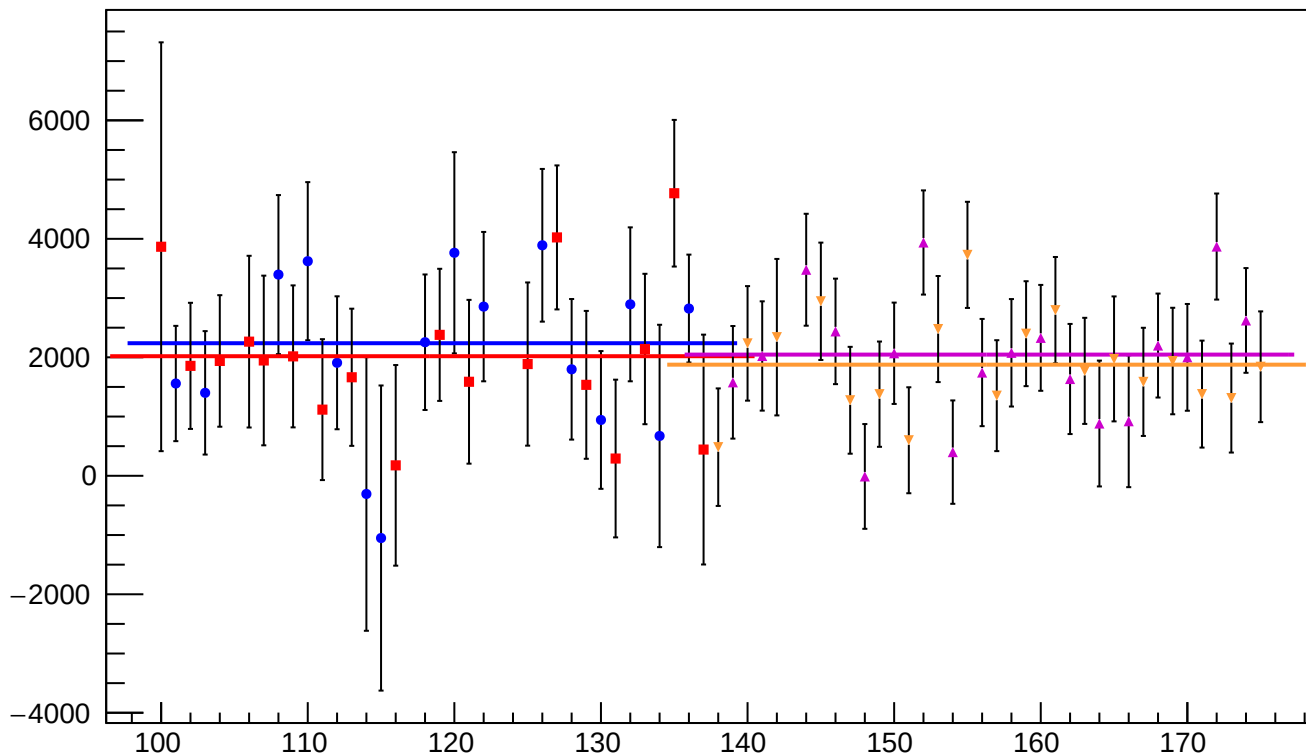


# dit\_asym\_us\_avg\_mean vs Slug, Sign Corrected



Right In: 2237.929+/-314.642

Left Out: 1875.820+/-214.607

Right Out: 2018.625+/-308.362

Left In: 2045.732+/-215.595

$\chi^2/\text{NDF}$ : 11.3/15

$\chi^2/\text{NDF}$ :13.4/18

$\chi^2/\text{NDF}$ : 12.6/17

$\chi^2/\text{NDF}$ :23.6/17

Left: 1960.386+/-152.098

Right: 2126.067+/-220.232

In: 2107.139+/-177.849

Out: 1922.419+/-176.147

$\chi^2/\text{NDF}$ : 37.3/36

$\chi^2/\text{NDF}$ : 24.1/33

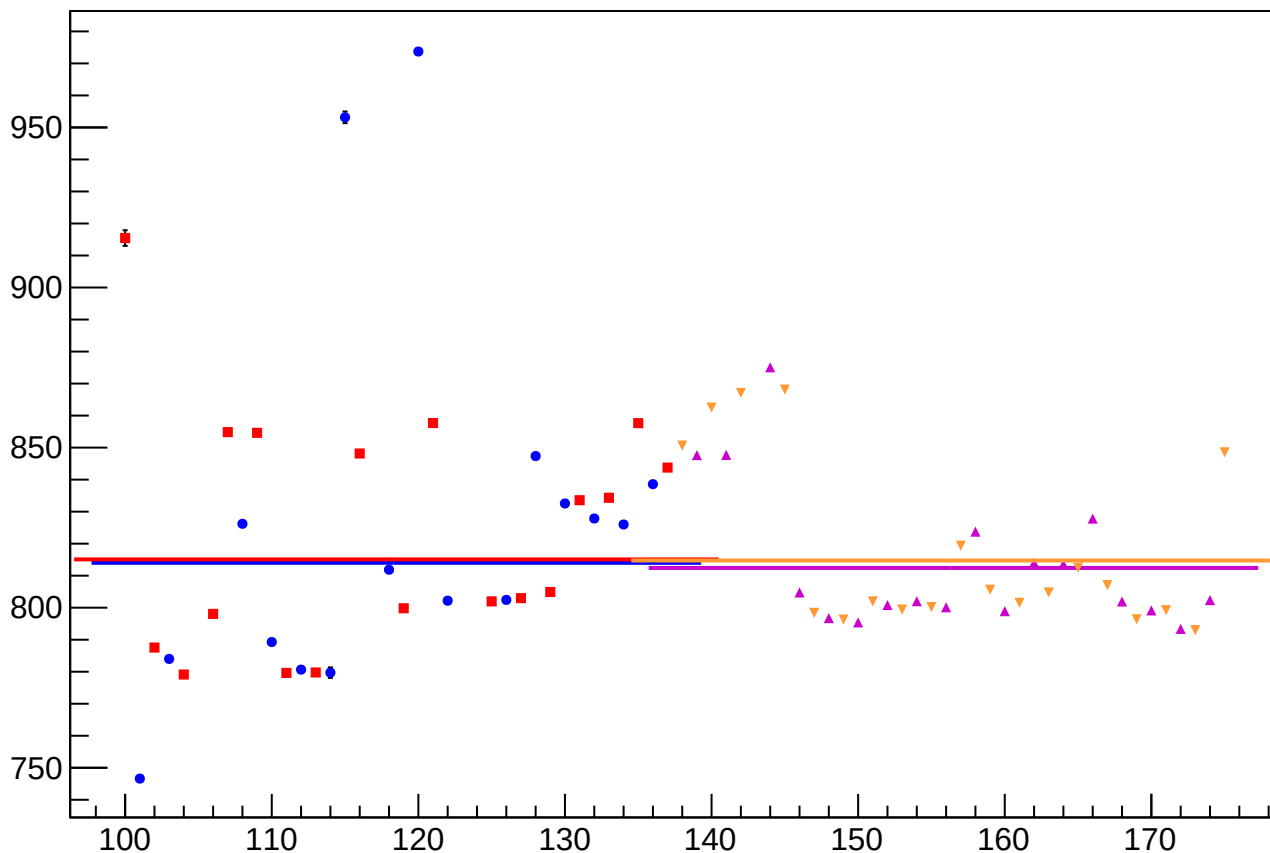
$\chi^2/\text{NDF}$ :35.2/33

$\chi^2/\text{NDF}$ :26.2/36

All: 2013.890+/-125.152

$\chi^2/\text{NDF}$ : 61.9/70

# dit\_asym\_us\_avg\_rms vs Slug, Sign Corrected



Right In: 814.021+/-0.222  $\chi^2/\text{NDF}$ : 42041.6/15

Left Out: 814.740+/-0.152  $\chi^2/\text{NDF}$ : 25742.9/18

Right Out: 815.084+/-0.218  $\chi^2/\text{NDF}$ : 19959.3/17

Left In: 812.410+/-0.152  $\chi^2/\text{NDF}$ : 20089.0/17

Left: 813.580+/-0.108  $\chi^2/\text{NDF}$ : 45949.3/36

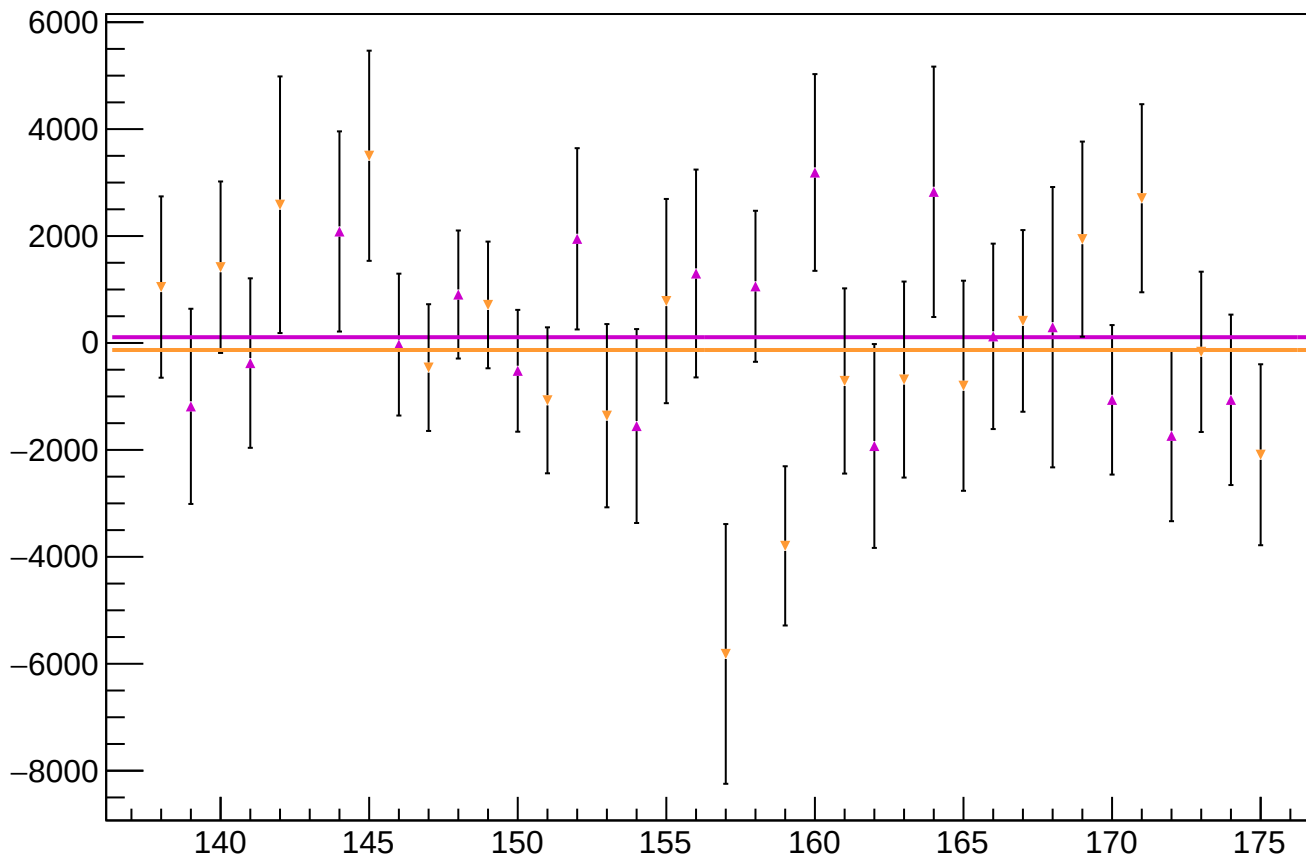
Right: 814.563+/-0.156  $\chi^2/\text{NDF}$ : 62012.6/33

In: 812.925+/-0.126  $\chi^2/\text{NDF}$ : 62166.4/33

Out: 814.852+/-0.125  $\chi^2/\text{NDF}$ : 45703.9/36

All: 813.898+/-0.088  $\chi^2/\text{NDF}$ : 107988.8/70

asym\_us\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -131.290+/-377.439  $\chi^2/\text{NDF}$ :25.1/18

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 108.120+/-378.882  $\chi^2/\text{NDF}$ :13.2/17

Left: -12.042+/-267.399  $\chi^2/\text{NDF}$ : 38.5/36

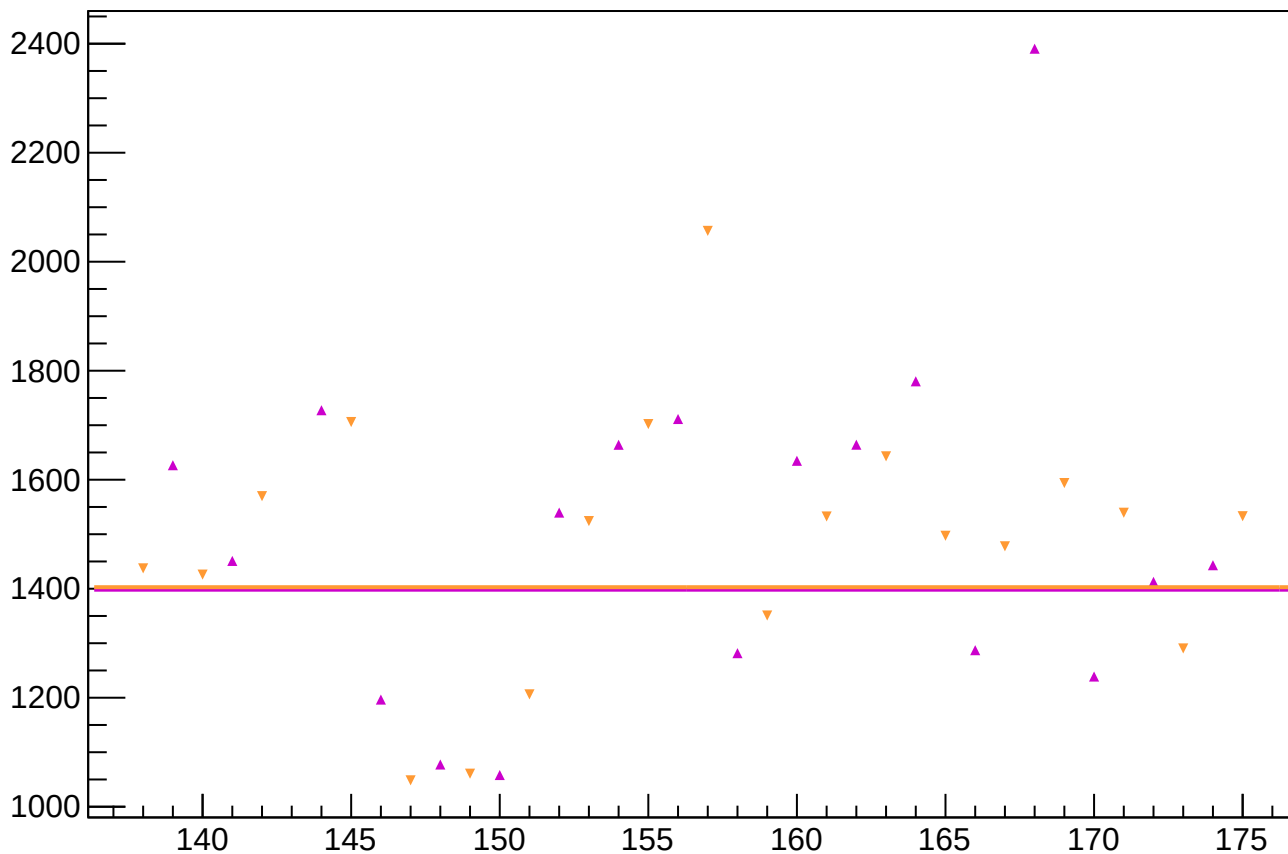
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 108.120+/-378.882  $\chi^2/\text{NDF}$ :13.2/17

Out: -131.290+/-377.439  $\chi^2/\text{NDF}$ :25.1/18

All: -12.042+/-267.399  $\chi^2/\text{NDF}$ : 38.5/36

asym\_us\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1402.759+/-0.267  $\chi^2/\text{NDF}$ : 763225.0/18

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1398.241+/-0.268  $\chi^2/\text{NDF}$ : 1033754.2/17

Left: 1400.509+/-0.189  $\chi^2/\text{NDF}$ : 1797122.0/36

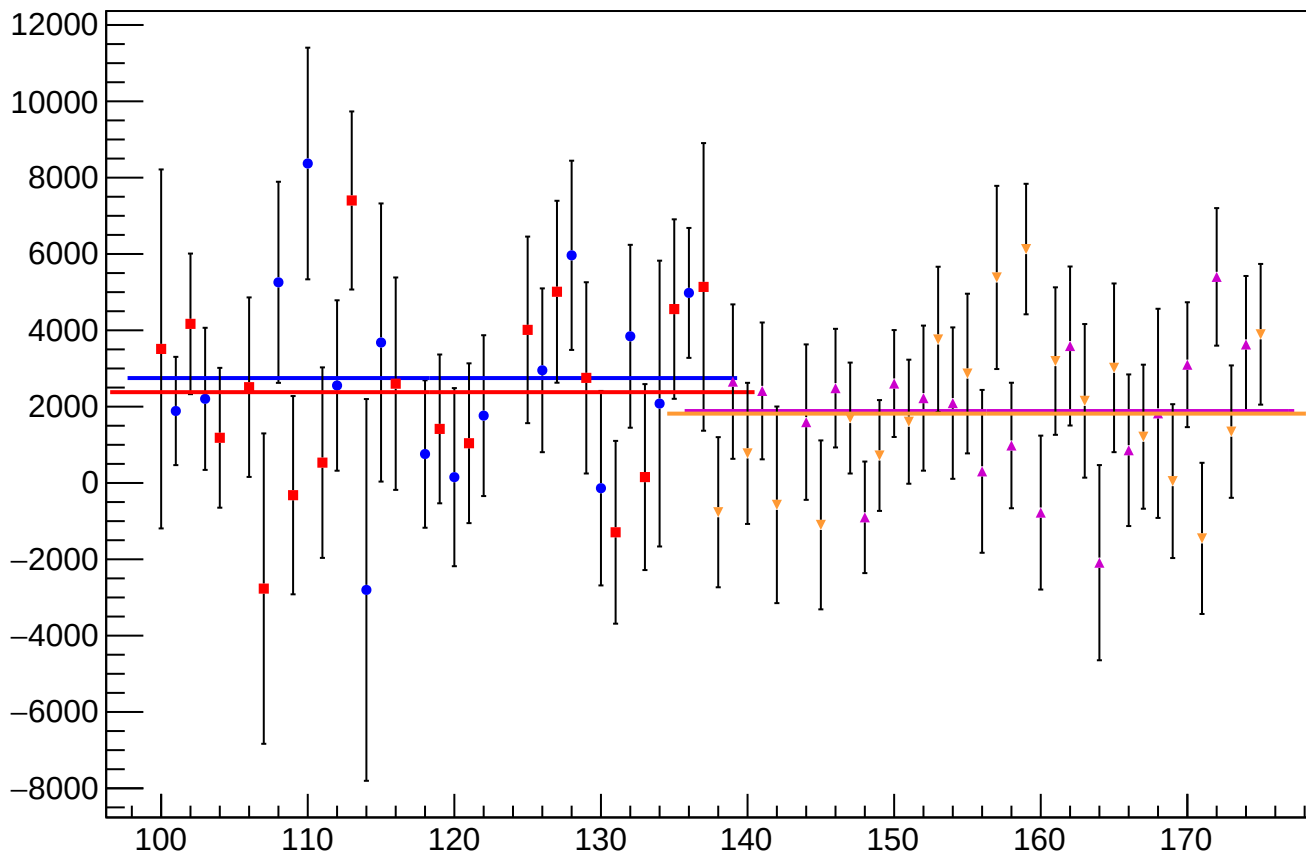
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 1398.241+/-0.268  $\chi^2/\text{NDF}$ : 1033754.2/17

Out: 1402.759+/-0.267  $\chi^2/\text{NDF}$ : 763225.0/18

All: 1400.509+/-0.189  $\chi^2/\text{NDF}$ : 1797122.0/36

# asym\_us\_avg\_mean vs Slug, Sign Corrected



Right In: 2748.777 $\pm$ 562.943  $\chi^2$ /NDF: 13.5/15

Left Out: 1817.024 $\pm$ 431.129  $\chi^2$ /NDF:20.9/18

Right Out: 2379.450 $\pm$ 568.967  $\chi^2$ /NDF: 16.2/17

Left In: 1884.951 $\pm$ 433.681  $\chi^2$ /NDF:15.6/17

Left: 1850.787 $\pm$ 305.752  $\chi^2$ /NDF: 36.5/36

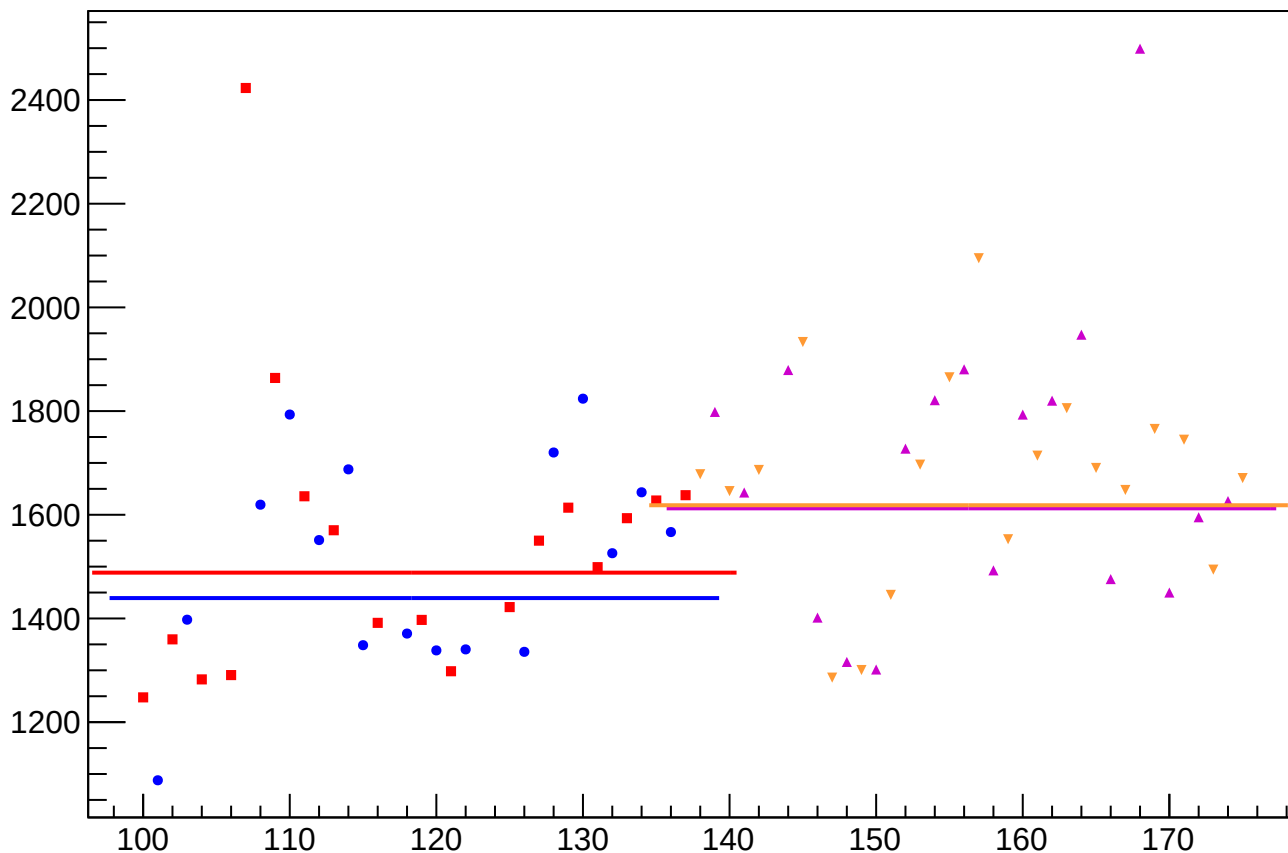
Right: 2566.079 $\pm$ 400.174  $\chi^2$ /NDF: 30.0/33

In: 2206.679 $\pm$ 343.555  $\chi^2$ /NDF:30.6/33

Out: 2022.166 $\pm$ 343.622  $\chi^2$ /NDF:37.7/36

All: 2114.441 $\pm$ 242.954  $\chi^2$ /NDF: 68.5/70

# asym\_us\_avg\_rms vs Slug, Sign Corrected



Right In: 1439.332 $\pm$ 0.398  $\chi^2$ /NDF: 277860.8/15

Left Out: 1618.380 $\pm$ 0.305  $\chi^2$ /NDF: 435803.3/18

Right Out: 1488.384 $\pm$ 0.402  $\chi^2$ /NDF: 256324.7/17

Left In: 1612.397 $\pm$ 0.307  $\chi^2$ /NDF: 650063.6/17

Left: 1615.406 $\pm$ 0.216  $\chi^2$ /NDF: 1086058.3/36

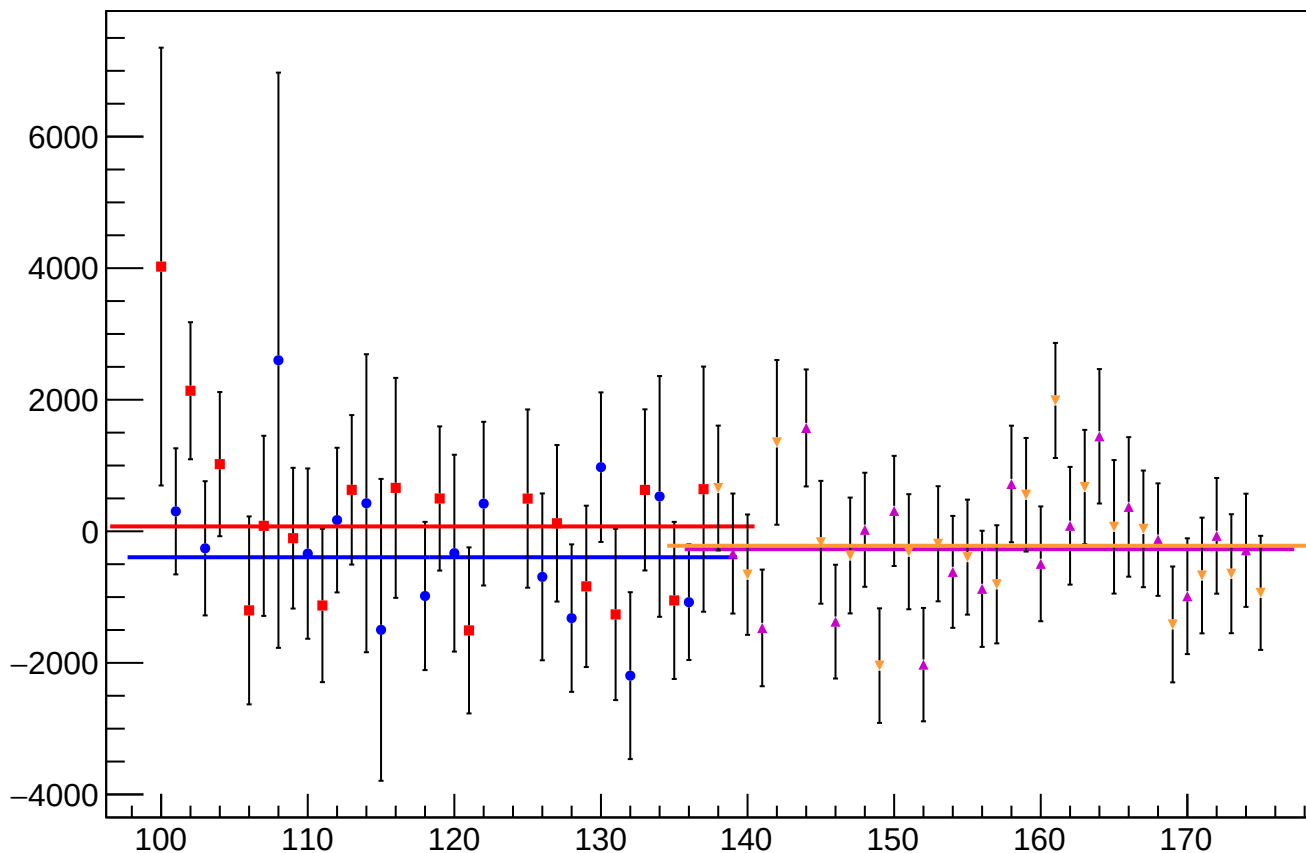
Right: 1463.597 $\pm$ 0.283  $\chi^2$ /NDF: 541697.1/33

In: 1547.940 $\pm$ 0.243  $\chi^2$ /NDF: 1046547.7/33

Out: 1570.964 $\pm$ 0.243  $\chi^2$ /NDF: 758450.8/36

All: 1559.450 $\pm$ 0.172  $\chi^2$ /NDF: 1809489.1/70

# dit\_asym\_us\_dd\_mean vs Slug, Sign Corrected



Right In:  $-394.364 \pm 313.174$   $\chi^2/\text{NDF}$ : 7.4/15

Left Out:  $-219.548 \pm 207.569$   $\chi^2/\text{NDF}$ : 19.0/18

Right Out:  $74.289 \pm 298.398$   $\chi^2/\text{NDF}$ : 12.9/17

Left In:  $-271.329 \pm 209.304$   $\chi^2/\text{NDF}$ : 18.5/17

Left:  $-245.223 \pm 147.383$   $\chi^2/\text{NDF}$ : 37.5/36

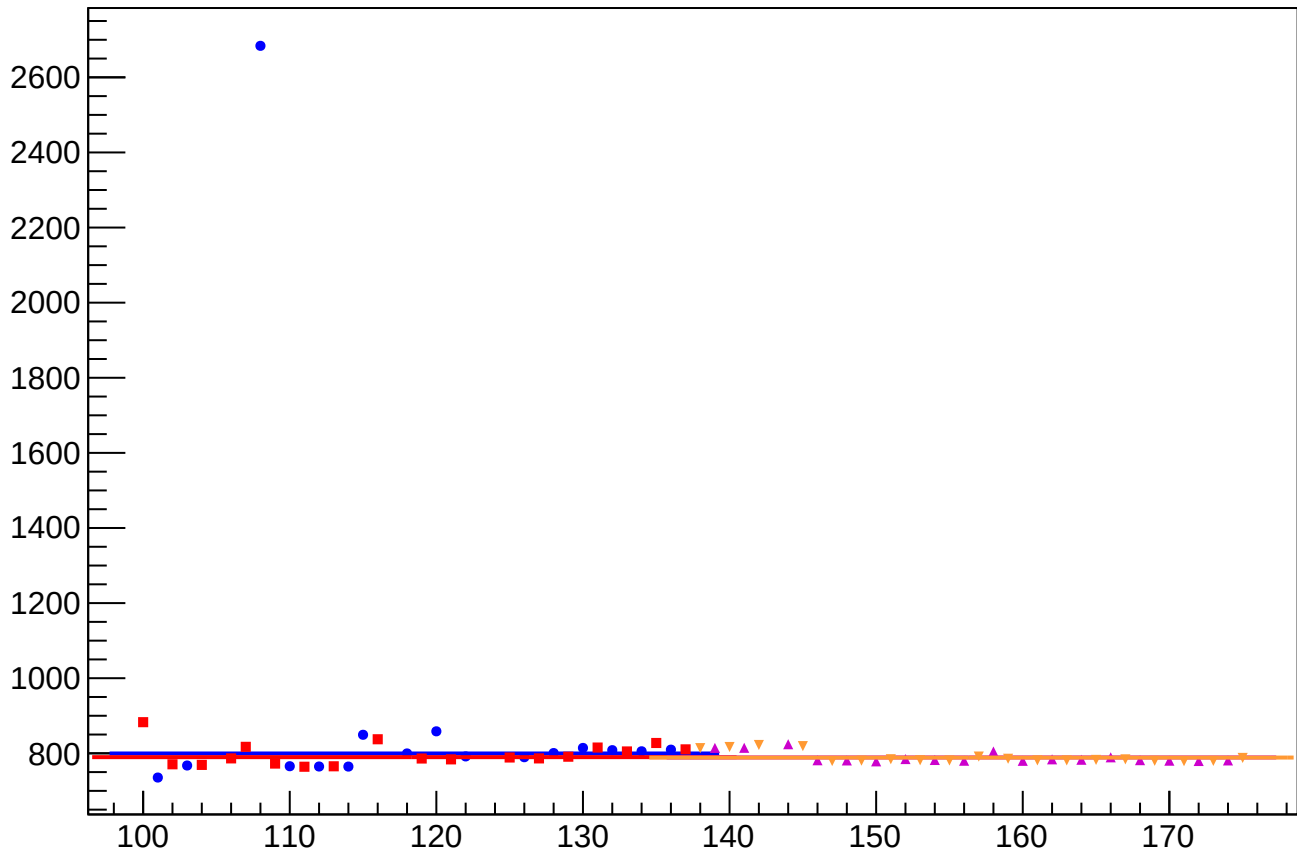
Right:  $-148.721 \pm 216.034$   $\chi^2/\text{NDF}$ : 21.5/33

In:  $-309.317 \pm 174.018$   $\chi^2/\text{NDF}$ : 26.0/33

Out:  $-123.731 \pm 170.398$   $\chi^2/\text{NDF}$ : 32.5/36

All:  $-214.574 \pm 121.749$   $\chi^2/\text{NDF}$ : 59.2/70

# dit\_asym\_us\_dd\_rms vs Slug, Sign Corrected



Right In: 799.537 $\pm$ 0.221  $\chi^2$ /NDF: 391185.9/15

Left Out: 788.698 $\pm$ 0.147  $\chi^2$ /NDF: 8714.9/18

Right Out: 789.794 $\pm$ 0.211  $\chi^2$ /NDF: 11174.9/17

Left In: 788.976 $\pm$ 0.148  $\chi^2$ /NDF: 9067.9/17

Left: 788.836 $\pm$ 0.104  $\chi^2$ /NDF: 17784.6/36

Right: 794.430 $\pm$ 0.153  $\chi^2$ /NDF: 403375.5/33

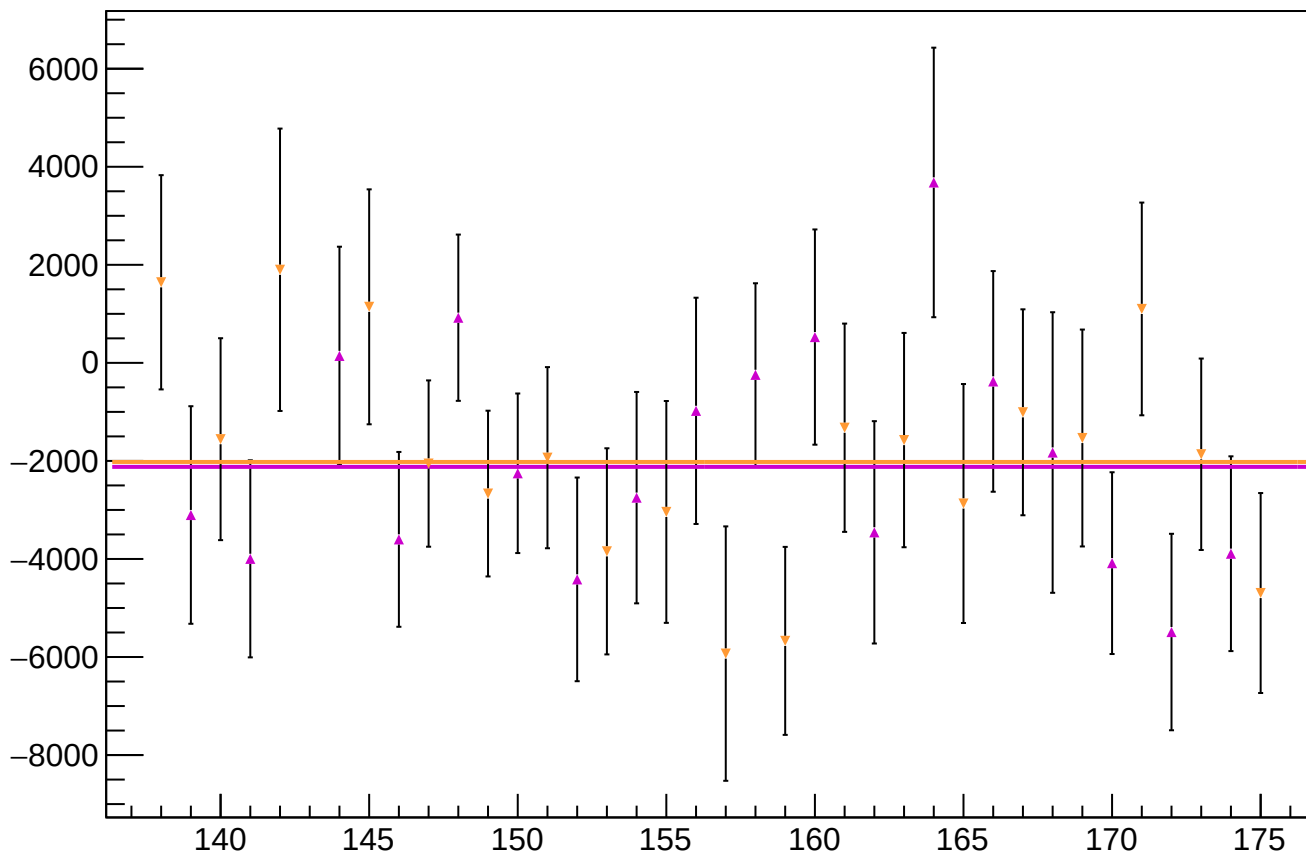
In: 792.237 $\pm$ 0.123  $\chi^2$ /NDF: 401826.0/33

Out: 789.055 $\pm$ 0.120  $\chi^2$ /NDF: 19908.0/36

All: 790.613 $\pm$ 0.086  $\chi^2$ /NDF: 422075.3/70



# asym\_us\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -2021.152+/-481.239  $\chi^2/\text{NDF}$ :17.8/18

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -2121.428+/-484.469  $\chi^2/\text{NDF}$ :20.2/17

Left: -2070.955+/-341.424  $\chi^2/\text{NDF}$ : 38.0/36

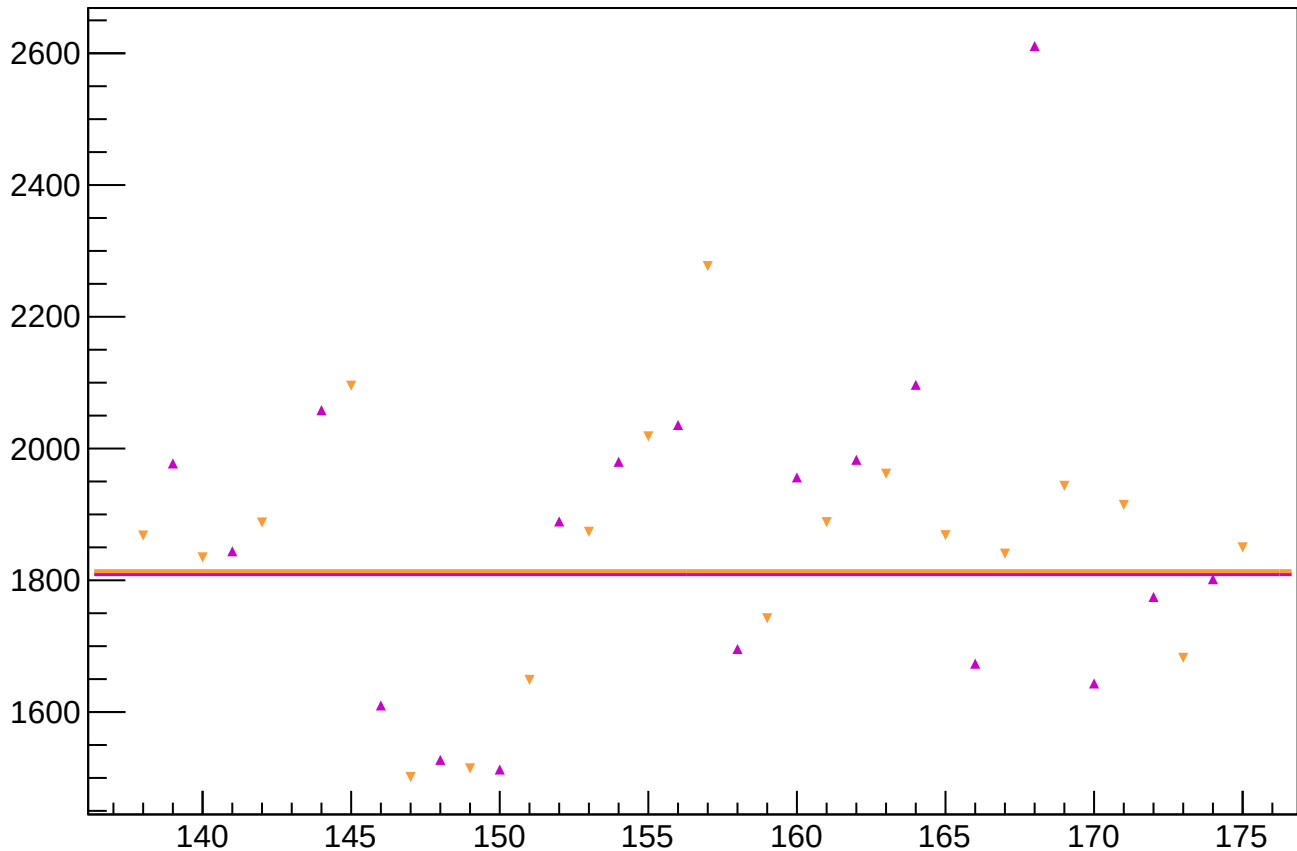
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -2121.428+/-484.469  $\chi^2/\text{NDF}$ :20.2/17

Out: -2021.152+/-481.239  $\chi^2/\text{NDF}$ :17.8/18

All: -2070.955+/-341.424  $\chi^2/\text{NDF}$ : 38.0/36

asym\_us\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1813.878+/-0.340  $\chi^2/\text{NDF}$ :295138.8/18

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1809.322+/-0.343  $\chi^2/\text{NDF}$ :449326.2/17

Left: 1811.616+/-0.241  $\chi^2/\text{NDF}$ : 744554.1/36

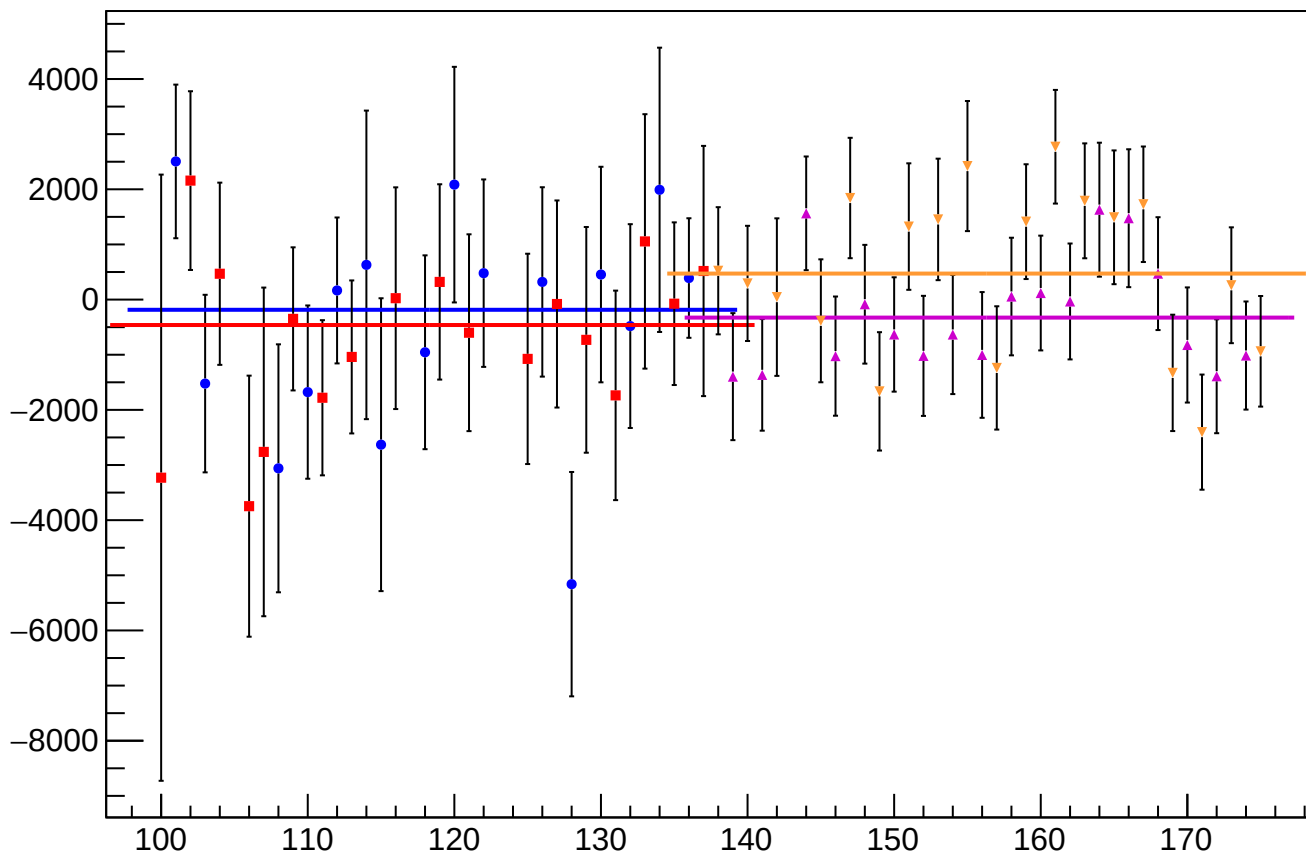
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 1809.322+/-0.343  $\chi^2/\text{NDF}$ :449326.2/17

Out: 1813.878+/-0.340  $\chi^2/\text{NDF}$ :295138.8/18

All: 1811.616+/-0.241  $\chi^2/\text{NDF}$ : 744554.1/36

# asym\_us\_dd\_mean vs Slug, Sign Corrected



Right In:  $-185.054 \pm 431.495$   $\chi^2/\text{NDF}$ : 16.6/15

Left Out:  $471.781 \pm 251.047$   $\chi^2/\text{NDF}$ : 34.7/18

Right Out:  $-461.253 \pm 426.921$   $\chi^2/\text{NDF}$ : 8.3/17

Left In:  $-326.791 \pm 252.650$   $\chi^2/\text{NDF}$ : 14.1/17

Left:  $75.036 \pm 178.081$   $\chi^2/\text{NDF}$ : 53.9/36

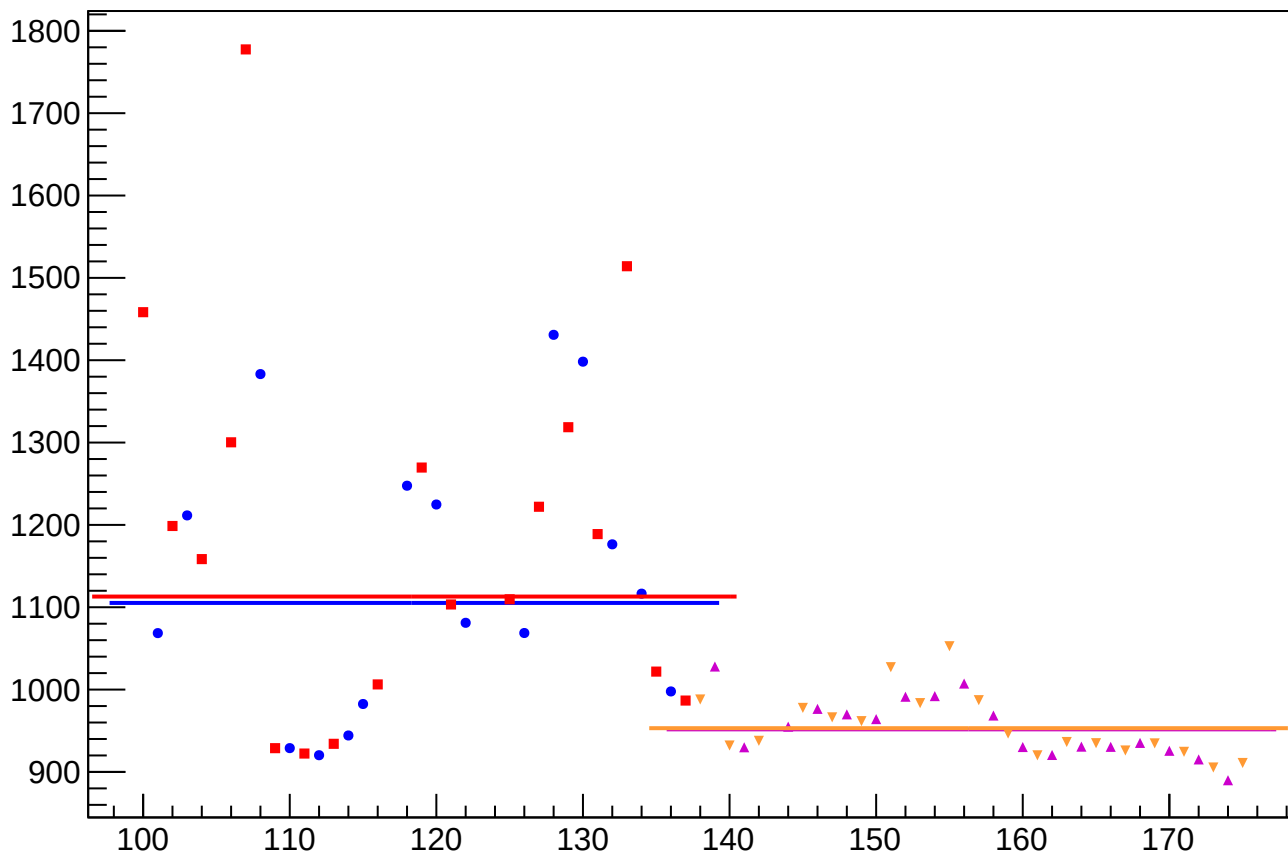
Right:  $-324.625 \pm 303.483$   $\chi^2/\text{NDF}$ : 25.2/33

