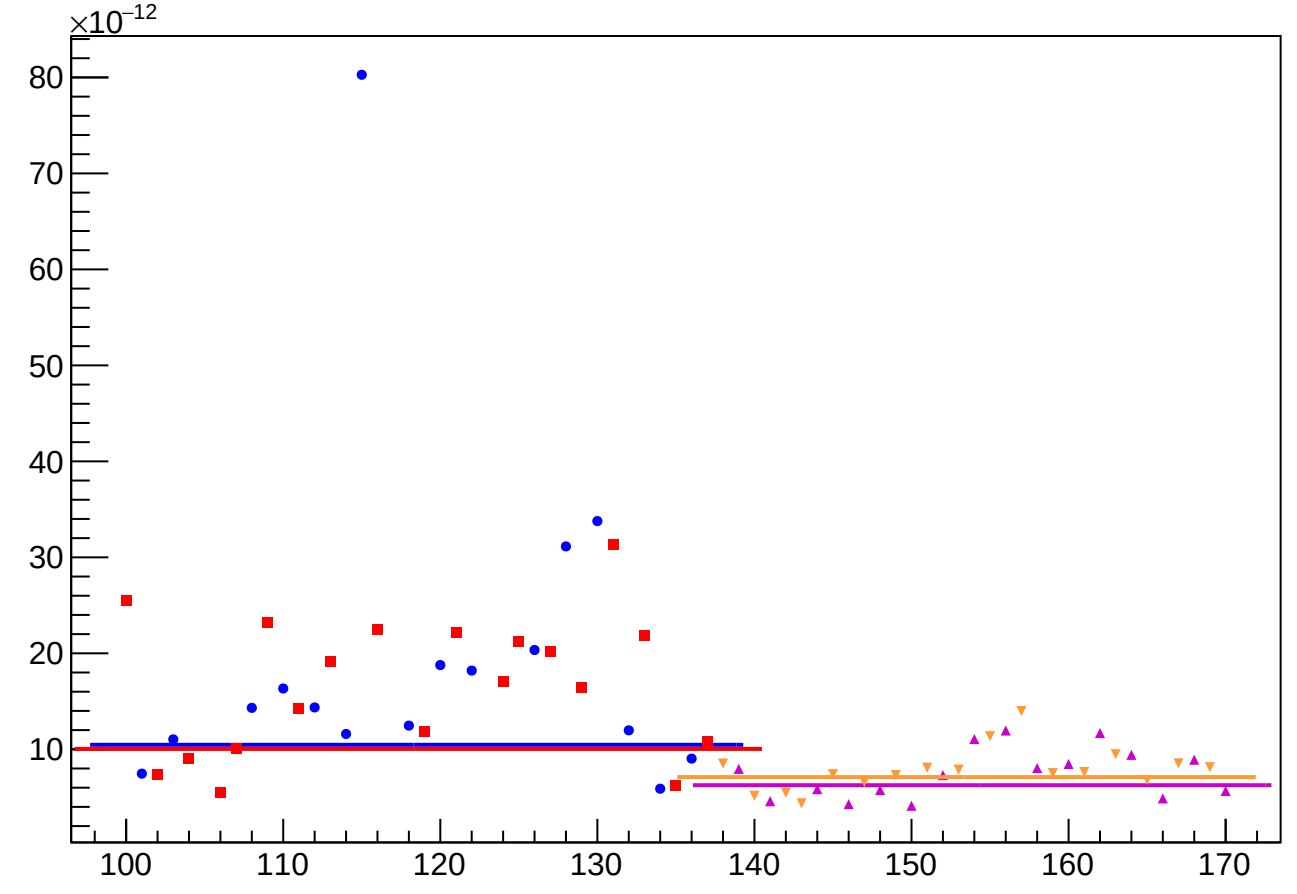
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 12.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:12.6/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 31.2/32

All: -0.000+/-0.000 $\chi^2$/NDF: 59.8/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1183833.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:707634.7/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1415778.7/18

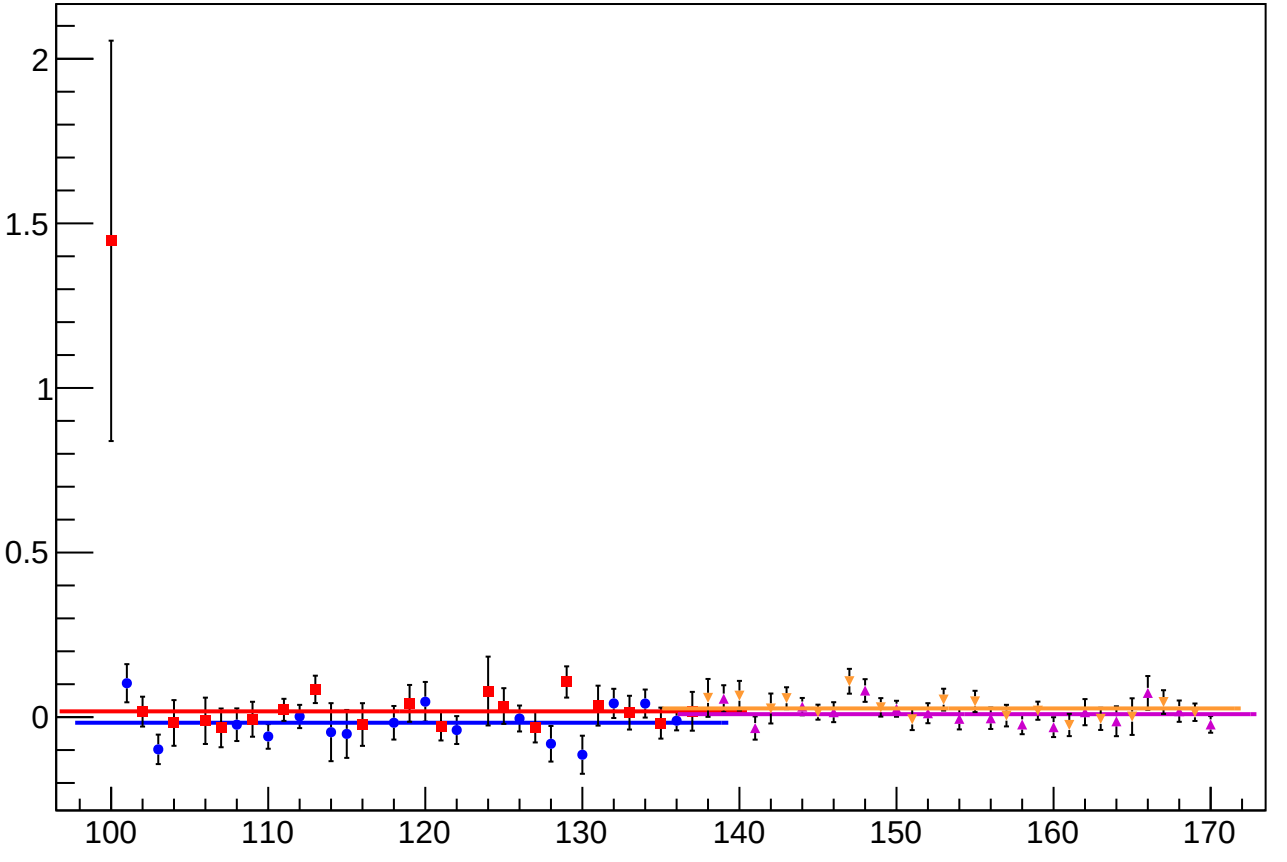
Left In: 0.000+/-0.000 $\chi^2$/NDF:1040533.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 2333028.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 5447806.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 3028097.4/34

# asym_sam_37_48_dd_dit_vs_cor_diff_mean vs Slug




Right In: -0.017+/-0.011 $\chi^2$/NDF: 18.8/15

Left Out: 0.026+/-0.008 $\chi^2$/NDF:13.4/16

Right Out: 0.018+/-0.012 $\chi^2$/NDF: 16.8/18

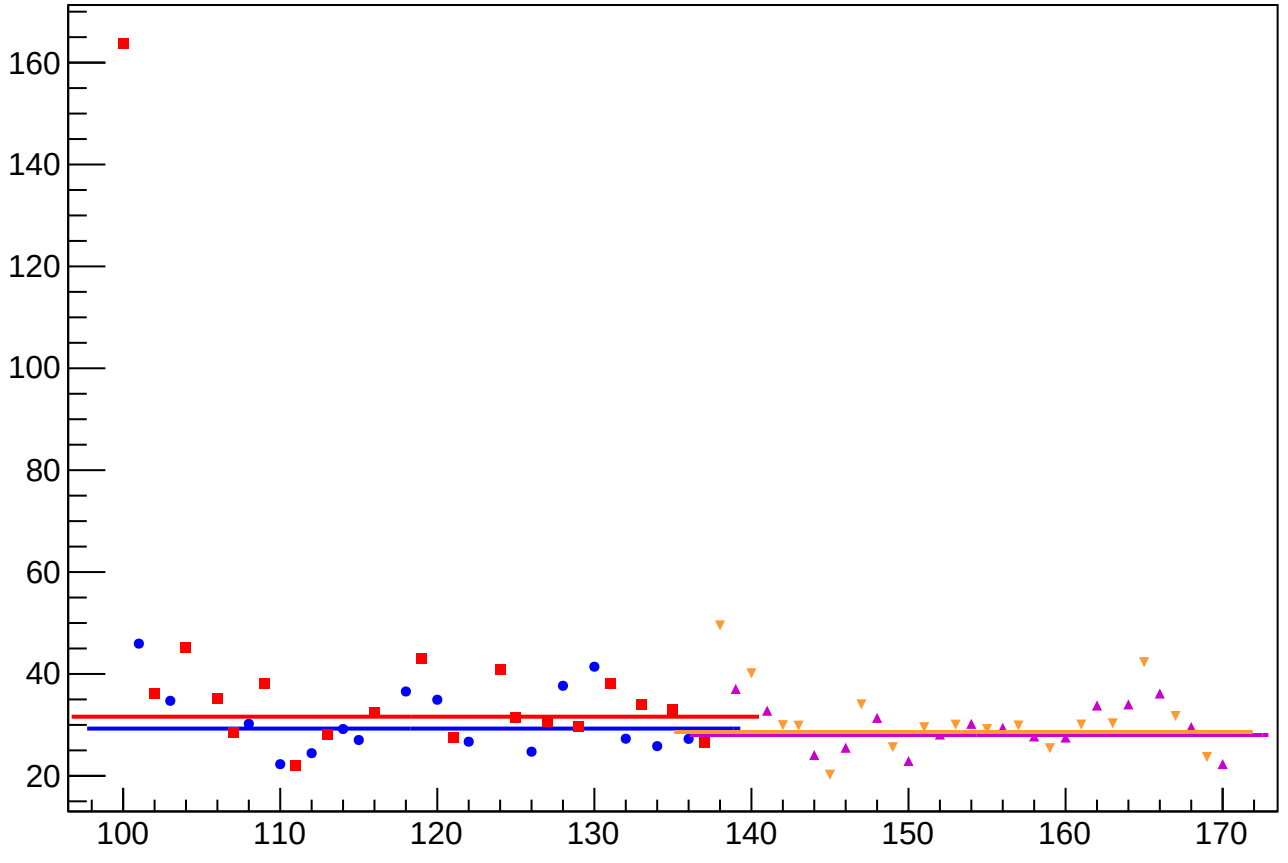
Left In: 0.009+/-0.008 $\chi^2$/NDF:15.0/15

+ sign 0.012+/-0.007 $\chi^2$/NDF: 41.9/32

All: 0.012+/-0.005 $\chi^2$/NDF: 74.1/67

- sign 0.012+/-0.007 $\chi^2$/NDF: 32.1/34

# asym_sam_37_48_dd_dit_vs_cor_diff_rms vs Slug




Right In: 29.278+/-0.008 $\chi^2$/NDF: 560654.9/15

Left Out: 28.606+/-0.006 $\chi^2$/NDF:982754.8/16

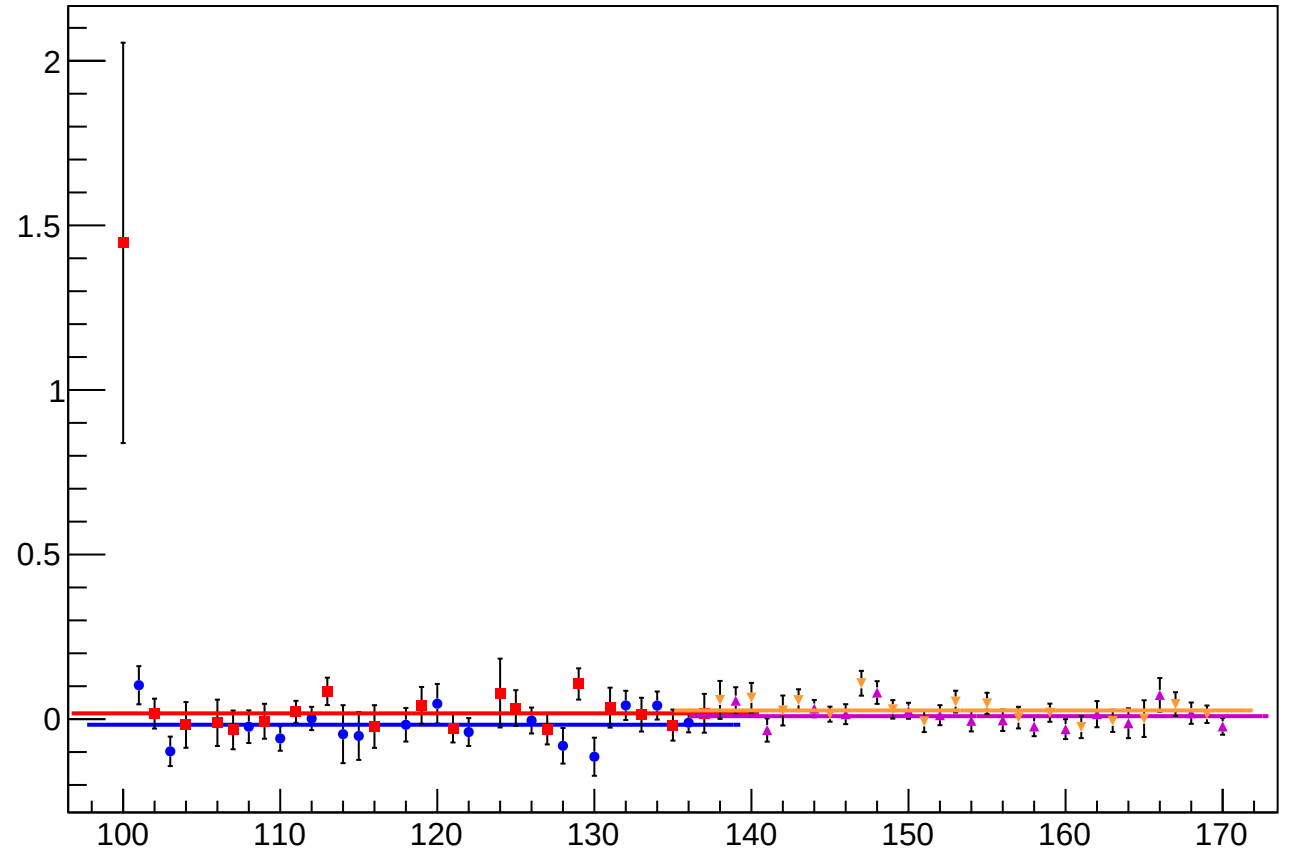
Right Out: 31.613+/-0.009 $\chi^2$/NDF: 572190.6/18

Left In: 28.016+/-0.006 $\chi^2$/NDF:548902.8/15

+ sign 28.831+/-0.005 $\chi^2$/NDF: 1548085.0/32

All: 28.966+/-0.003 $\chi^2$/NDF: 2794156.1/67

- sign 29.105+/-0.005 $\chi^2$/NDF: 1244352.3/34




Right In: -0.017+/-0.011 $\chi^2$/NDF: 18.8/15

Left Out: 0.026+/-0.008 $\chi^2$/NDF:13.4/16

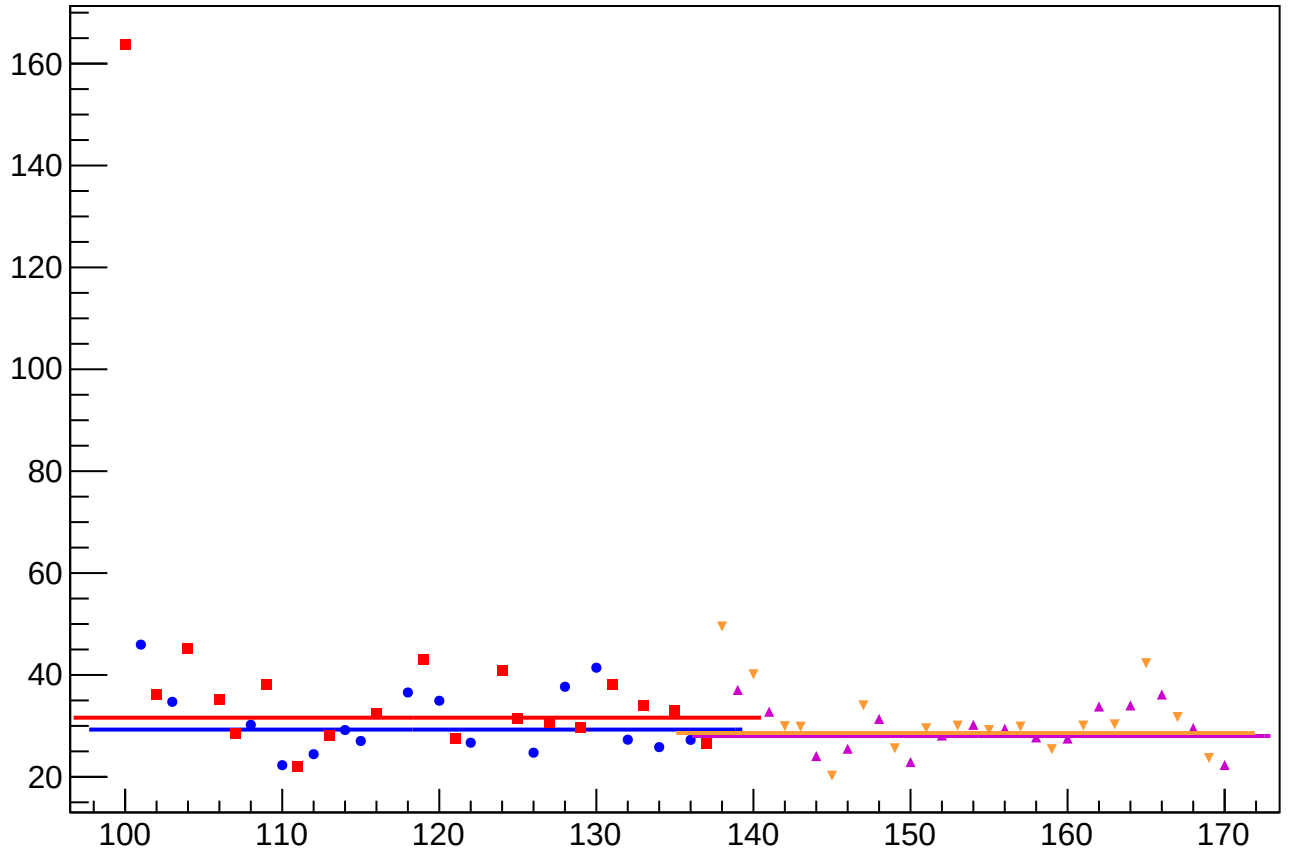
Right Out: 0.018+/-0.012 $\chi^2$/NDF: 16.8/18

Left In: 0.009+/-0.008 $\chi^2$/NDF:15.0/15

+ sign 0.012+/-0.007 $\chi^2$/NDF: 41.9/32

All: 0.012+/-0.005 $\chi^2$/NDF: 74.1/67

- sign 0.012+/-0.007 $\chi^2$/NDF: 32.1/34




Right In: 29.278+/-0.008 $\chi^2$/NDF: 560654.9/15

Left Out: 28.606+/-0.006 $\chi^2$/NDF:982754.8/16

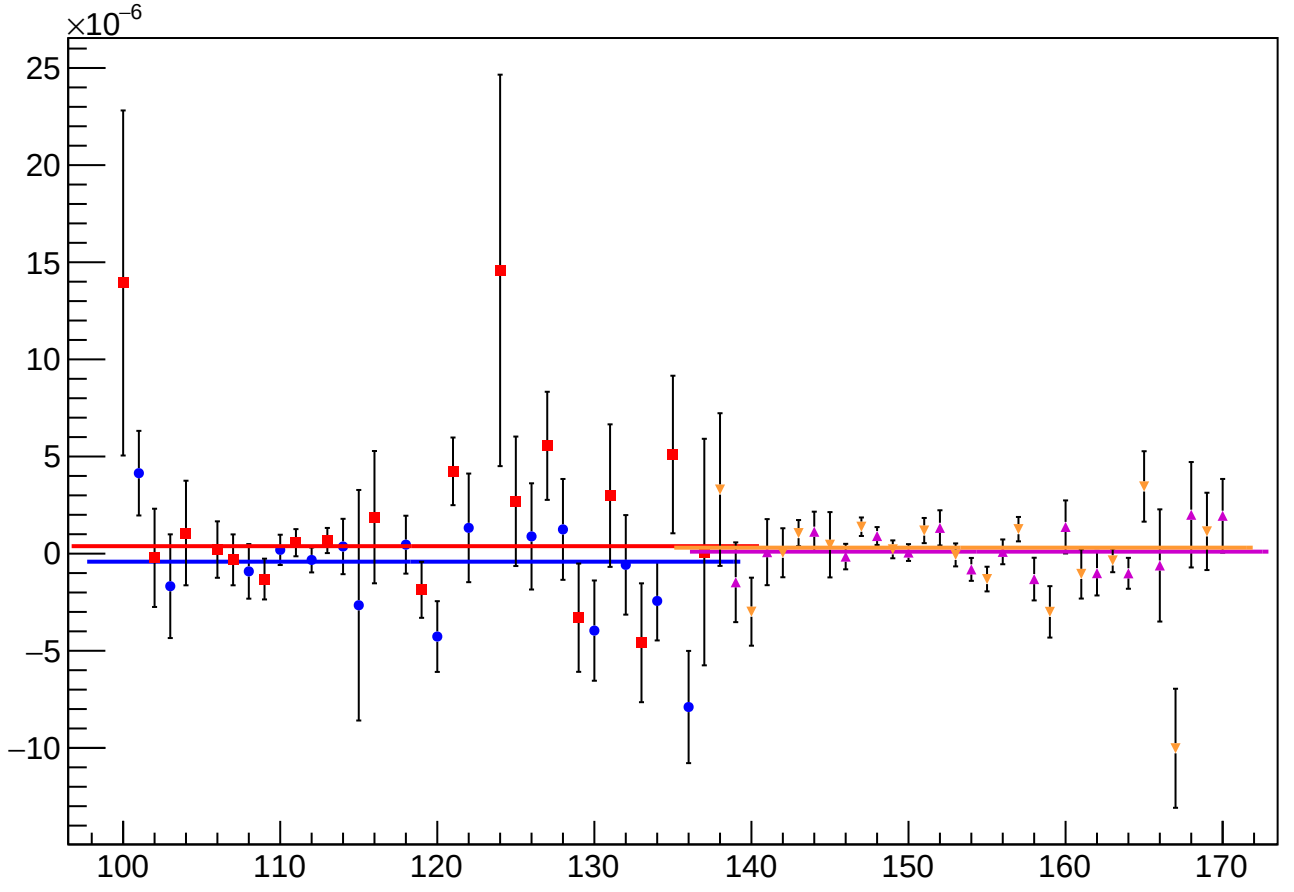
Right Out: 31.613+/-0.009 $\chi^2$/NDF: 572190.6/18

Left In: 28.016+/-0.006 $\chi^2$/NDF:548902.8/15

+ sign 28.831+/-0.005 $\chi^2$/NDF: 1548085.0/32

All: 28.966+/-0.003 $\chi^2$/NDF: 2794156.1/67

- sign 29.105+/-0.005 $\chi^2$/NDF: 1244352.3/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 21.2/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:44.7/16

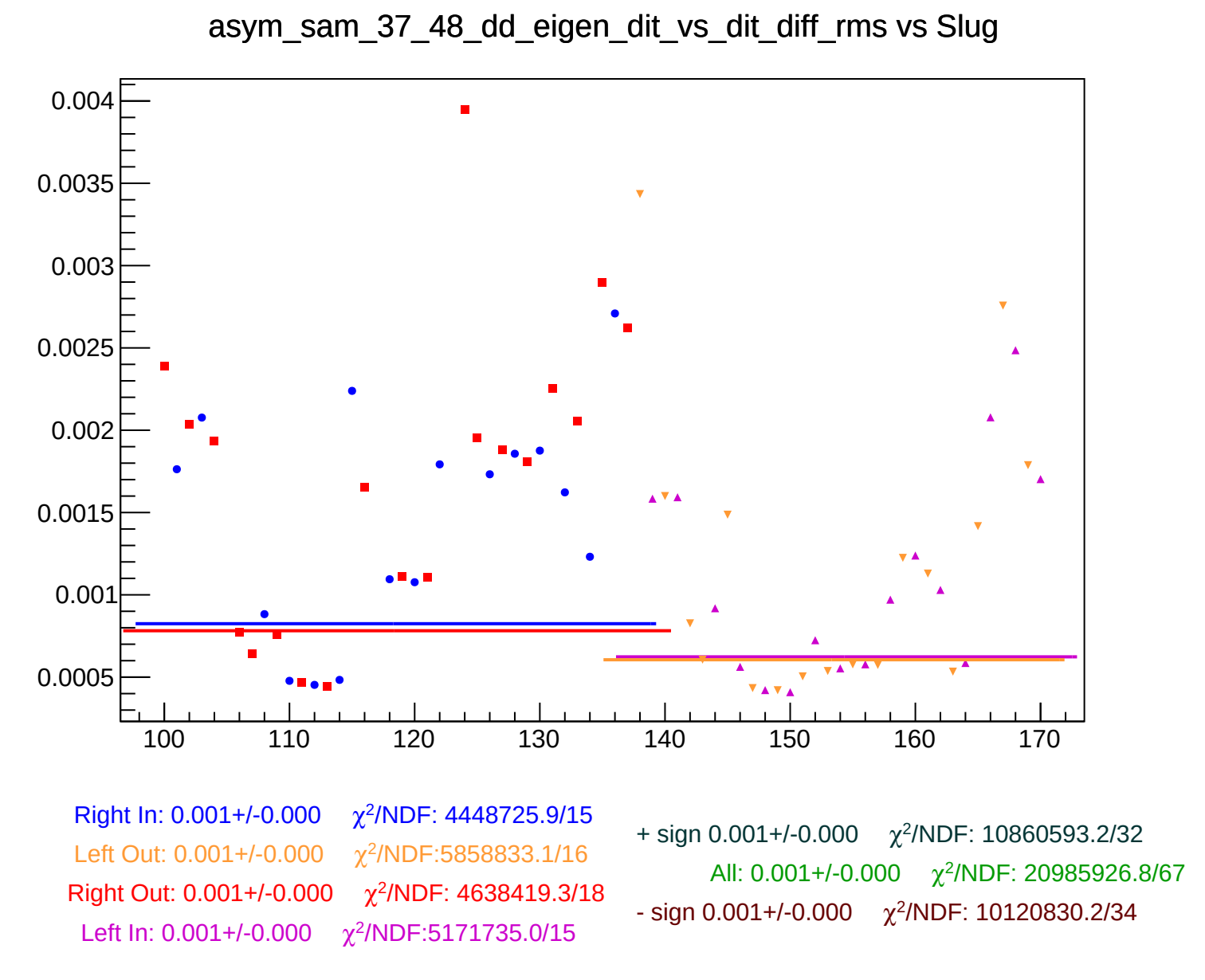
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 25.3/18

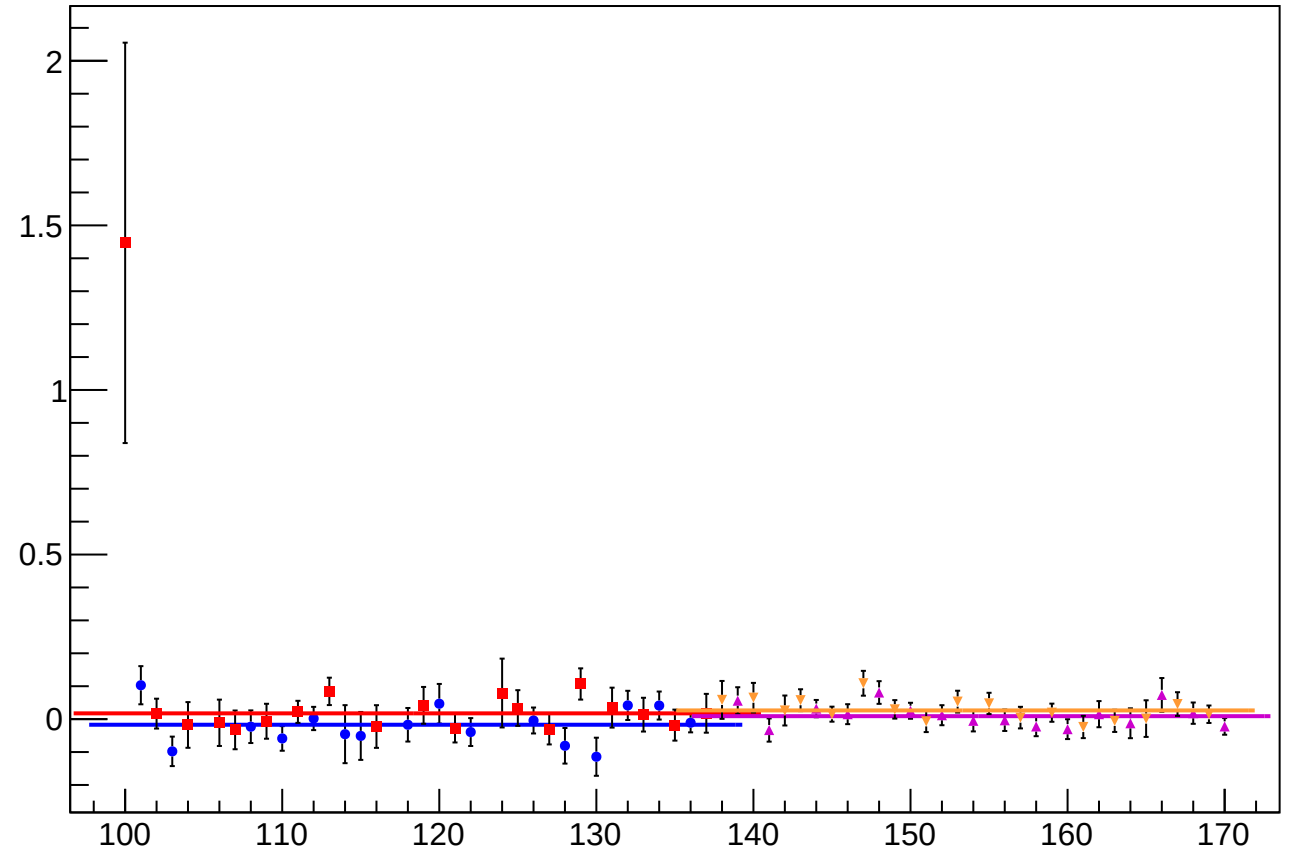
Left In: 0.000+/-0.000 $\chi^2$/NDF:15.9/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 68.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 110.6/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 41.7/34


asym_sam_37_48_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 4448725.9/15
Left Out: 0.001+/-0.000 χ²/NDF:5858833.1/16
Right Out: 0.001+/-0.000 χ²/NDF: 4638419.3/18
Left In: 0.001+/-0.000 χ²/NDF:5171735.0/15
+ sign 0.001+/-0.000 χ²/NDF: 10860593.2/32
All: 0.001+/-0.000 χ²/NDF: 20985926.8/67
- sign 0.001+/-0.000 χ²/NDF: 10120830.2/34




Right In: -0.017+/-0.011 $\chi^2$/NDF: 18.8/15

Left Out: 0.026+/-0.008 $\chi^2$/NDF:13.4/16

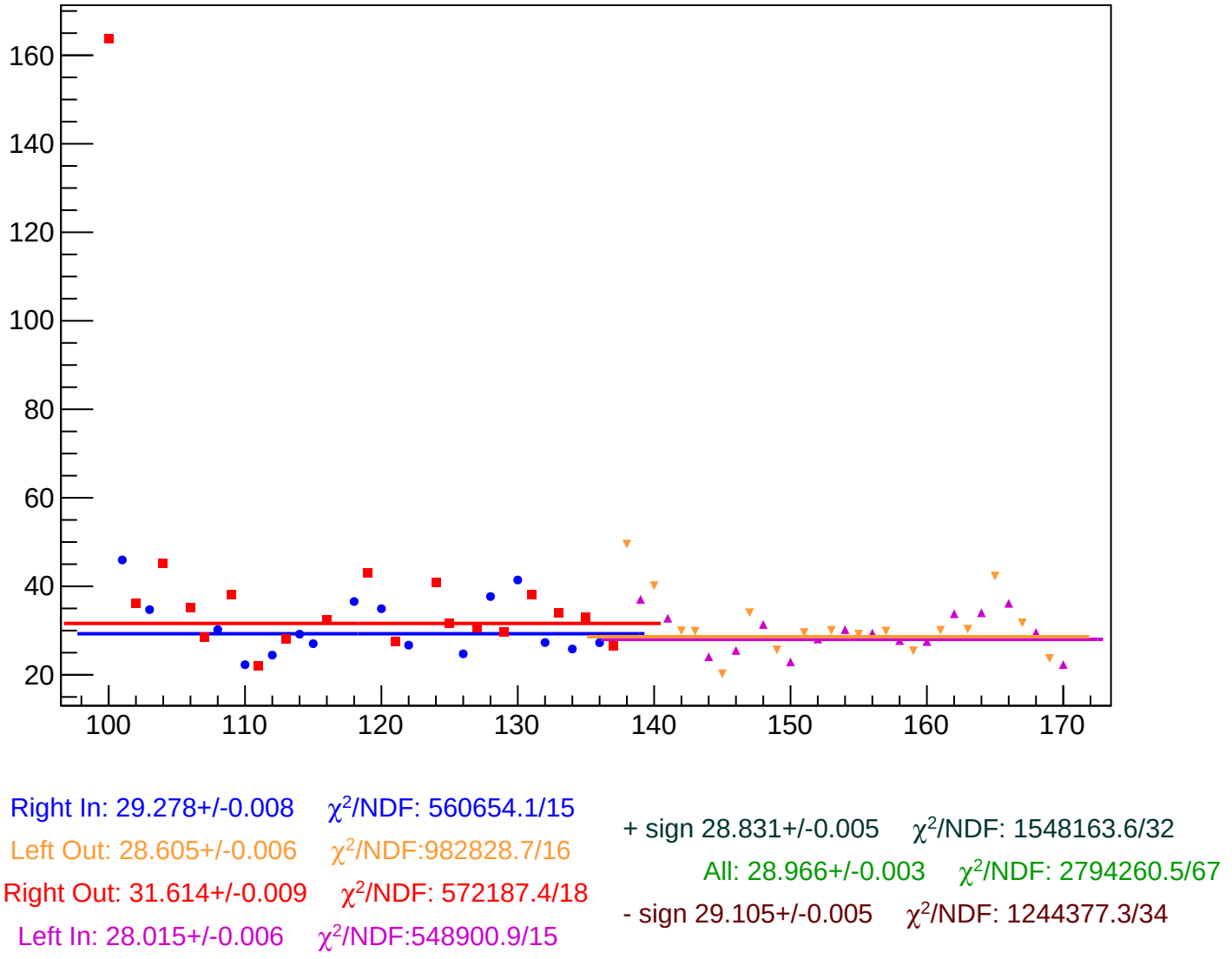
Right Out: 0.018+/-0.012 $\chi^2$/NDF: 16.8/18

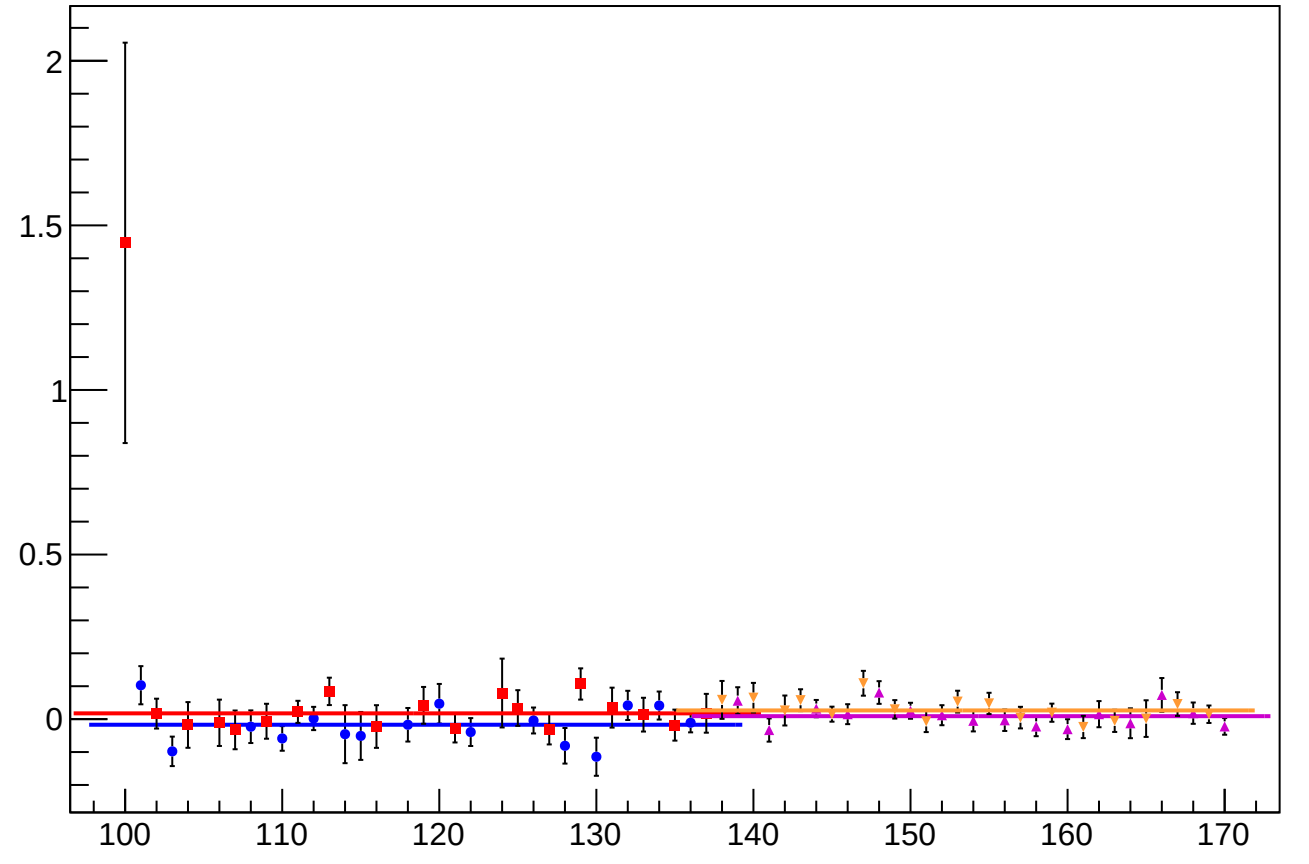
Left In: 0.009+/-0.008 $\chi^2$/NDF:15.0/15

+ sign 0.012+/-0.007 $\chi^2$/NDF: 41.9/32

All: 0.012+/-0.005 $\chi^2$/NDF: 74.1/67

- sign 0.012+/-0.007 $\chi^2$/NDF: 32.1/34


asym_sam_37_48_dd_eigen_dit_vs_cor_diff_rms vs Slug
160
140
120
100
80
60
40
20
100
110
120
130
140
150
160
170
Right In: 29.278+/-0.008 χ²/NDF: 560654.1/15
Left Out: 28.605+/-0.006 χ²/NDF:982828.7/16
Right Out: 31.614+/-0.009 χ²/NDF: 572187.4/18
Left In: 28.015+/-0.006 χ²/NDF:548900.9/15
+ sign 28.831+/-0.005 χ²/NDF: 1548163.6/32
All: 28.966+/-0.003 χ²/NDF: 2794260.5/67
- sign 29.105+/-0.005 χ²/NDF: 1244377.3/34




Right In: -0.017+/-0.011 $\chi^2$/NDF: 18.8/15

Left Out: 0.026+/-0.008 $\chi^2$/NDF:13.4/16

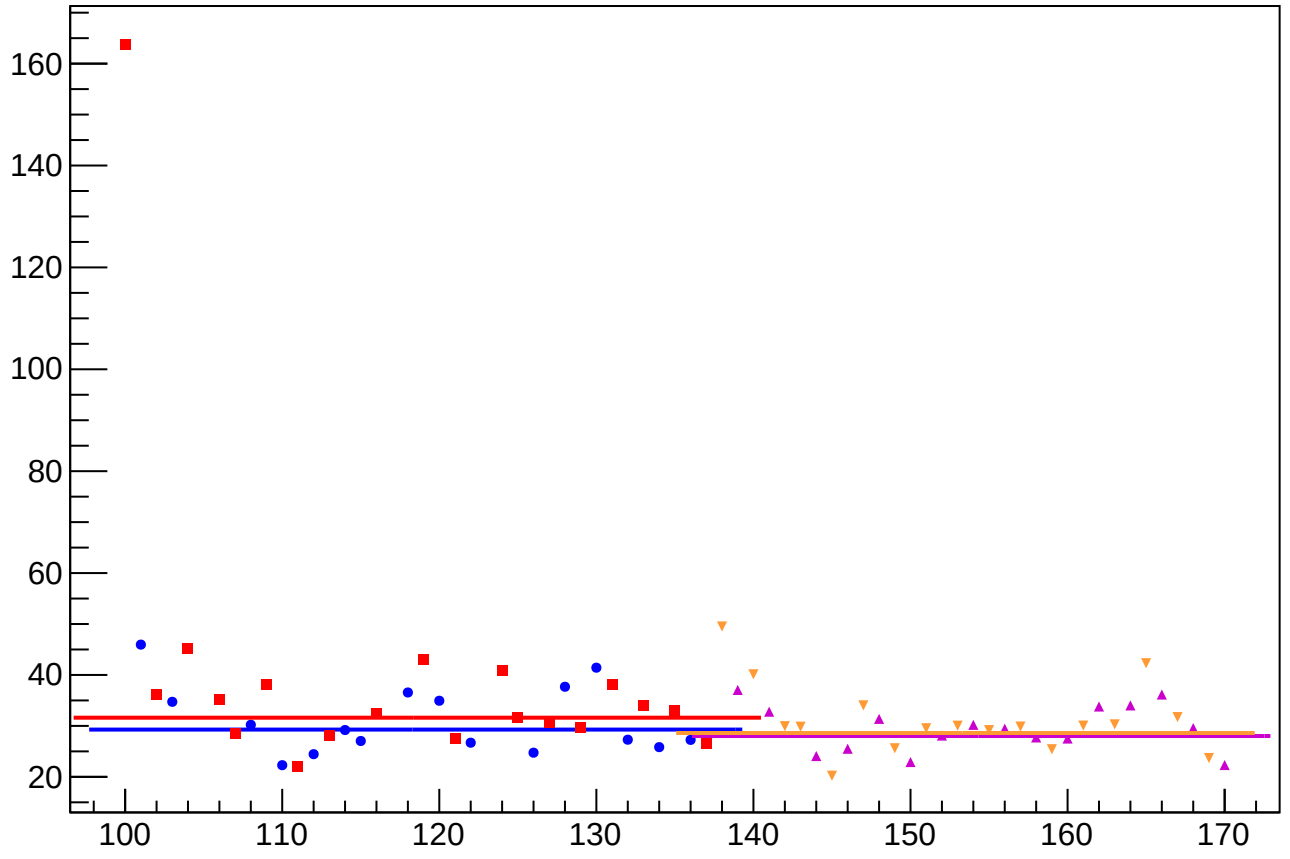
Right Out: 0.018+/-0.012 $\chi^2$/NDF: 16.8/18

Left In: 0.009+/-0.008 $\chi^2$/NDF:15.0/15

+ sign 0.012+/-0.007 $\chi^2$/NDF: 41.9/32

All: 0.012+/-0.005 $\chi^2$/NDF: 74.1/67

- sign 0.012+/-0.007 $\chi^2$/NDF: 32.1/34




Right In: 29.278+/-0.008 $\chi^2$/NDF: 560654.1/15

Left Out: 28.605+/-0.006 $\chi^2$/NDF:982828.7/16

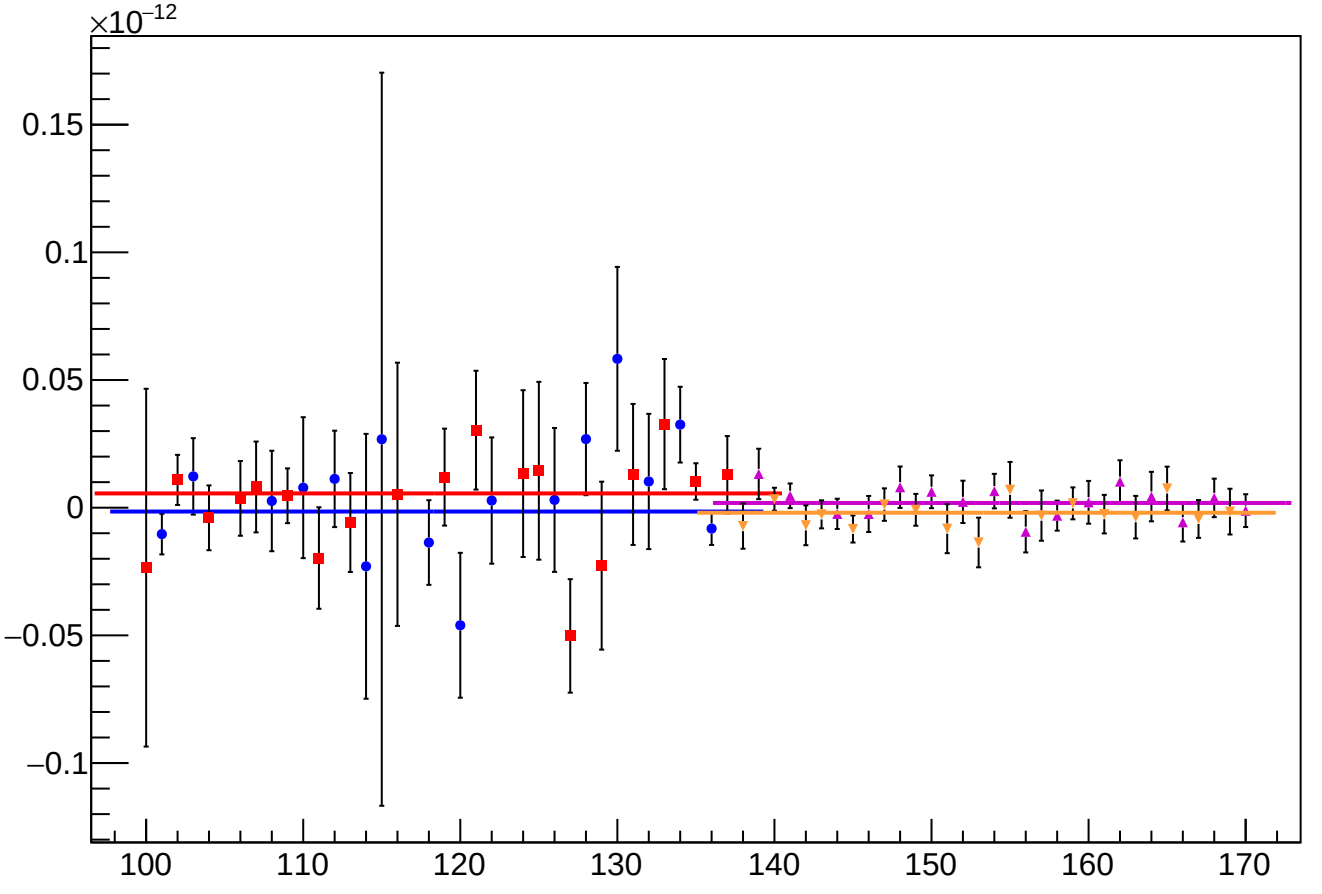
Right Out: 31.614+/-0.009 $\chi^2$/NDF: 572187.4/18

Left In: 28.015+/-0.006 $\chi^2$/NDF:548900.9/15

+ sign 28.831+/-0.005 $\chi^2$/NDF: 1548163.6/32

All: 28.966+/-0.003 $\chi^2$/NDF: 2794260.5/67

- sign 29.105+/-0.005 $\chi^2$/NDF: 1244377.3/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 16.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:8.1/16

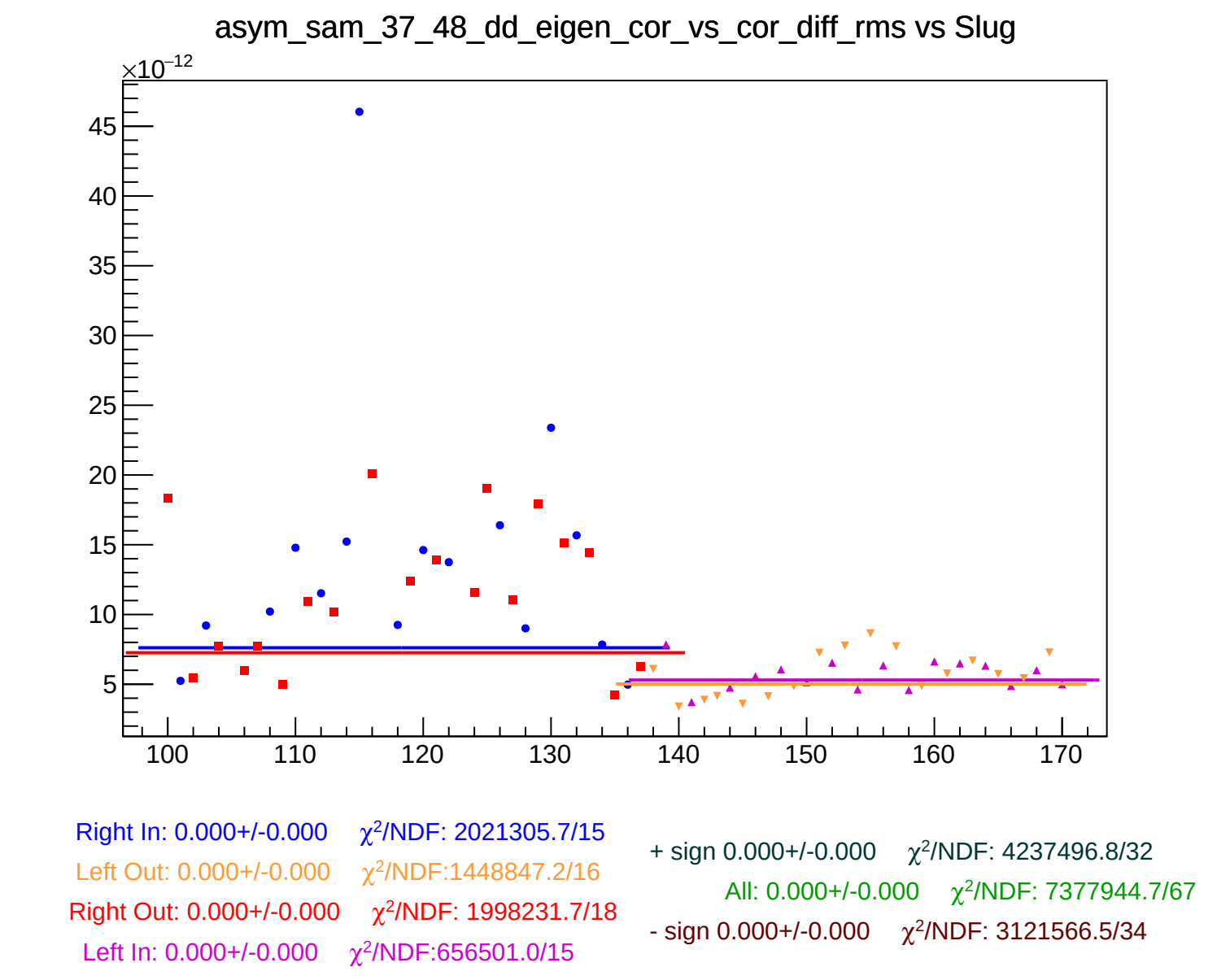
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 13.3/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:9.1/15

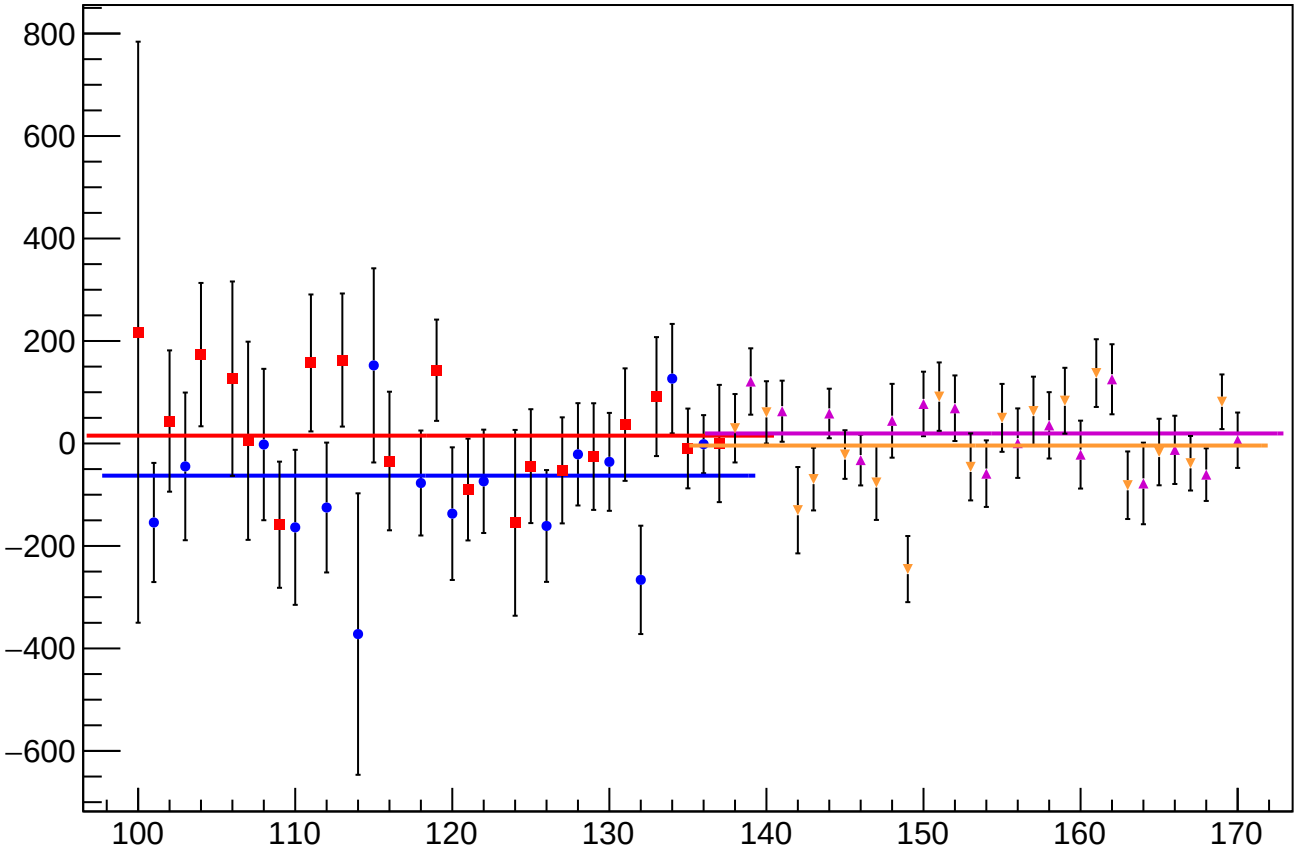
+ sign -0.000+/-0.000 $\chi^2$/NDF: 25.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 52.3/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 23.2/34


asym_sam_37_48_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
45
40
35
30
25
20
15
10
5
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2021305.7/15
Left Out: 0.000+/-0.000 χ²/NDF:1448847.2/16
Right Out: 0.000+/-0.000 χ²/NDF: 1998231.7/18
Left In: 0.000+/-0.000 χ²/NDF:656501.0/15
+ sign 0.000+/-0.000 χ²/NDF: 4237496.8/32
All: 0.000+/-0.000 χ²/NDF: 7377944.7/67
- sign 0.000+/-0.000 χ²/NDF: 3121566.5/34

# reg_asym_sam_15_26_dd_mean vs Slug




Right In: -62.798+/-27.213 $\chi^2$/NDF: 13.5/15

Left Out: -4.031+/-15.203 $\chi^2$/NDF:34.8/16

Right Out: 15.288+/-27.770 $\chi^2$/NDF: 11.5/18

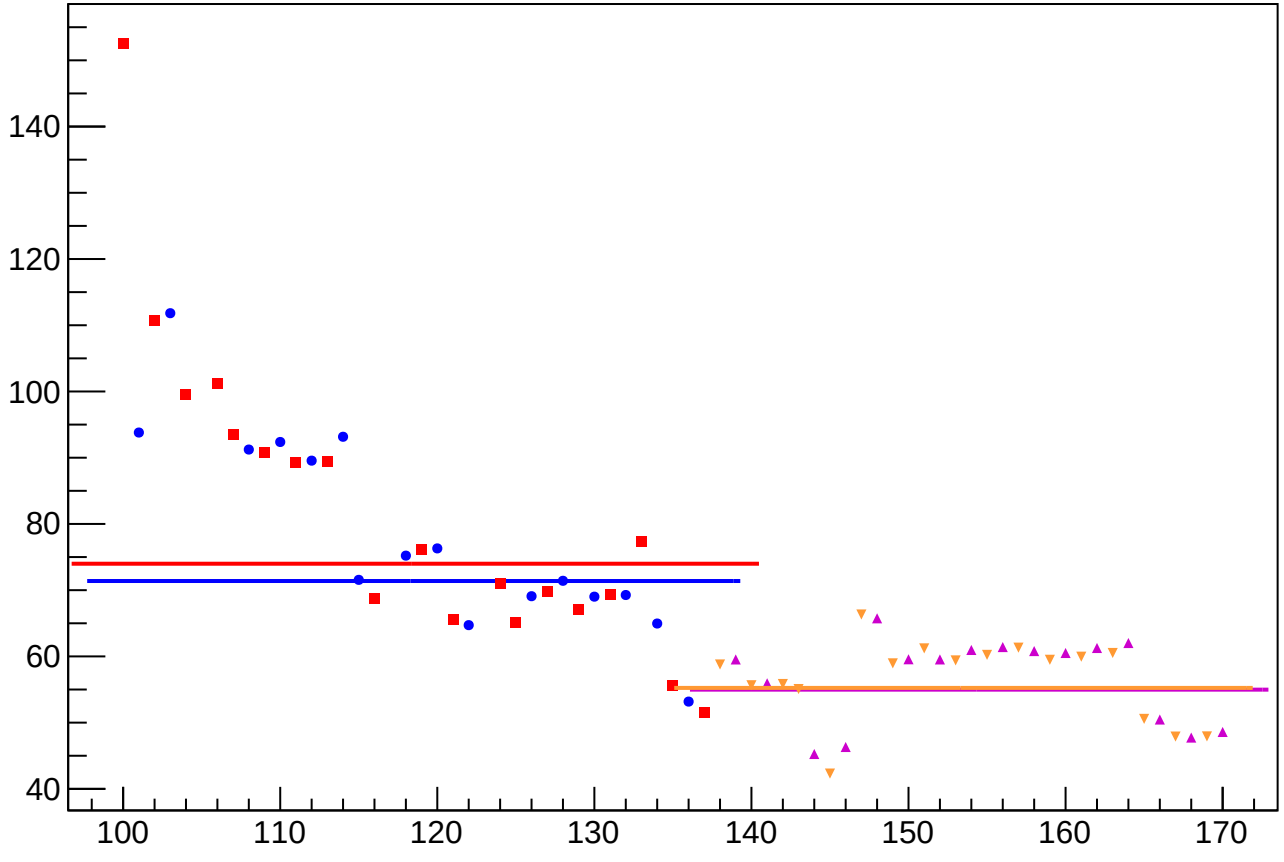
Left In: 19.540+/-15.279 $\chi^2$/NDF:14.9/15

+ sign -18.010+/-13.273 $\chi^2$/NDF: 51.8/32

All: 0.115+/-9.425 $\chi^2$/NDF: 82.0/67

- sign 18.552+/-13.387 $\chi^2$/NDF: 26.4/34

# reg_asym_sam_15_26_dd_rms vs Slug




Right In: 71.383+/-0.019 $\chi^2$/NDF: 590909.3/15

Left Out: 55.243+/-0.011 $\chi^2$/NDF:376861.2/16

Right Out: 73.994+/-0.020 $\chi^2$/NDF: 638445.5/18

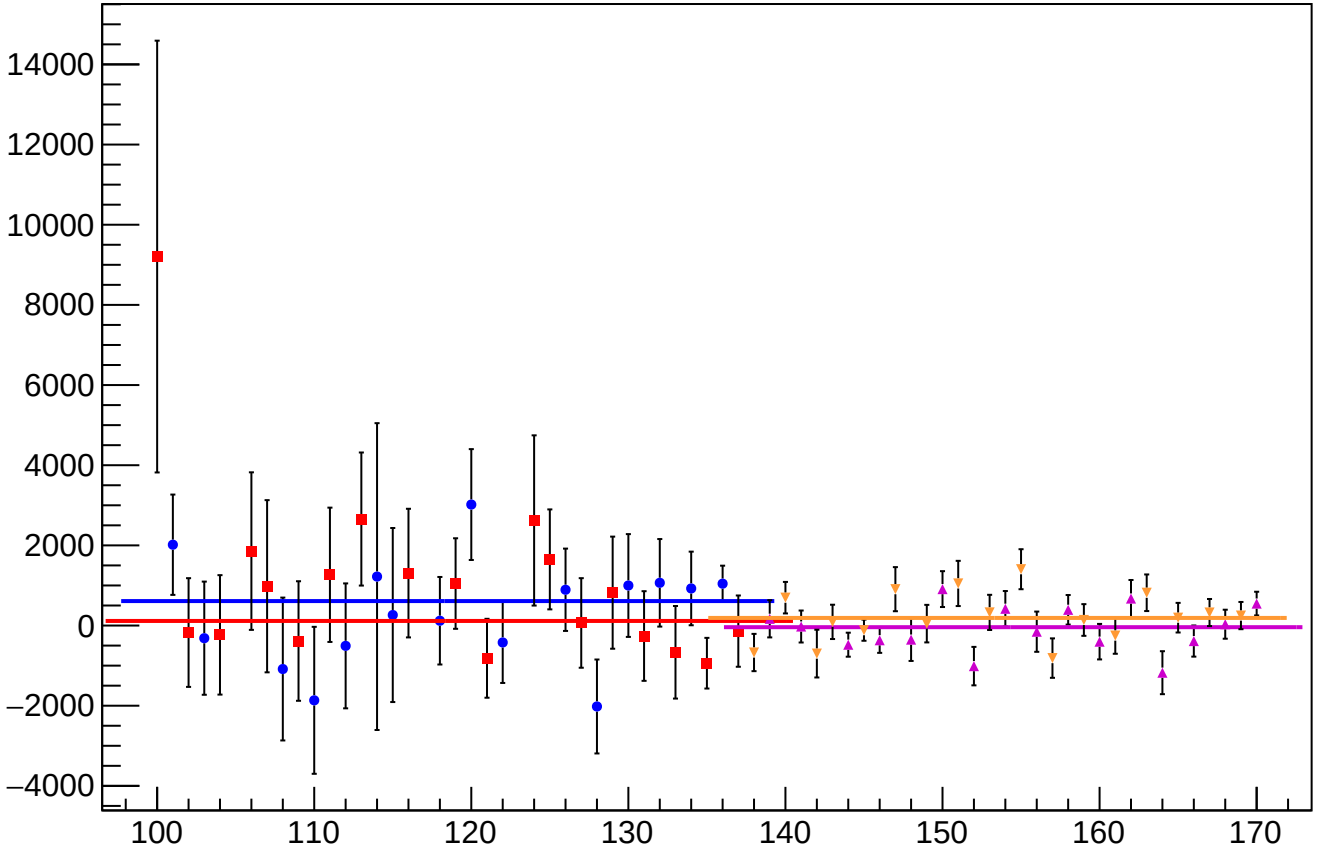
Left In: 54.980+/-0.011 $\chi^2$/NDF:392338.8/15

+ sign 59.082+/-0.009 $\chi^2$/NDF: 1503967.3/32

All: 59.239+/-0.007 $\chi^2$/NDF: 3255022.4/67

- sign 59.398+/-0.009 $\chi^2$/NDF: 1750492.9/34

# asym_sam_15_26_dd_reg_correction_mean vs Slug




Right In: 610.561+/-266.802 $\chi^2$/NDF: 15.7/15

Left Out: 189.963+/-100.550 $\chi^2$/NDF:26.1/16

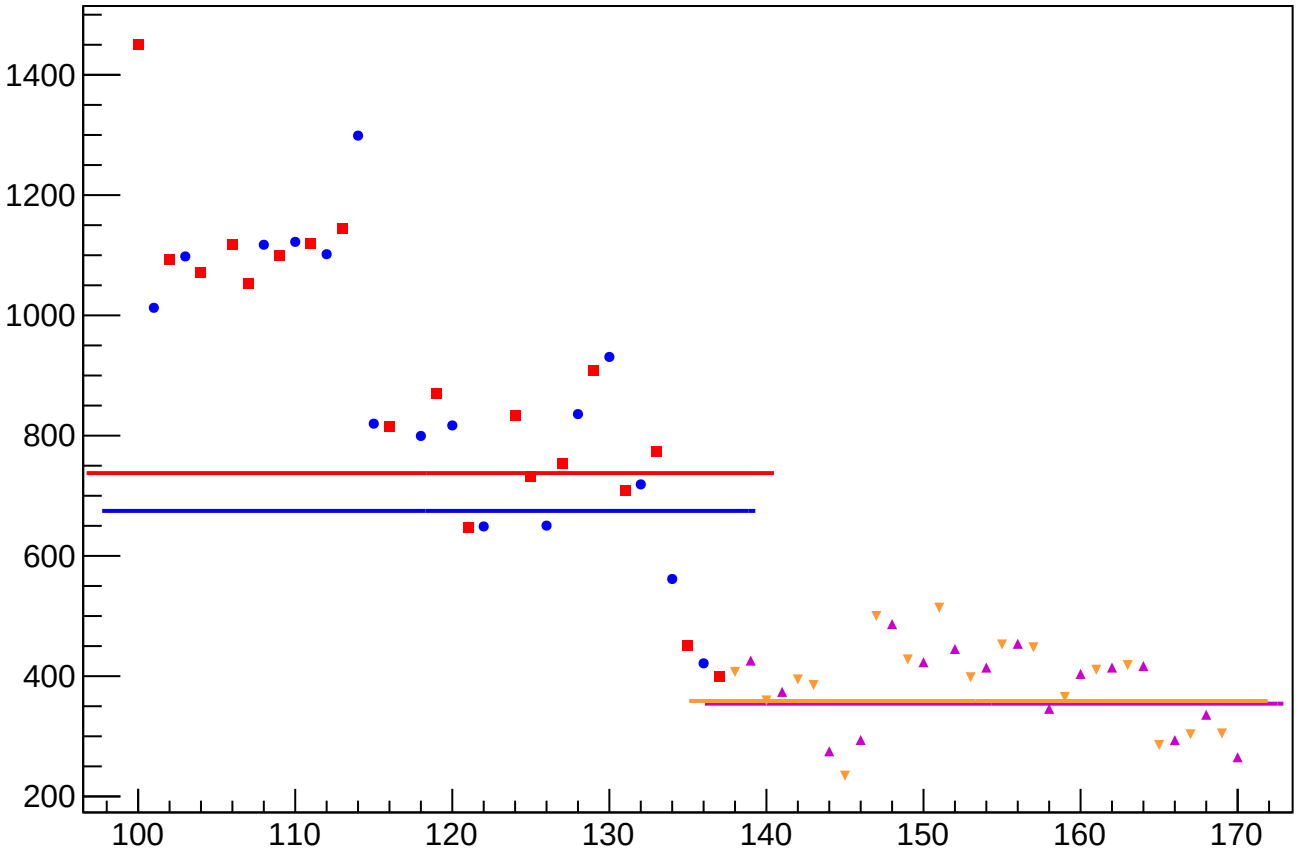
Right Out: 114.633+/-284.312 $\chi^2$/NDF: 15.6/18

Left In: -40.796+/-99.793 $\chi^2$/NDF:27.2/15

+ sign 242.272+/-94.090 $\chi^2$/NDF: 43.9/32

All: 109.363+/-66.557 $\chi^2$/NDF: 91.0/67

- sign -23.747+/-94.161 $\chi^2$/NDF: 43.0/34




Right In: 674.830+/-0.189 $\chi^2$/NDF: 1617598.7/15

Left Out: 358.708+/-0.071 $\chi^2$/NDF:1203611.0/16

Right Out: 737.674+/-0.201 $\chi^2$/NDF: 1516748.6/18

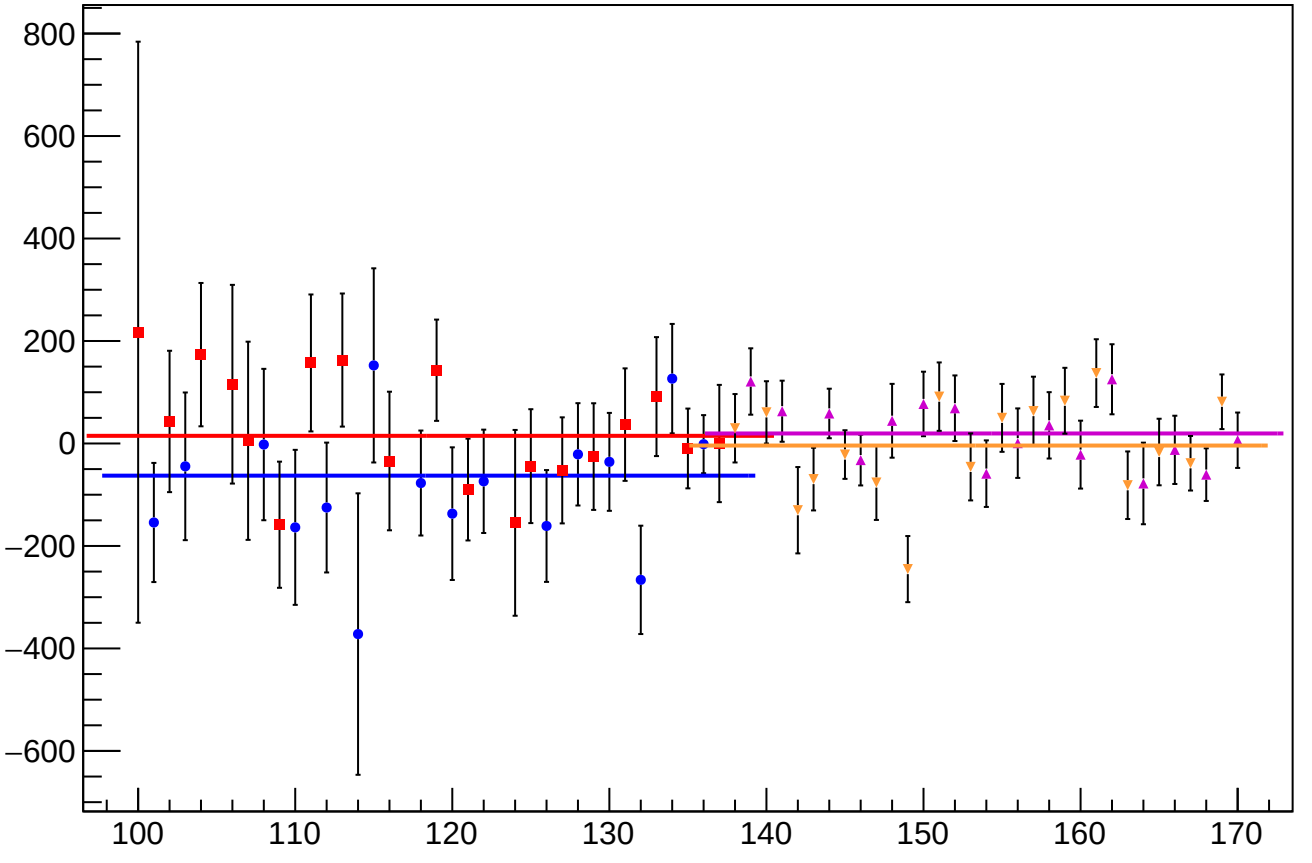
Left In: 354.264+/-0.071 $\chi^2$/NDF:946879.7/15

+ sign 398.024+/-0.067 $\chi^2$/NDF: 5279781.9/32

All: 397.172+/-0.047 $\chi^2$/NDF: 10981984.4/67

- sign 396.319+/-0.067 $\chi^2$/NDF: 5701874.6/34

# cor_asym_sam_15_26_dd_mean vs Slug




Right In: -62.789+/-27.213 $\chi^2$/NDF: 13.5/15

Left Out: -4.030+/-15.203 $\chi^2$/NDF:34.8/16

Right Out: 14.932+/-27.783 $\chi^2$/NDF: 11.4/18

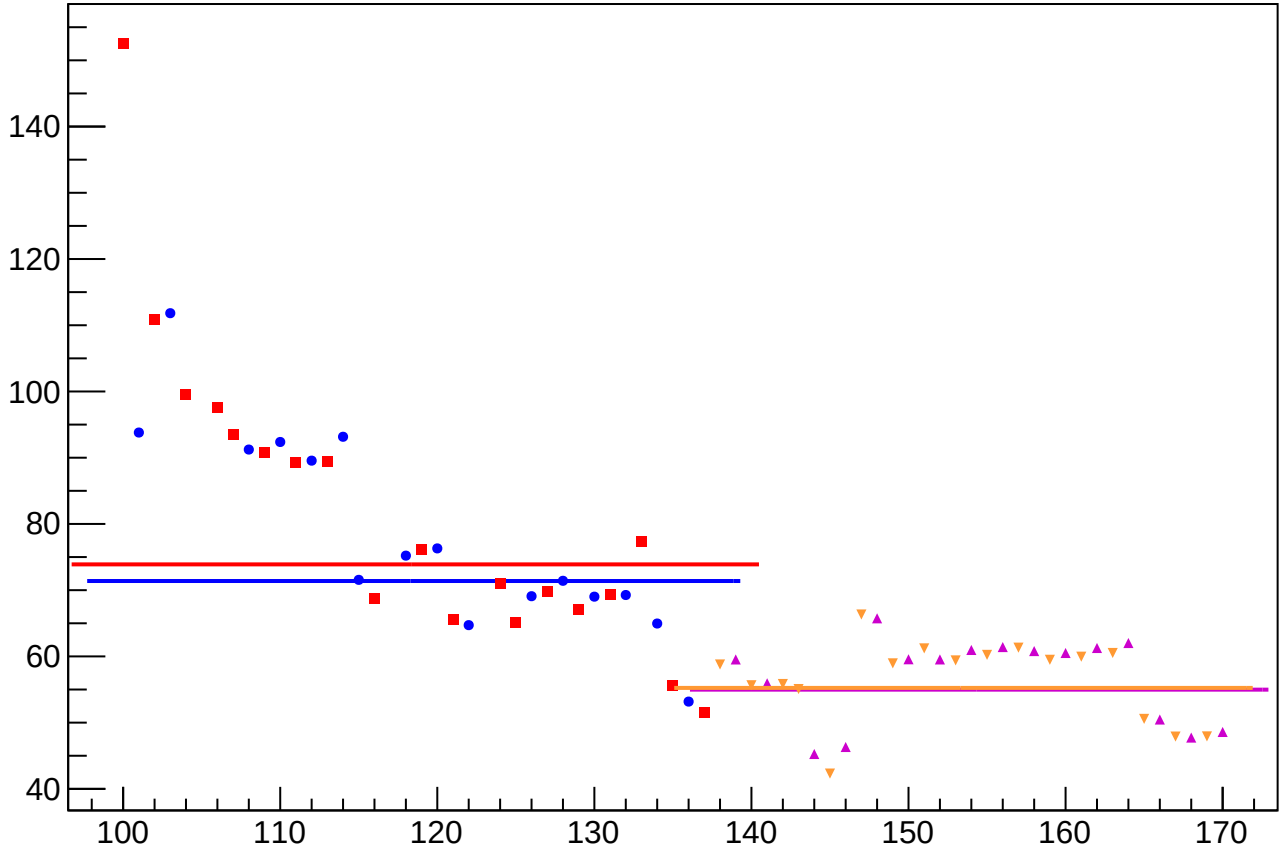
Left In: 19.542+/-15.279 $\chi^2$/NDF:14.9/15

+ sign -18.008+/-13.273 $\chi^2$/NDF: 51.8/32

All: 0.074+/-9.426 $\chi^2$/NDF: 81.9/67

- sign 18.471+/-13.388 $\chi^2$/NDF: 26.3/34

# cor_asym_sam_15_26_dd_rms vs Slug




Right In: 71.383+/-0.019 $\chi^2$/NDF: 590911.7/15

Left Out: 55.243+/-0.011 $\chi^2$/NDF:376861.2/16

Right Out: 73.894+/-0.020 $\chi^2$/NDF: 627014.3/18

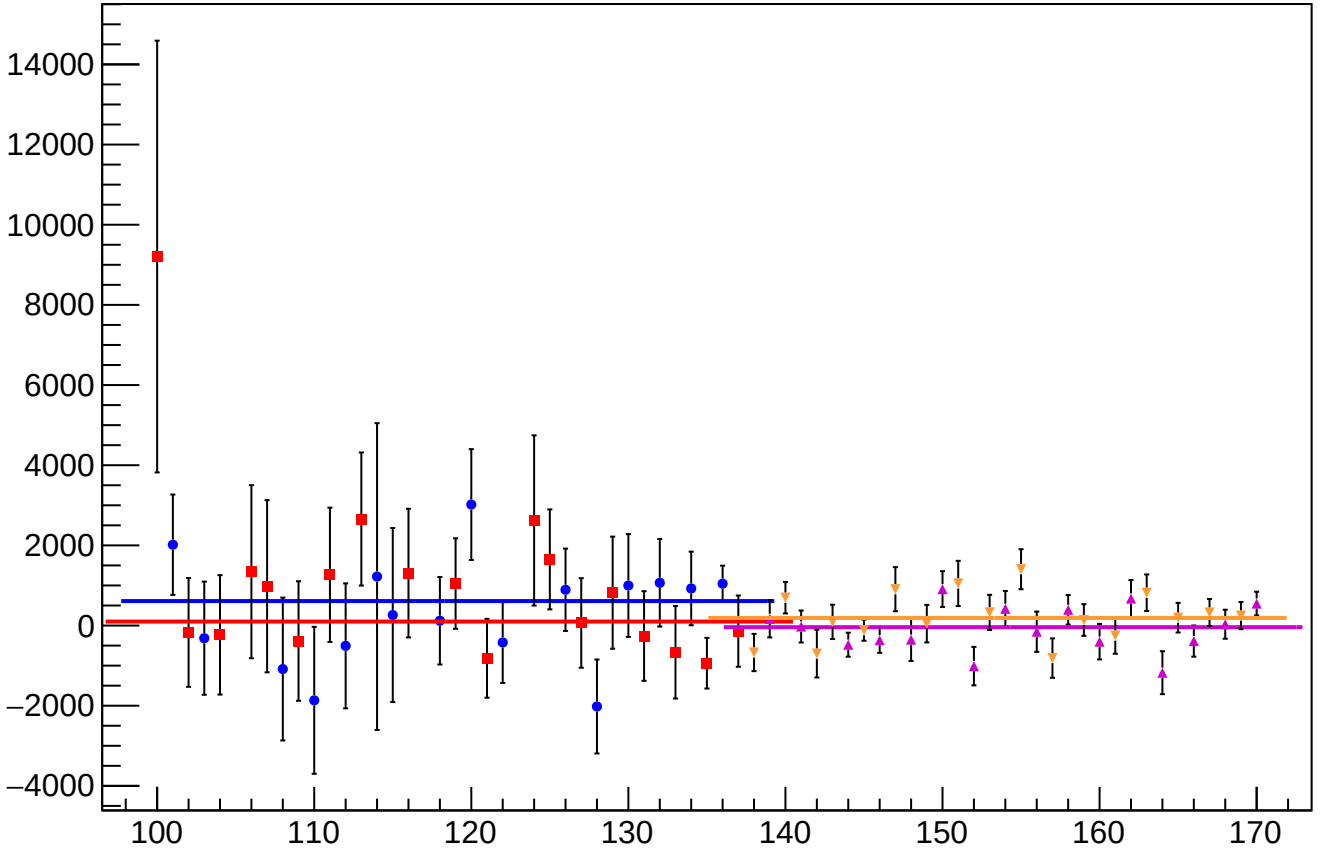
Left In: 54.980+/-0.011 $\chi^2$/NDF:392338.8/15

+ sign 59.082+/-0.009 $\chi^2$/NDF: 1503969.9/32

All: 59.226+/-0.007 $\chi^2$/NDF: 3235451.1/67

- sign 59.372+/-0.009 $\chi^2$/NDF: 1731009.1/34

# asym_sam_15_26_dd_cor_correction_mean vs Slug




Right In: 610.549+/-266.803 $\chi^2$/NDF: 15.7/15

Left Out: 189.961+/-100.550 $\chi^2$/NDF:26.1/16

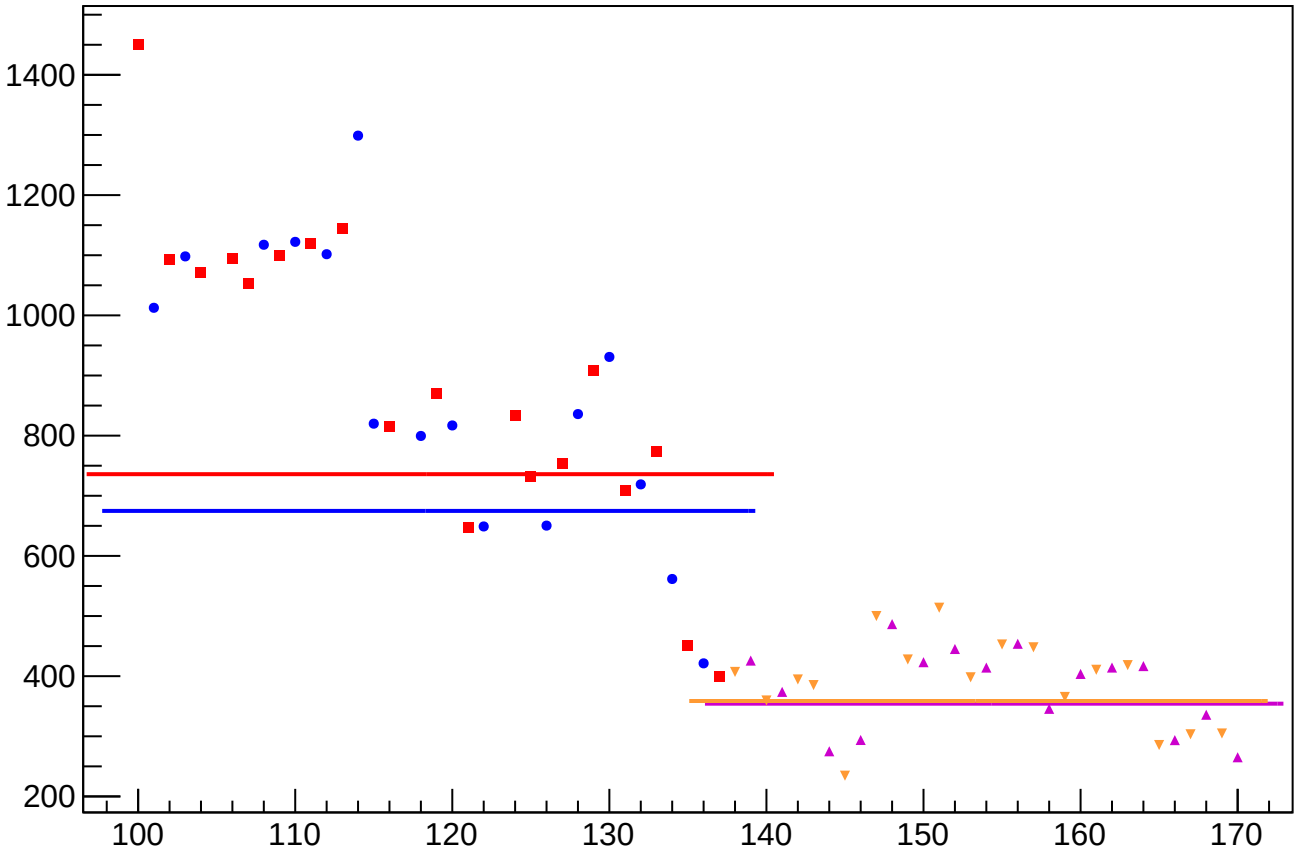
Right Out: 99.555+/-284.831 $\chi^2$/NDF: 15.1/18

Left In: -40.792+/-99.793 $\chi^2$/NDF:27.2/15

+ sign 242.269+/-94.090 $\chi^2$/NDF: 43.9/32

All: 108.538+/-66.563 $\chi^2$/NDF: 90.5/67

- sign -25.448+/-94.180 $\chi^2$/NDF: 42.5/34




Right In: 674.831+/-0.189 $\chi^2$/NDF: 1617624.1/15

Left Out: 358.708+/-0.071 $\chi^2$/NDF:1203615.5/16

Right Out: 735.919+/-0.201 $\chi^2$/NDF: 1496977.2/18

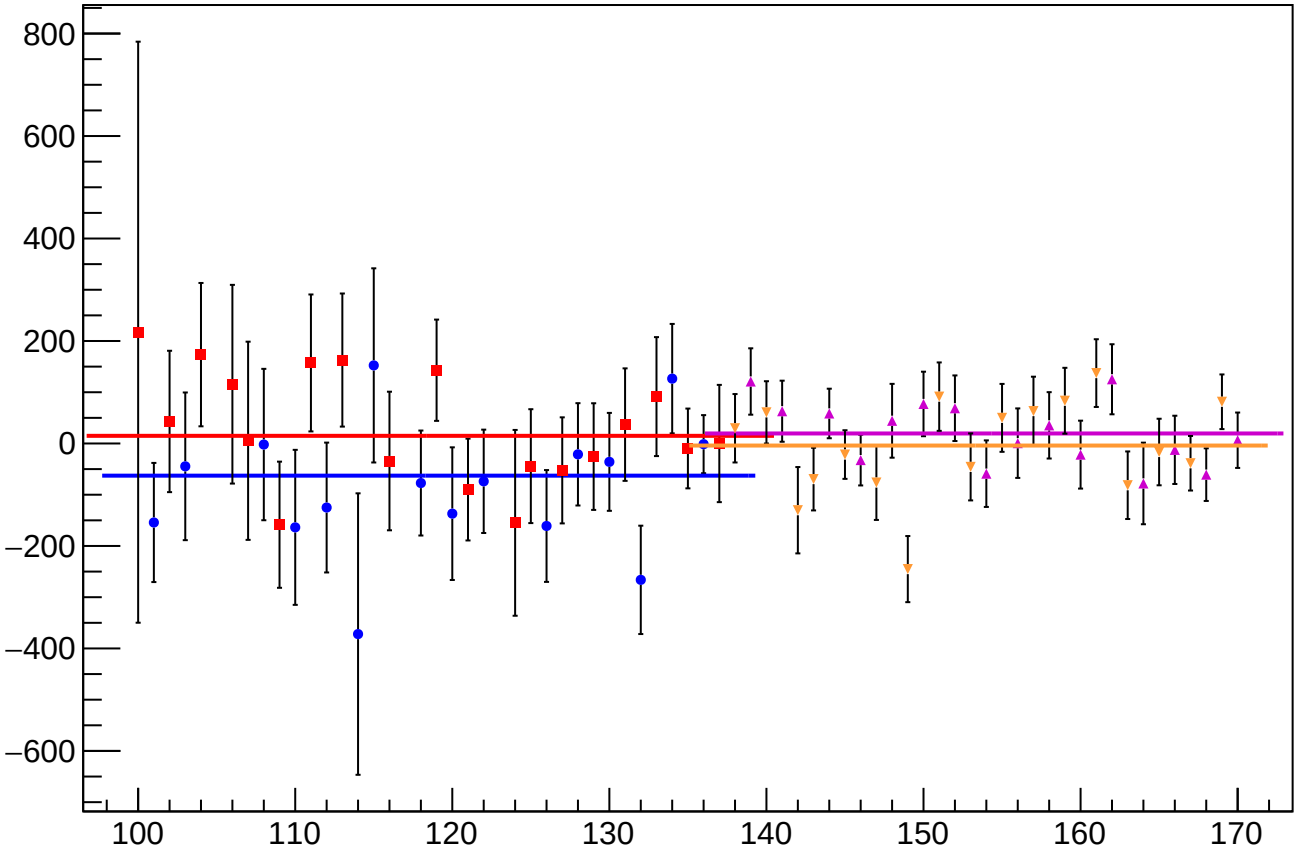
Left In: 354.264+/-0.071 $\chi^2$/NDF:946885.5/15

+ sign 398.023+/-0.067 $\chi^2$/NDF: 5279811.0/32

All: 397.008+/-0.047 $\chi^2$/NDF: 10922402.6/67

- sign 395.991+/-0.067 $\chi^2$/NDF: 5642125.4/34

# eigen_cor_asym_sam_15_26_dd_mean vs Slug




Right In: -62.789+/-27.213 $\chi^2$/NDF: 13.5/15

Left Out: -4.030+/-15.203 $\chi^2$/NDF:34.8/16

Right Out: 14.932+/-27.783 $\chi^2$/NDF: 11.4/18

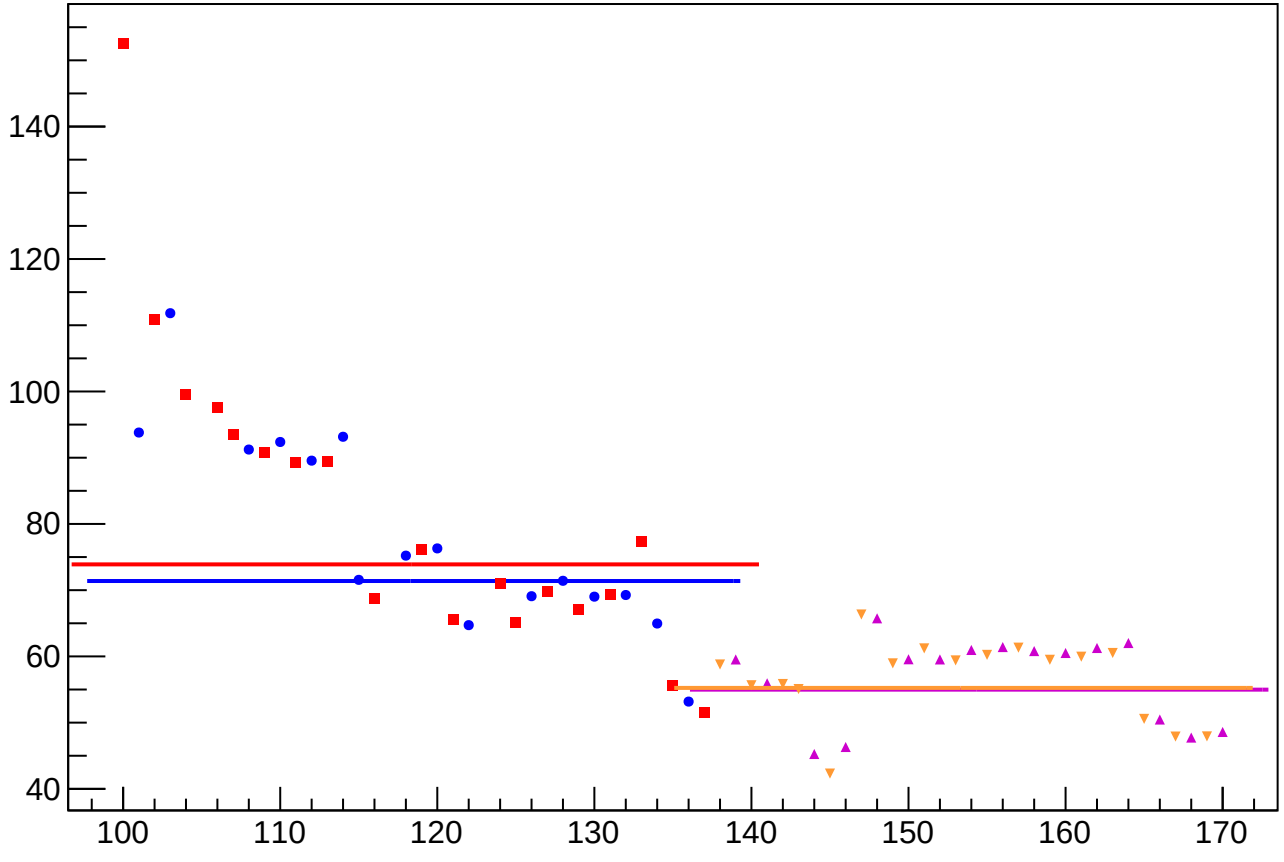
Left In: 19.542+/-15.279 $\chi^2$/NDF:14.9/15

+ sign -18.008+/-13.273 $\chi^2$/NDF: 51.8/32

All: 0.074+/-9.426 $\chi^2$/NDF: 81.9/67

- sign 18.471+/-13.388 $\chi^2$/NDF: 26.3/34

# eigen_cor_asym_sam_15_26_dd_rms vs Slug




Right In: 71.383+/-0.019 $\chi^2$/NDF: 590911.7/15

Left Out: 55.243+/-0.011 $\chi^2$/NDF:376861.2/16

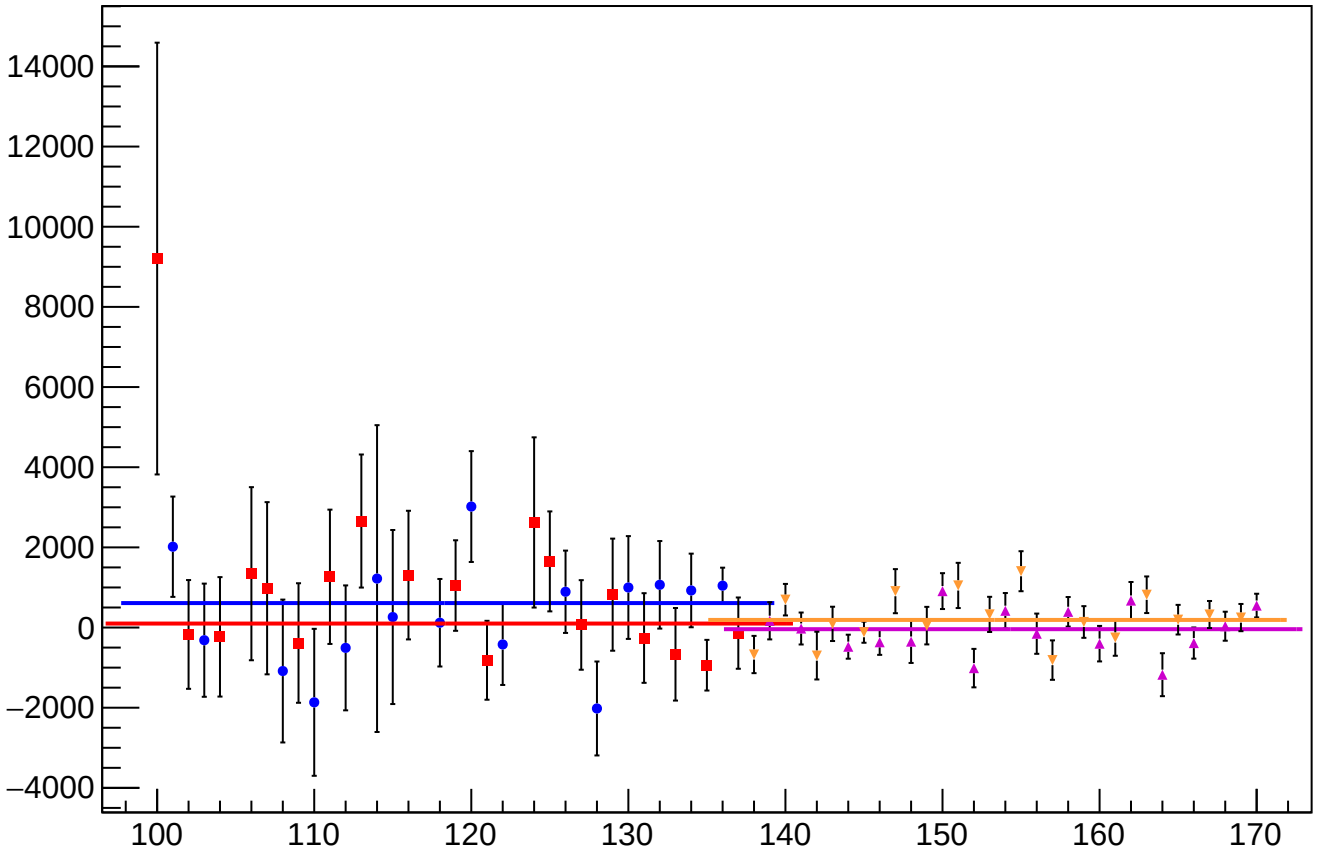
Right Out: 73.894+/-0.020 $\chi^2$/NDF: 627014.3/18

Left In: 54.980+/-0.011 $\chi^2$/NDF:392338.8/15

+ sign 59.082+/-0.009 $\chi^2$/NDF: 1503969.9/32

All: 59.226+/-0.007 $\chi^2$/NDF: 3235451.1/67

- sign 59.372+/-0.009 $\chi^2$/NDF: 1731009.1/34




Right In: 610.549+/-266.803 $\chi^2$/NDF: 15.7/15

Left Out: 189.961+/-100.550 $\chi^2$/NDF:26.1/16

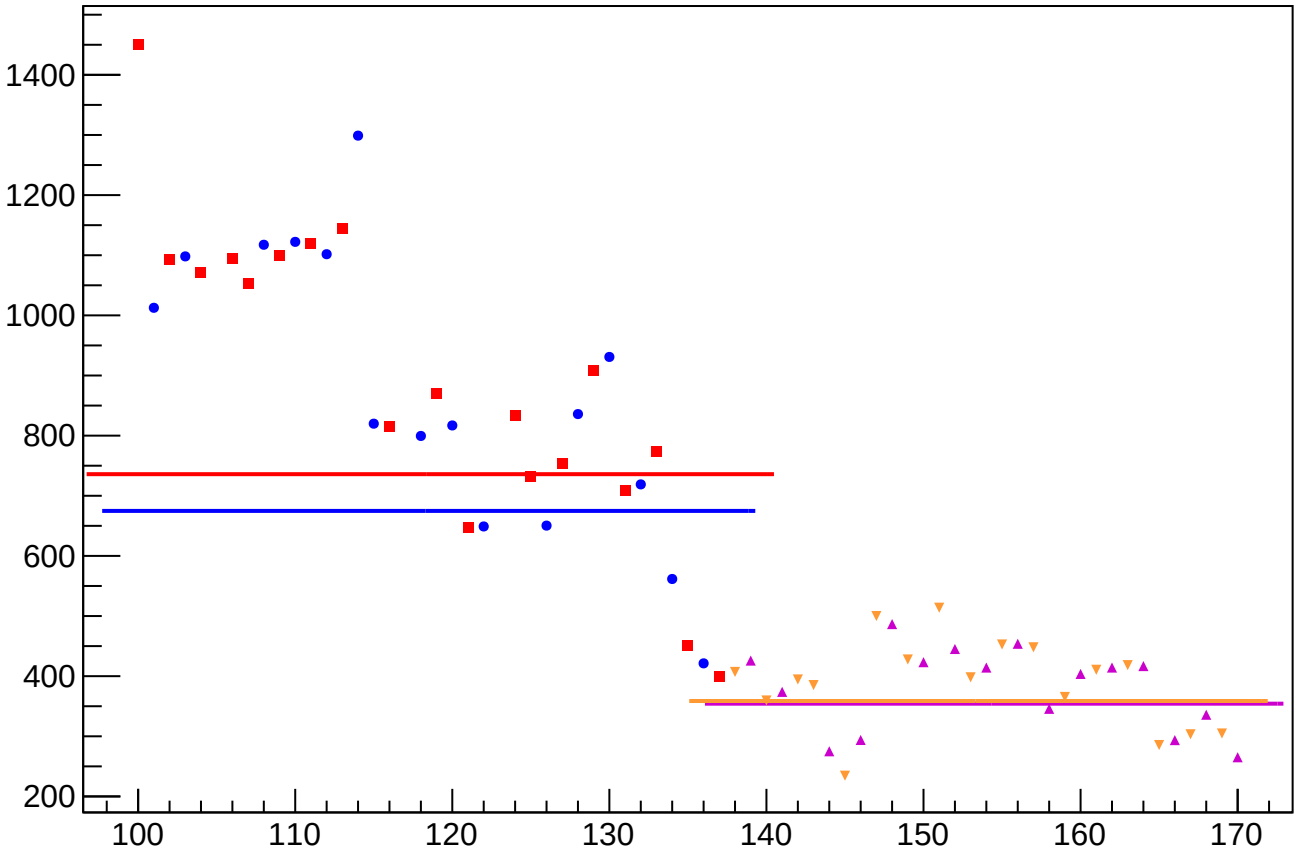
Right Out: 99.555+/-284.831 $\chi^2$/NDF: 15.1/18

Left In: -40.792+/-99.793 $\chi^2$/NDF:27.2/15

+ sign 242.269+/-94.090 $\chi^2$/NDF: 43.9/32

All: 108.538+/-66.563 $\chi^2$/NDF: 90.5/67

- sign -25.448+/-94.180 $\chi^2$/NDF: 42.5/34




Right In: 674.831+/-0.189 $\chi^2$/NDF: 1617624.1/15

Left Out: 358.708+/-0.071 $\chi^2$/NDF:1203615.5/16

Right Out: 735.919+/-0.201 $\chi^2$/NDF: 1496977.2/18

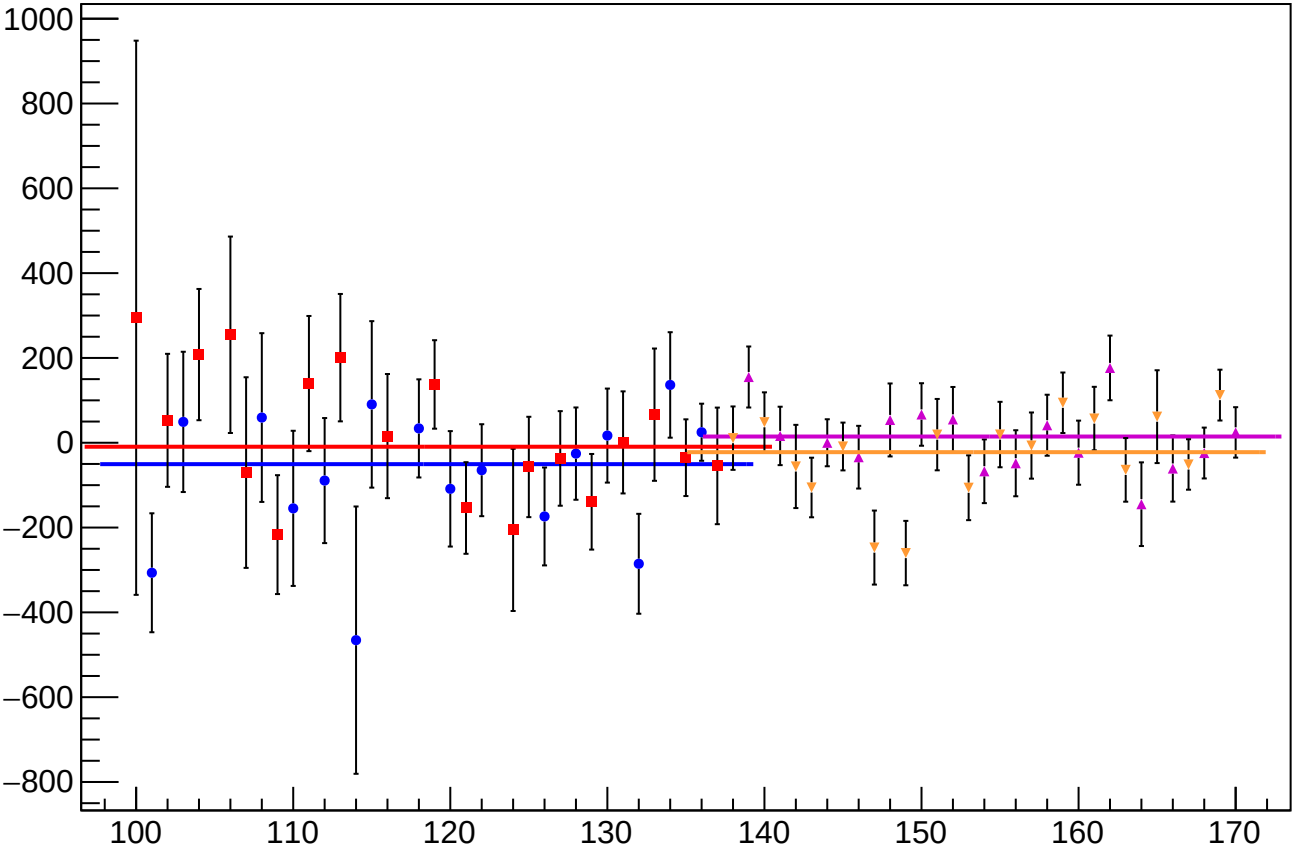
Left In: 354.264+/-0.071 $\chi^2$/NDF:946885.5/15

+ sign 398.023+/-0.067 $\chi^2$/NDF: 5279811.0/32

All: 397.008+/-0.047 $\chi^2$/NDF: 10922402.6/67

- sign 395.991+/-0.067 $\chi^2$/NDF: 5642125.4/34

# dit_asym_sam_15_26_dd_mean vs Slug




Right In: -50.465+/-31.061 $\chi^2$/NDF: 16.4/15

Left Out: -22.191+/-17.823 $\chi^2$/NDF:31.0/16

Right Out: -9.380+/-31.235 $\chi^2$/NDF: 15.6/18

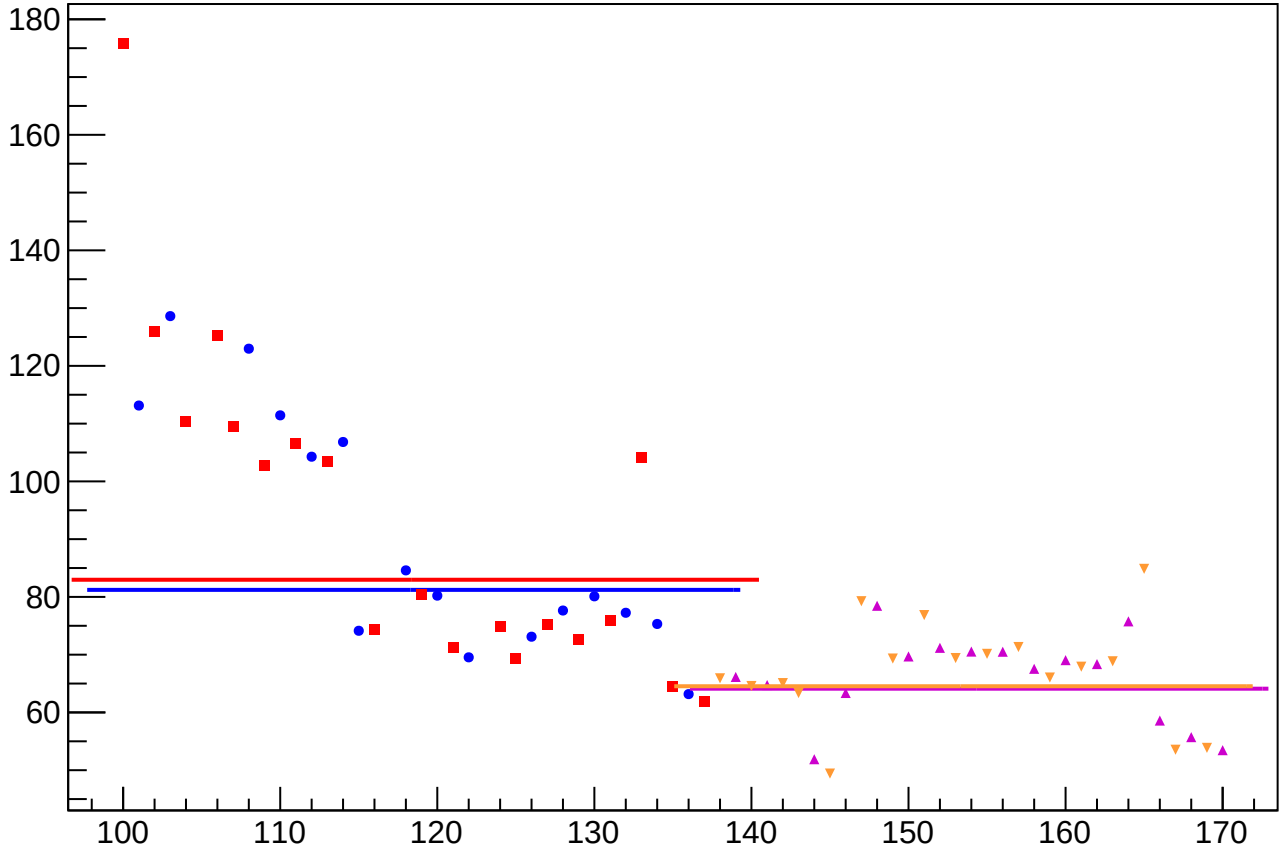
Left In: 14.676+/-17.924 $\chi^2$/NDF:16.0/15

+ sign -29.194+/-15.459 $\chi^2$/NDF: 48.0/32

All: -10.345+/-10.962 $\chi^2$/NDF: 83.1/67

- sign 8.717+/-15.546 $\chi^2$/NDF: 32.0/34

# dit_asym_sam_15_26_dd_rms vs Slug




Right In: 81.218+/-0.022 $\chi^2$/NDF: 662873.6/15

Left Out: 64.533+/-0.013 $\chi^2$/NDF:499085.5/16

Right Out: 82.971+/-0.022 $\chi^2$/NDF: 730384.9/18

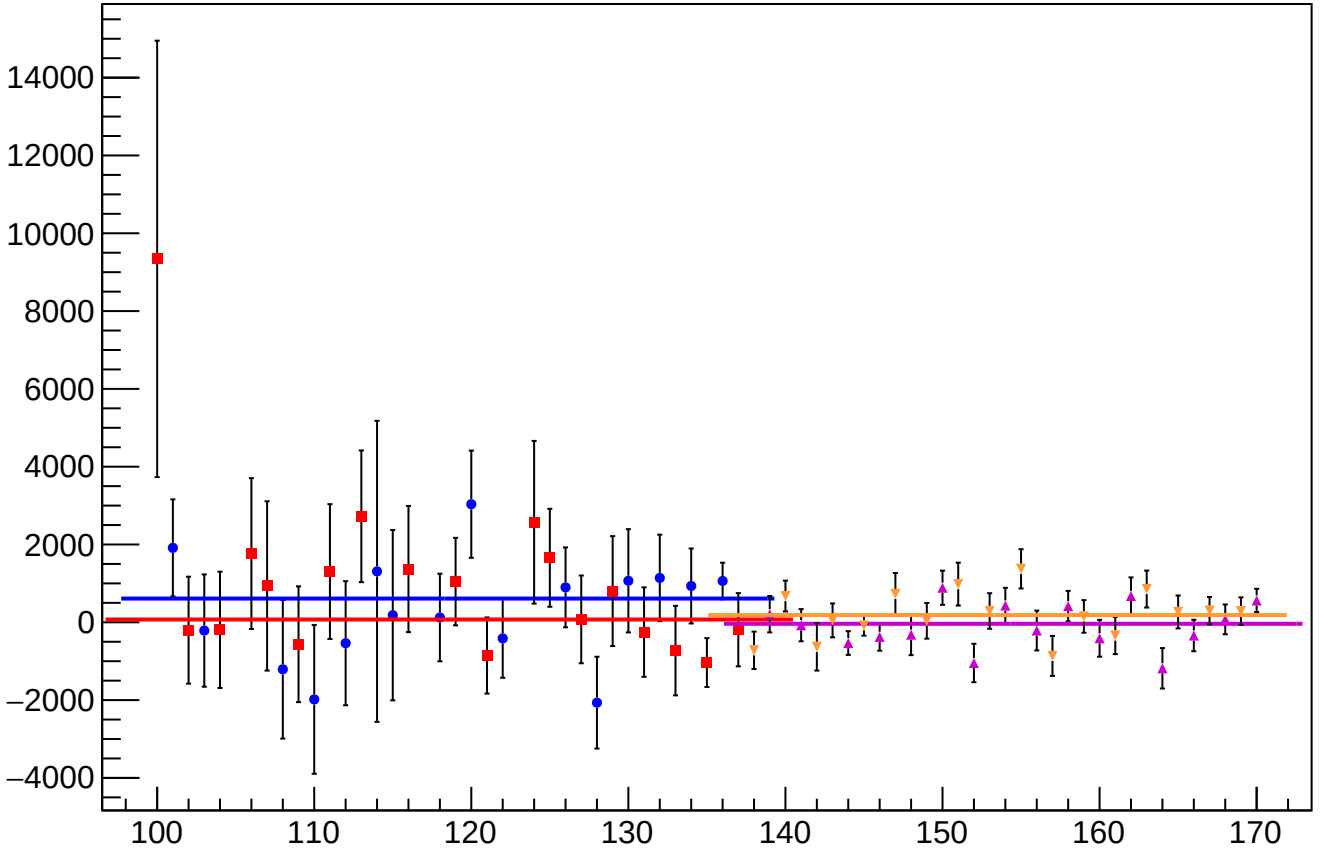
Left In: 64.110+/-0.013 $\chi^2$/NDF:371953.3/15

+ sign 68.666+/-0.011 $\chi^2$/NDF: 1596104.2/32

All: 68.724+/-0.008 $\chi^2$/NDF: 3247085.4/67

- sign 68.782+/-0.011 $\chi^2$/NDF: 1650924.6/34

# asym_sam_15_26_dd_dit_correction_mean vs Slug




Right In: 610.383+/-273.982 $\chi^2$/NDF: 15.8/15

Left Out: 186.232+/-103.468 $\chi^2$/NDF:24.4/16

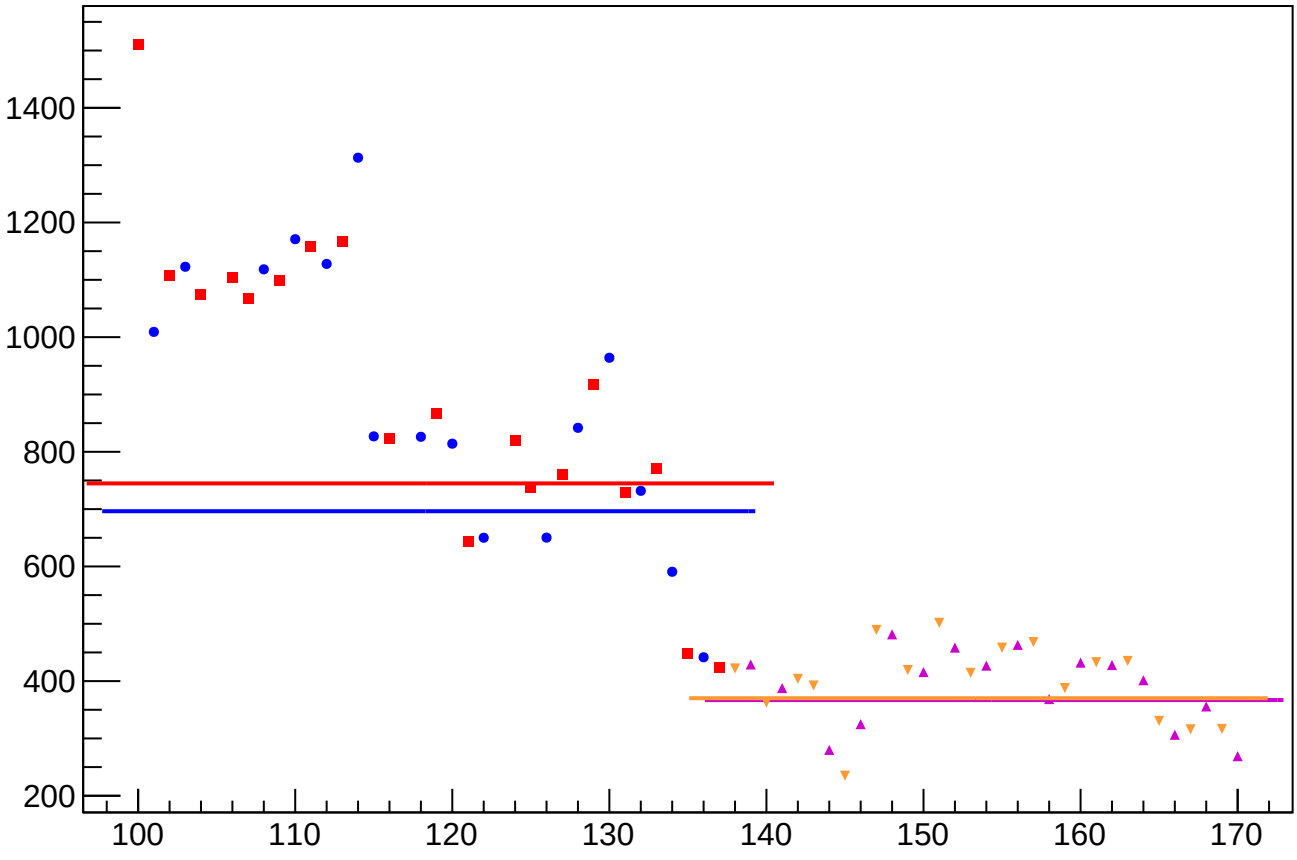
Right Out: 72.311+/-286.830 $\chi^2$/NDF: 16.2/18

Left In: -38.309+/-103.310 $\chi^2$/NDF:27.6/15

+ sign 239.173+/-96.796 $\chi^2$/NDF: 42.3/32

All: 107.332+/-68.587 $\chi^2$/NDF: 89.9/67

- sign -25.606+/-97.198 $\chi^2$/NDF: 43.9/34




Right In: 696.371+/-0.194 $\chi^2$/NDF: 1515478.0/15

Left Out: 370.170+/-0.073 $\chi^2$/NDF:1140174.5/16

Right Out: 744.875+/-0.203 $\chi^2$/NDF: 1498361.7/18

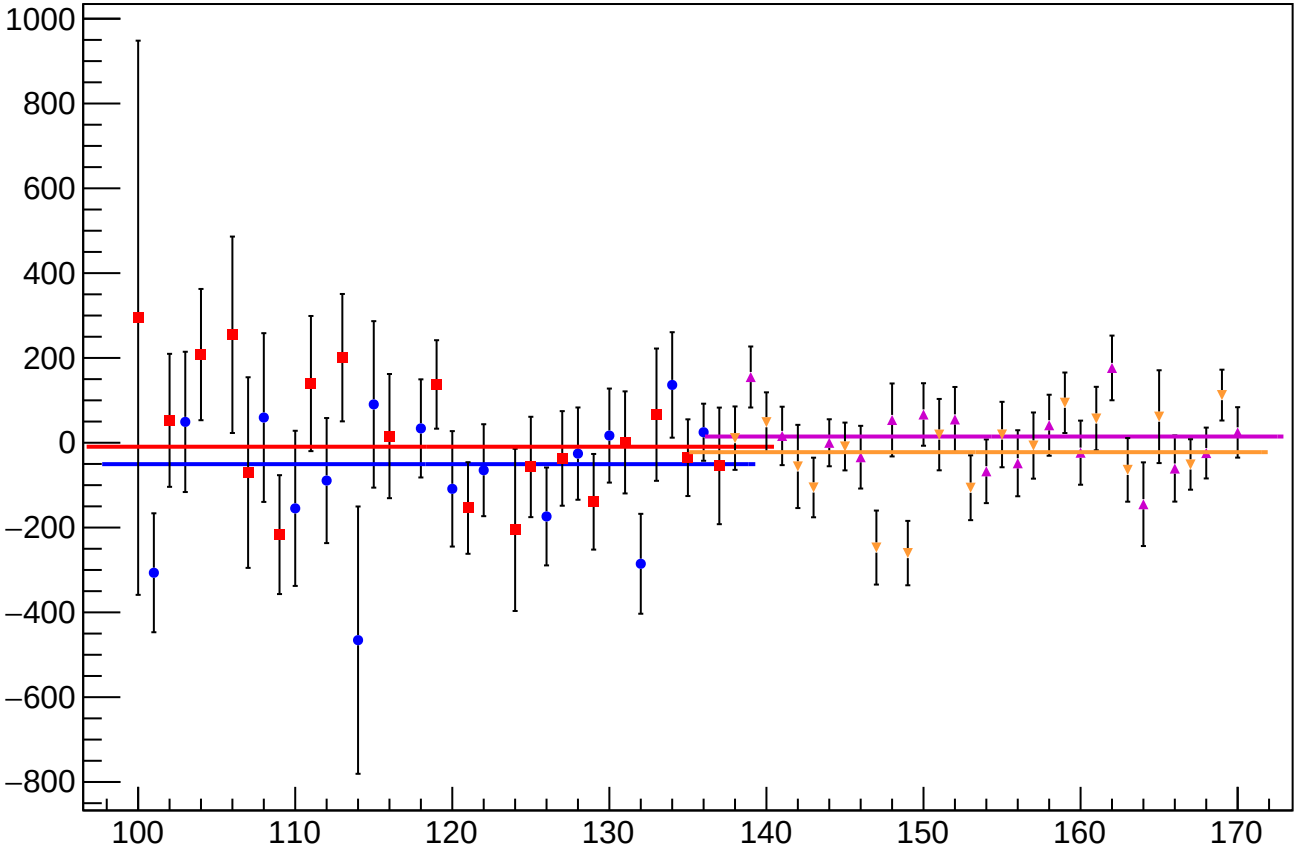
Left In: 366.949+/-0.073 $\chi^2$/NDF:864389.5/15

+ sign 410.885+/-0.068 $\chi^2$/NDF: 5136821.4/32

All: 410.617+/-0.048 $\chi^2$/NDF: 10573004.3/67

- sign 410.347+/-0.069 $\chi^2$/NDF: 5436152.2/34

# eigen_dit_asym_sam_15_26_dd_mean vs Slug




Right In: -50.466+/-31.061 $\chi^2$/NDF: 16.4/15

Left Out: -22.190+/-17.823 $\chi^2$/NDF:31.0/16

Right Out: -9.381+/-31.235 $\chi^2$/NDF: 15.6/18

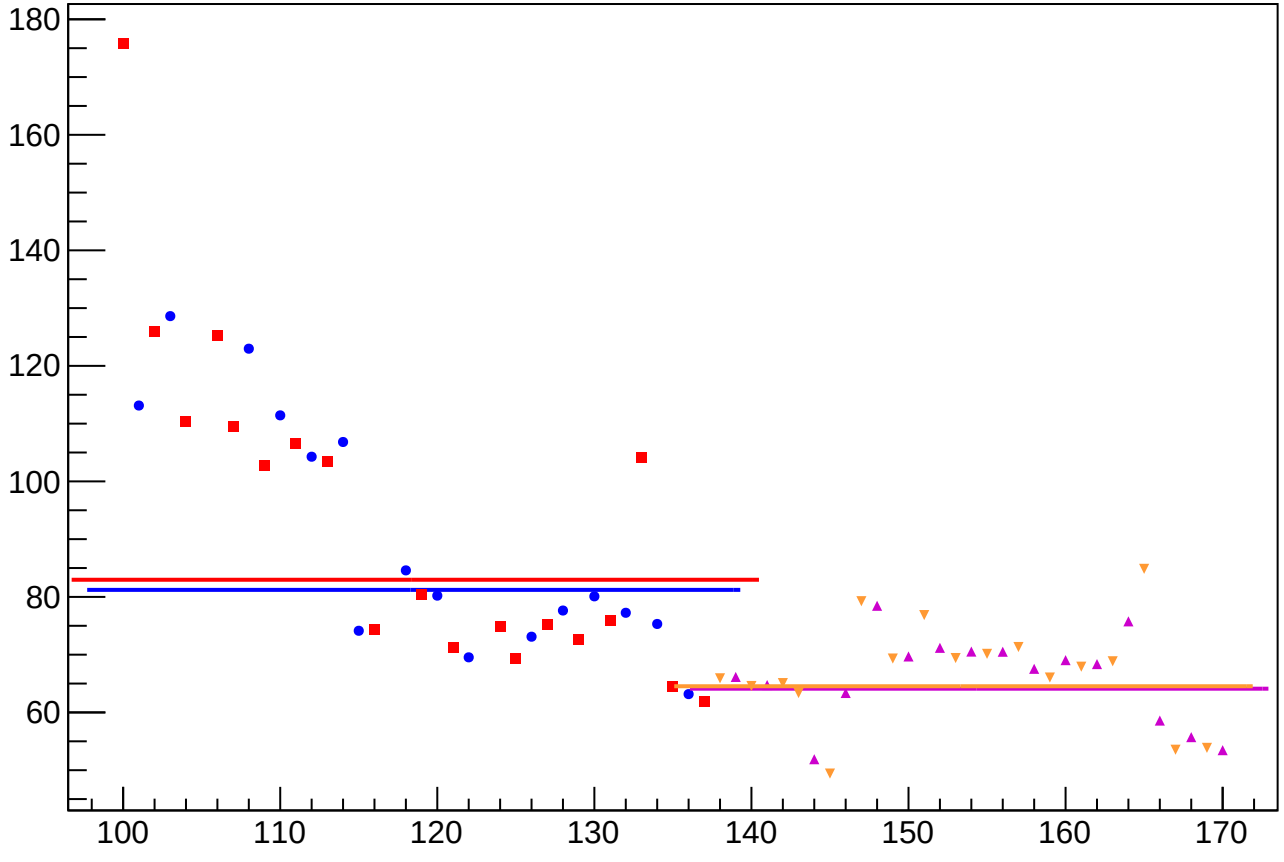
Left In: 14.675+/-17.924 $\chi^2$/NDF:16.0/15

+ sign -29.194+/-15.459 $\chi^2$/NDF: 48.0/32

All: -10.345+/-10.962 $\chi^2$/NDF: 83.1/67

- sign 8.716+/-15.546 $\chi^2$/NDF: 32.0/34

# eigen_dit_asym_sam_15_26_dd_rms vs Slug




Right In: 81.218+/-0.022 $\chi^2$/NDF: 662862.1/15

Left Out: 64.533+/-0.013 $\chi^2$/NDF:499080.8/16

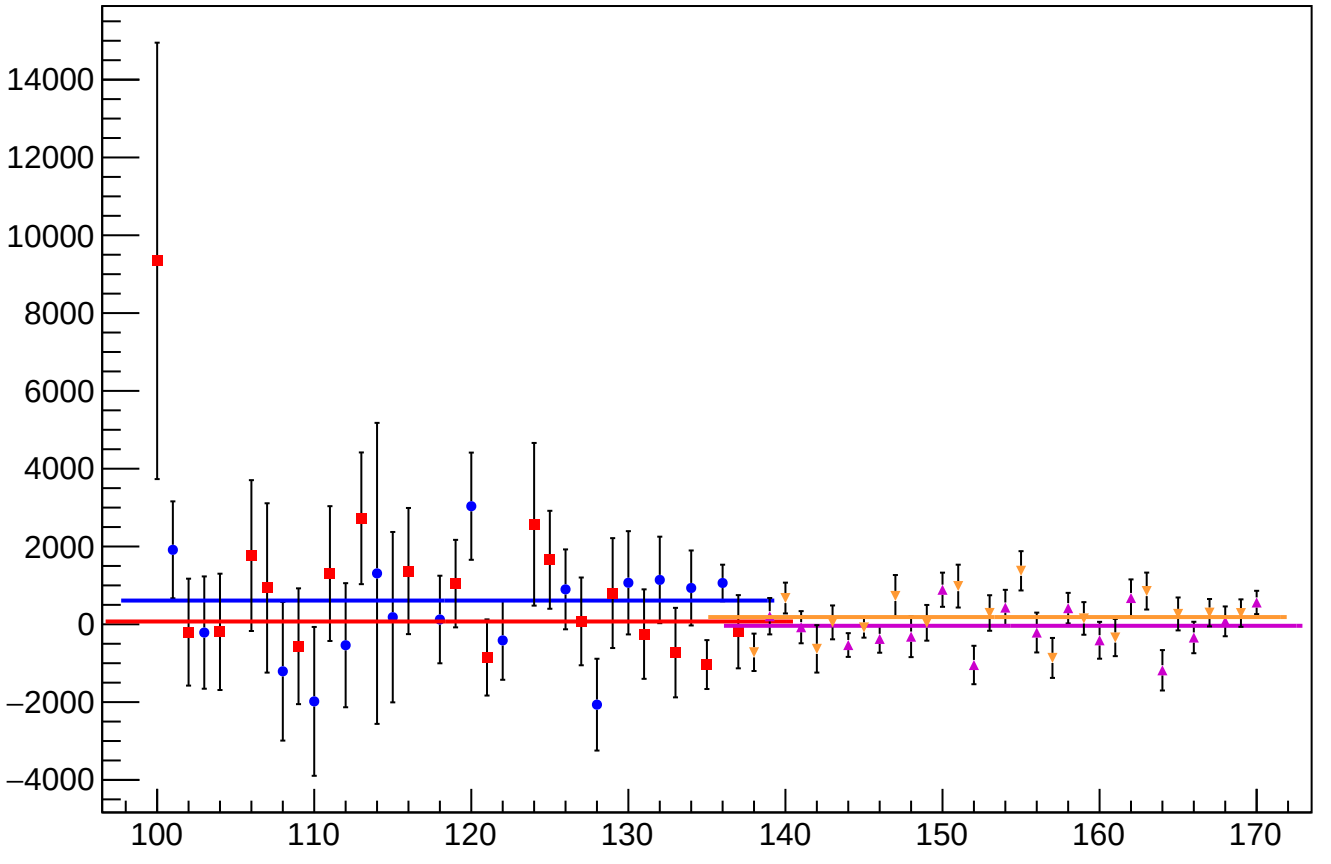
Right Out: 82.971+/-0.022 $\chi^2$/NDF: 730375.6/18

Left In: 64.110+/-0.013 $\chi^2$/NDF:371949.0/15

+ sign 68.666+/-0.011 $\chi^2$/NDF: 1596058.9/32

All: 68.724+/-0.008 $\chi^2$/NDF: 3247002.6/67

- sign 68.783+/-0.011 $\chi^2$/NDF: 1650887.1/34




Right In: 610.382+/-273.981 $\chi^2$/NDF: 15.8/15

Left Out: 186.232+/-103.468 $\chi^2$/NDF:24.4/16

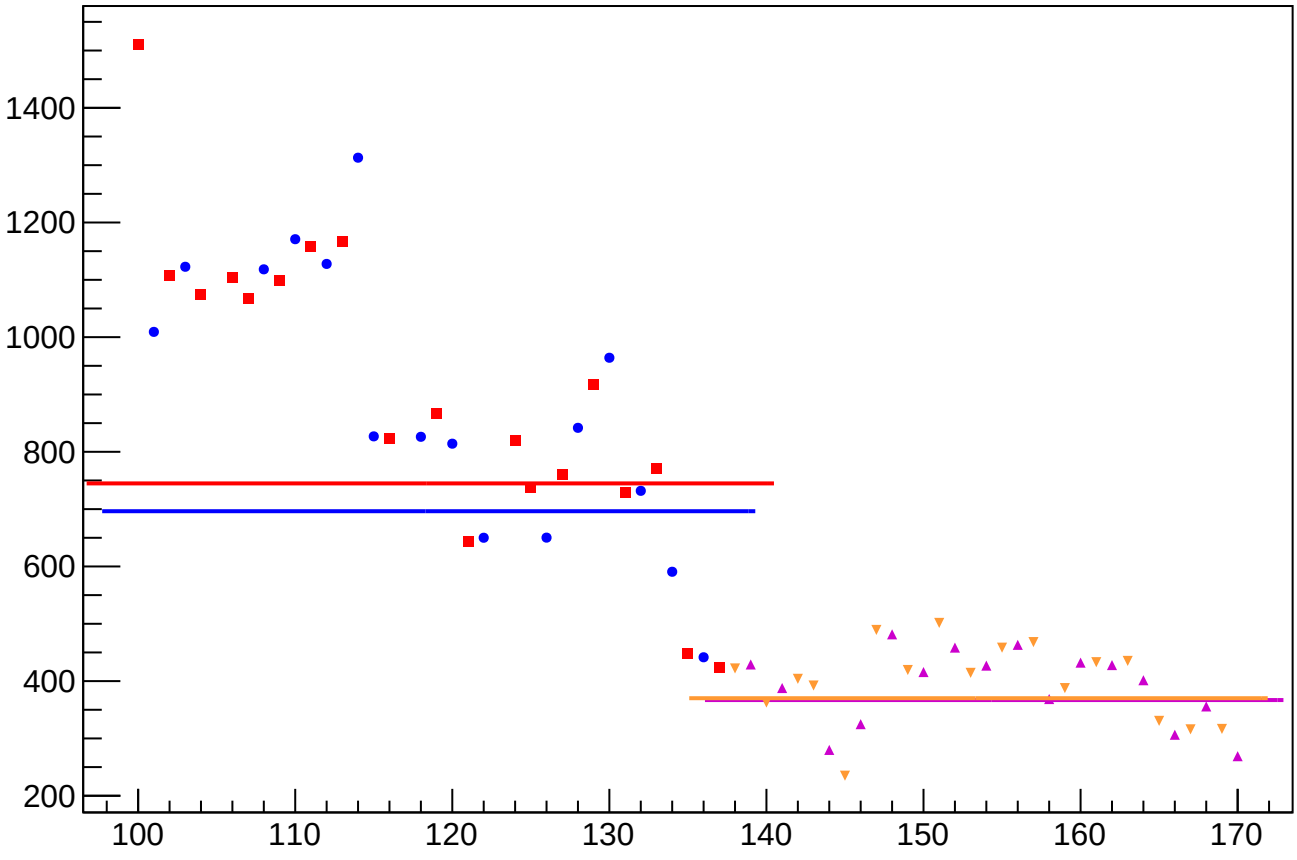
Right Out: 72.313+/-286.830 $\chi^2$/NDF: 16.2/18

Left In: -38.308+/-103.310 $\chi^2$/NDF:27.6/15

+ sign 239.173+/-96.796 $\chi^2$/NDF: 42.3/32

All: 107.332+/-68.587 $\chi^2$/NDF: 89.9/67

- sign -25.606+/-97.198 $\chi^2$/NDF: 43.9/34




Right In: 696.370+/-0.194 $\chi^2$/NDF: 1515461.8/15

Left Out: 370.170+/-0.073 $\chi^2$/NDF:1140194.7/16

Right Out: 744.874+/-0.203 $\chi^2$/NDF: 1498349.6/18

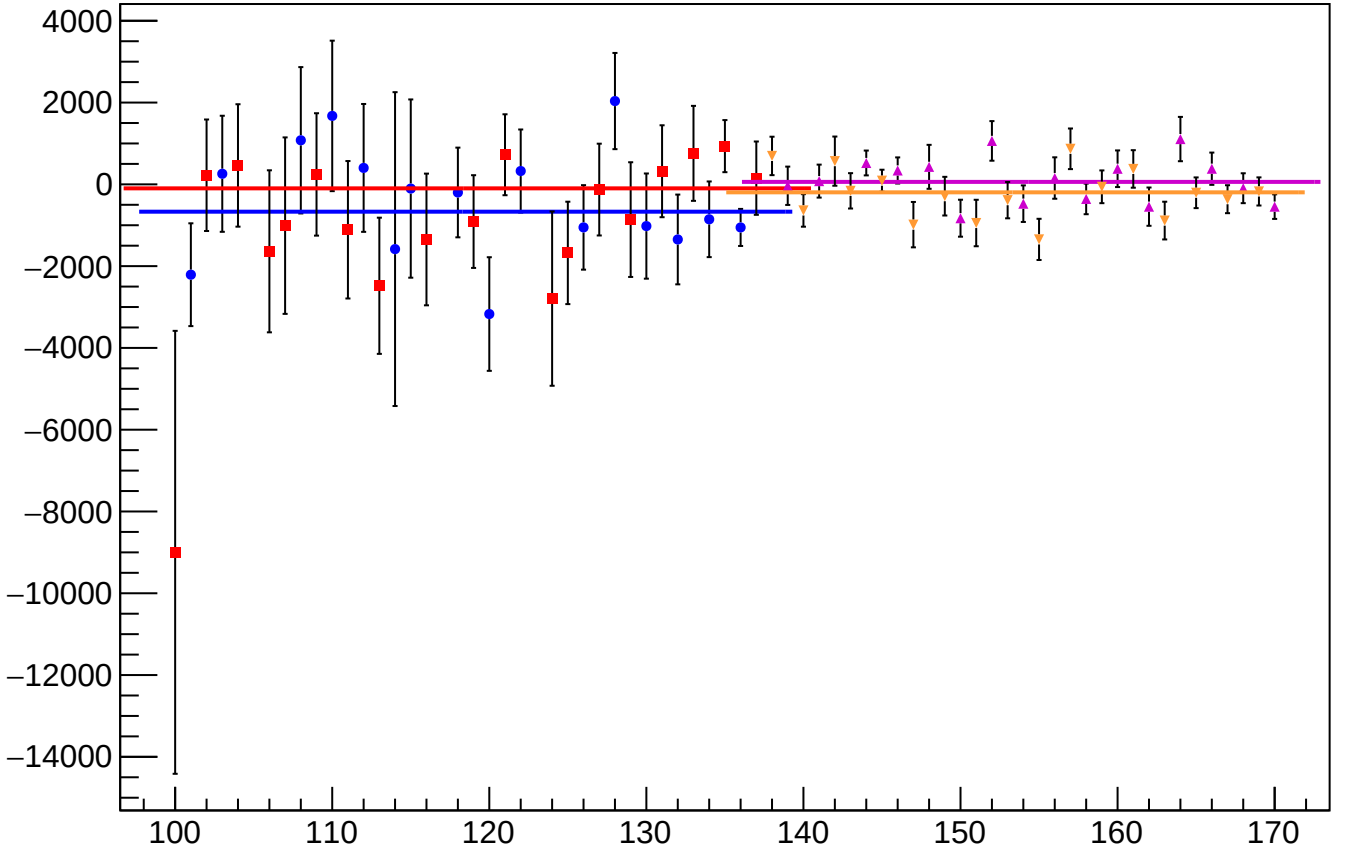
Left In: 366.949+/-0.073 $\chi^2$/NDF:864403.7/15

+ sign 410.885+/-0.068 $\chi^2$/NDF: 5136819.9/32

All: 410.617+/-0.048 $\chi^2$/NDF: 10572998.3/67

- sign 410.347+/-0.069 $\chi^2$/NDF: 5436147.6/34

# asym_sam_15_26_dd_mean vs Slug




Right In: -668.503+/-268.452 $\chi^2$/NDF: 16.1/15

Left Out: -195.332+/-101.764 $\chi^2$/NDF:25.5/16

Right Out: -98.003+/-285.882 $\chi^2$/NDF: 14.8/18

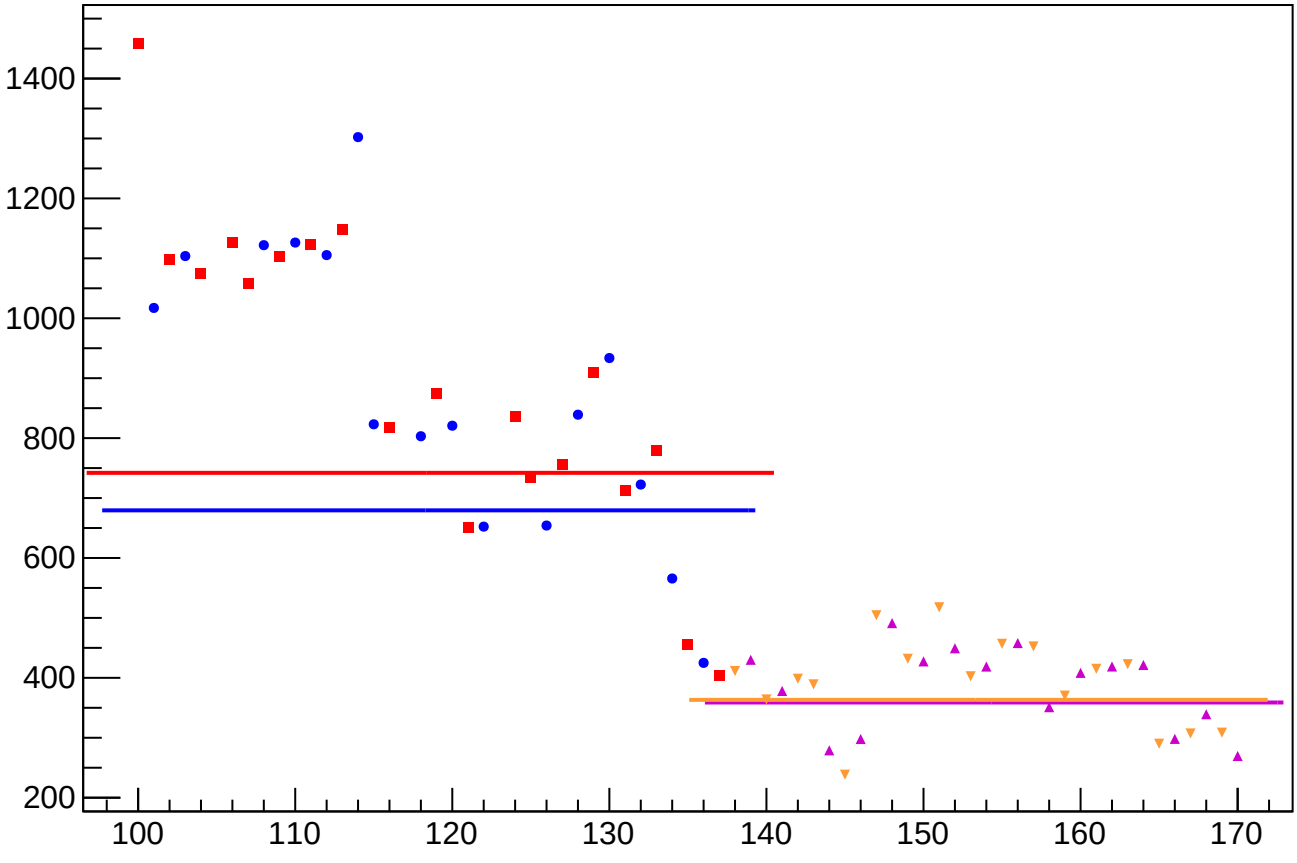
Left In: 60.103+/-101.033 $\chi^2$/NDF:25.3/15

+ sign -254.783+/-95.157 $\chi^2$/NDF: 44.4/32

All: -106.277+/-67.322 $\chi^2$/NDF: 89.6/67

- sign 42.549+/-95.259 $\chi^2$/NDF: 40.4/34

# asym_sam_15_26_dd_rms vs Slug




Right In: 679.469+/-0.190 $\chi^2$/NDF: 1600922.1/15

Left Out: 363.261+/-0.072 $\chi^2$/NDF:1177461.4/16

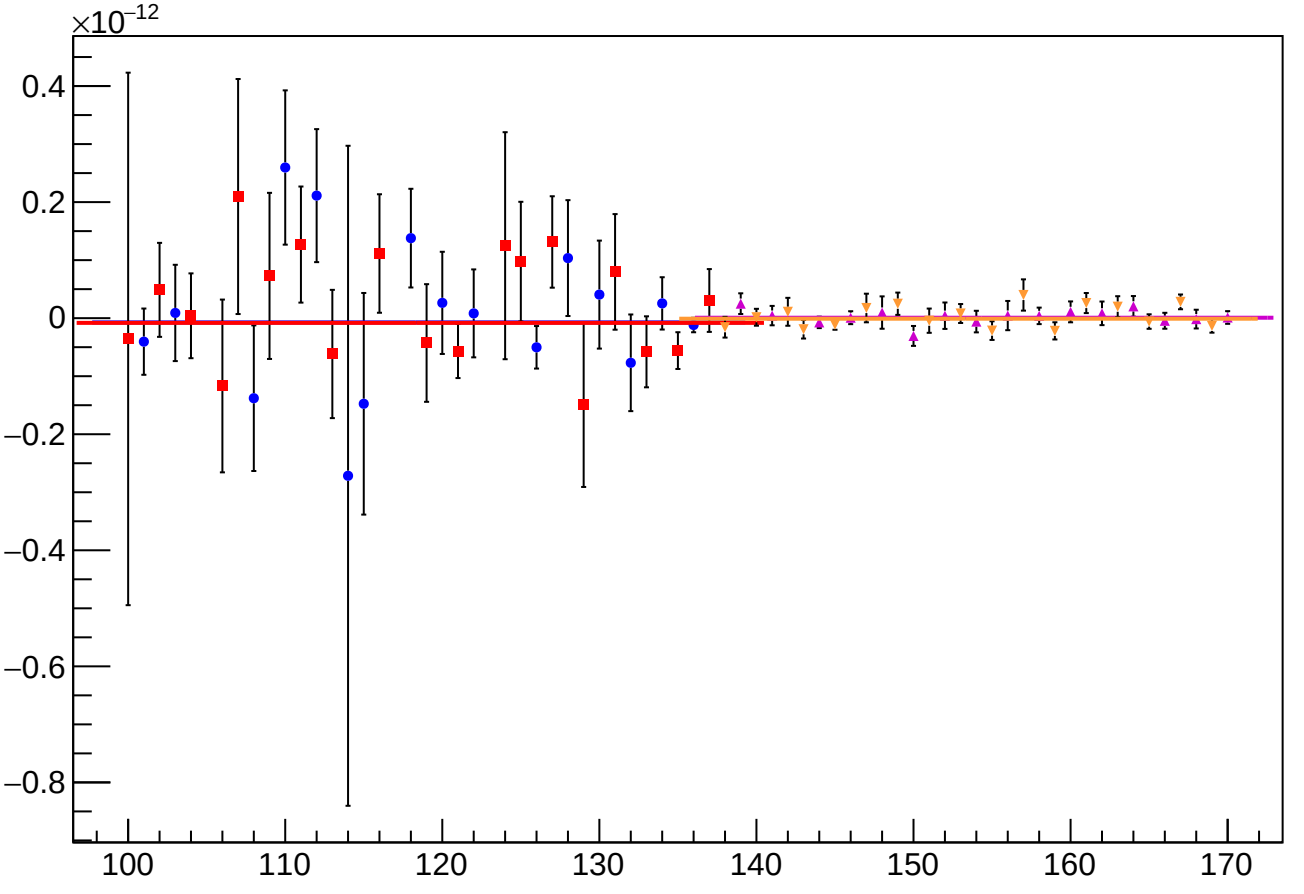
Right Out: 742.081+/-0.202 $\chi^2$/NDF: 1504391.2/18

Left In: 358.854+/-0.071 $\chi^2$/NDF:926267.8/15

+ sign 402.991+/-0.067 $\chi^2$/NDF: 5204595.6/32

All: 402.198+/-0.048 $\chi^2$/NDF: 10830421.7/67

- sign 401.404+/-0.067 $\chi^2$/NDF: 5625548.2/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 17.2/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:22.4/16

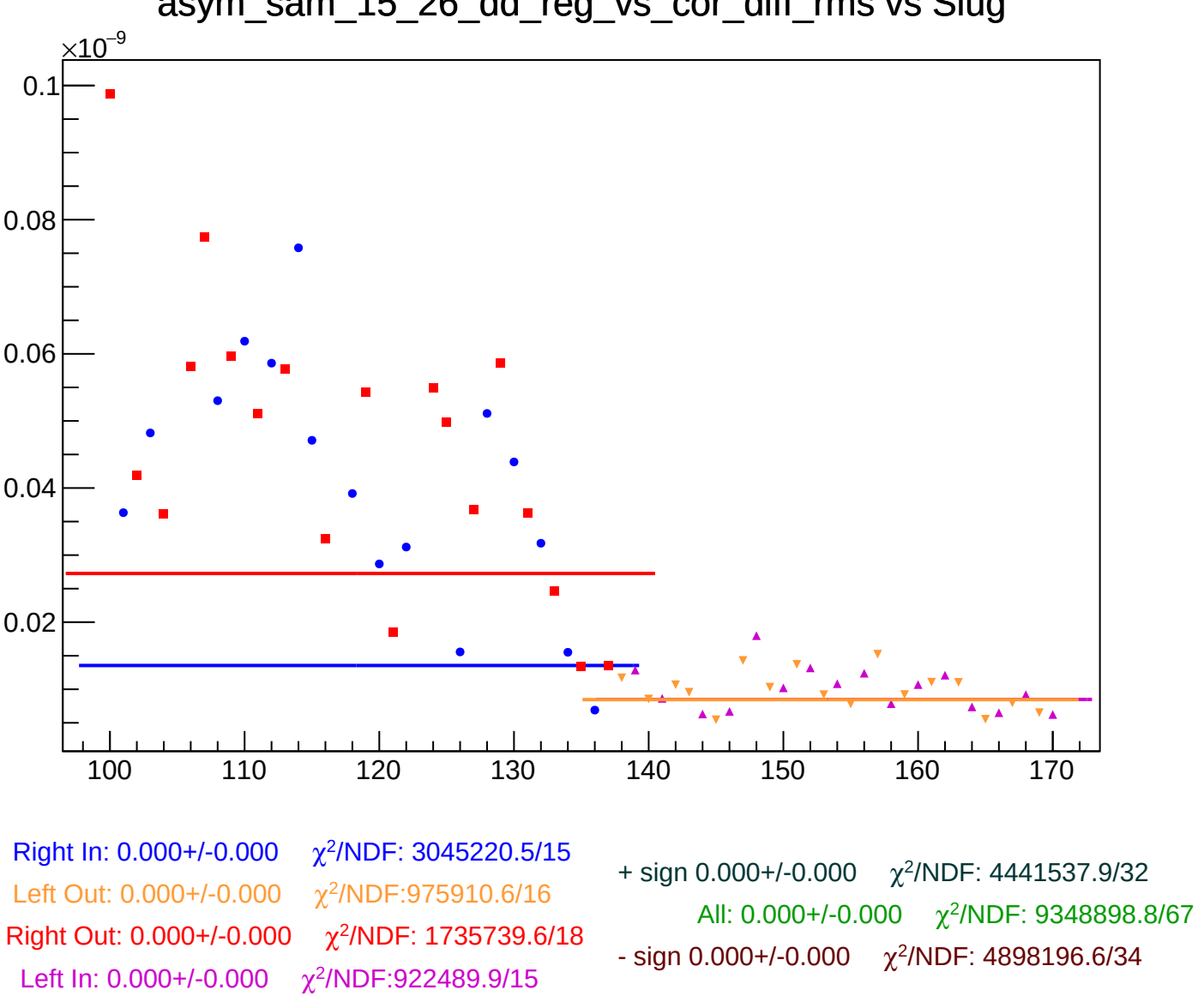
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 17.0/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:8.1/15

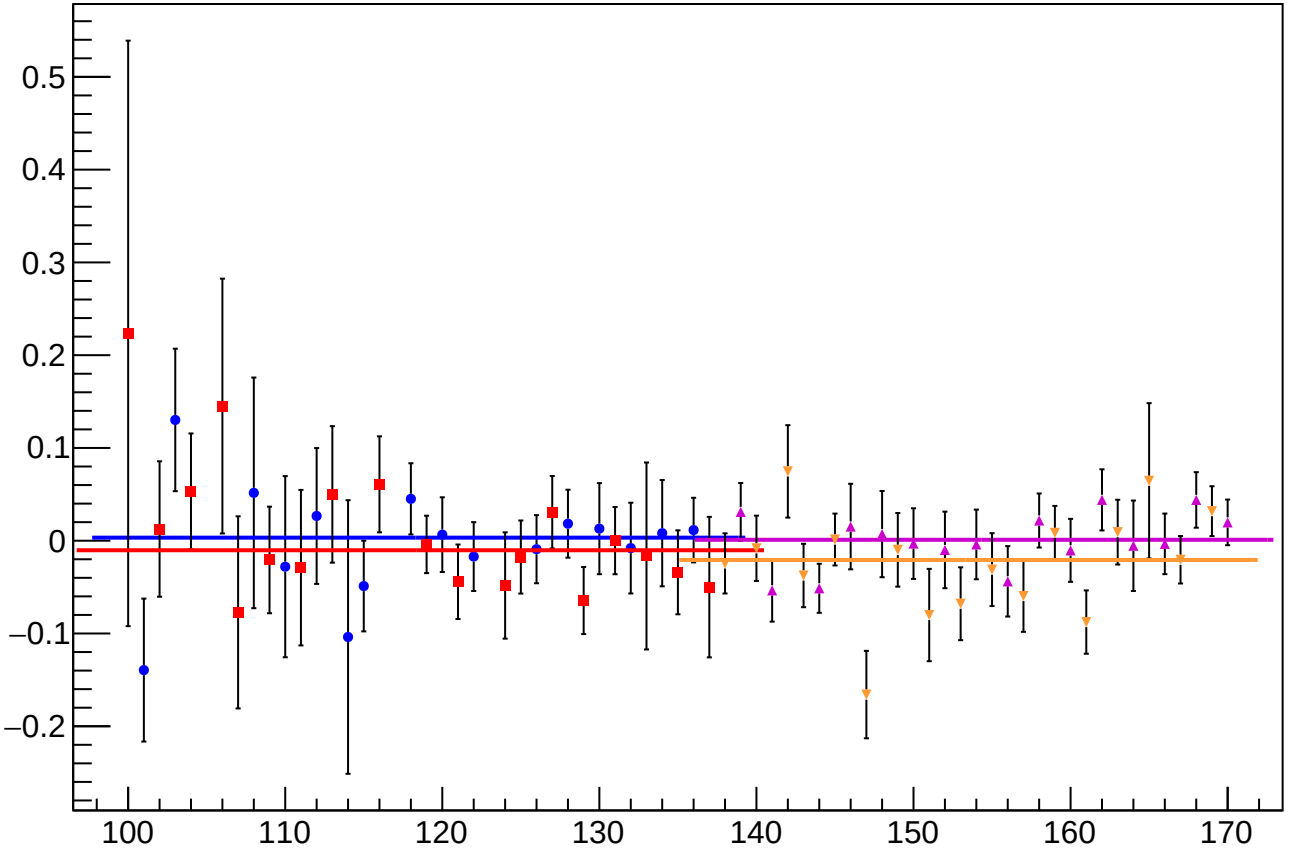
+ sign -0.000+/-0.000 $\chi^2$/NDF: 40.0/32

All: -0.000+/-0.000 $\chi^2$/NDF: 65.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 25.3/34


asym_sam_15_26_dd_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.1
0.08
0.06
0.04
0.02
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3045220.5/15
Left Out: 0.000+/-0.000 χ²/NDF:975910.6/16
Right Out: 0.000+/-0.000 χ²/NDF: 1735739.6/18
Left In: 0.000+/-0.000 χ²/NDF:922489.9/15
+ sign 0.000+/-0.000 χ²/NDF: 4441537.9/32
All: 0.000+/-0.000 χ²/NDF: 9348898.8/67
- sign 0.000+/-0.000 χ²/NDF: 4898196.6/34

# asym_sam_15_26_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.003+/-0.012 $\chi^2$/NDF: 10.1/15

Left Out: -0.021+/-0.009 $\chi^2$/NDF:28.6/16

Right Out: -0.010+/-0.012 $\chi^2$/NDF: 11.2/18

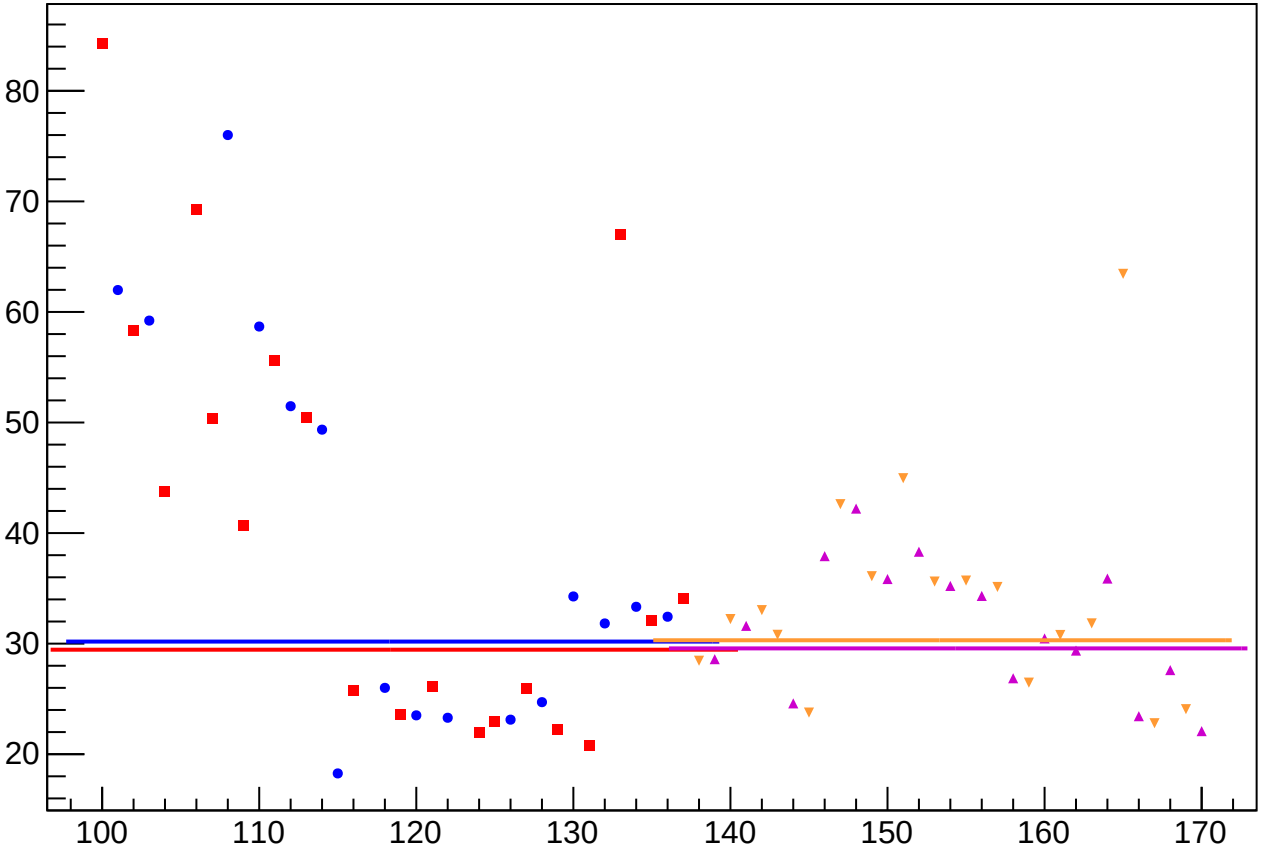
Left In: 0.001+/-0.008 $\chi^2$/NDF:14.1/15

+ sign -0.013+/-0.007 $\chi^2$/NDF: 41.3/32

All: -0.008+/-0.005 $\chi^2$/NDF: 68.3/67

- sign -0.003+/-0.007 $\chi^2$/NDF: 25.9/34

# asym_sam_15_26_dd_dit_vs_cor_diff_rms vs Slug




Right In: 30.187+/-0.009 $\chi^2$/NDF: 1687373.5/15

Left Out: 30.305+/-0.006 $\chi^2$/NDF:1218912.5/16

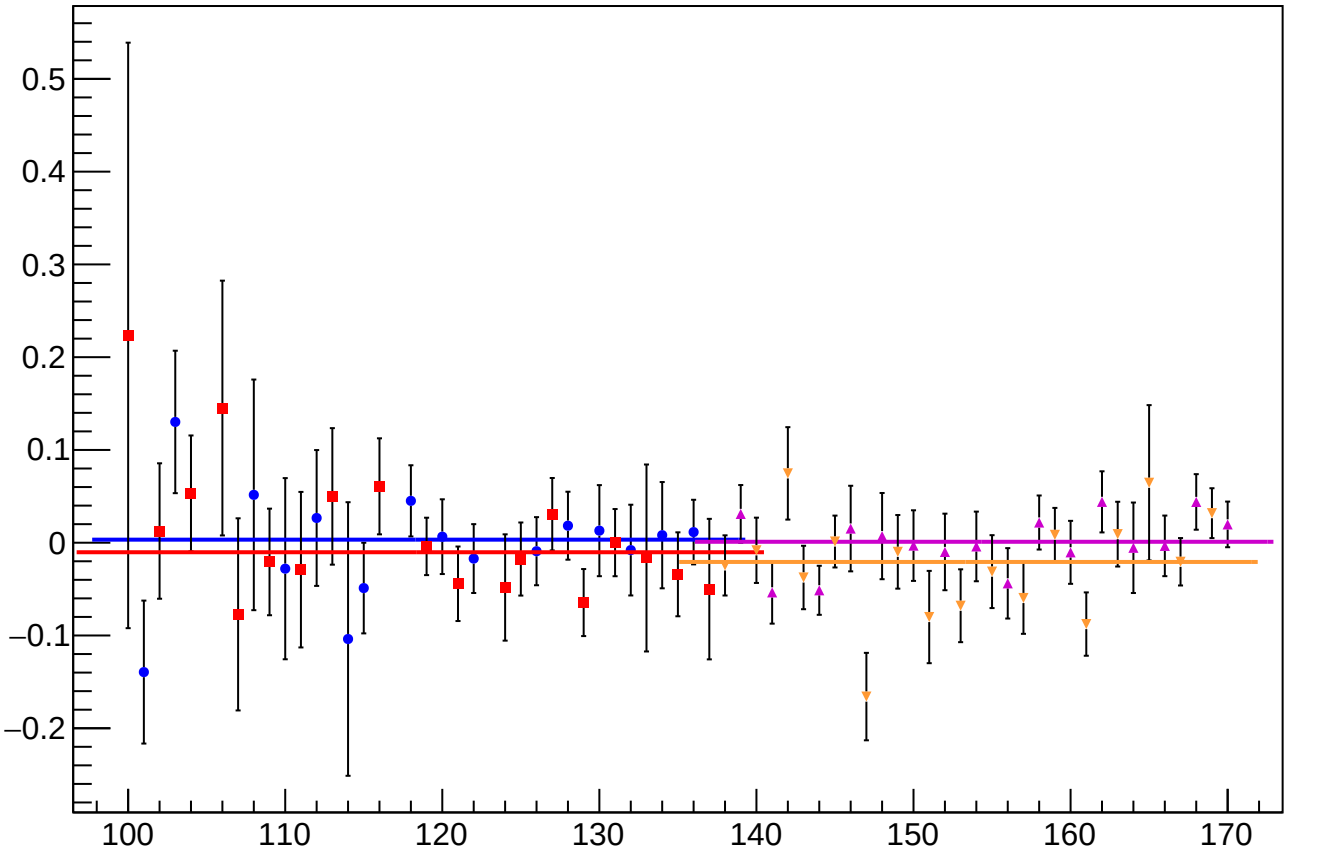
Right Out: 29.451+/-0.008 $\chi^2$/NDF: 1848636.5/18

Left In: 29.569+/-0.006 $\chi^2$/NDF:830705.0/15

+ sign 30.266+/-0.005 $\chi^2$/NDF: 2906410.1/32

All: 29.890+/-0.003 $\chi^2$/NDF: 5597146.5/67

- sign 29.529+/-0.005 $\chi^2$/NDF: 2679472.6/34




Right In: 0.003+/-0.012 $\chi^2$/NDF: 10.1/15

Left Out: -0.021+/-0.009 $\chi^2$/NDF:28.6/16

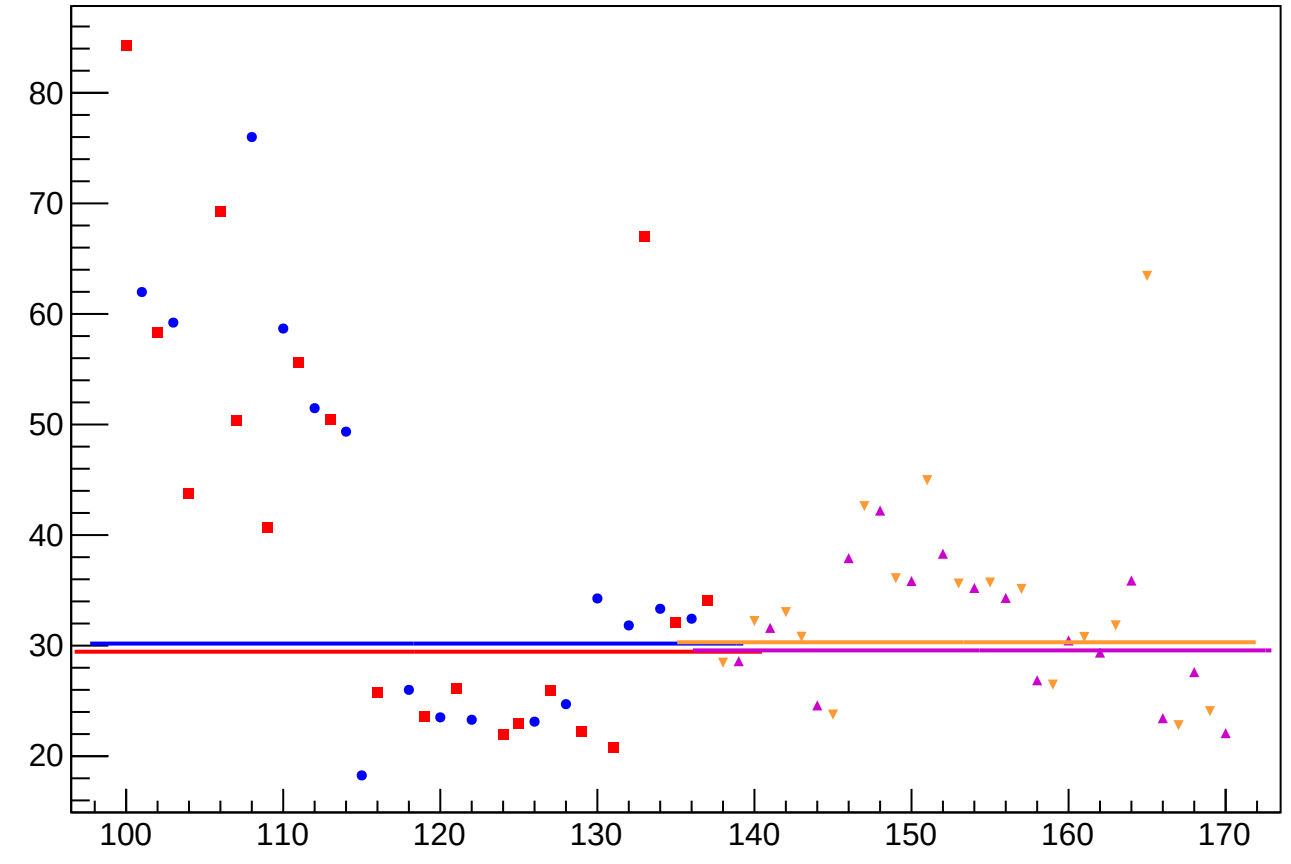
Right Out: -0.010+/-0.012 $\chi^2$/NDF: 11.2/18

Left In: 0.001+/-0.008 $\chi^2$/NDF:14.1/15

+ sign -0.013+/-0.007 $\chi^2$/NDF: 41.3/32

All: -0.008+/-0.005 $\chi^2$/NDF: 68.3/67

- sign -0.003+/-0.007 $\chi^2$/NDF: 25.9/34




Right In: 30.187+/-0.009 $\chi^2$/NDF: 1687373.5/15

Left Out: 30.305+/-0.006 $\chi^2$/NDF:1218912.5/16

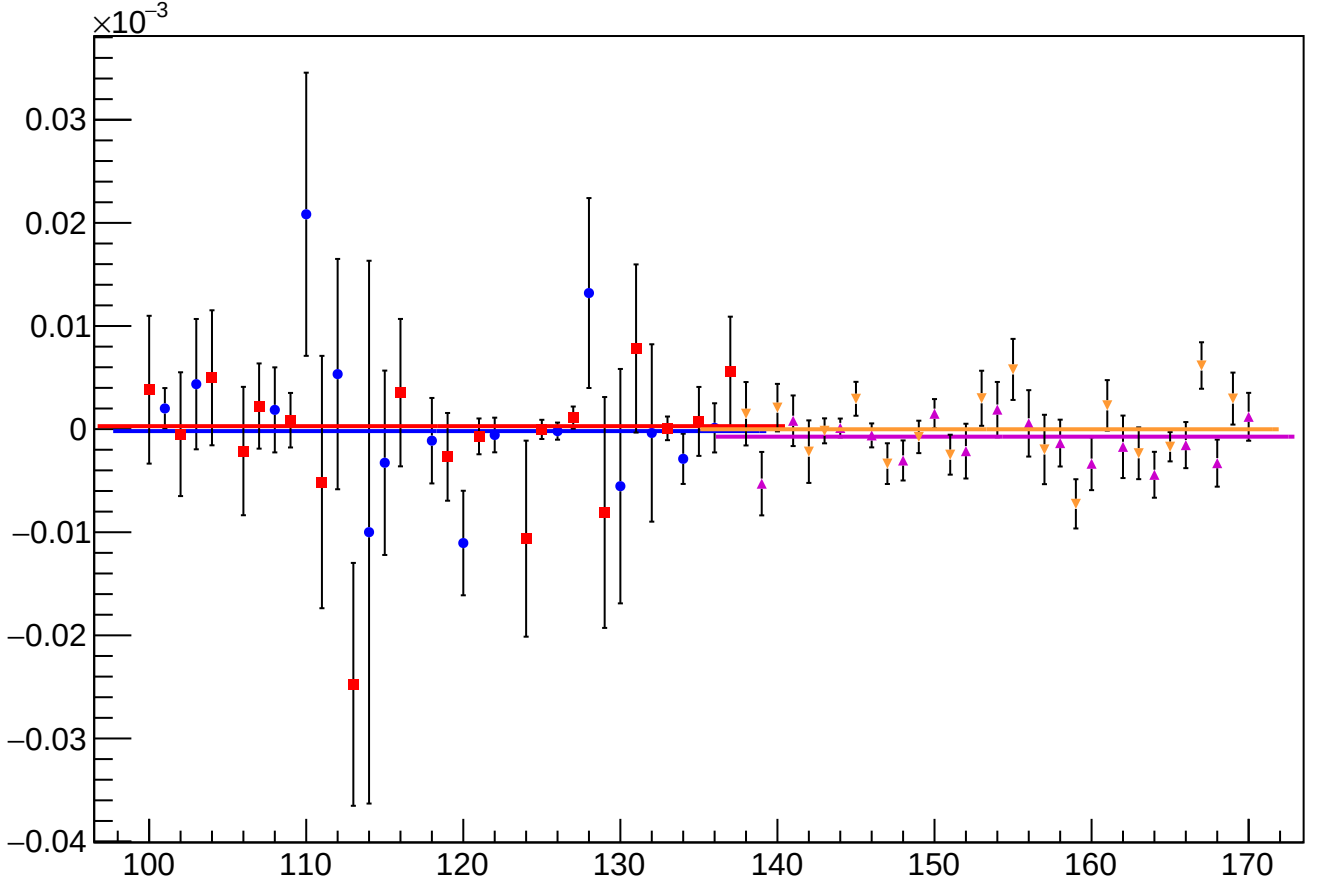
Right Out: 29.451+/-0.008 $\chi^2$/NDF: 1848636.5/18

Left In: 29.569+/-0.006 $\chi^2$/NDF:830705.0/15

+ sign 30.266+/-0.005 $\chi^2$/NDF: 2906410.1/32

All: 29.890+/-0.003 $\chi^2$/NDF: 5597146.5/67

- sign 29.529+/-0.005 $\chi^2$/NDF: 2679472.6/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 13.1/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:36.2/16

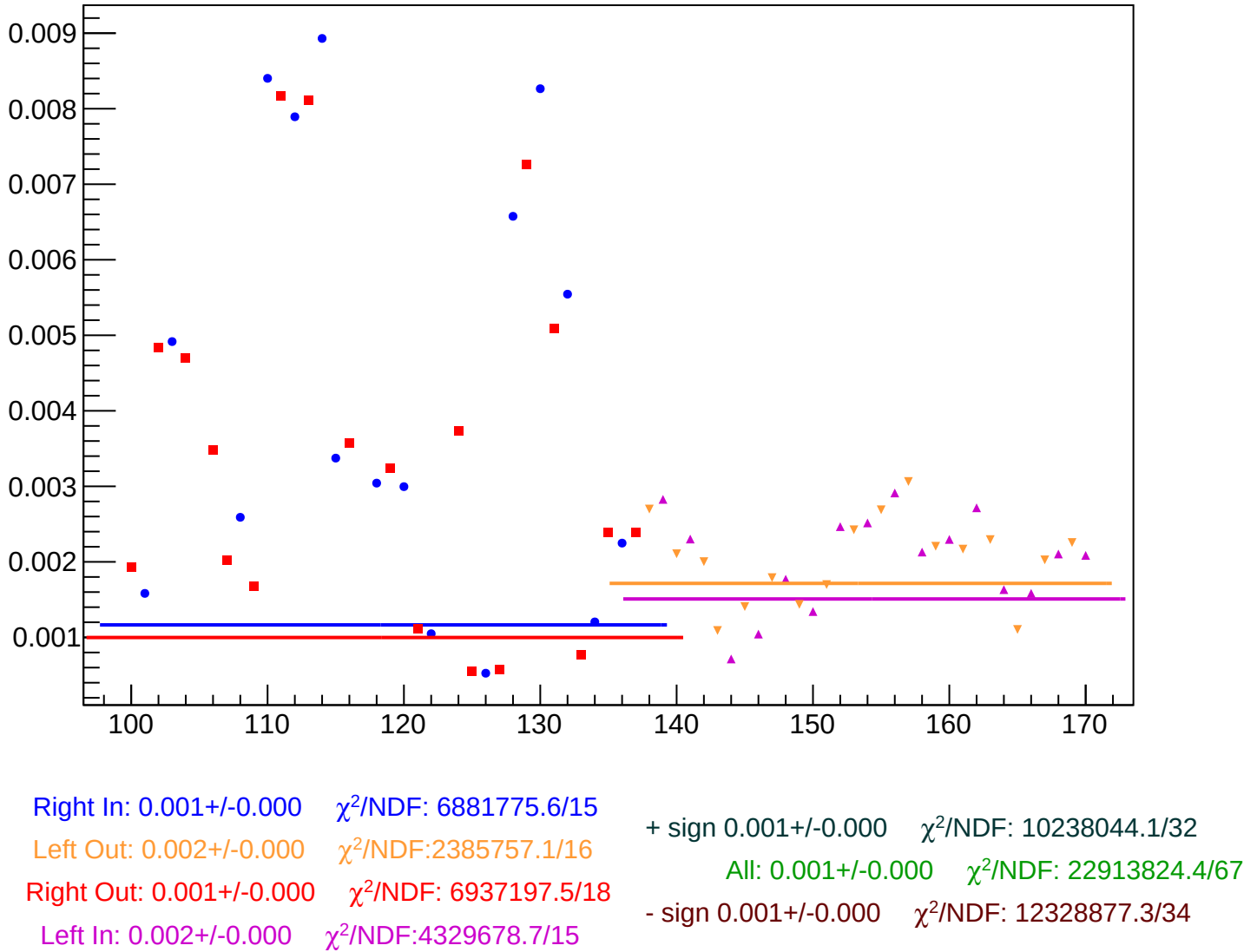
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 11.4/18

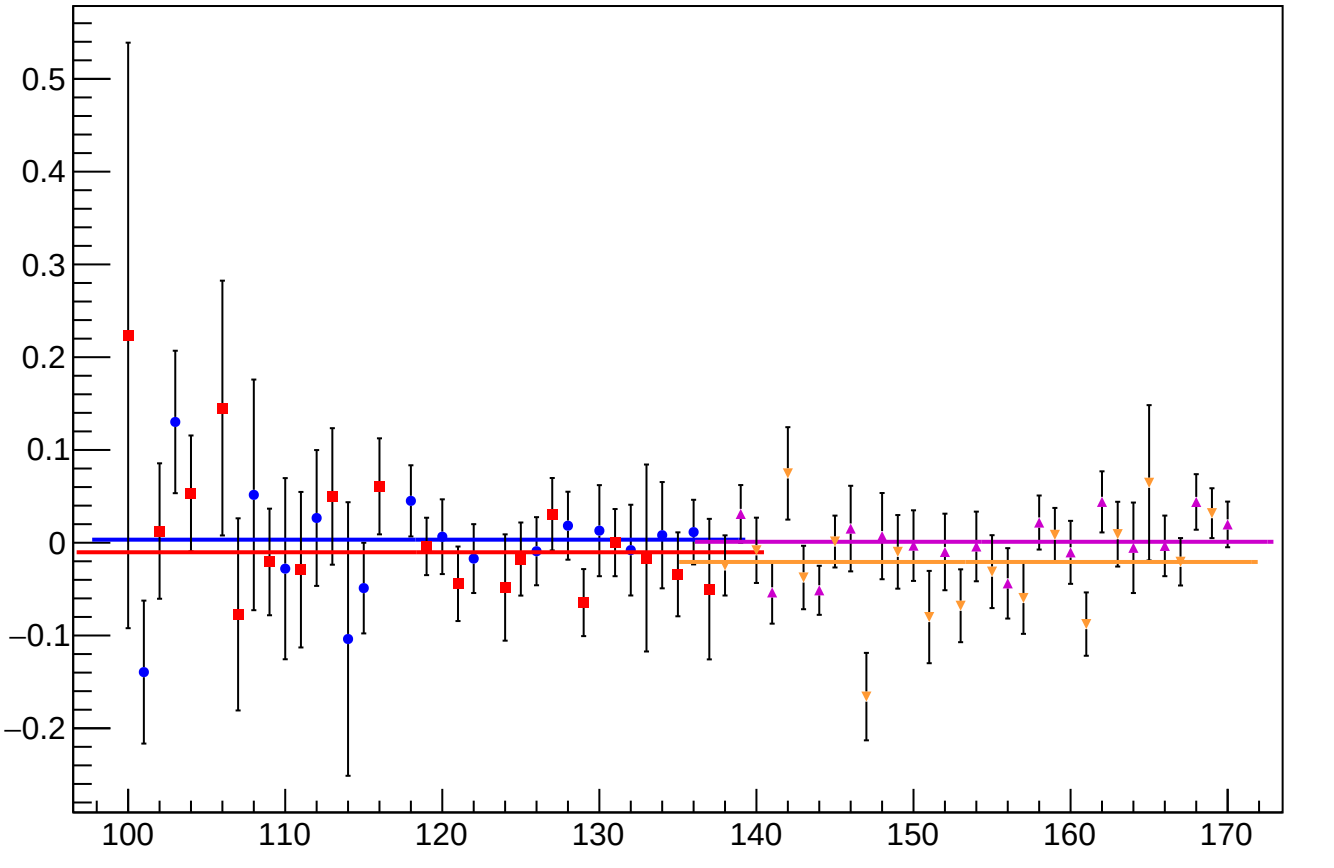
Left In: -0.000+/-0.000 $\chi^2$/NDF:14.8/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 49.4/32

All: -0.000+/-0.000 $\chi^2$/NDF: 77.9/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 28.4/34


asym_sam_15_26_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 6881775.6/15
Left Out: 0.002+/-0.000 χ²/NDF:2385757.1/16
Right Out: 0.001+/-0.000 χ²/NDF: 6937197.5/18
Left In: 0.002+/-0.000 χ²/NDF:4329678.7/15
+ sign 0.001+/-0.000 χ²/NDF: 10238044.1/32
All: 0.001+/-0.000 χ²/NDF: 22913824.4/67
- sign 0.001+/-0.000 χ²/NDF: 12328877.3/34




Right In: 0.003+/-0.012 $\chi^2$/NDF: 10.1/15

Left Out: -0.021+/-0.009 $\chi^2$/NDF:28.6/16

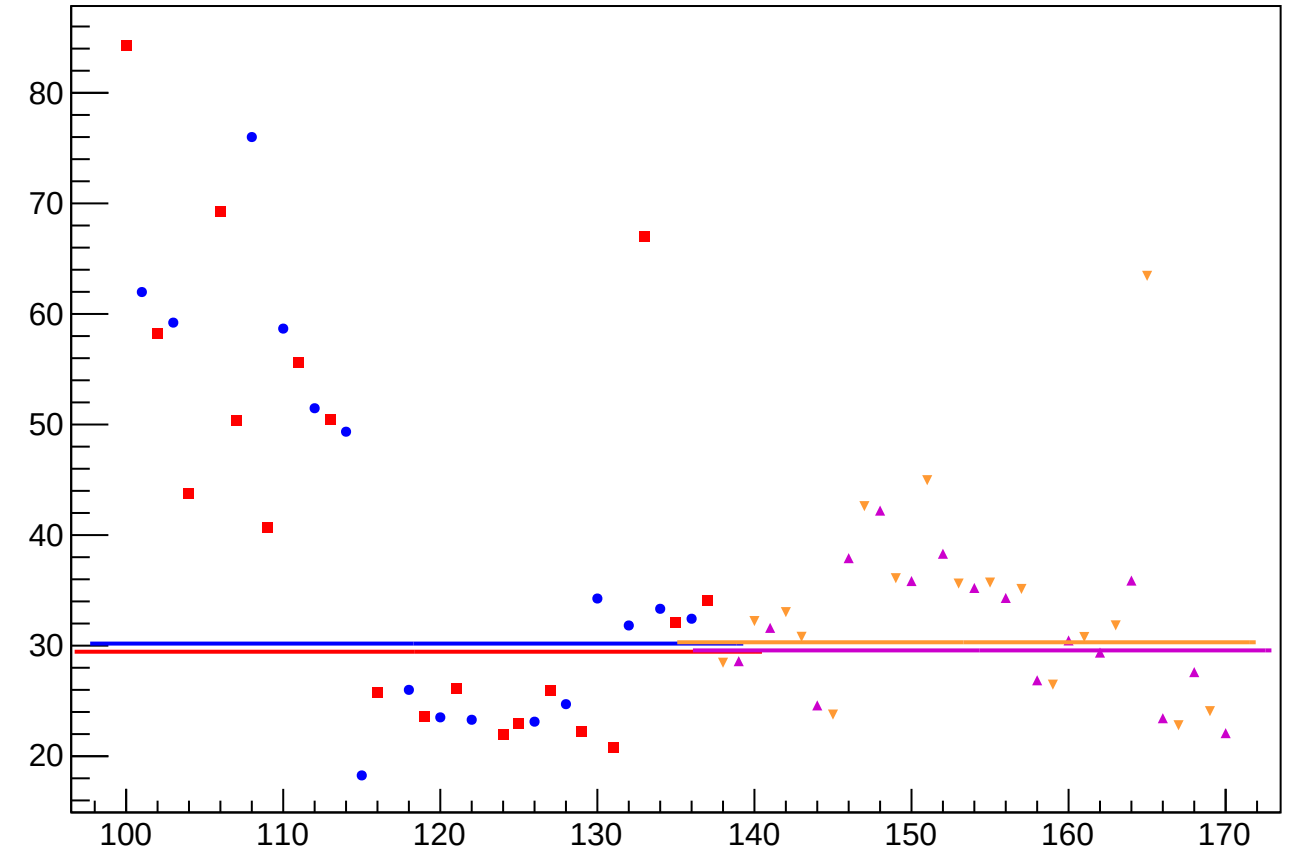
Right Out: -0.010+/-0.012 $\chi^2$/NDF: 11.2/18

Left In: 0.001+/-0.008 $\chi^2$/NDF:14.1/15

+ sign -0.013+/-0.007 $\chi^2$/NDF: 41.3/32

All: -0.008+/-0.005 $\chi^2$/NDF: 68.3/67

- sign -0.003+/-0.007 $\chi^2$/NDF: 25.9/34




Right In: 30.187+/-0.009 $\chi^2$/NDF: 1687188.2/15

Left Out: 30.305+/-0.006 $\chi^2$/NDF:1218903.5/16

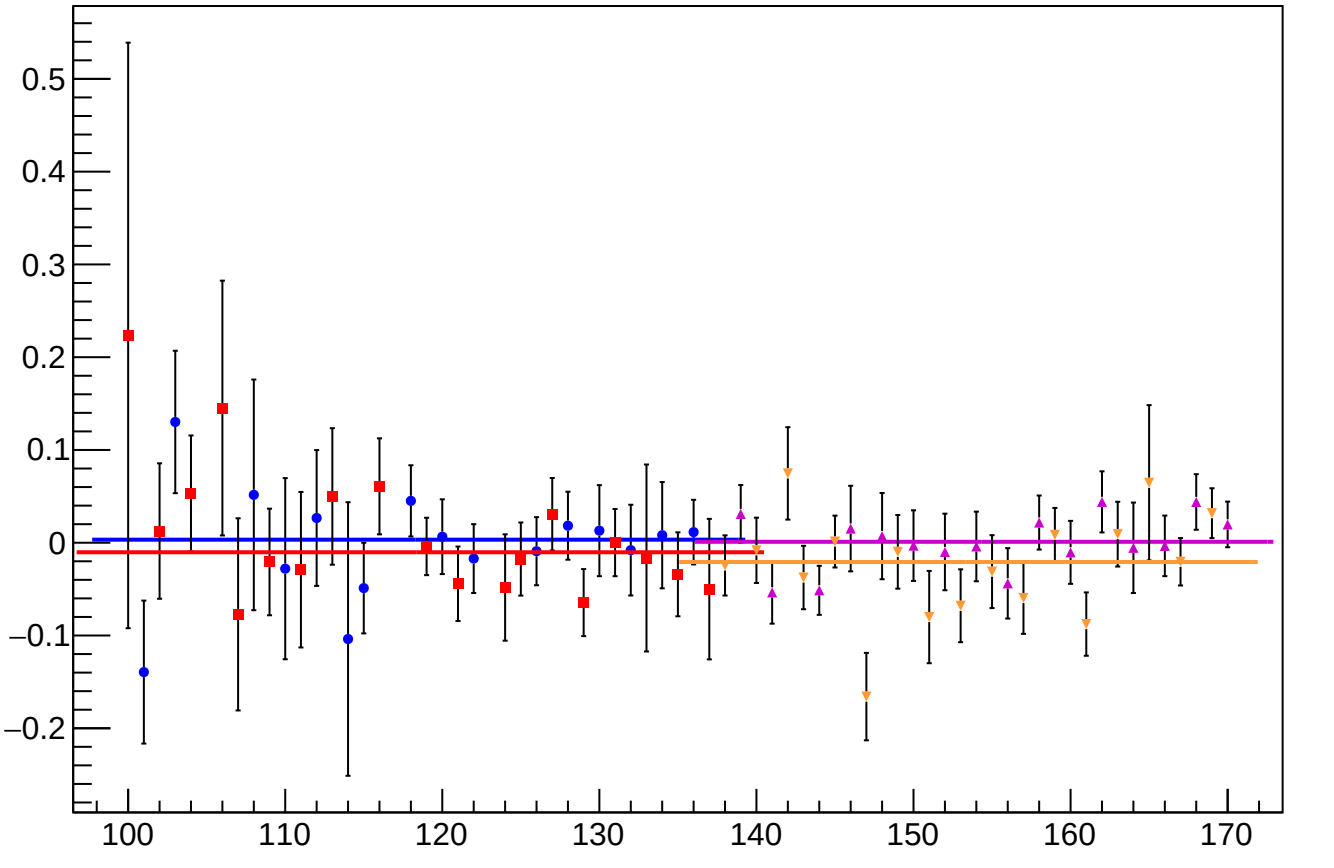
Right Out: 29.451+/-0.008 $\chi^2$/NDF: 1848632.6/18

Left In: 29.569+/-0.006 $\chi^2$/NDF:830687.4/15

+ sign 30.266+/-0.005 $\chi^2$/NDF: 2906216.2/32

All: 29.890+/-0.003 $\chi^2$/NDF: 5596938.5/67

- sign 29.529+/-0.005 $\chi^2$/NDF: 2679452.9/34




Right In: 0.003+/-0.012 $\chi^2$/NDF: 10.1/15

Left Out: -0.021+/-0.009 $\chi^2$/NDF:28.6/16

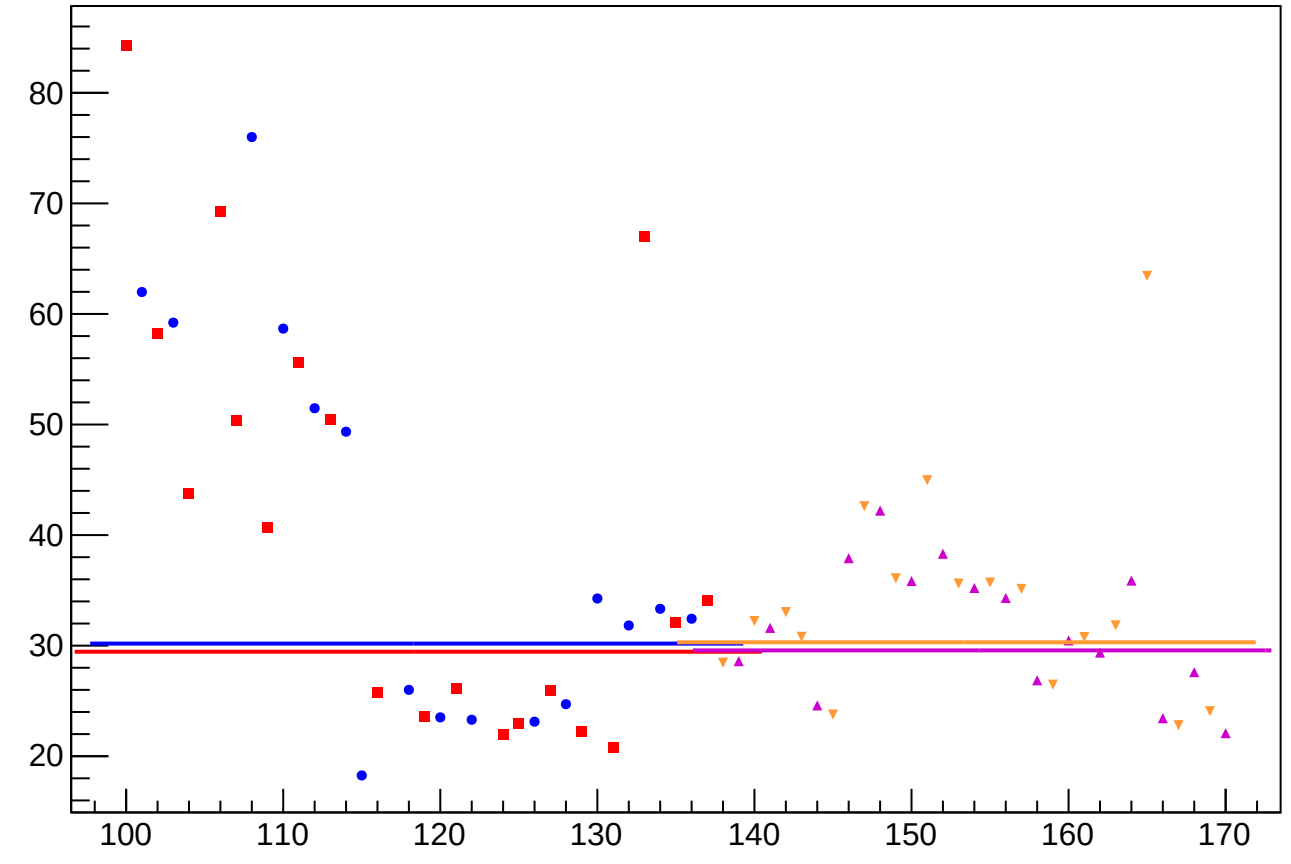
Right Out: -0.010+/-0.012 $\chi^2$/NDF: 11.2/18

Left In: 0.001+/-0.008 $\chi^2$/NDF:14.1/15

+ sign -0.013+/-0.007 $\chi^2$/NDF: 41.3/32

All: -0.008+/-0.005 $\chi^2$/NDF: 68.3/67

- sign -0.003+/-0.007 $\chi^2$/NDF: 25.9/34




Right In: 30.187+/-0.009 $\chi^2$/NDF: 1687188.2/15

Left Out: 30.305+/-0.006 $\chi^2$/NDF:1218903.5/16

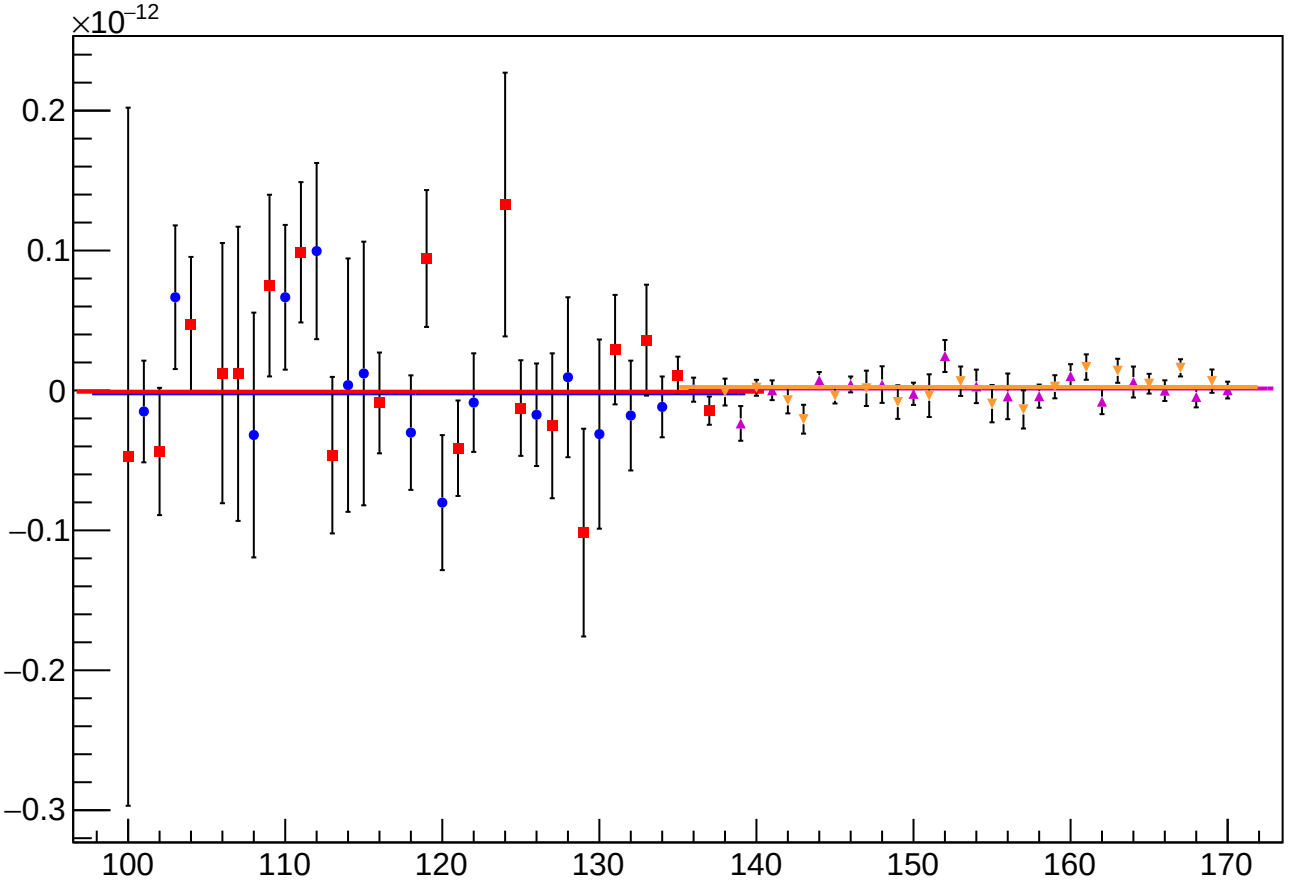
Right Out: 29.451+/-0.008 $\chi^2$/NDF: 1848632.6/18

Left In: 29.569+/-0.006 $\chi^2$/NDF:830687.4/15

+ sign 30.266+/-0.005 $\chi^2$/NDF: 2906216.2/32

All: 29.890+/-0.003 $\chi^2$/NDF: 5596938.5/67

- sign 29.529+/-0.005 $\chi^2$/NDF: 2679452.9/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 10.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:20.3/16

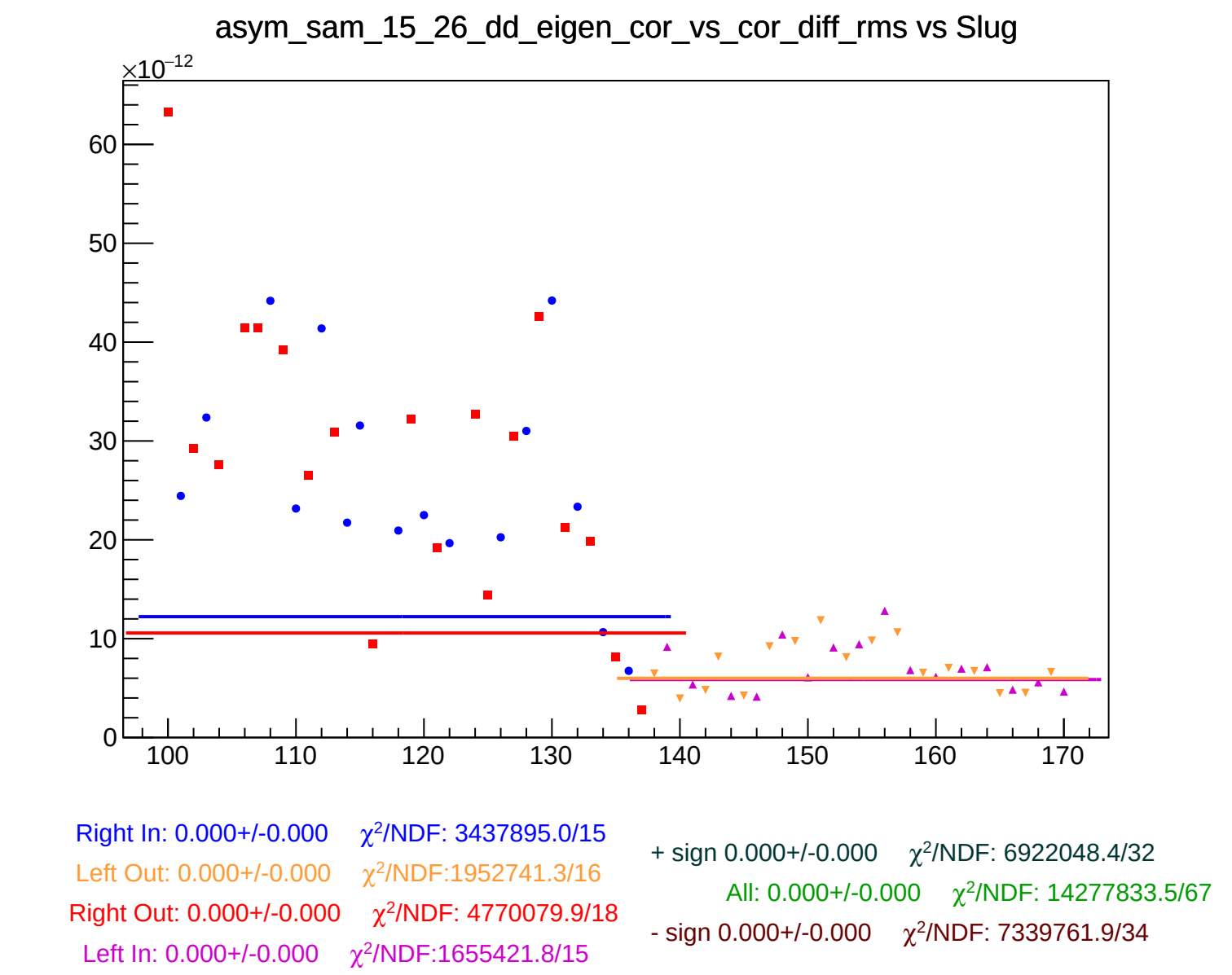
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 21.4/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:13.4/15

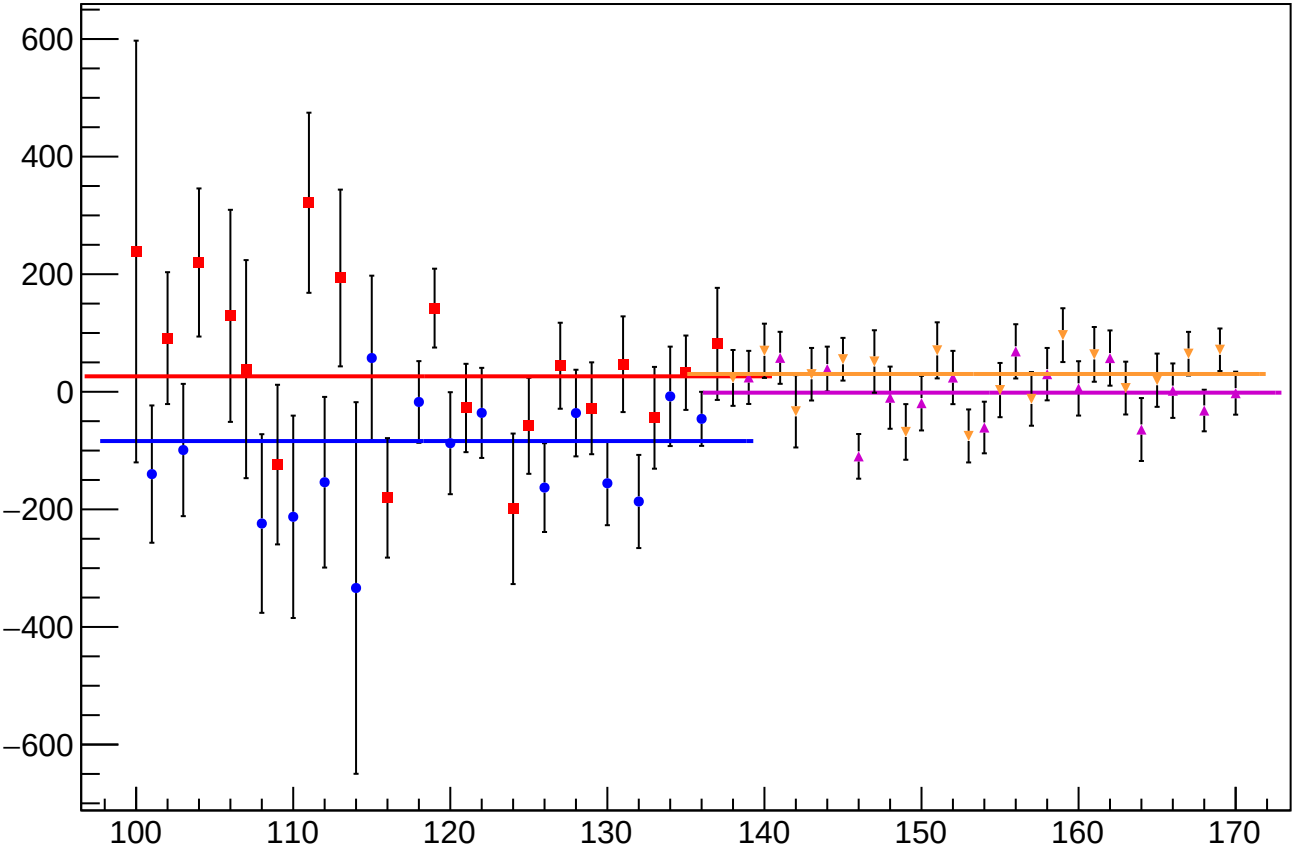
+ sign 0.000+/-0.000 $\chi^2$/NDF: 31.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 66.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 34.9/34


asym_sam_15_26_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3437895.0/15
Left Out: 0.000+/-0.000 χ²/NDF:1952741.3/16
Right Out: 0.000+/-0.000 χ²/NDF: 4770079.9/18
Left In: 0.000+/-0.000 χ²/NDF:1655421.8/15
+ sign 0.000+/-0.000 χ²/NDF: 6922048.4/32
All: 0.000+/-0.000 χ²/NDF: 14277833.5/67
- sign 0.000+/-0.000 χ²/NDF: 7339761.9/34

# reg_asym_sam_37_26_dd_mean vs Slug




Right In: -83.808+/-21.434 $\chi^2$/NDF: 10.5/15

Left Out: 30.281+/-10.828 $\chi^2$/NDF:19.3/16

Right Out: 26.301+/-22.067 $\chi^2$/NDF: 23.0/18

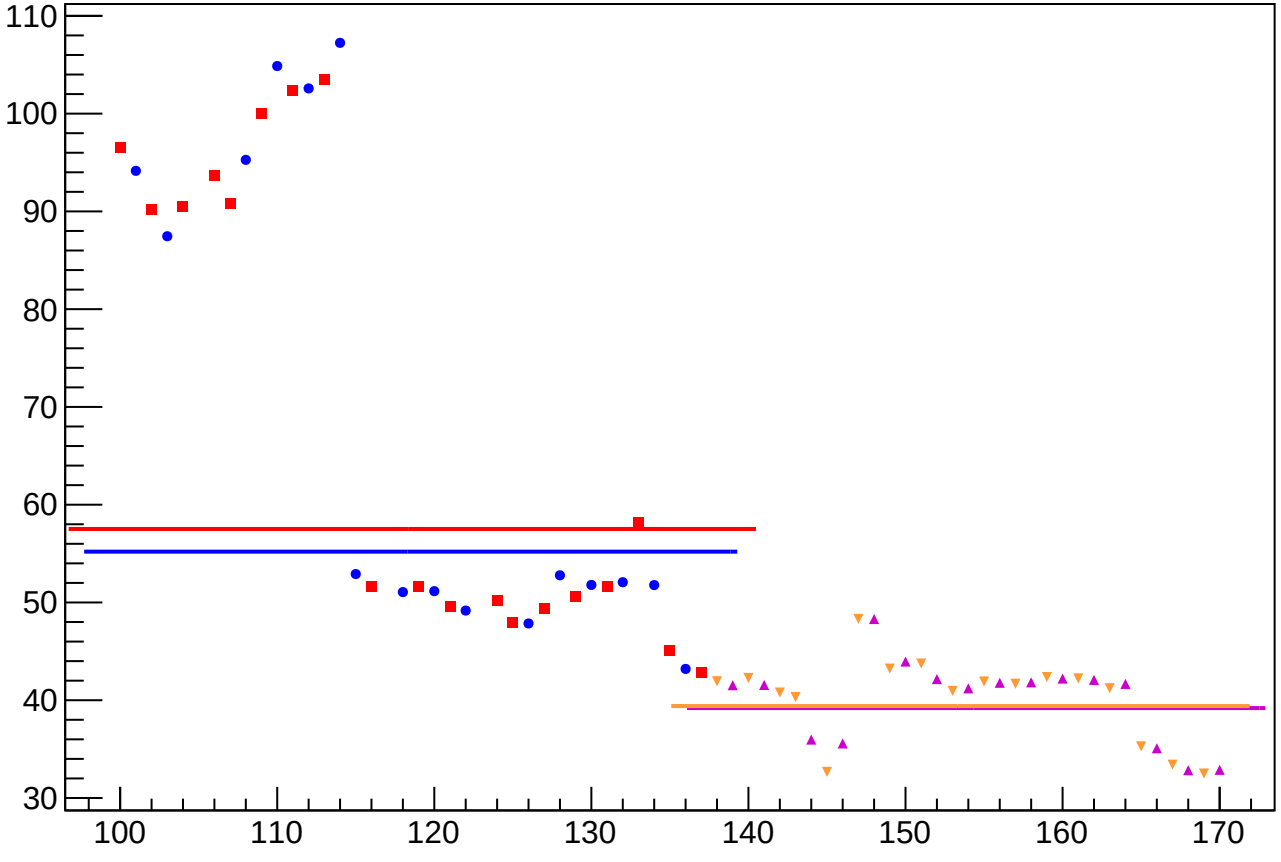
Left In: -1.513+/-10.868 $\chi^2$/NDF:20.2/15

+ sign 7.085+/-9.665 $\chi^2$/NDF: 52.4/32

All: 5.514+/-6.864 $\chi^2$/NDF: 96.9/67

- sign 3.917+/-9.750 $\chi^2$/NDF: 44.5/34

# reg_asym_sam_37_26_dd_rms vs Slug




Right In: 55.198+/-0.015 $\chi^2$/NDF: 1152581.1/15

Left Out: 39.404+/-0.008 $\chi^2$/NDF:344004.7/16

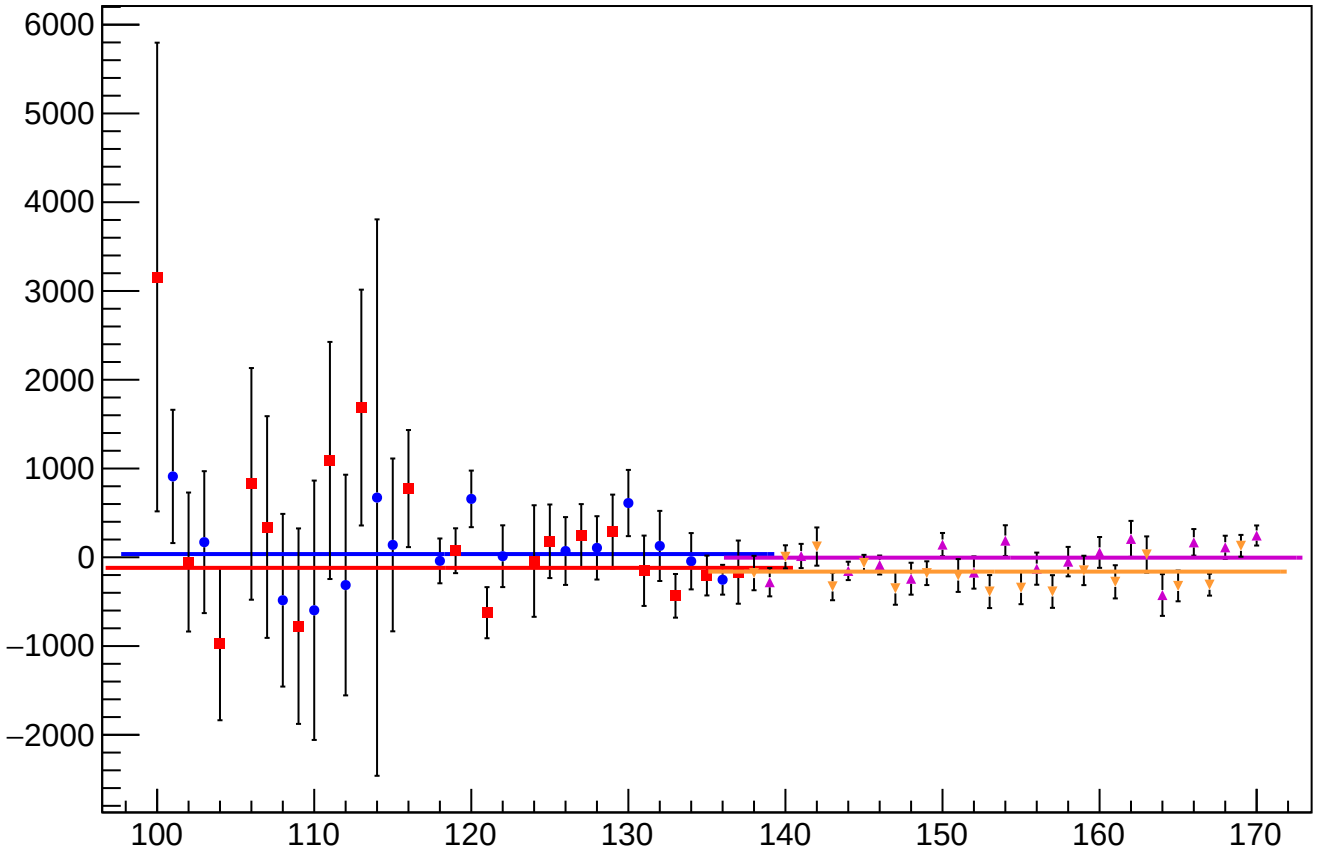
Right Out: 57.519+/-0.016 $\chi^2$/NDF: 1281793.1/18

Left In: 39.198+/-0.008 $\chi^2$/NDF:310272.5/15

+ sign 42.615+/-0.007 $\chi^2$/NDF: 2361654.6/32

All: 42.694+/-0.005 $\chi^2$/NDF: 5063529.0/67

- sign 42.774+/-0.007 $\chi^2$/NDF: 2701606.0/34




Right In: 36.327+/-93.563 $\chi^2$/NDF: 11.4/15

Left Out: -161.310+/-37.161 $\chi^2$/NDF:19.8/16

Right Out: -119.166+/-95.833 $\chi^2$/NDF: 16.0/18

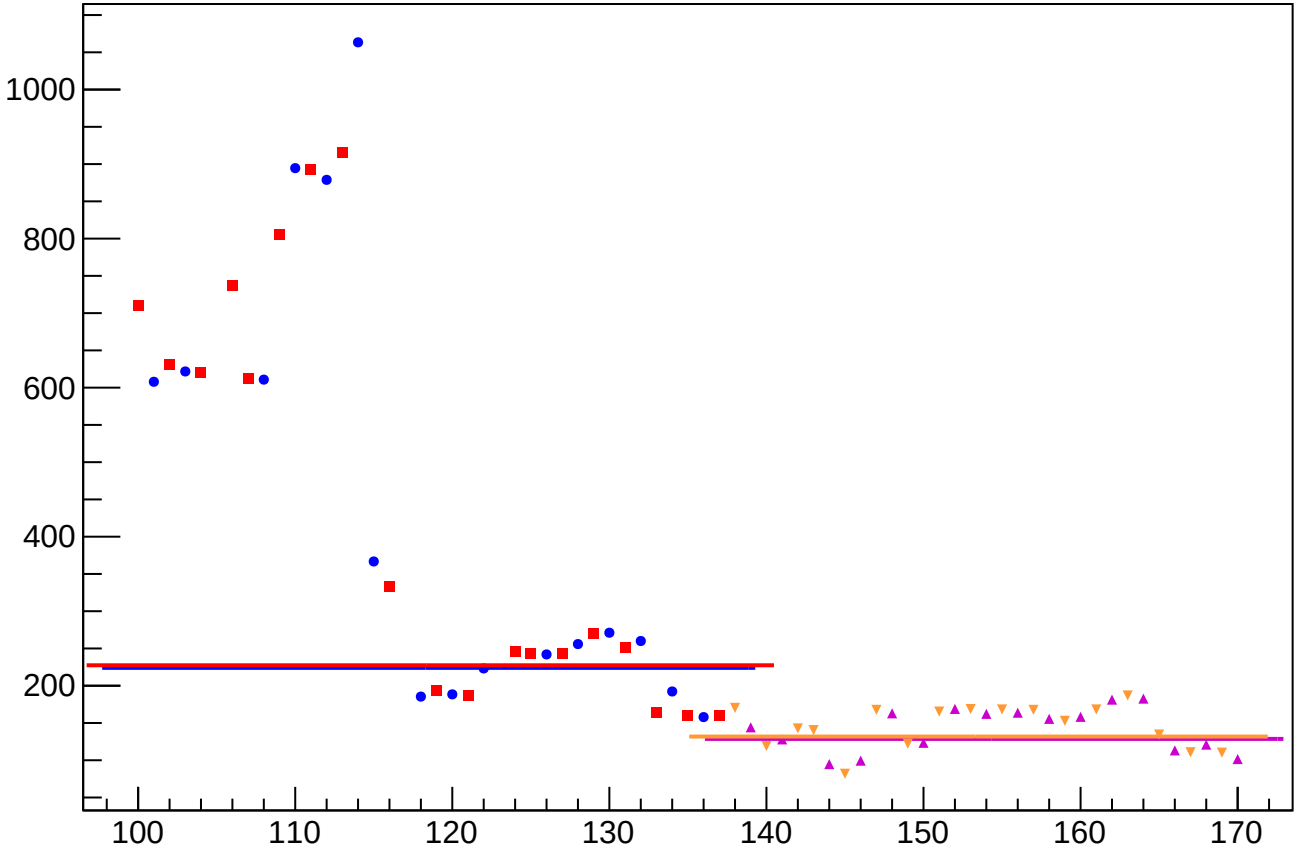
Left In: -4.292+/-36.481 $\chi^2$/NDF:22.7/15

+ sign -134.381+/-34.537 $\chi^2$/NDF: 35.1/32

All: -75.861+/-24.263 $\chi^2$/NDF: 80.8/67

- sign -18.832+/-34.094 $\chi^2$/NDF: 40.0/34

# asym_sam_37_26_dd_reg_correction_rms vs Slug




Right In: 224.042+/-0.066 $\chi^2$/NDF: 2968054.7/15

Left Out: 131.808+/-0.026 $\chi^2$/NDF:1461008.3/16

Right Out: 227.451+/-0.068 $\chi^2$/NDF: 3640634.3/18

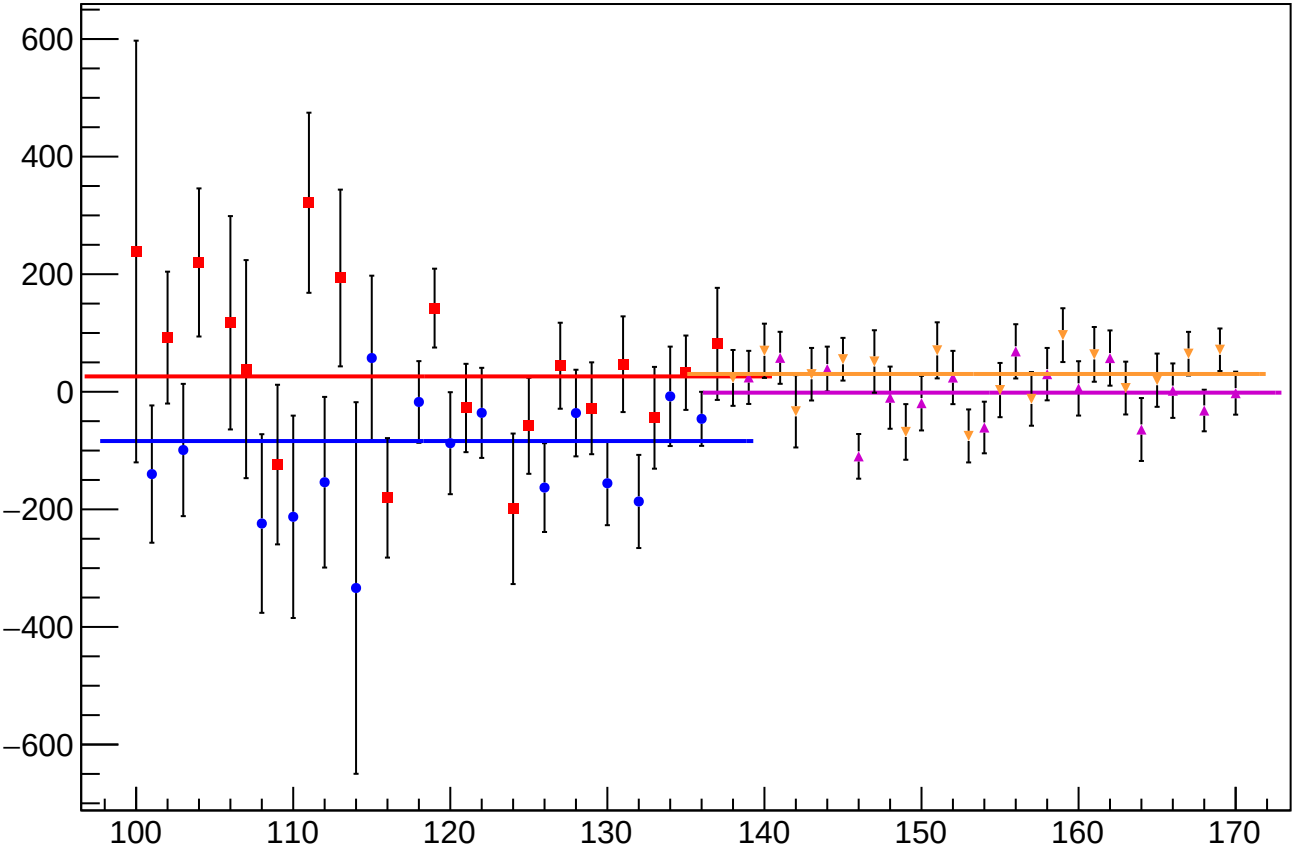
Left In: 128.657+/-0.026 $\chi^2$/NDF:1201053.3/15

+ sign 144.376+/-0.024 $\chi^2$/NDF: 6107809.1/32

All: 142.748+/-0.017 $\chi^2$/NDF: 12814724.9/67

- sign 141.161+/-0.024 $\chi^2$/NDF: 6698141.9/34

# cor_asym_sam_37_26_dd_mean vs Slug




Right In: -83.805+/-21.434 $\chi^2$/NDF: 10.5/15

Left Out: 30.283+/-10.828 $\chi^2$/NDF:19.3/16

Right Out: 26.142+/-22.069 $\chi^2$/NDF: 22.9/18

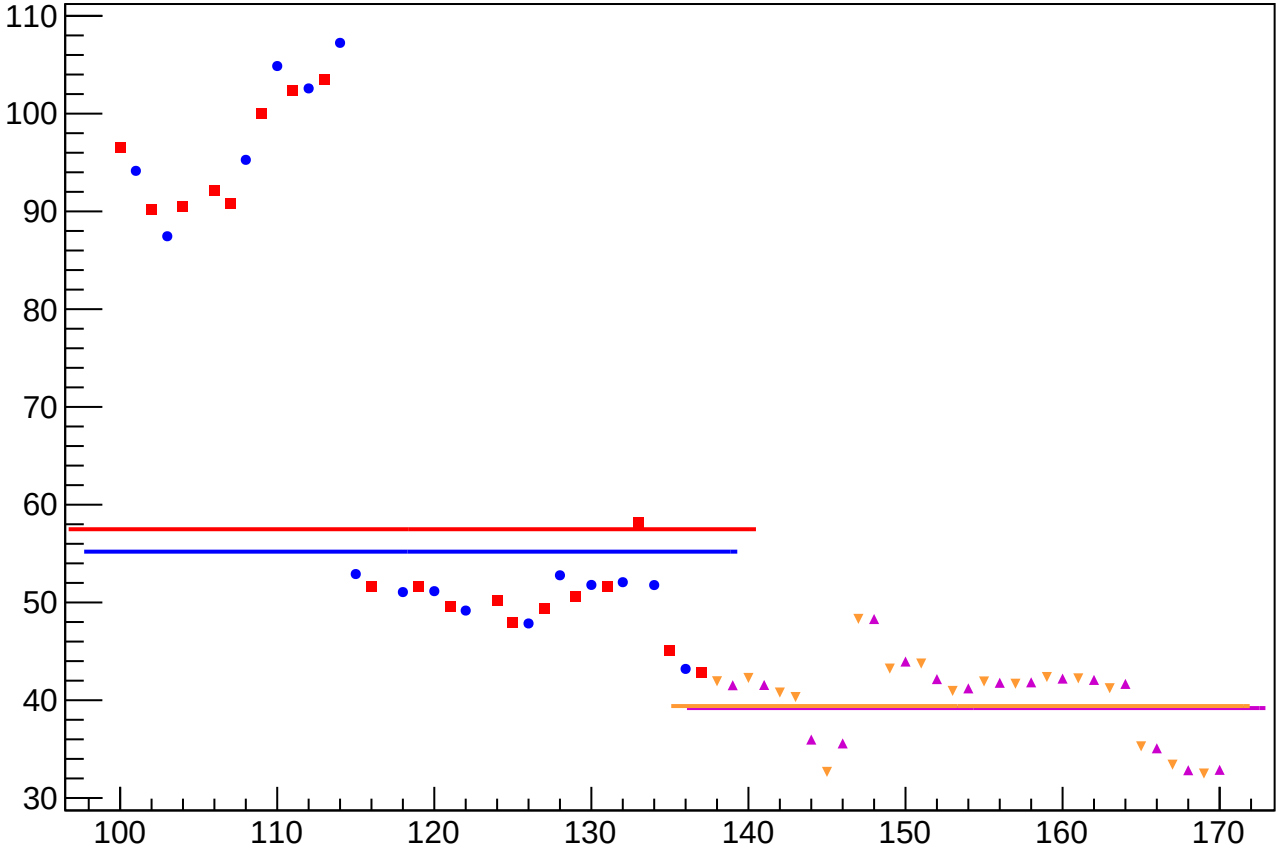
Left In: -1.512+/-10.868 $\chi^2$/NDF:20.2/15

+ sign 7.086+/-9.665 $\chi^2$/NDF: 52.4/32

All: 5.500+/-6.864 $\chi^2$/NDF: 96.8/67

- sign 3.885+/-9.750 $\chi^2$/NDF: 44.4/34

# cor_asym_sam_37_26_dd_rms vs Slug




Right In: 55.198+/-0.015 $\chi^2$/NDF: 1152581.3/15

Left Out: 39.404+/-0.008 $\chi^2$/NDF:344004.7/16

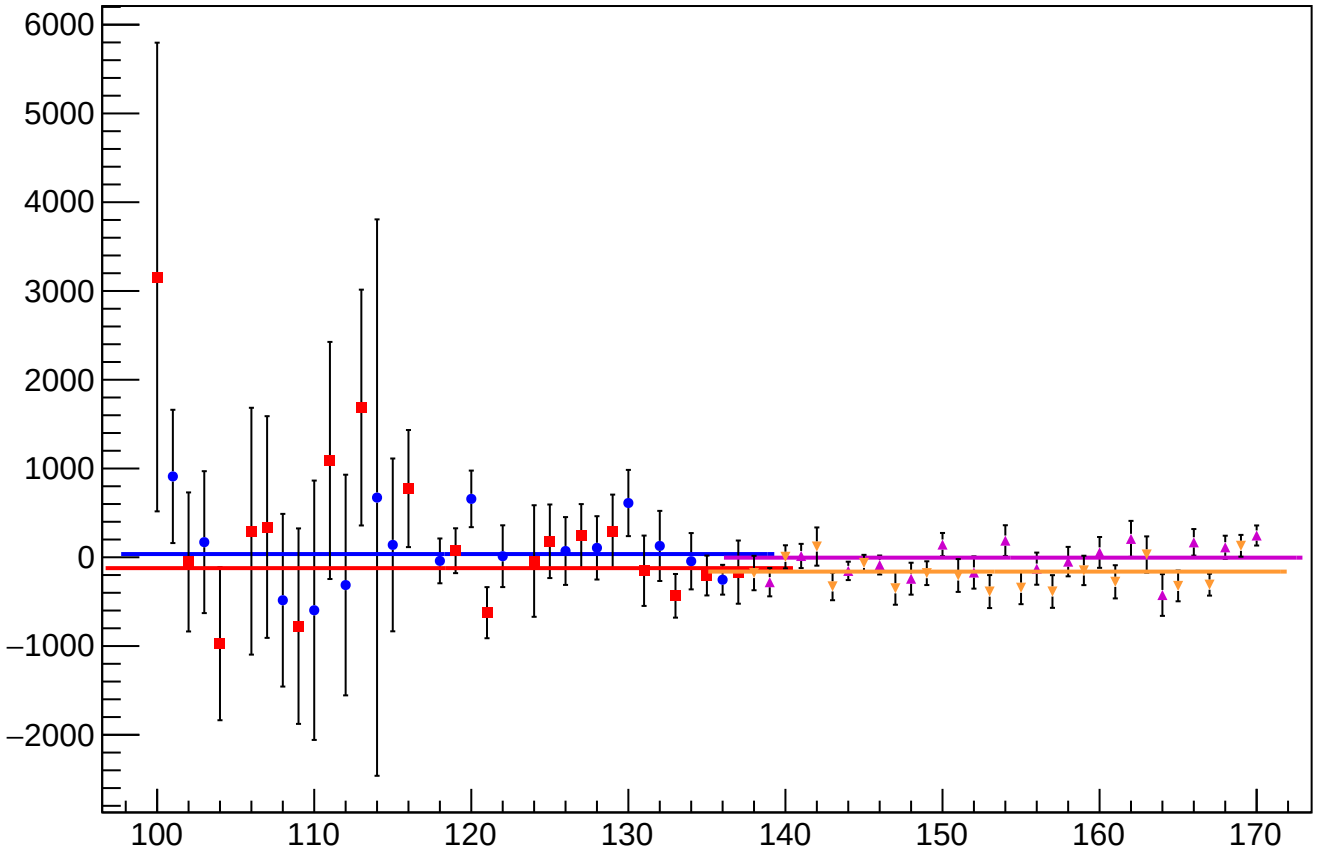
Right Out: 57.490+/-0.016 $\chi^2$/NDF: 1274387.3/18

Left In: 39.198+/-0.008 $\chi^2$/NDF:310272.5/15

+ sign 42.615+/-0.007 $\chi^2$/NDF: 2361654.9/32

All: 42.691+/-0.005 $\chi^2$/NDF: 5052437.6/67

- sign 42.768+/-0.007 $\chi^2$/NDF: 2690534.8/34




Right In: 36.327+/-93.563 $\chi^2$/NDF: 11.4/15

Left Out: -161.311+/-37.161 $\chi^2$/NDF:19.8/16

Right Out: -122.289+/-95.865 $\chi^2$/NDF: 15.6/18

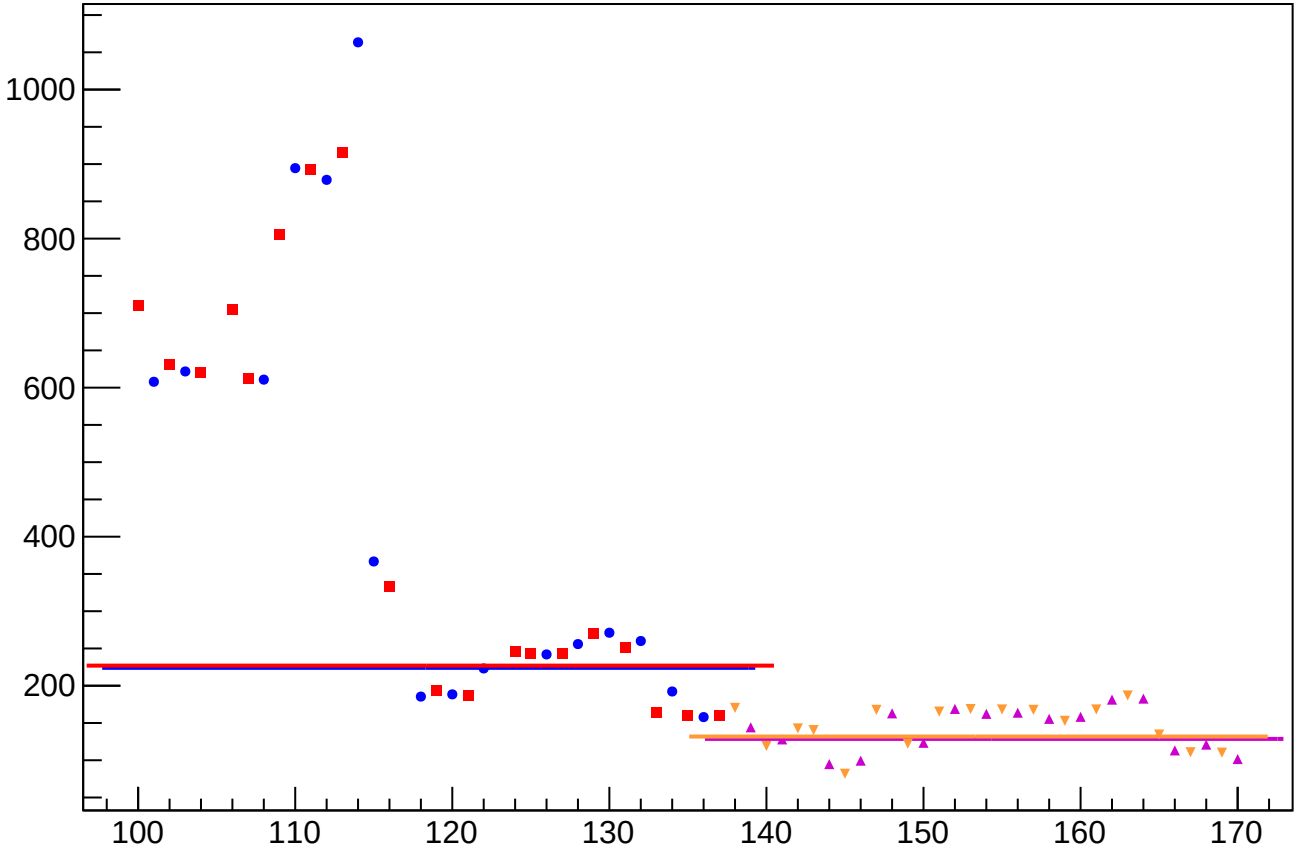
Left In: -4.293+/-36.481 $\chi^2$/NDF:22.7/15

+ sign -134.381+/-34.537 $\chi^2$/NDF: 35.1/32

All: -76.060+/-24.264 $\chi^2$/NDF: 80.4/67

- sign -19.219+/-34.096 $\chi^2$/NDF: 39.6/34

# asym_sam_37_26_dd_cor_correction_rms vs Slug




Right In: 224.042+/-0.066 $\chi^2$/NDF: 2968059.8/15

Left Out: 131.808+/-0.026 $\chi^2$/NDF:1461008.3/16

Right Out: 226.971+/-0.068 $\chi^2$/NDF: 3571946.9/18

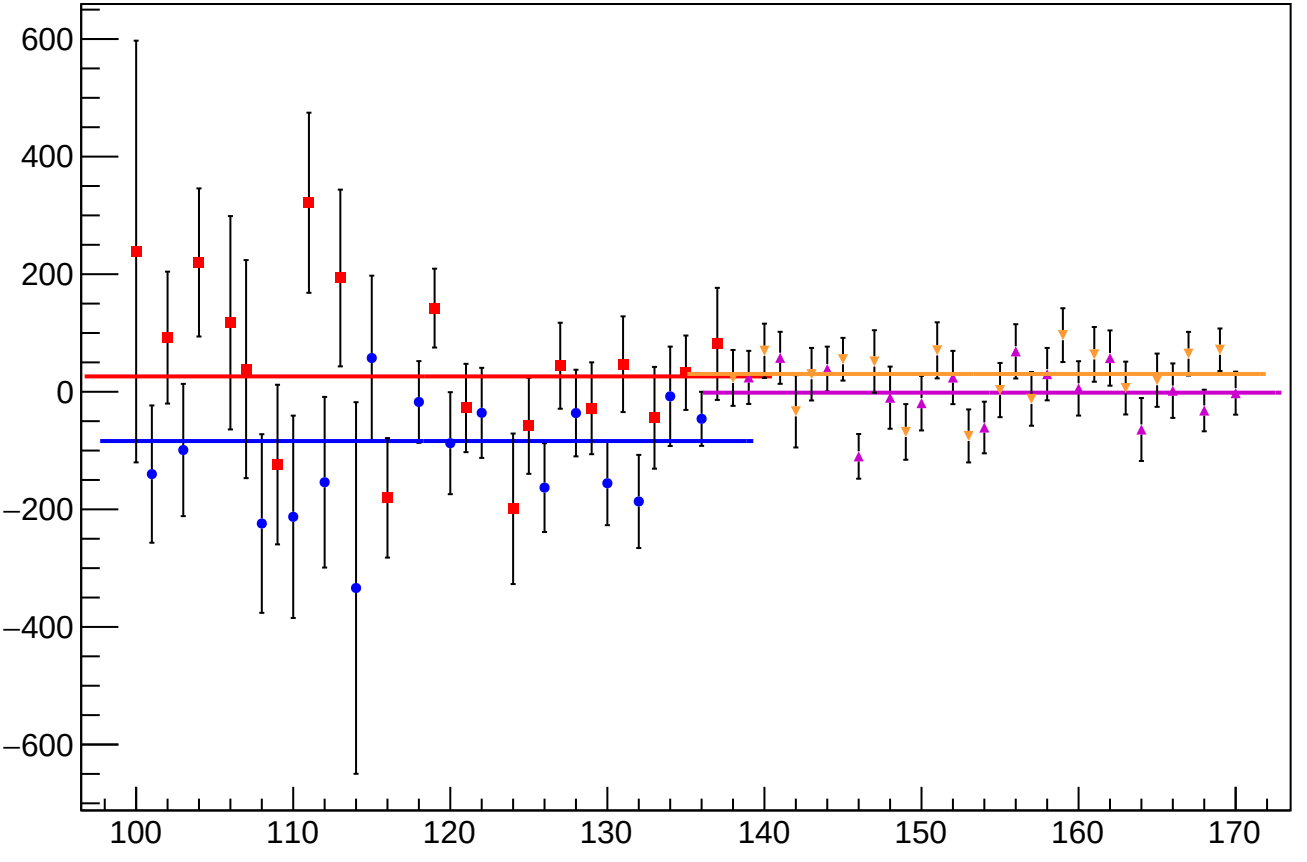
Left In: 128.657+/-0.026 $\chi^2$/NDF:1201058.8/15

+ sign 144.376+/-0.024 $\chi^2$/NDF: 6107814.6/32

All: 142.713+/-0.017 $\chi^2$/NDF: 12727386.2/67

- sign 141.093+/-0.024 $\chi^2$/NDF: 6610423.2/34

# eigen_cor_asym_sam_37_26_dd_mean vs Slug




Right In: -83.805+/-21.434 $\chi^2$/NDF: 10.5/15

Left Out: 30.283+/-10.828 $\chi^2$/NDF:19.3/16

Right Out: 26.142+/-22.069 $\chi^2$/NDF: 22.9/18

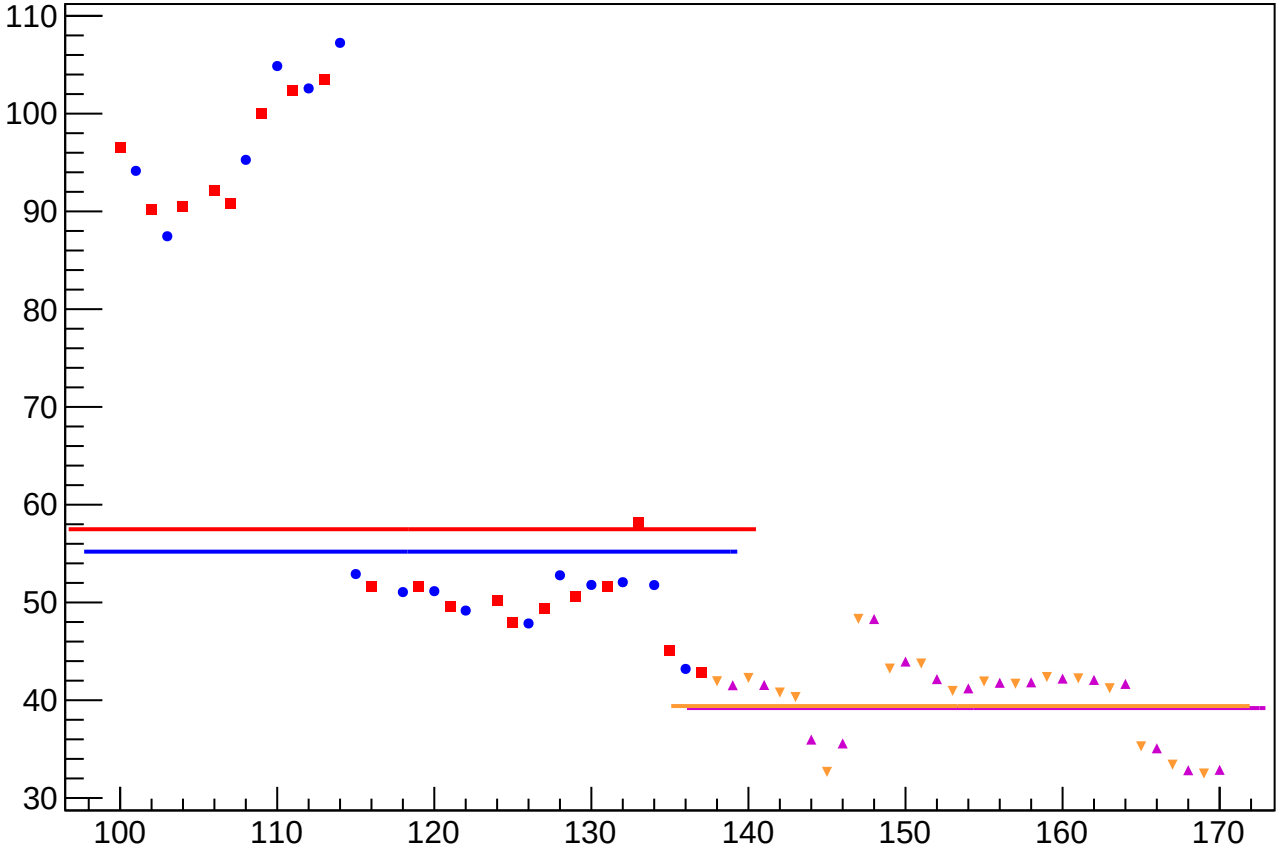
Left In: -1.512+/-10.868 $\chi^2$/NDF:20.2/15

+ sign 7.086+/-9.665 $\chi^2$/NDF: 52.4/32

All: 5.500+/-6.864 $\chi^2$/NDF: 96.8/67

- sign 3.885+/-9.750 $\chi^2$/NDF: 44.4/34

# eigen_cor_asym_sam_37_26_dd_rms vs Slug




Right In: 55.198+/-0.015 $\chi^2$/NDF: 1152581.3/15

Left Out: 39.404+/-0.008 $\chi^2$/NDF:344004.7/16

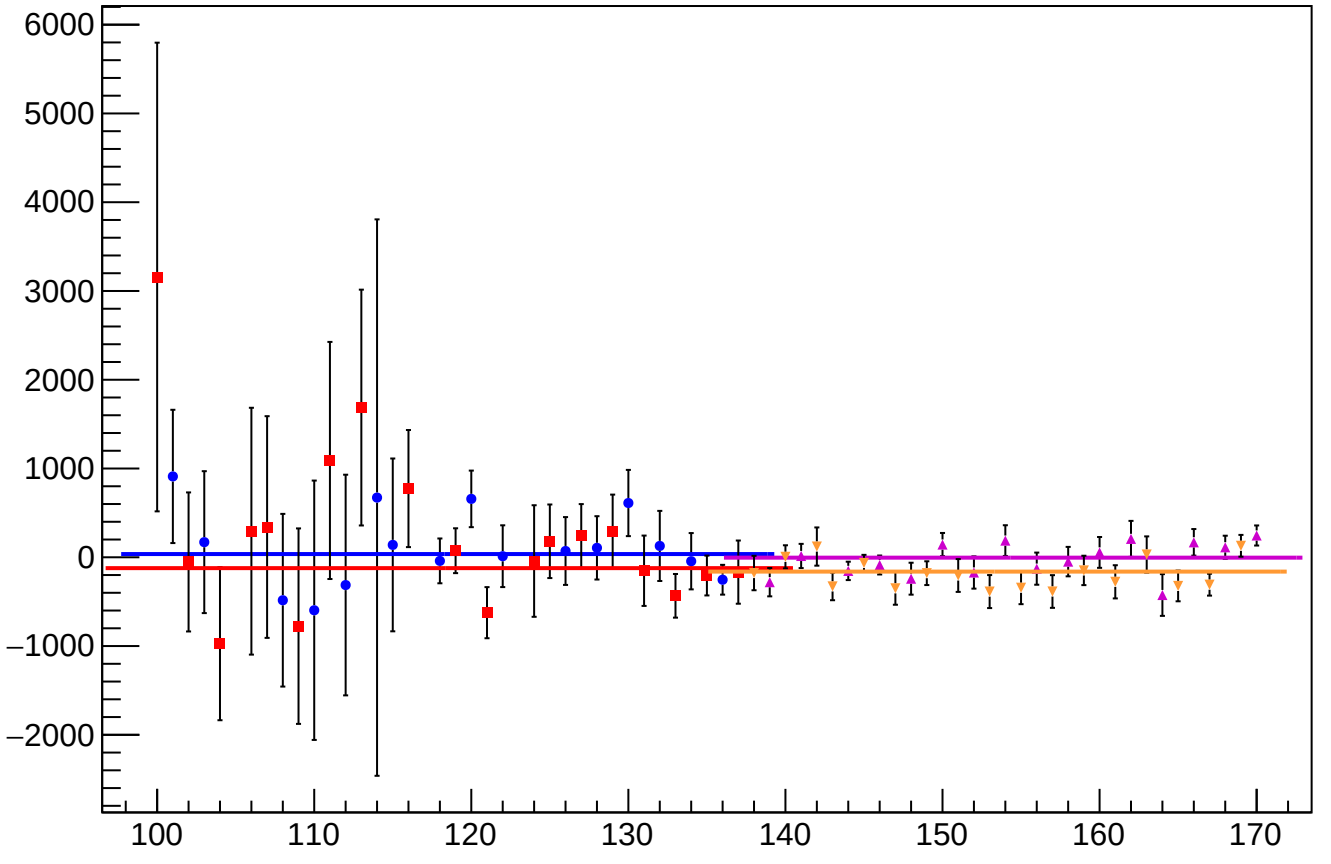
Right Out: 57.490+/-0.016 $\chi^2$/NDF: 1274387.3/18

Left In: 39.198+/-0.008 $\chi^2$/NDF:310272.5/15

+ sign 42.615+/-0.007 $\chi^2$/NDF: 2361654.9/32

All: 42.691+/-0.005 $\chi^2$/NDF: 5052437.6/67

- sign 42.768+/-0.007 $\chi^2$/NDF: 2690534.8/34




Right In: 36.327+/-93.563 $\chi^2$/NDF: 11.4/15

Left Out: -161.311+/-37.161 $\chi^2$/NDF:19.8/16

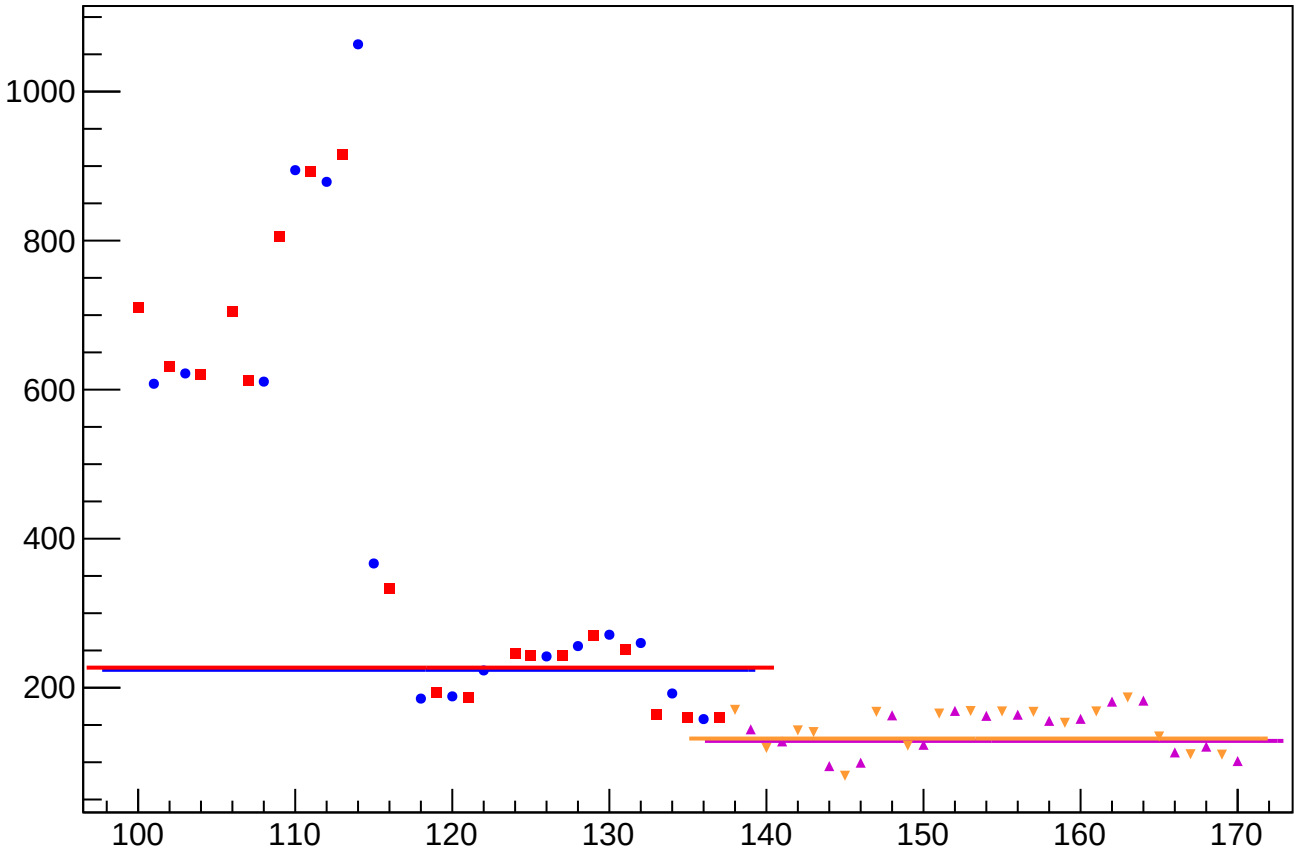
Right Out: -122.289+/-95.865 $\chi^2$/NDF: 15.6/18

Left In: -4.293+/-36.481 $\chi^2$/NDF:22.7/15

+ sign -134.381+/-34.537 $\chi^2$/NDF: 35.1/32

All: -76.060+/-24.264 $\chi^2$/NDF: 80.4/67

- sign -19.219+/-34.096 $\chi^2$/NDF: 39.6/34




Right In: 224.042+/-0.066 $\chi^2$/NDF: 2968059.8/15

Left Out: 131.808+/-0.026 $\chi^2$/NDF:1461008.3/16

Right Out: 226.971+/-0.068 $\chi^2$/NDF: 3571946.9/18

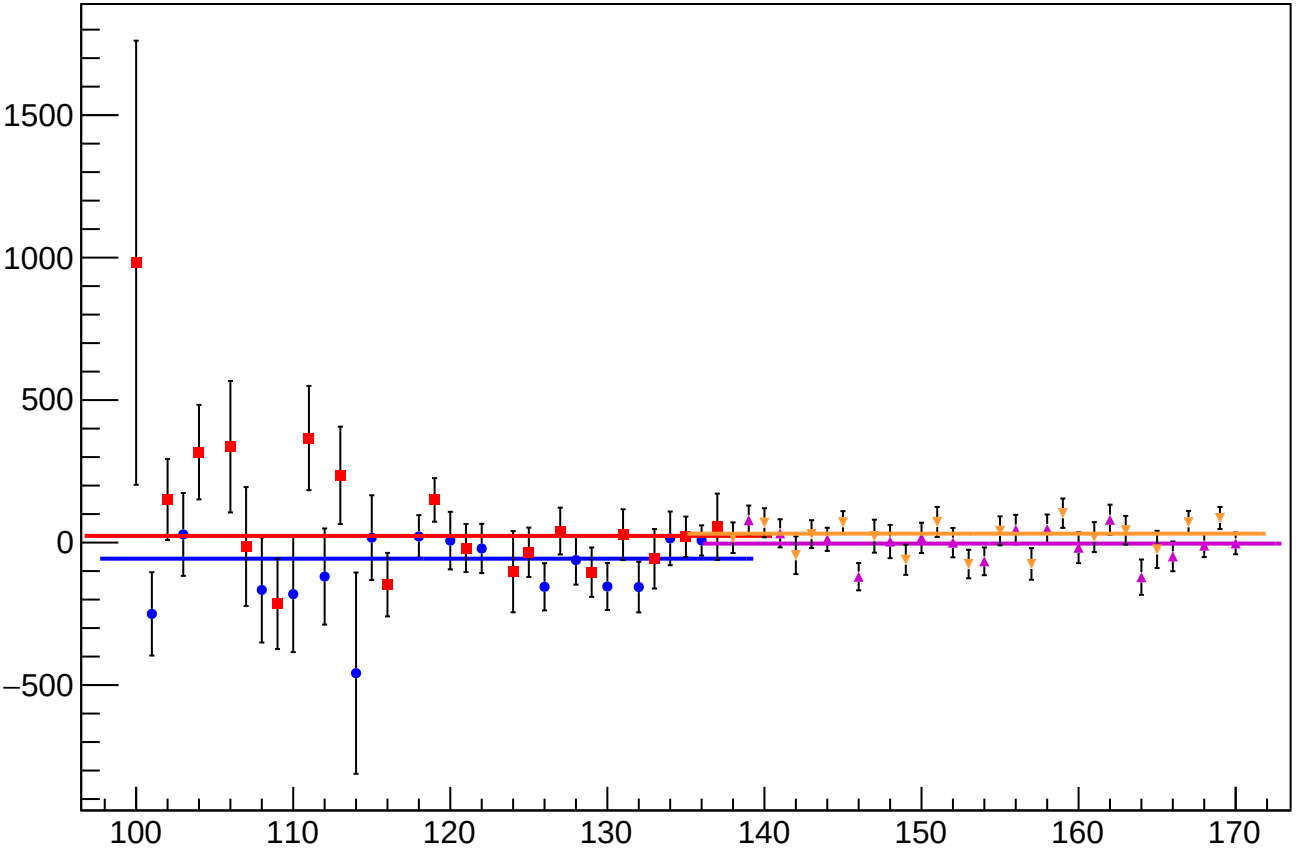
Left In: 128.657+/-0.026 $\chi^2$/NDF:1201058.8/15

+ sign 144.376+/-0.024 $\chi^2$/NDF: 6107814.6/32

All: 142.713+/-0.017 $\chi^2$/NDF: 12727386.2/67

- sign 141.093+/-0.024 $\chi^2$/NDF: 6610423.2/34

# dit_asym_sam_37_26_dd_mean vs Slug




Right In: -56.414+/-24.489 $\chi^2$/NDF: 12.3/15

Left Out: 31.295+/-12.109 $\chi^2$/NDF:20.6/16

Right Out: 23.495+/-25.161 $\chi^2$/NDF: 24.1/18

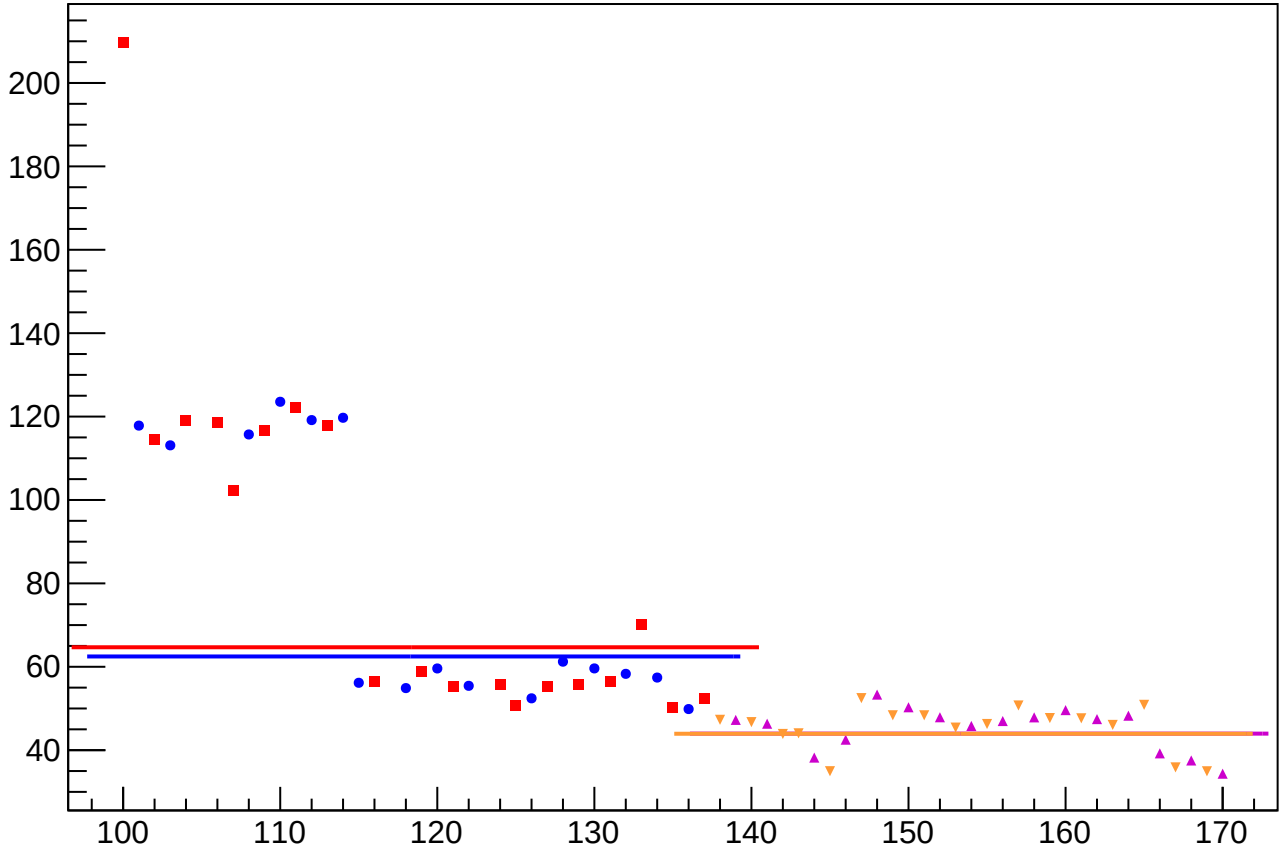
Left In: -3.492+/-12.262 $\chi^2$/NDF:19.7/15

+ sign 14.064+/-10.854 $\chi^2$/NDF: 43.2/32

All: 7.971+/-7.734 $\chi^2$/NDF: 88.5/67

- sign 1.688+/-11.023 $\chi^2$/NDF: 44.7/34

# dit_asym_sam_37_26_dd_rms vs Slug




Right In: 62.474+/-0.017 $\chi^2$/NDF: 1348224.3/15

Left Out: 43.940+/-0.009 $\chi^2$/NDF:462895.4/16

Right Out: 64.680+/-0.018 $\chi^2$/NDF: 1590446.9/18

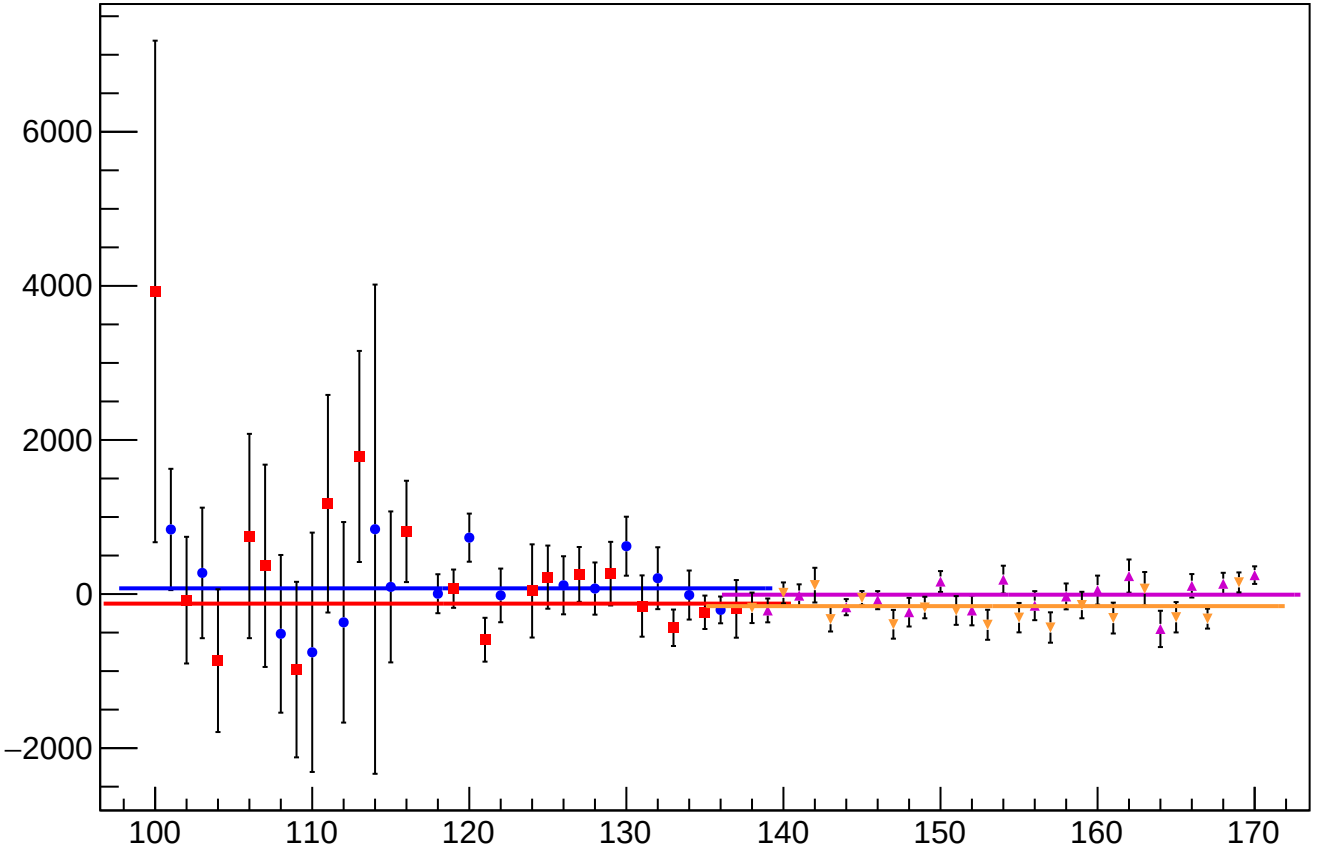
Left In: 43.970+/-0.009 $\chi^2$/NDF:400795.6/15

+ sign 47.581+/-0.008 $\chi^2$/NDF: 2731710.3/32

All: 47.760+/-0.005 $\chi^2$/NDF: 5819051.2/67

- sign 47.945+/-0.008 $\chi^2$/NDF: 3086232.8/34

# asym_sam_37_26_dd_dit_correction_mean vs Slug




Right In: 74.294+/-94.492 $\chi^2$/NDF: 11.2/15

Left Out: -156.691+/-38.476 $\chi^2$/NDF:20.9/16

Right Out: -124.201+/-94.665 $\chi^2$/NDF: 16.3/18

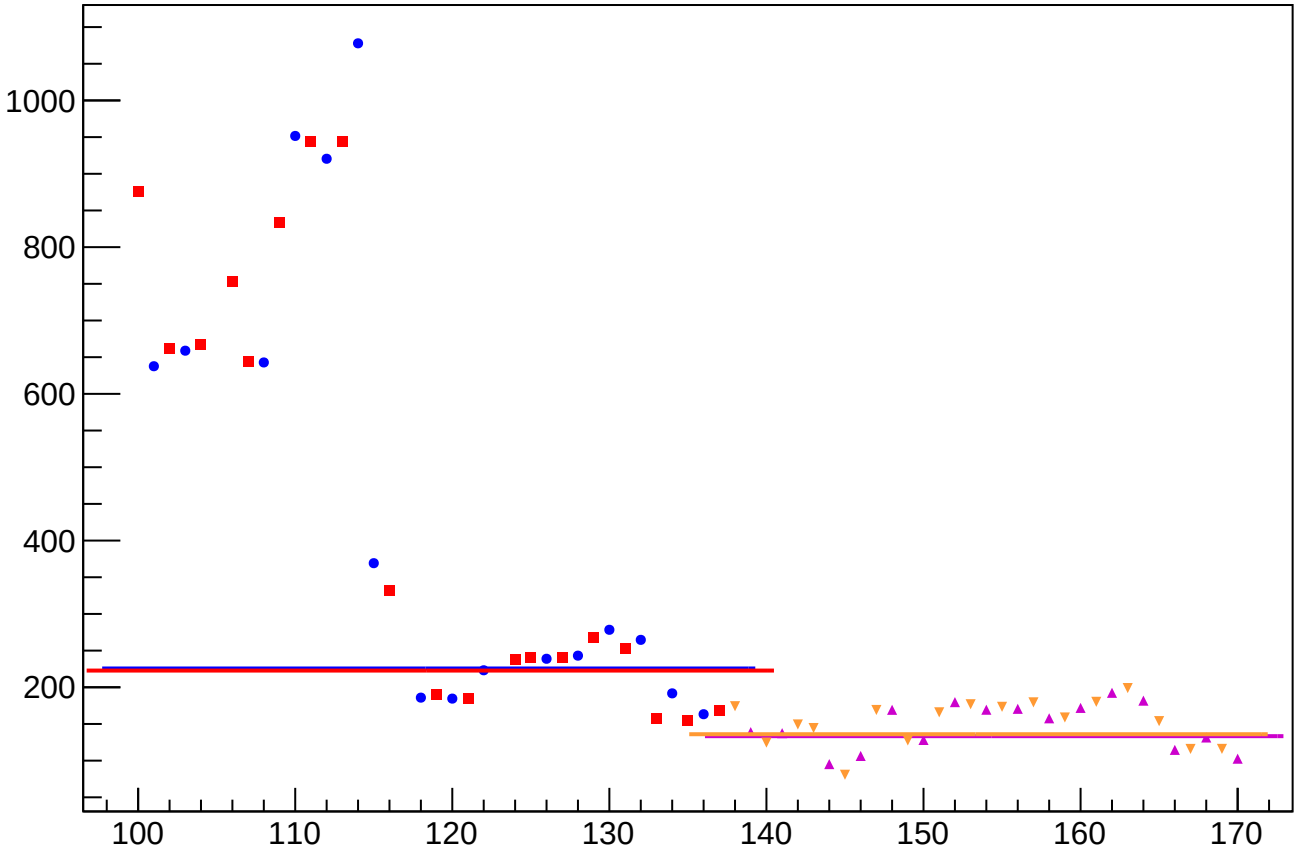
Left In: -8.228+/-37.965 $\chi^2$/NDF:21.9/15

+ sign -123.841+/-35.635 $\chi^2$/NDF: 37.2/32

All: -73.510+/-25.056 $\chi^2$/NDF: 80.7/67

- sign -24.296+/-35.237 $\chi^2$/NDF: 39.5/34

# asym_sam_37_26_dd_dit_correction_rms vs Slug




Right In: 225.614+/-0.067 $\chi^2$/NDF: 3026007.7/15

Left Out: 136.009+/-0.027 $\chi^2$/NDF:1650386.5/16

Right Out: 222.786+/-0.067 $\chi^2$/NDF: 3848156.1/18

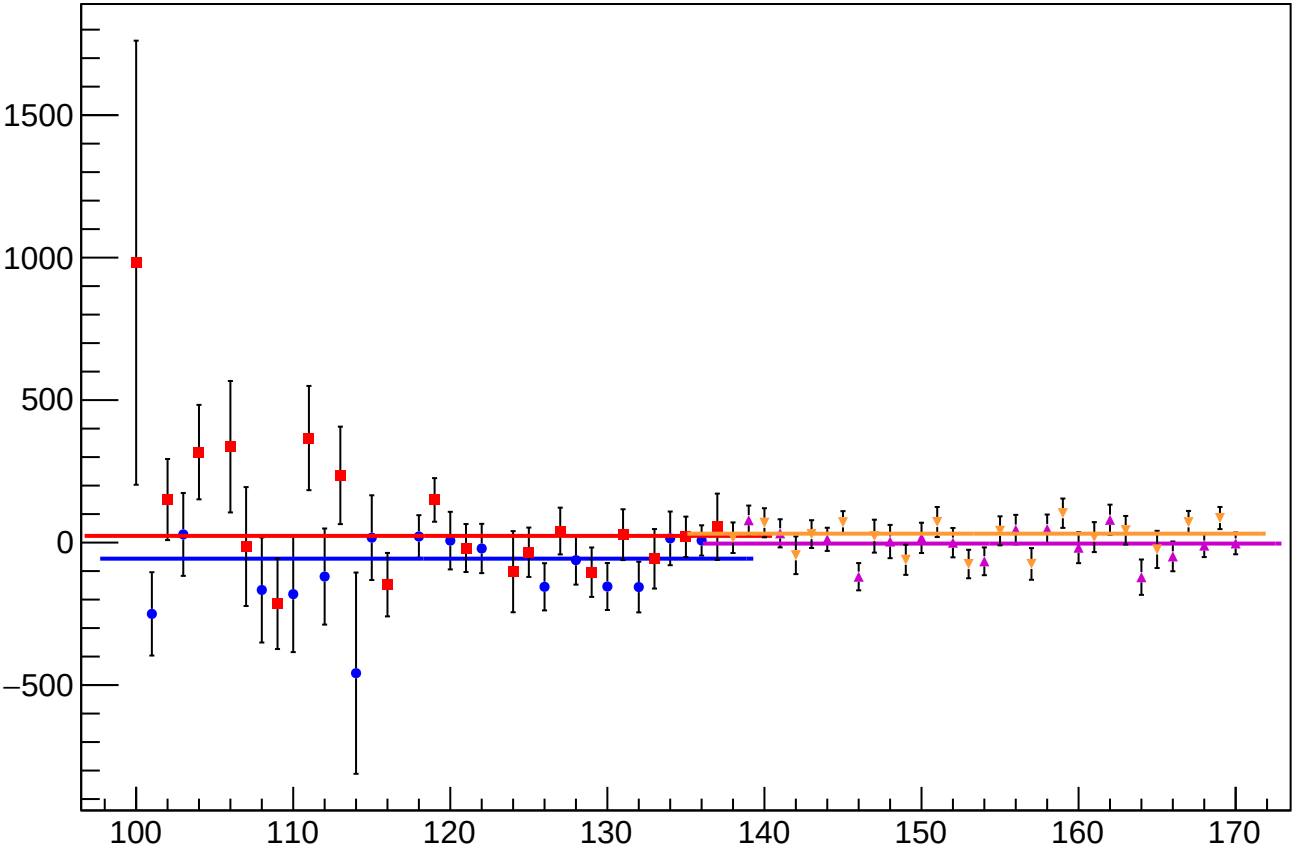
Left In: 133.358+/-0.027 $\chi^2$/NDF:1260251.9/15

+ sign 148.752+/-0.025 $\chi^2$/NDF: 6219097.0/32

All: 147.234+/-0.018 $\chi^2$/NDF: 12872216.5/67

- sign 145.749+/-0.025 $\chi^2$/NDF: 6645934.0/34

# eigen_dit_asym_sam_37_26_dd_mean vs Slug




Right In: -56.415+/-24.489 $\chi^2$/NDF: 12.3/15

Left Out: 31.296+/-12.109 $\chi^2$/NDF:20.6/16

Right Out: 23.498+/-25.160 $\chi^2$/NDF: 24.1/18

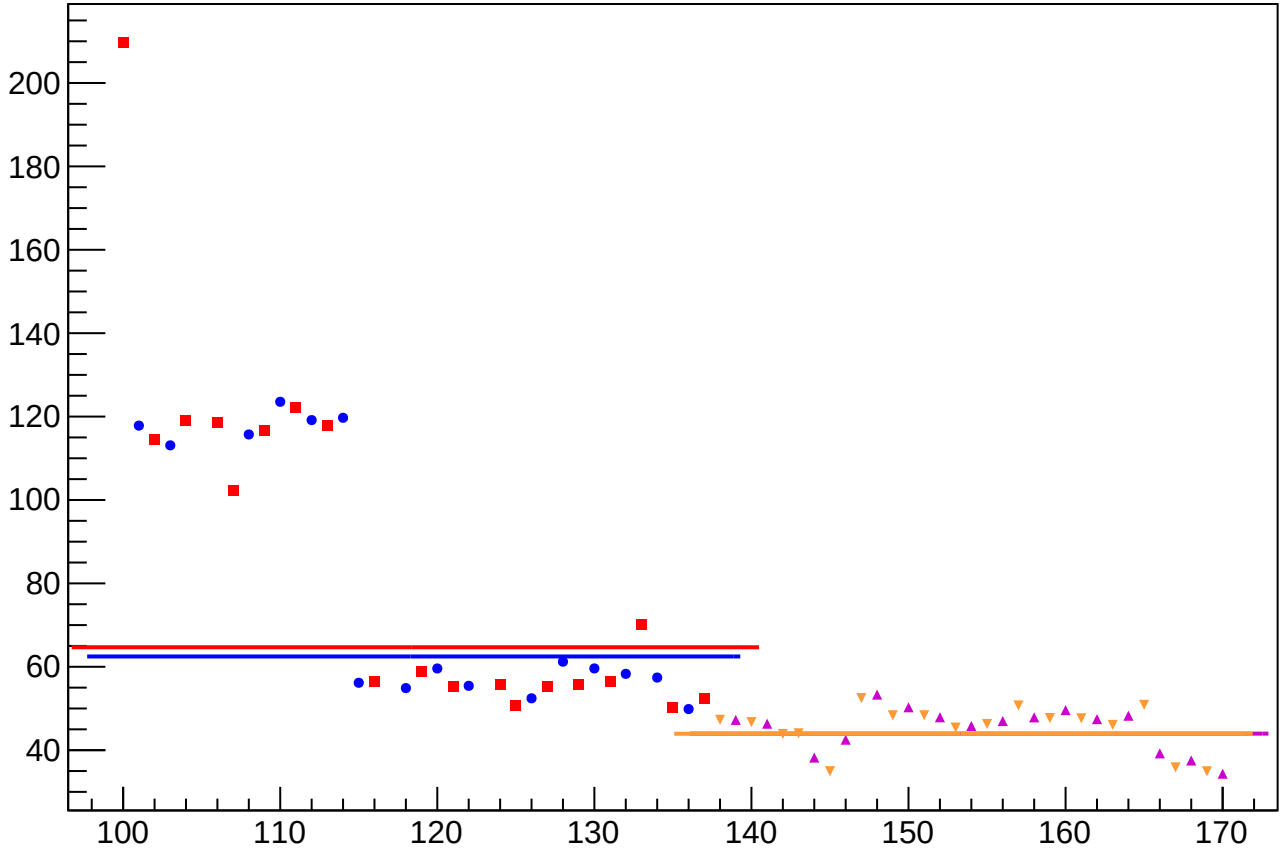
Left In: -3.493+/-12.262 $\chi^2$/NDF:19.7/15

+ sign 14.064+/-10.854 $\chi^2$/NDF: 43.2/32

All: 7.971+/-7.734 $\chi^2$/NDF: 88.5/67

- sign 1.688+/-11.023 $\chi^2$/NDF: 44.7/34

# eigen_dit_asym_sam_37_26_dd_rms vs Slug




Right In: 62.474+/-0.017 $\chi^2$/NDF: 1348204.7/15

Left Out: 43.940+/-0.009 $\chi^2$/NDF:462908.5/16

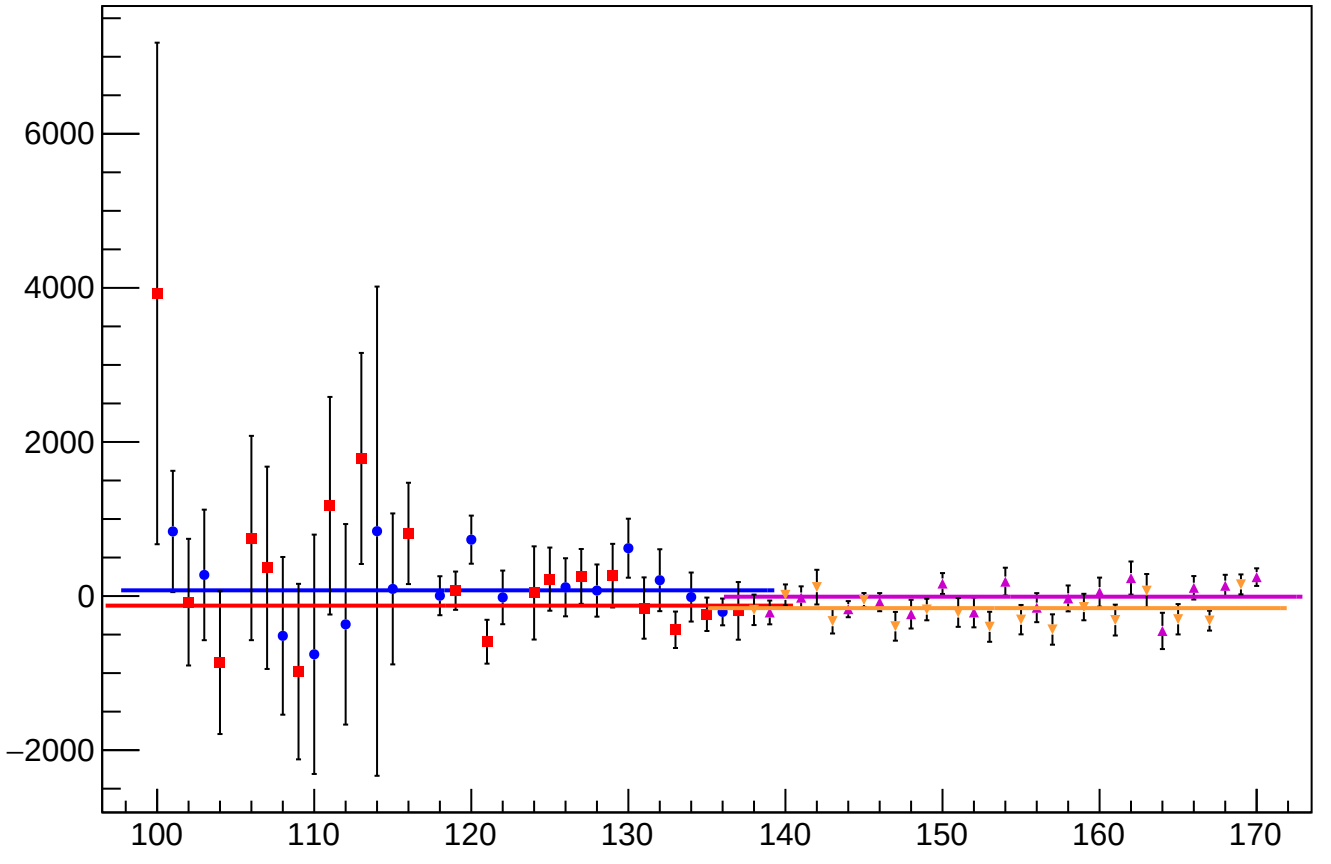
Right Out: 64.680+/-0.018 $\chi^2$/NDF: 1590426.1/18

Left In: 43.970+/-0.009 $\chi^2$/NDF:400803.2/15

+ sign 47.581+/-0.008 $\chi^2$/NDF: 2731660.1/32

All: 47.760+/-0.005 $\chi^2$/NDF: 5818960.2/67

- sign 47.945+/-0.008 $\chi^2$/NDF: 3086191.8/34




Right In: 74.295+/-94.492 $\chi^2$/NDF: 11.2/15

Left Out: -156.692+/-38.476 $\chi^2$/NDF:20.9/16

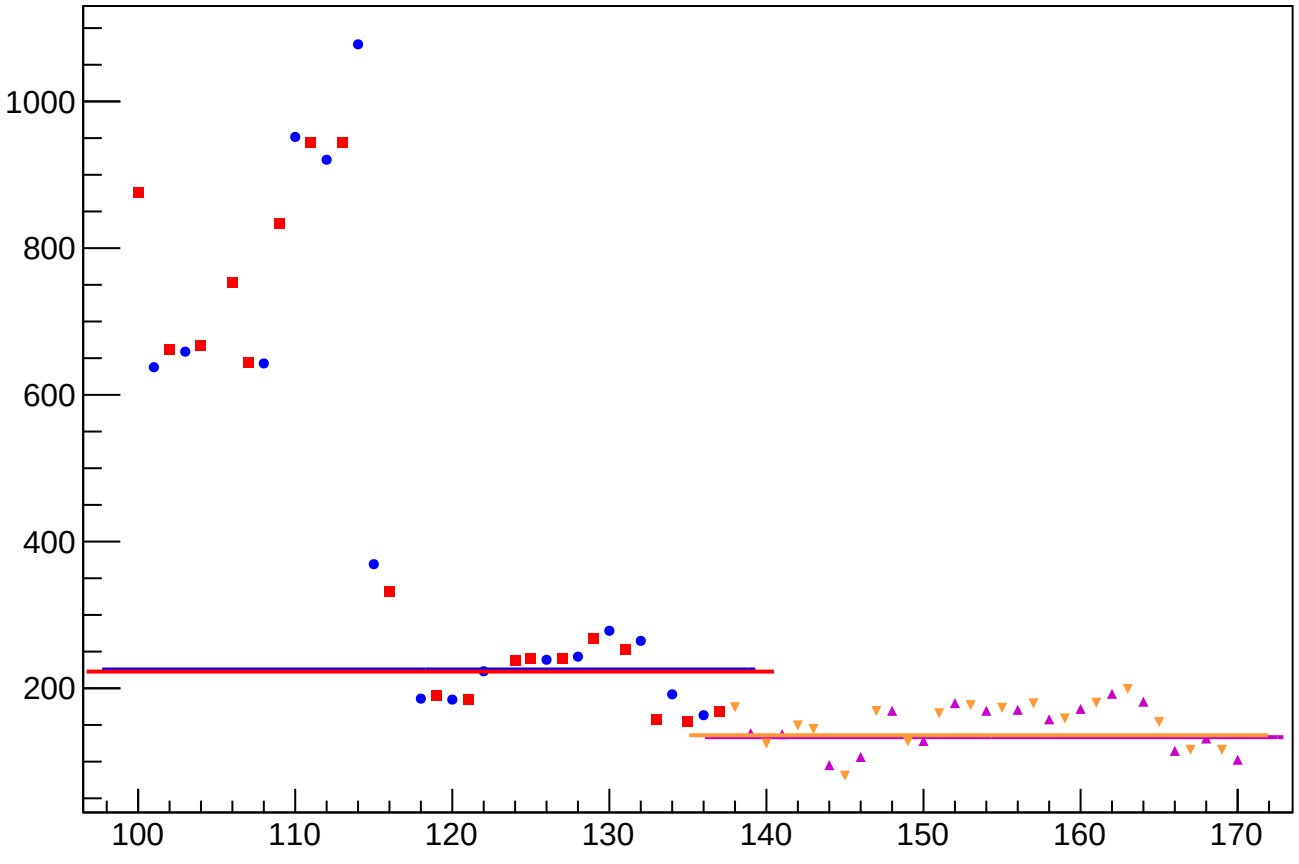
Right Out: -124.199+/-94.666 $\chi^2$/NDF: 16.3/18

Left In: -8.229+/-37.965 $\chi^2$/NDF:21.9/15

+ sign -123.841+/-35.635 $\chi^2$/NDF: 37.2/32

All: -73.510+/-25.056 $\chi^2$/NDF: 80.7/67

- sign -24.297+/-35.237 $\chi^2$/NDF: 39.5/34




Right In: 225.614+/-0.067 $\chi^2$/NDF: 3025994.8/15

Left Out: 136.009+/-0.027 $\chi^2$/NDF:1650375.6/16

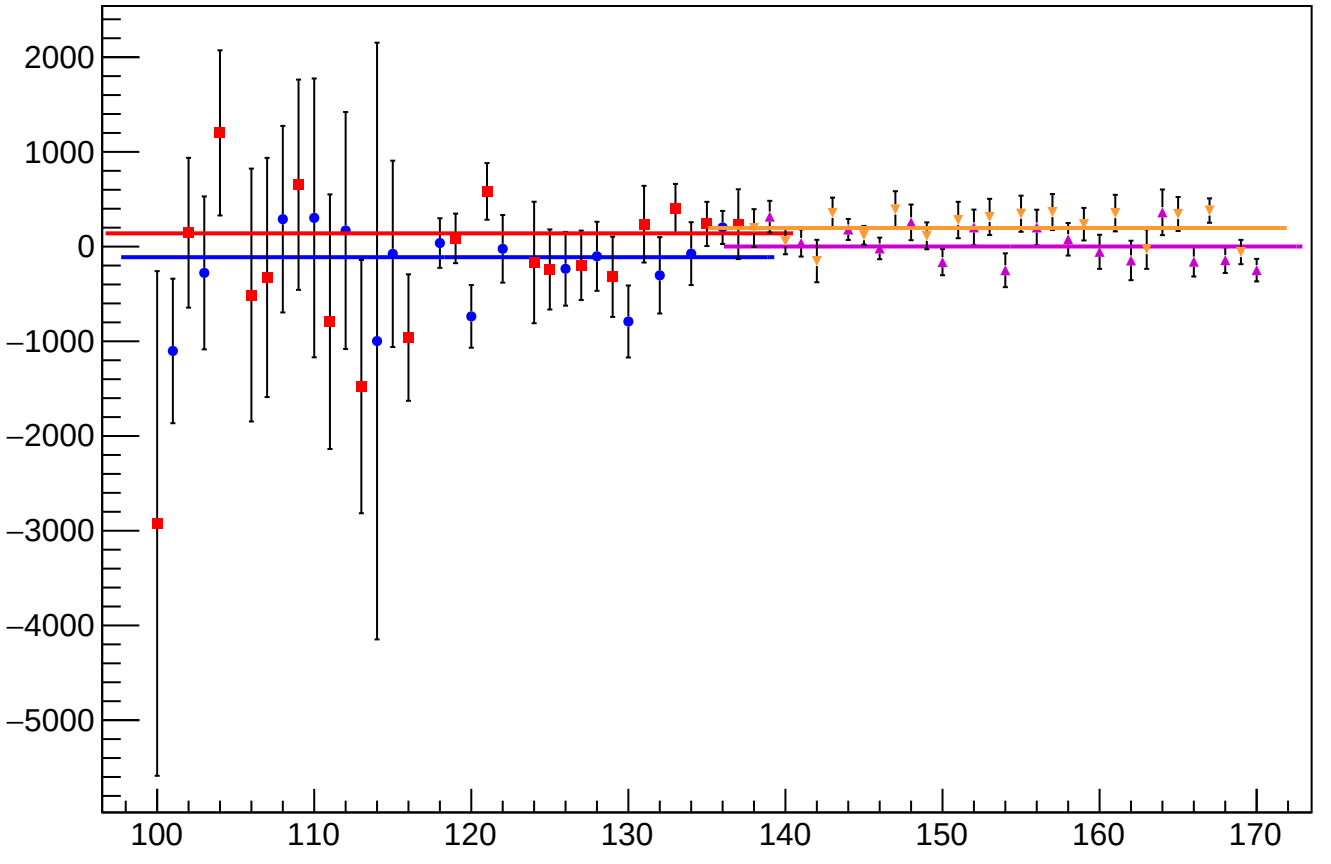
Right Out: 222.787+/-0.067 $\chi^2$/NDF: 3848136.6/18

Left In: 133.358+/-0.027 $\chi^2$/NDF:1260246.6/15

+ sign 148.753+/-0.025 $\chi^2$/NDF: 6219062.0/32

All: 147.234+/-0.018 $\chi^2$/NDF: 12872161.8/67

- sign 145.749+/-0.025 $\chi^2$/NDF: 6645914.1/34




Right In: -111.916+/-96.551 $\chi^2$/NDF: 12.8/15

Left Out: 196.533+/-38.925 $\chi^2$/NDF:16.8/16

Right Out: 139.974+/-99.174 $\chi^2$/NDF: 14.6/18

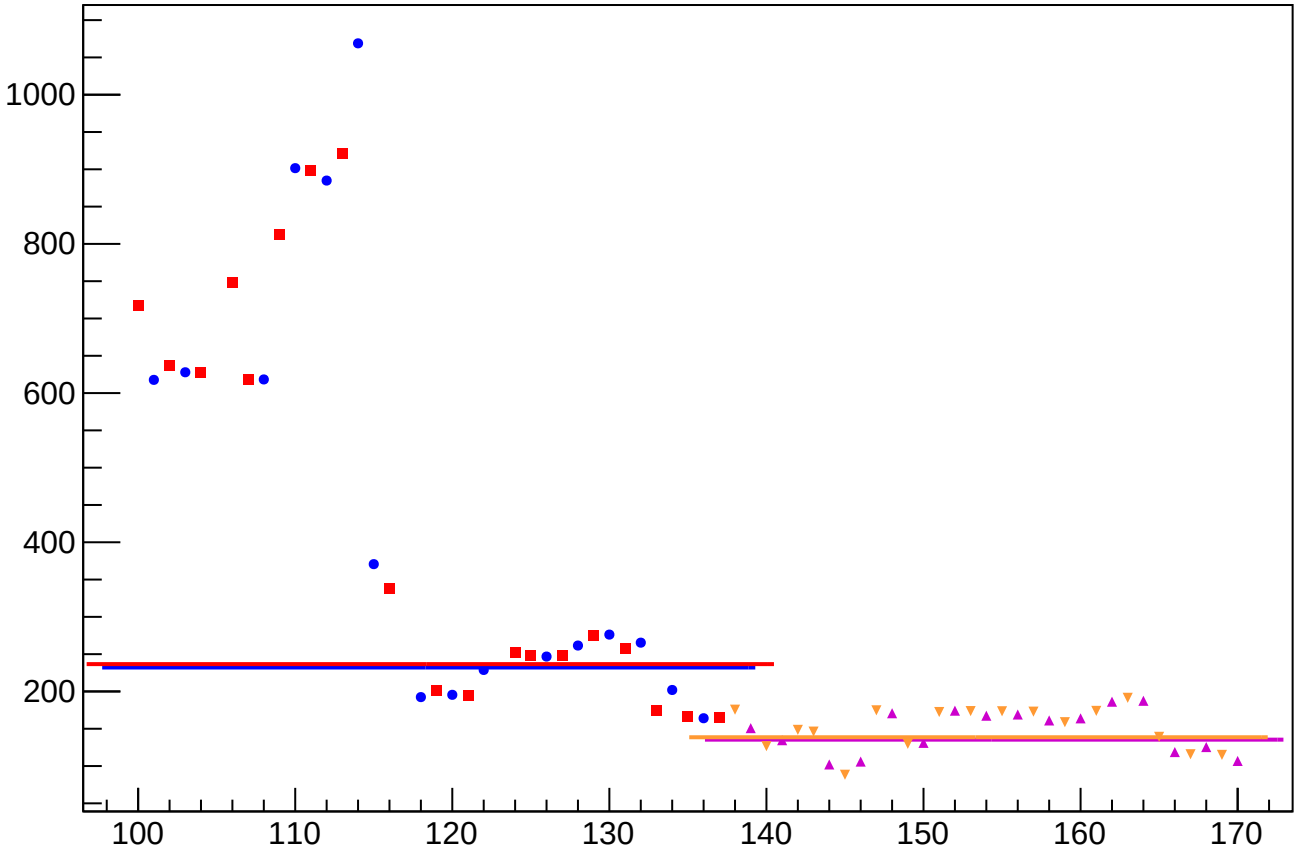
Left In: 1.124+/-38.261 $\chi^2$/NDF:23.5/15

+ sign 153.409+/-36.101 $\chi^2$/NDF: 38.5/32

All: 85.504+/-25.383 $\chi^2$/NDF: 85.3/67

- sign 19.113+/-35.696 $\chi^2$/NDF: 39.8/34

# asym_sam_37_26_dd_rms vs Slug




Right In: 232.107+/-0.068 $\chi^2$/NDF: 2885510.6/15

Left Out: 138.579+/-0.028 $\chi^2$/NDF:1302644.5/16

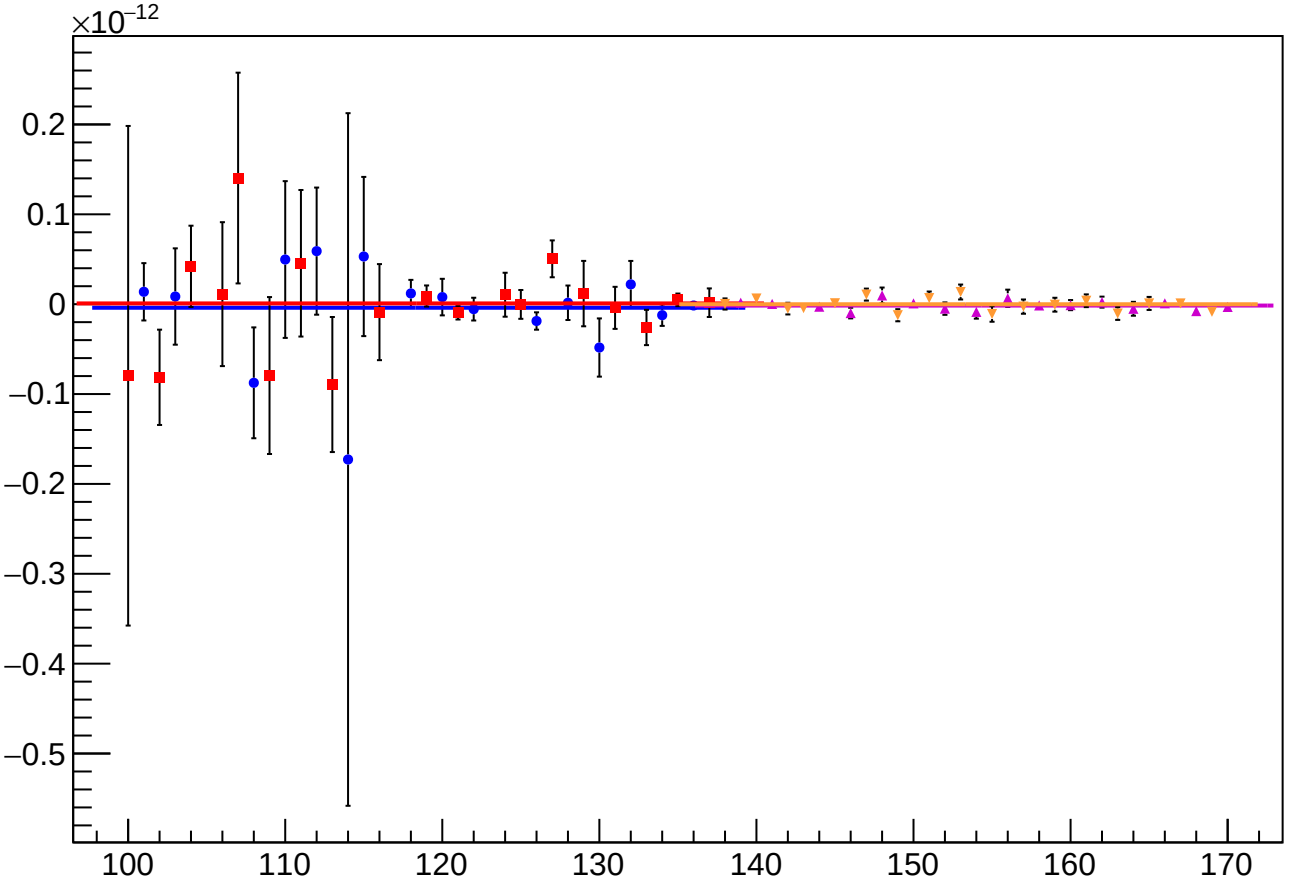
Right Out: 236.647+/-0.070 $\chi^2$/NDF: 3521033.7/18

Left In: 135.377+/-0.027 $\chi^2$/NDF:1075245.7/15

+ sign 151.655+/-0.026 $\chi^2$/NDF: 5802497.9/32

All: 150.058+/-0.018 $\chi^2$/NDF: 12221760.1/67

- sign 148.497+/-0.025 $\chi^2$/NDF: 6411524.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 11.4/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:21.4/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 18.1/18

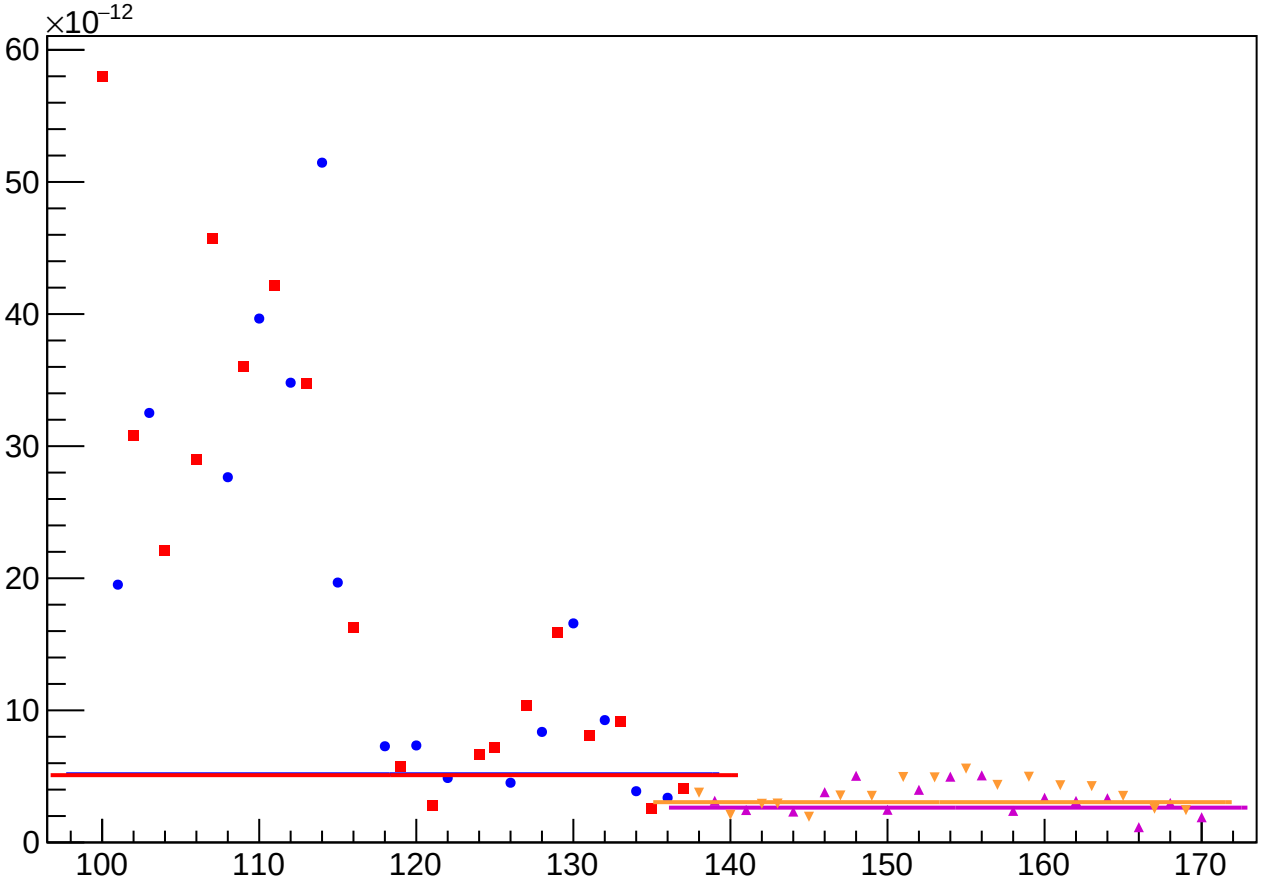
Left In: -0.000+/-0.000 $\chi^2$/NDF:9.2/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 33.8/32

All: -0.000+/-0.000 $\chi^2$/NDF: 61.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.6/34

# asym_sam_37_26_dd_reg_vs_cor_diff_rms vs Slug




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2618432.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1218790.3/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 3236196.8/18

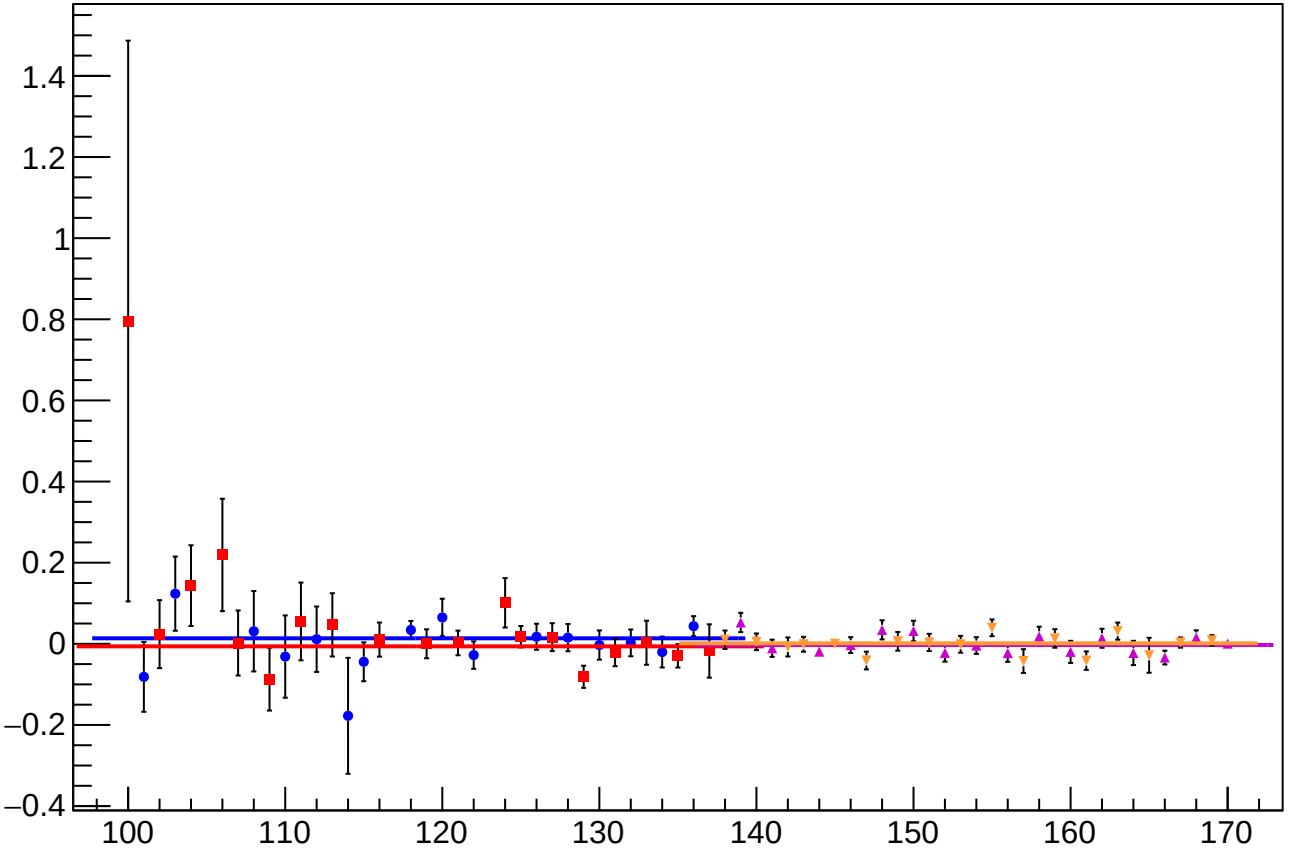
Left In: 0.000+/-0.000 $\chi^2$/NDF:1241097.6/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4421529.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 9727013.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 5179833.4/34

# asym_sam_37_26_dd_dit_vs_cor_diff_mean vs Slug




Right In: 0.014+/-0.010 $\chi^2$/NDF: 12.3/15

Left Out: 0.001+/-0.005 $\chi^2$/NDF:16.5/16

Right Out: -0.006+/-0.010 $\chi^2$/NDF: 21.5/18

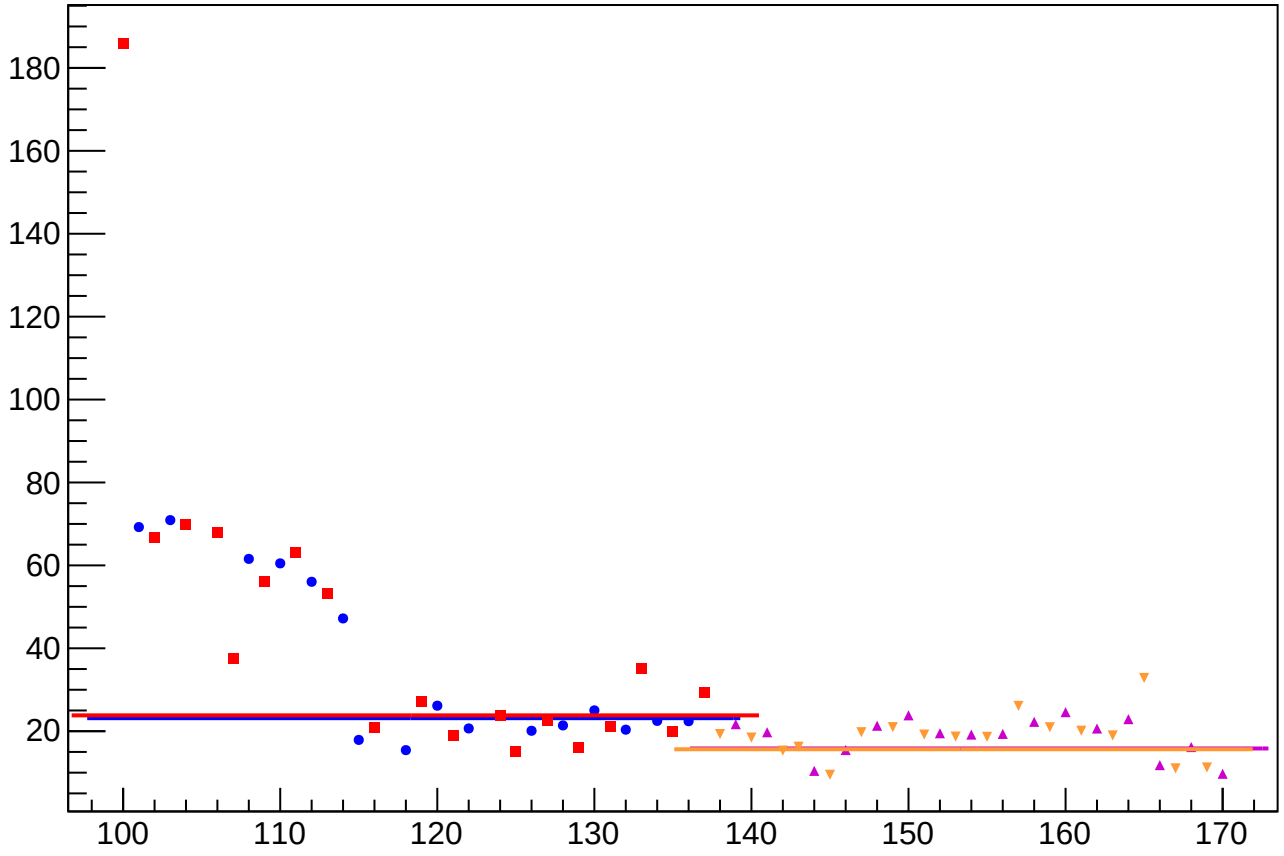
Left In: -0.003+/-0.005 $\chi^2$/NDF:20.1/15

+ sign 0.003+/-0.004 $\chi^2$/NDF: 30.1/32

All: 0.000+/-0.003 $\chi^2$/NDF: 73.1/67

- sign -0.004+/-0.004 $\chi^2$/NDF: 41.6/34

# asym_sam_37_26_dd_dit_vs_cor_diff_rms vs Slug




Right In: 23.145+/-0.007 $\chi^2$/NDF: 2406426.8/15

Left Out: 15.647+/-0.003 $\chi^2$/NDF:2311462.7/16

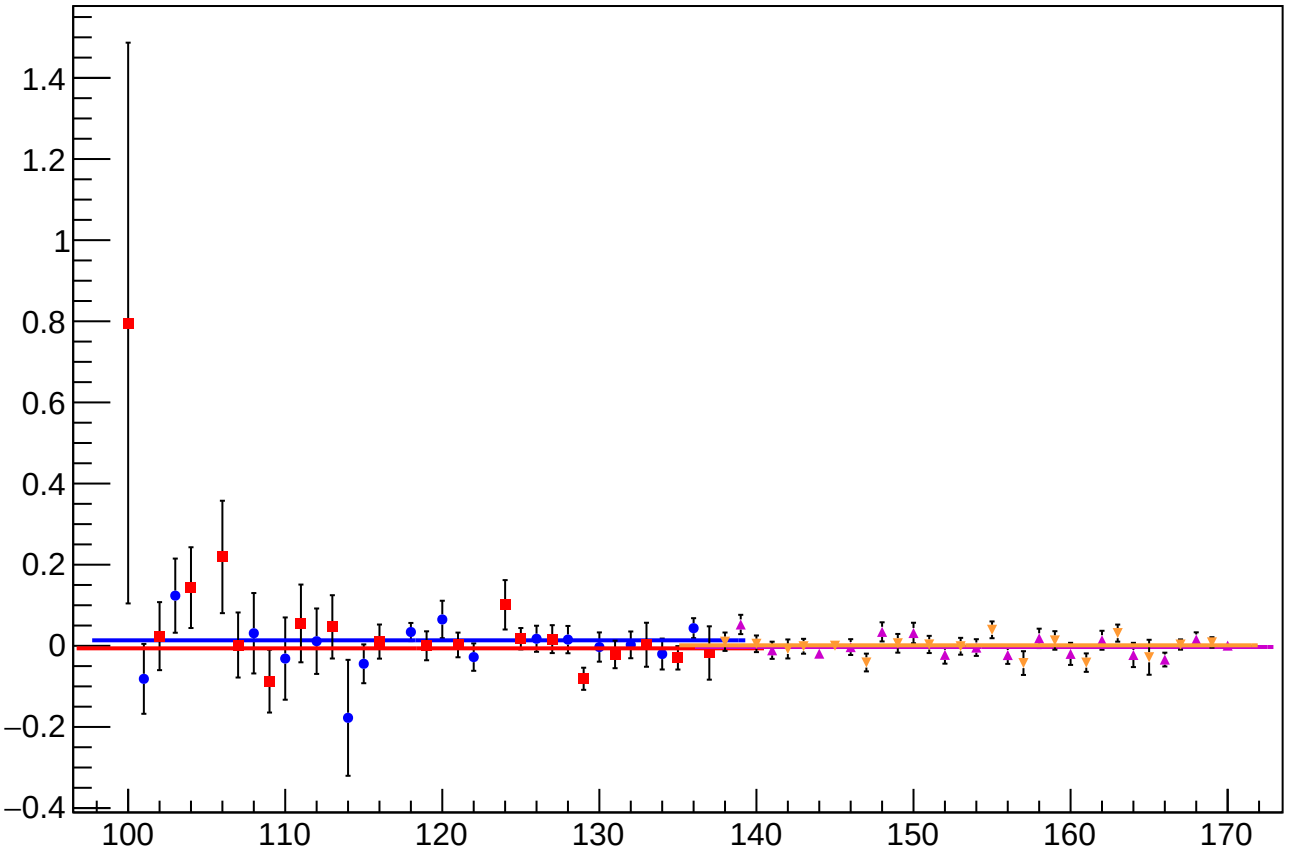
Right Out: 23.825+/-0.007 $\chi^2$/NDF: 2898916.7/18

Left In: 15.836+/-0.003 $\chi^2$/NDF:2371712.8/15

+ sign 16.975+/-0.003 $\chi^2$/NDF: 5672181.1/32

All: 17.121+/-0.002 $\chi^2$/NDF: 11980298.0/67

- sign 17.276+/-0.003 $\chi^2$/NDF: 6303016.1/34




Right In: 0.014+/-0.010 $\chi^2$/NDF: 12.3/15

Left Out: 0.001+/-0.005 $\chi^2$/NDF:16.5/16

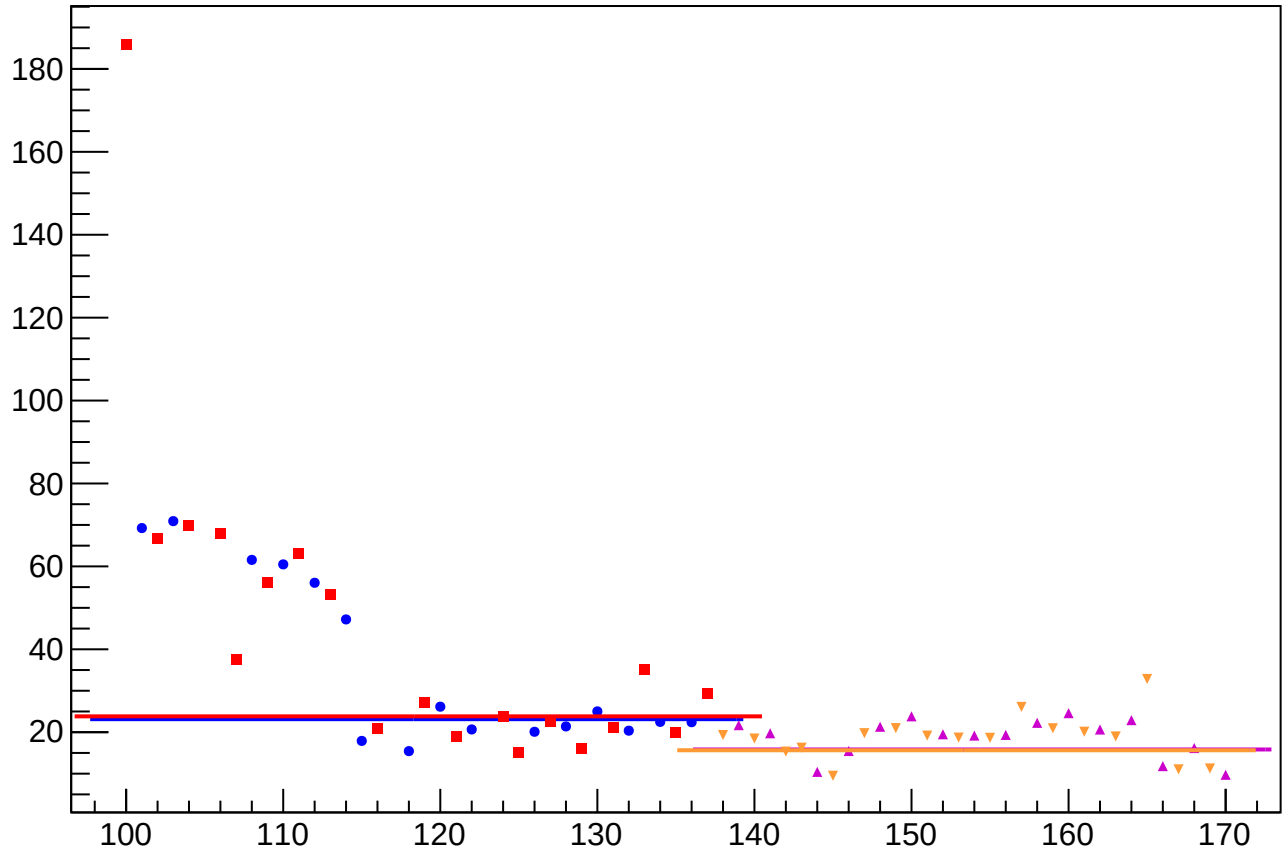
Right Out: -0.006+/-0.010 $\chi^2$/NDF: 21.5/18

Left In: -0.003+/-0.005 $\chi^2$/NDF:20.1/15

+ sign 0.003+/-0.004 $\chi^2$/NDF: 30.1/32

All: 0.000+/-0.003 $\chi^2$/NDF: 73.1/67

- sign -0.004+/-0.004 $\chi^2$/NDF: 41.6/34




Right In: 23.145+/-0.007 $\chi^2$/NDF: 2406426.8/15

Left Out: 15.647+/-0.003 $\chi^2$/NDF:2311462.7/16

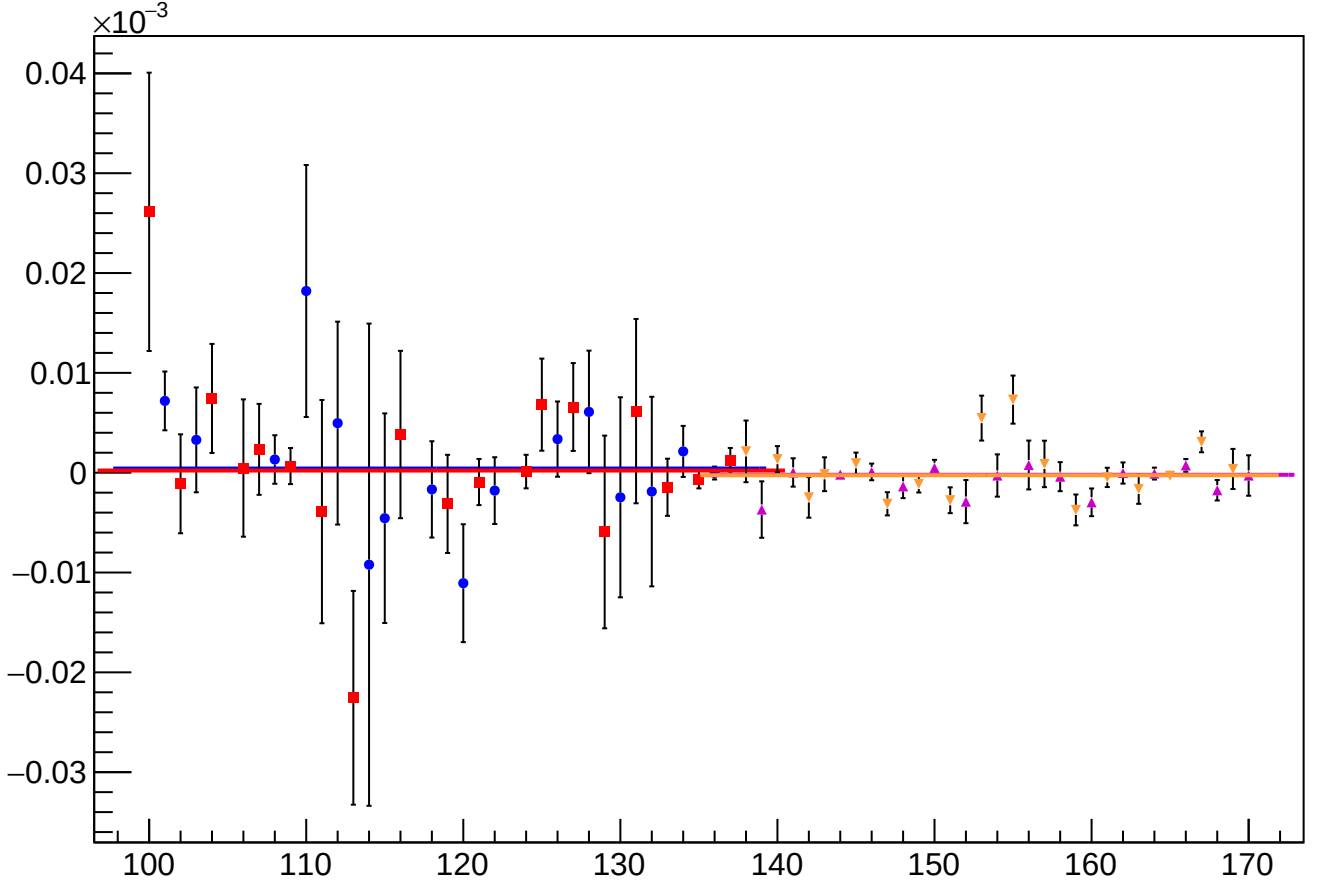
Right Out: 23.825+/-0.007 $\chi^2$/NDF: 2898916.7/18

Left In: 15.836+/-0.003 $\chi^2$/NDF:2371712.8/15

+ sign 16.975+/-0.003 $\chi^2$/NDF: 5672181.1/32

All: 17.121+/-0.002 $\chi^2$/NDF: 11980298.0/67

- sign 17.276+/-0.003 $\chi^2$/NDF: 6303016.1/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 15.3/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:48.4/16

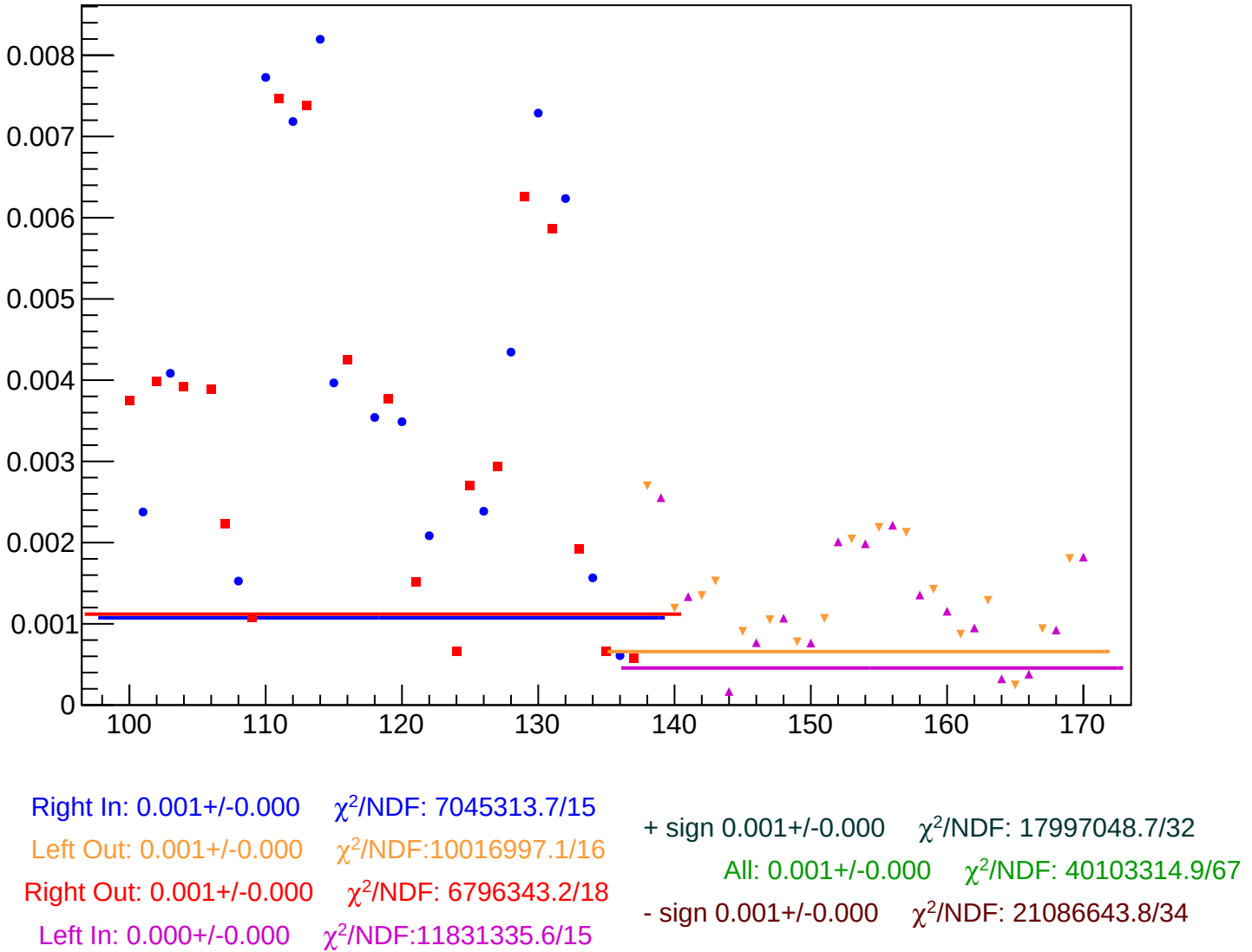
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 17.9/18

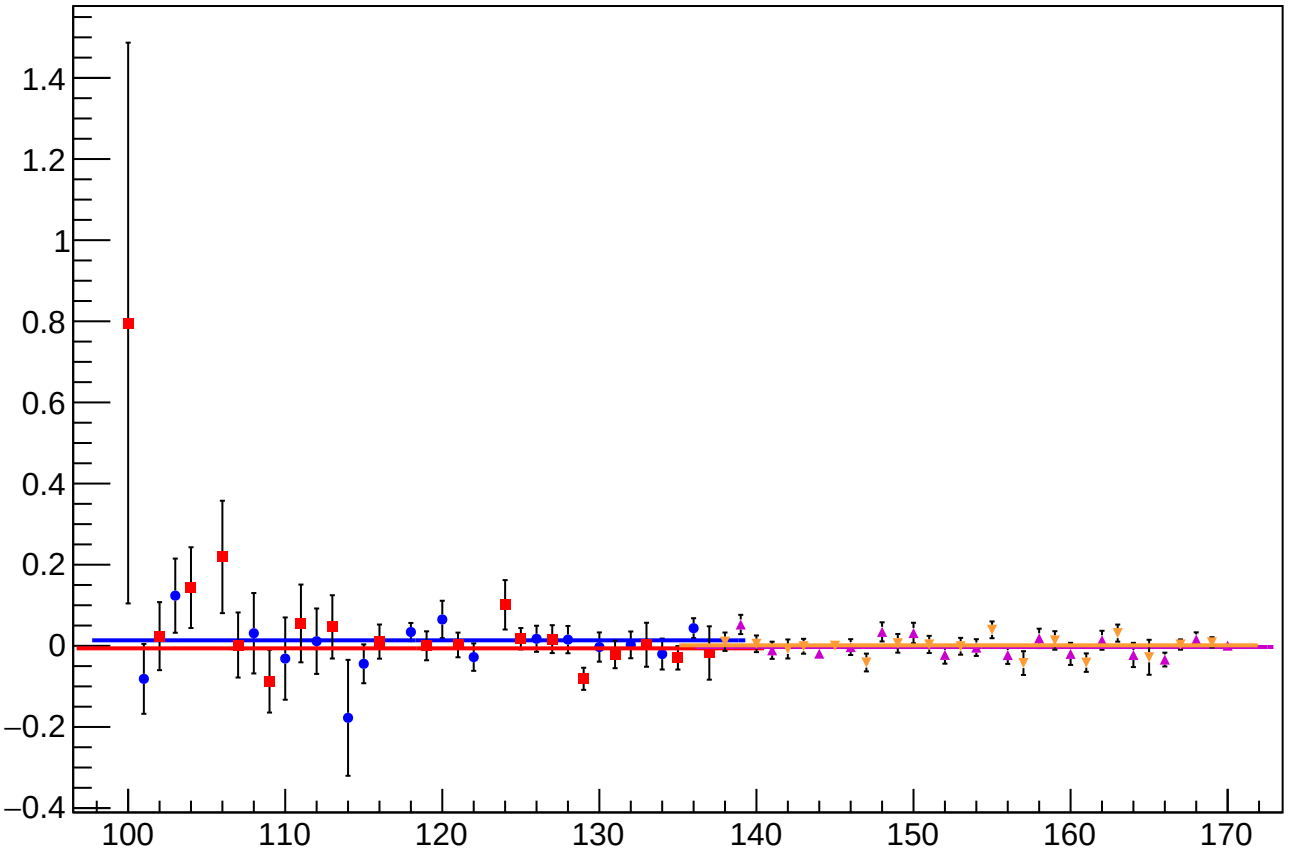
Left In: -0.000+/-0.000 $\chi^2$/NDF:13.6/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 64.8/32

All: -0.000+/-0.000 $\chi^2$/NDF: 96.8/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 32.0/34


asym_sam_37_26_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 7045313.7/15
Left Out: 0.001+/-0.000 χ²/NDF:10016997.1/16
Right Out: 0.001+/-0.000 χ²/NDF: 6796343.2/18
Left In: 0.000+/-0.000 χ²/NDF:11831335.6/15
+ sign 0.001+/-0.000 χ²/NDF: 17997048.7/32
All: 0.001+/-0.000 χ²/NDF: 40103314.9/67
- sign 0.001+/-0.000 χ²/NDF: 21086643.8/34




Right In: 0.014+/-0.010 $\chi^2$/NDF: 12.3/15

Left Out: 0.001+/-0.005 $\chi^2$/NDF:16.5/16

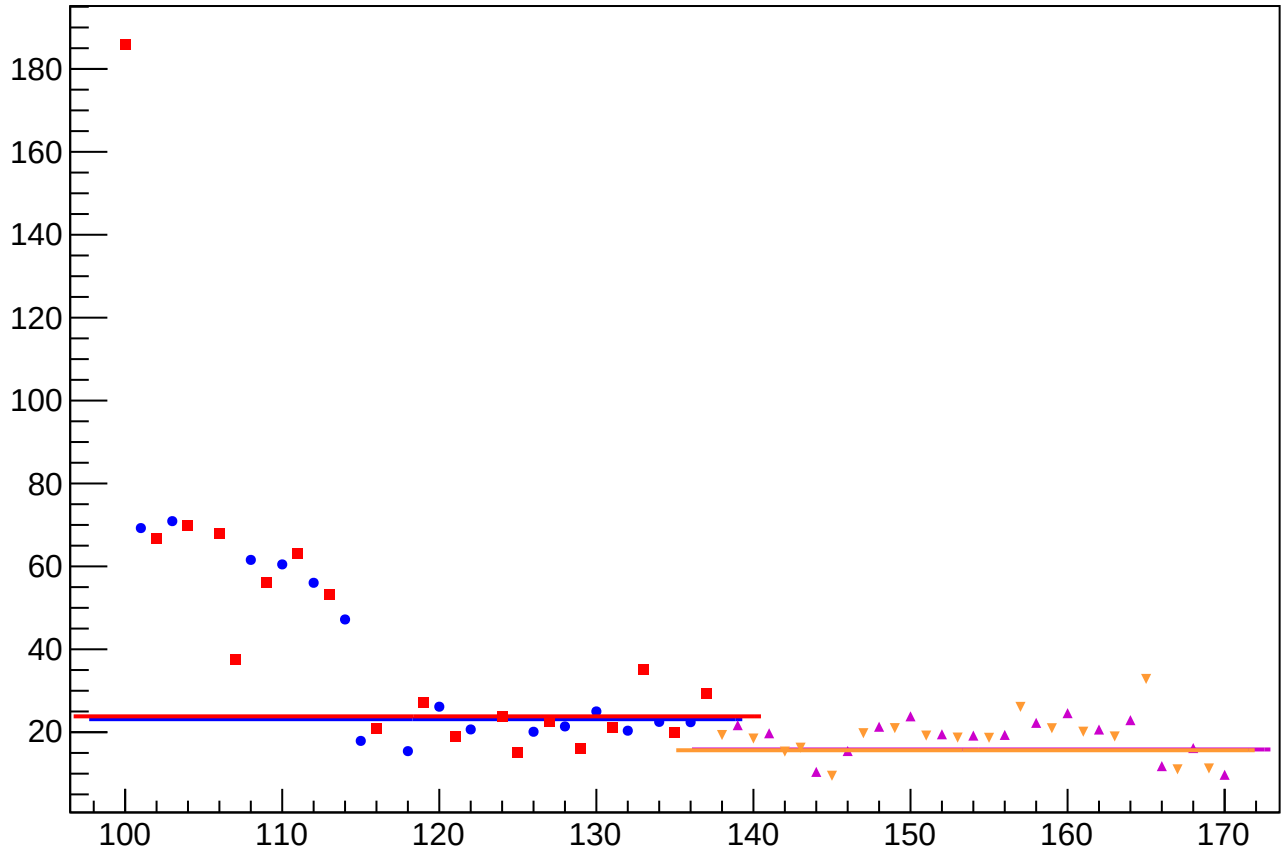
Right Out: -0.006+/-0.010 $\chi^2$/NDF: 21.5/18

Left In: -0.003+/-0.005 $\chi^2$/NDF:20.1/15

+ sign 0.003+/-0.004 $\chi^2$/NDF: 30.1/32

All: 0.000+/-0.003 $\chi^2$/NDF: 73.1/67

- sign -0.004+/-0.004 $\chi^2$/NDF: 41.6/34




Right In: 23.144+/-0.007 $\chi^2$/NDF: 2406451.1/15

Left Out: 15.647+/-0.003 $\chi^2$/NDF:2311624.1/16

Right Out: 23.824+/-0.007 $\chi^2$/NDF: 2898863.9/18

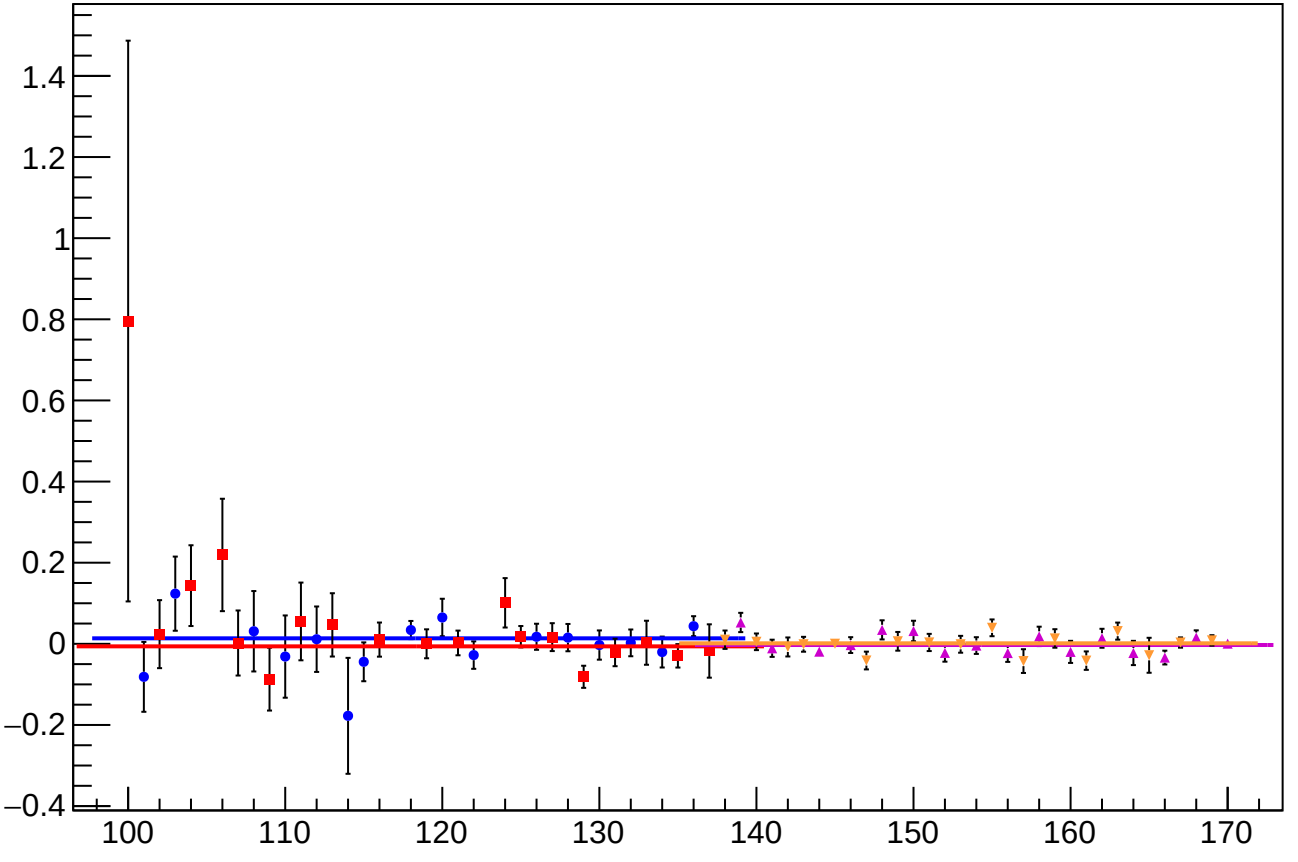
Left In: 15.836+/-0.003 $\chi^2$/NDF:2371743.5/15

+ sign 16.975+/-0.003 $\chi^2$/NDF: 5672111.4/32

All: 17.121+/-0.002 $\chi^2$/NDF: 11980073.5/67

- sign 17.276+/-0.003 $\chi^2$/NDF: 6302856.5/34

asym_sam_37_26_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.014+/-0.010 $\chi^2$/NDF: 12.3/15

Left Out: 0.001+/-0.005 $\chi^2$/NDF:16.5/16

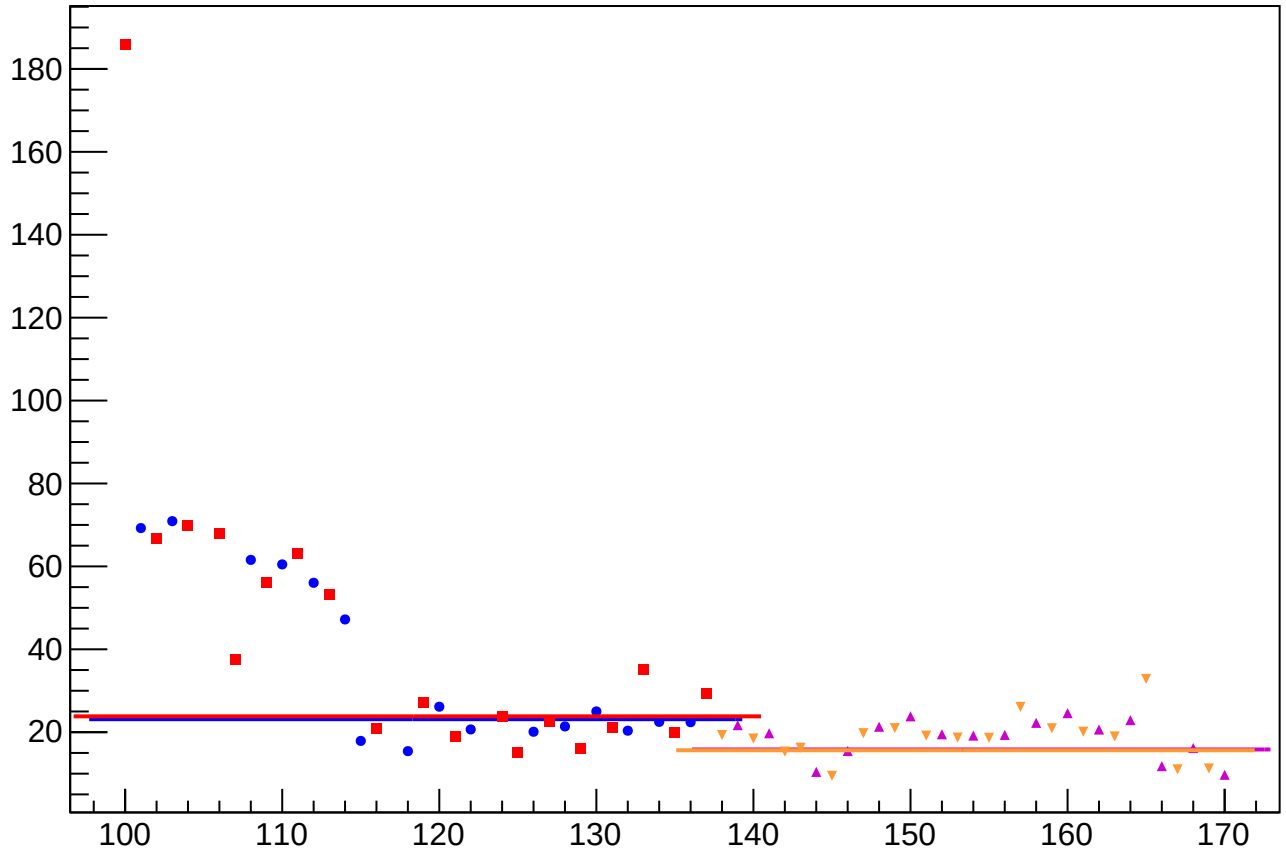
Right Out: -0.006+/-0.010 $\chi^2$/NDF: 21.5/18

Left In: -0.003+/-0.005 $\chi^2$/NDF:20.1/15

+ sign 0.003+/-0.004 $\chi^2$/NDF: 30.1/32

All: 0.000+/-0.003 $\chi^2$/NDF: 73.1/67

- sign -0.004+/-0.004 $\chi^2$/NDF: 41.6/34




Right In: 23.144+/-0.007 $\chi^2$/NDF: 2406451.1/15

Left Out: 15.647+/-0.003 $\chi^2$/NDF:2311624.1/16

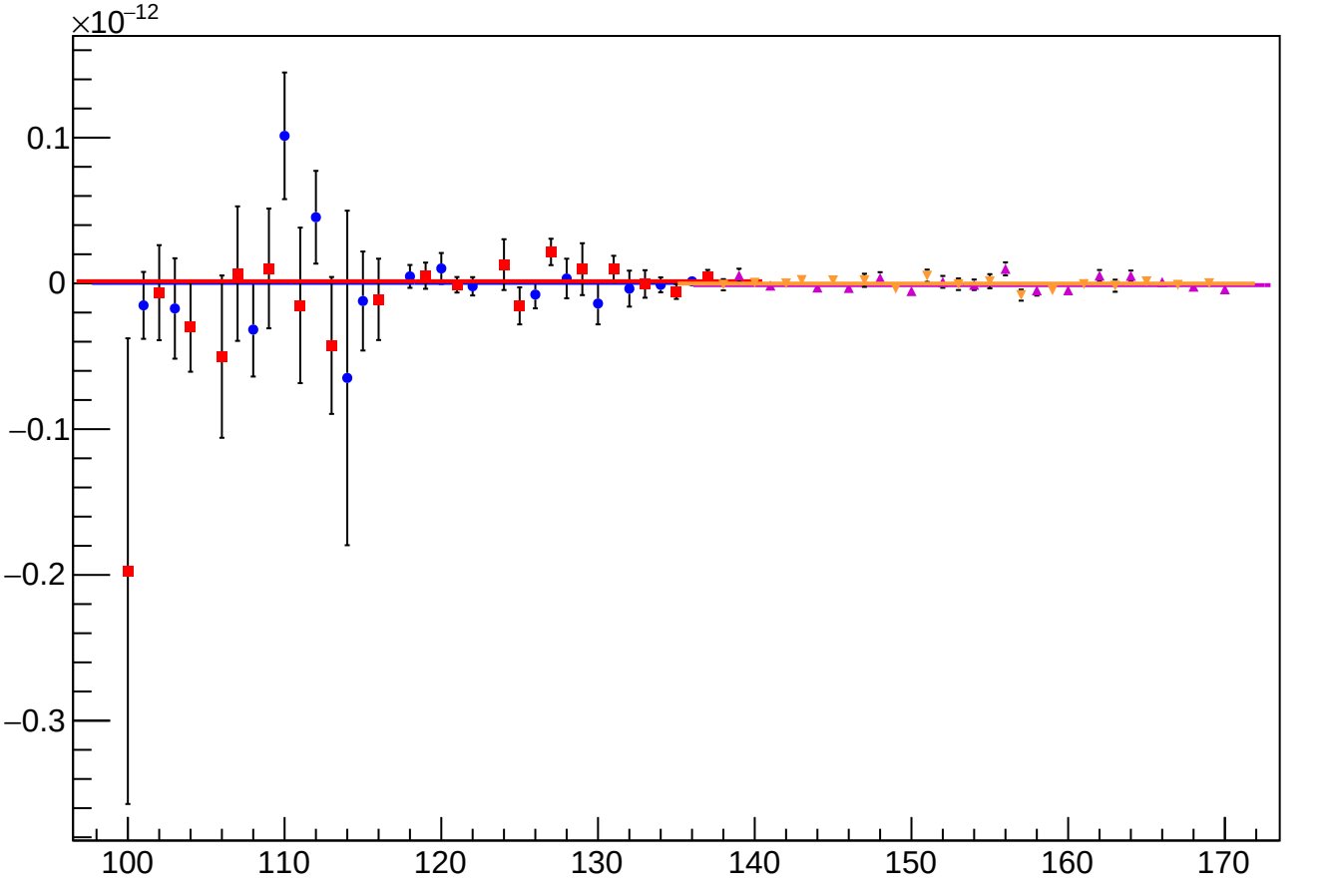
Right Out: 23.824+/-0.007 $\chi^2$/NDF: 2898863.9/18

Left In: 15.836+/-0.003 $\chi^2$/NDF:2371743.5/15

+ sign 16.975+/-0.003 $\chi^2$/NDF: 5672111.4/32

All: 17.121+/-0.002 $\chi^2$/NDF: 11980073.5/67

- sign 17.276+/-0.003 $\chi^2$/NDF: 6302856.5/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 12.9/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:12.5/16

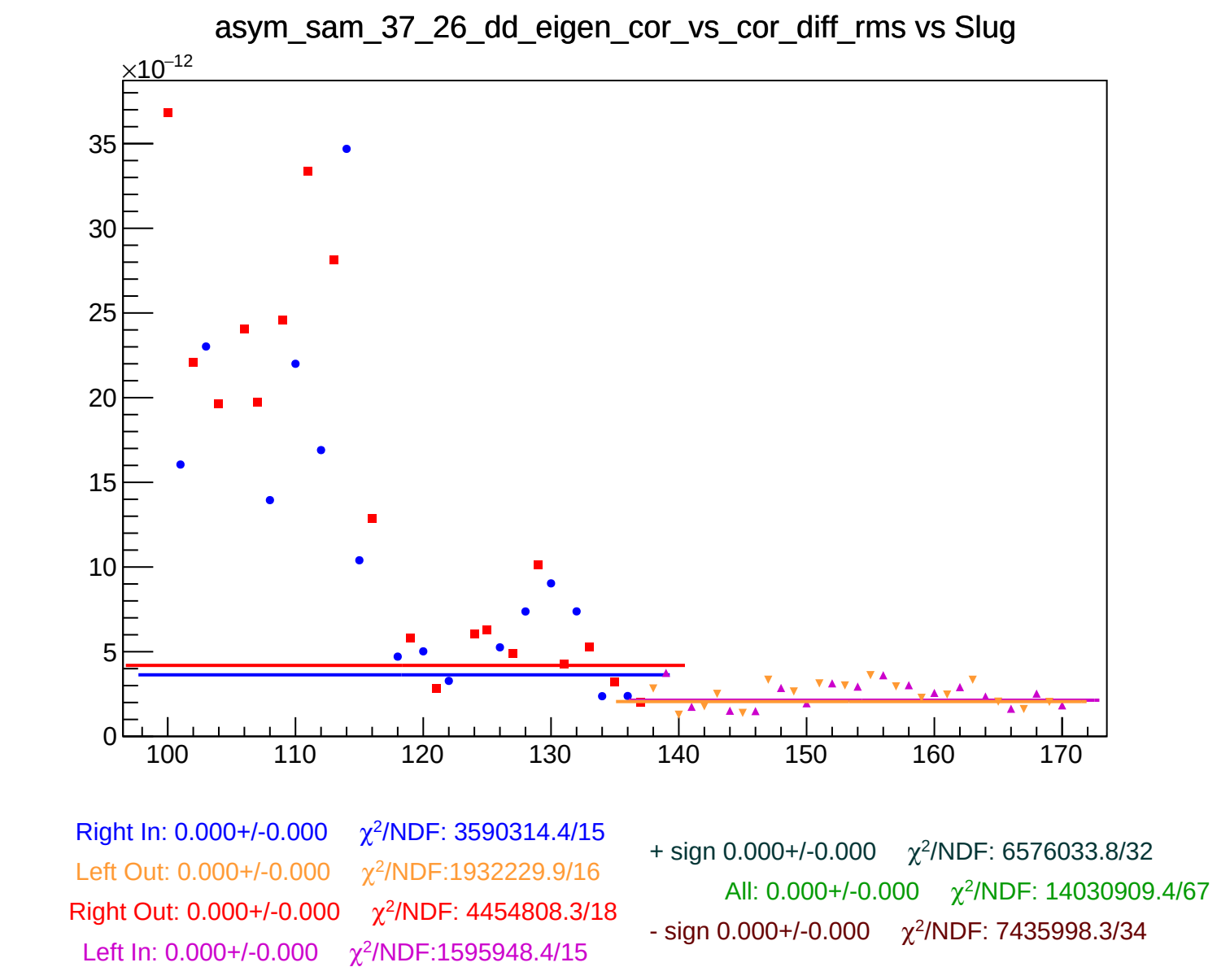
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 15.6/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:24.5/15

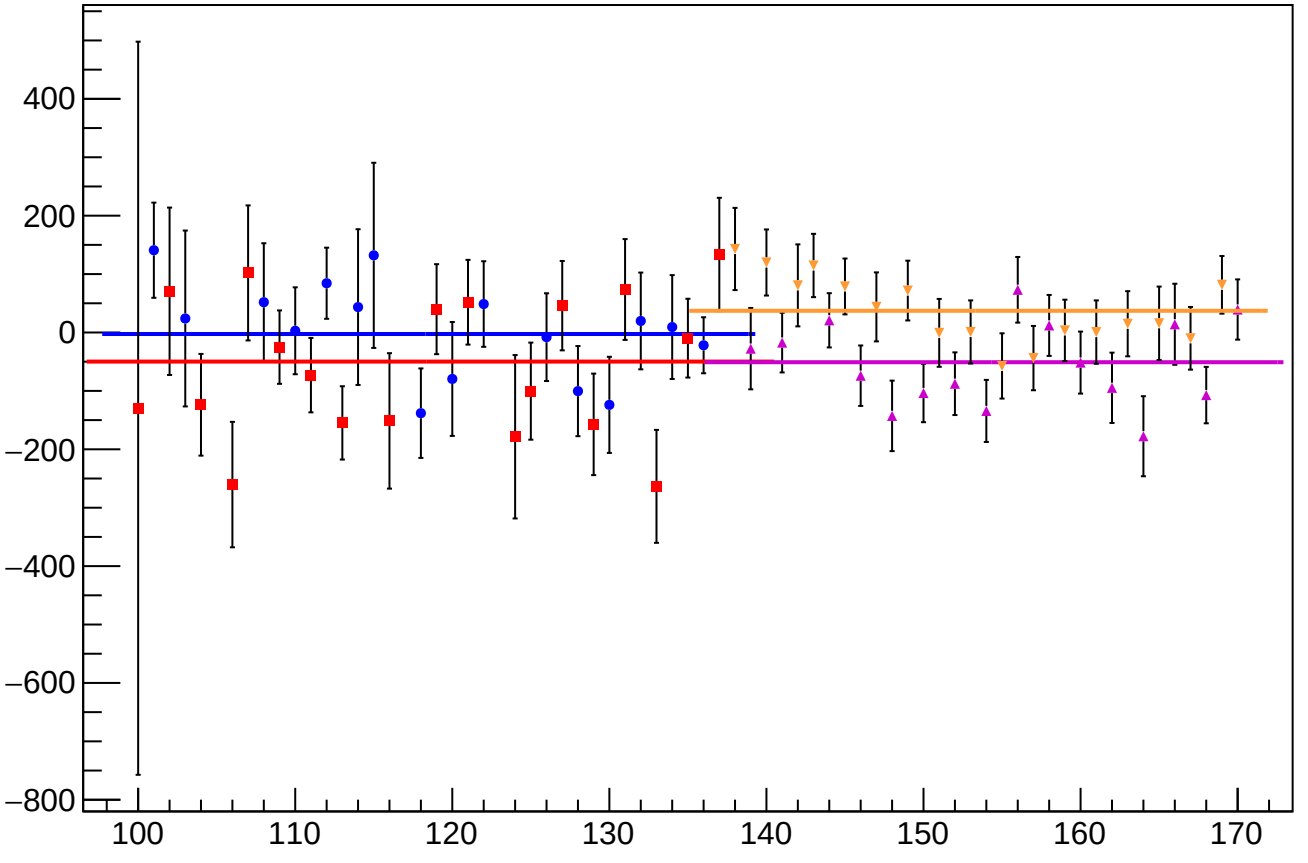
+ sign -0.000+/-0.000 $\chi^2$/NDF: 25.5/32

All: -0.000+/-0.000 $\chi^2$/NDF: 67.6/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 41.3/34


asym_sam_37_26_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
35
30
25
20
15
10
5
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 3590314.4/15
Left Out: 0.000+/-0.000 χ²/NDF:1932229.9/16
Right Out: 0.000+/-0.000 χ²/NDF: 4454808.3/18
Left In: 0.000+/-0.000 χ²/NDF:1595948.4/15
+ sign 0.000+/-0.000 χ²/NDF: 6576033.8/32
All: 0.000+/-0.000 χ²/NDF: 14030909.4/67
- sign 0.000+/-0.000 χ²/NDF: 7435998.3/34

# reg_asym_sam_1357_avg_mean vs Slug




Right In: -2.614+/-19.994 $\chi^2$/NDF: 14.6/15

Left Out: 37.158+/-13.500 $\chi^2$/NDF:16.7/16

Right Out: -49.810+/-19.621 $\chi^2$/NDF: 29.4/18

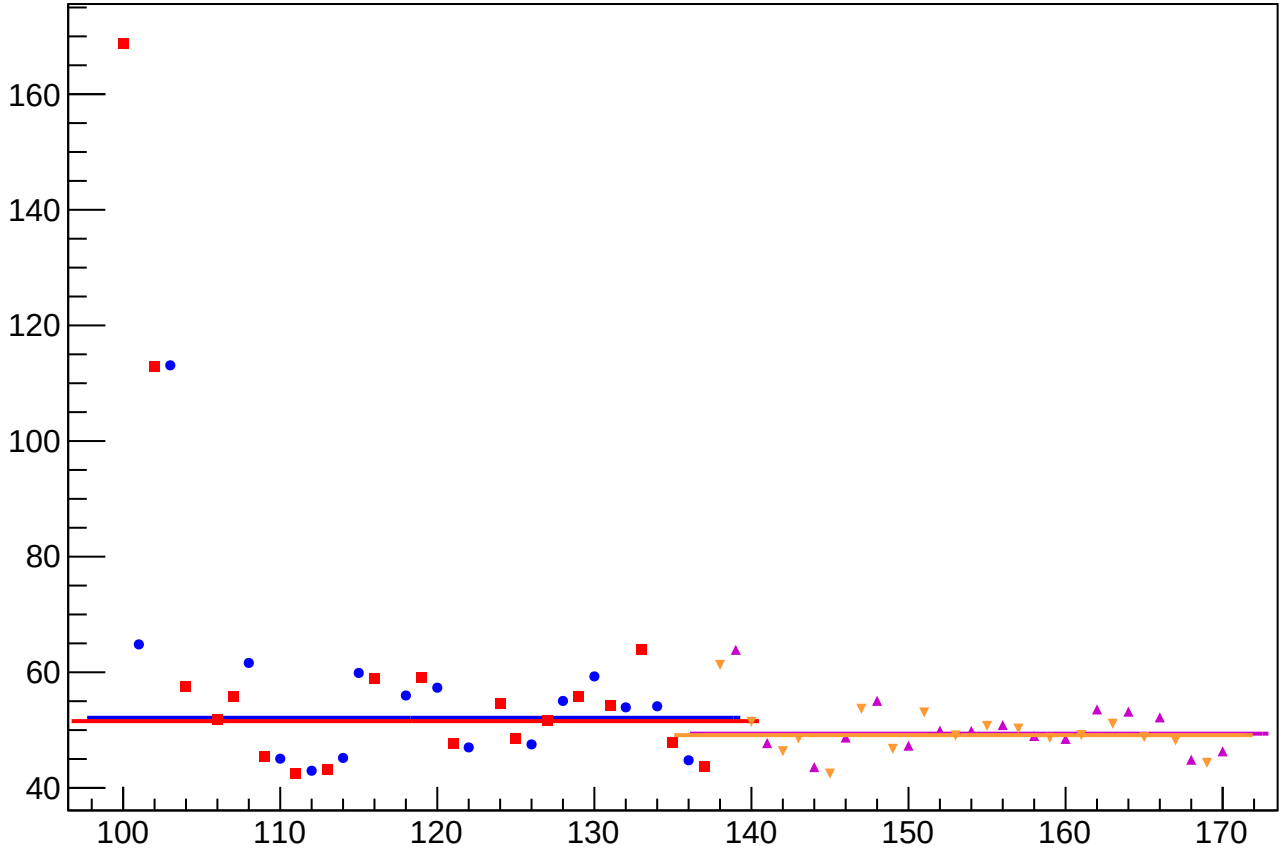
Left In: -50.888+/-13.682 $\chi^2$/NDF:25.1/15

+ sign 24.704+/-11.189 $\chi^2$/NDF: 34.0/32

All: -12.801+/-7.924 $\chi^2$/NDF: 110.9/67

- sign -50.535+/-11.223 $\chi^2$/NDF: 54.4/34

# reg_asym_sam_1357_avg_rms vs Slug




Right In: 52.128+/-0.014 $\chi^2$/NDF: 562918.0/15

Left Out: 49.127+/-0.010 $\chi^2$/NDF:155012.7/16

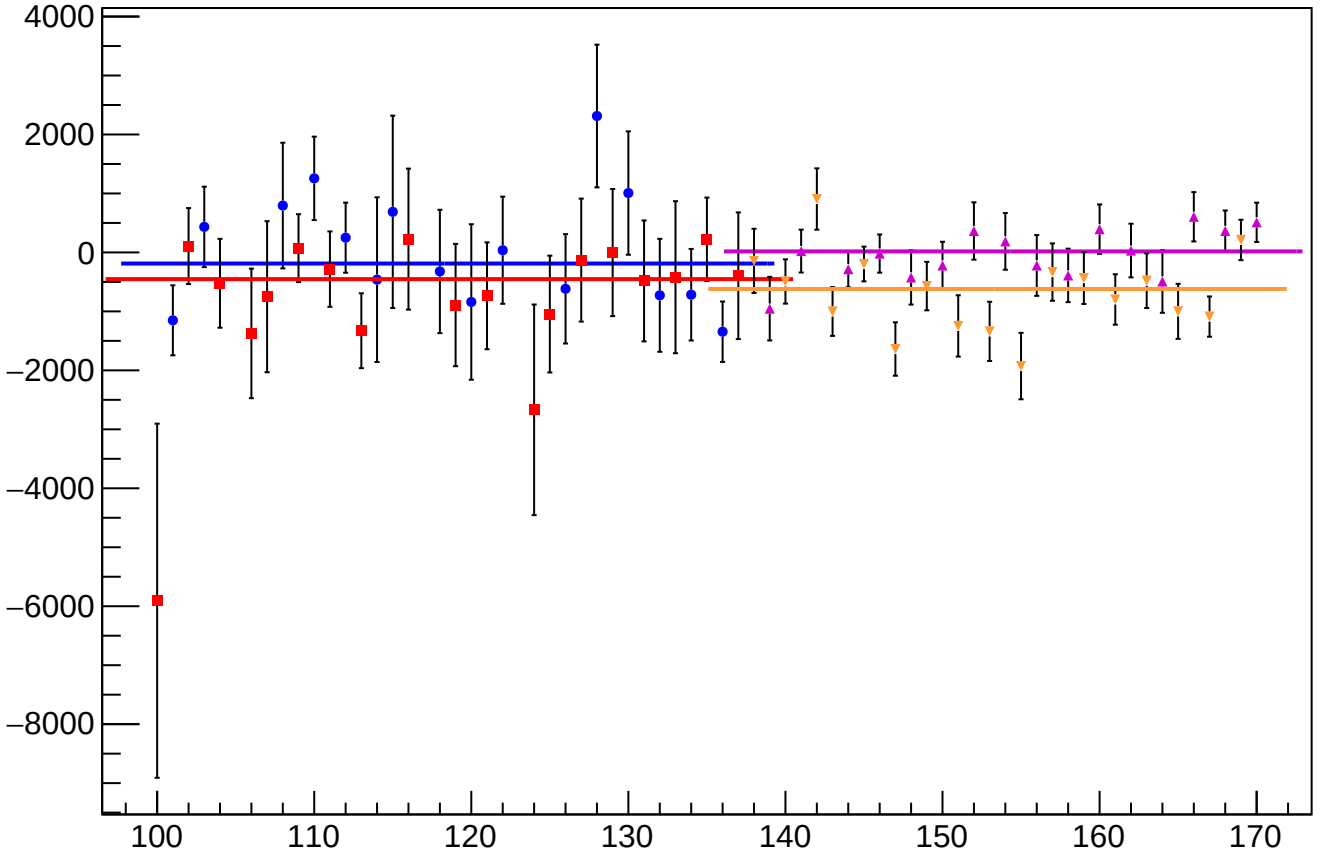
Right Out: 51.550+/-0.014 $\chi^2$/NDF: 639564.9/18

Left In: 49.383+/-0.010 $\chi^2$/NDF:187247.8/15

+ sign 50.067+/-0.008 $\chi^2$/NDF: 748882.0/32

All: 50.079+/-0.006 $\chi^2$/NDF: 1592113.5/67

- sign 50.092+/-0.008 $\chi^2$/NDF: 843226.6/34




Right In: -188.563+/-205.811 $\chi^2$/NDF: 21.4/15

Left Out: -619.877+/-102.937 $\chi^2$/NDF:35.6/16

Right Out: -452.540+/-203.918 $\chi^2$/NDF: 11.3/18

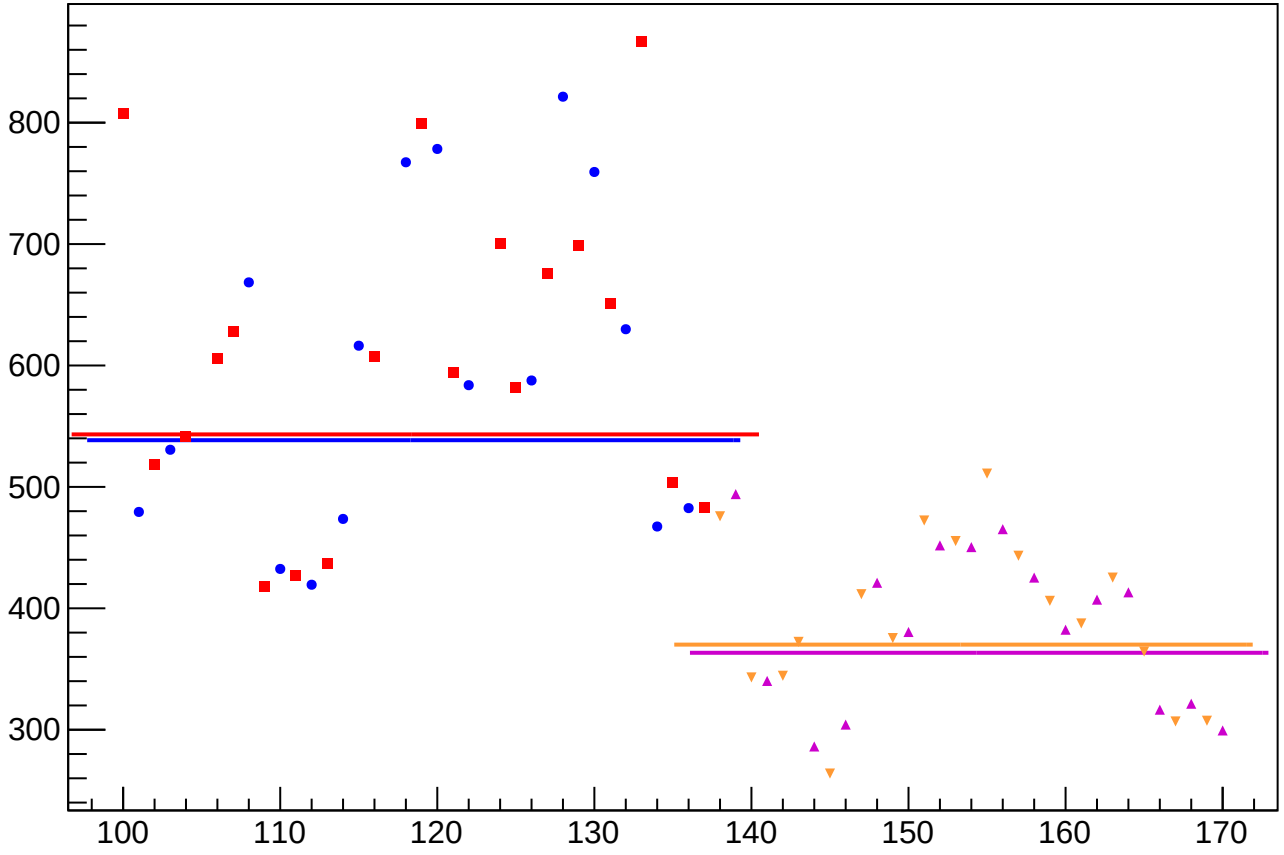
Left In: 17.235+/-101.801 $\chi^2$/NDF:14.1/15

\+ sign -533.572+/-92.064 $\chi^2$/NDF: 60.5/32

All: -302.578+/-64.749 $\chi^2$/NDF: 102.5/67

\- sign -76.486+/-91.082 $\chi^2$/NDF: 29.6/34

# asym_sam_1357_avg_reg_correction_rms vs Slug




Right In: 538.468+/-0.146 $\chi^2$/NDF: 613995.2/15

Left Out: 370.108+/-0.073 $\chi^2$/NDF:854062.8/16

Right Out: 543.242+/-0.144 $\chi^2$/NDF: 637115.5/18

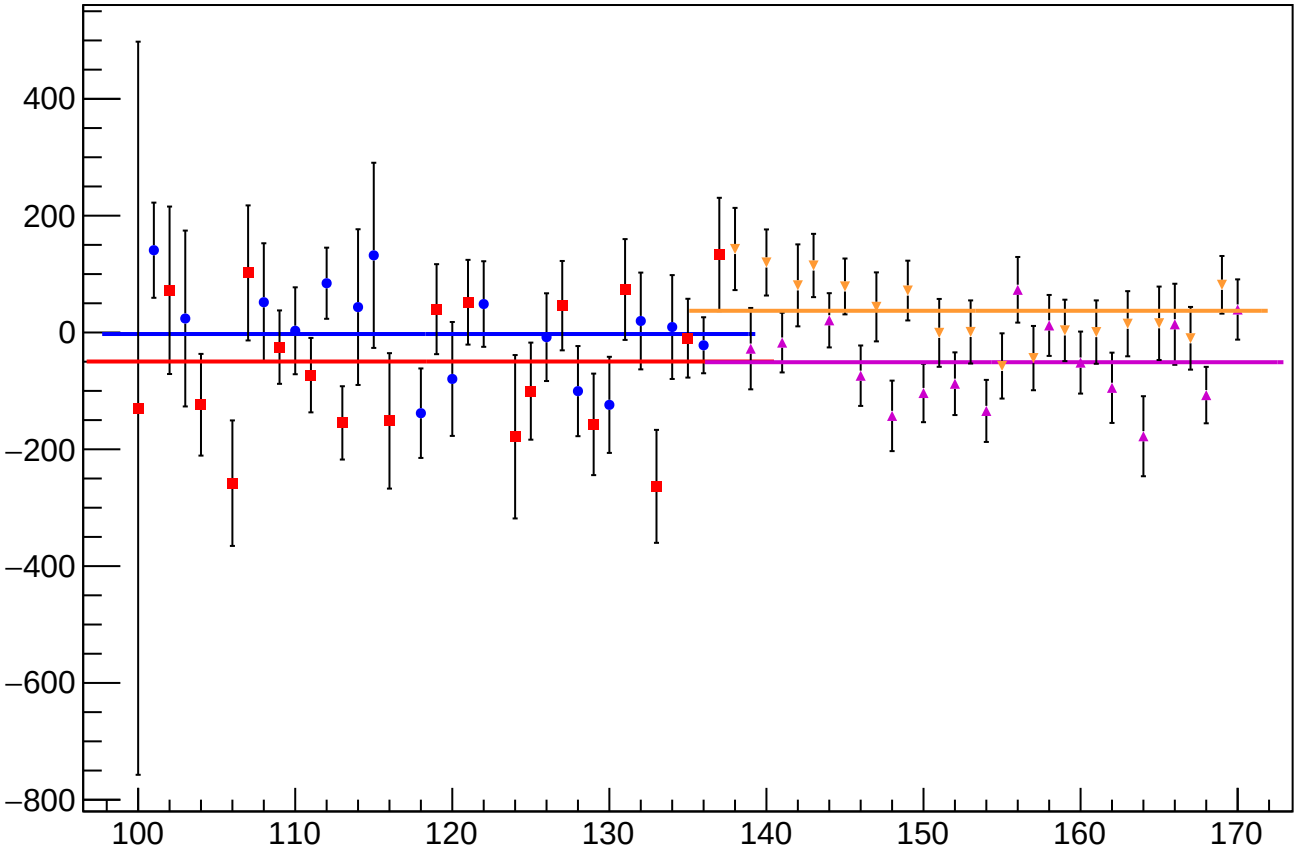
Left In: 363.380+/-0.072 $\chi^2$/NDF:770214.8/15

+ sign 403.796+/-0.065 $\chi^2$/NDF: 2538606.2/32

All: 401.505+/-0.046 $\chi^2$/NDF: 5193920.8/67

- sign 399.263+/-0.064 $\chi^2$/NDF: 2652864.1/34

# cor_asym_sam_1357_avg_mean vs Slug




Right In: -2.618+/-19.995 $\chi^2$/NDF: 14.6/15

Left Out: 37.161+/-13.500 $\chi^2$/NDF:16.7/16

Right Out: -49.694+/-19.622 $\chi^2$/NDF: 29.3/18

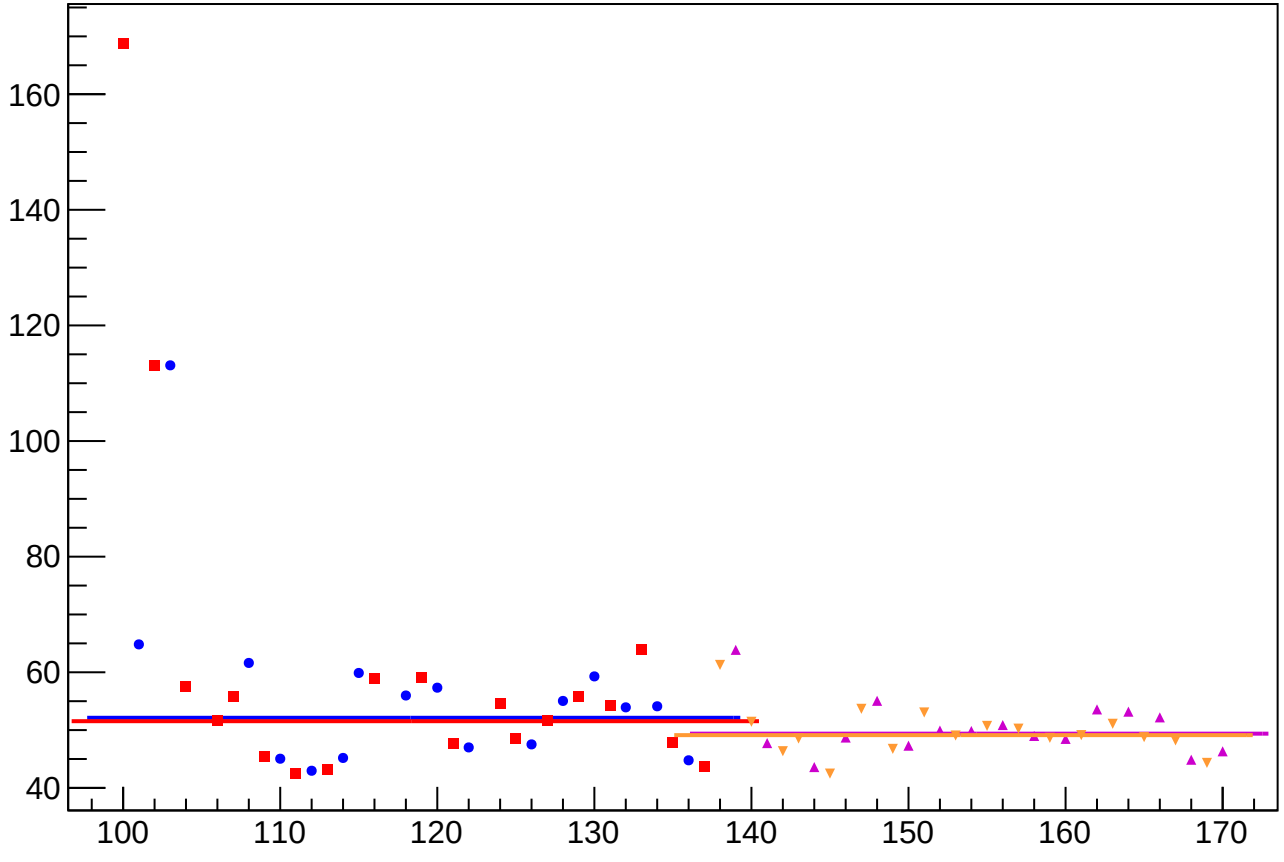
Left In: -50.886+/-13.682 $\chi^2$/NDF:25.1/15

+ sign 24.705+/-11.189 $\chi^2$/NDF: 34.0/32

All: -12.781+/-7.924 $\chi^2$/NDF: 110.8/67

- sign -50.496+/-11.223 $\chi^2$/NDF: 54.3/34

# cor_asym_sam_1357_avg_rms vs Slug




Right In: 52.128+/-0.014 $\chi^2$/NDF: 562920.3/15

Left Out: 49.127+/-0.010 $\chi^2$/NDF:155012.7/16

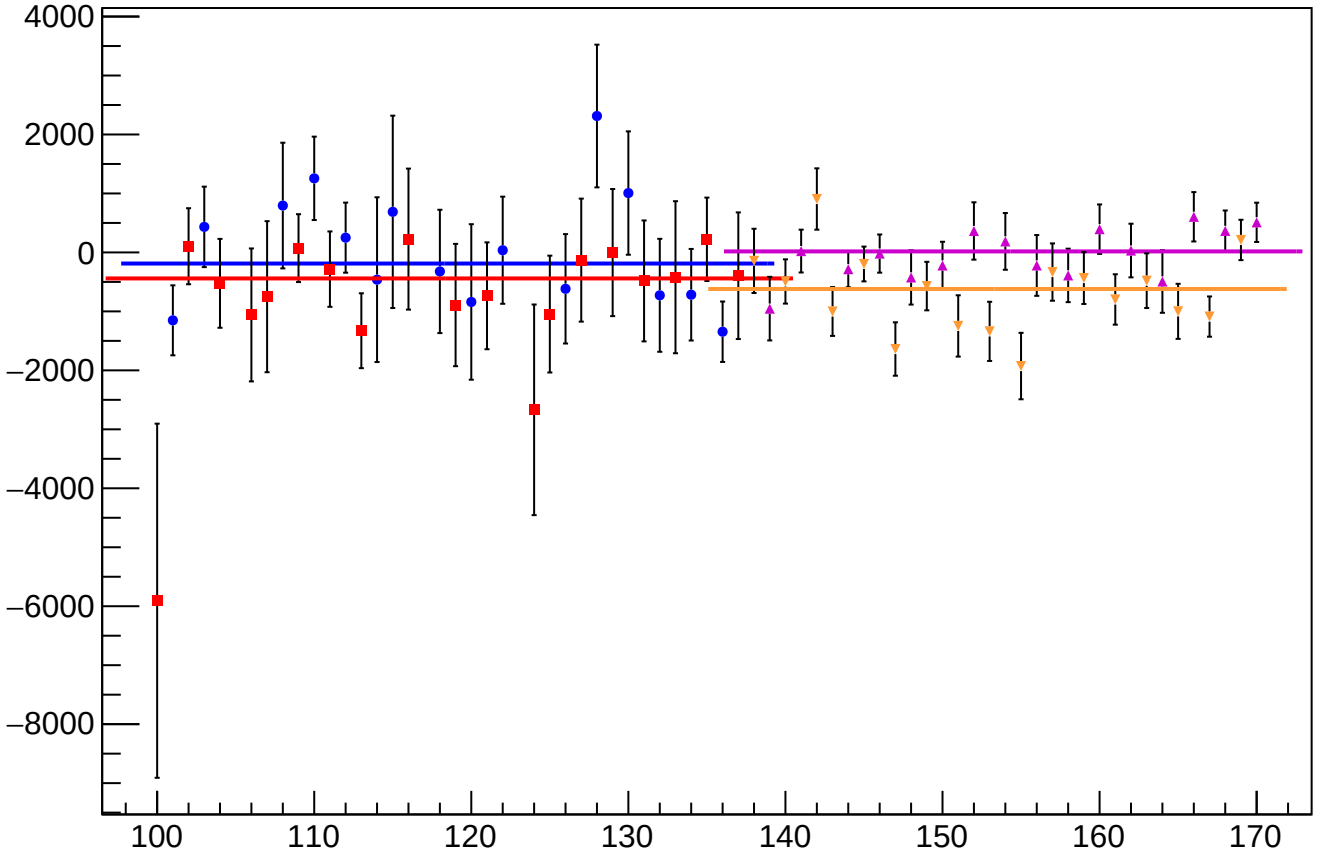
Right Out: 51.540+/-0.014 $\chi^2$/NDF: 639784.7/18

Left In: 49.383+/-0.010 $\chi^2$/NDF:187247.8/15

+ sign 50.067+/-0.008 $\chi^2$/NDF: 748884.3/32

All: 50.078+/-0.006 $\chi^2$/NDF: 1592178.0/67

- sign 50.088+/-0.008 $\chi^2$/NDF: 843290.1/34




Right In: -188.541+/-205.813 $\chi^2$/NDF: 21.4/15

Left Out: -619.873+/-102.937 $\chi^2$/NDF:35.6/16

Right Out: -441.171+/-204.111 $\chi^2$/NDF: 10.9/18

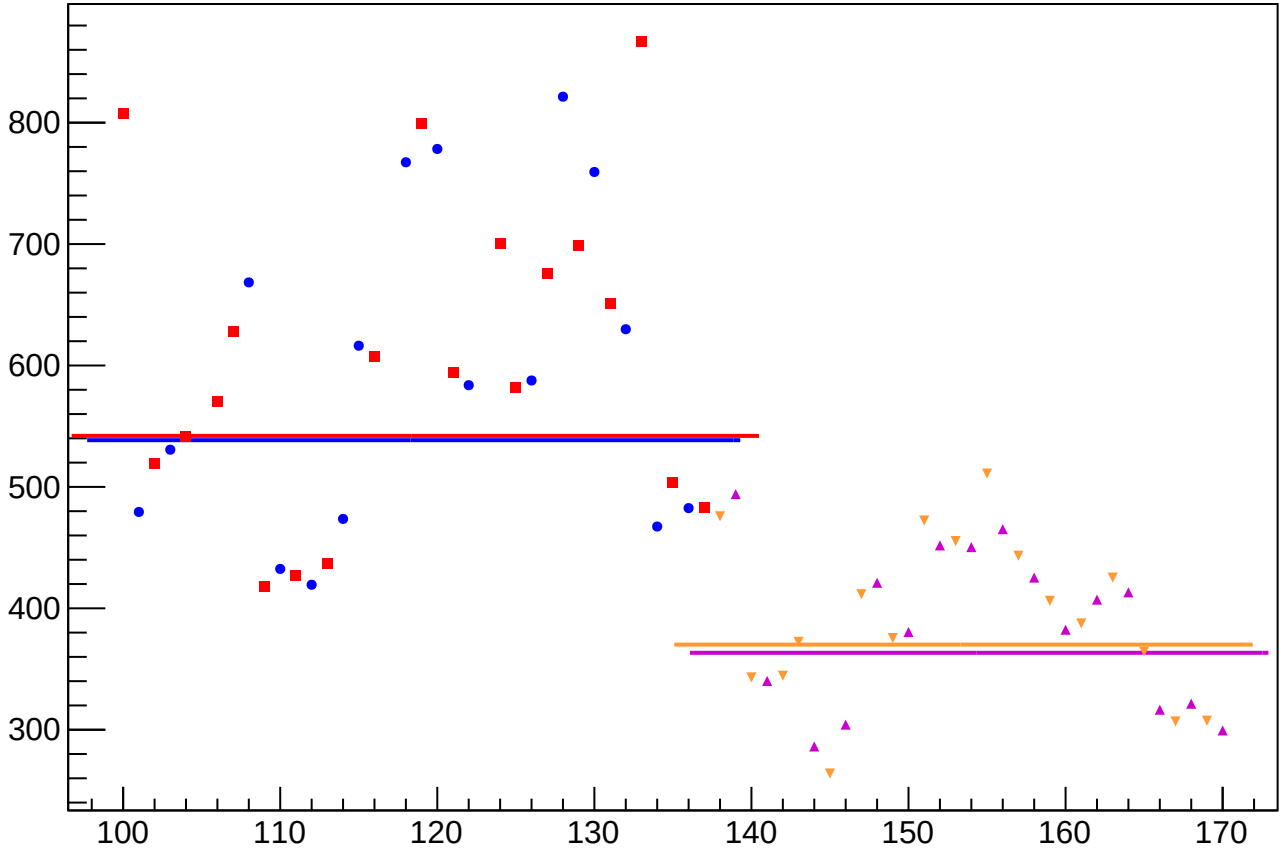
Left In: 17.234+/-101.801 $\chi^2$/NDF:14.1/15

+ sign -533.566+/-92.064 $\chi^2$/NDF: 60.5/32

All: -301.402+/-64.755 $\chi^2$/NDF: 102.0/67

- sign -74.081+/-91.099 $\chi^2$/NDF: 29.0/34

# asym_sam_1357_avg_cor_correction_rms vs Slug




Right In: 538.473+/-0.146 $\chi^2$/NDF: 613991.3/15

Left Out: 370.108+/-0.073 $\chi^2$/NDF:854065.9/16

Right Out: 542.025+/-0.144 $\chi^2$/NDF: 631559.6/18

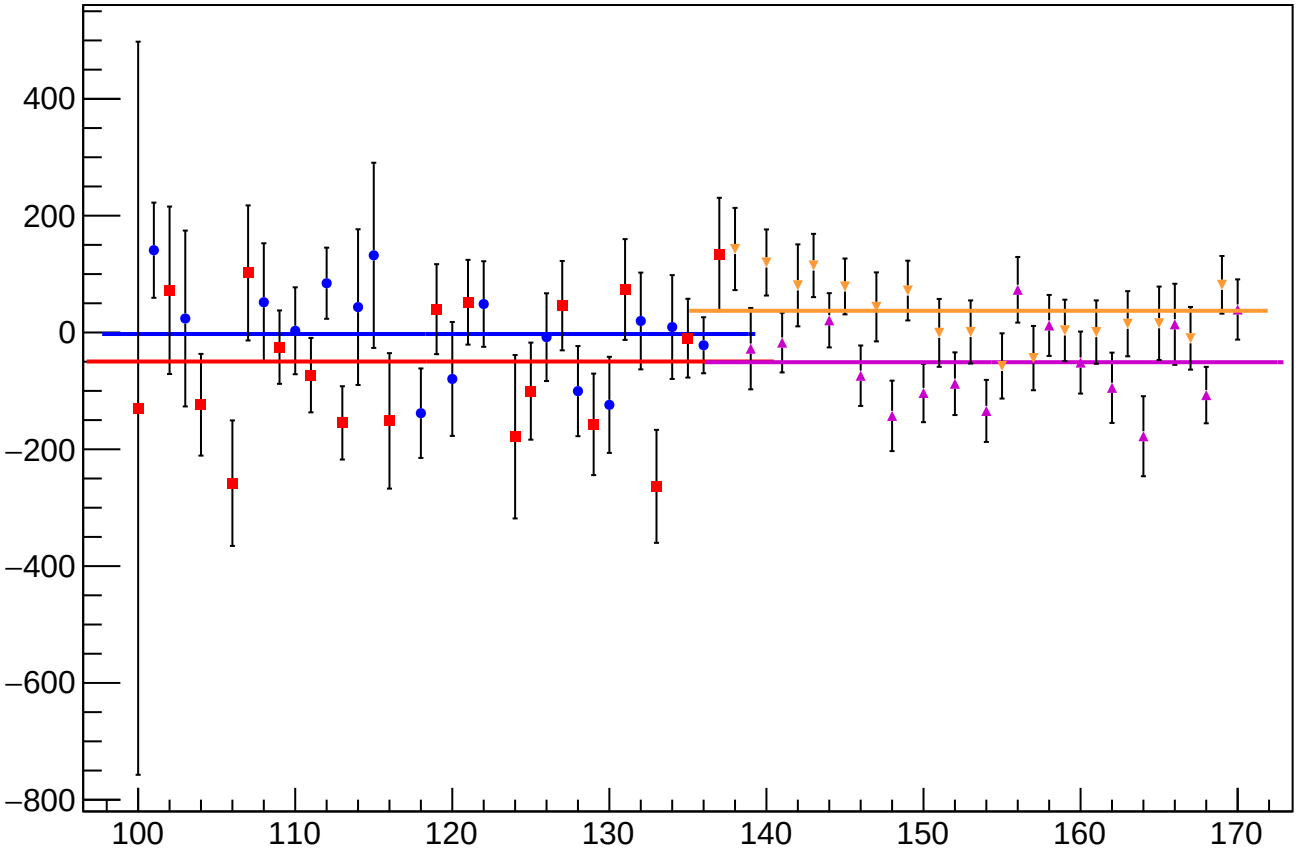
Left In: 363.380+/-0.072 $\chi^2$/NDF:770213.6/15

+ sign 403.797+/-0.065 $\chi^2$/NDF: 2538657.9/32

All: 401.356+/-0.046 $\chi^2$/NDF: 5170097.1/67

- sign 398.967+/-0.064 $\chi^2$/NDF: 2628657.6/34

# eigen_cor_asym_sam_1357_avg_mean vs Slug




Right In: -2.618+/-19.995 $\chi^2$/NDF: 14.6/15

Left Out: 37.161+/-13.500 $\chi^2$/NDF:16.7/16

Right Out: -49.694+/-19.622 $\chi^2$/NDF: 29.3/18

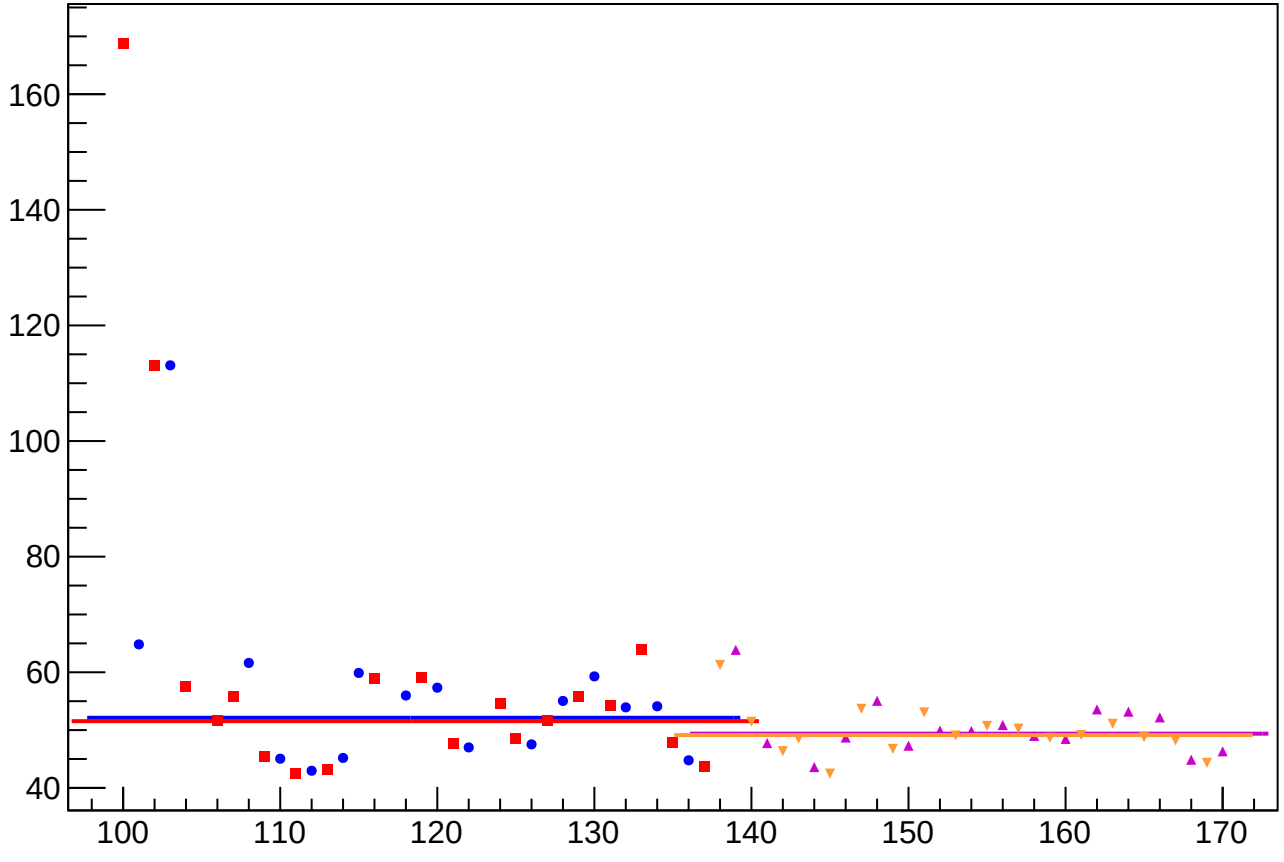
Left In: -50.886+/-13.682 $\chi^2$/NDF:25.1/15

+ sign 24.705+/-11.189 $\chi^2$/NDF: 34.0/32

All: -12.781+/-7.924 $\chi^2$/NDF: 110.8/67

- sign -50.496+/-11.223 $\chi^2$/NDF: 54.3/34

# eigen_cor_asym_sam_1357_avg_rms vs Slug




Right In: 52.128+/-0.014 $\chi^2$/NDF: 562920.3/15

Left Out: 49.127+/-0.010 $\chi^2$/NDF:155012.7/16

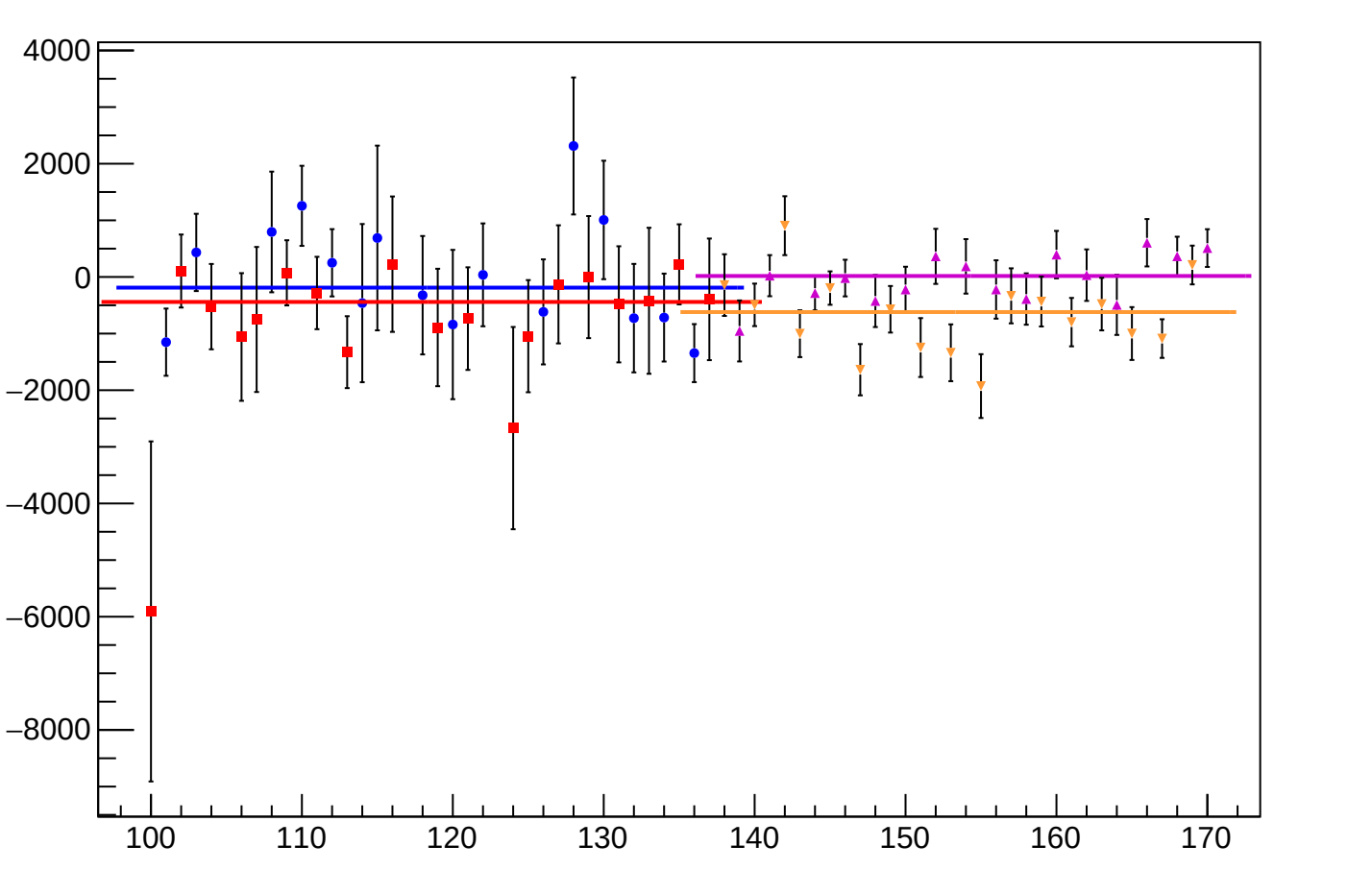
Right Out: 51.540+/-0.014 $\chi^2$/NDF: 639784.7/18

Left In: 49.383+/-0.010 $\chi^2$/NDF:187247.8/15

+ sign 50.067+/-0.008 $\chi^2$/NDF: 748884.3/32

All: 50.078+/-0.006 $\chi^2$/NDF: 1592178.0/67

- sign 50.088+/-0.008 $\chi^2$/NDF: 843290.1/34




Right In: -188.541+/-205.813 $\chi^2$/NDF: 21.4/15

Left Out: -619.873+/-102.937 $\chi^2$/NDF:35.6/16

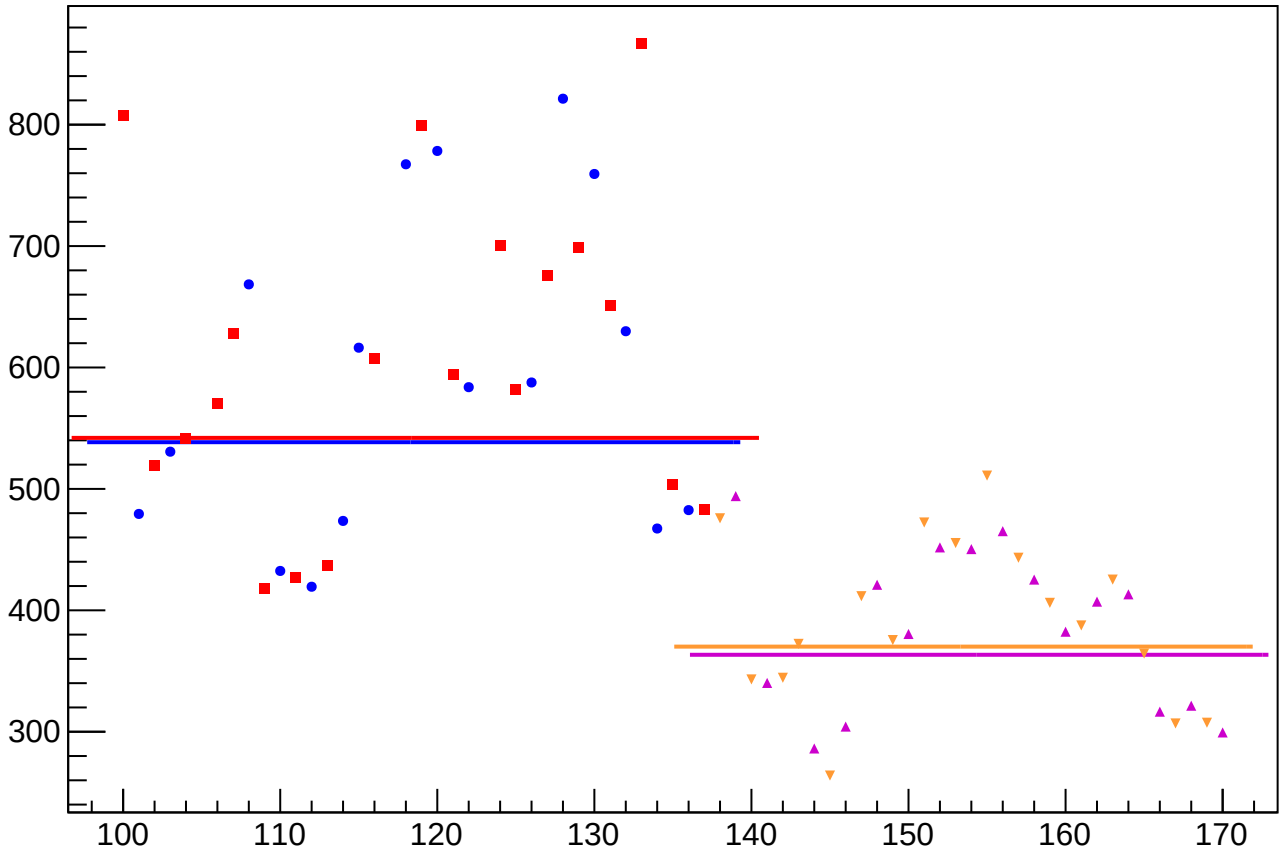
Right Out: -441.171+/-204.111 $\chi^2$/NDF: 10.9/18

Left In: 17.234+/-101.801 $\chi^2$/NDF:14.1/15

+ sign -533.566+/-92.064 $\chi^2$/NDF: 60.5/32

All: -301.402+/-64.755 $\chi^2$/NDF: 102.0/67

- sign -74.081+/-91.099 $\chi^2$/NDF: 29.0/34




Right In: 538.473+/-0.146 $\chi^2$/NDF: 613991.3/15

Left Out: 370.108+/-0.073 $\chi^2$/NDF:854065.9/16

Right Out: 542.025+/-0.144 $\chi^2$/NDF: 631559.6/18

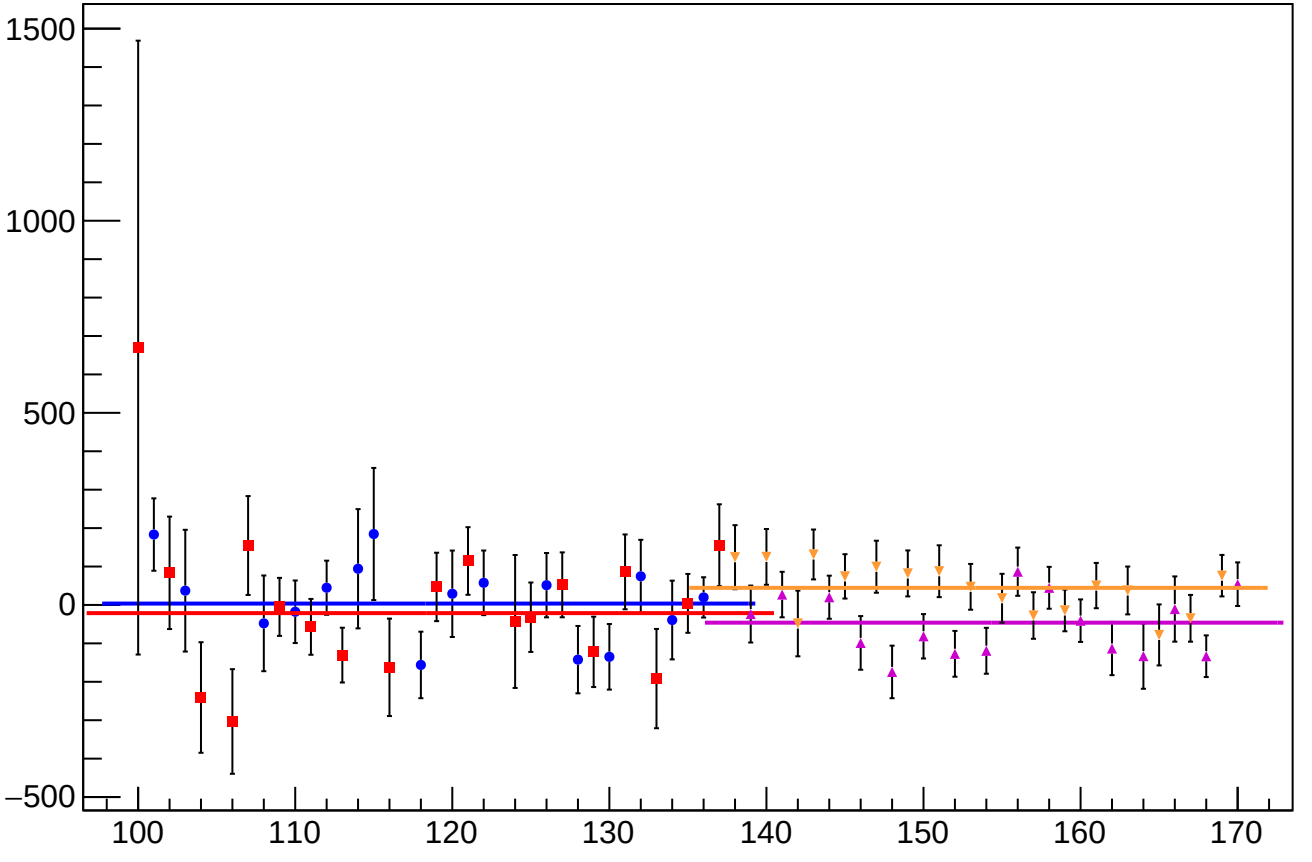
Left In: 363.380+/-0.072 $\chi^2$/NDF:770213.6/15

+ sign 403.797+/-0.065 $\chi^2$/NDF: 2538657.9/32

All: 401.356+/-0.046 $\chi^2$/NDF: 5170097.1/67

- sign 398.967+/-0.064 $\chi^2$/NDF: 2628657.6/34

# dit_asym_sam_1357_avg_mean vs Slug




Right In: 3.597+/-22.480 $\chi^2$/NDF: 16.1/15

Left Out: 44.511+/-15.460 $\chi^2$/NDF:14.1/16

Right Out: -21.253+/-22.769 $\chi^2$/NDF: 24.4/18

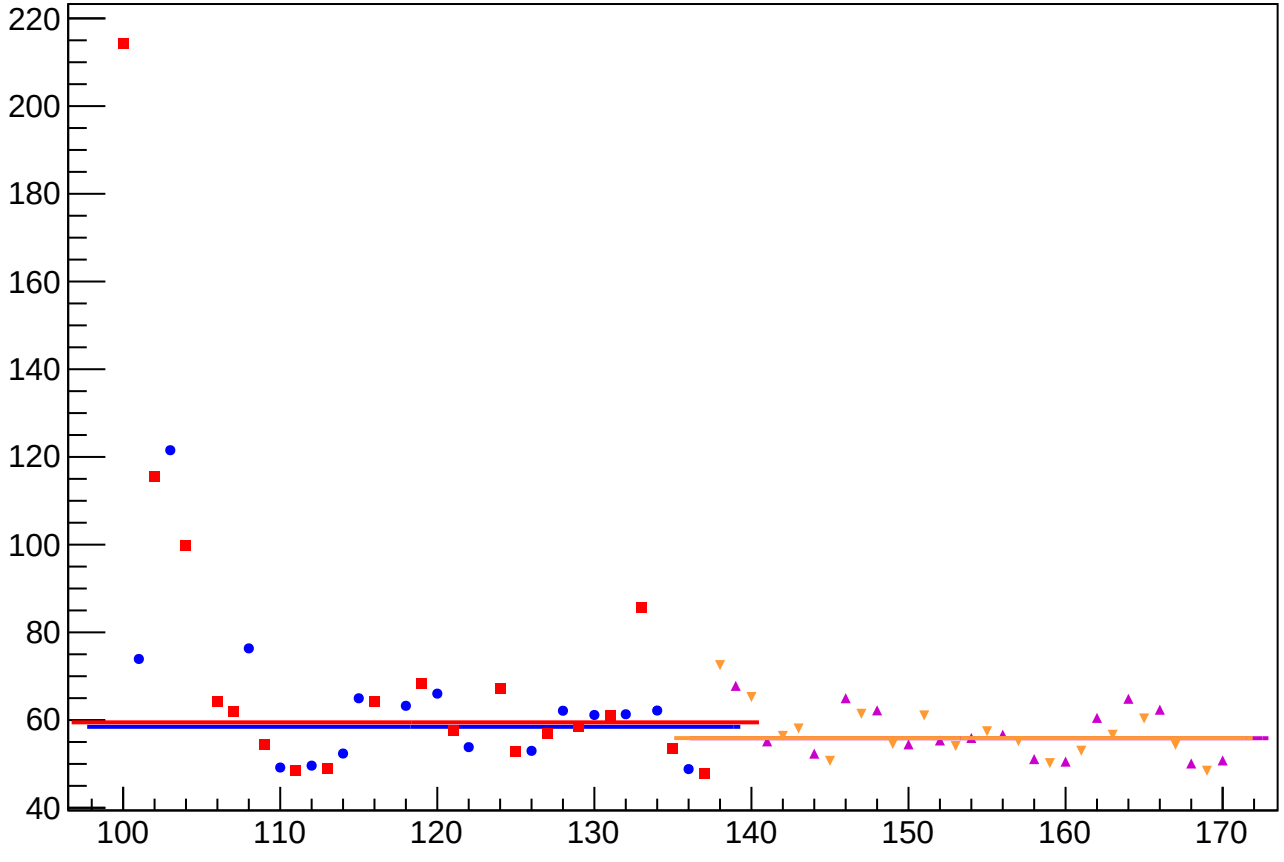
Left In: -46.113+/-15.582 $\chi^2$/NDF:25.9/15

+ sign 31.374+/-12.738 $\chi^2$/NDF: 32.5/32

All: -3.076+/-9.050 $\chi^2$/NDF: 98.4/67

- sign -38.183+/-12.859 $\chi^2$/NDF: 51.2/34

# dit_asym_sam_1357_avg_rms vs Slug




Right In: 58.465+/-0.016 $\chi^2$/NDF: 582984.2/15

Left Out: 55.891+/-0.011 $\chi^2$/NDF:233694.0/16

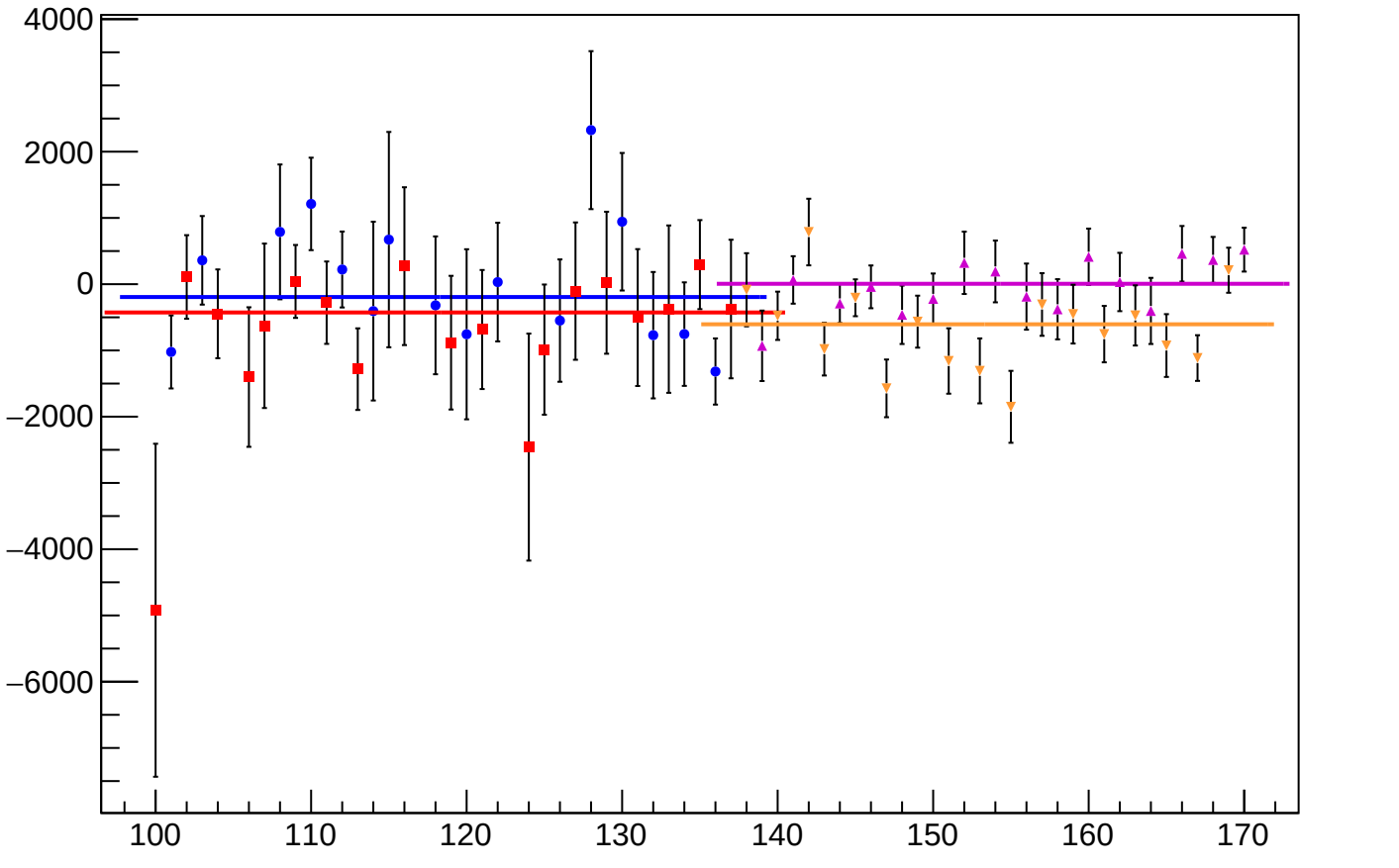
Right Out: 59.484+/-0.016 $\chi^2$/NDF: 784880.1/18

Left In: 55.862+/-0.011 $\chi^2$/NDF:228490.0/15

+ sign 56.718+/-0.009 $\chi^2$/NDF: 834481.8/32

All: 56.866+/-0.006 $\chi^2$/NDF: 1882870.6/67

- sign 57.017+/-0.009 $\chi^2$/NDF: 1047841.5/34




Right In: -193.899+/-200.604 $\chi^2$/NDF: 20.8/15

Left Out: -605.291+/-100.552 $\chi^2$/NDF:34.3/16

Right Out: -426.977+/-197.005 $\chi^2$/NDF: 11.3/18

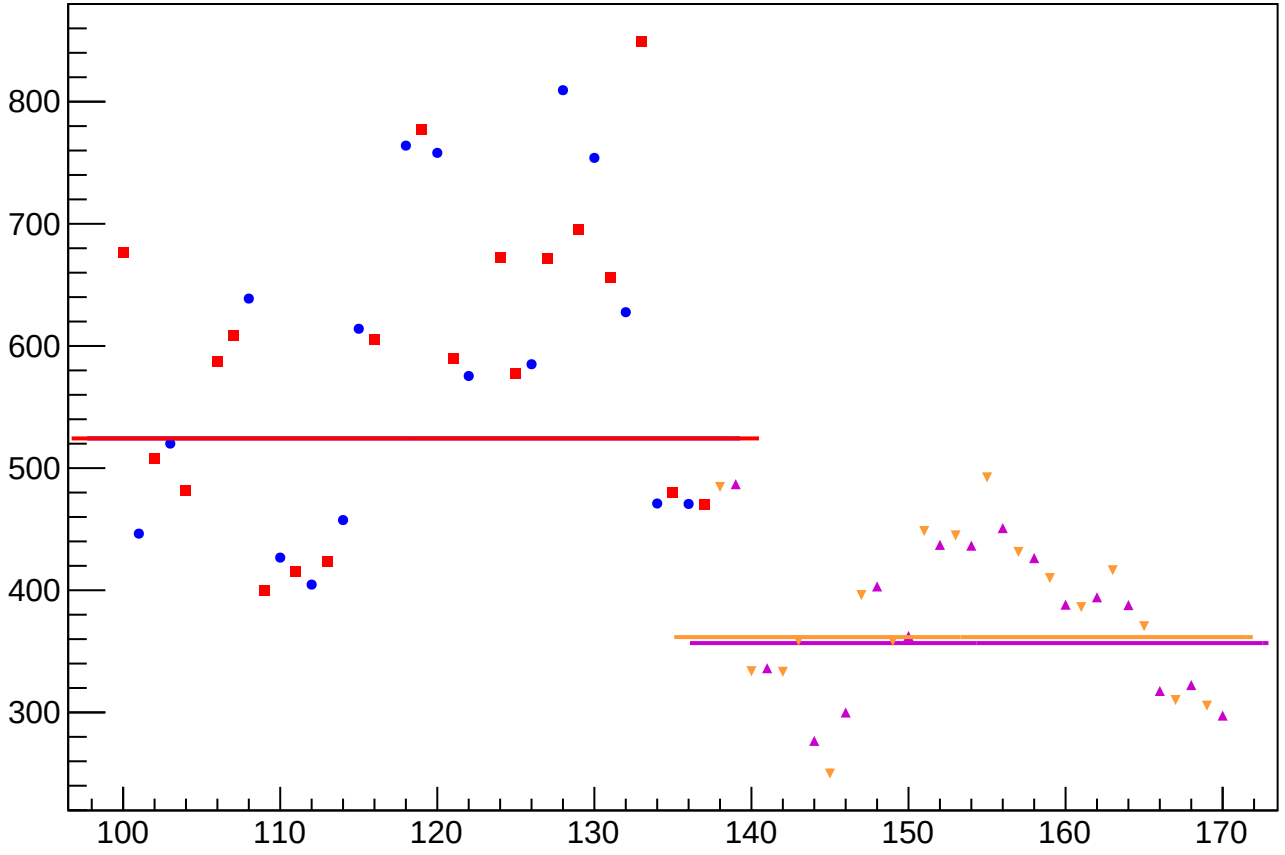
Left In: 5.922+/-99.904 $\chi^2$/NDF:13.4/15

+ sign -522.684+/-89.892 $\chi^2$/NDF: 58.5/32

All: -300.717+/-63.282 $\chi^2$/NDF: 99.1/67

- sign -82.632+/-89.102 $\chi^2$/NDF: 28.5/34

# asym_sam_1357_avg_dit_correction_rms vs Slug




Right In: 524.326+/-0.142 $\chi^2$/NDF: 658488.5/15

Left Out: 361.673+/-0.071 $\chi^2$/NDF:891208.2/16

Right Out: 524.306+/-0.139 $\chi^2$/NDF: 686061.2/18

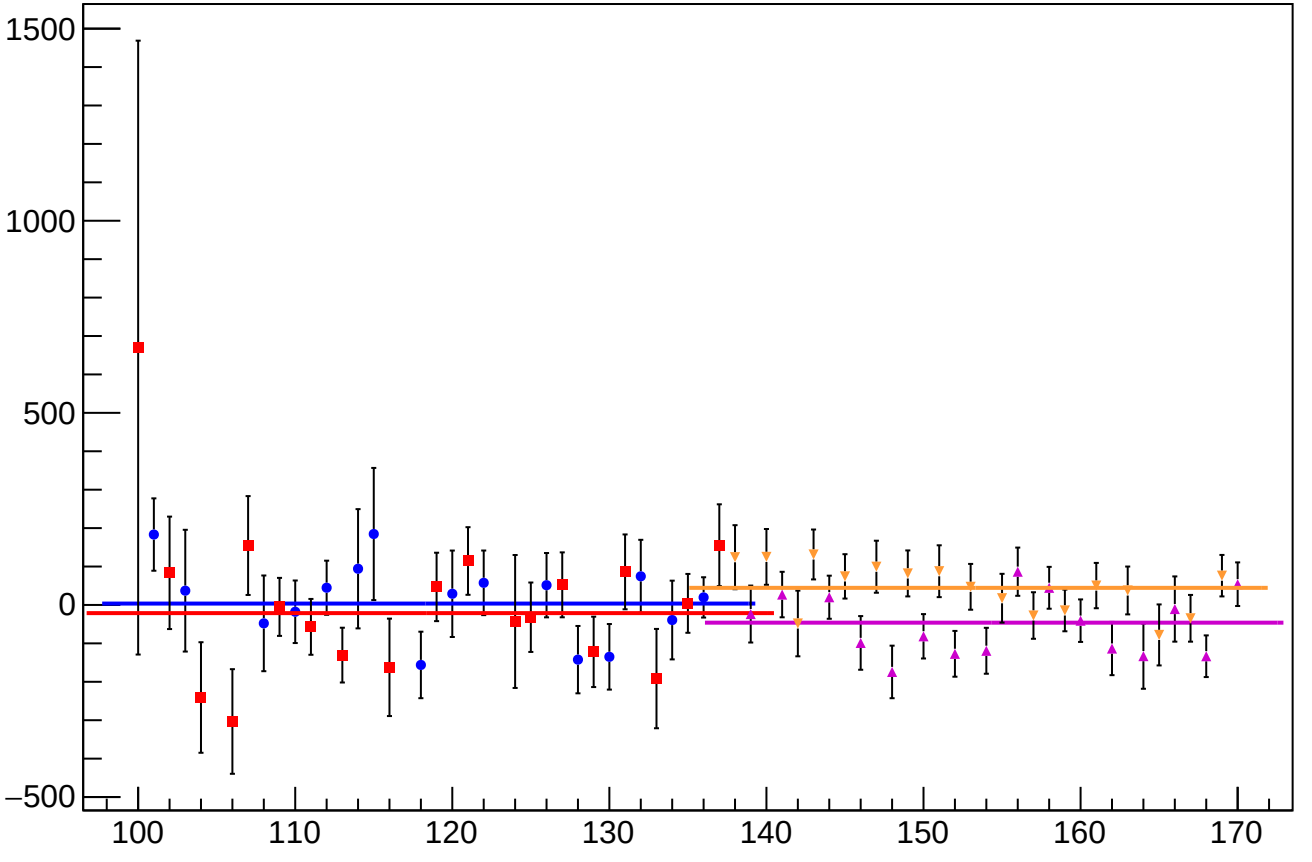
Left In: 356.779+/-0.071 $\chi^2$/NDF:727901.4/15

+ sign 394.334+/-0.064 $\chi^2$/NDF: 2600533.4/32

All: 392.676+/-0.045 $\chi^2$/NDF: 5166263.7/67

- sign 391.048+/-0.063 $\chi^2$/NDF: 2564382.8/34

# eigen_dit_asym_sam_1357_avg_mean vs Slug




Right In: 3.597+/-22.480 $\chi^2$/NDF: 16.1/15

Left Out: 44.511+/-15.460 $\chi^2$/NDF:14.1/16

Right Out: -21.251+/-22.769 $\chi^2$/NDF: 24.4/18

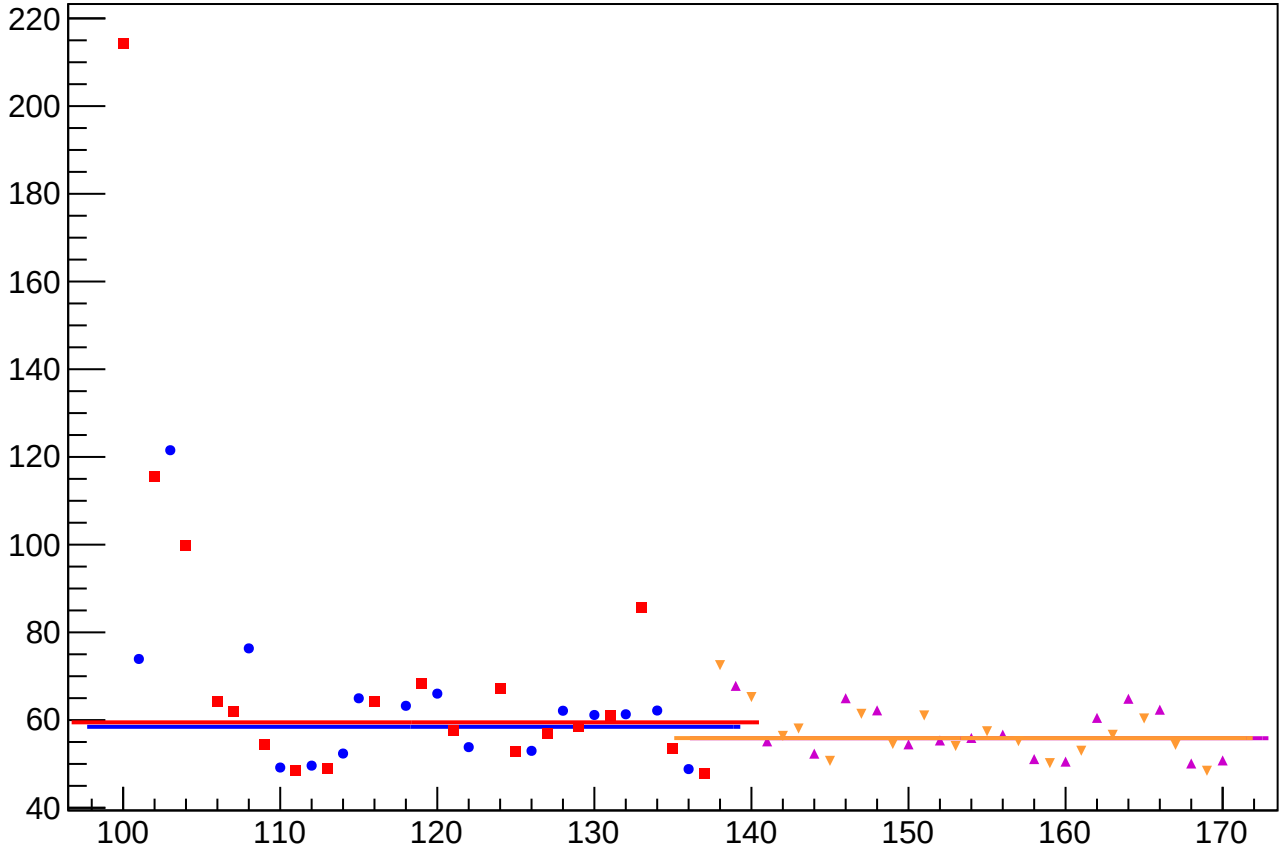
Left In: -46.113+/-15.583 $\chi^2$/NDF:25.9/15

+ sign 31.374+/-12.738 $\chi^2$/NDF: 32.5/32

All: -3.075+/-9.050 $\chi^2$/NDF: 98.4/67

- sign -38.182+/-12.859 $\chi^2$/NDF: 51.2/34

# eigen_dit_asym_sam_1357_avg_rms vs Slug




Right In: 58.466+/-0.016 $\chi^2$/NDF: 582980.6/15

Left Out: 55.891+/-0.011 $\chi^2$/NDF:233699.4/16

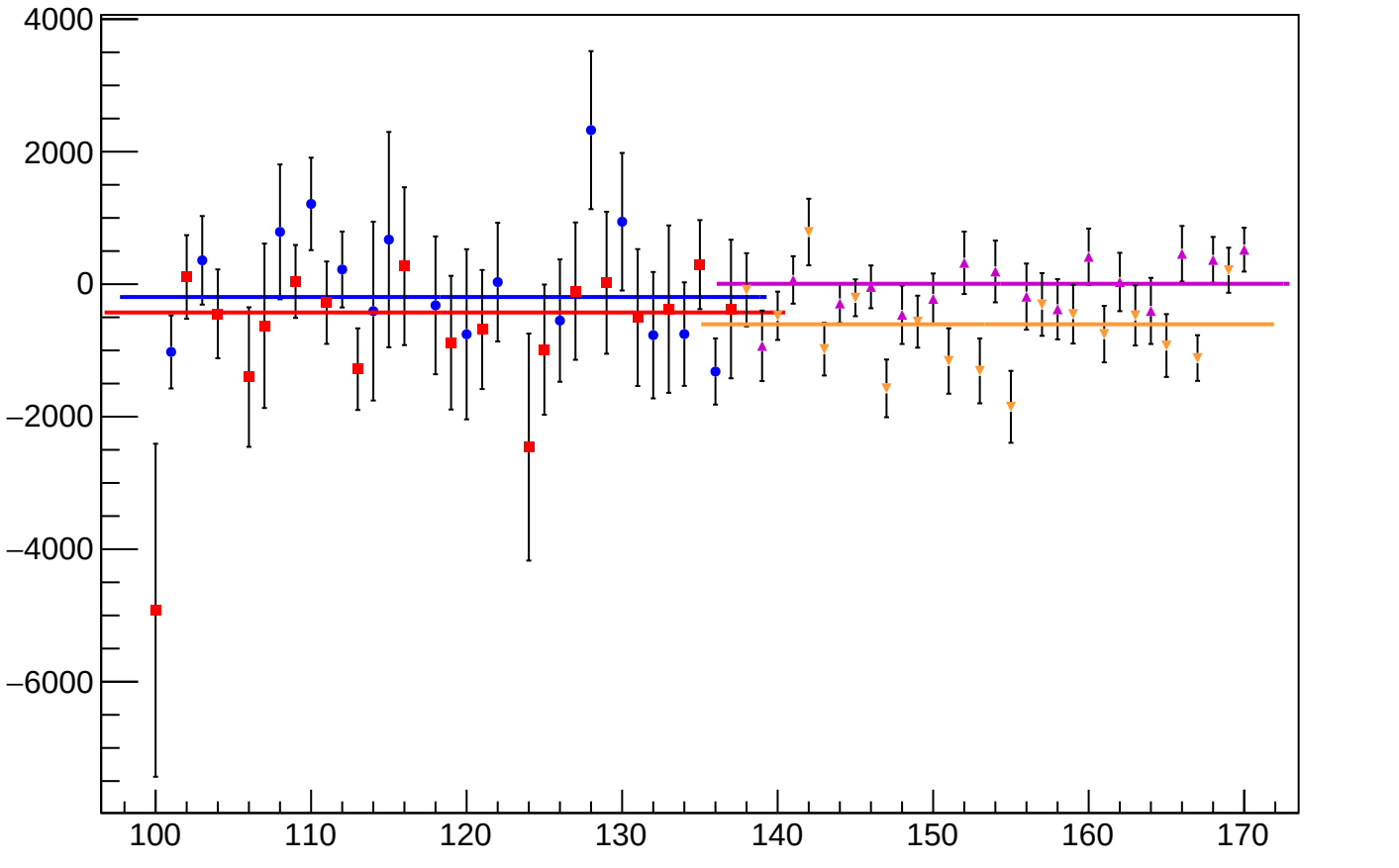
Right Out: 59.484+/-0.016 $\chi^2$/NDF: 784880.2/18

Left In: 55.862+/-0.011 $\chi^2$/NDF:228492.7/15

+ sign 56.718+/-0.009 $\chi^2$/NDF: 834482.8/32

All: 56.866+/-0.006 $\chi^2$/NDF: 1882874.1/67

- sign 57.017+/-0.009 $\chi^2$/NDF: 1047843.9/34




Right In: -193.899+/-200.603 $\chi^2$/NDF: 20.8/15

Left Out: -605.291+/-100.552 $\chi^2$/NDF:34.3/16

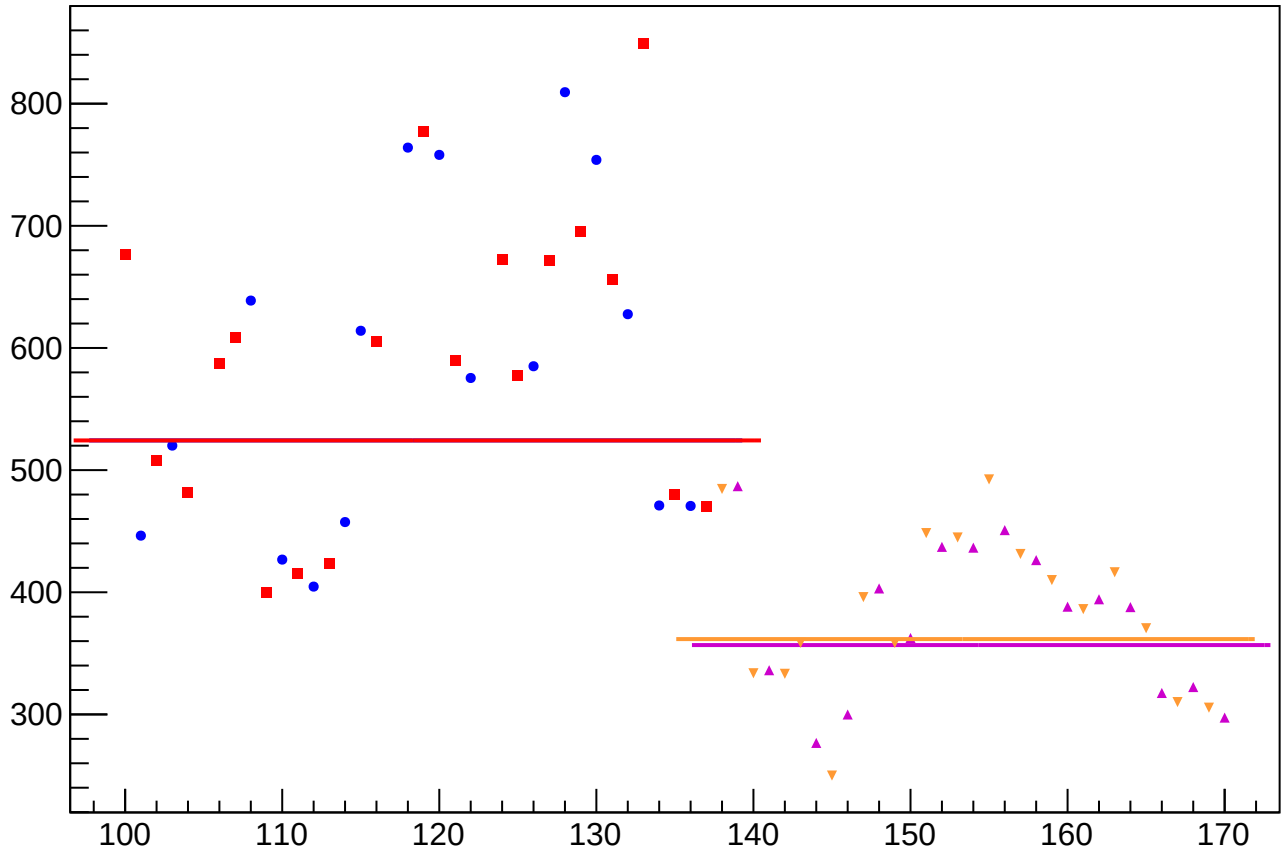
Right Out: -426.976+/-197.005 $\chi^2$/NDF: 11.3/18

Left In: 5.923+/-99.904 $\chi^2$/NDF:13.4/15

+ sign -522.684+/-89.892 $\chi^2$/NDF: 58.5/32

All: -300.716+/-63.282 $\chi^2$/NDF: 99.1/67

- sign -82.632+/-89.102 $\chi^2$/NDF: 28.5/34




Right In: 524.325+/-0.142 $\chi^2$/NDF: 658493.8/15

Left Out: 361.672+/-0.071 $\chi^2$/NDF:891204.5/16

Right Out: 524.305+/-0.139 $\chi^2$/NDF: 686063.6/18

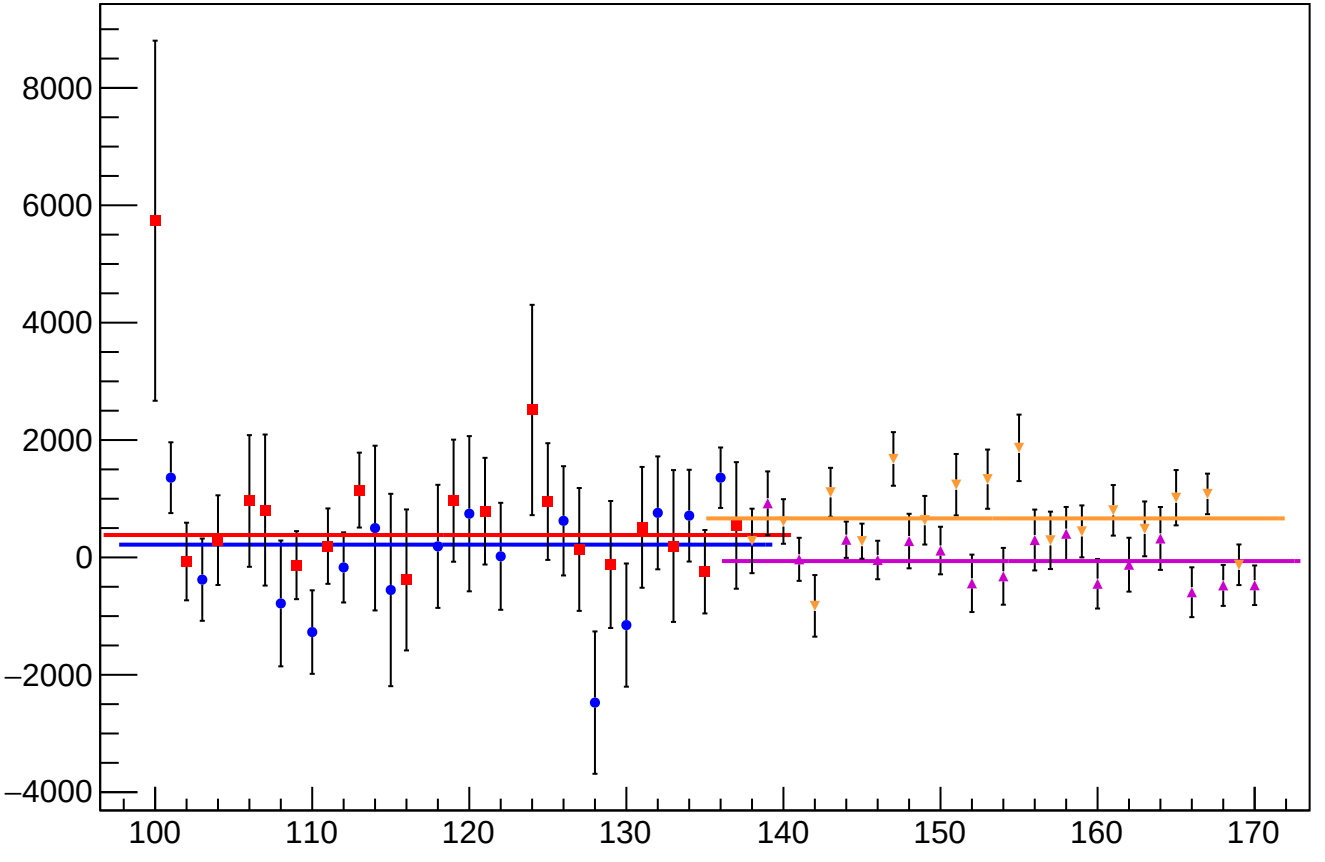
Left In: 356.778+/-0.071 $\chi^2$/NDF:727897.3/15

+ sign 394.333+/-0.064 $\chi^2$/NDF: 2600528.5/32

All: 392.676+/-0.045 $\chi^2$/NDF: 5166250.3/67

- sign 391.048+/-0.063 $\chi^2$/NDF: 2564374.3/34

# asym_sam_1357_avg_mean vs Slug




Right In: 217.756+/-207.492 $\chi^2$/NDF: 22.9/15

Left Out: 665.086+/-103.901 $\chi^2$/NDF:32.1/16

Right Out: 381.836+/-205.585 $\chi^2$/NDF: 10.0/18

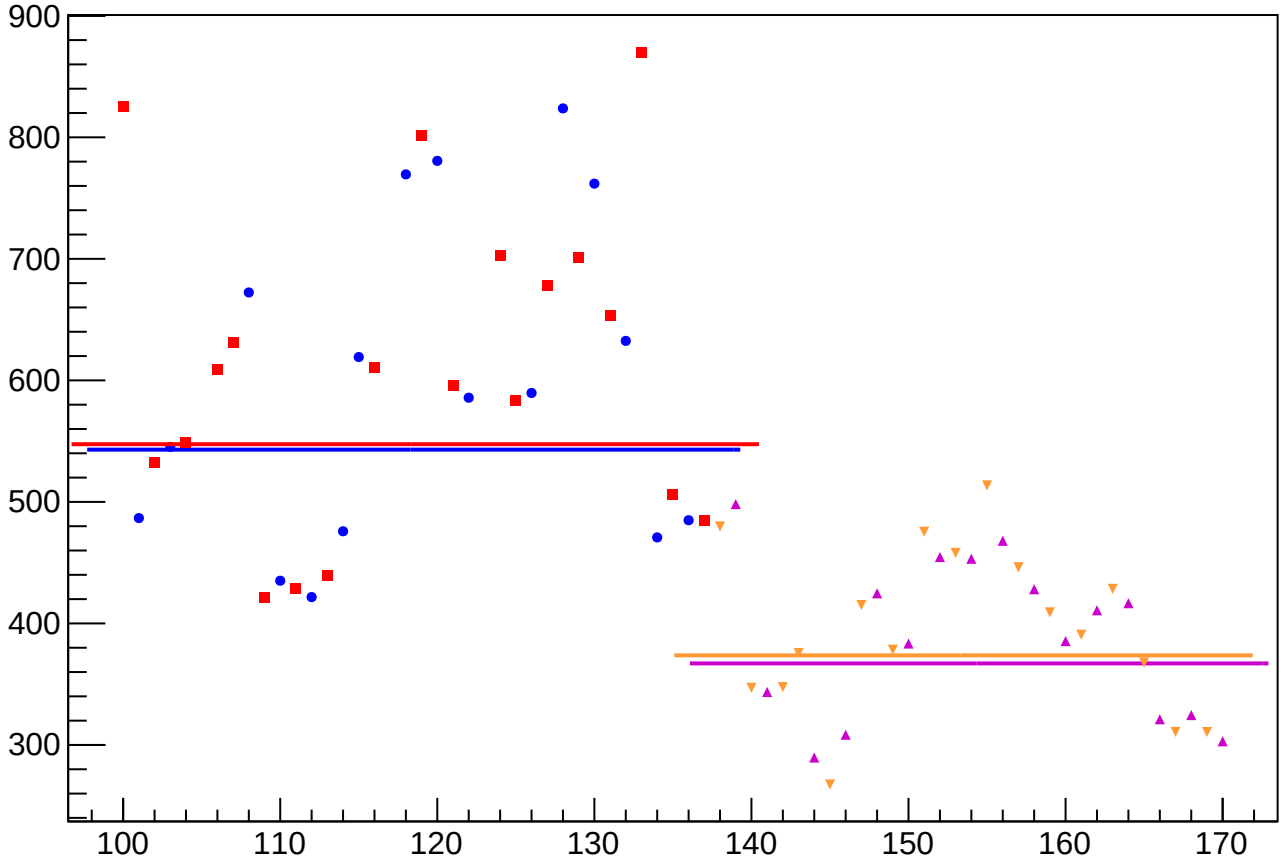
Left In: -62.143+/-102.802 $\chi^2$/NDF:13.7/15

+ sign 575.406+/-92.904 $\chi^2$/NDF: 58.7/32

All: 298.195+/-65.352 $\chi^2$/NDF: 103.7/67

- sign 26.666+/-91.947 $\chi^2$/NDF: 27.4/34

# asym_sam_1357_avg_rms vs Slug




Right In: 542.997+/-0.147 $\chi^2$/NDF: 605250.7/15

Left Out: 373.728+/-0.073 $\chi^2$/NDF:833310.6/16

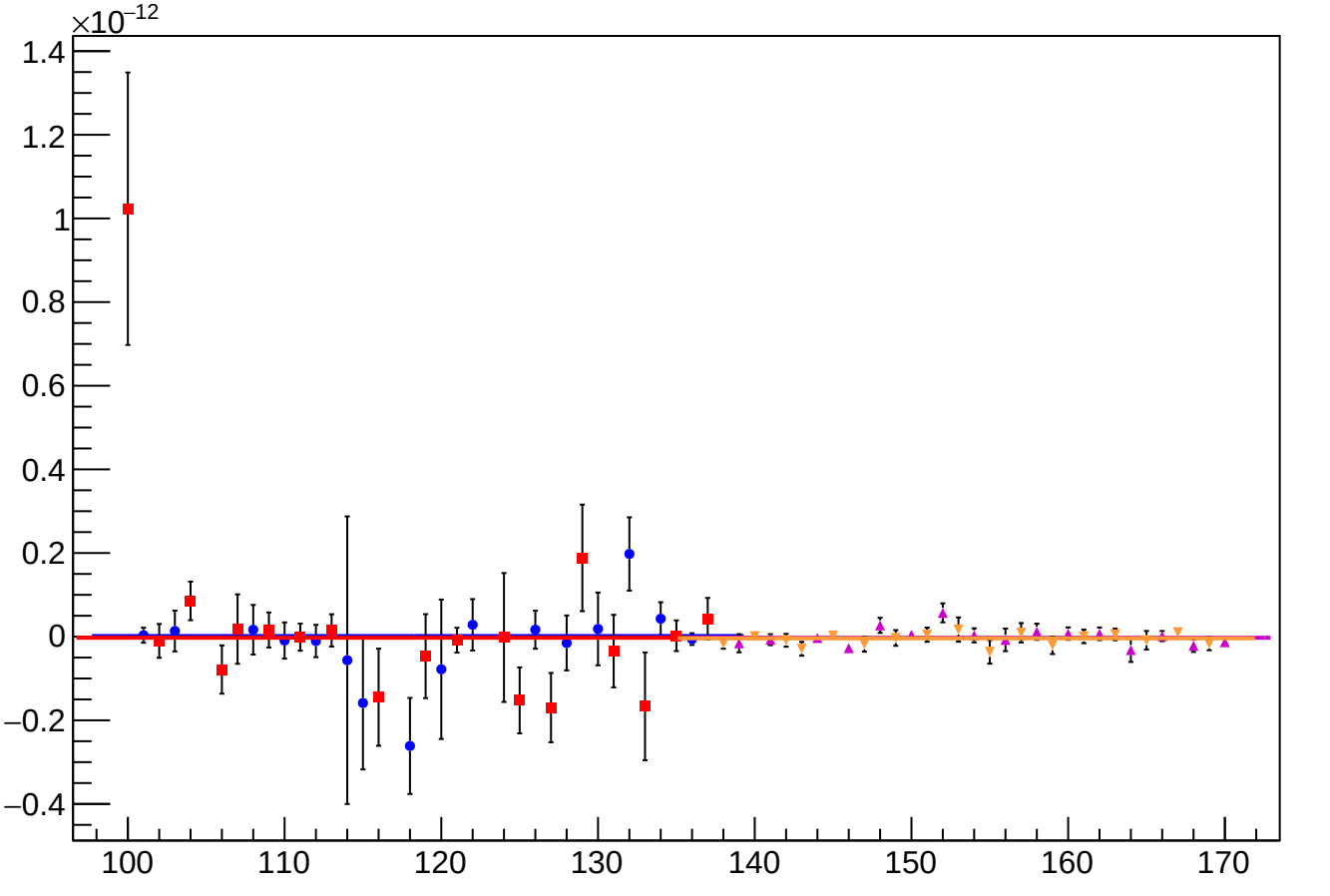
Right Out: 547.465+/-0.145 $\chi^2$/NDF: 630284.0/18

Left In: 367.105+/-0.073 $\chi^2$/NDF:751221.0/15

+ sign 407.663+/-0.066 $\chi^2$/NDF: 2502745.7/32

All: 405.399+/-0.046 $\chi^2$/NDF: 5118002.8/67

- sign 403.182+/-0.065 $\chi^2$/NDF: 2612907.2/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 13.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:10.7/16

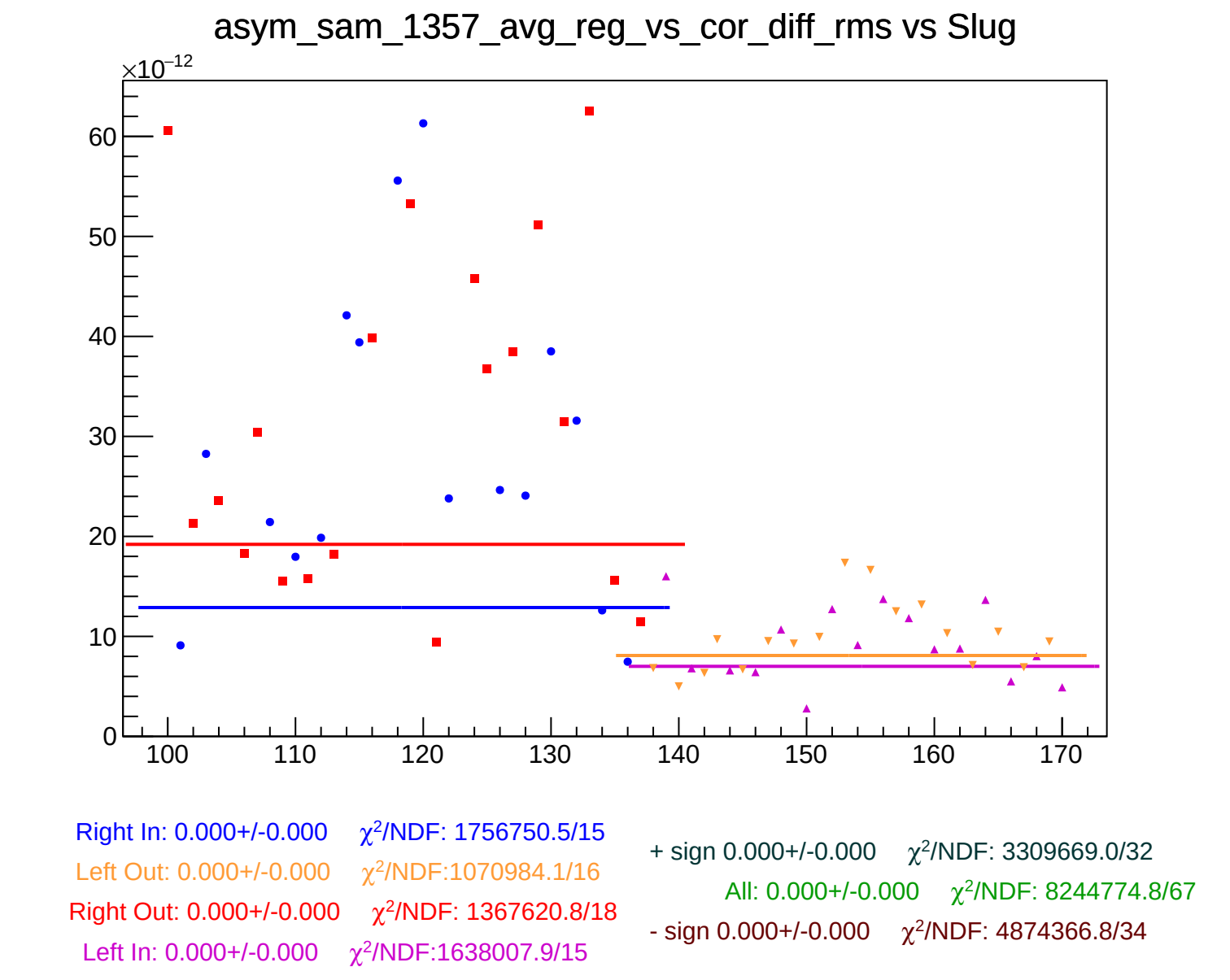
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 30.1/18

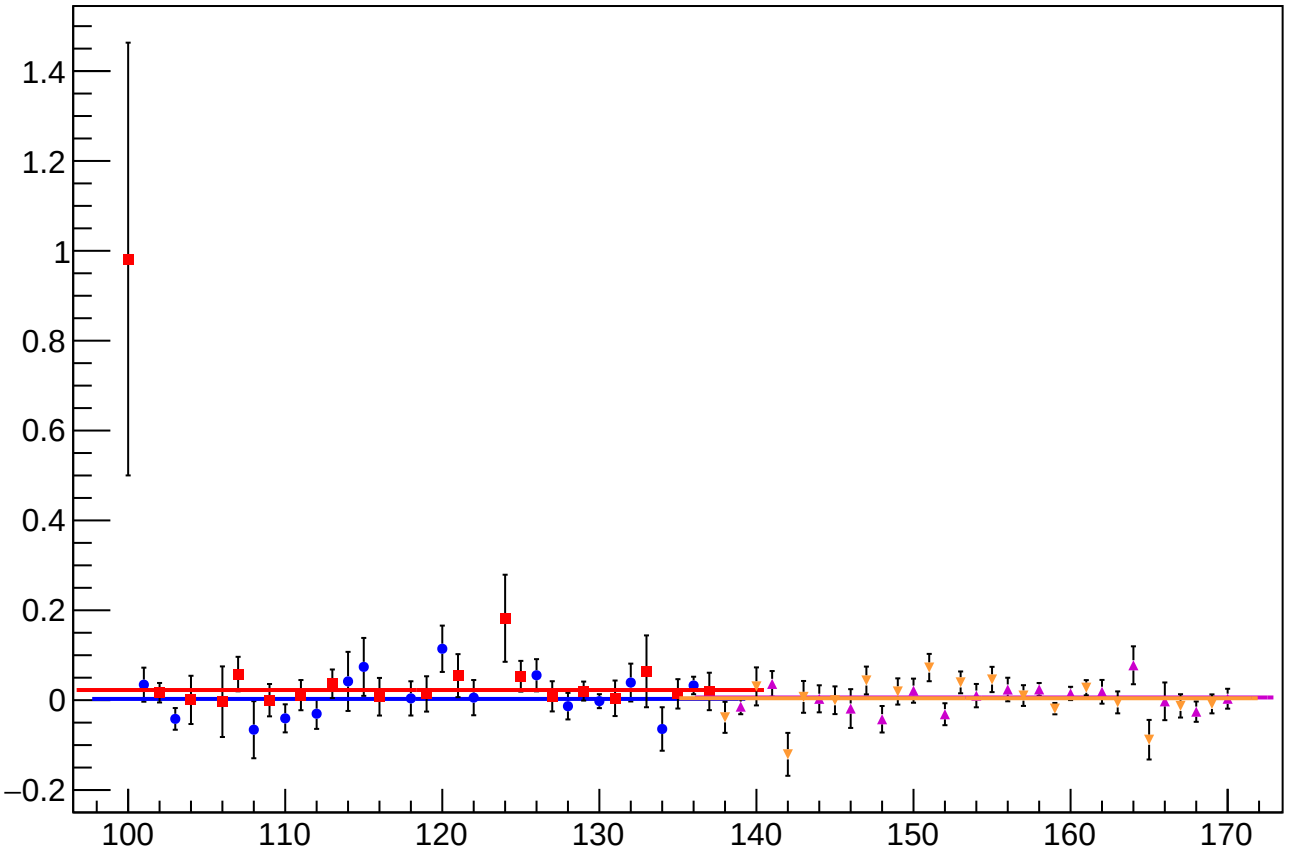
Left In: -0.000+/-0.000 $\chi^2$/NDF:21.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 24.6/32

All: -0.000+/-0.000 $\chi^2$/NDF: 75.8/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 51.2/34


asym_sam_1357_avg_reg_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1756750.5/15
Left Out: 0.000+/-0.000 χ²/NDF:1070984.1/16
Right Out: 0.000+/-0.000 χ²/NDF: 1367620.8/18
Left In: 0.000+/-0.000 χ²/NDF:1638007.9/15
+ sign 0.000+/-0.000 χ²/NDF: 3309669.0/32
All: 0.000+/-0.000 χ²/NDF: 8244774.8/67
- sign 0.000+/-0.000 χ²/NDF: 4874366.8/34




Right In: 0.003+/-0.008 $\chi^2$/NDF: 22.0/15

Left Out: 0.004+/-0.006 $\chi^2$/NDF:30.7/16

Right Out: 0.023+/-0.008 $\chi^2$/NDF: 10.8/18

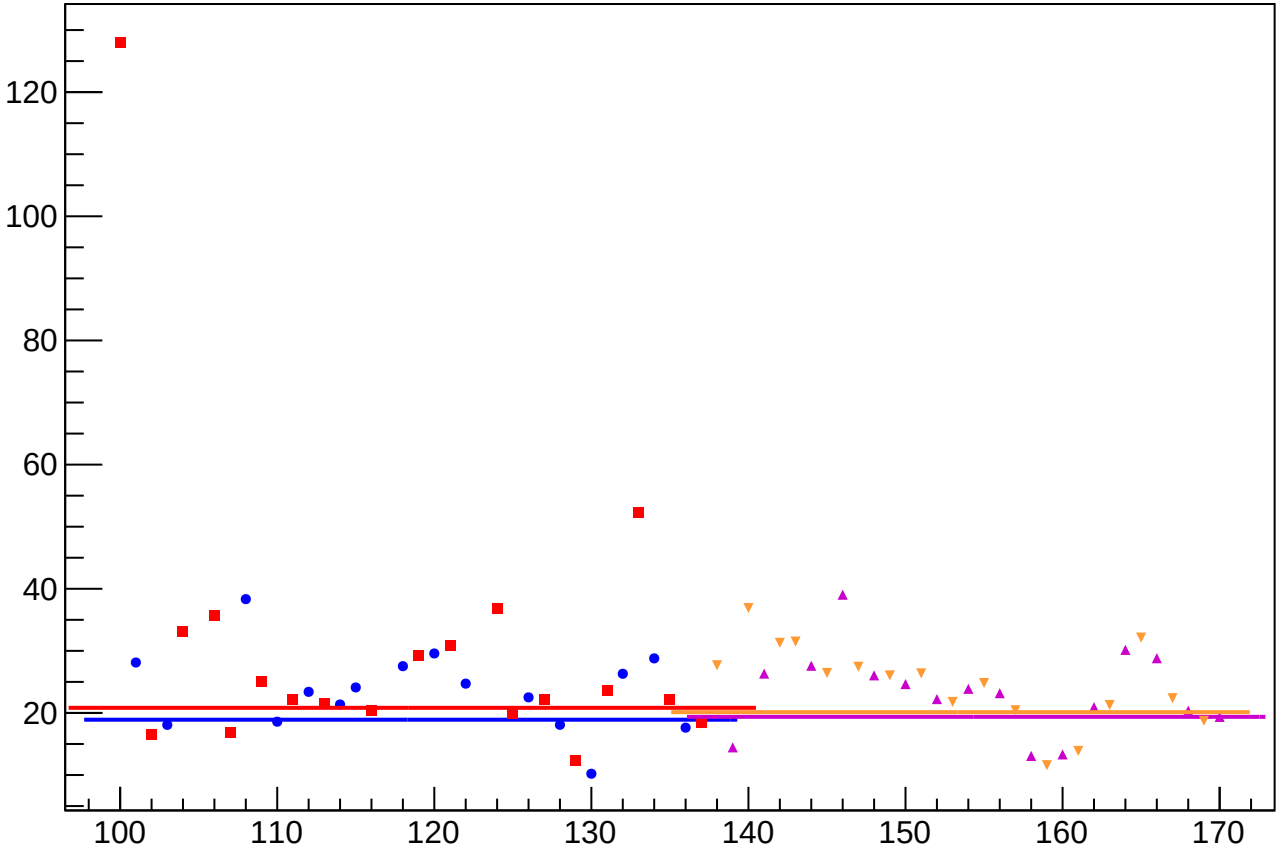
Left In: 0.006+/-0.006 $\chi^2$/NDF:15.8/15

+ sign 0.004+/-0.005 $\chi^2$/NDF: 52.6/32

All: 0.007+/-0.003 $\chi^2$/NDF: 83.1/67

- sign 0.011+/-0.005 $\chi^2$/NDF: 29.2/34

# asym_sam_1357_avg_dit_vs_cor_diff_rms vs Slug




Right In: 18.911+/-0.006 $\chi^2$/NDF: 1390349.2/15

Left Out: 20.129+/-0.004 $\chi^2$/NDF:2513210.8/16

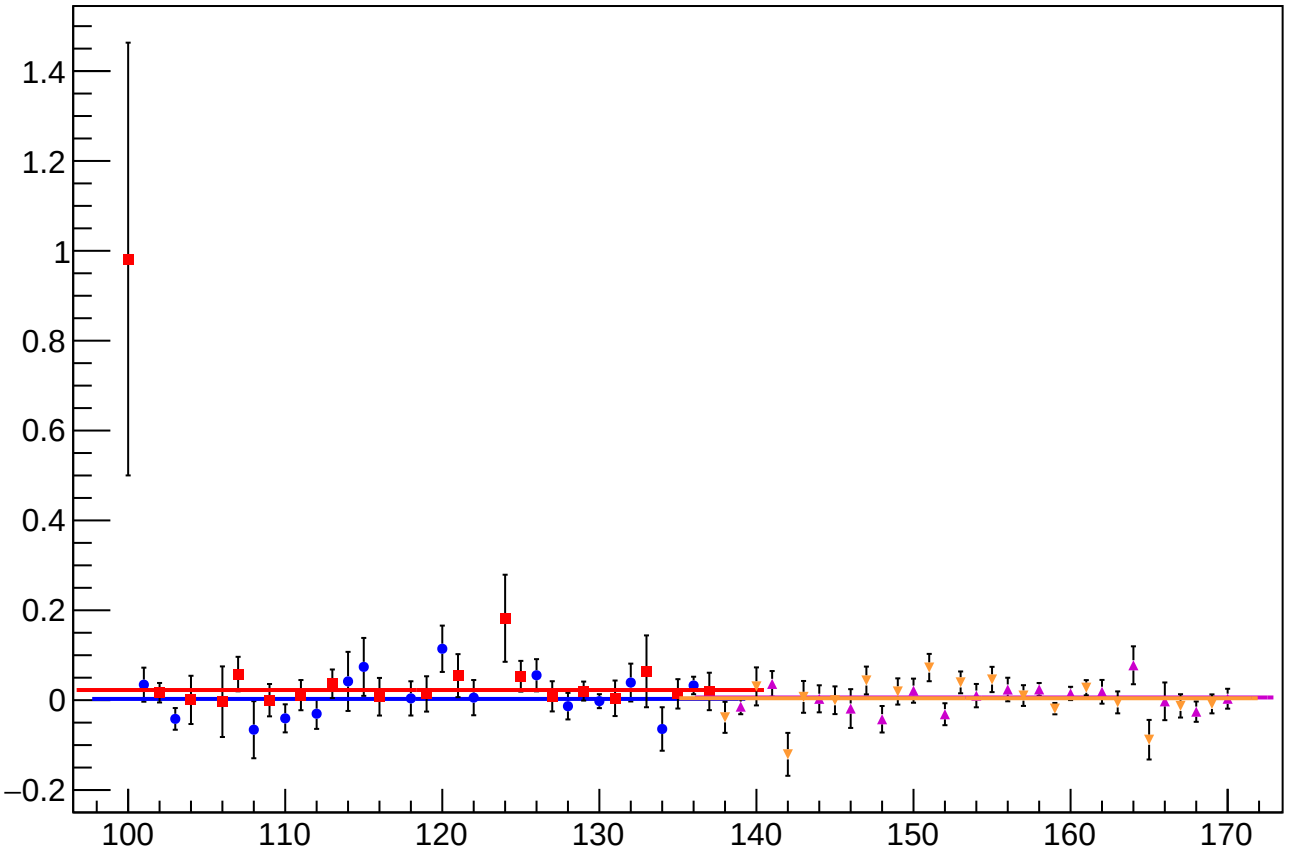
Right Out: 20.826+/-0.006 $\chi^2$/NDF: 1291541.1/18

Left In: 19.371+/-0.004 $\chi^2$/NDF:2131138.9/15

+ sign 19.673+/-0.003 $\chi^2$/NDF: 3934021.7/32

All: 19.756+/-0.002 $\chi^2$/NDF: 7398145.4/67

- sign 19.839+/-0.003 $\chi^2$/NDF: 3462919.0/34




Right In: 0.003+/-0.008 $\chi^2$/NDF: 22.0/15

Left Out: 0.004+/-0.006 $\chi^2$/NDF:30.7/16

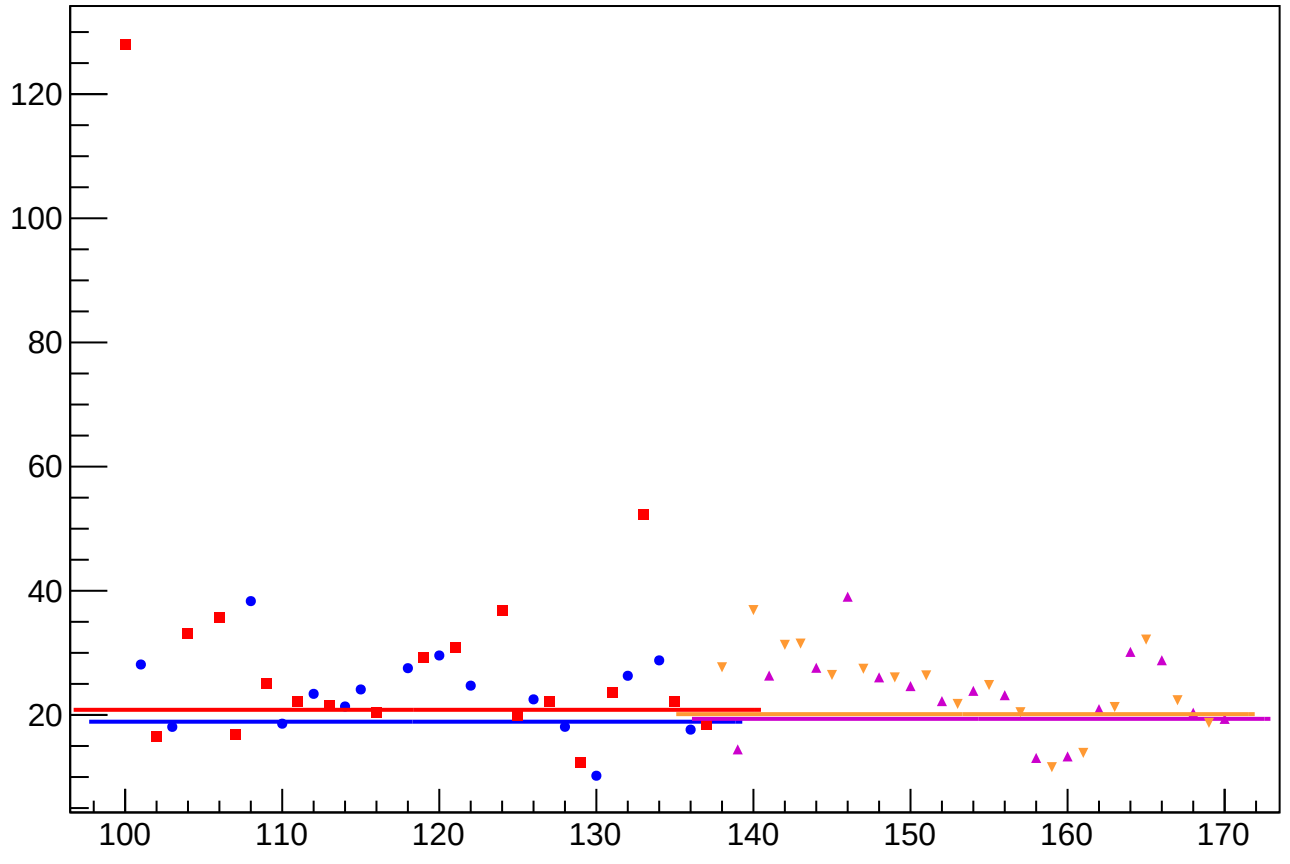
Right Out: 0.023+/-0.008 $\chi^2$/NDF: 10.8/18

Left In: 0.006+/-0.006 $\chi^2$/NDF:15.8/15

+ sign 0.004+/-0.005 $\chi^2$/NDF: 52.6/32

All: 0.007+/-0.003 $\chi^2$/NDF: 83.1/67

- sign 0.011+/-0.005 $\chi^2$/NDF: 29.2/34




Right In: 18.911+/-0.006 $\chi^2$/NDF: 1390349.2/15

Left Out: 20.129+/-0.004 $\chi^2$/NDF:2513210.8/16

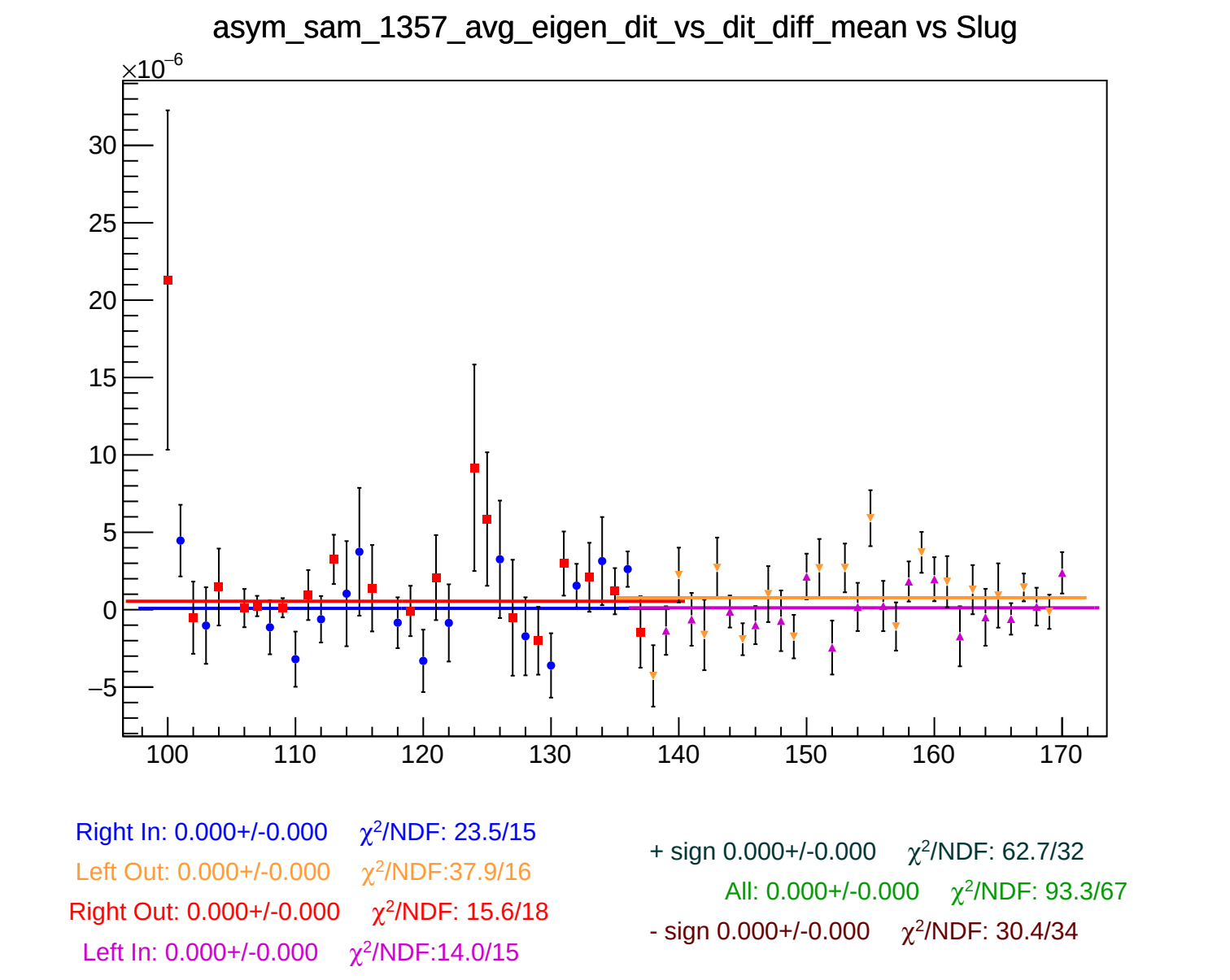
Right Out: 20.826+/-0.006 $\chi^2$/NDF: 1291541.1/18

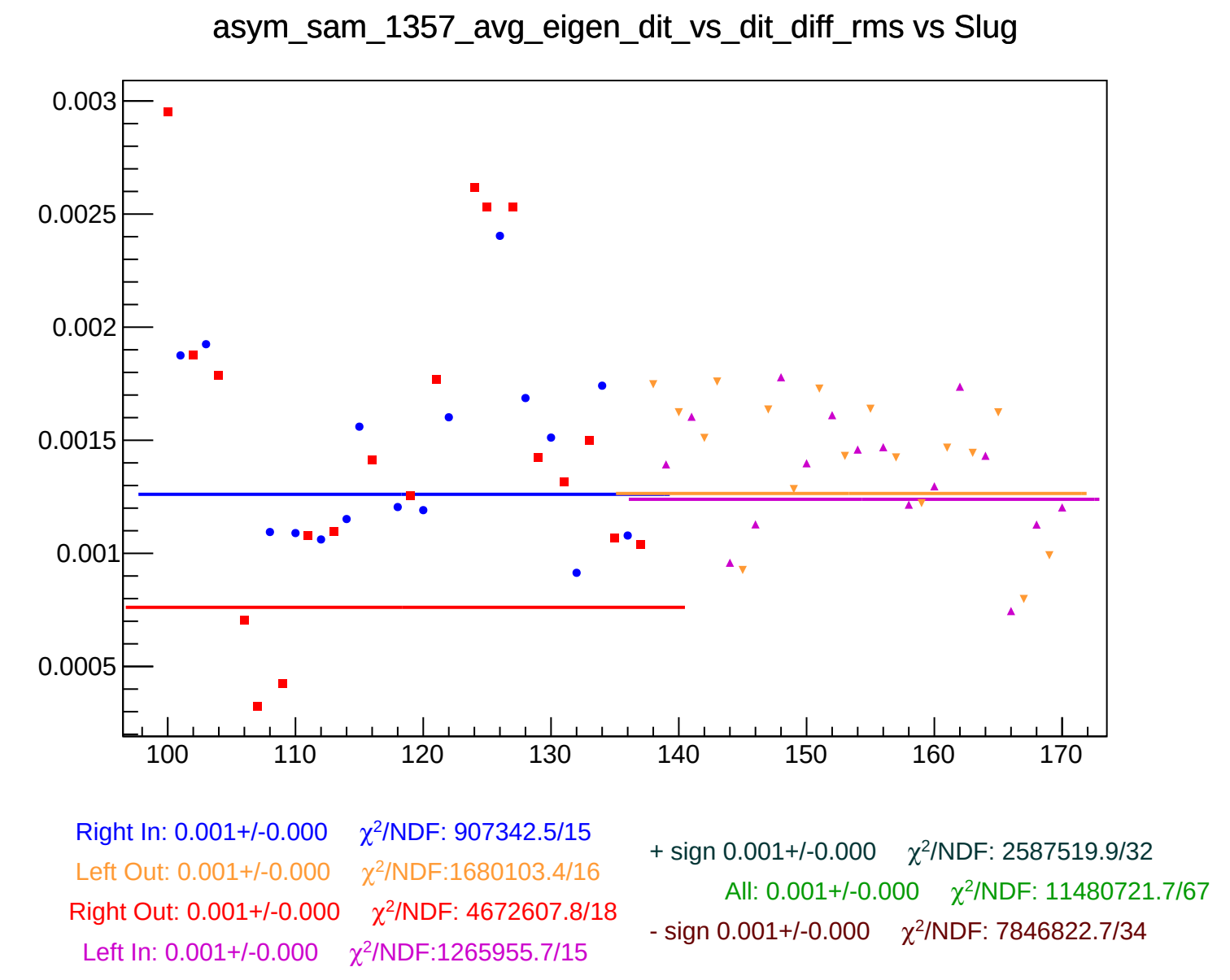
Left In: 19.371+/-0.004 $\chi^2$/NDF:2131138.9/15

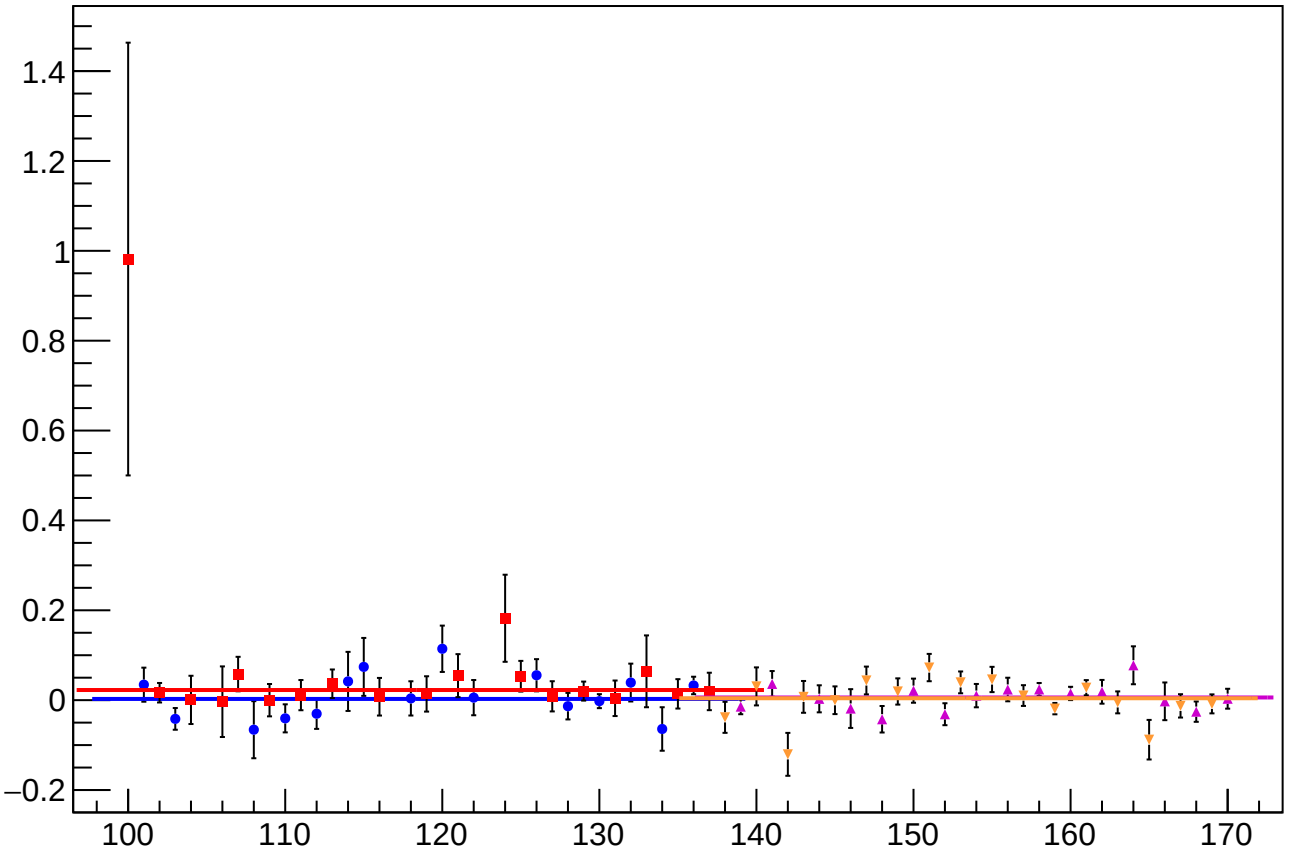
\+ sign 19.673+/-0.003 $\chi^2$/NDF: 3934021.7/32

All: 19.756+/-0.002 $\chi^2$/NDF: 7398145.4/67

\- sign 19.839+/-0.003 $\chi^2$/NDF: 3462919.0/34


asym_sam_1357_avg_eigen_dit_vs_dit_diff_mean vs Slug
×10⁻⁶
30
25
20
15
10
5
0
−5
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 23.5/15
Left Out: 0.000+/-0.000 χ²/NDF:37.9/16
Right Out: 0.000+/-0.000 χ²/NDF: 15.6/18
Left In: 0.000+/-0.000 χ²/NDF:14.0/15
+ sign 0.000+/-0.000 χ²/NDF: 62.7/32
All: 0.000+/-0.000 χ²/NDF: 93.3/67
- sign 0.000+/-0.000 χ²/NDF: 30.4/34


asym_sam_1357_avg_eigen_dit_vs_dit_diff_rms vs Slug
0.003
0.0025
0.002
0.0015
0.001
0.0005
100
110
120
130
140
150
160
170
Right In: 0.001+/-0.000 χ²/NDF: 907342.5/15
Left Out: 0.001+/-0.000 χ²/NDF:1680103.4/16
Right Out: 0.001+/-0.000 χ²/NDF: 4672607.8/18
Left In: 0.001+/-0.000 χ²/NDF:1265955.7/15
+ sign 0.001+/-0.000 χ²/NDF: 2587519.9/32
All: 0.001+/-0.000 χ²/NDF: 11480721.7/67
- sign 0.001+/-0.000 χ²/NDF: 7846822.7/34




Right In: 0.003+/-0.008 $\chi^2$/NDF: 22.0/15

Left Out: 0.004+/-0.006 $\chi^2$/NDF:30.7/16

Right Out: 0.023+/-0.008 $\chi^2$/NDF: 10.8/18

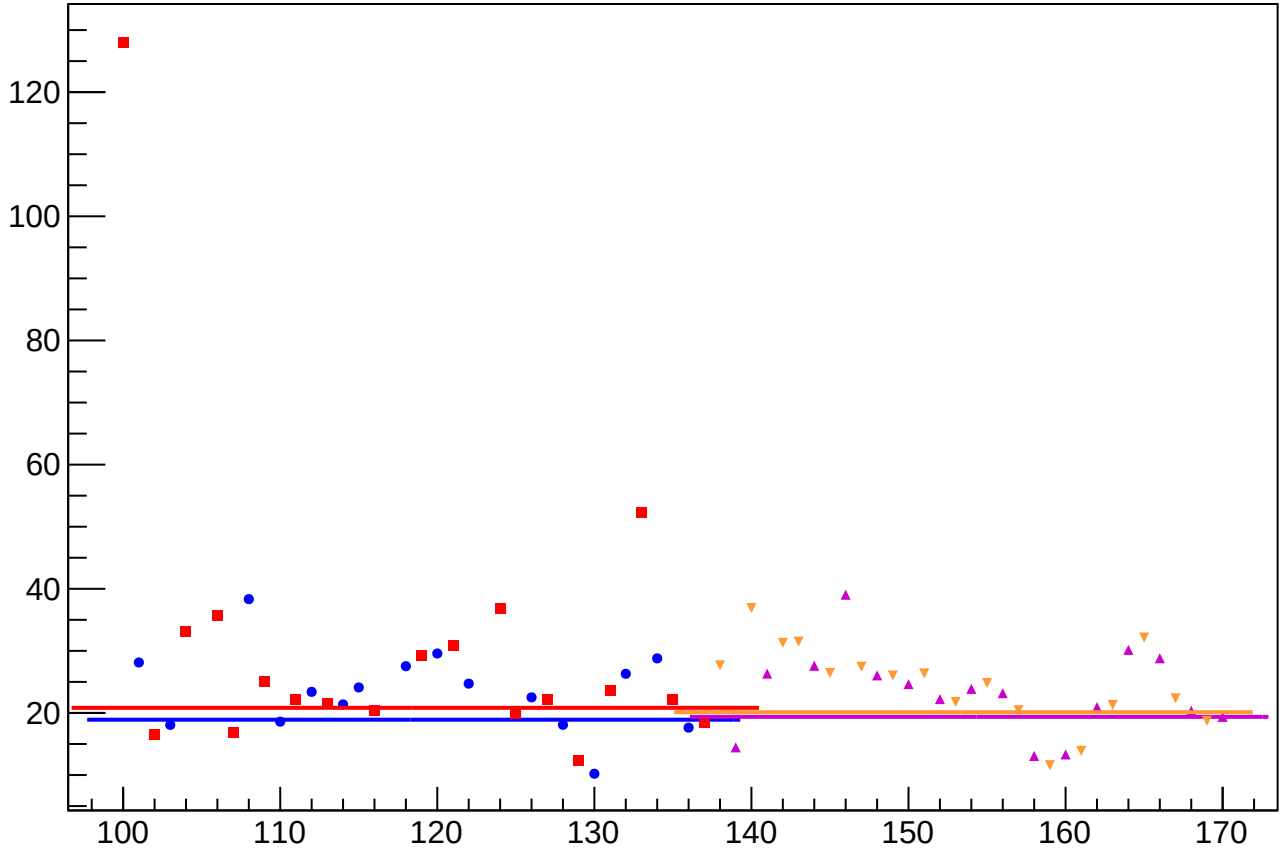
Left In: 0.006+/-0.006 $\chi^2$/NDF:15.8/15

+ sign 0.004+/-0.005 $\chi^2$/NDF: 52.6/32

All: 0.007+/-0.003 $\chi^2$/NDF: 83.1/67

- sign 0.011+/-0.005 $\chi^2$/NDF: 29.2/34

# asym_sam_1357_avg_eigen_dit_vs_cor_diff_rms vs Slug




Right In: 18.912+/-0.006 $\chi^2$/NDF: 1390233.4/15

Left Out: 20.129+/-0.004 $\chi^2$/NDF:2513405.0/16

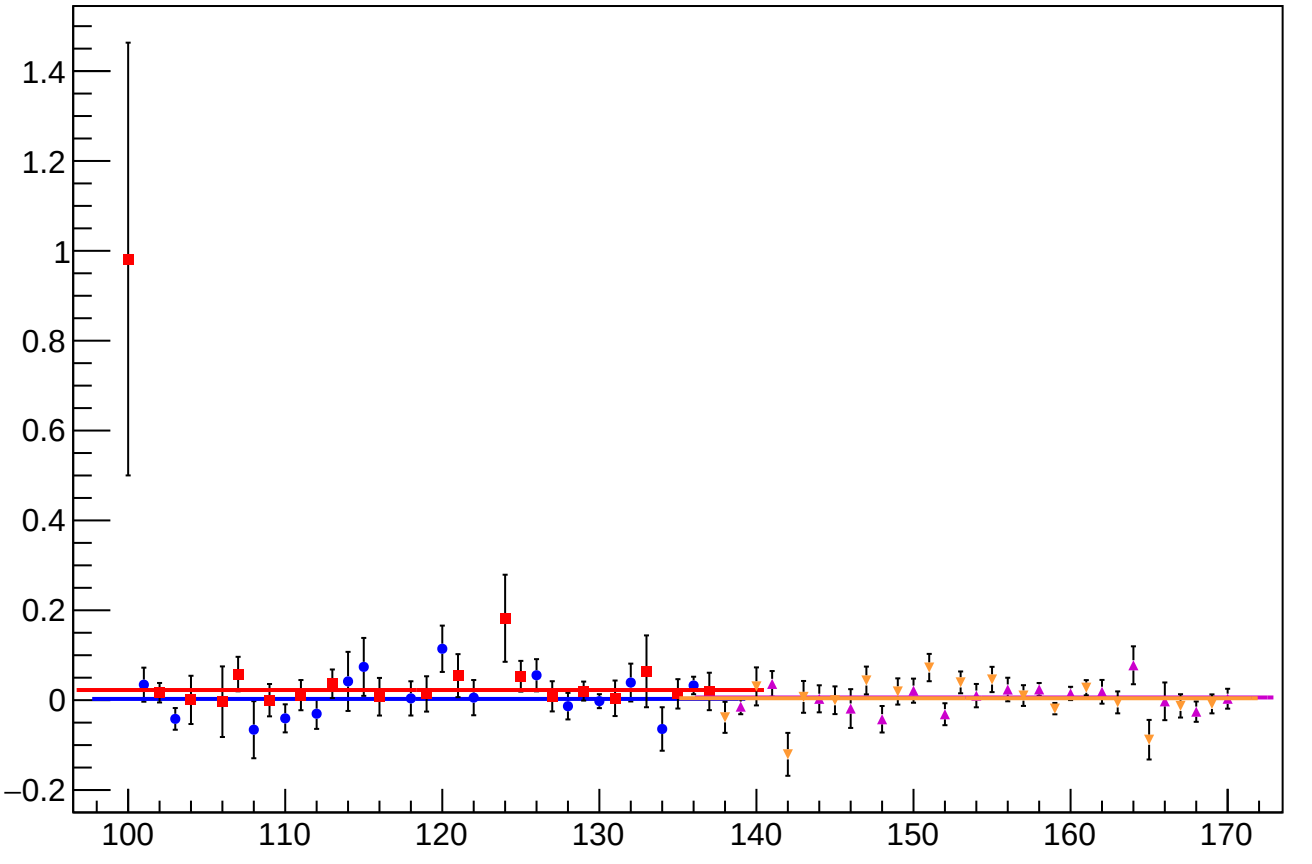
Right Out: 20.827+/-0.006 $\chi^2$/NDF: 1291537.3/18

Left In: 19.372+/-0.004 $\chi^2$/NDF:2131235.0/15

+ sign 19.674+/-0.003 $\chi^2$/NDF: 3934082.1/32

All: 19.756+/-0.002 $\chi^2$/NDF: 7398298.5/67

- sign 19.840+/-0.003 $\chi^2$/NDF: 3463011.7/34




Right In: 0.003+/-0.008 $\chi^2$/NDF: 22.0/15

Left Out: 0.004+/-0.006 $\chi^2$/NDF:30.7/16

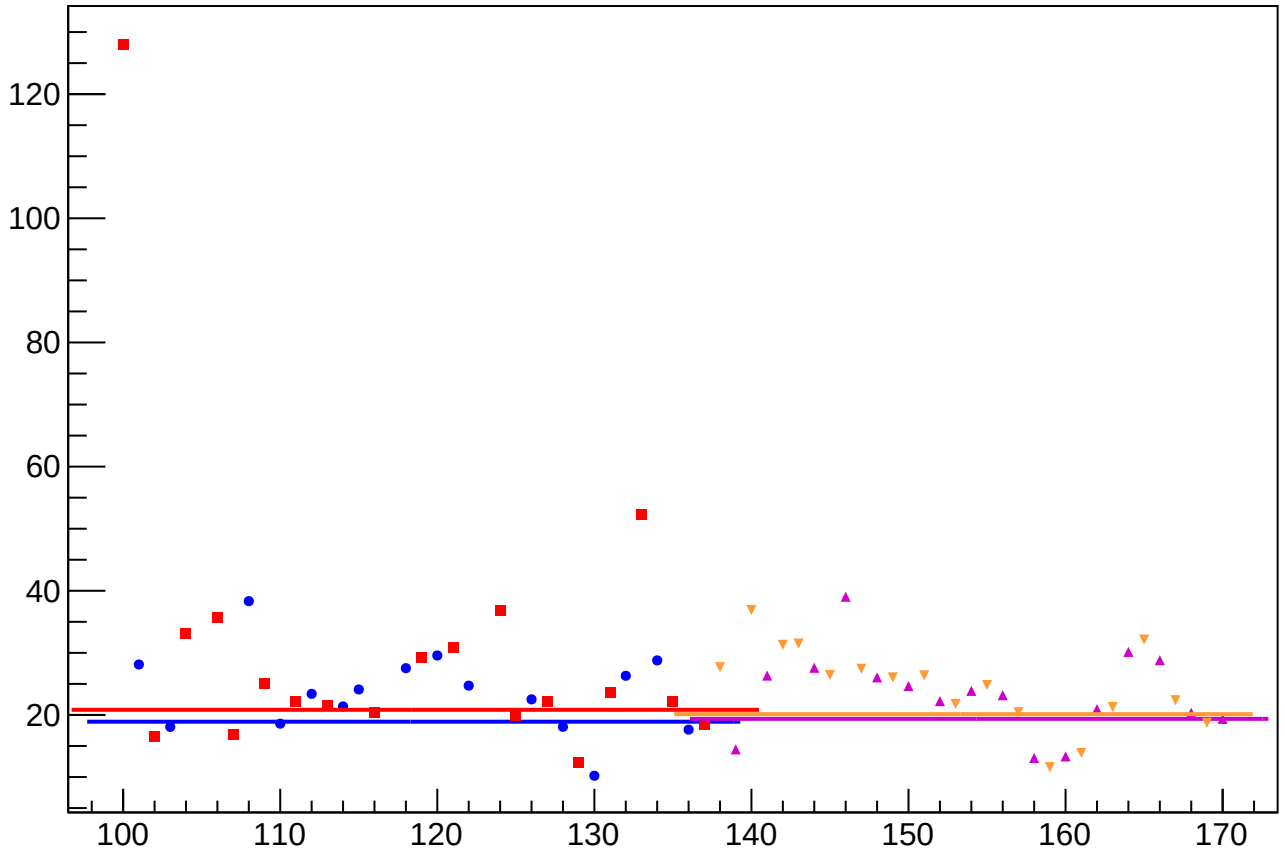
Right Out: 0.023+/-0.008 $\chi^2$/NDF: 10.8/18

Left In: 0.006+/-0.006 $\chi^2$/NDF:15.8/15

+ sign 0.004+/-0.005 $\chi^2$/NDF: 52.6/32

All: 0.007+/-0.003 $\chi^2$/NDF: 83.1/67

- sign 0.011+/-0.005 $\chi^2$/NDF: 29.2/34




Right In: 18.912+/-0.006 $\chi^2$/NDF: 1390233.4/15

Left Out: 20.129+/-0.004 $\chi^2$/NDF:2513405.0/16

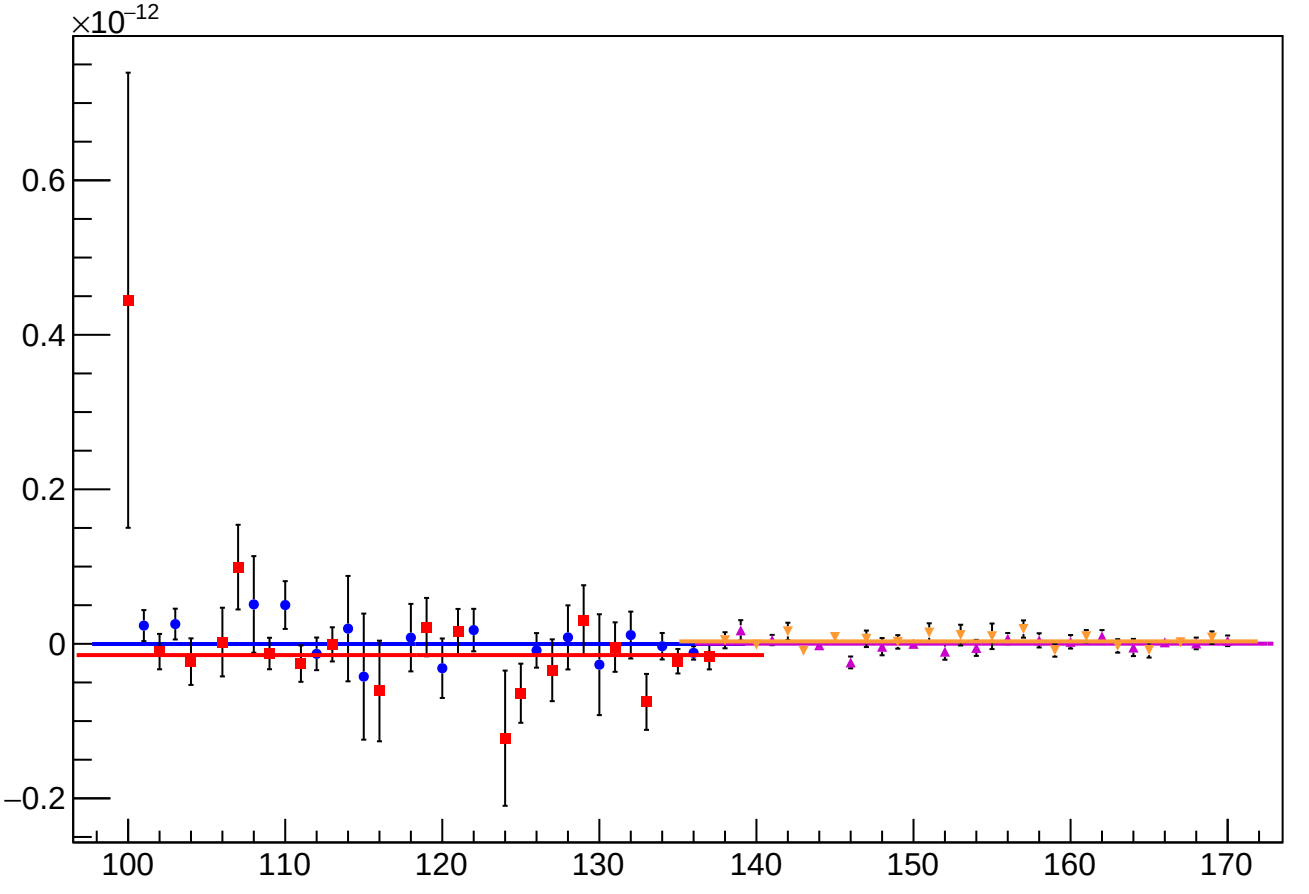
Right Out: 20.827+/-0.006 $\chi^2$/NDF: 1291537.3/18

Left In: 19.372+/-0.004 $\chi^2$/NDF:2131235.0/15

+ sign 19.674+/-0.003 $\chi^2$/NDF: 3934082.1/32

All: 19.756+/-0.002 $\chi^2$/NDF: 7398298.5/67

- sign 19.840+/-0.003 $\chi^2$/NDF: 3463011.7/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 10.5/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:15.1/16

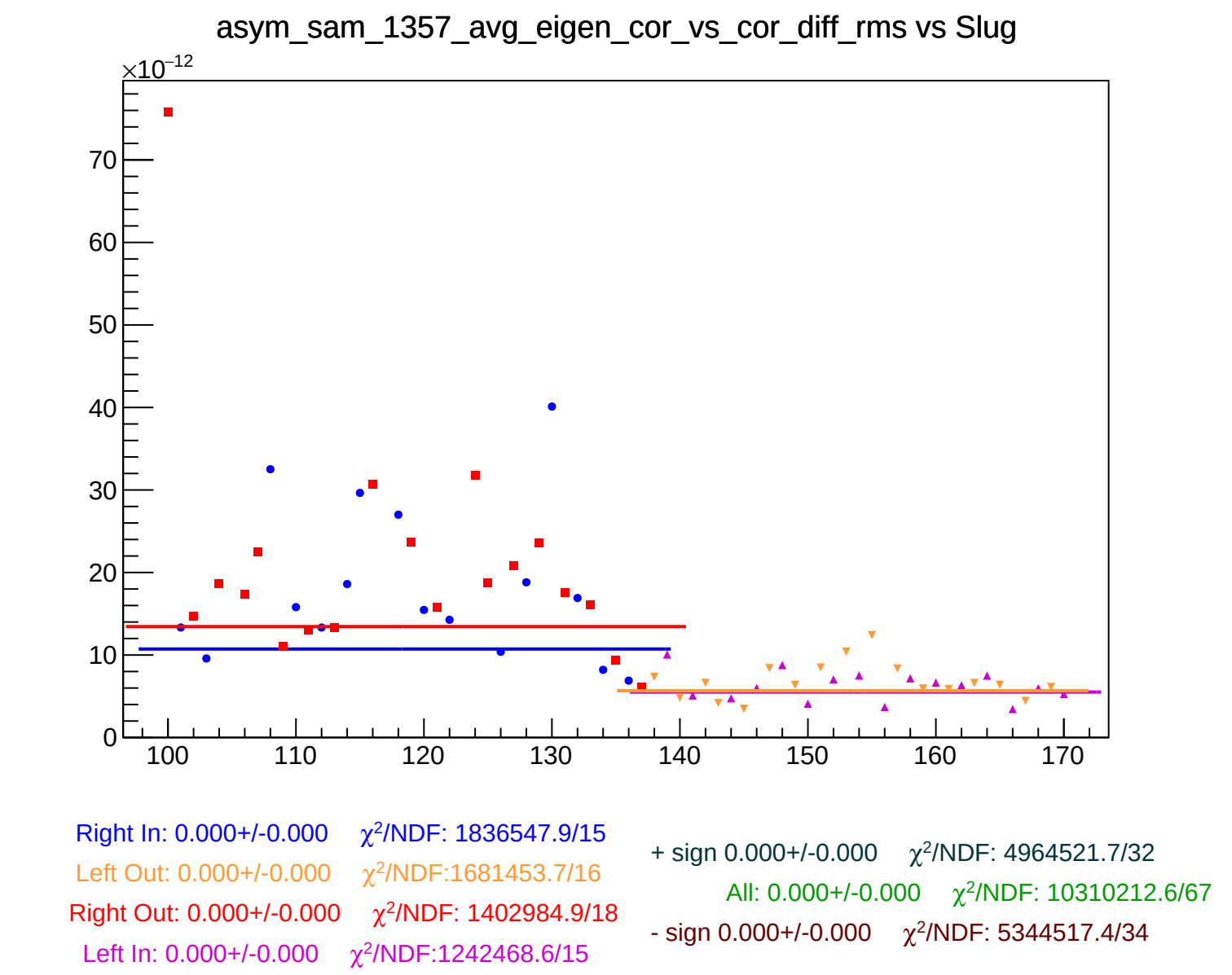
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 17.6/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:16.8/15

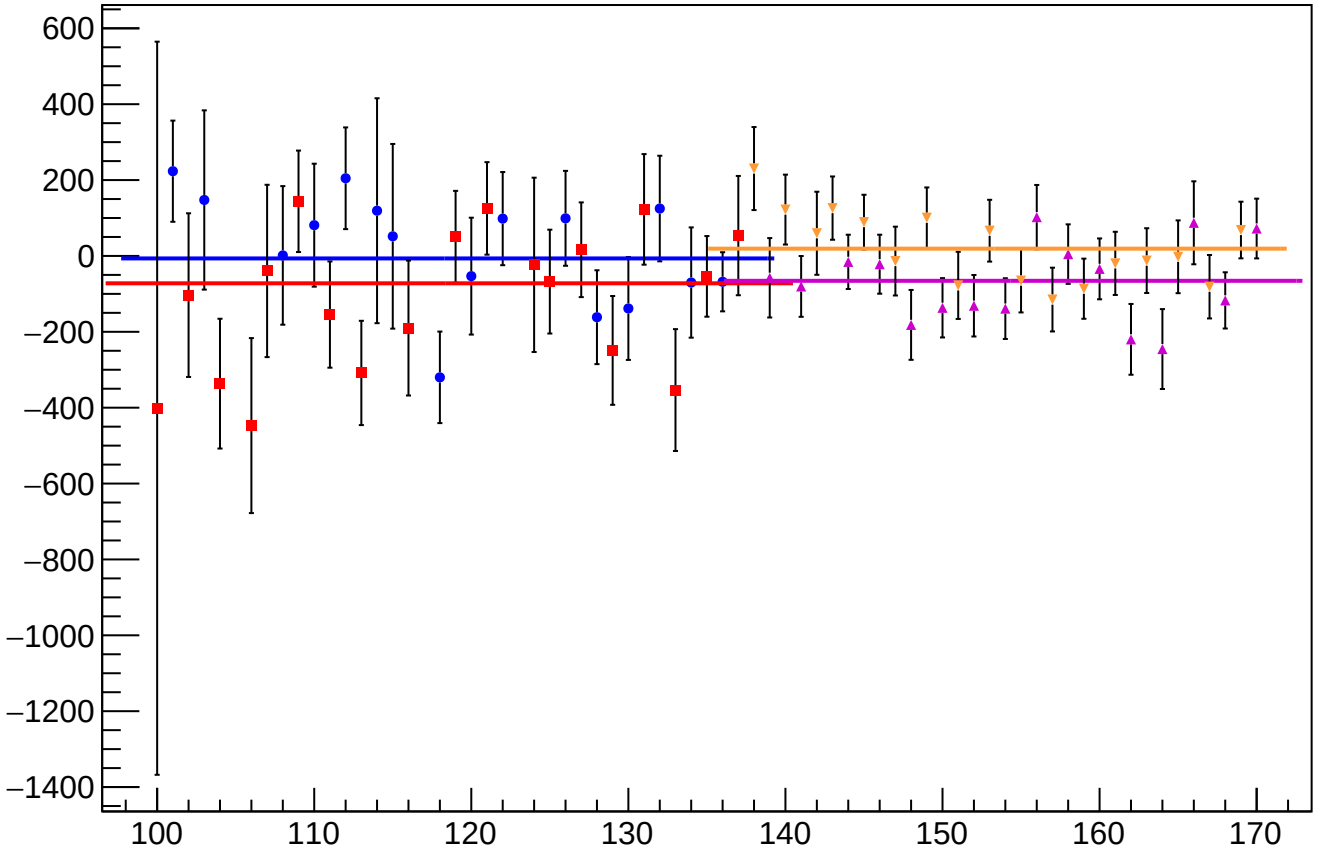
+ sign 0.000+/-0.000 $\chi^2$/NDF: 25.9/32

All: 0.000+/-0.000 $\chi^2$/NDF: 67.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 39.1/34


asym_sam_1357_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
70
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1836547.9/15
Left Out: 0.000+/-0.000 χ²/NDF:1681453.7/16
Right Out: 0.000+/-0.000 χ²/NDF: 1402984.9/18
Left In: 0.000+/-0.000 χ²/NDF:1242468.6/15
+ sign 0.000+/-0.000 χ²/NDF: 4964521.7/32
All: 0.000+/-0.000 χ²/NDF: 10310212.6/67
- sign 0.000+/-0.000 χ²/NDF: 5344517.4/34

# reg_asym_sam_2468_avg_mean vs Slug




Right In: -6.559+/-34.286 $\chi^2$/NDF: 18.9/15

Left Out: 19.219+/-20.703 $\chi^2$/NDF:18.0/16

Right Out: -72.124+/-34.883 $\chi^2$/NDF: 22.8/18

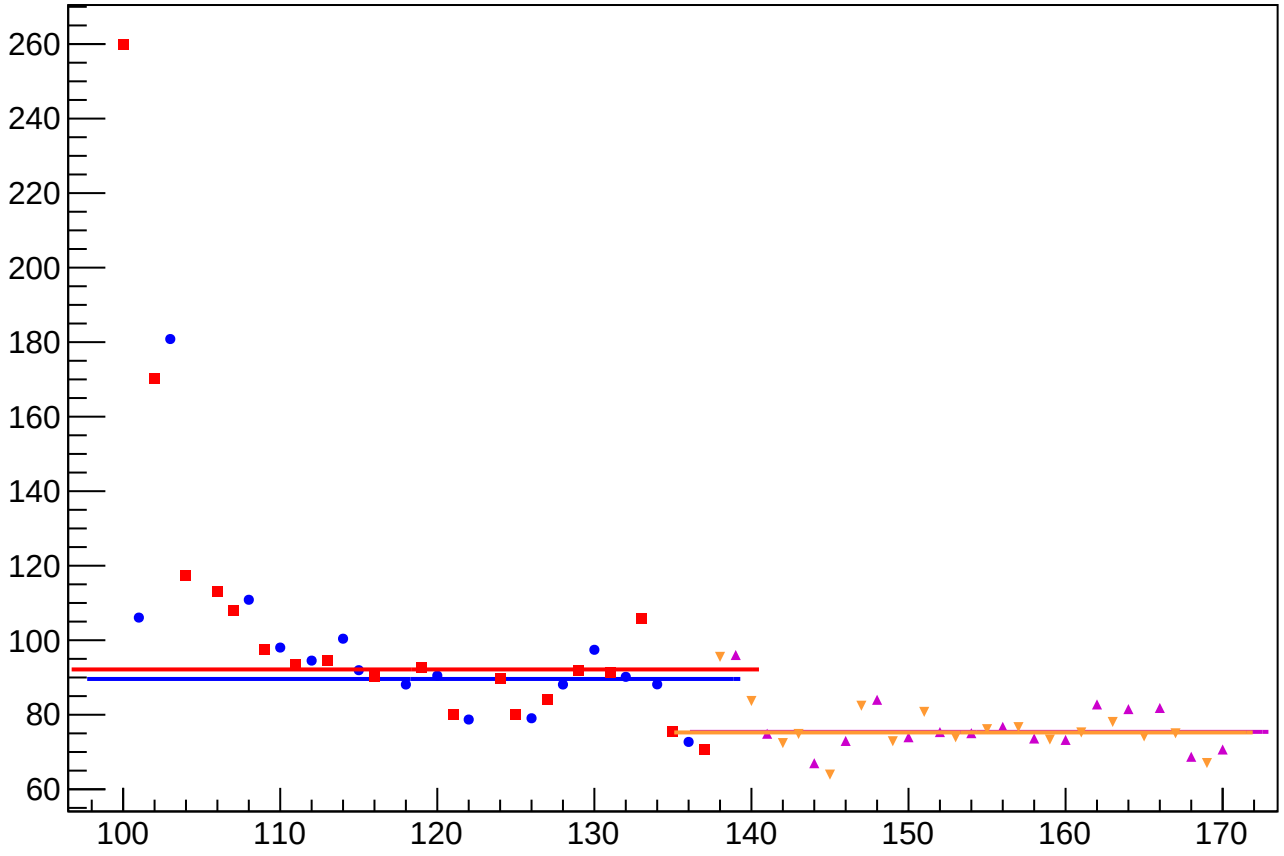
Left In: -65.562+/-20.911 $\chi^2$/NDF:20.8/15

+ sign 12.332+/-17.723 $\chi^2$/NDF: 37.3/32

All: -27.007+/-12.606 $\chi^2$/NDF: 90.9/67

- sign -67.296+/-17.935 $\chi^2$/NDF: 43.6/34

# reg_asym_sam_2468_avg_rms vs Slug




Right In: 89.604+/-0.024 $\chi^2$/NDF: 498380.8/15

Left Out: 75.251+/-0.015 $\chi^2$/NDF:187281.4/16

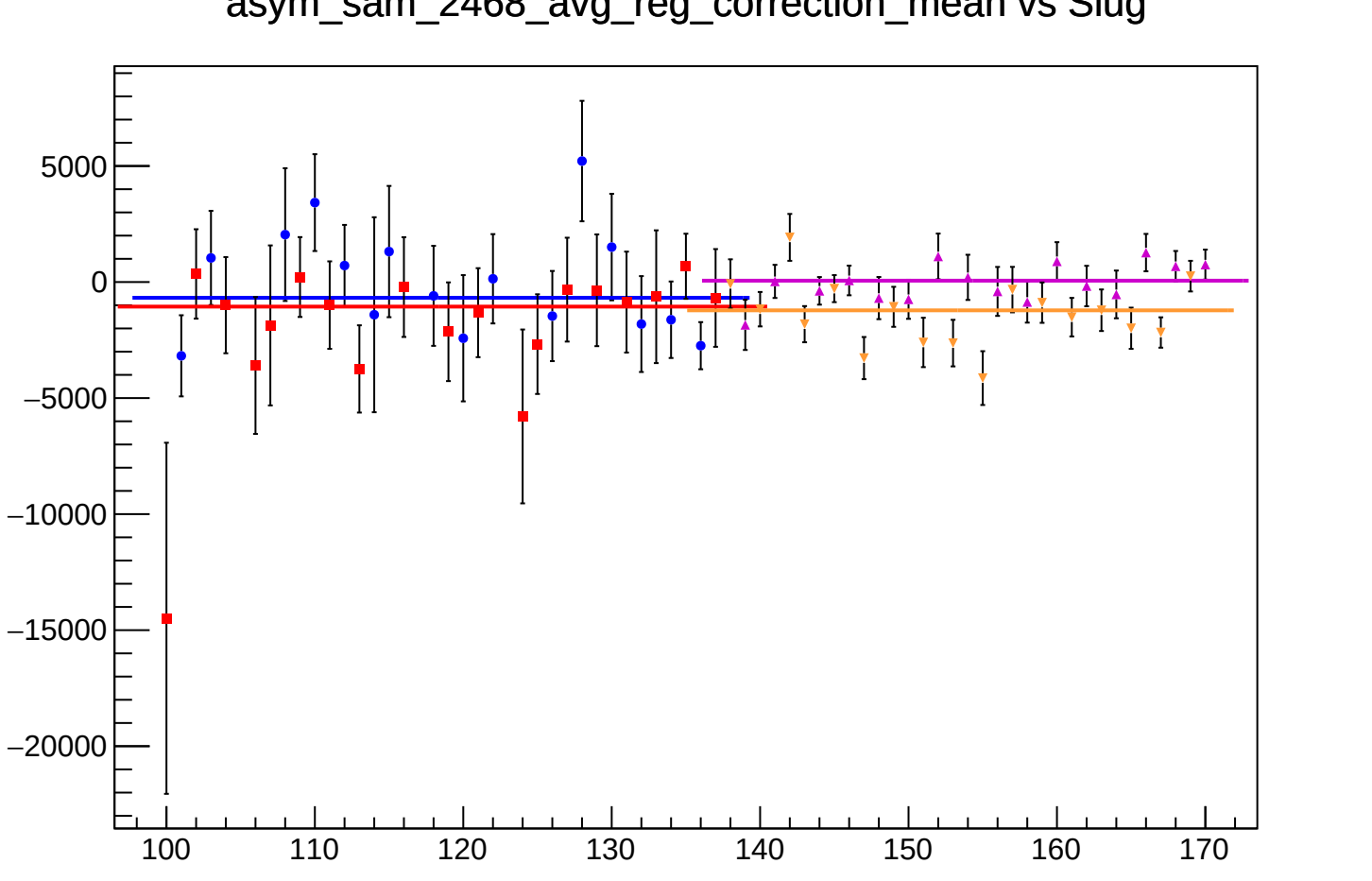
Right Out: 92.161+/-0.025 $\chi^2$/NDF: 542074.4/18

Left In: 75.404+/-0.015 $\chi^2$/NDF:178188.8/15

+ sign 79.086+/-0.013 $\chi^2$/NDF: 942482.5/32

All: 79.456+/-0.009 $\chi^2$/NDF: 2004013.3/67

- sign 79.834+/-0.013 $\chi^2$/NDF: 1059770.3/34




Right In: -677.381+/-486.480 $\chi^2$/NDF: 20.3/15

Left Out: -1219.563+/-202.298 $\chi^2$/NDF:38.2/16

Right Out: -1058.761+/-496.350 $\chi^2$/NDF: 11.5/18

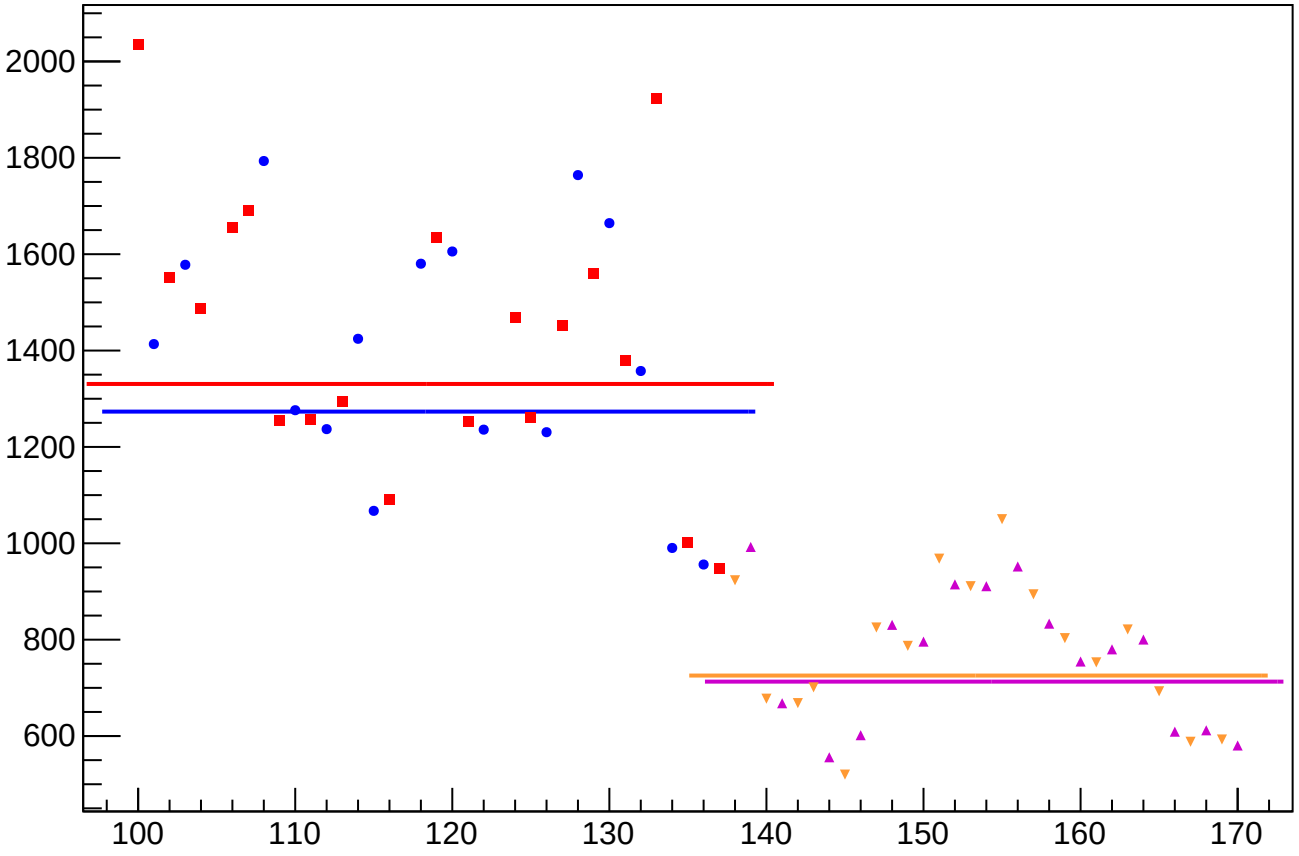
Left In: 58.931+/-200.205 $\chi^2$/NDF:13.4/15

+ sign -1139.630+/-186.791 $\chi^2$/NDF: 59.5/32

All: -615.411+/-131.683 $\chi^2$/NDF: 104.3/67

- sign -97.467+/-185.670 $\chi^2$/NDF: 29.2/34

# asym_sam_2468_avg_reg_correction_rms vs Slug




Right In: 1273.324+/-0.344 $\chi^2$/NDF: 597520.6/15

Left Out: 725.546+/-0.143 $\chi^2$/NDF:971765.3/16

Right Out: 1330.683+/-0.351 $\chi^2$/NDF: 470703.7/18

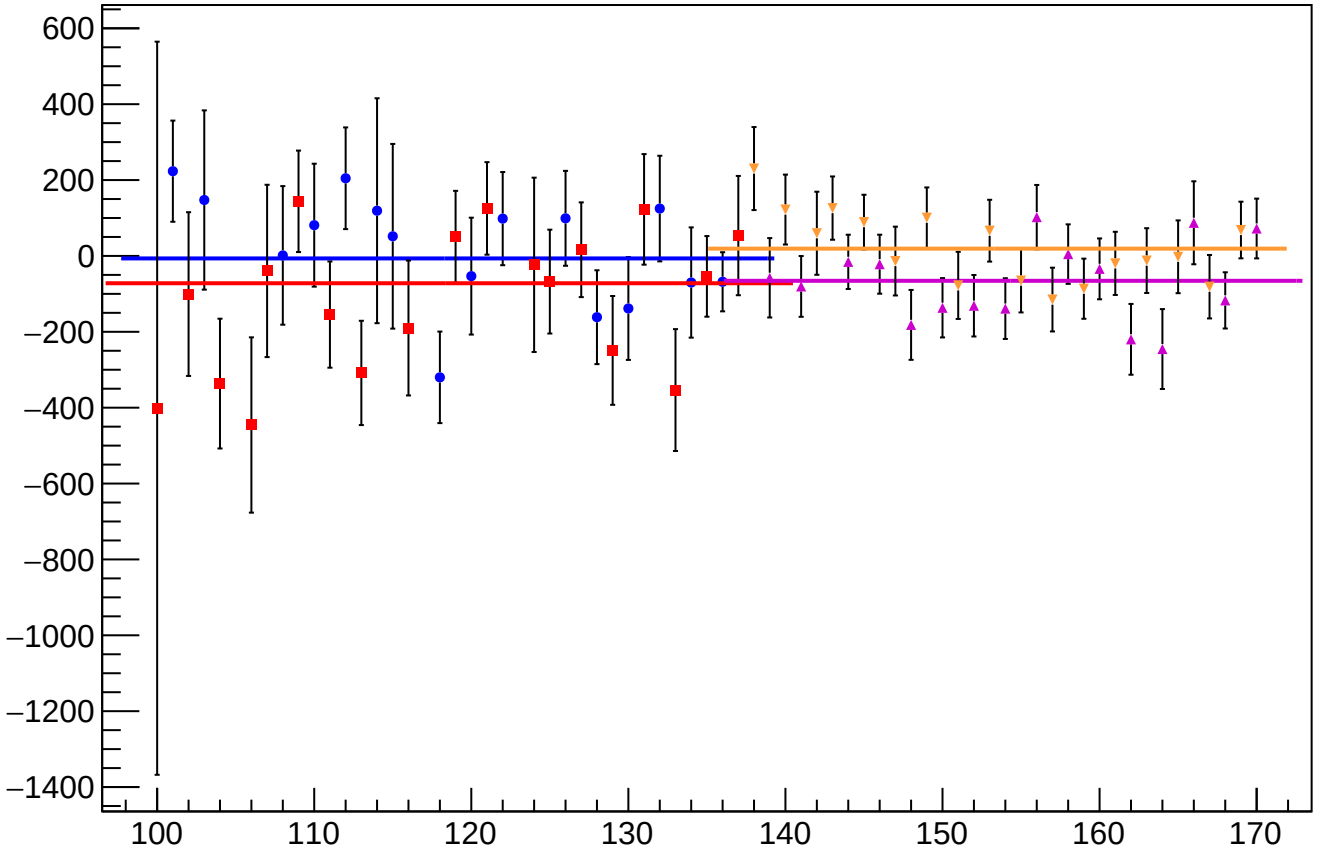
Left In: 712.938+/-0.142 $\chi^2$/NDF:896861.5/15

+ sign 806.305+/-0.132 $\chi^2$/NDF: 3731208.5/32

All: 802.821+/-0.093 $\chi^2$/NDF: 7764604.1/67

- sign 799.378+/-0.131 $\chi^2$/NDF: 4032012.5/34

# cor_asym_sam_2468_avg_mean vs Slug




Right In: -6.568+/-34.286 $\chi^2$/NDF: 18.9/15

Left Out: 19.223+/-20.703 $\chi^2$/NDF:18.0/16

Right Out: -71.981+/-34.885 $\chi^2$/NDF: 22.8/18

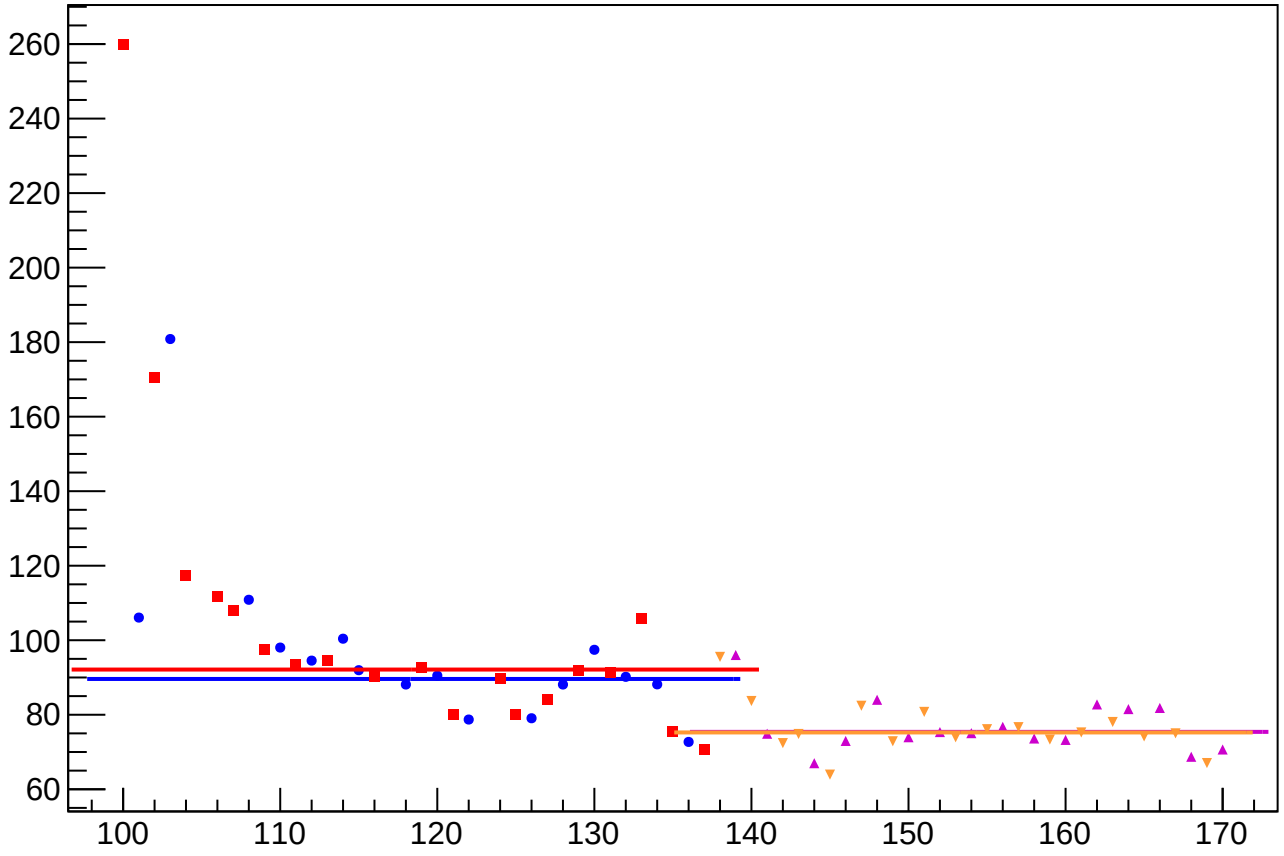
Left In: -65.560+/-20.911 $\chi^2$/NDF:20.8/15

+ sign 12.332+/-17.723 $\chi^2$/NDF: 37.3/32

All: -26.987+/-12.606 $\chi^2$/NDF: 90.9/67

- sign -67.257+/-17.936 $\chi^2$/NDF: 43.6/34

# cor_asym_sam_2468_avg_rms vs Slug




Right In: 89.604+/-0.024 $\chi^2$/NDF: 498384.4/15

Left Out: 75.251+/-0.015 $\chi^2$/NDF:187281.4/16

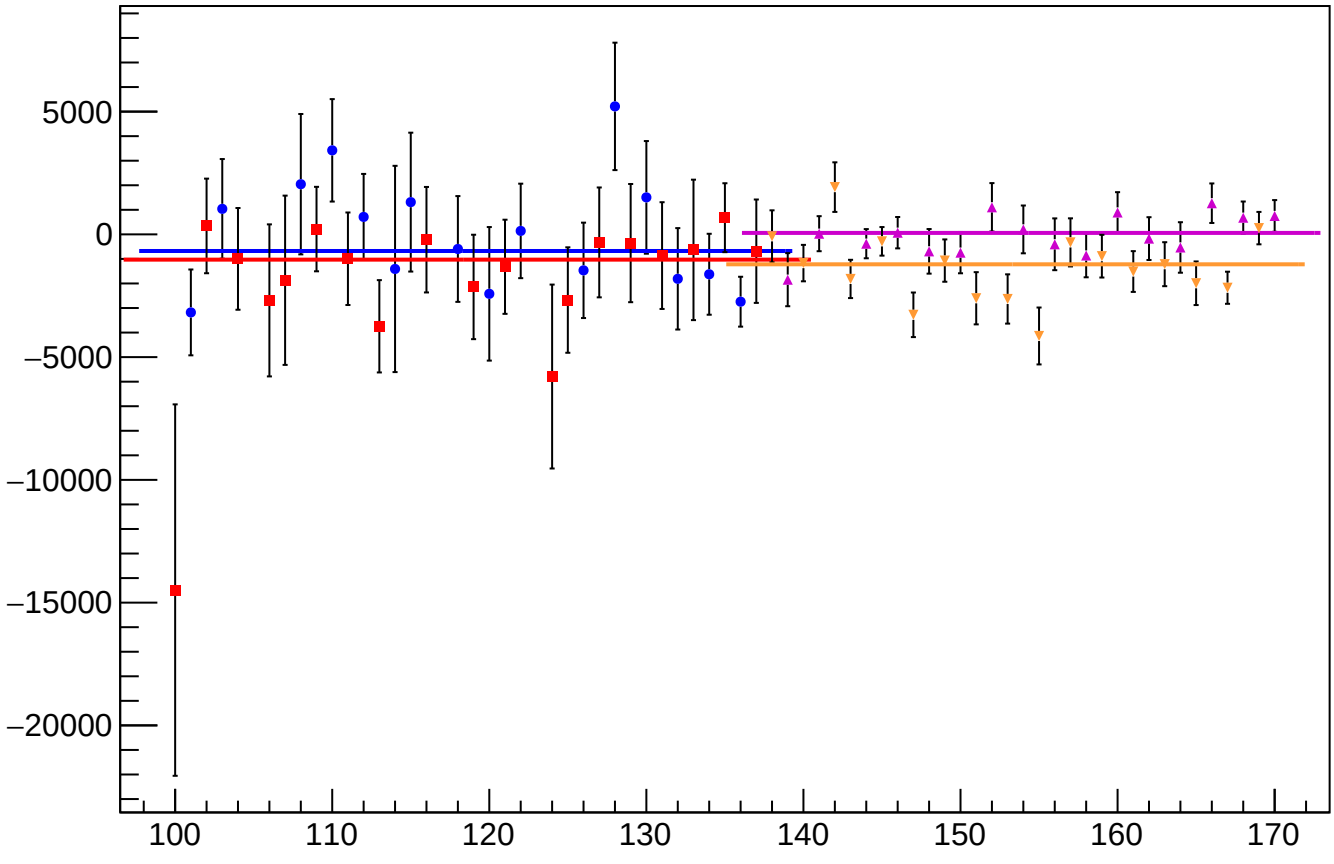
Right Out: 92.129+/-0.025 $\chi^2$/NDF: 540308.7/18

Left In: 75.404+/-0.015 $\chi^2$/NDF:178188.8/15

+ sign 79.086+/-0.013 $\chi^2$/NDF: 942486.0/32

All: 79.451+/-0.009 $\chi^2$/NDF: 2000895.4/67

- sign 79.825+/-0.013 $\chi^2$/NDF: 1056690.0/34




Right In: -677.345+/-486.482 $\chi^2$/NDF: 20.3/15

Left Out: -1219.556+/-202.298 $\chi^2$/NDF:38.2/16

Right Out: -1029.395+/-497.018 $\chi^2$/NDF: 11.0/18

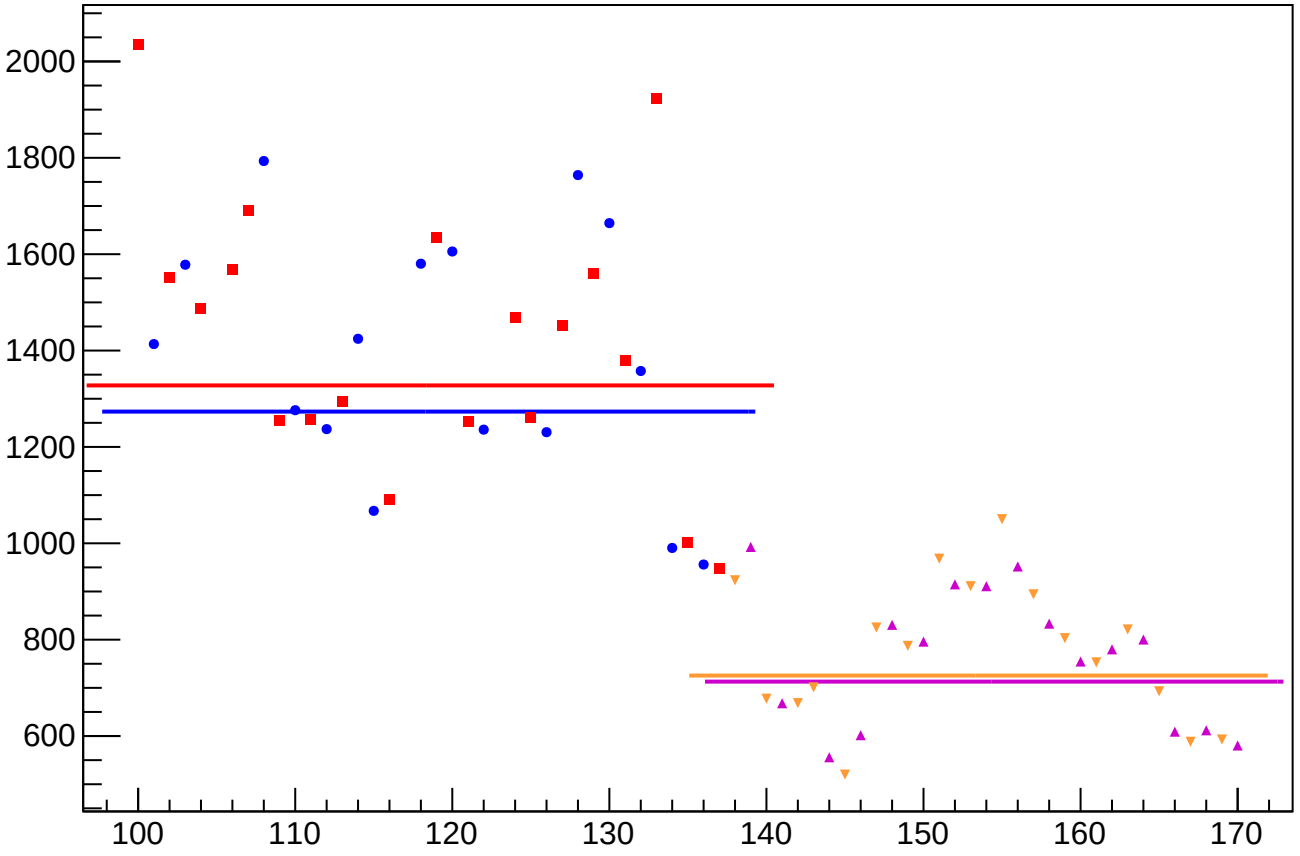
Left In: 58.929+/-200.205 $\chi^2$/NDF:13.4/15

+ sign -1139.618+/-186.791 $\chi^2$/NDF: 59.5/32

All: -613.261+/-131.696 $\chi^2$/NDF: 103.8/67

- sign -93.008+/-185.705 $\chi^2$/NDF: 28.5/34

# asym_sam_2468_avg_cor_correction_rms vs Slug




Right In: 1273.327+/-0.344 $\chi^2$/NDF: 597547.8/15

Left Out: 725.546+/-0.143 $\chi^2$/NDF:971768.1/16

Right Out: 1327.661+/-0.351 $\chi^2$/NDF: 458481.2/18

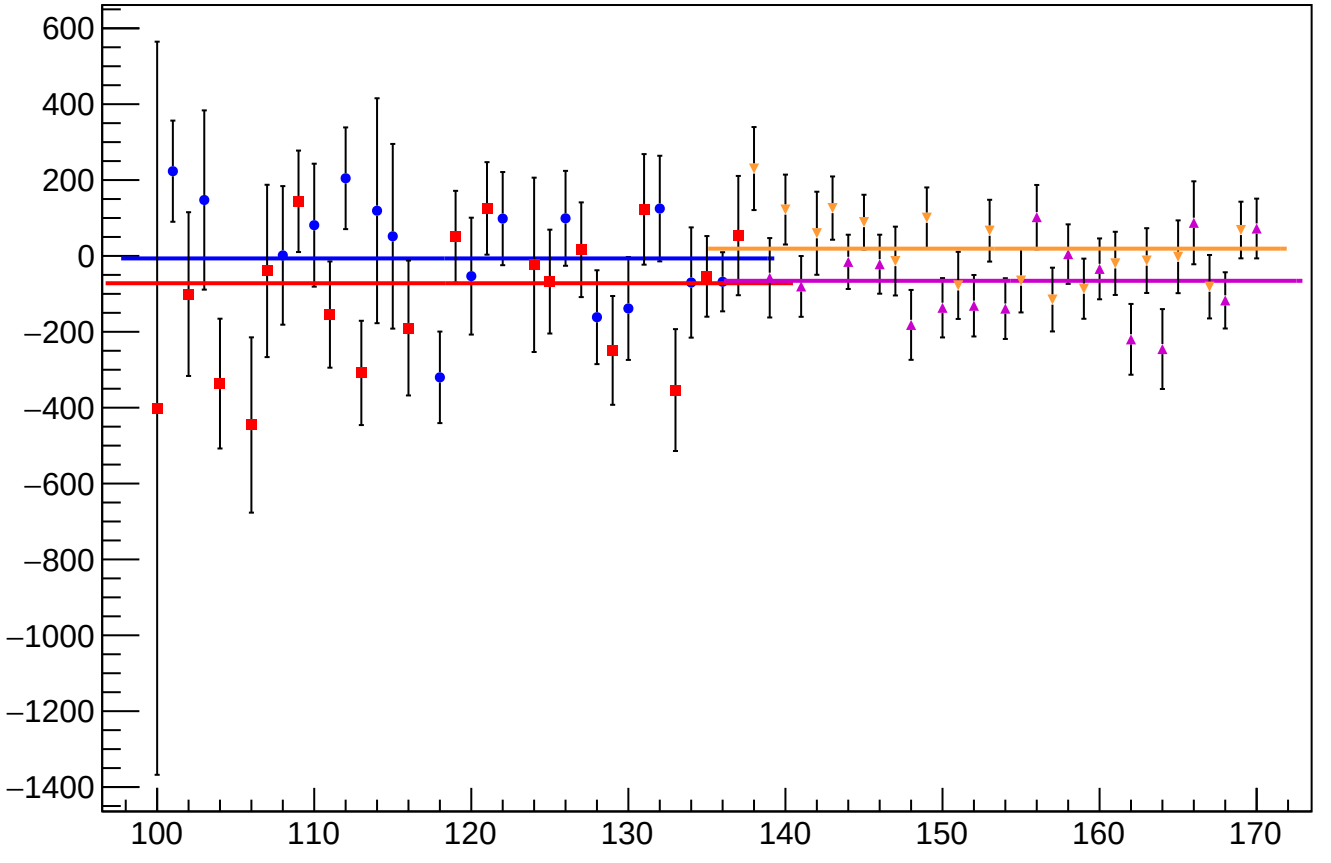
Left In: 712.938+/-0.142 $\chi^2$/NDF:896858.8/15

+ sign 806.304+/-0.132 $\chi^2$/NDF: 3731253.4/32

All: 802.509+/-0.093 $\chi^2$/NDF: 7720577.8/67

- sign 798.757+/-0.131 $\chi^2$/NDF: 3987682.3/34

# eigen_cor_asym_sam_2468_avg_mean vs Slug




Right In: -6.568+/-34.286 $\chi^2$/NDF: 18.9/15

Left Out: 19.223+/-20.703 $\chi^2$/NDF:18.0/16

Right Out: -71.981+/-34.885 $\chi^2$/NDF: 22.8/18

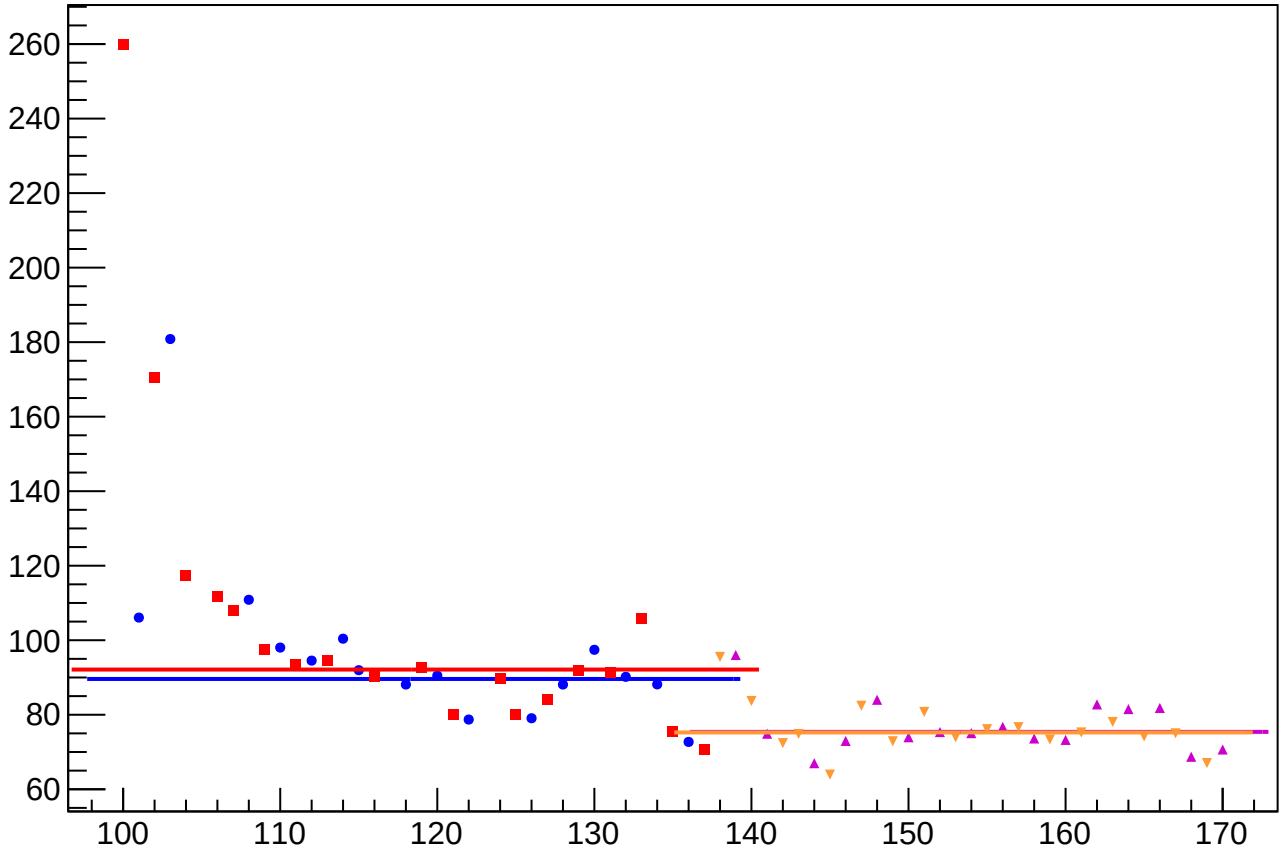
Left In: -65.560+/-20.911 $\chi^2$/NDF:20.8/15

+ sign 12.332+/-17.723 $\chi^2$/NDF: 37.3/32

All: -26.987+/-12.606 $\chi^2$/NDF: 90.9/67

- sign -67.257+/-17.936 $\chi^2$/NDF: 43.6/34

# eigen_cor_asym_sam_2468_avg_rms vs Slug




Right In: 89.604+/-0.024 $\chi^2$/NDF: 498384.4/15

Left Out: 75.251+/-0.015 $\chi^2$/NDF:187281.4/16

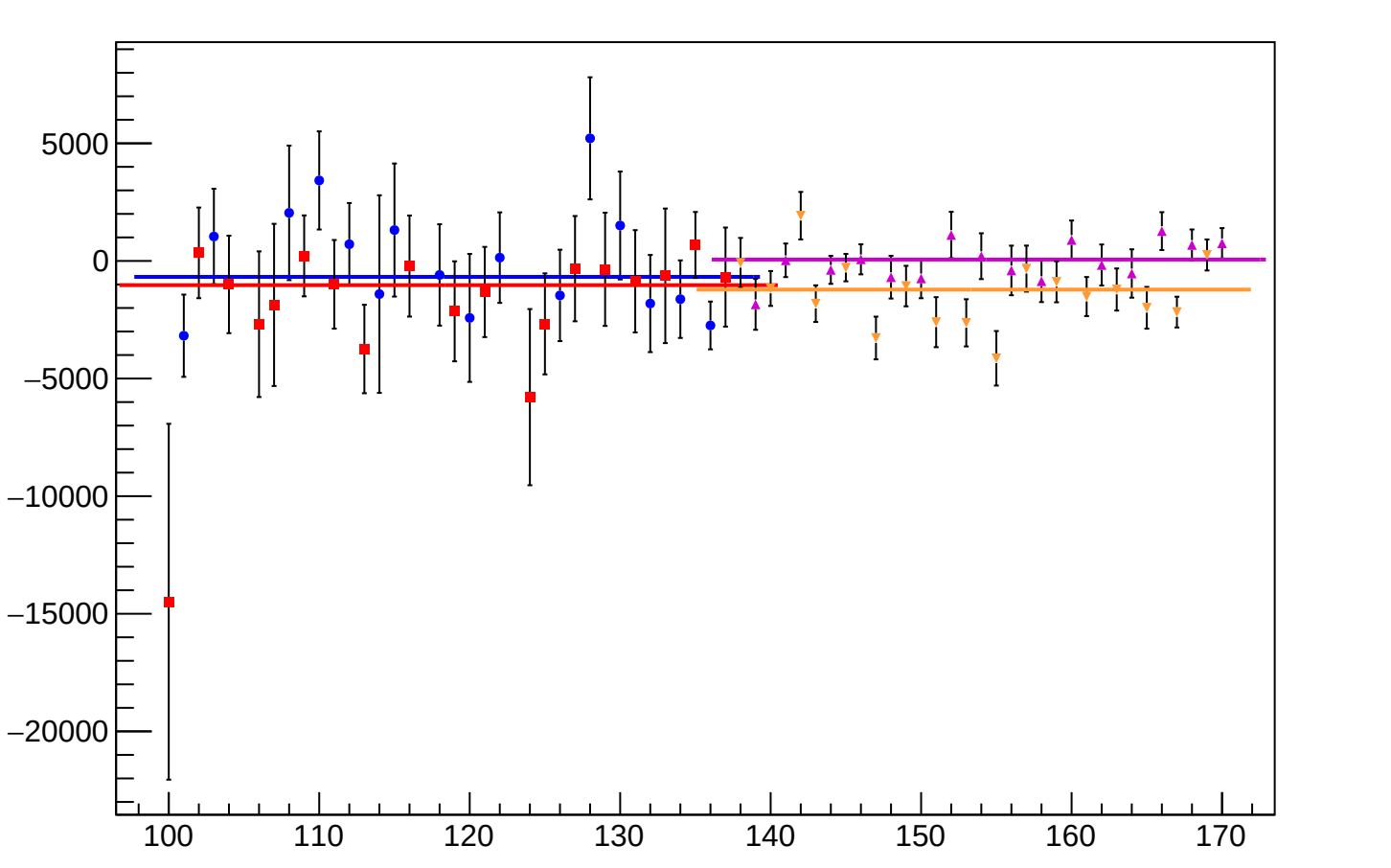
Right Out: 92.129+/-0.025 $\chi^2$/NDF: 540308.7/18

Left In: 75.404+/-0.015 $\chi^2$/NDF:178188.8/15

+ sign 79.086+/-0.013 $\chi^2$/NDF: 942486.0/32

All: 79.451+/-0.009 $\chi^2$/NDF: 2000895.4/67

- sign 79.825+/-0.013 $\chi^2$/NDF: 1056690.0/34




Right In: -677.345+/-486.482 $\chi^2$/NDF: 20.3/15

Left Out: -1219.556+/-202.298 $\chi^2$/NDF:38.2/16

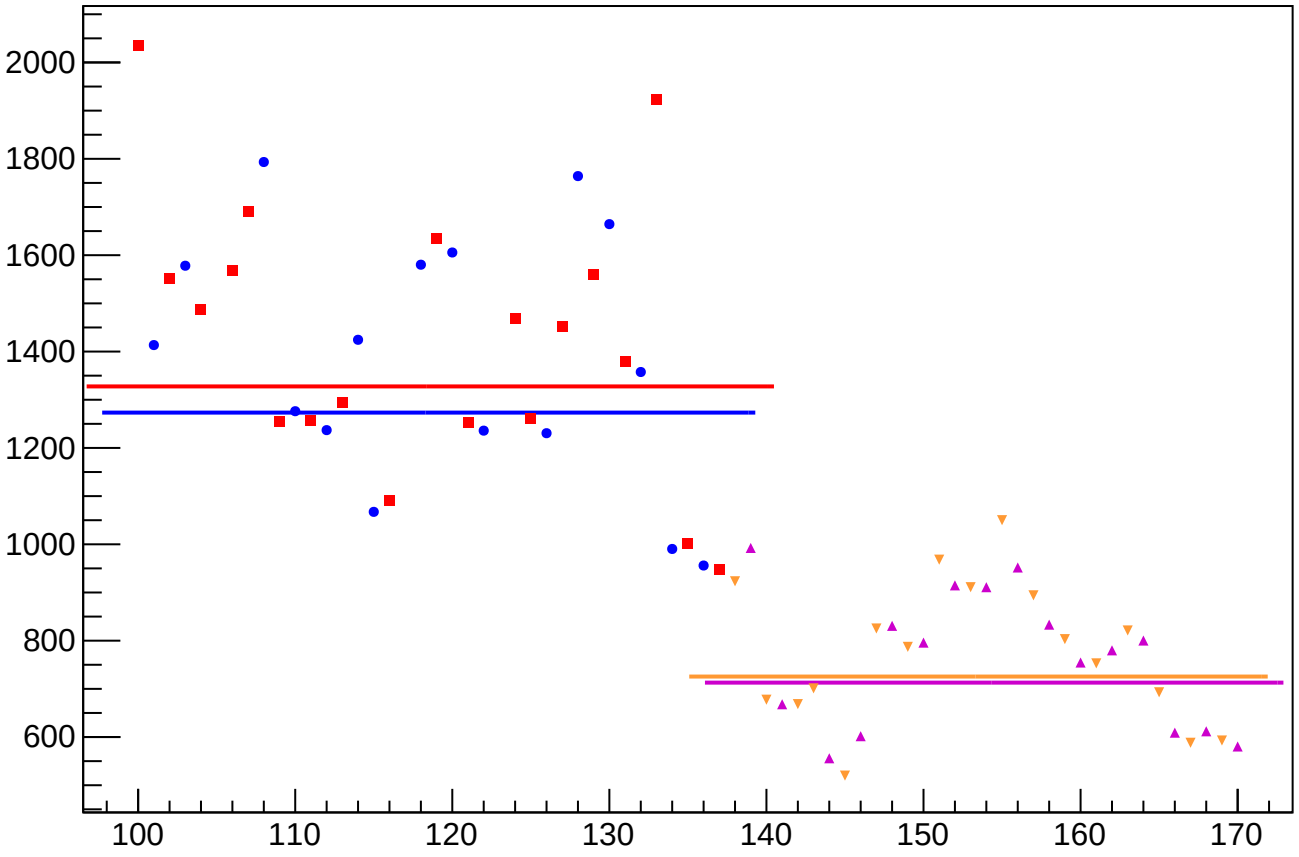
Right Out: -1029.395+/-497.018 $\chi^2$/NDF: 11.0/18

Left In: 58.929+/-200.205 $\chi^2$/NDF:13.4/15

+ sign -1139.618+/-186.791 $\chi^2$/NDF: 59.5/32

All: -613.261+/-131.696 $\chi^2$/NDF: 103.8/67

- sign -93.008+/-185.705 $\chi^2$/NDF: 28.5/34




Right In: 1273.327+/-0.344 $\chi^2$/NDF: 597547.8/15

Left Out: 725.546+/-0.143 $\chi^2$/NDF:971768.1/16

Right Out: 1327.661+/-0.351 $\chi^2$/NDF: 458481.2/18

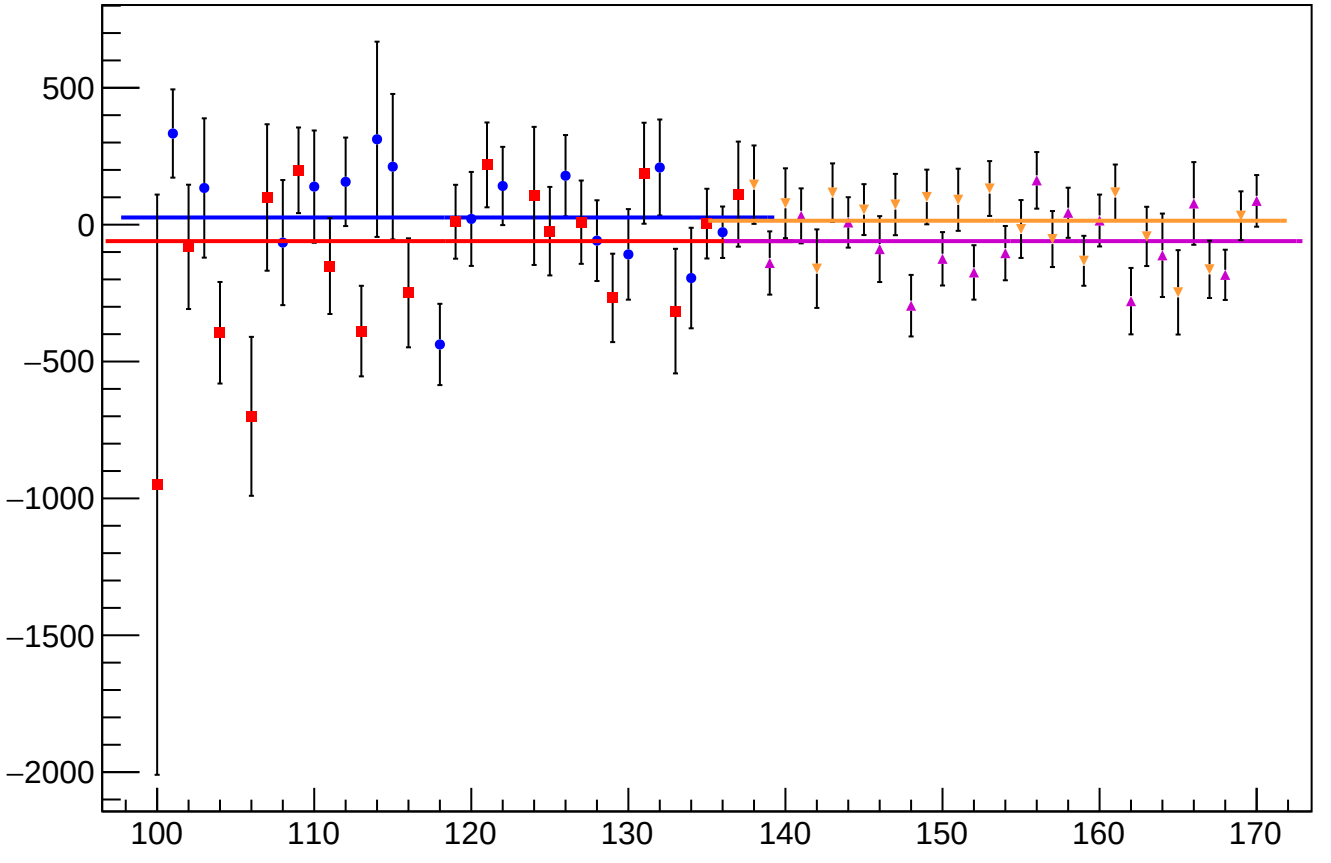
Left In: 712.938+/-0.142 $\chi^2$/NDF:896858.8/15

+ sign 806.304+/-0.132 $\chi^2$/NDF: 3731253.4/32

All: 802.509+/-0.093 $\chi^2$/NDF: 7720577.8/67

- sign 798.757+/-0.131 $\chi^2$/NDF: 3987682.3/34

# dit_asym_sam_2468_avg_mean vs Slug




Right In: 26.251+/-41.220 $\chi^2$/NDF: 21.4/15

Left Out: 14.369+/-26.126 $\chi^2$/NDF:16.8/16

Right Out: -60.119+/-41.528 $\chi^2$/NDF: 27.0/18

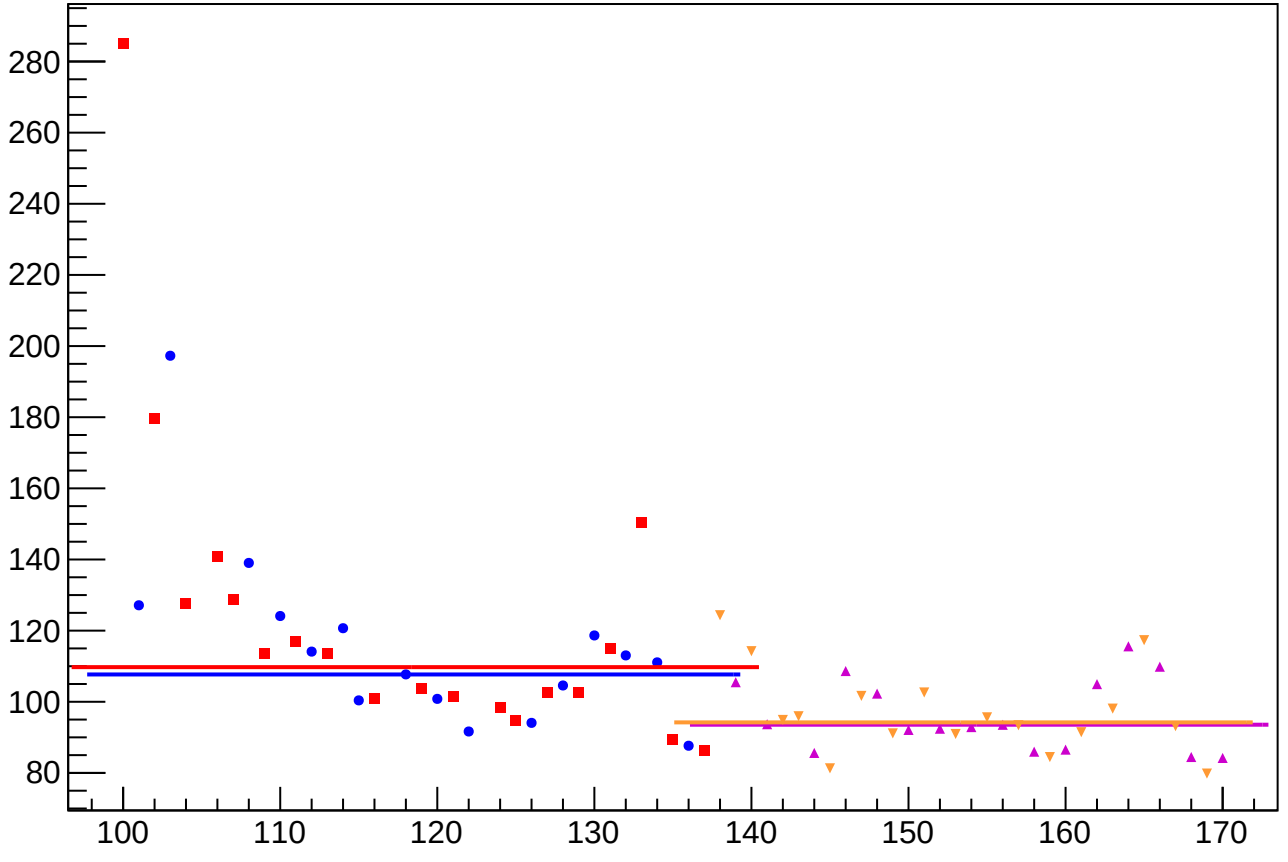
Left In: -60.105+/-26.188 $\chi^2$/NDF:23.3/15

+ sign 17.774+/-22.067 $\chi^2$/NDF: 38.2/32

All: -21.019+/-15.633 $\chi^2$/NDF: 94.6/67

- sign -60.109+/-22.151 $\chi^2$/NDF: 50.3/34

# dit_asym_sam_2468_avg_rms vs Slug




Right In: 107.680+/-0.029 $\chi^2$/NDF: 483125.6/15

Left Out: 94.209+/-0.018 $\chi^2$/NDF:325565.3/16

Right Out: 109.739+/-0.029 $\chi^2$/NDF: 491787.3/18

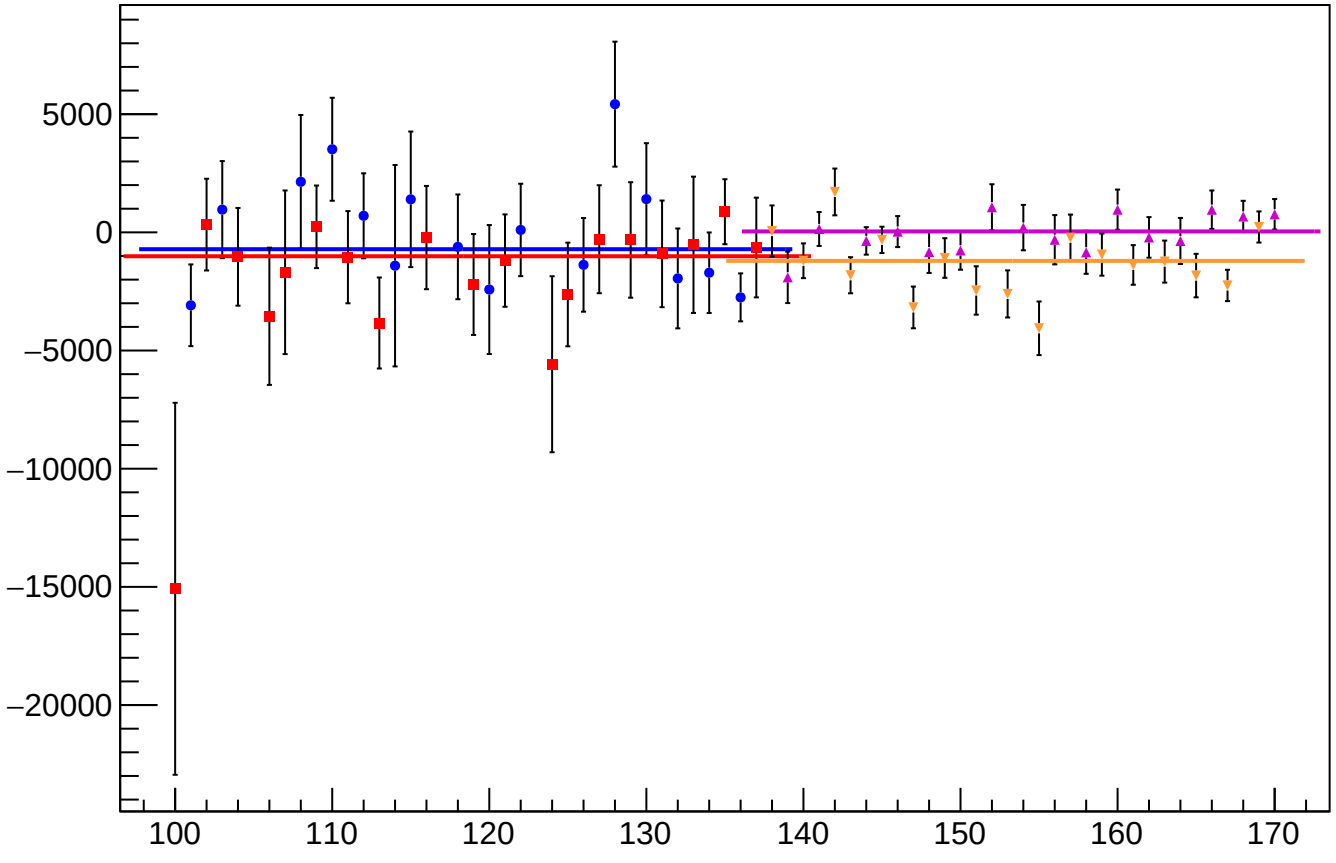
Left In: 93.552+/-0.019 $\chi^2$/NDF:227187.6/15

+ sign 98.070+/-0.016 $\chi^2$/NDF: 961069.5/32

All: 98.114+/-0.011 $\chi^2$/NDF: 1897477.2/67

- sign 98.158+/-0.016 $\chi^2$/NDF: 936392.0/34

# asym_sam_2468_avg_dit_correction_mean vs Slug




Right In: -712.887+/-493.253 $\chi^2$/NDF: 20.1/15

Left Out: -1206.742+/-200.537 $\chi^2$/NDF:36.8/16

Right Out: -1010.557+/-501.374 $\chi^2$/NDF: 11.8/18

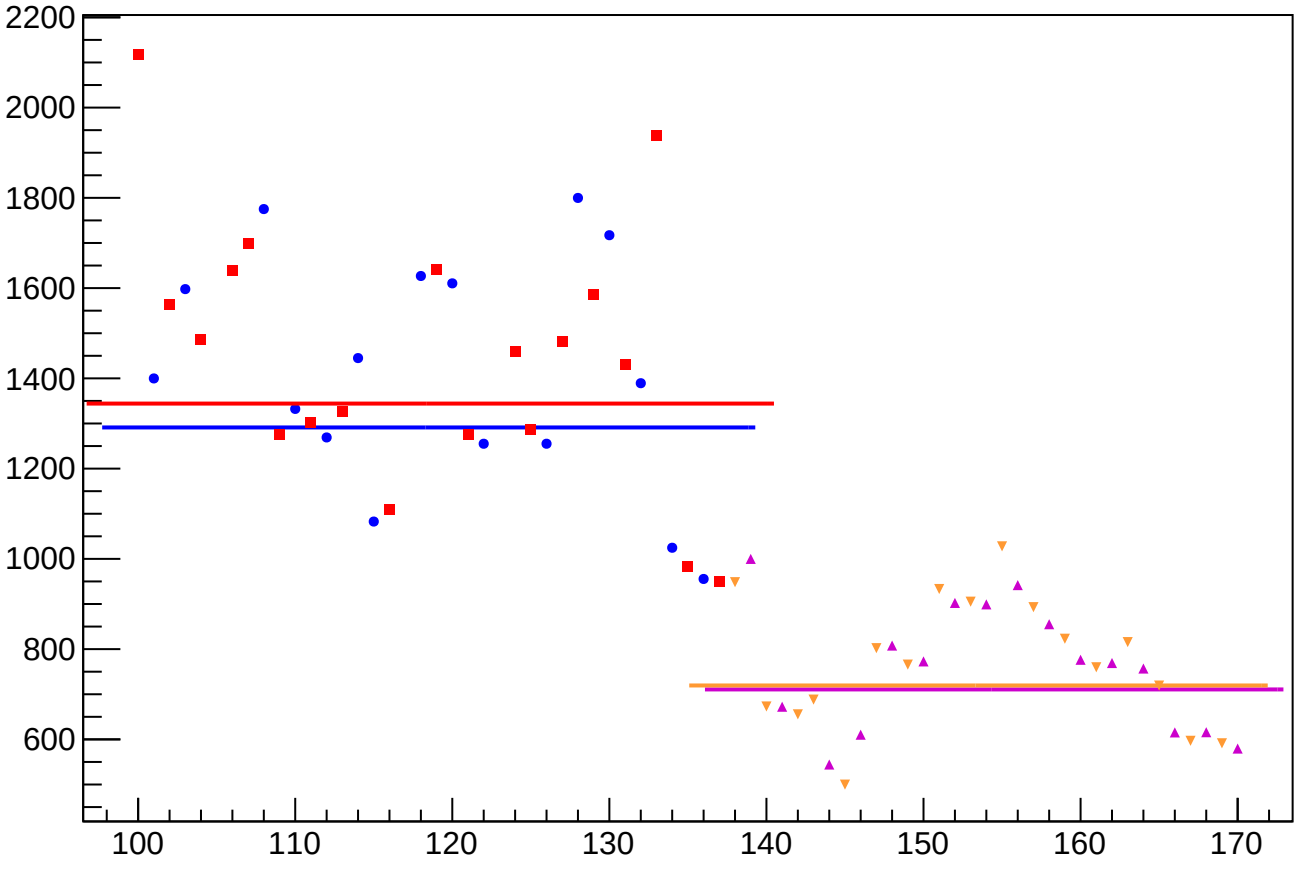
Left In: 38.965+/-199.562 $\chi^2$/NDF:12.7/15

+ sign -1136.691+/-185.771 $\chi^2$/NDF: 57.8/32

All: -619.639+/-131.233 $\chi^2$/NDF: 101.5/67

- sign -104.569+/-185.414 $\chi^2$/NDF: 28.2/34

# asym_sam_2468_avg_dit_correction_rms vs Slug




Right In: 1291.223+/-0.349 $\chi^2$/NDF: 610897.3/15

Left Out: 719.469+/-0.142 $\chi^2$/NDF:1010671.9/16

Right Out: 1344.118+/-0.355 $\chi^2$/NDF: 490963.7/18

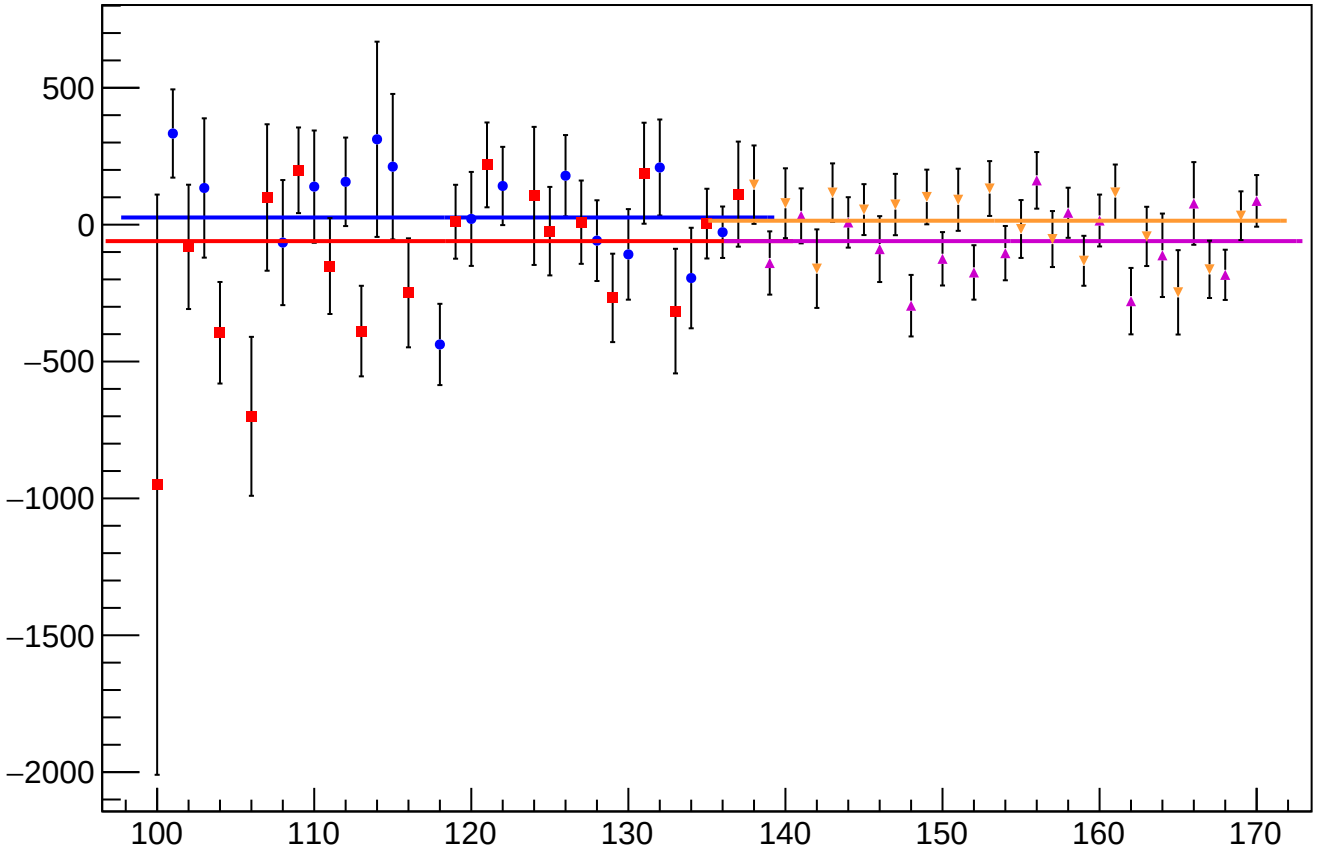
Left In: 710.683+/-0.141 $\chi^2$/NDF:873446.8/15

+ sign 800.570+/-0.131 $\chi^2$/NDF: 3927650.9/32

All: 798.938+/-0.093 $\chi^2$/NDF: 8048131.2/67

- sign 797.312+/-0.131 $\chi^2$/NDF: 4120172.3/34

# eigen_dit_asym_sam_2468_avg_mean vs Slug




Right In: 26.252+/-41.219 $\chi^2$/NDF: 21.4/15

Left Out: 14.370+/-26.126 $\chi^2$/NDF:16.8/16

Right Out: -60.117+/-41.528 $\chi^2$/NDF: 27.0/18

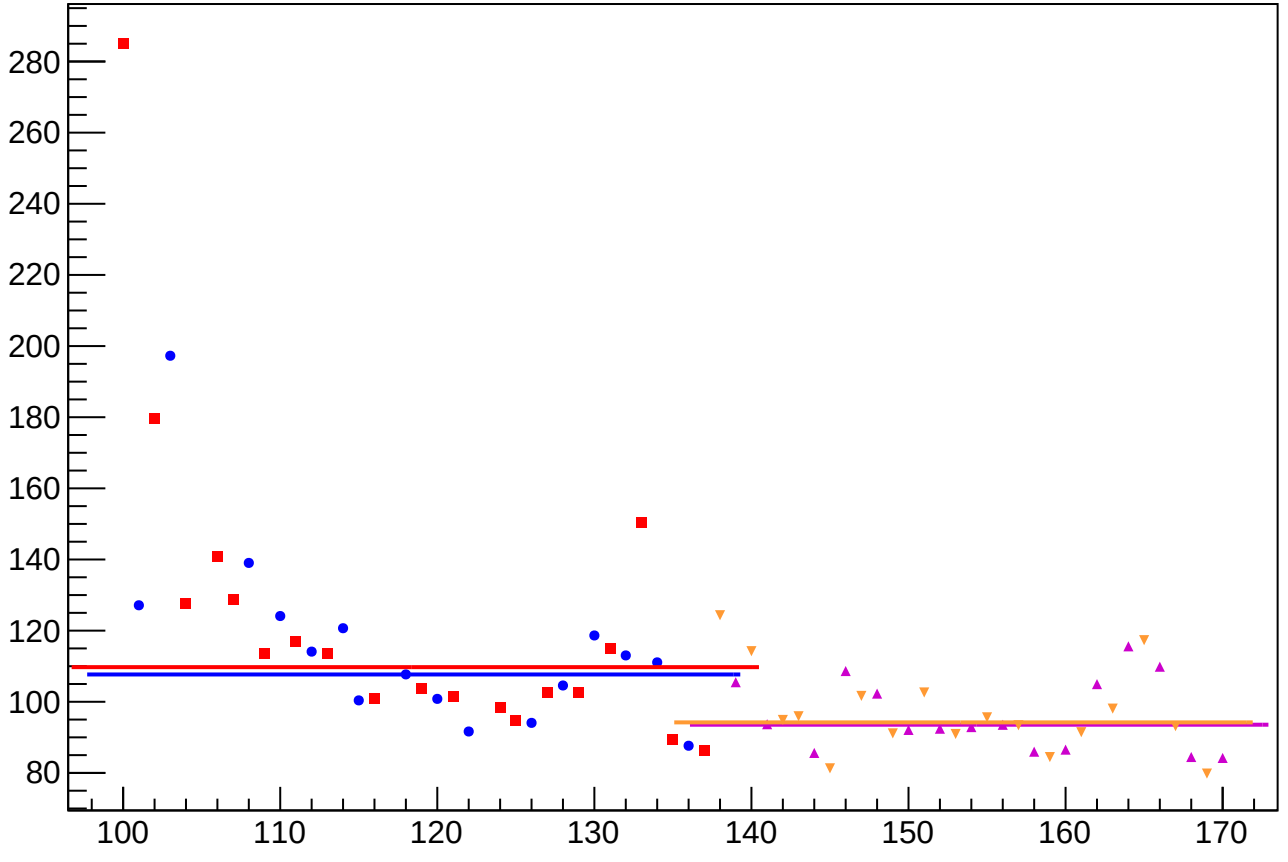
Left In: -60.104+/-26.188 $\chi^2$/NDF:23.3/15

+ sign 17.775+/-22.067 $\chi^2$/NDF: 38.2/32

All: -21.018+/-15.633 $\chi^2$/NDF: 94.6/67

- sign -60.108+/-22.151 $\chi^2$/NDF: 50.3/34

# eigen_dit_asym_sam_2468_avg_rms vs Slug




Right In: 107.679+/-0.029 $\chi^2$/NDF: 483112.2/15

Left Out: 94.210+/-0.018 $\chi^2$/NDF:325555.9/16

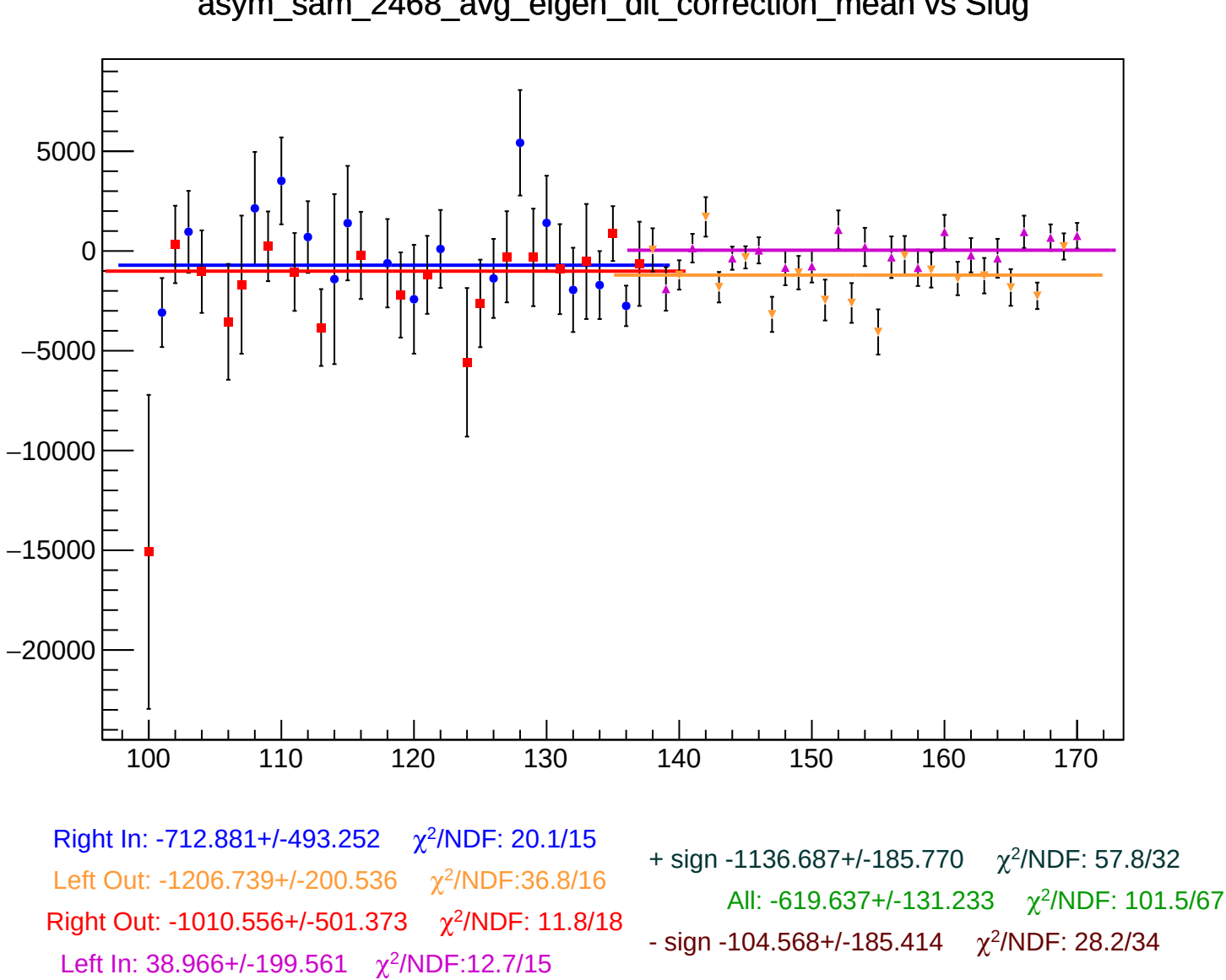
Right Out: 109.739+/-0.029 $\chi^2$/NDF: 491784.5/18

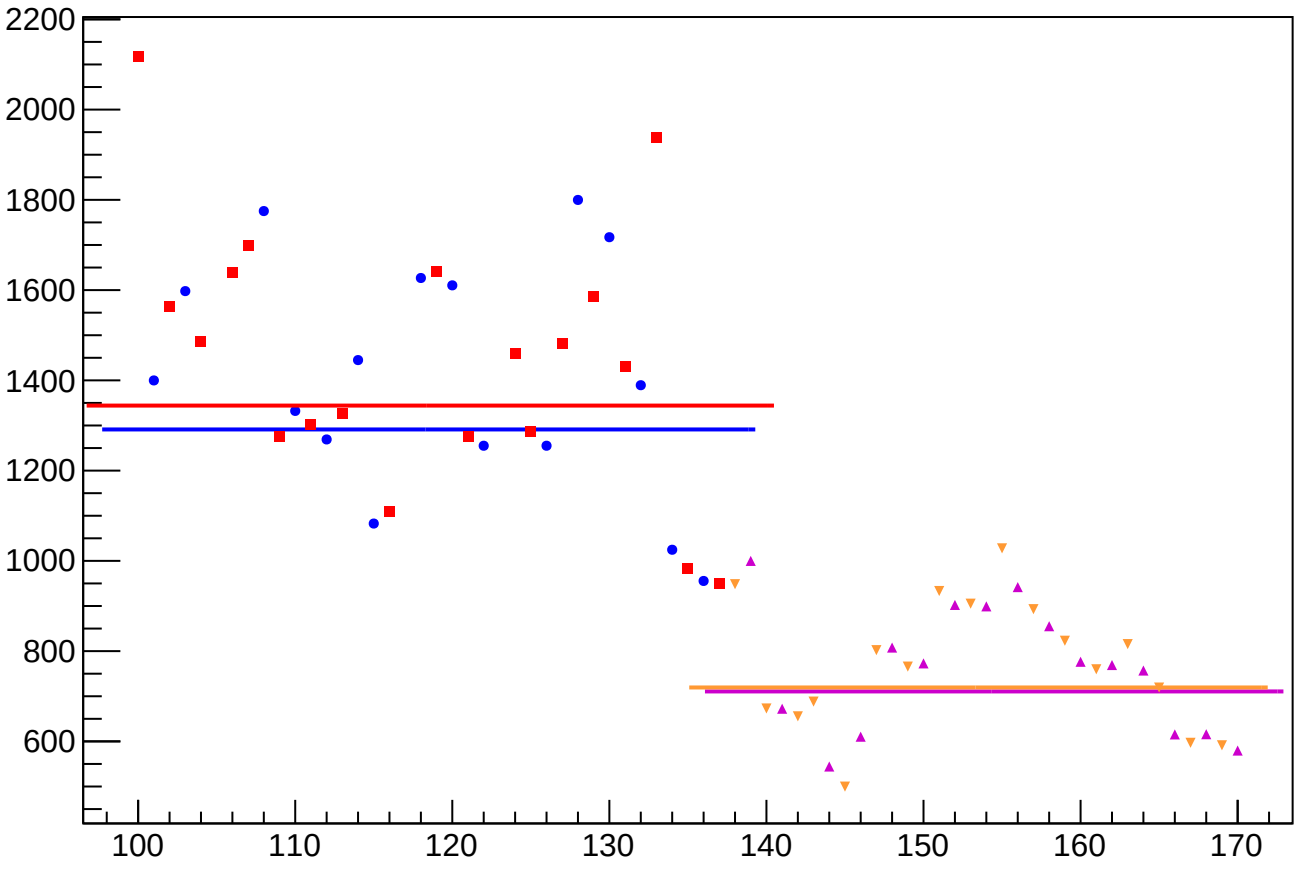
Left In: 93.552+/-0.019 $\chi^2$/NDF:227189.9/15

+ sign 98.070+/-0.016 $\chi^2$/NDF: 961022.9/32

All: 98.114+/-0.011 $\chi^2$/NDF: 1897405.6/67

- sign 98.158+/-0.016 $\chi^2$/NDF: 936366.9/34


asym_sam_2468_avg_eigen_dit_correction_mean vs Slug
5000
0
−5000
−10000
−15000
−20000
100
110
120
130
140
150
160
170
Right In: -712.881+/-493.252 χ²/NDF: 20.1/15
Left Out: -1206.739+/-200.536 χ²/NDF:36.8/16
Right Out: -1010.556+/-501.373 χ²/NDF: 11.8/18
Left In: 38.966+/-199.561 χ²/NDF:12.7/15
+ sign -1136.687+/-185.770 χ²/NDF: 57.8/32
All: -619.637+/-131.233 χ²/NDF: 101.5/67
- sign -104.568+/-185.414 χ²/NDF: 28.2/34




Right In: 1291.220+/-0.349 $\chi^2$/NDF: 610894.9/15

Left Out: 719.467+/-0.142 $\chi^2$/NDF:1010684.1/16

Right Out: 1344.115+/-0.355 $\chi^2$/NDF: 490963.4/18

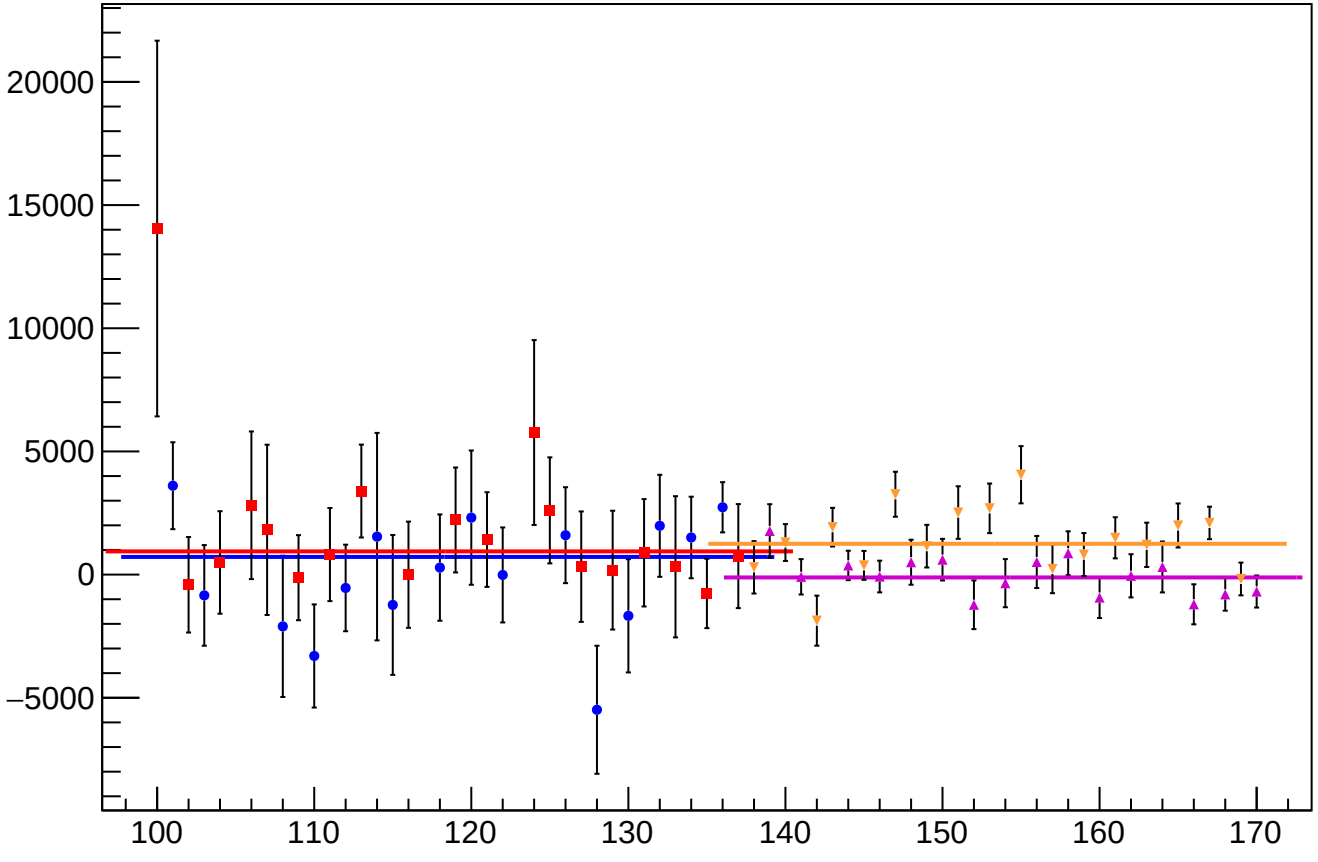
Left In: 710.681+/-0.141 $\chi^2$/NDF:873452.0/15

+ sign 800.568+/-0.131 $\chi^2$/NDF: 3927662.4/32

All: 798.936+/-0.093 $\chi^2$/NDF: 8048146.5/67

- sign 797.311+/-0.131 $\chi^2$/NDF: 4120176.1/34

# asym_sam_2468_avg_mean vs Slug




Right In: 717.617+/-488.239 $\chi^2$/NDF: 21.0/15

Left Out: 1249.675+/-203.489 $\chi^2$/NDF:35.7/16

Right Out: 942.308+/-498.052 $\chi^2$/NDF: 10.6/18

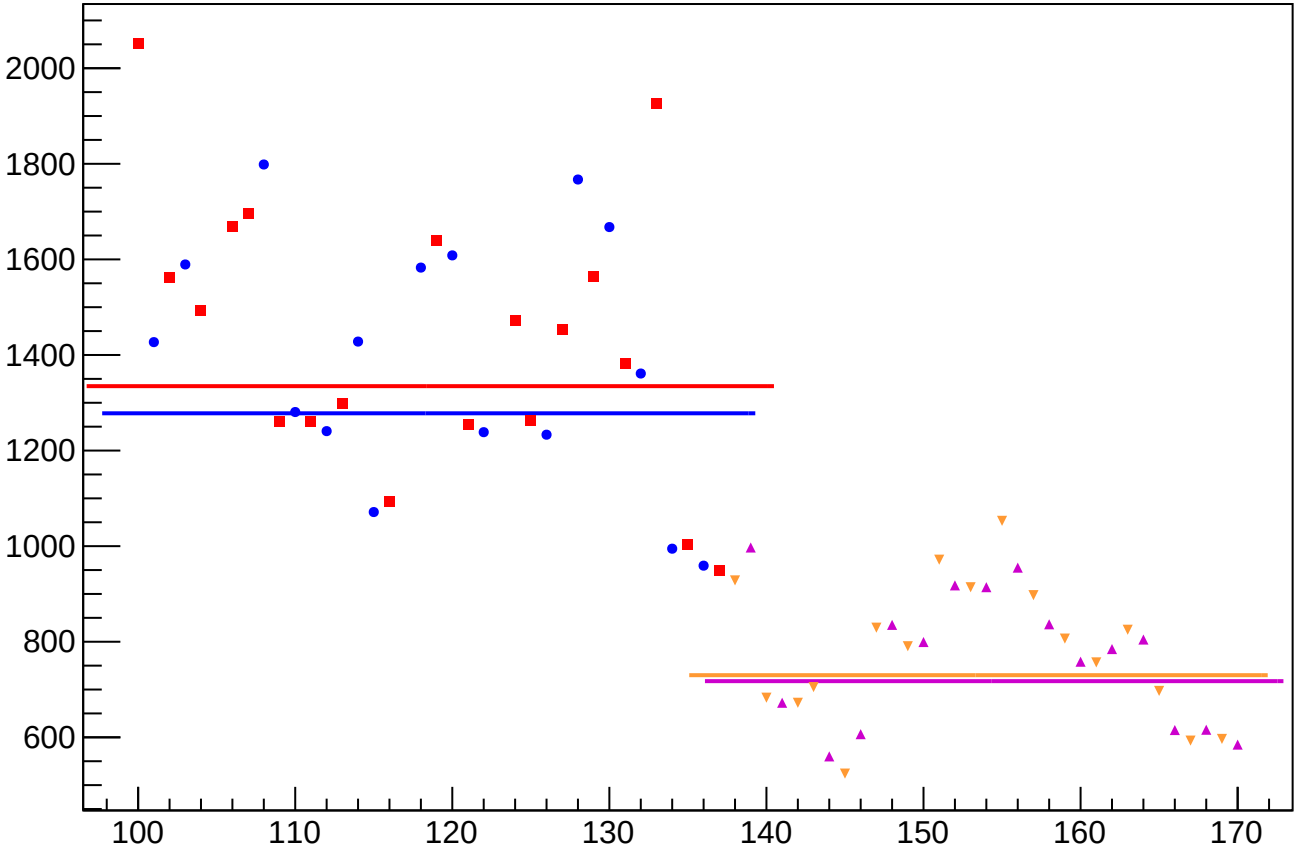
Left In: -115.352+/-201.439 $\chi^2$/NDF:12.5/15

+ sign 1170.931+/-187.828 $\chi^2$/NDF: 57.7/32

All: 598.838+/-132.429 $\chi^2$/NDF: 103.2/67

- sign 33.339+/-186.743 $\chi^2$/NDF: 27.0/34

# asym_sam_2468_avg_rms vs Slug




Right In: 1277.979+/-0.345 $\chi^2$/NDF: 597666.8/15

Left Out: 730.034+/-0.144 $\chi^2$/NDF:956933.5/16

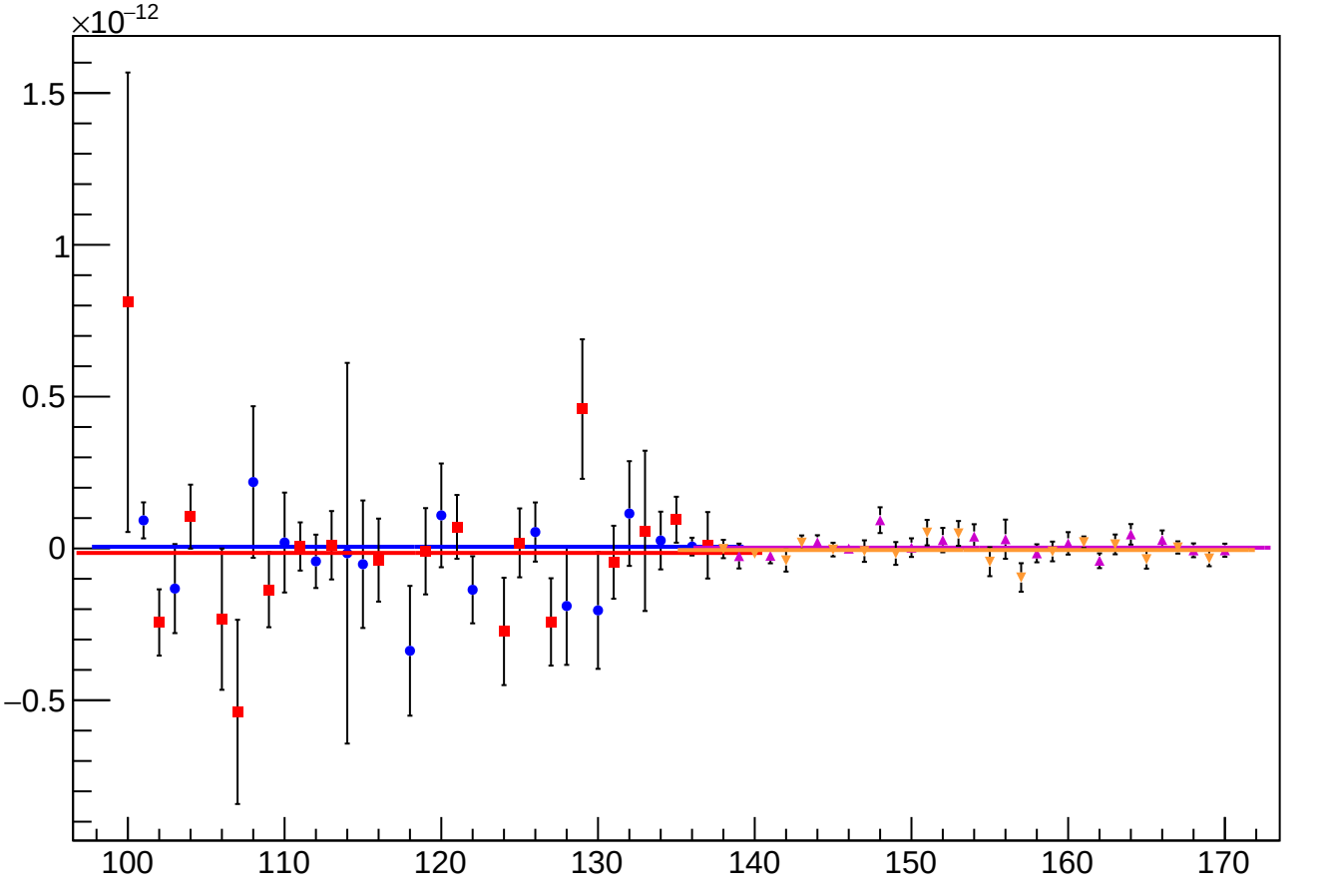
Right Out: 1334.775+/-0.352 $\chi^2$/NDF: 471897.2/18

Left In: 717.546+/-0.142 $\chi^2$/NDF:882339.4/15

+ sign 811.130+/-0.133 $\chi^2$/NDF: 3700843.3/32

All: 807.705+/-0.094 $\chi^2$/NDF: 7696235.1/67

- sign 804.320+/-0.132 $\chi^2$/NDF: 3994069.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 11.6/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:15.1/16

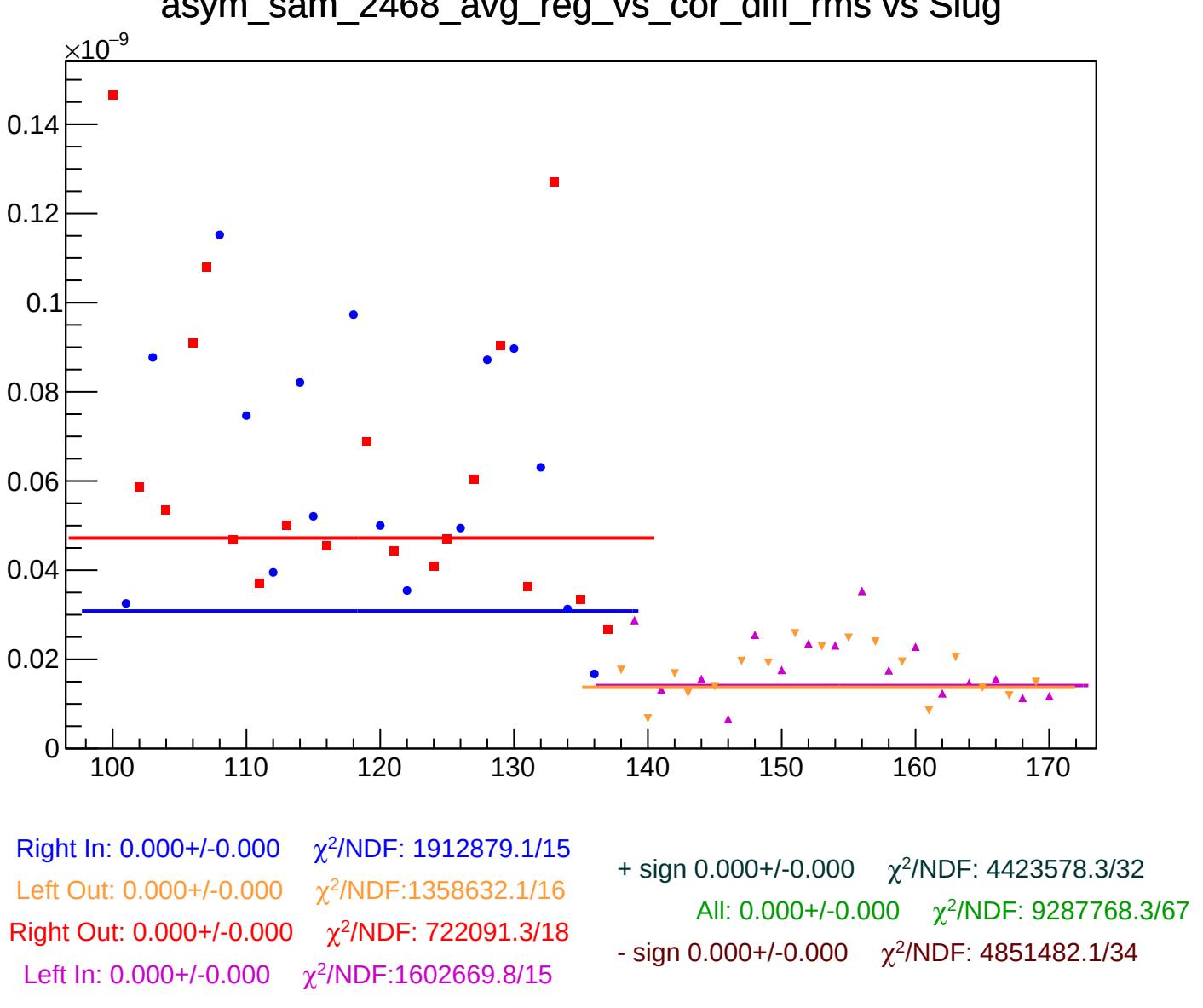
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 23.8/18

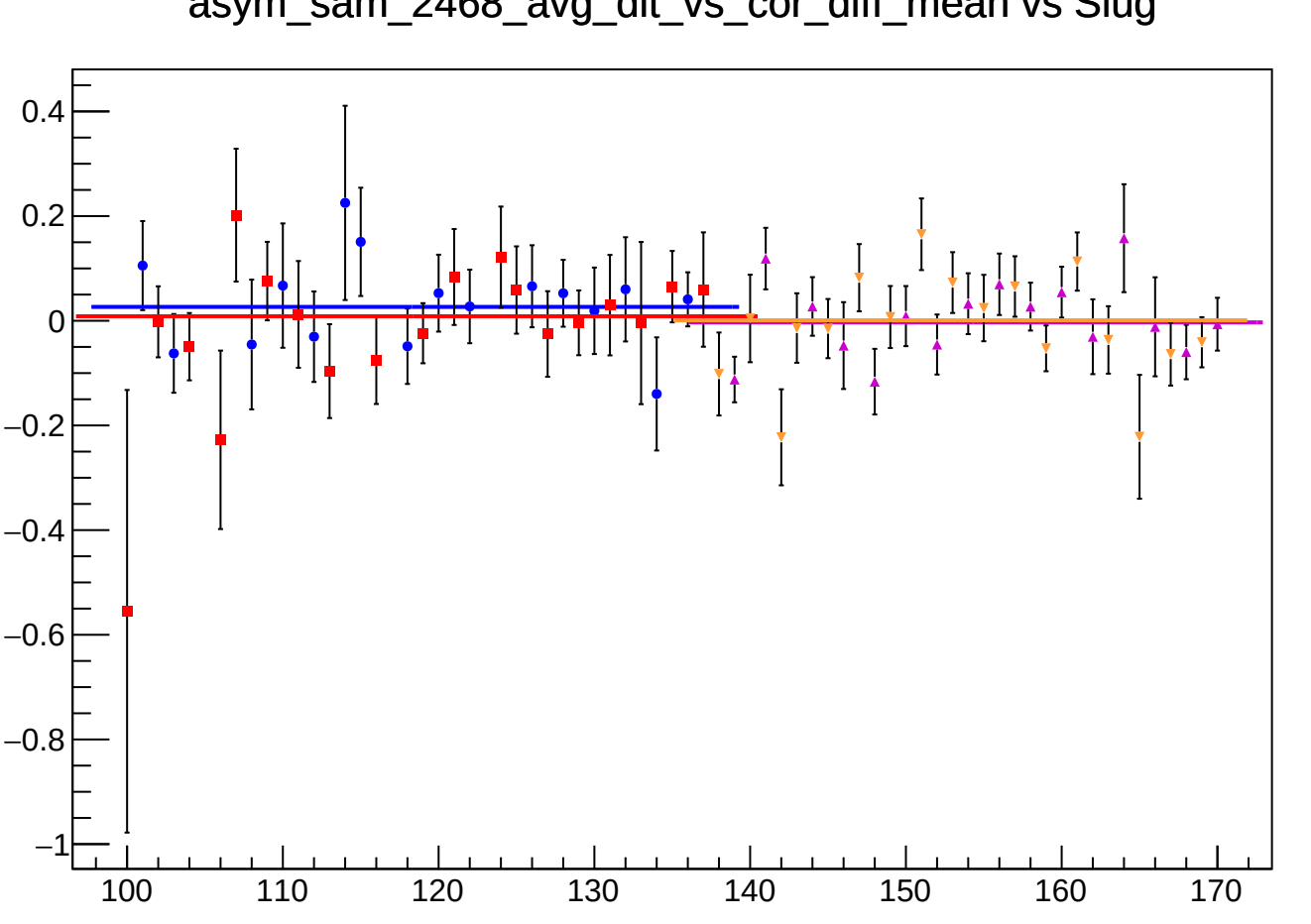
Left In: 0.000+/-0.000 $\chi^2$/NDF:14.5/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 27.0/32

All: -0.000+/-0.000 $\chi^2$/NDF: 66.0/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 38.6/34


asym_sam_2468_avg_reg_vs_cor_diff_rms vs Slug
×10⁻⁹
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1912879.1/15
Left Out: 0.000+/-0.000 χ²/NDF:1358632.1/16
Right Out: 0.000+/-0.000 χ²/NDF: 722091.3/18
Left In: 0.000+/-0.000 χ²/NDF:1602669.8/15
+ sign 0.000+/-0.000 χ²/NDF: 4423578.3/32
All: 0.000+/-0.000 χ²/NDF: 9287768.3/67
- sign 0.000+/-0.000 χ²/NDF: 4851482.1/34




Right In: 0.026+/-0.020 $\chi^2$/NDF: 9.9/15

Left Out: 0.001+/-0.015 $\chi^2$/NDF:29.4/16

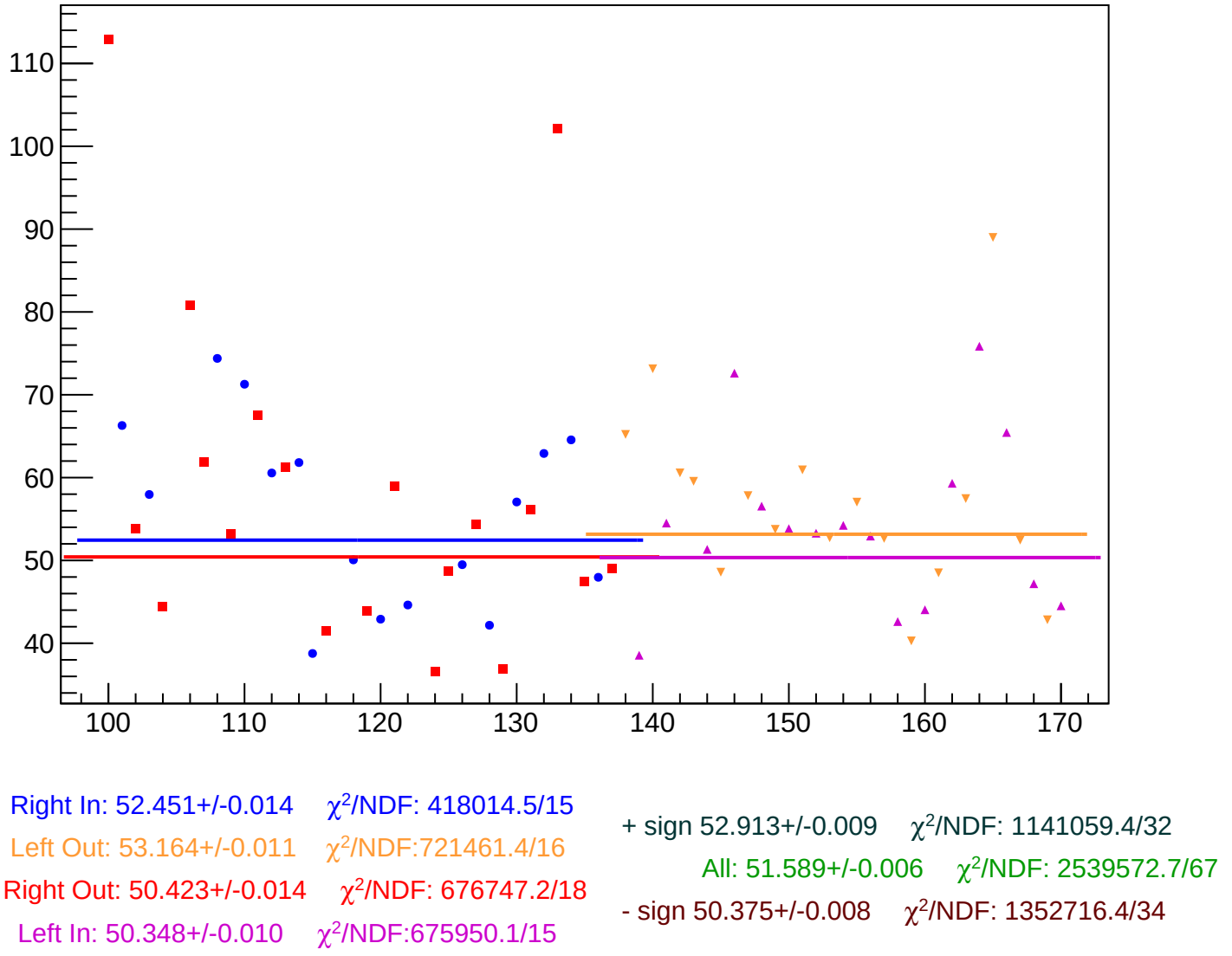
Right Out: 0.009+/-0.019 $\chi^2$/NDF: 13.9/18

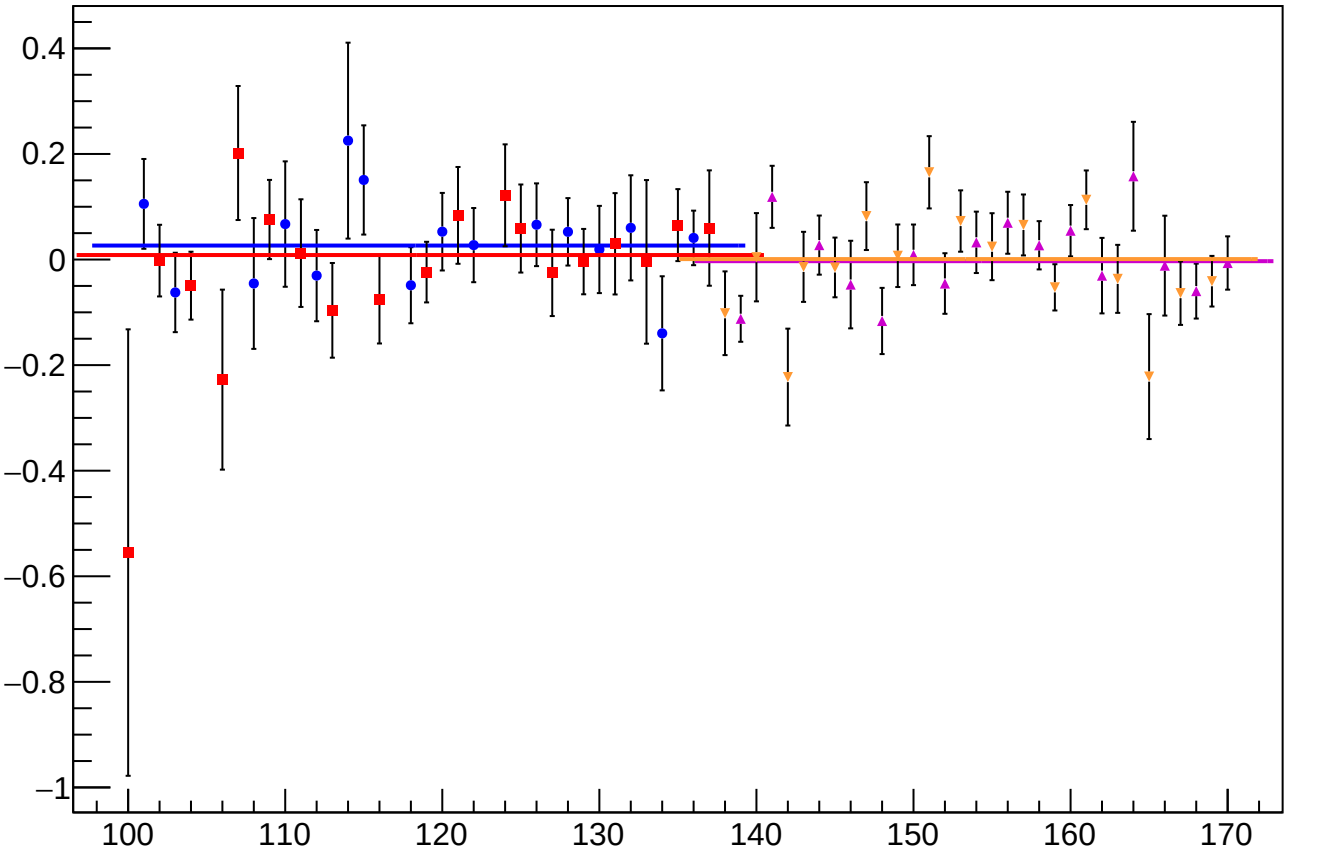
Left In: -0.003+/-0.014 $\chi^2$/NDF:22.5/15

+ sign 0.010+/-0.012 $\chi^2$/NDF: 40.4/32

All: 0.005+/-0.008 $\chi^2$/NDF: 77.4/67

- sign 0.001+/-0.012 $\chi^2$/NDF: 36.7/34


asym_sam_2468_avg_dit_vs_cor_diff_rms vs Slug
110
100
90
80
70
60
50
40
100
110
120
130
140
150
160
170
Right In: 52.451+/-0.014 χ²/NDF: 418014.5/15
Left Out: 53.164+/-0.011 χ²/NDF:721461.4/16
Right Out: 50.423+/-0.014 χ²/NDF: 676747.2/18
Left In: 50.348+/-0.010 χ²/NDF:675950.1/15
+ sign 52.913+/-0.009 χ²/NDF: 1141059.4/32
All: 51.589+/-0.006 χ²/NDF: 2539572.7/67
- sign 50.375+/-0.008 χ²/NDF: 1352716.4/34




Right In: 0.026+/-0.020 $\chi^2$/NDF: 9.9/15

Left Out: 0.001+/-0.015 $\chi^2$/NDF:29.4/16

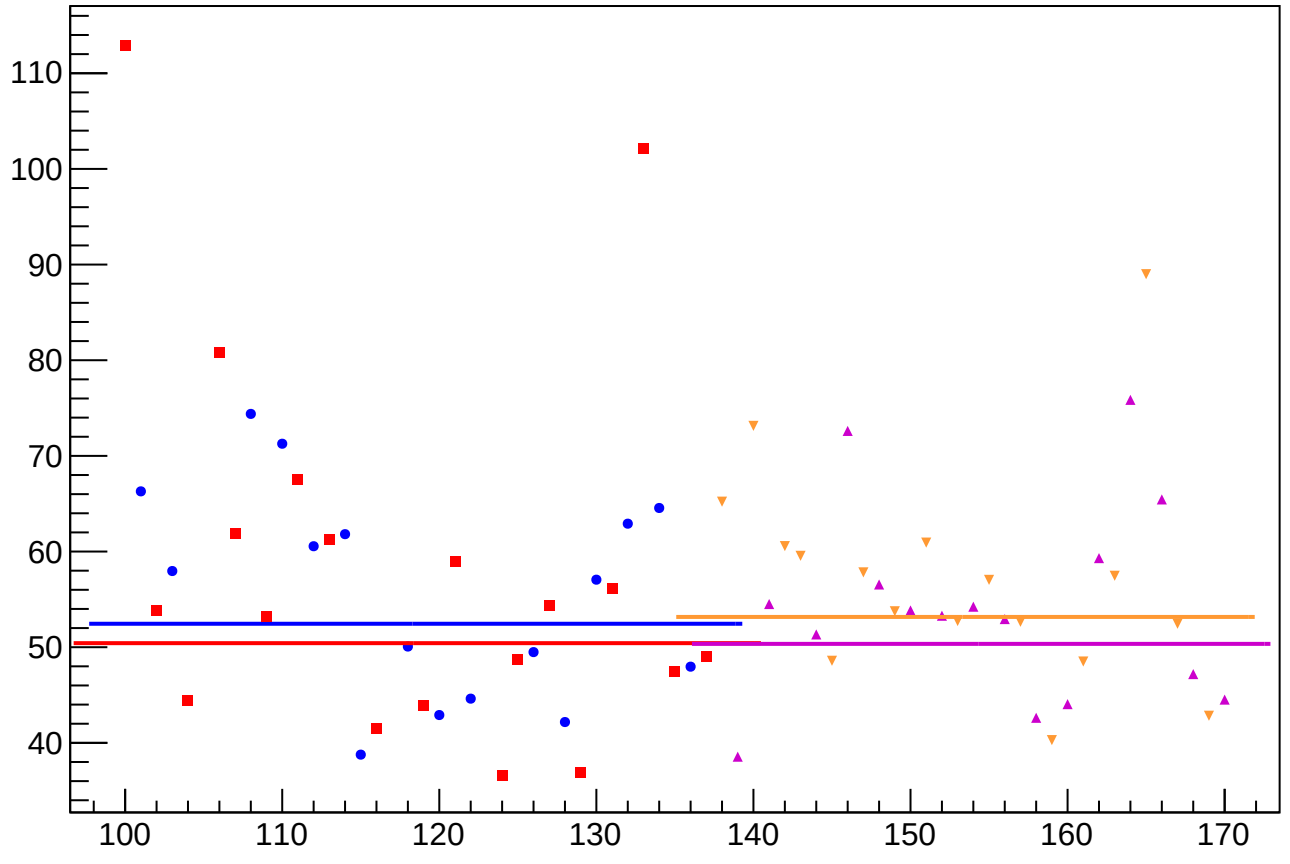
Right Out: 0.009+/-0.019 $\chi^2$/NDF: 13.9/18

Left In: -0.003+/-0.014 $\chi^2$/NDF:22.5/15

+ sign 0.010+/-0.012 $\chi^2$/NDF: 40.4/32

All: 0.005+/-0.008 $\chi^2$/NDF: 77.4/67

- sign 0.001+/-0.012 $\chi^2$/NDF: 36.7/34




Right In: 52.451+/-0.014 $\chi^2$/NDF: 418014.5/15

Left Out: 53.164+/-0.011 $\chi^2$/NDF:721461.4/16

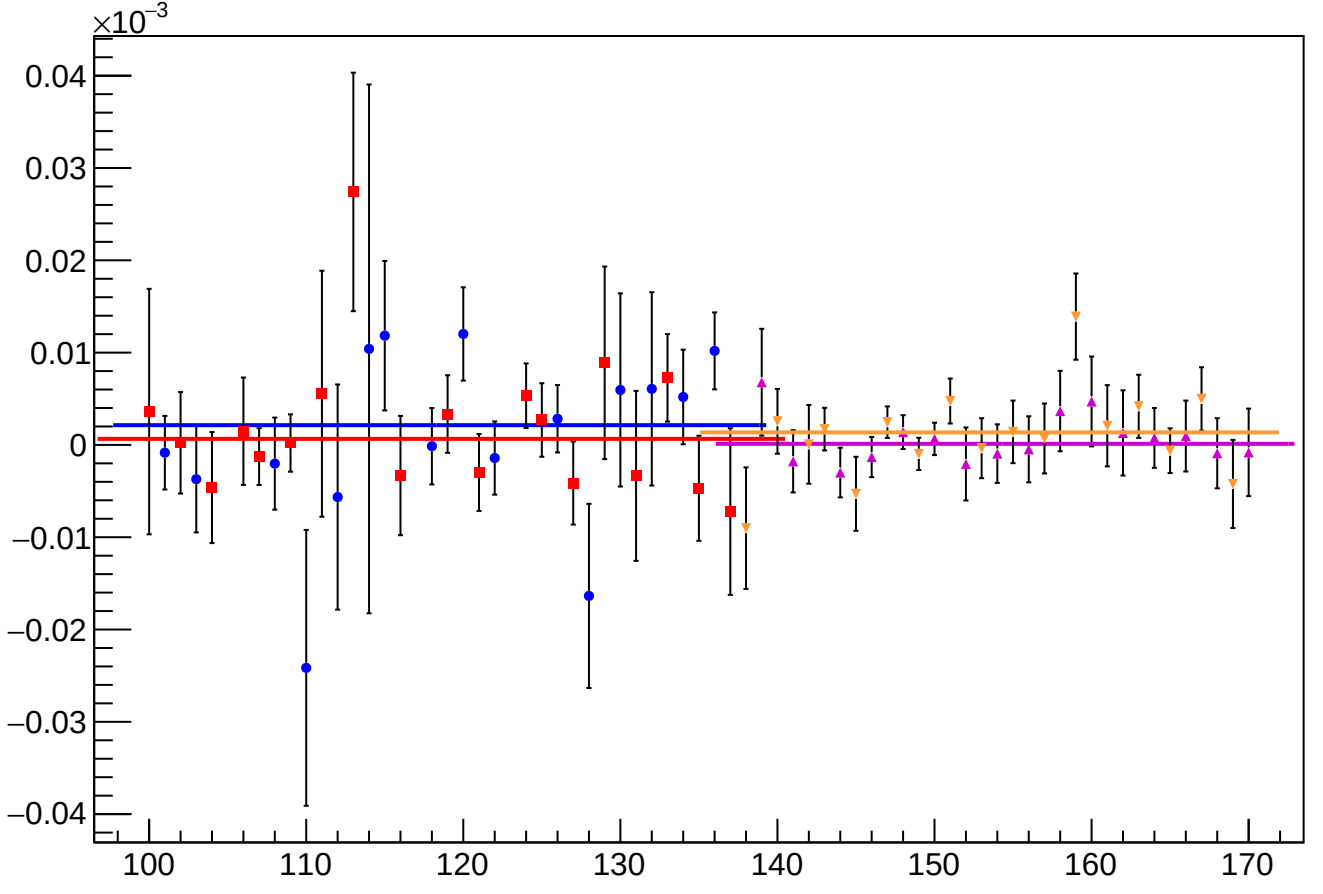
Right Out: 50.423+/-0.014 $\chi^2$/NDF: 676747.2/18

Left In: 50.348+/-0.010 $\chi^2$/NDF:675950.1/15

+ sign 52.913+/-0.009 $\chi^2$/NDF: 1141059.4/32

All: 51.589+/-0.006 $\chi^2$/NDF: 2539572.7/67

- sign 50.375+/-0.008 $\chi^2$/NDF: 1352716.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 20.1/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:21.0/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 14.8/18

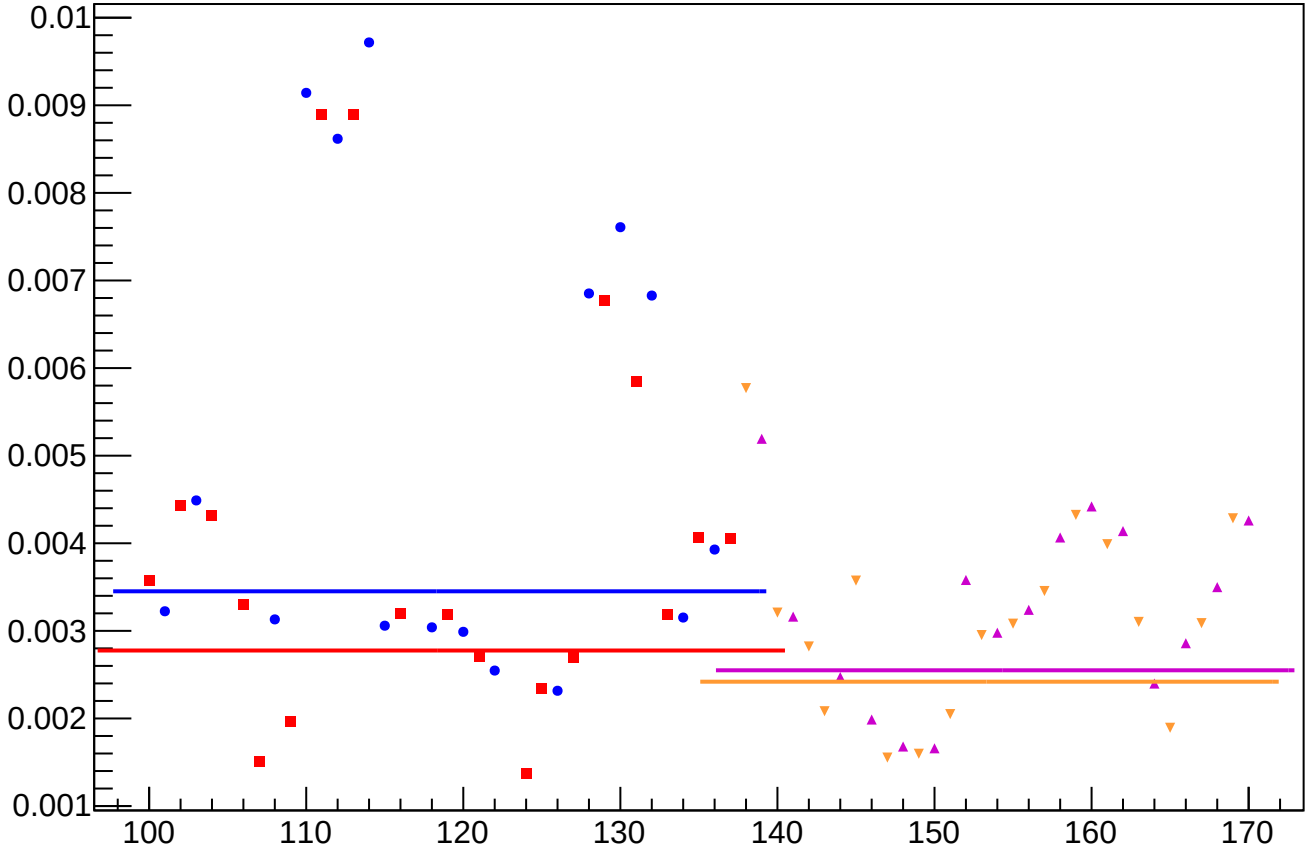
Left In: 0.000+/-0.000 $\chi^2$/NDF:6.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 41.3/32

All: 0.000+/-0.000 $\chi^2$/NDF: 64.5/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 21.2/34

# asym_sam_2468_avg_eigen_dit_vs_dit_diff_rms vs Slug




Right In: 0.003+/-0.000 $\chi^2$/NDF: 1951102.6/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:3269754.7/16

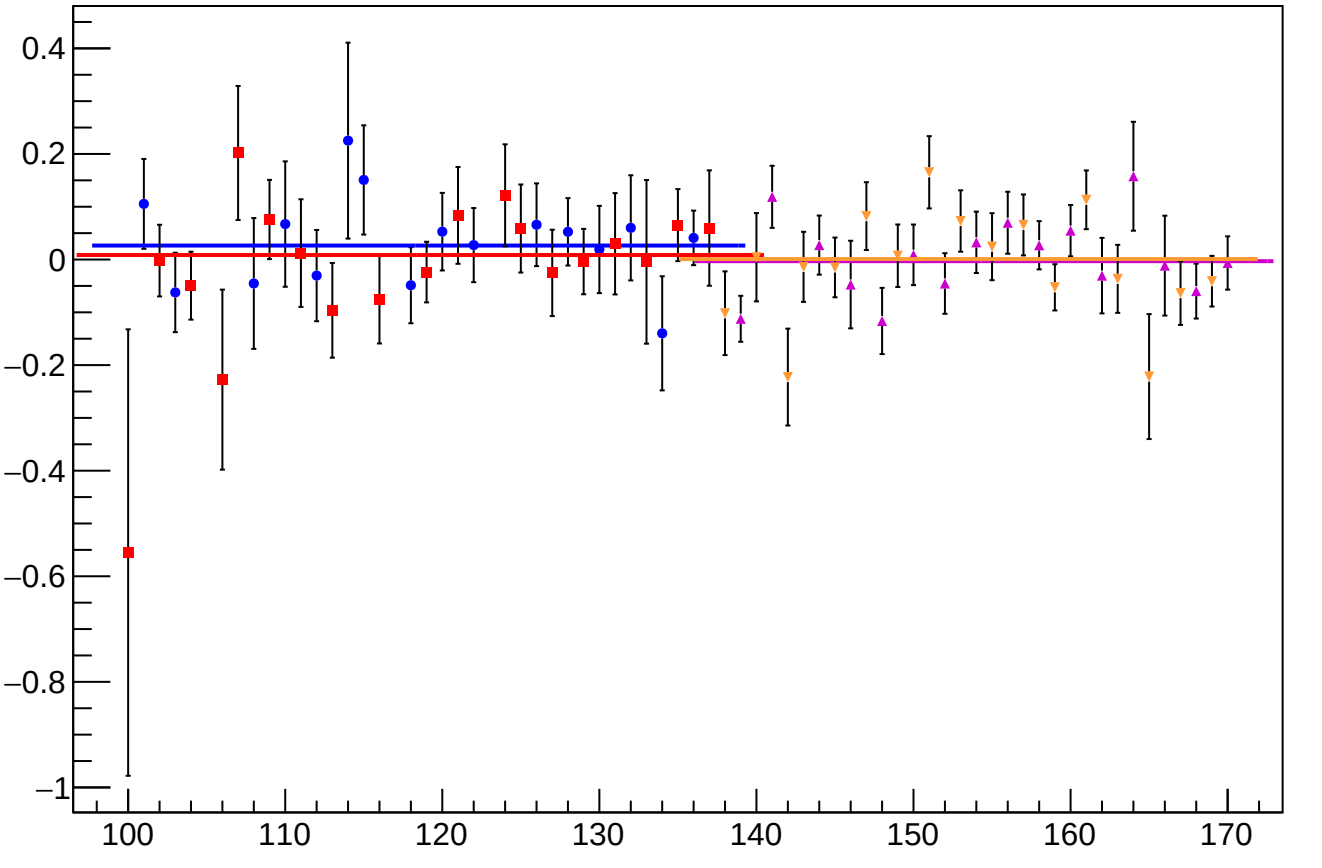
Right Out: 0.003+/-0.000 $\chi^2$/NDF: 2734939.6/18

Left In: 0.003+/-0.000 $\chi^2$/NDF:3007634.2/15

+ sign 0.003+/-0.000 $\chi^2$/NDF: 6098982.9/32

All: 0.003+/-0.000 $\chi^2$/NDF: 11896223.3/67

- sign 0.003+/-0.000 $\chi^2$/NDF: 5796567.2/34




Right In: 0.026+/-0.020 $\chi^2$/NDF: 9.9/15

Left Out: 0.001+/-0.015 $\chi^2$/NDF:29.4/16

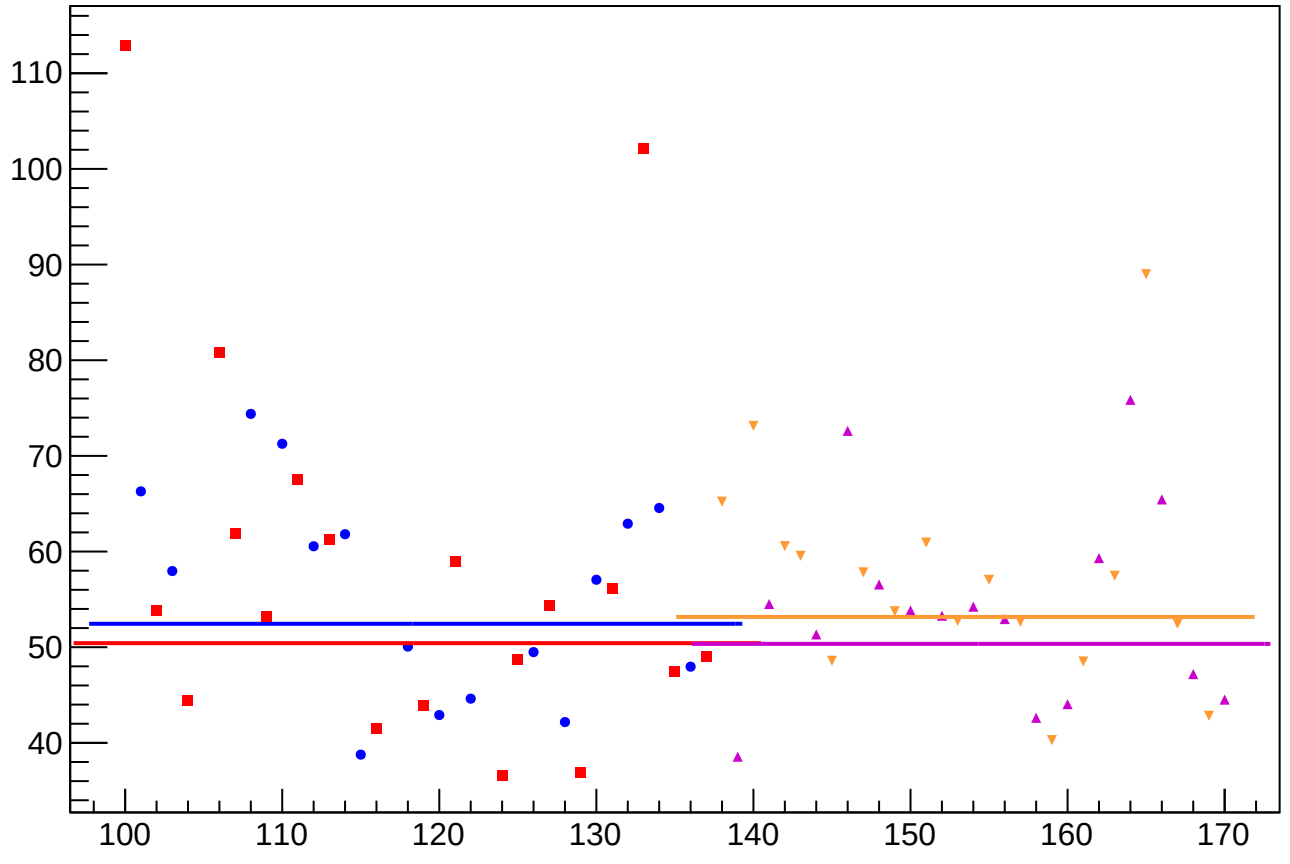
Right Out: 0.009+/-0.019 $\chi^2$/NDF: 13.9/18

Left In: -0.003+/-0.014 $\chi^2$/NDF:22.5/15

+ sign 0.010+/-0.012 $\chi^2$/NDF: 40.4/32

All: 0.005+/-0.008 $\chi^2$/NDF: 77.4/67

- sign 0.001+/-0.012 $\chi^2$/NDF: 36.7/34




Right In: 52.450+/-0.014 $\chi^2$/NDF: 417967.5/15

Left Out: 53.165+/-0.011 $\chi^2$/NDF:721466.5/16

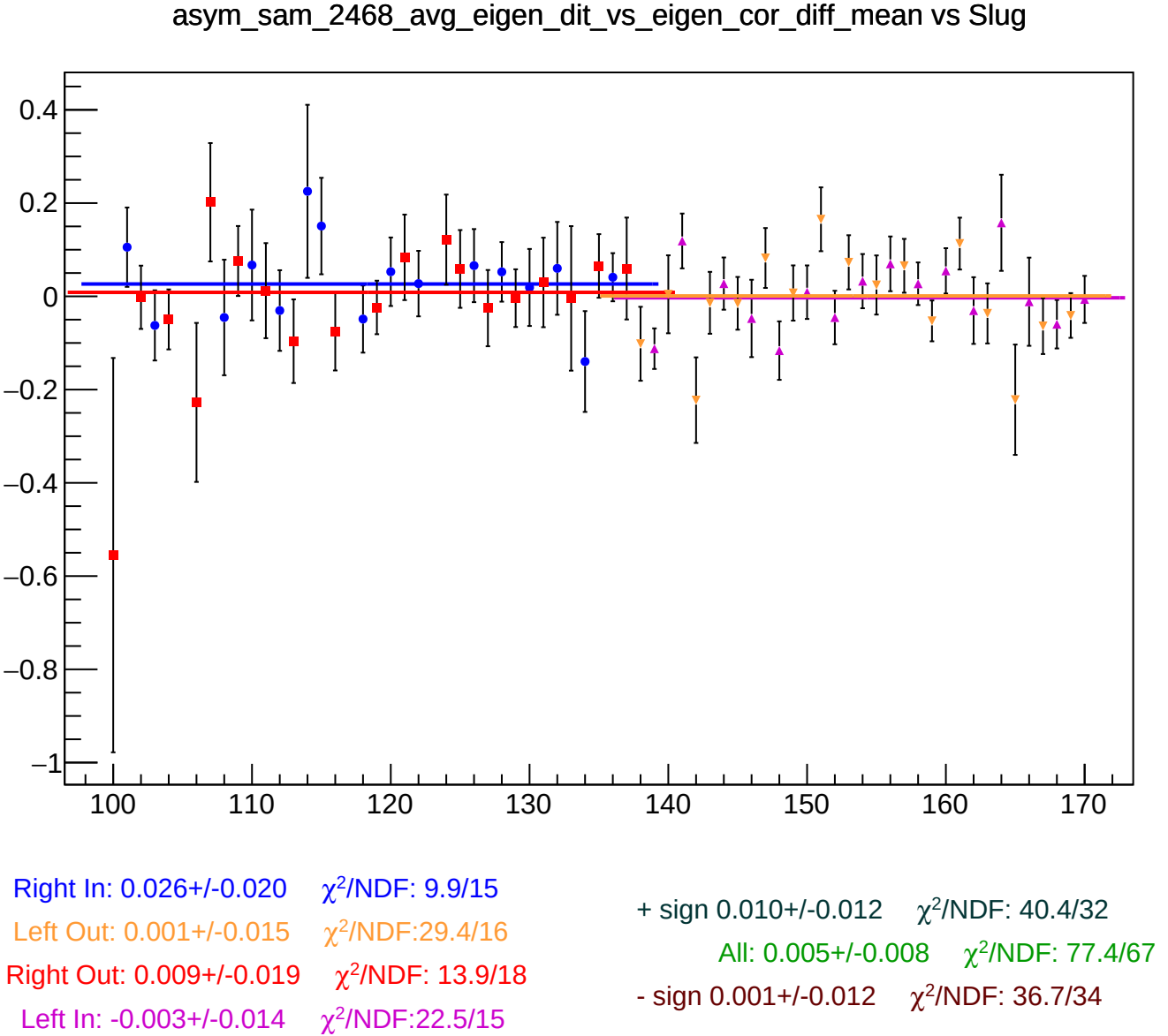
Right Out: 50.422+/-0.014 $\chi^2$/NDF: 676753.5/18

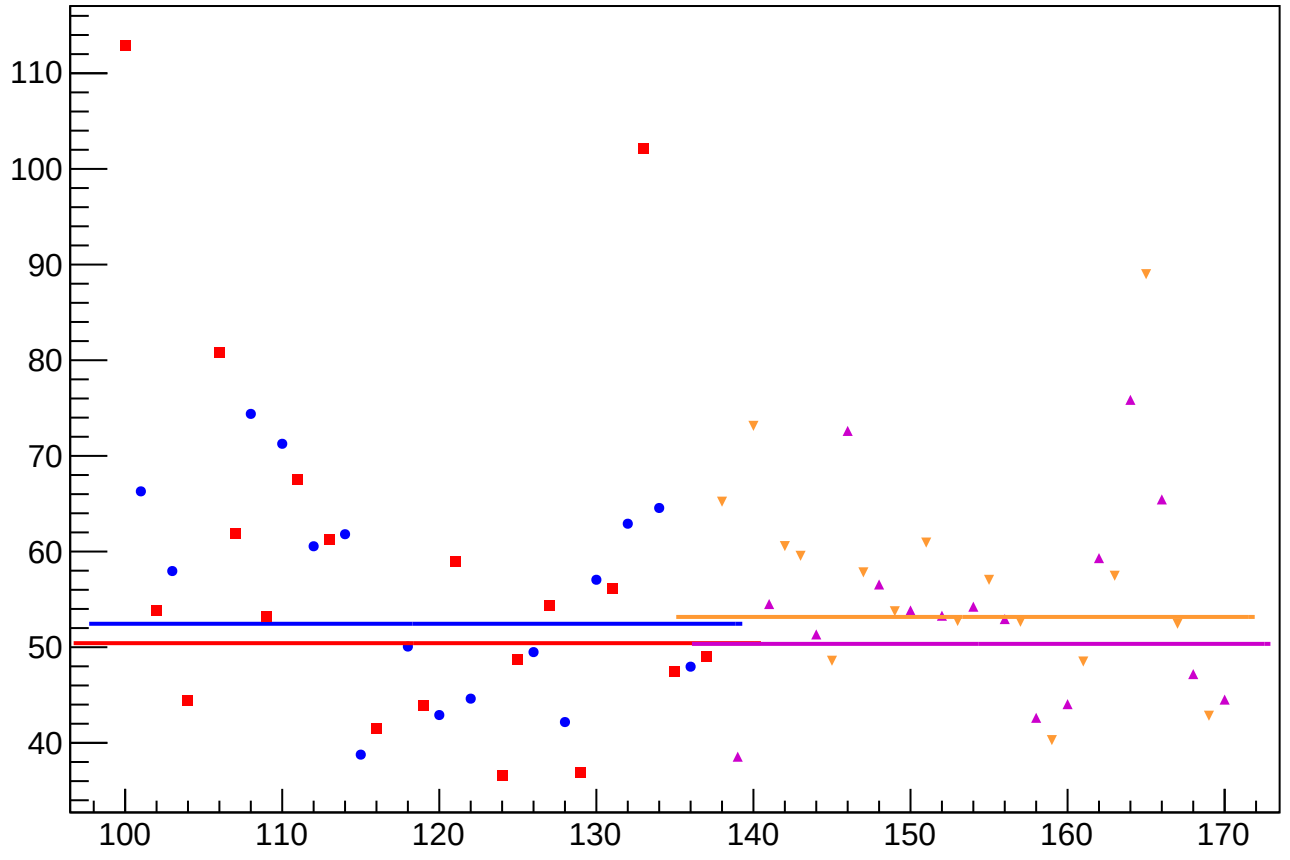
Left In: 50.348+/-0.010 $\chi^2$/NDF:676026.6/15

+ sign 52.913+/-0.009 $\chi^2$/NDF: 1141024.5/32

All: 51.589+/-0.006 $\chi^2$/NDF: 2539623.0/67

- sign 50.374+/-0.008 $\chi^2$/NDF: 1352798.5/34


asym_sam_2468_avg_eigen_dit_vs_eigen_cor_diff_mean vs Slug
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
100
110
120
130
140
150
160
170
Right In: 0.026+/-0.020 χ²/NDF: 9.9/15
Left Out: 0.001+/-0.015 χ²/NDF:29.4/16
Right Out: 0.009+/-0.019 χ²/NDF: 13.9/18
Left In: -0.003+/-0.014 χ²/NDF:22.5/15
+ sign 0.010+/-0.012 χ²/NDF: 40.4/32
All: 0.005+/-0.008 χ²/NDF: 77.4/67
- sign 0.001+/-0.012 χ²/NDF: 36.7/34




Right In: 52.450+/-0.014 $\chi^2$/NDF: 417967.5/15

Left Out: 53.165+/-0.011 $\chi^2$/NDF:721466.5/16

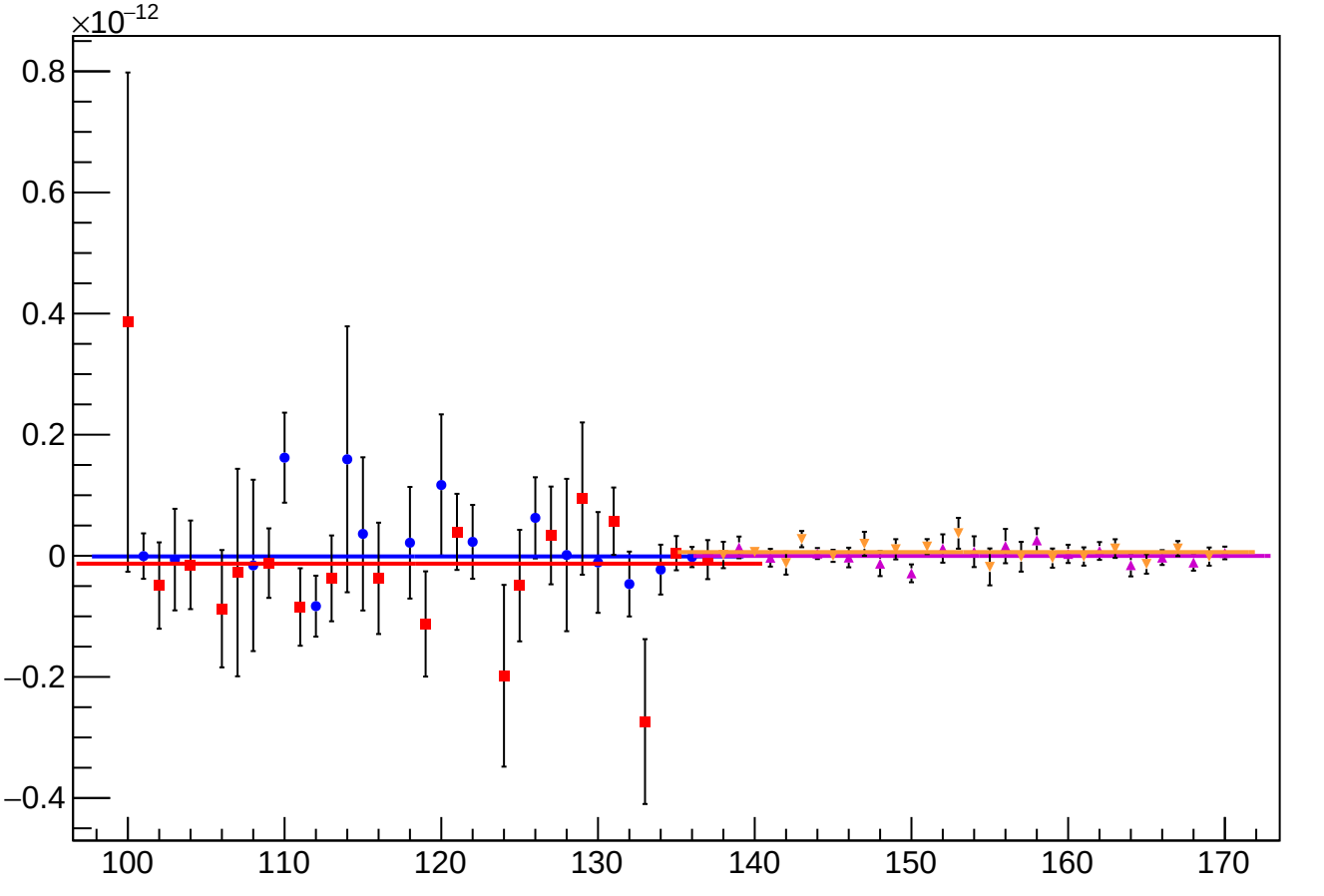
Right Out: 50.422+/-0.014 $\chi^2$/NDF: 676753.5/18

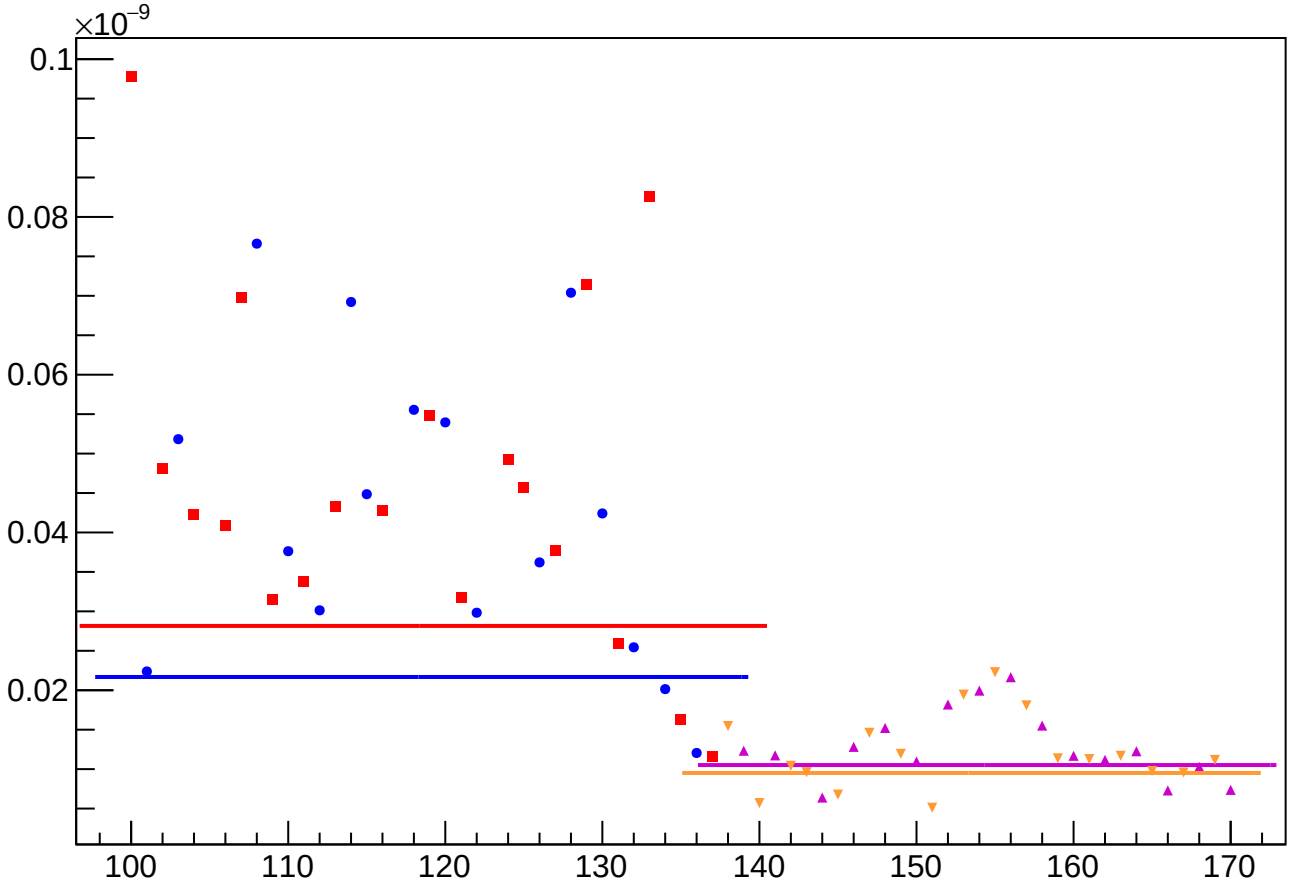
Left In: 50.348+/-0.010 $\chi^2$/NDF:676026.6/15

+ sign 52.913+/-0.009 $\chi^2$/NDF: 1141024.5/32

All: 51.589+/-0.006 $\chi^2$/NDF: 2539623.0/67

- sign 50.374+/-0.008 $\chi^2$/NDF: 1352798.5/34


asym_sam_2468_avg_eigen_cor_vs_cor_diff_mean vs Slug
×10^−12
0.8
0.6
0.4
0.2
0
−0.2
−0.4
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 11.3/15
Left Out: 0.000+/-0.000 χ²/NDF:9.9/16
Right Out: -0.000+/-0.000 χ²/NDF: 13.7/18
Left In: -0.000+/-0.000 χ²/NDF:9.4/15
+ sign 0.000+/-0.000 χ²/NDF: 21.5/32
All: 0.000+/-0.000 χ²/NDF: 47.0/67
- sign -0.000+/-0.000 χ²/NDF: 23.7/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 2522749.6/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:2185906.7/16

Right Out: 0.000+/-0.000 $\chi^2$/NDF: 2381736.6/18

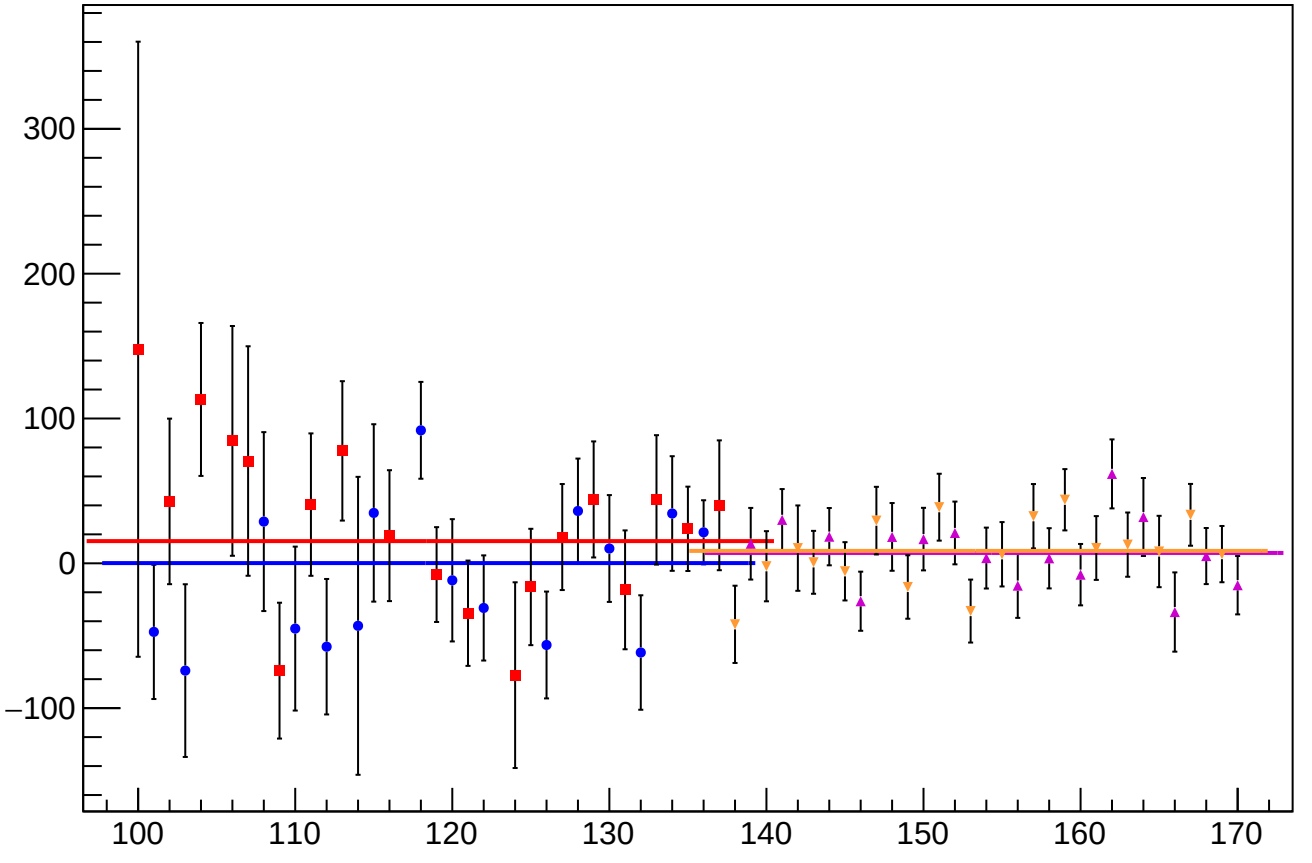
Left In: 0.000+/-0.000 $\chi^2$/NDF:1871722.8/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 6604310.1/32

All: 0.000+/-0.000 $\chi^2$/NDF: 13733461.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 7025827.5/34

# reg_asym_sam_1357_2468_dd_mean vs Slug




Right In: 0.155+/-10.048 $\chi^2$/NDF: 21.3/15

Left Out: 8.577+/-5.453 $\chi^2$/NDF:17.3/16

Right Out: 15.333+/-10.267 $\chi^2$/NDF: 17.9/18

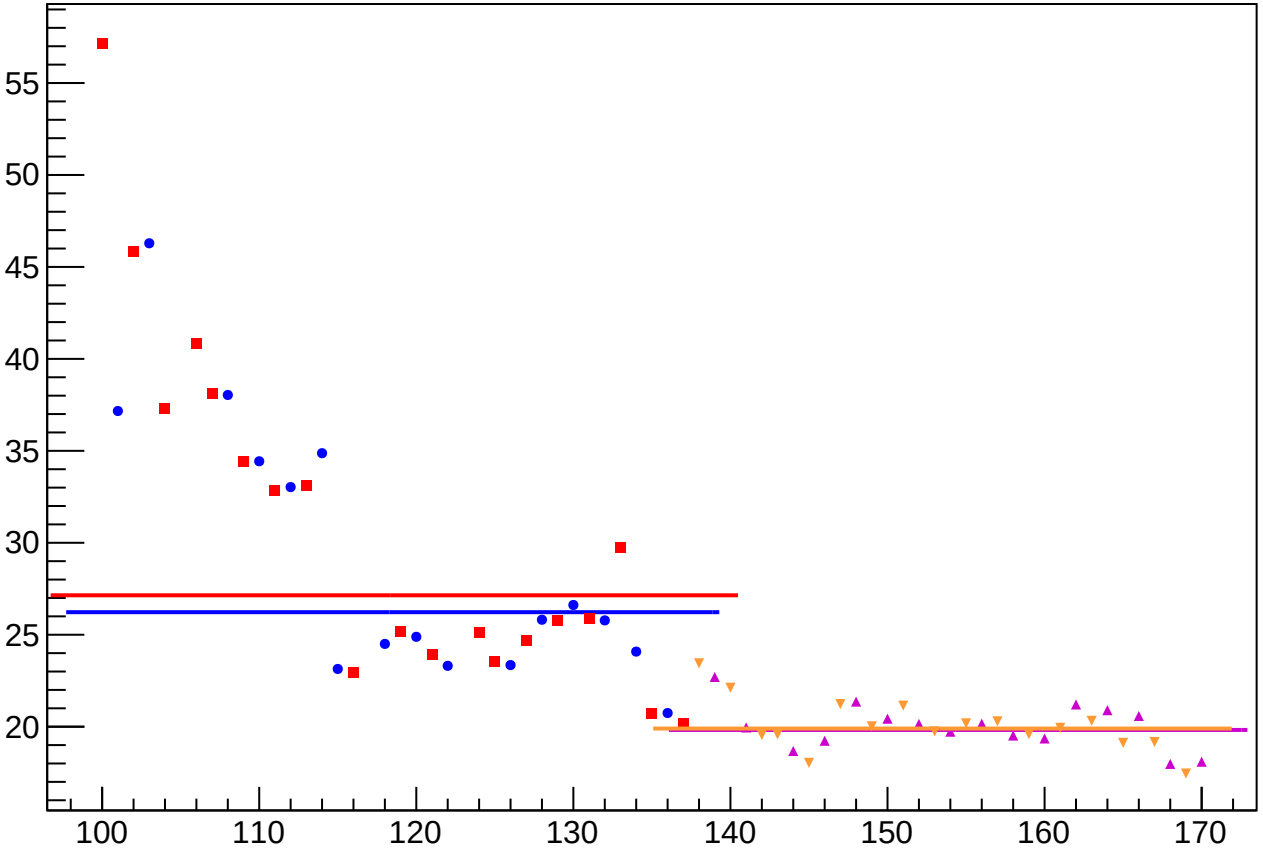
Left In: 7.154+/-5.478 $\chi^2$/NDF:16.2/15

\+ sign 6.661+/-4.793 $\chi^2$/NDF: 39.1/32

All: 7.804+/-3.403 $\chi^2$/NDF: 73.9/67

\- sign 8.966+/-4.833 $\chi^2$/NDF: 34.6/34

# reg_asym_sam_1357_2468_dd_rms vs Slug




Right In: 26.227+/-0.007 $\chi^2$/NDF: 676026.2/15

Left Out: 19.899+/-0.004 $\chi^2$/NDF:120585.0/16

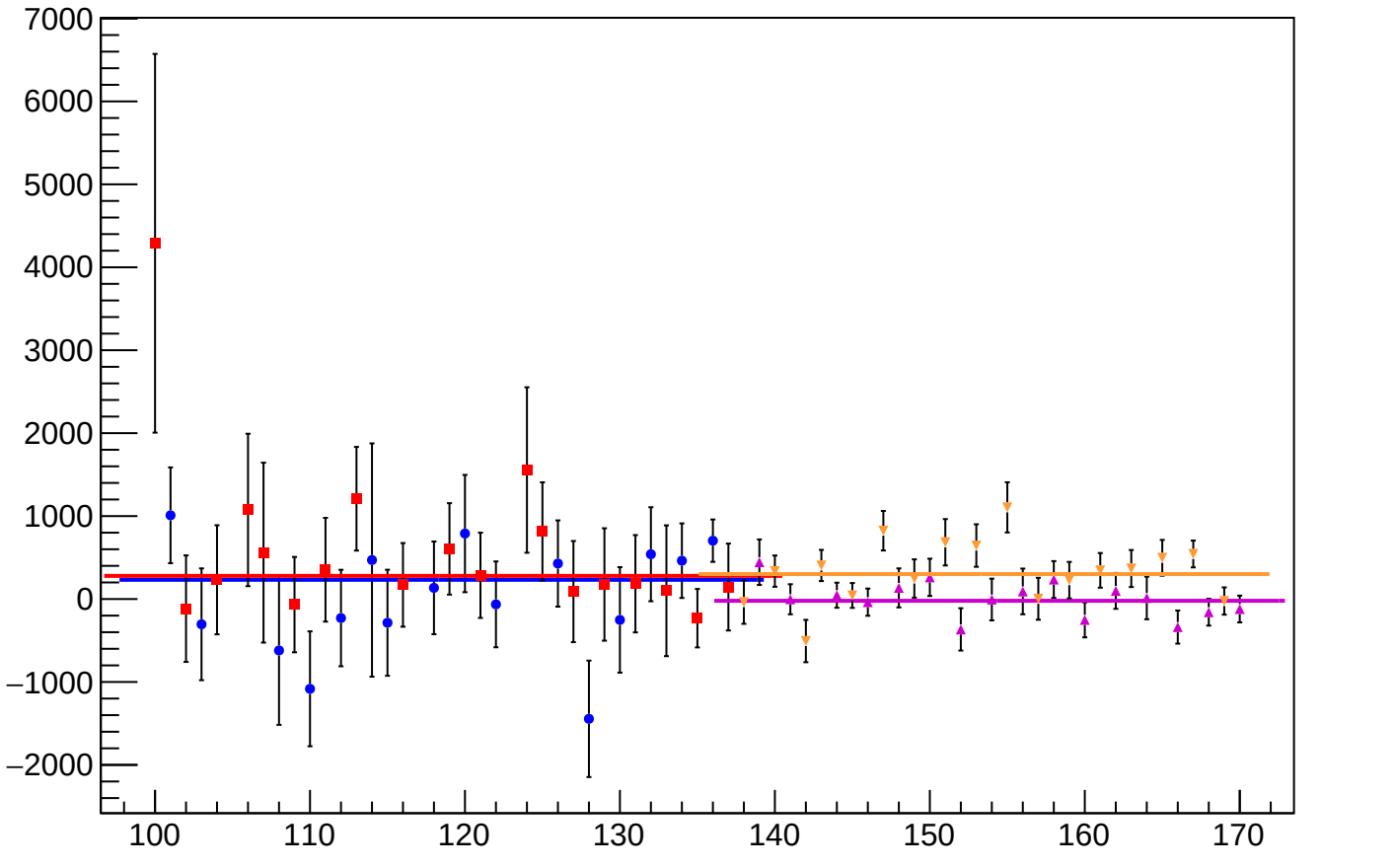
Right Out: 27.145+/-0.007 $\chi^2$/NDF: 755419.8/18

Left In: 19.824+/-0.004 $\chi^2$/NDF:92594.3/15

+ sign 21.339+/-0.003 $\chi^2$/NDF: 1409303.7/32

All: 21.392+/-0.002 $\chi^2$/NDF: 3049435.6/67

- sign 21.446+/-0.003 $\chi^2$/NDF: 1639634.9/34




Right In: 232.092+/-134.871 $\chi^2$/NDF: 19.6/15

Left Out: 300.601+/-51.155 $\chi^2$/NDF:39.2/16

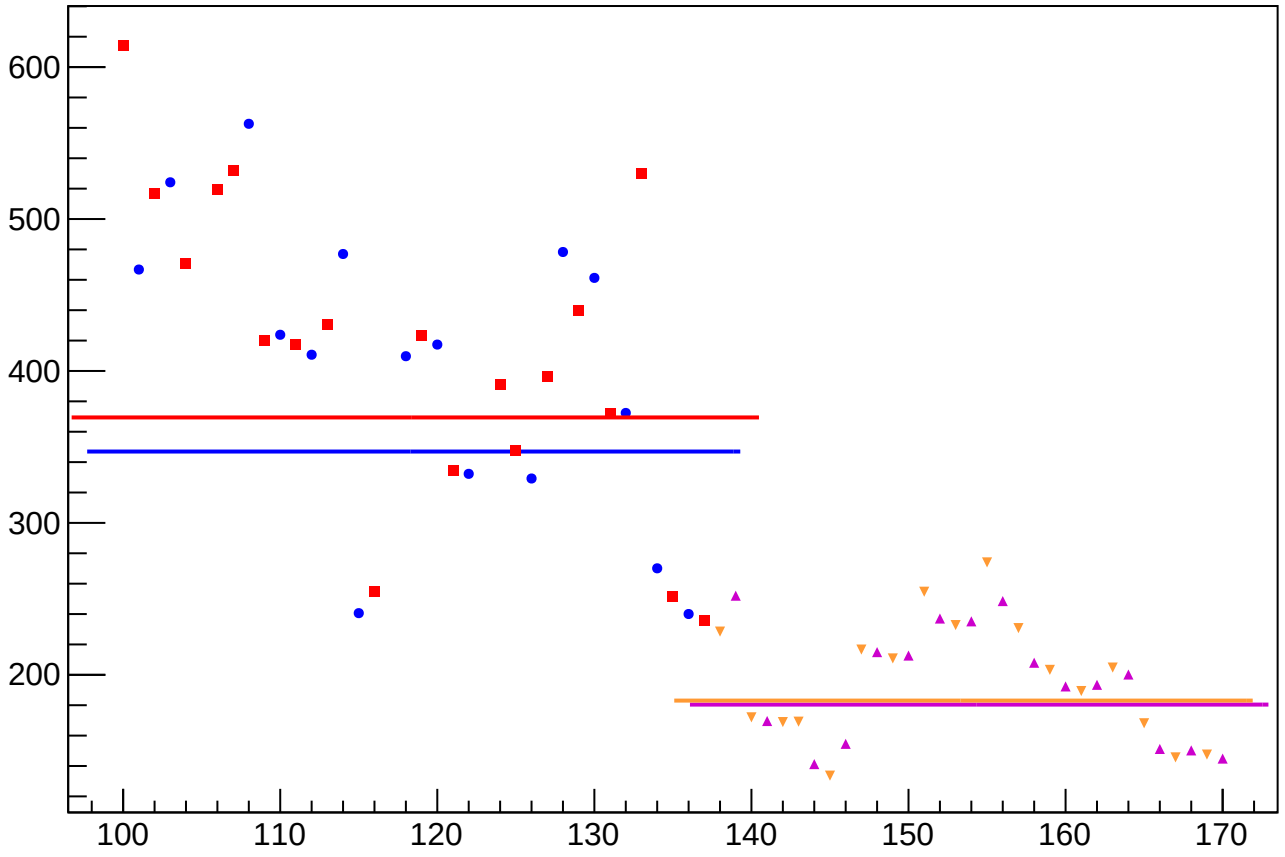
Right Out: 279.042+/-139.965 $\chi^2$/NDF: 12.1/18

Left In: -21.099+/-50.756 $\chi^2$/NDF:13.6/15

+ sign 291.985+/-47.830 $\chi^2$/NDF: 59.0/32

All: 152.553+/-33.780 $\chi^2$/NDF: 105.7/67

- sign 13.784+/-47.716 $\chi^2$/NDF: 29.7/34




Right In: 346.969+/-0.095 $\chi^2$/NDF: 1058029.4/15

Left Out: 183.047+/-0.036 $\chi^2$/NDF:1075854.7/16

Right Out: 369.410+/-0.099 $\chi^2$/NDF: 918852.6/18

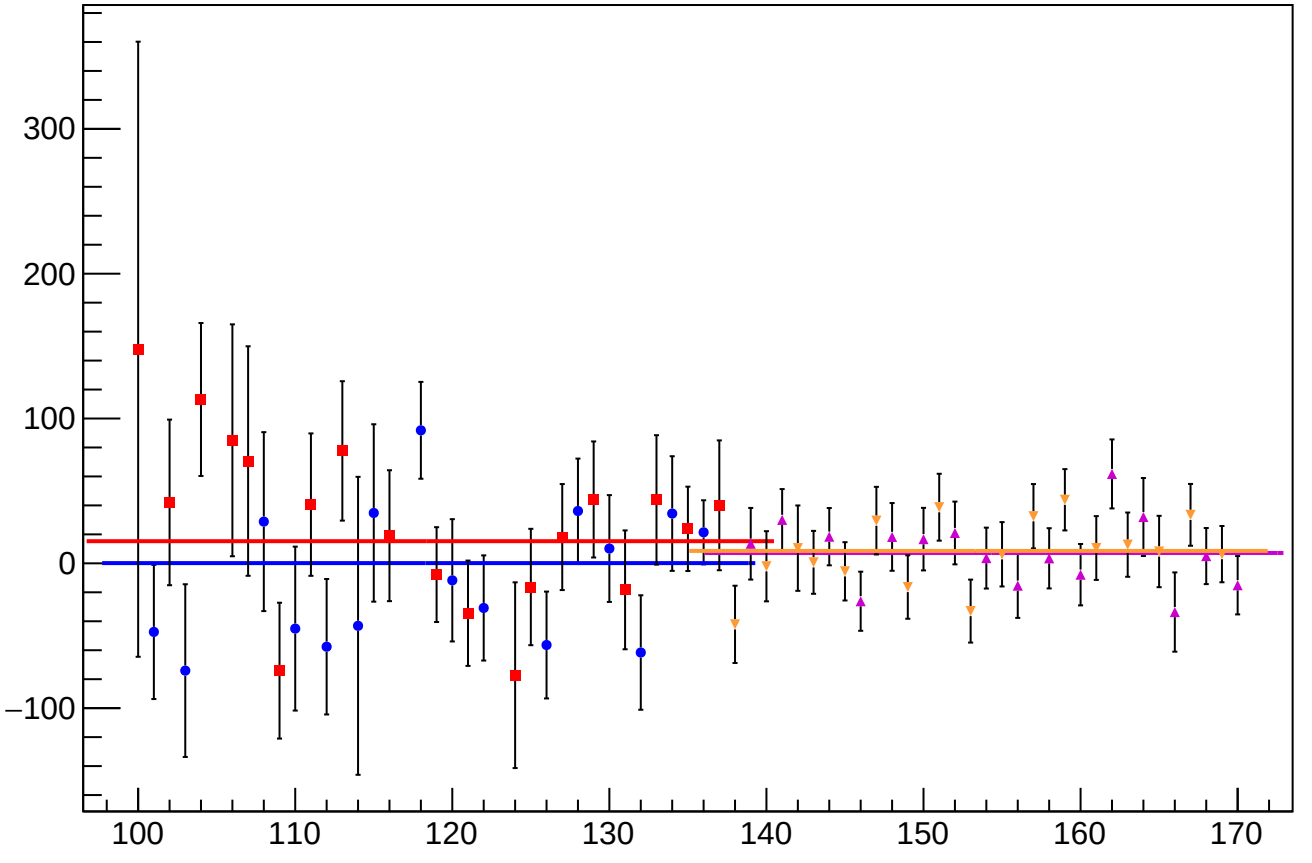
Left In: 180.411+/-0.036 $\chi^2$/NDF:993836.6/15

+ sign 203.663+/-0.034 $\chi^2$/NDF: 4716705.5/32

All: 203.019+/-0.024 $\chi^2$/NDF: 9853059.1/67

- sign 202.377+/-0.034 $\chi^2$/NDF: 5135629.1/34

# cor_asym_sam_1357_2468_dd_mean vs Slug




Right In: 0.157+/-10.048 $\chi^2$/NDF: 21.3/15

Left Out: 8.577+/-5.453 $\chi^2$/NDF:17.3/16

Right Out: 15.292+/-10.269 $\chi^2$/NDF: 17.9/18

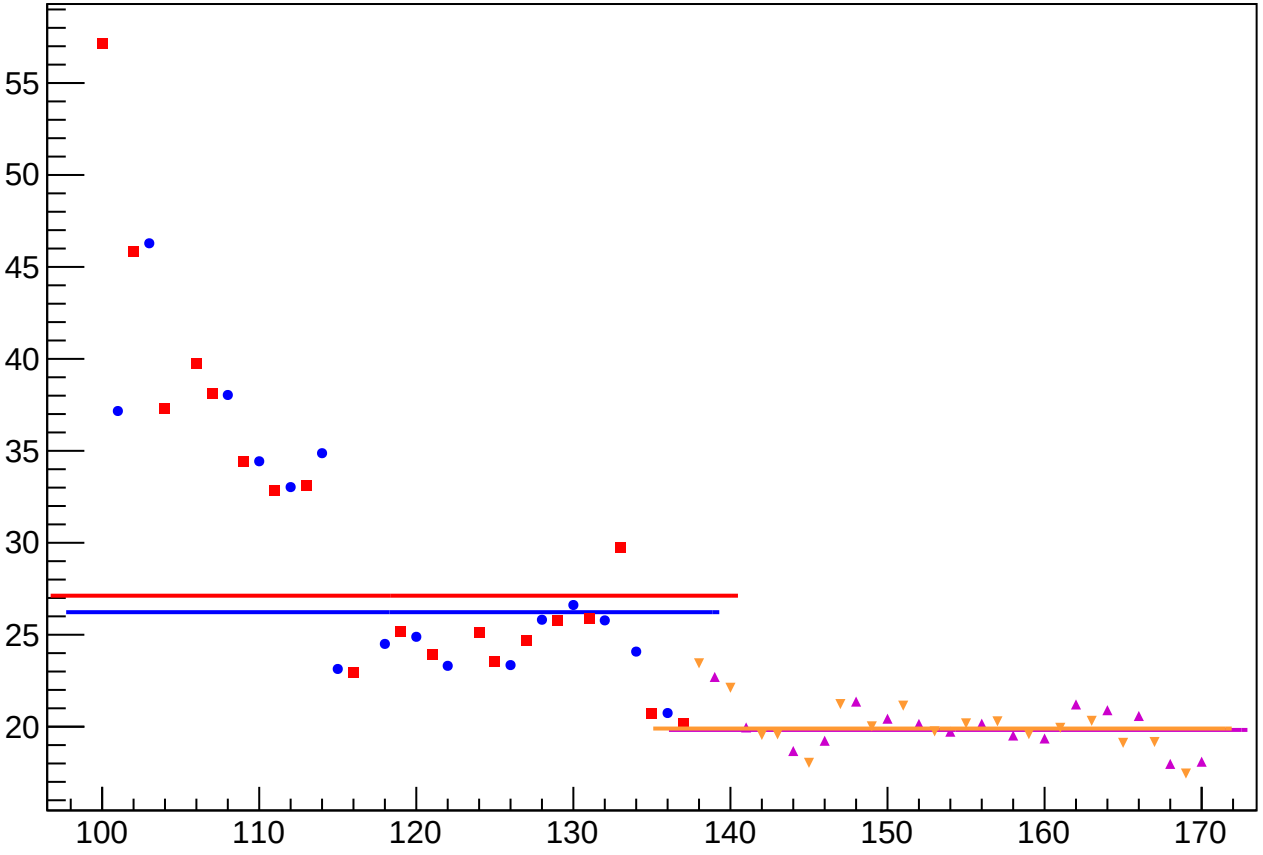
Left In: 7.154+/-5.478 $\chi^2$/NDF:16.2/15

+ sign 6.661+/-4.793 $\chi^2$/NDF: 39.1/32

All: 7.799+/-3.403 $\chi^2$/NDF: 73.8/67

- sign 8.957+/-4.833 $\chi^2$/NDF: 34.6/34

# cor_asym_sam_1357_2468_dd_rms vs Slug




Right In: 26.227+/-0.007 $\chi^2$/NDF: 676029.5/15

Left Out: 19.899+/-0.004 $\chi^2$/NDF:120585.0/16

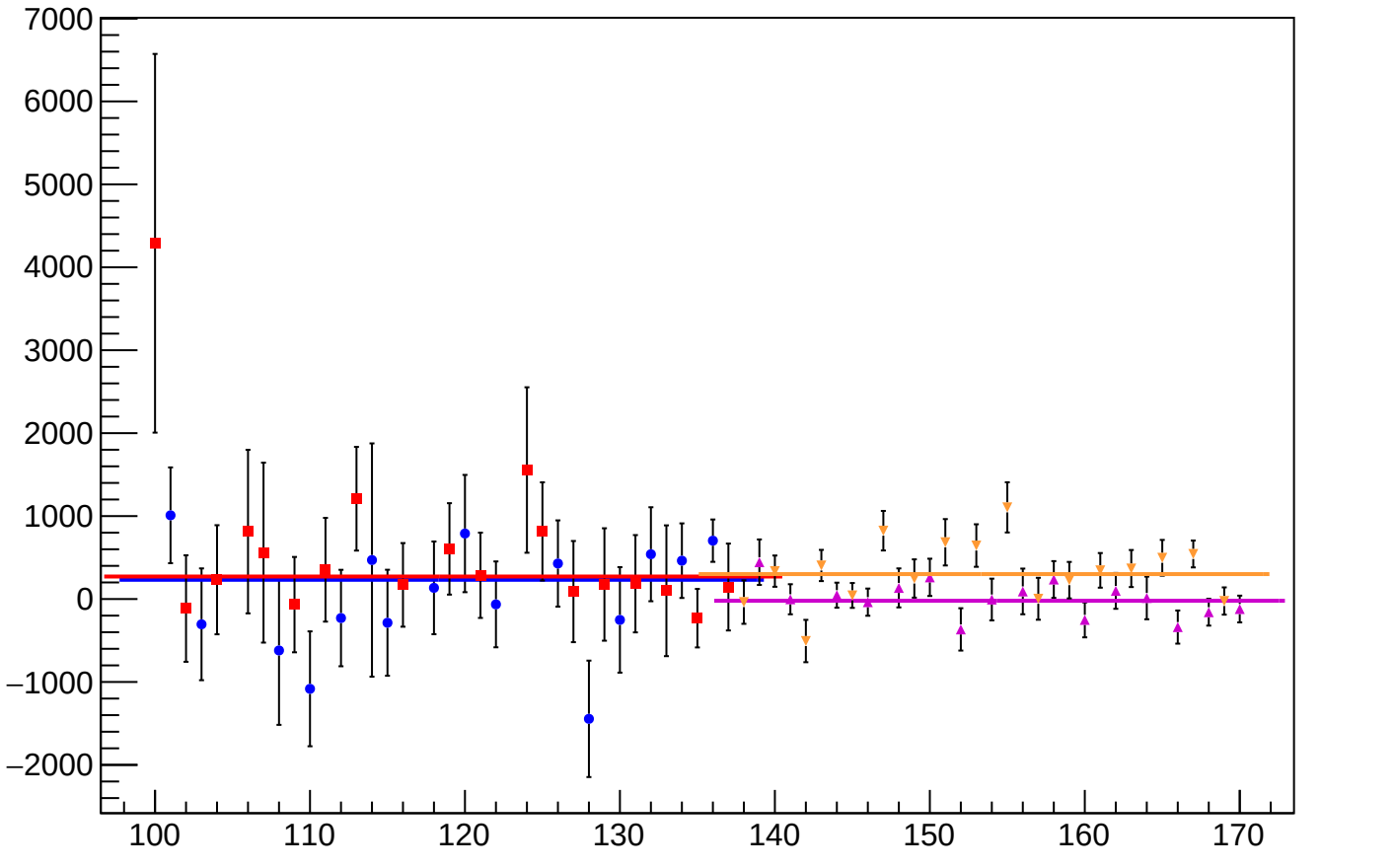
Right Out: 27.123+/-0.007 $\chi^2$/NDF: 745675.5/18

Left In: 19.824+/-0.004 $\chi^2$/NDF:92594.3/15

+ sign 21.339+/-0.003 $\chi^2$/NDF: 1409307.1/32

All: 21.390+/-0.002 $\chi^2$/NDF: 3034711.5/67

- sign 21.441+/-0.003 $\chi^2$/NDF: 1624955.1/34




Right In: 232.084+/-134.871 $\chi^2$/NDF: 19.6/15

Left Out: 300.599+/-51.155 $\chi^2$/NDF:39.2/16

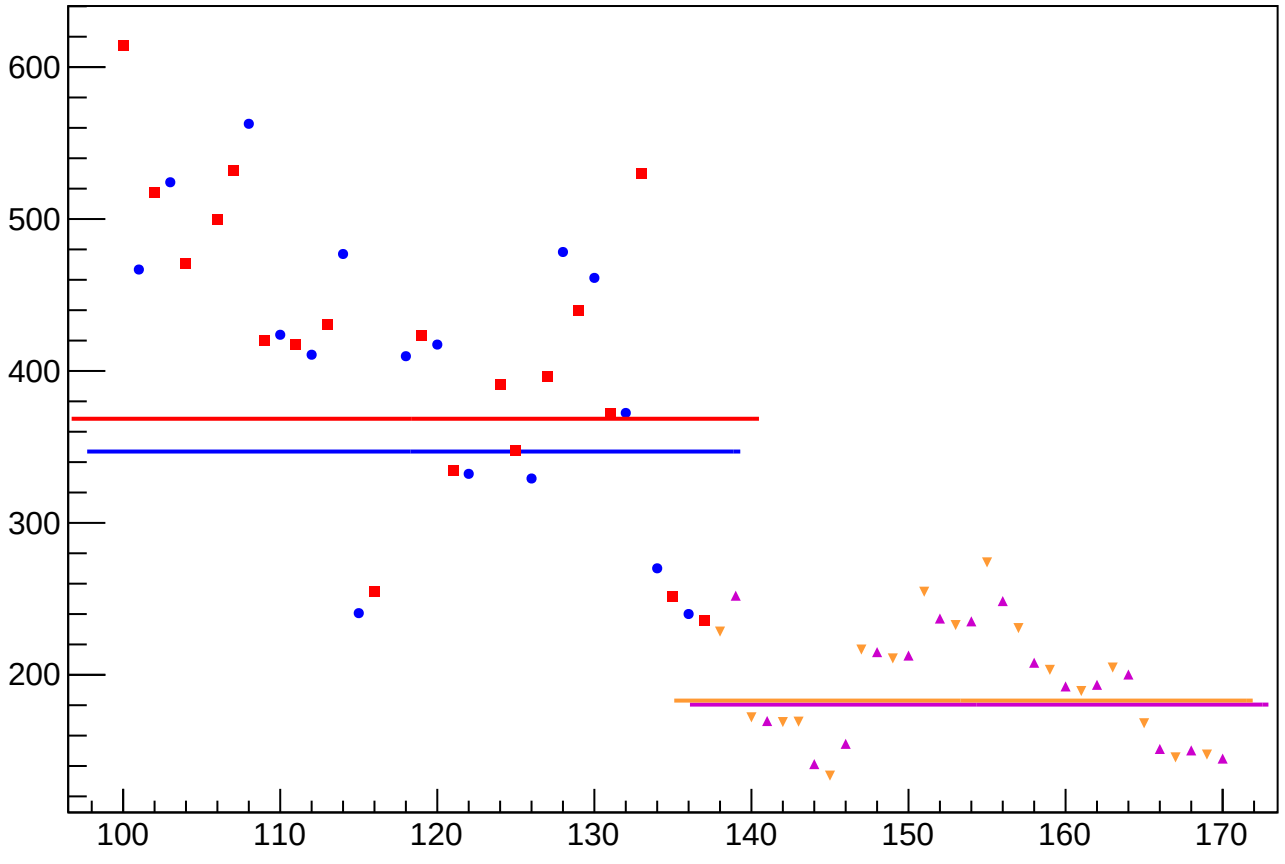
Right Out: 271.412+/-140.183 $\chi^2$/NDF: 11.6/18

Left In: -21.098+/-50.756 $\chi^2$/NDF:13.6/15

+ sign 291.983+/-47.830 $\chi^2$/NDF: 59.0/32

All: 152.086+/-33.784 $\chi^2$/NDF: 105.2/67

- sign 12.805+/-47.725 $\chi^2$/NDF: 29.1/34




Right In: 346.969+/-0.095 $\chi^2$/NDF: 1058057.4/15

Left Out: 183.047+/-0.036 $\chi^2$/NDF:1075856.8/16

Right Out: 368.543+/-0.099 $\chi^2$/NDF: 900219.6/18

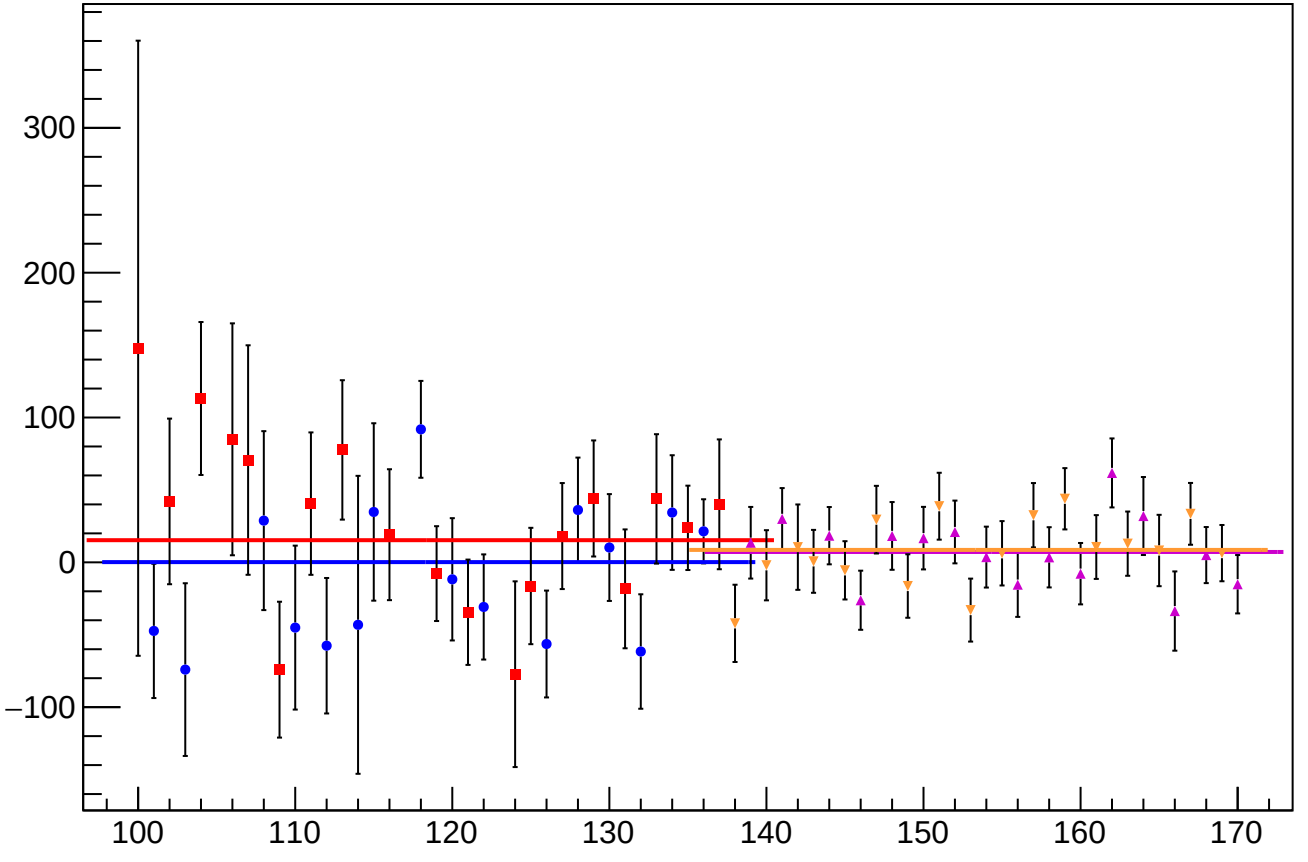
Left In: 180.412+/-0.036 $\chi^2$/NDF:993832.9/15

+ sign 203.663+/-0.034 $\chi^2$/NDF: 4716735.6/32

All: 202.938+/-0.024 $\chi^2$/NDF: 9796382.6/67

- sign 202.217+/-0.034 $\chi^2$/NDF: 5078730.4/34

# eigen_cor_asym_sam_1357_2468_dd_mean vs Slug




Right In: 0.157+/-10.048 $\chi^2$/NDF: 21.3/15

Left Out: 8.577+/-5.453 $\chi^2$/NDF:17.3/16

Right Out: 15.292+/-10.269 $\chi^2$/NDF: 17.9/18

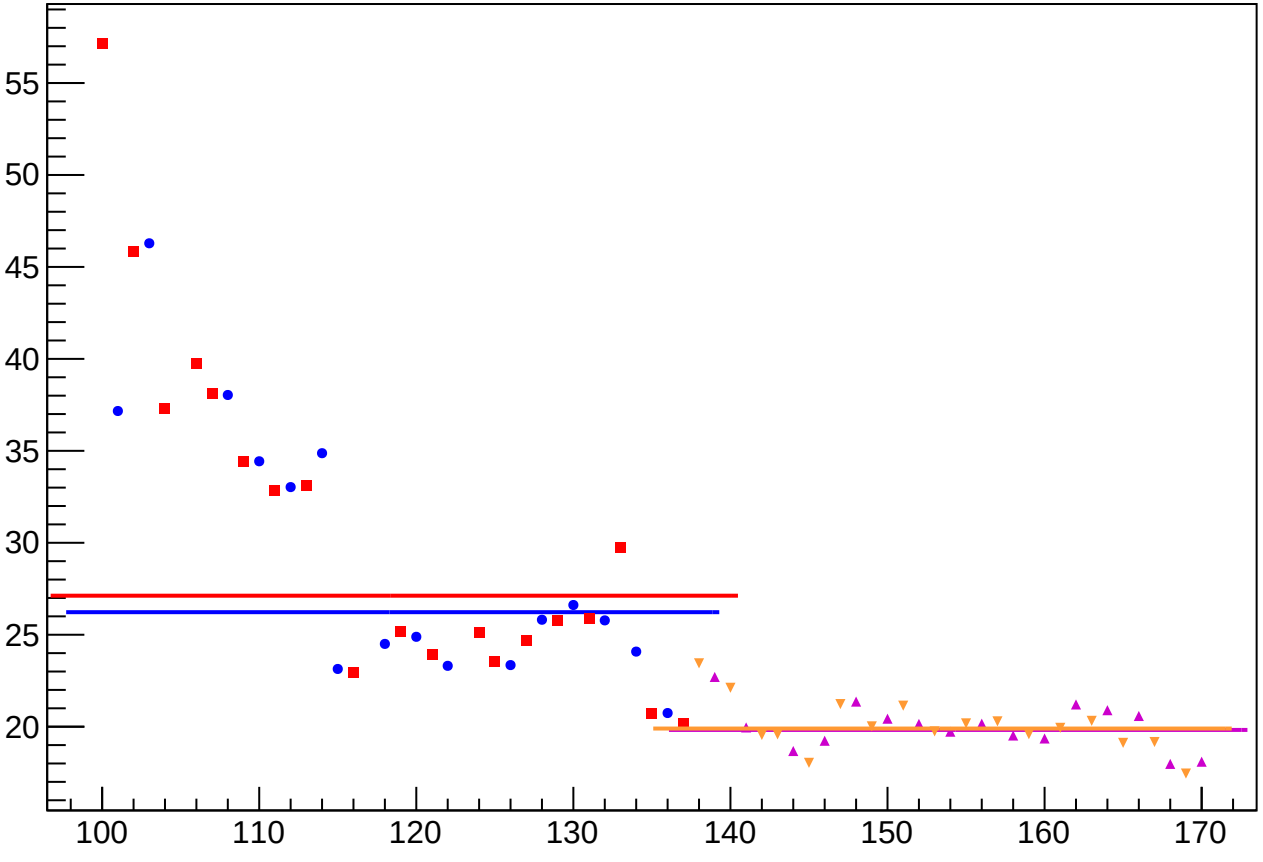
Left In: 7.154+/-5.478 $\chi^2$/NDF:16.2/15

\+ sign 6.661+/-4.793 $\chi^2$/NDF: 39.1/32

All: 7.799+/-3.403 $\chi^2$/NDF: 73.8/67

\- sign 8.957+/-4.833 $\chi^2$/NDF: 34.6/34

# eigen_cor_asym_sam_1357_2468_dd_rms vs Slug




Right In: 26.227+/-0.007 $\chi^2$/NDF: 676029.5/15

Left Out: 19.899+/-0.004 $\chi^2$/NDF:120585.0/16

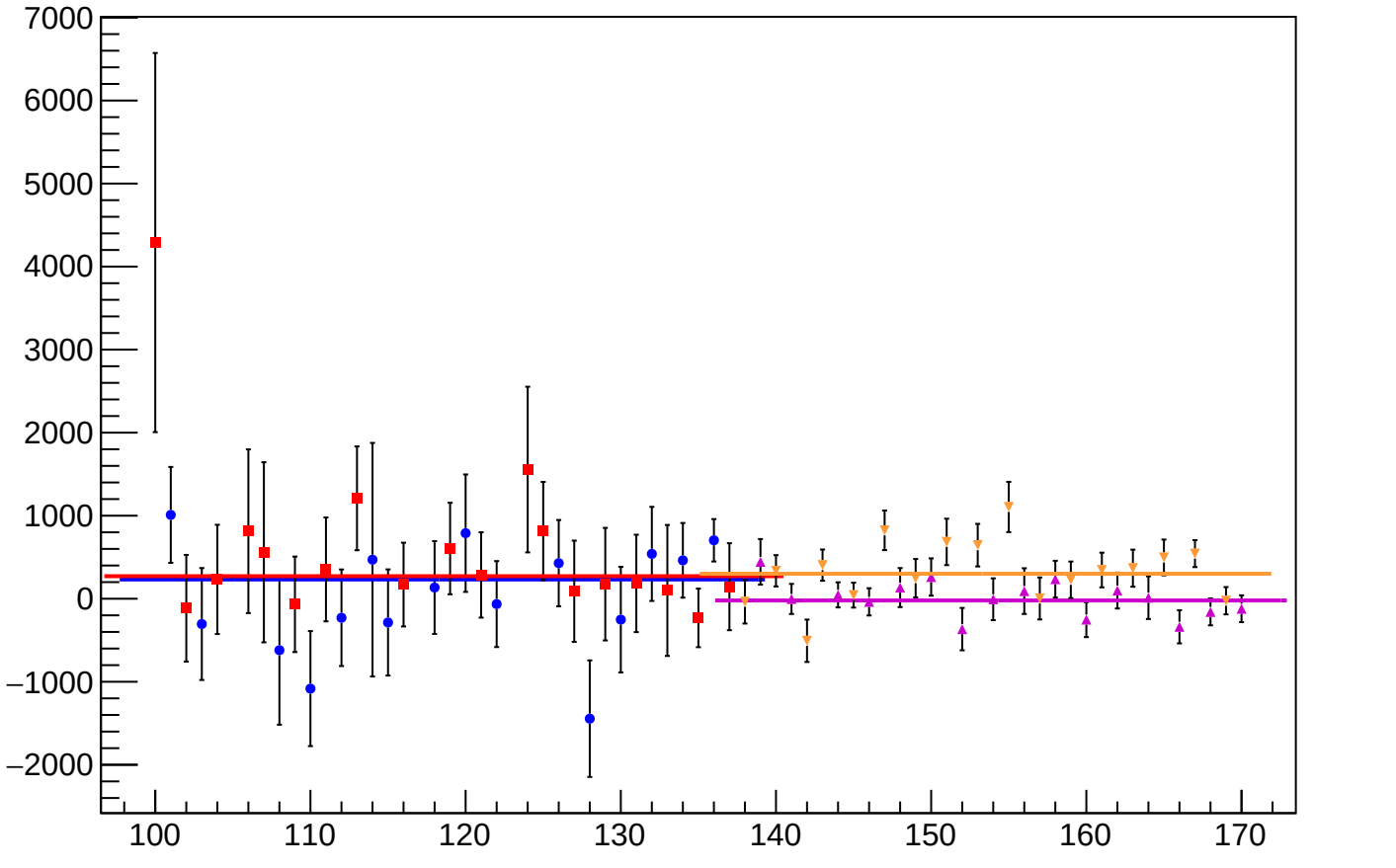
Right Out: 27.123+/-0.007 $\chi^2$/NDF: 745675.5/18

Left In: 19.824+/-0.004 $\chi^2$/NDF:92594.3/15

+ sign 21.339+/-0.003 $\chi^2$/NDF: 1409307.1/32

All: 21.390+/-0.002 $\chi^2$/NDF: 3034711.5/67

- sign 21.441+/-0.003 $\chi^2$/NDF: 1624955.1/34




Right In: 232.084+/-134.871 $\chi^2$/NDF: 19.6/15

Left Out: 300.599+/-51.155 $\chi^2$/NDF:39.2/16

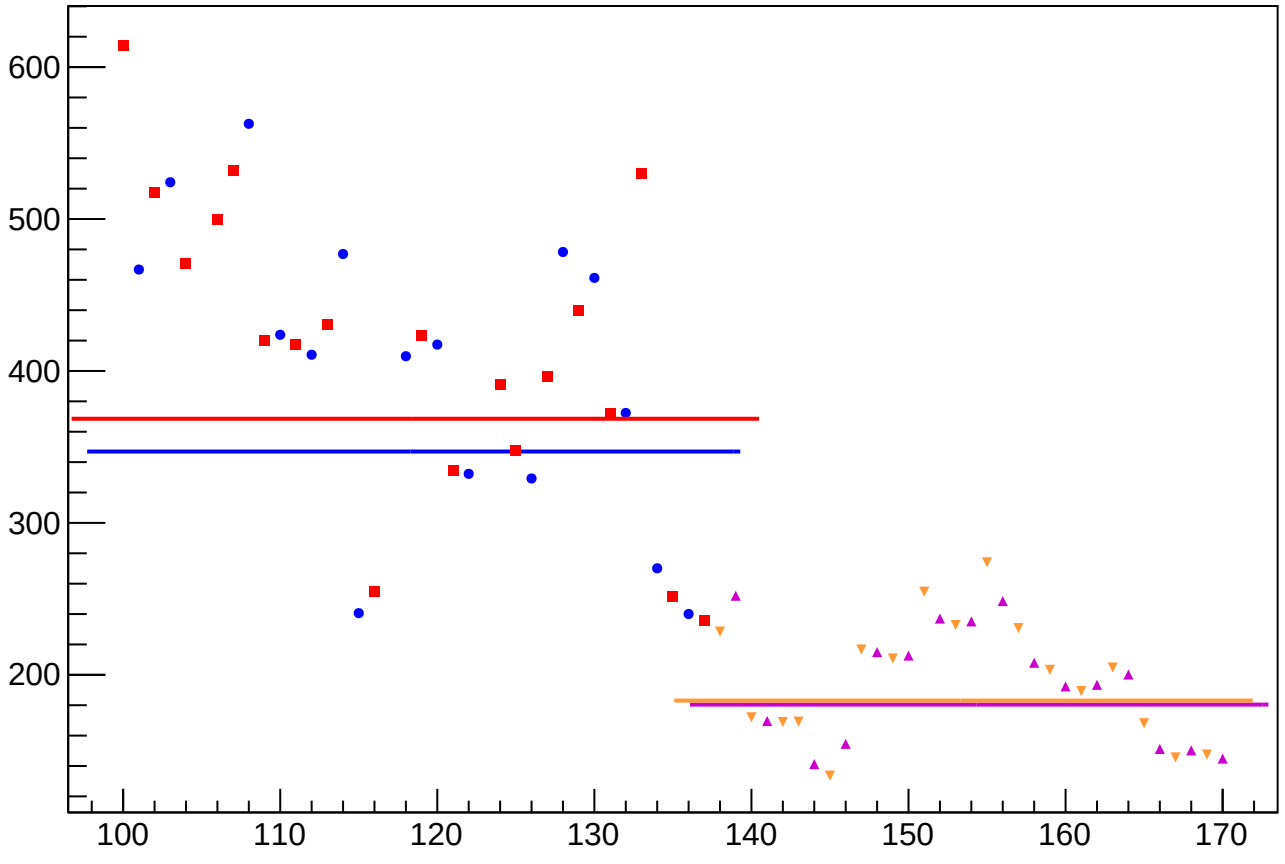
Right Out: 271.412+/-140.183 $\chi^2$/NDF: 11.6/18

Left In: -21.098+/-50.756 $\chi^2$/NDF:13.6/15

+ sign 291.983+/-47.830 $\chi^2$/NDF: 59.0/32

All: 152.086+/-33.784 $\chi^2$/NDF: 105.2/67

- sign 12.805+/-47.725 $\chi^2$/NDF: 29.1/34




Right In: 346.969+/-0.095 $\chi^2$/NDF: 1058057.4/15

Left Out: 183.047+/-0.036 $\chi^2$/NDF:1075856.8/16

Right Out: 368.543+/-0.099 $\chi^2$/NDF: 900219.6/18

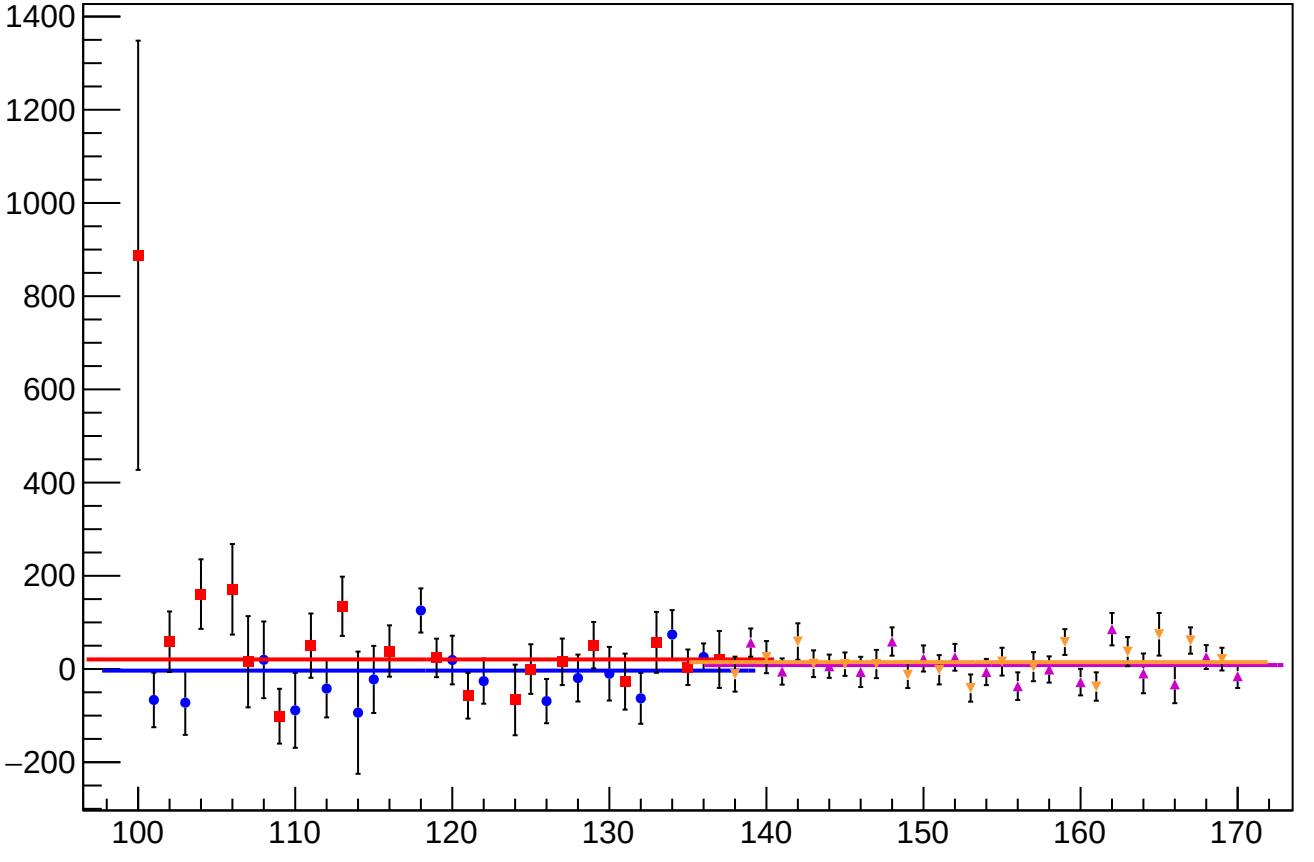
Left In: 180.412+/-0.036 $\chi^2$/NDF:993832.9/15

+ sign 203.663+/-0.034 $\chi^2$/NDF: 4716735.6/32

All: 202.938+/-0.024 $\chi^2$/NDF: 9796382.6/67

- sign 202.217+/-0.034 $\chi^2$/NDF: 5078730.4/34

# dit_asym_sam_1357_2468_dd_mean vs Slug




Right In: -3.423+/-13.393 $\chi^2$/NDF: 18.5/15

Left Out: 14.741+/-7.351 $\chi^2$/NDF:17.2/16

Right Out: 20.569+/-13.475 $\chi^2$/NDF: 23.1/18

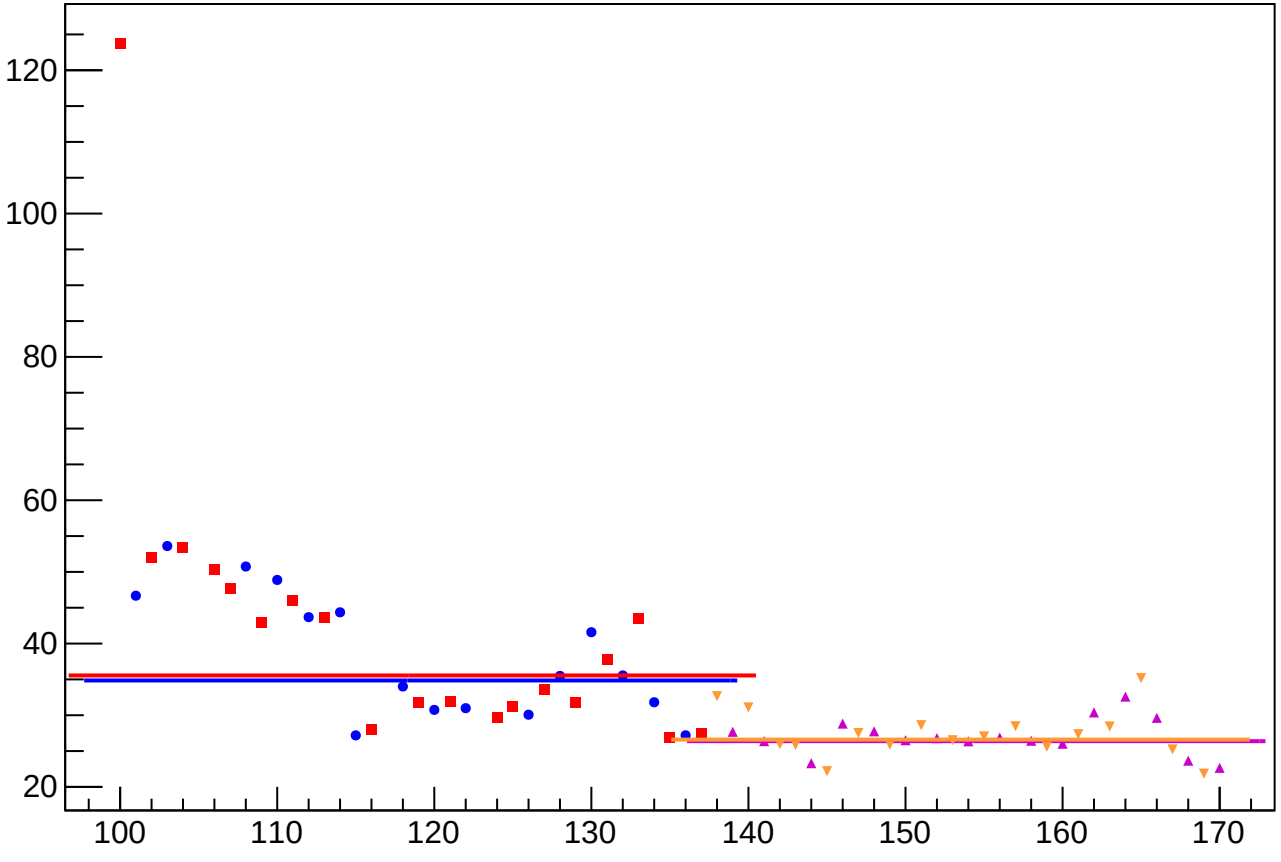
Left In: 8.499+/-7.367 $\chi^2$/NDF:18.2/15

+ sign 10.536+/-6.444 $\chi^2$/NDF: 37.1/32

All: 10.905+/-4.564 $\chi^2$/NDF: 79.0/67

- sign 11.277+/-6.464 $\chi^2$/NDF: 41.9/34

# dit_asym_sam_1357_2468_dd_rms vs Slug




Right In: 34.850+/-0.009 $\chi^2$/NDF: 658141.6/15

Left Out: 26.601+/-0.005 $\chi^2$/NDF:330500.9/16

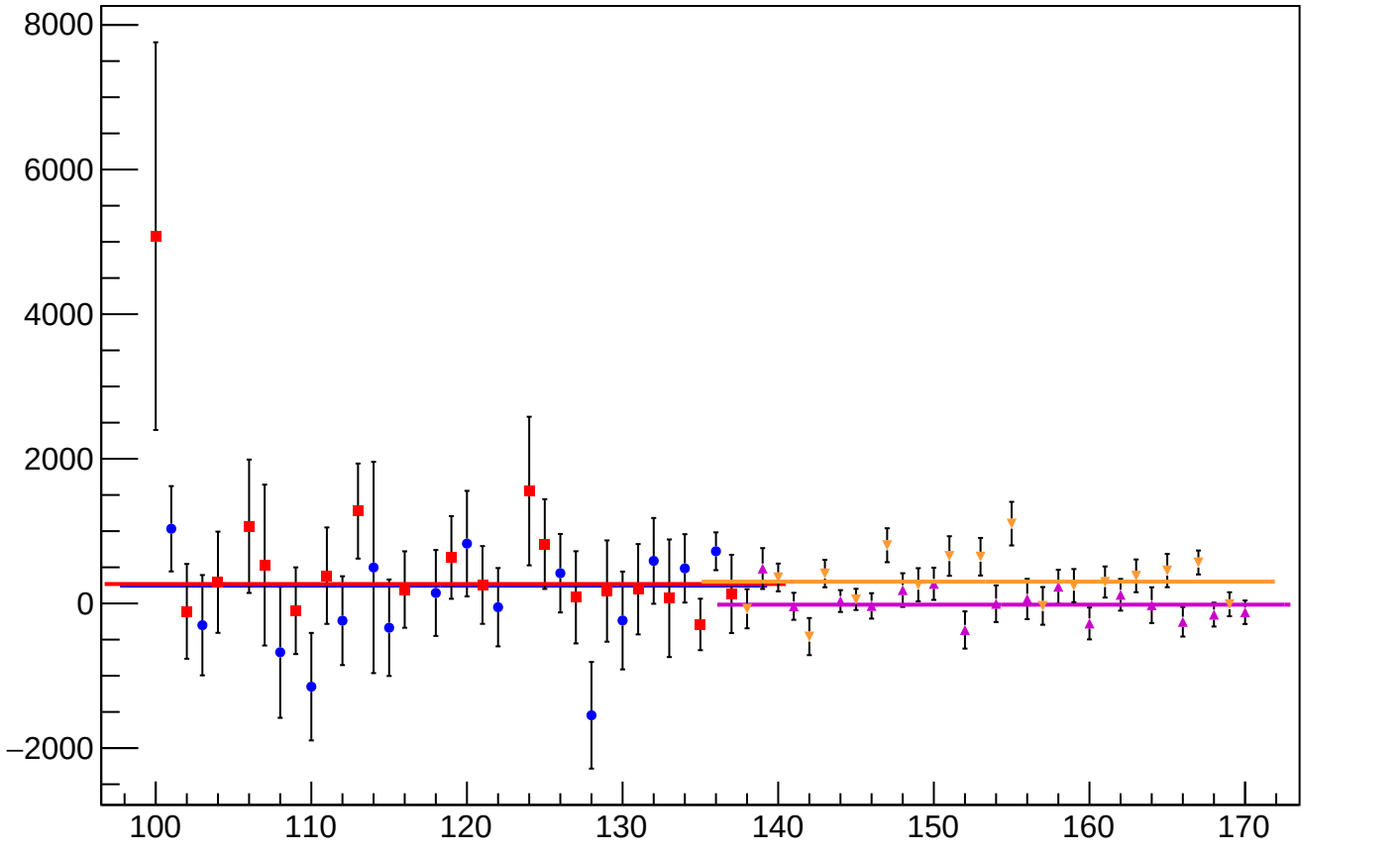
Right Out: 35.553+/-0.010 $\chi^2$/NDF: 779880.3/18

Left In: 26.380+/-0.005 $\chi^2$/NDF:198685.4/15

+ sign 28.510+/-0.005 $\chi^2$/NDF: 1571878.9/32

All: 28.501+/-0.003 $\chi^2$/NDF: 3263958.1/67

- sign 28.491+/-0.005 $\chi^2$/NDF: 1692070.4/34




Right In: 246.507+/-140.275 $\chi^2$/NDF: 19.8/15

Left Out: 301.933+/-51.761 $\chi^2$/NDF:37.5/16

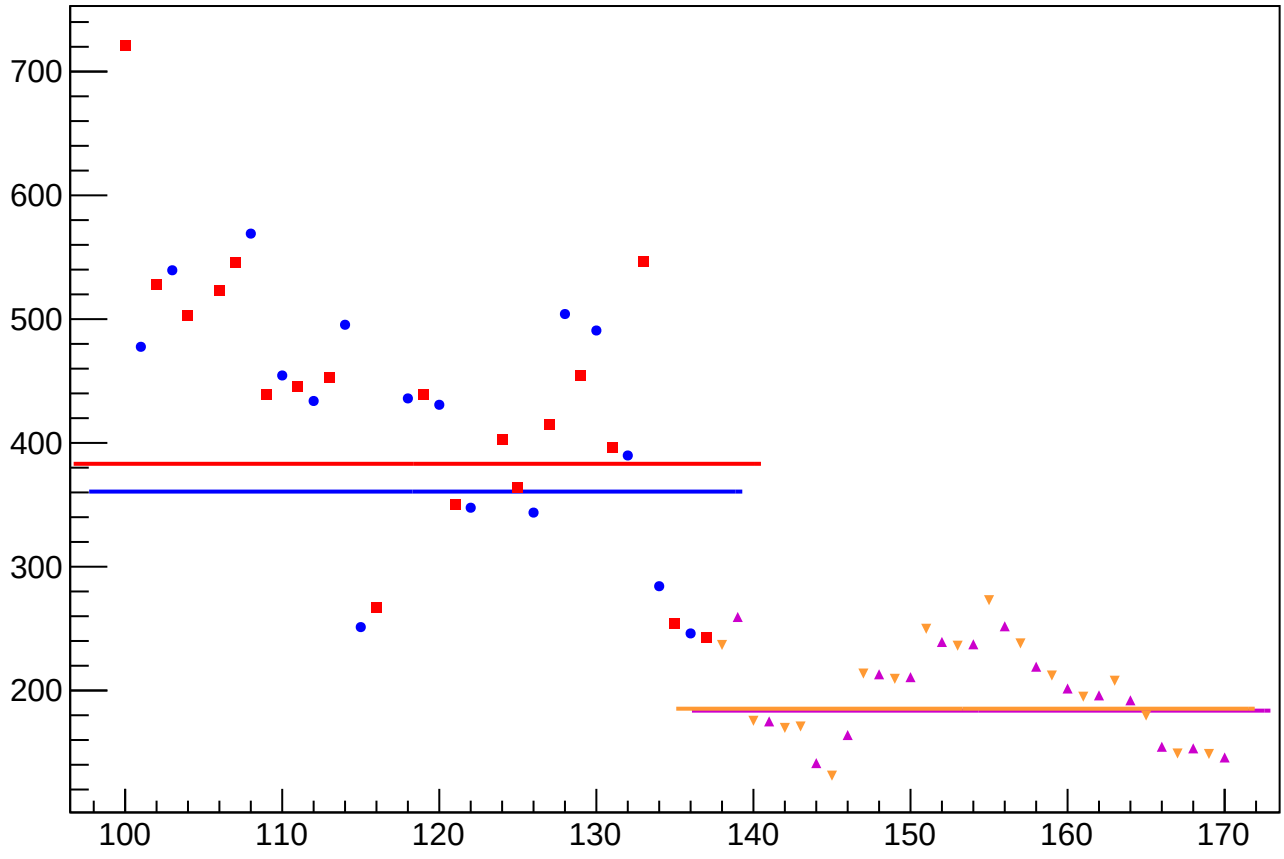
Right Out: 268.913+/-145.295 $\chi^2$/NDF: 12.6/18

Left In: -16.822+/-51.700 $\chi^2$/NDF:13.0/15

+ sign 295.290+/-48.561 $\chi^2$/NDF: 57.4/32

All: 155.716+/-34.390 $\chi^2$/NDF: 103.0/67

- sign 15.290+/-48.709 $\chi^2$/NDF: 29.1/34




Right In: 360.692+/-0.099 $\chi^2$/NDF: 1092760.6/15

Left Out: 185.303+/-0.037 $\chi^2$/NDF:1104982.5/16

Right Out: 383.132+/-0.103 $\chi^2$/NDF: 963125.0/18

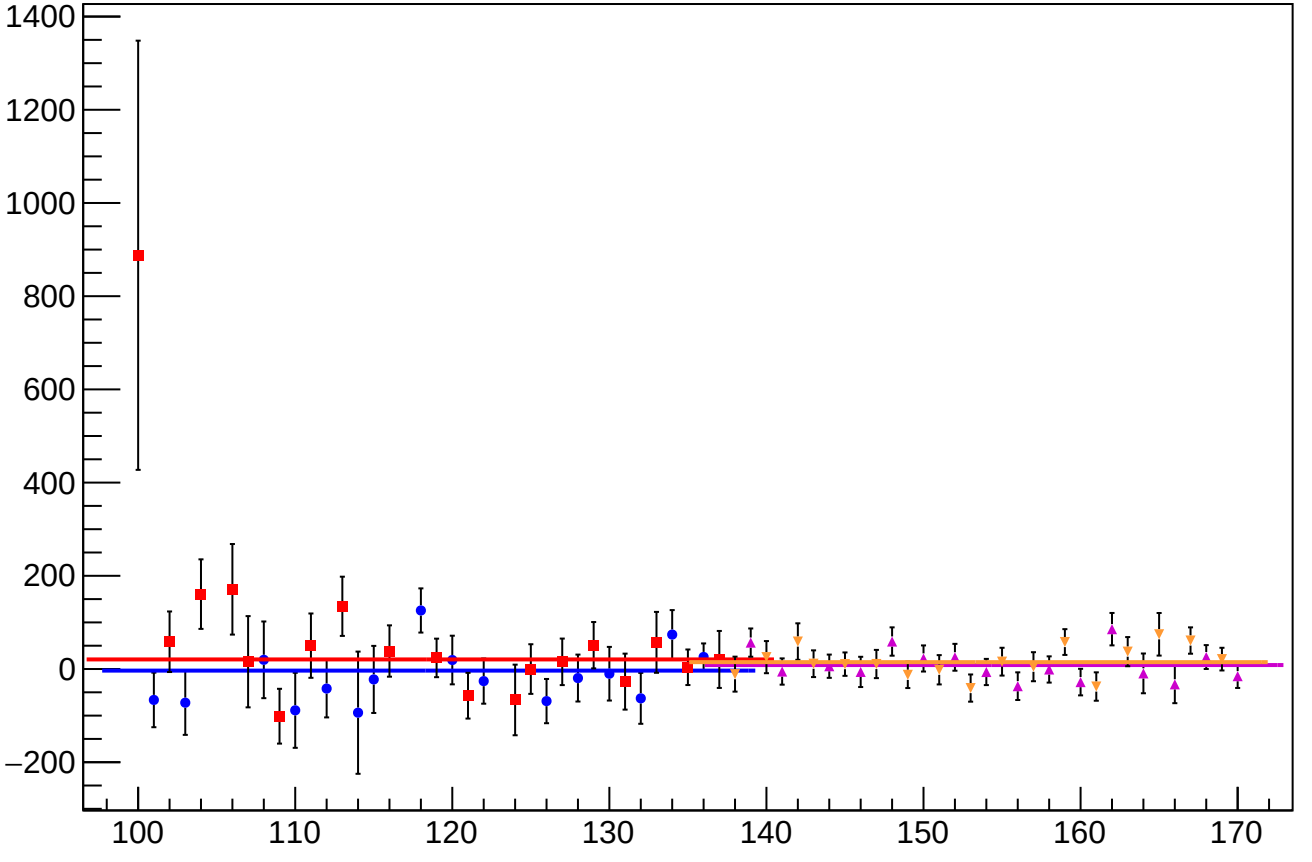
Left In: 183.728+/-0.037 $\chi^2$/NDF:979121.3/15

+ sign 206.322+/-0.034 $\chi^2$/NDF: 4949661.0/32

All: 206.231+/-0.024 $\chi^2$/NDF: 10235533.2/67

- sign 206.138+/-0.034 $\chi^2$/NDF: 5285857.8/34

# eigen_dit_asym_sam_1357_2468_dd_mean vs Slug




Right In: -3.425+/-13.392 $\chi^2$/NDF: 18.5/15

Left Out: 14.741+/-7.351 $\chi^2$/NDF:17.2/16

Right Out: 20.569+/-13.475 $\chi^2$/NDF: 23.1/18

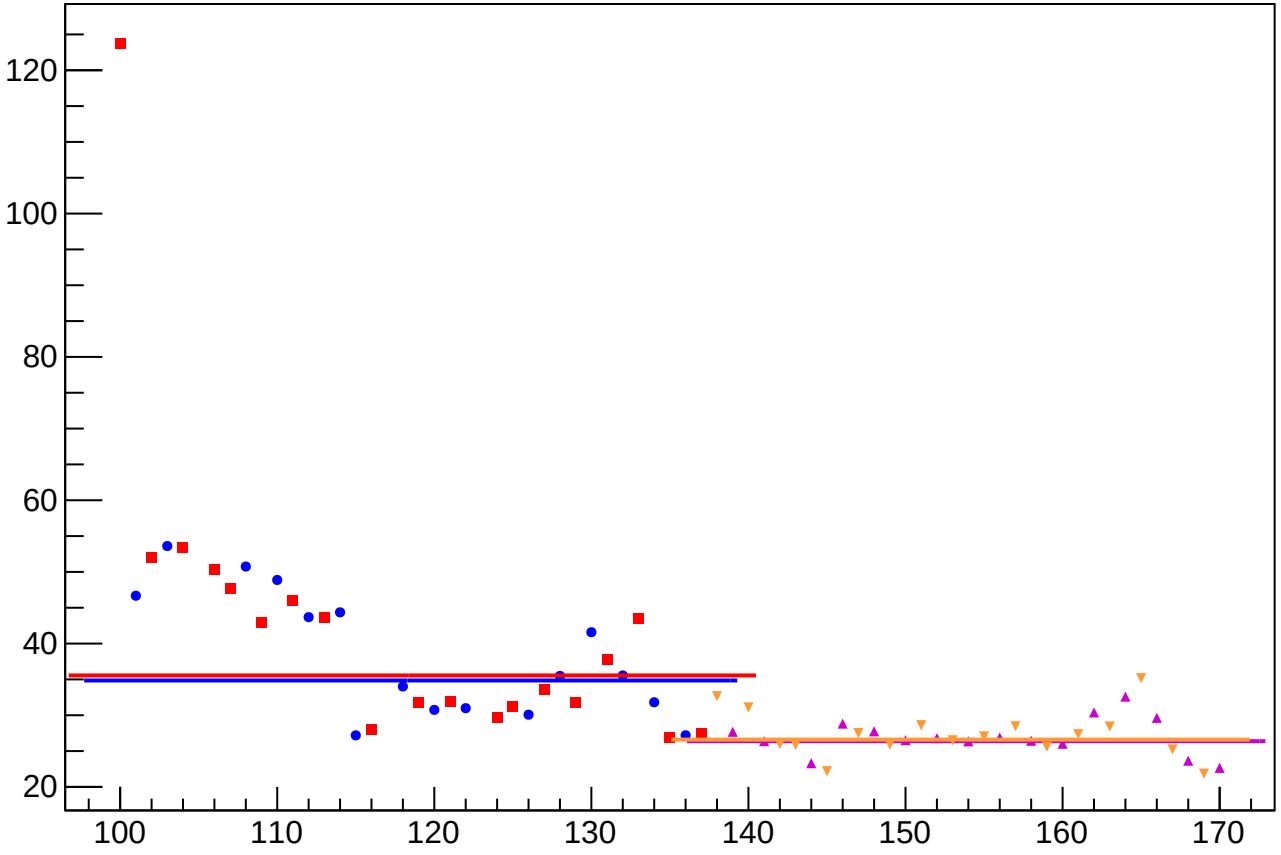
Left In: 8.499+/-7.367 $\chi^2$/NDF:18.2/15

+ sign 10.535+/-6.444 $\chi^2$/NDF: 37.1/32

All: 10.905+/-4.564 $\chi^2$/NDF: 79.0/67

- sign 11.277+/-6.464 $\chi^2$/NDF: 41.9/34

# eigen_dit_asym_sam_1357_2468_dd_rms vs Slug




Right In: 34.850+/-0.009 $\chi^2$/NDF: 658089.6/15

Left Out: 26.601+/-0.005 $\chi^2$/NDF:330488.0/16

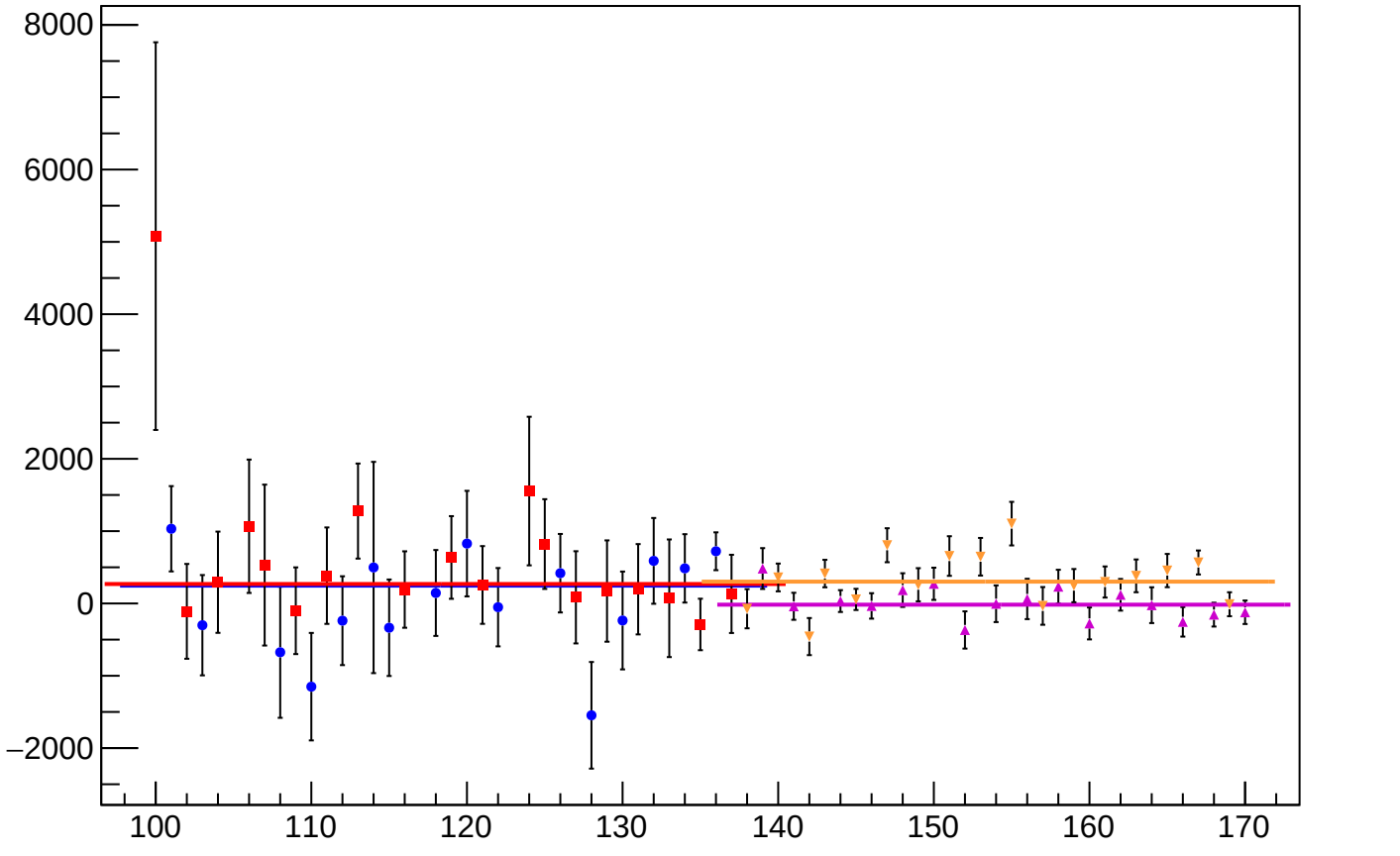
Right Out: 35.552+/-0.010 $\chi^2$/NDF: 779849.4/18

Left In: 26.380+/-0.005 $\chi^2$/NDF:198683.4/15

+ sign 28.510+/-0.005 $\chi^2$/NDF: 1571743.4/32

All: 28.501+/-0.003 $\chi^2$/NDF: 3263729.8/67

- sign 28.491+/-0.005 $\chi^2$/NDF: 1691977.6/34




Right In: 246.505+/-140.274 $\chi^2$/NDF: 19.8/15

Left Out: 301.932+/-51.761 $\chi^2$/NDF:37.5/16

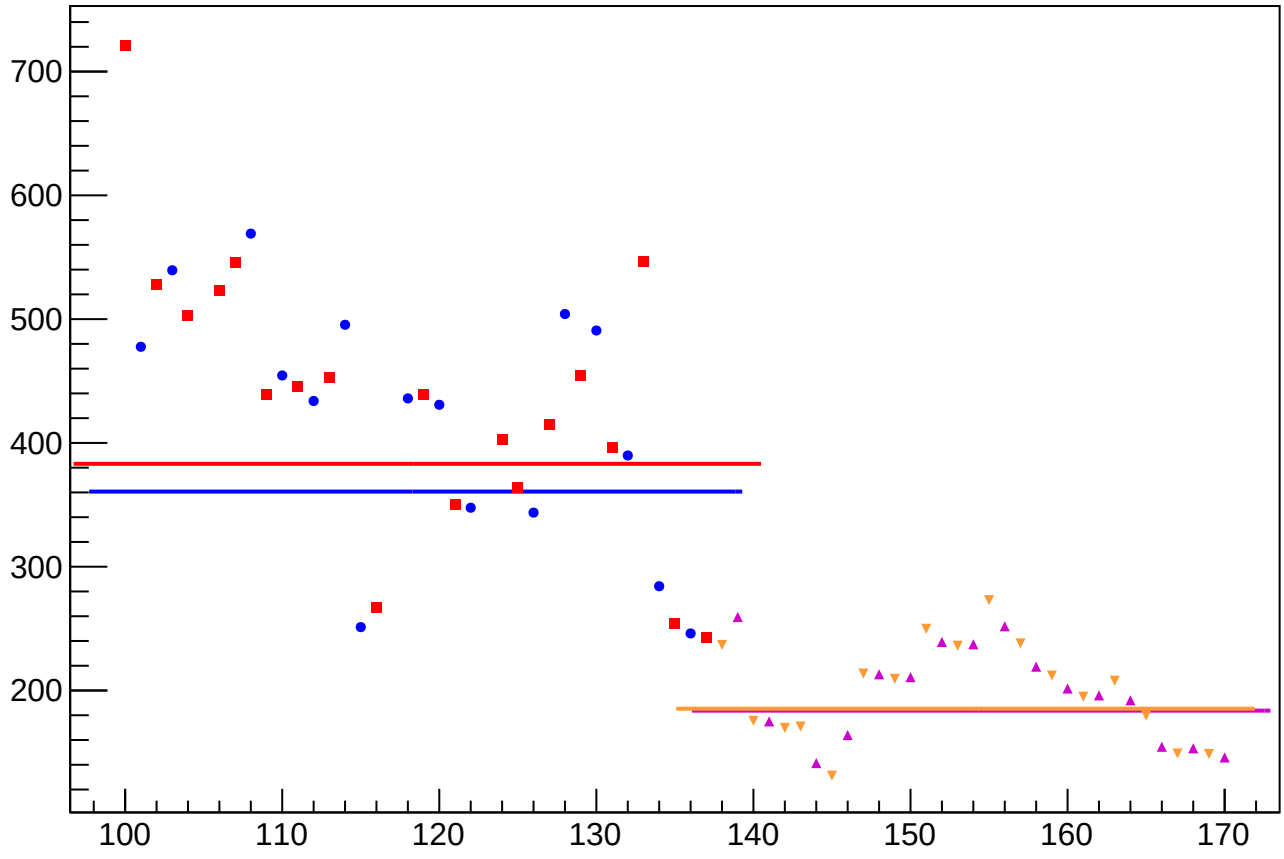
Right Out: 268.913+/-145.295 $\chi^2$/NDF: 12.6/18

Left In: -16.823+/-51.700 $\chi^2$/NDF:13.0/15

+ sign 295.289+/-48.560 $\chi^2$/NDF: 57.4/32

All: 155.715+/-34.390 $\chi^2$/NDF: 103.0/67

- sign 15.289+/-48.708 $\chi^2$/NDF: 29.1/34




Right In: 360.691+/-0.099 $\chi^2$/NDF: 1092752.5/15

Left Out: 185.303+/-0.037 $\chi^2$/NDF:1105011.6/16

Right Out: 383.131+/-0.103 $\chi^2$/NDF: 963120.8/18

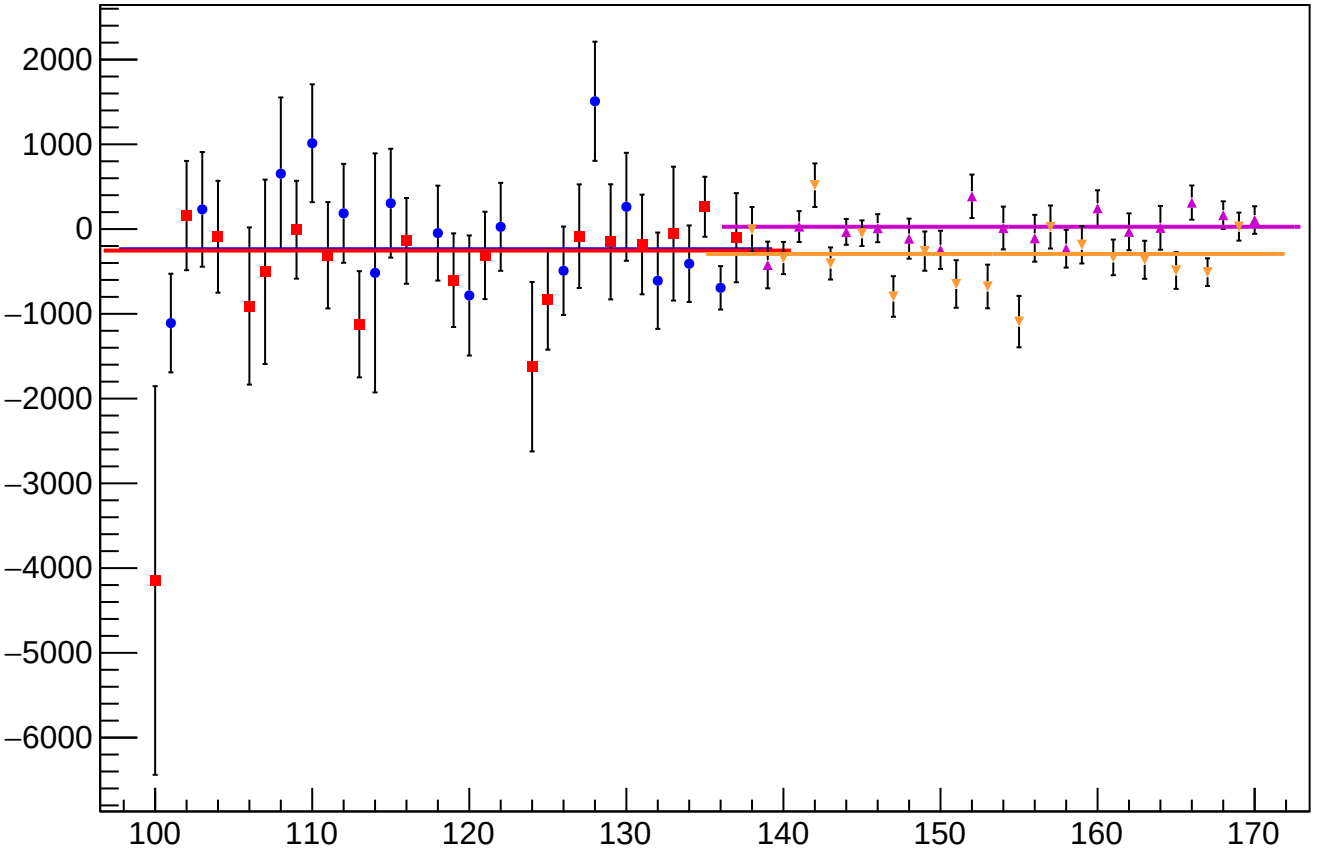
Left In: 183.728+/-0.037 $\chi^2$/NDF:979139.0/15

+ sign 206.322+/-0.034 $\chi^2$/NDF: 4949691.3/32

All: 206.230+/-0.024 $\chi^2$/NDF: 10235585.6/67

- sign 206.138+/-0.034 $\chi^2$/NDF: 5285880.0/34

# asym_sam_1357_2468_dd_mean vs Slug




Right In: -238.043+/-135.349 $\chi^2$/NDF: 19.9/15

Left Out: -293.234+/-51.484 $\chi^2$/NDF:37.6/16

Right Out: -253.445+/-140.414 $\chi^2$/NDF: 11.7/18

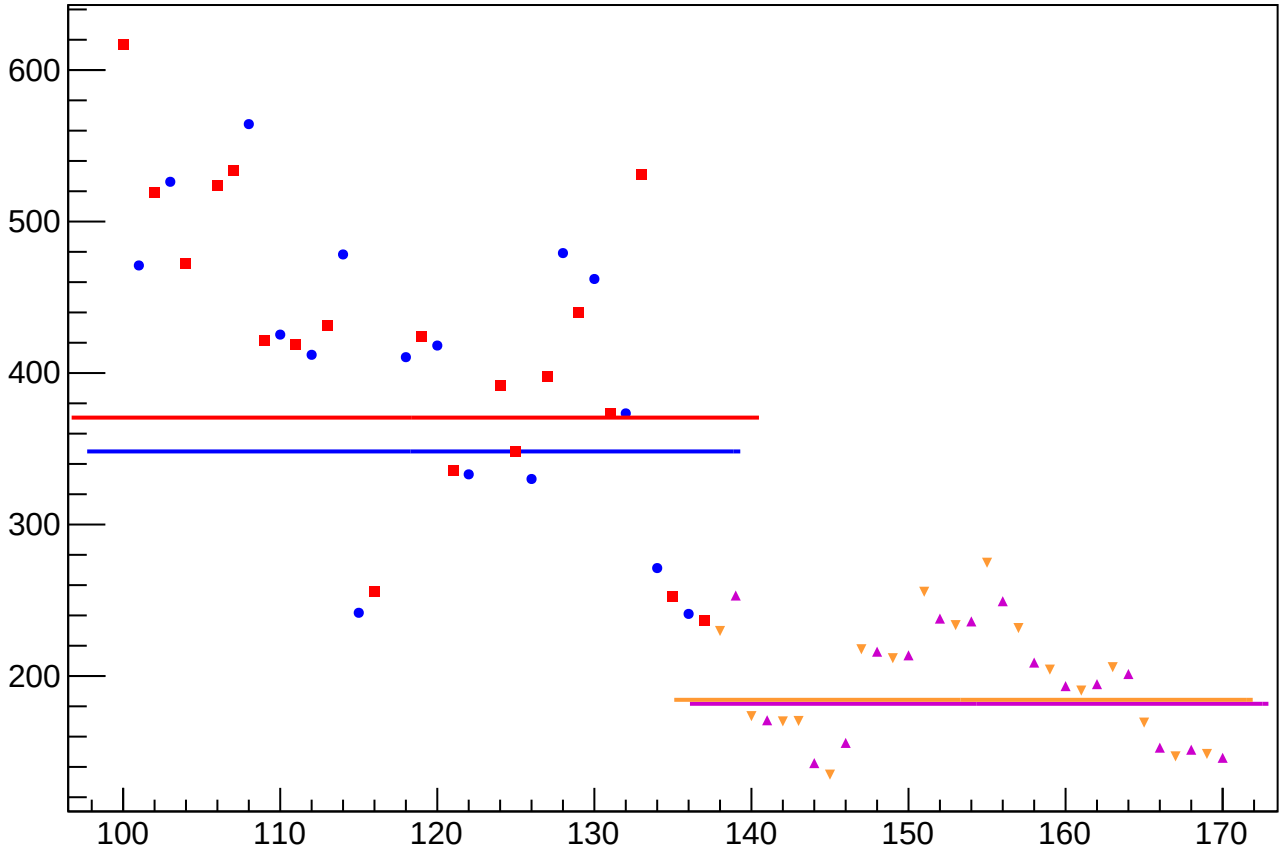
Left In: 27.243+/-51.091 $\chi^2$/NDF:12.3/15

+ sign -286.258+/-48.120 $\chi^2$/NDF: 57.7/32

All: -145.600+/-33.988 $\chi^2$/NDF: 102.3/67

- sign -5.574+/-48.012 $\chi^2$/NDF: 27.5/34

# asym_sam_1357_2468_dd_rms vs Slug




Right In: 348.253+/-0.096 $\chi^2$/NDF: 1056820.3/15

Left Out: 184.300+/-0.036 $\chi^2$/NDF:1057168.9/16

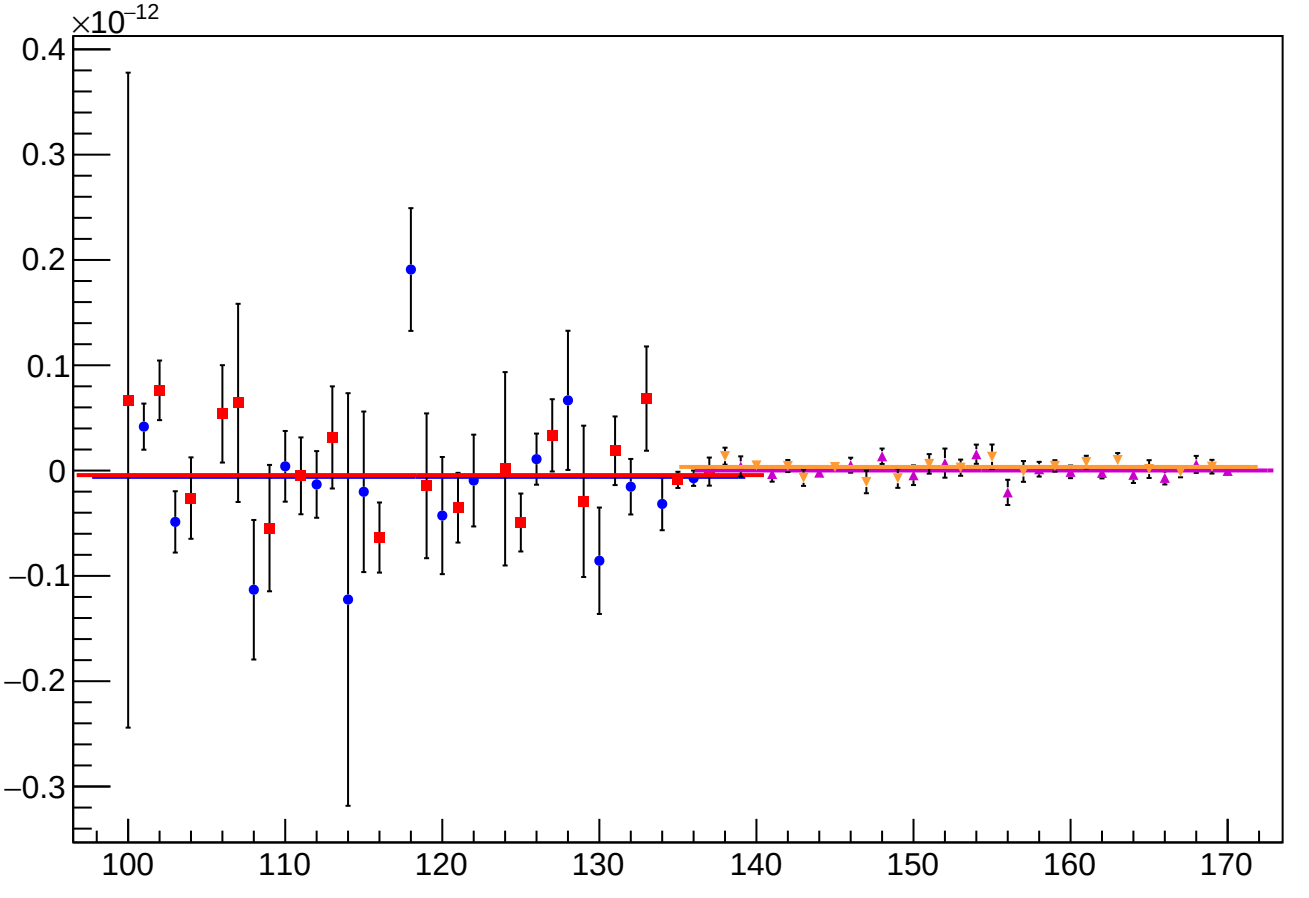
Right Out: 370.585+/-0.099 $\chi^2$/NDF: 917913.5/18

Left In: 181.674+/-0.036 $\chi^2$/NDF:975647.9/15

+ sign 205.023+/-0.034 $\chi^2$/NDF: 4677703.0/32

All: 204.391+/-0.024 $\chi^2$/NDF: 9768845.6/67

- sign 203.761+/-0.034 $\chi^2$/NDF: 5090452.4/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 27.3/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:10.1/16

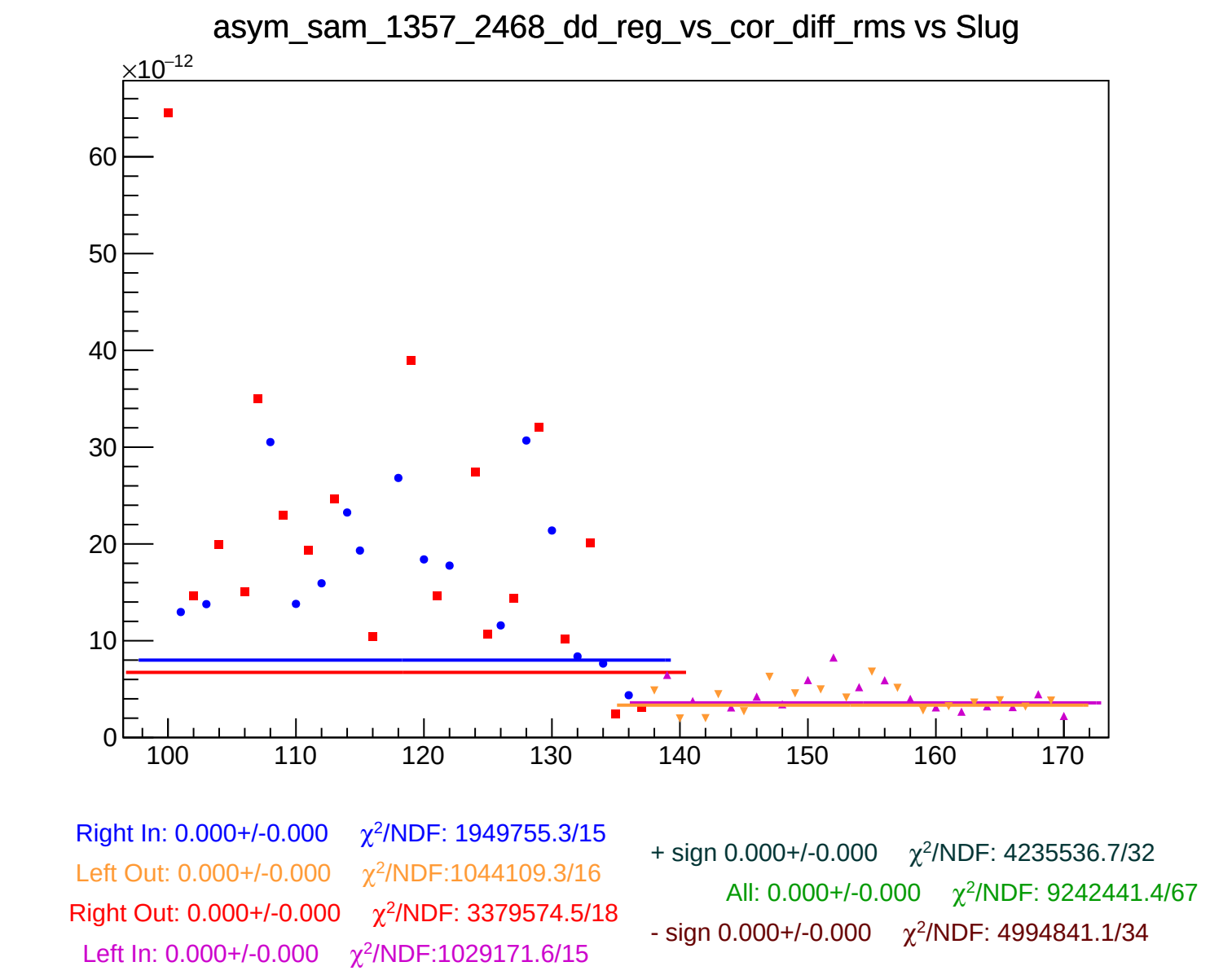
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 23.0/18

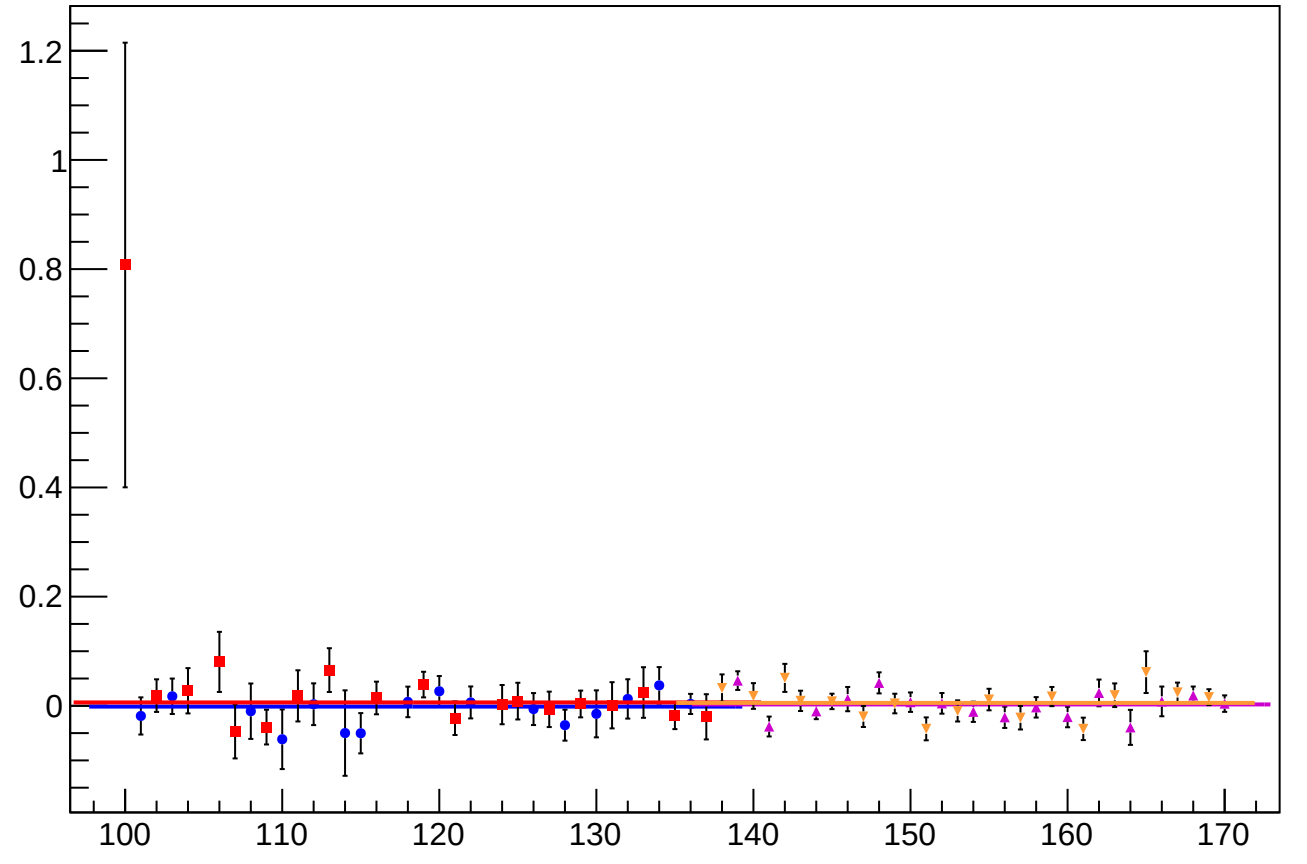
Left In: 0.000+/-0.000 $\chi^2$/NDF:13.1/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 40.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 78.5/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 36.7/34


asym_sam_1357_2468_dd_reg_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 1949755.3/15
Left Out: 0.000+/-0.000 χ²/NDF:1044109.3/16
Right Out: 0.000+/-0.000 χ²/NDF: 3379574.5/18
Left In: 0.000+/-0.000 χ²/NDF:1029171.6/15
+ sign 0.000+/-0.000 χ²/NDF: 4235536.7/32
All: 0.000+/-0.000 χ²/NDF: 9242441.4/67
- sign 0.000+/-0.000 χ²/NDF: 4994841.1/34




Right In: -0.001+/-0.008 $\chi^2$/NDF: 8.3/15

Left Out: 0.005+/-0.005 $\chi^2$/NDF:23.9/16

Right Out: 0.006+/-0.008 $\chi^2$/NDF: 16.2/18

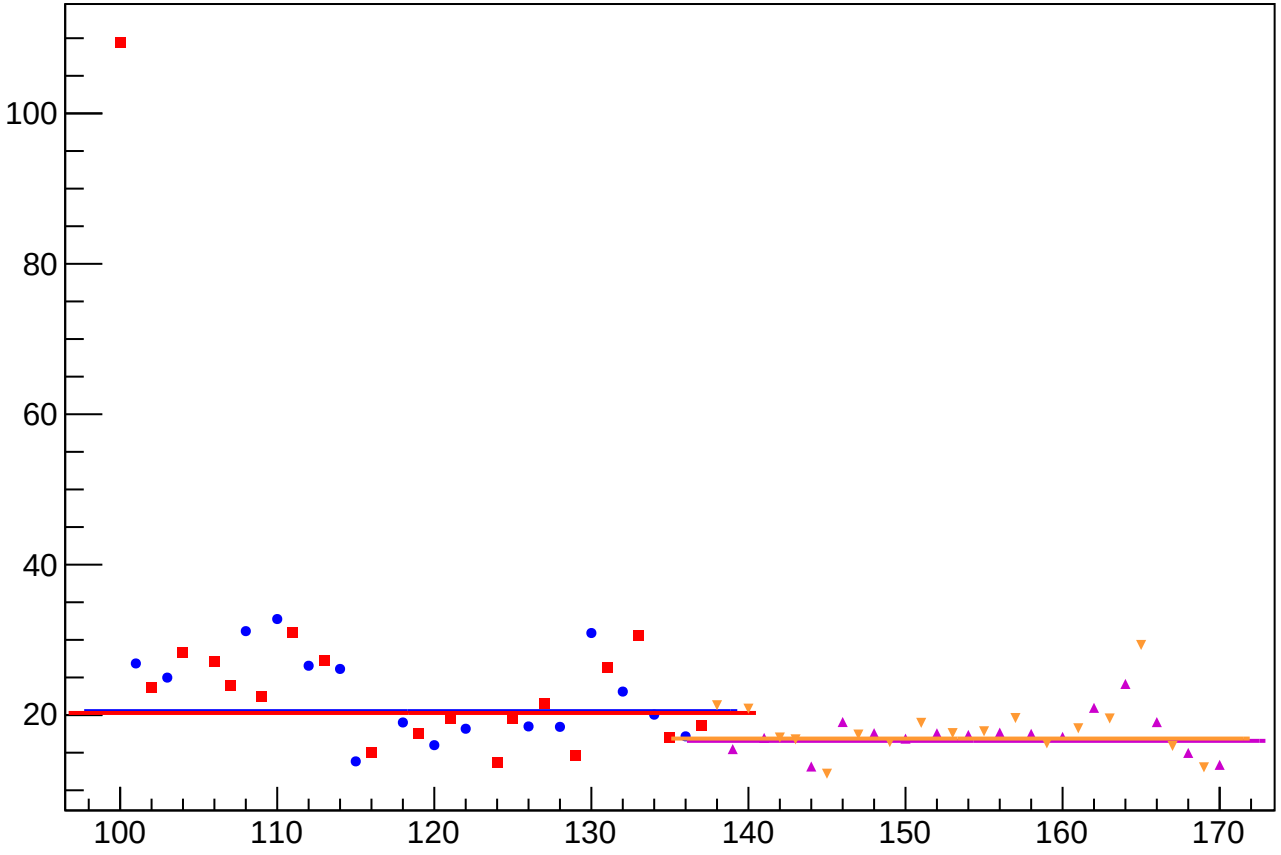
Left In: 0.003+/-0.005 $\chi^2$/NDF:23.7/15

+ sign 0.004+/-0.004 $\chi^2$/NDF: 32.6/32

All: 0.004+/-0.003 $\chi^2$/NDF: 72.8/67

- sign 0.003+/-0.004 $\chi^2$/NDF: 40.1/34

# asym_sam_1357_2468_dd_dit_vs_cor_diff_rms vs Slug




Right In: 20.522+/-0.006 $\chi^2$/NDF: 705998.4/15

Left Out: 16.877+/-0.003 $\chi^2$/NDF:798625.8/16

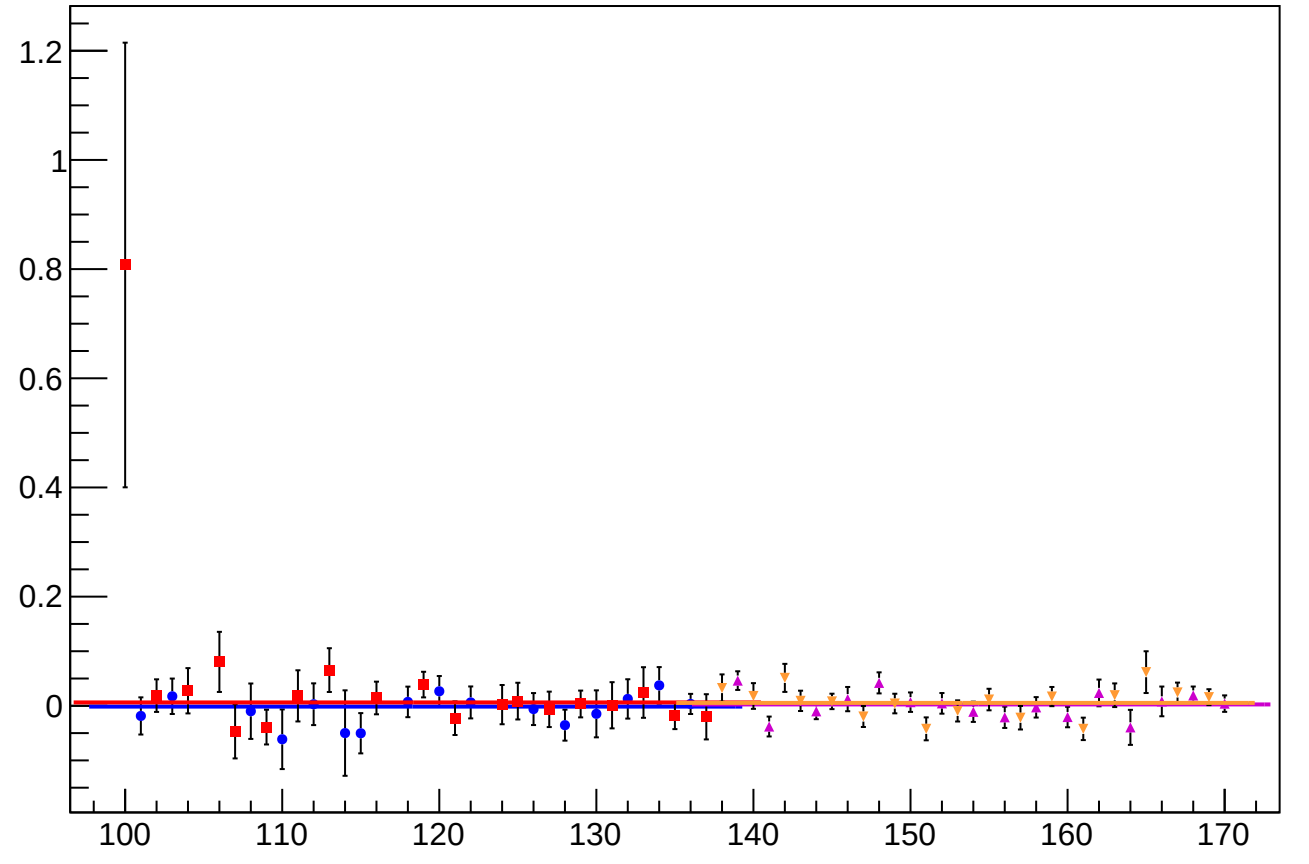
Right Out: 20.282+/-0.006 $\chi^2$/NDF: 864352.6/18