In:  $-290.604 \pm 218.026$   $\chi^2/\text{NDF}$ : 30.8/33

Out:  $232.044 \pm 216.404$   $\chi^2/\text{NDF}$ : 46.6/36

All:  $-27.330 \pm 153.591$   $\chi^2/\text{NDF}$ : 80.3/70

# asym\_us\_dd\_rms vs Slug, Sign Corrected



Right In: 1105.236 $\pm$ 0.305  $\chi^2$ /NDF: 255366.2/15

Left Out: 953.118 $\pm$ 0.178  $\chi^2$ /NDF: 44450.9/18

Right Out: 1112.974 $\pm$ 0.302  $\chi^2$ /NDF: 362995.4/17

Left In: 951.687 $\pm$ 0.179  $\chi^2$ /NDF: 38324.7/17

Left: 952.407 $\pm$ 0.126  $\chi^2$ /NDF: 82807.8/36

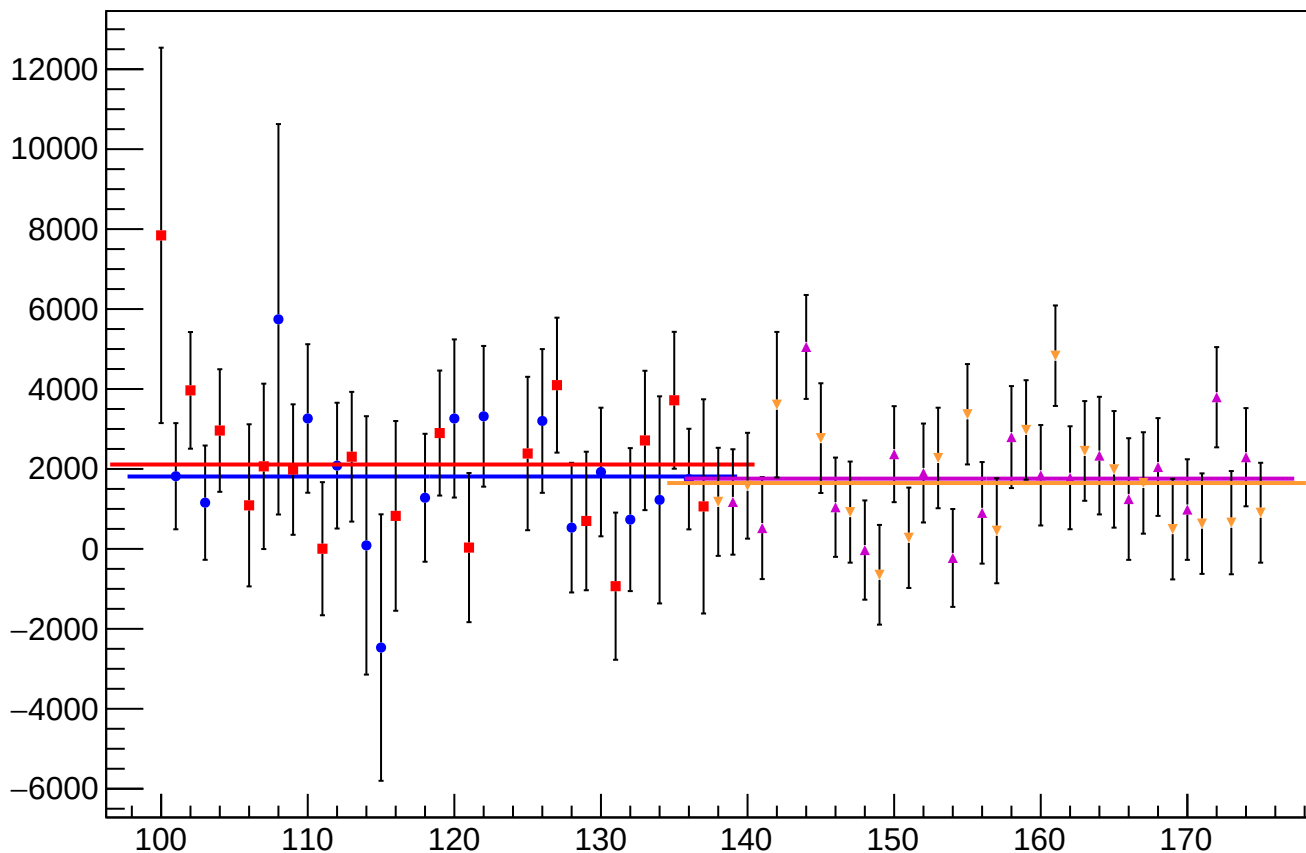
Right: 1109.146 $\pm$ 0.215  $\chi^2$ /NDF: 618686.6/33

In: 990.889 $\pm$ 0.154  $\chi^2$ /NDF: 482293.1/33

Out: 994.192 $\pm$ 0.153  $\chi^2$ /NDF: 615807.7/36

All: 992.553 $\pm$ 0.109  $\chi^2$ /NDF: 1098331.9/70

# dit\_asym\_usl\_mean vs Slug, Sign Corrected



Right In: 1811.054 $\pm$ 442.142  $\chi^2$ /NDF: 6.5/15

Left Out: 1647.596 $\pm$ 298.576  $\chi^2$ /NDF:20.3/18

Right Out: 2111.004 $\pm$ 427.676  $\chi^2$ /NDF: 13.0/17

Left In: 1757.685 $\pm$ 300.757  $\chi^2$ /NDF:17.5/17

Left: 1702.240 $\pm$ 211.892  $\chi^2$ /NDF: 37.8/36

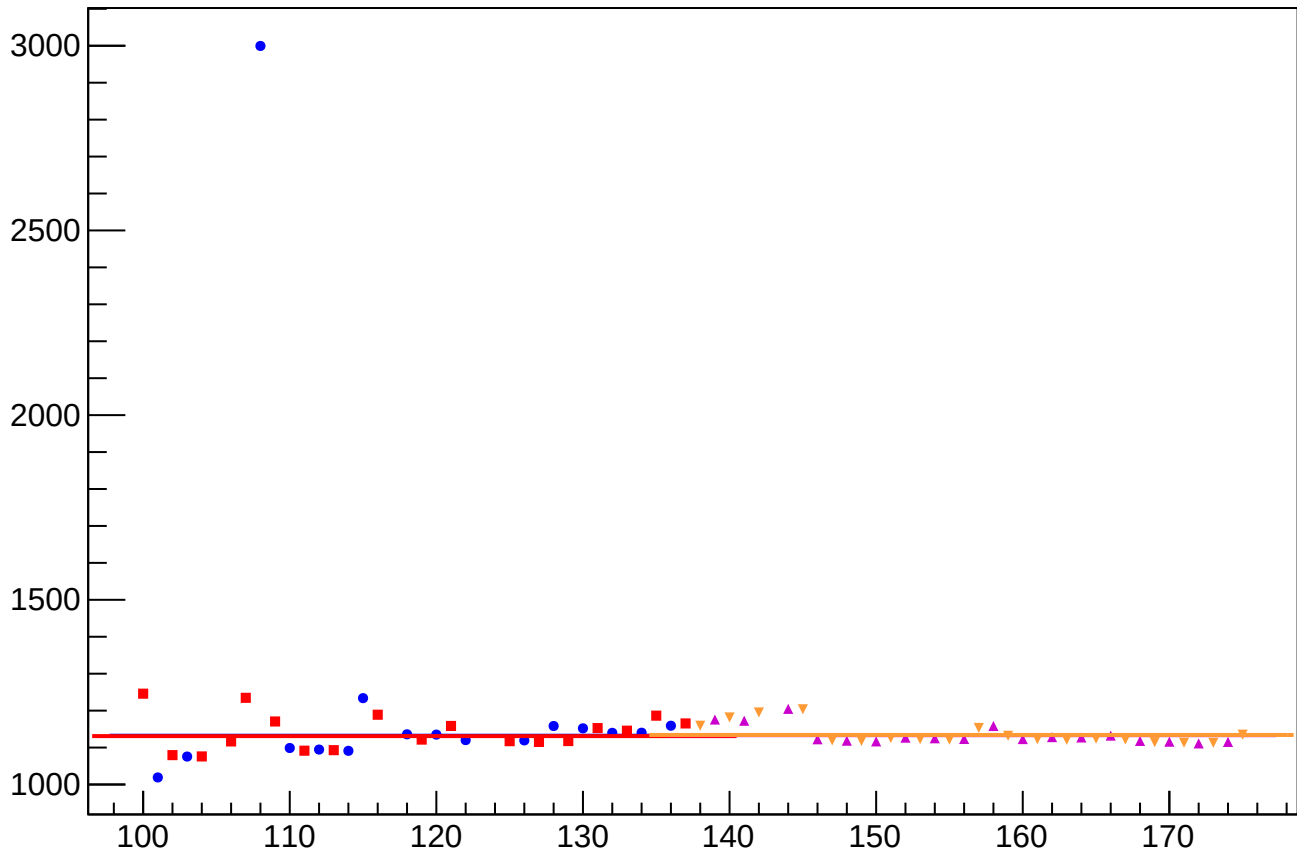
Right: 1966.016 $\pm$ 307.400  $\chi^2$ /NDF: 19.7/33

In: 1774.568 $\pm$ 248.677  $\chi^2$ /NDF:24.0/33

Out: 1799.447 $\pm$ 244.817  $\chi^2$ /NDF:34.1/36

All: 1787.202 $\pm$ 174.461  $\chi^2$ /NDF: 58.1/70

# dit\_asym\_usl\_rms vs Slug, Sign Corrected



Right In: 1132.074+/-0.313  $\chi^2/\text{NDF}$ : 316026.3/15

Left Out: 1134.086+/-0.211  $\chi^2/\text{NDF}$ : 14339.9/18

Right Out: 1131.016+/-0.302  $\chi^2/\text{NDF}$ : 19719.1/17

Left In: 1133.541+/-0.213  $\chi^2/\text{NDF}$ : 13838.0/17

Left: 1133.815+/-0.150  $\chi^2/\text{NDF}$ : 28181.2/36

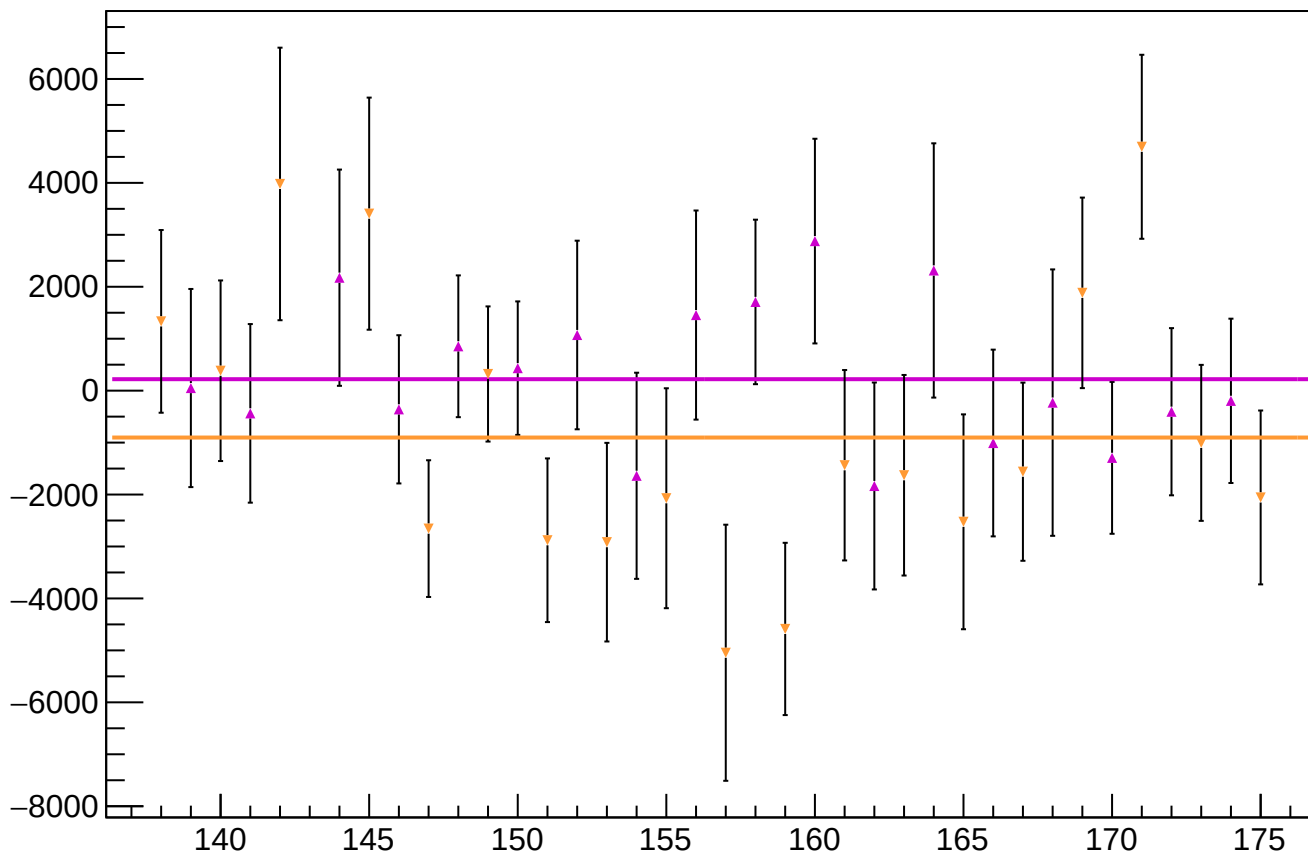
Right: 1131.528+/-0.217  $\chi^2/\text{NDF}$ : 335751.3/33

In: 1133.077+/-0.176  $\chi^2/\text{NDF}$ : 329879.3/33

Out: 1133.080+/-0.173  $\chi^2/\text{NDF}$ : 34128.3/36

All: 1133.078+/-0.123  $\chi^2/\text{NDF}$ : 364007.6/70

# asym\_usl\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -902.523+/-403.150  $\chi^2/\text{NDF}$ :36.5/18

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 220.668+/-405.782  $\chi^2/\text{NDF}$ :9.2/17

Left: -344.581+/-285.996  $\chi^2/\text{NDF}$ : 49.6/36

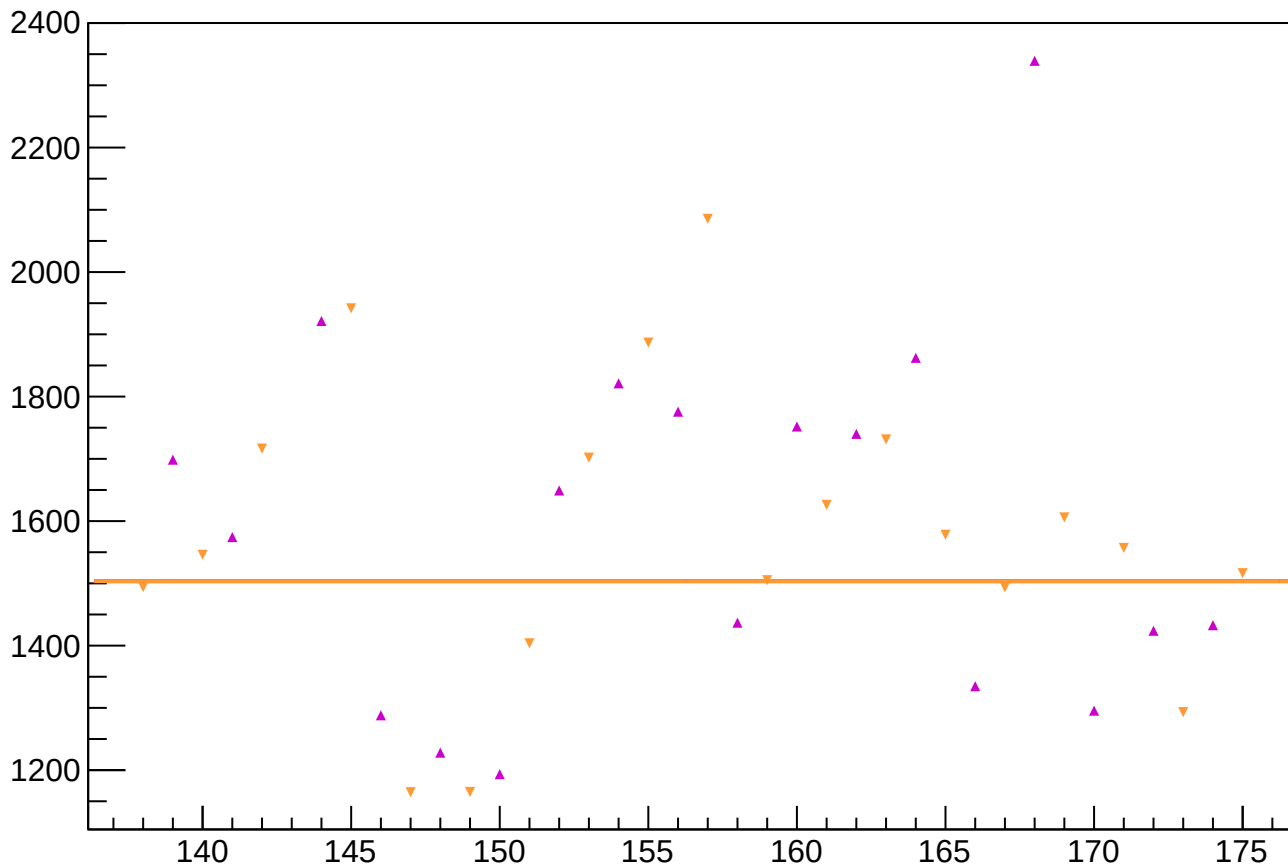
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 220.668+/-405.782  $\chi^2/\text{NDF}$ :9.2/17

Out: -902.523+/-403.150  $\chi^2/\text{NDF}$ :36.5/18

All: -344.581+/-285.996  $\chi^2/\text{NDF}$ : 49.6/36

# asym\_usl\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1503.554+/-0.285  $\chi^2/\text{NDF}$ :652960.0/18

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1503.576+/-0.287  $\chi^2/\text{NDF}$ :835183.4/17

Left: 1503.565+/-0.202  $\chi^2/\text{NDF}$ : 1488143.4/36

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

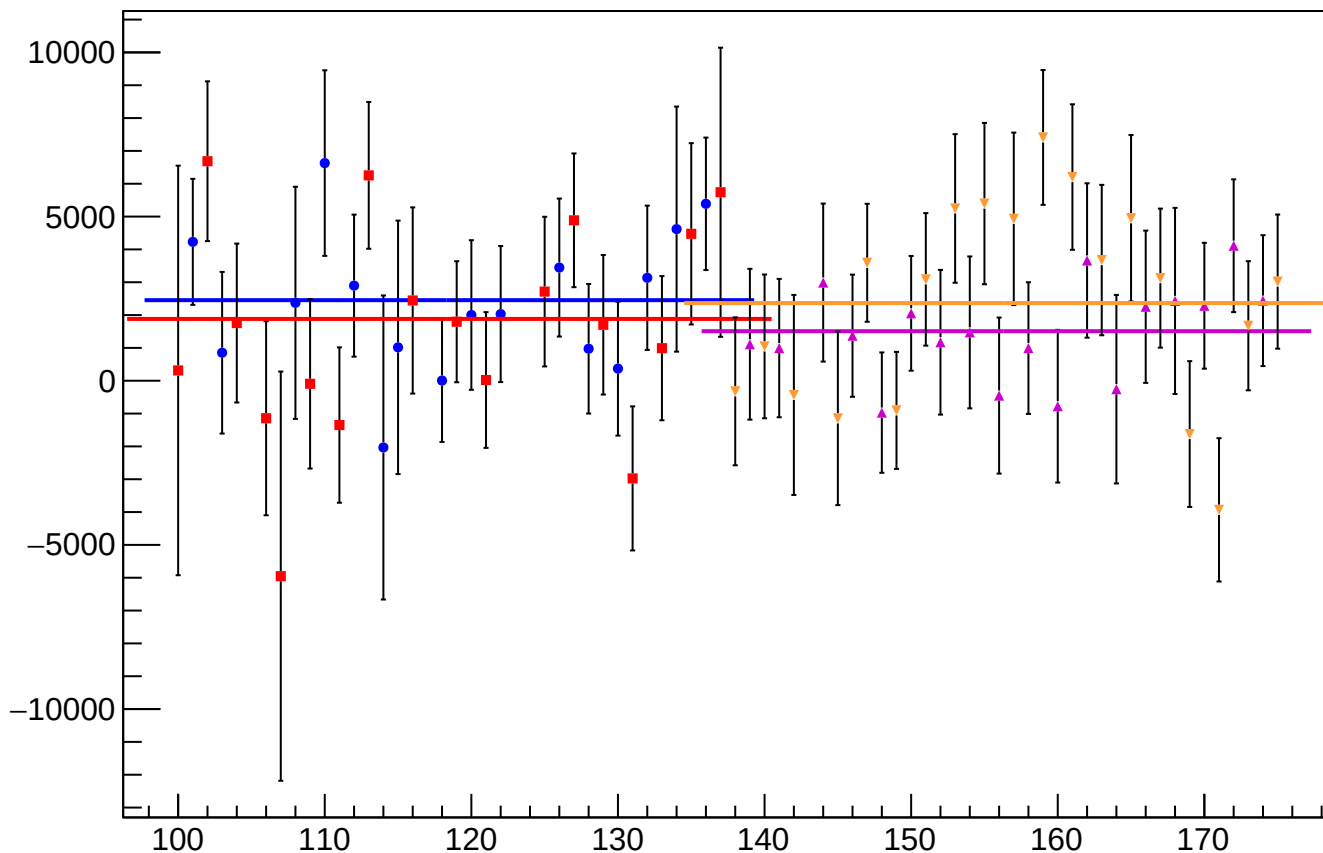
In: 1503.576+/-0.287  $\chi^2/\text{NDF}$ :835183.4/17

Out: 1503.554+/-0.285  $\chi^2/\text{NDF}$ :652960.0/18

All: 1503.565+/-0.202  $\chi^2/\text{NDF}$ : 1488143.4/36



# asym\_usl\_mean vs Slug, Sign Corrected



Right In: 2453.670 $\pm$ 584.307  $\chi^2/\text{NDF}$ : 10.8/15

Left Out: 2365.721 $\pm$ 502.889  $\chi^2/\text{NDF}$ : 34.8/18

Right Out: 1882.755 $\pm$ 583.188  $\chi^2/\text{NDF}$ : 22.8/17

Left In: 1509.173 $\pm$ 507.267  $\chi^2/\text{NDF}$ : 7.6/17

Left: 1941.159 $\pm$ 357.134  $\chi^2/\text{NDF}$ : 43.8/36

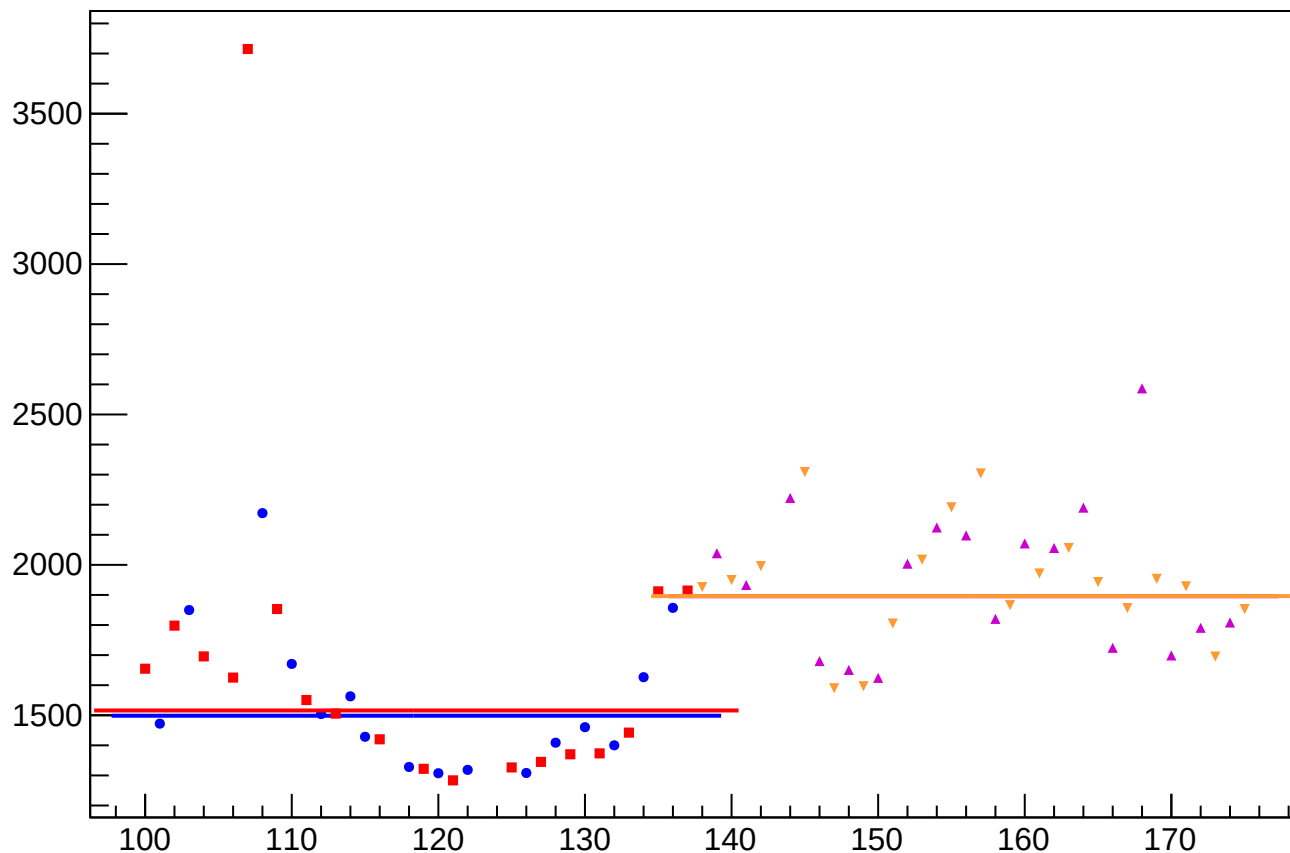
Right: 2167.665 $\pm$ 412.771  $\chi^2/\text{NDF}$ : 34.0/33

In: 1915.092 $\pm$ 383.054  $\chi^2/\text{NDF}$ : 19.8/33

Out: 2159.752 $\pm$ 380.848  $\chi^2/\text{NDF}$ : 57.9/36

All: 2038.129 $\pm$ 270.077  $\chi^2/\text{NDF}$ : 78.0/70

# asym\_usl\_rms vs Slug, Sign Corrected



Right In: 1498.485 $\pm$ 0.413  $\chi^2$ /NDF: 258807.5/15

Left Out: 1896.195 $\pm$ 0.356  $\chi^2$ /NDF: 291423.2/18

Right Out: 1515.949 $\pm$ 0.412  $\chi^2$ /NDF: 480541.4/17

Left In: 1895.778 $\pm$ 0.359  $\chi^2$ /NDF: 399614.3/17

Left: 1895.988 $\pm$ 0.253  $\chi^2$ /NDF: 691038.2/36

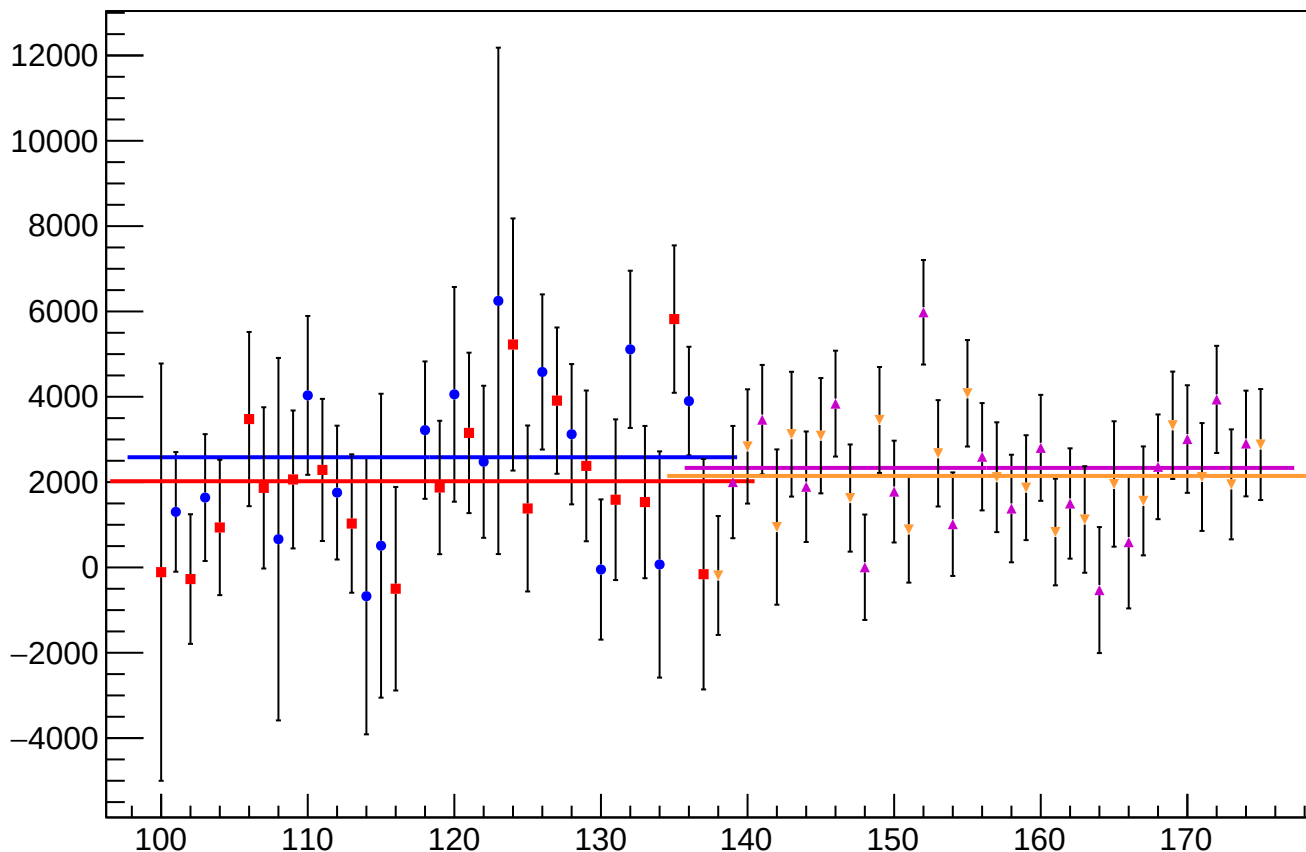
Right: 1507.233 $\pm$ 0.292  $\chi^2$ /NDF: 740243.9/33

In: 1725.032 $\pm$ 0.271  $\chi^2$ /NDF: 1185674.4/33

Out: 1734.032 $\pm$ 0.269  $\chi^2$ /NDF: 1259606.0/36

All: 1729.558 $\pm$ 0.191  $\chi^2$ /NDF: 2445835.7/70

# dit\_asym\_usr\_mean vs Slug, Sign Corrected



Right In: 2582.988 $\pm$ 453.193  $\chi^2/\text{NDF}$ : 12.3/16

Left Out: 2145.293 $\pm$ 292.655  $\chi^2/\text{NDF}$ : 12.6/19

Right Out: 2020.735 $\pm$ 426.756  $\chi^2/\text{NDF}$ : 13.5/18

Left In: 2333.045 $\pm$ 300.239  $\chi^2/\text{NDF}$ : 24.6/17

Left: 2236.768 $\pm$ 209.568  $\chi^2/\text{NDF}$ : 37.4/37

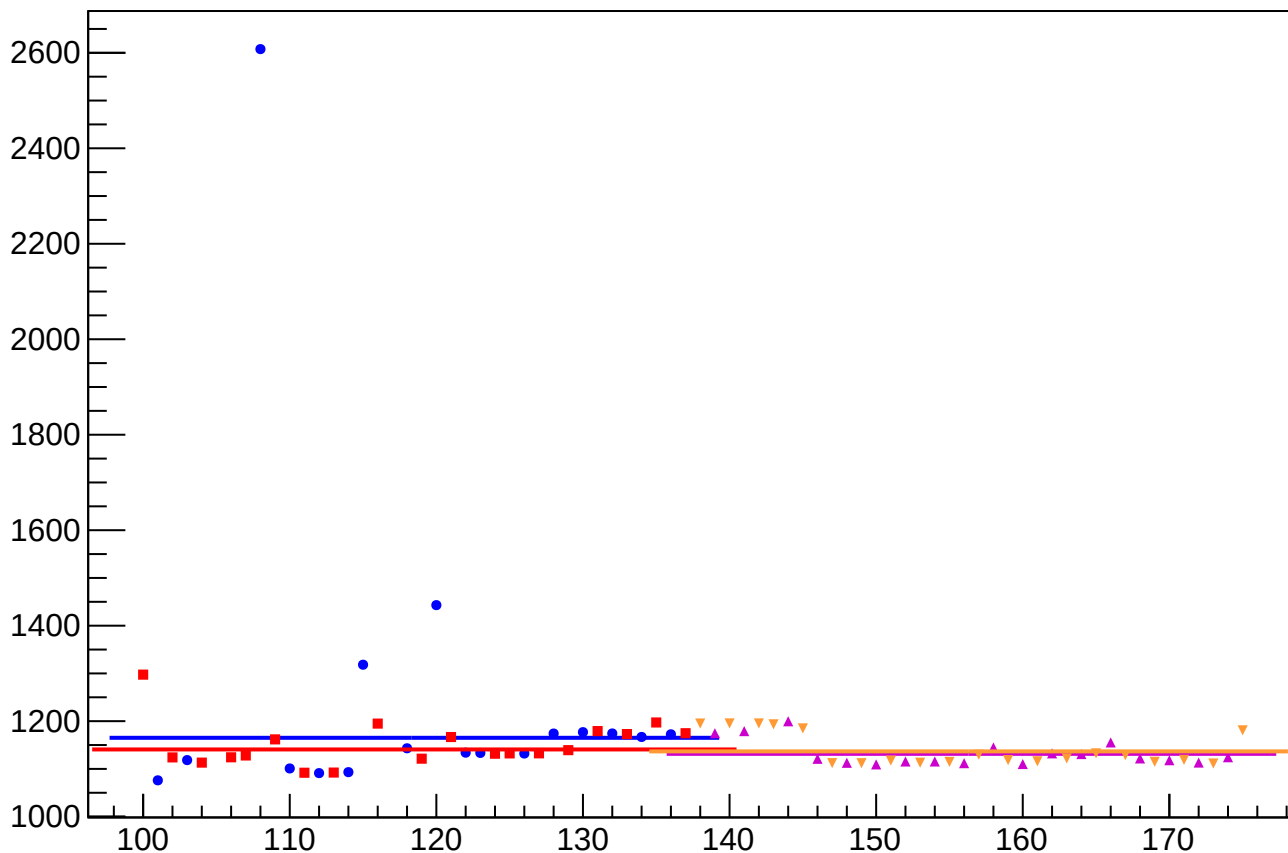
Right: 2284.984 $\pm$ 310.688  $\chi^2/\text{NDF}$ : 26.6/35

In: 2409.284 $\pm$ 250.295  $\chi^2/\text{NDF}$ : 37.1/34

Out: 2105.452 $\pm$ 241.355  $\chi^2/\text{NDF}$ : 26.2/38

All: 2251.846 $\pm$ 173.738  $\chi^2/\text{NDF}$ : 64.0/73

# dit\_asym\_usr\_rms vs Slug, Sign Corrected



Right In: 1165.146 $\pm$ 0.320  $\chi^2$ /NDF: 278570.1/16

Left Out: 1136.691 $\pm$ 0.207  $\chi^2$ /NDF: 23828.9/19

Right Out: 1140.752 $\pm$ 0.302  $\chi^2$ /NDF: 12717.7/18

Left In: 1131.552 $\pm$ 0.212  $\chi^2$ /NDF: 15033.6/17

Left: 1134.187 $\pm$ 0.148  $\chi^2$ /NDF: 39163.0/37

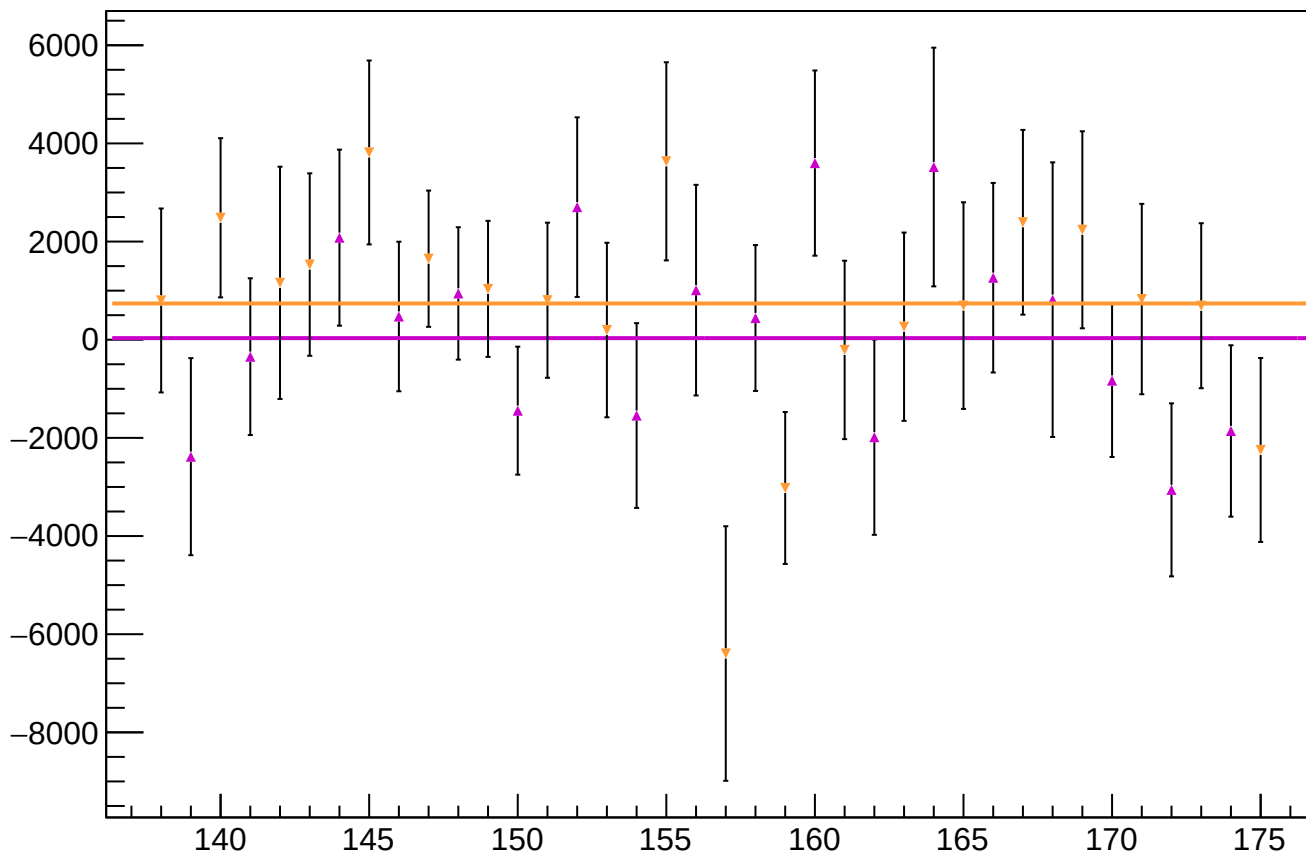
Right: 1152.217 $\pm$ 0.220  $\chi^2$ /NDF: 294359.2/35

In: 1141.799 $\pm$ 0.177  $\chi^2$ /NDF: 301241.6/34

Out: 1137.990 $\pm$ 0.171  $\chi^2$ /NDF: 36669.7/38

All: 1139.825 $\pm$ 0.123  $\chi^2$ /NDF: 338151.3/73

asym\_usr\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 738.508+/-400.955  $\chi^2/\text{NDF}$ : 24.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 32.595+/-410.609  $\chi^2/\text{NDF}$ : 19.4/17

Left: 393.948+/-286.870  $\chi^2/\text{NDF}$ : 45.3/37

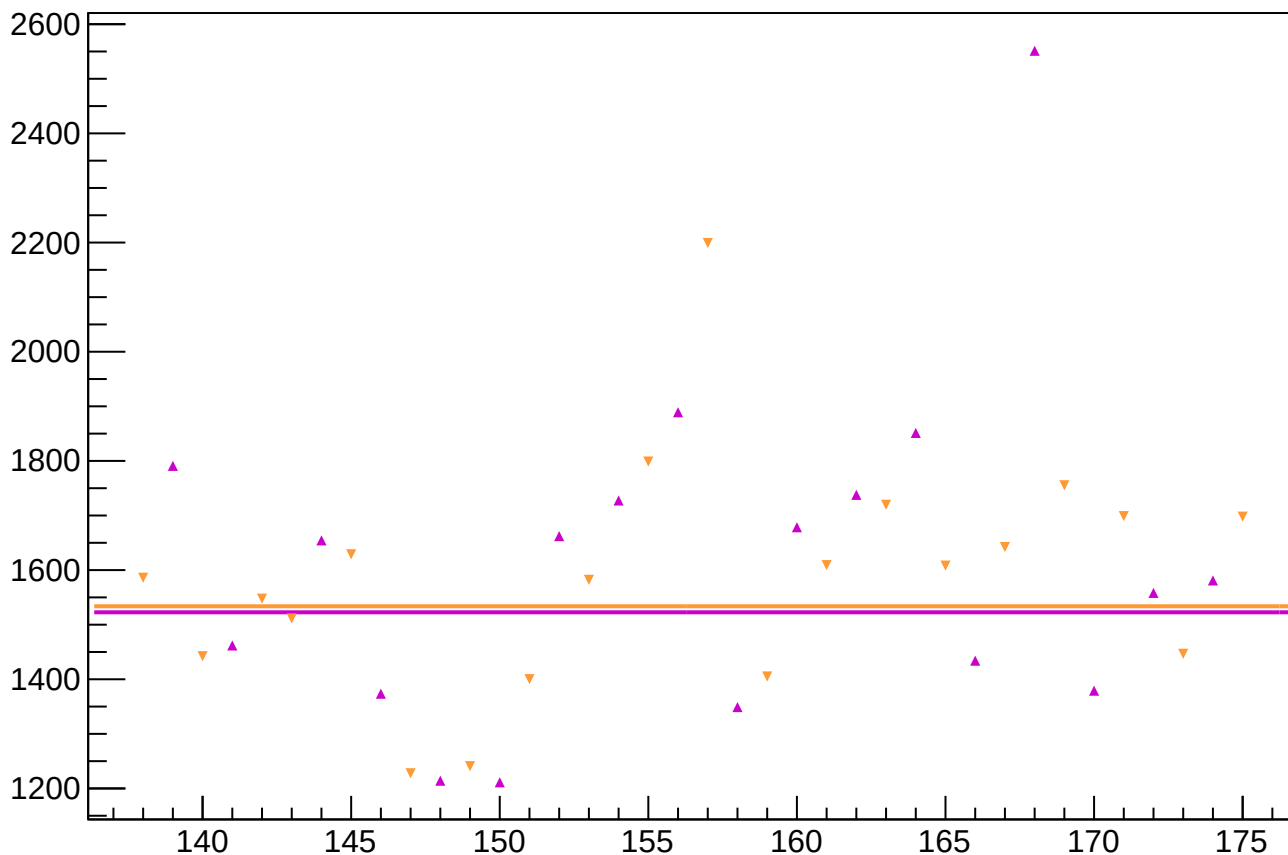
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 32.595+/-410.609  $\chi^2/\text{NDF}$ : 19.4/17

Out: 738.508+/-400.955  $\chi^2/\text{NDF}$ : 24.4/19

All: 393.948+/-286.870  $\chi^2/\text{NDF}$ : 45.3/37

# asym\_usr\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1533.713+/-0.284  $\chi^2/\text{NDF}$ :486612.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1522.680+/-0.290  $\chi^2/\text{NDF}$ :776366.2/17

Left: 1528.328+/-0.203  $\chi^2/\text{NDF}$ : 1263717.3/37

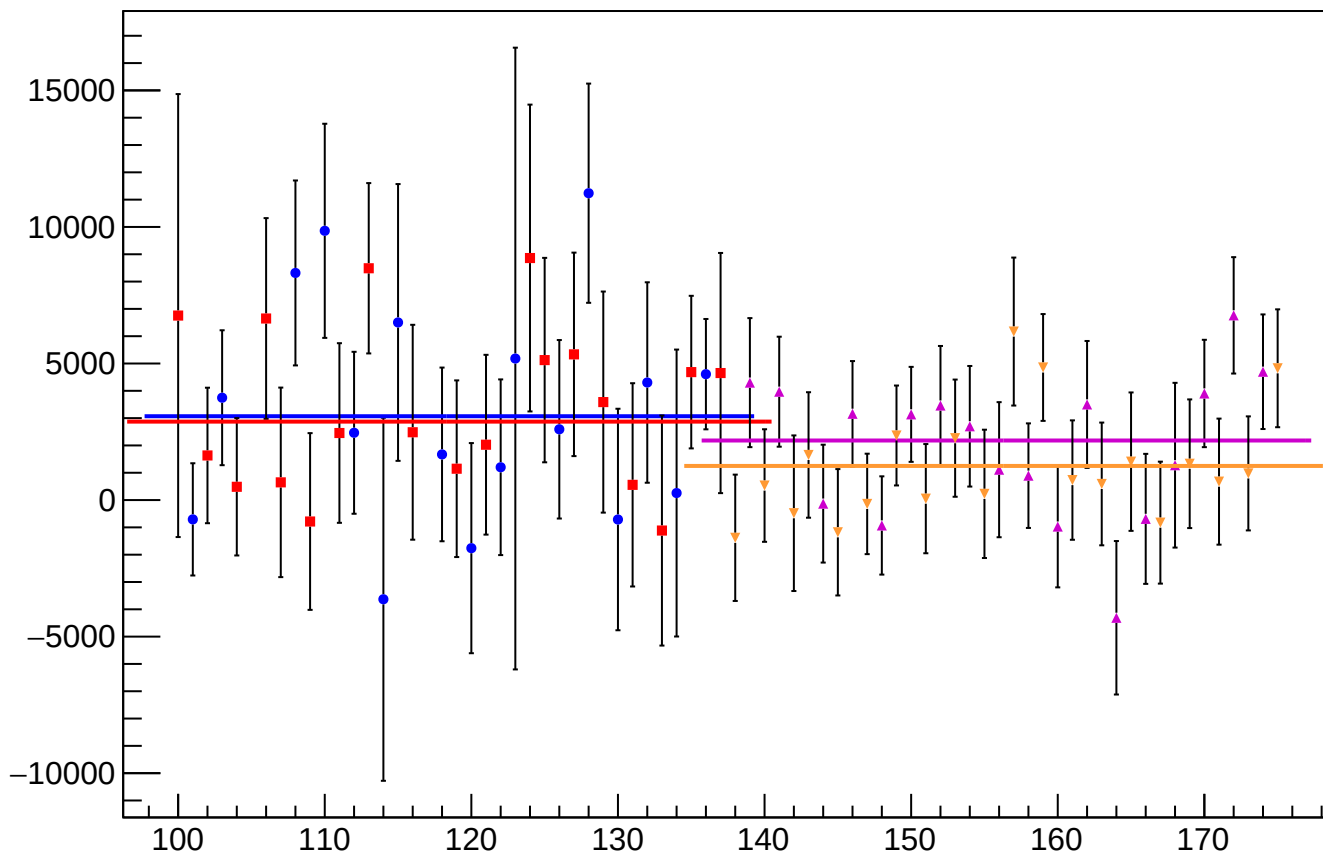
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 1522.680+/-0.290  $\chi^2/\text{NDF}$ :776366.2/17