Left In: 16.573+/-0.003 $\chi^2$/NDF:475954.0/15

+ sign 17.814+/-0.003 $\chi^2$/NDF: 1808510.5/32

All: 17.678+/-0.002 $\chi^2$/NDF: 3479632.7/67

- sign 17.546+/-0.003 $\chi^2$/NDF: 1666782.6/34




Right In: -0.001+/-0.008 $\chi^2$/NDF: 8.3/15

Left Out: 0.005+/-0.005 $\chi^2$/NDF:23.9/16

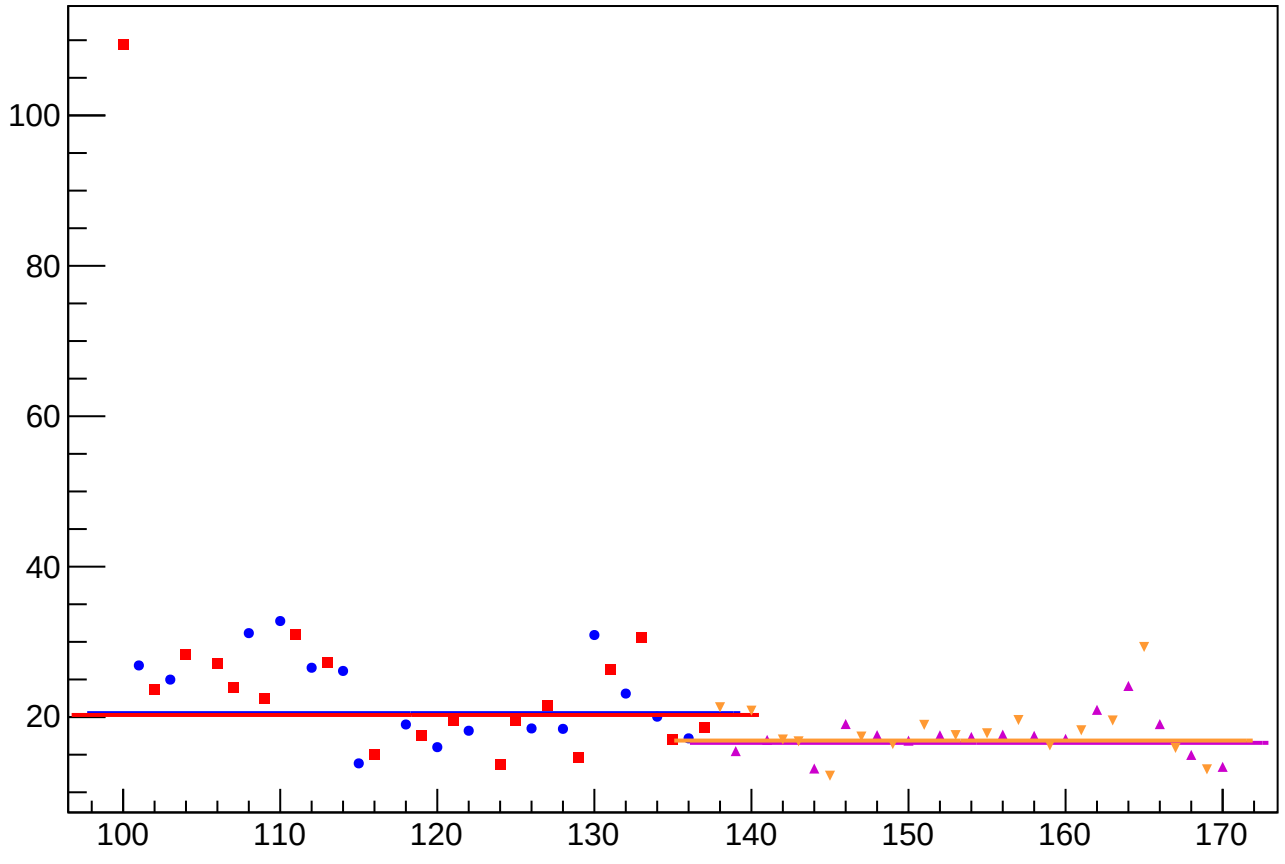
Right Out: 0.006+/-0.008 $\chi^2$/NDF: 16.2/18

Left In: 0.003+/-0.005 $\chi^2$/NDF:23.7/15

+ sign 0.004+/-0.004 $\chi^2$/NDF: 32.6/32

All: 0.004+/-0.003 $\chi^2$/NDF: 72.8/67

- sign 0.003+/-0.004 $\chi^2$/NDF: 40.1/34




Right In: 20.522+/-0.006 $\chi^2$/NDF: 705998.4/15

Left Out: 16.877+/-0.003 $\chi^2$/NDF:798625.8/16

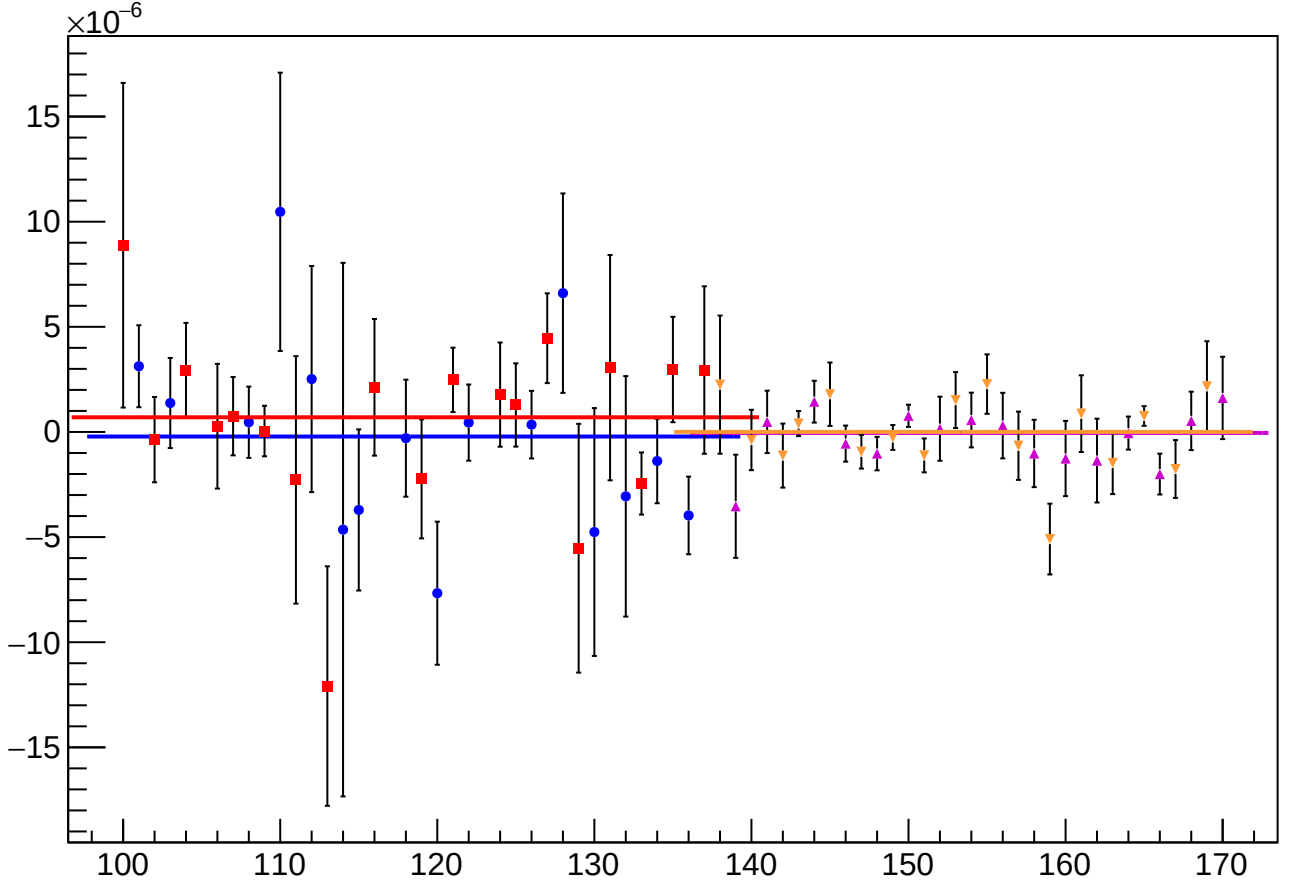
Right Out: 20.282+/-0.006 $\chi^2$/NDF: 864352.6/18

Left In: 16.573+/-0.003 $\chi^2$/NDF:475954.0/15

+ sign 17.814+/-0.003 $\chi^2$/NDF: 1808510.5/32

All: 17.678+/-0.002 $\chi^2$/NDF: 3479632.7/67

- sign 17.546+/-0.003 $\chi^2$/NDF: 1666782.6/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 19.9/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:26.2/16

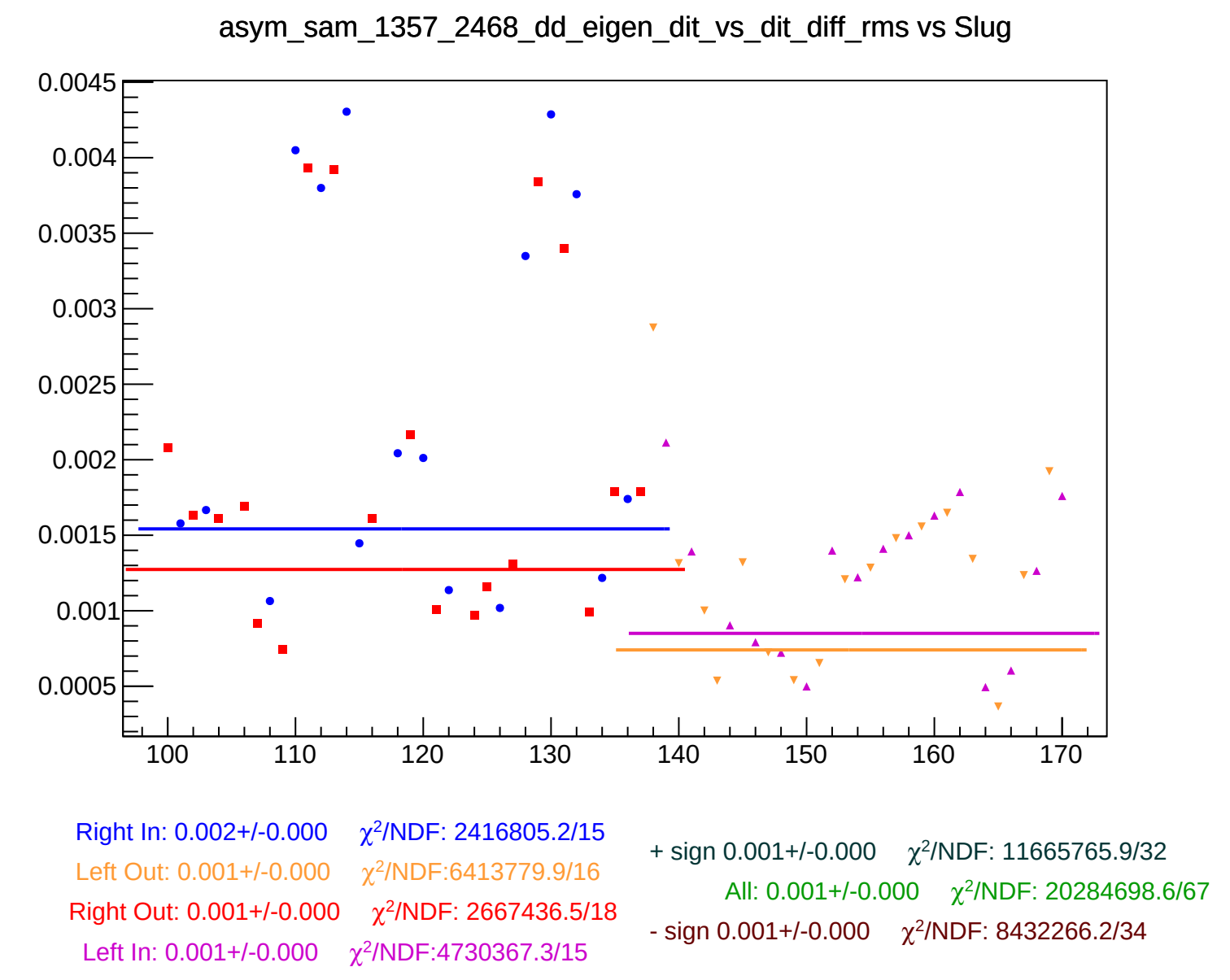
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 21.0/18

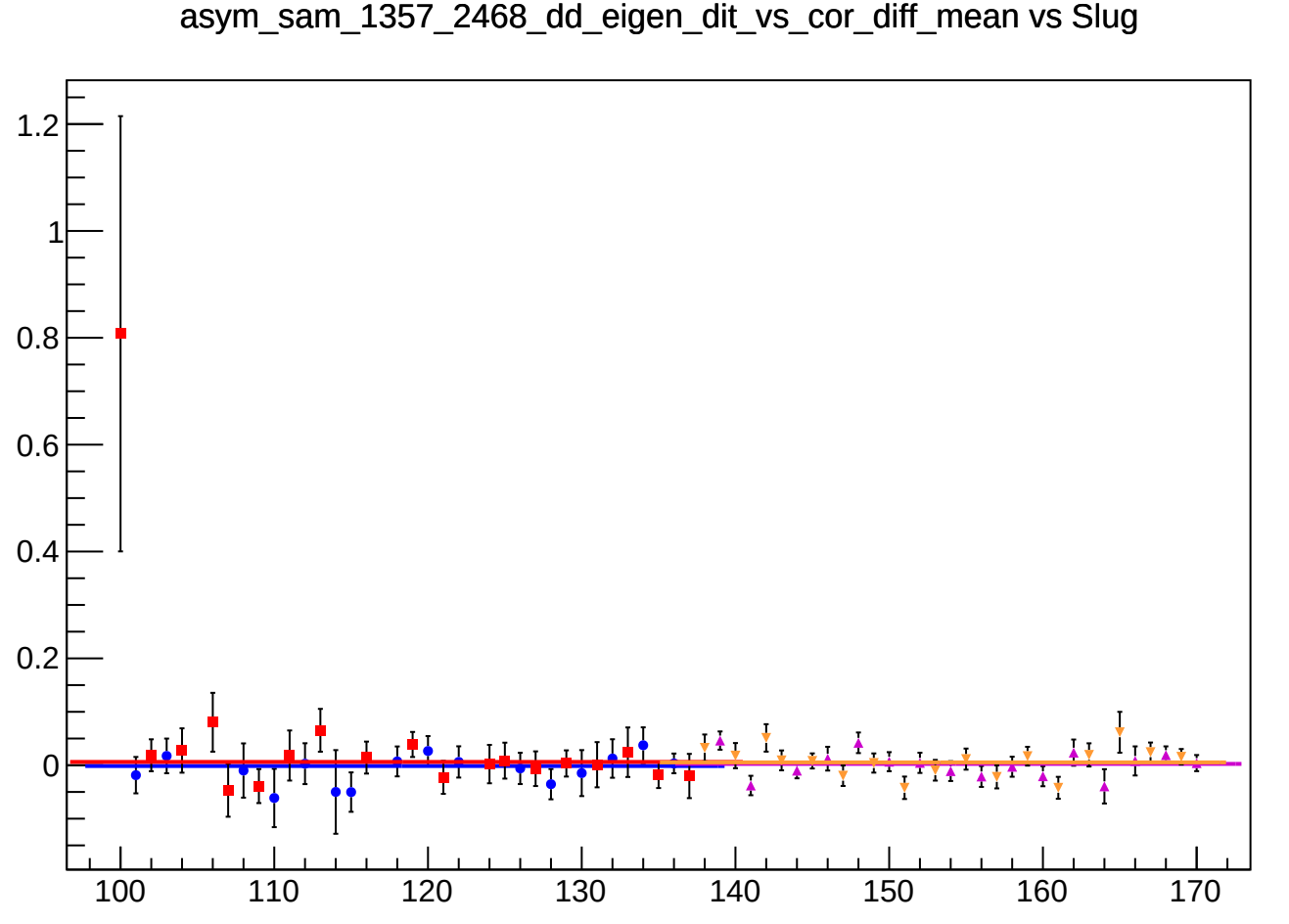
Left In: -0.000+/-0.000 $\chi^2$/NDF:15.1/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 46.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 84.1/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 37.7/34


asym_sam_1357_2468_dd_eigen_dit_vs_dit_diff_rms vs Slug
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
100
110
120
130
140
150
160
170
Right In: 0.002+/-0.000 χ²/NDF: 2416805.2/15
Left Out: 0.001+/-0.000 χ²/NDF:6413779.9/16
Right Out: 0.001+/-0.000 χ²/NDF: 2667436.5/18
Left In: 0.001+/-0.000 χ²/NDF:4730367.3/15
+ sign 0.001+/-0.000 χ²/NDF: 11665765.9/32
All: 0.001+/-0.000 χ²/NDF: 20284698.6/67
- sign 0.001+/-0.000 χ²/NDF: 8432266.2/34




Right In: -0.001+/-0.008 $\chi^2$/NDF: 8.3/15

Left Out: 0.005+/-0.005 $\chi^2$/NDF:23.9/16

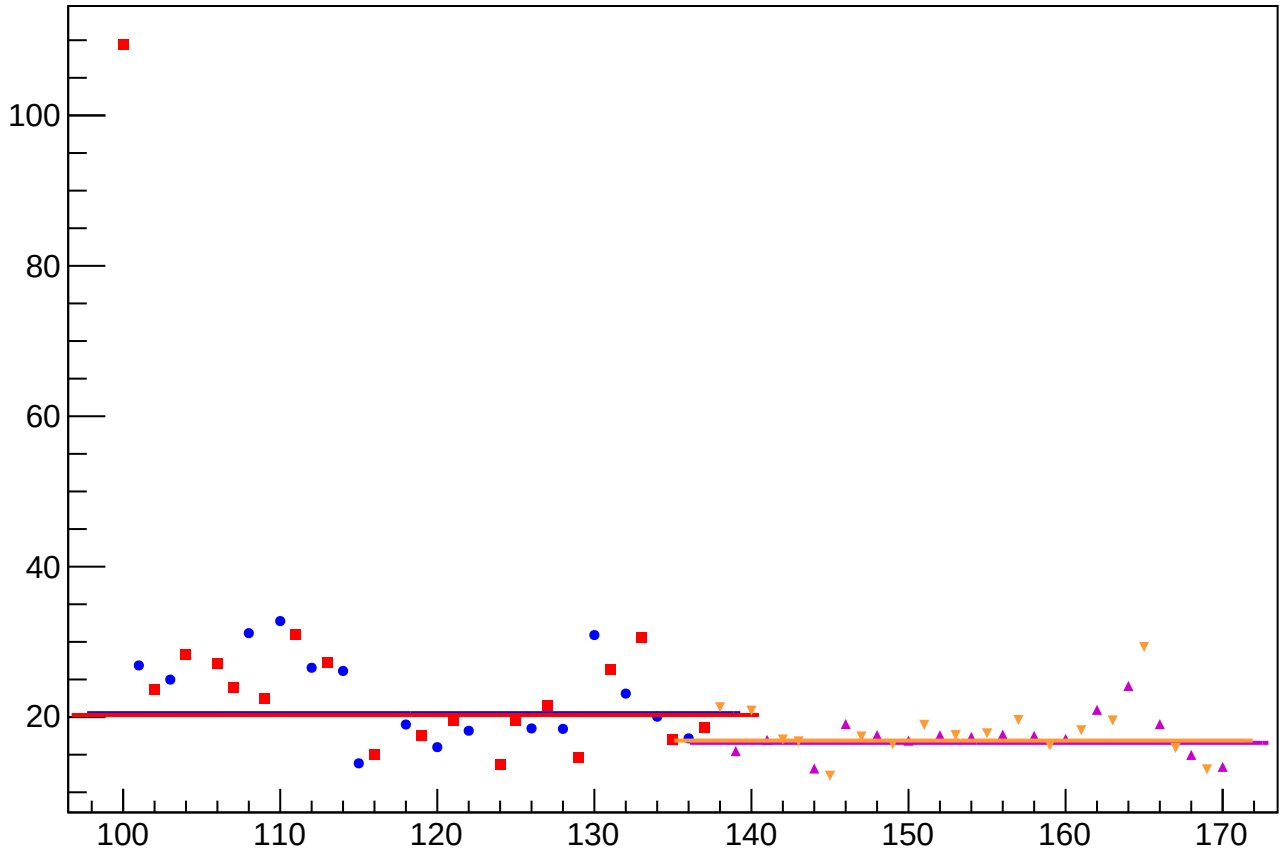
Right Out: 0.006+/-0.008 $\chi^2$/NDF: 16.2/18

Left In: 0.003+/-0.005 $\chi^2$/NDF:23.7/15

+ sign 0.004+/-0.004 $\chi^2$/NDF: 32.6/32

All: 0.004+/-0.003 $\chi^2$/NDF: 72.8/67

- sign 0.003+/-0.004 $\chi^2$/NDF: 40.1/34




Right In: 20.521+/-0.006 $\chi^2$/NDF: 705877.0/15

Left Out: 16.877+/-0.003 $\chi^2$/NDF:798563.6/16

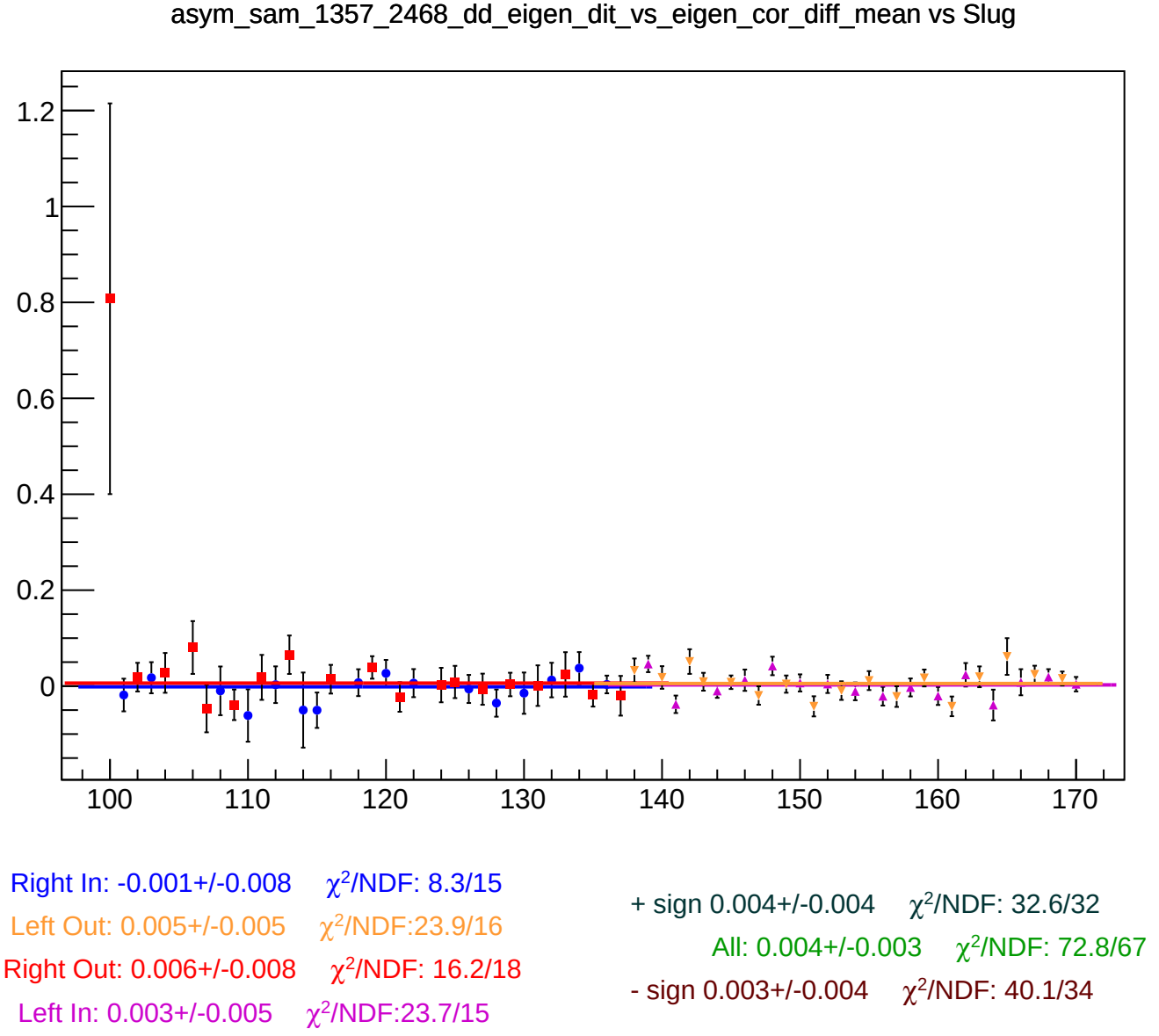
Right Out: 20.281+/-0.006 $\chi^2$/NDF: 864361.2/18

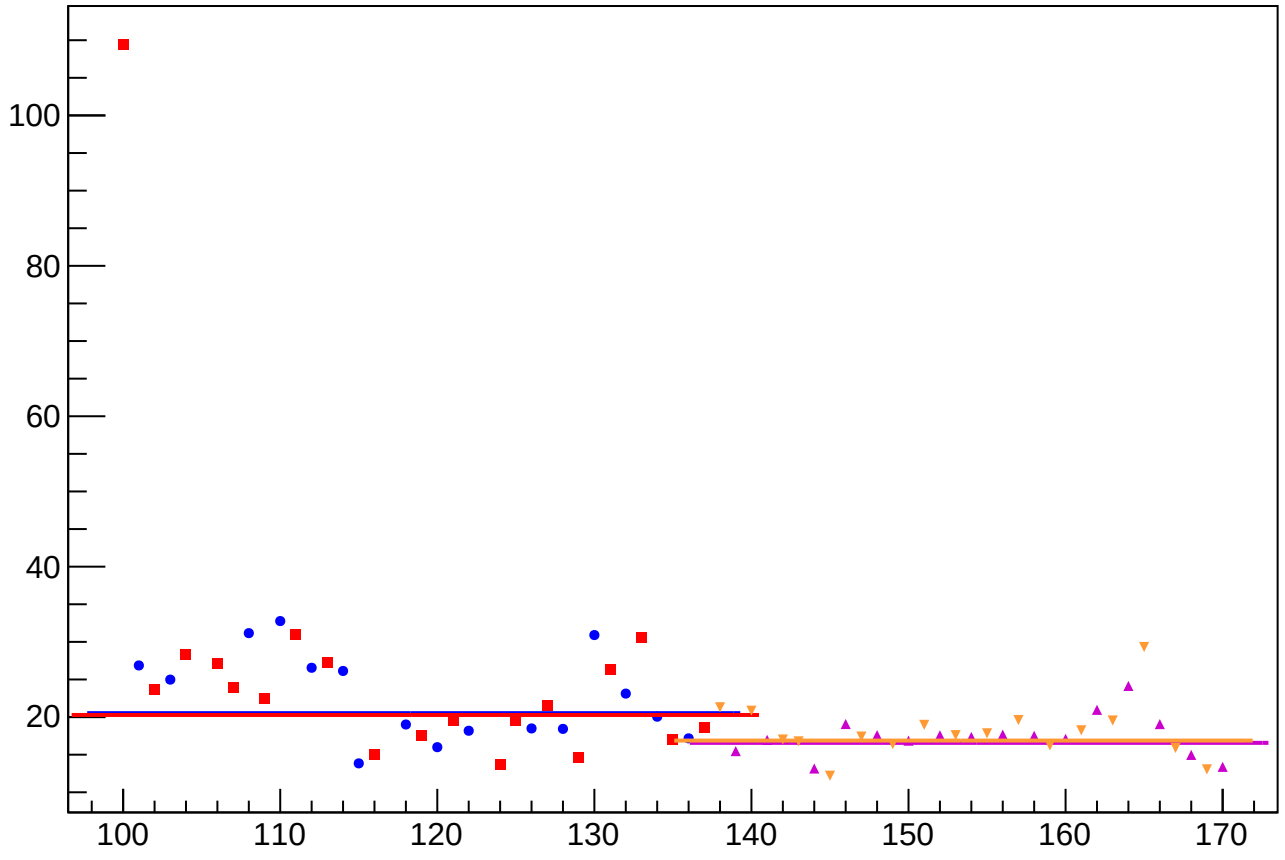
Left In: 16.573+/-0.003 $\chi^2$/NDF:475967.9/15

+ sign 17.814+/-0.003 $\chi^2$/NDF: 1808207.7/32

All: 17.678+/-0.002 $\chi^2$/NDF: 3479224.4/67

- sign 17.546+/-0.003 $\chi^2$/NDF: 1666673.6/34


asym_sam_1357_2468_dd_eigen_dit_vs_eigen_cor_diff_mean vs Slug
1.2
1
0.8
0.6
0.4
0.2
0
100
110
120
130
140
150
160
170
Right In: -0.001+/-0.008 χ²/NDF: 8.3/15
Left Out: 0.005+/-0.005 χ²/NDF:23.9/16
Right Out: 0.006+/-0.008 χ²/NDF: 16.2/18
Left In: 0.003+/-0.005 χ²/NDF:23.7/15
+ sign 0.004+/-0.004 χ²/NDF: 32.6/32
All: 0.004+/-0.003 χ²/NDF: 72.8/67
- sign 0.003+/-0.004 χ²/NDF: 40.1/34




Right In: 20.521+/-0.006 $\chi^2$/NDF: 705877.0/15

Left Out: 16.877+/-0.003 $\chi^2$/NDF:798563.6/16

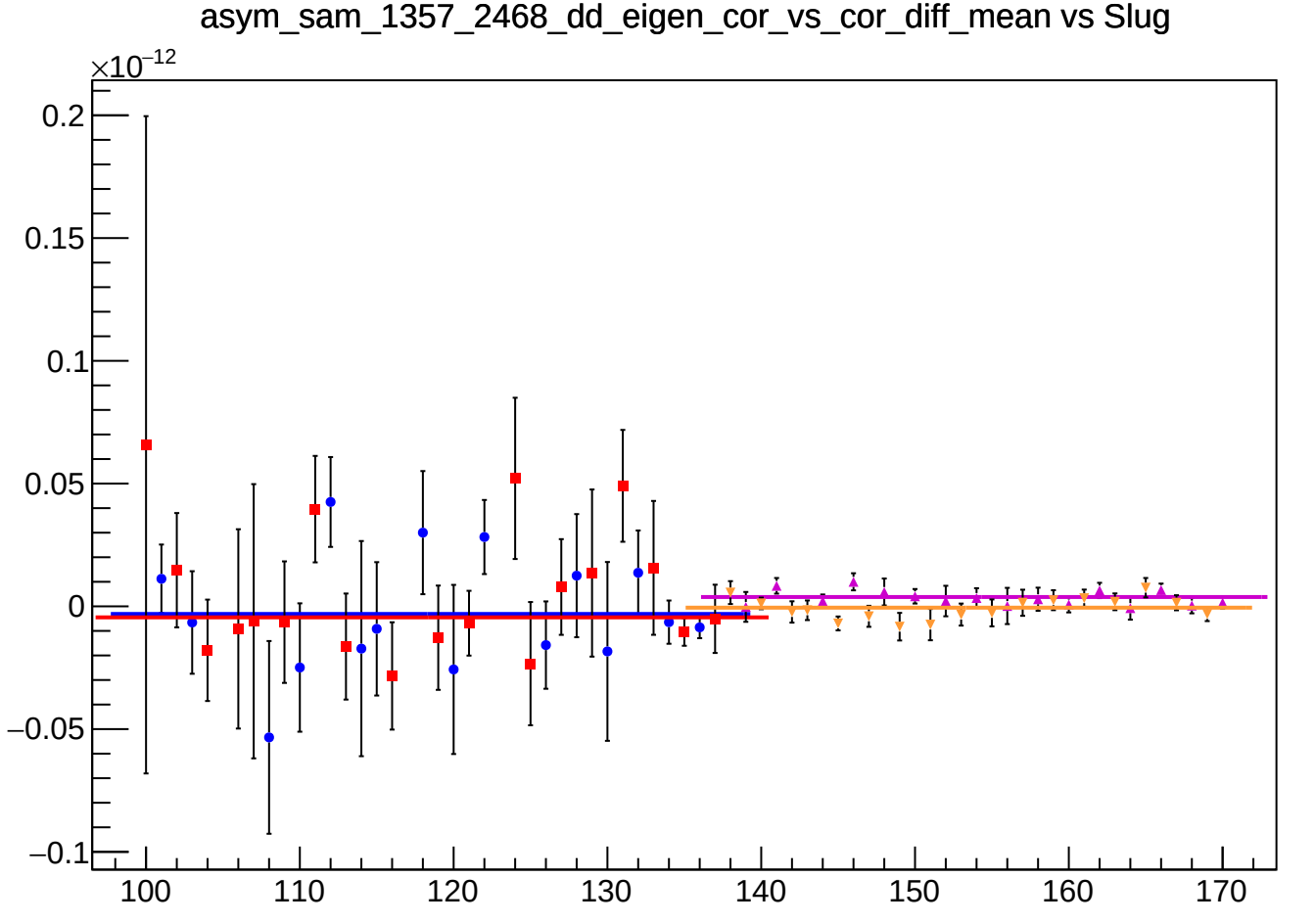
Right Out: 20.281+/-0.006 $\chi^2$/NDF: 864361.2/18

Left In: 16.573+/-0.003 $\chi^2$/NDF:475967.9/15

+ sign 17.814+/-0.003 $\chi^2$/NDF: 1808207.7/32

All: 17.678+/-0.002 $\chi^2$/NDF: 3479224.4/67

- sign 17.546+/-0.003 $\chi^2$/NDF: 1666673.6/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 20.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:19.8/16

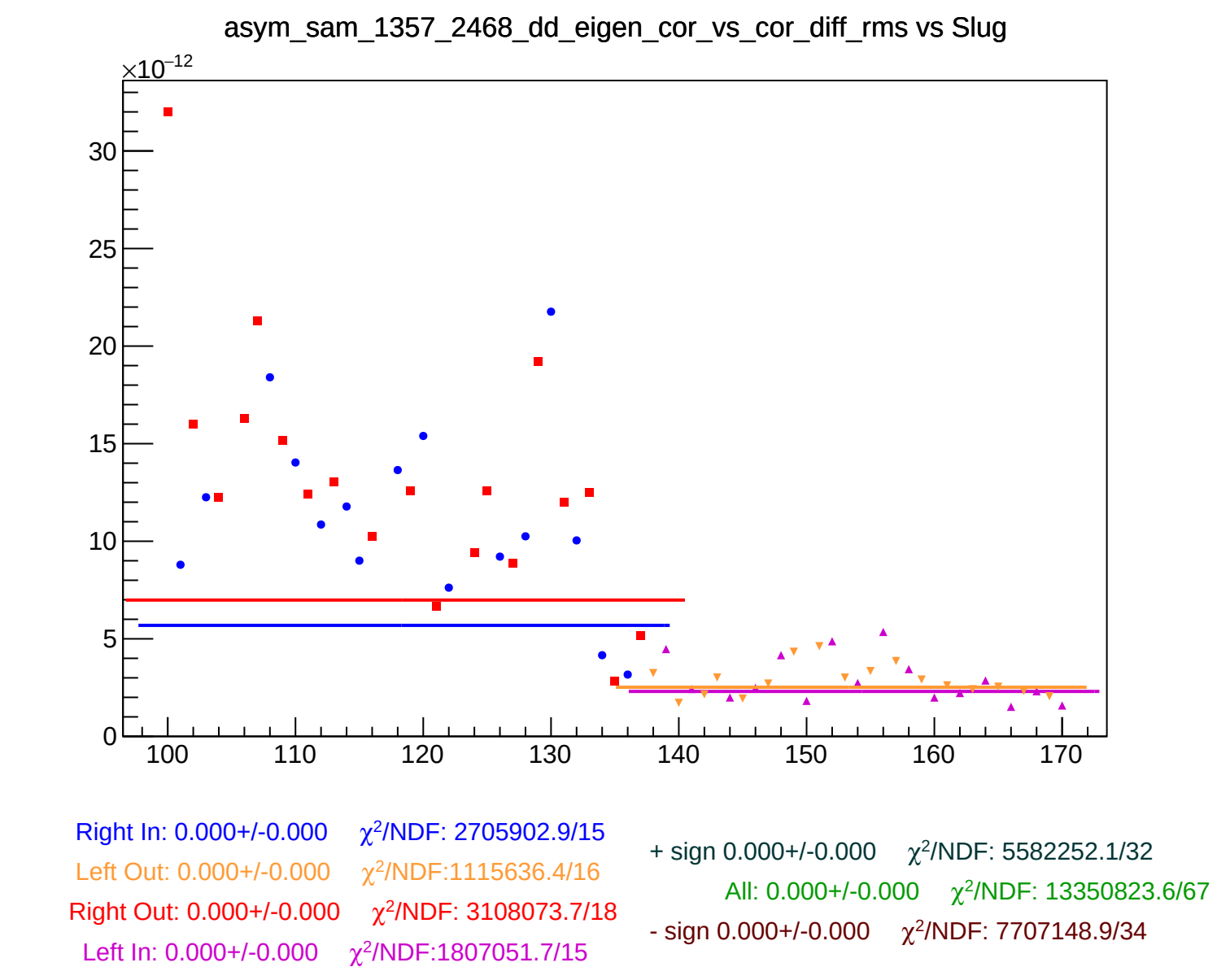
Right Out: -0.000+/-0.000 $\chi^2$/NDF: 18.6/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:12.4/15

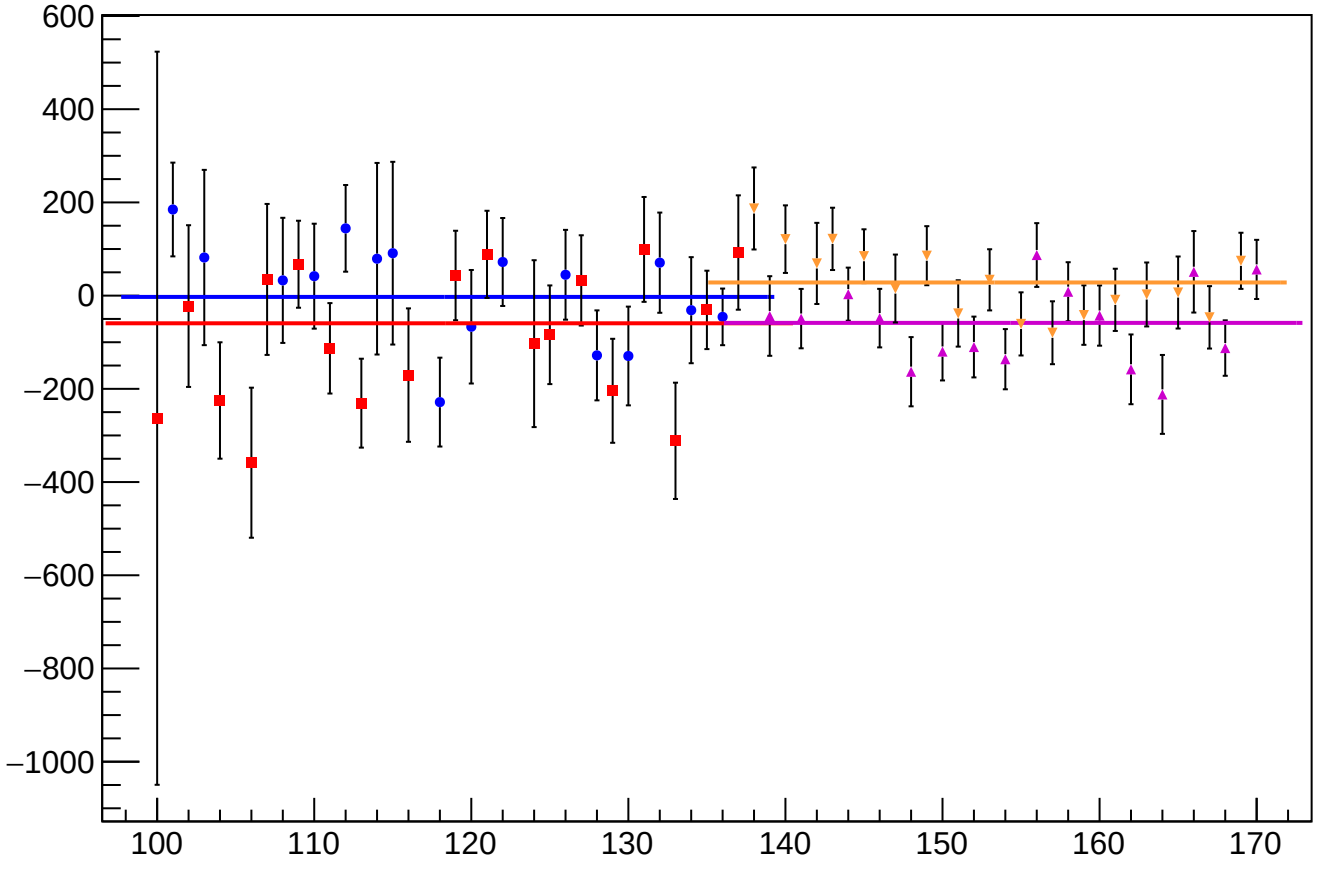
+ sign -0.000+/-0.000 $\chi^2$/NDF: 40.4/32

All: 0.000+/-0.000 $\chi^2$/NDF: 87.2/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 35.4/34


asym_sam_1357_2468_dd_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
30
25
20
15
10
5
0
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2705902.9/15
Left Out: 0.000+/-0.000 χ²/NDF:1115636.4/16
Right Out: 0.000+/-0.000 χ²/NDF: 3108073.7/18
Left In: 0.000+/-0.000 χ²/NDF:1807051.7/15
+ sign 0.000+/-0.000 χ²/NDF: 5582252.1/32
All: 0.000+/-0.000 χ²/NDF: 13350823.6/67
- sign 0.000+/-0.000 χ²/NDF: 7707148.9/34

# reg_asym_sam_12345678_avg_mean vs Slug




Right In: -2.766+/-26.213 $\chi^2$/NDF: 17.7/15

Left Out: 28.223+/-16.601 $\chi^2$/NDF:17.6/16

Right Out: -59.349+/-26.382 $\chi^2$/NDF: 25.7/18

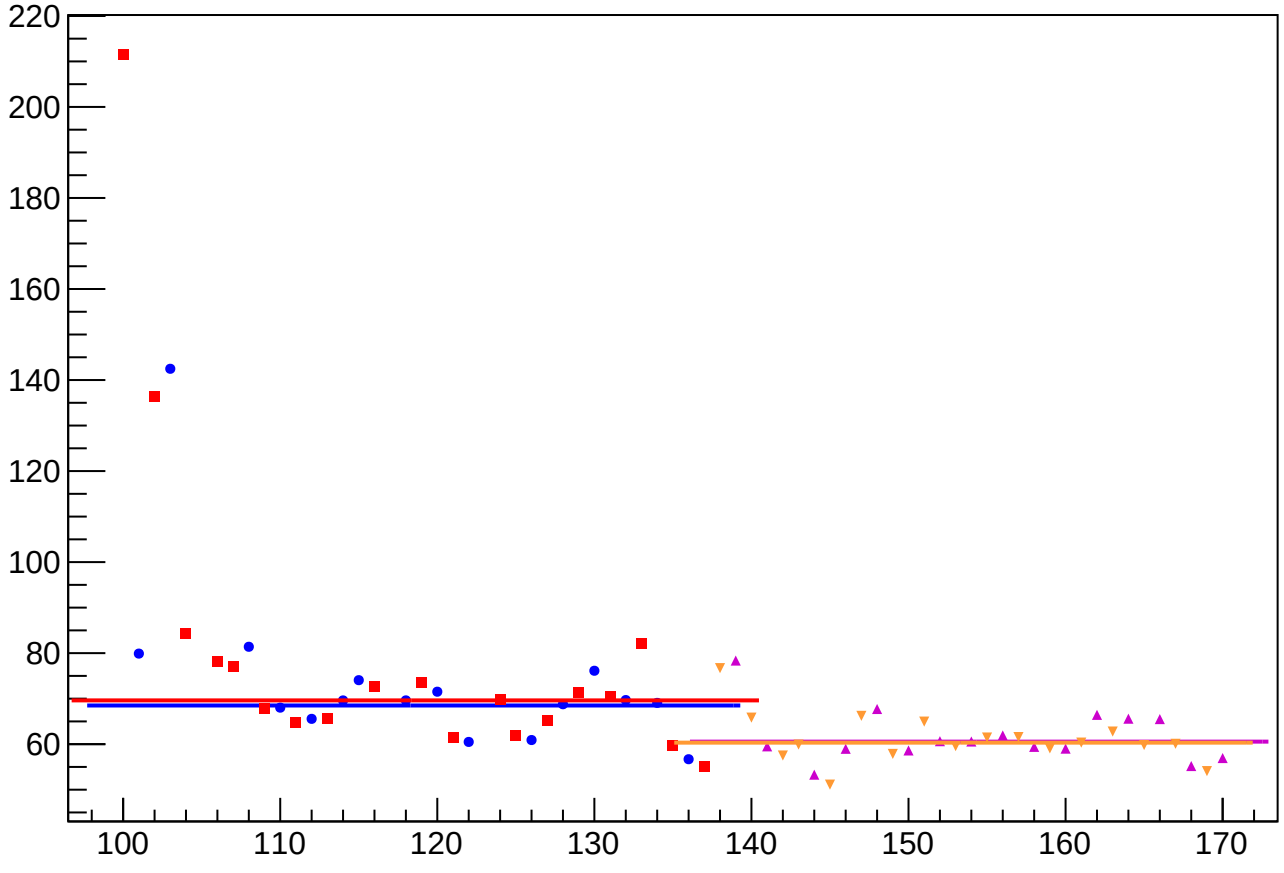
Left In: -58.489+/-16.796 $\chi^2$/NDF:22.7/15

+ sign 19.352+/-14.025 $\chi^2$/NDF: 36.3/32

All: -19.295+/-9.968 $\chi^2$/NDF: 100.1/67

- sign -58.737+/-14.169 $\chi^2$/NDF: 48.4/34

# reg_asym_sam_12345678_avg_rms vs Slug




Right In: 68.499+/-0.019 $\chi^2$/NDF: 471865.0/15

Left Out: 60.337+/-0.012 $\chi^2$/NDF:184964.9/16

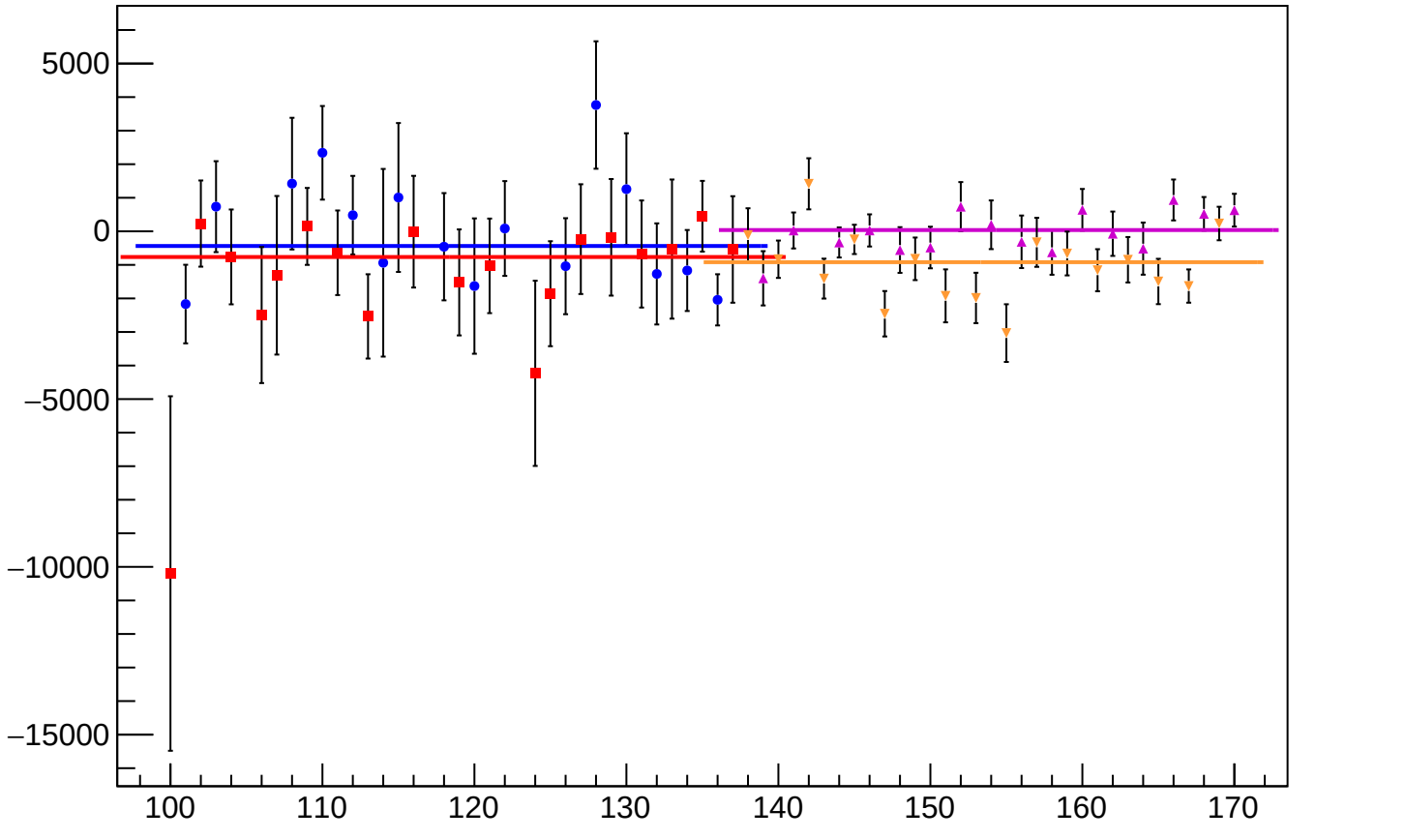
Right Out: 69.620+/-0.019 $\chi^2$/NDF: 520403.9/18

Left In: 60.559+/-0.012 $\chi^2$/NDF:193036.1/15

+ sign 62.673+/-0.010 $\chi^2$/NDF: 795226.3/32

All: 62.920+/-0.007 $\chi^2$/NDF: 1677782.9/67

- sign 63.172+/-0.010 $\chi^2$/NDF: 881302.7/34




Right In: -437.444+/-348.880 $\chi^2$/NDF: 20.6/15

Left Out: -919.459+/-152.134 $\chi^2$/NDF:37.5/16

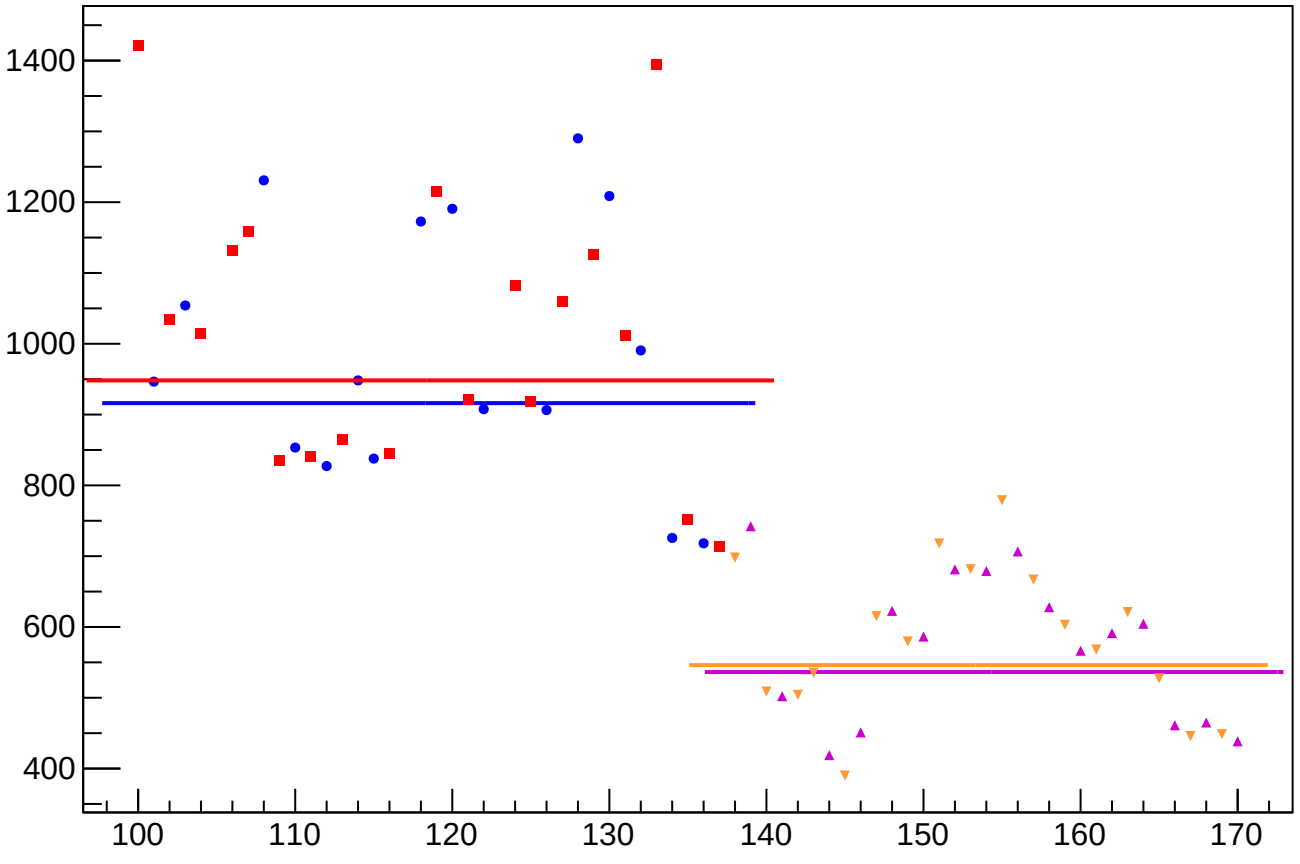
Right Out: -765.341+/-353.052 $\chi^2$/NDF: 11.3/18

Left In: 37.880+/-150.498 $\chi^2$/NDF:13.5/15

+ sign -842.447+/-139.452 $\chi^2$/NDF: 59.6/32

All: -461.295+/-98.249 $\chi^2$/NDF: 103.7/67

- sign -85.632+/-138.445 $\chi^2$/NDF: 29.2/34




Right In: 916.171+/-0.247 $\chi^2$/NDF: 509126.4/15

Left Out: 546.090+/-0.108 $\chi^2$/NDF:933274.8/16

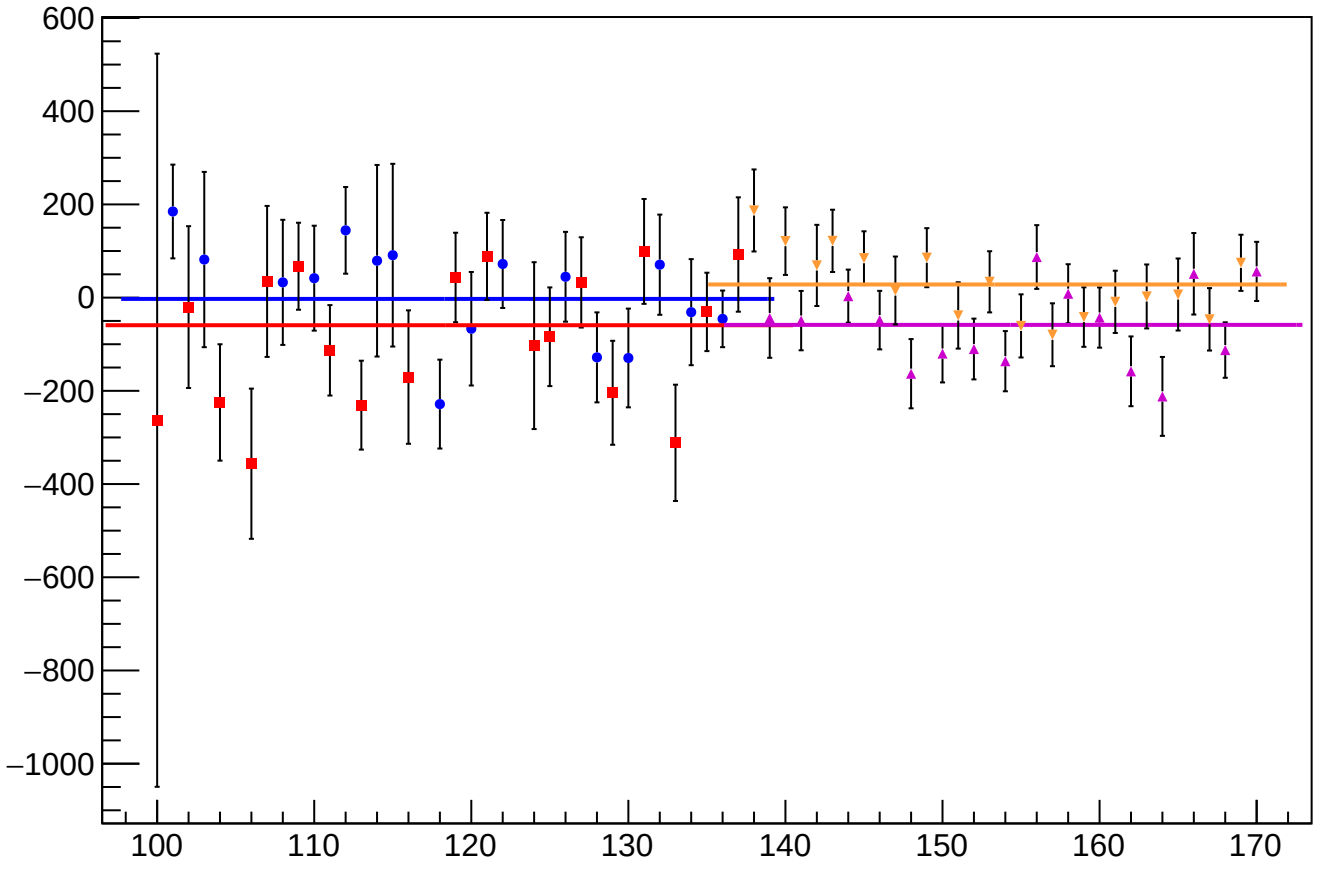
Right Out: 948.235+/-0.250 $\chi^2$/NDF: 415192.3/18

Left In: 536.342+/-0.106 $\chi^2$/NDF:856572.2/15

+ sign 605.219+/-0.099 $\chi^2$/NDF: 3333297.5/32

All: 602.429+/-0.069 $\chi^2$/NDF: 6910269.5/67

- sign 599.679+/-0.098 $\chi^2$/NDF: 3575382.5/34




Right In: -2.773+/-26.213 $\chi^2$/NDF: 17.7/15

Left Out: 28.227+/-16.601 $\chi^2$/NDF:17.6/16

Right Out: -59.226+/-26.384 $\chi^2$/NDF: 25.7/18

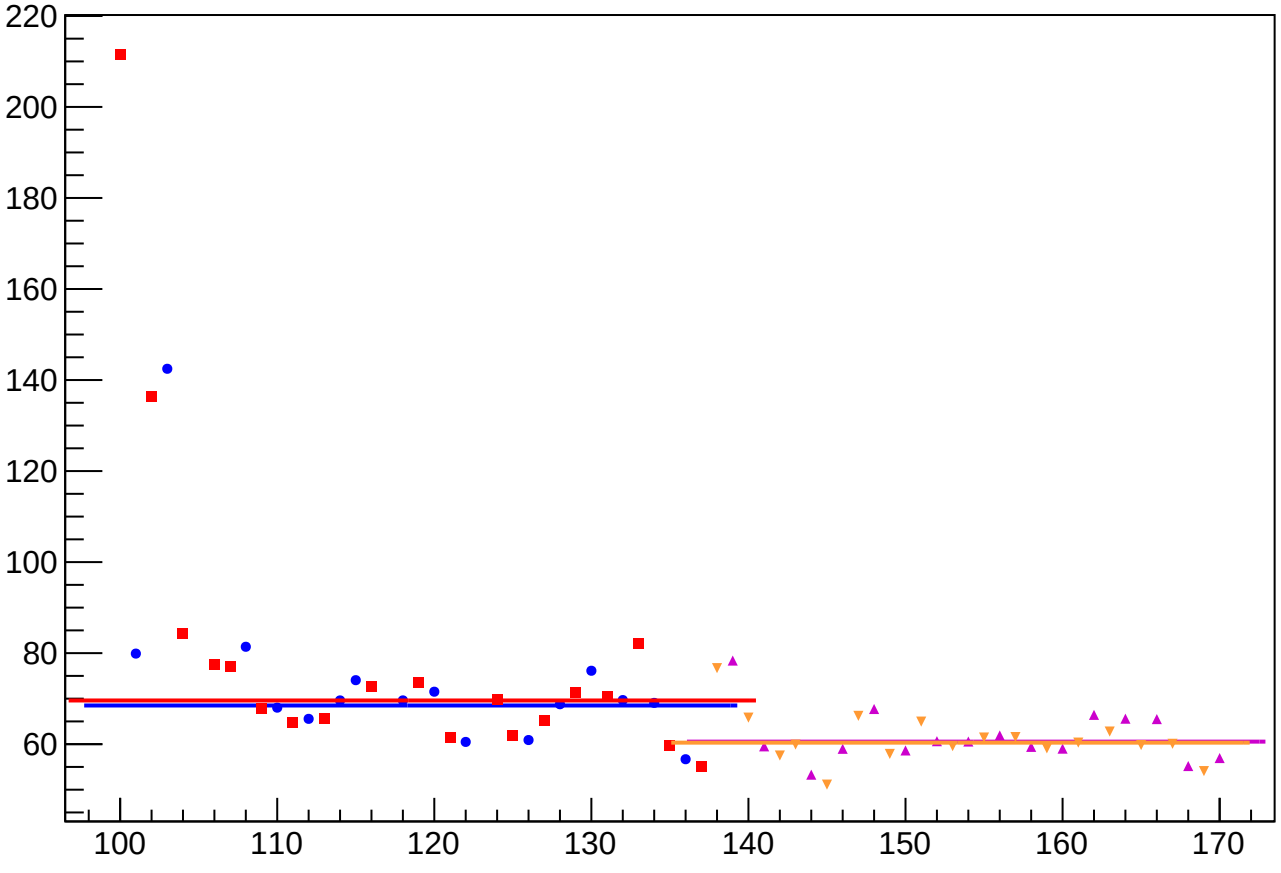
Left In: -58.487+/-16.796 $\chi^2$/NDF:22.7/15

+ sign 19.352+/-14.025 $\chi^2$/NDF: 36.3/32

All: -19.276+/-9.968 $\chi^2$/NDF: 100.0/67

- sign -58.700+/-14.169 $\chi^2$/NDF: 48.4/34

# cor_asym_sam_12345678_avg_rms vs Slug




Right In: 68.499+/-0.019 $\chi^2$/NDF: 471868.0/15

Left Out: 60.337+/-0.012 $\chi^2$/NDF:184964.9/16

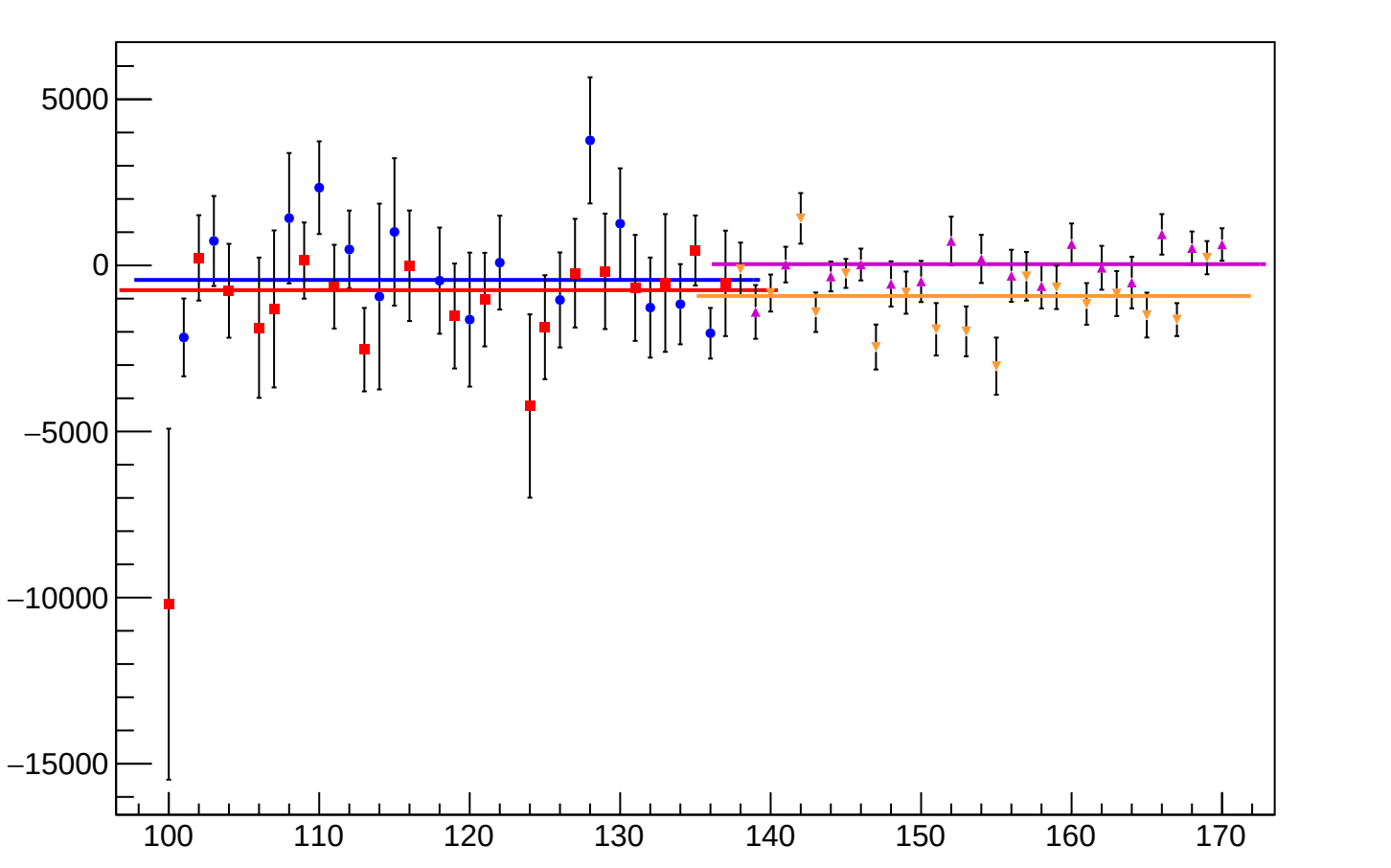
Right Out: 69.600+/-0.019 $\chi^2$/NDF: 519788.9/18

Left In: 60.559+/-0.012 $\chi^2$/NDF:193036.1/15

+ sign 62.673+/-0.010 $\chi^2$/NDF: 795229.3/32

All: 62.917+/-0.007 $\chi^2$/NDF: 1676420.0/67

- sign 63.167+/-0.010 $\chi^2$/NDF: 879965.4/34




Right In: -437.415+/-348.881 $\chi^2$/NDF: 20.6/15

Left Out: -919.453+/-152.134 $\chi^2$/NDF:37.5/16

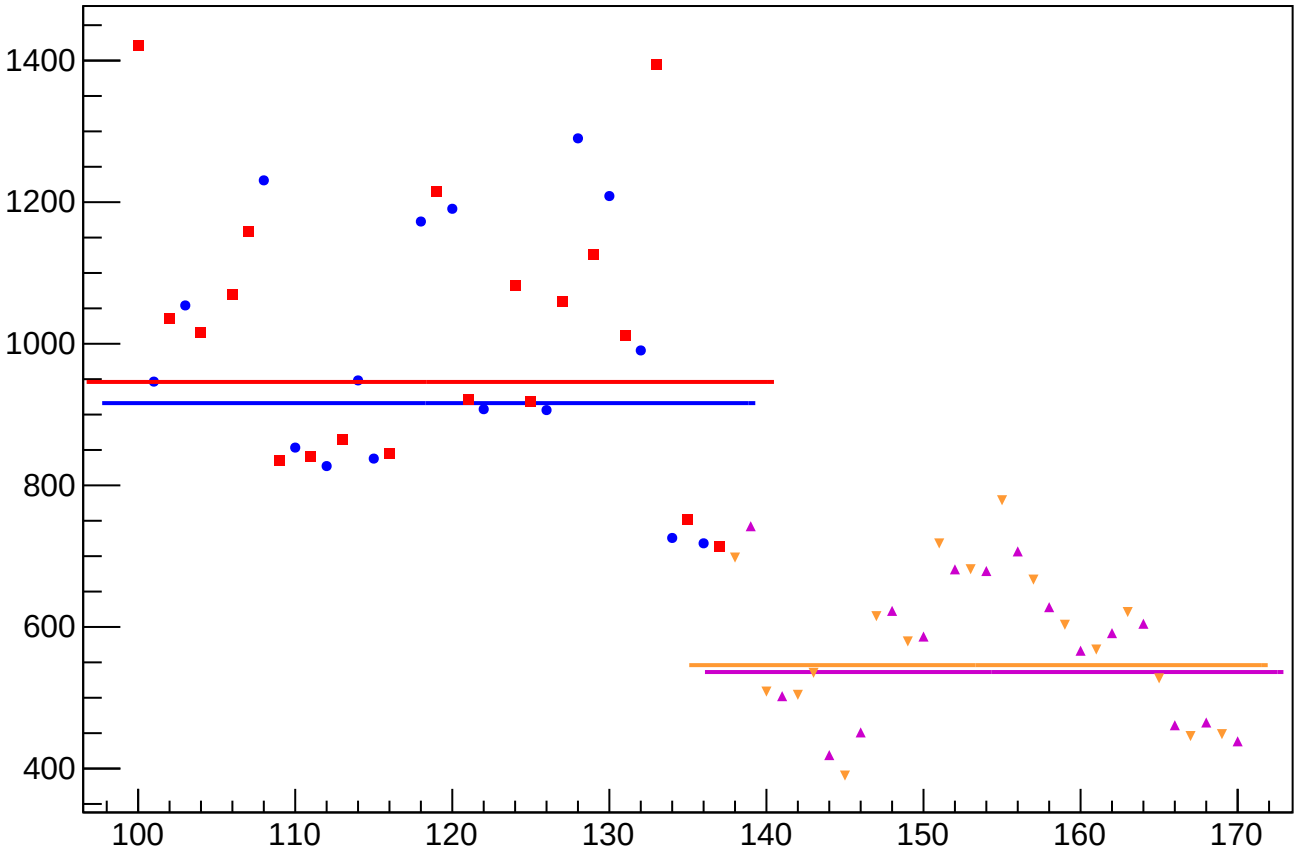
Right Out: -744.388+/-353.488 $\chi^2$/NDF: 10.9/18

Left In: 37.879+/-150.498 $\chi^2$/NDF:13.5/15

+ sign -842.438+/-139.452 $\chi^2$/NDF: 59.6/32

All: -459.614+/-98.259 $\chi^2$/NDF: 103.1/67

- sign -82.160+/-138.471 $\chi^2$/NDF: 28.5/34




Right In: 916.174+/-0.247 $\chi^2$/NDF: 509149.2/15

Left Out: 546.090+/-0.108 $\chi^2$/NDF:933277.8/16

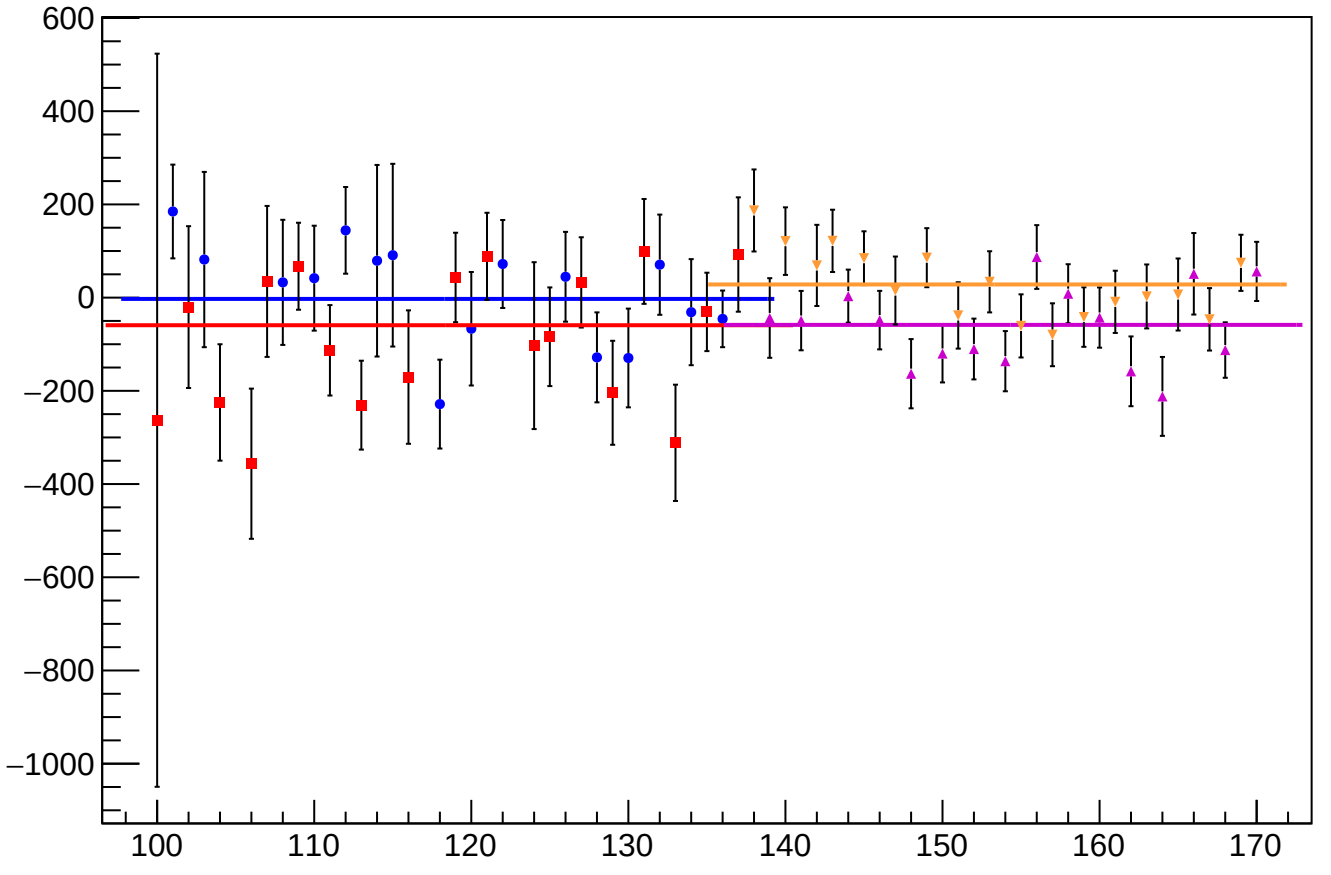
Right Out: 946.093+/-0.250 $\chi^2$/NDF: 405411.3/18

Left In: 536.342+/-0.106 $\chi^2$/NDF:856570.0/15

+ sign 605.219+/-0.099 $\chi^2$/NDF: 3333347.8/32

All: 602.197+/-0.069 $\chi^2$/NDF: 6872148.4/67

- sign 599.218+/-0.098 $\chi^2$/NDF: 3536936.0/34




Right In: -2.773+/-26.213 $\chi^2$/NDF: 17.7/15

Left Out: 28.227+/-16.601 $\chi^2$/NDF:17.6/16

Right Out: -59.226+/-26.384 $\chi^2$/NDF: 25.7/18

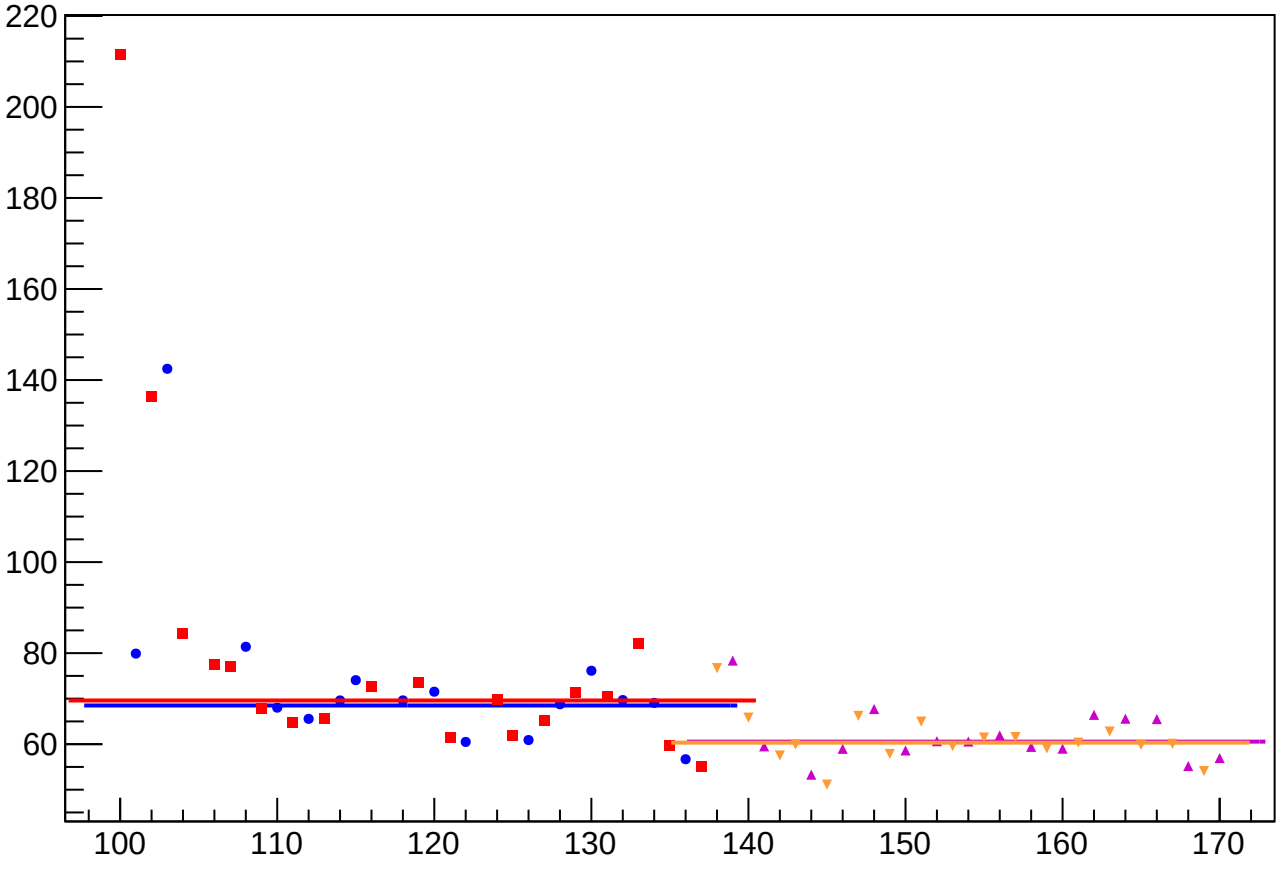
Left In: -58.487+/-16.796 $\chi^2$/NDF:22.7/15

+ sign 19.352+/-14.025 $\chi^2$/NDF: 36.3/32

All: -19.276+/-9.968 $\chi^2$/NDF: 100.0/67

- sign -58.700+/-14.169 $\chi^2$/NDF: 48.4/34

# eigen_cor_asym_sam_12345678_avg_rms vs Slug




Right In: 68.499+/-0.019 $\chi^2$/NDF: 471868.0/15

Left Out: 60.337+/-0.012 $\chi^2$/NDF:184964.9/16

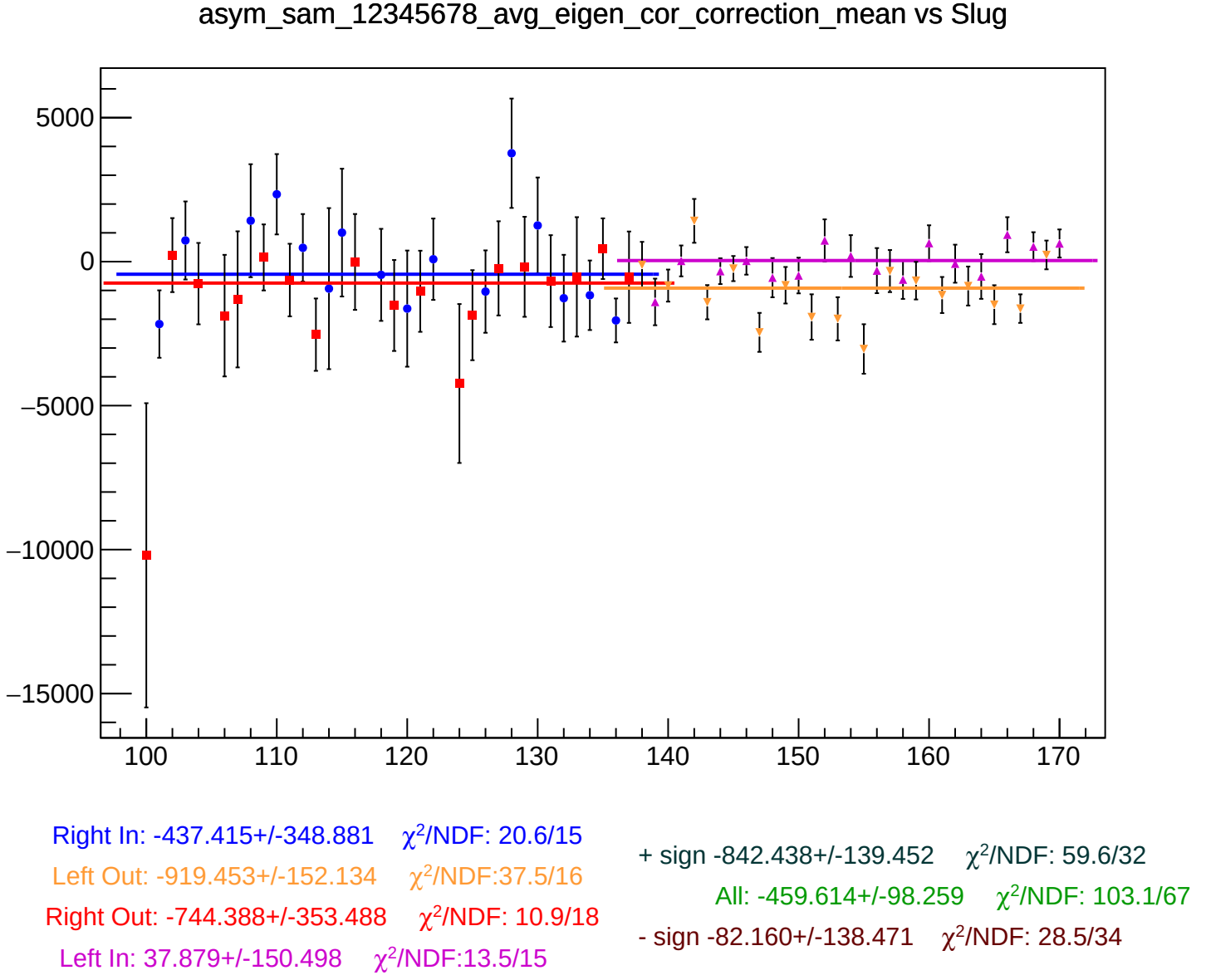
Right Out: 69.600+/-0.019 $\chi^2$/NDF: 519788.9/18

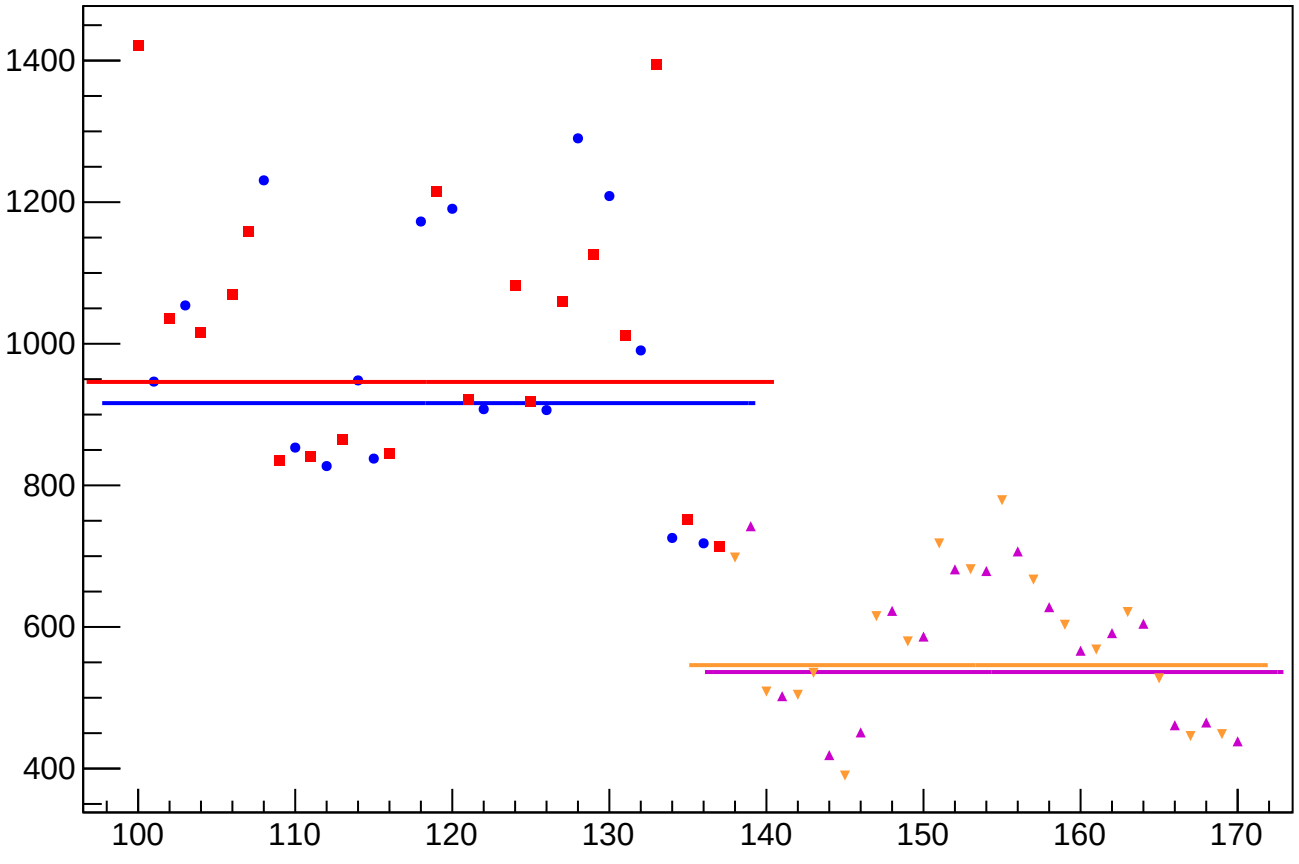
Left In: 60.559+/-0.012 $\chi^2$/NDF:193036.1/15

+ sign 62.673+/-0.010 $\chi^2$/NDF: 795229.3/32

All: 62.917+/-0.007 $\chi^2$/NDF: 1676420.0/67

- sign 63.167+/-0.010 $\chi^2$/NDF: 879965.4/34


asym_sam_12345678_avg_eigen_cor_correction_mean vs Slug
5000
0
−5000
−10000
−15000
100
110
120
130
140
150
160
170
Right In: -437.415+/-348.881 χ²/NDF: 20.6/15
Left Out: -919.453+/-152.134 χ²/NDF:37.5/16
Right Out: -744.388+/-353.488 χ²/NDF: 10.9/18
Left In: 37.879+/-150.498 χ²/NDF:13.5/15
+ sign -842.438+/-139.452 χ²/NDF: 59.6/32
All: -459.614+/-98.259 χ²/NDF: 103.1/67
- sign -82.160+/-138.471 χ²/NDF: 28.5/34




Right In: 916.174+/-0.247 $\chi^2$/NDF: 509149.2/15

Left Out: 546.090+/-0.108 $\chi^2$/NDF:933277.8/16

Right Out: 946.093+/-0.250 $\chi^2$/NDF: 405411.3/18

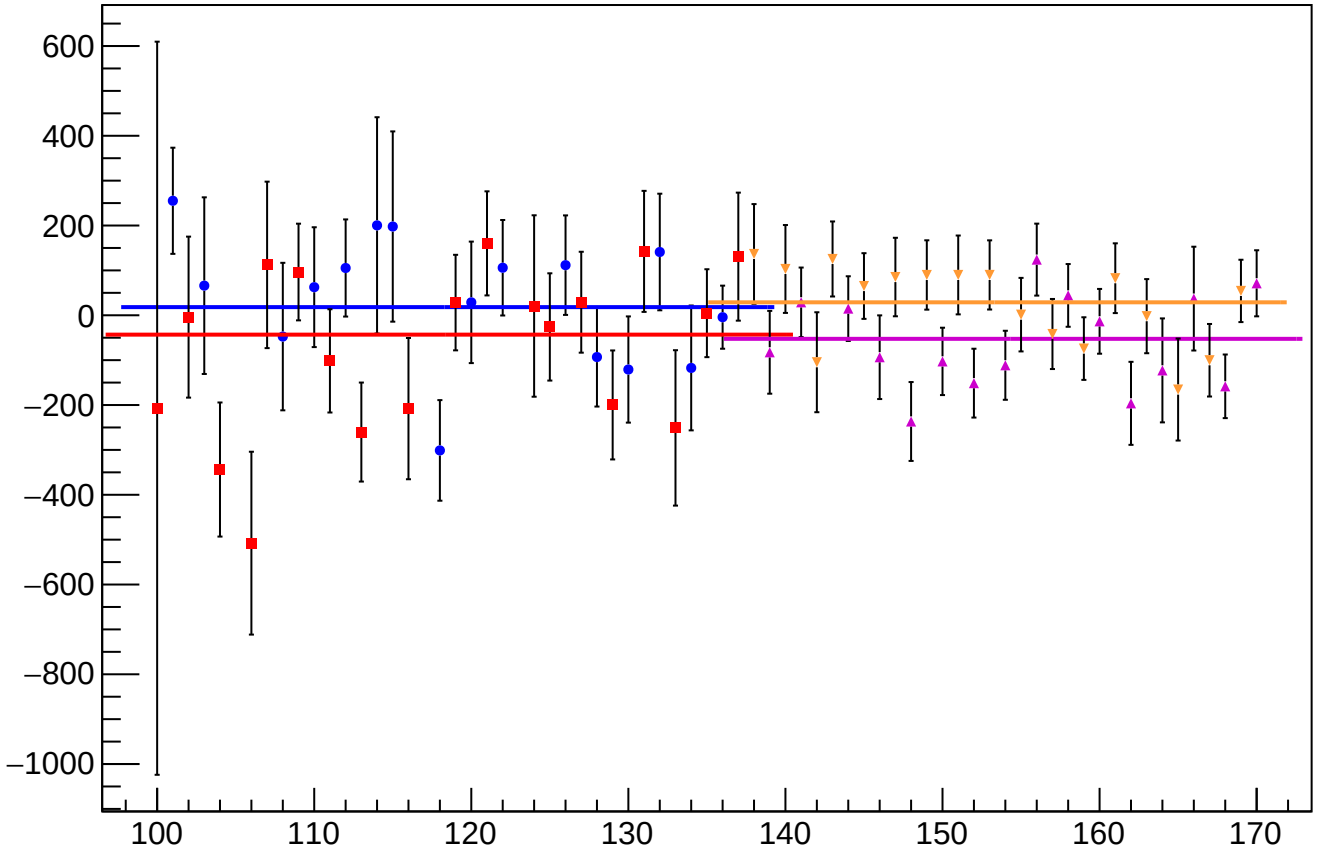
Left In: 536.342+/-0.106 $\chi^2$/NDF:856570.0/15

+ sign 605.219+/-0.099 $\chi^2$/NDF: 3333347.8/32

All: 602.197+/-0.069 $\chi^2$/NDF: 6872148.4/67

- sign 599.218+/-0.098 $\chi^2$/NDF: 3536936.0/34

# dit_asym_sam_12345678_avg_mean vs Slug




Right In: 18.175+/-30.346 $\chi^2$/NDF: 20.1/15

Left Out: 28.881+/-20.161 $\chi^2$/NDF:16.0/16

Right Out: -43.146+/-30.707 $\chi^2$/NDF: 27.7/18

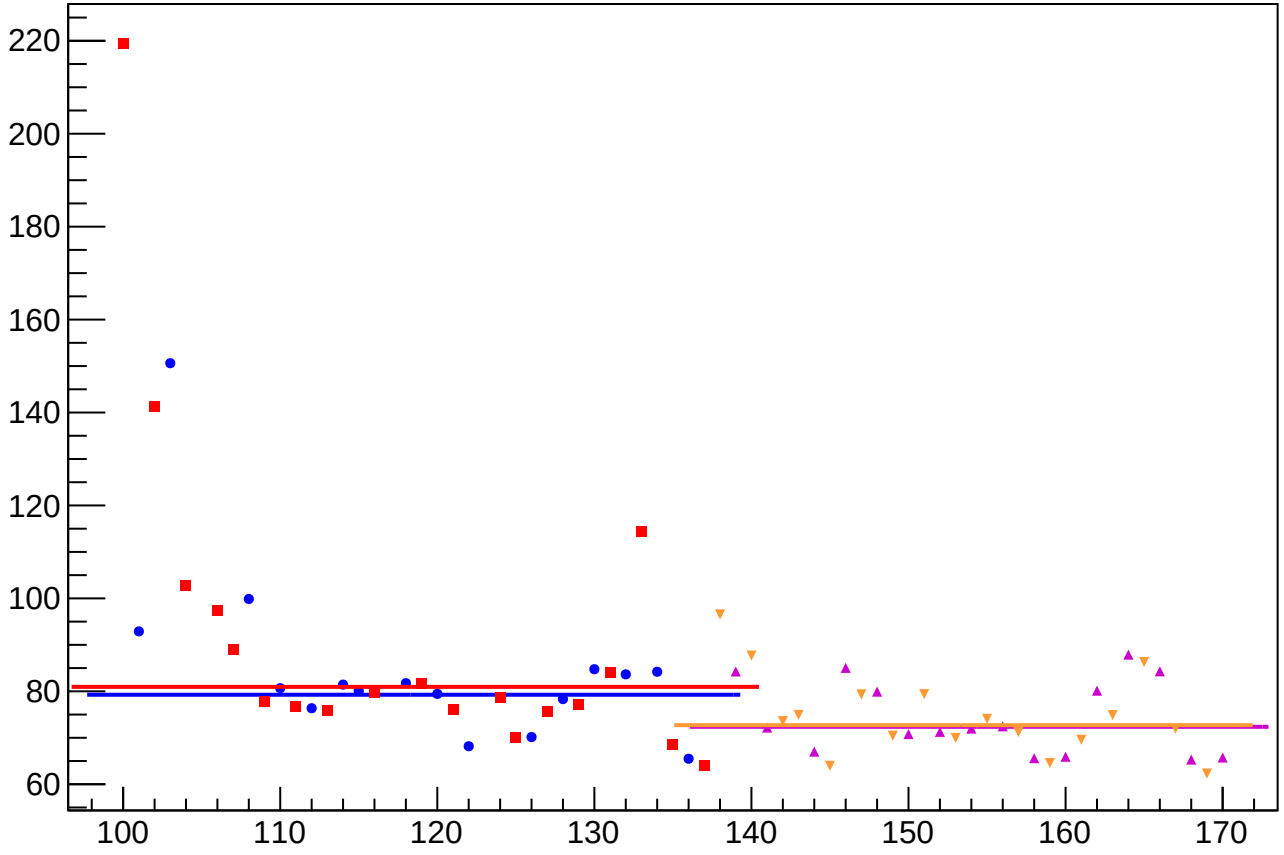
Left In: -52.501+/-20.246 $\chi^2$/NDF:24.9/15

+ sign 25.603+/-16.793 $\chi^2$/NDF: 36.2/32

All: -11.786+/-11.913 $\chi^2$/NDF: 98.9/67

- sign -49.666+/-16.903 $\chi^2$/NDF: 52.6/34

# dit_asym_sam_12345678_avg_rms vs Slug




Right In: 79.263+/-0.021 $\chi^2$/NDF: 444951.1/15

Left Out: 72.713+/-0.014 $\chi^2$/NDF:303059.6/16

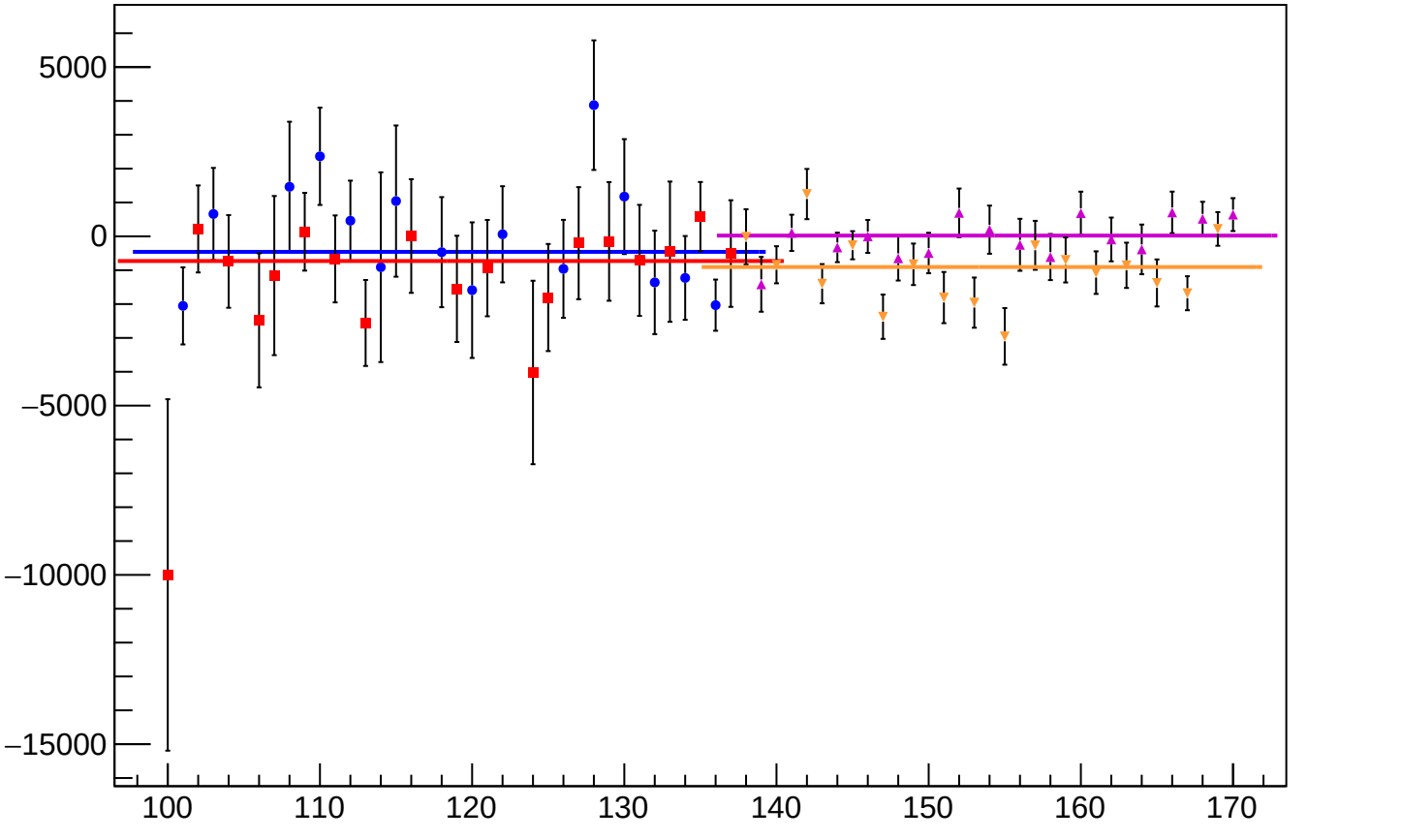
Right Out: 80.958+/-0.022 $\chi^2$/NDF: 514182.4/18

Left In: 72.362+/-0.014 $\chi^2$/NDF:239469.9/15

+ sign 74.719+/-0.012 $\chi^2$/NDF: 812648.2/32

All: 74.842+/-0.008 $\chi^2$/NDF: 1675756.4/67

- sign 74.967+/-0.012 $\chi^2$/NDF: 862891.8/34




Right In: -458.108+/-350.075 $\chi^2$/NDF: 20.3/15

Left Out: -905.637+/-149.954 $\chi^2$/NDF:36.2/16

Right Out: -728.750+/-352.574 $\chi^2$/NDF: 11.5/18

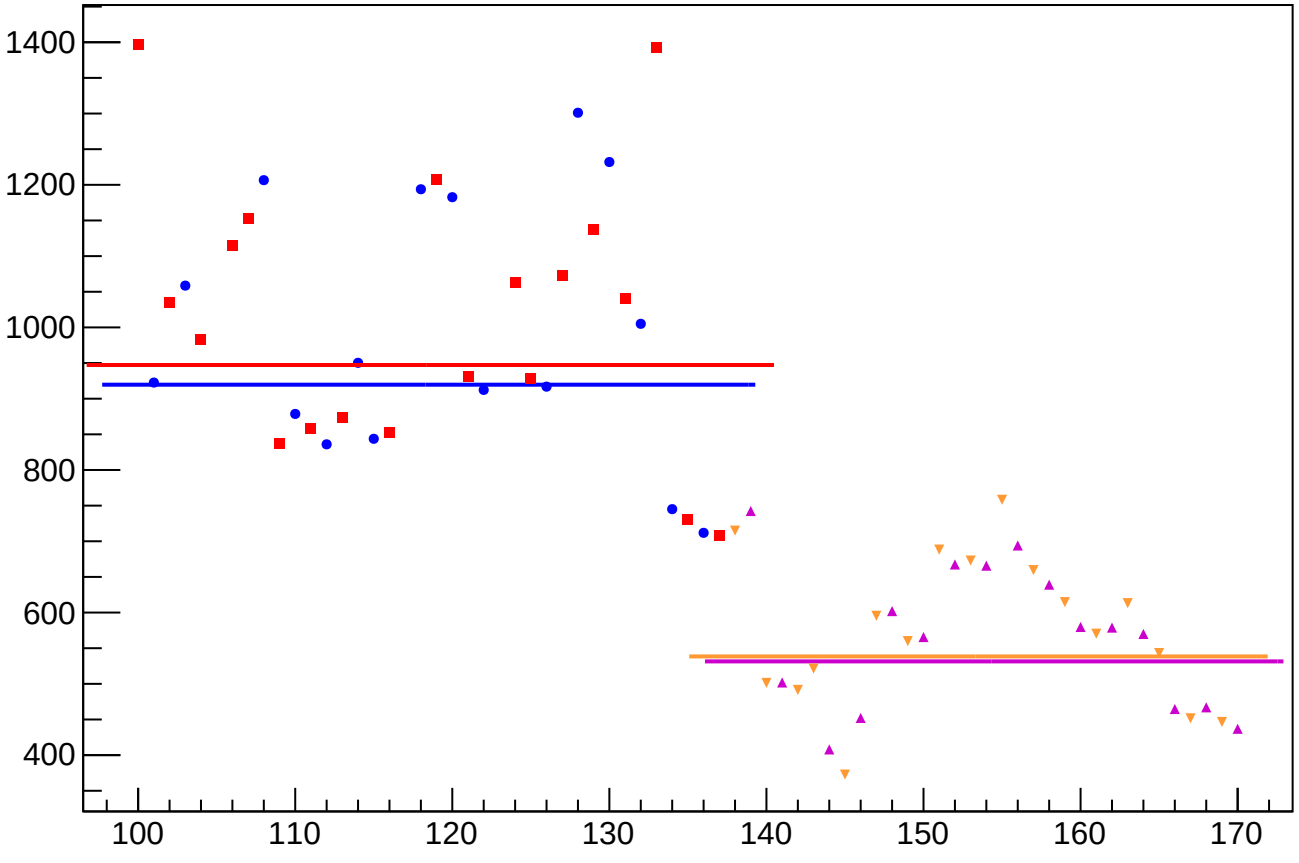
Left In: 22.243+/-149.109 $\chi^2$/NDF:12.8/15

+ sign -836.254+/-137.841 $\chi^2$/NDF: 57.8/32

All: -462.601+/-97.288 $\chi^2$/NDF: 100.7/67

- sign -91.698+/-137.333 $\chi^2$/NDF: 28.2/34

# asym_sam_12345678_avg_dit_correction_rms vs Slug




Right In: 919.638+/-0.248 $\chi^2$/NDF: 515443.8/15

Left Out: 538.445+/-0.106 $\chi^2$/NDF:972657.4/16

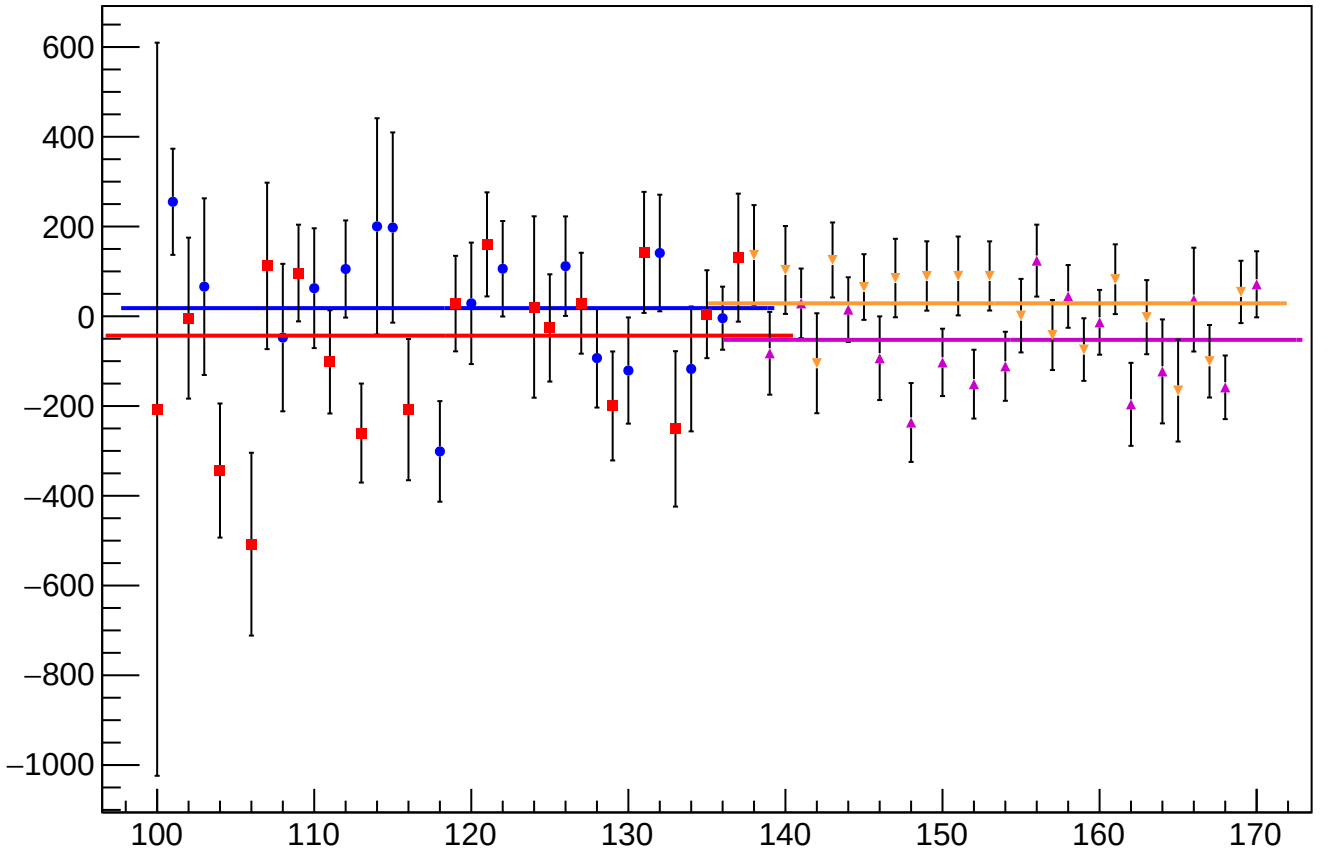
Right Out: 947.272+/-0.249 $\chi^2$/NDF: 425563.8/18

Left In: 531.483+/-0.105 $\chi^2$/NDF:828067.1/15

+ sign 597.543+/-0.097 $\chi^2$/NDF: 3491824.5/32

All: 596.050+/-0.069 $\chi^2$/NDF: 7105397.8/67

- sign 594.567+/-0.097 $\chi^2$/NDF: 3613105.3/34




Right In: 18.175+/-30.346 $\chi^2$/NDF: 20.1/15

Left Out: 28.882+/-20.161 $\chi^2$/NDF:16.0/16

Right Out: -43.144+/-30.707 $\chi^2$/NDF: 27.7/18

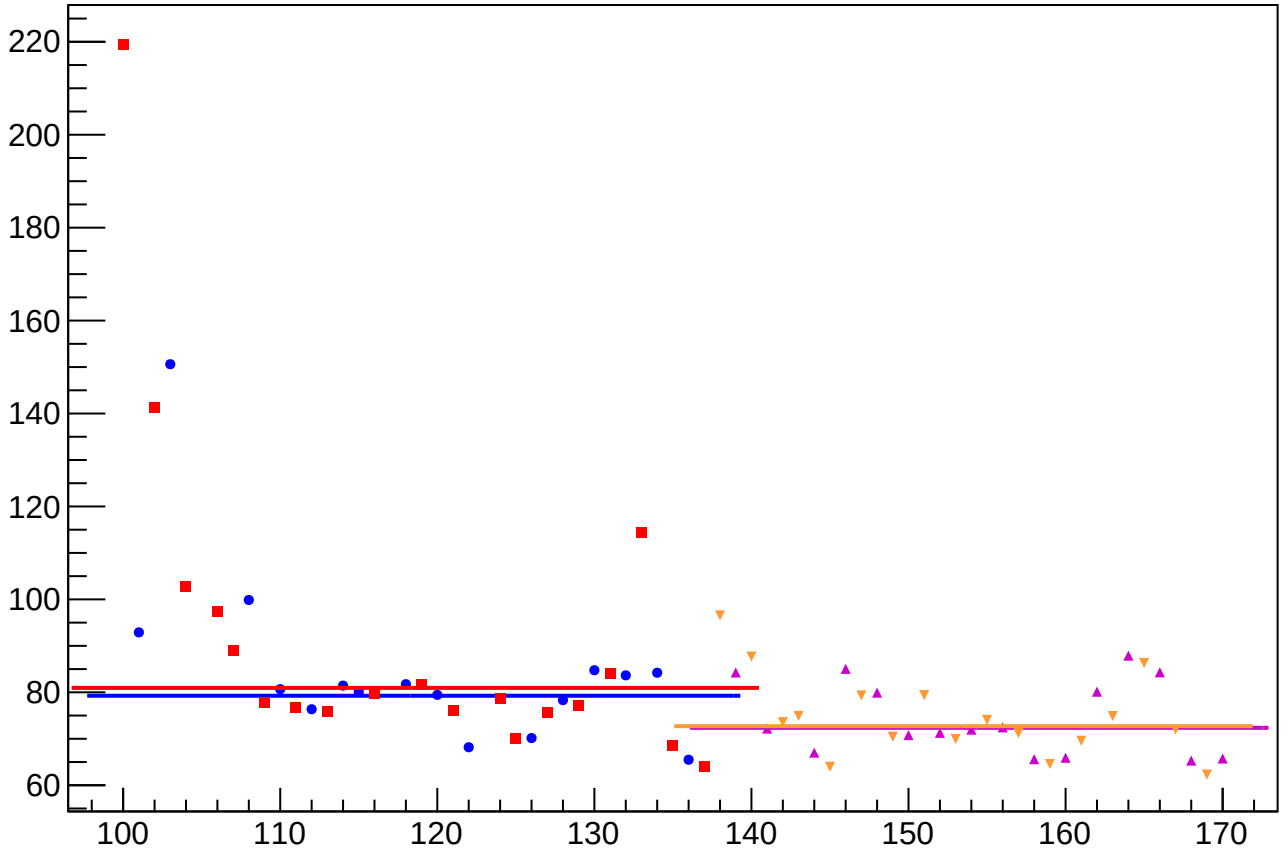
Left In: -52.500+/-20.246 $\chi^2$/NDF:24.9/15

+ sign 25.604+/-16.793 $\chi^2$/NDF: 36.2/32

All: -11.785+/-11.913 $\chi^2$/NDF: 98.9/67

- sign -49.665+/-16.903 $\chi^2$/NDF: 52.6/34

# eigen_dit_asym_sam_12345678_avg_rms vs Slug




Right In: 79.263+/-0.021 $\chi^2$/NDF: 444948.4/15

Left Out: 72.714+/-0.014 $\chi^2$/NDF:303055.8/16

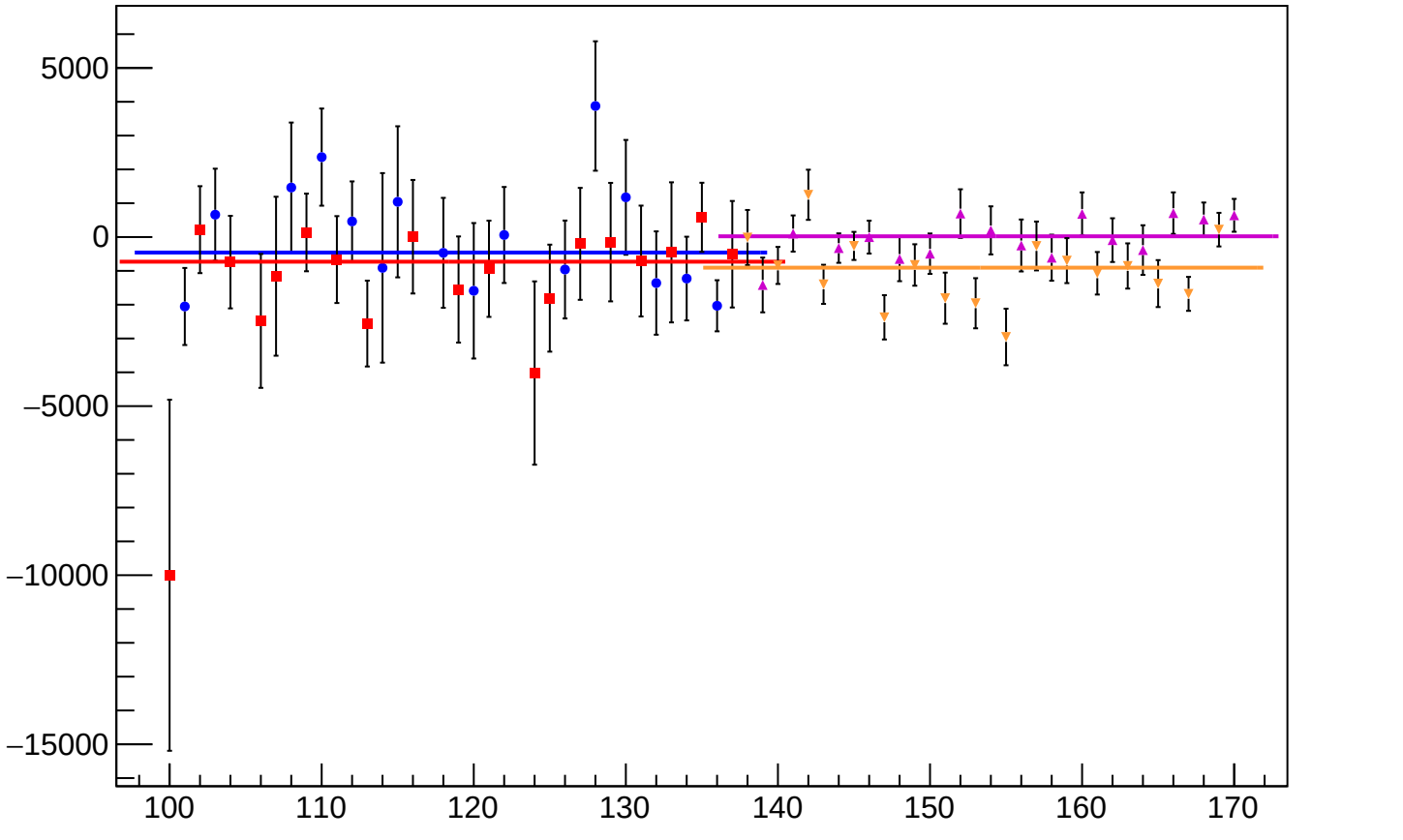
Right Out: 80.958+/-0.022 $\chi^2$/NDF: 514191.2/18

Left In: 72.363+/-0.014 $\chi^2$/NDF:239473.2/15

+ sign 74.719+/-0.012 $\chi^2$/NDF: 812631.6/32

All: 74.842+/-0.008 $\chi^2$/NDF: 1675740.4/67

- sign 74.967+/-0.012 $\chi^2$/NDF: 862892.3/34




Right In: -458.104+/-350.074 $\chi^2$/NDF: 20.3/15

Left Out: -905.635+/-149.954 $\chi^2$/NDF:36.2/16

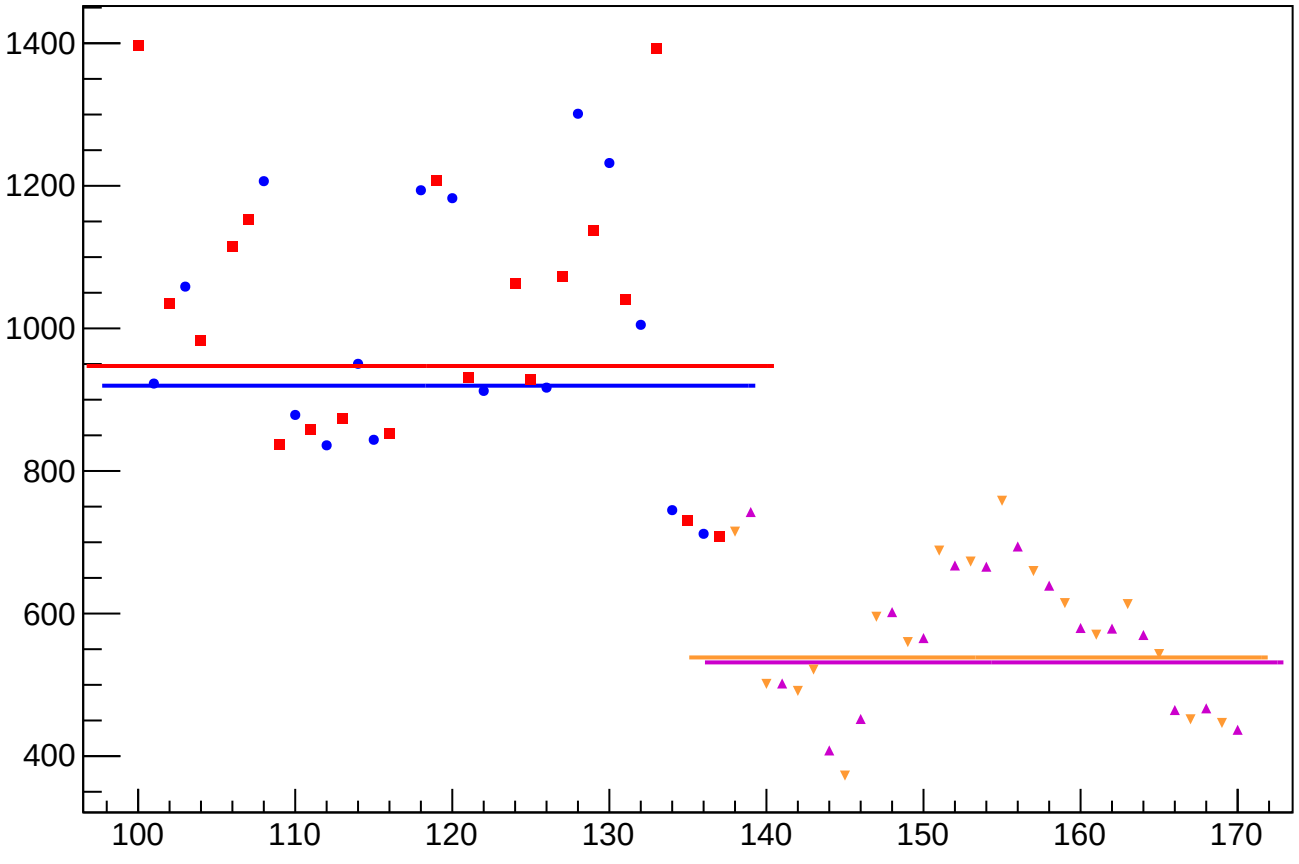
Right Out: -728.749+/-352.573 $\chi^2$/NDF: 11.5/18

Left In: 22.244+/-149.109 $\chi^2$/NDF:12.8/15

+ sign -836.252+/-137.840 $\chi^2$/NDF: 57.8/32

All: -462.600+/-97.288 $\chi^2$/NDF: 100.7/67

- sign -91.697+/-137.332 $\chi^2$/NDF: 28.2/34




Right In: 919.636+/-0.248 $\chi^2$/NDF: 515443.9/15

Left Out: 538.444+/-0.106 $\chi^2$/NDF:972663.9/16

Right Out: 947.270+/-0.249 $\chi^2$/NDF: 425565.2/18

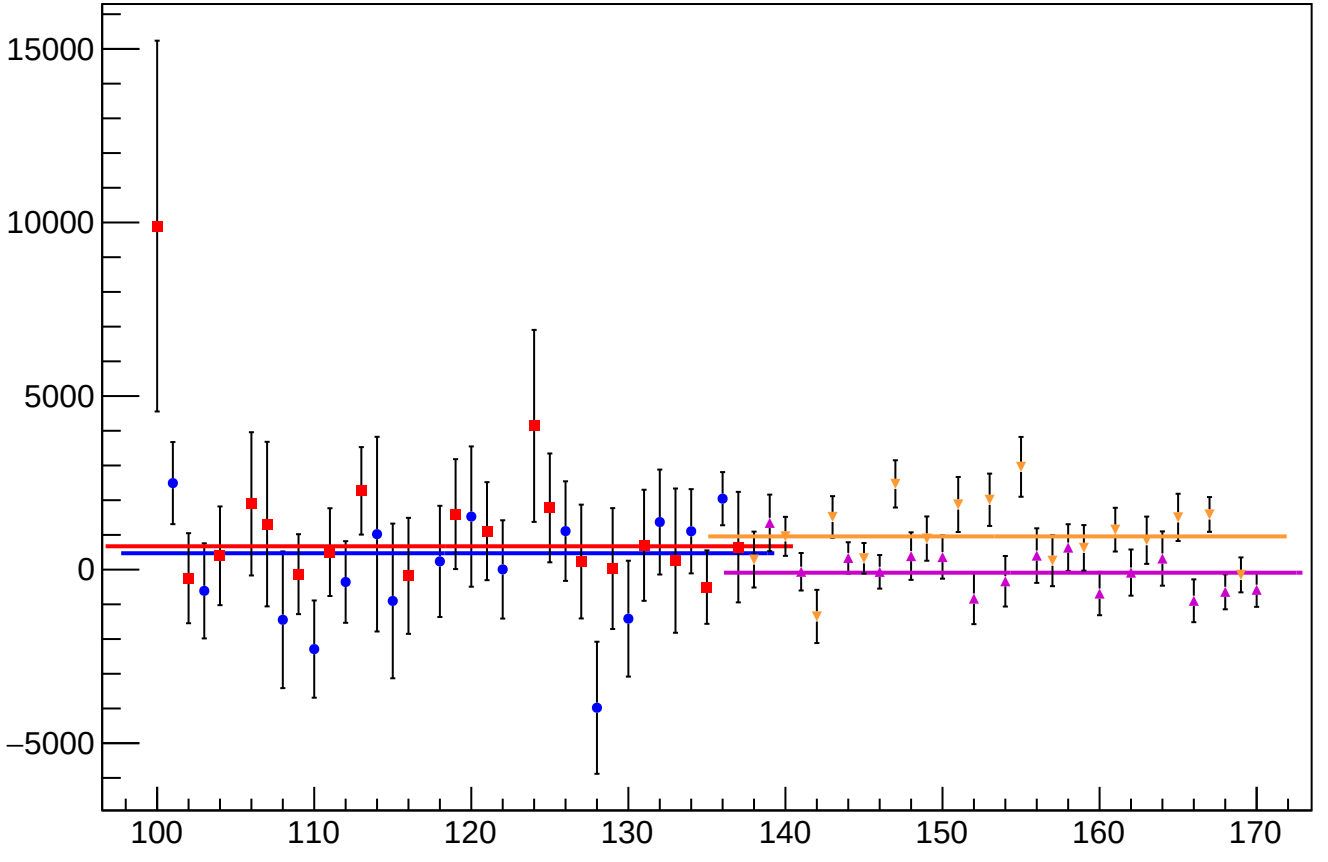
Left In: 531.482+/-0.105 $\chi^2$/NDF:828068.7/15

+ sign 597.542+/-0.097 $\chi^2$/NDF: 3491829.6/32

All: 596.048+/-0.069 $\chi^2$/NDF: 7105401.6/67

- sign 594.566+/-0.097 $\chi^2$/NDF: 3613104.0/34

# asym_sam_12345678_avg_mean vs Slug




Right In: 472.014+/-350.376 $\chi^2$/NDF: 21.5/15

Left Out: 957.102+/-153.143 $\chi^2$/NDF:34.7/16

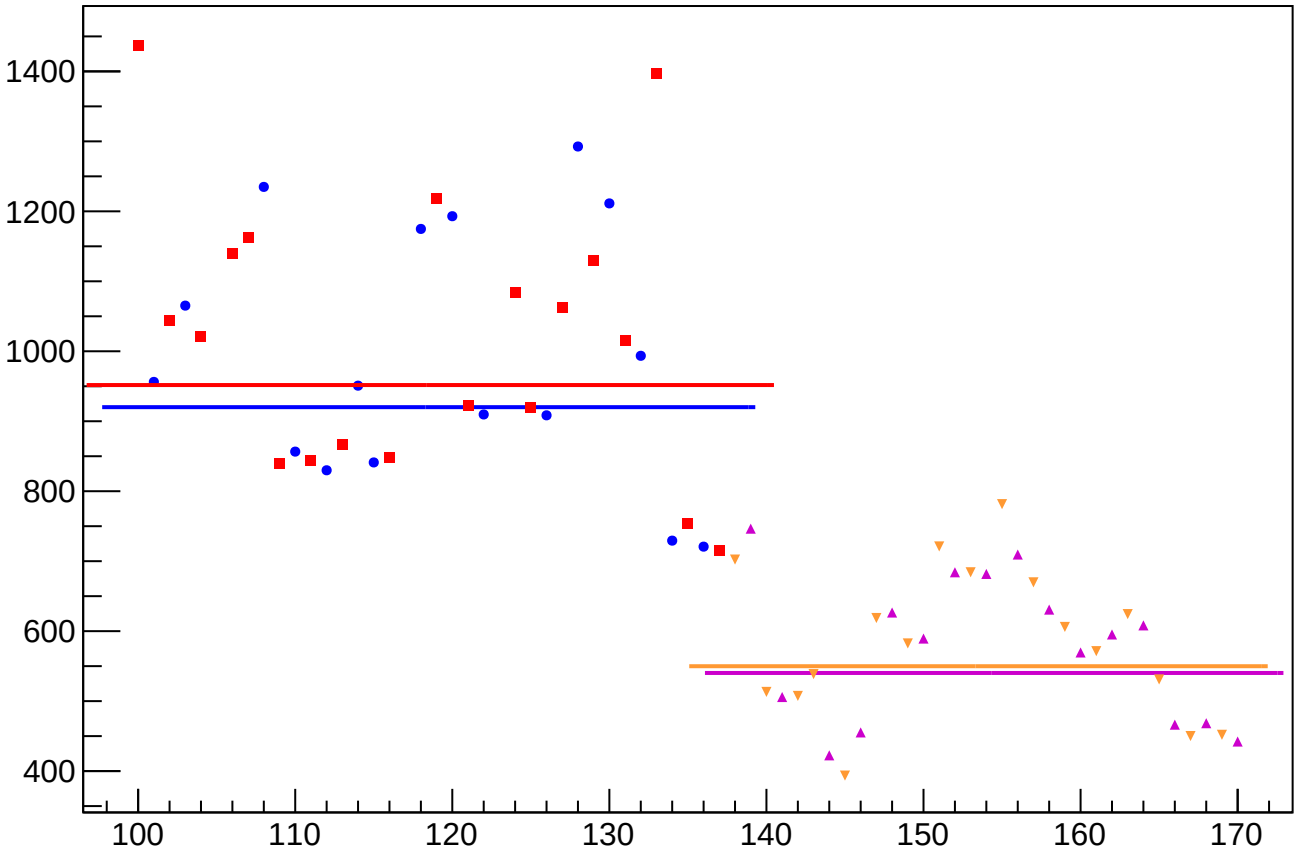
Right Out: 672.537+/-354.512 $\chi^2$/NDF: 10.3/18

Left In: -88.434+/-151.546 $\chi^2$/NDF:12.8/15

+ sign 879.295+/-140.325 $\chi^2$/NDF: 57.8/32

All: 451.246+/-98.877 $\chi^2$/NDF: 103.3/67

- sign 29.138+/-139.348 $\chi^2$/NDF: 27.0/34




Right In: 920.125+/-0.248 $\chi^2$/NDF: 508678.6/15

Left Out: 549.882+/-0.108 $\chi^2$/NDF:917342.1/16

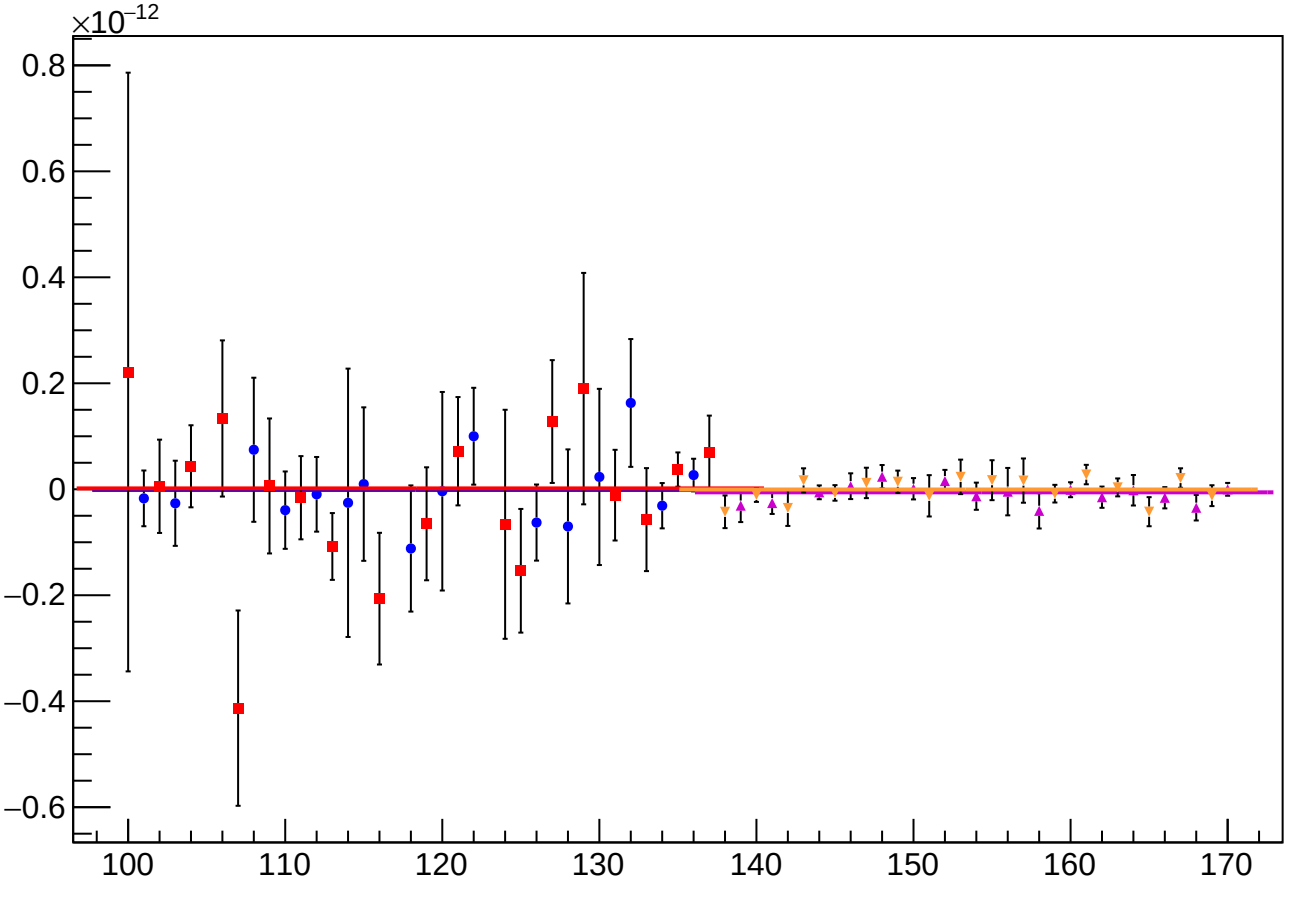
Right Out: 951.726+/-0.251 $\chi^2$/NDF: 416116.3/18

Left In: 540.245+/-0.107 $\chi^2$/NDF:841248.6/15

\+ sign 609.269+/-0.099 $\chi^2$/NDF: 3301055.4/32

All: 606.525+/-0.070 $\chi^2$/NDF: 6838073.6/67

\- sign 603.820+/-0.099 $\chi^2$/NDF: 3535500.1/34




Right In: -0.000+/-0.000 $\chi^2$/NDF: 7.0/15

Left Out: -0.000+/-0.000 $\chi^2$/NDF:12.7/16

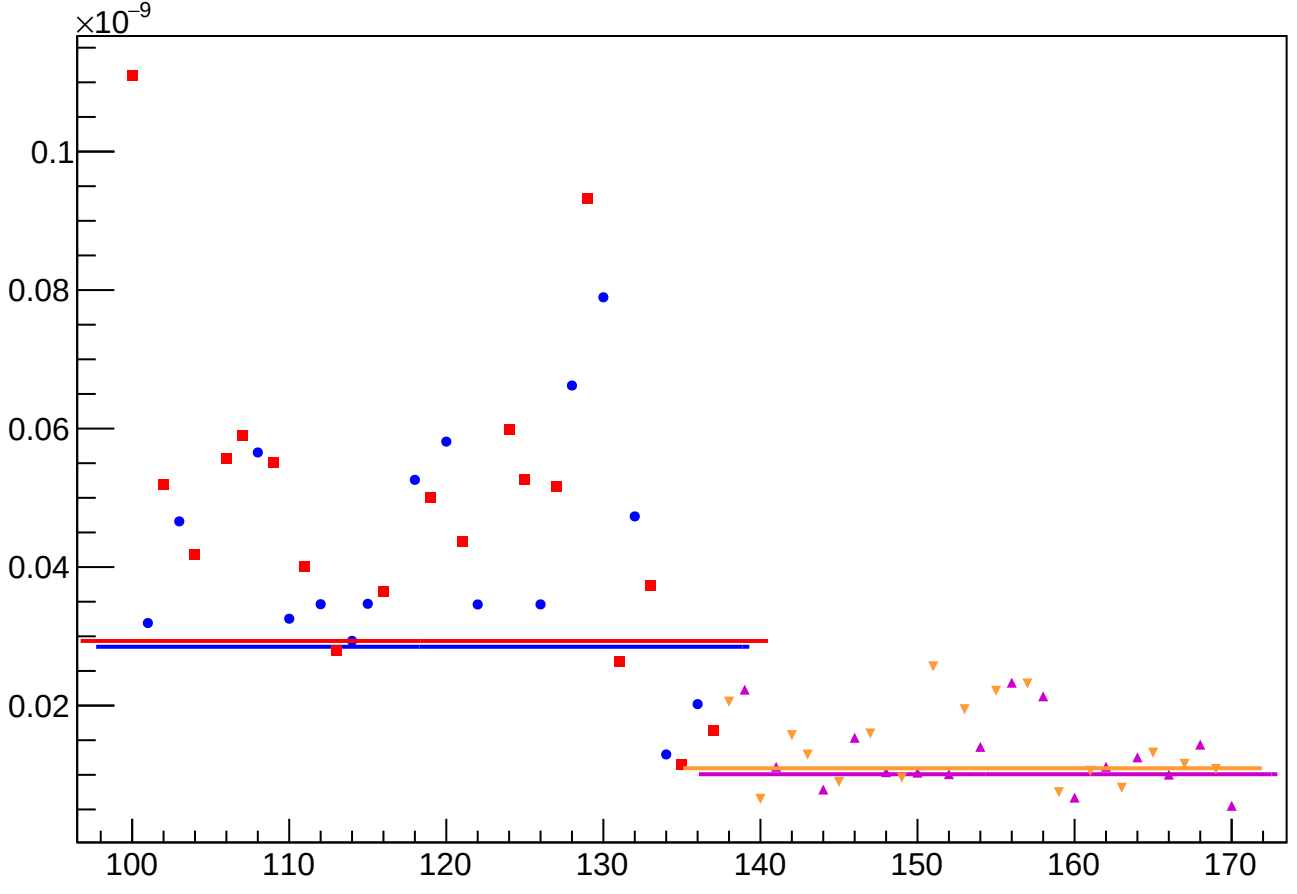
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 19.4/18

Left In: -0.000+/-0.000 $\chi^2$/NDF:8.2/15

+ sign -0.000+/-0.000 $\chi^2$/NDF: 19.7/32

All: -0.000+/-0.000 $\chi^2$/NDF: 48.0/67

- sign -0.000+/-0.000 $\chi^2$/NDF: 27.8/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 1152293.4/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:1510314.5/16

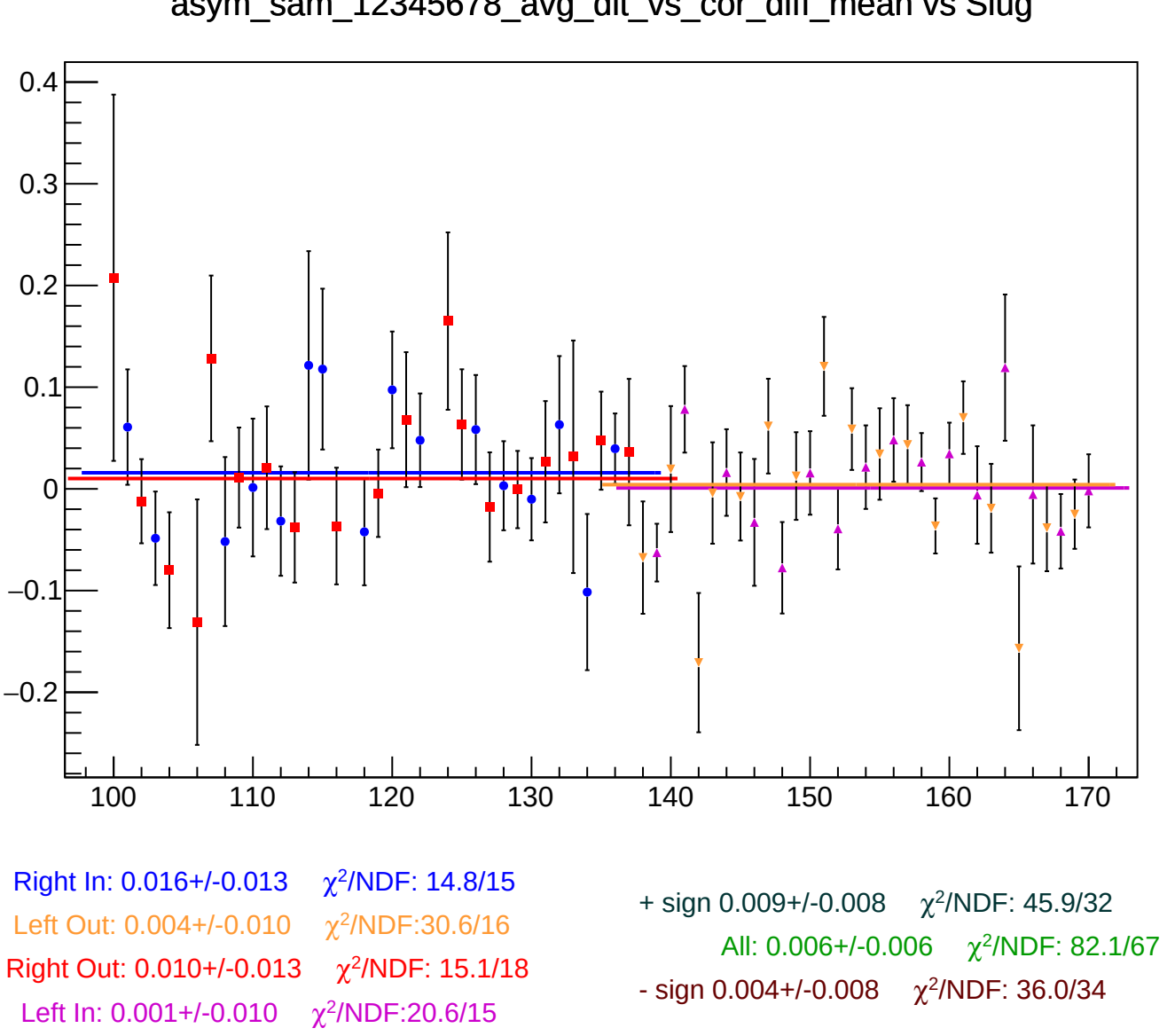
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 1645968.5/18

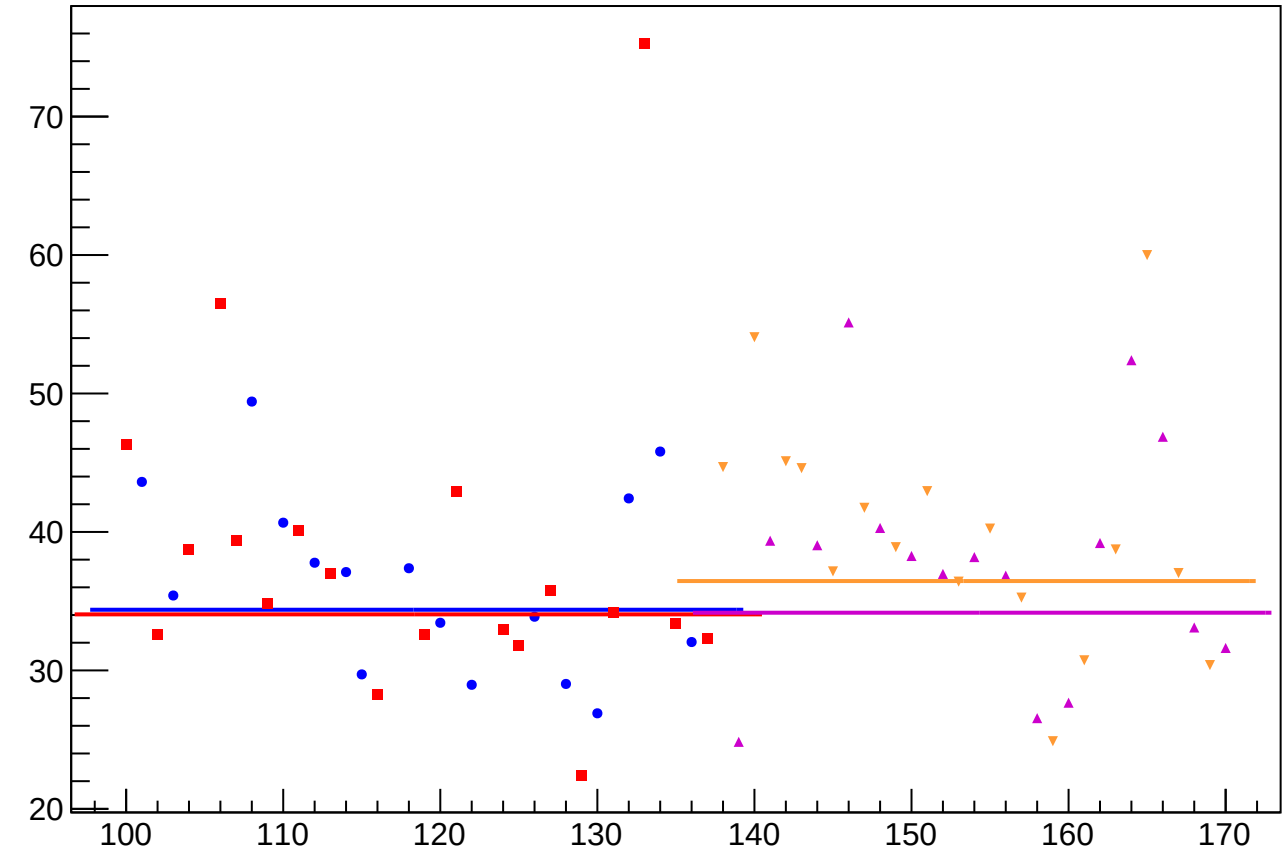
Left In: 0.000+/-0.000 $\chi^2$/NDF:1396981.2/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 4472225.0/32

All: 0.000+/-0.000 $\chi^2$/NDF: 9432300.9/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 4915619.4/34


asym_sam_12345678_avg_dit_vs_cor_diff_mean vs Slug
0.4
0.3
0.2
0.1
0
−0.1
−0.2
100
110
120
130
140
150
160
170
Right In: 0.016+/-0.013 χ²/NDF: 14.8/15
Left Out: 0.004+/-0.010 χ²/NDF:30.6/16
Right Out: 0.010+/-0.013 χ²/NDF: 15.1/18
Left In: 0.001+/-0.010 χ²/NDF:20.6/15
+ sign 0.009+/-0.008 χ²/NDF: 45.9/32
All: 0.006+/-0.006 χ²/NDF: 82.1/67
- sign 0.004+/-0.008 χ²/NDF: 36.0/34




Right In: 34.382+/-0.009 $\chi^2$/NDF: 367883.0/15

Left Out: 36.454+/-0.007 $\chi^2$/NDF:1032458.8/16

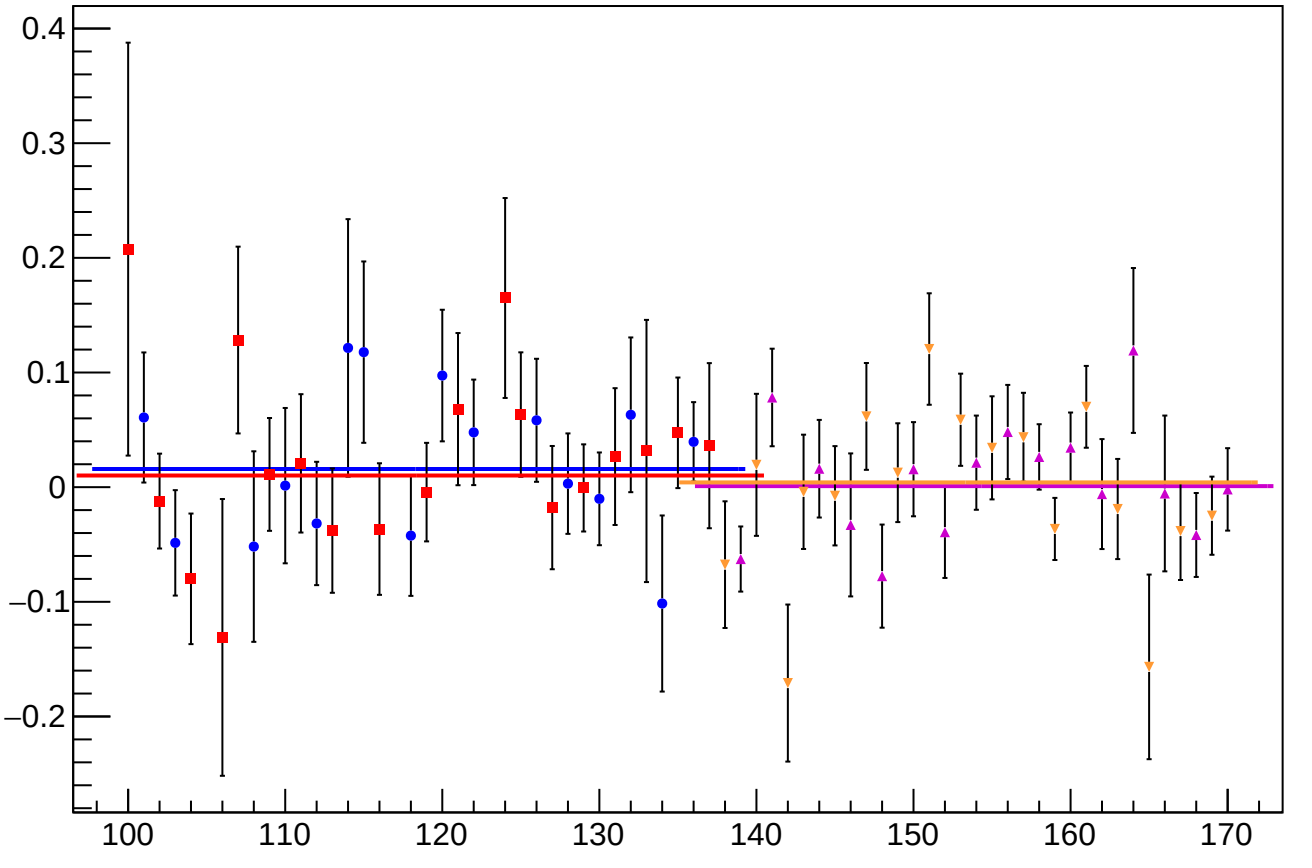
Right Out: 34.047+/-0.009 $\chi^2$/NDF: 642697.3/18

Left In: 34.167+/-0.007 $\chi^2$/NDF:1057194.1/15

+ sign 35.671+/-0.006 $\chi^2$/NDF: 1430111.0/32

All: 34.868+/-0.004 $\chi^2$/NDF: 3166720.5/67

- sign 34.124+/-0.006 $\chi^2$/NDF: 1699996.4/34




Right In: 0.016+/-0.013 $\chi^2$/NDF: 14.8/15

Left Out: 0.004+/-0.010 $\chi^2$/NDF:30.6/16

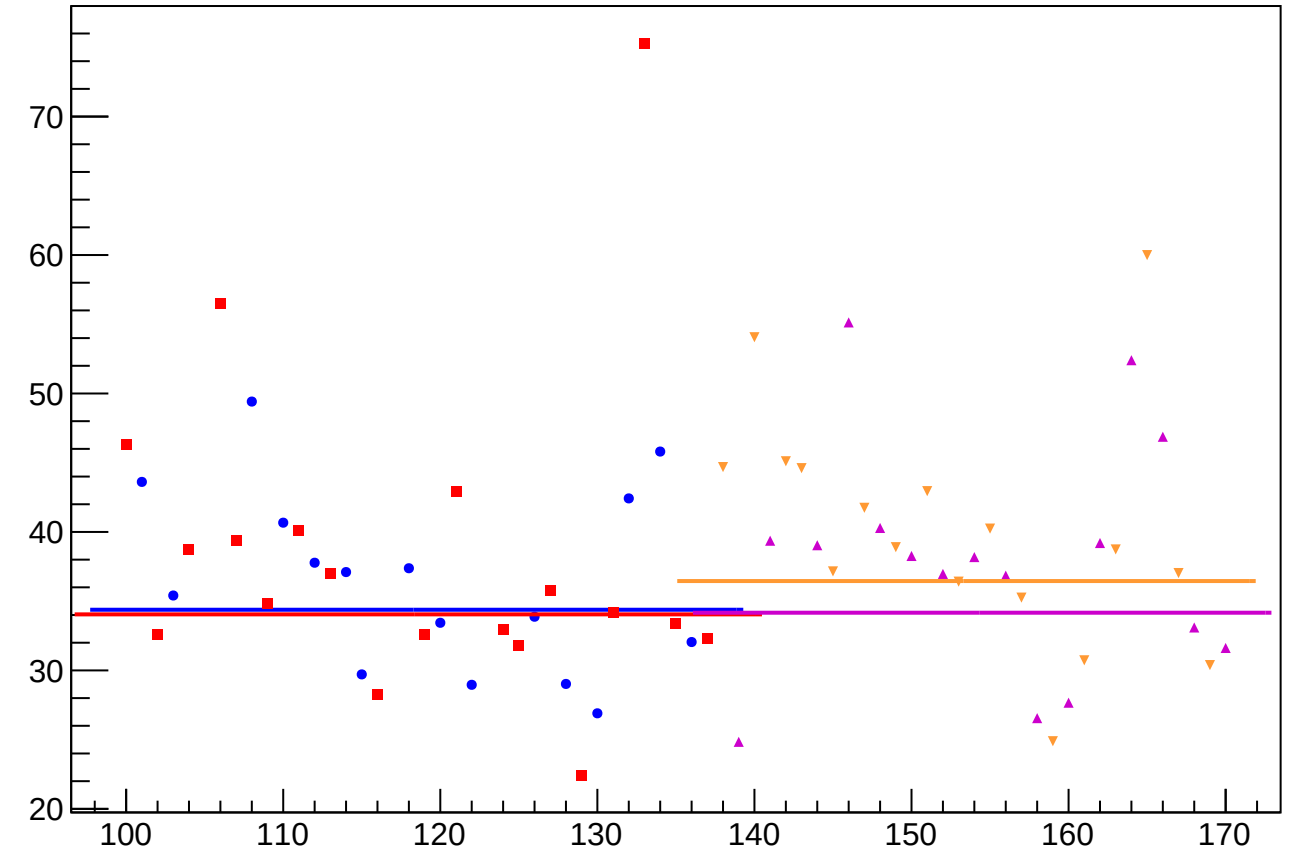
Right Out: 0.010+/-0.013 $\chi^2$/NDF: 15.1/18

Left In: 0.001+/-0.010 $\chi^2$/NDF:20.6/15

+ sign 0.009+/-0.008 $\chi^2$/NDF: 45.9/32

All: 0.006+/-0.006 $\chi^2$/NDF: 82.1/67

- sign 0.004+/-0.008 $\chi^2$/NDF: 36.0/34




Right In: 34.382+/-0.009 $\chi^2$/NDF: 367883.0/15

Left Out: 36.454+/-0.007 $\chi^2$/NDF:1032458.8/16

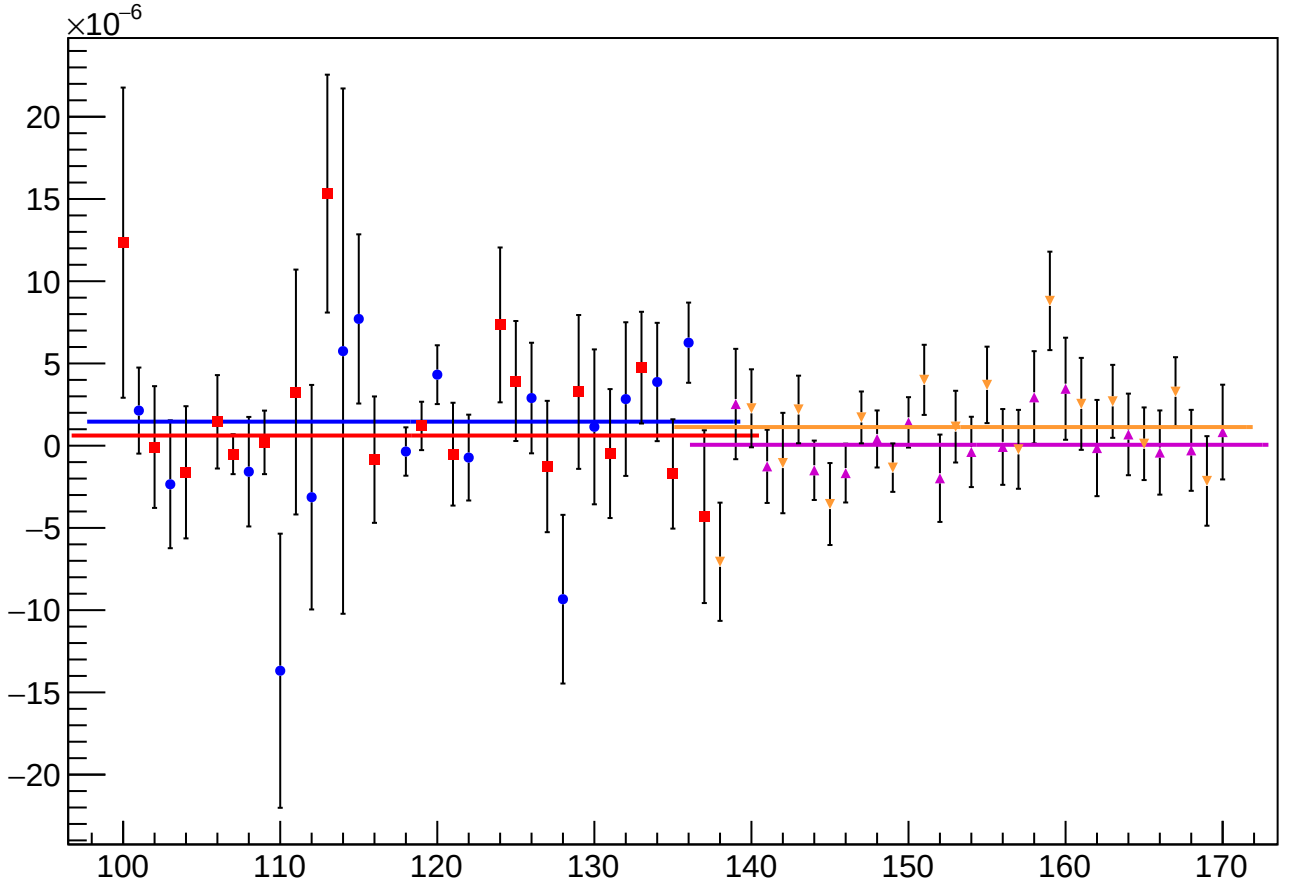
Right Out: 34.047+/-0.009 $\chi^2$/NDF: 642697.3/18

Left In: 34.167+/-0.007 $\chi^2$/NDF:1057194.1/15

+ sign 35.671+/-0.006 $\chi^2$/NDF: 1430111.0/32

All: 34.868+/-0.004 $\chi^2$/NDF: 3166720.5/67

- sign 34.124+/-0.006 $\chi^2$/NDF: 1699996.4/34




Right In: 0.000+/-0.000 $\chi^2$/NDF: 21.0/15

Left Out: 0.000+/-0.000 $\chi^2$/NDF:26.1/16

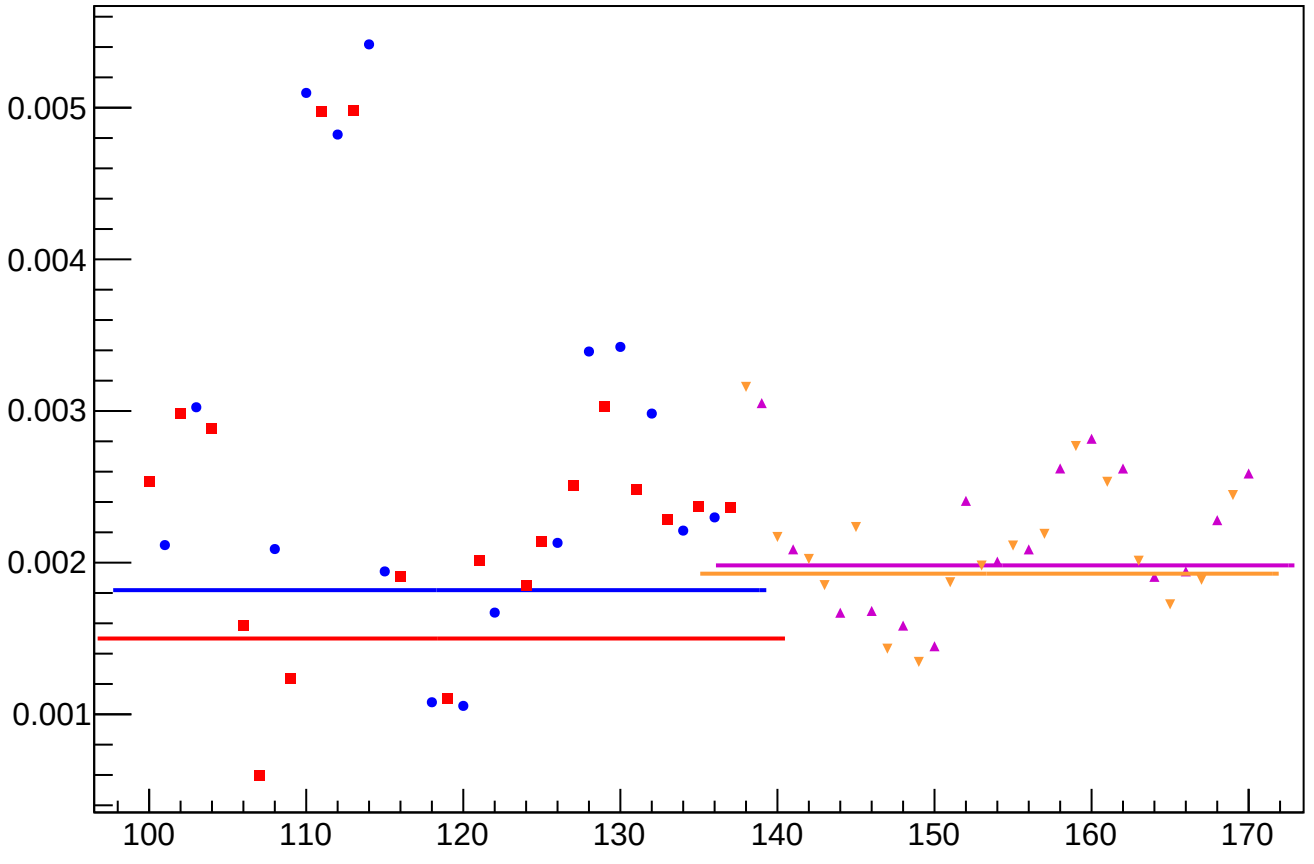
Right Out: 0.000+/-0.000 $\chi^2$/NDF: 13.9/18

Left In: 0.000+/-0.000 $\chi^2$/NDF:6.5/15

+ sign 0.000+/-0.000 $\chi^2$/NDF: 47.2/32

All: 0.000+/-0.000 $\chi^2$/NDF: 70.4/67

- sign 0.000+/-0.000 $\chi^2$/NDF: 20.8/34




Right In: 0.002+/-0.000 $\chi^2$/NDF: 2570250.6/15

Left Out: 0.002+/-0.000 $\chi^2$/NDF:1184386.1/16

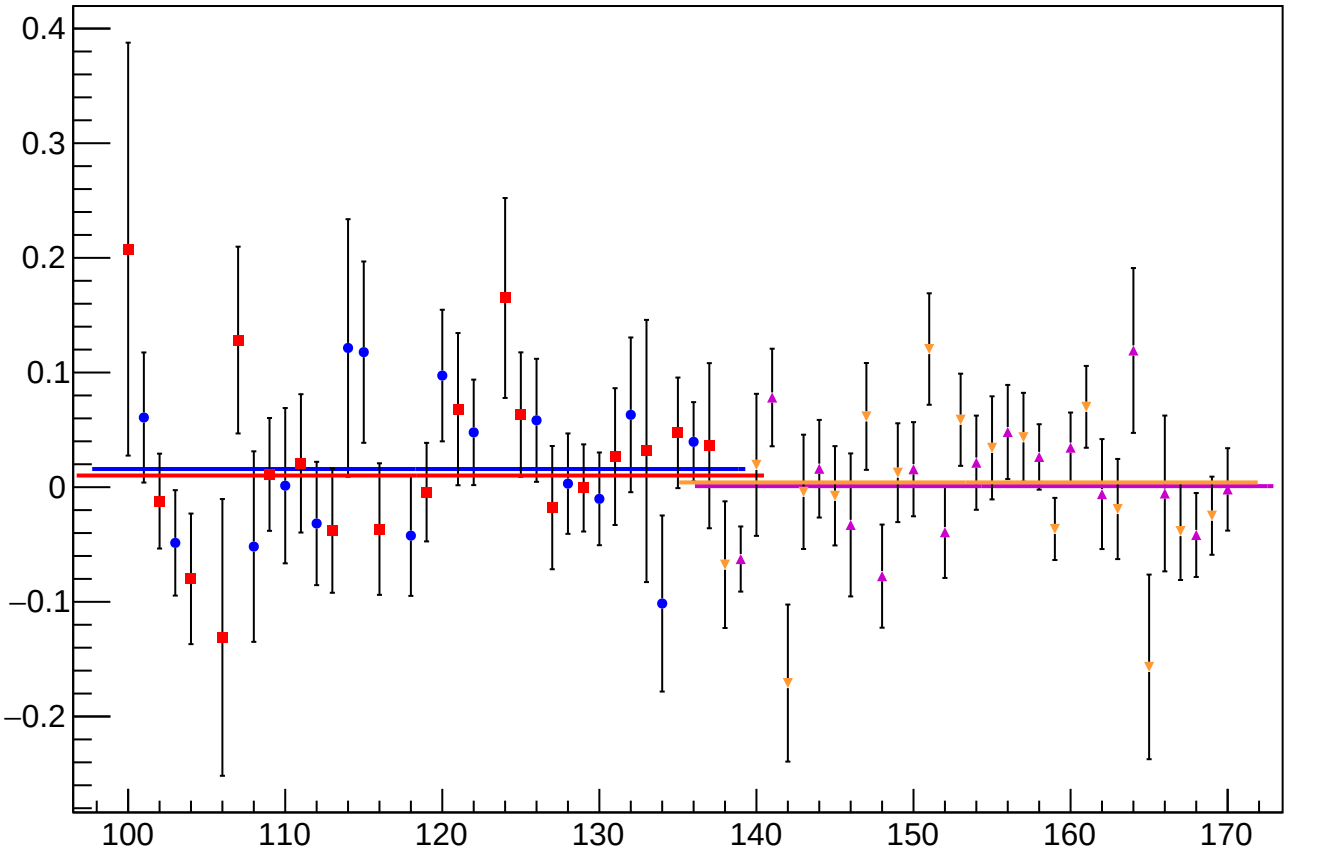
Right Out: 0.001+/-0.000 $\chi^2$/NDF: 3689451.2/18

Left In: 0.002+/-0.000 $\chi^2$/NDF:1191425.2/15

+ sign 0.002+/-0.000 $\chi^2$/NDF: 3782133.8/32

All: 0.002+/-0.000 $\chi^2$/NDF: 9369080.6/67

- sign 0.002+/-0.000 $\chi^2$/NDF: 5514742.2/34




Right In: 0.016+/-0.013 $\chi^2$/NDF: 14.8/15

Left Out: 0.004+/-0.010 $\chi^2$/NDF:30.6/16

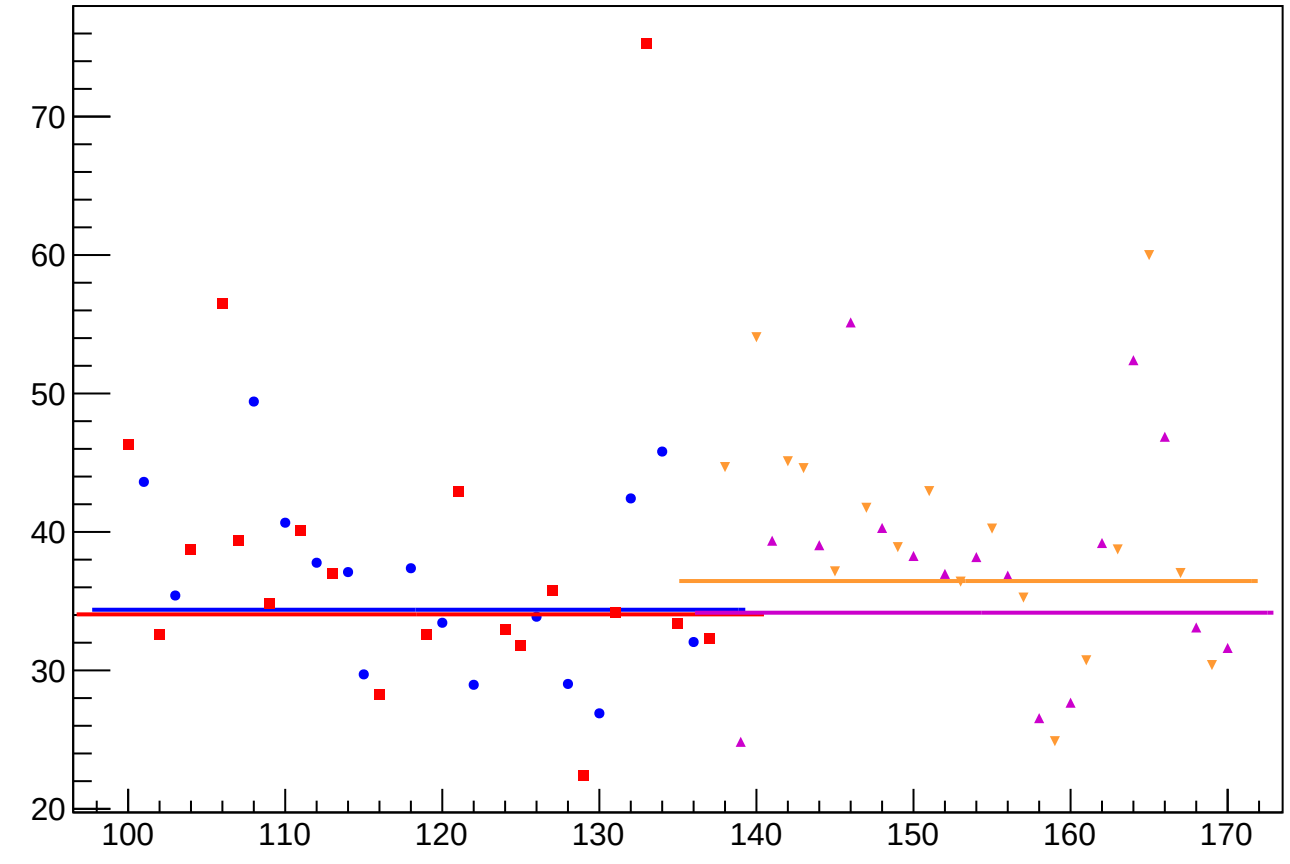
Right Out: 0.010+/-0.013 $\chi^2$/NDF: 15.1/18

Left In: 0.001+/-0.010 $\chi^2$/NDF:20.6/15

+ sign 0.009+/-0.008 $\chi^2$/NDF: 45.9/32

All: 0.006+/-0.006 $\chi^2$/NDF: 82.1/67

- sign 0.004+/-0.008 $\chi^2$/NDF: 36.0/34




Right In: 34.381+/-0.009 $\chi^2$/NDF: 367940.1/15

Left Out: 36.454+/-0.007 $\chi^2$/NDF:1032515.1/16

Right Out: 34.047+/-0.009 $\chi^2$/NDF: 642741.5/18

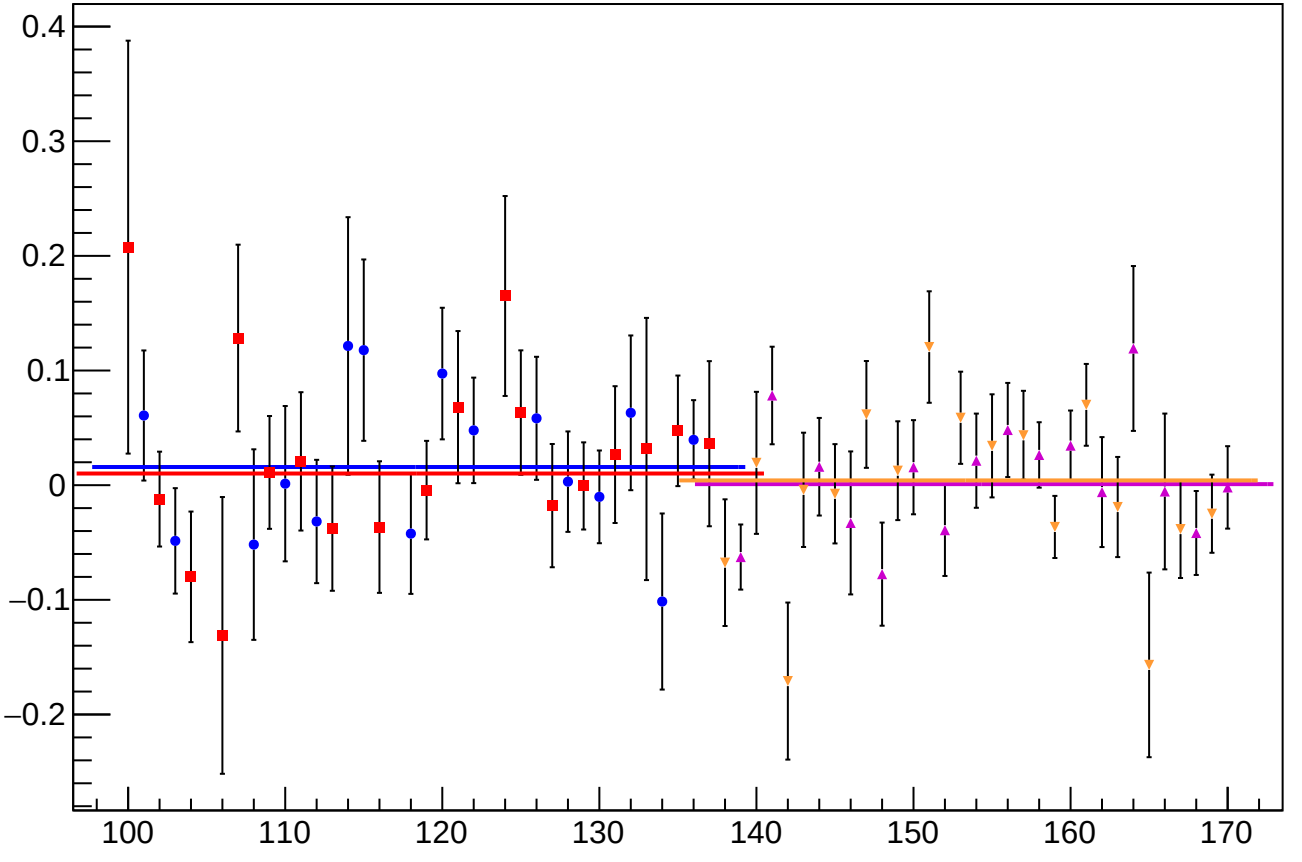
Left In: 34.167+/-0.007 $\chi^2$/NDF:1057264.2/15

+ sign 35.671+/-0.006 $\chi^2$/NDF: 1430254.1/32

All: 34.868+/-0.004 $\chi^2$/NDF: 3166972.3/67

- sign 34.124+/-0.006 $\chi^2$/NDF: 1700112.1/34

asym_sam_12345678_avg_eigen_dit_vs_eigen_cor_diff_mean vs Slug




Right In: 0.016+/-0.013 $\chi^2$/NDF: 14.8/15

Left Out: 0.004+/-0.010 $\chi^2$/NDF:30.6/16

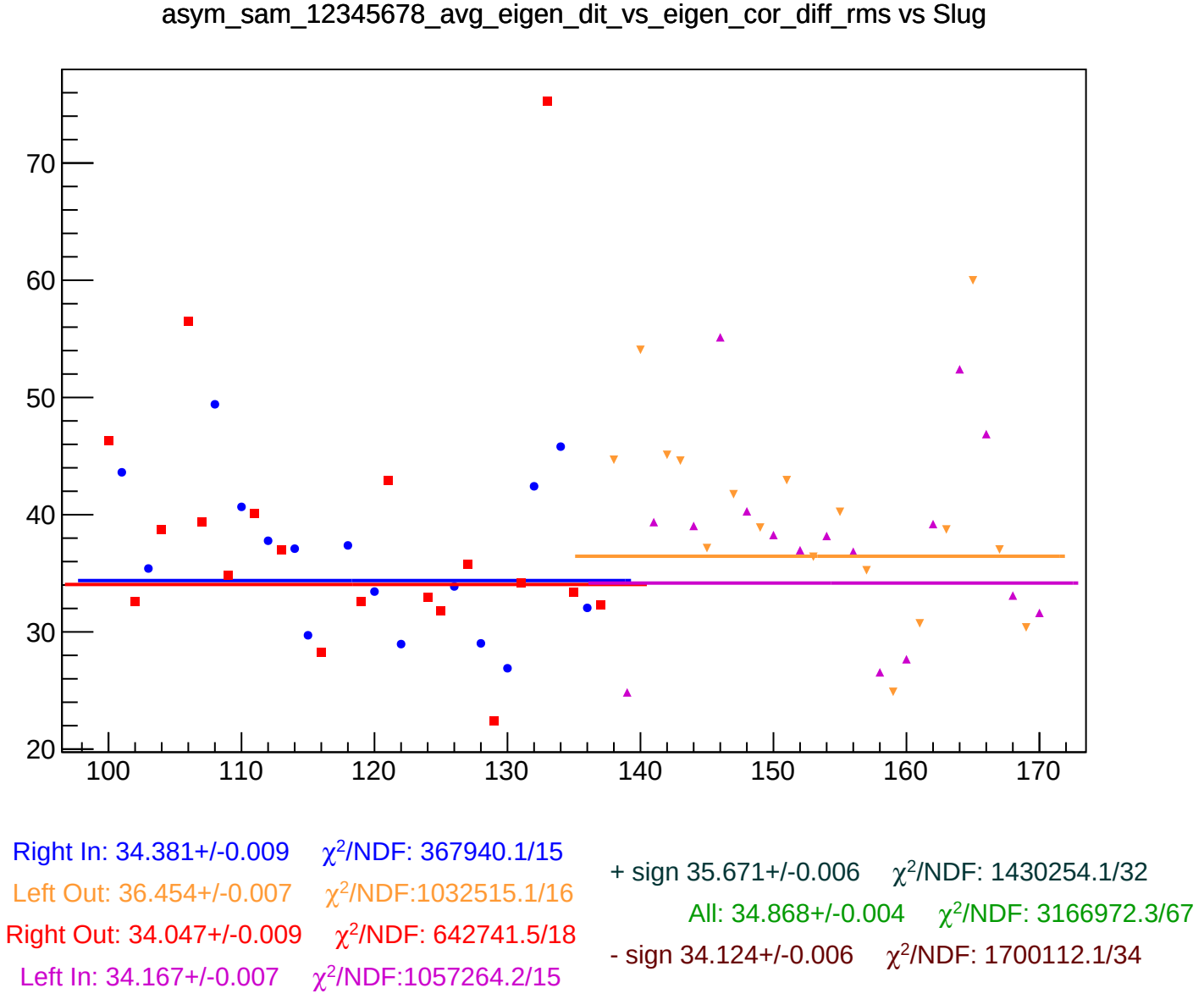
Right Out: 0.010+/-0.013 $\chi^2$/NDF: 15.1/18

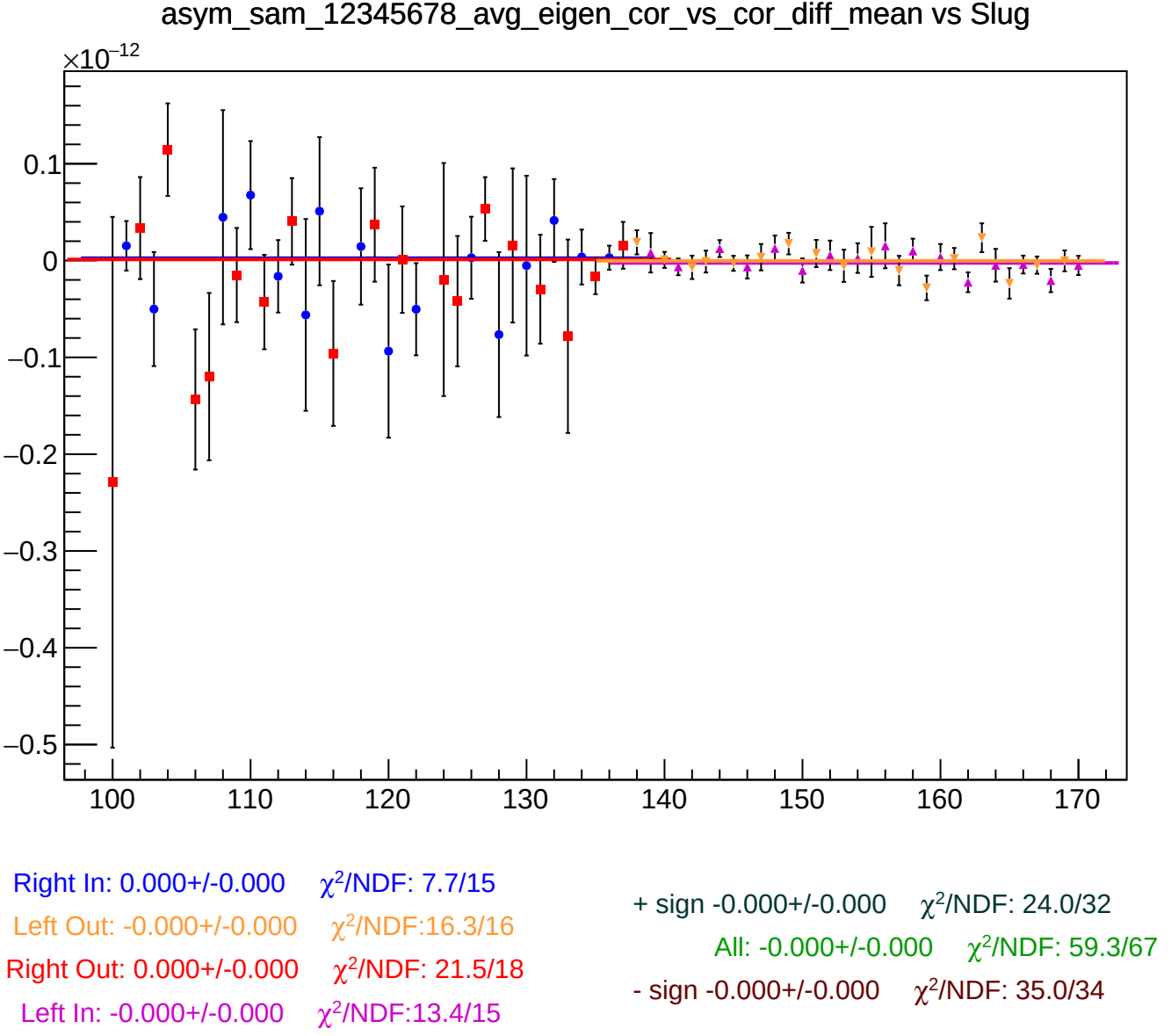
Left In: 0.001+/-0.010 $\chi^2$/NDF:20.6/15

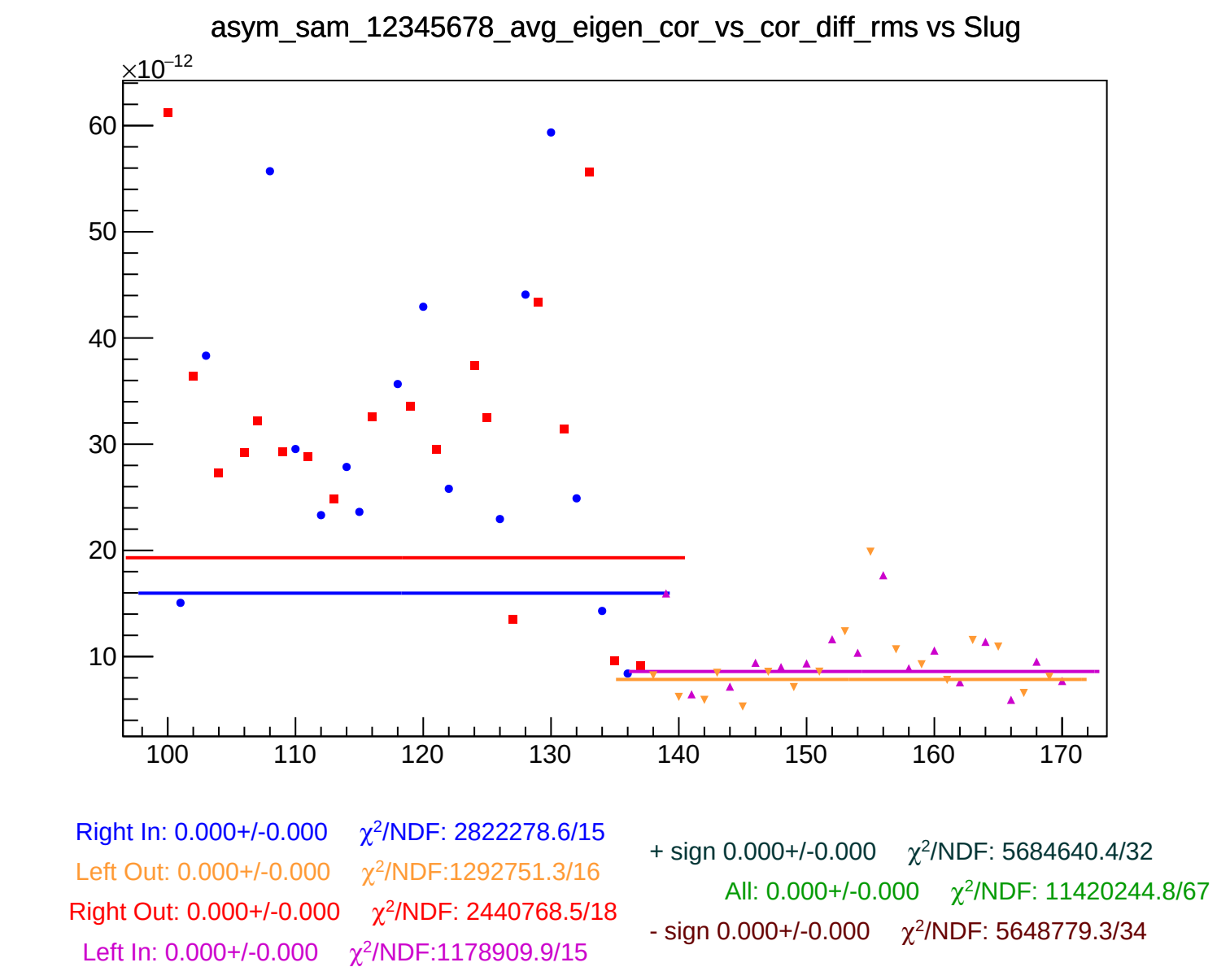
+ sign 0.009+/-0.008 $\chi^2$/NDF: 45.9/32

All: 0.006+/-0.006 $\chi^2$/NDF: 82.1/67

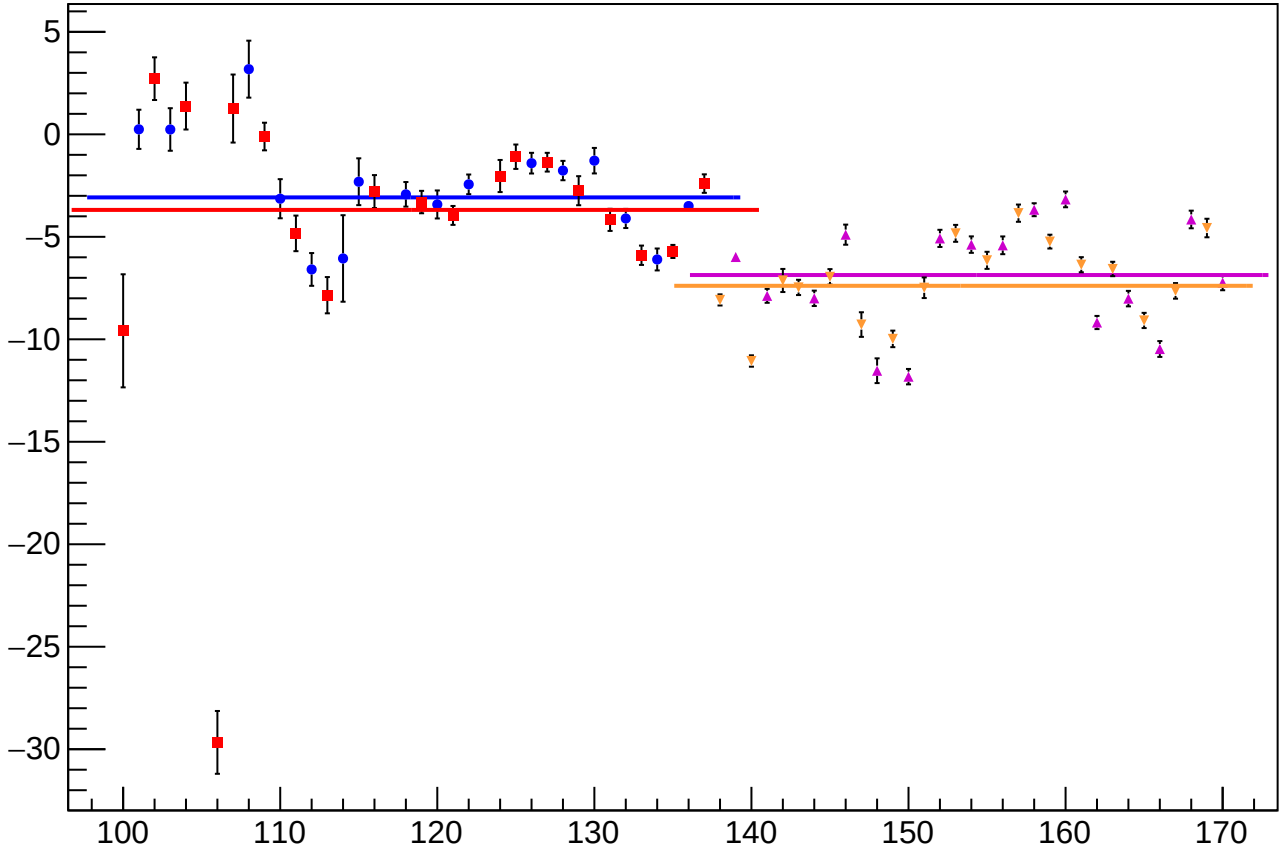
- sign 0.004+/-0.008 $\chi^2$/NDF: 36.0/34


asym_sam_12345678_avg_eigen_dit_vs_eigen_cor_diff_rms vs Slug
70
60
50
40
30
20
100
110
120
130
140
150
160
170
Right In: 34.381+/-0.009 χ²/NDF: 367940.1/15
Left Out: 36.454+/-0.007 χ²/NDF:1032515.1/16
Right Out: 34.047+/-0.009 χ²/NDF: 642741.5/18
Left In: 34.167+/-0.007 χ²/NDF:1057264.2/15
+ sign 35.671+/-0.006 χ²/NDF: 1430254.1/32
All: 34.868+/-0.004 χ²/NDF: 3166972.3/67
- sign 34.124+/-0.006 χ²/NDF: 1700112.1/34


asym_sam_12345678_avg_eigen_cor_vs_cor_diff_mean vs Slug
×10^−12
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 7.7/15
Left Out: -0.000+/-0.000 χ²/NDF:16.3/16
Right Out: 0.000+/-0.000 χ²/NDF: 21.5/18
Left In: -0.000+/-0.000 χ²/NDF:13.4/15
+ sign -0.000+/-0.000 χ²/NDF: 24.0/32
All: -0.000+/-0.000 χ²/NDF: 59.3/67
- sign -0.000+/-0.000 χ²/NDF: 35.0/34


asym_sam_12345678_avg_eigen_cor_vs_cor_diff_rms vs Slug
×10^−12
60
50
40
30
20
10
100
110
120
130
140
150
160
170
Right In: 0.000+/-0.000 χ²/NDF: 2822278.6/15
Left Out: 0.000+/-0.000 χ²/NDF:1292751.3/16
Right Out: 0.000+/-0.000 χ²/NDF: 2440768.5/18
Left In: 0.000+/-0.000 χ²/NDF:1178909.9/15
+ sign 0.000+/-0.000 χ²/NDF: 5684640.4/32
All: 0.000+/-0.000 χ²/NDF: 11420244.8/67
- sign 0.000+/-0.000 χ²/NDF: 5648779.3/34

# reg_asym_sam1_diff_bpm1X_slope vs Slug




Right In: -3.077+/-0.135 $\chi^2$/NDF: 133.8/15

Left Out: -7.390+/-0.092 $\chi^2$/NDF:466.2/16

Right Out: -3.687+/-0.140 $\chi^2$/NDF: 534.8/18

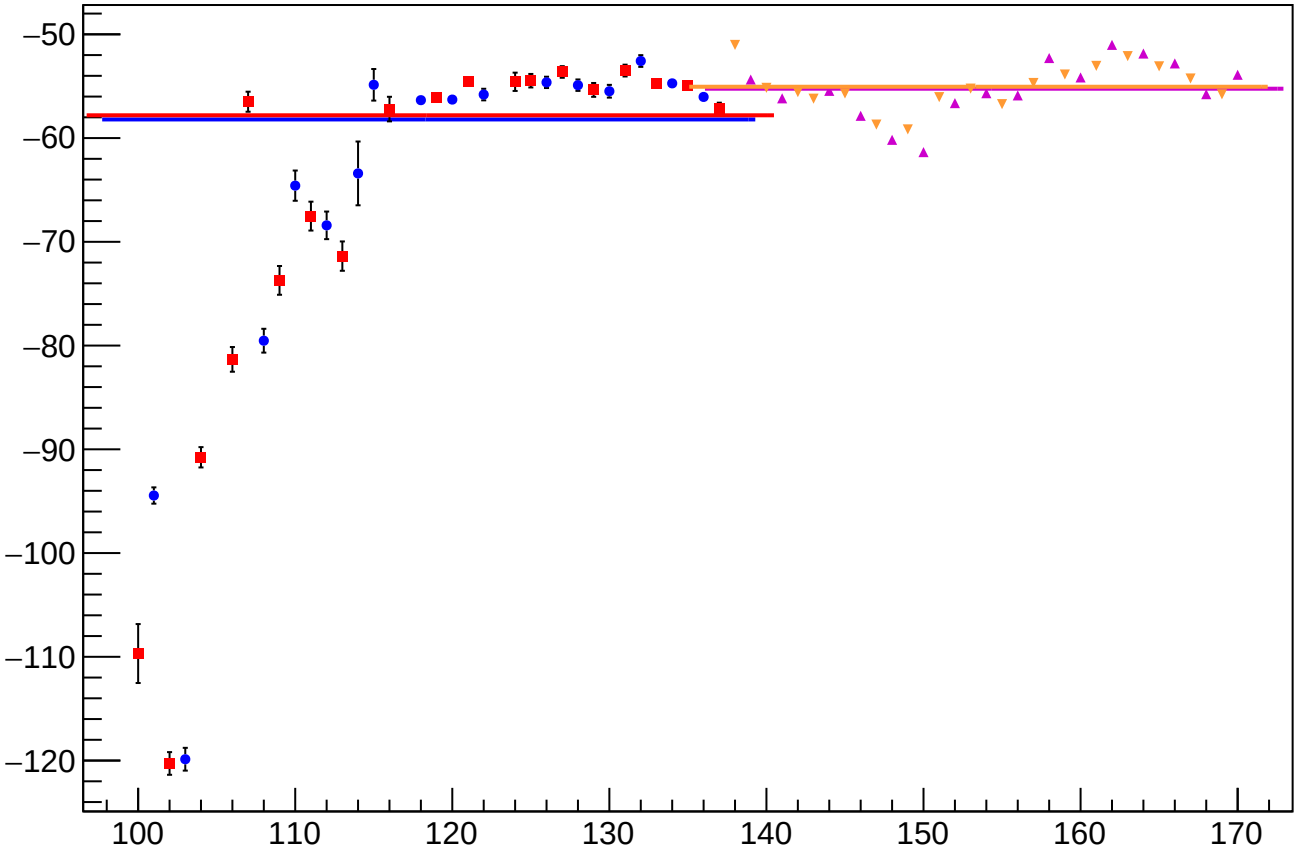
Left In: -6.864+/-0.092 $\chi^2$/NDF:706.7/15

+ sign -6.019+/-0.076 $\chi^2$/NDF: 1293.9/32

All: -5.961+/-0.054 $\chi^2$/NDF: 2894.6/67

- sign -5.901+/-0.077 $\chi^2$/NDF: 1599.5/34

# reg_asym_sam1_diff_bpm4aY_slope vs Slug




Right In: -58.204+/-0.136 $\chi^2$/NDF: 6126.9/15

Left Out: -55.052+/-0.068 $\chi^2$/NDF:938.7/16

Right Out: -57.804+/-0.138 $\chi^2$/NDF: 5792.7/18

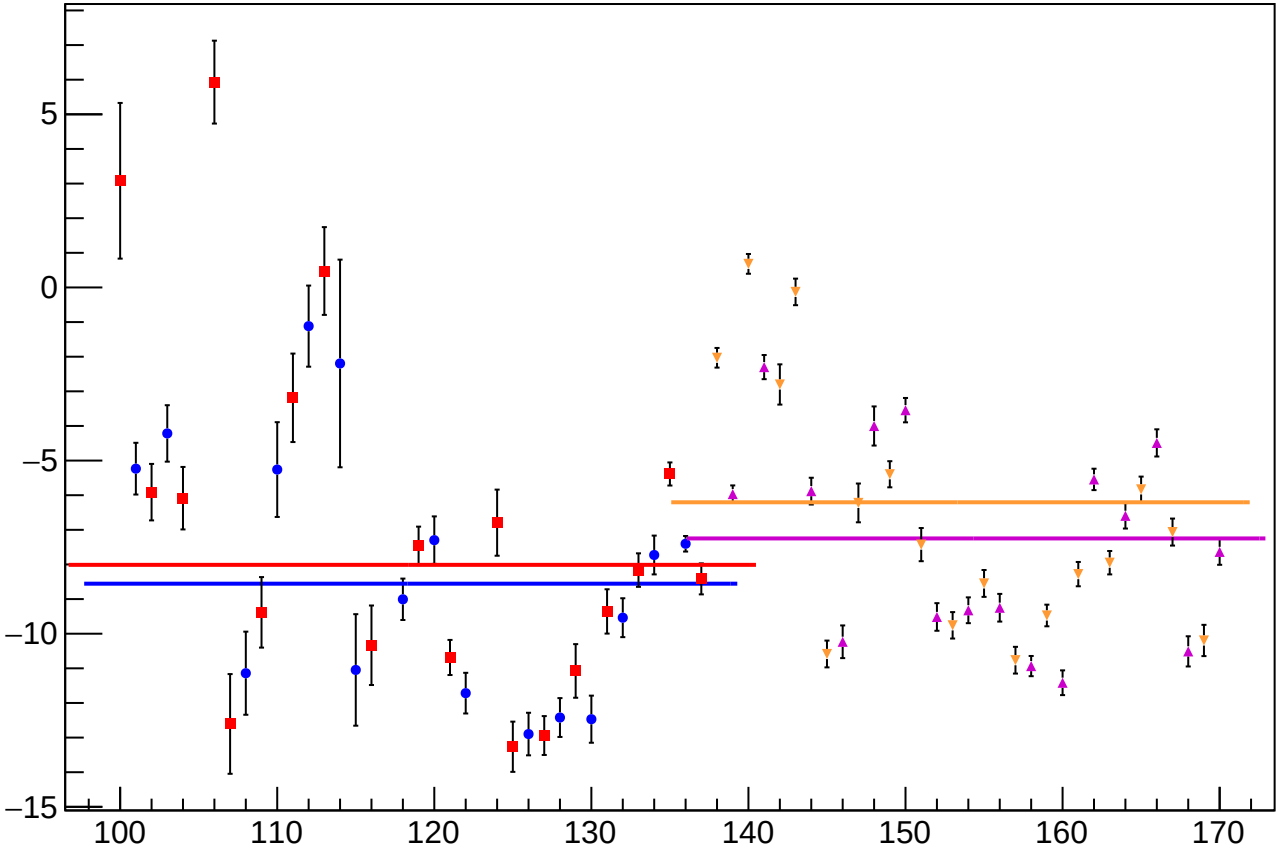
Left In: -55.242+/-0.070 $\chi^2$/NDF:1682.9/15

+ sign -55.684+/-0.061 $\chi^2$/NDF: 7498.0/32

All: -55.722+/-0.044 $\chi^2$/NDF: 15247.1/67

- sign -55.762+/-0.062 $\chi^2$/NDF: 7748.3/34

# reg_asym_sam1_diff_bpm4eX_slope vs Slug




Right In: -8.555+/-0.145 $\chi^2$/NDF: 300.7/15

Left Out: -6.204+/-0.091 $\chi^2$/NDF:1739.8/16

Right Out: -8.011+/-0.153 $\chi^2$/NDF: 489.3/18

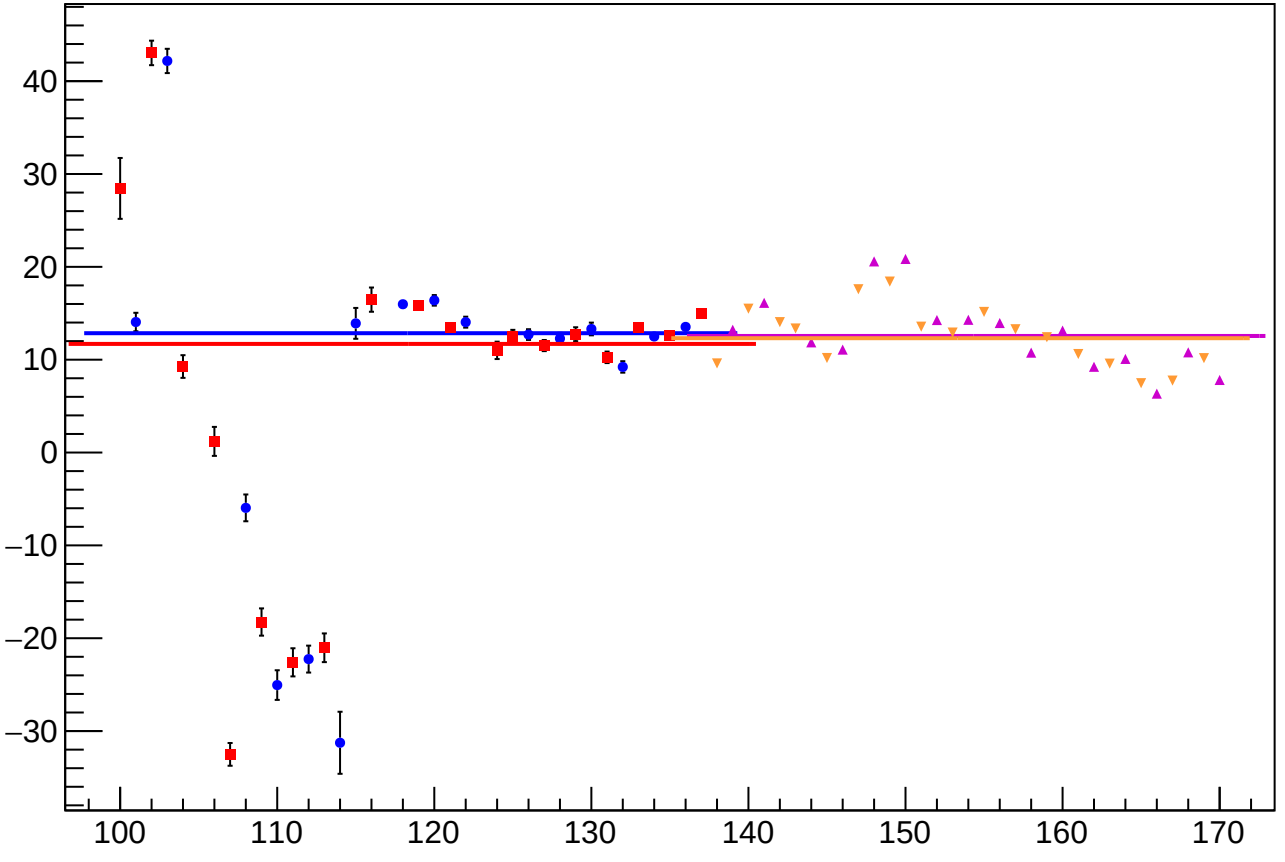
Left In: -7.249+/-0.090 $\chi^2$/NDF:947.7/15

+ sign -6.866+/-0.077 $\chi^2$/NDF: 2230.1/32

All: -7.152+/-0.055 $\chi^2$/NDF: 3713.7/67

- sign -7.446+/-0.078 $\chi^2$/NDF: 1455.5/34

# reg_asym_sam1_diff_bpm4eY_slope vs Slug




Right In: 12.853+/-0.150 $\chi^2$/NDF: 2128.4/15

Left Out: 12.314+/-0.077 $\chi^2$/NDF:1529.0/16

Right Out: 11.699+/-0.155 $\chi^2$/NDF: 3498.8/18

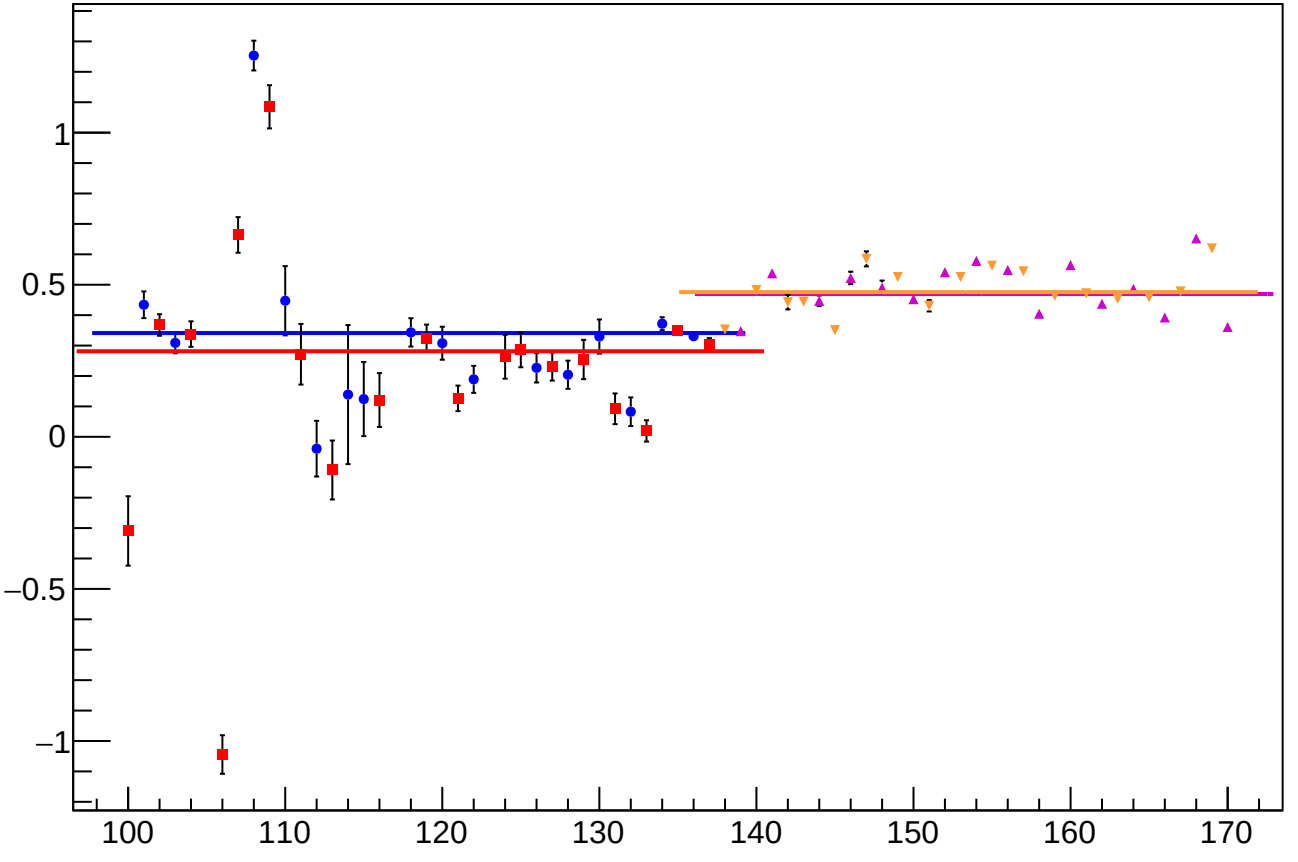
Left In: 12.555+/-0.078 $\chi^2$/NDF:2325.2/15

+ sign 12.426+/-0.068 $\chi^2$/NDF: 3667.6/32

All: 12.404+/-0.049 $\chi^2$/NDF: 9516.2/67

- sign 12.381+/-0.070 $\chi^2$/NDF: 5848.3/34

# reg_asym_sam1_diff_bpm12X_slope vs Slug




Right In: 0.341+/-0.008 $\chi^2$/NDF: 434.8/15

Left Out: 0.476+/-0.003 $\chi^2$/NDF:410.6/16

Right Out: 0.281+/-0.008 $\chi^2$/NDF: 777.6/18

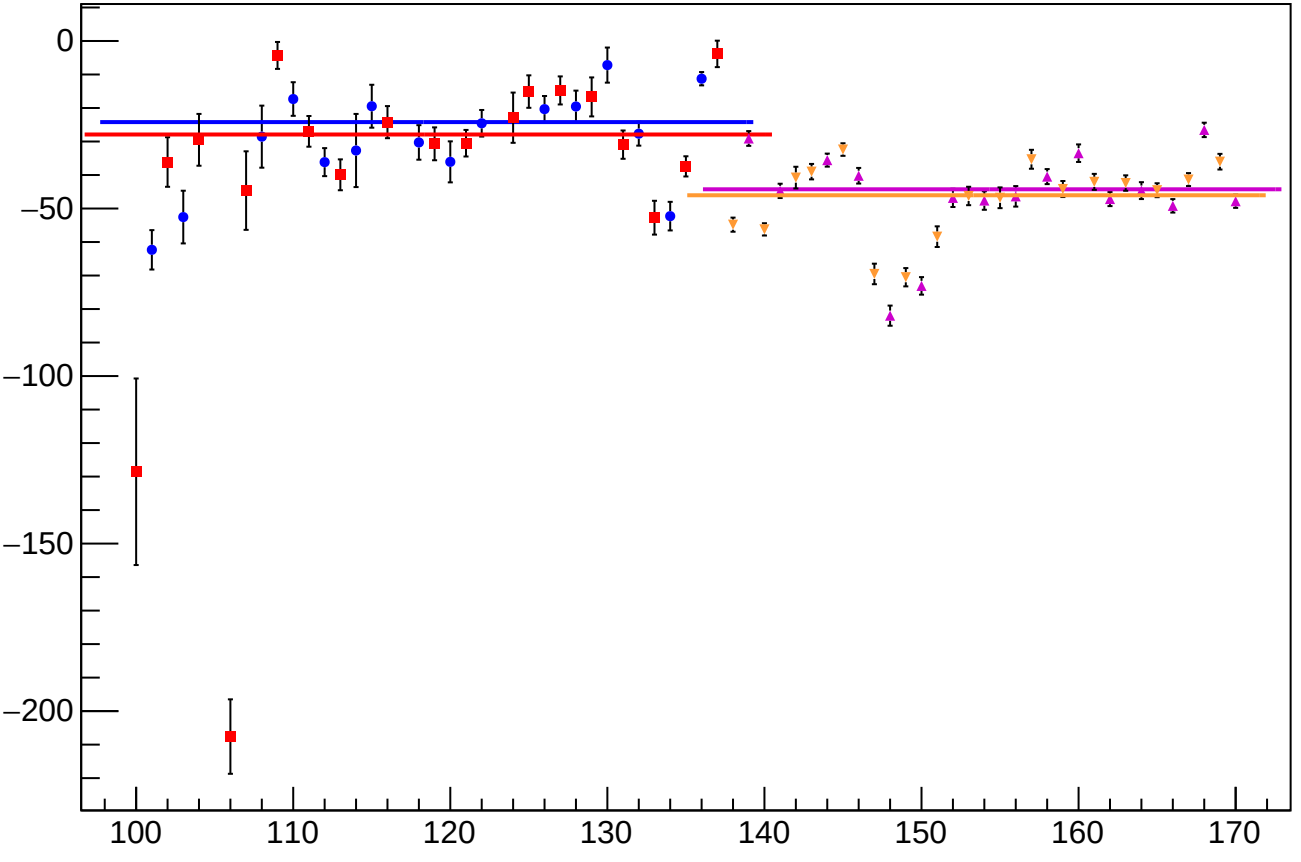
Left In: 0.469+/-0.003 $\chi^2$/NDF:710.3/15

\+ sign 0.455+/-0.003 $\chi^2$/NDF: 1091.7/32

All: 0.450+/-0.002 $\chi^2$/NDF: 3012.7/67

\- sign 0.444+/-0.003 $\chi^2$/NDF: 1915.4/34

# reg_asym_sam2_diff_bpm1X_slope vs Slug




Right In: -24.205+/-1.086 $\chi^2$/NDF: 170.7/15

Left Out: -46.043+/-0.576 $\chi^2$/NDF:313.2/16

Right Out: -27.906+/-1.137 $\chi^2$/NDF: 413.4/18

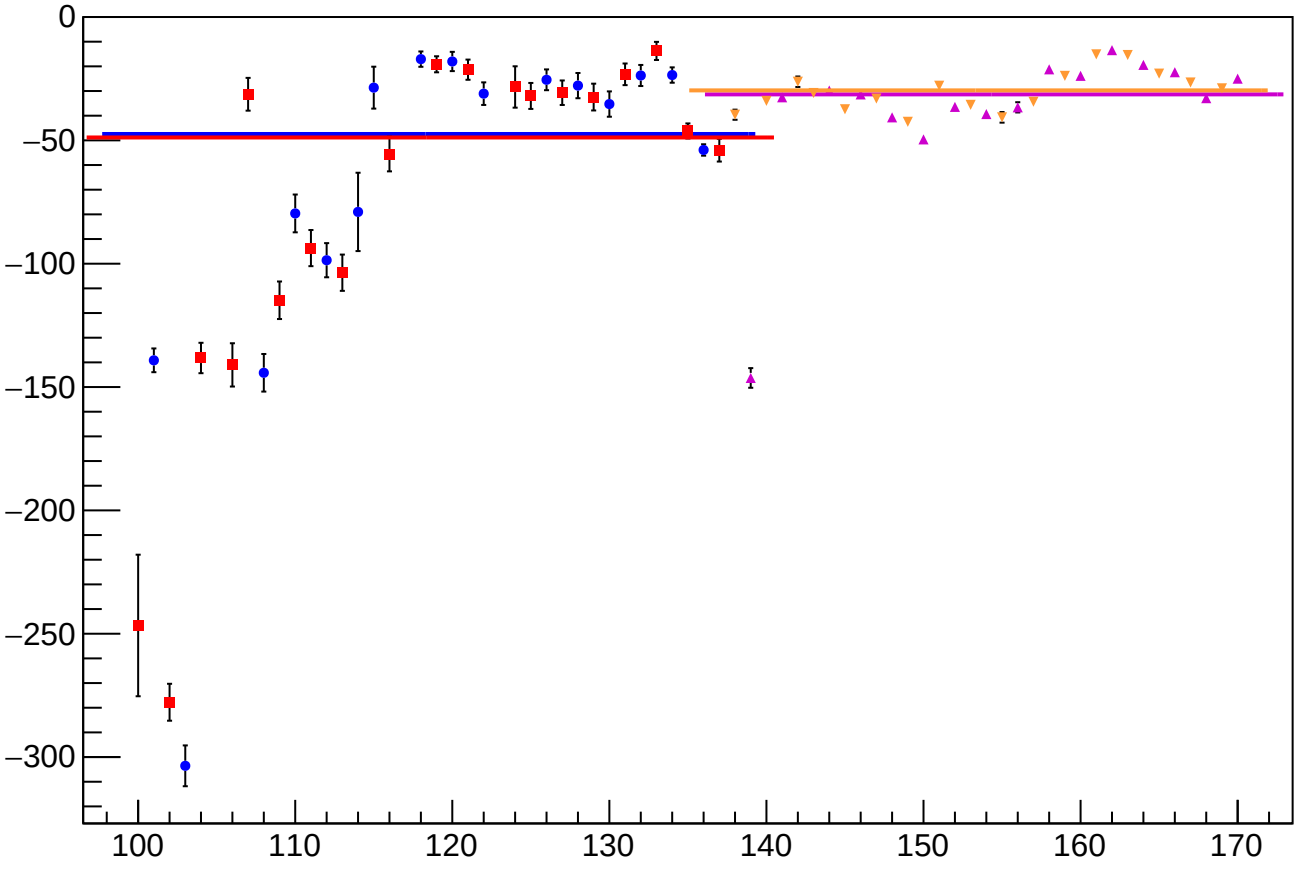
Left In: -44.261+/-0.583 $\chi^2$/NDF:450.9/15

+ sign -41.255+/-0.509 $\chi^2$/NDF: 799.5/32

All: -41.061+/-0.363 $\chi^2$/NDF: 1827.9/67

- sign -40.859+/-0.519 $\chi^2$/NDF: 1028.1/34

# reg_asym_sam2_diff_bpm4aY_slope vs Slug




Right In: -47.421+/-1.101 $\chi^2$/NDF: 1873.5/15

Left Out: -29.742+/-0.410 $\chi^2$/NDF:355.7/16

Right Out: -48.831+/-1.182 $\chi^2$/NDF: 1774.6/18

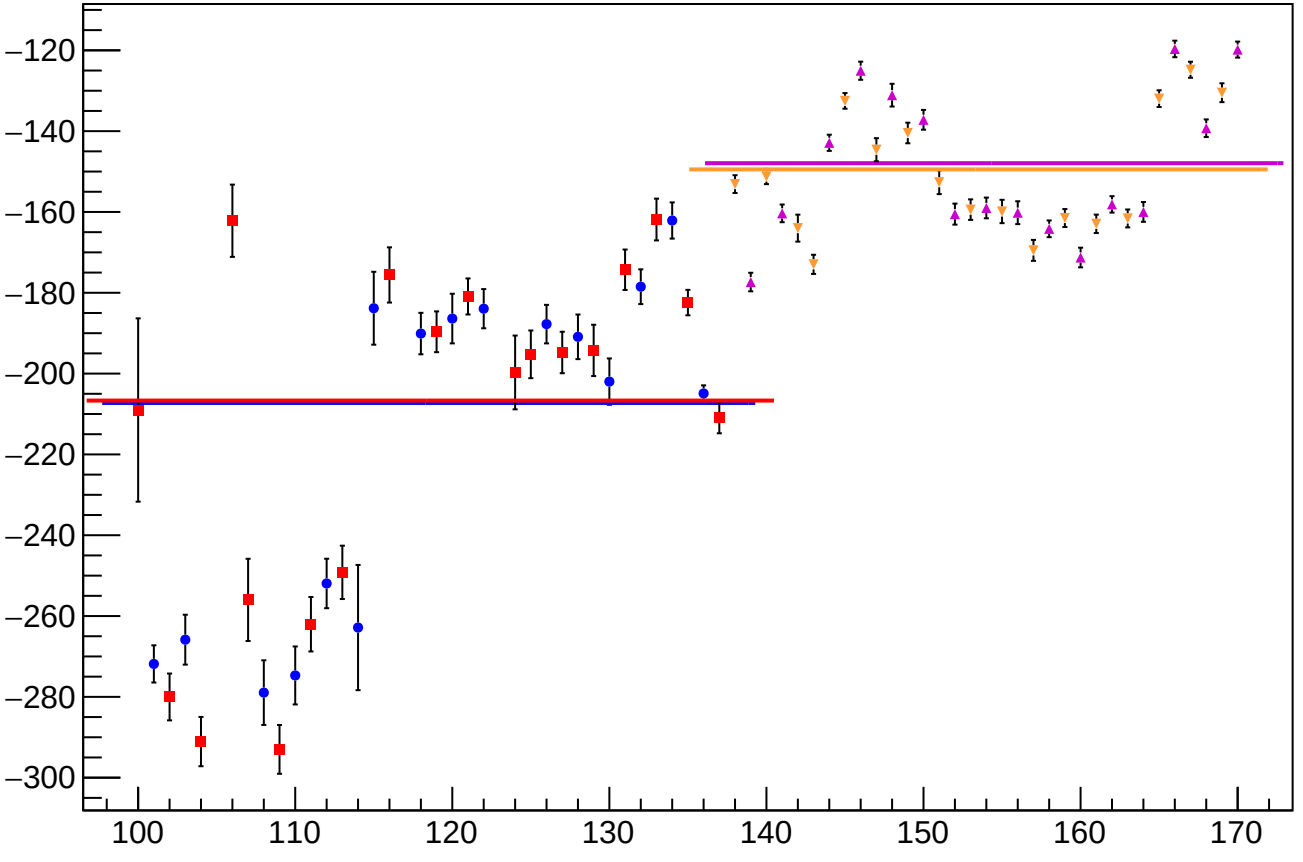
Left In: -31.360+/-0.418 $\chi^2$/NDF:1289.1/15

+ sign -31.897+/-0.384 $\chi^2$/NDF: 2455.6/32

All: -32.582+/-0.275 $\chi^2$/NDF: 5719.9/67

- sign -33.304+/-0.394 $\chi^2$/NDF: 3257.7/34

# reg_asym_sam2_diff_bpm4eX_slope vs Slug




Right In: -207.266+/-1.178 $\chi^2$/NDF: 748.5/15

Left Out: -149.470+/-0.567 $\chi^2$/NDF:689.3/16

Right Out: -206.673+/-1.279 $\chi^2$/NDF: 969.4/18

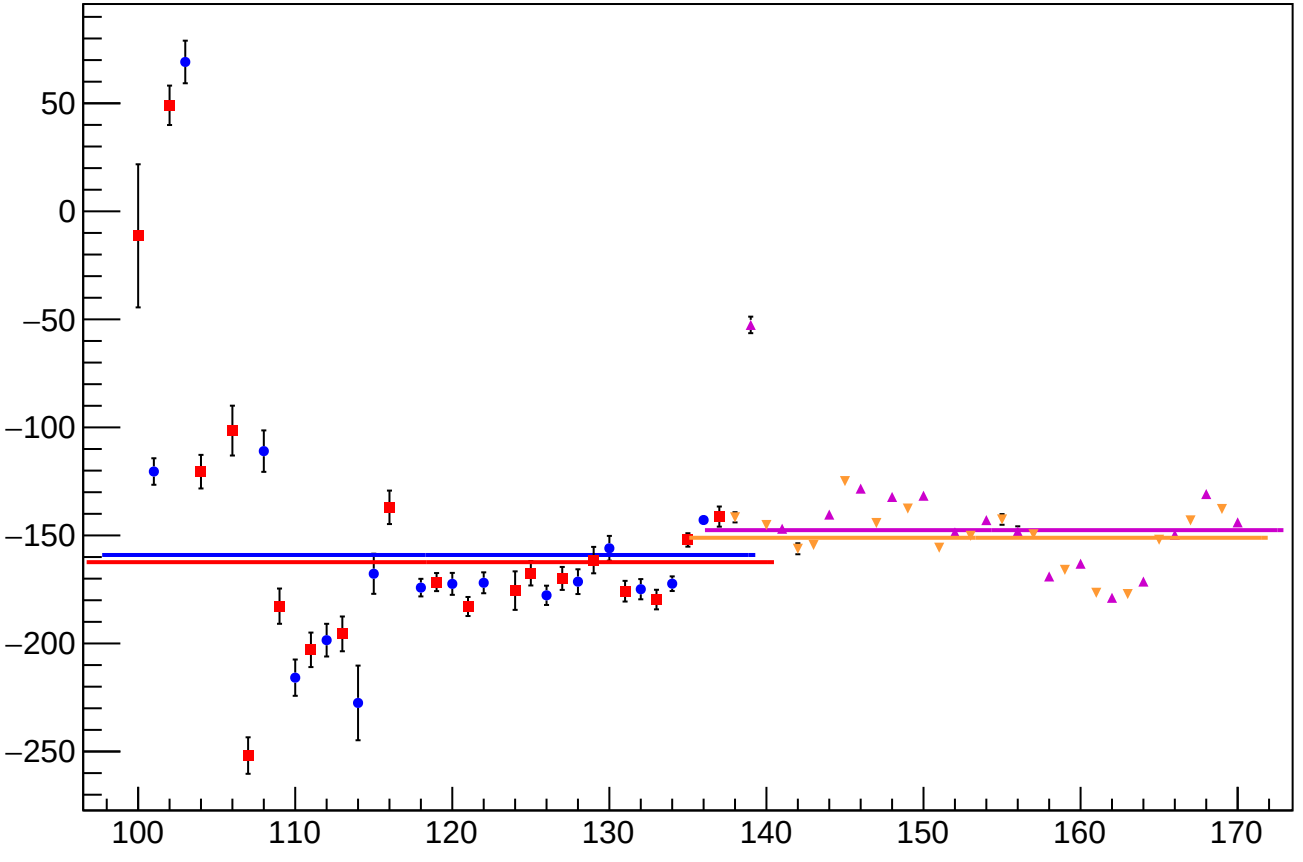
Left In: -147.926+/-0.570 $\chi^2$/NDF:1033.4/15

+ sign -160.336+/-0.511 $\chi^2$/NDF: 3391.3/32

All: -159.019+/-0.365 $\chi^2$/NDF: 7166.9/67

- sign -157.651+/-0.521 $\chi^2$/NDF: 3762.1/34

# reg_asym_sam2_diff_bpm4eY_slope vs Slug




Right In: -159.048+/-1.225 $\chi^2$/NDF: 815.8/15

Left Out: -151.084+/-0.470 $\chi^2$/NDF:933.7/16

Right Out: -162.370+/-1.324 $\chi^2$/NDF: 872.6/18

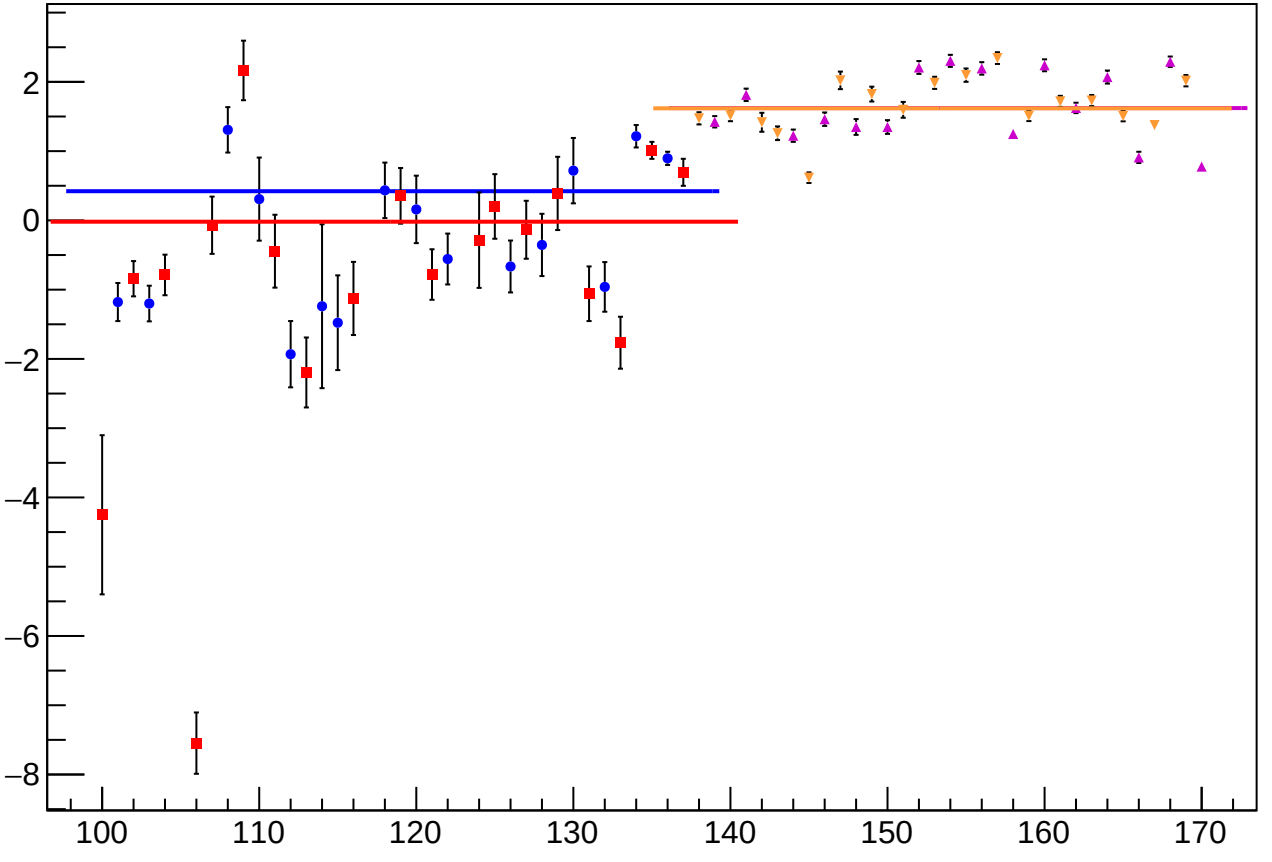
Left In: -147.554+/-0.477 $\chi^2$/NDF:1688.6/15

\+ sign -152.105+/-0.439 $\chi^2$/NDF: 1786.2/32

All: -150.714+/-0.314 $\chi^2$/NDF: 4478.8/67

\- sign -149.257+/-0.449 $\chi^2$/NDF: 2672.0/34

# reg_asym_sam2_diff_bpm12X_slope vs Slug




Right In: 0.421+/-0.065 $\chi^2$/NDF: 197.6/15

Left Out: 1.618+/-0.021 $\chi^2$/NDF:362.0/16

Right Out: -0.019+/-0.072 $\chi^2$/NDF: 488.2/18

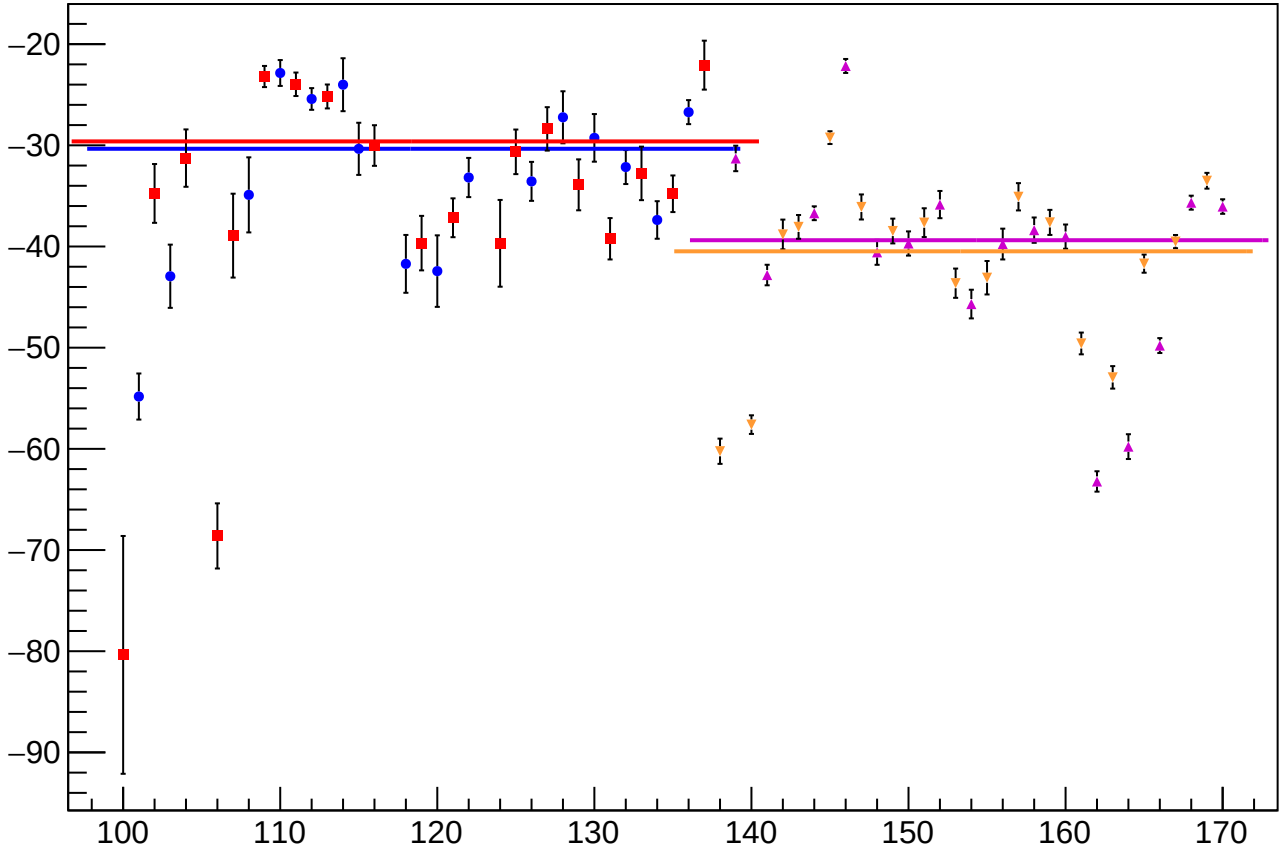
Left In: 1.622+/-0.021 $\chi^2$/NDF:597.4/15

+ sign 1.501+/-0.020 $\chi^2$/NDF: 867.1/32

All: 1.496+/-0.014 $\chi^2$/NDF: 2426.5/67

- sign 1.491+/-0.020 $\chi^2$/NDF: 1559.3/34

# reg_asym_sam3_diff_bpm1X_slope vs Slug




Right In: -30.341+/-0.468 $\chi^2$/NDF: 253.6/15

Left Out: -40.476+/-0.248 $\chi^2$/NDF:1247.6/16

Right Out: -29.613+/-0.450 $\chi^2$/NDF: 329.2/18

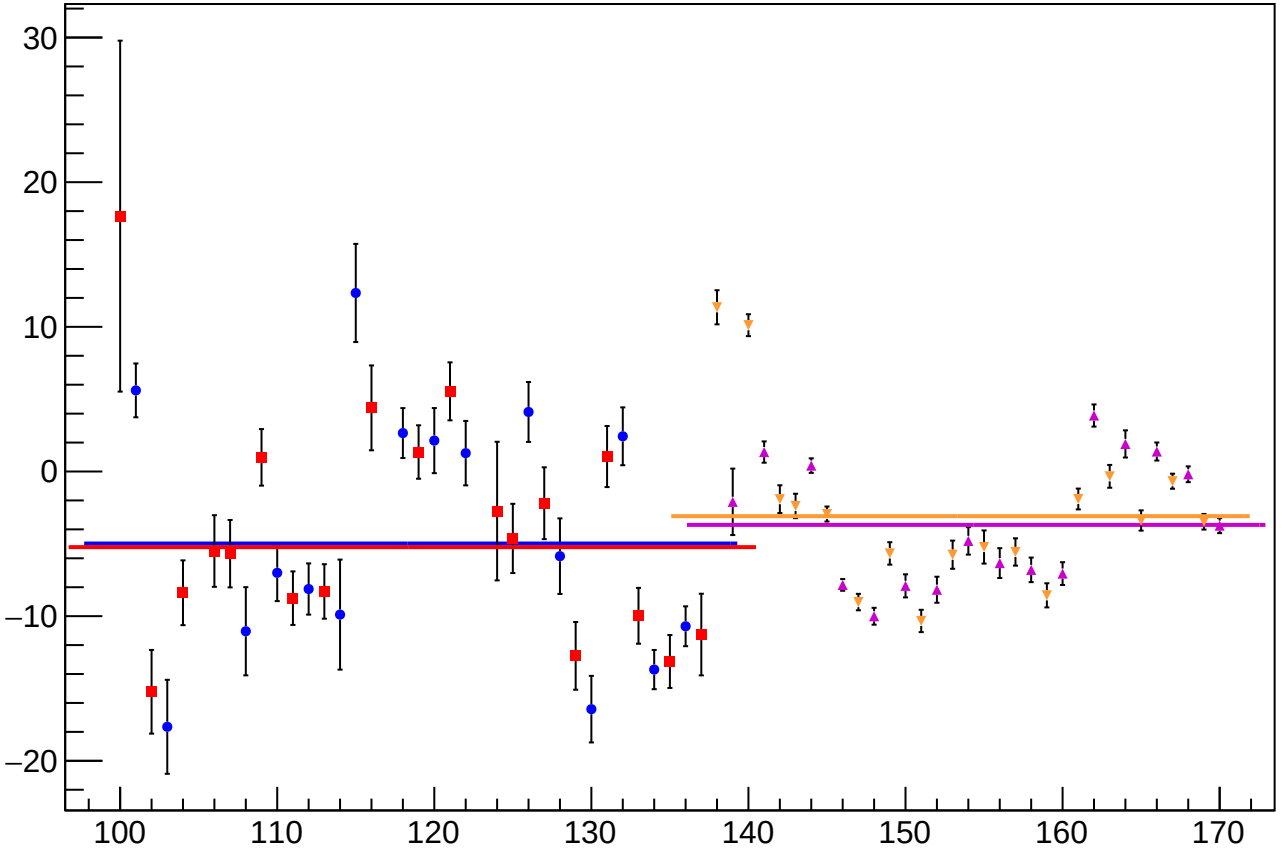
Left In: -39.379+/-0.239 $\chi^2$/NDF:1803.7/15

+ sign -38.254+/-0.219 $\chi^2$/NDF: 1867.6/32

All: -37.726+/-0.152 $\chi^2$/NDF: 4378.6/67

- sign -37.235+/-0.211 $\chi^2$/NDF: 2499.7/34

# reg_asym_sam3_diff_bpm4aY_slope vs Slug




Right In: -4.980+/-0.510 $\chi^2$/NDF: 237.3/15

Left Out: -3.087+/-0.176 $\chi^2$/NDF:763.3/16

Right Out: -5.228+/-0.524 $\chi^2$/NDF: 136.5/18

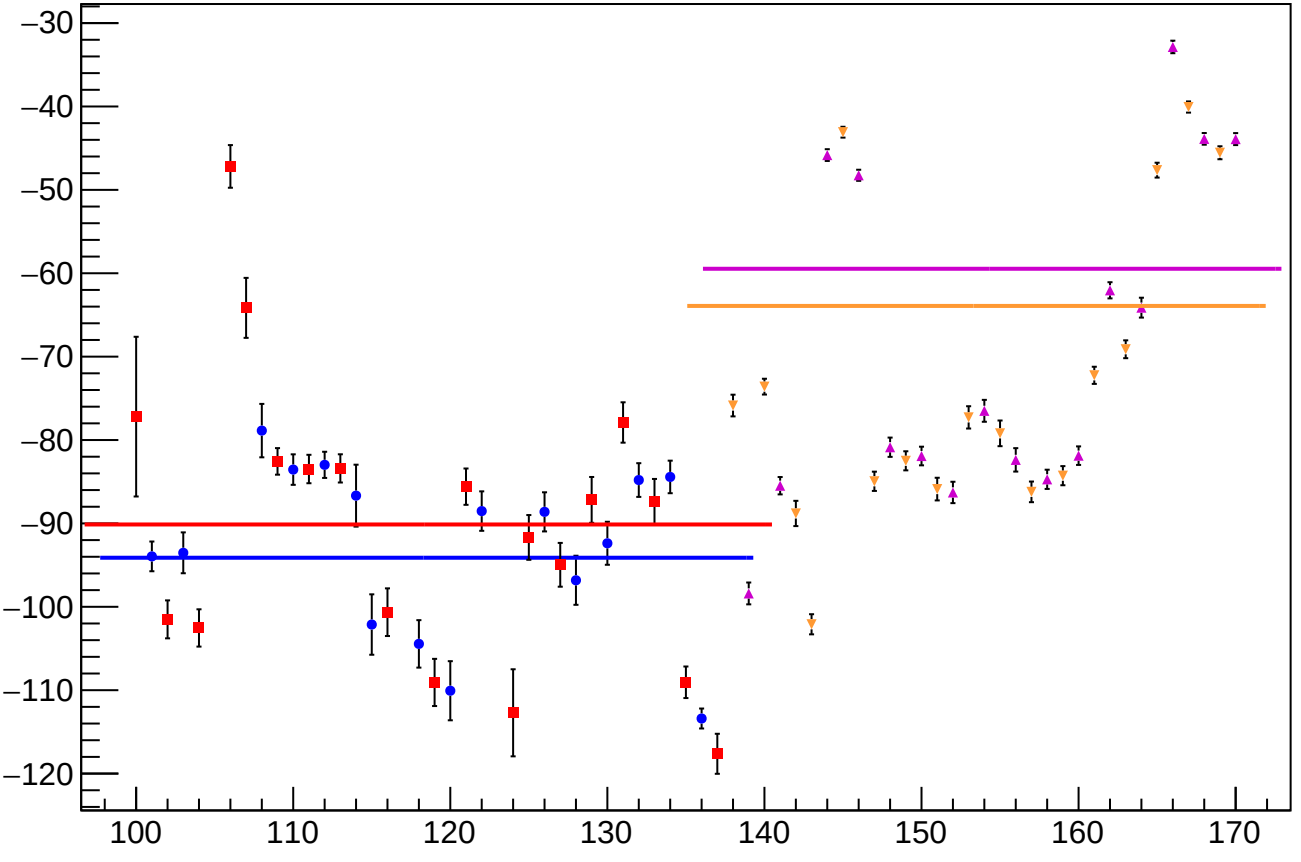
Left In: -3.692+/-0.168 $\chi^2$/NDF:668.4/15

+ sign -3.289+/-0.167 $\chi^2$/NDF: 1012.9/32

All: -3.573+/-0.115 $\chi^2$/NDF: 1831.2/67

- sign -3.835+/-0.160 $\chi^2$/NDF: 812.7/34

# reg_asym_sam3_diff_bpm4eX_slope vs Slug




Right In: -94.115+/-0.537 $\chi^2$/NDF: 466.8/15

Left Out: -63.918+/-0.245 $\chi^2$/NDF:6426.3/16

Right Out: -90.127+/-0.543 $\chi^2$/NDF: 789.3/18

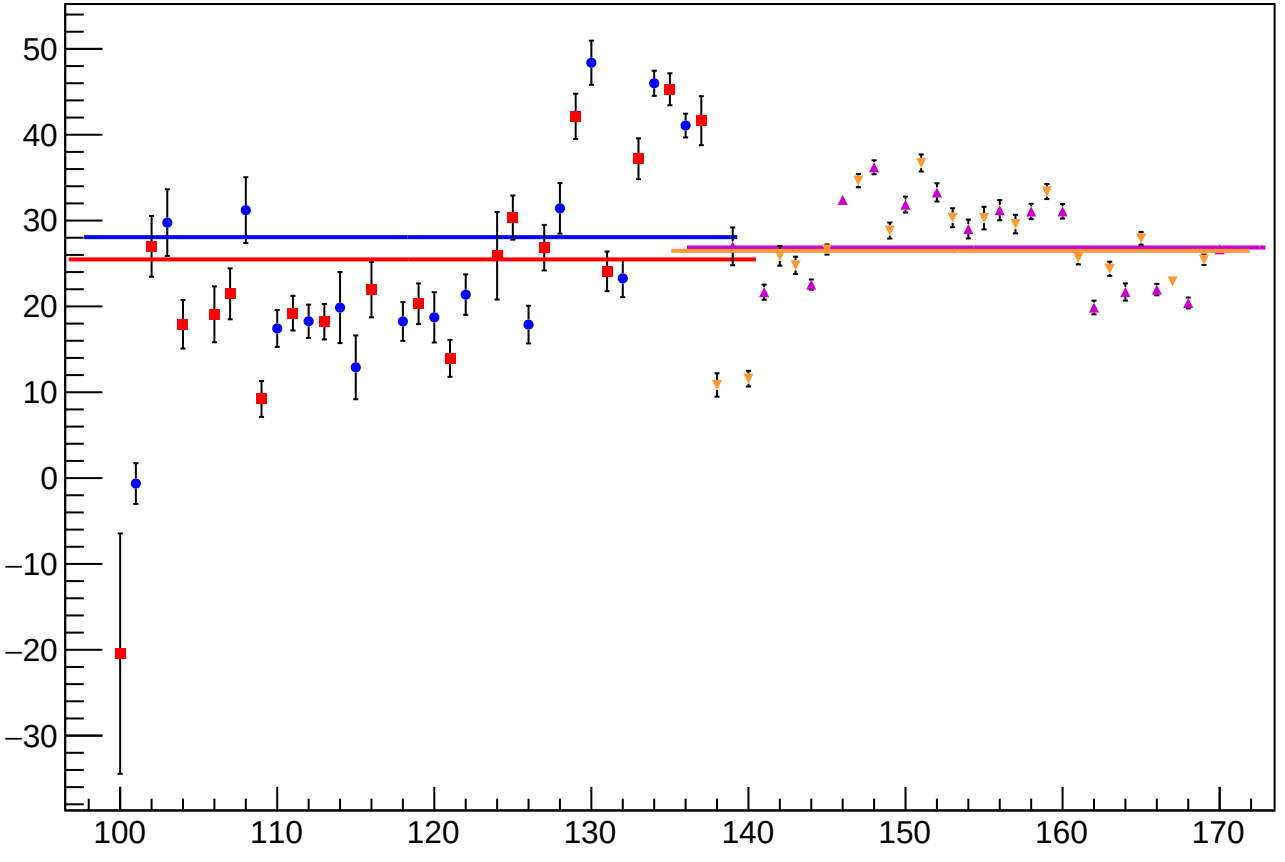
Left In: -59.462+/-0.235 $\chi^2$/NDF:6907.9/15

+ sign -69.137+/-0.223 $\chi^2$/NDF: 9508.5/32

All: -66.638+/-0.155 $\chi^2$/NDF: 20134.3/67

- sign -64.304+/-0.216 $\chi^2$/NDF: 10383.5/34

# reg_asym_sam3_diff_bpm4eY_slope vs Slug




Right In: 28.068+/-0.569 $\chi^2$/NDF: 583.1/15

Left Out: 26.470+/-0.202 $\chi^2$/NDF:767.7/16

Right Out: 25.477+/-0.590 $\chi^2$/NDF: 354.6/18

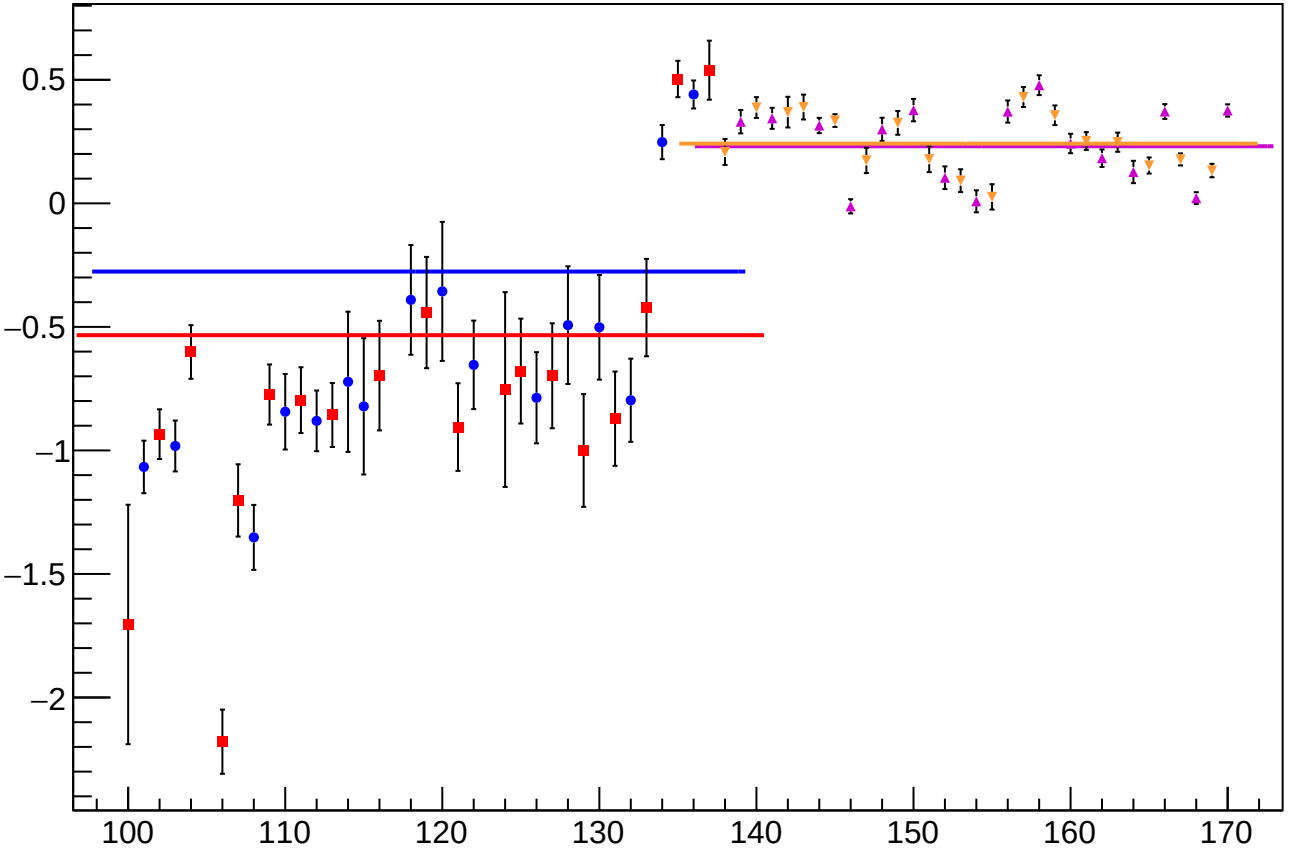
Left In: 26.865+/-0.194 $\chi^2$/NDF:730.4/15

+ sign 26.649+/-0.190 $\chi^2$/NDF: 1357.8/32

All: 26.690+/-0.133 $\chi^2$/NDF: 2447.9/67

- sign 26.729+/-0.185 $\chi^2$/NDF: 1090.1/34

# reg_asym_sam3_diff_bpm12X_slope vs Slug




Right In: -0.276+/-0.031 $\chi^2$/NDF: 455.6/15

Left Out: 0.242+/-0.009 $\chi^2$/NDF:133.1/16

Right Out: -0.534+/-0.033 $\chi^2$/NDF: 510.3/18

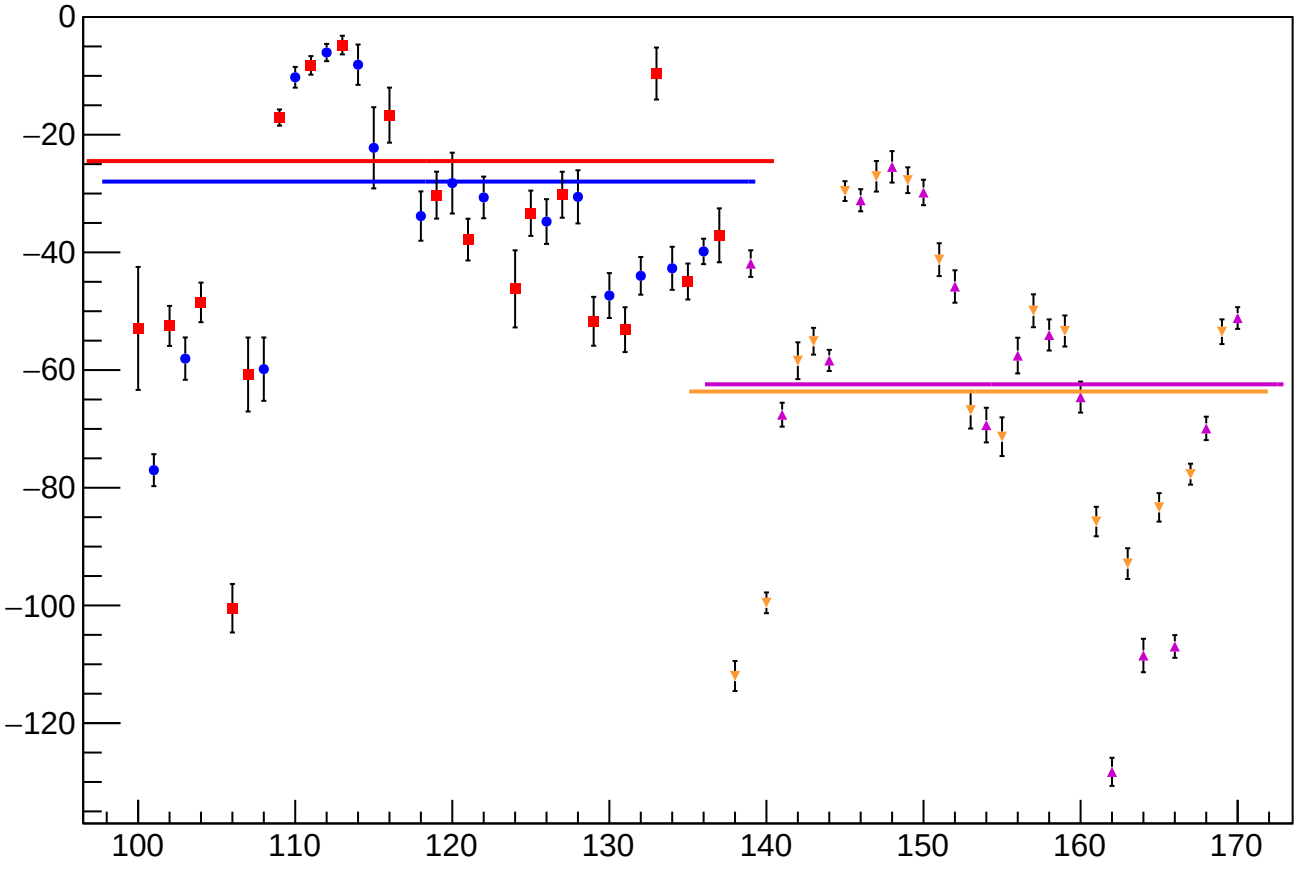
Left In: 0.231+/-0.009 $\chi^2$/NDF:322.3/15

+ sign 0.199+/-0.009 $\chi^2$/NDF: 850.7/32

All: 0.189+/-0.006 $\chi^2$/NDF: 2190.7/67

- sign 0.179+/-0.009 $\chi^2$/NDF: 1337.5/34

# reg_asym_sam4_diff_bpm1X_slope vs Slug




Right In: -27.967+/-0.728 $\chi^2$/NDF: 894.7/15

Left Out: -63.644+/-0.568 $\chi^2$/NDF:2134.7/16

Right Out: -24.485+/-0.663 $\chi^2$/NDF: 989.7/18

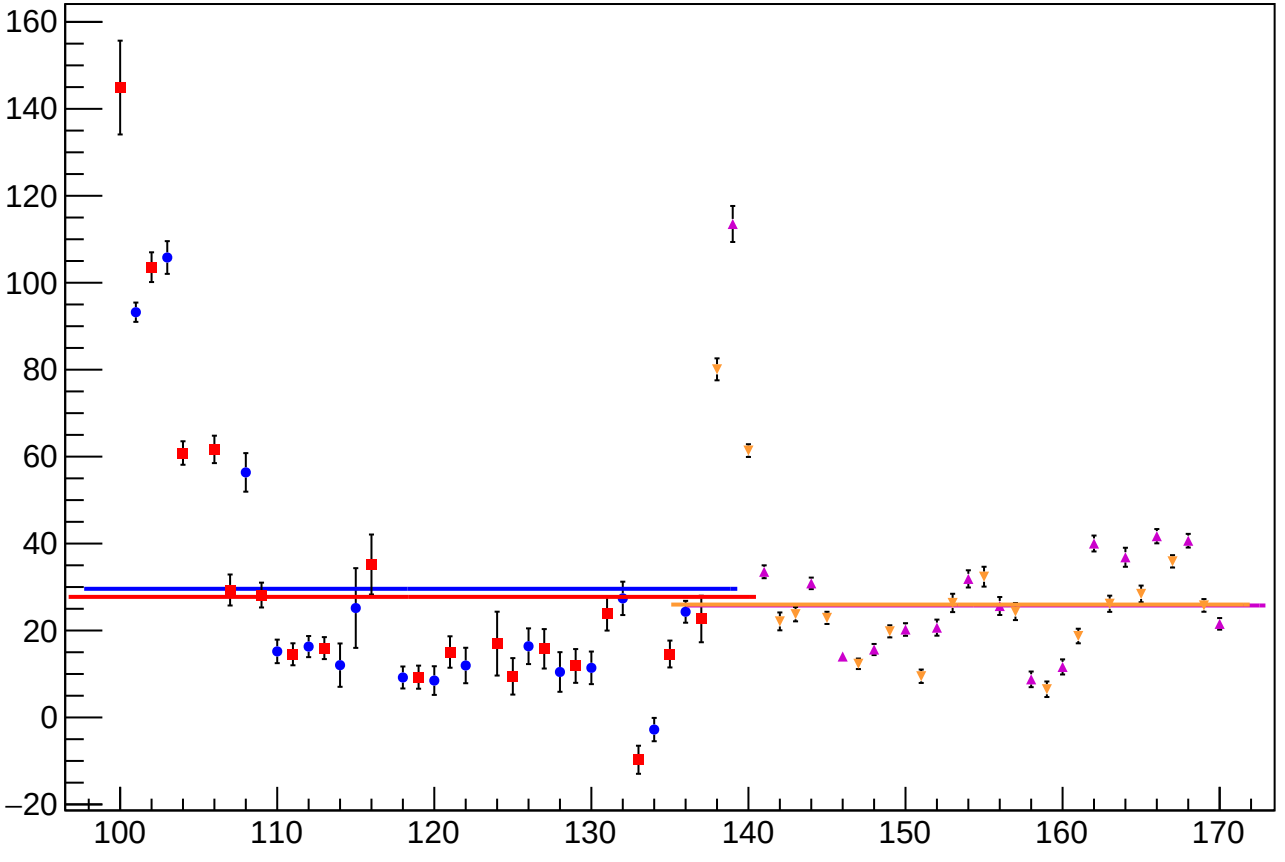
Left In: -62.419+/-0.564 $\chi^2$/NDF:2449.7/15

+ sign -50.127+/-0.448 $\chi^2$/NDF: 4522.7/32

All: -48.228+/-0.310 $\chi^2$/NDF: 9895.6/67

- sign -46.480+/-0.430 $\chi^2$/NDF: 5338.4/34

# reg_asym_sam4_diff_bpm4aY_slope vs Slug




Right In: 29.594+/-0.807 $\chi^2$/NDF: 1665.7/15

Left Out: 25.969+/-0.401 $\chi^2$/NDF:1509.5/16

Right Out: 27.736+/-0.797 $\chi^2$/NDF: 1185.1/18

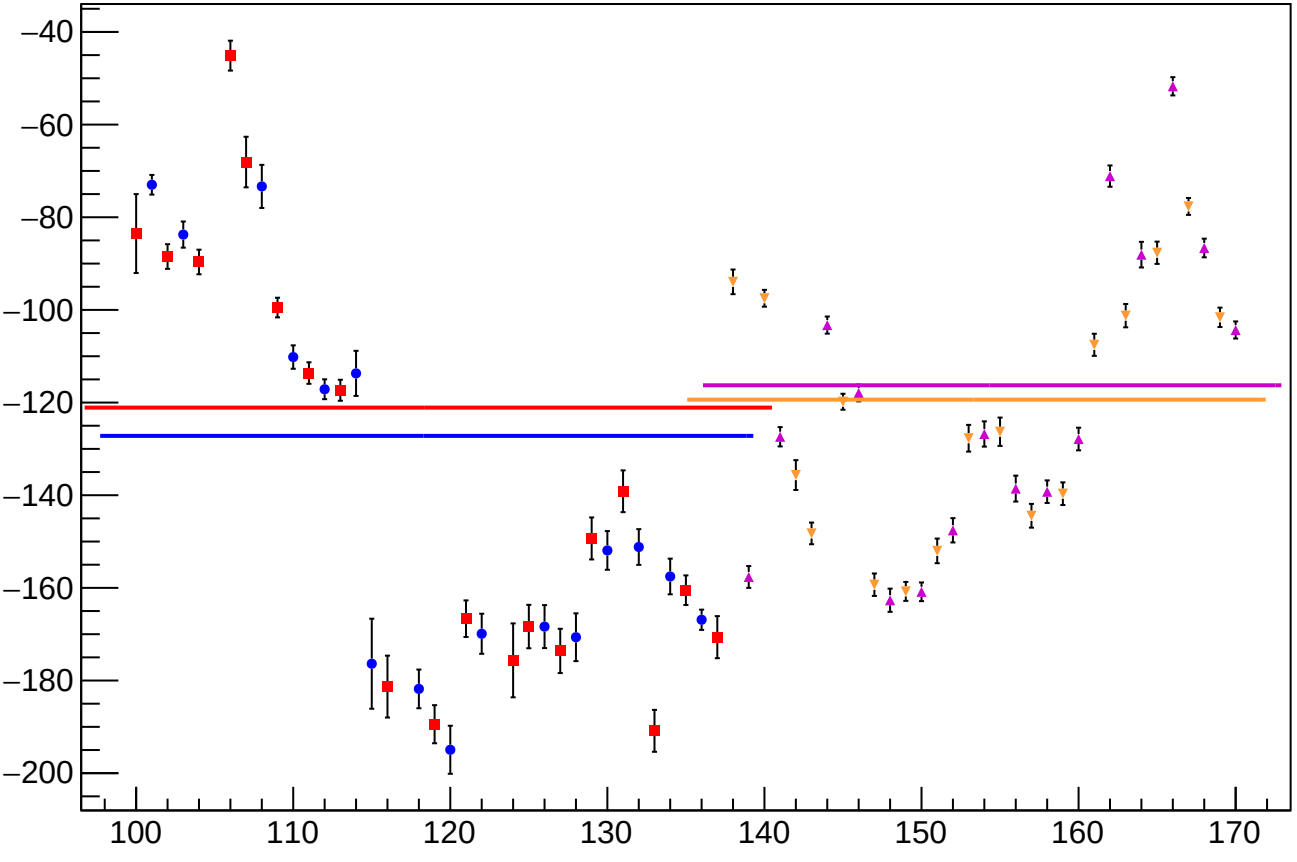
Left In: 25.758+/-0.402 $\chi^2$/NDF:1124.9/15

+ sign 26.686+/-0.359 $\chi^2$/NDF: 3191.4/32

All: 26.422+/-0.254 $\chi^2$/NDF: 5507.4/67

- sign 26.159+/-0.359 $\chi^2$/NDF: 2314.9/34

# reg_asym_sam4_diff_bpm4eX_slope vs Slug




Right In: -127.190+/-0.829 $\chi^2$/NDF: 2178.2/15

Left Out: -119.371+/-0.560 $\chi^2$/NDF:2270.4/16

Right Out: -121.086+/-0.798 $\chi^2$/NDF: 2397.3/18

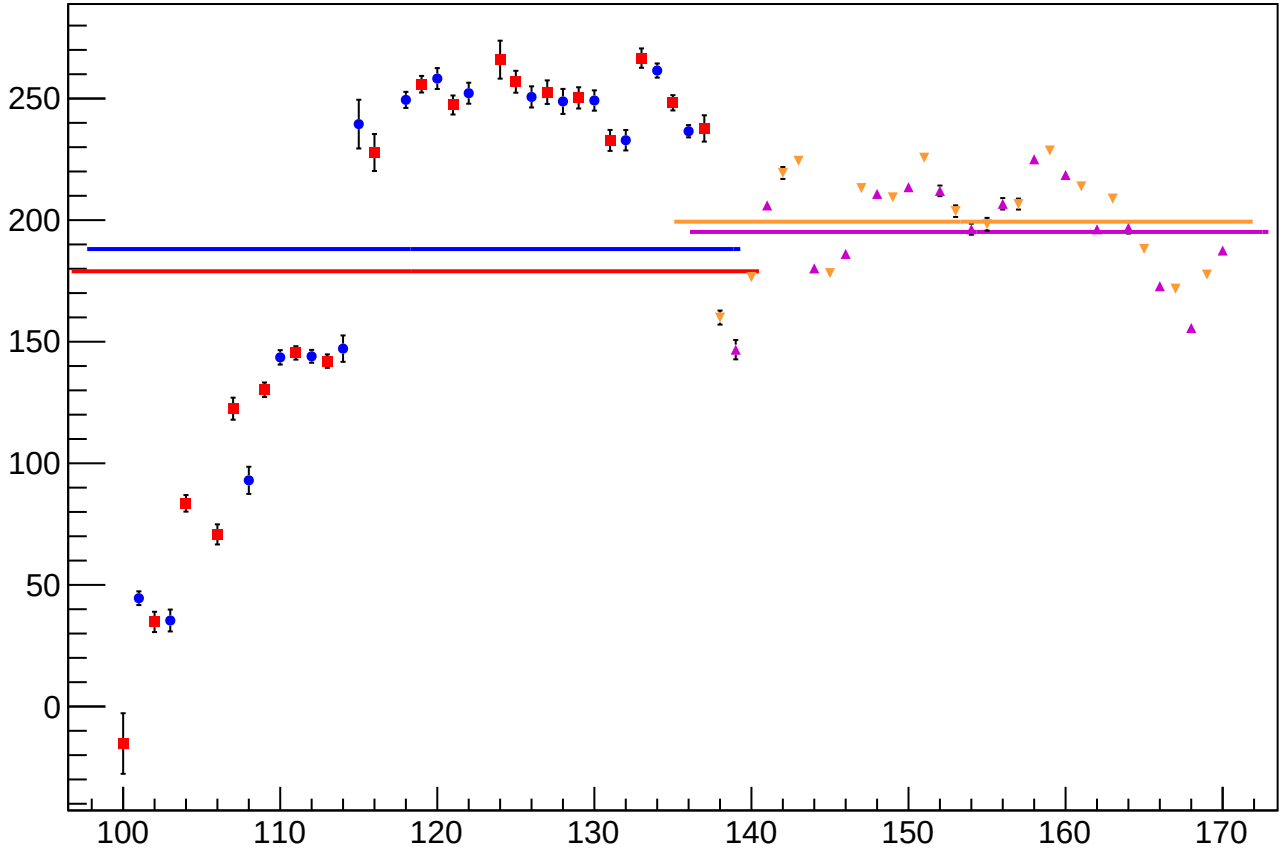
Left In: -116.268+/-0.553 $\chi^2$/NDF:3371.4/15

+ sign -121.817+/-0.464 $\chi^2$/NDF: 4509.7/32

All: -119.783+/-0.325 $\chi^2$/NDF: 10340.7/67

- sign -117.831+/-0.454 $\chi^2$/NDF: 5793.3/34

# reg_asym_sam4_diff_bpm4eY_slope vs Slug




Right In: 188.107+/-0.918 $\chi^2$/NDF: 7118.6/15

Left Out: 199.360+/-0.463 $\chi^2$/NDF:1913.9/16

Right Out: 178.971+/-0.908 $\chi^2$/NDF: 6668.8/18

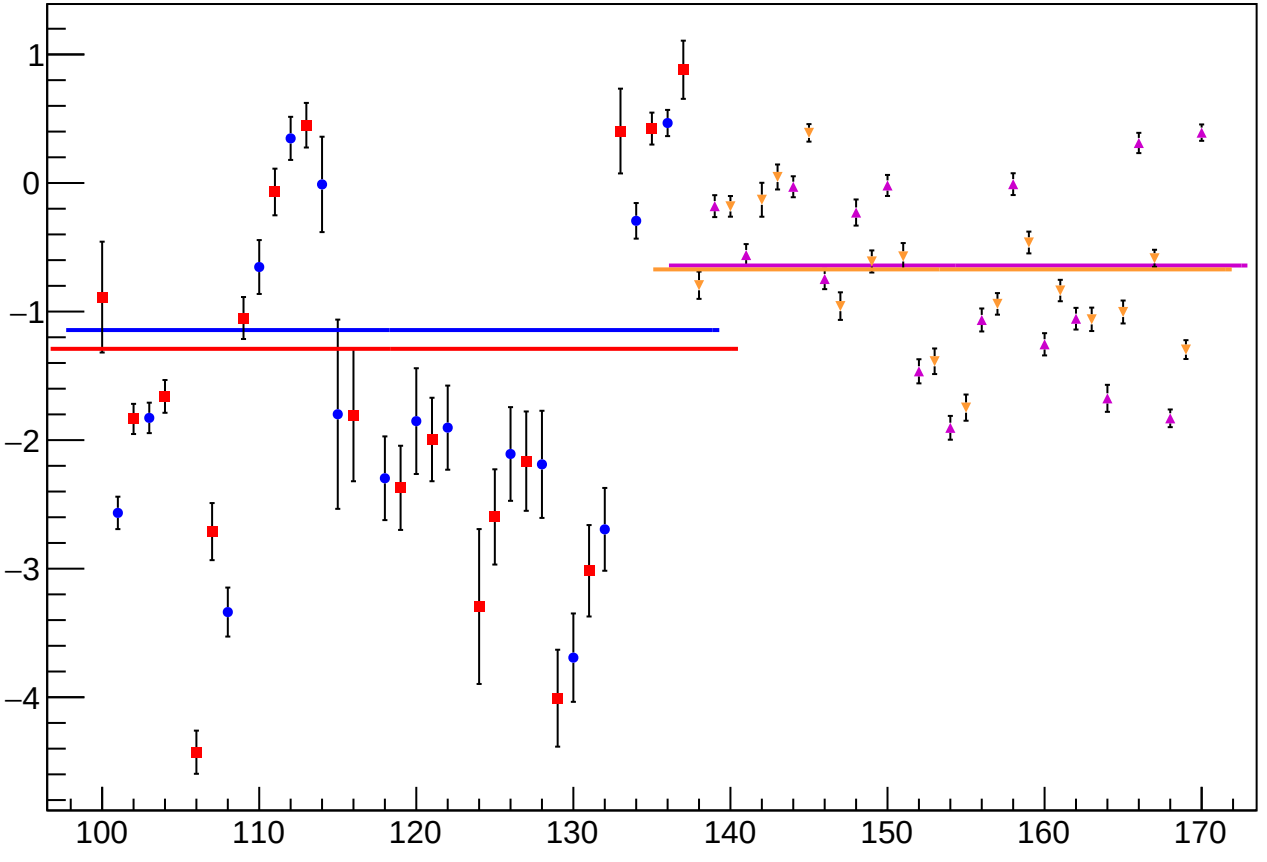
Left In: 195.140+/-0.462 $\chi^2$/NDF:1664.8/15

+ sign 197.075+/-0.414 $\chi^2$/NDF: 9152.3/32

All: 194.432+/-0.292 $\chi^2$/NDF: 17818.9/67

- sign 191.811+/-0.412 $\chi^2$/NDF: 8585.4/34

# reg_asym_sam4_diff_bpm12X_slope vs Slug




Right In: -1.144+/-0.048 $\chi^2$/NDF: 787.4/15

Left Out: -0.672+/-0.021 $\chi^2$/NDF:650.6/16

Right Out: -1.290+/-0.047 $\chi^2$/NDF: 998.3/18

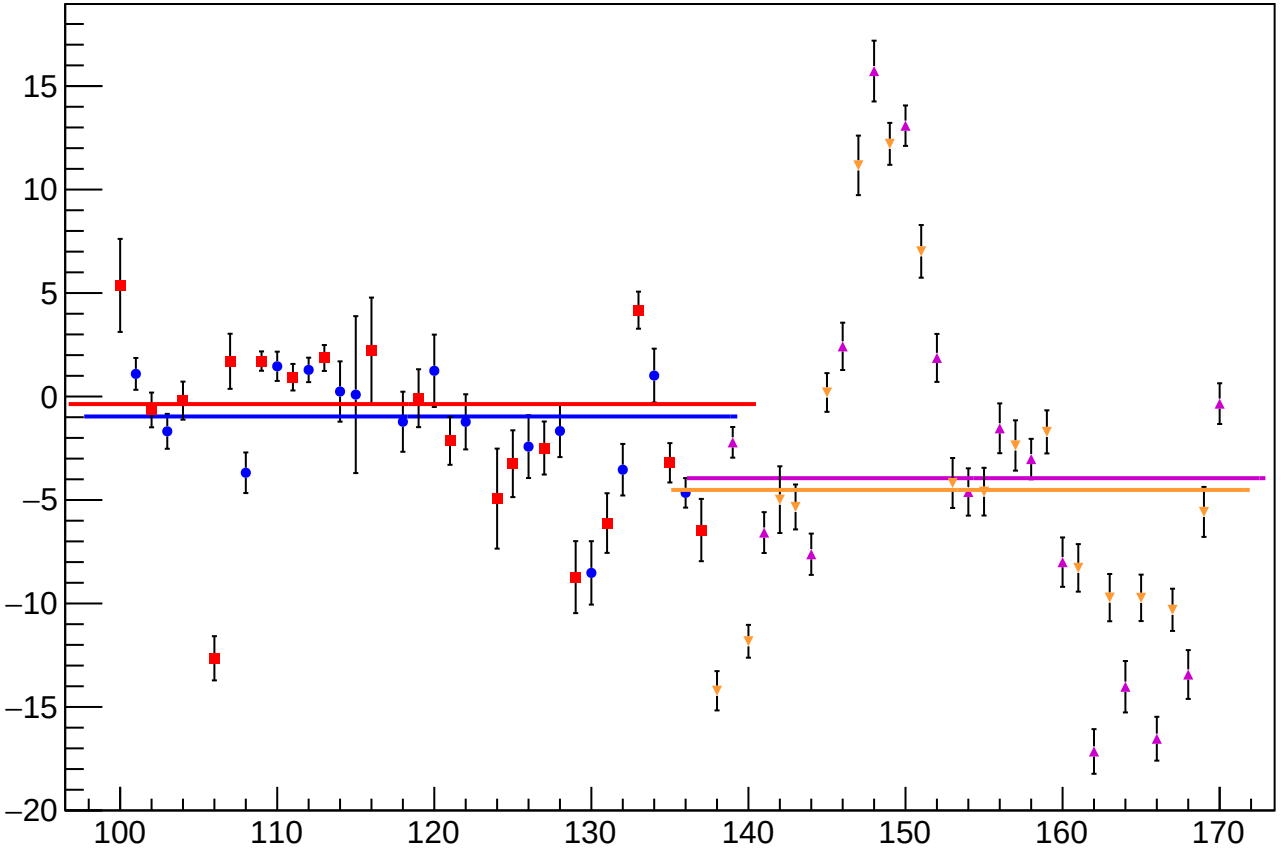
Left In: -0.642+/-0.021 $\chi^2$/NDF:1382.5/15

+ sign -0.749+/-0.019 $\chi^2$/NDF: 1518.8/32

All: -0.748+/-0.014 $\chi^2$/NDF: 4056.1/67

- sign -0.746+/-0.019 $\chi^2$/NDF: 2537.3/34

# reg_asym_sam5_diff_bpm1X_slope vs Slug




Right In: -0.964+/-0.253 $\chi^2$/NDF: 103.2/15

Left Out: -4.513+/-0.266 $\chi^2$/NDF:785.3/16

Right Out: -0.365+/-0.224 $\chi^2$/NDF: 280.6/18

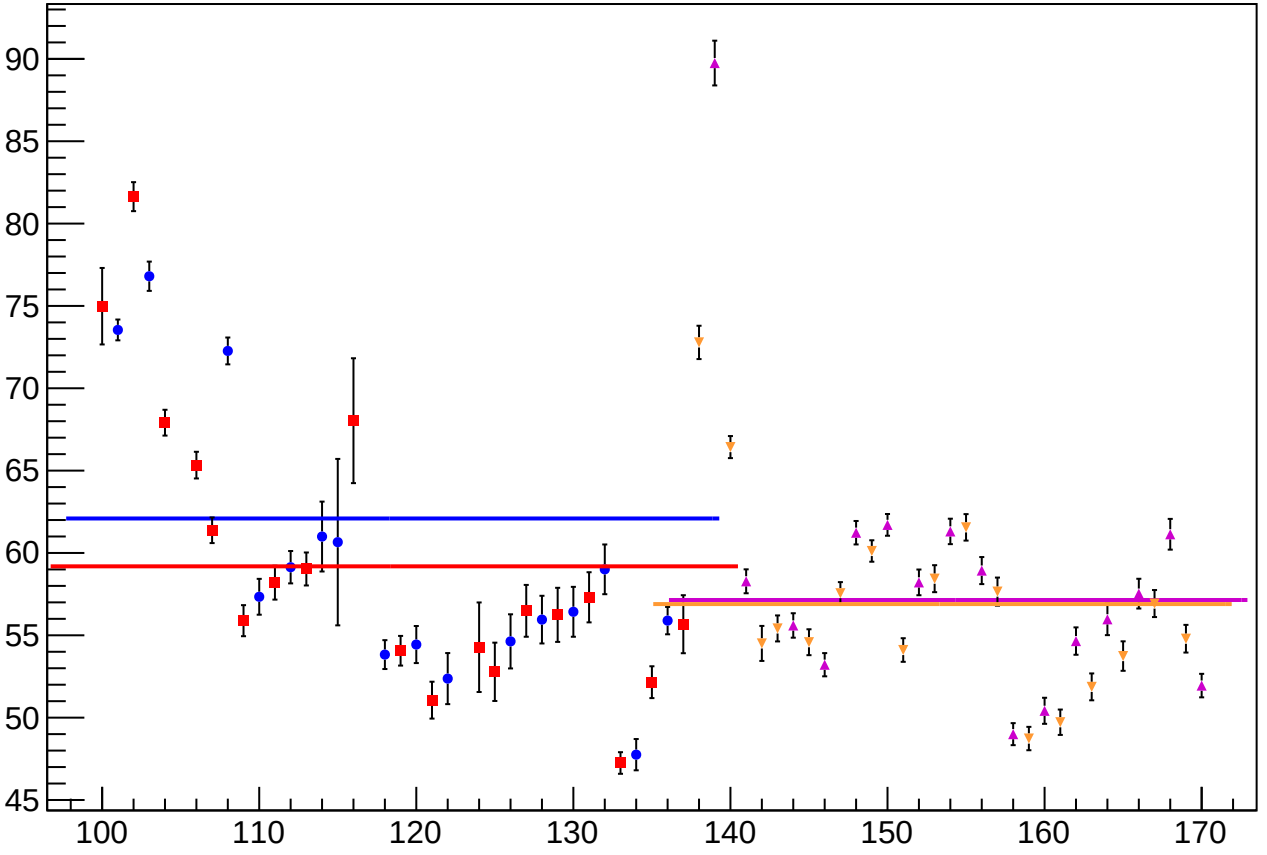
Left In: -3.946+/-0.265 $\chi^2$/NDF:1017.5/15

+ sign -2.653+/-0.183 $\chi^2$/NDF: 982.0/32

All: -2.226+/-0.125 $\chi^2$/NDF: 2396.7/67

- sign -1.855+/-0.171 $\chi^2$/NDF: 1404.6/34

# reg_asym_sam5_diff_bpm4aY_slope vs Slug




Right In: 62.094+/-0.265 $\chi^2$/NDF: 1301.3/15

Left Out: 56.896+/-0.191 $\chi^2$/NDF:820.6/16

Right Out: 59.188+/-0.244 $\chi^2$/NDF: 1402.1/18

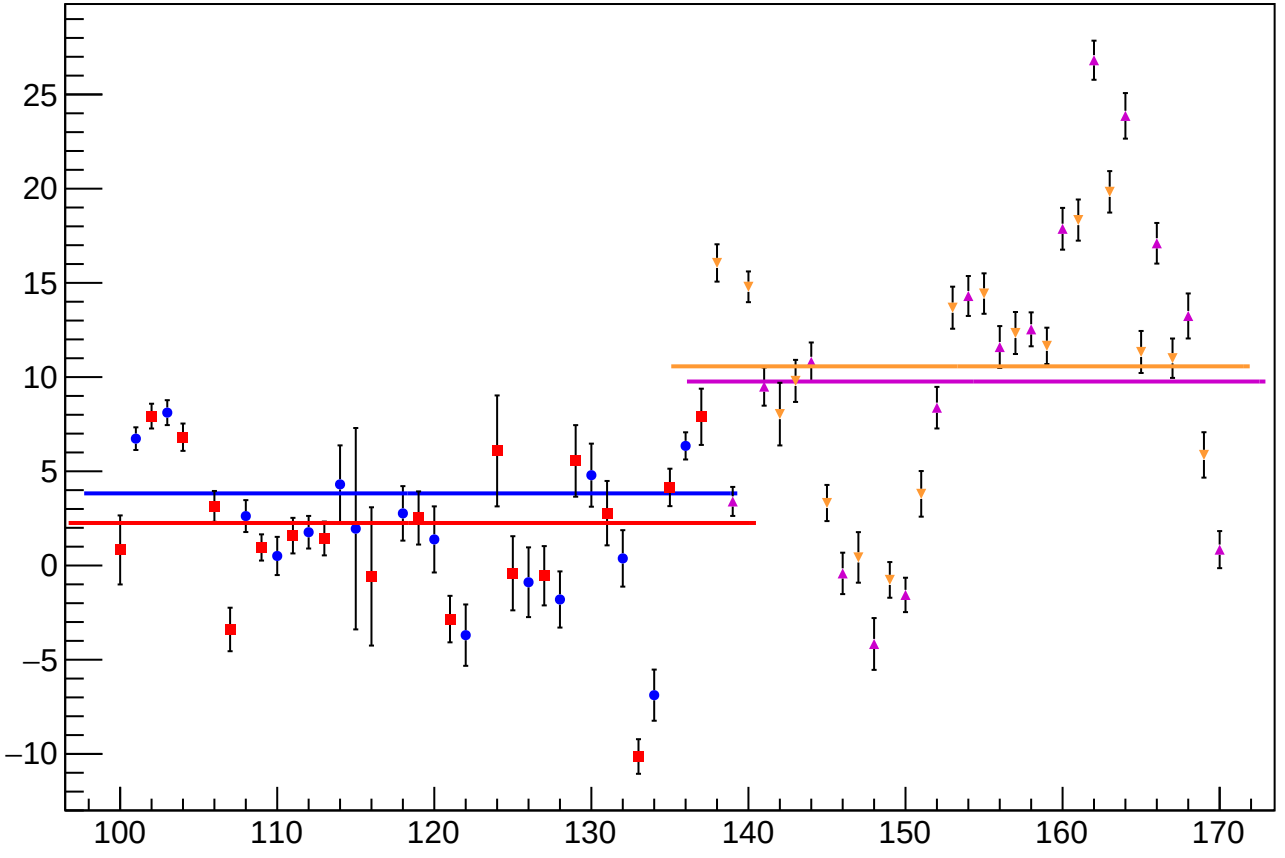
Left In: 57.144+/-0.196 $\chi^2$/NDF:1032.4/15

+ sign 58.664+/-0.155 $\chi^2$/NDF: 2375.0/32

All: 58.300+/-0.109 $\chi^2$/NDF: 4863.1/67

- sign 57.946+/-0.153 $\chi^2$/NDF: 2477.2/34

# reg_asym_sam5_diff_bpm4eX_slope vs Slug




Right In: 3.828+/-0.265 $\chi^2$/NDF: 208.6/15

Left Out: 10.570+/-0.260 $\chi^2$/NDF:510.7/16

Right Out: 2.257+/-0.246 $\chi^2$/NDF: 371.9/18

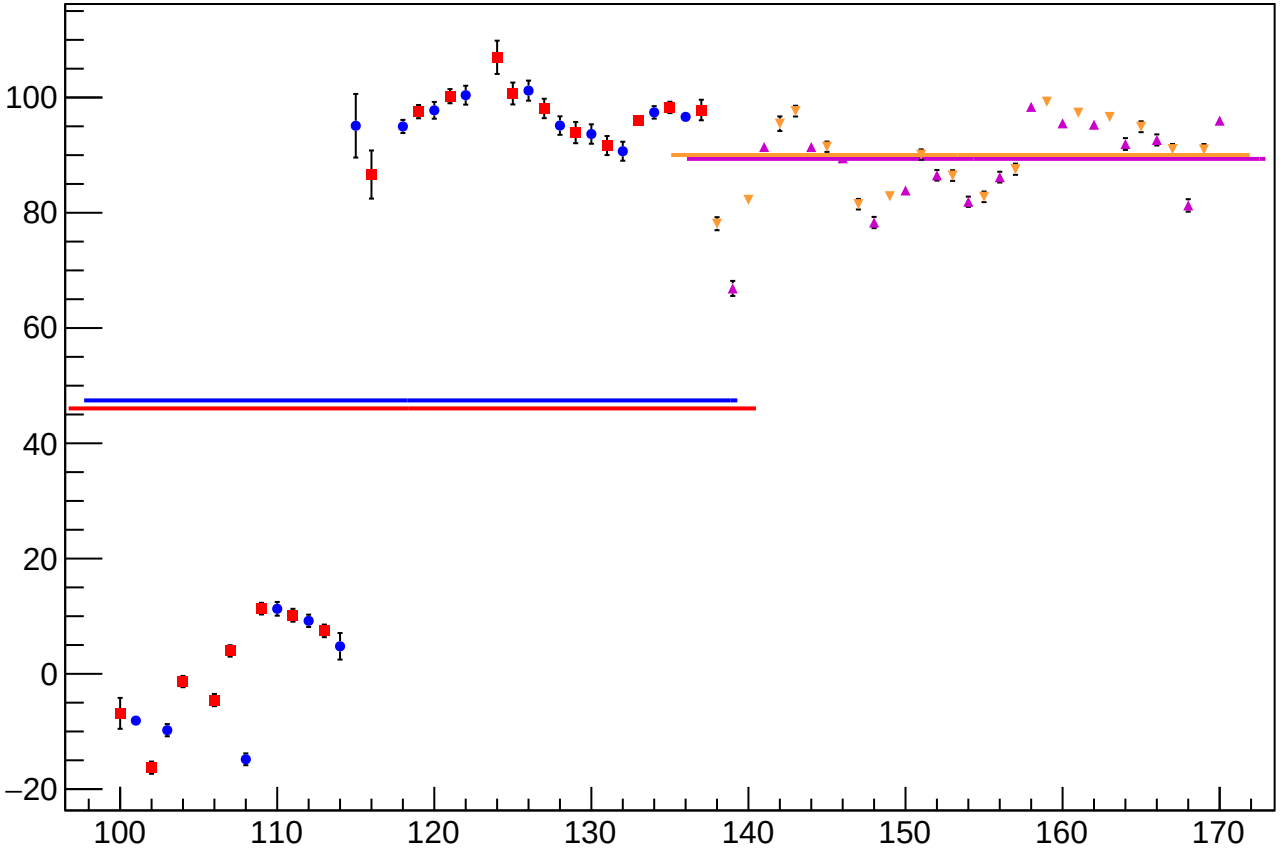
Left In: 9.764+/-0.259 $\chi^2$/NDF:1040.3/15

+ sign 7.262+/-0.186 $\chi^2$/NDF: 1048.3/32

All: 6.516+/-0.129 $\chi^2$/NDF: 2932.9/67

- sign 5.828+/-0.178 $\chi^2$/NDF: 1853.6/34

# reg_asym_sam5_diff_bpm4eY_slope vs Slug




Right In: 47.443+/-0.308 $\chi^2$/NDF: 26886.9/15

Left Out: 90.024+/-0.218 $\chi^2$/NDF:870.1/16

Right Out: 46.053+/-0.284 $\chi^2$/NDF: 28897.8/18

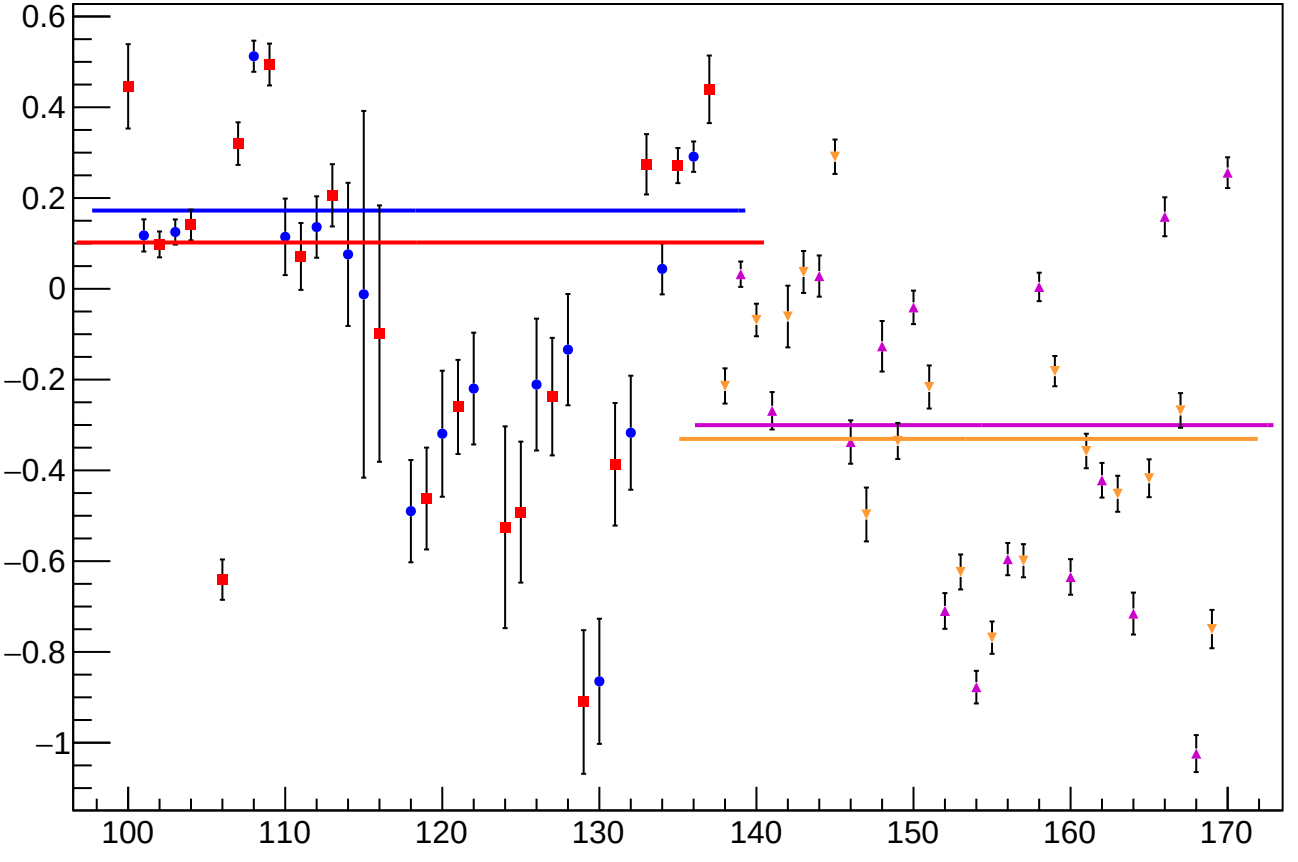
Left In: 89.352+/-0.222 $\chi^2$/NDF:990.3/15

+ sign 75.785+/-0.178 $\chi^2$/NDF: 40473.9/32

All: 74.344+/-0.125 $\chi^2$/NDF: 84887.2/67

- sign 72.953+/-0.175 $\chi^2$/NDF: 44284.6/34

# reg_asym_sam5_diff_bpm12X_slope vs Slug




Right In: 0.172+/-0.014 $\chi^2$/NDF: 265.0/15

Left Out: -0.331+/-0.010 $\chi^2$/NDF:822.6/16

Right Out: 0.102+/-0.013 $\chi^2$/NDF: 558.7/18

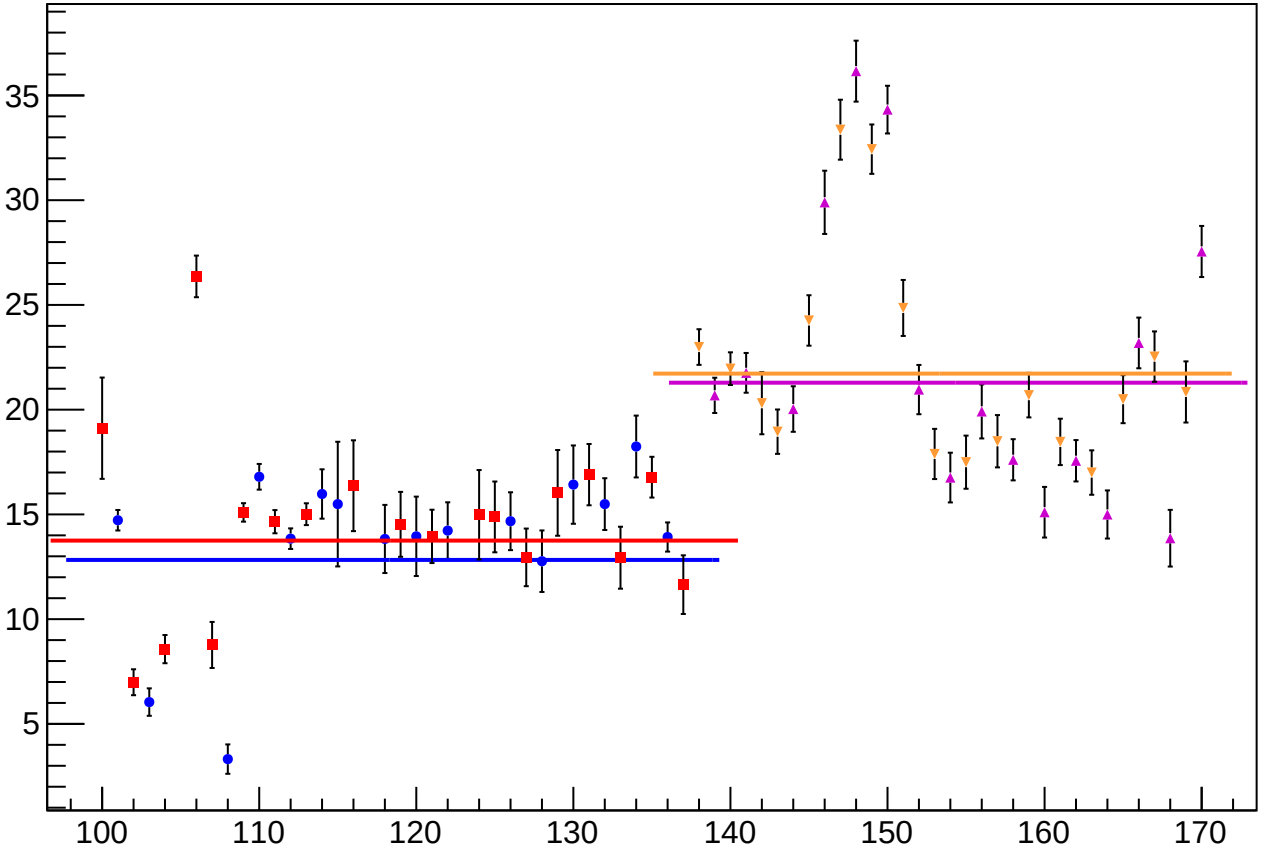
Left In: -0.300+/-0.010 $\chi^2$/NDF:1646.6/15

+ sign -0.168+/-0.008 $\chi^2$/NDF: 1942.7/32

All: -0.166+/-0.006 $\chi^2$/NDF: 4741.8/67

- sign -0.165+/-0.008 $\chi^2$/NDF: 2799.1/34

# reg_asym_sam6_diff_bpm1X_slope vs Slug




Right In: 12.827+/-0.214 $\chi^2$/NDF: 388.0/15

Left Out: 21.722+/-0.274 $\chi^2$/NDF:228.3/16

Right Out: 13.750+/-0.204 $\chi^2$/NDF: 404.0/18

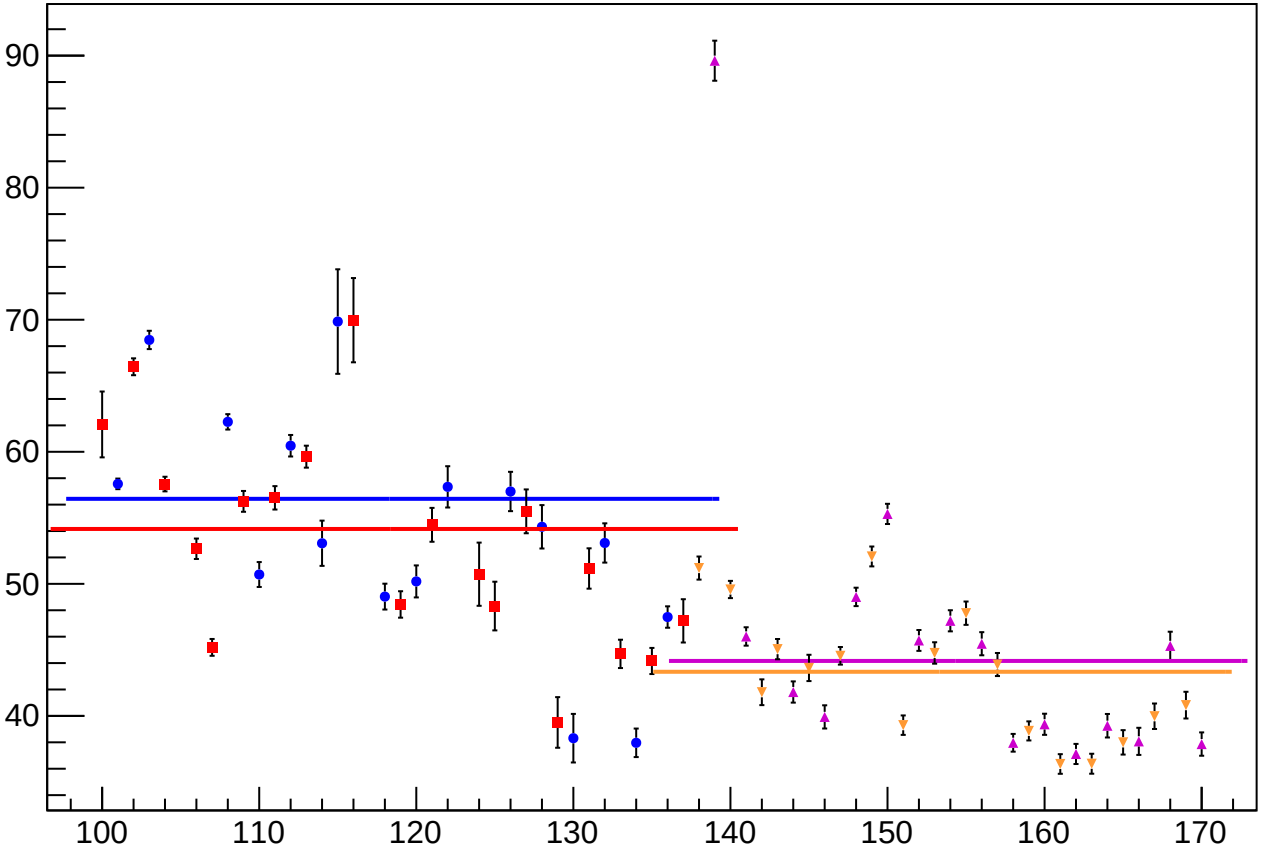
Left In: 21.288+/-0.283 $\chi^2$/NDF:429.3/15

+ sign 16.196+/-0.169 $\chi^2$/NDF: 1270.2/32

All: 16.264+/-0.118 $\chi^2$/NDF: 2570.5/67

- sign 16.330+/-0.166 $\chi^2$/NDF: 1300.0/34

# reg_asym_sam6_diff_bpm4aY_slope vs Slug




Right In: 56.438+/-0.222 $\chi^2$/NDF: 1088.0/15

Left Out: 43.342+/-0.196 $\chi^2$/NDF:639.6/16

Right Out: 54.156+/-0.225 $\chi^2$/NDF: 1006.6/18

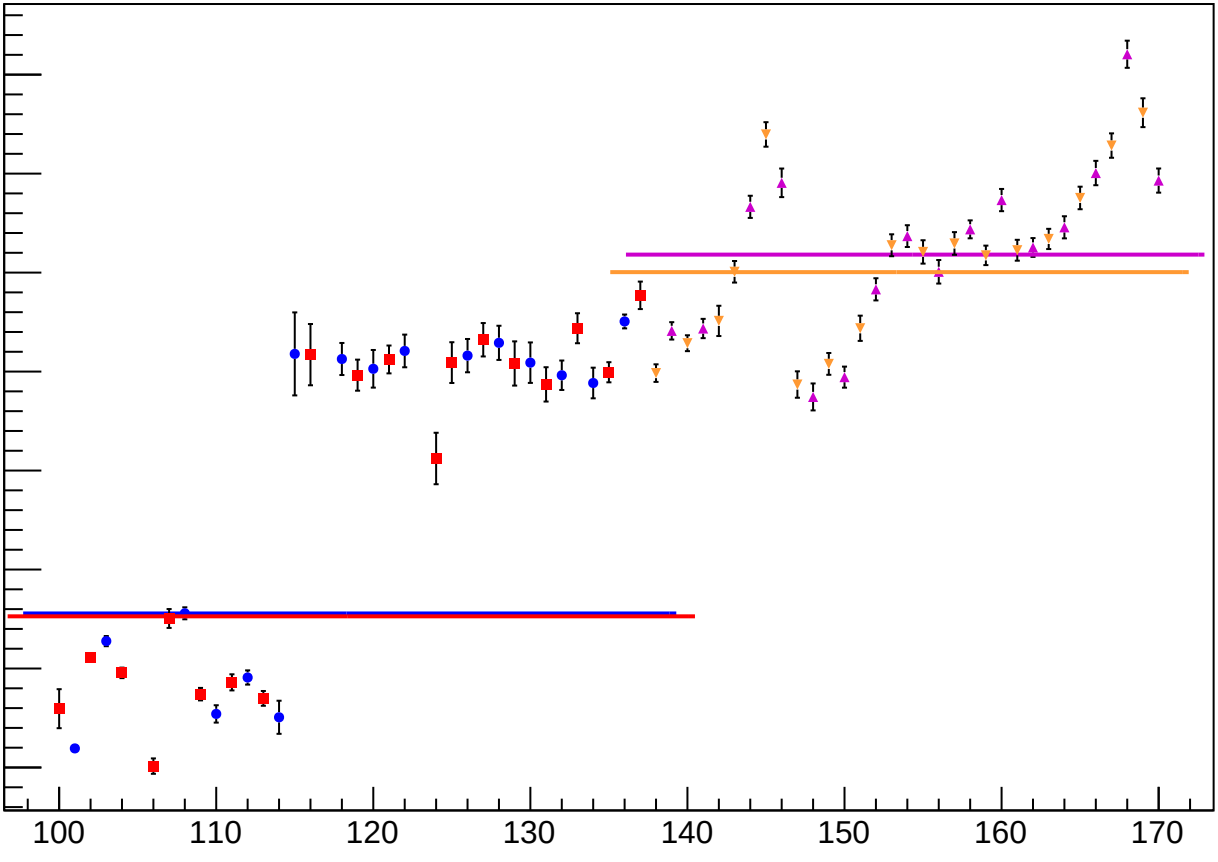
Left In: 44.162+/-0.207 $\chi^2$/NDF:1541.1/15

+ sign 49.077+/-0.147 $\chi^2$/NDF: 3687.0/32

All: 48.916+/-0.106 $\chi^2$/NDF: 7310.2/67

- sign 48.744+/-0.152 $\chi^2$/NDF: 3620.7/34

# reg_asym_sam6_diff_bpm4eX_slope vs Slug




Right In: 15.561+/-0.214 $\chi^2$/NDF: 5176.0/15

Left Out: 50.047+/-0.269 $\chi^2$/NDF:818.5/16

Right Out: 15.272+/-0.219 $\chi^2$/NDF: 3873.0/18

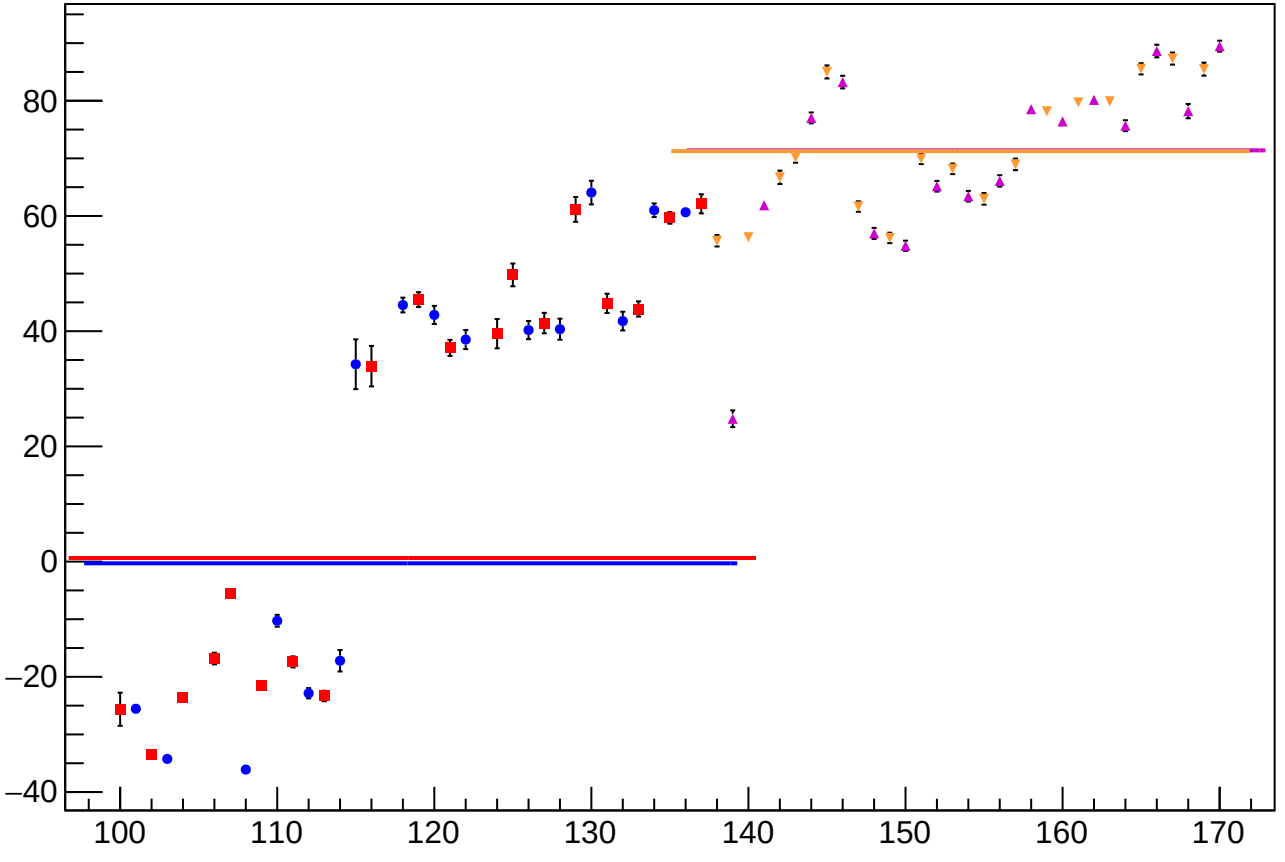
Left In: 51.817+/-0.276 $\chi^2$/NDF:780.4/15

+ sign 28.933+/-0.167 $\chi^2$/NDF: 16065.4/32

All: 29.175+/-0.120 $\chi^2$/NDF: 31496.3/67

- sign 29.428+/-0.172 $\chi^2$/NDF: 15426.7/34

# reg_asym_sam6_diff_bpm4eY_slope vs Slug




Right In: -0.296+/-0.261 $\chi^2$/NDF: 21030.9/15

Left Out: 71.263+/-0.225 $\chi^2$/NDF:2172.6/16

Right Out: 0.633+/-0.264 $\chi^2$/NDF: 16028.1/18

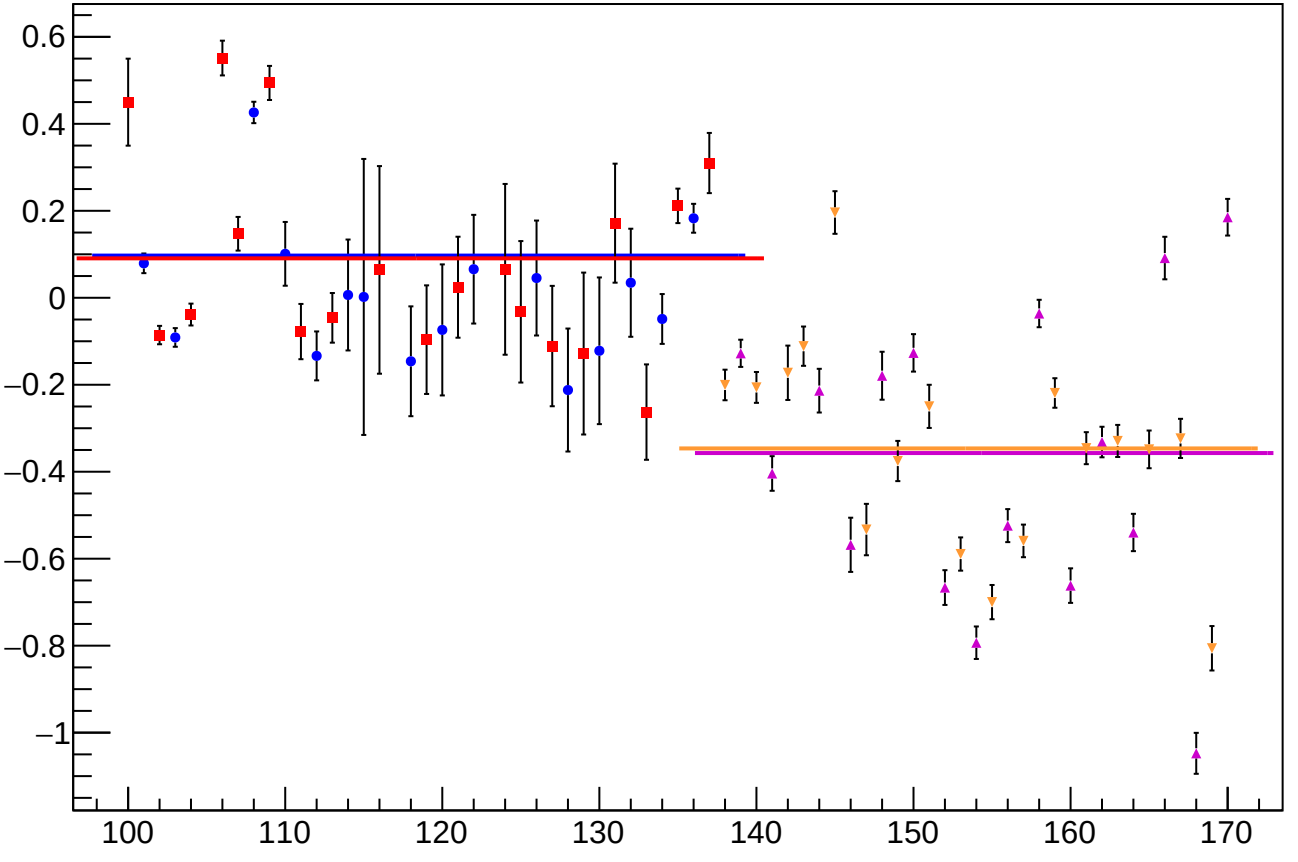
Left In: 71.390+/-0.234 $\chi^2$/NDF:2949.6/15

+ sign 40.827+/-0.170 $\chi^2$/NDF: 66270.1/32

All: 40.506+/-0.122 $\chi^2$/NDF: 125509.7/67

- sign 40.167+/-0.175 $\chi^2$/NDF: 59232.4/34

# reg_asym_sam6_diff_bpm12X_slope vs Slug




Right In: 0.097+/-0.011 $\chi^2$/NDF: 299.1/15

Left Out: -0.346+/-0.010 $\chi^2$/NDF:452.9/16

Right Out: 0.091+/-0.011 $\chi^2$/NDF: 399.5/18

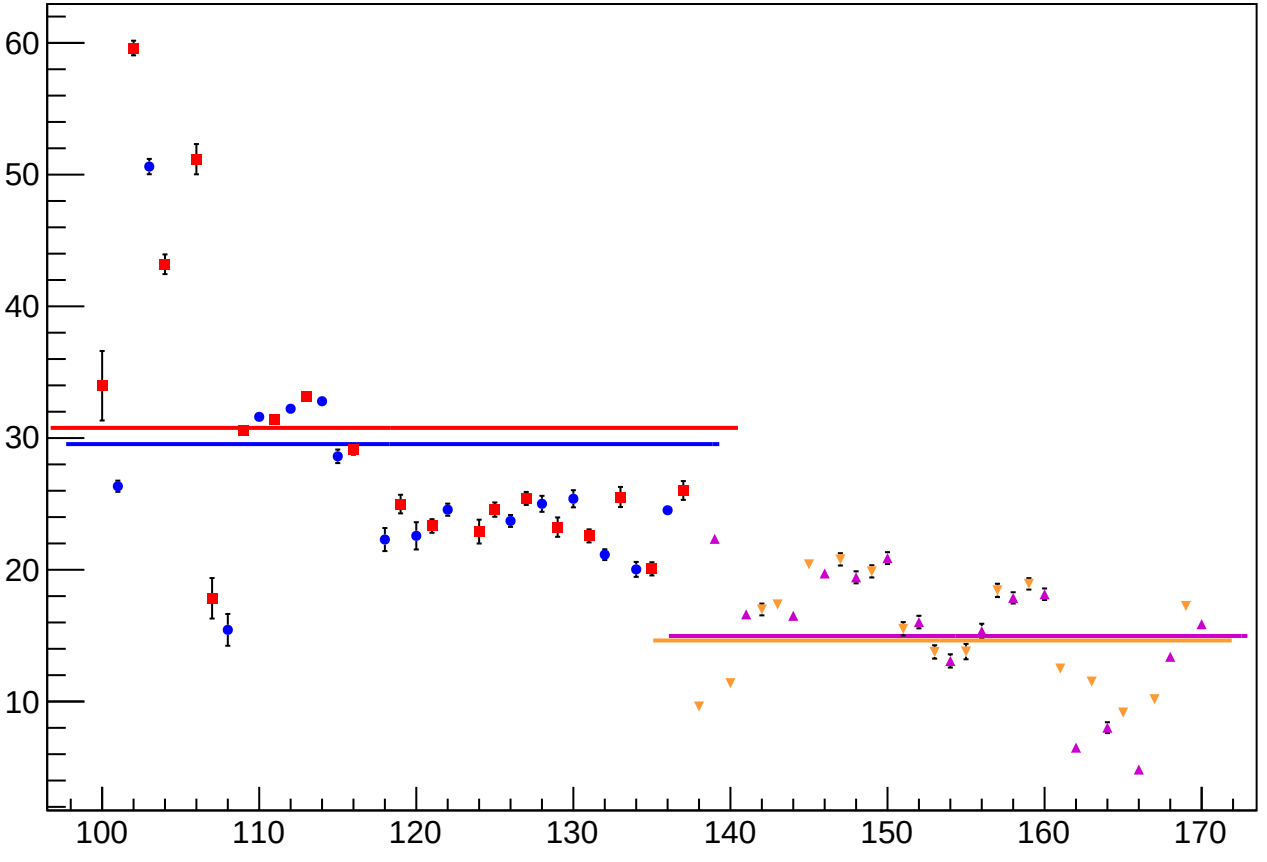
Left In: -0.357+/-0.010 $\chi^2$/NDF:975.0/15

+ sign -0.147+/-0.008 $\chi^2$/NDF: 1611.4/32

All: -0.152+/-0.005 $\chi^2$/NDF: 3845.1/67

- sign -0.158+/-0.008 $\chi^2$/NDF: 2232.5/34

# reg_asym_sam7_diff_bpm1X_slope vs Slug




Right In: 29.542+/-0.092 $\chi^2$/NDF: 3372.2/15

Left Out: 14.635+/-0.092 $\chi^2$/NDF:1977.4/16

Right Out: 30.774+/-0.080 $\chi^2$/NDF: 5079.2/18

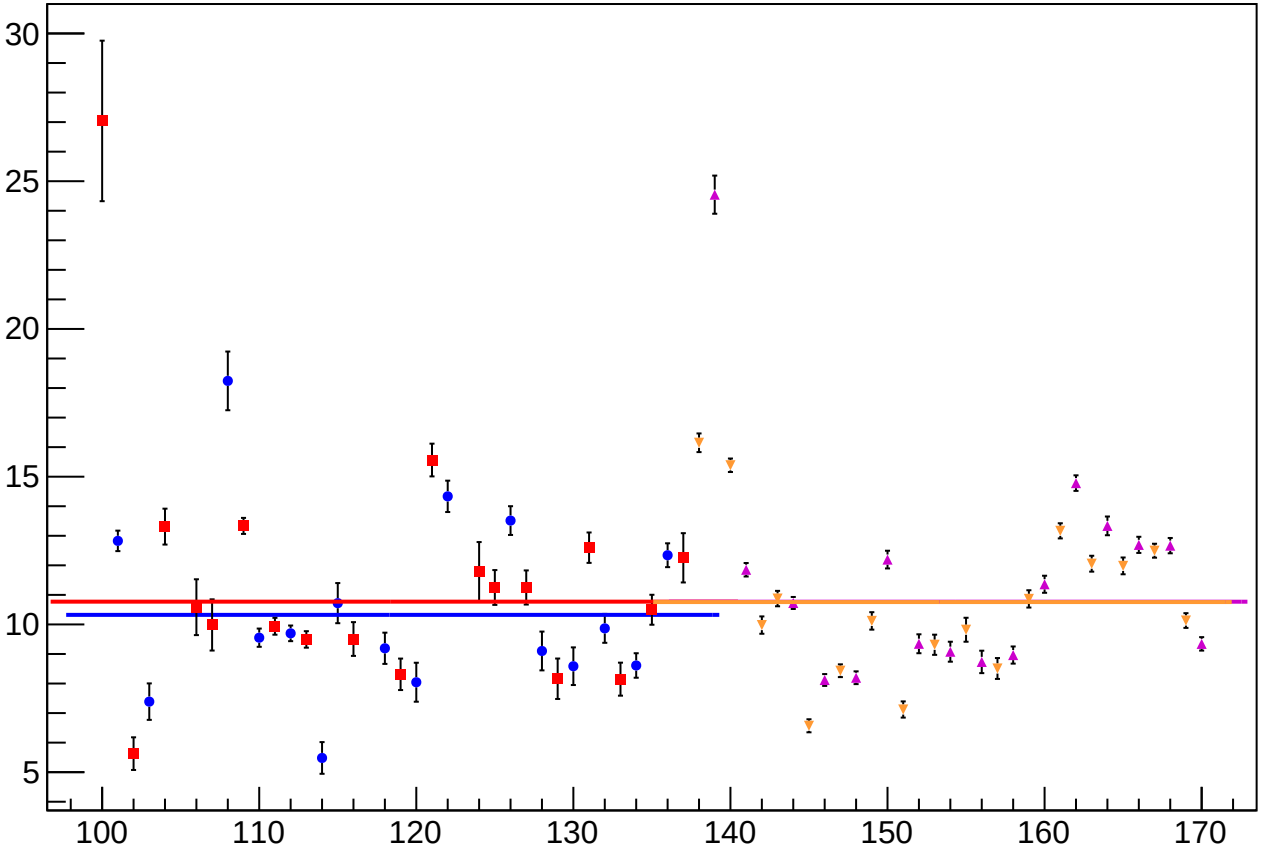
Left In: 14.975+/-0.093 $\chi^2$/NDF:2965.7/15

+ sign 22.095+/-0.065 $\chi^2$/NDF: 18477.2/32

All: 23.152+/-0.044 $\chi^2$/NDF: 43489.8/67

- sign 24.075+/-0.061 $\chi^2$/NDF: 24518.4/34

# reg_asym_sam7_diff_bpm4aY_slope vs Slug




Right In: 10.324+/-0.114 $\chi^2$/NDF: 402.6/15

Left Out: 10.757+/-0.066 $\chi^2$/NDF:1620.9/16

Right Out: 10.771+/-0.113 $\chi^2$/NDF: 415.8/18

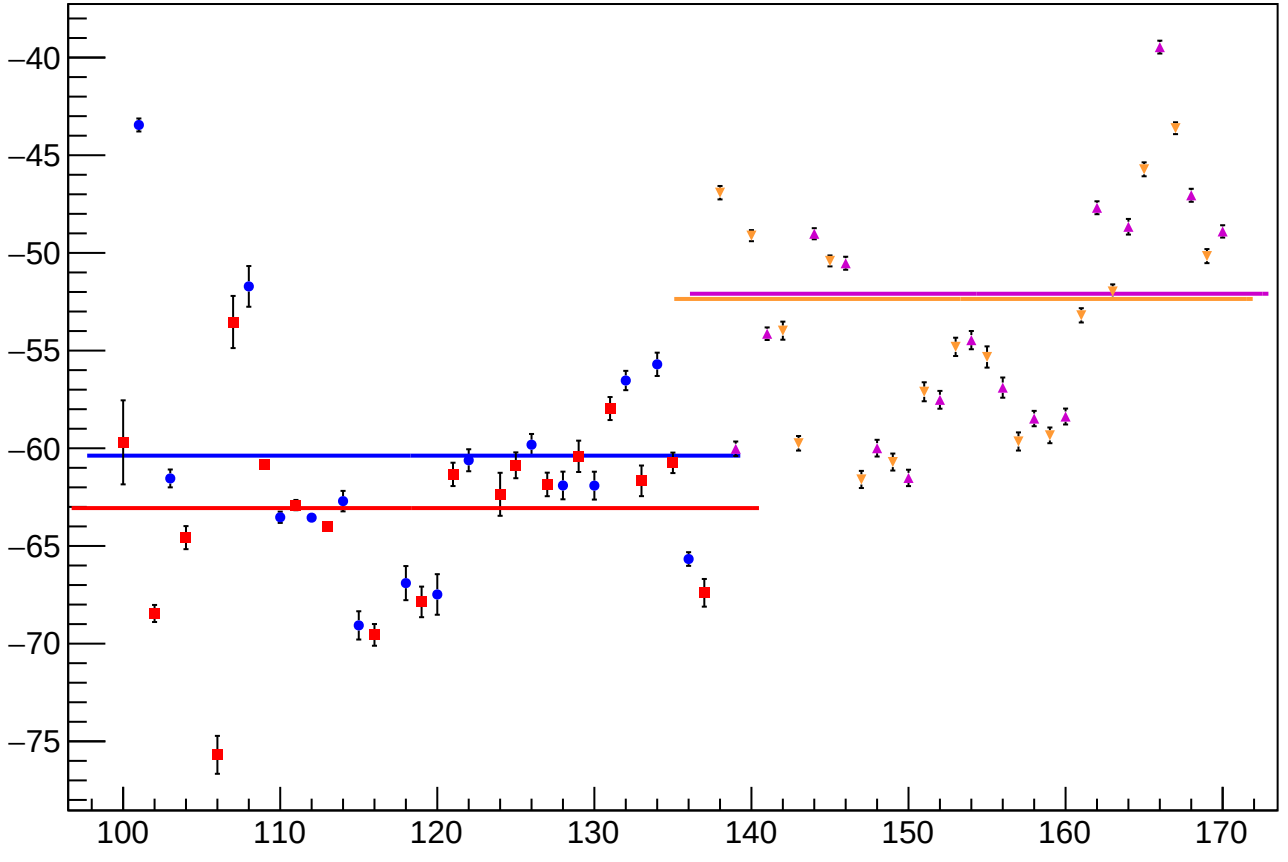
Left In: 10.769+/-0.067 $\chi^2$/NDF:1374.3/15

+ sign 10.649+/-0.057 $\chi^2$/NDF: 2034.4/32

All: 10.709+/-0.040 $\chi^2$/NDF: 3826.7/67

- sign 10.770+/-0.057 $\chi^2$/NDF: 1790.1/34

# reg_asym_sam7_diff_bpm4eX_slope vs Slug




Right In: -60.377+/-0.113 $\chi^2$/NDF: 3597.6/15

Left Out: -52.357+/-0.091 $\chi^2$/NDF:3563.9/16

Right Out: -63.061+/-0.107 $\chi^2$/NDF: 844.1/18

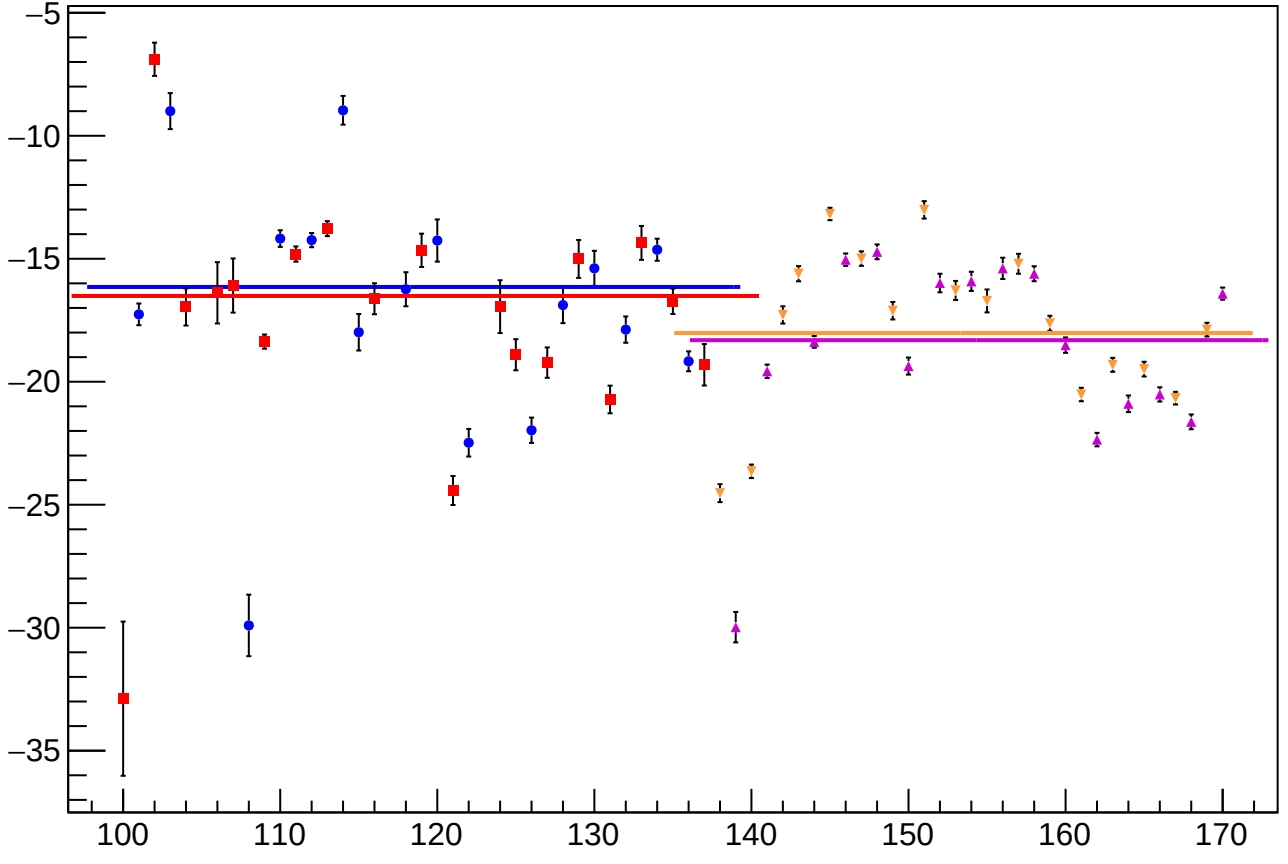
Left In: -52.090+/-0.092 $\chi^2$/NDF:4289.6/15

+ sign -55.520+/-0.071 $\chi^2$/NDF: 10212.3/32

All: -56.135+/-0.050 $\chi^2$/NDF: 21532.7/67

- sign -56.730+/-0.070 $\chi^2$/NDF: 11172.5/34

# reg_asym_sam7_diff_bpm4eY_slope vs Slug




Right In: -16.147+/-0.127 $\chi^2$/NDF: 797.1/15

Left Out: -18.020+/-0.076 $\chi^2$/NDF:1791.8/16

Right Out: -16.512+/-0.125 $\chi^2$/NDF: 684.7/18

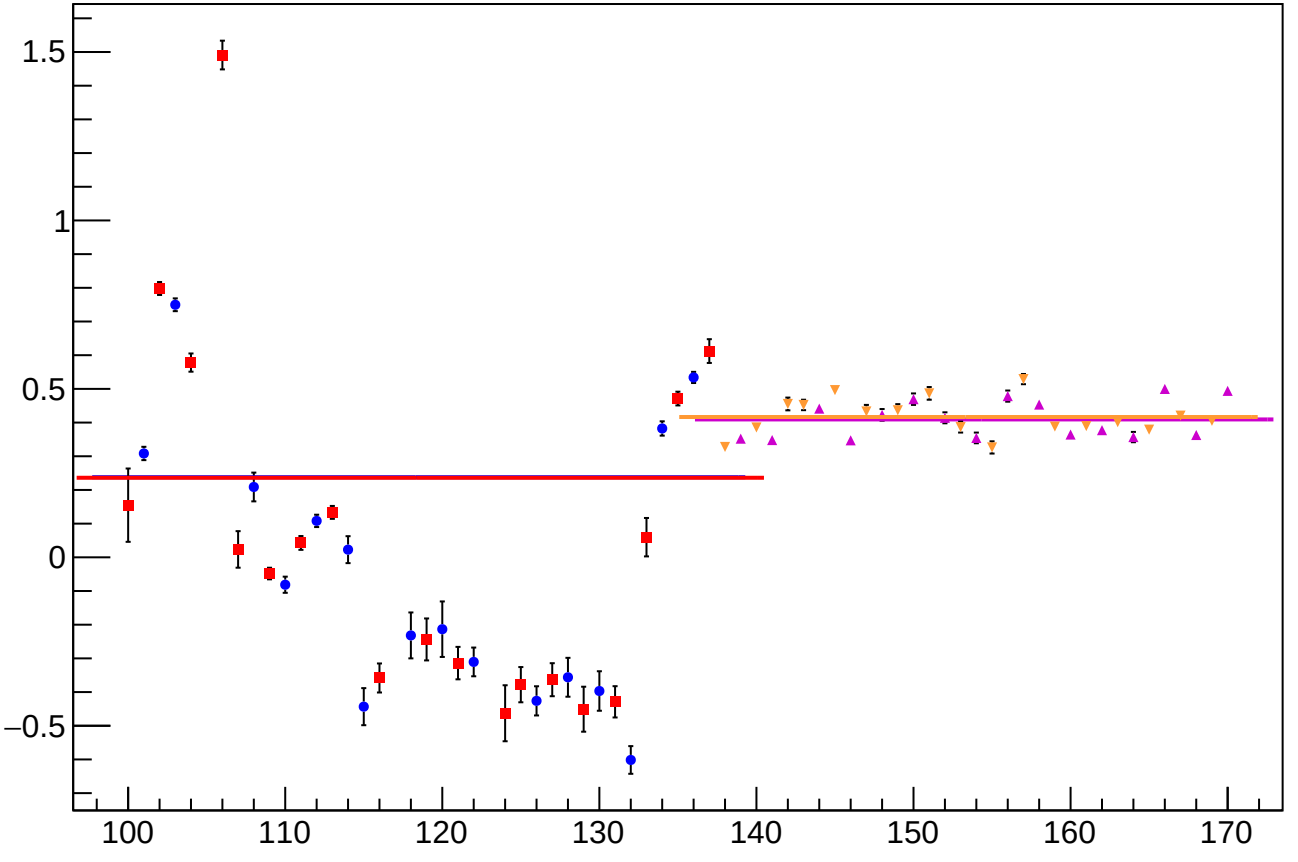
Left In: -18.310+/-0.077 $\chi^2$/NDF:1408.8/15

+ sign -17.531+/-0.065 $\chi^2$/NDF: 2749.2/32

All: -17.673+/-0.046 $\chi^2$/NDF: 5003.2/67

- sign -17.816+/-0.065 $\chi^2$/NDF: 2244.4/34

# reg_asym_sam7_diff_bpm12X_slope vs Slug




Right In: 0.238+/-0.007 $\chi^2$/NDF: 2632.9/15

Left Out: 0.416+/-0.003 $\chi^2$/NDF:225.7/16

Right Out: 0.236+/-0.007 $\chi^2$/NDF: 3595.0/18

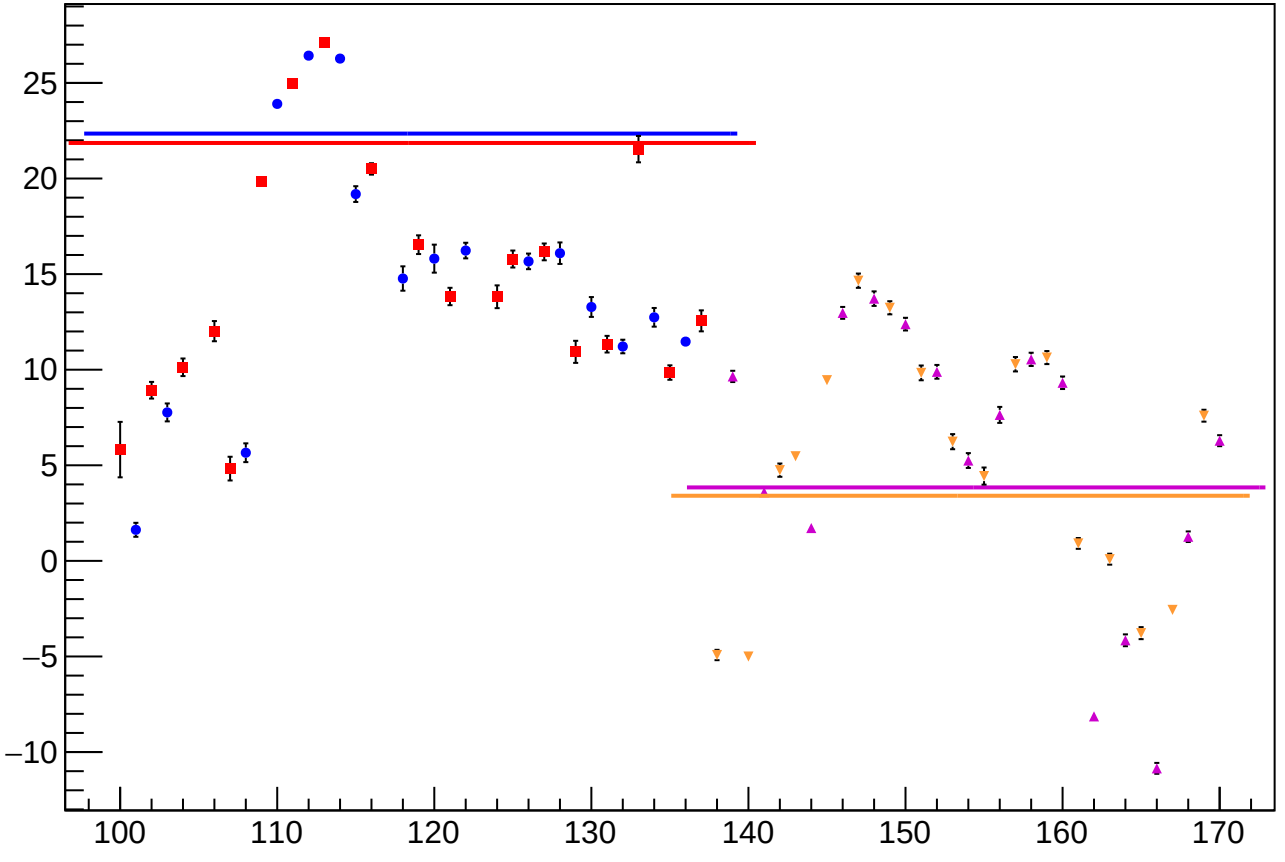
Left In: 0.409+/-0.003 $\chi^2$/NDF:270.7/15

+ sign 0.382+/-0.003 $\chi^2$/NDF: 3374.4/32

All: 0.379+/-0.002 $\chi^2$/NDF: 7723.2/67

- sign 0.376+/-0.003 $\chi^2$/NDF: 4347.2/34

# reg_asym_sam8_diff_bpm1X_slope vs Slug




Right In: 22.350+/-0.057 $\chi^2$/NDF: 12336.9/15

Left Out: 3.407+/-0.073 $\chi^2$/NDF:7463.9/16

Right Out: 21.859+/-0.046 $\chi^2$/NDF: 10692.4/18

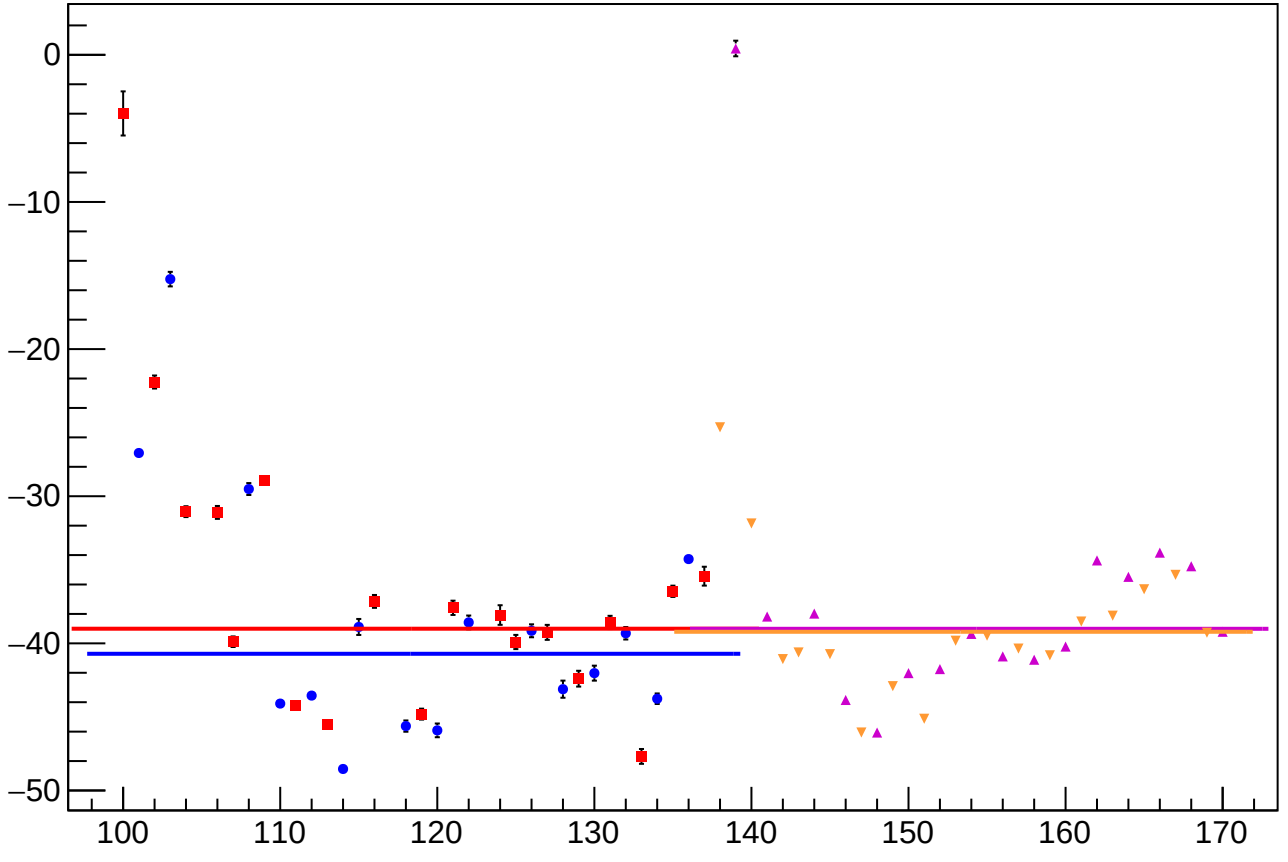
Left In: 3.842+/-0.076 $\chi^2$/NDF:9326.2/15

+ sign 15.236+/-0.045 $\chi^2$/NDF: 61935.2/32

All: 16.208+/-0.030 $\chi^2$/NDF: 123931.4/67

- sign 16.968+/-0.040 $\chi^2$/NDF: 61153.6/34

# reg_asym_sam8_diff_bpm4aY_slope vs Slug




Right In: -40.709+/-0.076 $\chi^2$/NDF: 7780.4/15

Left Out: -39.213+/-0.052 $\chi^2$/NDF:7985.2/16

Right Out: -39.005+/-0.071 $\chi^2$/NDF: 10101.3/18

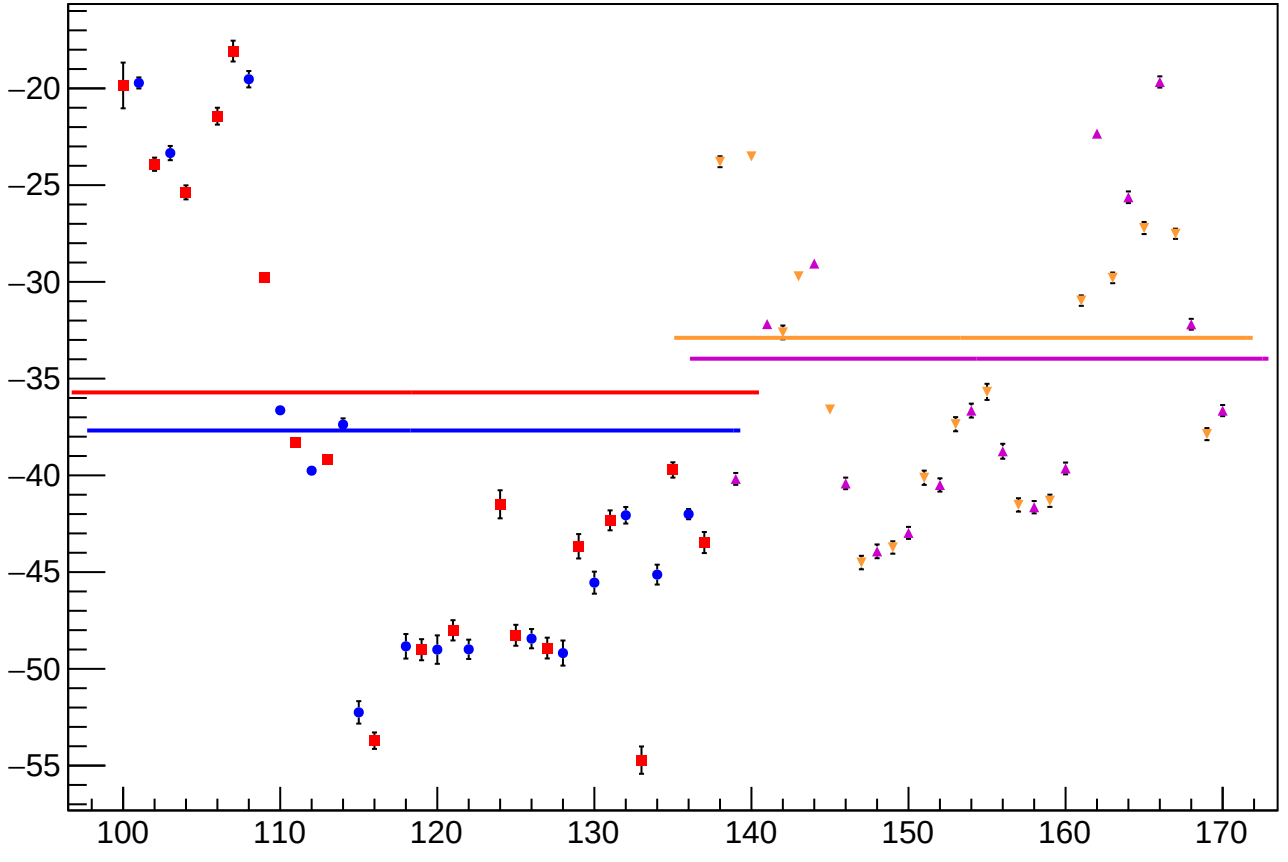
Left In: -39.011+/-0.054 $\chi^2$/NDF:9846.6/15

+ sign -39.683+/-0.043 $\chi^2$/NDF: 16027.8/32

All: -39.348+/-0.030 $\chi^2$/NDF: 36098.6/67

- sign -39.009+/-0.043 $\chi^2$/NDF: 19948.0/34

# reg_asym_sam8_diff_bpm4eX_slope vs Slug




Right In: -37.681+/-0.074 $\chi^2$/NDF: 10853.9/15

Left Out: -32.891+/-0.072 $\chi^2$/NDF:8573.5/16

Right Out: -35.714+/-0.064 $\chi^2$/NDF: 13274.5/18

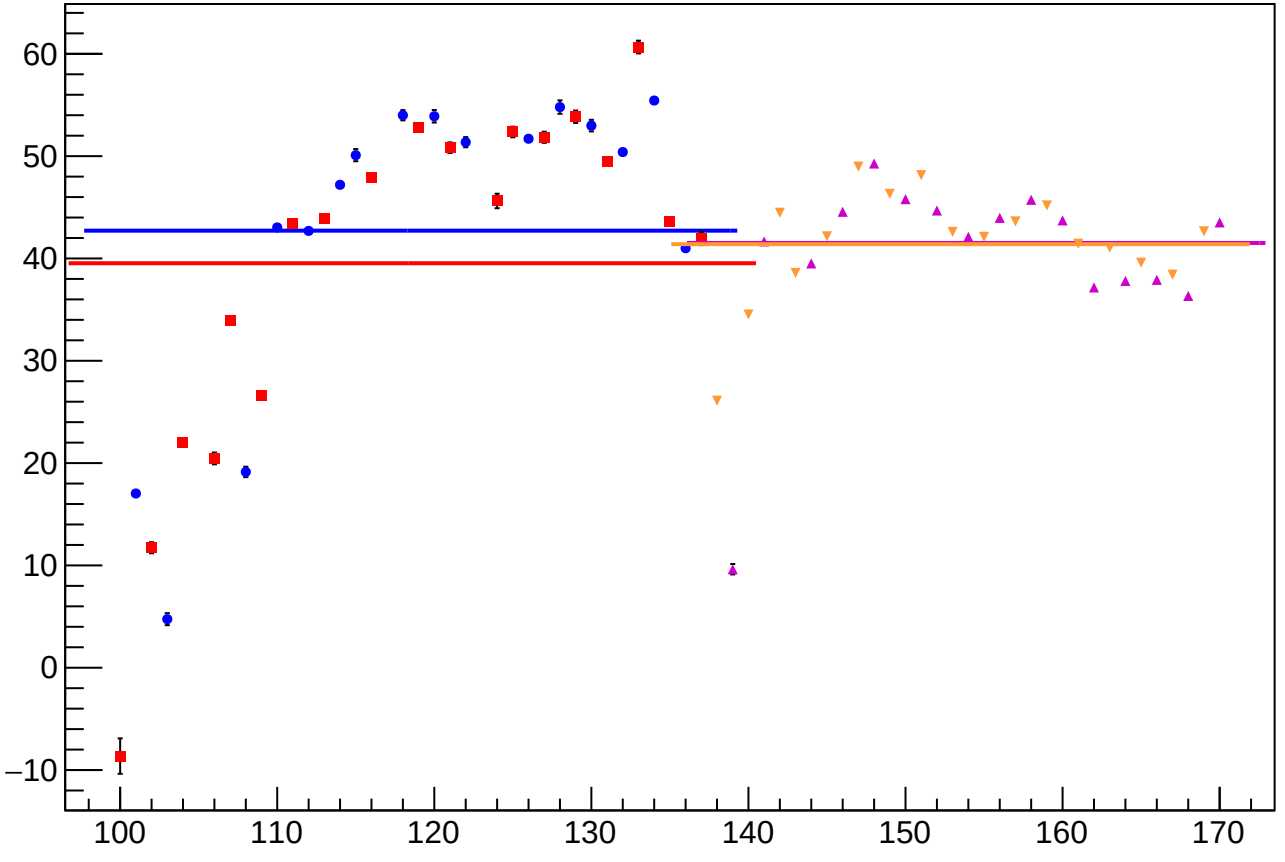
Left In: -33.970+/-0.074 $\chi^2$/NDF:9966.5/15

+ sign -35.232+/-0.052 $\chi^2$/NDF: 21584.1/32

All: -35.092+/-0.035 $\chi^2$/NDF: 45153.6/67

- sign -34.967+/-0.049 $\chi^2$/NDF: 23555.5/34

# reg_asym_sam8_diff_bpm4eY_slope vs Slug




Right In: 42.718+/-0.085 $\chi^2$/NDF: 14765.0/15

Left Out: 41.395+/-0.060 $\chi^2$/NDF:6530.5/16

Right Out: 39.533+/-0.078 $\chi^2$/NDF: 17978.2/18

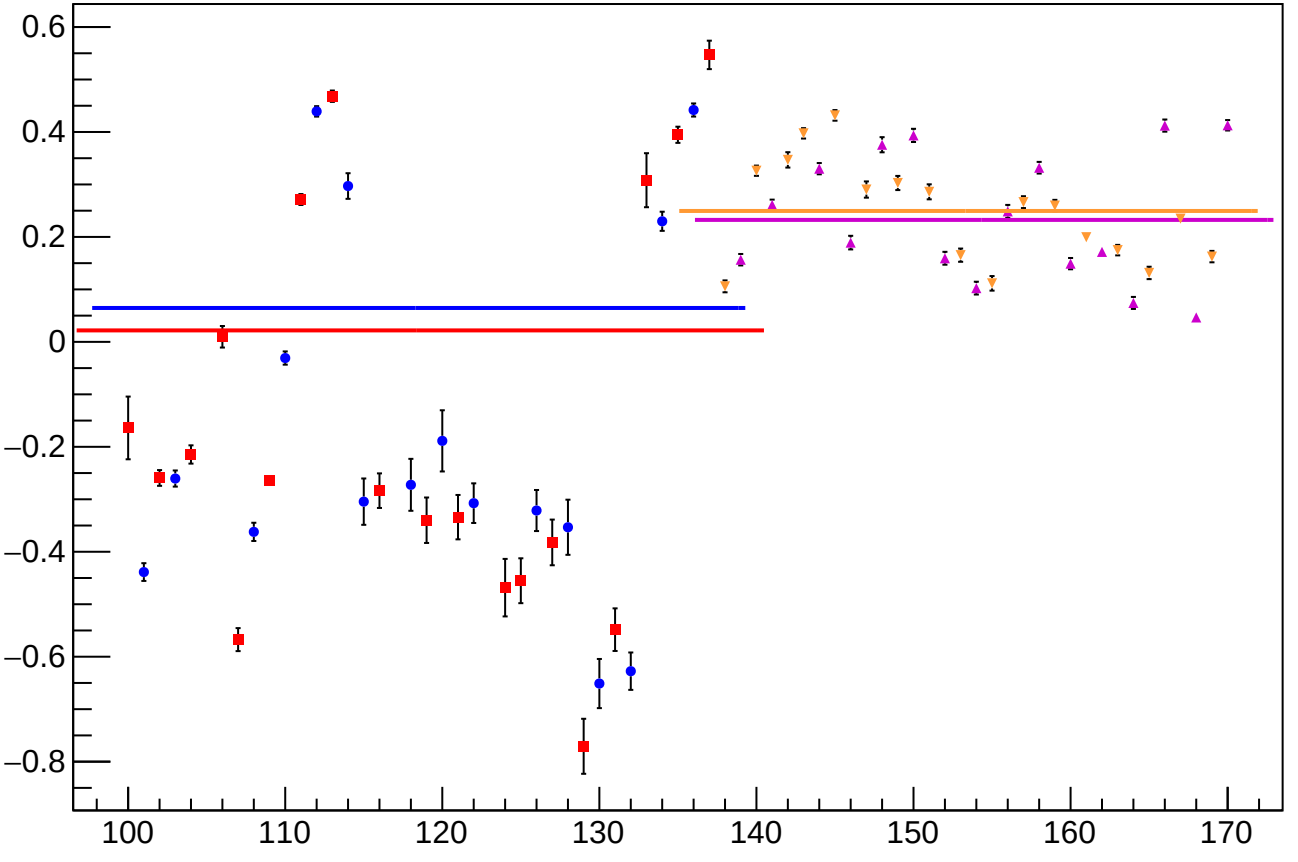
Left In: 41.515+/-0.062 $\chi^2$/NDF:7343.1/15

+ sign 41.832+/-0.049 $\chi^2$/NDF: 21457.5/32

All: 41.287+/-0.035 $\chi^2$/NDF: 47419.9/67

- sign 40.745+/-0.049 $\chi^2$/NDF: 25714.5/34

# reg_asym_sam8_diff_bpm12X_slope vs Slug




Right In: 0.065+/-0.005 $\chi^2$/NDF: 5497.5/15

Left Out: 0.249+/-0.003 $\chi^2$/NDF:1236.4/16

Right Out: 0.022+/-0.004 $\chi^2$/NDF: 6405.3/18

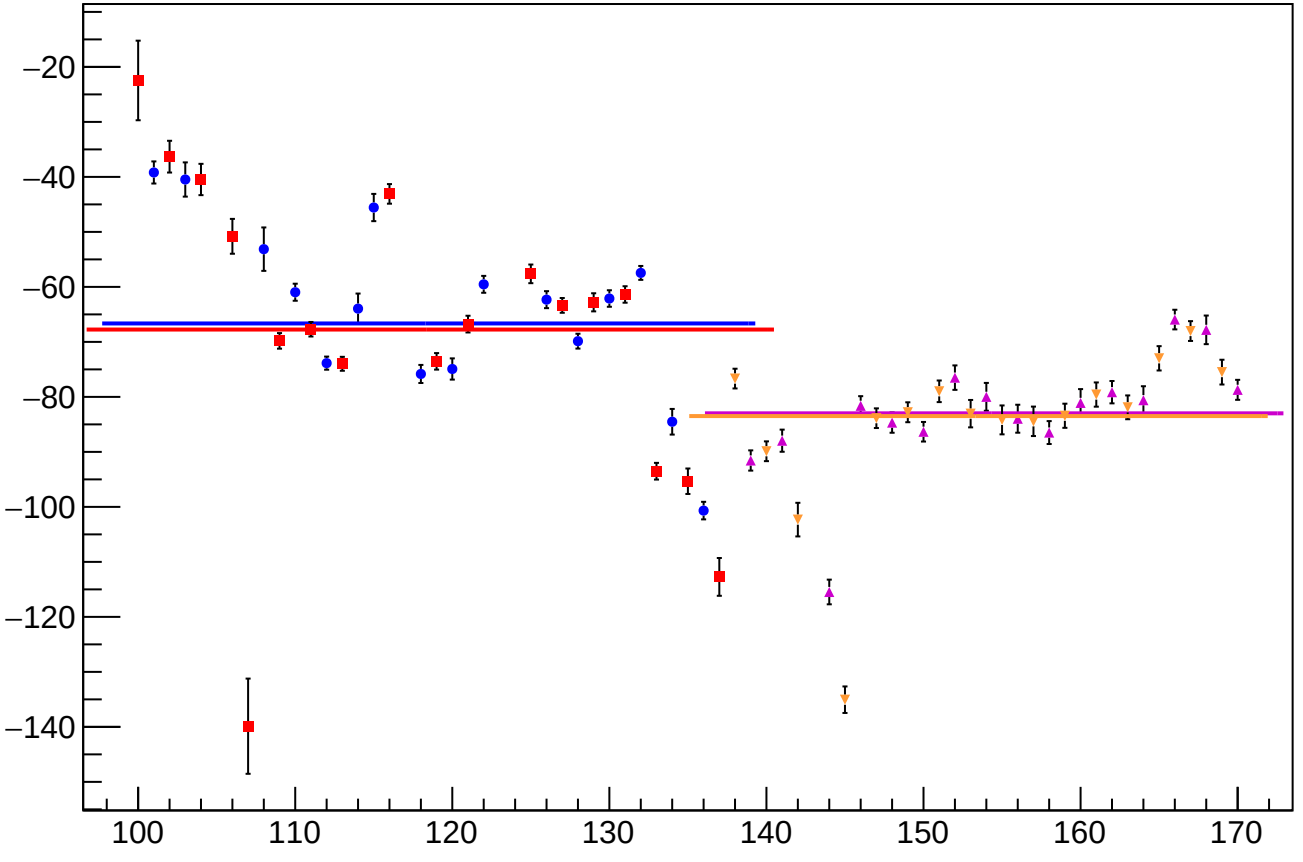
Left In: 0.232+/-0.003 $\chi^2$/NDF:1877.5/15

+ sign 0.204+/-0.002 $\chi^2$/NDF: 7836.9/32

All: 0.188+/-0.002 $\chi^2$/NDF: 17855.2/67

- sign 0.172+/-0.002 $\chi^2$/NDF: 9923.3/34

# reg_asym_usl_diff_bpm1X_slope vs Slug




Right In: -66.648+/-0.426 $\chi^2$/NDF: 1052.4/15

Left Out: -83.489+/-0.530 $\chi^2$/NDF:640.8/15

Right Out: -67.755+/-0.419 $\chi^2$/NDF: 1255.4/17

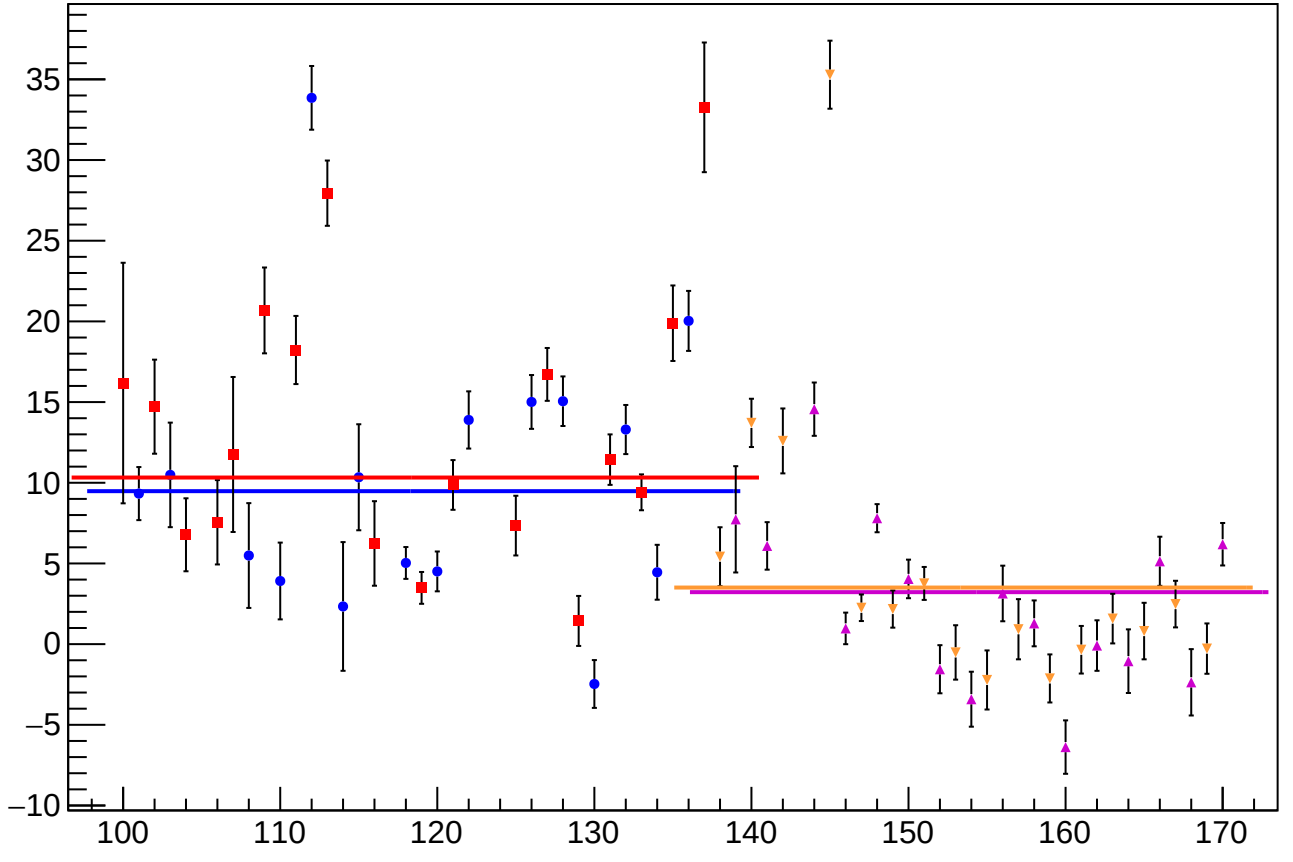
Left In: -82.990+/-0.517 $\chi^2$/NDF:391.2/15

+ sign -73.259+/-0.332 $\chi^2$/NDF: 2306.4/31

All: -73.536+/-0.233 $\chi^2$/NDF: 4478.0/65

- sign -73.803+/-0.326 $\chi^2$/NDF: 2170.3/33

# reg_asym_usl_diff_bpm4aY_slope vs Slug




Right In: 9.480+/-0.428 $\chi^2$/NDF: 341.9/15

Left Out: 3.507+/-0.356 $\chi^2$/NDF:347.9/15

Right Out: 10.324+/-0.436 $\chi^2$/NDF: 263.4/17

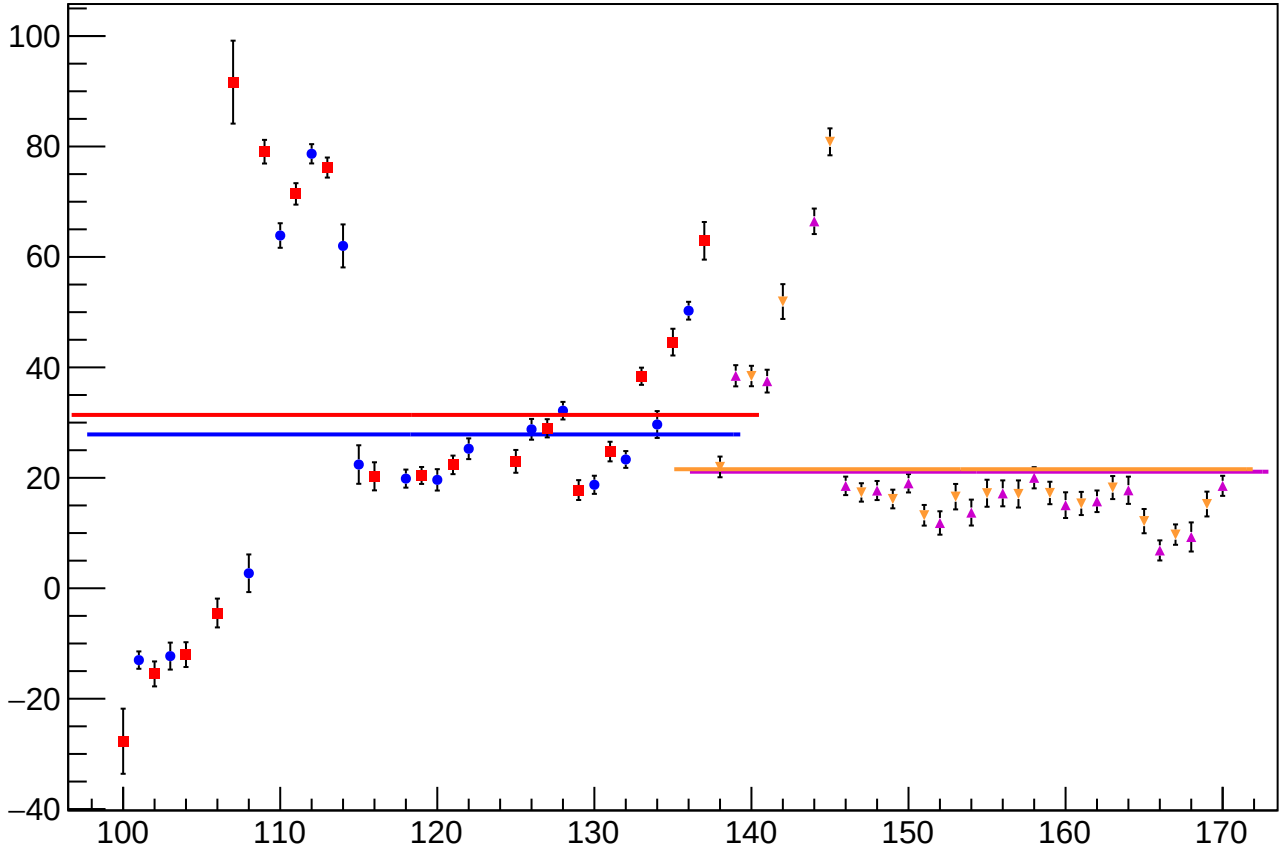
Left In: 3.221+/-0.356 $\chi^2$/NDF:170.3/15

+ sign 5.947+/-0.274 $\chi^2$/NDF: 804.9/31

All: 6.007+/-0.194 $\chi^2$/NDF: 1398.1/65

- sign 6.067+/-0.276 $\chi^2$/NDF: 593.1/33

# reg_asym_usl_diff_bpm4eX_slope vs Slug




Right In: 27.860+/-0.482 $\chi^2$/NDF: 2474.0/15

Left Out: 21.559+/-0.516 $\chi^2$/NDF:897.1/15

Right Out: 31.394+/-0.488 $\chi^2$/NDF: 3011.4/17

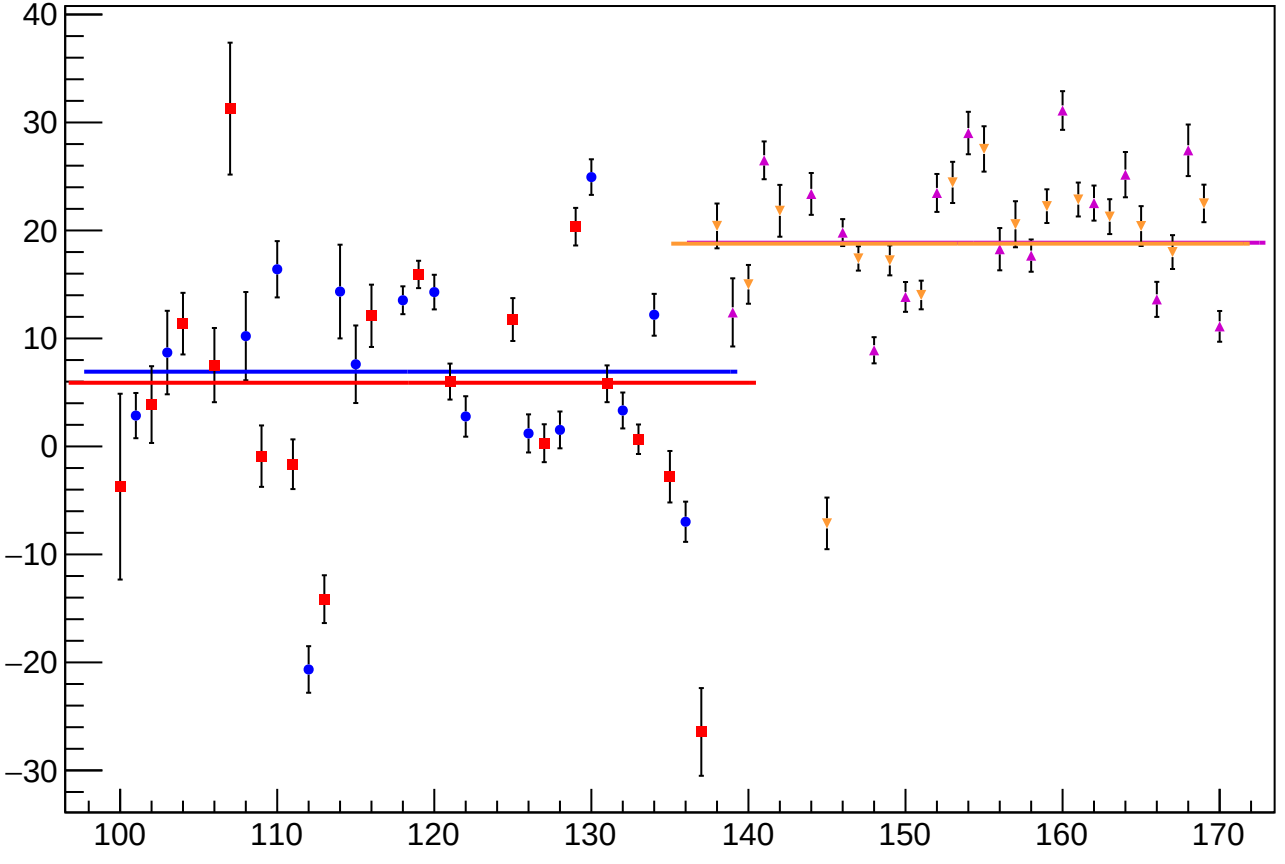
Left In: 21.107+/-0.502 $\chi^2$/NDF:670.4/15

\+ sign 24.919+/-0.352 $\chi^2$/NDF: 3450.7/31

All: 25.667+/-0.248 $\chi^2$/NDF: 7357.4/65

\- sign 26.404+/-0.350 $\chi^2$/NDF: 3897.8/33

# reg_asym_usl_diff_bpm4eY_slope vs Slug




Right In: 6.922+/-0.496 $\chi^2$/NDF: 444.3/15

Left Out: 18.779+/-0.418 $\chi^2$/NDF:186.4/15

Right Out: 5.896+/-0.502 $\chi^2$/NDF: 367.7/17

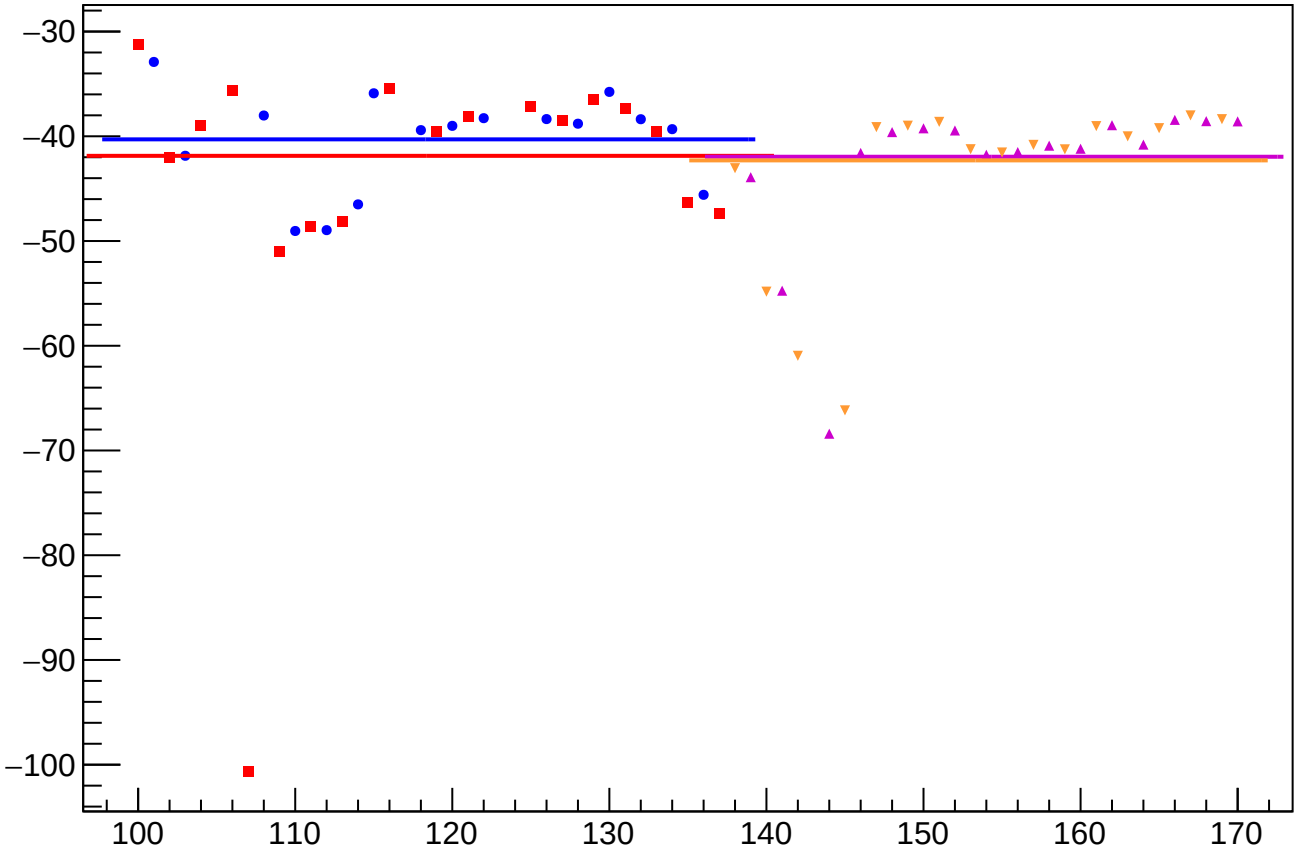
Left In: 18.865+/-0.415 $\chi^2$/NDF:257.9/15

+ sign 13.848+/-0.320 $\chi^2$/NDF: 965.1/31

All: 13.720+/-0.226 $\chi^2$/NDF: 1987.5/65

- sign 13.592+/-0.320 $\chi^2$/NDF: 1022.0/33

# reg_asym_usl_diff_bpm12X_slope vs Slug




Right In: -40.293+/-0.031 $\chi^2$/NDF: 20663.5/15

Left Out: -42.302+/-0.020 $\chi^2$/NDF:123651.4/15

Right Out: -41.867+/-0.032 $\chi^2$/NDF: 58734.8/17

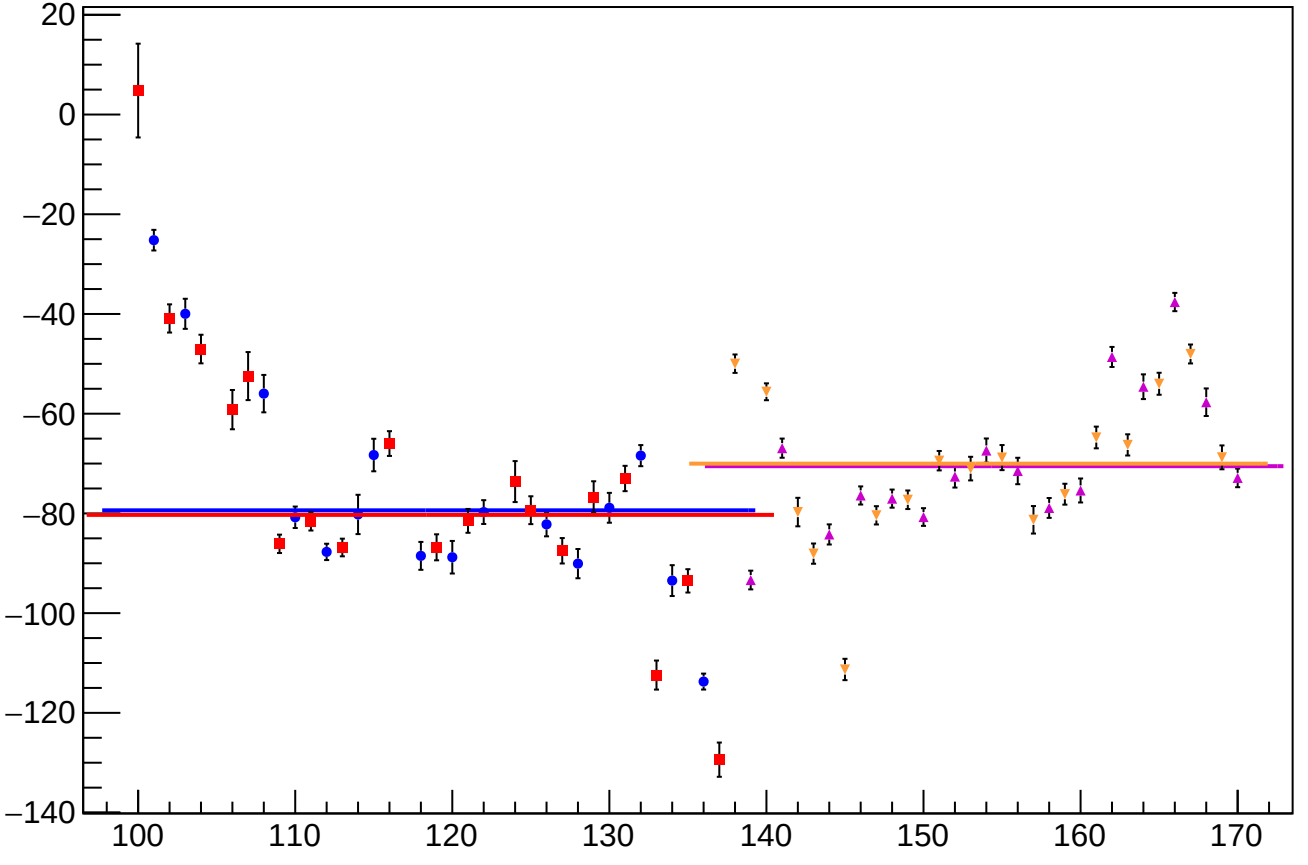
Left In: -41.954+/-0.019 $\chi^2$/NDF:101427.5/15

+ sign -41.740+/-0.017 $\chi^2$/NDF: 147262.0/31

All: -41.838+/-0.012 $\chi^2$/NDF: 307497.6/65

- sign -41.932+/-0.016 $\chi^2$/NDF: 160167.6/33

# reg_asym_usr_diff_bpm1X_slope vs Slug




Right In: -79.382+/-0.611 $\chi^2$/NDF: 1475.9/15

Left Out: -70.018+/-0.509 $\chi^2$/NDF:922.0/16

Right Out: -80.294+/-0.604 $\chi^2$/NDF: 914.7/18

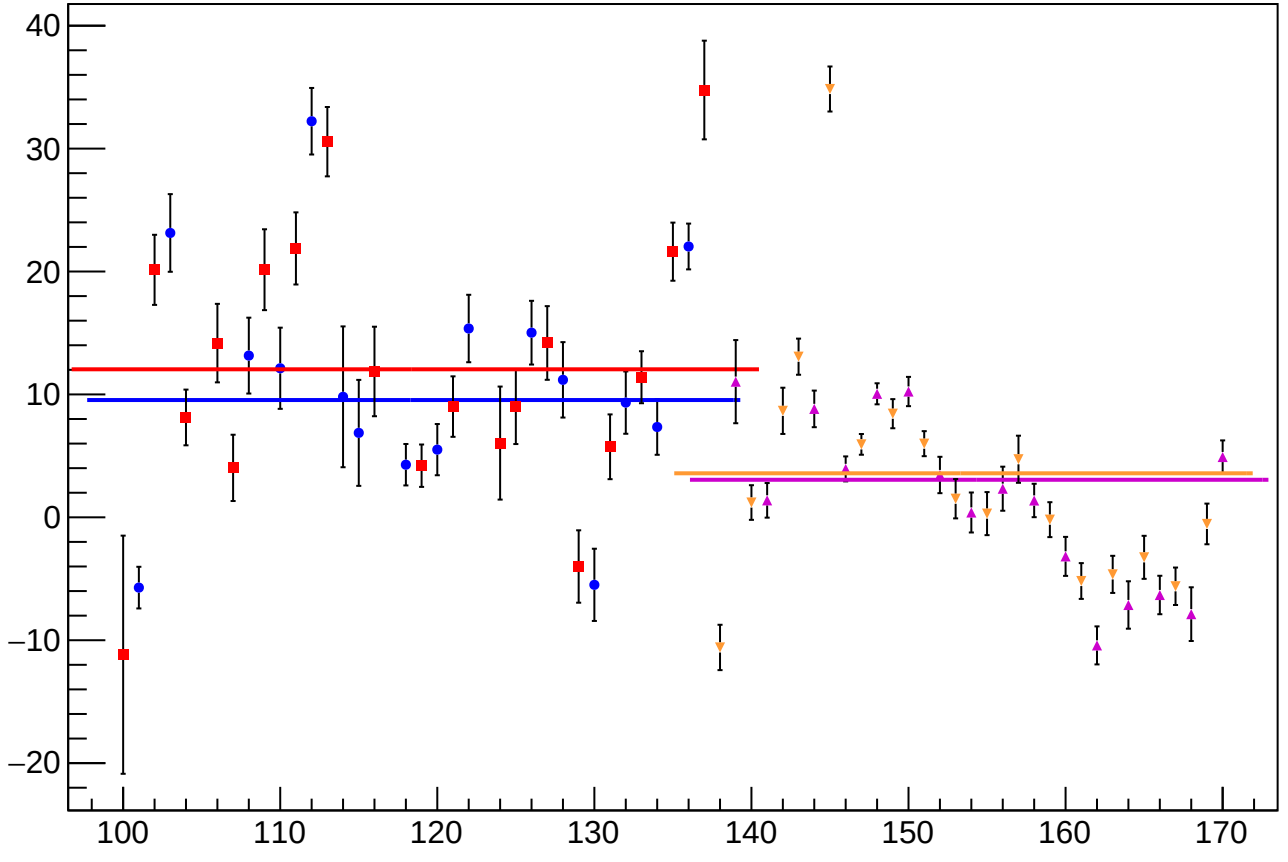
Left In: -70.529+/-0.514 $\chi^2$/NDF:782.9/15