Out: 1533.713+/-0.284  $\chi^2/\text{NDF}$ :486612.0/19

All: 1528.328+/-0.203  $\chi^2/\text{NDF}$ : 1263717.3/37

# asym\_usr\_mean vs Slug, Sign Corrected



Right In: 3069.484 $\pm$ 797.741  $\chi^2$ /NDF: 18.5/16

Left Out: 1249.516 $\pm$ 491.561  $\chi^2$ /NDF:15.2/19

Right Out: 2872.615 $\pm$ 795.352  $\chi^2$ /NDF: 11.6/18

Left In: 2180.938 $\pm$ 505.925  $\chi^2$ /NDF:23.4/17

Left: 1701.817 $\pm$ 352.555  $\chi^2$ /NDF: 40.3/37

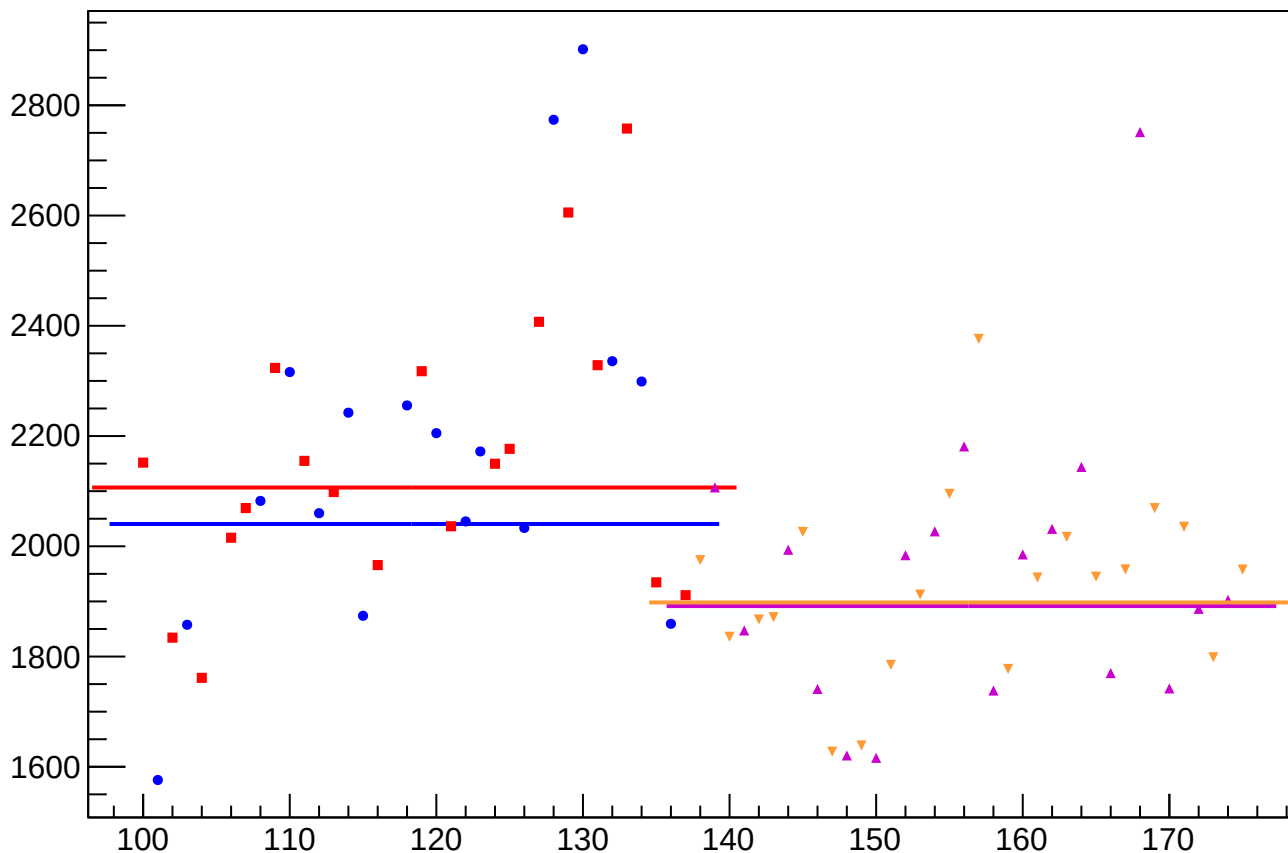
Right: 2970.754 $\pm$ 563.242  $\chi^2$ /NDF: 30.1/35

In: 2435.807 $\pm$ 427.248  $\chi^2$ /NDF:42.8/34

Out: 1698.137 $\pm$ 418.145  $\chi^2$ /NDF:29.8/38

All: 2059.030 $\pm$ 298.840  $\chi^2$ /NDF: 74.1/73

# asym\_usr\_rms vs Slug, Sign Corrected



Right In: 2040.433+/-0.564  $\chi^2/\text{NDF}$ : 331339.9/16

Left Out: 1898.160+/-0.348  $\chi^2/\text{NDF}$ : 217003.6/19

Right Out: 2106.624+/-0.562  $\chi^2/\text{NDF}$ : 195414.9/18

Left In: 1891.536+/-0.358  $\chi^2/\text{NDF}$ : 387396.7/17

Left: 1894.943+/-0.249  $\chi^2/\text{NDF}$ : 604576.7/37

Right: 2073.628+/-0.398  $\chi^2/\text{NDF}$ : 533659.8/35

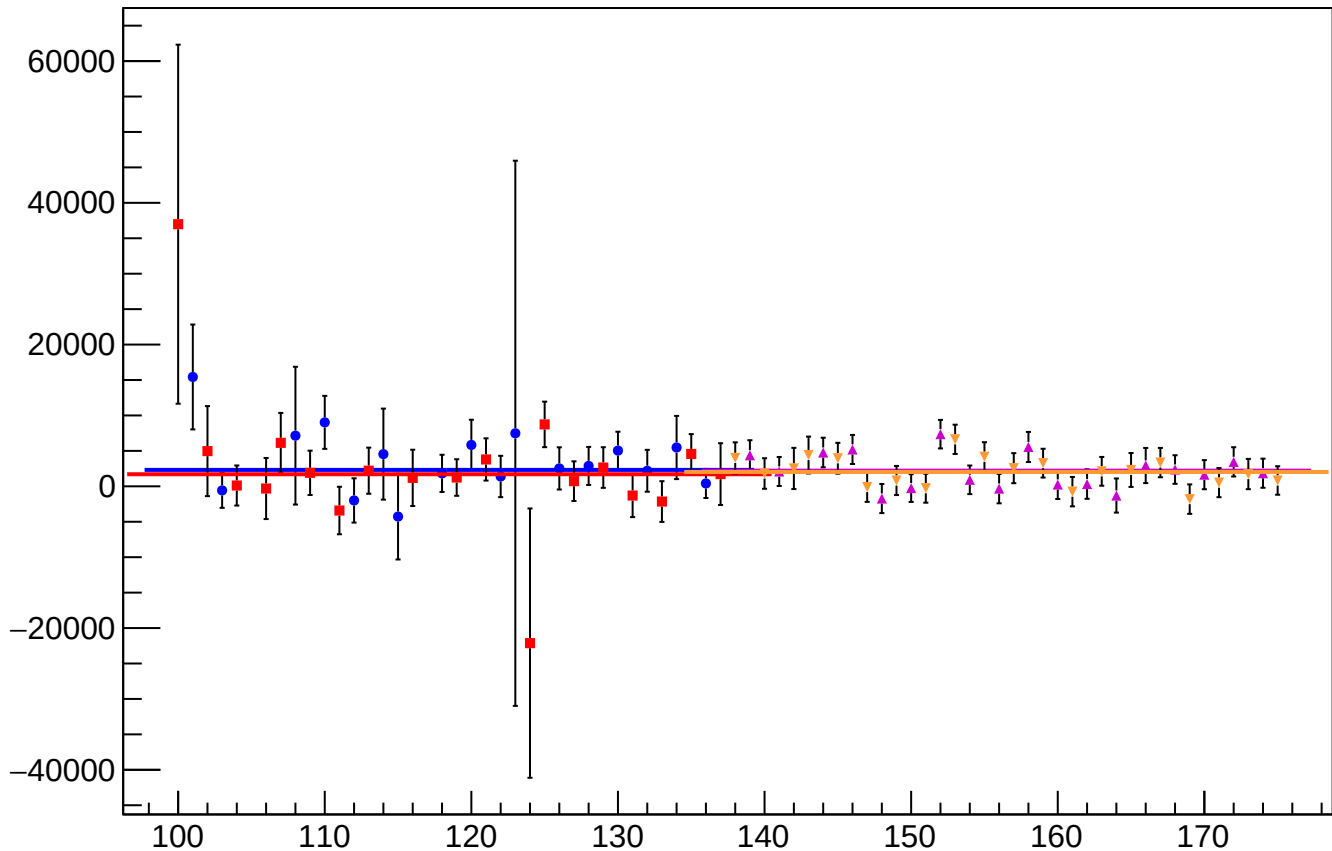
In: 1934.245+/-0.302  $\chi^2/\text{NDF}$ : 768426.6/34

Out: 1955.779+/-0.296  $\chi^2/\text{NDF}$ : 511838.2/38

All: 1945.244+/-0.211  $\chi^2/\text{NDF}$ : 1282859.7/73



# dit\_asym\_at1\_avg\_mean vs Slug, Sign Corrected



Right In: 2319.038 $\pm$ 801.440  $\chi^2$ /NDF: 14.8/16

Left Out: 2026.012 $\pm$ 478.879  $\chi^2$ /NDF:18.2/19

Right Out: 1705.508 $\pm$ 782.848  $\chi^2$ /NDF: 17.2/18

Left In: 2211.397 $\pm$ 491.890  $\chi^2$ /NDF:25.3/17

Left: 2116.220 $\pm$ 343.126  $\chi^2$ /NDF: 43.5/37

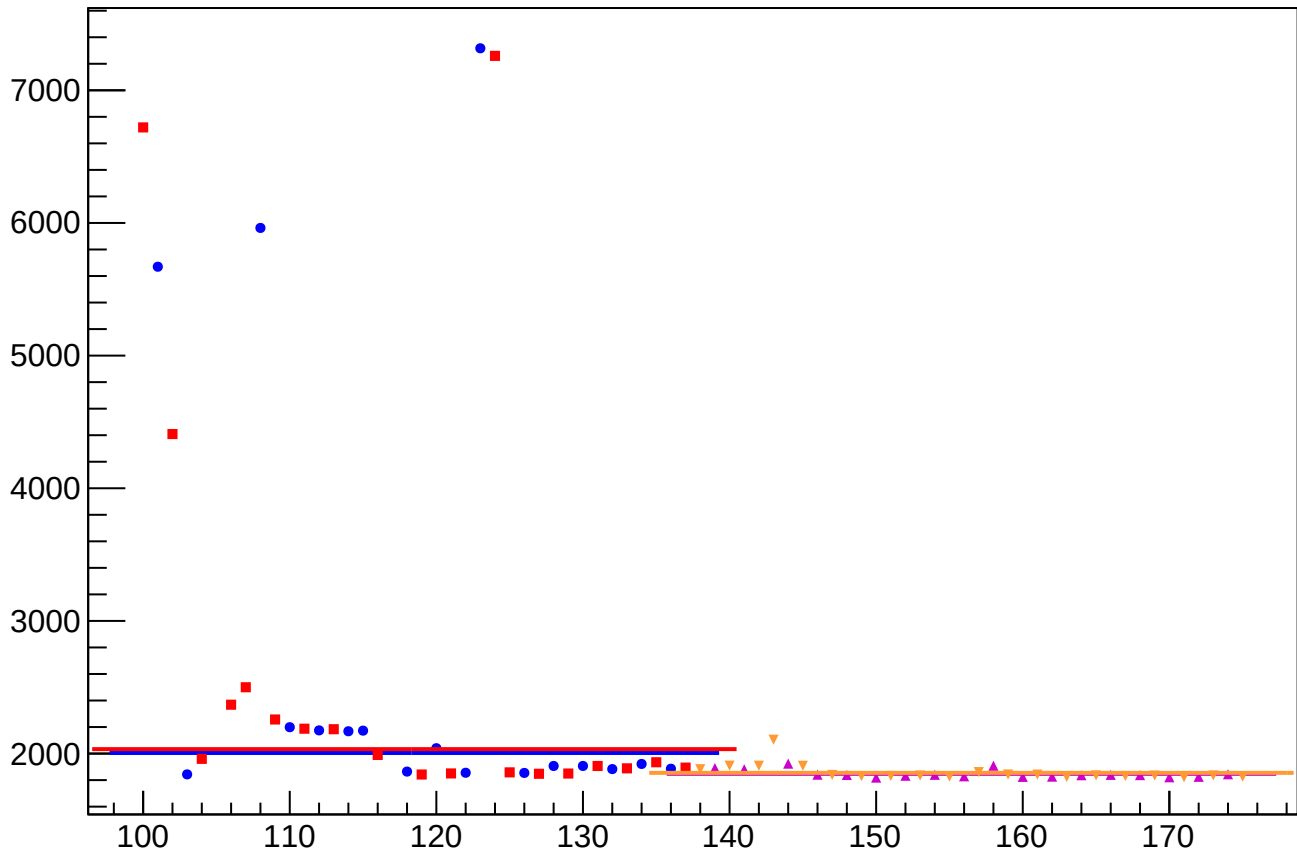
Right: 2005.073 $\pm$ 560.015  $\chi^2$ /NDF: 32.3/35

In: 2240.850 $\pm$ 419.227  $\chi^2$ /NDF:40.1/34

Out: 1938.738 $\pm$ 408.509  $\chi^2$ /NDF:35.4/38

All: 2085.883 $\pm$ 292.575  $\chi^2$ /NDF: 75.8/73

# dit\_asym\_at1\_avg\_rms vs Slug, Sign Corrected



Right In: 2004.551+/-0.567  $\chi^2/\text{NDF}$ : 916013.4/16

Left Out: 1854.717+/-0.339  $\chi^2/\text{NDF}$ : 25459.2/19

Right Out: 2033.490+/-0.554  $\chi^2/\text{NDF}$ : 611009.8/18

Left In: 1847.413+/-0.348  $\chi^2/\text{NDF}$ : 7655.2/17

Left: 1851.163+/-0.243  $\chi^2/\text{NDF}$ : 33340.8/37

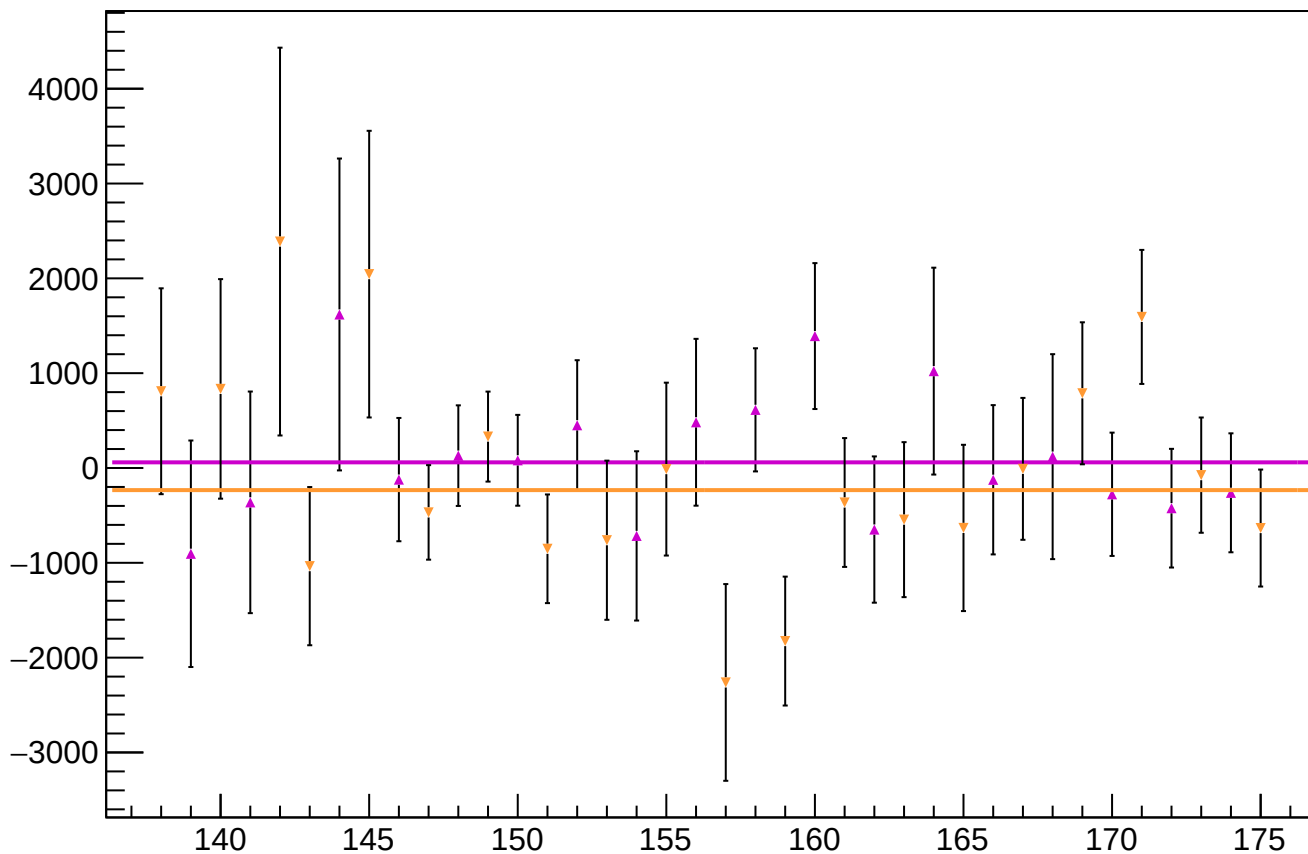
Right: 2019.360+/-0.396  $\chi^2/\text{NDF}$ : 1528357.7/35

In: 1890.410+/-0.296  $\chi^2/\text{NDF}$ : 979516.6/34

Out: 1903.397+/-0.289  $\chi^2/\text{NDF}$ : 712368.0/38

All: 1897.072+/-0.207  $\chi^2/\text{NDF}$ : 1692869.1/73

asym\_at1\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -233.318+/-164.832  $\chi^2/\text{NDF}$ :28.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 59.518+/-173.383  $\chi^2/\text{NDF}$ :9.6/17

Left: -94.299+/-119.462  $\chi^2/\text{NDF}$ : 39.8/37

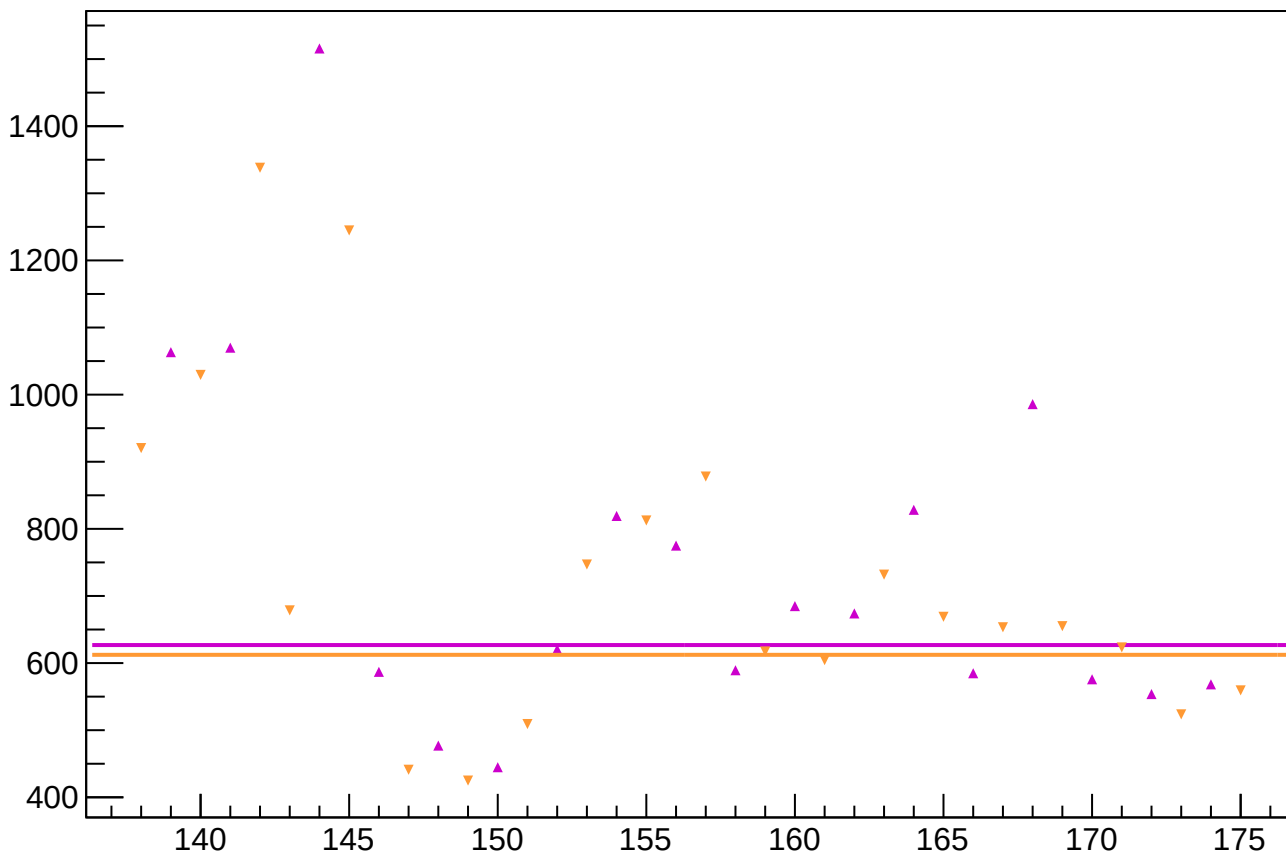
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 59.518+/-173.383  $\chi^2/\text{NDF}$ :9.6/17

Out: -233.318+/-164.832  $\chi^2/\text{NDF}$ :28.7/19

All: -94.299+/-119.462  $\chi^2/\text{NDF}$ : 39.8/37

asym\_at1\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 612.298+/-0.117  $\chi^2/\text{NDF}$ :2048685.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 626.865+/-0.123  $\chi^2/\text{NDF}$ :2121758.6/17

Left: 619.214+/-0.084  $\chi^2/\text{NDF}$ : 4177859.5/37

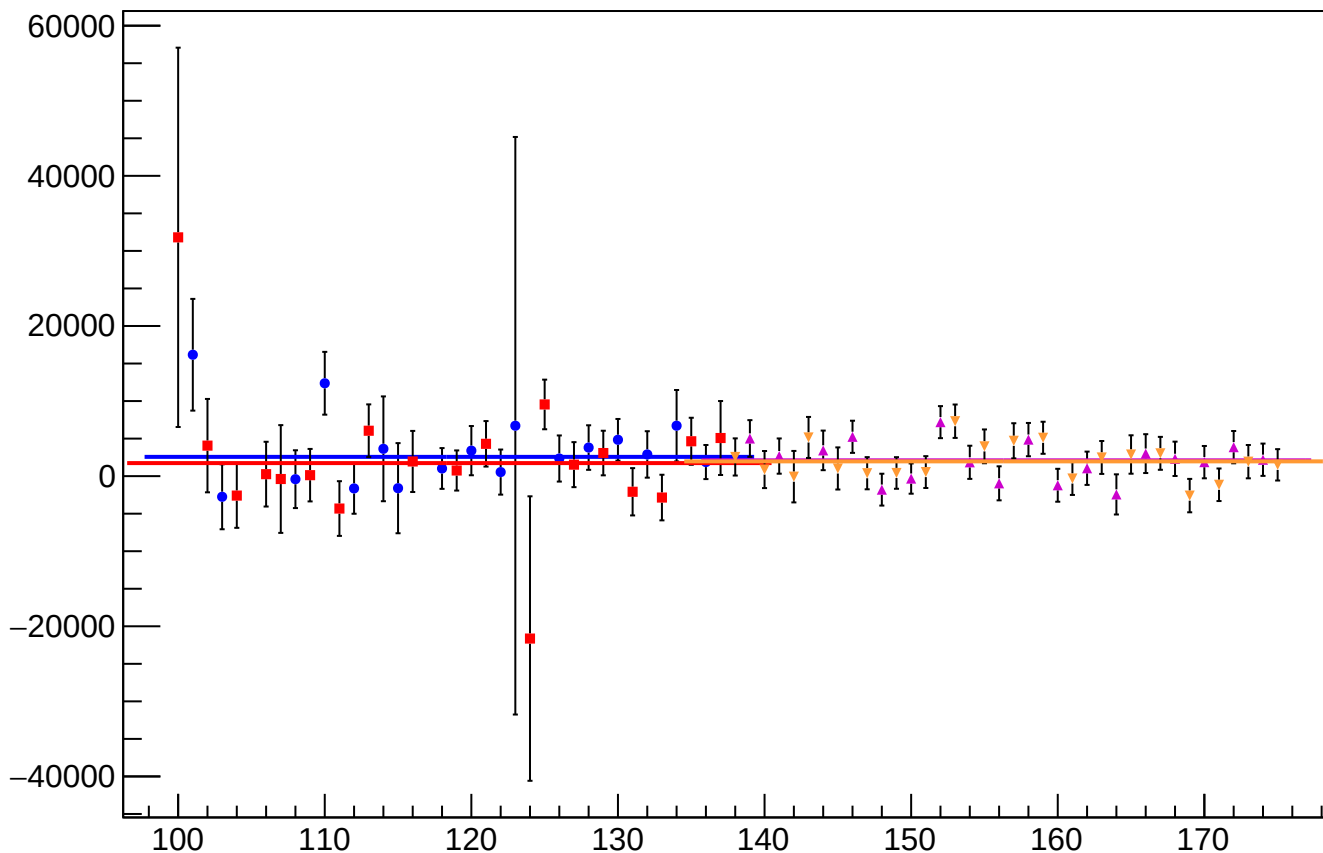
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 626.865+/-0.123  $\chi^2/\text{NDF}$ :2121758.6/17

Out: 612.298+/-0.117  $\chi^2/\text{NDF}$ :2048685.1/19

All: 619.214+/-0.084  $\chi^2/\text{NDF}$ : 4177859.5/37

# asym\_at1\_avg\_mean vs Slug, Sign Corrected



Right In: 2566.797 $\pm$ 856.089  $\chi^2$ /NDF: 15.6/16

Left Out: 1968.123 $\pm$ 515.352  $\chi^2$ /NDF:21.5/19

Right Out: 1737.684 $\pm$ 853.181  $\chi^2$ /NDF: 20.5/18

Left In: 2105.741 $\pm$ 531.348  $\chi^2$ /NDF:24.0/17

Left: 2034.829 $\pm$ 369.935  $\chi^2$ /NDF: 45.6/37

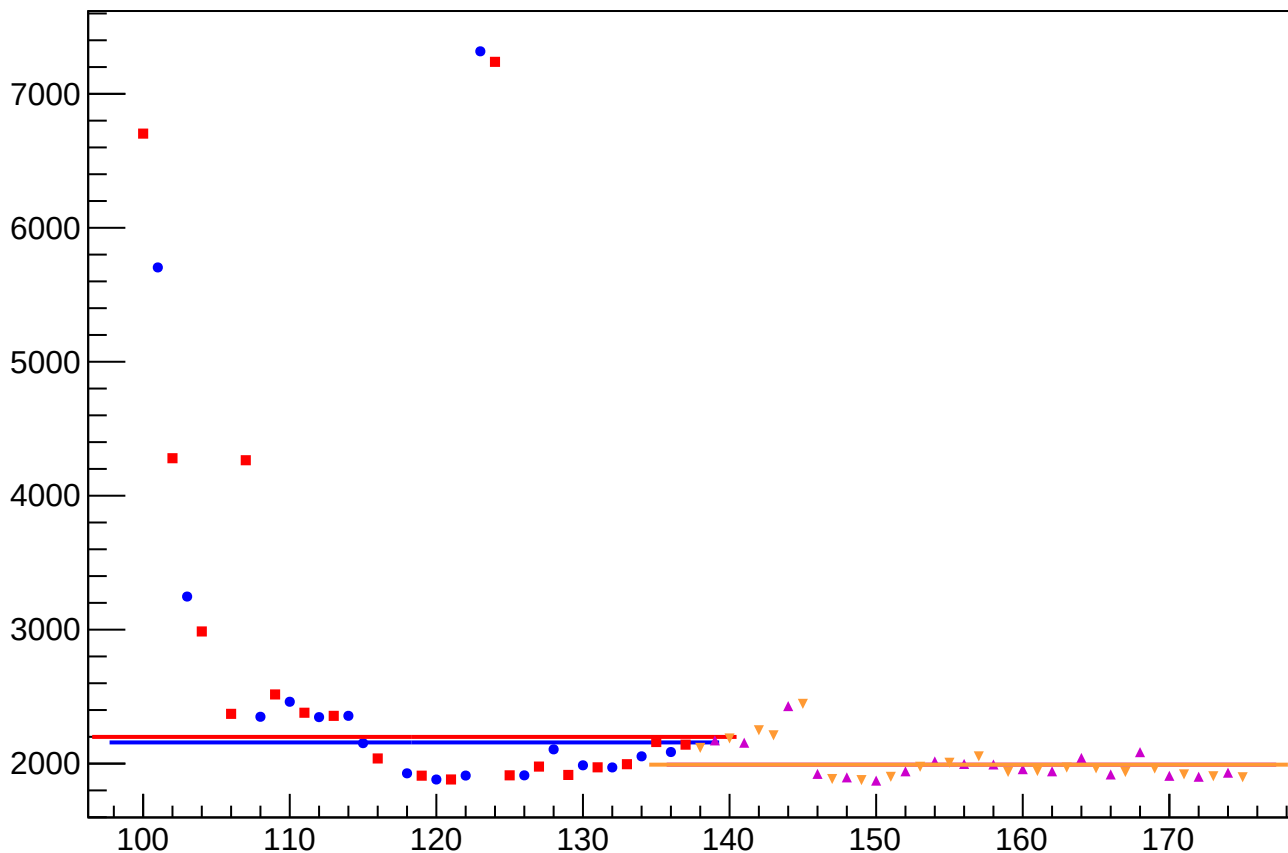
Right: 2150.830 $\pm$ 604.316  $\chi^2$ /NDF: 36.5/35

In: 2233.960 $\pm$ 451.459  $\chi^2$ /NDF:39.8/34

Out: 1906.521 $\pm$ 441.124  $\chi^2$ /NDF:42.1/38

All: 2066.449 $\pm$ 315.512  $\chi^2$ /NDF: 82.2/73

# asym\_at1\_avg\_rms vs Slug, Sign Corrected



Right In: 2158.148+/-0.605  $\chi^2/\text{NDF}$ : 713862.1/16

Left Out: 1992.139+/-0.364  $\chi^2/\text{NDF}$ :124008.3/19

Right Out: 2199.343+/-0.603  $\chi^2/\text{NDF}$ : 803022.0/18

Left In: 1992.078+/-0.376  $\chi^2/\text{NDF}$ :105261.2/17

Left: 1992.109+/-0.262  $\chi^2/\text{NDF}$ : 229269.5/37

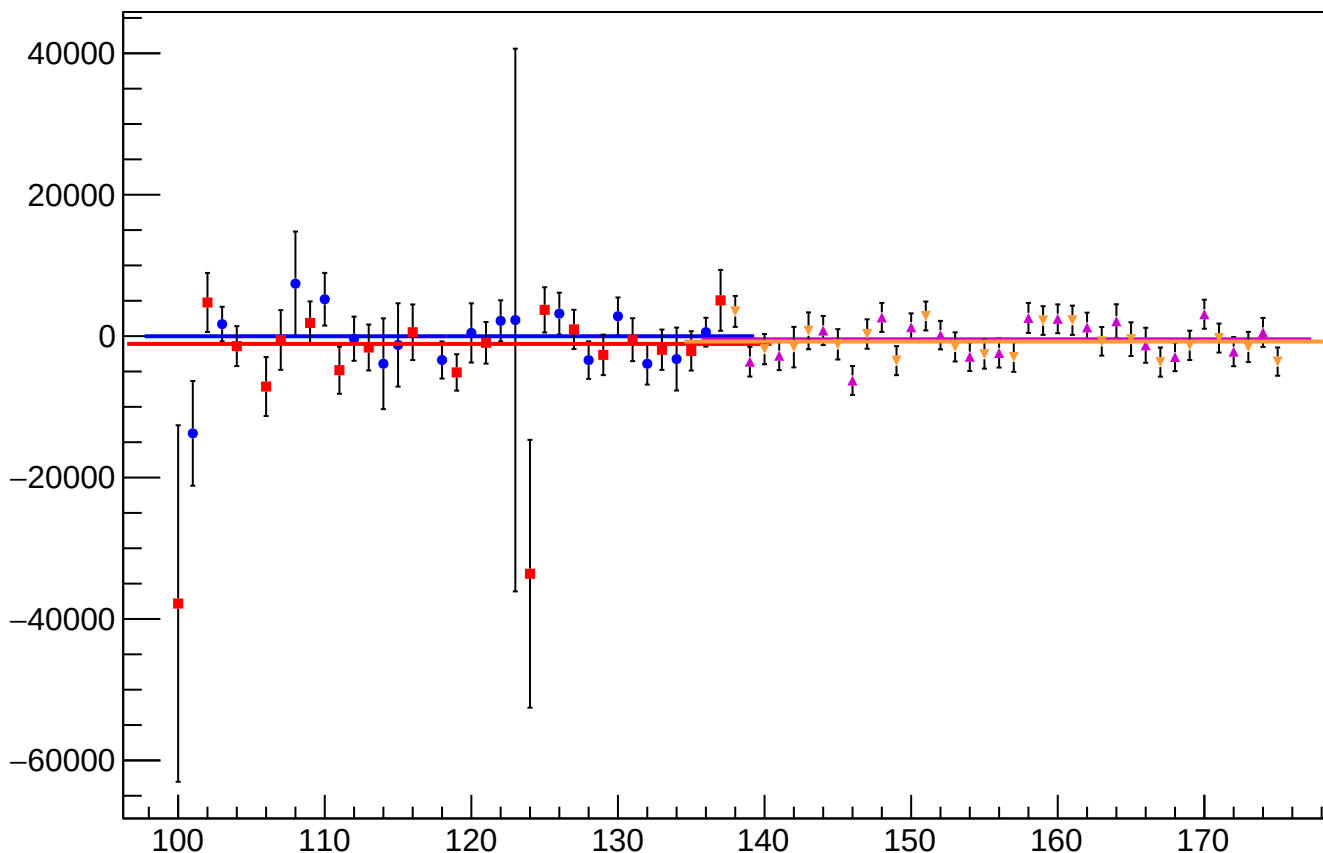
Right: 2178.816+/-0.427  $\chi^2/\text{NDF}$ : 1519207.5/35

In: 2038.262+/-0.319  $\chi^2/\text{NDF}$ :873455.2/34

Out: 2047.530+/-0.312  $\chi^2/\text{NDF}$ :1013459.2/38

All: 2043.003+/-0.223  $\chi^2/\text{NDF}$ : 1887345.6/73

# dit\_asym\_at1\_dd\_mean vs Slug, Sign Corrected



Right In:  $-18.275 \pm 801.405$   $\chi^2/\text{NDF}$ : 15.8/16

Left Out:  $-766.225 \pm 476.923$   $\chi^2/\text{NDF}$ : 20.1/19

Right Out:  $-1095.433 \pm 769.722$   $\chi^2/\text{NDF}$ : 19.4/18

Left In:  $-445.804 \pm 490.245$   $\chi^2/\text{NDF}$ : 29.0/17

Left:  $-610.427 \pm 341.848$   $\chi^2/\text{NDF}$ : 49.4/37

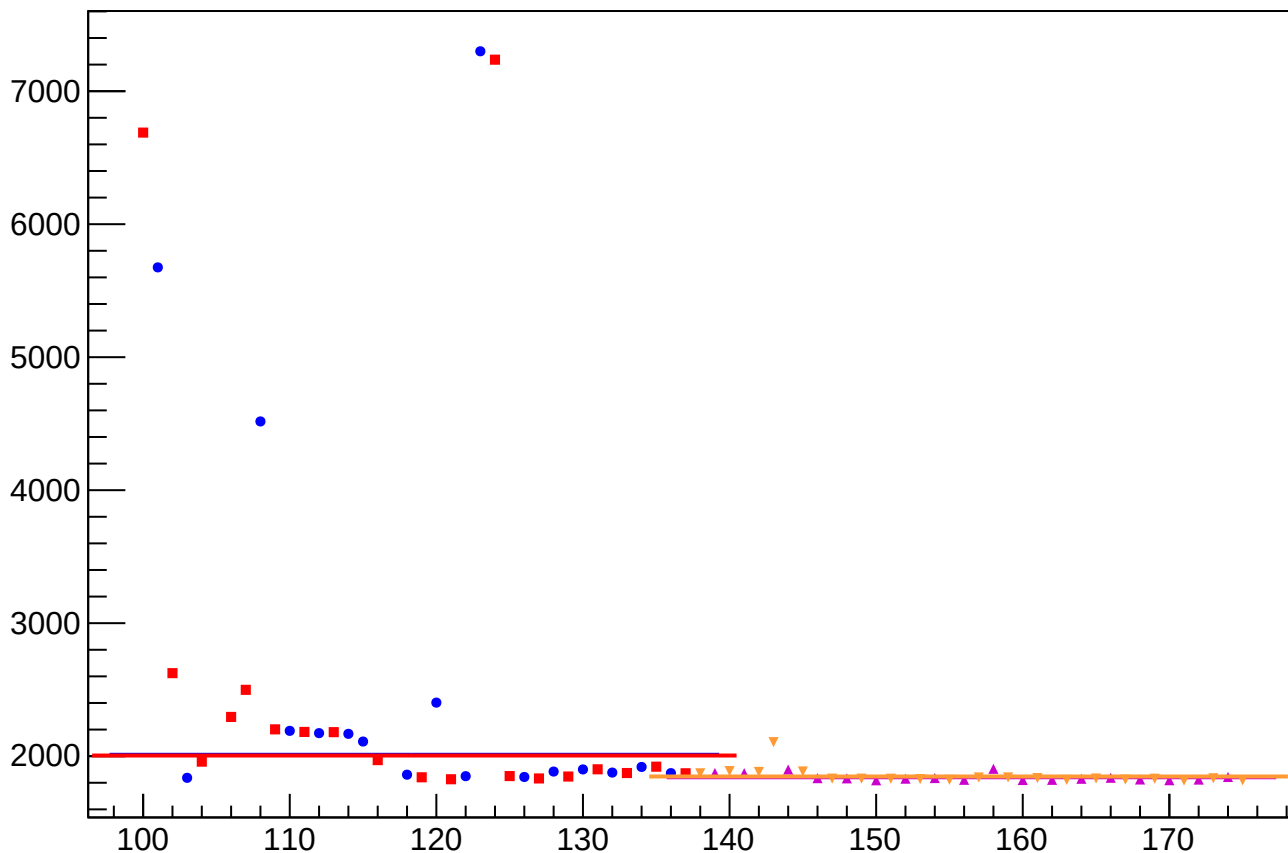
Right:  $-578.567 \pm 555.139$   $\chi^2/\text{NDF}$ : 36.2/35

In:  $-329.383 \pm 418.201$   $\chi^2/\text{NDF}$ : 45.1/34

Out:  $-857.550 \pm 405.410$   $\chi^2/\text{NDF}$ : 39.7/38

All:  $-601.667 \pm 291.085$   $\chi^2/\text{NDF}$ : 85.6/73

# dit\_asym\_at1\_dd\_rms vs Slug, Sign Corrected



Right In: 2010.272 $\pm$ 0.567  $\chi^2$ /NDF: 839746.7/16

Left Out: 1847.229 $\pm$ 0.337  $\chi^2$ /NDF: 24235.9/19

Right Out: 2004.882 $\pm$ 0.544  $\chi^2$ /NDF: 367513.0/18

Left In: 1841.312 $\pm$ 0.347  $\chi^2$ /NDF: 5808.6/17

Left: 1844.352 $\pm$ 0.242  $\chi^2$ /NDF: 30194.1/37

Right: 2007.469 $\pm$ 0.393  $\chi^2$ /NDF: 1207306.7/35

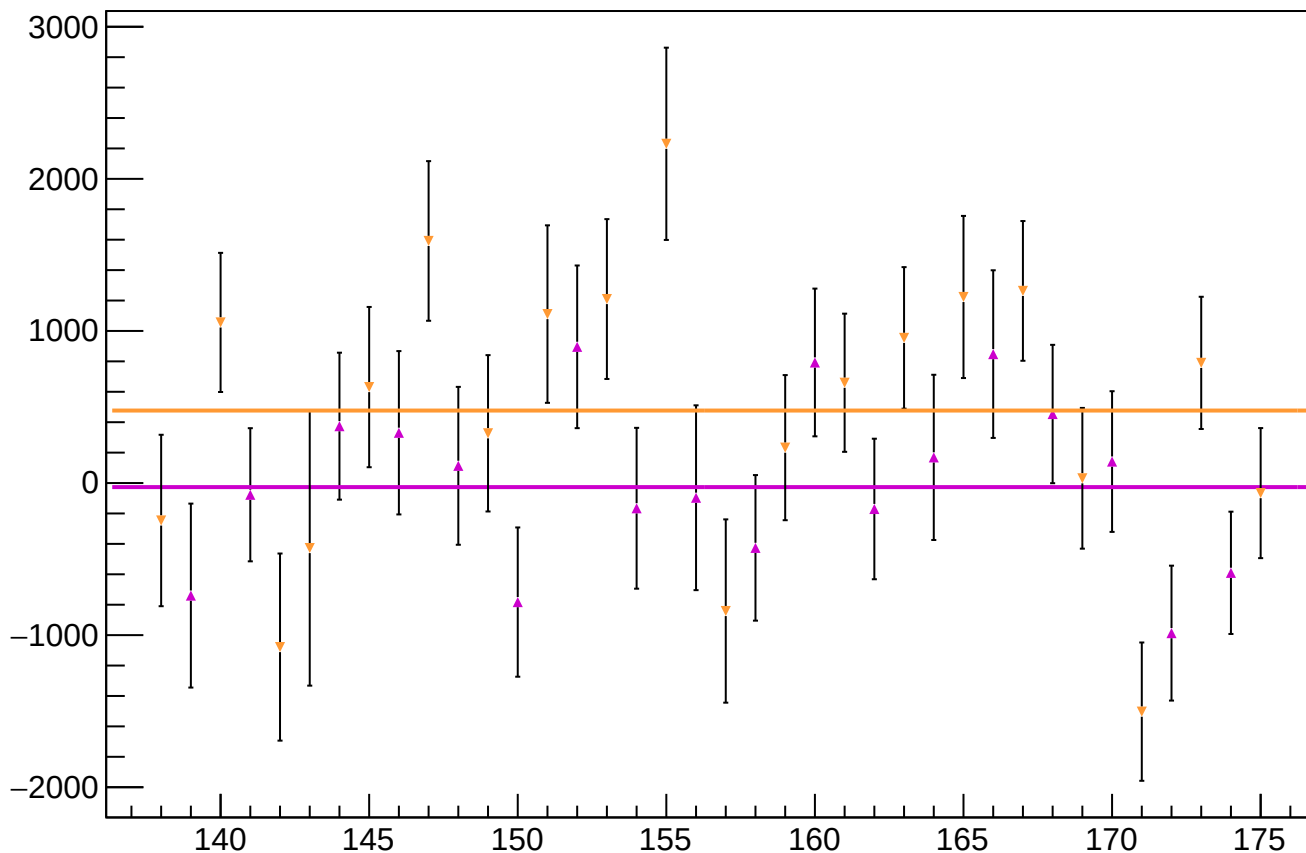
In: 1887.322 $\pm$ 0.296  $\chi^2$ /NDF: 910245.8/34

Out: 1890.964 $\pm$ 0.287  $\chi^2$ /NDF: 452375.5/38

All: 1889.199 $\pm$ 0.206  $\chi^2$ /NDF: 1362699.5/73



asym\_at1\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 476.671+/-113.954  $\chi^2/\text{NDF}$ :59.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -26.719+/-116.167  $\chi^2/\text{NDF}$ :22.2/17

Left: 229.818+/-81.349  $\chi^2/\text{NDF}$ : 91.1/37

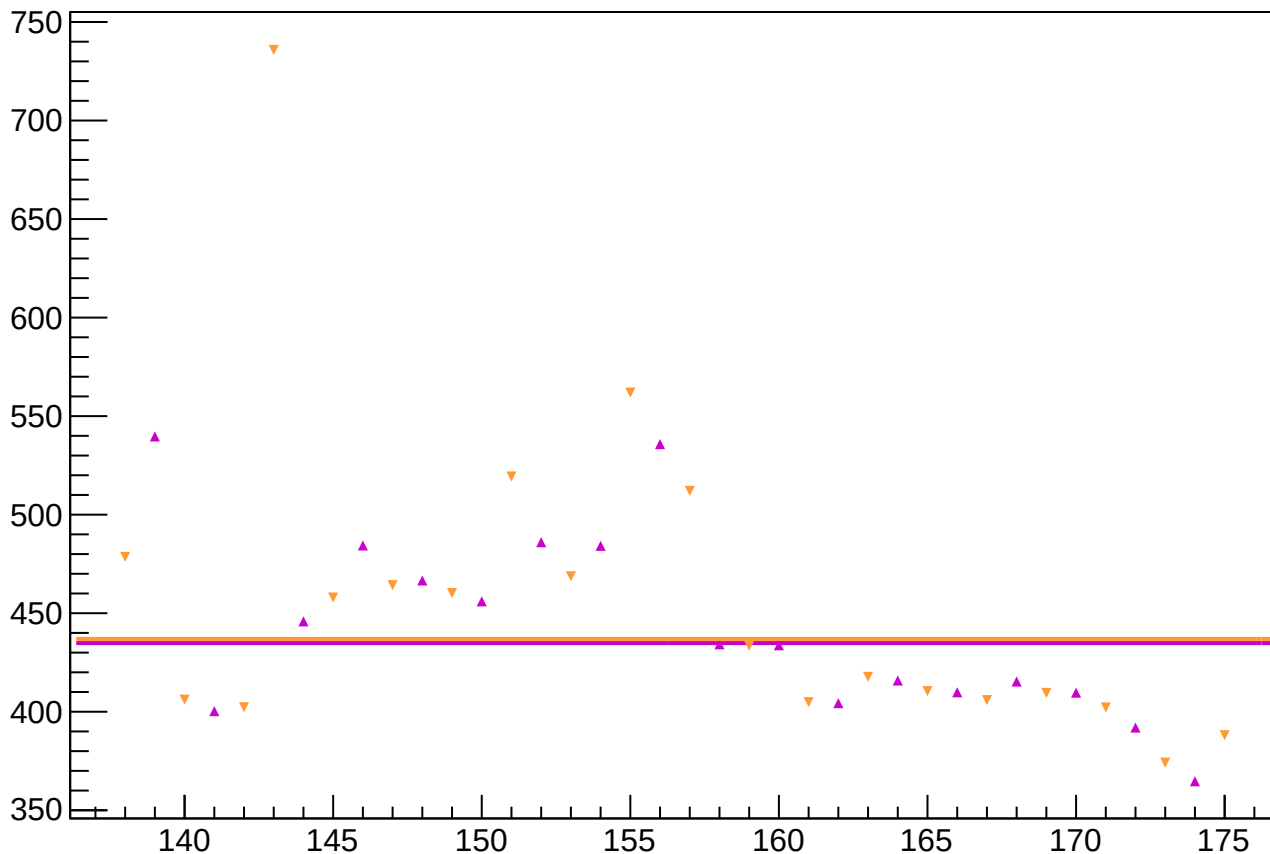
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -26.719+/-116.167  $\chi^2/\text{NDF}$ :22.2/17

Out: 476.671+/-113.954  $\chi^2/\text{NDF}$ :59.3/19

All: 229.818+/-81.349  $\chi^2/\text{NDF}$ : 91.1/37

asym\_at1\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 436.952+/-0.081  $\chi^2/\text{NDF}$ :527985.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 434.844+/-0.082  $\chi^2/\text{NDF}$ :297186.7/17

Left: 435.918+/-0.058  $\chi^2/\text{NDF}$ : 825508.0/37

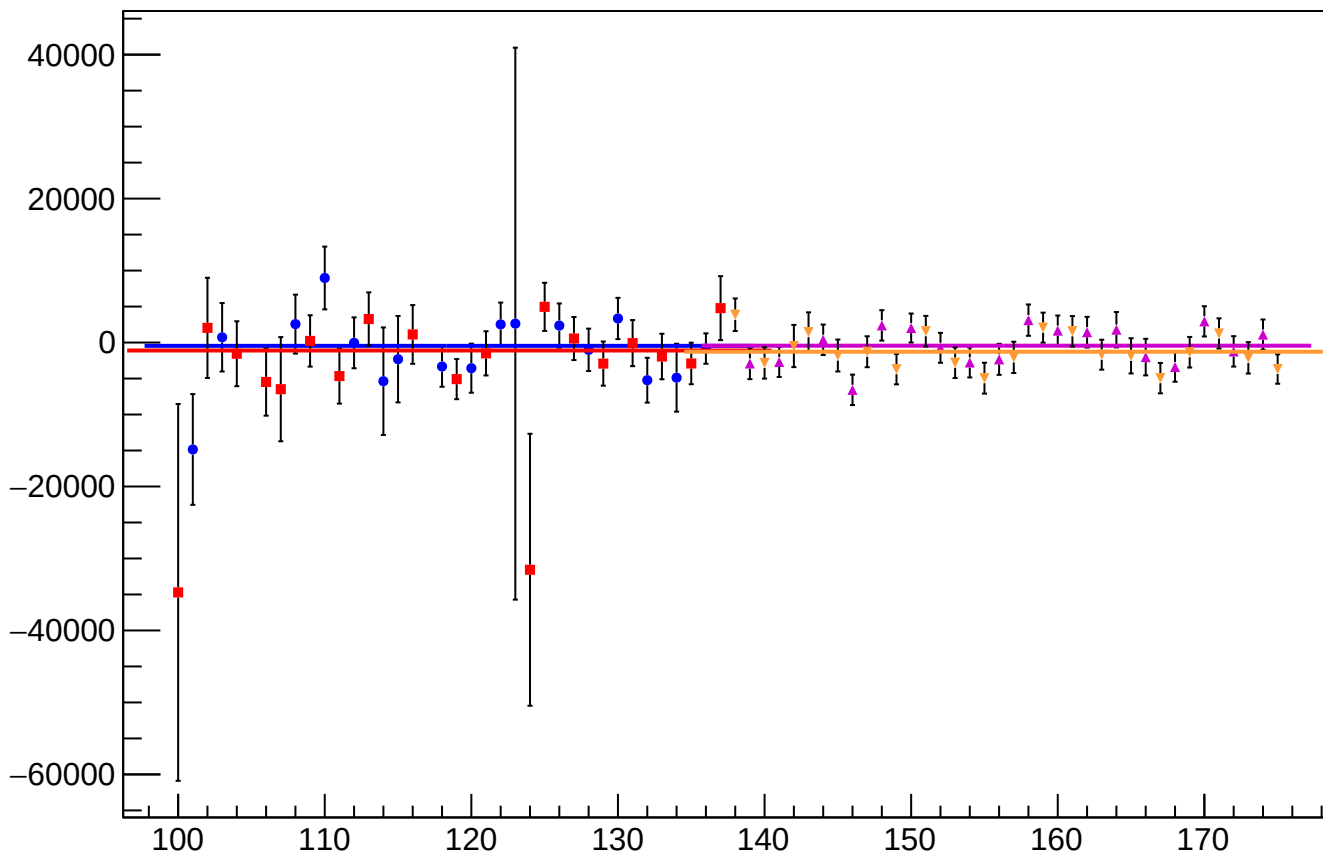
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 434.844+/-0.082  $\chi^2/\text{NDF}$ :297186.7/17

Out: 436.952+/-0.081  $\chi^2/\text{NDF}$ :527985.5/19

All: 435.918+/-0.058  $\chi^2/\text{NDF}$ : 825508.0/37

# asym\_at1\_dd\_mean vs Slug, Sign Corrected



Right In: -458.311+/-865.151  $\chi^2/\text{NDF}$ : 18.1/16

Left Out: -1272.506+/-491.398  $\chi^2/\text{NDF}$ :23.9/19

Right Out: -1104.312+/-867.160  $\chi^2/\text{NDF}$ : 16.9/18

Left In: -437.584+/-504.466  $\chi^2/\text{NDF}$ :27.3/17

Left: -865.999+/-352.000  $\chi^2/\text{NDF}$ : 52.7/37

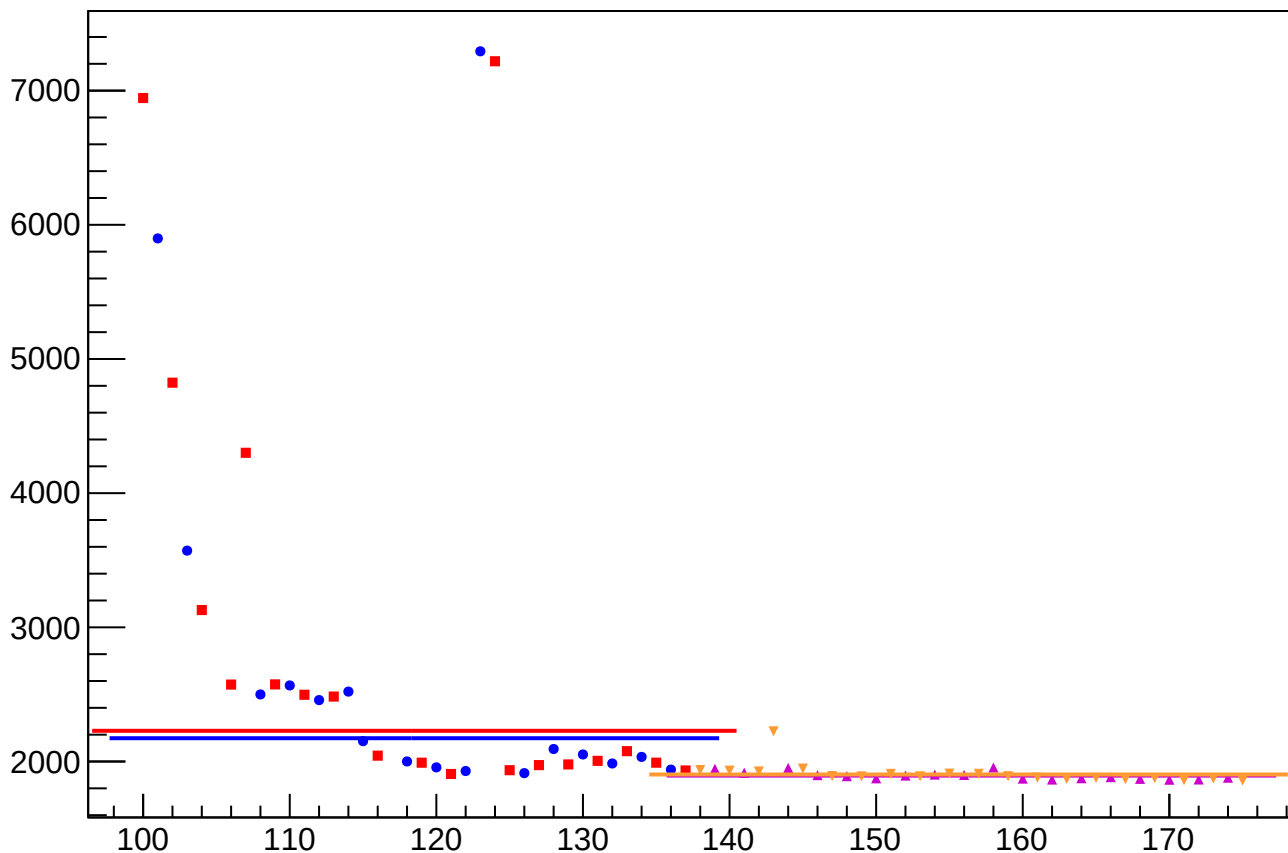
Right: -780.562+/-612.463  $\chi^2/\text{NDF}$ : 35.2/35

In: -442.843+/-435.792  $\chi^2/\text{NDF}$ :45.4/34

Out: -1231.623+/-427.526  $\chi^2/\text{NDF}$ :40.9/38

All: -844.785+/-305.187  $\chi^2/\text{NDF}$ : 87.9/73

# asym\_at1\_dd\_rms vs Slug, Sign Corrected



Right In: 2173.529 $\pm$ 0.612  $\chi^2$ /NDF: 805360.7/16

Left Out: 1903.210 $\pm$ 0.347  $\chi^2$ /NDF:33439.4/19

Right Out: 2228.892 $\pm$ 0.613  $\chi^2$ /NDF: 895863.4/18

Left In: 1894.880 $\pm$ 0.357  $\chi^2$ /NDF:6493.7/17

Left: 1899.154 $\pm$ 0.249  $\chi^2$ /NDF: 40213.0/37

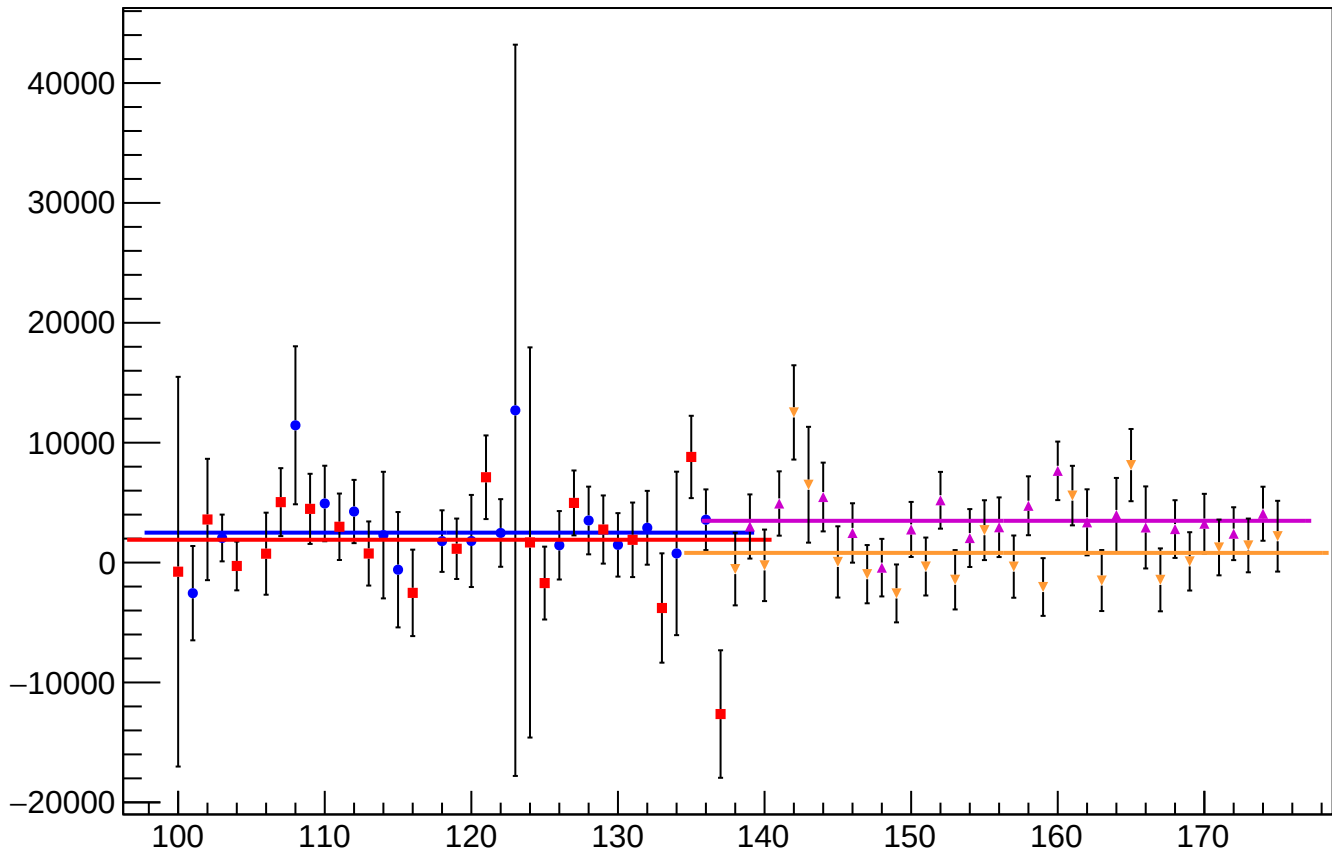
Right: 2201.146 $\pm$ 0.433  $\chi^2$ /NDF: 1705309.7/35

In: 1965.582 $\pm$ 0.308  $\chi^2$ /NDF:966684.7/34

Out: 1982.373 $\pm$ 0.302  $\chi^2$ /NDF:1142842.7/38

All: 1974.138 $\pm$ 0.216  $\chi^2$ /NDF: 2111040.5/73

# dit\_asym\_at2\_avg\_mean vs Slug, Sign Corrected



Right In: 2496.610 $\pm$ 768.295  $\chi^2$ /NDF: 5.9/16

Left Out: 808.410 $\pm$ 593.539  $\chi^2$ /NDF: 27.9/19

Right Out: 1902.970 $\pm$ 736.793  $\chi^2$ /NDF: 23.5/18

Left In: 3484.196 $\pm$ 594.479  $\chi^2$ /NDF: 8.3/17

Left: 2144.187 $\pm$ 420.027  $\chi^2$ /NDF: 46.3/37

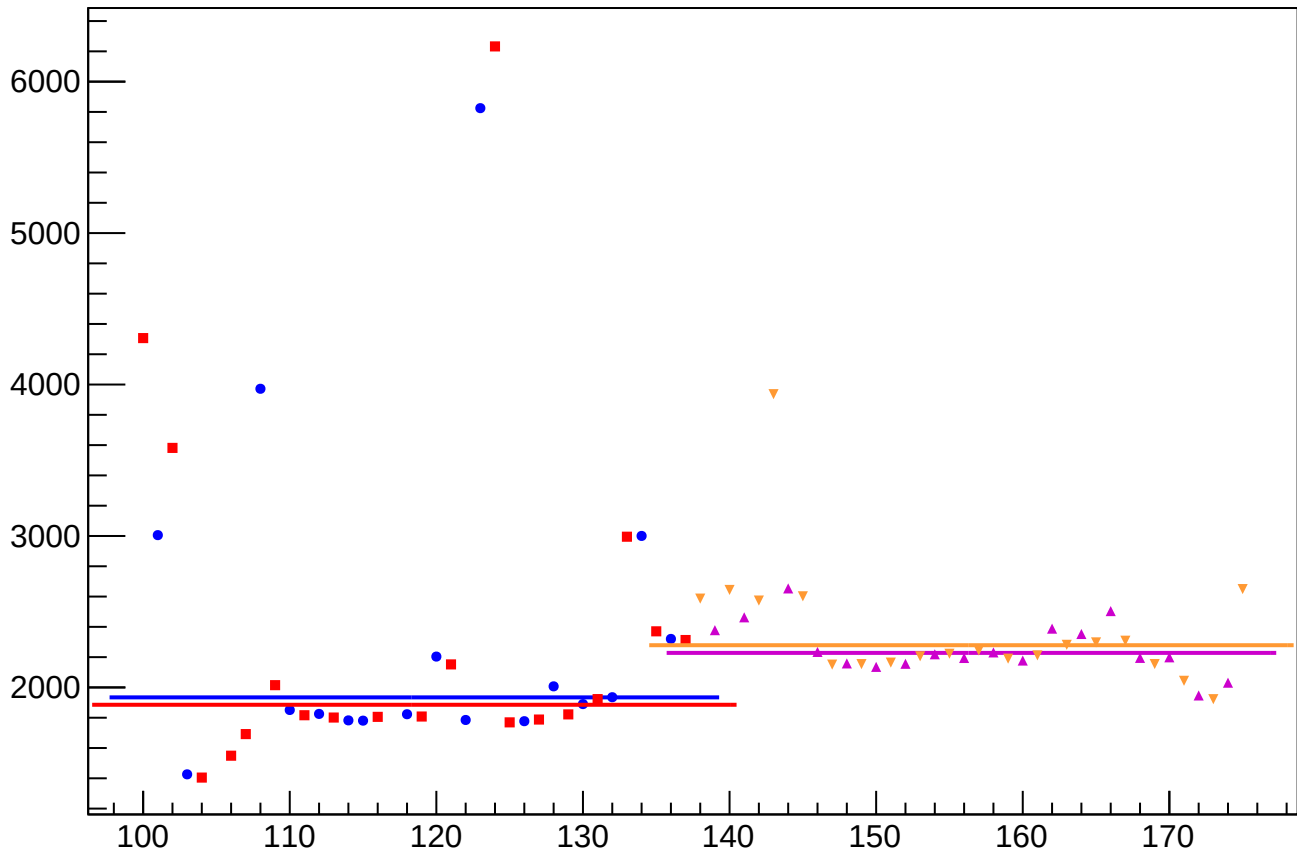
Right: 2187.370 $\pm$ 531.779  $\chi^2$ /NDF: 29.7/35

In: 3114.349 $\pm$ 470.166  $\chi^2$ /NDF: 15.2/34

Out: 1239.176 $\pm$ 462.217  $\chi^2$ /NDF: 52.7/38

All: 2160.777 $\pm$ 329.611  $\chi^2$ /NDF: 76.0/73

# dit\_asym\_at2\_avg\_rms vs Slug, Sign Corrected



Right In:  $1934.404 \pm 0.543$   $\chi^2/\text{NDF}: 638920.4/16$

Left Out:  $2278.804 \pm 0.420$   $\chi^2/\text{NDF}: 451737.7/19$

Right Out:  $1885.547 \pm 0.521$   $\chi^2/\text{NDF}: 752091.8/18$

Left In:  $2228.084 \pm 0.420$   $\chi^2/\text{NDF}: 145151.8/17$

Left:  $2253.484 \pm 0.297$   $\chi^2/\text{NDF}: 604180.1/37$

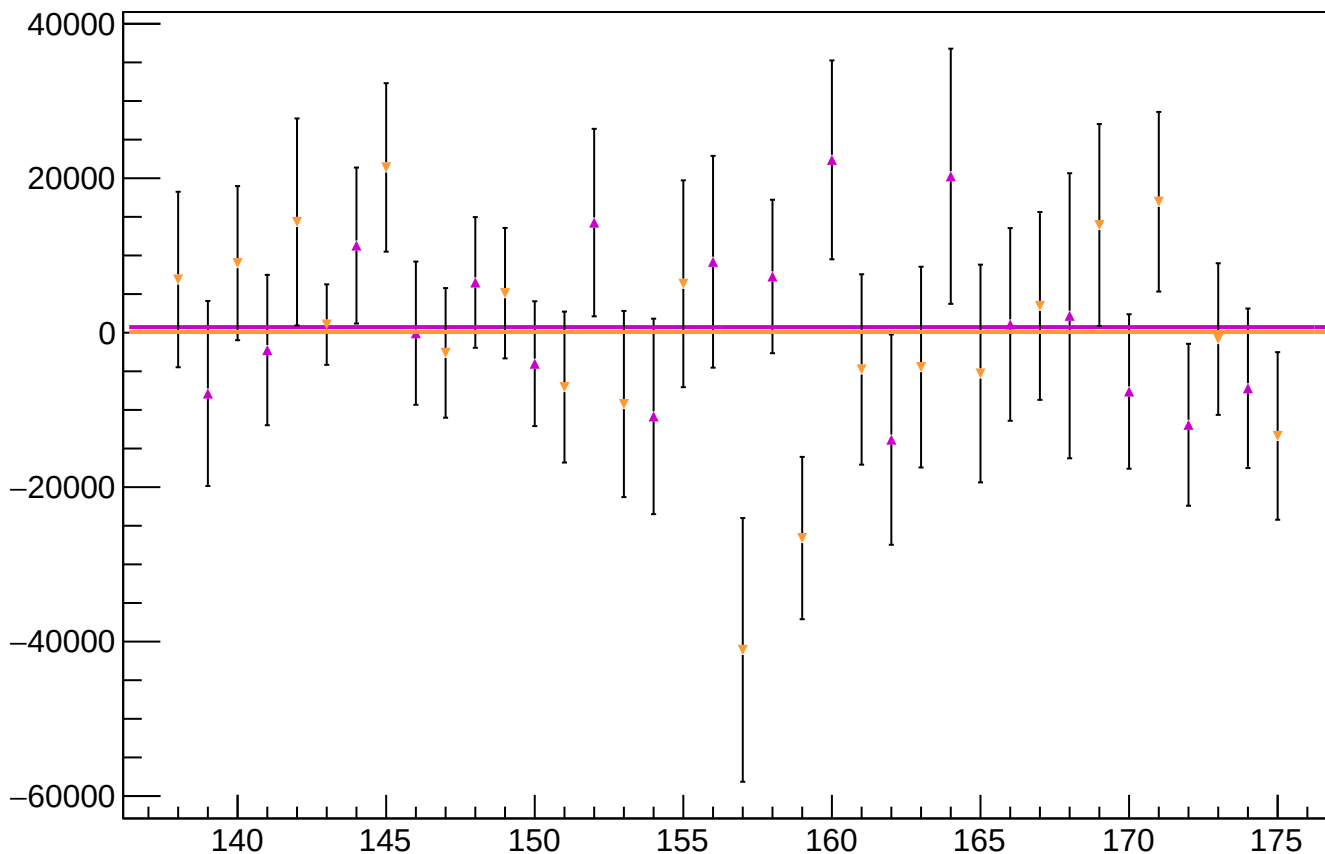
Right:  $1908.949 \pm 0.376$   $\chi^2/\text{NDF}: 1395226.1/35$

In:  $2118.102 \pm 0.332$   $\chi^2/\text{NDF}: 966863.2/34$

Out:  $2124.003 \pm 0.327$   $\chi^2/\text{NDF}: 1549436.9/38$

All:  $2121.103 \pm 0.233$   $\chi^2/\text{NDF}: 2516460.2/73$

asym\_at2\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 89.629+/-2302.743  $\chi^2/\text{NDF}$ :25.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 723.374+/-2585.423  $\chi^2/\text{NDF}$ :13.5/17

Left: 369.975+/-1719.575  $\chi^2/\text{NDF}$ : 39.0/37

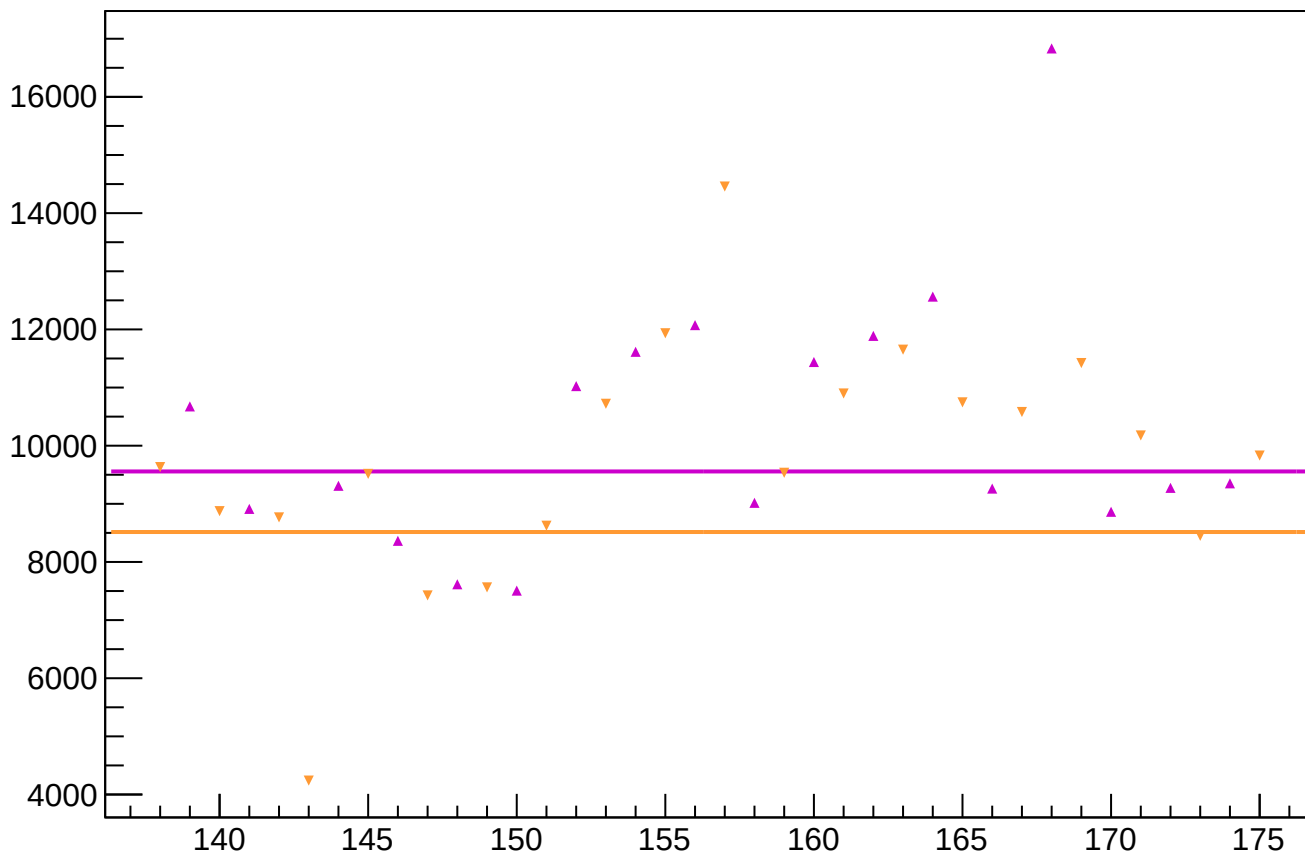
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 723.374+/-2585.423  $\chi^2/\text{NDF}$ :13.5/17

Out: 89.629+/-2302.743  $\chi^2/\text{NDF}$ :25.5/19

All: 369.975+/-1719.575  $\chi^2/\text{NDF}$ : 39.0/37

asym\_at2\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 8515.197+/-1.628  $\chi^2/\text{NDF}$ :2370961.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 9556.834+/-1.828  $\chi^2/\text{NDF}$ :941160.9/17

Left: 8975.979+/-1.216  $\chi^2/\text{NDF}$ : 3493152.5/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

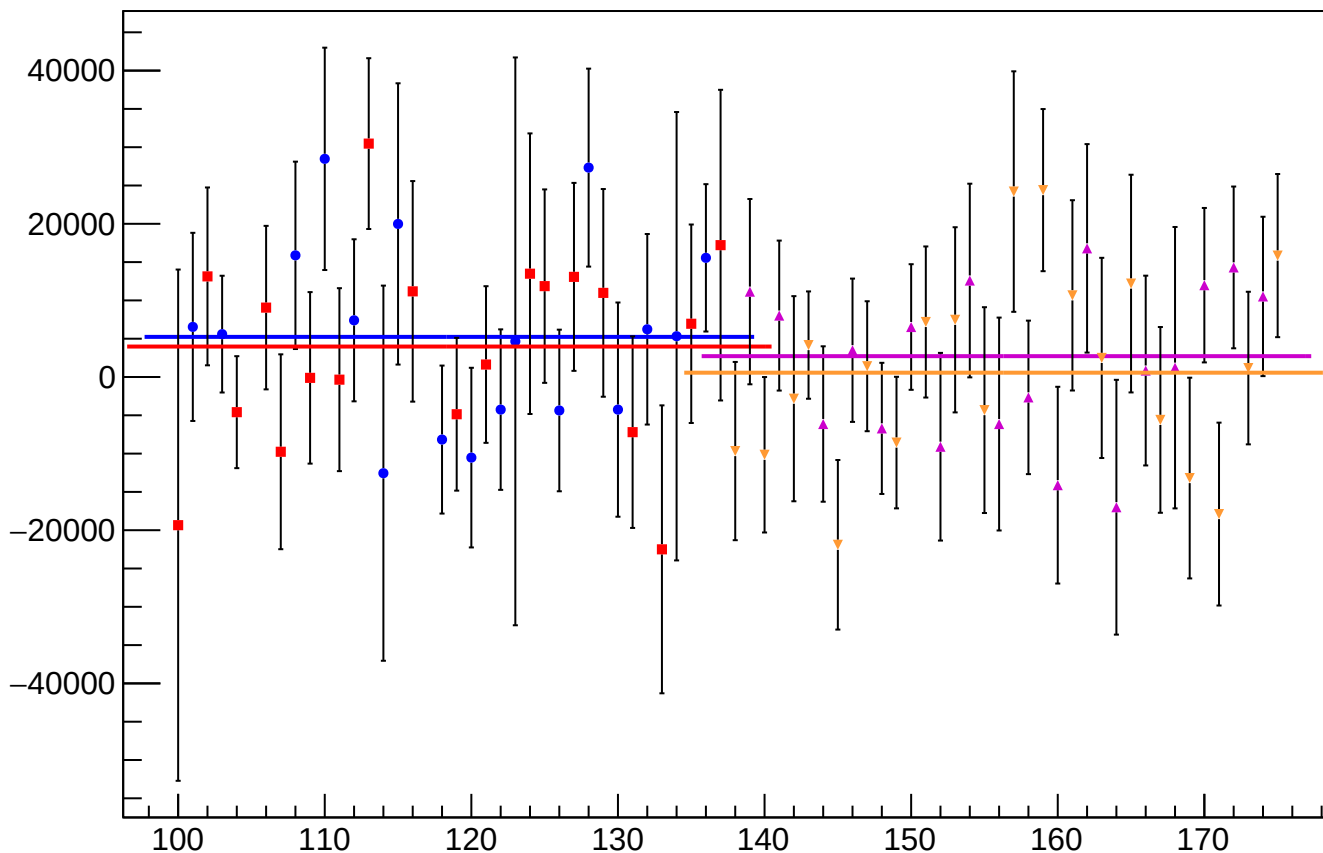
In: 9556.834+/-1.828  $\chi^2/\text{NDF}$ :941160.9/17

Out: 8515.197+/-1.628  $\chi^2/\text{NDF}$ :2370961.4/19

All: 8975.979+/-1.216  $\chi^2/\text{NDF}$ : 3493152.5/37



# asym\_at2\_avg\_mean vs Slug, Sign Corrected



Right In: 5238.554+/-2946.164  $\chi^2/\text{NDF}$ : 14.5/16

Left Out: 563.466+/-2424.309  $\chi^2/\text{NDF}$ : 22.9/19

Right Out: 3976.061+/-2790.421  $\chi^2/\text{NDF}$ : 15.6/18

Left In: 2721.781+/-2602.903  $\chi^2/\text{NDF}$ : 12.0/17

Left: 1566.045+/-1774.026  $\chi^2/\text{NDF}$ : 35.3/37

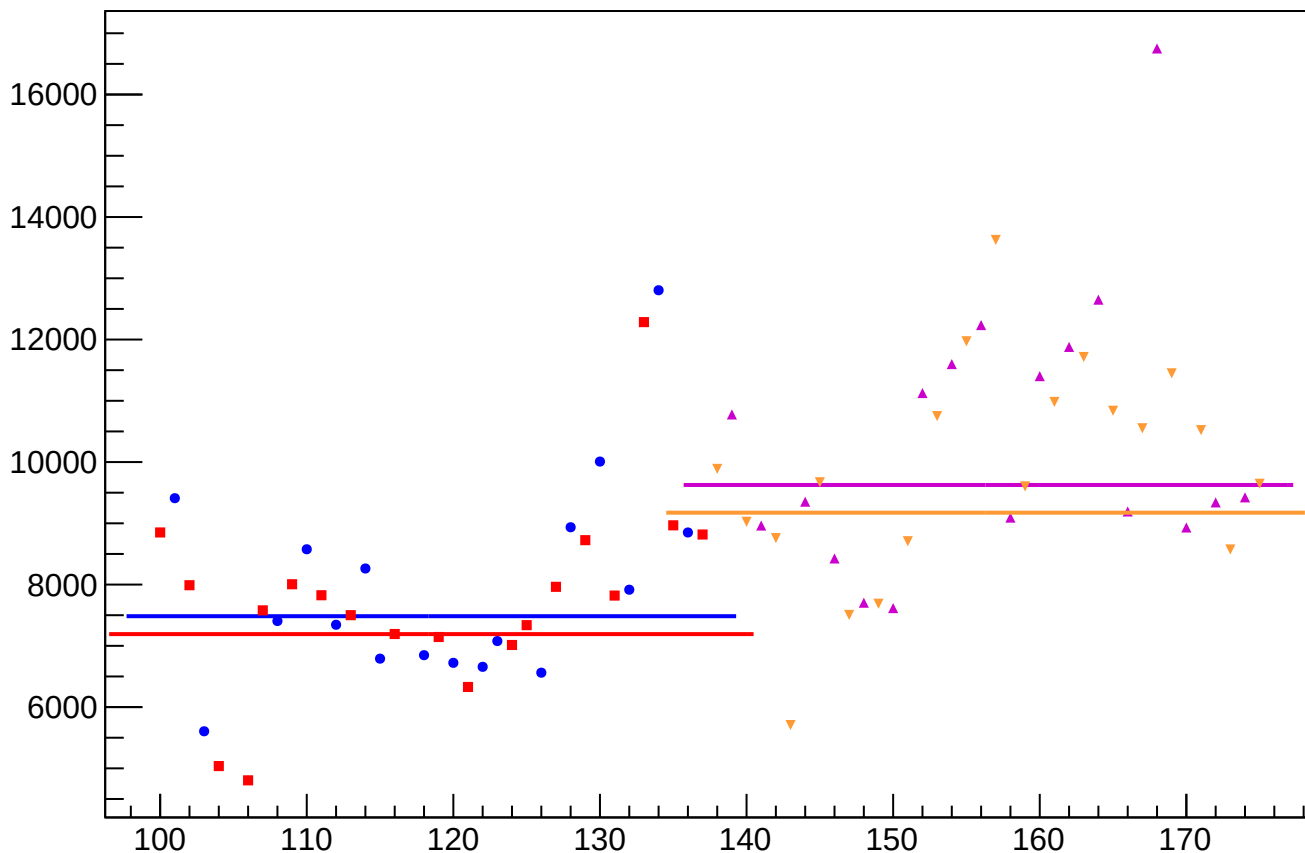
Right: 4573.057+/-2025.948  $\chi^2/\text{NDF}$ : 30.2/35

In: 3825.075+/-1950.656  $\chi^2/\text{NDF}$ : 26.9/34

Out: 2031.350+/-1830.093  $\chi^2/\text{NDF}$ : 39.4/38

All: 2871.071+/-1334.659  $\chi^2/\text{NDF}$ : 66.7/73

# asym\_at2\_avg\_rms vs Slug, Sign Corrected



Right In: 7483.785 $\pm$ 2.083  $\chi^2/\text{NDF}$ : 431806.2/16

Left Out: 9173.799 $\pm$ 1.714  $\chi^2/\text{NDF}$ :1198621.4/19

Right Out: 7191.451 $\pm$ 1.973  $\chi^2/\text{NDF}$ : 558753.1/18

Left In: 9625.852 $\pm$ 1.841  $\chi^2/\text{NDF}$ :911980.8/17

Left: 9383.786 $\pm$ 1.254  $\chi^2/\text{NDF}$ : 2142904.7/37

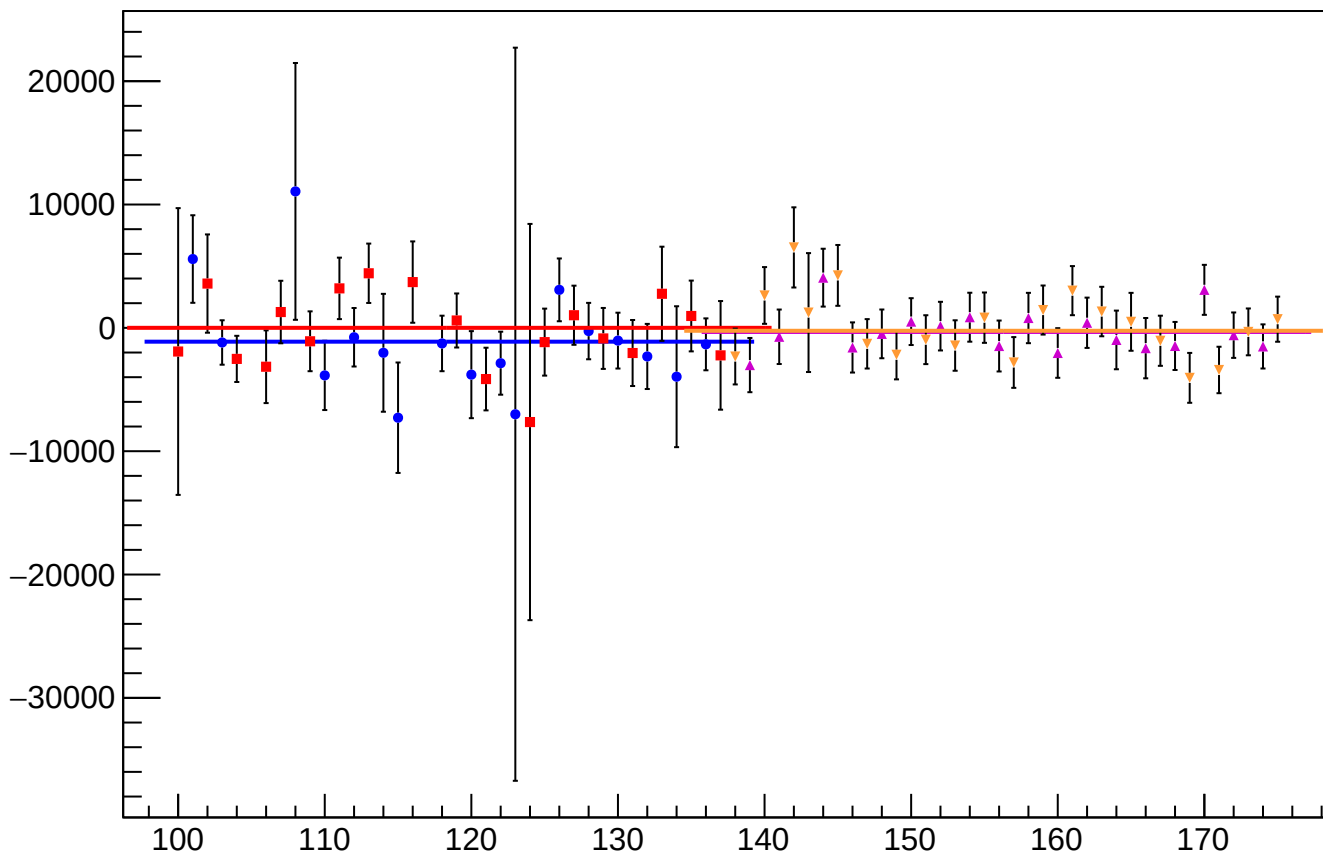
Right: 7329.673 $\pm$ 1.432  $\chi^2/\text{NDF}$ : 1000940.7/35

In: 8686.793 $\pm$ 1.379  $\chi^2/\text{NDF}$ :1937586.2/34

Out: 8320.993 $\pm$ 1.294  $\chi^2/\text{NDF}$ :2332660.8/38

All: 8492.232 $\pm$ 0.944  $\chi^2/\text{NDF}$ : 4307656.1/73

# dit\_asym\_at2\_dd\_mean vs Slug, Sign Corrected



Right In:  $-1120.496 \pm 679.161$   $\chi^2/\text{NDF}: 12.3/16$

Left Out:  $-236.831 \pm 474.770$   $\chi^2/\text{NDF}: 24.6/19$

Right Out:  $2.515 \pm 639.678$   $\chi^2/\text{NDF}: 15.5/18$

Left In:  $-333.480 \pm 482.195$   $\chi^2/\text{NDF}: 11.5/17$

Left:  $-284.405 \pm 338.308$   $\chi^2/\text{NDF}: 36.1/37$

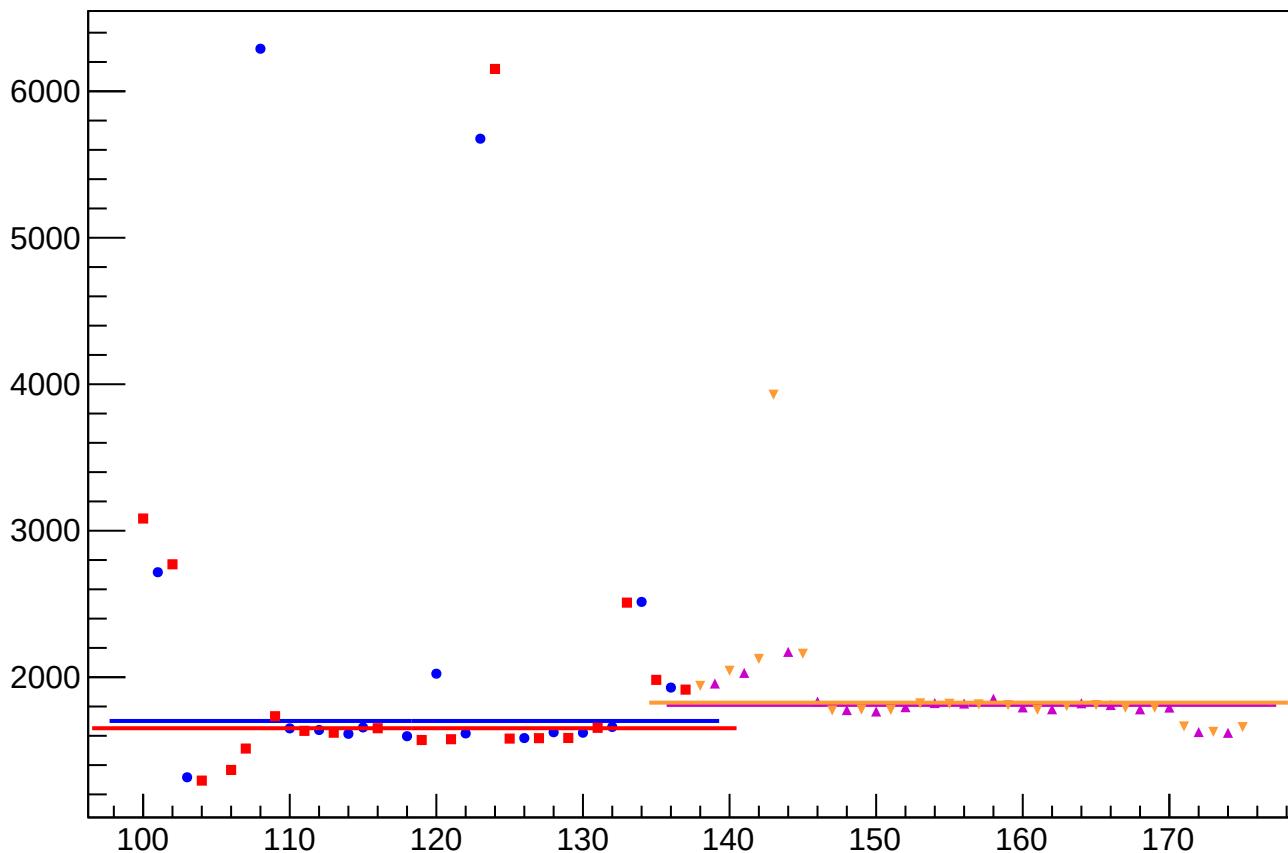
Right:  $-525.400 \pm 465.654$   $\chi^2/\text{NDF}: 29.2/35$

In:  $-597.242 \pm 393.176$   $\chi^2/\text{NDF}: 24.6/34$

Out:  $-151.816 \pm 381.238$   $\chi^2/\text{NDF}: 40.2/38$

All:  $-367.664 \pm 273.699$   $\chi^2/\text{NDF}: 65.5/73$

# dit\_asym\_at2\_dd\_rms vs Slug, Sign Corrected



Right In: 1701.283+/-0.480  $\chi^2/\text{NDF}$ : 778718.7/16

Left Out: 1826.295+/-0.336  $\chi^2/\text{NDF}$ : 517205.8/19

Right Out: 1651.734+/-0.452  $\chi^2/\text{NDF}$ : 588842.2/18

Left In: 1811.038+/-0.341  $\chi^2/\text{NDF}$ : 123362.7/17

Left: 1818.785+/-0.239  $\chi^2/\text{NDF}$ : 641585.2/37

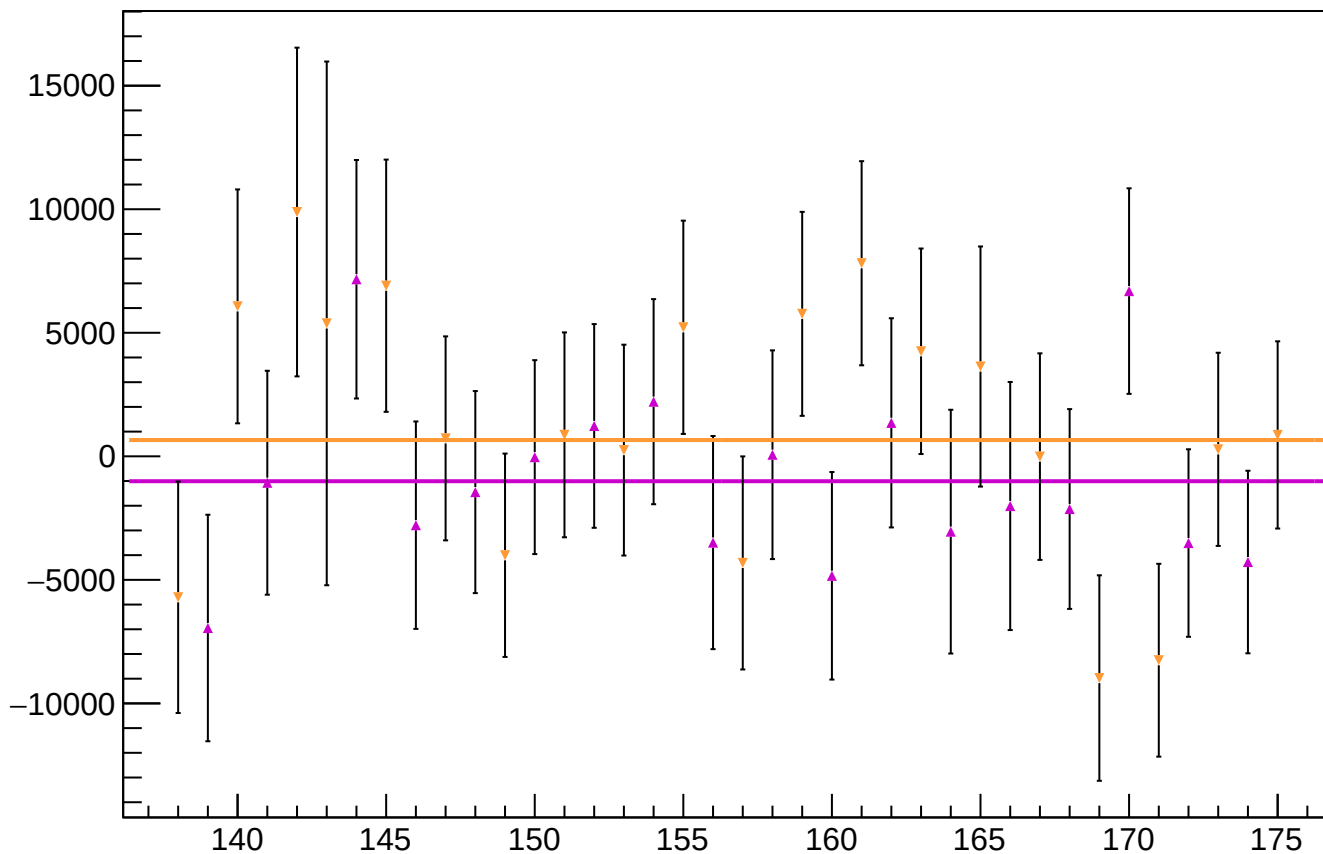
Right: 1675.026+/-0.329  $\chi^2/\text{NDF}$ : 1373201.9/35

In: 1774.255+/-0.278  $\chi^2/\text{NDF}$ : 936808.5/34

Out: 1764.291+/-0.270  $\chi^2/\text{NDF}$ : 1202083.1/38

All: 1769.119+/-0.194  $\chi^2/\text{NDF}$ : 2139553.6/73

asym\_at2\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 658.474+/-984.498  $\chi^2/\text{NDF}$ :26.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -1007.708+/-998.818  $\chi^2/\text{NDF}$ :12.2/17