+ sign -73.854+/-0.391 $\chi^2$/NDF: 2536.6/32

All: -74.240+/-0.277 $\chi^2$/NDF: 4387.8/67

- sign -74.628+/-0.391 $\chi^2$/NDF: 1849.3/34

# reg_asym_usr_diff_bpm4aY_slope vs Slug




Right In: 9.543+/-0.621 $\chi^2$/NDF: 267.1/15

Left Out: 3.582+/-0.344 $\chi^2$/NDF:568.6/16

Right Out: 12.044+/-0.637 $\chi^2$/NDF: 195.8/18

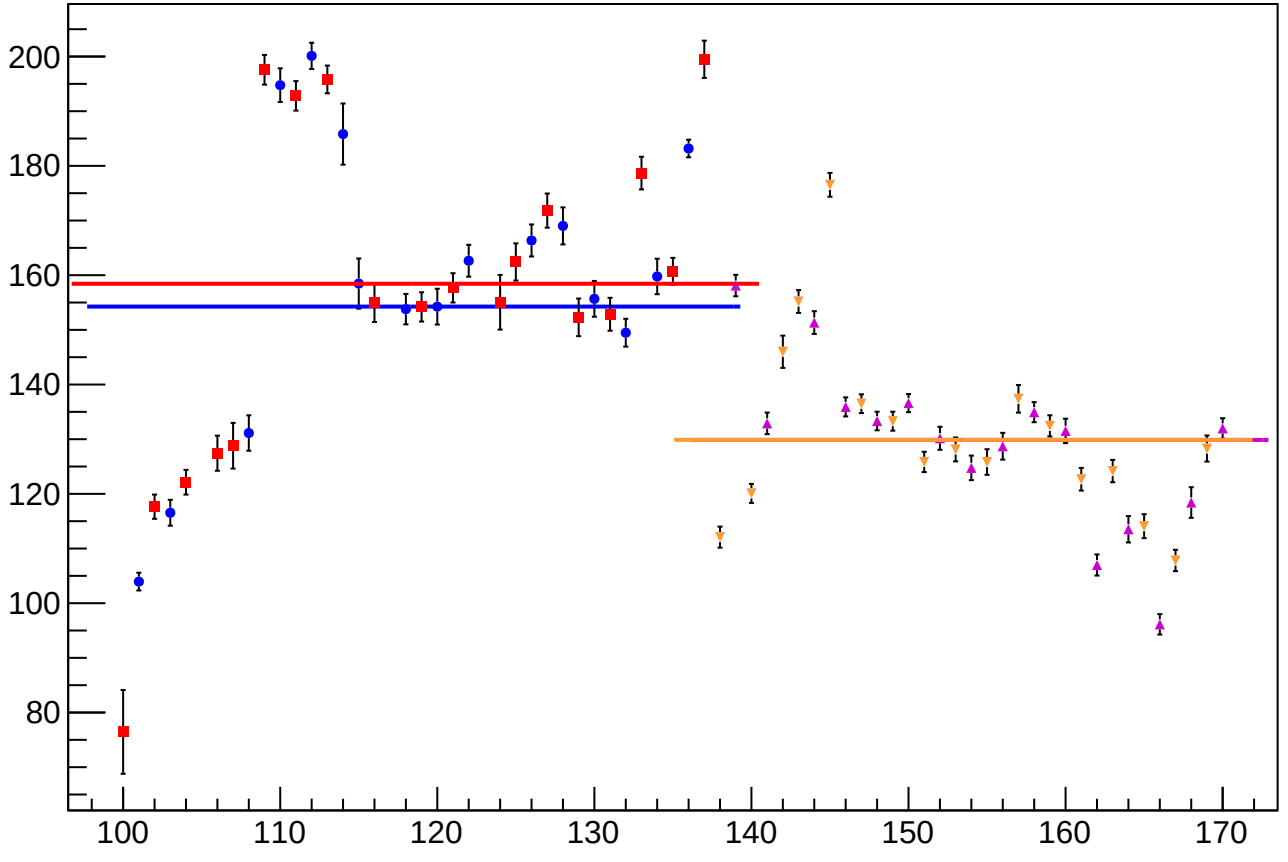
Left In: 3.055+/-0.353 $\chi^2$/NDF:312.3/15

\+ sign 4.982+/-0.301 $\chi^2$/NDF: 906.0/32

All: 5.073+/-0.216 $\chi^2$/NDF: 1566.7/67

\- sign 5.169+/-0.309 $\chi^2$/NDF: 660.5/34

# reg_asym_usr_diff_bpm4eX_slope vs Slug




Right In: 154.260+/-0.662 $\chi^2$/NDF: 2213.7/15

Left Out: 129.884+/-0.497 $\chi^2$/NDF:991.2/16

Right Out: 158.435+/-0.683 $\chi^2$/NDF: 1664.2/18

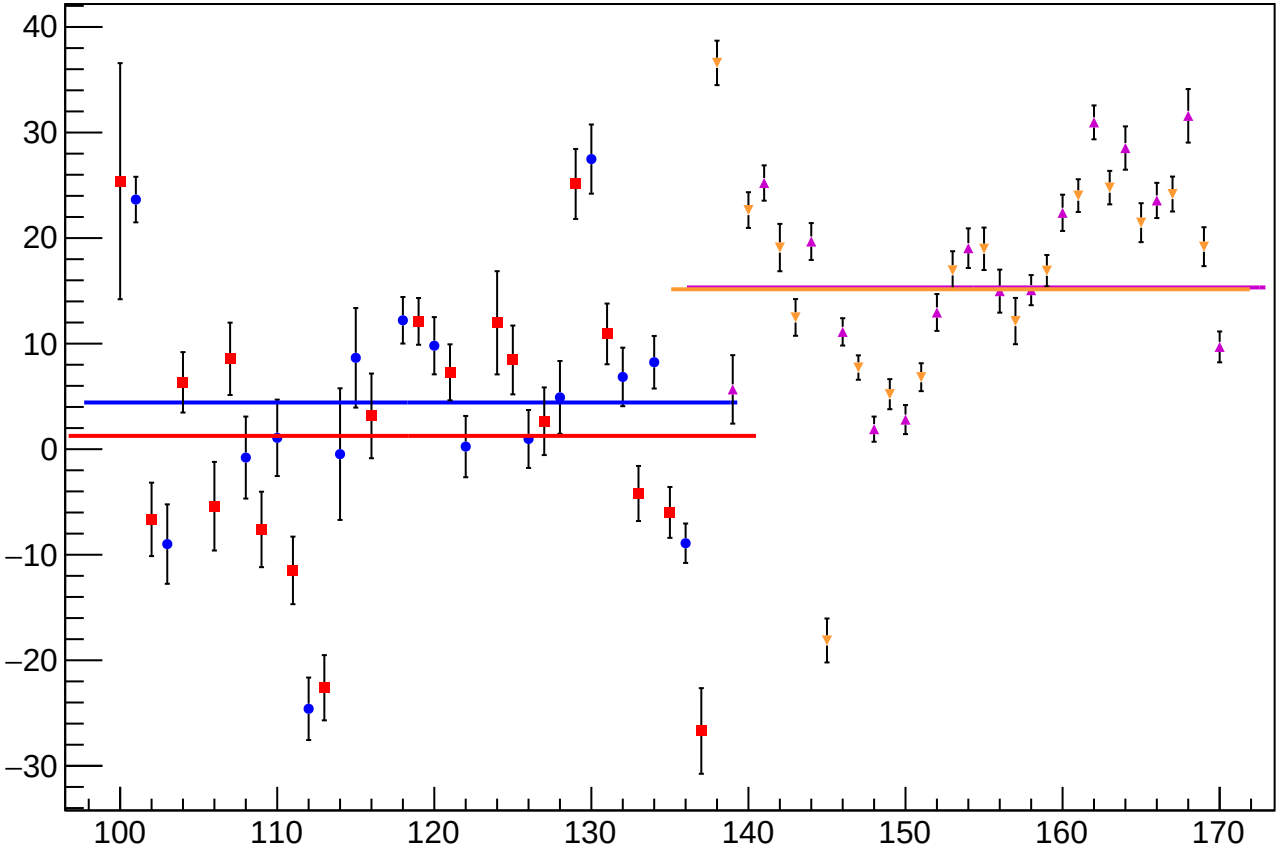
Left In: 129.867+/-0.499 $\chi^2$/NDF:892.3/15

+ sign 138.675+/-0.397 $\chi^2$/NDF: 4072.5/32

All: 139.238+/-0.283 $\chi^2$/NDF: 7774.6/67

- sign 139.817+/-0.403 $\chi^2$/NDF: 3698.1/34

# reg_asym_usr_diff_bpm4eY_slope vs Slug




Right In: 4.424+/-0.714 $\chi^2$/NDF: 316.1/15

Left Out: 15.149+/-0.404 $\chi^2$/NDF:637.3/16

Right Out: 1.260+/-0.732 $\chi^2$/NDF: 264.9/18

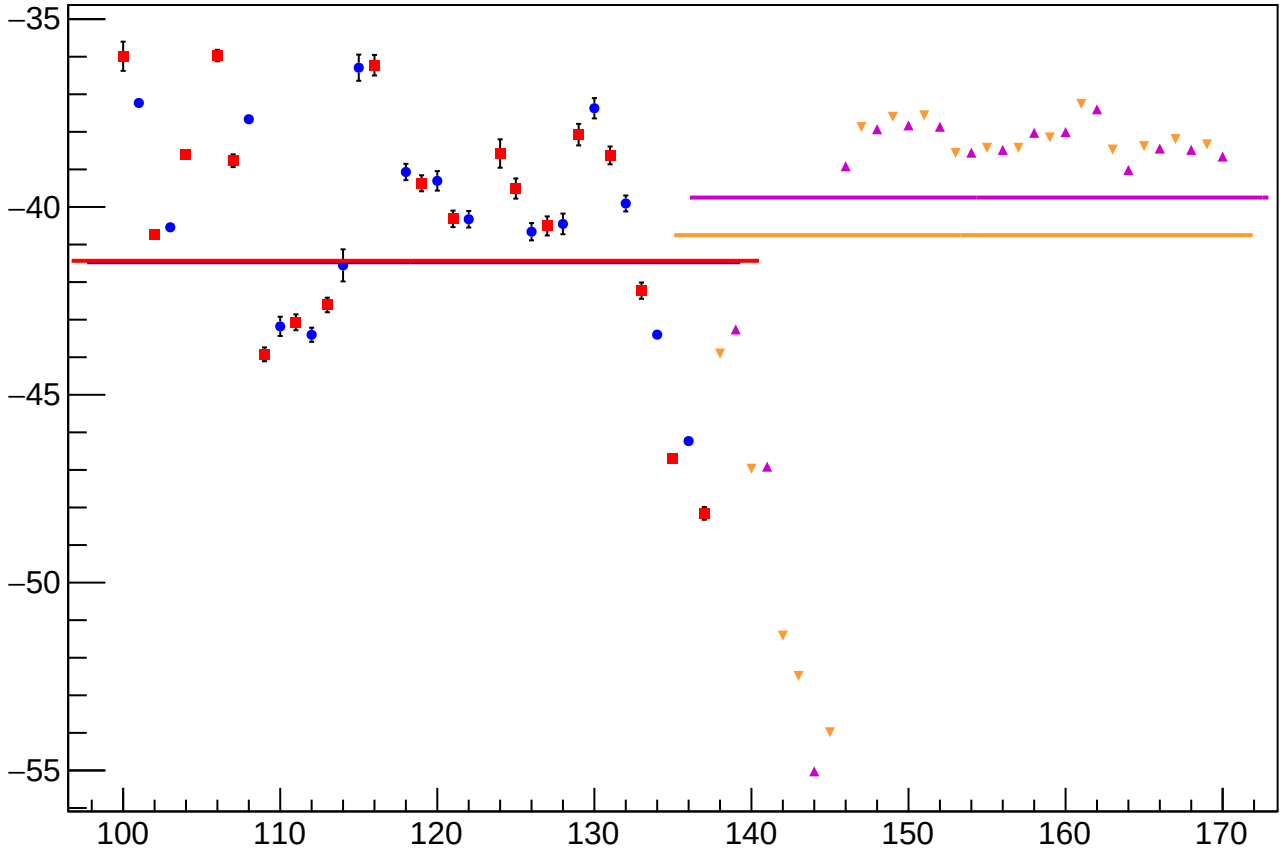
Left In: 15.324+/-0.412 $\chi^2$/NDF:509.5/15

+ sign 12.547+/-0.352 $\chi^2$/NDF: 1124.3/32

All: 12.250+/-0.251 $\chi^2$/NDF: 2180.7/67

- sign 11.940+/-0.359 $\chi^2$/NDF: 1055.0/34

# reg_asym_usr_diff_bpm12X_slope vs Slug




Right In: -41.472+/-0.038 $\chi^2$/NDF: 7912.0/15

Left Out: -40.749+/-0.019 $\chi^2$/NDF:73143.6/16

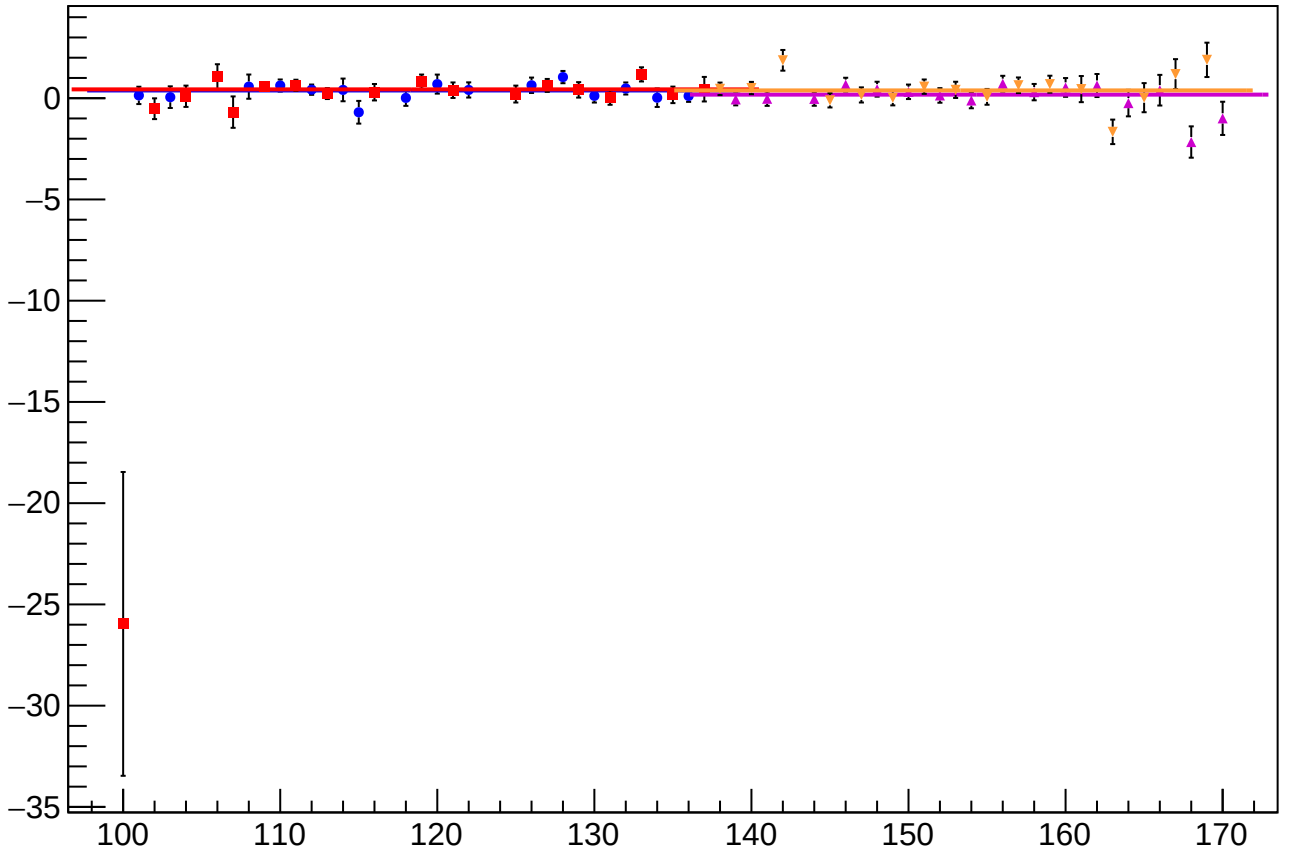
Right Out: -41.433+/-0.040 $\chi^2$/NDF: 8225.4/18

Left In: -39.749+/-0.019 $\chi^2$/NDF:43156.6/15

+ sign -40.893+/-0.017 $\chi^2$/NDF: 81343.7/32

All: -40.476+/-0.012 $\chi^2$/NDF: 135410.5/67

- sign -40.060+/-0.017 $\chi^2$/NDF: 52862.5/34




Right In: 0.382+/-0.092 $\chi^2$/NDF: 14.0/15

Left Out: 0.385+/-0.105 $\chi^2$/NDF:29.9/15

Right Out: 0.436+/-0.090 $\chi^2$/NDF: 29.0/17

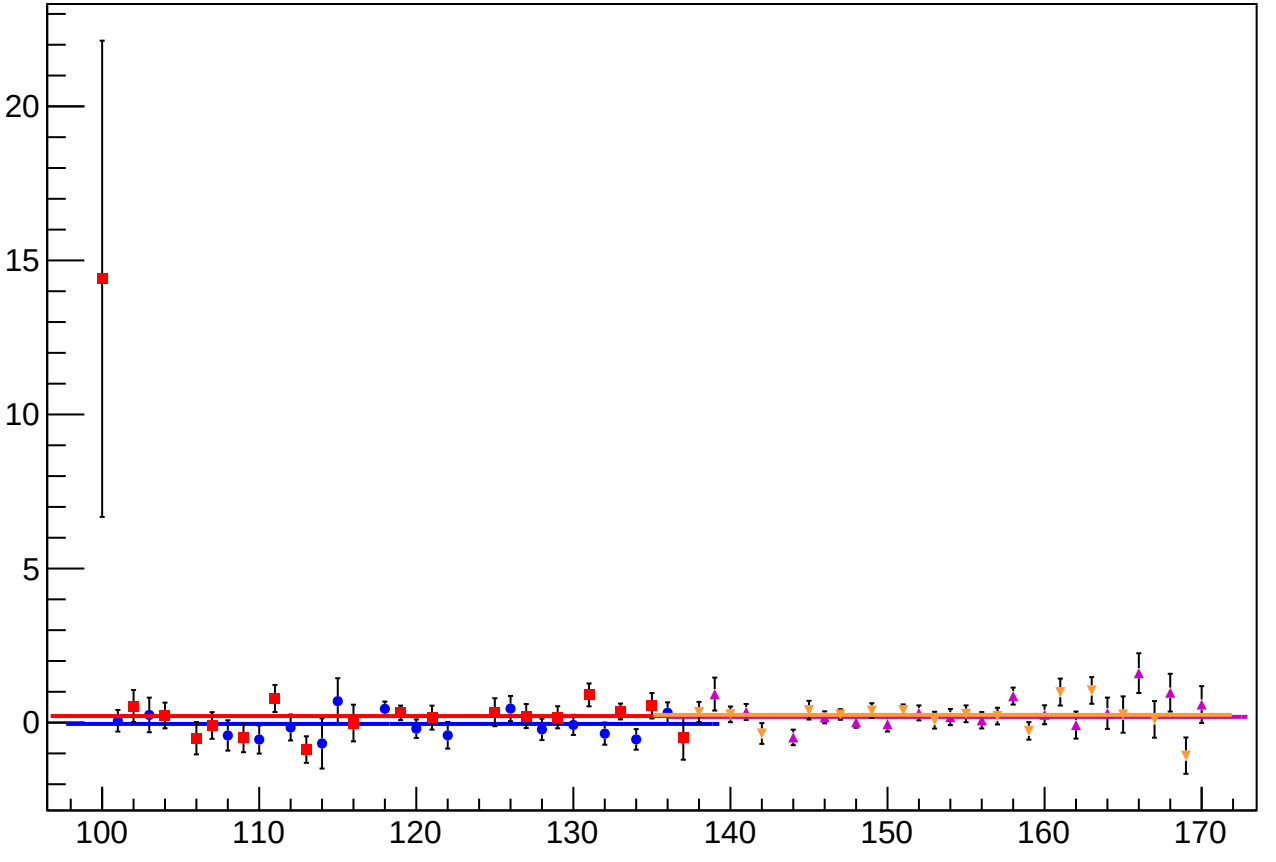
Left In: 0.177+/-0.103 $\chi^2$/NDF:19.6/15

+ sign 0.383+/-0.069 $\chi^2$/NDF: 43.9/31

All: 0.353+/-0.048 $\chi^2$/NDF: 96.4/65

- sign 0.324+/-0.068 $\chi^2$/NDF: 52.2/33

# reg_asym_dsl_diff_bpm4aY_slope vs Slug




Right In: -0.043+/-0.094 $\chi^2$/NDF: 15.0/15

Left Out: 0.251+/-0.071 $\chi^2$/NDF:19.7/15

Right Out: 0.213+/-0.095 $\chi^2$/NDF: 22.4/17

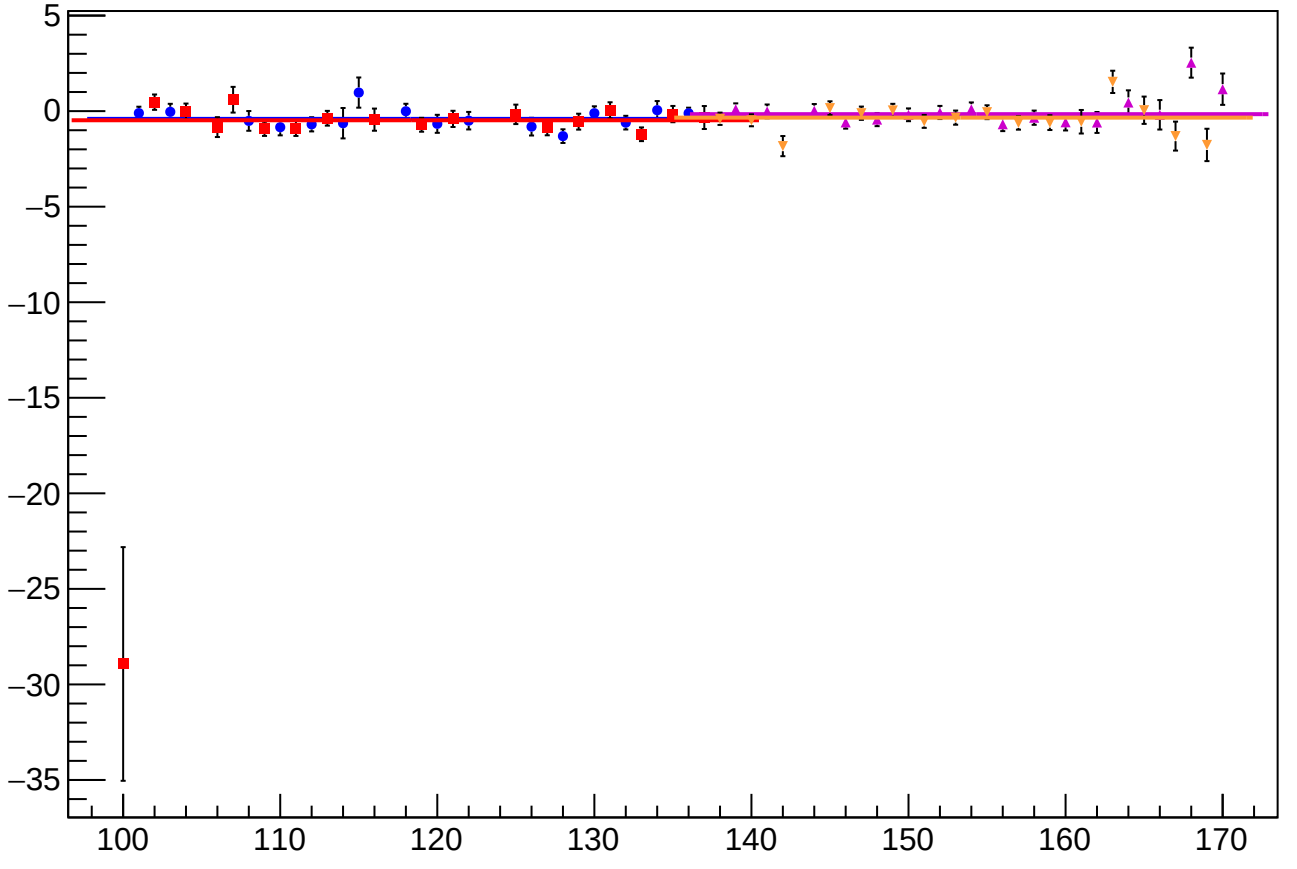
Left In: 0.186+/-0.071 $\chi^2$/NDF:25.1/15

+ sign 0.144+/-0.057 $\chi^2$/NDF: 40.9/31

All: 0.170+/-0.040 $\chi^2$/NDF: 88.9/65

- sign 0.196+/-0.057 $\chi^2$/NDF: 47.6/33

# reg_asym_dsl_diff_bpm4eX_slope vs Slug




Right In: -0.406+/-0.103 $\chi^2$/NDF: 17.8/15

Left Out: -0.340+/-0.102 $\chi^2$/NDF:29.0/15

Right Out: -0.478+/-0.104 $\chi^2$/NDF: 42.3/17

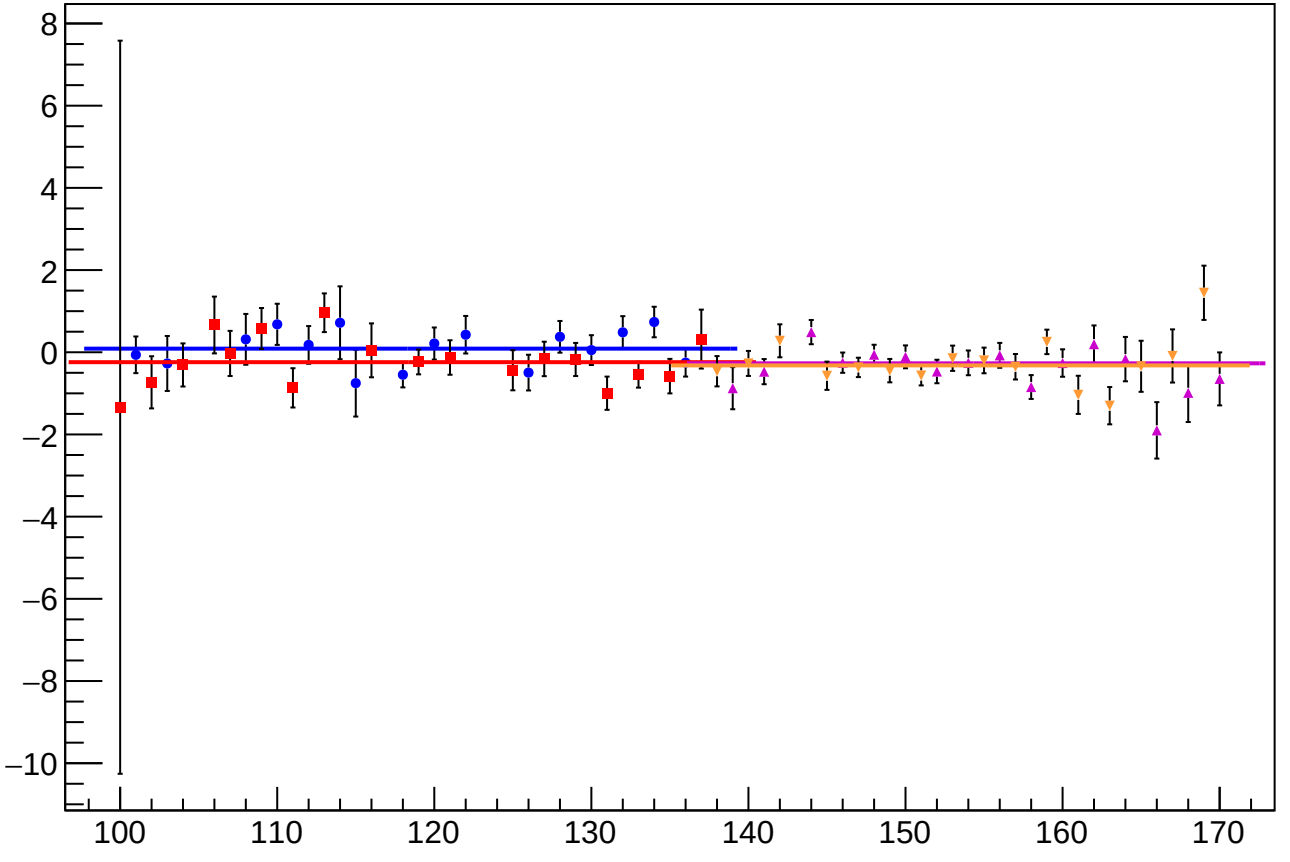
Left In: -0.159+/-0.100 $\chi^2$/NDF:23.3/15

+ sign -0.373+/-0.072 $\chi^2$/NDF: 46.9/31

All: -0.342+/-0.051 $\chi^2$/NDF: 117.8/65

- sign -0.312+/-0.072 $\chi^2$/NDF: 70.5/33

# reg_asym_dsl_diff_bpm4eY_slope vs Slug




Right In: 0.088+/-0.108 $\chi^2$/NDF: 15.9/15

Left Out: -0.320+/-0.085 $\chi^2$/NDF:22.7/15

Right Out: -0.241+/-0.110 $\chi^2$/NDF: 19.6/17

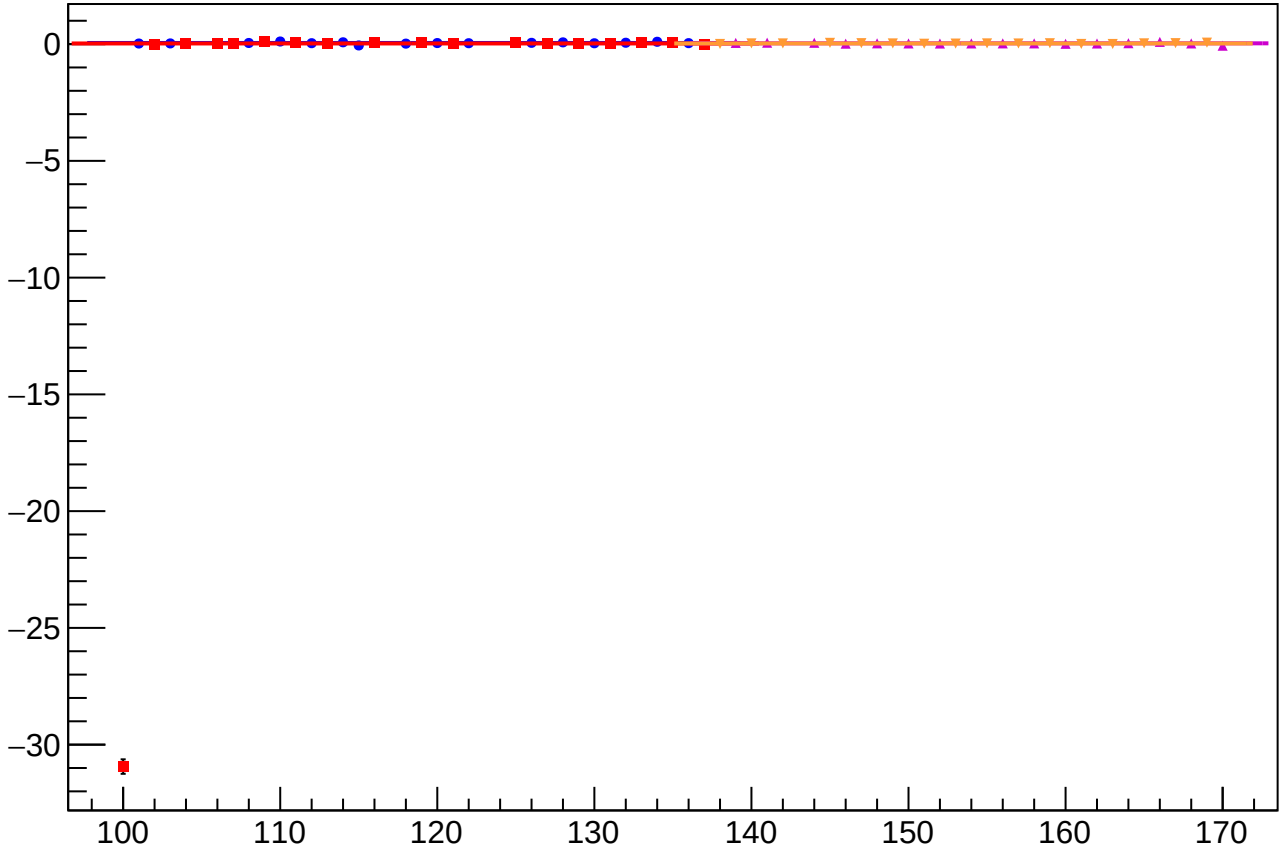
Left In: -0.269+/-0.084 $\chi^2$/NDF:22.5/15

+ sign -0.165+/-0.067 $\chi^2$/NDF: 47.4/31

All: -0.212+/-0.047 $\chi^2$/NDF: 90.5/65

- sign -0.259+/-0.067 $\chi^2$/NDF: 42.1/33

# reg_asym_dsl_diff_bpm12X_slope vs Slug




Right In: 0.049+/-0.006 $\chi^2$/NDF: 19.2/15

Left Out: 0.028+/-0.004 $\chi^2$/NDF:12.0/15

Right Out: 0.028+/-0.006 $\chi^2$/NDF: 10020.9/17

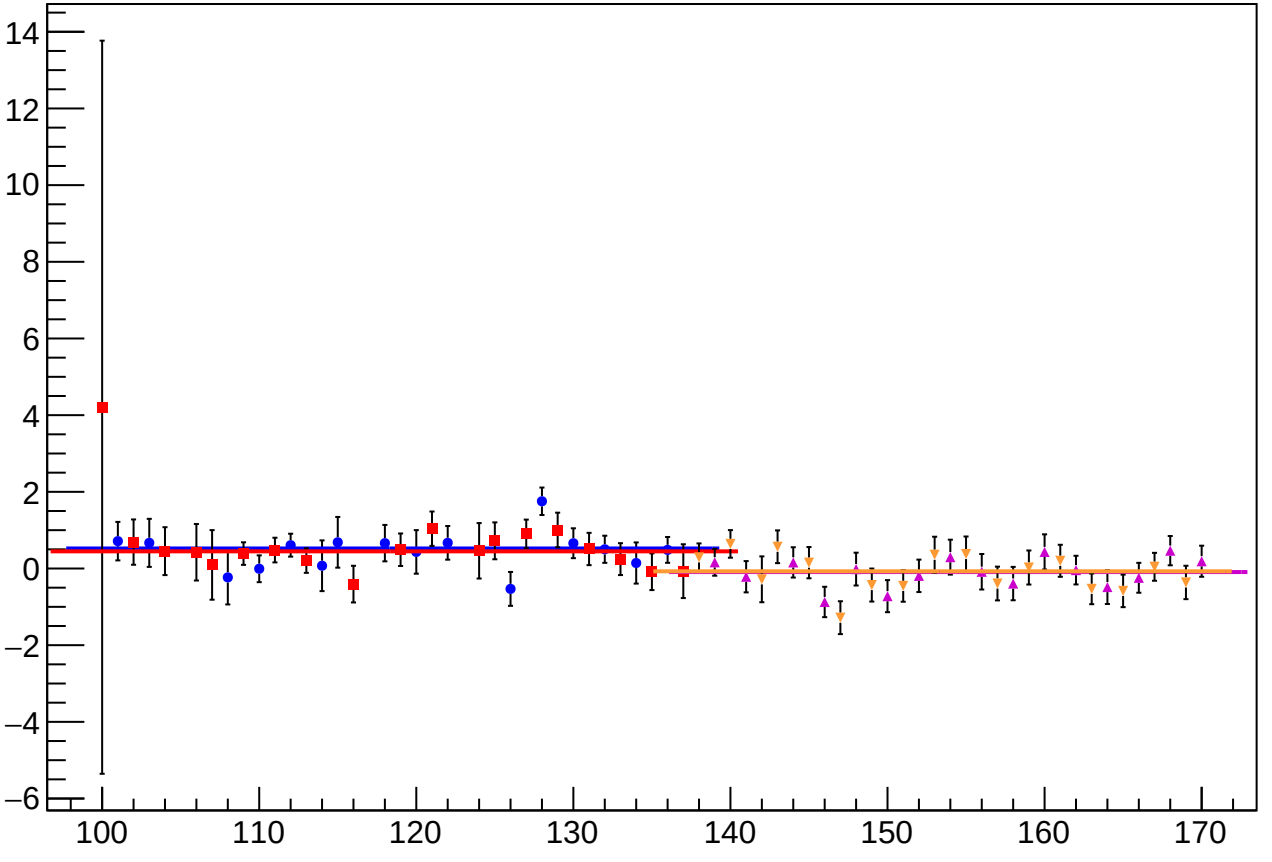
Left In: 0.034+/-0.004 $\chi^2$/NDF:28.9/15

+ sign 0.034+/-0.003 $\chi^2$/NDF: 39.1/31

All: 0.033+/-0.002 $\chi^2$/NDF: 10089.7/65

- sign 0.032+/-0.003 $\chi^2$/NDF: 10050.5/33

# reg_asym_dsr_diff_bpm1X_slope vs Slug




Right In: 0.522+/-0.108 $\chi^2$/NDF: 22.6/15

Left Out: -0.073+/-0.102 $\chi^2$/NDF:23.3/16

Right Out: 0.448+/-0.105 $\chi^2$/NDF: 11.4/18

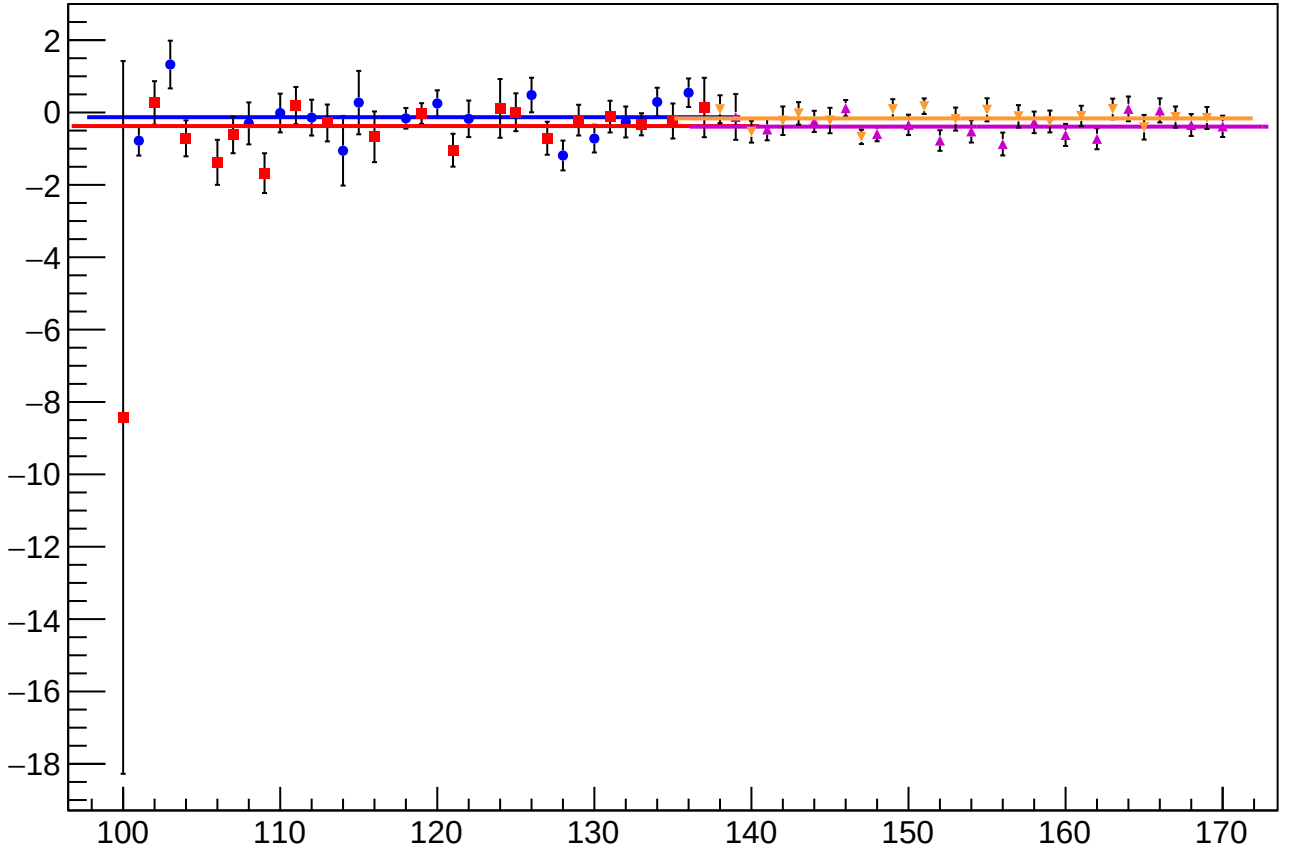
Left In: -0.093+/-0.103 $\chi^2$/NDF:13.3/15

+ sign 0.206+/-0.074 $\chi^2$/NDF: 61.9/32

All: 0.188+/-0.052 $\chi^2$/NDF: 100.2/67

- sign 0.171+/-0.073 $\chi^2$/NDF: 38.3/34

# reg_asym_dsr_diff_bpm4aY_slope vs Slug




Right In: -0.130+/-0.112 $\chi^2$/NDF: 24.6/15

Left Out: -0.163+/-0.071 $\chi^2$/NDF:14.2/16

Right Out: -0.375+/-0.111 $\chi^2$/NDF: 18.2/18

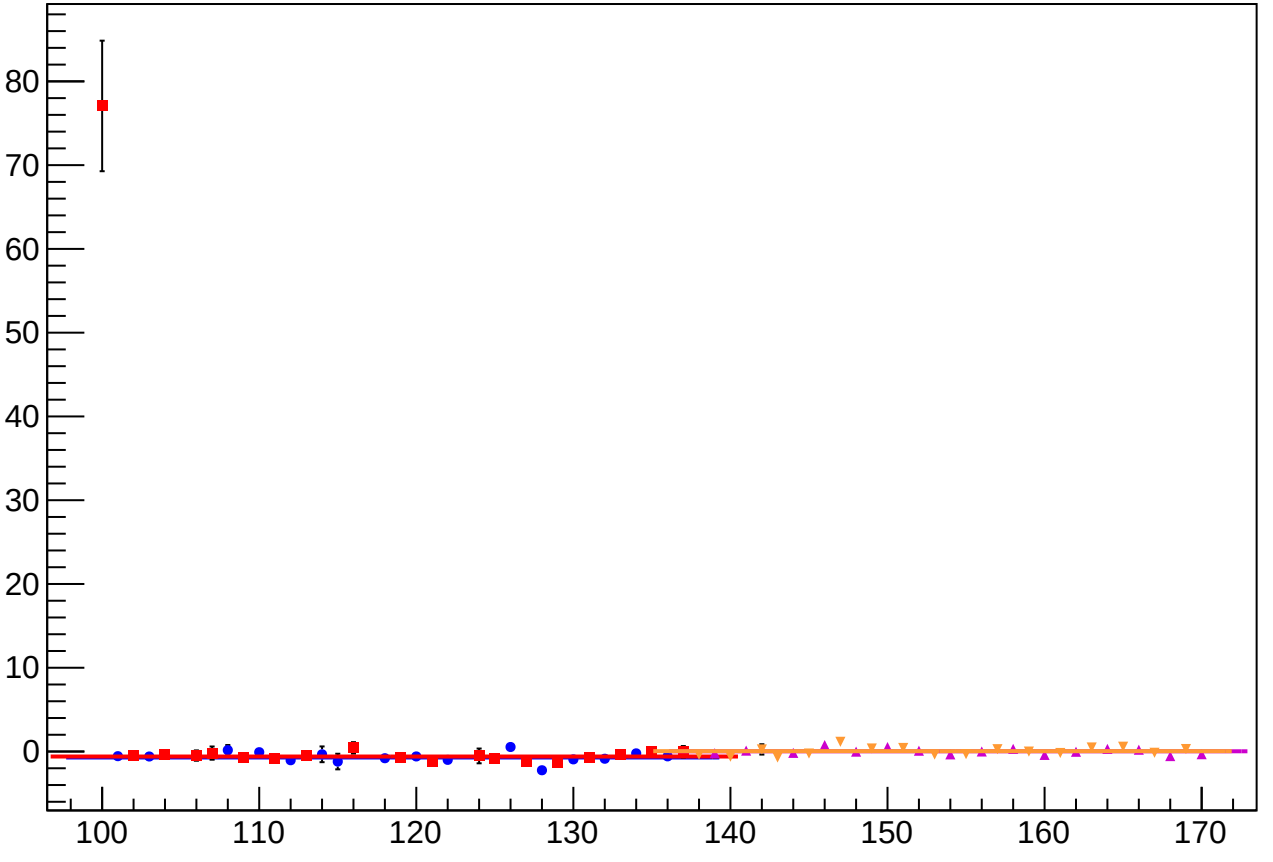
Left In: -0.391+/-0.073 $\chi^2$/NDF:17.0/15

+ sign -0.154+/-0.060 $\chi^2$/NDF: 38.9/32

All: -0.268+/-0.043 $\chi^2$/NDF: 81.5/67

- sign -0.386+/-0.061 $\chi^2$/NDF: 35.2/34

# reg_asym_dsr_diff_bpm4eX_slope vs Slug




Right In: -0.713+/-0.122 $\chi^2$/NDF: 24.9/15

Left Out: 0.043+/-0.100 $\chi^2$/NDF:23.2/16

Right Out: -0.597+/-0.122 $\chi^2$/NDF: 110.9/18

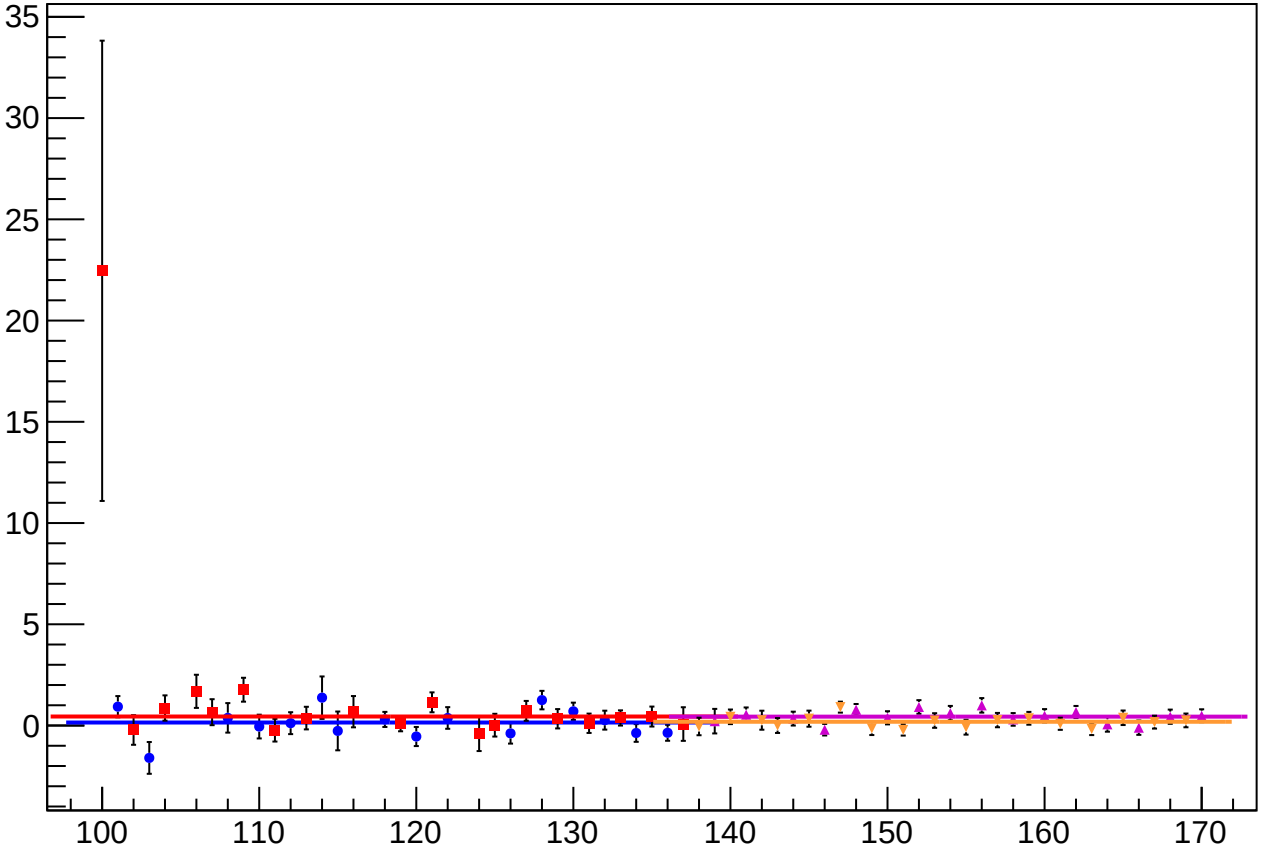
Left In: 0.027+/-0.100 $\chi^2$/NDF:12.1/15

+ sign -0.261+/-0.077 $\chi^2$/NDF: 71.2/32

All: -0.242+/-0.055 $\chi^2$/NDF: 210.2/67

- sign -0.224+/-0.077 $\chi^2$/NDF: 138.8/34

# reg_asym_dsr_diff_bpm4eY_slope vs Slug




Right In: 0.148+/-0.128 $\chi^2$/NDF: 23.3/15

Left Out: 0.185+/-0.082 $\chi^2$/NDF:14.1/16

Right Out: 0.445+/-0.128 $\chi^2$/NDF: 19.7/18

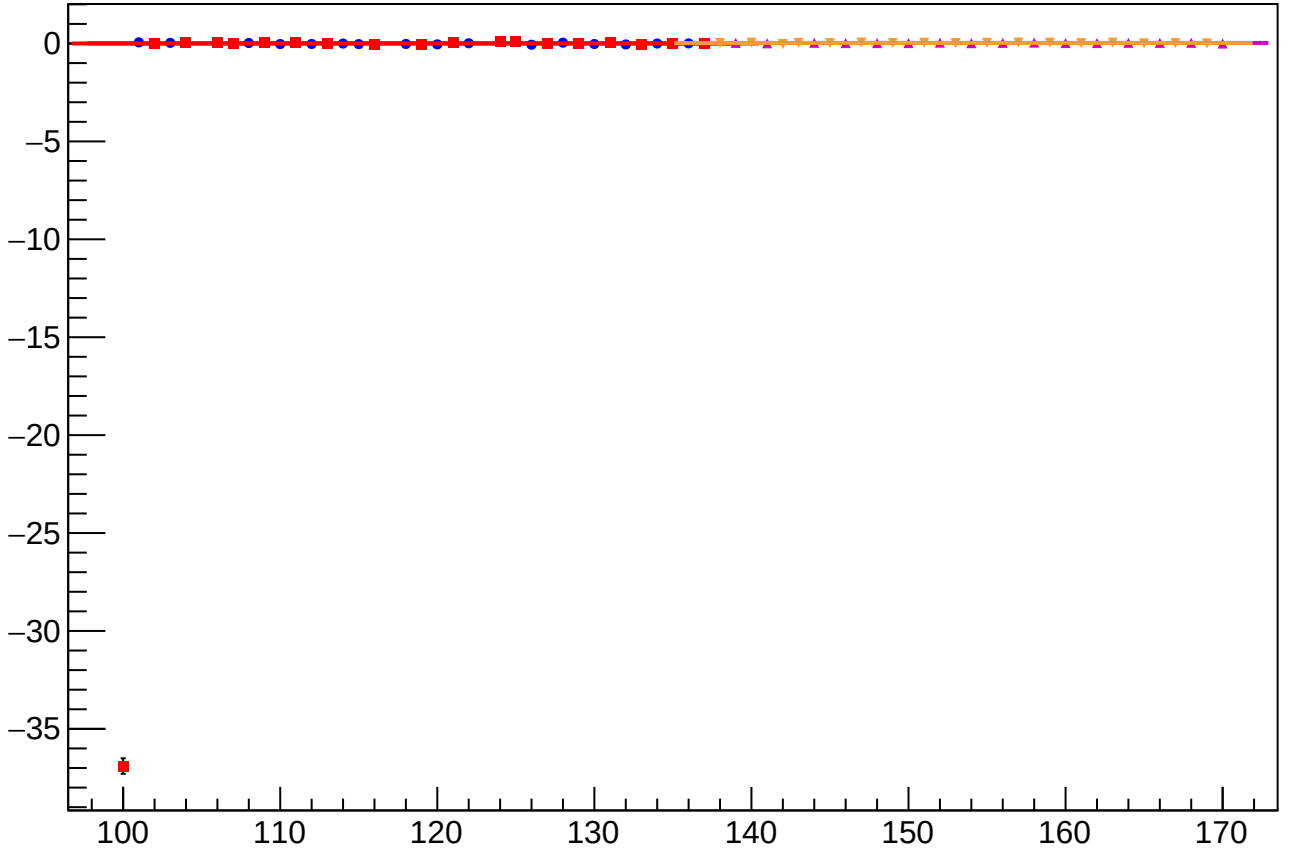
Left In: 0.438+/-0.084 $\chi^2$/NDF:15.9/15

+ sign 0.175+/-0.069 $\chi^2$/NDF: 37.5/32

All: 0.305+/-0.049 $\chi^2$/NDF: 80.3/67

- sign 0.440+/-0.070 $\chi^2$/NDF: 35.6/34

# reg_asym_dsr_diff_bpm12X_slope vs Slug




Right In: 0.006+/-0.007 $\chi^2$/NDF: 17.6/15

Left Out: 0.026+/-0.004 $\chi^2$/NDF:15.7/16

Right Out: 0.002+/-0.007 $\chi^2$/NDF: 8753.3/18

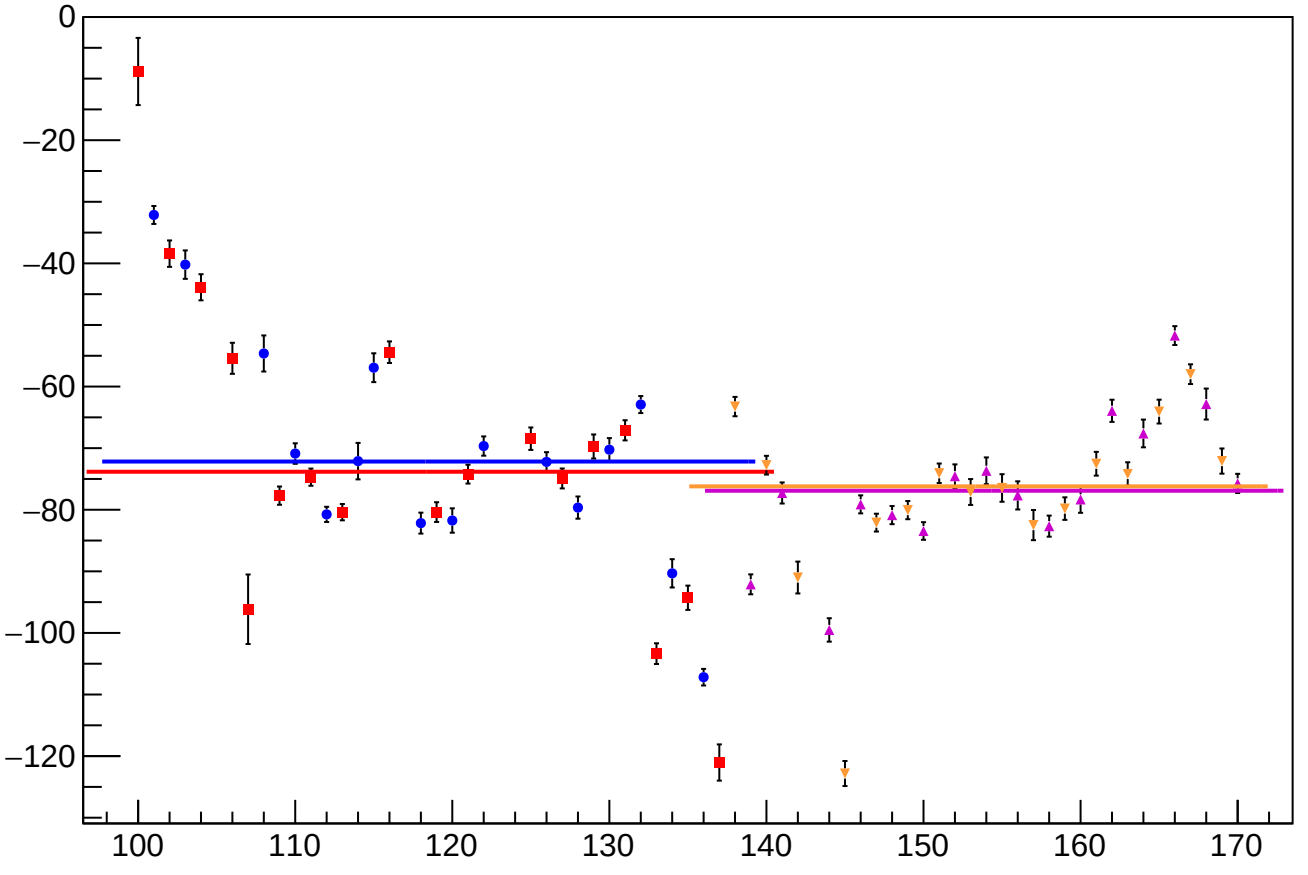
Left In: 0.029+/-0.004 $\chi^2$/NDF:10.0/15

+ sign 0.022+/-0.003 $\chi^2$/NDF: 39.1/32

All: 0.023+/-0.002 $\chi^2$/NDF: 8813.0/67

- sign 0.024+/-0.003 $\chi^2$/NDF: 8773.8/34

# reg_asym_us_avg_diff_bpm1X_slope vs Slug




Right In: -72.173+/-0.432 $\chi^2$/NDF: 1936.0/15

Left Out: -76.204+/-0.452 $\chi^2$/NDF:845.7/15

Right Out: -73.831+/-0.431 $\chi^2$/NDF: 1557.7/17

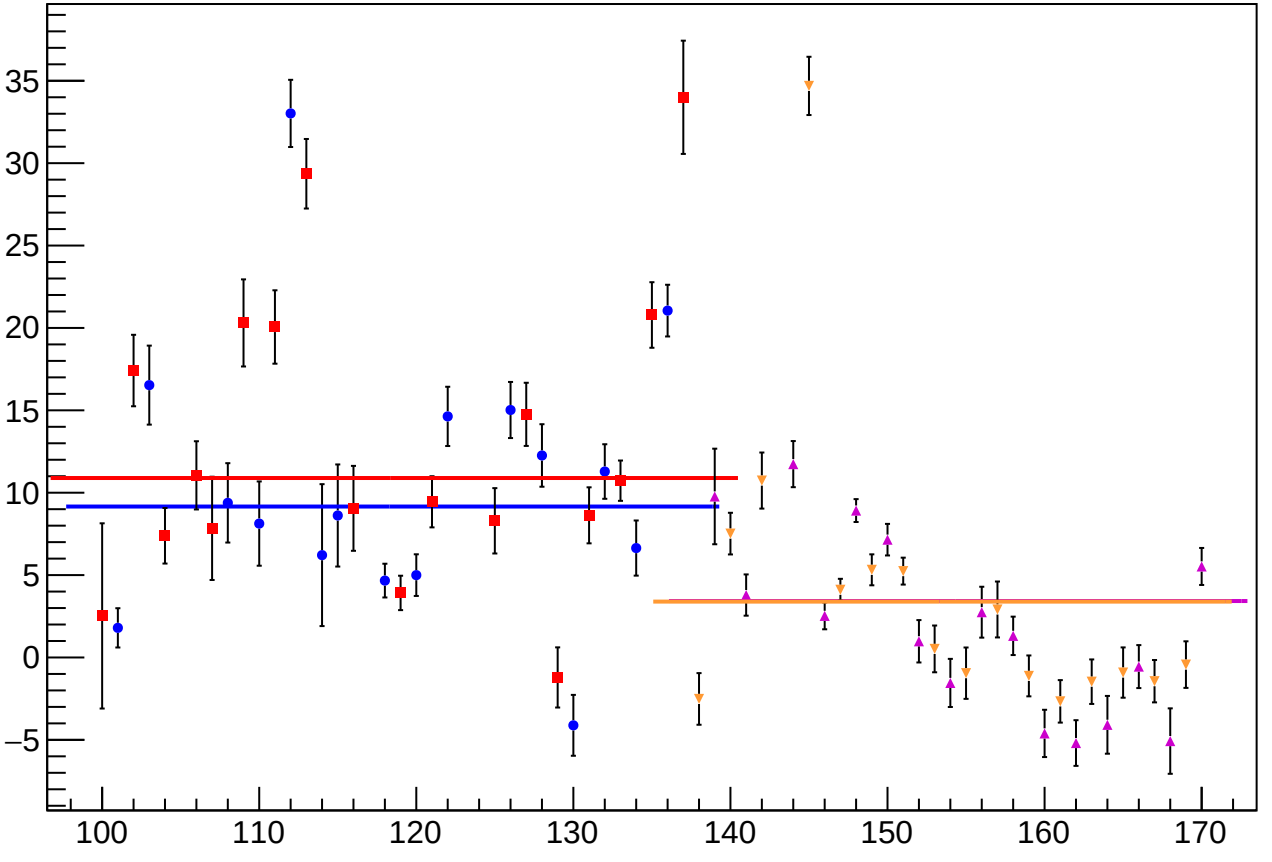
Left In: -76.911+/-0.441 $\chi^2$/NDF:647.4/15

+ sign -74.098+/-0.312 $\chi^2$/NDF: 2823.2/31

All: -74.725+/-0.219 $\chi^2$/NDF: 5061.2/65

- sign -75.335+/-0.308 $\chi^2$/NDF: 2230.1/33

# reg_asym_us_avg_diff_bpm4aY_slope vs Slug




Right In: 9.161+/-0.425 $\chi^2$/NDF: 352.1/15

Left Out: 3.391+/-0.299 $\chi^2$/NDF:457.1/15

Right Out: 10.892+/-0.440 $\chi^2$/NDF: 290.2/17

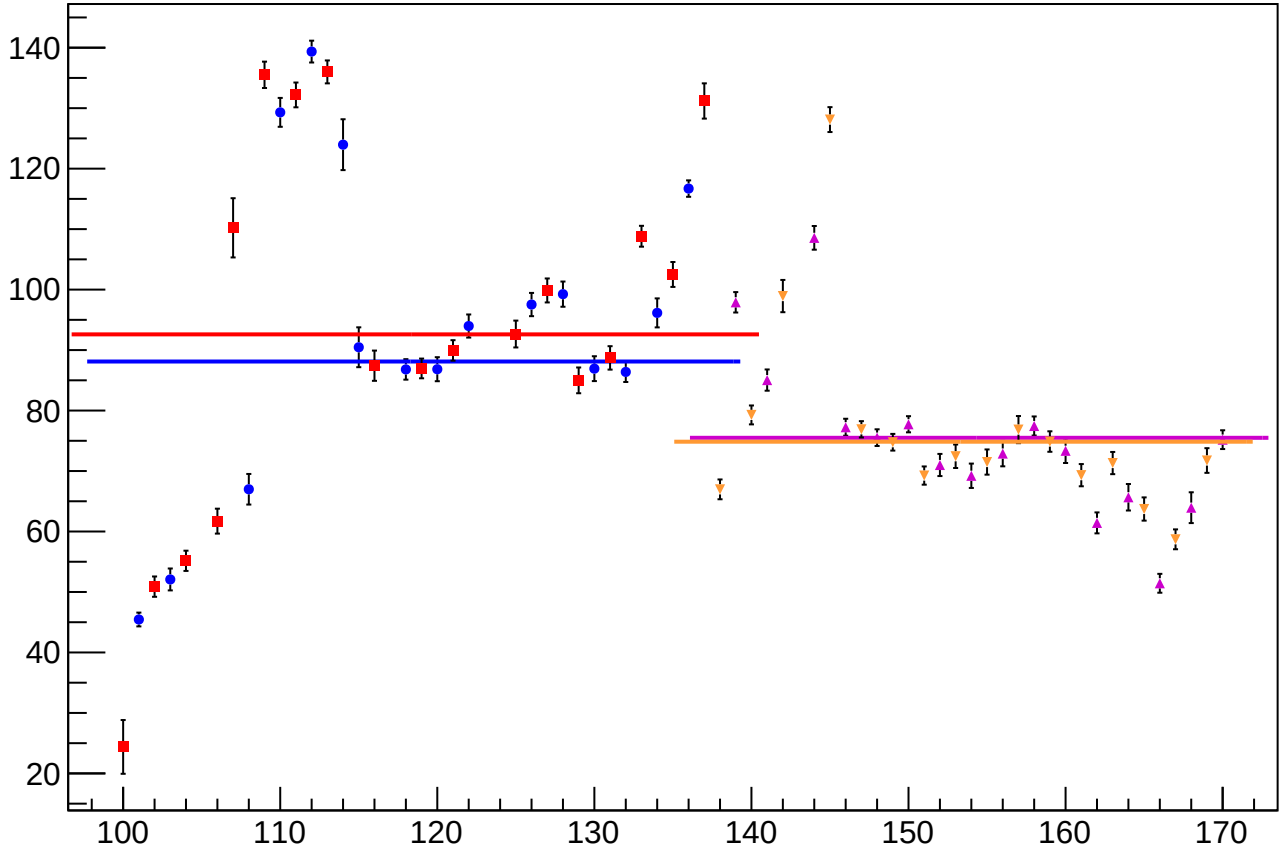
Left In: 3.426+/-0.300 $\chi^2$/NDF:257.0/15

\+ sign 5.302+/-0.245 $\chi^2$/NDF: 932.4/31

All: 5.544+/-0.174 $\chi^2$/NDF: 1678.2/65

\- sign 5.792+/-0.248 $\chi^2$/NDF: 743.8/33

# reg_asym_us_avg_diff_bpm4eX_slope vs Slug




Right In: 88.109+/-0.469 $\chi^2$/NDF: 3561.7/15

Left Out: 74.849+/-0.439 $\chi^2$/NDF:948.6/15

Right Out: 92.596+/-0.483 $\chi^2$/NDF: 3211.0/17

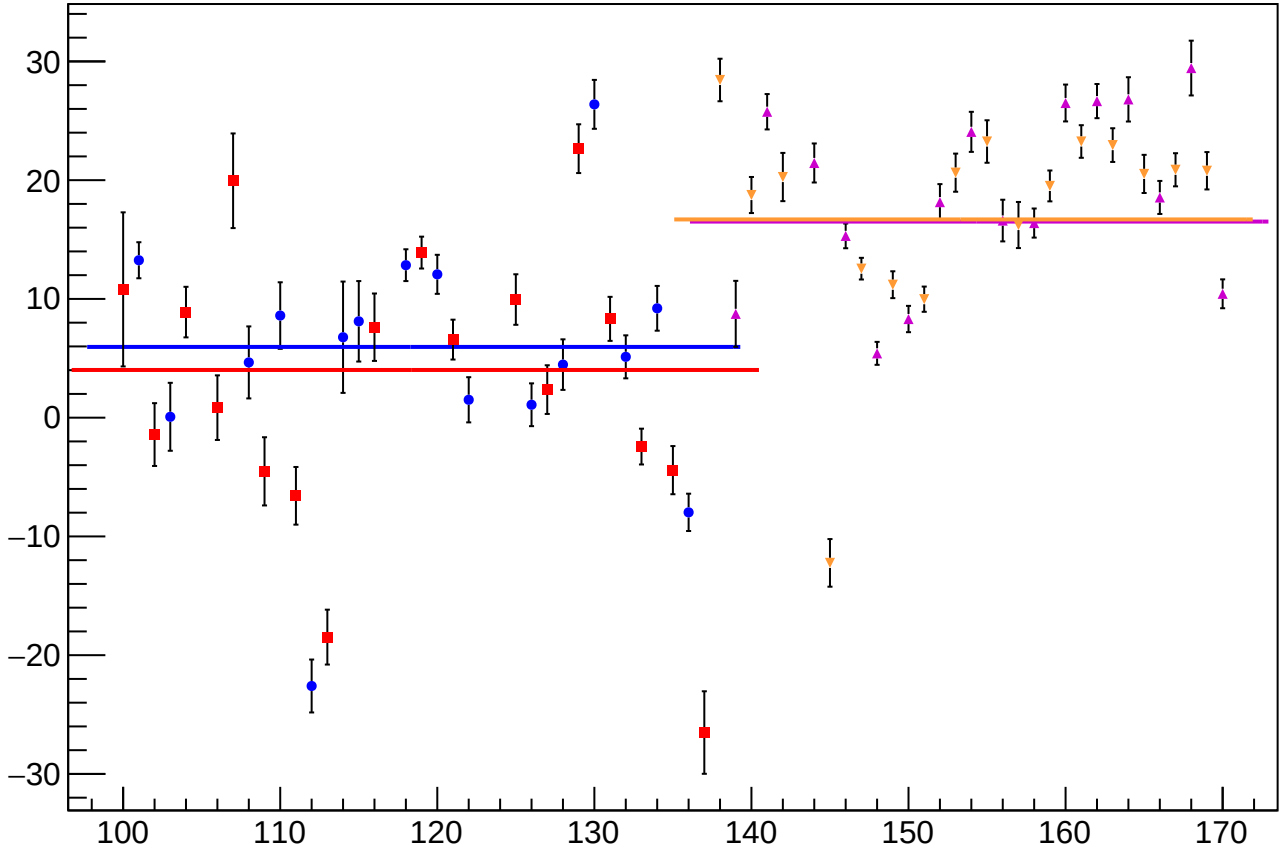
Left In: 75.494+/-0.428 $\chi^2$/NDF:859.8/15

+ sign 81.046+/-0.320 $\chi^2$/NDF: 4936.8/31

All: 82.026+/-0.226 $\chi^2$/NDF: 9729.1/65

- sign 83.005+/-0.320 $\chi^2$/NDF: 4773.5/33

# reg_asym_us_avg_diff_bpm4eY_slope vs Slug




Right In: 5.958+/-0.495 $\chi^2$/NDF: 426.8/15

Left Out: 16.693+/-0.354 $\chi^2$/NDF:428.0/15

Right Out: 4.017+/-0.510 $\chi^2$/NDF: 417.7/17

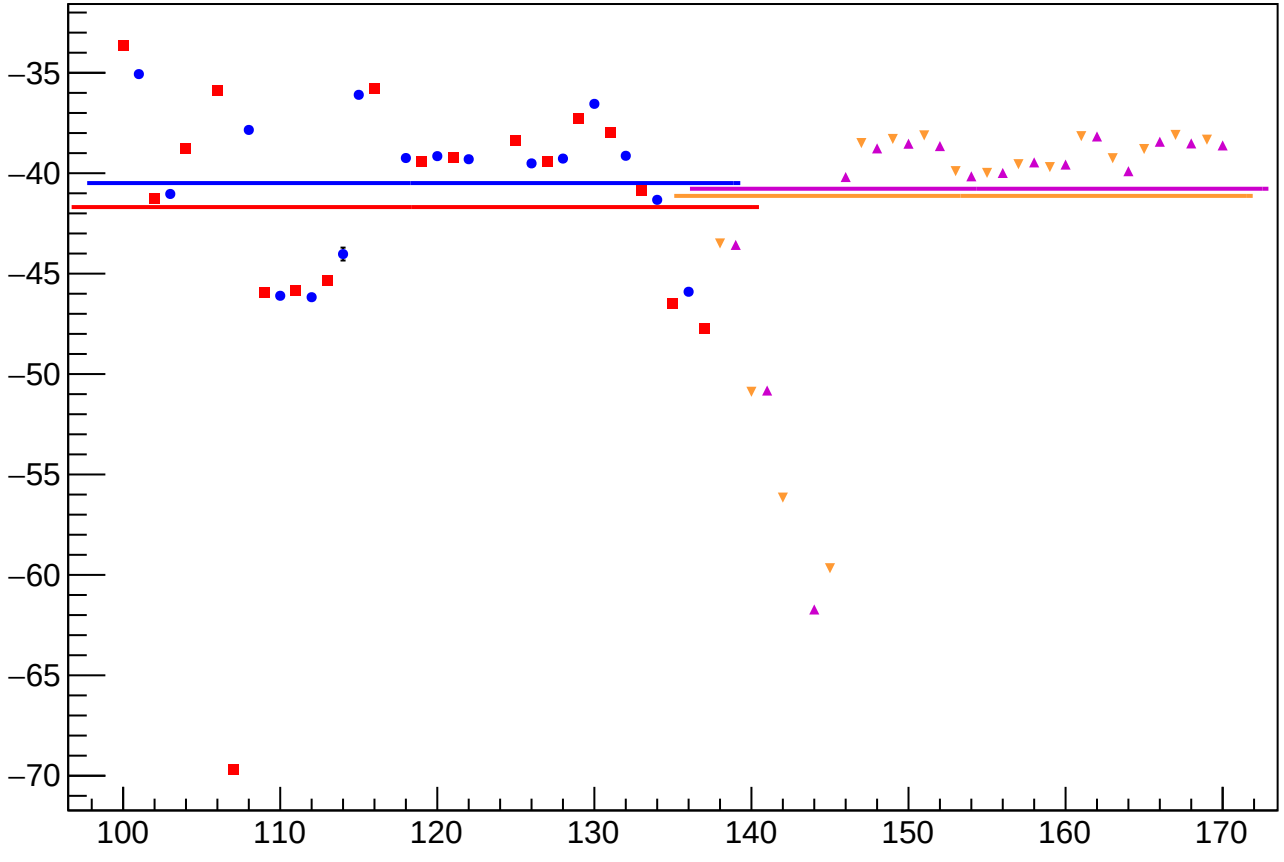
Left In: 16.513+/-0.351 $\chi^2$/NDF:444.8/15

+ sign 13.062+/-0.288 $\chi^2$/NDF: 1166.5/31

All: 12.777+/-0.204 $\chi^2$/NDF: 2438.5/65

- sign 12.488+/-0.289 $\chi^2$/NDF: 1270.0/33

# reg_asym_us_avg_diff_bpm12X_slope vs Slug




Right In: -40.491+/-0.028 $\chi^2$/NDF: 18125.4/15

Left Out: -41.129+/-0.017 $\chi^2$/NDF:108256.9/15

Right Out: -41.686+/-0.029 $\chi^2$/NDF: 36838.6/17

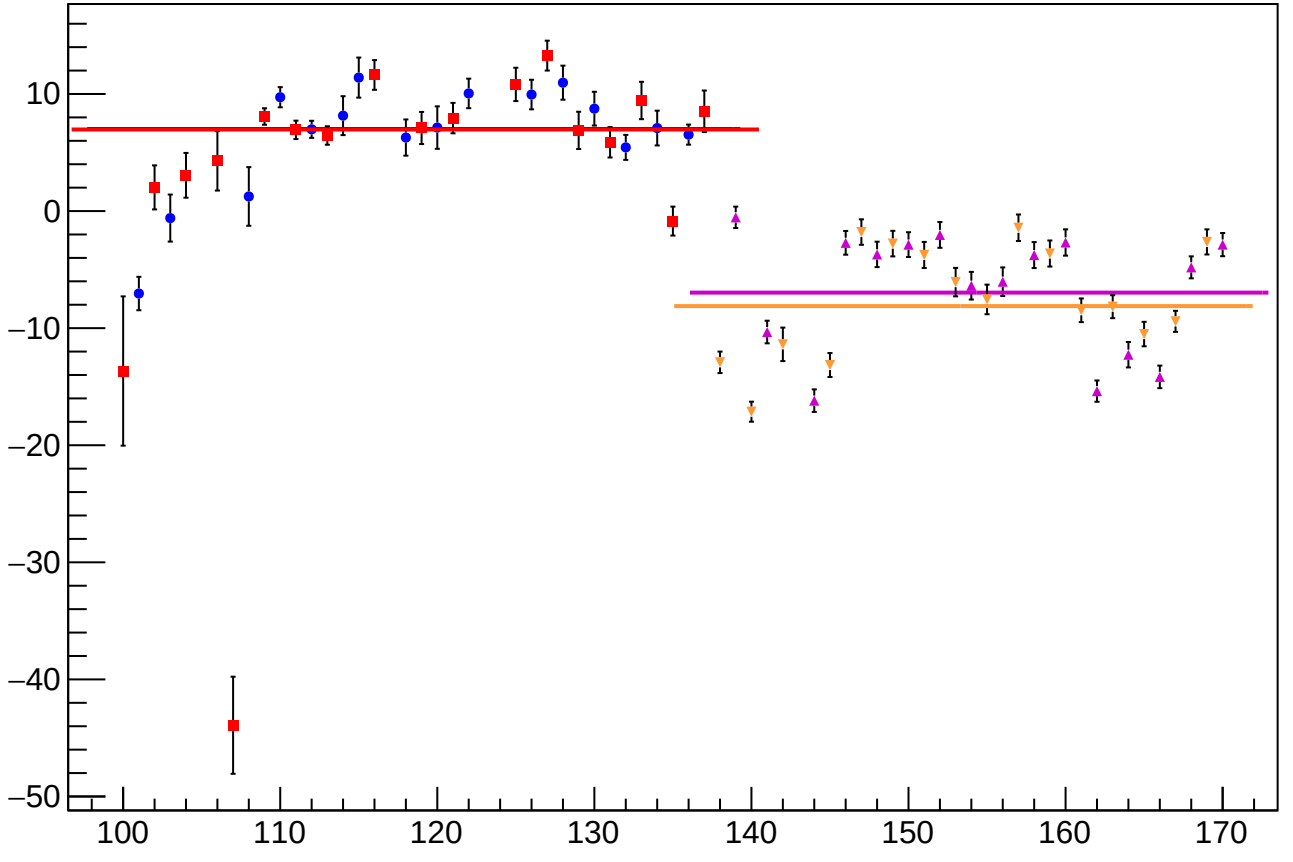
Left In: -40.773+/-0.016 $\chi^2$/NDF:89039.3/15

+ sign -40.964+/-0.014 $\chi^2$/NDF: 126758.7/31

All: -40.975+/-0.010 $\chi^2$/NDF: 253384.1/65

- sign -40.986+/-0.014 $\chi^2$/NDF: 126624.2/33

# reg_asym_us_dd_diff_bpm1X_slope vs Slug




Right In: 7.011+/-0.309 $\chi^2$/NDF: 156.3/15

Left Out: -8.115+/-0.263 $\chi^2$/NDF:328.8/15

Right Out: 6.967+/-0.298 $\chi^2$/NDF: 266.0/17

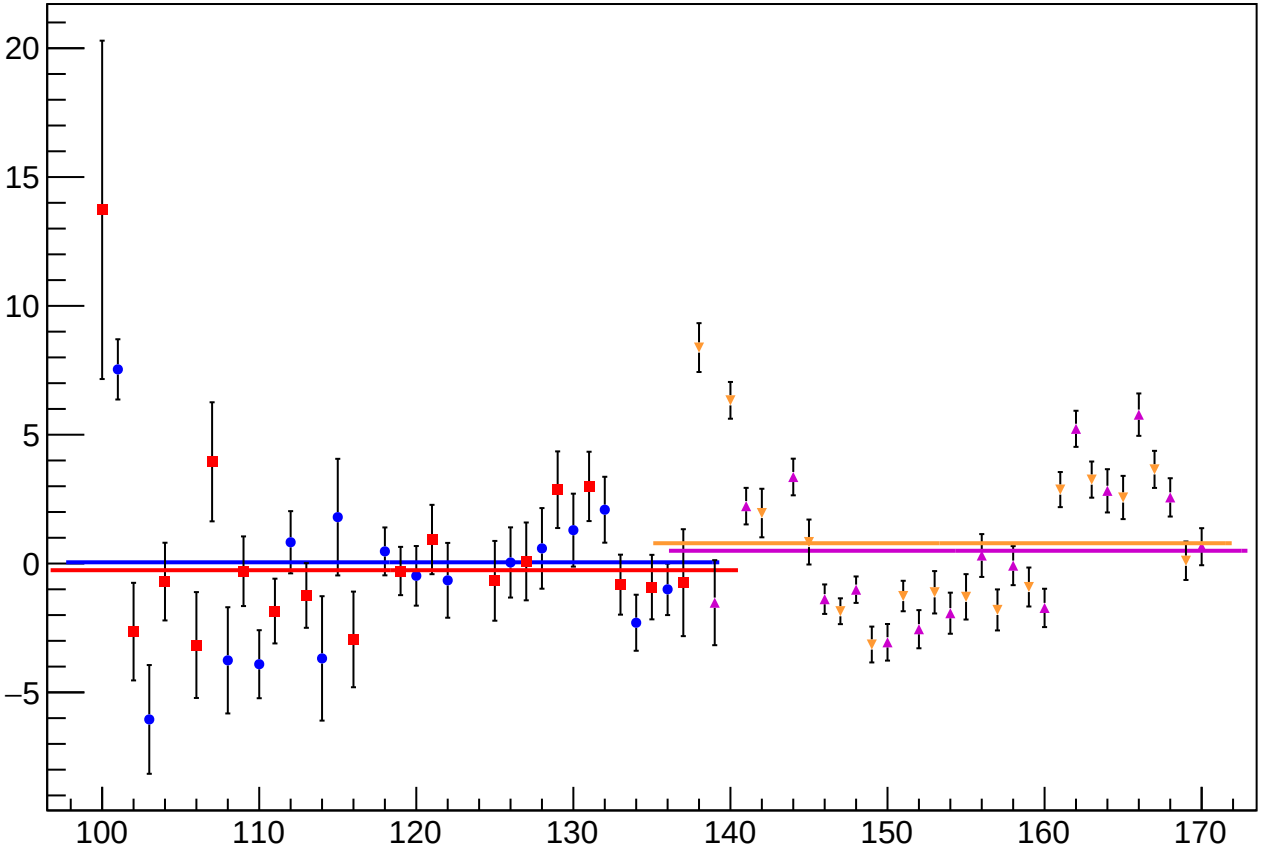
Left In: -6.965+/-0.257 $\chi^2$/NDF:426.8/15

+ sign -1.755+/-0.201 $\chi^2$/NDF: 1871.5/31

All: -1.383+/-0.140 $\chi^2$/NDF: 3824.6/65

- sign -1.034+/-0.195 $\chi^2$/NDF: 1946.4/33

# reg_asym_us_dd_diff_bpm4aY_slope vs Slug




Right In: 0.048+/-0.331 $\chi^2$/NDF: 75.0/15

Left Out: 0.788+/-0.183 $\chi^2$/NDF:267.2/15

Right Out: -0.259+/-0.344 $\chi^2$/NDF: 27.5/17

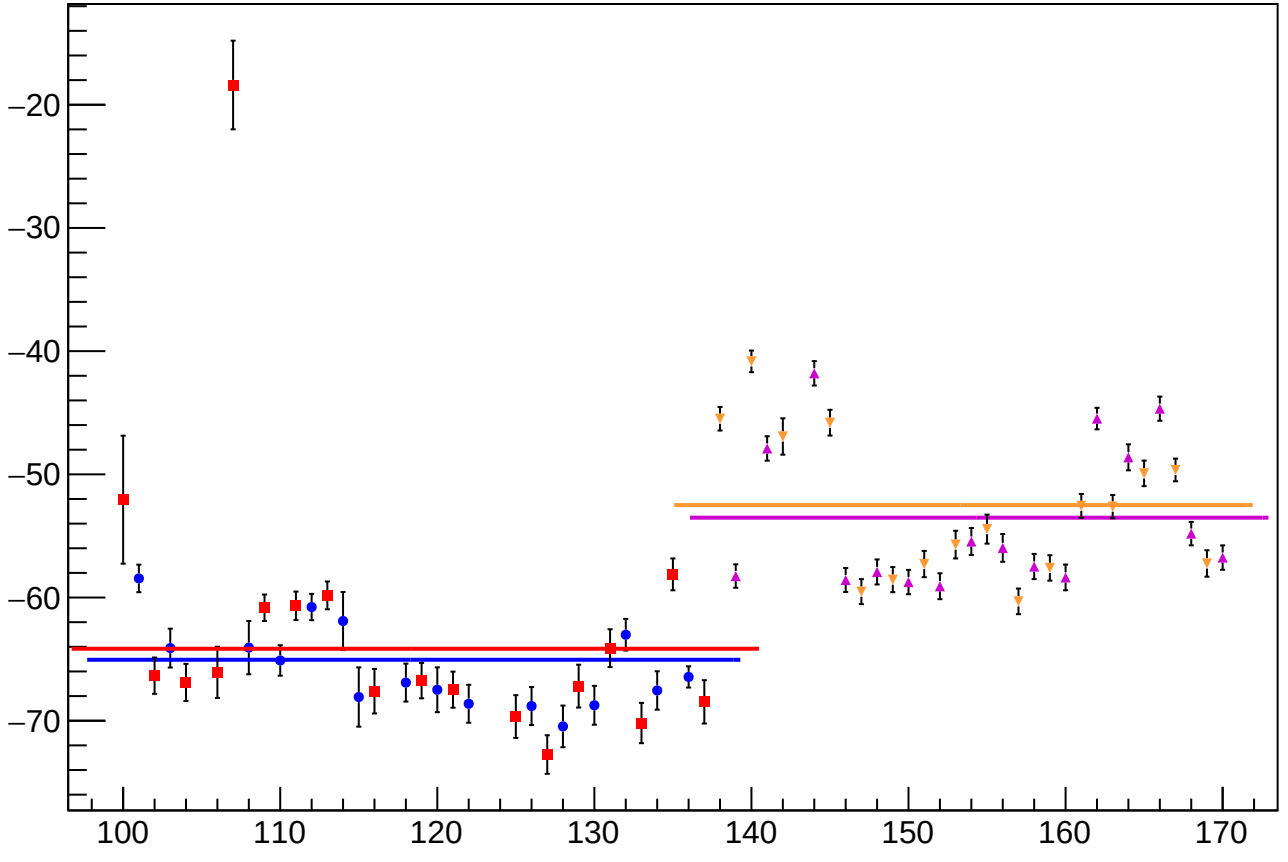
Left In: 0.496+/-0.182 $\chi^2$/NDF:206.1/15

+ sign 0.615+/-0.160 $\chi^2$/NDF: 346.0/31

All: 0.474+/-0.114 $\chi^2$/NDF: 585.0/65

- sign 0.331+/-0.161 $\chi^2$/NDF: 237.4/33

# reg_asym_us_dd_diff_bpm4eX_slope vs Slug




Right In: -65.051+/-0.354 $\chi^2$/NDF: 92.8/15

Left Out: -52.496+/-0.257 $\chi^2$/NDF:515.2/15

Right Out: -64.156+/-0.360 $\chi^2$/NDF: 303.7/17

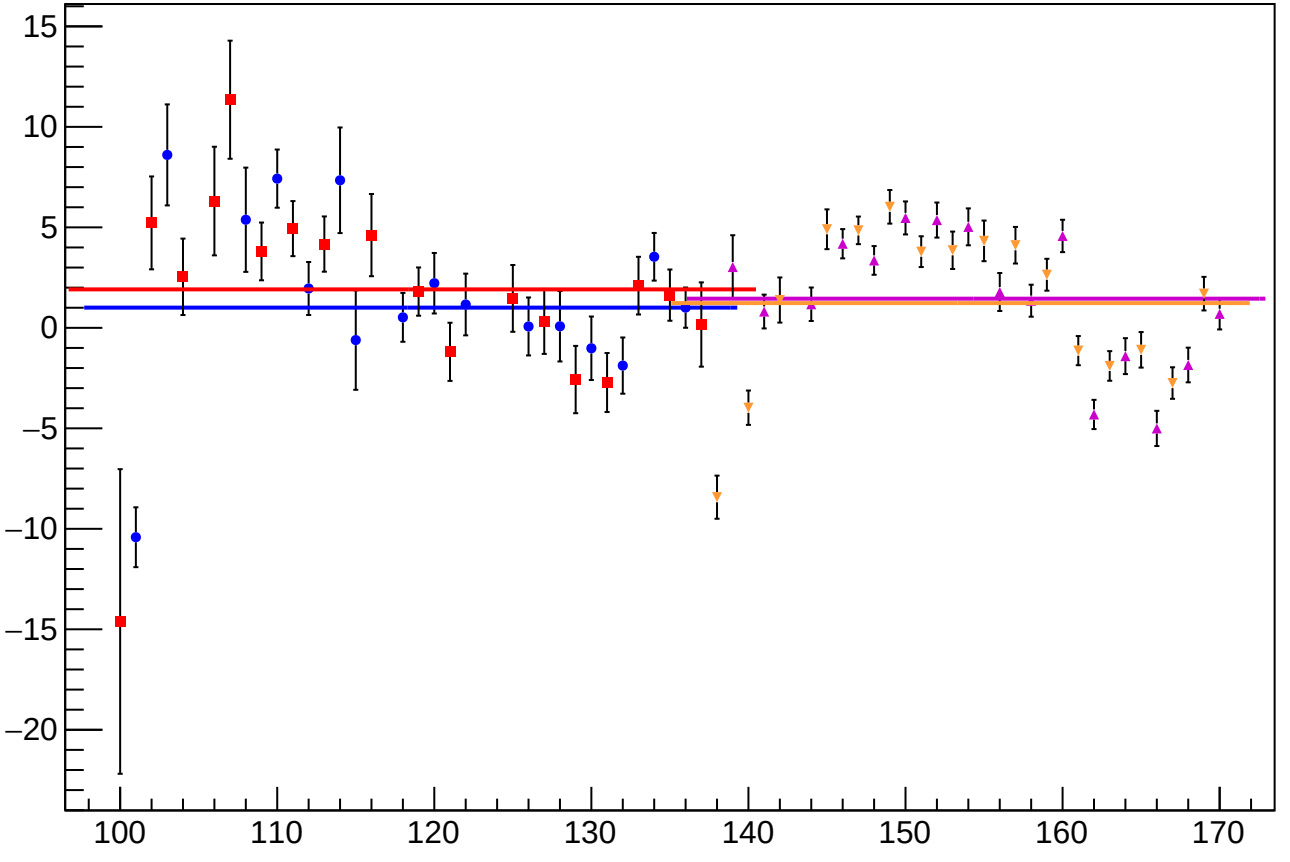
Left In: -53.518+/-0.250 $\chi^2$/NDF:543.2/15

+ sign -56.833+/-0.208 $\chi^2$/NDF: 1431.4/31

All: -56.907+/-0.146 $\chi^2$/NDF: 2866.1/65

- sign -56.979+/-0.206 $\chi^2$/NDF: 1434.5/33

# reg_asym_us_dd_diff_bpm4eY_slope vs Slug




Right In: 1.006+/-0.376 $\chi^2$/NDF: 109.2/15

Left Out: 1.231+/-0.212 $\chi^2$/NDF:295.8/15

Right Out: 1.914+/-0.390 $\chi^2$/NDF: 54.5/17

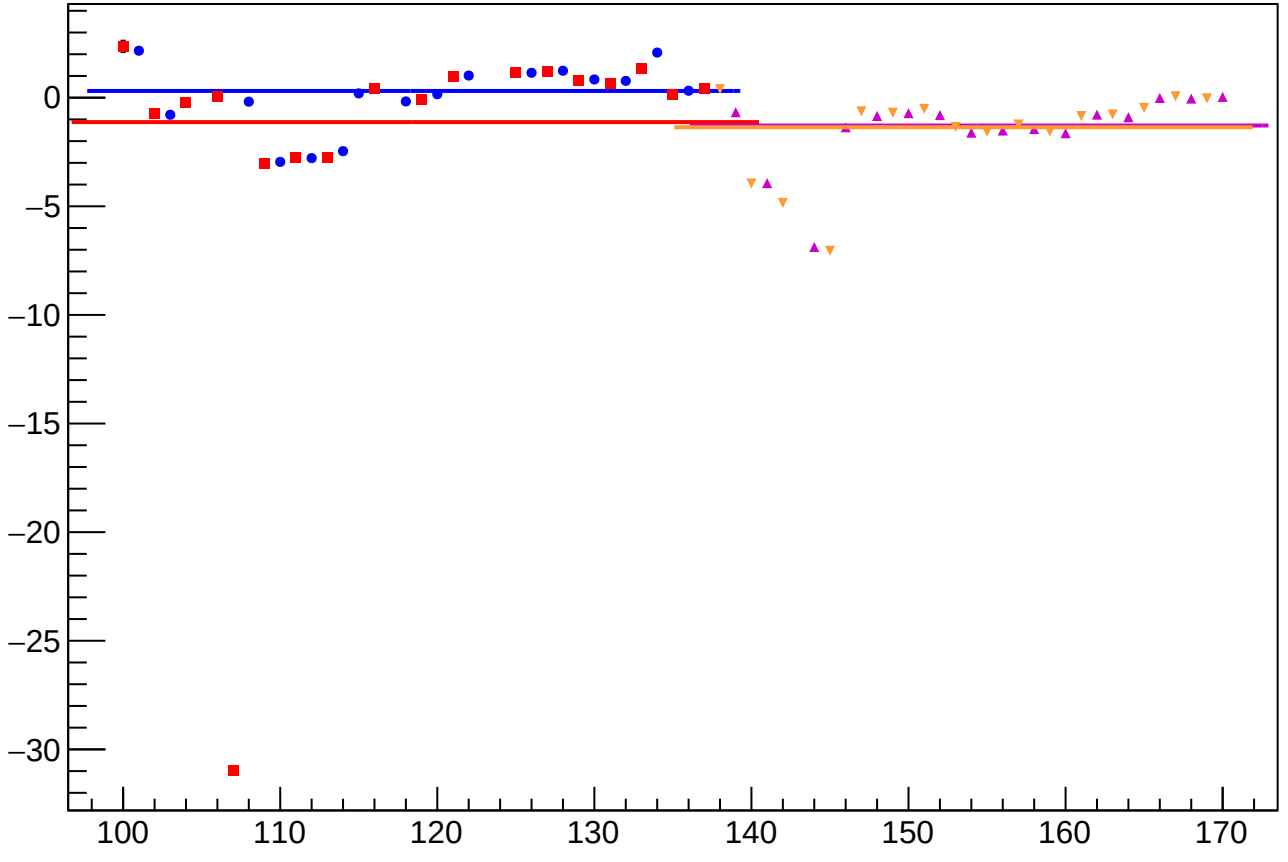
Left In: 1.452+/-0.210 $\chi^2$/NDF:240.1/15

+ sign 1.177+/-0.184 $\chi^2$/NDF: 405.4/31

All: 1.366+/-0.130 $\chi^2$/NDF: 703.1/65

- sign 1.555+/-0.185 $\chi^2$/NDF: 295.7/33

# reg_asym_us_dd_diff_bpm12X_slope vs Slug




Right In: 0.310+/-0.021 $\chi^2$/NDF: 4848.4/15

Left Out: -1.361+/-0.010 $\chi^2$/NDF:33972.8/15

Right Out: -1.124+/-0.022 $\chi^2$/NDF: 46347.9/17

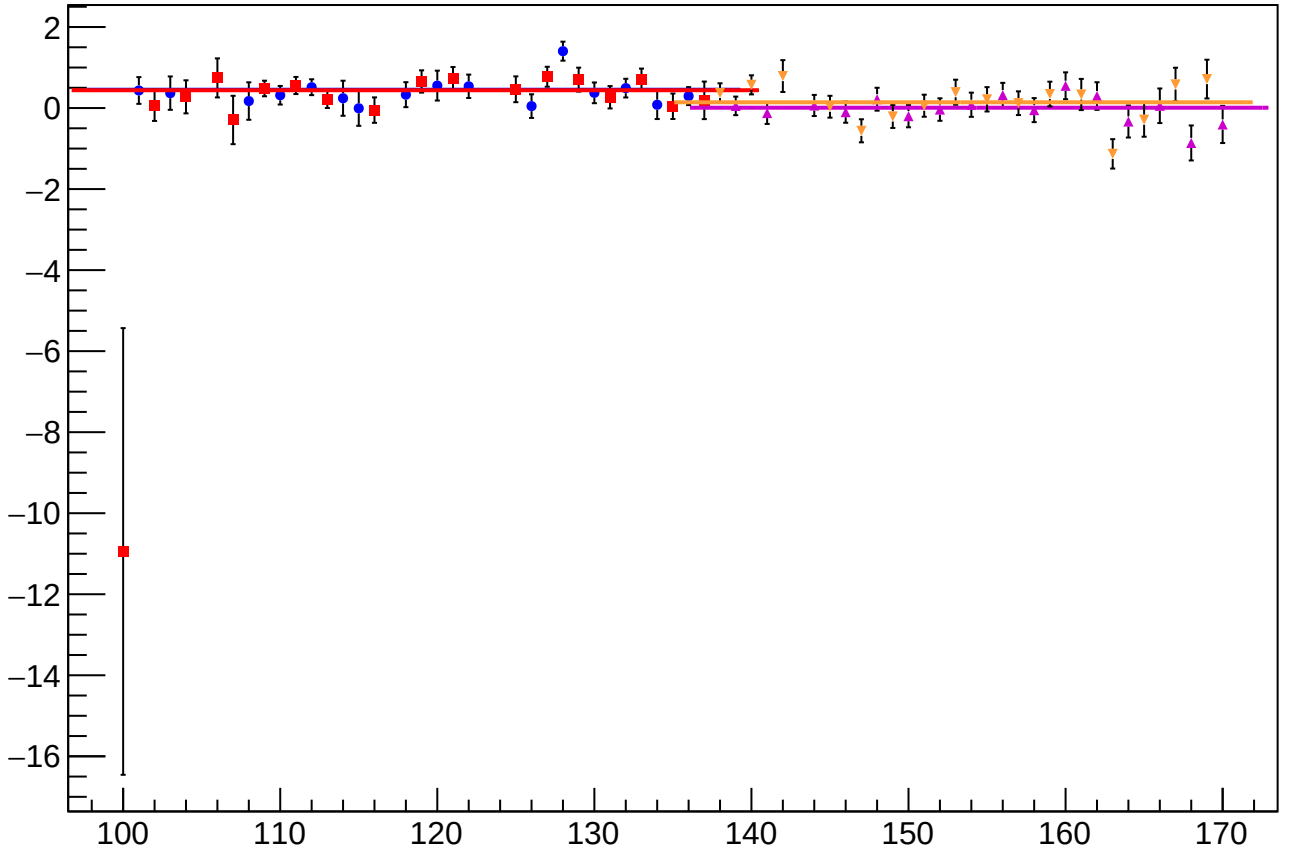
Left In: -1.281+/-0.009 $\chi^2$/NDF:25569.8/15

+ sign -1.072+/-0.009 $\chi^2$/NDF: 44026.7/31

All: -1.167+/-0.006 $\chi^2$/NDF: 116216.6/65

- sign -1.258+/-0.009 $\chi^2$/NDF: 71960.5/33

# reg_asym_ds_avg_diff_bpm1X_slope vs Slug




Right In: 0.452+/-0.071 $\chi^2$/NDF: 22.6/15

Left Out: 0.142+/-0.077 $\chi^2$/NDF:32.2/15

Right Out: 0.440+/-0.070 $\chi^2$/NDF: 18.5/17

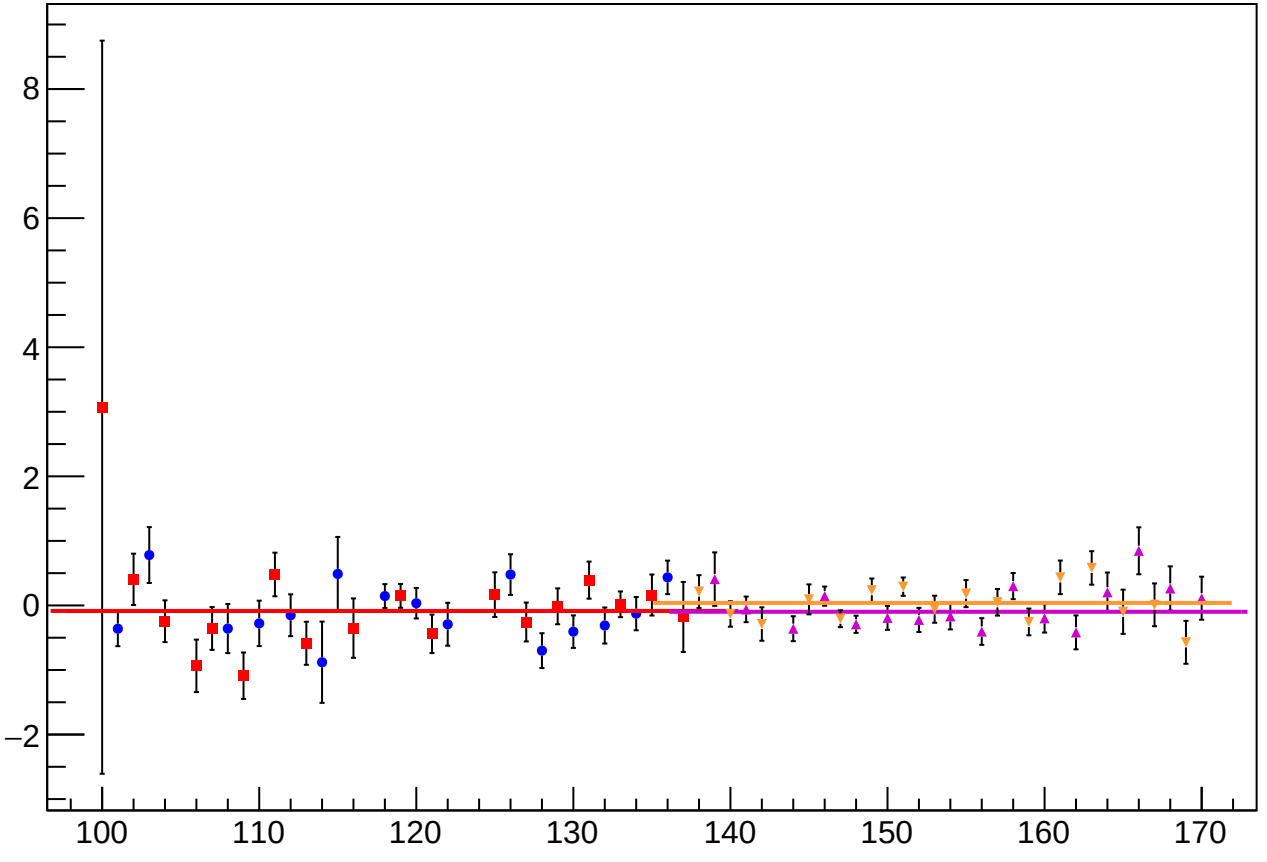
Left In: 0.008+/-0.076 $\chi^2$/NDF:11.8/15

+ sign 0.309+/-0.052 $\chi^2$/NDF: 63.6/31

All: 0.275+/-0.037 $\chi^2$/NDF: 112.4/65

- sign 0.242+/-0.051 $\chi^2$/NDF: 48.0/33

# reg_asym_ds_avg_diff_bpm4aY_slope vs Slug




Right In: -0.086+/-0.073 $\chi^2$/NDF: 25.4/15

Left Out: 0.039+/-0.053 $\chi^2$/NDF:23.6/15

Right Out: -0.085+/-0.074 $\chi^2$/NDF: 27.9/17

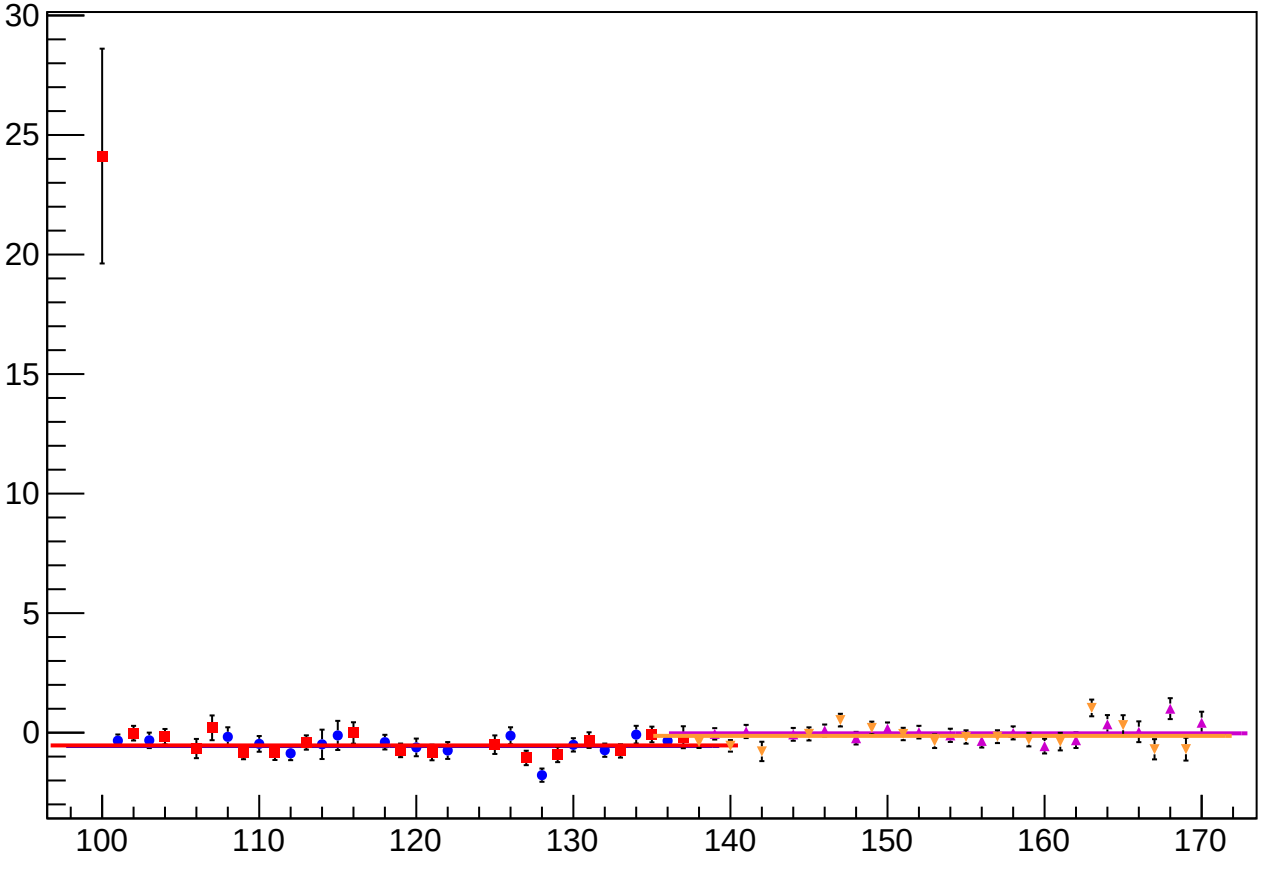
Left In: -0.098+/-0.053 $\chi^2$/NDF:25.9/15

+ sign -0.004+/-0.043 $\chi^2$/NDF: 50.9/31

All: -0.049+/-0.030 $\chi^2$/NDF: 107.0/65

- sign -0.094+/-0.043 $\chi^2$/NDF: 53.8/33

# reg_asym_ds_avg_diff_bpm4eX_slope vs Slug




Right In: -0.558+/-0.080 $\chi^2$/NDF: 28.3/15

Left Out: -0.134+/-0.075 $\chi^2$/NDF:31.3/15

Right Out: -0.534+/-0.081 $\chi^2$/NDF: 49.2/17

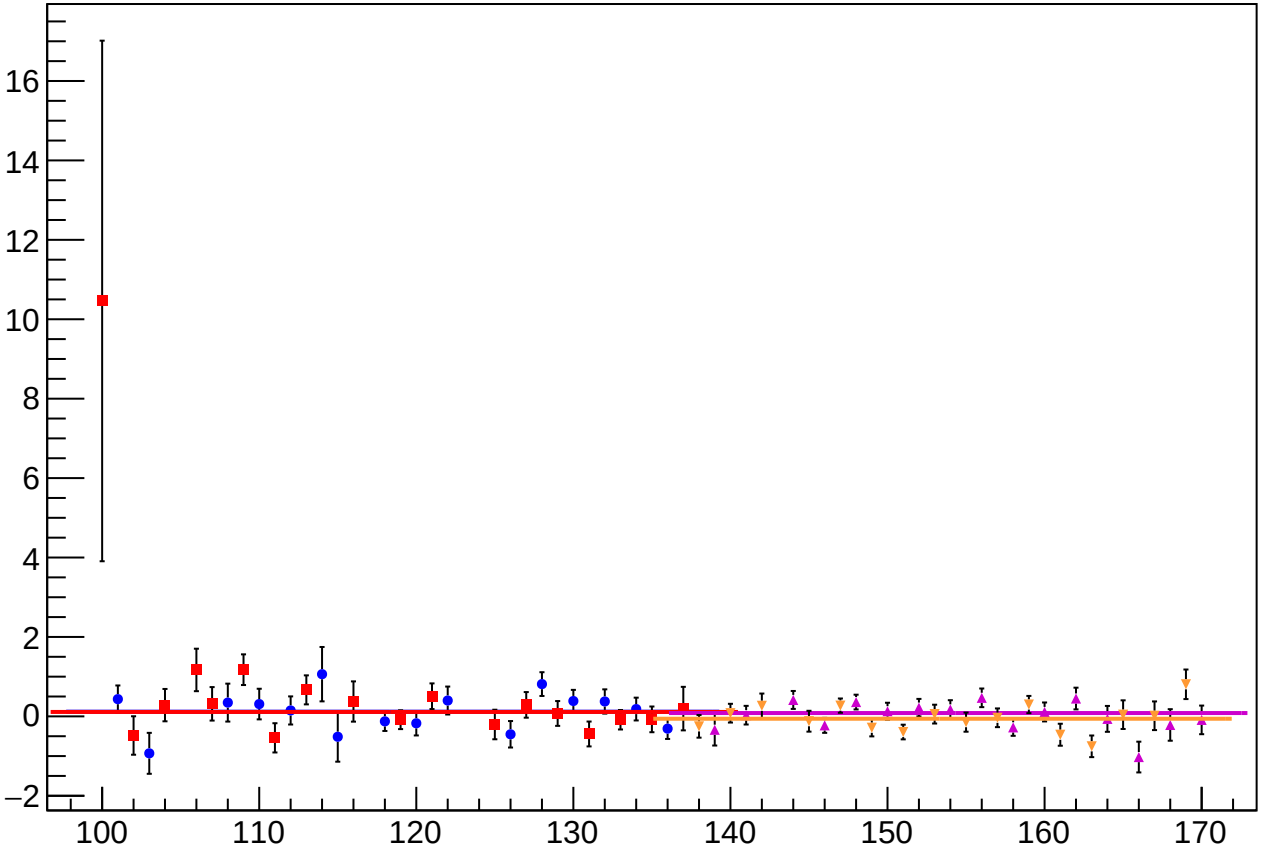
Left In: -0.028+/-0.073 $\chi^2$/NDF:14.2/15

+ sign -0.333+/-0.055 $\chi^2$/NDF: 74.8/31

All: -0.295+/-0.038 $\chi^2$/NDF: 160.6/65

- sign -0.257+/-0.054 $\chi^2$/NDF: 84.9/33

# reg_asym_ds_avg_diff_bpm4eY_slope vs Slug




Right In: 0.118+/-0.084 $\chi^2$/NDF: 23.6/15

Left Out: -0.060+/-0.062 $\chi^2$/NDF:27.0/15

Right Out: 0.111+/-0.085 $\chi^2$/NDF: 29.0/17

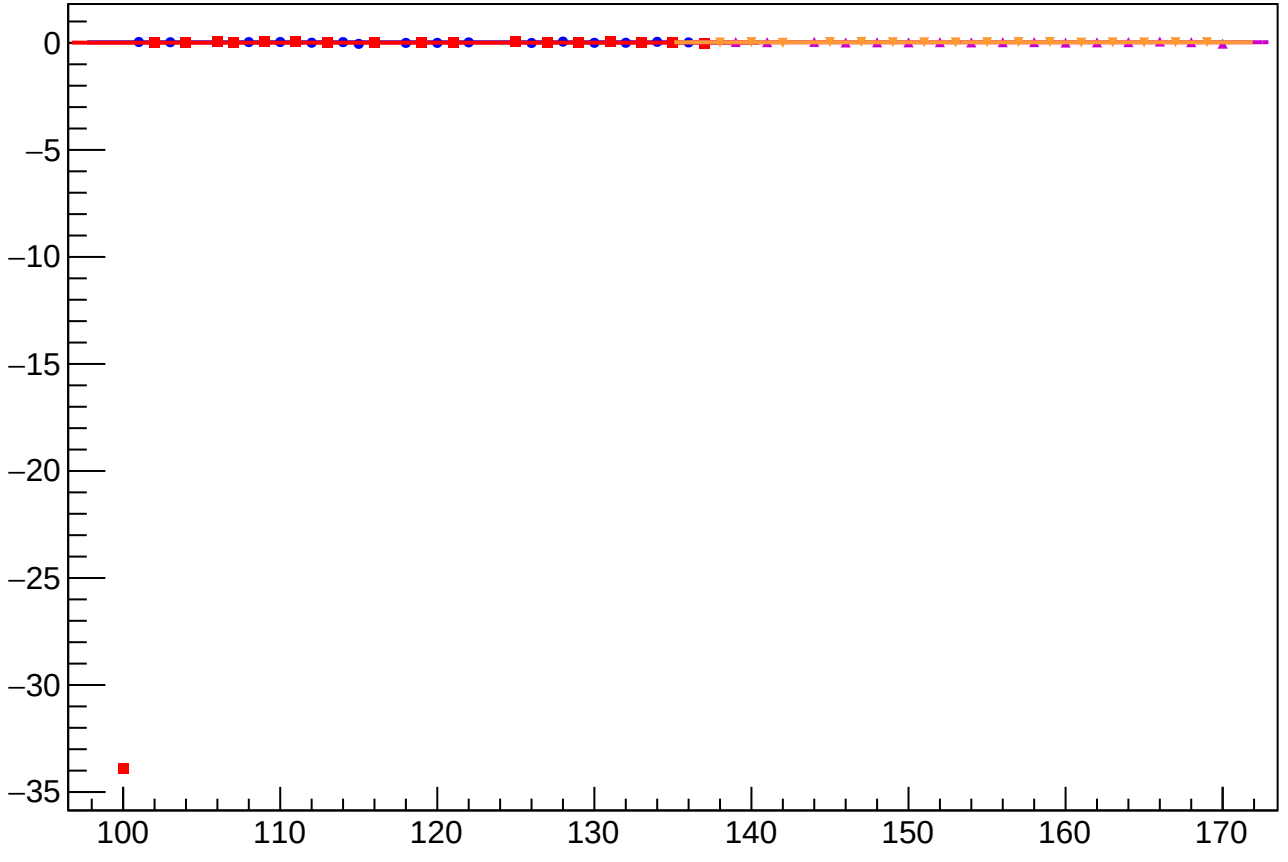
Left In: 0.084+/-0.062 $\chi^2$/NDF:25.3/15

+ sign 0.003+/-0.050 $\chi^2$/NDF: 53.5/31

All: 0.048+/-0.035 $\chi^2$/NDF: 109.6/65

- sign 0.093+/-0.050 $\chi^2$/NDF: 54.4/33

# reg_asym_ds_avg_diff_bpm12X_slope vs Slug




Right In: 0.027+/-0.005 $\chi^2$/NDF: 14.7/15

Left Out: 0.028+/-0.003 $\chi^2$/NDF:11.7/15

Right Out: 0.012+/-0.005 $\chi^2$/NDF: 22262.0/17

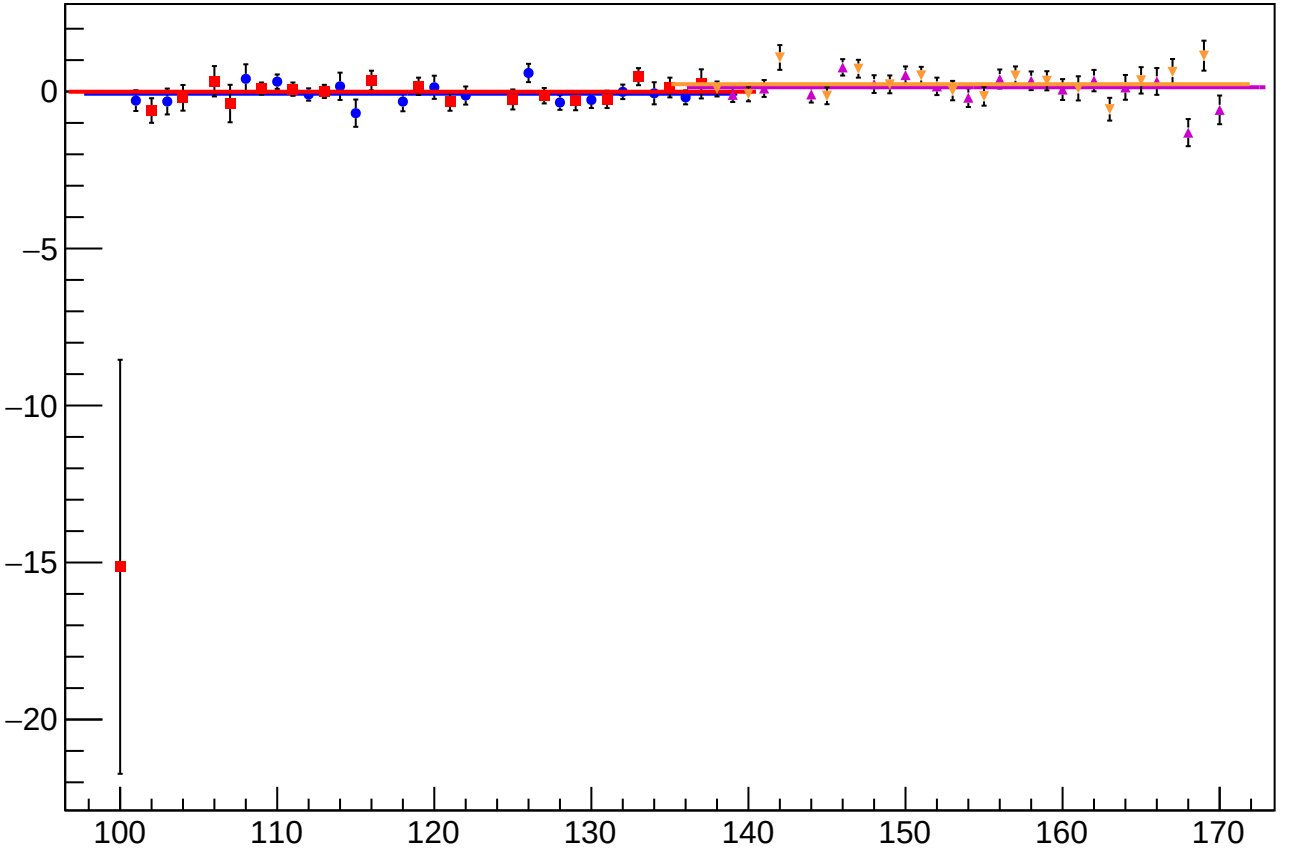
Left In: 0.031+/-0.003 $\chi^2$/NDF:29.7/15

+ sign 0.028+/-0.002 $\chi^2$/NDF: 26.4/31

All: 0.027+/-0.002 $\chi^2$/NDF: 22330.1/65

- sign 0.026+/-0.002 $\chi^2$/NDF: 22303.6/33

# reg_asym_ds_dd_diff_bpm1X_slope vs Slug




Right In: -0.070+/-0.071 $\chi^2$/NDF: 15.5/15

Left Out: 0.233+/-0.077 $\chi^2$/NDF:25.4/15

Right Out: -0.007+/-0.070 $\chi^2$/NDF: 18.1/17

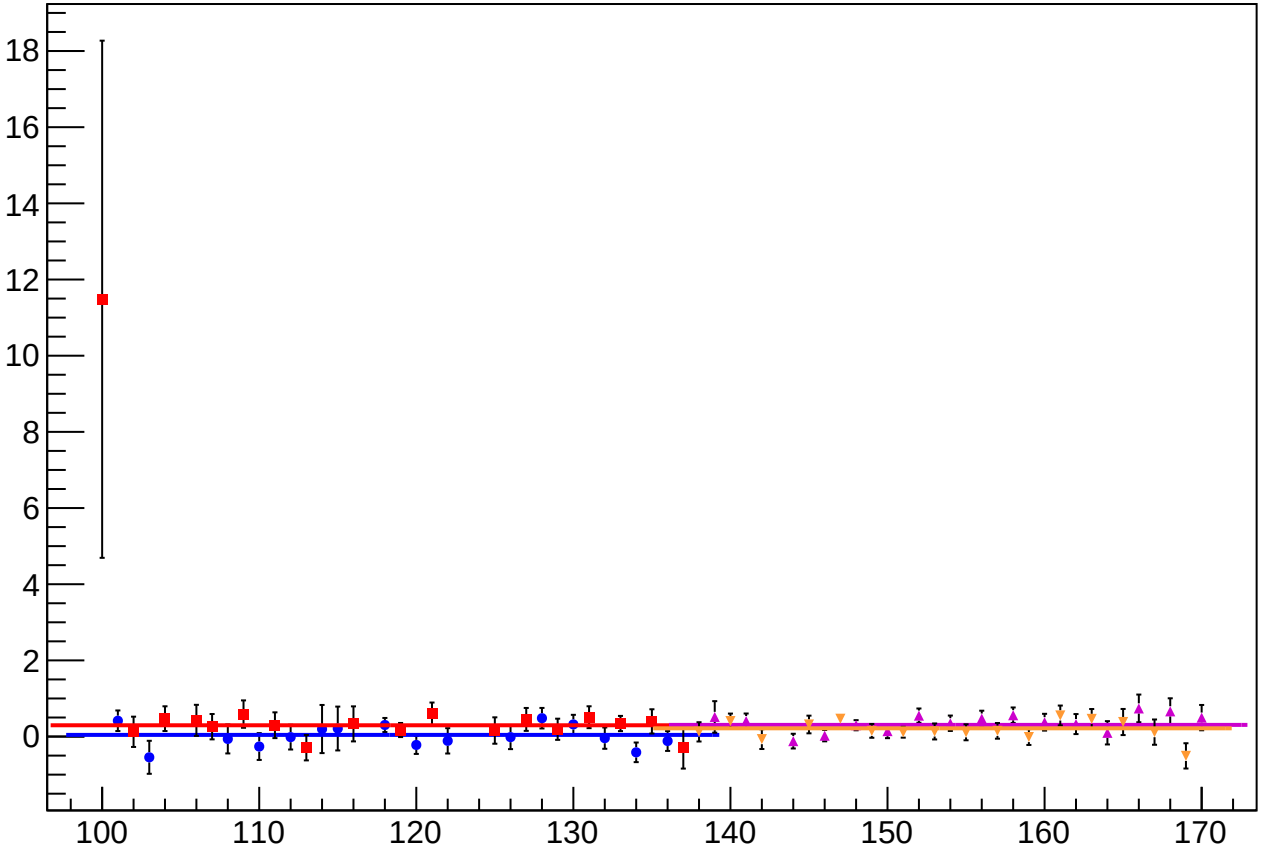
Left In: 0.136+/-0.076 $\chi^2$/NDF:26.6/15

+ sign 0.069+/-0.052 $\chi^2$/NDF: 49.2/31

All: 0.064+/-0.037 $\chi^2$/NDF: 95.9/65

- sign 0.058+/-0.051 $\chi^2$/NDF: 46.7/33

# reg_asym_ds_dd_diff_bpm4aY_slope vs Slug




Right In: 0.044+/-0.073 $\chi^2$/NDF: 15.7/15

Left Out: 0.216+/-0.053 $\chi^2$/NDF:16.2/15

Right Out: 0.296+/-0.074 $\chi^2$/NDF: 11.0/17

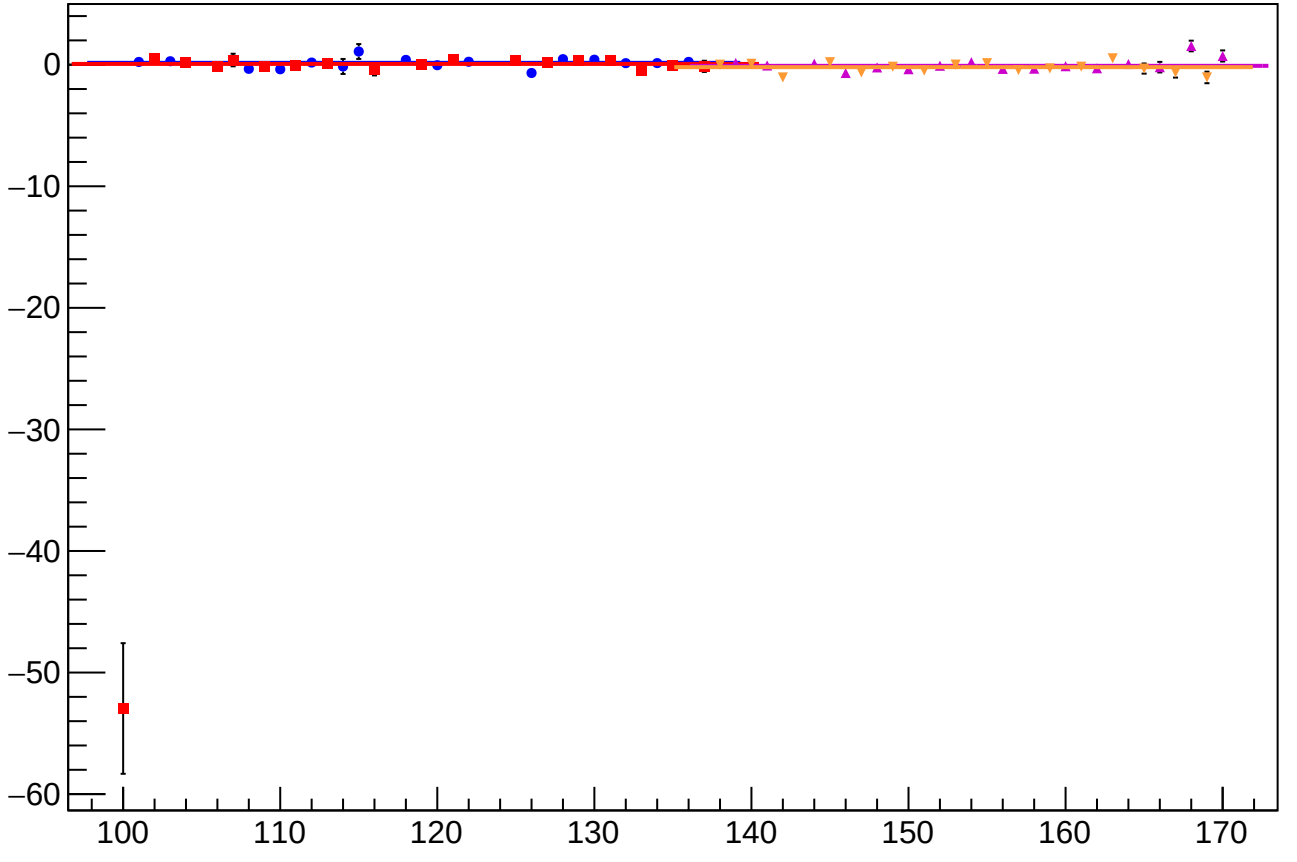
Left In: 0.306+/-0.053 $\chi^2$/NDF:17.1/15

+ sign 0.157+/-0.043 $\chi^2$/NDF: 35.6/31

All: 0.230+/-0.030 $\chi^2$/NDF: 69.5/65

- sign 0.303+/-0.043 $\chi^2$/NDF: 28.1/33

# reg_asym_ds_dd_diff_bpm4eX_slope vs Slug




Right In: 0.154+/-0.080 $\chi^2$/NDF: 15.6/15

Left Out: -0.201+/-0.075 $\chi^2$/NDF:23.9/15

Right Out: 0.065+/-0.081 $\chi^2$/NDF: 109.3/17

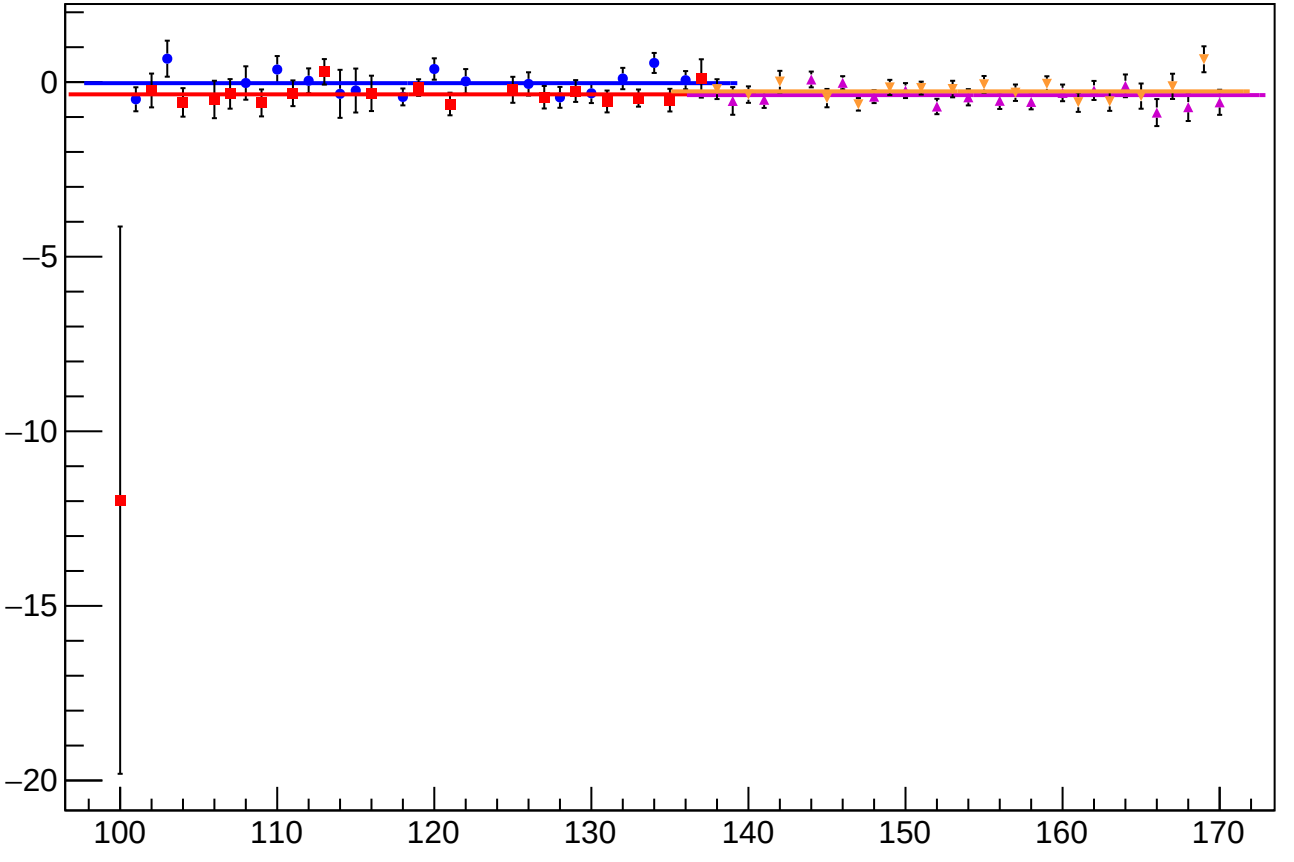
Left In: -0.092+/-0.073 $\chi^2$/NDF:28.6/15

+ sign -0.035+/-0.055 $\chi^2$/NDF: 50.0/31

All: -0.028+/-0.038 $\chi^2$/NDF: 190.1/65

- sign -0.021+/-0.054 $\chi^2$/NDF: 140.0/33

# reg_asym_ds_dd_diff_bpm4eY_slope vs Slug




Right In: -0.030+/-0.084 $\chi^2$/NDF: 16.8/15

Left Out: -0.265+/-0.062 $\chi^2$/NDF:16.9/15

Right Out: -0.350+/-0.085 $\chi^2$/NDF: 9.4/17

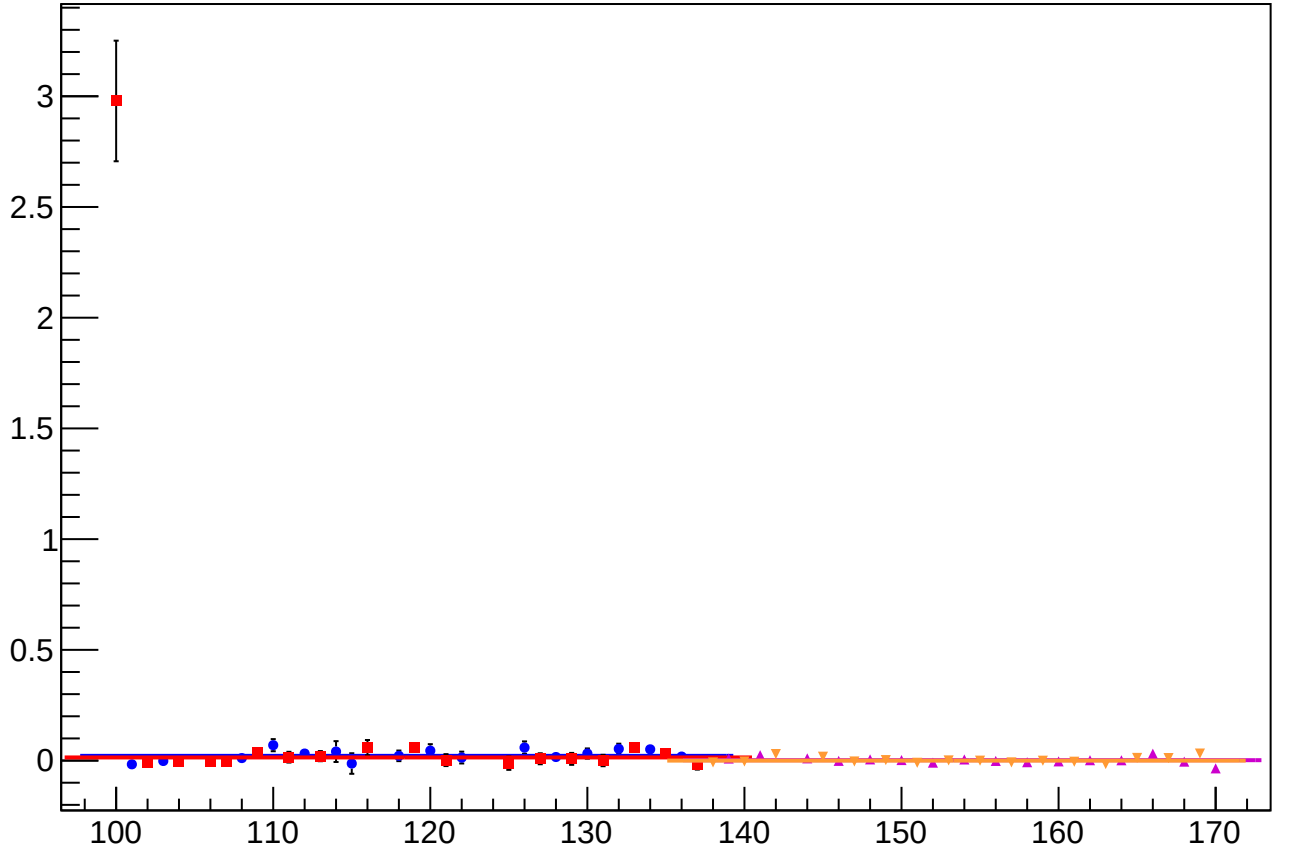
Left In: -0.372+/-0.062 $\chi^2$/NDF:15.6/15

+ sign -0.182+/-0.050 $\chi^2$/NDF: 38.8/31

All: -0.273+/-0.035 $\chi^2$/NDF: 70.6/65

- sign -0.365+/-0.050 $\chi^2$/NDF: 25.1/33

# reg_asym_ds_dd_diff_bpm12X_slope vs Slug




Right In: 0.021+/-0.005 $\chi^2$/NDF: 22.5/15

Left Out: -0.000+/-0.003 $\chi^2$/NDF:15.1/15

Right Out: 0.014+/-0.005 $\chi^2$/NDF: 140.9/17

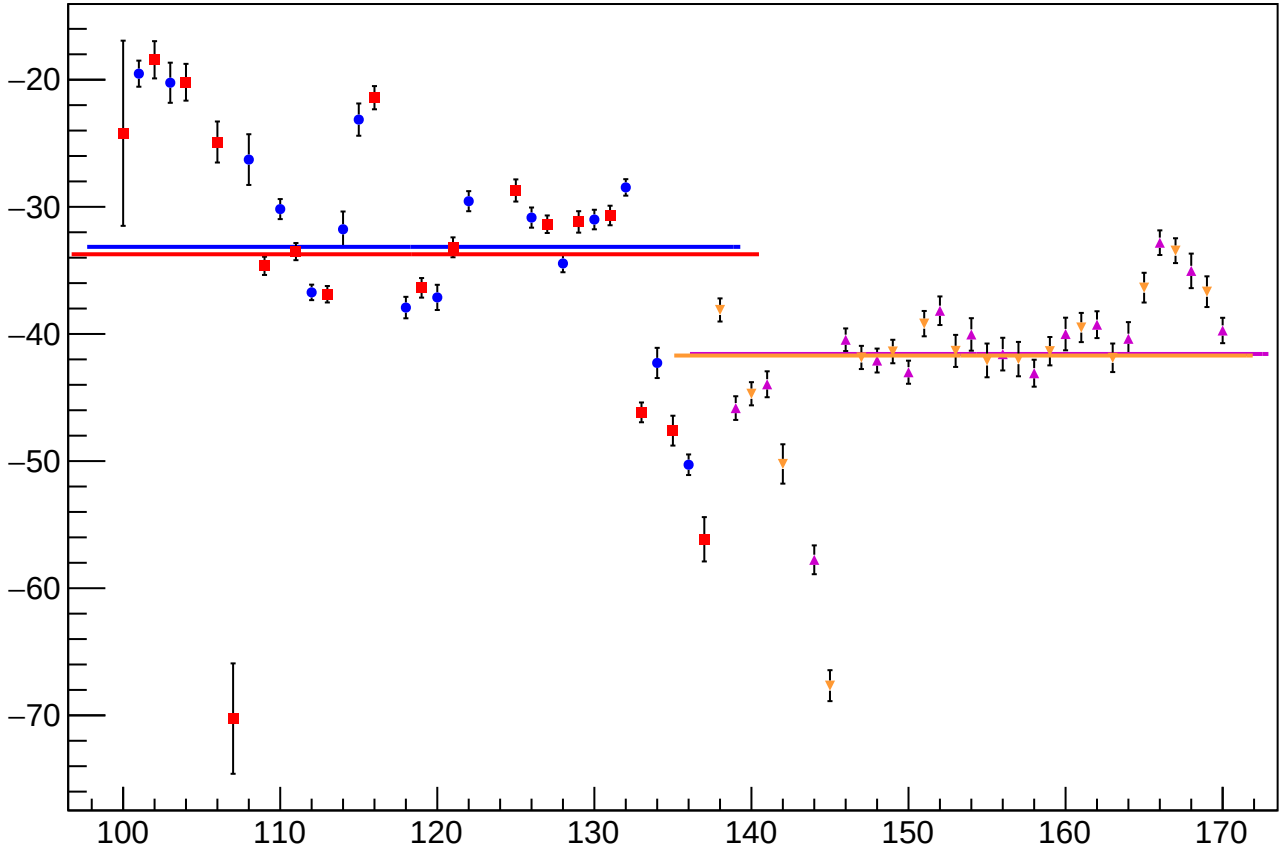
Left In: 0.002+/-0.003 $\chi^2$/NDF:16.7/15

+ sign 0.005+/-0.002 $\chi^2$/NDF: 52.3/31

All: 0.005+/-0.002 $\chi^2$/NDF: 214.7/65

- sign 0.005+/-0.002 $\chi^2$/NDF: 162.4/33

# reg_asym_left_avg_diff_bpm1X_slope vs Slug




Right In: -33.148+/-0.218 $\chi^2$/NDF: 1013.9/15

Left Out: -41.697+/-0.273 $\chi^2$/NDF:631.6/15

Right Out: -33.730+/-0.215 $\chi^2$/NDF: 1148.4/17

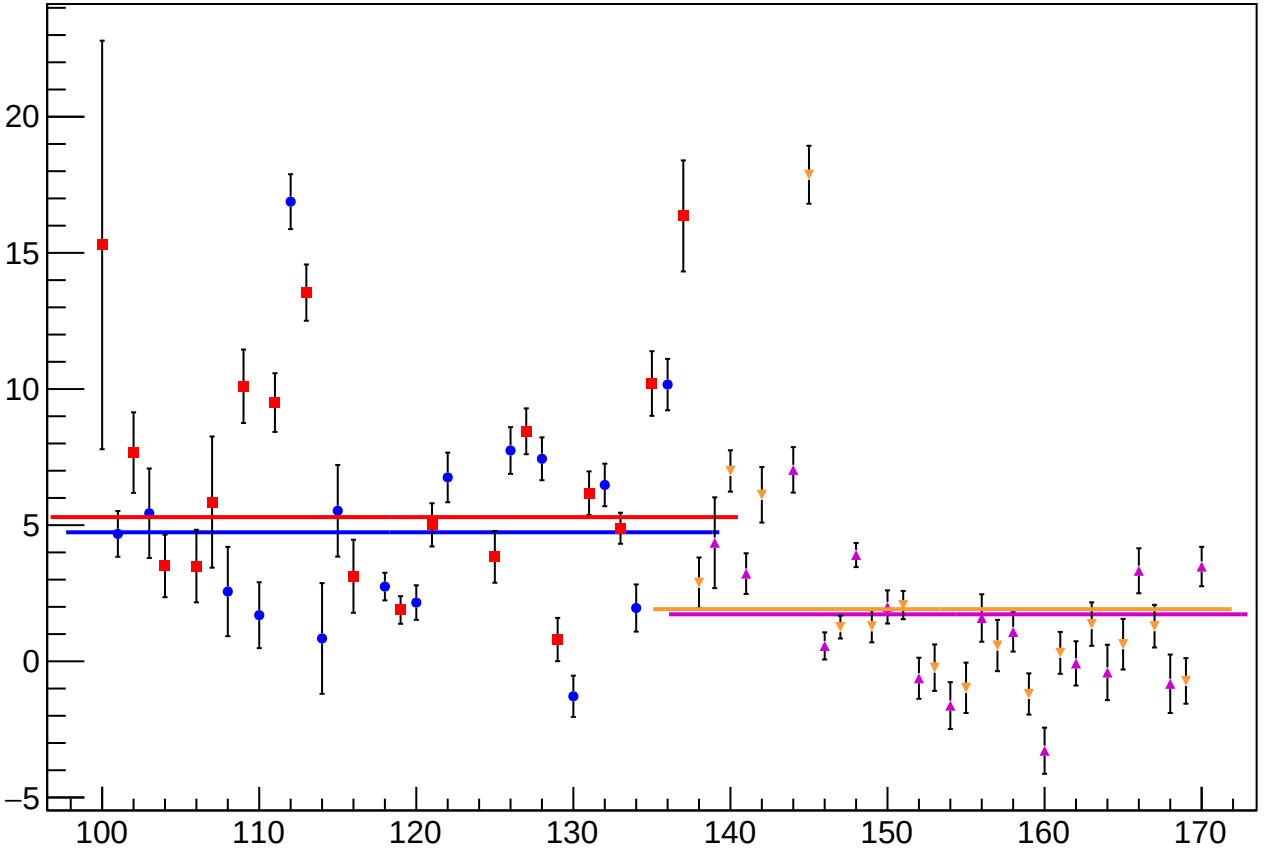
Left In: -41.573+/-0.266 $\chi^2$/NDF:362.5/15

+ sign -36.480+/-0.170 $\chi^2$/NDF: 2245.1/31

All: -36.654+/-0.119 $\chi^2$/NDF: 4283.3/65

- sign -36.822+/-0.167 $\chi^2$/NDF: 2036.1/33

# reg_asym_left_avg_diff_bpm4aY_slope vs Slug




Right In: 4.738+/-0.219 $\chi^2$/NDF: 329.6/15

Left Out: 1.915+/-0.183 $\chi^2$/NDF:343.7/15

Right Out: 5.295+/-0.223 $\chi^2$/NDF: 245.0/17

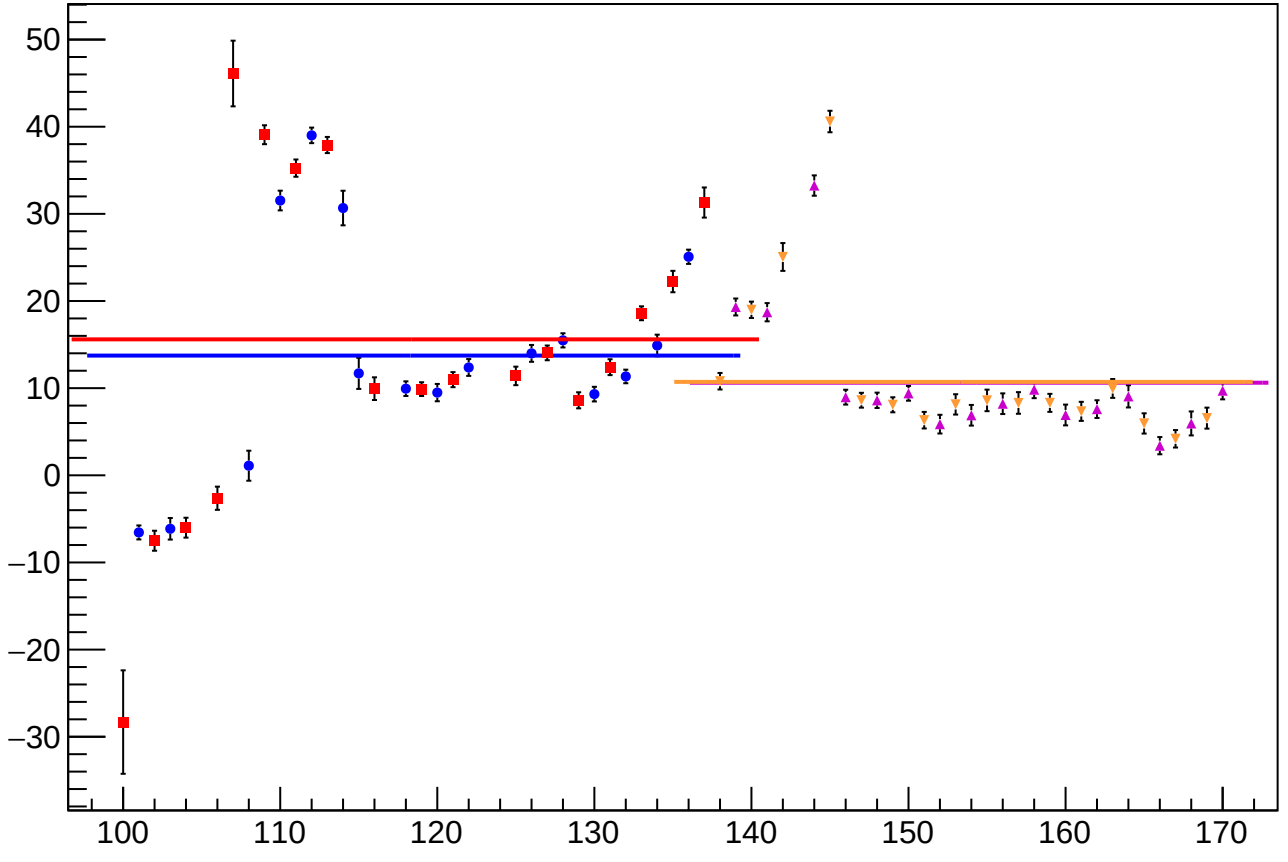
Left In: 1.726+/-0.183 $\chi^2$/NDF:161.7/15

+ sign 3.073+/-0.140 $\chi^2$/NDF: 771.1/31

All: 3.117+/-0.100 $\chi^2$/NDF: 1330.7/65

- sign 3.161+/-0.142 $\chi^2$/NDF: 559.5/33

# reg_asym_left_avg_diff_bpm4eX_slope vs Slug




Right In: 13.738+/-0.247 $\chi^2$/NDF: 2349.9/15

Left Out: 10.721+/-0.265 $\chi^2$/NDF:881.5/15

Right Out: 15.599+/-0.250 $\chi^2$/NDF: 2826.3/17

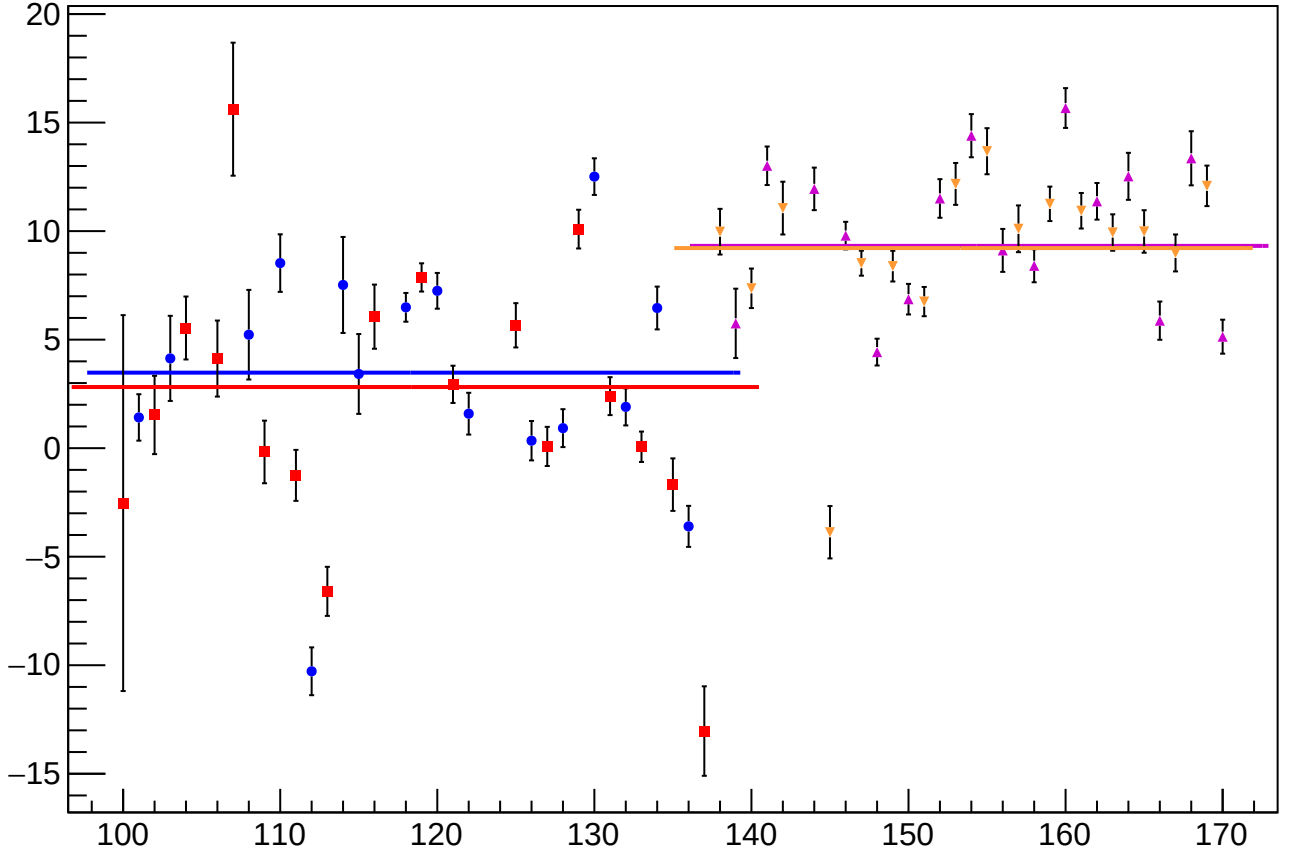
Left In: 10.625+/-0.259 $\chi^2$/NDF:646.9/15

+ sign 12.338+/-0.181 $\chi^2$/NDF: 3300.7/31

All: 12.769+/-0.127 $\chi^2$/NDF: 6976.4/65

- sign 13.196+/-0.180 $\chi^2$/NDF: 3664.3/33

# reg_asym_left_avg_diff_bpm4eY_slope vs Slug




Right In: 3.479+/-0.254 $\chi^2$/NDF: 427.6/15

Left Out: 9.219+/-0.215 $\chi^2$/NDF:190.6/15

Right Out: 2.817+/-0.257 $\chi^2$/NDF: 345.3/17

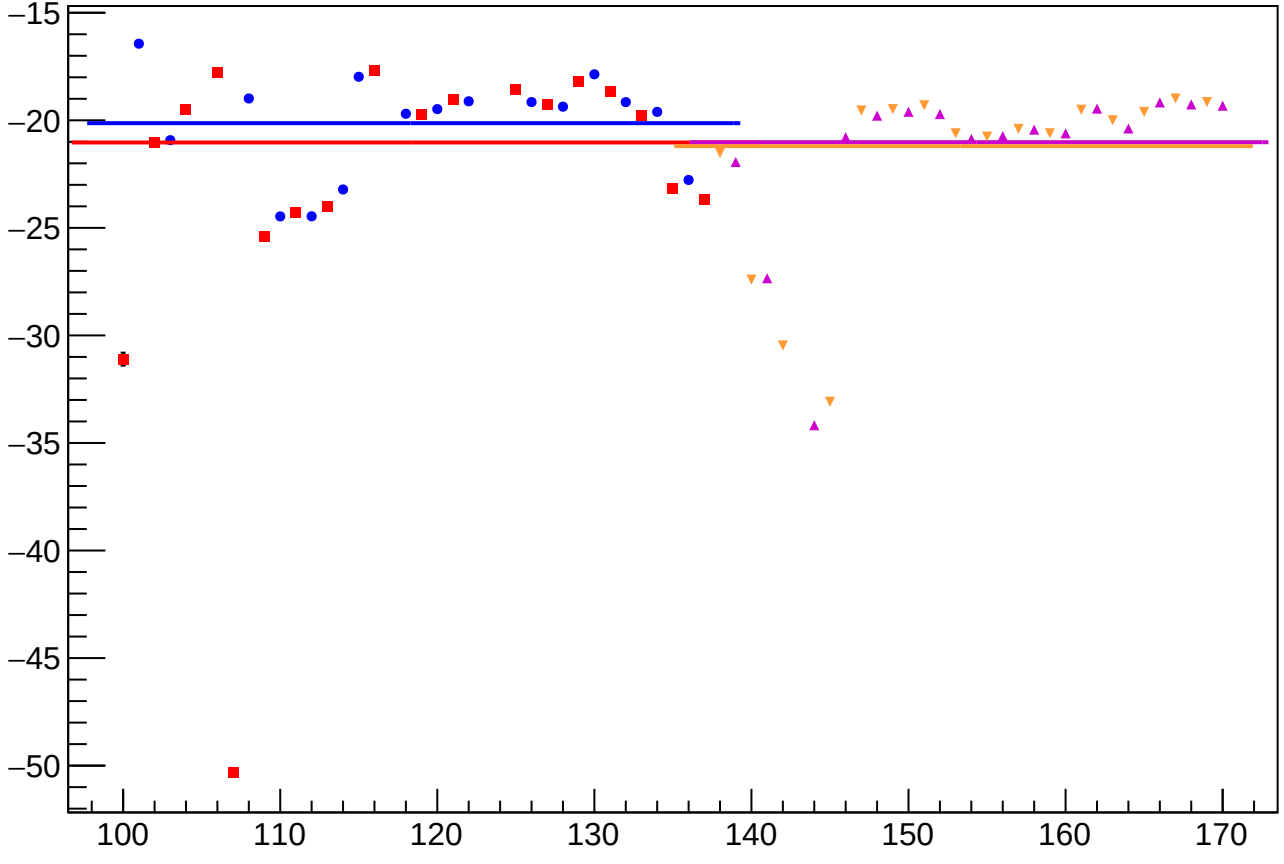
Left In: 9.320+/-0.214 $\chi^2$/NDF:255.6/15

+ sign 6.817+/-0.164 $\chi^2$/NDF: 915.9/31

All: 6.739+/-0.116 $\chi^2$/NDF: 1895.0/65

- sign 6.662+/-0.164 $\chi^2$/NDF: 978.7/33

# reg_asym_left_avg_diff_bpm12X_slope vs Slug




Right In: -20.133+/-0.016 $\chi^2$/NDF: 19831.2/15

Left Out: -21.200+/-0.010 $\chi^2$/NDF:119872.2/15

Right Out: -21.031+/-0.016 $\chi^2$/NDF: 57523.6/17

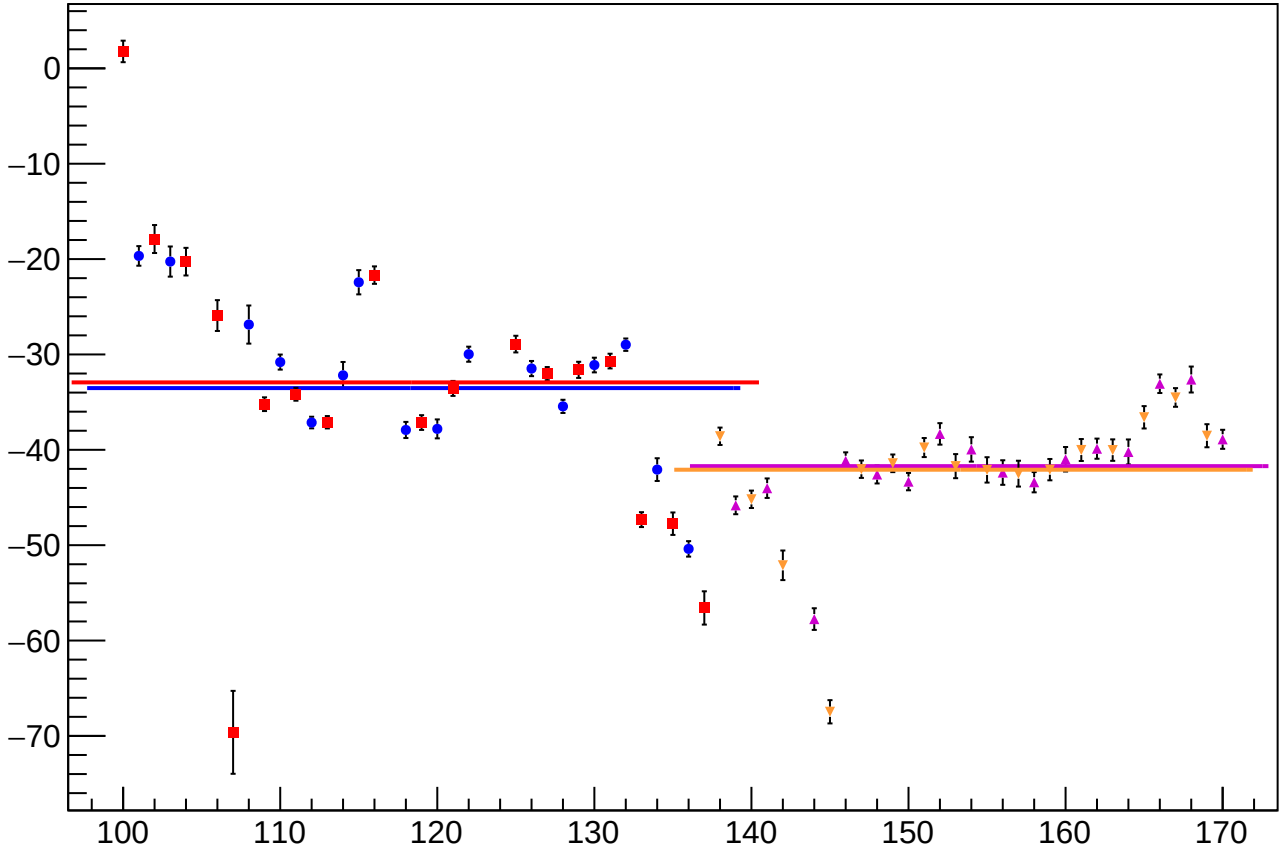
Left In: -21.018+/-0.010 $\chi^2$/NDF:97875.8/15

+ sign -20.898+/-0.009 $\chi^2$/NDF: 142887.8/31

All: -20.961+/-0.006 $\chi^2$/NDF: 298393.9/65

- sign -21.021+/-0.008 $\chi^2$/NDF: 155399.8/33

# reg_asym_left_dd_diff_bpm1X_slope vs Slug




Right In: -33.528+/-0.218 $\chi^2$/NDF: 1008.7/15

Left Out: -42.087+/-0.273 $\chi^2$/NDF:604.2/15

Right Out: -32.931+/-0.212 $\chi^2$/NDF: 2170.0/17

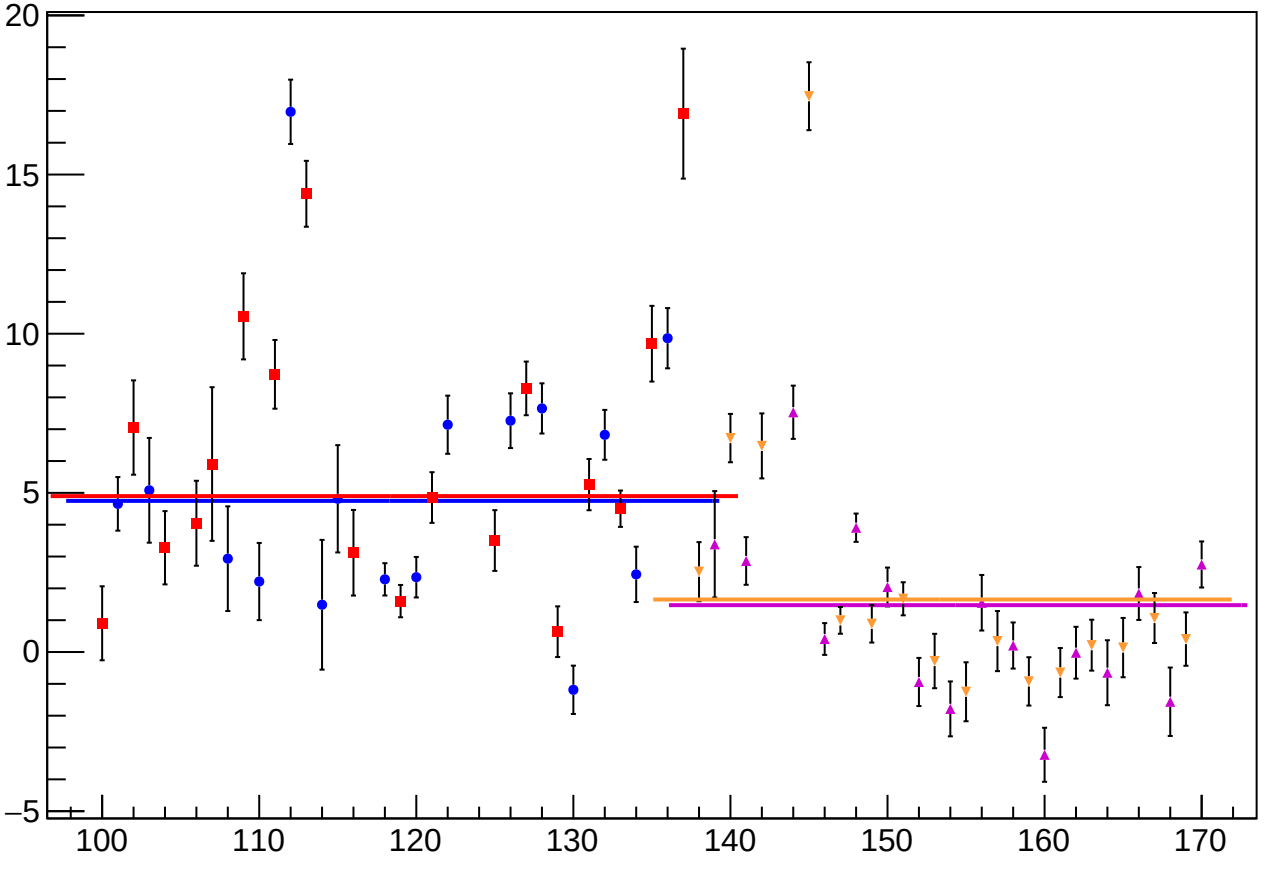
Left In: -41.711+/-0.267 $\chi^2$/NDF:377.9/15

+ sign -36.866+/-0.171 $\chi^2$/NDF: 2211.6/31

All: -36.585+/-0.119 $\chi^2$/NDF: 5429.4/65

- sign -36.320+/-0.166 $\chi^2$/NDF: 3212.6/33

# reg_asym_left_dd_diff_bpm4aY_slope vs Slug




Right In: 4.748+/-0.220 $\chi^2$/NDF: 325.7/15

Left Out: 1.650+/-0.183 $\chi^2$/NDF:337.4/15

Right Out: 4.898+/-0.220 $\chi^2$/NDF: 273.1/17

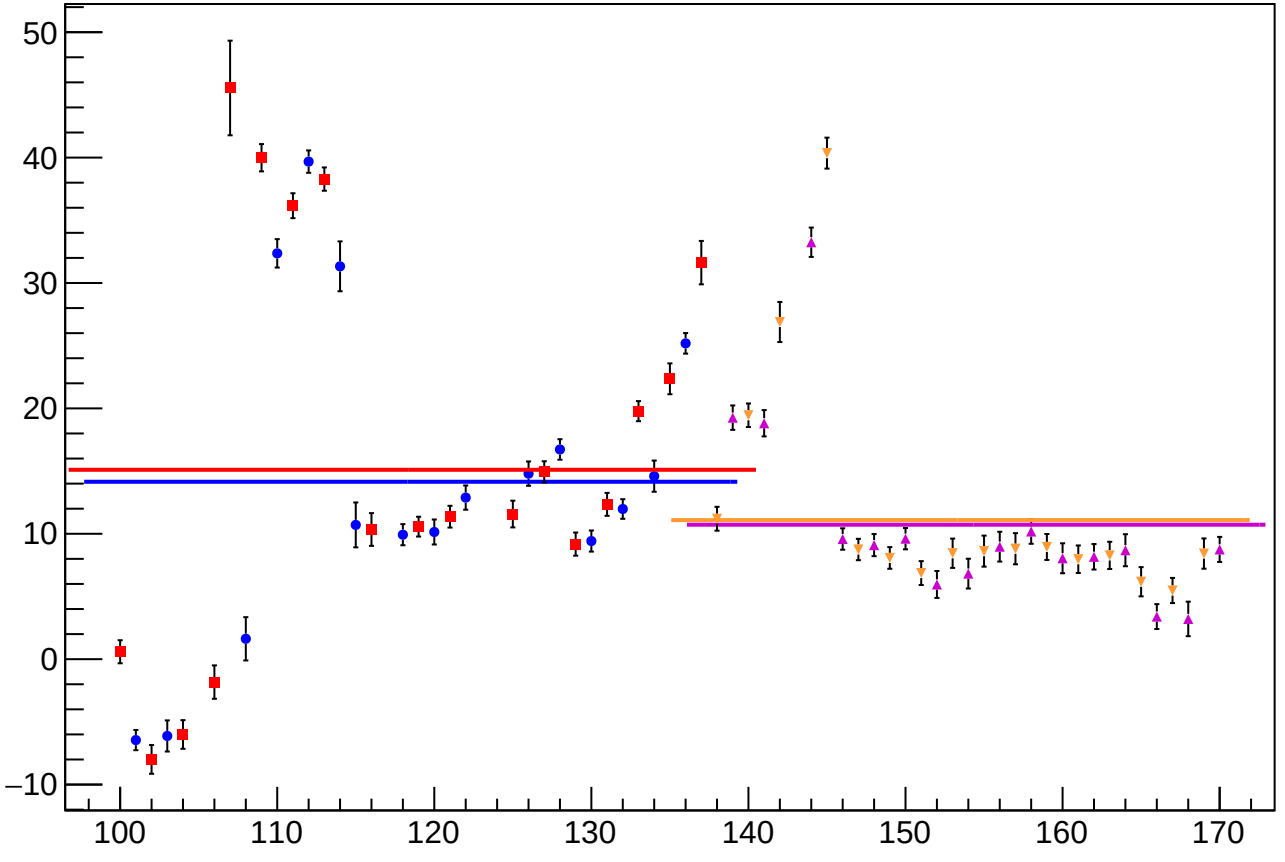
Left In: 1.472+/-0.183 $\chi^2$/NDF:169.8/15

+ sign 2.921+/-0.141 $\chi^2$/NDF: 780.5/31

All: 2.899+/-0.100 $\chi^2$/NDF: 1366.5/65

- sign 2.878+/-0.141 $\chi^2$/NDF: 586.0/33

# reg_asym_left_dd_diff_bpm4eX_slope vs Slug




Right In: 14.149+/-0.247 $\chi^2$/NDF: 2402.4/15

Left Out: 11.091+/-0.266 $\chi^2$/NDF:863.5/15

Right Out: 15.103+/-0.242 $\chi^2$/NDF: 3102.3/17

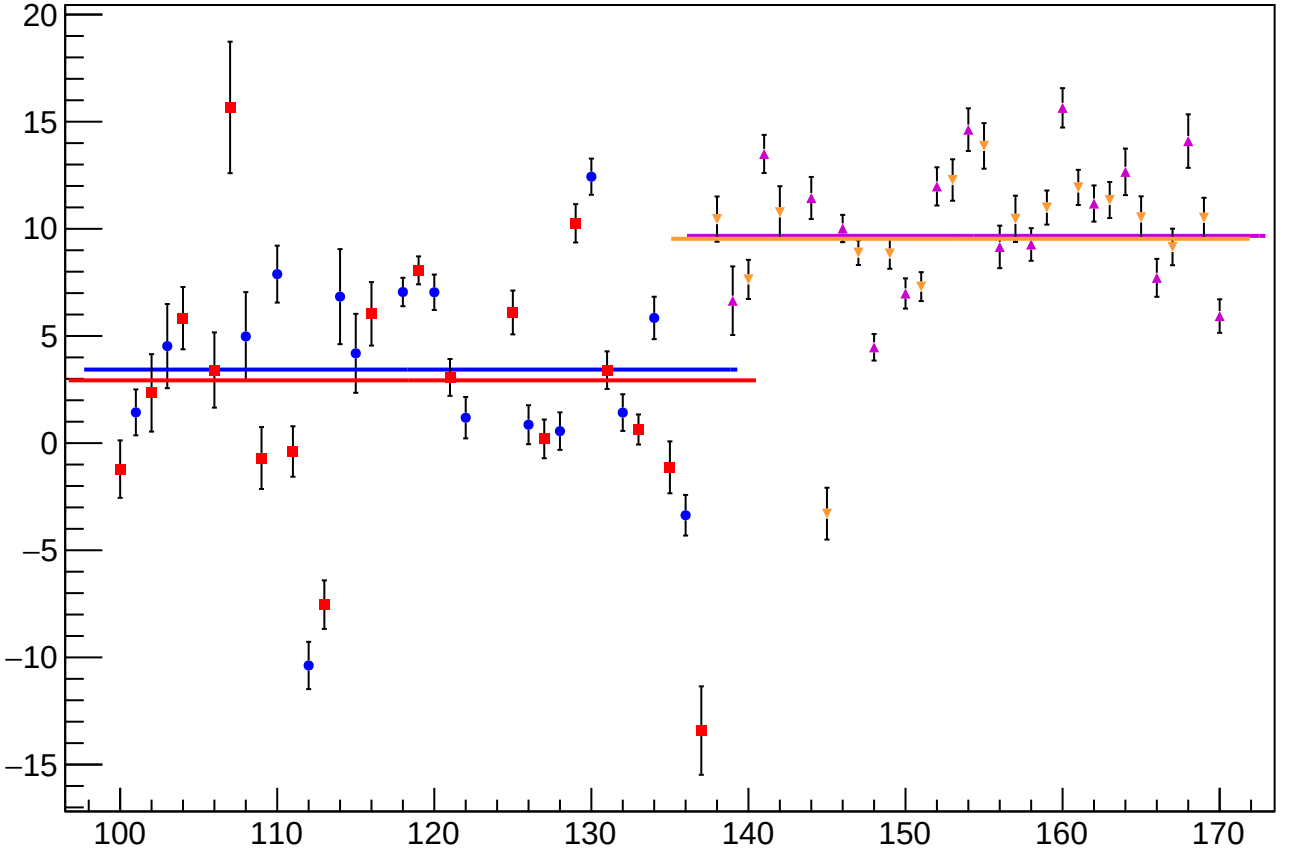
Left In: 10.723+/-0.259 $\chi^2$/NDF:649.6/15

+ sign 12.730+/-0.181 $\chi^2$/NDF: 3336.9/31

All: 12.900+/-0.126 $\chi^2$/NDF: 7243.1/65

- sign 13.063+/-0.177 $\chi^2$/NDF: 3904.5/33

# reg_asym_left_dd_diff_bpm4eY_slope vs Slug




Right In: 3.432+/-0.254 $\chi^2$/NDF: 424.0/15

Left Out: 9.536+/-0.216 $\chi^2$/NDF:176.1/15

Right Out: 2.929+/-0.253 $\chi^2$/NDF: 367.7/17

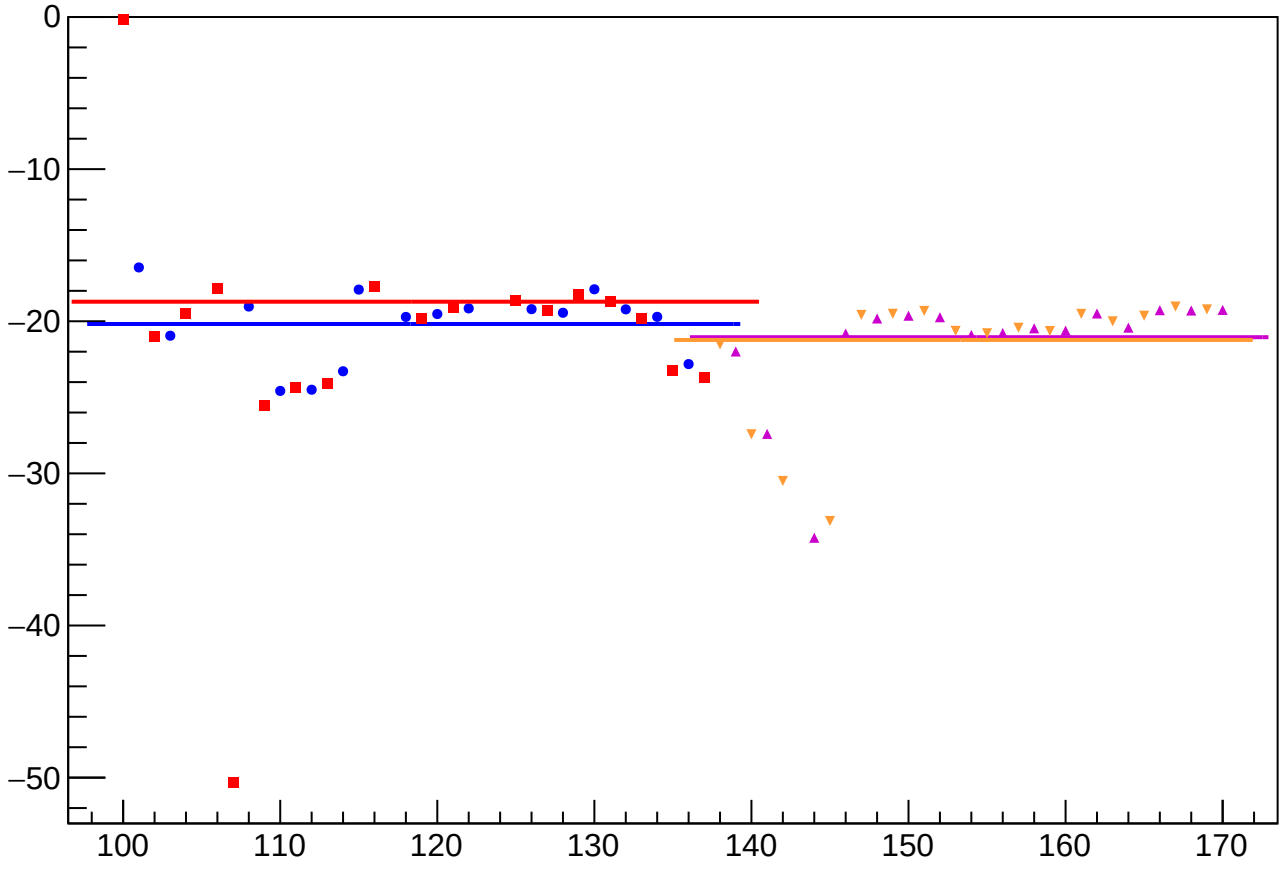
Left In: 9.671+/-0.214 $\chi^2$/NDF:236.2/15

+ sign 6.982+/-0.164 $\chi^2$/NDF: 935.4/31

All: 6.920+/-0.116 $\chi^2$/NDF: 1952.5/65

- sign 6.859+/-0.164 $\chi^2$/NDF: 1016.9/33

# reg_asym_left_dd_diff_bpm12X_slope vs Slug




Right In: -20.180+/-0.016 $\chi^2$/NDF: 19856.9/15

Left Out: -21.229+/-0.010 $\chi^2$/NDF:119506.3/15

Right Out: -18.714+/-0.016 $\chi^2$/NDF: 234667.0/17

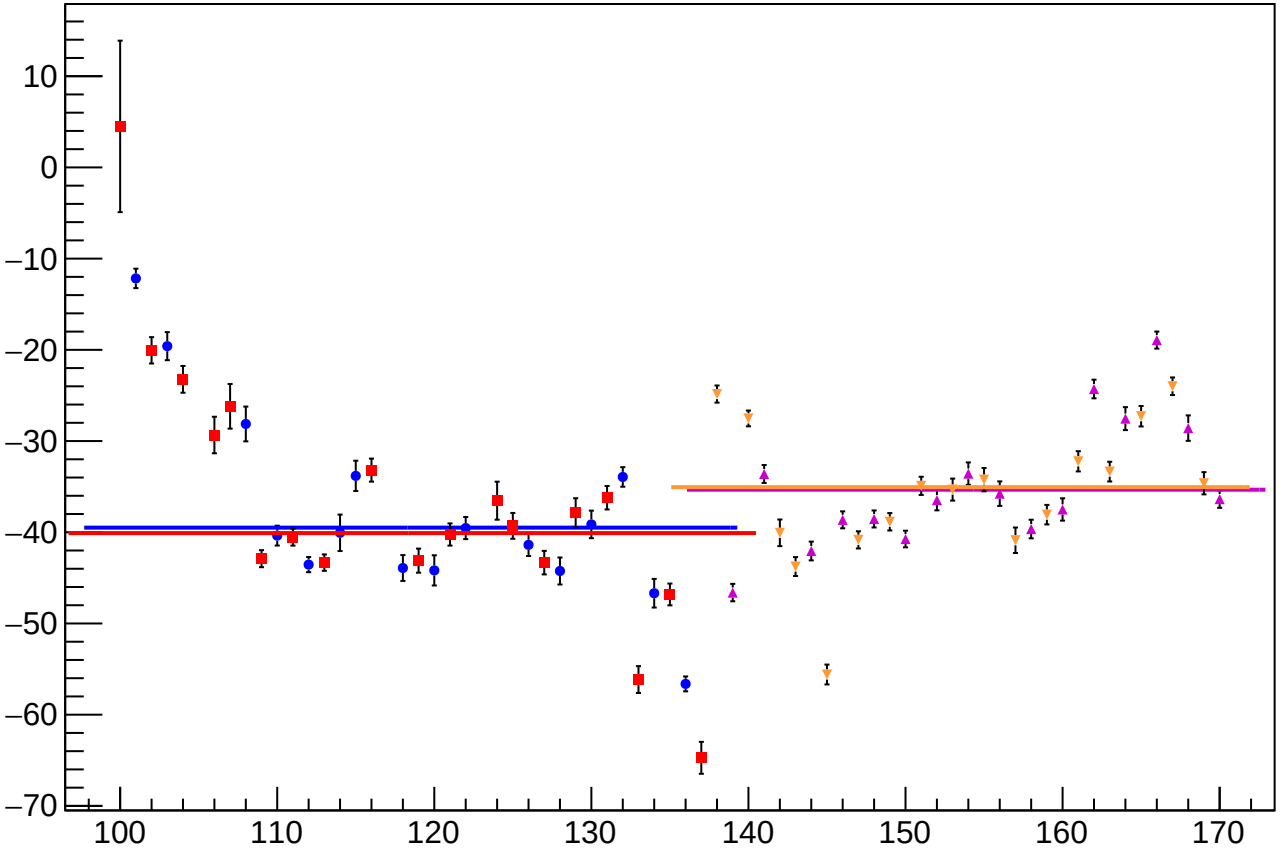
Left In: -21.048+/-0.010 $\chi^2$/NDF:98151.1/15

+ sign -20.932+/-0.009 $\chi^2$/NDF: 142422.7/31

All: -20.652+/-0.006 $\chi^2$/NDF: 493466.4/65

- sign -20.391+/-0.008 $\chi^2$/NDF: 348969.4/33

# reg_asym_right_avg_diff_bpm1X_slope vs Slug




Right In: -39.493+/-0.311 $\chi^2$/NDF: 1417.1/15

Left Out: -35.051+/-0.260 $\chi^2$/NDF:899.1/16

Right Out: -40.090+/-0.307 $\chi^2$/NDF: 834.9/18

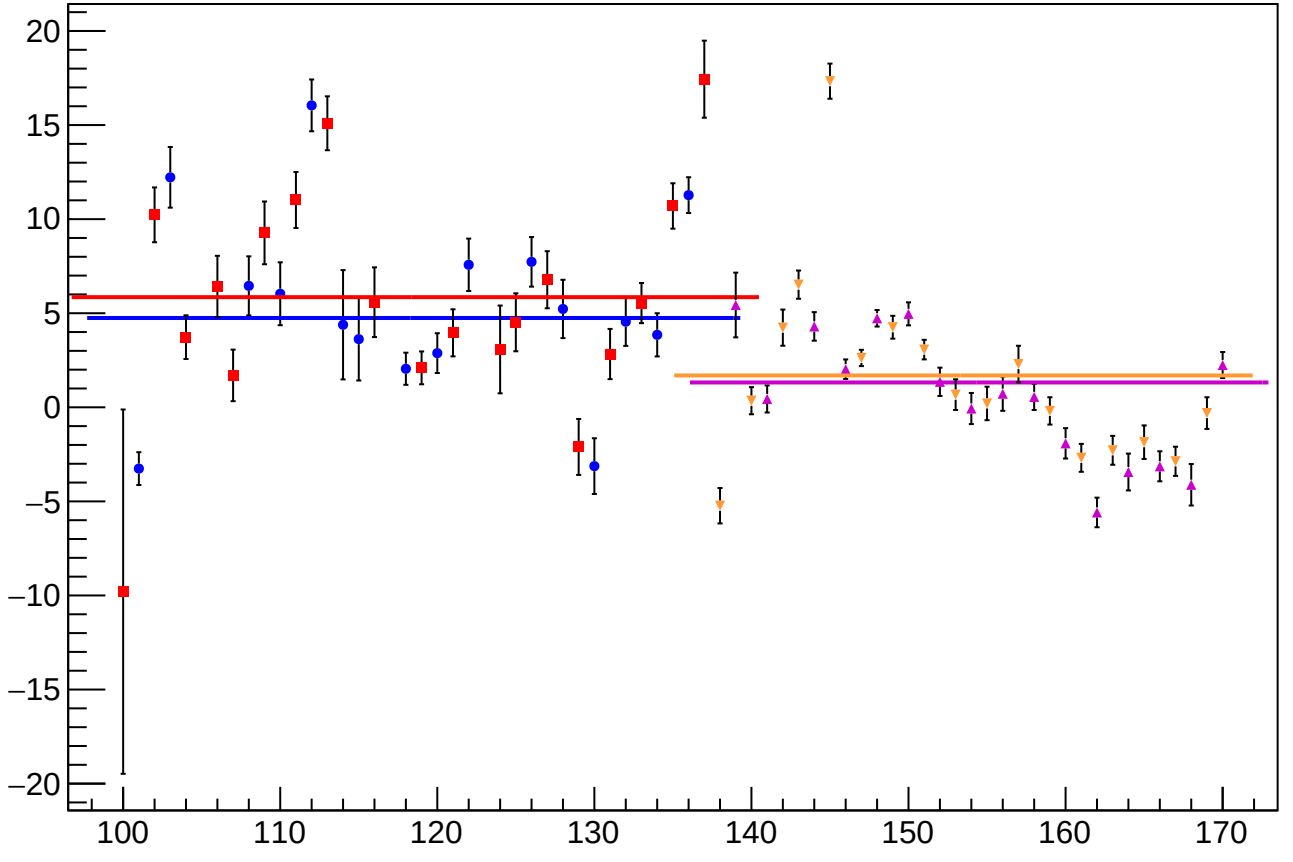
Left In: -35.335+/-0.262 $\chi^2$/NDF:755.3/15

+ sign -36.878+/-0.199 $\chi^2$/NDF: 2436.6/32

All: -37.108+/-0.141 $\chi^2$/NDF: 4168.3/67

- sign -37.338+/-0.199 $\chi^2$/NDF: 1729.0/34

# reg_asym_right_avg_diff_bpm4aY_slope vs Slug




Right In: 4.747+/-0.316 $\chi^2$/NDF: 273.8/15

Left Out: 1.692+/-0.176 $\chi^2$/NDF:545.8/16

Right Out: 5.854+/-0.324 $\chi^2$/NDF: 187.6/18

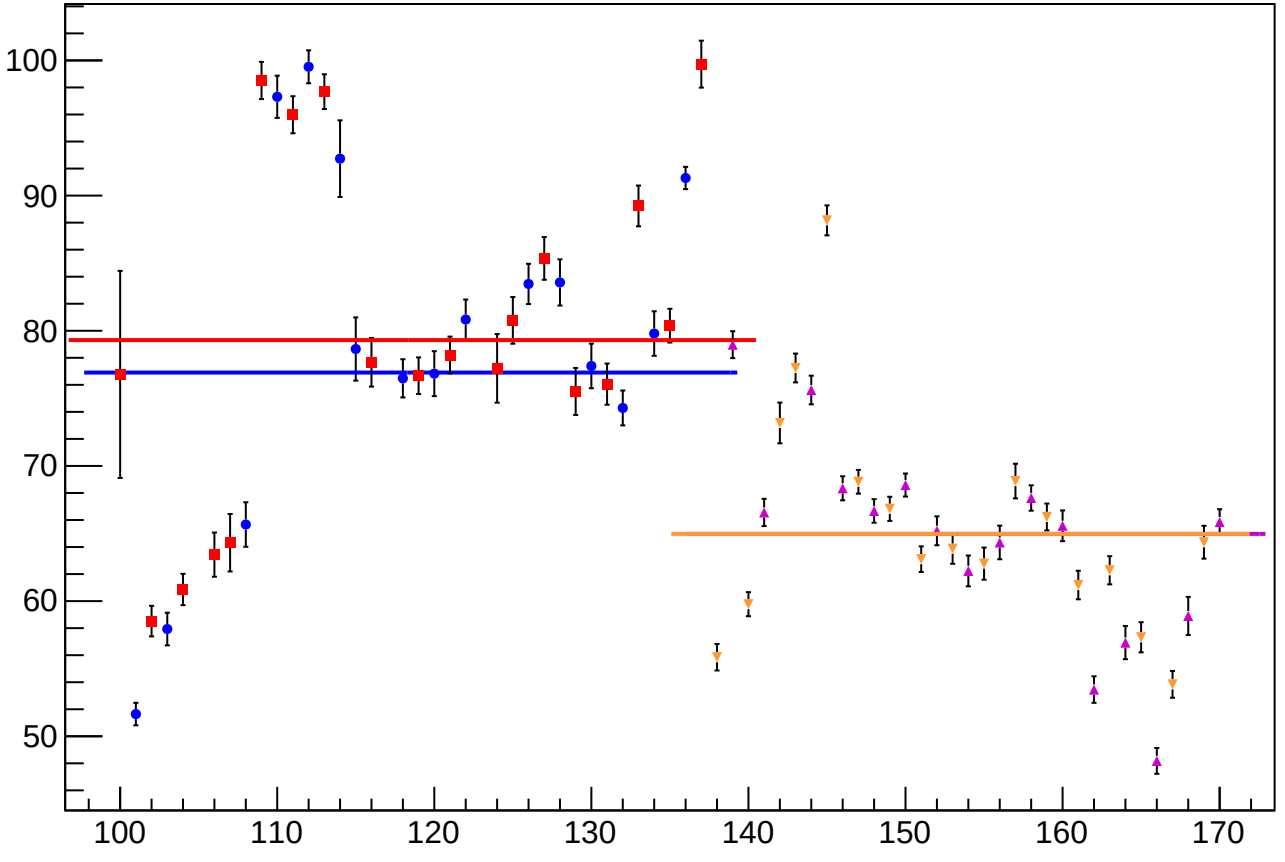
Left In: 1.320+/-0.180 $\chi^2$/NDF:298.8/15

+ sign 2.414+/-0.154 $\chi^2$/NDF: 891.0/32

All: 2.404+/-0.110 $\chi^2$/NDF: 1527.1/67

- sign 2.393+/-0.158 $\chi^2$/NDF: 636.0/34

# reg_asym_right_avg_diff_bpm4eX_slope vs Slug




Right In: 76.909+/-0.337 $\chi^2$/NDF: 2116.0/15

Left Out: 64.972+/-0.254 $\chi^2$/NDF:956.8/16

Right Out: 79.311+/-0.348 $\chi^2$/NDF: 1496.4/18

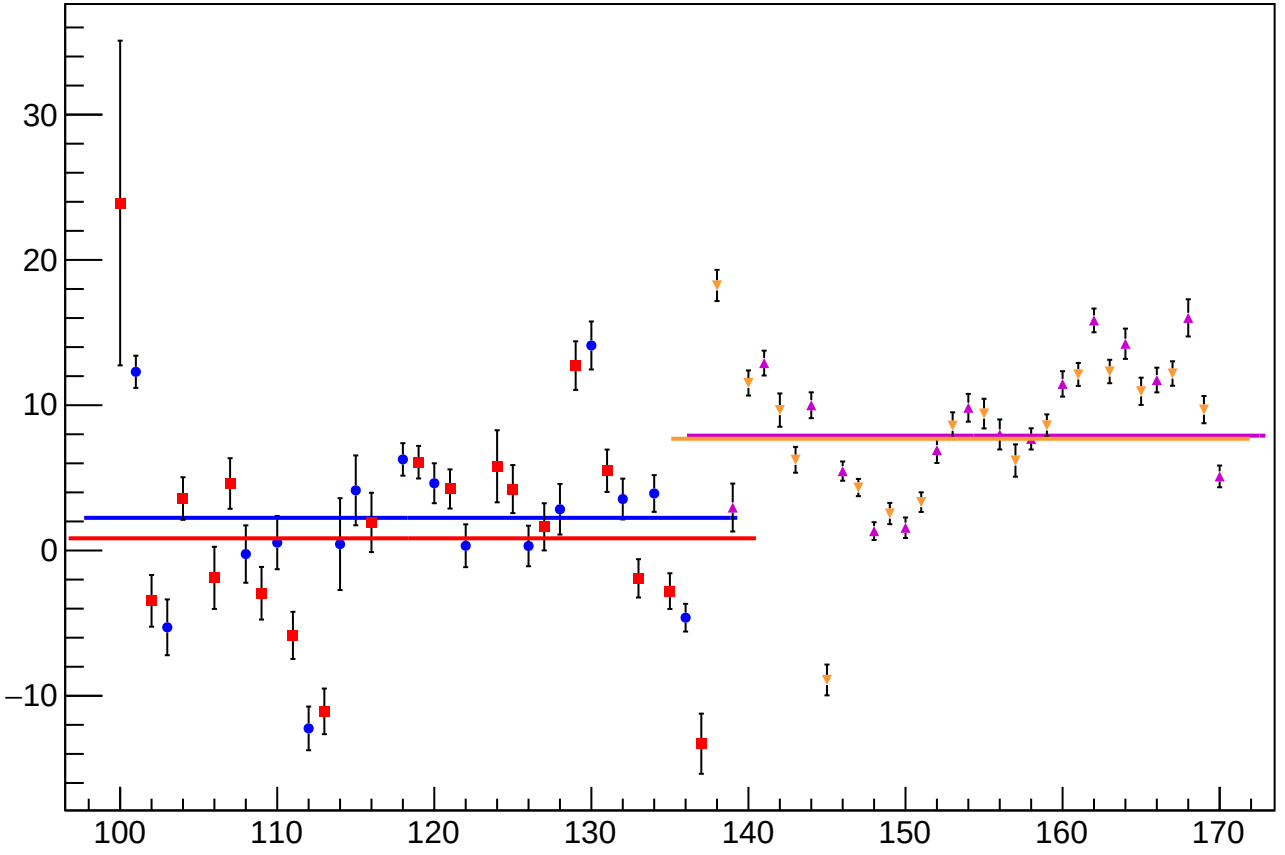
Left In: 64.974+/-0.255 $\chi^2$/NDF:860.9/15

+ sign 69.288+/-0.203 $\chi^2$/NDF: 3874.5/32

All: 69.626+/-0.144 $\chi^2$/NDF: 7343.8/67

- sign 69.973+/-0.205 $\chi^2$/NDF: 3463.7/34

# reg_asym_right_avg_diff_bpm4eY_slope vs Slug




Right In: 2.248+/-0.363 $\chi^2$/NDF: 319.6/15

Left Out: 7.693+/-0.206 $\chi^2$/NDF:606.9/16

Right Out: 0.840+/-0.372 $\chi^2$/NDF: 256.2/18

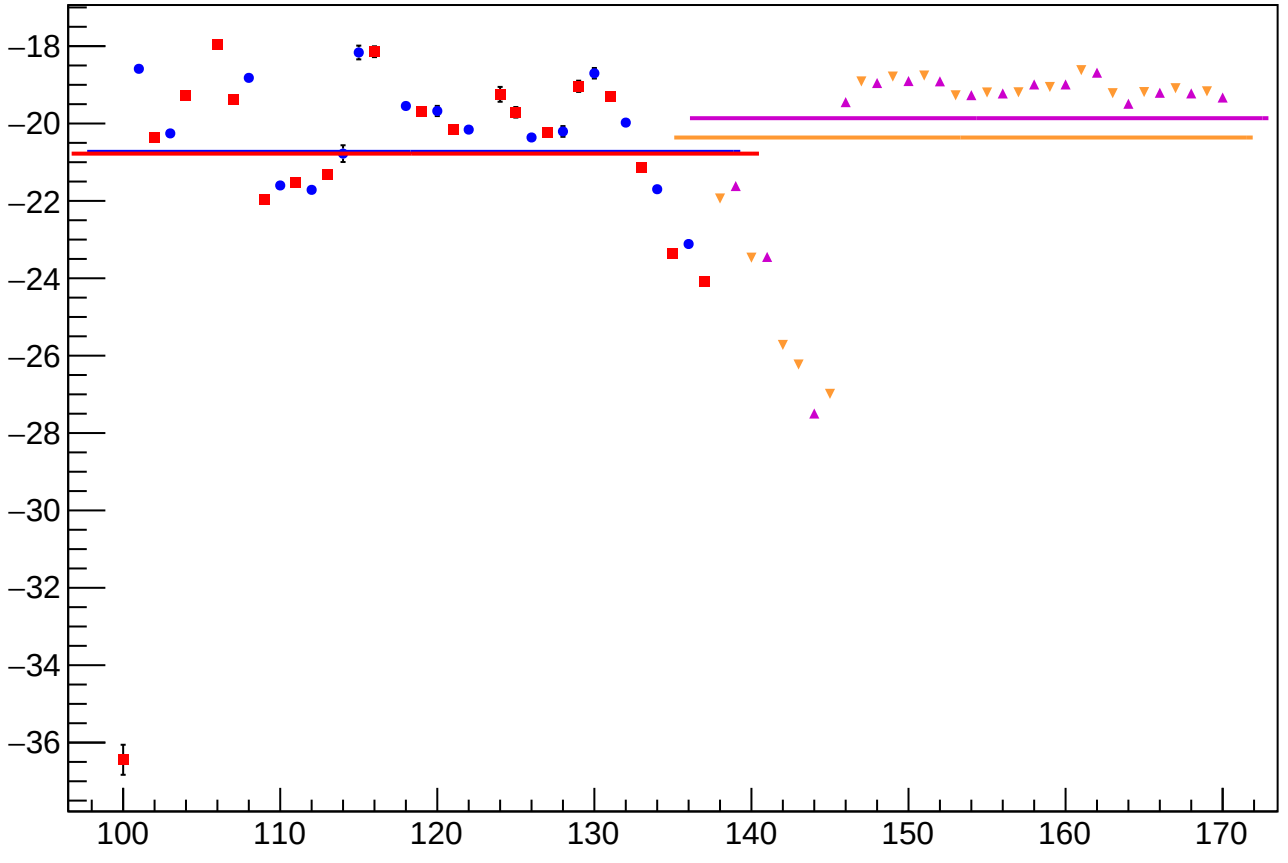
Left In: 7.905+/-0.210 $\chi^2$/NDF:485.6/15

+ sign 6.364+/-0.179 $\chi^2$/NDF: 1096.5/32

All: 6.282+/-0.128 $\chi^2$/NDF: 2112.0/67

- sign 6.196+/-0.183 $\chi^2$/NDF: 1015.1/34

# reg_asym_right_avg_diff_bpm12X_slope vs Slug




Right In: -20.732+/-0.019 $\chi^2$/NDF: 7634.1/15

Left Out: -20.362+/-0.010 $\chi^2$/NDF:70477.0/16

Right Out: -20.778+/-0.020 $\chi^2$/NDF: 9426.6/18

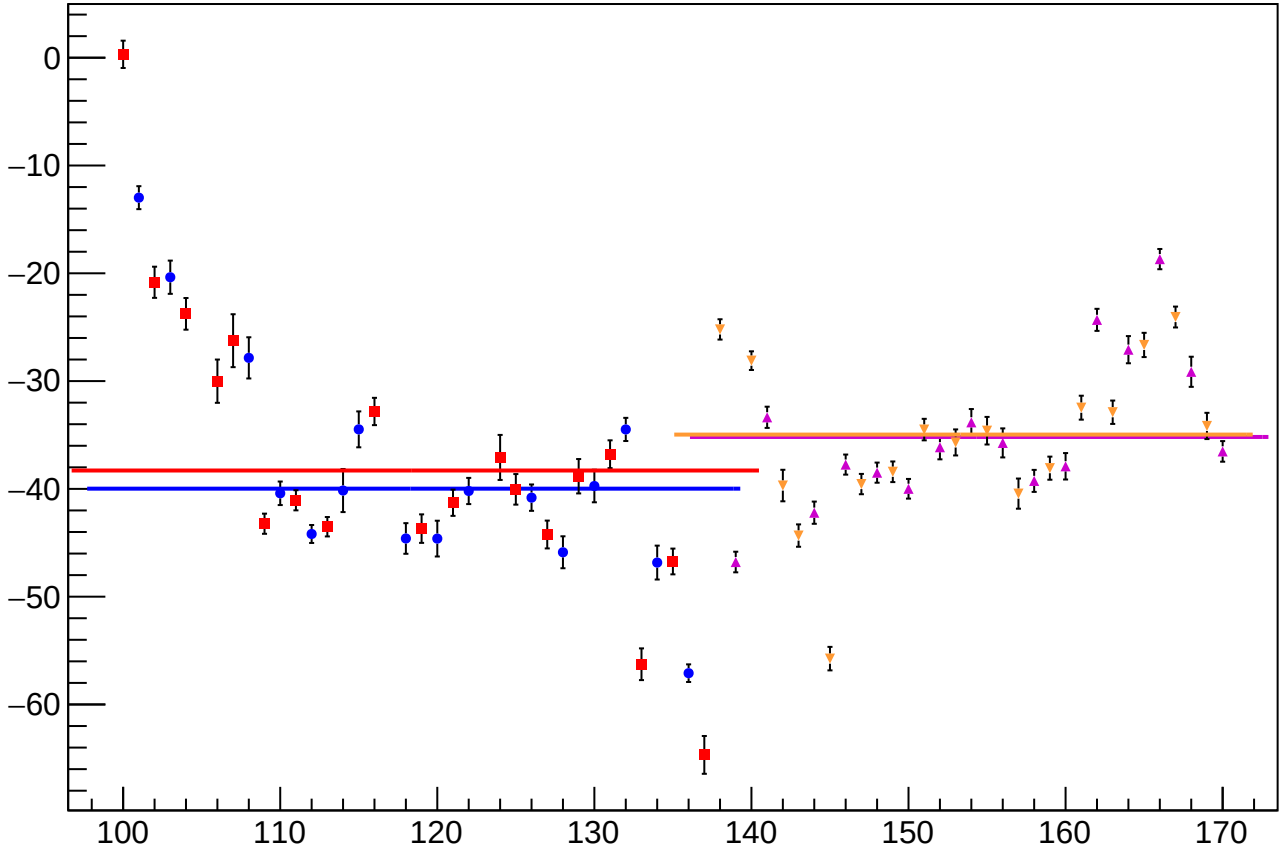
Left In: -19.863+/-0.010 $\chi^2$/NDF:41575.3/15

+ sign -20.436+/-0.009 $\chi^2$/NDF: 78402.6/32

All: -20.233+/-0.006 $\chi^2$/NDF: 132179.0/67

- sign -20.031+/-0.009 $\chi^2$/NDF: 52682.0/34

# reg_asym_right_dd_diff_bpm1X_slope vs Slug




Right In: -39.979+/-0.311 $\chi^2$/NDF: 1398.4/15

Left Out: -34.963+/-0.260 $\chi^2$/NDF:876.9/16

Right Out: -38.295+/-0.299 $\chi^2$/NDF: 1773.8/18

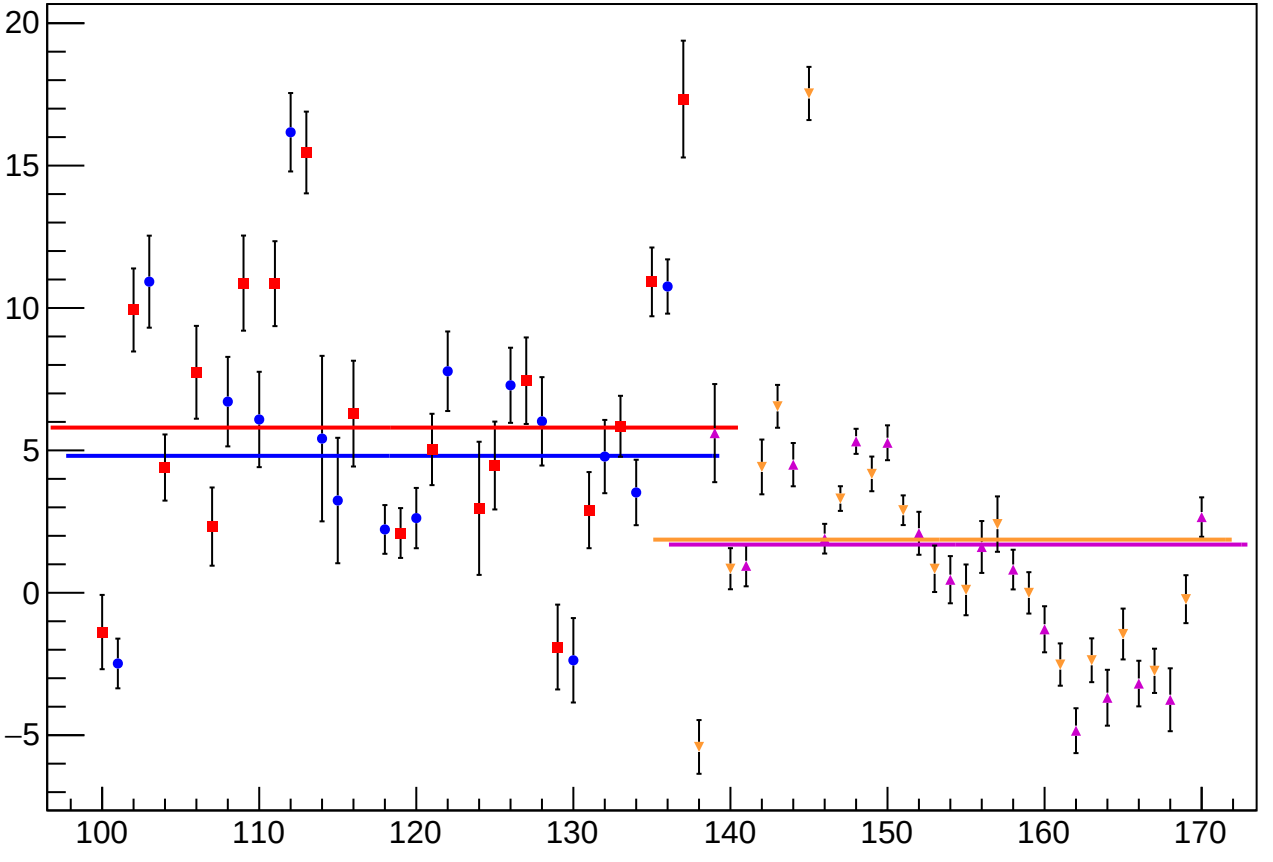
Left In: -35.183+/-0.262 $\chi^2$/NDF:751.0/15

+ sign -37.026+/-0.200 $\chi^2$/NDF: 2428.4/32

All: -36.779+/-0.140 $\chi^2$/NDF: 5017.3/67

- sign -36.537+/-0.197 $\chi^2$/NDF: 2585.9/34

# reg_asym_right_dd_diff_bpm4aY_slope vs Slug




Right In: 4.808+/-0.316 $\chi^2$/NDF: 240.5/15

Left Out: 1.867+/-0.176 $\chi^2$/NDF:551.0/16

Right Out: 5.801+/-0.315 $\chi^2$/NDF: 216.4/18

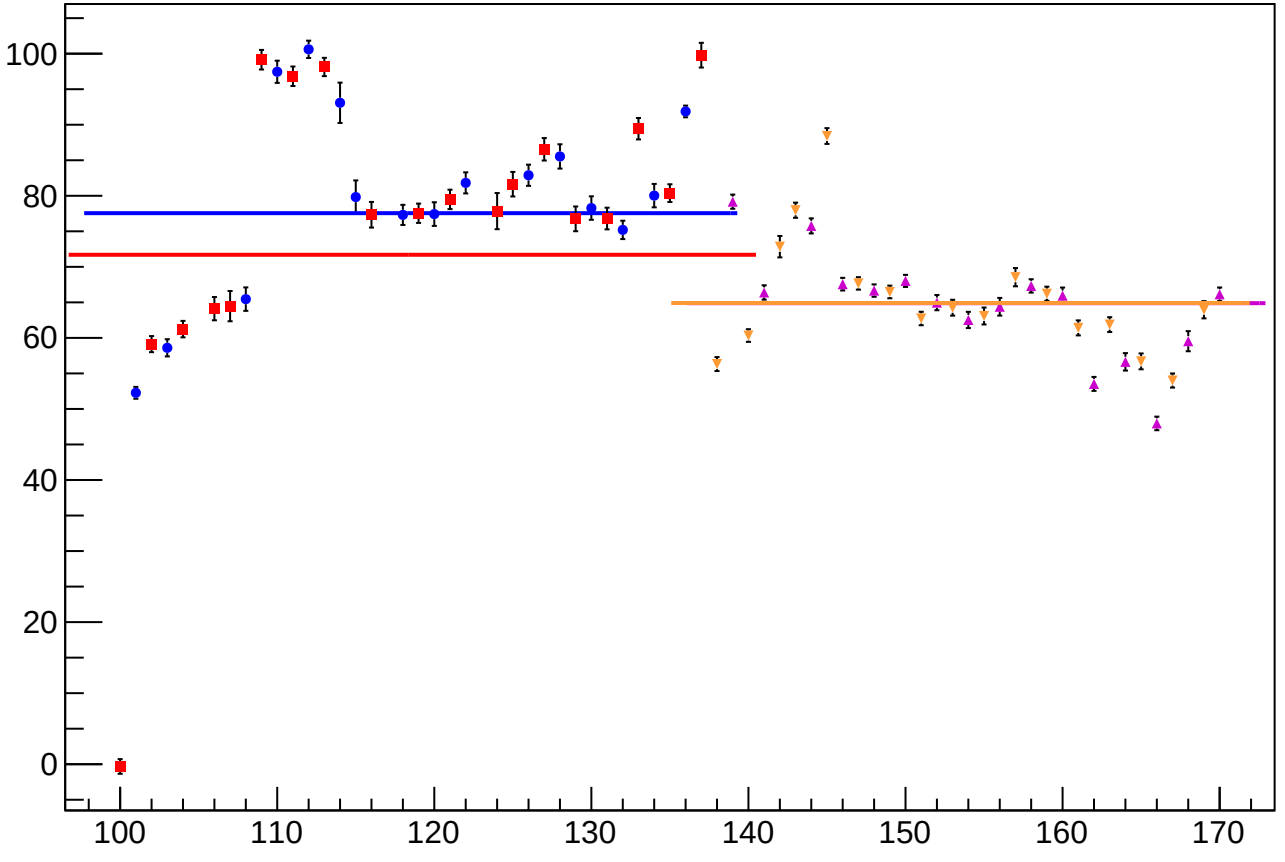
Left In: 1.693+/-0.181 $\chi^2$/NDF:301.8/15

\+ sign 2.562+/-0.154 $\chi^2$/NDF: 857.5/32

All: 2.635+/-0.110 $\chi^2$/NDF: 1504.2/67

\- sign 2.710+/-0.157 $\chi^2$/NDF: 646.2/34

# reg_asym_right_dd_diff_bpm4eX_slope vs Slug




Right In: 77.554+/-0.337 $\chi^2$/NDF: 2118.3/15

Left Out: 64.910+/-0.254 $\chi^2$/NDF:954.0/16

Right Out: 71.699+/-0.330 $\chi^2$/NDF: 6903.5/18

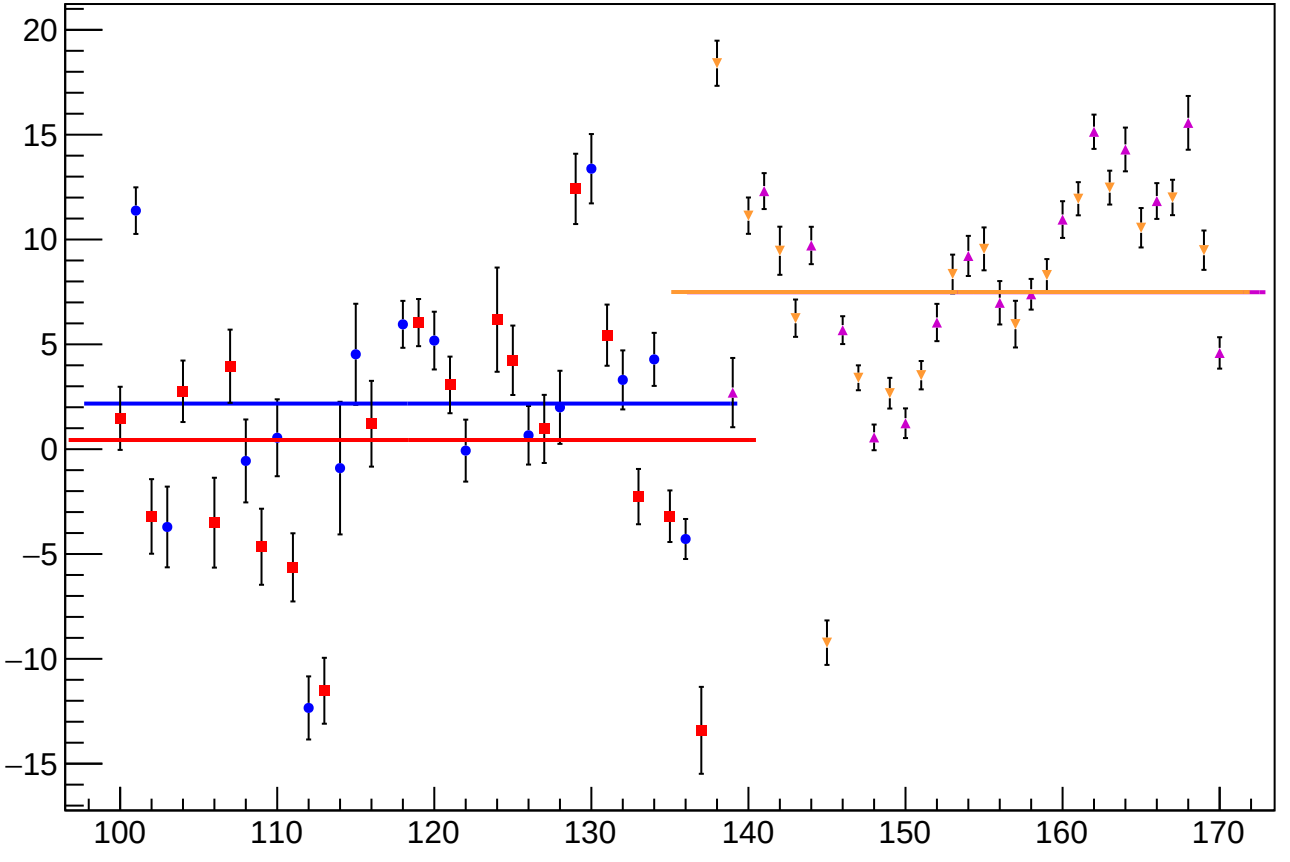
Left In: 64.887+/-0.255 $\chi^2$/NDF:858.2/15

+ sign 69.482+/-0.203 $\chi^2$/NDF: 3969.0/32

All: 68.450+/-0.143 $\chi^2$/NDF: 12048.5/67

- sign 67.429+/-0.202 $\chi^2$/NDF: 8028.1/34

# reg_asym_right_dd_diff_bpm4eY_slope vs Slug




Right In: 2.175+/-0.364 $\chi^2$/NDF: 290.3/15

Left Out: 7.496+/-0.207 $\chi^2$/NDF:620.2/16

Right Out: 0.438+/-0.362 $\chi^2$/NDF: 254.1/18

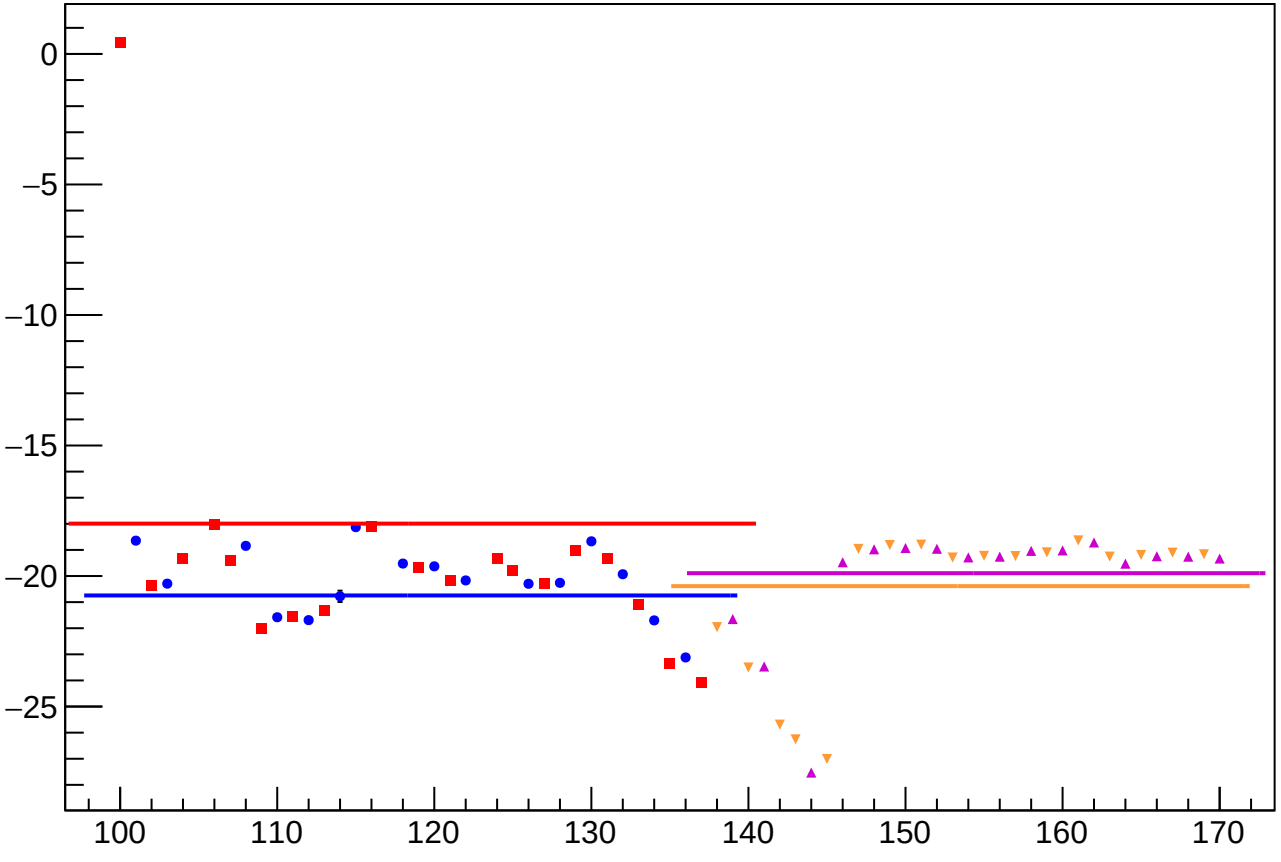
Left In: 7.486+/-0.211 $\chi^2$/NDF:491.9/15

+ sign 6.198+/-0.180 $\chi^2$/NDF: 1072.4/32

All: 5.954+/-0.128 $\chi^2$/NDF: 2105.5/67

- sign 5.704+/-0.182 $\chi^2$/NDF: 1029.4/34

# reg_asym_right_dd_diff_bpm12X_slope vs Slug




Right In: -20.745+/-0.019 $\chi^2$/NDF: 7513.6/15

Left Out: -20.387+/-0.010 $\chi^2$/NDF:70086.9/16

Right Out: -17.993+/-0.019 $\chi^2$/NDF: 150579.1/18

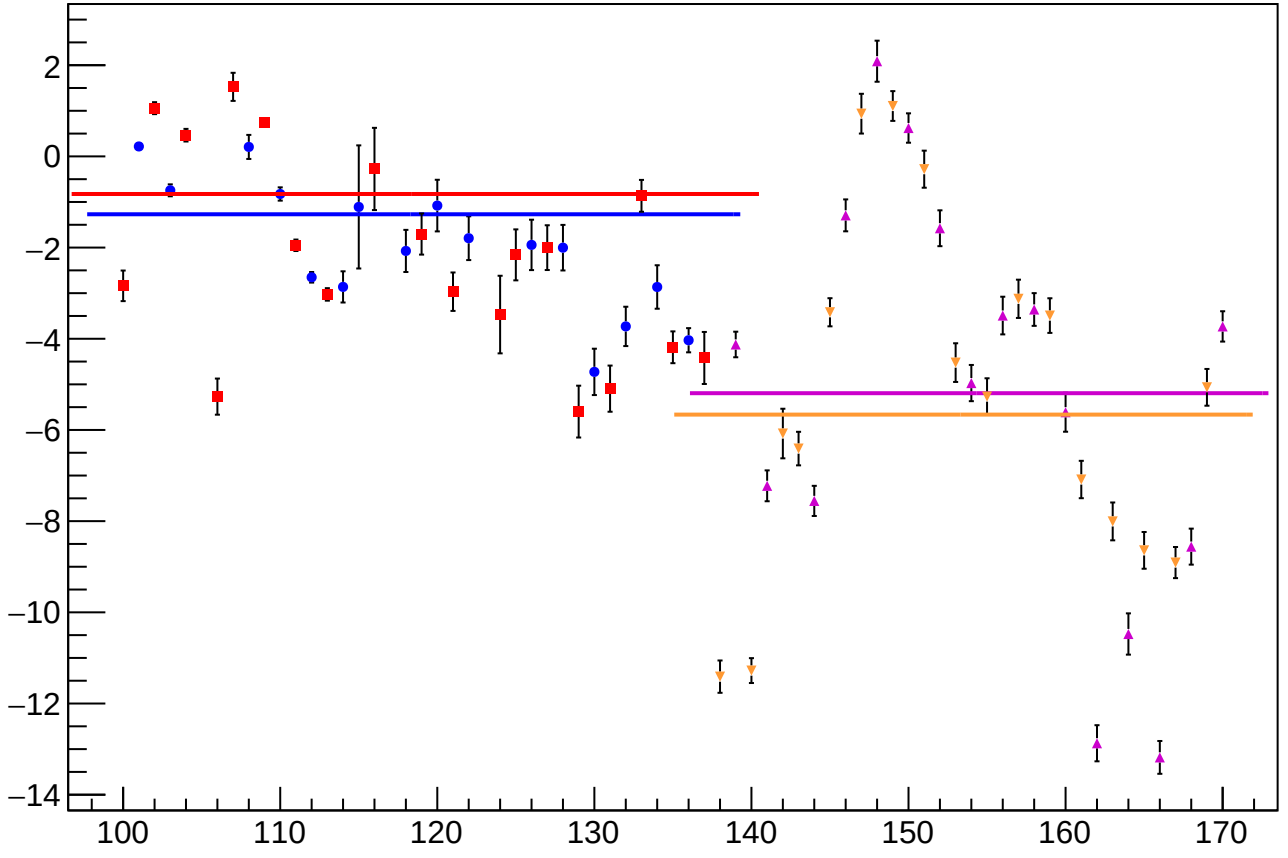
Left In: -19.891+/-0.010 $\chi^2$/NDF:41418.2/15

+ sign -20.458+/-0.009 $\chi^2$/NDF: 77870.8/32

All: -19.974+/-0.006 $\chi^2$/NDF: 284077.3/67

- sign -19.501+/-0.009 $\chi^2$/NDF: 200032.0/34

# reg_asym_sam_15_avg_diff_bpm1X_slope vs Slug




Right In: -1.270+/-0.055 $\chi^2$/NDF: 616.5/15

Left Out: -5.663+/-0.091 $\chi^2$/NDF:1847.3/16

Right Out: -0.825+/-0.051 $\chi^2$/NDF: 1384.3/18

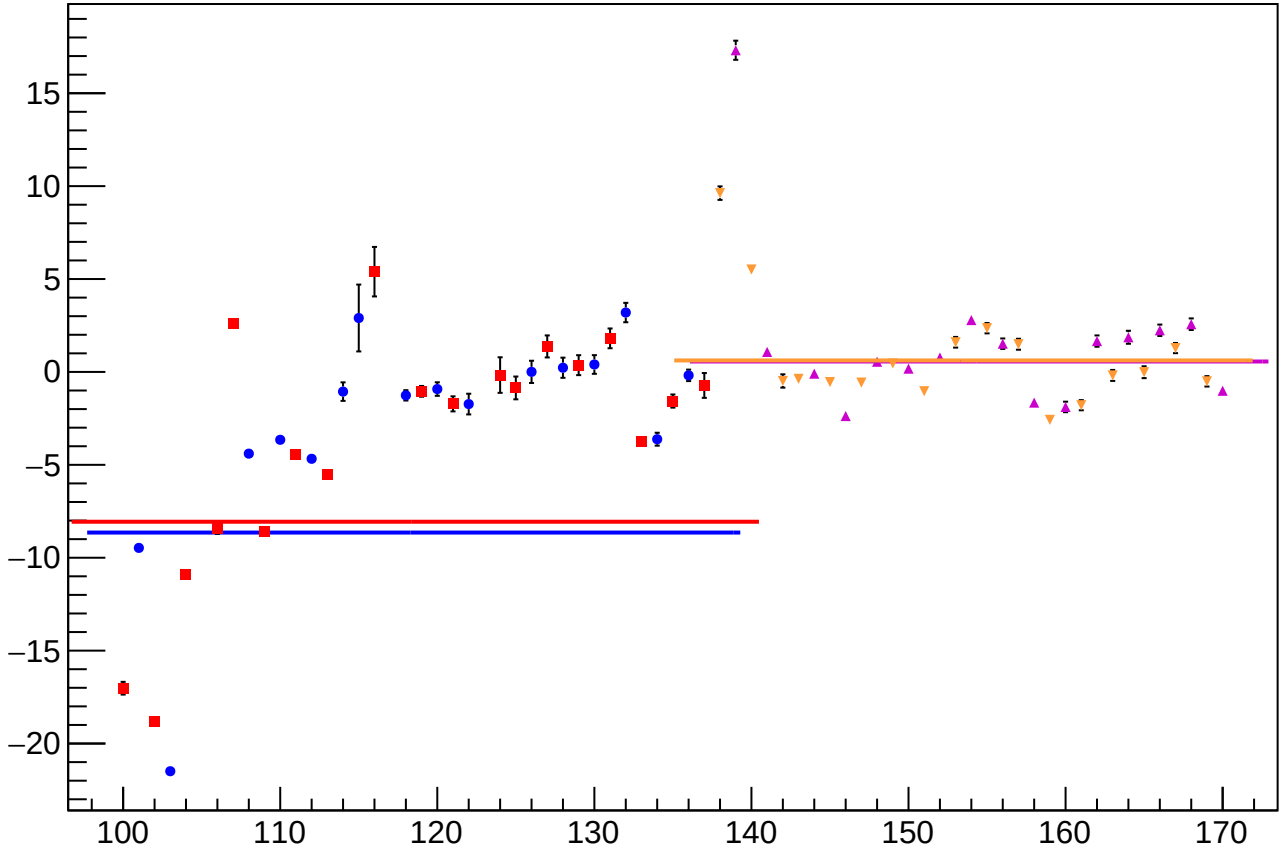
Left In: -5.194+/-0.091 $\chi^2$/NDF:2038.4/15

+ sign -2.428+/-0.047 $\chi^2$/NDF: 4175.3/32

All: -2.132+/-0.032 $\chi^2$/NDF: 9415.4/67

- sign -1.863+/-0.045 $\chi^2$/NDF: 5163.7/34

# reg_asym_sam_15_avg_diff_bpm4aY_slope vs Slug




Right In: -8.645+/-0.057 $\chi^2$/NDF: 13827.6/15

Left Out: 0.619+/-0.064 $\chi^2$/NDF:1521.3/16

Right Out: -8.063+/-0.058 $\chi^2$/NDF: 14427.9/18

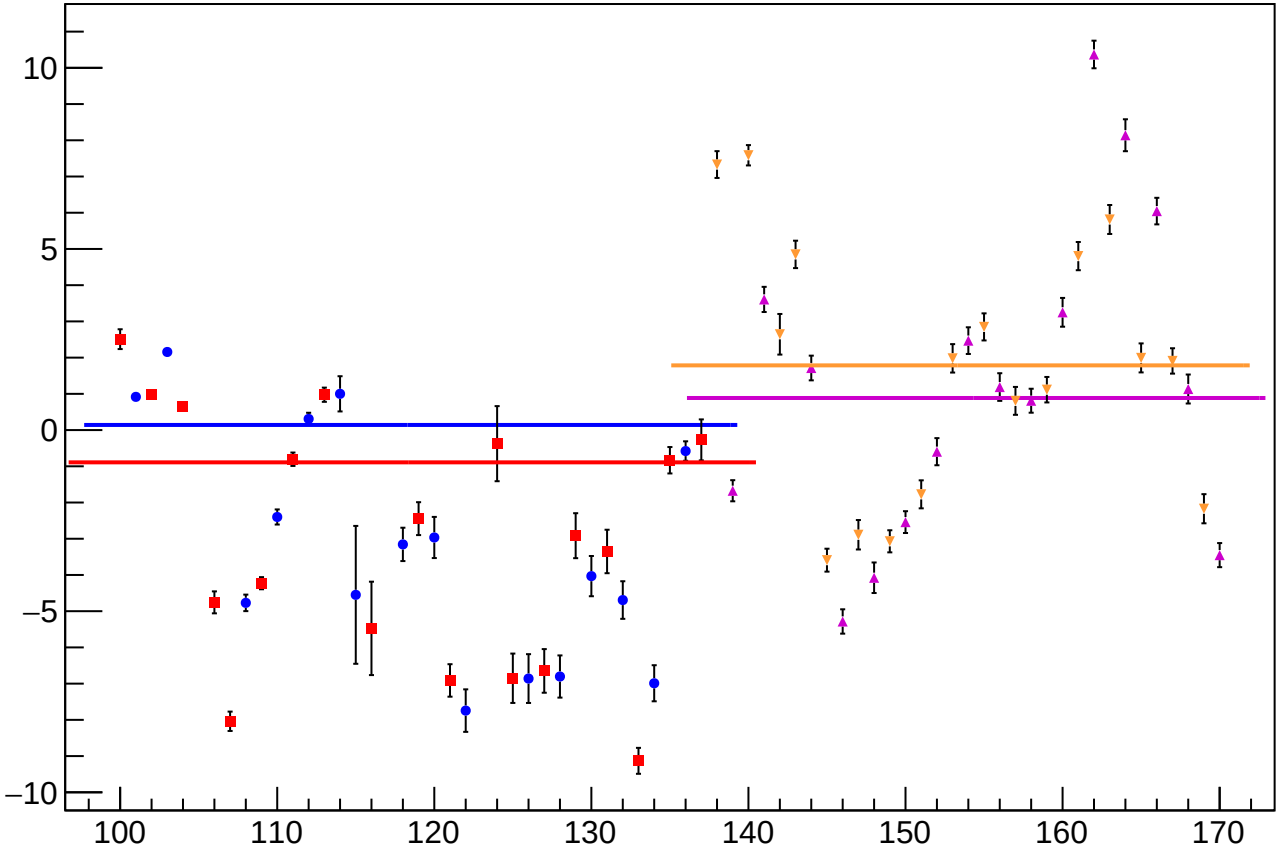
Left In: 0.561+/-0.066 $\chi^2$/NDF:1641.2/15

+ sign -4.578+/-0.043 $\chi^2$/NDF: 26971.3/32

All: -4.468+/-0.030 $\chi^2$/NDF: 52724.2/67

- sign -4.355+/-0.043 $\chi^2$/NDF: 25739.6/34

# reg_asym_sam_15_avg_diff_bpm4eX_slope vs Slug




Right In: 0.141+/-0.053 $\chi^2$/NDF: 1959.8/15

Left Out: 1.786+/-0.089 $\chi^2$/NDF:1756.0/16

Right Out: -0.891+/-0.054 $\chi^2$/NDF: 2985.7/18

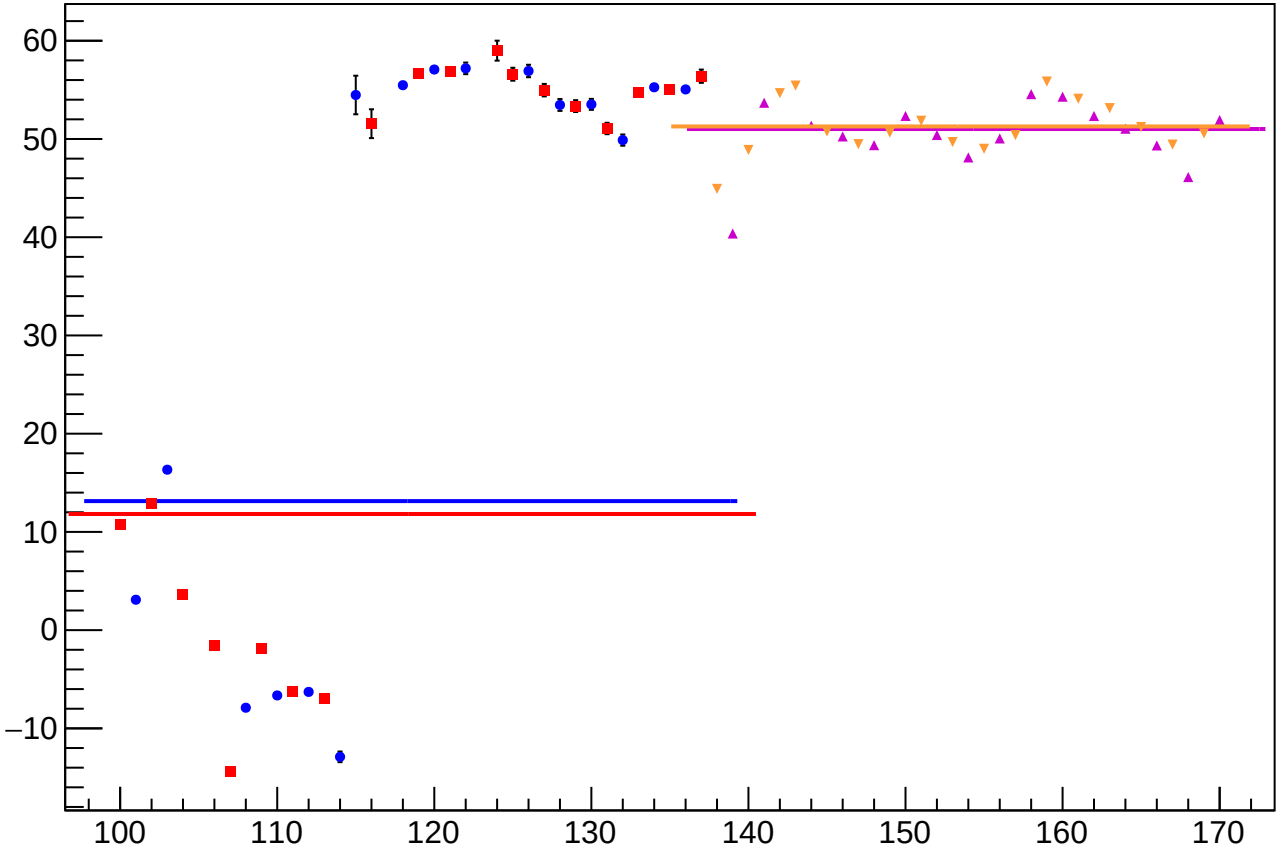
Left In: 0.886+/-0.089 $\chi^2$/NDF:2078.3/15

+ sign 0.570+/-0.046 $\chi^2$/NDF: 3967.0/32

All: 0.080+/-0.032 $\chi^2$/NDF: 9556.2/67

- sign -0.419+/-0.046 $\chi^2$/NDF: 5355.6/34

# reg_asym_sam_15_avg_diff_bpm4eY_slope vs Slug




Right In: 13.136+/-0.068 $\chi^2$/NDF: 108574.4/15

Left Out: 51.278+/-0.074 $\chi^2$/NDF:1145.4/16

Right Out: 11.822+/-0.068 $\chi^2$/NDF: 118168.5/18

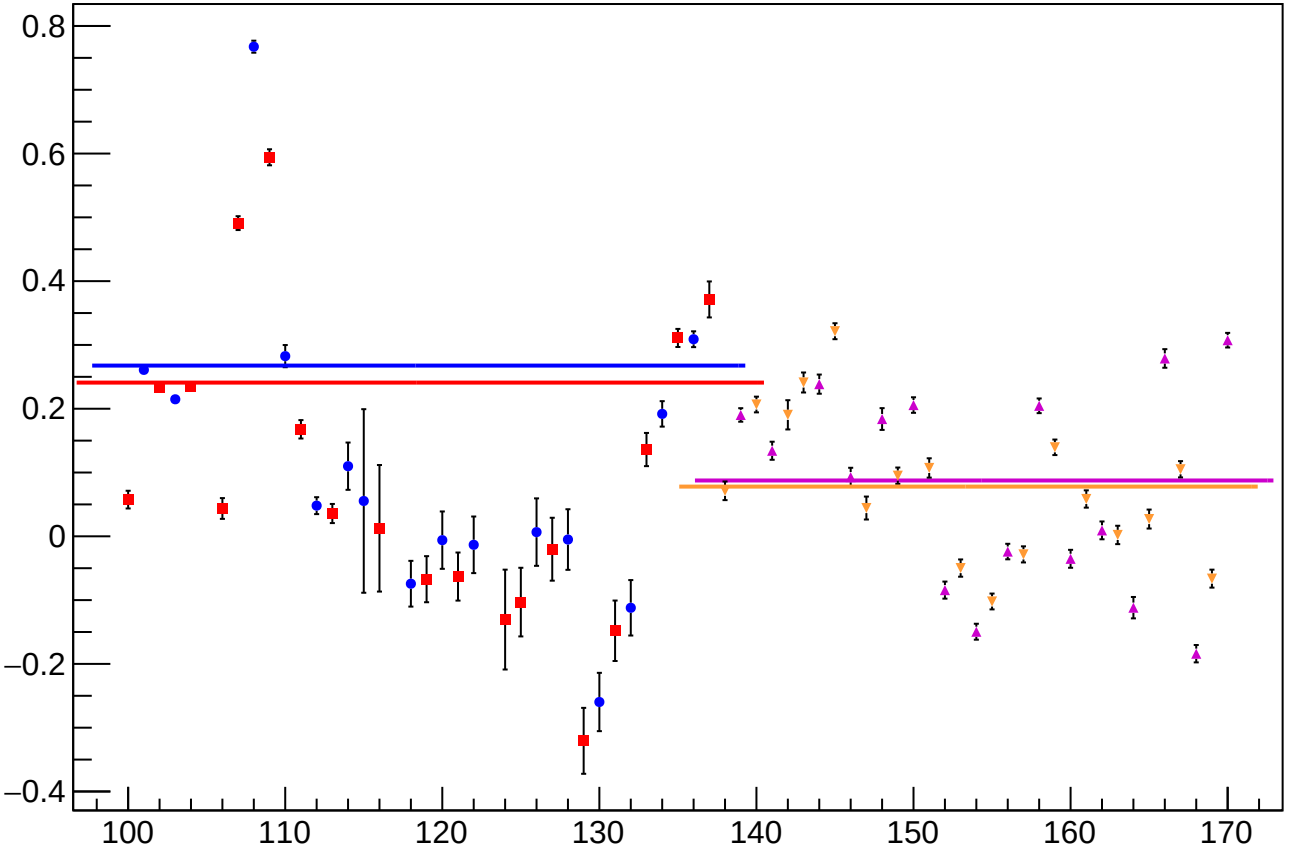
Left In: 51.015+/-0.076 $\chi^2$/NDF:1257.1/15

+ sign 30.498+/-0.050 $\chi^2$/NDF: 253175.0/32

All: 29.895+/-0.036 $\chi^2$/NDF: 521556.1/67

- sign 29.284+/-0.051 $\chi^2$/NDF: 268090.0/34

# reg_asym_sam_15_avg_diff_bpm12X_slope vs Slug




Right In: 0.268+/-0.003 $\chi^2$/NDF: 3720.4/15

Left Out: 0.078+/-0.003 $\chi^2$/NDF:1177.1/16

Right Out: 0.241+/-0.003 $\chi^2$/NDF: 2339.2/18

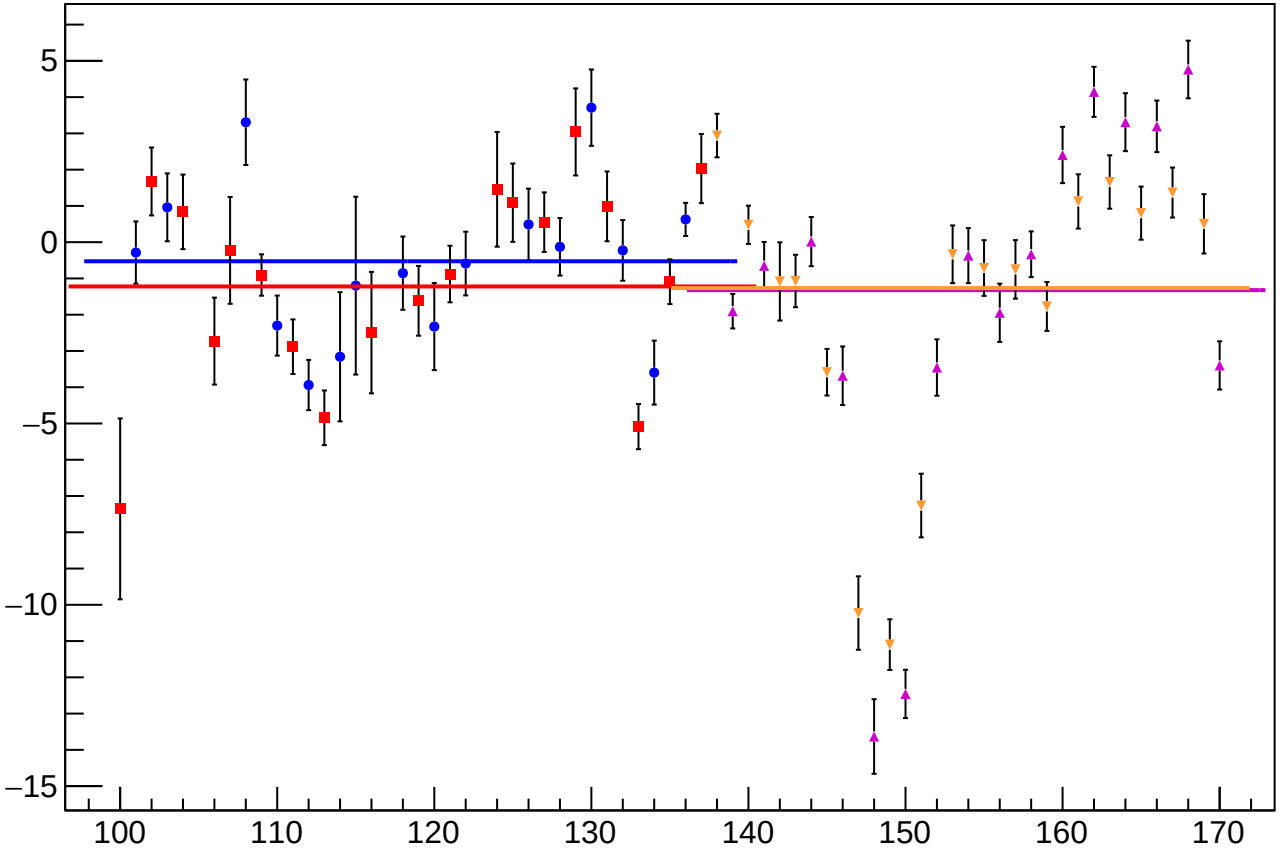
Left In: 0.088+/-0.003 $\chi^2$/NDF:2232.1/15

+ sign 0.190+/-0.002 $\chi^2$/NDF: 6777.4/32

All: 0.184+/-0.002 $\chi^2$/NDF: 12634.2/67

- sign 0.179+/-0.002 $\chi^2$/NDF: 5841.5/34

# reg_asym_sam_15_dd_diff_bpm1X_slope vs Slug




Right In: -0.527+/-0.217 $\chi^2$/NDF: 82.7/15

Left Out: -1.266+/-0.177 $\chi^2$/NDF:452.1/16

Right Out: -1.221+/-0.205 $\chi^2$/NDF: 130.9/18

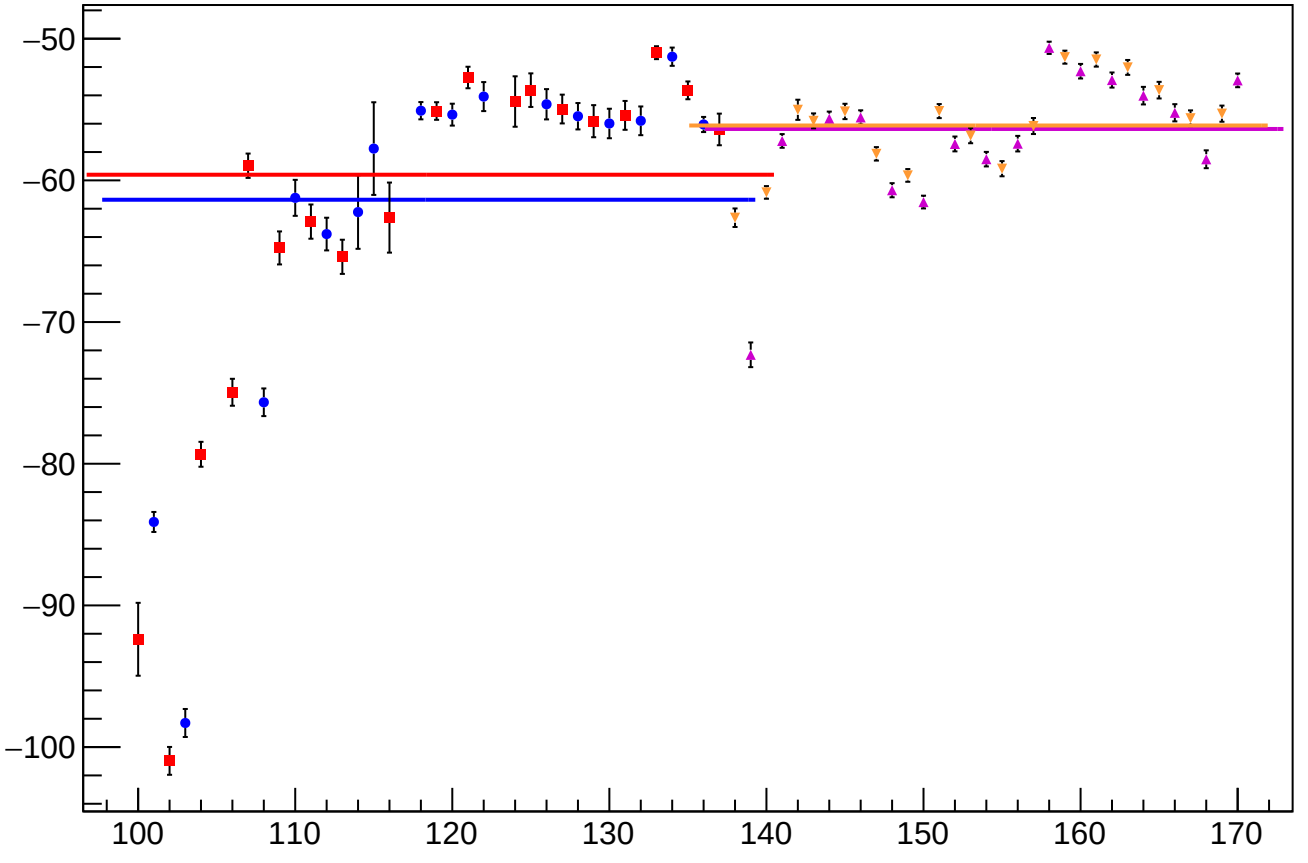
Left In: -1.322+/-0.176 $\chi^2$/NDF:677.7/15

+ sign -0.971+/-0.137 $\chi^2$/NDF: 541.8/32

All: -1.129+/-0.096 $\chi^2$/NDF: 1353.1/67

- sign -1.279+/-0.133 $\chi^2$/NDF: 808.7/34

# reg_asym_sam_15_dd_diff_bpm4aY_slope vs Slug




Right In: -61.367+/-0.219 $\chi^2$/NDF: 3351.2/15

Left Out: -56.127+/-0.128 $\chi^2$/NDF:612.0/16

Right Out: -59.601+/-0.207 $\chi^2$/NDF: 3421.3/18

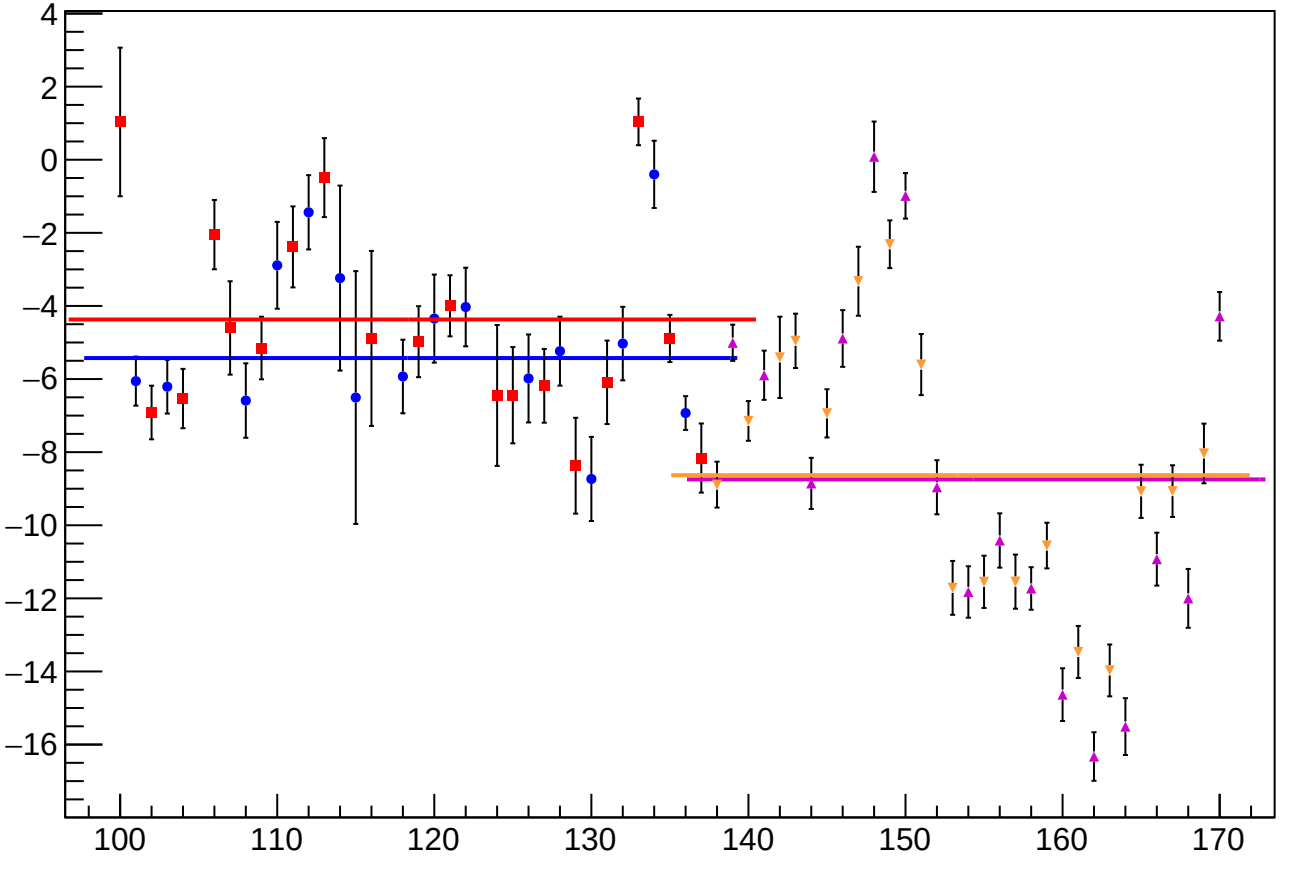
Left In: -56.372+/-0.131 $\chi^2$/NDF:933.2/15

+ sign -57.456+/-0.110 $\chi^2$/NDF: 4390.4/32

All: -57.379+/-0.078 $\chi^2$/NDF: 8919.9/67

- sign -57.301+/-0.111 $\chi^2$/NDF: 4528.5/34

# reg_asym_sam_15_dd_diff_bpm4eX_slope vs Slug




Right In: -5.425+/-0.230 $\chi^2$/NDF: 76.0/15

Left Out: -8.631+/-0.173 $\chi^2$/NDF:348.7/16

Right Out: -4.371+/-0.223 $\chi^2$/NDF: 156.6/18

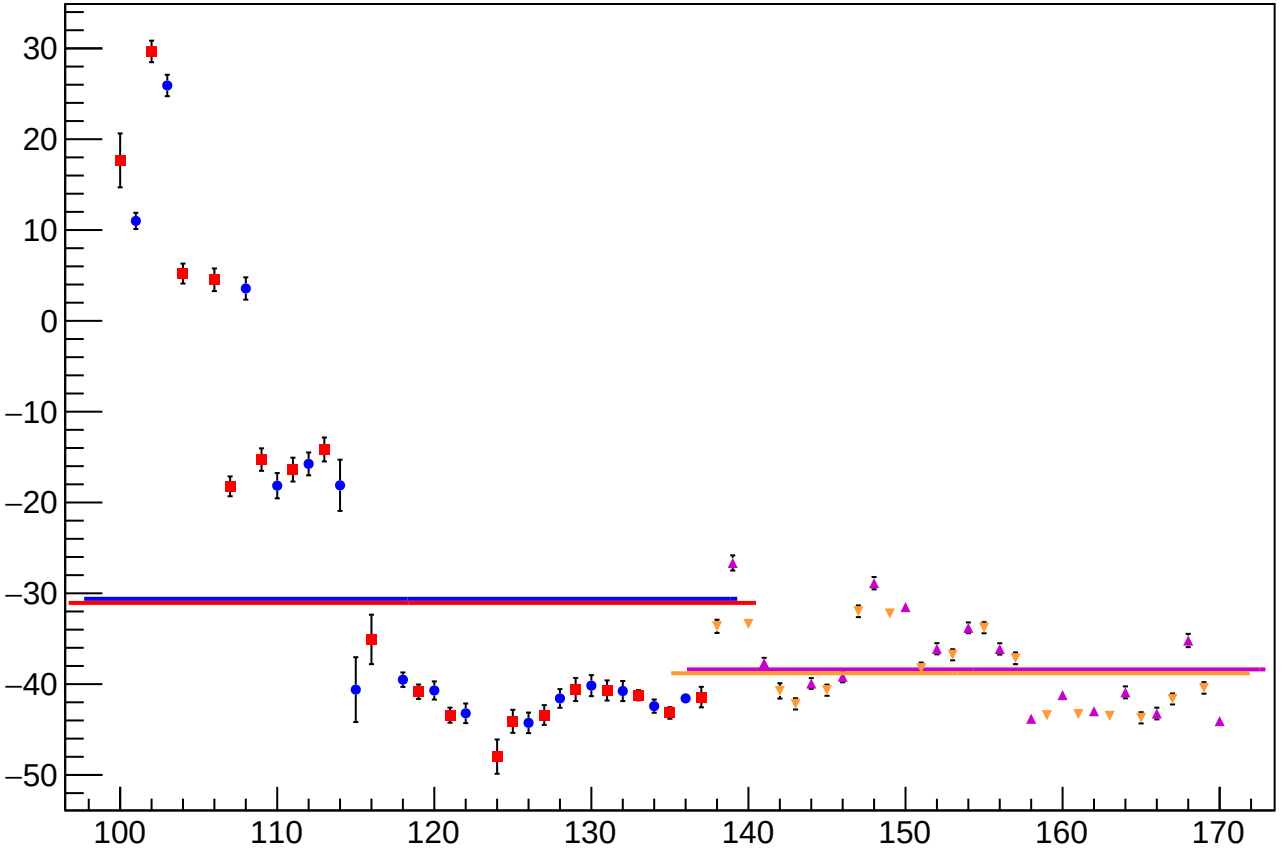
Left In: -8.746+/-0.172 $\chi^2$/NDF:732.4/15

+ sign -7.469+/-0.138 $\chi^2$/NDF: 548.5/32

All: -7.286+/-0.097 $\chi^2$/NDF: 1683.0/67

- sign -7.109+/-0.136 $\chi^2$/NDF: 1131.0/34

# reg_asym_sam_15_dd_diff_bpm4eY_slope vs Slug




Right In: -30.605+/-0.249 $\chi^2$/NDF: 6938.0/15

Left Out: -38.806+/-0.146 $\chi^2$/NDF:870.3/16

Right Out: -31.056+/-0.238 $\chi^2$/NDF: 6976.4/18

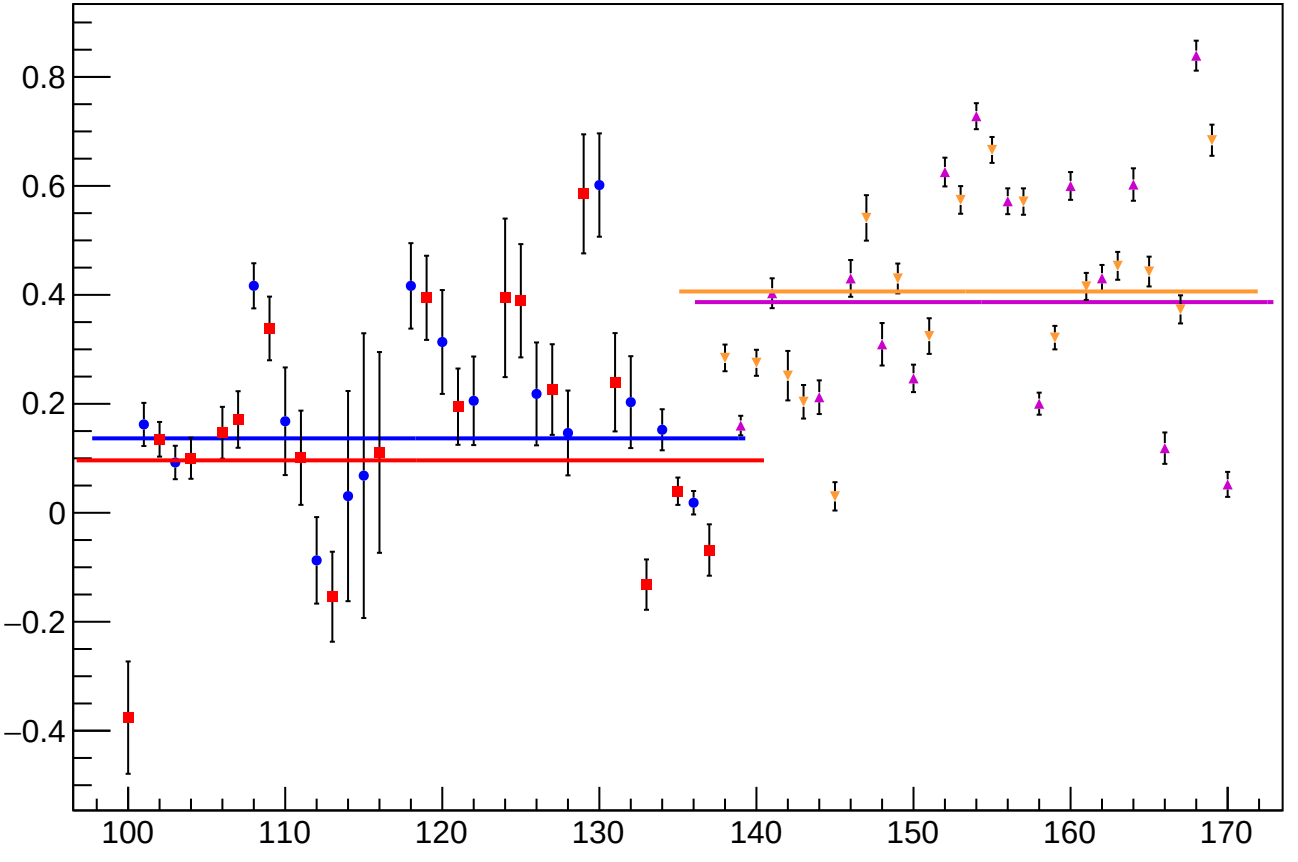
Left In: -38.380+/-0.148 $\chi^2$/NDF:1106.4/15

\+ sign -36.717+/-0.126 $\chi^2$/NDF: 8614.1/32

All: -36.523+/-0.089 $\chi^2$/NDF: 17384.9/67

\- sign -36.330+/-0.126 $\chi^2$/NDF: 8766.1/34

# reg_asym_sam_15_dd_diff_bpm12X_slope vs Slug




Right In: 0.137+/-0.013 $\chi^2$/NDF: 129.2/15

Left Out: 0.406+/-0.007 $\chi^2$/NDF:662.0/16

Right Out: 0.096+/-0.012 $\chi^2$/NDF: 147.7/18

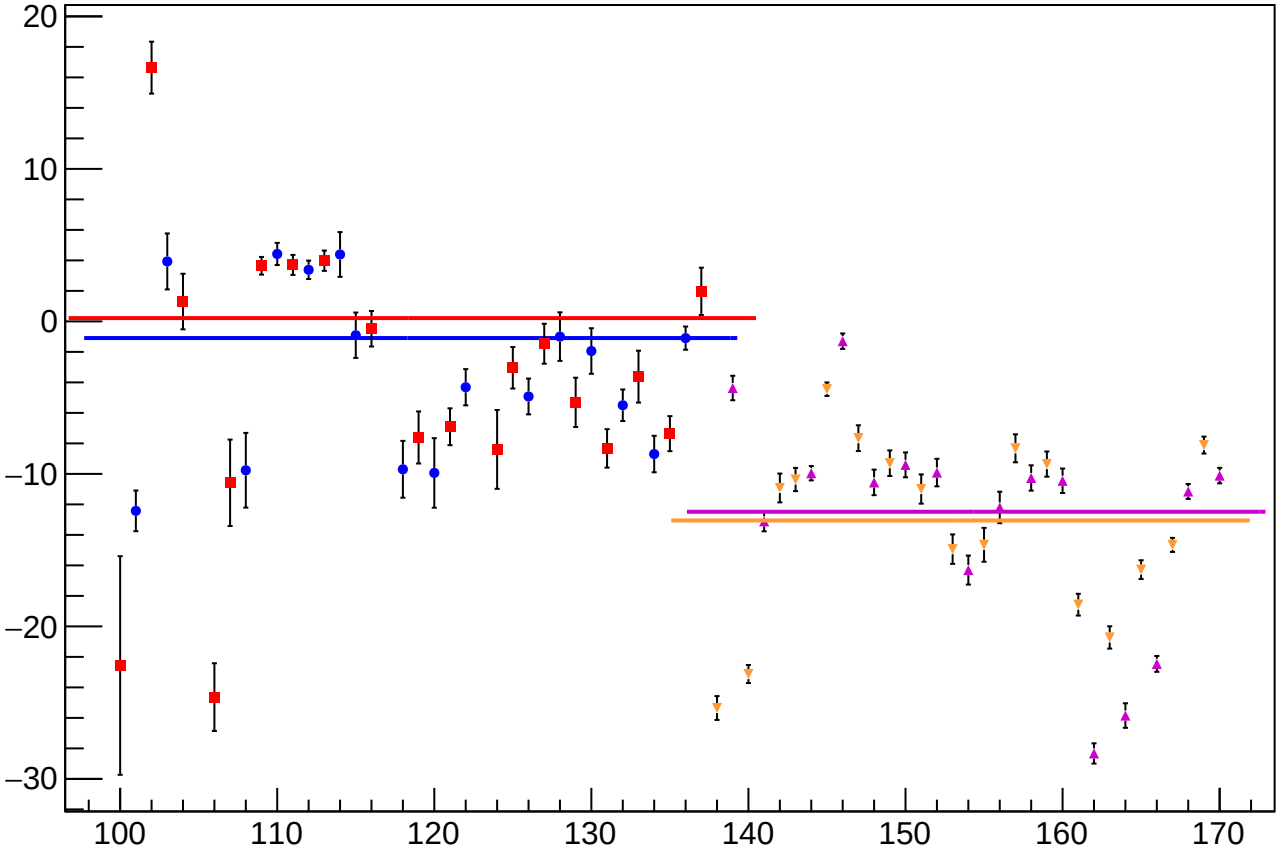
Left In: 0.387+/-0.006 $\chi^2$/NDF:1355.5/15

+ sign 0.349+/-0.006 $\chi^2$/NDF: 1157.4/32

All: 0.337+/-0.004 $\chi^2$/NDF: 3106.5/67

- sign 0.326+/-0.006 $\chi^2$/NDF: 1941.0/34

# reg_asym_sam_37_avg_diff_bpm1X_slope vs Slug




Right In: -1.092+/-0.281 $\chi^2$/NDF: 332.0/15

Left Out: -13.054+/-0.168 $\chi^2$/NDF:1340.8/16

Right Out: 0.216+/-0.266 $\chi^2$/NDF: 520.8/18

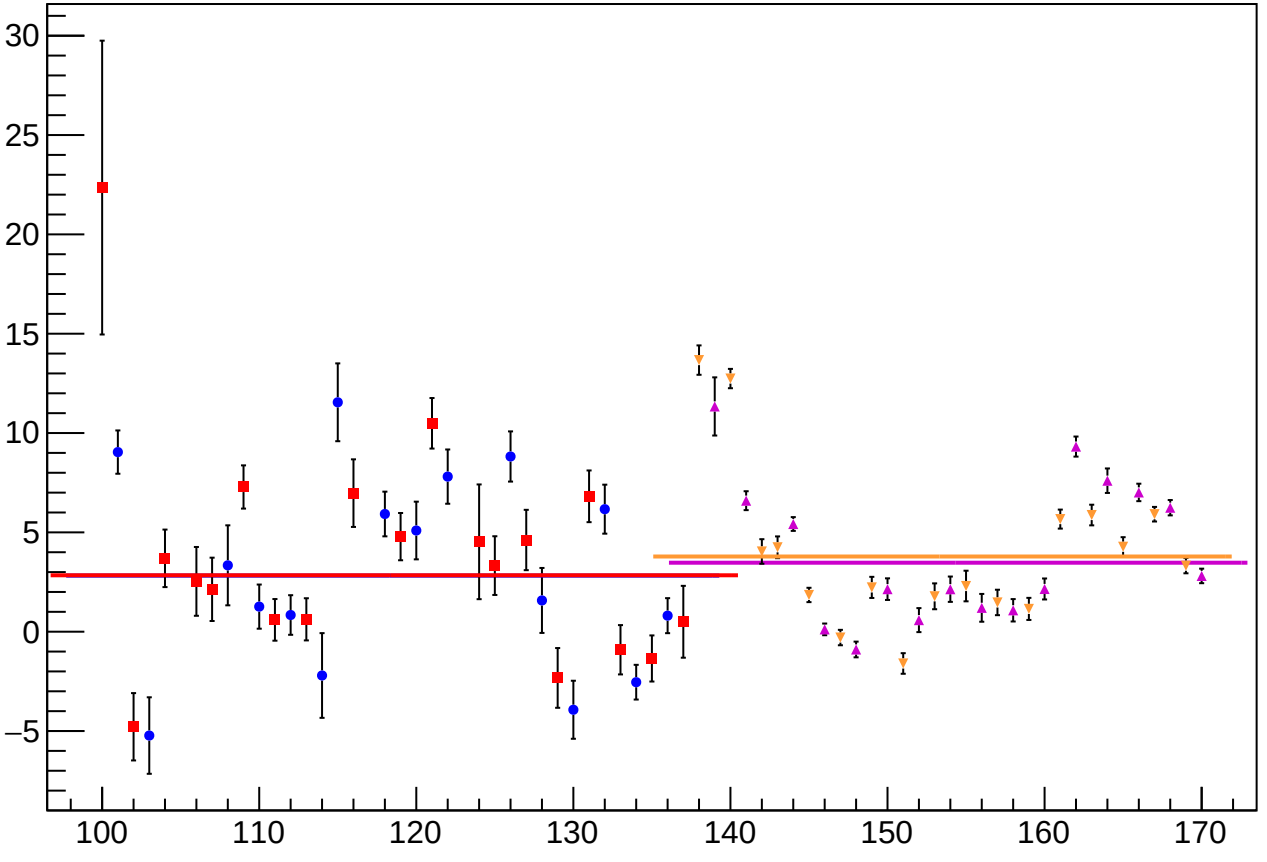
Left In: -12.481+/-0.164 $\chi^2$/NDF:1921.3/15

+ sign -9.890+/-0.144 $\chi^2$/NDF: 3009.5/32

All: -9.420+/-0.100 $\chi^2$/NDF: 7119.9/67

- sign -8.978+/-0.140 $\chi^2$/NDF: 4089.8/34

# reg_asym_sam_37_avg_diff_bpm4aY_slope vs Slug




Right In: 2.823+/-0.313 $\chi^2$/NDF: 199.6/15

Left Out: 3.785+/-0.120 $\chi^2$/NDF:890.8/16

Right Out: 2.840+/-0.322 $\chi^2$/NDF: 145.0/18

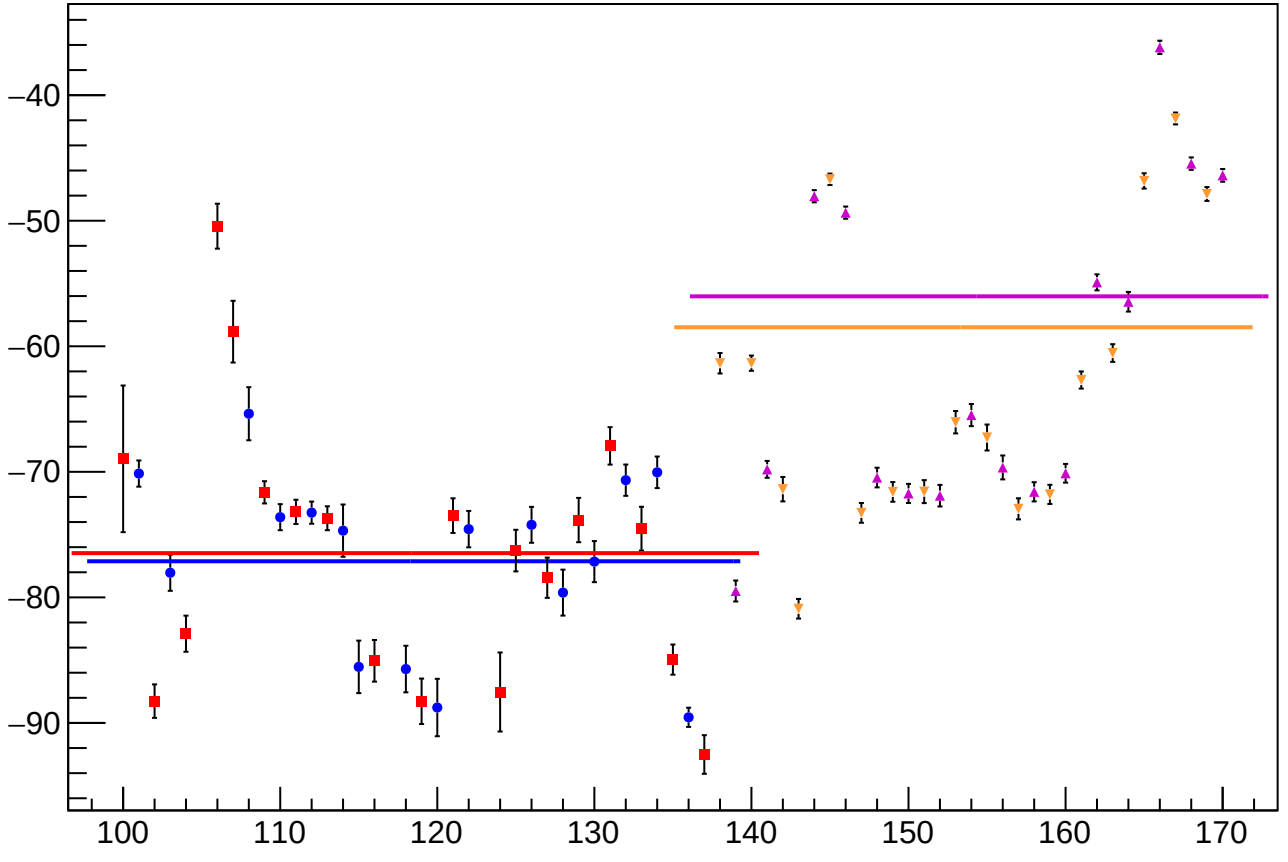
Left In: 3.472+/-0.116 $\chi^2$/NDF:721.8/15

+ sign 3.662+/-0.112 $\chi^2$/NDF: 1098.5/32

All: 3.528+/-0.078 $\chi^2$/NDF: 1971.6/67

- sign 3.400+/-0.109 $\chi^2$/NDF: 870.2/34

# reg_asym_sam_37_avg_diff_bpm4eX_slope vs Slug




Right In: -77.123+/-0.326 $\chi^2$/NDF: 503.3/15

Left Out: -58.484+/-0.167 $\chi^2$/NDF:5292.0/16

Right Out: -76.475+/-0.328 $\chi^2$/NDF: 695.8/18

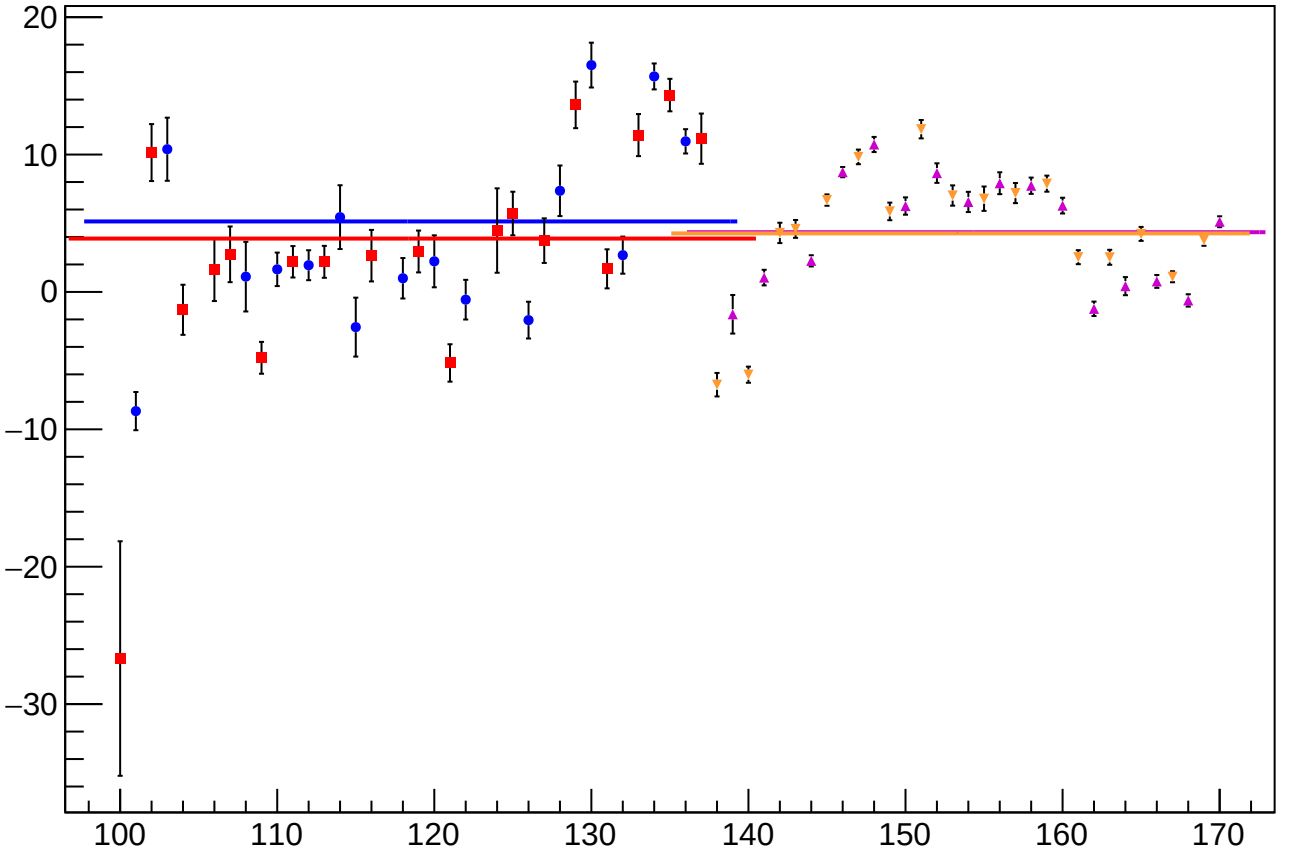
Left In: -56.022+/-0.162 $\chi^2$/NDF:6077.8/15

+ sign -62.339+/-0.148 $\chi^2$/NDF: 8383.7/32

All: -61.147+/-0.104 $\chi^2$/NDF: 18404.4/67

- sign -60.009+/-0.145 $\chi^2$/NDF: 9894.7/34

# reg_asym_sam_37_avg_diff_bpm4eY_slope vs Slug




Right In: 5.132+/-0.350 $\chi^2$/NDF: 412.3/15

Left Out: 4.262+/-0.137 $\chi^2$/NDF:913.1/16

Right Out: 3.885+/-0.361 $\chi^2$/NDF: 291.5/18

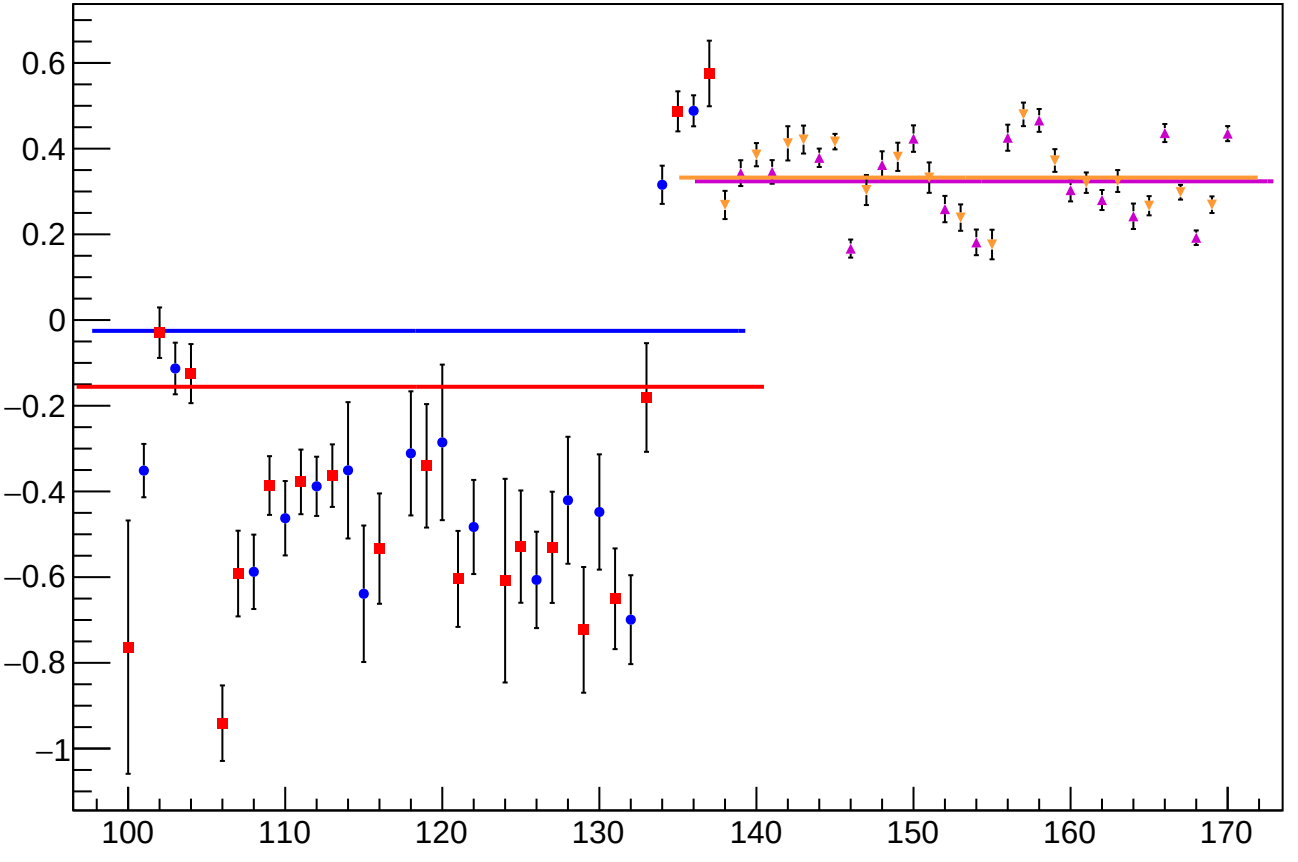
Left In: 4.348+/-0.134 $\chi^2$/NDF:801.4/15

+ sign 4.379+/-0.128 $\chi^2$/NDF: 1330.7/32

All: 4.334+/-0.090 $\chi^2$/NDF: 2425.3/67

- sign 4.292+/-0.126 $\chi^2$/NDF: 1094.3/34

# reg_asym_sam_37_avg_diff_bpm12X_slope vs Slug




Right In: -0.025+/-0.019 $\chi^2$/NDF: 512.5/15

Left Out: 0.332+/-0.006 $\chi^2$/NDF:127.7/16

Right Out: -0.156+/-0.020 $\chi^2$/NDF: 494.9/18

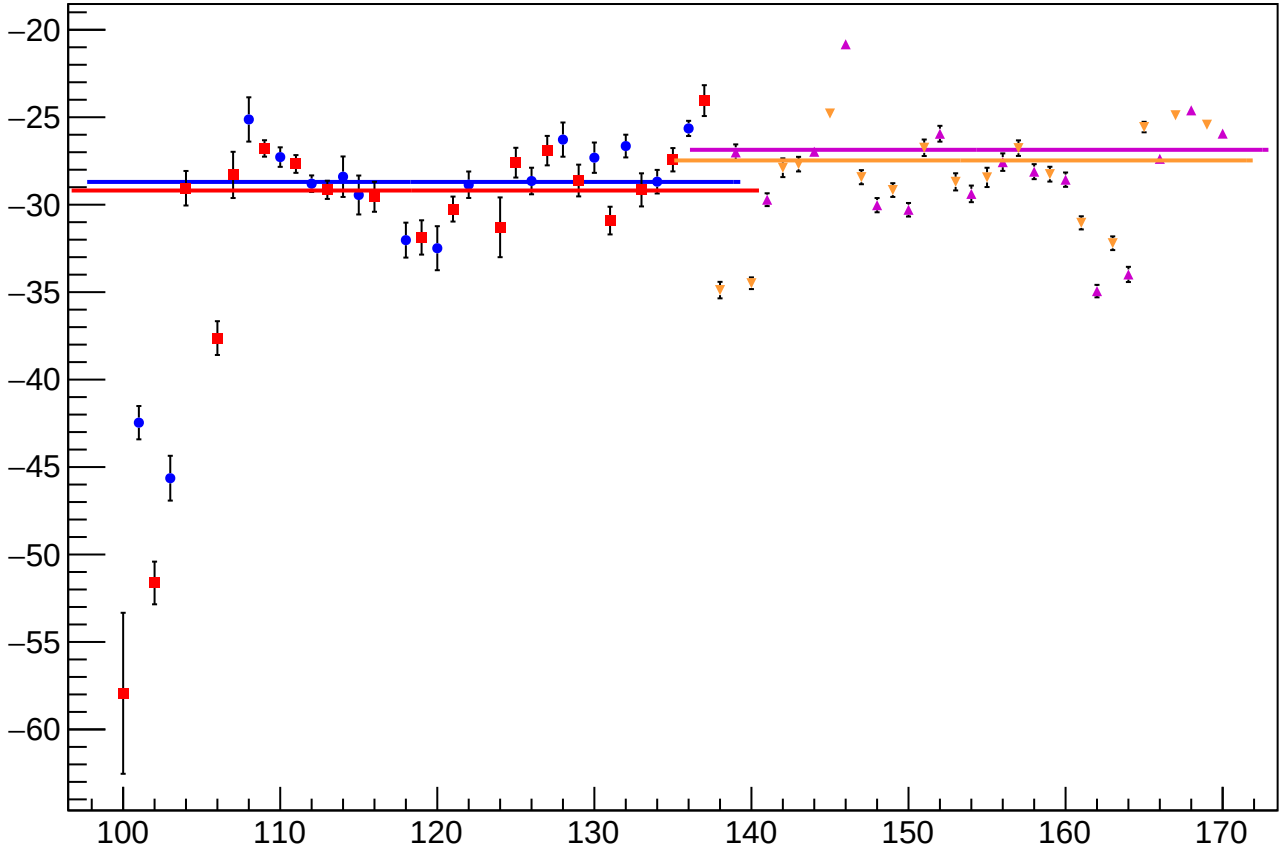
Left In: 0.324+/-0.006 $\chi^2$/NDF:281.4/15

+ sign 0.297+/-0.006 $\chi^2$/NDF: 961.5/32

All: 0.290+/-0.004 $\chi^2$/NDF: 2256.3/67

- sign 0.284+/-0.006 $\chi^2$/NDF: 1292.1/34

# reg_asym_sam_37_dd_diff_bpm1X_slope vs Slug




Right In: -28.698+/-0.186 $\chi^2$/NDF: 487.3/15

Left Out: -27.470+/-0.083 $\chi^2$/NDF:1397.6/16

Right Out: -29.189+/-0.181 $\chi^2$/NDF: 557.3/18

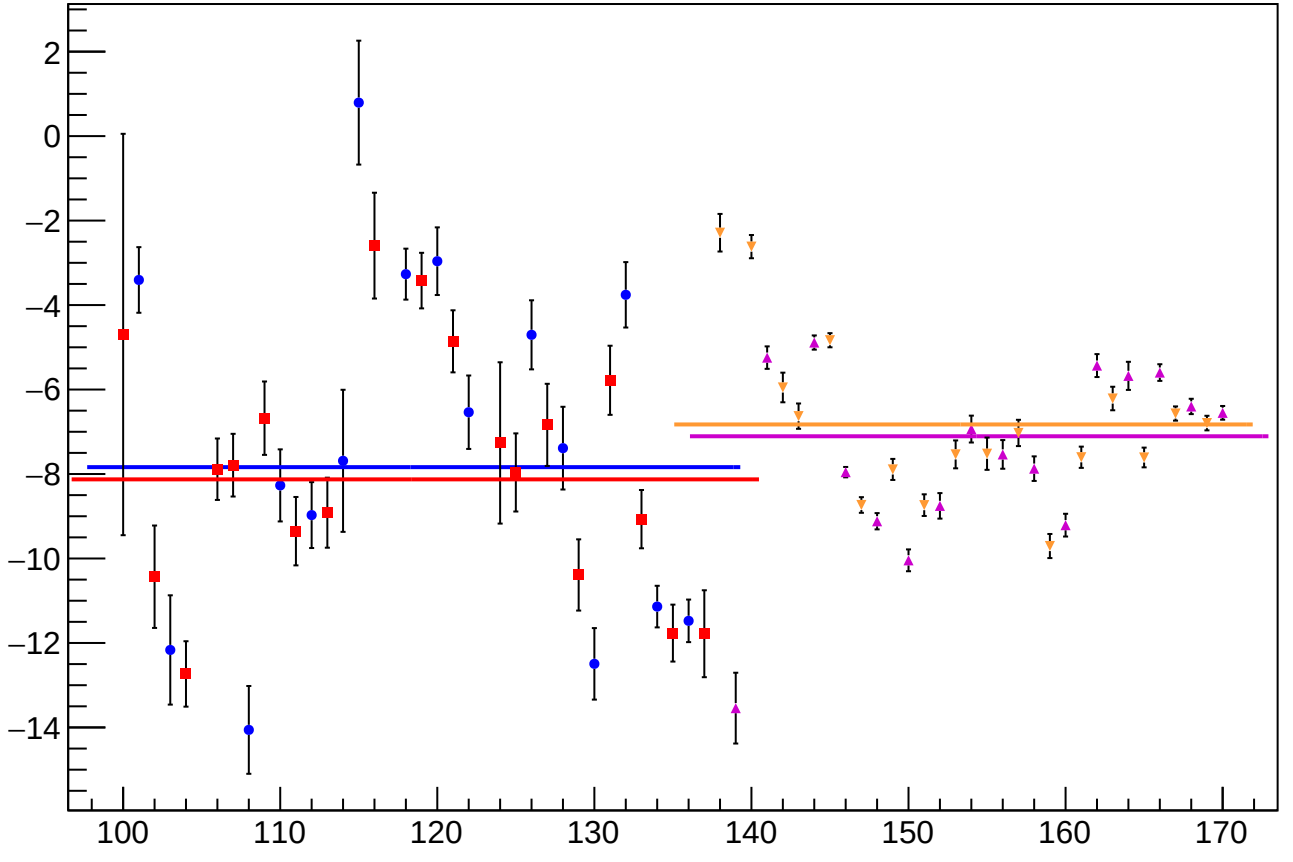
Left In: -26.862+/-0.078 $\chi^2$/NDF:2015.3/15

+ sign -27.674+/-0.076 $\chi^2$/NDF: 1921.4/32

All: -27.440+/-0.052 $\chi^2$/NDF: 4650.9/67

- sign -27.229+/-0.072 $\chi^2$/NDF: 2711.4/34

# reg_asym_sam_37_dd_diff_bpm4aY_slope vs Slug




Right In: -7.837+/-0.195 $\chi^2$/NDF: 383.2/15

Left Out: -6.827+/-0.059 $\chi^2$/NDF:804.6/16

Right Out: -8.127+/-0.197 $\chi^2$/NDF: 197.3/18

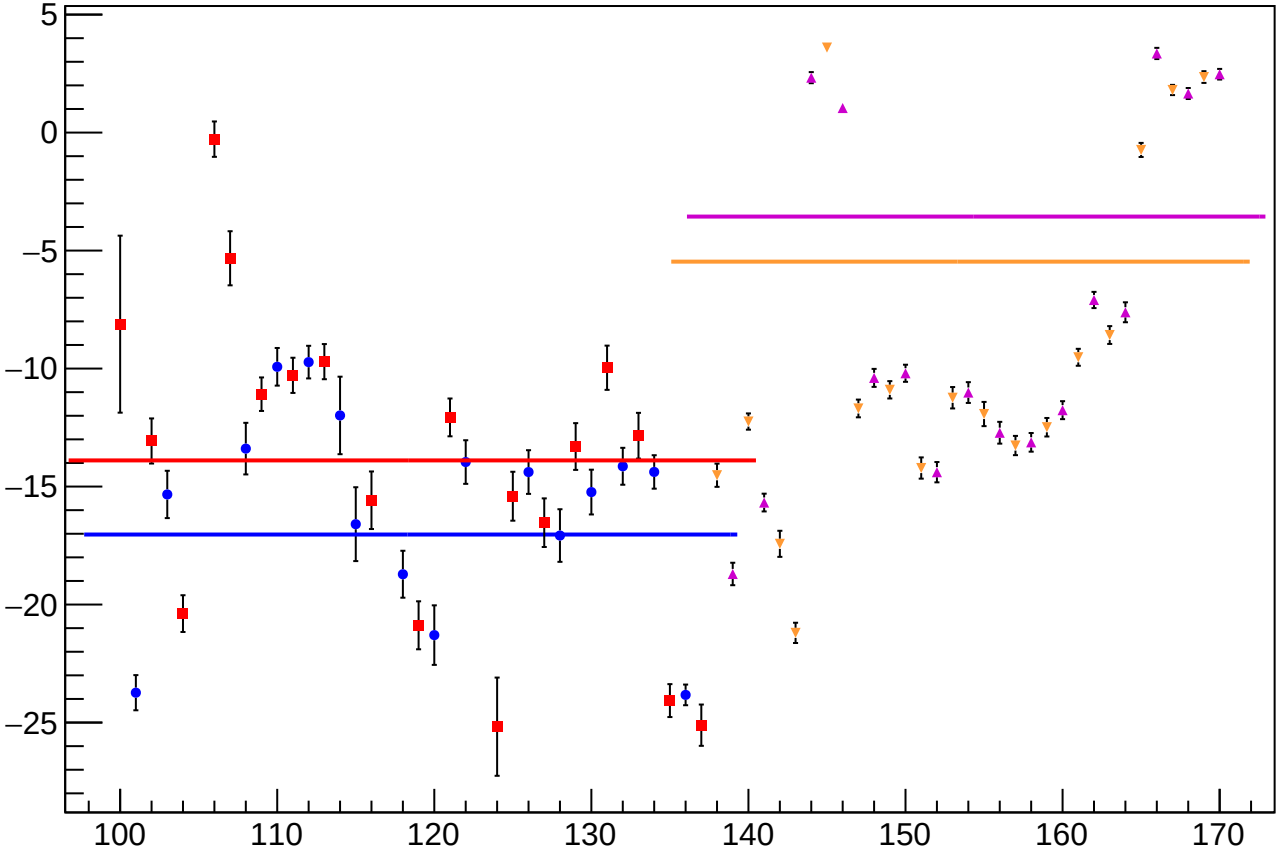
Left In: -7.106+/-0.055 $\chi^2$/NDF:809.2/15

+ sign -6.911+/-0.056 $\chi^2$/NDF: 1212.4/32

All: -7.054+/-0.039 $\chi^2$/NDF: 2256.0/67

- sign -7.180+/-0.053 $\chi^2$/NDF: 1031.5/34

# reg_asym_sam_37_dd_diff_bpm4eX_slope vs Slug




Right In: -17.033+/-0.209 $\chi^2$/NDF: 601.2/15

Left Out: -5.469+/-0.082 $\chi^2$/NDF:8878.6/16

Right Out: -13.892+/-0.209 $\chi^2$/NDF: 1017.4/18

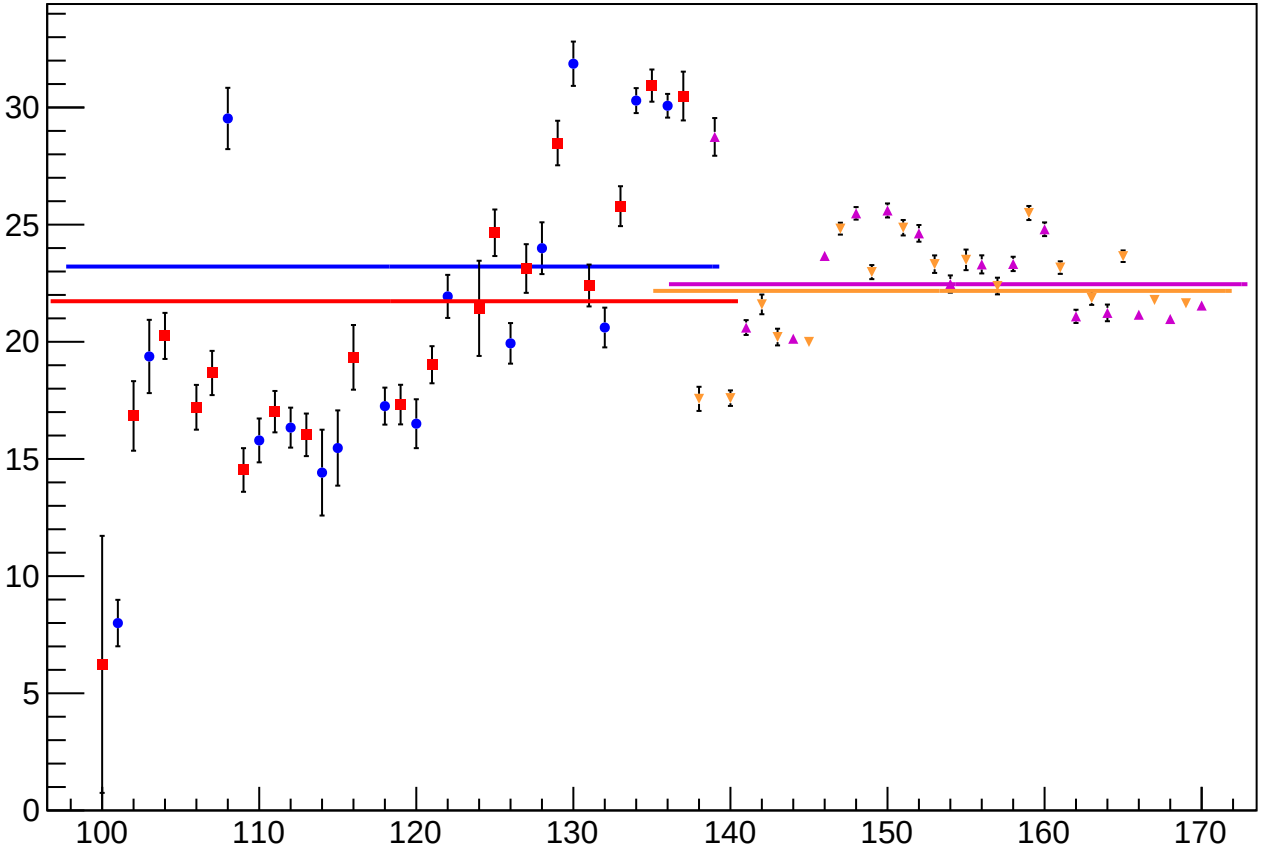
Left In: -3.559+/-0.077 $\chi^2$/NDF:8496.4/15

+ sign -7.009+/-0.076 $\chi^2$/NDF: 12124.0/32

All: -5.843+/-0.053 $\chi^2$/NDF: 24224.9/67

- sign -4.796+/-0.072 $\chi^2$/NDF: 11658.9/34

# reg_asym_sam_37_dd_diff_bpm4eY_slope vs Slug




Right In: 23.211+/-0.218 $\chi^2$/NDF: 1008.2/15

Left Out: 22.173+/-0.068 $\chi^2$/NDF:819.4/16

Right Out: 21.731+/-0.224 $\chi^2$/NDF: 558.2/18

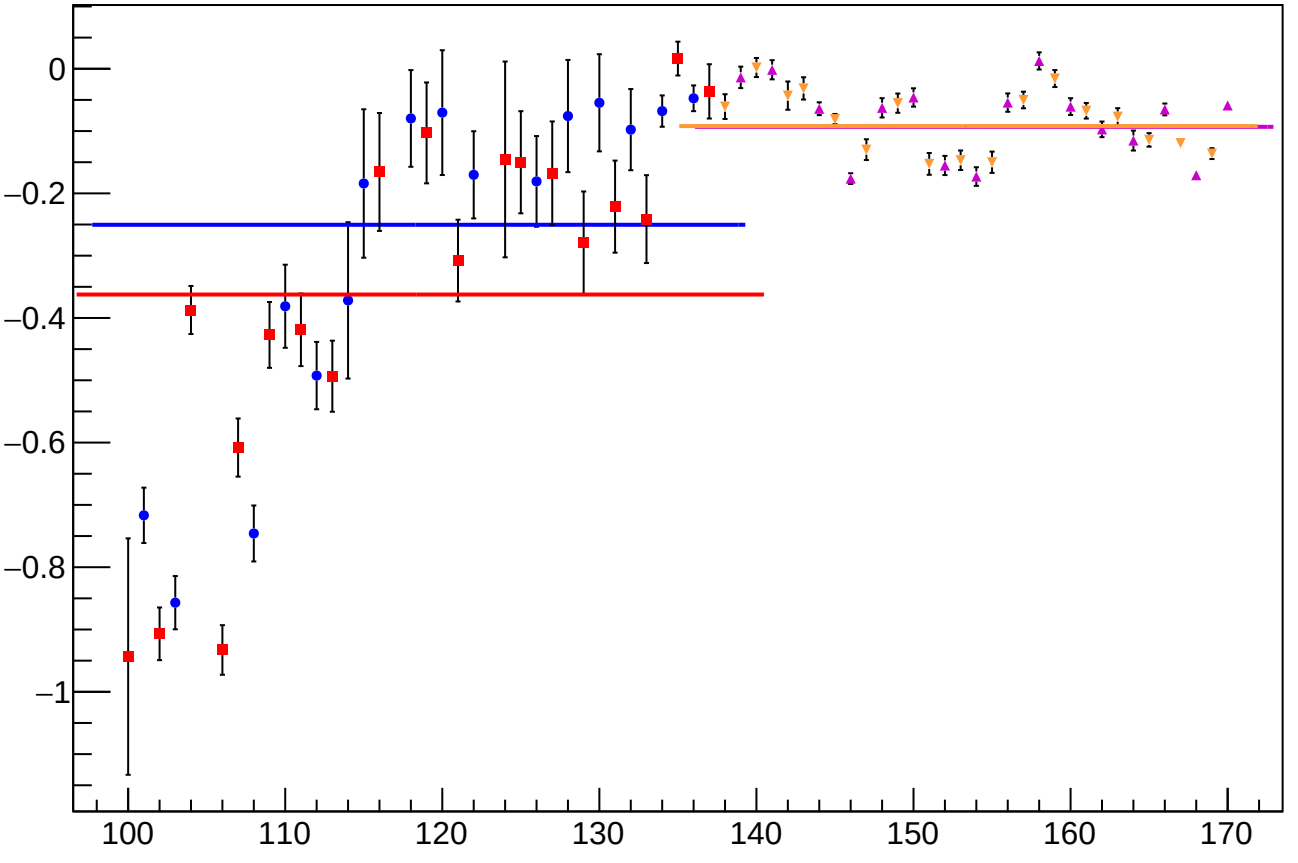
Left In: 22.458+/-0.064 $\chi^2$/NDF:797.4/15

+ sign 22.264+/-0.065 $\chi^2$/NDF: 1848.2/32

All: 22.337+/-0.044 $\chi^2$/NDF: 3216.0/67

- sign 22.404+/-0.061 $\chi^2$/NDF: 1365.3/34

# reg_asym_sam_37_dd_diff_bpm12X_slope vs Slug




Right In: -0.250+/-0.012 $\chi^2$/NDF: 633.5/15

Left Out: -0.092+/-0.003 $\chi^2$/NDF:193.0/16

Right Out: -0.362+/-0.012 $\chi^2$/NDF: 704.3/18

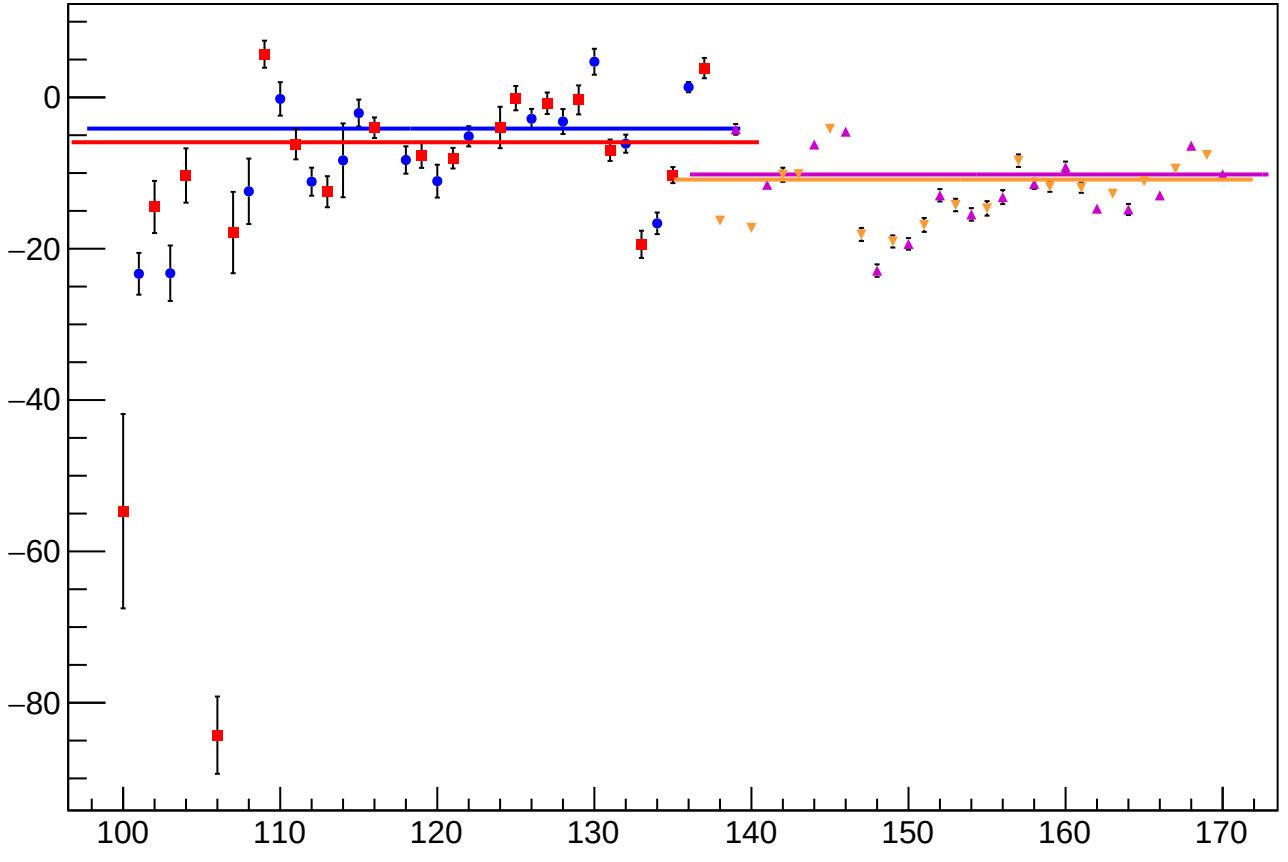
Left In: -0.093+/-0.003 $\chi^2$/NDF:412.9/15

+ sign -0.102+/-0.003 $\chi^2$/NDF: 999.1/32

All: -0.105+/-0.002 $\chi^2$/NDF: 2567.8/67

- sign -0.108+/-0.003 $\chi^2$/NDF: 1567.1/34

# reg_asym_sam_26_avg_diff_bpm1X_slope vs Slug




Right In: -4.124+/-0.382 $\chi^2$/NDF: 287.9/15

Left Out: -10.865+/-0.147 $\chi^2$/NDF:869.0/16

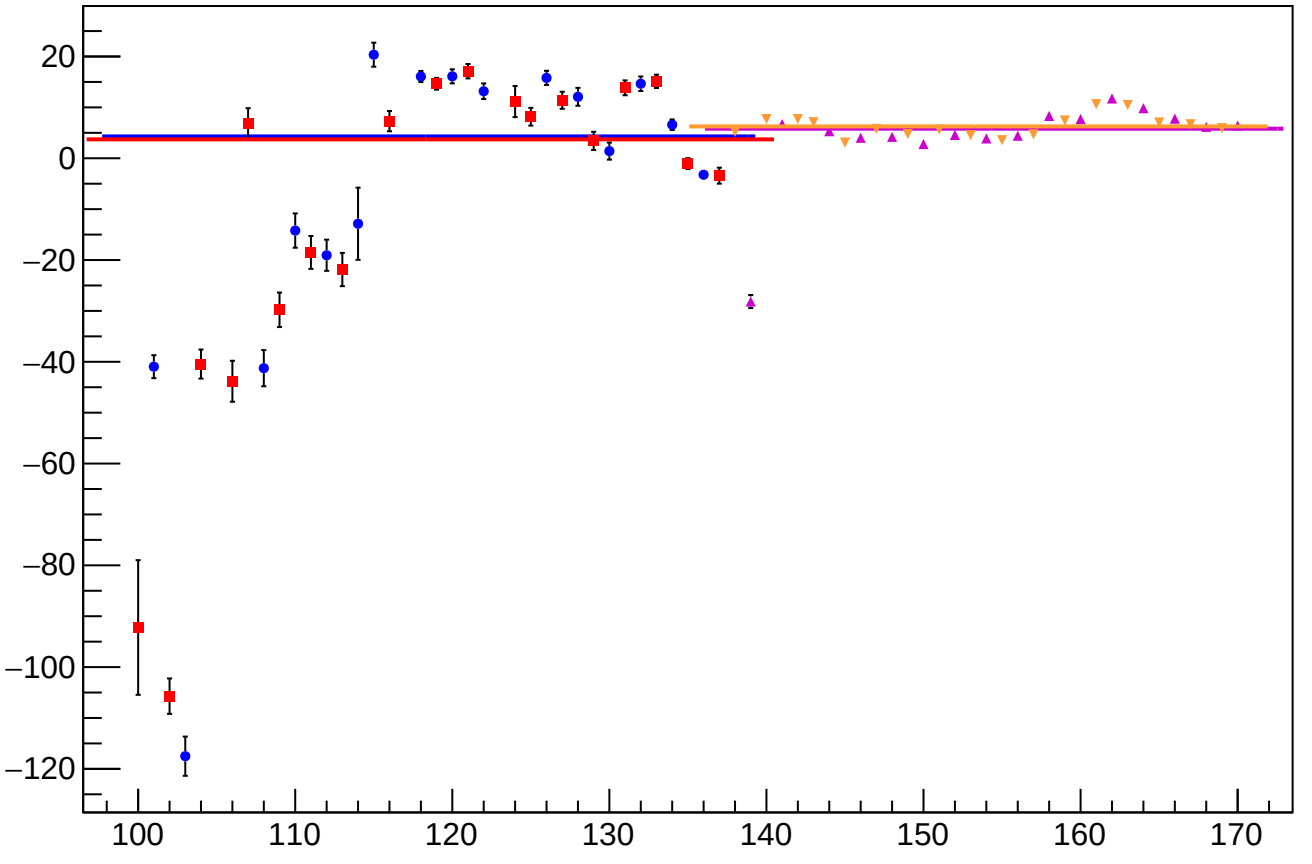
Right Out: -5.930+/-0.408 $\chi^2$/NDF: 482.6/18

Left In: -10.186+/-0.142 $\chi^2$/NDF:1024.4/15

+ sign -9.998+/-0.137 $\chi^2$/NDF: 1428.6/32

All: -9.858+/-0.096 $\chi^2$/NDF: 3034.8/67

- sign -9.723+/-0.134 $\chi^2$/NDF: 1604.1/34




Right In: 4.292+/-0.385 $\chi^2$/NDF: 2169.1/15

Left Out: 6.259+/-0.106 $\chi^2$/NDF:368.9/16

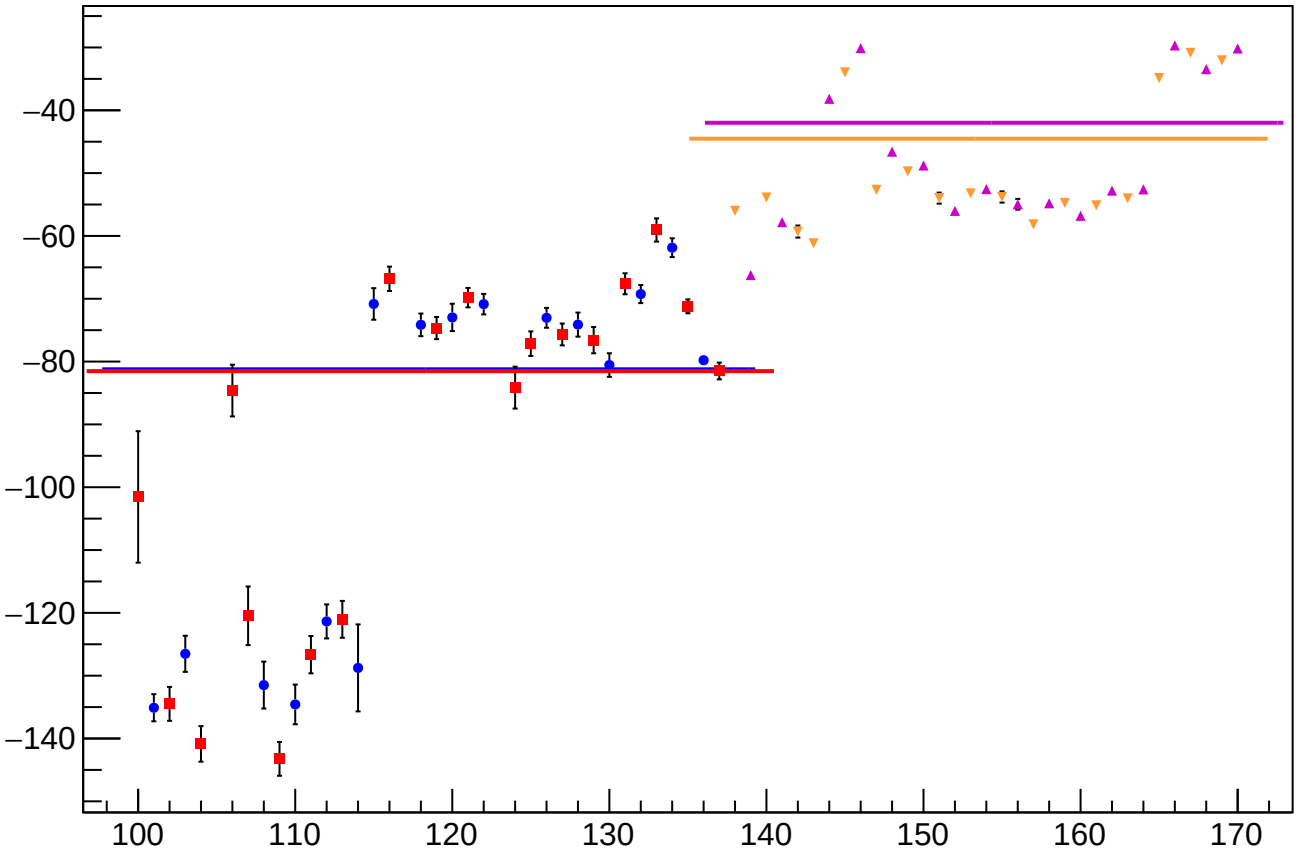
Right Out: 3.717+/-0.423 $\chi^2$/NDF: 2007.2/18

Left In: 5.813+/-0.102 $\chi^2$/NDF:1128.5/15

+ sign 6.121+/-0.102 $\chi^2$/NDF: 2562.2/32

All: 5.904+/-0.071 $\chi^2$/NDF: 5730.2/67

- sign 5.699+/-0.099 $\chi^2$/NDF: 3159.0/34




Right In: -81.231+/-0.417 $\chi^2$/NDF: 1971.1/15

Left Out: -44.517+/-0.146 $\chi^2$/NDF:6021.8/16

Right Out: -81.523+/-0.462 $\chi^2$/NDF: 2293.2/18

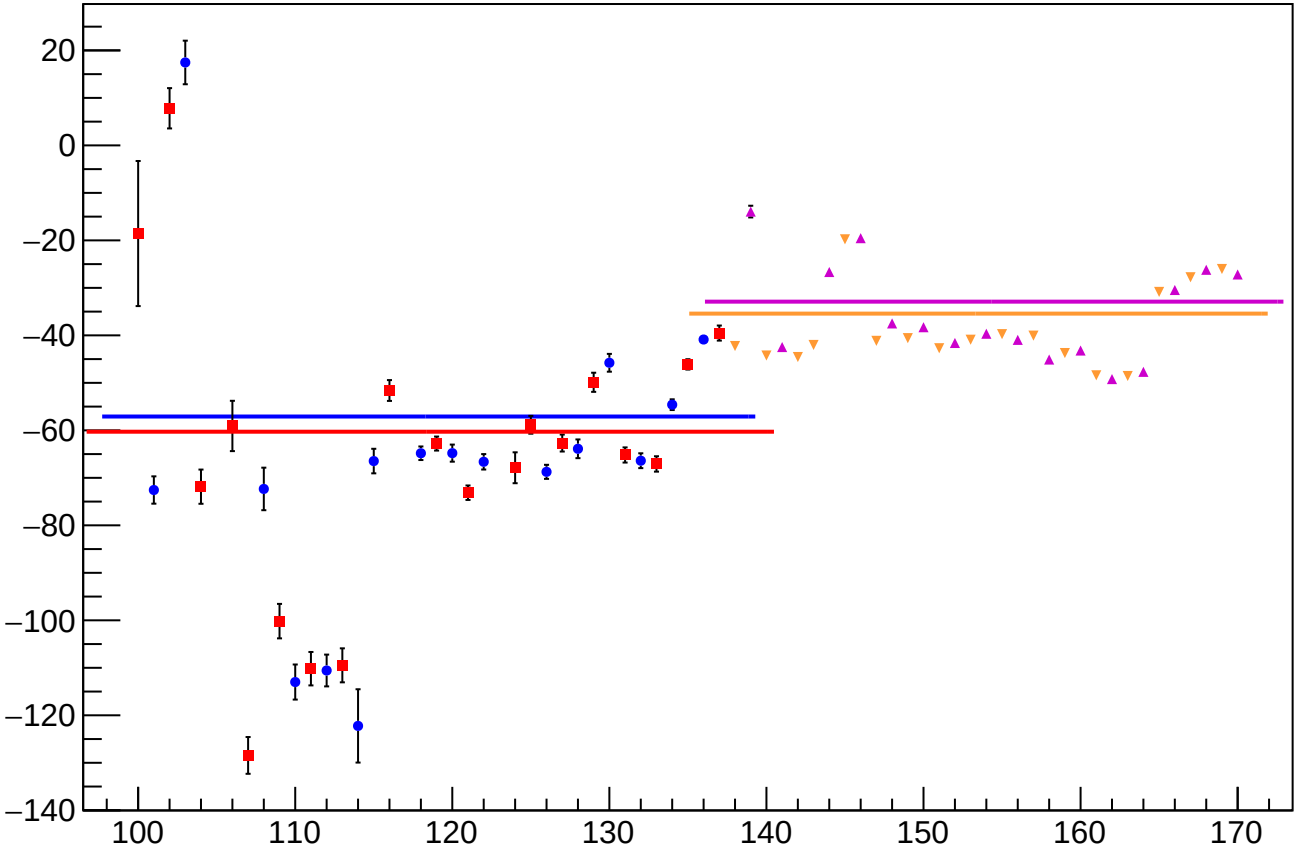
Left In: -41.987+/-0.140 $\chi^2$/NDF:7031.8/15

+ sign -48.505+/-0.137 $\chi^2$/NDF: 14907.9/32

All: -46.880+/-0.096 $\chi^2$/NDF: 31222.4/67

- sign -45.329+/-0.134 $\chi^2$/NDF: 16040.9/34

# reg_asym_sam_26_avg_diff_bpm4eY_slope vs Slug




Right In: -57.089+/-0.426 $\chi^2$/NDF: 1526.8/15

Left Out: -35.422+/-0.120 $\chi^2$/NDF:6261.3/16

Right Out: -60.287+/-0.470 $\chi^2$/NDF: 1587.9/18

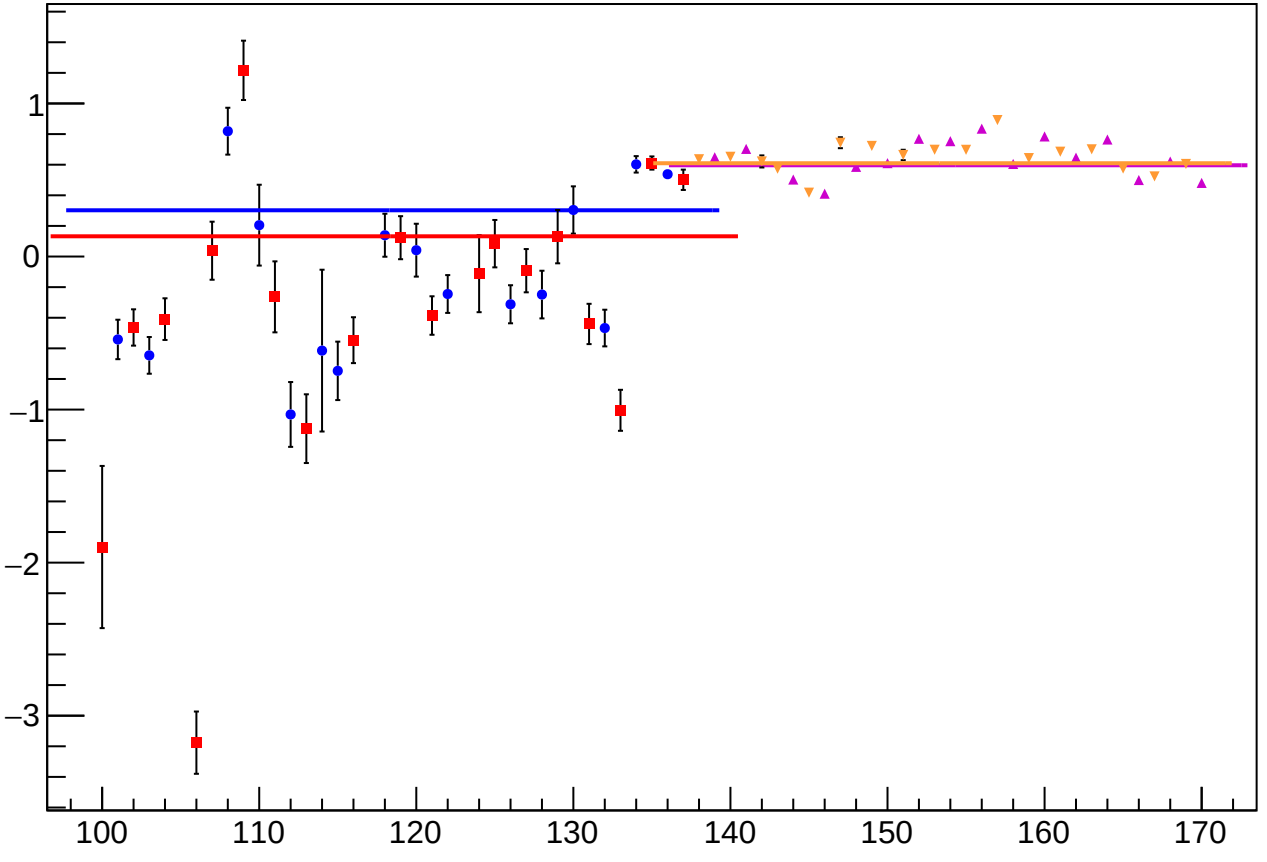
Left In: -32.902+/-0.117 $\chi^2$/NDF:6742.9/15

+ sign -37.025+/-0.116 $\chi^2$/NDF: 10186.7/32

All: -35.728+/-0.081 $\chi^2$/NDF: 21960.3/67

- sign -34.490+/-0.113 $\chi^2$/NDF: 11528.5/34

# reg_asym_sam_26_avg_diff_bpm12X_slope vs Slug




Right In: 0.302+/-0.023 $\chi^2$/NDF: 374.8/15

Left Out: 0.610+/-0.005 $\chi^2$/NDF:415.8/16

Right Out: 0.132+/-0.027 $\chi^2$/NDF: 672.5/18

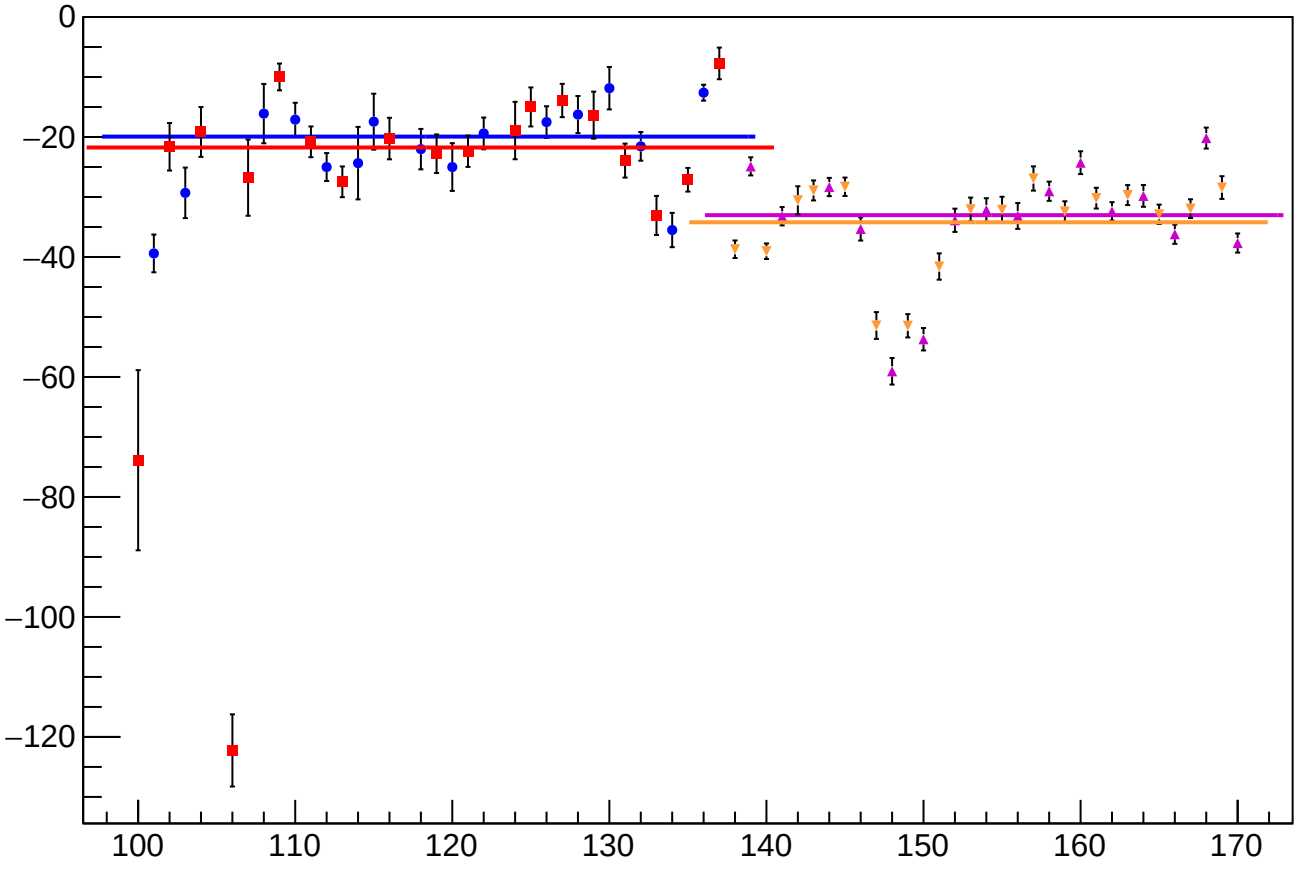
Left In: 0.596+/-0.005 $\chi^2$/NDF:517.3/15

+ sign 0.593+/-0.005 $\chi^2$/NDF: 960.4/32

All: 0.586+/-0.004 $\chi^2$/NDF: 2449.0/67

- sign 0.579+/-0.005 $\chi^2$/NDF: 1484.7/34

# reg_asym_sam_26_dd_diff_bpm1X_slope vs Slug




Right In: -19.935+/-0.695 $\chi^2$/NDF: 120.6/15

Left Out: -34.215+/-0.425 $\chi^2$/NDF:241.6/16

Right Out: -21.746+/-0.714 $\chi^2$/NDF: 388.3/18

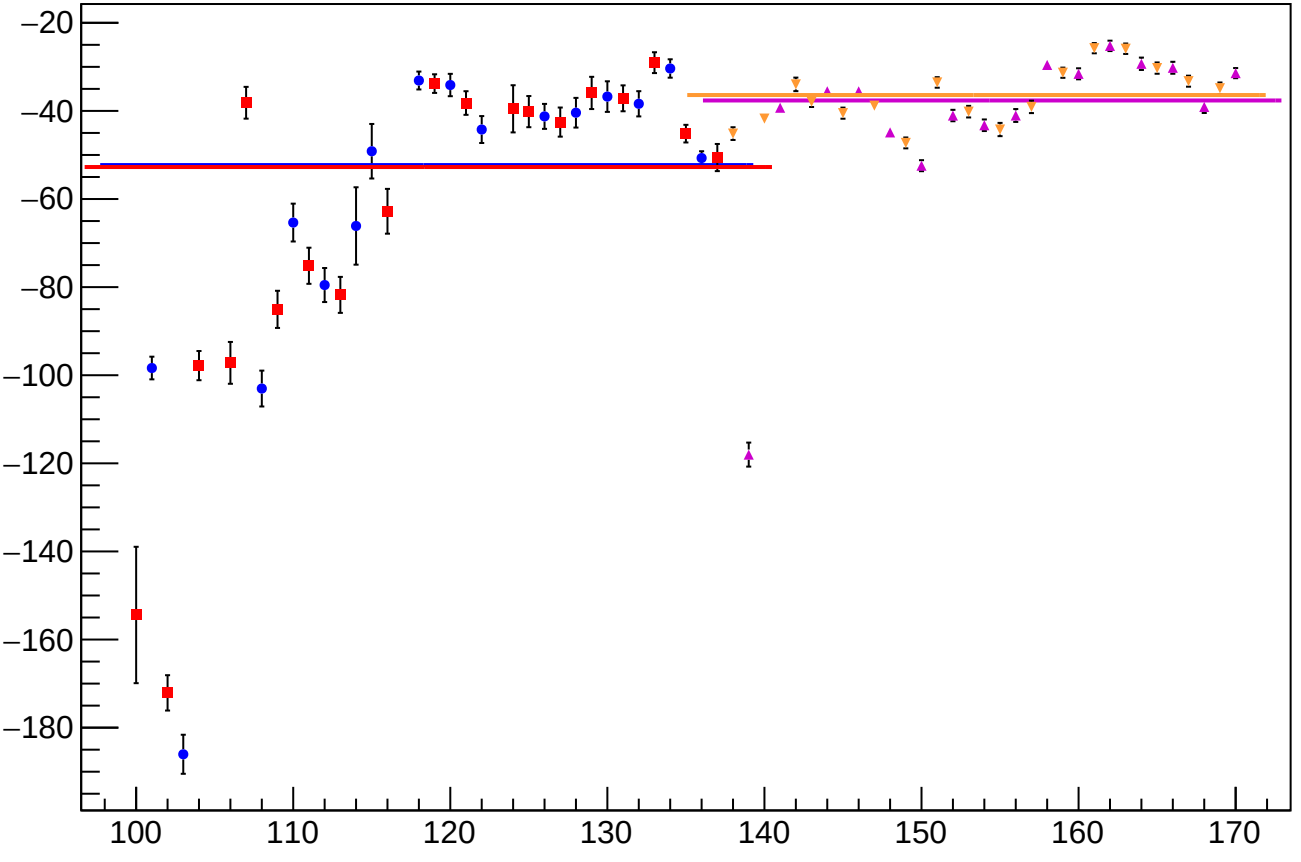
Left In: -33.026+/-0.434 $\chi^2$/NDF:398.6/15

+ sign -30.326+/-0.363 $\chi^2$/NDF: 669.6/32

All: -30.157+/-0.259 $\chi^2$/NDF: 1639.4/67

- sign -29.980+/-0.371 $\chi^2$/NDF: 969.4/34

# reg_asym_sam_26_dd_diff_bpm4aY_slope vs Slug




Right In: -52.296+/-0.708 $\chi^2$/NDF: 1778.2/15

Left Out: -36.396+/-0.303 $\chi^2$/NDF:415.4/16

Right Out: -52.737+/-0.748 $\chi^2$/NDF: 1662.5/18

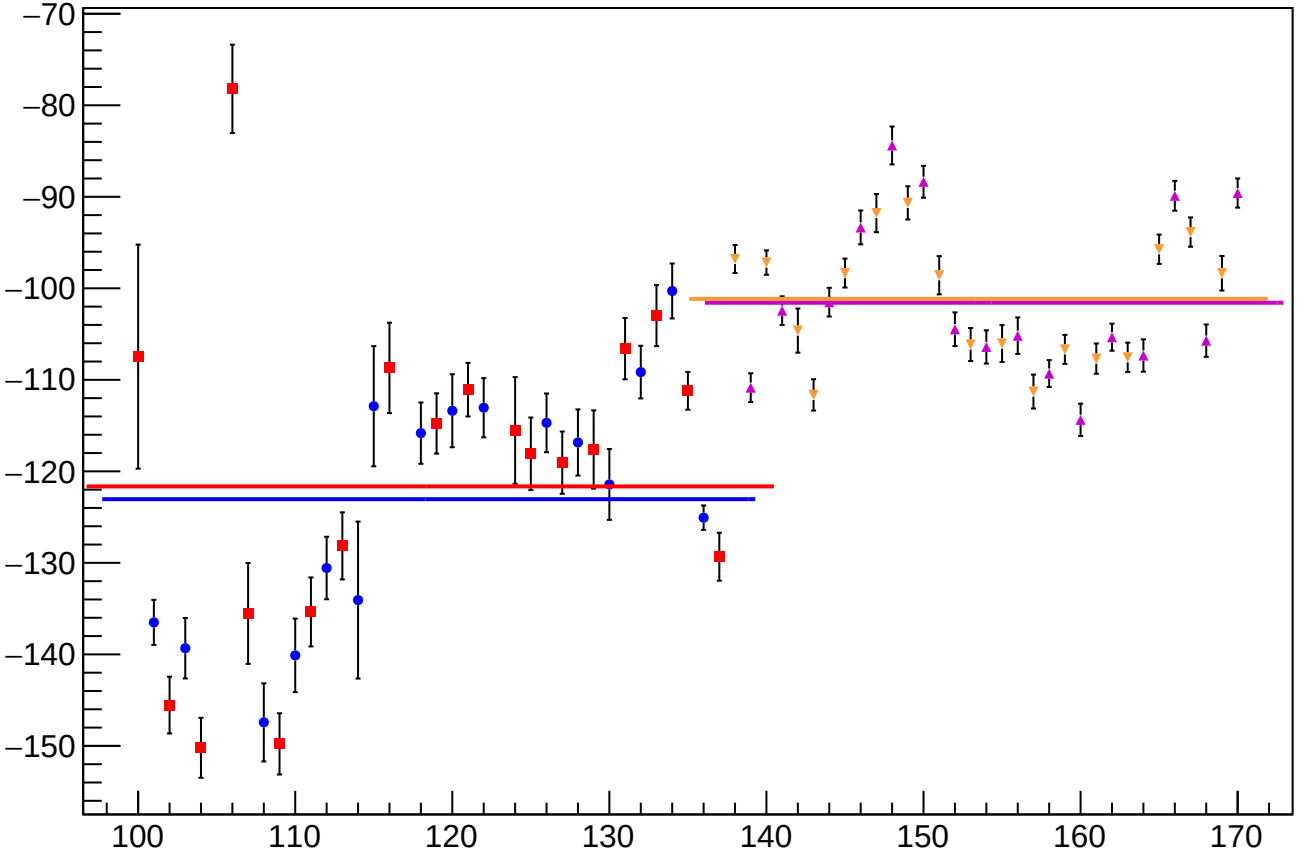
Left In: -37.631+/-0.313 $\chi^2$/NDF:1379.9/15

+ sign -38.852+/-0.278 $\chi^2$/NDF: 2619.9/32

All: -39.347+/-0.200 $\chi^2$/NDF: 6015.8/67

- sign -39.881+/-0.289 $\chi^2$/NDF: 3389.4/34

# reg_asym_sam_26_dd_diff_bpm4eX_slope vs Slug




Right In: -123.039+/-0.750 $\chi^2$/NDF: 226.8/15

Left Out: -101.152+/-0.418 $\chi^2$/NDF:236.3/16

Right Out: -121.646+/-0.801 $\chi^2$/NDF: 424.5/18

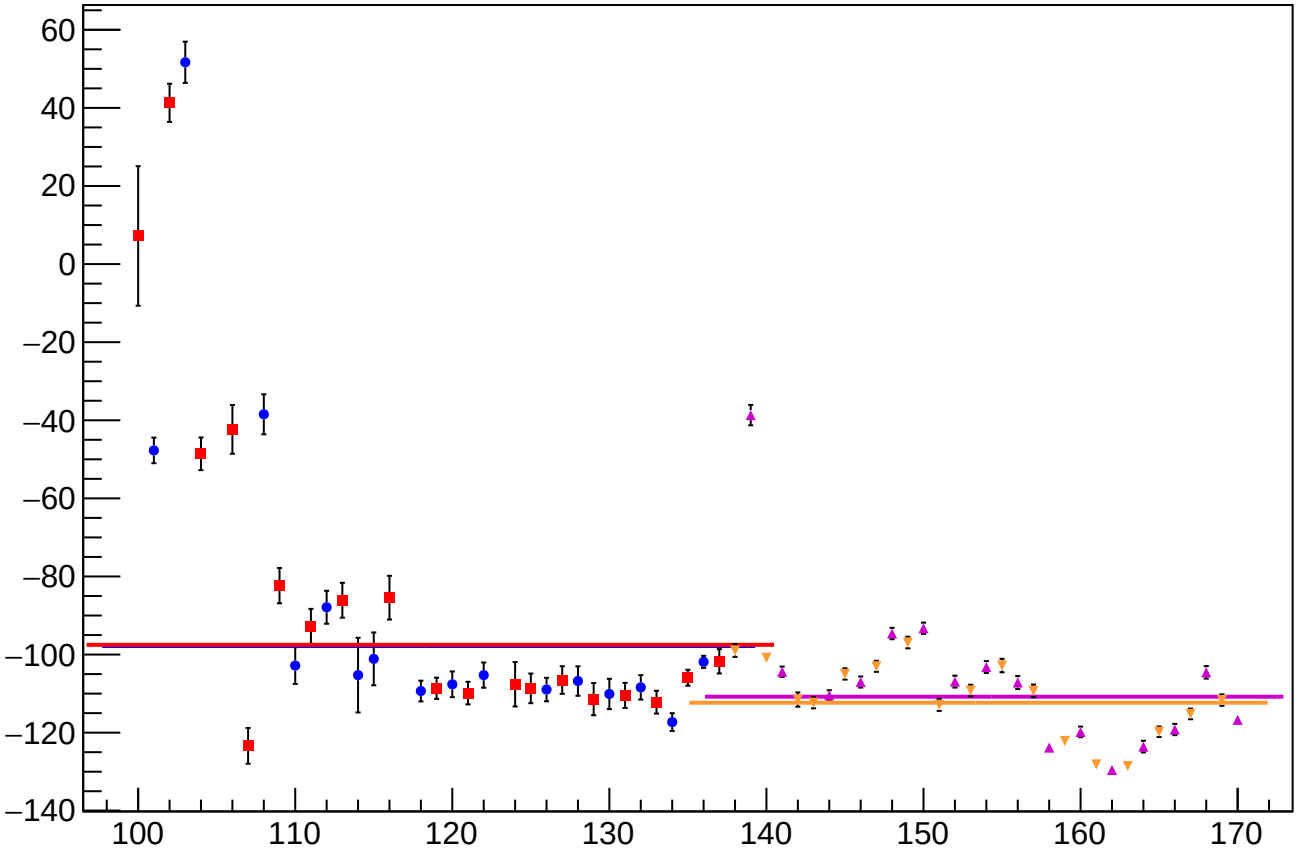
Left In: -101.576+/-0.424 $\chi^2$/NDF:404.5/15

+ sign -106.338+/-0.365 $\chi^2$/NDF: 1112.9/32

All: -106.155+/-0.261 $\chi^2$/NDF: 2432.8/67

- sign -105.962+/-0.375 $\chi^2$/NDF: 1319.4/34

# reg_asym_sam_26_dd_diff_bpm4eY_slope vs Slug




Right In: -97.814+/-0.793 $\chi^2$/NDF: 1330.8/15

Left Out: -112.331+/-0.347 $\chi^2$/NDF:791.8/16

Right Out: -97.504+/-0.843 $\chi^2$/NDF: 1236.4/18

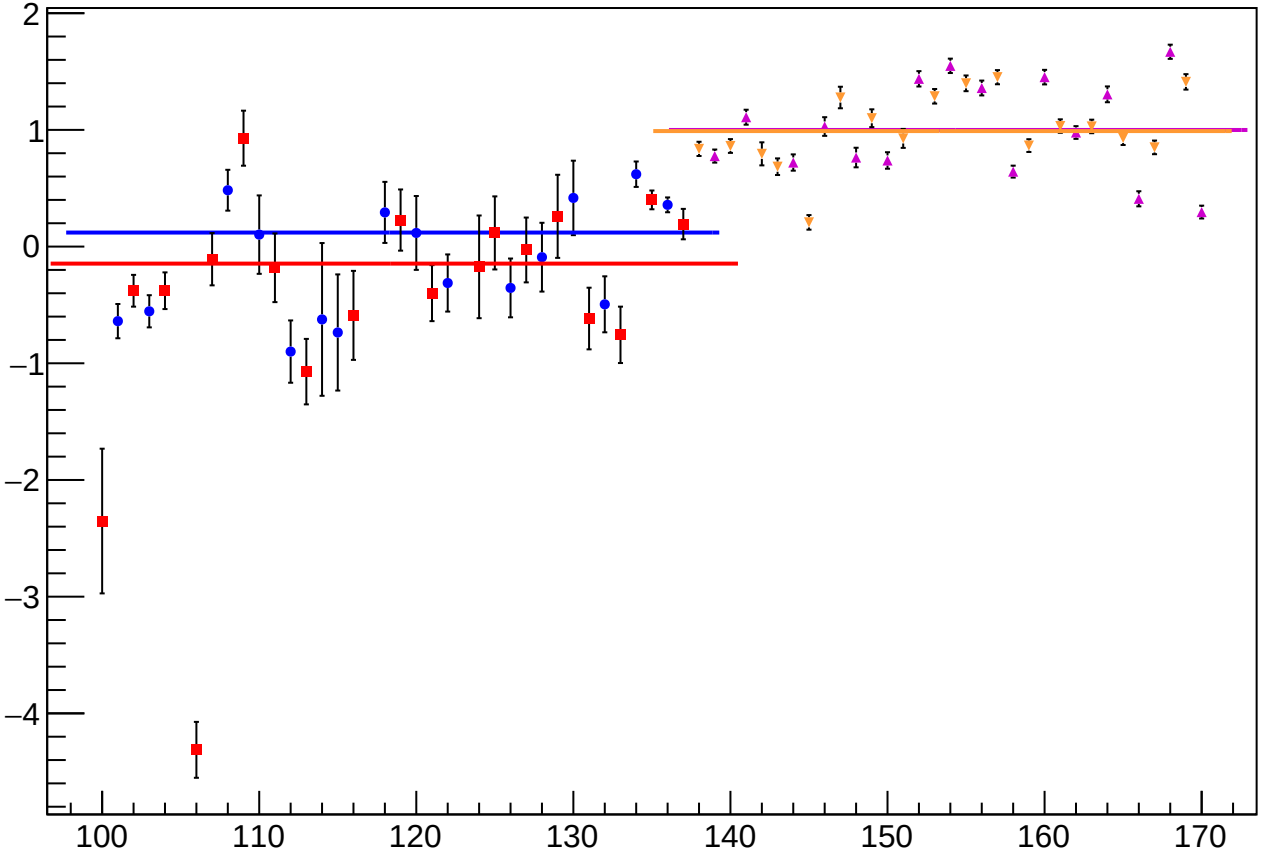
Left In: -110.793+/-0.356 $\chi^2$/NDF:1648.2/15

+ sign -109.996+/-0.318 $\chi^2$/NDF: 2403.8/32

All: -109.406+/-0.228 $\chi^2$/NDF: 5506.5/67

- sign -108.778+/-0.328 $\chi^2$/NDF: 3095.6/34

# reg_asym_sam_26_dd_diff_bpm12X_slope vs Slug




Right In: 0.120+/-0.041 $\chi^2$/NDF: 123.9/15

Left Out: 0.990+/-0.016 $\chi^2$/NDF:373.0/16

Right Out: -0.146+/-0.045 $\chi^2$/NDF: 421.0/18

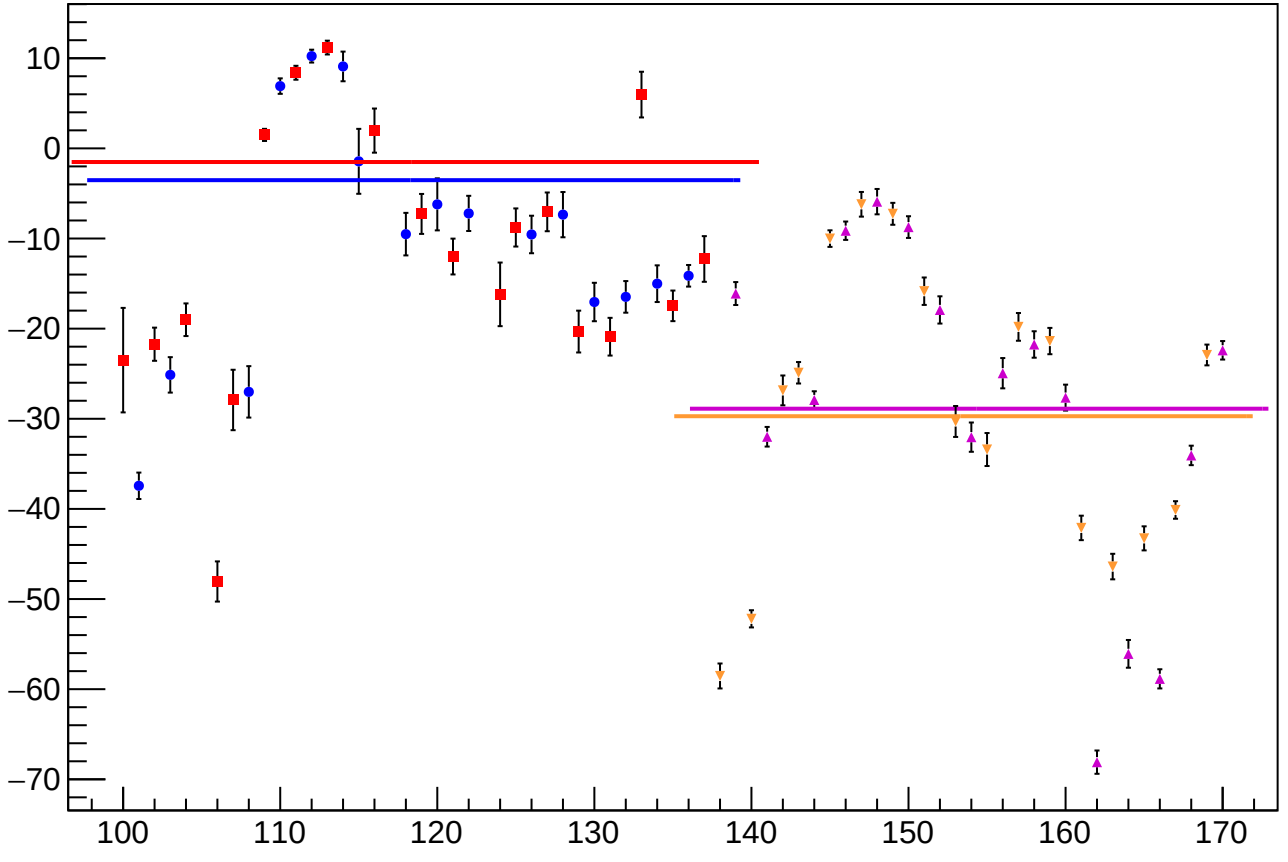
Left In: 0.999+/-0.016 $\chi^2$/NDF:700.7/15

+ sign 0.879+/-0.015 $\chi^2$/NDF: 885.2/32

All: 0.876+/-0.010 $\chi^2$/NDF: 2586.6/67

- sign 0.874+/-0.015 $\chi^2$/NDF: 1701.4/34

# reg_asym_sam_48_avg_diff_bpm1X_slope vs Slug




Right In: -3.527+/-0.377 $\chi^2$/NDF: 1529.1/15

Left Out: -29.716+/-0.309 $\chi^2$/NDF:2738.8/16

Right Out: -1.513+/-0.338 $\chi^2$/NDF: 1524.7/18

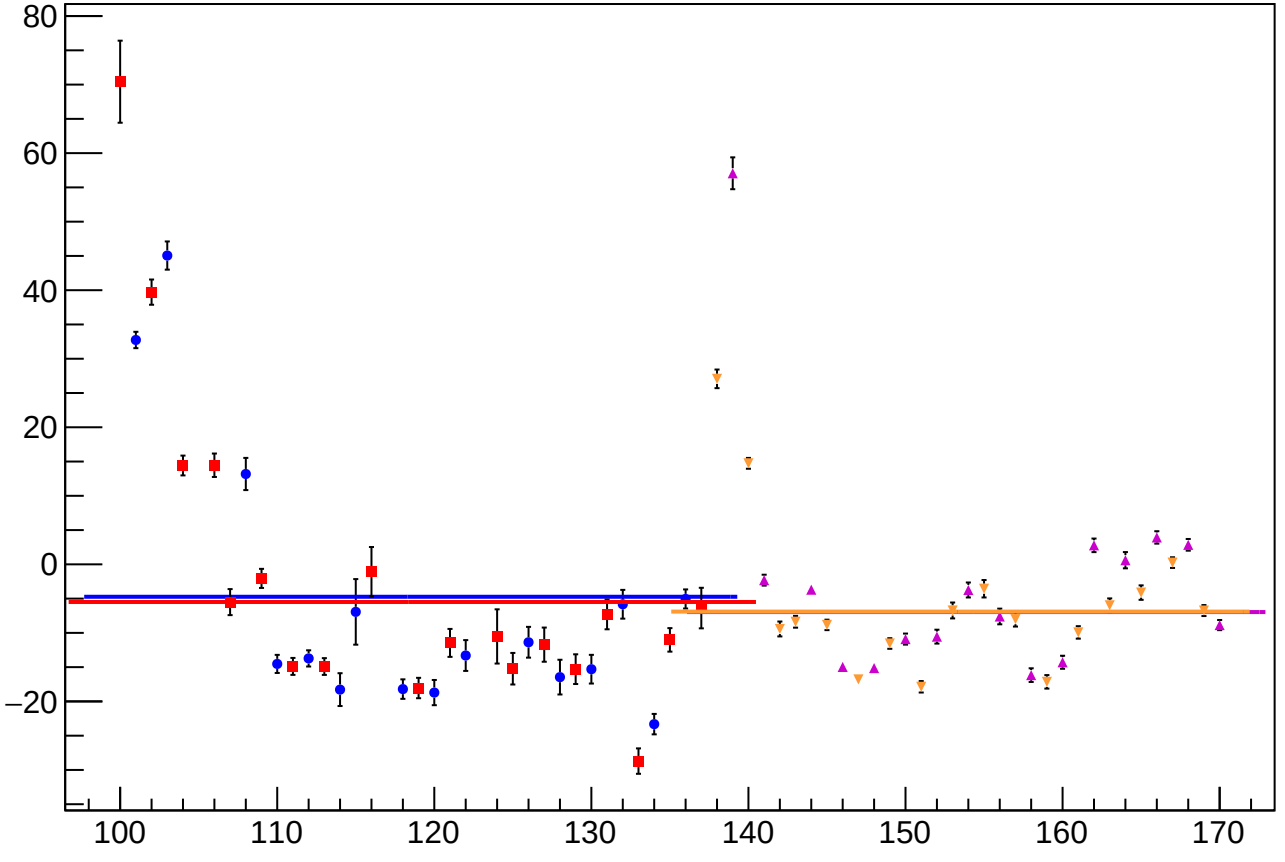
Left In: -28.882+/-0.308 $\chi^2$/NDF:3208.0/15

+ sign -19.174+/-0.239 $\chi^2$/NDF: 7154.6/32

All: -17.759+/-0.165 $\chi^2$/NDF: 15528.5/67

- sign -16.472+/-0.228 $\chi^2$/NDF: 8306.9/34

# reg_asym_sam_48_avg_diff_bpm4aY_slope vs Slug




Right In: -4.729+/-0.431 $\chi^2$/NDF: 2148.0/15

Left Out: -6.894+/-0.217 $\chi^2$/NDF:2059.6/16

Right Out: -5.491+/-0.422 $\chi^2$/NDF: 1508.6/18

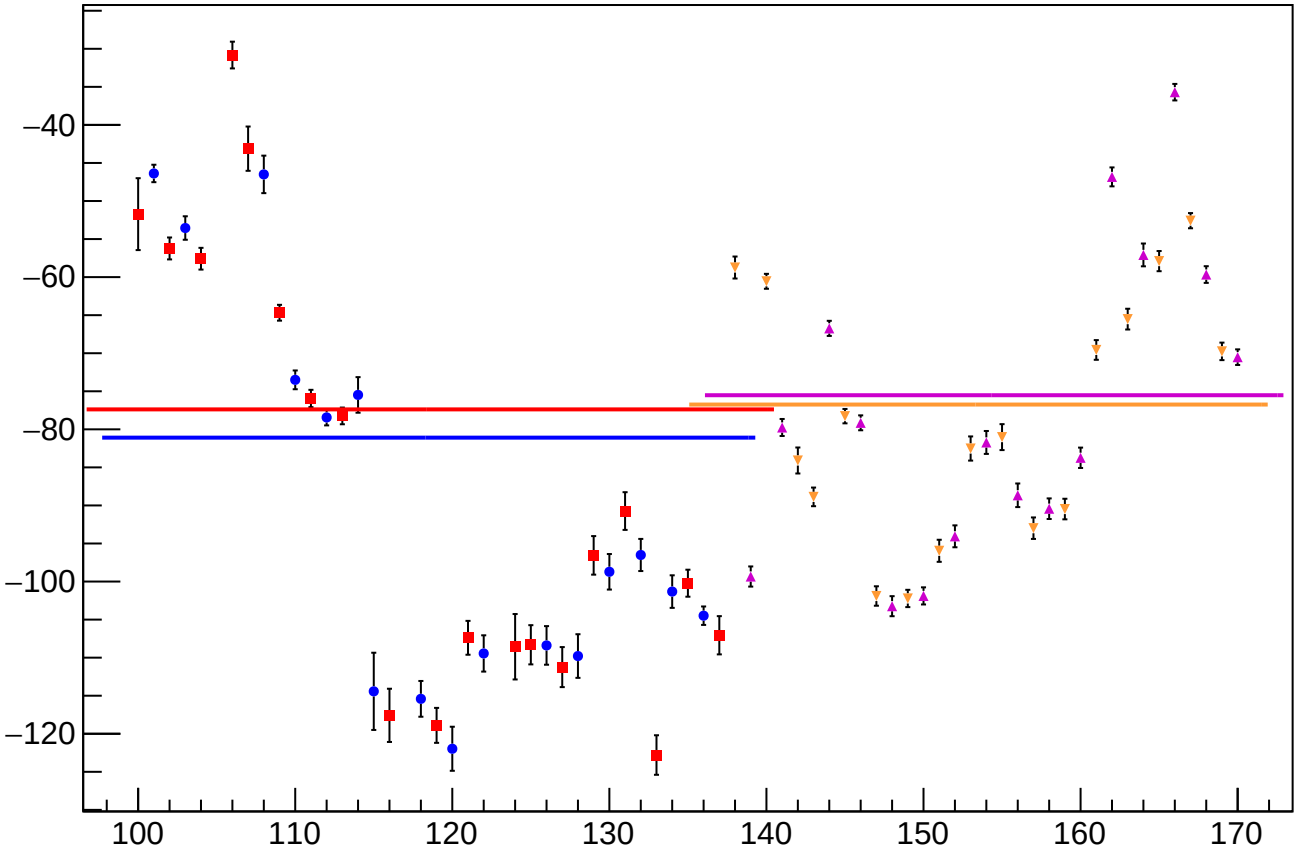
Left In: -6.963+/-0.218 $\chi^2$/NDF:1744.6/15

+ sign -6.455+/-0.194 $\chi^2$/NDF: 4227.7/32

All: -6.554+/-0.137 $\chi^2$/NDF: 7491.0/67

- sign -6.652+/-0.194 $\chi^2$/NDF: 3262.8/34

# reg_asym_sam_48_avg_diff_bpm4eX_slope vs Slug




Right In: -81.091+/-0.438 $\chi^2$/NDF: 2870.3/15

Left Out: -76.744+/-0.305 $\chi^2$/NDF:2792.2/16

Right Out: -77.379+/-0.417 $\chi^2$/NDF: 3129.7/18

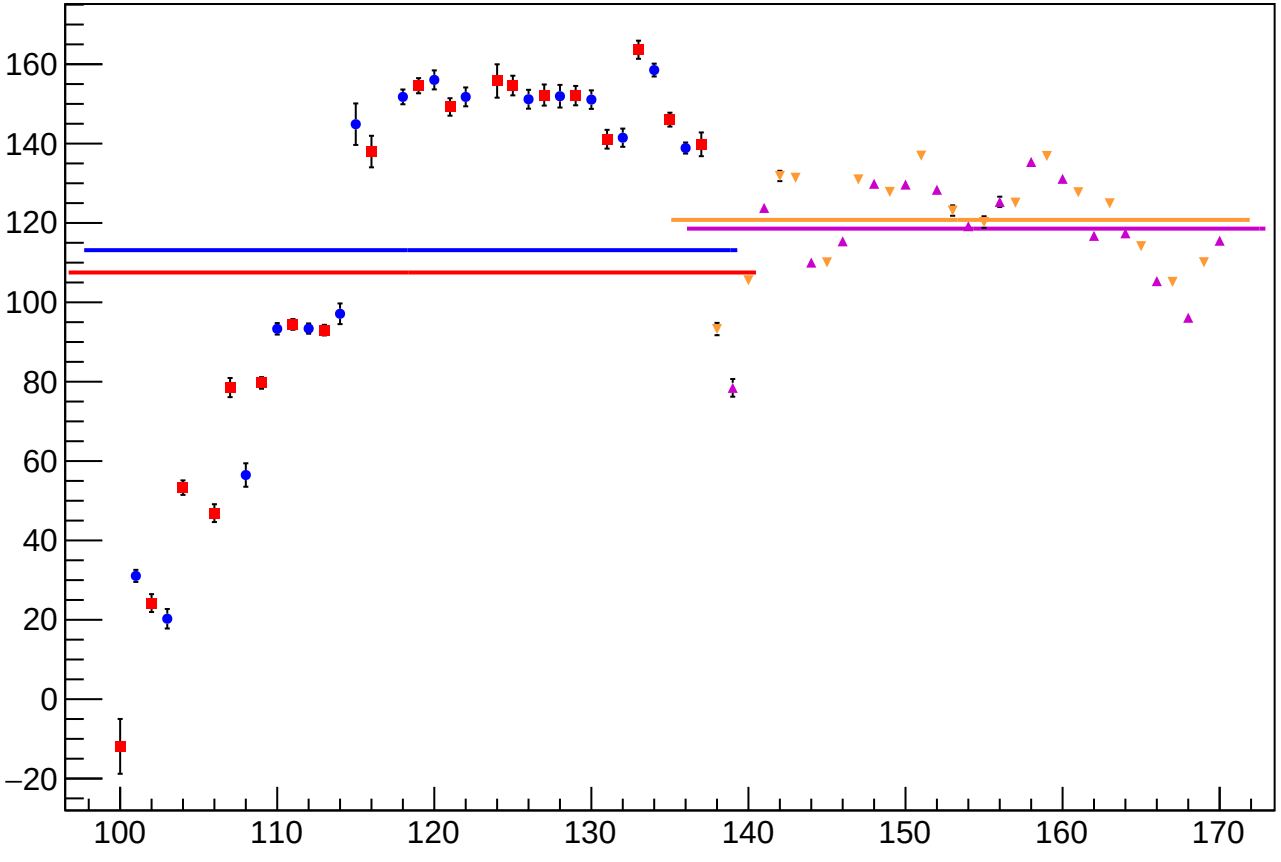
Left In: -75.517+/-0.302 $\chi^2$/NDF:4100.8/15

+ sign -78.160+/-0.250 $\chi^2$/NDF: 5728.9/32

All: -77.137+/-0.175 $\chi^2$/NDF: 13005.1/67

- sign -76.158+/-0.245 $\chi^2$/NDF: 7243.5/34

# reg_asym_sam_48_avg_diff_bpm4eY_slope vs Slug




Right In: 113.143+/-0.489 $\chi^2$/NDF: 8204.1/15

Left Out: 120.774+/-0.252 $\chi^2$/NDF:2165.3/16

Right Out: 107.515+/-0.479 $\chi^2$/NDF: 7544.0/18

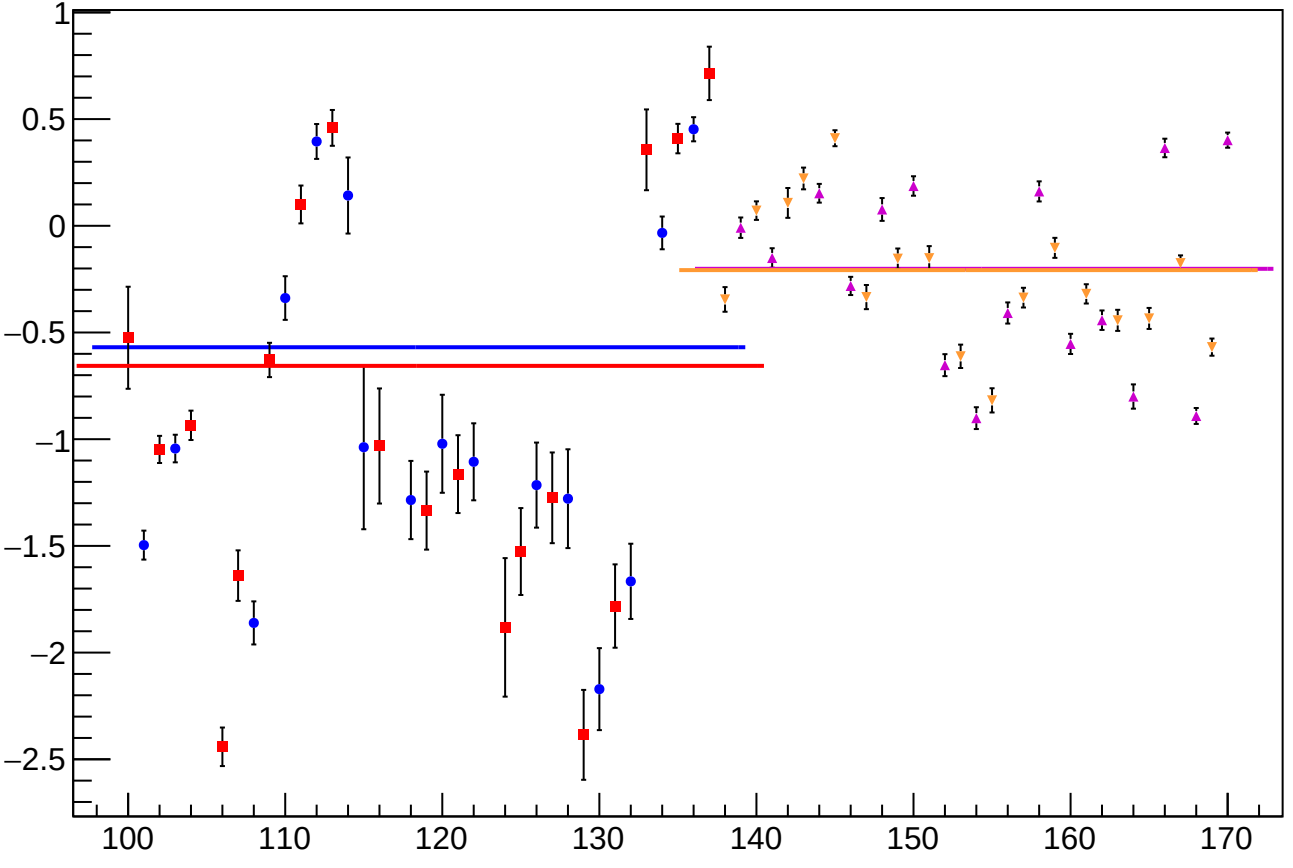
Left In: 118.570+/-0.252 $\chi^2$/NDF:1983.8/15

+ sign 119.175+/-0.224 $\chi^2$/NDF: 10561.9/32

All: 117.670+/-0.158 $\chi^2$/NDF: 20596.4/67

- sign 116.179+/-0.223 $\chi^2$/NDF: 9944.6/34

# reg_asym_sam_48_avg_diff_bpm12X_slope vs Slug




Right In: -0.569+/-0.026 $\chi^2$/NDF: 1097.4/15

Left Out: -0.208+/-0.012 $\chi^2$/NDF:732.6/16

Right Out: -0.656+/-0.025 $\chi^2$/NDF: 1315.2/18

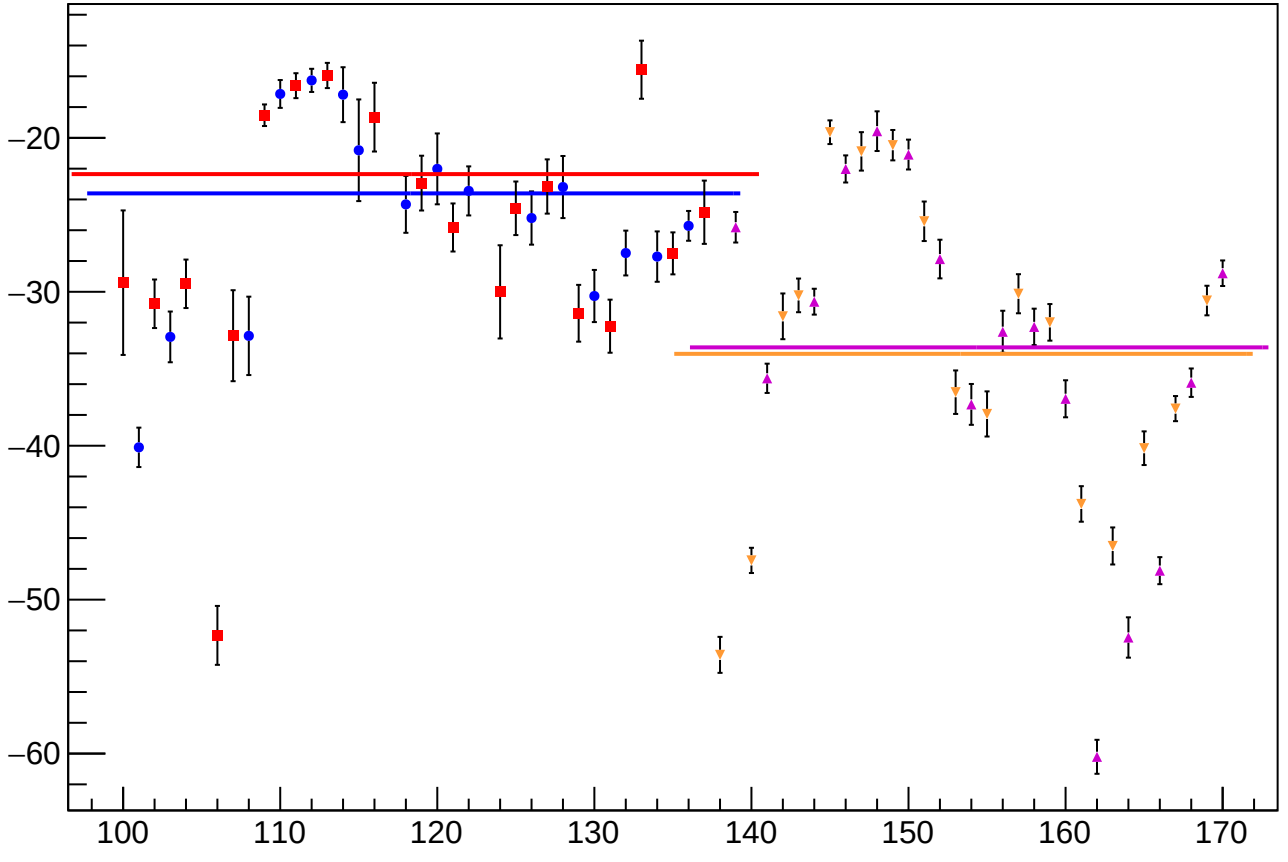
Left In: -0.202+/-0.011 $\chi^2$/NDF:1520.0/15

+ sign -0.268+/-0.011 $\chi^2$/NDF: 1993.4/32

All: -0.274+/-0.007 $\chi^2$/NDF: 5099.5/67

- sign -0.279+/-0.010 $\chi^2$/NDF: 3105.6/34

# reg_asym_sam_48_dd_diff_bpm1X_slope vs Slug




Right In: -23.607+/-0.348 $\chi^2$/NDF: 406.4/15

Left Out: -34.031+/-0.261 $\chi^2$/NDF:1521.6/16

Right Out: -22.354+/-0.322 $\chi^2$/NDF: 551.7/18

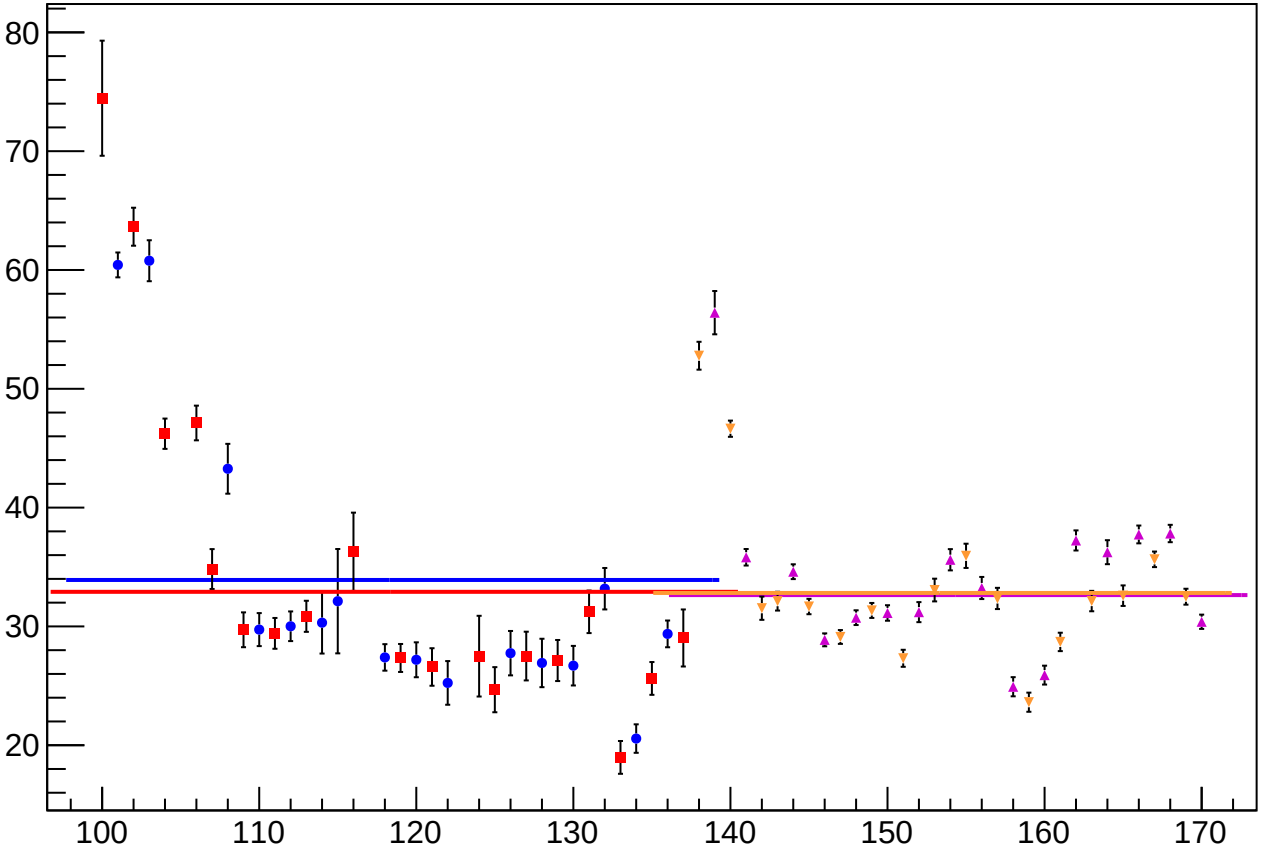
Left In: -33.611+/-0.259 $\chi^2$/NDF:1675.3/15

+ sign -30.273+/-0.209 $\chi^2$/NDF: 2500.9/32

All: -29.713+/-0.145 $\chi^2$/NDF: 5485.3/67

- sign -29.193+/-0.202 $\chi^2$/NDF: 2970.6/34

# reg_asym_sam_48_dd_diff_bpm4aY_slope vs Slug




Right In: 33.909+/-0.375 $\chi^2$/NDF: 1184.4/15

Left Out: 32.817+/-0.185 $\chi^2$/NDF:998.8/16

Right Out: 32.911+/-0.373 $\chi^2$/NDF: 875.0/18

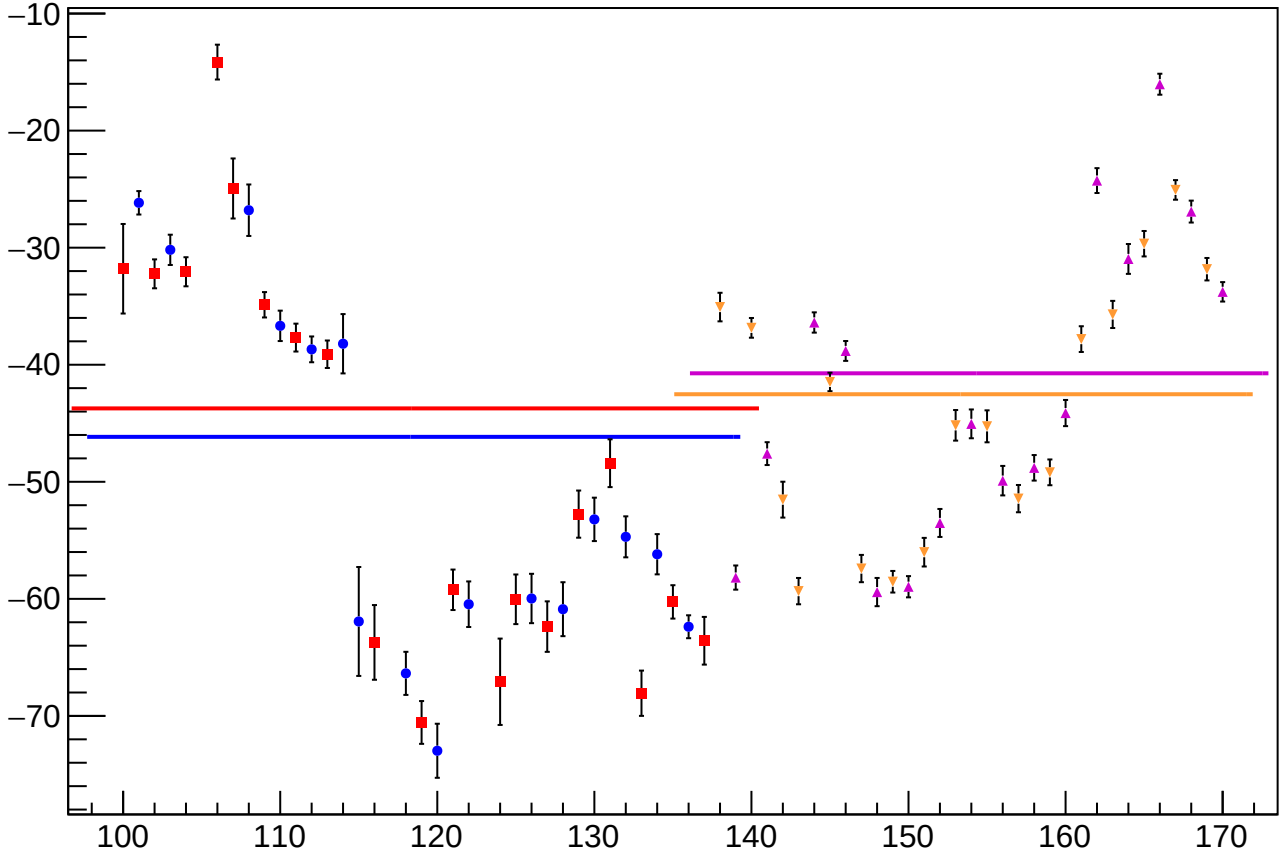
Left In: 32.636+/-0.186 $\chi^2$/NDF:594.4/15

+ sign 33.031+/-0.166 $\chi^2$/NDF: 2190.0/32

All: 32.861+/-0.118 $\chi^2$/NDF: 3661.9/67

- sign 32.691+/-0.166 $\chi^2$/NDF: 1469.8/34

# reg_asym_sam_48_dd_diff_bpm4eX_slope vs Slug




Right In: -46.160+/-0.390 $\chi^2$/NDF: 1489.6/15

Left Out: -42.520+/-0.257 $\chi^2$/NDF:1785.0/16

Right Out: -43.730+/-0.378 $\chi^2$/NDF: 1663.4/18

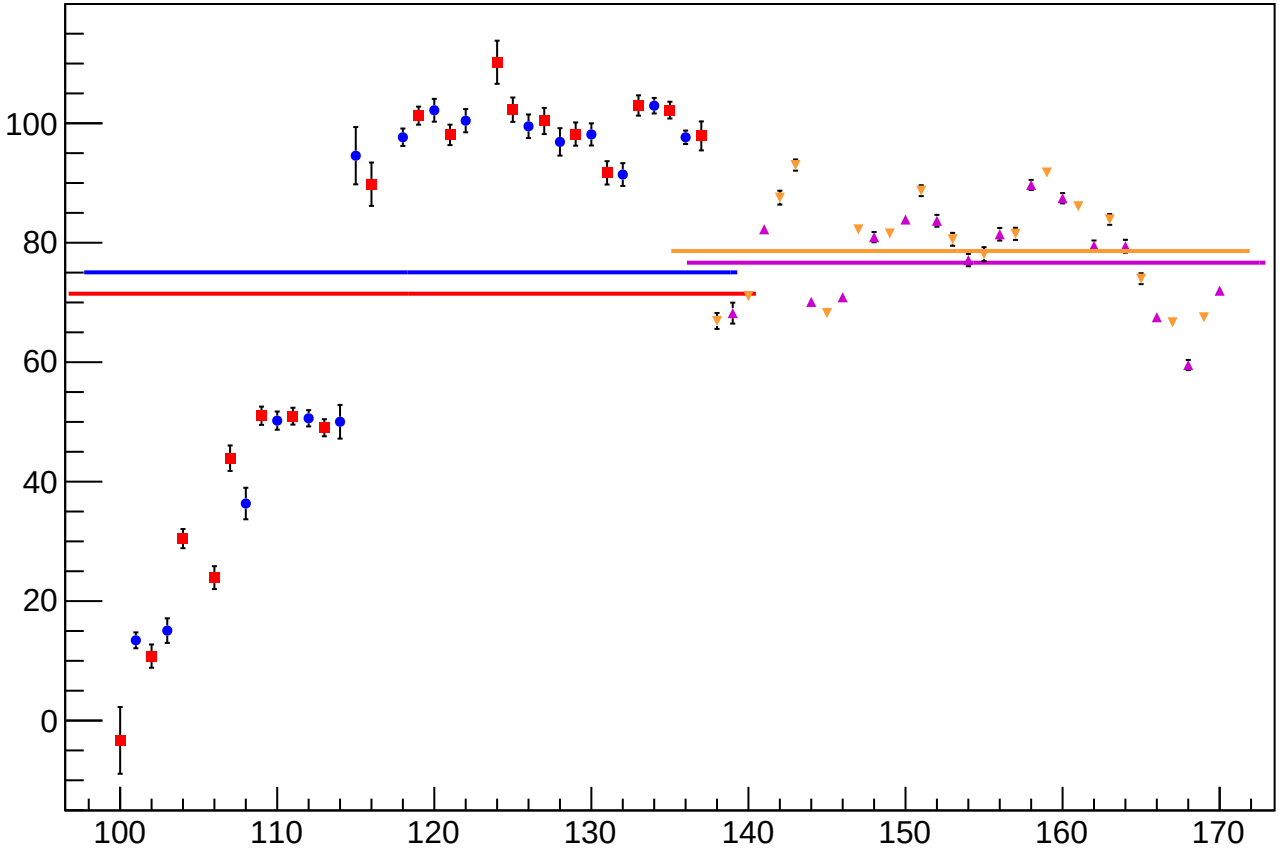
Left In: -40.732+/-0.253 $\chi^2$/NDF:2599.9/15