Left: -162.588+/-701.153  $\chi^2/\text{NDF}$ : 40.4/37

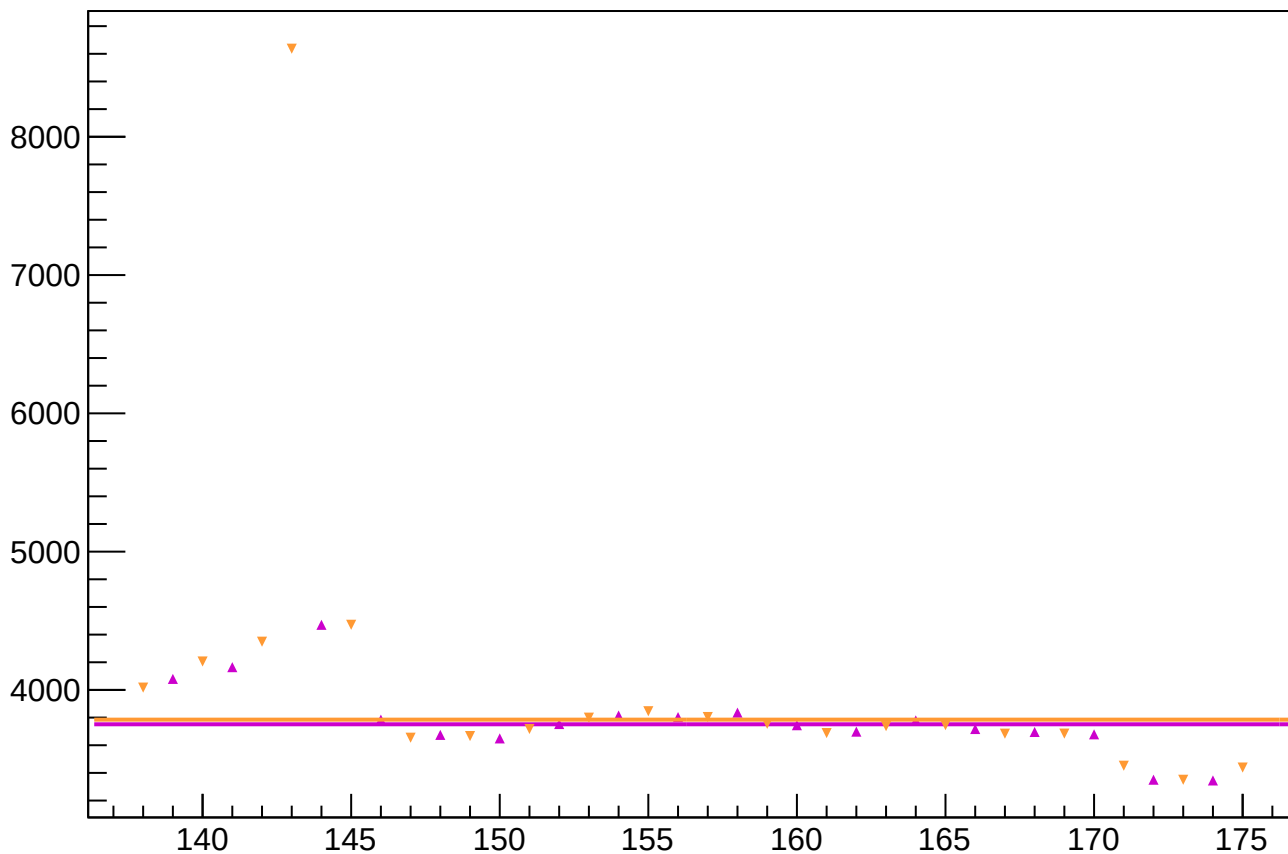
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -1007.708+/-998.818  $\chi^2/\text{NDF}$ :12.2/17

Out: 658.474+/-984.498  $\chi^2/\text{NDF}$ :26.8/19

All: -162.588+/-701.153  $\chi^2/\text{NDF}$ : 40.4/37

asym\_at2\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 3785.109+/-0.696  $\chi^2/\text{NDF}$ :555009.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 3751.508+/-0.706  $\chi^2/\text{NDF}$ :122965.3/17

Left: 3768.551+/-0.496  $\chi^2/\text{NDF}$ : 679123.0/37

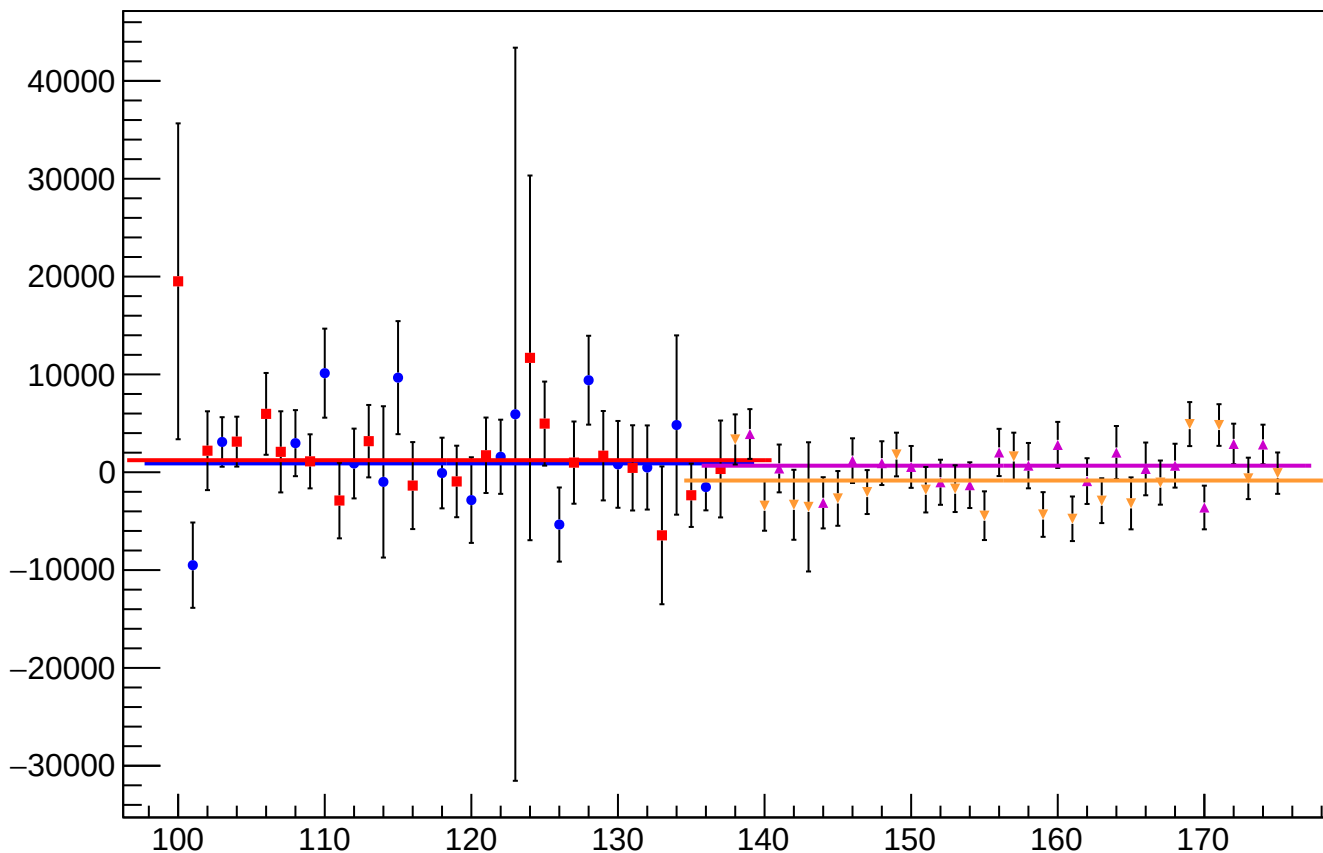
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 3751.508+/-0.706  $\chi^2/\text{NDF}$ :122965.3/17

Out: 3785.109+/-0.696  $\chi^2/\text{NDF}$ :555009.6/19

All: 3768.551+/-0.496  $\chi^2/\text{NDF}$ : 679123.0/37

# asym\_at2\_dd\_mean vs Slug, Sign Corrected



Right In:  $903.274 \pm 961.918$   $\chi^2/\text{NDF}$ : 21.6/16

Left Out:  $-846.269 \pm 542.100$   $\chi^2/\text{NDF}$ : 30.5/19

Right Out:  $1231.015 \pm 925.029$   $\chi^2/\text{NDF}$ : 8.9/18

Left In:  $669.484 \pm 548.648$   $\chi^2/\text{NDF}$ : 12.9/17

Left:  $-97.493 \pm 385.617$   $\chi^2/\text{NDF}$ : 47.3/37

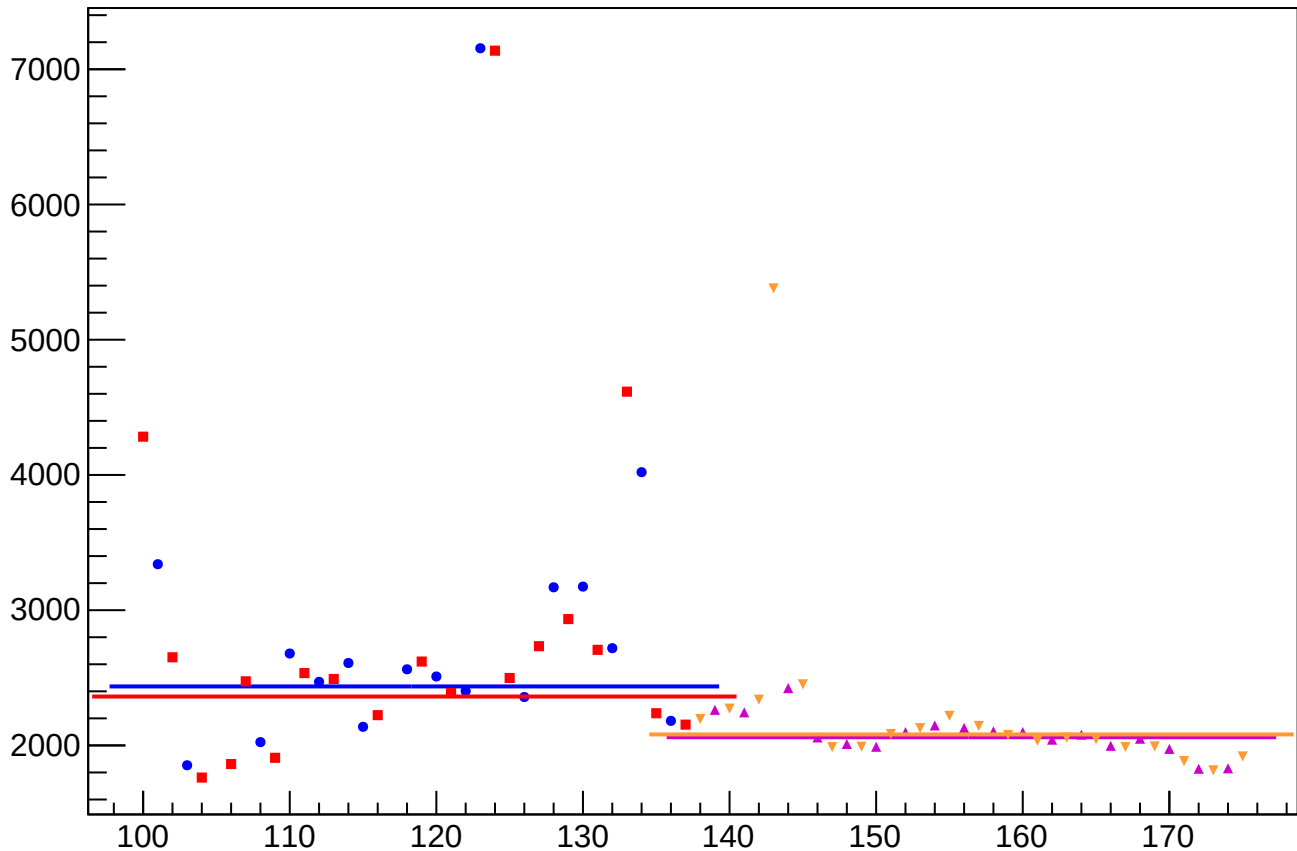
Right:  $1073.549 \pm 666.754$   $\chi^2/\text{NDF}$ : 30.6/35

In:  $726.871 \pm 476.578$   $\chi^2/\text{NDF}$ : 34.5/34

Out:  $-315.231 \pm 467.703$   $\chi^2/\text{NDF}$ : 43.2/38

All:  $196.027 \pm 333.809$   $\chi^2/\text{NDF}$ : 80.2/73

# asym\_at2\_dd\_rms vs Slug, Sign Corrected



Right In: 2436.256 $\pm$ 0.680  $\chi^2/\text{NDF}$ : 468552.3/16

Left Out: 2081.313 $\pm$ 0.383  $\chi^2/\text{NDF}$ : 642797.1/19

Right Out: 2361.558 $\pm$ 0.654  $\chi^2/\text{NDF}$ : 655845.9/18

Left In: 2060.589 $\pm$ 0.388  $\chi^2/\text{NDF}$ : 127493.0/17

Left: 2071.075 $\pm$ 0.273  $\chi^2/\text{NDF}$ : 771734.1/37

Right: 2397.448 $\pm$ 0.471  $\chi^2/\text{NDF}$ : 1130664.2/35

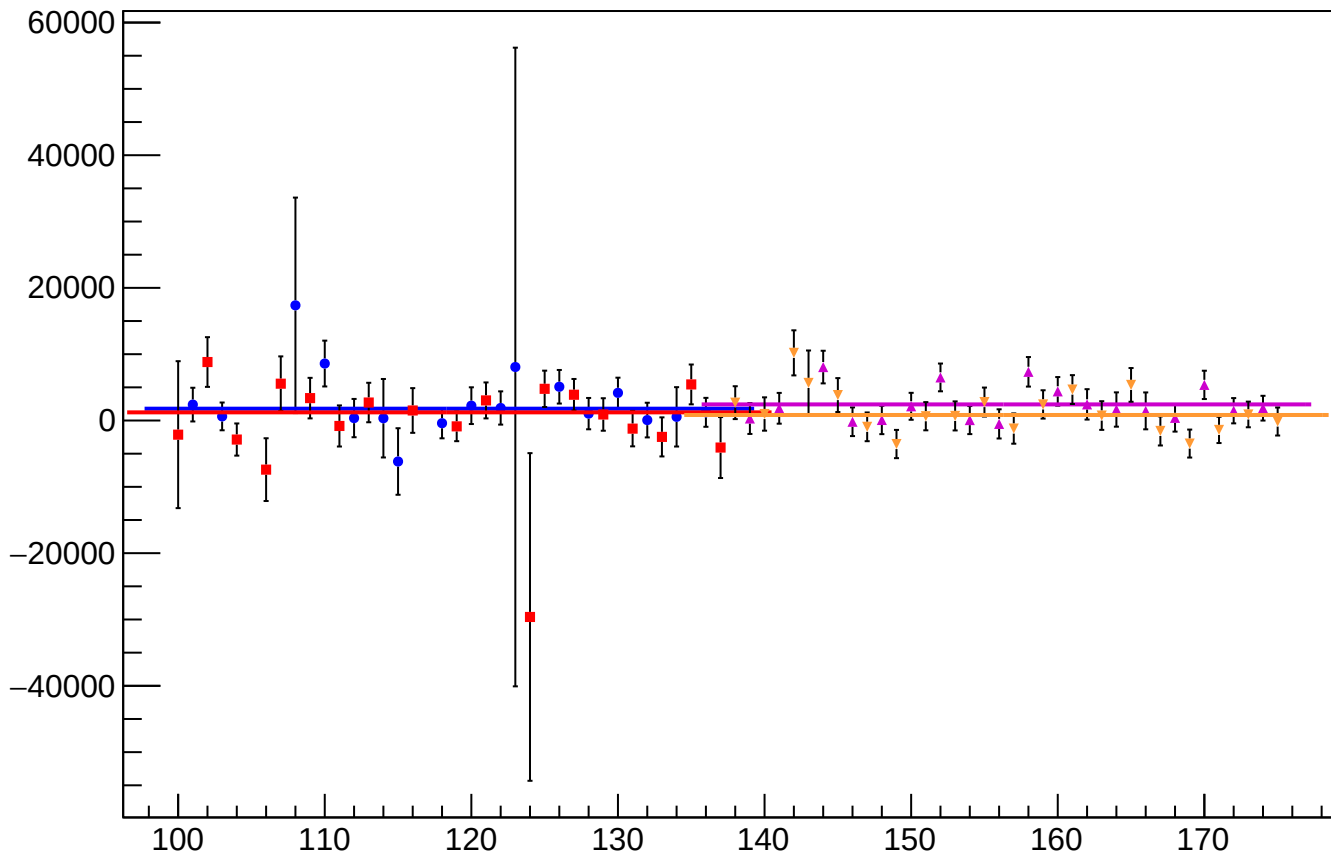
In: 2152.803 $\pm$ 0.337  $\chi^2/\text{NDF}$ : 826211.4/34

Out: 2152.956 $\pm$ 0.331  $\chi^2/\text{NDF}$ : 1435284.2/38

All: 2152.881 $\pm$ 0.236  $\chi^2/\text{NDF}$ : 2261495.6/73



# dit\_asym\_atl\_avg\_mean vs Slug, Sign Corrected



Right In: 1783.505 $\pm$ 694.403  $\chi^2$ /NDF: 12.4/16

Left Out: 833.902 $\pm$ 509.903  $\chi^2$ /NDF:30.8/19

Right Out: 1229.293 $\pm$ 708.144  $\chi^2$ /NDF: 24.2/18

Left In: 2430.178 $\pm$ 515.096  $\chi^2$ /NDF:24.7/17

Left: 1623.953 $\pm$ 362.378  $\chi^2$ /NDF: 60.4/37

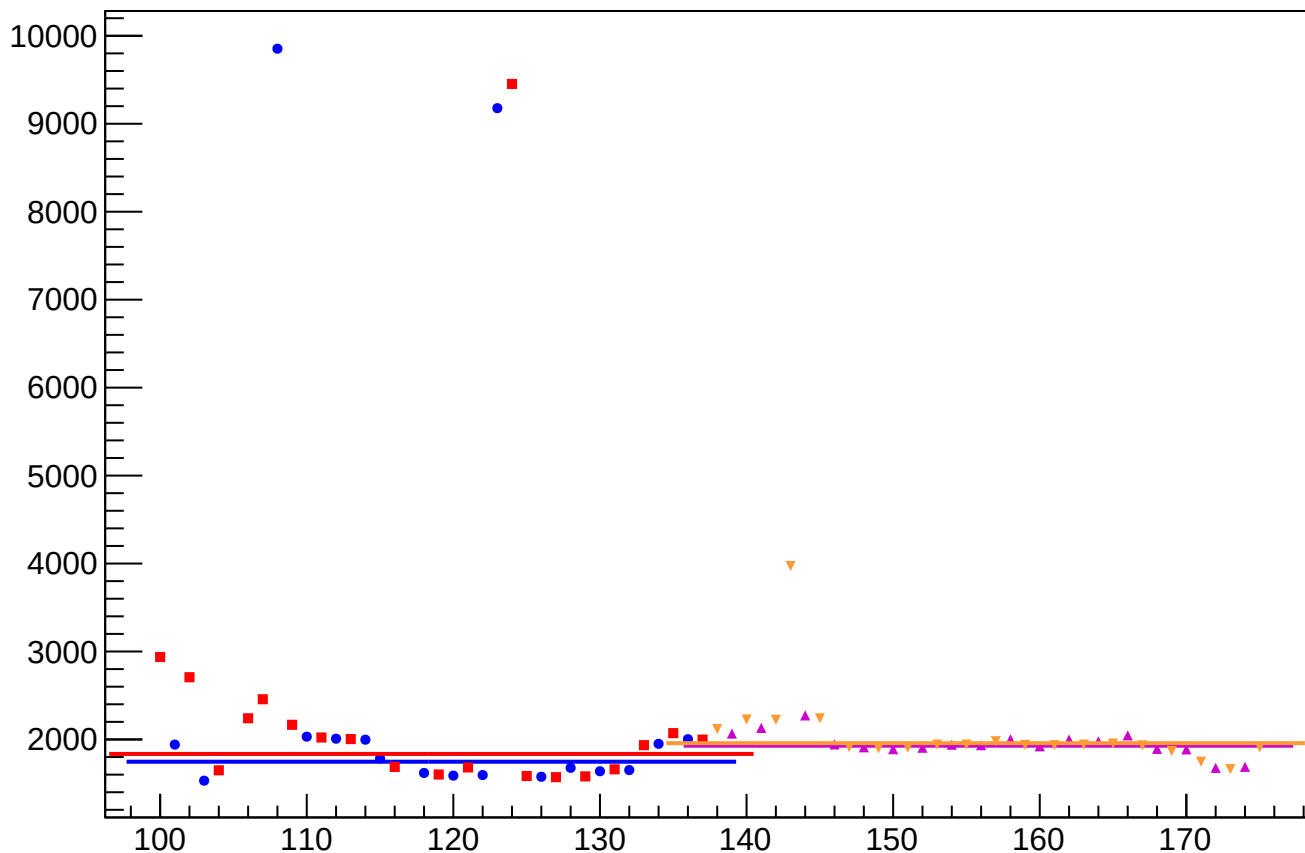
Right: 1511.828 $\pm$ 495.804  $\chi^2$ /NDF: 37.0/35

In: 2200.649 $\pm$ 413.703  $\chi^2$ /NDF:37.7/34

Out: 968.907 $\pm$ 413.793  $\chi^2$ /NDF:55.2/38

All: 1584.912 $\pm$ 292.564  $\chi^2$ /NDF: 97.4/73

# dit\_asym\_atl\_avg\_rms vs Slug, Sign Corrected



Right In: 1746.836+/-0.491  $\chi^2/\text{NDF}$ : 682484.5/16

Left Out: 1957.761+/-0.361  $\chi^2/\text{NDF}$ : 485785.7/19

Right Out: 1835.413+/-0.500  $\chi^2/\text{NDF}$ : 550402.9/18

Left In: 1929.368+/-0.364  $\chi^2/\text{NDF}$ : 140661.6/17

Left: 1943.708+/-0.256  $\chi^2/\text{NDF}$ : 629516.6/37

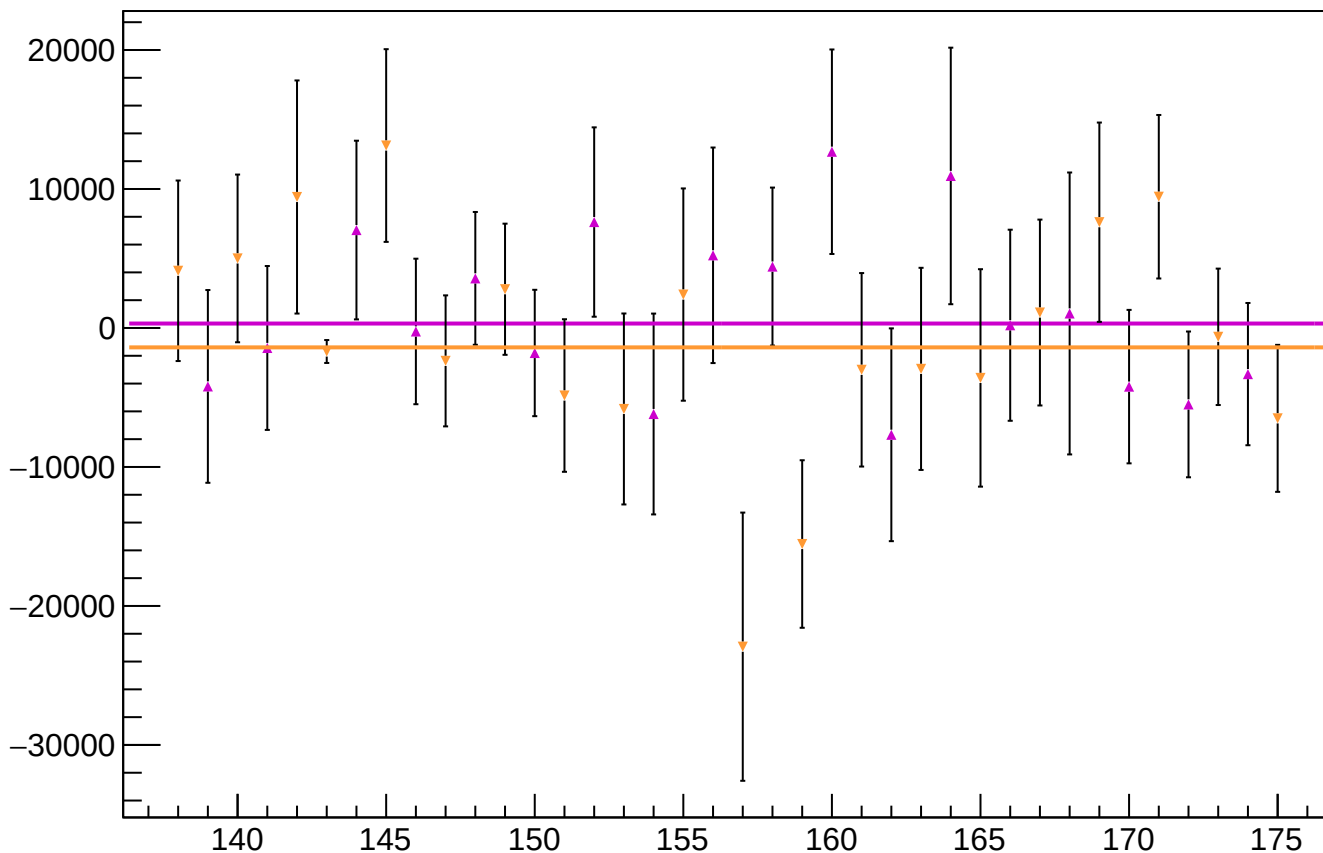
Right: 1790.310+/-0.350  $\chi^2/\text{NDF}$ : 1248859.1/35

In: 1864.580+/-0.293  $\chi^2/\text{NDF}$ : 912288.4/34

Out: 1915.920+/-0.292  $\chi^2/\text{NDF}$ : 1075566.9/38

All: 1890.255+/-0.207  $\chi^2/\text{NDF}$ : 2003258.5/73

asym\_atl\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1395.536+/-714.003  $\chi^2/\text{NDF}$ :26.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 319.621+/-1449.003  $\chi^2/\text{NDF}$ :12.8/17

Left: -1060.446+/-640.469  $\chi^2/\text{NDF}$ : 40.6/37

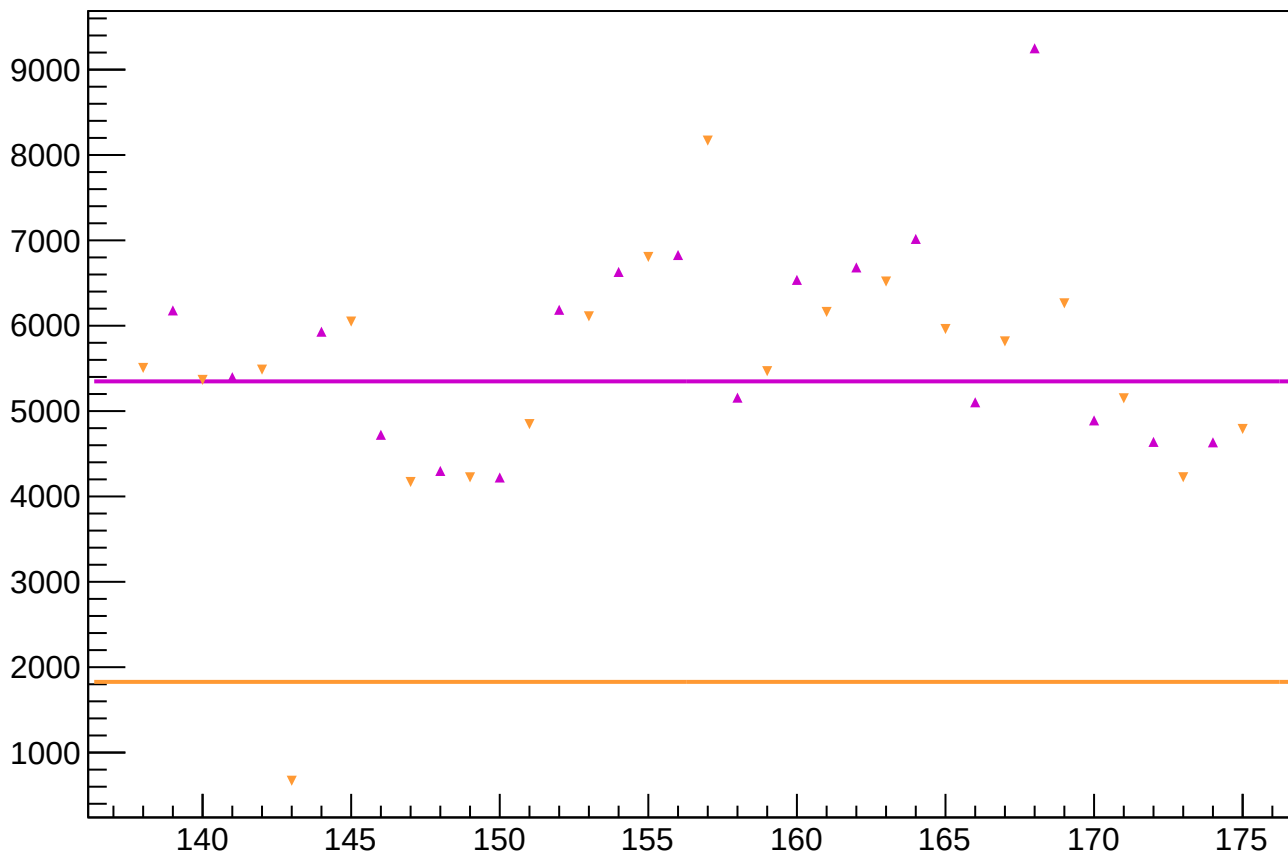
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 319.621+/-1449.003  $\chi^2/\text{NDF}$ :12.8/17

Out: -1395.536+/-714.003  $\chi^2/\text{NDF}$ :26.7/19

All: -1060.446+/-640.469  $\chi^2/\text{NDF}$ : 40.6/37

asym\_atl\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1827.937+/-0.505  $\chi^2/\text{NDF}$ :16618483.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 5348.053+/-1.025  $\chi^2/\text{NDF}$ :1027577.1/17

Left: 2515.662+/-0.453  $\chi^2/\text{NDF}$ : 27143394.1/37

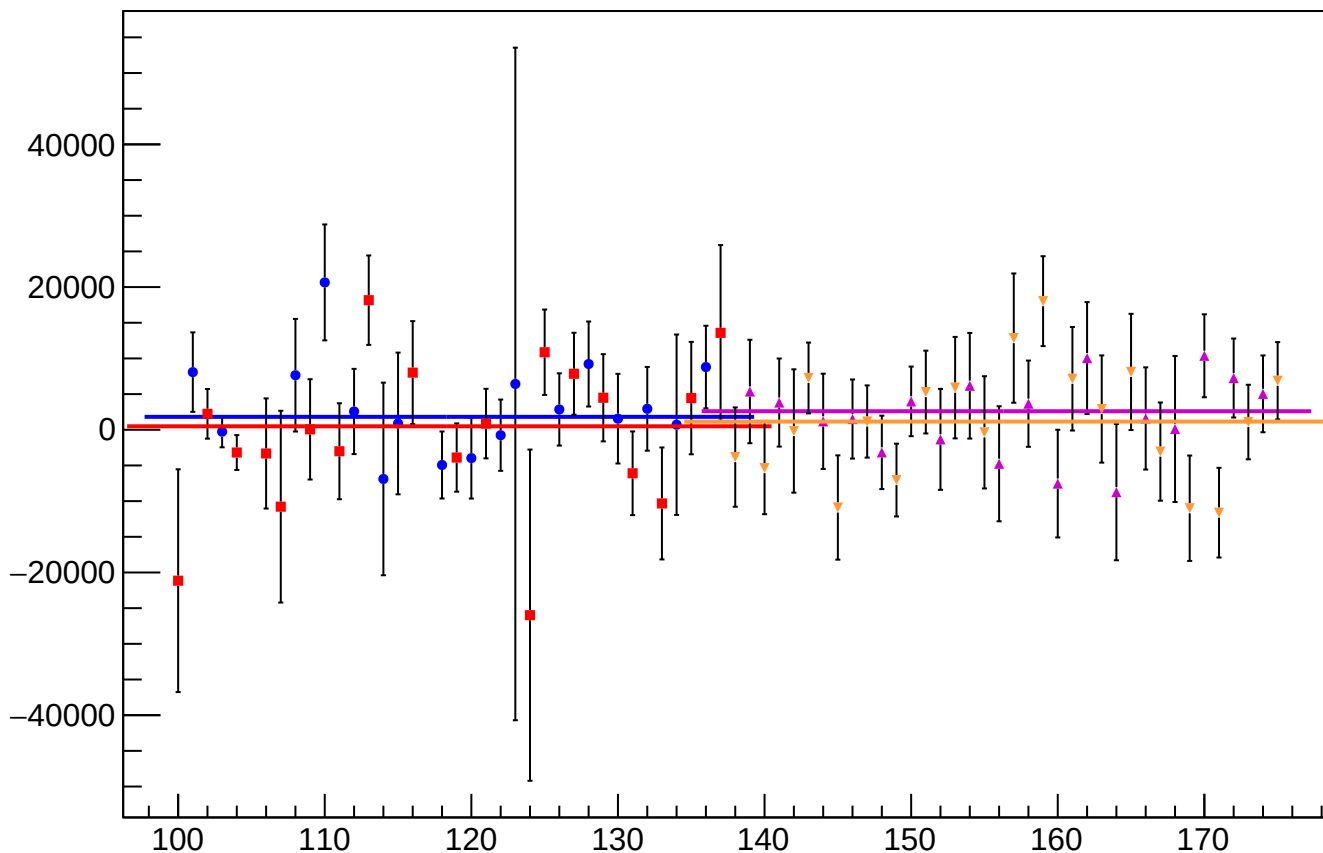
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 5348.053+/-1.025  $\chi^2/\text{NDF}$ :1027577.1/17

Out: 1827.937+/-0.505  $\chi^2/\text{NDF}$ :16618483.1/19

All: 2515.662+/-0.453  $\chi^2/\text{NDF}$ : 27143394.1/37

# asym\_atl\_avg\_mean vs Slug, Sign Corrected



Right In: 1814.267+/-1301.312  $\chi^2/\text{NDF}$ : 15.0/16

Left Out: 1149.585+/-1435.650  $\chi^2/\text{NDF}$ : 28.0/19

Right Out: 488.360+/-1286.073  $\chi^2/\text{NDF}$ : 26.5/18

Left In: 2601.646+/-1522.057  $\chi^2/\text{NDF}$ : 9.9/17

Left: 1833.231+/-1044.369  $\chi^2/\text{NDF}$ : 38.4/37

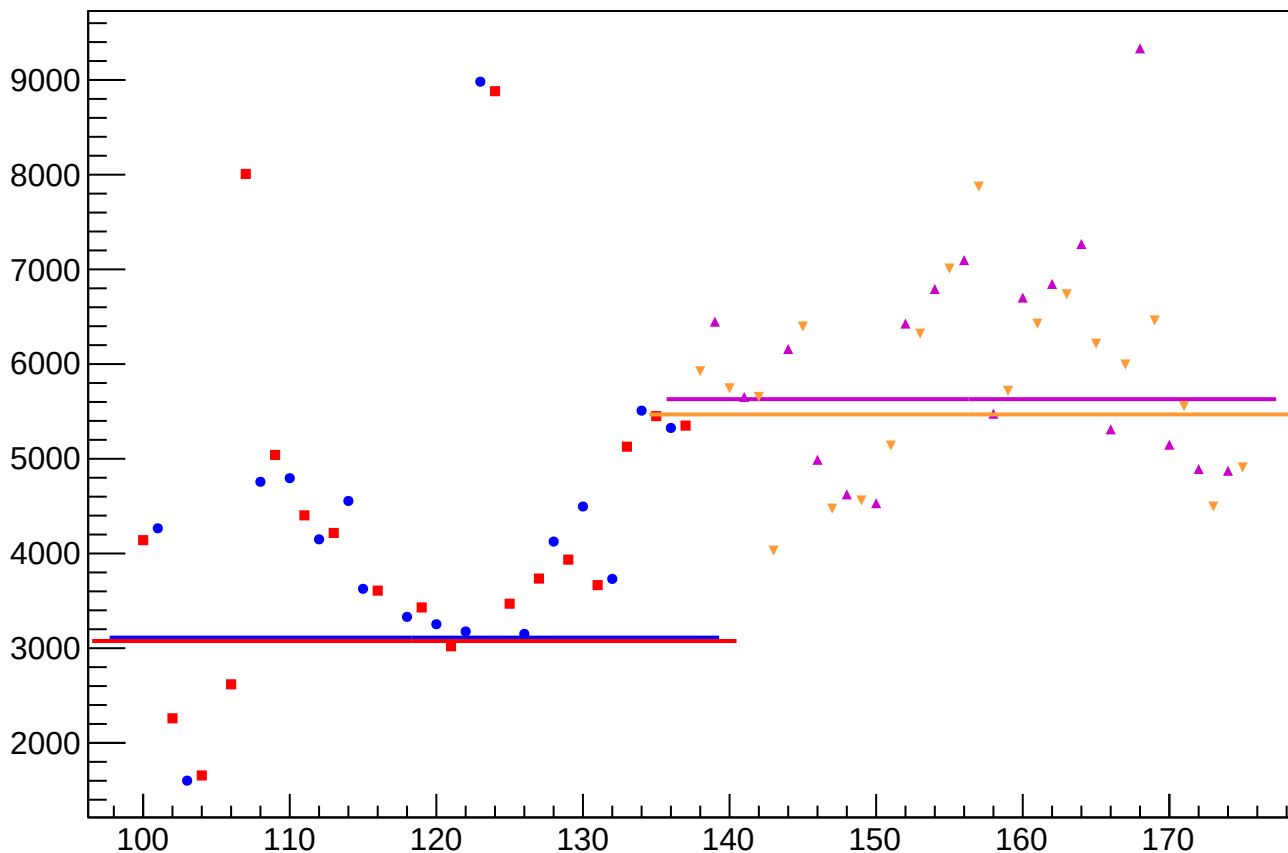
Right: 1143.505+/-914.731  $\chi^2/\text{NDF}$ : 42.0/35

In: 2146.770+/-989.091  $\chi^2/\text{NDF}$ : 25.1/34

Out: 782.743+/-957.923  $\chi^2/\text{NDF}$ : 54.6/38

All: 1442.926+/-688.109  $\chi^2/\text{NDF}$ : 80.6/73

# asym\_atl\_avg\_rms vs Slug, Sign Corrected



Right In: 3111.560+/-0.920  $\chi^2/\text{NDF}$ : 1878991.5/16

Left Out: 5468.118+/-1.015  $\chi^2/\text{NDF}$ : 857770.8/19

Right Out: 3075.800+/-0.896  $\chi^2/\text{NDF}$ : 2009557.4/18

Left In: 5629.596+/-1.076  $\chi^2/\text{NDF}$ : 887041.3/17

Left: 5544.144+/-0.738  $\chi^2/\text{NDF}$ : 1756724.8/37

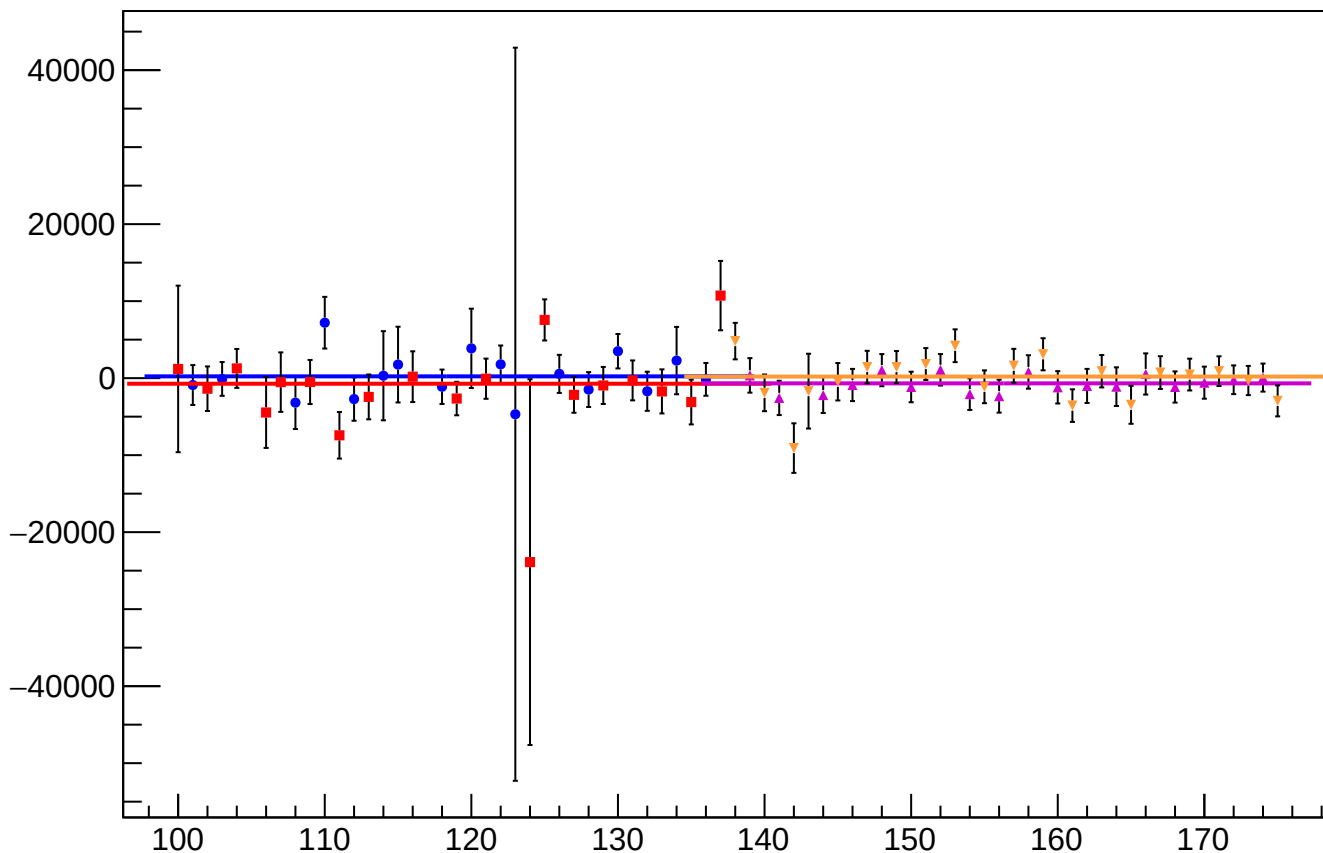
Right: 3093.209+/-0.642  $\chi^2/\text{NDF}$ : 3889323.9/35

In: 4174.896+/-0.699  $\chi^2/\text{NDF}$ : 5928339.7/34

Out: 4123.680+/-0.672  $\chi^2/\text{NDF}$ : 5988319.1/38

All: 4148.260+/-0.485  $\chi^2/\text{NDF}$ : 11919447.7/77

# dit\_asym\_atl\_dd\_mean vs Slug, Sign Corrected



Right In: 232.323+/-686.786  $\chi^2/\text{NDF}$ : 11.5/16

Left Out: 205.031+/-494.279  $\chi^2/\text{NDF}$ : 28.9/19

Right Out: -726.169+/-684.175  $\chi^2/\text{NDF}$ : 25.8/18

Left In: -677.757+/-500.209  $\chi^2/\text{NDF}$ : 5.0/17

Left: -231.099+/-351.586  $\chi^2/\text{NDF}$ : 35.5/37

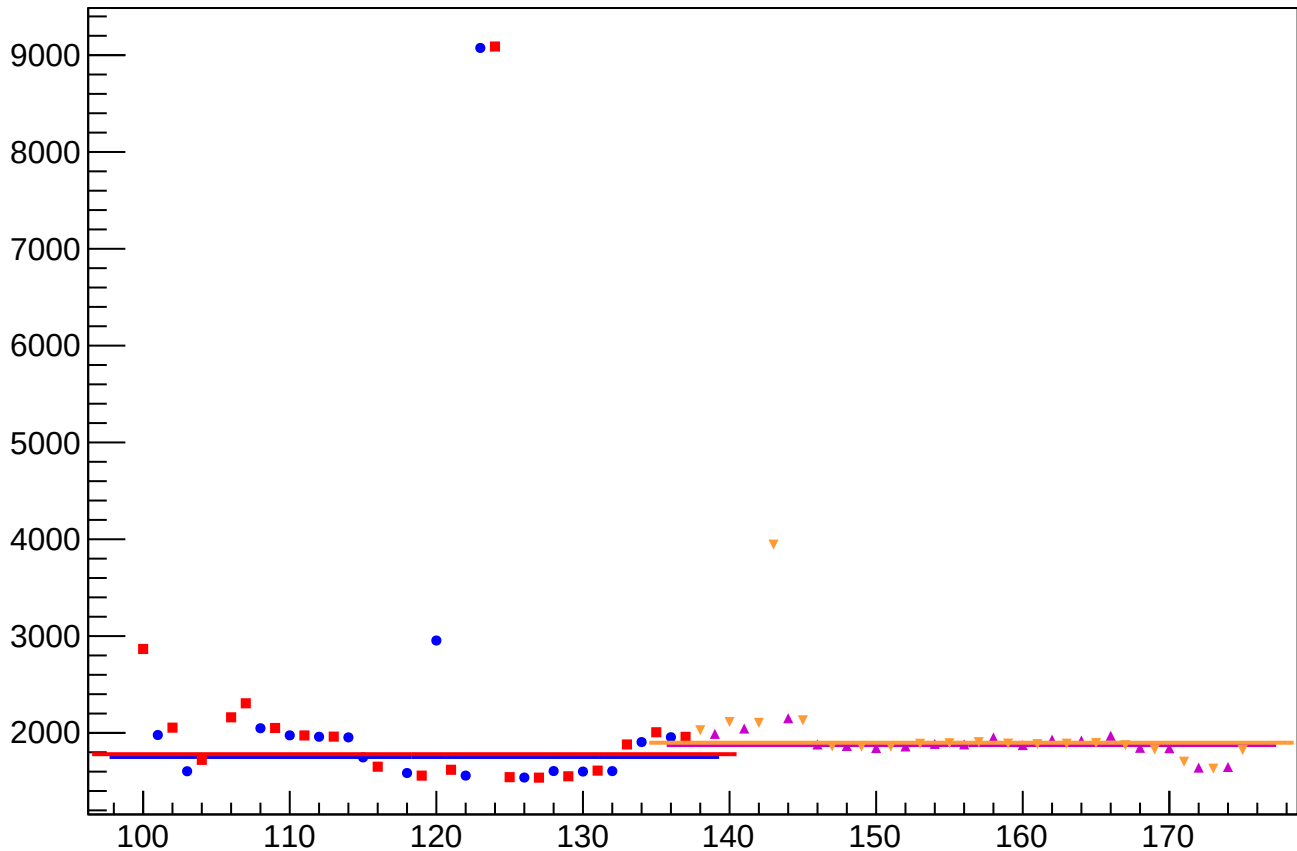
Right: -248.748+/-484.705  $\chi^2/\text{NDF}$ : 38.3/35

In: -362.318+/-404.333  $\chi^2/\text{NDF}$ : 17.7/34

Out: -114.313+/-400.659  $\chi^2/\text{NDF}$ : 55.9/38

All: -237.184+/-284.599  $\chi^2/\text{NDF}$ : 73.8/73

# dit\_asym\_atl\_dd\_rms vs Slug, Sign Corrected



Right In: 1751.850+/-0.486  $\chi^2/\text{NDF}$ : 300898.3/16

Left Out: 1898.711+/-0.350  $\chi^2/\text{NDF}$ : 471716.2/19

Right Out: 1780.209+/-0.483  $\chi^2/\text{NDF}$ : 428327.5/18

Left In: 1874.719+/-0.354  $\chi^2/\text{NDF}$ : 116249.3/17

Left: 1886.858+/-0.249  $\chi^2/\text{NDF}$ : 590293.5/37

Right: 1766.106+/-0.342  $\chi^2/\text{NDF}$ : 730940.0/35

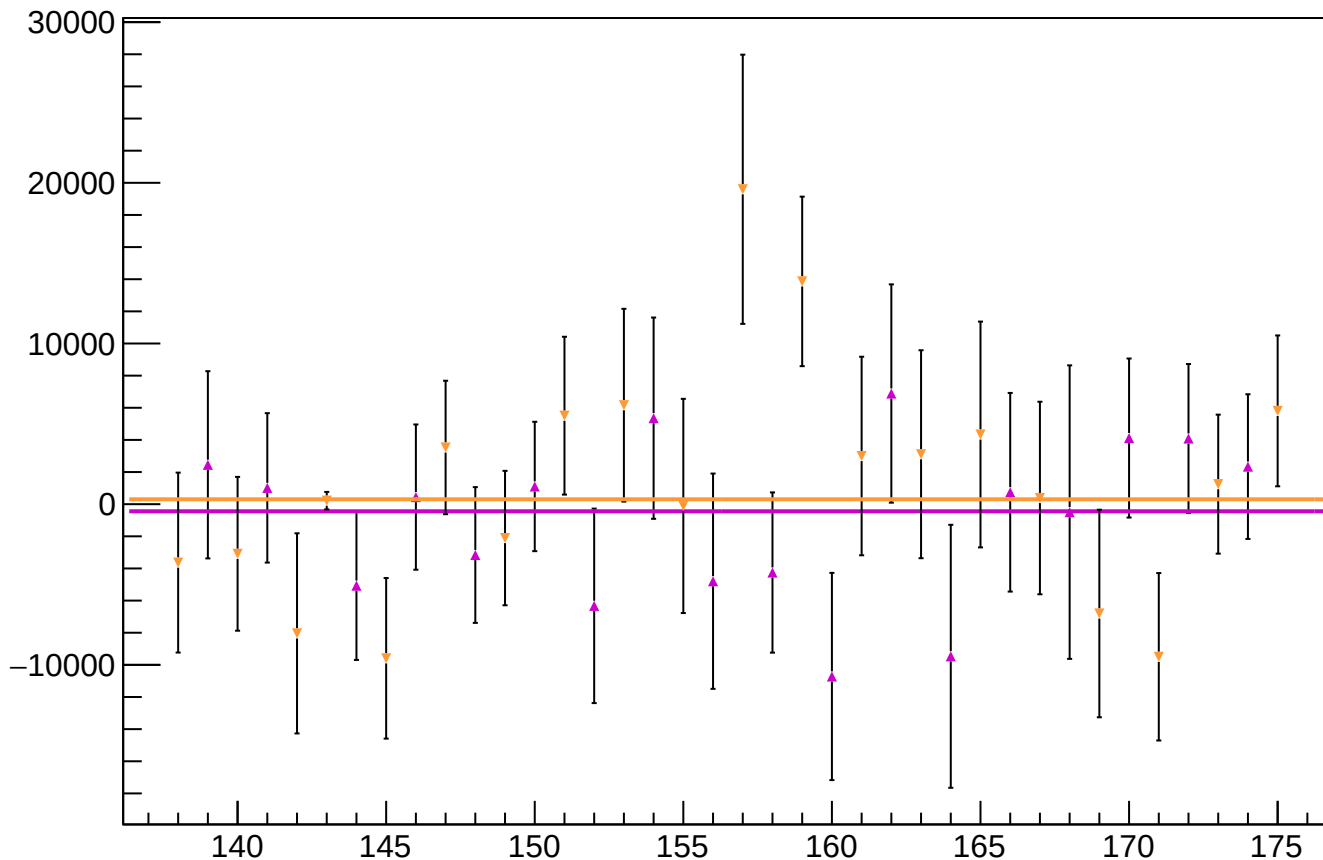
In: 1832.132+/-0.286  $\chi^2/\text{NDF}$ : 458973.3/34