+ sign -43.625+/-0.215 $\chi^2$/NDF: 3335.4/32

All: -42.623+/-0.150 $\chi^2$/NDF: 7684.7/67

- sign -41.661+/-0.210 $\chi^2$/NDF: 4306.6/34

# reg_asym_sam_48_dd_diff_bpm4eY_slope vs Slug




Right In: 75.042+/-0.427 $\chi^2$/NDF: 5828.3/15

Left Out: 78.617+/-0.214 $\chi^2$/NDF:1710.9/16

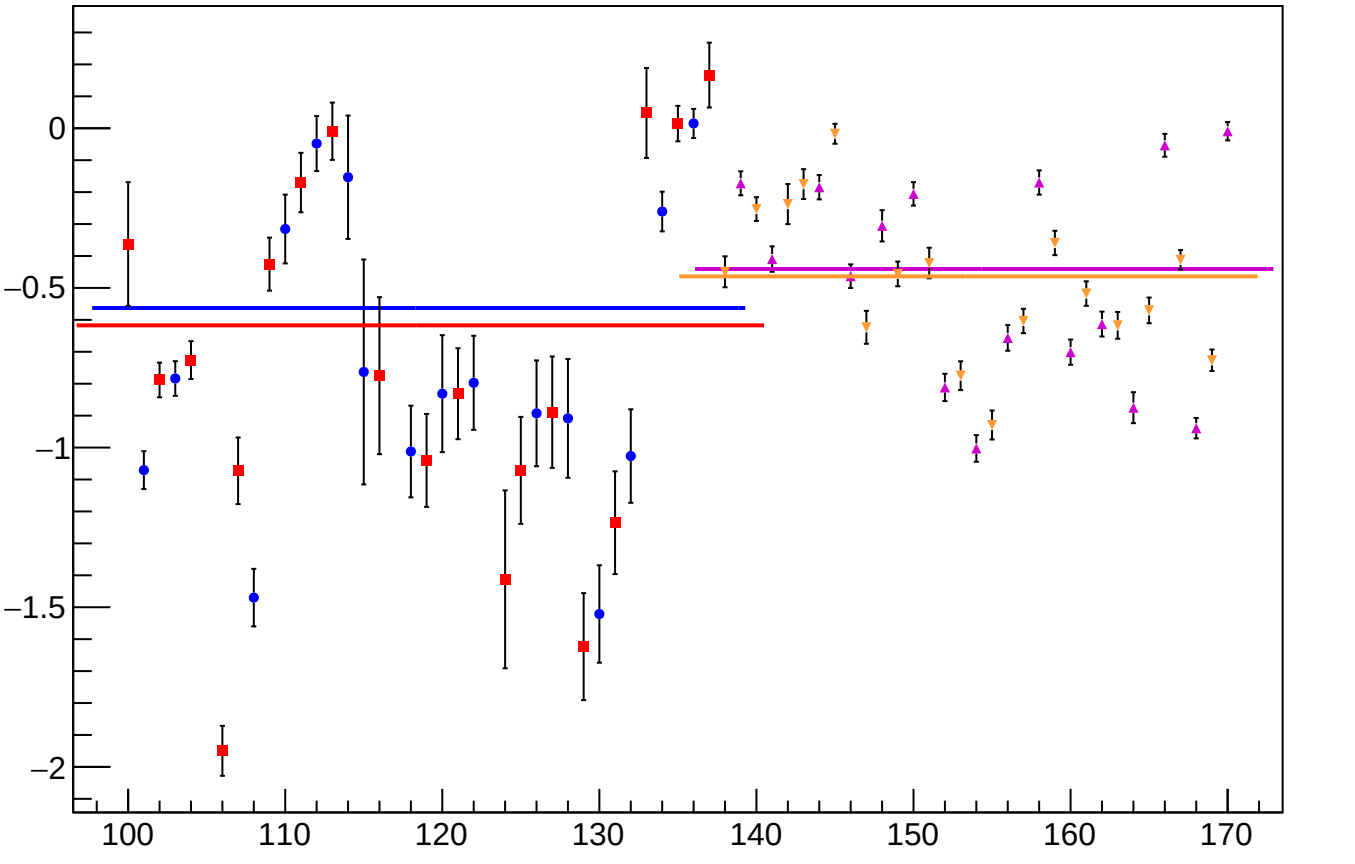
Right Out: 71.468+/-0.426 $\chi^2$/NDF: 5628.2/18

Left In: 76.661+/-0.213 $\chi^2$/NDF:1412.8/15

+ sign 77.902+/-0.191 $\chi^2$/NDF: 7595.1/32

All: 76.757+/-0.135 $\chi^2$/NDF: 14826.6/67

- sign 75.623+/-0.190 $\chi^2$/NDF: 7160.1/34




Right In: -0.563+/-0.022 $\chi^2$/NDF: 493.0/15

Left Out: -0.464+/-0.010 $\chi^2$/NDF:558.5/16

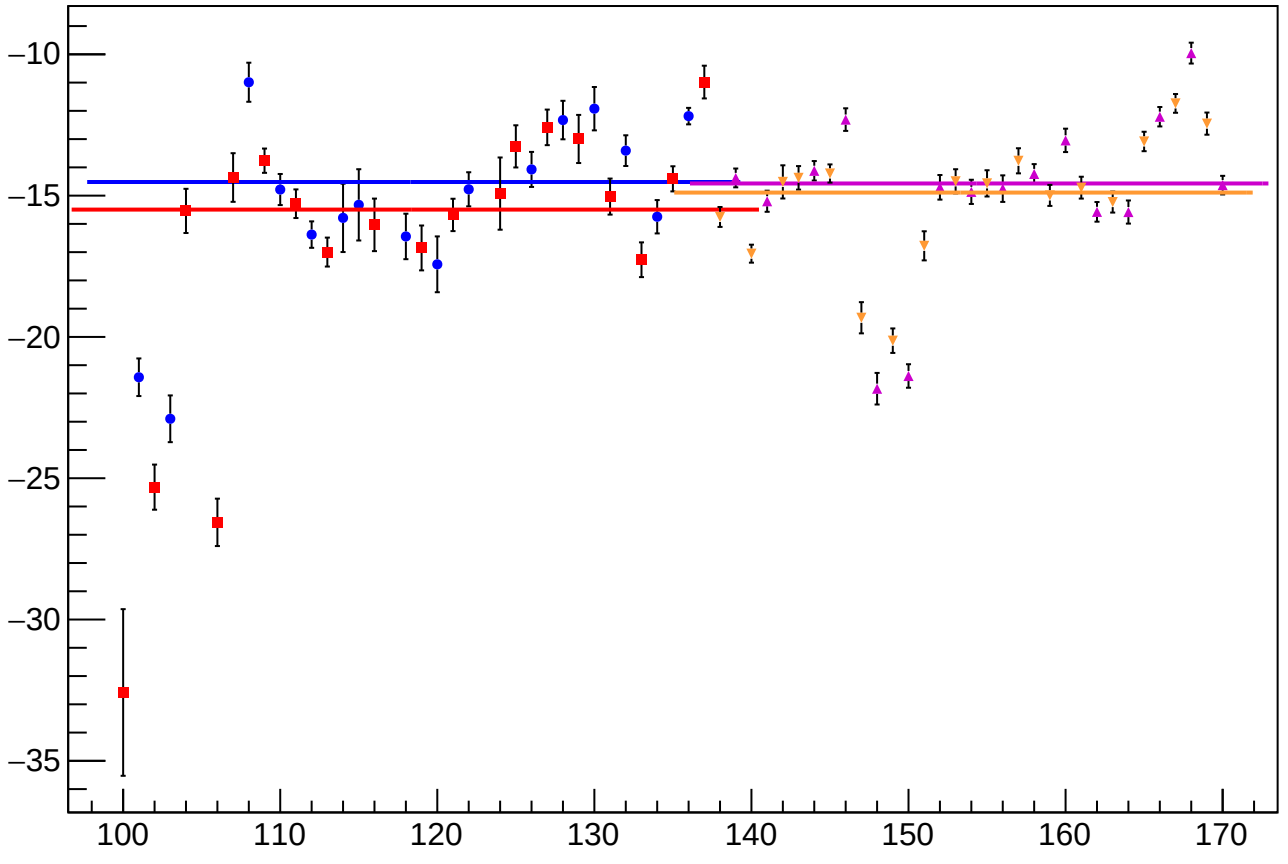
Right Out: -0.617+/-0.022 $\chi^2$/NDF: 690.0/18

Left In: -0.441+/-0.010 $\chi^2$/NDF:1212.8/15

+ sign -0.480+/-0.009 $\chi^2$/NDF: 1068.2/32

All: -0.474+/-0.006 $\chi^2$/NDF: 3025.3/67

- sign -0.468+/-0.009 $\chi^2$/NDF: 1956.3/34




Right In: -14.518+/-0.149 $\chi^2$/NDF: 363.3/15

Left Out: -14.892+/-0.096 $\chi^2$/NDF:448.4/16

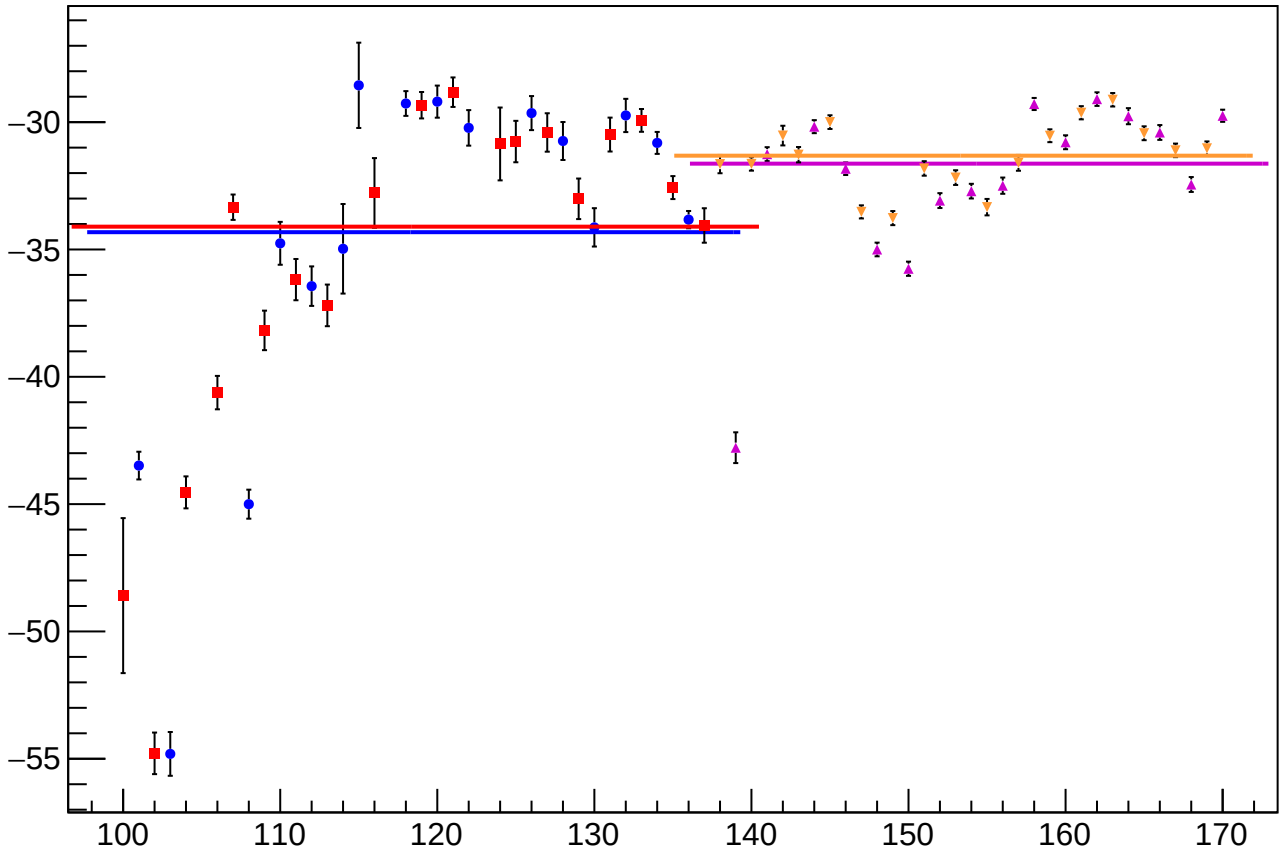
Right Out: -15.494+/-0.150 $\chi^2$/NDF: 503.8/18

Left In: -14.570+/-0.096 $\chi^2$/NDF:707.0/15

+ sign -14.783+/-0.081 $\chi^2$/NDF: 816.2/32

All: -14.811+/-0.057 $\chi^2$/NDF: 2054.3/67

- sign -14.838+/-0.081 $\chi^2$/NDF: 1237.8/34




Right In: -34.321+/-0.153 $\chi^2$/NDF: 1620.5/15

Left Out: -31.316+/-0.069 $\chi^2$/NDF:367.2/16

Right Out: -34.104+/-0.154 $\chi^2$/NDF: 1434.8/18

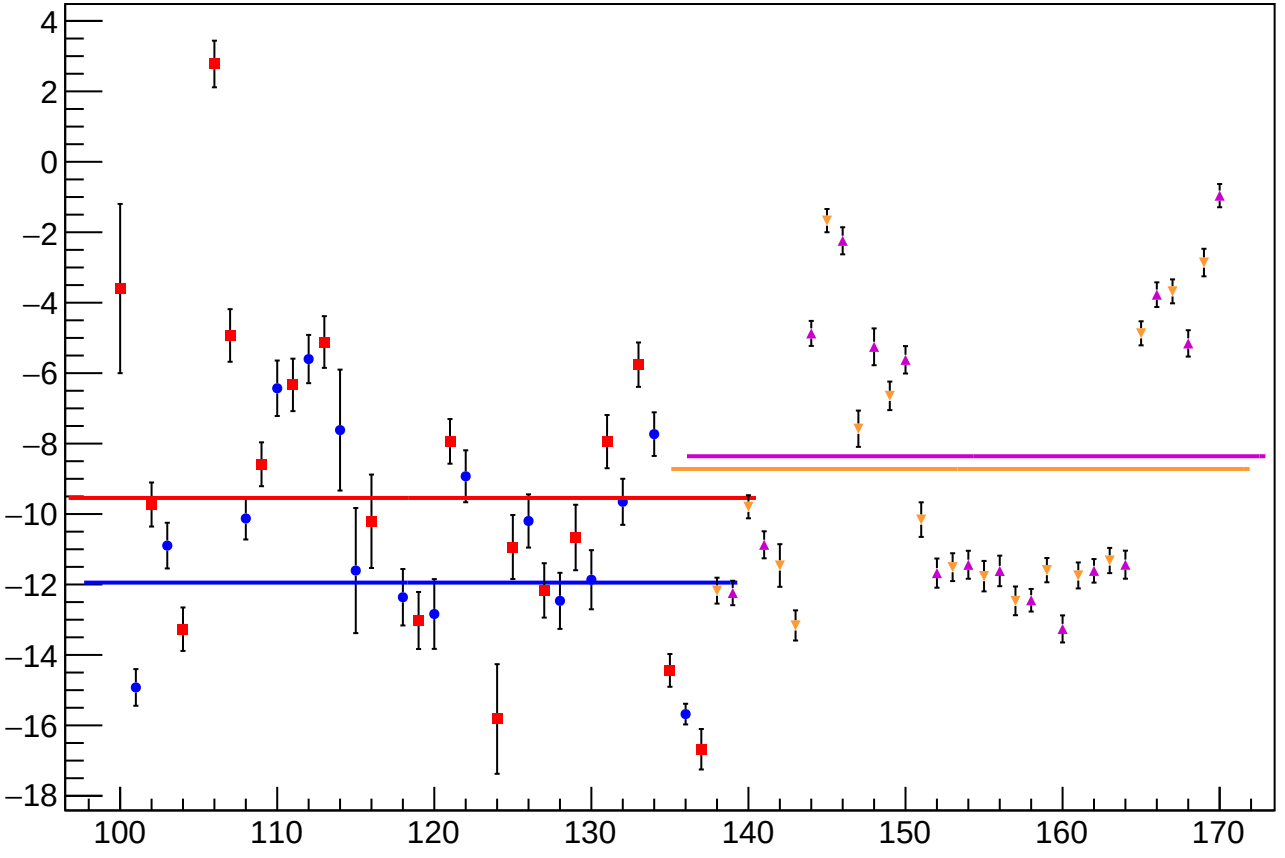
Left In: -31.629+/-0.070 $\chi^2$/NDF:1115.9/15

+ sign -31.819+/-0.063 $\chi^2$/NDF: 2307.7/32

All: -31.934+/-0.045 $\chi^2$/NDF: 5078.9/67

- sign -32.053+/-0.064 $\chi^2$/NDF: 2764.4/34

# reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs Slug




Right In: -11.946+/-0.160 $\chi^2$/NDF: 430.0/15

Left Out: -8.720+/-0.094 $\chi^2$/NDF:1668.1/16

Right Out: -9.544+/-0.165 $\chi^2$/NDF: 847.1/18

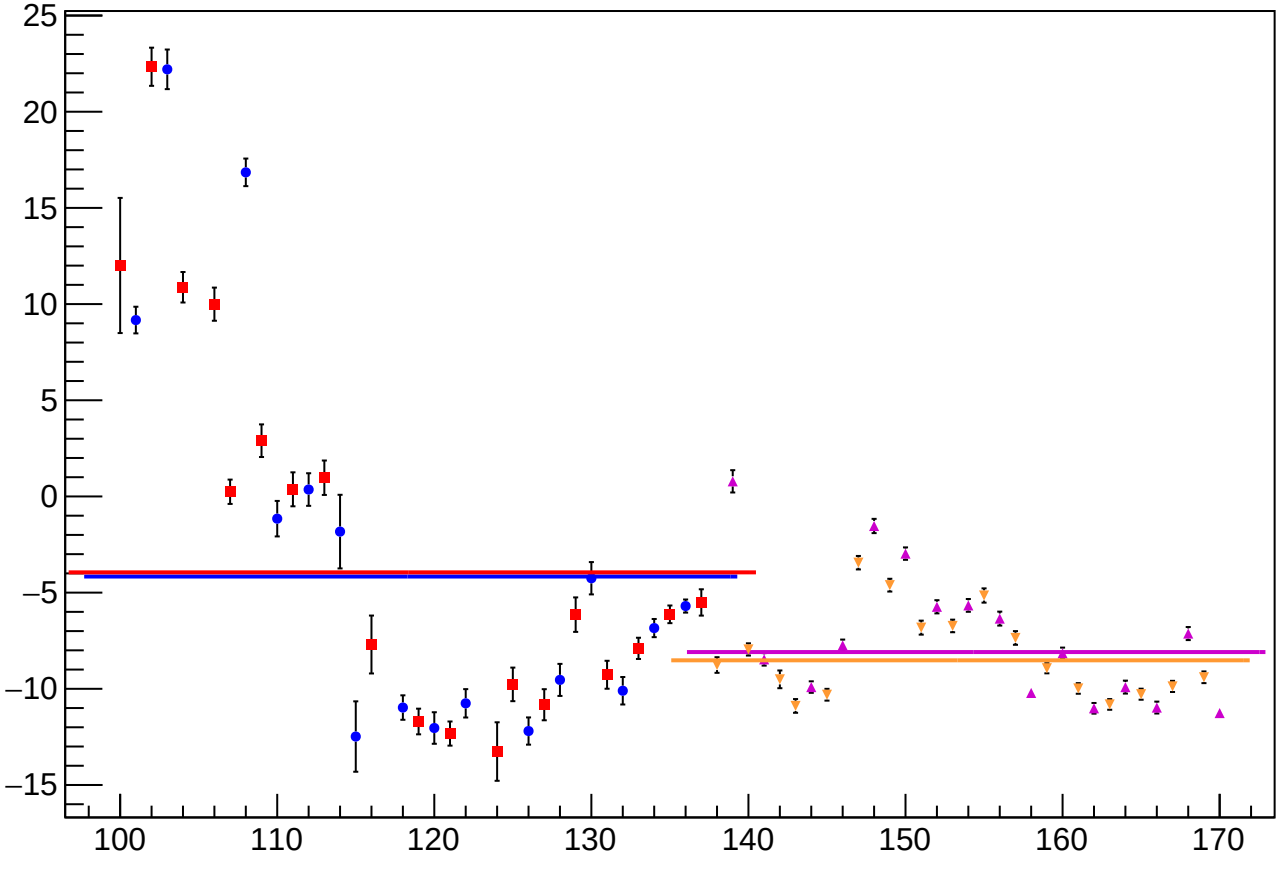
Left In: -8.359+/-0.094 $\chi^2$/NDF:2012.4/15

+ sign -9.547+/-0.081 $\chi^2$/NDF: 2400.0/32

All: -9.100+/-0.057 $\chi^2$/NDF: 5359.6/67

- sign -8.647+/-0.082 $\chi^2$/NDF: 2898.4/34

# reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs Slug




Right In: -4.163+/-0.172 $\chi^2$/NDF: 2525.0/15

Left Out: -8.519+/-0.078 $\chi^2$/NDF:745.1/16

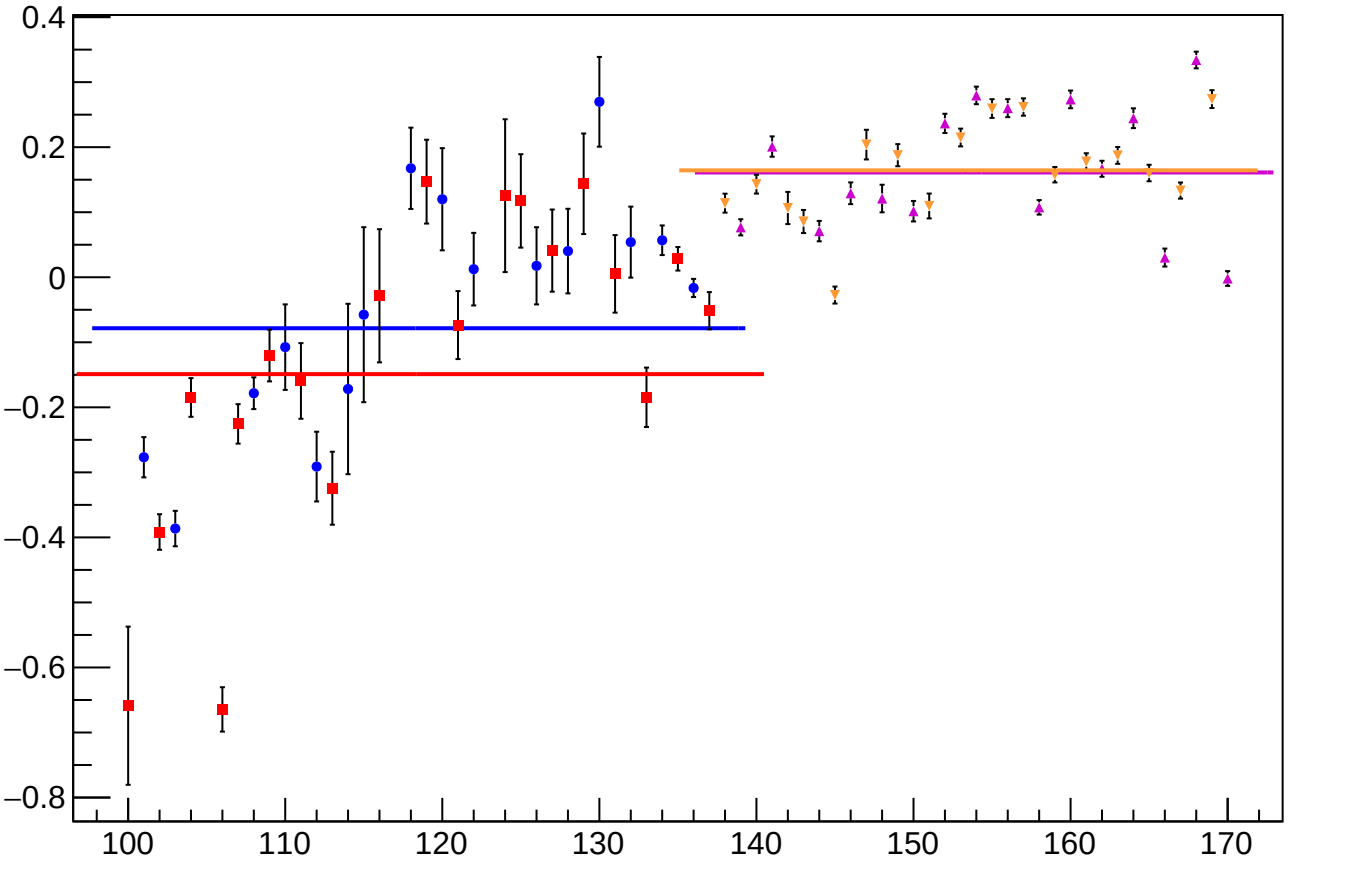
Right Out: -3.947+/-0.176 $\chi^2$/NDF: 2110.2/18

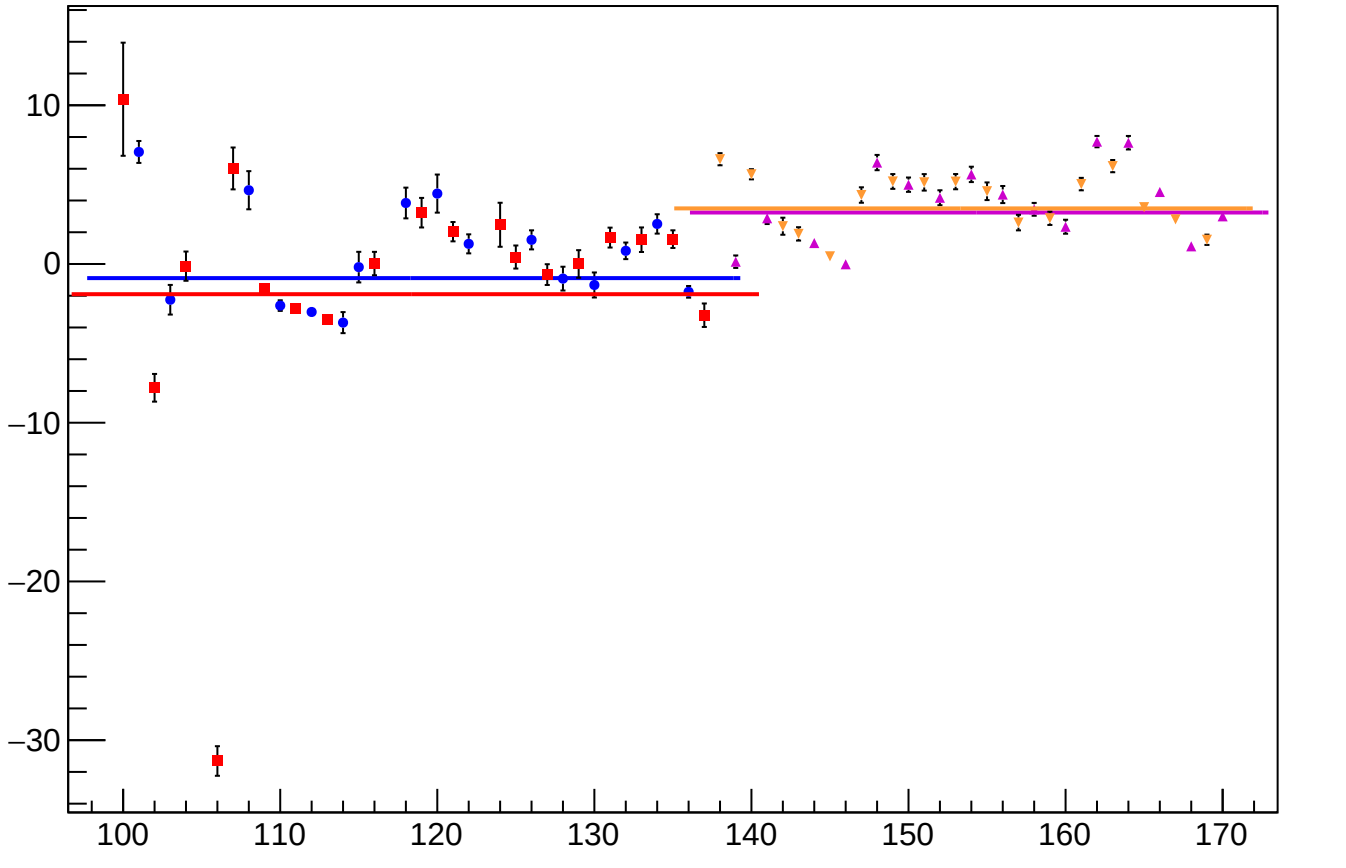
Left In: -8.090+/-0.079 $\chi^2$/NDF:1419.2/15

+ sign -7.772+/-0.071 $\chi^2$/NDF: 3802.0/32

All: -7.586+/-0.051 $\chi^2$/NDF: 7806.2/67

- sign -7.393+/-0.072 $\chi^2$/NDF: 3990.2/34


reg_asym_sam_13_57_dd_diff_bpm12X_slope vs Slug
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
100
110
120
130
140
150
160
170
Right In: -0.078+/-0.009 χ²/NDF: 318.8/15
Left Out: 0.164+/-0.004 χ²/NDF:453.9/16
Right Out: -0.149+/-0.009 χ²/NDF: 524.8/18
Left In: 0.161+/-0.003 χ²/NDF:860.5/15
+ sign 0.130+/-0.003 χ²/NDF: 1459.9/32
All: 0.126+/-0.002 χ²/NDF: 3867.3/67
- sign 0.122+/-0.003 χ²/NDF: 2404.4/34




Right In: -0.889+/-0.137 $\chi^2$/NDF: 380.3/15

Left Out: 3.502+/-0.092 $\chi^2$/NDF:435.9/16

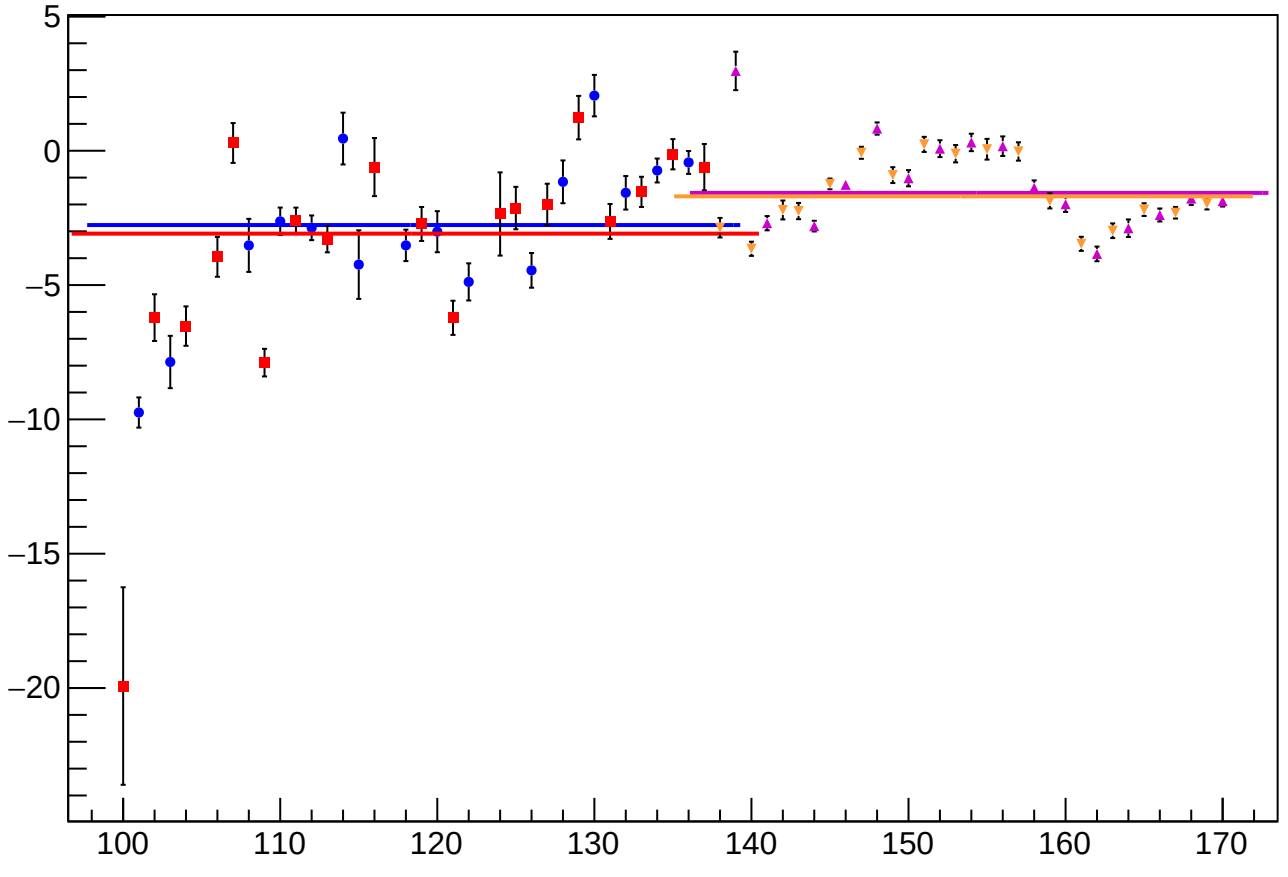
Right Out: -1.903+/-0.128 $\chi^2$/NDF: 1331.8/18

Left In: 3.243+/-0.091 $\chi^2$/NDF:659.6/15

+ sign 2.142+/-0.076 $\chi^2$/NDF: 1529.5/32

All: 1.825+/-0.053 $\chi^2$/NDF: 4625.0/67

- sign 1.523+/-0.074 $\chi^2$/NDF: 3061.6/34




Right In: -2.766+/-0.156 $\chi^2$/NDF: 310.1/15

Left Out: -1.698+/-0.065 $\chi^2$/NDF:332.1/16

Right Out: -3.086+/-0.158 $\chi^2$/NDF: 272.5/18

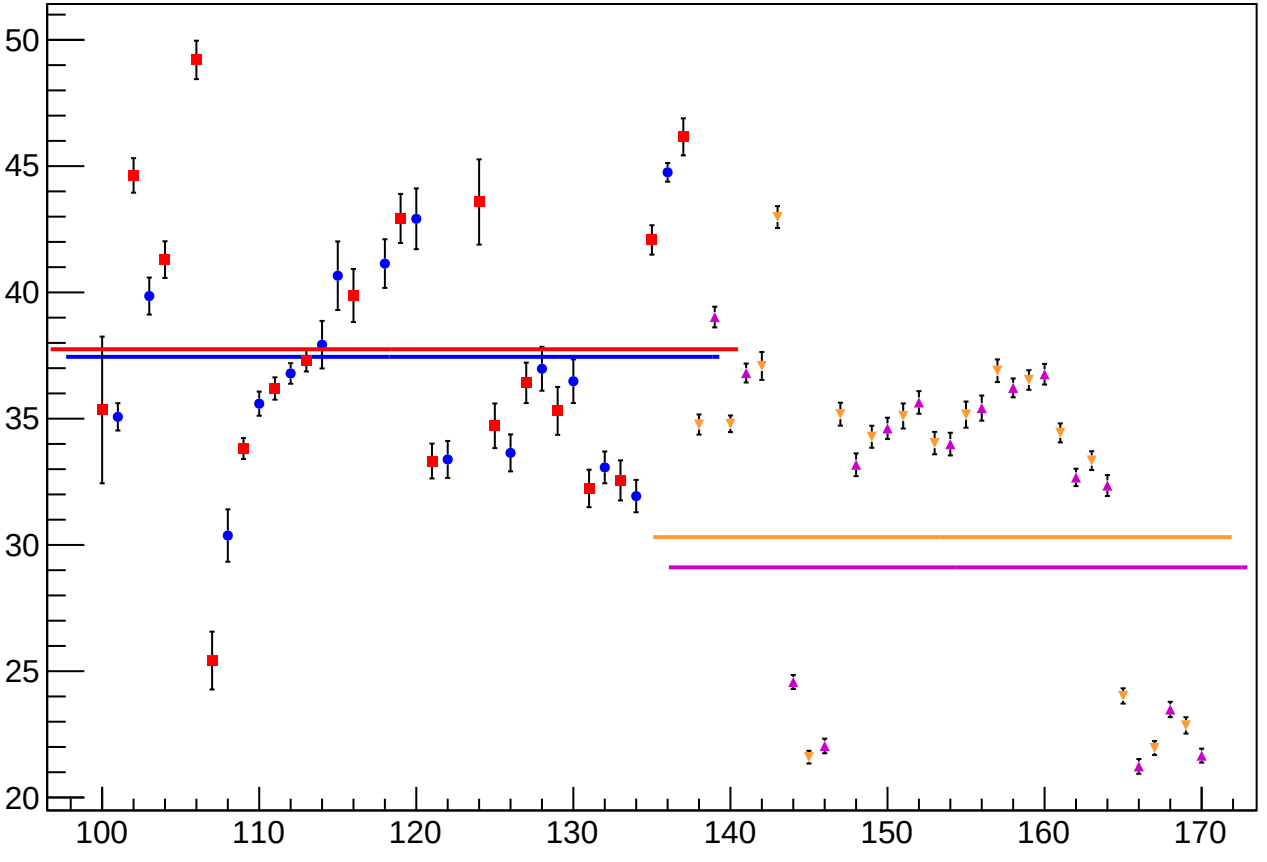
Left In: -1.570+/-0.065 $\chi^2$/NDF:399.4/15

+ sign -1.857+/-0.060 $\chi^2$/NDF: 681.9/32

All: -1.823+/-0.043 $\chi^2$/NDF: 1433.7/67

- sign -1.789+/-0.060 $\chi^2$/NDF: 751.1/34

# reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs Slug




Right In: 37.449+/-0.161 $\chi^2$/NDF: 706.9/15

Left Out: 30.308+/-0.091 $\chi^2$/NDF:5483.5/16

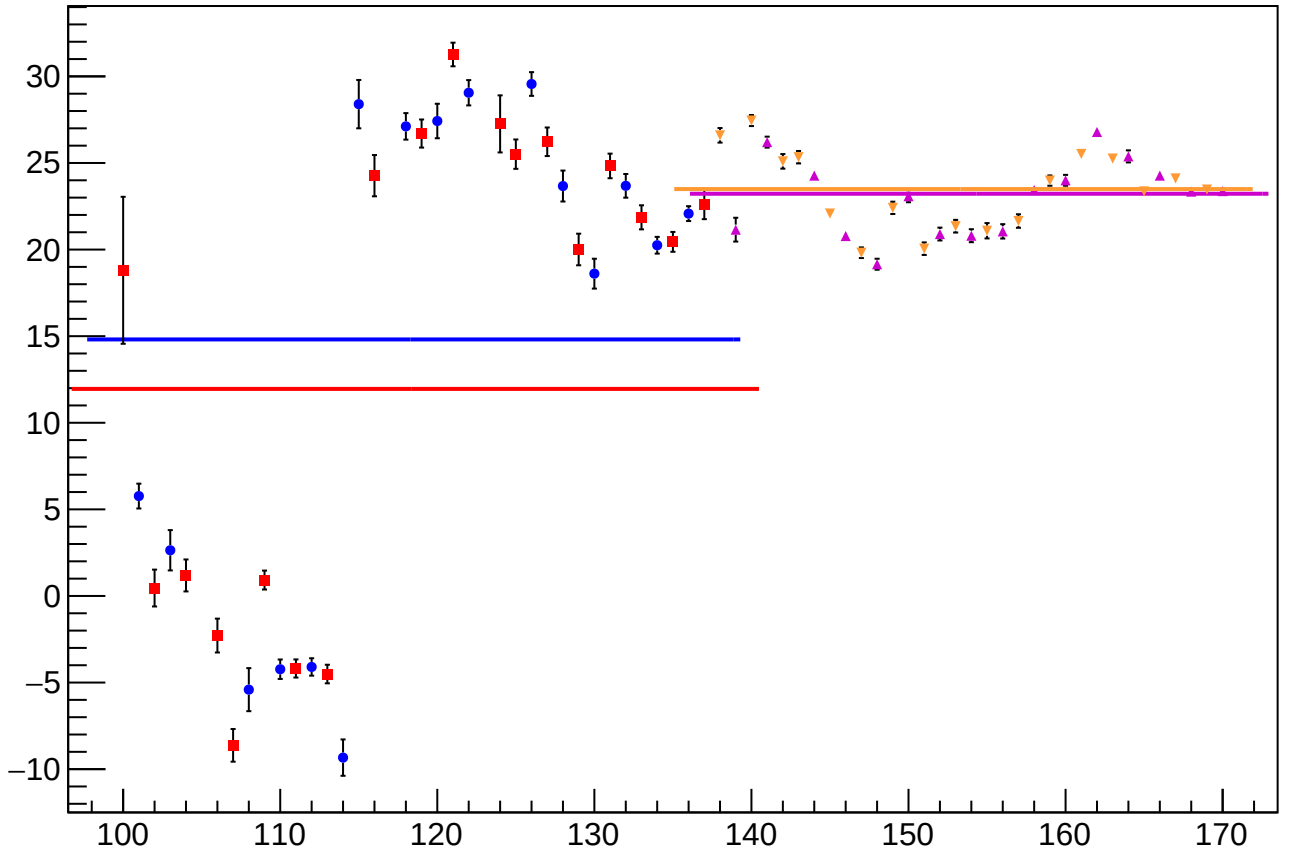
Right Out: 37.749+/-0.159 $\chi^2$/NDF: 963.6/18

Left In: 29.112+/-0.089 $\chi^2$/NDF:5281.0/15

+ sign 32.028+/-0.079 $\chi^2$/NDF: 7689.1/32

All: 31.597+/-0.055 $\chi^2$/NDF: 16226.7/67

- sign 31.176+/-0.078 $\chi^2$/NDF: 8478.6/34




Right In: 14.812+/-0.174 $\chi^2$/NDF: 5686.4/15

Left Out: 23.494+/-0.075 $\chi^2$/NDF:715.1/16

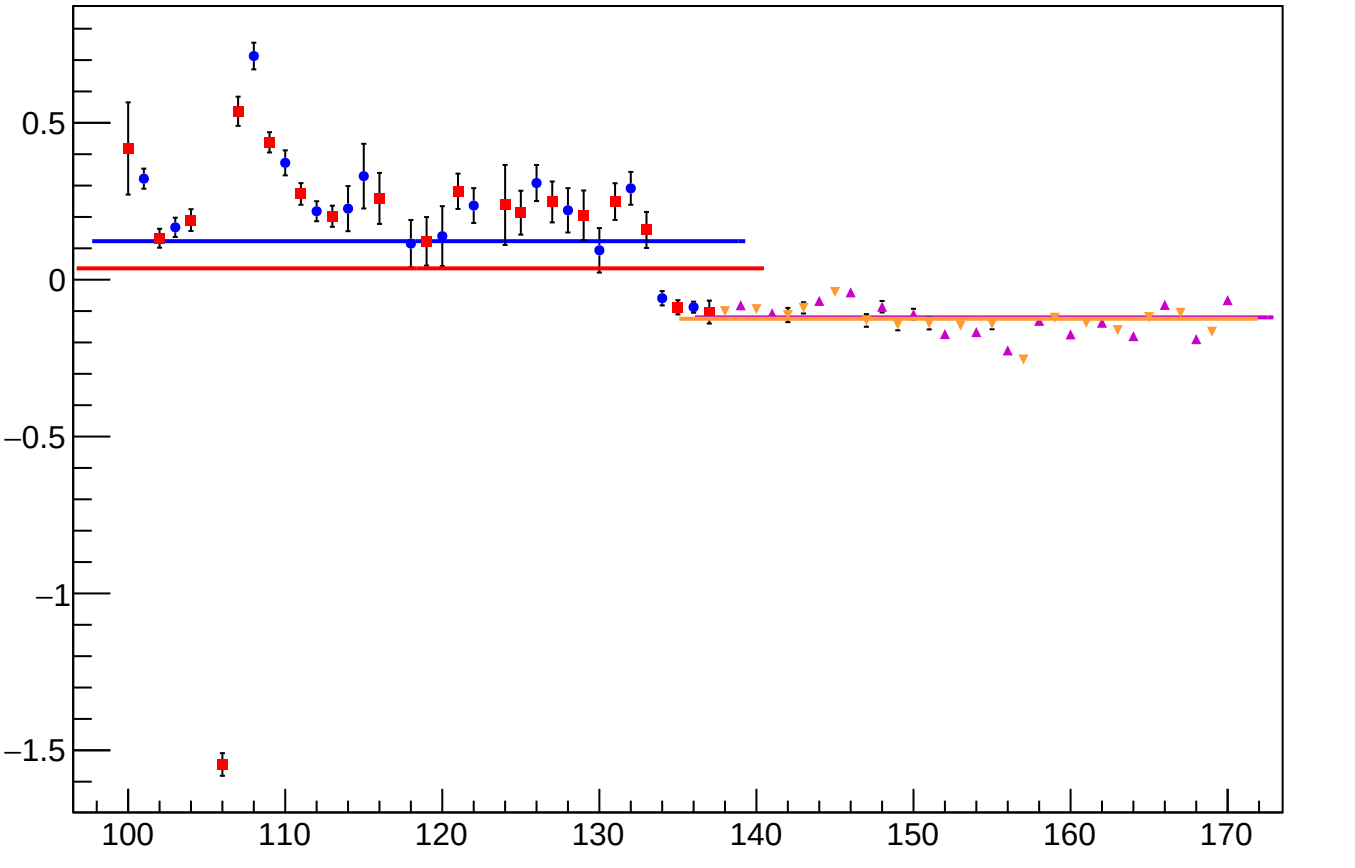
Right Out: 11.955+/-0.177 $\chi^2$/NDF: 6105.5/18

Left In: 23.224+/-0.074 $\chi^2$/NDF:731.2/15

+ sign 22.140+/-0.069 $\chi^2$/NDF: 8505.9/32

All: 21.836+/-0.048 $\chi^2$/NDF: 18833.6/67

- sign 21.533+/-0.068 $\chi^2$/NDF: 10288.5/34




Right In: 0.123+/-0.009 $\chi^2$/NDF: 520.0/15

Left Out: -0.124+/-0.003 $\chi^2$/NDF:191.5/16

Right Out: 0.036+/-0.010 $\chi^2$/NDF: 2414.7/18

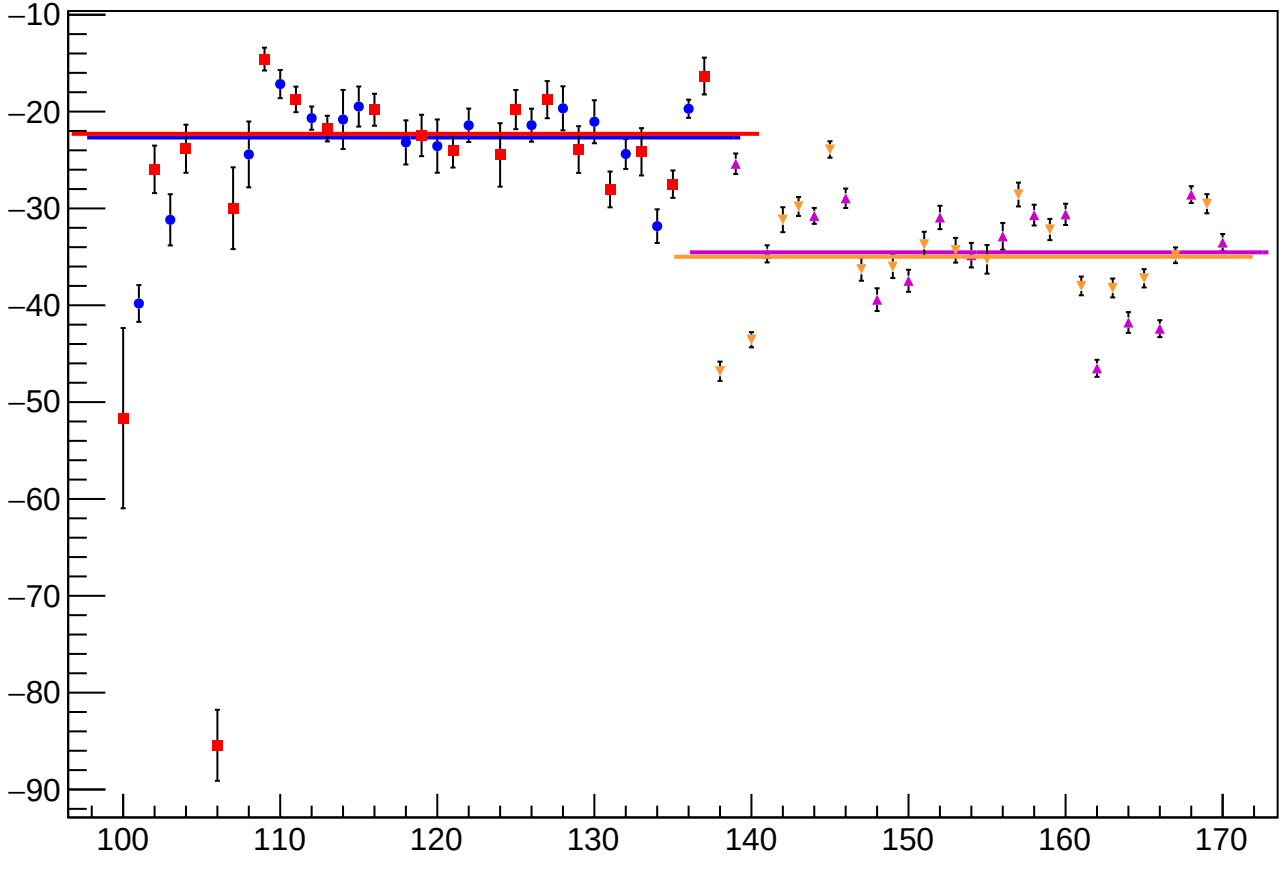
Left In: -0.120+/-0.003 $\chi^2$/NDF:254.7/15

+ sign -0.096+/-0.003 $\chi^2$/NDF: 1321.8/32

All: -0.100+/-0.002 $\chi^2$/NDF: 4222.8/67

- sign -0.104+/-0.003 $\chi^2$/NDF: 2898.0/34

# reg_asym_sam_24_68_dd_diff_bpm1X_slope vs Slug




Right In: -22.675+/-0.435 $\chi^2$/NDF: 154.4/15

Left Out: -34.989+/-0.250 $\chi^2$/NDF:560.5/16

Right Out: -22.295+/-0.435 $\chi^2$/NDF: 405.5/18

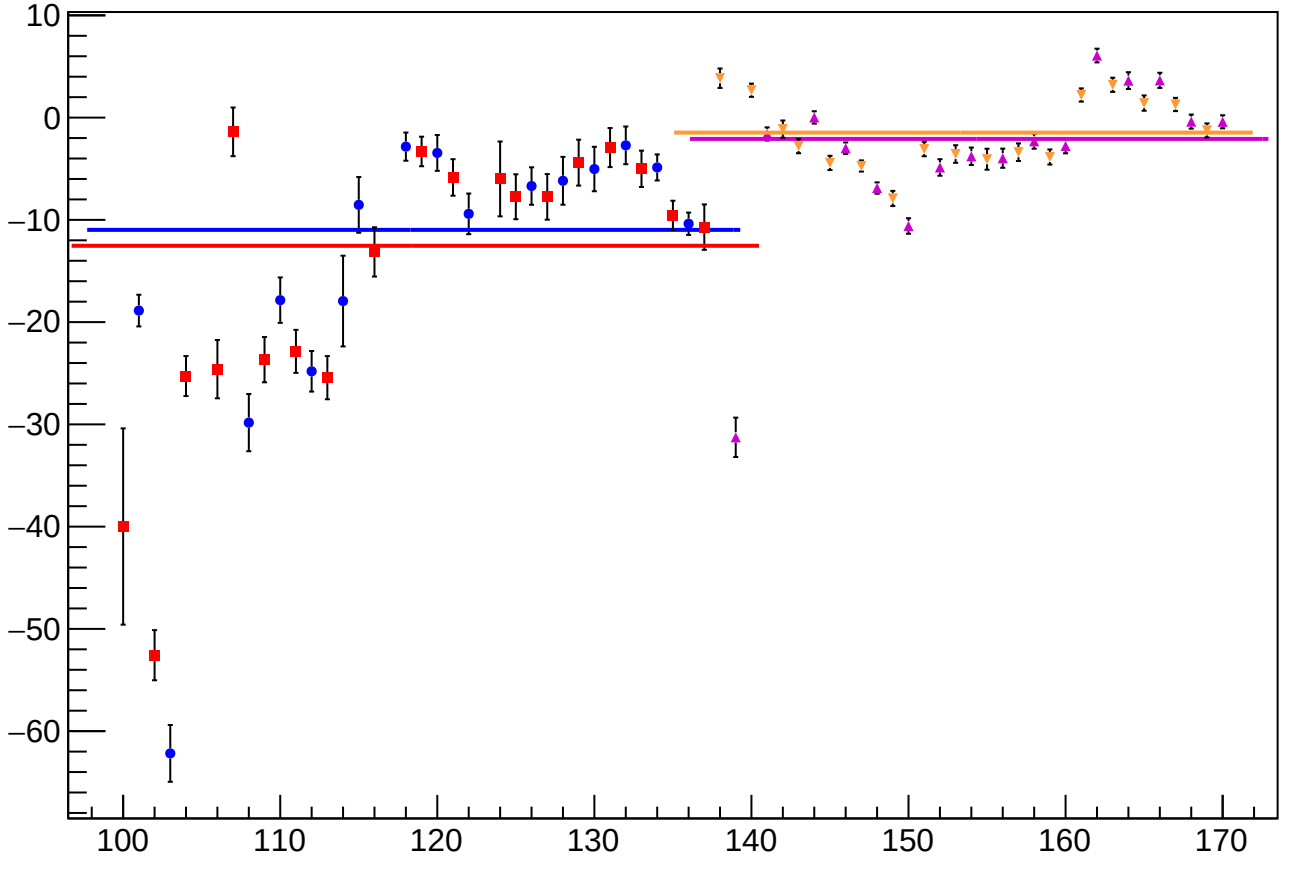
Left In: -34.533+/-0.252 $\chi^2$/NDF:547.4/15

+ sign -31.930+/-0.217 $\chi^2$/NDF: 1318.6/32

All: -31.696+/-0.154 $\chi^2$/NDF: 2866.1/67

- sign -31.459+/-0.218 $\chi^2$/NDF: 1545.2/34

# reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs Slug




Right In: -10.978+/-0.453 $\chi^2$/NDF: 587.3/15

Left Out: -1.467+/-0.176 $\chi^2$/NDF:348.2/16

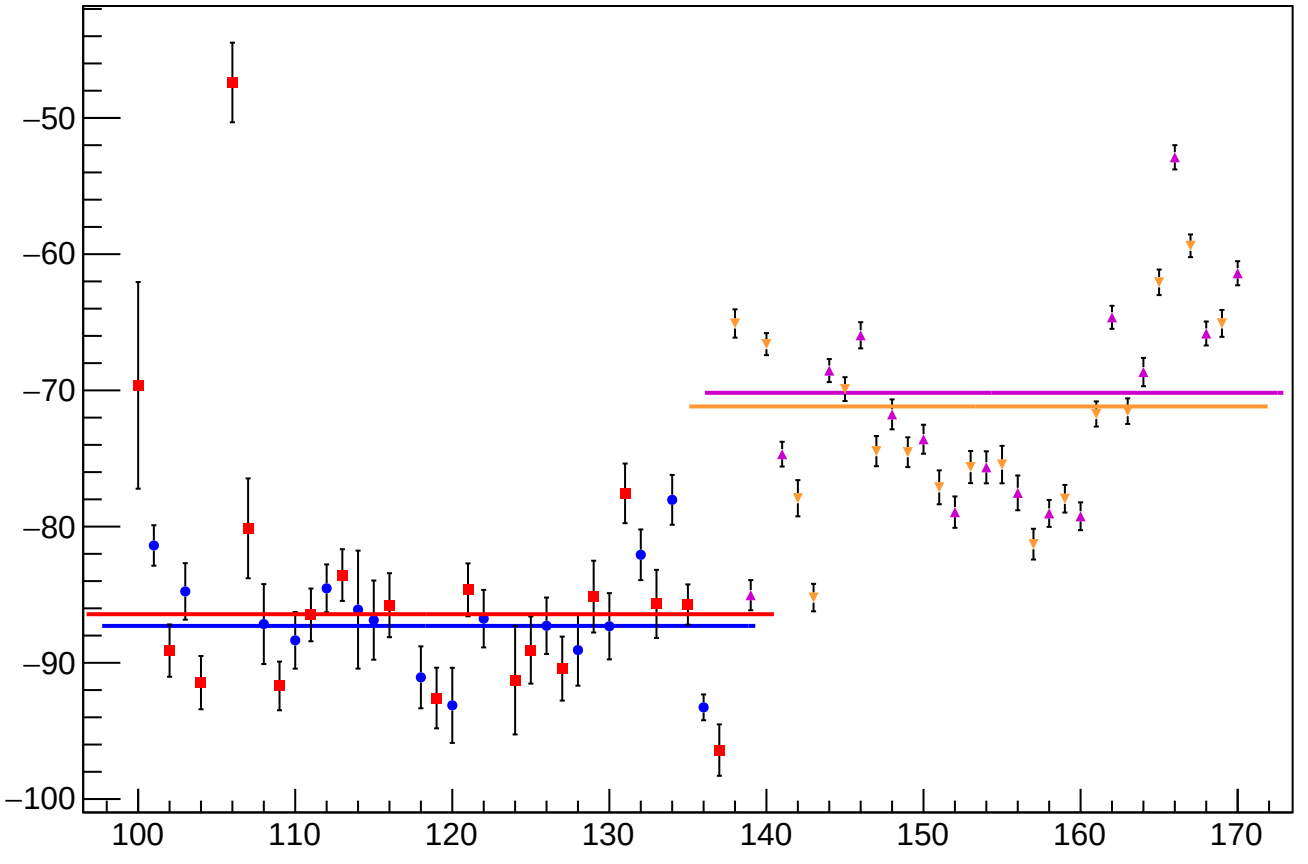
Right Out: -12.533+/-0.481 $\chi^2$/NDF: 572.3/18

Left In: -2.084+/-0.178 $\chi^2$/NDF:734.3/15

+ sign -2.710+/-0.164 $\chi^2$/NDF: 1318.1/32

All: -3.022+/-0.117 $\chi^2$/NDF: 3046.9/67

- sign -3.346+/-0.167 $\chi^2$/NDF: 1721.4/34




Right In: -87.291+/-0.481 $\chi^2$/NDF: 101.2/15

Left Out: -71.180+/-0.246 $\chi^2$/NDF:811.2/16

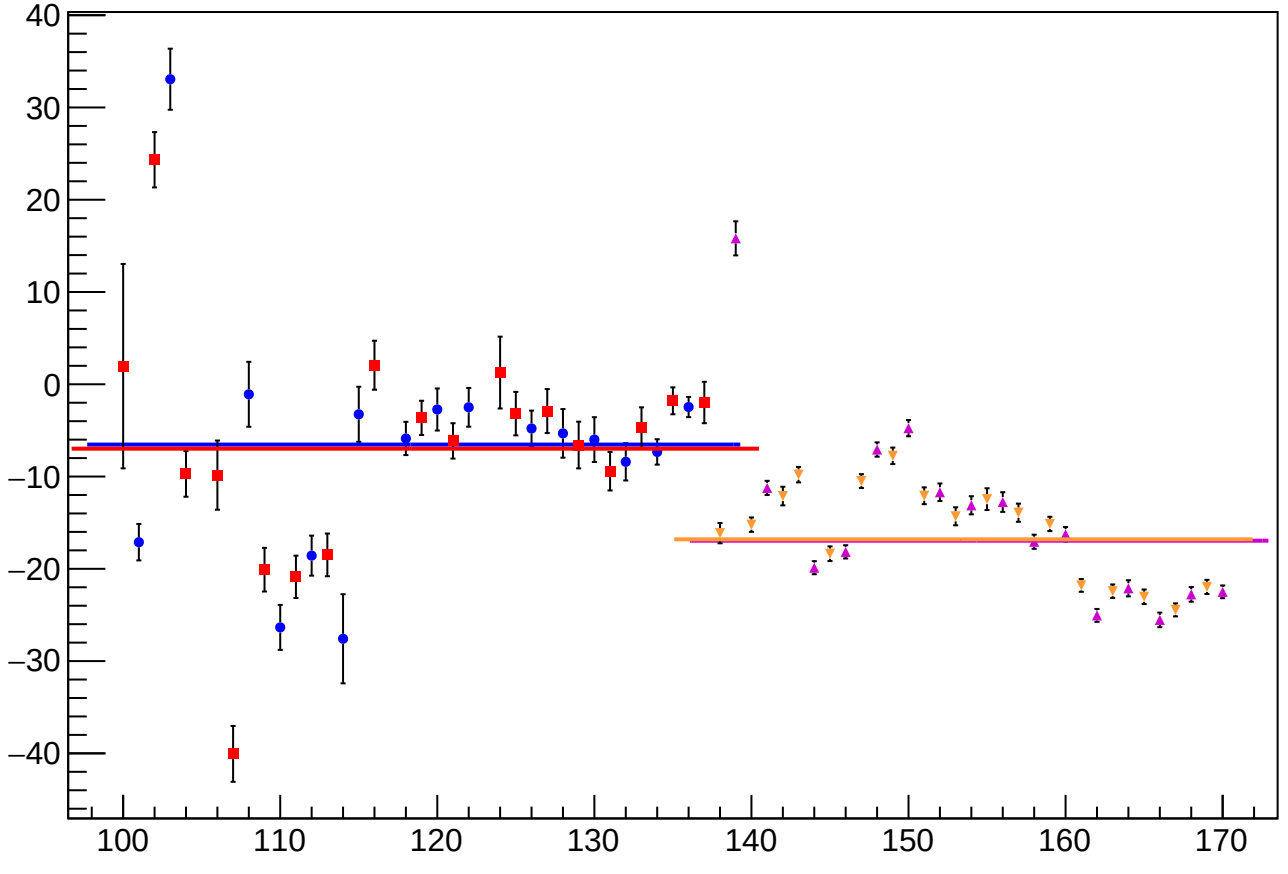
Right Out: -86.431+/-0.506 $\chi^2$/NDF: 264.8/18

Left In: -70.178+/-0.247 $\chi^2$/NDF:1056.7/15

+ sign -74.525+/-0.219 $\chi^2$/NDF: 1802.8/32

All: -73.919+/-0.156 $\chi^2$/NDF: 3973.8/67

- sign -73.298+/-0.222 $\chi^2$/NDF: 2155.5/34




Right In: -6.535+/-0.508 $\chi^2$/NDF: 313.9/15

Left Out: -16.805+/-0.202 $\chi^2$/NDF:669.4/16

Right Out: -6.979+/-0.542 $\chi^2$/NDF: 368.3/18

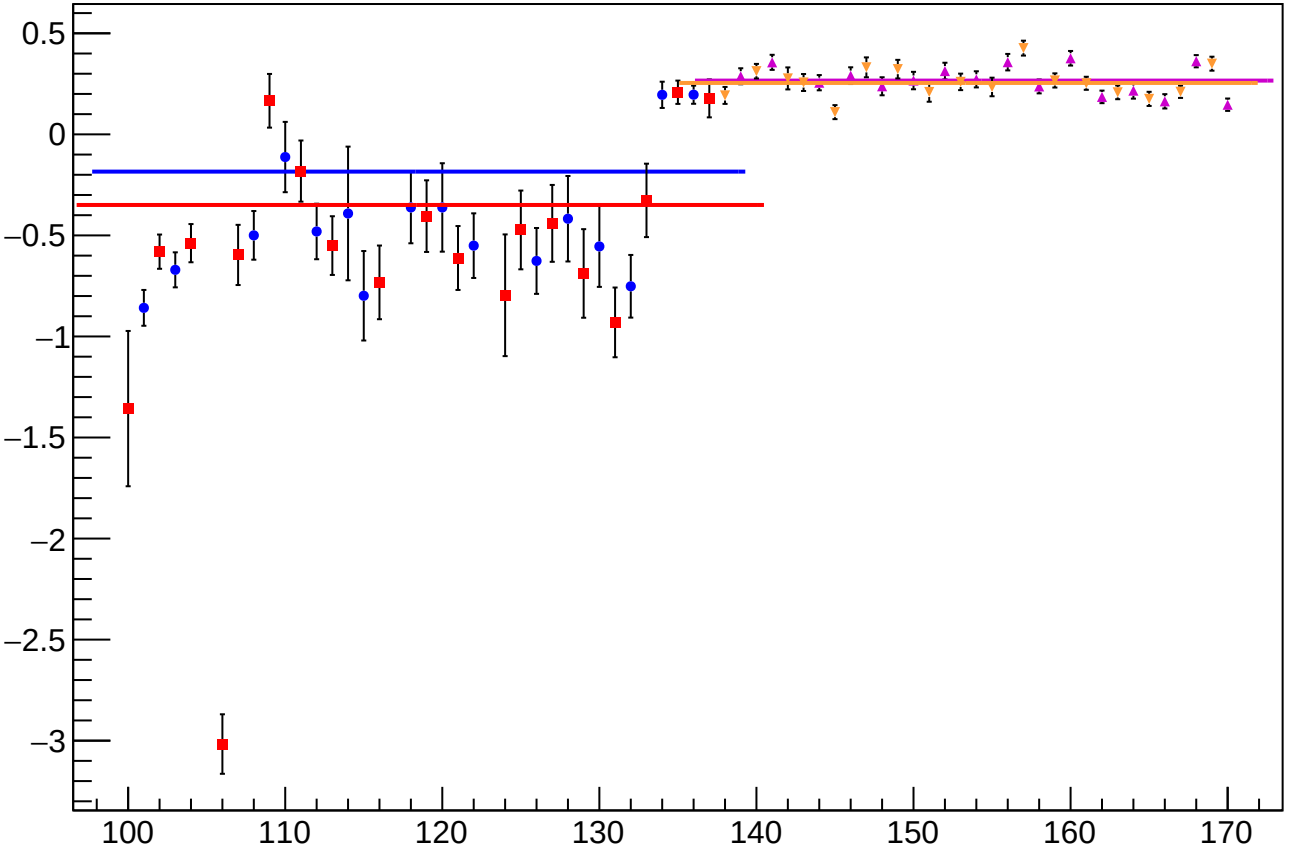
Left In: -16.953+/-0.205 $\chi^2$/NDF:1211.0/15

+ sign -15.398+/-0.188 $\chi^2$/NDF: 1336.2/32

All: -15.548+/-0.134 $\chi^2$/NDF: 3213.4/67

- sign -15.704+/-0.192 $\chi^2$/NDF: 1875.9/34

# reg_asym_sam_24_68_dd_diff_bpm12X_slope vs Slug




Right In: -0.184+/-0.027 $\chi^2$/NDF: 247.3/15

Left Out: 0.254+/-0.009 $\chi^2$/NDF:66.5/16

Right Out: -0.349+/-0.029 $\chi^2$/NDF: 516.5/18

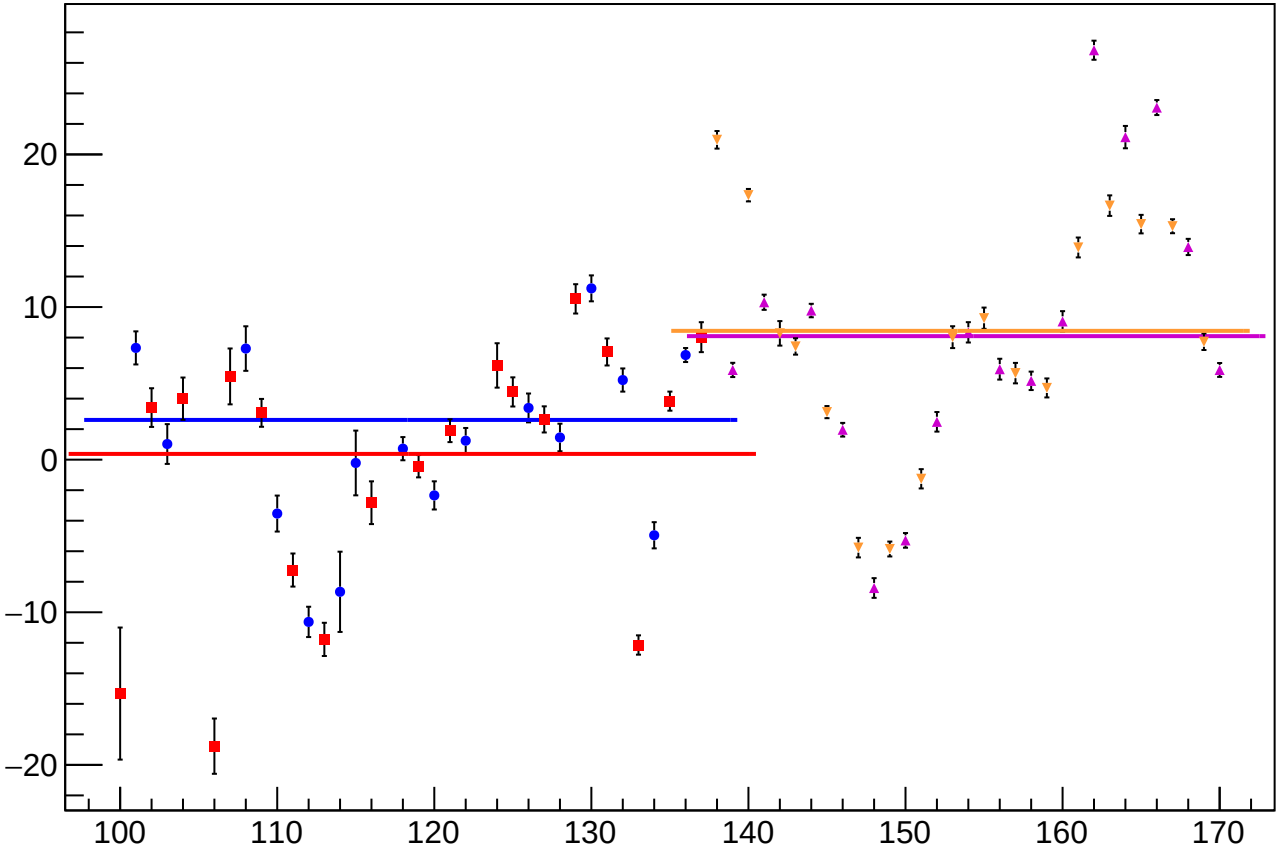
Left In: 0.266+/-0.009 $\chi^2$/NDF:65.2/15

+ sign 0.207+/-0.009 $\chi^2$/NDF: 553.6/32

All: 0.209+/-0.006 $\chi^2$/NDF: 1536.1/67

- sign 0.210+/-0.009 $\chi^2$/NDF: 982.5/34

# reg_asym_sam_26_48_dd_diff_bpm1X_slope vs Slug




Right In: 2.604+/-0.224 $\chi^2$/NDF: 573.1/15

Left Out: 8.441+/-0.136 $\chi^2$/NDF:3343.6/16

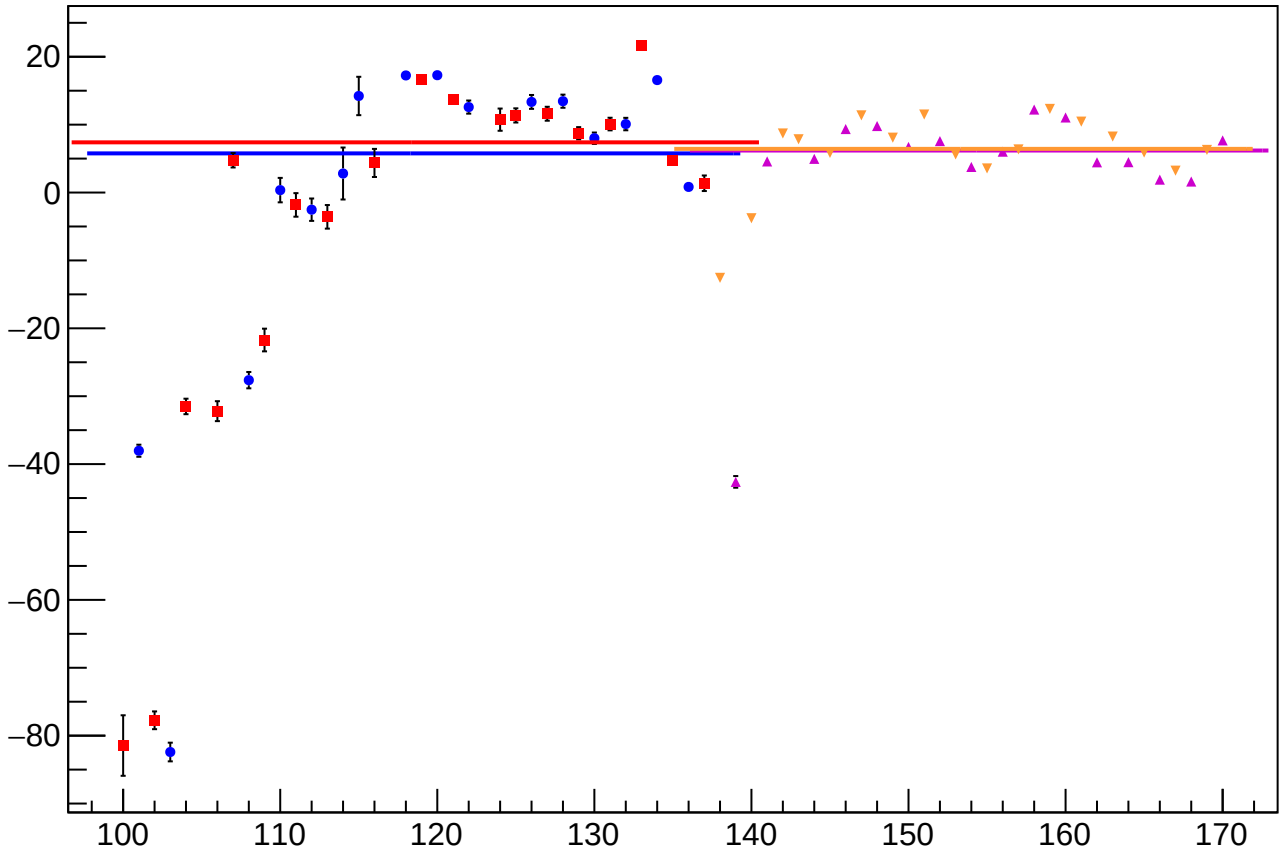
Right Out: 0.377+/-0.222 $\chi^2$/NDF: 1030.9/18

Left In: 8.094+/-0.136 $\chi^2$/NDF:4071.4/15

+ sign 6.863+/-0.117 $\chi^2$/NDF: 4411.7/32

All: 6.426+/-0.082 $\chi^2$/NDF: 10419.5/67

- sign 5.994+/-0.116 $\chi^2$/NDF: 5980.0/34




Right In: 5.768+/-0.210 $\chi^2$/NDF: 8933.8/15

Left Out: 6.434+/-0.097 $\chi^2$/NDF:2906.2/16

Right Out: 7.393+/-0.209 $\chi^2$/NDF: 8390.6/18

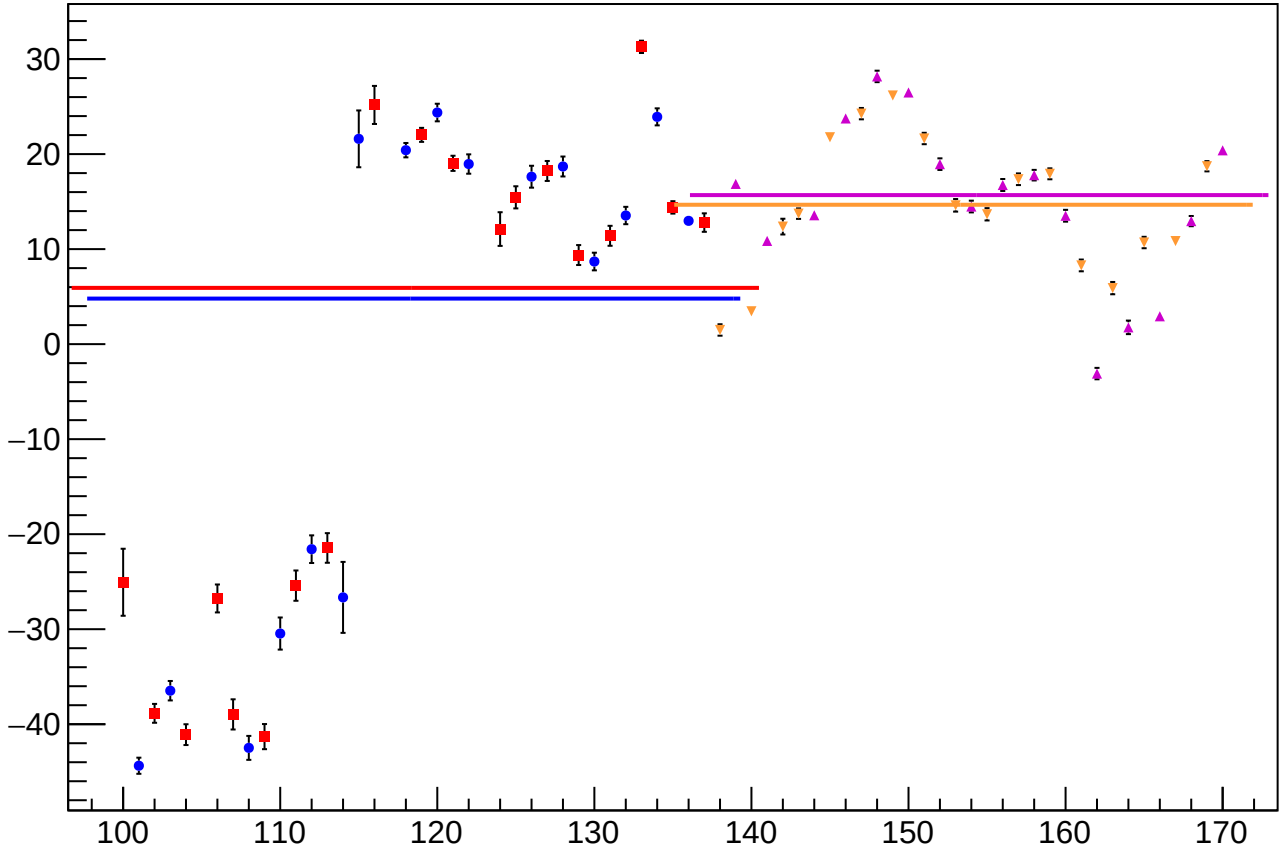
Left In: 6.188+/-0.097 $\chi^2$/NDF:4175.6/15

+ sign 6.317+/-0.088 $\chi^2$/NDF: 11848.3/32

All: 6.360+/-0.062 $\chi^2$/NDF: 24442.3/67

- sign 6.404+/-0.088 $\chi^2$/NDF: 12593.6/34

# reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs Slug




Right In: 4.794+/-0.237 $\chi^2$/NDF: 9496.9/15

Left Out: 14.669+/-0.134 $\chi^2$/NDF:3040.2/16

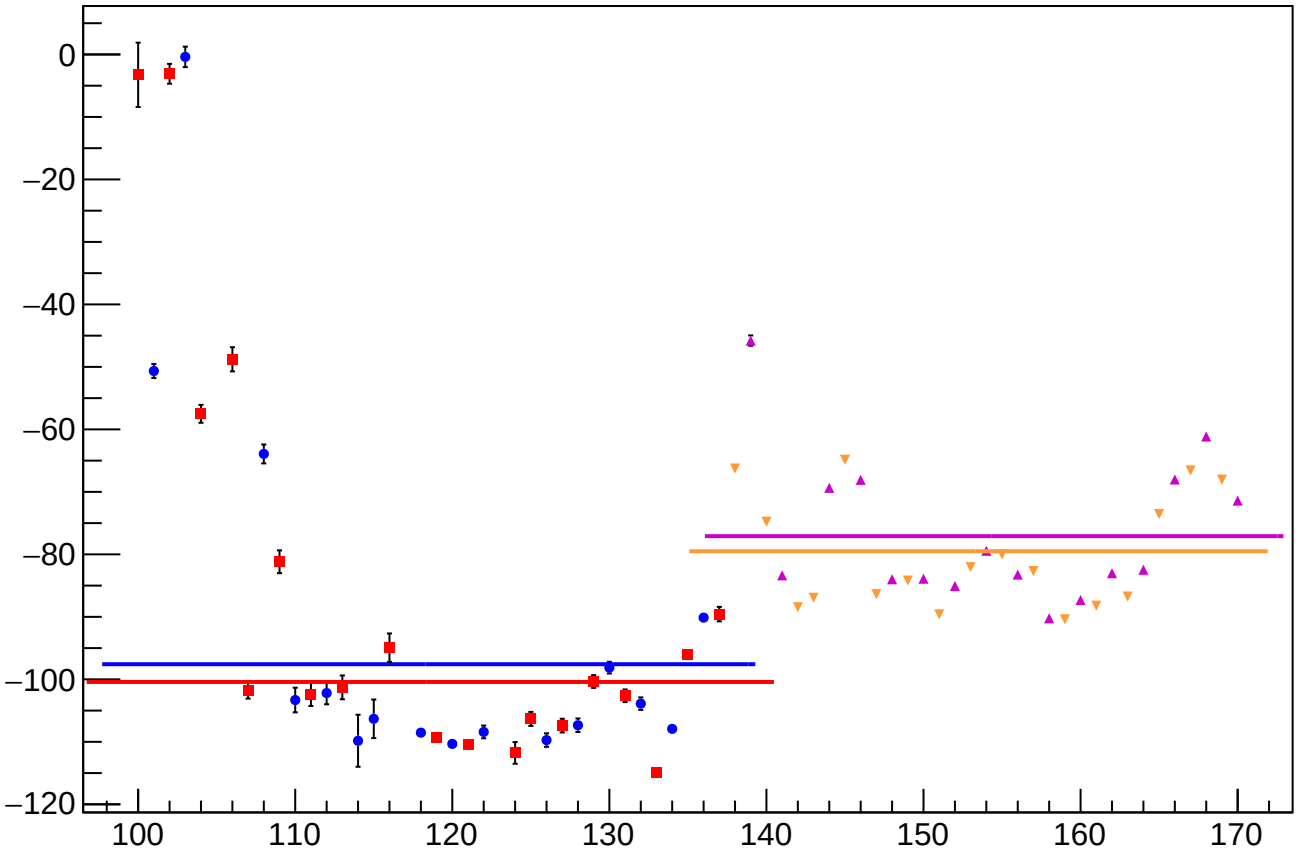
Right Out: 5.921+/-0.240 $\chi^2$/NDF: 10059.4/18

Left In: 15.685+/-0.133 $\chi^2$/NDF:3668.6/15

+ sign 12.277+/-0.117 $\chi^2$/NDF: 13848.2/32

All: 12.837+/-0.082 $\chi^2$/NDF: 28889.2/67

- sign 13.391+/-0.116 $\chi^2$/NDF: 14995.4/34




Right In: -97.581+/-0.242 $\chi^2$/NDF: 7144.2/15

Left Out: -79.500+/-0.112 $\chi^2$/NDF:6584.1/16

Right Out: -100.418+/-0.241 $\chi^2$/NDF: 7115.7/18

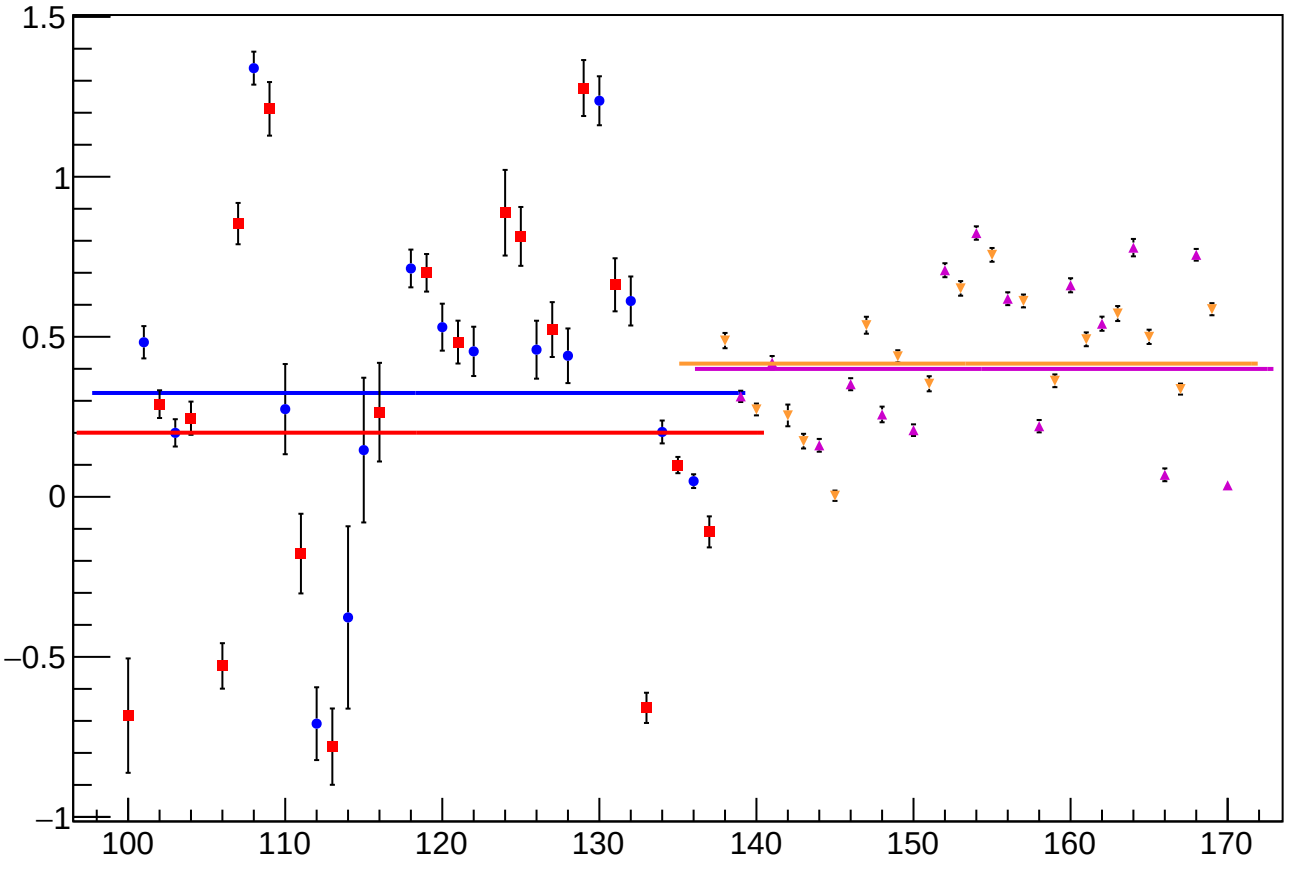
Left In: -77.086+/-0.112 $\chi^2$/NDF:7086.0/15

+ sign -82.687+/-0.101 $\chi^2$/NDF: 18338.8/32

All: -81.962+/-0.072 $\chi^2$/NDF: 40349.8/67

- sign -81.236+/-0.102 $\chi^2$/NDF: 21909.0/34

# reg_asym_sam_26_48_dd_diff_bpm12X_slope vs Slug




Right In: 0.324+/-0.013 $\chi^2$/NDF: 886.5/15

Left Out: 0.416+/-0.005 $\chi^2$/NDF:1512.3/16

Right Out: 0.200+/-0.014 $\chi^2$/NDF: 1206.3/18

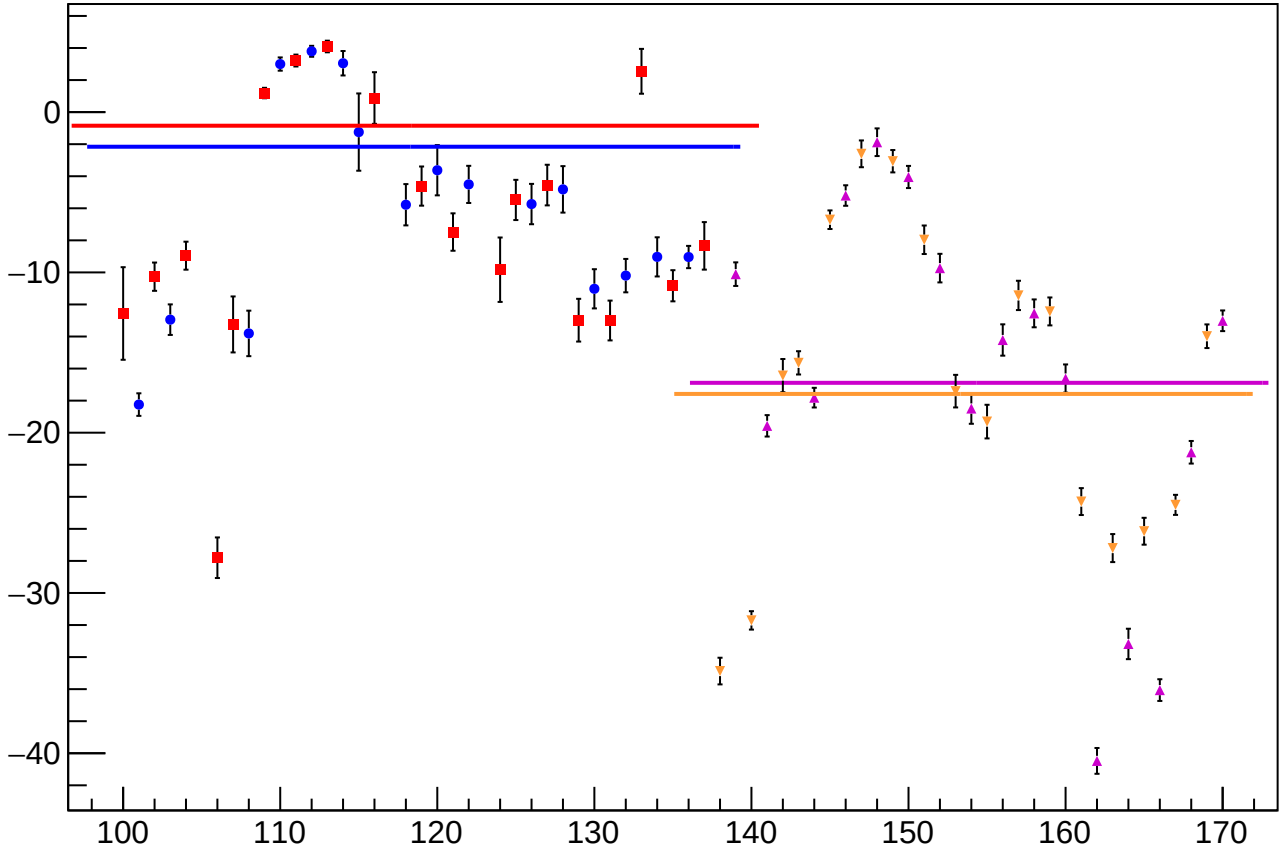
Left In: 0.400+/-0.005 $\chi^2$/NDF:2693.4/15

+ sign 0.404+/-0.005 $\chi^2$/NDF: 2440.3/32

All: 0.390+/-0.003 $\chi^2$/NDF: 6540.4/67

- sign 0.377+/-0.005 $\chi^2$/NDF: 4082.8/34

# reg_asym_sam_1548_avg_diff_bpm1X_slope vs Slug




Right In: -2.159+/-0.192 $\chi^2$/NDF: 1491.0/15

Left Out: -17.582+/-0.189 $\chi^2$/NDF:2787.4/16

Right Out: -0.848+/-0.170 $\chi^2$/NDF: 1465.4/18

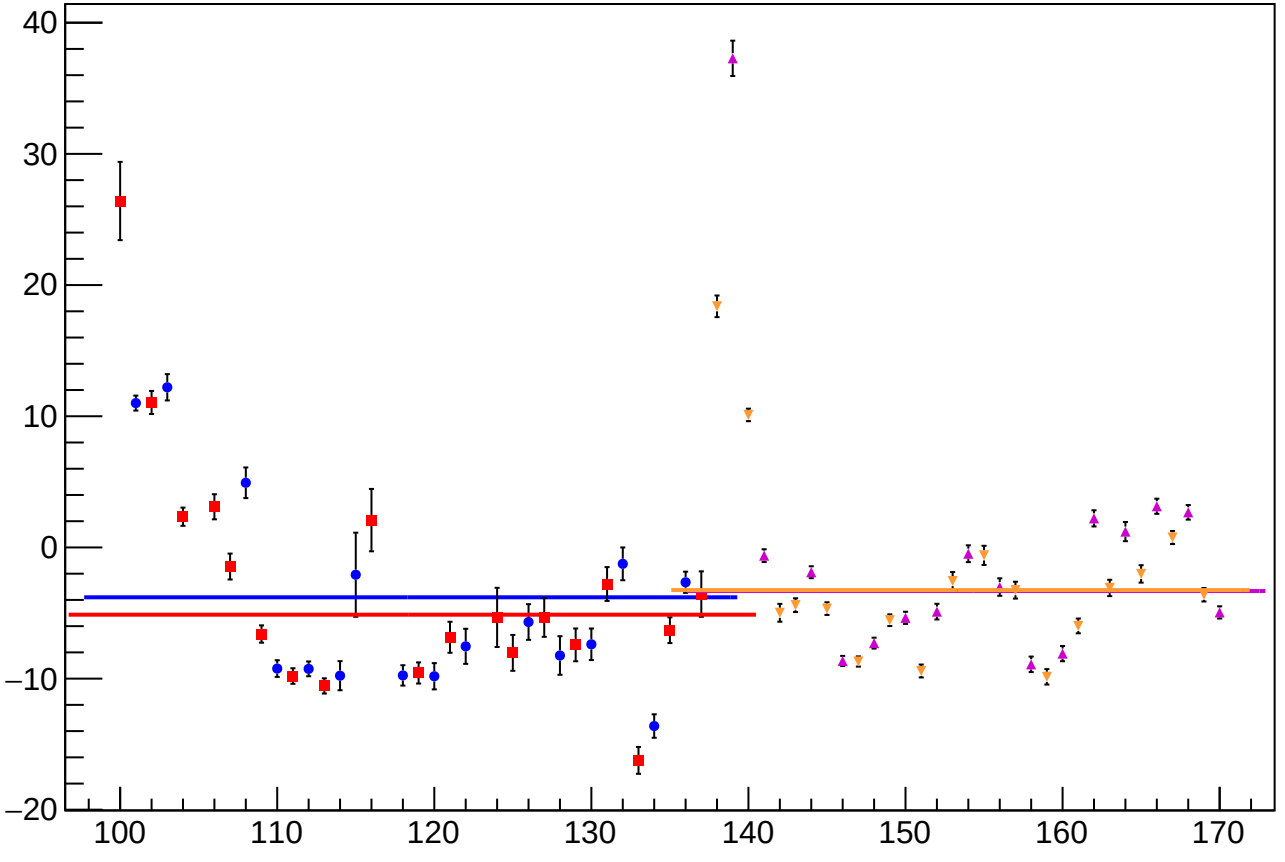
Left In: -16.889+/-0.189 $\chi^2$/NDF:3211.6/15

+ sign -9.987+/-0.135 $\chi^2$/NDF: 7554.0/32

All: -8.946+/-0.092 $\chi^2$/NDF: 16308.7/67

- sign -8.026+/-0.127 $\chi^2$/NDF: 8642.2/34

# reg_asym_sam_1548_avg_diff_bpm4aY_slope vs Slug




Right In: -3.800+/-0.226 $\chi^2$/NDF: 1425.5/15

Left Out: -3.251+/-0.133 $\chi^2$/NDF:2099.1/16

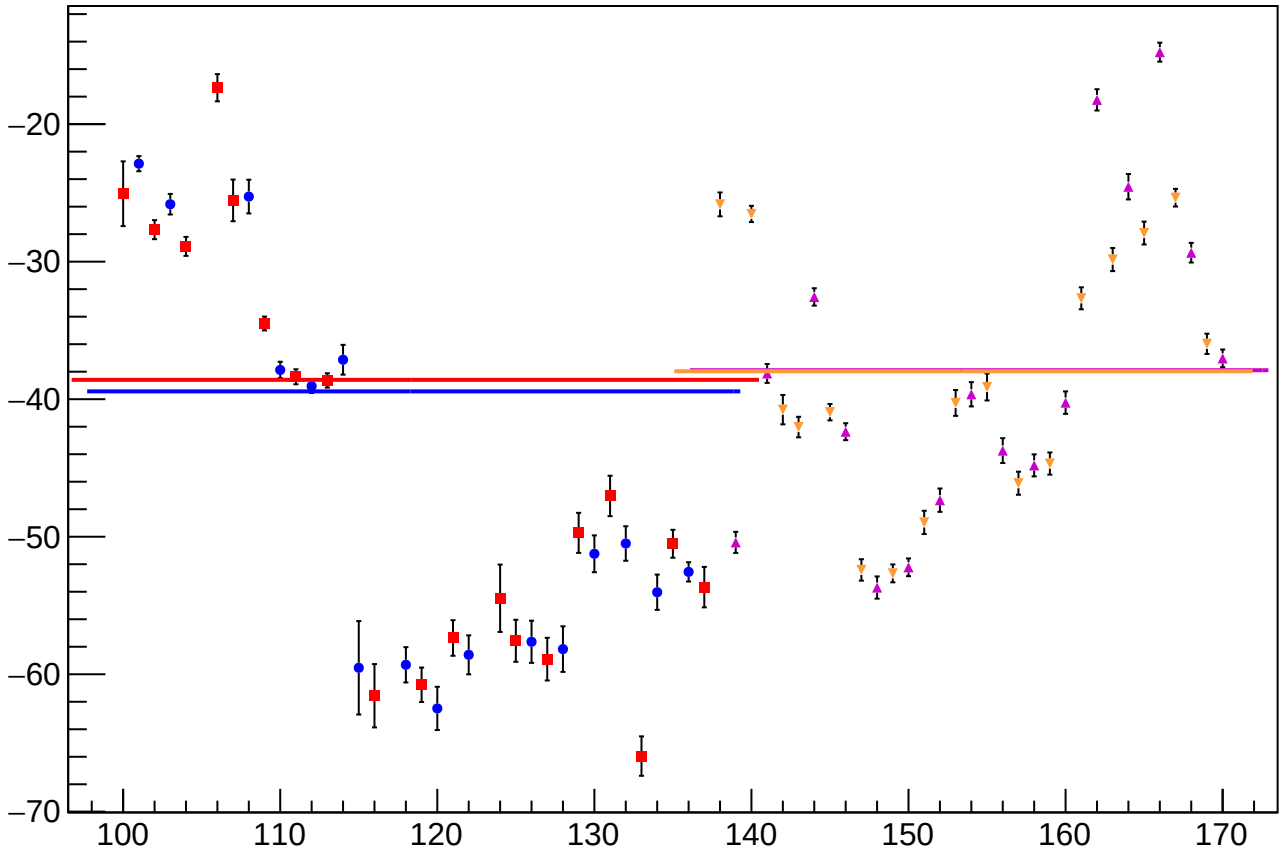
Right Out: -5.126+/-0.219 $\chi^2$/NDF: 980.6/18

Left In: -3.323+/-0.134 $\chi^2$/NDF:1807.0/15

+ sign -3.392+/-0.114 $\chi^2$/NDF: 3529.0/32

All: -3.604+/-0.081 $\chi^2$/NDF: 6372.7/67

- sign -3.817+/-0.115 $\chi^2$/NDF: 2836.8/34




Right In: -39.431+/-0.225 $\chi^2$/NDF: 2958.1/15

Left Out: -37.968+/-0.186 $\chi^2$/NDF:2500.8/16

Right Out: -38.593+/-0.213 $\chi^2$/NDF: 2772.1/18

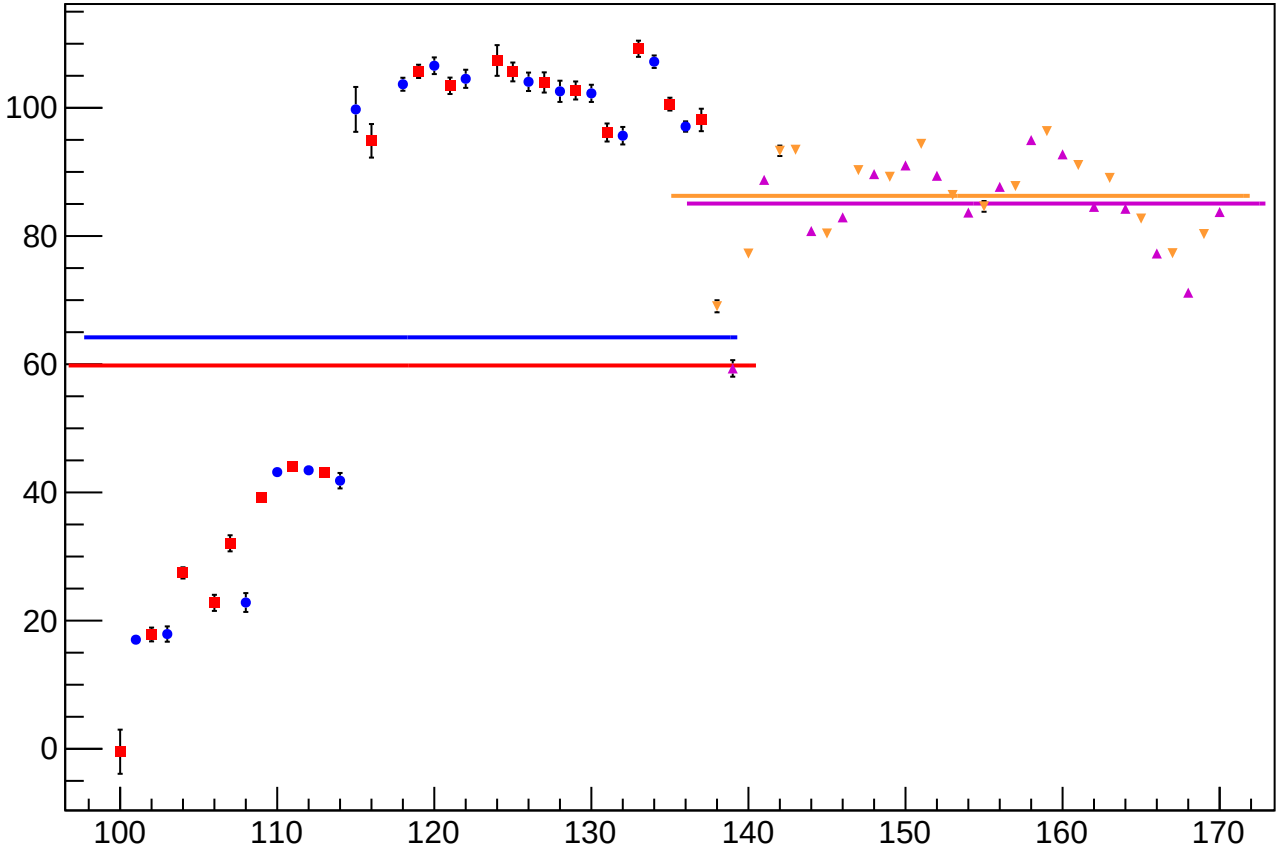
Left In: -37.893+/-0.185 $\chi^2$/NDF:3637.4/15

+ sign -38.561+/-0.143 $\chi^2$/NDF: 5484.0/32

All: -38.373+/-0.100 $\chi^2$/NDF: 11903.0/67

- sign -38.195+/-0.140 $\chi^2$/NDF: 6415.7/34

# reg_asym_sam_1548_avg_diff_bpm4eY_slope vs Slug




Right In: 64.196+/-0.258 $\chi^2$/NDF: 18596.4/15

Left Out: 86.270+/-0.154 $\chi^2$/NDF:1915.6/16

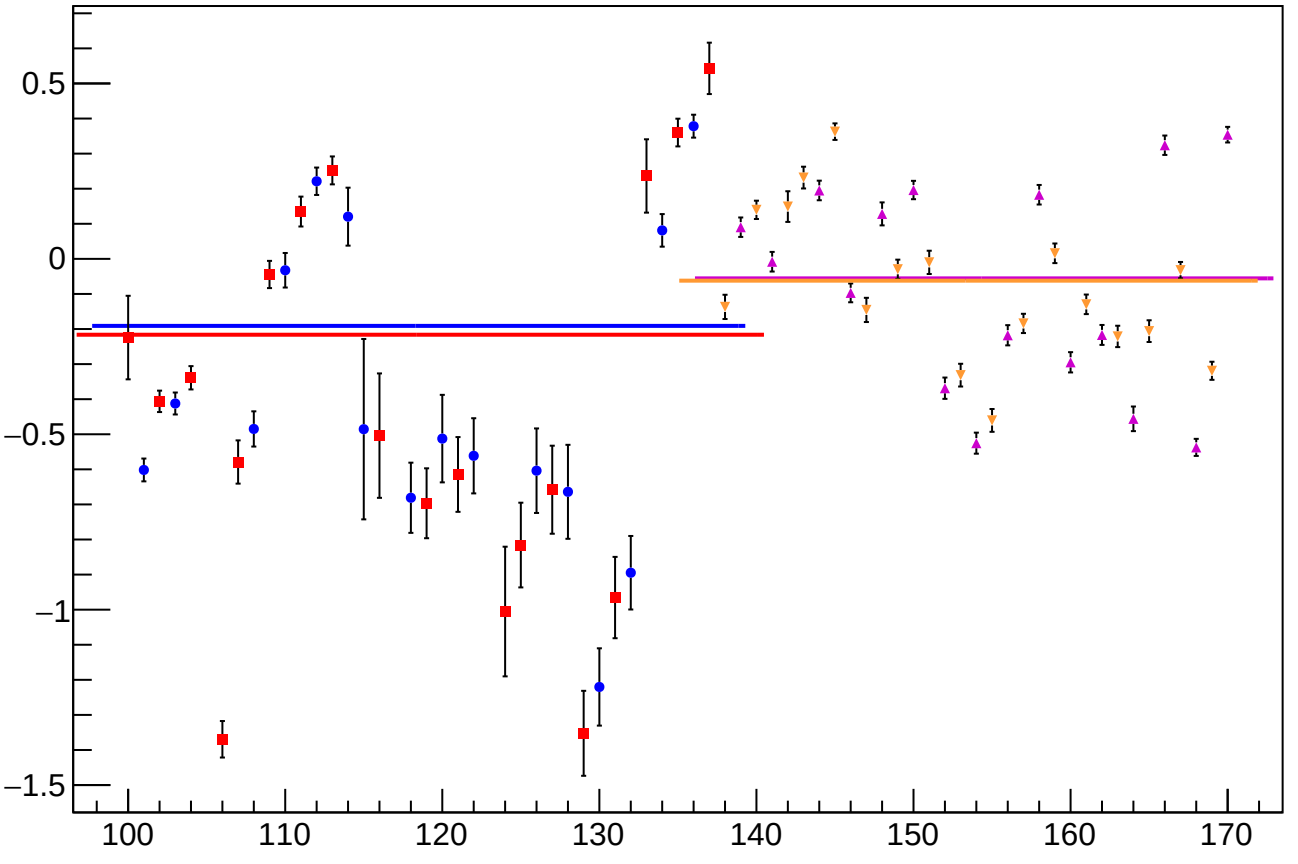
Right Out: 59.805+/-0.249 $\chi^2$/NDF: 17431.2/18

Left In: 85.066+/-0.155 $\chi^2$/NDF:1796.2/15

+ sign 80.460+/-0.132 $\chi^2$/NDF: 25926.3/32

All: 79.228+/-0.093 $\chi^2$/NDF: 52758.6/67

- sign 78.008+/-0.131 $\chi^2$/NDF: 26659.2/34




Right In: -0.191+/-0.013 $\chi^2$/NDF: 918.3/15

Left Out: -0.062+/-0.007 $\chi^2$/NDF:914.7/16

Right Out: -0.216+/-0.013 $\chi^2$/NDF: 1368.1/18

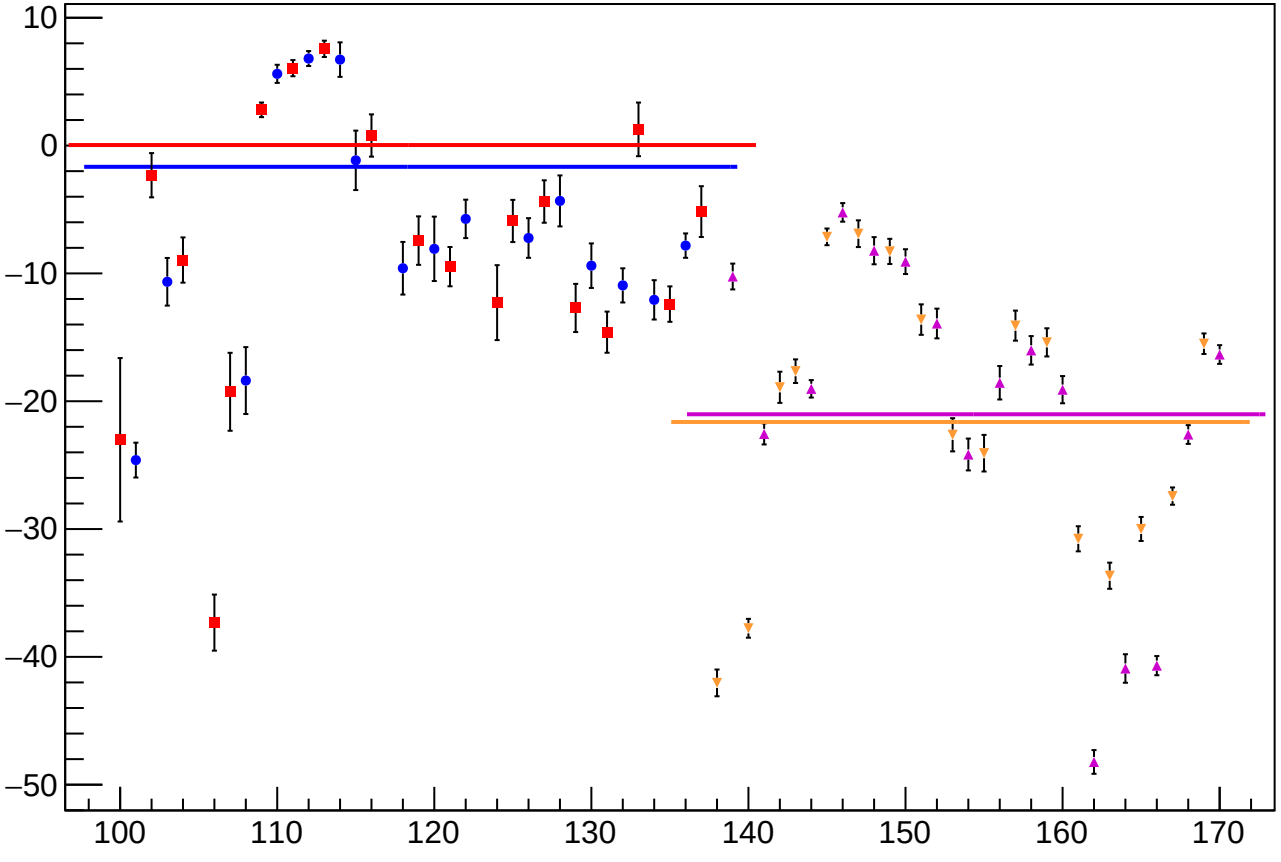
Left In: -0.056+/-0.007 $\chi^2$/NDF:1844.1/15

+ sign -0.090+/-0.006 $\chi^2$/NDF: 1905.2/32

All: -0.091+/-0.004 $\chi^2$/NDF: 5236.9/67

- sign -0.092+/-0.006 $\chi^2$/NDF: 3331.6/34

# reg_asym_sam_3748_avg_diff_bpm1X_slope vs Slug




Right In: -1.661+/-0.308 $\chi^2$/NDF: 900.3/15

Left Out: -21.622+/-0.229 $\chi^2$/NDF:2313.9/16

Right Out: 0.042+/-0.282 $\chi^2$/NDF: 931.1/18

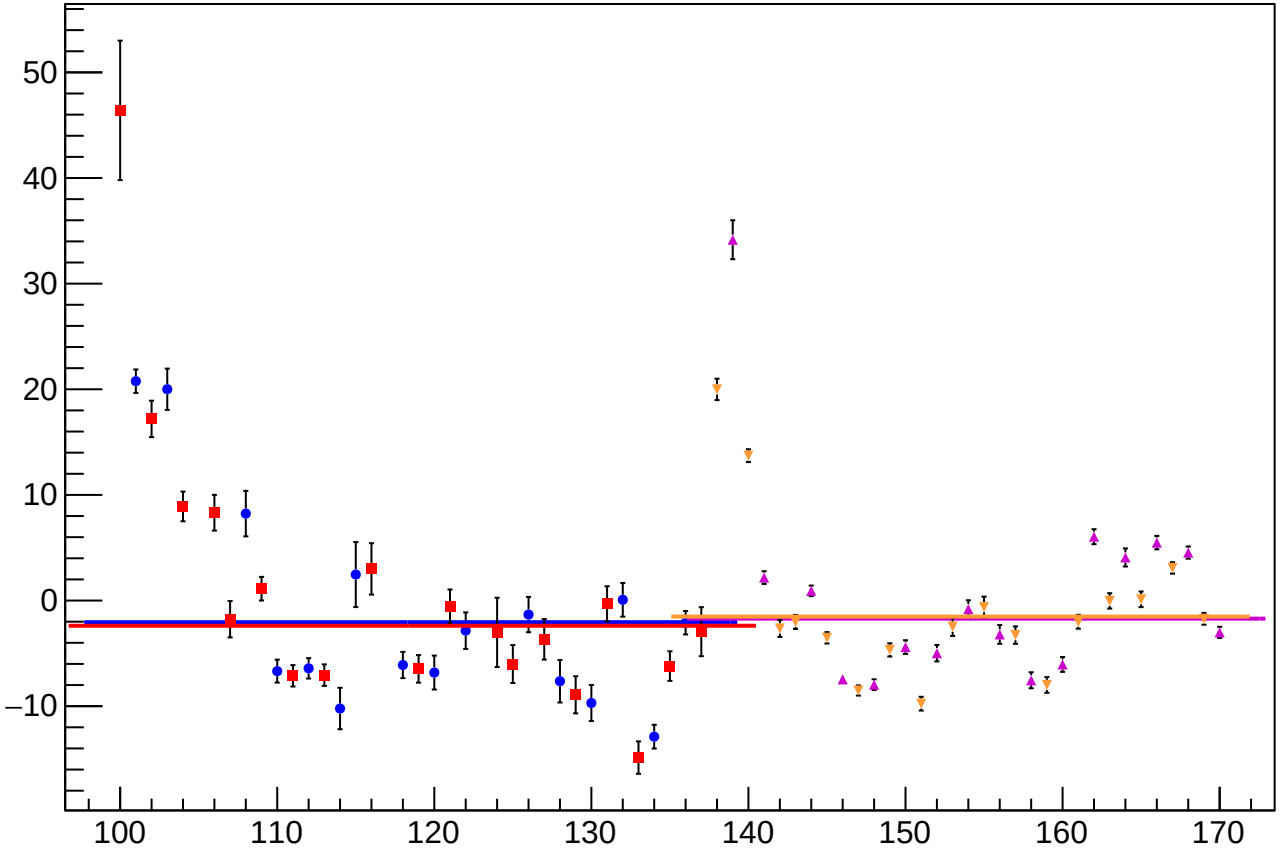
Left In: -21.020+/-0.226 $\chi^2$/NDF:2875.3/15

+ sign -14.518+/-0.184 $\chi^2$/NDF: 5918.5/32

All: -13.610+/-0.127 $\chi^2$/NDF: 13168.5/67

- sign -12.774+/-0.176 $\chi^2$/NDF: 7203.1/34

# reg_asym_sam_3748_avg_diff_bpm4aY_slope vs Slug




Right In: -2.050+/-0.356 $\chi^2$/NDF: 771.9/15

Left Out: -1.517+/-0.161 $\chi^2$/NDF:1657.2/16

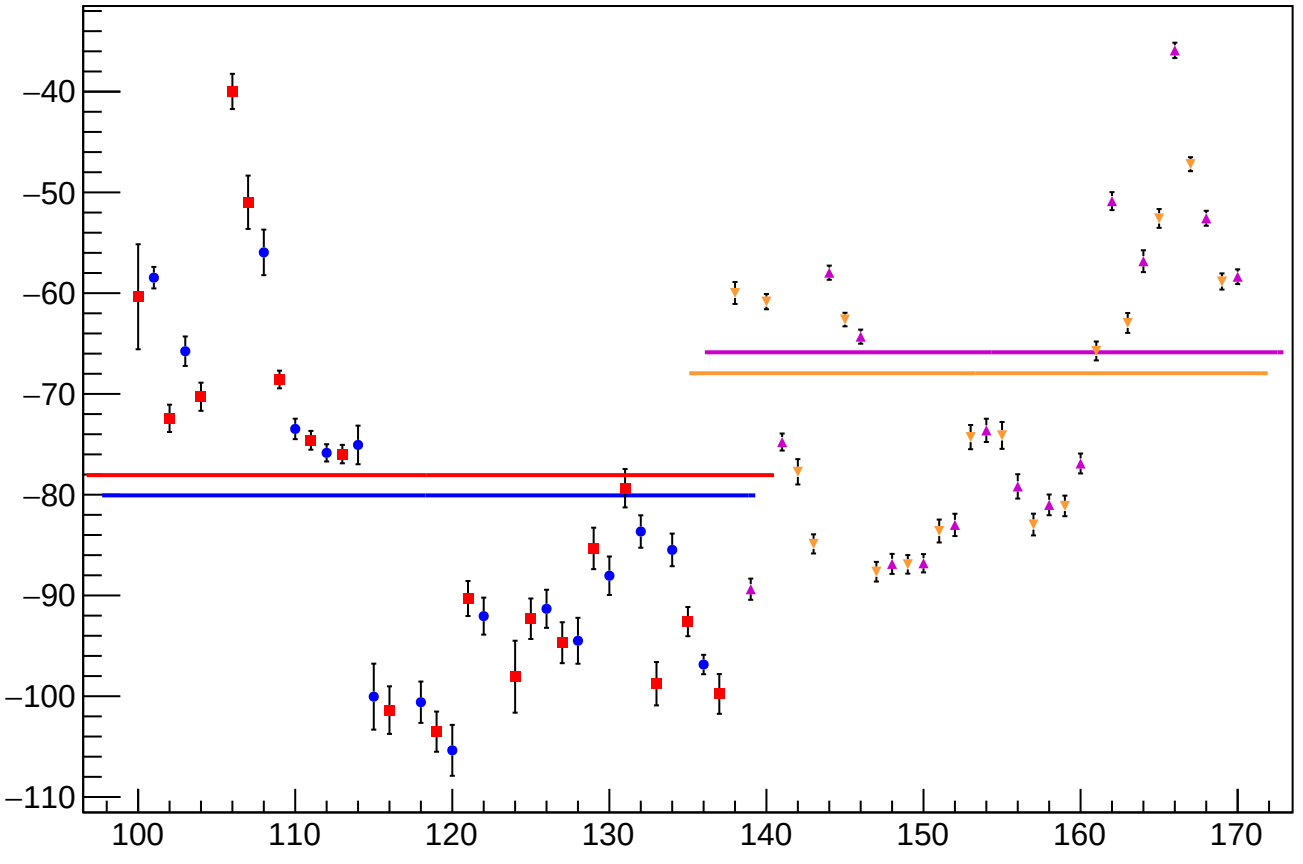
Right Out: -2.386+/-0.355 $\chi^2$/NDF: 450.9/18

Left In: -1.713+/-0.160 $\chi^2$/NDF:1331.1/15

+ sign -1.608+/-0.147 $\chi^2$/NDF: 2430.9/32

All: -1.718+/-0.103 $\chi^2$/NDF: 4217.0/67

- sign -1.826+/-0.146 $\chi^2$/NDF: 1785.0/34




Right In: -80.069+/-0.364 $\chi^2$/NDF: 1387.2/15

Left Out: -67.947+/-0.226 $\chi^2$/NDF:3338.3/16

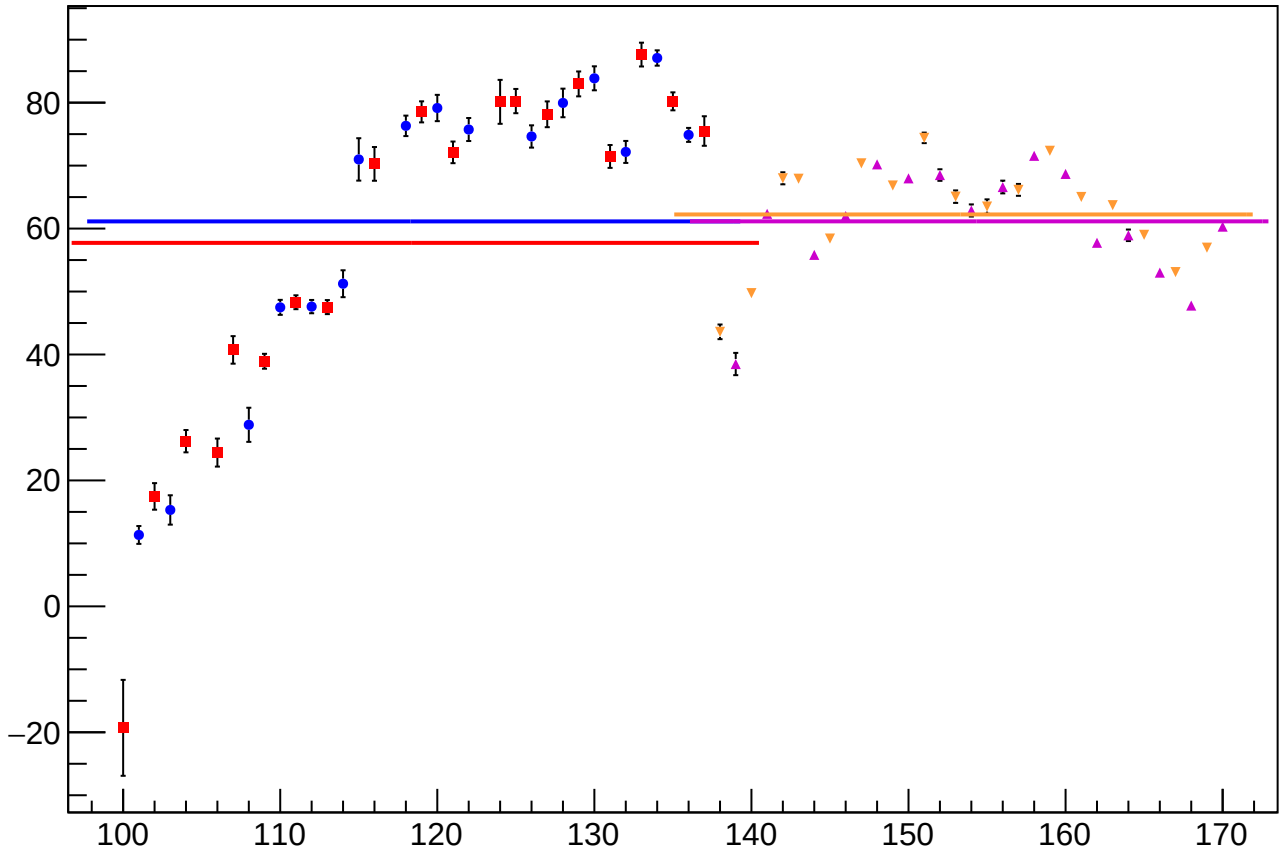
Right Out: -78.059+/-0.354 $\chi^2$/NDF: 1561.2/18

Left In: -65.867+/-0.222 $\chi^2$/NDF:4779.1/15

+ sign -71.316+/-0.192 $\chi^2$/NDF: 5524.5/32

All: -70.293+/-0.134 $\chi^2$/NDF: 12773.3/67

- sign -69.314+/-0.188 $\chi^2$/NDF: 7193.4/34




Right In: 61.139+/-0.401 $\chi^2$/NDF: 3229.3/15

Left Out: 62.242+/-0.186 $\chi^2$/NDF:1617.2/16

Right Out: 57.728+/-0.400 $\chi^2$/NDF: 2775.6/18

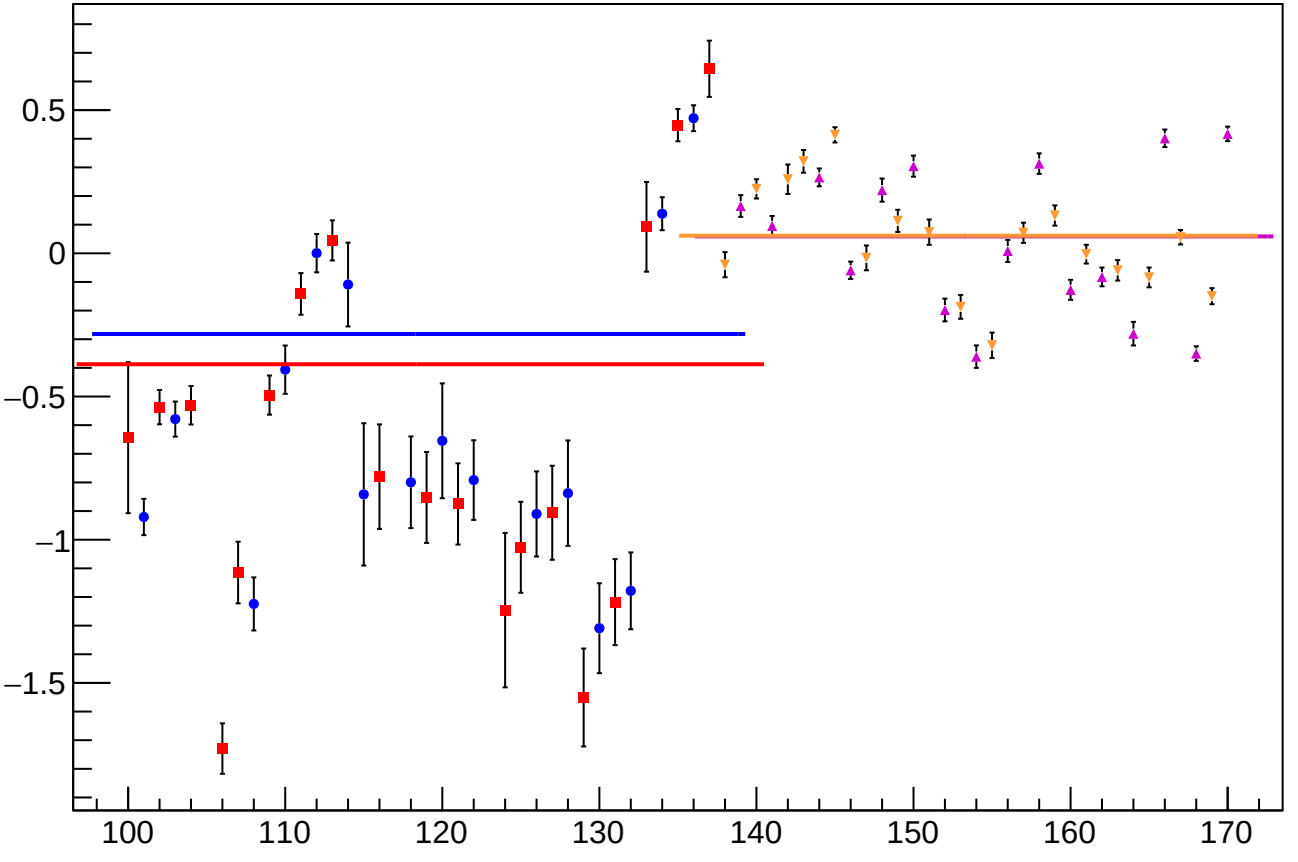
Left In: 61.145+/-0.185 $\chi^2$/NDF:1433.5/15

+ sign 62.046+/-0.169 $\chi^2$/NDF: 4852.7/32

All: 61.289+/-0.119 $\chi^2$/NDF: 9161.7/67

- sign 60.546+/-0.168 $\chi^2$/NDF: 4269.3/34

# reg_asym_sam_3748_avg_diff_bpm12X_slope vs Slug




Right In: -0.282+/-0.022 $\chi^2$/NDF: 728.2/15

Left Out: 0.062+/-0.009 $\chi^2$/NDF:470.7/16

Right Out: -0.387+/-0.022 $\chi^2$/NDF: 818.7/18

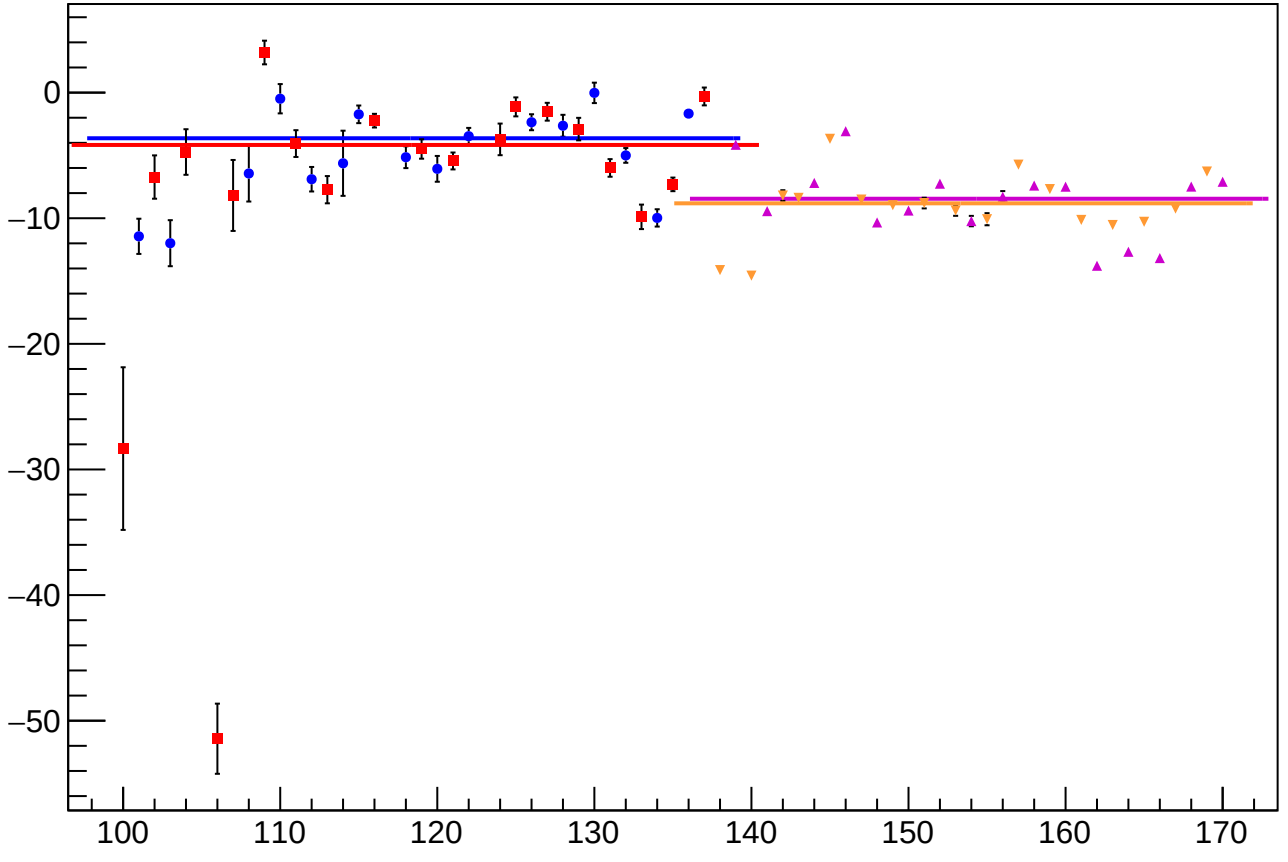
Left In: 0.059+/-0.008 $\chi^2$/NDF:1037.2/15

+ sign 0.015+/-0.008 $\chi^2$/NDF: 1416.7/32

All: 0.008+/-0.006 $\chi^2$/NDF: 3636.2/67

- sign 0.002+/-0.008 $\chi^2$/NDF: 2218.1/34

# reg_asym_sam_1526_avg_diff_bpm1X_slope vs Slug




Right In: -3.634+/-0.189 $\chi^2$/NDF: 234.8/15

Left Out: -8.814+/-0.076 $\chi^2$/NDF:1527.8/16

Right Out: -4.167+/-0.199 $\chi^2$/NDF: 529.7/18

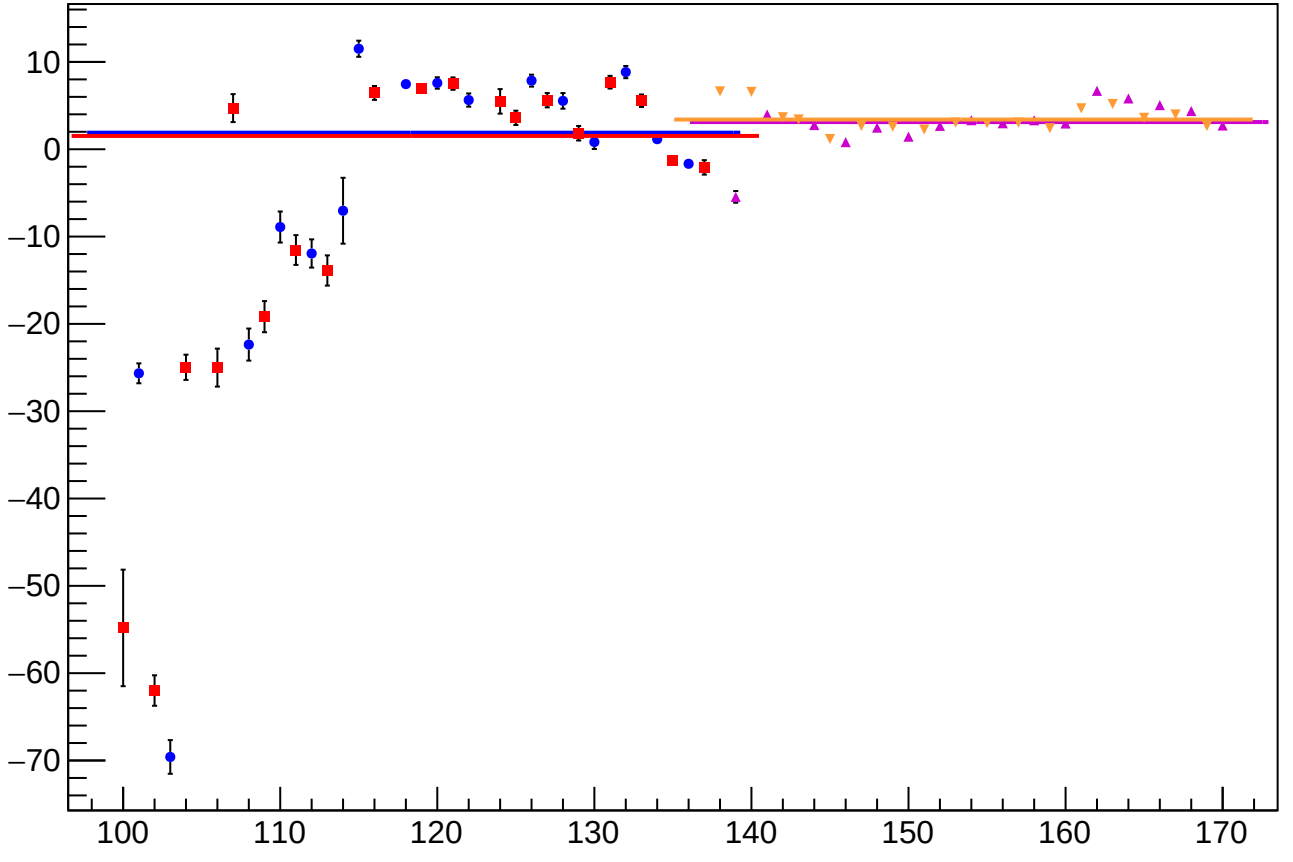
Left In: -8.449+/-0.074 $\chi^2$/NDF:1750.1/15

+ sign -8.099+/-0.070 $\chi^2$/NDF: 2409.8/32

All: -8.015+/-0.049 $\chi^2$/NDF: 5097.9/67

- sign -7.933+/-0.069 $\chi^2$/NDF: 2685.2/34

# reg_asym_sam_1526_avg_diff_bpm4aY_slope vs Slug




Right In: 1.898+/-0.189 $\chi^2$/NDF: 2838.2/15

Left Out: 3.403+/-0.054 $\chi^2$/NDF:667.8/16

Right Out: 1.525+/-0.208 $\chi^2$/NDF: 2559.8/18

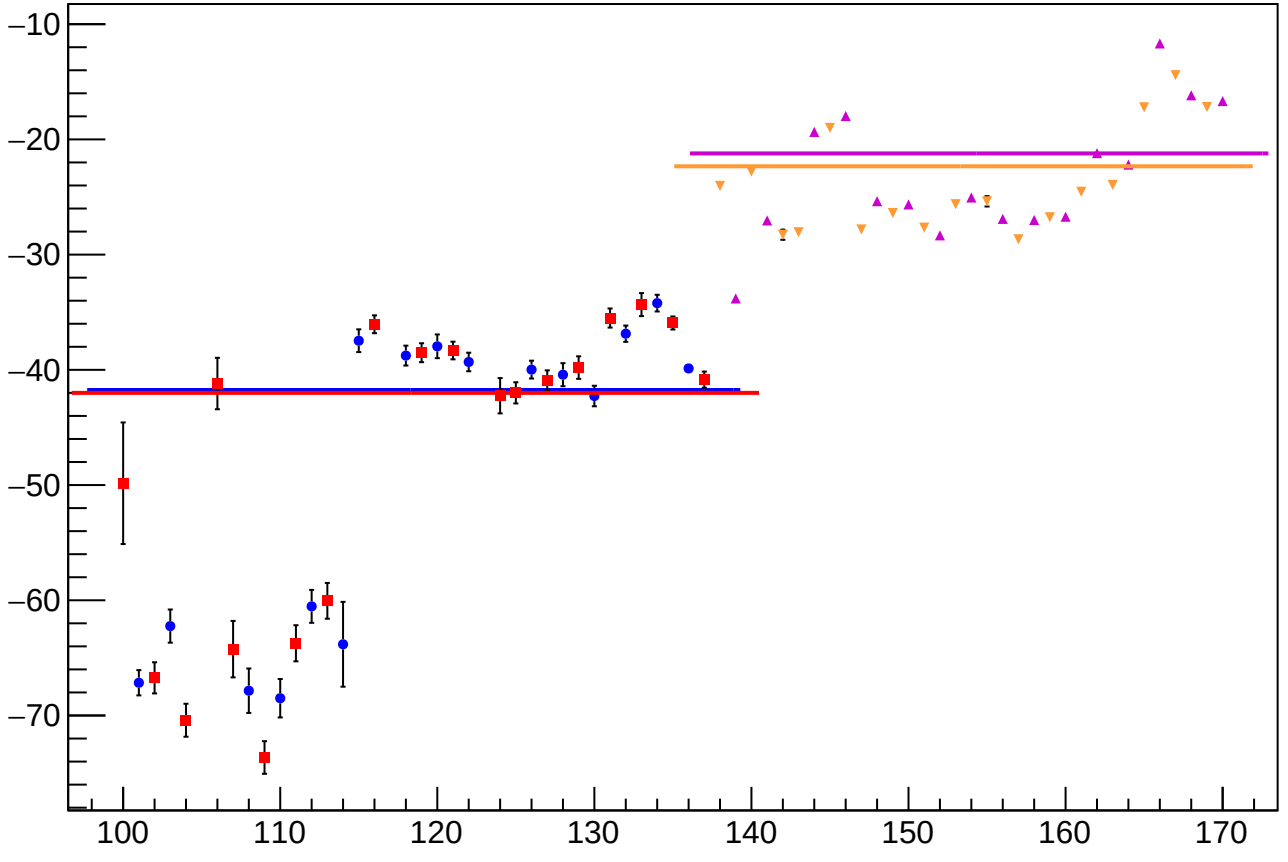
Left In: 3.113+/-0.052 $\chi^2$/NDF:1049.9/15

+ sign 3.291+/-0.052 $\chi^2$/NDF: 3564.7/32

All: 3.152+/-0.036 $\chi^2$/NDF: 7243.1/67

- sign 3.019+/-0.051 $\chi^2$/NDF: 3664.4/34

# reg_asym_sam_1526_avg_diff_bpm4eX_slope vs Slug




Right In: -41.751+/-0.208 $\chi^2$/NDF: 1633.9/15

Left Out: -22.333+/-0.075 $\chi^2$/NDF:4098.7/16

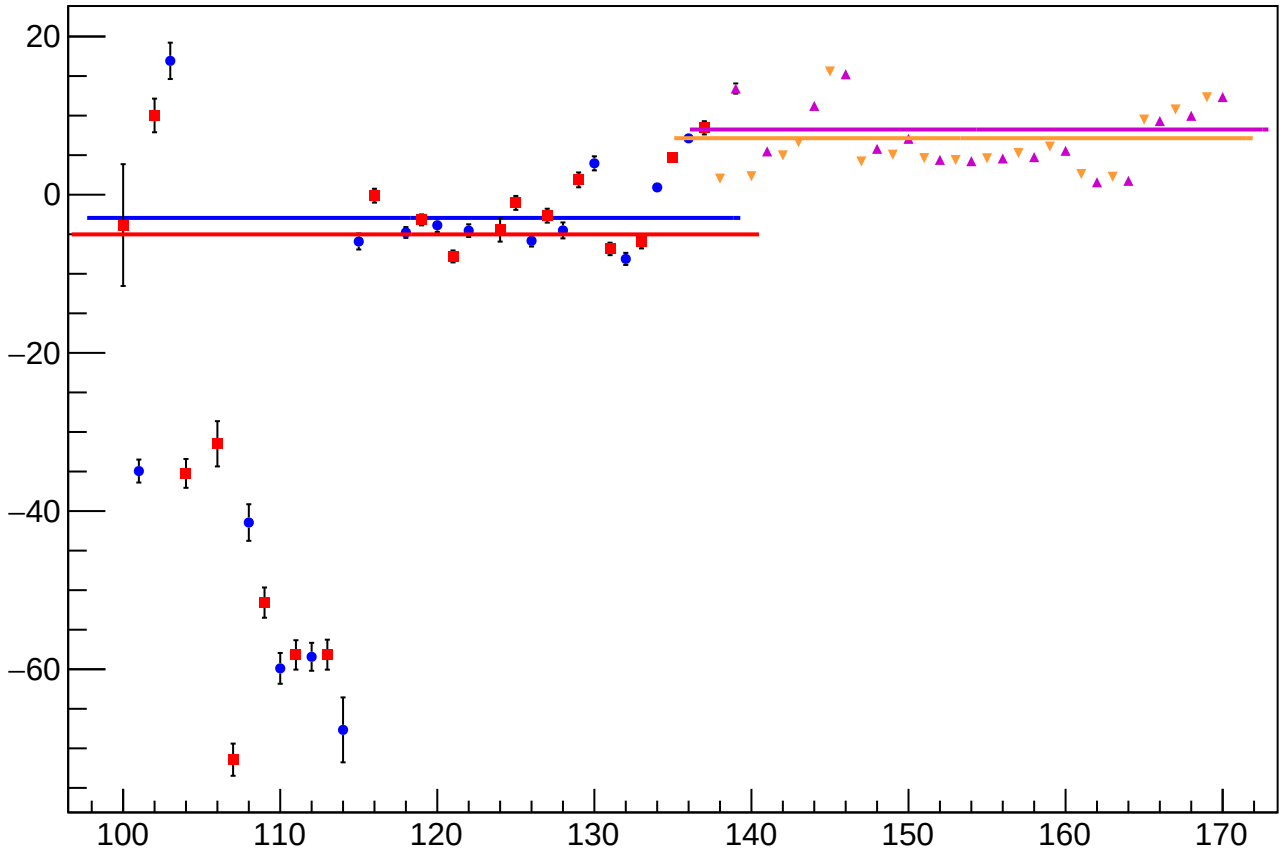
Right Out: -41.999+/-0.228 $\chi^2$/NDF: 1985.2/18

Left In: -21.217+/-0.073 $\chi^2$/NDF:5774.2/15

+ sign -24.560+/-0.070 $\chi^2$/NDF: 13476.0/32

All: -23.829+/-0.049 $\chi^2$/NDF: 28977.0/67

- sign -23.122+/-0.069 $\chi^2$/NDF: 15288.2/34




Right In: -2.936+/-0.210 $\chi^2$/NDF: 3725.6/15

Left Out: 7.144+/-0.062 $\chi^2$/NDF:4775.0/16

Right Out: -5.018+/-0.232 $\chi^2$/NDF: 4377.3/18

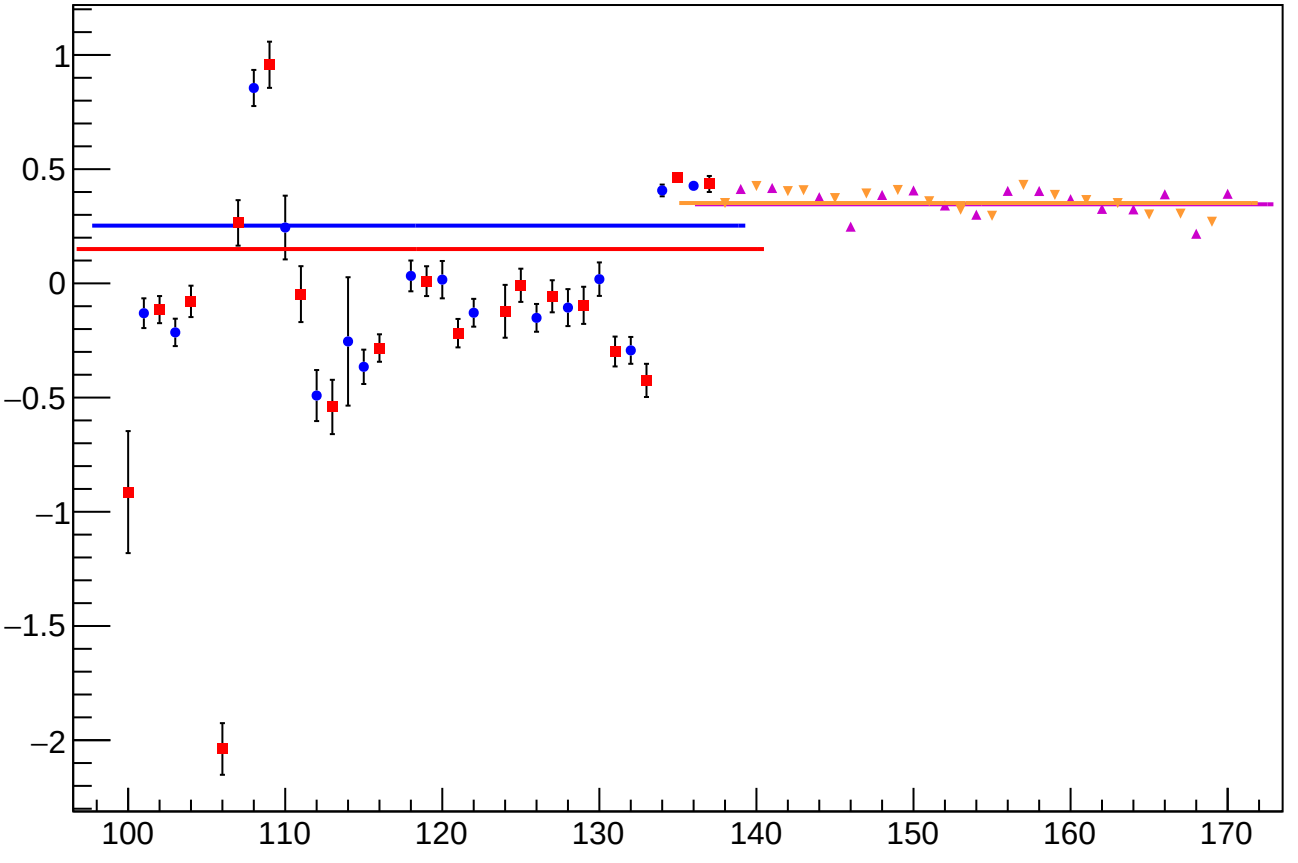
Left In: 8.242+/-0.060 $\chi^2$/NDF:4885.7/15

+ sign 6.346+/-0.059 $\chi^2$/NDF: 10629.2/32

All: 6.882+/-0.041 $\chi^2$/NDF: 23121.1/67

- sign 7.405+/-0.058 $\chi^2$/NDF: 12328.7/34

# reg_asym_sam_1526_avg_diff_bpm12X_slope vs Slug




Right In: 0.253+/-0.011 $\chi^2$/NDF: 631.0/15

Left Out: 0.352+/-0.003 $\chi^2$/NDF:314.0/16

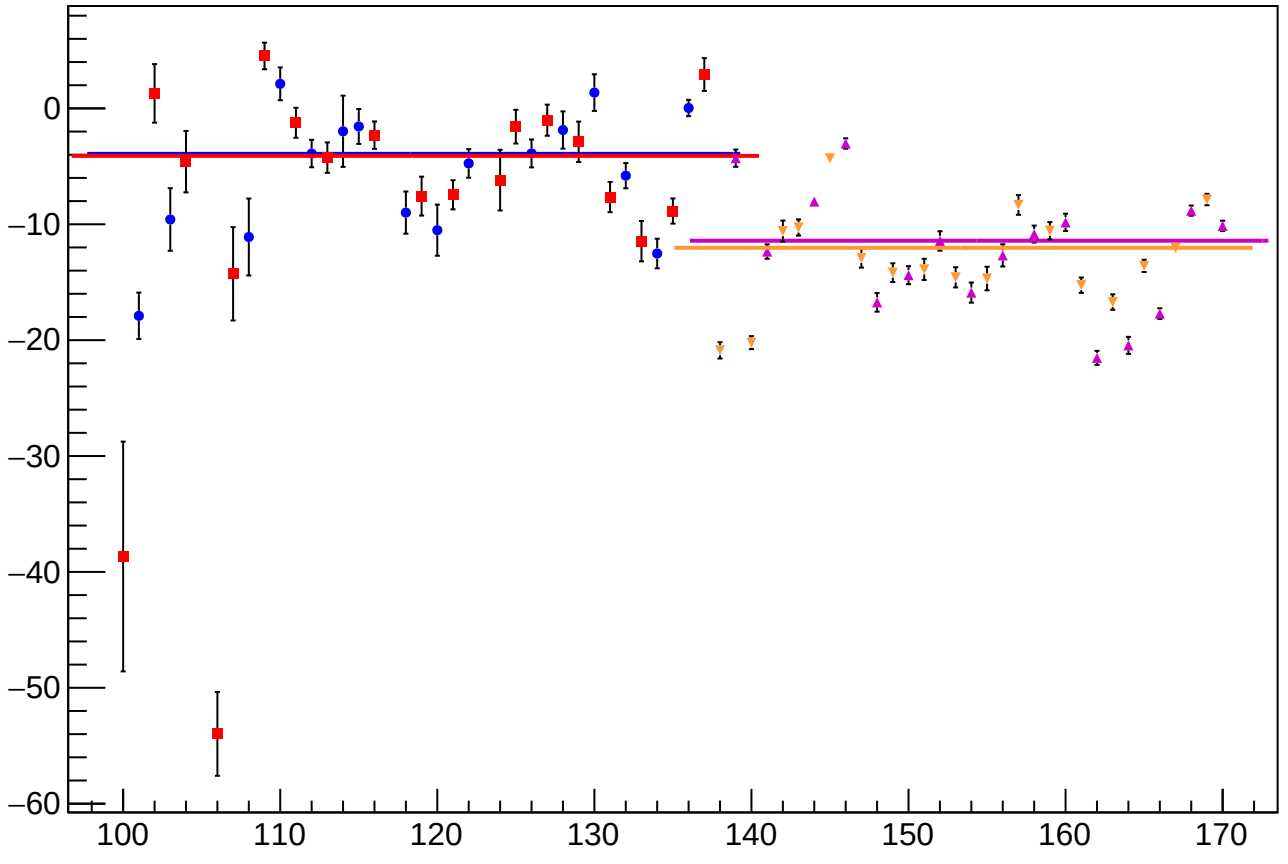
Right Out: 0.150+/-0.013 $\chi^2$/NDF: 1018.0/18

Left In: 0.346+/-0.003 $\chi^2$/NDF:600.0/15

+ sign 0.346+/-0.003 $\chi^2$/NDF: 1015.1/32

All: 0.342+/-0.002 $\chi^2$/NDF: 2843.9/67

- sign 0.338+/-0.003 $\chi^2$/NDF: 1824.6/34




Right In: -3.924+/-0.346 $\chi^2$/NDF: 188.8/15

Left Out: -12.029+/-0.153 $\chi^2$/NDF:966.3/16

Right Out: -4.096+/-0.357 $\chi^2$/NDF: 366.9/18

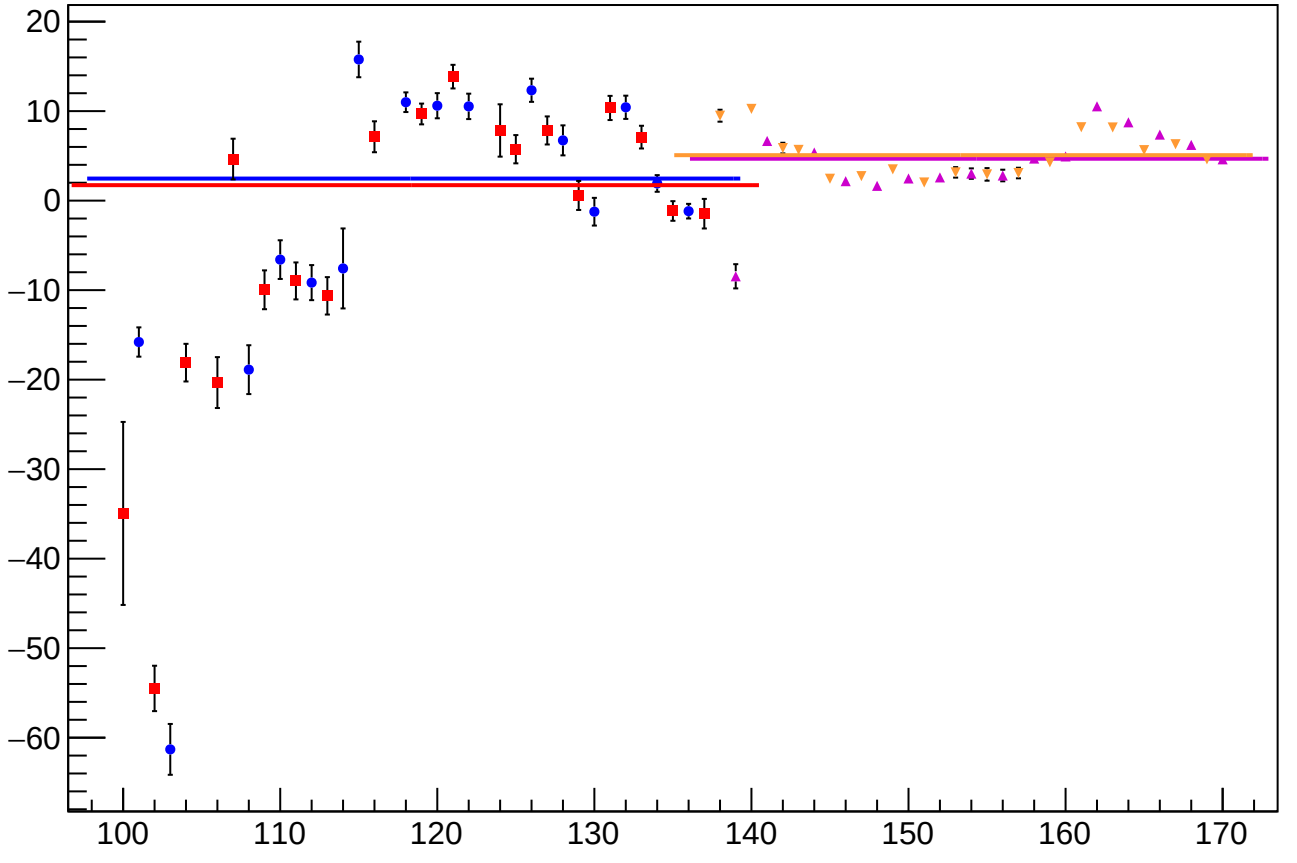
Left In: -11.418+/-0.149 $\chi^2$/NDF:1257.5/15

+ sign -10.702+/-0.140 $\chi^2$/NDF: 1614.0/32

All: -10.512+/-0.098 $\chi^2$/NDF: 3600.4/67

- sign -10.329+/-0.138 $\chi^2$/NDF: 1982.8/34

# reg_asym_sam_3726_avg_diff_bpm4aY_slope vs Slug




Right In: 2.465+/-0.357 $\chi^2$/NDF: 1046.7/15

Left Out: 5.079+/-0.109 $\chi^2$/NDF:469.0/16

Right Out: 1.728+/-0.386 $\chi^2$/NDF: 983.1/18

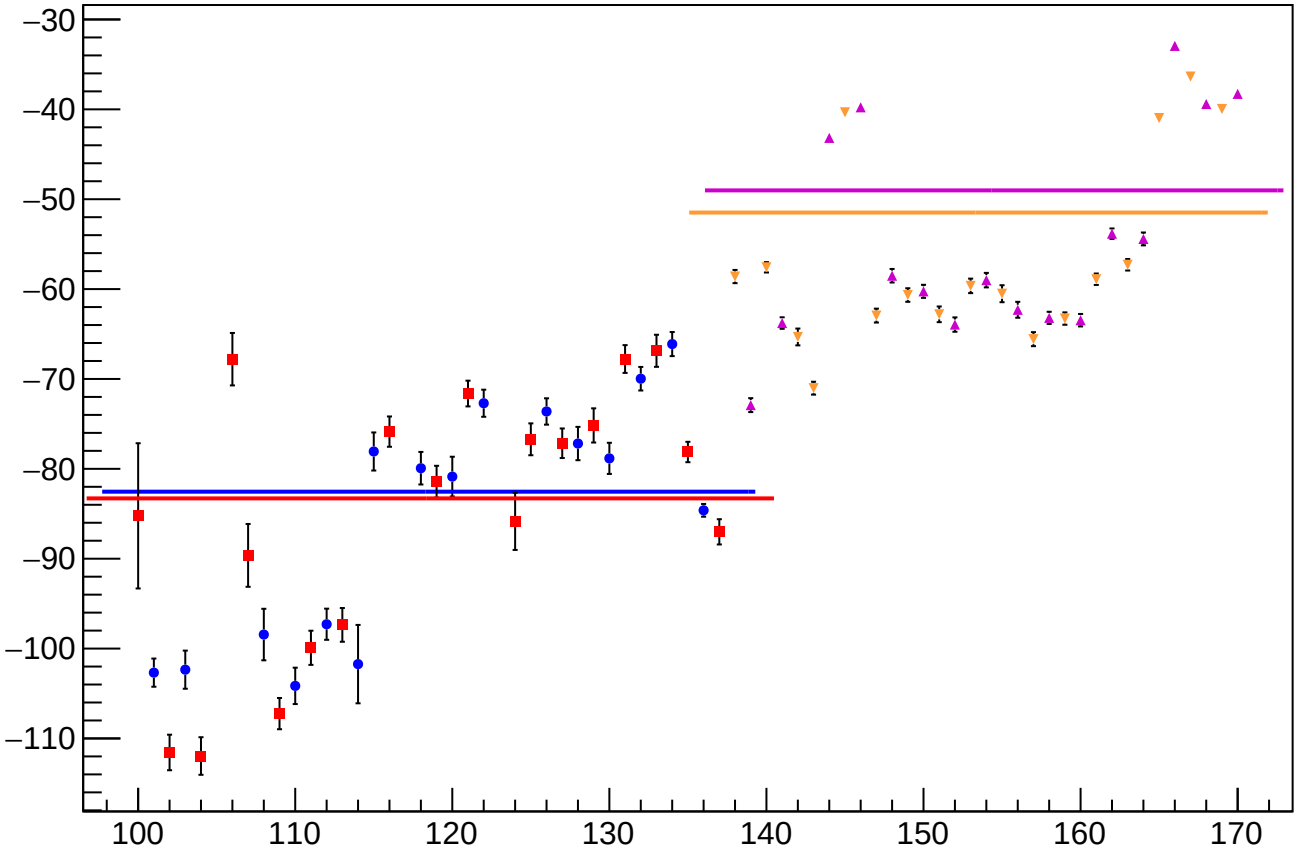
Left In: 4.681+/-0.106 $\chi^2$/NDF:601.6/15

+ sign 4.854+/-0.105 $\chi^2$/NDF: 1564.8/32

All: 4.659+/-0.073 $\chi^2$/NDF: 3210.6/67

- sign 4.475+/-0.102 $\chi^2$/NDF: 1639.1/34

# reg_asym_sam_3726_avg_diff_bpm4eX_slope vs Slug




Right In: -82.542+/-0.384 $\chi^2$/NDF: 838.8/15

Left Out: -51.483+/-0.152 $\chi^2$/NDF:5725.0/16

Right Out: -83.290+/-0.414 $\chi^2$/NDF: 1092.6/18

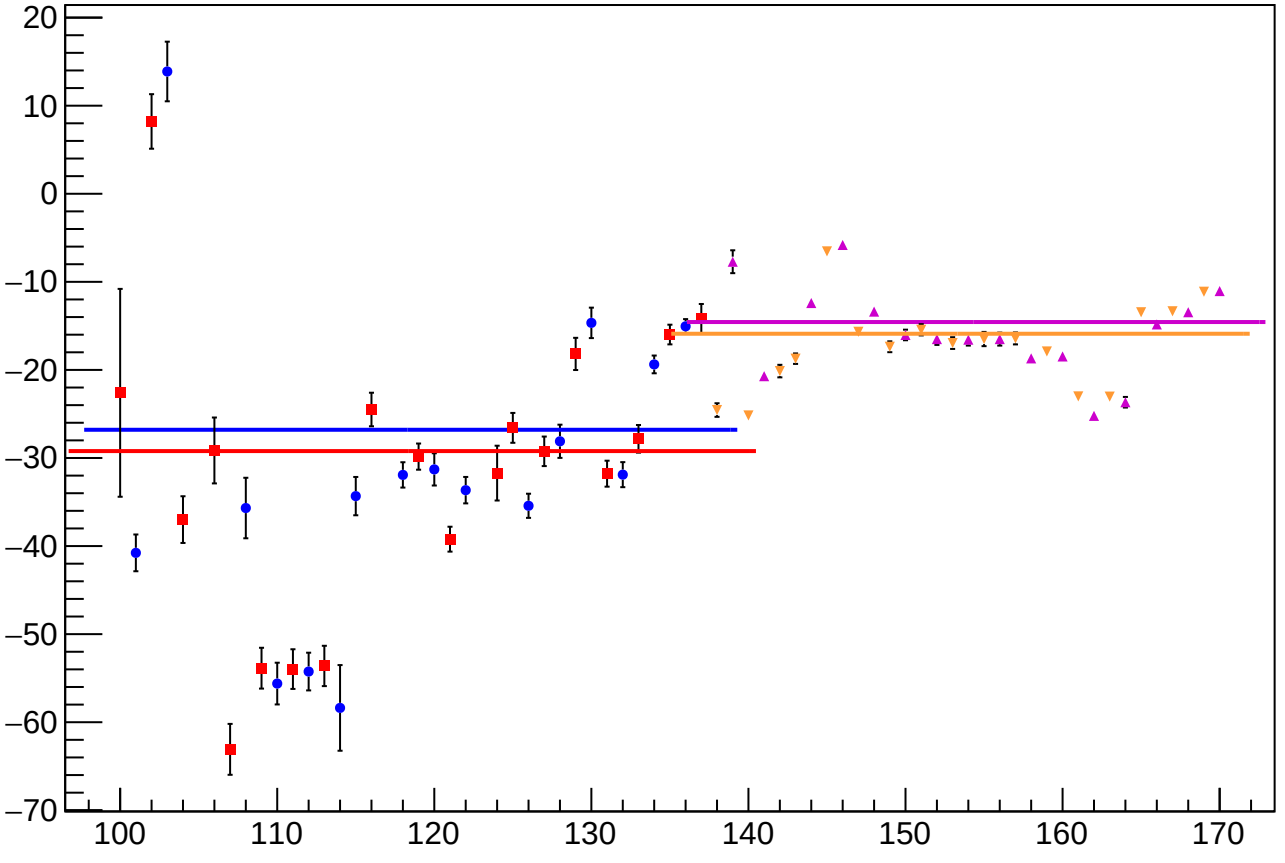
Left In: -49.018+/-0.147 $\chi^2$/NDF:6458.0/15

+ sign -55.673+/-0.141 $\chi^2$/NDF: 12213.9/32

All: -54.230+/-0.099 $\chi^2$/NDF: 26050.1/67

- sign -52.843+/-0.138 $\chi^2$/NDF: 13631.2/34

# reg_asym_sam_3726_avg_diff_bpm4eY_slope vs Slug




Right In: -26.796+/-0.396 $\chi^2$/NDF: 963.5/15

Left Out: -15.894+/-0.125 $\chi^2$/NDF:1803.1/16

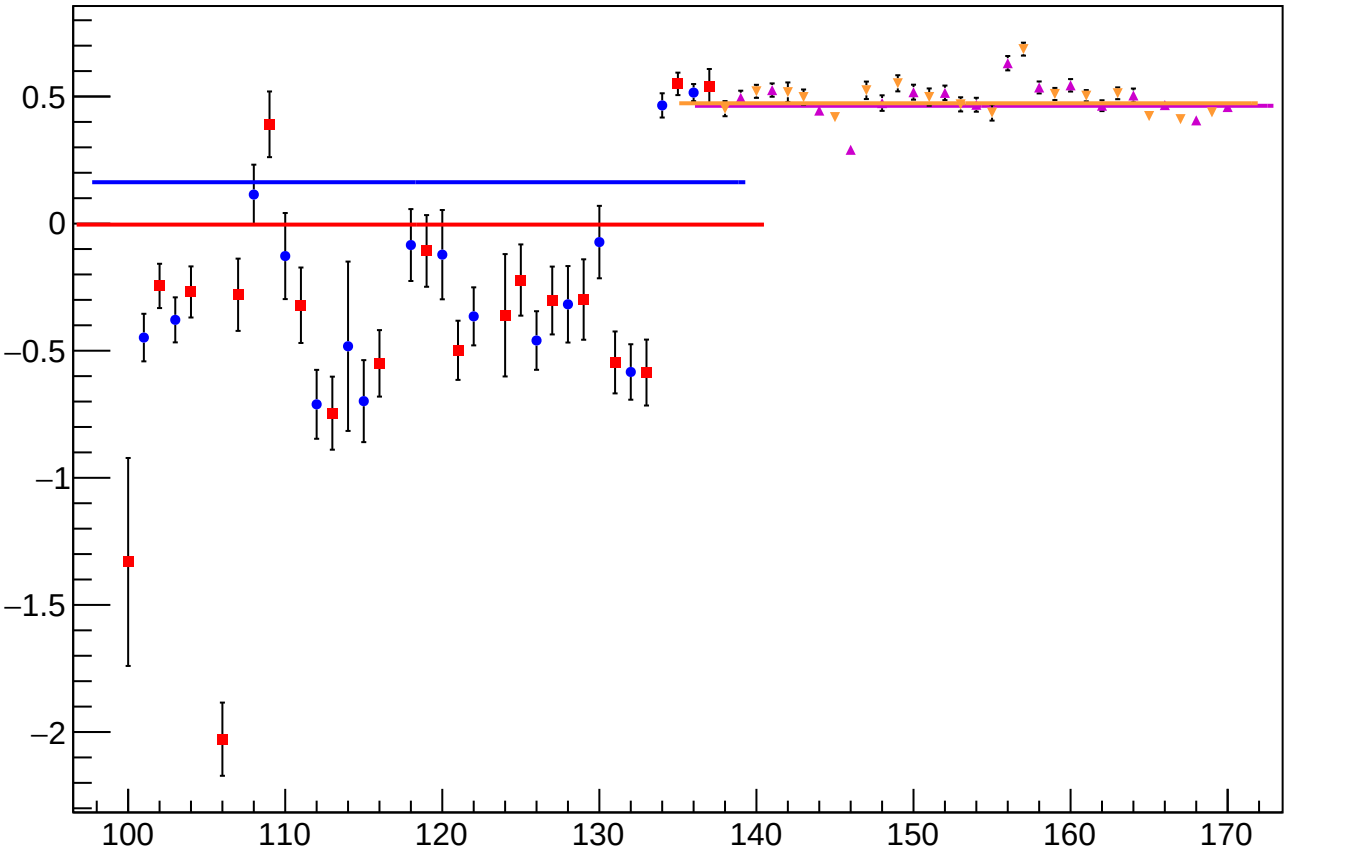
Right Out: -29.216+/-0.431 $\chi^2$/NDF: 960.7/18

Left In: -14.564+/-0.122 $\chi^2$/NDF:1867.5/15

+ sign -16.886+/-0.119 $\chi^2$/NDF: 3457.0/32

All: -16.255+/-0.084 $\chi^2$/NDF: 7409.8/67

- sign -15.647+/-0.117 $\chi^2$/NDF: 3898.0/34




Right In: 0.163+/-0.021 $\chi^2$/NDF: 422.6/15

Left Out: 0.473+/-0.006 $\chi^2$/NDF:131.9/16

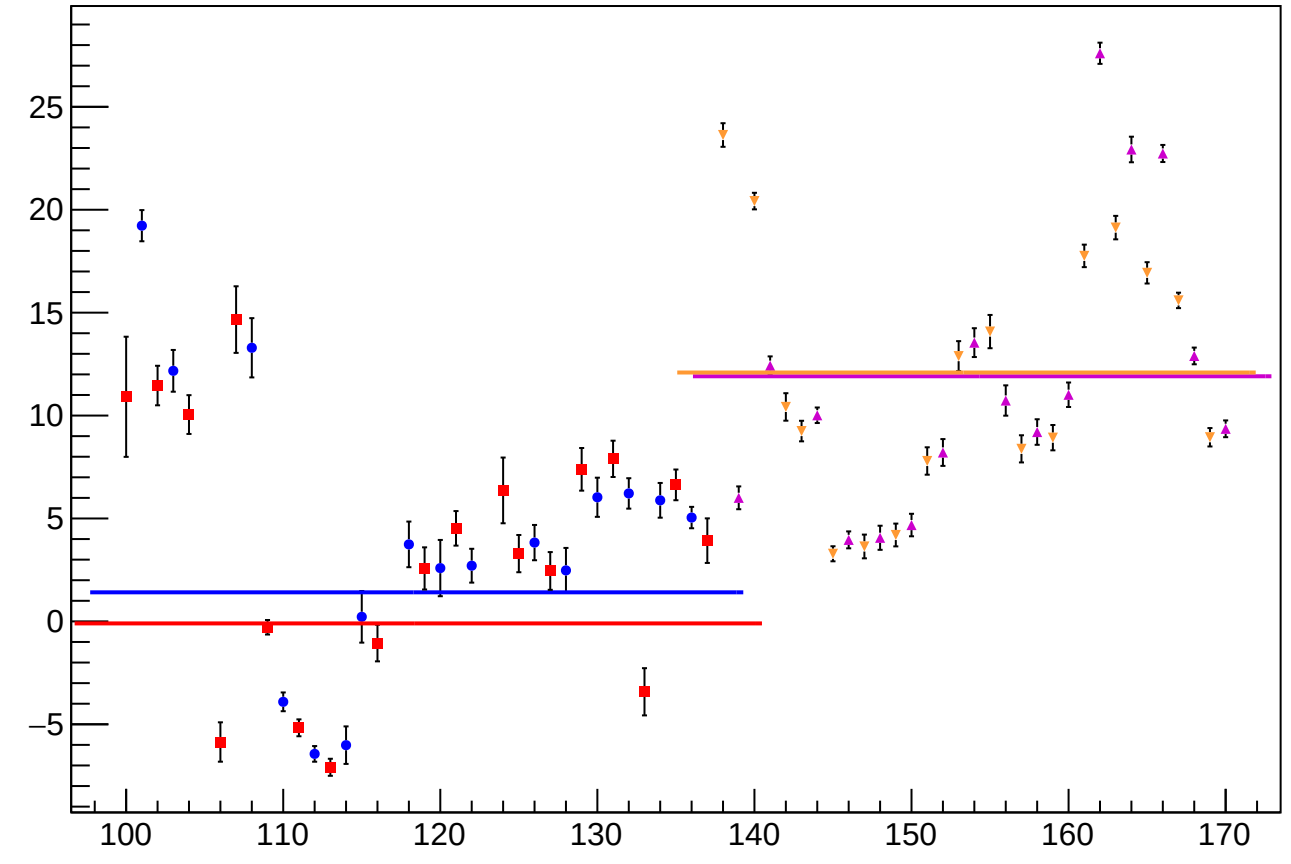
Right Out: -0.004+/-0.024 $\chi^2$/NDF: 573.3/18

Left In: 0.463+/-0.006 $\chi^2$/NDF:171.6/15

+ sign 0.453+/-0.006 $\chi^2$/NDF: 751.0/32

All: 0.447+/-0.004 $\chi^2$/NDF: 1847.1/67

- sign 0.441+/-0.005 $\chi^2$/NDF: 1093.6/34




Right In: 1.412+/-0.183 $\chi^2$/NDF: 1522.1/15

Left Out: 12.092+/-0.127 $\chi^2$/NDF:2460.3/16

Right Out: -0.098+/-0.167 $\chi^2$/NDF: 1147.2/18

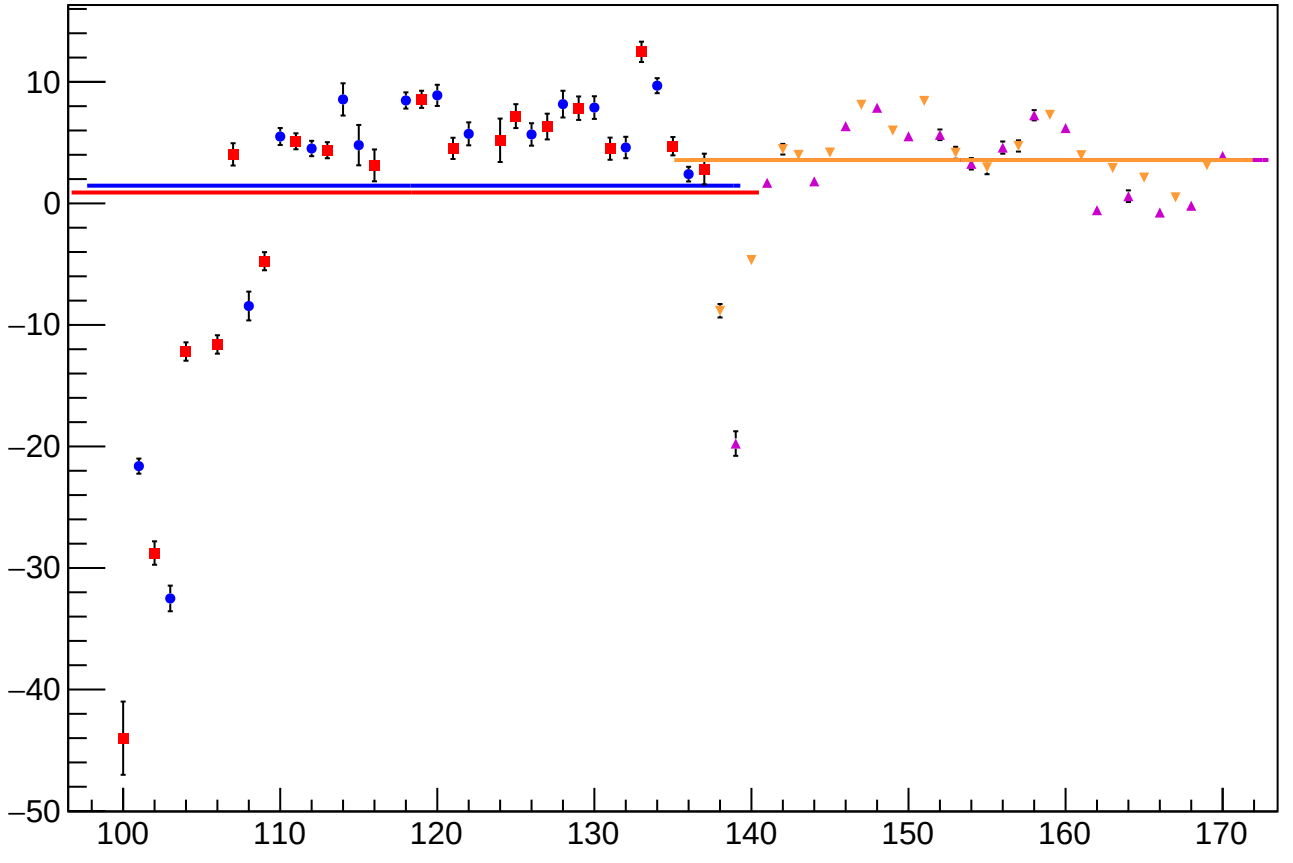
Left In: 11.909+/-0.126 $\chi^2$/NDF:2897.3/15

+ sign 8.625+/-0.104 $\chi^2$/NDF: 6280.3/32

All: 8.083+/-0.072 $\chi^2$/NDF: 13666.6/67

- sign 7.579+/-0.101 $\chi^2$/NDF: 7334.1/34

# reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs Slug




Right In: 1.459+/-0.203 $\chi^2$/NDF: 3080.3/15

Left Out: 3.566+/-0.089 $\chi^2$/NDF:1855.5/16

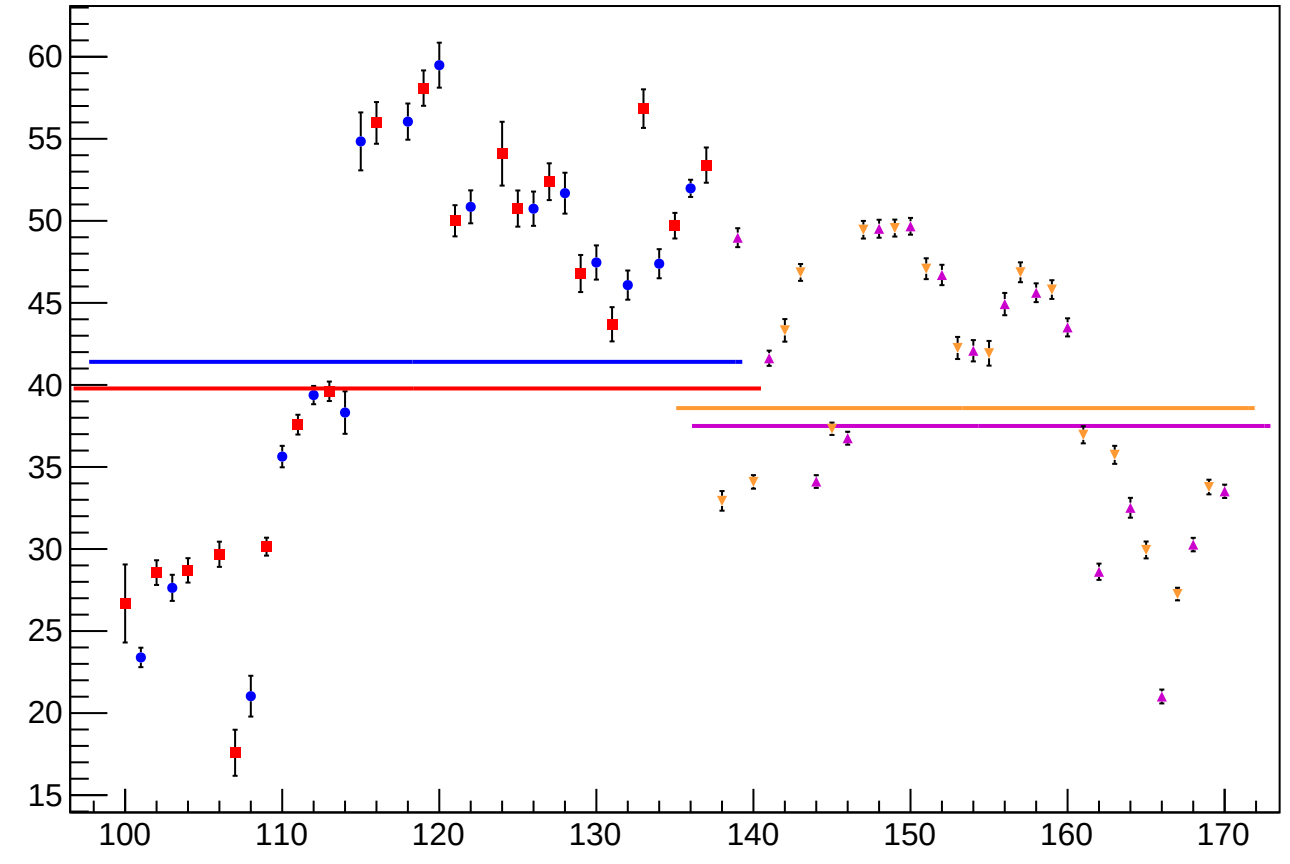
Right Out: 0.896+/-0.202 $\chi^2$/NDF: 2377.1/18

Left In: 3.572+/-0.089 $\chi^2$/NDF:1593.6/15

+ sign 3.224+/-0.082 $\chi^2$/NDF: 5025.6/32

All: 3.181+/-0.058 $\chi^2$/NDF: 9143.8/67

- sign 3.139+/-0.081 $\chi^2$/NDF: 4117.7/34




Right In: 41.407+/-0.211 $\chi^2$/NDF: 2746.0/15

Left Out: 38.589+/-0.125 $\chi^2$/NDF:3262.5/16

Right Out: 39.784+/-0.203 $\chi^2$/NDF: 2653.8/18

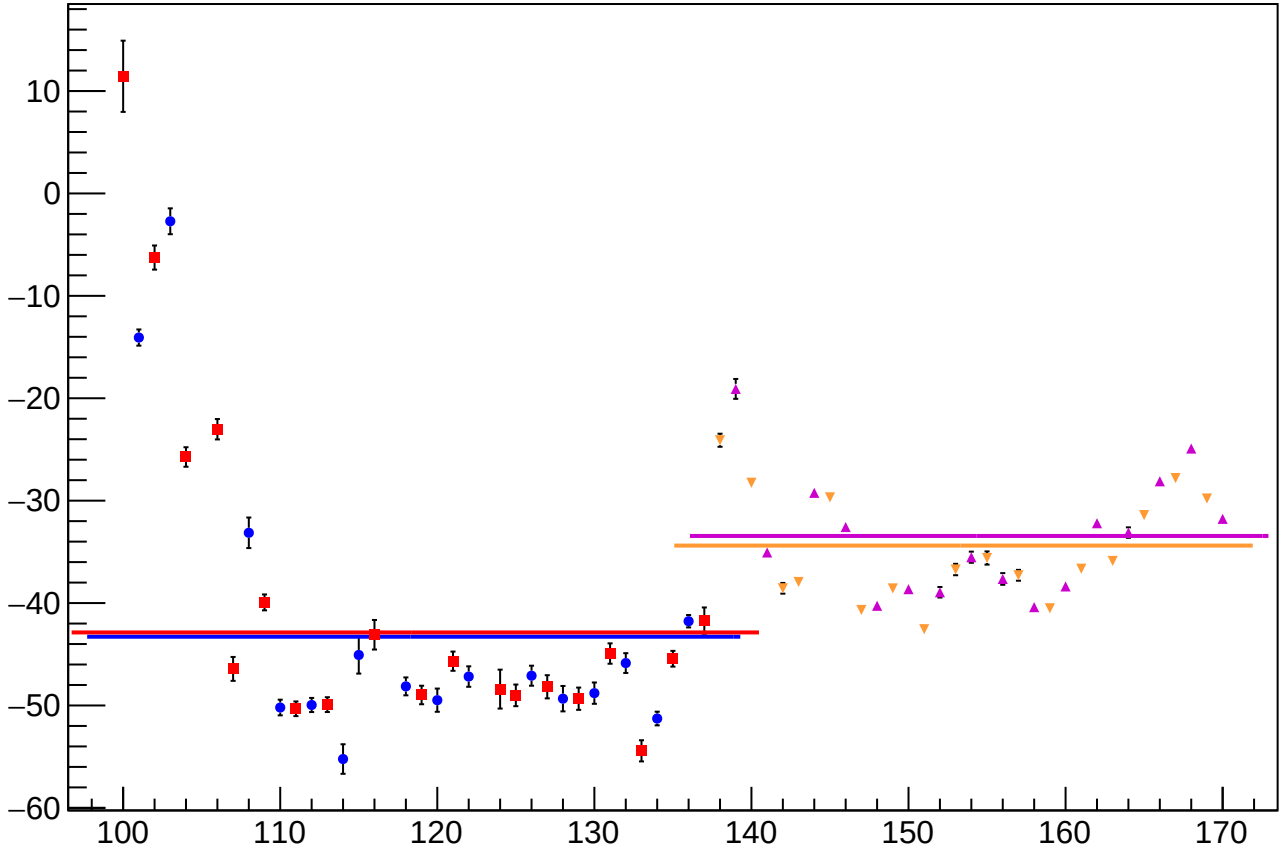
Left In: 37.499+/-0.123 $\chi^2$/NDF:4622.2/15

+ sign 39.326+/-0.108 $\chi^2$/NDF: 6140.7/32

All: 38.708+/-0.075 $\chi^2$/NDF: 13573.7/67

- sign 38.117+/-0.105 $\chi^2$/NDF: 7368.6/34

# reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs Slug




Right In: -43.285+/-0.229 $\chi^2$/NDF: 2985.2/15

Left Out: -34.386+/-0.103 $\chi^2$/NDF:2439.8/16

Right Out: -42.867+/-0.229 $\chi^2$/NDF: 2454.2/18

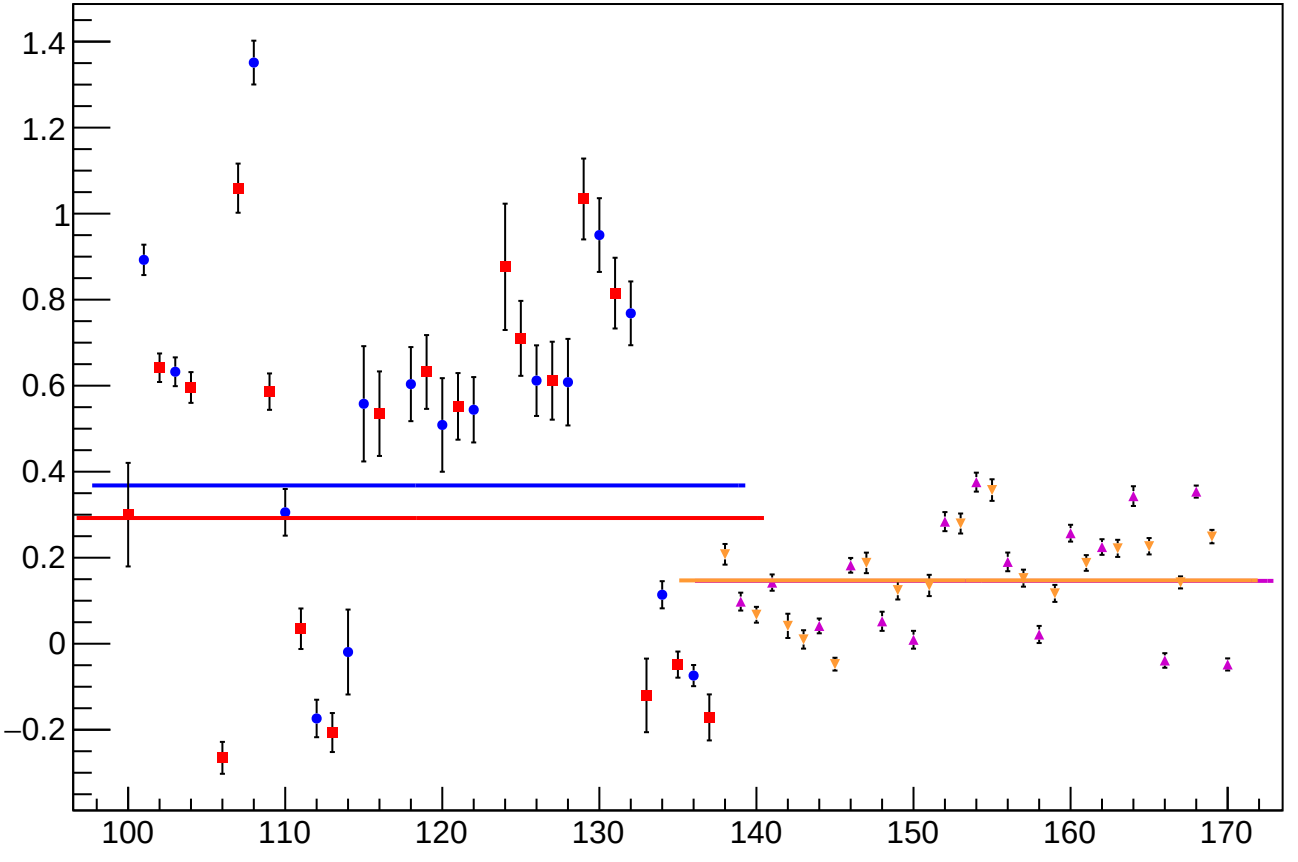
Left In: -33.447+/-0.103 $\chi^2$/NDF:2200.3/15

+ sign -35.891+/-0.094 $\chi^2$/NDF: 6676.3/32

All: -35.453+/-0.066 $\chi^2$/NDF: 12782.7/67

- sign -35.021+/-0.094 $\chi^2$/NDF: 6063.7/34

# reg_asym_sam_15_48_dd_diff_bpm12X_slope vs Slug




Right In: 0.368+/-0.012 $\chi^2$/NDF: 1320.9/15

Left Out: 0.147+/-0.005 $\chi^2$/NDF:439.1/16

Right Out: 0.292+/-0.012 $\chi^2$/NDF: 1199.2/18

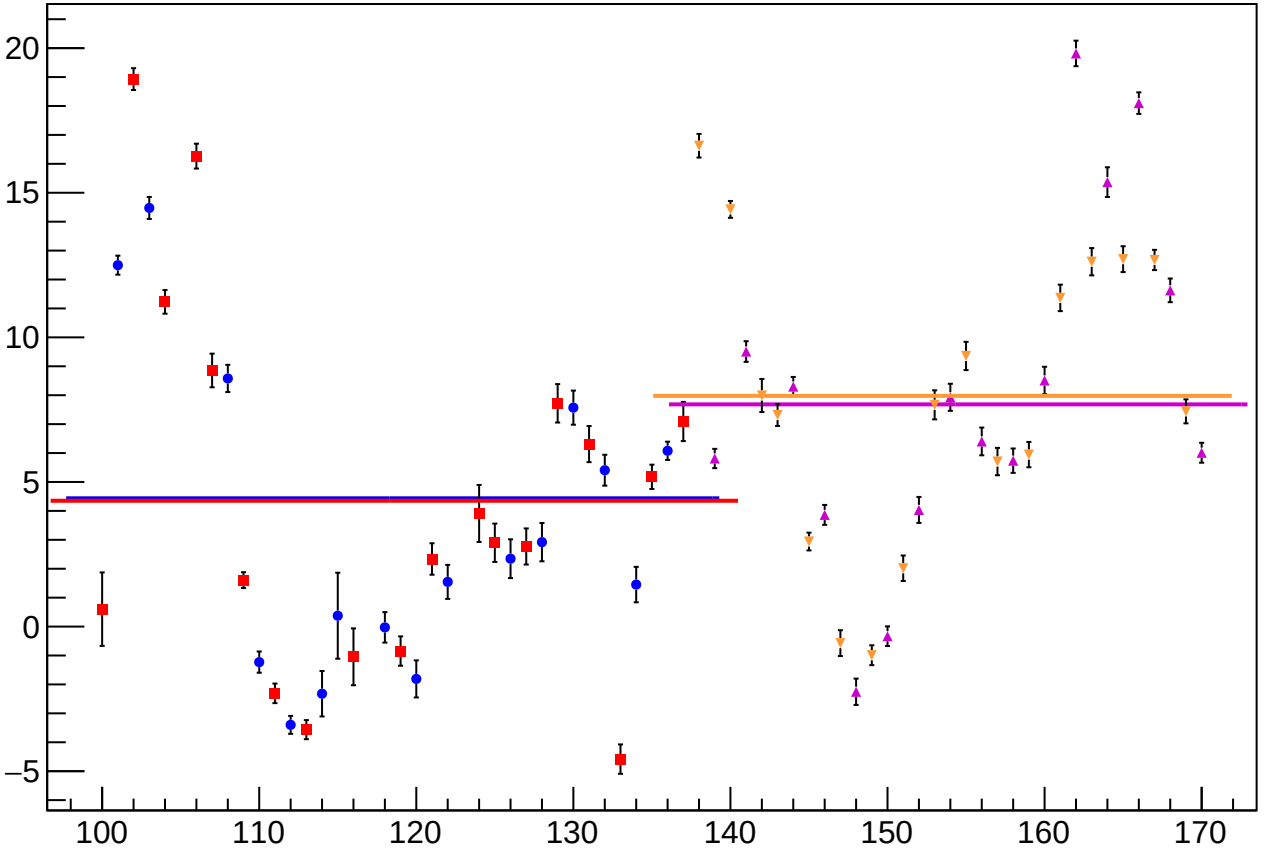
Left In: 0.146+/-0.005 $\chi^2$/NDF:950.3/15

+ sign 0.176+/-0.004 $\chi^2$/NDF: 2044.3/32

All: 0.171+/-0.003 $\chi^2$/NDF: 4324.1/67

- sign 0.165+/-0.004 $\chi^2$/NDF: 2276.5/34

# reg_asym_sam_37_48_dd_diff_bpm1X_slope vs Slug




Right In: 4.435+/-0.117 $\chi^2$/NDF: 2622.0/15

Left Out: 7.978+/-0.099 $\chi^2$/NDF:2935.7/16

Right Out: 4.351+/-0.109 $\chi^2$/NDF: 4205.3/18

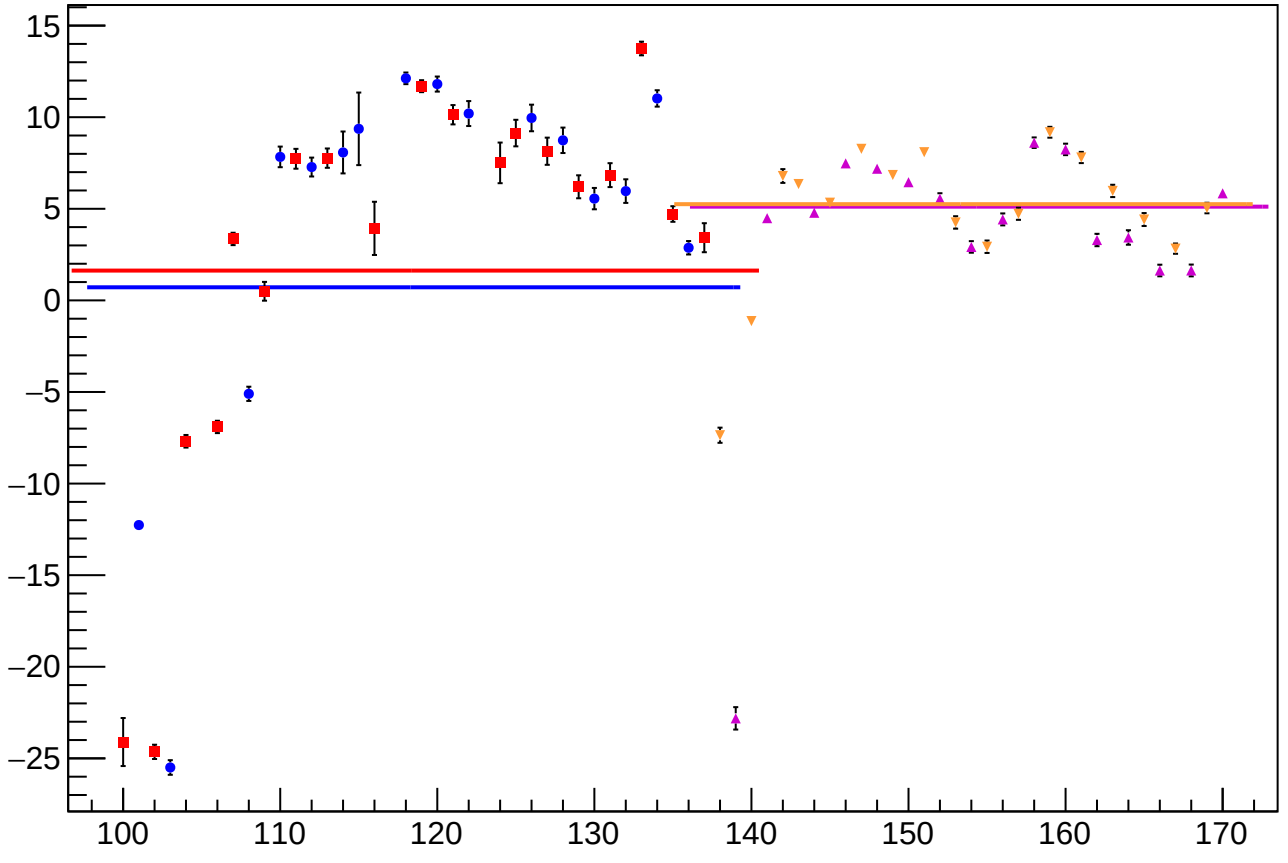
Left In: 7.683+/-0.099 $\chi^2$/NDF:3194.6/15

+ sign 6.508+/-0.075 $\chi^2$/NDF: 6094.5/32

All: 6.339+/-0.053 $\chi^2$/NDF: 14016.3/67

- sign 6.180+/-0.073 $\chi^2$/NDF: 7912.0/34

# reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs Slug




Right In: 0.715+/-0.116 $\chi^2$/NDF: 10454.0/15

Left Out: 5.252+/-0.069 $\chi^2$/NDF:2424.5/16

Right Out: 1.627+/-0.111 $\chi^2$/NDF: 9255.5/18

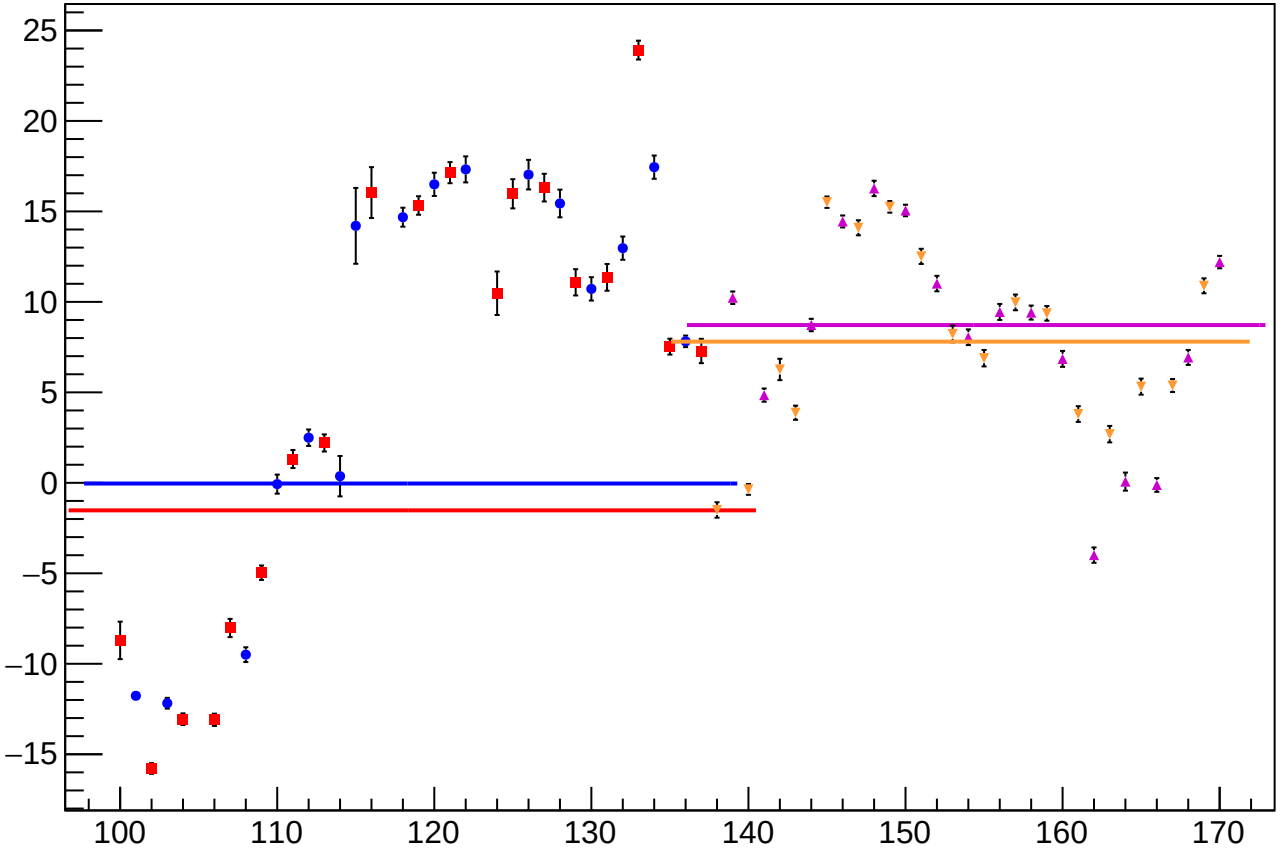
Left In: 5.116+/-0.071 $\chi^2$/NDF:2936.2/15

+ sign 4.057+/-0.060 $\chi^2$/NDF: 14006.8/32

All: 4.082+/-0.042 $\chi^2$/NDF: 26901.2/67

- sign 4.108+/-0.060 $\chi^2$/NDF: 12894.0/34

# reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs Slug




Right In: -0.038+/-0.119 $\chi^2$/NDF: 9274.3/15

Left Out: 7.803+/-0.097 $\chi^2$/NDF:3202.7/16

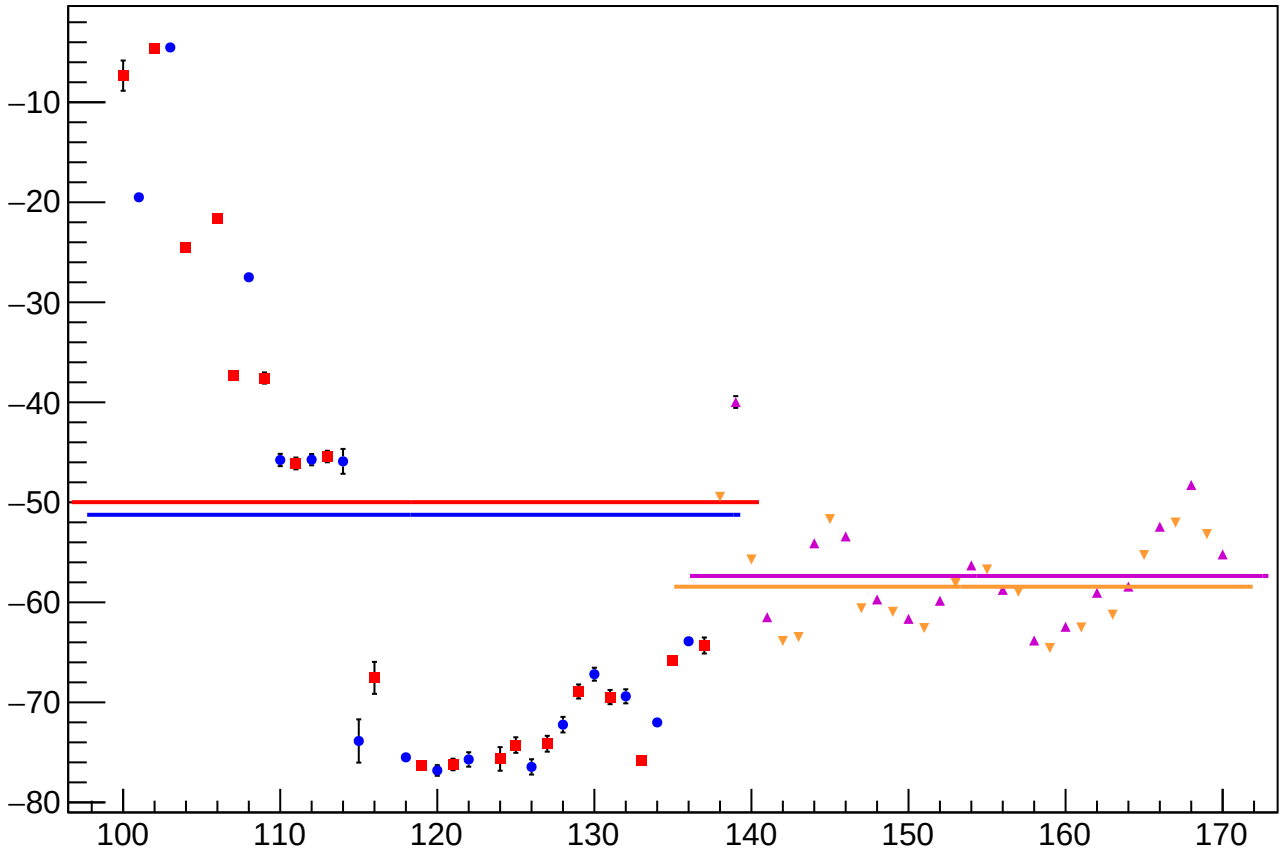
Right Out: -1.521+/-0.115 $\chi^2$/NDF: 12130.2/18

Left In: 8.720+/-0.097 $\chi^2$/NDF:3056.2/15

+ sign 4.695+/-0.075 $\chi^2$/NDF: 15081.9/32

All: 4.590+/-0.053 $\chi^2$/NDF: 34917.9/67

- sign 4.488+/-0.074 $\chi^2$/NDF: 19832.2/34




Right In: -51.246+/-0.136 $\chi^2$/NDF: 33765.2/15

Left Out: -58.438+/-0.080 $\chi^2$/NDF:3100.4/16

Right Out: -49.983+/-0.131 $\chi^2$/NDF: 33892.5/18

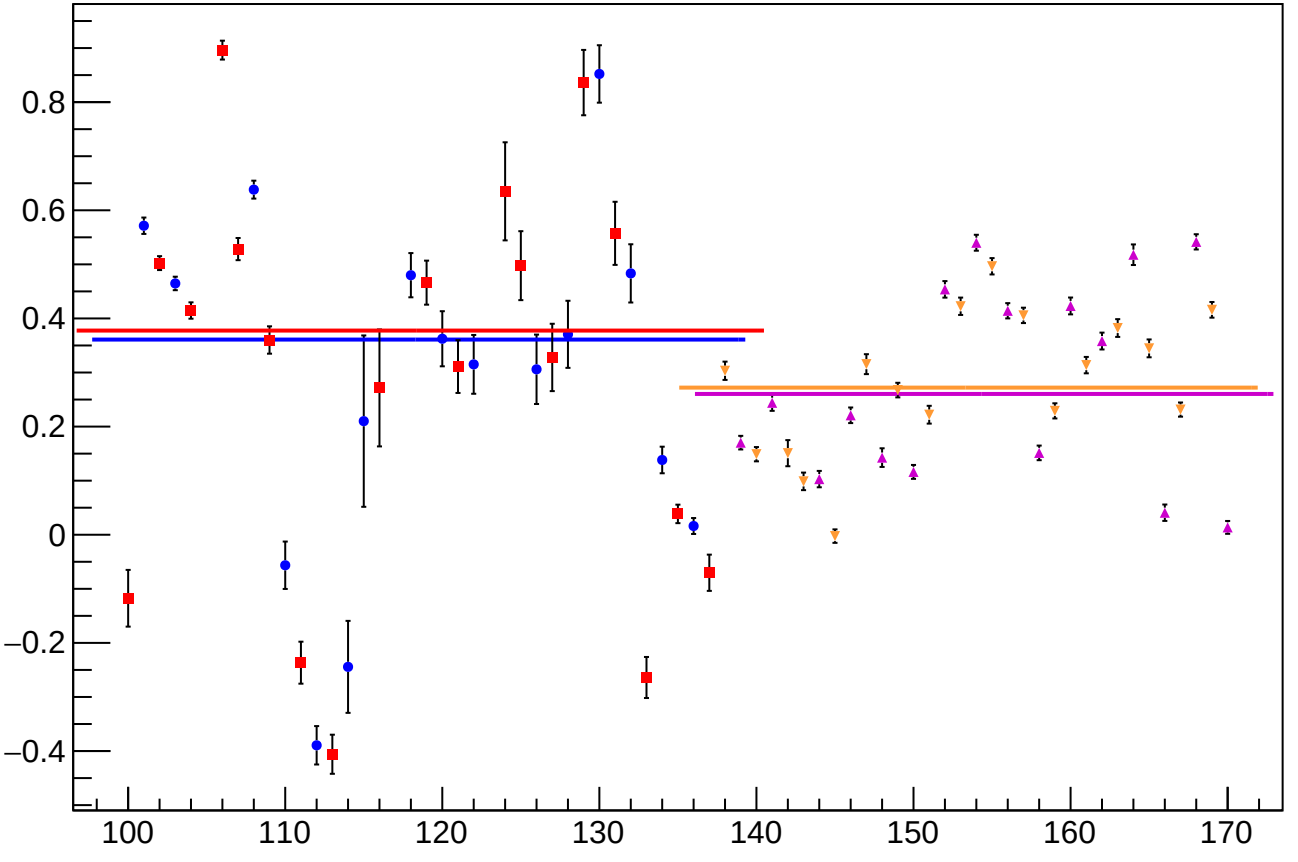
Left In: -57.361+/-0.081 $\chi^2$/NDF:3378.9/15

+ sign -56.570+/-0.069 $\chi^2$/NDF: 38943.0/32

All: -55.933+/-0.049 $\chi^2$/NDF: 78680.1/67

- sign -55.299+/-0.069 $\chi^2$/NDF: 39568.2/34

# reg_asym_sam_37_48_dd_diff_bpm12X_slope vs Slug




Right In: 0.361+/-0.006 $\chi^2$/NDF: 1860.0/15

Left Out: 0.272+/-0.004 $\chi^2$/NDF:1316.0/16

Right Out: 0.378+/-0.006 $\chi^2$/NDF: 2790.5/18

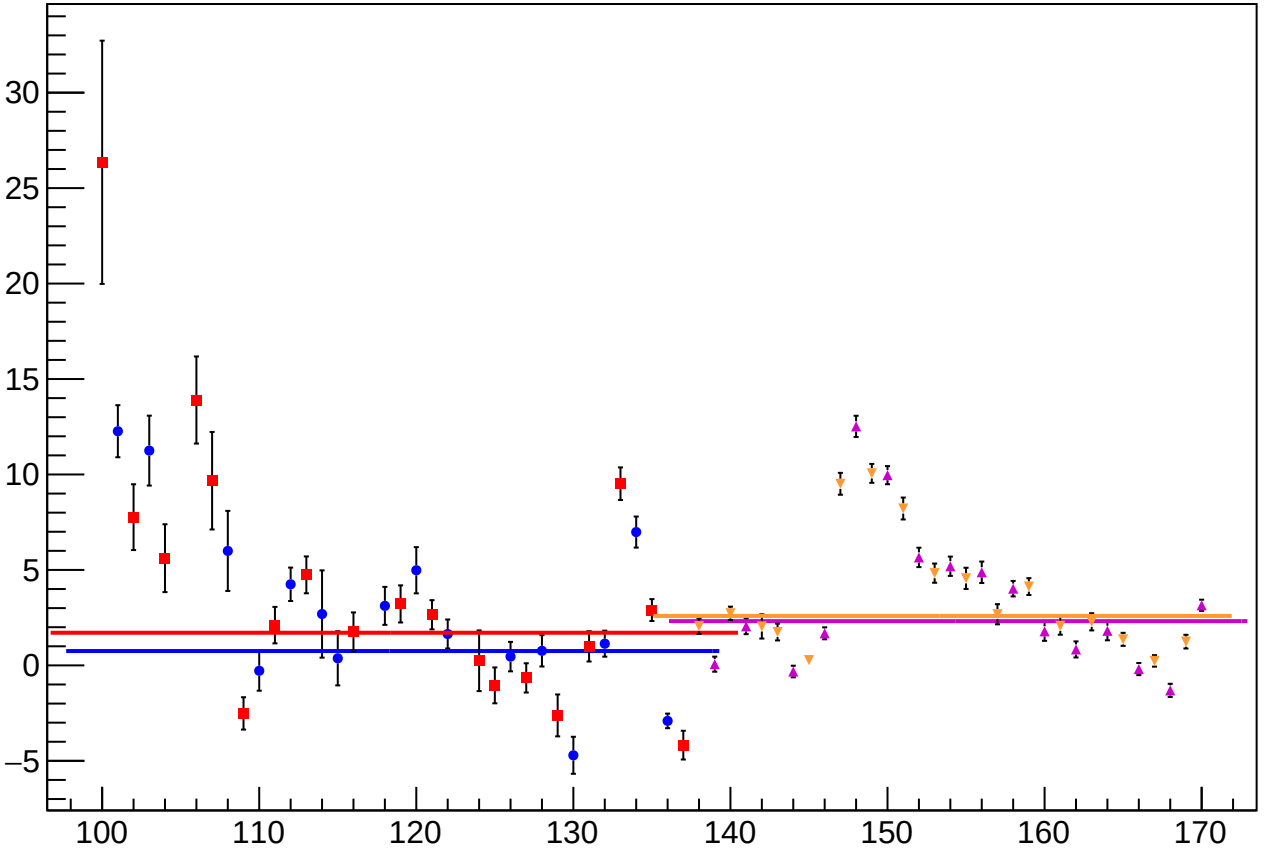
Left In: 0.260+/-0.004 $\chi^2$/NDF:2414.7/15

+ sign 0.294+/-0.003 $\chi^2$/NDF: 3322.1/32

All: 0.293+/-0.002 $\chi^2$/NDF: 8799.9/67

- sign 0.291+/-0.003 $\chi^2$/NDF: 5477.2/34

# reg_asym_sam_15_26_dd_diff_bpm1X_slope vs Slug




Right In: 0.752+/-0.212 $\chi^2$/NDF: 330.1/15

Left Out: 2.591+/-0.100 $\chi^2$/NDF:687.2/16

Right Out: 1.710+/-0.223 $\chi^2$/NDF: 293.8/18

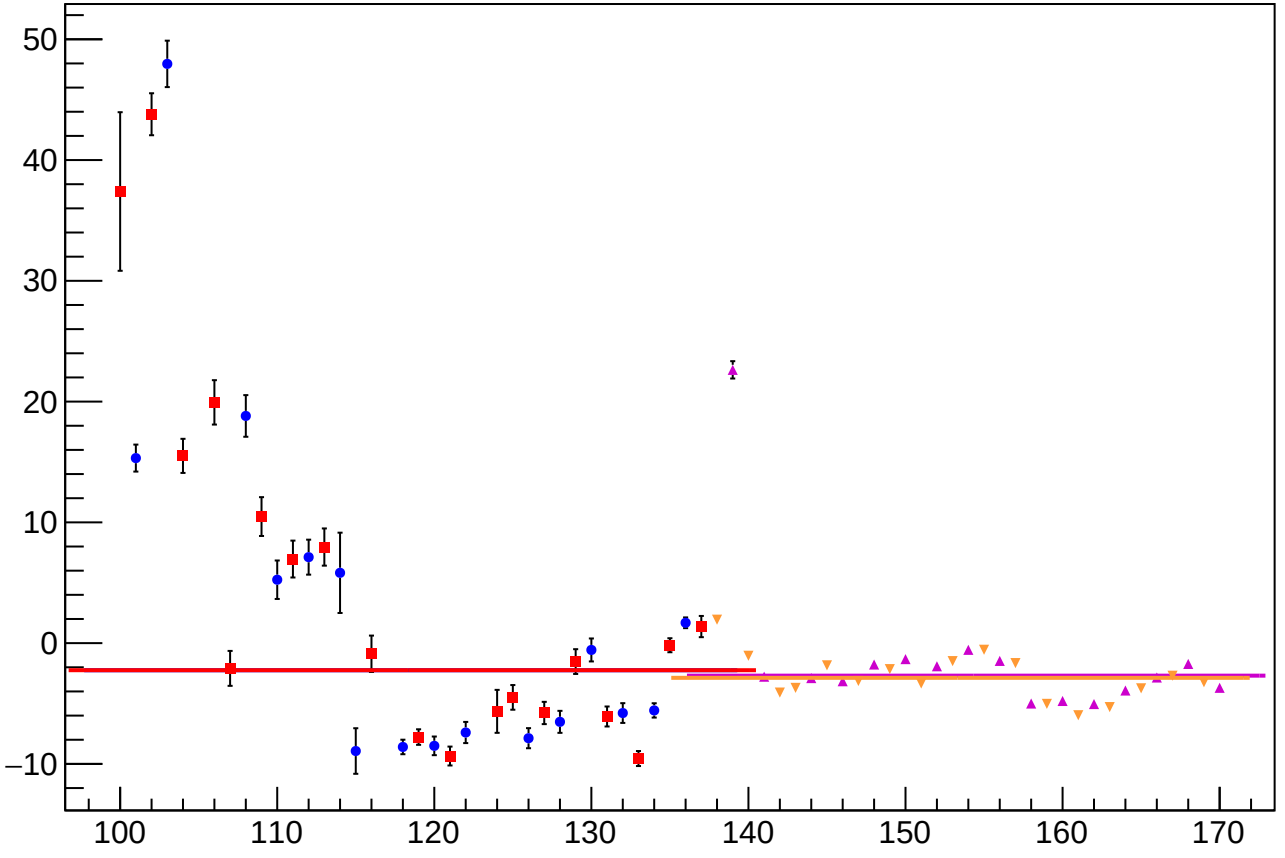
Left In: 2.319+/-0.099 $\chi^2$/NDF:1017.8/15

+ sign 2.255+/-0.091 $\chi^2$/NDF: 1078.6/32

All: 2.237+/-0.064 $\chi^2$/NDF: 2396.5/67

- sign 2.218+/-0.091 $\chi^2$/NDF: 1317.8/34

# reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs Slug




Right In: -2.245+/-0.215 $\chi^2$/NDF: 1572.5/15

Left Out: -2.873+/-0.072 $\chi^2$/NDF:519.8/16

Right Out: -2.242+/-0.229 $\chi^2$/NDF: 1555.6/18

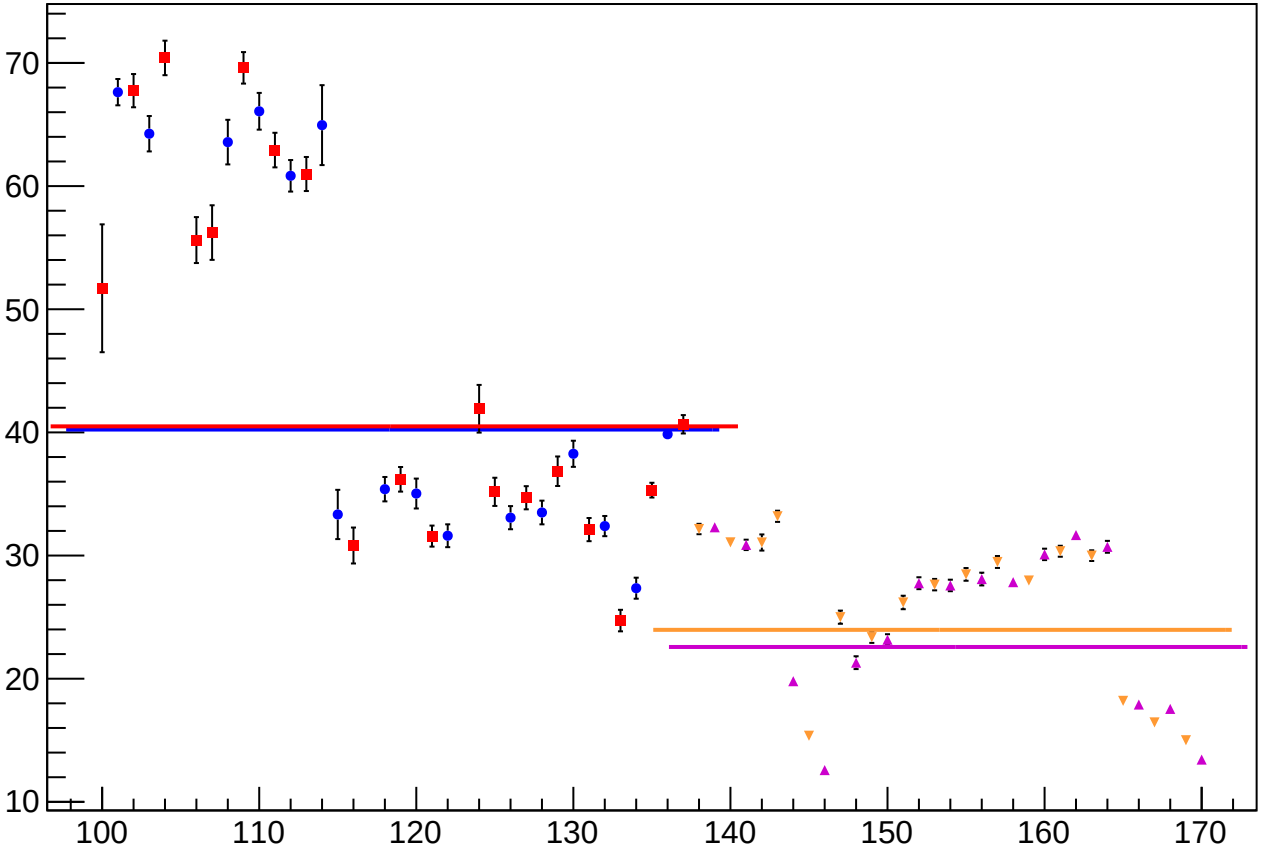
Left In: -2.692+/-0.071 $\chi^2$/NDF:1546.2/15

+ sign -2.809+/-0.068 $\chi^2$/NDF: 2099.9/32

All: -2.730+/-0.048 $\chi^2$/NDF: 5207.9/67

- sign -2.652+/-0.068 $\chi^2$/NDF: 3105.4/34

# reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs Slug




Right In: 40.232+/-0.231 $\chi^2$/NDF: 2291.1/15

Left Out: 23.968+/-0.099 $\chi^2$/NDF:4588.9/16

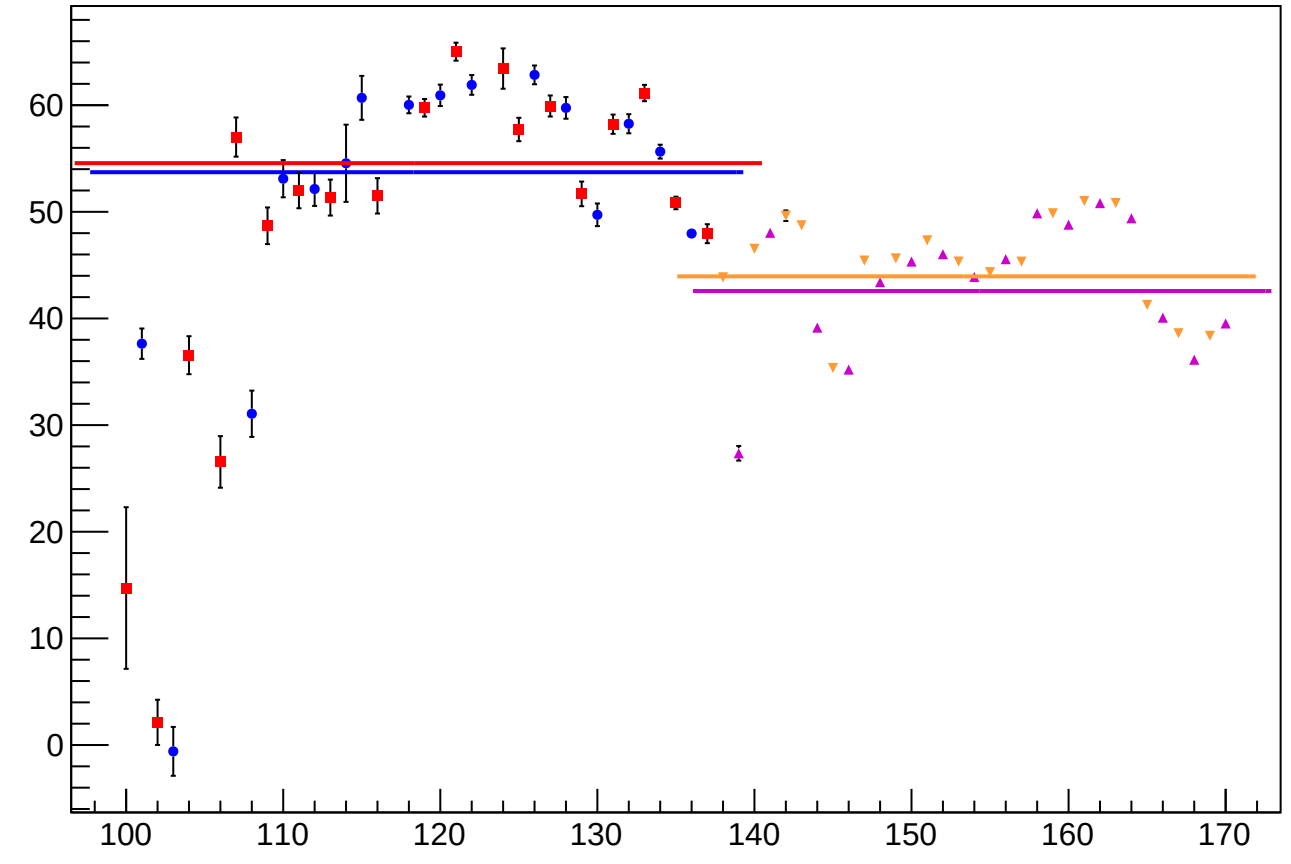
Right Out: 40.490+/-0.250 $\chi^2$/NDF: 2698.0/18

Left In: 22.576+/-0.097 $\chi^2$/NDF:5109.6/15

+ sign 26.494+/-0.091 $\chi^2$/NDF: 11051.5/32

All: 25.706+/-0.064 $\chi^2$/NDF: 23453.2/67

- sign 24.926+/-0.091 $\chi^2$/NDF: 12253.1/34




Right In: 53.715+/-0.239 $\chi^2$/NDF: 1362.7/15

Left Out: 43.947+/-0.082 $\chi^2$/NDF:3824.2/16

Right Out: 54.565+/-0.256 $\chi^2$/NDF: 1342.6/18

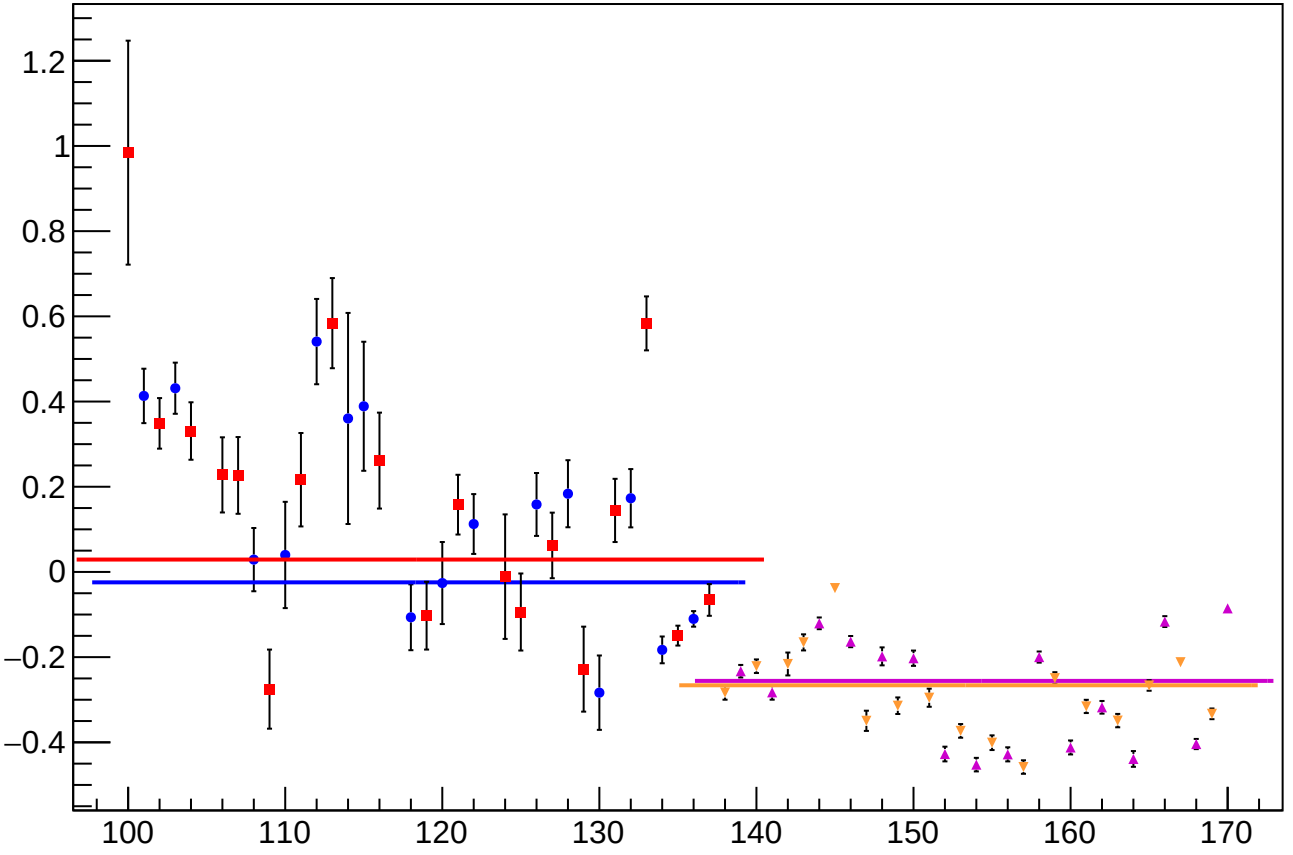
Left In: 42.576+/-0.081 $\chi^2$/NDF:4531.2/15

+ sign 44.986+/-0.078 $\chi^2$/NDF: 6679.5/32

All: 44.329+/-0.055 $\chi^2$/NDF: 14684.7/67

- sign 43.677+/-0.078 $\chi^2$/NDF: 7863.5/34

# reg_asym_sam_15_26_dd_diff_bpm12X_slope vs Slug




Right In: -0.024+/-0.013 $\chi^2$/NDF: 229.7/15

Left Out: -0.266+/-0.004 $\chi^2$/NDF:852.5/16

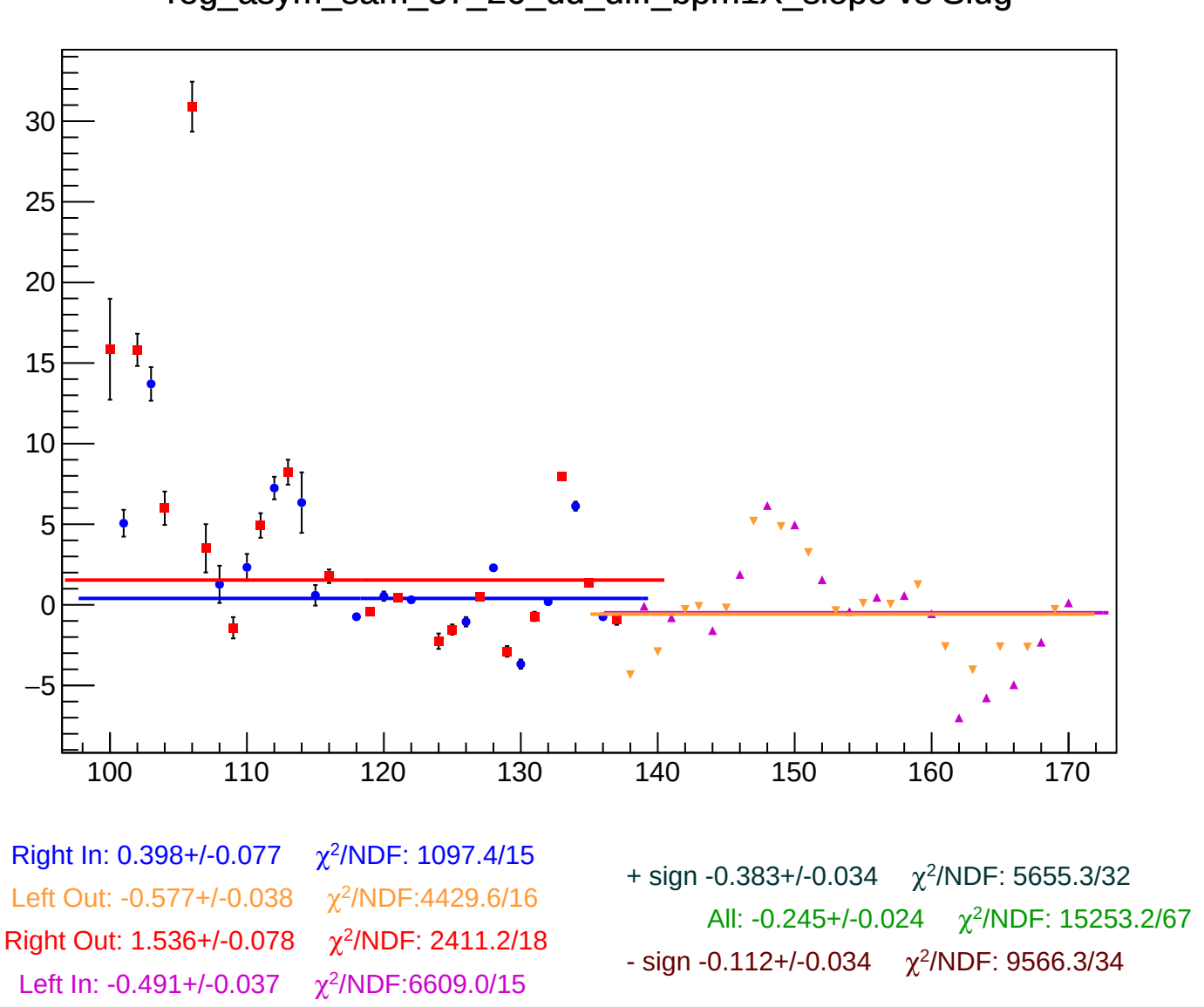
Right Out: 0.029+/-0.014 $\chi^2$/NDF: 276.4/18

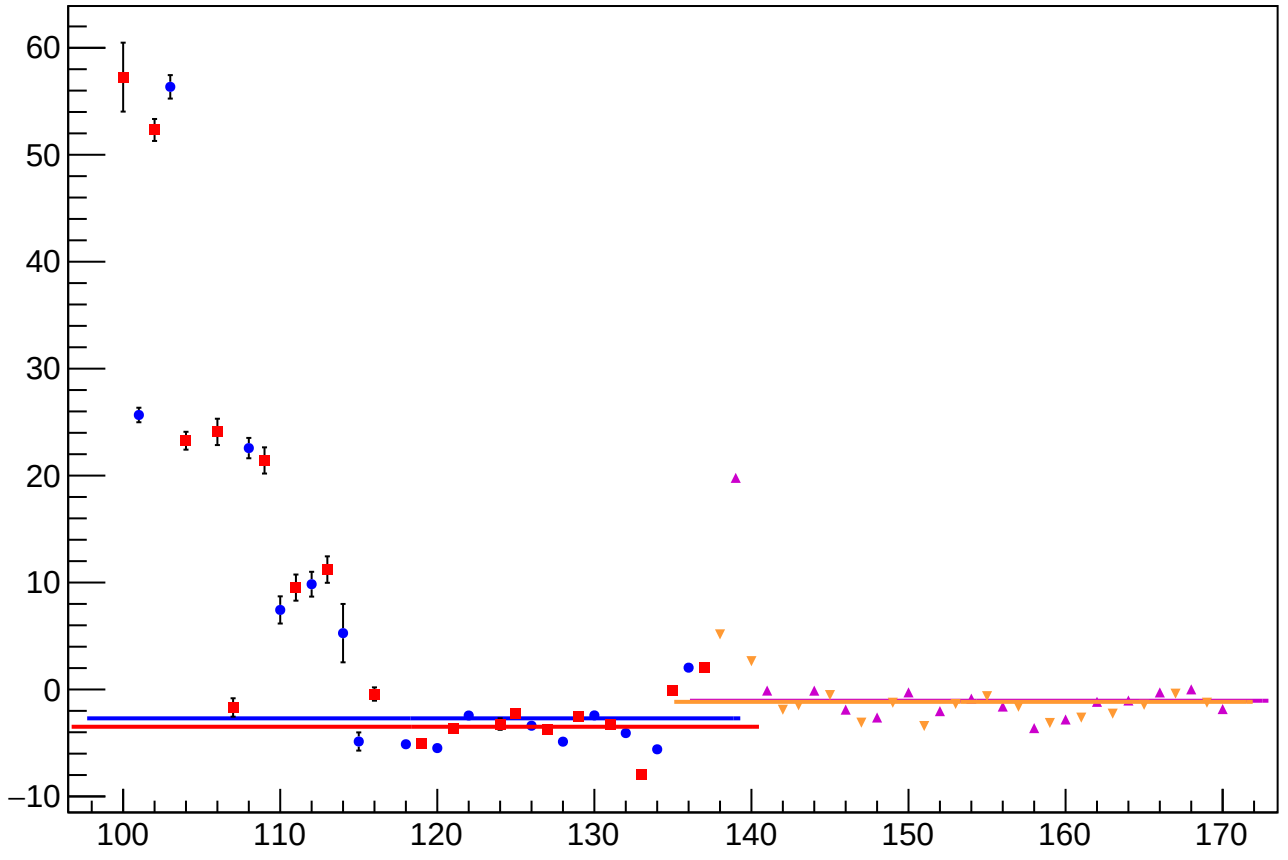
Left In: -0.256+/-0.004 $\chi^2$/NDF:1307.7/15

+ sign -0.247+/-0.004 $\chi^2$/NDF: 1410.5/32

All: -0.243+/-0.003 $\chi^2$/NDF: 3372.8/67

- sign -0.238+/-0.004 $\chi^2$/NDF: 1959.2/34


reg_asym_sam_37_26_dd_diff_bpm1X_slope vs Slug
30
25
20
15
10
5
0
−5
100
110
120
130
140
150
160
170
Right In: 0.398+/-0.077 χ²/NDF: 1097.4/15
Left Out: -0.577+/-0.038 χ²/NDF:4429.6/16
Right Out: 1.536+/-0.078 χ²/NDF: 2411.2/18
Left In: -0.491+/-0.037 χ²/NDF:6609.0/15
+ sign -0.383+/-0.034 χ²/NDF: 5655.3/32
All: -0.245+/-0.024 χ²/NDF: 15253.2/67
- sign -0.112+/-0.034 χ²/NDF: 9566.3/34




Right In: -2.699+/-0.071 $\chi^2$/NDF: 7103.8/15

Left Out: -1.157+/-0.028 $\chi^2$/NDF:4252.1/16

Right Out: -3.486+/-0.071 $\chi^2$/NDF: 7159.9/18

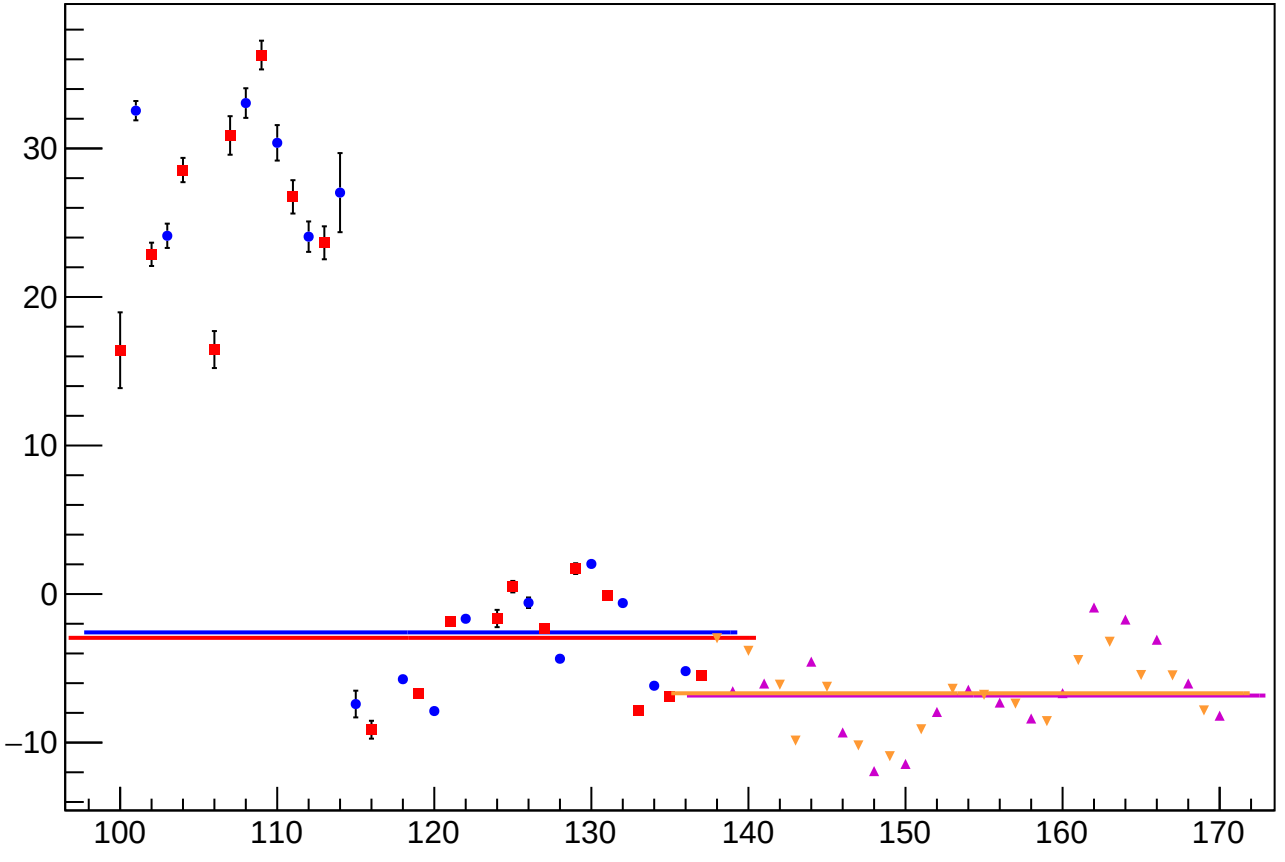
Left In: -1.053+/-0.027 $\chi^2$/NDF:8319.3/15

+ sign -1.360+/-0.026 $\chi^2$/NDF: 11768.8/32

All: -1.360+/-0.018 $\chi^2$/NDF: 28277.3/67

- sign -1.361+/-0.025 $\chi^2$/NDF: 16508.6/34

# reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs Slug




Right In: -2.582+/-0.083 $\chi^2$/NDF: 8159.7/15

Left Out: -6.681+/-0.038 $\chi^2$/NDF:3619.4/16

Right Out: -2.948+/-0.085 $\chi^2$/NDF: 8196.4/18

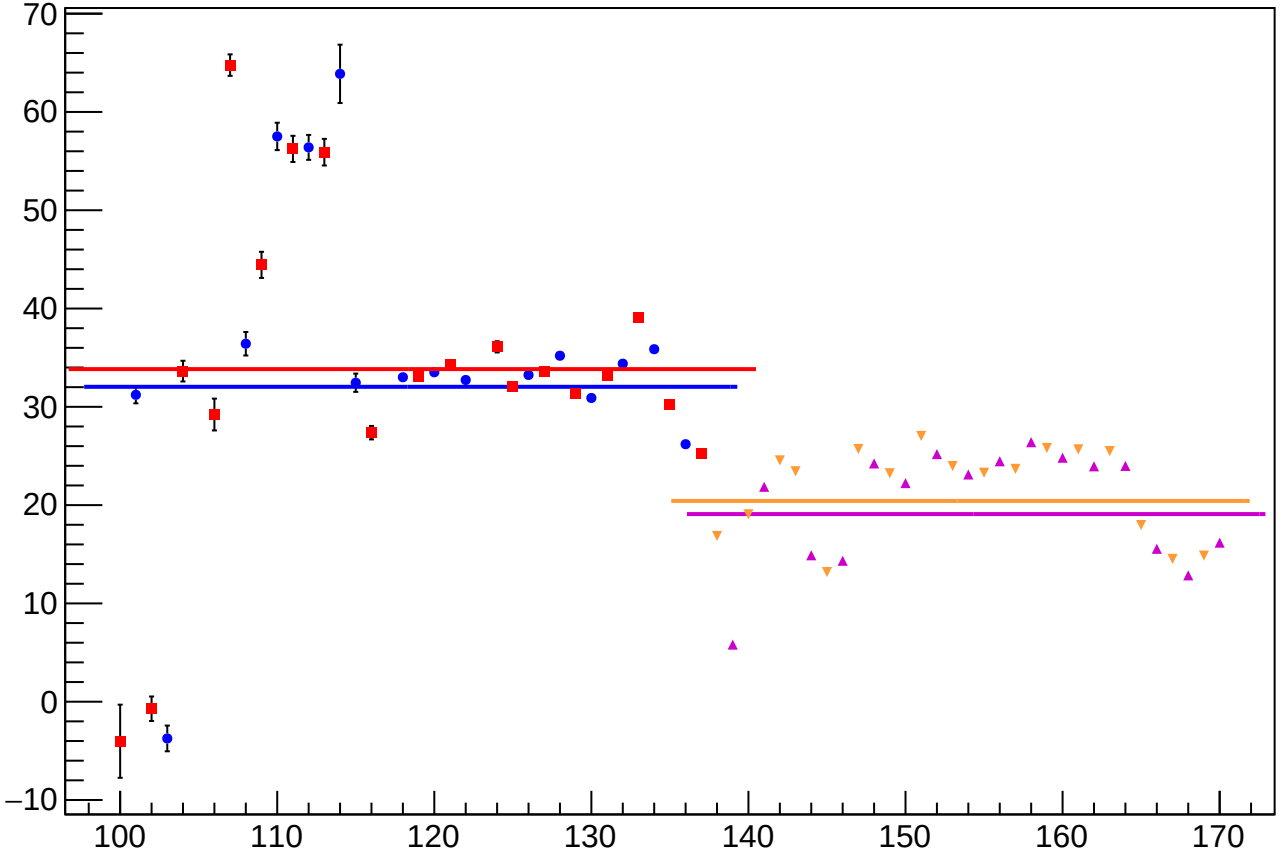
Left In: -6.834+/-0.037 $\chi^2$/NDF:5722.6/15

+ sign -5.974+/-0.035 $\chi^2$/NDF: 13793.4/32

All: -6.098+/-0.024 $\chi^2$/NDF: 29499.1/67

- sign -6.218+/-0.034 $\chi^2$/NDF: 15680.1/34

# reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs Slug




Right In: 32.038+/-0.081 $\chi^2$/NDF: 3255.9/15

Left Out: 20.424+/-0.032 $\chi^2$/NDF:24347.5/16

Right Out: 33.837+/-0.082 $\chi^2$/NDF: 4237.8/18

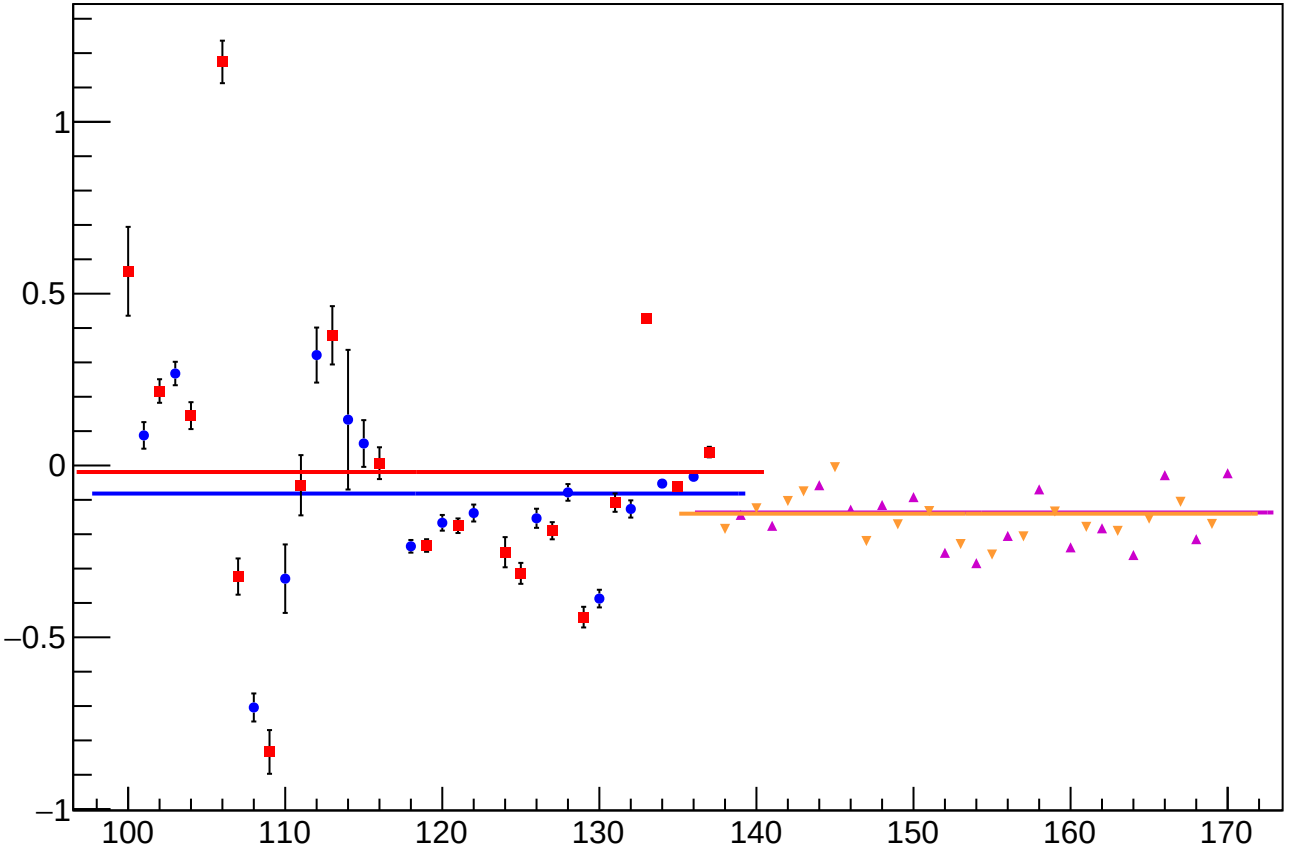
Left In: 19.088+/-0.031 $\chi^2$/NDF:25353.1/15

\+ sign 21.959+/-0.030 $\chi^2$/NDF: 45318.0/32

All: 21.448+/-0.021 $\chi^2$/NDF: 104018.7/67

\- sign 20.955+/-0.029 $\chi^2$/NDF: 58112.9/34

# reg_asym_sam_37_26_dd_diff_bpm12X_slope vs Slug




Right In: -0.082+/-0.005 $\chi^2$/NDF: 689.2/15

Left Out: -0.140+/-0.001 $\chi^2$/NDF:2257.4/16

Right Out: -0.019+/-0.005 $\chi^2$/NDF: 2273.7/18

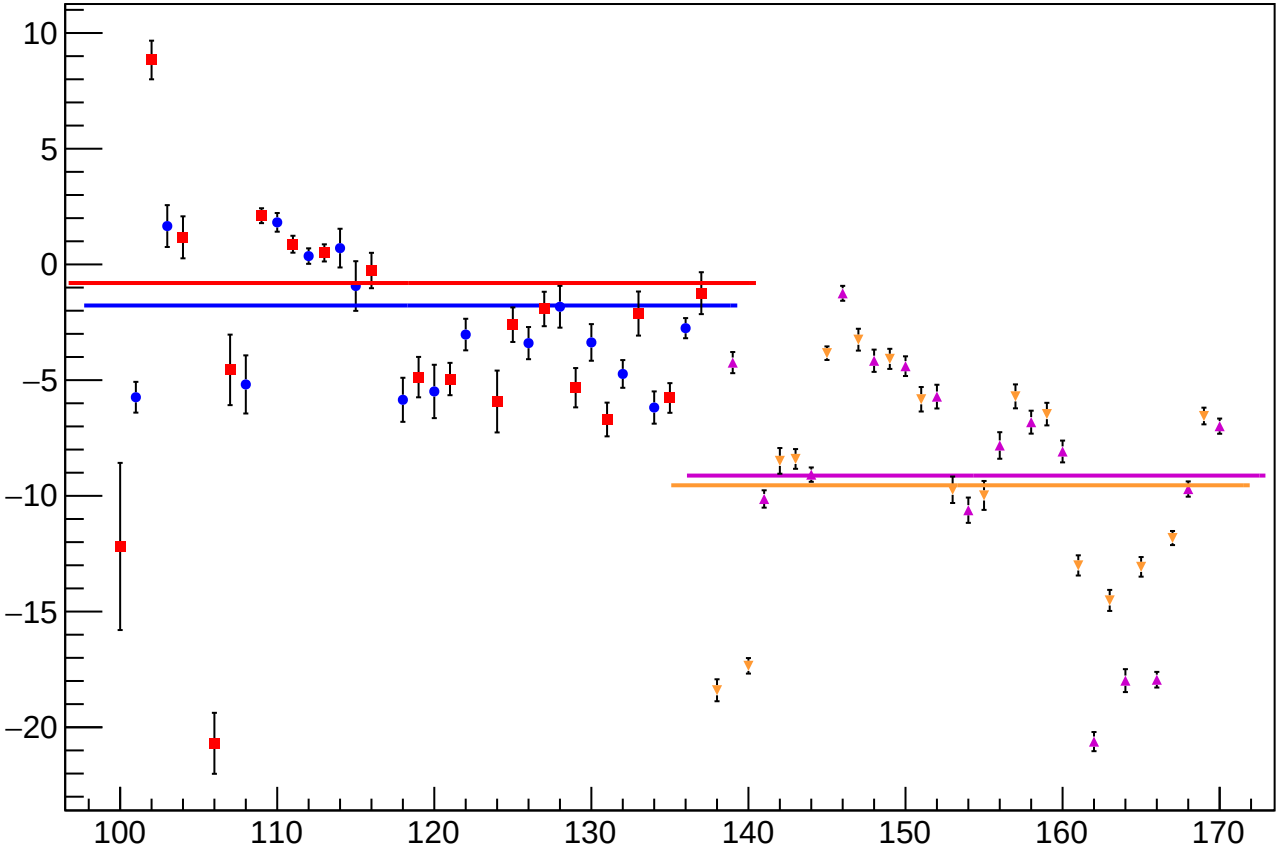
Left In: -0.137+/-0.001 $\chi^2$/NDF:3557.6/15

+ sign -0.135+/-0.001 $\chi^2$/NDF: 3081.6/32

All: -0.132+/-0.001 $\chi^2$/NDF: 9403.4/67

- sign -0.129+/-0.001 $\chi^2$/NDF: 6310.2/34

# reg_asym_sam_1357_avg_diff_bpm1X_slope vs Slug




Right In: -1.775+/-0.157 $\chi^2$/NDF: 297.7/15

Left Out: -9.544+/-0.103 $\chi^2$/NDF:2136.5/16

Right Out: -0.803+/-0.148 $\chi^2$/NDF: 733.7/18

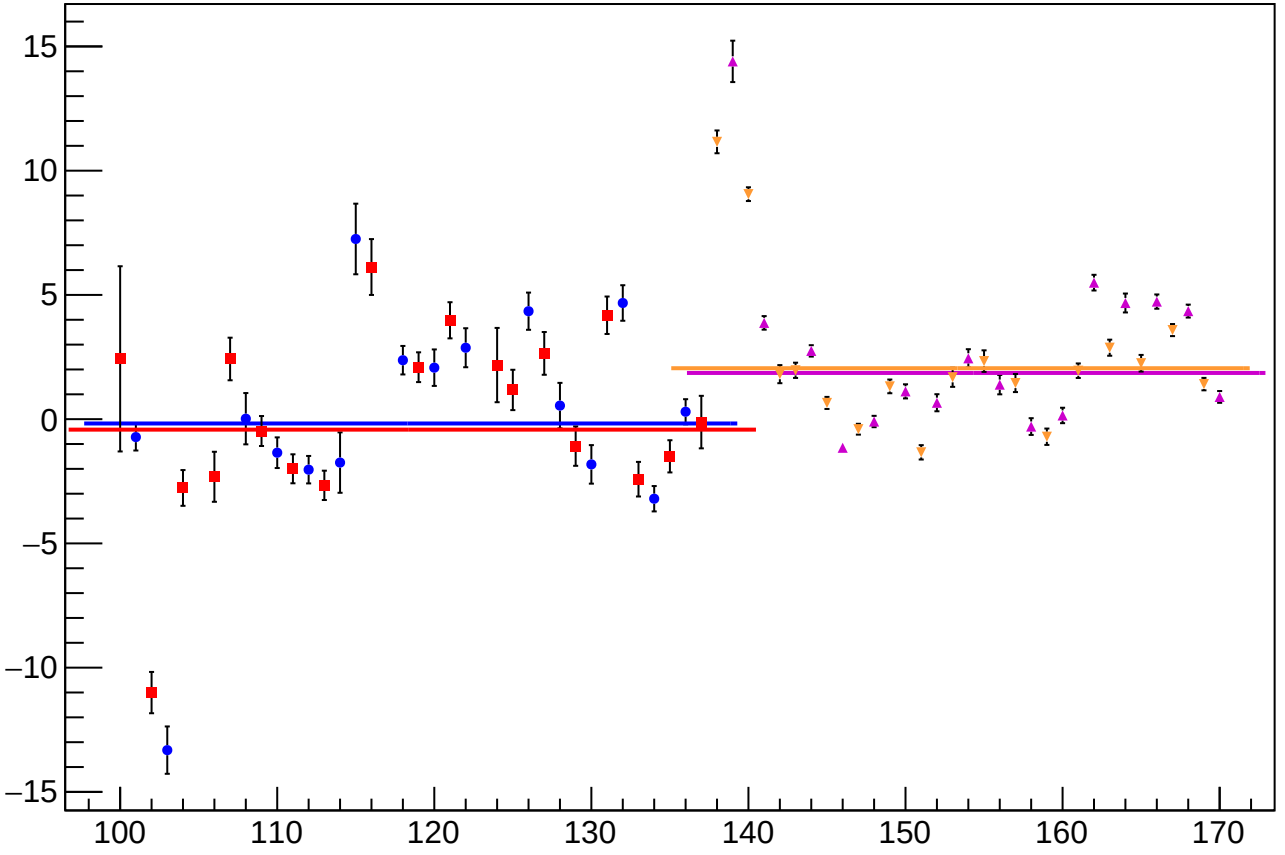
Left In: -9.124+/-0.101 $\chi^2$/NDF:2848.1/15

+ sign -7.217+/-0.086 $\chi^2$/NDF: 4146.8/32

All: -6.838+/-0.060 $\chi^2$/NDF: 9913.8/67

- sign -6.480+/-0.084 $\chi^2$/NDF: 5729.2/34

# reg_asym_sam_1357_avg_diff_bpm4aY_slope vs Slug




Right In: -0.174+/-0.173 $\chi^2$/NDF: 403.1/15

Left Out: 2.050+/-0.072 $\chi^2$/NDF:1467.1/16

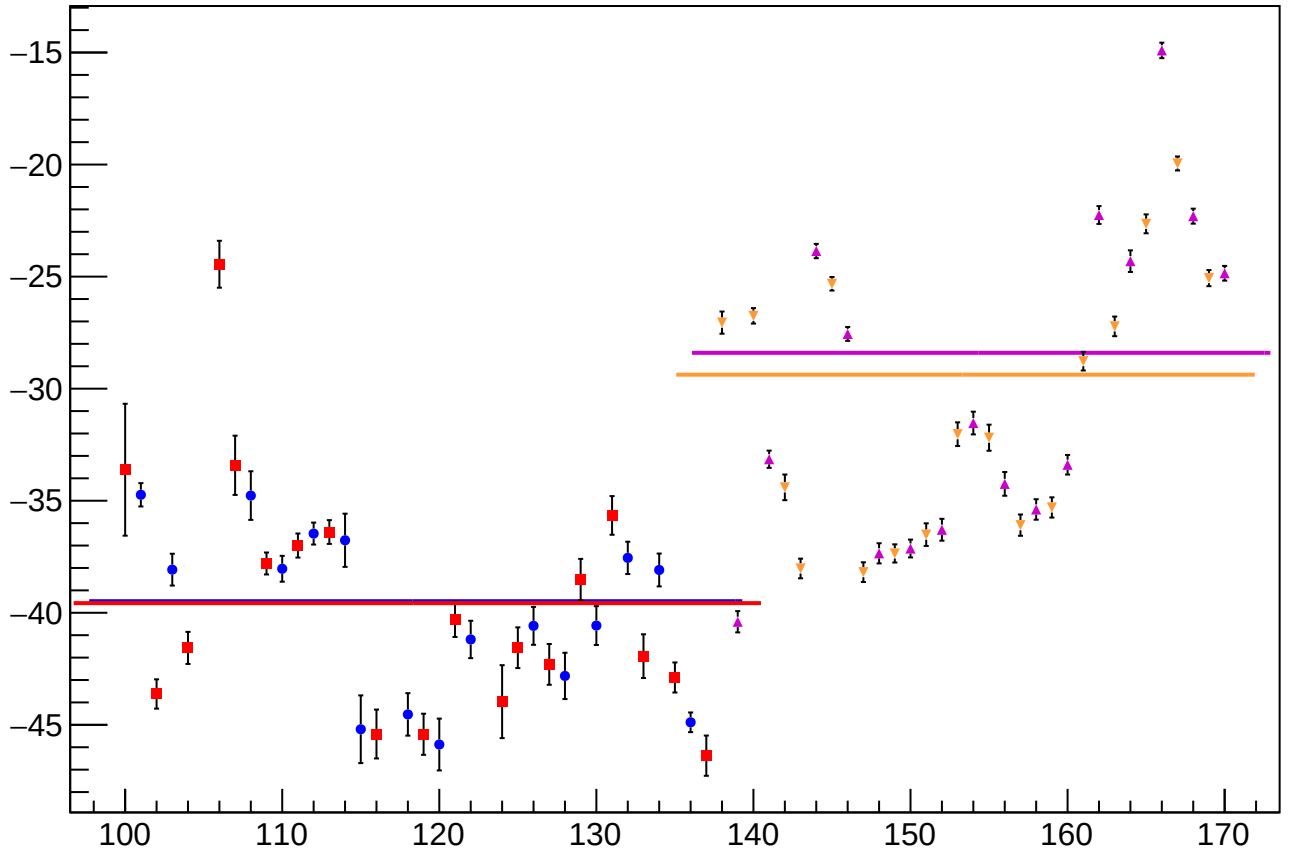
Right Out: -0.421+/-0.177 $\chi^2$/NDF: 366.3/18

Left In: 1.860+/-0.072 $\chi^2$/NDF:1098.2/15

+ sign 1.719+/-0.067 $\chi^2$/NDF: 2010.8/32

All: 1.629+/-0.047 $\chi^2$/NDF: 3621.4/67

- sign 1.540+/-0.066 $\chi^2$/NDF: 1607.0/34




Right In: -39.484+/-0.180 $\chi^2$/NDF: 409.3/15

Left Out: -29.375+/-0.101 $\chi^2$/NDF:3471.7/16

Right Out: -39.570+/-0.181 $\chi^2$/NDF: 553.5/18

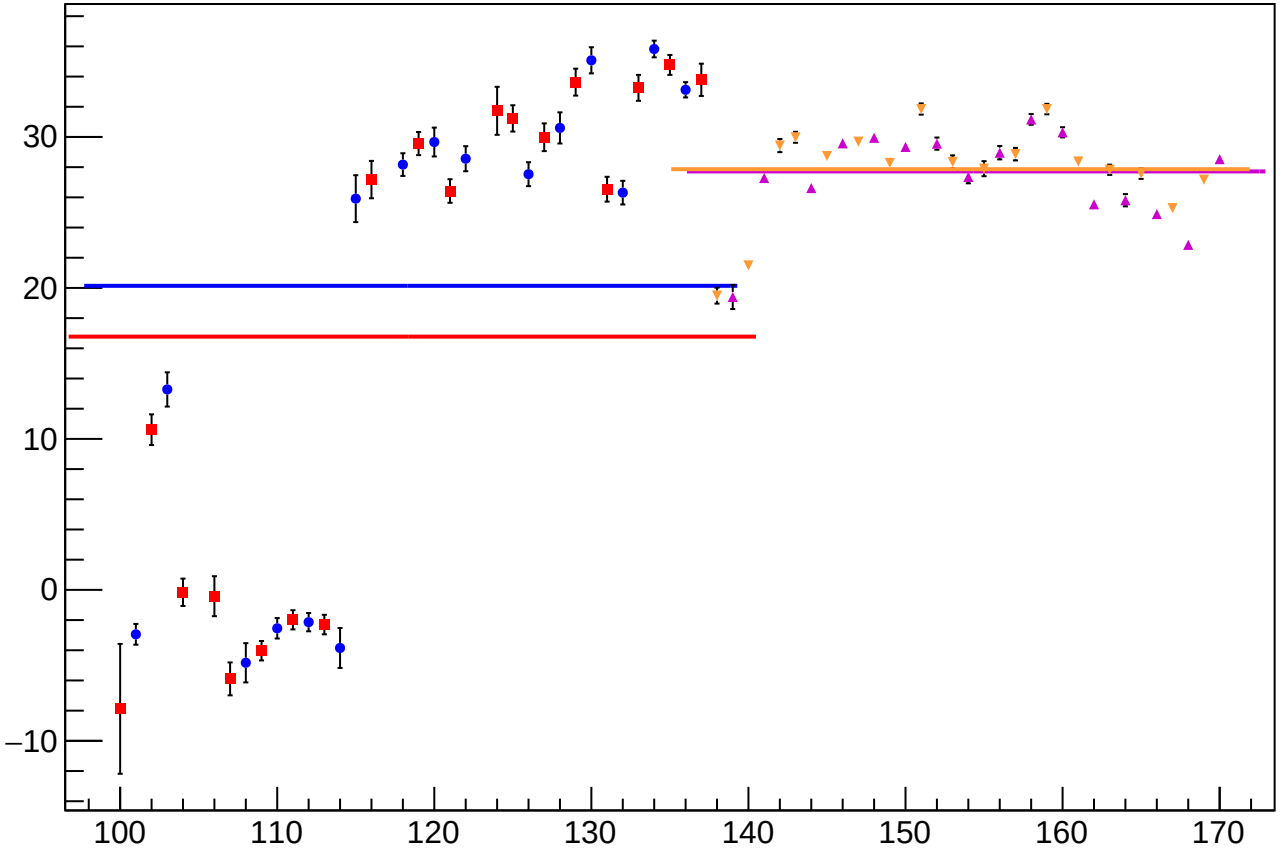
Left In: -28.400+/-0.099 $\chi^2$/NDF:4951.8/15

+ sign -31.803+/-0.088 $\chi^2$/NDF: 6271.3/32

All: -31.387+/-0.062 $\chi^2$/NDF: 14748.4/67

- sign -30.984+/-0.087 $\chi^2$/NDF: 8433.4/34

# reg_asym_sam_1357_avg_diff_bpm4eY_slope vs Slug




Right In: 20.140+/-0.195 $\chi^2$/NDF: 6684.6/15

Left Out: 27.865+/-0.084 $\chi^2$/NDF:1072.1/16

Right Out: 16.775+/-0.200 $\chi^2$/NDF: 6739.1/18

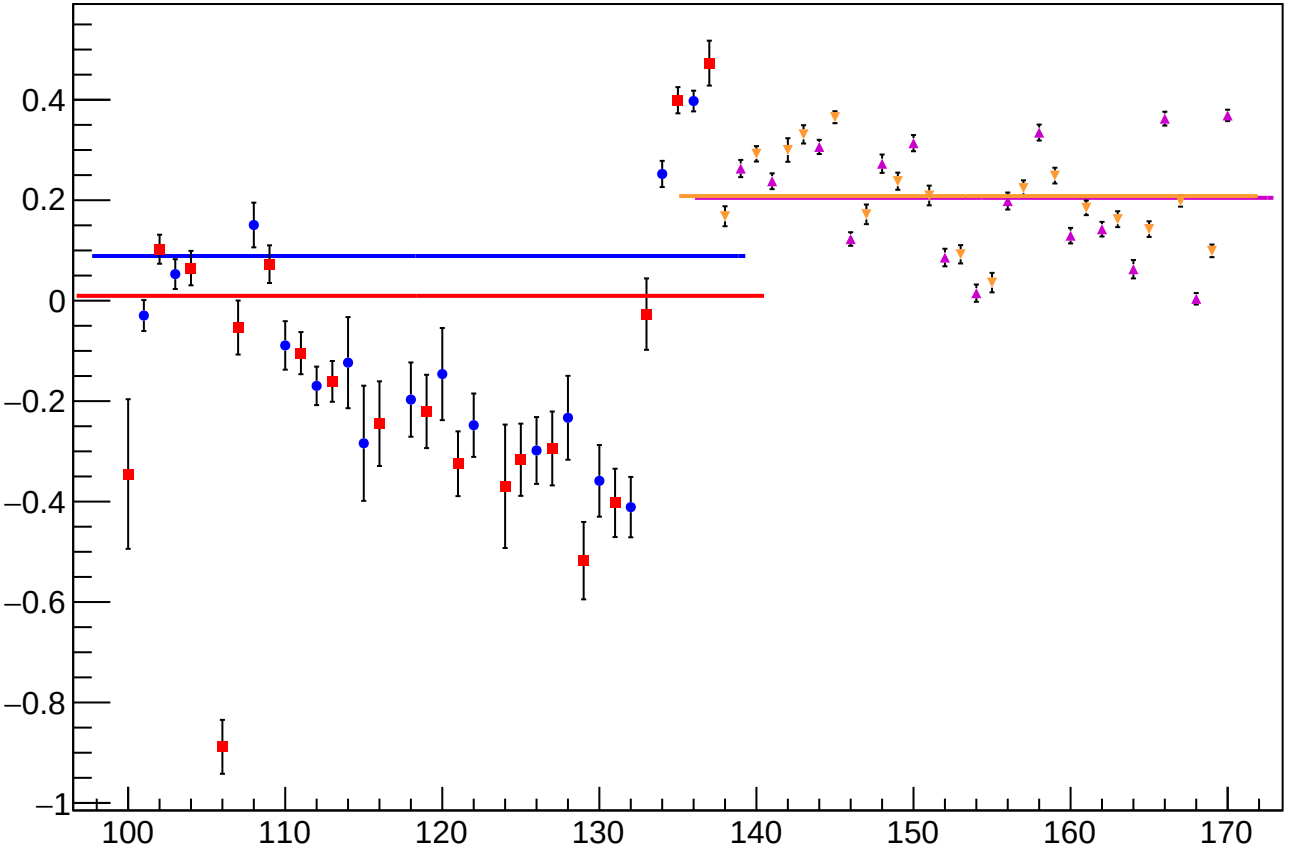
Left In: 27.717+/-0.083 $\chi^2$/NDF:861.0/15

+ sign 26.664+/-0.077 $\chi^2$/NDF: 9086.1/32

All: 26.390+/-0.054 $\chi^2$/NDF: 19275.3/67

- sign 26.120+/-0.076 $\chi^2$/NDF: 10163.9/34

# reg_asym_sam_1357_avg_diff_bpm12X_slope vs Slug




Right In: 0.089+/-0.010 $\chi^2$/NDF: 563.9/15

Left Out: 0.208+/-0.004 $\chi^2$/NDF:506.0/16

Right Out: 0.010+/-0.011 $\chi^2$/NDF: 834.8/18

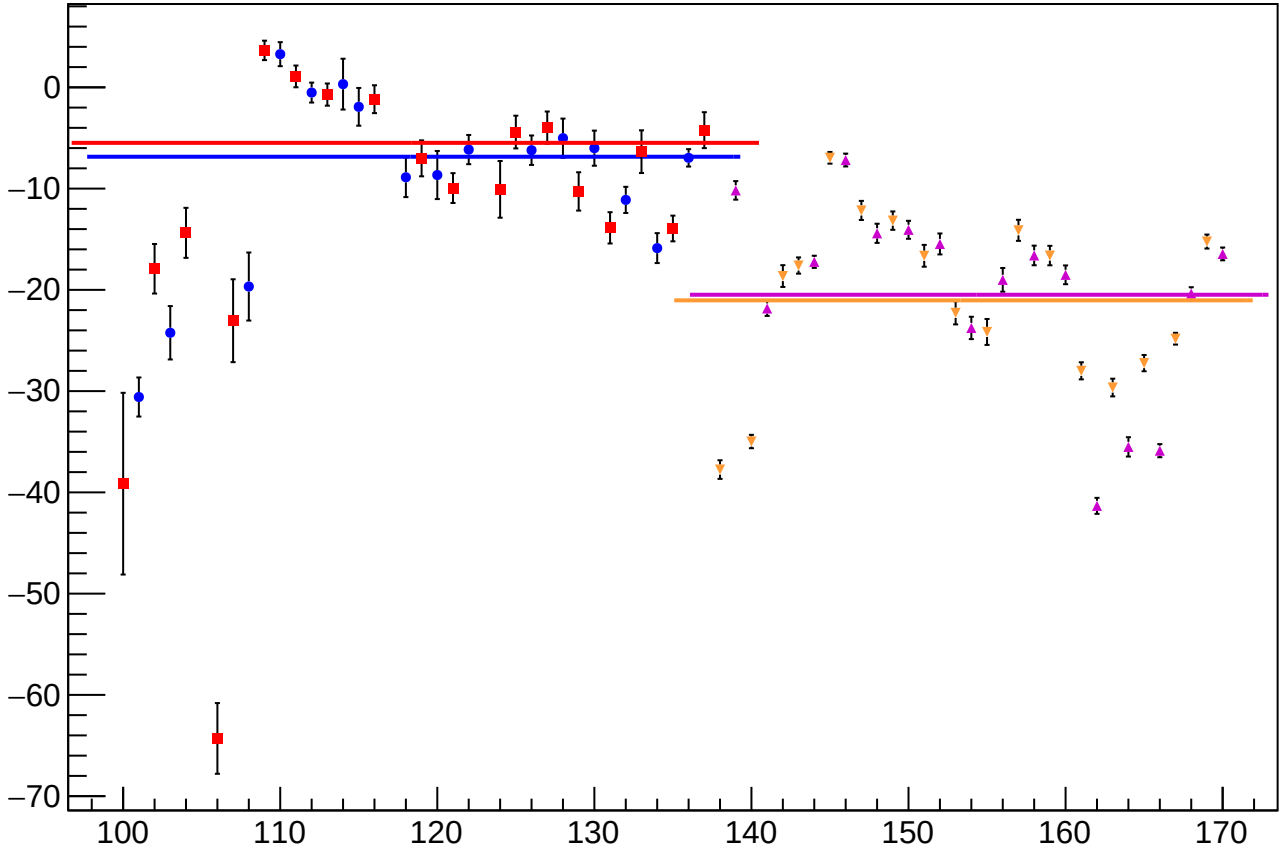
Left In: 0.205+/-0.004 $\chi^2$/NDF:1149.9/15

+ sign 0.194+/-0.004 $\chi^2$/NDF: 1185.6/32

All: 0.189+/-0.003 $\chi^2$/NDF: 3454.9/67

- sign 0.185+/-0.004 $\chi^2$/NDF: 2265.9/34

# reg_asym_sam_2468_avg_diff_bpm1X_slope vs Slug




Right In: -6.853+/-0.376 $\chi^2$/NDF: 390.1/15

Left Out: -21.036+/-0.201 $\chi^2$/NDF:1986.3/16

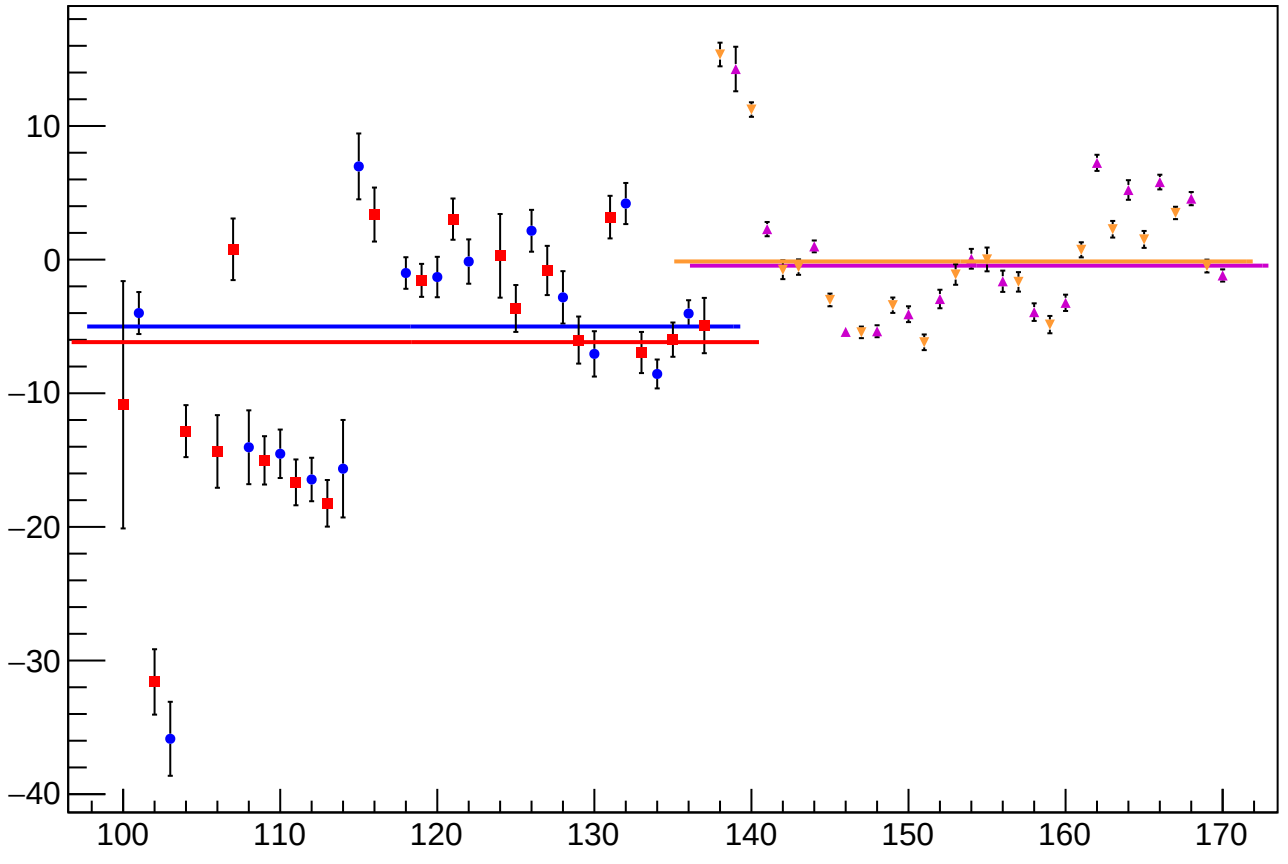
Right Out: -5.483+/-0.369 $\chi^2$/NDF: 606.5/18

Left In: -20.483+/-0.198 $\chi^2$/NDF:2296.5/15

+ sign -17.883+/-0.177 $\chi^2$/NDF: 3485.3/32

All: -17.501+/-0.124 $\chi^2$/NDF: 7680.8/67

- sign -17.132+/-0.174 $\chi^2$/NDF: 4186.4/34




Right In: -5.005+/-0.395 $\chi^2$/NDF: 341.7/15

Left Out: -0.135+/-0.142 $\chi^2$/NDF:1213.8/16

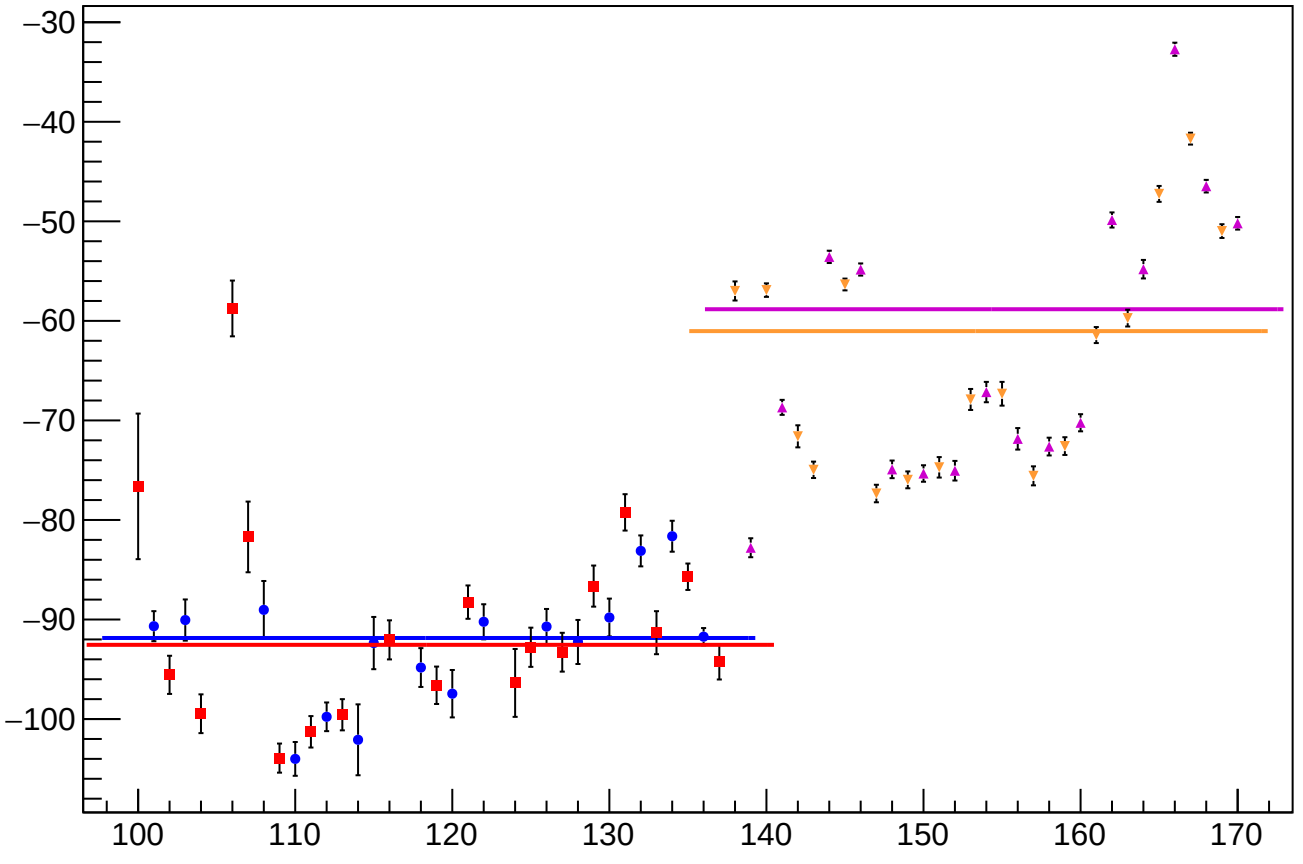
Right Out: -6.173+/-0.417 $\chi^2$/NDF: 369.1/18

Left In: -0.450+/-0.140 $\chi^2$/NDF:968.0/15

+ sign -0.690+/-0.133 $\chi^2$/NDF: 1690.0/32

All: -0.861+/-0.094 $\chi^2$/NDF: 3200.0/67

- sign -1.029+/-0.133 $\chi^2$/NDF: 1506.8/34




Right In: -91.856+/-0.424 $\chi^2$/NDF: 177.3/15

Left Out: -61.029+/-0.198 $\chi^2$/NDF:3359.6/16

Right Out: -92.544+/-0.439 $\chi^2$/NDF: 387.8/18

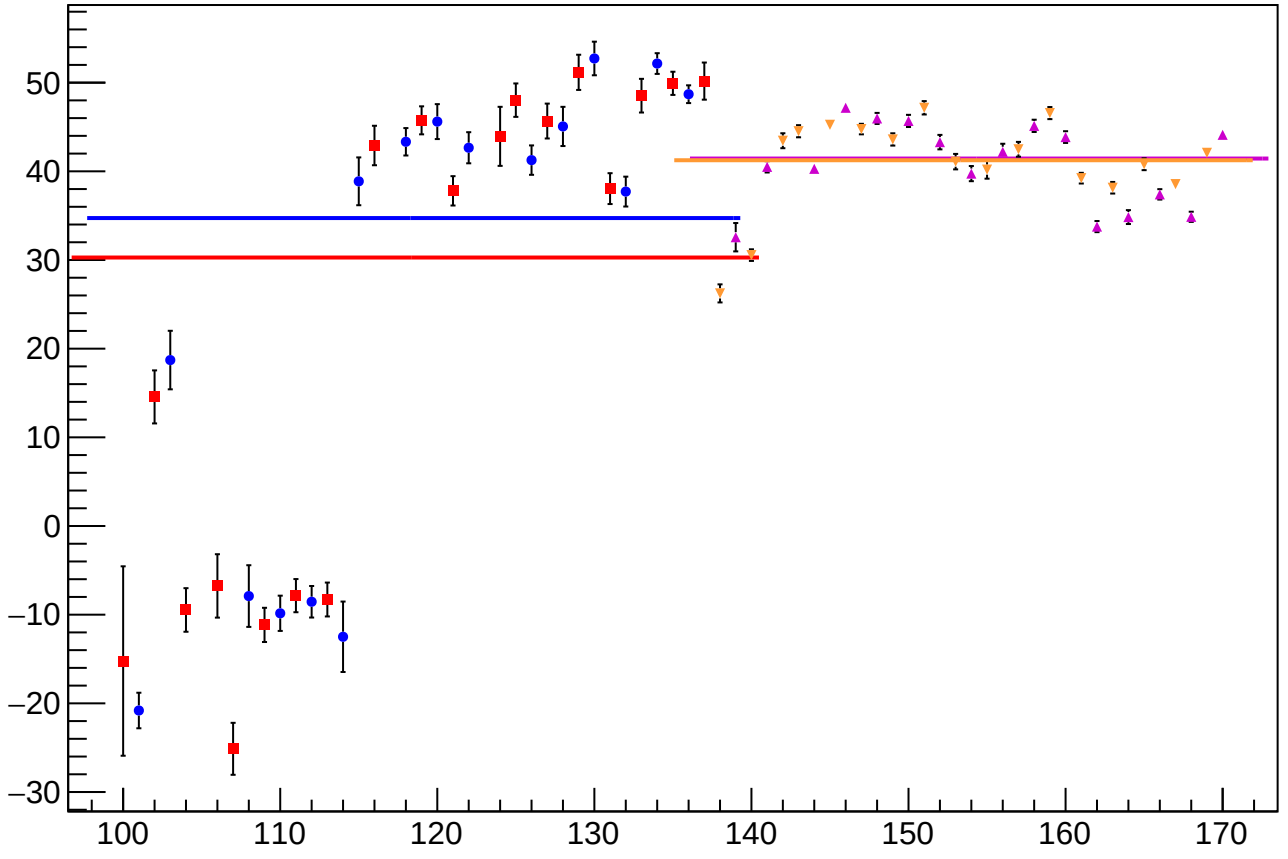
Left In: -58.830+/-0.194 $\chi^2$/NDF:4827.8/15

+ sign -66.565+/-0.180 $\chi^2$/NDF: 7872.8/32

All: -65.444+/-0.126 $\chi^2$/NDF: 18092.3/67

- sign -64.348+/-0.178 $\chi^2$/NDF: 10142.5/34

# reg_asym_sam_2468_avg_diff_bpm4eY_slope vs Slug




Right In: 34.729+/-0.442 $\chi^2$/NDF: 2809.1/15

Left Out: 41.249+/-0.163 $\chi^2$/NDF:804.2/16

Right Out: 30.279+/-0.467 $\chi^2$/NDF: 2911.2/18

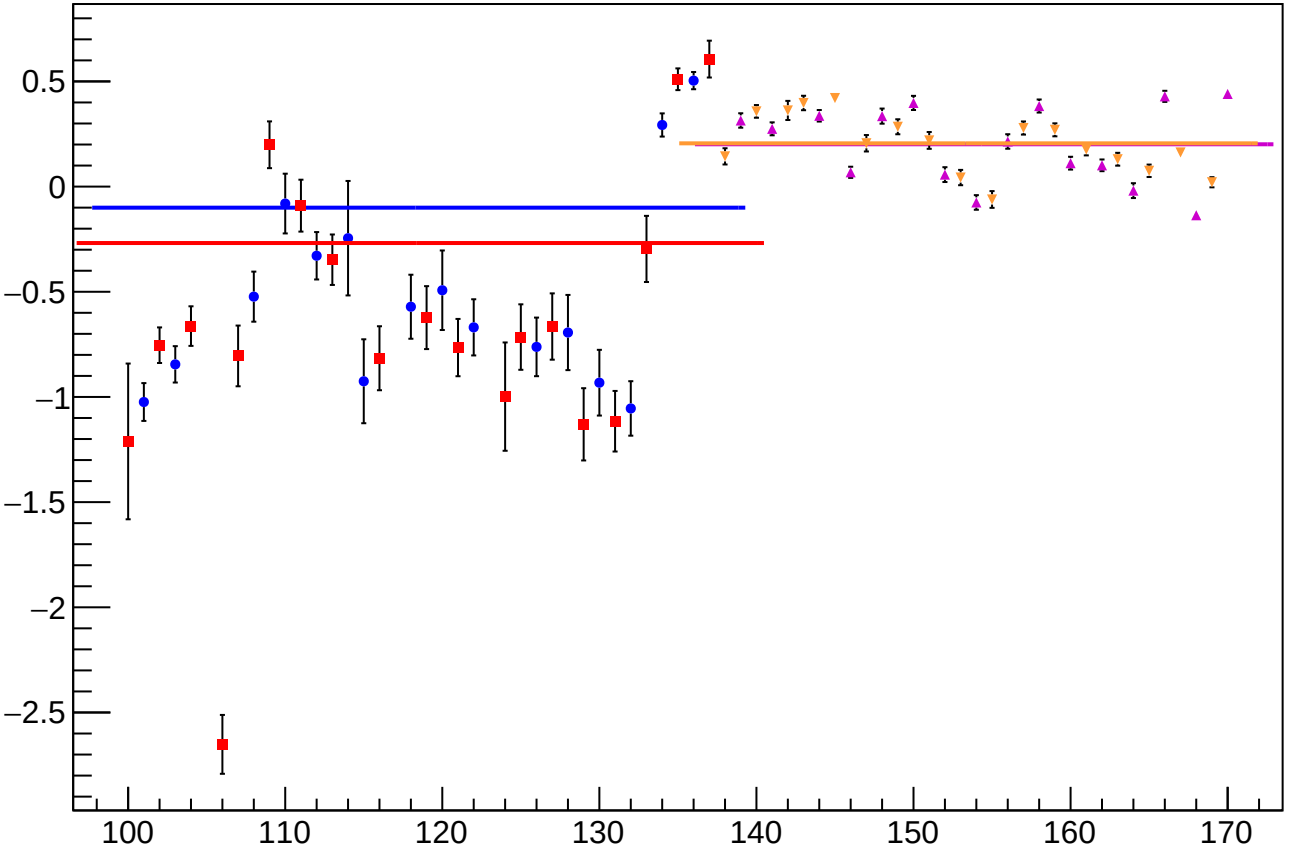
Left In: 41.441+/-0.161 $\chi^2$/NDF:756.2/15

+ sign 40.465+/-0.153 $\chi^2$/NDF: 3804.8/32

All: 40.357+/-0.108 $\chi^2$/NDF: 7983.3/67

- sign 40.251+/-0.153 $\chi^2$/NDF: 4177.5/34

# reg_asym_sam_2468_avg_diff_bpm12X_slope vs Slug




Right In: -0.100+/-0.024 $\chi^2$/NDF: 631.4/15

Left Out: 0.206+/-0.008 $\chi^2$/NDF:323.7/16

Right Out: -0.268+/-0.026 $\chi^2$/NDF: 822.4/18

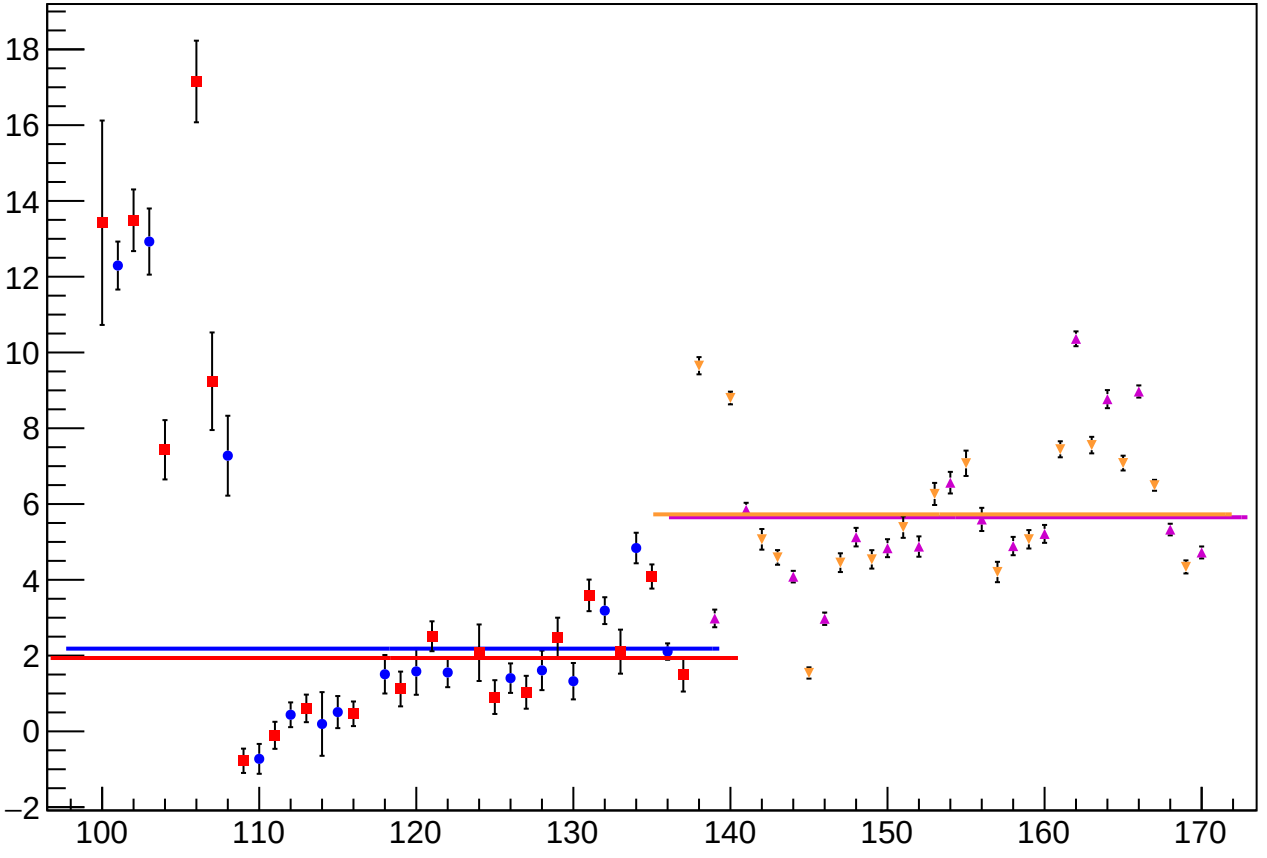
Left In: 0.201+/-0.007 $\chi^2$/NDF:724.9/15

+ sign 0.178+/-0.007 $\chi^2$/NDF: 1102.8/32

All: 0.173+/-0.005 $\chi^2$/NDF: 2946.1/67

- sign 0.167+/-0.007 $\chi^2$/NDF: 1842.1/34

# reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs Slug




Right In: 2.184+/-0.105 $\chi^2$/NDF: 599.3/15

Left Out: 5.727+/-0.051 $\chi^2$/NDF:1853.7/16

Right Out: 1.936+/-0.105 $\chi^2$/NDF: 717.1/18

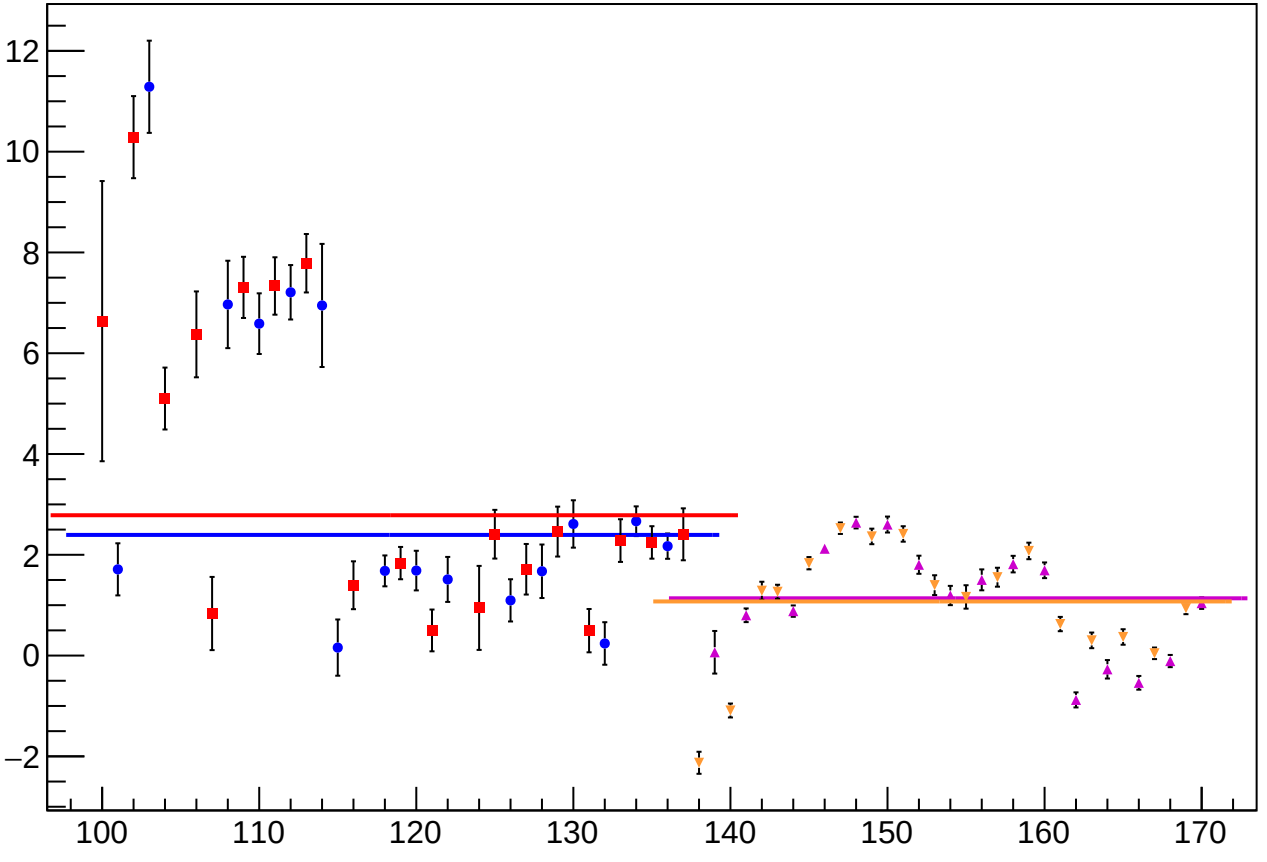
Left In: 5.651+/-0.050 $\chi^2$/NDF:1770.9/15

+ sign 5.057+/-0.046 $\chi^2$/NDF: 3376.7/32

All: 5.012+/-0.032 $\chi^2$/NDF: 6878.8/67

- sign 4.968+/-0.045 $\chi^2$/NDF: 3500.1/34

# reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs Slug




Right In: 2.394+/-0.108 $\chi^2$/NDF: 333.9/15

Left Out: 1.074+/-0.036 $\chi^2$/NDF:995.0/16

Right Out: 2.785+/-0.116 $\chi^2$/NDF: 410.9/18

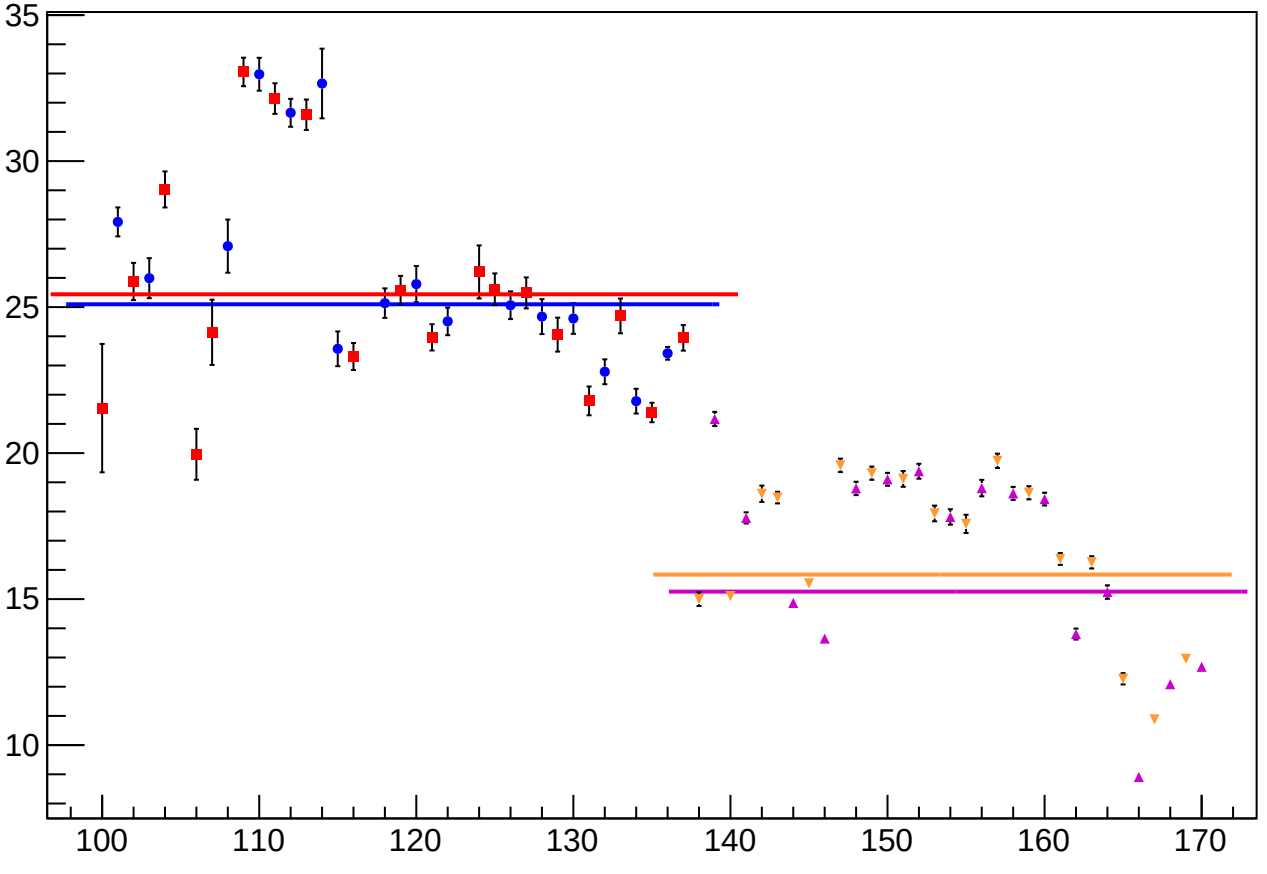
Left In: 1.136+/-0.035 $\chi^2$/NDF:924.3/15

+ sign 1.205+/-0.034 $\chi^2$/NDF: 1462.6/32

All: 1.241+/-0.024 $\chi^2$/NDF: 2985.2/67

- sign 1.277+/-0.034 $\chi^2$/NDF: 1520.3/34

# reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs Slug




Right In: 25.096+/-0.118 $\chi^2$/NDF: 622.9/15

Left Out: 15.840+/-0.050 $\chi^2$/NDF:3203.2/16

Right Out: 25.438+/-0.124 $\chi^2$/NDF: 877.6/18

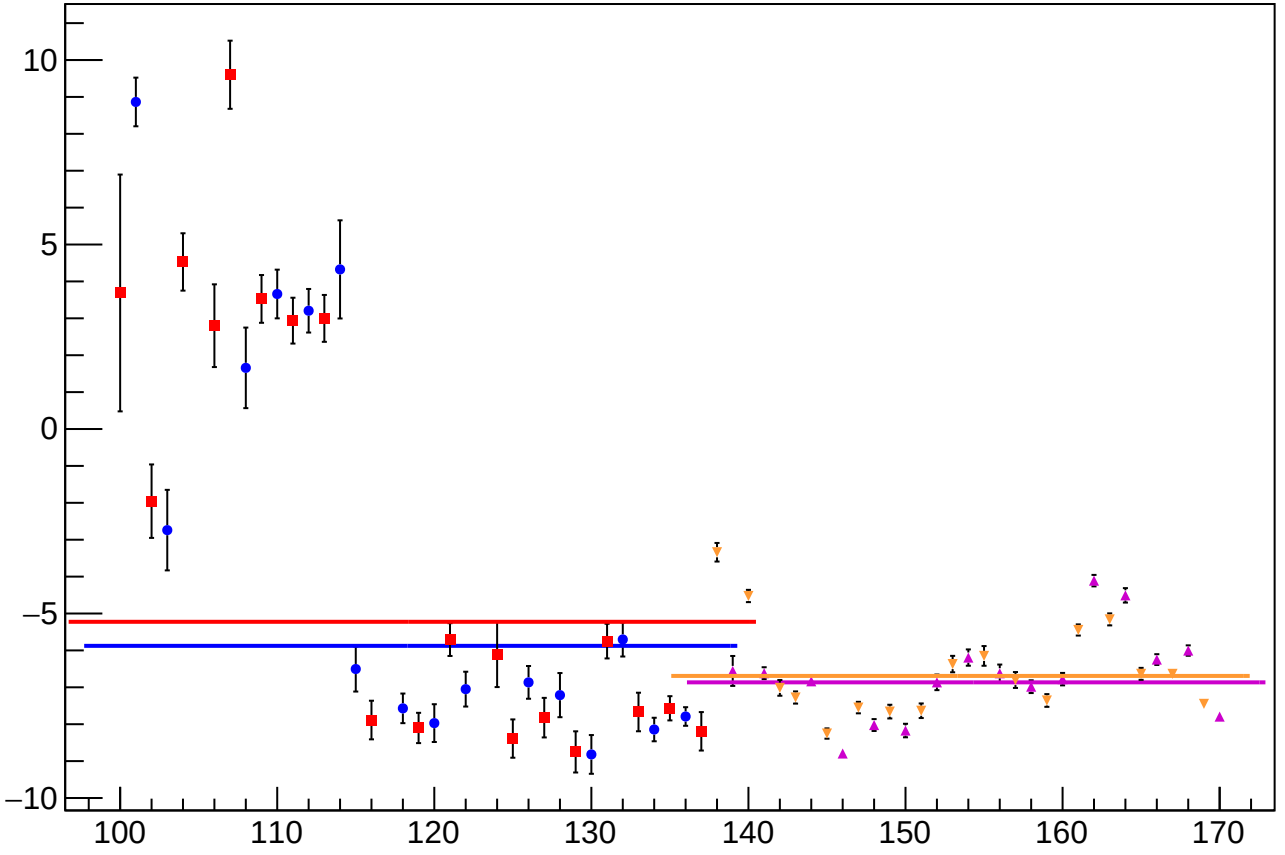
Left In: 15.257+/-0.049 $\chi^2$/NDF:4608.0/15

+ sign 17.267+/-0.046 $\chi^2$/NDF: 9071.9/32

All: 16.952+/-0.032 $\chi^2$/NDF: 20472.4/67

- sign 16.642+/-0.046 $\chi^2$/NDF: 11308.0/34

# reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs Slug




Right In: -5.876+/-0.121 $\chi^2$/NDF: 1251.4/15

Left Out: -6.691+/-0.041 $\chi^2$/NDF:775.5/16

Right Out: -5.225+/-0.129 $\chi^2$/NDF: 1292.0/18

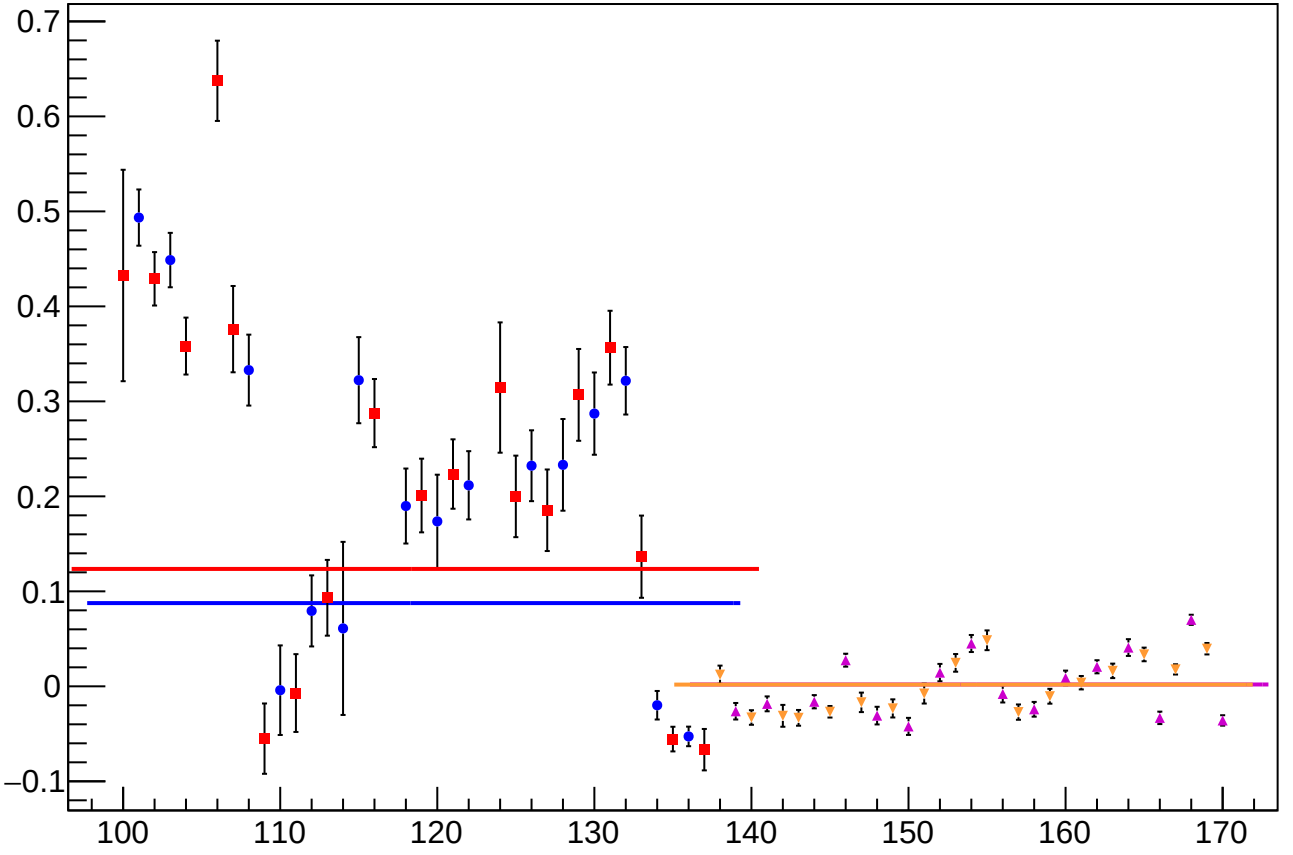
Left In: -6.866+/-0.041 $\chi^2$/NDF:946.0/15

+ sign -6.606+/-0.039 $\chi^2$/NDF: 2067.7/32

All: -6.662+/-0.028 $\chi^2$/NDF: 4456.0/67

- sign -6.717+/-0.039 $\chi^2$/NDF: 2384.2/34

# reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs Slug




Right In: 0.088+/-0.007 $\chi^2$/NDF: 768.0/15

Left Out: 0.002+/-0.002 $\chi^2$/NDF:193.6/16

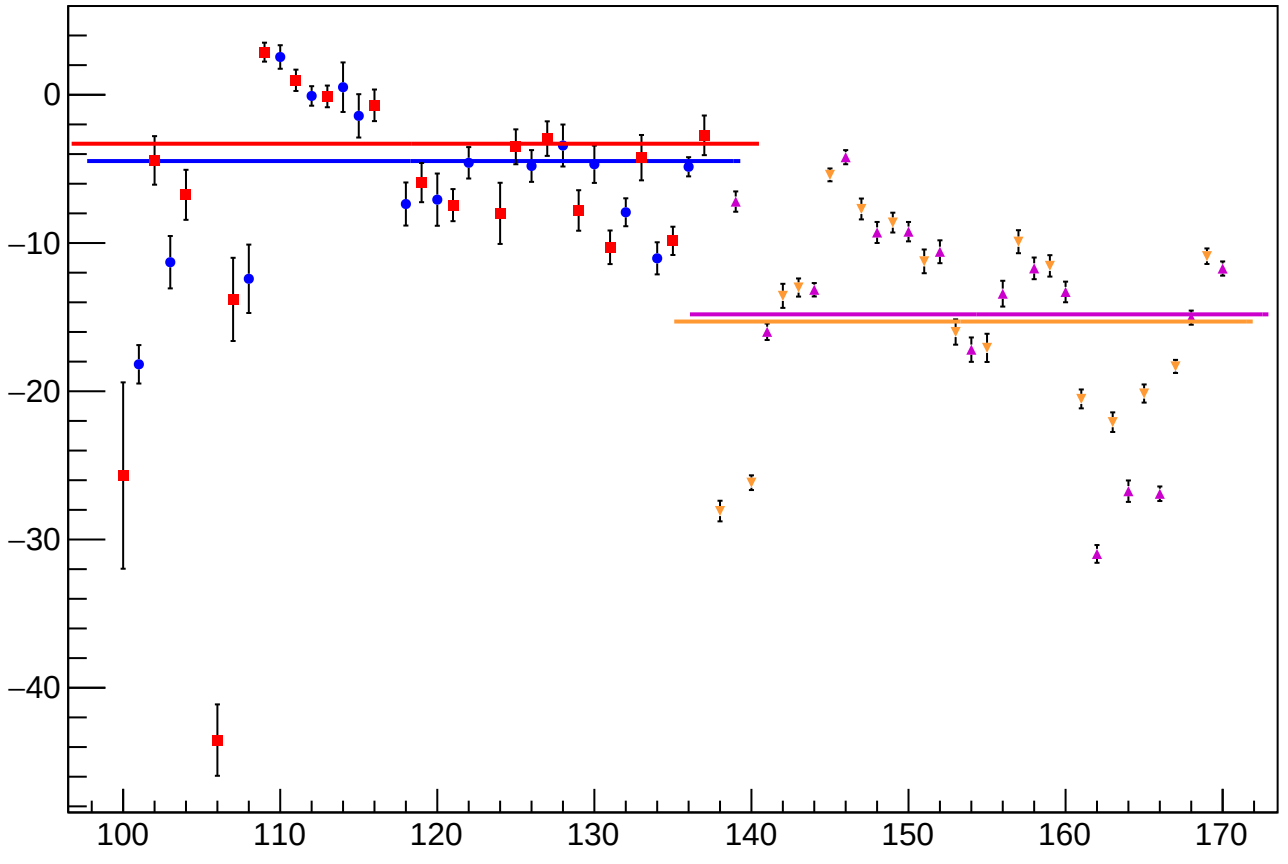
Right Out: 0.124+/-0.007 $\chi^2$/NDF: 762.3/18

Left In: 0.002+/-0.002 $\chi^2$/NDF:379.2/15

+ sign 0.008+/-0.002 $\chi^2$/NDF: 1118.1/32

All: 0.009+/-0.001 $\chi^2$/NDF: 2518.6/67

- sign 0.009+/-0.002 $\chi^2$/NDF: 1400.4/34




Right In: -4.471+/-0.268 $\chi^2$/NDF: 331.8/15

Left Out: -15.296+/-0.151 $\chi^2$/NDF:2033.8/16

Right Out: -3.302+/-0.261 $\chi^2$/NDF: 584.6/18

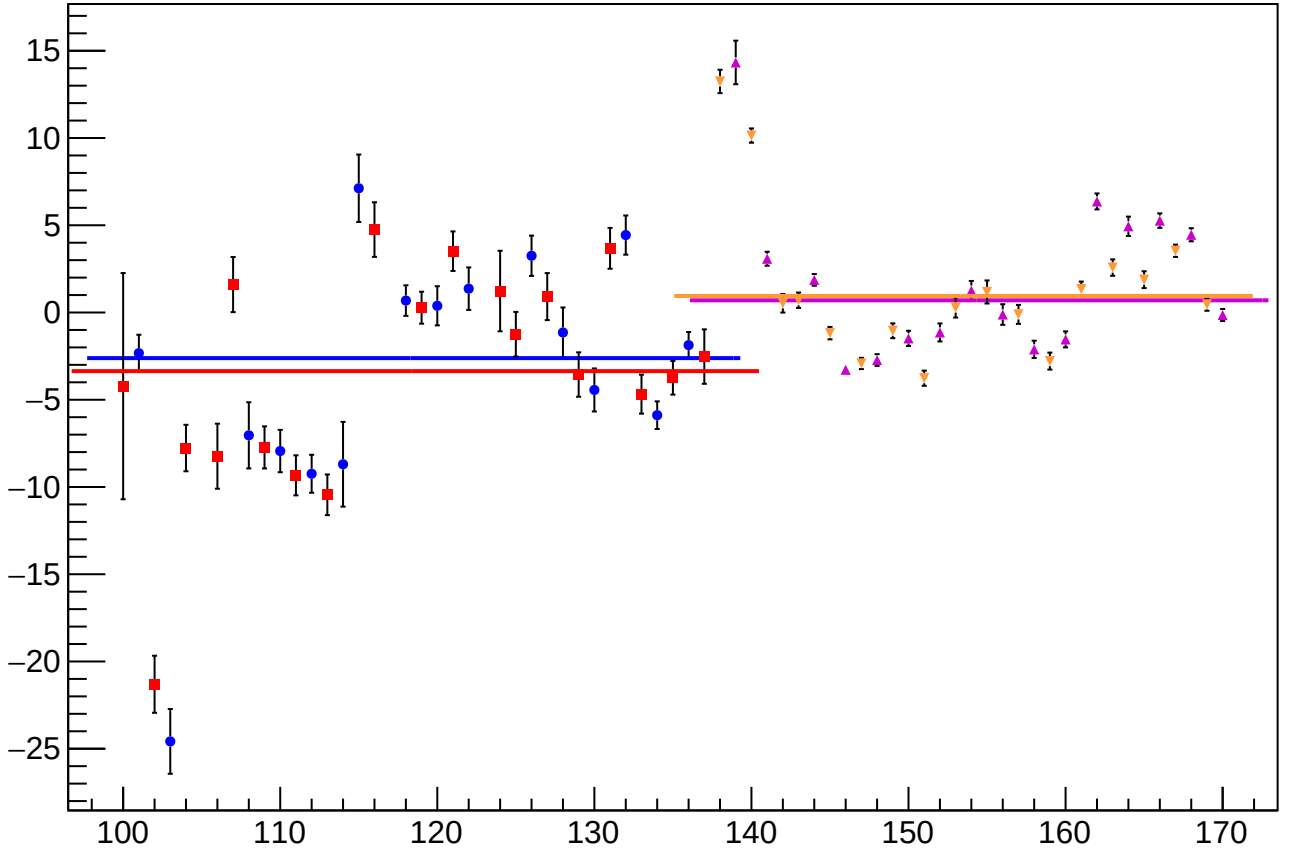
Left In: -14.812+/-0.149 $\chi^2$/NDF:2482.3/15

+ sign -12.688+/-0.132 $\chi^2$/NDF: 3600.1/32

All: -12.327+/-0.092 $\chi^2$/NDF: 8149.8/67

- sign -11.980+/-0.129 $\chi^2$/NDF: 4535.0/34

# reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs Slug




Right In: -2.615+/-0.286 $\chi^2$/NDF: 351.9/15

Left Out: 0.950+/-0.107 $\chi^2$/NDF:1295.9/16

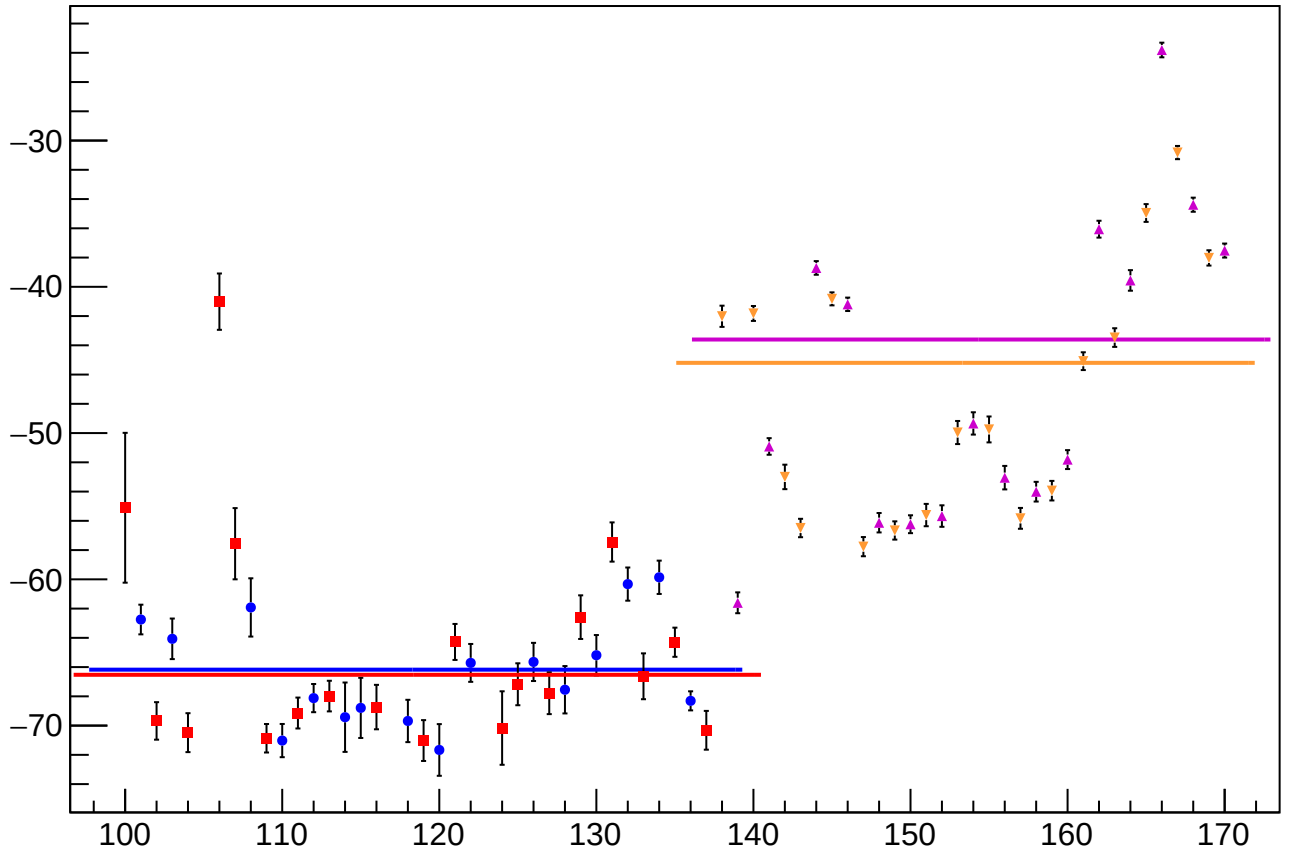
Right Out: -3.359+/-0.299 $\chi^2$/NDF: 359.6/18

Left In: 0.698+/-0.105 $\chi^2$/NDF:1001.3/15

+ sign 0.514+/-0.100 $\chi^2$/NDF: 1784.5/32

All: 0.381+/-0.070 $\chi^2$/NDF: 3313.0/67

- sign 0.250+/-0.099 $\chi^2$/NDF: 1525.0/34




Right In: -66.176+/-0.304 $\chi^2$/NDF: 129.2/15

Left Out: -45.198+/-0.149 $\chi^2$/NDF:3403.6/16

Right Out: -66.526+/-0.312 $\chi^2$/NDF: 321.7/18

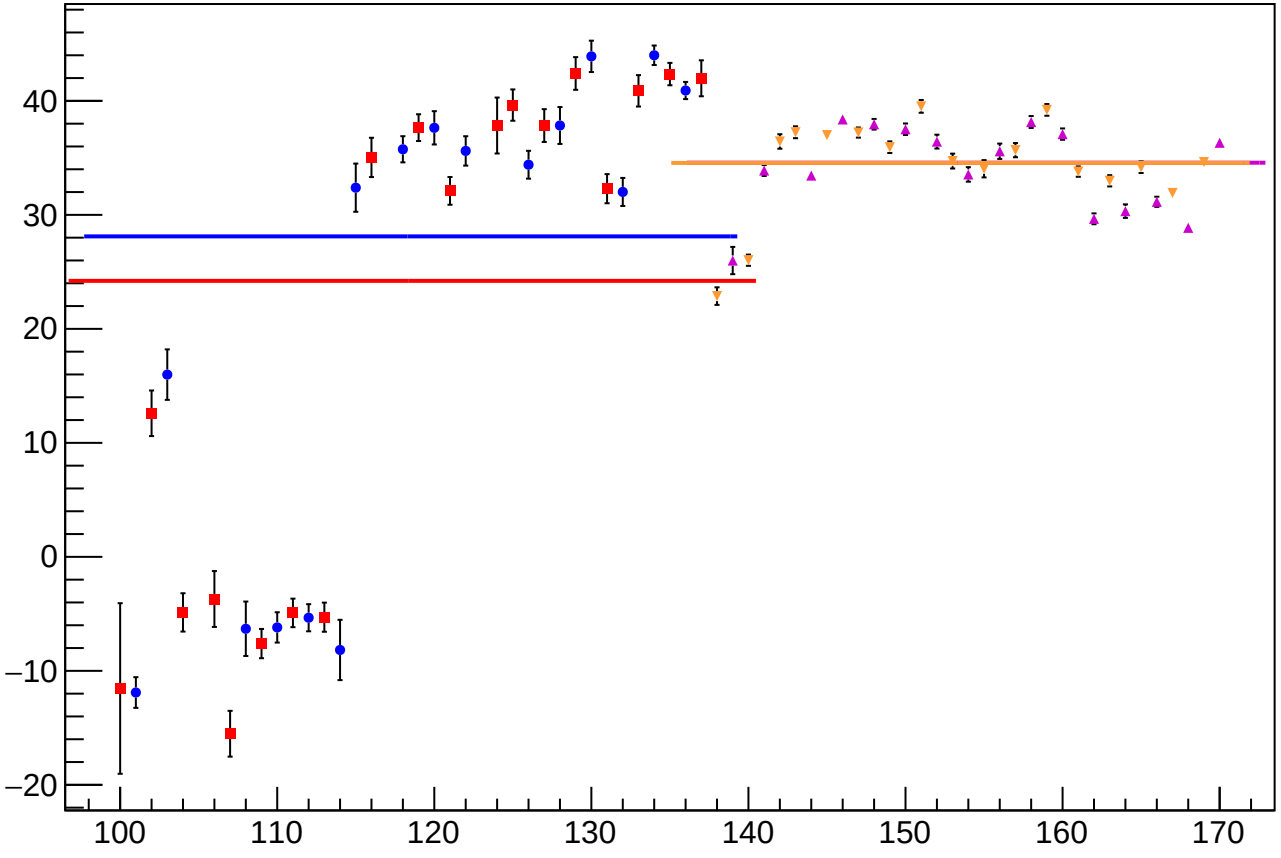
Left In: -43.604+/-0.146 $\chi^2$/NDF:4881.2/15

+ sign -49.269+/-0.134 $\chi^2$/NDF: 7362.3/32

All: -48.487+/-0.094 $\chi^2$/NDF: 17047.1/67

- sign -47.723+/-0.132 $\chi^2$/NDF: 9617.4/34

# reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs Slug




Right In: 28.112+/-0.320 $\chi^2$/NDF: 3727.7/15

Left Out: 34.558+/-0.123 $\chi^2$/NDF:868.6/16

Right Out: 24.212+/-0.336 $\chi^2$/NDF: 3841.7/18

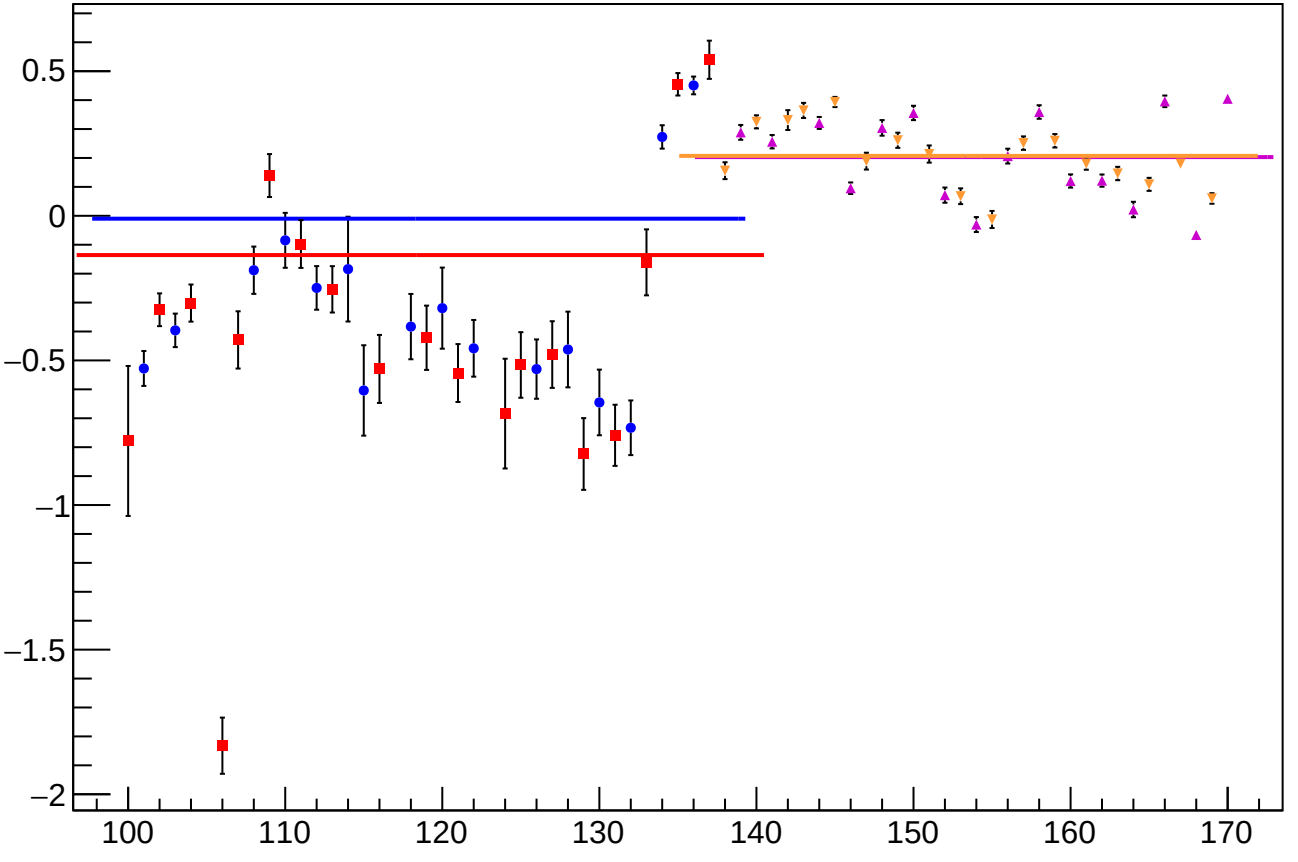
Left In: 34.577+/-0.121 $\chi^2$/NDF:758.4/15

+ sign 33.727+/-0.115 $\chi^2$/NDF: 4949.8/32

All: 33.551+/-0.081 $\chi^2$/NDF: 10398.0/67

- sign 33.376+/-0.114 $\chi^2$/NDF: 5443.5/34

# reg_asym_sam_12345678_avg_diff_bpm12X_slope vs Slug




Right In: -0.010+/-0.017 $\chi^2$/NDF: 587.4/15

Left Out: 0.207+/-0.006 $\chi^2$/NDF:380.5/16

Right Out: -0.136+/-0.019 $\chi^2$/NDF: 818.5/18

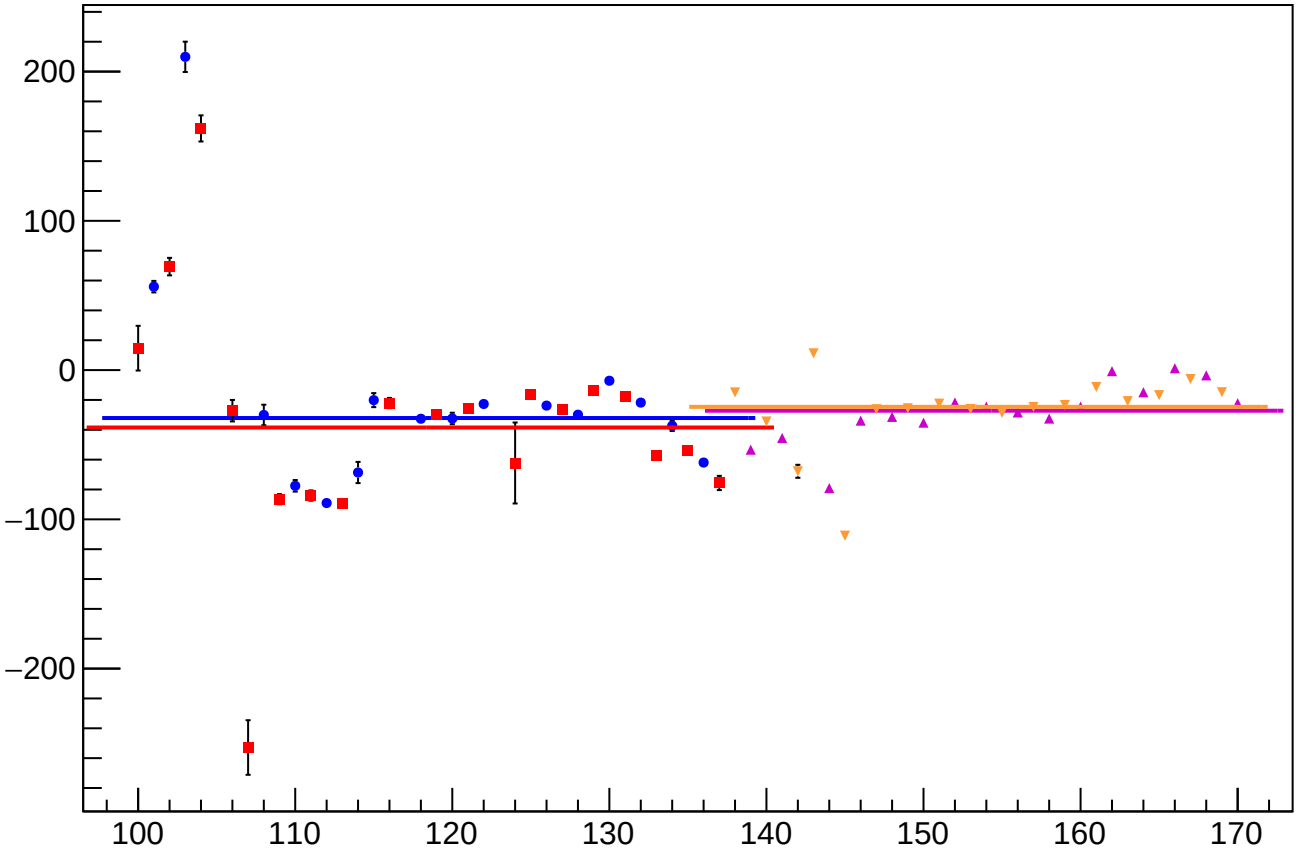
Left In: 0.203+/-0.006 $\chi^2$/NDF:861.7/15

+ sign 0.186+/-0.005 $\chi^2$/NDF: 1109.8/32

All: 0.181+/-0.004 $\chi^2$/NDF: 3089.9/67

- sign 0.176+/-0.005 $\chi^2$/NDF: 1978.3/34

# reg_asym_atl1_diff_bpm1X_slope vs Slug




Right In: -32.117+/-0.843 $\chi^2$/NDF: 1877.5/15

Left Out: -24.632+/-0.696 $\chi^2$/NDF:1077.5/16

Right Out: -38.462+/-0.864 $\chi^2$/NDF: 1972.5/18

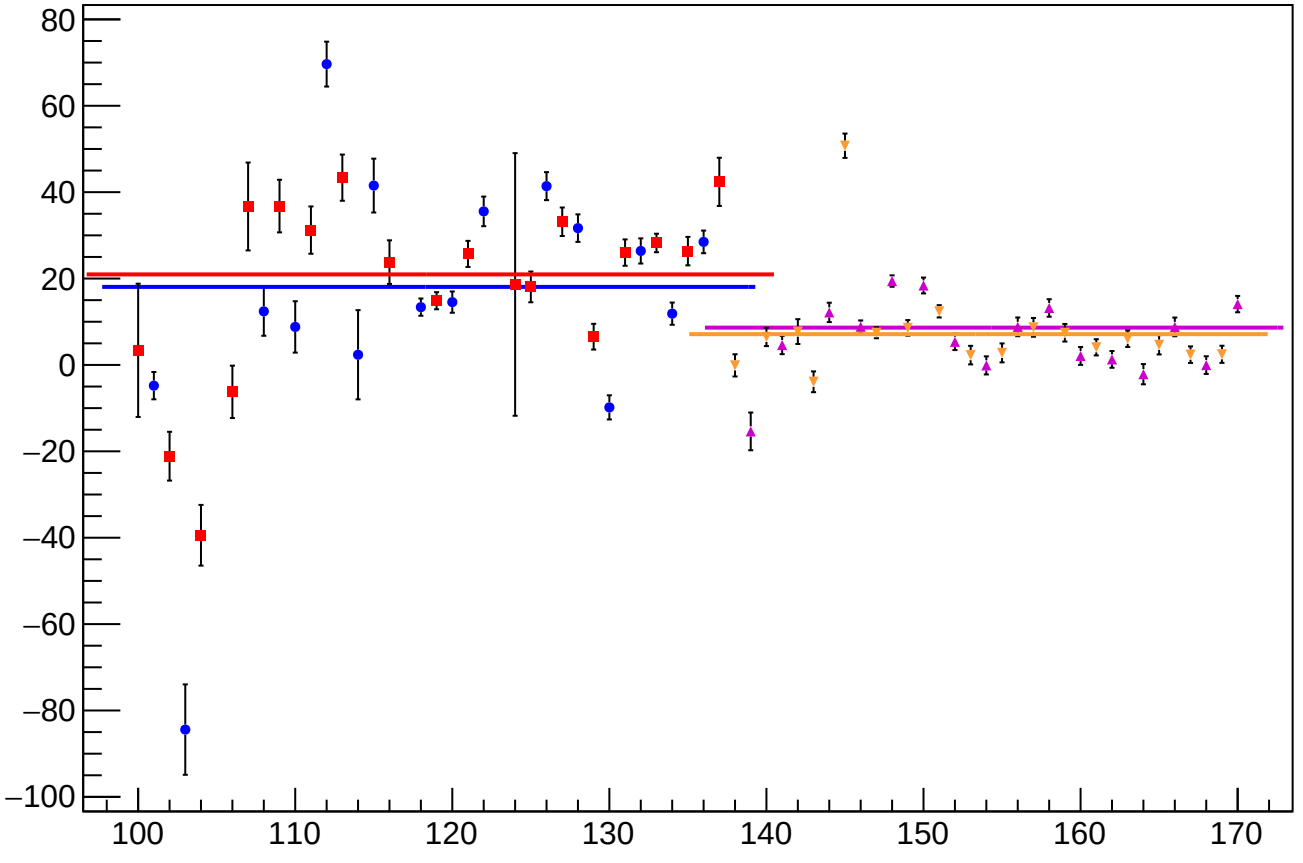
Left In: -27.219+/-0.694 $\chi^2$/NDF:815.1/15

+ sign -27.667+/-0.537 $\chi^2$/NDF: 3001.9/32

All: -29.630+/-0.381 $\chi^2$/NDF: 5919.3/67

- sign -31.627+/-0.541 $\chi^2$/NDF: 2890.5/34

# reg_asym_atl1_diff_bpm4aY_slope vs Slug




Right In: 18.068+/-0.823 $\chi^2$/NDF: 499.6/15

Left Out: 7.126+/-0.479 $\chi^2$/NDF:308.8/16

Right Out: 20.959+/-0.868 $\chi^2$/NDF: 262.6/18

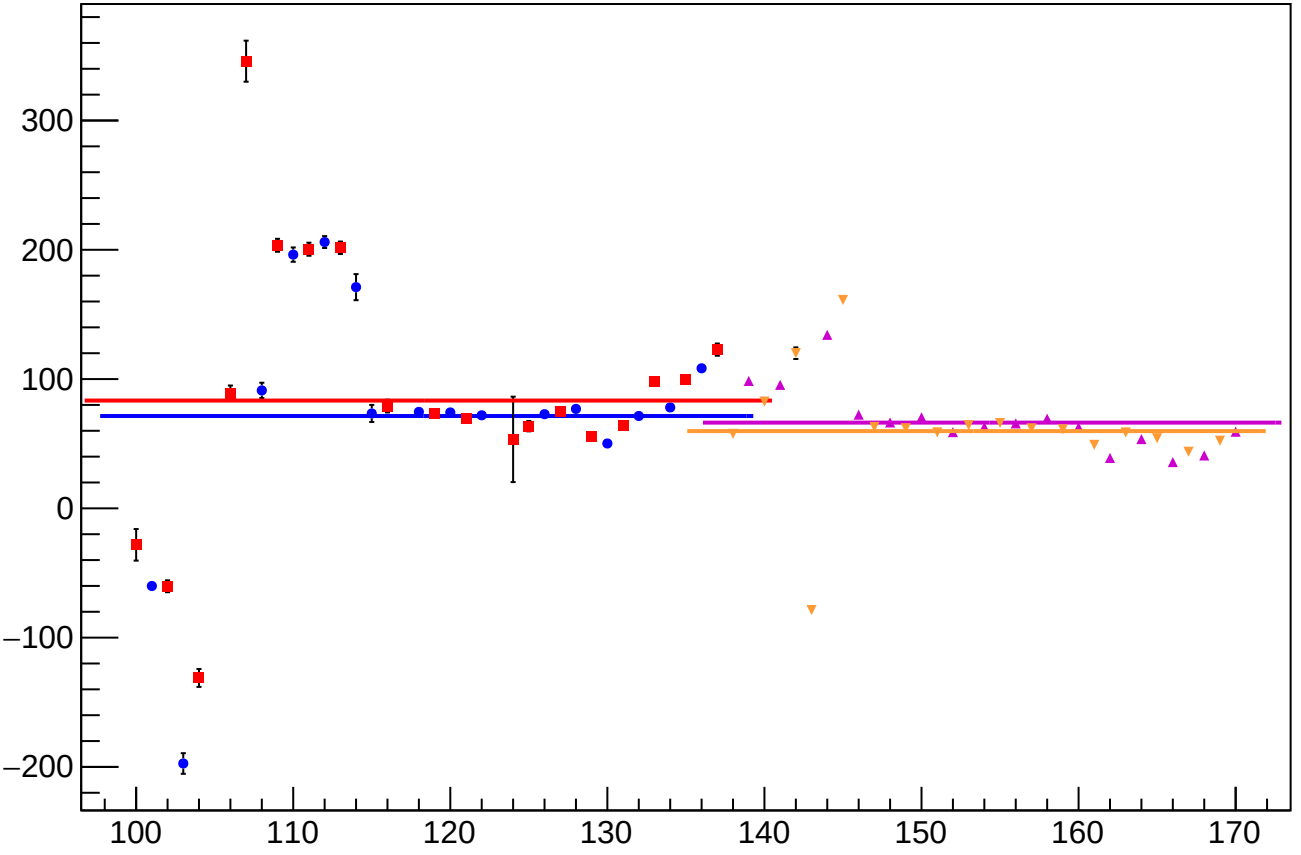
Left In: 8.637+/-0.489 $\chi^2$/NDF:228.7/15

\+ sign 9.899+/-0.414 $\chi^2$/NDF: 940.5/32

All: 10.725+/-0.297 $\chi^2$/NDF: 1592.9/67

\- sign 11.599+/-0.426 $\chi^2$/NDF: 644.3/34

# reg_asym_atl1_diff_bpm4eX_slope vs Slug




Right In: 71.421+/-0.931 $\chi^2$/NDF: 4819.6/15

Left Out: 59.741+/-0.679 $\chi^2$/NDF:2971.9/16

Right Out: 83.385+/-0.985 $\chi^2$/NDF: 4297.3/18

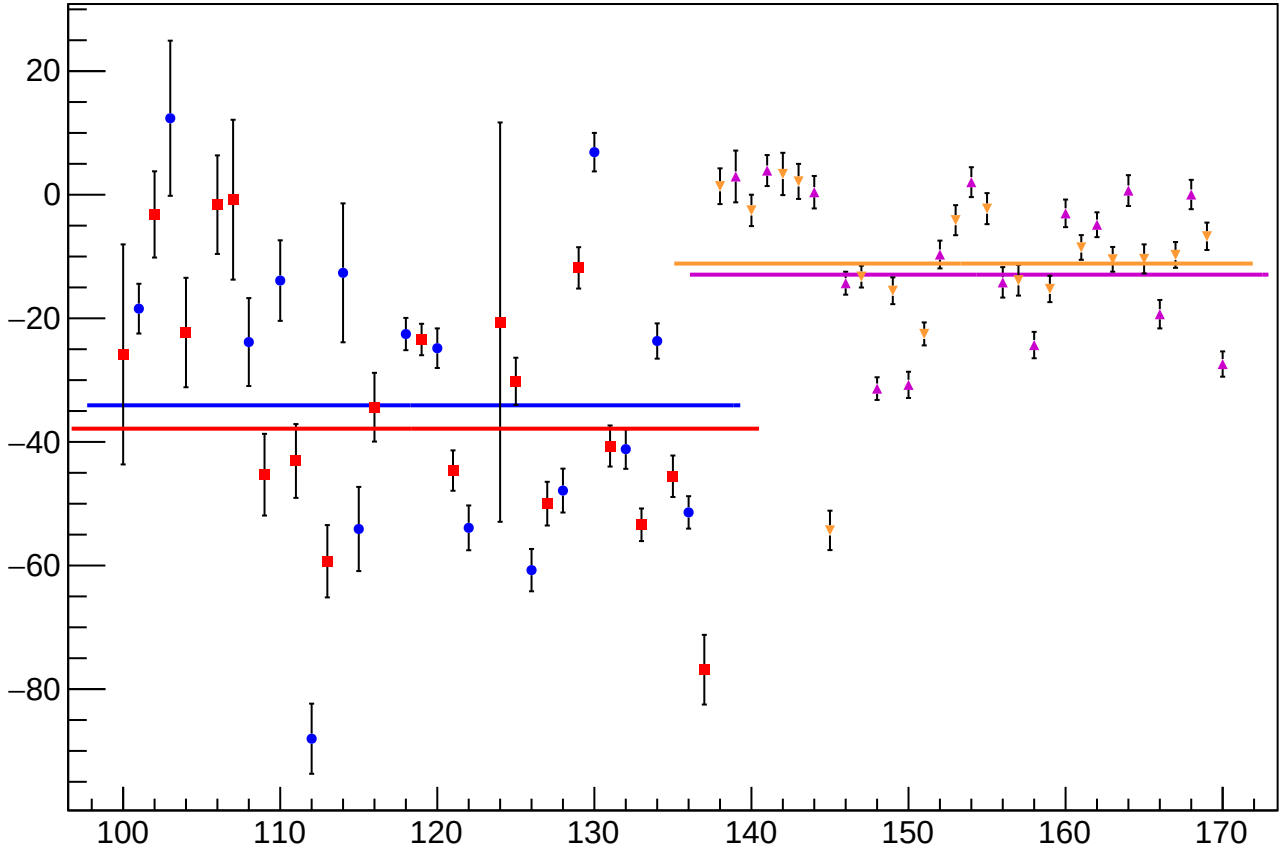
Left In: 66.319+/-0.675 $\chi^2$/NDF:1140.3/15

+ sign 63.795+/-0.549 $\chi^2$/NDF: 7894.2/32

All: 67.725+/-0.391 $\chi^2$/NDF: 13640.2/67

- sign 71.777+/-0.557 $\chi^2$/NDF: 5641.8/34

# reg_asym_atl1_diff_bpm4eY_slope vs Slug




Right In: -34.077+/-0.942 $\chi^2$/NDF: 511.2/15

Left Out: -11.139+/-0.557 $\chi^2$/NDF:328.8/16

Right Out: -37.855+/-0.994 $\chi^2$/NDF: 274.6/18

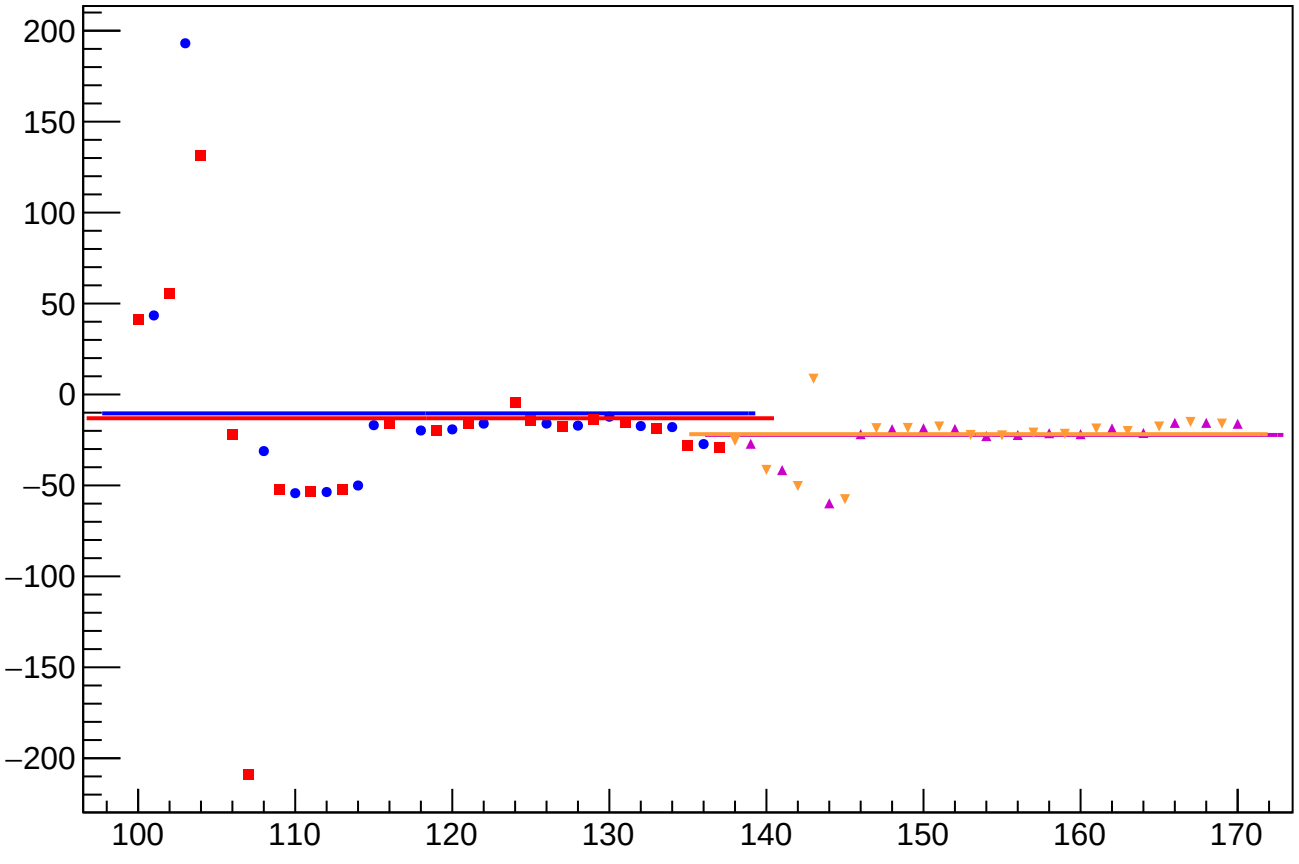
Left In: -12.933+/-0.565 $\chi^2$/NDF:479.9/15

+ sign -17.073+/-0.479 $\chi^2$/NDF: 1279.3/32

All: -18.020+/-0.343 $\chi^2$/NDF: 2517.3/67

- sign -19.014+/-0.491 $\chi^2$/NDF: 1229.9/34

# reg_asym_atl1_diff_bpm12X_slope vs Slug




Right In: -10.400+/-0.057 $\chi^2$/NDF: 522334.6/15

Left Out: -21.835+/-0.025 $\chi^2$/NDF:194587.0/16

Right Out: -13.074+/-0.063 $\chi^2$/NDF: 449609.3/18

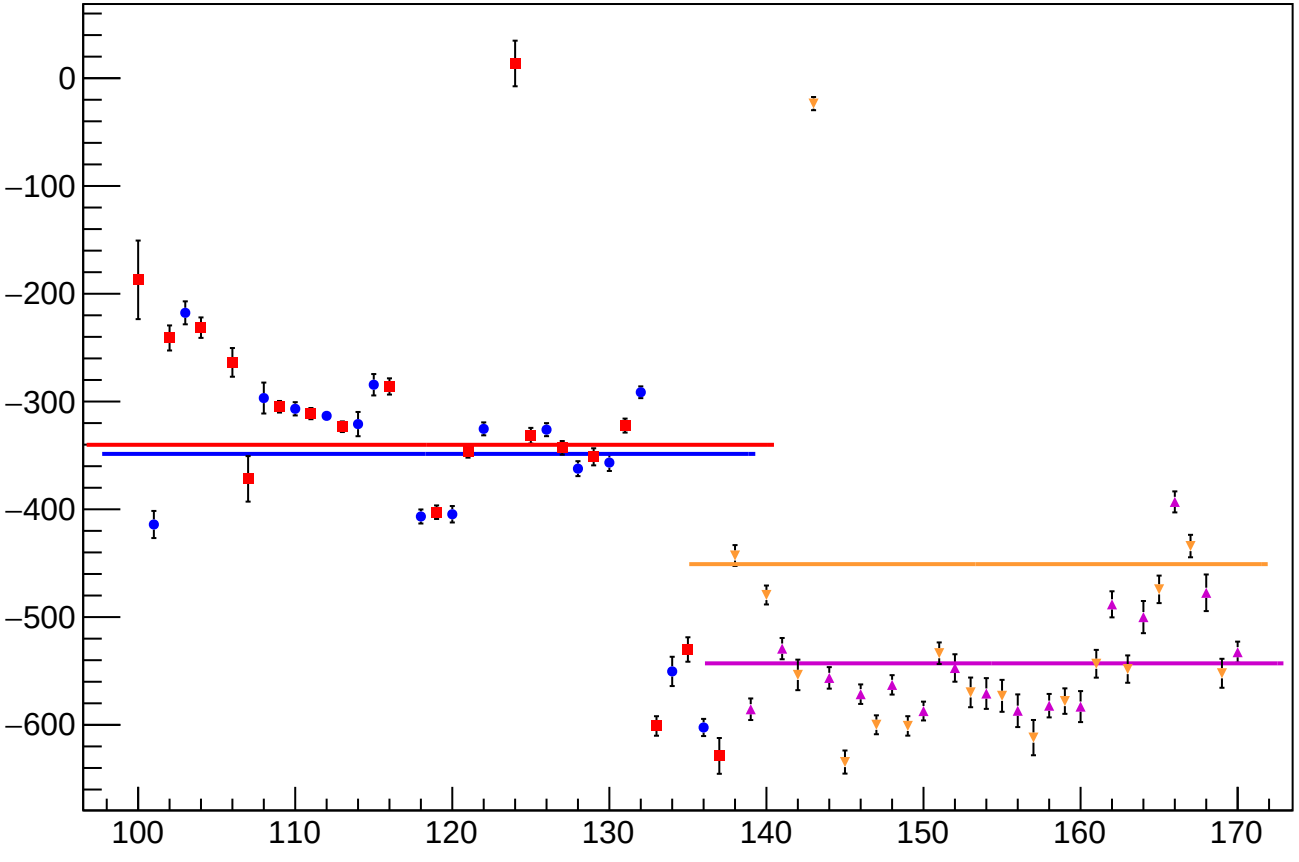
Left In: -22.246+/-0.025 $\chi^2$/NDF:119958.6/15

+ sign -19.925+/-0.023 $\chi^2$/NDF: 750659.3/32

All: -20.451+/-0.016 $\chi^2$/NDF: 1339744.7/67

- sign -20.978+/-0.023 $\chi^2$/NDF: 588059.5/34

# reg_asym_atl2_diff_bpm1X_slope vs Slug




Right In: -348.586+/-1.825 $\chi^2$/NDF: 1858.3/15

Left Out: -450.868+/-2.556 $\chi^2$/NDF:6391.2/16

Right Out: -340.144+/-1.759 $\chi^2$/NDF: 2197.1/18

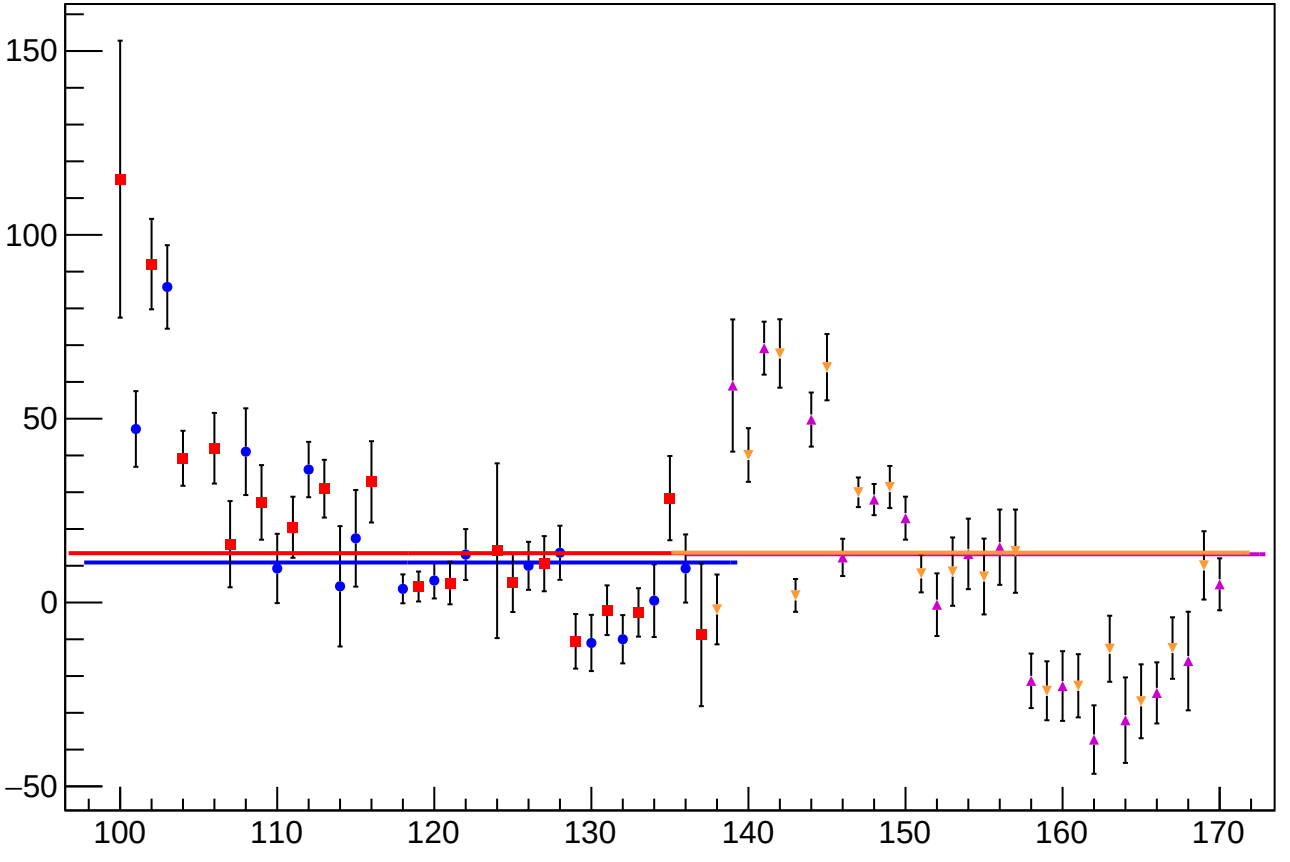
Left In: -542.922+/-2.749 $\chi^2$/NDF:376.0/15

+ sign -383.113+/-1.485 $\chi^2$/NDF: 9310.2/32

All: -391.115+/-1.049 $\chi^2$/NDF: 15802.1/67

- sign -399.081+/-1.482 $\chi^2$/NDF: 6434.0/34

# reg_asym_atl2_diff_bpm4aY_slope vs Slug




Right In: 10.888+/-1.843 $\chi^2$/NDF: 98.2/15

Left Out: 13.576+/-1.716 $\chi^2$/NDF:190.2/16

Right Out: 13.427+/-1.854 $\chi^2$/NDF: 112.4/18

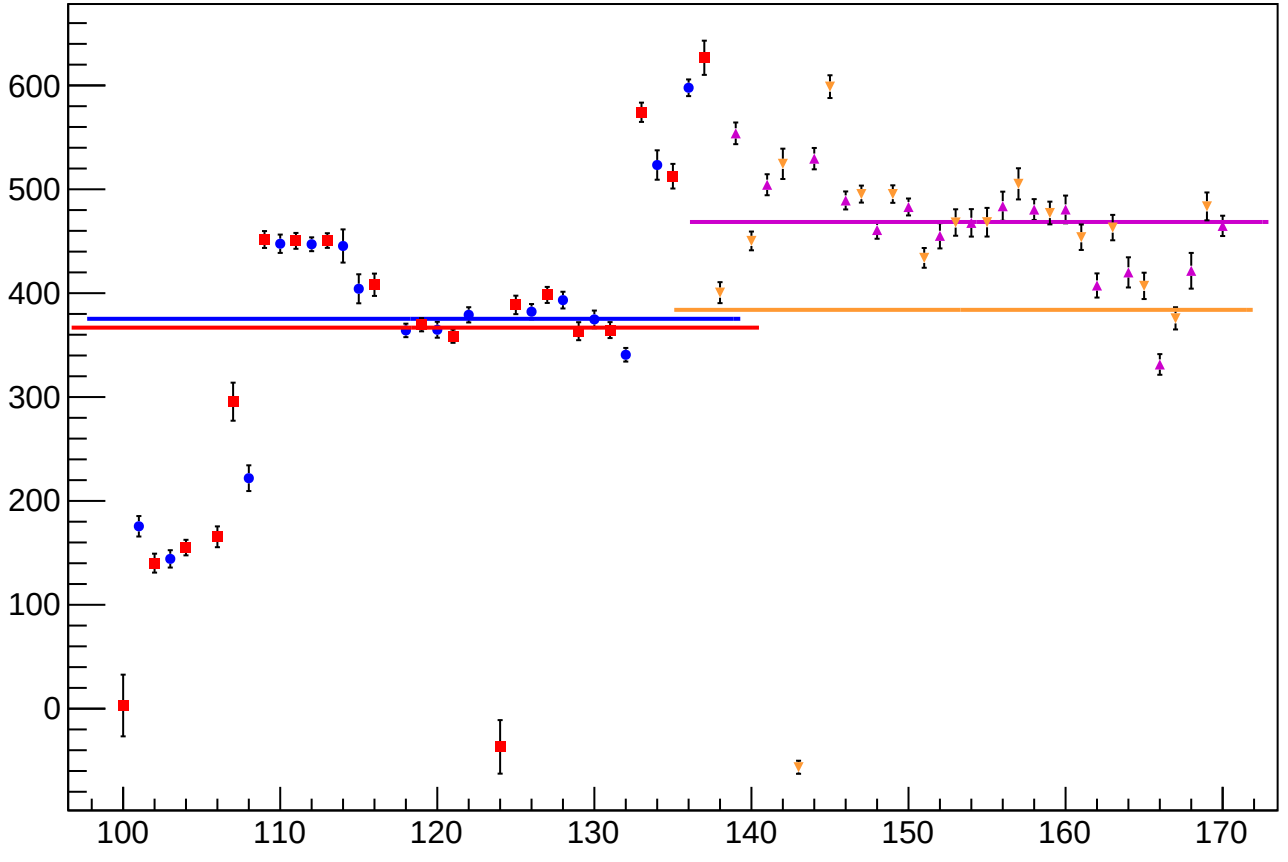
Left In: 13.123+/-1.866 $\chi^2$/NDF:216.5/15

+ sign 12.327+/-1.256 $\chi^2$/NDF: 289.6/32

All: 12.780+/-0.908 $\chi^2$/NDF: 618.8/67

- sign 13.276+/-1.315 $\chi^2$/NDF: 329.0/34

# reg_asym_atl2_diff_bpm4eX_slope vs Slug




Right In: 375.321+/-2.103 $\chi^2$/NDF: 2449.5/15

Left Out: 383.948+/-2.512 $\chi^2$/NDF:6164.8/16

Right Out: 366.830+/-2.049 $\chi^2$/NDF: 3541.1/18

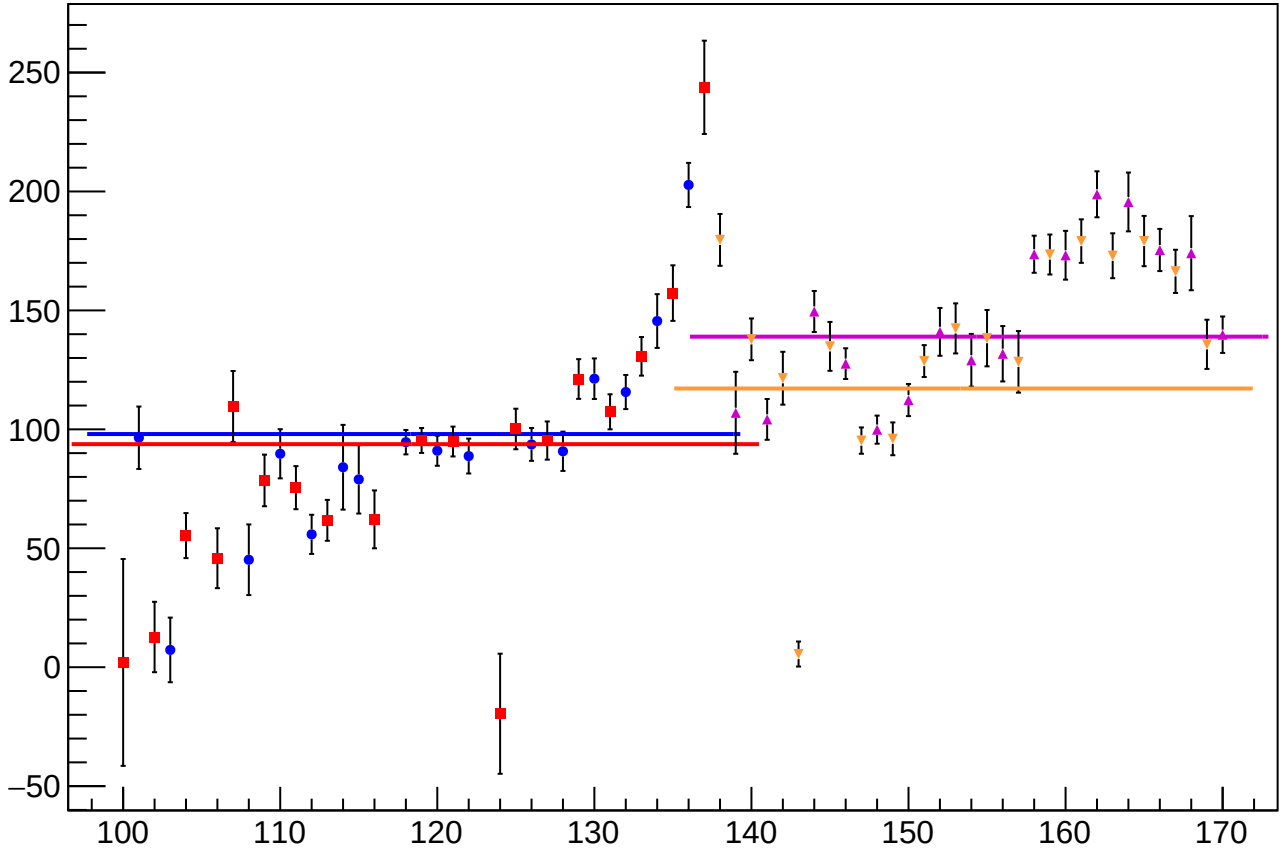
Left In: 468.540+/-2.672 $\chi^2$/NDF:365.4/15

+ sign 378.875+/-1.612 $\chi^2$/NDF: 8621.2/32

All: 391.576+/-1.145 $\chi^2$/NDF: 13564.9/67

- sign 404.496+/-1.626 $\chi^2$/NDF: 4818.6/34

# reg_asym_atl2_diff_bpm4eY_slope vs Slug




Right In: 98.021+/-2.144 $\chi^2$/NDF: 249.5/15

Left Out: 117.169+/-2.038 $\chi^2$/NDF:722.0/16

Right Out: 93.771+/-2.138 $\chi^2$/NDF: 237.1/18

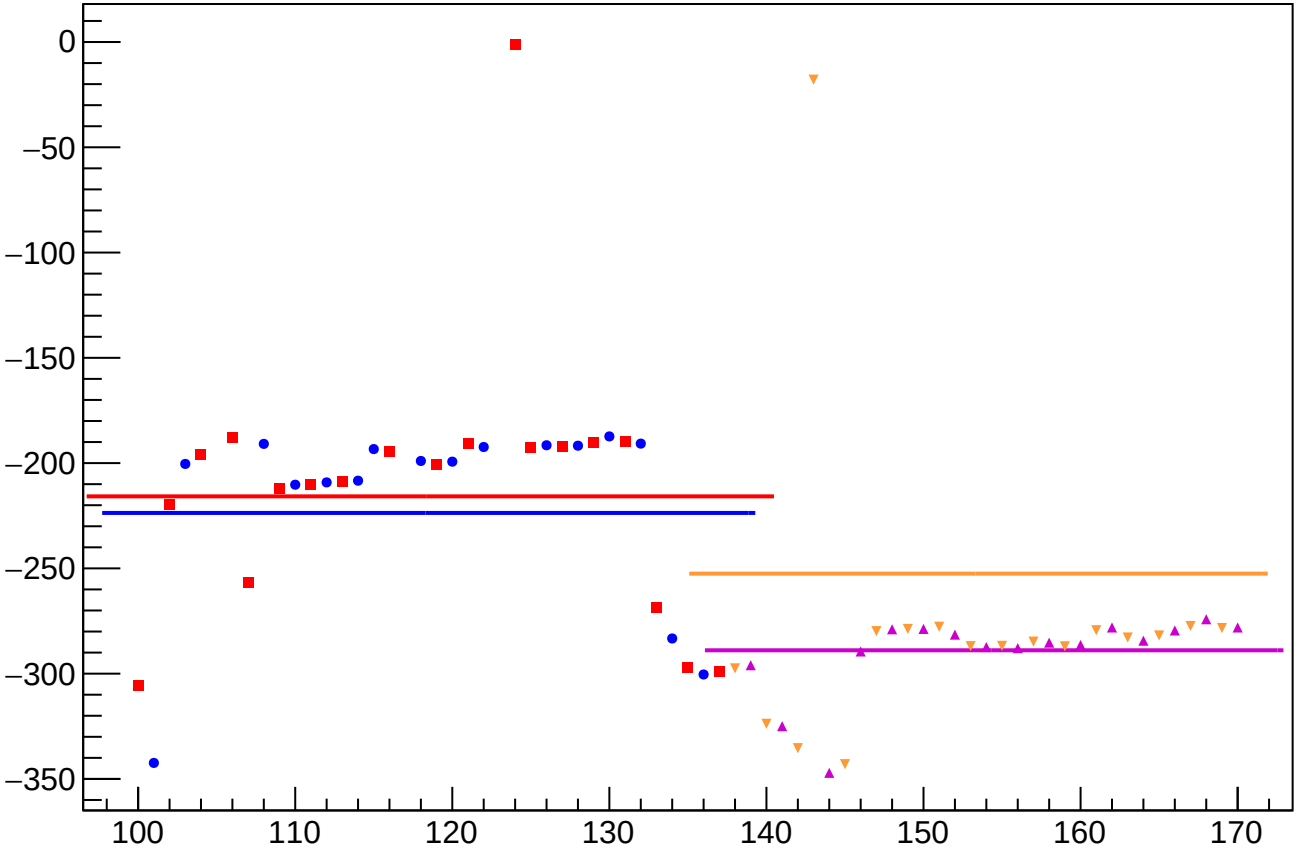
Left In: 138.962+/-2.195 $\chi^2$/NDF:197.3/15

+ sign 108.083+/-1.477 $\chi^2$/NDF: 1013.4/32

All: 111.788+/-1.063 $\chi^2$/NDF: 1678.3/67

- sign 115.773+/-1.532 $\chi^2$/NDF: 651.8/34

# reg_asym_atl2_diff_bpm12X_slope vs Slug




Right In: -223.666+/-0.138 $\chi^2$/NDF: 121528.3/15

Left Out: -252.494+/-0.098 $\chi^2$/NDF:971388.2/16

Right Out: -215.797+/-0.134 $\chi^2$/NDF: 81516.6/18

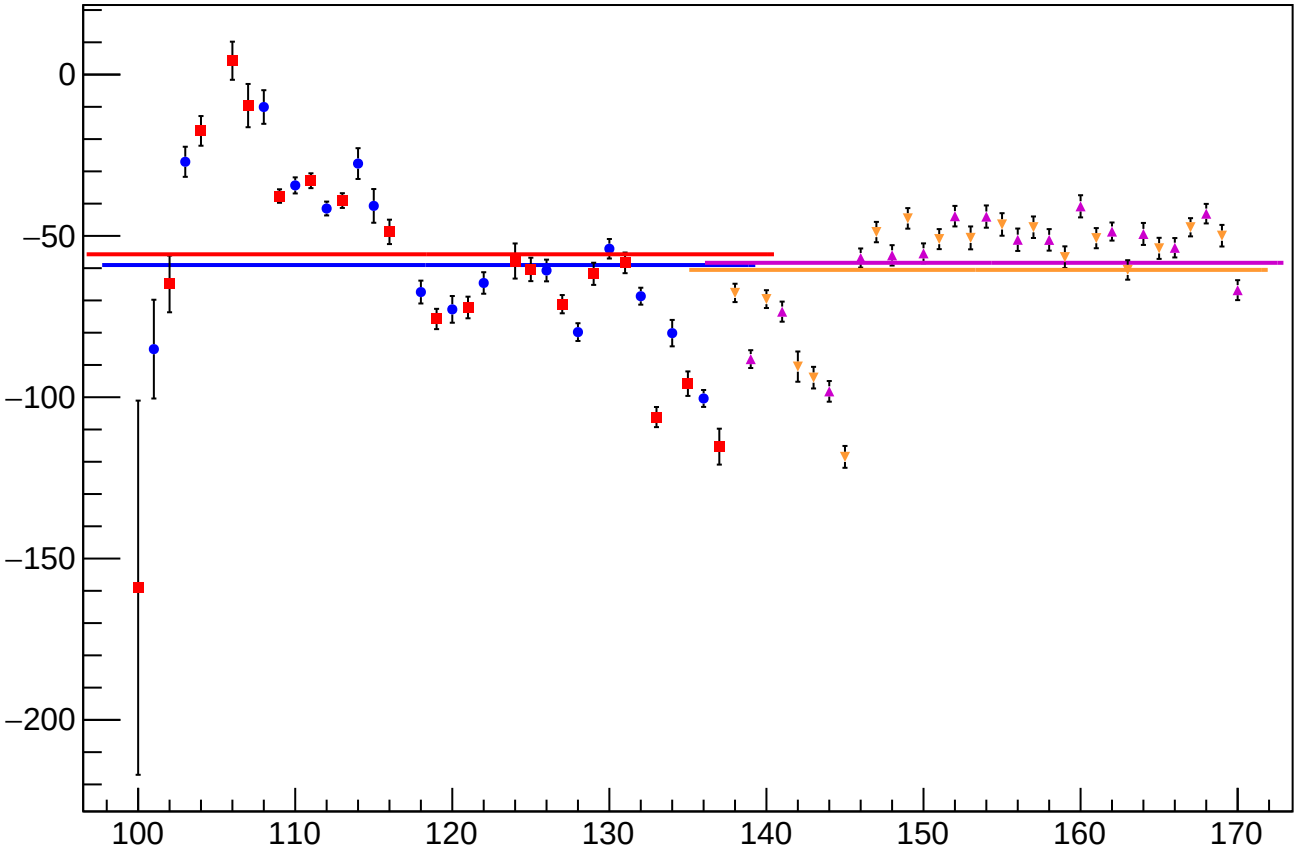
Left In: -288.906+/-0.102 $\chi^2$/NDF:29017.8/15