Out: 1857.987+/-0.283  $\chi^2/\text{NDF}$ : 939549.5/38

All: 1845.185+/-0.201  $\chi^2/\text{NDF}$ : 1402651.5/73



asym\_atl\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 304.498+/-496.976  $\chi^2/\text{NDF}$ :28.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -441.143+/-1249.949  $\chi^2/\text{NDF}$ :11.9/17

Left: 202.715+/-461.812  $\chi^2/\text{NDF}$ : 40.8/37

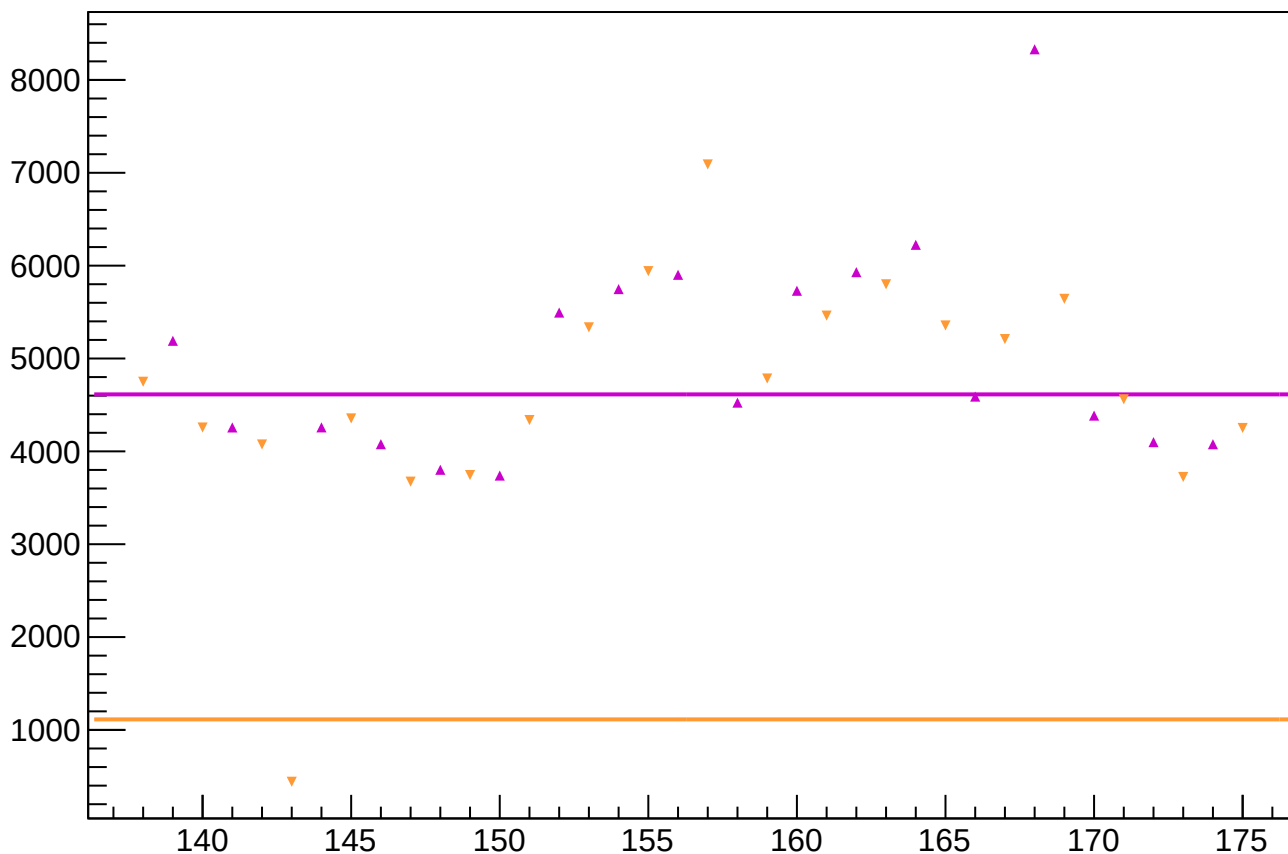
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -441.143+/-1249.949  $\chi^2/\text{NDF}$ :11.9/17

Out: 304.498+/-496.976  $\chi^2/\text{NDF}$ :28.5/19

All: 202.715+/-461.812  $\chi^2/\text{NDF}$ : 40.8/37

asym\_atl\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1113.317+/-0.351  $\chi^2/\text{NDF}$ :19686310.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 4613.542+/-0.884  $\chi^2/\text{NDF}$ :1023092.5/17

Left: 1591.112+/-0.327  $\chi^2/\text{NDF}$ : 34251855.3/37

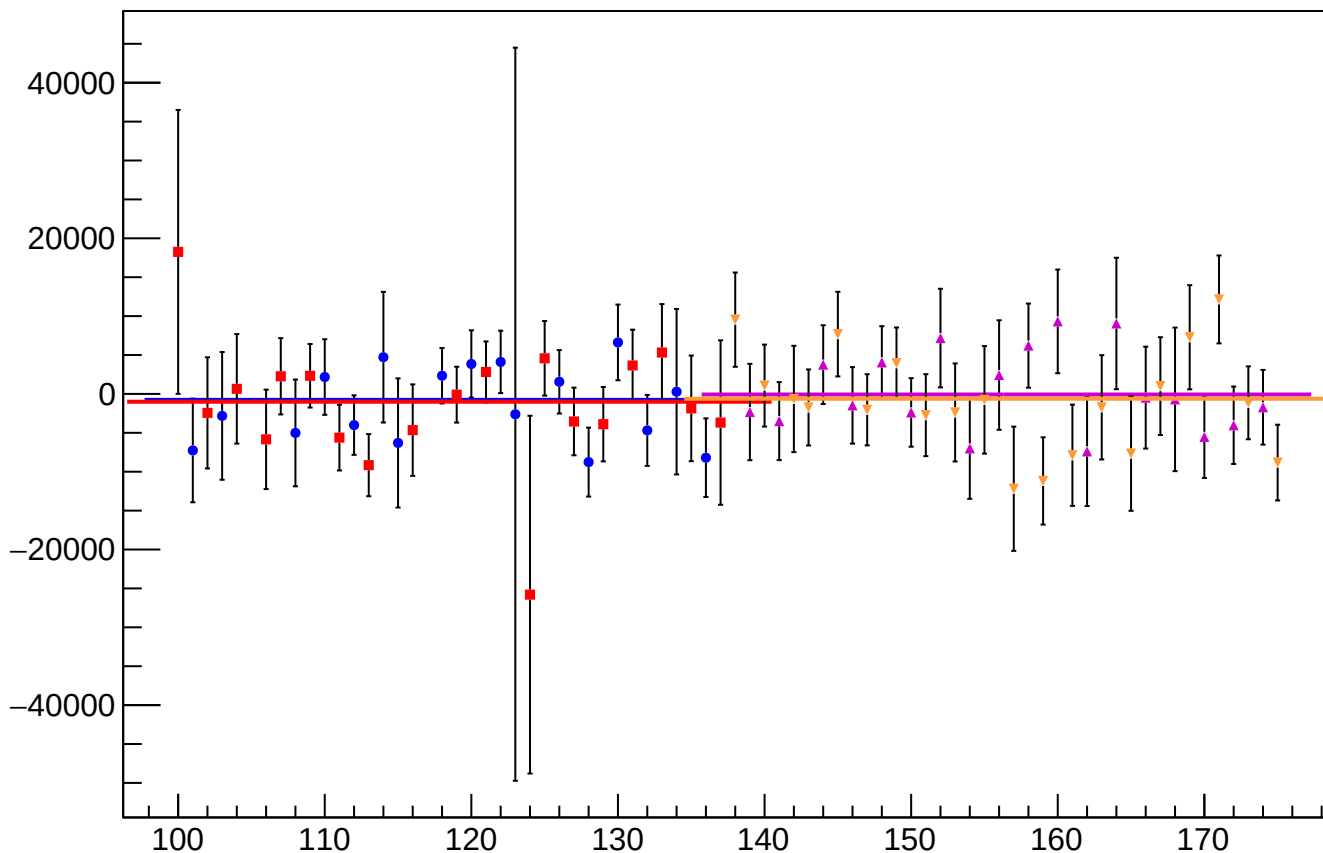
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 4613.542+/-0.884  $\chi^2/\text{NDF}$ :1023092.5/17

Out: 1113.317+/-0.351  $\chi^2/\text{NDF}$ :19686310.3/19

All: 1591.112+/-0.327  $\chi^2/\text{NDF}$ : 34251855.3/37

# asym\_atl\_dd\_mean vs Slug, Sign Corrected



Right In: -765.107+/-1247.704  $\chi^2/\text{NDF}$ : 15.5/16

Left Out: -620.891+/-1274.040  $\chi^2/\text{NDF}$ : 23.9/19

Right Out: -1004.792+/-1191.116  $\chi^2/\text{NDF}$ : 15.0/18

Left In: -76.160+/-1338.031  $\chi^2/\text{NDF}$ : 12.3/17

Left: -361.863+/-922.676  $\chi^2/\text{NDF}$ : 36.3/37

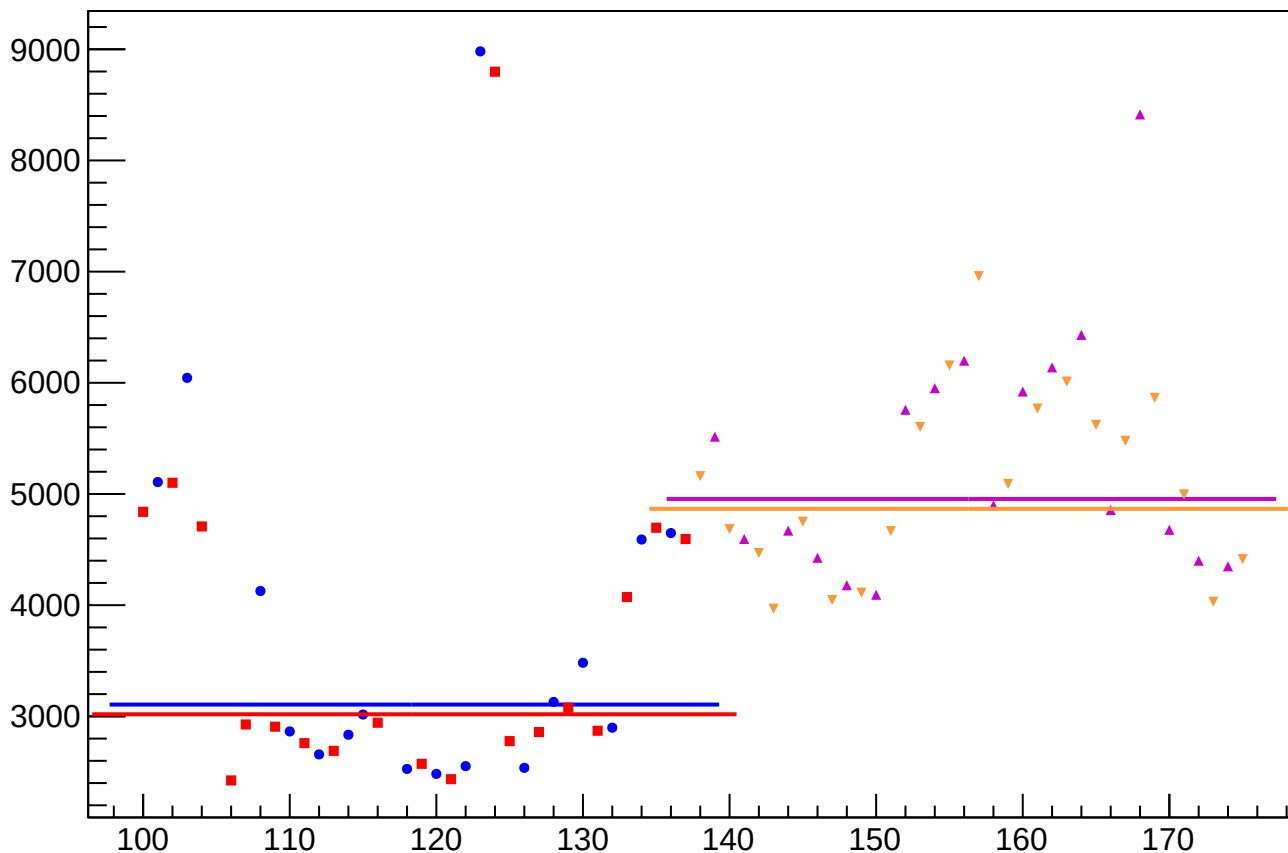
Right: -890.508+/-861.557  $\chi^2/\text{NDF}$ : 30.6/35

In: -444.671+/-912.523  $\chi^2/\text{NDF}$ : 28.0/34

Out: -825.741+/-870.086  $\chi^2/\text{NDF}$ : 38.9/38

All: -644.273+/-629.712  $\chi^2/\text{NDF}$ : 67.0/73

# asym\_atl\_dd\_rms vs Slug, Sign Corrected



Right In: 3105.849+/-0.882  $\chi^2/\text{NDF}$ : 959826.4/16

Left Out: 4866.426+/-0.901  $\chi^2/\text{NDF}$ : 703809.9/19

Right Out: 3018.781+/-0.832  $\chi^2/\text{NDF}$ : 794275.0/18

Left In: 4955.115+/-0.946  $\chi^2/\text{NDF}$ : 834037.1/17

Left: 4908.599+/-0.652  $\chi^2/\text{NDF}$ : 1542455.6/37

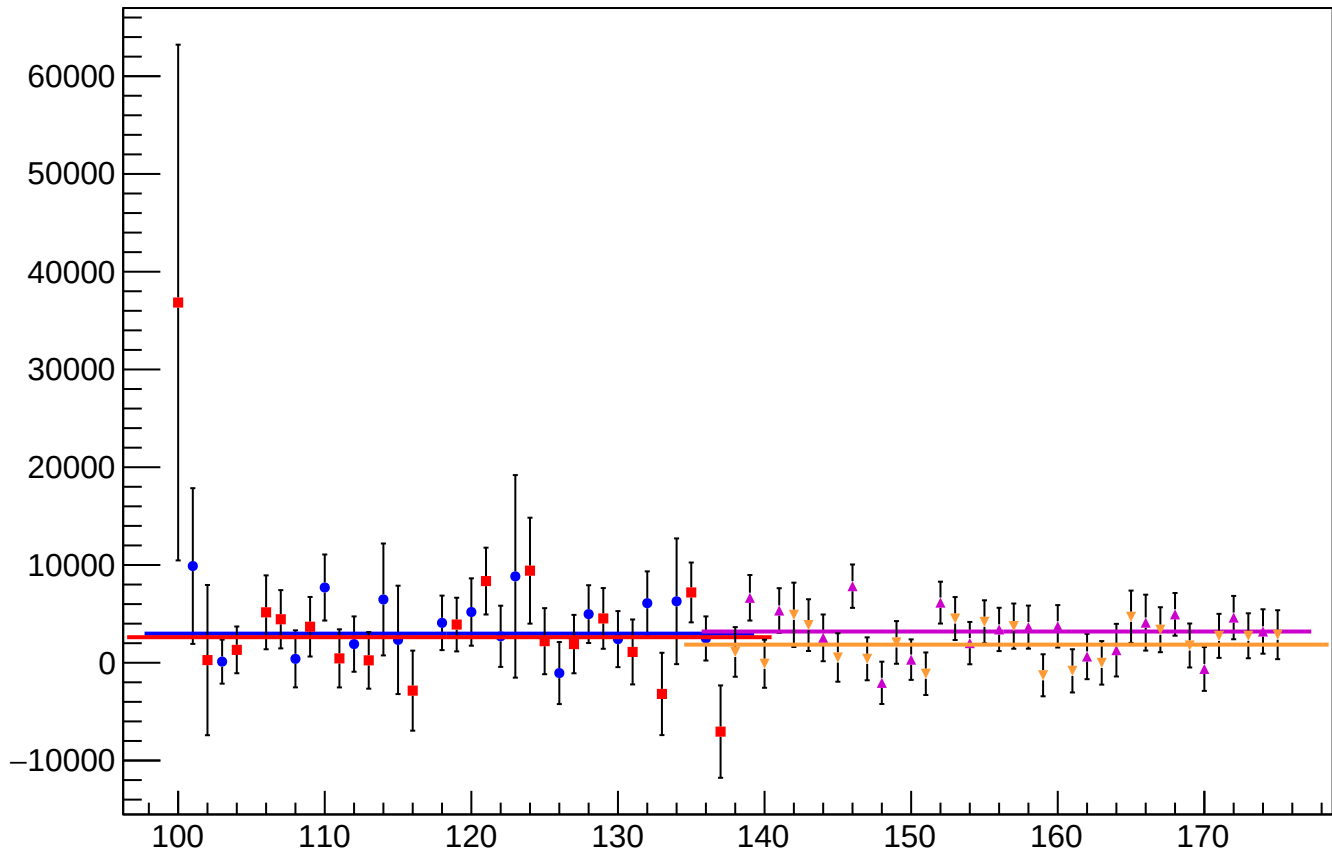
Right: 3059.752+/-0.605  $\chi^2/\text{NDF}$ : 1759257.8/35

In: 3965.956+/-0.645  $\chi^2/\text{NDF}$ : 3837307.8/34

Out: 3869.007+/-0.611  $\chi^2/\text{NDF}$ : 3768786.9/38

All: 3914.850+/-0.444  $\chi^2/\text{NDF}$ : 7617995.2/73

# dit\_asym\_atr\_avg\_mean vs Slug, Sign Corrected



Right In: 2978.445 $\pm$ 795.398  $\chi^2/\text{NDF}$ : 9.9/16

Left Out: 1853.083 $\pm$ 523.881  $\chi^2/\text{NDF}$ :14.4/19

Right Out: 2613.881 $\pm$ 783.228  $\chi^2/\text{NDF}$ : 19.6/18

Left In: 3194.122 $\pm$ 534.028  $\chi^2/\text{NDF}$ :23.4/17

Left: 2510.740 $\pm$ 373.976  $\chi^2/\text{NDF}$ : 41.0/37

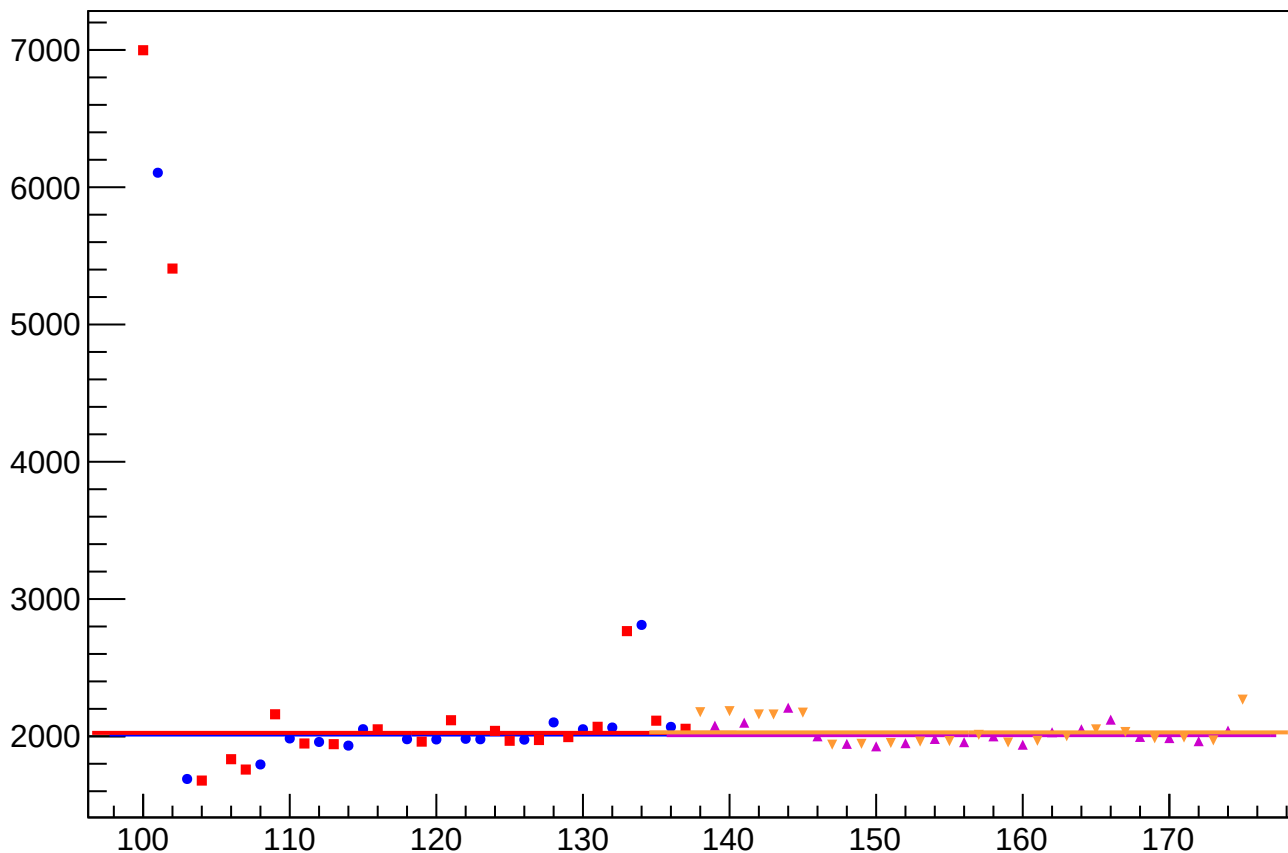
Right: 2793.353 $\pm$ 558.079  $\chi^2/\text{NDF}$ : 29.6/35

In: 3127.108 $\pm$ 443.368  $\chi^2/\text{NDF}$ :33.4/34

Out: 2088.247 $\pm$ 435.451  $\chi^2/\text{NDF}$ :34.6/38

All: 2598.320 $\pm$ 310.672  $\chi^2/\text{NDF}$ : 70.8/73

# dit\_asym\_atr\_avg\_rms vs Slug, Sign Corrected



Right In: 2012.945+/-0.562  $\chi^2/\text{NDF}$ : 617707.4/16

Left Out: 2028.606+/-0.370  $\chi^2/\text{NDF}$ : 66847.1/19

Right Out: 2025.070+/-0.554  $\chi^2/\text{NDF}$ : 597422.5/18

Left In: 2008.466+/-0.378  $\chi^2/\text{NDF}$ : 33965.9/17

Left: 2018.729+/-0.264  $\chi^2/\text{NDF}$ : 102262.7/37

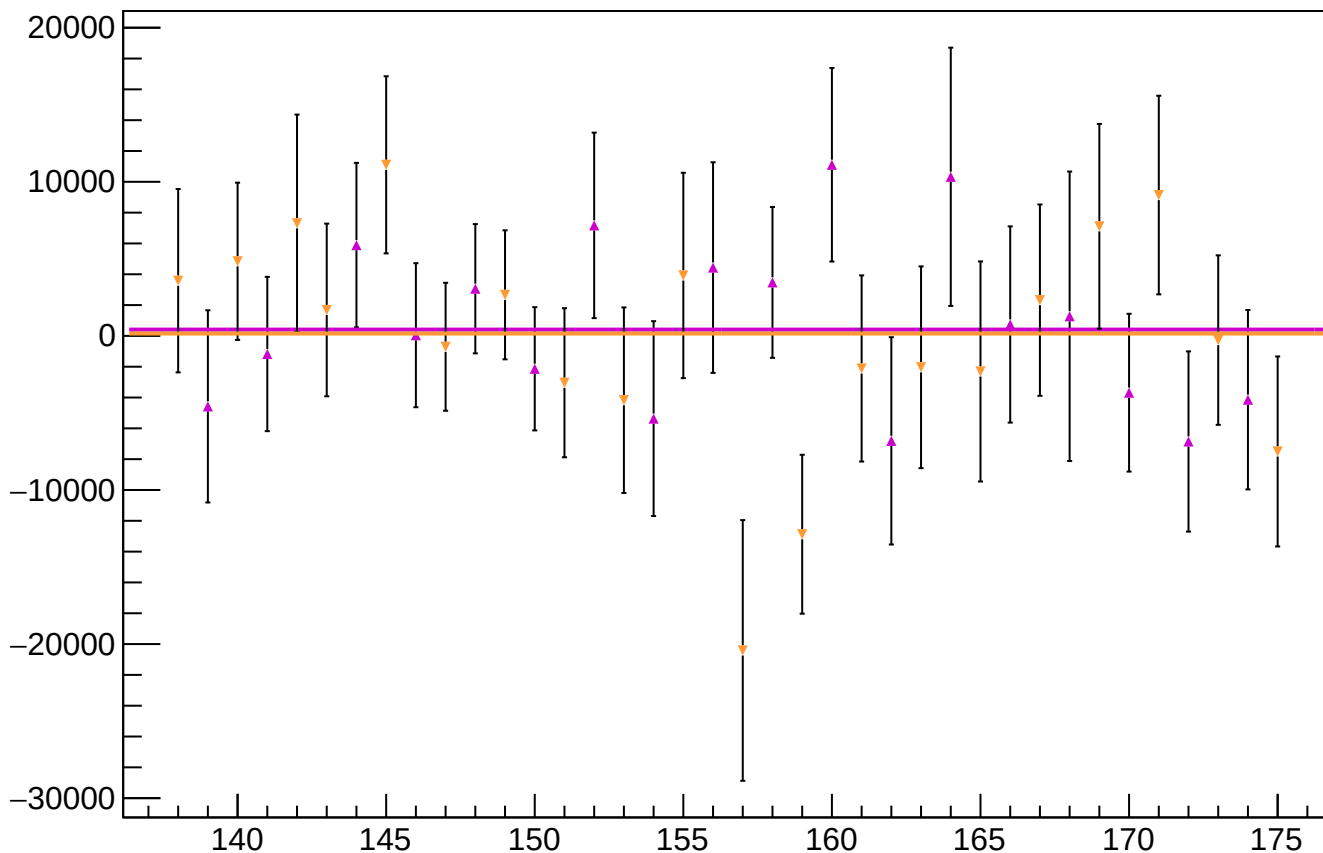
Right: 2019.103+/-0.395  $\chi^2/\text{NDF}$ : 1215366.0/35

In: 2009.858+/-0.314  $\chi^2/\text{NDF}$ : 651717.1/34

Out: 2027.513+/-0.308  $\chi^2/\text{NDF}$ : 664297.8/38

All: 2018.845+/-0.220  $\chi^2/\text{NDF}$ : 1317629.3/73

asym\_atr\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 152.246+/-1279.573  $\chi^2/\text{NDF}$ :25.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 409.485+/-1317.468  $\chi^2/\text{NDF}$ :13.7/17

Left: 277.113+/-917.899  $\chi^2/\text{NDF}$ : 38.7/37

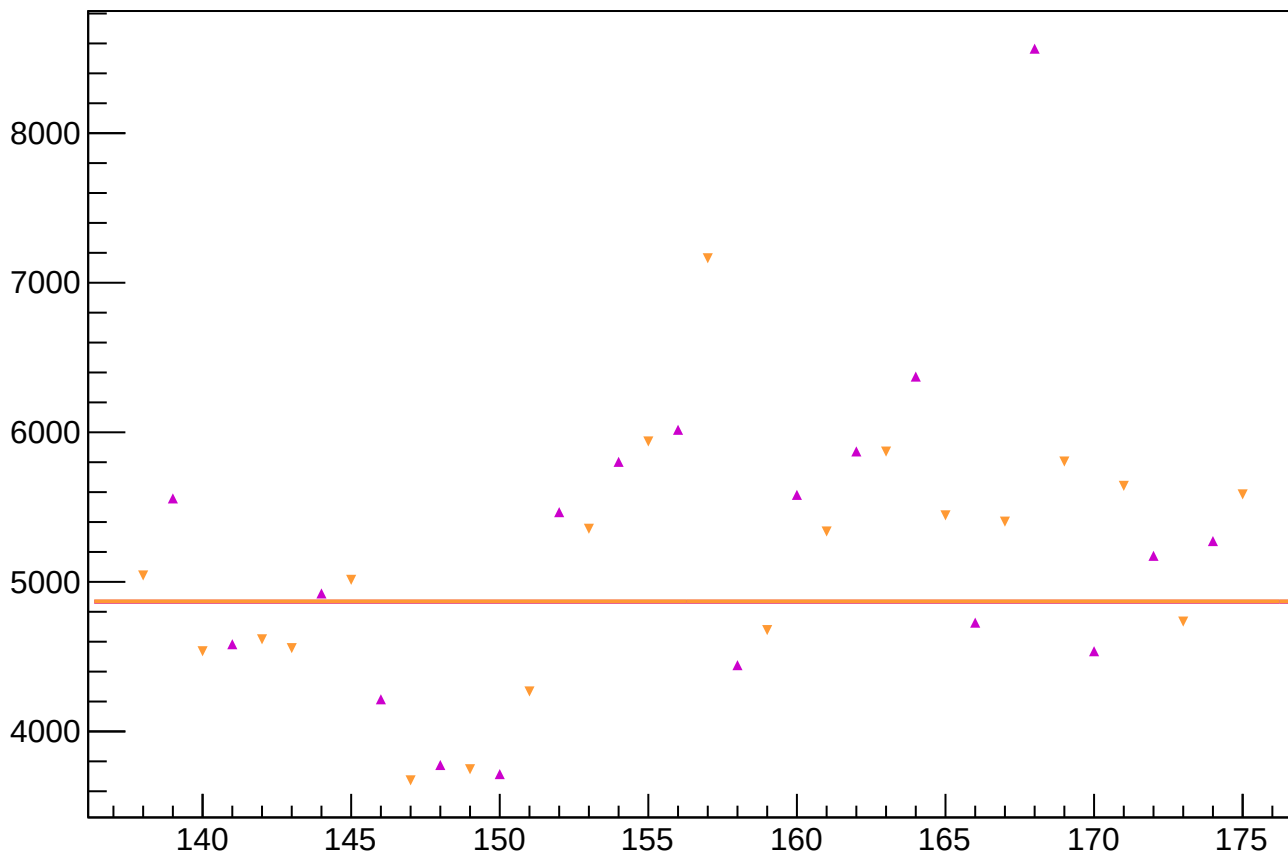
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 409.485+/-1317.468  $\chi^2/\text{NDF}$ :13.7/17

Out: 152.246+/-1279.573  $\chi^2/\text{NDF}$ :25.0/19

All: 277.113+/-917.899  $\chi^2/\text{NDF}$ : 38.7/37

asym\_atr\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 4869.354+/-0.905  $\chi^2/\text{NDF}$ :758466.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 4866.987+/-0.932  $\chi^2/\text{NDF}$ :976492.1/17

Left: 4868.205+/-0.649  $\chi^2/\text{NDF}$ : 1734961.9/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

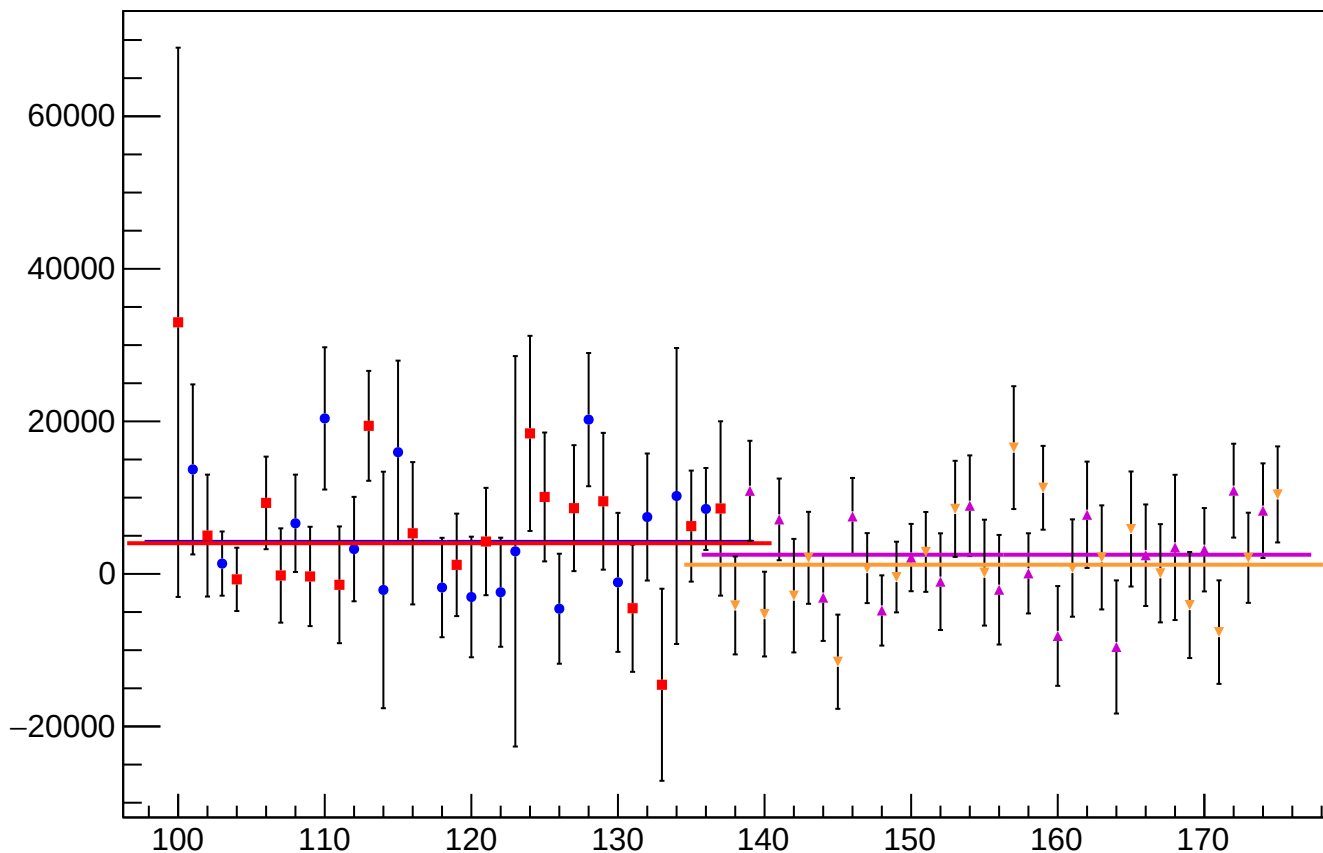
In: 4866.987+/-0.932  $\chi^2/\text{NDF}$ :976492.1/17

Out: 4869.354+/-0.905  $\chi^2/\text{NDF}$ :758466.5/19

All: 4868.205+/-0.649  $\chi^2/\text{NDF}$ : 1734961.9/37



# asym\_atr\_avg\_mean vs Slug, Sign Corrected



Right In: 4198.770+/-1857.803  $\chi^2/\text{NDF}$ : 14.1/16

Left Out: 1205.435+/-1364.092  $\chi^2/\text{NDF}$ : 20.1/19

Right Out: 4023.682+/-1725.187  $\chi^2/\text{NDF}$ : 14.8/18

Left In: 2516.581+/-1404.644  $\chi^2/\text{NDF}$ : 16.6/17

Left: 1841.809+/-978.581  $\chi^2/\text{NDF}$ : 37.2/37

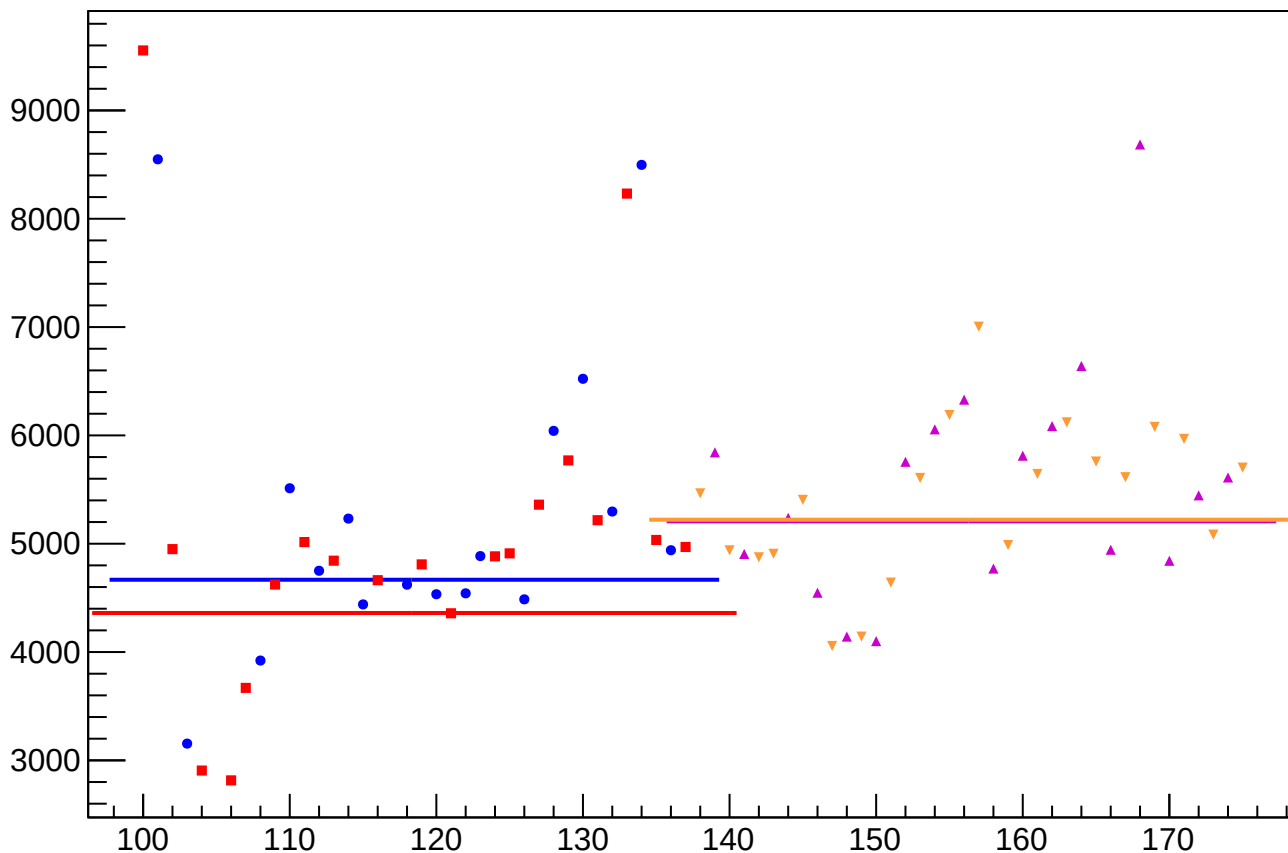
Right: 4104.755+/-1264.177  $\chi^2/\text{NDF}$ : 29.0/35

In: 3128.440+/-1120.438  $\chi^2/\text{NDF}$ : 31.3/34

Out: 2289.583+/-1070.018  $\chi^2/\text{NDF}$ : 36.6/38

All: 2689.713+/-773.828  $\chi^2/\text{NDF}$ : 68.2/73

# asym\_atr\_avg\_rms vs Slug, Sign Corrected



Right In: 4667.470+/-1.314  $\chi^2/\text{NDF}$ : 777857.9/16

Left Out: 5221.799+/-0.965  $\chi^2/\text{NDF}$ : 557914.8/19

Right Out: 4360.582+/-1.213  $\chi^2/\text{NDF}$ : 832745.2/18

Left In: 5206.499+/-0.993  $\chi^2/\text{NDF}$ : 795908.8/17

Left: 5214.373+/-0.692  $\chi^2/\text{NDF}$ : 1353945.7/37

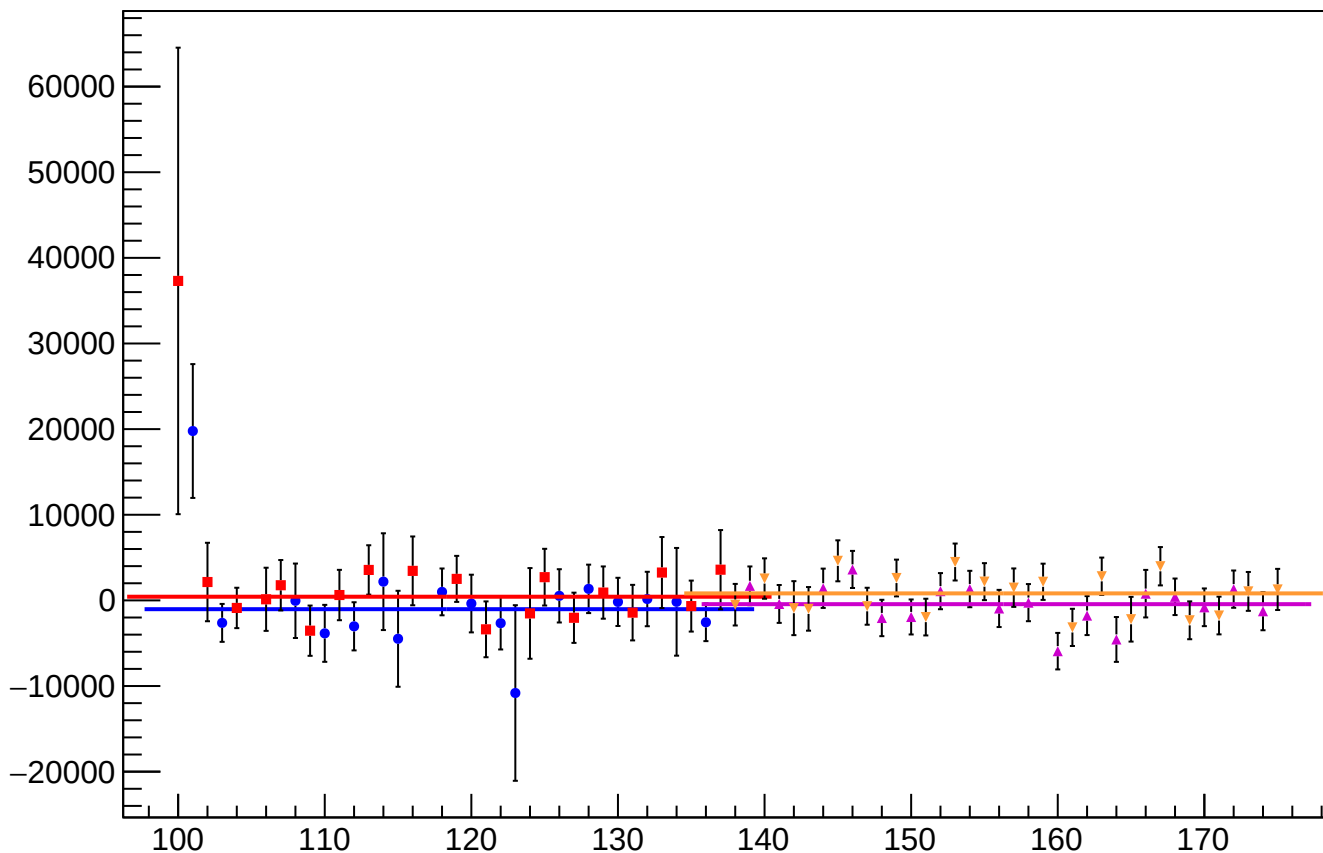
Right: 4501.800+/-0.891  $\chi^2/\text{NDF}$ : 1640064.7/35

In: 5010.440+/-0.792  $\chi^2/\text{NDF}$ : 1680893.5/34

Out: 4888.135+/-0.755  $\chi^2/\text{NDF}$ : 1699522.6/38

All: 4946.337+/-0.547  $\chi^2/\text{NDF}$ : 3392906.5/73

# dit\_asym\_atr\_dd\_mean vs Slug, Sign Corrected



Right In: -1027.051 $\pm$ 796.597  $\chi^2$ /NDF: 13.1/16

Left Out: 817.238 $\pm$ 511.306  $\chi^2$ /NDF: 21.8/19

Right Out: 428.488 $\pm$ 760.817  $\chi^2$ /NDF: 10.8/18

Left In: -440.977 $\pm$ 522.460  $\chi^2$ /NDF: 18.1/17

Left: 201.704 $\pm$ 365.428  $\chi^2$ /NDF: 42.8/37

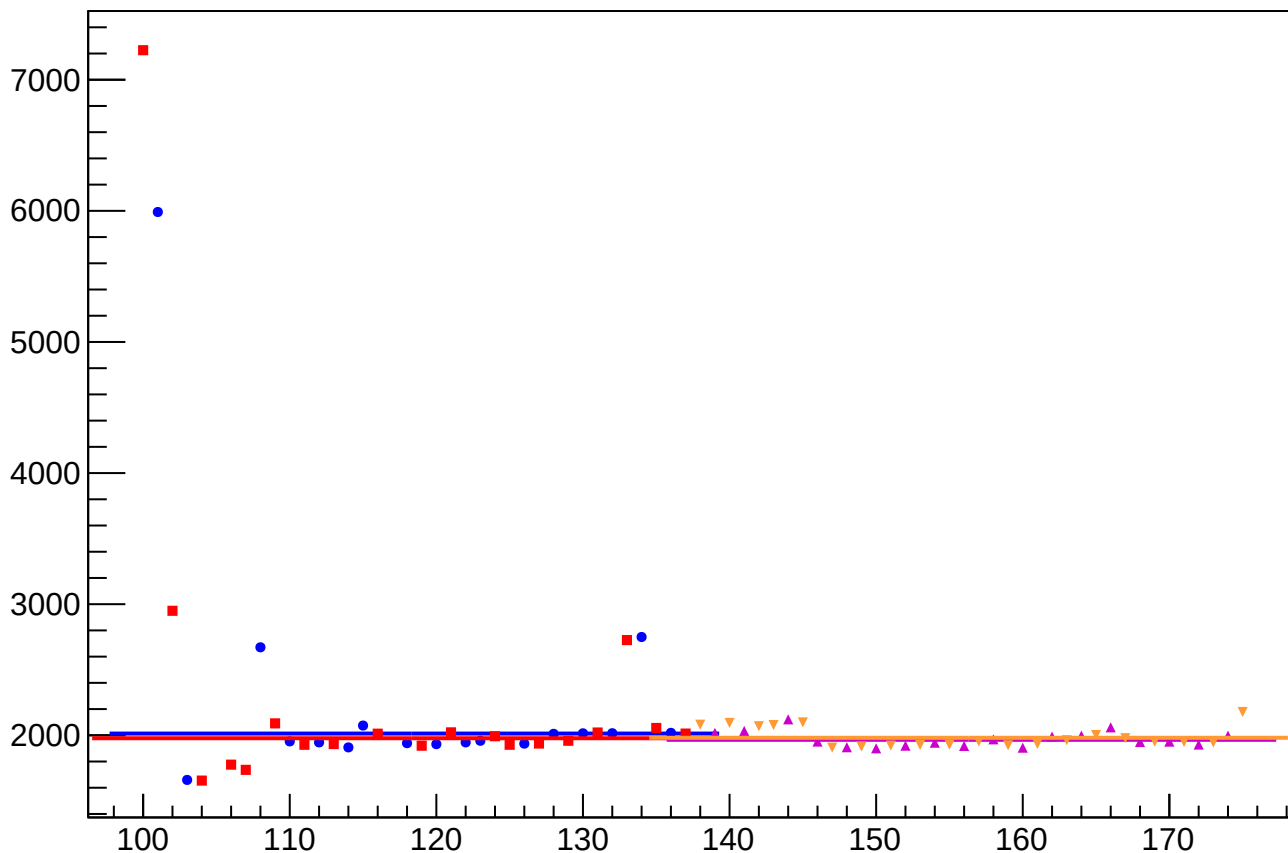
Right: -265.860 $\pm$ 550.193  $\chi^2$ /NDF: 25.6/35

In: -617.255 $\pm$ 436.879  $\chi^2$ /NDF: 31.5/34

Out: 696.287 $\pm$ 424.375  $\chi^2$ /NDF: 32.7/38

All: 58.581 $\pm$ 304.403  $\chi^2$ /NDF: 68.9/73

# dit\_asym\_atr\_dd\_rms vs Slug, Sign Corrected



Right In: 2013.270+/-0.563  $\chi^2/\text{NDF}$ : 650048.6/16

Left Out: 1981.067+/-0.362  $\chi^2/\text{NDF}$ : 43313.9/19

Right Out: 1977.545+/-0.537  $\chi^2/\text{NDF}$ : 294899.1/18

Left In: 1965.530+/-0.369  $\chi^2/\text{NDF}$ : 23421.9/17

Left: 1973.466+/-0.258  $\chi^2/\text{NDF}$ : 67639.3/37

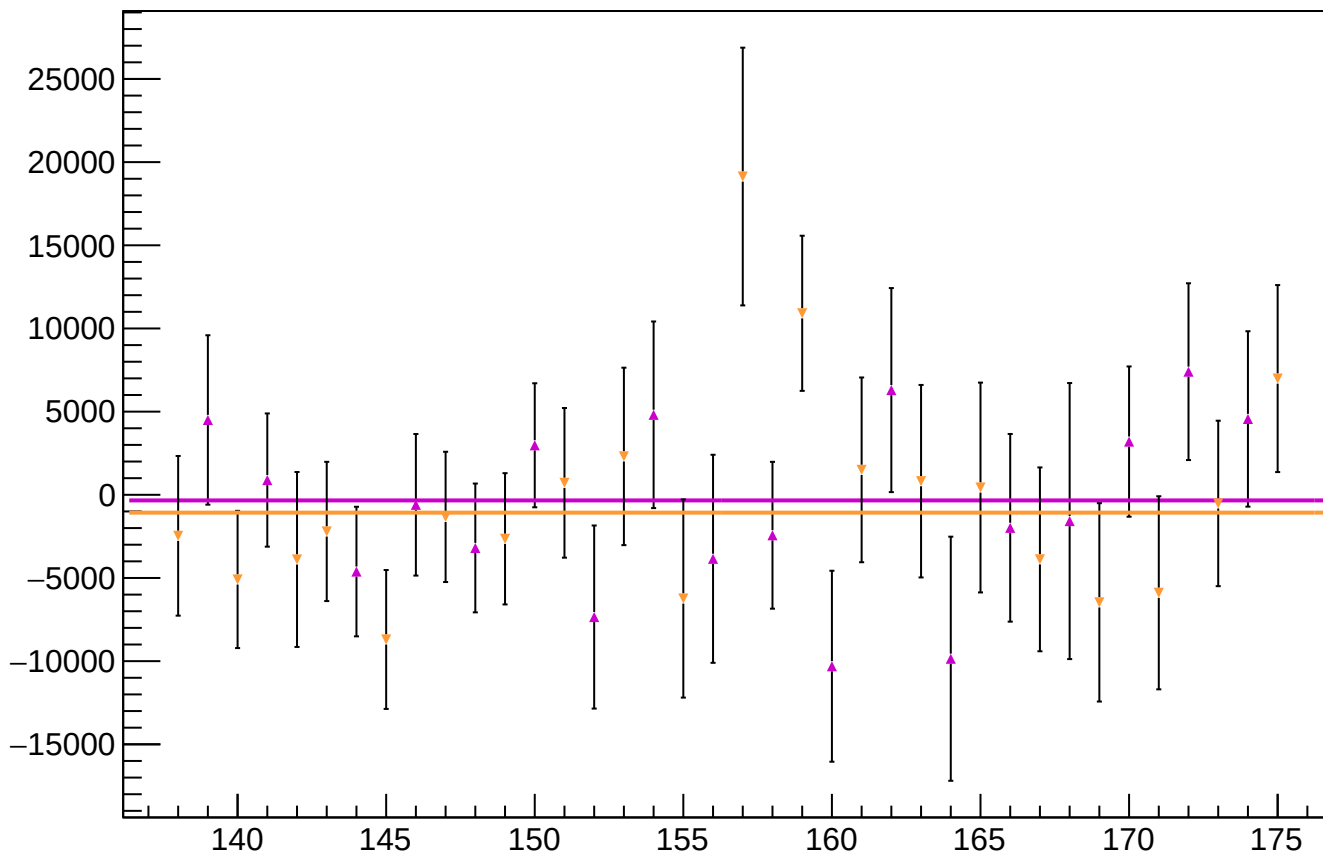
Right: 1994.568+/-0.389  $\chi^2/\text{NDF}$ : 947053.5/35

In: 1979.889+/-0.309  $\chi^2/\text{NDF}$ : 678493.2/34

Out: 1979.969+/-0.300  $\chi^2/\text{NDF}$ : 338242.6/38

All: 1979.930+/-0.215  $\chi^2/\text{NDF}$ : 1016735.9/73

asym\_atr\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1071.978+/-1112.699  $\chi^2/\text{NDF}$ :23.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -337.036+/-1159.145  $\chi^2/\text{NDF}$ :16.1/17

Left: -719.526+/-802.715  $\chi^2/\text{NDF}$ : 40.1/37

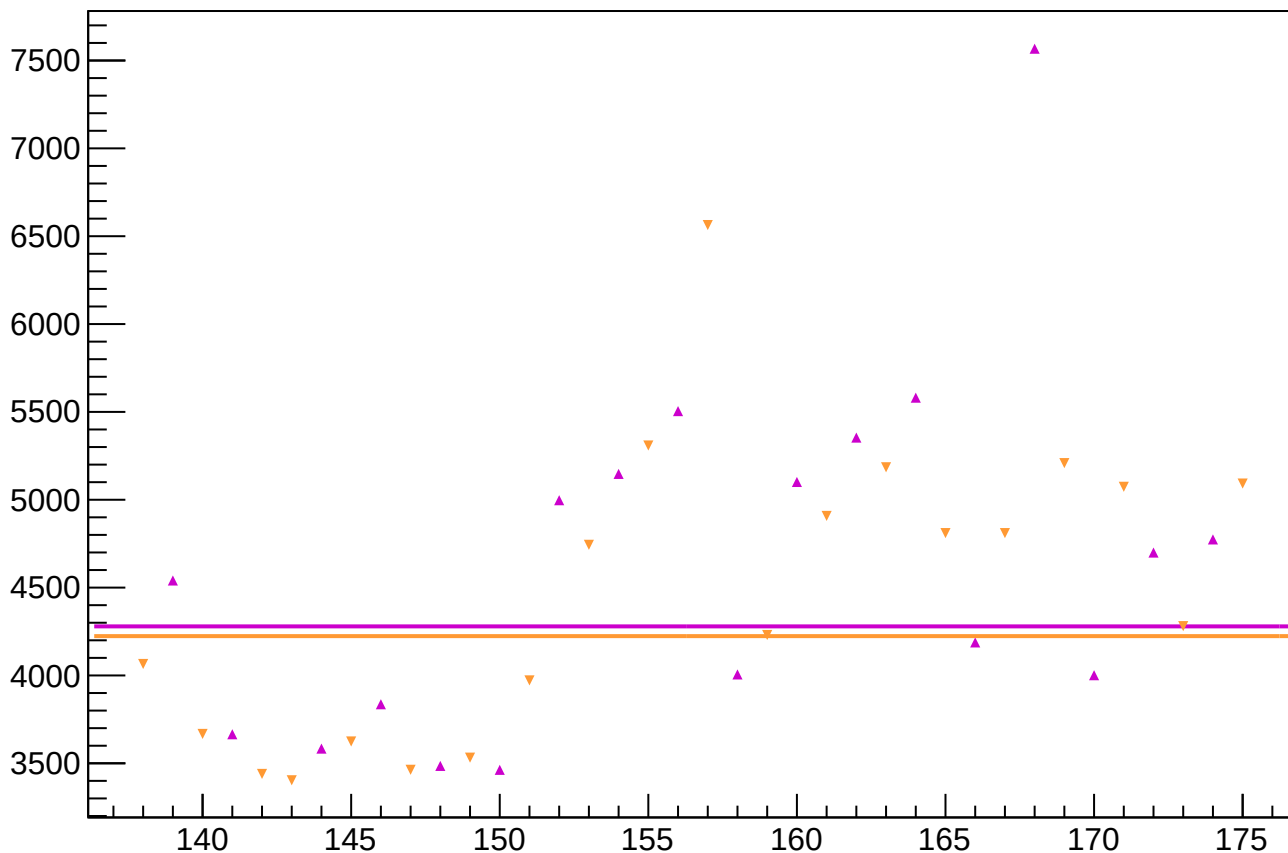
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -337.036+/-1159.145  $\chi^2/\text{NDF}$ :16.1/17

Out: -1071.978+/-1112.699  $\chi^2/\text{NDF}$ :23.8/19

All: -719.526+/-802.715  $\chi^2/\text{NDF}$ : 40.1/37

asym\_atr\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 4223.791+/-0.787  $\chi^2/\text{NDF}$ :882940.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 4279.291+/-0.820  $\chi^2/\text{NDF}$ :1001774.2/17

Left: 4250.407+/-0.568  $\chi^2/\text{NDF}$ : 1887100.8/37

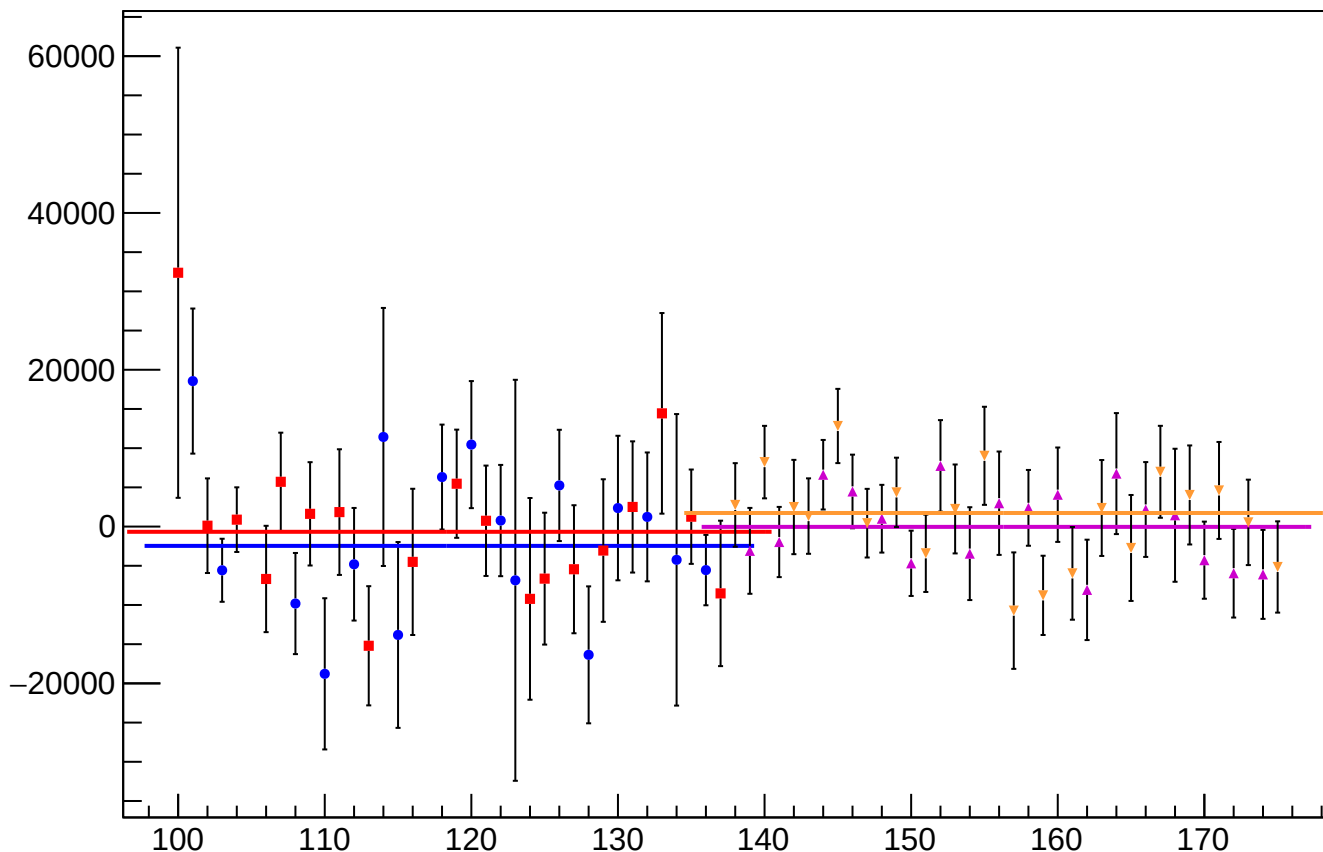
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 4279.291+/-0.820  $\chi^2/\text{NDF}$ :1001774.2/17

Out: 4223.791+/-0.787  $\chi^2/\text{NDF}$ :882940.5/19

All: 4250.407+/-0.568  $\chi^2/\text{NDF}$ : 1887100.8/37

# asym\_atr\_dd\_mean vs Slug, Sign Corrected



Right In: -2462.254+/-1797.293  $\chi^2/\text{NDF}$ : 20.8/16

Left Out: 1733.389+/-1215.845  $\chi^2/\text{NDF}$ : 22.3/19

Right Out: -666.170+/-1689.812  $\chi^2/\text{NDF}$ : 11.9/18

Left In: -38.067+/-1261.795  $\chi^2/\text{NDF}$ : 13.5/17

Left: 880.503+/-875.526  $\chi^2/\text{NDF}$ : 36.8/37

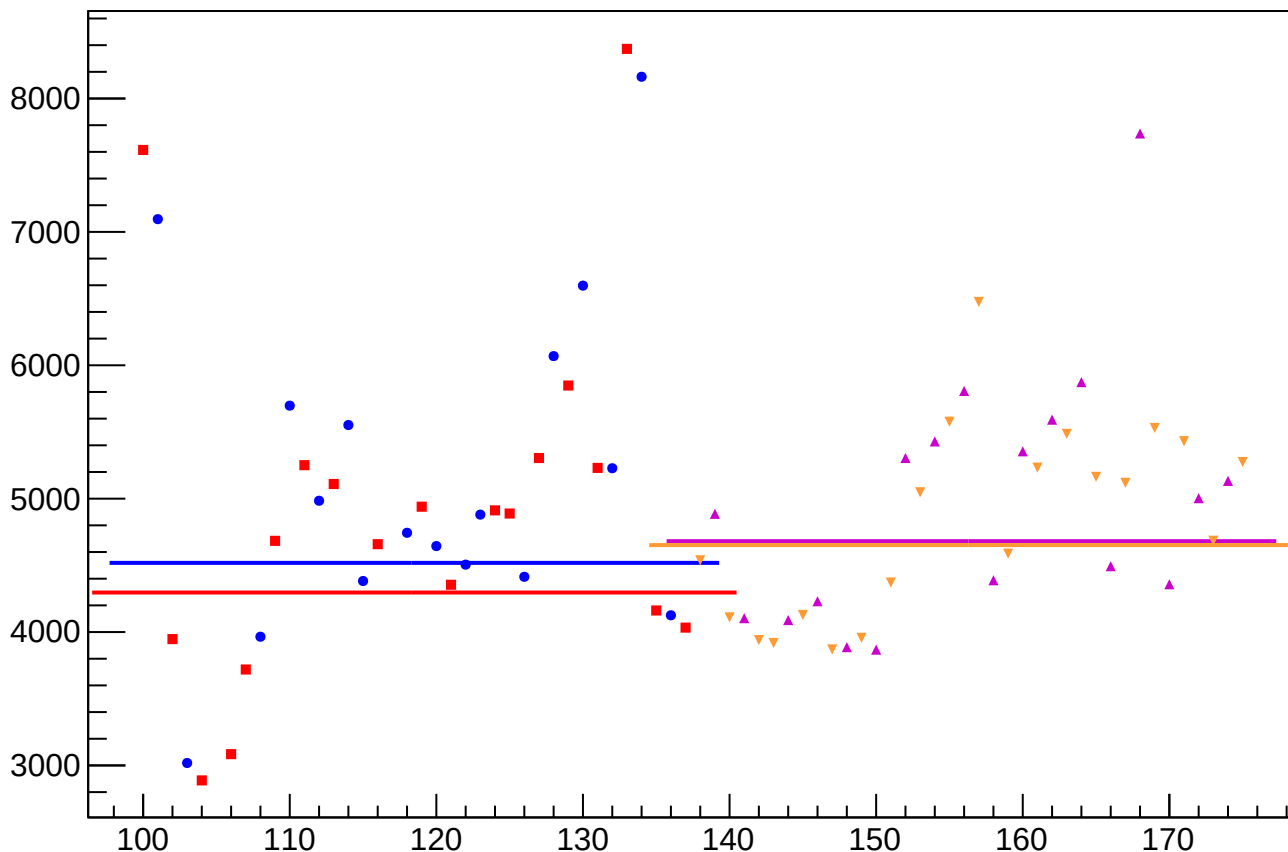
Right: -1508.905+/-1231.122  $\chi^2/\text{NDF}$ : 33.3/35

In: -838.420+/-1032.706  $\chi^2/\text{NDF}$ : 35.6/34

Out: 914.878+/-986.927  $\chi^2/\text{NDF}$ : 35.5/38

All: 77.951+/-713.498  $\chi^2/\text{NDF}$ : 72.6/73

# asym\_atr\_dd\_rms vs Slug, Sign Corrected



Right In: 4518.684 $\pm$ 1.271  $\chi^2/\text{NDF}$ : 770226.9/16

Left Out: 4652.079 $\pm$ 0.860  $\chi^2/\text{NDF}$ : 595466.7/19

Right Out: 4296.379 $\pm$ 1.188  $\chi^2/\text{NDF}$ : 771702.5/18

Left In: 4681.338 $\pm$ 0.892  $\chi^2/\text{NDF}$ : 757212.1/17

Left: 4666.166 $\pm$ 0.619  $\chi^2/\text{NDF}$ : 1353236.5/37

Right: 4400.071 $\pm$ 0.868  $\chi^2/\text{NDF}$ : 1558255.2/35

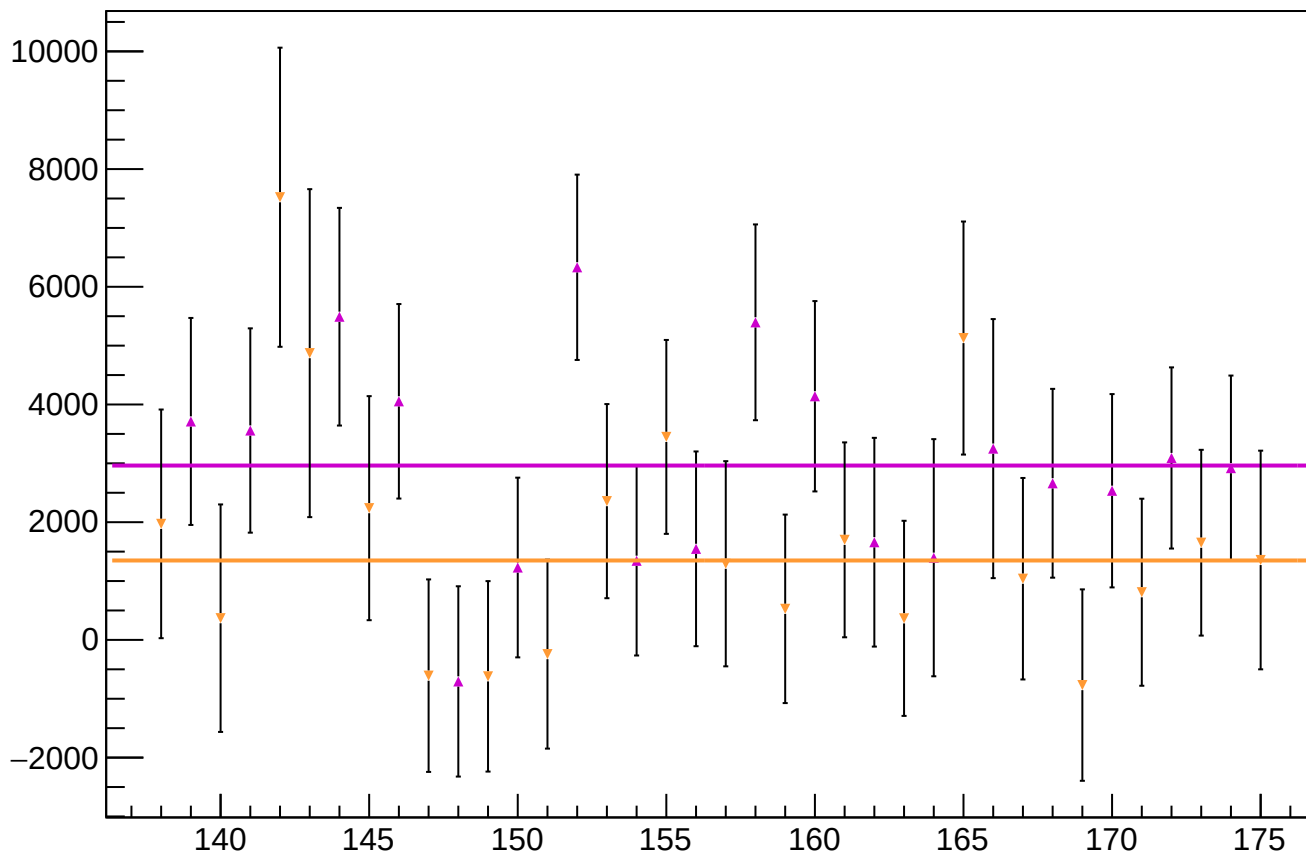
In: 4627.637 $\pm$ 0.730  $\chi^2/\text{NDF}$ : 1538411.3/34

Out: 4529.856 $\pm$ 0.697  $\chi^2/\text{NDF}$ : 1425987.1/38

All: 4576.438 $\pm$ 0.504  $\chi^2/\text{NDF}$ : 2973786.9/73



dit\_asym\_atl\_avg\_atr\_avg\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1349.343+/-392.803  $\chi^2/\text{NDF}$ :20.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 2962.515+/-395.910  $\chi^2/\text{NDF}$ :19.3/17

Left: 2149.575+/-278.845  $\chi^2/\text{NDF}$ : 47.8/37

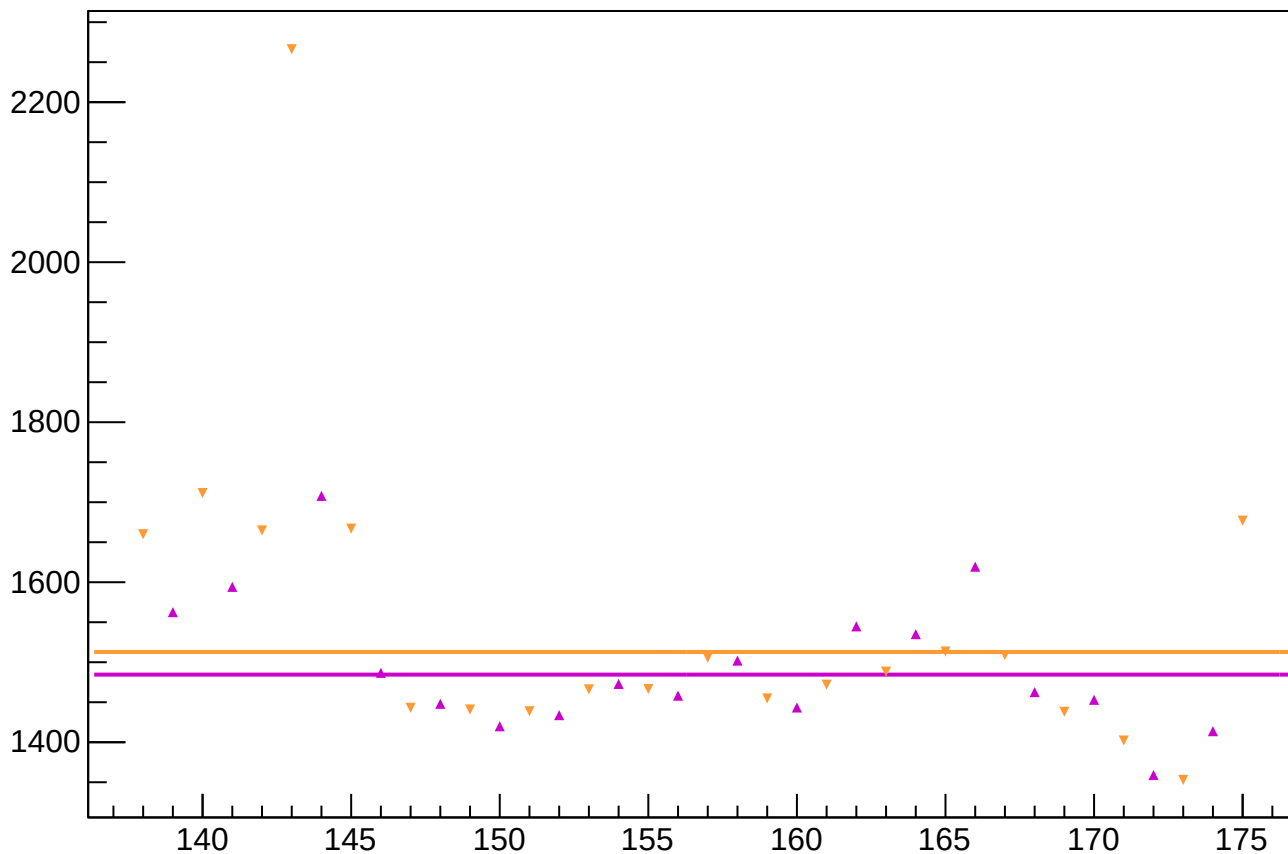
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 2962.515+/-395.910  $\chi^2/\text{NDF}$ :19.3/17

Out: 1349.343+/-392.803  $\chi^2/\text{NDF}$ :20.2/19

All: 2149.575+/-278.845  $\chi^2/\text{NDF}$ : 47.8/37

dit\_asym\_atl\_avg\_atr\_avg\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 1512.819+/-0.278  $\chi^2$ /NDF:268438.3/19

Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left In: 1484.528+/-0.280  $\chi^2$ /NDF:79436.6/17

Left: 1498.785+/-0.197  $\chi^2$ /NDF: 353021.2/37

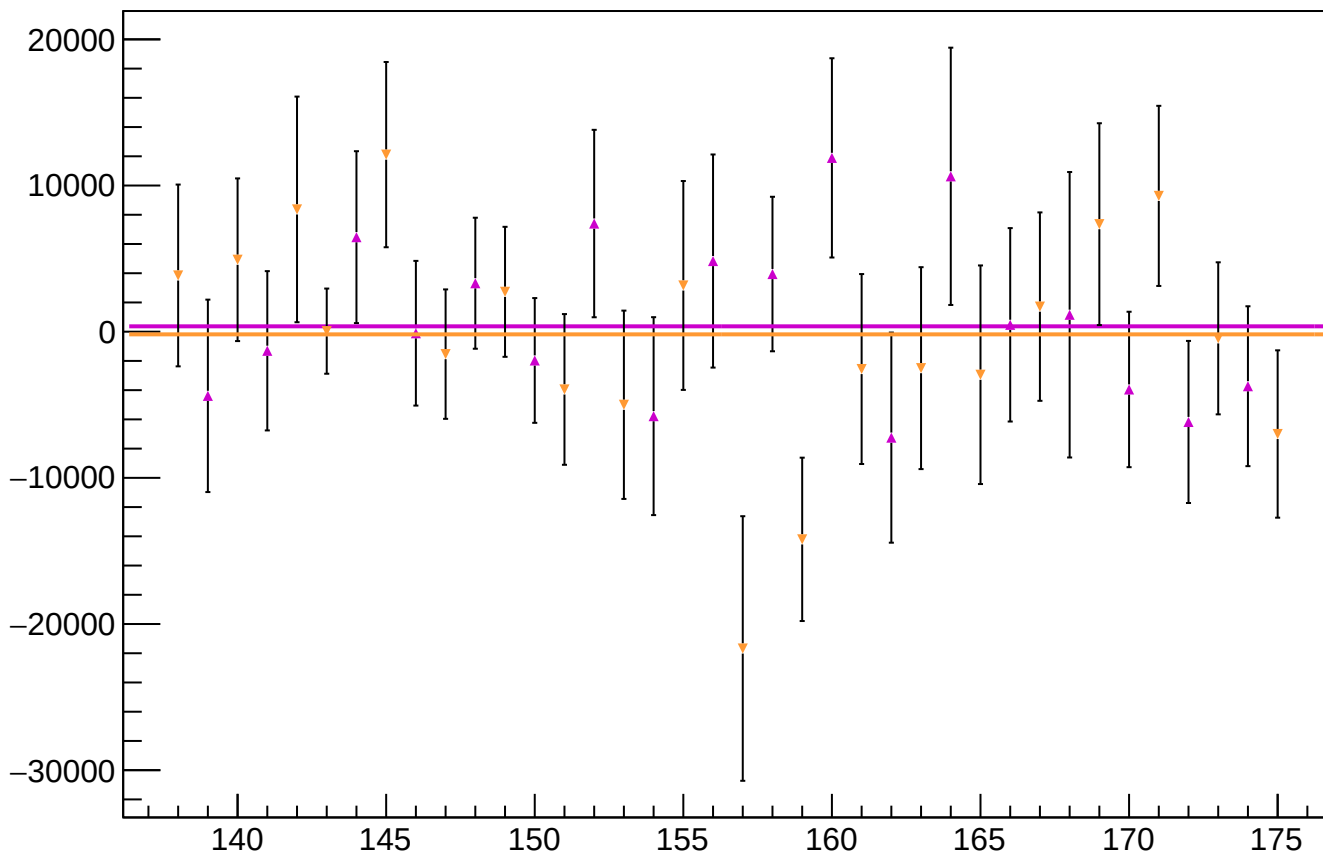
Right: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

In: 1484.528+/-0.280  $\chi^2$ /NDF:79436.6/17

Out: 1512.819+/-0.278  $\chi^2$ /NDF:268438.3/19

All: 1498.785+/-0.197  $\chi^2$ /NDF: 353021.2/37

asym\_atl\_avg\_atr\_avg\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -182.370+/-1244.102  $\chi^2/\text{NDF}$ :25.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 366.885+/-1386.275  $\chi^2/\text{NDF}$ :13.3/17

Left: 62.657+/-925.910  $\chi^2/\text{NDF}$ : 38.8/37

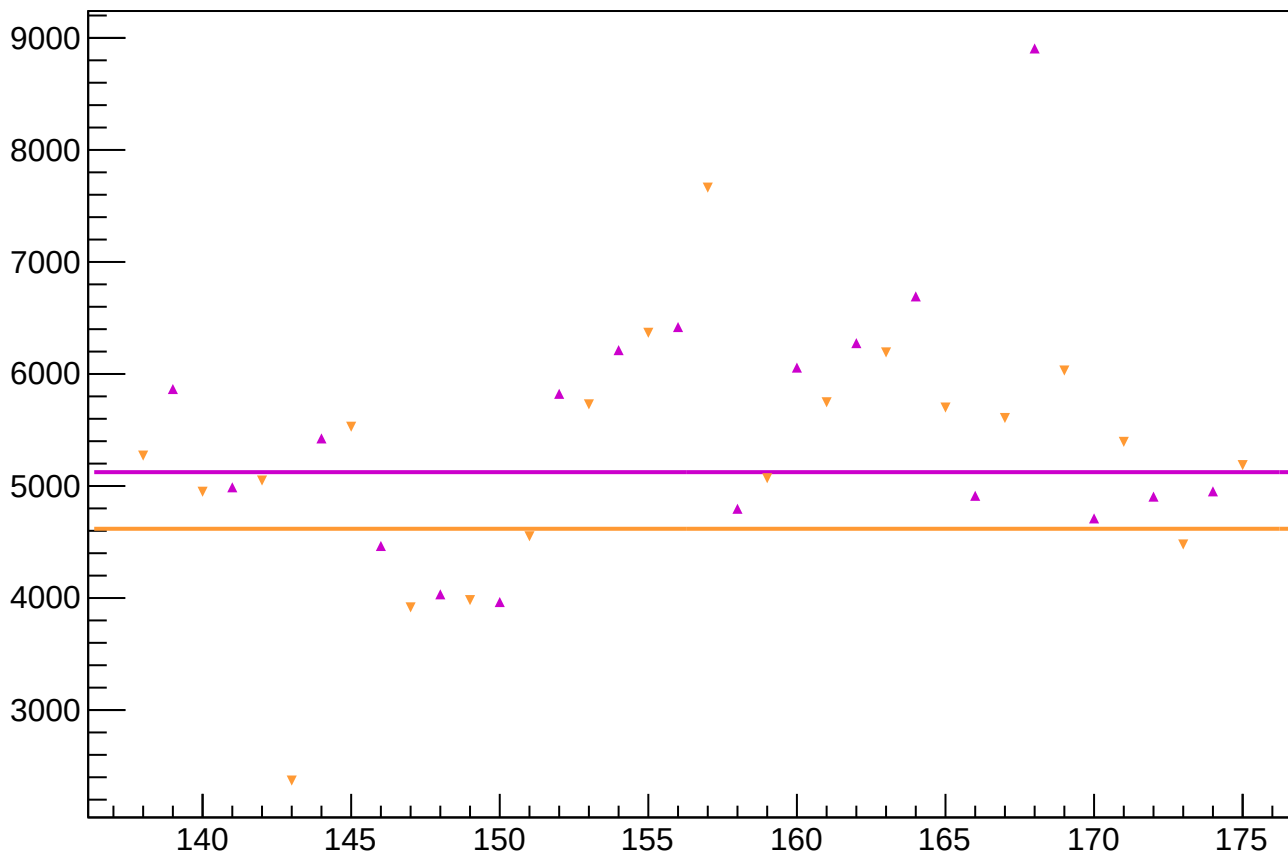
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 366.885+/-1386.275  $\chi^2/\text{NDF}$ :13.3/17

Out: -182.370+/-1244.102  $\chi^2/\text{NDF}$ :25.5/19

All: 62.657+/-925.910  $\chi^2/\text{NDF}$ : 38.8/37

asym\_atl\_avg\_atr\_avg\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 4618.215+/-0.880  $\chi^2/\text{NDF}$ :2166709.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 5123.603+/-0.980  $\chi^2/\text{NDF}$ :951353.9/17

Left: 4843.672+/-0.655  $\chi^2/\text{NDF}$ : 3265296.9/37

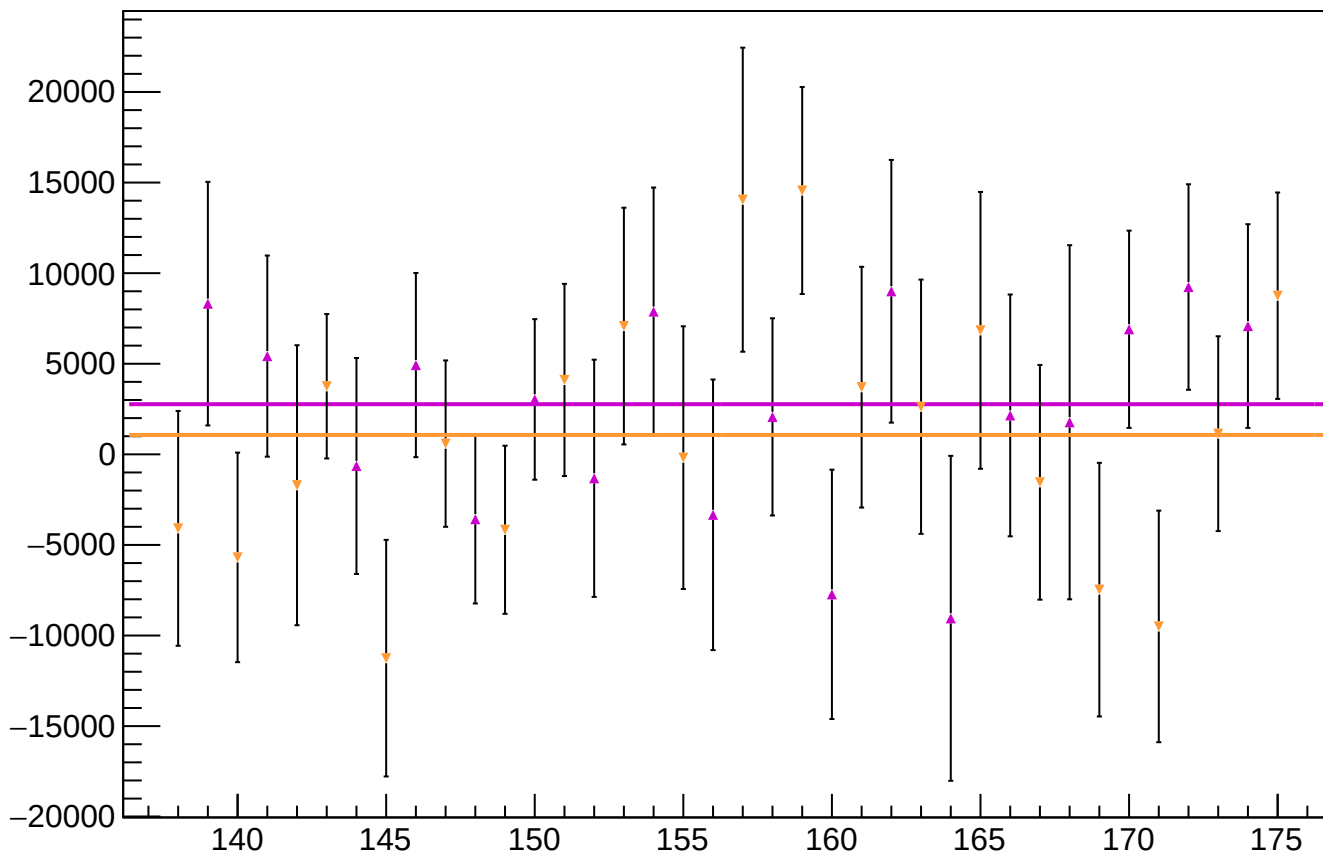
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 5123.603+/-0.980  $\chi^2/\text{NDF}$ :951353.9/17

Out: 4618.215+/-0.880  $\chi^2/\text{NDF}$ :2166709.3/19

All: 4843.672+/-0.655  $\chi^2/\text{NDF}$ : 3265296.9/37

asym\_atl\_avg\_atr\_avg\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1070.545+/-1326.941  $\chi^2/\text{NDF}$ :23.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 2767.400+/-1418.572  $\chi^2/\text{NDF}$ :12.2/17

Left: 1862.403+/-969.064  $\chi^2/\text{NDF}$ : 36.6/37

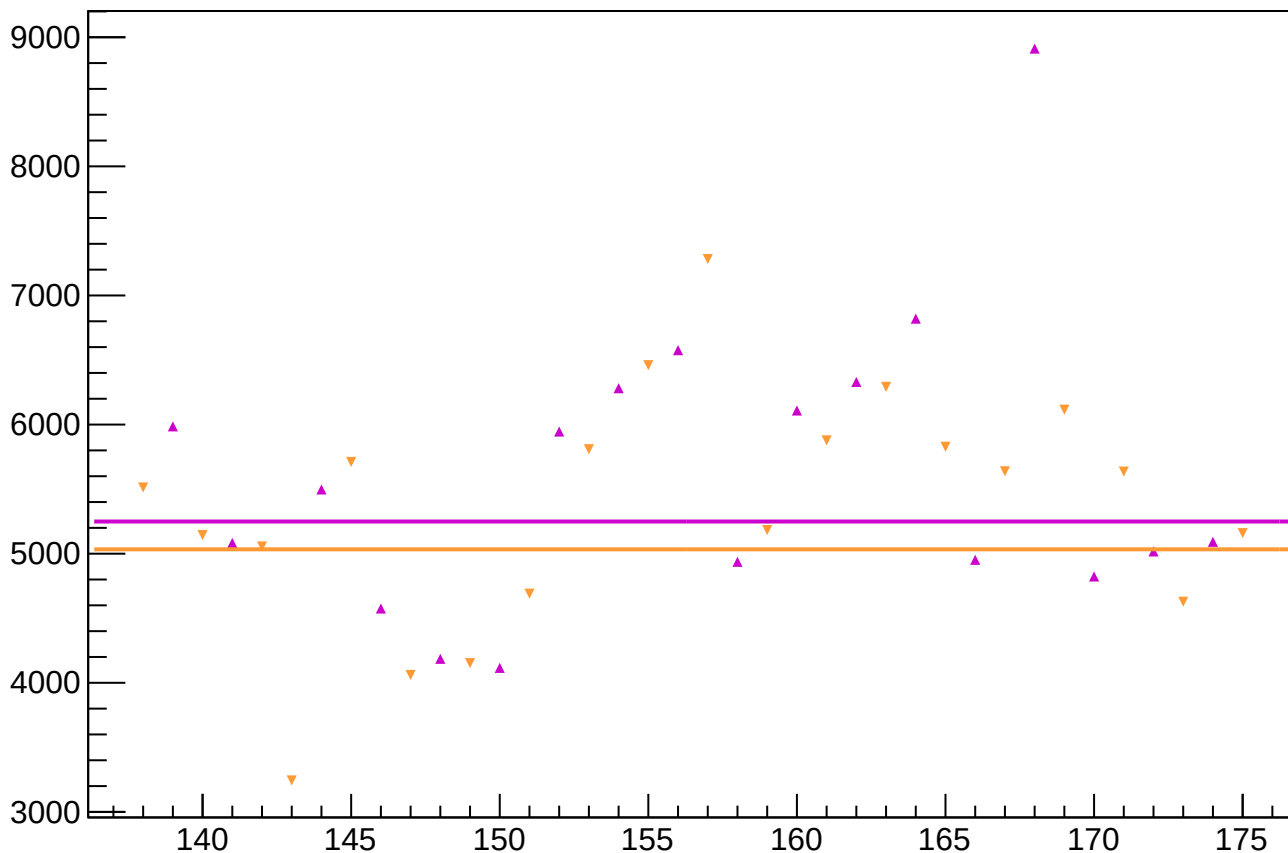
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 2767.400+/-1418.572  $\chi^2/\text{NDF}$ :12.2/17

Out: 1070.545+/-1326.941  $\chi^2/\text{NDF}$ :23.6/19

All: 1862.403+/-969.064  $\chi^2/\text{NDF}$ : 36.6/37

asym\_atl\_avg\_atr\_avg\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 5033.827+/-0.938  $\chi^2/\text{NDF}$ :1071262.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 5249.115+/-1.003  $\chi^2/\text{NDF}$ :876854.4/17

Left: 5134.294+/-0.685  $\chi^2/\text{NDF}$ : 1972684.5/37

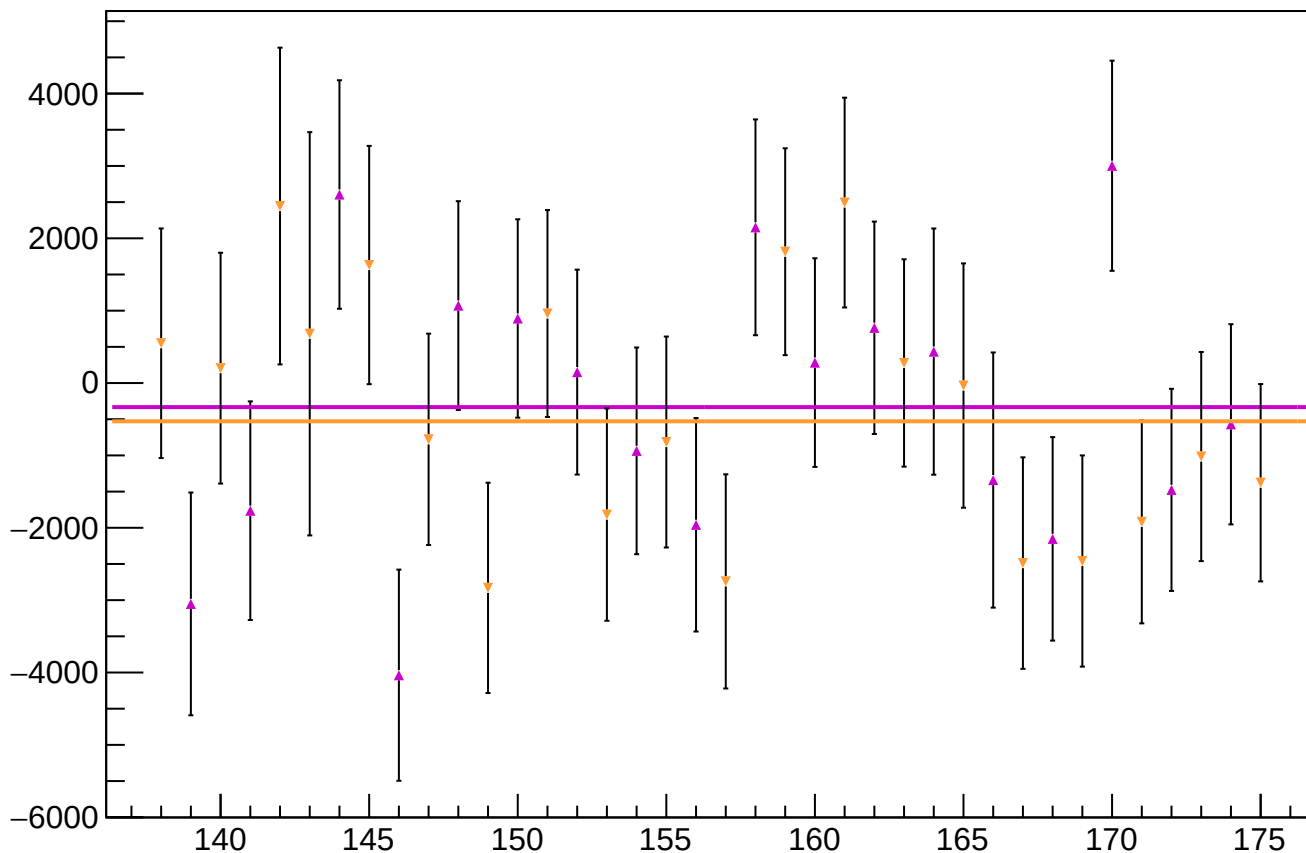
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 5249.115+/-1.003  $\chi^2/\text{NDF}$ :876854.4/17

Out: 5033.827+/-0.938  $\chi^2/\text{NDF}$ :1071262.0/19

All: 5134.294+/-0.685  $\chi^2/\text{NDF}$ : 1972684.5/37

dit\_asym\_atl\_avg\_atr\_avg\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -528.748+/-341.243  $\chi^2/\text{NDF}$ :23.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -332.620+/-347.710  $\chi^2/\text{NDF}$ :28.9/17

Left: -432.524+/-243.549  $\chi^2/\text{NDF}$ : 52.6/37

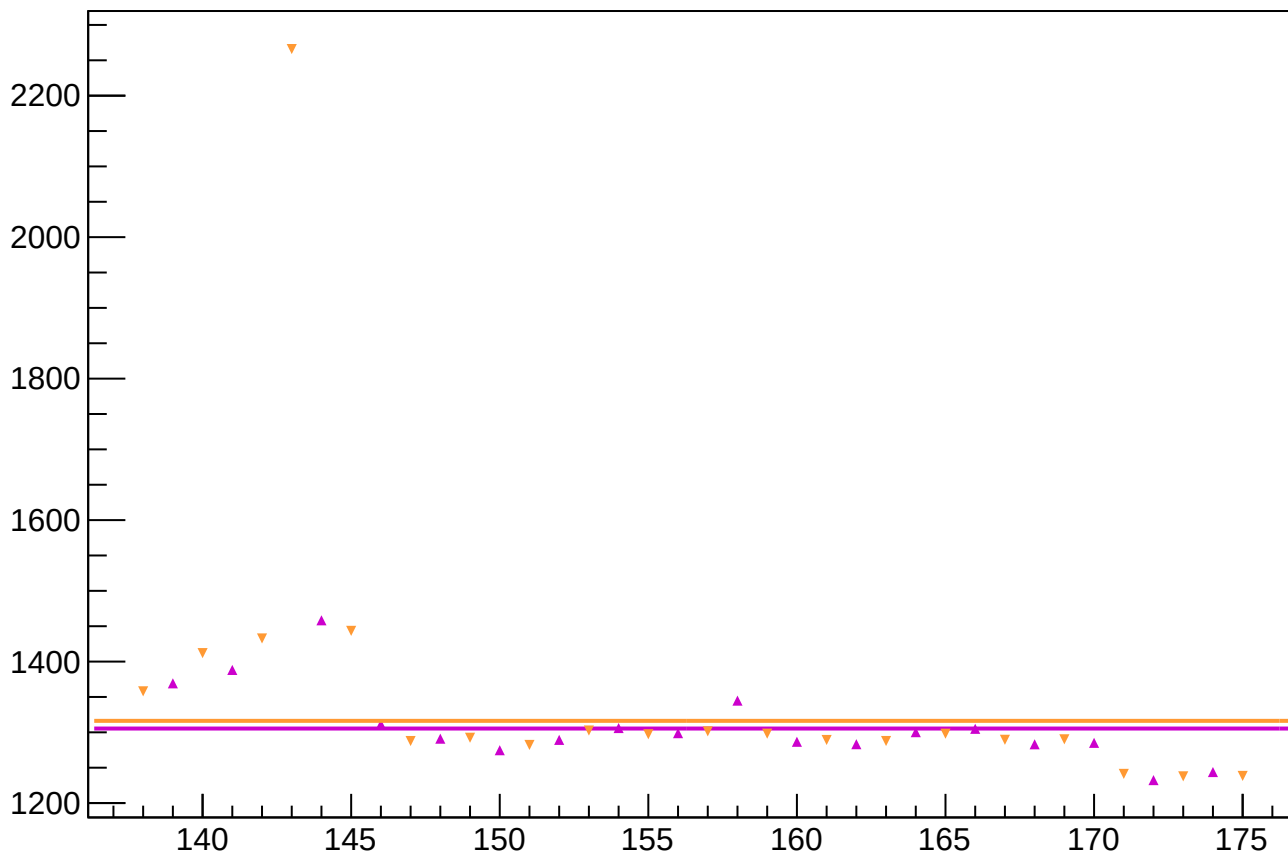
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -332.620+/-347.710  $\chi^2/\text{NDF}$ :28.9/17