+ sign -242.872+/-0.080 $\chi^2$/NDF: 1121869.8/32

All: -252.437+/-0.057 $\chi^2$/NDF: 1449906.0/67

- sign -262.280+/-0.081 $\chi^2$/NDF: 298952.5/34

# reg_asym_atr1_diff_bpm1X_slope vs Slug




Right In: -59.030+/-0.829 $\chi^2$/NDF: 727.3/15

Left Out: -60.533+/-0.781 $\chi^2$/NDF:585.4/16

Right Out: -55.701+/-0.790 $\chi^2$/NDF: 1041.1/18

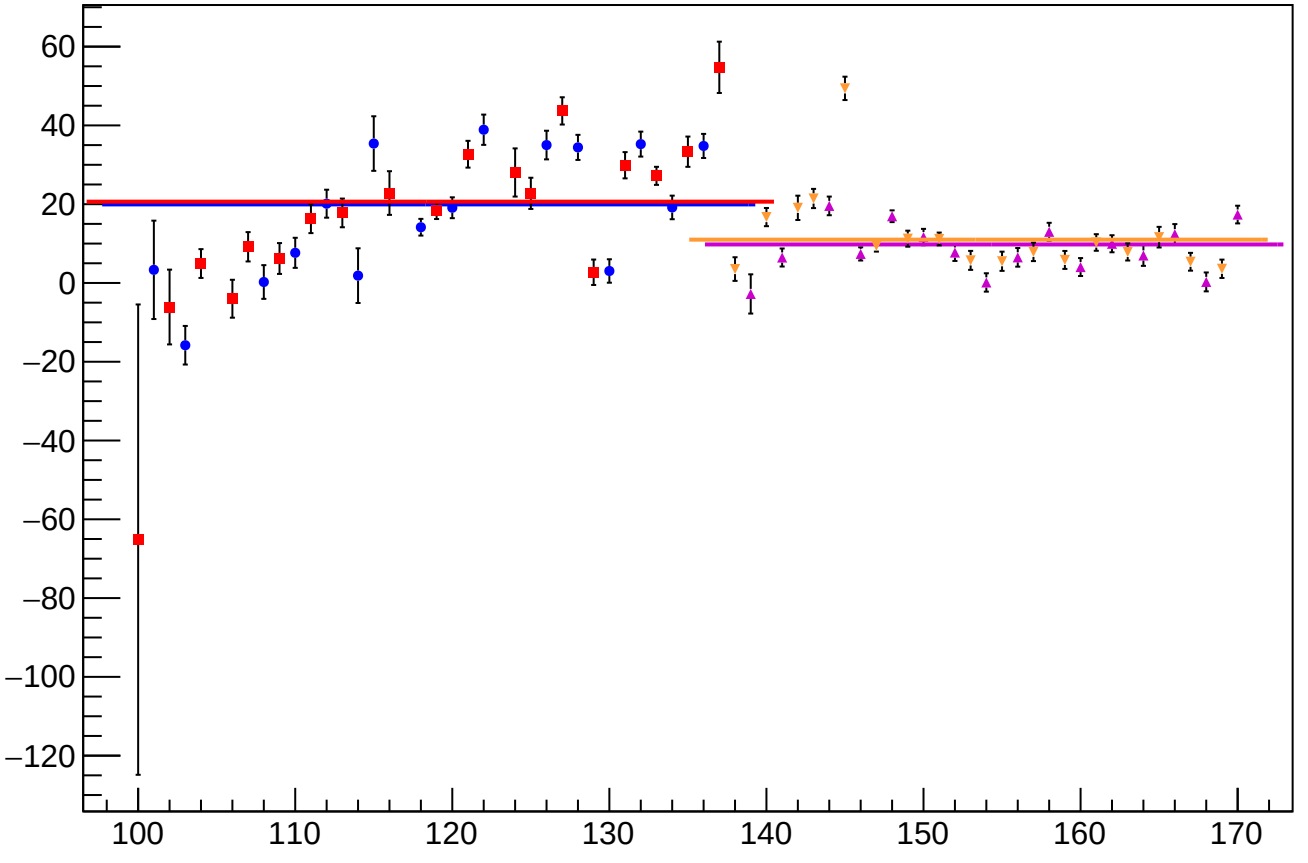
Left In: -58.339+/-0.784 $\chi^2$/NDF:423.3/15

+ sign -59.827+/-0.568 $\chi^2$/NDF: 1314.5/32

All: -58.398+/-0.398 $\chi^2$/NDF: 2796.9/67

- sign -57.031+/-0.556 $\chi^2$/NDF: 1470.1/34

# reg_asym_atr1_diff_bpm4aY_slope vs Slug




Right In: 19.946+/-0.867 $\chi^2$/NDF: 247.2/15

Left Out: 10.999+/-0.538 $\chi^2$/NDF:241.7/16

Right Out: 20.643+/-0.844 $\chi^2$/NDF: 224.8/18

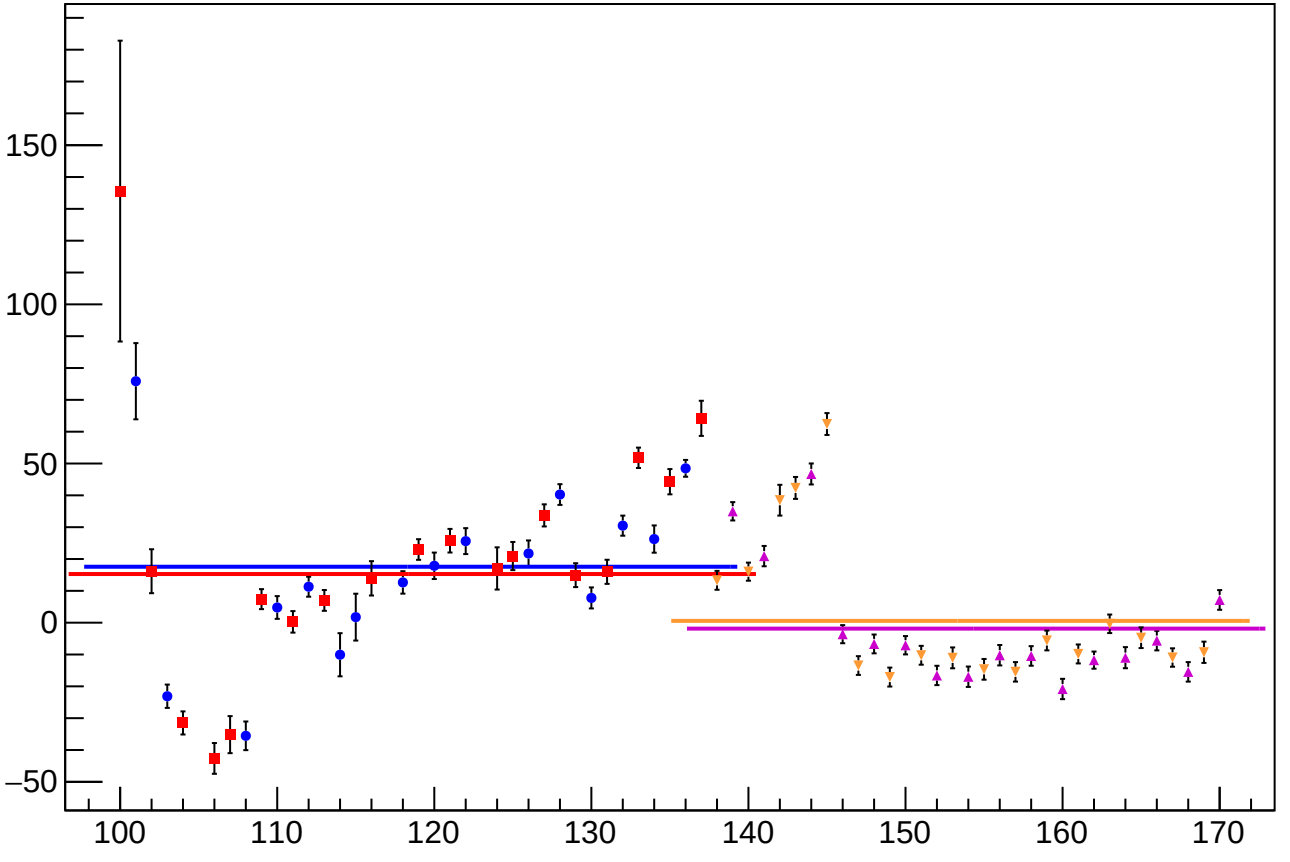
Left In: 9.778+/-0.551 $\chi^2$/NDF:109.0/15

+ sign 13.482+/-0.457 $\chi^2$/NDF: 565.8/32

All: 13.257+/-0.325 $\chi^2$/NDF: 1016.2/67

- sign 13.027+/-0.461 $\chi^2$/NDF: 450.0/34

# reg_asym_atr1_diff_bpm4eX_slope vs Slug




Right In: 17.574+/-0.957 $\chi^2$/NDF: 546.2/15

Left Out: 0.561+/-0.762 $\chi^2$/NDF:757.0/16

Right Out: 15.283+/-0.934 $\chi^2$/NDF: 730.0/18

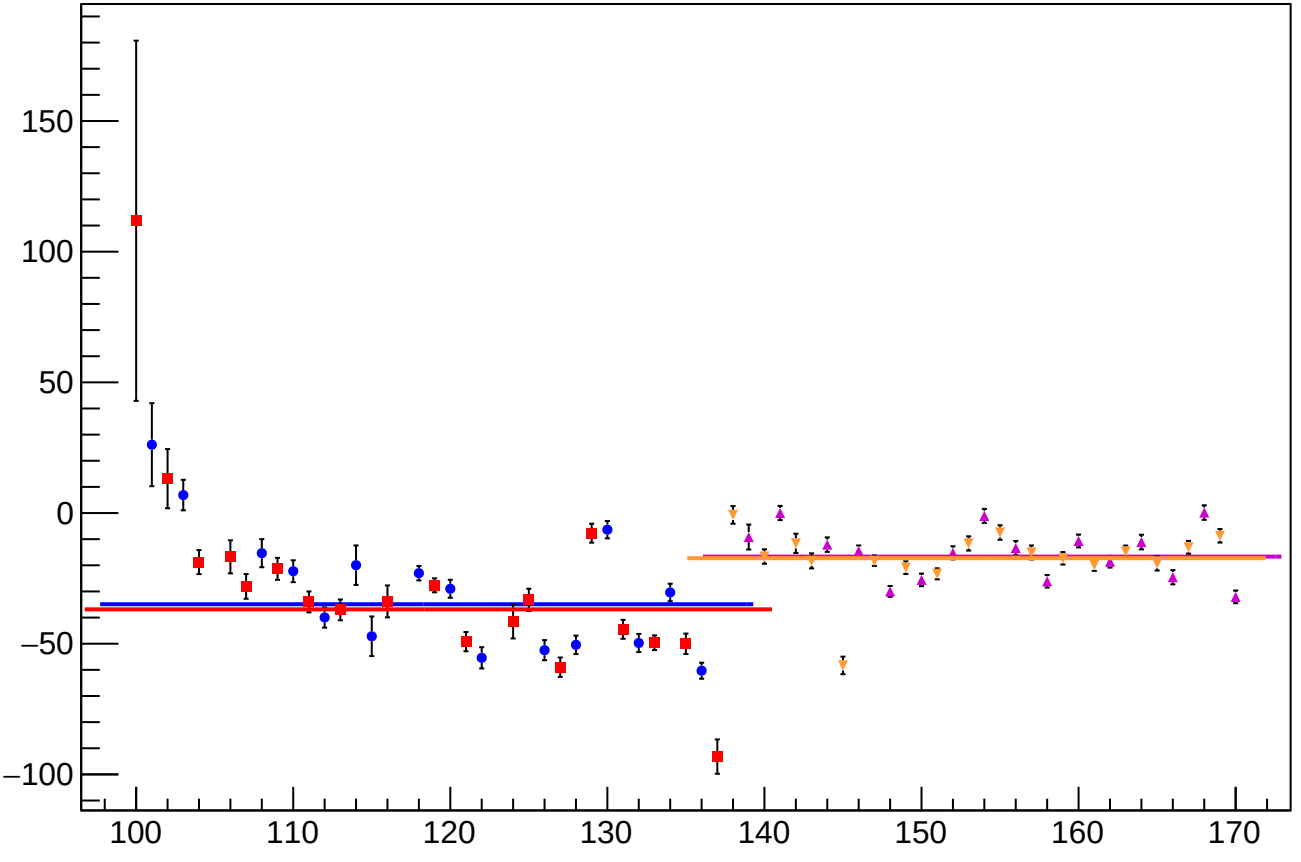
Left In: -1.867+/-0.762 $\chi^2$/NDF:584.3/15

+ sign 7.162+/-0.596 $\chi^2$/NDF: 1496.8/32

All: 6.063+/-0.419 $\chi^2$/NDF: 3020.3/67

- sign 4.985+/-0.590 $\chi^2$/NDF: 1516.8/34

# reg_asym_atr1_diff_bpm4eY_slope vs Slug




Right In: -34.899+/-0.990 $\chi^2$/NDF: 346.6/15

Left Out: -17.284+/-0.625 $\chi^2$/NDF:220.8/16

Right Out: -36.853+/-0.970 $\chi^2$/NDF: 301.4/18

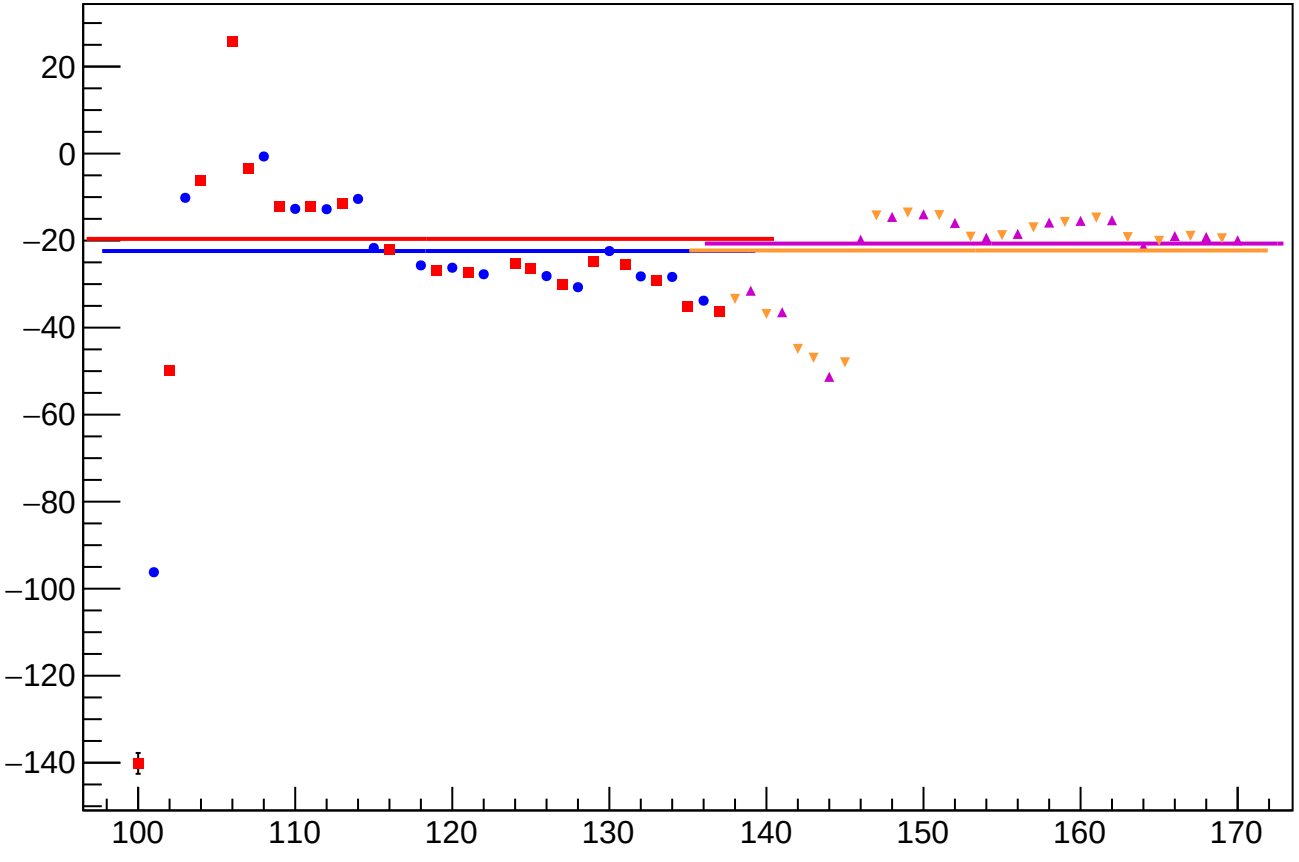
Left In: -16.665+/-0.637 $\chi^2$/NDF:245.8/15

+ sign -22.302+/-0.529 $\chi^2$/NDF: 793.7/32

All: -22.524+/-0.375 $\chi^2$/NDF: 1644.2/67

- sign -22.749+/-0.532 $\chi^2$/NDF: 850.1/34

# reg_asym_atr1_diff_bpm12X_slope vs Slug




Right In: -22.394+/-0.058 $\chi^2$/NDF: 46519.7/15

Left Out: -22.271+/-0.029 $\chi^2$/NDF:131405.8/16

Right Out: -19.605+/-0.059 $\chi^2$/NDF: 83865.7/18

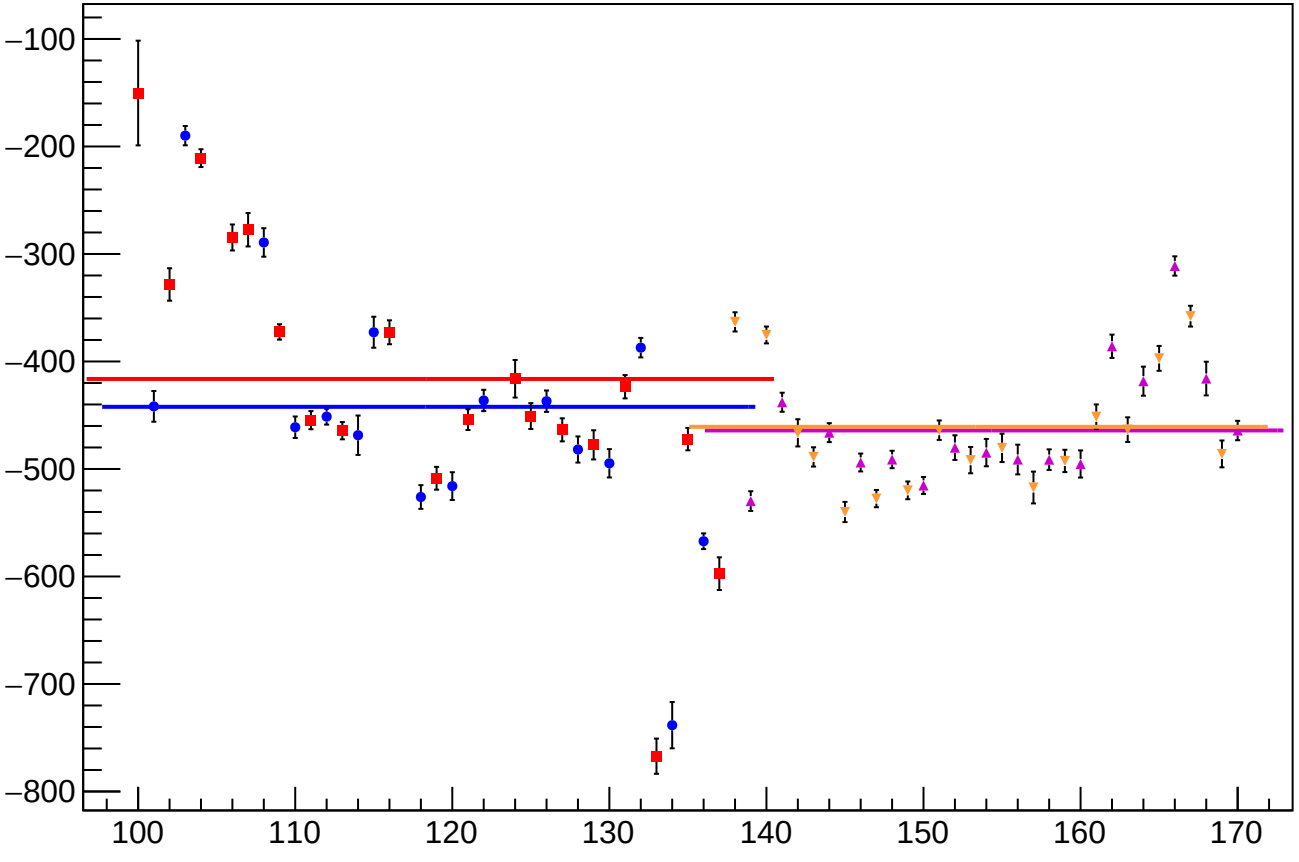
Left In: -20.680+/-0.028 $\chi^2$/NDF:84928.8/15

+ sign -22.295+/-0.026 $\chi^2$/NDF: 177929.1/32

All: -21.385+/-0.018 $\chi^2$/NDF: 349498.7/67

- sign -20.481+/-0.026 $\chi^2$/NDF: 169060.9/34

# reg_asym_atr2_diff_bpm1X_slope vs Slug




Right In: -442.182+/-2.682 $\chi^2$/NDF: 1589.1/15

Left Out: -460.777+/-2.445 $\chi^2$/NDF:621.1/16

Right Out: -416.259+/-2.523 $\chi^2$/NDF: 1753.8/18

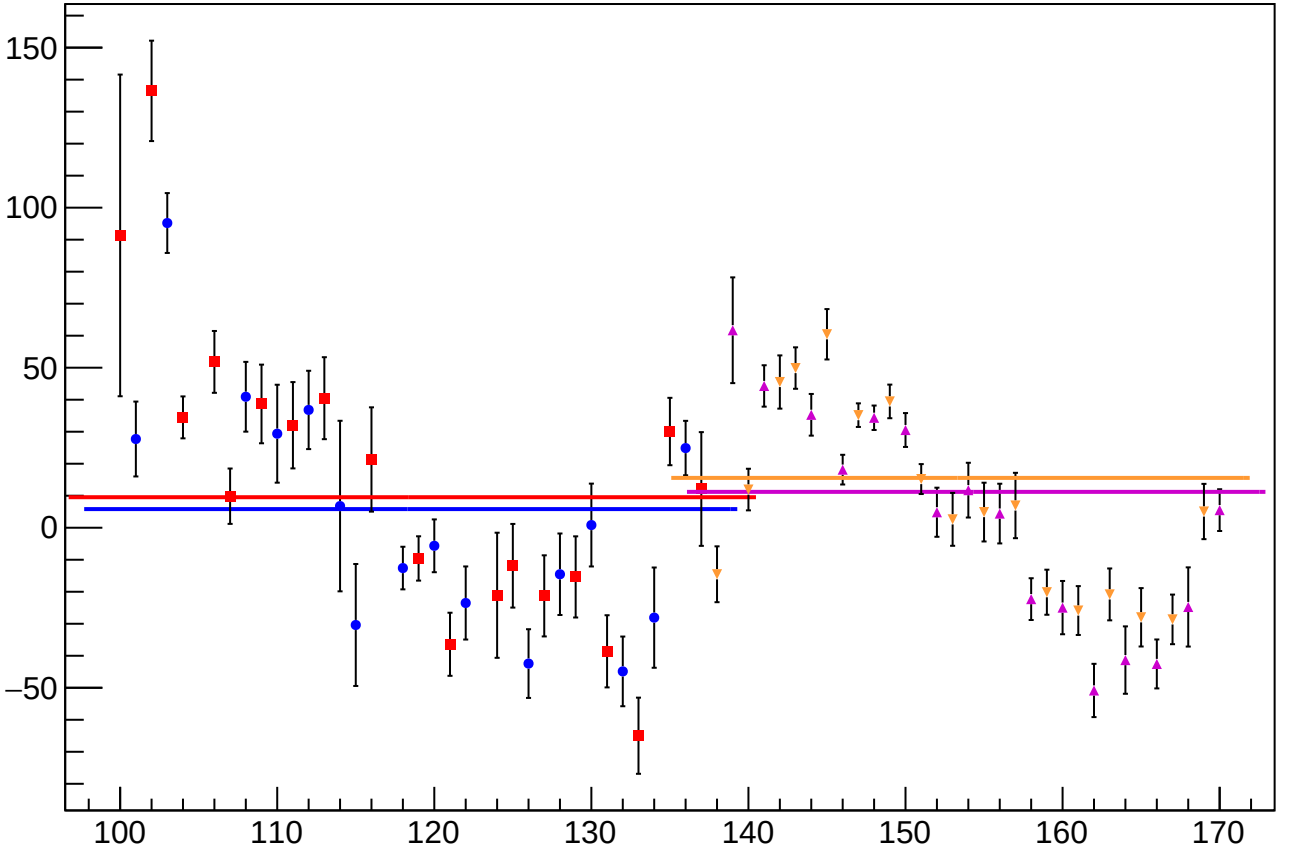
Left In: -464.159+/-2.484 $\chi^2$/NDF:512.3/15

+ sign -452.337+/-1.807 $\chi^2$/NDF: 2236.5/32

All: -446.338+/-1.264 $\chi^2$/NDF: 4707.3/67

- sign -440.580+/-1.770 $\chi^2$/NDF: 2449.2/34

# reg_asym_atr2_diff_bpm4aY_slope vs Slug




Right In: 5.824+/-2.728 $\chi^2$/NDF: 188.1/15

Left Out: 15.570+/-1.628 $\chi^2$/NDF:271.5/16

Right Out: 9.536+/-2.556 $\chi^2$/NDF: 222.2/18

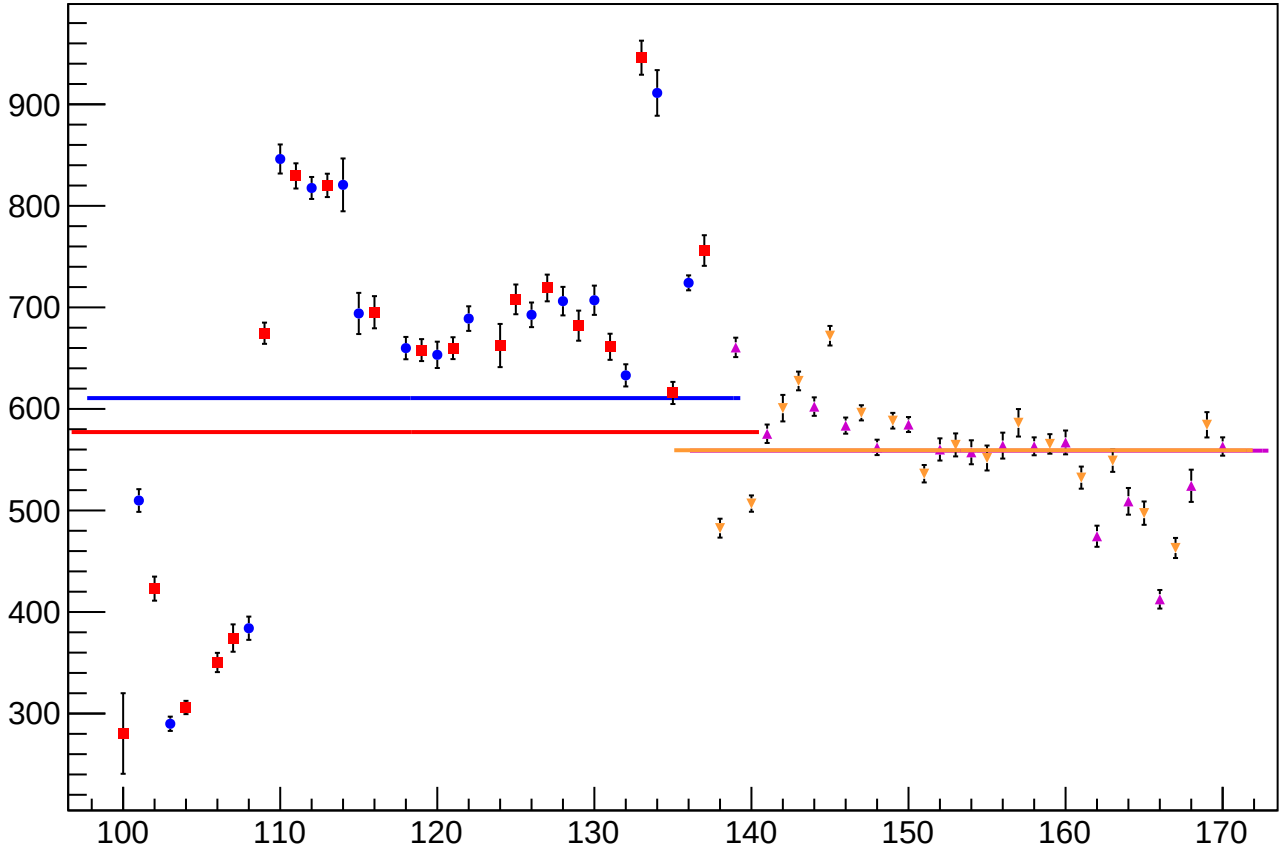
Left In: 11.207+/-1.684 $\chi^2$/NDF:287.2/15

+ sign 13.012+/-1.398 $\chi^2$/NDF: 469.0/32

All: 11.864+/-0.991 $\chi^2$/NDF: 980.0/67

- sign 10.701+/-1.406 $\chi^2$/NDF: 509.7/34

# reg_asym_atr2_diff_bpm4eX_slope vs Slug




Right In: 610.665+/-2.892 $\chi^2$/NDF: 3892.6/15

Left Out: 559.316+/-2.390 $\chi^2$/NDF:497.6/16

Right Out: 577.205+/-2.755 $\chi^2$/NDF: 4800.3/18

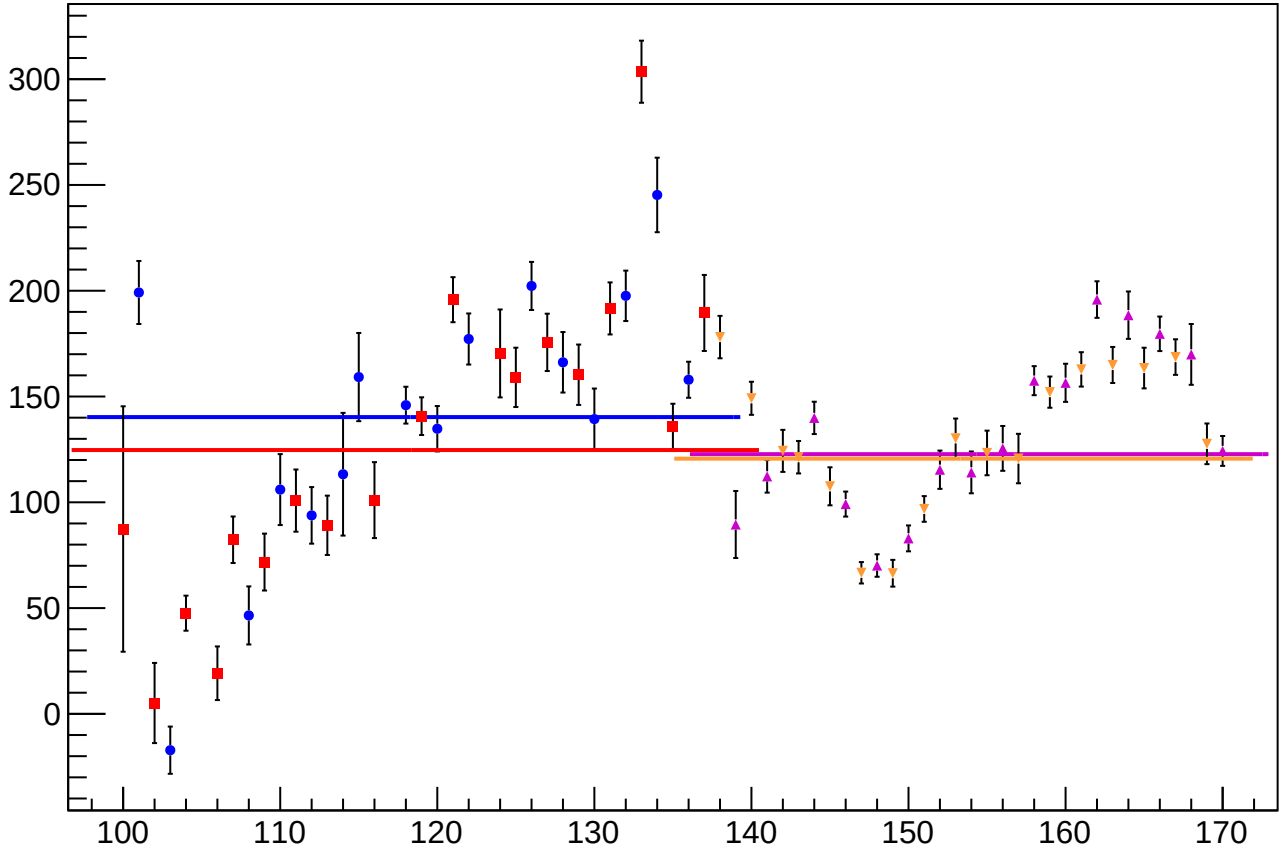
Left In: 558.891+/-2.414 $\chi^2$/NDF:502.8/15

+ sign 580.151+/-1.842 $\chi^2$/NDF: 4577.4/32

All: 573.400+/-1.293 $\chi^2$/NDF: 9932.1/67

- sign 566.844+/-1.815 $\chi^2$/NDF: 5328.2/34

# reg_asym_atr2_diff_bpm4eY_slope vs Slug




Right In: 140.278+/-3.151 $\chi^2$/NDF: 385.4/15

Left Out: 120.626+/-1.932 $\chi^2$/NDF:377.1/16

Right Out: 124.697+/-2.979 $\chi^2$/NDF: 508.5/18

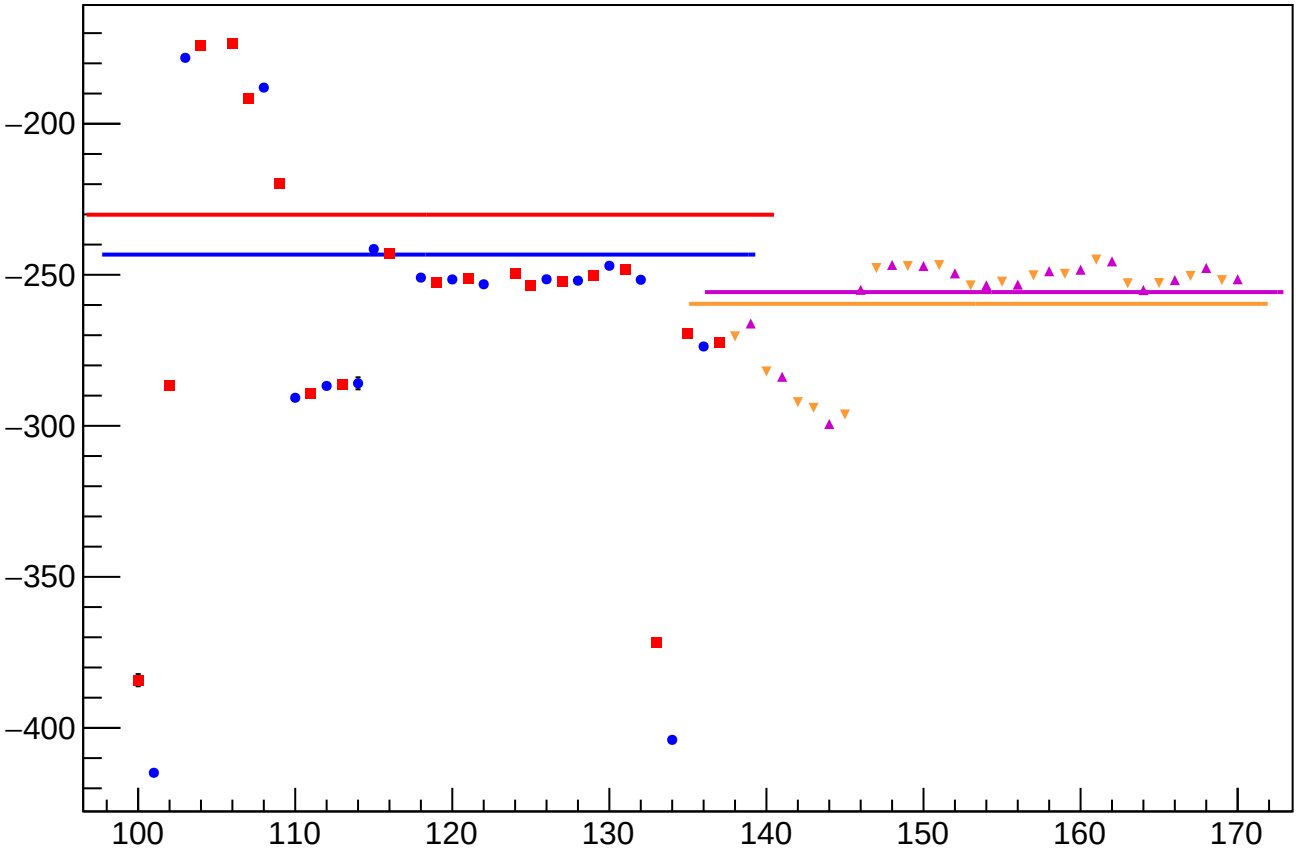
Left In: 122.755+/-1.981 $\chi^2$/NDF:374.2/15

+ sign 125.996+/-1.647 $\chi^2$/NDF: 790.7/32

All: 124.675+/-1.165 $\chi^2$/NDF: 1675.1/67

- sign 123.350+/-1.649 $\chi^2$/NDF: 883.1/34

# reg_asym_atr2_diff_bpm12X_slope vs Slug




Right In: -243.308+/-0.163 $\chi^2$/NDF: 173487.9/15

Left Out: -259.613+/-0.092 $\chi^2$/NDF:34665.4/16

Right Out: -230.109+/-0.157 $\chi^2$/NDF: 102451.2/18

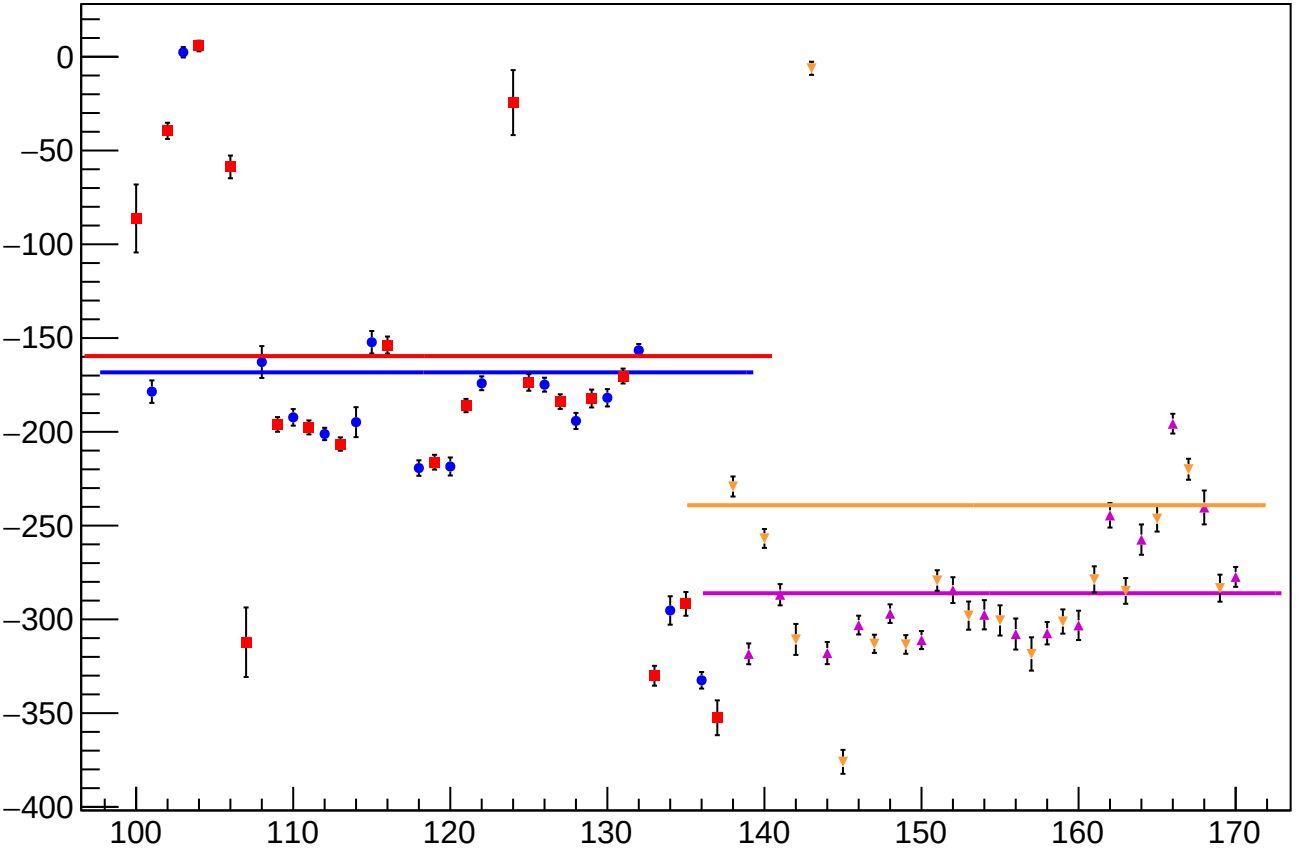
Left In: -255.729+/-0.092 $\chi^2$/NDF:22150.8/15

+ sign -255.623+/-0.080 $\chi^2$/NDF: 215756.3/32

All: -252.380+/-0.056 $\chi^2$/NDF: 363345.8/67

- sign -249.225+/-0.079 $\chi^2$/NDF: 144378.2/34

# reg_asym_atl_avg_diff_bpm1X_slope vs Slug




Right In: -168.291+/-1.076 $\chi^2$/NDF: 5907.6/15

Left Out: -239.122+/-1.421 $\chi^2$/NDF:5884.9/16

Right Out: -159.602+/-1.042 $\chi^2$/NDF: 7197.9/18

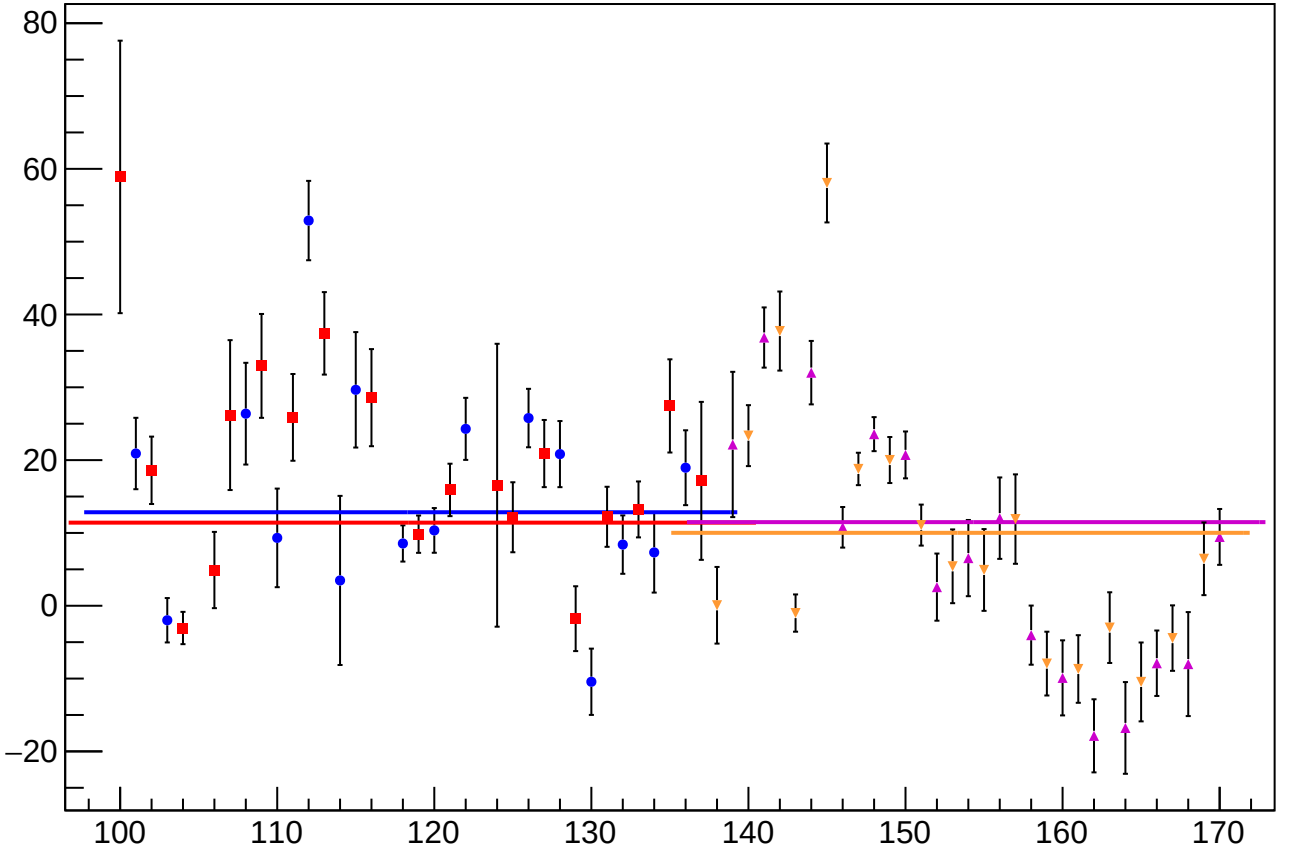
Left In: -286.070+/-1.516 $\chi^2$/NDF:508.1/15

+ sign -194.095+/-0.858 $\chi^2$/NDF: 13371.8/32

All: -197.140+/-0.607 $\chi^2$/NDF: 25828.2/67

- sign -200.194+/-0.859 $\chi^2$/NDF: 12431.2/34

# reg_asym_atl_avg_diff_bpm4aY_slope vs Slug




Right In: 12.842+/-1.076 $\chi^2$/NDF: 143.7/15

Left Out: 10.016+/-0.952 $\chi^2$/NDF:229.8/16

Right Out: 11.414+/-1.035 $\chi^2$/NDF: 119.6/18

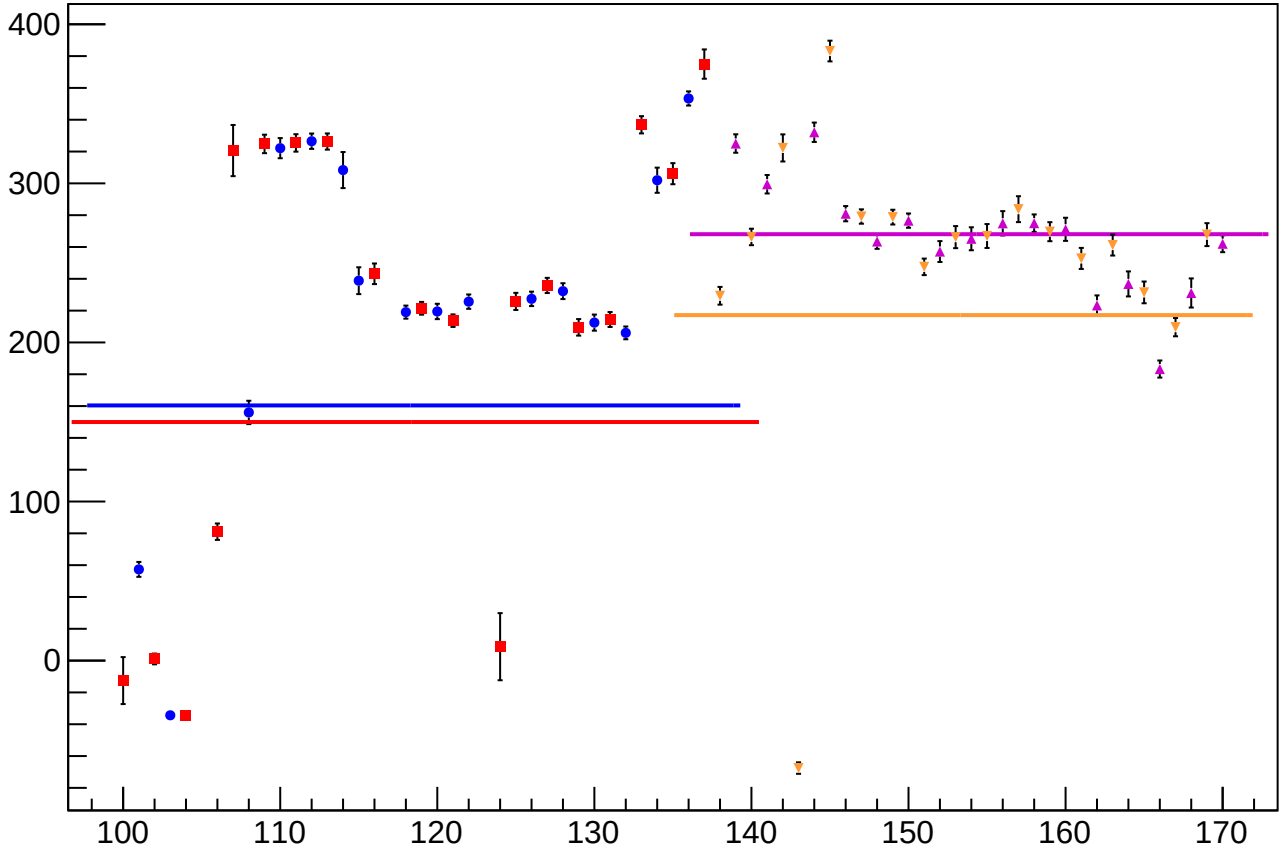
Left In: 11.484+/-1.028 $\chi^2$/NDF:213.1/15

+ sign 11.256+/-0.713 $\chi^2$/NDF: 377.4/32

All: 11.350+/-0.510 $\chi^2$/NDF: 710.1/67

- sign 11.449+/-0.730 $\chi^2$/NDF: 332.7/34

# reg_asym_atl_avg_diff_bpm4eX_slope vs Slug




Right In: 160.407+/-1.139 $\chi^2$/NDF: 13949.8/15

Left Out: 217.180+/-1.394 $\chi^2$/NDF:7883.2/16

Right Out: 149.974+/-1.107 $\chi^2$/NDF: 16265.2/18

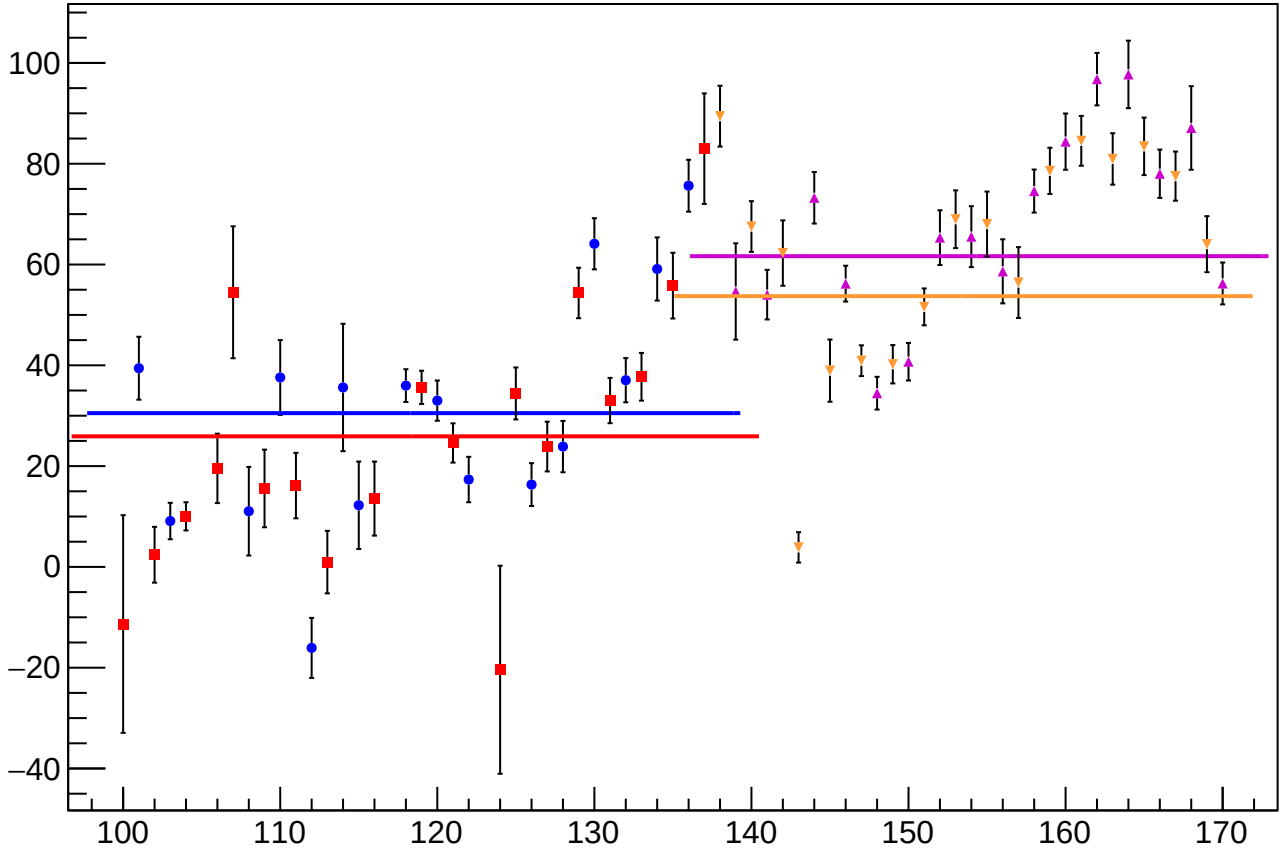
Left In: 268.041+/-1.473 $\chi^2$/NDF:586.7/15

+ sign 183.126+/-0.882 $\chi^2$/NDF: 22827.2/32

All: 187.844+/-0.625 $\chi^2$/NDF: 43844.0/67

- sign 192.589+/-0.885 $\chi^2$/NDF: 20959.4/34

# reg_asym_atl_avg_diff_bpm4eY_slope vs Slug




Right In: 30.510+/-1.255 $\chi^2$/NDF: 276.9/15

Left Out: 53.721+/-1.129 $\chi^2$/NDF:516.9/16

Right Out: 25.903+/-1.213 $\chi^2$/NDF: 187.8/18

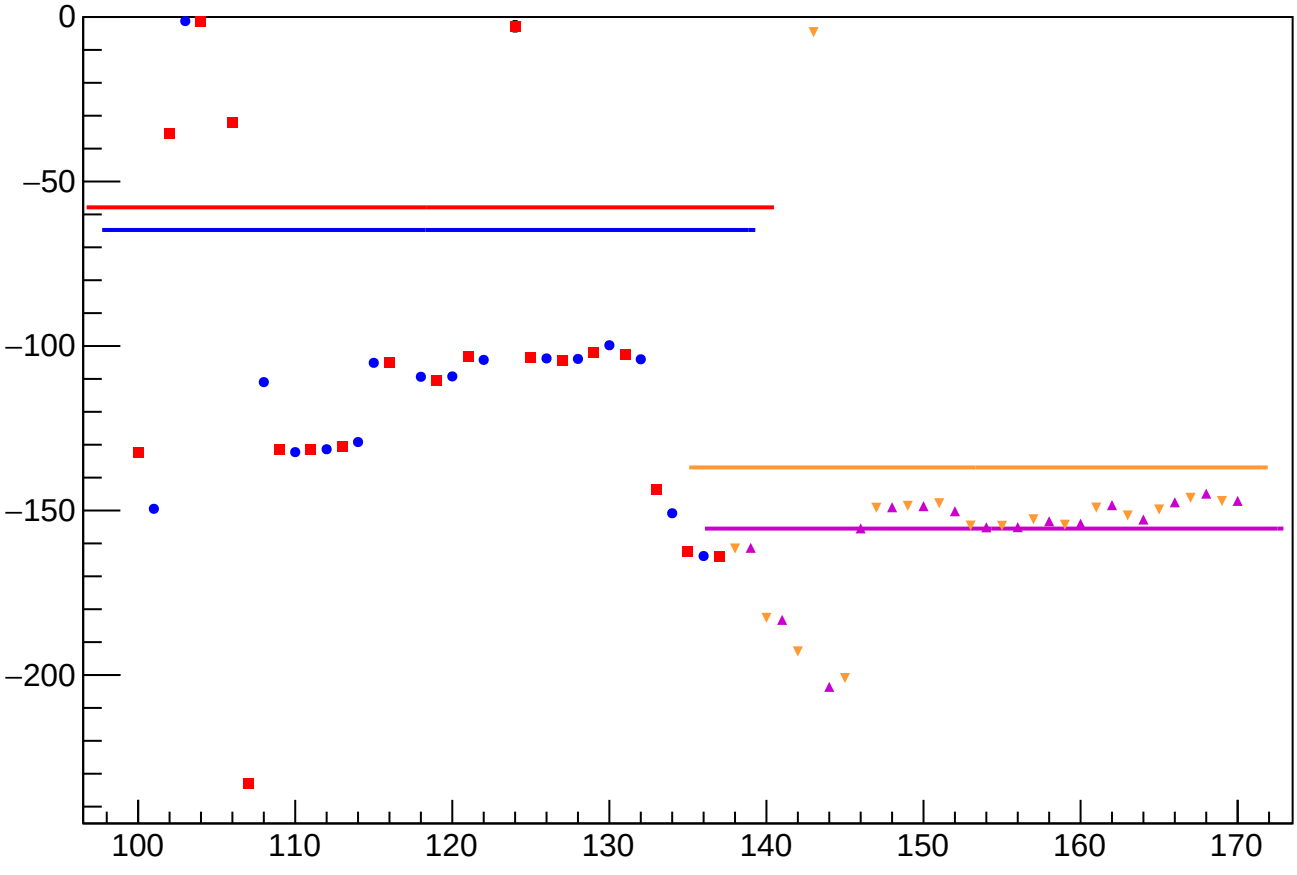
Left In: 61.653+/-1.209 $\chi^2$/NDF:236.0/15

+ sign 43.336+/-0.839 $\chi^2$/NDF: 983.0/32

All: 43.583+/-0.599 $\chi^2$/NDF: 1842.8/67

- sign 43.841+/-0.856 $\chi^2$/NDF: 859.6/34

# reg_asym_atl_avg_diff_bpm12X_slope vs Slug




Right In: -64.726+/-0.064 $\chi^2$/NDF: 1044441.7/15

Left Out: -136.911+/-0.054 $\chi^2$/NDF:961965.4/16

Right Out: -57.855+/-0.062 $\chi^2$/NDF: 875795.9/18

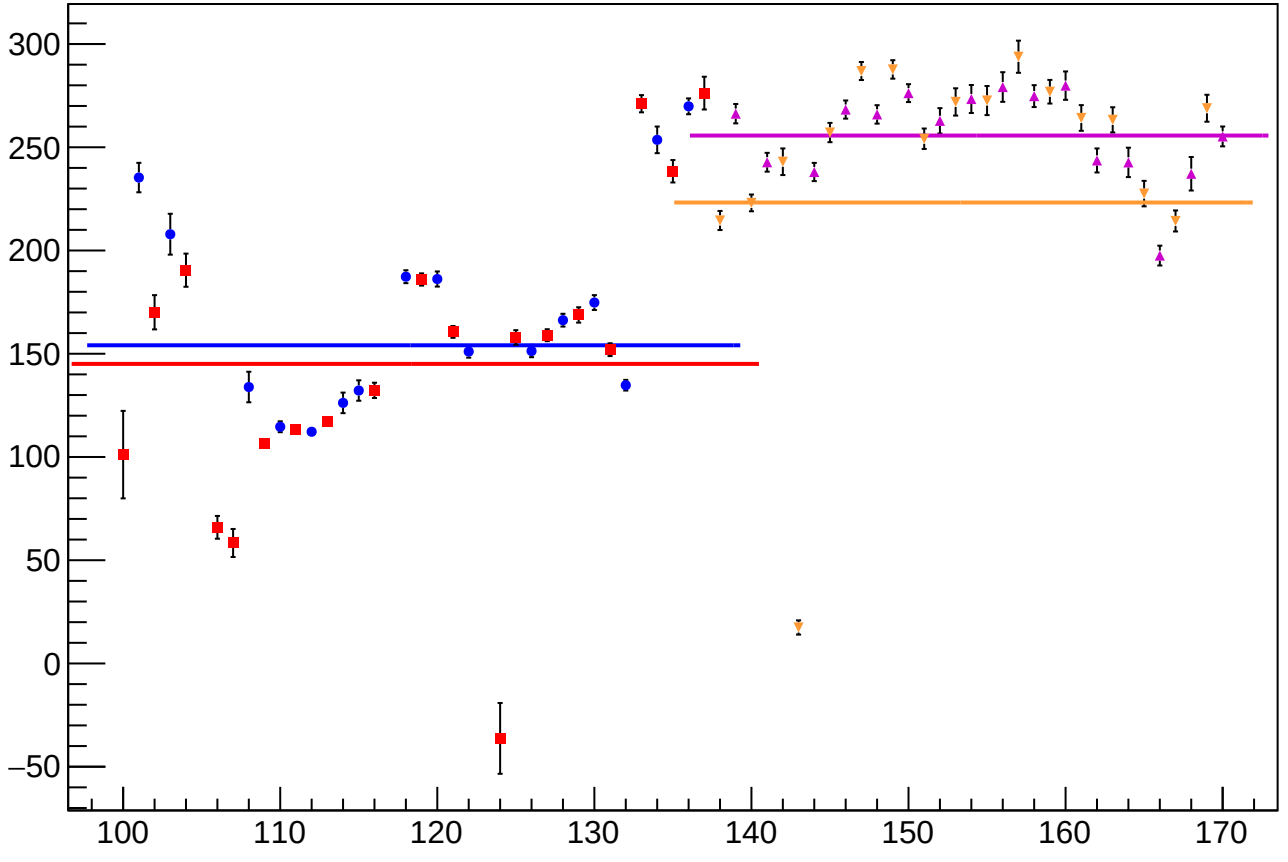
Left In: -155.491+/-0.056 $\chi^2$/NDF:54258.7/15

+ sign -106.683+/-0.041 $\chi^2$/NDF: 2750658.0/32

All: -109.253+/-0.029 $\chi^2$/NDF: 5053549.5/67

- sign -111.856+/-0.042 $\chi^2$/NDF: 2295090.6/34

# reg_asym_atl_dd_diff_bpm1X_slope vs Slug




Right In: 154.096+/-0.869 $\chi^2$/NDF: 2281.1/15

Left Out: 223.244+/-1.254 $\chi^2$/NDF:4507.9/16

Right Out: 145.083+/-0.826 $\chi^2$/NDF: 2958.4/18

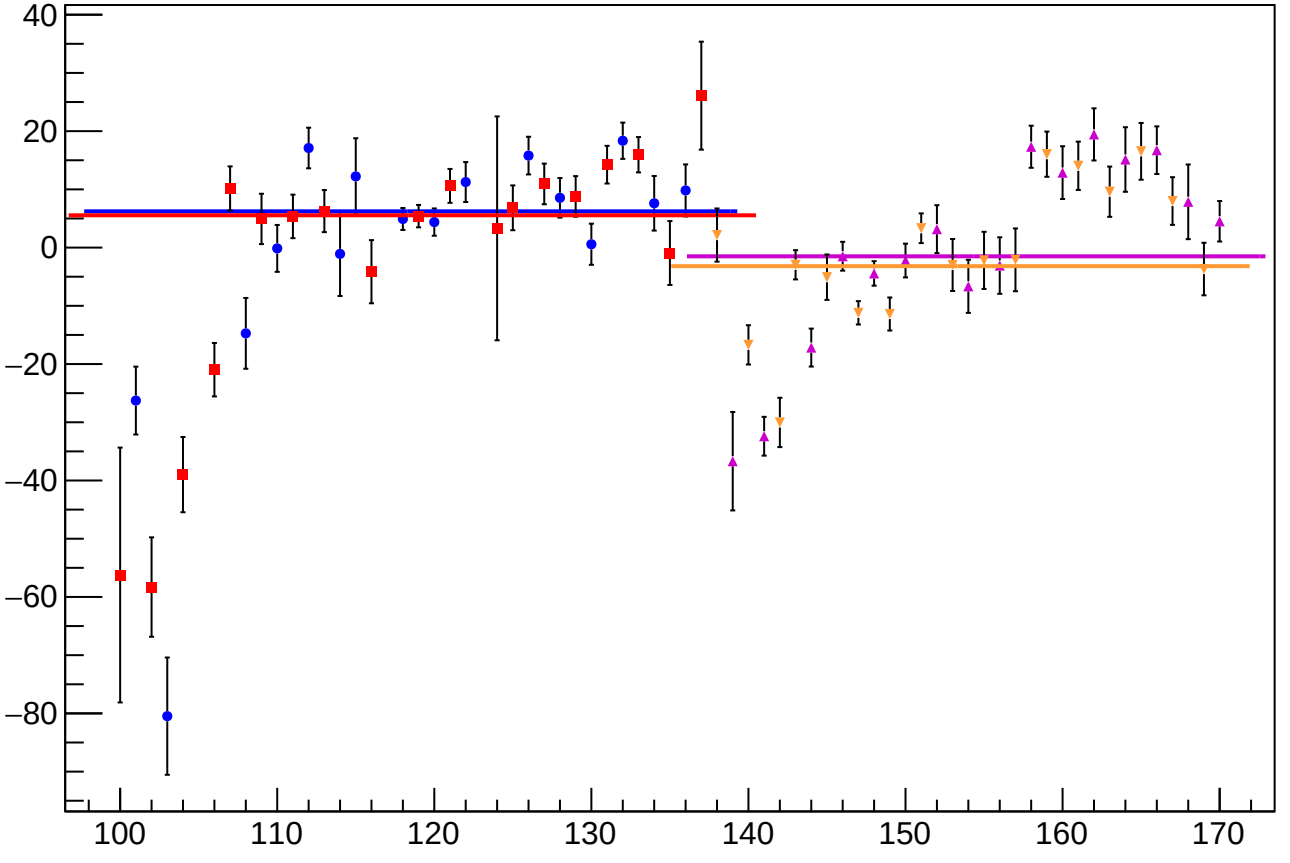
Left In: 255.674+/-1.318 $\chi^2$/NDF:268.8/15

\+ sign 176.539+/-0.714 $\chi^2$/NDF: 8843.6/32

All: 176.400+/-0.500 $\chi^2$/NDF: 17124.9/67

\- sign 176.265+/-0.700 $\chi^2$/NDF: 8281.2/34

# reg_asym_atl_dd_diff_bpm4aY_slope vs Slug




Right In: 6.229+/-0.890 $\chi^2$/NDF: 162.1/15

Left Out: -3.189+/-0.846 $\chi^2$/NDF:163.2/16

Right Out: 5.548+/-0.889 $\chi^2$/NDF: 181.1/18

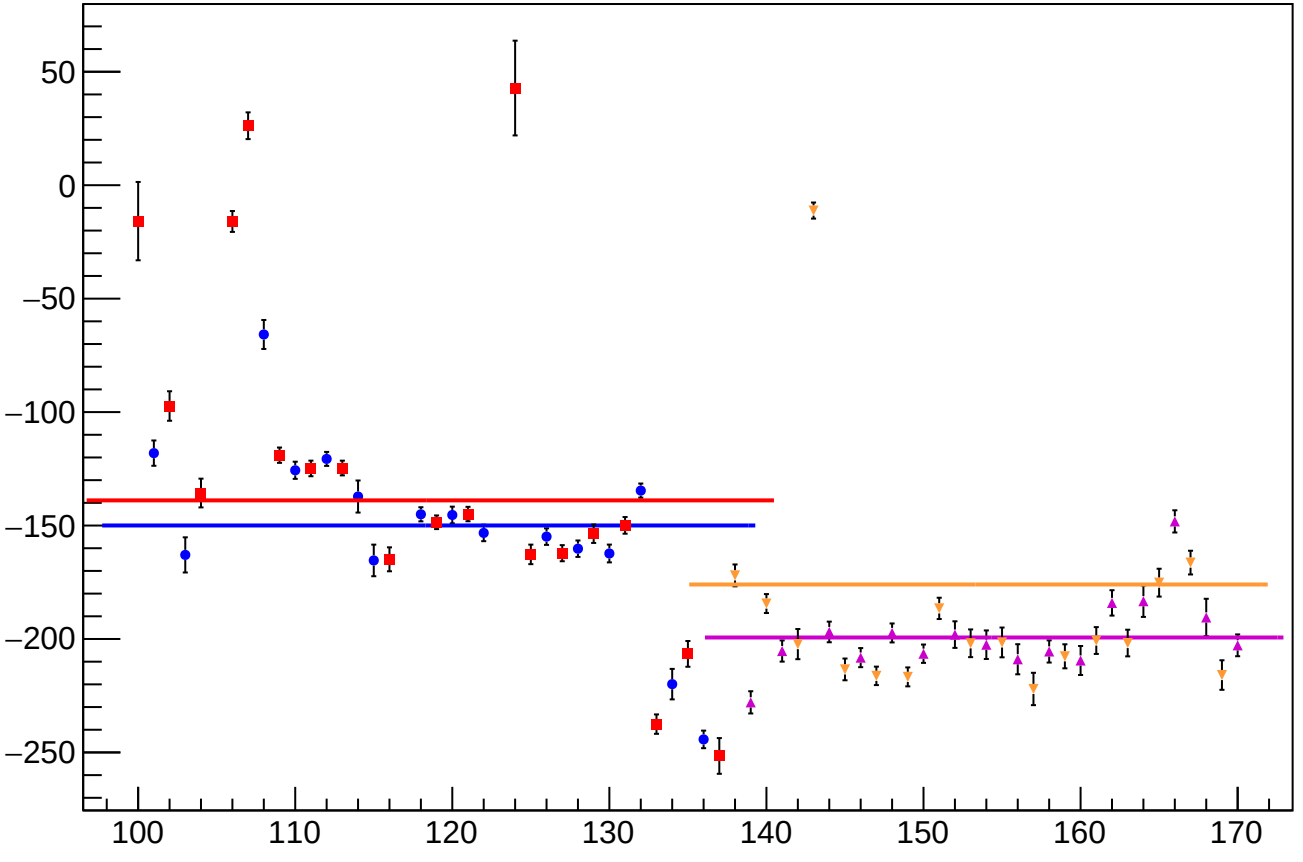
Left In: -1.498+/-0.902 $\chi^2$/NDF:224.2/15

+ sign 1.281+/-0.613 $\chi^2$/NDF: 384.1/32

All: 1.664+/-0.440 $\chi^2$/NDF: 821.2/67

- sign 2.073+/-0.633 $\chi^2$/NDF: 436.3/34

# reg_asym_atl_dd_diff_bpm4eX_slope vs Slug




Right In: -149.970+/-1.026 $\chi^2$/NDF: 1099.5/15

Left Out: -175.983+/-1.232 $\chi^2$/NDF:2630.9/16

Right Out: -138.912+/-0.993 $\chi^2$/NDF: 2750.9/18

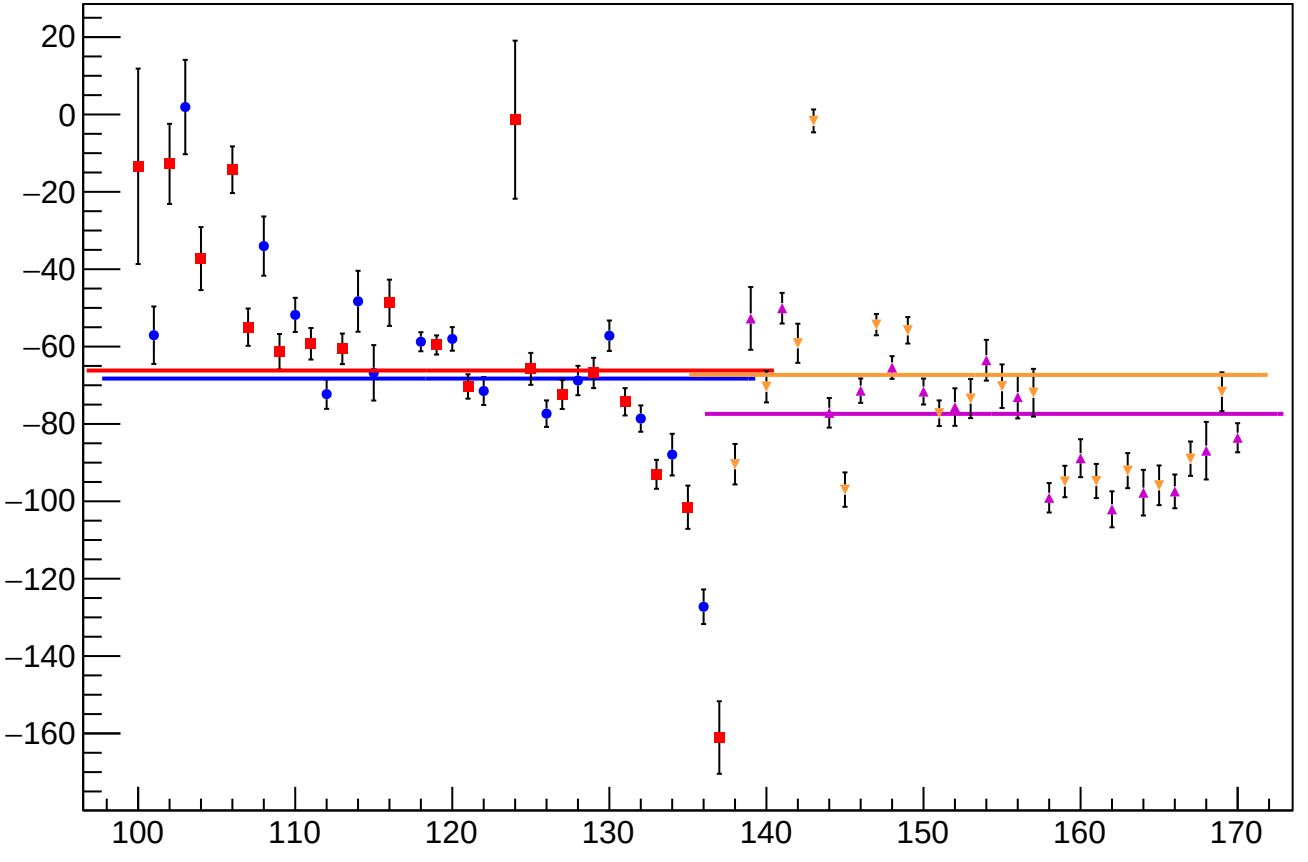
Left In: -199.344+/-1.284 $\chi^2$/NDF:174.0/15

+ sign -160.620+/-0.788 $\chi^2$/NDF: 3993.7/32

All: -161.086+/-0.556 $\chi^2$/NDF: 8305.4/67

- sign -161.549+/-0.786 $\chi^2$/NDF: 4311.0/34

# reg_asym_atl_dd_diff_bpm4eY_slope vs Slug




Right In: -68.272+/-1.033 $\chi^2$/NDF: 315.4/15

Left Out: -67.324+/-1.002 $\chi^2$/NDF:773.2/16

Right Out: -66.186+/-1.024 $\chi^2$/NDF: 358.3/18

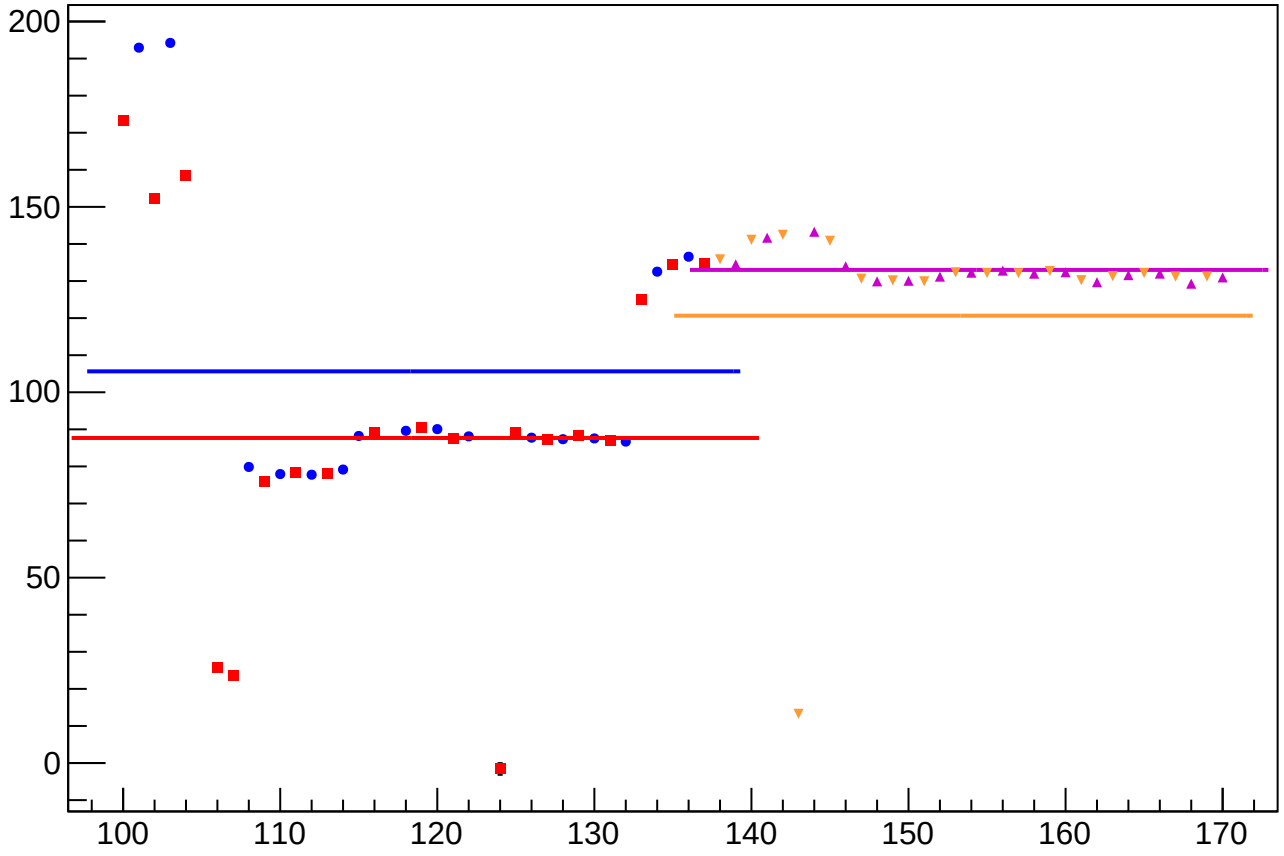
Left In: -77.394+/-1.059 $\chi^2$/NDF:191.4/15

+ sign -67.783+/-0.719 $\chi^2$/NDF: 1089.0/32

All: -69.650+/-0.514 $\chi^2$/NDF: 1710.4/67

- sign -71.603+/-0.736 $\chi^2$/NDF: 607.7/34

# reg_asym_atl_dd_diff_bpm12X_slope vs Slug




Right In: 105.640+/-0.071 $\chi^2$/NDF: 239614.1/15

Left Out: 120.654+/-0.048 $\chi^2$/NDF:602381.7/16

Right Out: 87.673+/-0.066 $\chi^2$/NDF: 374460.7/18

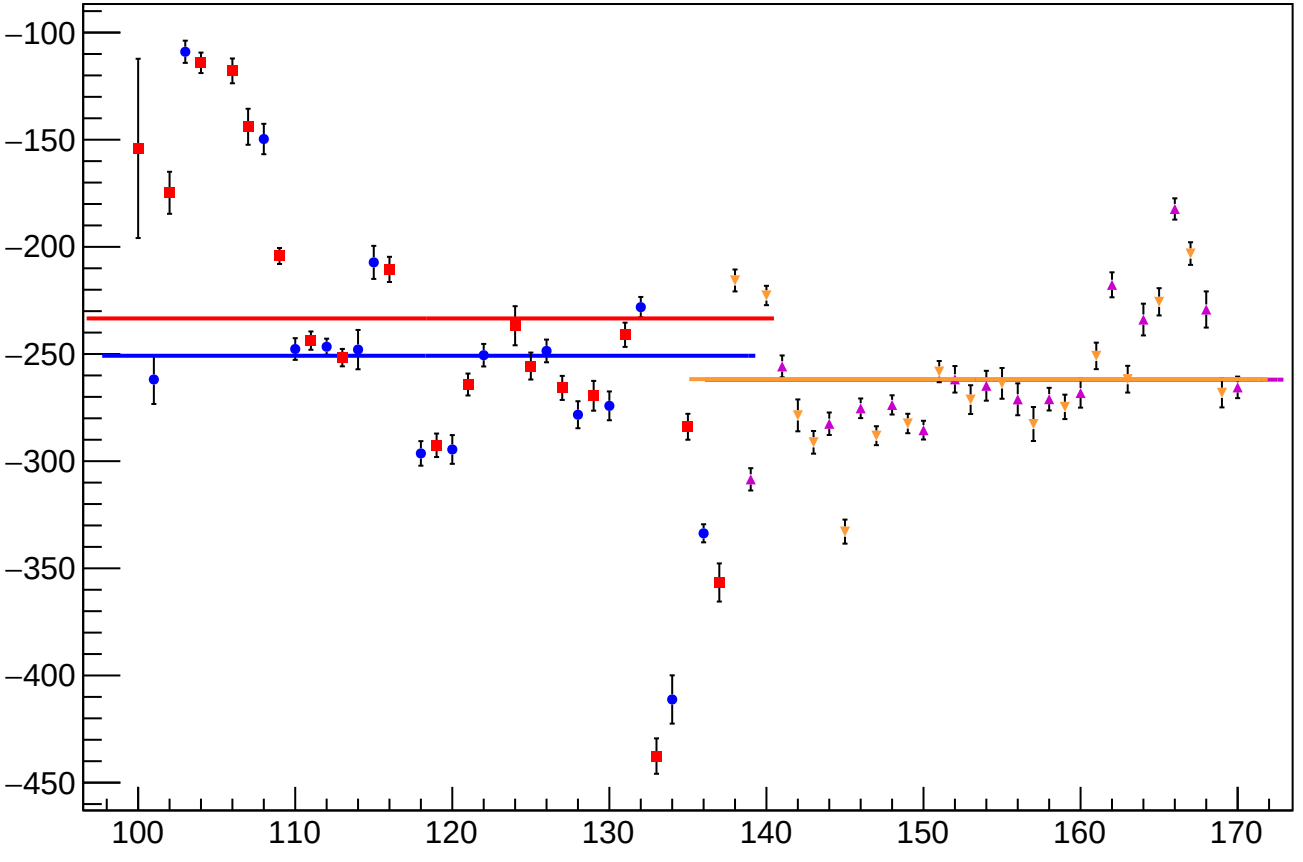
Left In: 132.999+/-0.049 $\chi^2$/NDF:6127.8/15

+ sign 115.949+/-0.040 $\chi^2$/NDF: 872848.7/32

All: 116.398+/-0.028 $\chi^2$/NDF: 1560597.7/67

- sign 116.837+/-0.039 $\chi^2$/NDF: 687495.7/34

# reg_asym_atr_avg_diff_bpm1X_slope vs Slug




Right In: -250.812+/-1.438 $\chi^2$/NDF: 1735.7/15

Left Out: -261.725+/-1.366 $\chi^2$/NDF:583.0/16

Right Out: -233.396+/-1.333 $\chi^2$/NDF: 2378.5/18

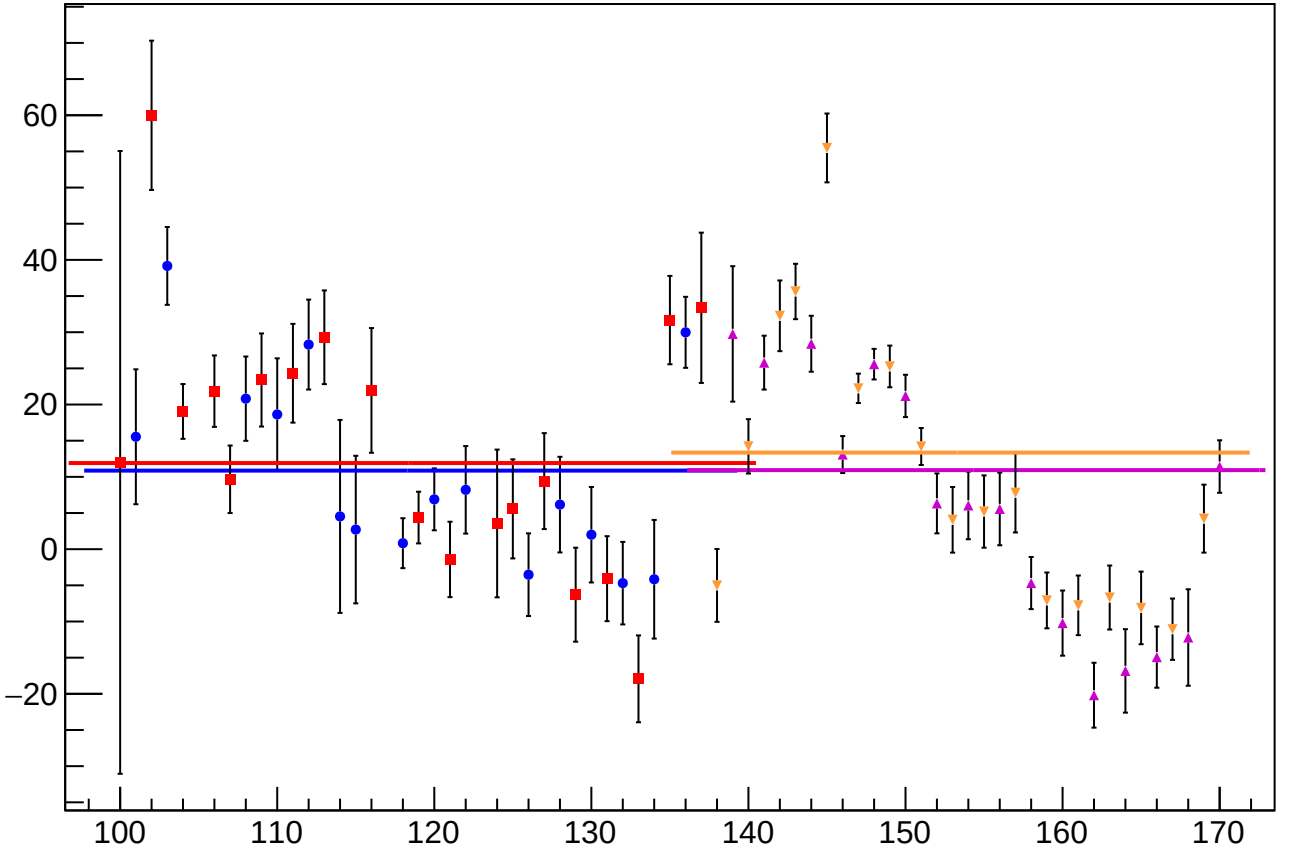
Left In: -261.959+/-1.380 $\chi^2$/NDF:491.4/15

+ sign -256.548+/-0.991 $\chi^2$/NDF: 2348.9/32

All: -251.714+/-0.689 $\chi^2$/NDF: 5486.5/67

- sign -247.184+/-0.959 $\chi^2$/NDF: 3091.5/34

# reg_asym_atr_avg_diff_bpm4aY_slope vs Slug




Right In: 10.864+/-1.471 $\chi^2$/NDF: 84.7/15

Left Out: 13.355+/-0.905 $\chi^2$/NDF:314.8/16

Right Out: 11.912+/-1.368 $\chi^2$/NDF: 111.9/18

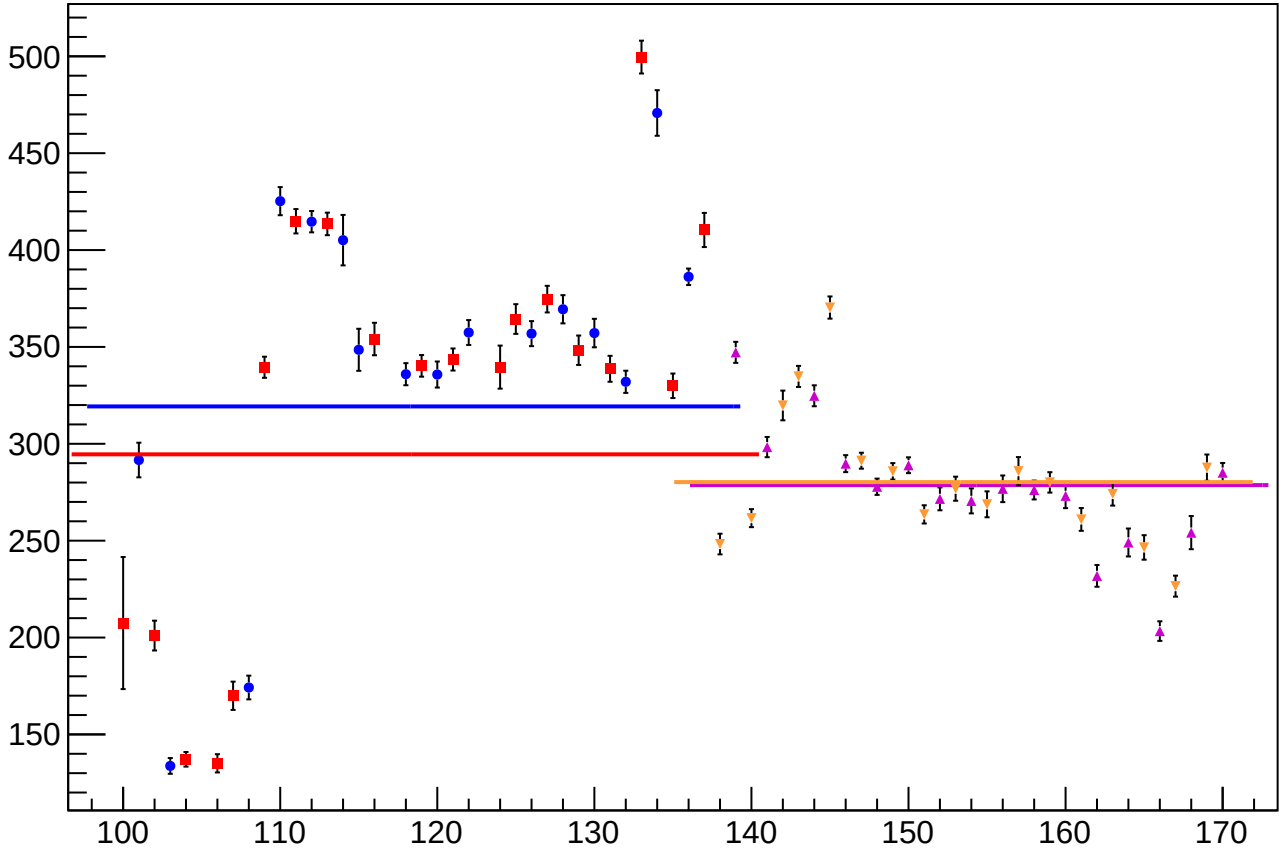
Left In: 10.931+/-0.934 $\chi^2$/NDF:266.3/15

+ sign 12.670+/-0.771 $\chi^2$/NDF: 401.5/32

All: 11.957+/-0.545 $\chi^2$/NDF: 781.8/67

- sign 11.243+/-0.771 $\chi^2$/NDF: 378.6/34

# reg_asym_atr_avg_diff_bpm4eX_slope vs Slug




Right In: 319.293+/-1.586 $\chi^2$/NDF: 3792.9/15

Left Out: 280.234+/-1.333 $\chi^2$/NDF:591.6/16

Right Out: 294.567+/-1.481 $\chi^2$/NDF: 5503.2/18

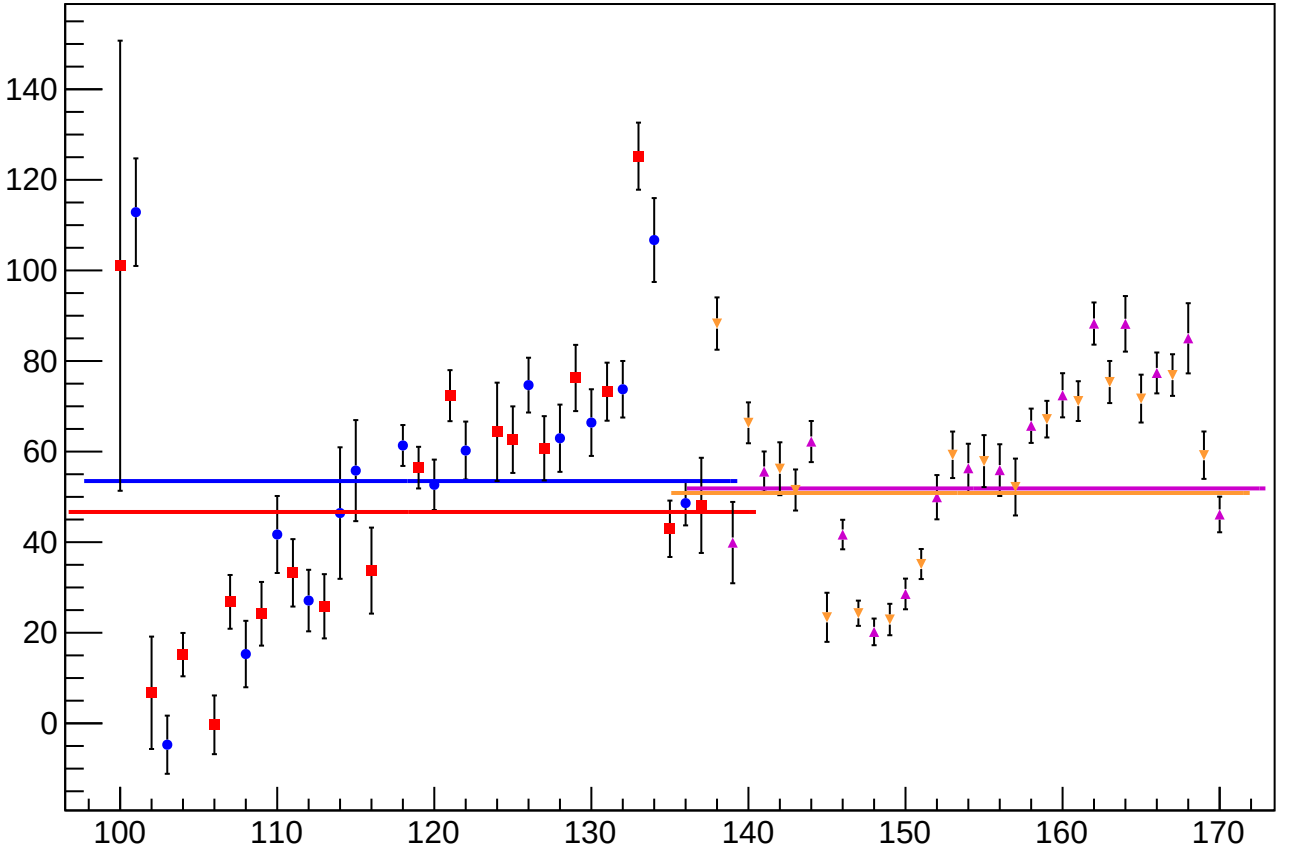
Left In: 278.685+/-1.339 $\chi^2$/NDF:581.4/15

+ sign 296.397+/-1.020 $\chi^2$/NDF: 4740.0/32

All: 290.972+/-0.712 $\chi^2$/NDF: 10942.9/67

- sign 285.828+/-0.993 $\chi^2$/NDF: 6147.8/34

# reg_asym_atr_avg_diff_bpm4eY_slope vs Slug




Right In: 53.494+/-1.699 $\chi^2$/NDF: 217.2/15

Left Out: 50.862+/-1.074 $\chi^2$/NDF:378.1/16

Right Out: 46.666+/-1.593 $\chi^2$/NDF: 325.6/18

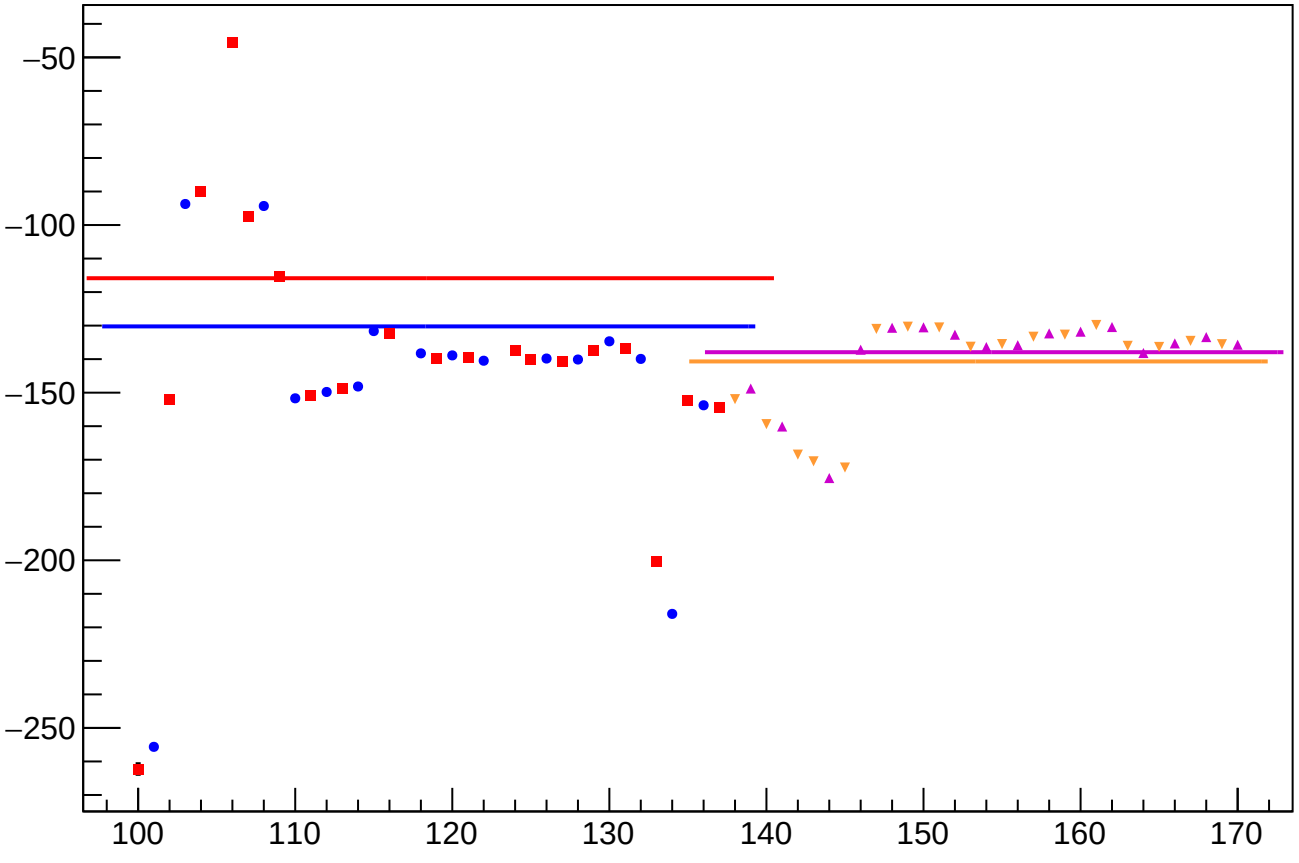
Left In: 51.867+/-1.097 $\chi^2$/NDF:361.6/15

+ sign 51.613+/-0.908 $\chi^2$/NDF: 597.0/32

All: 50.900+/-0.641 $\chi^2$/NDF: 1292.7/67

- sign 50.194+/-0.904 $\chi^2$/NDF: 694.5/34

# reg_asym_atr_avg_diff_bpm12X_slope vs Slug




Right In: -130.236+/-0.091 $\chi^2$/NDF: 174208.5/15

Left Out: -140.687+/-0.051 $\chi^2$/NDF:73370.4/16

Right Out: -115.865+/-0.086 $\chi^2$/NDF: 205899.4/18

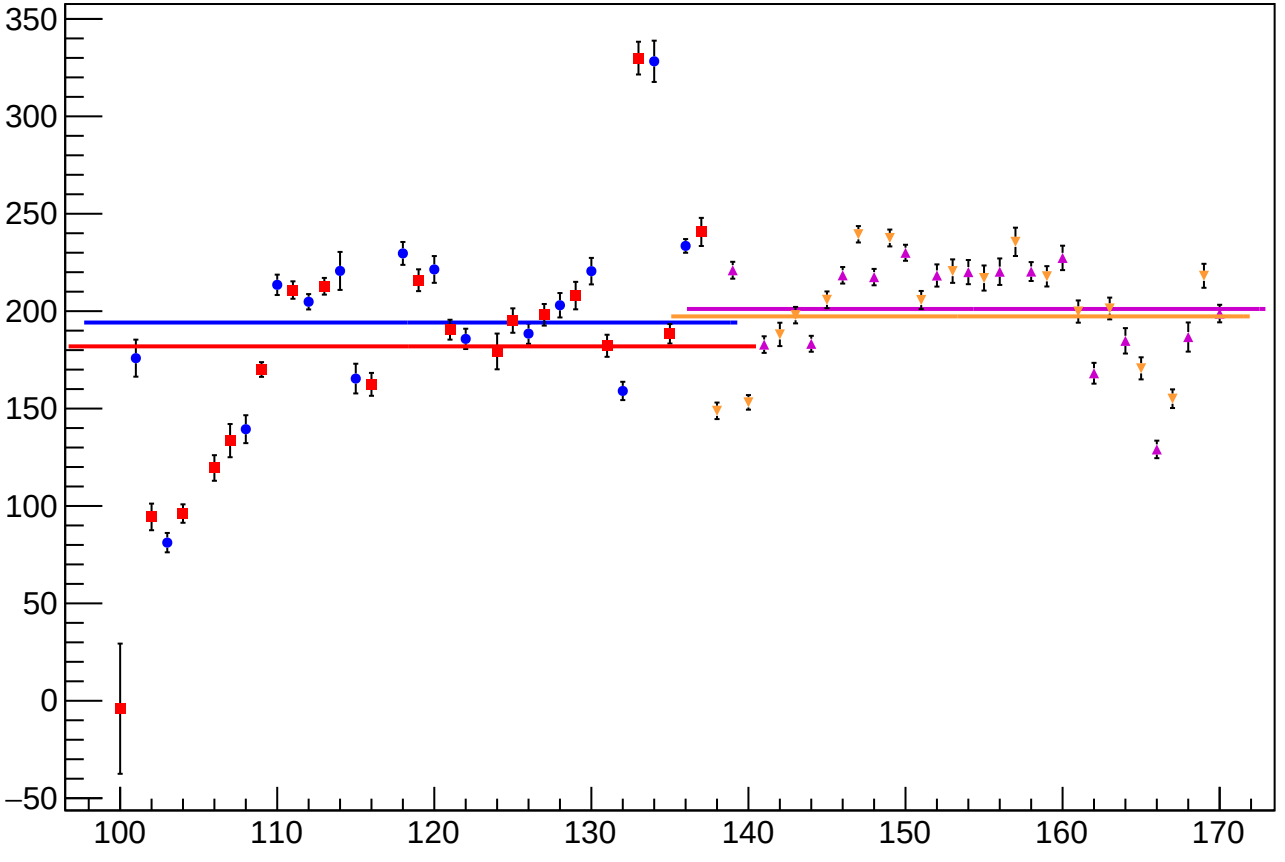
Left In: -137.929+/-0.051 $\chi^2$/NDF:46170.7/15

+ sign -138.164+/-0.045 $\chi^2$/NDF: 257565.3/32

All: -135.108+/-0.031 $\chi^2$/NDF: 567775.7/67

- sign -132.193+/-0.044 $\chi^2$/NDF: 301100.3/34

# reg_asym_atr_dd_diff_bpm1X_slope vs Slug




Right In: 194.164+/-1.407 $\chi^2$/NDF: 1035.2/15

Left Out: 197.316+/-1.202 $\chi^2$/NDF:645.0/16

Right Out: 181.928+/-1.322 $\chi^2$/NDF: 1204.8/18

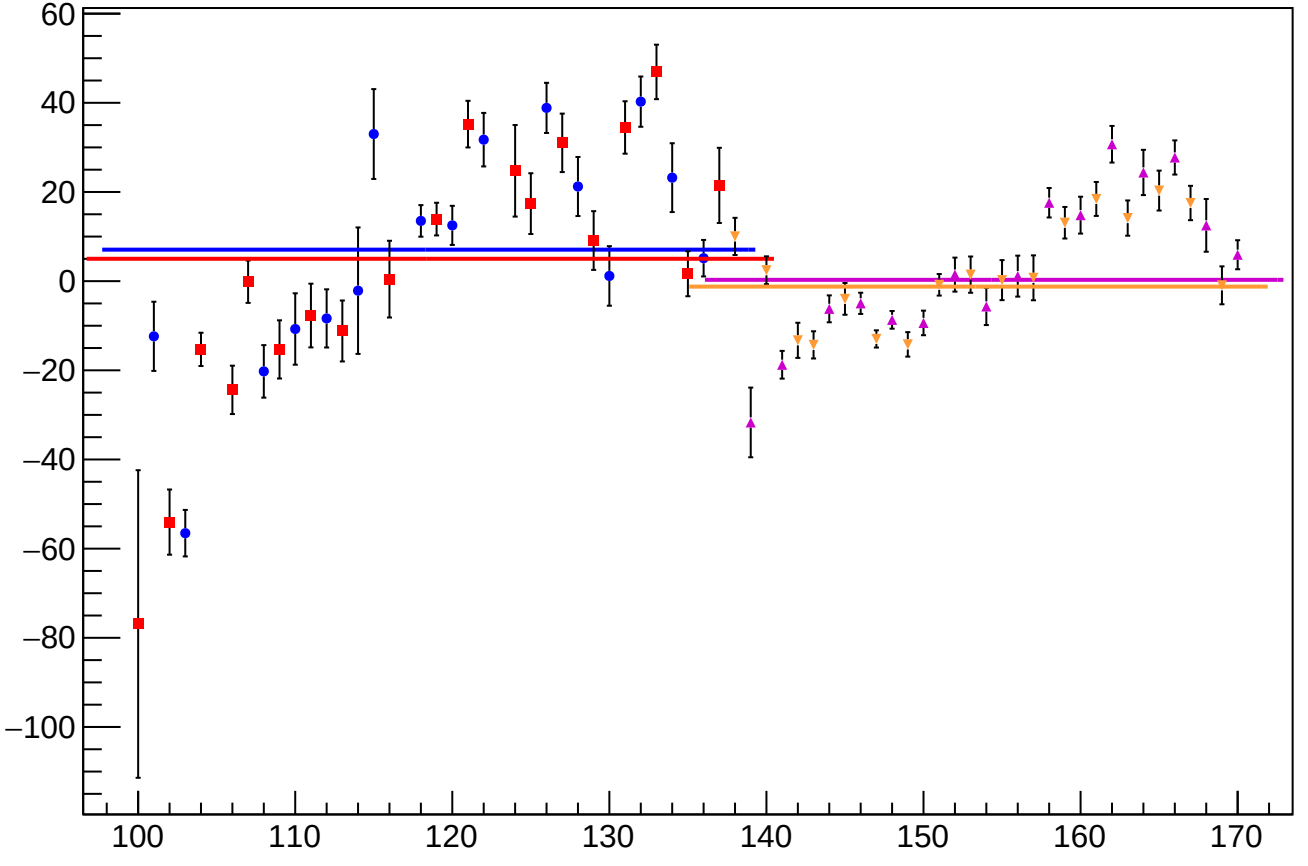
Left In: 201.130+/-1.230 $\chi^2$/NDF:504.4/15

+ sign 195.986+/-0.914 $\chi^2$/NDF: 1683.1/32

All: 194.074+/-0.641 $\chi^2$/NDF: 3514.0/67

- sign 192.218+/-0.901 $\chi^2$/NDF: 1822.3/34

# reg_asym_atr_dd_diff_bpm4aY_slope vs Slug




Right In: 7.066+/-1.443 $\chi^2$/NDF: 292.6/15

Left Out: -1.227+/-0.812 $\chi^2$/NDF:201.8/16

Right Out: 5.015+/-1.355 $\chi^2$/NDF: 288.5/18

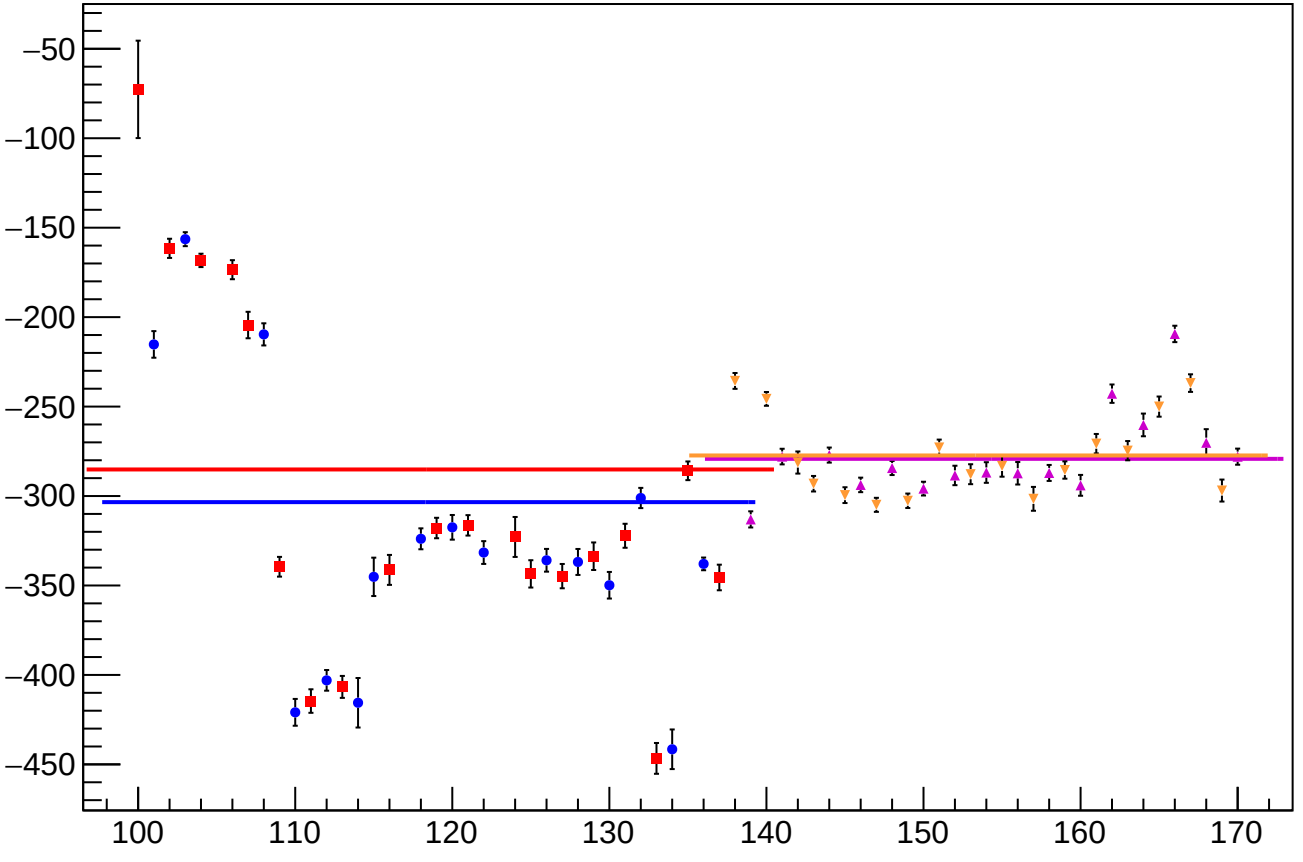
Left In: 0.295+/-0.844 $\chi^2$/NDF:274.3/15

+ sign 0.768+/-0.708 $\chi^2$/NDF: 519.4/32

All: 1.186+/-0.503 $\chi^2$/NDF: 1091.7/67

- sign 1.614+/-0.716 $\chi^2$/NDF: 571.5/34

# reg_asym_atr_dd_diff_bpm4eX_slope vs Slug




Right In: -303.408+/-1.530 $\chi^2$/NDF: 2785.5/15

Left Out: -277.324+/-1.179 $\chi^2$/NDF:408.3/16

Right Out: -285.148+/-1.451 $\chi^2$/NDF: 3754.8/18

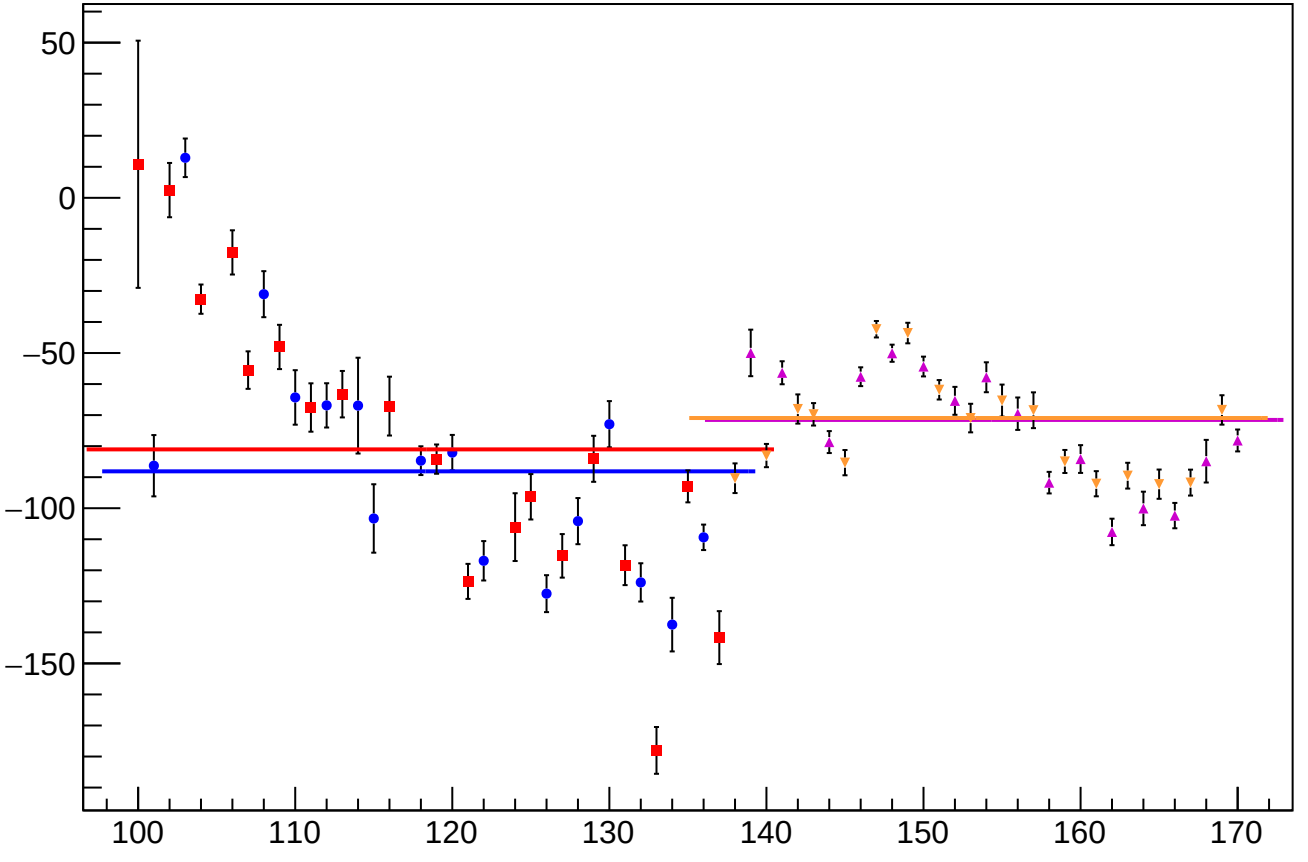
Left In: -279.213+/-1.198 $\chi^2$/NDF:398.5/15

+ sign -287.042+/-0.934 $\chi^2$/NDF: 3376.1/32

All: -284.301+/-0.657 $\chi^2$/NDF: 7556.4/67

- sign -281.619+/-0.924 $\chi^2$/NDF: 4163.2/34

# reg_asym_atr_dd_diff_bpm4eY_slope vs Slug




Right In: -88.119+/-1.655 $\chi^2$/NDF: 511.9/15

Left Out: -70.939+/-0.960 $\chi^2$/NDF:341.4/16

Right Out: -81.046+/-1.569 $\chi^2$/NDF: 677.5/18

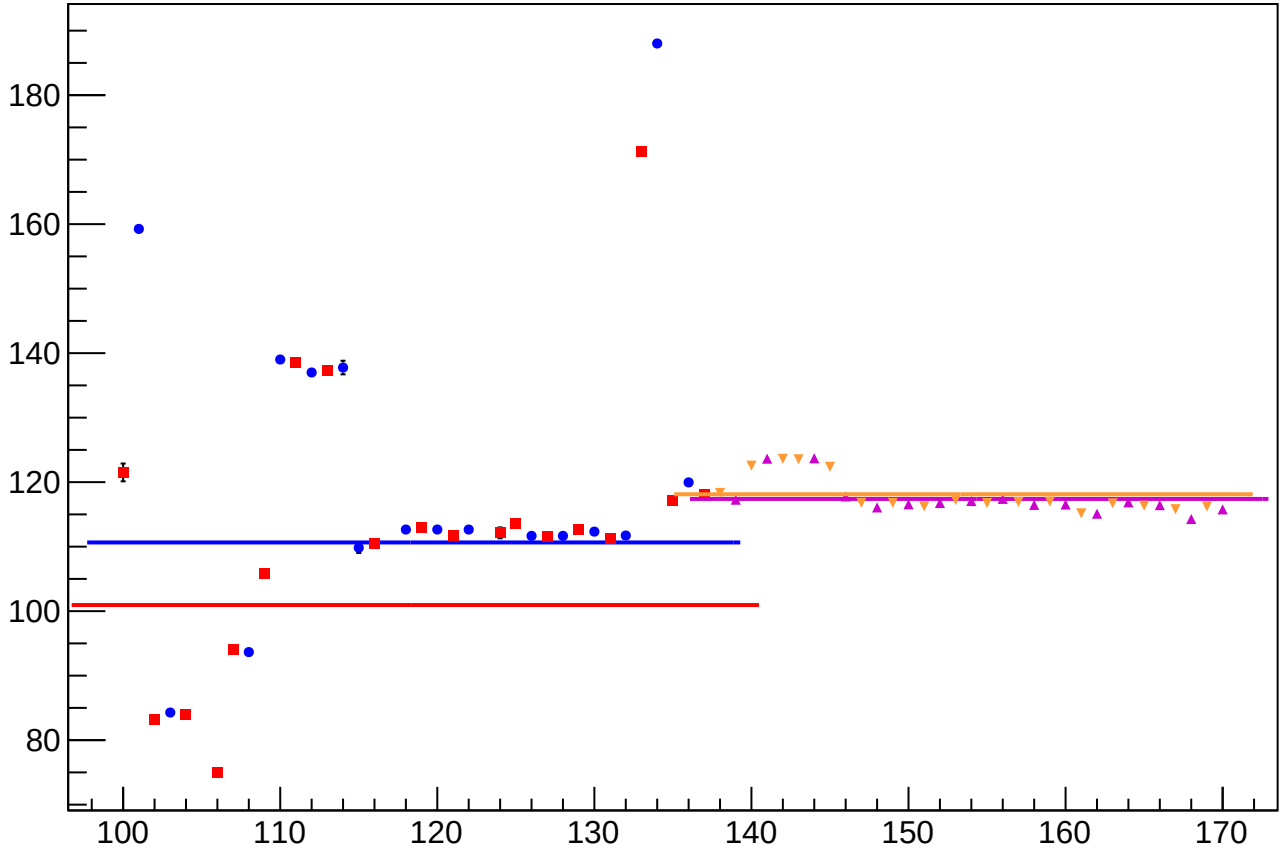
Left In: -71.556+/-0.989 $\chi^2$/NDF:355.7/15

+ sign -75.263+/-0.830 $\chi^2$/NDF: 934.0/32

All: -74.763+/-0.589 $\chi^2$/NDF: 1994.1/67

- sign -74.256+/-0.837 $\chi^2$/NDF: 1059.4/34

# reg_asym_atr_dd_diff_bpm12X_slope vs Slug




Right In: 110.651+/-0.086 $\chi^2$/NDF: 83521.8/15

Left Out: 118.123+/-0.046 $\chi^2$/NDF:3613.2/16

Right Out: 100.949+/-0.081 $\chi^2$/NDF: 62002.4/18

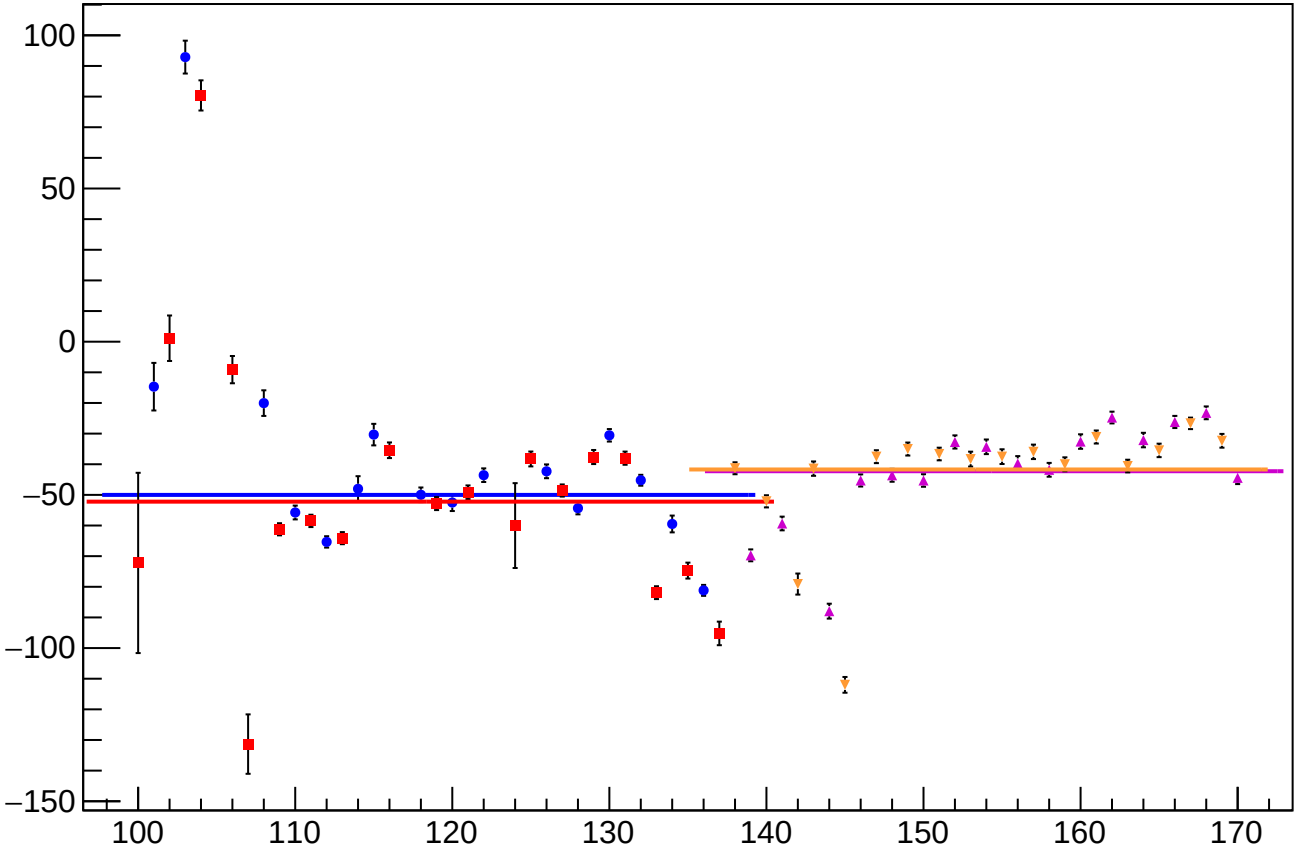
Left In: 117.399+/-0.046 $\chi^2$/NDF:2936.1/15

+ sign 116.479+/-0.040 $\chi^2$/NDF: 93047.7/32

All: 114.942+/-0.028 $\chi^2$/NDF: 192220.0/67

- sign 113.447+/-0.040 $\chi^2$/NDF: 96294.9/34

# reg_asym_at1_avg_diff_bpm1X_slope vs Slug




Right In: -50.008+/-0.610 $\chi^2$/NDF: 1327.4/15

Left Out: -41.708+/-0.537 $\chi^2$/NDF:1038.3/16

Right Out: -52.207+/-0.605 $\chi^2$/NDF: 1570.3/18

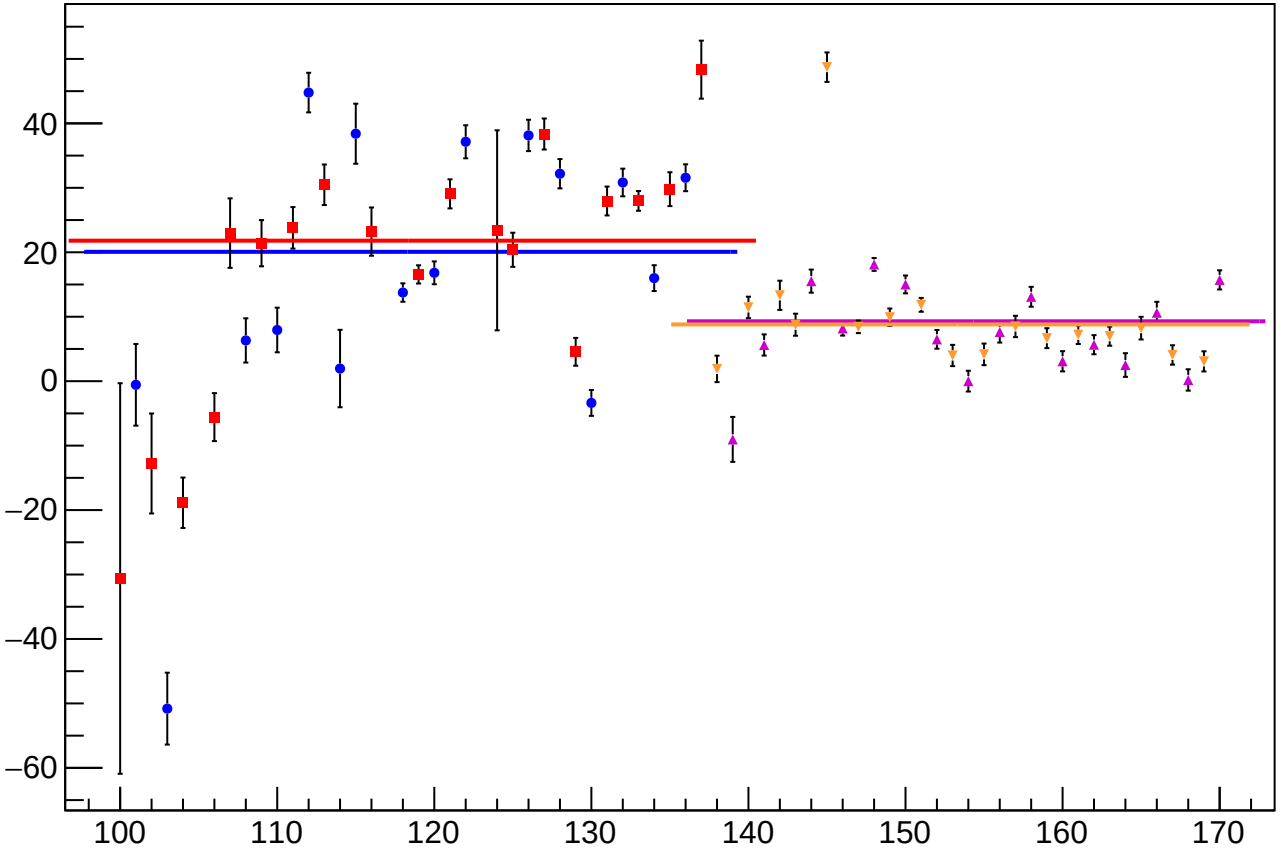
Left In: -42.278+/-0.538 $\chi^2$/NDF:915.4/15

\+ sign -45.330+/-0.403 $\chi^2$/NDF: 2470.0/32

All: -45.998+/-0.285 $\chi^2$/NDF: 5111.6/67

\- sign -46.662+/-0.402 $\chi^2$/NDF: 2636.2/34

# reg_asym_at1_avg_diff_bpm4aY_slope vs Slug




Right In: 20.072+/-0.612 $\chi^2$/NDF: 636.2/15

Left Out: 8.805+/-0.367 $\chi^2$/NDF:376.0/16

Right Out: 21.800+/-0.622 $\chi^2$/NDF: 396.3/18

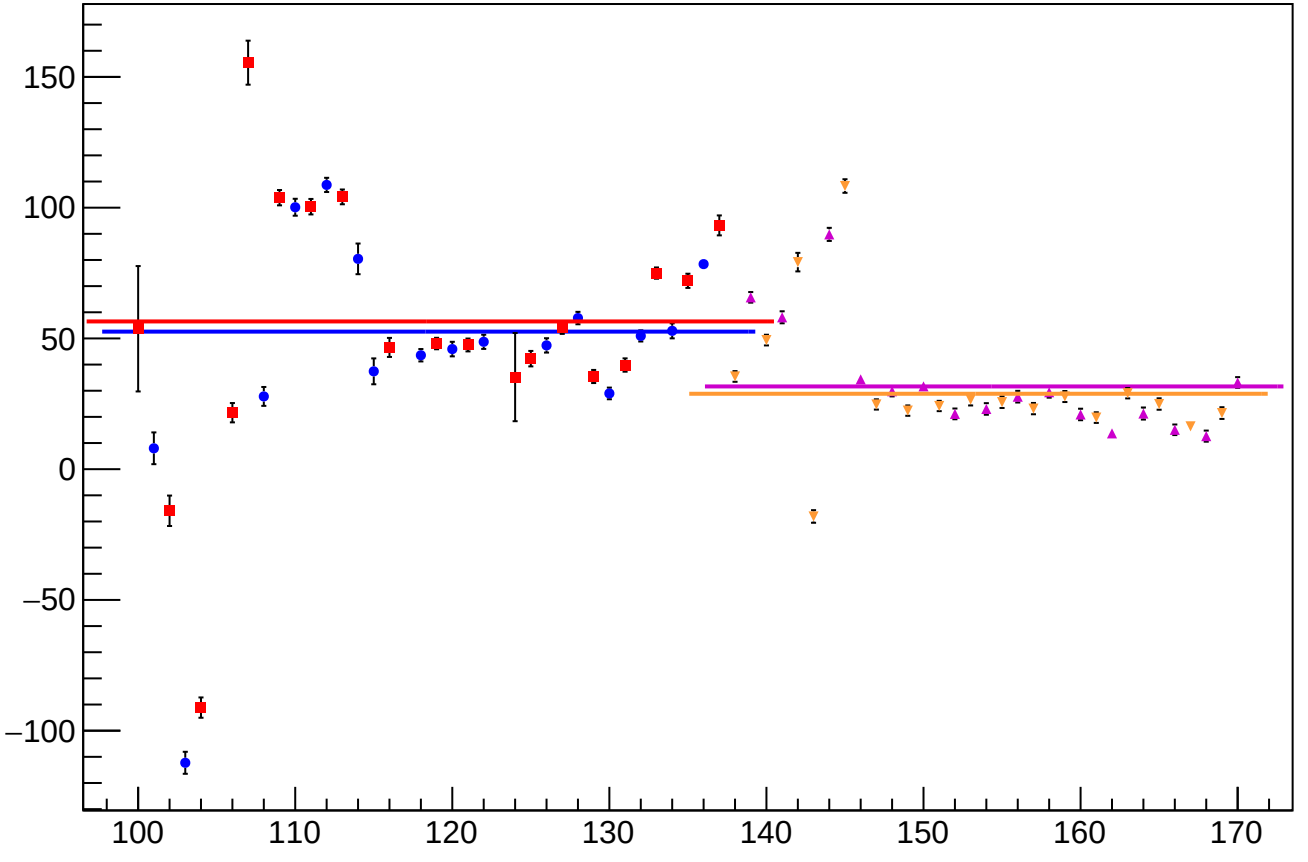
Left In: 9.292+/-0.376 $\chi^2$/NDF:269.7/15

+ sign 11.787+/-0.315 $\chi^2$/NDF: 1261.5/32

All: 12.205+/-0.225 $\chi^2$/NDF: 2227.2/67

- sign 12.642+/-0.322 $\chi^2$/NDF: 962.1/34

# reg_asym_at1_avg_diff_bpm4eX_slope vs Slug




Right In: 52.605+/-0.696 $\chi^2$/NDF: 2659.4/15

Left Out: 28.838+/-0.523 $\chi^2$/NDF:1735.0/16

Right Out: 56.499+/-0.705 $\chi^2$/NDF: 2965.5/18

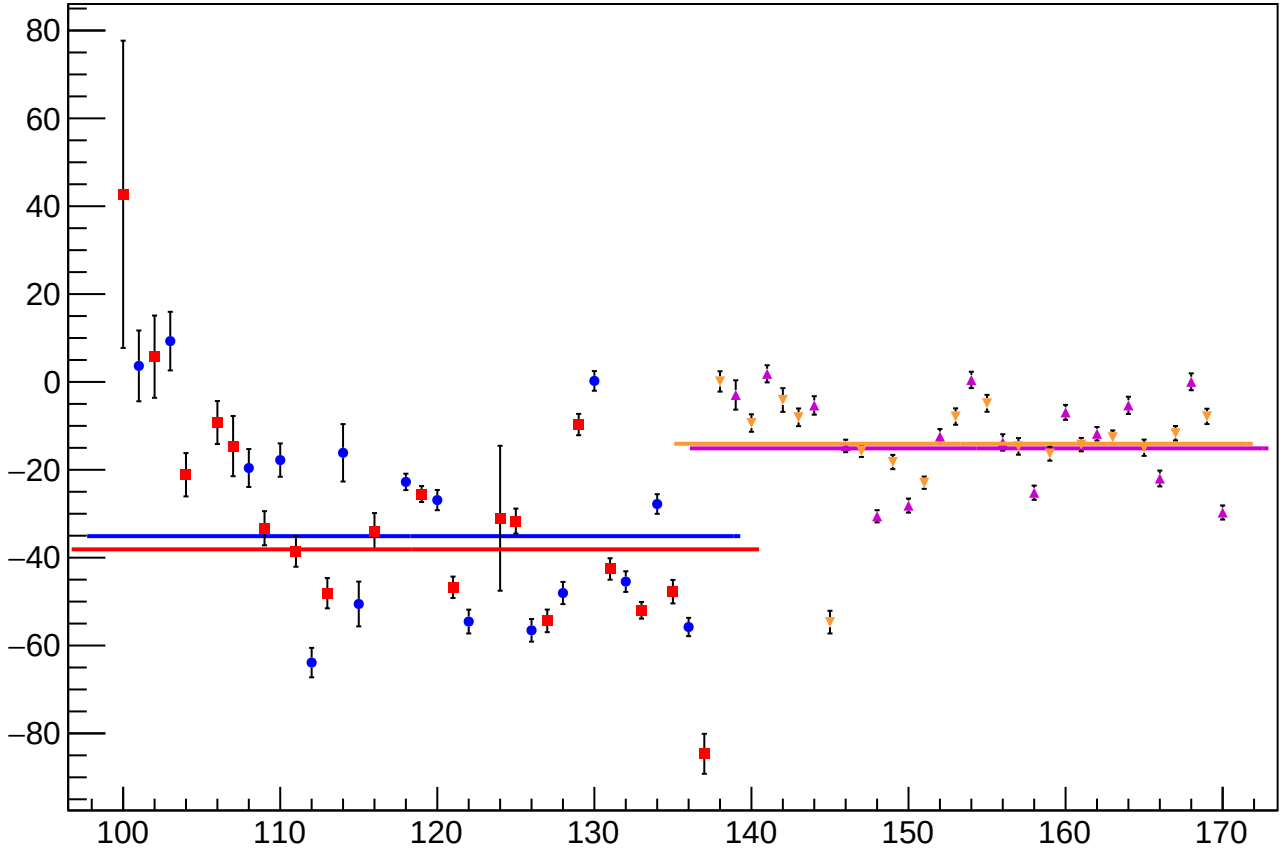
Left In: 31.643+/-0.522 $\chi^2$/NDF:1289.9/15

\+ sign 37.407+/-0.418 $\chi^2$/NDF: 5139.3/32

All: 38.922+/-0.296 $\chi^2$/NDF: 10222.8/67

\- sign 40.448+/-0.420 $\chi^2$/NDF: 5057.1/34

# reg_asym_at1_avg_diff_bpm4eY_slope vs Slug




Right In: -35.104+/-0.700 $\chi^2$/NDF: 773.2/15

Left Out: -14.067+/-0.427 $\chi^2$/NDF:412.9/16

Right Out: -38.109+/-0.714 $\chi^2$/NDF: 514.6/18

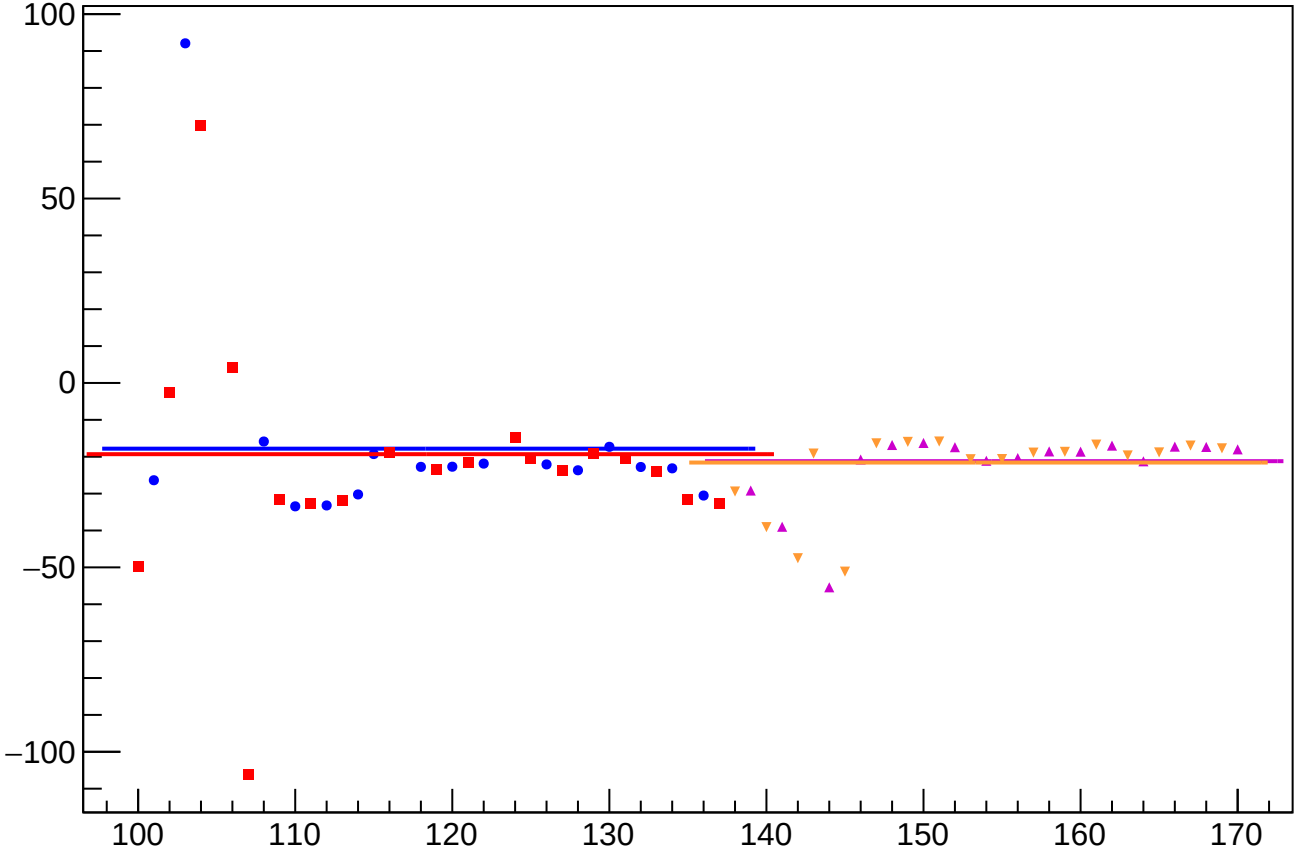
Left In: -15.121+/-0.435 $\chi^2$/NDF:625.6/15

+ sign -19.776+/-0.365 $\chi^2$/NDF: 1844.0/32

All: -20.548+/-0.260 $\chi^2$/NDF: 3749.3/67

- sign -21.349+/-0.372 $\chi^2$/NDF: 1896.2/34

# reg_asym_at1_avg_diff_bpm12X_slope vs Slug




Right In: -17.817+/-0.043 $\chi^2$/NDF: 426105.1/15

Left Out: -21.576+/-0.020 $\chi^2$/NDF:192999.9/16

Right Out: -19.311+/-0.046 $\chi^2$/NDF: 344626.7/18

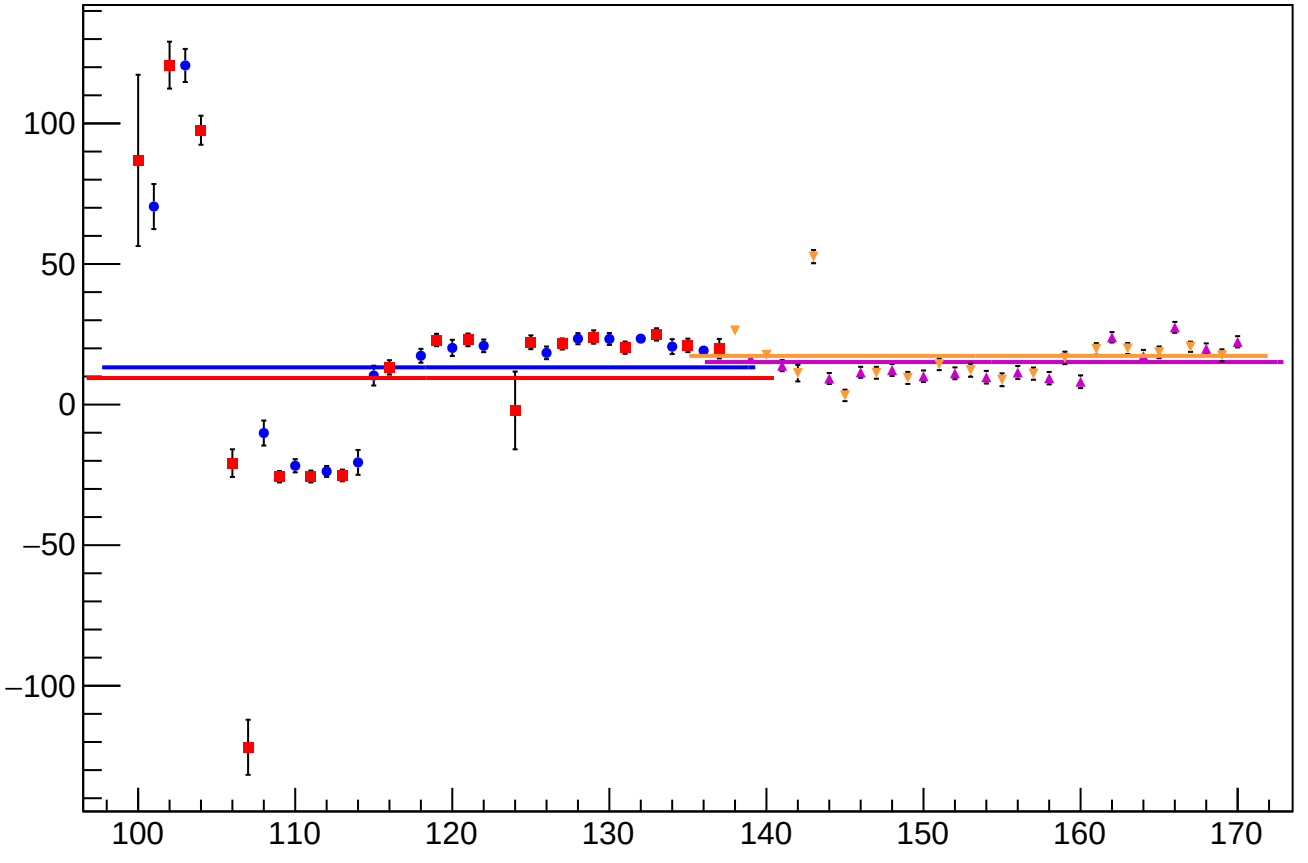
Left In: -21.207+/-0.019 $\chi^2$/NDF:164164.6/15

+ sign -20.935+/-0.018 $\chi^2$/NDF: 625375.6/32

All: -20.928+/-0.013 $\chi^2$/NDF: 1135605.6/67

- sign -20.922+/-0.018 $\chi^2$/NDF: 510229.8/34

# reg_asym_at1_dd_diff_bpm1X_slope vs Slug




Right In: 13.250+/-0.615 $\chi^2$/NDF: 1182.5/15

Left Out: 17.316+/-0.507 $\chi^2$/NDF:358.7/16

Right Out: 9.450+/-0.615 $\chi^2$/NDF: 1836.6/18

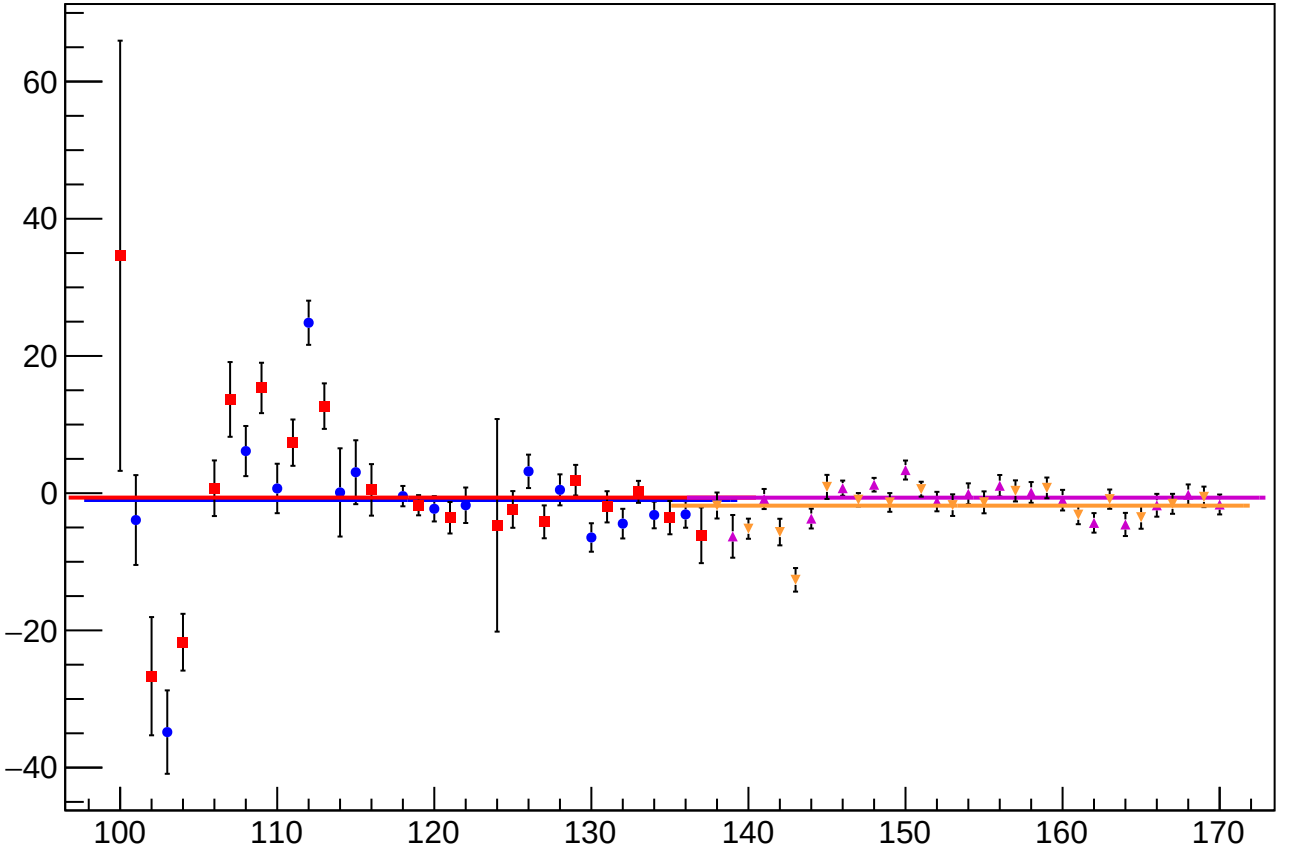
Left In: 15.139+/-0.507 $\chi^2$/NDF:132.7/15

\+ sign 15.669+/-0.391 $\chi^2$/NDF: 1567.2/32

All: 14.253+/-0.277 $\chi^2$/NDF: 3613.7/67

\- sign 12.837+/-0.391 $\chi^2$/NDF: 2020.3/34

# reg_asym_at1_dd_diff_bpm4aY_slope vs Slug




Right In: -0.993+/-0.619 $\chi^2$/NDF: 116.3/15

Left Out: -1.818+/-0.352 $\chi^2$/NDF:65.1/16

Right Out: -0.644+/-0.636 $\chi^2$/NDF: 94.2/18

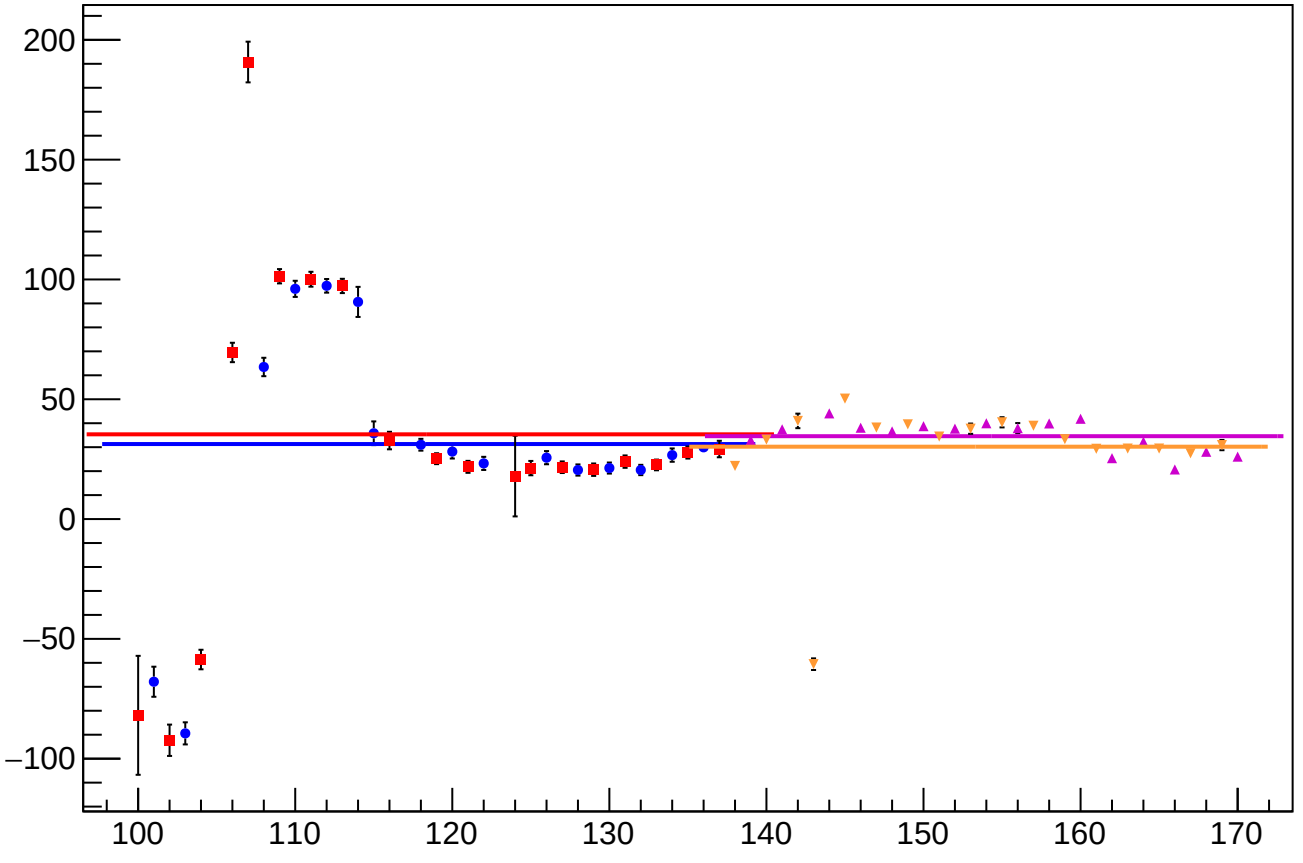
Left In: -0.656+/-0.359 $\chi^2$/NDF:36.2/15

+ sign -1.617+/-0.306 $\chi^2$/NDF: 182.8/32

All: -1.145+/-0.219 $\chi^2$/NDF: 318.1/67

- sign -0.653+/-0.313 $\chi^2$/NDF: 130.5/34

# reg_asym_at1_dd_diff_bpm4eX_slope vs Slug




Right In: 31.310+/-0.700 $\chi^2$/NDF: 2085.9/15

Left Out: 30.206+/-0.496 $\chi^2$/NDF:1628.2/16

Right Out: 35.366+/-0.717 $\chi^2$/NDF: 2897.7/18

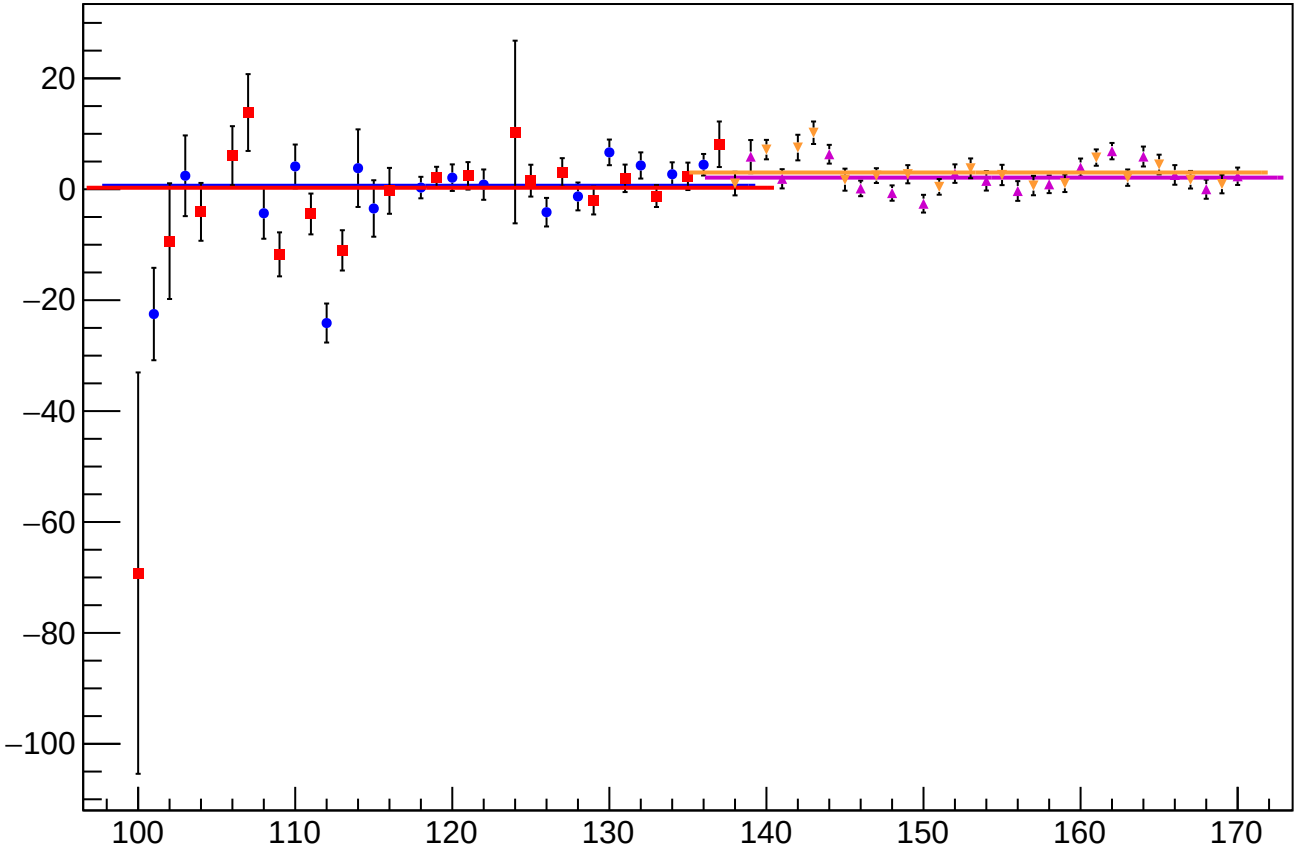
Left In: 34.587+/-0.494 $\chi^2$/NDF:171.8/15

\+ sign 30.574+/-0.405 $\chi^2$/NDF: 3715.8/32

All: 32.694+/-0.287 $\chi^2$/NDF: 6841.2/67

\- sign 34.838+/-0.407 $\chi^2$/NDF: 3070.2/34

# reg_asym_at1_dd_diff_bpm4eY_slope vs Slug




Right In: 0.632+/-0.705 $\chi^2$/NDF: 78.4/15

Left Out: 3.024+/-0.408 $\chi^2$/NDF:36.9/16

Right Out: 0.274+/-0.726 $\chi^2$/NDF: 40.5/18

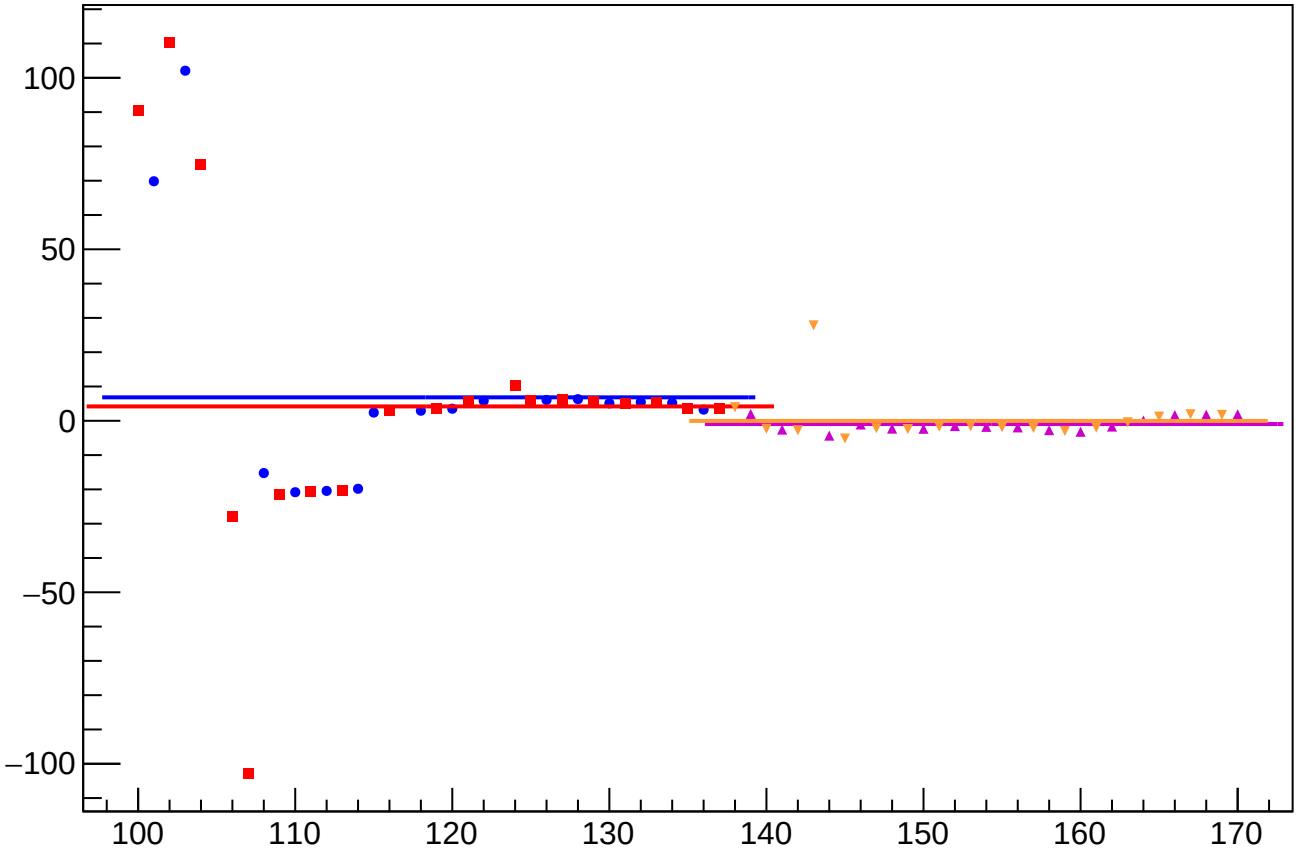
Left In: 2.100+/-0.415 $\chi^2$/NDF:42.9/15

+ sign 2.423+/-0.353 $\chi^2$/NDF: 123.9/32

All: 2.044+/-0.252 $\chi^2$/NDF: 214.4/67

- sign 1.651+/-0.360 $\chi^2$/NDF: 88.1/34

# reg_asym_at1_dd_diff_bpm12X_slope vs Slug




Right In: 6.838+/-0.043 $\chi^2$/NDF: 320954.7/15

Left Out: -0.037+/-0.019 $\chi^2$/NDF:92772.6/16

Right Out: 4.190+/-0.046 $\chi^2$/NDF: 434546.8/18

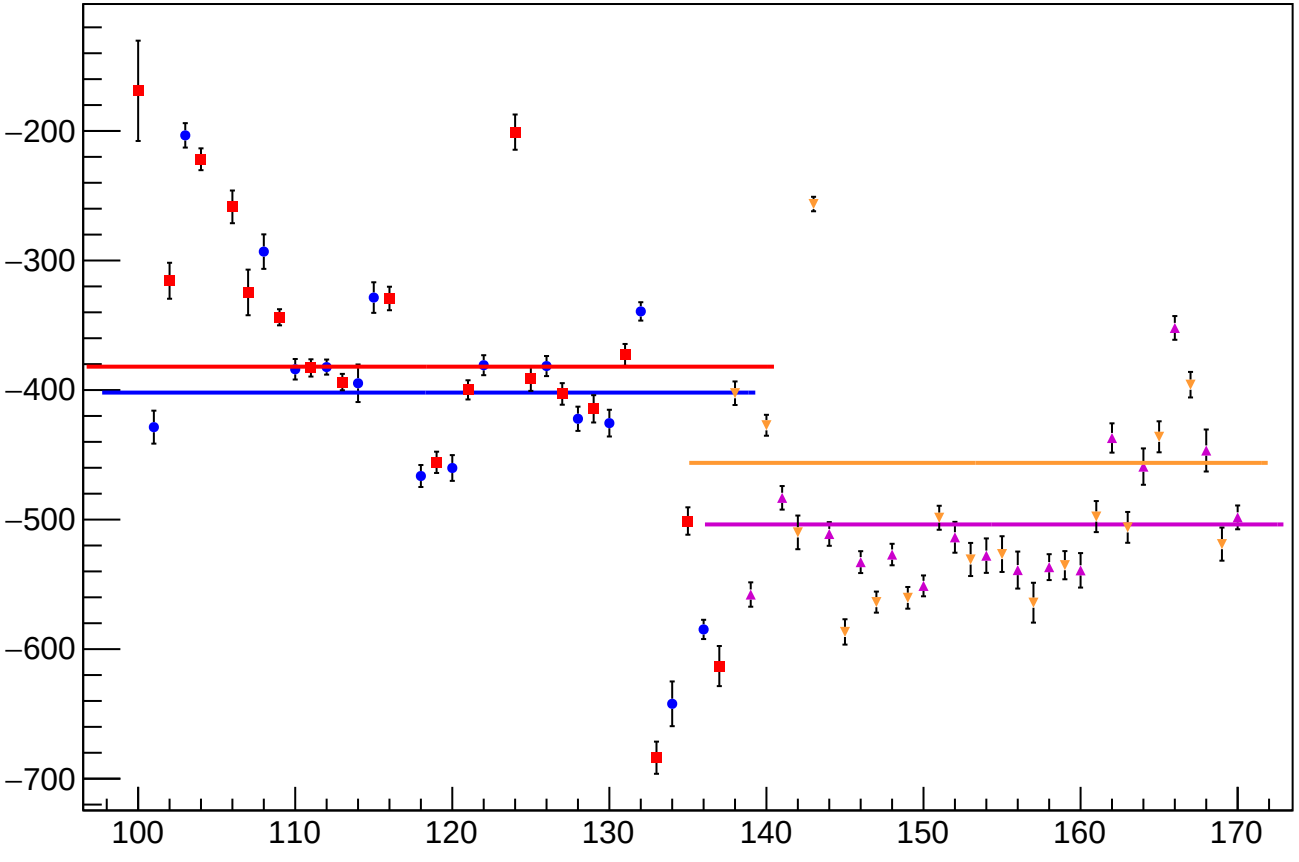
Left In: -0.943+/-0.018 $\chi^2$/NDF:11262.5/15

+ sign 1.051+/-0.017 $\chi^2$/NDF: 435398.6/32

All: 0.403+/-0.012 $\chi^2$/NDF: 894721.7/67

- sign -0.246+/-0.017 $\chi^2$/NDF: 456432.1/34

# reg_asym_at2_avg_diff_bpm1X_slope vs Slug




Right In: -401.961+/-2.236 $\chi^2$/NDF: 1563.3/15

Left Out: -456.212+/-2.368 $\chi^2$/NDF:2128.1/16

Right Out: -381.949+/-2.124 $\chi^2$/NDF: 1817.4/18

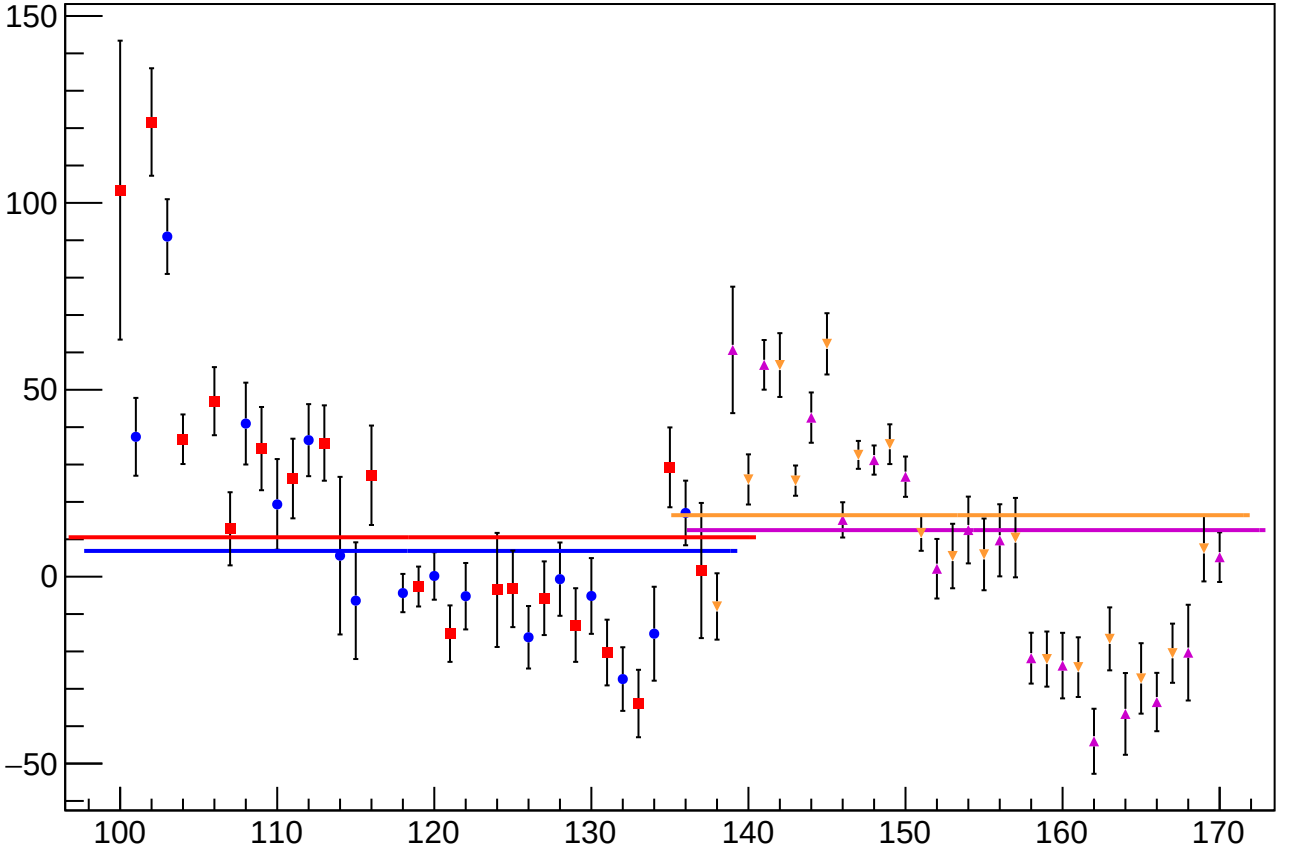
Left In: -503.739+/-2.556 $\chi^2$/NDF:453.0/15

+ sign -427.530+/-1.626 $\chi^2$/NDF: 3968.8/32

All: -429.606+/-1.152 $\chi^2$/NDF: 7585.2/67

- sign -431.702+/-1.634 $\chi^2$/NDF: 3613.1/34

# reg_asym_at2_avg_diff_bpm4aY_slope vs Slug




Right In: 6.889+/-2.264 $\chi^2$/NDF: 138.4/15

Left Out: 16.449+/-1.587 $\chi^2$/NDF:216.6/16

Right Out: 10.544+/-2.197 $\chi^2$/NDF: 180.0/18

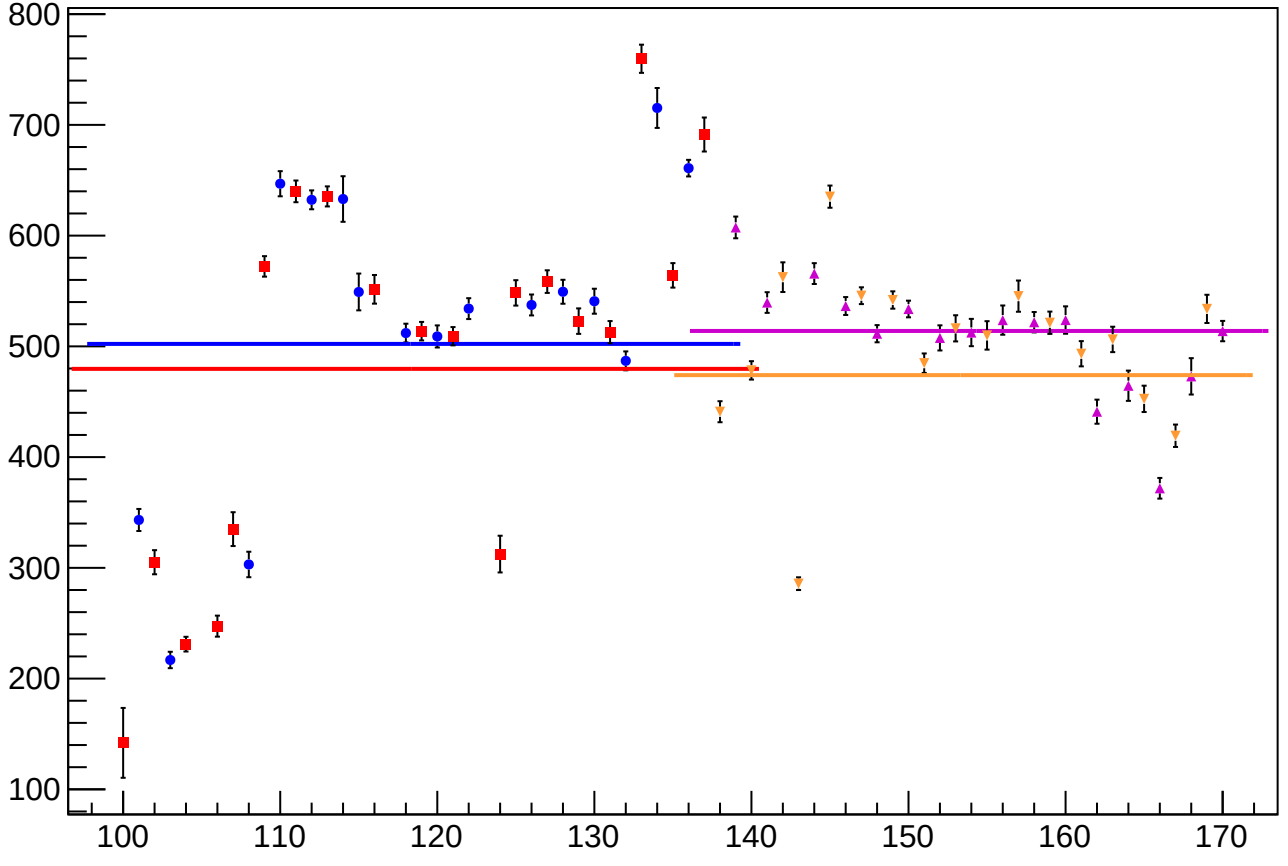
Left In: 12.454+/-1.732 $\chi^2$/NDF:251.9/15

+ sign 13.298+/-1.300 $\chi^2$/NDF: 367.0/32

All: 12.546+/-0.940 $\chi^2$/NDF: 800.1/67

- sign 11.722+/-1.360 $\chi^2$/NDF: 432.4/34

# reg_asym_at2_avg_diff_bpm4eX_slope vs Slug




Right In: 502.213+/-2.493 $\chi^2$/NDF: 3135.2/15

Left Out: 474.030+/-2.328 $\chi^2$/NDF:1689.1/16

Right Out: 479.679+/-2.399 $\chi^2$/NDF: 4138.5/18

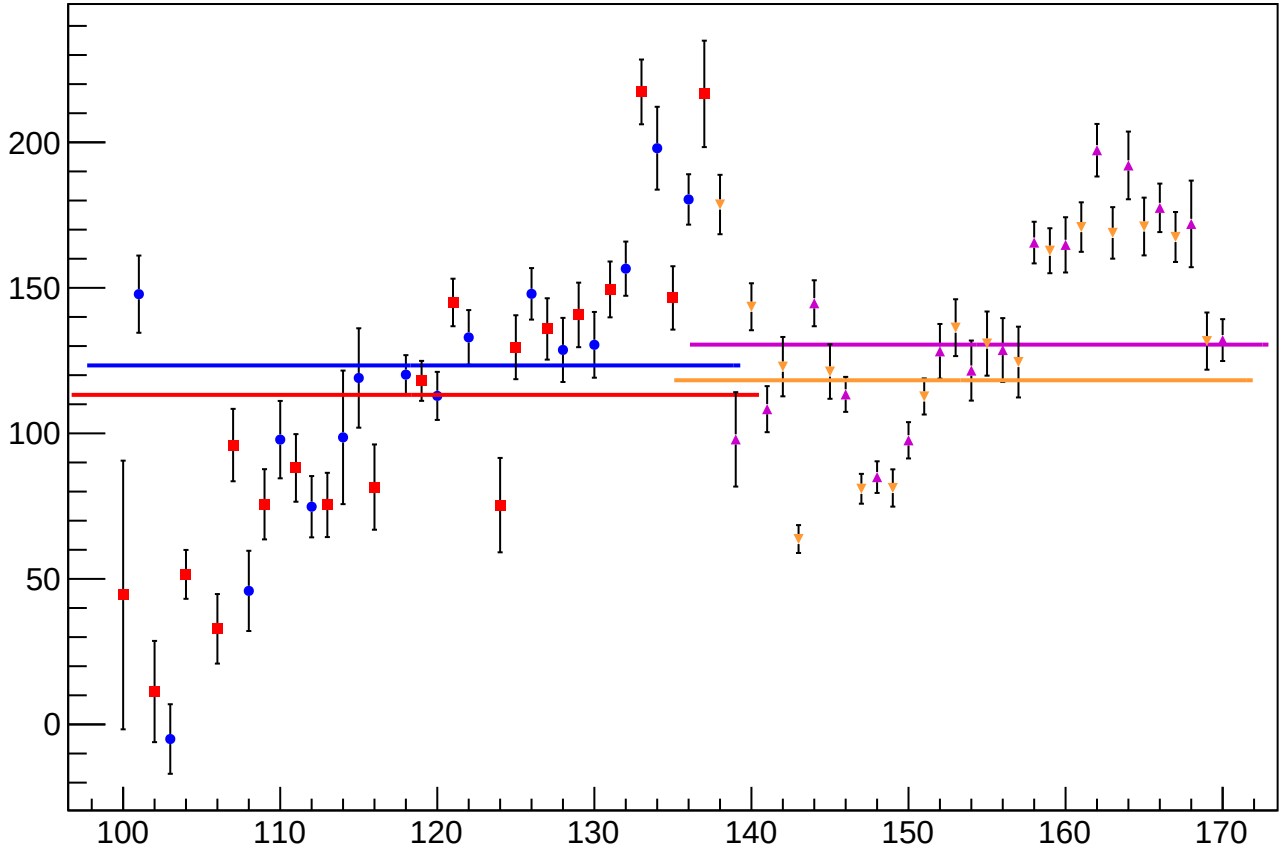
Left In: 513.913+/-2.485 $\chi^2$/NDF:441.3/15

+ sign 487.160+/-1.701 $\chi^2$/NDF: 4892.5/32

All: 491.614+/-1.212 $\chi^2$/NDF: 9584.5/67

- sign 496.198+/-1.726 $\chi^2$/NDF: 4678.1/34

# reg_asym_at2_avg_diff_bpm4eY_slope vs Slug




Right In: 123.344+/-2.627 $\chi^2$/NDF: 271.4/15

Left Out: 118.247+/-1.887 $\chi^2$/NDF:434.4/16

Right Out: 113.235+/-2.545 $\chi^2$/NDF: 345.8/18

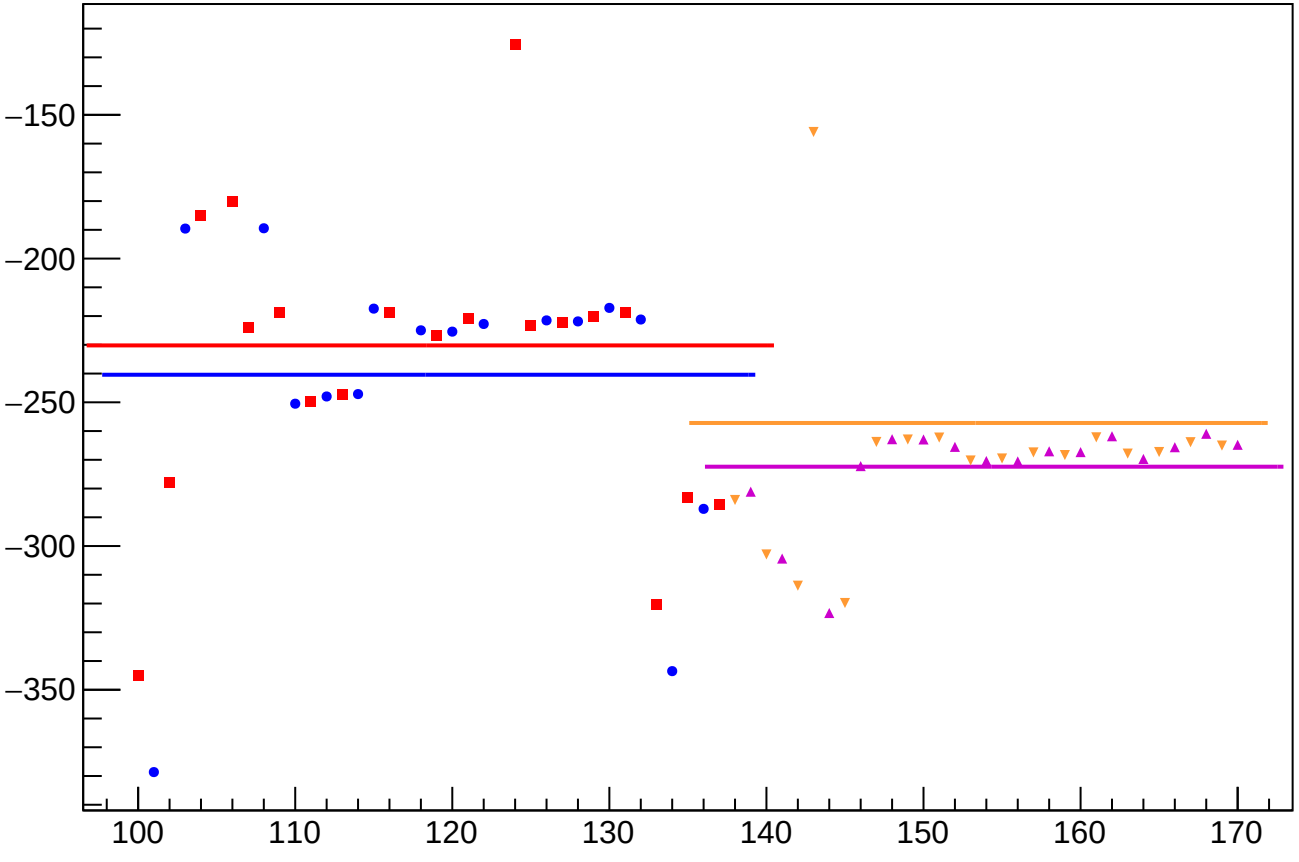
Left In: 130.496+/-2.038 $\chi^2$/NDF:281.4/15

+ sign 119.981+/-1.532 $\chi^2$/NDF: 708.2/32

All: 121.795+/-1.104 $\chi^2$/NDF: 1366.3/67

- sign 123.750+/-1.591 $\chi^2$/NDF: 655.2/34

# reg_asym_at2_avg_diff_bpm12X_slope vs Slug




Right In: -240.411+/-0.151 $\chi^2$/NDF: 134152.1/15

Left Out: -257.188+/-0.091 $\chi^2$/NDF:240788.9/16

Right Out: -230.207+/-0.146 $\chi^2$/NDF: 83431.4/18

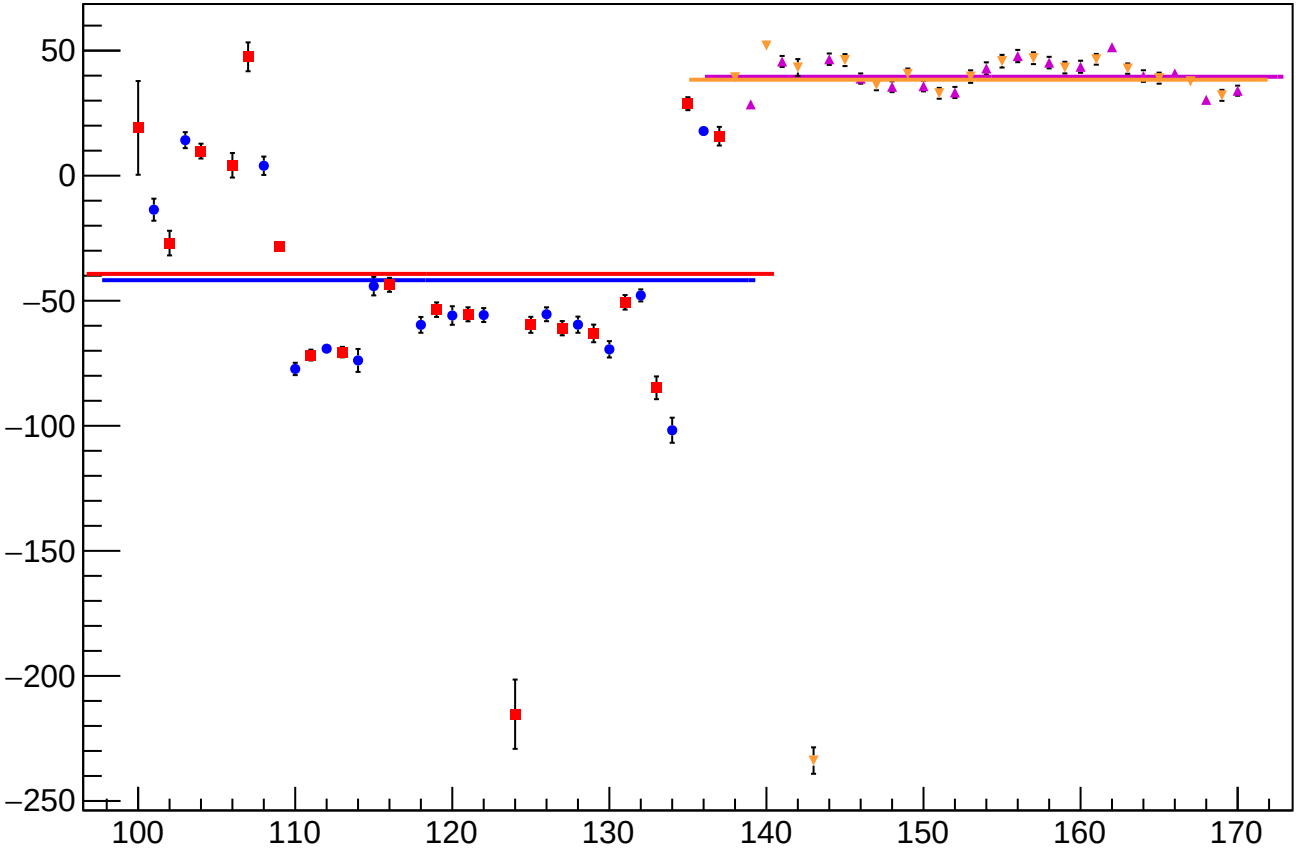
Left In: -272.400+/-0.095 $\chi^2$/NDF:26842.3/15

+ sign -252.711+/-0.078 $\chi^2$/NDF: 384037.2/32

All: -256.271+/-0.056 $\chi^2$/NDF: 557130.1/67

- sign -259.984+/-0.079 $\chi^2$/NDF: 168816.2/34

# reg_asym_at2_dd_diff_bpm1X_slope vs Slug




Right In: -41.788+/-0.723 $\chi^2$/NDF: 2405.5/15

Left Out: 38.369+/-0.551 $\chi^2$/NDF:2771.7/16

Right Out: -39.263+/-0.680 $\chi^2$/NDF: 2478.3/18

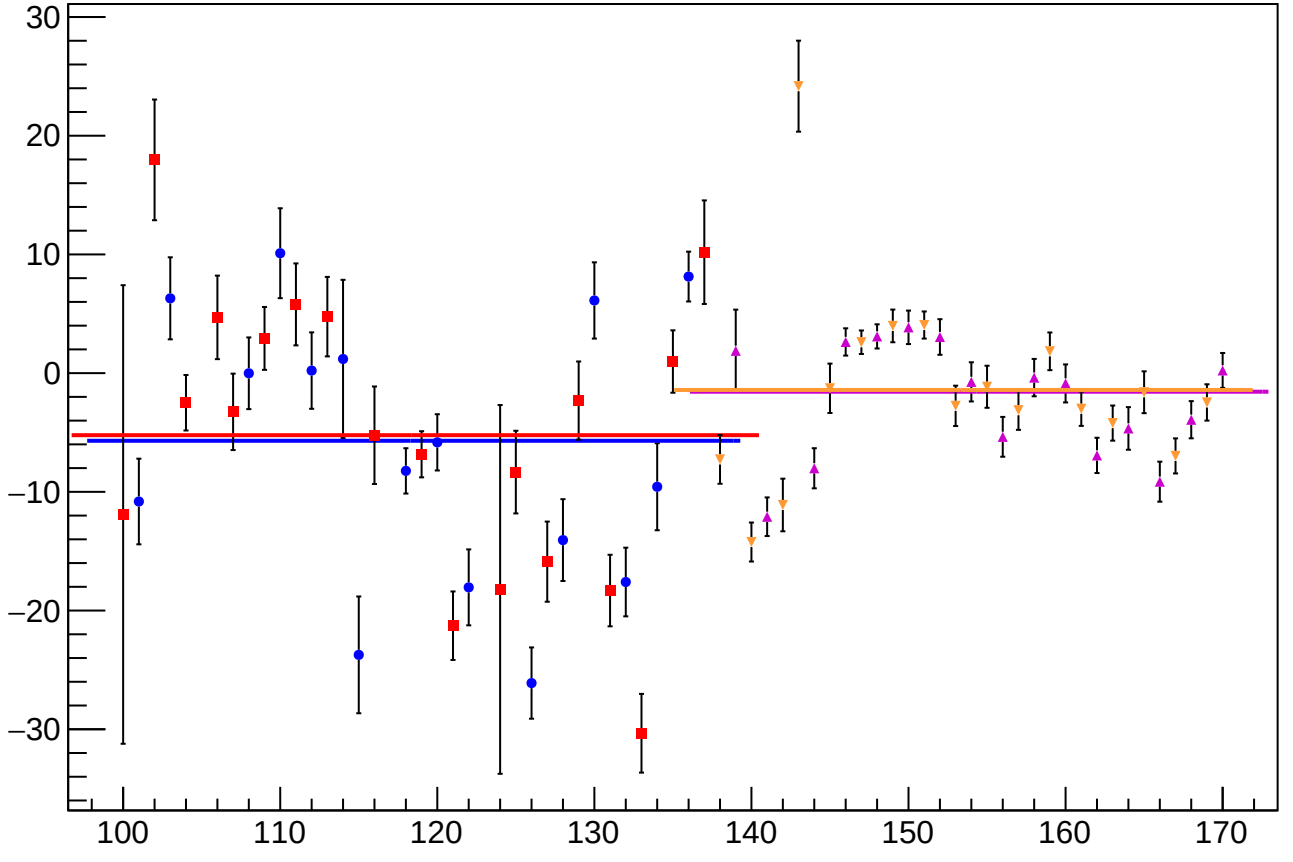
Left In: 39.553+/-0.538 $\chi^2$/NDF:154.0/15

\+ sign 8.959+/-0.438 $\chi^2$/NDF: 12956.1/32

All: 9.069+/-0.304 $\chi^2$/NDF: 23853.0/67

\- sign 9.171+/-0.422 $\chi^2$/NDF: 10896.8/34

# reg_asym_at2_dd_diff_bpm4aY_slope vs Slug




Right In: -5.697+/-0.753 $\chi^2$/NDF: 196.7/15

Left Out: -1.417+/-0.378 $\chi^2$/NDF:212.7/16

Right Out: -5.227+/-0.740 $\chi^2$/NDF: 197.3/18

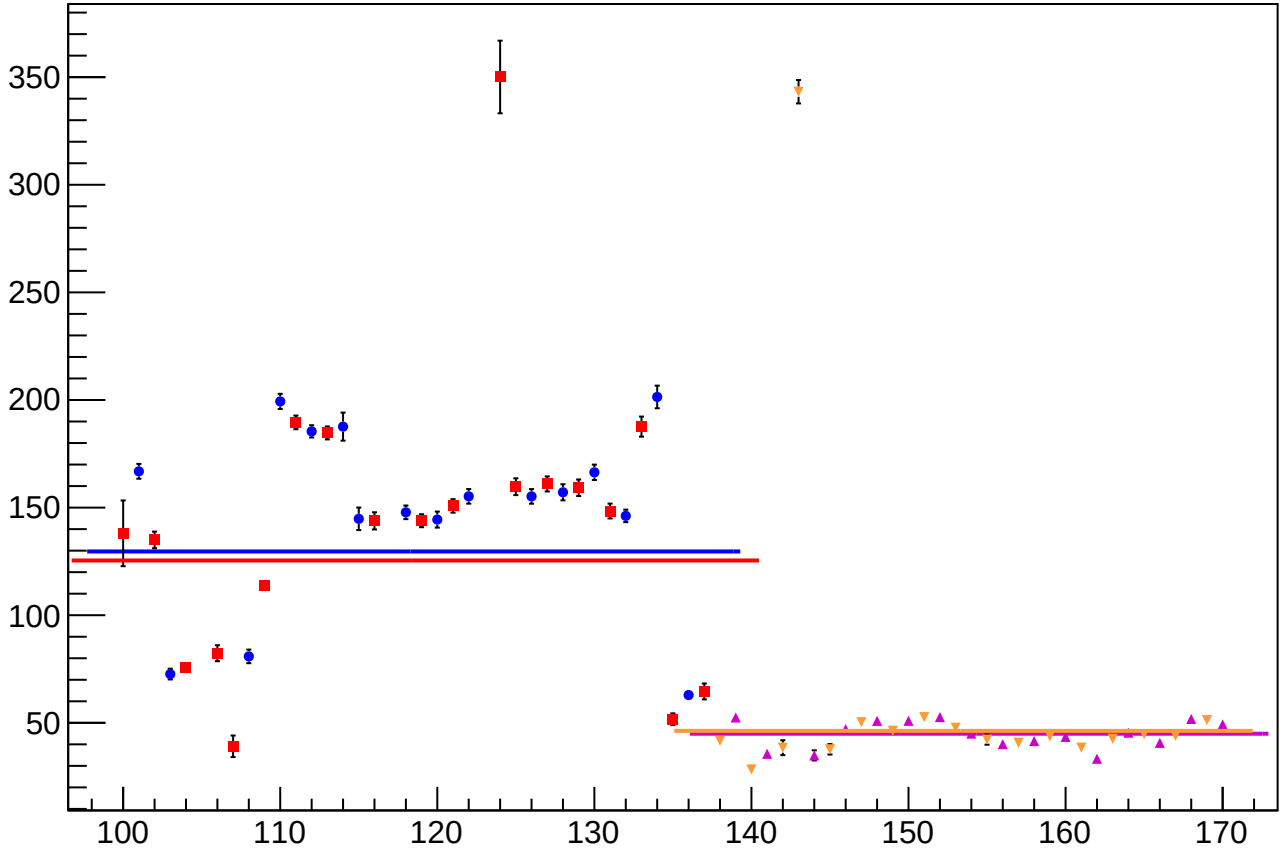
Left In: -1.565+/-0.379 $\chi^2$/NDF:162.0/15

+ sign -2.279+/-0.338 $\chi^2$/NDF: 435.3/32

All: -2.302+/-0.239 $\chi^2$/NDF: 814.0/67

- sign -2.325+/-0.337 $\chi^2$/NDF: 378.8/34

# reg_asym_at2_dd_diff_bpm4eX_slope vs Slug




Right In: 129.621+/-0.801 $\chi^2$/NDF: 3624.4/15

Left Out: 46.264+/-0.536 $\chi^2$/NDF:3132.2/16

Right Out: 125.435+/-0.790 $\chi^2$/NDF: 3503.2/18

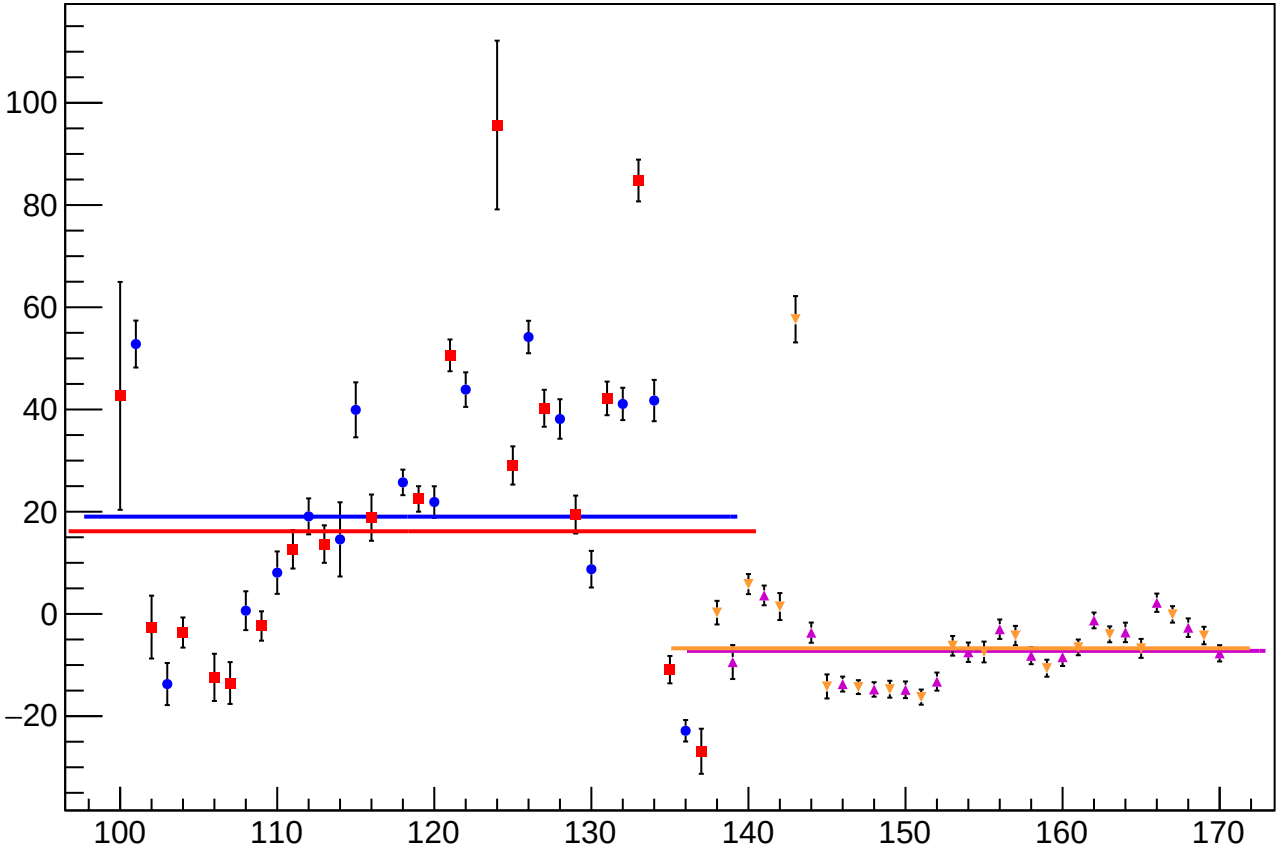
Left In: 44.939+/-0.524 $\chi^2$/NDF:149.6/15

+ sign 72.070+/-0.445 $\chi^2$/NDF: 14240.6/32

All: 70.771+/-0.312 $\chi^2$/NDF: 25125.1/67

- sign 69.523+/-0.436 $\chi^2$/NDF: 10867.8/34

# reg_asym_at2_dd_diff_bpm4eY_slope vs Slug




Right In: 19.035+/-0.860 $\chi^2$/NDF: 858.1/15

Left Out: -6.726+/-0.439 $\chi^2$/NDF:397.0/16

Right Out: 16.173+/-0.846 $\chi^2$/NDF: 941.3/18

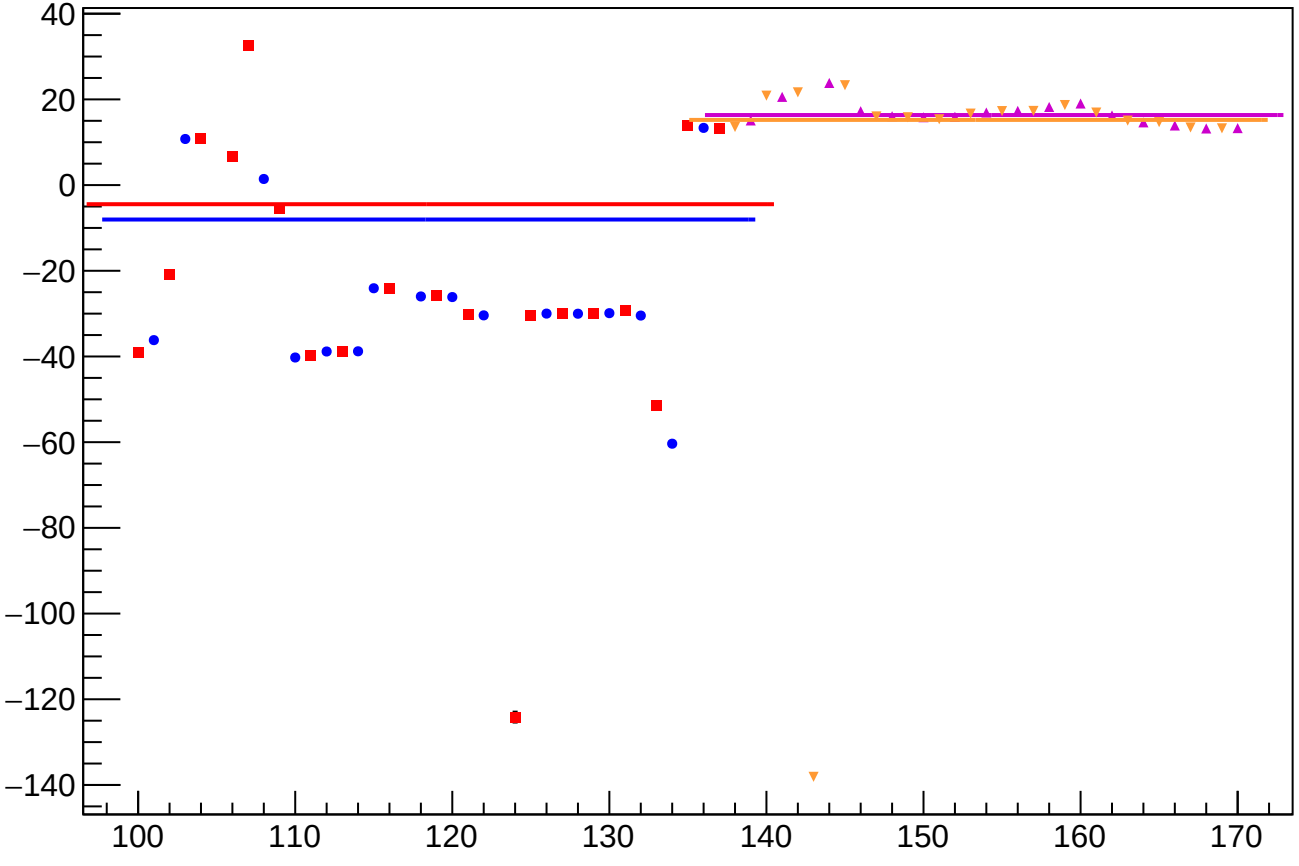
Left In: -7.226+/-0.437 $\chi^2$/NDF:174.9/15

\+ sign -1.400+/-0.391 $\chi^2$/NDF: 1967.0/32

All: -1.849+/-0.276 $\chi^2$/NDF: 3689.5/67

\- sign -2.292+/-0.388 $\chi^2$/NDF: 1719.9/34

# reg_asym_at2_dd_diff_bpm12X_slope vs Slug




Right In: -8.038+/-0.046 $\chi^2$/NDF: 267883.6/15

Left Out: 15.211+/-0.020 $\chi^2$/NDF:477849.1/16

Right Out: -4.461+/-0.047 $\chi^2$/NDF: 228422.2/18

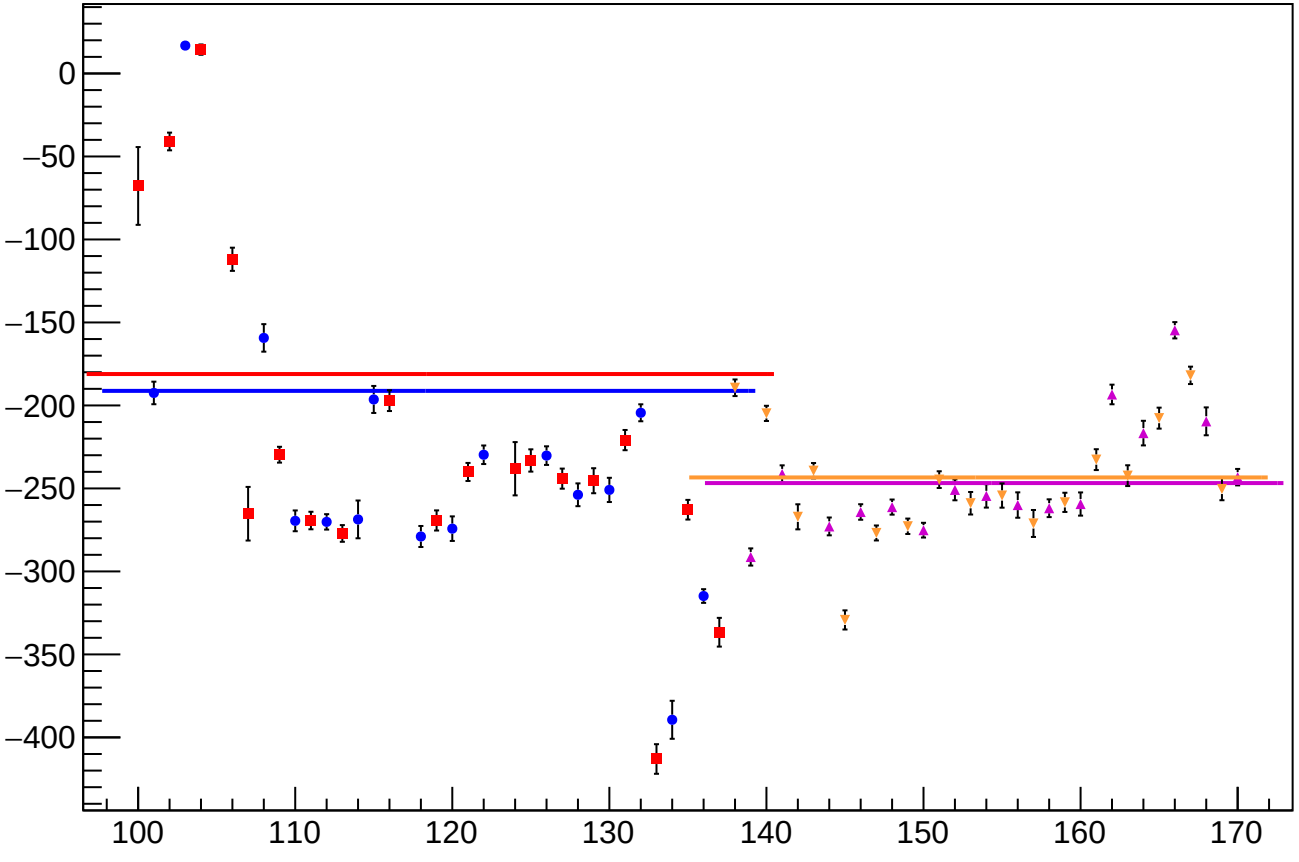
Left In: 16.350+/-0.019 $\chi^2$/NDF:14998.1/15

+ sign 11.480+/-0.018 $\chi^2$/NDF: 961790.4/32

All: 12.402+/-0.013 $\chi^2$/NDF: 1378783.4/67

- sign 13.285+/-0.018 $\chi^2$/NDF: 412050.4/34

# reg_asym_atl1r2_avg_diff_bpm1X_slope vs Slug




Right In: -191.225+/-1.419 $\chi^2$/NDF: 7224.7/15

Left Out: -243.377+/-1.366 $\chi^2$/NDF:714.5/16

Right Out: -181.080+/-1.383 $\chi^2$/NDF: 7374.0/18

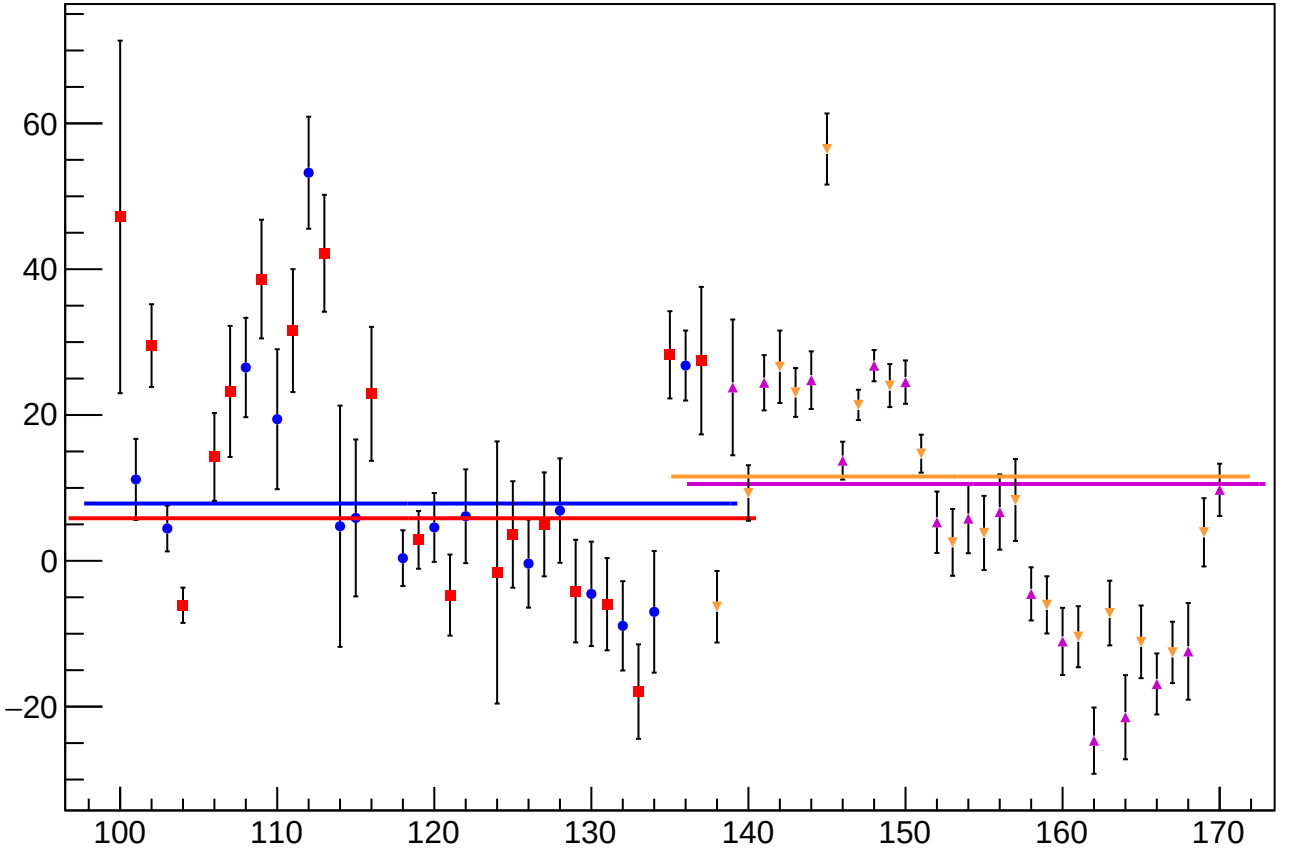
Left In: -246.776+/-1.394 $\chi^2$/NDF:648.8/15

+ sign -218.292+/-0.984 $\chi^2$/NDF: 8640.7/32

All: -215.971+/-0.695 $\chi^2$/NDF: 17794.4/67

- sign -213.661+/-0.982 $\chi^2$/NDF: 9142.6/34

# reg_asym_atl1r2_avg_diff_bpm4aY_slope vs Slug




Right In: 7.859+/-1.438 $\chi^2$/NDF: 80.9/15

Left Out: 11.565+/-0.909 $\chi^2$/NDF:289.6/16

Right Out: 5.839+/-1.355 $\chi^2$/NDF: 141.9/18

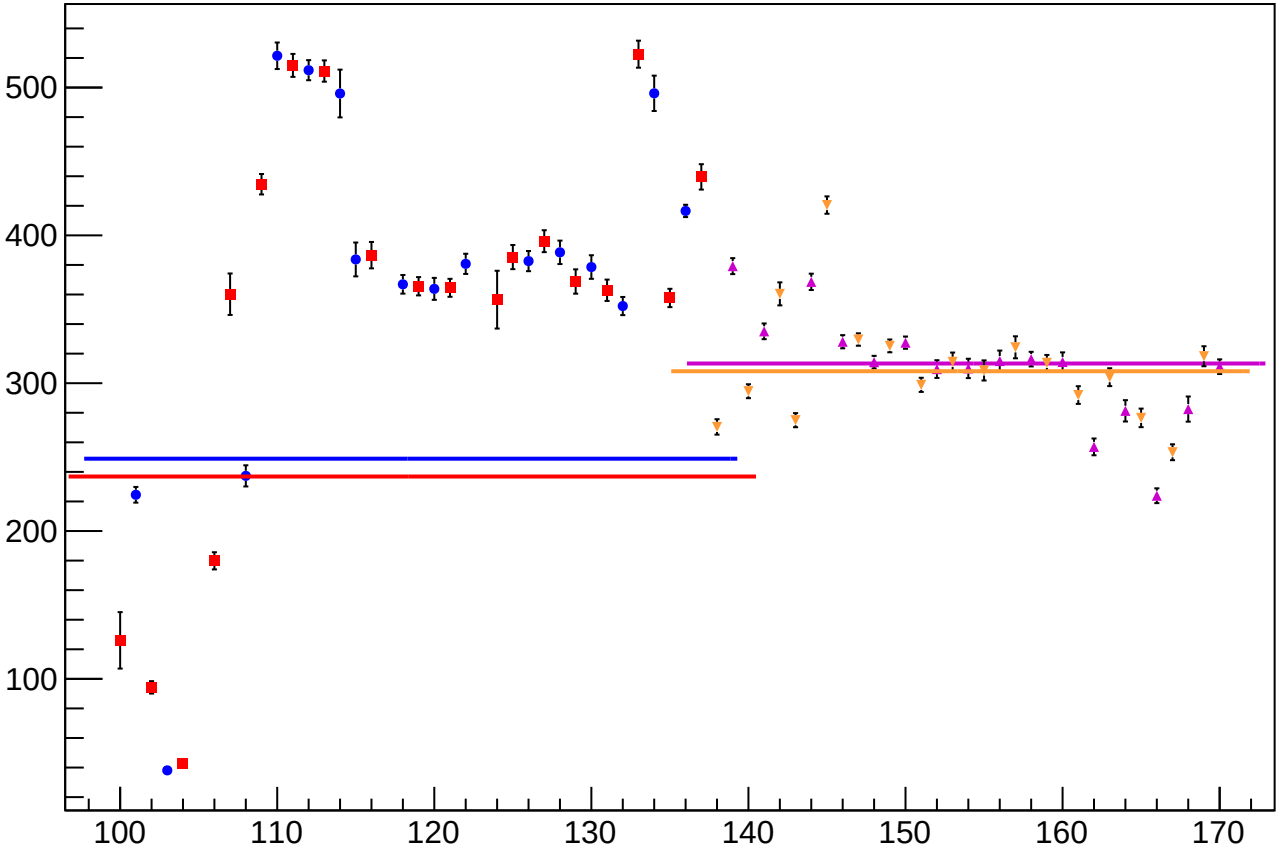
Left In: 10.538+/-0.945 $\chi^2$/NDF:297.2/15

+ sign 10.507+/-0.768 $\chi^2$/NDF: 375.3/32

All: 9.761+/-0.546 $\chi^2$/NDF: 824.3/67

- sign 9.002+/-0.775 $\chi^2$/NDF: 447.1/34

# reg_asym_atl1r2_avg_diff_bpm4eX_slope vs Slug




Right In: 248.932+/-1.422 $\chi^2$/NDF: 15302.2/15

Left Out: 308.097+/-1.334 $\chi^2$/NDF:709.9/16

Right Out: 236.871+/-1.407 $\chi^2$/NDF: 15657.3/18

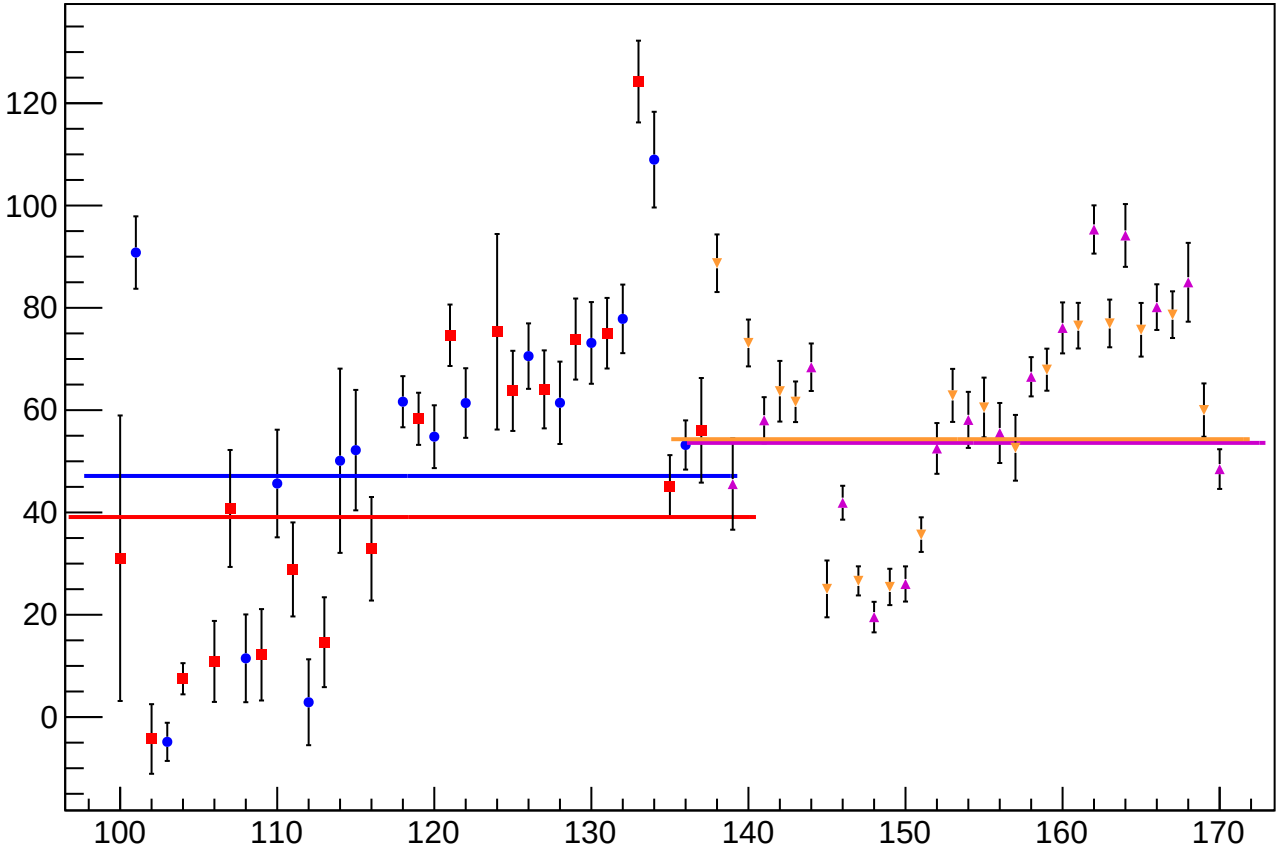
Left In: 313.322+/-1.353 $\chi^2$/NDF:739.4/15

+ sign 280.389+/-0.973 $\chi^2$/NDF: 16932.9/32

All: 278.487+/-0.689 $\chi^2$/NDF: 34871.3/67

- sign 276.577+/-0.975 $\chi^2$/NDF: 17930.8/34

# reg_asym_atl1r2_avg_diff_bpm4eY_slope vs Slug




Right In: 47.137+/-1.668 $\chi^2$/NDF: 385.3/15

Left Out: 54.322+/-1.078 $\chi^2$/NDF:388.6/16

Right Out: 39.105+/-1.596 $\chi^2$/NDF: 416.5/18

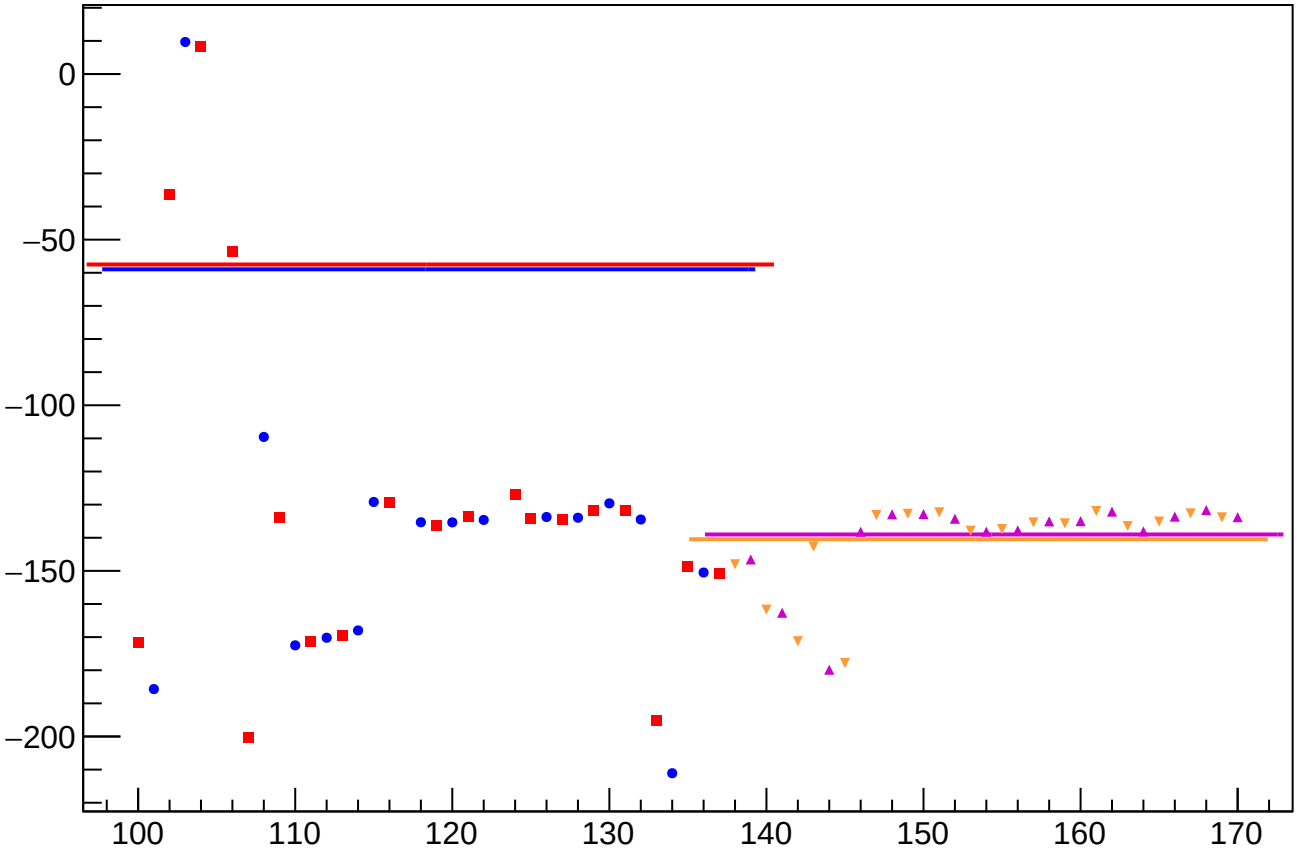
Left In: 53.601+/-1.110 $\chi^2$/NDF:426.9/15

+ sign 52.205+/-0.905 $\chi^2$/NDF: 787.0/32

All: 50.552+/-0.642 $\chi^2$/NDF: 1692.7/67

- sign 48.876+/-0.911 $\chi^2$/NDF: 899.0/34

# reg_asym_atl1r2_avg_diff_bpm12X_slope vs Slug




Right In: -58.956+/-0.073 $\chi^2$/NDF: 1227079.0/15

Left Out: -140.459+/-0.052 $\chi^2$/NDF:58001.2/16

Right Out: -57.497+/-0.074 $\chi^2$/NDF: 871305.9/18

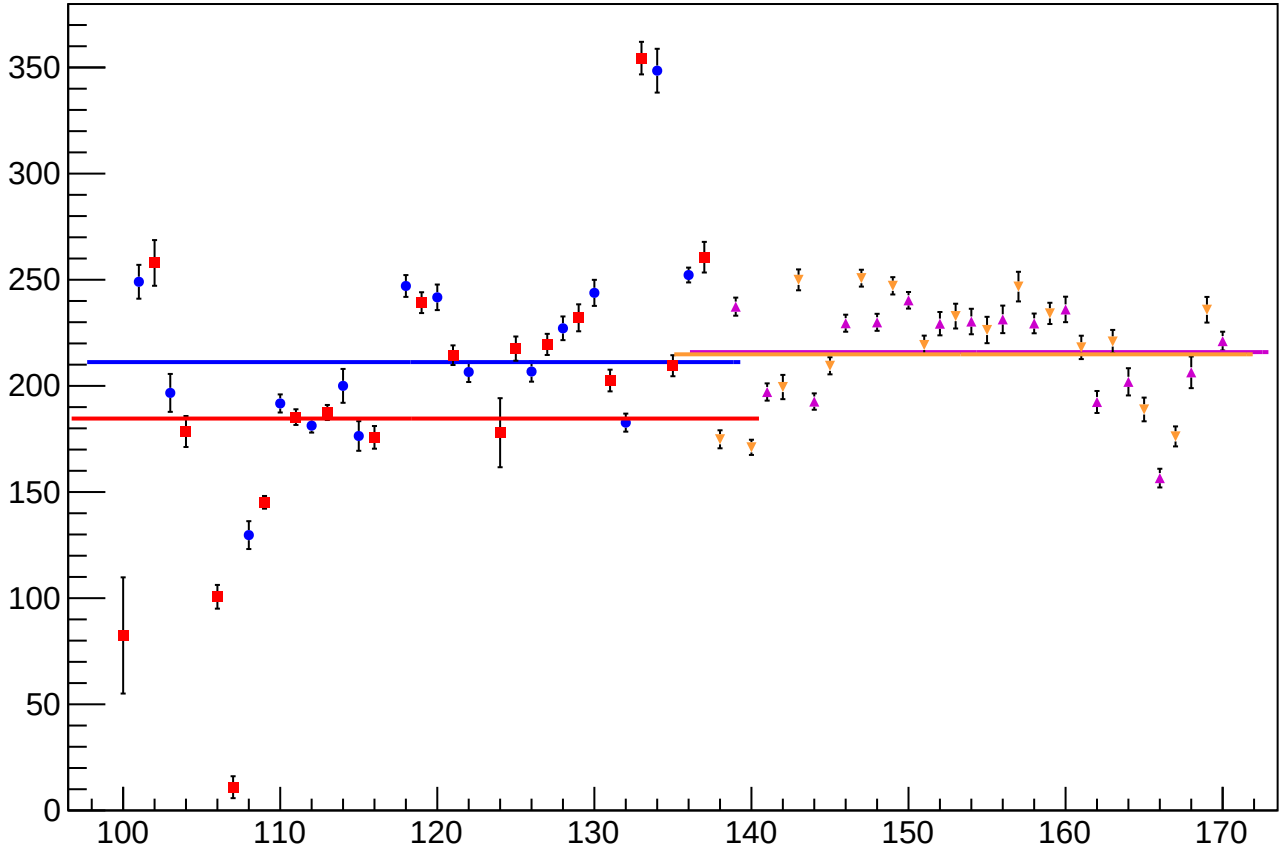
Left In: -139.008+/-0.051 $\chi^2$/NDF:47745.9/15

+ sign -113.174+/-0.042 $\chi^2$/NDF: 2123319.9/32

All: -112.922+/-0.030 $\chi^2$/NDF: 3857905.4/67

- sign -112.668+/-0.042 $\chi^2$/NDF: 1734513.2/34

# reg_asym_atl1r2_dd_diff_bpm1X_slope vs Slug




Right In: 211.210+/-1.296 $\chi^2$/NDF: 783.0/15

Left Out: 214.874+/-1.172 $\chi^2$/NDF:594.5/16

Right Out: 184.614+/-1.194 $\chi^2$/NDF: 2540.4/18

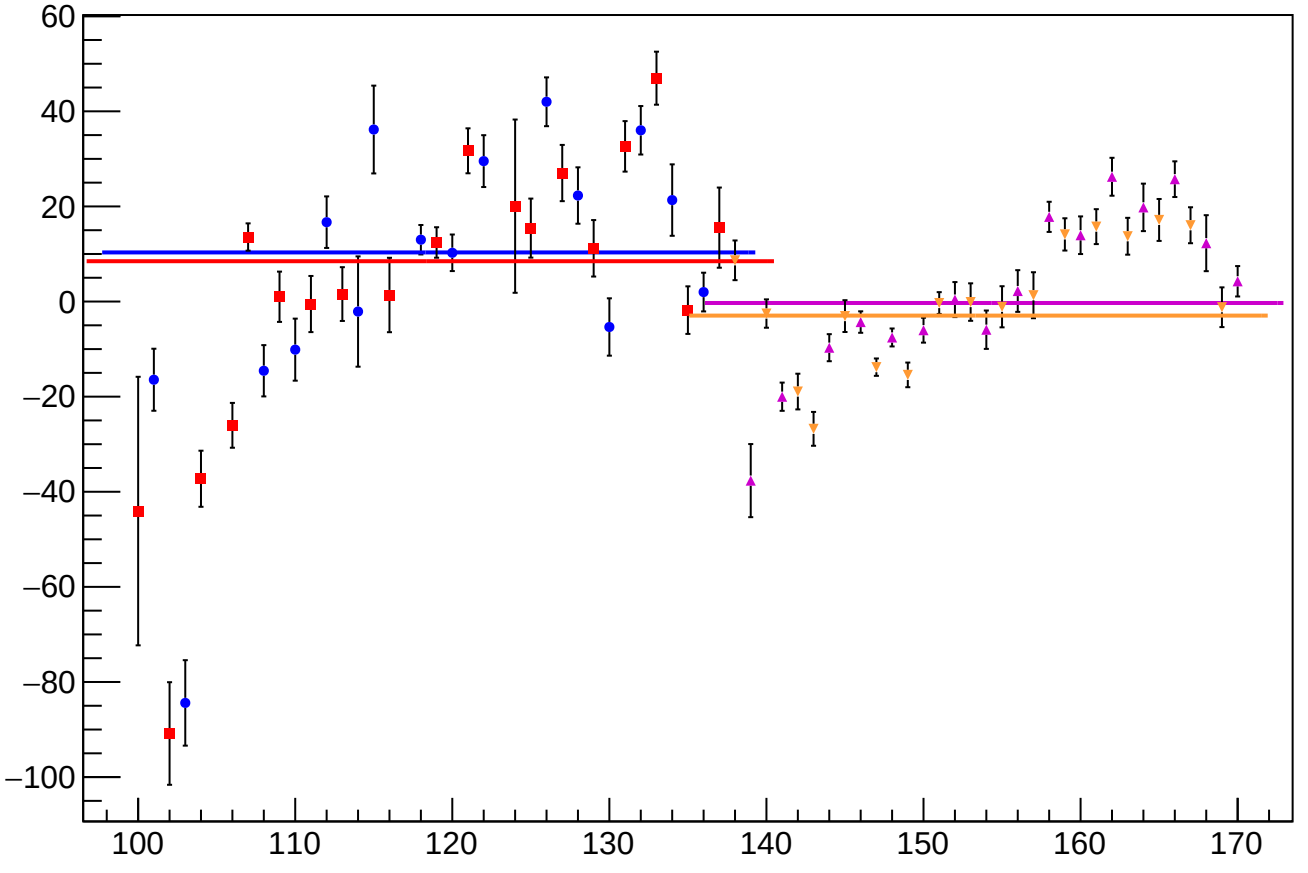
Left In: 215.914+/-1.183 $\chi^2$/NDF:393.0/15

\+ sign 213.225+/-0.869 $\chi^2$/NDF: 1381.9/32

All: 206.597+/-0.604 $\chi^2$/NDF: 4774.4/67

\- sign 200.401+/-0.840 $\chi^2$/NDF: 3280.0/34

# reg_asym_atl1r2_dd_diff_bpm4aY_slope vs Slug




Right In: 10.329+/-1.333 $\chi^2$/NDF: 263.3/15

Left Out: -2.956+/-0.787 $\chi^2$/NDF:247.9/16

Right Out: 8.480+/-1.225 $\chi^2$/NDF: 322.3/18

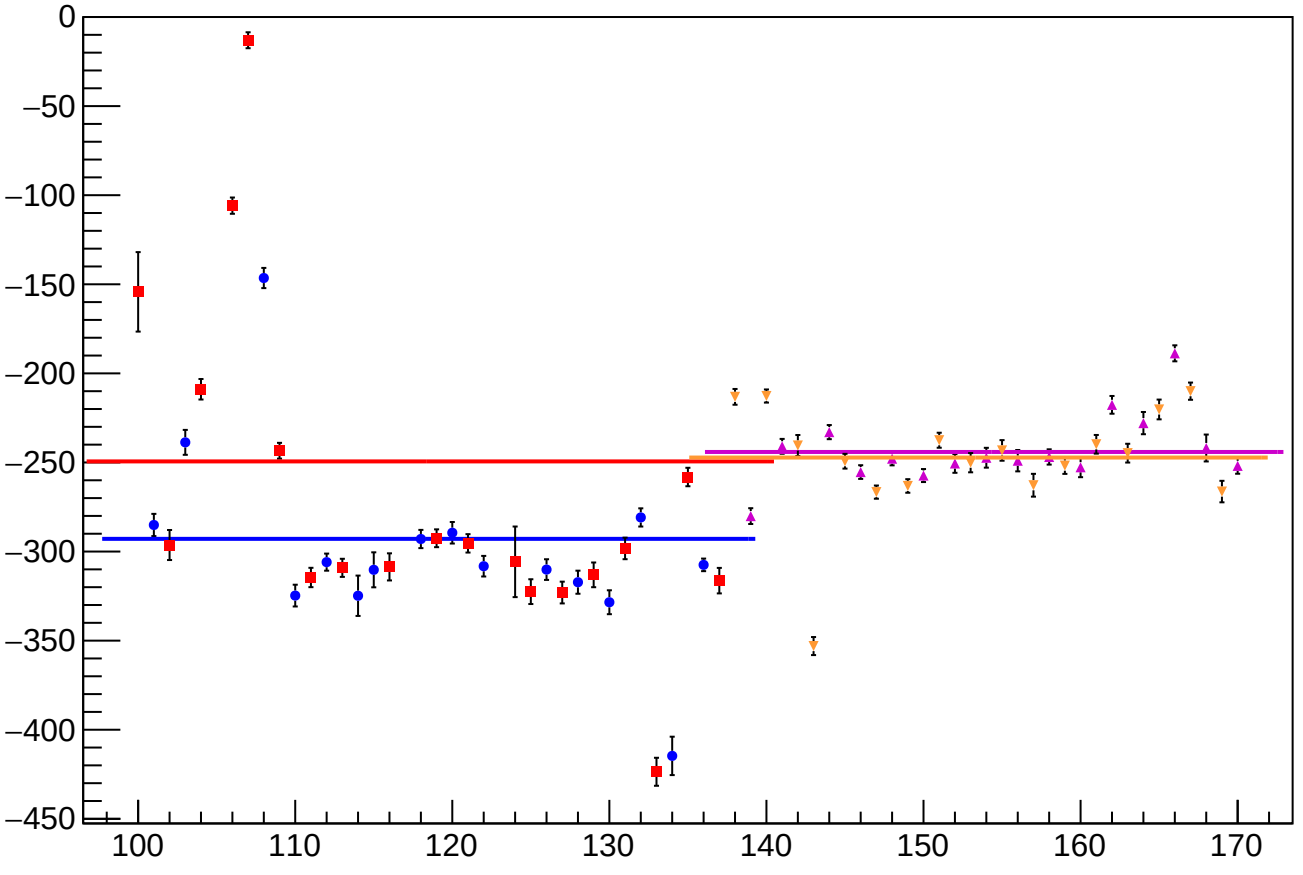
Left In: -0.304+/-0.809 $\chi^2$/NDF:264.5/15

\+ sign 0.478+/-0.678 $\chi^2$/NDF: 584.8/32

All: 1.425+/-0.478 $\chi^2$/NDF: 1211.4/67

\- sign 2.364+/-0.675 $\chi^2$/NDF: 622.6/34

# reg_asym_atl1r2_dd_diff_bpm4eX_slope vs Slug




Right In: -292.872+/-1.467 $\chi^2$/NDF: 983.5/15

Left Out: -247.241+/-1.147 $\chi^2$/NDF:738.5/16

Right Out: -249.407+/-1.369 $\chi^2$/NDF: 5368.5/18

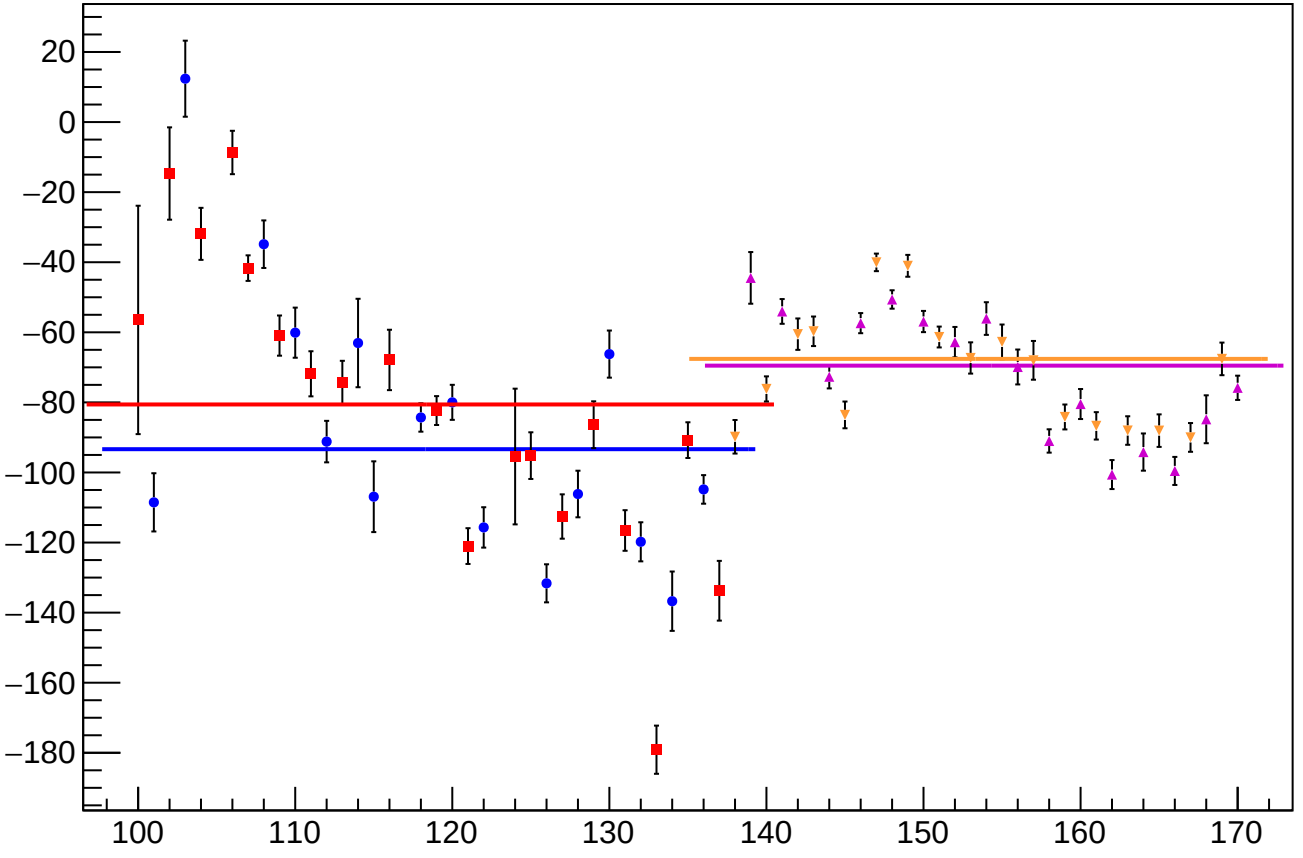
Left In: -244.108+/-1.152 $\chi^2$/NDF:292.5/15

+ sign -264.554+/-0.904 $\chi^2$/NDF: 2322.0/32

All: -255.200+/-0.631 $\chi^2$/NDF: 8200.6/67

- sign -246.305+/-0.881 $\chi^2$/NDF: 5669.7/34

# reg_asym_atl1r2_dd_diff_bpm4eY_slope vs Slug




Right In: -93.357+/-1.534 $\chi^2$/NDF: 355.3/15

Left Out: -67.585+/-0.932 $\chi^2$/NDF:369.6/16

Right Out: -80.592+/-1.424 $\chi^2$/NDF: 715.3/18

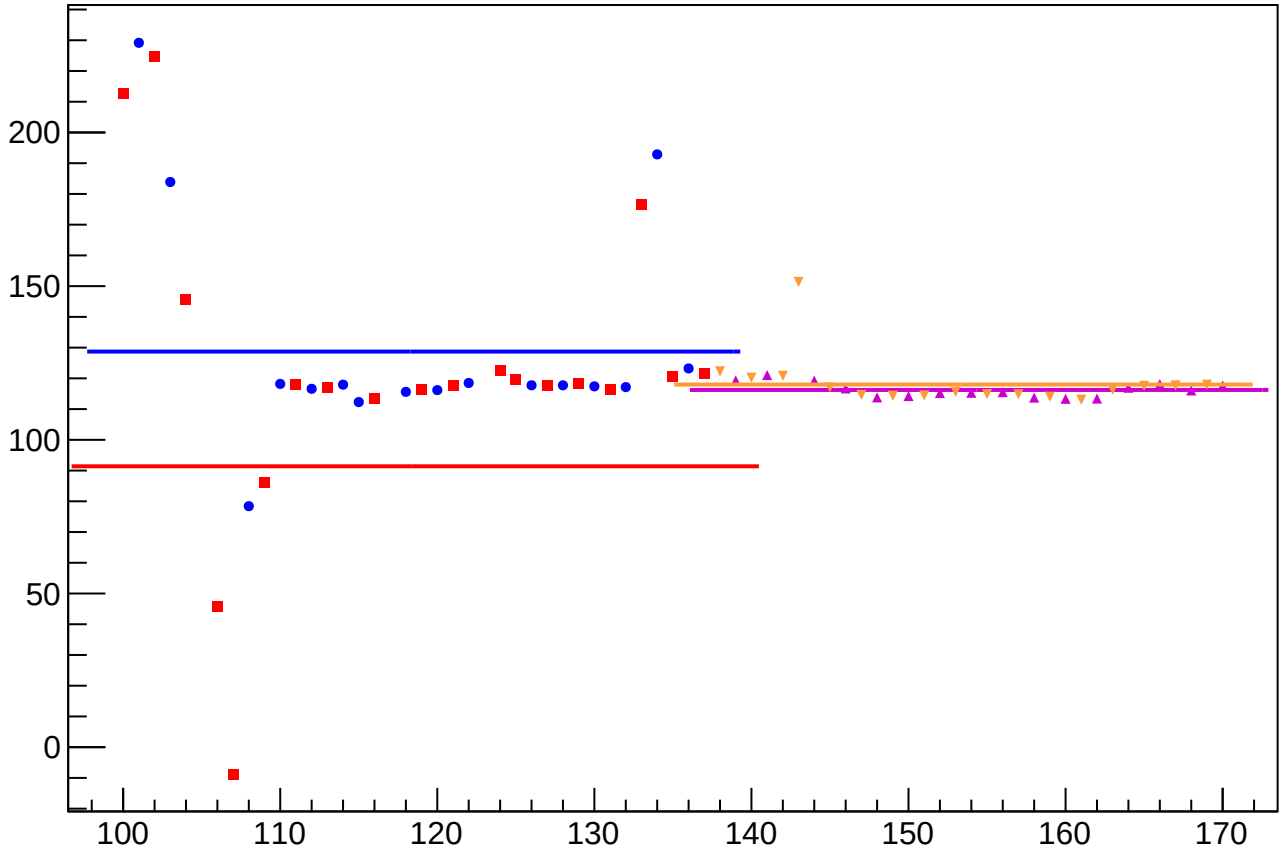
Left In: -69.512+/-0.950 $\chi^2$/NDF:320.1/15

+ sign -74.530+/-0.797 $\chi^2$/NDF: 931.0/32

All: -73.720+/-0.561 $\chi^2$/NDF: 2010.4/67

- sign -72.922+/-0.790 $\chi^2$/NDF: 1077.3/34

# reg_asym_atl1r2_dd_diff_bpm12X_slope vs Slug




Right In: 128.715+/-0.089 $\chi^2$/NDF: 183522.8/15

Left Out: 117.983+/-0.044 $\chi^2$/NDF:29406.0/16

Right Out: 91.385+/-0.079 $\chi^2$/NDF: 604912.4/18

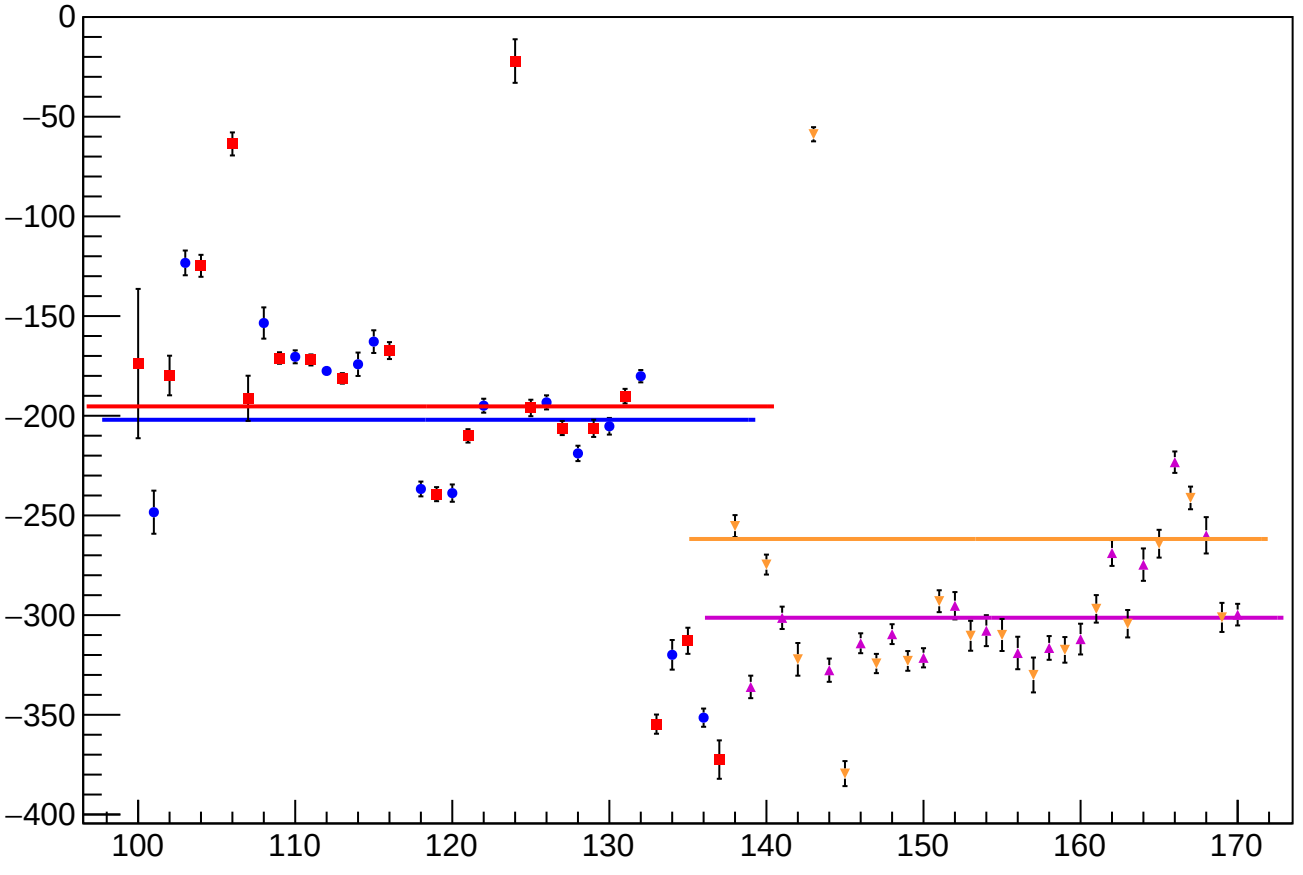
Left In: 116.227+/-0.044 $\chi^2$/NDF:2922.4/15

+ sign 120.112+/-0.040 $\chi^2$/NDF: 224549.8/32

All: 115.078+/-0.028 $\chi^2$/NDF: 938958.3/67

- sign 110.382+/-0.038 $\chi^2$/NDF: 683334.6/34

# reg_asym_atr1l2_avg_diff_bpm1X_slope vs Slug




Right In: -202.020+/-1.024 $\chi^2$/NDF: 2040.4/15

Left Out: -261.809+/-1.426 $\chi^2$/NDF:4341.0/16

Right Out: -195.311+/-0.974 $\chi^2$/NDF: 3100.7/18

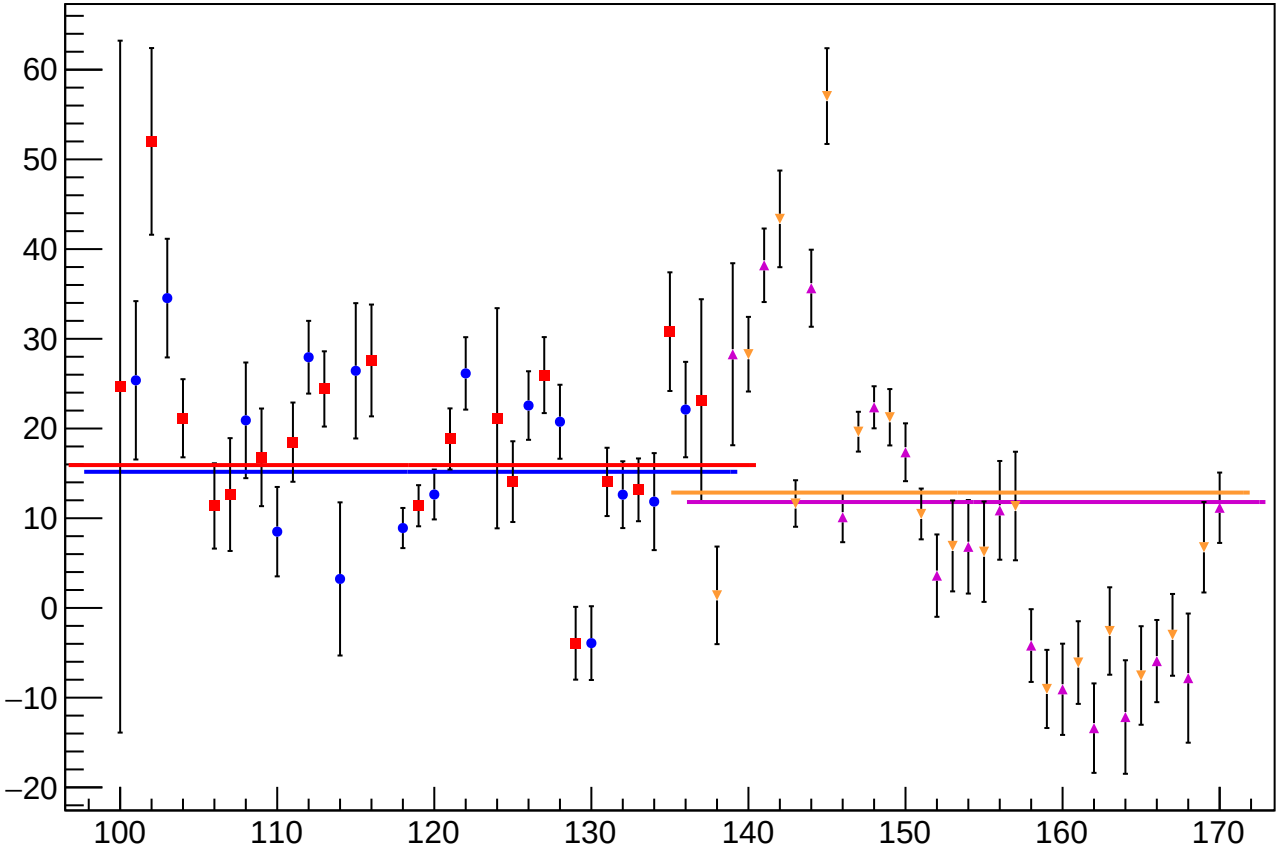
Left In: -301.318+/-1.518 $\chi^2$/NDF:366.7/15

+ sign -222.371+/-0.832 $\chi^2$/NDF: 7541.7/32

All: -224.323+/-0.584 $\chi^2$/NDF: 14473.2/67

- sign -226.220+/-0.820 $\chi^2$/NDF: 6920.7/34

# reg_asym_atr1l2_avg_diff_bpm4aY_slope vs Slug




Right In: 15.175+/-1.048 $\chi^2$/NDF: 72.3/15

Left Out: 12.860+/-0.954 $\chi^2$/NDF:218.6/16

Right Out: 15.925+/-1.037 $\chi^2$/NDF: 63.5/18

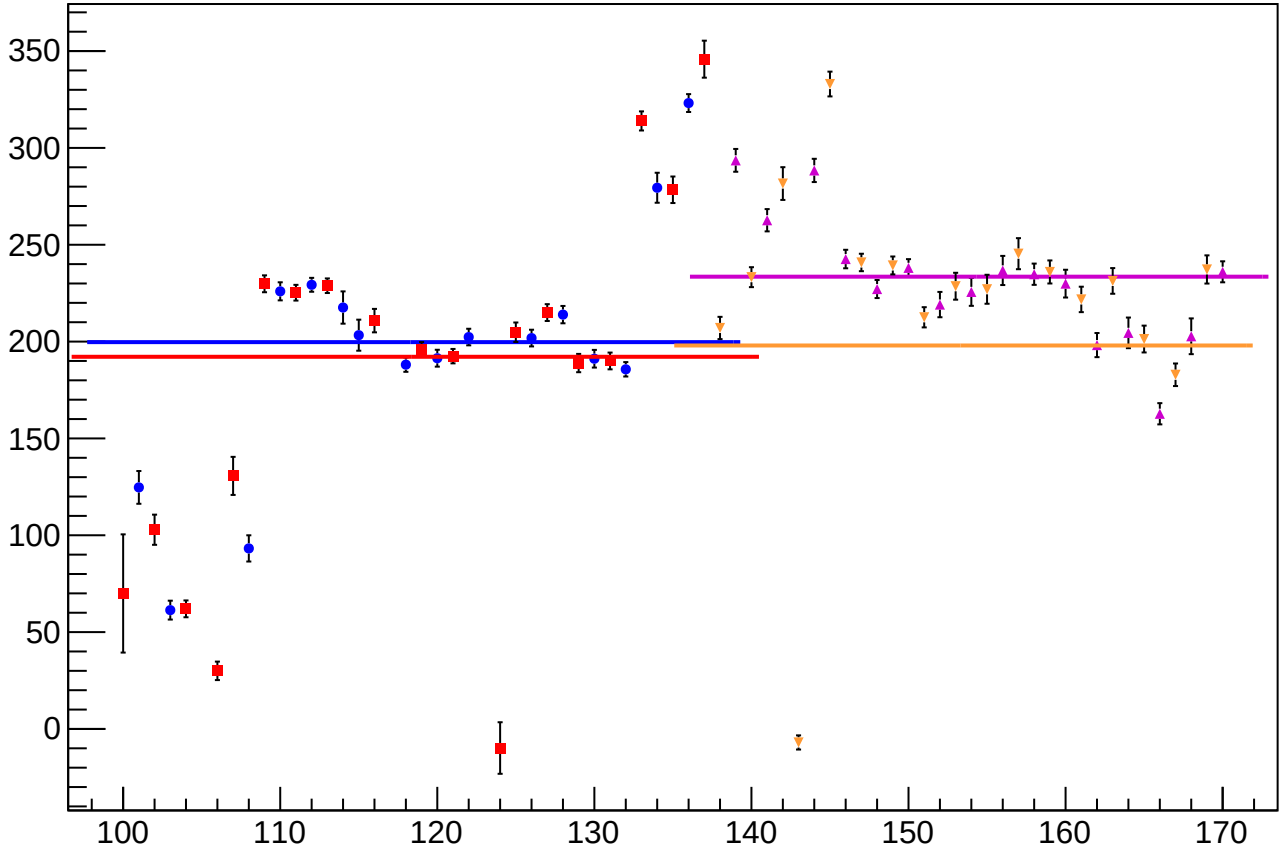
Left In: 11.806+/-1.029 $\chi^2$/NDF:197.4/15

+ sign 13.909+/-0.705 $\chi^2$/NDF: 293.6/32

All: 13.880+/-0.507 $\chi^2$/NDF: 562.5/67

- sign 13.850+/-0.730 $\chi^2$/NDF: 268.9/34

# reg_asym_atr1l2_avg_diff_bpm4eX_slope vs Slug




Right In: 199.722+/-1.196 $\chi^2$/NDF: 2101.6/15

Left Out: 197.988+/-1.398 $\chi^2$/NDF:4091.9/16

Right Out: 192.156+/-1.150 $\chi^2$/NDF: 3777.1/18

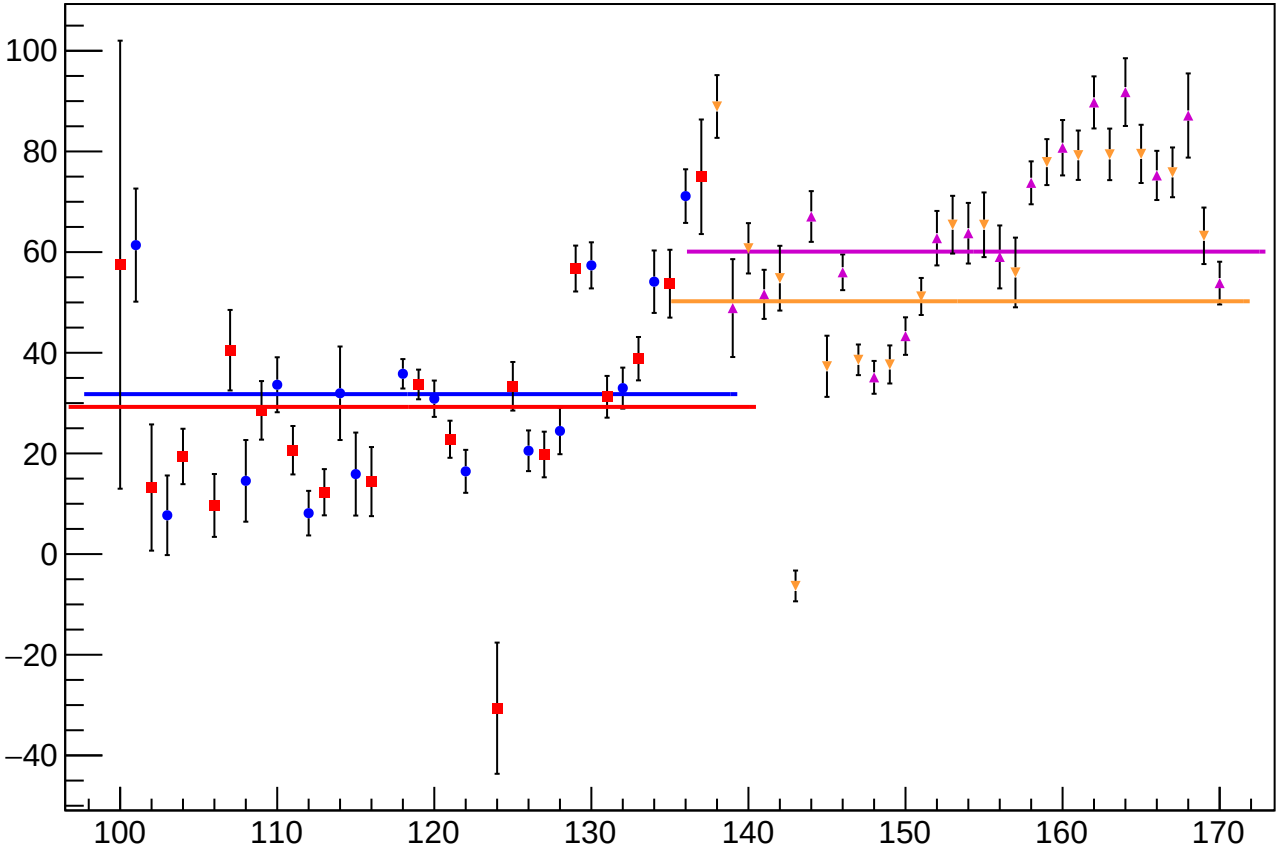
Left In: 233.514+/-1.474 $\chi^2$/NDF:450.0/15

+ sign 198.989+/-0.909 $\chi^2$/NDF: 6194.4/32

All: 203.407+/-0.642 $\chi^2$/NDF: 10957.8/67

- sign 207.808+/-0.907 $\chi^2$/NDF: 4716.2/34

# reg_asym_atr1l2_avg_diff_bpm4eY_slope vs Slug




Right In: 31.782+/-1.217 $\chi^2$/NDF: 177.0/15

Left Out: 50.233+/-1.131 $\chi^2$/NDF:591.0/16

Right Out: 29.245+/-1.197 $\chi^2$/NDF: 140.9/18

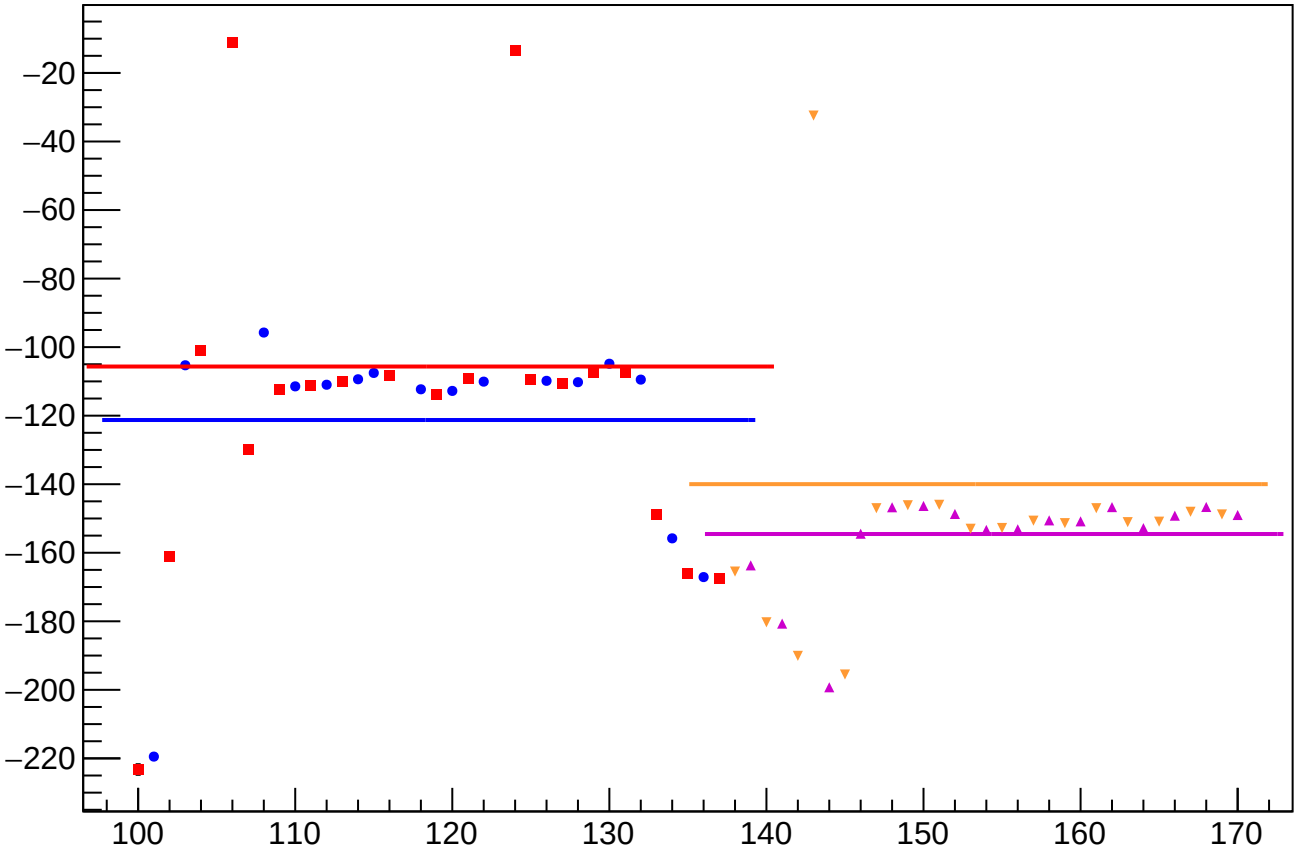
Left In: 60.097+/-1.210 $\chi^2$/NDF:188.7/15

+ sign 41.676+/-0.828 $\chi^2$/NDF: 891.3/32

All: 43.052+/-0.594 $\chi^2$/NDF: 1555.4/67

- sign 44.504+/-0.851 $\chi^2$/NDF: 658.4/34

# reg_asym_atr1l2_avg_diff_bpm12X_slope vs Slug




Right In: -121.268+/-0.079 $\chi^2$/NDF: 119398.5/15

Left Out: -139.982+/-0.054 $\chi^2$/NDF:633667.7/16

Right Out: -105.660+/-0.075 $\chi^2$/NDF: 355093.7/18

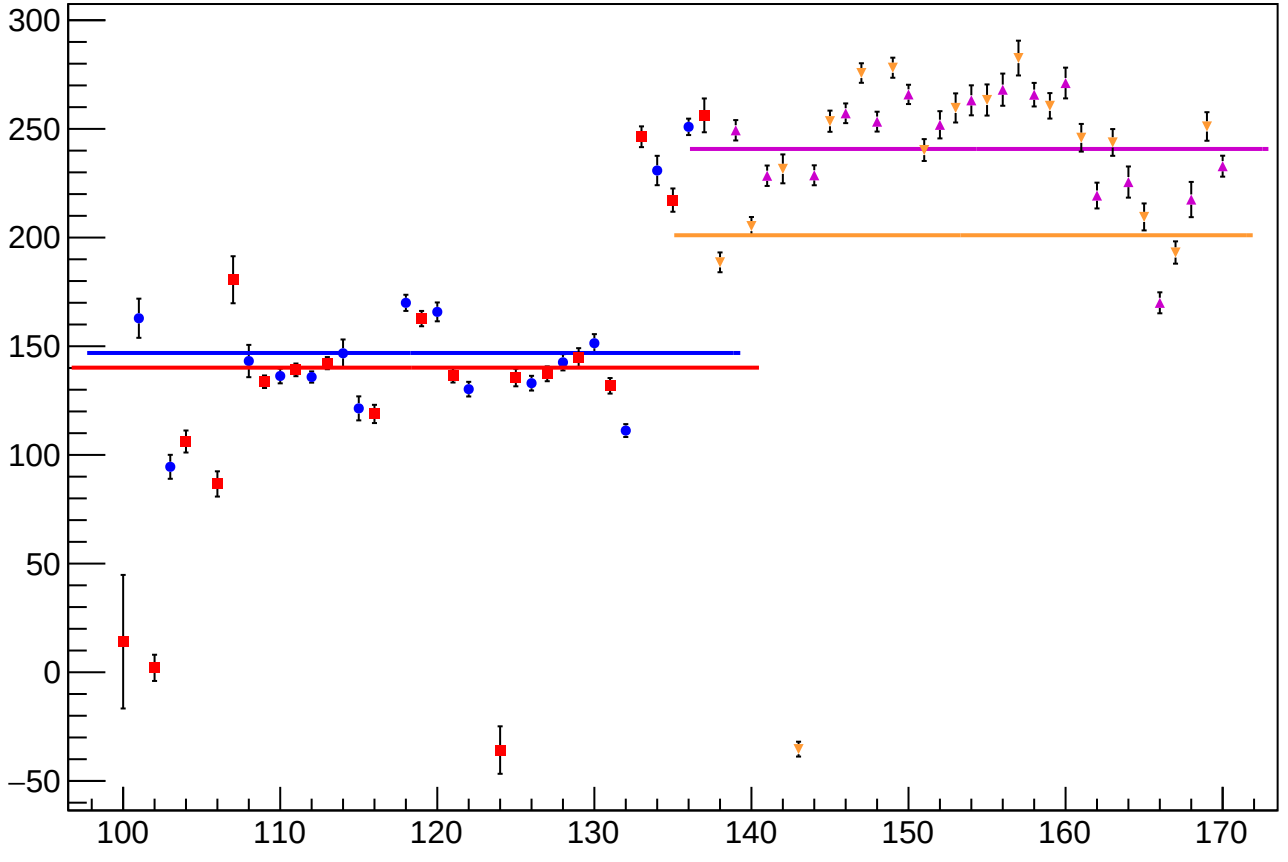
Left In: -154.532+/-0.056 $\chi^2$/NDF:50107.5/15

+ sign -134.005+/-0.045 $\chi^2$/NDF: 791043.5/32

All: -135.488+/-0.032 $\chi^2$/NDF: 1472652.7/67

- sign -136.972+/-0.045 $\chi^2$/NDF: 679413.3/34

# reg_asym_atr1l2_dd_diff_bpm1X_slope vs Slug




Right In: 146.905+/-1.003 $\chi^2$/NDF: 1302.0/15

Left Out: 201.067+/-1.274 $\chi^2$/NDF:6061.5/16

Right Out: 140.153+/-0.960 $\chi^2$/NDF: 1950.6/18

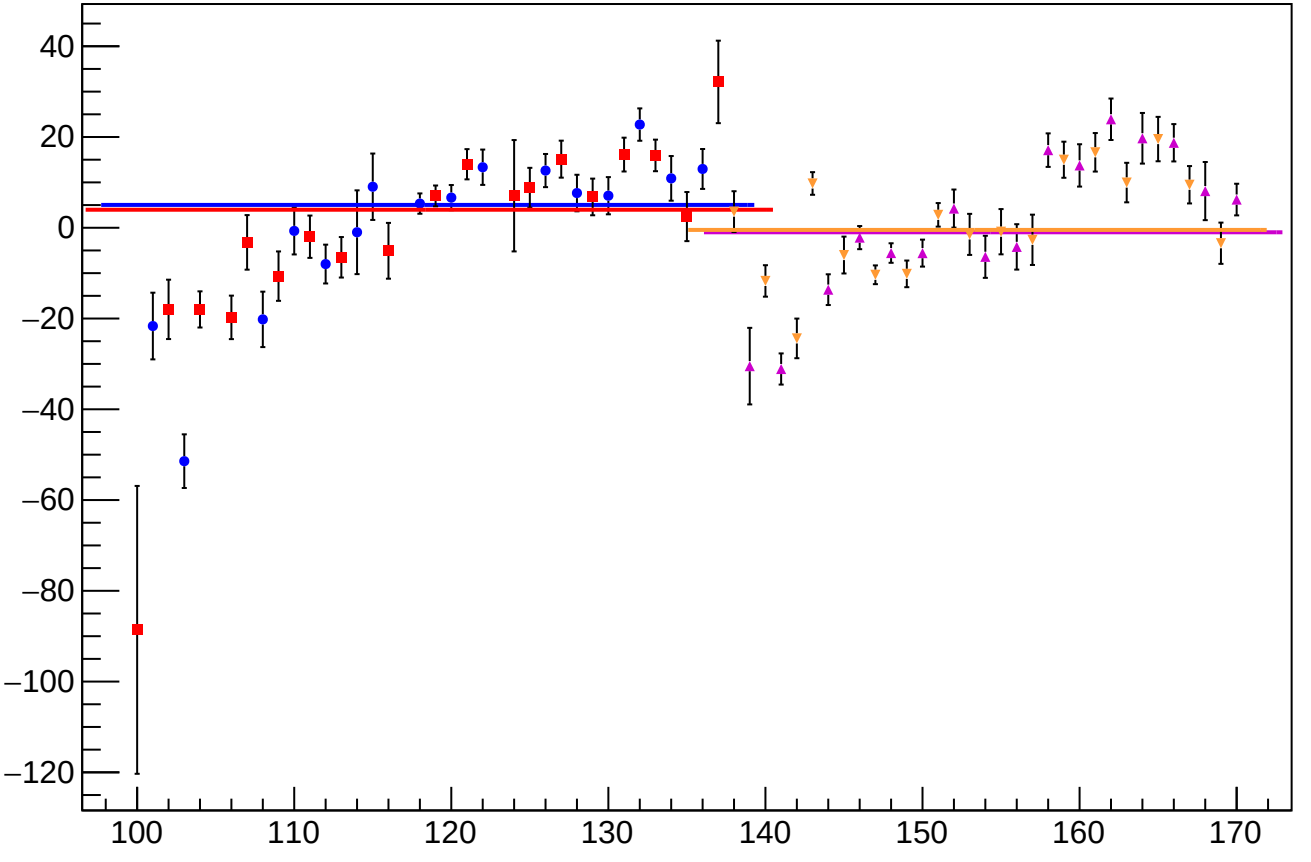
Left In: 240.770+/-1.344 $\chi^2$/NDF:380.2/15

+ sign 167.647+/-0.788 $\chi^2$/NDF: 8479.5/32

All: 170.919+/-0.555 $\chi^2$/NDF: 14554.2/67

- sign 174.135+/-0.781 $\chi^2$/NDF: 6040.5/34

# reg_asym_atr1l2_dd_diff_bpm4aY_slope vs Slug




Right In: 5.037+/-1.021 $\chi^2$/NDF: 171.9/15

Left Out: -0.474+/-0.862 $\chi^2$/NDF:155.7/16

Right Out: 3.974+/-1.012 $\chi^2$/NDF: 144.9/18

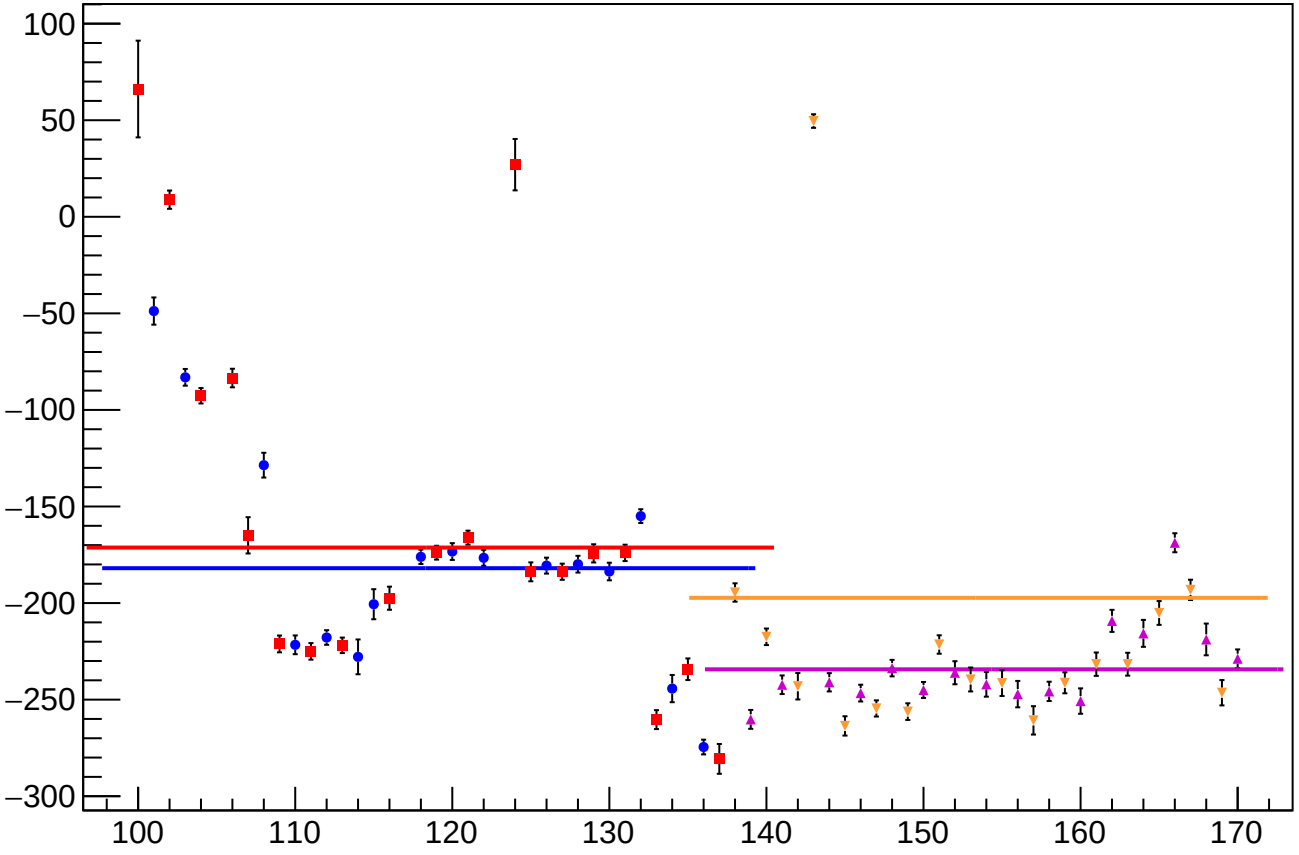
Left In: -0.995+/-0.922 $\chi^2$/NDF:220.3/15

+ sign 1.818+/-0.658 $\chi^2$/NDF: 344.6/32

All: 1.548+/-0.473 $\chi^2$/NDF: 723.3/67

- sign 1.258+/-0.681 $\chi^2$/NDF: 378.4/34

# reg_asym_atr1l2_dd_diff_bpm4eX_slope vs Slug




Right In: -181.947+/-1.154 $\chi^2$/NDF: 1870.4/15

Left Out: -197.296+/-1.252 $\chi^2$/NDF:5924.9/16

Right Out: -171.262+/-1.111 $\chi^2$/NDF: 3628.2/18

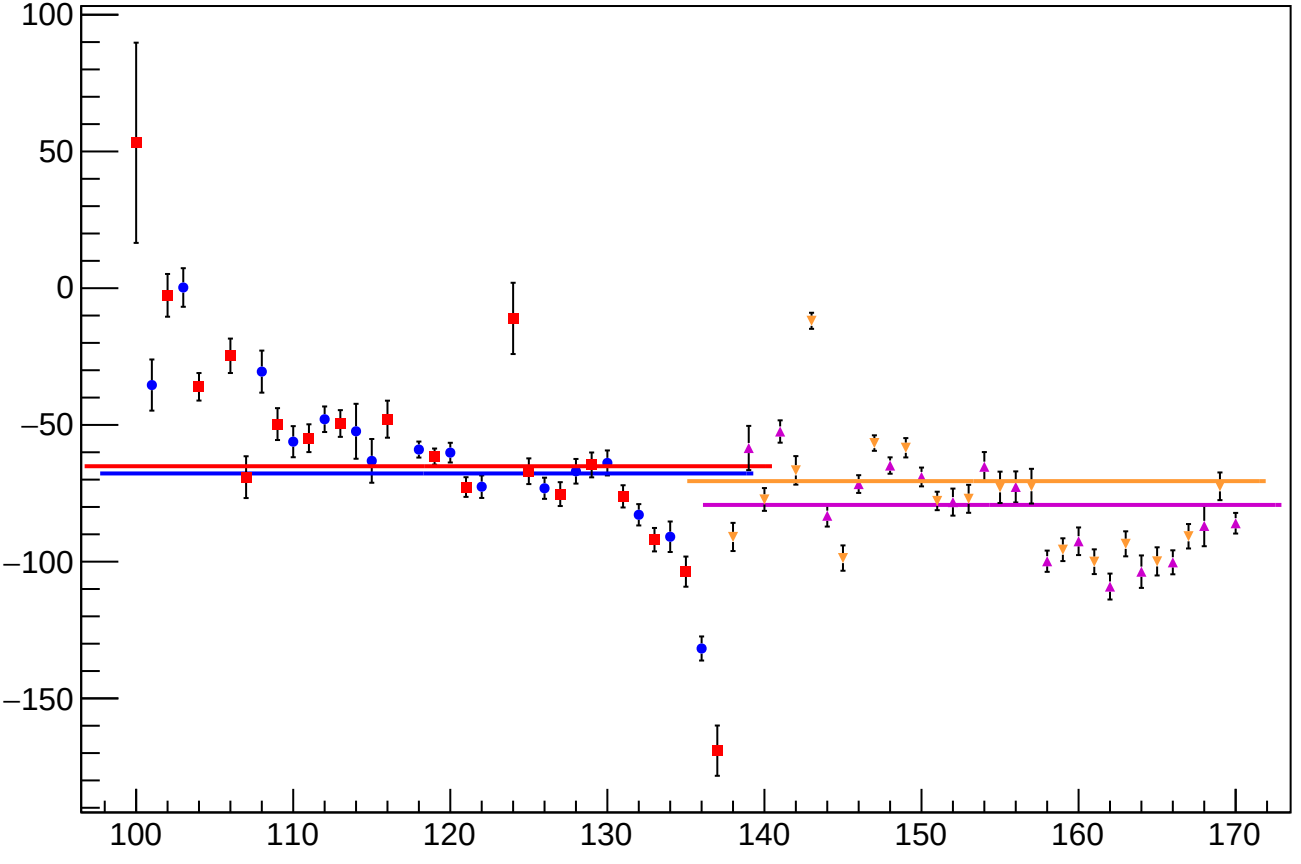
Left In: -234.302+/-1.310 $\chi^2$/NDF:272.7/15

+ sign -188.996+/-0.849 $\chi^2$/NDF: 7876.6/32

All: -193.328+/-0.600 $\chi^2$/NDF: 13176.9/67

- sign -197.647+/-0.847 $\chi^2$/NDF: 5248.3/34

# reg_asym_atr1l2_dd_diff_bpm4eY_slope vs Slug




Right In: -67.745+/-1.181 $\chi^2$/NDF: 414.0/15

Left Out: -70.552+/-1.020 $\chi^2$/NDF:652.8/16

Right Out: -65.105+/-1.167 $\chi^2$/NDF: 429.0/18

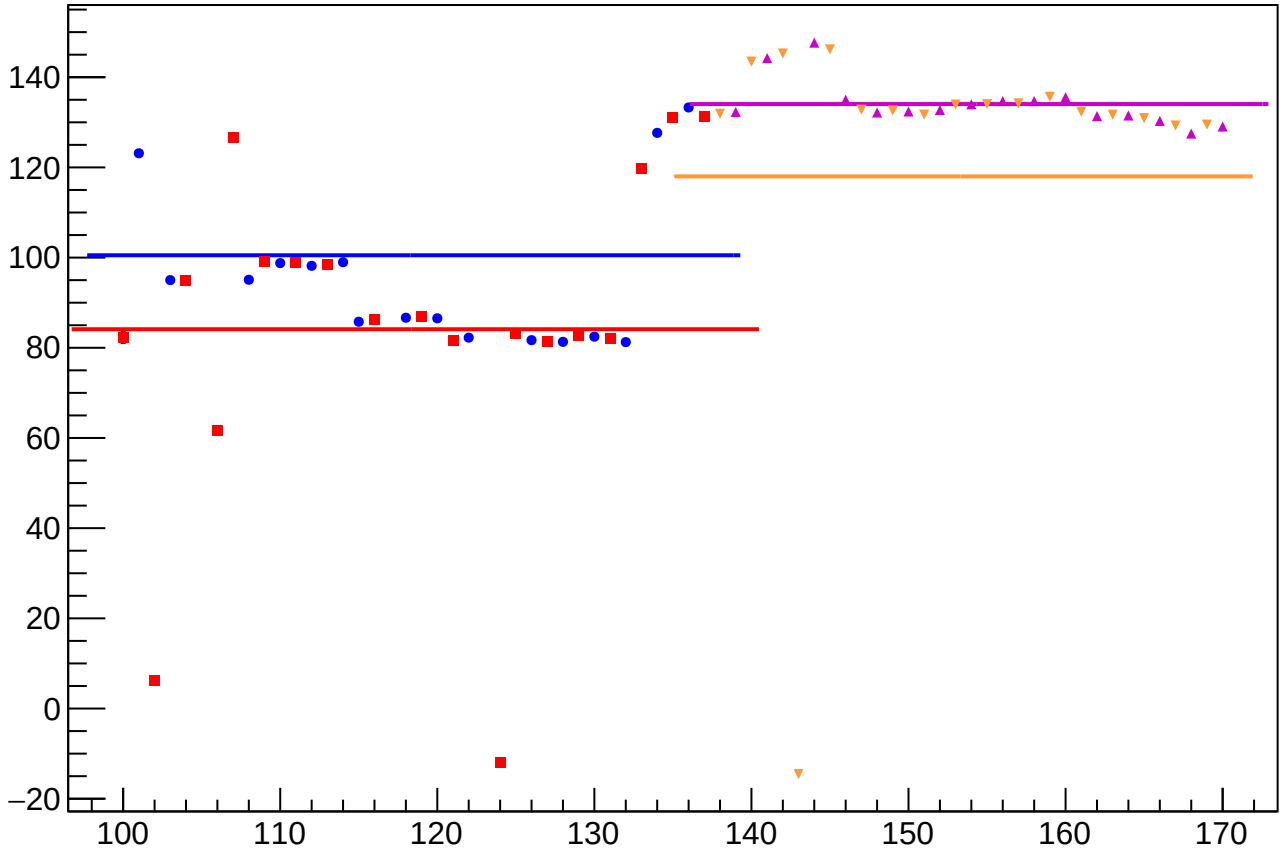
Left In: -79.253+/-1.081 $\chi^2$/NDF:215.1/15

+ sign -69.353+/-0.772 $\chi^2$/NDF: 1070.1/32

All: -70.988+/-0.553 $\chi^2$/NDF: 1802.6/67

- sign -72.714+/-0.793 $\chi^2$/NDF: 723.3/34

# reg_asym_atr1l2_dd_diff_bpm12X_slope vs Slug




Right In: 100.517+/-0.074 $\chi^2$/NDF: 67464.8/15

Left Out: 118.006+/-0.049 $\chi^2$/NDF:937017.2/16

Right Out: 84.116+/-0.069 $\chi^2$/NDF: 263788.9/18

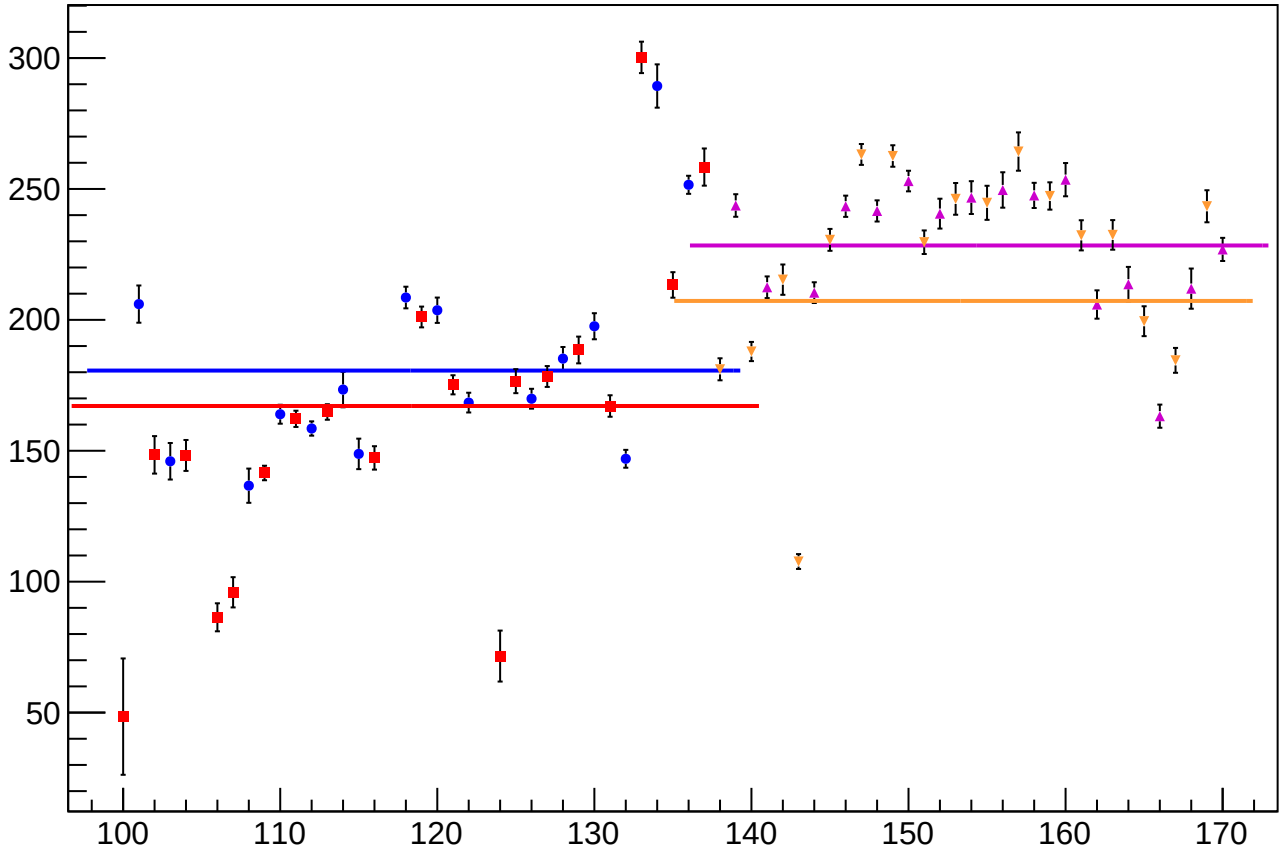
Left In: 134.052+/-0.050 $\chi^2$/NDF:9286.3/15

+ sign 112.728+/-0.041 $\chi^2$/NDF: 1043520.4/32

All: 114.887+/-0.029 $\chi^2$/NDF: 1665301.5/67

- sign 117.023+/-0.040 $\chi^2$/NDF: 616165.2/34

# reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs Slug




Right In: 180.634+/-1.090 $\chi^2$/NDF: 993.4/15

Left Out: 207.229+/-1.130 $\chi^2$/NDF:2022.4/16

Right Out: 167.102+/-1.021 $\chi^2$/NDF: 1484.6/18

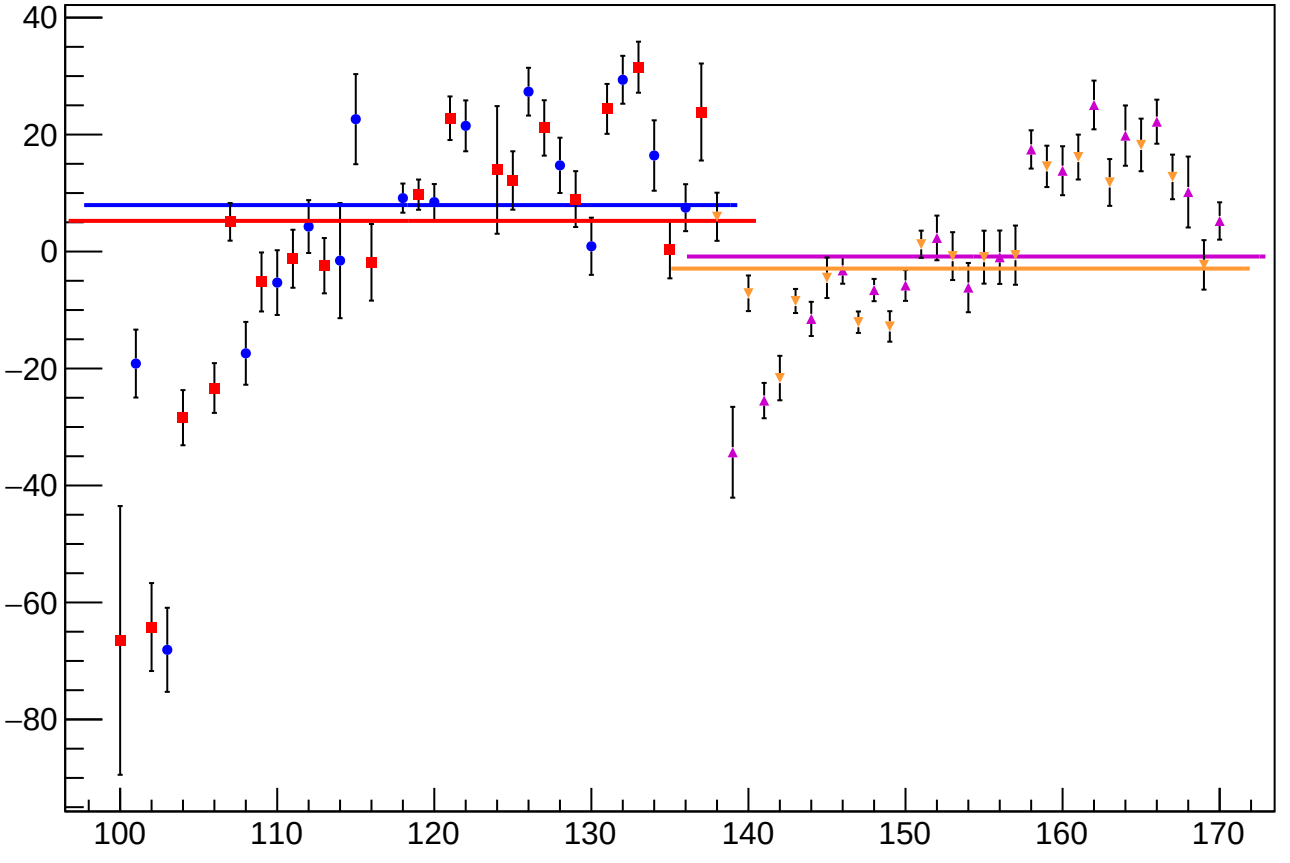
Left In: 228.411+/-1.208 $\chi^2$/NDF:410.4/15

+ sign 193.446+/-0.784 $\chi^2$/NDF: 3302.8/32

All: 193.039+/-0.553 $\chi^2$/NDF: 6700.7/67

- sign 192.636+/-0.780 $\chi^2$/NDF: 3397.3/34

# reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs Slug




Right In: 7.942+/-1.113 $\chi^2$/NDF: 232.9/15

Left Out: -2.912+/-0.763 $\chi^2$/NDF:183.2/16

Right Out: 5.244+/-1.062 $\chi^2$/NDF: 302.9/18

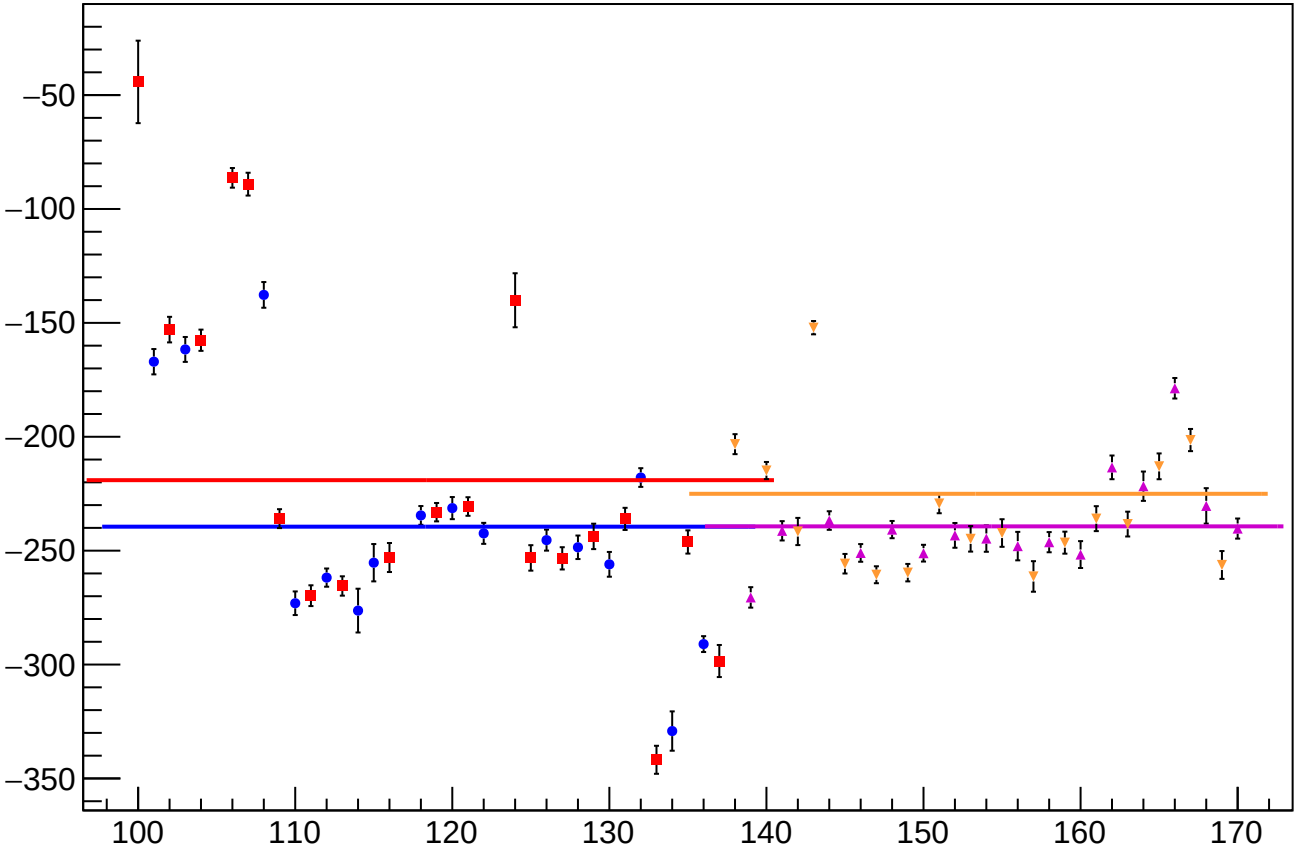
Left In: -0.850+/-0.825 $\chi^2$/NDF:257.0/15

+ sign 0.558+/-0.629 $\chi^2$/NDF: 480.8/32

All: 0.985+/-0.453 $\chi^2$/NDF: 1062.2/67

- sign 1.443+/-0.652 $\chi^2$/NDF: 580.5/34

# reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs Slug




Right In: -239.468+/-1.245 $\chi^2$/NDF: 1162.2/15

Left Out: -225.038+/-1.112 $\chi^2$/NDF:1020.9/16

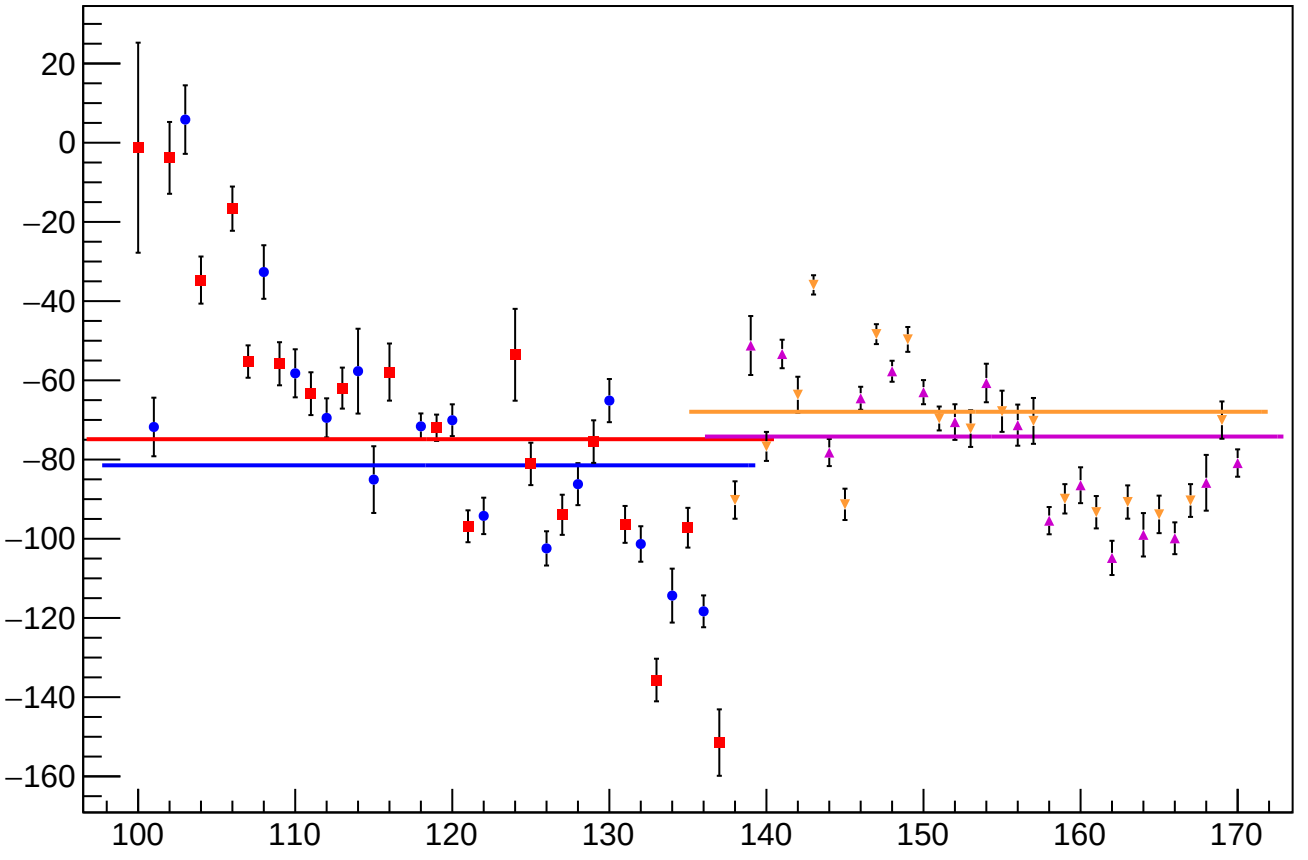
Right Out: -219.053+/-1.176 $\chi^2$/NDF: 3049.3/18

Left In: -239.335+/-1.177 $\chi^2$/NDF:292.9/15

+ sign -231.442+/-0.830 $\chi^2$/NDF: 2257.8/32

All: -230.319+/-0.587 $\chi^2$/NDF: 5752.3/67

- sign -229.190+/-0.832 $\chi^2$/NDF: 3490.8/34




Right In: -81.462+/-1.287 $\chi^2$/NDF: 366.5/15

Left Out: -67.936+/-0.905 $\chi^2$/NDF:495.2/16

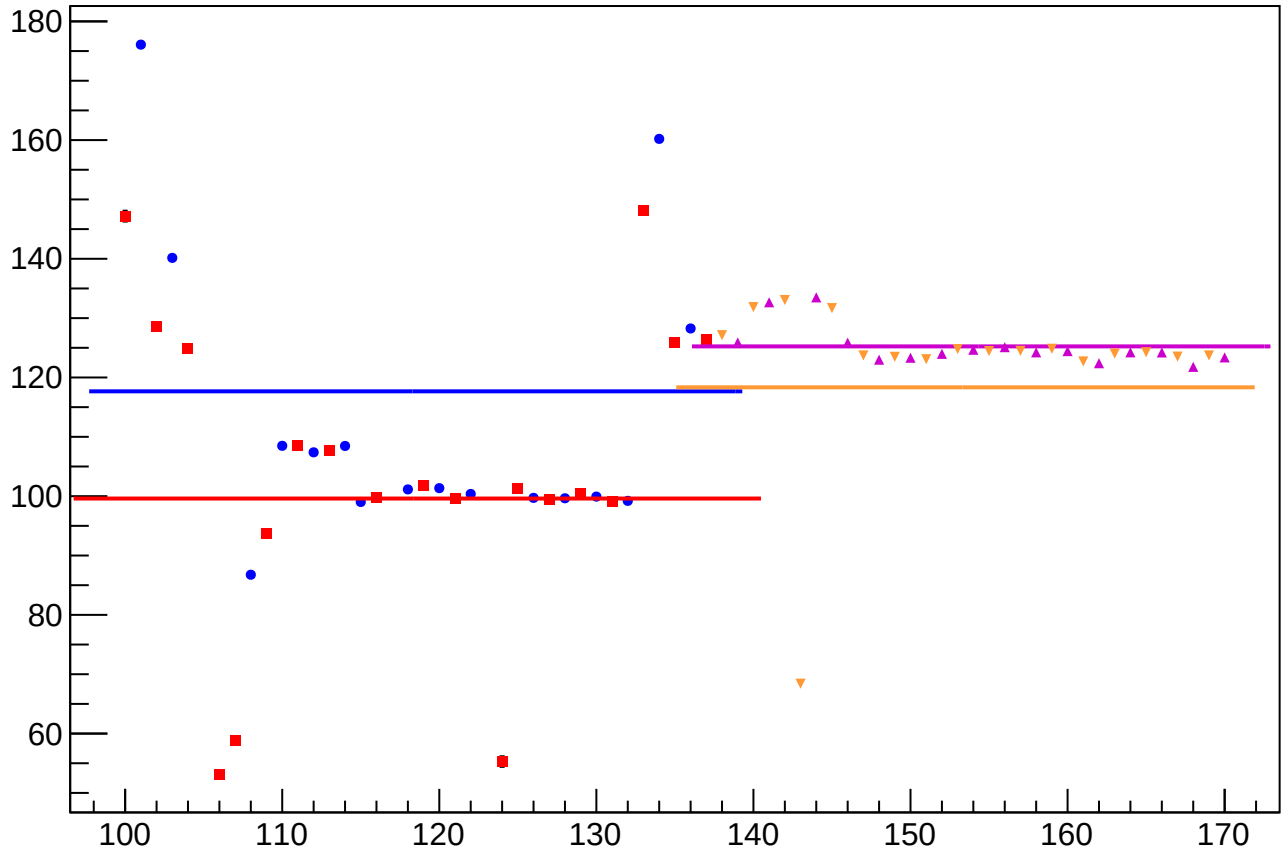
Right Out: -74.861+/-1.230 $\chi^2$/NDF: 576.6/18

Left In: -74.193+/-0.970 $\chi^2$/NDF:280.0/15

+ sign -72.413+/-0.740 $\chi^2$/NDF: 935.6/32

All: -73.403+/-0.531 $\chi^2$/NDF: 1796.1/67

- sign -74.449+/-0.761 $\chi^2$/NDF: 856.8/34




Right In: 117.666+/-0.078 $\chi^2$/NDF: 95397.2/15

Left Out: 118.343+/-0.043 $\chi^2$/NDF:198047.7/16

Right Out: 99.604+/-0.070 $\chi^2$/NDF: 166236.0/18

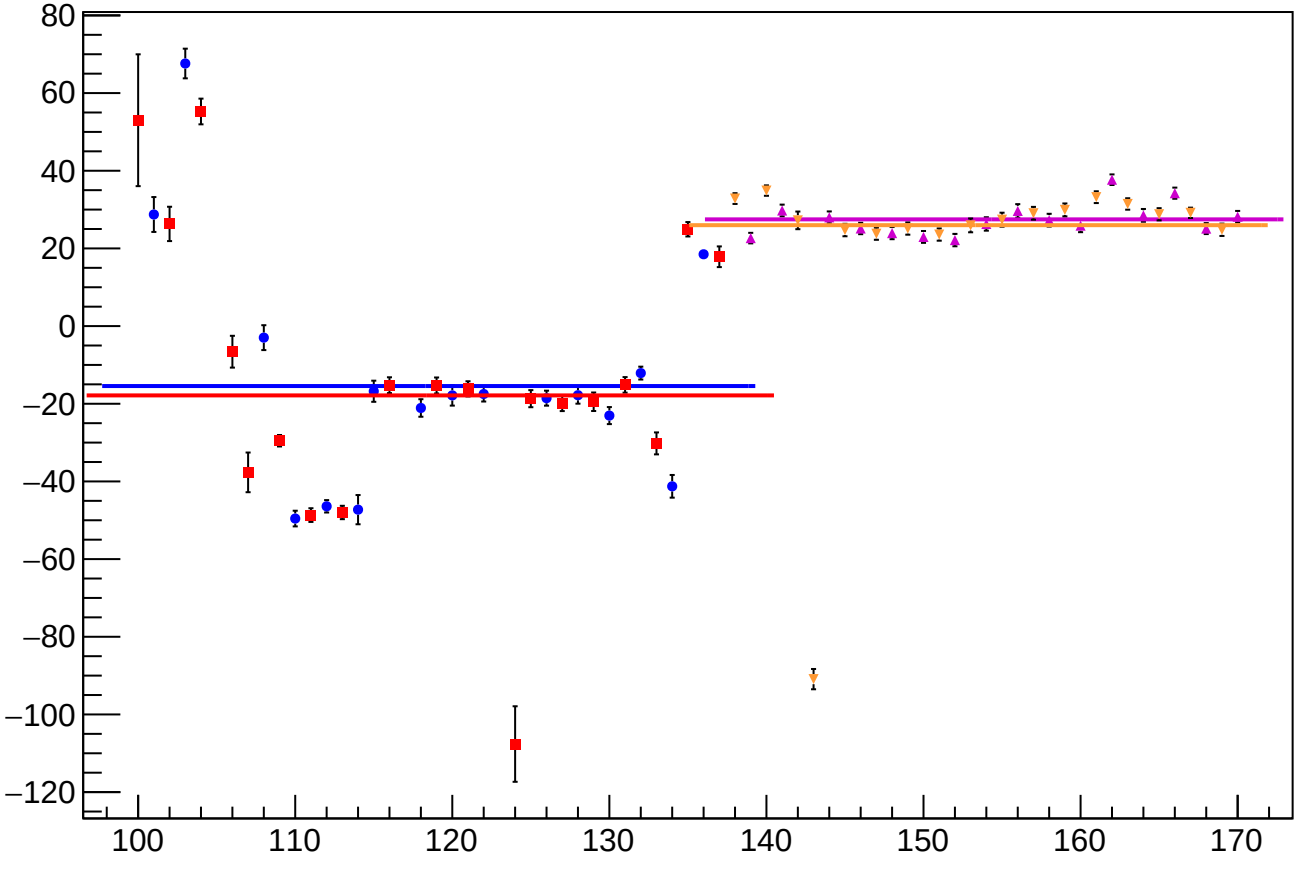
Left In: 125.238+/-0.045 $\chi^2$/NDF:4971.2/15

+ sign 118.184+/-0.038 $\chi^2$/NDF: 293502.2/32

All: 118.002+/-0.027 $\chi^2$/NDF: 559237.6/67

- sign 117.821+/-0.038 $\chi^2$/NDF: 265689.7/34

# reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs Slug




Right In: -15.438+/-0.539 $\chi^2$/NDF: 2124.2/15

Left Out: 25.986+/-0.388 $\chi^2$/NDF:2131.7/16

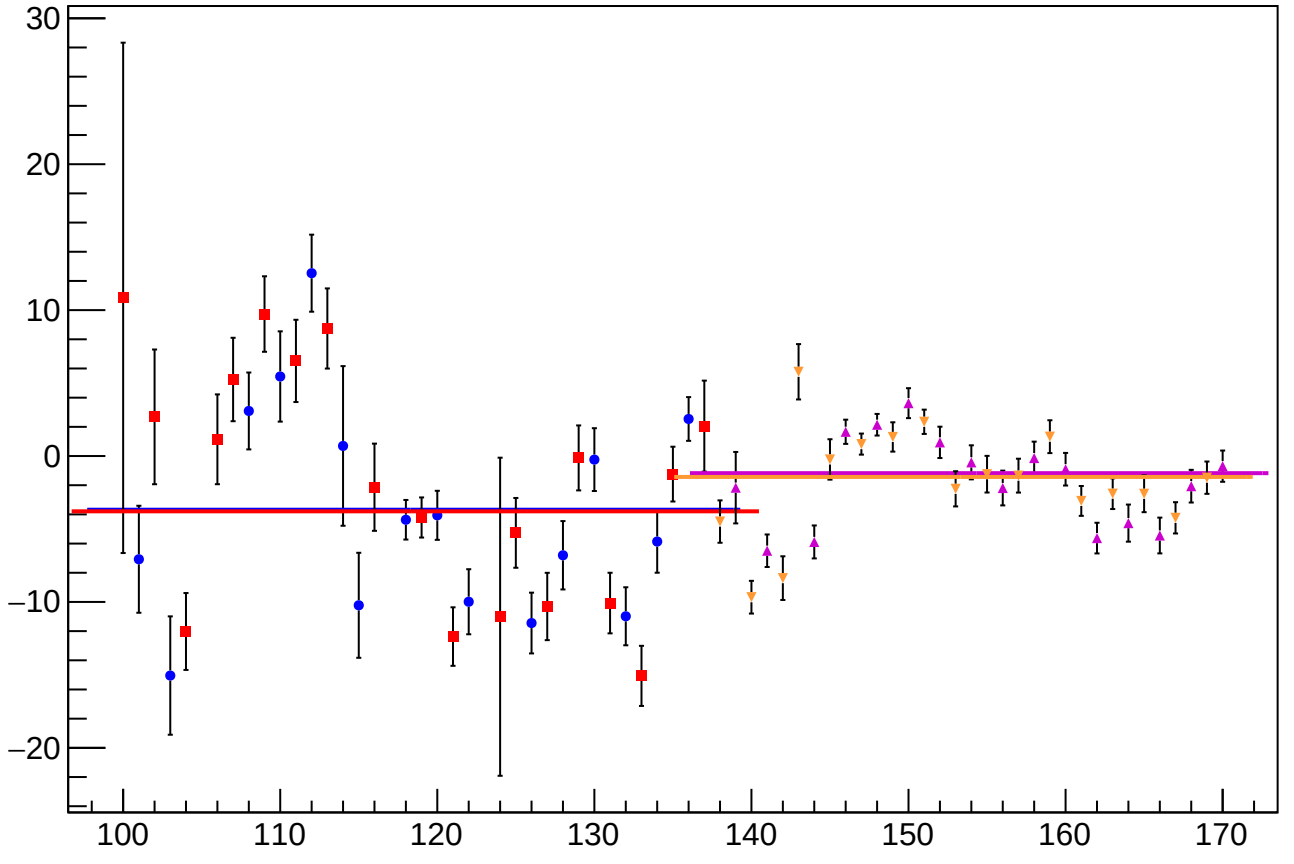
Right Out: -17.848+/-0.530 $\chi^2$/NDF: 2125.2/18

Left In: 27.481+/-0.382 $\chi^2$/NDF:127.3/15

+ sign 11.829+/-0.315 $\chi^2$/NDF: 8143.1/32

All: 11.887+/-0.221 $\chi^2$/NDF: 15209.8/67

- sign 11.944+/-0.310 $\chi^2$/NDF: 7066.7/34




Right In: -3.679+/-0.552 $\chi^2$/NDF: 124.0/15

Left Out: -1.432+/-0.268 $\chi^2$/NDF:150.9/16

Right Out: -3.790+/-0.564 $\chi^2$/NDF: 161.2/18

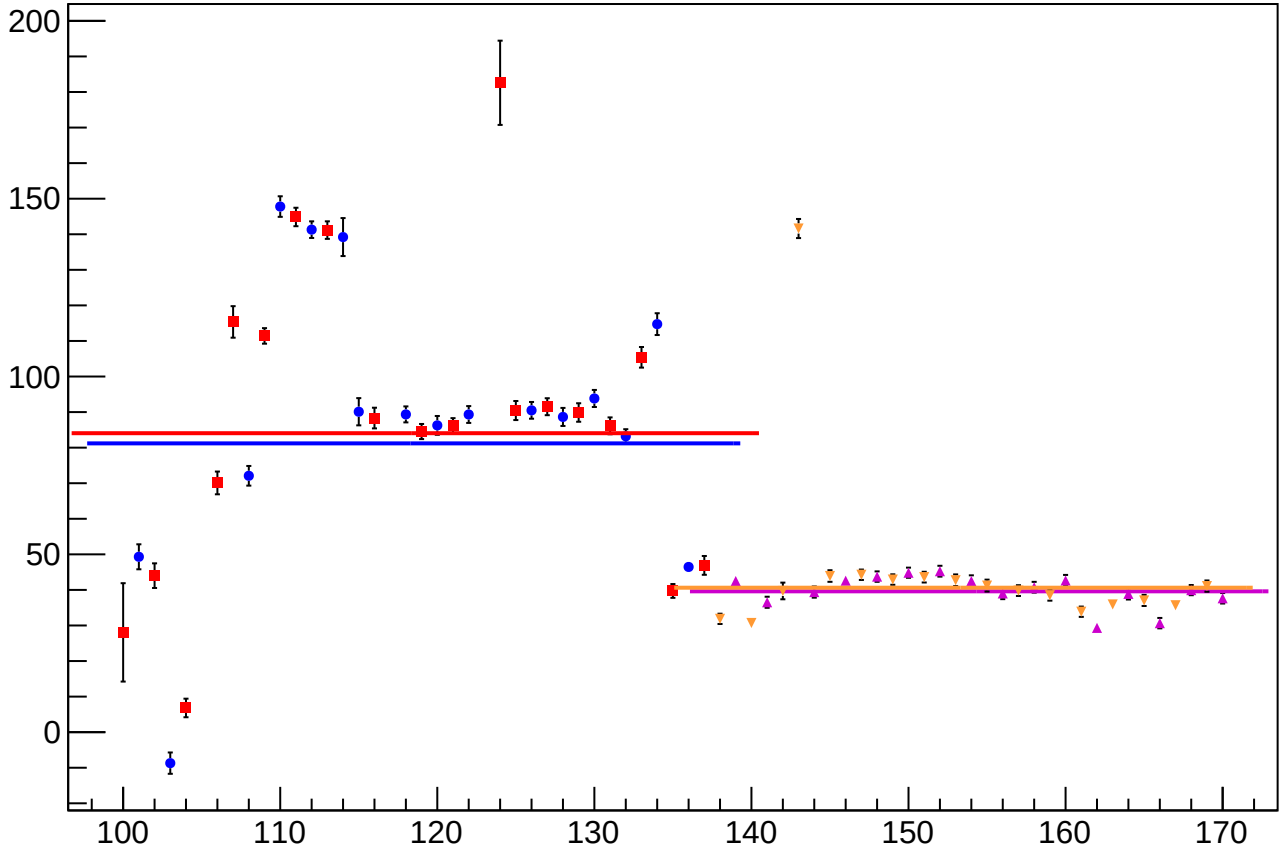
Left In: -1.174+/-0.270 $\chi^2$/NDF:138.0/15

+ sign -1.862+/-0.241 $\chi^2$/NDF: 288.2/32

All: -1.762+/-0.171 $\chi^2$/NDF: 605.3/67

- sign -1.662+/-0.243 $\chi^2$/NDF: 316.8/34

# reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs Slug




Right In: 81.203+/-0.607 $\chi^2$/NDF: 3230.5/15

Left Out: 40.620+/-0.379 $\chi^2$/NDF:1573.1/16

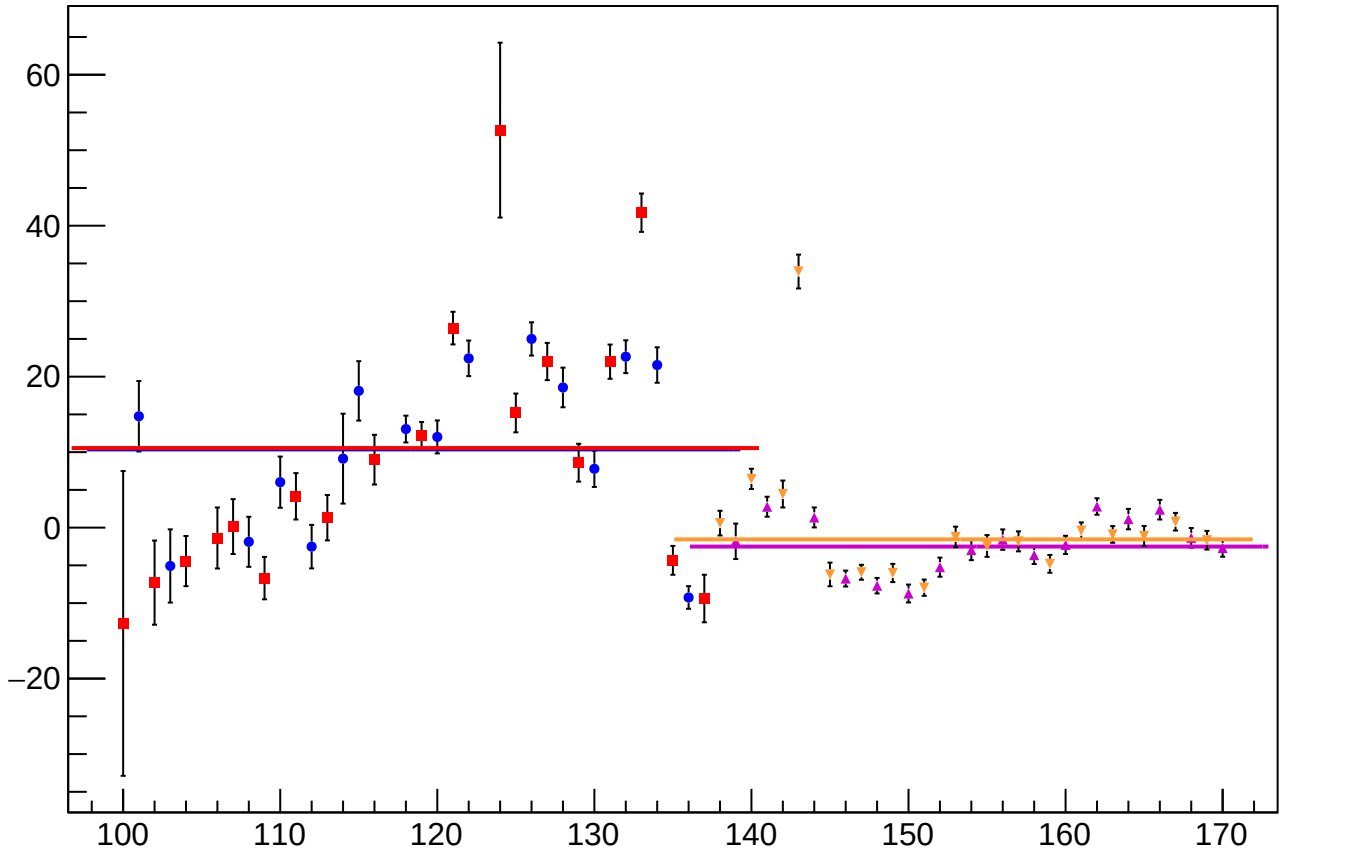
Right Out: 84.065+/-0.616 $\chi^2$/NDF: 3206.5/18

Left In: 39.603+/-0.372 $\chi^2$/NDF:156.5/15

+ sign 51.994+/-0.321 $\chi^2$/NDF: 8020.3/32

All: 51.742+/-0.226 $\chi^2$/NDF: 15197.7/67

- sign 51.494+/-0.319 $\chi^2$/NDF: 7176.1/34




Right In: 10.367+/-0.627 $\chi^2$/NDF: 359.8/15

Left Out: -1.556+/-0.311 $\chi^2$/NDF:390.0/16

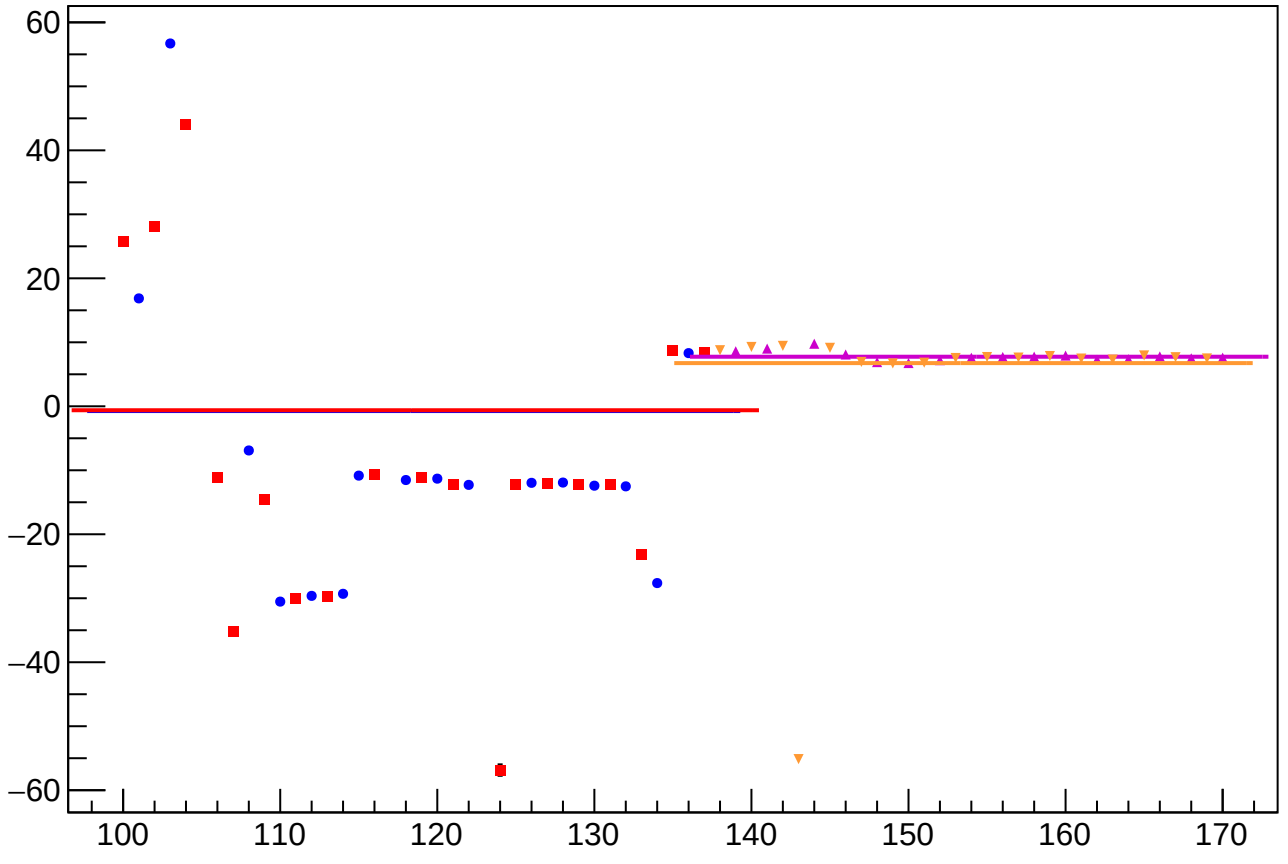
Right Out: 10.539+/-0.640 $\chi^2$/NDF: 470.7/18

Left In: -2.508+/-0.311 $\chi^2$/NDF:145.4/15

+ sign 0.802+/-0.279 $\chi^2$/NDF: 1040.4/32

All: 0.397+/-0.198 $\chi^2$/NDF: 1996.6/67

- sign -0.012+/-0.280 $\chi^2$/NDF: 952.0/34




Right In: -0.745+/-0.036 $\chi^2$/NDF: 367993.9/15

Left Out: 6.749+/-0.014 $\chi^2$/NDF:314259.0/16

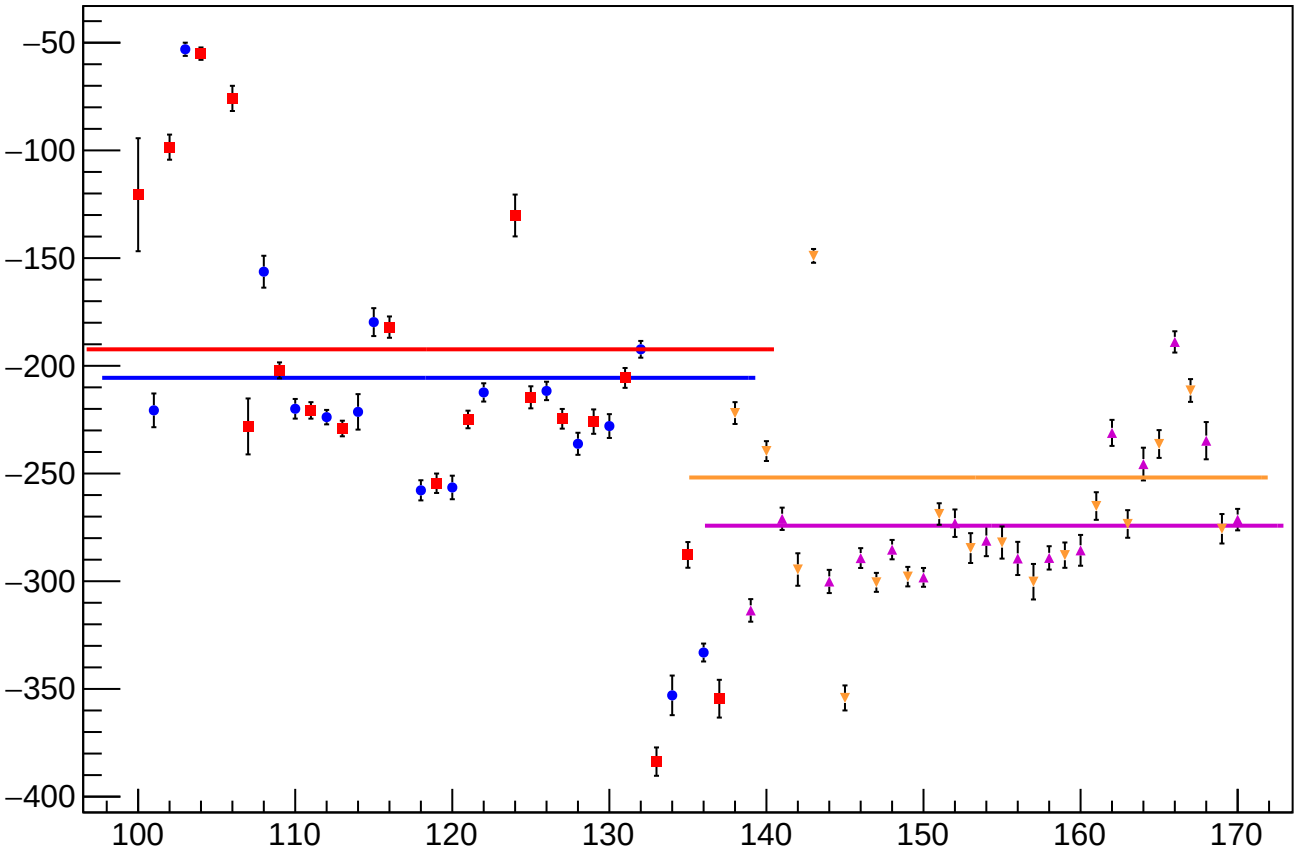
Right Out: -0.618+/-0.037 $\chi^2$/NDF: 316492.6/18

Left In: 7.746+/-0.014 $\chi^2$/NDF:2330.1/15

+ sign 5.737+/-0.013 $\chi^2$/NDF: 719987.2/32

All: 6.244+/-0.009 $\chi^2$/NDF: 1085854.3/67

- sign 6.735+/-0.013 $\chi^2$/NDF: 362955.2/34




Right In: -205.577+/-1.185 $\chi^2$/NDF: 4056.0/15

Left Out: -251.840+/-1.309 $\chi^2$/NDF:1852.6/16

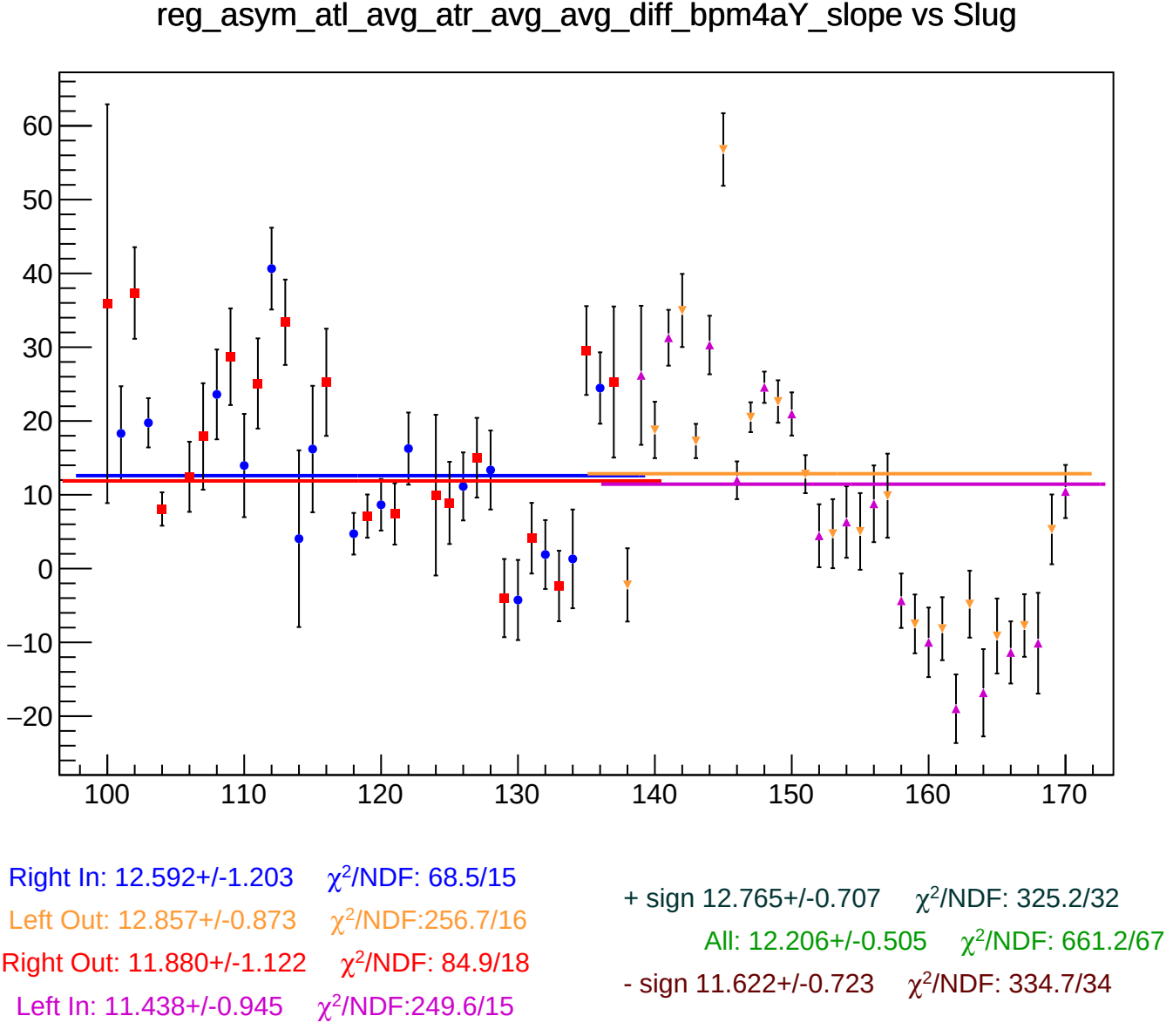
Right Out: -192.345+/-1.123 $\chi^2$/NDF: 4969.8/18

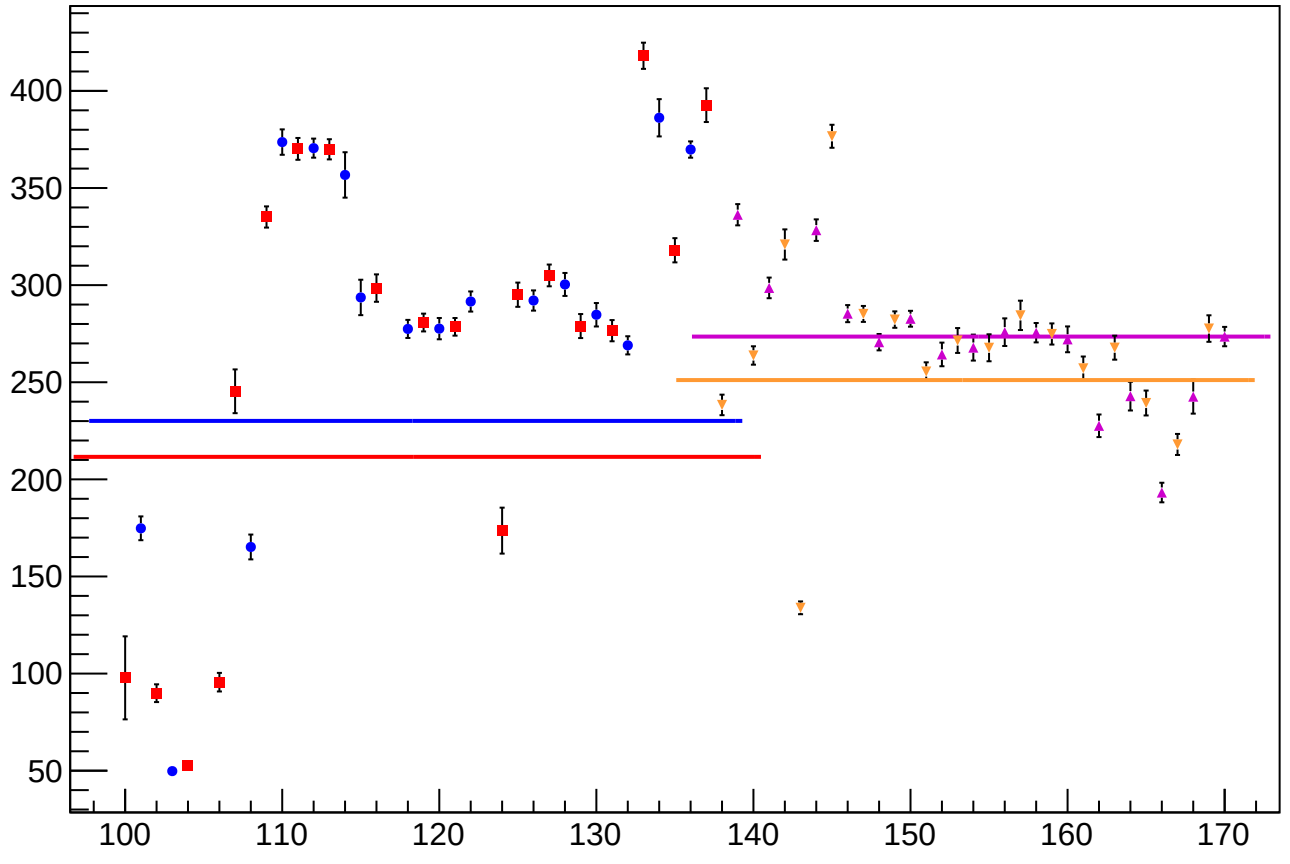
Left In: -274.220+/-1.400 $\chi^2$/NDF:525.8/15

+ sign -226.400+/-0.879 $\chi^2$/NDF: 6595.0/32

All: -225.395+/-0.620 $\chi^2$/NDF: 14176.0/67

- sign -224.397+/-0.876 $\chi^2$/NDF: 7578.3/34


reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs Slug
60
50
40
30
20
10
0
−10
−20
100
110
120
130
140
150
160
170
Right In: 12.592+/-1.203 χ²/NDF: 68.5/15
Left Out: 12.857+/-0.873 χ²/NDF:256.7/16
Right Out: 11.880+/-1.122 χ²/NDF: 84.9/18
Left In: 11.438+/-0.945 χ²/NDF:249.6/15
+ sign 12.765+/-0.707 χ²/NDF: 325.2/32
All: 12.206+/-0.505 χ²/NDF: 661.2/67
- sign 11.622+/-0.723 χ²/NDF: 334.7/34




Right In: 230.095+/-1.260 $\chi^2$/NDF: 9375.6/15

Left Out: 251.117+/-1.284 $\chi^2$/NDF:2048.6/16

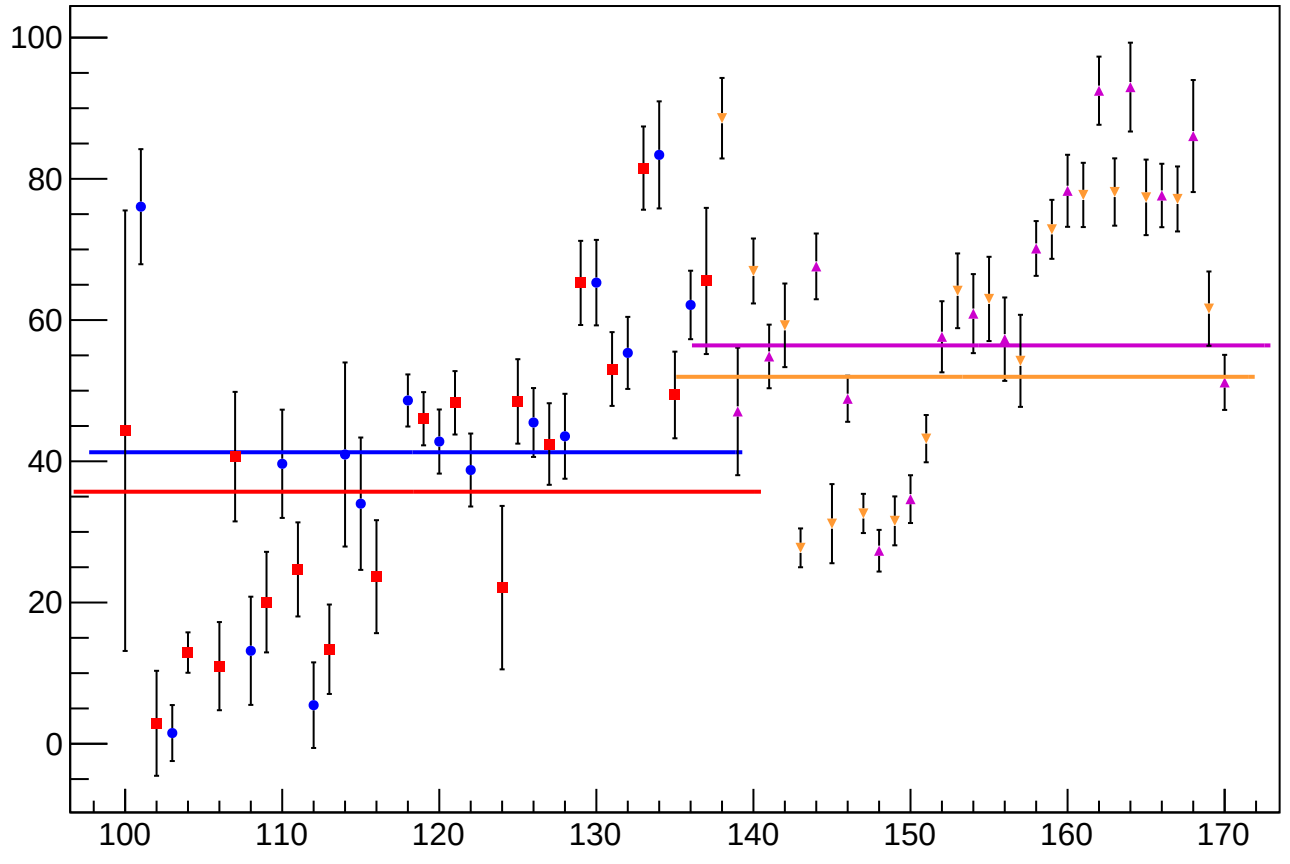
Right Out: 211.588+/-1.195 $\chi^2$/NDF: 11472.1/18

Left In: 273.508+/-1.359 $\chi^2$/NDF:613.6/15

+ sign 240.401+/-0.899 $\chi^2$/NDF: 11560.8/32

All: 239.502+/-0.635 $\chi^2$/NDF: 24819.5/67

- sign 238.607+/-0.897 $\chi^2$/NDF: 13256.7/34




Right In: 41.282+/-1.398 $\chi^2$/NDF: 245.8/15

Left Out: 51.966+/-1.038 $\chi^2$/NDF:386.8/16

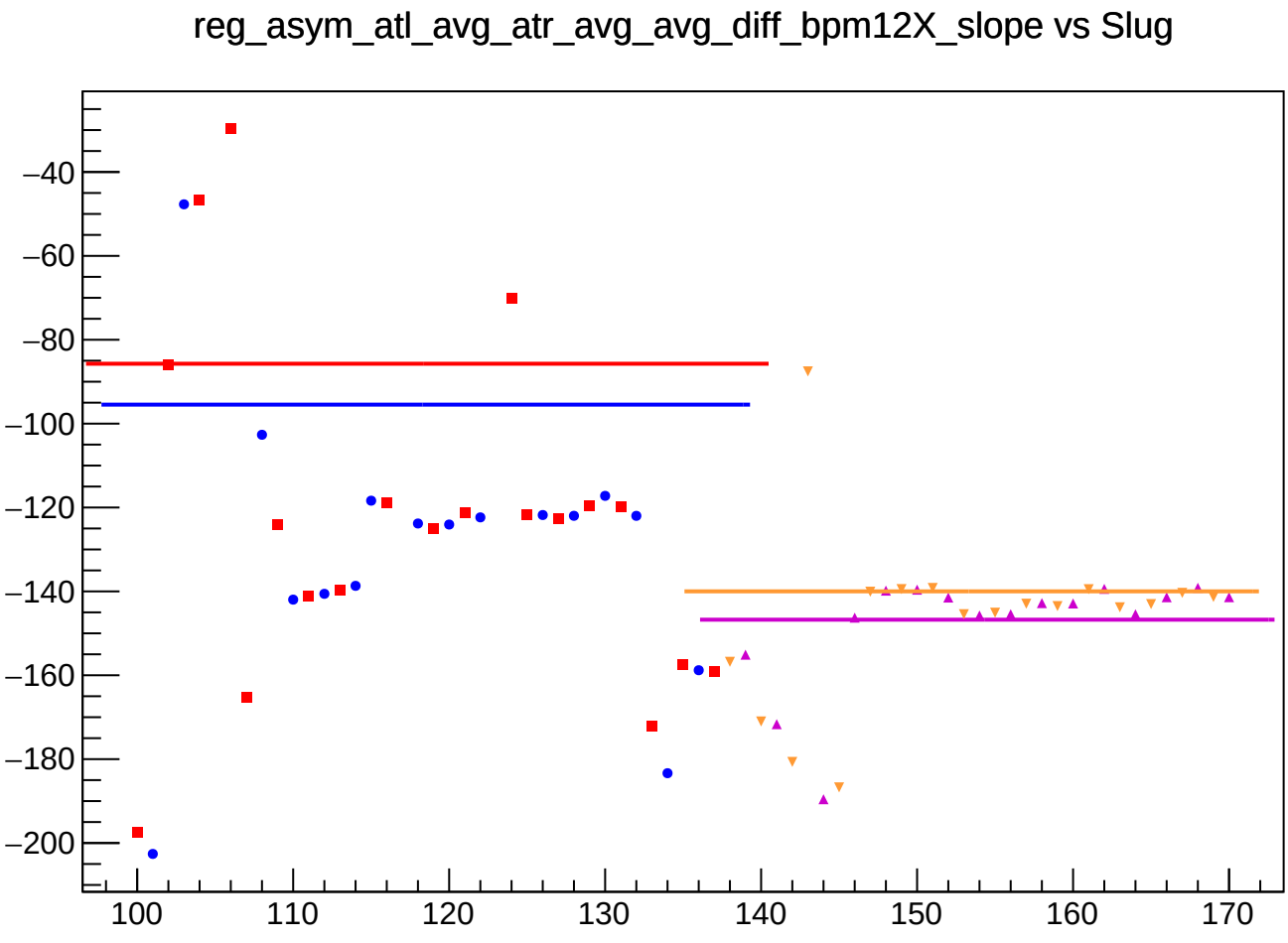
Right Out: 35.692+/-1.317 $\chi^2$/NDF: 253.2/18

Left In: 56.411+/-1.113 $\chi^2$/NDF:310.2/15

+ sign 48.168+/-0.833 $\chi^2$/NDF: 670.2/32

All: 47.979+/-0.595 $\chi^2$/NDF: 1378.1/67

- sign 47.783+/-0.850 $\chi^2$/NDF: 707.8/34




Right In: -95.468+/-0.069 $\chi^2$/NDF: 519953.8/15

Left Out: -139.989+/-0.050 $\chi^2$/NDF:231525.5/16

Right Out: -85.716+/-0.067 $\chi^2$/NDF: 482604.9/18

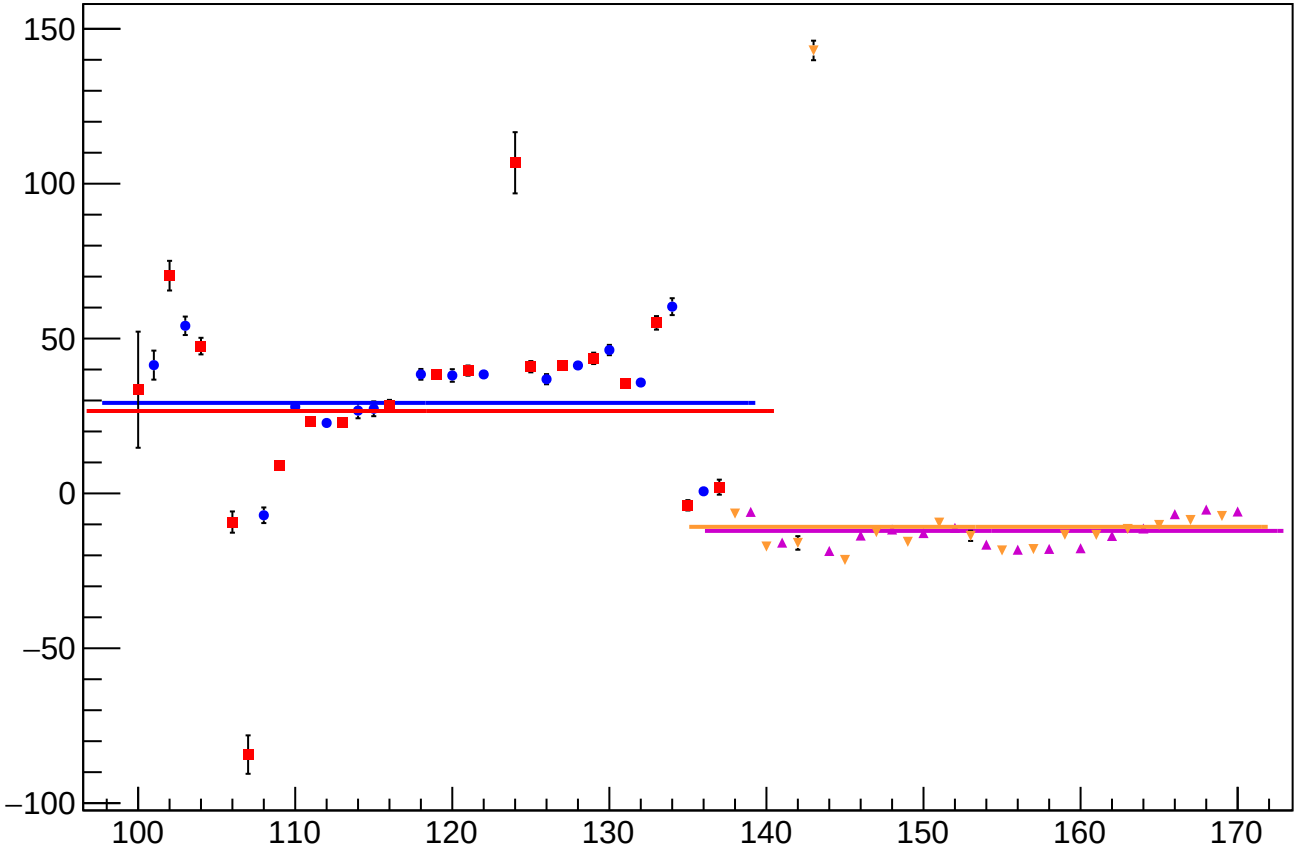
Left In: -146.748+/-0.052 $\chi^2$/NDF:52957.0/15

+ sign -124.802+/-0.041 $\chi^2$/NDF: 1022223.4/32

All: -124.404+/-0.029 $\chi^2$/NDF: 2079272.4/67

- sign -124.001+/-0.041 $\chi^2$/NDF: 1056855.6/34

# reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs Slug




Right In: 29.229+/-0.424 $\chi^2$/NDF: 1342.9/15

Left Out: -10.790+/-0.364 $\chi^2$/NDF:2540.4/16

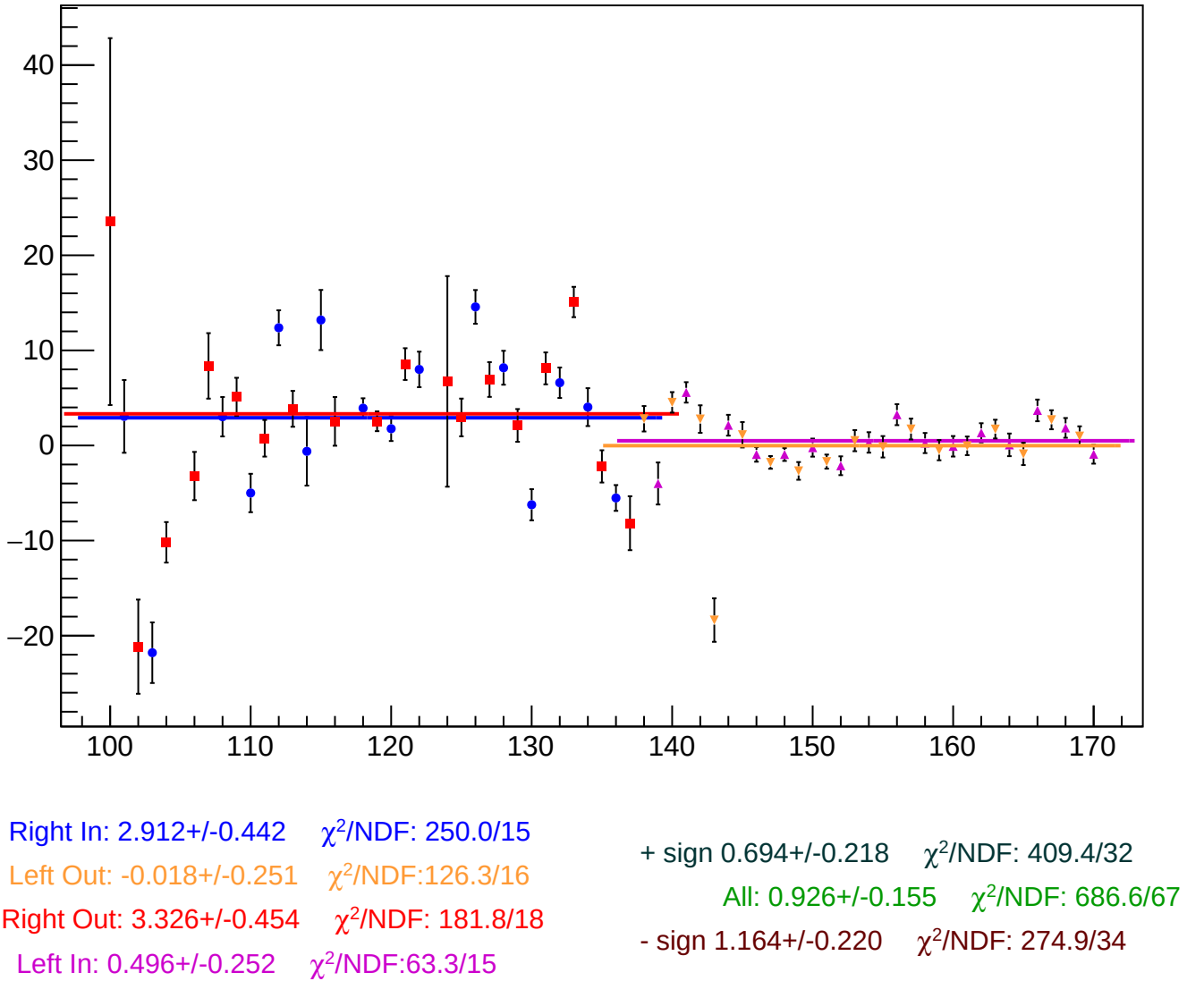
Right Out: 26.609+/-0.414 $\chi^2$/NDF: 1920.6/18

Left In: -12.101+/-0.357 $\chi^2$/NDF:167.6/15

\+ sign 6.172+/-0.276 $\chi^2$/NDF: 9009.4/32

All: 5.269+/-0.193 $\chi^2$/NDF: 16131.3/67

\- sign 4.404+/-0.270 $\chi^2$/NDF: 7101.1/34


reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs Slug
40
30
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−10
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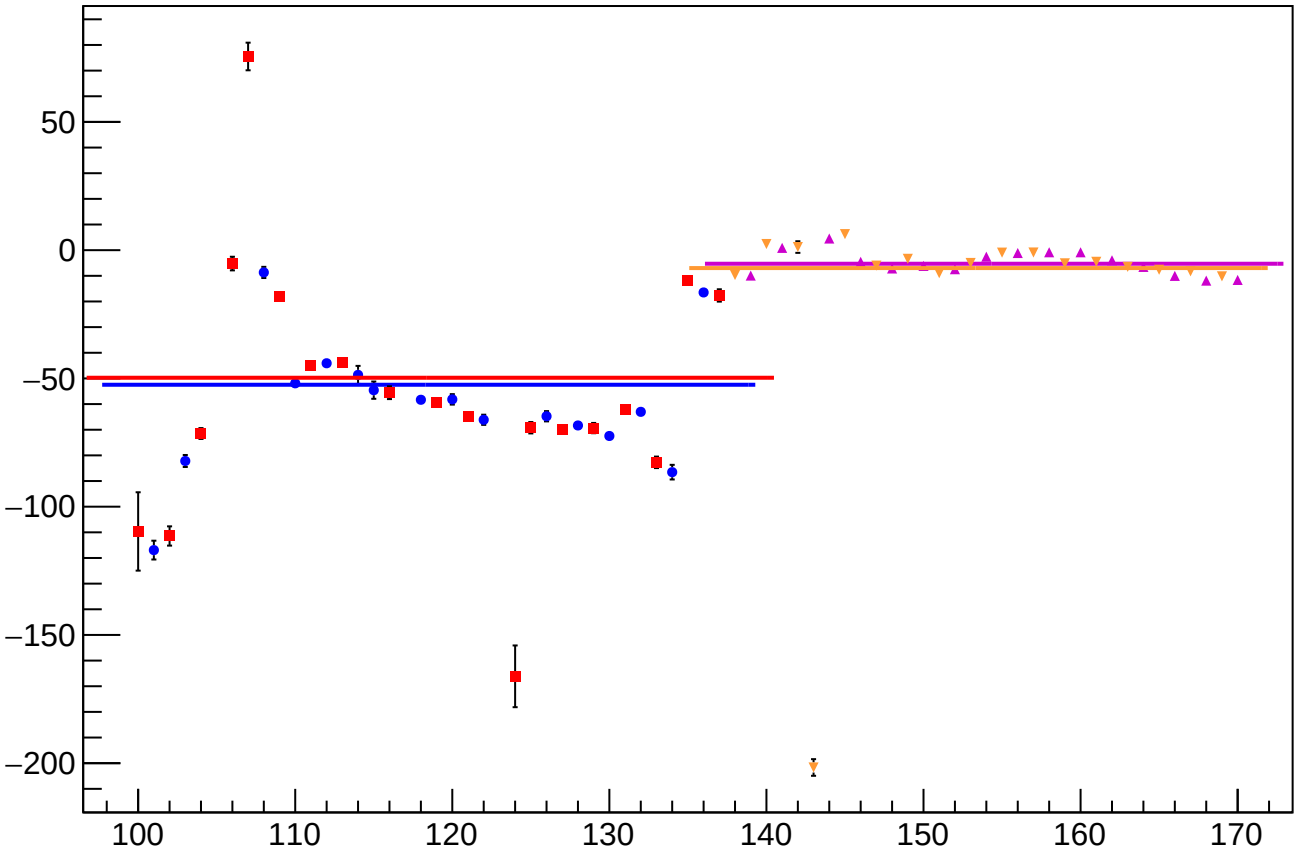
110
120
130
140
150
160
170
Right In: 2.912+/-0.442 χ²/NDF: 250.0/15
Left Out: -0.018+/-0.251 χ²/NDF:126.3/16
Right Out: 3.326+/-0.454 χ²/NDF: 181.8/18
Left In: 0.496+/-0.252 χ²/NDF:63.3/15
+ sign 0.694+/-0.218 χ²/NDF: 409.4/32
All: 0.926+/-0.155 χ²/NDF: 686.6/67
- sign 1.164+/-0.220 χ²/NDF: 274.9/34




Right In: -52.467+/-0.488 $\chi^2$/NDF: 2330.2/15

Left Out: -6.981+/-0.355 $\chi^2$/NDF:3794.7/16

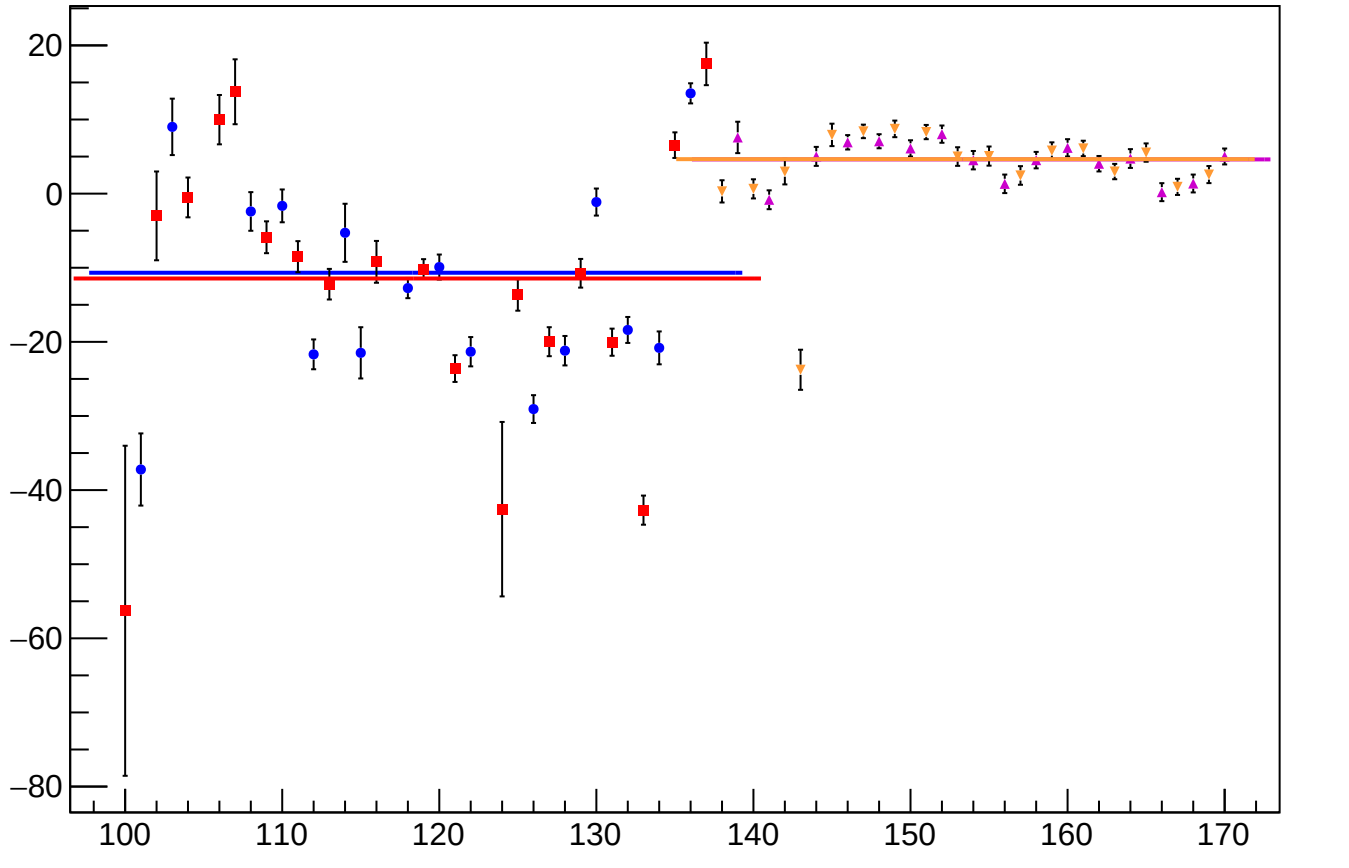
Right Out: -49.734+/-0.494 $\chi^2$/NDF: 3009.7/18

Left In: -5.290+/-0.348 $\chi^2$/NDF:166.4/15

+ sign -22.706+/-0.287 $\chi^2$/NDF: 11814.4/32

All: -21.343+/-0.202 $\chi^2$/NDF: 20448.9/67

- sign -20.004+/-0.284 $\chi^2$/NDF: 8589.7/34




Right In: -10.675+/-0.505 $\chi^2$/NDF: 666.4/15

Left Out: 4.651+/-0.291 $\chi^2$/NDF:203.0/16

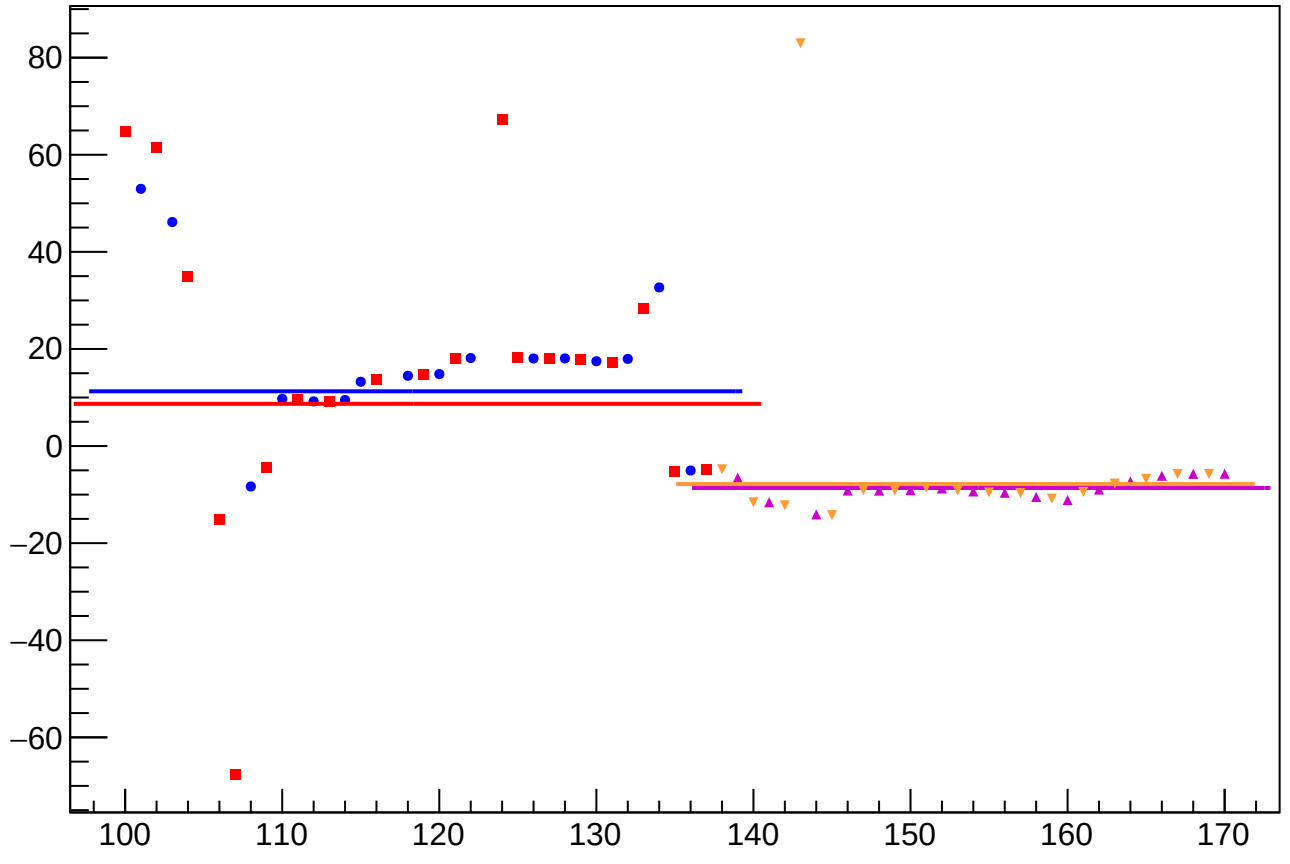
Right Out: -11.450+/-0.516 $\chi^2$/NDF: 665.7/18

Left In: 4.617+/-0.291 $\chi^2$/NDF:72.8/15

+ sign 0.835+/-0.252 $\chi^2$/NDF: 1559.9/32

All: 0.787+/-0.179 $\chi^2$/NDF: 3033.8/67

- sign 0.738+/-0.254 $\chi^2$/NDF: 1473.8/34




Right In: 11.277+/-0.030 $\chi^2$/NDF: 349346.9/15

Left Out: -7.826+/-0.013 $\chi^2$/NDF:485138.5/16

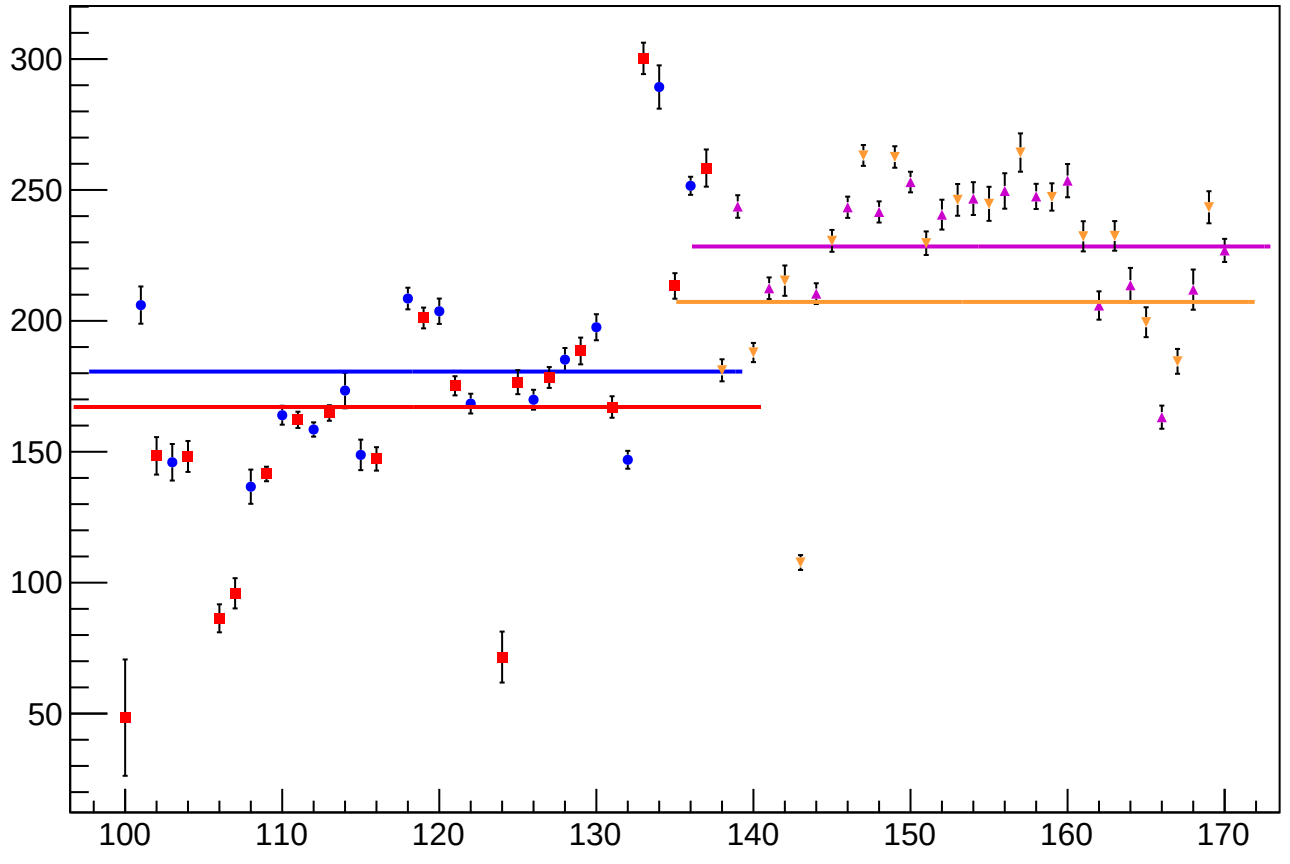
Right Out: 8.698+/-0.031 $\chi^2$/NDF: 436156.0/18

Left In: -8.634+/-0.013 $\chi^2$/NDF:26041.0/15

+ sign -4.695+/-0.012 $\chi^2$/NDF: 1175263.9/32

All: -5.425+/-0.009 $\chi^2$/NDF: 1904985.6/67

- sign -6.134+/-0.012 $\chi^2$/NDF: 722566.3/34


reg_asym_at1_avg_at2_avg_dd_diff_bpm1X_slope vs Slug
300
250
200
150
100
50
100
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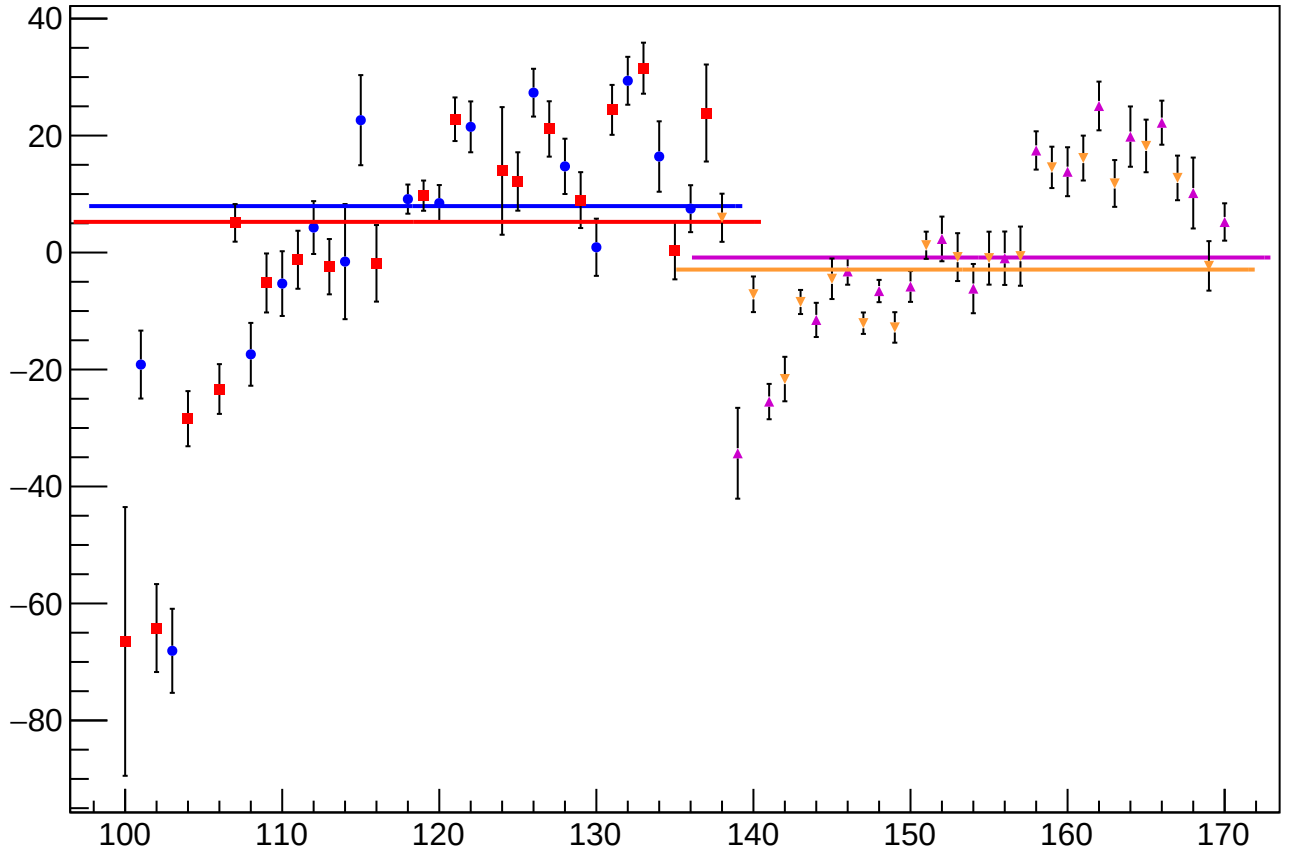
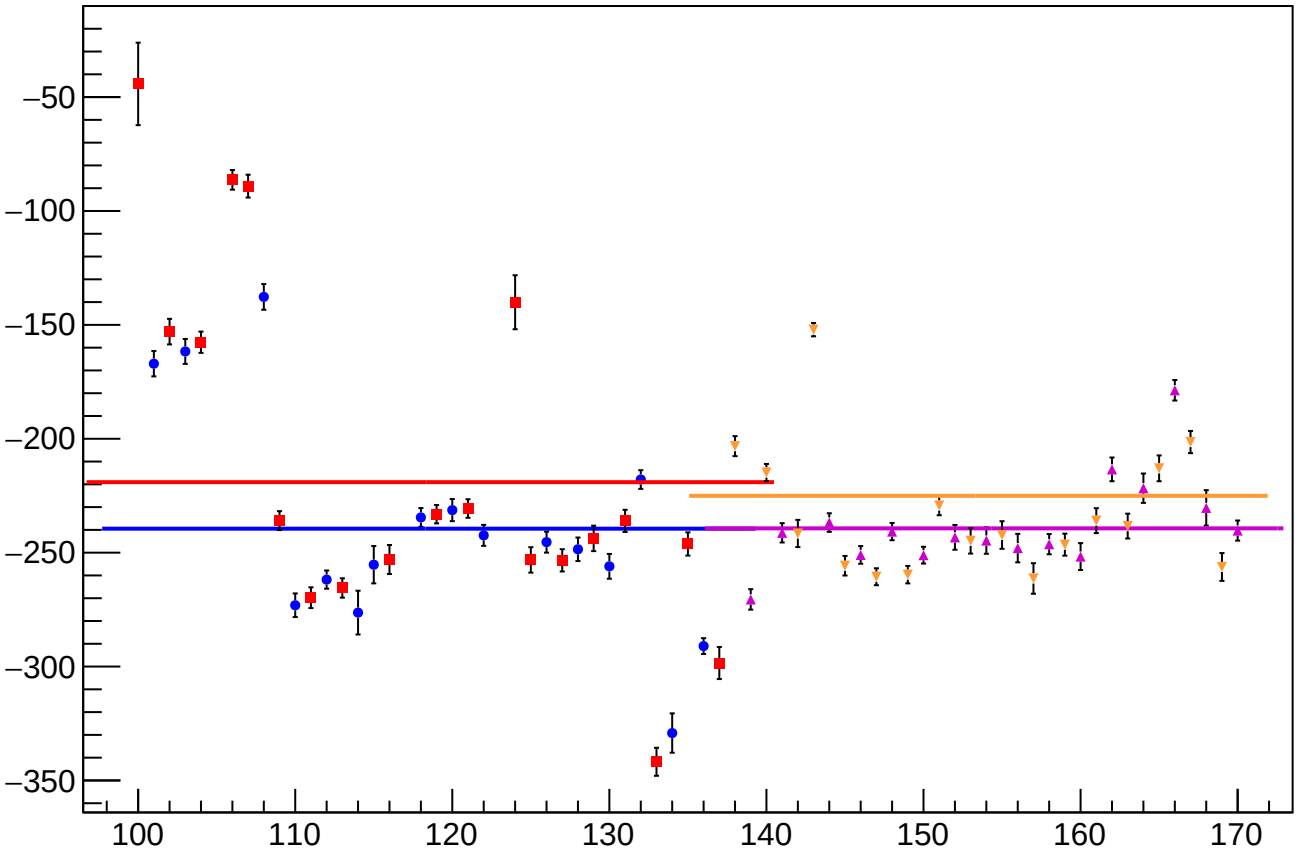
120
130
140
150
160
170
Right In: 180.634+/-1.090 χ²/NDF: 993.4/15
Left Out: 207.229+/-1.130 χ²/NDF:2022.4/16
Right Out: 167.102+/-1.021 χ²/NDF: 1484.6/18
Left In: 228.411+/-1.208 χ²/NDF:410.4/15
+ sign 193.446+/-0.784 χ²/NDF: 3302.8/32
All: 193.039+/-0.553 χ²/NDF: 6700.7/67
- sign 192.636+/-0.780 χ²/NDF: 3397.3/34


reg_asym_at1_avg_at2_avg_dd_diff_bpm4aY_slope vs Slug
40
20
0
−20
−40
−60
−80
100
110
120
130
140
150
160
170
Right In: 7.942+/-1.113 χ²/NDF: 232.9/15
Left Out: -2.912+/-0.763 χ²/NDF:183.2/16
Right Out: 5.244+/-1.062 χ²/NDF: 302.9/18
Left In: -0.850+/-0.825 χ²/NDF:257.0/15
+ sign 0.558+/-0.629 χ²/NDF: 480.8/32
All: 0.985+/-0.453 χ²/NDF: 1062.2/67
- sign 1.443+/-0.652 χ²/NDF: 580.5/34




Right In: -239.468+/-1.245 $\chi^2$/NDF: 1162.2/15

Left Out: -225.038+/-1.112 $\chi^2$/NDF:1020.9/16

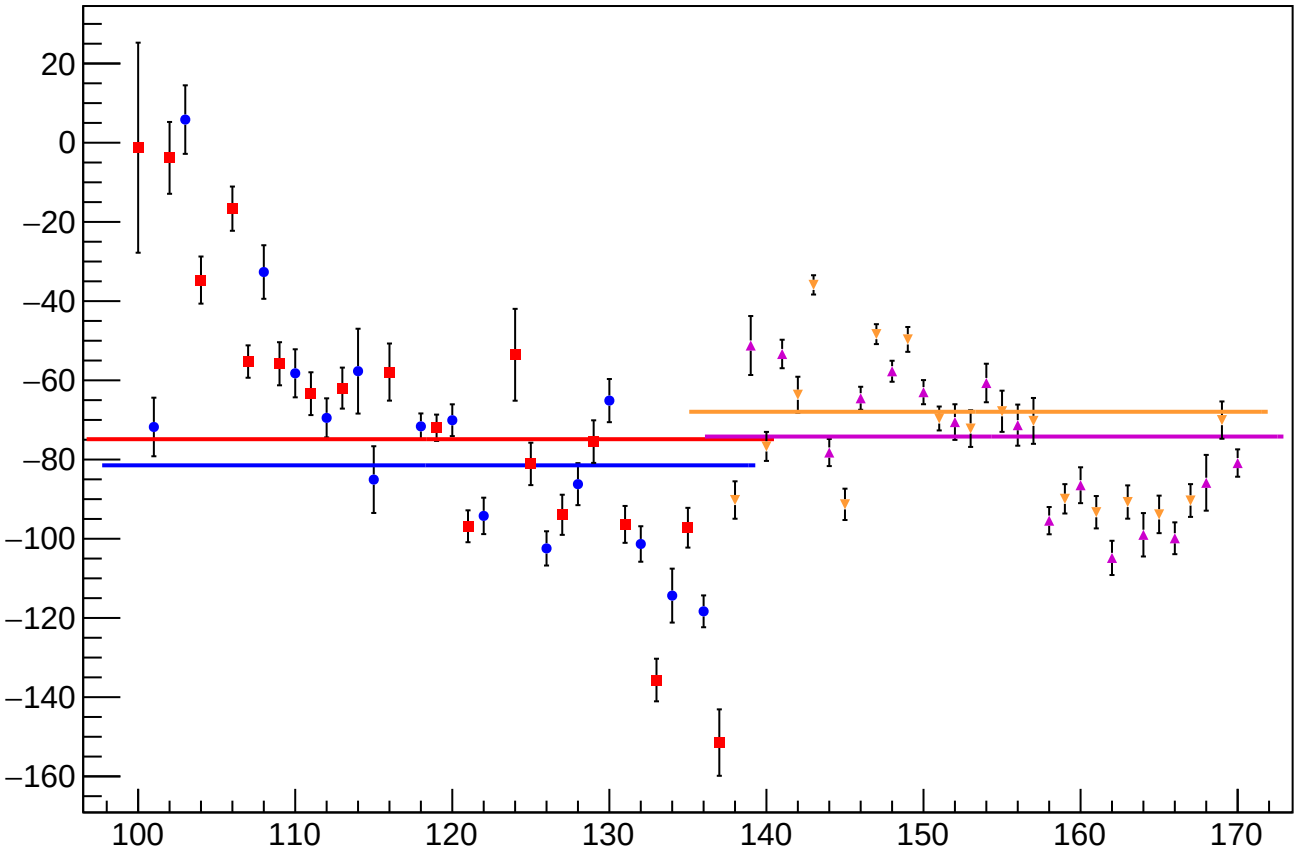
Right Out: -219.053+/-1.176 $\chi^2$/NDF: 3049.3/18

Left In: -239.335+/-1.177 $\chi^2$/NDF:292.9/15

+ sign -231.442+/-0.830 $\chi^2$/NDF: 2257.8/32

All: -230.319+/-0.587 $\chi^2$/NDF: 5752.3/67

- sign -229.190+/-0.832 $\chi^2$/NDF: 3490.8/34




Right In: -81.462+/-1.287 $\chi^2$/NDF: 366.5/15

Left Out: -67.936+/-0.905 $\chi^2$/NDF:495.2/16

Right Out: -74.861+/-1.230 $\chi^2$/NDF: 576.6/18

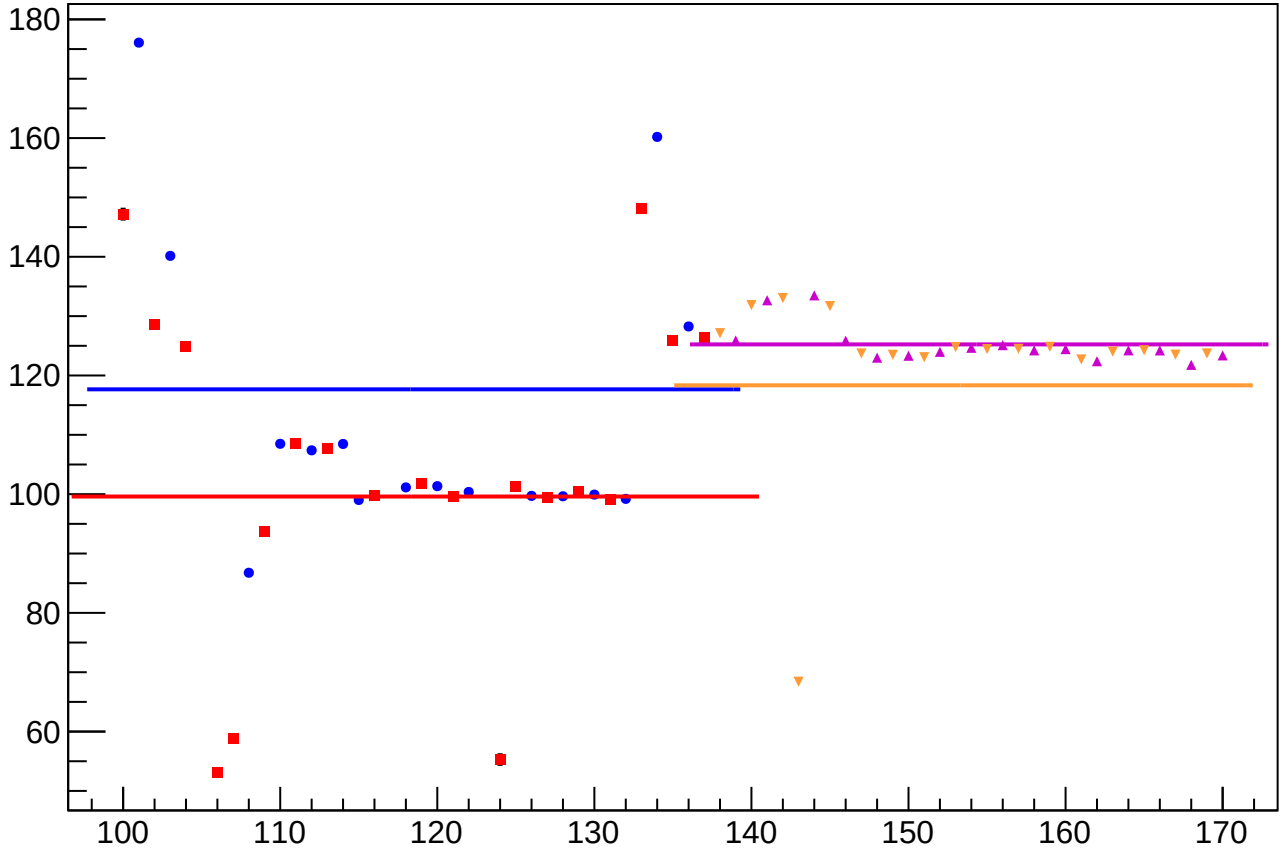
Left In: -74.193+/-0.970 $\chi^2$/NDF:280.0/15

+ sign -72.413+/-0.740 $\chi^2$/NDF: 935.6/32

All: -73.403+/-0.531 $\chi^2$/NDF: 1796.1/67

- sign -74.449+/-0.761 $\chi^2$/NDF: 856.8/34

# reg_asym_at1_avg_at2_avg_dd_diff_bpm12X_slope vs Slug




Right In: 117.666+/-0.078 $\chi^2$/NDF: 95397.2/15

Left Out: 118.343+/-0.043 $\chi^2$/NDF:198047.7/16

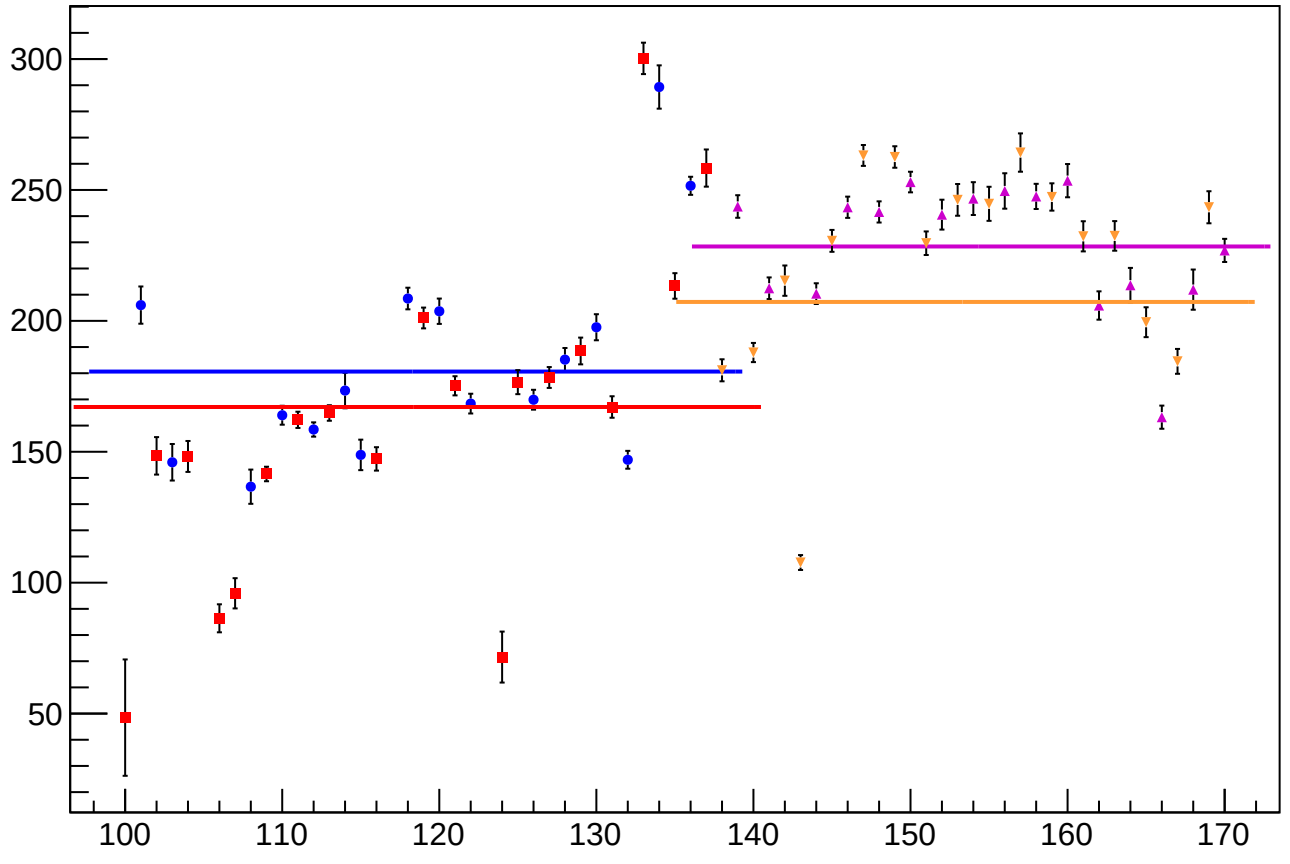
Right Out: 99.604+/-0.070 $\chi^2$/NDF: 166236.0/18

Left In: 125.238+/-0.045 $\chi^2$/NDF:4971.2/15

+ sign 118.184+/-0.038 $\chi^2$/NDF: 293502.2/32

All: 118.002+/-0.027 $\chi^2$/NDF: 559237.6/67

- sign 117.821+/-0.038 $\chi^2$/NDF: 265689.7/34




Right In: 180.634+/-1.090 $\chi^2$/NDF: 993.4/15

Left Out: 207.229+/-1.130 $\chi^2$/NDF:2022.4/16

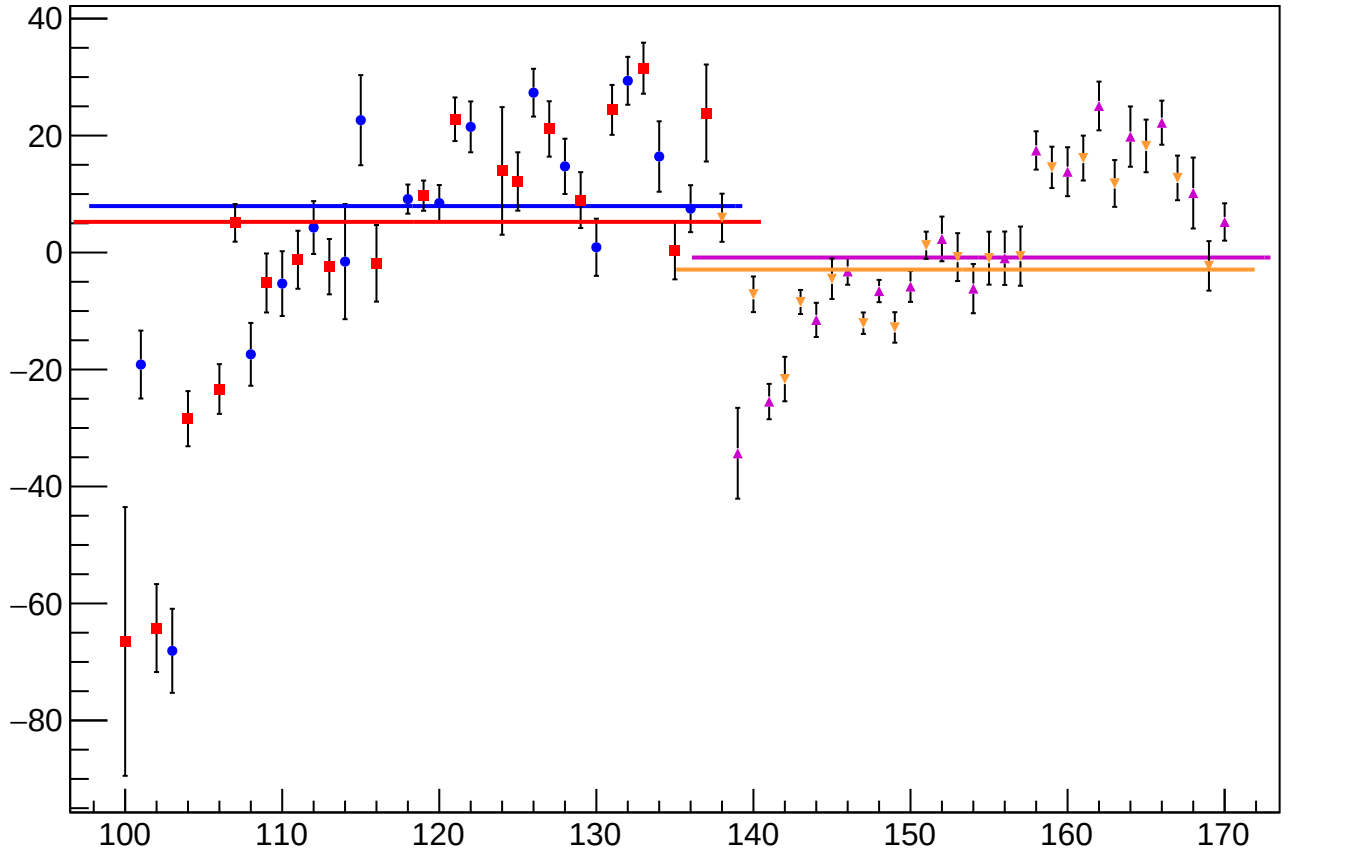
Right Out: 167.102+/-1.021 $\chi^2$/NDF: 1484.6/18

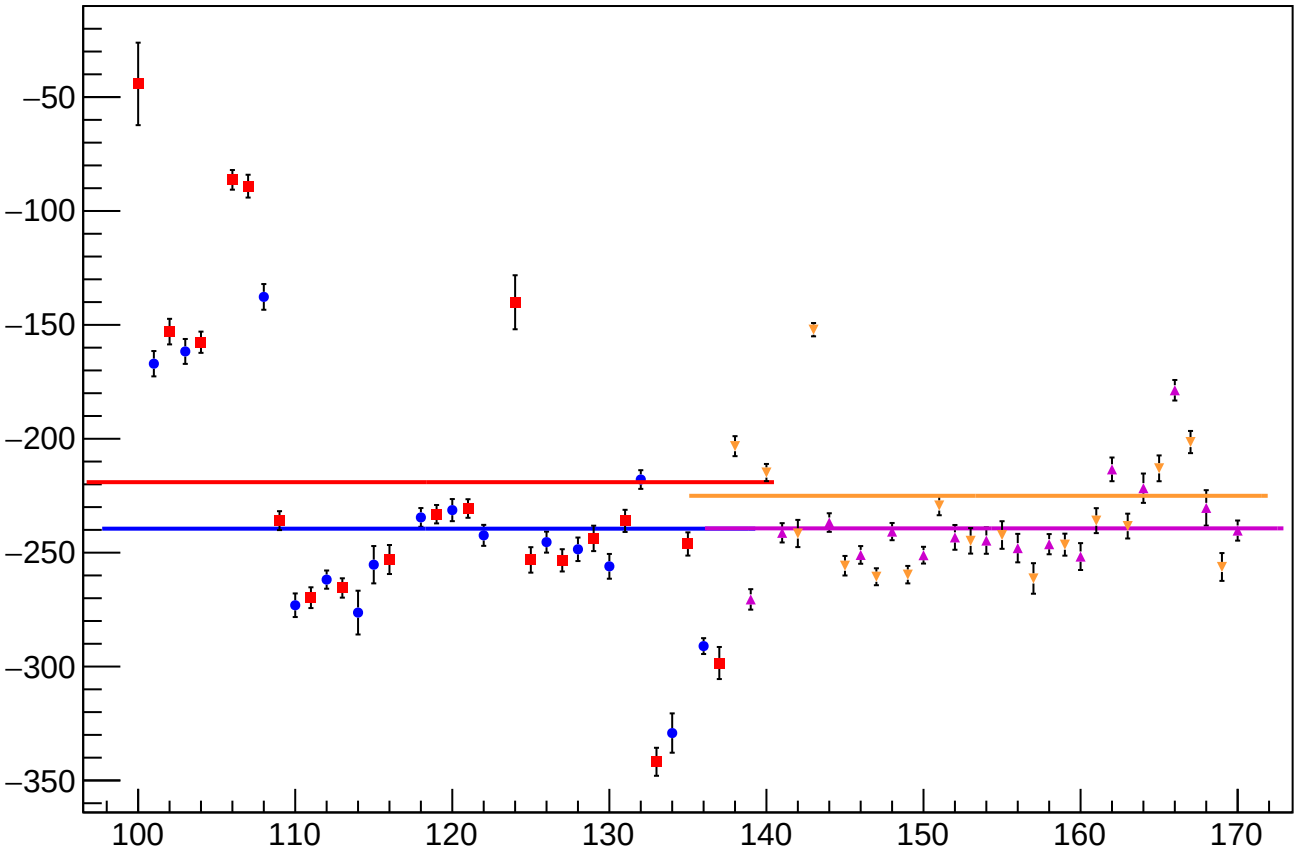
Left In: 228.411+/-1.208 $\chi^2$/NDF:410.4/15

+ sign 193.446+/-0.784 $\chi^2$/NDF: 3302.8/32

All: 193.039+/-0.553 $\chi^2$/NDF: 6700.7/67

- sign 192.636+/-0.780 $\chi^2$/NDF: 3397.3/34


reg_asym_atl1r2_dd_atl2r1_dd_dd_diff_bpm4aY_slope vs Slug
40
20
0
−20
−40
−60
−80
100
110
120
130
140
150
160
170
Right In: 7.942+/-1.113 χ²/NDF: 232.9/15
Left Out: -2.912+/-0.763 χ²/NDF:183.2/16
Right Out: 5.244+/-1.062 χ²/NDF: 302.9/18
Left In: -0.850+/-0.825 χ²/NDF:257.0/15
+ sign 0.558+/-0.629 χ²/NDF: 480.8/32
All: 0.985+/-0.453 χ²/NDF: 1062.2/67
- sign 1.443+/-0.652 χ²/NDF: 580.5/34




Right In: -239.468+/-1.245 $\chi^2$/NDF: 1162.2/15

Left Out: -225.038+/-1.112 $\chi^2$/NDF:1020.9/16

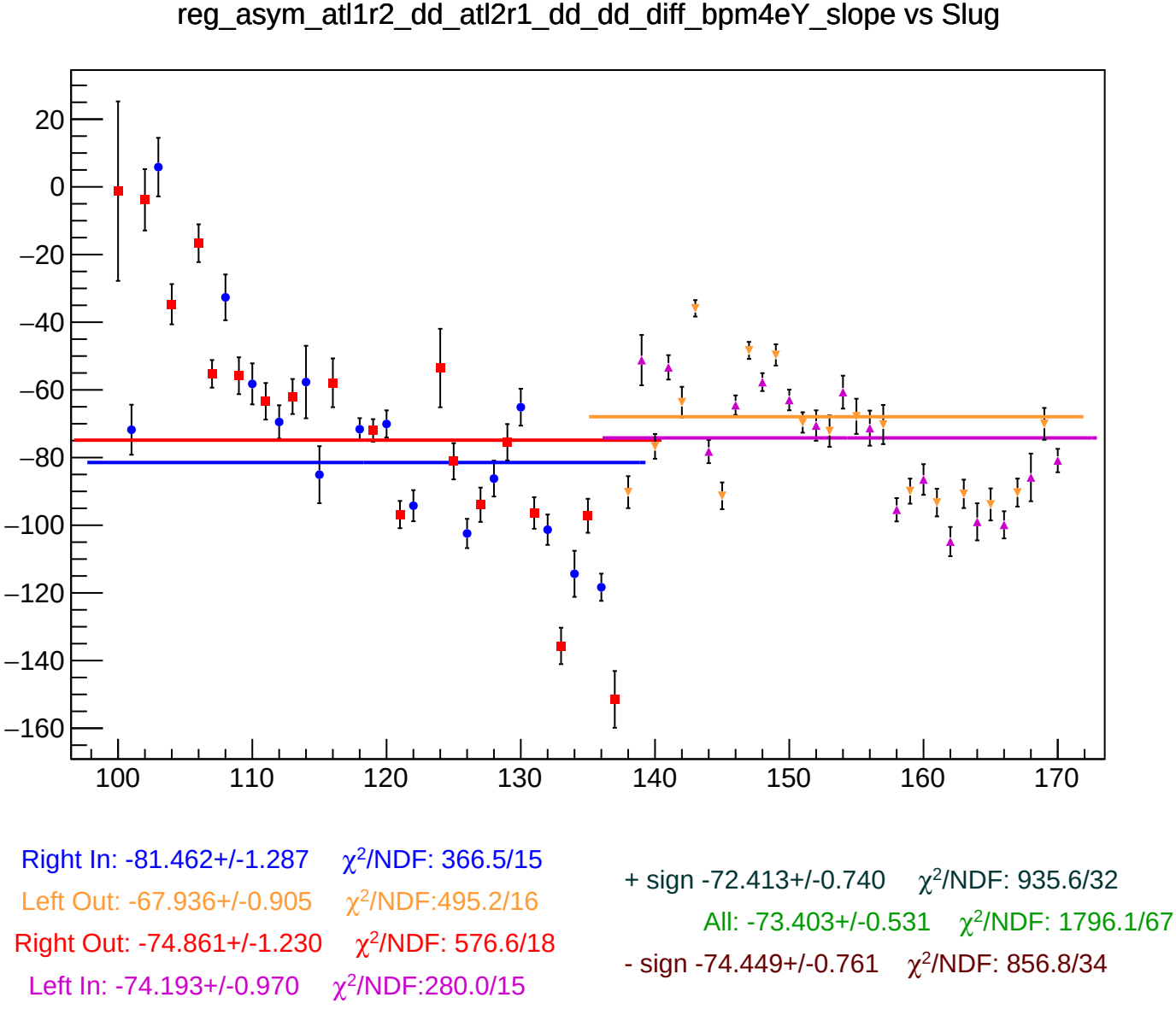
Right Out: -219.053+/-1.176 $\chi^2$/NDF: 3049.3/18

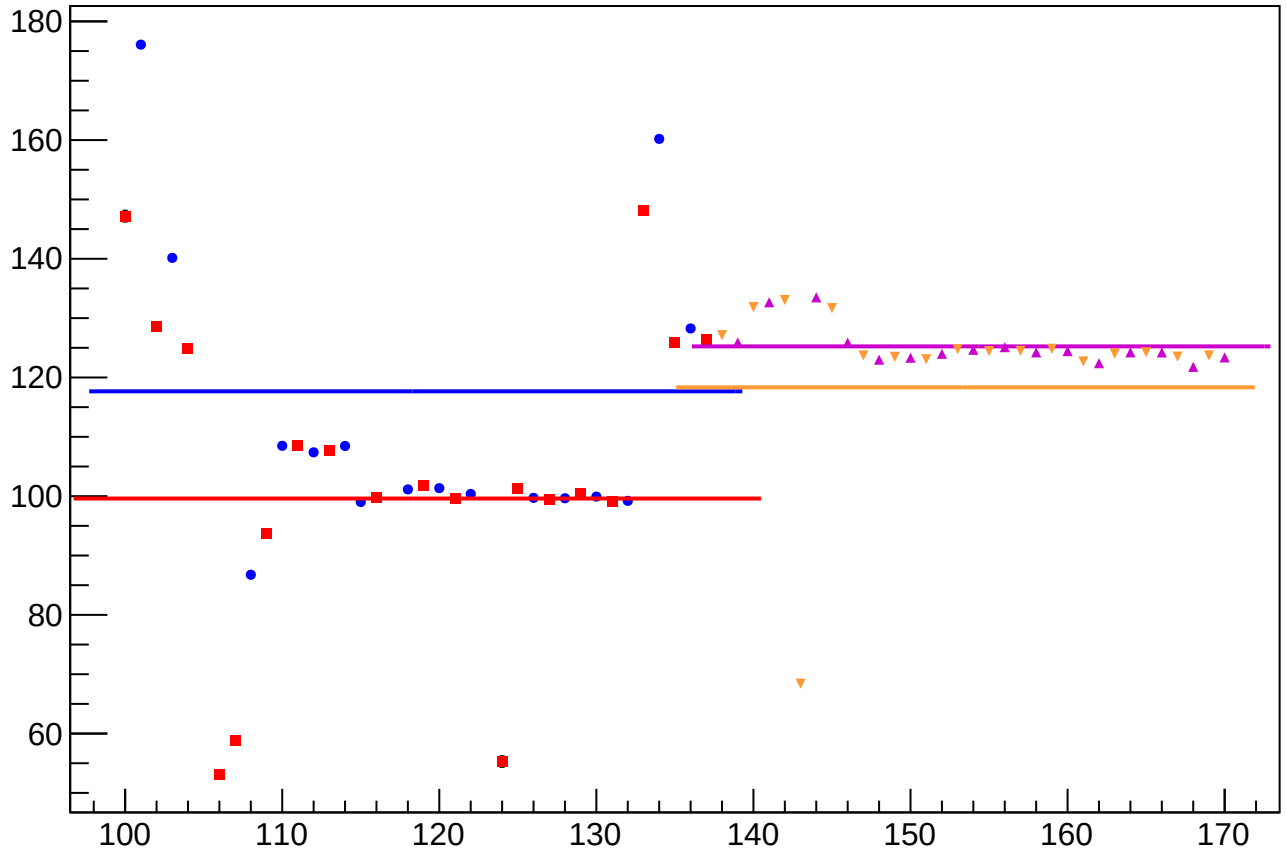
Left In: -239.335+/-1.177 $\chi^2$/NDF:292.9/15

+ sign -231.442+/-0.830 $\chi^2$/NDF: 2257.8/32

All: -230.319+/-0.587 $\chi^2$/NDF: 5752.3/67

- sign -229.190+/-0.832 $\chi^2$/NDF: 3490.8/34


reg_asym_atl1r2_dd_atl2r1_dd_dd_diff_bpm4eY_slope vs Slug
20
0
−20
−40
−60
−80
−100
−120
−140
−160
100
110
120
130
140
150
160
170
Right In: -81.462+/-1.287 χ²/NDF: 366.5/15
Left Out: -67.936+/-0.905 χ²/NDF:495.2/16
Right Out: -74.861+/-1.230 χ²/NDF: 576.6/18
Left In: -74.193+/-0.970 χ²/NDF:280.0/15
+ sign -72.413+/-0.740 χ²/NDF: 935.6/32
All: -73.403+/-0.531 χ²/NDF: 1796.1/67
- sign -74.449+/-0.761 χ²/NDF: 856.8/34




Right In: 117.666+/-0.078 $\chi^2$/NDF: 95397.2/15

Left Out: 118.343+/-0.043 $\chi^2$/NDF:198047.7/16

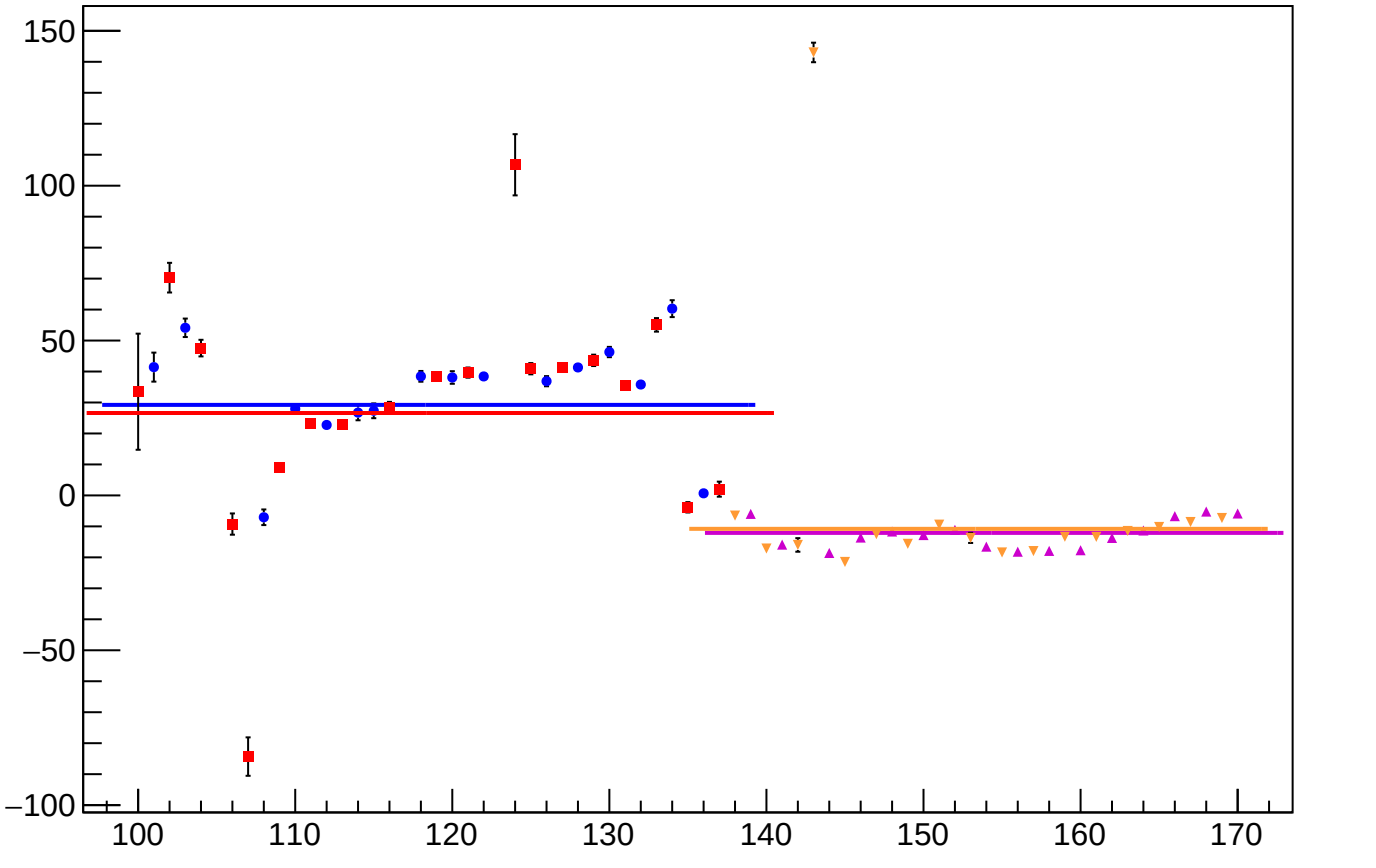
Right Out: 99.604+/-0.070 $\chi^2$/NDF: 166236.0/18

Left In: 125.238+/-0.045 $\chi^2$/NDF:4971.2/15

+ sign 118.184+/-0.038 $\chi^2$/NDF: 293502.2/32

All: 118.002+/-0.027 $\chi^2$/NDF: 559237.6/67

- sign 117.821+/-0.038 $\chi^2$/NDF: 265689.7/34




Right In: 29.229+/-0.424 $\chi^2$/NDF: 1342.9/15

Left Out: -10.790+/-0.364 $\chi^2$/NDF:2540.4/16

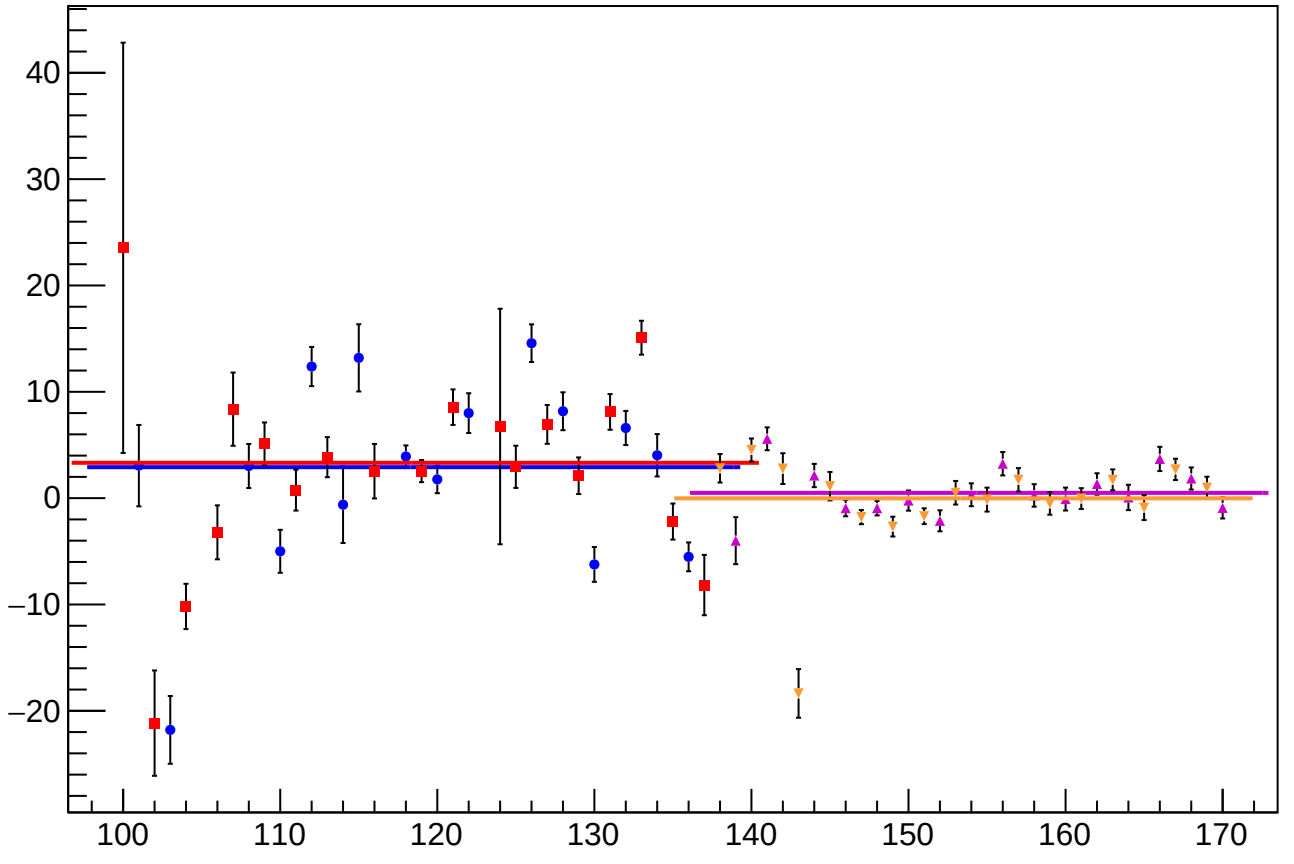
Right Out: 26.609+/-0.414 $\chi^2$/NDF: 1920.6/18

Left In: -12.101+/-0.357 $\chi^2$/NDF:167.6/15

+ sign 6.172+/-0.276 $\chi^2$/NDF: 9009.4/32

All: 5.269+/-0.193 $\chi^2$/NDF: 16131.3/67

- sign 4.404+/-0.270 $\chi^2$/NDF: 7101.1/34




Right In: 2.912+/-0.442 $\chi^2$/NDF: 250.0/15

Left Out: -0.018+/-0.251 $\chi^2$/NDF:126.3/16

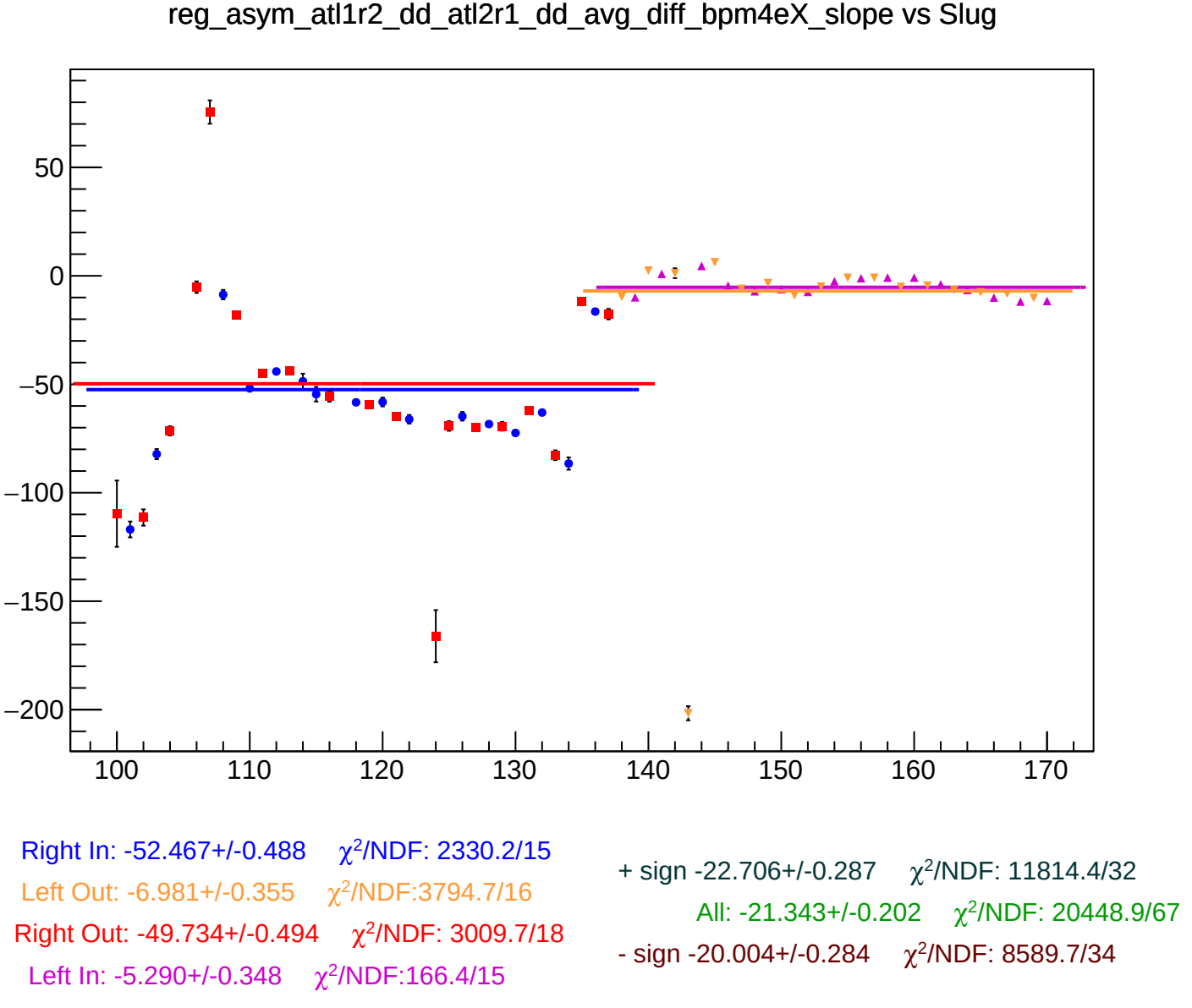
Right Out: 3.326+/-0.454 $\chi^2$/NDF: 181.8/18

Left In: 0.496+/-0.252 $\chi^2$/NDF:63.3/15

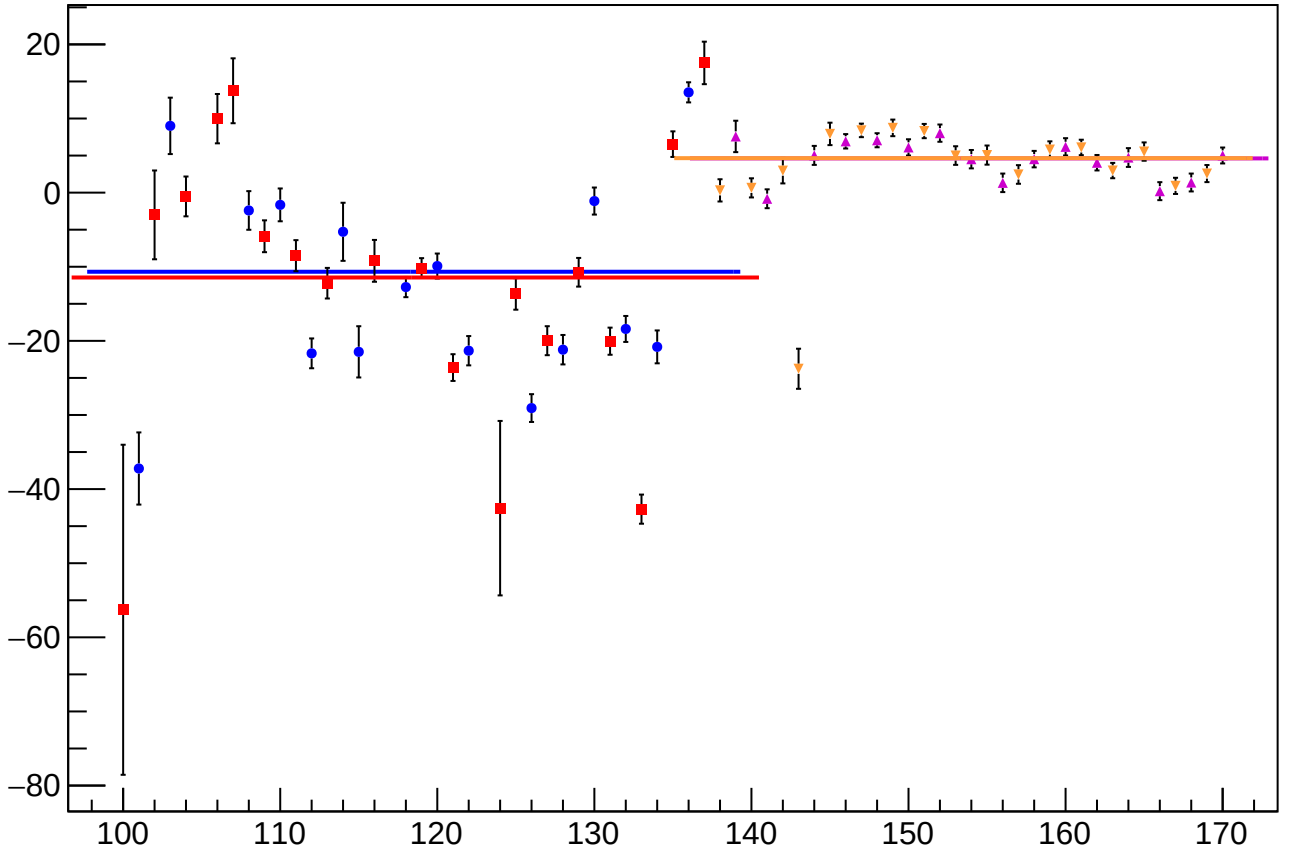
+ sign 0.694+/-0.218 $\chi^2$/NDF: 409.4/32

All: 0.926+/-0.155 $\chi^2$/NDF: 686.6/67

- sign 1.164+/-0.220 $\chi^2$/NDF: 274.9/34


reg_asym_atl1r2_dd_atl2r1_dd_avg_diff_bpm4eX_slope vs Slug
50
0
−50
−100
−150
−200
100
110
120
130
140
150
160
170
Right In: -52.467+/-0.488 χ²/NDF: 2330.2/15
Left Out: -6.981+/-0.355 χ²/NDF:3794.7/16
Right Out: -49.734+/-0.494 χ²/NDF: 3009.7/18
Left In: -5.290+/-0.348 χ²/NDF:166.4/15
+ sign -22.706+/-0.287 χ²/NDF: 11814.4/32
All: -21.343+/-0.202 χ²/NDF: 20448.9/67
- sign -20.004+/-0.284 χ²/NDF: 8589.7/34

reg_asym_atl1r2_dd_atl2r1_dd_avg_diff_bpm4eY_slope vs Slug




Right In: -10.675+/-0.505 $\chi^2$/NDF: 666.4/15

Left Out: 4.651+/-0.291 $\chi^2$/NDF:203.0/16

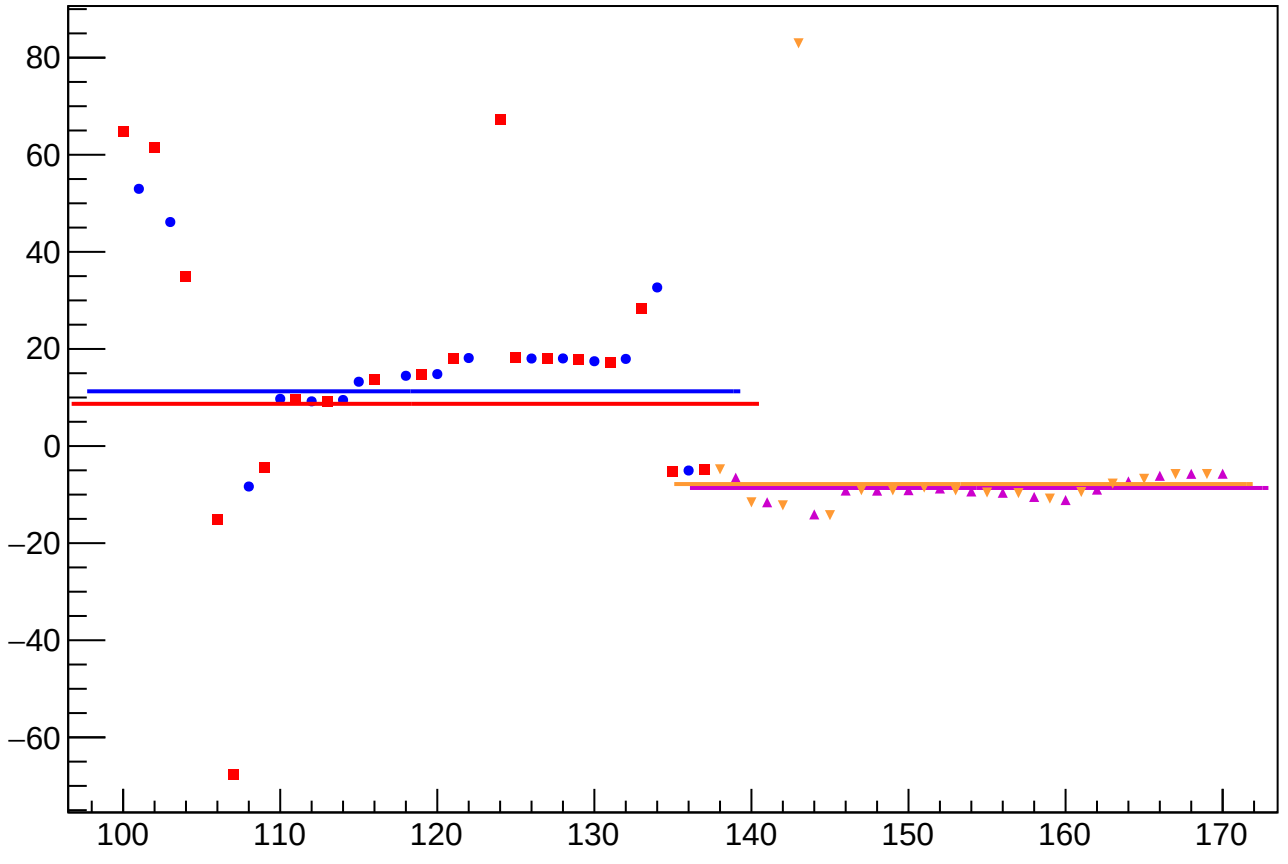
Right Out: -11.450+/-0.516 $\chi^2$/NDF: 665.7/18

Left In: 4.617+/-0.291 $\chi^2$/NDF:72.8/15

+ sign 0.835+/-0.252 $\chi^2$/NDF: 1559.9/32

All: 0.787+/-0.179 $\chi^2$/NDF: 3033.8/67

- sign 0.738+/-0.254 $\chi^2$/NDF: 1473.8/34




Right In: 11.277+/-0.030 $\chi^2$/NDF: 349346.9/15

Left Out: -7.826+/-0.013 $\chi^2$/NDF:485138.5/16

Right Out: 8.698+/-0.031 $\chi^2$/NDF: 436156.0/18

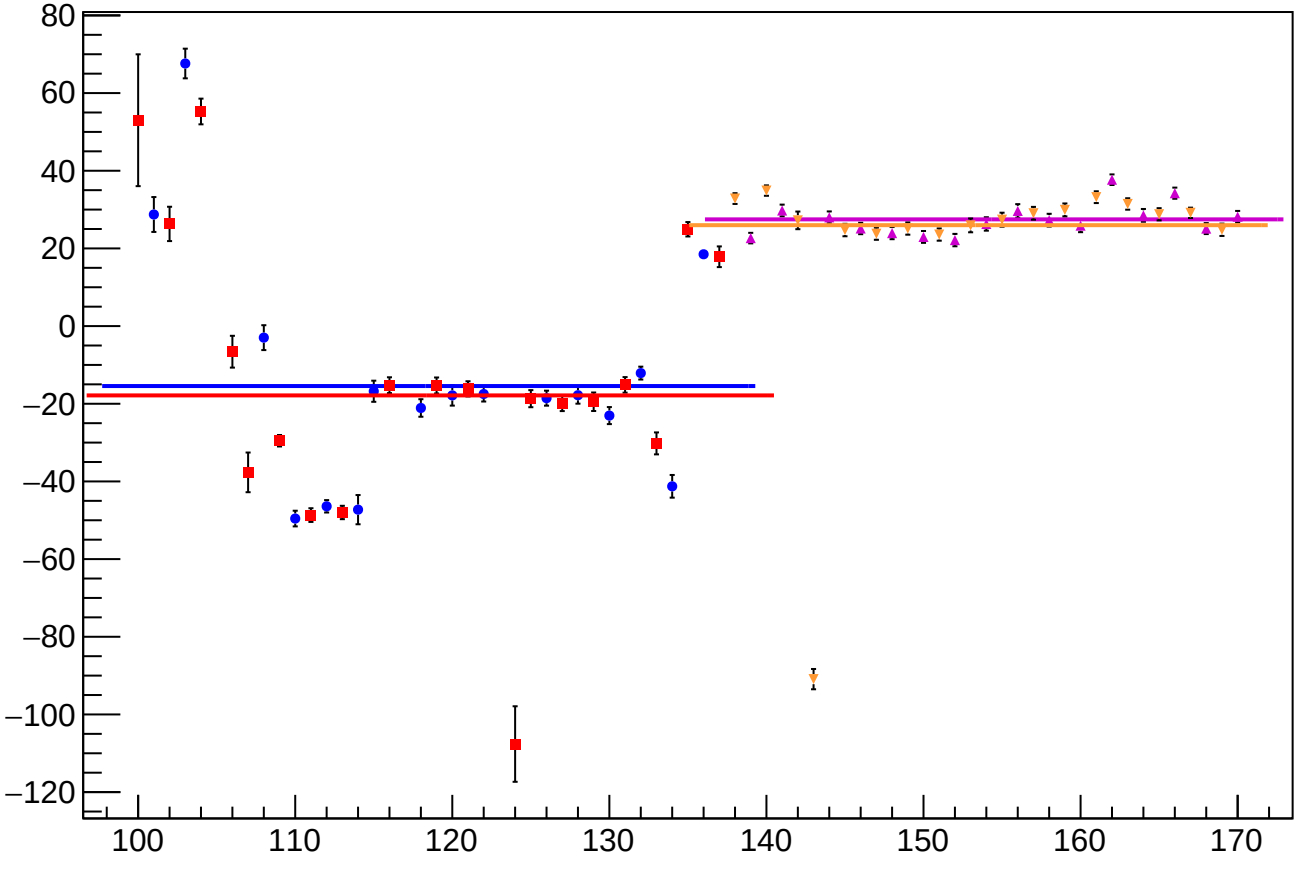
Left In: -8.634+/-0.013 $\chi^2$/NDF:26041.0/15

+ sign -4.695+/-0.012 $\chi^2$/NDF: 1175263.9/32

All: -5.425+/-0.009 $\chi^2$/NDF: 1904985.6/67

- sign -6.134+/-0.012 $\chi^2$/NDF: 722566.3/34

# reg_asym_at1_dd_at2_dd_avg_diff_bpm1X_slope vs Slug




Right In: -15.438+/-0.539 $\chi^2$/NDF: 2124.2/15

Left Out: 25.986+/-0.388 $\chi^2$/NDF:2131.7/16

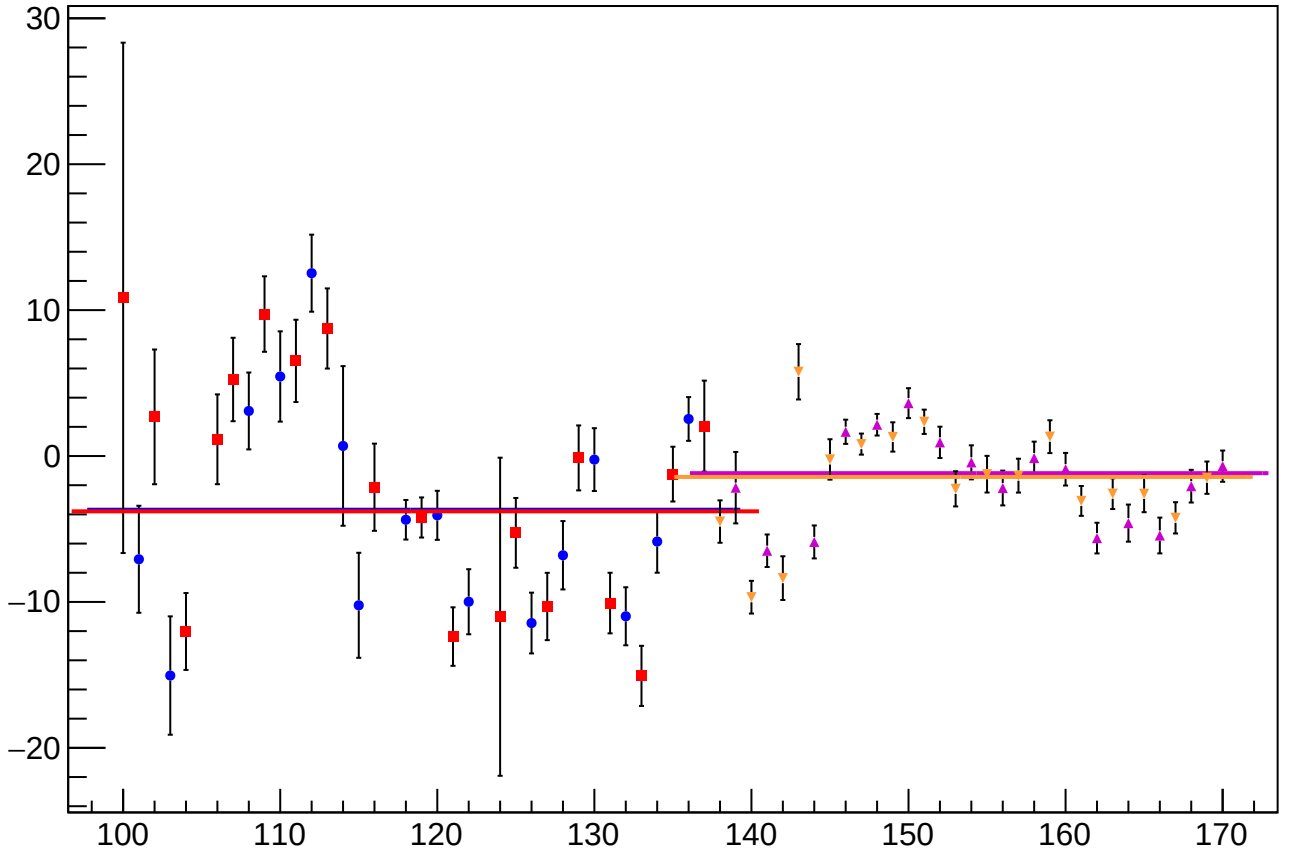
Right Out: -17.848+/-0.530 $\chi^2$/NDF: 2125.2/18

Left In: 27.481+/-0.382 $\chi^2$/NDF:127.3/15

+ sign 11.829+/-0.315 $\chi^2$/NDF: 8143.1/32

All: 11.887+/-0.221 $\chi^2$/NDF: 15209.8/67

- sign 11.944+/-0.310 $\chi^2$/NDF: 7066.7/34




Right In: -3.679+/-0.552 $\chi^2$/NDF: 124.0/15

Left Out: -1.432+/-0.268 $\chi^2$/NDF:150.9/16

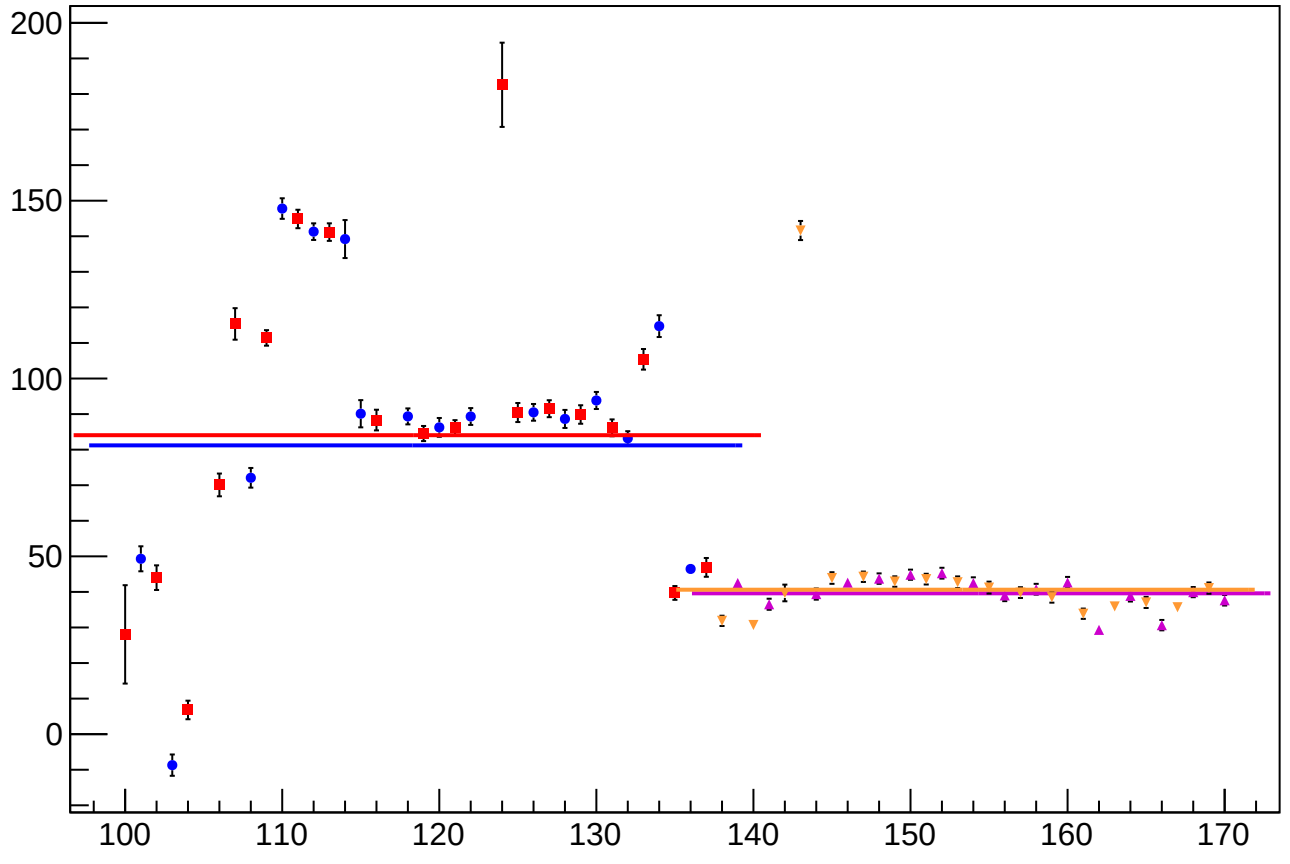
Right Out: -3.790+/-0.564 $\chi^2$/NDF: 161.2/18

Left In: -1.174+/-0.270 $\chi^2$/NDF:138.0/15

+ sign -1.862+/-0.241 $\chi^2$/NDF: 288.2/32

All: -1.762+/-0.171 $\chi^2$/NDF: 605.3/67

- sign -1.662+/-0.243 $\chi^2$/NDF: 316.8/34




Right In: 81.203+/-0.607 $\chi^2$/NDF: 3230.5/15

Left Out: 40.620+/-0.379 $\chi^2$/NDF:1573.1/16

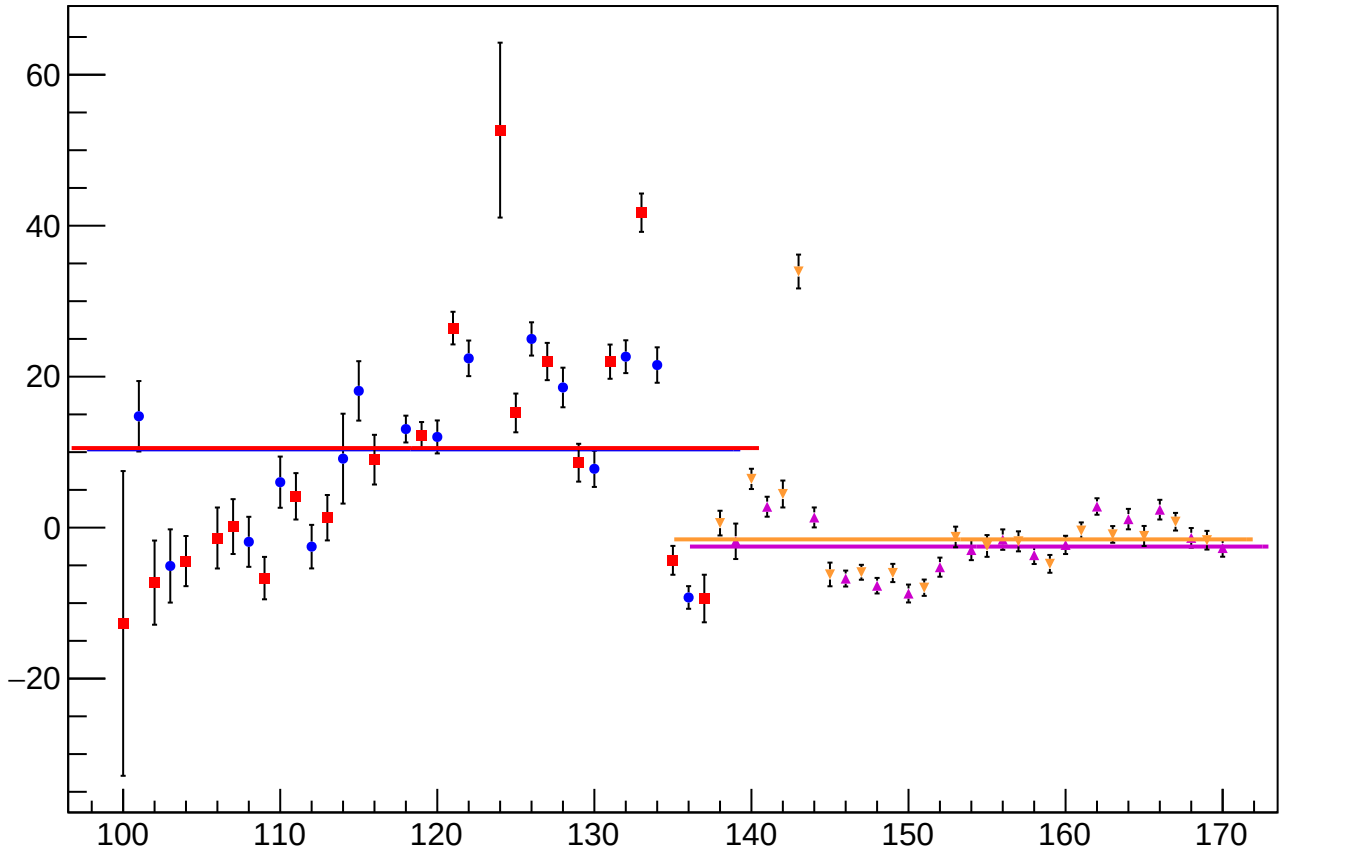
Right Out: 84.065+/-0.616 $\chi^2$/NDF: 3206.5/18

Left In: 39.603+/-0.372 $\chi^2$/NDF:156.5/15

+ sign 51.994+/-0.321 $\chi^2$/NDF: 8020.3/32

All: 51.742+/-0.226 $\chi^2$/NDF: 15197.7/67

- sign 51.494+/-0.319 $\chi^2$/NDF: 7176.1/34




Right In: 10.367+/-0.627 $\chi^2$/NDF: 359.8/15

Left Out: -1.556+/-0.311 $\chi^2$/NDF:390.0/16

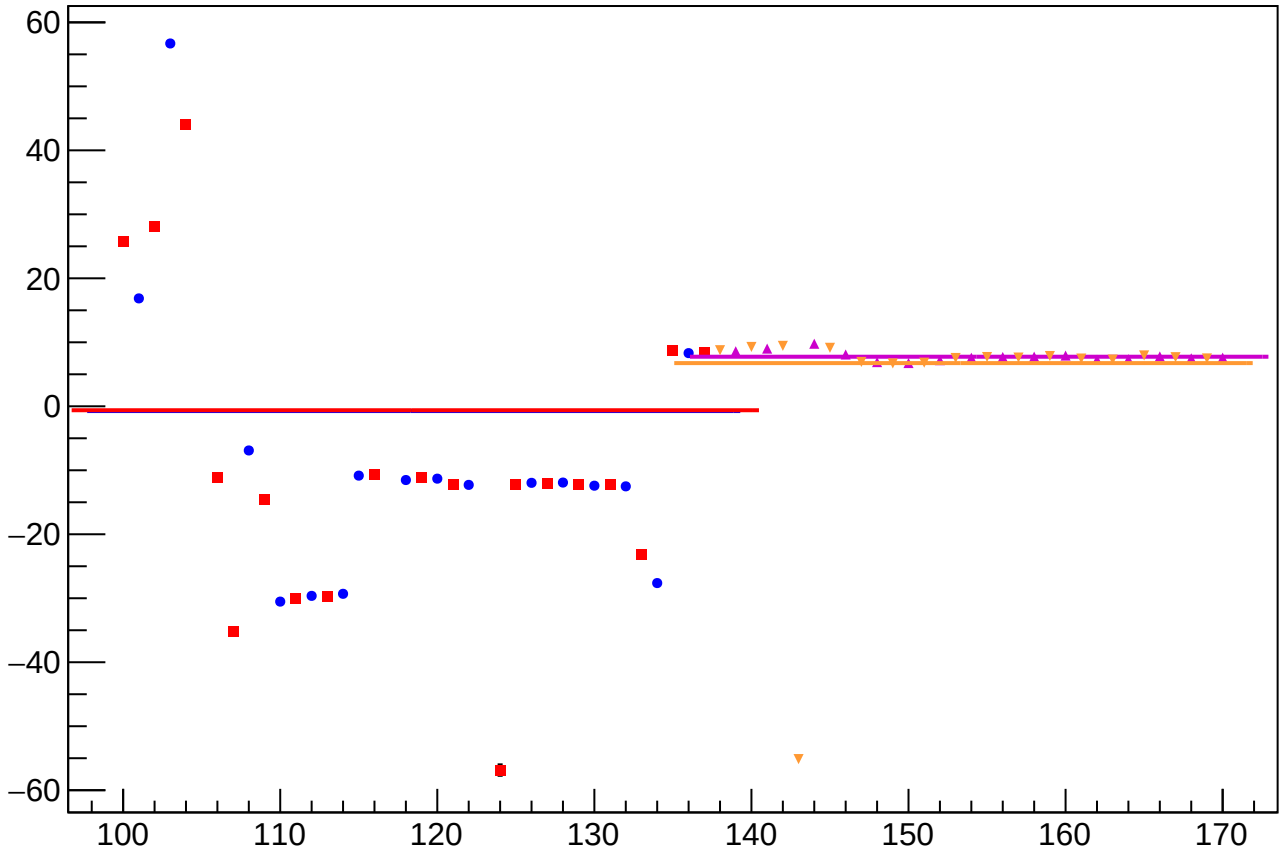
Right Out: 10.539+/-0.640 $\chi^2$/NDF: 470.7/18

Left In: -2.508+/-0.311 $\chi^2$/NDF:145.4/15

+ sign 0.802+/-0.279 $\chi^2$/NDF: 1040.4/32

All: 0.397+/-0.198 $\chi^2$/NDF: 1996.6/67

- sign -0.012+/-0.280 $\chi^2$/NDF: 952.0/34




Right In: -0.745+/-0.036 $\chi^2$/NDF: 367993.9/15

Left Out: 6.749+/-0.014 $\chi^2$/NDF:314259.0/16

Right Out: -0.618+/-0.037 $\chi^2$/NDF: 316492.6/18

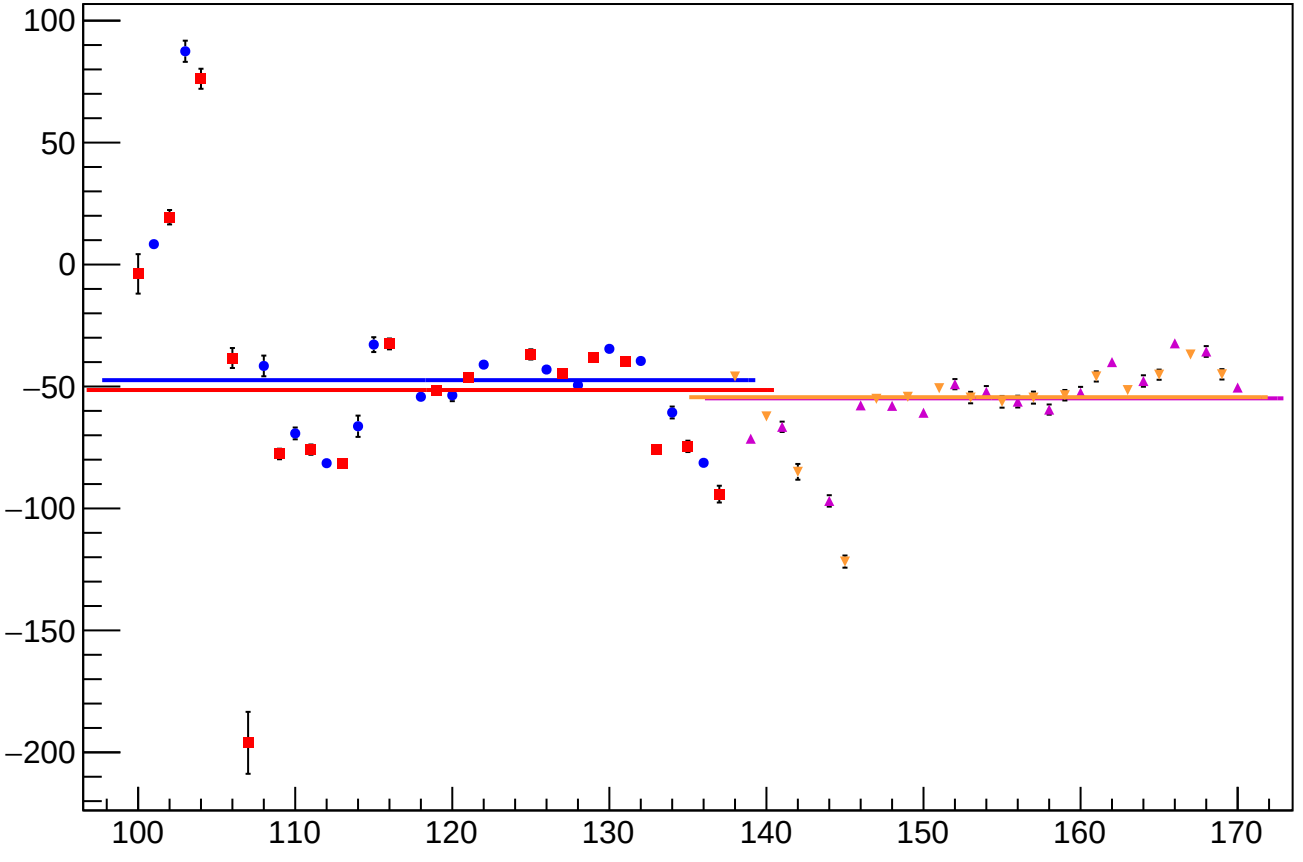
Left In: 7.746+/-0.014 $\chi^2$/NDF:2330.1/15

+ sign 5.737+/-0.013 $\chi^2$/NDF: 719987.2/32

All: 6.244+/-0.009 $\chi^2$/NDF: 1085854.3/67

- sign 6.735+/-0.013 $\chi^2$/NDF: 362955.2/34

# reg_asym_usl_atl1_avg_diff_bpm1X_slope vs Slug




Right In: -47.398+/-0.535 $\chi^2$/NDF: 2769.0/15

Left Out: -54.387+/-0.521 $\chi^2$/NDF:1024.8/15

Right Out: -51.442+/-0.545 $\chi^2$/NDF: 2872.7/17

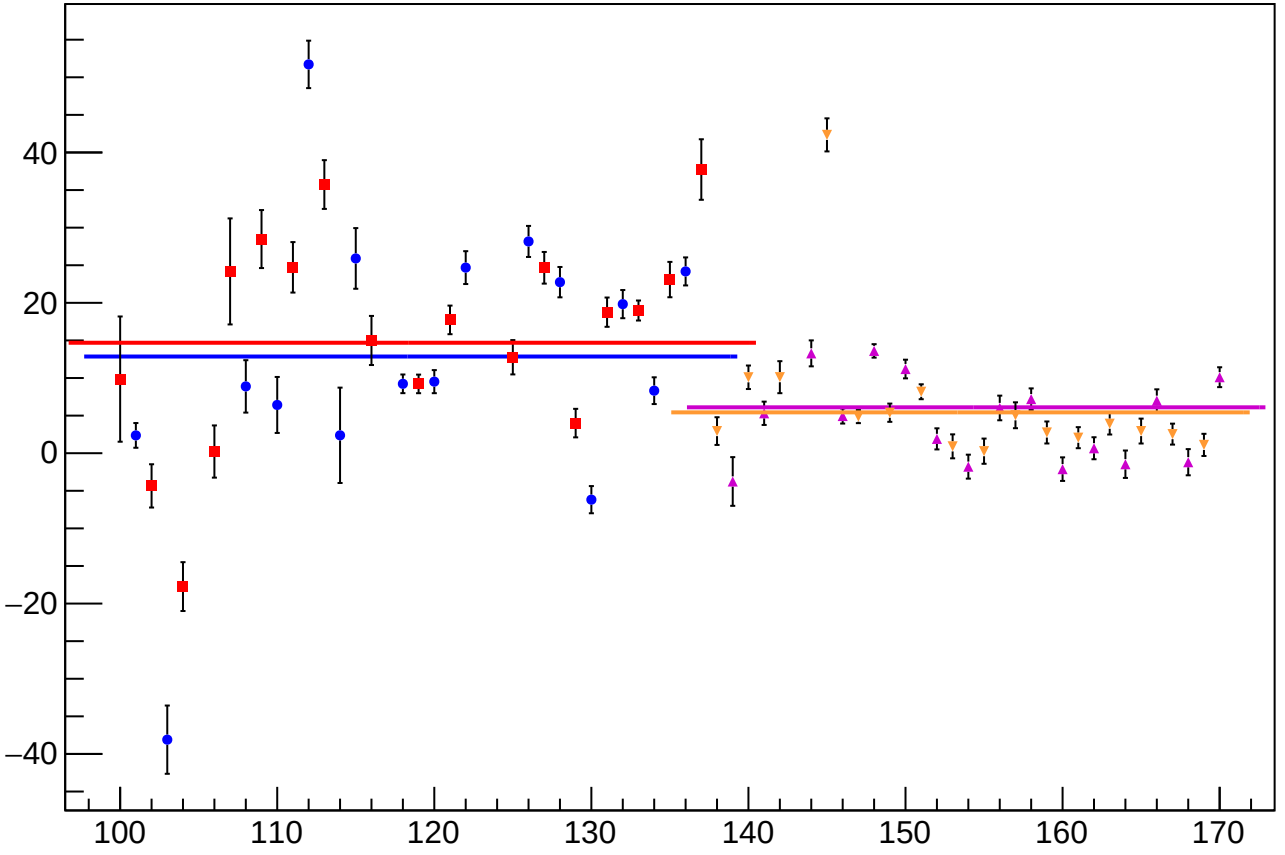
Left In: -54.857+/-0.509 $\chi^2$/NDF:780.9/15

+ sign -50.986+/-0.373 $\chi^2$/NDF: 3881.4/31

All: -52.131+/-0.263 $\chi^2$/NDF: 7574.8/65

- sign -53.267+/-0.372 $\chi^2$/NDF: 3674.6/33

# reg_asym_usl_atl1_avg_diff_bpm4aY_slope vs Slug




Right In: 12.860+/-0.519 $\chi^2$/NDF: 625.5/15

Left Out: 5.432+/-0.352 $\chi^2$/NDF:348.2/15

Right Out: 14.691+/-0.544 $\chi^2$/NDF: 364.1/17

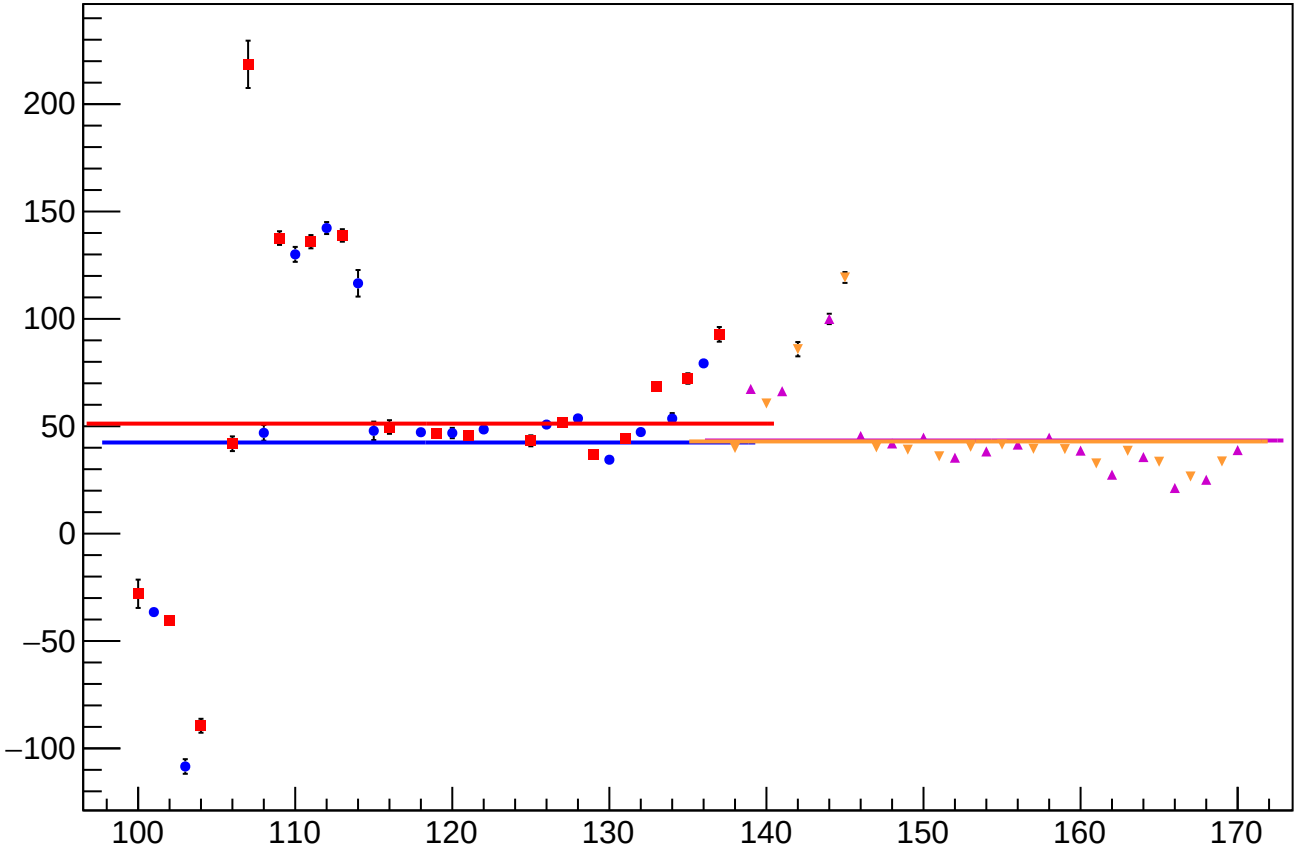
Left In: 6.103+/-0.353 $\chi^2$/NDF:234.8/15

+ sign 7.778+/-0.292 $\chi^2$/NDF: 1114.0/31

All: 8.207+/-0.208 $\chi^2$/NDF: 1892.5/65

- sign 8.649+/-0.296 $\chi^2$/NDF: 774.1/33

# reg_asym_usl_atl1_avg_diff_bpm4eX_slope vs Slug




Right In: 42.437+/-0.584 $\chi^2$/NDF: 7168.9/15

Left Out: 42.931+/-0.507 $\chi^2$/NDF:1357.0/15

Right Out: 51.226+/-0.615 $\chi^2$/NDF: 6611.3/17

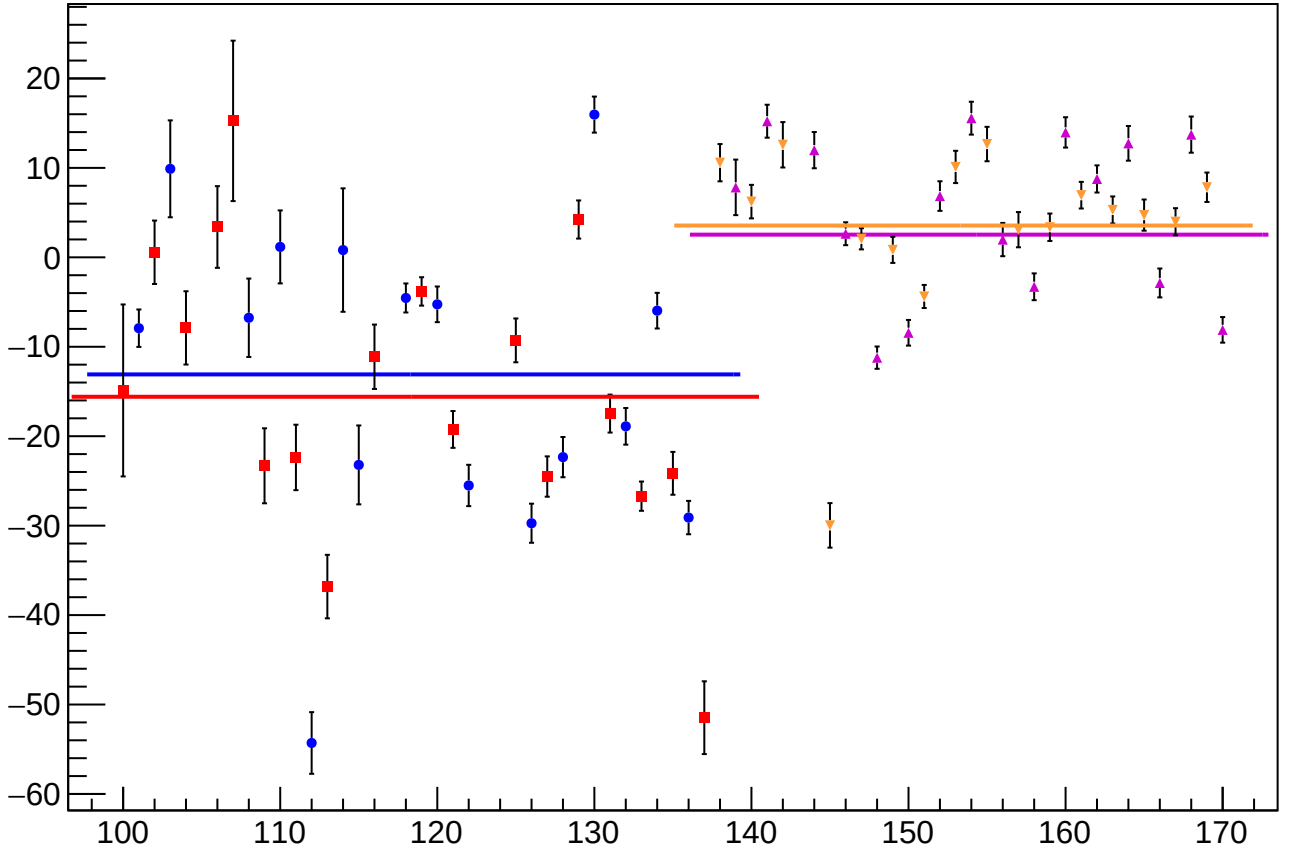
Left In: 43.366+/-0.494 $\chi^2$/NDF:1165.1/15

+ sign 42.719+/-0.383 $\chi^2$/NDF: 8526.3/31

All: 44.573+/-0.272 $\chi^2$/NDF: 16449.2/65

- sign 46.452+/-0.385 $\chi^2$/NDF: 7875.6/33

# reg_asym_usl_atl1_avg_diff_bpm4eY_slope vs Slug




Right In: -13.090+/-0.600 $\chi^2$/NDF: 639.9/15

Left Out: 3.555+/-0.412 $\chi^2$/NDF:299.7/15

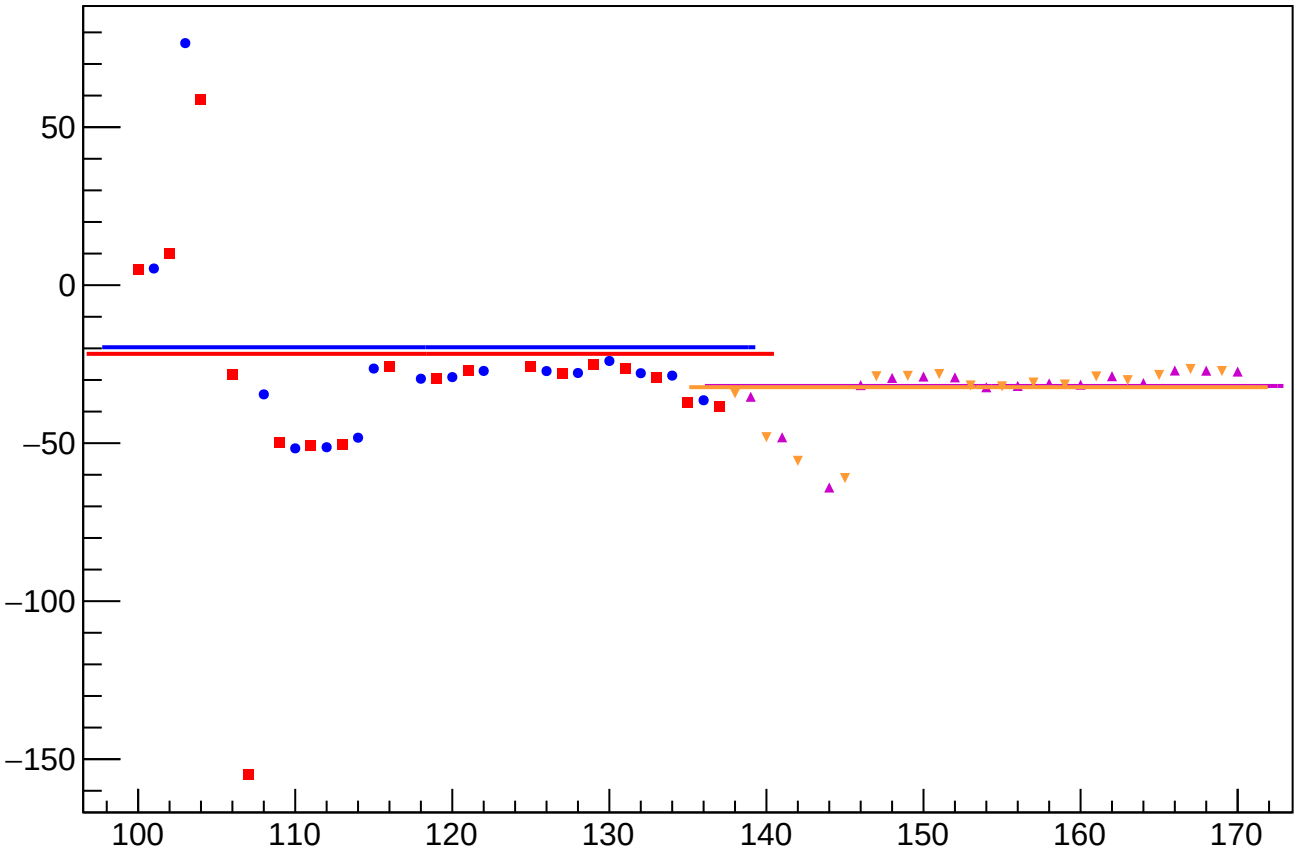
Right Out: -15.589+/-0.627 $\chi^2$/NDF: 401.8/17

Left In: 2.535+/-0.410 $\chi^2$/NDF:511.7/15

\+ sign -1.777+/-0.339 $\chi^2$/NDF: 1463.1/31

All: -2.332+/-0.241 $\chi^2$/NDF: 2967.5/65

\- sign -2.900+/-0.343 $\chi^2$/NDF: 1498.9/33




Right In: -19.644+/-0.036 $\chi^2$/NDF: 646925.7/15

Left Out: -32.282+/-0.019 $\chi^2$/NDF:174469.9/15

Right Out: -21.730+/-0.039 $\chi^2$/NDF: 546659.9/17

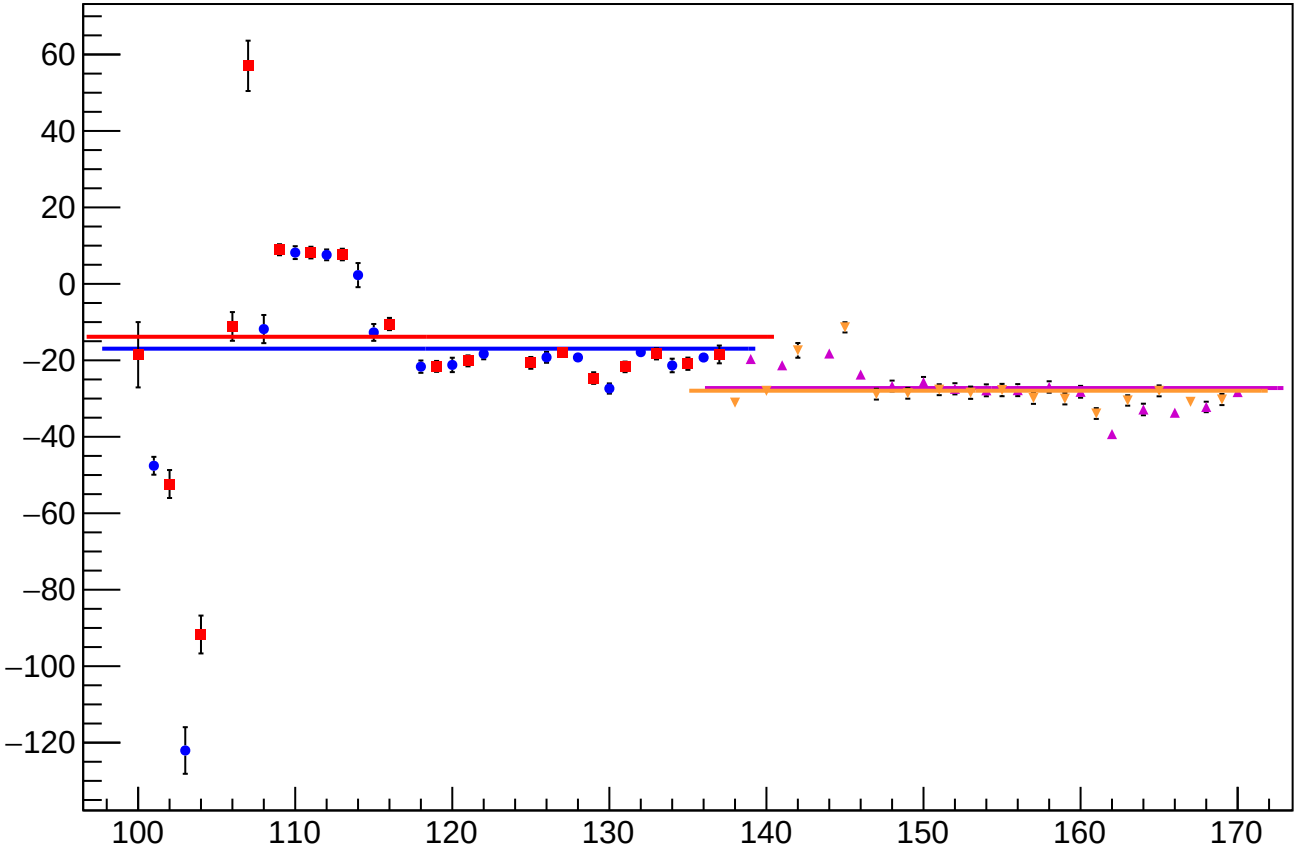
Left In: -31.895+/-0.018 $\chi^2$/NDF:144825.1/15

+ sign -29.534+/-0.017 $\chi^2$/NDF: 917240.6/31

All: -29.783+/-0.012 $\chi^2$/NDF: 1664937.8/65

- sign -30.028+/-0.017 $\chi^2$/NDF: 747262.1/33

# reg_asym_usl_atl1_dd_diff_bpm1X_slope vs Slug




Right In: -16.949+/-0.404 $\chi^2$/NDF: 1128.2/15

Left Out: -27.946+/-0.352 $\chi^2$/NDF:224.5/15

Right Out: -13.837+/-0.409 $\chi^2$/NDF: 1333.2/17

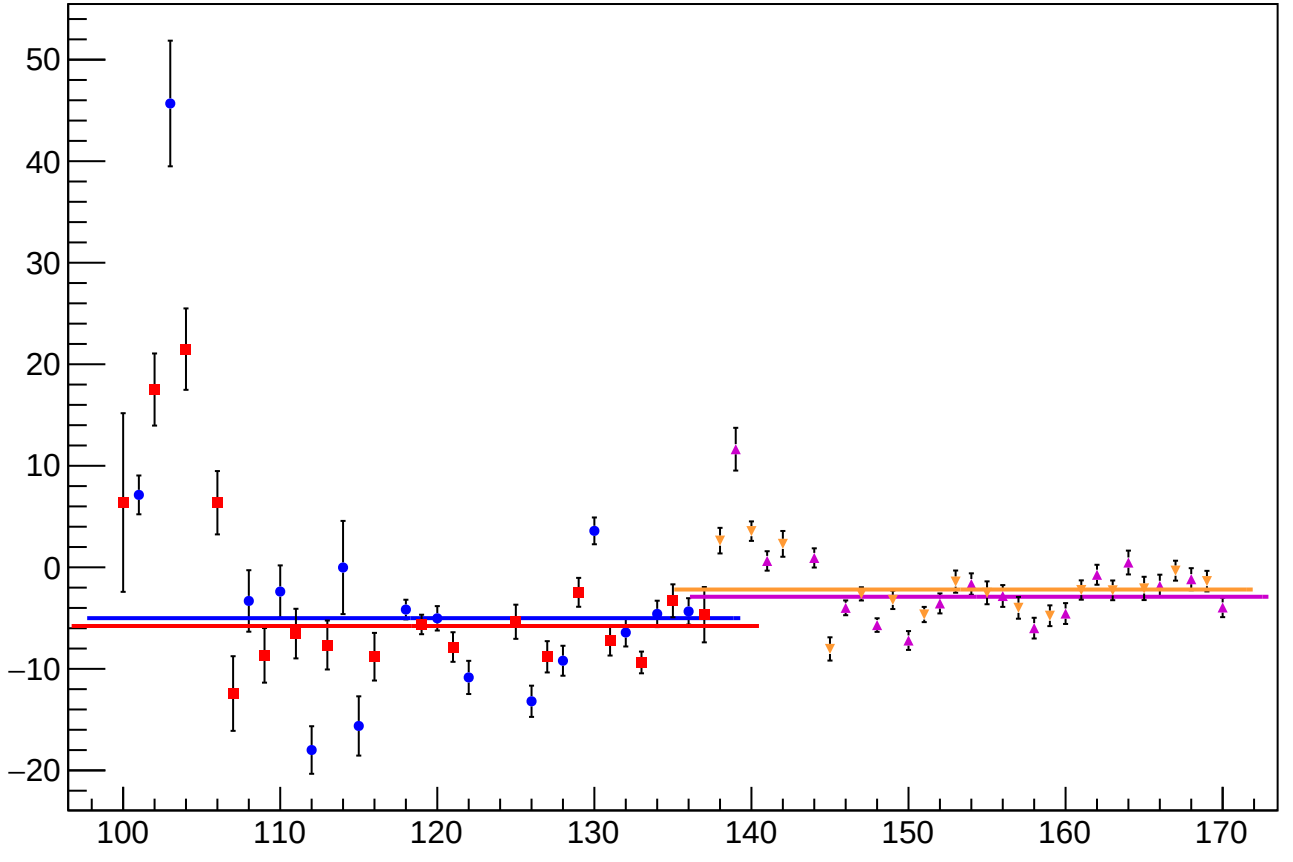
Left In: -27.251+/-0.343 $\chi^2$/NDF:264.9/15

+ sign -23.203+/-0.265 $\chi^2$/NDF: 1774.4/31

All: -22.450+/-0.187 $\chi^2$/NDF: 4019.1/65

- sign -21.710+/-0.263 $\chi^2$/NDF: 2228.8/33

# reg_asym_usl_atl1_dd_diff_bpm4aY_slope vs Slug




Right In: -5.006+/-0.401 $\chi^2$/NDF: 247.8/15

Left Out: -2.186+/-0.244 $\chi^2$/NDF:115.6/15

Right Out: -5.779+/-0.419 $\chi^2$/NDF: 139.3/17

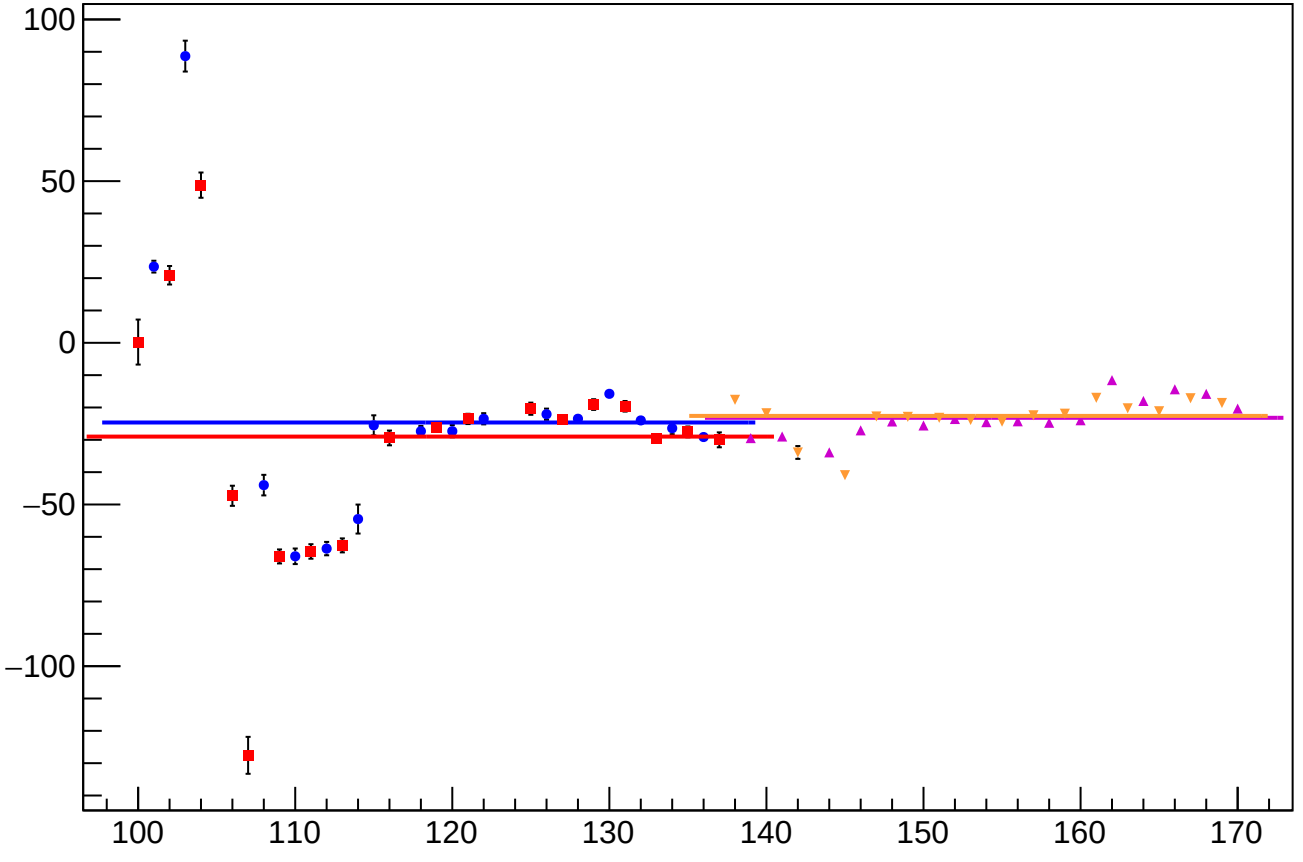
Left In: -2.899+/-0.243 $\chi^2$/NDF:150.2/15

+ sign -2.945+/-0.208 $\chi^2$/NDF: 399.5/31

All: -3.281+/-0.148 $\chi^2$/NDF: 729.6/65

- sign -3.622+/-0.210 $\chi^2$/NDF: 324.9/33

# reg_asym_usl_atl1_dd_diff_bpm4eX_slope vs Slug




Right In: -24.641+/-0.455 $\chi^2$/NDF: 2051.8/15

Left Out: -22.602+/-0.343 $\chi^2$/NDF:280.5/15

Right Out: -29.002+/-0.475 $\chi^2$/NDF: 1952.3/17

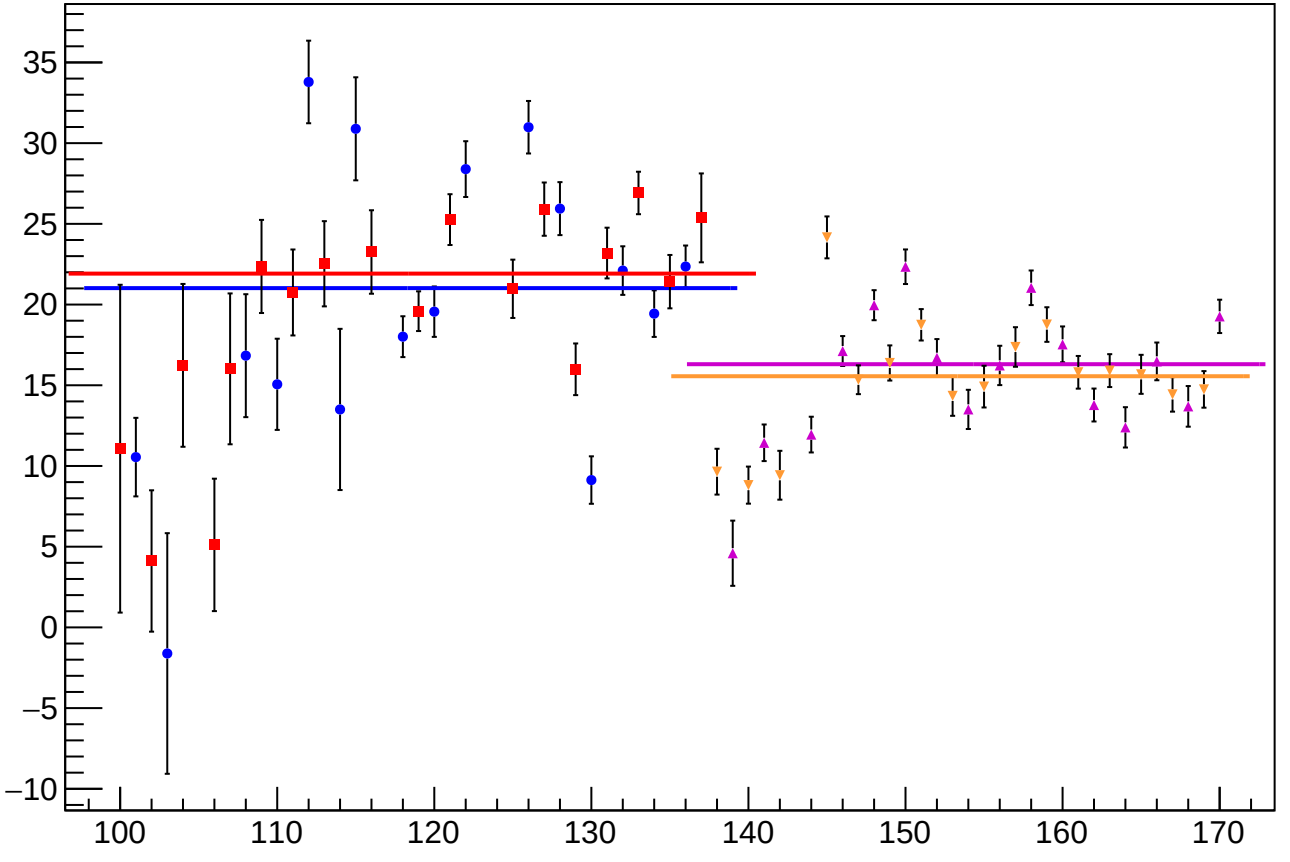
Left In: -23.190+/-0.335 $\chi^2$/NDF:310.1/15

+ sign -23.342+/-0.274 $\chi^2$/NDF: 2345.1/31

All: -24.231+/-0.194 $\chi^2$/NDF: 4728.5/65

- sign -25.117+/-0.274 $\chi^2$/NDF: 2362.3/33

# reg_asym_usl_atl1_dd_diff_bpm4eY_slope vs Slug




Right In: 21.019+/-0.458 $\chi^2$/NDF: 209.6/15

Left Out: 15.560+/-0.283 $\chi^2$/NDF:137.7/15

Right Out: 21.918+/-0.478 $\chi^2$/NDF: 82.5/17

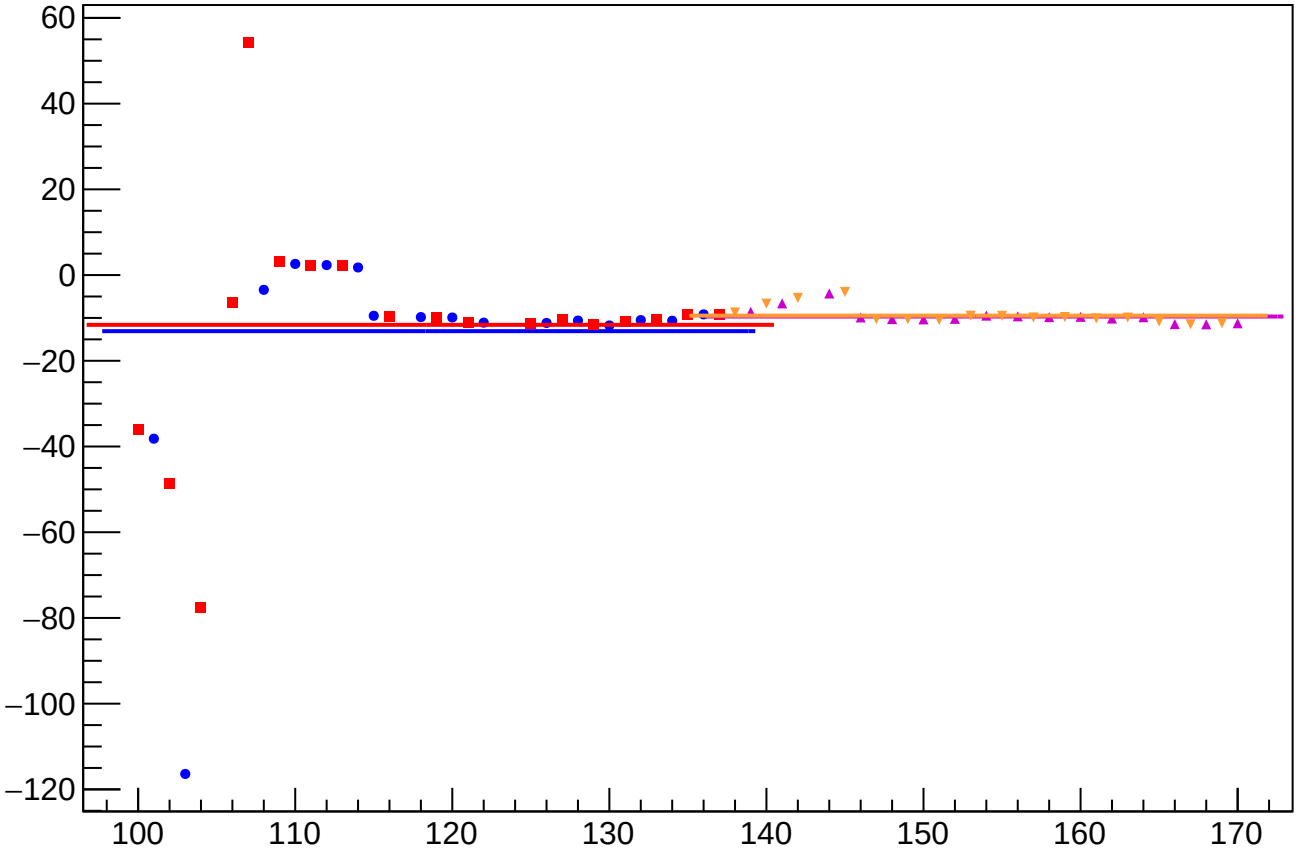
Left In: 16.305+/-0.280 $\chi^2$/NDF:170.2/15

+ sign 17.065+/-0.241 $\chi^2$/NDF: 450.1/31

All: 17.401+/-0.171 $\chi^2$/NDF: 809.2/65

- sign 17.741+/-0.242 $\chi^2$/NDF: 355.2/33

# reg_asym_usl_atl1_dd_diff_bpm12X_slope vs Slug




Right In: -13.086+/-0.028 $\chi^2$/NDF: 344941.2/15

Left Out: -9.464+/-0.013 $\chi^2$/NDF:21198.5/15

Right Out: -11.610+/-0.031 $\chi^2$/NDF: 314183.9/17

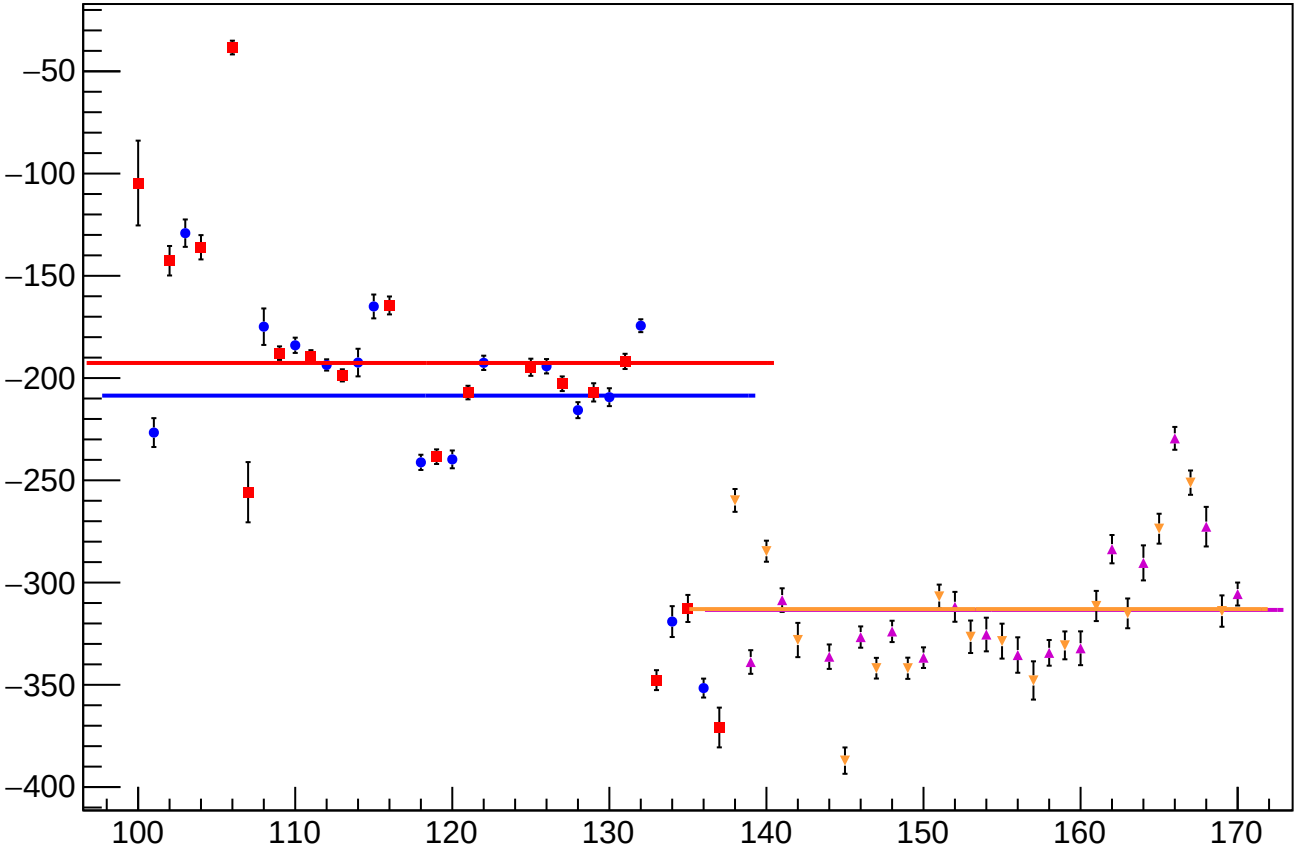
Left In: -9.671+/-0.012 $\chi^2$/NDF:16551.4/15

+ sign -10.081+/-0.012 $\chi^2$/NDF: 379627.5/31

All: -10.011+/-0.008 $\chi^2$/NDF: 713819.3/65

- sign -9.943+/-0.012 $\chi^2$/NDF: 334122.0/33

# reg_asym_usl_atl2_avg_diff_bpm1X_slope vs Slug




Right In: -208.586+/-1.067 $\chi^2$/NDF: 1751.1/15

Left Out: -312.972+/-1.627 $\chi^2$/NDF:485.5/15

Right Out: -192.617+/-0.999 $\chi^2$/NDF: 4207.1/17

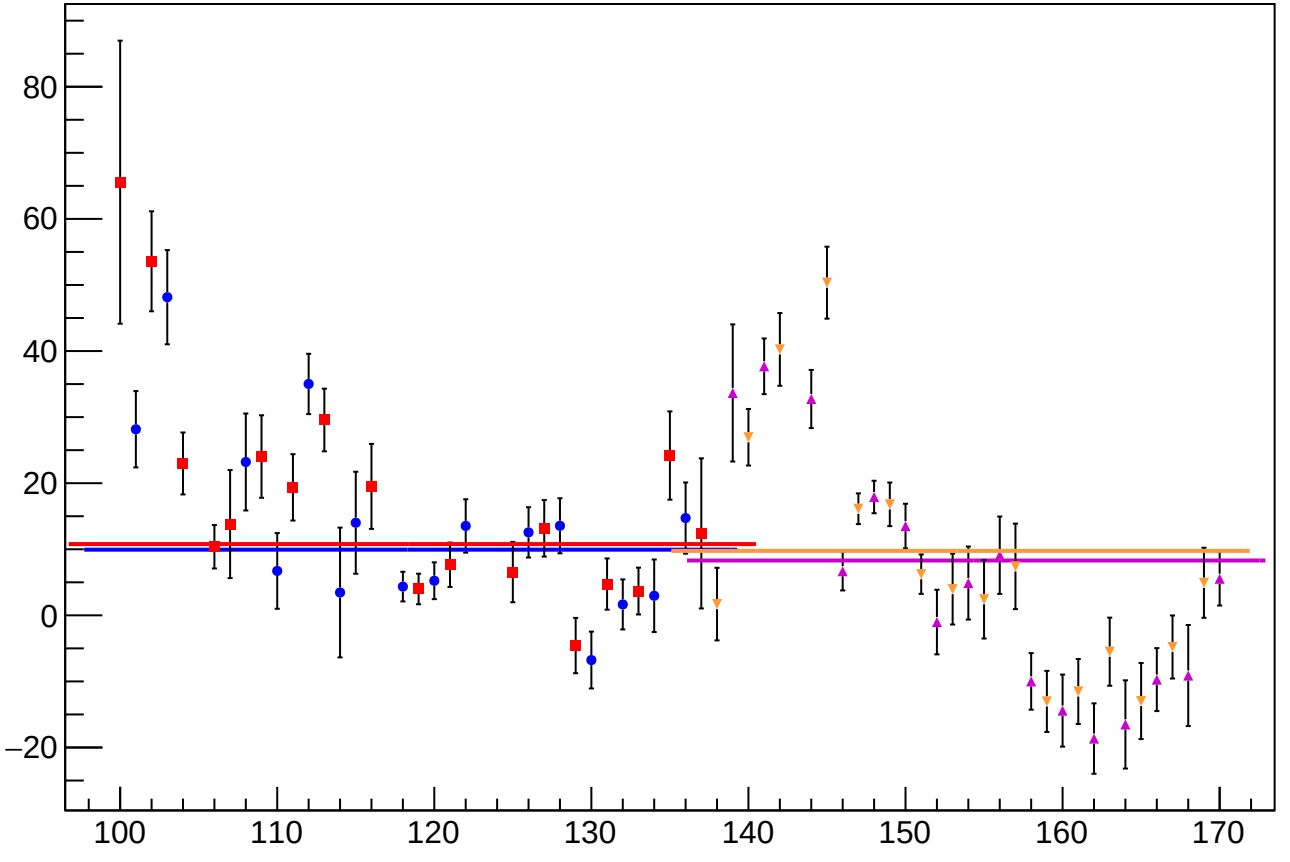
Left In: -313.377+/-1.588 $\chi^2$/NDF:362.3/15

+ sign -239.971+/-0.892 $\chi^2$/NDF: 5116.9/31

All: -233.061+/-0.614 $\chi^2$/NDF: 13943.8/65

- sign -226.850+/-0.846 $\chi^2$/NDF: 8712.9/33

# reg_asym_usl_atl2_avg_diff_bpm4aY_slope vs Slug




Right In: 9.938+/-1.065 $\chi^2$/NDF: 106.6/15

Left Out: 9.755+/-1.074 $\chi^2$/NDF:198.2/15

Right Out: 10.788+/-1.044 $\chi^2$/NDF: 105.1/17

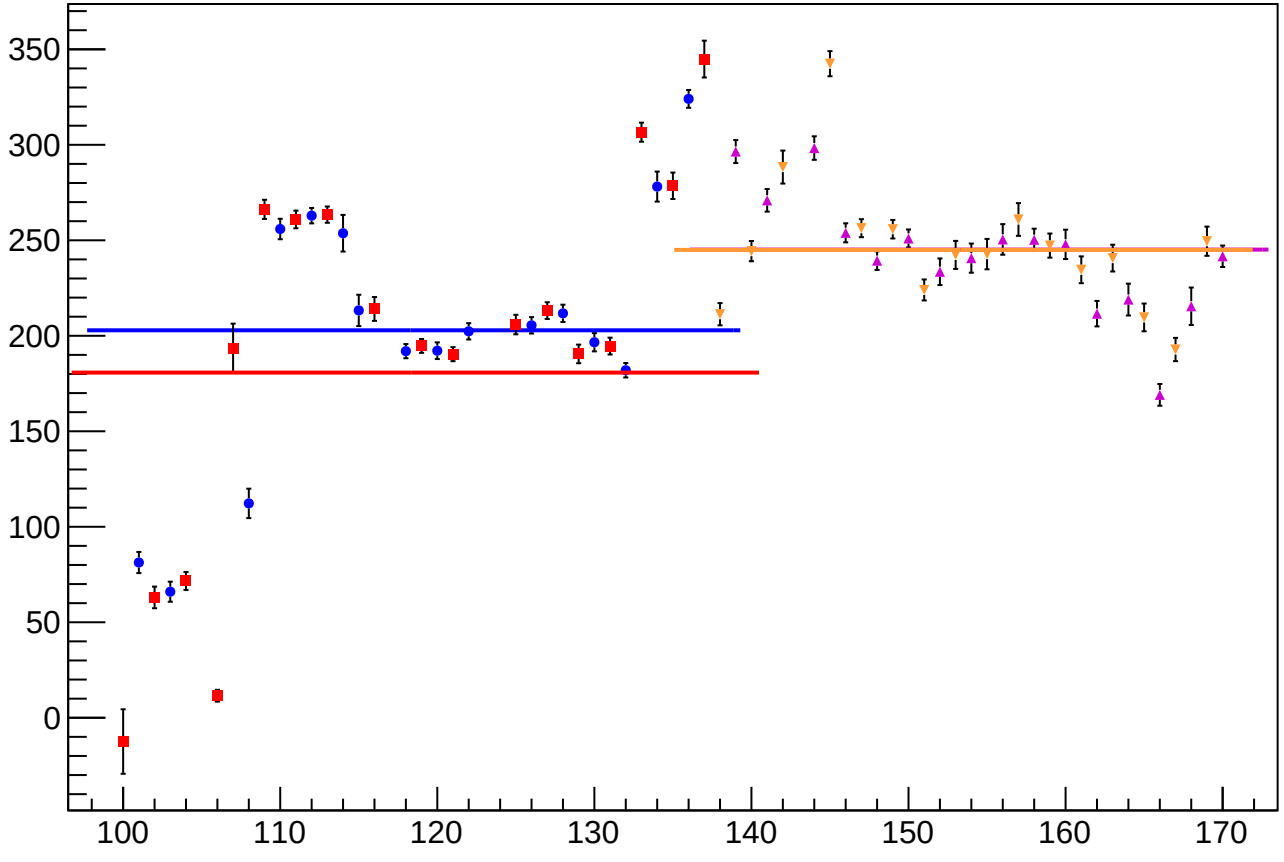
Left In: 8.301+/-1.078 $\chi^2$/NDF:202.4/15

+ sign 9.847+/-0.757 $\chi^2$/NDF: 304.8/31

All: 9.715+/-0.533 $\chi^2$/NDF: 615.1/65

- sign 9.585+/-0.750 $\chi^2$/NDF: 310.2/33

# reg_asym_usl_atl2_avg_diff_bpm4eX_slope vs Slug




Right In: 202.874+/-1.226 $\chi^2$/NDF: 2464.2/15

Left Out: 244.962+/-1.583 $\chi^2$/NDF:407.6/15

Right Out: 180.731+/-1.144 $\chi^2$/NDF: 6347.9/17

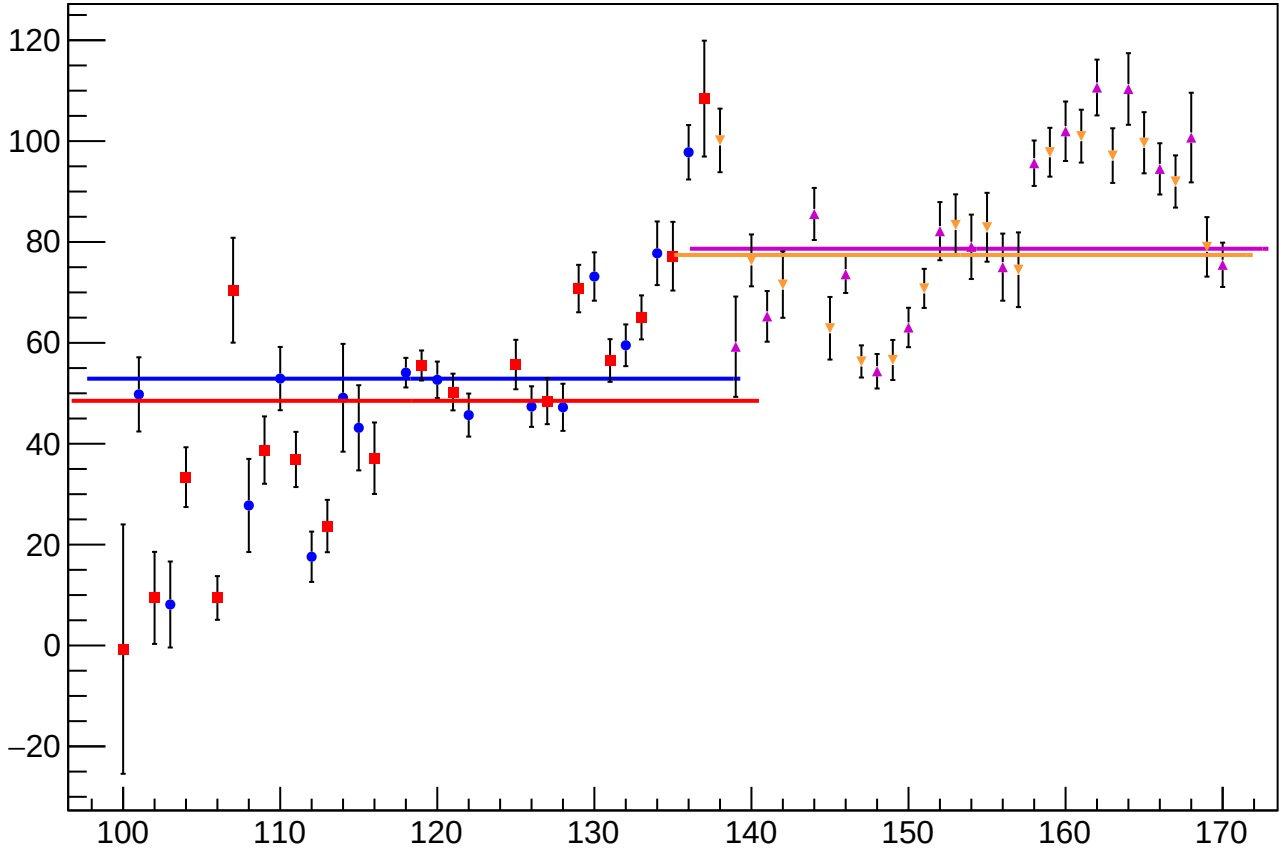
Left In: 245.132+/-1.543 $\chi^2$/NDF:399.7/15

+ sign 218.643+/-0.969 $\chi^2$/NDF: 3313.6/31

All: 210.698+/-0.667 $\chi^2$/NDF: 11312.8/65

- sign 203.556+/-0.919 $\chi^2$/NDF: 7871.5/33

# reg_asym_usl_atl2_avg_diff_bpm4eY_slope vs Slug




Right In: 52.899+/-1.242 $\chi^2$/NDF: 198.3/15

Left Out: 77.425+/-1.276 $\chi^2$/NDF:167.9/15

Right Out: 48.510+/-1.214 $\chi^2$/NDF: 240.0/17

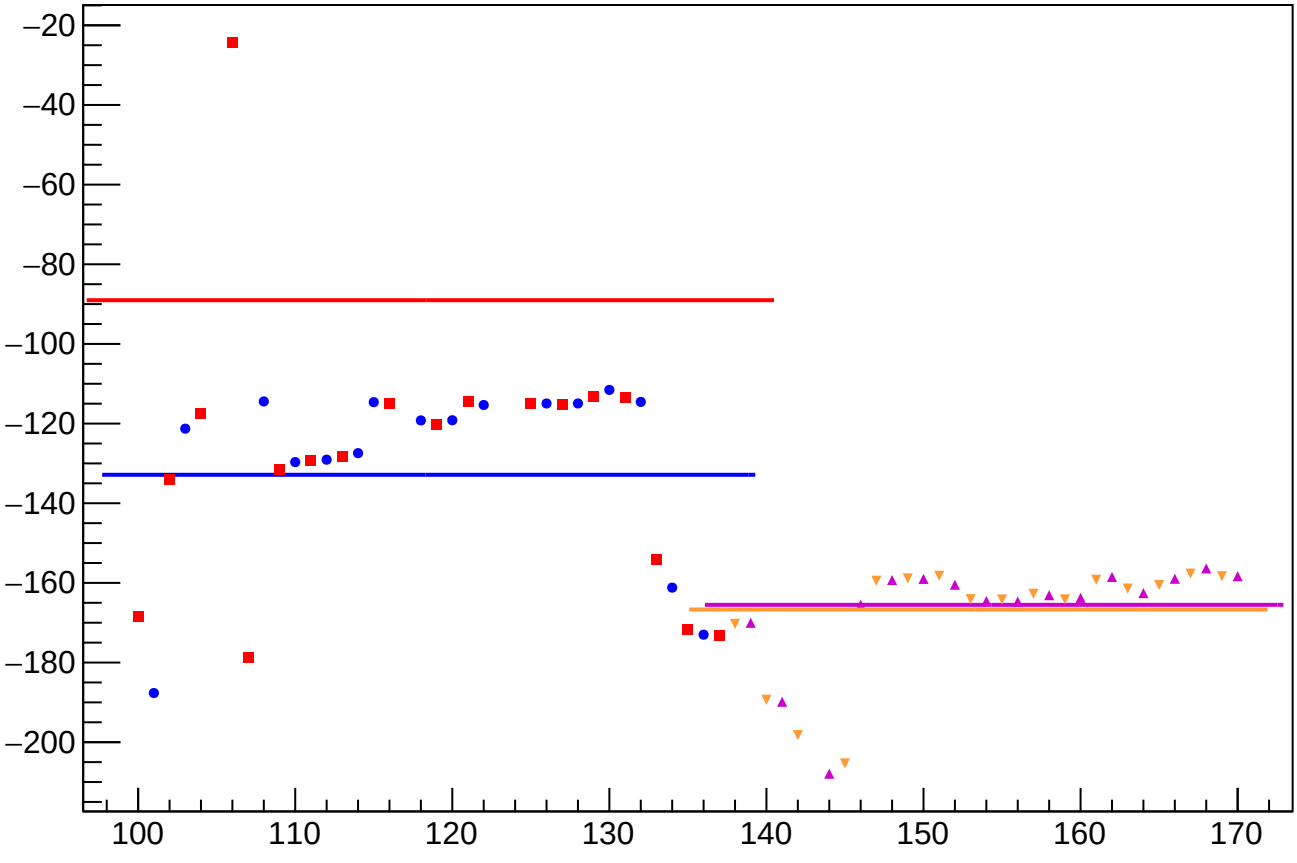
Left In: 78.662+/-1.268 $\chi^2$/NDF:181.2/15

+ sign 64.822+/-0.890 $\chi^2$/NDF: 556.0/31

All: 63.865+/-0.625 $\chi^2$/NDF: 1274.4/65

- sign 62.936+/-0.877 $\chi^2$/NDF: 716.2/33

# reg_asym_usl_atl2_avg_diff_bpm12X_slope vs Slug




Right In: -132.856+/-0.081 $\chi^2$/NDF: 93497.9/15

Left Out: -166.683+/-0.061 $\chi^2$/NDF:48486.9/15

Right Out: -89.020+/-0.064 $\chi^2$/NDF: 728110.1/17

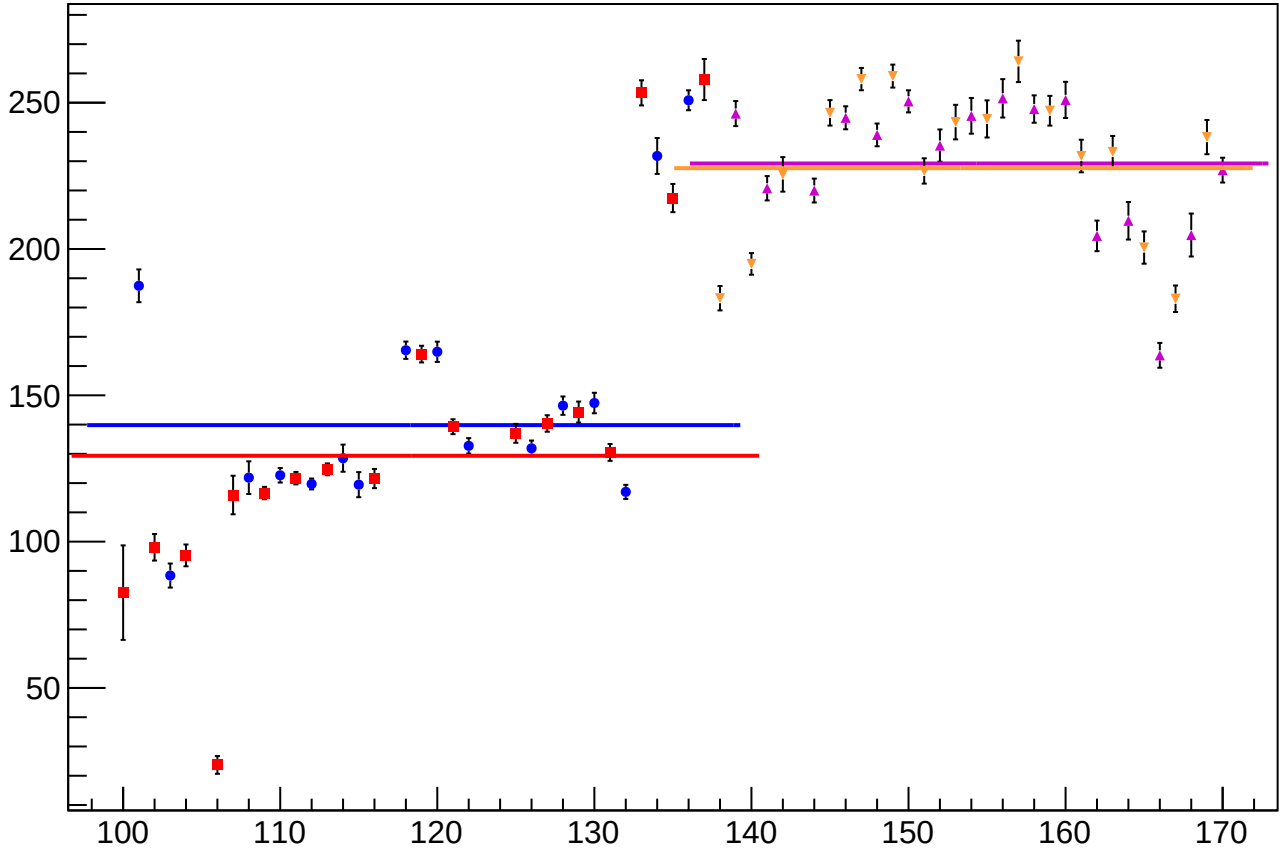
Left In: -165.510+/-0.059 $\chi^2$/NDF:40684.5/15

+ sign -154.526+/-0.049 $\chi^2$/NDF: 252742.5/31

All: -141.200+/-0.032 $\chi^2$/NDF: 1929341.2/65

- sign -130.703+/-0.043 $\chi^2$/NDF: 1543135.0/33

# reg_asym_usl_atl2_dd_diff_bpm1X_slope vs Slug




Right In: 139.810+/-0.785 $\chi^2$/NDF: 1964.9/15

Left Out: 227.618+/-1.205 $\chi^2$/NDF:520.8/15

Right Out: 129.344+/-0.734 $\chi^2$/NDF: 3123.5/17

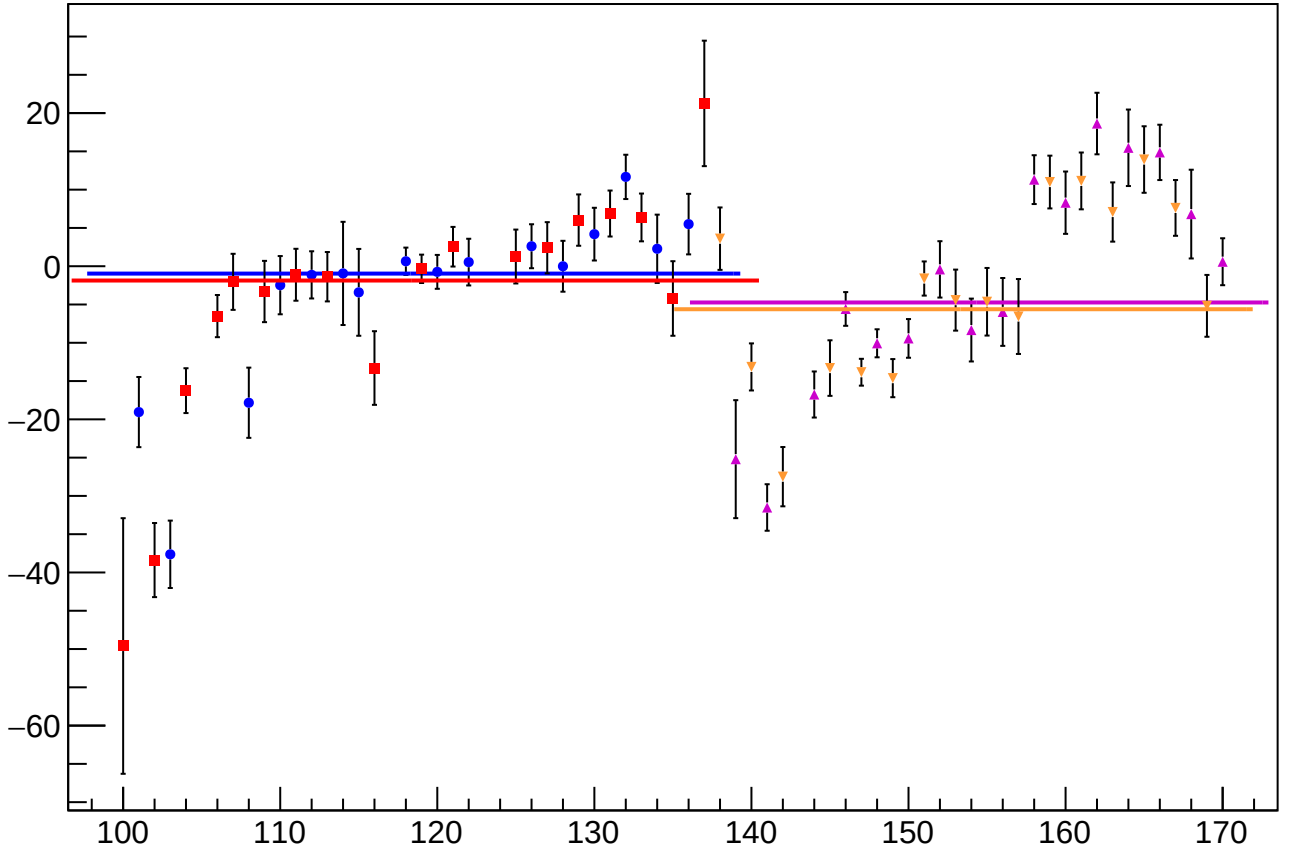
Left In: 229.219+/-1.179 $\chi^2$/NDF:409.0/15

+ sign 165.942+/-0.658 $\chi^2$/NDF: 6213.4/31

All: 161.362+/-0.452 $\chi^2$/NDF: 15007.2/65

- sign 157.247+/-0.623 $\chi^2$/NDF: 8701.6/33

# reg_asym_usl_atl2_dd_diff_bpm4aY_slope vs Slug




Right In: -0.963+/-0.808 $\chi^2$/NDF: 126.1/15

Left Out: -5.617+/-0.799 $\chi^2$/NDF:173.9/15

Right Out: -1.869+/-0.784 $\chi^2$/NDF: 133.2/17

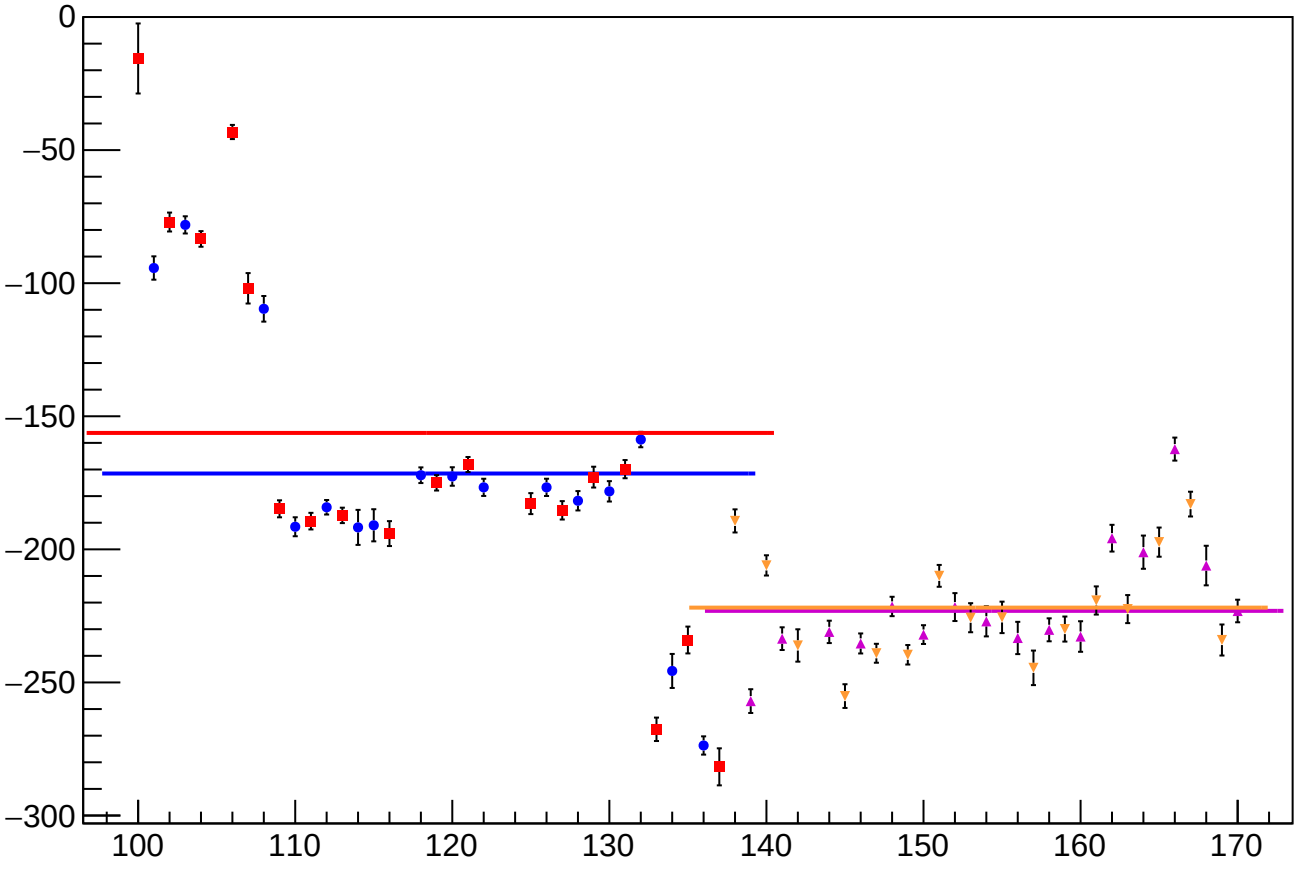
Left In: -4.735+/-0.802 $\chi^2$/NDF:237.2/15

+ sign -3.316+/-0.568 $\chi^2$/NDF: 316.7/31

All: -3.292+/-0.399 $\chi^2$/NDF: 693.6/65

- sign -3.268+/-0.561 $\chi^2$/NDF: 376.9/33

# reg_asym_usl_atl2_dd_diff_bpm4eX_slope vs Slug




Right In: -171.506+/-0.907 $\chi^2$/NDF: 2442.8/15

Left Out: -221.893+/-1.175 $\chi^2$/NDF:300.5/15

Right Out: -156.260+/-0.847 $\chi^2$/NDF: 4904.3/17

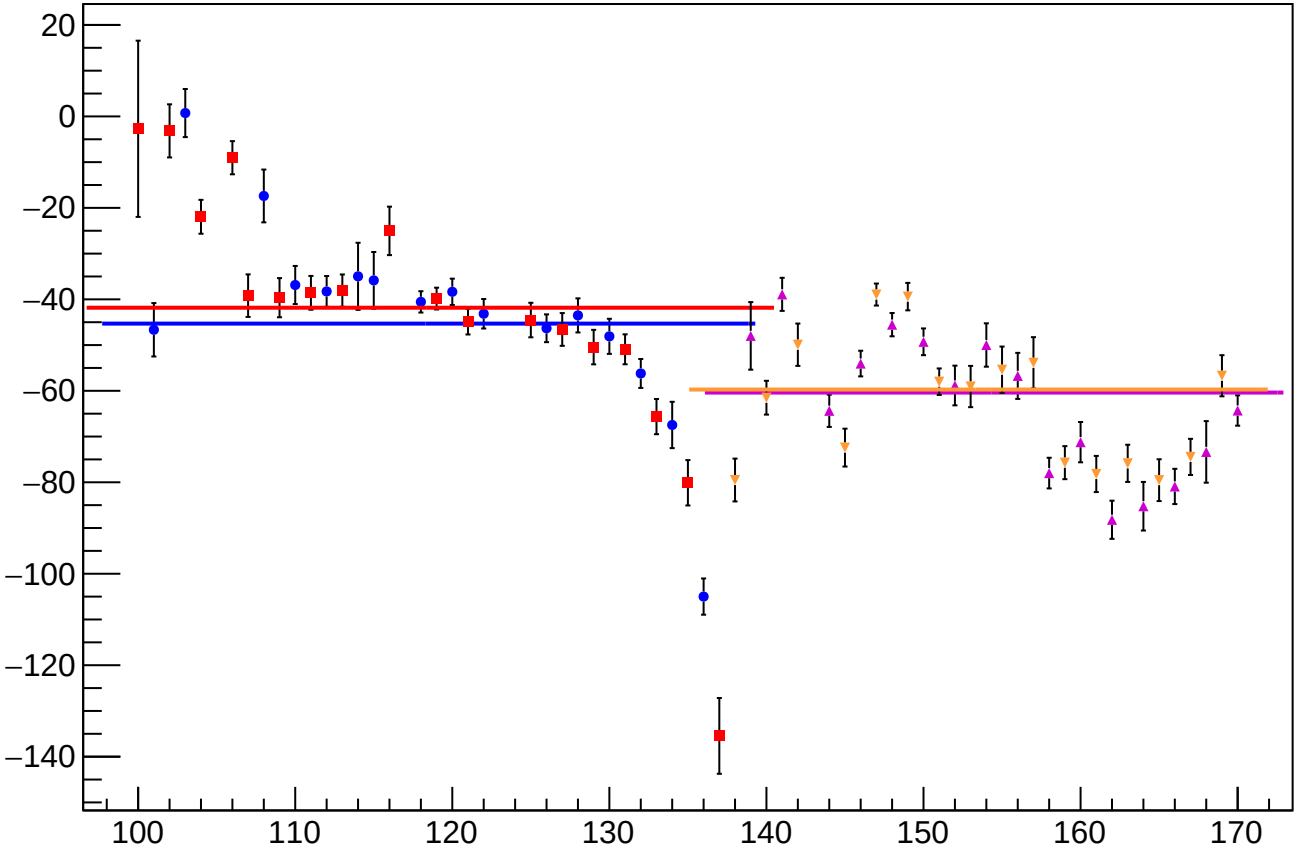
Left In: -223.109+/-1.147 $\chi^2$/NDF:338.2/15

\+ sign -190.311+/-0.718 $\chi^2$/NDF: 3895.6/31

All: -184.812+/-0.494 $\chi^2$/NDF: 11446.5/65

\- sign -179.855+/-0.682 $\chi^2$/NDF: 7439.3/33

# reg_asym_usl_atl2_dd_diff_bpm4eY_slope vs Slug




Right In: -45.304+/-0.938 $\chi^2$/NDF: 382.0/15

Left Out: -59.722+/-0.949 $\chi^2$/NDF:245.0/15

Right Out: -41.832+/-0.909 $\chi^2$/NDF: 414.2/17

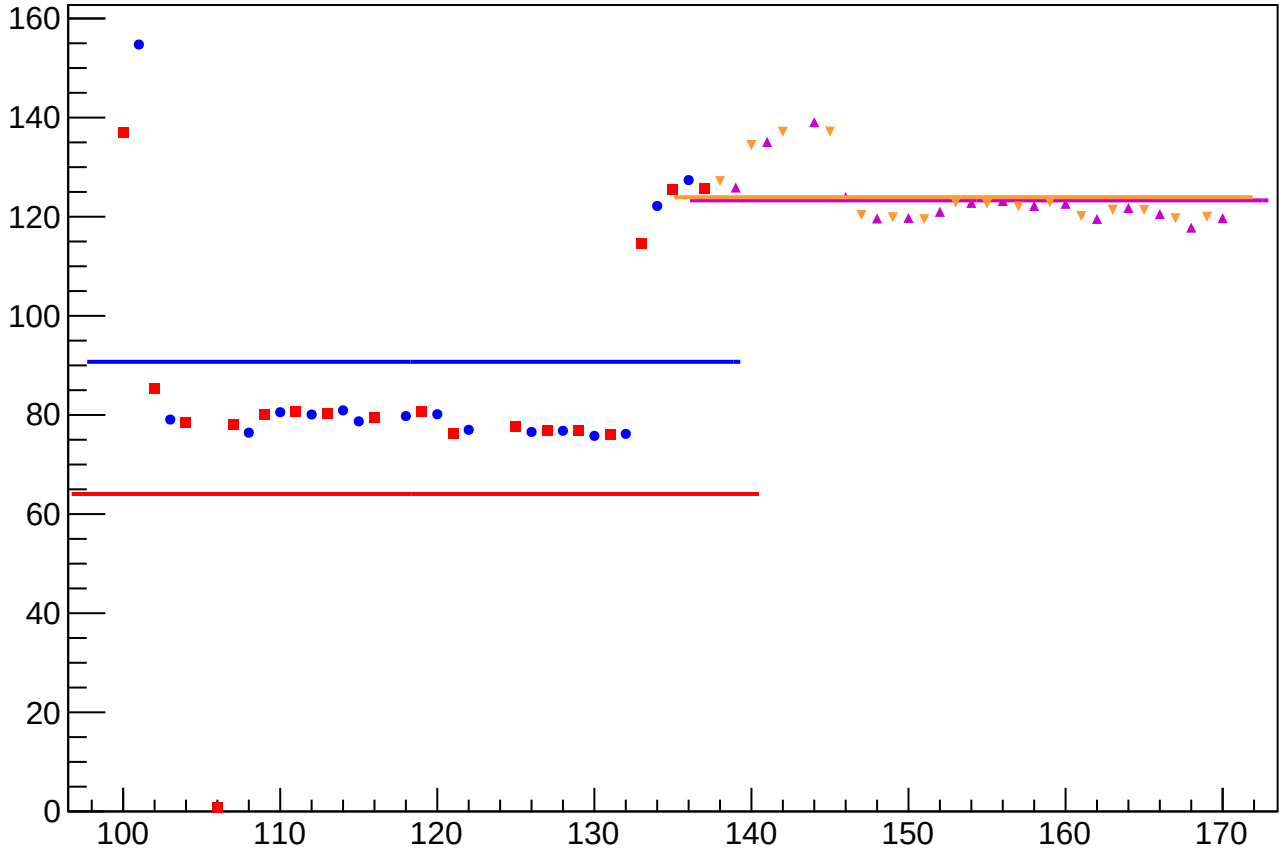
Left In: -60.380+/-0.943 $\chi^2$/NDF:231.8/15

+ sign -52.424+/-0.667 $\chi^2$/NDF: 743.8/31

All: -51.579+/-0.467 $\chi^2$/NDF: 1593.4/65

- sign -50.766+/-0.655 $\chi^2$/NDF: 846.4/33

# reg_asym_usl_atl2_dd_diff_bpm12X_slope vs Slug




Right In: 90.726+/-0.058 $\chi^2$/NDF: 161153.0/15

Left Out: 123.935+/-0.045 $\chi^2$/NDF:16478.2/15

Right Out: 64.059+/-0.049 $\chi^2$/NDF: 660935.1/17

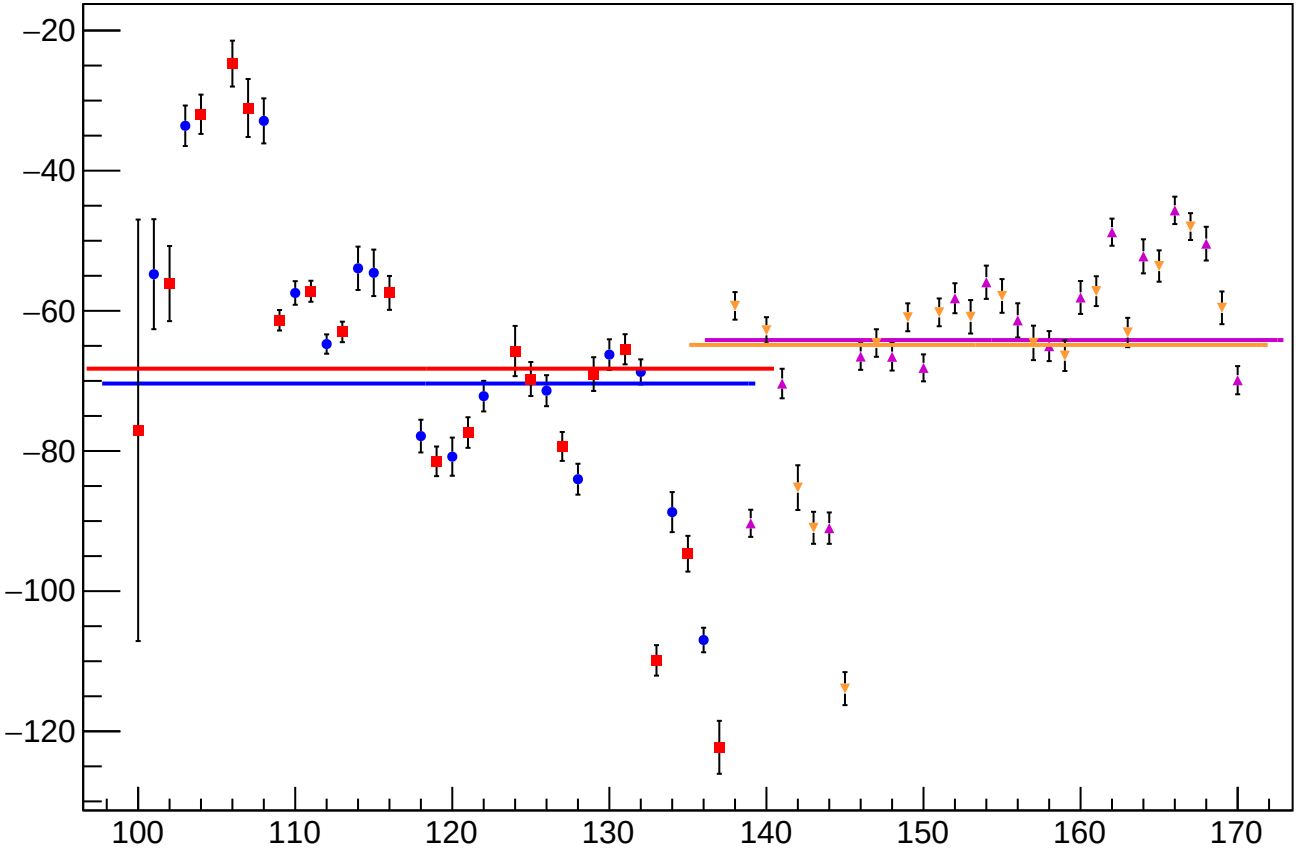
Left In: 123.296+/-0.044 $\chi^2$/NDF:15071.6/15

+ sign 111.479+/-0.036 $\chi^2$/NDF: 379134.4/31

All: 103.714+/-0.024 $\chi^2$/NDF: 1950243.5/65

- sign 97.244+/-0.033 $\chi^2$/NDF: 1484927.5/33

# reg_asym_usr_atr1_avg_diff_bpm1X_slope vs Slug




Right In: -70.374+/-0.558 $\chi^2$/NDF: 974.9/15

Left Out: -64.863+/-0.527 $\chi^2$/NDF:757.0/16

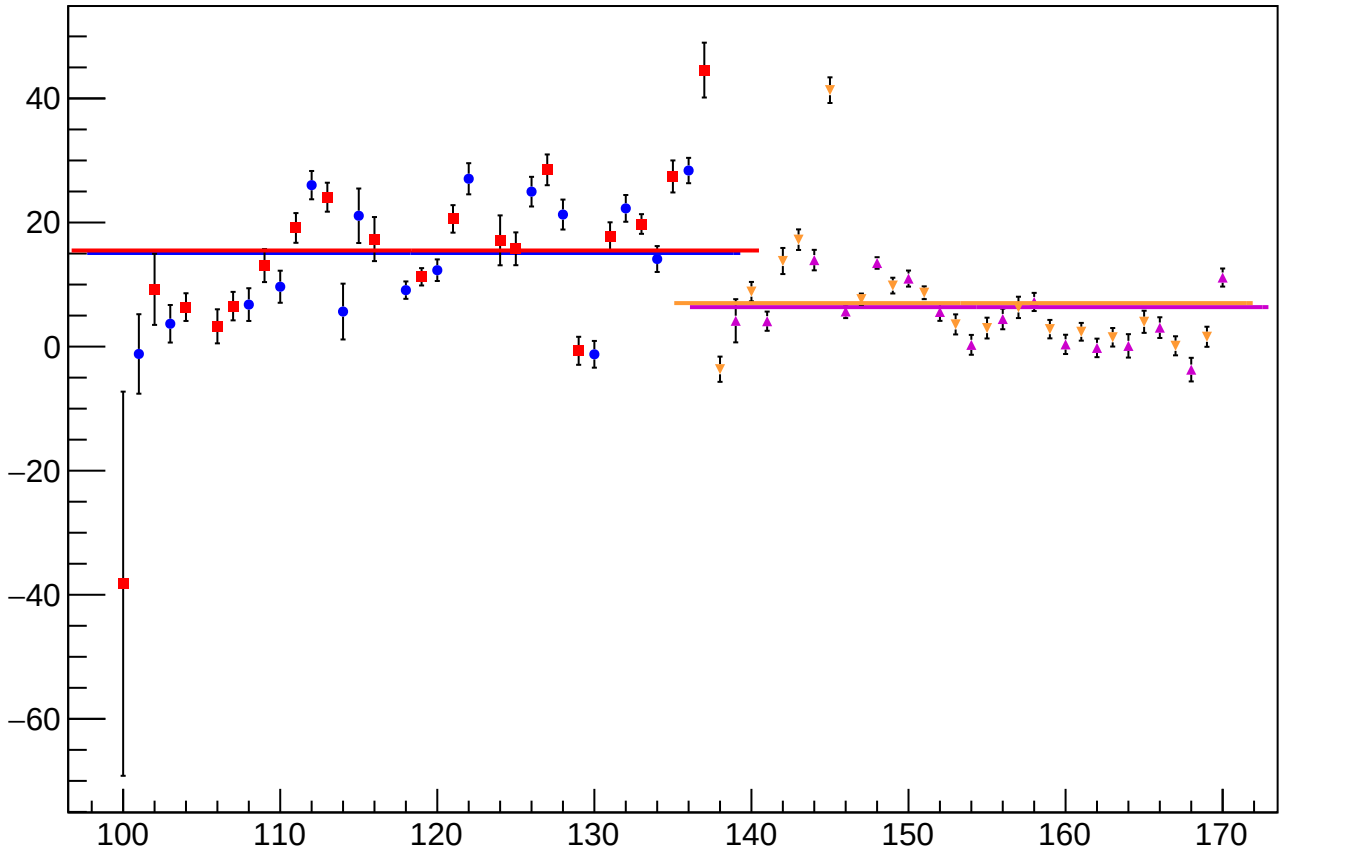
Right Out: -68.252+/-0.527 $\chi^2$/NDF: 1306.0/18

Left In: -64.168+/-0.529 $\chi^2$/NDF:588.0/15

\+ sign -67.460+/-0.383 $\chi^2$/NDF: 1783.6/32

All: -66.823+/-0.267 $\chi^2$/NDF: 3712.9/67

\- sign -66.218+/-0.373 $\chi^2$/NDF: 1924.0/34




Right In: 15.092+/-0.581 $\chi^2$/NDF: 242.4/15

Left Out: 7.011+/-0.357 $\chi^2$/NDF:437.1/16

Right Out: 15.491+/-0.558 $\chi^2$/NDF: 239.3/18

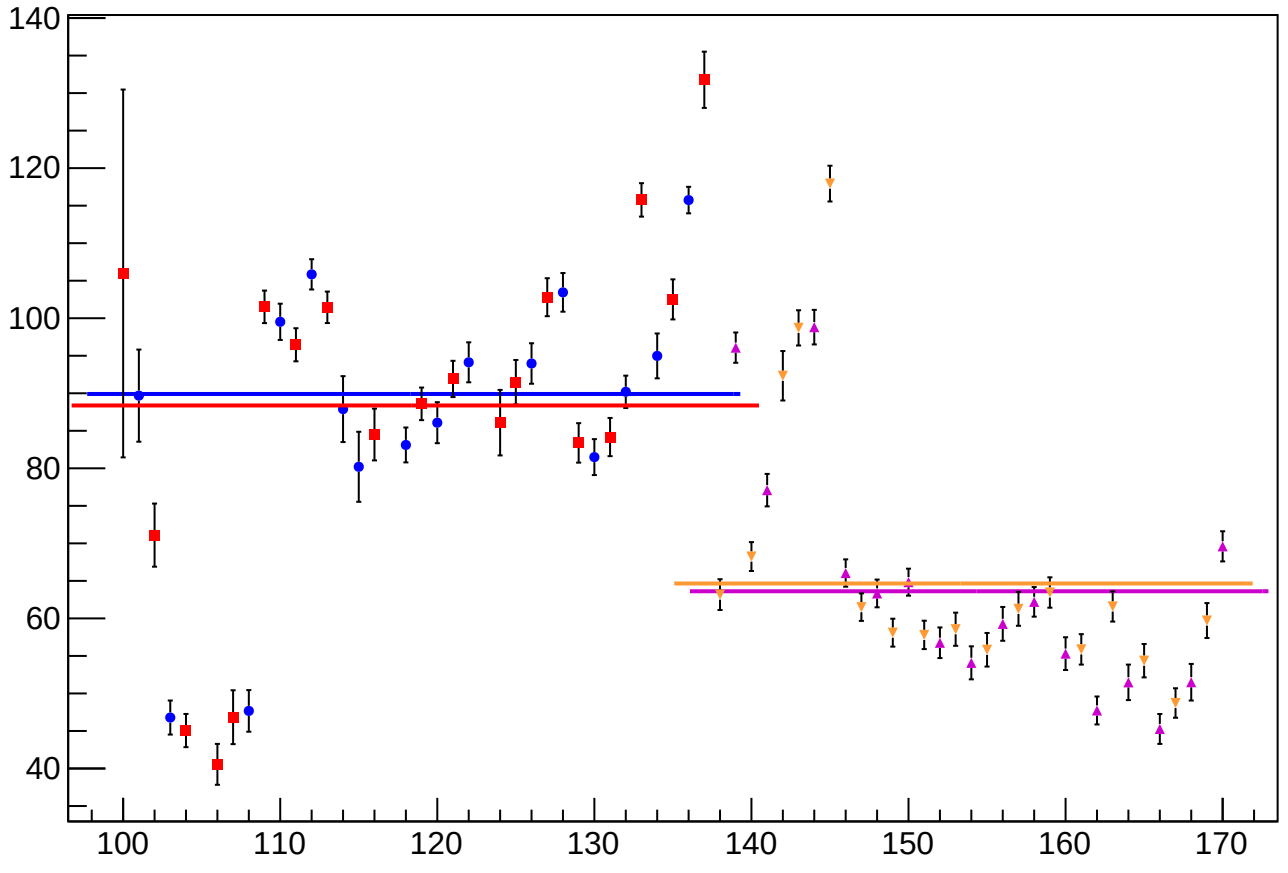
Left In: 6.363+/-0.367 $\chi^2$/NDF:199.2/15

\+ sign 9.228+/-0.304 $\chi^2$/NDF: 820.0/32

All: 9.171+/-0.216 $\chi^2$/NDF: 1445.3/67

\- sign 9.114+/-0.306 $\chi^2$/NDF: 625.3/34

# reg_asym_usr_atr1_avg_diff_bpm4eX_slope vs Slug




Right In: 89.907+/-0.641 $\chi^2$/NDF: 947.7/15

Left Out: 64.653+/-0.513 $\chi^2$/NDF:951.7/16

Right Out: 88.375+/-0.617 $\chi^2$/NDF: 1288.9/18

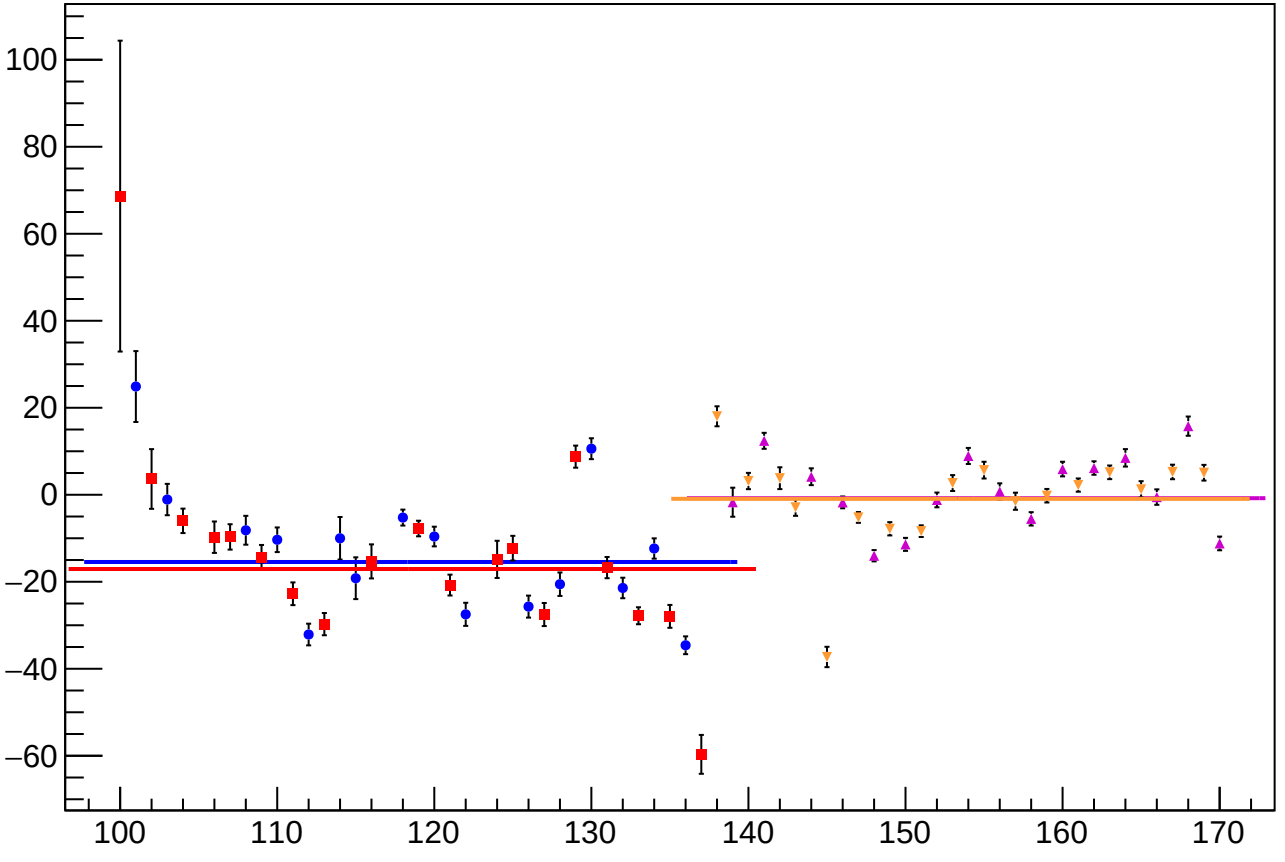
Left In: 63.618+/-0.513 $\chi^2$/NDF:799.7/15

+ sign 74.514+/-0.400 $\chi^2$/NDF: 2846.4/32

All: 74.118+/-0.281 $\chi^2$/NDF: 5887.7/67

- sign 73.734+/-0.395 $\chi^2$/NDF: 3039.4/34

# reg_asym_usr_atr1_avg_diff_bpm4eY_slope vs Slug




Right In: -15.454+/-0.665 $\chi^2$/NDF: 386.5/15

Left Out: -0.930+/-0.418 $\chi^2$/NDF:442.8/16

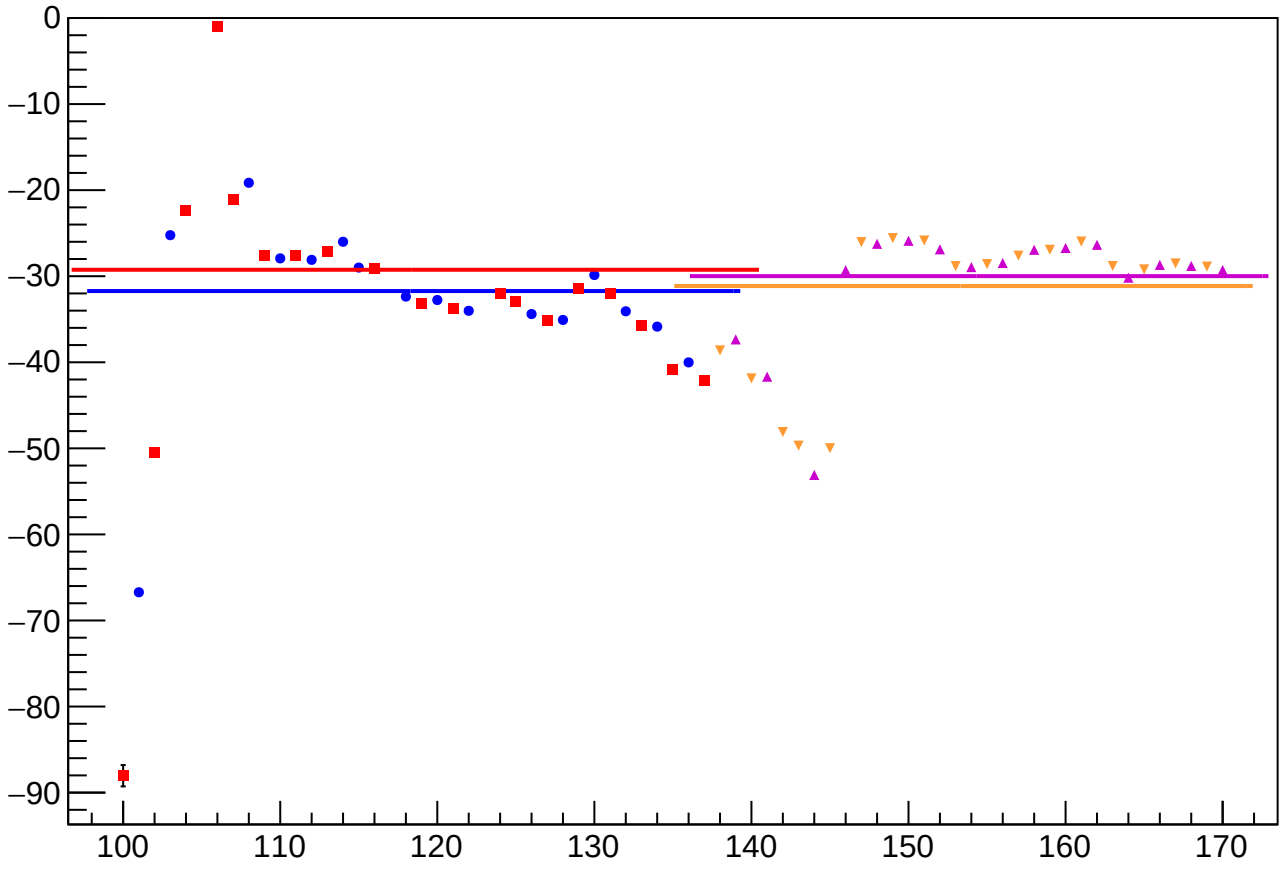
Right Out: -17.066+/-0.644 $\chi^2$/NDF: 361.0/18

Left In: -0.789+/-0.425 $\chi^2$/NDF:407.9/15

+ sign -5.032+/-0.354 $\chi^2$/NDF: 1171.1/32

All: -5.384+/-0.251 $\chi^2$/NDF: 2387.0/67

- sign -5.739+/-0.355 $\chi^2$/NDF: 1213.9/34




Right In: -31.725+/-0.039 $\chi^2$/NDF: 39636.6/15

Left Out: -31.143+/-0.019 $\chi^2$/NDF:147365.5/16

Right Out: -29.250+/-0.038 $\chi^2$/NDF: 95235.9/18

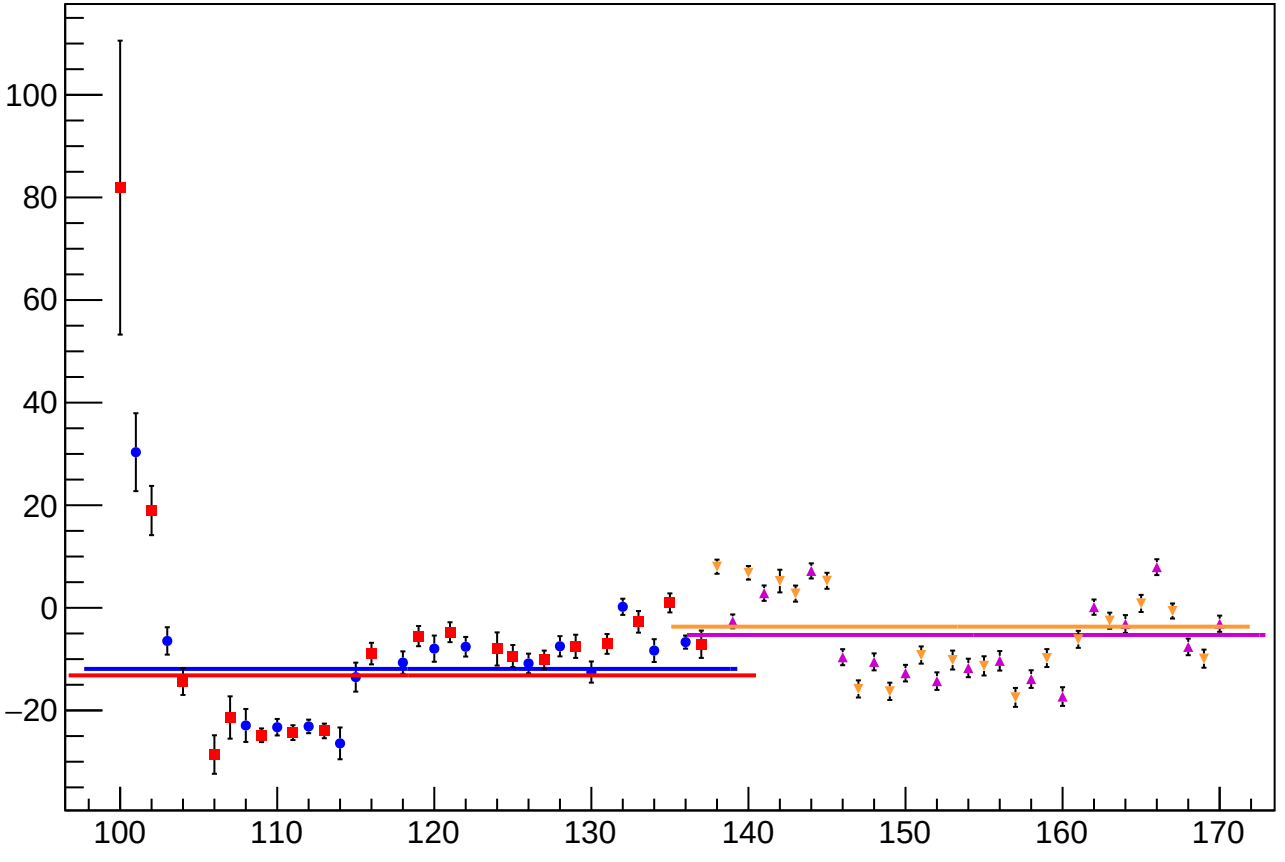
Left In: -29.989+/-0.019 $\chi^2$/NDF:93385.3/15

\+ sign -31.260+/-0.017 $\chi^2$/NDF: 187184.3/32

All: -30.545+/-0.012 $\chi^2$/NDF: 379492.6/67

\- sign -29.842+/-0.017 $\chi^2$/NDF: 188917.4/34

# reg_asym_usr_atr1_dd_diff_bpm1X_slope vs Slug




Right In: -11.906+/-0.497 $\chi^2$/NDF: 282.1/15

Left Out: -3.672+/-0.399 $\chi^2$/NDF:444.0/16

Right Out: -13.169+/-0.480 $\chi^2$/NDF: 421.5/18

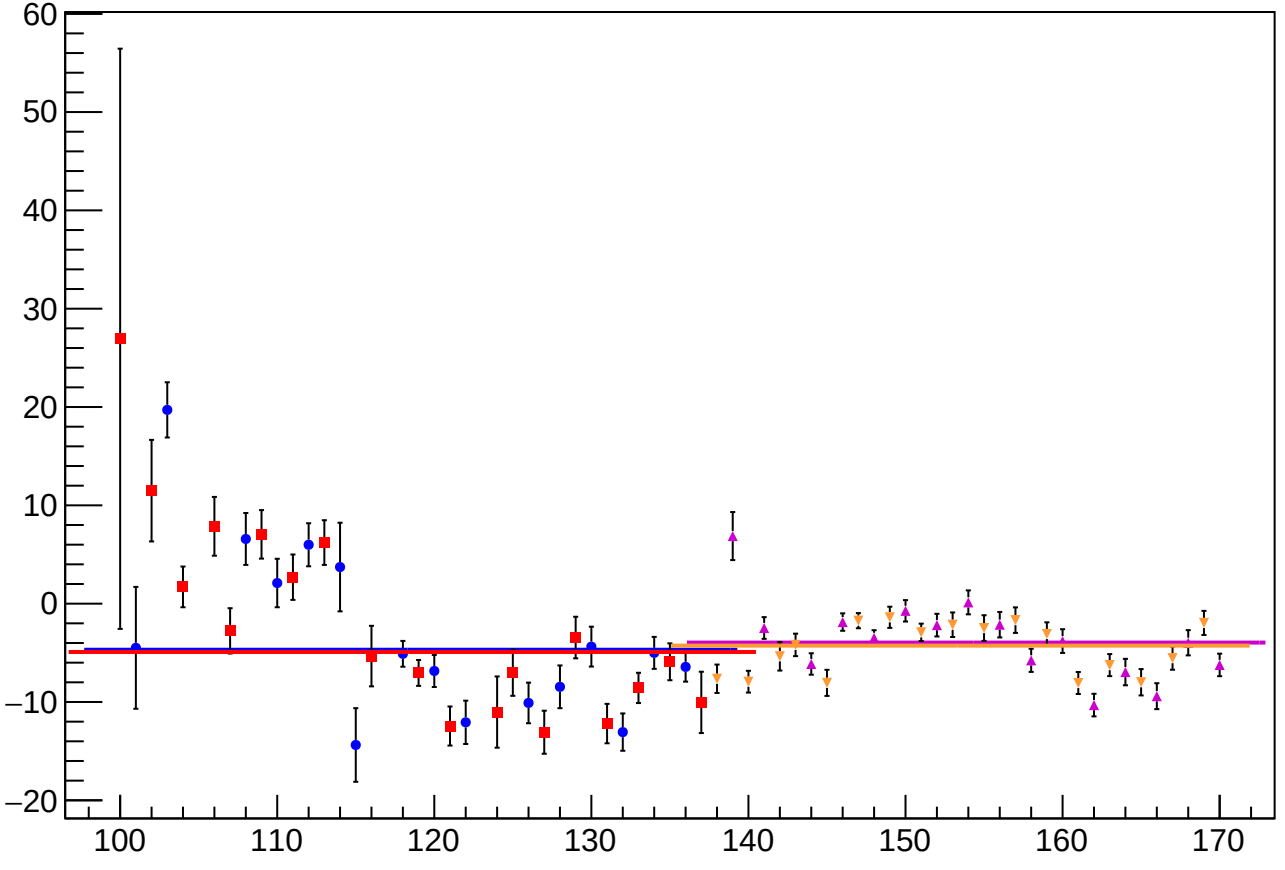
Left In: -5.290+/-0.403 $\chi^2$/NDF:351.6/15

+ sign -6.897+/-0.311 $\chi^2$/NDF: 893.2/32

All: -7.728+/-0.219 $\chi^2$/NDF: 1838.5/67

- sign -8.548+/-0.309 $\chi^2$/NDF: 931.1/34

# reg_asym_usr_atr1_dd_diff_bpm4aY_slope vs Slug




Right In: -4.686+/-0.517 $\chi^2$/NDF: 179.0/15

Left Out: -4.268+/-0.277 $\chi^2$/NDF:82.4/16

Right Out: -4.913+/-0.513 $\chi^2$/NDF: 155.9/18

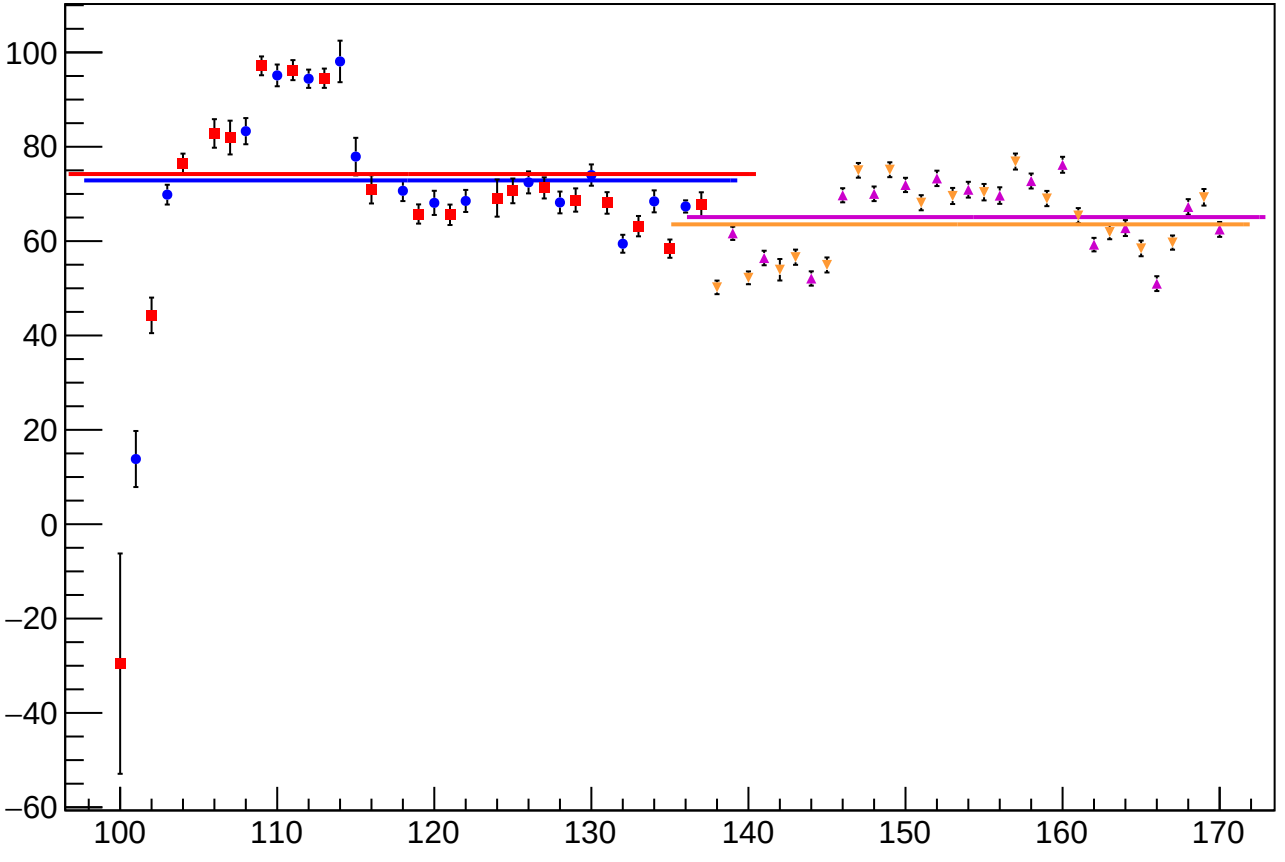
Left In: -3.958+/-0.285 $\chi^2$/NDF:114.8/15

+ sign -4.362+/-0.244 $\chi^2$/NDF: 261.9/32

All: -4.274+/-0.175 $\chi^2$/NDF: 535.5/67

- sign -4.184+/-0.249 $\chi^2$/NDF: 273.3/34

# reg_asym_usr_atr1_dd_diff_bpm4eX_slope vs Slug




Right In: 72.866+/-0.565 $\chi^2$/NDF: 450.7/15

Left Out: 63.554+/-0.390 $\chi^2$/NDF:467.0/16

Right Out: 74.217+/-0.562 $\chi^2$/NDF: 586.2/18

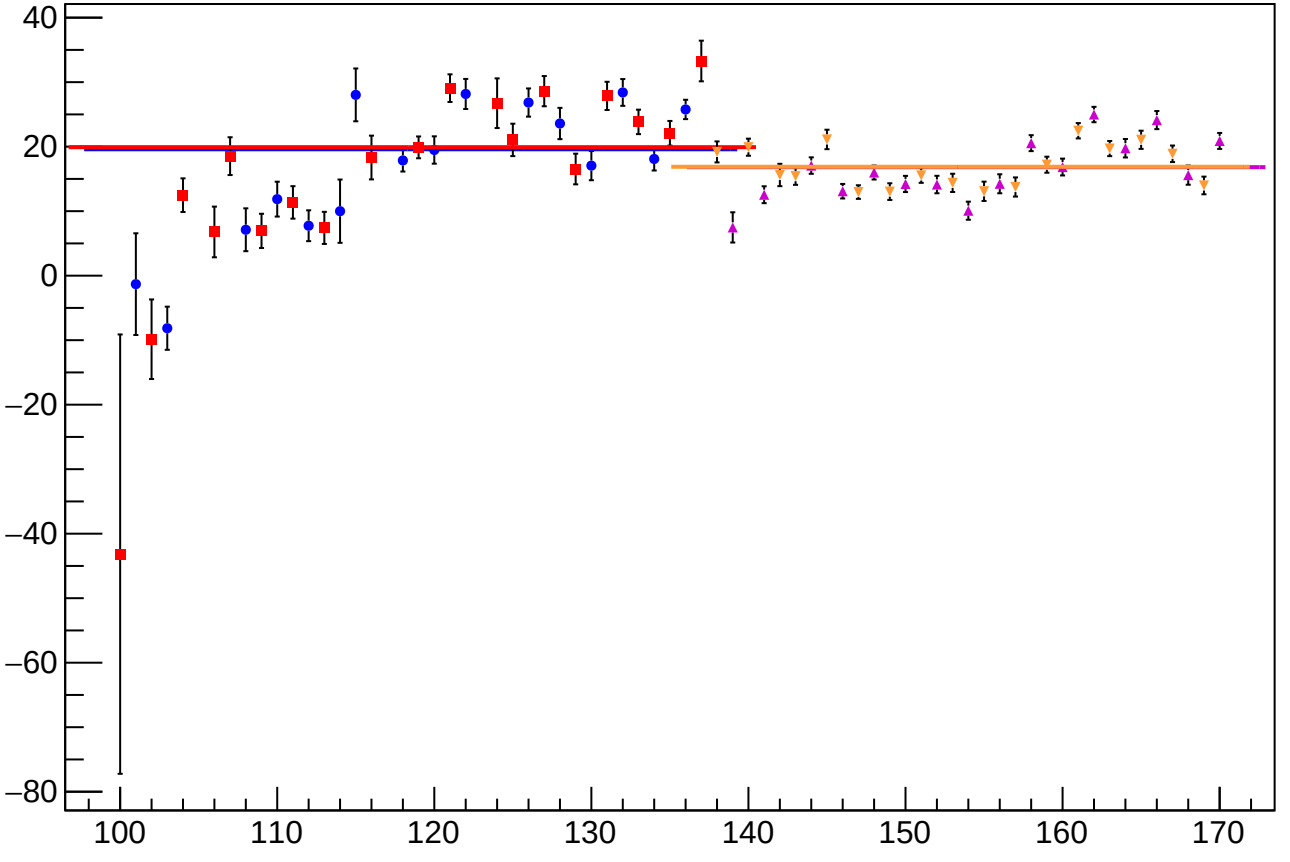
Left In: 65.094+/-0.393 $\chi^2$/NDF:364.5/15

+ sign 66.560+/-0.321 $\chi^2$/NDF: 1101.4/32

All: 67.322+/-0.227 $\chi^2$/NDF: 2240.2/67

- sign 68.088+/-0.322 $\chi^2$/NDF: 1127.6/34

# reg_asym_usr_atr1_dd_diff_bpm4eY_slope vs Slug




Right In: 19.598+/-0.585 $\chi^2$/NDF: 196.0/15

Left Out: 16.882+/-0.322 $\chi^2$/NDF:98.5/16

Right Out: 19.919+/-0.585 $\chi^2$/NDF: 181.3/18

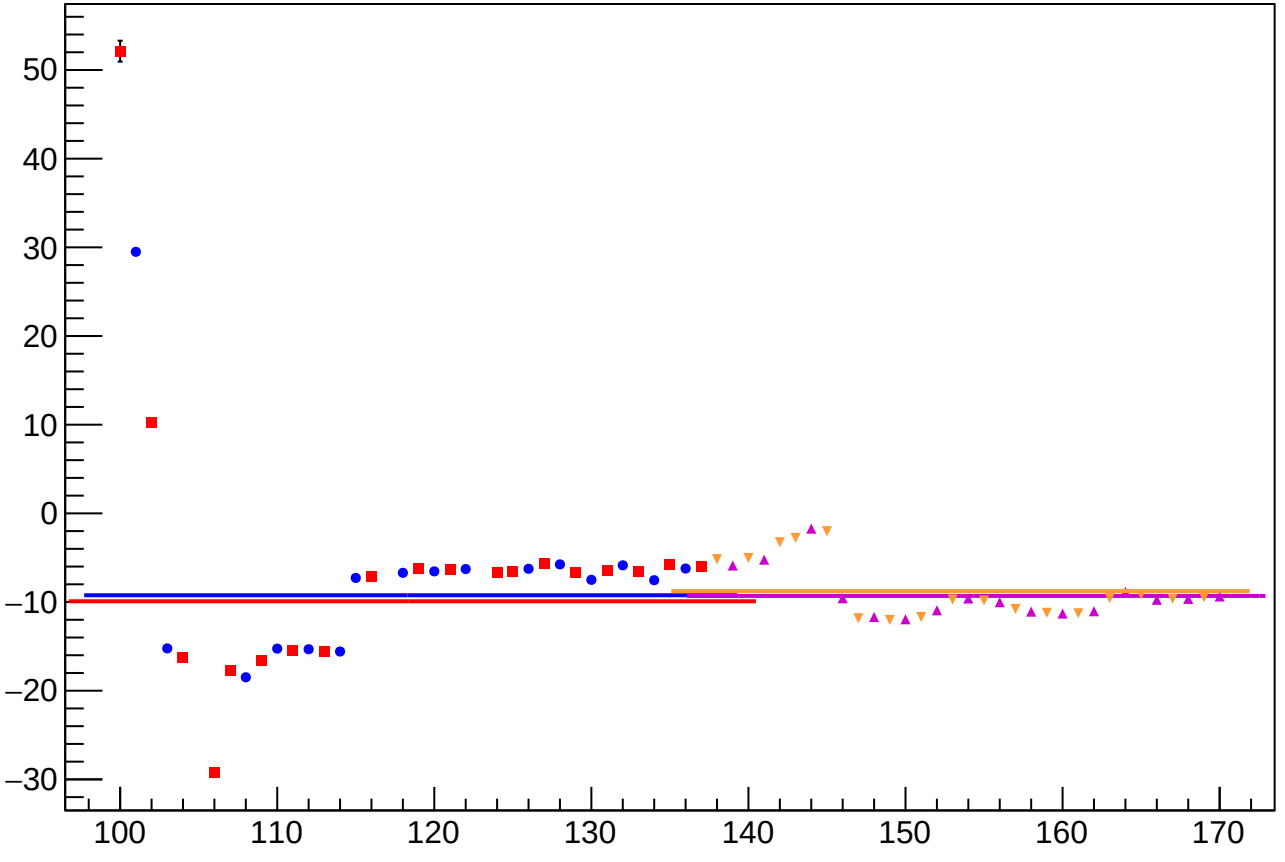
Left In: 16.822+/-0.330 $\chi^2$/NDF:171.2/15

+ sign 17.513+/-0.282 $\chi^2$/NDF: 311.0/32

All: 17.540+/-0.201 $\chi^2$/NDF: 684.8/67

- sign 17.568+/-0.287 $\chi^2$/NDF: 373.7/34

# reg_asym_usr_atr1_dd_diff_bpm12X_slope vs Slug




Right In: -9.235+/-0.033 $\chi^2$/NDF: 31159.3/15

Left Out: -8.763+/-0.015 $\chi^2$/NDF:44047.4/16

Right Out: -9.913+/-0.034 $\chi^2$/NDF: 53863.3/18

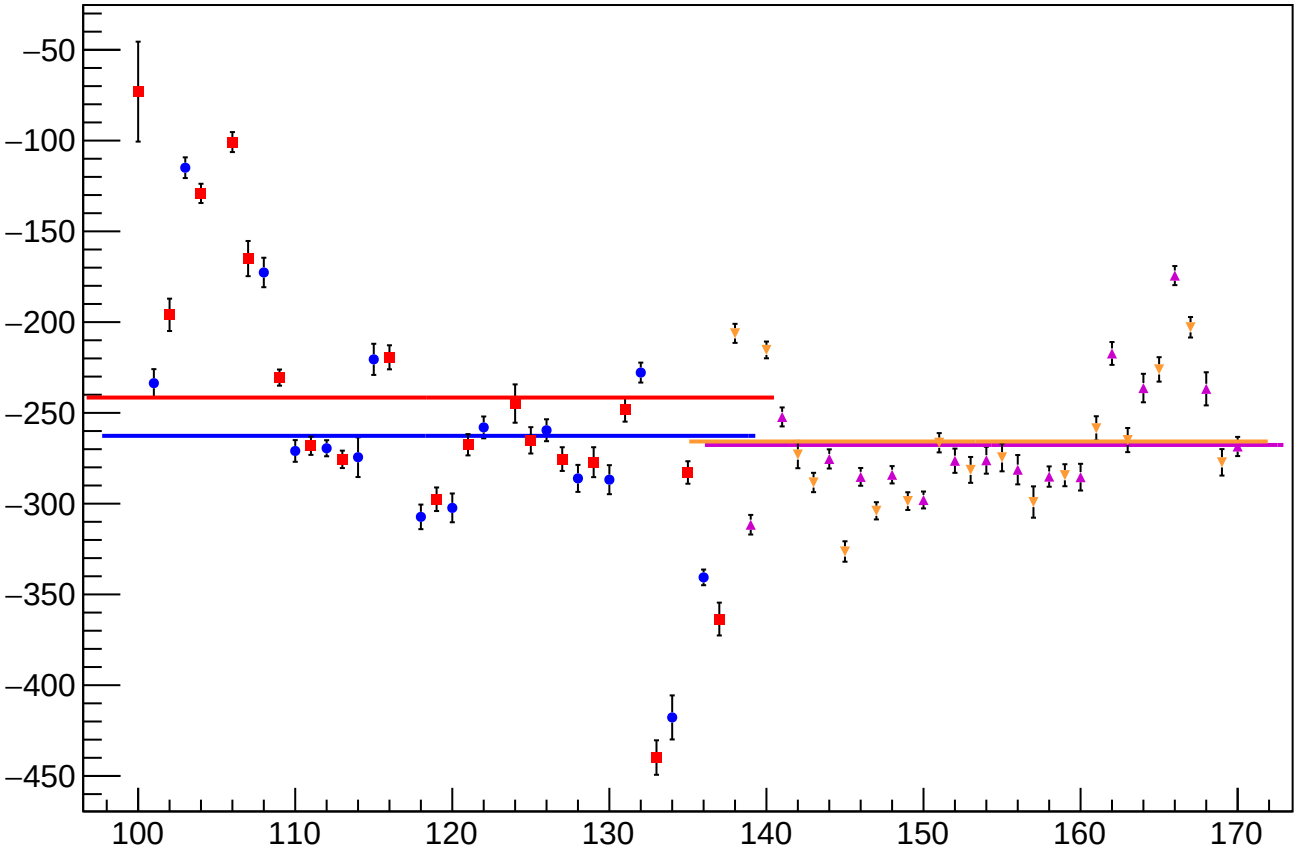
Left In: -9.310+/-0.015 $\chi^2$/NDF:28972.6/15

+ sign -8.842+/-0.013 $\chi^2$/NDF: 75378.5/32

All: -9.121+/-0.010 $\chi^2$/NDF: 159340.8/67

- sign -9.402+/-0.013 $\chi^2$/NDF: 83095.1/34

# reg_asym_usr_atr2_avg_diff_bpm1X_slope vs Slug




Right In: -262.643+/-1.614 $\chi^2$/NDF: 1454.3/15

Left Out: -265.752+/-1.437 $\chi^2$/NDF:686.5/16

Right Out: -241.548+/-1.506 $\chi^2$/NDF: 2138.6/18

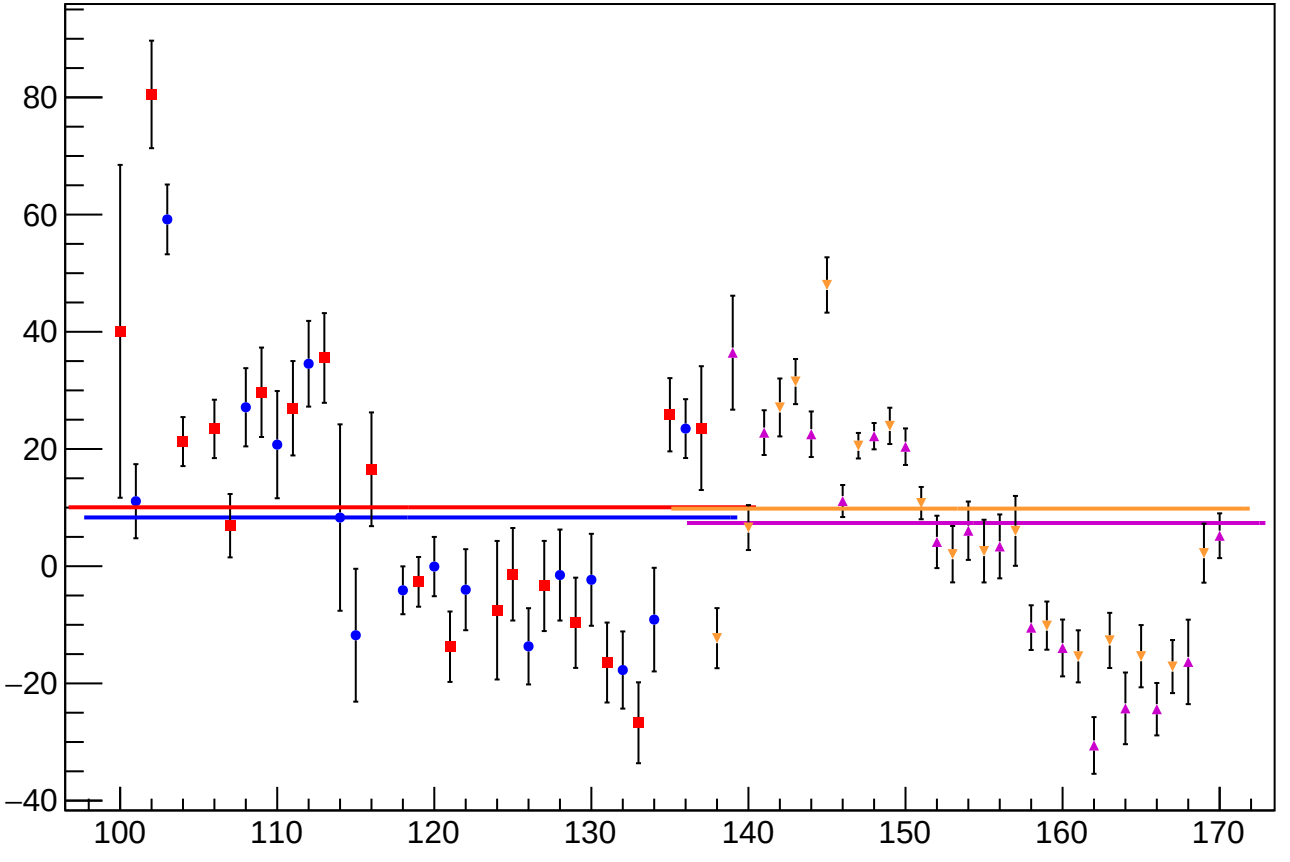
Left In: -267.665+/-1.458 $\chi^2$/NDF:573.0/15

+ sign -264.377+/-1.073 $\chi^2$/NDF: 2142.9/32

All: -259.591+/-0.750 $\chi^2$/NDF: 5048.5/67

- sign -255.031+/-1.048 $\chi^2$/NDF: 2866.7/34

# reg_asym_usr_atr2_avg_diff_bpm4aY_slope vs Slug




Right In: 8.320+/-1.644 $\chi^2$/NDF: 157.6/15

Left Out: 9.826+/-0.957 $\chi^2$/NDF:317.4/16

Right Out: 10.052+/-1.539 $\chi^2$/NDF: 187.4/18

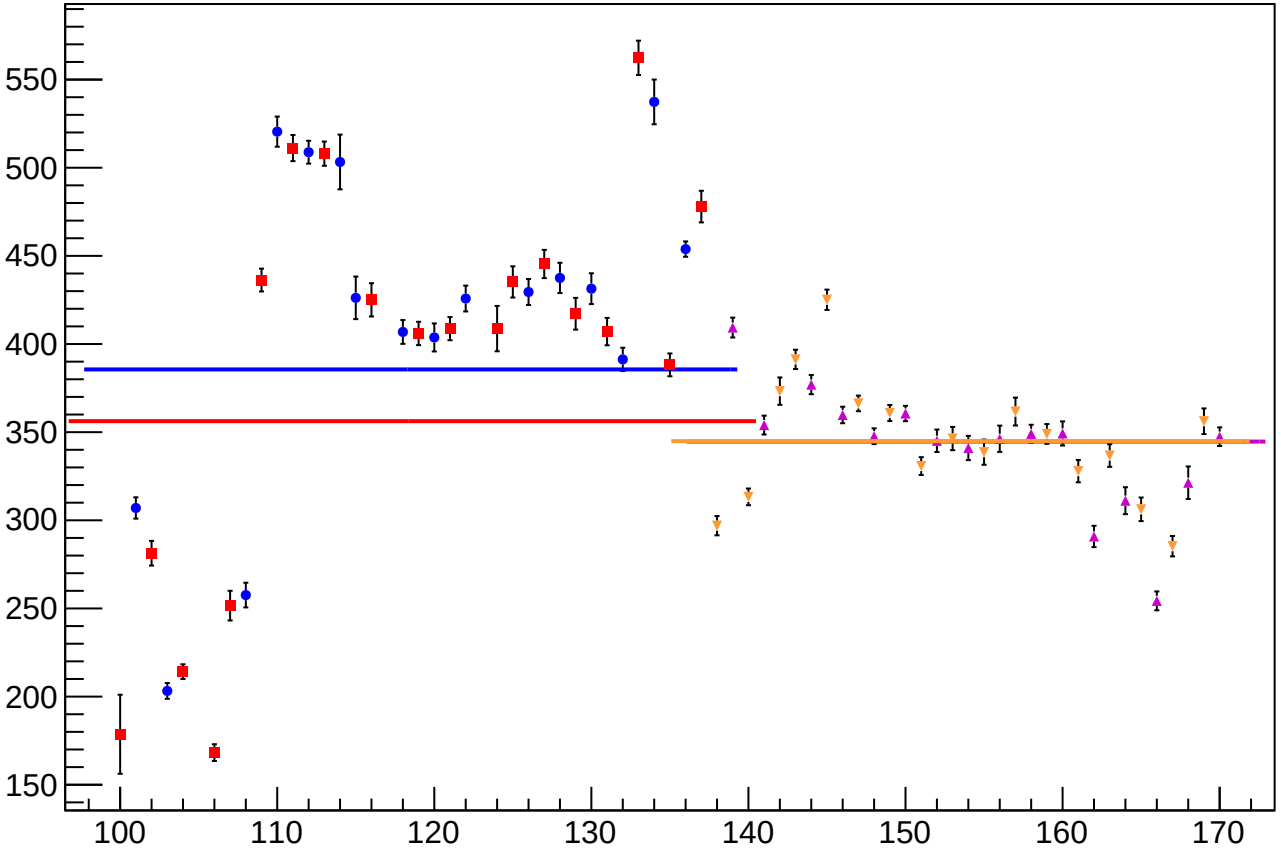
Left In: 7.372+/-0.989 $\chi^2$/NDF:295.6/15

+ sign 9.445+/-0.827 $\chi^2$/NDF: 475.7/32

All: 8.803+/-0.587 $\chi^2$/NDF: 962.1/67

- sign 8.155+/-0.832 $\chi^2$/NDF: 485.2/34

# reg_asym_usr_atr2_avg_diff_bpm4eX_slope vs Slug




Right In: 385.590+/-1.742 $\chi^2$/NDF: 3373.1/15

Left Out: 344.899+/-1.404 $\chi^2$/NDF:600.3/16

Right Out: 356.245+/-1.647 $\chi^2$/NDF: 5270.3/18

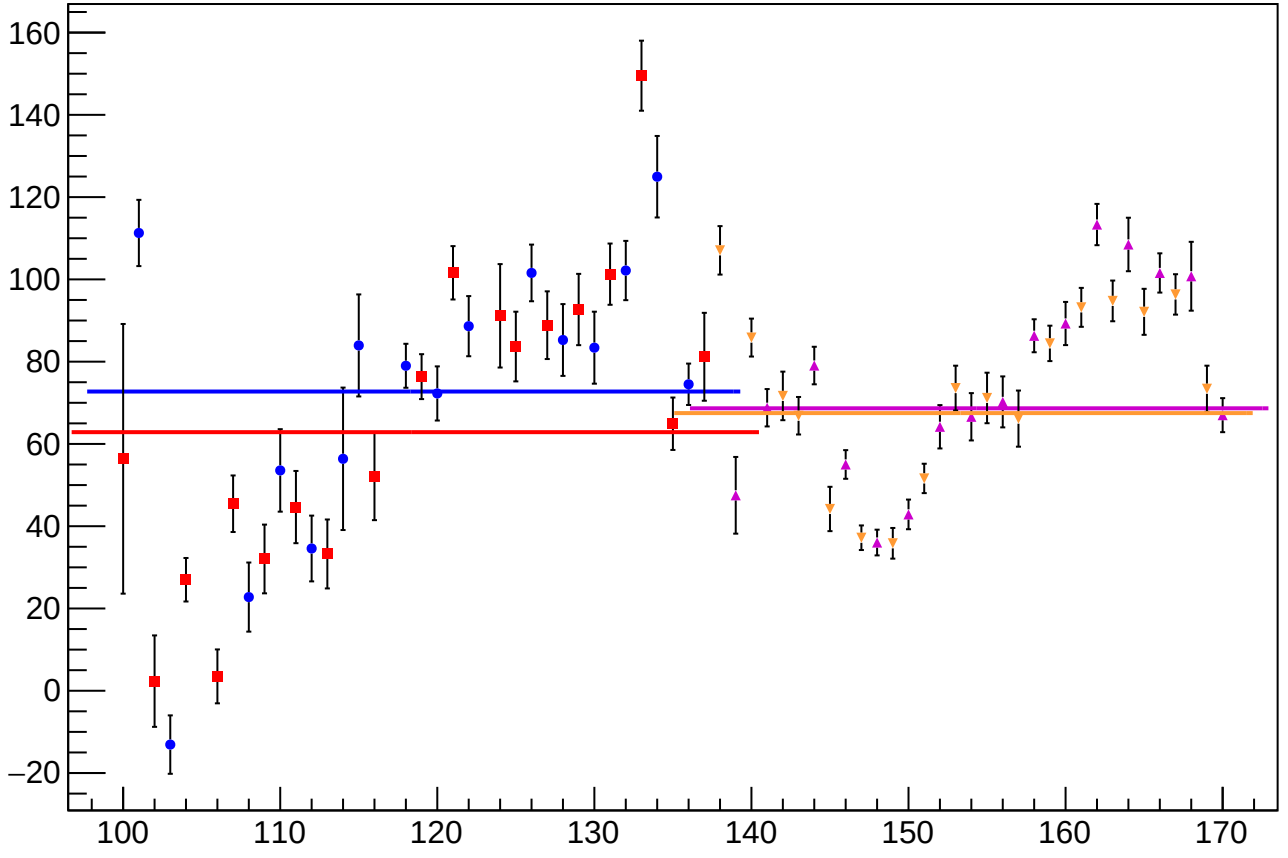
Left In: 344.653+/-1.416 $\chi^2$/NDF:586.3/15

+ sign 360.923+/-1.093 $\chi^2$/NDF: 4304.0/32

All: 355.151+/-0.766 $\chi^2$/NDF: 10243.8/67

- sign 349.583+/-1.074 $\chi^2$/NDF: 5885.0/34

# reg_asym_usr_atr2_avg_diff_bpm4eY_slope vs Slug




Right In: 72.740+/-1.897 $\chi^2$/NDF: 304.3/15

Left Out: 67.498+/-1.135 $\chi^2$/NDF:406.7/16

Right Out: 62.863+/-1.795 $\chi^2$/NDF: 403.6/18

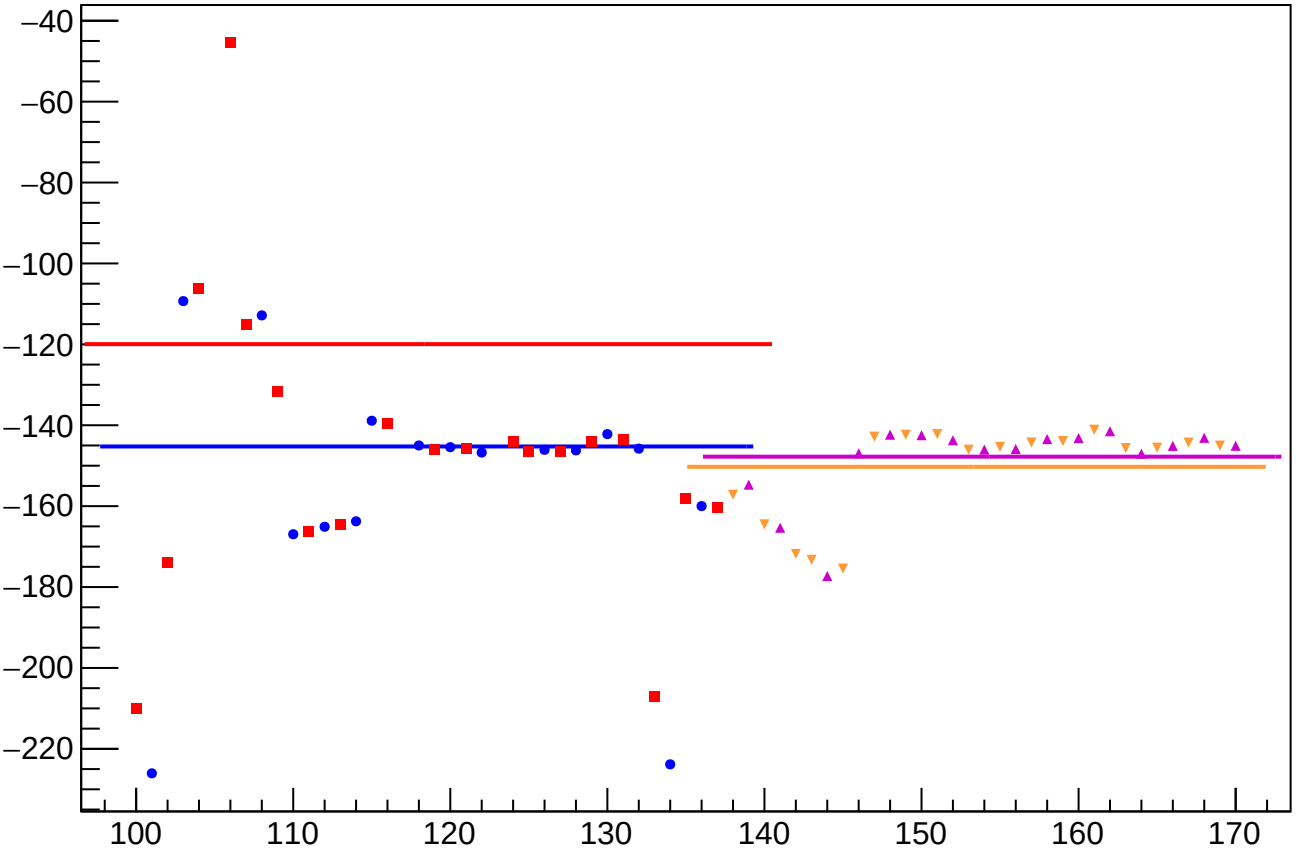
Left In: 68.662+/-1.162 $\chi^2$/NDF:400.6/15

+ sign 68.881+/-0.974 $\chi^2$/NDF: 716.7/32

All: 67.916+/-0.689 $\chi^2$/NDF: 1530.2/67

- sign 66.949+/-0.976 $\chi^2$/NDF: 811.5/34

# reg_asym_usr_atr2_avg_diff_bpm12X_slope vs Slug




Right In: -145.246+/-0.098 $\chi^2$/NDF: 132057.3/15

Left Out: -150.275+/-0.054 $\chi^2$/NDF:43177.1/16

Right Out: -119.947+/-0.089 $\chi^2$/NDF: 270354.1/18

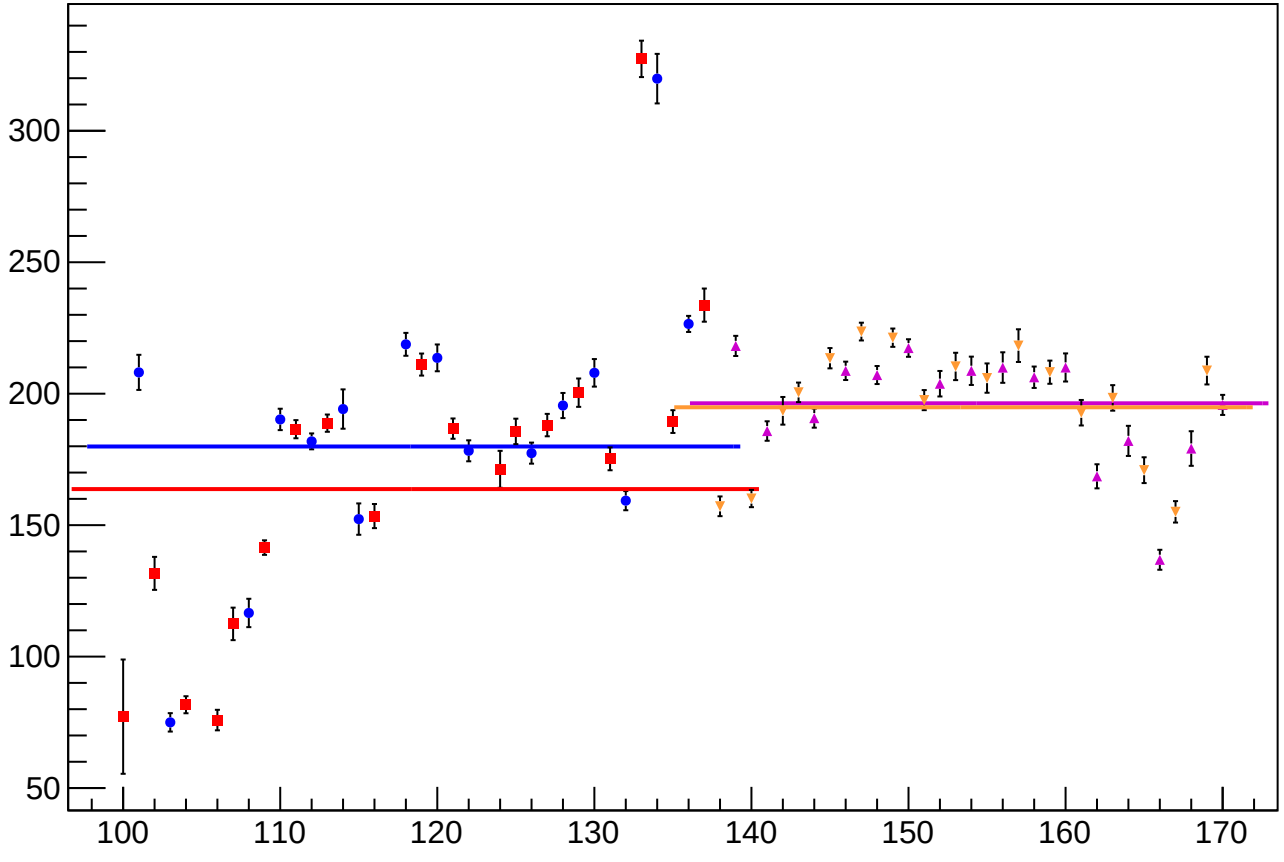
Left In: -147.767+/-0.054 $\chi^2$/NDF:26881.6/15

+ sign -149.101+/-0.048 $\chi^2$/NDF: 177239.0/32

All: -144.569+/-0.033 $\chi^2$/NDF: 563687.9/67

- sign -140.314+/-0.046 $\chi^2$/NDF: 368817.1/34

# reg_asym_usr_atr2_dd_diff_bpm1X_slope vs Slug




Right In: 179.918+/-1.089 $\chi^2$/NDF: 1732.7/15

Left Out: 194.831+/-1.027 $\chi^2$/NDF:532.7/16

Right Out: 163.718+/-1.001 $\chi^2$/NDF: 2416.8/18

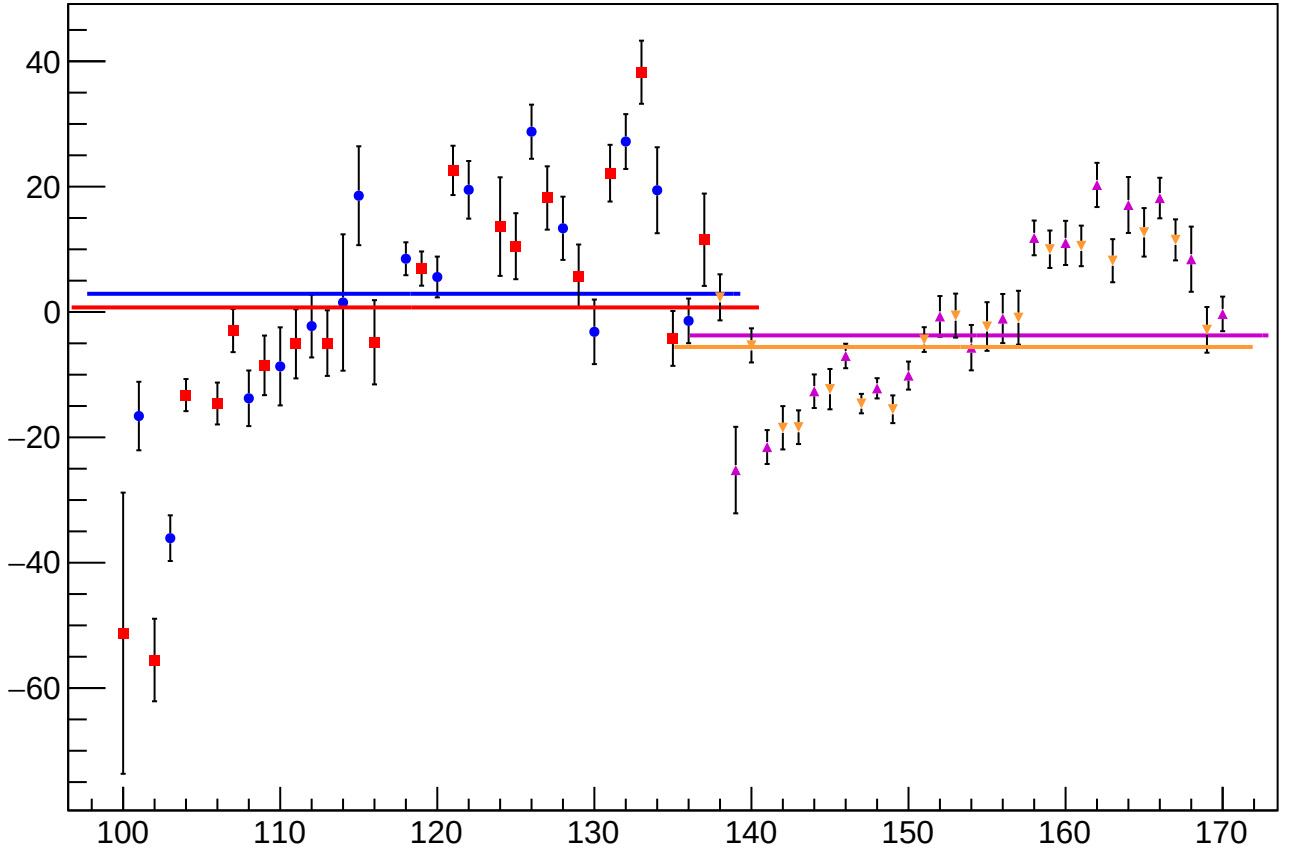
Left In: 196.346+/-1.046 $\chi^2$/NDF:426.0/15

\+ sign 187.805+/-0.747 $\chi^2$/NDF: 2364.6/32

All: 183.422+/-0.520 $\chi^2$/NDF: 5782.3/67

\- sign 179.318+/-0.723 $\chi^2$/NDF: 3351.1/34

# reg_asym_usr_atr2_dd_diff_bpm4aY_slope vs Slug




Right In: 2.907+/-1.105 $\chi^2$/NDF: 247.5/15

Left Out: -5.579+/-0.685 $\chi^2$/NDF:222.2/16

Right Out: 0.729+/-1.012 $\chi^2$/NDF: 273.6/18

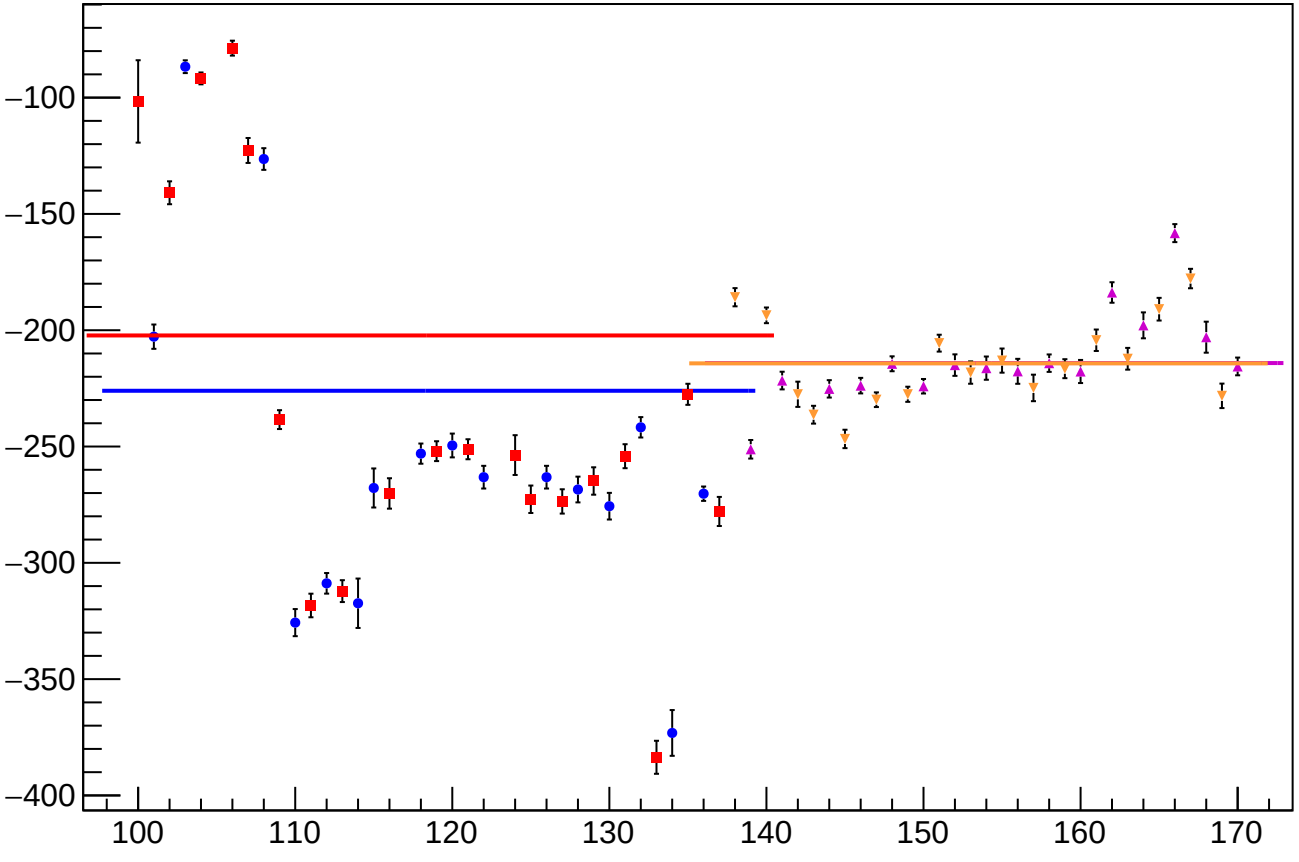
Left In: -3.736+/-0.710 $\chi^2$/NDF:274.2/15

+ sign -3.224+/-0.582 $\chi^2$/NDF: 512.4/32

All: -2.743+/-0.411 $\chi^2$/NDF: 1074.5/67

- sign -2.264+/-0.581 $\chi^2$/NDF: 560.8/34

# reg_asym_usr_atr2_dd_diff_bpm4eX_slope vs Slug




Right In: -226.028+/-1.175 $\chi^2$/NDF: 4539.0/15

Left Out: -214.243+/-1.005 $\chi^2$/NDF:359.3/16

Right Out: -202.247+/-1.087 $\chi^2$/NDF: 6690.8/18

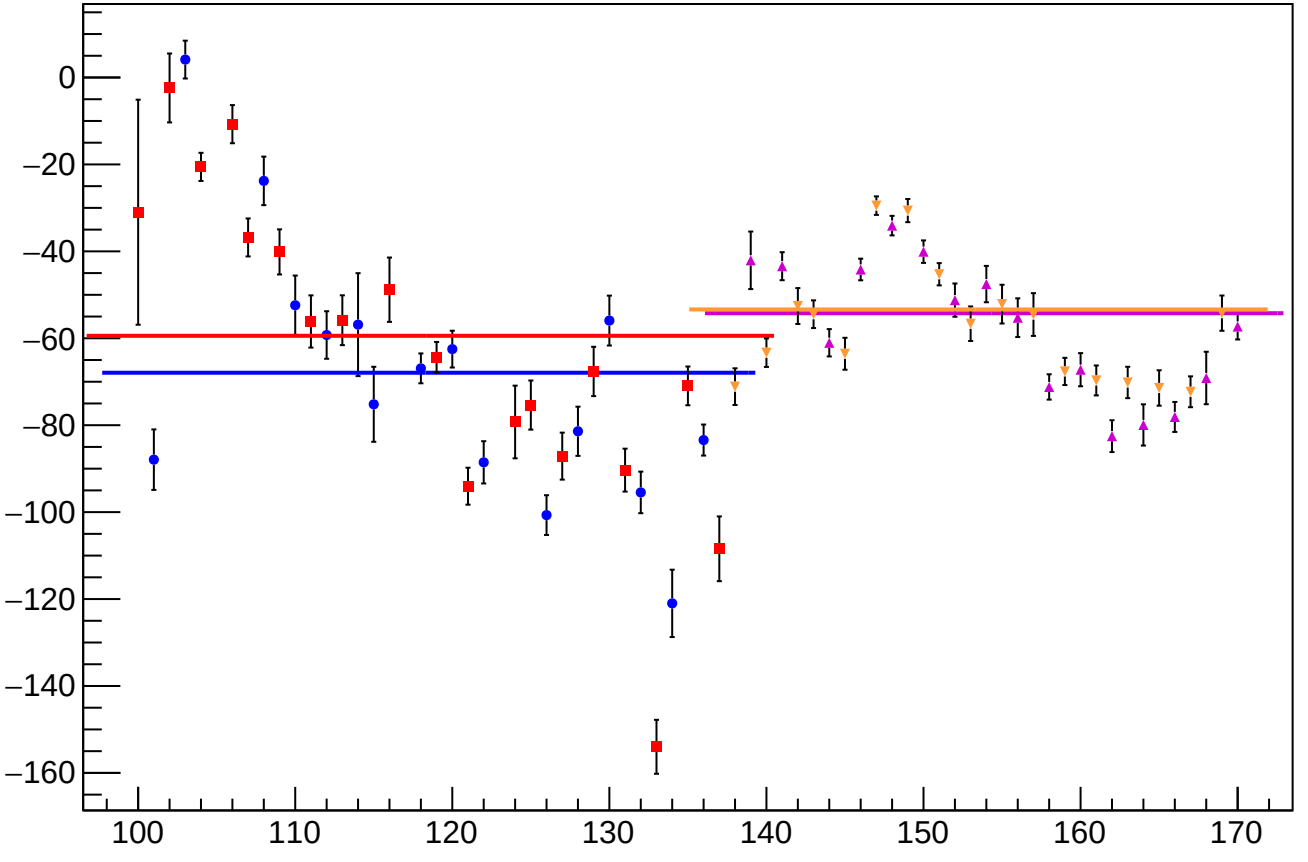
Left In: -214.114+/-1.017 $\chi^2$/NDF:385.8/15

+ sign -219.222+/-0.764 $\chi^2$/NDF: 4956.4/32

All: -213.750+/-0.532 $\chi^2$/NDF: 12196.5/67

- sign -208.578+/-0.742 $\chi^2$/NDF: 7140.1/34

# reg_asym_usr_atr2_dd_diff_bpm4eY_slope vs Slug




Right In: -67.927+/-1.278 $\chi^2$/NDF: 534.0/15

Left Out: -53.366+/-0.813 $\chi^2$/NDF:357.4/16

Right Out: -59.428+/-1.184 $\chi^2$/NDF: 794.9/18

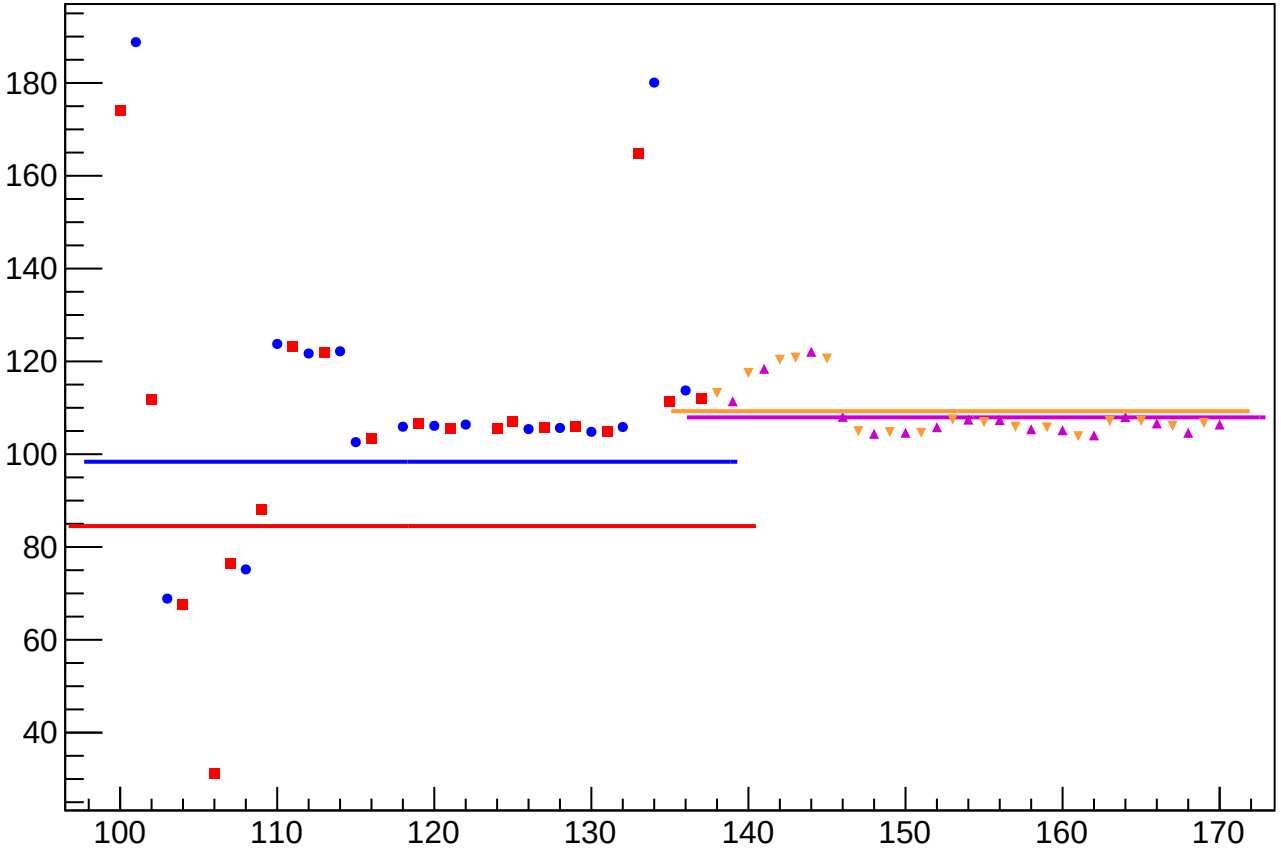
Left In: -54.233+/-0.835 $\chi^2$/NDF:339.0/15

+ sign -57.561+/-0.686 $\chi^2$/NDF: 983.9/32

All: -56.755+/-0.484 $\chi^2$/NDF: 2133.3/67

- sign -55.958+/-0.682 $\chi^2$/NDF: 1146.7/34

# reg_asym_usr_atr2_dd_diff_bpm12X_slope vs Slug




Right In: 98.377+/-0.066 $\chi^2$/NDF: 228419.7/15

Left Out: 109.274+/-0.039 $\chi^2$/NDF:22848.5/16

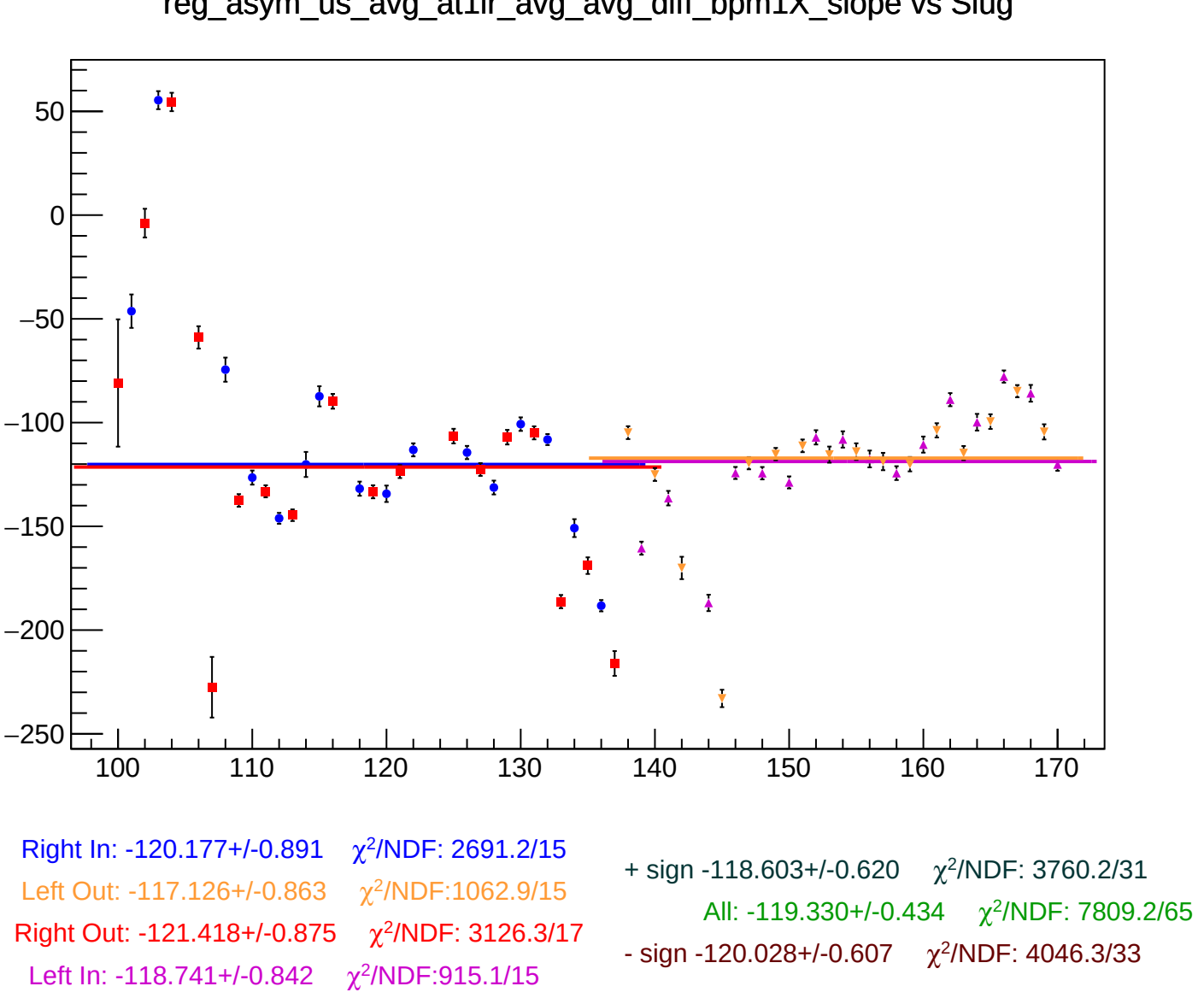
Right Out: 84.512+/-0.061 $\chi^2$/NDF: 268911.0/18

Left In: 107.935+/-0.039 $\chi^2$/NDF:15465.6/15

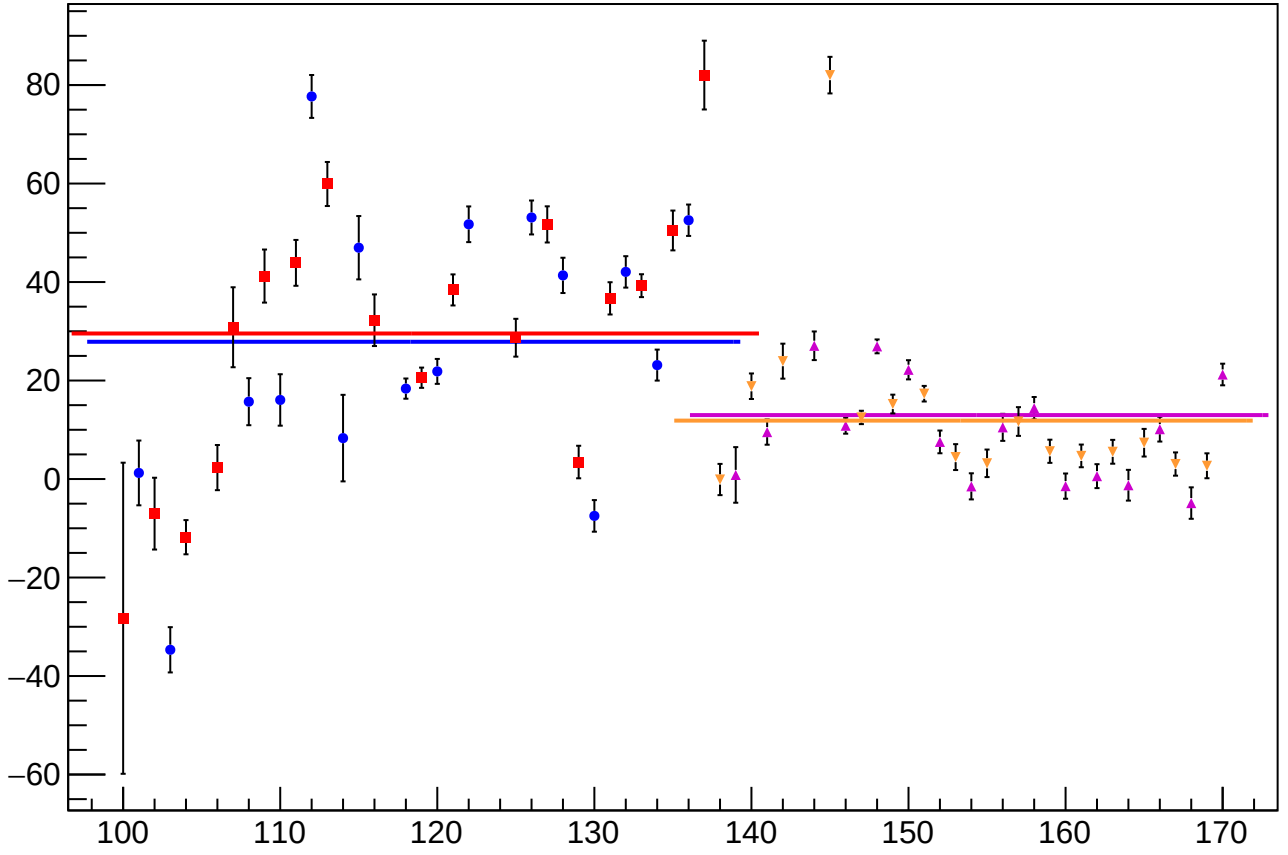
+ sign 106.465+/-0.034 $\chi^2$/NDF: 271476.2/32

All: 103.738+/-0.023 $\chi^2$/NDF: 674793.3/67

- sign 101.159+/-0.033 $\chi^2$/NDF: 390447.9/34


reg_asym_us_avg_at1lr_avg_avg_diff_bpm1X_slope vs Slug
50
0
−50
−100
−150
−200
−250
100
110
120
130
140
150
160
170
Right In: -120.177+/-0.891 χ²/NDF: 2691.2/15
Left Out: -117.126+/-0.863 χ²/NDF:1062.9/15
Right Out: -121.418+/-0.875 χ²/NDF: 3126.3/17
Left In: -118.741+/-0.842 χ²/NDF:915.1/15
+ sign -118.603+/-0.620 χ²/NDF: 3760.2/31
All: -119.330+/-0.434 χ²/NDF: 7809.2/65
- sign -120.028+/-0.607 χ²/NDF: 4046.3/33

# reg_asym_us_avg_at1lr_avg_avg_diff_bpm4aY_slope vs Slug




Right In: 27.872+/-0.888 $\chi^2$/NDF: 699.6/15

Left Out: 11.864+/-0.576 $\chi^2$/NDF:475.8/15

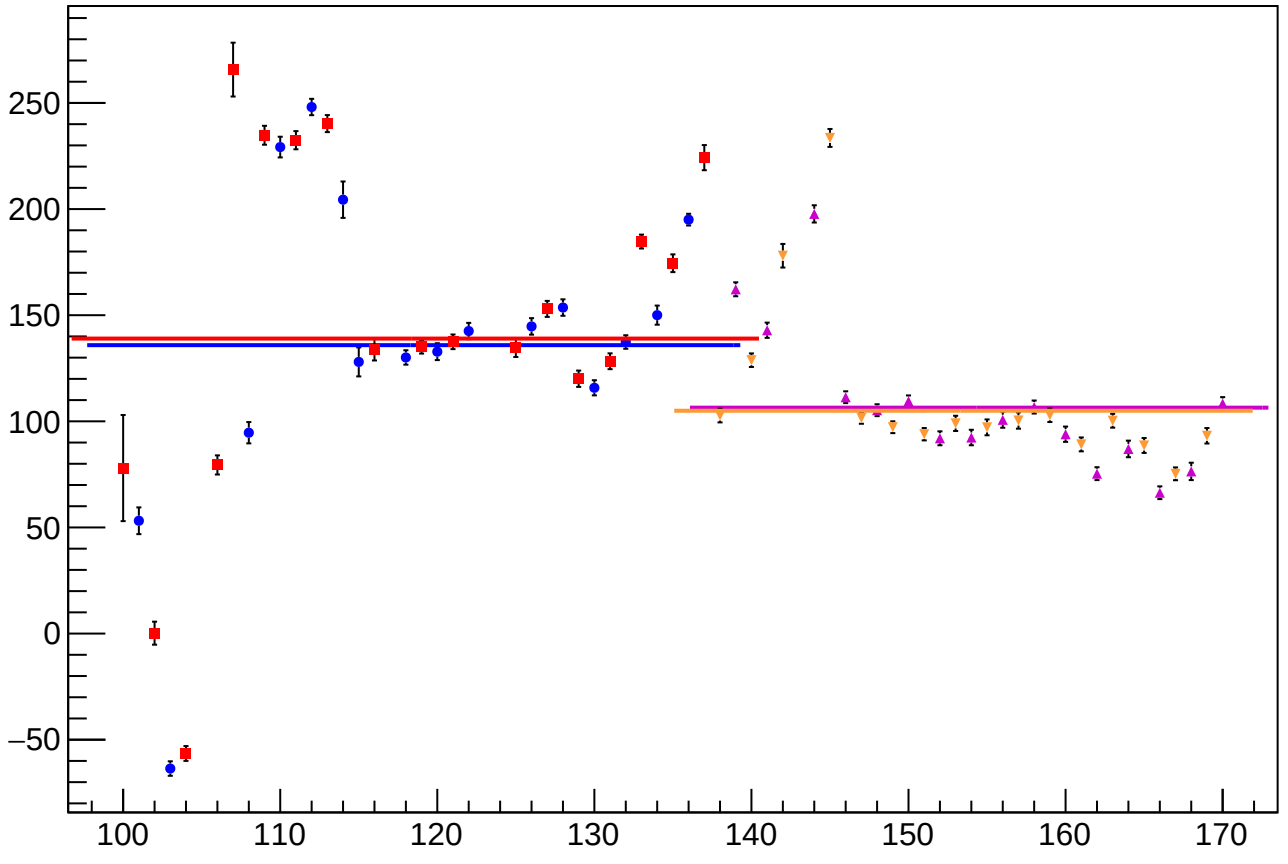
Right Out: 29.553+/-0.890 $\chi^2$/NDF: 497.5/17

Left In: 12.984+/-0.578 $\chi^2$/NDF:313.6/15

+ sign 16.607+/-0.483 $\chi^2$/NDF: 1404.0/31

All: 17.253+/-0.342 $\chi^2$/NDF: 2462.5/65

- sign 17.903+/-0.485 $\chi^2$/NDF: 1054.9/33




Right In: 135.883+/-0.999 $\chi^2$/NDF: 5463.6/15

Left Out: 104.990+/-0.837 $\chi^2$/NDF:1343.0/15

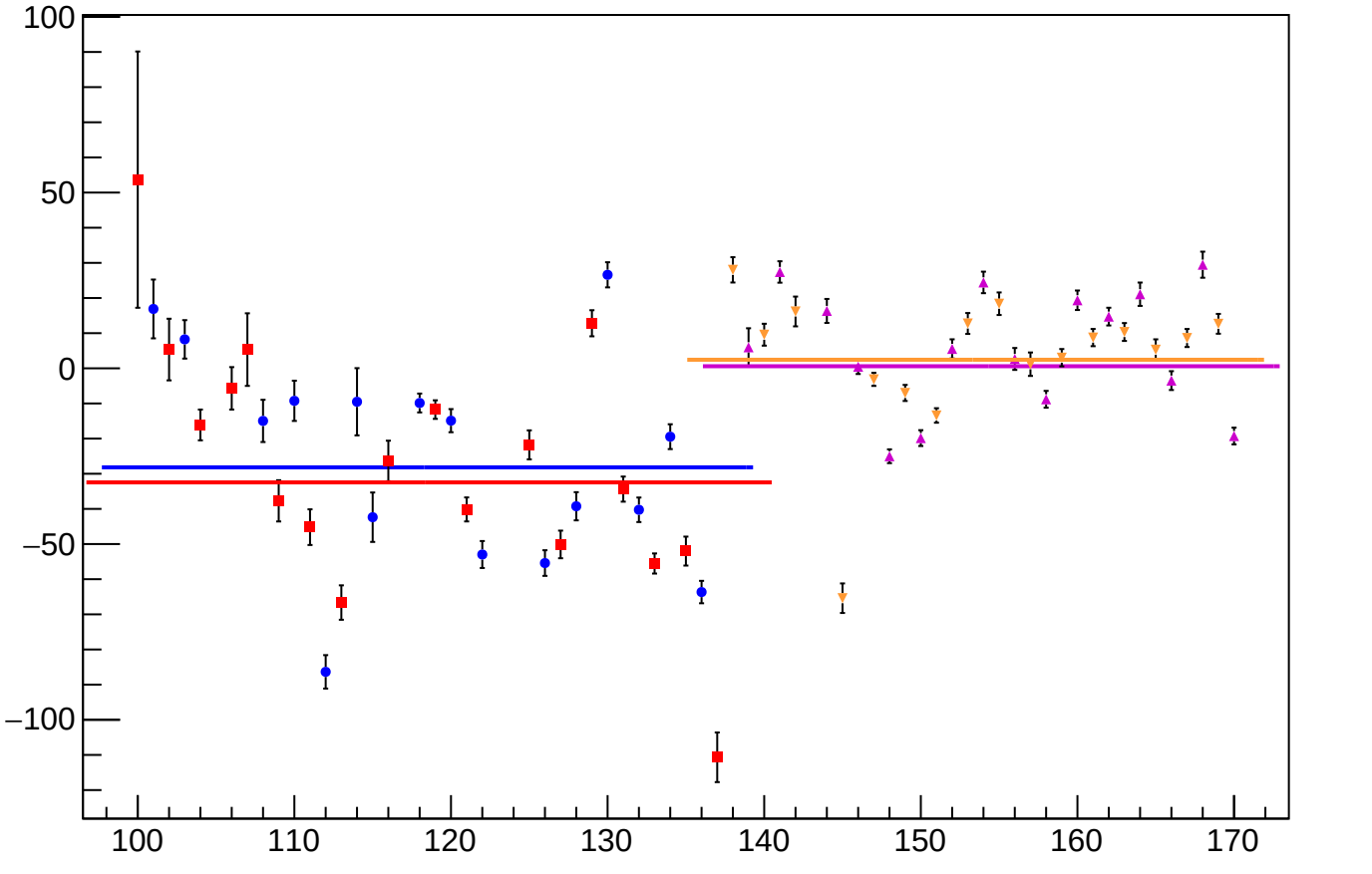
Right Out: 138.985+/-0.998 $\chi^2$/NDF: 6156.4/17

Left In: 106.443+/-0.817 $\chi^2$/NDF:1310.6/15

\+ sign 117.741+/-0.641 $\chi^2$/NDF: 7368.8/31

All: 118.628+/-0.450 $\chi^2$/NDF: 15476.3/65

\- sign 119.489+/-0.632 $\chi^2$/NDF: 8103.7/33




Right In: -28.175+/-1.022 $\chi^2$/NDF: 791.2/15

Left Out: 2.437+/-0.676 $\chi^2$/NDF:485.2/15

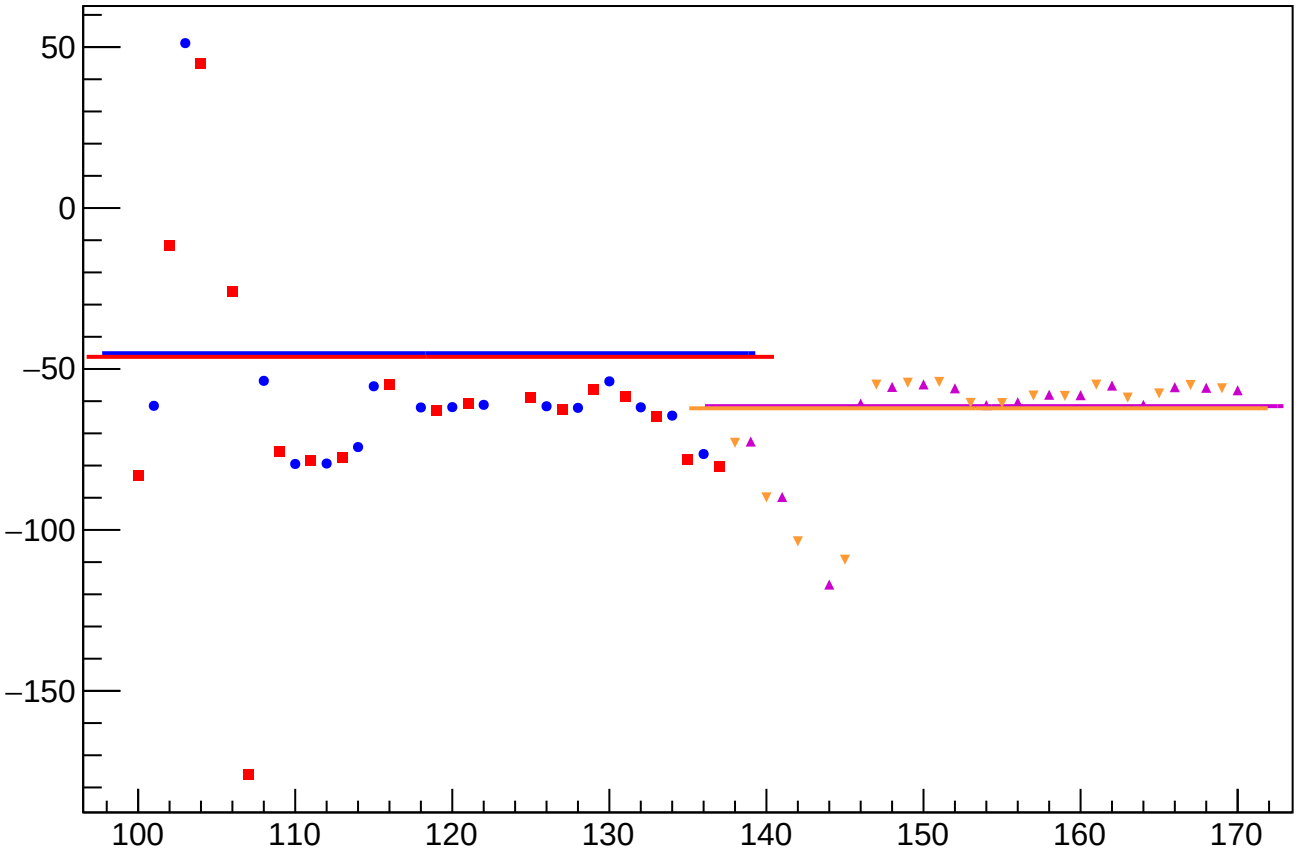
Right Out: -32.459+/-1.027 $\chi^2$/NDF: 580.8/17

Left In: 0.591+/-0.673 $\chi^2$/NDF:680.6/15

+ sign -6.881+/-0.564 $\chi^2$/NDF: 1900.2/31

All: -8.113+/-0.399 $\chi^2$/NDF: 3895.1/65

- sign -9.340+/-0.563 $\chi^2$/NDF: 1985.3/33




Right In: -45.106+/-0.060 $\chi^2$/NDF: 575184.2/15

Left Out: -62.210+/-0.032 $\chi^2$/NDF:186000.7/15

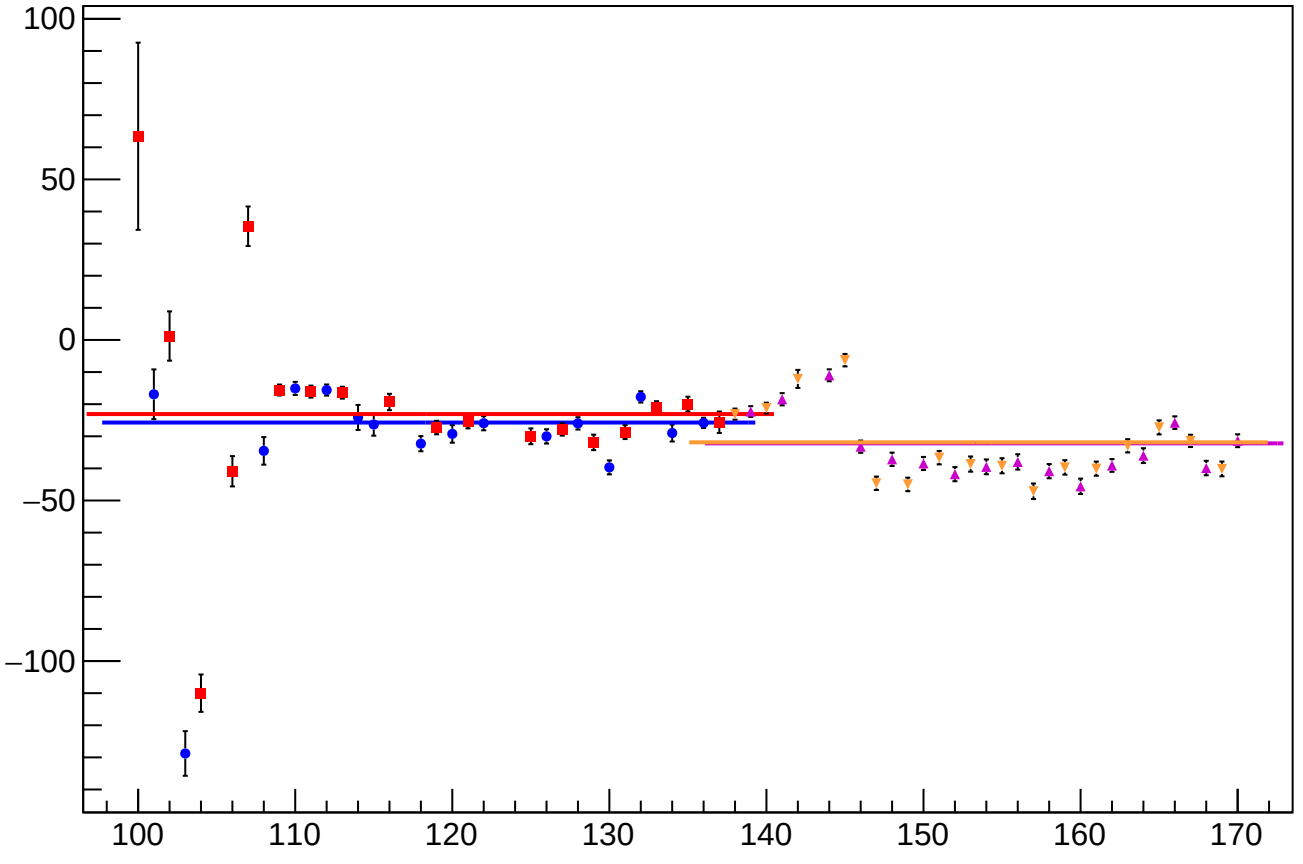
Right Out: -46.229+/-0.063 $\chi^2$/NDF: 493616.3/17

Left In: -61.542+/-0.031 $\chi^2$/NDF:158048.3/15

+ sign -58.514+/-0.028 $\chi^2$/NDF: 824607.3/31

All: -58.554+/-0.020 $\chi^2$/NDF: 1524612.9/65

- sign -58.593+/-0.027 $\chi^2$/NDF: 700001.5/33




Right In: -25.721+/-0.590 $\chi^2$/NDF: 363.0/15

Left Out: -31.881+/-0.527 $\chi^2$/NDF:471.0/15

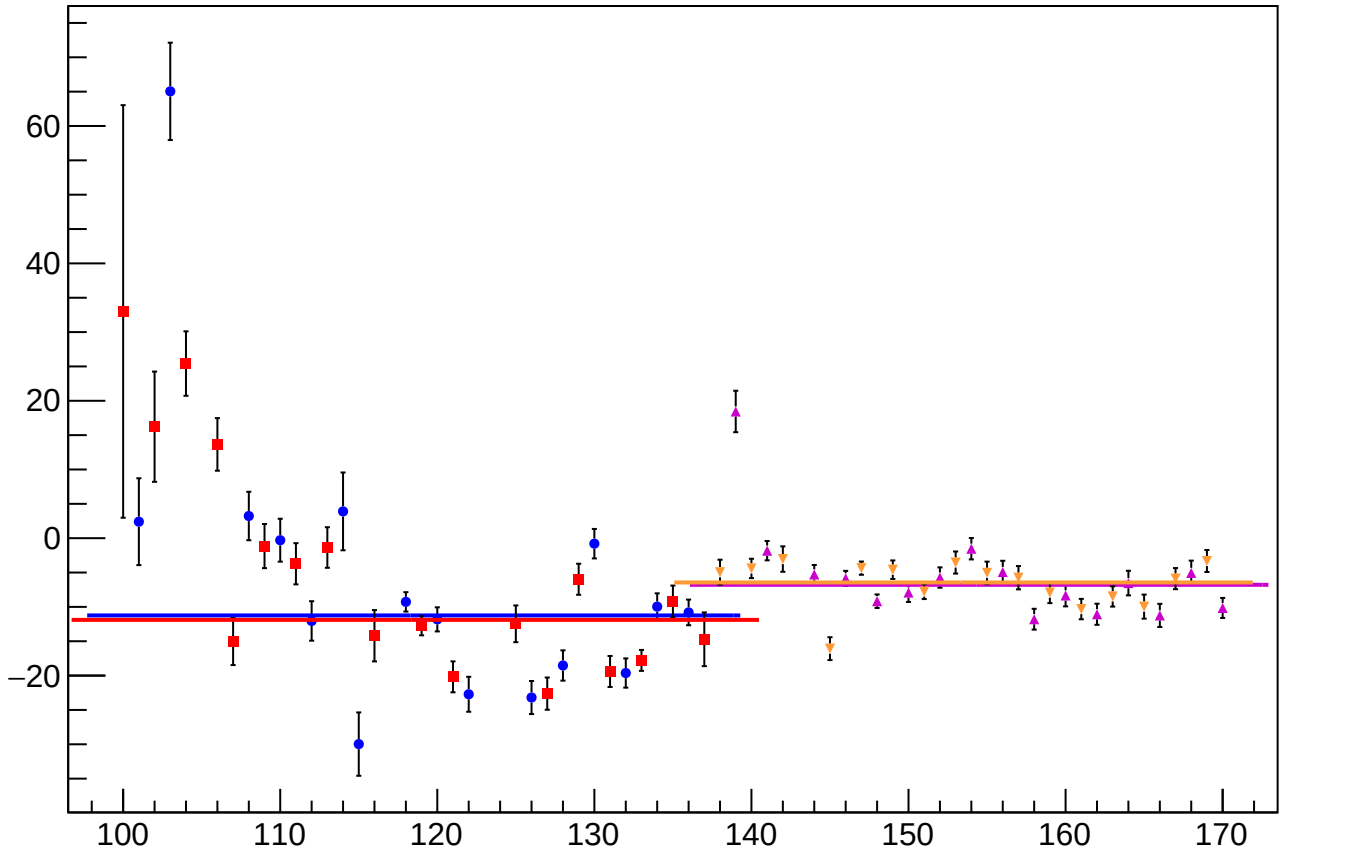
Right Out: -23.079+/-0.582 $\chi^2$/NDF: 437.1/17

Left In: -32.206+/-0.516 $\chi^2$/NDF:351.0/15

+ sign -29.146+/-0.393 $\chi^2$/NDF: 894.5/31

All: -28.657+/-0.276 $\chi^2$/NDF: 1823.4/65

- sign -28.186+/-0.386 $\chi^2$/NDF: 925.8/33




Right In: -11.246+/-0.600 $\chi^2$/NDF: 271.1/15

Left Out: -6.444+/-0.365 $\chi^2$/NDF:69.4/15

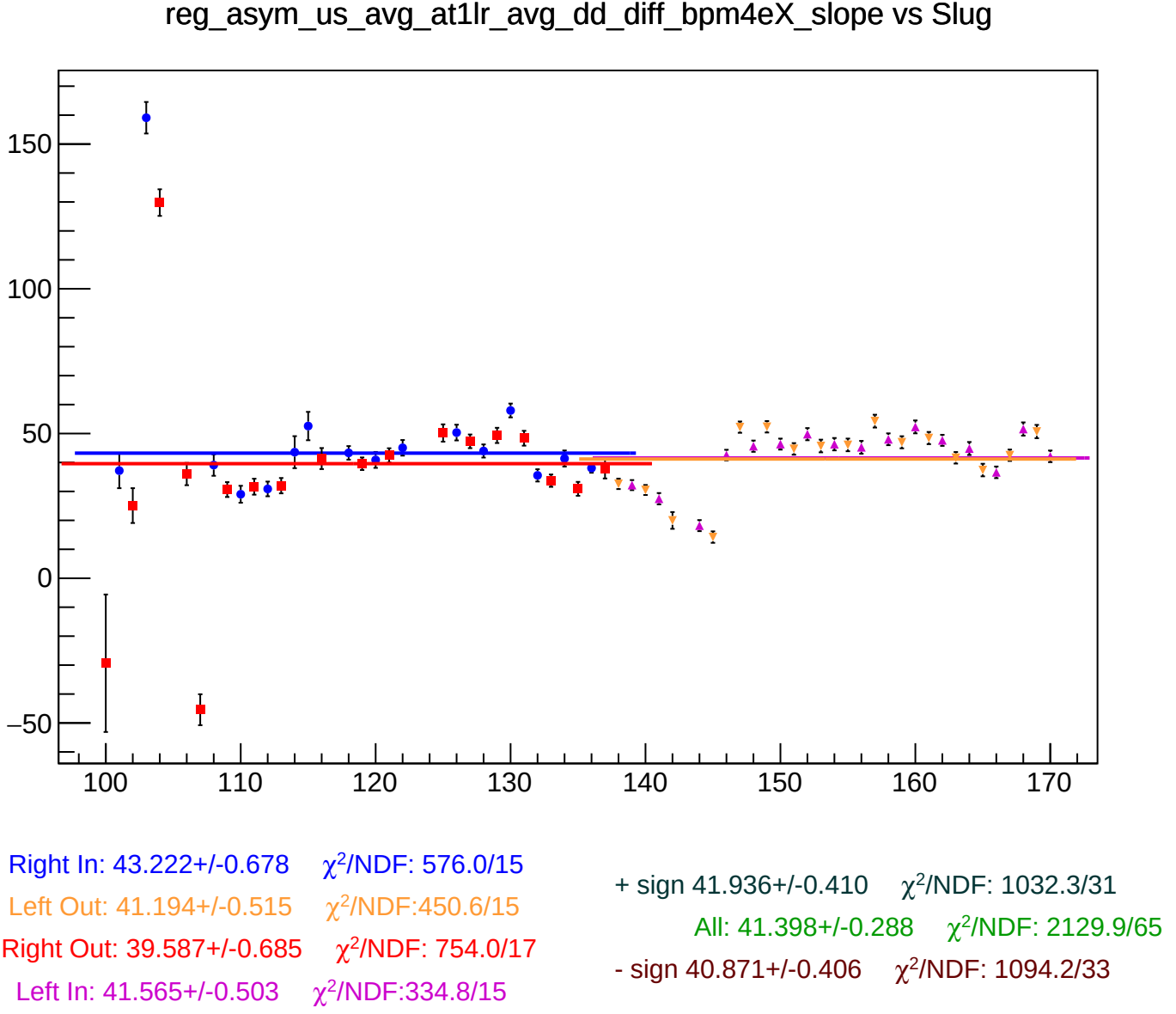
Right Out: -11.890+/-0.607 $\chi^2$/NDF: 224.5/17

Left In: -6.787+/-0.365 $\chi^2$/NDF:137.0/15

+ sign -7.742+/-0.312 $\chi^2$/NDF: 387.3/31

All: -7.942+/-0.221 $\chi^2$/NDF: 801.4/65

- sign -8.144+/-0.313 $\chi^2$/NDF: 413.3/33




Right In: 43.222+/-0.678 $\chi^2$/NDF: 576.0/15

Left Out: 41.194+/-0.515 $\chi^2$/NDF:450.6/15

Right Out: 39.587+/-0.685 $\chi^2$/NDF: 754.0/17

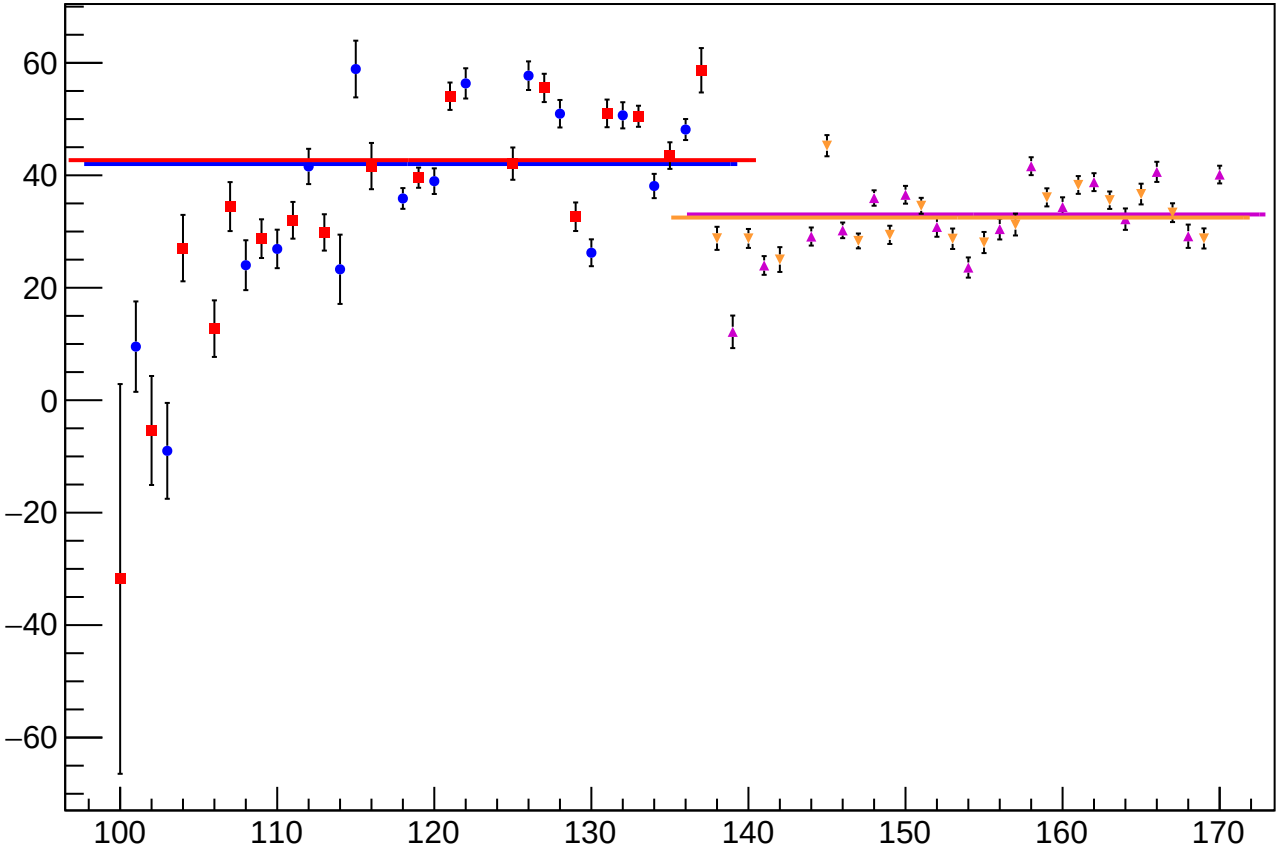
Left In: 41.565+/-0.503 $\chi^2$/NDF:334.8/15

\+ sign 41.936+/-0.410 $\chi^2$/NDF: 1032.3/31

All: 41.398+/-0.288 $\chi^2$/NDF: 2129.9/65

\- sign 40.871+/-0.406 $\chi^2$/NDF: 1094.2/33

# reg_asym_us_avg_at1lr_avg_dd_diff_bpm4eY_slope vs Slug




Right In: 42.006+/-0.684 $\chi^2$/NDF: 272.7/15

Left Out: 32.488+/-0.425 $\chi^2$/NDF:123.7/15

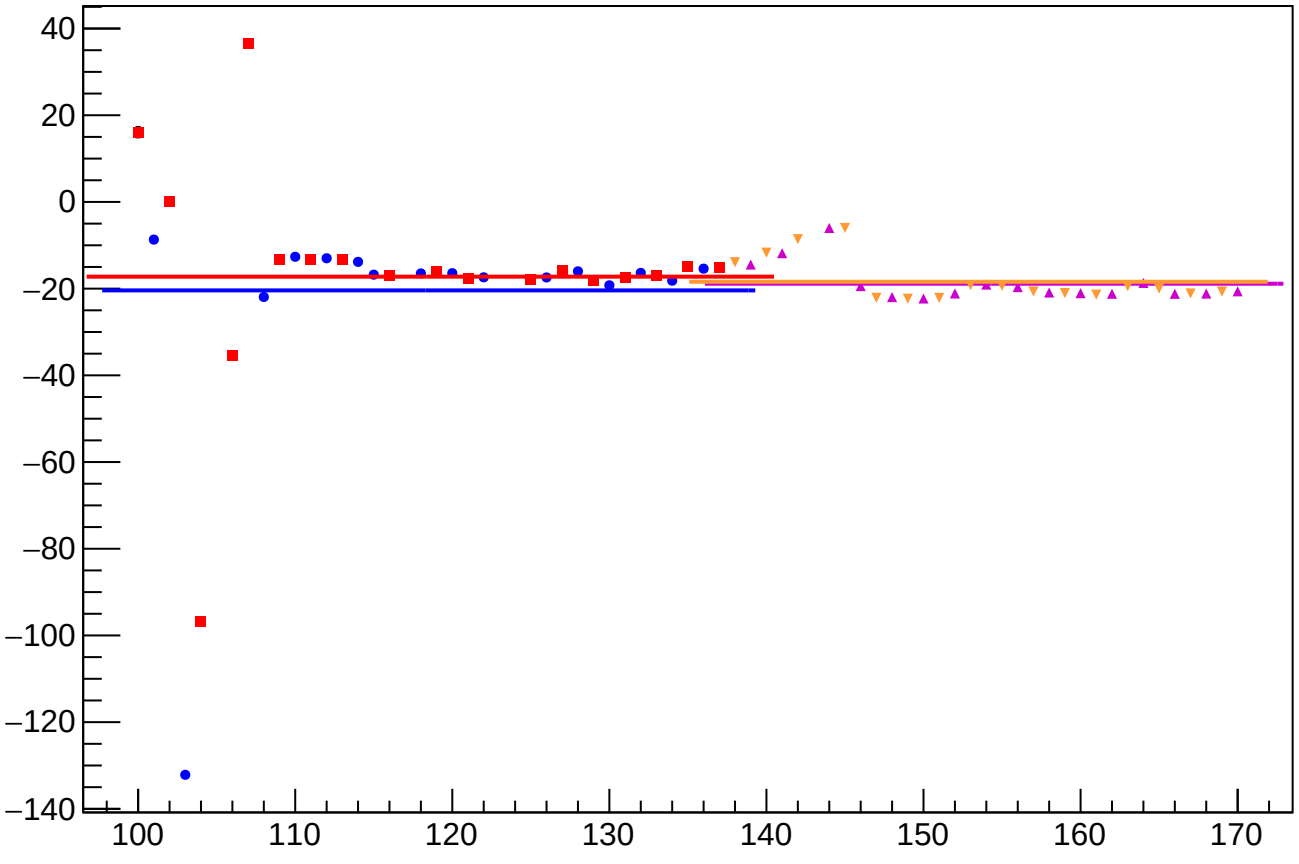
Right Out: 42.696+/-0.695 $\chi^2$/NDF: 230.3/17

Left In: 33.038+/-0.423 $\chi^2$/NDF:217.0/15

+ sign 35.137+/-0.361 $\chi^2$/NDF: 536.2/31

All: 35.392+/-0.255 $\chi^2$/NDF: 1125.6/65

- sign 35.647+/-0.361 $\chi^2$/NDF: 588.4/33




Right In: -20.405+/-0.042 $\chi^2$/NDF: 245611.9/15

Left Out: -18.411+/-0.019 $\chi^2$/NDF:57150.7/15

Right Out: -17.236+/-0.044 $\chi^2$/NDF: 204657.3/17

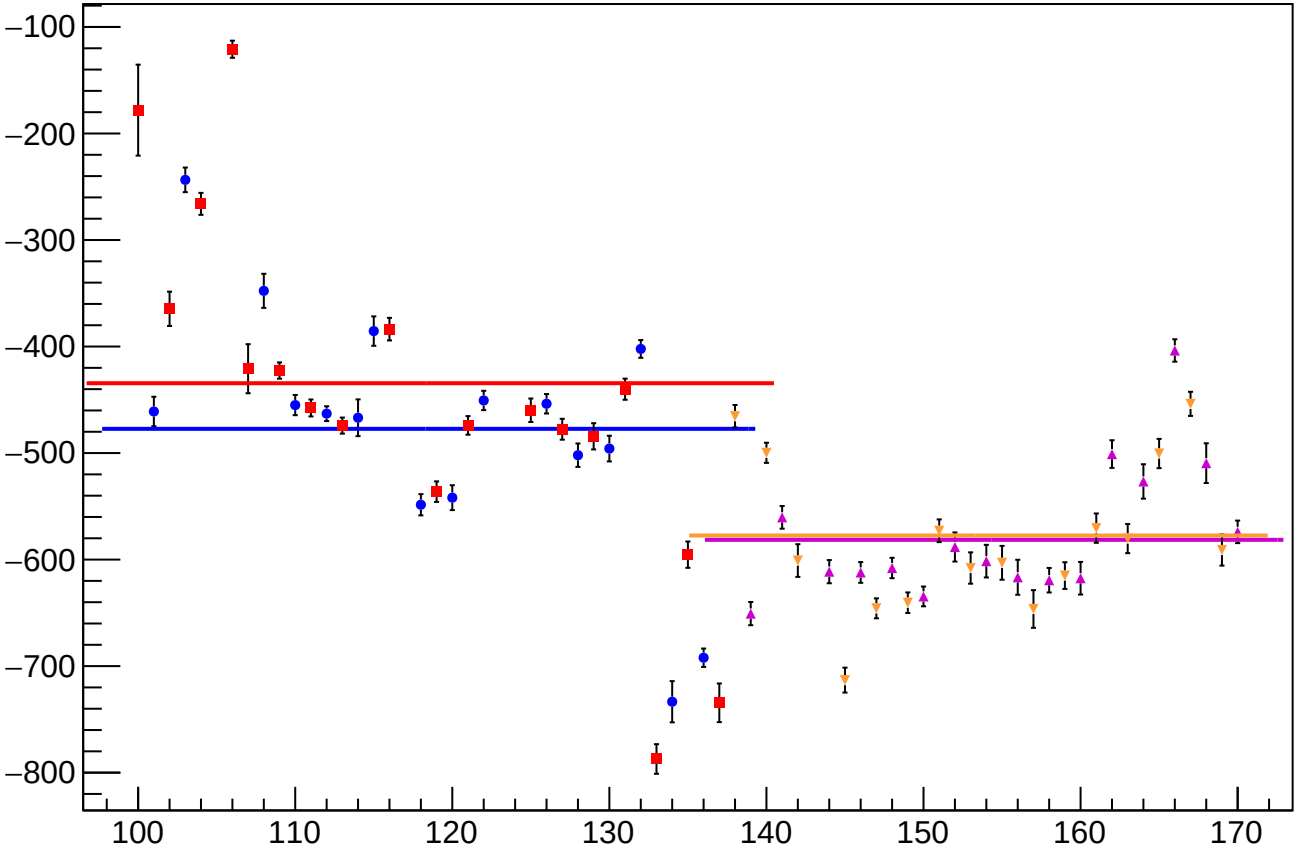
Left In: -18.866+/-0.019 $\chi^2$/NDF:45047.8/15

+ sign -18.762+/-0.018 $\chi^2$/NDF: 304627.6/31

All: -18.687+/-0.012 $\chi^2$/NDF: 555523.8/65

- sign -18.615+/-0.017 $\chi^2$/NDF: 250860.4/33

# reg_asym_us_avg_at2lr_avg_avg_diff_bpm1X_slope vs Slug




Right In: -477.255+/-2.633 $\chi^2$/NDF: 1510.8/15

Left Out: -577.385+/-3.025 $\chi^2$/NDF:596.7/15

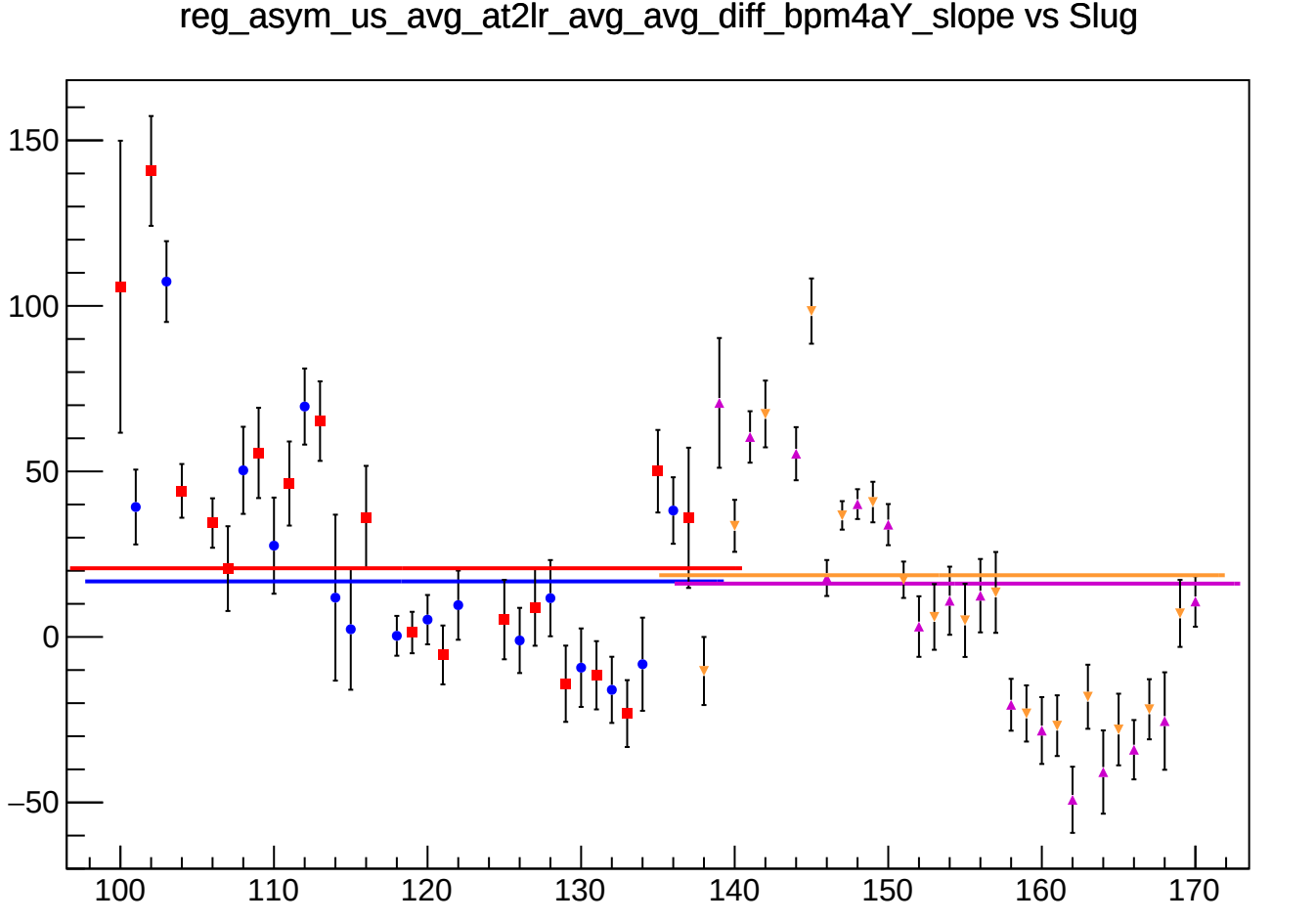
Right Out: -434.437+/-2.464 $\chi^2$/NDF: 3161.9/17

Left In: -581.452+/-2.955 $\chi^2$/NDF:475.6/15

+ sign -520.410+/-1.986 $\chi^2$/NDF: 2730.8/31

All: -506.945+/-1.370 $\chi^2$/NDF: 7916.0/65

- sign -494.721+/-1.892 $\chi^2$/NDF: 5097.5/33




Right In: 16.780+/-2.654 $\chi^2$/NDF: 125.0/15

Left Out: 18.647+/-1.994 $\chi^2$/NDF:237.4/15

Right Out: 20.749+/-2.548 $\chi^2$/NDF: 157.9/17

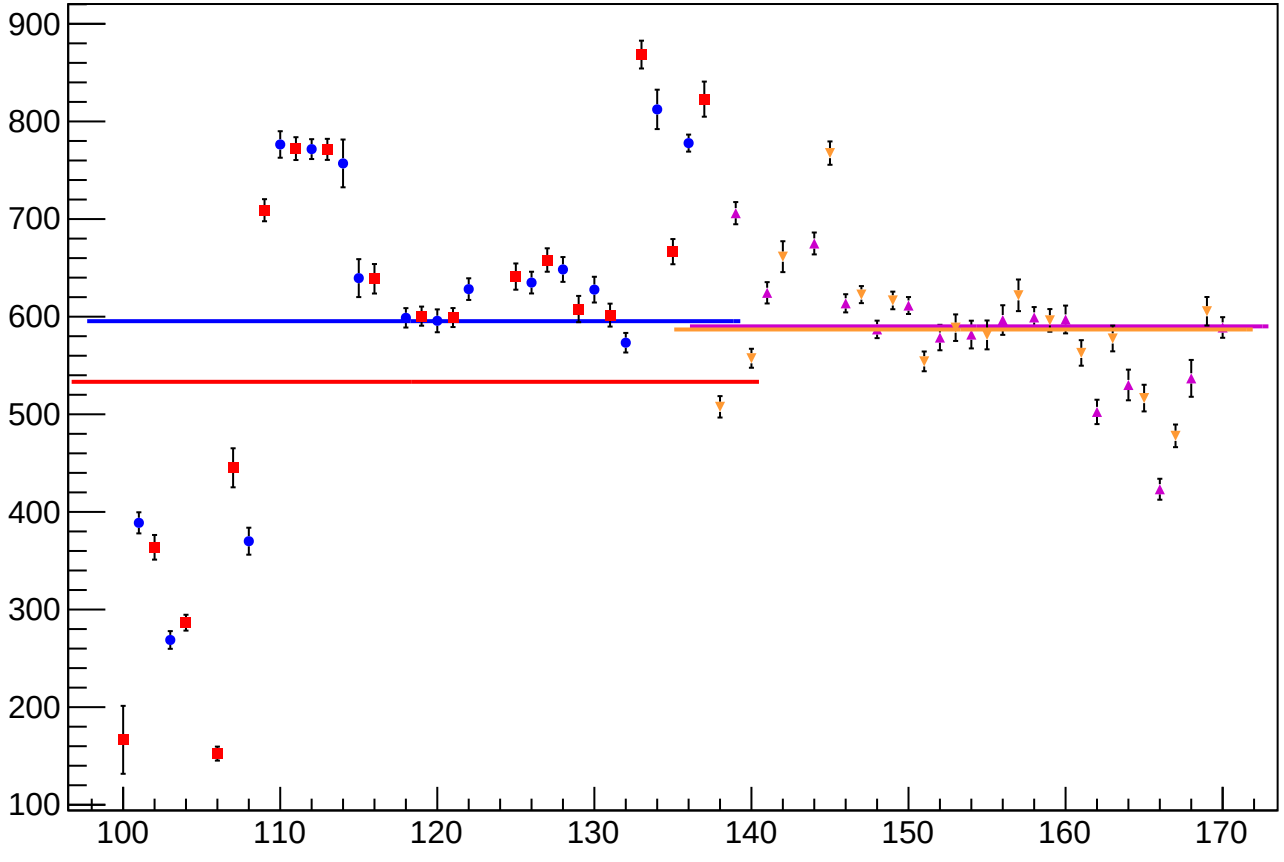
Left In: 16.110+/-2.000 $\chi^2$/NDF:247.4/15

+ sign 17.974+/-1.594 $\chi^2$/NDF: 362.7/31

All: 17.925+/-1.120 $\chi^2$/NDF: 770.1/65

- sign 17.878+/-1.573 $\chi^2$/NDF: 407.4/33

# reg_asym_us_avg_at2lr_avg_avg_diff_bpm4eX_slope vs Slug




Right In: 595.406+/-2.930 $\chi^2$/NDF: 3059.7/15

Left Out: 586.889+/-2.945 $\chi^2$/NDF:475.3/15

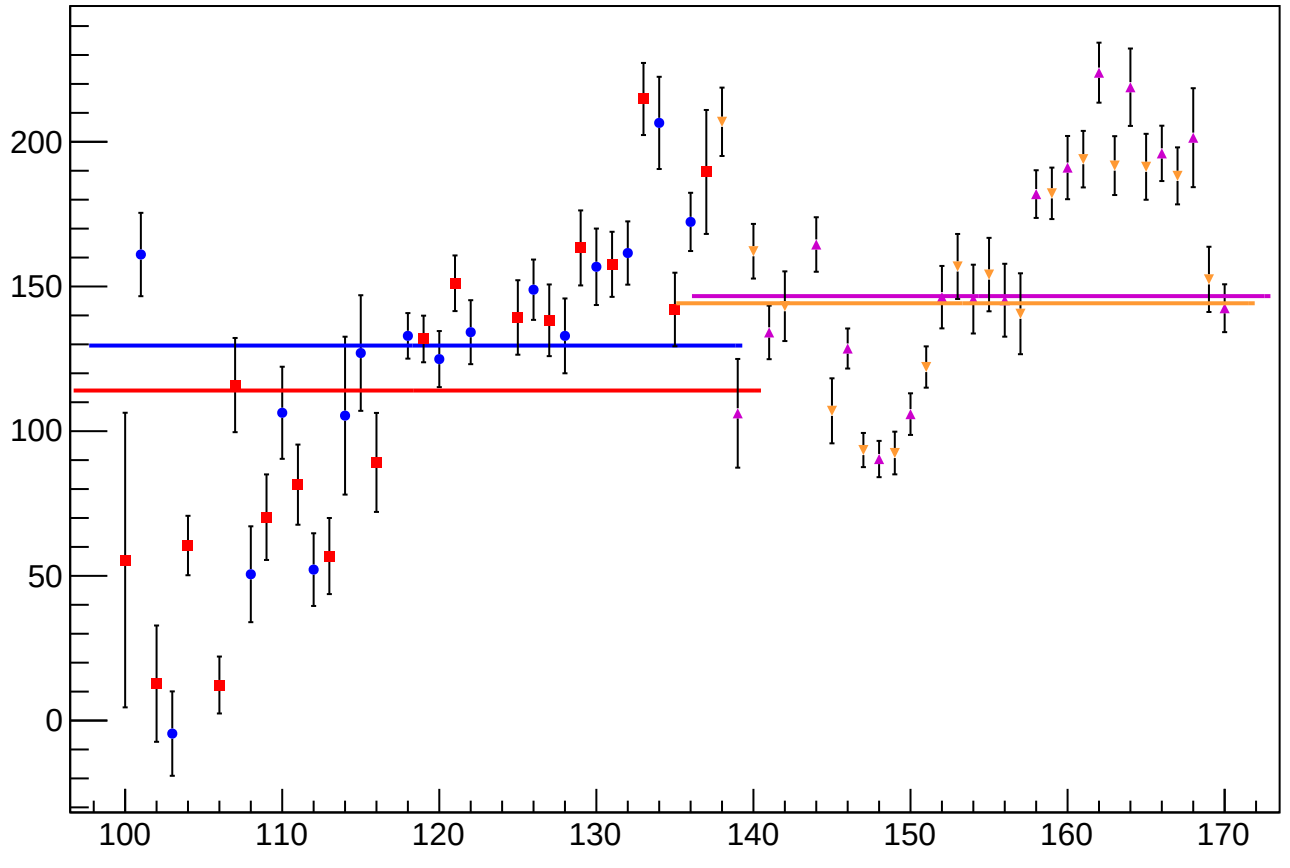
Right Out: 533.283+/-2.746 $\chi^2$/NDF: 6502.9/17

Left In: 590.079+/-2.871 $\chi^2$/NDF:499.9/15

+ sign 591.169+/-2.077 $\chi^2$/NDF: 3539.2/31

All: 575.094+/-1.435 $\chi^2$/NDF: 10860.9/65

- sign 560.415+/-1.985 $\chi^2$/NDF: 7207.1/33




Right In: 129.586+/-3.081 $\chi^2$/NDF: 211.2/15

Left Out: 144.201+/-2.372 $\chi^2$/NDF:281.0/15

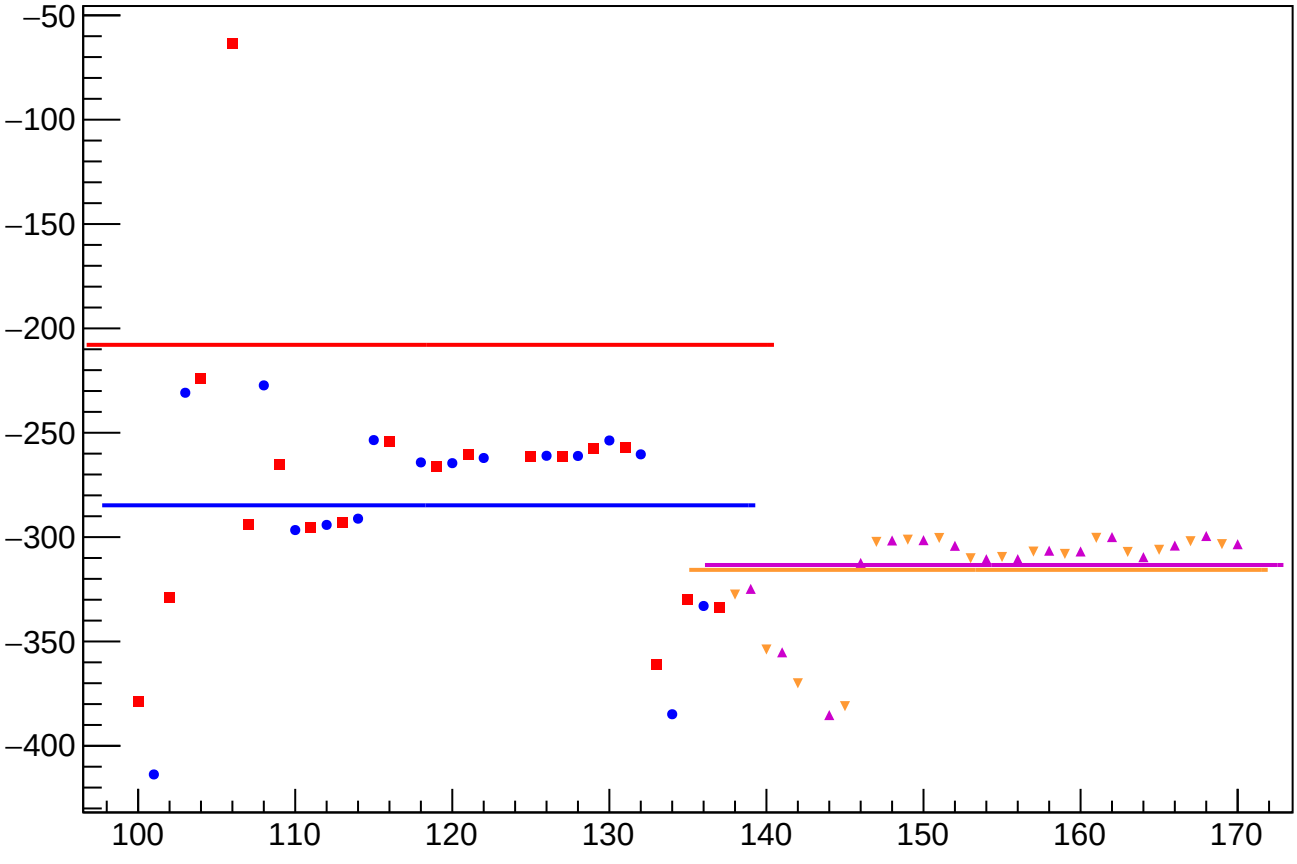
Right Out: 114.048+/-2.976 $\chi^2$/NDF: 335.9/17

Left In: 146.673+/-2.355 $\chi^2$/NDF:286.3/15

+ sign 138.763+/-1.879 $\chi^2$/NDF: 506.4/31

All: 136.397+/-1.317 $\chi^2$/NDF: 1205.6/65

- sign 134.113+/-1.847 $\chi^2$/NDF: 696.1/33




Right In: -284.765+/-0.178 $\chi^2$/NDF: 104370.4/15

Left Out: -315.690+/-0.113 $\chi^2$/NDF:42823.5/15

Right Out: -207.875+/-0.149 $\chi^2$/NDF: 536707.7/17

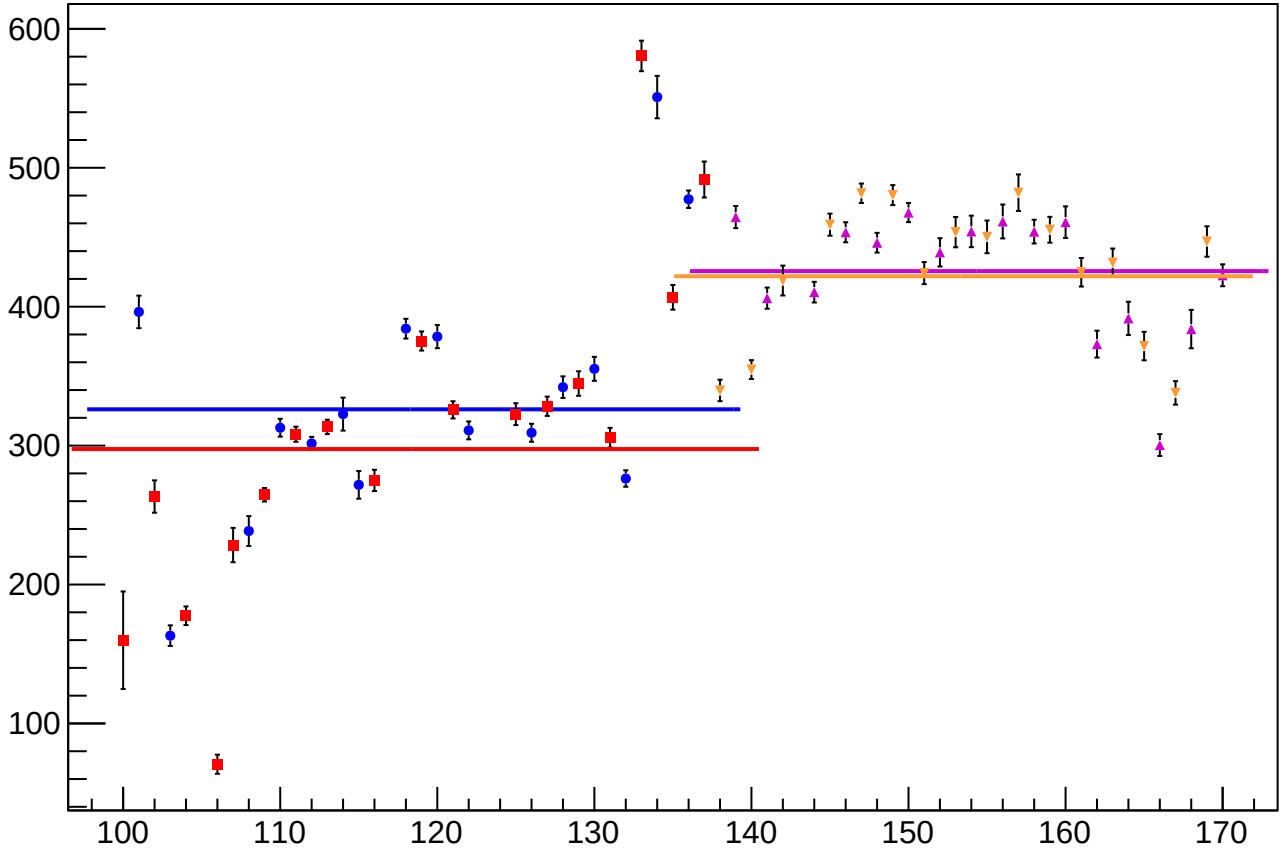
Left In: -313.350+/-0.109 $\chi^2$/NDF:35678.1/15

+ sign -306.720+/-0.096 $\chi^2$/NDF: 168730.5/31

All: -290.330+/-0.065 $\chi^2$/NDF: 1121808.7/65

- sign -276.433+/-0.088 $\chi^2$/NDF: 898796.4/33

# reg_asym_us_avg_at2lr_avg_dd_diff_bpm1X_slope vs Slug




Right In: 326.133+/-1.857 $\chi^2$/NDF: 1642.9/15

Left Out: 421.926+/-2.221 $\chi^2$/NDF:550.1/15

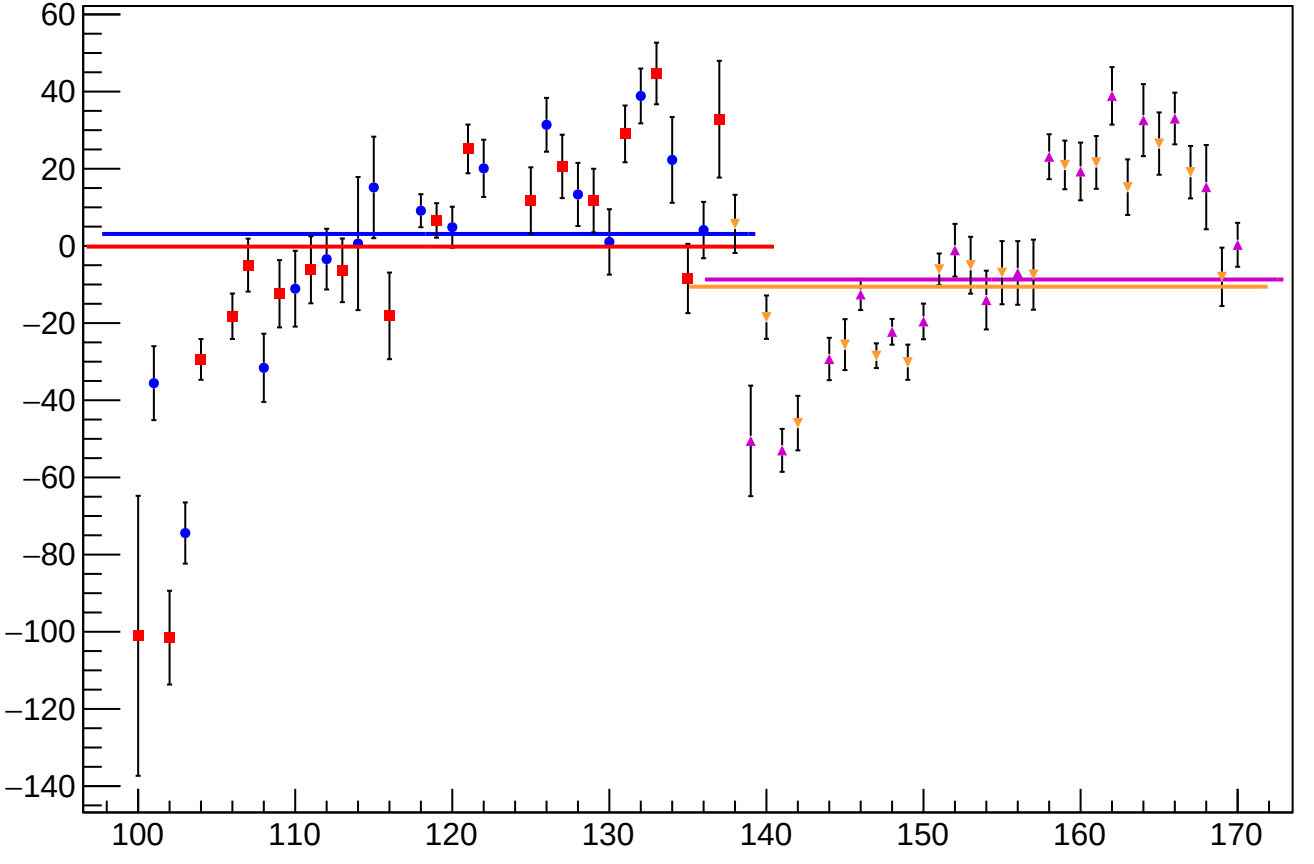
Right Out: 297.538+/-1.735 $\chi^2$/NDF: 2775.4/17

Left In: 425.605+/-2.173 $\chi^2$/NDF:432.7/15

+ sign 365.550+/-1.424 $\chi^2$/NDF: 3288.2/31

All: 356.012+/-0.982 $\chi^2$/NDF: 8702.9/65

- sign 347.372+/-1.356 $\chi^2$/NDF: 5329.3/33




Right In: 3.101+/-1.892 $\chi^2$/NDF: 184.5/15

Left Out: -10.570+/-1.470 $\chi^2$/NDF:188.9/15

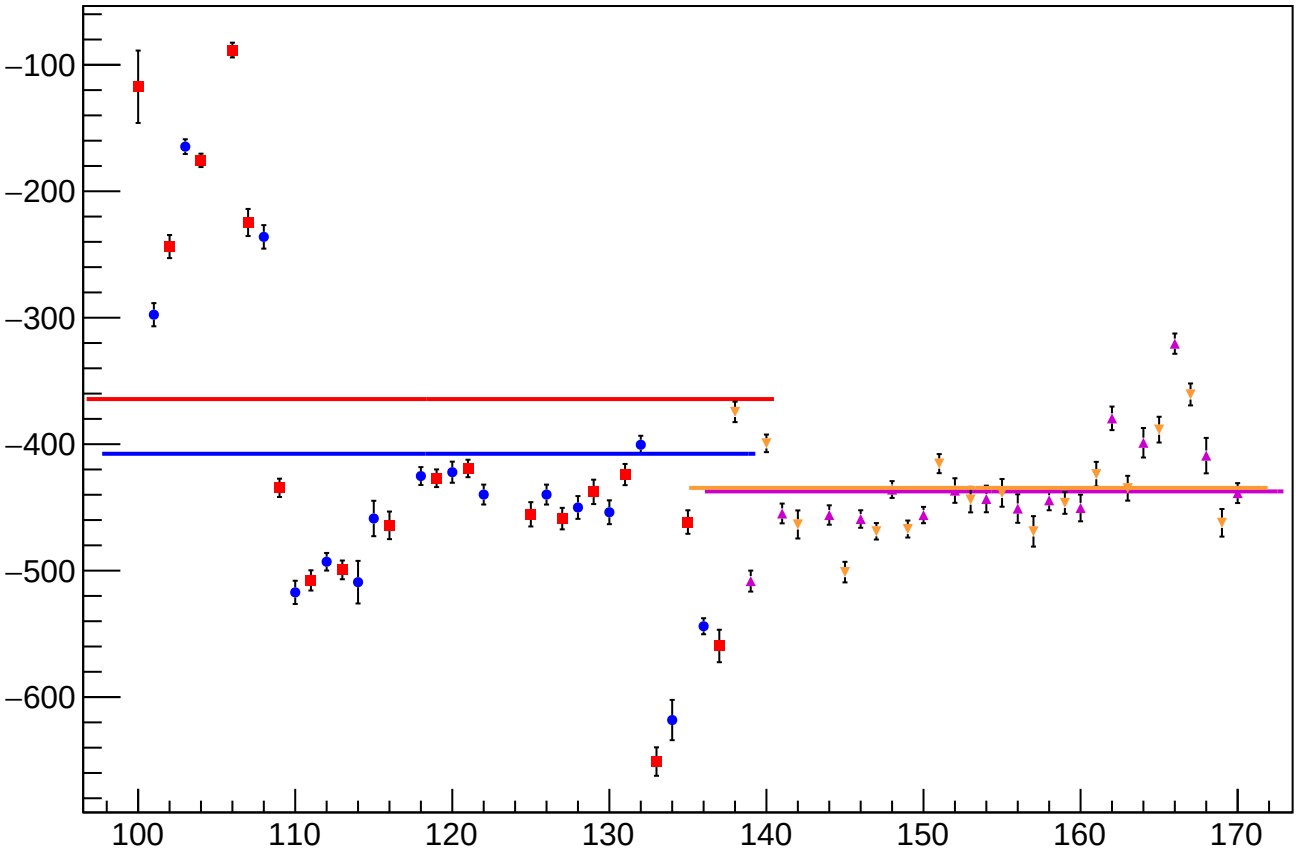
Right Out: -0.180+/-1.791 $\chi^2$/NDF: 205.2/17

Left In: -8.703+/-1.475 $\chi^2$/NDF:260.9/15

+ sign -5.426+/-1.161 $\chi^2$/NDF: 406.0/31

All: -5.341+/-0.813 $\chi^2$/NDF: 885.6/65

- sign -5.259+/-1.139 $\chi^2$/NDF: 479.6/33




Right In: -407.575+/-2.074 $\chi^2$/NDF: 3280.5/15

Left Out: -434.574+/-2.165 $\chi^2$/NDF:324.4/15

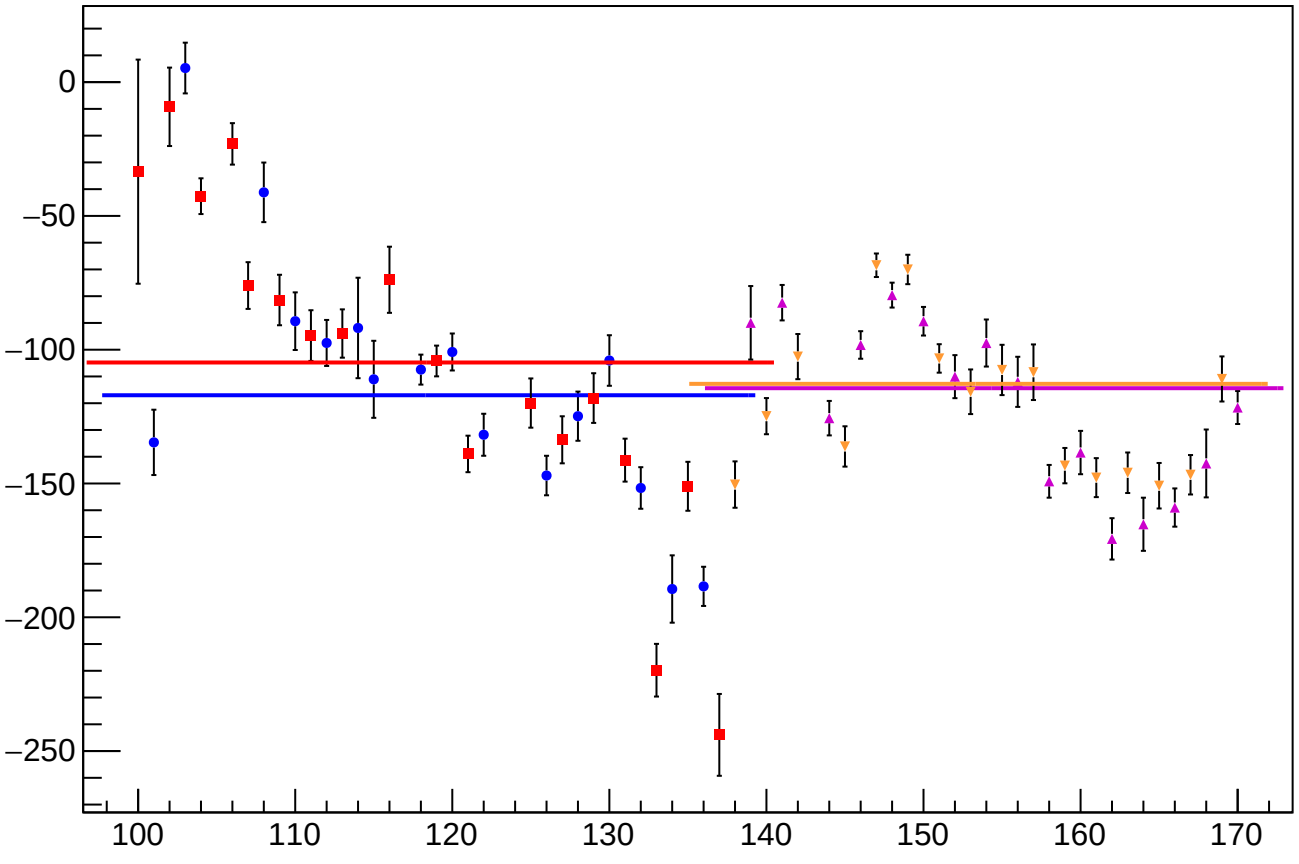
Right Out: -364.323+/-1.942 $\chi^2$/NDF: 6220.4/17

Left In: -437.350+/-2.114 $\chi^2$/NDF:372.4/15

+ sign -420.495+/-1.497 $\chi^2$/NDF: 3686.0/31

All: -408.602+/-1.034 $\chi^2$/NDF: 11046.5/65

- sign -397.753+/-1.430 $\chi^2$/NDF: 7239.9/33




Right In: -117.021+/-2.194 $\chi^2$/NDF: 407.8/15

Left Out: -112.764+/-1.747 $\chi^2$/NDF:304.3/15

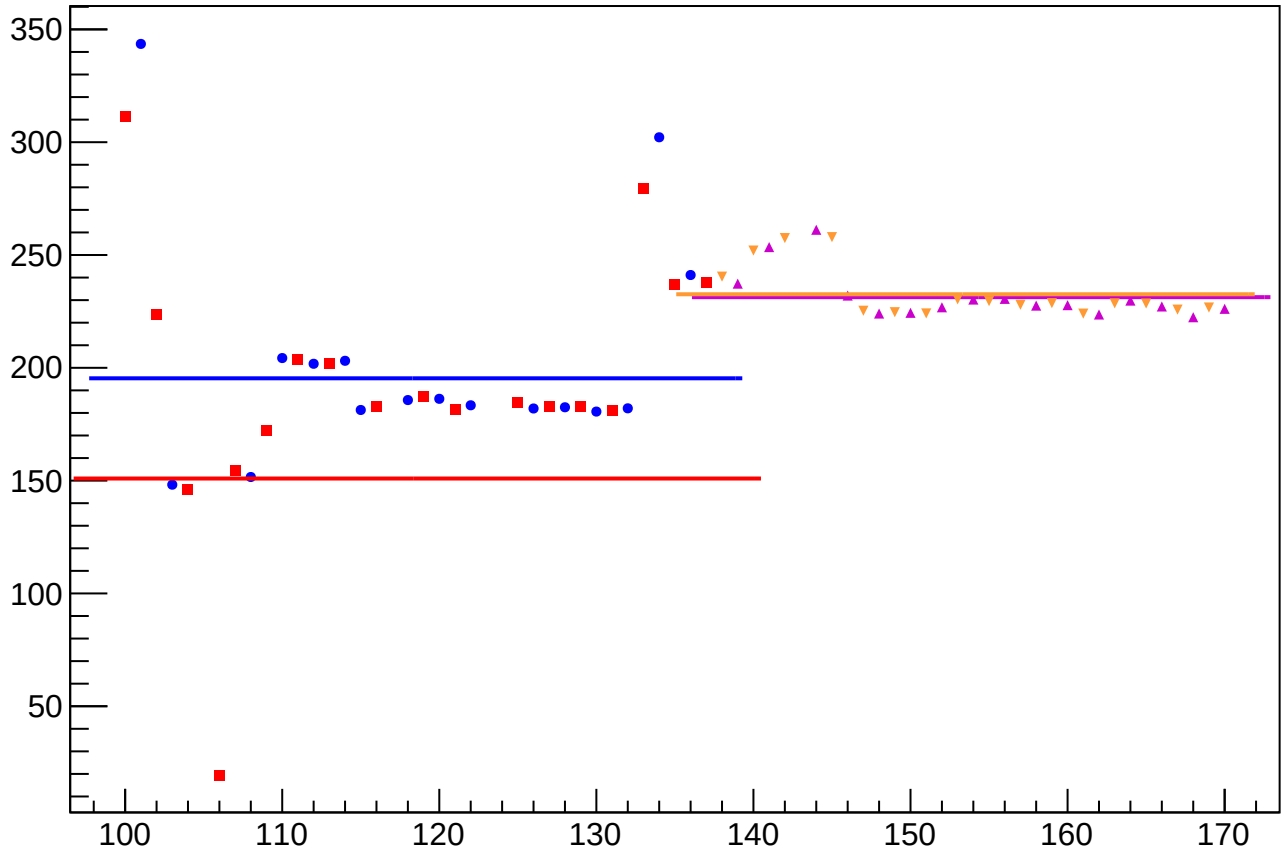
Right Out: -104.780+/-2.091 $\chi^2$/NDF: 575.1/17

Left In: -114.389+/-1.736 $\chi^2$/NDF:286.8/15

+ sign -114.416+/-1.367 $\chi^2$/NDF: 714.4/31

All: -112.396+/-0.955 $\chi^2$/NDF: 1593.0/65

- sign -110.468+/-1.336 $\chi^2$/NDF: 874.4/33




Right In: 195.351+/-0.125 $\chi^2$/NDF: 176975.5/15

Left Out: 232.600+/-0.084 $\chi^2$/NDF:17835.4/15

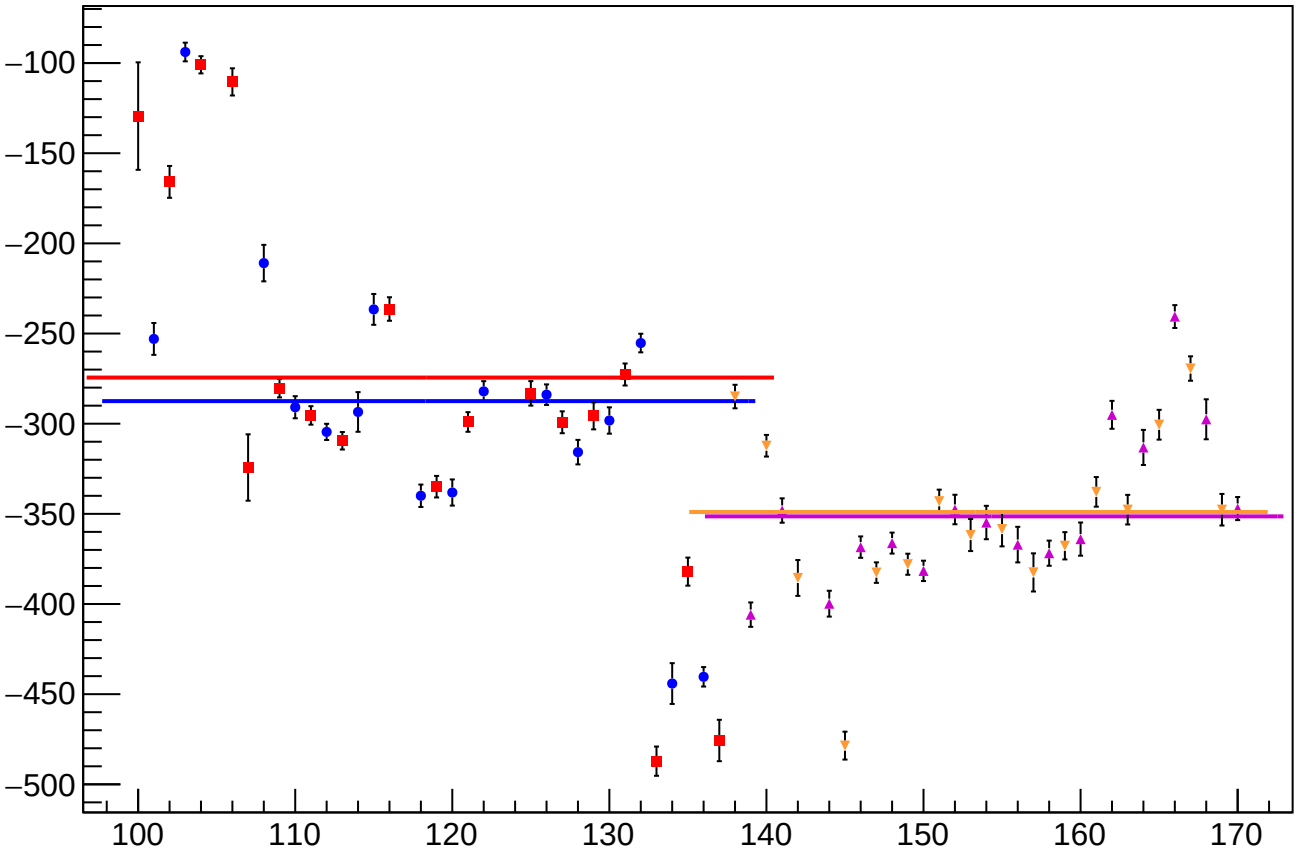
Right Out: 150.932+/-0.110 $\chi^2$/NDF: 499233.7/17

Left In: 231.313+/-0.081 $\chi^2$/NDF:16042.9/15

+ sign 221.047+/-0.069 $\chi^2$/NDF: 256432.4/31

All: 211.600+/-0.047 $\chi^2$/NDF: 1153361.6/65

- sign 203.307+/-0.065 $\chi^2$/NDF: 862143.0/33




Right In: -287.476+/-1.611 $\chi^2$/NDF: 2696.5/15

Left Out: -348.975+/-1.852 $\chi^2$/NDF:681.7/15

Right Out: -274.417+/-1.551 $\chi^2$/NDF: 3413.4/17

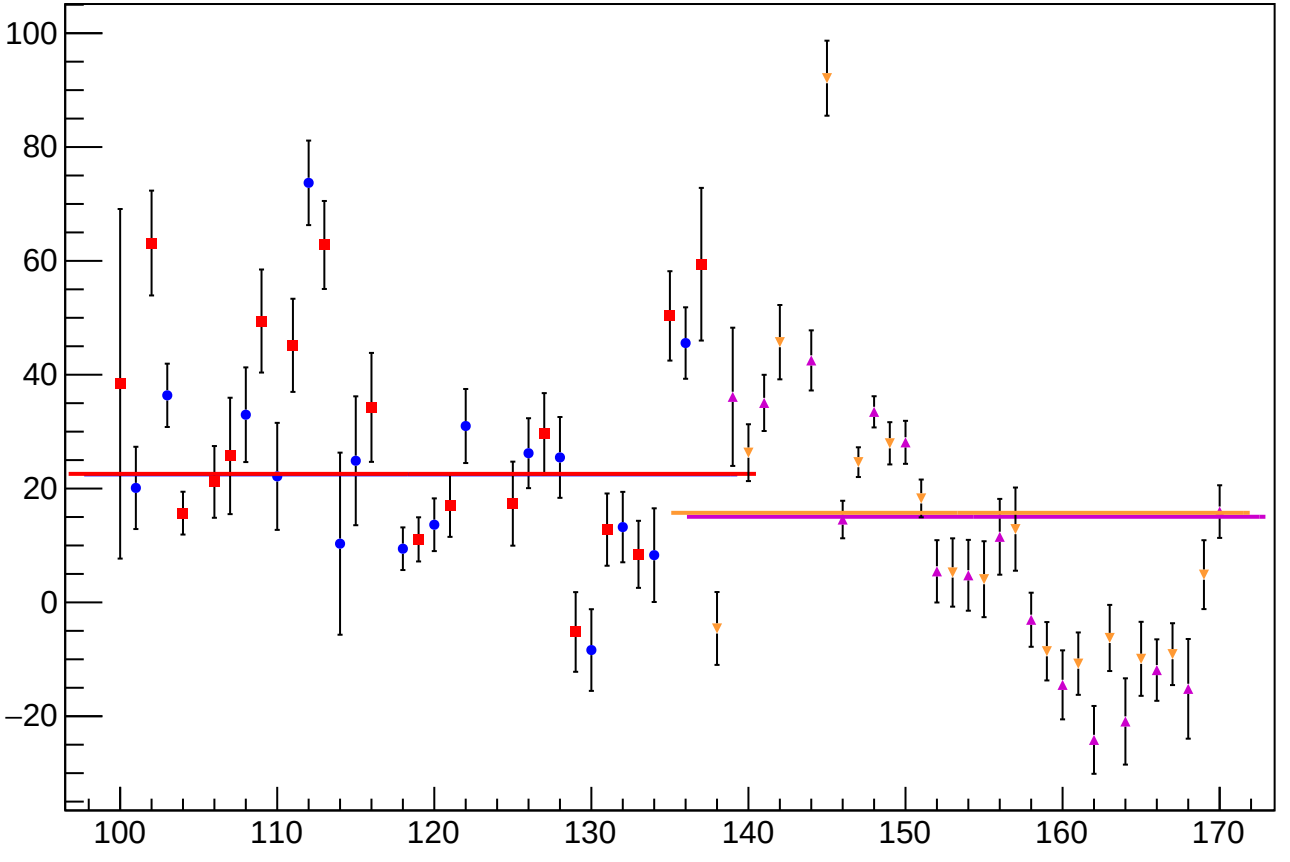
Left In: -351.400+/-1.806 $\chi^2$/NDF:565.4/15

+ sign -313.967+/-1.216 $\chi^2$/NDF: 4005.8/31

All: -310.420+/-0.846 $\chi^2$/NDF: 9046.3/65

- sign -307.095+/-1.177 $\chi^2$/NDF: 5024.1/33

# reg_asym_us_avg_atlr_avg_avg_diff_bpm4aY_slope vs Slug




Right In: 22.492+/-1.621 $\chi^2$/NDF: 111.4/15

Left Out: 15.736+/-1.216 $\chi^2$/NDF:299.0/15

Right Out: 22.580+/-1.570 $\chi^2$/NDF: 123.3/17

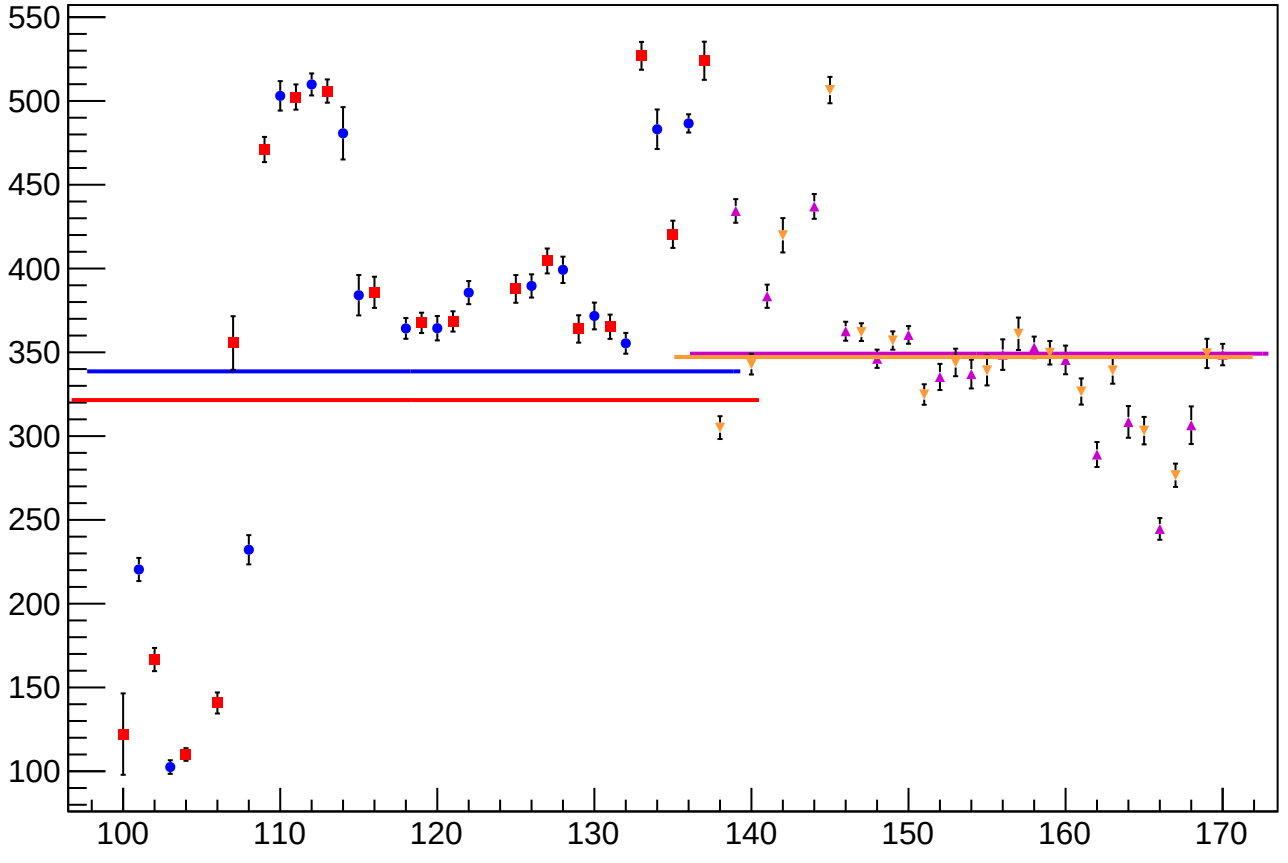
Left In: 15.043+/-1.220 $\chi^2$/NDF:250.6/15

+ sign 18.171+/-0.973 $\chi^2$/NDF: 421.5/31

All: 18.025+/-0.685 $\chi^2$/NDF: 809.9/65

- sign 17.881+/-0.963 $\chi^2$/NDF: 388.3/33

# reg_asym_us_avg_atlr_avg_avg_diff_bpm4eX_slope vs Slug




Right In: 338.633+/-1.748 $\chi^2$/NDF: 6042.6/15

Left Out: 347.175+/-1.800 $\chi^2$/NDF:665.6/15

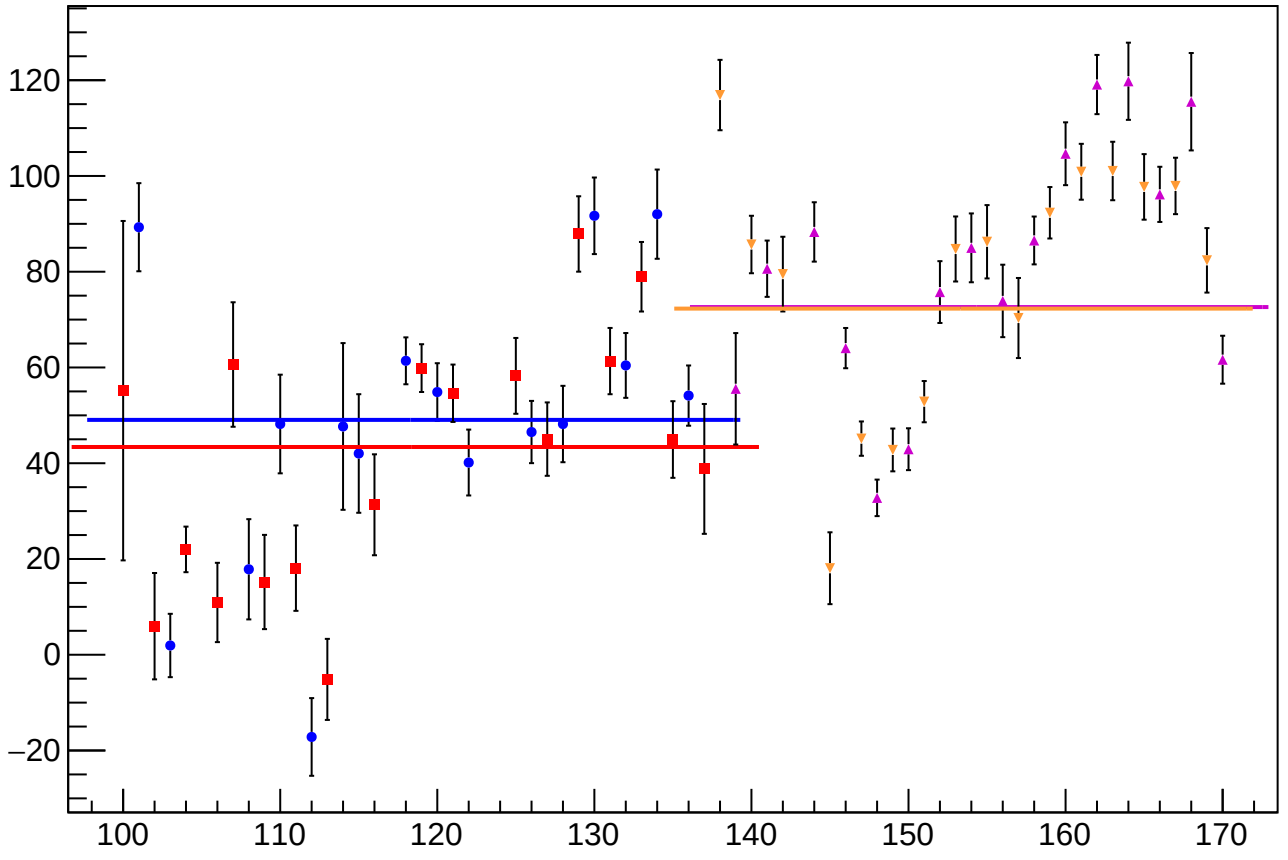
Right Out: 321.500+/-1.694 $\chi^2$/NDF: 7720.8/17

Left In: 349.190+/-1.753 $\chi^2$/NDF:688.0/15

+ sign 342.780+/-1.254 $\chi^2$/NDF: 6719.9/31

All: 338.712+/-0.874 $\chi^2$/NDF: 15278.2/65

- sign 334.873+/-1.218 $\chi^2$/NDF: 8537.8/33




Right In: 49.053+/-1.882 $\chi^2$/NDF: 207.9/15

Left Out: 72.295+/-1.446 $\chi^2$/NDF:317.9/15

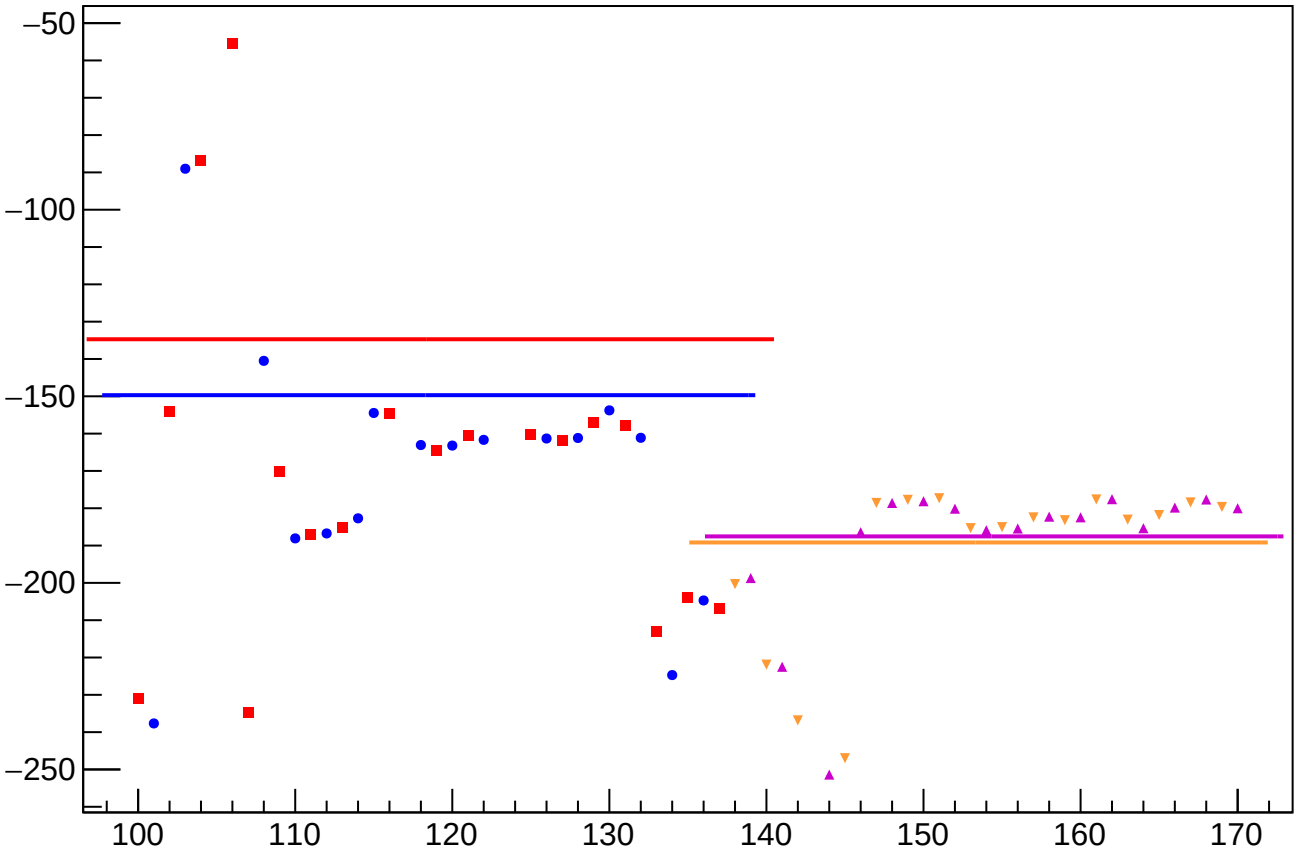
Right Out: 43.392+/-1.834 $\chi^2$/NDF: 180.0/17

Left In: 72.617+/-1.435 $\chi^2$/NDF:334.7/15

+ sign 63.670+/-1.147 $\chi^2$/NDF: 621.7/31

All: 62.576+/-0.805 $\chi^2$/NDF: 1295.6/65

- sign 61.513+/-1.130 $\chi^2$/NDF: 672.1/33




Right In: -149.698+/-0.101 $\chi^2$/NDF: 256472.2/15

Left Out: -189.171+/-0.069 $\chi^2$/NDF:76751.3/15

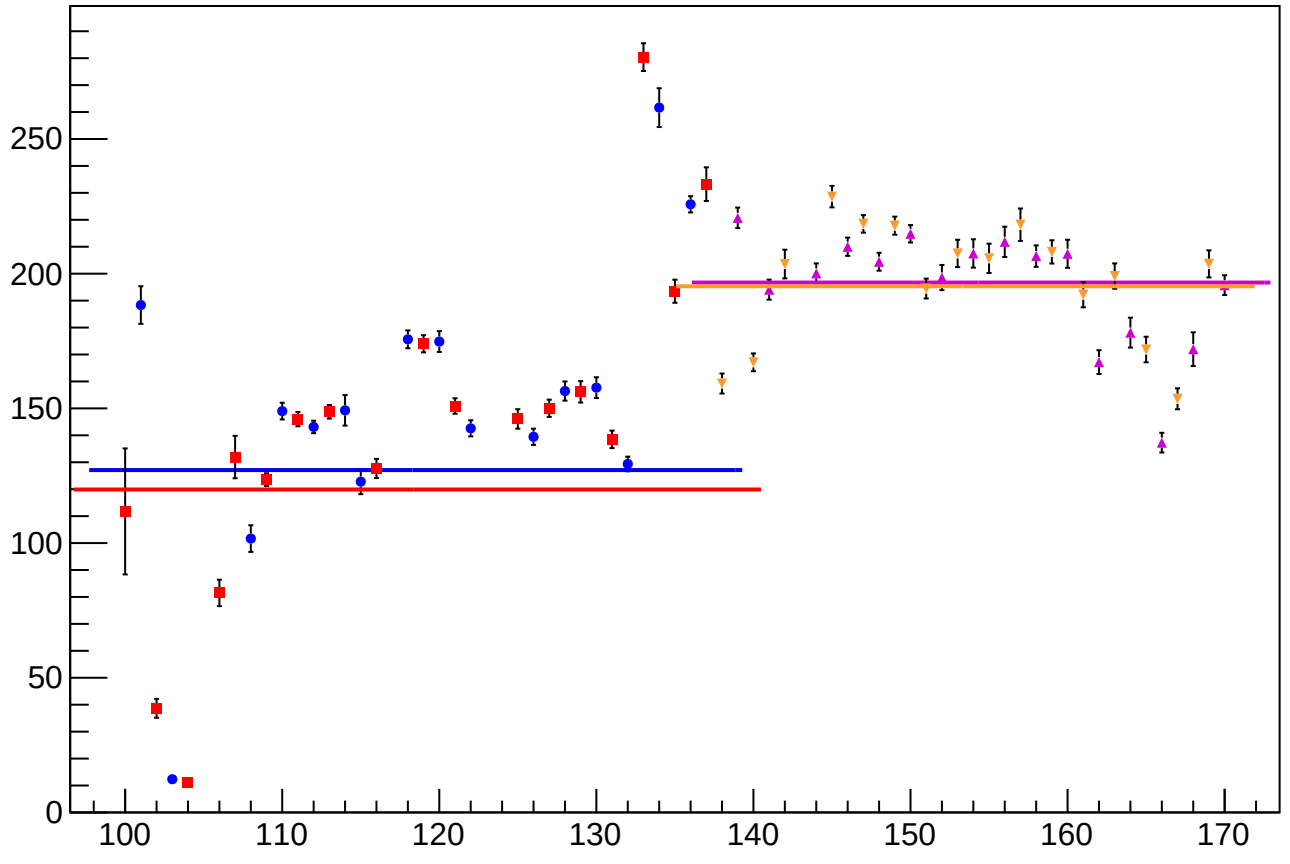
Right Out: -134.715+/-0.097 $\chi^2$/NDF: 312639.8/17

Left In: -187.542+/-0.067 $\chi^2$/NDF:63422.7/15

\+ sign -176.537+/-0.057 $\chi^2$/NDF: 437447.7/31

All: -173.475+/-0.040 $\chi^2$/NDF: 1020789.9/65

\- sign -170.642+/-0.055 $\chi^2$/NDF: 577793.4/33




Right In: 127.100+/-0.811 $\chi^2$/NDF: 6163.2/15

Left Out: 195.333+/-1.046 $\chi^2$/NDF:511.5/15

Right Out: 119.886+/-0.774 $\chi^2$/NDF: 6649.6/17

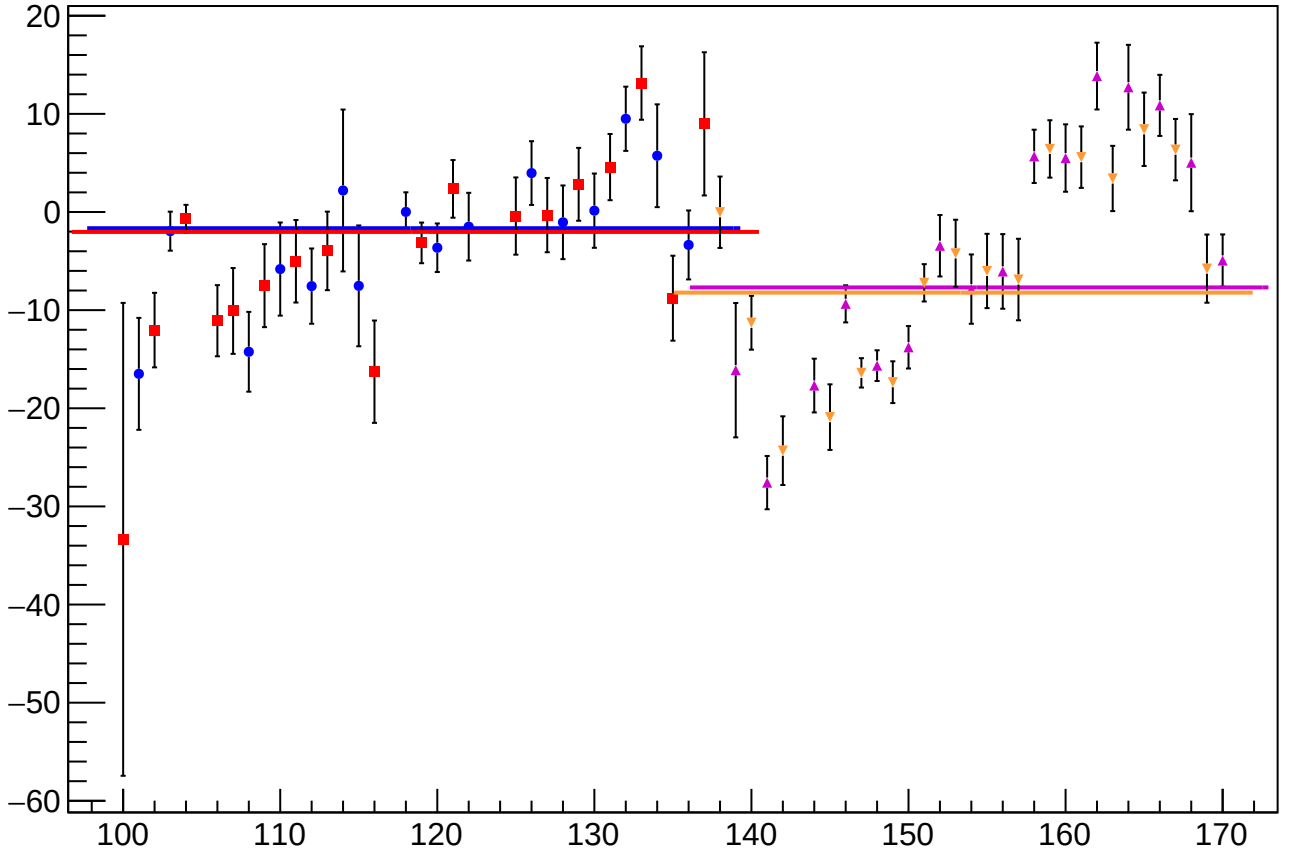
Left In: 196.709+/-1.022 $\chi^2$/NDF:451.2/15

+ sign 152.710+/-0.641 $\chi^2$/NDF: 9332.8/31

All: 150.221+/-0.444 $\chi^2$/NDF: 20054.8/65

- sign 147.913+/-0.617 $\chi^2$/NDF: 10692.9/33

# reg_asym_us_avg_atlr_avg_dd_diff_bpm4aY_slope vs Slug




Right In: -1.651+/-0.833 $\chi^2$/NDF: 39.1/15

Left Out: -8.214+/-0.690 $\chi^2$/NDF:190.9/15

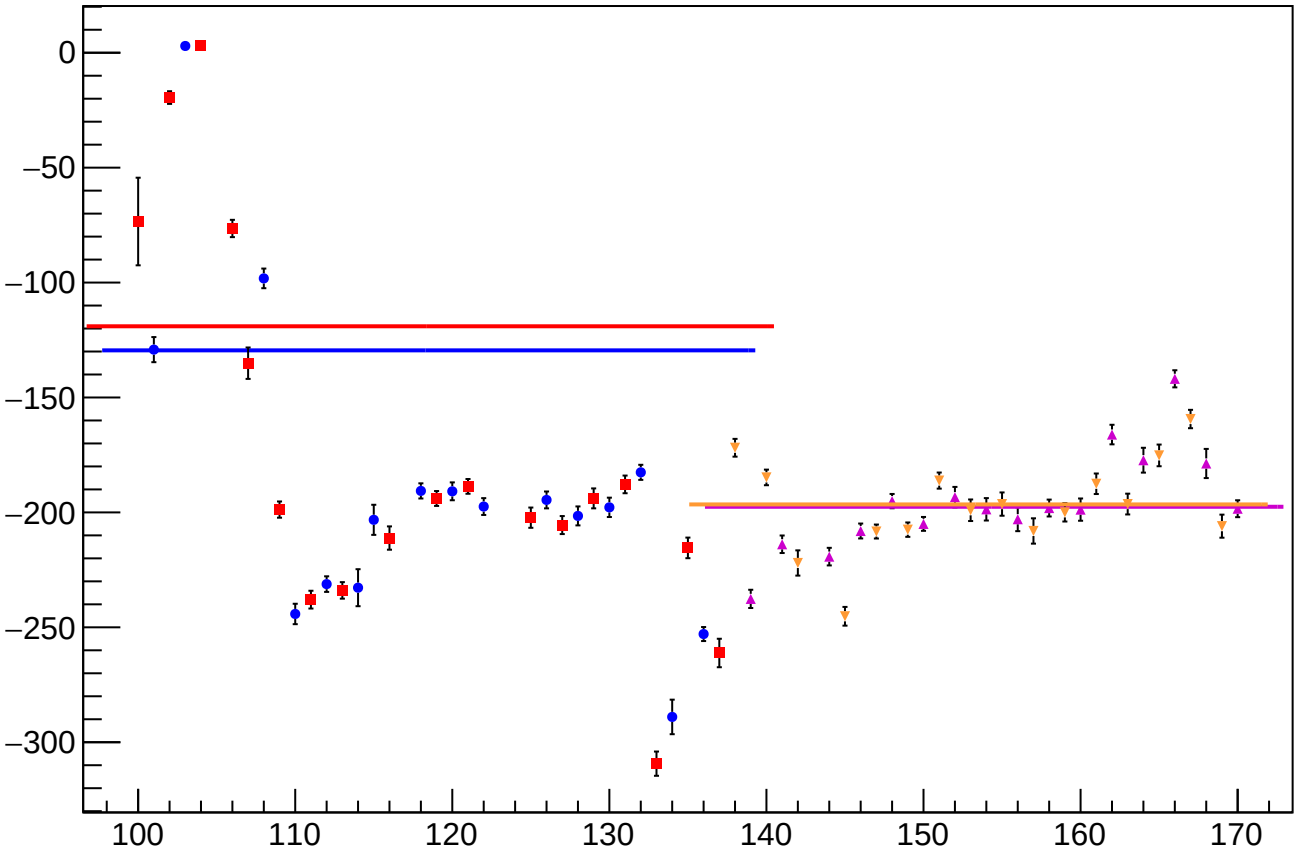
Right Out: -2.027+/-0.770 $\chi^2$/NDF: 58.6/17

Left In: -7.686+/-0.692 $\chi^2$/NDF:249.7/15

+ sign -5.543+/-0.531 $\chi^2$/NDF: 266.8/31

All: -5.345+/-0.370 $\chi^2$/NDF: 605.2/65

- sign -5.159+/-0.515 $\chi^2$/NDF: 338.1/33




Right In: -129.497+/-0.846 $\chi^2$/NDF: 14687.9/15

Left Out: -196.530+/-1.018 $\chi^2$/NDF:372.9/15

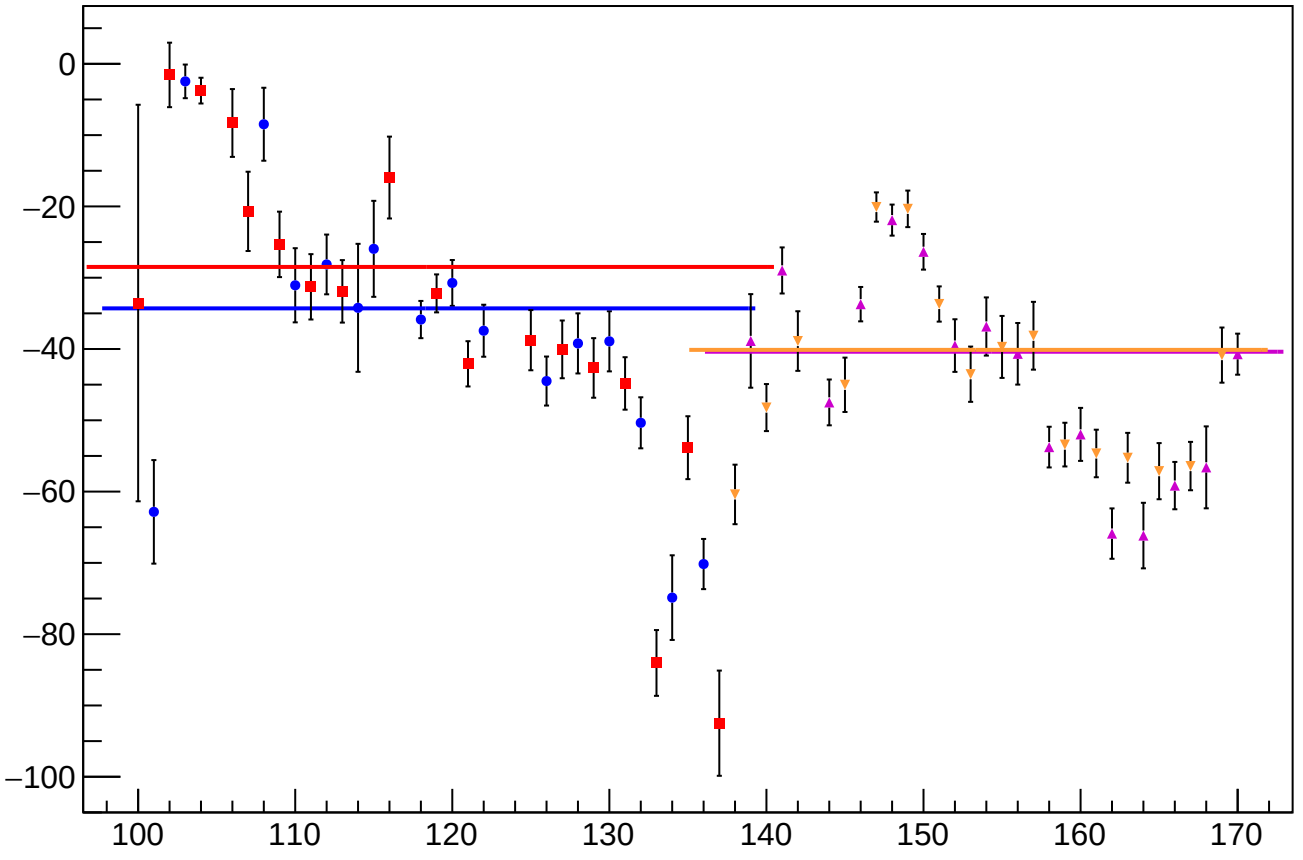
Right Out: -119.022+/-0.813 $\chi^2$/NDF: 16177.3/17

Left In: -197.549+/-0.992 $\chi^2$/NDF:472.8/15

+ sign -156.898+/-0.651 $\chi^2$/NDF: 17624.8/31

All: -153.614+/-0.452 $\chi^2$/NDF: 38071.6/65

- sign -150.549+/-0.629 $\chi^2$/NDF: 20397.5/33




Right In: -34.301+/-0.968 $\chi^2$/NDF: 411.3/15

Left Out: -40.122+/-0.820 $\chi^2$/NDF:292.1/15

Right Out: -28.488+/-0.907 $\chi^2$/NDF: 568.0/17

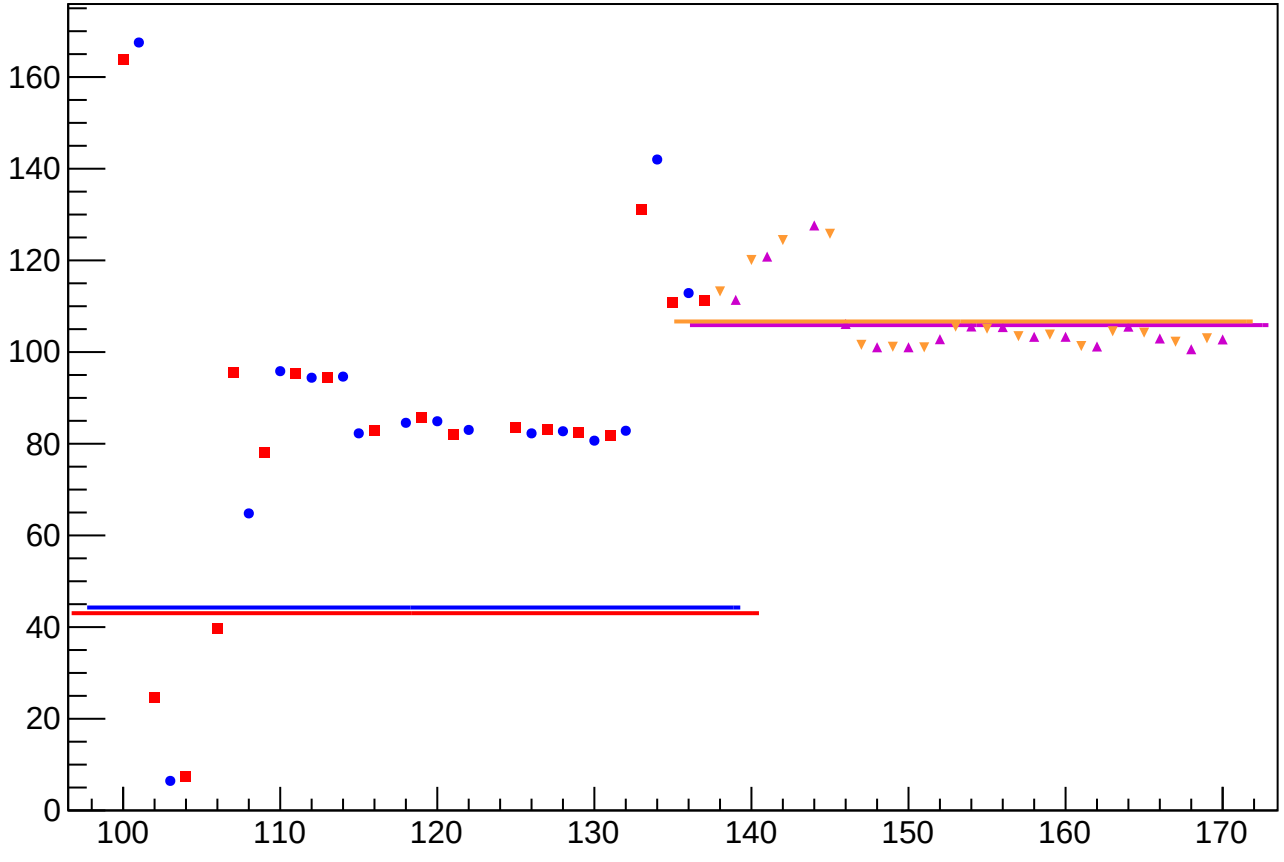
Left In: -40.384+/-0.814 $\chi^2$/NDF:284.4/15

+ sign -37.690+/-0.625 $\chi^2$/NDF: 724.5/31

All: -36.342+/-0.435 $\chi^2$/NDF: 1681.2/65

- sign -35.077+/-0.606 $\chi^2$/NDF: 947.7/33

# reg_asym_us_avg_atlr_avg_dd_diff_bpm12X_slope vs Slug




Right In: 44.274+/-0.045 $\chi^2$/NDF: 1085082.2/15

Left Out: 106.675+/-0.039 $\chi^2$/NDF:38424.9/15

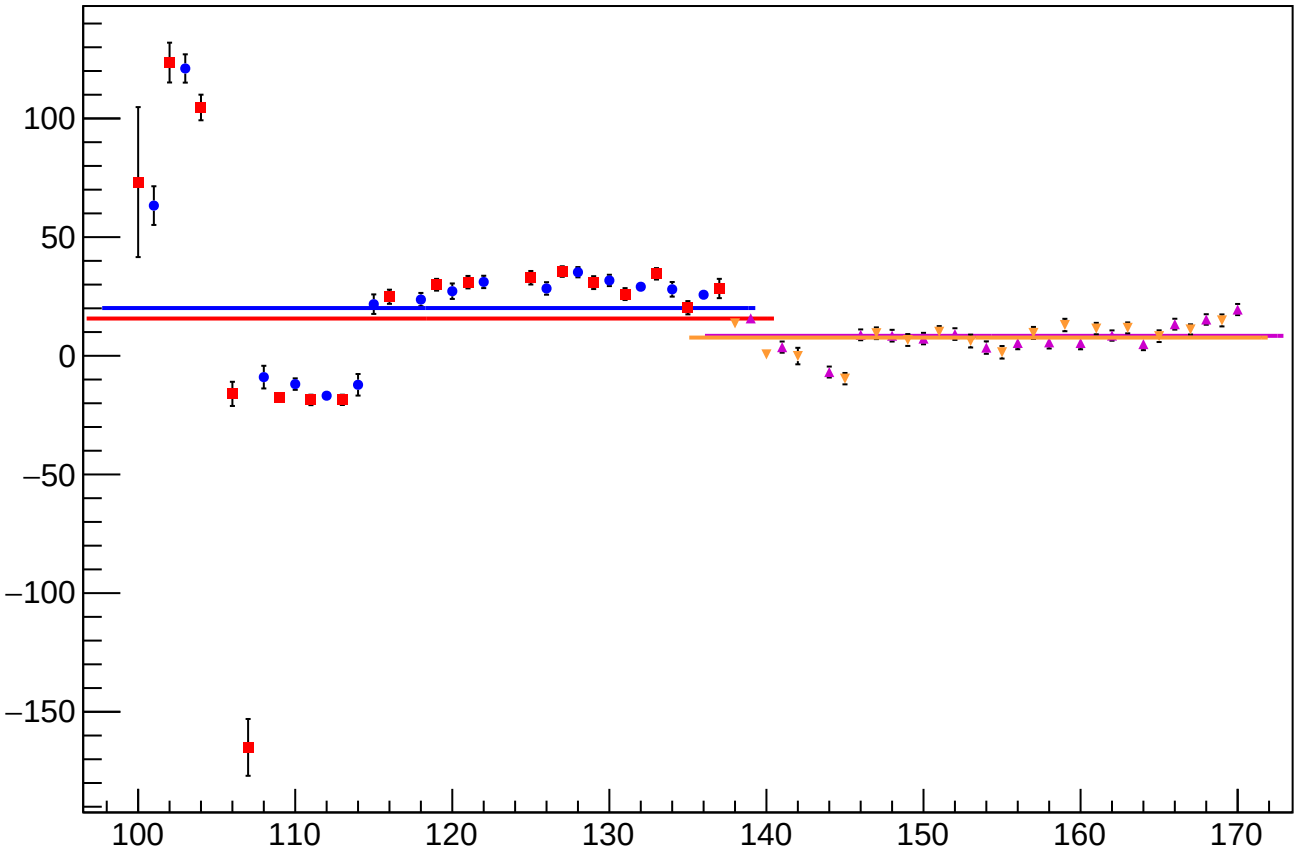
Right Out: 43.035+/-0.045 $\chi^2$/NDF: 805108.5/17

Left In: 105.880+/-0.038 $\chi^2$/NDF:33229.3/15

+ sign 79.734+/-0.030 $\chi^2$/NDF: 2219090.1/31

All: 79.853+/-0.021 $\chi^2$/NDF: 4201778.1/65

- sign 79.966+/-0.029 $\chi^2$/NDF: 1982656.6/33




Right In: 20.117+/-0.687 $\chi^2$/NDF: 1048.1/15

Left Out: 7.679+/-0.609 $\chi^2$/NDF:105.7/15

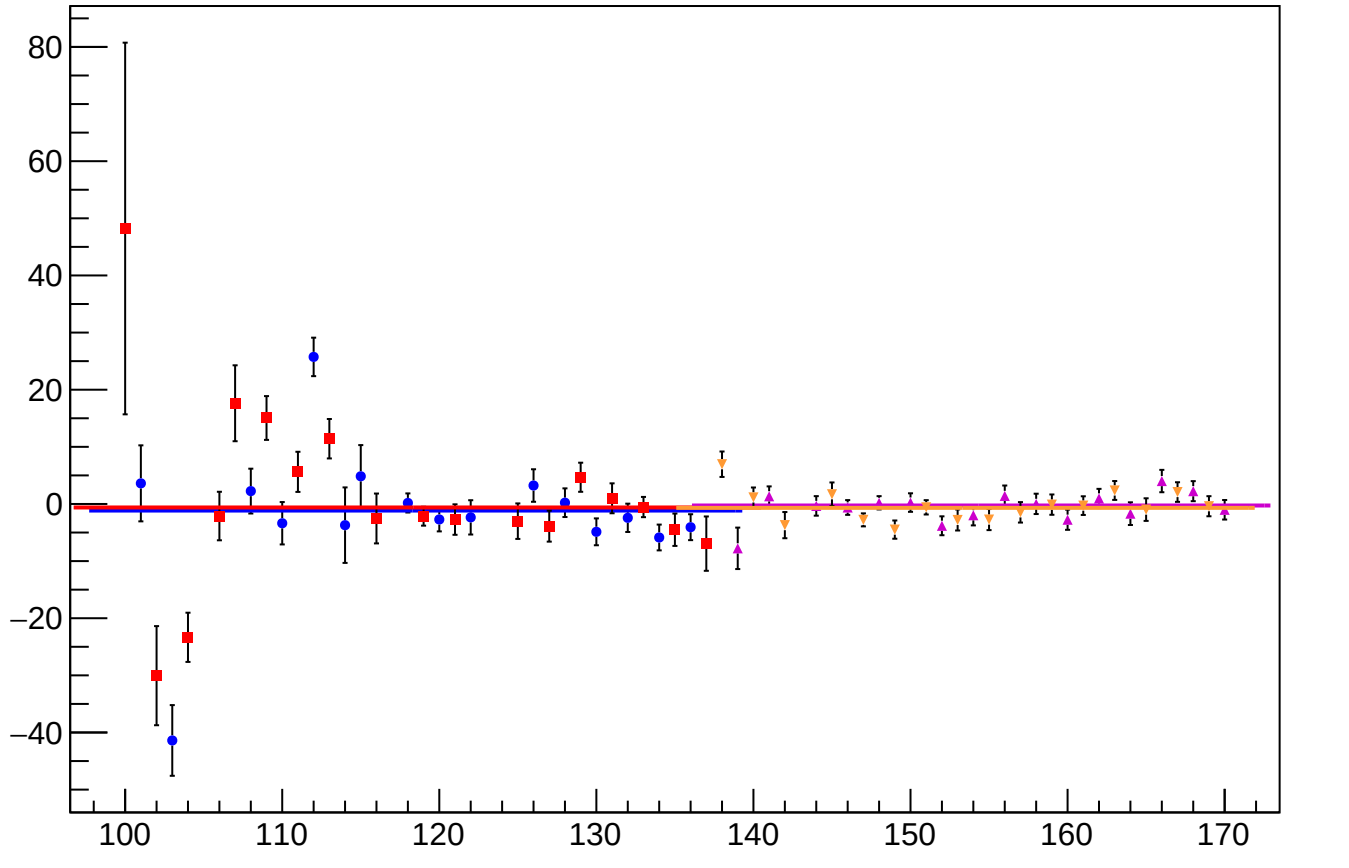
Right Out: 15.700+/-0.682 $\chi^2$/NDF: 1773.8/17

Left In: 8.408+/-0.595 $\chi^2$/NDF:107.1/15

\+ sign 13.153+/-0.456 $\chi^2$/NDF: 1337.3/31

All: 12.343+/-0.320 $\chi^2$/NDF: 3289.4/65

\- sign 11.558+/-0.448 $\chi^2$/NDF: 1945.8/33




Right In: -1.151+/-0.699 $\chi^2$/NDF: 121.8/15

Left Out: -0.681+/-0.421 $\chi^2$/NDF:34.0/15

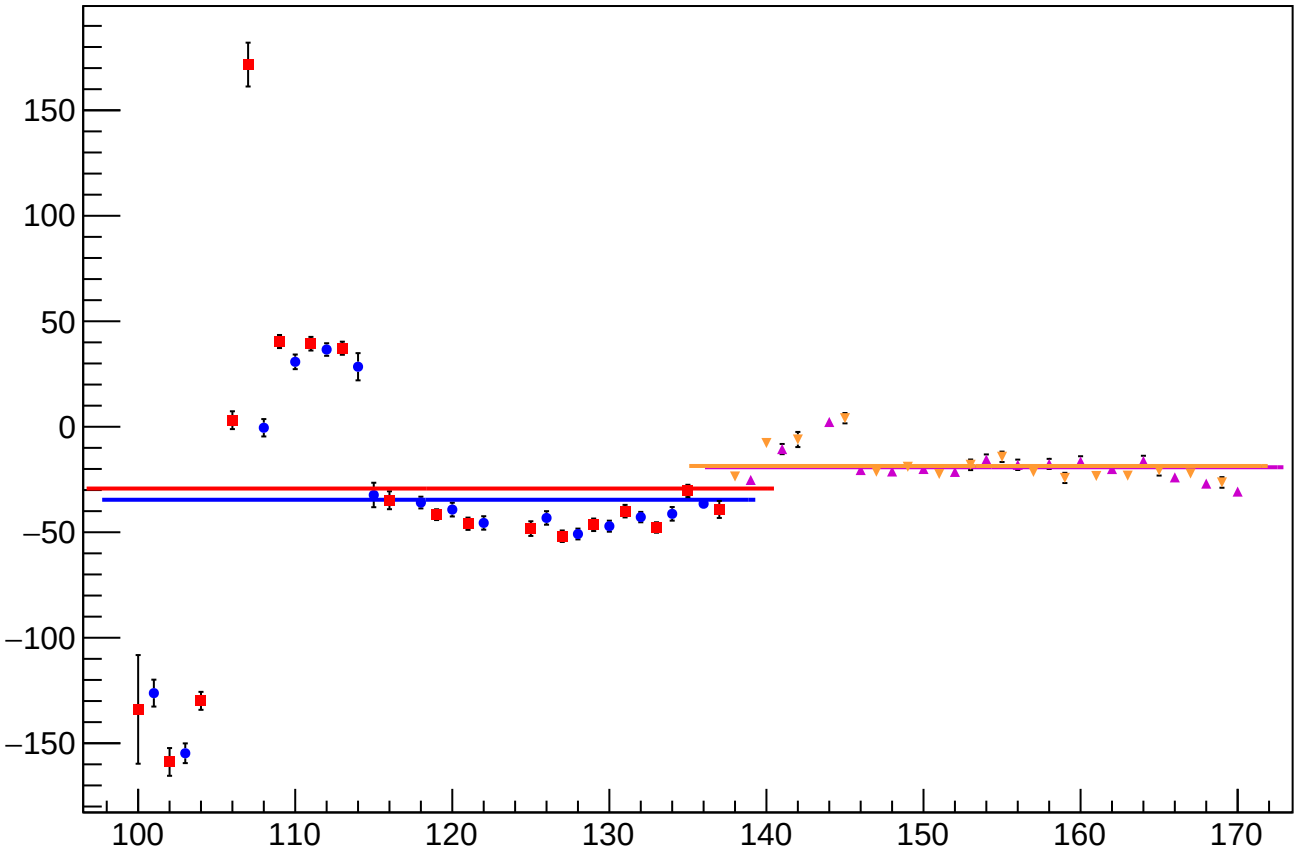
Right Out: -0.614+/-0.713 $\chi^2$/NDF: 93.4/17

Left In: -0.268+/-0.422 $\chi^2$/NDF:21.9/15

+ sign -0.806+/-0.361 $\chi^2$/NDF: 156.2/31

All: -0.583+/-0.256 $\chi^2$/NDF: 272.4/65

- sign -0.358+/-0.363 $\chi^2$/NDF: 115.5/33




Right In: -34.598+/-0.786 $\chi^2$/NDF: 2058.4/15

Left Out: -18.587+/-0.594 $\chi^2$/NDF:165.3/15

Right Out: -29.277+/-0.800 $\chi^2$/NDF: 3081.1/17

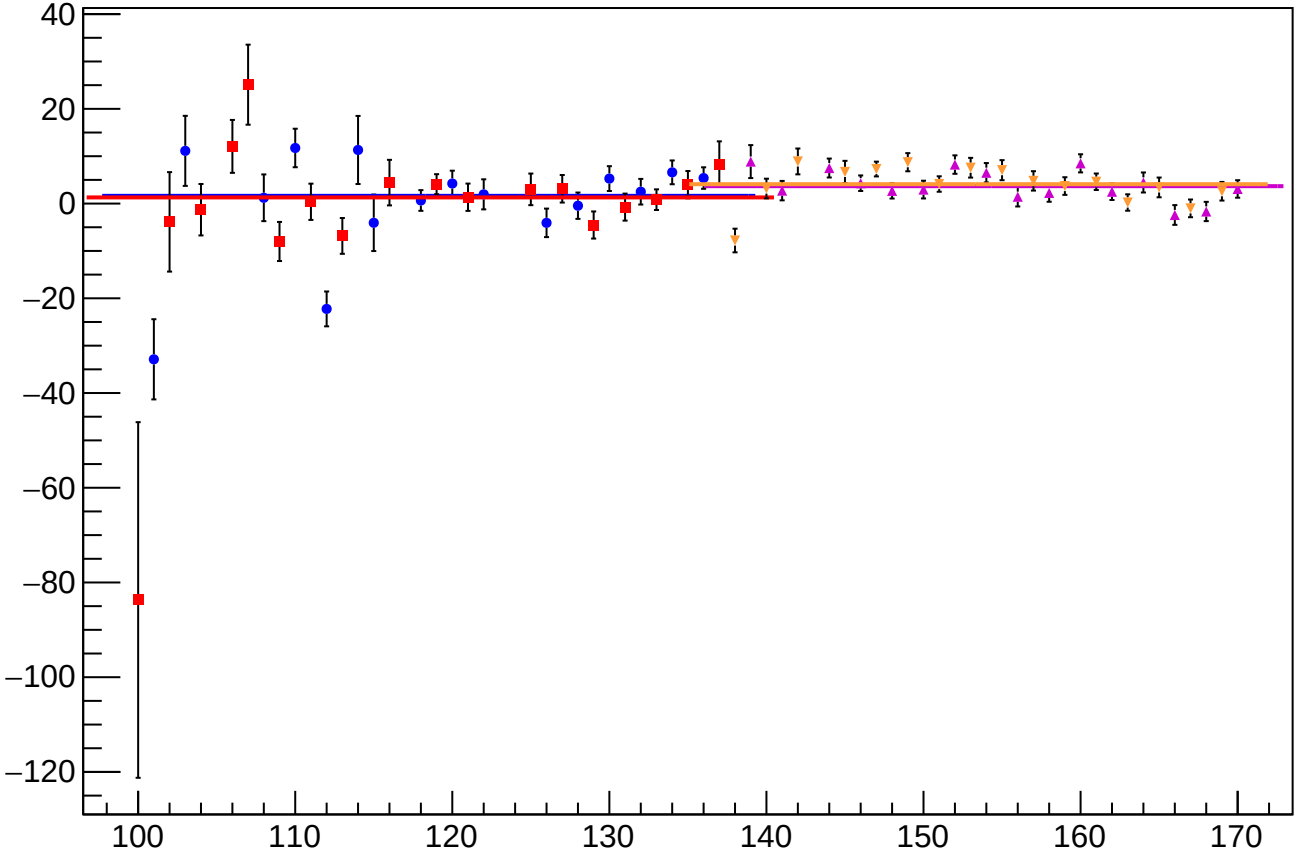
Left In: -19.191+/-0.579 $\chi^2$/NDF:150.6/15

+ sign -24.400+/-0.474 $\chi^2$/NDF: 2487.9/31

All: -23.524+/-0.333 $\chi^2$/NDF: 5830.6/65

- sign -22.663+/-0.469 $\chi^2$/NDF: 3335.9/33

# reg_asym_us_dd_at1lr_dd_avg_diff_bpm4eY_slope vs Slug




Right In: 1.630+/-0.797 $\chi^2$/NDF: 83.3/15

Left Out: 4.088+/-0.489 $\chi^2$/NDF:55.4/15

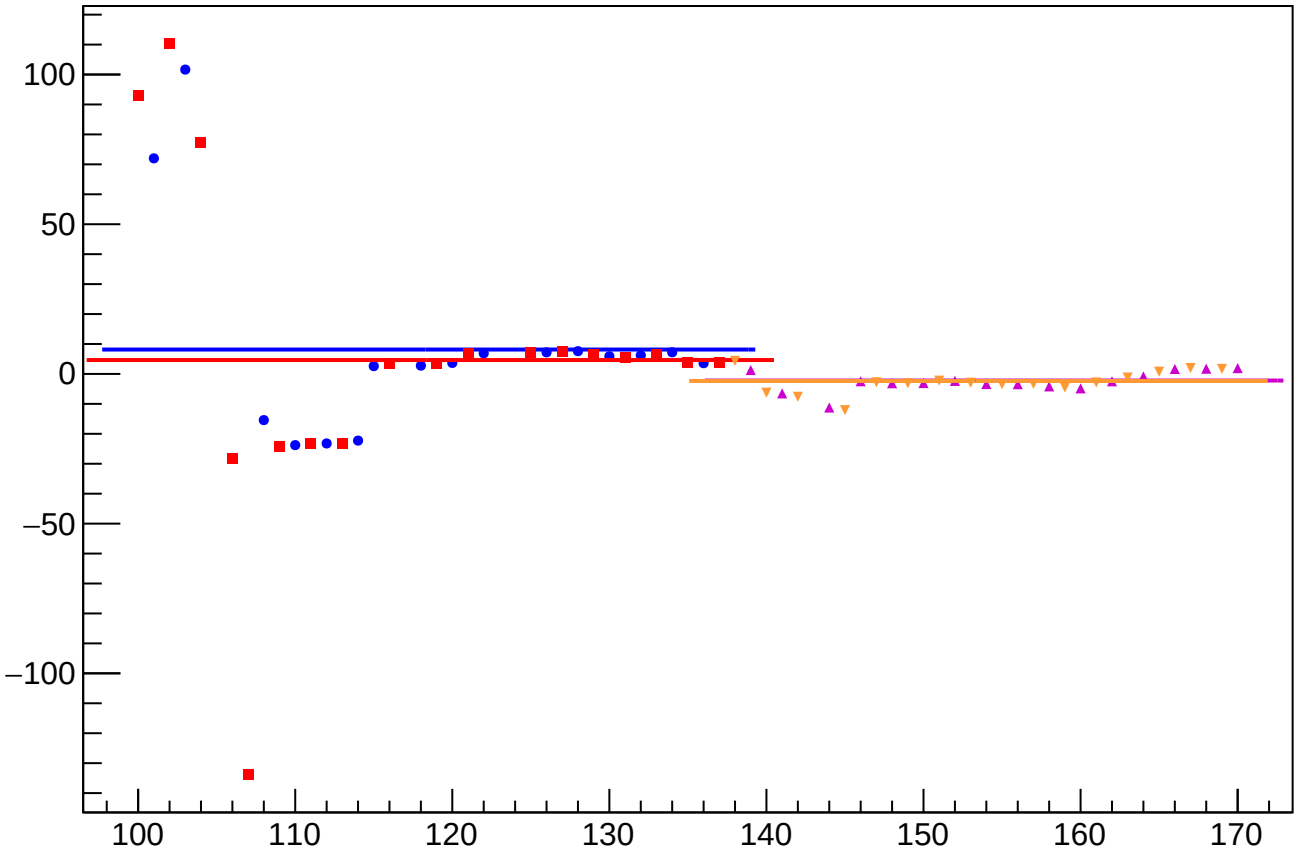
Right Out: 1.298+/-0.817 $\chi^2$/NDF: 37.5/17

Left In: 3.675+/-0.487 $\chi^2$/NDF:38.4/15

+ sign 3.417+/-0.417 $\chi^2$/NDF: 145.6/31

All: 3.235+/-0.295 $\chi^2$/NDF: 228.1/65

- sign 3.052+/-0.418 $\chi^2$/NDF: 82.2/33




Right In: 8.146+/-0.048 $\chi^2$/NDF: 313350.7/15

Left Out: -2.351+/-0.022 $\chi^2$/NDF:26922.1/15

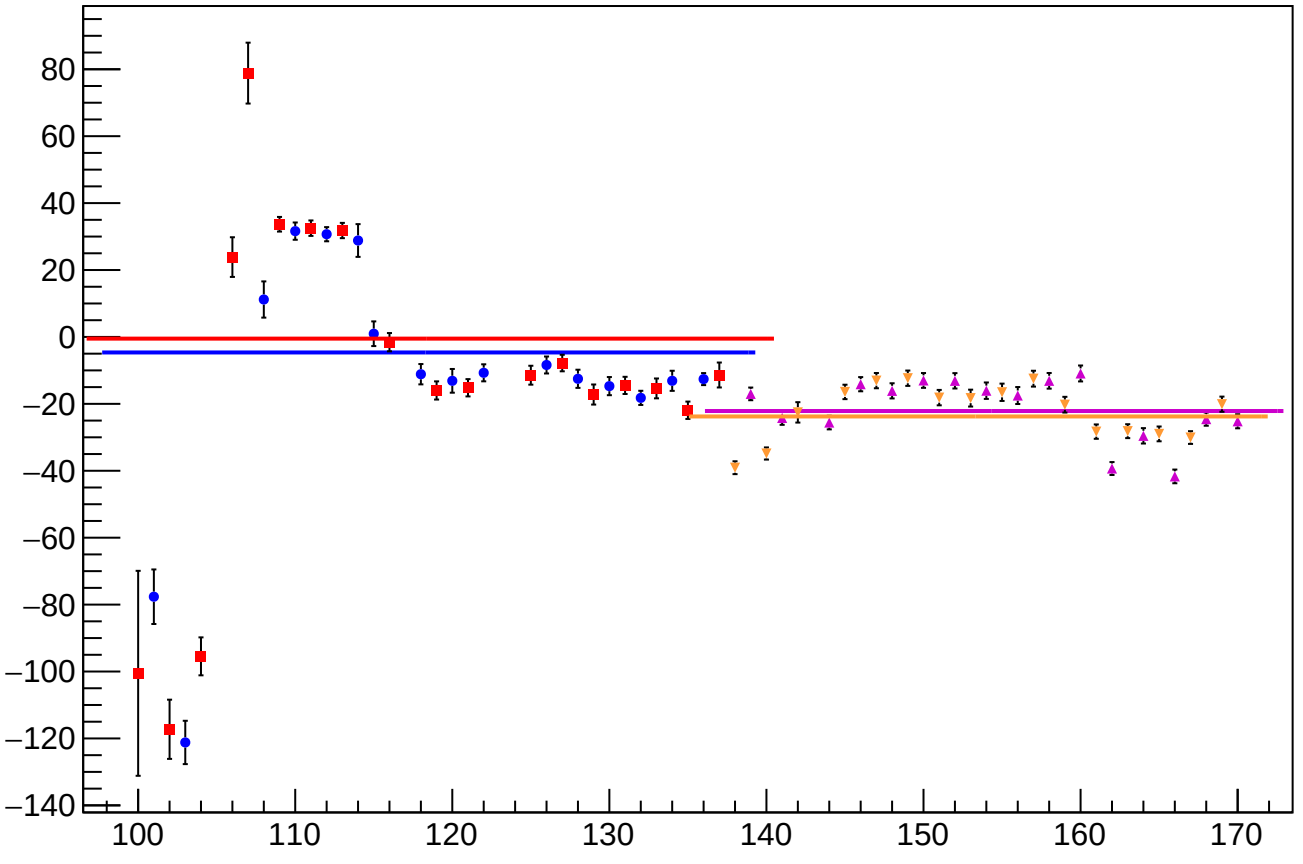
Right Out: 4.638+/-0.052 $\chi^2$/NDF: 446805.7/17

Left In: -2.207+/-0.022 $\chi^2$/NDF:20604.3/15

+ sign -0.531+/-0.020 $\chi^2$/NDF: 379199.4/31

All: -0.868+/-0.014 $\chi^2$/NDF: 862105.8/65

- sign -1.195+/-0.020 $\chi^2$/NDF: 482355.7/33




Right In: -4.640+/-0.712 $\chi^2$/NDF: 1046.3/15

Left Out: -23.767+/-0.554 $\chi^2$/NDF:230.6/15

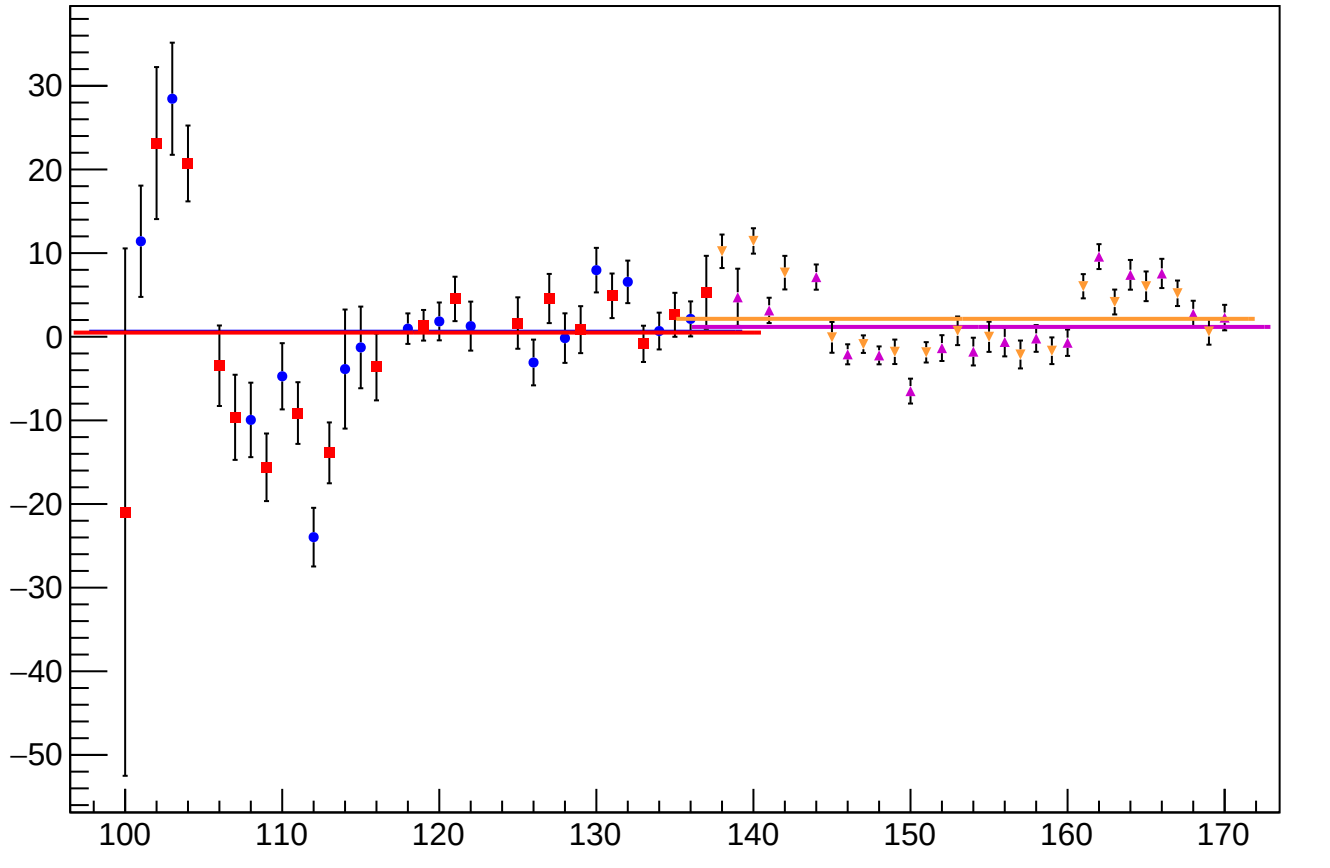
Right Out: -0.505+/-0.711 $\chi^2$/NDF: 1457.8/17

Left In: -22.140+/-0.540 $\chi^2$/NDF:296.1/15

\+ sign -16.545+/-0.437 $\chi^2$/NDF: 1726.6/31

All: -15.361+/-0.307 $\chi^2$/NDF: 4081.9/65

\- sign -14.215+/-0.430 $\chi^2$/NDF: 2340.9/33




Right In: 0.602+/-0.727 $\chi^2$/NDF: 92.9/15

Left Out: 2.142+/-0.385 $\chi^2$/NDF:122.5/15

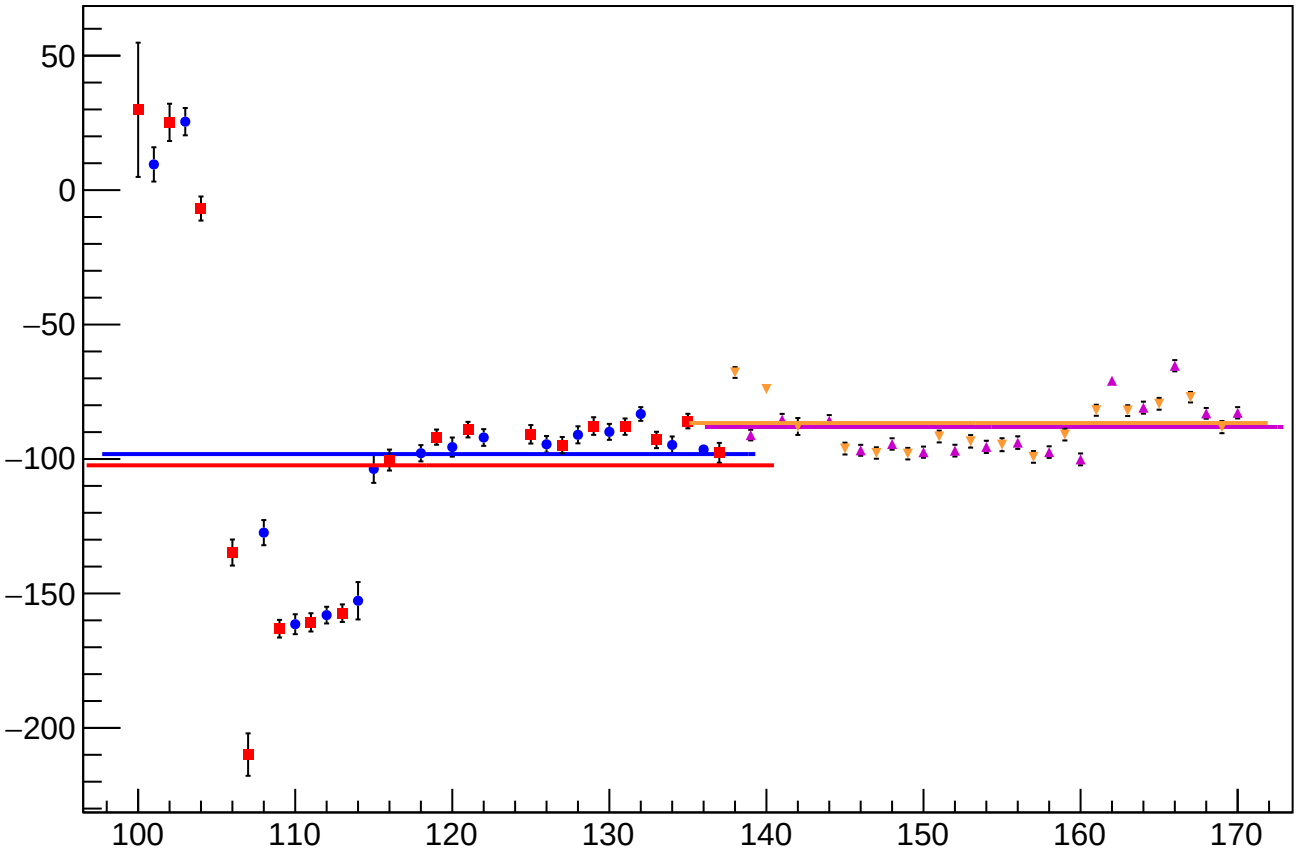
Right Out: 0.496+/-0.755 $\chi^2$/NDF: 80.2/17

Left In: 1.175+/-0.383 $\chi^2$/NDF:130.7/15

+ sign 1.805+/-0.340 $\chi^2$/NDF: 218.9/31

All: 1.422+/-0.241 $\chi^2$/NDF: 432.9/65

- sign 1.036+/-0.341 $\chi^2$/NDF: 211.5/33




Right In: -98.168+/-0.813 $\chi^2$/NDF: 1699.9/15

Left Out: -86.621+/-0.541 $\chi^2$/NDF:316.3/15

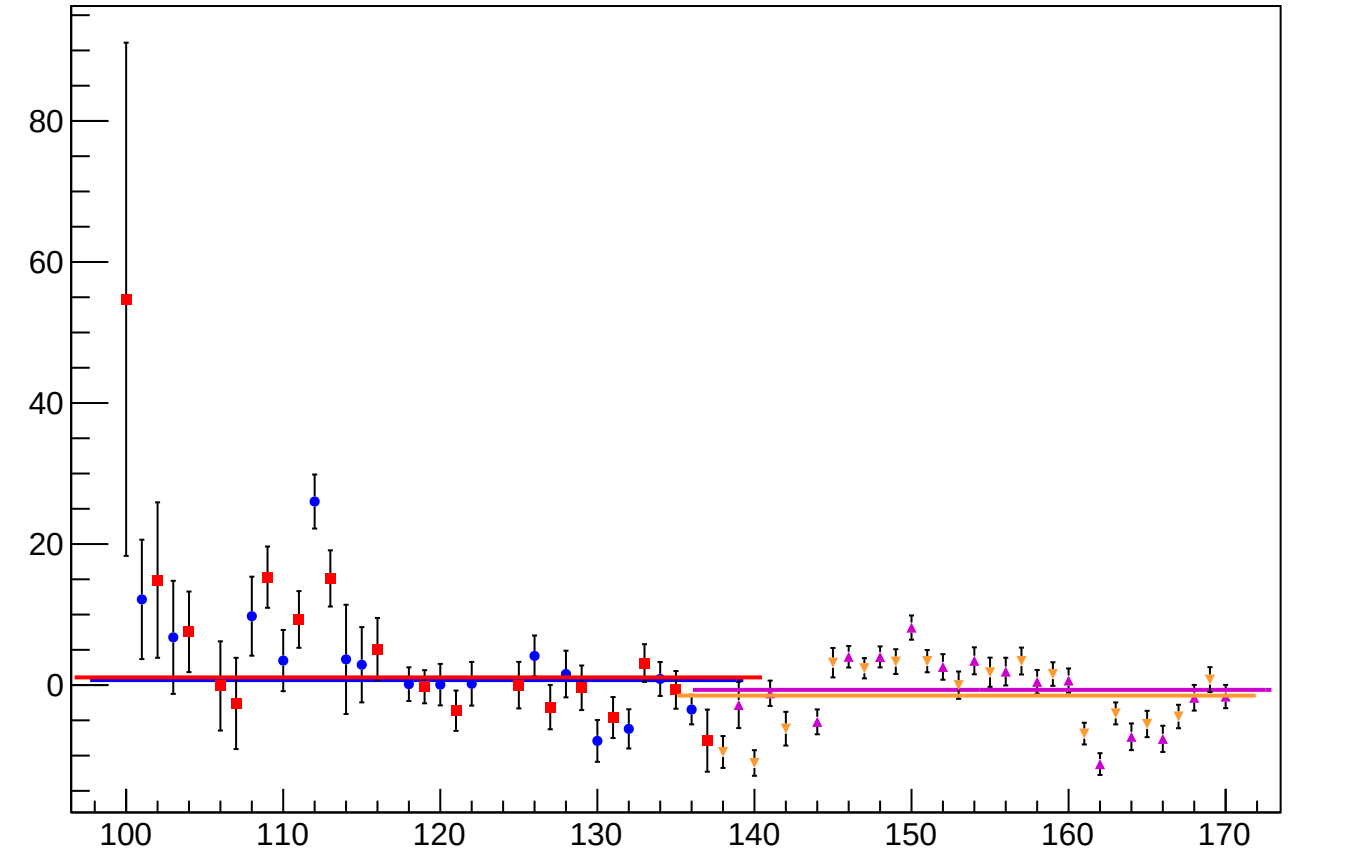
Right Out: -102.349+/-0.837 $\chi^2$/NDF: 2117.5/17

Left In: -88.085+/-0.527 $\chi^2$/NDF:362.5/15

+ sign -90.166+/-0.450 $\chi^2$/NDF: 2156.1/31

All: -91.159+/-0.317 $\chi^2$/NDF: 4853.8/65

- sign -92.132+/-0.446 $\chi^2$/NDF: 2688.0/33




Right In: 0.711+/-0.821 $\chi^2$/NDF: 69.6/15

Left Out: -1.492+/-0.445 $\chi^2$/NDF:110.8/15

Right Out: 1.088+/-0.856 $\chi^2$/NDF: 47.7/17

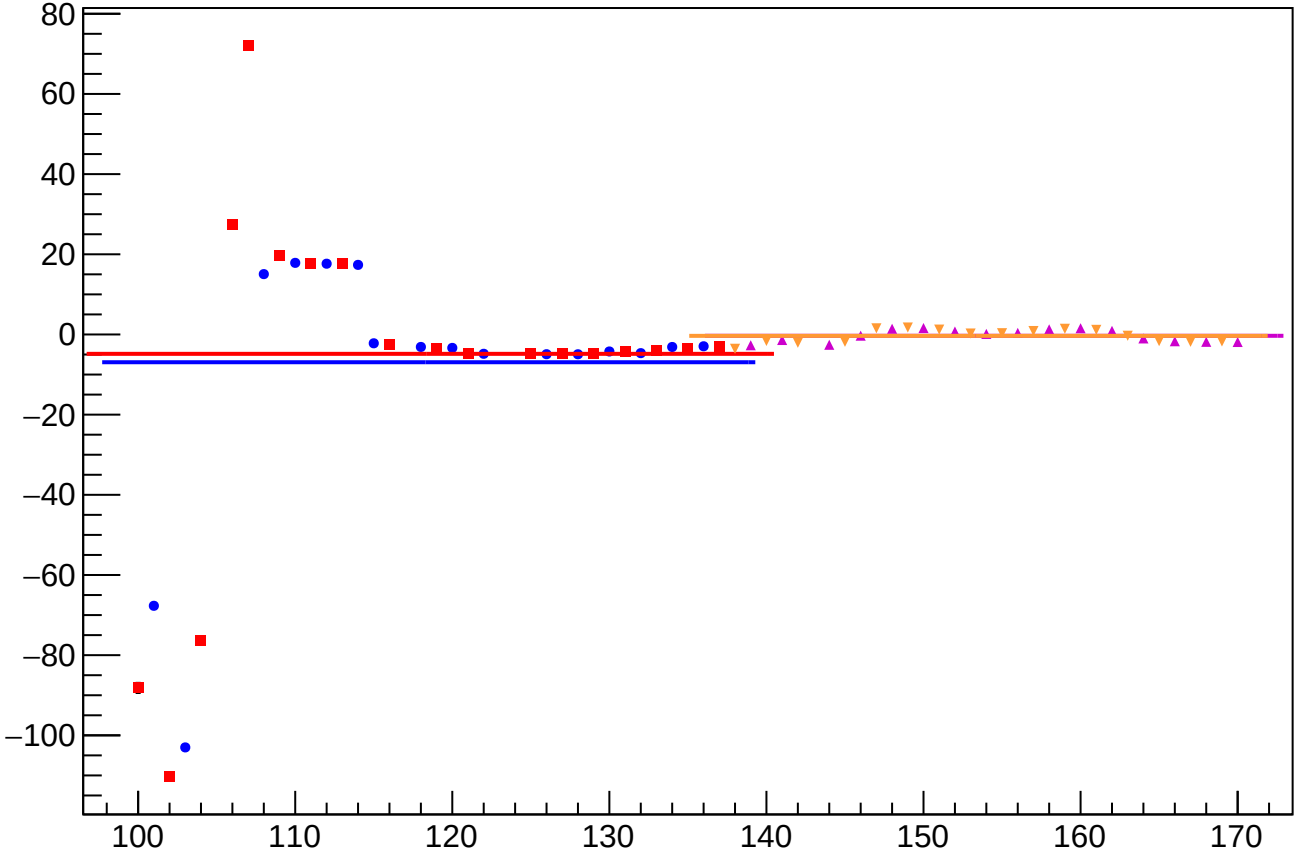
Left In: -0.679+/-0.441 $\chi^2$/NDF:136.8/15

+ sign -0.992+/-0.391 $\chi^2$/NDF: 185.9/31

All: -0.651+/-0.277 $\chi^2$/NDF: 375.3/65

- sign -0.308+/-0.392 $\chi^2$/NDF: 187.9/33

# reg_asym_us_dd_at1lr_dd_dd_diff_bpm12X_slope vs Slug




Right In: -6.927+/-0.049 $\chi^2$/NDF: 265187.0/15

Left Out: -0.344+/-0.020 $\chi^2$/NDF:6022.6/15

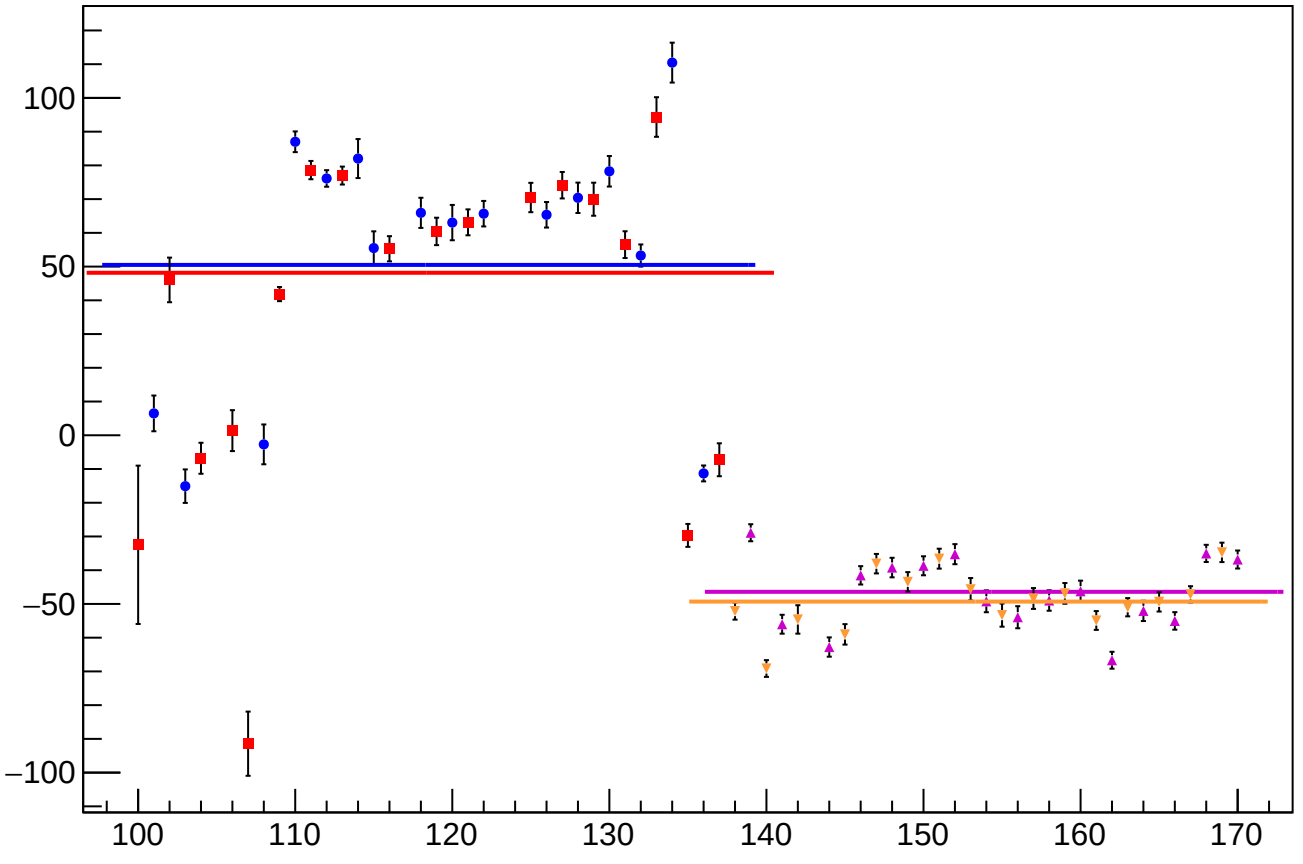
Right Out: -4.833+/-0.053 $\chi^2$/NDF: 339363.3/17

Left In: -0.331+/-0.020 $\chi^2$/NDF:5715.0/15

+ sign -1.319+/-0.019 $\chi^2$/NDF: 286887.4/31

All: -1.094+/-0.013 $\chi^2$/NDF: 638637.6/65

- sign -0.876+/-0.018 $\chi^2$/NDF: 351465.5/33




Right In: 50.503+/-0.965 $\chi^2$/NDF: 1503.6/15

Left Out: -49.304+/-0.725 $\chi^2$/NDF:149.0/15

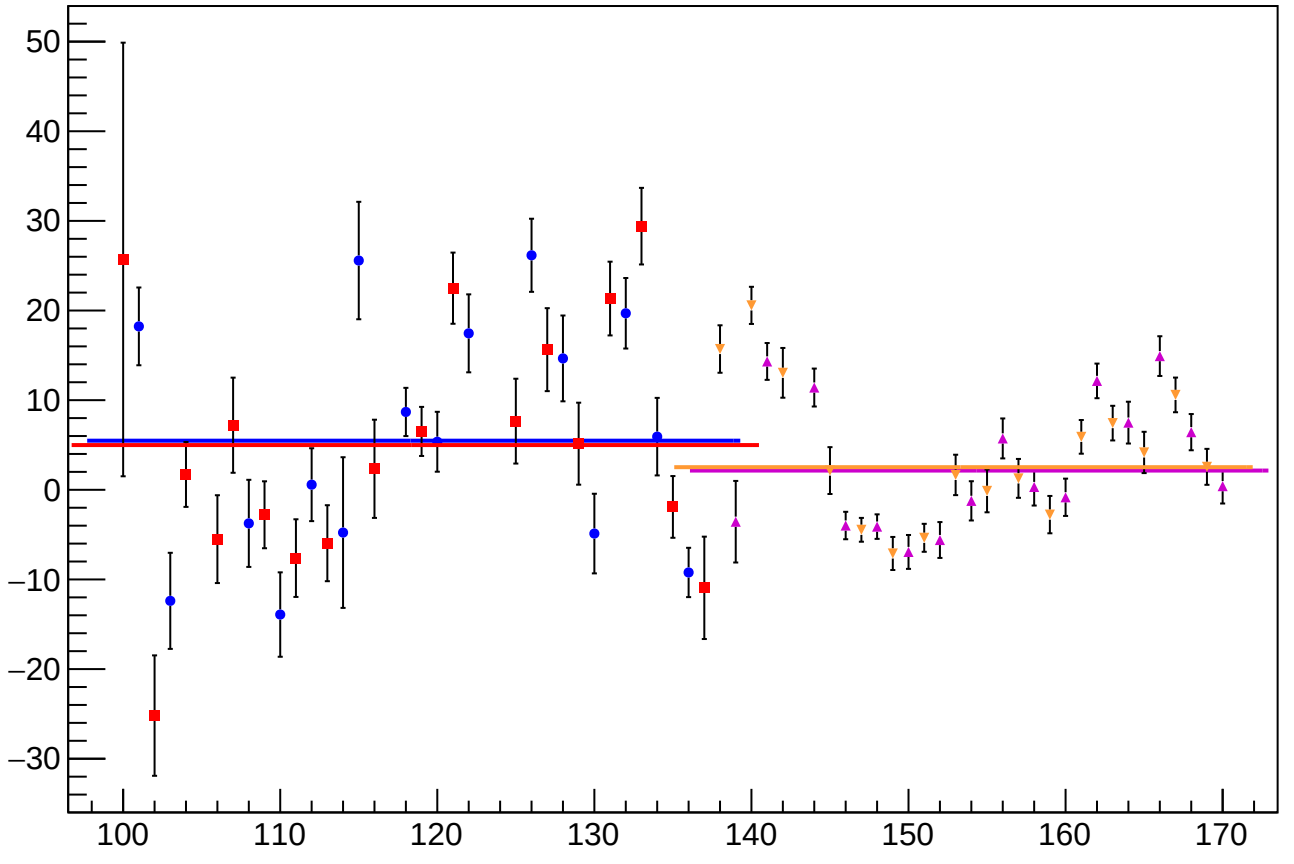
Right Out: 48.172+/-0.914 $\chi^2$/NDF: 1519.5/17

Left In: -46.408+/-0.705 $\chi^2$/NDF:243.4/15

\+ sign -13.311+/-0.580 $\chi^2$/NDF: 8487.3/31

All: -12.181+/-0.402 $\chi^2$/NDF: 16967.3/65

\- sign -11.132+/-0.558 $\chi^2$/NDF: 8472.7/33




Right In: 5.481+/-1.021 $\chi^2$/NDF: 138.2/15

Left Out: 2.524+/-0.500 $\chi^2$/NDF:231.2/15

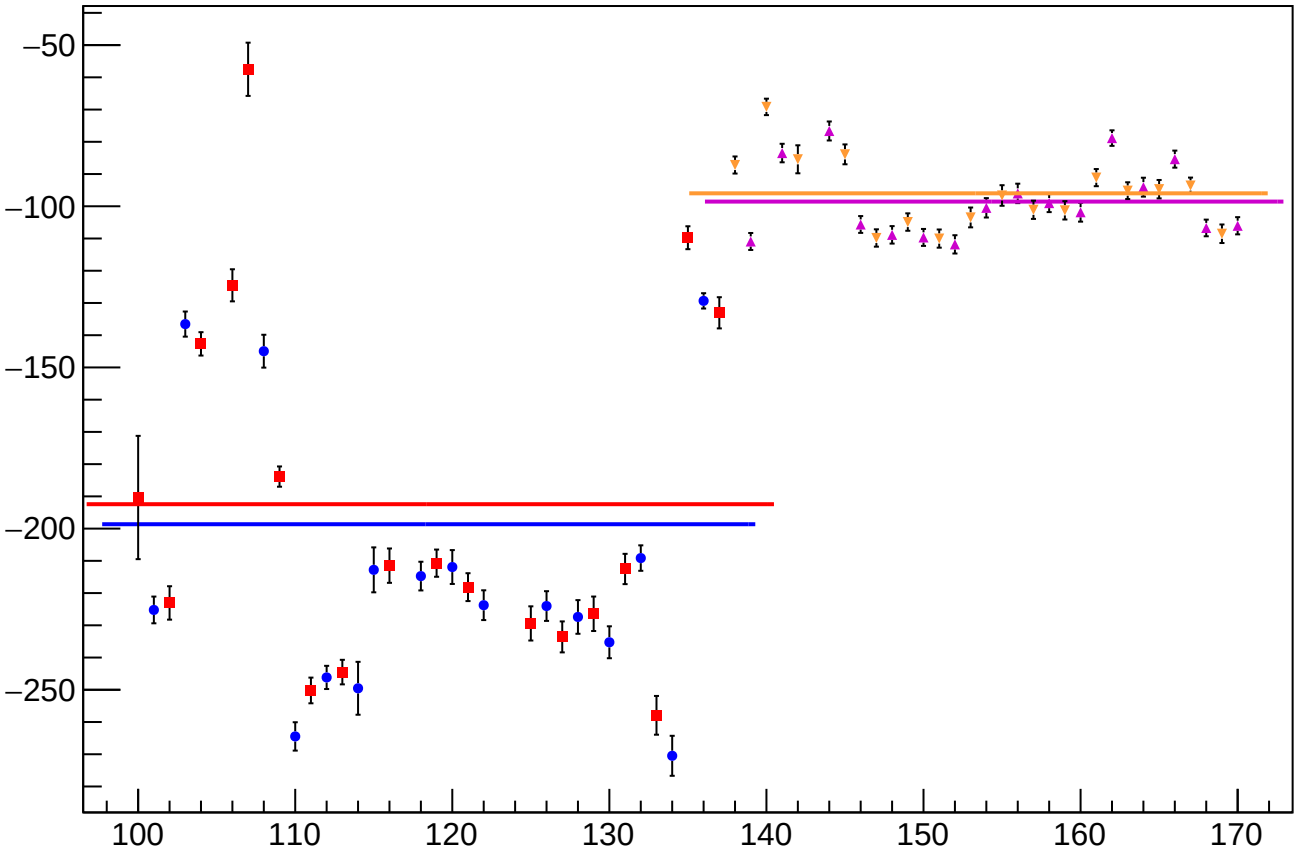
Right Out: 4.992+/-1.023 $\chi^2$/NDF: 131.8/17

Left In: 2.147+/-0.498 $\chi^2$/NDF:209.2/15

+ sign 3.097+/-0.449 $\chi^2$/NDF: 376.1/31

All: 2.893+/-0.317 $\chi^2$/NDF: 723.8/65

- sign 2.692+/-0.447 $\chi^2$/NDF: 347.3/33




Right In: -198.641+/-1.083 $\chi^2$/NDF: 2002.3/15

Left Out: -95.984+/-0.707 $\chi^2$/NDF:241.2/15

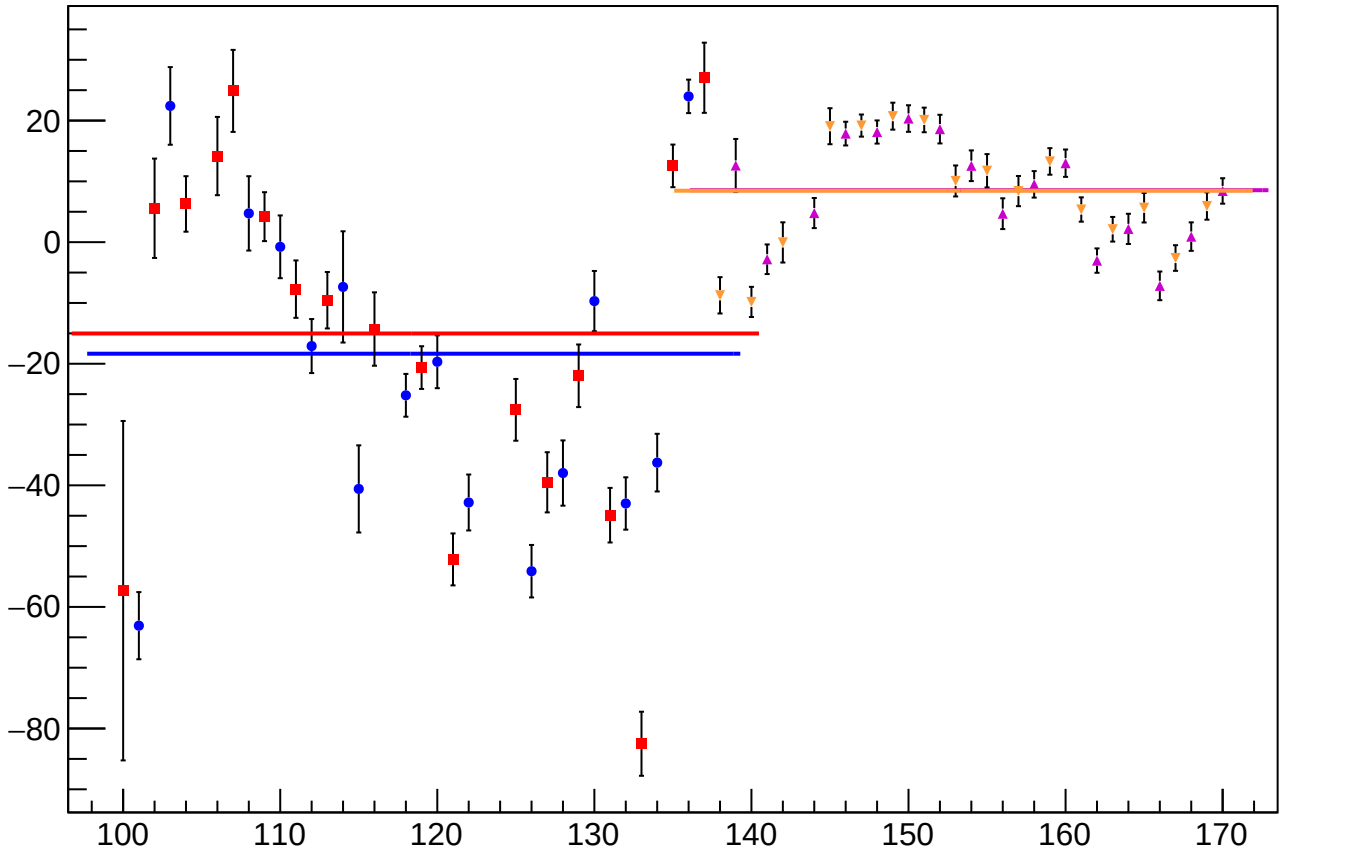
Right Out: -192.426+/-1.080 $\chi^2$/NDF: 2139.0/17

Left In: -98.548+/-0.687 $\chi^2$/NDF:280.9/15

+ sign -126.620+/-0.592 $\chi^2$/NDF: 8542.6/31

All: -126.093+/-0.414 $\chi^2$/NDF: 16346.2/65

- sign -125.588+/-0.579 $\chi^2$/NDF: 7802.1/33




Right In: -18.348+/-1.159 $\chi^2$/NDF: 543.9/15

Left Out: 8.464+/-0.580 $\chi^2$/NDF:254.3/15

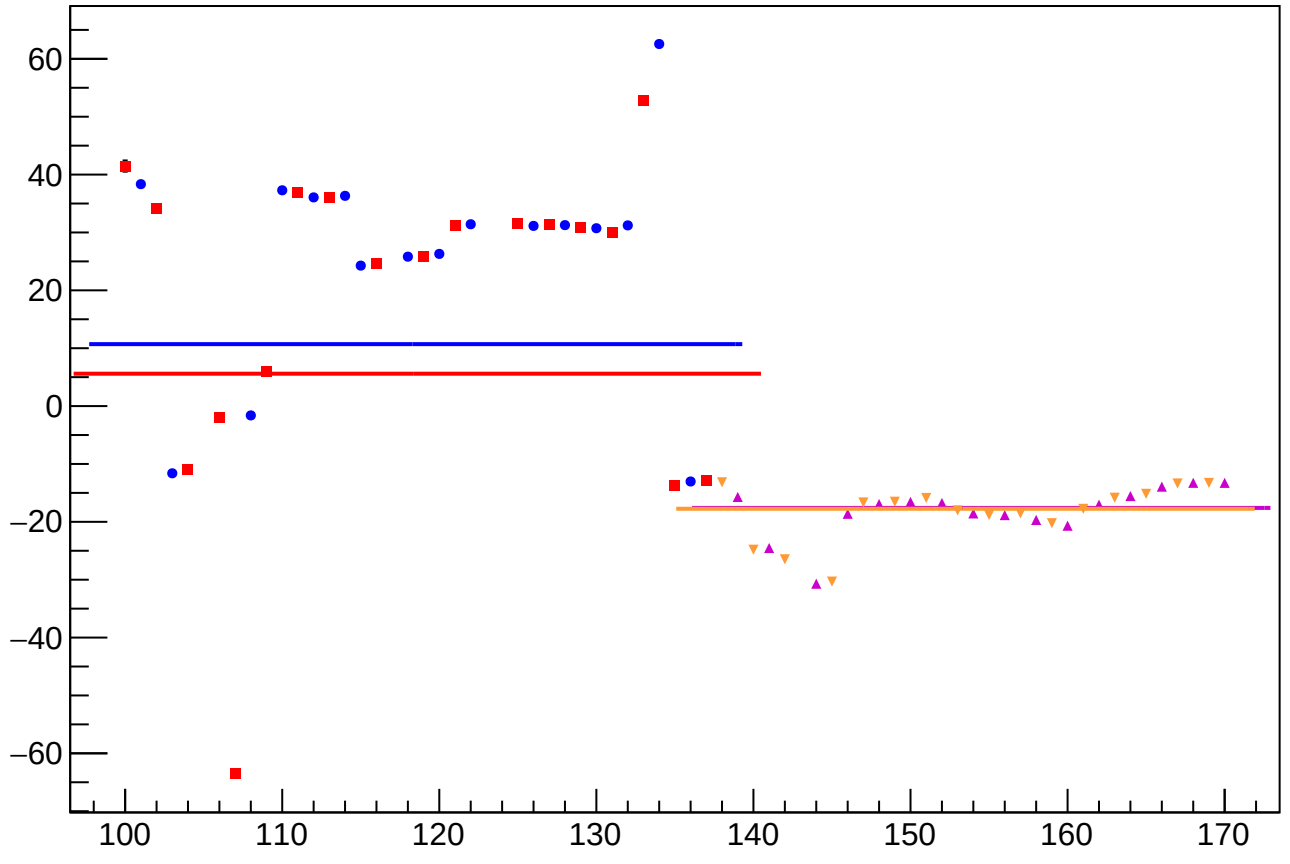
Right Out: -15.021+/-1.162 $\chi^2$/NDF: 546.4/17

Left In: 8.549+/-0.574 $\chi^2$/NDF:224.2/15

+ sign 3.100+/-0.519 $\chi^2$/NDF: 1226.1/31

All: 3.514+/-0.365 $\chi^2$/NDF: 2328.8/65

- sign 3.923+/-0.515 $\chi^2$/NDF: 1101.5/33




Right In: 10.704+/-0.063 $\chi^2$/NDF: 164860.8/15

Left Out: -17.741+/-0.026 $\chi^2$/NDF:25585.2/15

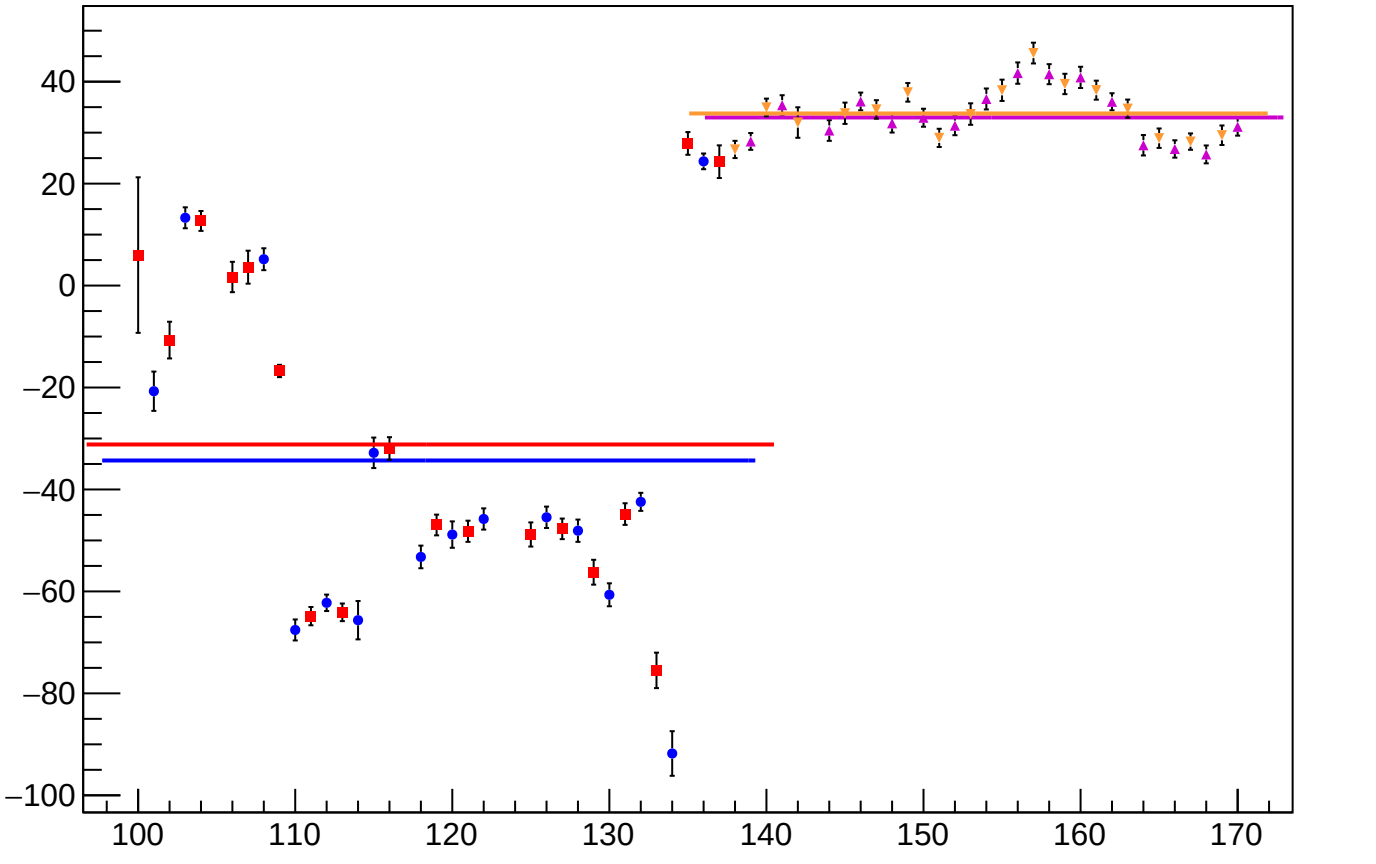
Right Out: 5.595+/-0.064 $\chi^2$/NDF: 154966.4/17

Left In: -17.596+/-0.026 $\chi^2$/NDF:21838.6/15

+ sign -13.478+/-0.024 $\chi^2$/NDF: 364293.1/31

All: -13.942+/-0.017 $\chi^2$/NDF: 656274.4/65

- sign -14.381+/-0.024 $\chi^2$/NDF: 291276.1/33




Right In: -34.315+/-0.548 $\chi^2$/NDF: 3500.2/15

Left Out: 33.763+/-0.475 $\chi^2$/NDF:107.3/15

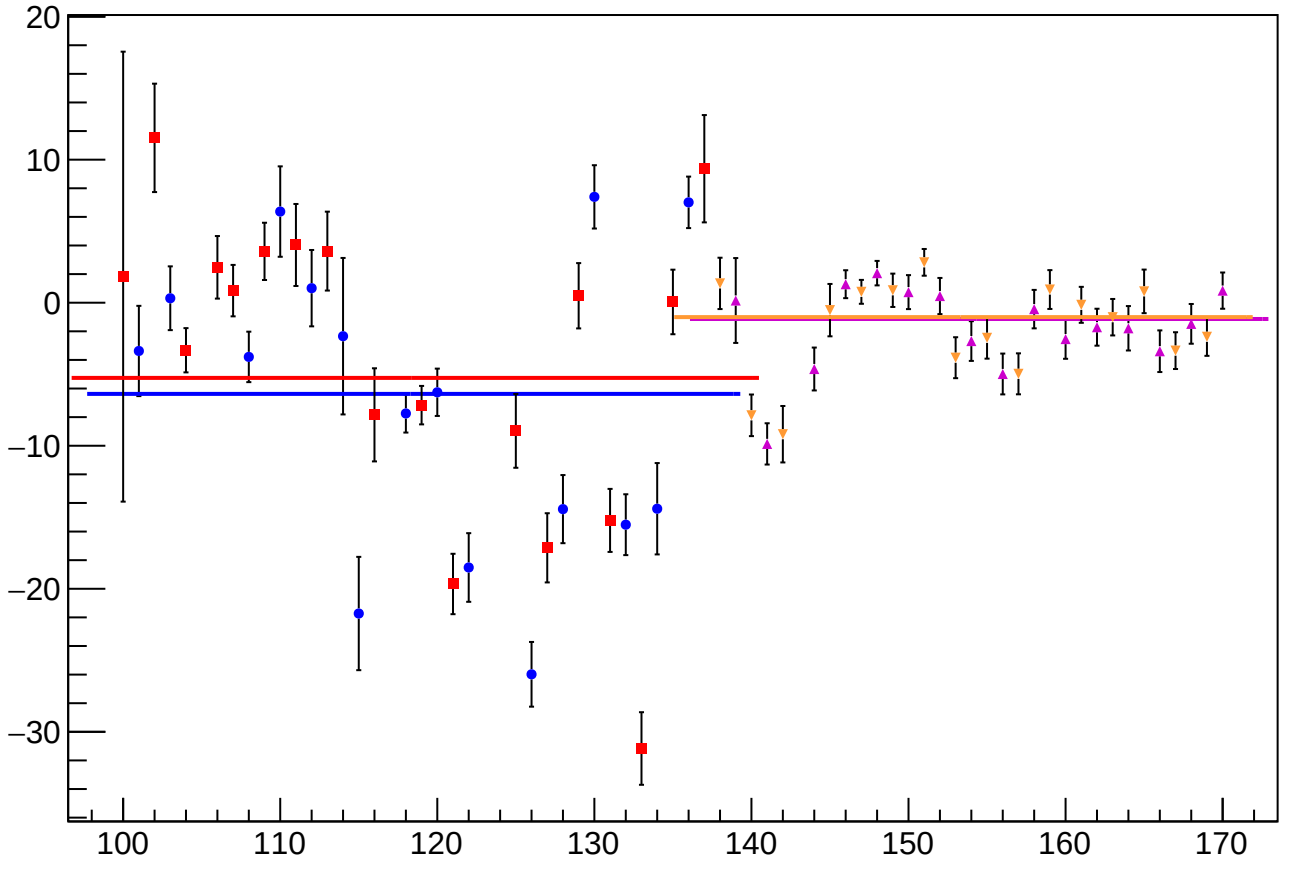
Right Out: -31.175+/-0.516 $\chi^2$/NDF: 3200.4/17

Left In: 32.979+/-0.463 $\chi^2$/NDF:111.0/15

+ sign 4.513+/-0.359 $\chi^2$/NDF: 12417.0/31

All: 4.435+/-0.249 $\chi^2$/NDF: 24300.2/65

- sign 4.364+/-0.344 $\chi^2$/NDF: 11883.2/33




Right In: -6.375+/-0.554 $\chi^2$/NDF: 283.6/15

Left Out: -1.007+/-0.325 $\chi^2$/NDF:86.0/15

Right Out: -5.256+/-0.533 $\chi^2$/NDF: 312.9/17

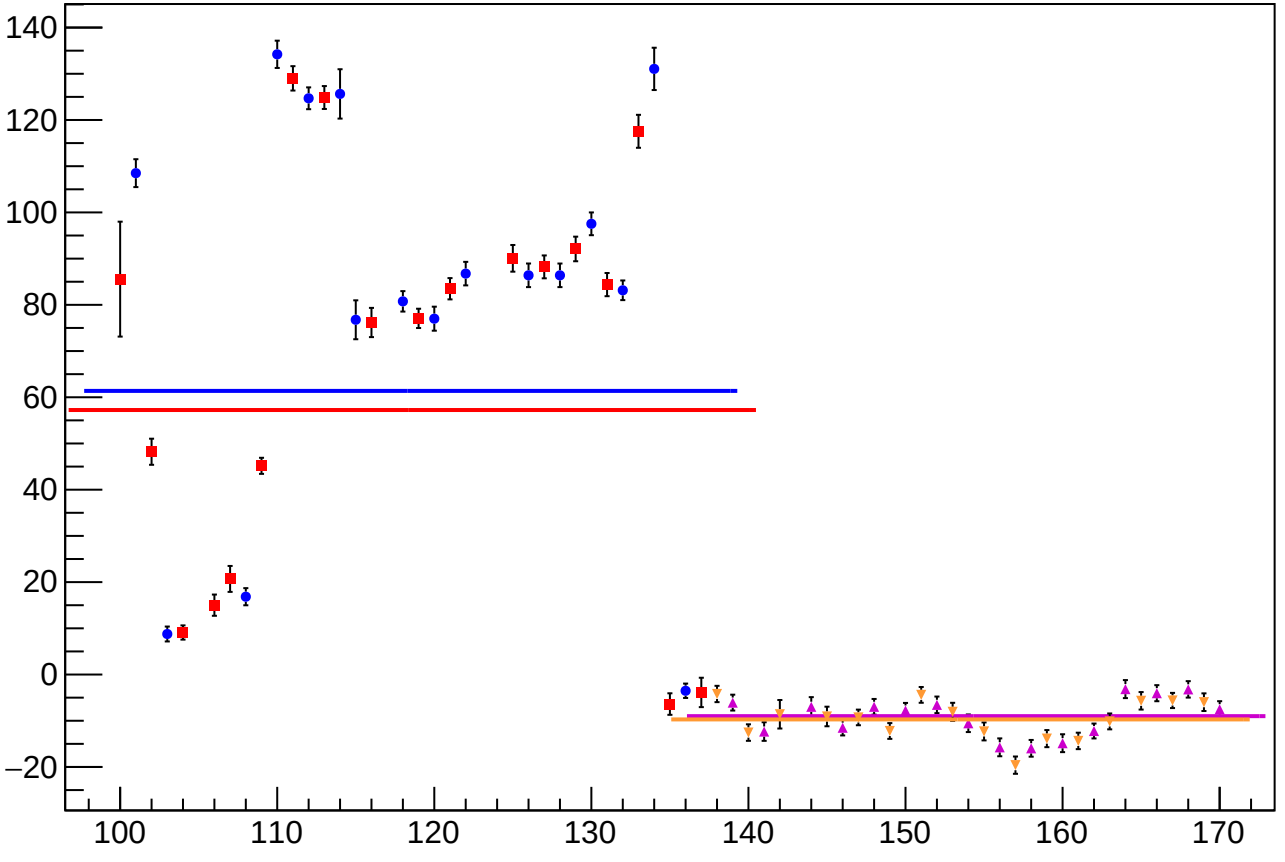
Left In: -1.138+/-0.324 $\chi^2$/NDF:81.7/15

+ sign -2.381+/-0.280 $\chi^2$/NDF: 439.6/31

All: -2.316+/-0.197 $\chi^2$/NDF: 877.9/65

- sign -2.252+/-0.277 $\chi^2$/NDF: 438.2/33

# reg_asym_us_dd_at2lr_dd_dd_diff_bpm4eX_slope vs Slug




Right In: 61.377+/-0.594 $\chi^2$/NDF: 6066.8/15

Left Out: -9.711+/-0.462 $\chi^2$/NDF:81.3/15

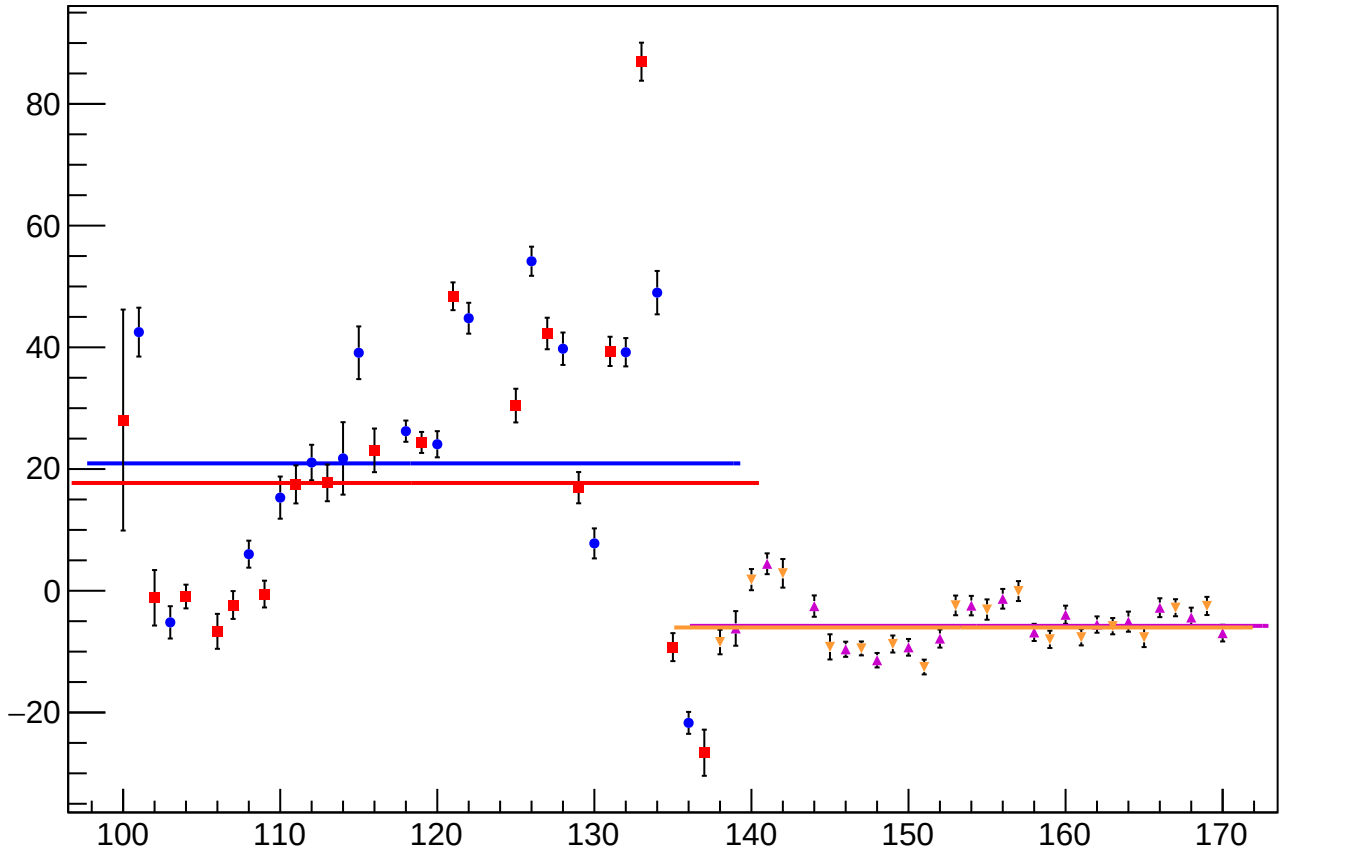
Right Out: 57.240+/-0.580 $\chi^2$/NDF: 5267.5/17

Left In: -9.002+/-0.450 $\chi^2$/NDF:81.9/15

+ sign 17.076+/-0.365 $\chi^2$/NDF: 15064.6/31

All: 16.455+/-0.255 $\chi^2$/NDF: 28561.5/65

- sign 15.865+/-0.355 $\chi^2$/NDF: 13491.3/33




Right In: 20.931+/-0.640 $\chi^2$/NDF: 1245.4/15

Left Out: -6.033+/-0.377 $\chi^2$/NDF:116.9/15

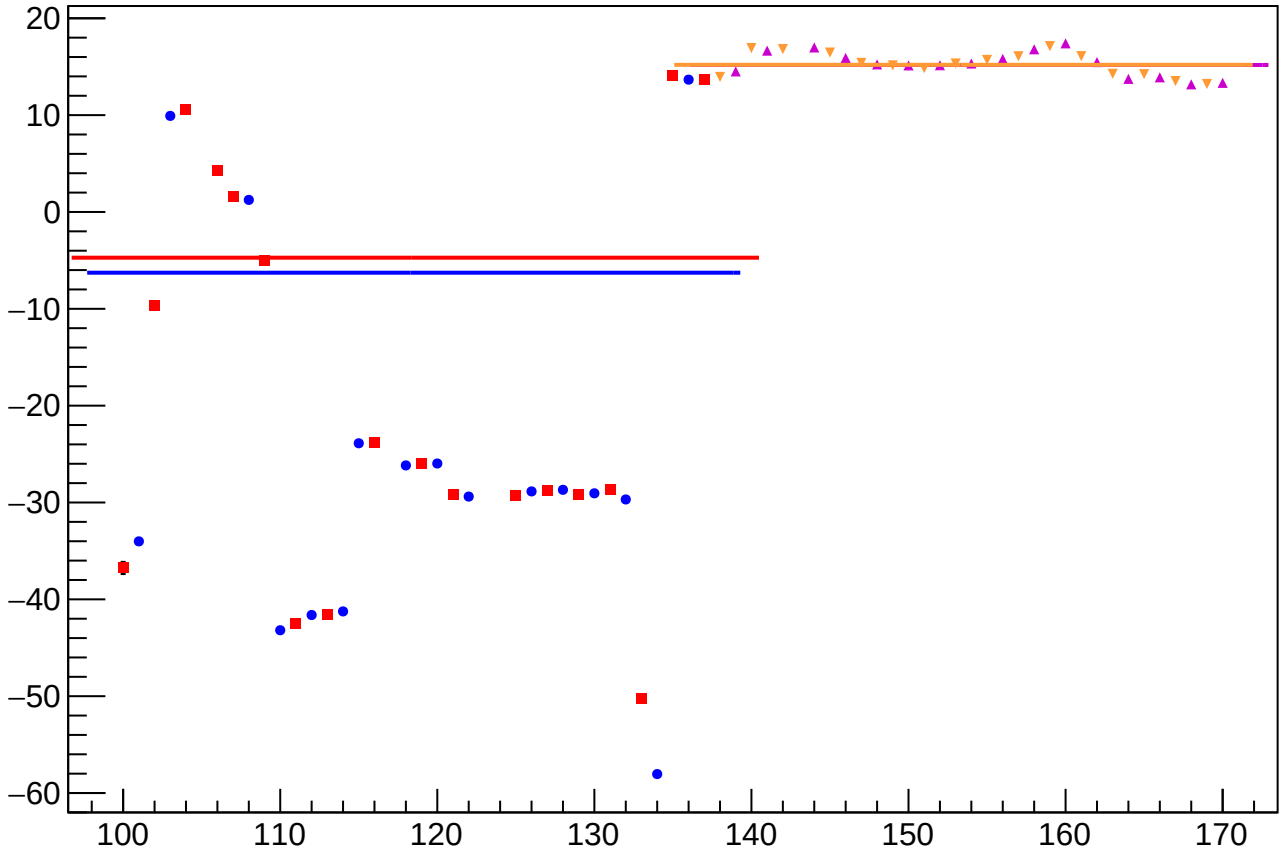
Right Out: 17.711+/-0.618 $\chi^2$/NDF: 1481.9/17

Left In: -5.767+/-0.375 $\chi^2$/NDF:99.0/15

+ sign 0.924+/-0.325 $\chi^2$/NDF: 2678.7/31

All: 0.737+/-0.228 $\chi^2$/NDF: 5314.5/65

- sign 0.555+/-0.321 $\chi^2$/NDF: 2635.1/33




Right In: -6.271+/-0.033 $\chi^2$/NDF: 410461.0/15

Left Out: 15.195+/-0.017 $\chi^2$/NDF:4691.5/15

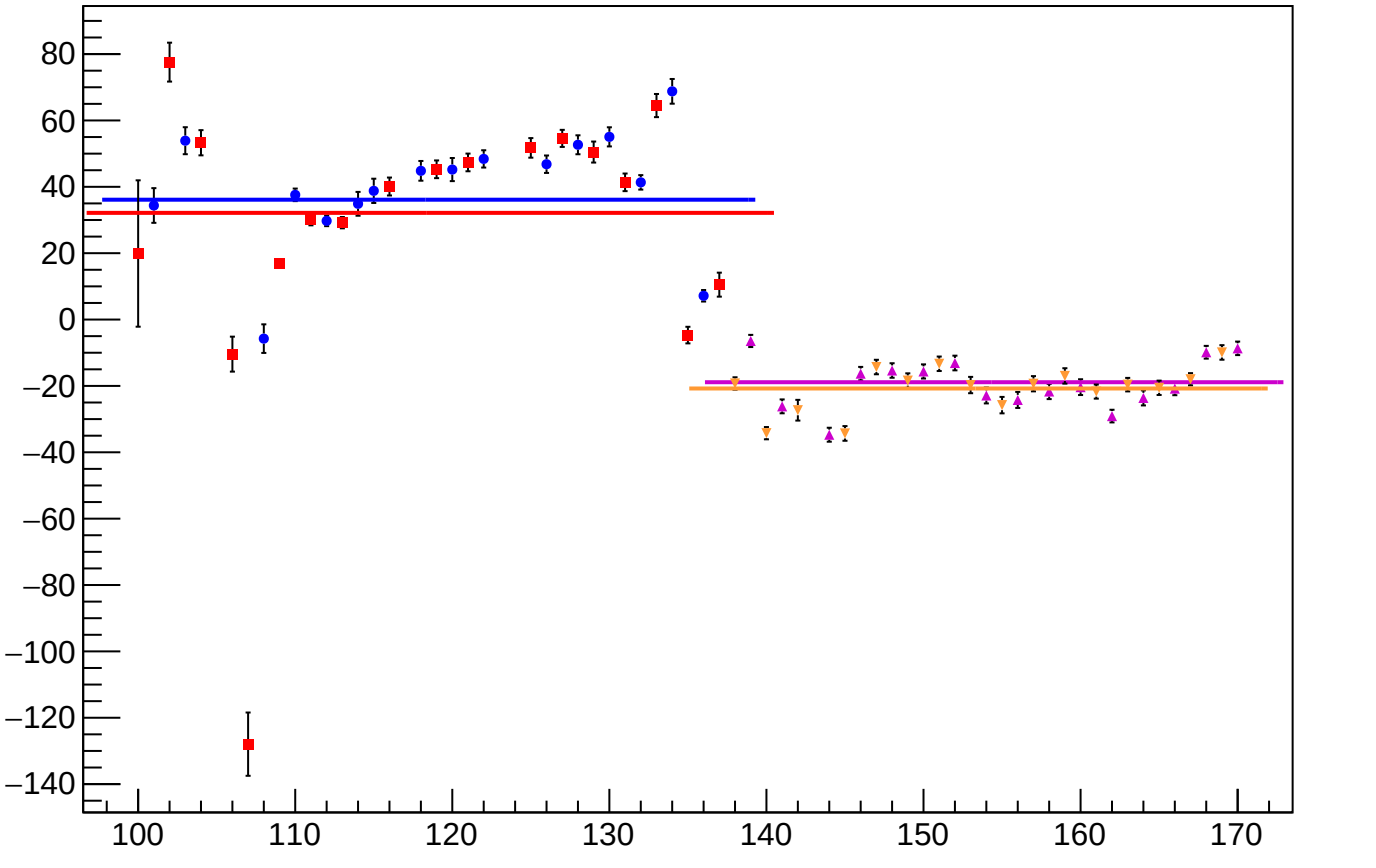
Right Out: -4.720+/-0.034 $\chi^2$/NDF: 306663.6/17

Left In: 15.177+/-0.017 $\chi^2$/NDF:5502.6/15

+ sign 10.681+/-0.015 $\chi^2$/NDF: 741025.4/31

All: 10.974+/-0.011 $\chi^2$/NDF: 1333926.6/65

- sign 11.253+/-0.015 $\chi^2$/NDF: 592187.8/33




Right In: 36.118+/-0.656 $\chi^2$/NDF: 622.8/15

Left Out: -20.776+/-0.543 $\chi^2$/NDF:151.7/15

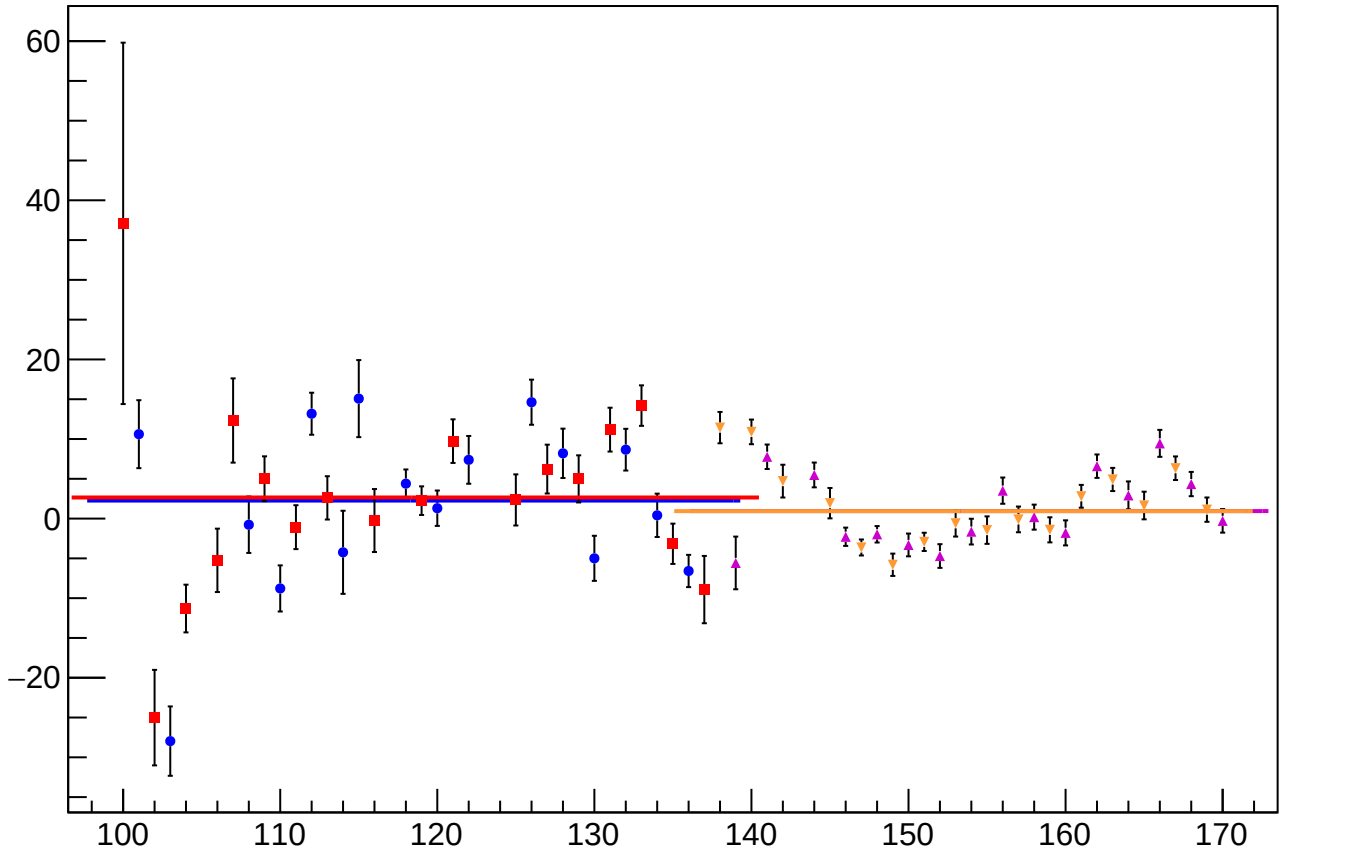
Right Out: 32.150+/-0.631 $\chi^2$/NDF: 1114.6/17

Left In: -18.884+/-0.529 $\chi^2$/NDF:218.5/15

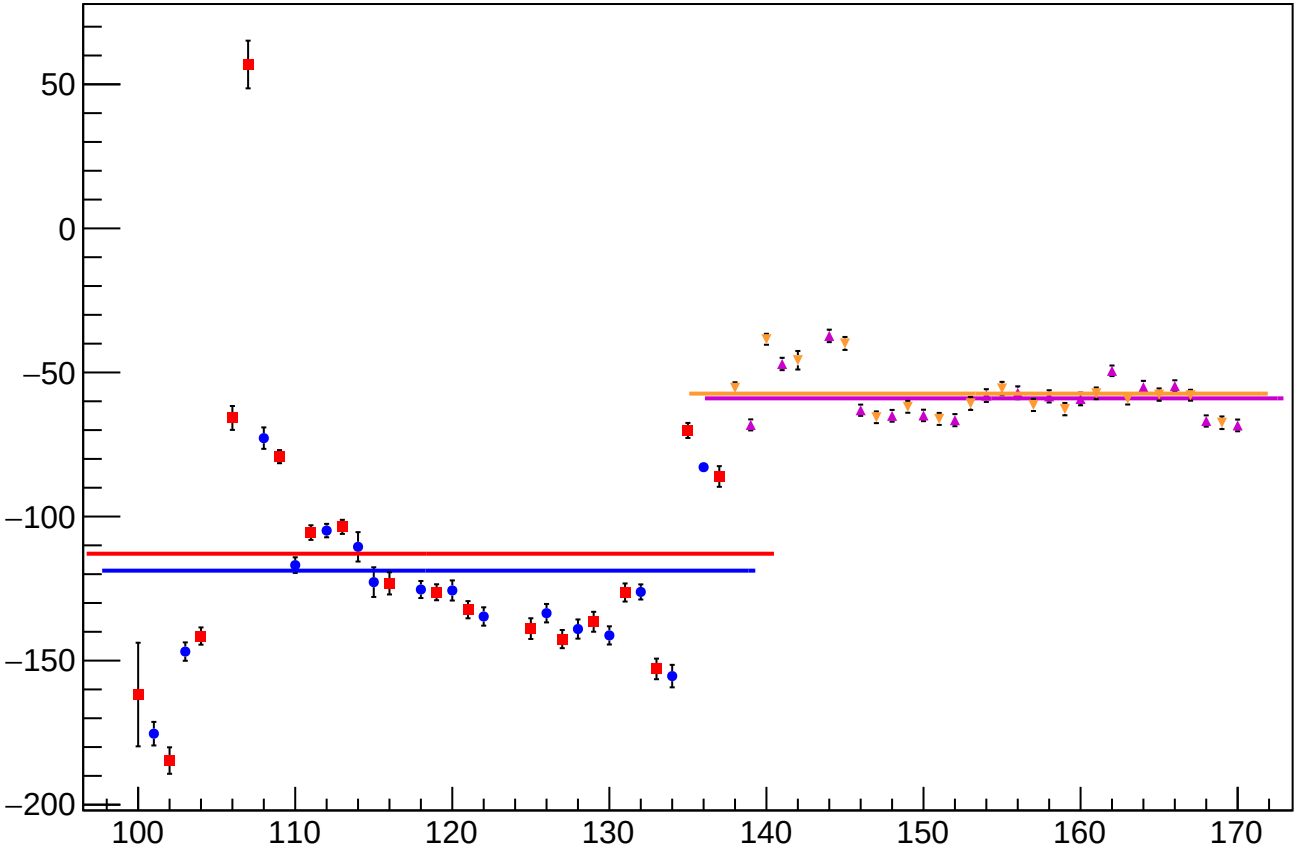
\+ sign 2.335+/-0.418 $\chi^2$/NDF: 5235.1/31

All: 2.262+/-0.291 $\chi^2$/NDF: 10412.6/65

\- sign 2.193+/-0.405 $\chi^2$/NDF: 5177.4/33


reg_asym_us_dd_atlr_dd_avg_diff_bpm4aY_slope vs Slug
60
40
20
0
−20
100
110
120
130
140
150
160
170
Right In: 2.265+/-0.701 χ²/NDF: 152.0/15
Left Out: 0.937+/-0.375 χ²/NDF:156.5/15
Right Out: 2.651+/-0.715 χ²/NDF: 107.2/17
Left In: 0.945+/-0.374 χ²/NDF:126.2/15
+ sign 1.233+/-0.331 χ²/NDF: 311.3/31
All: 1.272+/-0.234 χ²/NDF: 549.2/65
- sign 1.312+/-0.332 χ²/NDF: 237.9/33

# reg_asym_us_dd_atlr_dd_avg_diff_bpm4eX_slope vs Slug




Right In: -118.778+/-0.757 $\chi^2$/NDF: 1119.5/15

Left Out: -57.334+/-0.529 $\chi^2$/NDF:245.8/15

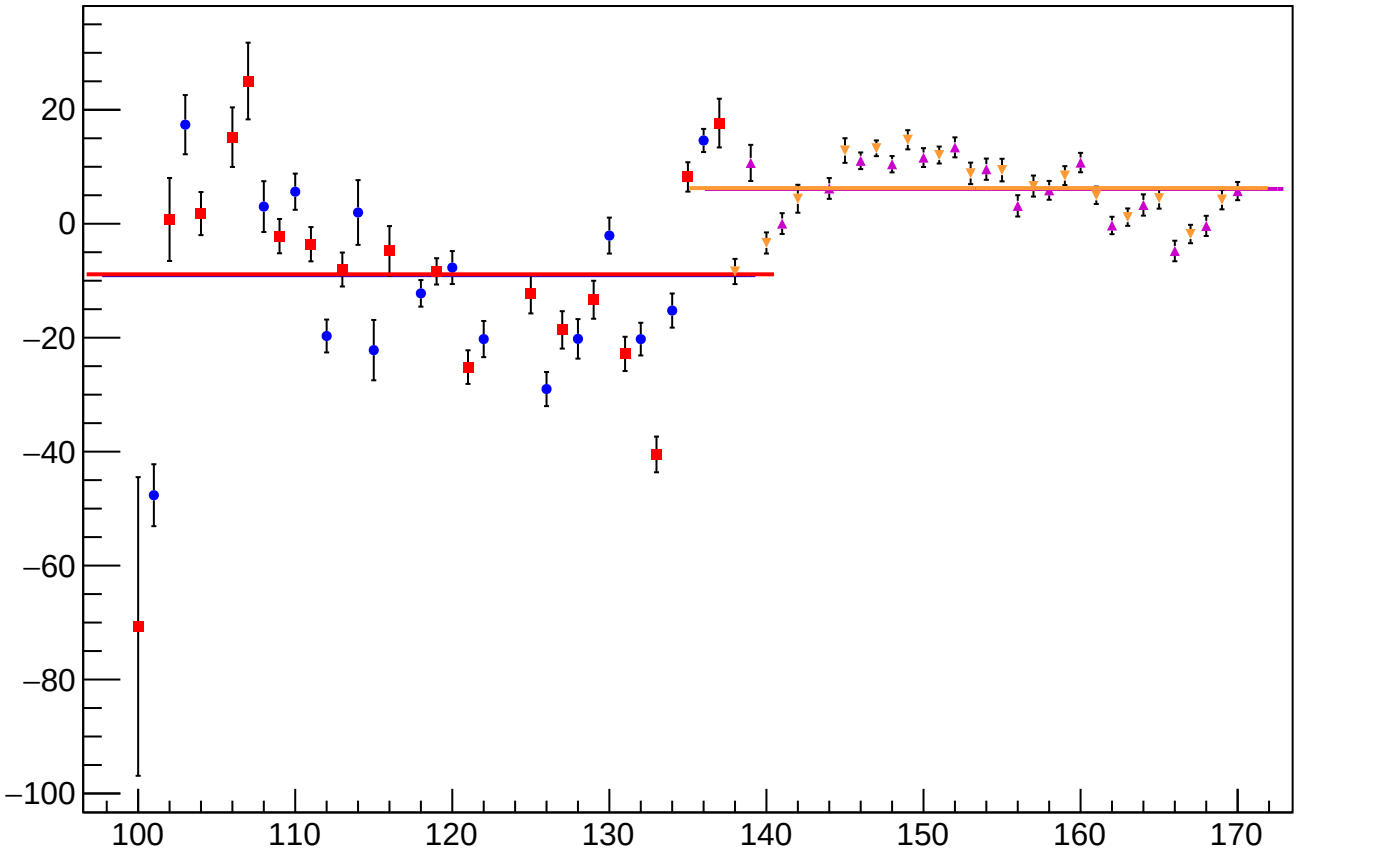
Right Out: -112.899+/-0.761 $\chi^2$/NDF: 1862.9/17

Left In: -58.984+/-0.515 $\chi^2$/NDF:262.3/15

\+ sign -77.511+/-0.434 $\chi^2$/NDF: 5792.1/31

All: -76.710+/-0.304 $\chi^2$/NDF: 11365.6/65

\- sign -75.935+/-0.427 $\chi^2$/NDF: 5566.8/33




Right In: -9.022+/-0.796 $\chi^2$/NDF: 358.0/15

Left Out: 6.258+/-0.435 $\chi^2$/NDF:192.2/15

Right Out: -8.878+/-0.810 $\chi^2$/NDF: 318.7/17

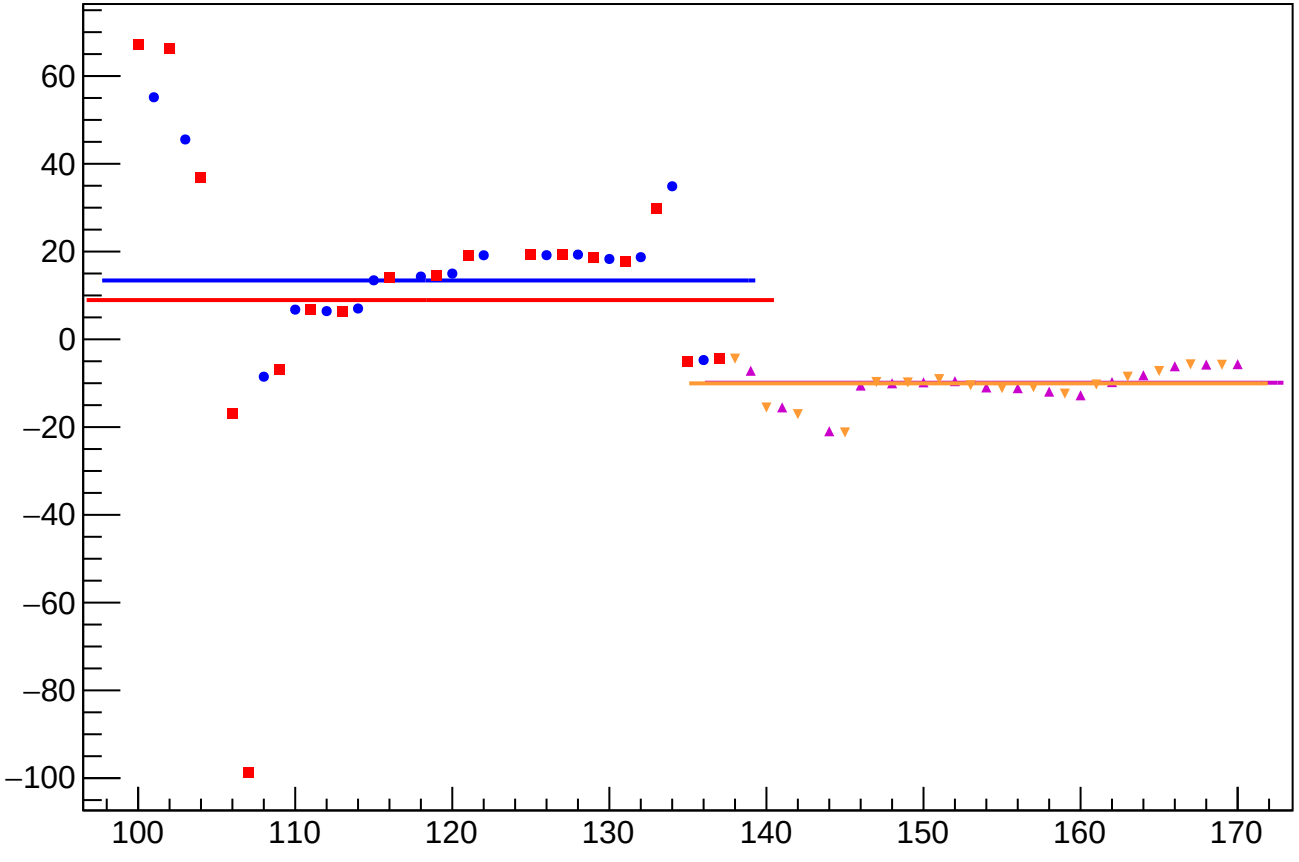
Left In: 6.106+/-0.432 $\chi^2$/NDF:145.4/15

+ sign 2.741+/-0.382 $\chi^2$/NDF: 834.1/31

All: 2.766+/-0.270 $\chi^2$/NDF: 1564.5/65

- sign 2.792+/-0.381 $\chi^2$/NDF: 730.3/33

# reg_asym_us_dd_atlr_dd_avg_diff_bpm12X_slope vs Slug




Right In: 13.412+/-0.045 $\chi^2$/NDF: 183707.4/15

Left Out: -10.034+/-0.020 $\chi^2$/NDF:38593.9/15

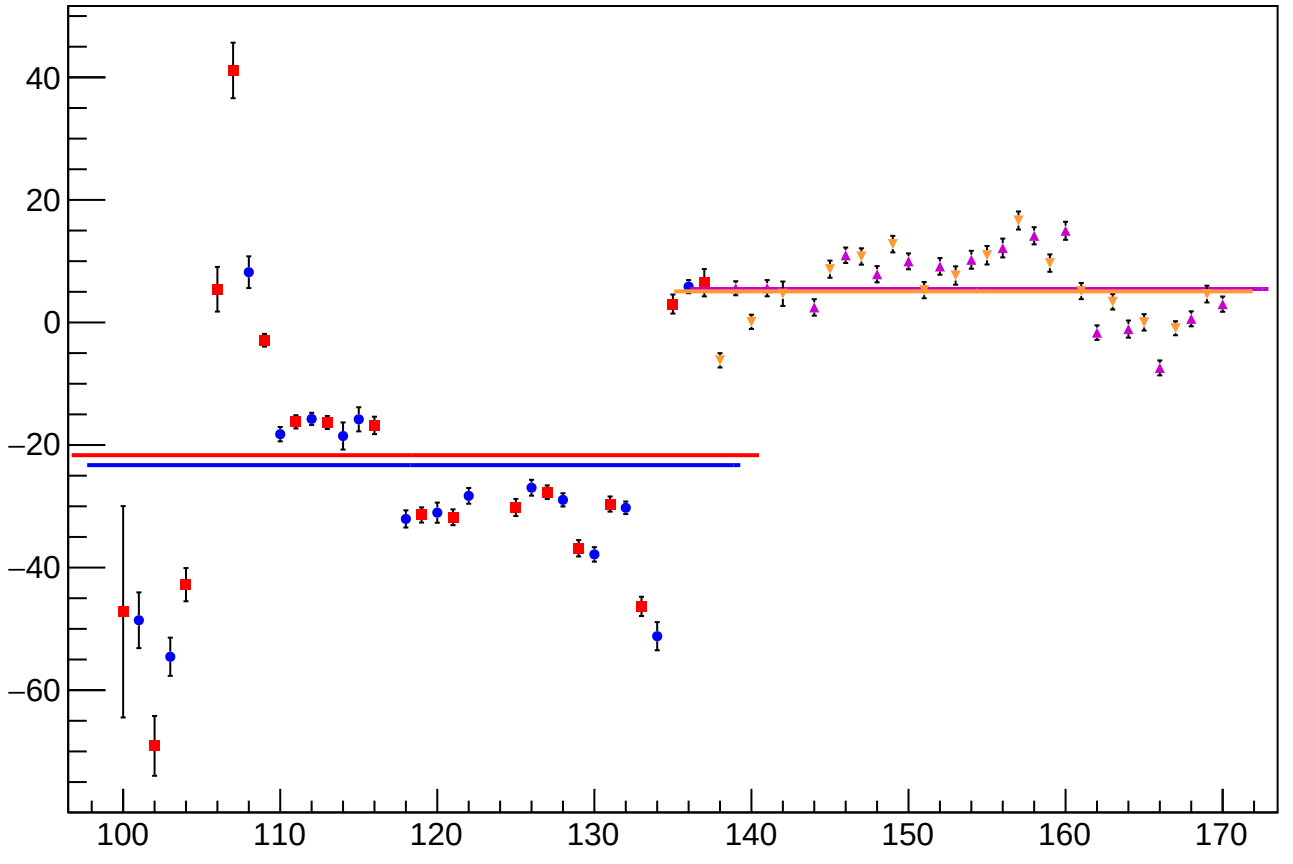
Right Out: 8.943+/-0.047 $\chi^2$/NDF: 291126.5/17

Left In: -9.892+/-0.019 $\chi^2$/NDF:31459.1/15

\+ sign -6.281+/-0.018 $\chi^2$/NDF: 447485.0/31

All: -6.775+/-0.013 $\chi^2$/NDF: 907281.3/65

\- sign -7.250+/-0.018 $\chi^2$/NDF: 458336.7/33




Right In: -23.281+/-0.350 $\chi^2$/NDF: 1567.9/15

Left Out: 5.077+/-0.337 $\chi^2$/NDF:302.9/15

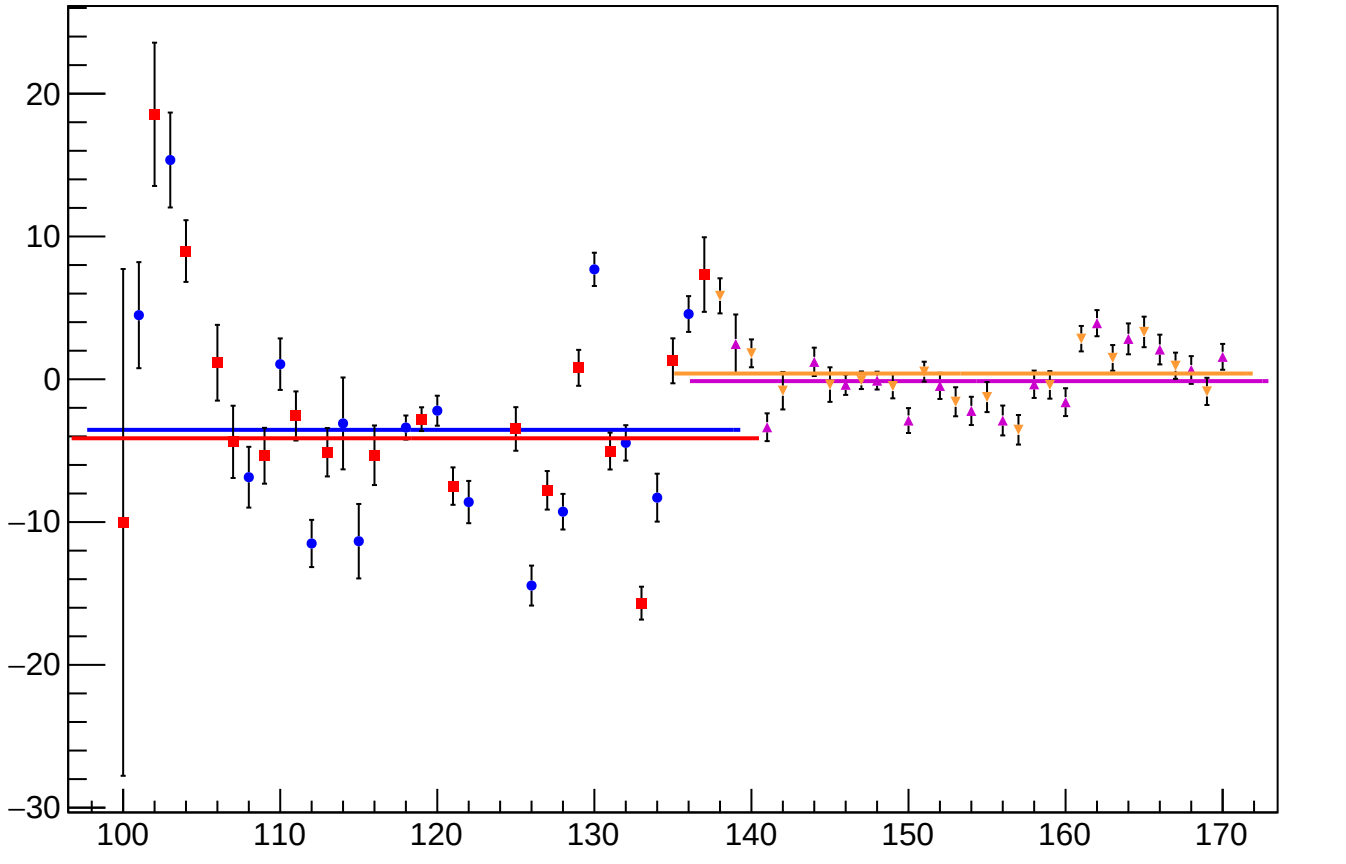
Right Out: -21.660+/-0.347 $\chi^2$/NDF: 1813.6/17

Left In: 5.459+/-0.328 $\chi^2$/NDF:345.5/15

+ sign -8.546+/-0.243 $\chi^2$/NDF: 5274.2/31

All: -7.926+/-0.170 $\chi^2$/NDF: 10667.7/65

- sign -7.329+/-0.239 $\chi^2$/NDF: 5380.7/33




Right In: -3.541+/-0.363 $\chi^2$/NDF: 316.8/15

Left Out: 0.403+/-0.232 $\chi^2$/NDF:64.5/15

Right Out: -4.132+/-0.371 $\chi^2$/NDF: 227.4/17

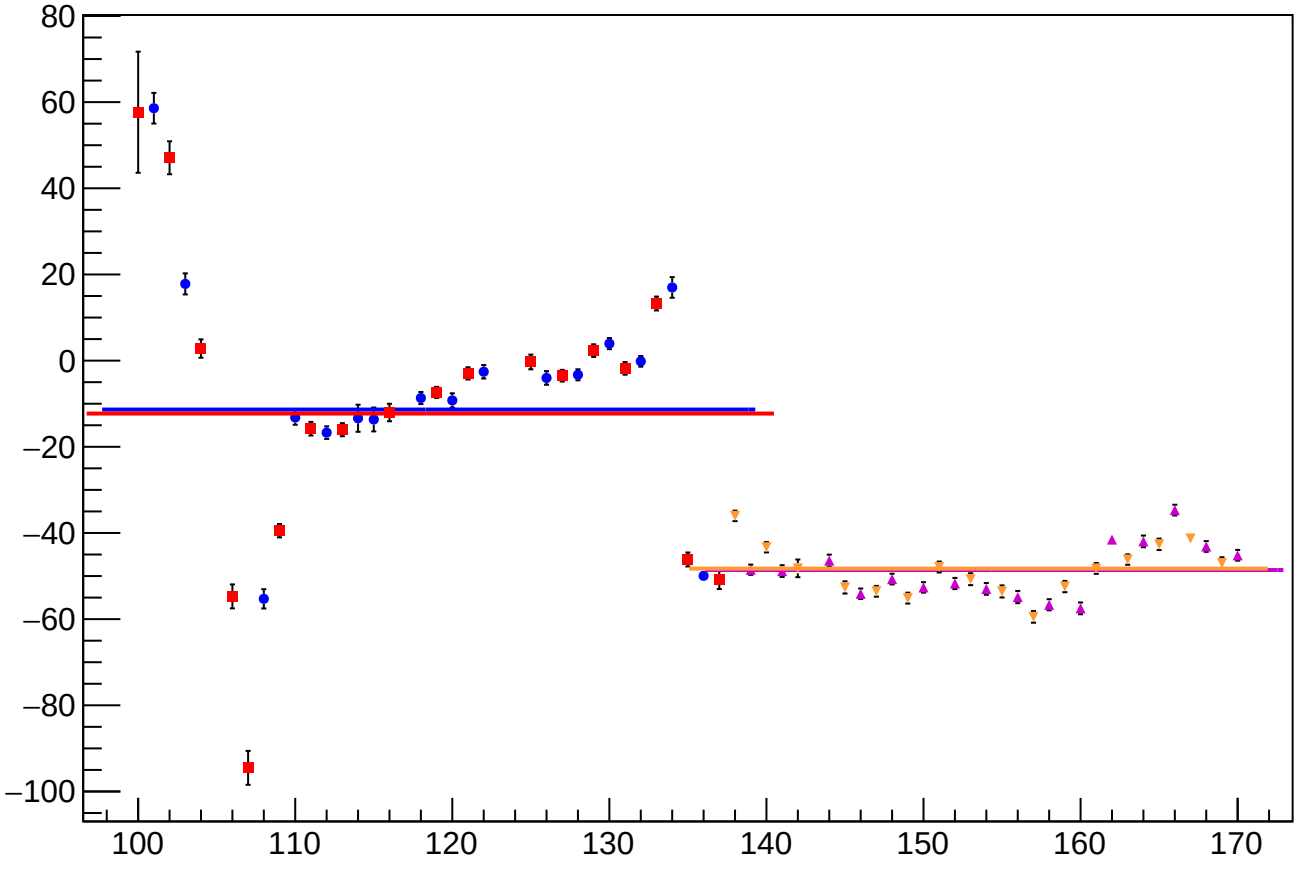
Left In: -0.130+/-0.231 $\chi^2$/NDF:74.3/15

+ sign -0.743+/-0.195 $\chi^2$/NDF: 465.2/31

All: -0.996+/-0.139 $\chi^2$/NDF: 854.2/65

- sign -1.251+/-0.196 $\chi^2$/NDF: 385.7/33

# reg_asym_us_dd_atlr_dd_dd_diff_bpm4eX_slope vs Slug




Right In: -11.355+/-0.406 $\chi^2$/NDF: 2661.6/15

Left Out: -48.271+/-0.328 $\chi^2$/NDF:328.1/15

Right Out: -12.281+/-0.413 $\chi^2$/NDF: 2590.4/17

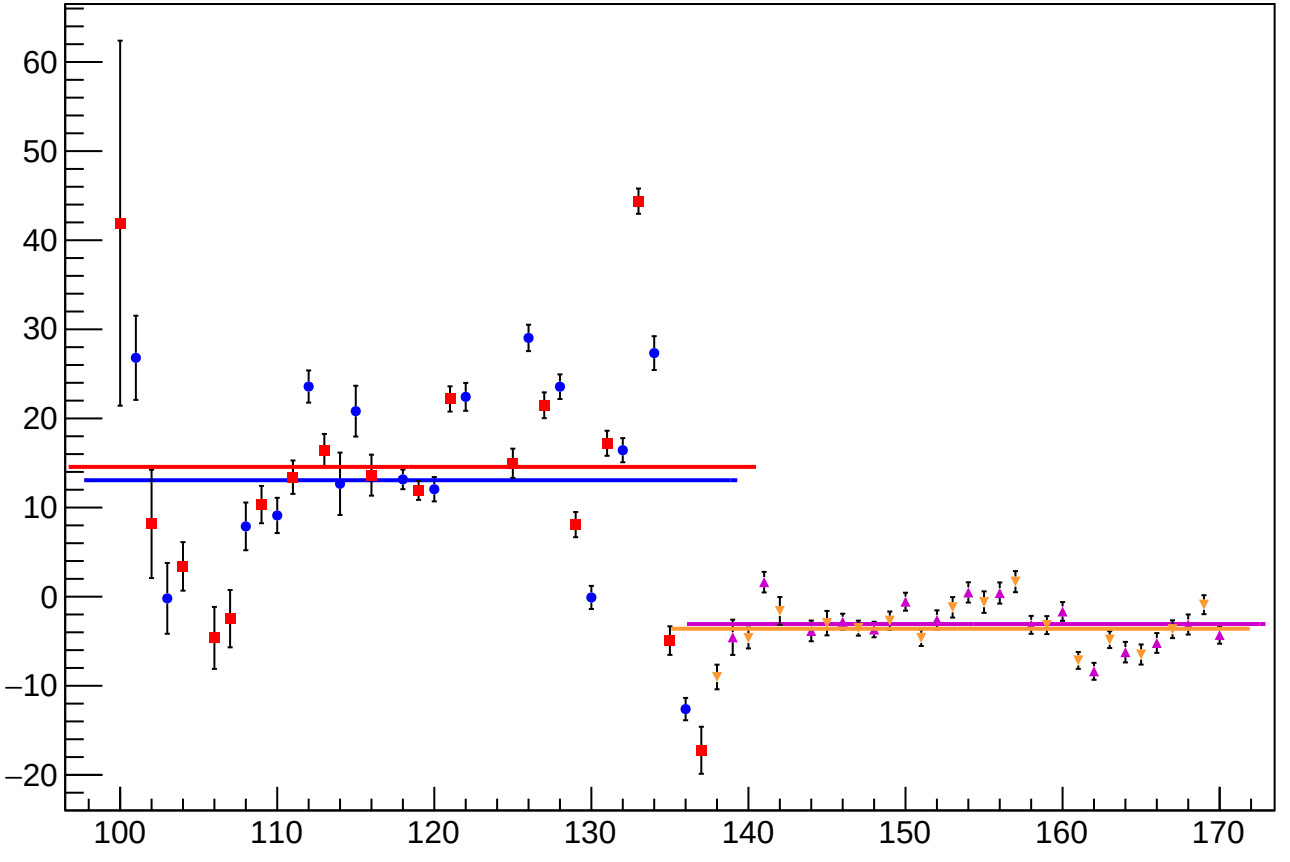
Left In: -48.600+/-0.319 $\chi^2$/NDF:368.9/15

+ sign -33.669+/-0.255 $\chi^2$/NDF: 7995.1/31

All: -34.348+/-0.180 $\chi^2$/NDF: 15805.4/65

- sign -35.014+/-0.253 $\chi^2$/NDF: 7796.3/33

# reg_asym_us_dd_atlr_dd_dd_diff_bpm4eY_slope vs Slug




Right In: 13.066+/-0.415 $\chi^2$/NDF: 863.4/15

Left Out: -3.600+/-0.269 $\chi^2$/NDF:79.3/15

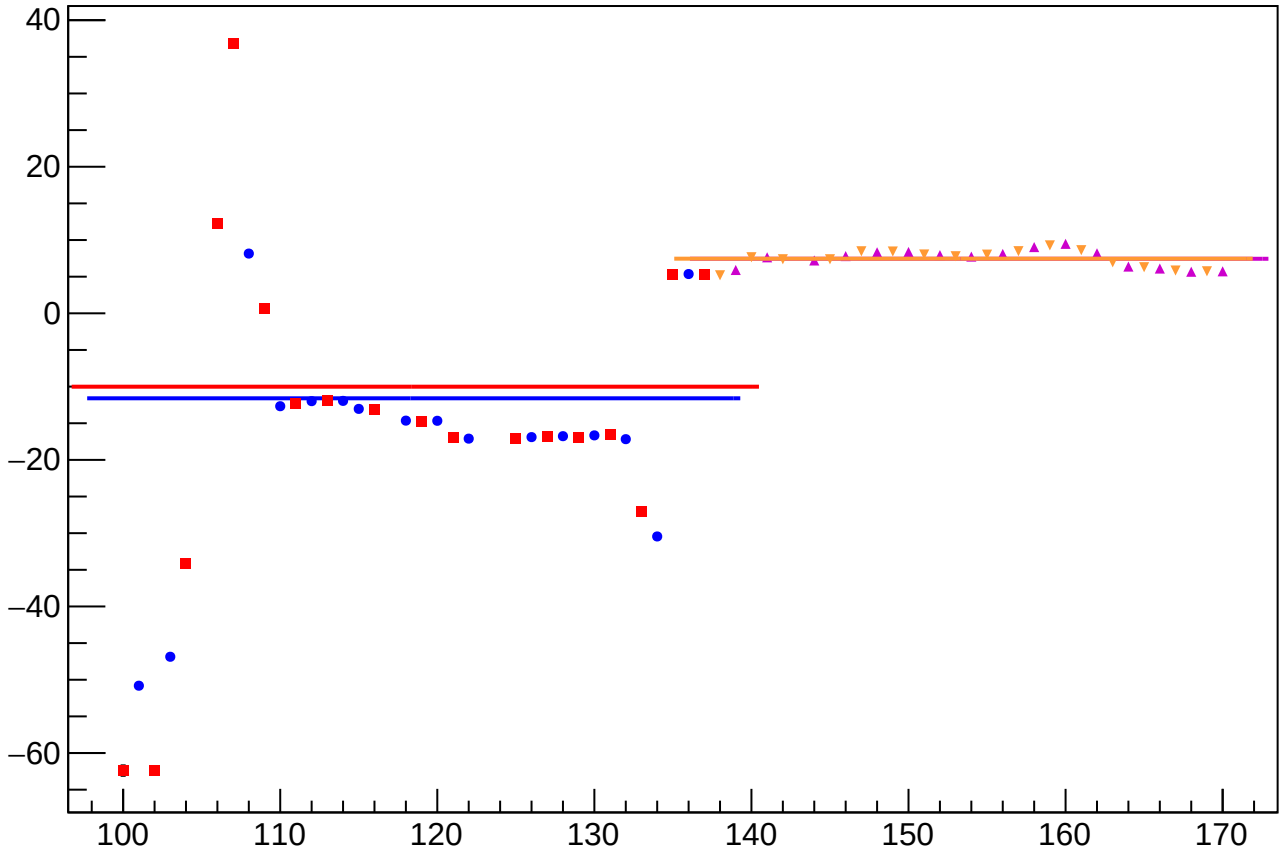
Right Out: 14.563+/-0.423 $\chi^2$/NDF: 903.1/17

Left In: -3.070+/-0.267 $\chi^2$/NDF:88.6/15

+ sign 1.341+/-0.226 $\chi^2$/NDF: 2078.9/31

All: 1.654+/-0.160 $\chi^2$/NDF: 4318.7/65

- sign 1.967+/-0.226 $\chi^2$/NDF: 2236.0/33




Right In: -11.596+/-0.026 $\chi^2$/NDF: 360523.2/15

Left Out: 7.456+/-0.012 $\chi^2$/NDF:9462.2/15

Right Out: -10.012+/-0.027 $\chi^2$/NDF: 396286.9/17

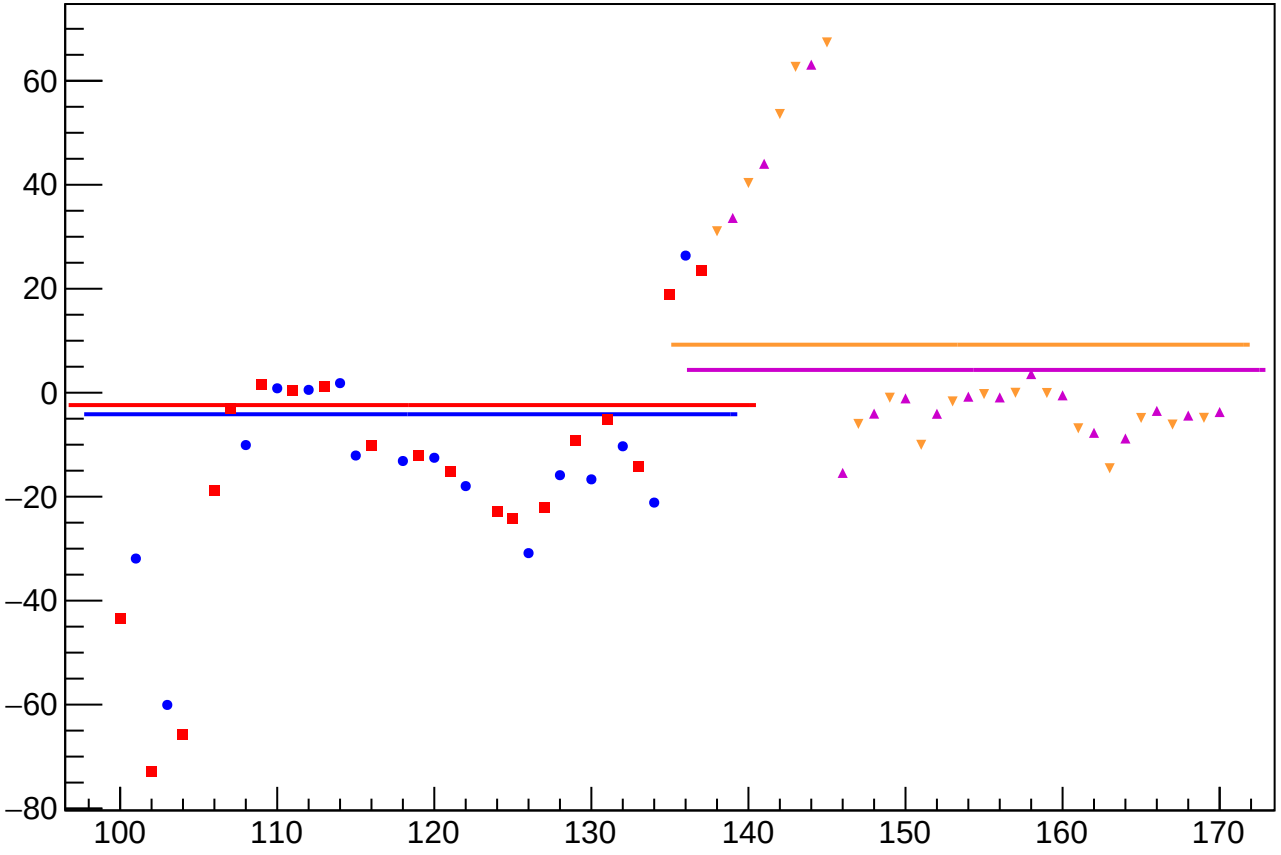
Left In: 7.442+/-0.012 $\chi^2$/NDF:10206.4/15

+ sign 4.056+/-0.011 $\chi^2$/NDF: 800783.7/31

All: 4.380+/-0.008 $\chi^2$/NDF: 1549650.0/65

- sign 4.692+/-0.011 $\chi^2$/NDF: 747200.1/33

# reg_asym_bcm_an_ds3_diff_bpm1X_slope vs Slug




Right In: -4.145+/-0.055 $\chi^2$/NDF: 75262.7/15

Left Out: 9.237+/-0.060 $\chi^2$/NDF:150979.0/16

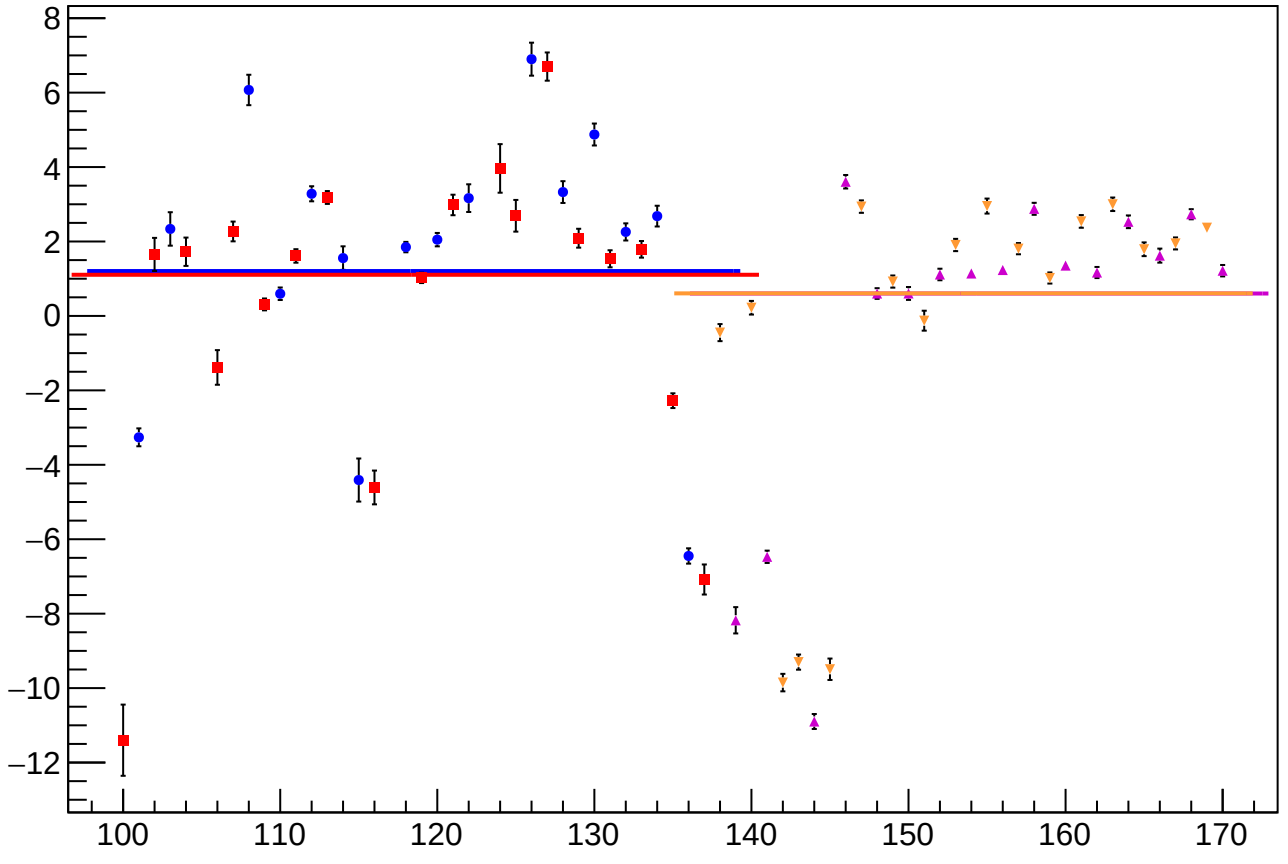
Right Out: -2.382+/-0.046 $\chi^2$/NDF: 80749.3/18

Left In: 4.384+/-0.052 $\chi^2$/NDF:121530.8/15

+ sign 1.880+/-0.041 $\chi^2$/NDF: 253207.1/32

All: 1.124+/-0.026 $\chi^2$/NDF: 465481.4/67

- sign 0.573+/-0.035 $\chi^2$/NDF: 211673.7/34




Right In: 1.206+/-0.060 $\chi^2$/NDF: 2584.4/15

Left Out: 0.606+/-0.044 $\chi^2$/NDF:6665.2/16

Right Out: 1.106+/-0.057 $\chi^2$/NDF: 1587.2/18

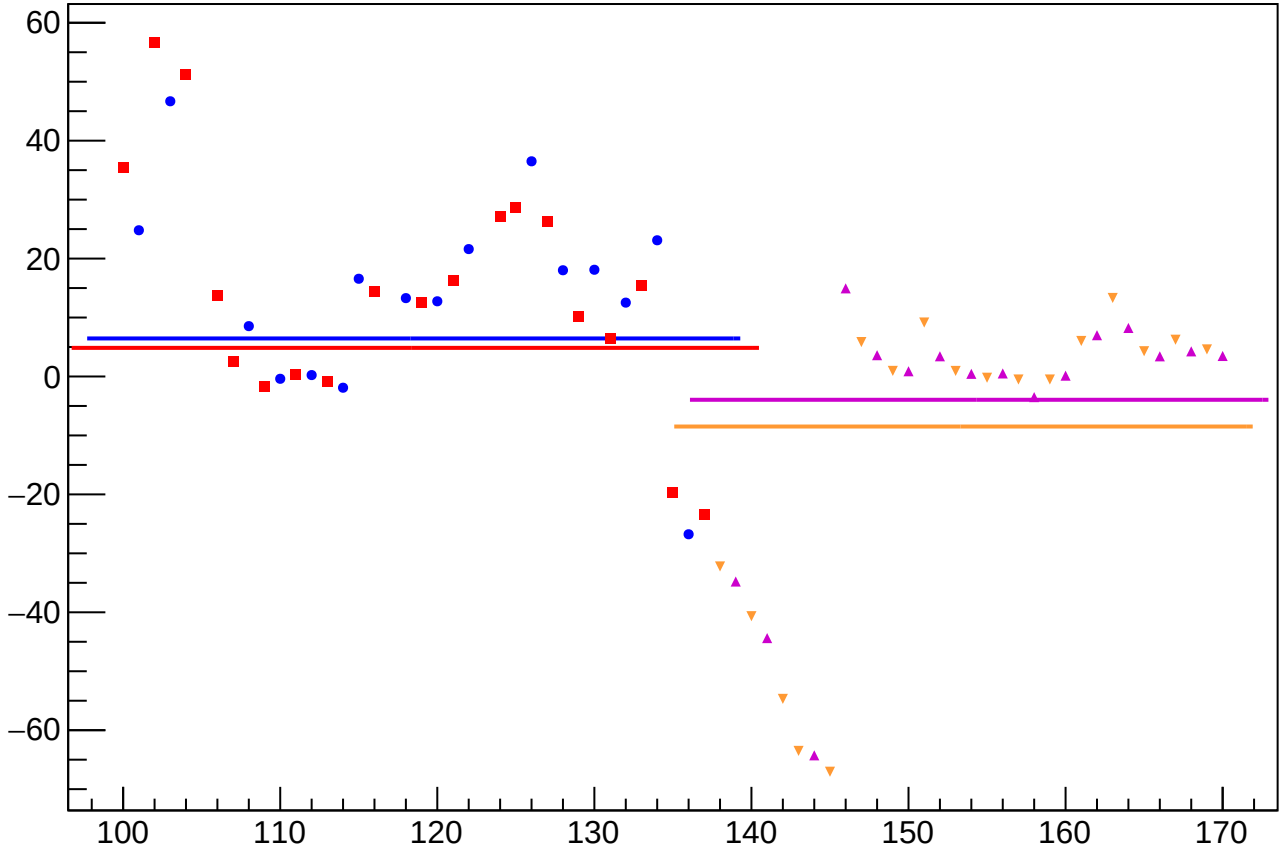
Left In: 0.602+/-0.038 $\chi^2$/NDF:6719.0/15

+ sign 0.811+/-0.035 $\chi^2$/NDF: 9314.6/32

All: 0.780+/-0.023 $\chi^2$/NDF: 17676.2/67

- sign 0.754+/-0.031 $\chi^2$/NDF: 8360.2/34

# reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs Slug




Right In: 6.453+/-0.065 $\chi^2$/NDF: 70671.1/15

Left Out: -8.488+/-0.059 $\chi^2$/NDF:147271.8/16

Right Out: 4.854+/-0.059 $\chi^2$/NDF: 75267.0/18

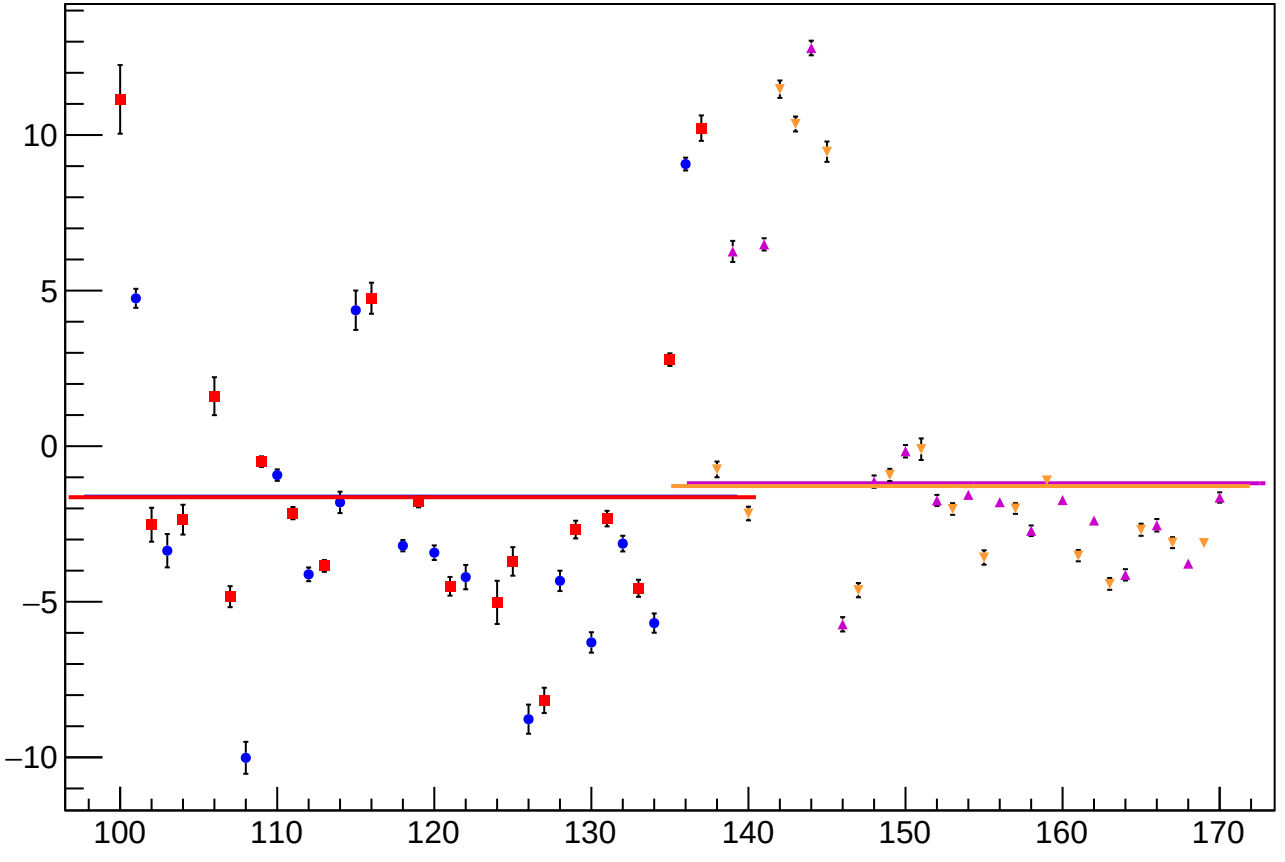
Left In: -3.952+/-0.051 $\chi^2$/NDF:119124.0/15

+ sign -1.759+/-0.044 $\chi^2$/NDF: 246793.1/32

All: -0.897+/-0.029 $\chi^2$/NDF: 454670.7/67

- sign -0.233+/-0.038 $\chi^2$/NDF: 207191.5/34

# reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs Slug




Right In: -1.622+/-0.070 $\chi^2$/NDF: 4525.3/15

Left Out: -1.281+/-0.049 $\chi^2$/NDF:6629.0/16

Right Out: -1.640+/-0.065 $\chi^2$/NDF: 2462.1/18

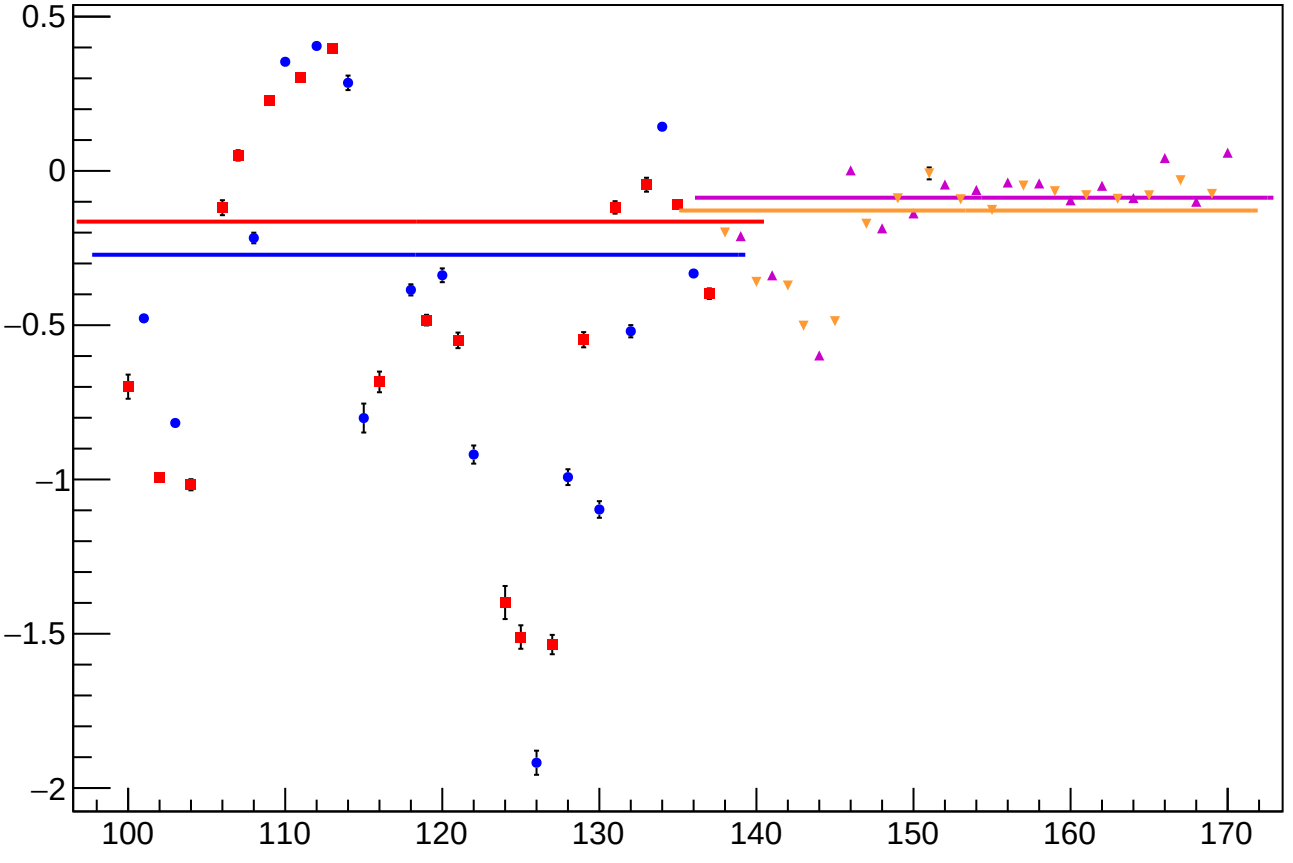
Left In: -1.192+/-0.043 $\chi^2$/NDF:6732.2/15

+ sign -1.395+/-0.040 $\chi^2$/NDF: 11170.2/32

All: -1.357+/-0.027 $\chi^2$/NDF: 20399.7/67

- sign -1.328+/-0.036 $\chi^2$/NDF: 9227.9/34

# reg_asym_bcm_an_ds3_diff_bpm12X_slope vs Slug




Right In: -0.272+/-0.004 $\chi^2$/NDF: 12048.2/15

Left Out: -0.128+/-0.002 $\chi^2$/NDF:3194.4/16

Right Out: -0.164+/-0.004 $\chi^2$/NDF: 15497.0/18

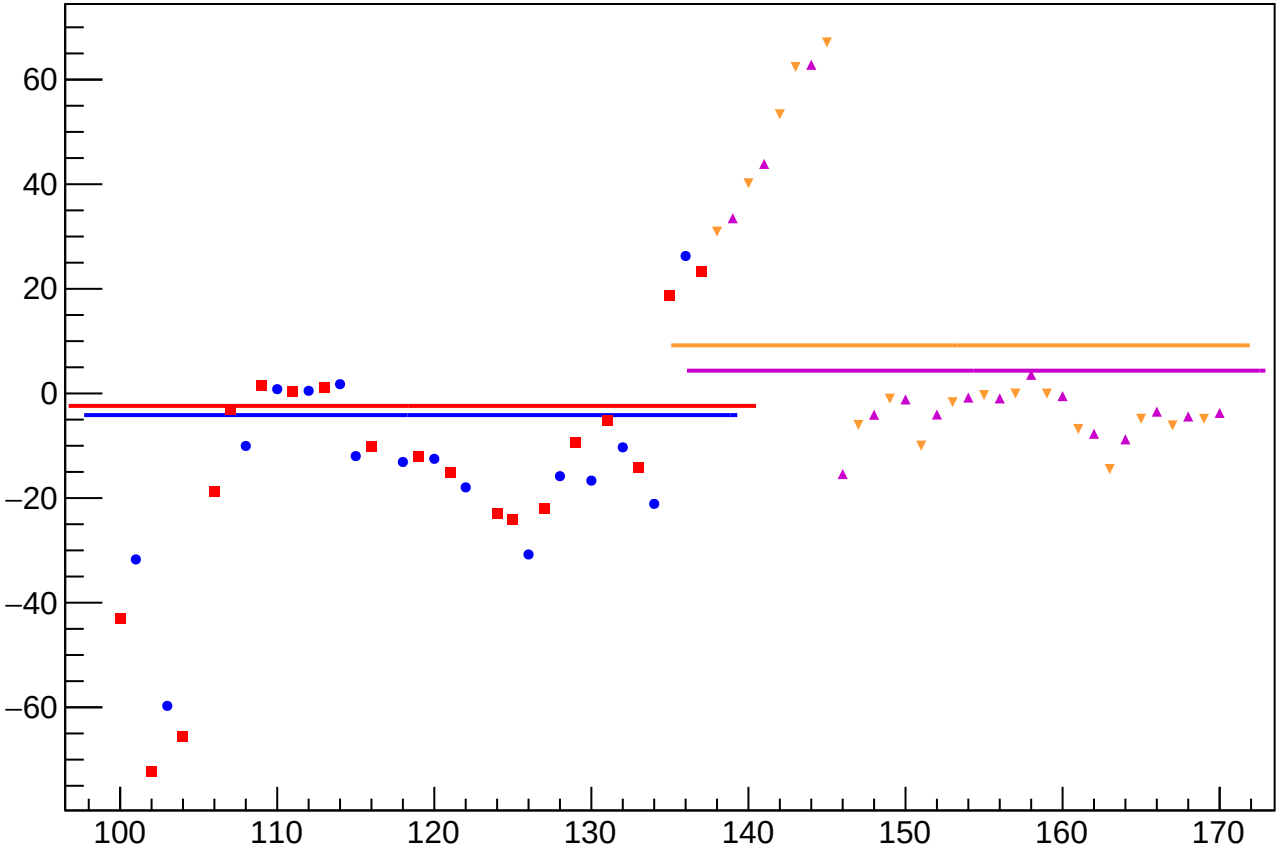
Left In: -0.087+/-0.002 $\chi^2$/NDF:3656.6/15

+ sign -0.159+/-0.002 $\chi^2$/NDF: 16177.7/32

All: -0.125+/-0.001 $\chi^2$/NDF: 36197.3/67

- sign -0.101+/-0.002 $\chi^2$/NDF: 19492.7/34

# reg_asym_bcm_an_ds_diff_bpm1X_slope vs Slug




Right In: -4.139+/-0.054 $\chi^2$/NDF: 75240.1/15

Left Out: 9.197+/-0.060 $\chi^2$/NDF:150721.8/16

Right Out: -2.380+/-0.046 $\chi^2$/NDF: 80668.5/18

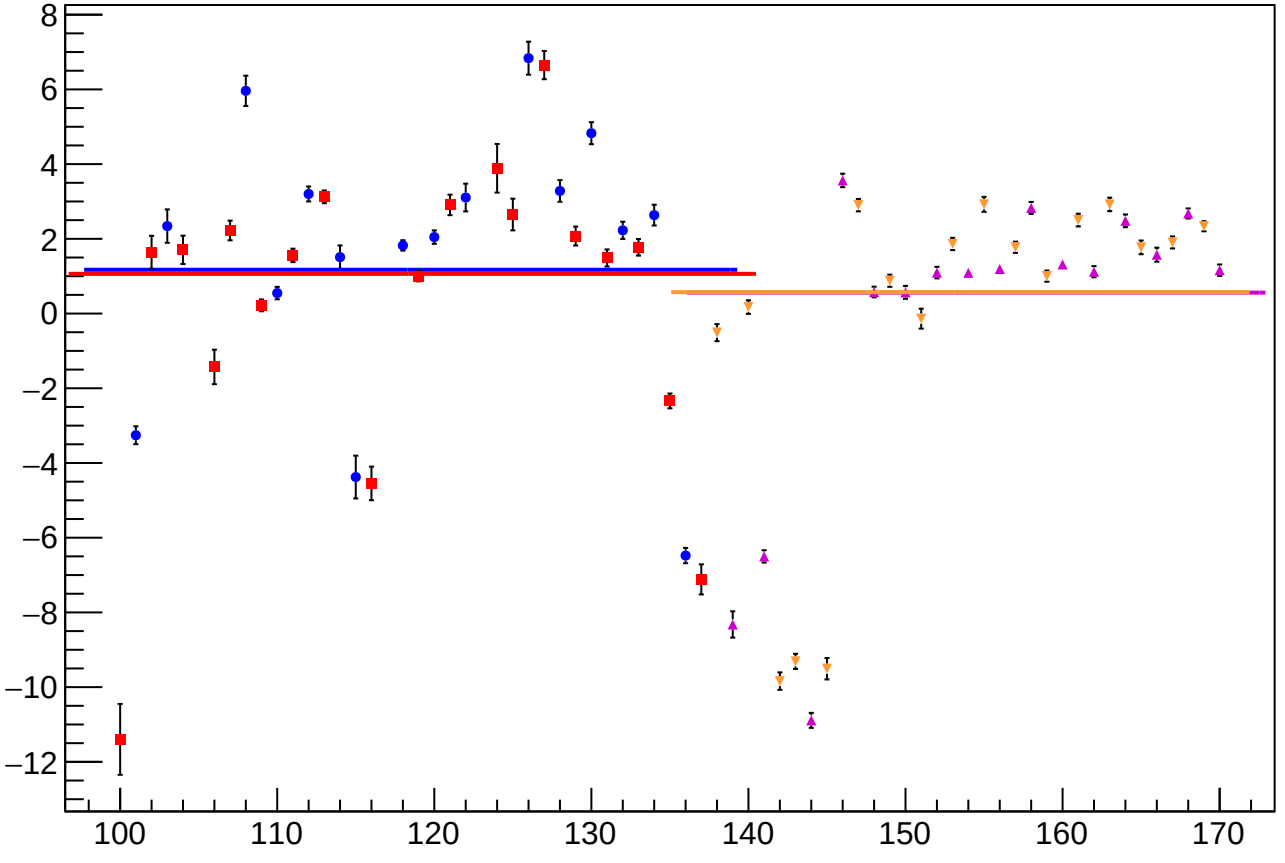
Left In: 4.355+/-0.052 $\chi^2$/NDF:121416.2/15

+ sign 1.846+/-0.040 $\chi^2$/NDF: 252985.5/32

All: 1.096+/-0.026 $\chi^2$/NDF: 465055.7/67

- sign 0.549+/-0.034 $\chi^2$/NDF: 211473.3/34

# reg_asym_bcm_an_ds_diff_bpm4aY_slope vs Slug




Right In: 1.172+/-0.060 $\chi^2$/NDF: 2584.5/15

Left Out: 0.571+/-0.043 $\chi^2$/NDF:6669.6/16

Right Out: 1.063+/-0.057 $\chi^2$/NDF: 1596.5/18

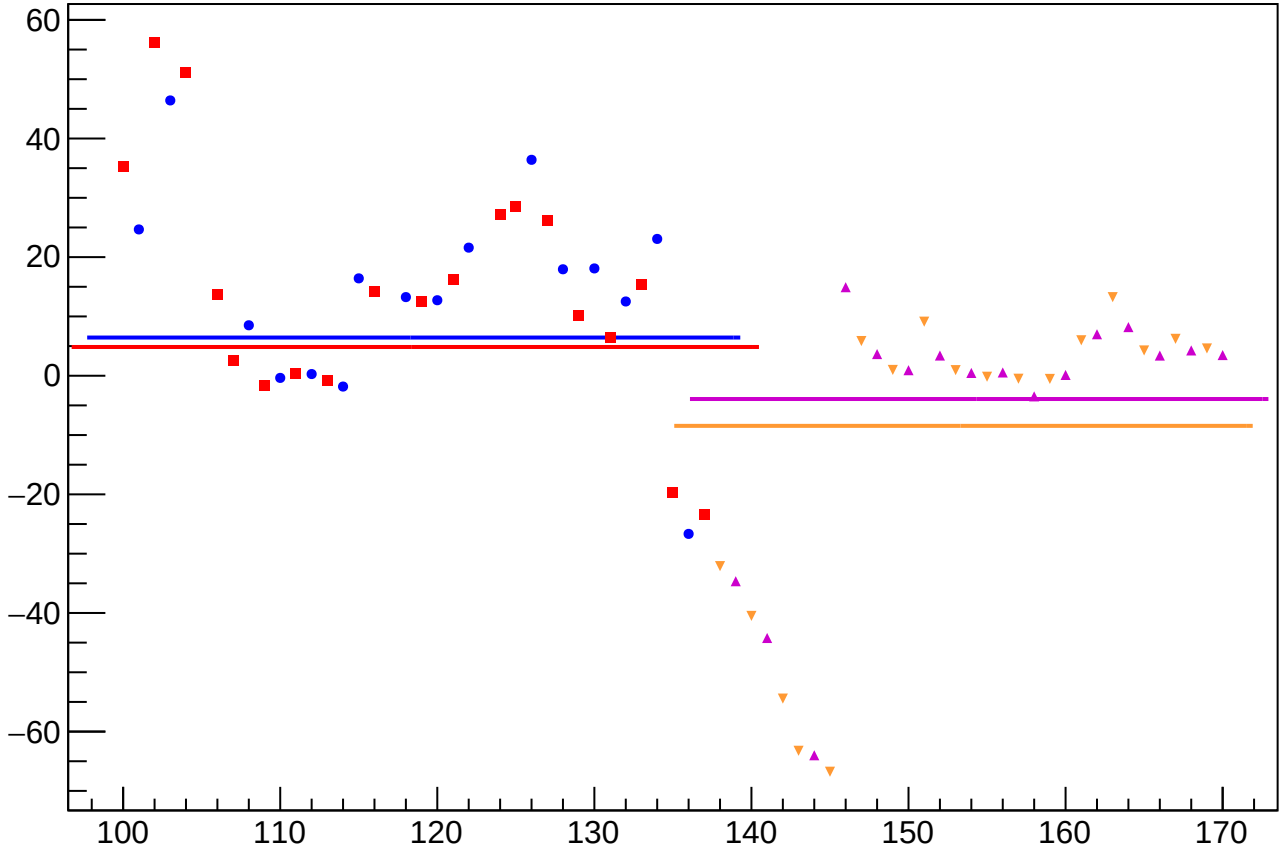
Left In: 0.560+/-0.038 $\chi^2$/NDF:6734.3/15

+ sign 0.777+/-0.035 $\chi^2$/NDF: 9319.8/32

All: 0.741+/-0.023 $\chi^2$/NDF: 17706.9/67

- sign 0.712+/-0.031 $\chi^2$/NDF: 8385.1/34

# reg_asym_bcm_an_ds_diff_bpm4eX_slope vs Slug




Right In: 6.442+/-0.065 $\chi^2$/NDF: 70630.3/15

Left Out: -8.450+/-0.059 $\chi^2$/NDF:147022.1/16

Right Out: 4.848+/-0.059 $\chi^2$/NDF: 75159.9/18

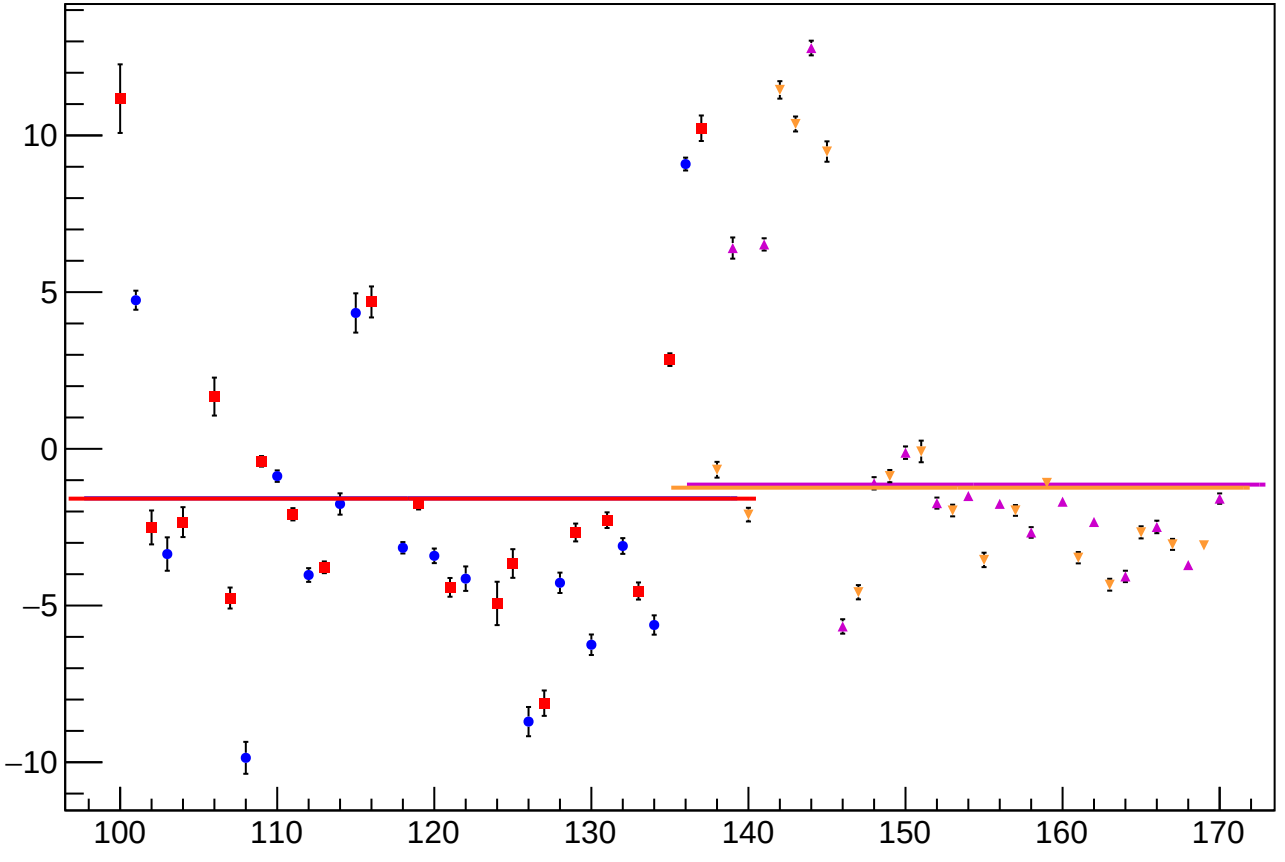
Left In: -3.924+/-0.050 $\chi^2$/NDF:119007.6/15

+ sign -1.725+/-0.044 $\chi^2$/NDF: 246571.3/32

All: -0.868+/-0.029 $\chi^2$/NDF: 454238.6/67

- sign -0.206+/-0.038 $\chi^2$/NDF: 206981.4/34

# reg_asym_bcm_an_ds_diff_bpm4eY_slope vs Slug




Right In: -1.580+/-0.069 $\chi^2$/NDF: 4524.3/15

Left Out: -1.239+/-0.049 $\chi^2$/NDF:6628.2/16

Right Out: -1.589+/-0.064 $\chi^2$/NDF: 2472.2/18

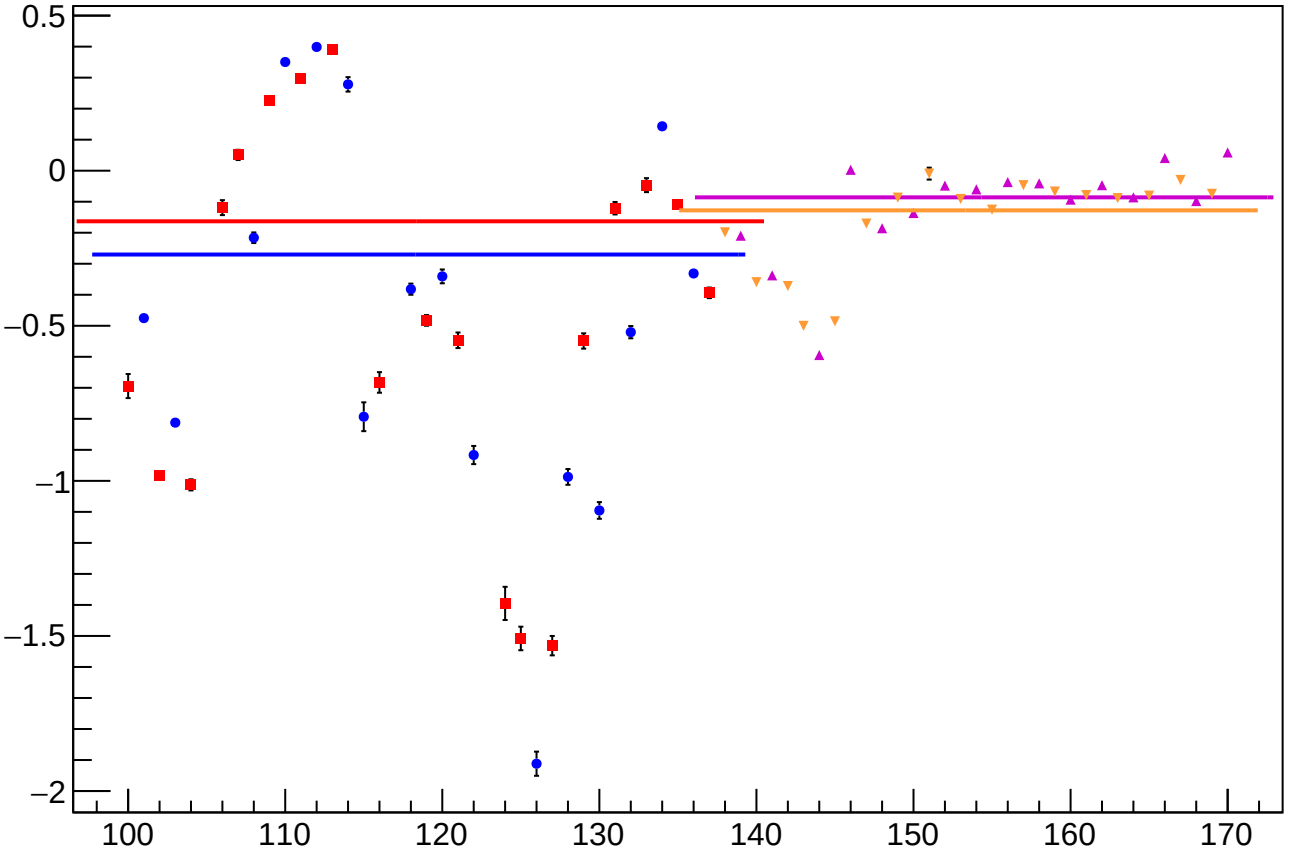
Left In: -1.142+/-0.042 $\chi^2$/NDF:6745.3/15

+ sign -1.354+/-0.040 $\chi^2$/NDF: 11168.5/32

All: -1.311+/-0.027 $\chi^2$/NDF: 20421.7/67

- sign -1.278+/-0.035 $\chi^2$/NDF: 9251.2/34

# reg_asym_bcm_an_ds_diff_bpm12X_slope vs Slug




Right In: -0.270+/-0.004 $\chi^2$/NDF: 12036.3/15

Left Out: -0.128+/-0.002 $\chi^2$/NDF:3205.2/16

Right Out: -0.163+/-0.004 $\chi^2$/NDF: 15510.0/18

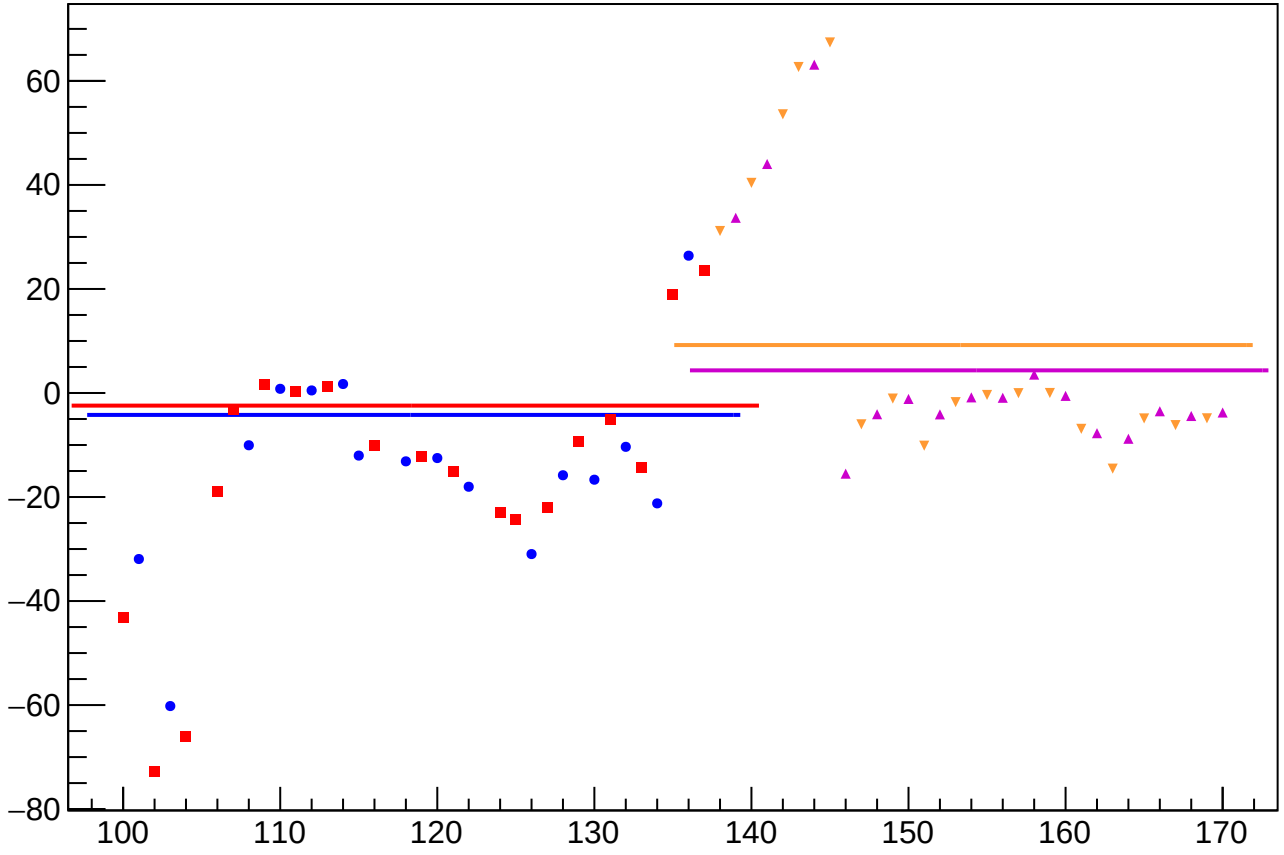
Left In: -0.086+/-0.002 $\chi^2$/NDF:3638.3/15

+ sign -0.159+/-0.002 $\chi^2$/NDF: 16172.9/32

All: -0.125+/-0.001 $\chi^2$/NDF: 36197.2/67

- sign -0.100+/-0.002 $\chi^2$/NDF: 19488.1/34

# reg_asym_bcm_an_us_diff_bpm1X_slope vs Slug




Right In: -4.214+/-0.055 $\chi^2$/NDF: 75215.4/15

Left Out: 9.216+/-0.060 $\chi^2$/NDF:151075.6/16

Right Out: -2.427+/-0.046 $\chi^2$/NDF: 80724.5/18

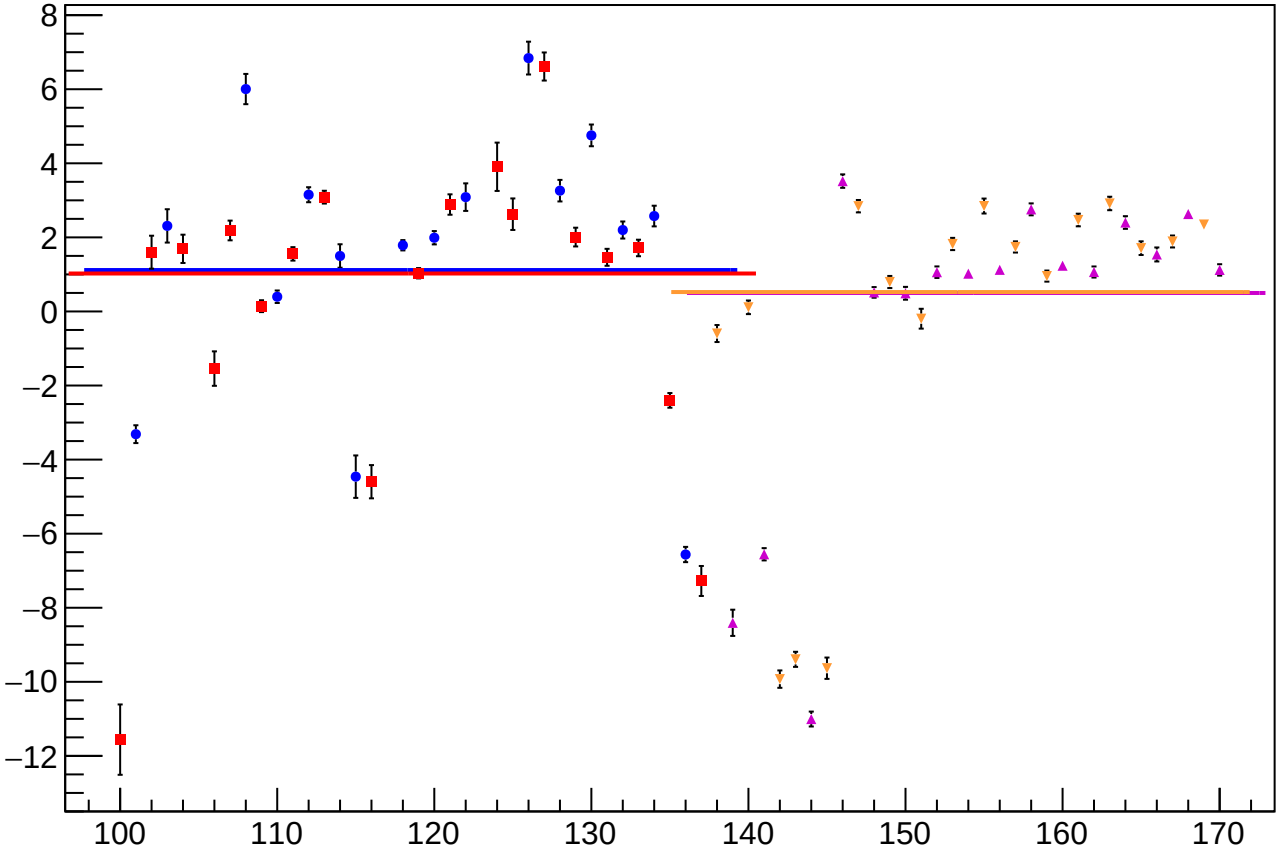
Left In: 4.351+/-0.052 $\chi^2$/NDF:121538.0/15

+ sign 1.830+/-0.041 $\chi^2$/NDF: 253411.0/32

All: 1.080+/-0.026 $\chi^2$/NDF: 465674.0/67

- sign 0.533+/-0.035 $\chi^2$/NDF: 211672.8/34

# reg_asym_bcm_an_us_diff_bpm4aY_slope vs Slug




Right In: 1.118+/-0.060 $\chi^2$/NDF: 2591.7/15

Left Out: 0.524+/-0.044 $\chi^2$/NDF:6689.4/16

Right Out: 1.025+/-0.057 $\chi^2$/NDF: 1612.0/18

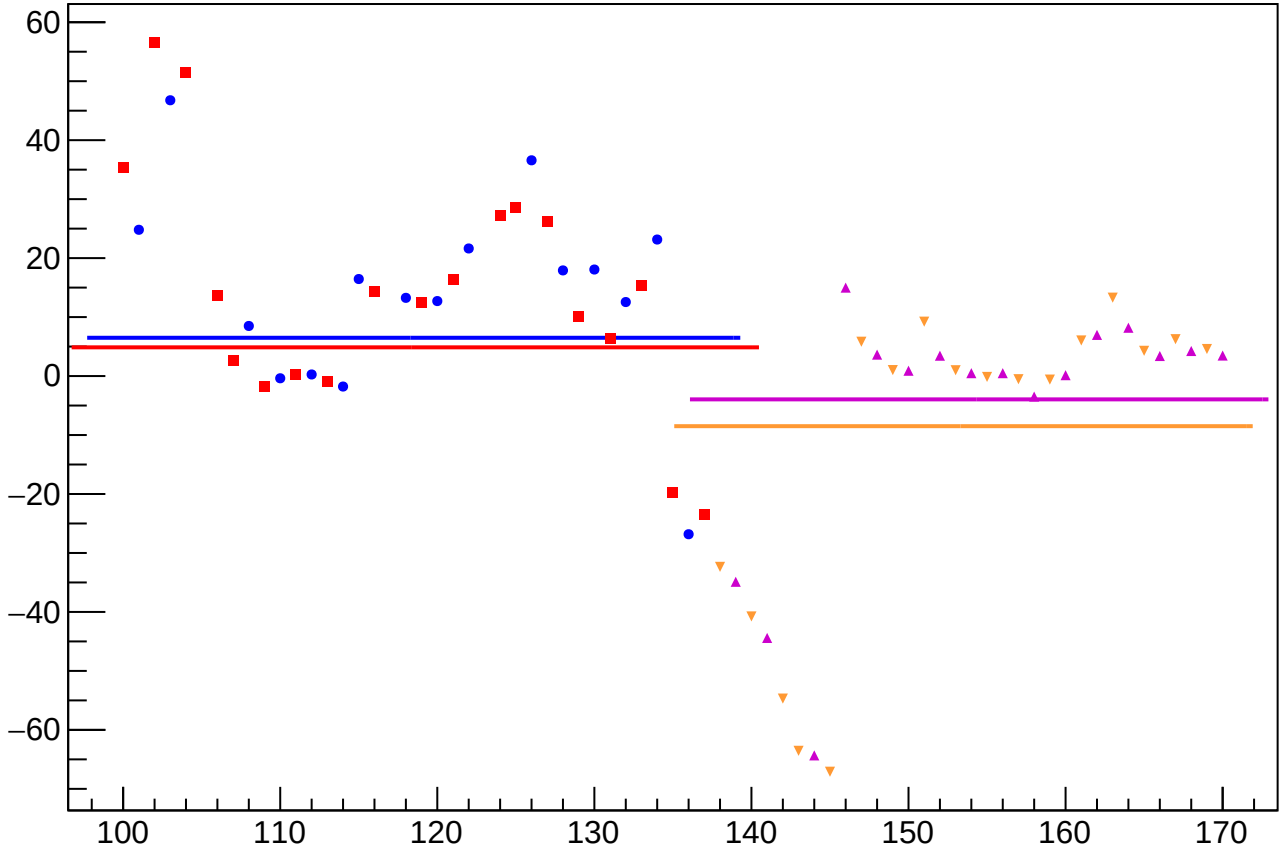
Left In: 0.499+/-0.038 $\chi^2$/NDF:6712.5/15

+ sign 0.727+/-0.035 $\chi^2$/NDF: 9344.7/32

All: 0.689+/-0.024 $\chi^2$/NDF: 17730.2/67

- sign 0.658+/-0.031 $\chi^2$/NDF: 8383.4/34

# reg_asym_bcm_an_us_diff_bpm4eX_slope vs Slug




Right In: 6.492+/-0.065 $\chi^2$/NDF: 70623.9/15

Left Out: -8.500+/-0.059 $\chi^2$/NDF:147384.3/16

Right Out: 4.869+/-0.059 $\chi^2$/NDF: 75265.6/18

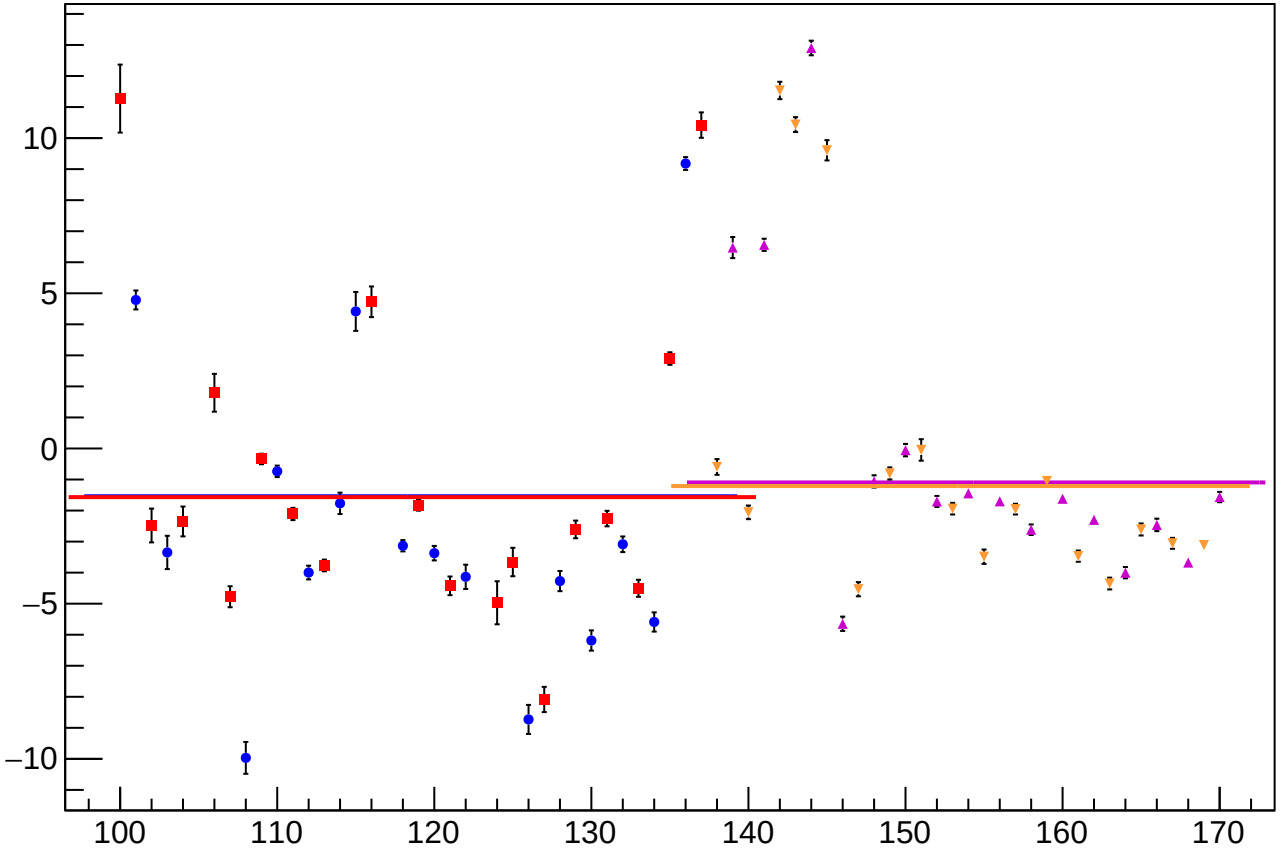
Left In: -3.954+/-0.051 $\chi^2$/NDF:119136.2/15

+ sign -1.742+/-0.044 $\chi^2$/NDF: 247024.8/32

All: -0.887+/-0.029 $\chi^2$/NDF: 454932.7/67

- sign -0.227+/-0.038 $\chi^2$/NDF: 207232.2/34

# reg_asym_bcm_an_us_diff_bpm4eY_slope vs Slug




Right In: -1.540+/-0.070 $\chi^2$/NDF: 4535.9/15

Left Out: -1.211+/-0.049 $\chi^2$/NDF:6651.8/16

Right Out: -1.567+/-0.065 $\chi^2$/NDF: 2497.0/18

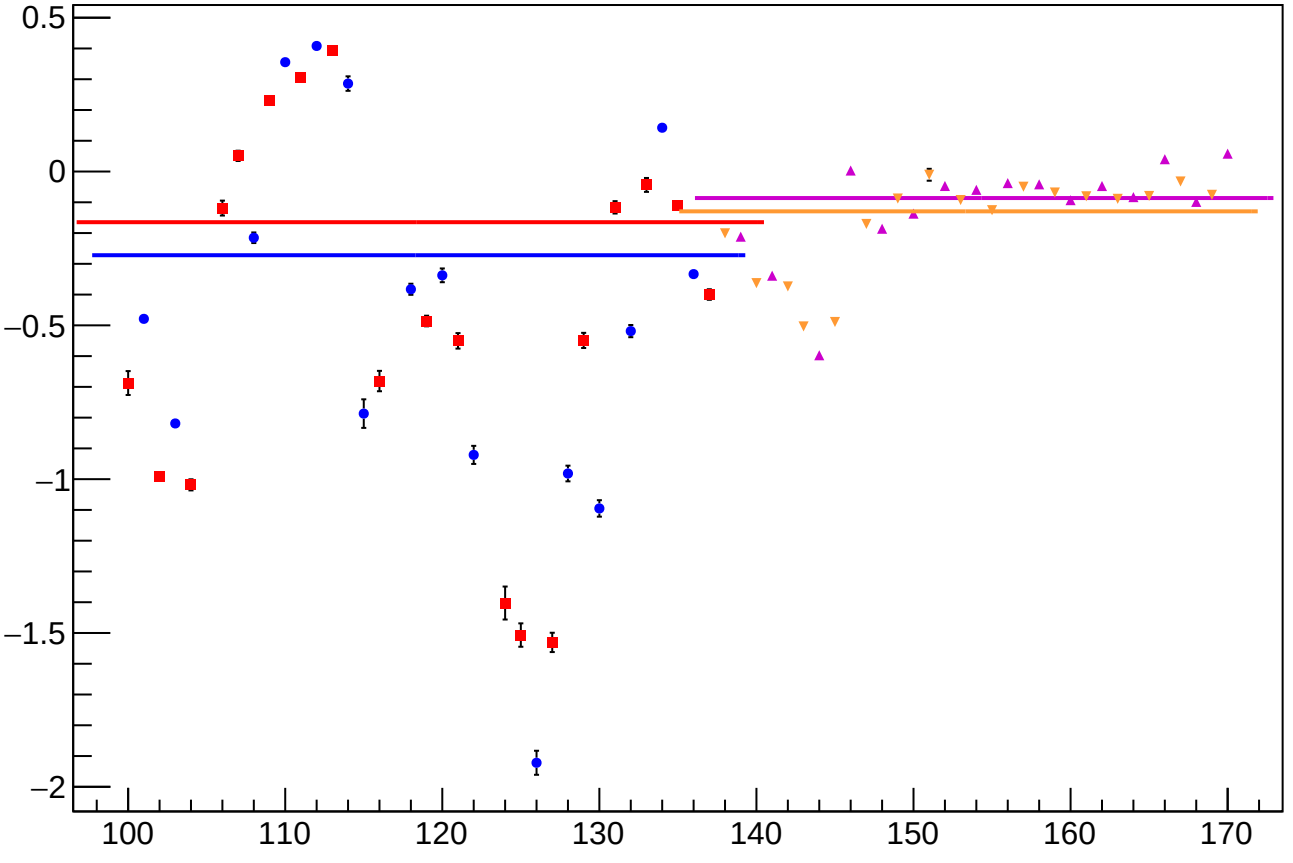
Left In: -1.094+/-0.043 $\chi^2$/NDF:6728.6/15

+ sign -1.321+/-0.040 $\chi^2$/NDF: 11202.5/32

All: -1.274+/-0.027 $\chi^2$/NDF: 20467.9/67

- sign -1.238+/-0.036 $\chi^2$/NDF: 9263.0/34

# reg_asym_bcm_an_us_diff_bpm12X_slope vs Slug




Right In: -0.272+/-0.004 $\chi^2$/NDF: 12063.6/15

Left Out: -0.129+/-0.002 $\chi^2$/NDF:3202.4/16

Right Out: -0.165+/-0.004 $\chi^2$/NDF: 15490.5/18

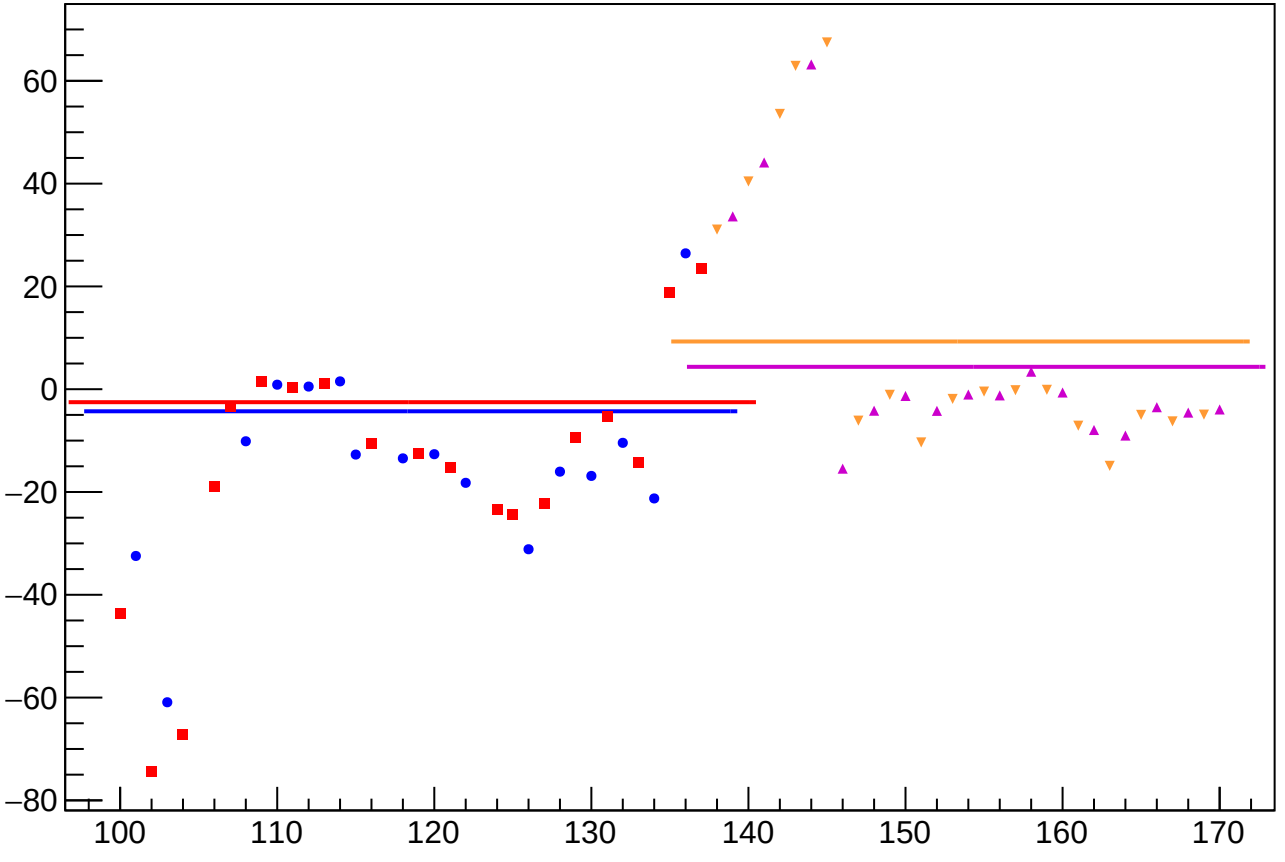
Left In: -0.086+/-0.002 $\chi^2$/NDF:3635.0/15

+ sign -0.160+/-0.002 $\chi^2$/NDF: 16189.9/32

All: -0.126+/-0.001 $\chi^2$/NDF: 36214.3/67

- sign -0.101+/-0.002 $\chi^2$/NDF: 19472.9/34

# reg_asym_bcm_dg_ds_diff_bpm1X_slope vs Slug




Right In: -4.296+/-0.056 $\chi^2$/NDF: 74218.3/15

Left Out: 9.285+/-0.061 $\chi^2$/NDF:148890.7/16

Right Out: -2.524+/-0.047 $\chi^2$/NDF: 79883.8/18

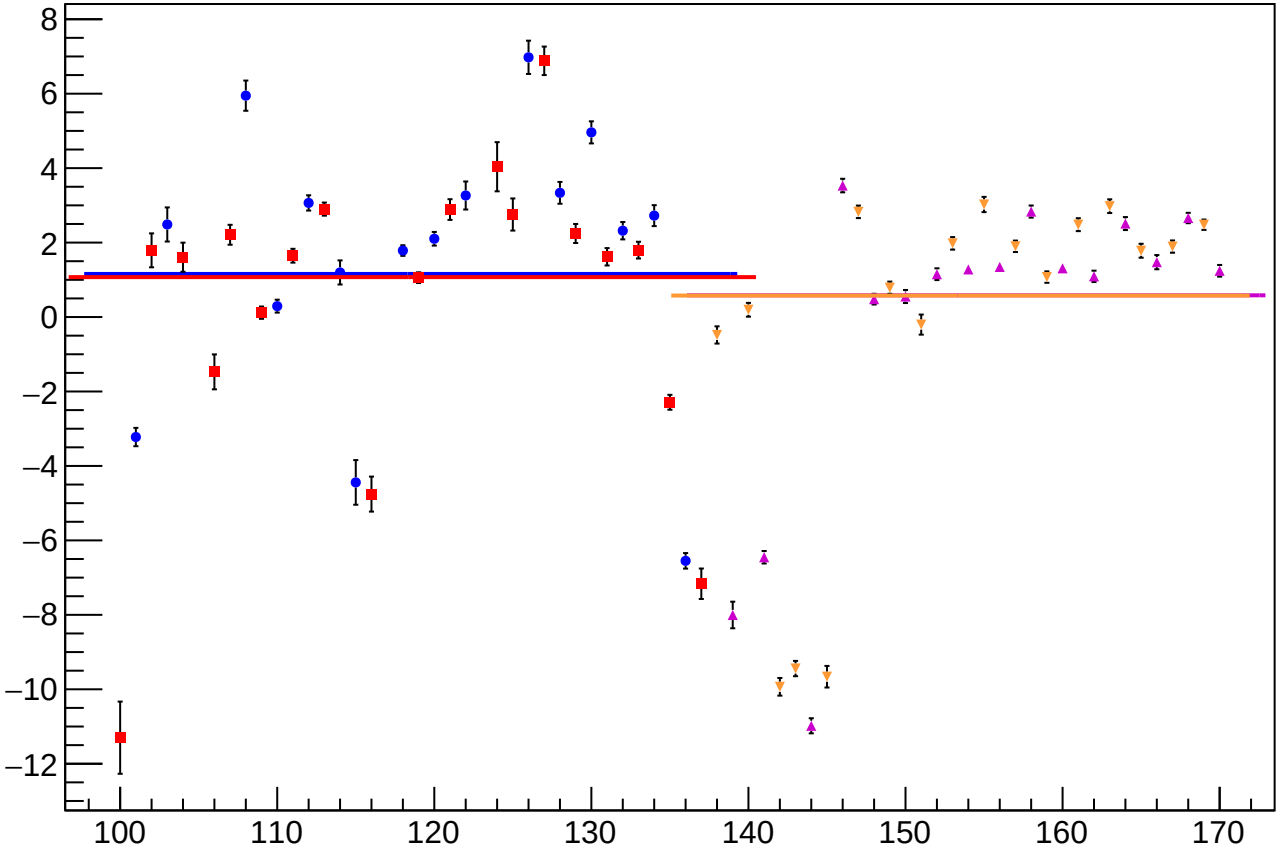
Left In: 4.355+/-0.054 $\chi^2$/NDF:119634.4/15

+ sign 1.839+/-0.041 $\chi^2$/NDF: 249929.7/32

All: 1.061+/-0.027 $\chi^2$/NDF: 459356.0/67

- sign 0.488+/-0.035 $\chi^2$/NDF: 208809.2/34

# reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs Slug




Right In: 1.158+/-0.062 $\chi^2$/NDF: 2549.9/15

Left Out: 0.577+/-0.044 $\chi^2$/NDF:6671.3/16

Right Out: 1.072+/-0.058 $\chi^2$/NDF: 1551.4/18

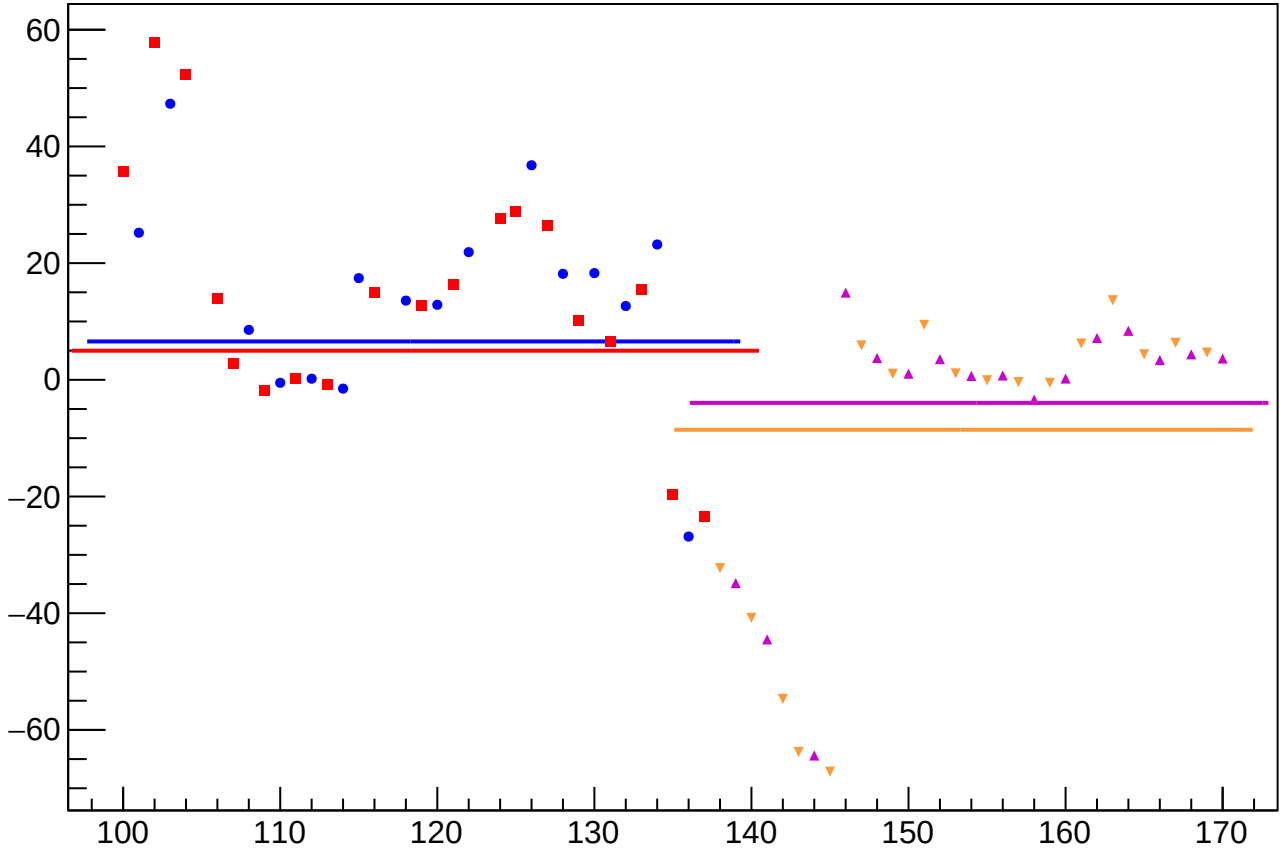
Left In: 0.584+/-0.038 $\chi^2$/NDF:6554.1/15

+ sign 0.775+/-0.036 $\chi^2$/NDF: 9279.9/32

All: 0.751+/-0.024 $\chi^2$/NDF: 17435.1/67

- sign 0.732+/-0.032 $\chi^2$/NDF: 8154.4/34

# reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs Slug




Right In: 6.578+/-0.066 $\chi^2$/NDF: 69731.5/15

Left Out: -8.559+/-0.060 $\chi^2$/NDF:145257.0/16

Right Out: 4.992+/-0.060 $\chi^2$/NDF: 74461.3/18

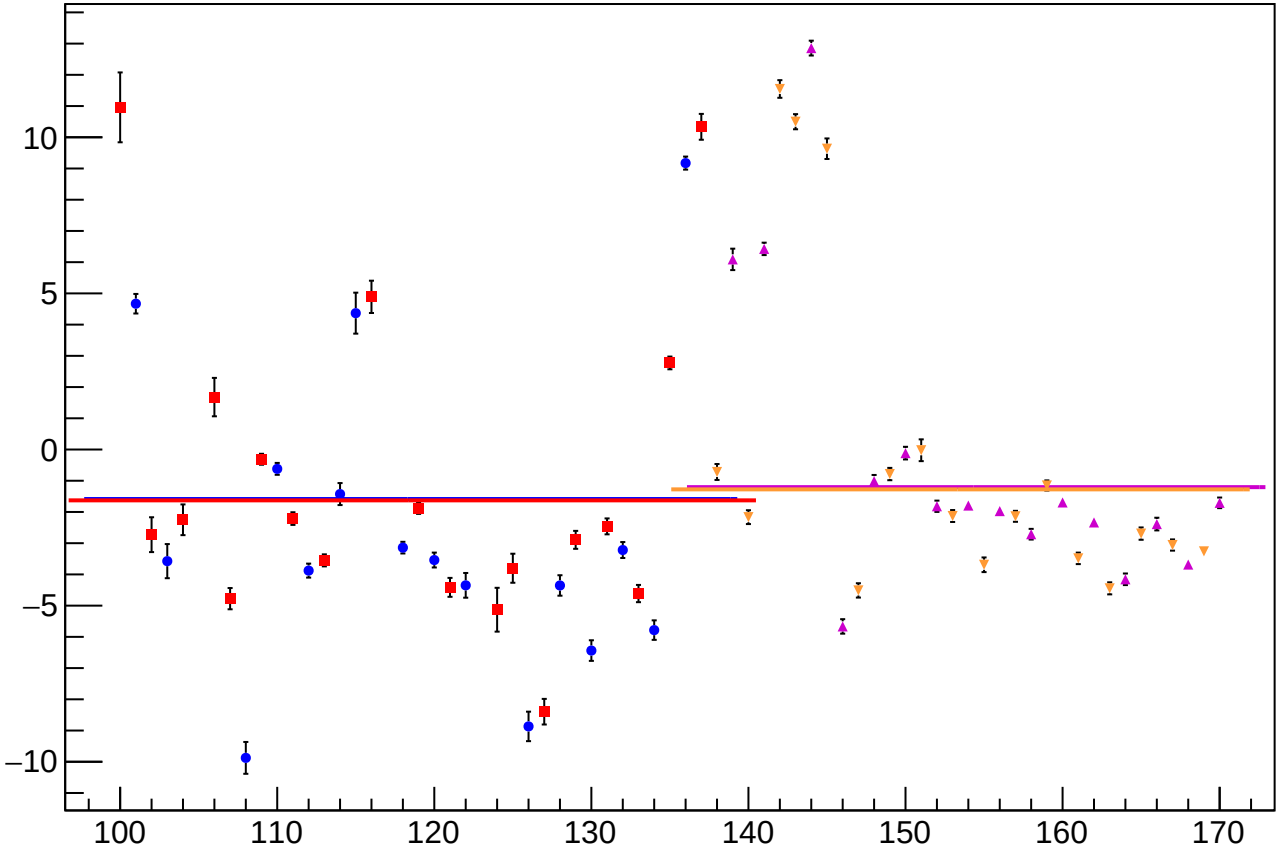
Left In: -3.952+/-0.052 $\chi^2$/NDF:117253.5/15

+ sign -1.755+/-0.045 $\chi^2$/NDF: 243600.6/32

All: -0.865+/-0.029 $\chi^2$/NDF: 448679.3/67

- sign -0.173+/-0.039 $\chi^2$/NDF: 204368.7/34

# reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs Slug




Right In: -1.586+/-0.071 $\chi^2$/NDF: 4472.6/15

Left Out: -1.276+/-0.050 $\chi^2$/NDF:6629.9/16

Right Out: -1.628+/-0.066 $\chi^2$/NDF: 2422.3/18

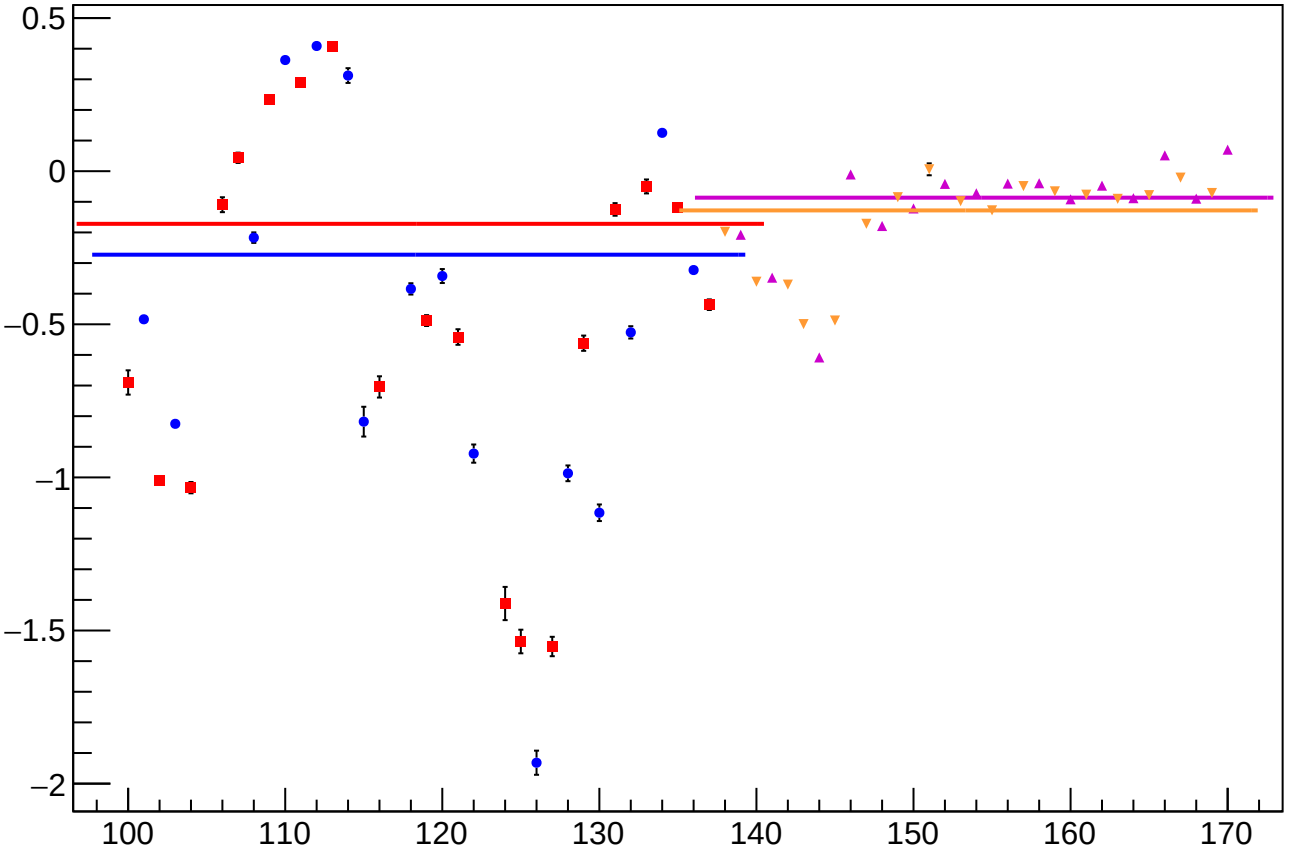
Left In: -1.205+/-0.044 $\chi^2$/NDF:6559.6/15

+ sign -1.380+/-0.041 $\chi^2$/NDF: 11115.3/32

All: -1.354+/-0.027 $\chi^2$/NDF: 20126.6/67

- sign -1.334+/-0.036 $\chi^2$/NDF: 9010.6/34

# reg_asym_bcm_dg_ds_diff_bpm12X_slope vs Slug




Right In: -0.273+/-0.004 $\chi^2$/NDF: 11856.3/15

Left Out: -0.128+/-0.002 $\chi^2$/NDF:3155.4/16

Right Out: -0.172+/-0.004 $\chi^2$/NDF: 15322.3/18

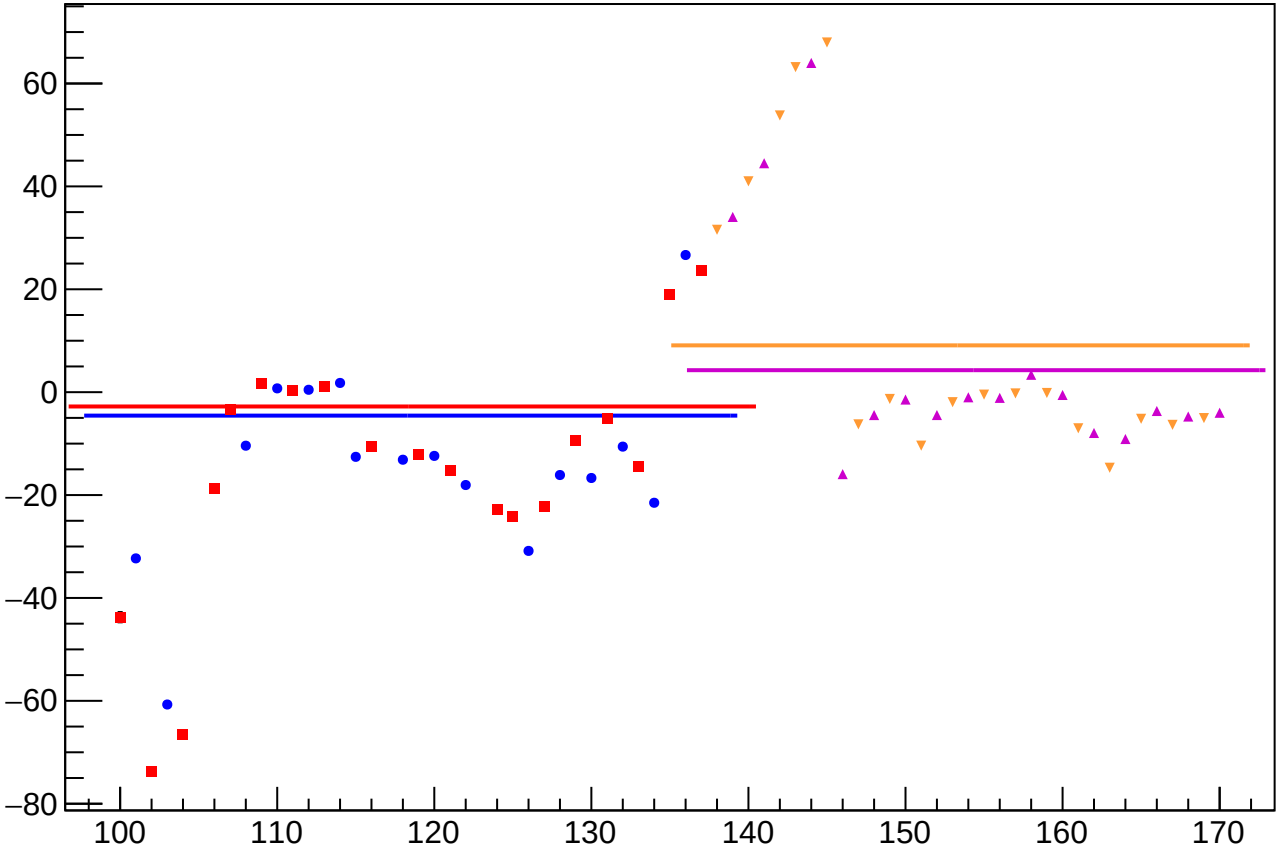
Left In: -0.086+/-0.002 $\chi^2$/NDF:3695.6/15

+ sign -0.159+/-0.002 $\chi^2$/NDF: 15932.3/32

All: -0.126+/-0.001 $\chi^2$/NDF: 35833.4/67

- sign -0.102+/-0.002 $\chi^2$/NDF: 19414.8/34

# reg_asym_bcm_dg_us_diff_bpm1X_slope vs Slug




Right In: -4.557+/-0.057 $\chi^2$/NDF: 72635.2/15

Left Out: 9.099+/-0.062 $\chi^2$/NDF:147217.5/16

Right Out: -2.780+/-0.049 $\chi^2$/NDF: 77905.3/18

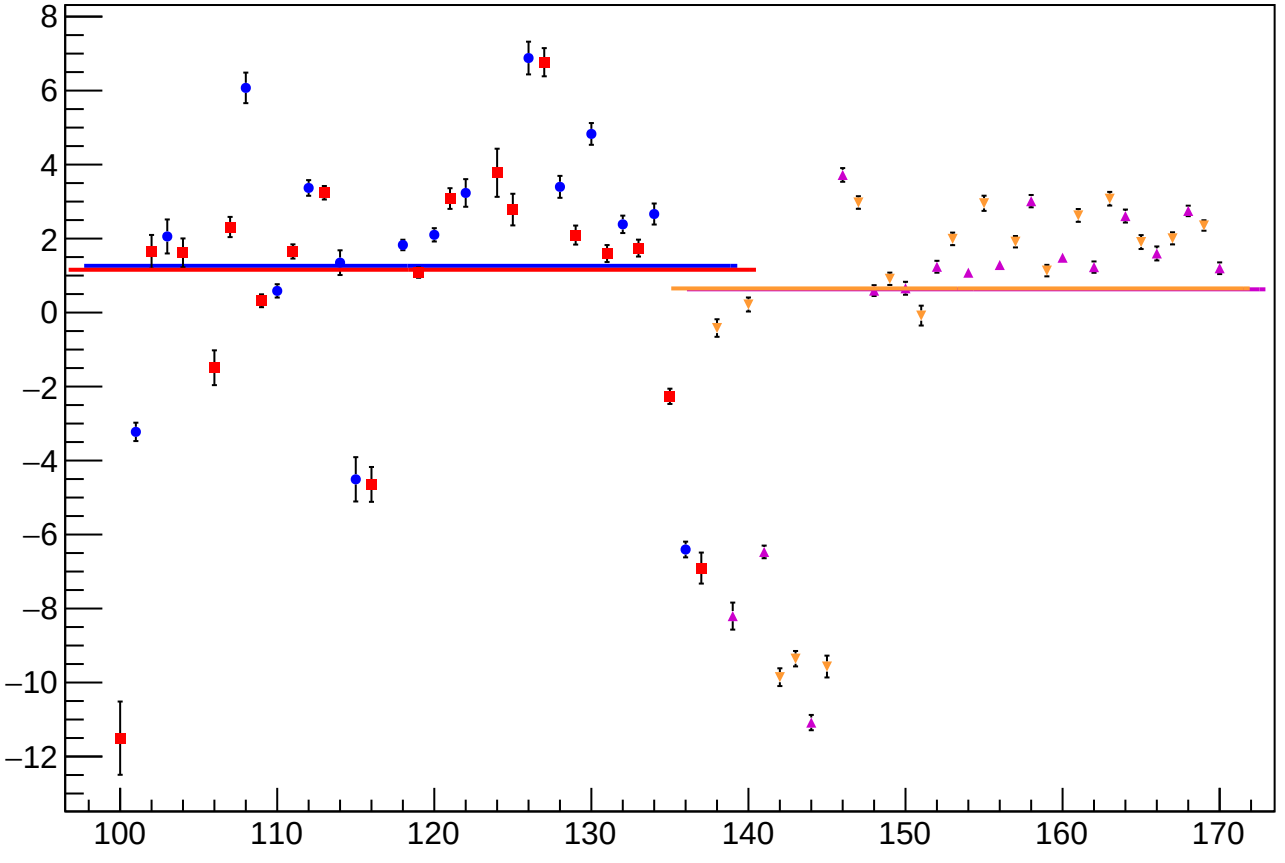
Left In: 4.275+/-0.054 $\chi^2$/NDF:118384.3/15

+ sign 1.673+/-0.042 $\chi^2$/NDF: 246223.4/32

All: 0.918+/-0.027 $\chi^2$/NDF: 452481.7/67

- sign 0.356+/-0.036 $\chi^2$/NDF: 205691.6/34

# reg_asym_bcm_dg_us_diff_bpm4aY_slope vs Slug




Right In: 1.263+/-0.062 $\chi^2$/NDF: 2443.8/15

Left Out: 0.652+/-0.045 $\chi^2$/NDF:6461.3/16

Right Out: 1.157+/-0.059 $\chi^2$/NDF: 1490.5/18

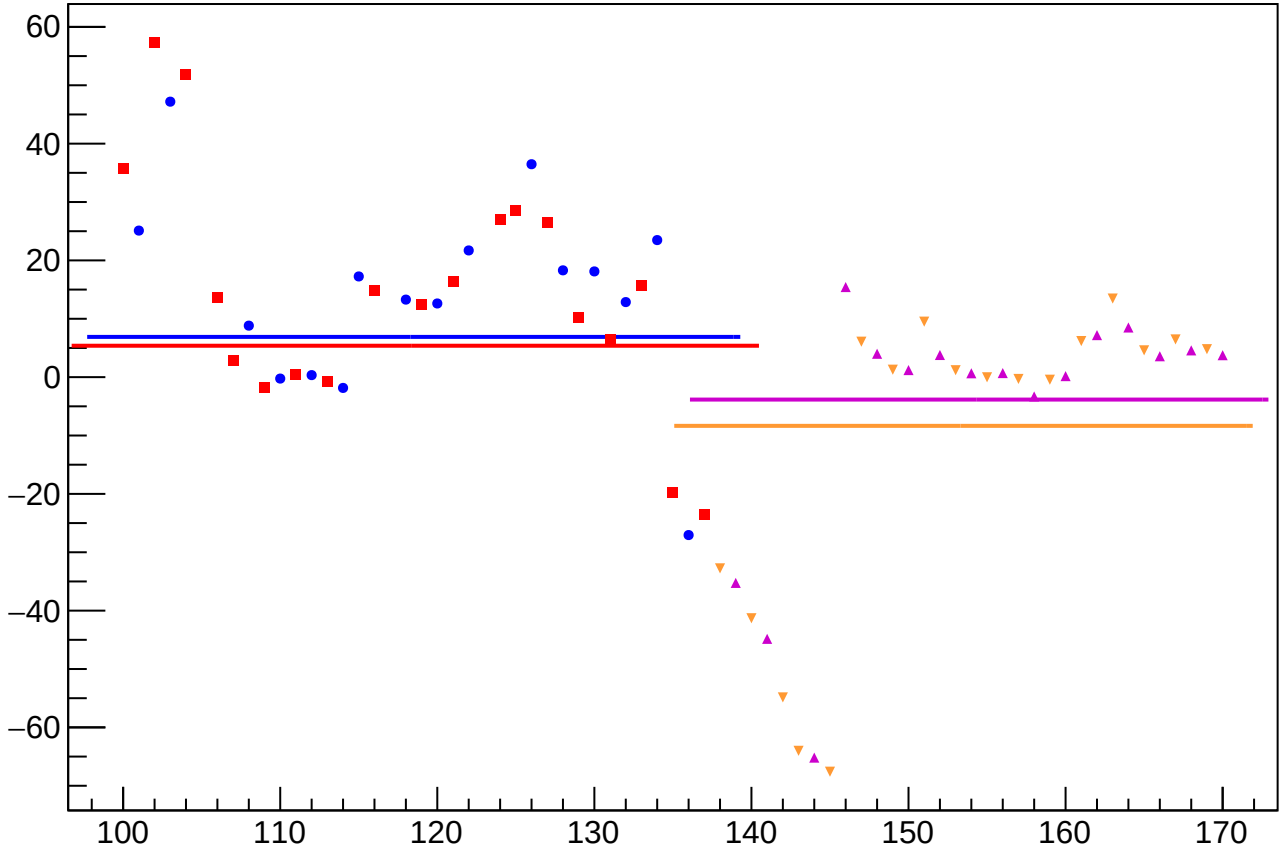
Left In: 0.628+/-0.039 $\chi^2$/NDF:6510.7/15

+ sign 0.861+/-0.036 $\chi^2$/NDF: 8969.0/32

All: 0.821+/-0.024 $\chi^2$/NDF: 17028.1/67

- sign 0.789+/-0.033 $\chi^2$/NDF: 8057.0/34

# reg_asym_bcm_dg_us_diff_bpm4eX_slope vs Slug




Right In: 6.895+/-0.067 $\chi^2$/NDF: 68047.4/15

Left Out: -8.345+/-0.061 $\chi^2$/NDF:143469.0/16

Right Out: 5.381+/-0.062 $\chi^2$/NDF: 72230.2/18

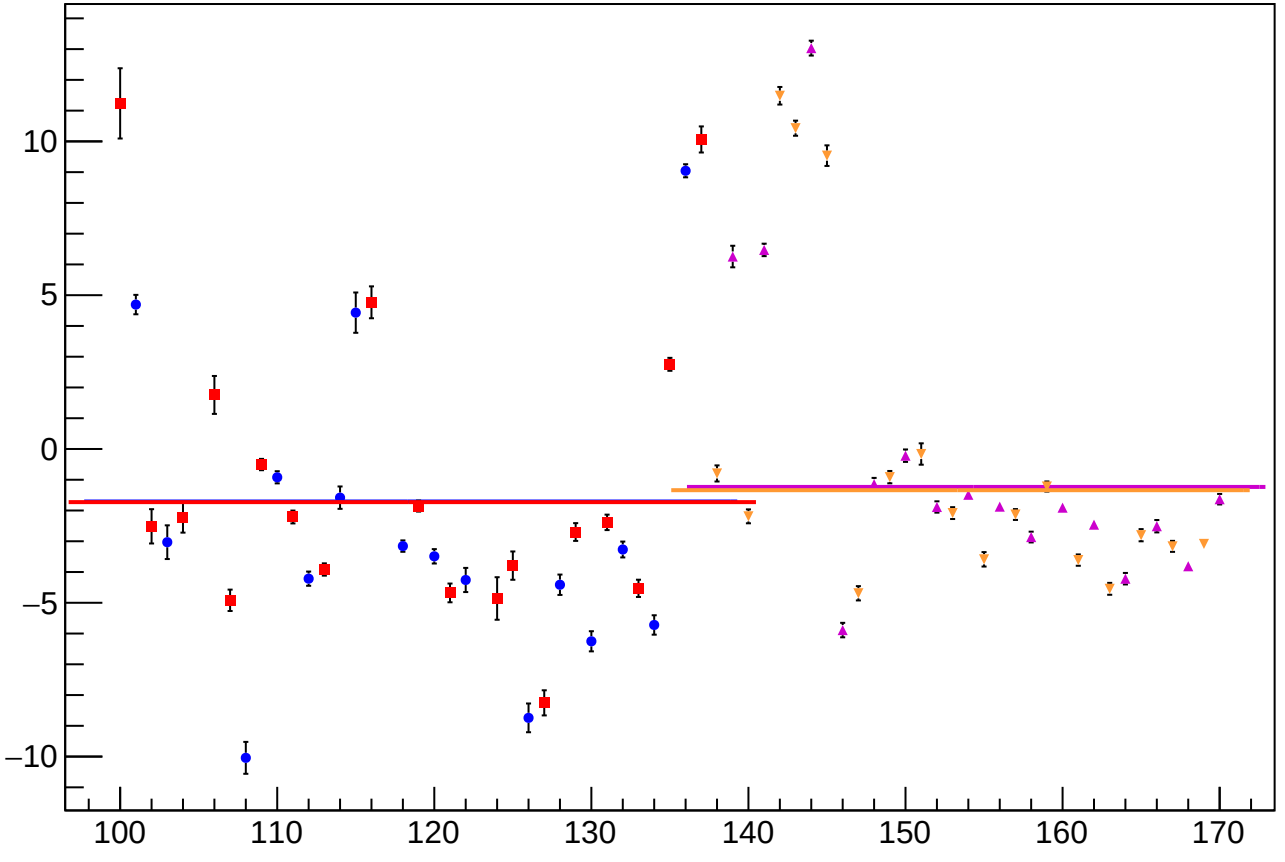
Left In: -3.842+/-0.052 $\chi^2$/NDF:115976.3/15

\+ sign -1.531+/-0.045 $\chi^2$/NDF: 239813.1/32

All: -0.661+/-0.030 $\chi^2$/NDF: 441674.0/67

\- sign 0.022+/-0.040 $\chi^2$/NDF: 201195.0/34

# reg_asym_bcm_dg_us_diff_bpm4eY_slope vs Slug




Right In: -1.708+/-0.072 $\chi^2$/NDF: 4289.8/15

Left Out: -1.340+/-0.051 $\chi^2$/NDF:6432.9/16

Right Out: -1.727+/-0.067 $\chi^2$/NDF: 2309.6/18

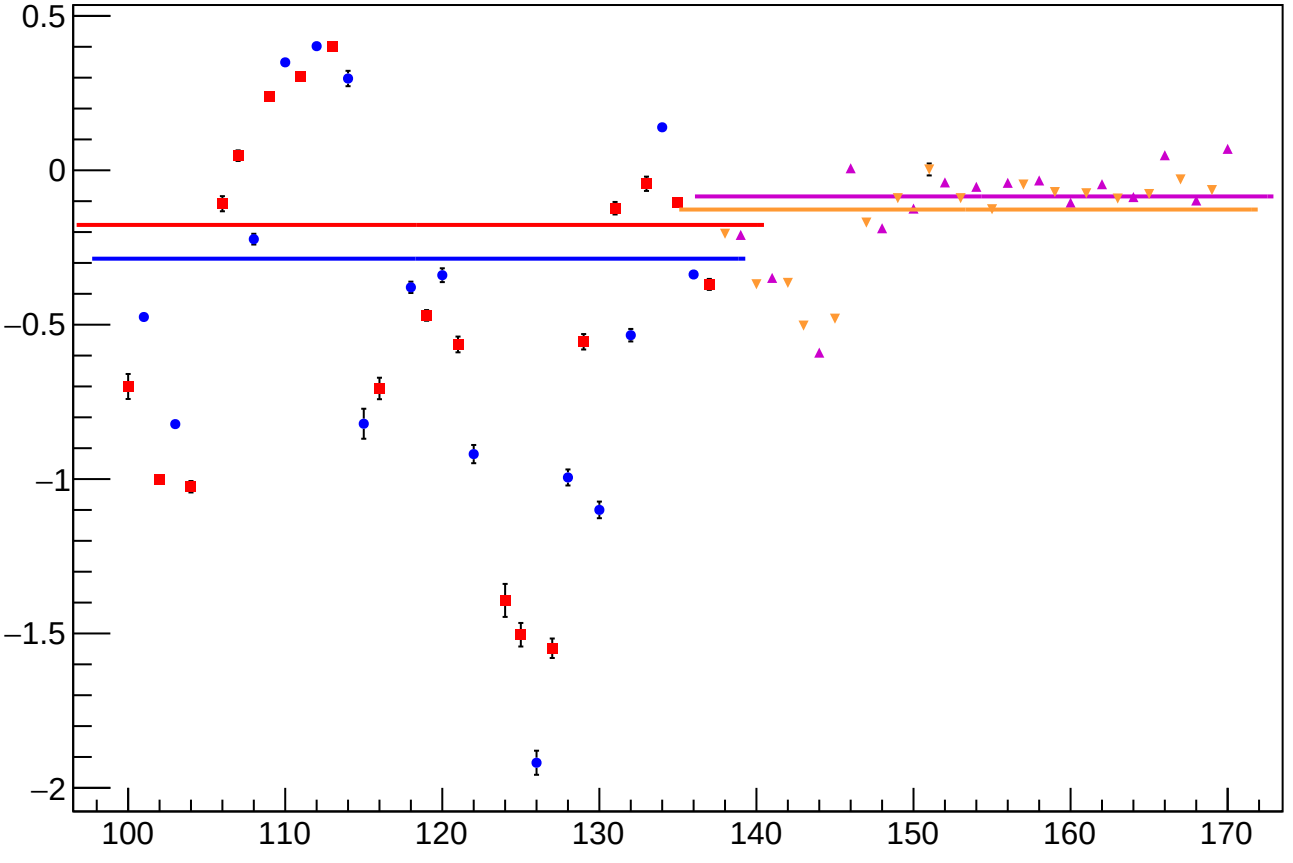
Left In: -1.234+/-0.044 $\chi^2$/NDF:6546.1/15

+ sign -1.462+/-0.041 $\chi^2$/NDF: 10740.3/32

All: -1.418+/-0.027 $\chi^2$/NDF: 19636.0/67

- sign -1.383+/-0.037 $\chi^2$/NDF: 8893.7/34

# reg_asym_bcm_dg_us_diff_bpm12X_slope vs Slug




Right In: -0.286+/-0.004 $\chi^2$/NDF: 11361.1/15

Left Out: -0.127+/-0.002 $\chi^2$/NDF:3096.0/16

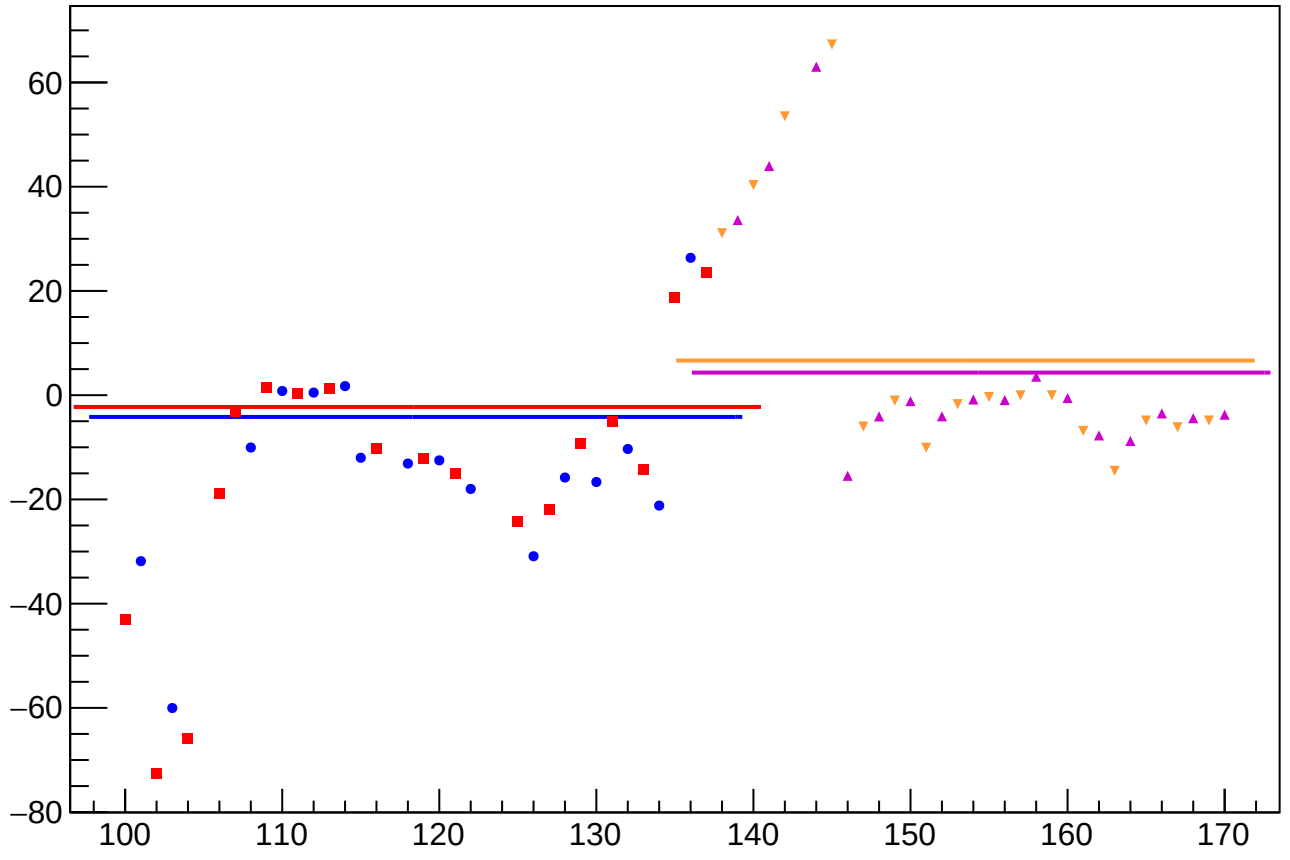
Right Out: -0.177+/-0.004 $\chi^2$/NDF: 14767.8/18

Left In: -0.085+/-0.002 $\chi^2$/NDF:3565.2/15

+ sign -0.161+/-0.002 $\chi^2$/NDF: 15544.0/32

All: -0.127+/-0.001 $\chi^2$/NDF: 34842.0/67

- sign -0.102+/-0.002 $\chi^2$/NDF: 18778.0/34




Right In: -4.173+/-0.054 $\chi^2$/NDF: 75394.5/15

Left Out: 6.652+/-0.062 $\chi^2$/NDF:113956.1/15

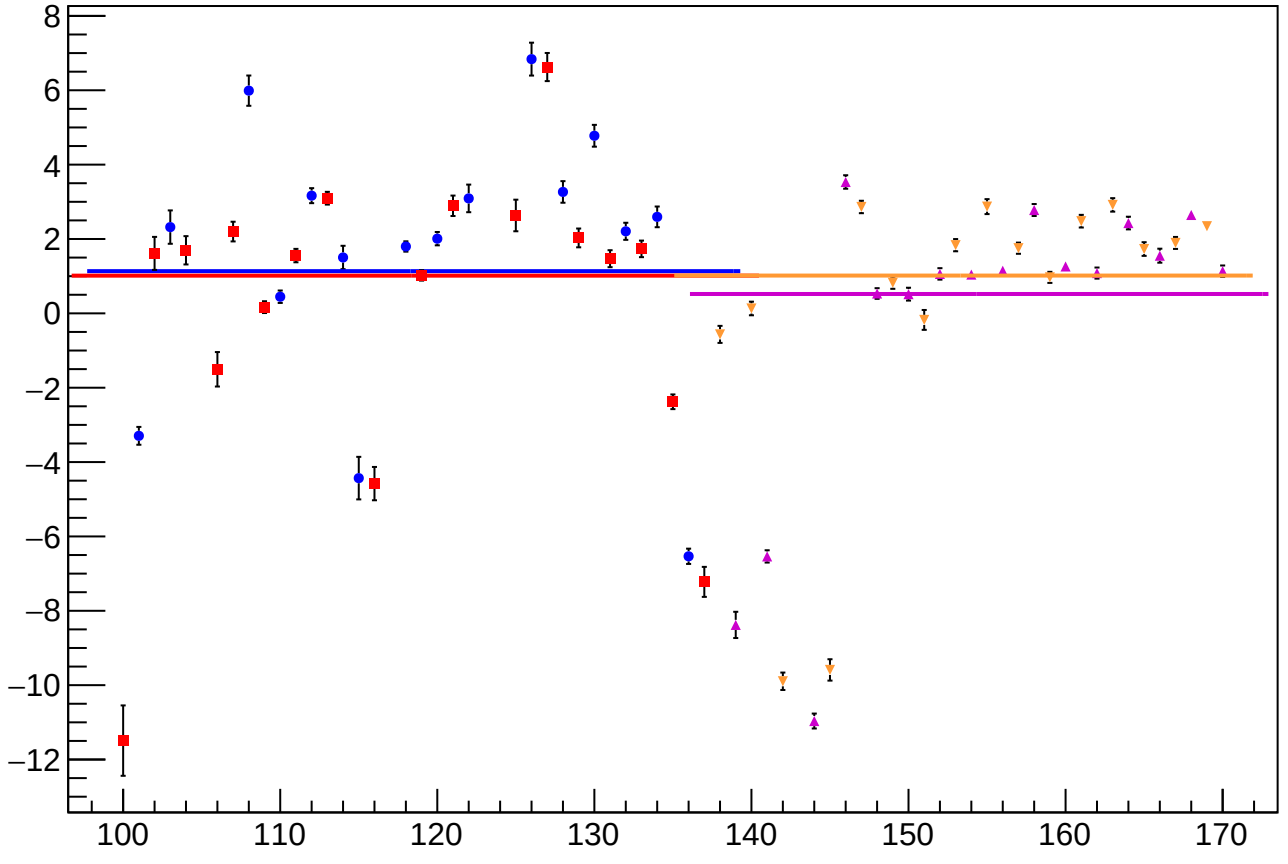
Right Out: -2.261+/-0.046 $\chi^2$/NDF: 79624.4/17

Left In: 4.334+/-0.052 $\chi^2$/NDF:121785.8/15

+ sign 0.566+/-0.041 $\chi^2$/NDF: 206653.3/31

All: 0.599+/-0.026 $\chi^2$/NDF: 417036.7/65

- sign 0.622+/-0.035 $\chi^2$/NDF: 210382.3/33




Right In: 1.135+/-0.060 $\chi^2$/NDF: 2595.7/15

Left Out: 1.016+/-0.044 $\chi^2$/NDF:4203.3/15

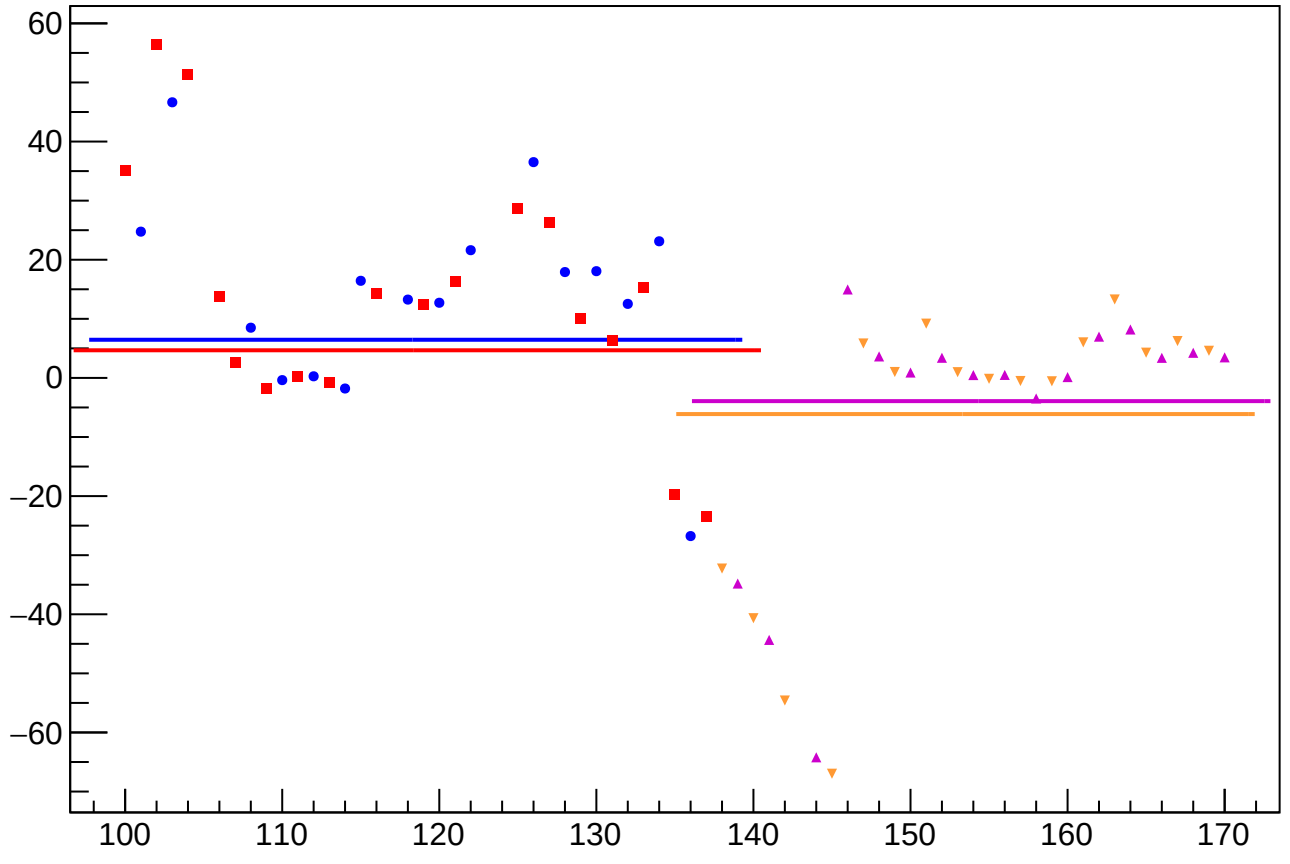
Right Out: 1.014+/-0.057 $\chi^2$/NDF: 1593.0/17

Left In: 0.521+/-0.038 $\chi^2$/NDF:6734.2/15

+ sign 1.058+/-0.036 $\chi^2$/NDF: 6801.5/31

All: 0.838+/-0.024 $\chi^2$/NDF: 15247.6/65

- sign 0.669+/-0.031 $\chi^2$/NDF: 8379.3/33




Right In: 6.458+/-0.065 $\chi^2$/NDF: 70792.7/15

Left Out: -6.117+/-0.060 $\chi^2$/NDF:110341.6/15

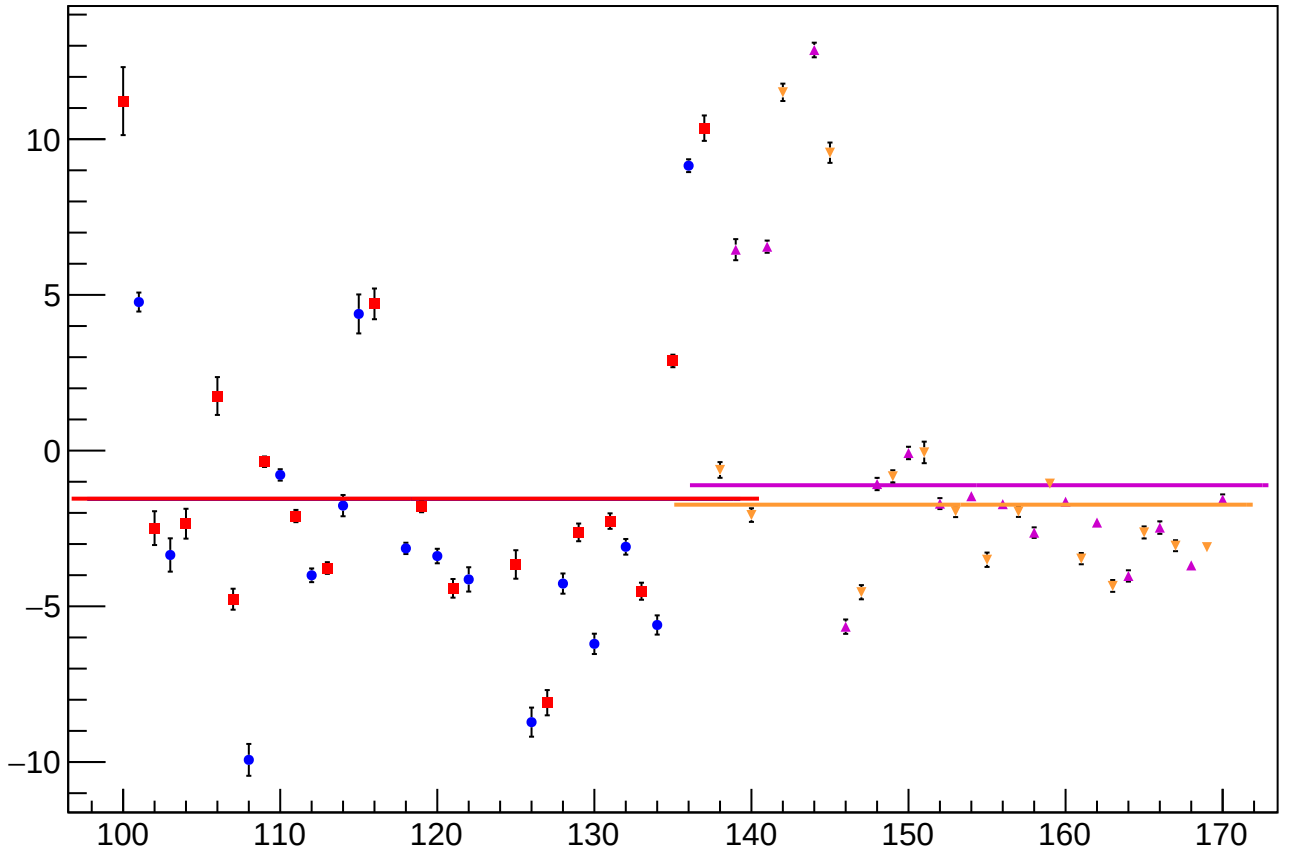
Right Out: 4.677+/-0.059 $\chi^2$/NDF: 74414.5/17

Left In: -3.927+/-0.050 $\chi^2$/NDF:119370.7/15

+ sign -0.314+/-0.044 $\chi^2$/NDF: 201313.2/31

All: -0.307+/-0.029 $\chi^2$/NDF: 407367.4/65

- sign -0.302+/-0.038 $\chi^2$/NDF: 206054.2/33




Right In: -1.552+/-0.069 $\chi^2$/NDF: 4543.6/15

Left Out: -1.736+/-0.050 $\chi^2$/NDF:4189.4/15

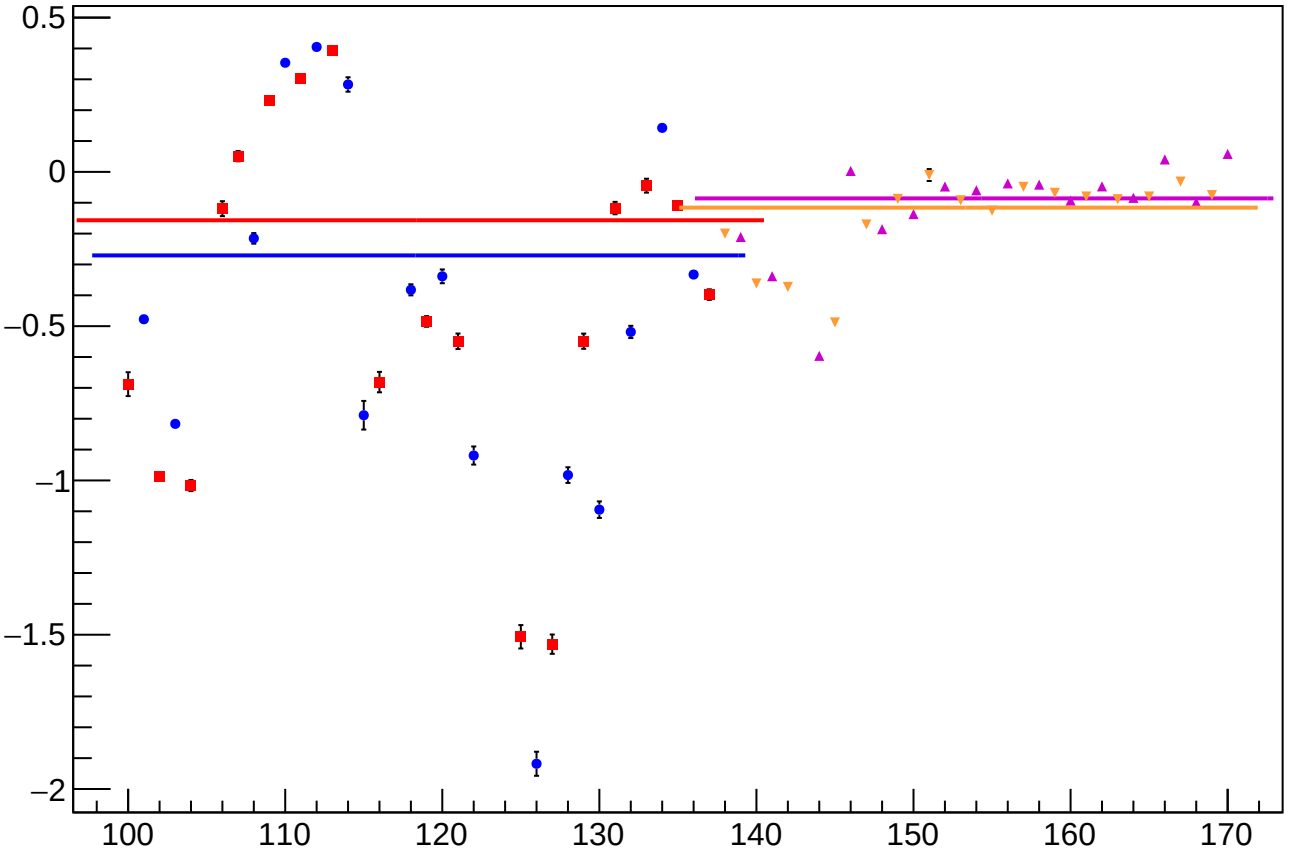
Right Out: -1.543+/-0.065 $\chi^2$/NDF: 2473.0/17

Left In: -1.112+/-0.042 $\chi^2$/NDF:6748.5/15

+ sign -1.672+/-0.041 $\chi^2$/NDF: 8737.6/31

All: -1.428+/-0.027 $\chi^2$/NDF: 18053.9/65

- sign -1.242+/-0.035 $\chi^2$/NDF: 9252.7/33




Right In: -0.271+/-0.004 $\chi^2$/NDF: 12096.1/15

Left Out: -0.116+/-0.002 $\chi^2$/NDF:2180.8/15

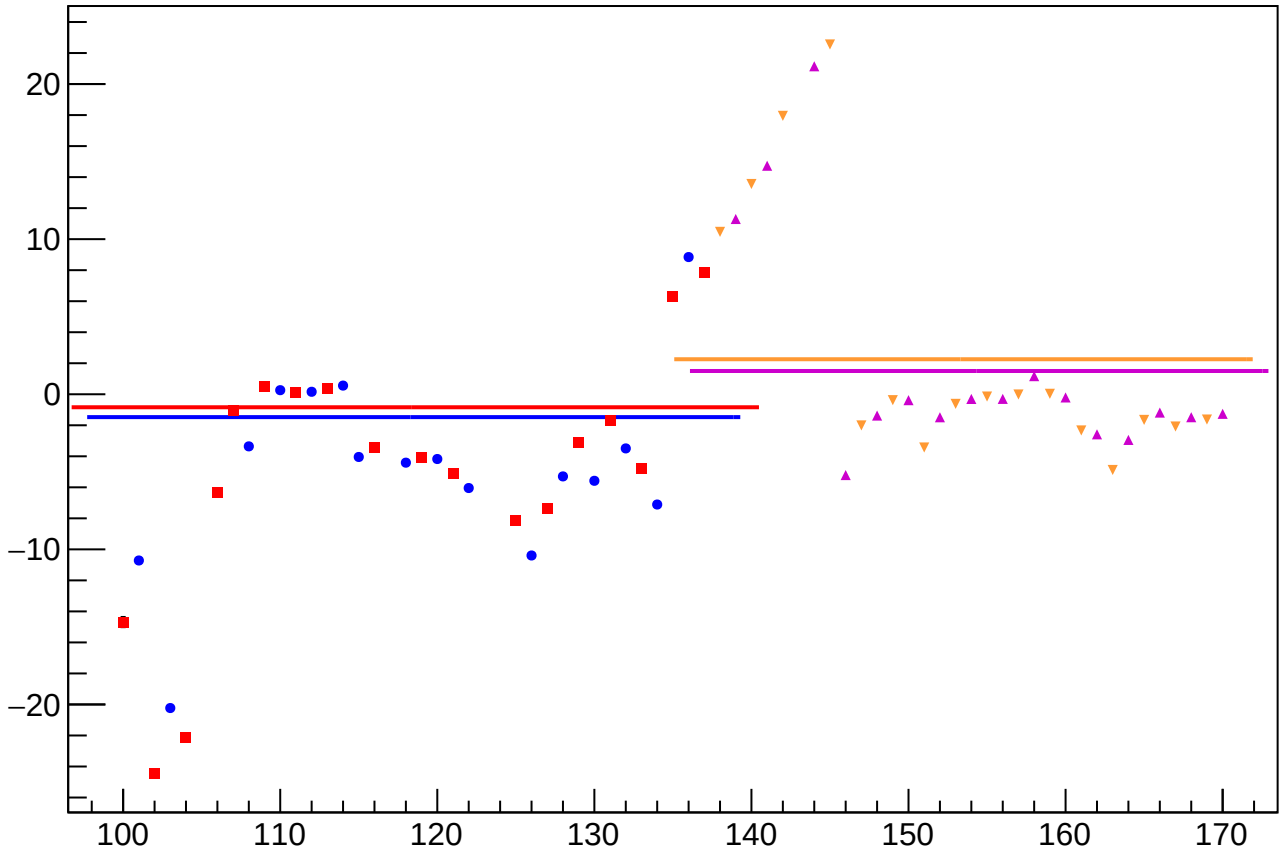
Right Out: -0.157+/-0.004 $\chi^2$/NDF: 15019.0/17

Left In: -0.086+/-0.002 $\chi^2$/NDF:3644.6/15

+ sign -0.150+/-0.002 $\chi^2$/NDF: 15366.1/31

All: -0.120+/-0.001 $\chi^2$/NDF: 34718.4/65

- sign -0.099+/-0.002 $\chi^2$/NDF: 18948.0/33




Right In: -1.474+/-0.019 $\chi^2$/NDF: 73722.2/15

Left Out: 2.258+/-0.021 $\chi^2$/NDF:111957.6/15

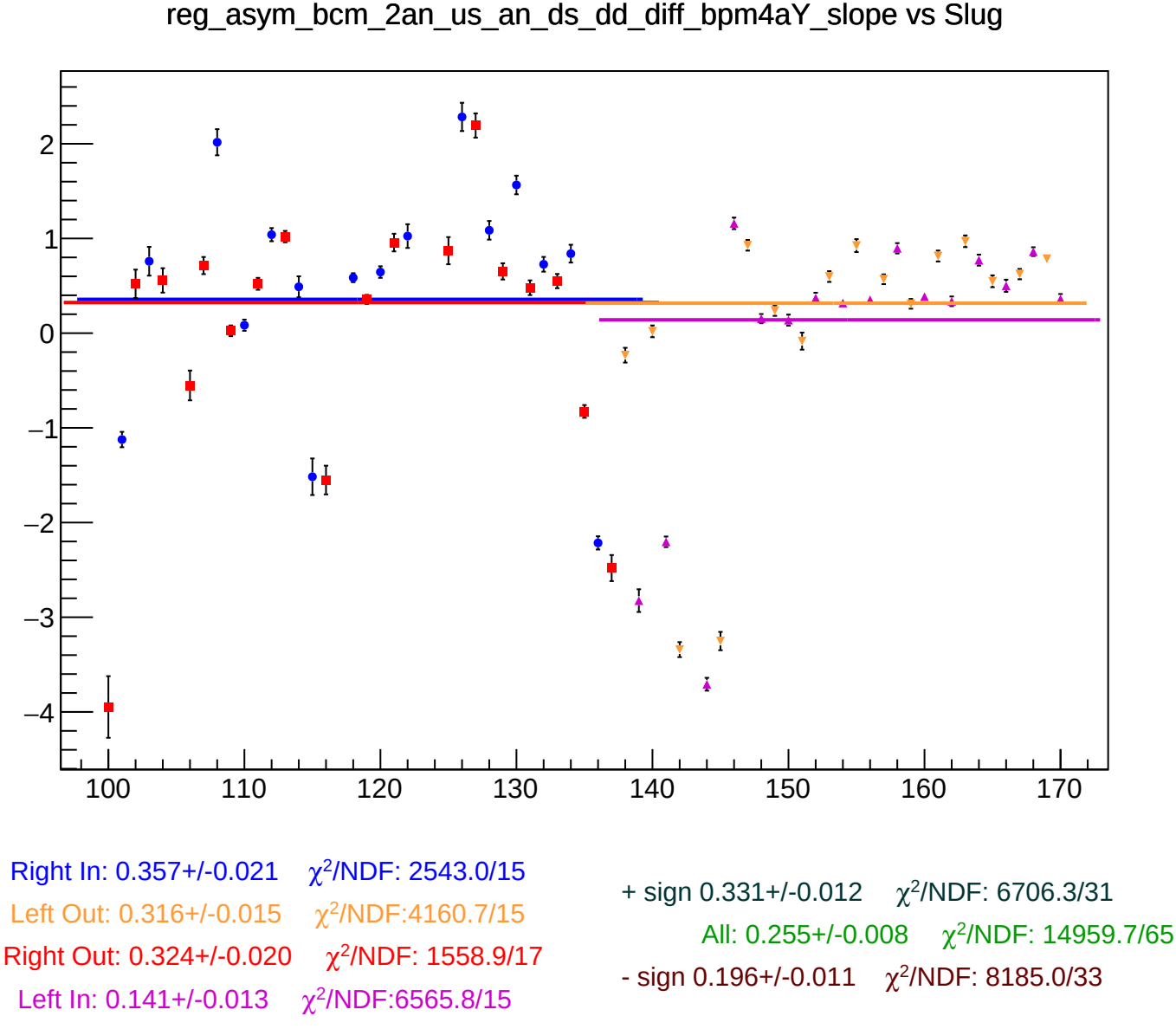
Right Out: -0.838+/-0.016 $\chi^2$/NDF: 78013.1/17

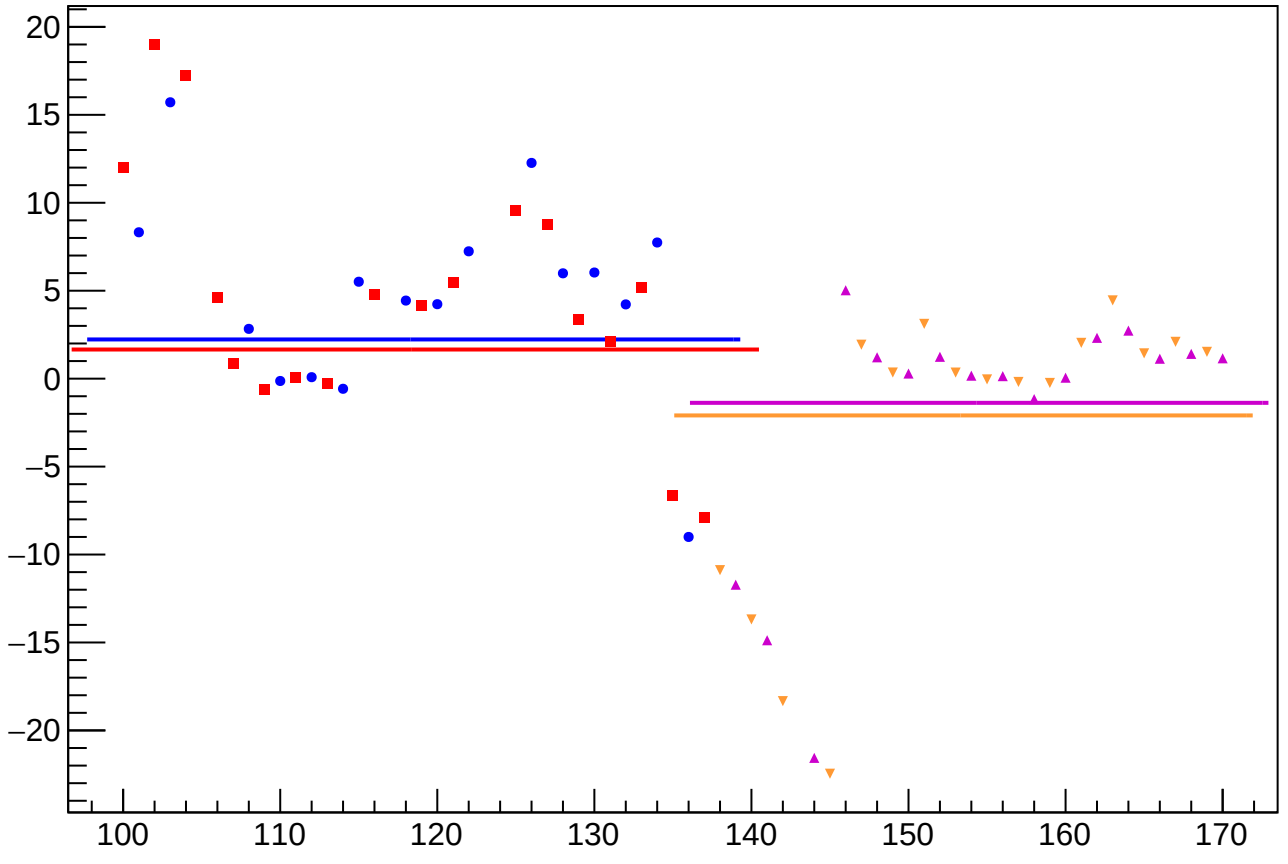
Left In: 1.500+/-0.018 $\chi^2$/NDF:119170.0/15

\+ sign 0.176+/-0.014 $\chi^2$/NDF: 203215.4/31

All: 0.190+/-0.009 $\chi^2$/NDF: 409842.4/65

\- sign 0.199+/-0.012 $\chi^2$/NDF: 206625.4/33


reg_asym_bcm_2an_us_an_ds_dd_diff_bpm4aY_slope vs Slug
2
1
0
−1
−2
−3
−4
100
110
120
130
140
150
160
170
Right In: 0.357+/-0.021 χ²/NDF: 2543.0/15
Left Out: 0.316+/-0.015 χ²/NDF:4160.7/15
Right Out: 0.324+/-0.020 χ²/NDF: 1558.9/17
Left In: 0.141+/-0.013 χ²/NDF:6565.8/15
+ sign 0.331+/-0.012 χ²/NDF: 6706.3/31
All: 0.255+/-0.008 χ²/NDF: 14959.7/65
- sign 0.196+/-0.011 χ²/NDF: 8185.0/33




Right In: 2.229+/-0.022 $\chi^2$/NDF: 69187.1/15

Left Out: -2.091+/-0.021 $\chi^2$/NDF:108428.1/15

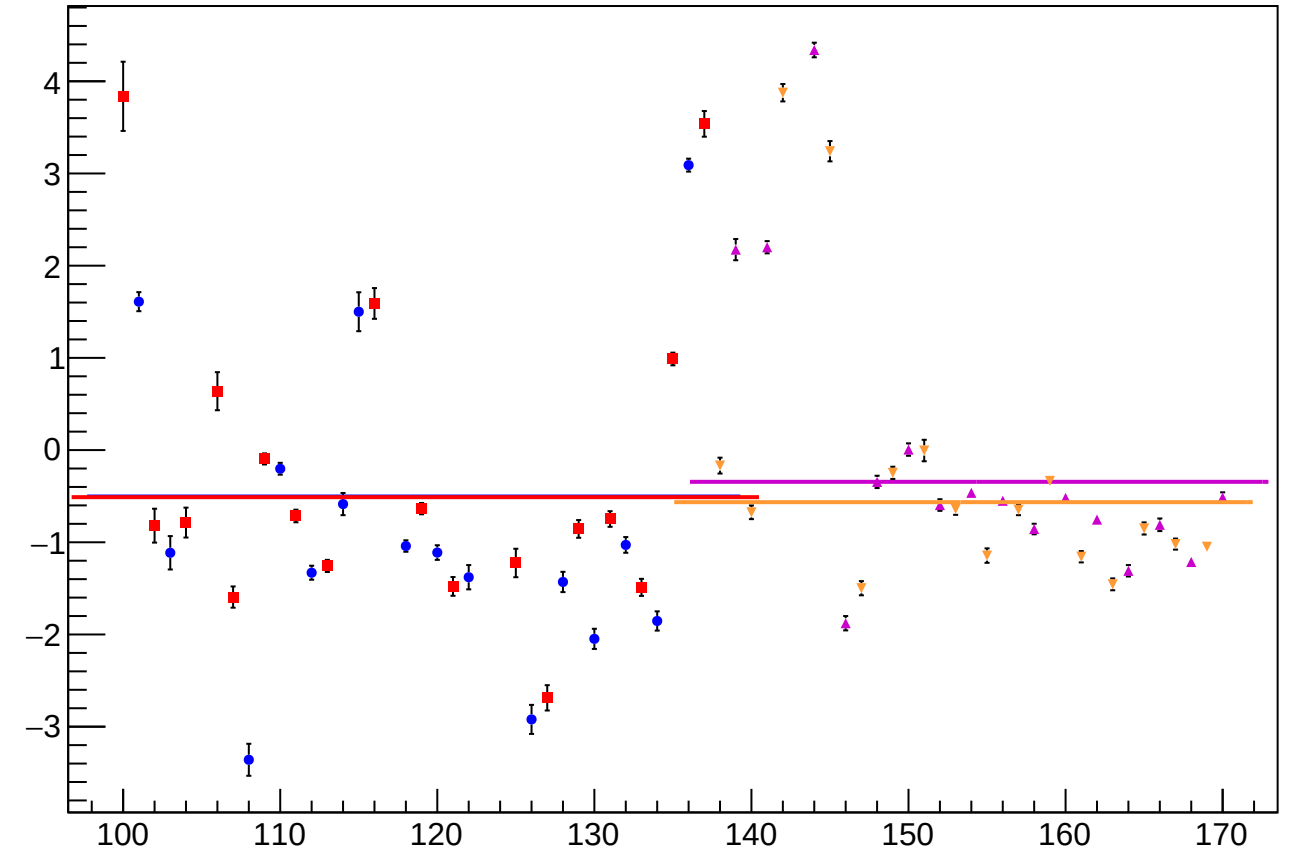
Right Out: 1.657+/-0.020 $\chi^2$/NDF: 72797.4/17

Left In: -1.375+/-0.017 $\chi^2$/NDF:116868.2/15

+ sign -0.106+/-0.015 $\chi^2$/NDF: 197977.6/31

All: -0.106+/-0.010 $\chi^2$/NDF: 400429.8/65

- sign -0.107+/-0.013 $\chi^2$/NDF: 202452.3/33




Right In: -0.504+/-0.024 $\chi^2$/NDF: 4447.2/15

Left Out: -0.565+/-0.017 $\chi^2$/NDF:4150.2/15

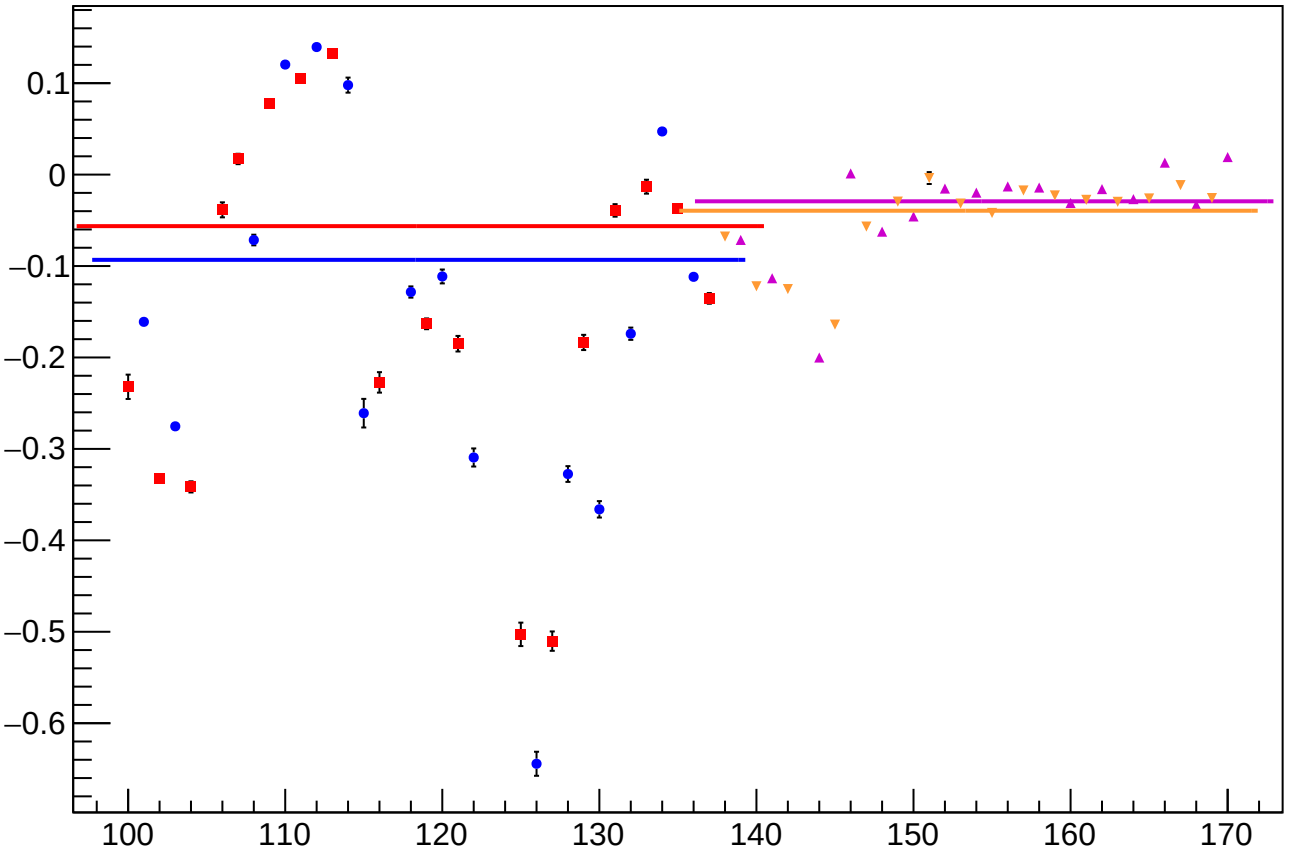
Right Out: -0.511+/-0.022 $\chi^2$/NDF: 2424.0/17

Left In: -0.344+/-0.015 $\chi^2$/NDF:6588.6/15

+ sign -0.544+/-0.014 $\chi^2$/NDF: 8601.8/31

All: -0.459+/-0.009 $\chi^2$/NDF: 17718.7/65

- sign -0.394+/-0.012 $\chi^2$/NDF: 9051.6/33




Right In: -0.093+/-0.001 $\chi^2$/NDF: 11742.4/15

Left Out: -0.040+/-0.001 $\chi^2$/NDF:2134.5/15

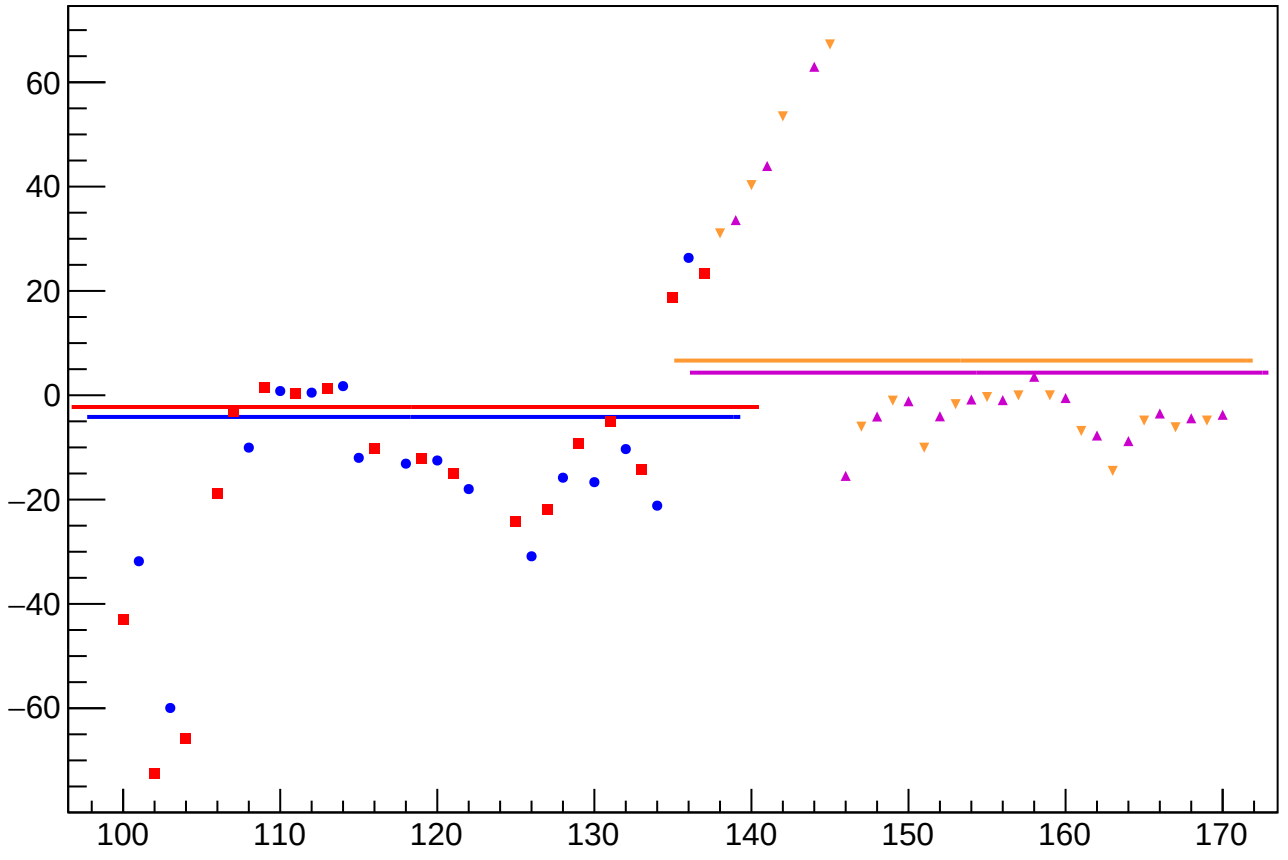
Right Out: -0.056+/-0.001 $\chi^2$/NDF: 14457.4/17

Left In: -0.029+/-0.001 $\chi^2$/NDF:3558.9/15

+ sign -0.051+/-0.001 $\chi^2$/NDF: 15001.3/31

All: -0.041+/-0.000 $\chi^2$/NDF: 33758.5/65

- sign -0.034+/-0.001 $\chi^2$/NDF: 18368.6/33




Right In: -4.159+/-0.054 $\chi^2$/NDF: 75420.4/15

Left Out: 6.650+/-0.062 $\chi^2$/NDF:113941.2/15

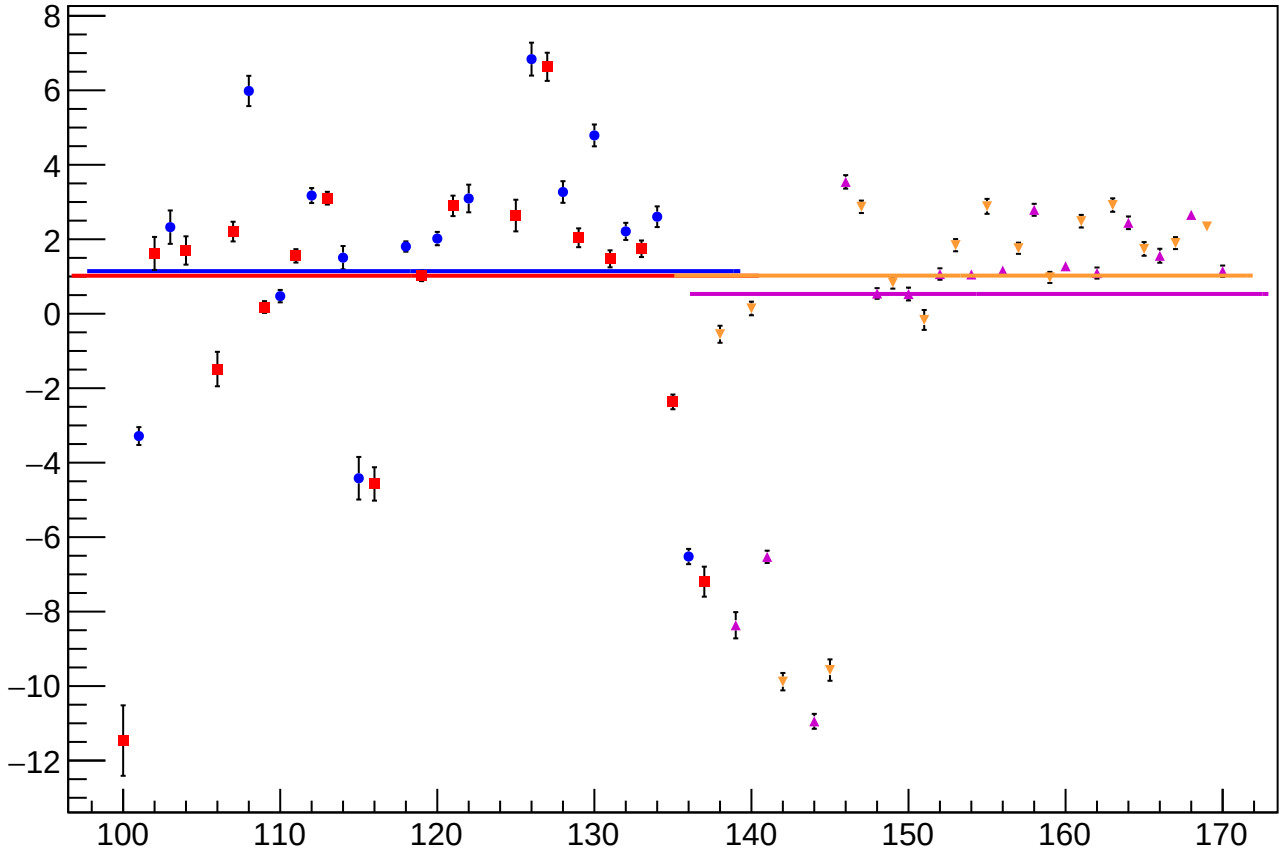
Right Out: -2.251+/-0.046 $\chi^2$/NDF: 79637.5/17

Left In: 4.332+/-0.052 $\chi^2$/NDF:121802.0/15

+ sign 0.570+/-0.041 $\chi^2$/NDF: 206650.0/31

All: 0.602+/-0.026 $\chi^2$/NDF: 417053.4/65

- sign 0.625+/-0.034 $\chi^2$/NDF: 210402.3/33




Right In: 1.144+/-0.060 $\chi^2$/NDF: 2595.3/15

Left Out: 1.024+/-0.044 $\chi^2$/NDF:4200.8/15

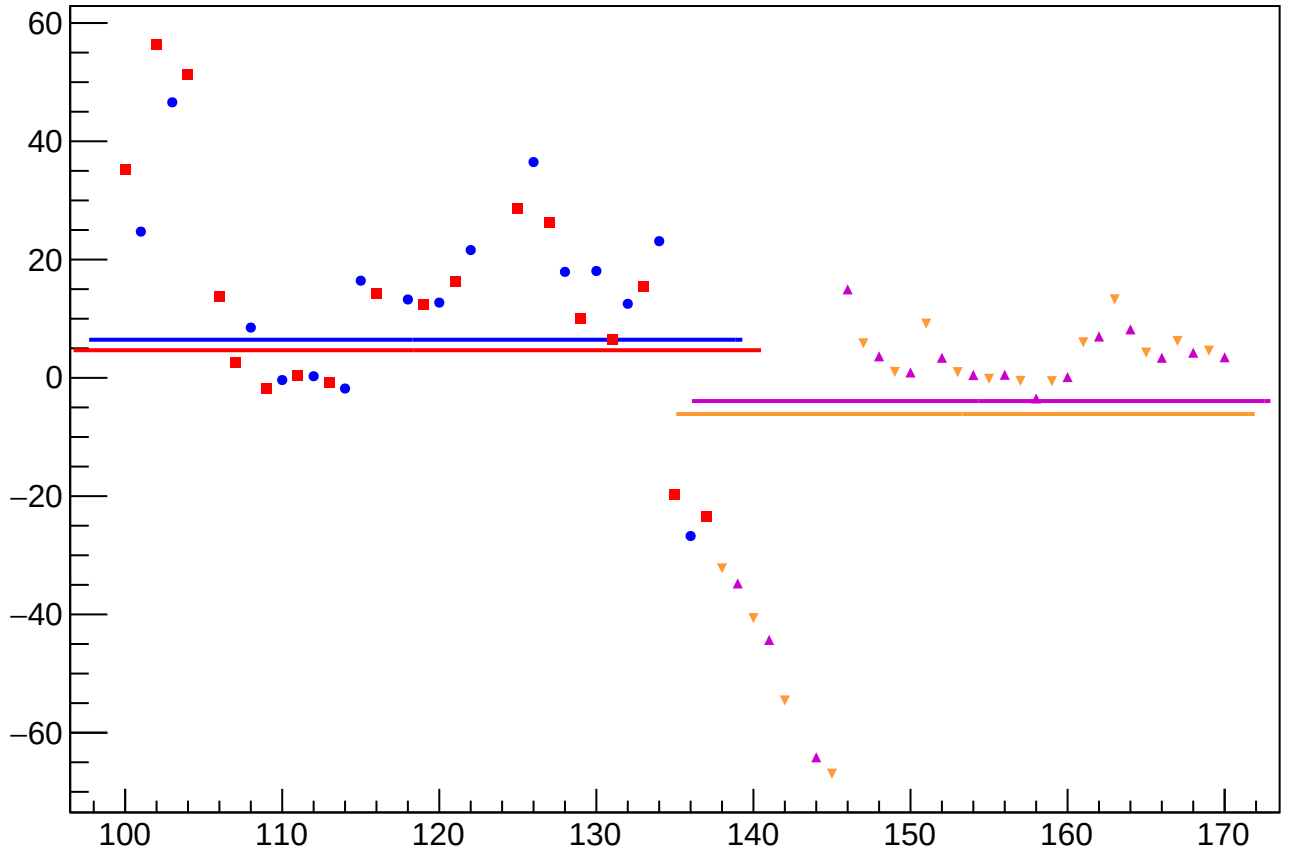
Right Out: 1.021+/-0.057 $\chi^2$/NDF: 1591.2/17

Left In: 0.531+/-0.037 $\chi^2$/NDF:6739.7/15

+ sign 1.067+/-0.036 $\chi^2$/NDF: 6798.7/31

All: 0.847+/-0.024 $\chi^2$/NDF: 15247.5/65

- sign 0.679+/-0.031 $\chi^2$/NDF: 8382.2/33




Right In: 6.448+/-0.065 $\chi^2$/NDF: 70815.1/15

Left Out: -6.111+/-0.060 $\chi^2$/NDF:110325.7/15

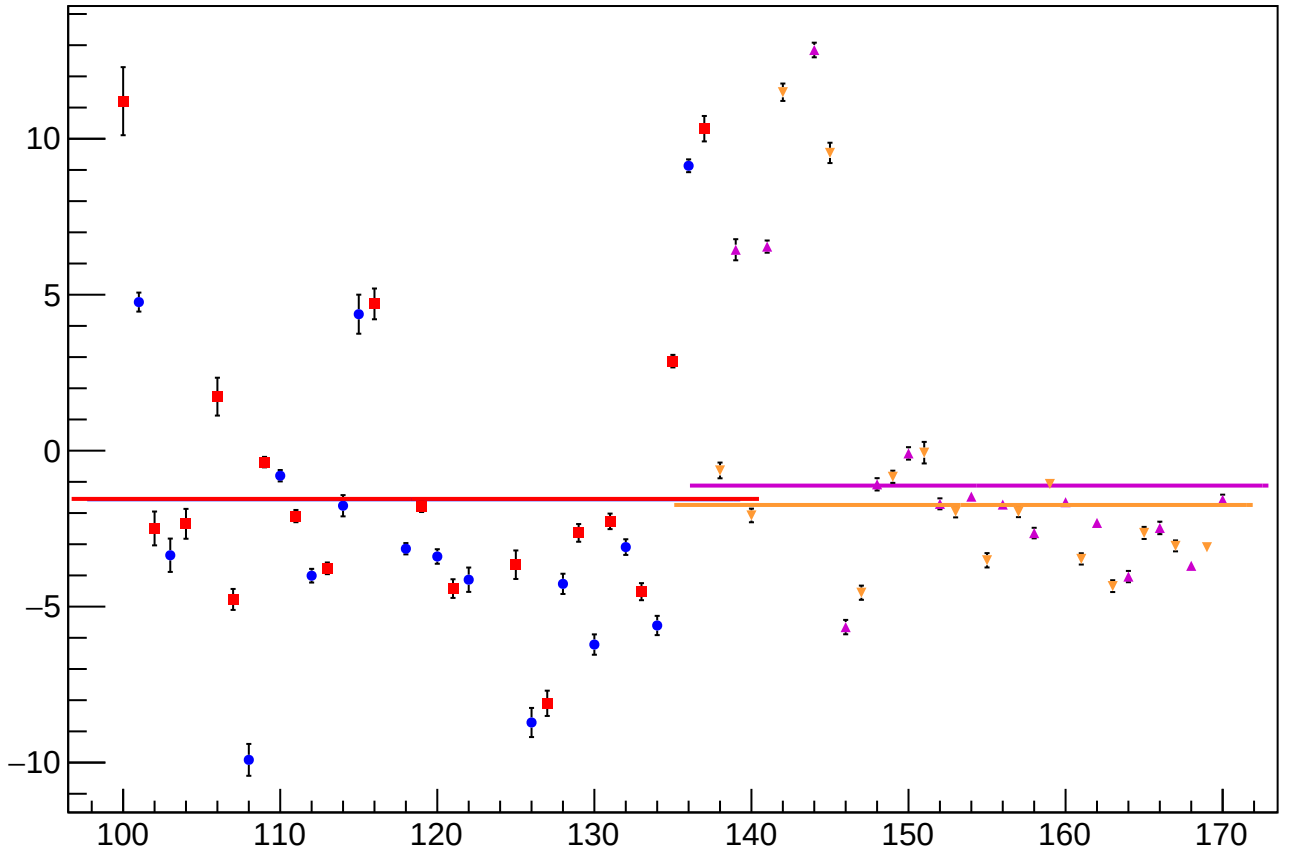
Right Out: 4.671+/-0.059 $\chi^2$/NDF: 74420.3/17

Left In: -3.920+/-0.050 $\chi^2$/NDF:119384.4/15

+ sign -0.313+/-0.044 $\chi^2$/NDF: 201305.6/31

All: -0.304+/-0.029 $\chi^2$/NDF: 407370.1/65

- sign -0.298+/-0.038 $\chi^2$/NDF: 206064.5/33




Right In: -1.558+/-0.069 $\chi^2$/NDF: 4543.1/15

Left Out: -1.741+/-0.050 $\chi^2$/NDF:4186.3/15

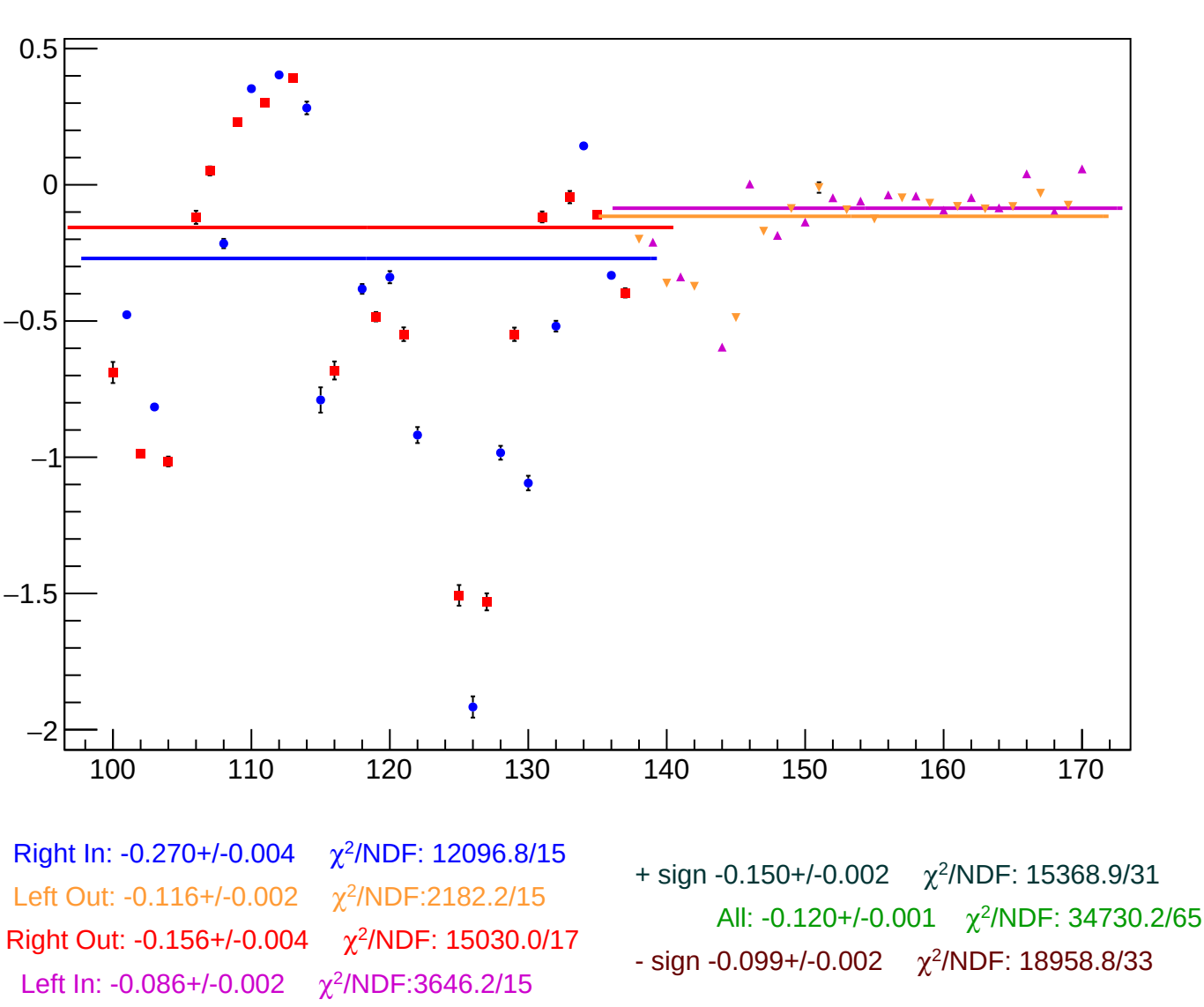
Right Out: -1.547+/-0.064 $\chi^2$/NDF: 2470.1/17

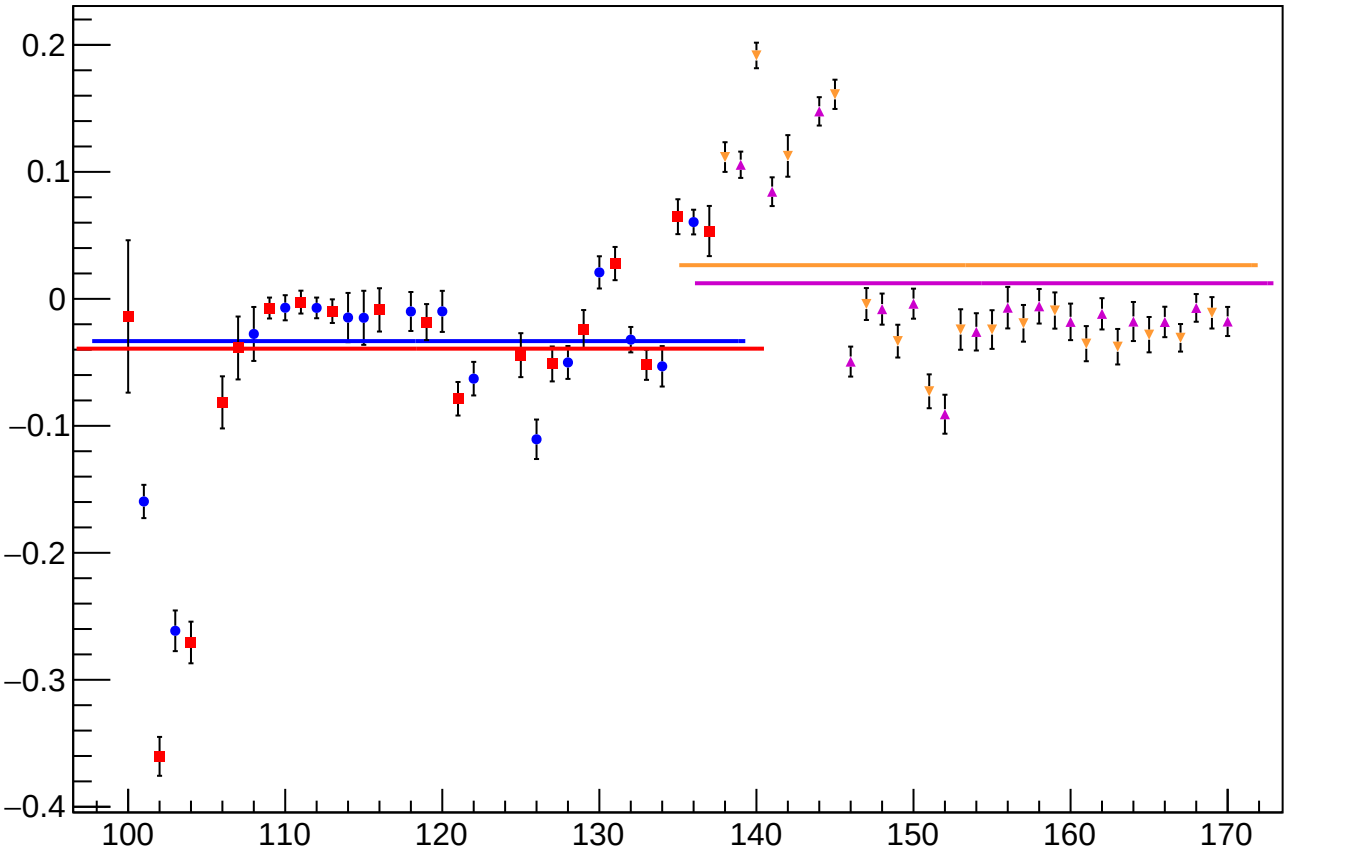
Left In: -1.120+/-0.042 $\chi^2$/NDF:6753.1/15

+ sign -1.678+/-0.041 $\chi^2$/NDF: 8733.9/31

All: -1.434+/-0.027 $\chi^2$/NDF: 18050.9/65

- sign -1.249+/-0.035 $\chi^2$/NDF: 9253.8/33


reg_asym_bcm_an_us_an_ds_avg_diff_bpm12X_slope vs Slug
0.5
0
−0.5
−1
−1.5
−2
100
110
120
130
140
150
160
170
Right In: -0.270+/-0.004 χ²/NDF: 12096.8/15
Left Out: -0.116+/-0.002 χ²/NDF:2182.2/15
Right Out: -0.156+/-0.004 χ²/NDF: 15030.0/17
Left In: -0.086+/-0.002 χ²/NDF:3646.2/15
+ sign -0.150+/-0.002 χ²/NDF: 15368.9/31
All: -0.120+/-0.001 χ²/NDF: 34730.2/65
- sign -0.099+/-0.002 χ²/NDF: 18958.8/33




Right In: -0.033+/-0.003 $\chi^2$/NDF: 463.5/15

Left Out: 0.027+/-0.003 $\chi^2$/NDF:700.0/15

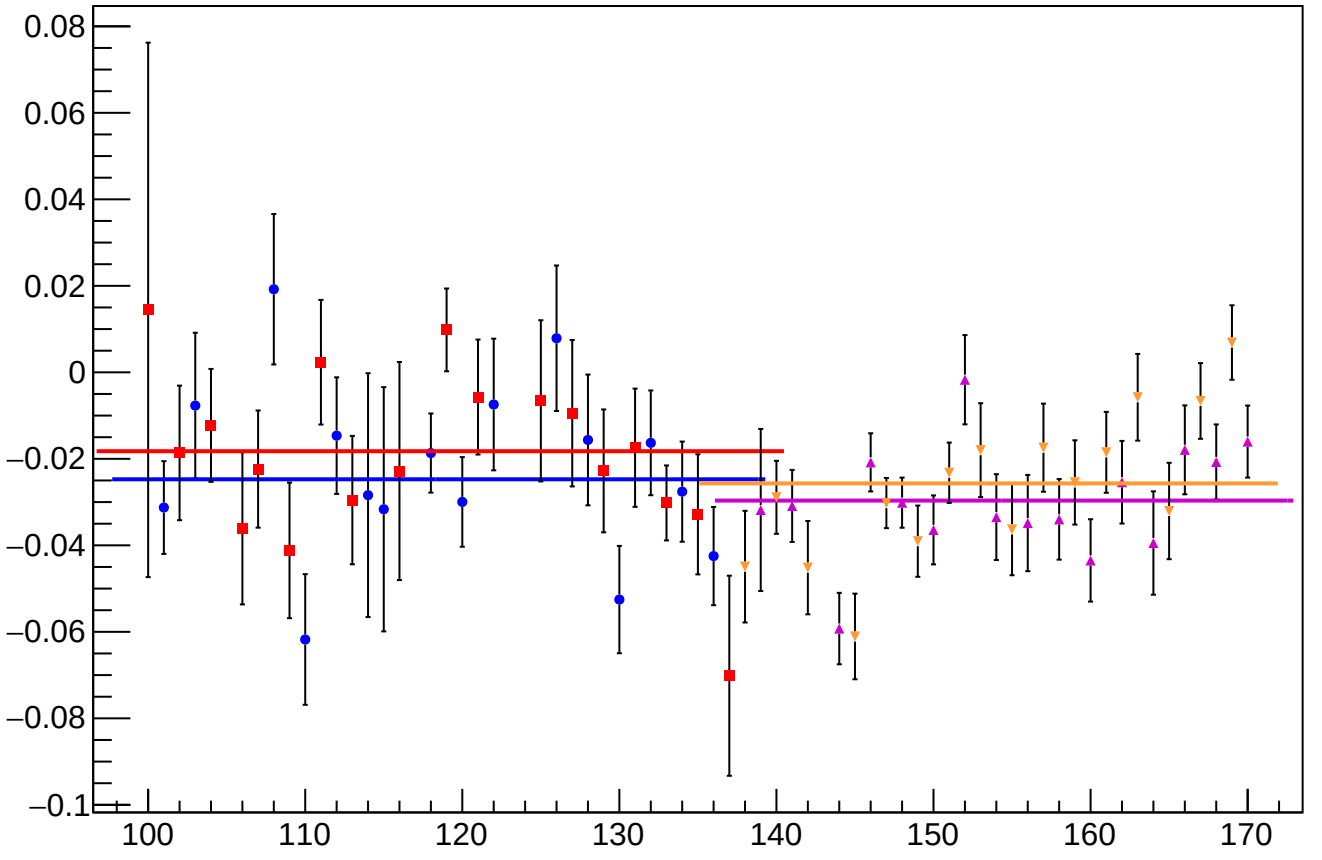
Right Out: -0.039+/-0.003 $\chi^2$/NDF: 807.6/17

Left In: 0.012+/-0.003 $\chi^2$/NDF:384.2/15

+ sign -0.004+/-0.002 $\chi^2$/NDF: 1334.7/31

All: -0.008+/-0.002 $\chi^2$/NDF: 2668.6/65

- sign -0.013+/-0.002 $\chi^2$/NDF: 1325.4/33




Right In: -0.025+/-0.003 $\chi^2$/NDF: 28.5/15

Left Out: -0.026+/-0.002 $\chi^2$/NDF:47.9/15

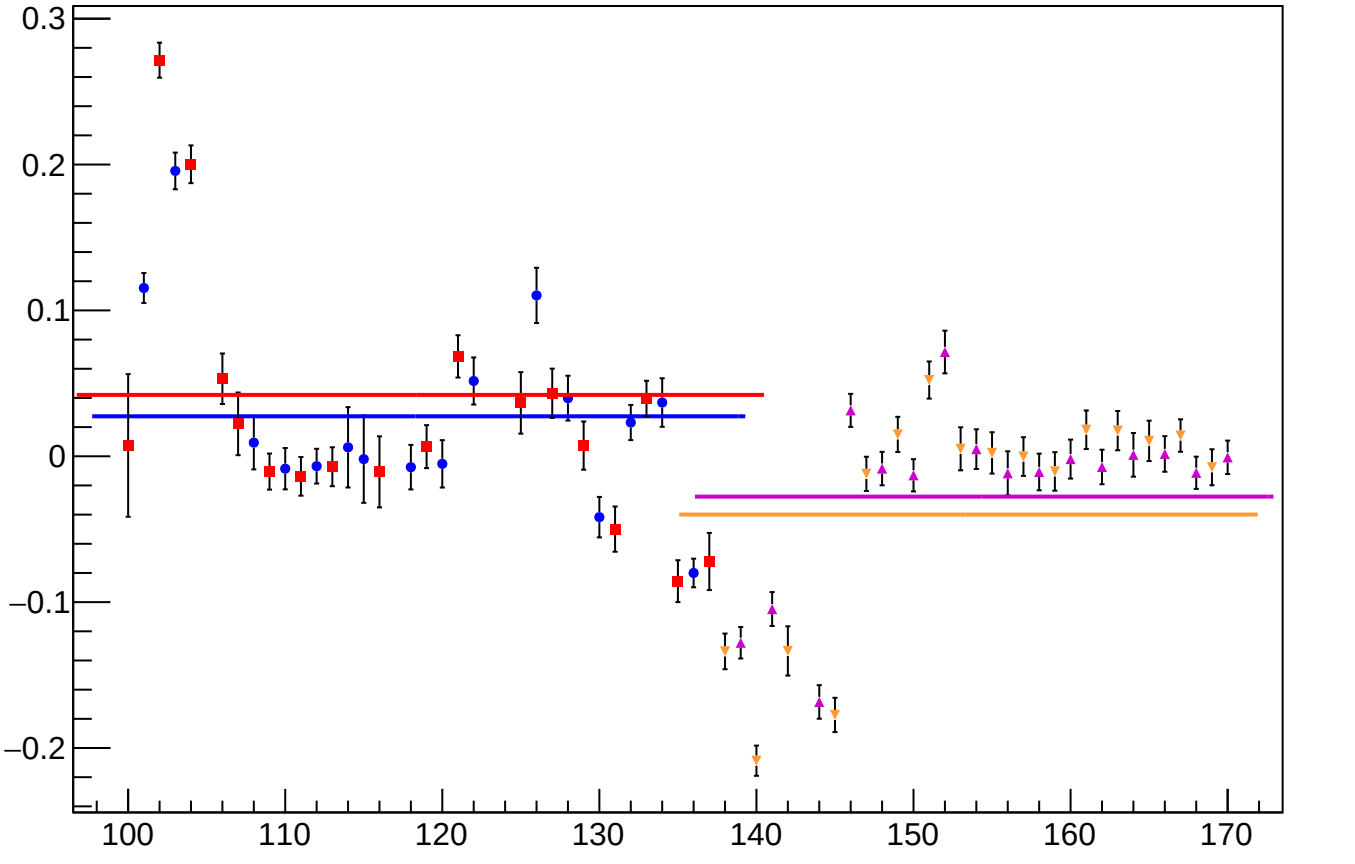
Right Out: -0.018+/-0.003 $\chi^2$/NDF: 24.7/17

Left In: -0.030+/-0.002 $\chi^2$/NDF:31.3/15

+ sign -0.025+/-0.002 $\chi^2$/NDF: 76.5/31

All: -0.026+/-0.001 $\chi^2$/NDF: 140.5/65

- sign -0.026+/-0.002 $\chi^2$/NDF: 64.0/33




Right In: 0.027+/-0.004 $\chi^2$/NDF: 446.1/15

Left Out: -0.040+/-0.003 $\chi^2$/NDF:684.7/15

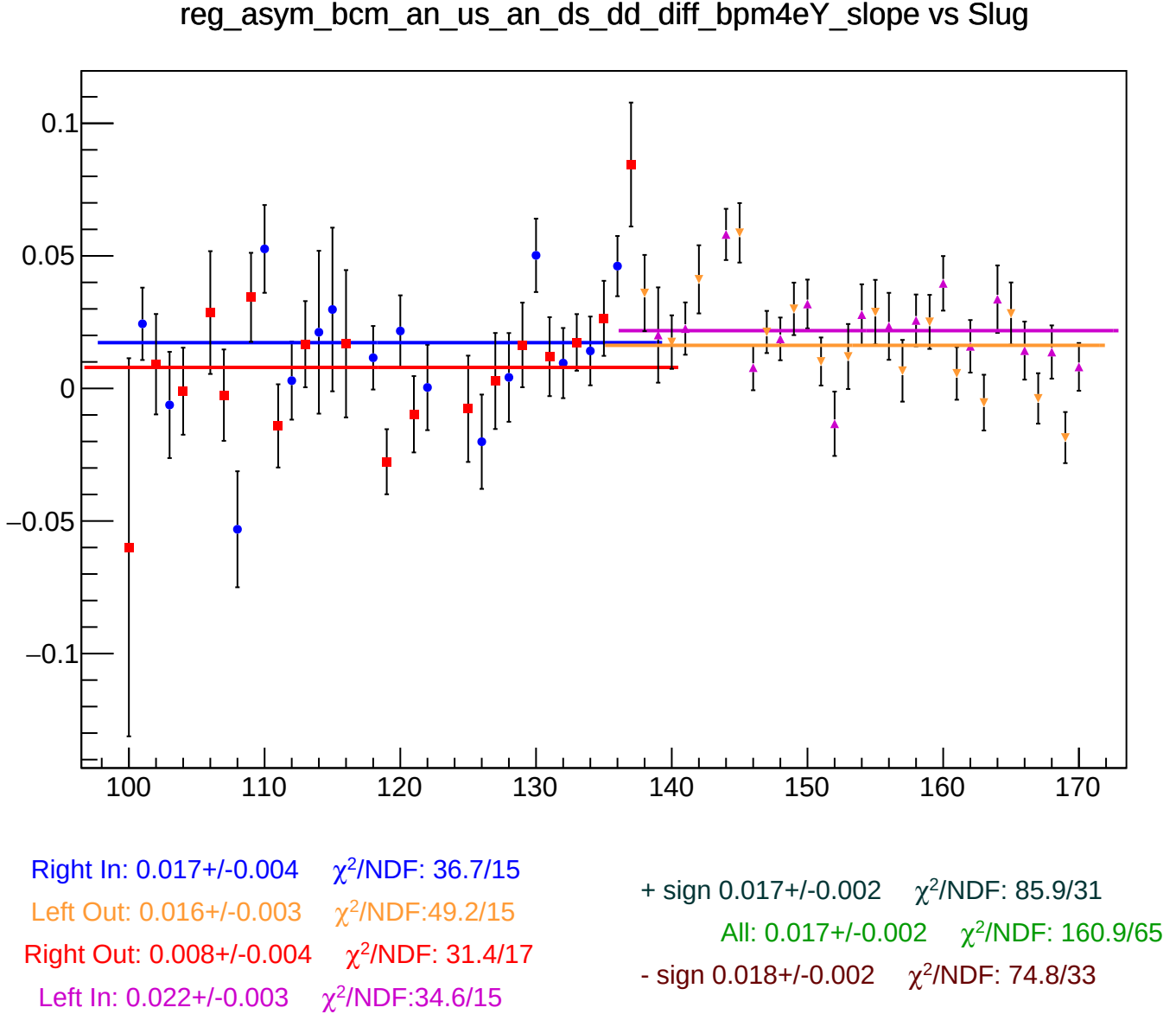
Right Out: 0.042+/-0.004 $\chi^2$/NDF: 733.2/17

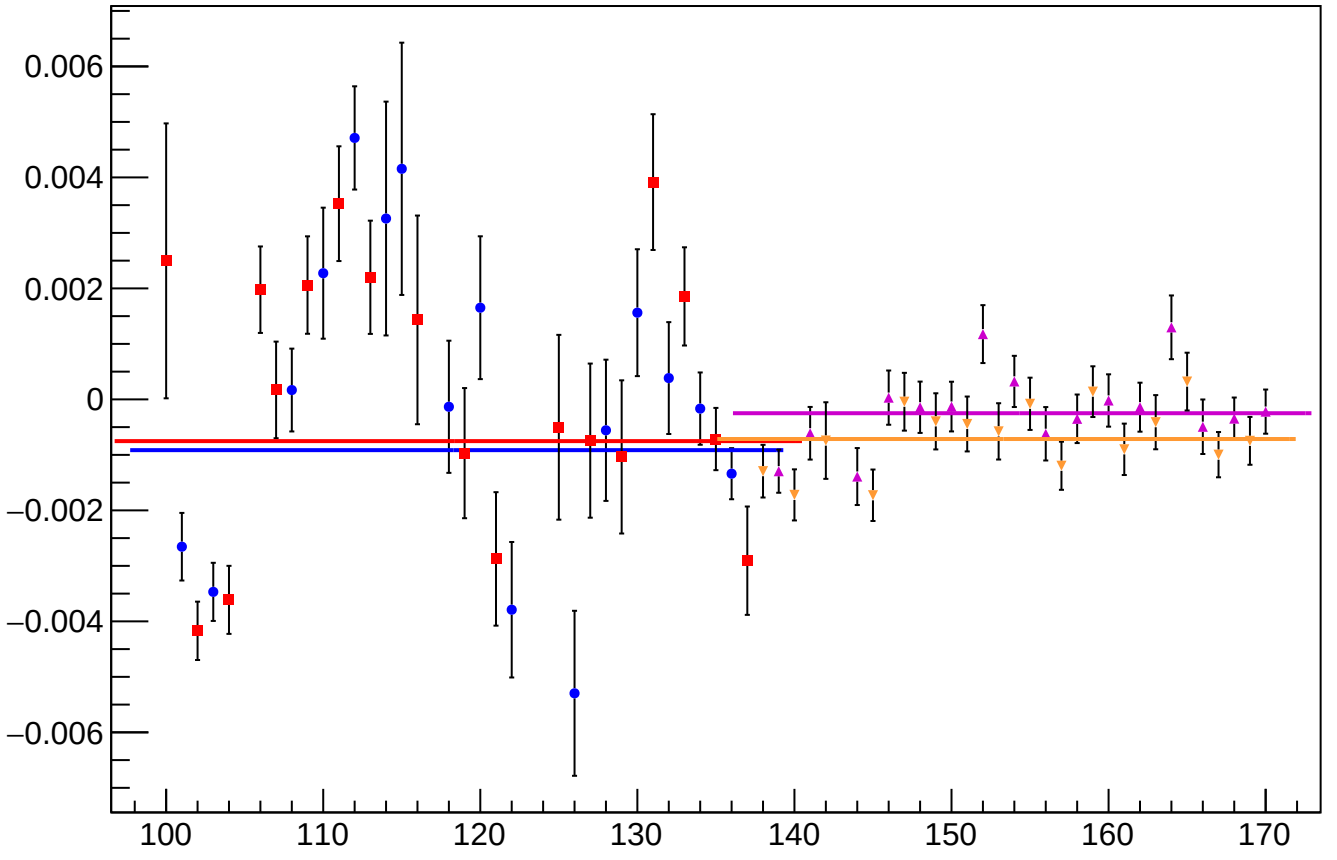
Left In: -0.028+/-0.003 $\chi^2$/NDF:390.2/15

+ sign -0.010+/-0.002 $\chi^2$/NDF: 1329.2/31

All: -0.004+/-0.002 $\chi^2$/NDF: 2680.2/65

- sign 0.001+/-0.002 $\chi^2$/NDF: 1339.3/33


reg_asym_bcm_an_us_an_ds_dd_diff_bpm4eY_slope vs Slug
0.1
0.05
0
−0.05
−0.1
100
110
120
130
140
150
160
170
Right In: 0.017+/-0.004 χ²/NDF: 36.7/15
Left Out: 0.016+/-0.003 χ²/NDF:49.2/15
Right Out: 0.008+/-0.004 χ²/NDF: 31.4/17
Left In: 0.022+/-0.003 χ²/NDF:34.6/15
+ sign 0.017+/-0.002 χ²/NDF: 85.9/31
All: 0.017+/-0.002 χ²/NDF: 160.9/65
- sign 0.018+/-0.002 χ²/NDF: 74.8/33




Right In: -0.001+/-0.000 $\chi^2$/NDF: 114.1/15

Left Out: -0.001+/-0.000 $\chi^2$/NDF:25.0/15

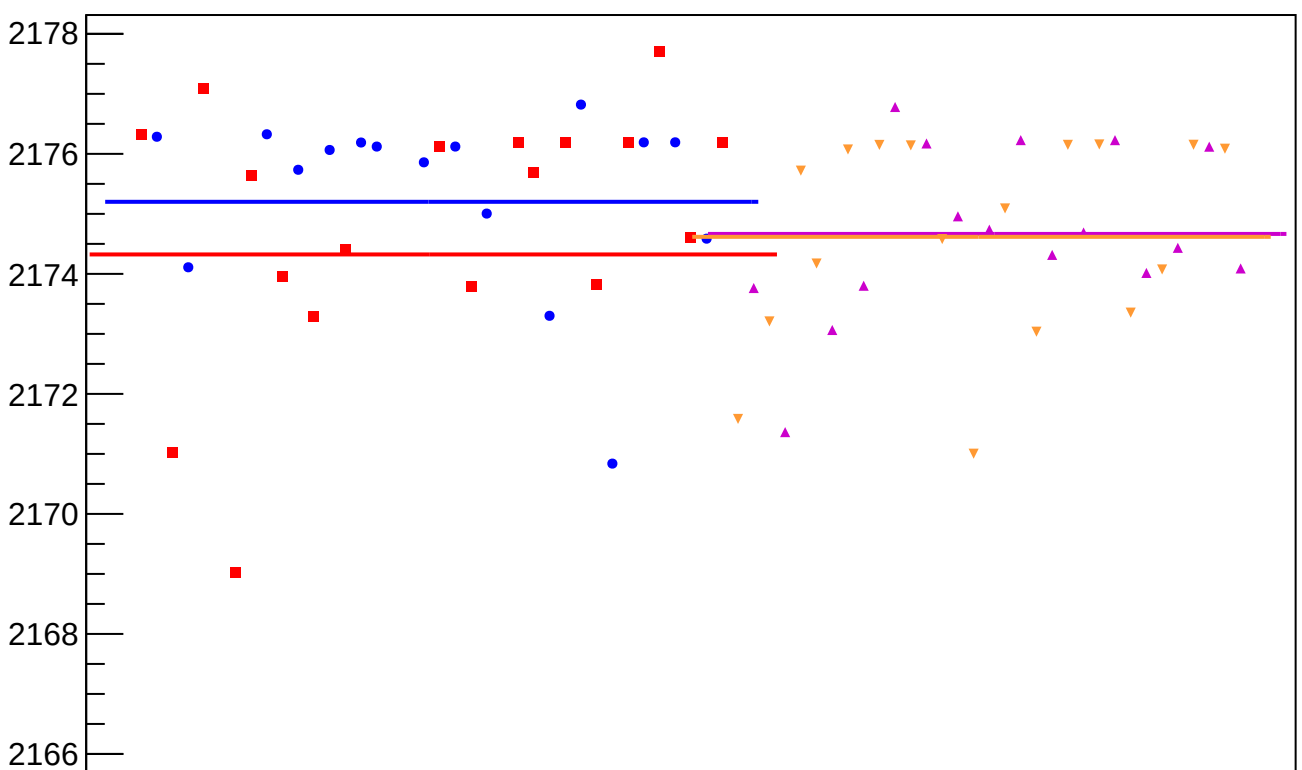
Right Out: -0.001+/-0.000 $\chi^2$/NDF: 147.6/17

Left In: -0.000+/-0.000 $\chi^2$/NDF:30.7/15

+ sign -0.001+/-0.000 $\chi^2$/NDF: 139.8/31

All: -0.001+/-0.000 $\chi^2$/NDF: 330.1/65

- sign -0.000+/-0.000 $\chi^2$/NDF: 182.6/33




Right In: 2175.201+/-0.000 $\chi^2$/NDF: 176572407292366018093705133136281 6.0/15

+ sign 2174.819+/-0.000 $\chi^2$/NDF: 5848000644224 1

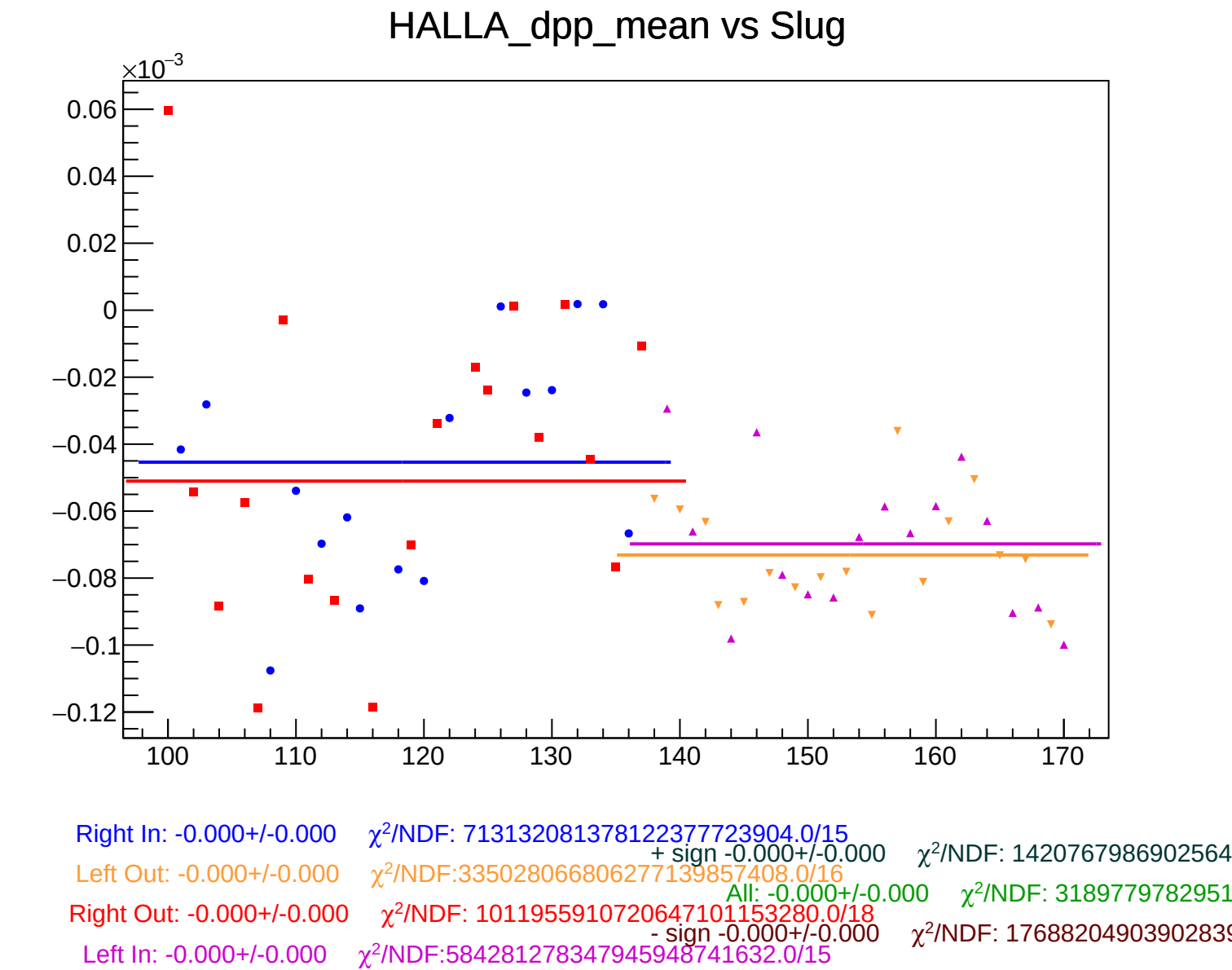
Left Out: 2174.617+/-0.000 $\chi^2$/NDF:391712144602346548740350827456102 4.0/16

All: 2174.682+/-0.000 $\chi^2$/NDF: 141994442 94

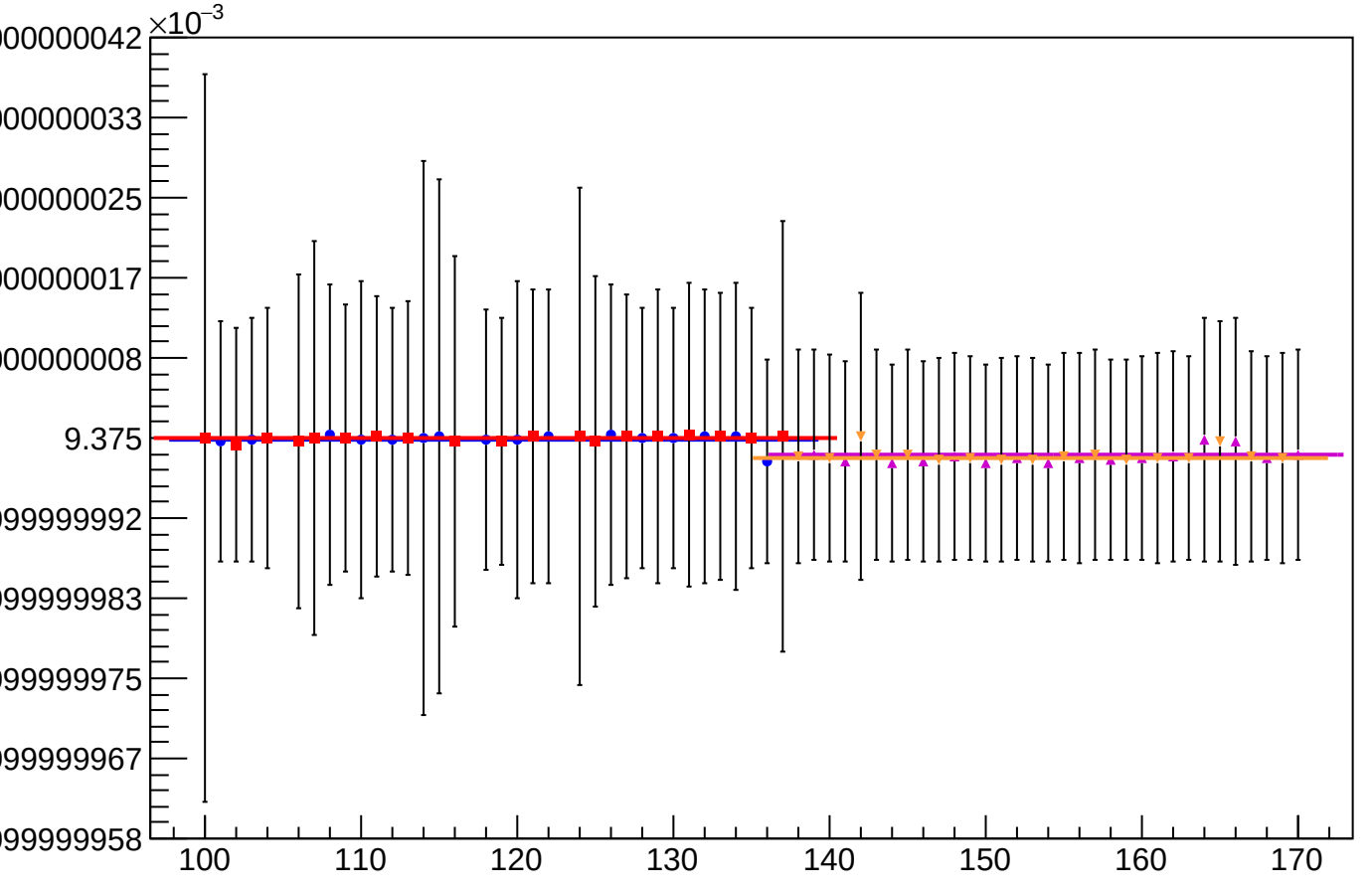
Right Out: 2174.324+/-0.000 $\chi^2$/NDF: 554223941568104692872352720171827 2.0/18

- sign 2174.544+/-0.000 $\chi^2$/NDF: 8270276136564 3

Left In: 2174.666+/-0.000 $\chi^2$/NDF:267069856259117246166580733988044 8.0/15


HALLA_dpp_mean vs Slug
×10^−3
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
100
110
120
130
140
150
160
170
Right In: -0.000+/-0.000 χ²/NDF: 7131320813781223777239040.0/15
Left Out: -0.000+/-0.000 χ²/NDF:335028066806277139857408.0/16
Right Out: -0.000+/-0.000 χ²/NDF: 10119559107206471011532800.0/18
Left In: -0.000+/-0.000 χ²/NDF:58428127834794594874163 2.0/15
+ sign -0.000+/-0.000 χ²/NDF: 1420767986902564
All: -0.000+/-0.000 χ²/NDF: 3189779782951
- sign -0.000+/-0.000 χ²/NDF: 1768820490390283

# MQ171LM_mean vs Slug




Right In: 0.009+/-0.000 $\chi^2$/NDF: 0.1/15

Left Out: 0.009+/-0.000 $\chi^2$/NDF:0.0/16

Right Out: 0.009+/-0.000 $\chi^2$/NDF: 0.0/18

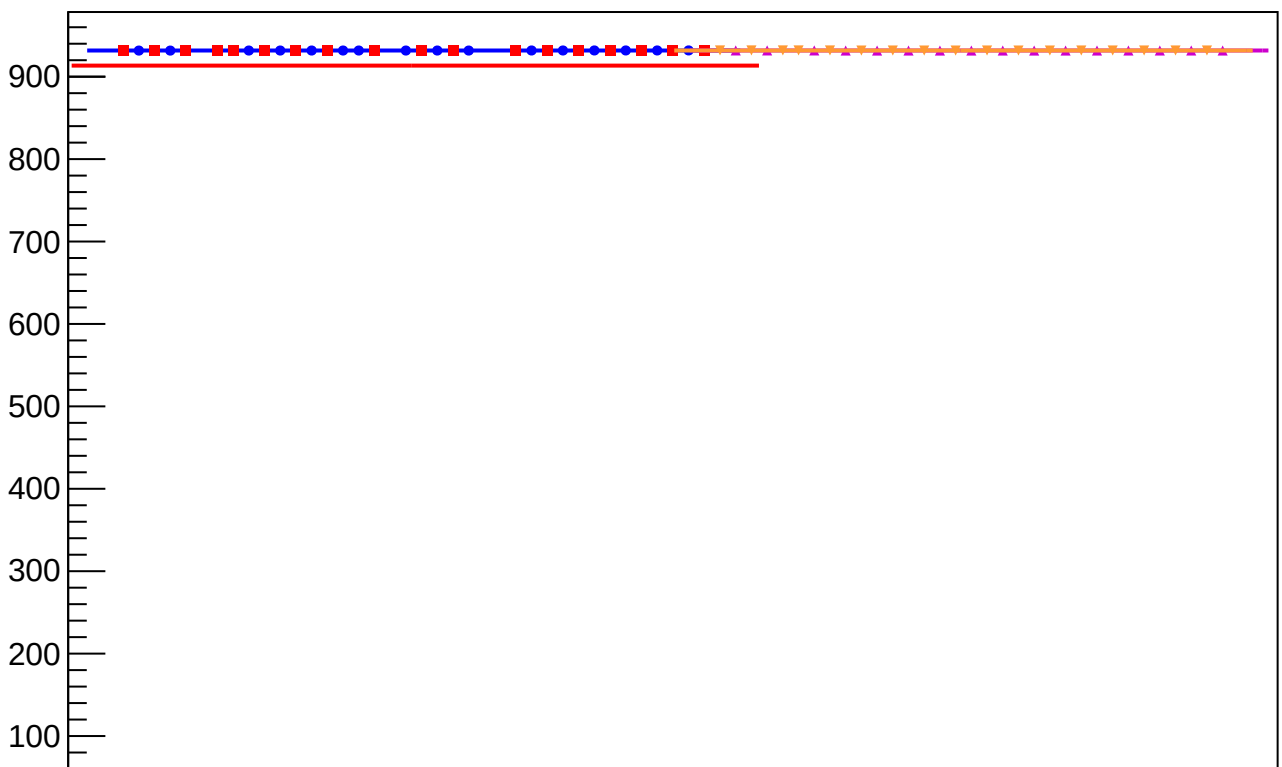
Left In: 0.009+/-0.000 $\chi^2$/NDF:0.1/15

+ sign 0.009+/-0.000 $\chi^2$/NDF: 0.2/32

All: 0.009+/-0.000 $\chi^2$/NDF: 0.5/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 0.3/34

# HacL_Q2_HP3458A_IOUT_mean vs Slug




Right In: 931.769+/-0.000 $\chi^2$/NDF: 2757217223595001187167685836800.0/15

+ sign 931.780+/-0.000 $\chi^2$/NDF: 703359061653595

Left Out: 931.785+/-0.000 $\chi^2$/NDF:4153160605005820307461795479552.0/16

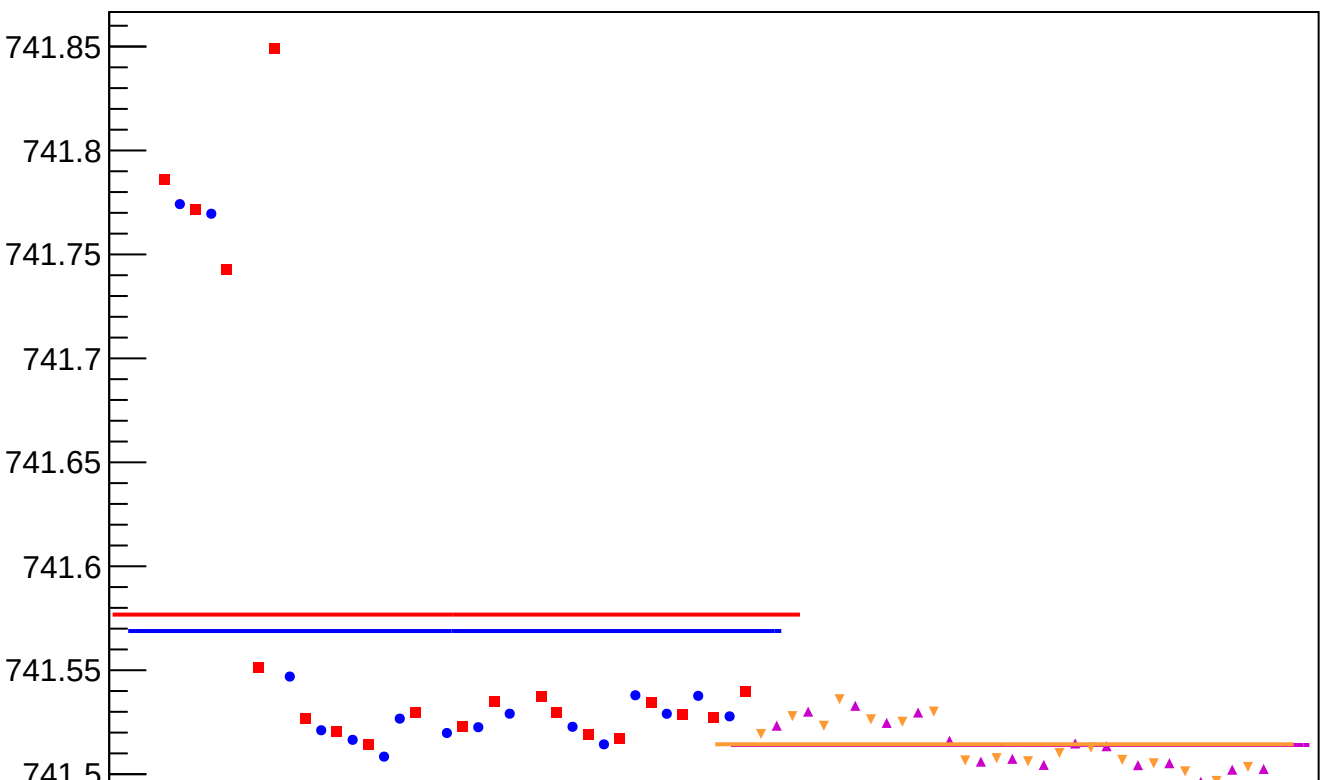
All: 928.509+/-0.000 $\chi^2$/NDF: 12976542196

Right Out: 913.447+/-0.000 $\chi^2$/NDF: 12765879635094435683491886518824337408.0/18

- sign 925.227+/-0.000 $\chi^2$/NDF: 129306057227461

Left In: 931.773+/-0.000 $\chi^2$/NDF:3668555033248633859227714060288.0/15

# HacL_D1_HP3458A_IOUT_mean vs Slug




Right In: 741.569+/-0.000 $\chi^2$/NDF: 643295117612794706193889938636 8.0/15

+ sign 741.533+/-0.000 $\chi^2$/NDF: 805239836781860

Left Out: 741.514+/-0.000 $\chi^2$/NDF:1810300972296379744808515665 92.0/16

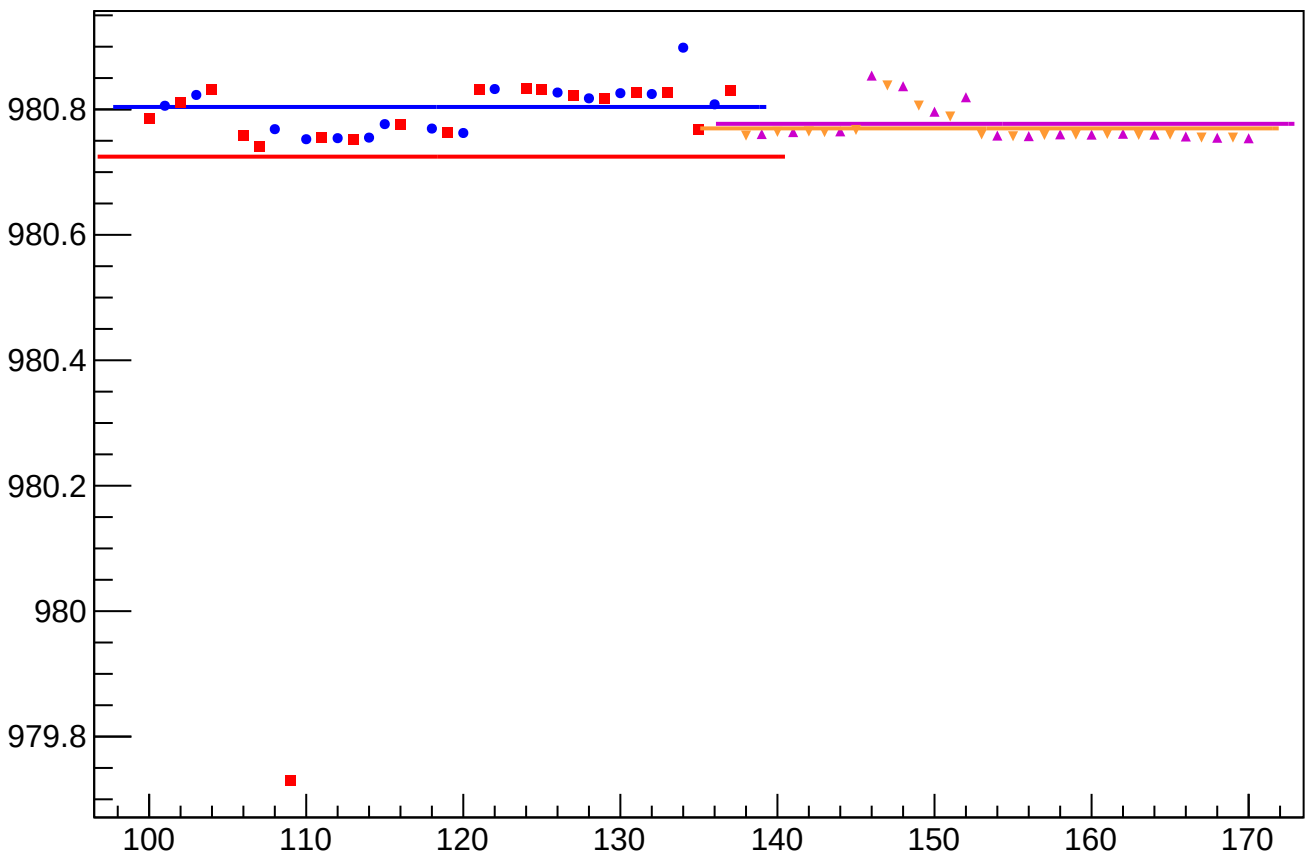
All: 741.535+/-0.000 $\chi^2$/NDF: 1785538867 89

Right Out: 741.577+/-0.000 $\chi^2$/NDF: 769226394789261471153747761 5616.0/18

- sign 741.536+/-0.000 $\chi^2$/NDF: 979188504018010

Left In: 741.514+/-0.000 $\chi^2$/NDF:1702299201027306698014269112 32.0/15

# HacL_Q3_HP3458A_IOUT_mean vs Slug




Right In: 980.804+/-0.000 $\chi^2$/NDF: 9333132768848077867742459330560.0/15

Left Out: 980.770+/-0.000 $\chi^2$/NDF:67932754707996628126405754880 0.0/16

Right Out: 980.725+/-0.000 $\chi^2$/NDF: 560402056173583362216628762705920.0/18

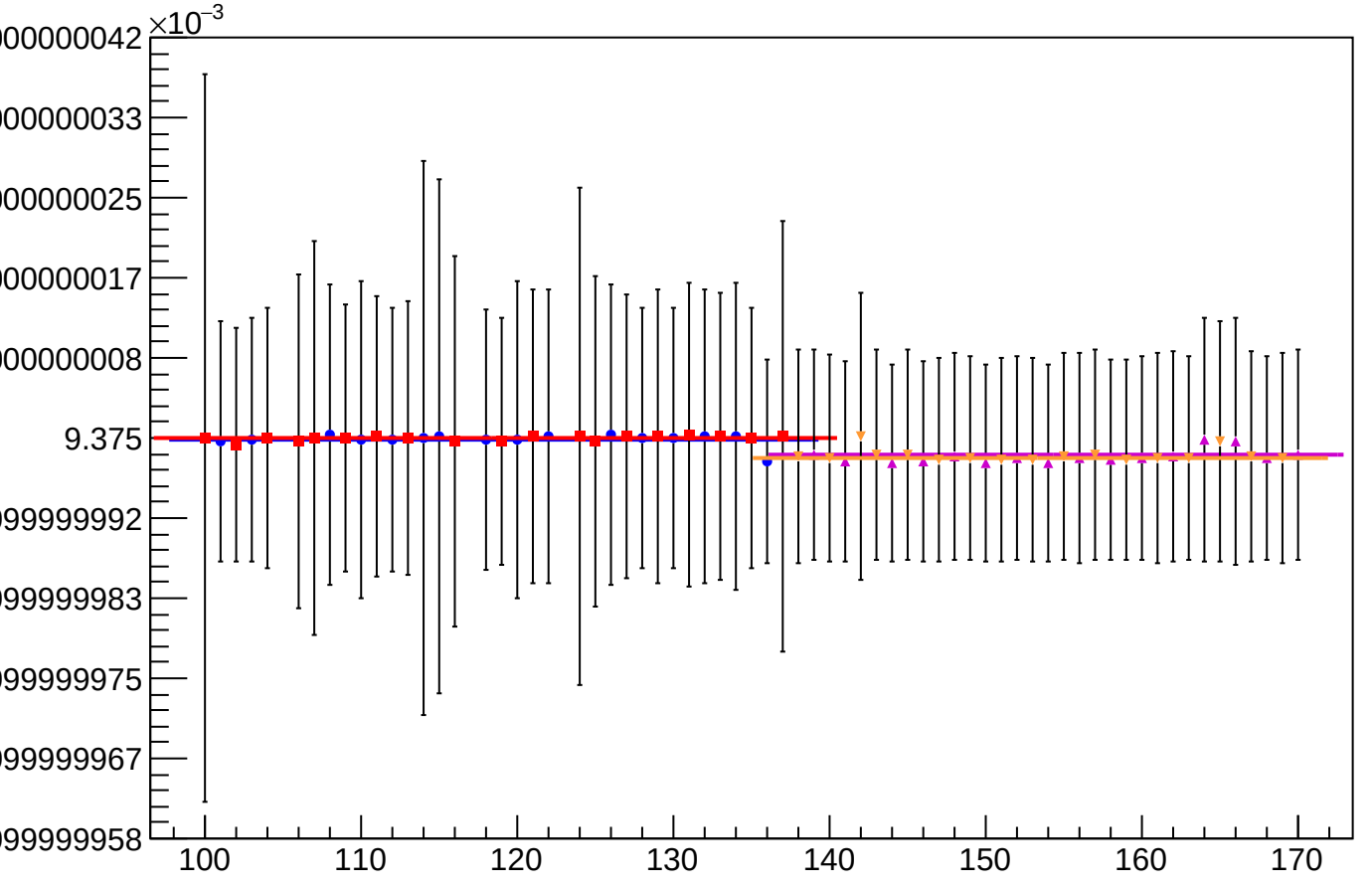
Left In: 980.777+/-0.000 $\chi^2$/NDF:13654398668389209600741227888640.0/15

+ sign 980.782+/-0.000 $\chi^2$/NDF: 217821747862461

All: 980.770+/-0.000 $\chi^2$/NDF: 615045755034

- sign 980.758+/-0.000 $\chi^2$/NDF: 587488582724227

# MQ172RM_mean vs Slug




Right In: 0.009+/-0.000 $\chi^2$/NDF: 0.1/15

Left Out: 0.009+/-0.000 $\chi^2$/NDF:0.0/16

Right Out: 0.009+/-0.000 $\chi^2$/NDF: 0.0/18

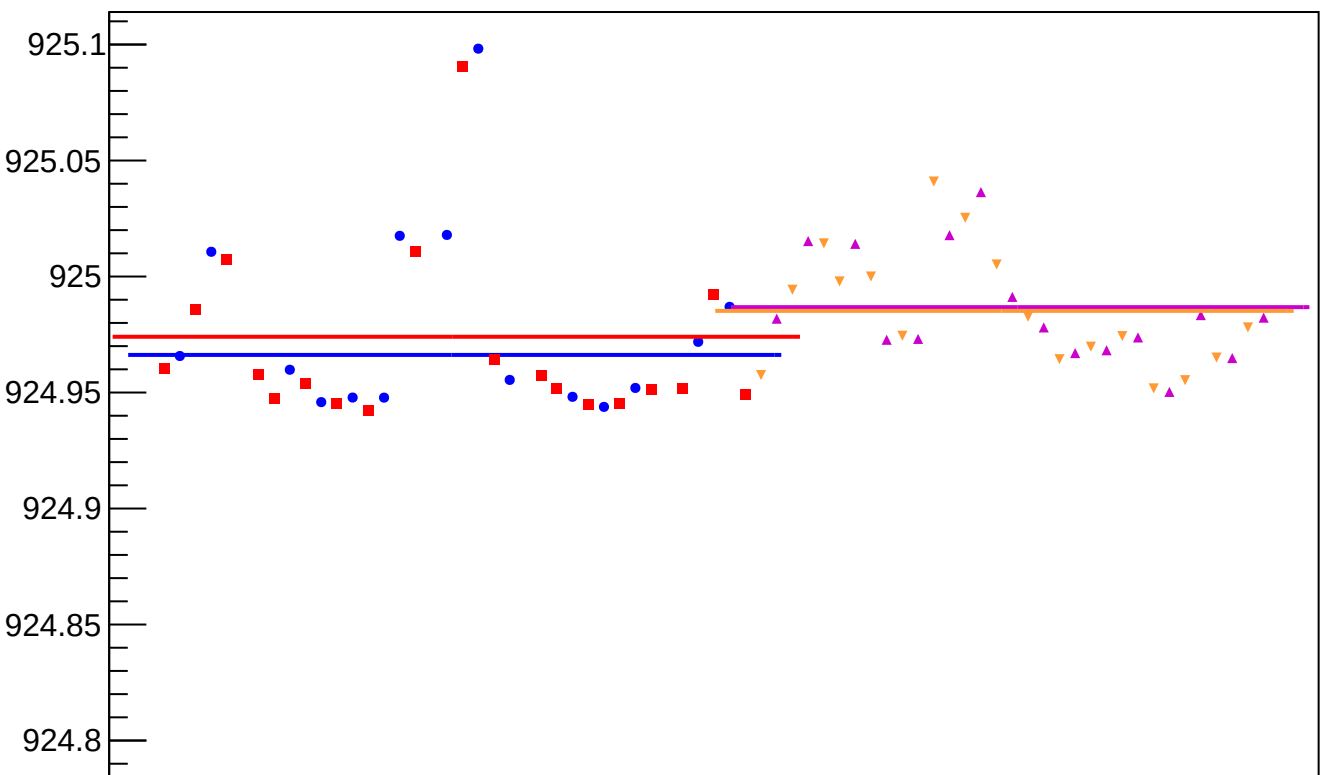
Left In: 0.009+/-0.000 $\chi^2$/NDF:0.1/15

+ sign 0.009+/-0.000 $\chi^2$/NDF: 0.2/32

All: 0.009+/-0.000 $\chi^2$/NDF: 0.5/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 0.3/34

# HacR_Q2_HP3458A_IOUT_mean vs Slug




Right In: 924.966+/-0.000 $\chi^2$/NDF: 254437050808765880053303712153 6.0/15

Left Out: 924.985+/-0.000 $\chi^2$/NDF:866256670047353090007887773696.0/16

Right Out: 924.974+/-0.000 $\chi^2$/NDF: 124198152111689090023635183206 4.0/18

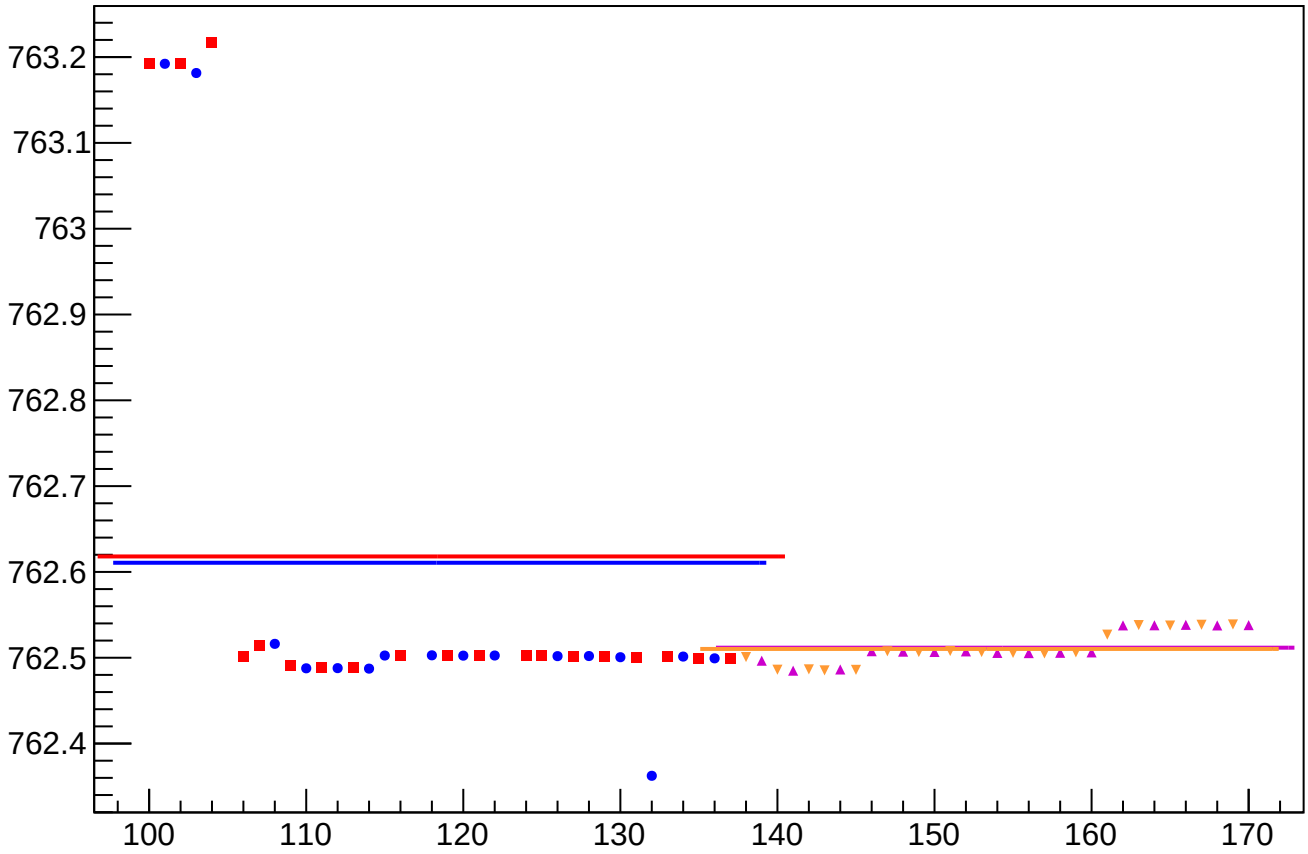
Left In: 924.987+/-0.000 $\chi^2$/NDF:71117301547978976767285343027 2.0/15

+ sign 924.979+/-0.000 $\chi^2$/NDF: 358539684018115

All: 924.980+/-0.000 $\chi^2$/NDF: 563230240521

- sign 924.982+/-0.000 $\chi^2$/NDF: 203298484036900

# HacR_D1_HP3458A_IOUT_mean vs Slug




Right In: 762.611+/-0.000 $\chi^2$/NDF: 52161453489138778834460408283136.0/15

Left Out: 762.510+/-0.000 $\chi^2$/NDF:4702646775836892219579354316800.0/16

Right Out: 762.618+/-0.000 $\chi^2$/NDF: 53134338532630395841297843748864.0/18

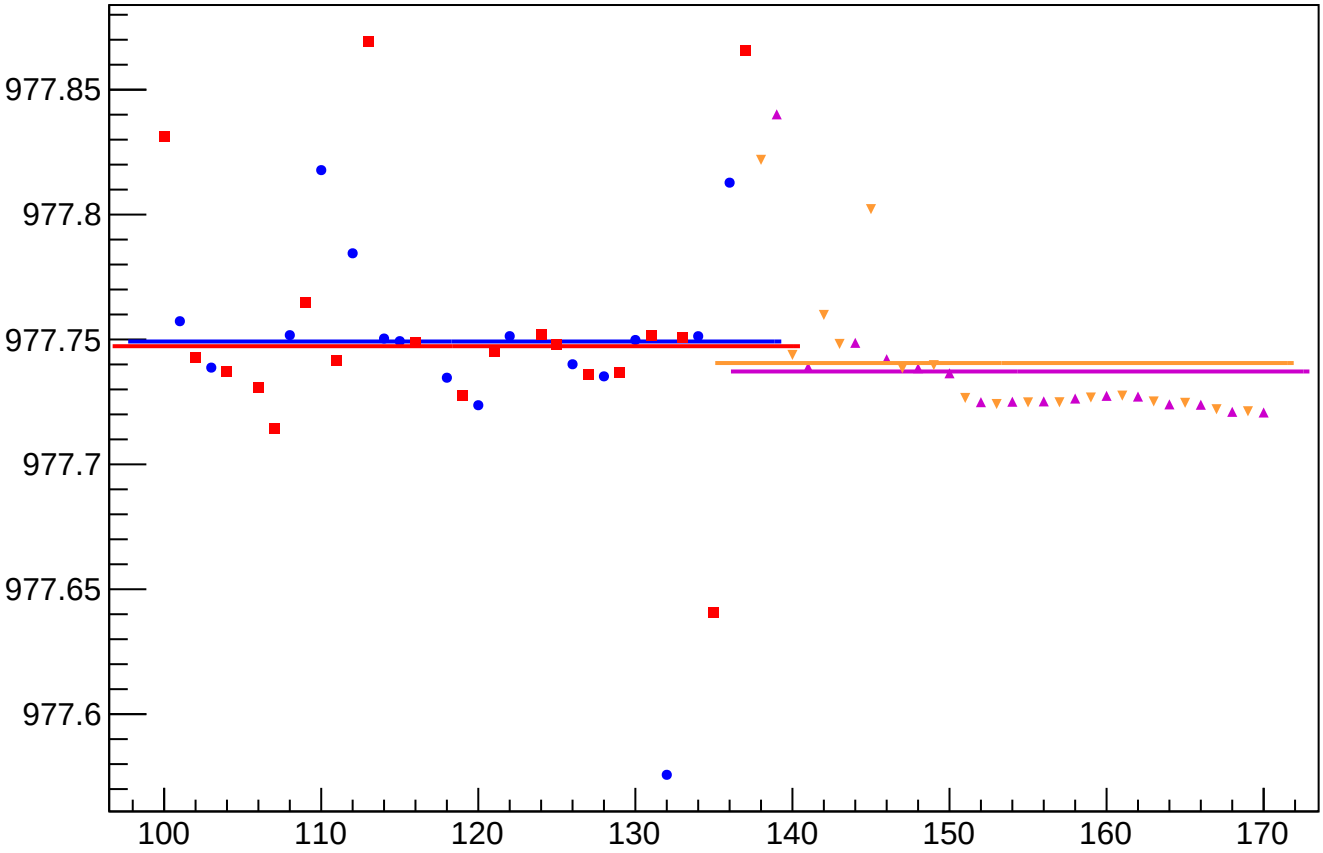
Left In: 762.512+/-0.000 $\chi^2$/NDF:428297856834921926844515090432.0/15

+ sign 762.545+/-0.000 $\chi^2$/NDF: 575226680313929

All: 762.547+/-0.000 $\chi^2$/NDF: 116654418332

- sign 762.550+/-0.000 $\chi^2$/NDF: 591080146676704

# HacR_Q3_HP3458A_IOUT_mean vs Slug




Right In: 977.749+/-0.000 $\chi^2$/NDF: 19595783310723160744482245181440.0/15

Left Out: 977.741+/-0.000 $\chi^2$/NDF:109022571230930780459280367616 0.0/16

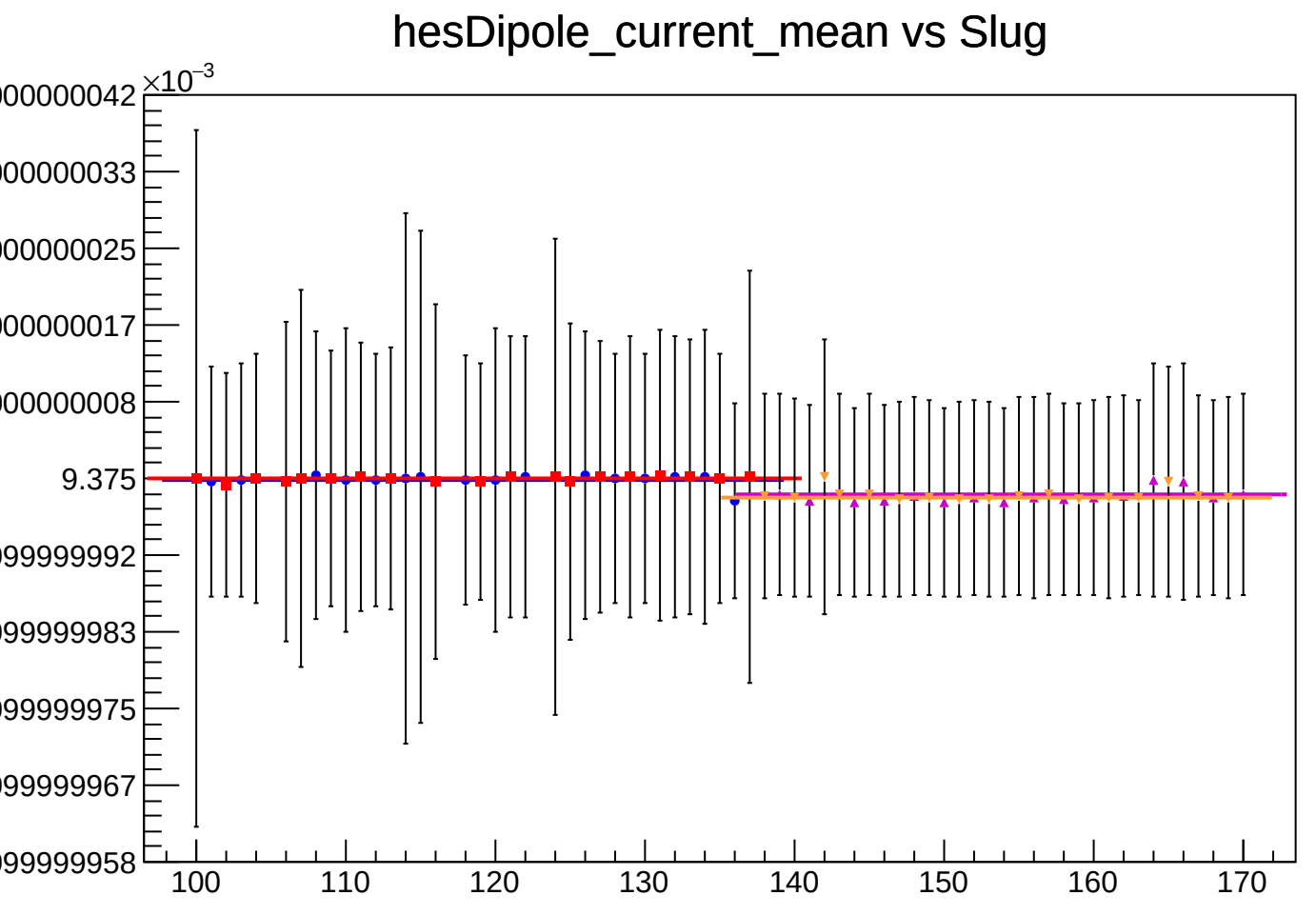
Right Out: 977.747+/-0.000 $\chi^2$/NDF: 178222687781691472632796623667 2.0/18

Left In: 977.737+/-0.000 $\chi^2$/NDF:104019053485571234658361383321 6.0/15

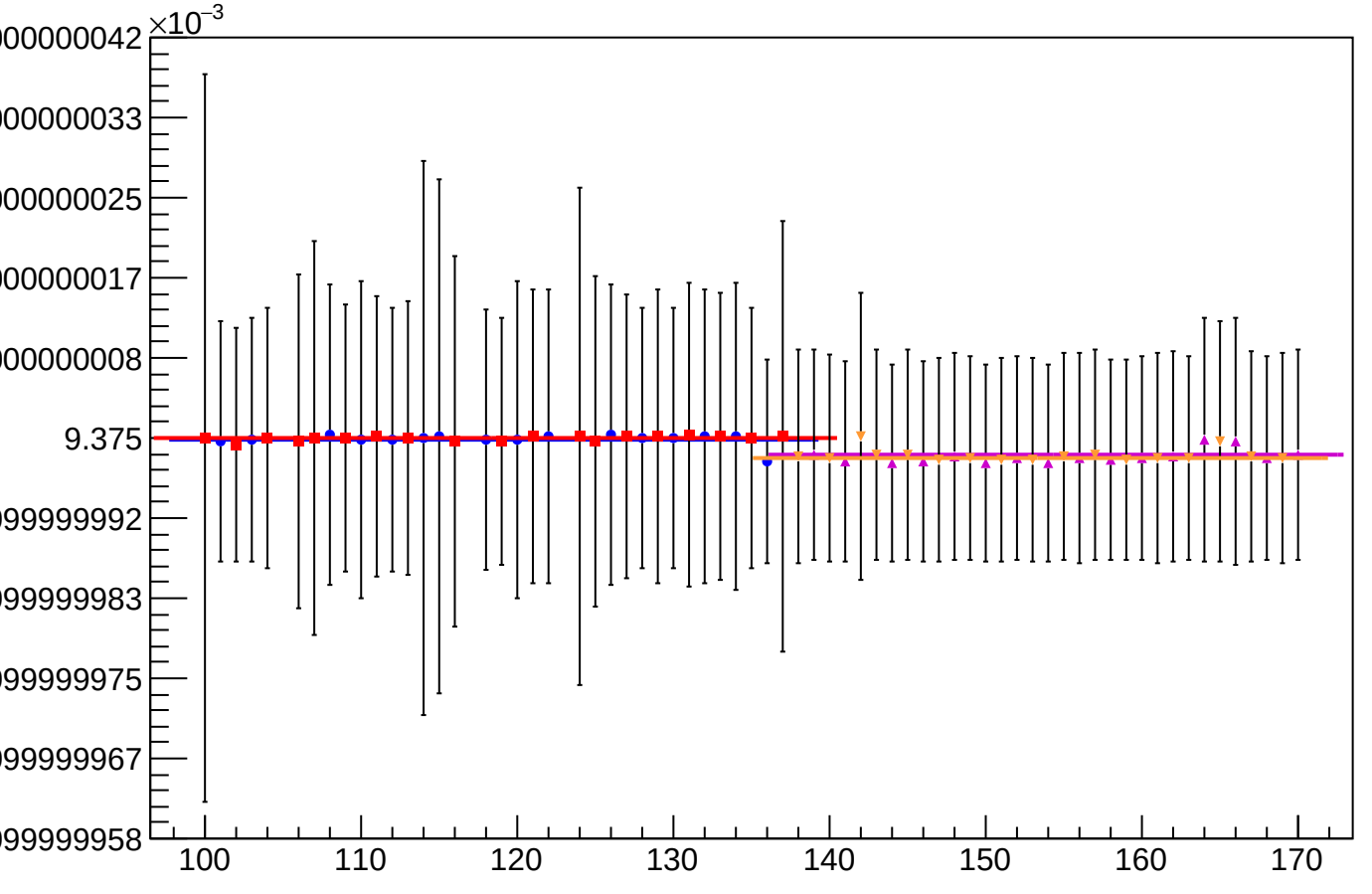
+ sign 977.744+/-0.000 $\chi^2$/NDF: 308588098726504

All: 977.742+/-0.000 $\chi^2$/NDF: 596662779686

- sign 977.741+/-0.000 $\chi^2$/NDF: 287265501584786


hesDipole_current_mean vs Slug
×10⁻³
100
110
120
130
140
150
160
170
9.375
Right In: 0.009+/-0.000 χ²/NDF: 0.1/15
Left Out: 0.009+/-0.000 χ²/NDF:0.0/16
Right Out: 0.009+/-0.000 χ²/NDF: 0.0/18
Left In: 0.009+/-0.000 χ²/NDF:0.1/15
+ sign 0.009+/-0.000 χ²/NDF: 0.2/32
All: 0.009+/-0.000 χ²/NDF: 0.5/67
- sign 0.009+/-0.000 χ²/NDF: 0.3/34

# MSUPERBIGBITEreadcalc_mean vs Slug




Right In: 0.009+/-0.000 $\chi^2$/NDF: 0.1/15

Left Out: 0.009+/-0.000 $\chi^2$/NDF:0.0/16

Right Out: 0.009+/-0.000 $\chi^2$/NDF: 0.0/18

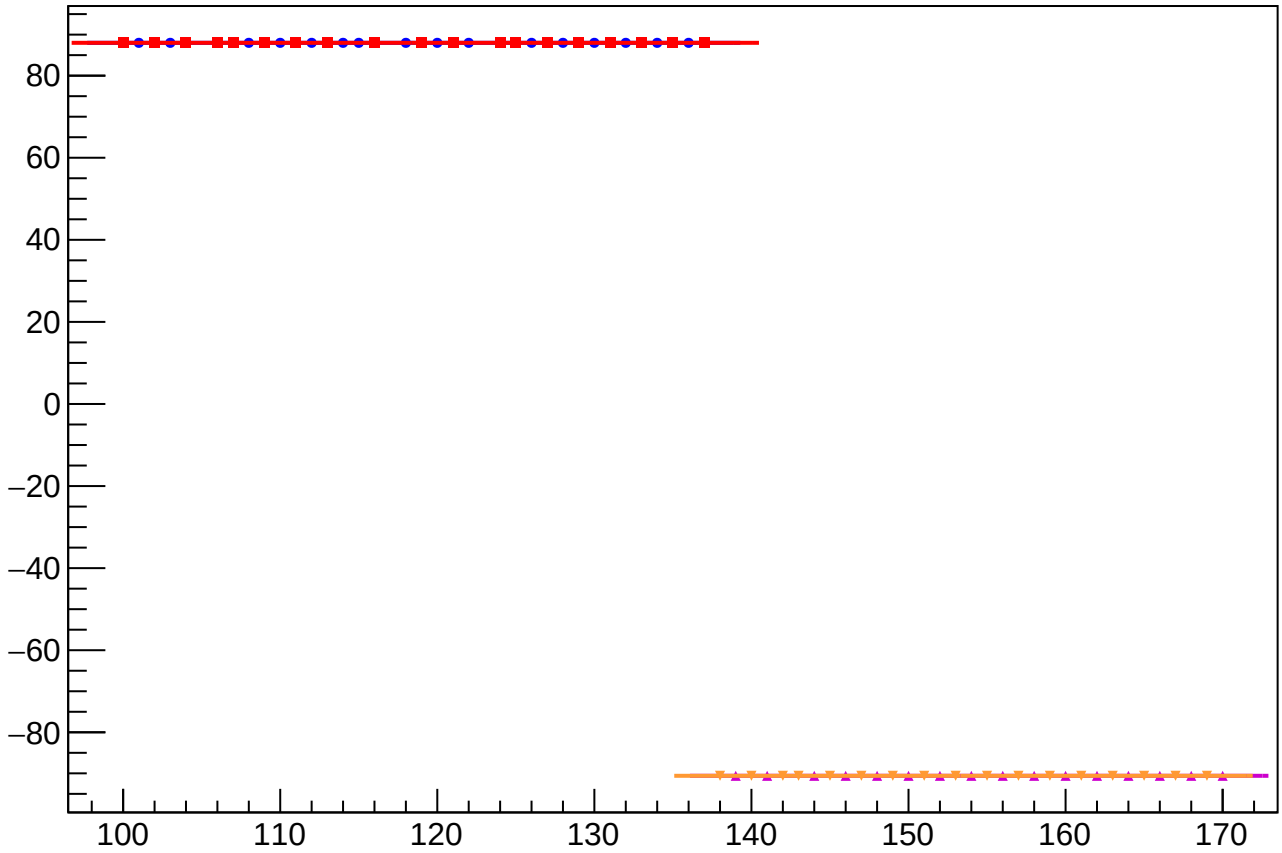
Left In: 0.009+/-0.000 $\chi^2$/NDF:0.1/15

+ sign 0.009+/-0.000 $\chi^2$/NDF: 0.2/32

All: 0.009+/-0.000 $\chi^2$/NDF: 0.5/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 0.3/34

# VWienAngle_mean vs Slug




Right In: 88.001+/-0.000 $\chi^2$/NDF: 1500072.7/15

Left Out: -90.599+/-0.000 $\chi^2$/NDF:4561004.4/16

Right Out: 88.003+/-0.000 $\chi^2$/NDF: 732270589413796643601760911360/18

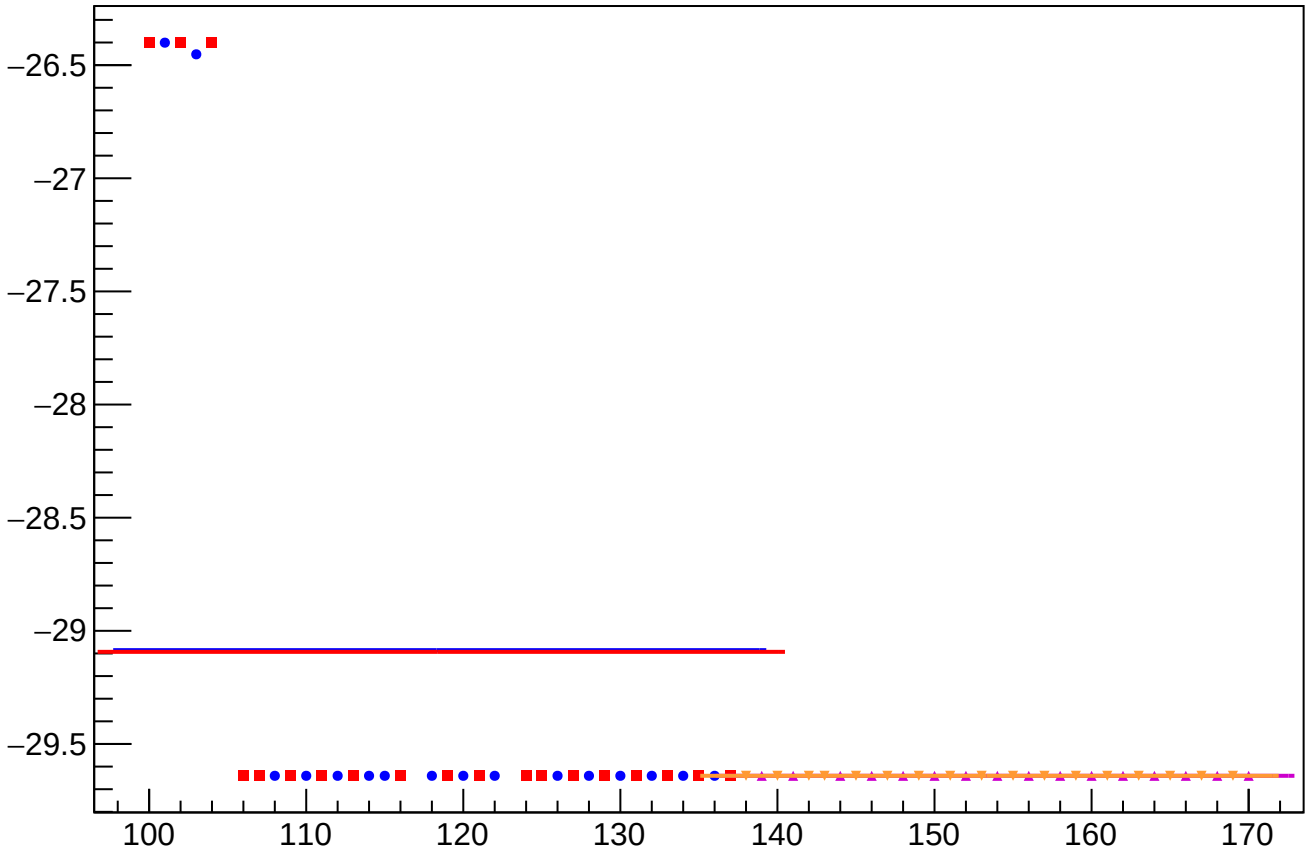
Left In: -90.599+/-0.000 $\chi^2$/NDF:5187852.2/15

+ sign -28.844+/-0.000 $\chi^2$/NDF: 154634701263275

All: -27.824+/-0.000 $\chi^2$/NDF: 311127298358

- sign -26.801+/-0.000 $\chi^2$/NDF: 156447953496816

# HWienAngle_mean vs Slug




Right In: -29.085+/-0.000 $\chi^2$/NDF: 109436788525160987735503641195315 2.0/15

Left Out: -29.641+/-0.000 $\chi^2$/NDF:196129.8/16

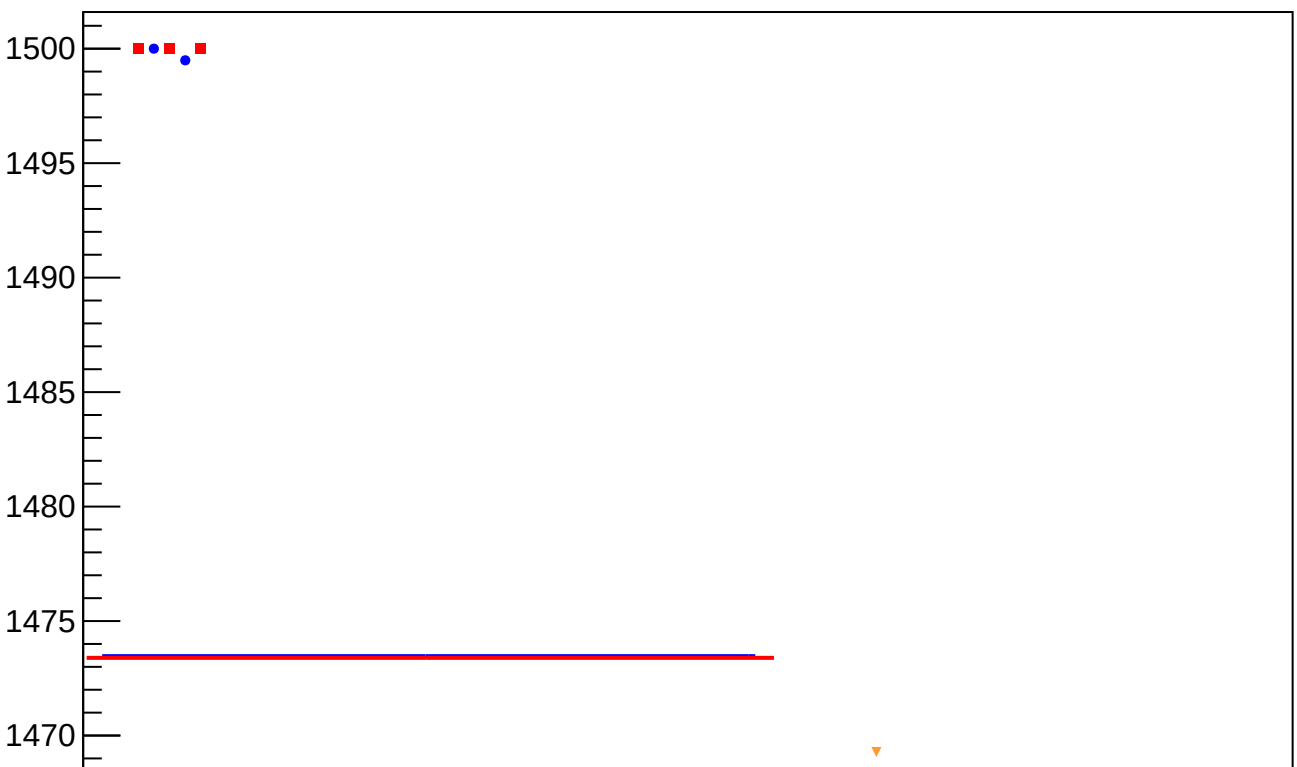
Right Out: -29.093+/-0.000 $\chi^2$/NDF: 112523815674969284979780589977600 0.0/18

Left In: -29.641+/-0.000 $\chi^2$/NDF:139786.2/15

+ sign -29.449+/-0.000 $\chi^2$/NDF: 124385546030264

All: -29.447+/-0.000 $\chi^2$/NDF: 251627624259

- sign -29.445+/-0.000 $\chi^2$/NDF: 127240642921347




Right In: 1473.467+/-0.000 $\chi^2$/NDF: 10689419486070617687848579370477158 4.0/15

+ sign 1469.938+/-0.000 $\chi^2$/NDF: 12113815006616

Left Out: 1468.073+/-0.000 $\chi^2$/NDF:13722893683839701436429106151424 0.0/16

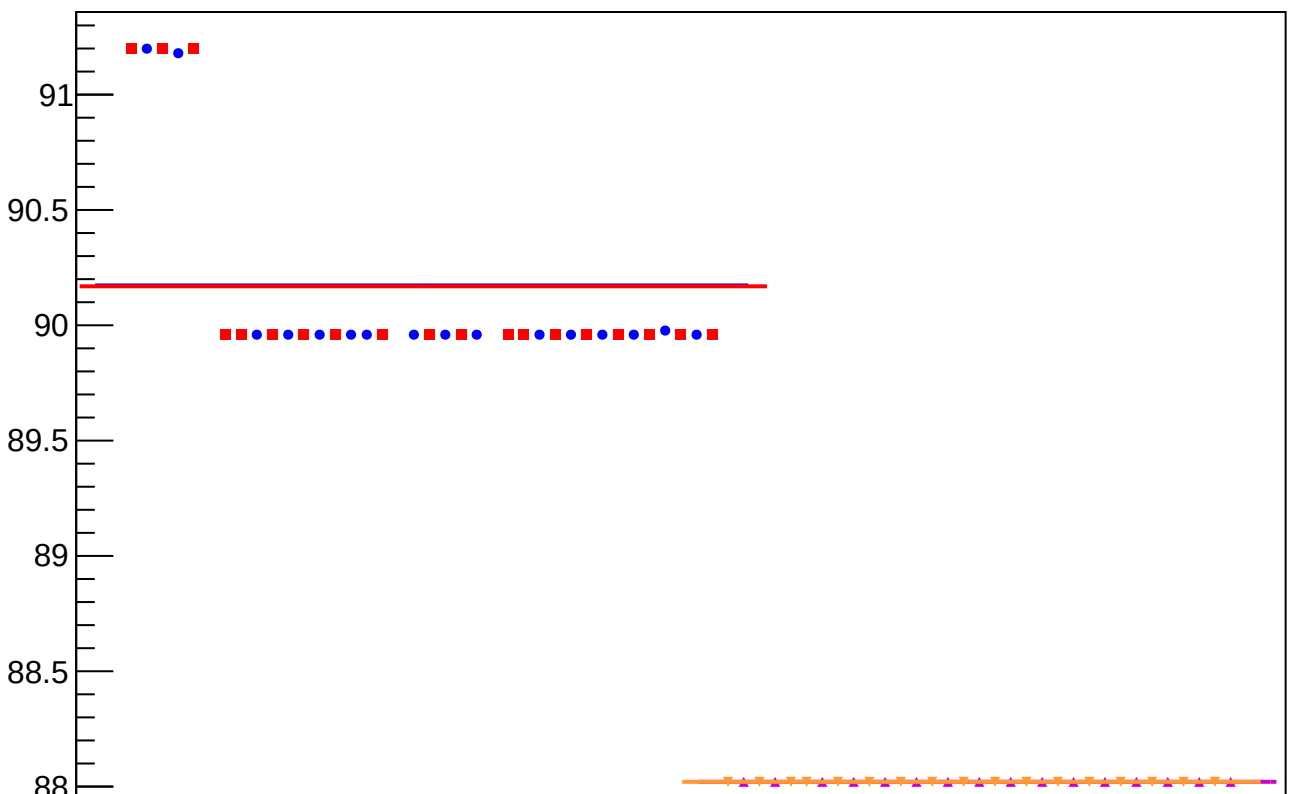
All: 1469.930+/-0.000 $\chi^2$/NDF: 245358953 33

Right Out: 1473.393+/-0.000 $\chi^2$/NDF: 10990949973340107876106784330062233 6.0/18

- sign 1469.921+/-0.000 $\chi^2$/NDF: 12422047991547

Left In: 1467.991+/-0.000 $\chi^2$/NDF:13138412232662398089119662080 0.0/15

# Phi_FG_mean vs Slug




Right In: 90.173+/-0.000 $\chi^2$/NDF: 160010492173064584437589858058240.0/15

Left Out: 88.021+/-0.000 $\chi^2$/NDF:3850550.0/16

Right Out: 90.169+/-0.000 $\chi^2$/NDF: 164815404456112641329707295440896.0/18

Left In: 88.021+/-0.000 $\chi^2$/NDF:5103033.9/15

+ sign 88.765+/-0.000 $\chi^2$/NDF: 2405186391328345

All: 88.776+/-0.000 $\chi^2$/NDF: 483396956092

- sign 88.788+/-0.000 $\chi^2$/NDF: 2428205324759898

# IGL1I00DI24_24M_mean vs Slug

Right In: 16.009+/-0.000 $\chi^2$/NDF: 44239.3/15

Left Out: 17.009+/-0.000 $\chi^2$/NDF:208172300850888965221253120.0/16

Right Out: 17.009+/-0.000 $\chi^2$/NDF: 13878987313036743260766208.0/18

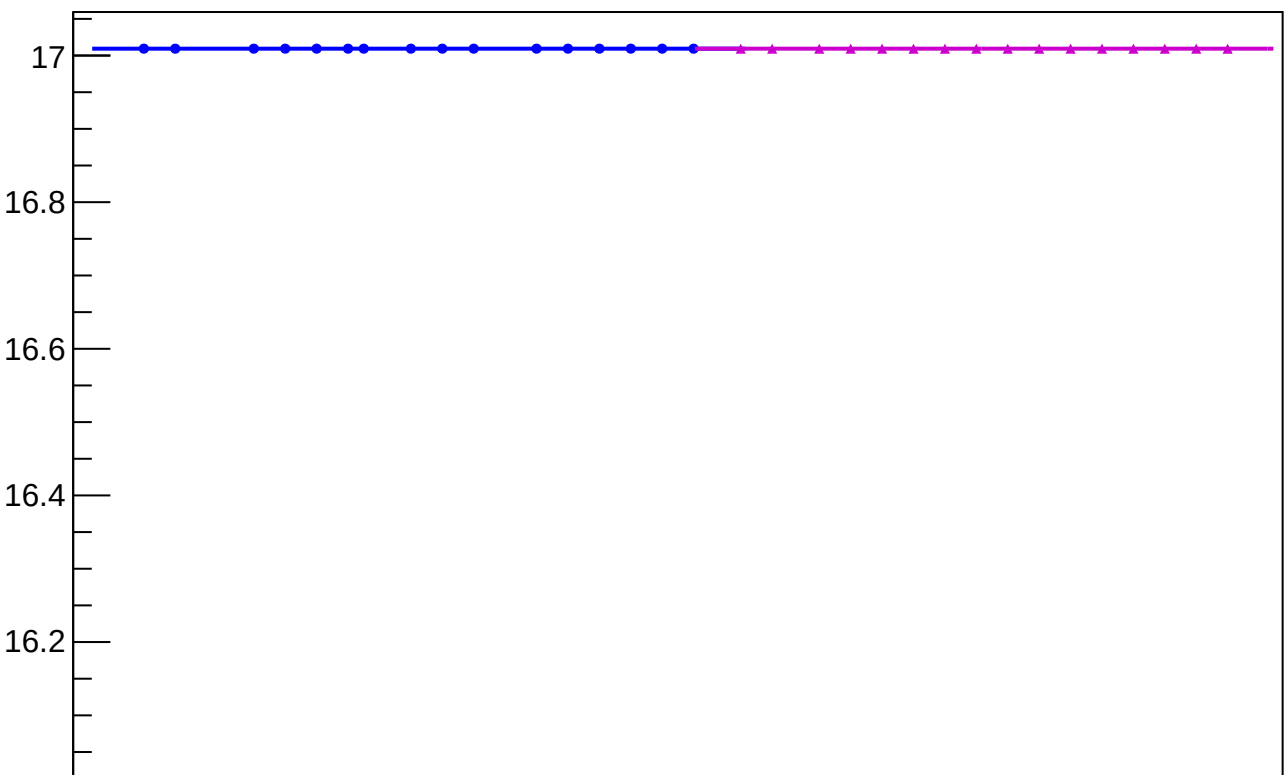
Left In: 16.009+/-0.000 $\chi^2$/NDF:12253095515587944959180 8.0/15

+ sign 16.657+/-0.000 $\chi^2$/NDF: 4543585993102177

All: 16.510+/-0.000 $\chi^2$/NDF: 988758998491

- sign 16.362+/-0.000 $\chi^2$/NDF: 4485197789046272

# IGL1I00OD16_16_mean vs Slug




Right In: 17.009+/-0.000 $\chi^2$/NDF: 126634.3/15

Left Out: 16.009+/-0.000 $\chi^2$/NDF:63740.0/16

Right Out: 16.009+/-0.000 $\chi^2$/NDF: 39518.8/18

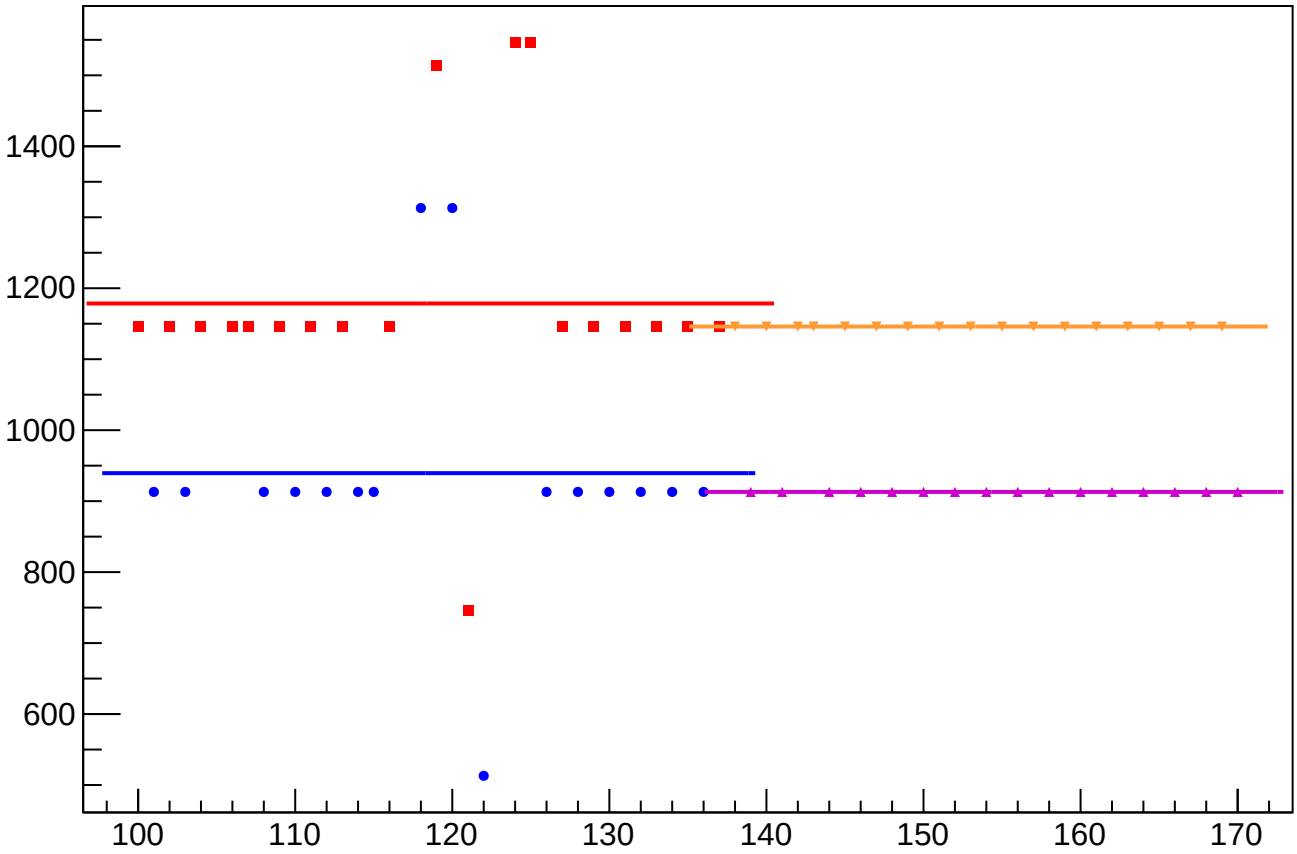
Left In: 17.009+/-0.000 $\chi^2$/NDF:109034345022865199333376.0/15

+ sign 16.346+/-0.000 $\chi^2$/NDF: 4689766666666667

All: 16.498+/-0.000 $\chi^2$/NDF: 105223332948

- sign 16.650+/-0.000 $\chi^2$/NDF: 4861029163835006

# RTPAPOSUCNT_mean vs Slug




Right In: 939.446+/-0.000 $\chi^2$/NDF: 21082933856092788763552768673189986304.0/15

+ sign 1074.586+/-0.000 $\chi^2$/NDF: 41768047364184

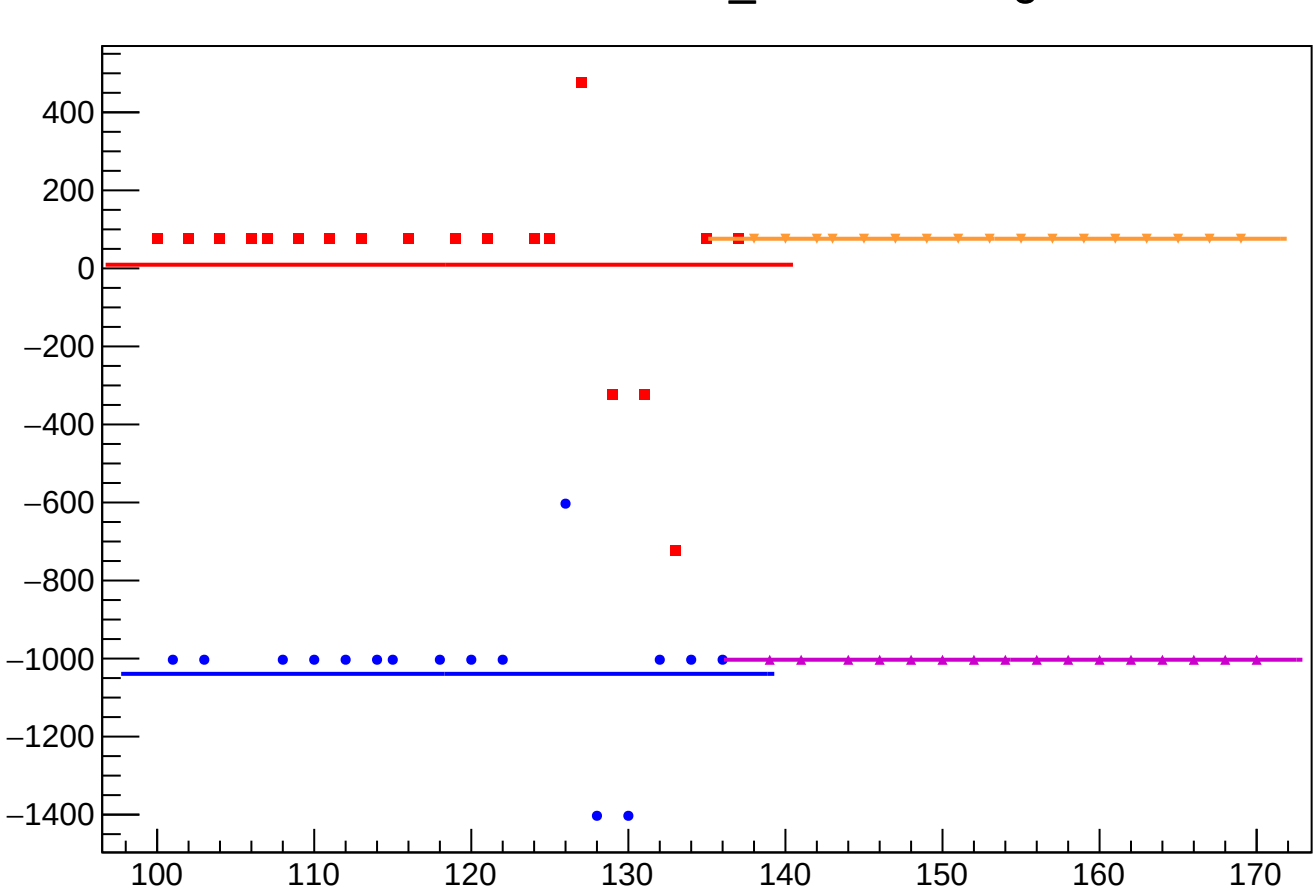
Left Out: 1146.011+/-0.000 $\chi^2$/NDF:539787745506340788474426163 2.0/16

All: 1041.268+/-0.000 $\chi^2$/NDF: 1032506730

Right Out: 1178.513+/-0.000 $\chi^2$/NDF: 22140259958123277565481106114837741568.0/18

- sign 1007.840+/-0.000 $\chi^2$/NDF: 56716963592768

Left In: 912.995+/-0.000 $\chi^2$/NDF:17761477532087409565189013504.0/15




Right In: -1039.157+/-0.000 $\chi^2$/NDF: 228703773085071640027081015550845911104.0/15

+ sign -309.588+/-0.000 $\chi^2$/NDF: 62574152978434

Left Out: 76.011+/-0.000 $\chi^2$/NDF:9809040197852509361938628608.0/16

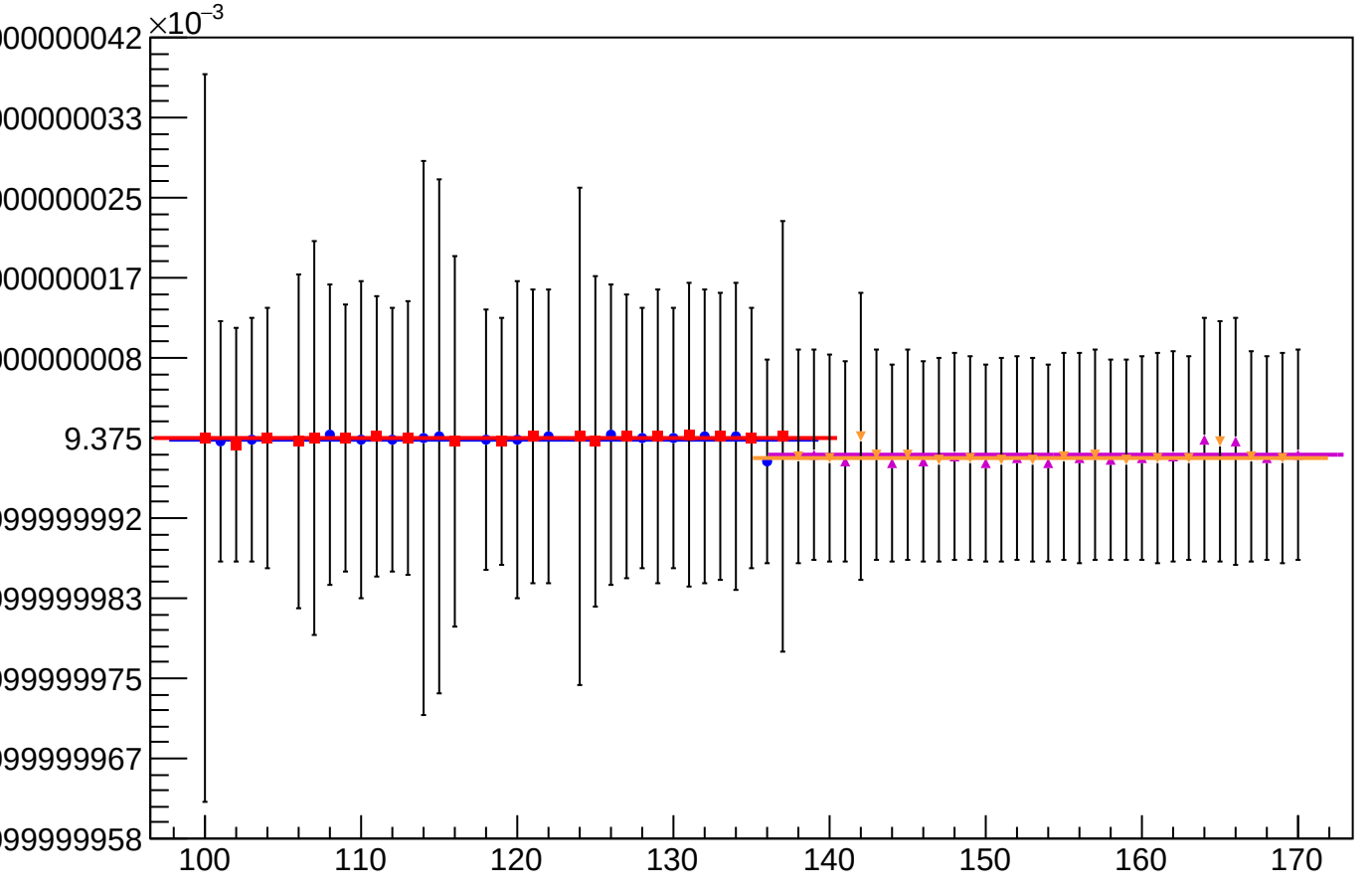
All: -475.194+/-0.000 $\chi^2$/NDF: 1292243874

Right Out: 9.430+/-0.000 $\chi^2$/NDF: 460573947349287664748937365260515409920.0/18

- sign -641.344+/-0.000 $\chi^2$/NDF: 54876422161672

Left In: -1002.990+/-0.000 $\chi^2$/NDF:22745077715414800597264629760.0/15

# RTPPITA1CNT_mean vs Slug




Right In: 0.009+/-0.000 $\chi^2$/NDF: 0.1/15

Left Out: 0.009+/-0.000 $\chi^2$/NDF:0.0/16

Right Out: 0.009+/-0.000 $\chi^2$/NDF: 0.0/18

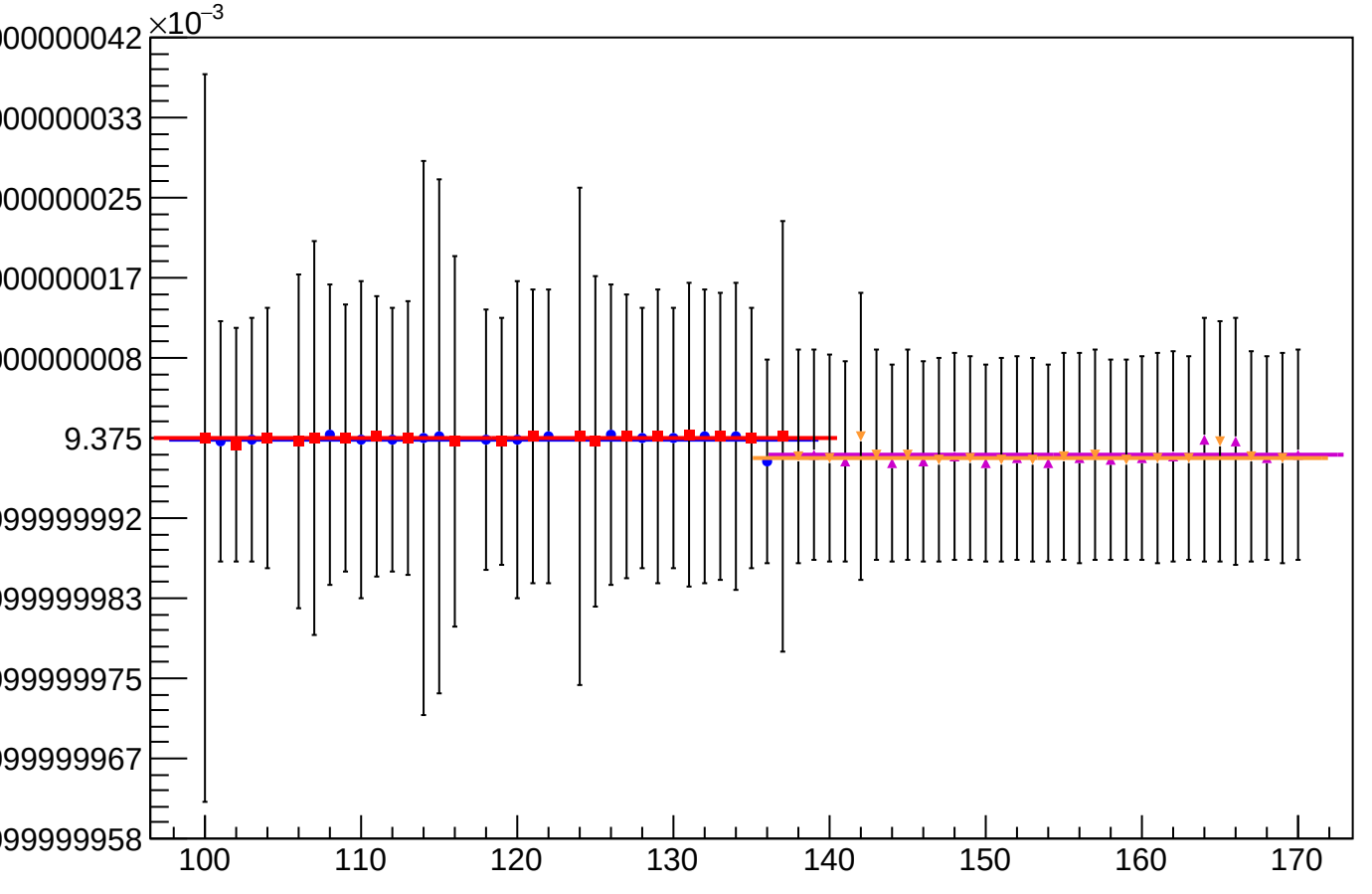
Left In: 0.009+/-0.000 $\chi^2$/NDF:0.1/15

+ sign 0.009+/-0.000 $\chi^2$/NDF: 0.2/32

All: 0.009+/-0.000 $\chi^2$/NDF: 0.5/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 0.3/34

# RTPPITA2CNT_mean vs Slug




Right In: 0.009+/-0.000 $\chi^2$/NDF: 0.1/15

Left Out: 0.009+/-0.000 $\chi^2$/NDF:0.0/16

Right Out: 0.009+/-0.000 $\chi^2$/NDF: 0.0/18

Left In: 0.009+/-0.000 $\chi^2$/NDF:0.1/15

+ sign 0.009+/-0.000 $\chi^2$/NDF: 0.2/32

All: 0.009+/-0.000 $\chi^2$/NDF: 0.5/67

- sign 0.009+/-0.000 $\chi^2$/NDF: 0.3/34