Out: -528.748+/-341.243  $\chi^2/\text{NDF}$ :23.6/19

All: -432.524+/-243.549  $\chi^2/\text{NDF}$ : 52.6/37

dit\_asym\_atl\_avg\_atr\_avg\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1316.227+/-0.241  $\chi^2/\text{NDF}$ :283162.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1305.354+/-0.246  $\chi^2/\text{NDF}$ :42283.4/17

Left: 1310.893+/-0.172  $\chi^2/\text{NDF}$ : 326441.7/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

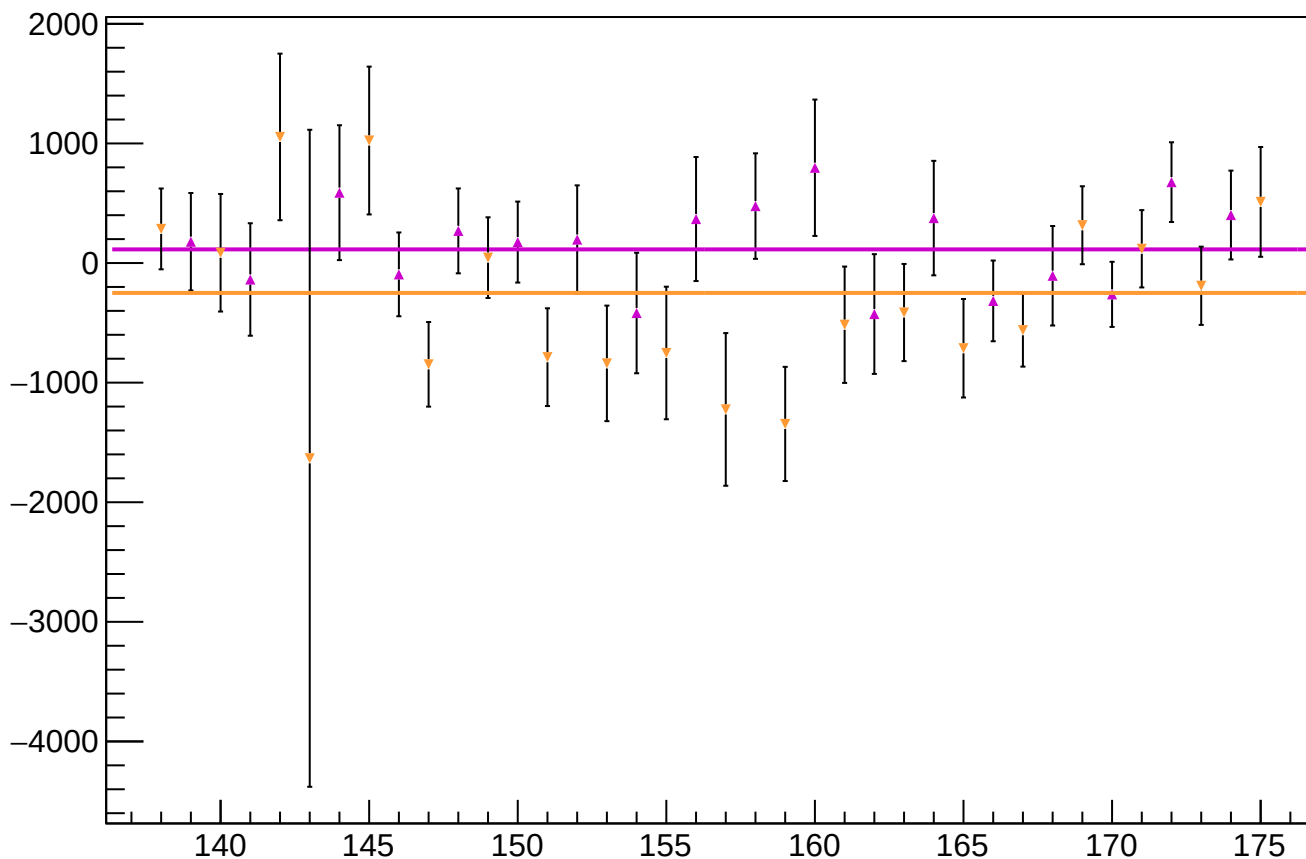
In: 1305.354+/-0.246  $\chi^2/\text{NDF}$ :42283.4/17

Out: 1316.227+/-0.241  $\chi^2/\text{NDF}$ :283162.0/19

All: 1310.893+/-0.172  $\chi^2/\text{NDF}$ : 326441.7/37



asym\_atl\_avg\_atr\_avg\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -249.909+/-93.291  $\chi^2/\text{NDF}$ :36.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 114.132+/-94.521  $\chi^2/\text{NDF}$ :13.8/17

Left: -70.271+/-66.397  $\chi^2/\text{NDF}$ : 57.4/37

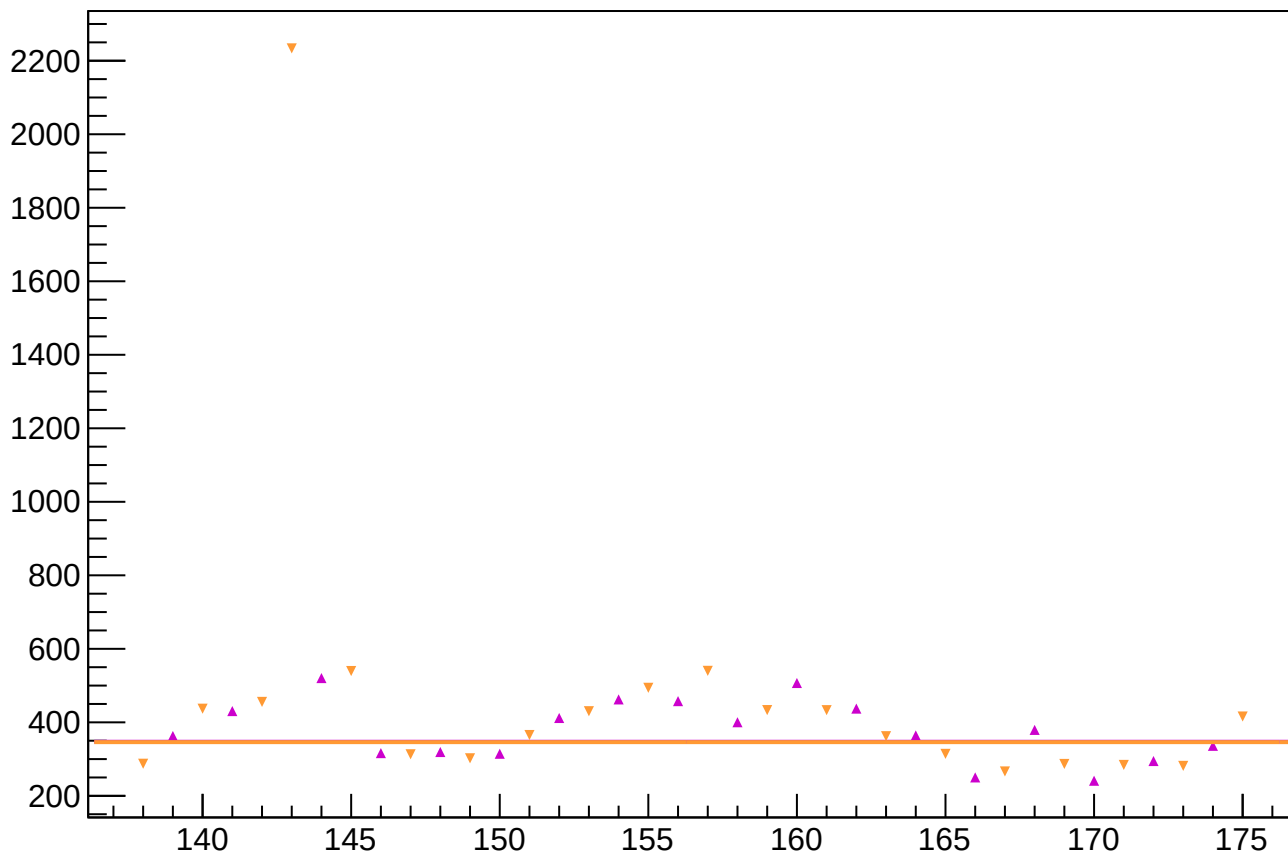
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 114.132+/-94.521  $\chi^2/\text{NDF}$ :13.8/17

Out: -249.909+/-93.291  $\chi^2/\text{NDF}$ :36.1/19

All: -70.271+/-66.397  $\chi^2/\text{NDF}$ : 57.4/37

asym\_atl\_avg\_atr\_avg\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 346.146+/-0.066  $\chi^2/\text{NDF}$ :2309469.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 347.097+/-0.067  $\chi^2/\text{NDF}$ :1323592.4/17

Left: 346.615+/-0.047  $\chi^2/\text{NDF}$ : 3633164.1/37

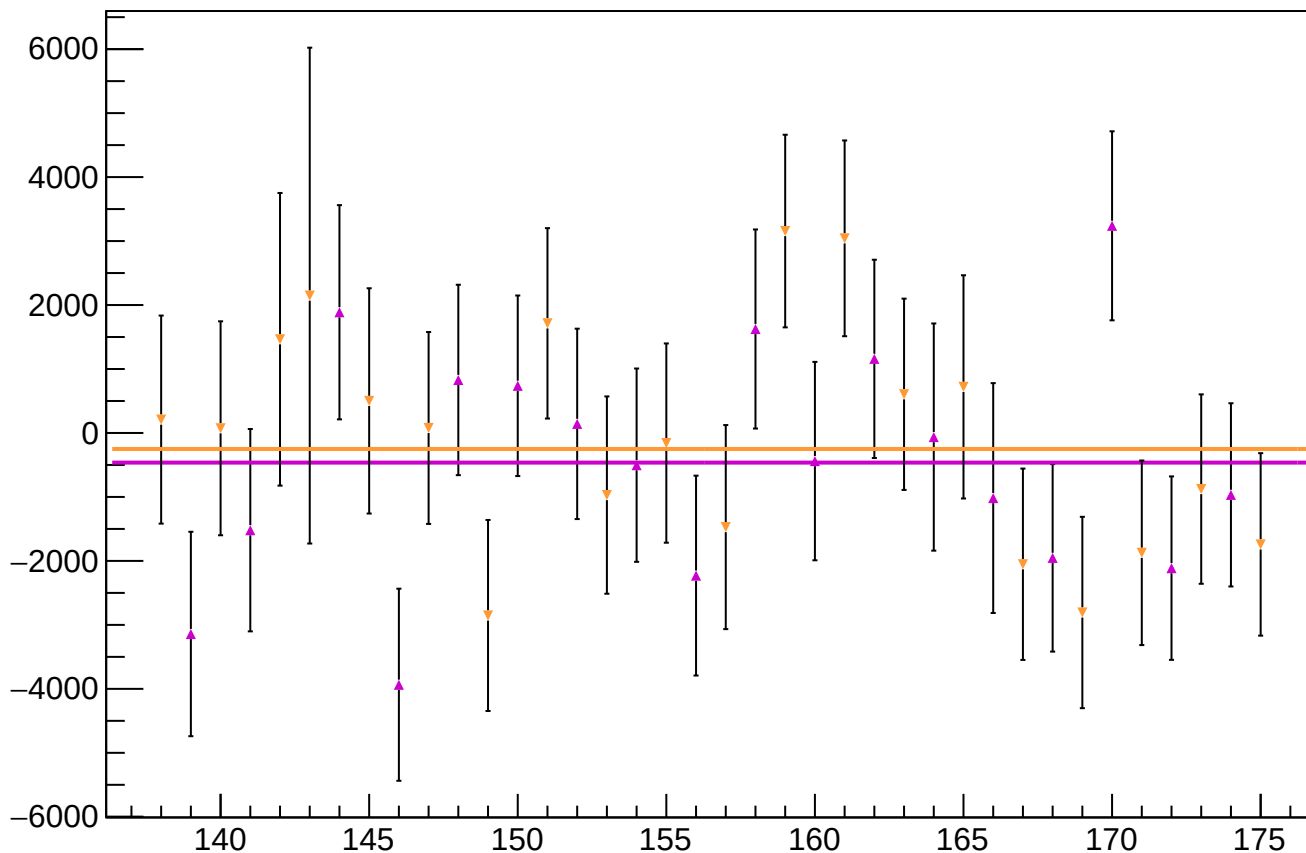
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 347.097+/-0.067  $\chi^2/\text{NDF}$ :1323592.4/17

Out: 346.146+/-0.066  $\chi^2/\text{NDF}$ :2309469.1/19

All: 346.615+/-0.047  $\chi^2/\text{NDF}$ : 3633164.1/37

asym\_atl\_avg\_atr\_avg\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -249.904+/-356.850  $\chi^2/\text{NDF}$ :24.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -463.079+/-362.380  $\chi^2/\text{NDF}$ :25.3/17

Left: -354.853+/-254.264  $\chi^2/\text{NDF}$ : 49.7/37

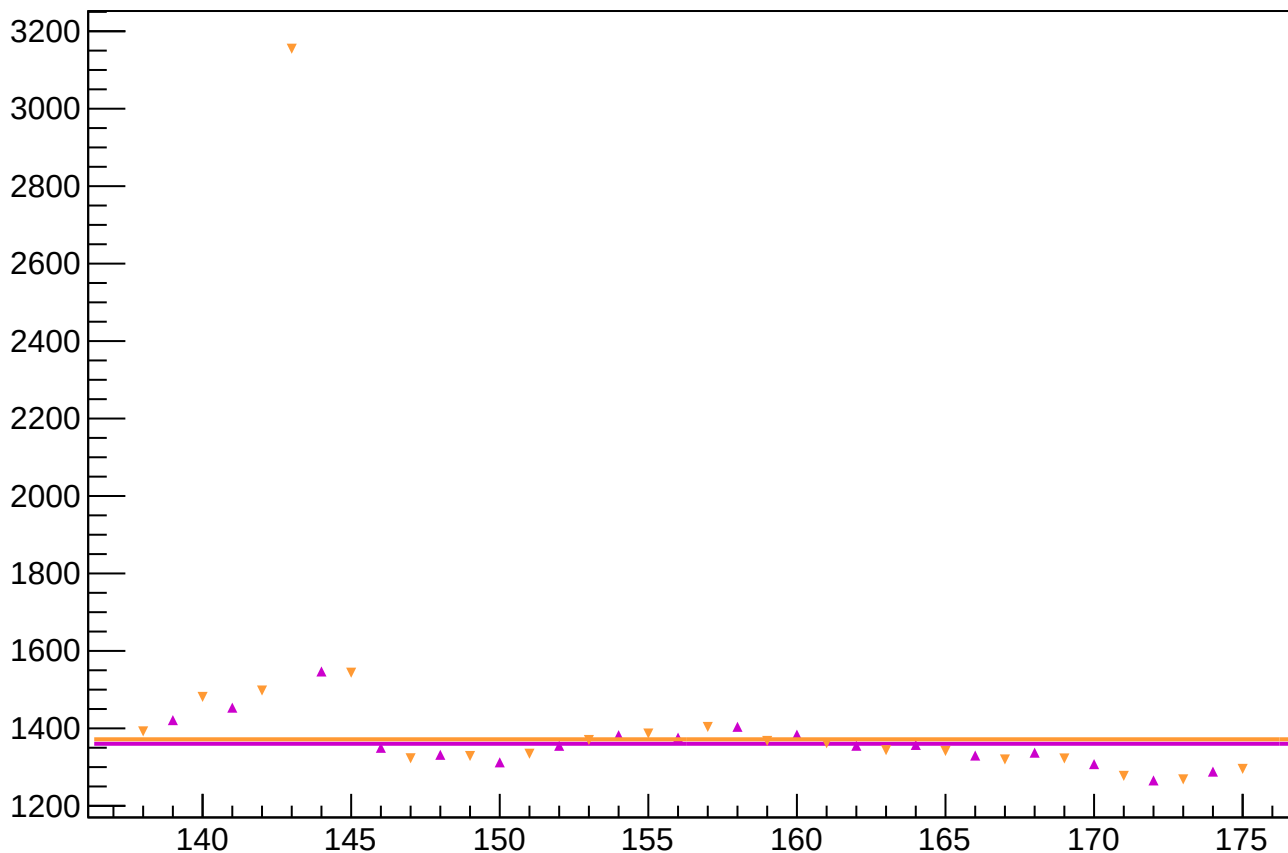
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -463.079+/-362.380  $\chi^2/\text{NDF}$ :25.3/17

Out: -249.904+/-356.850  $\chi^2/\text{NDF}$ :24.2/19

All: -354.853+/-254.264  $\chi^2/\text{NDF}$ : 49.7/37

asym\_atl\_avg\_atr\_avg\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1371.857+/-0.252  $\chi^2/\text{NDF}$ :493500.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1360.240+/-0.256  $\chi^2/\text{NDF}$ :57949.4/17

Left: 1366.138+/-0.180  $\chi^2/\text{NDF}$ : 552493.3/37

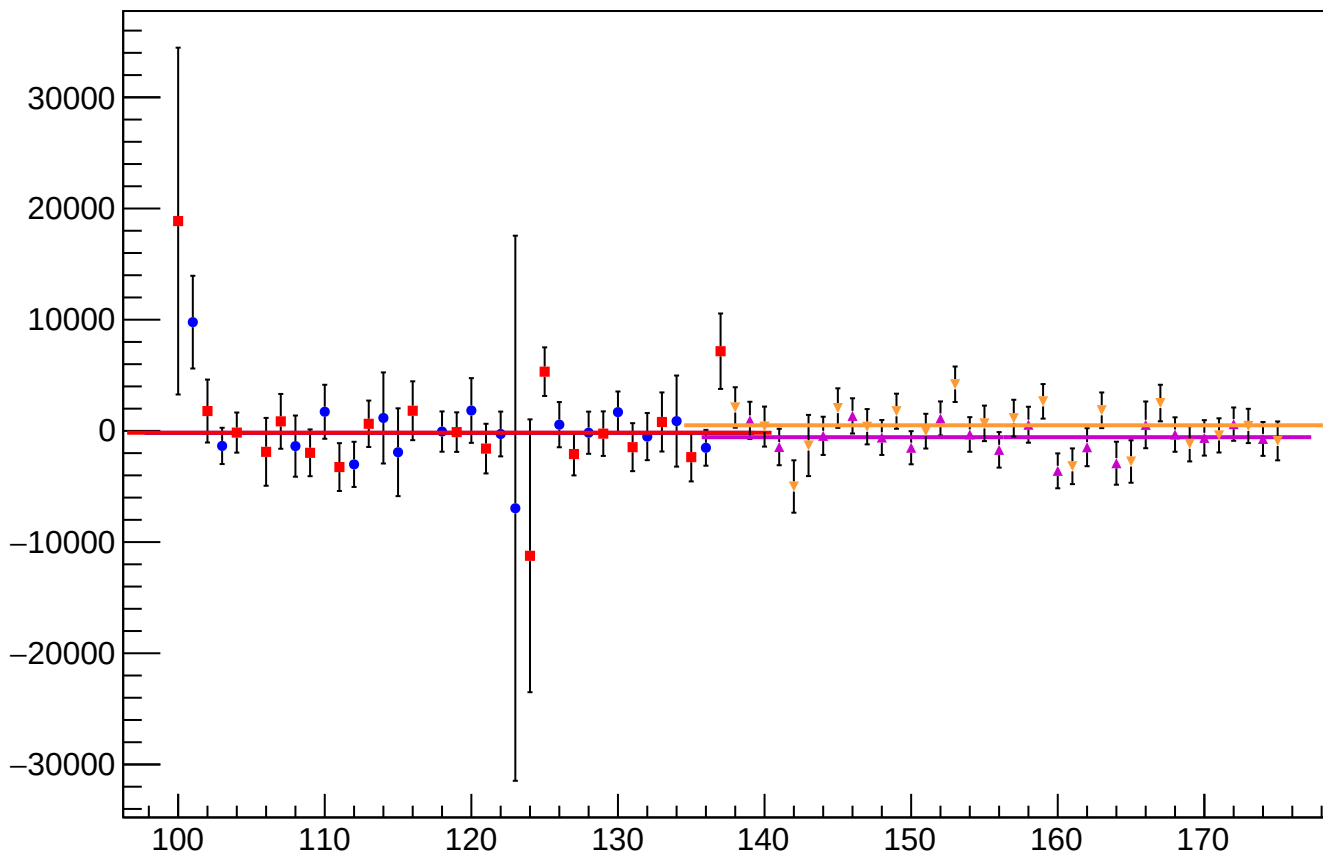
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 1360.240+/-0.256  $\chi^2/\text{NDF}$ :57949.4/17

Out: 1371.857+/-0.252  $\chi^2/\text{NDF}$ :493500.4/19

All: 1366.138+/-0.180  $\chi^2/\text{NDF}$ : 552493.3/37

dit\_asym\_atl\_dd\_atr\_dd\_avg\_mean vs Slug, Sign Corrected



Right In:  $-174.841 \pm 554.659$   $\chi^2/\text{NDF}: 11.8/16$

Left Out:  $503.705 \pm 377.851$   $\chi^2/\text{NDF}: 28.1/19$

Right Out:  $-164.937 \pm 540.101$   $\chi^2/\text{NDF}: 20.7/18$

Left In:  $-566.886 \pm 381.665$   $\chi^2/\text{NDF}: 11.6/17$

Left:  $-26.214 \pm 268.519$   $\chi^2/\text{NDF}: 43.7/37$

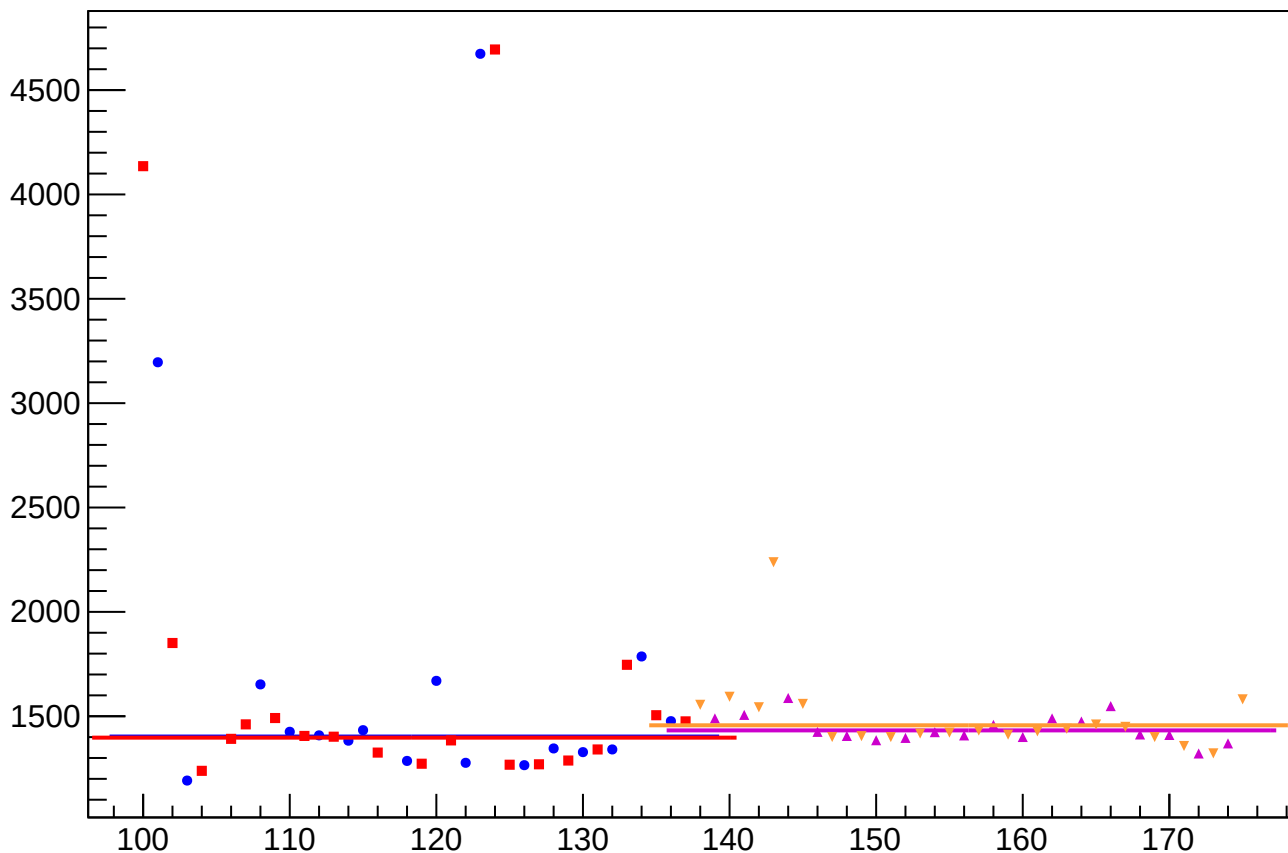
Right:  $-169.758 \pm 386.953$   $\chi^2/\text{NDF}: 32.4/35$

In:  $-440.906 \pm 314.419$   $\chi^2/\text{NDF}: 23.7/34$

Out:  $283.987 \pm 309.607$   $\chi^2/\text{NDF}: 49.8/38$

All:  $-72.870 \pm 220.607$   $\chi^2/\text{NDF}: 76.2/73$

dit\_asym\_atl\_dd\_atr\_dd\_avg\_rms vs Slug, Sign Corrected



Right In: 1402.709 $\pm$ 0.392  $\chi^2$ /NDF: 526326.4/16

Left Out: 1456.574 $\pm$ 0.267  $\chi^2$ /NDF: 236585.1/19

Right Out: 1397.442 $\pm$ 0.382  $\chi^2$ /NDF: 353365.4/18

Left In: 1432.165 $\pm$ 0.270  $\chi^2$ /NDF: 52692.6/17

Left: 1444.492 $\pm$ 0.190  $\chi^2$ /NDF: 293408.8/37

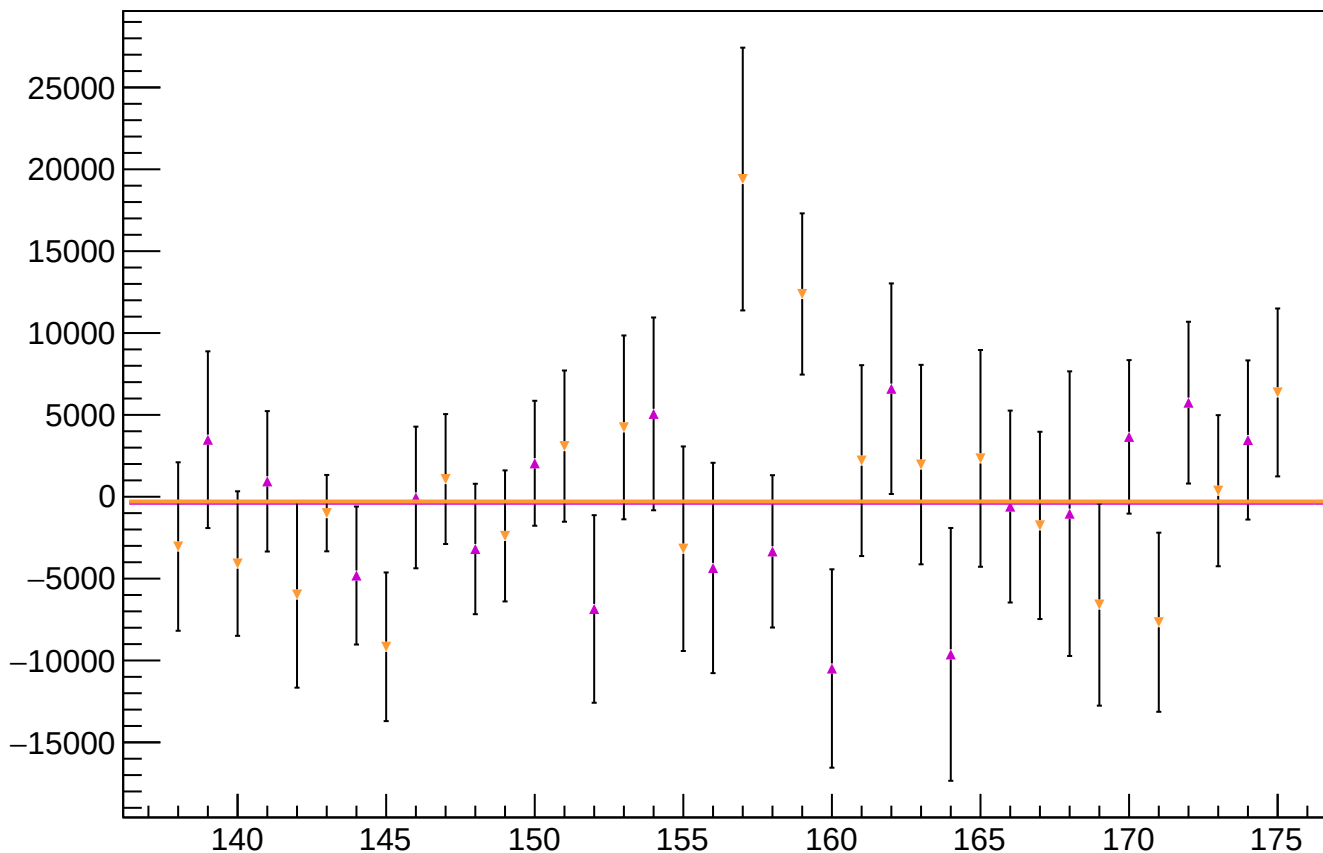
Right: 1400.004 $\pm$ 0.274  $\chi^2$ /NDF: 879784.5/35

In: 1422.700 $\pm$ 0.222  $\chi^2$ /NDF: 582847.2/34

Out: 1437.128 $\pm$ 0.219  $\chi^2$ /NDF: 606058.4/38

All: 1430.027 $\pm$ 0.156  $\chi^2$ /NDF: 1191044.5/73

asym\_atl\_dd\_atr\_dd\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -290.268+/-1057.791  $\chi^2/\text{NDF}$ :25.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -365.283+/-1195.885  $\chi^2/\text{NDF}$ :13.8/17

Left: -323.196+/-792.317  $\chi^2/\text{NDF}$ : 39.3/37

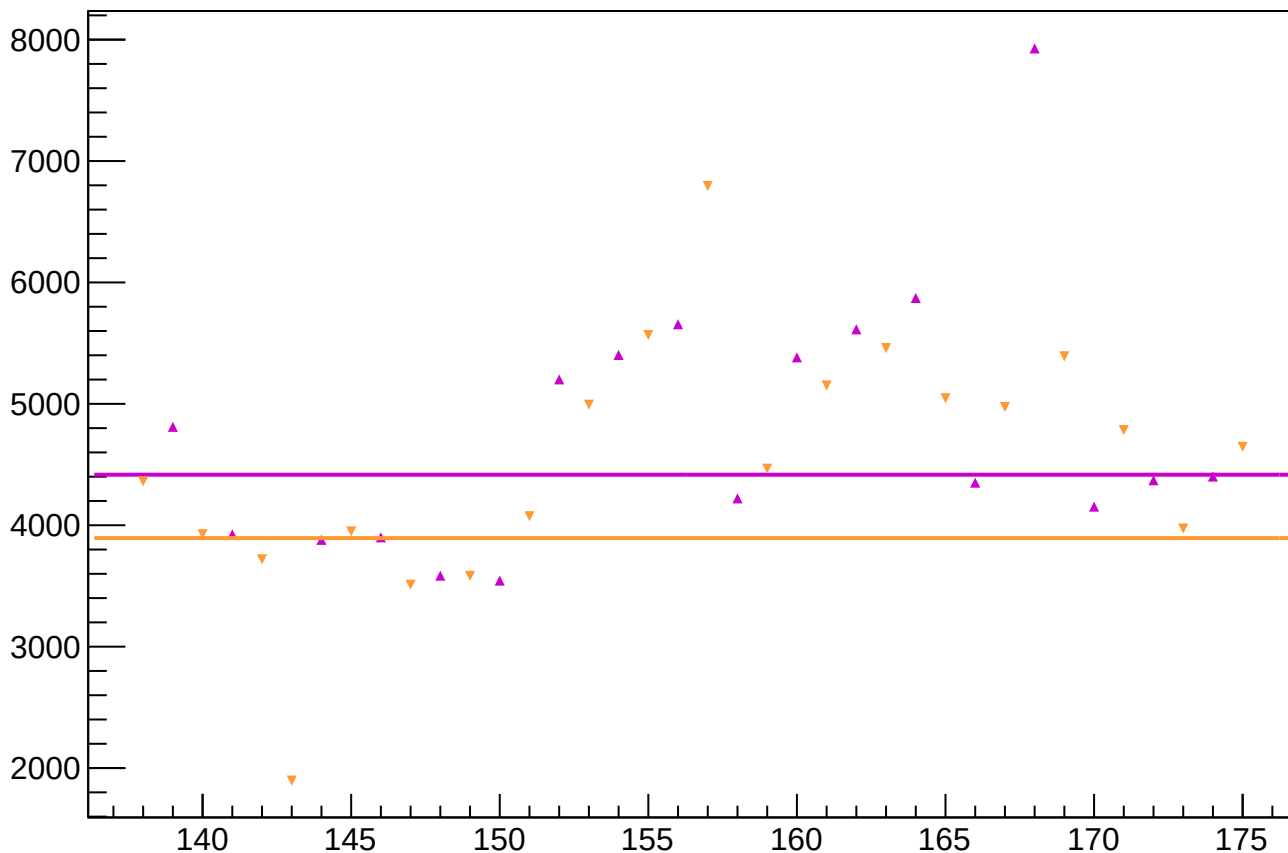
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -365.283+/-1195.885  $\chi^2/\text{NDF}$ :13.8/17

Out: -290.268+/-1057.791  $\chi^2/\text{NDF}$ :25.5/19

All: -323.196+/-792.317  $\chi^2/\text{NDF}$ : 39.3/37

asym\_atl\_dd\_atr\_dd\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/NDF$ : 0.0/0

Left Out: 3894.189+/-0.748  $\chi^2/NDF$ :2598556.6/19

Right Out: 0.000+/-0.000  $\chi^2/NDF$ : 0.0/0

Left In: 4416.462+/-0.846  $\chi^2/NDF$ :985410.8/17

Left: 4123.443+/-0.560  $\chi^2/NDF$ : 3797982.8/37

Right: 0.000+/-0.000  $\chi^2/NDF$ : 0.0/0

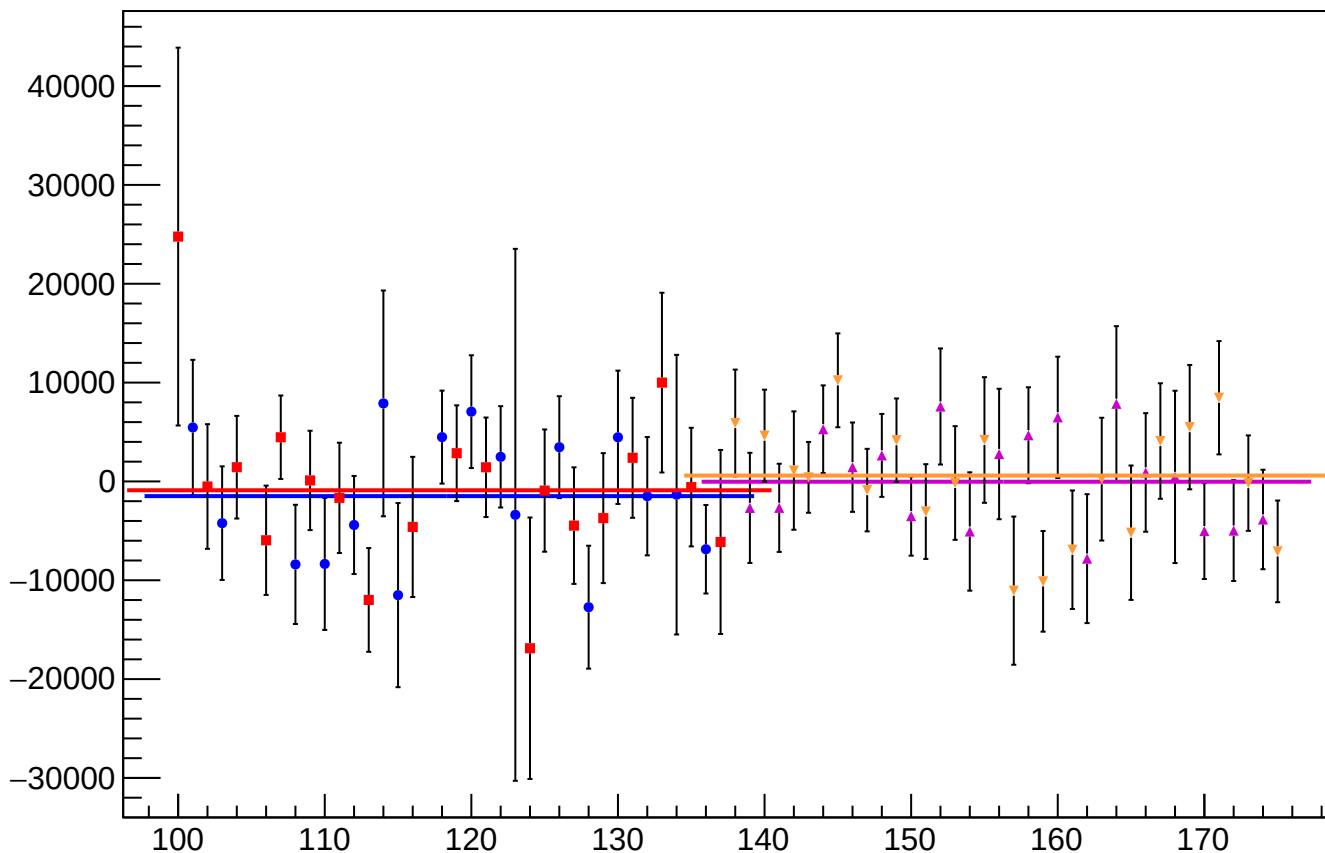
In: 4416.462+/-0.846  $\chi^2/NDF$ :985410.8/17

Out: 3894.189+/-0.748  $\chi^2/NDF$ :2598556.6/19

All: 4123.443+/-0.560  $\chi^2/NDF$ : 3797982.8/37



asym\_atl\_dd\_atr\_dd\_avg\_mean vs Slug, Sign Corrected



Right In: -1487.038 $\pm$ 1499.116  $\chi^2$ /NDF: 16.7/16

Left Out: 593.476 $\pm$ 1162.494  $\chi^2$ /NDF:21.8/19

Right Out: -894.160 $\pm$ 1378.910  $\chi^2$ /NDF: 14.1/18

Left In: -30.333 $\pm$ 1238.960  $\chi^2$ /NDF:12.9/17

Left: 301.414 $\pm$ 847.752  $\chi^2$ /NDF: 34.9/37

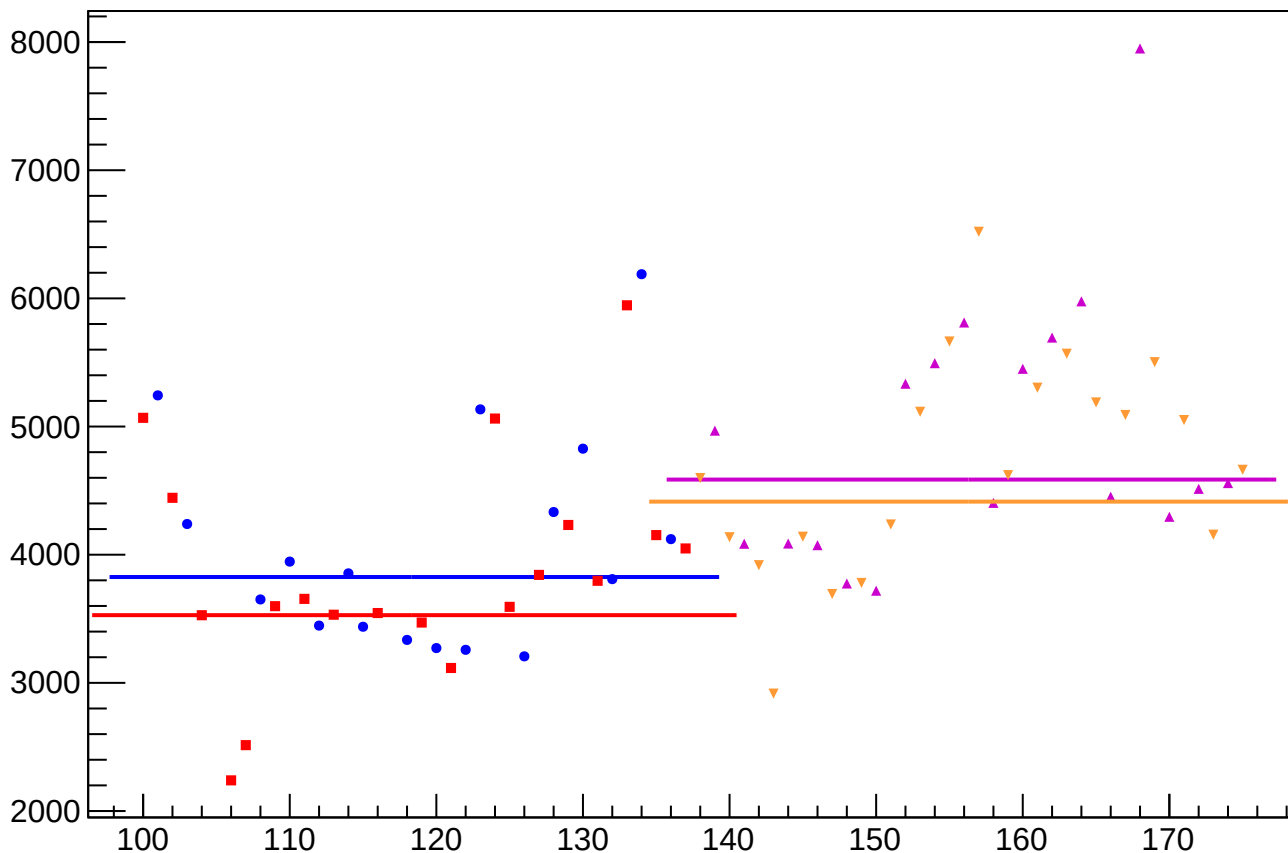
Right: -1165.879 $\pm$ 1014.876  $\chi^2$ /NDF: 30.9/35

In: -621.516 $\pm$ 955.016  $\chi^2$ /NDF:30.2/34

Out: -24.573 $\pm$ 888.790  $\chi^2$ /NDF:36.6/38

All: -301.631 $\pm$ 650.623  $\chi^2$ /NDF: 67.0/73

asym\_atl\_dd\_atr\_dd\_avg\_rms vs Slug, Sign Corrected



Right In: 3825.844+/-1.060  $\chi^2/\text{NDF}$ : 334404.3/16

Left Out: 4414.195+/-0.822  $\chi^2/\text{NDF}$ : 1015827.1/19

Right Out: 3528.289+/-0.966  $\chi^2/\text{NDF}$ : 555414.1/18

Left In: 4586.138+/-0.876  $\chi^2/\text{NDF}$ : 870984.9/17

Left: 4494.697+/-0.599  $\chi^2/\text{NDF}$ : 1907297.3/37

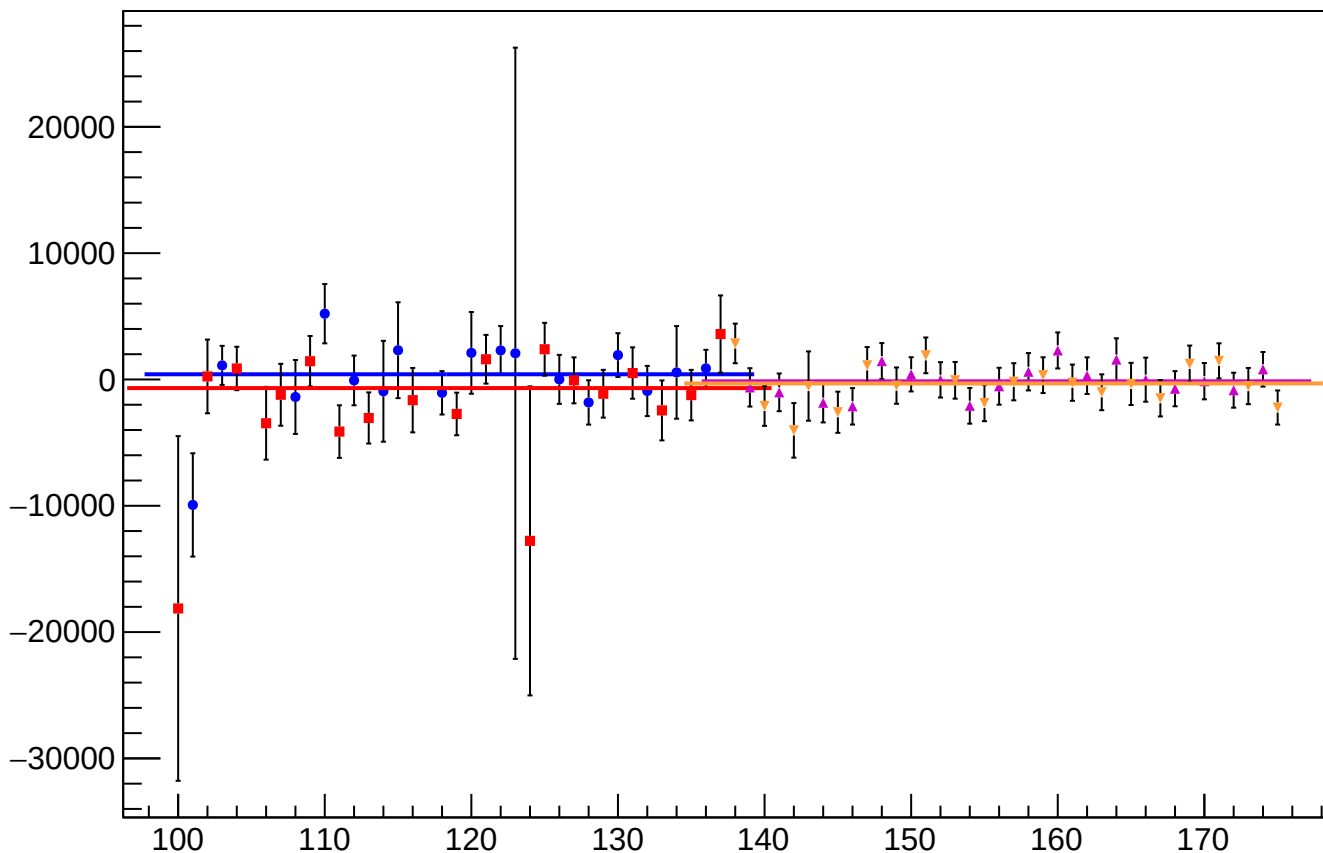
Right: 3663.316+/-0.714  $\chi^2/\text{NDF}$ : 932858.8/35

In: 4277.574+/-0.675  $\chi^2/\text{NDF}$ : 1511052.1/34

Out: 4042.204+/-0.626  $\chi^2/\text{NDF}$ : 2058958.3/38

All: 4151.001+/-0.459  $\chi^2/\text{NDF}$ : 3635340.2/73

dit\_asym\_atl\_dd\_atr\_dd\_dd\_mean vs Slug, Sign Corrected



Right In: 411.419 $\pm$ 527.980  $\chi^2$ /NDF: 16.5/16

Left Out: -313.916 $\pm$ 337.791  $\chi^2$ /NDF:20.9/19

Right Out: -682.176 $\pm$ 510.196  $\chi^2$ /NDF: 18.0/18

Left In: -146.557 $\pm$ 344.080  $\chi^2$ /NDF:12.1/17

Left: -231.780 $\pm$ 241.047  $\chi^2$ /NDF: 33.1/37

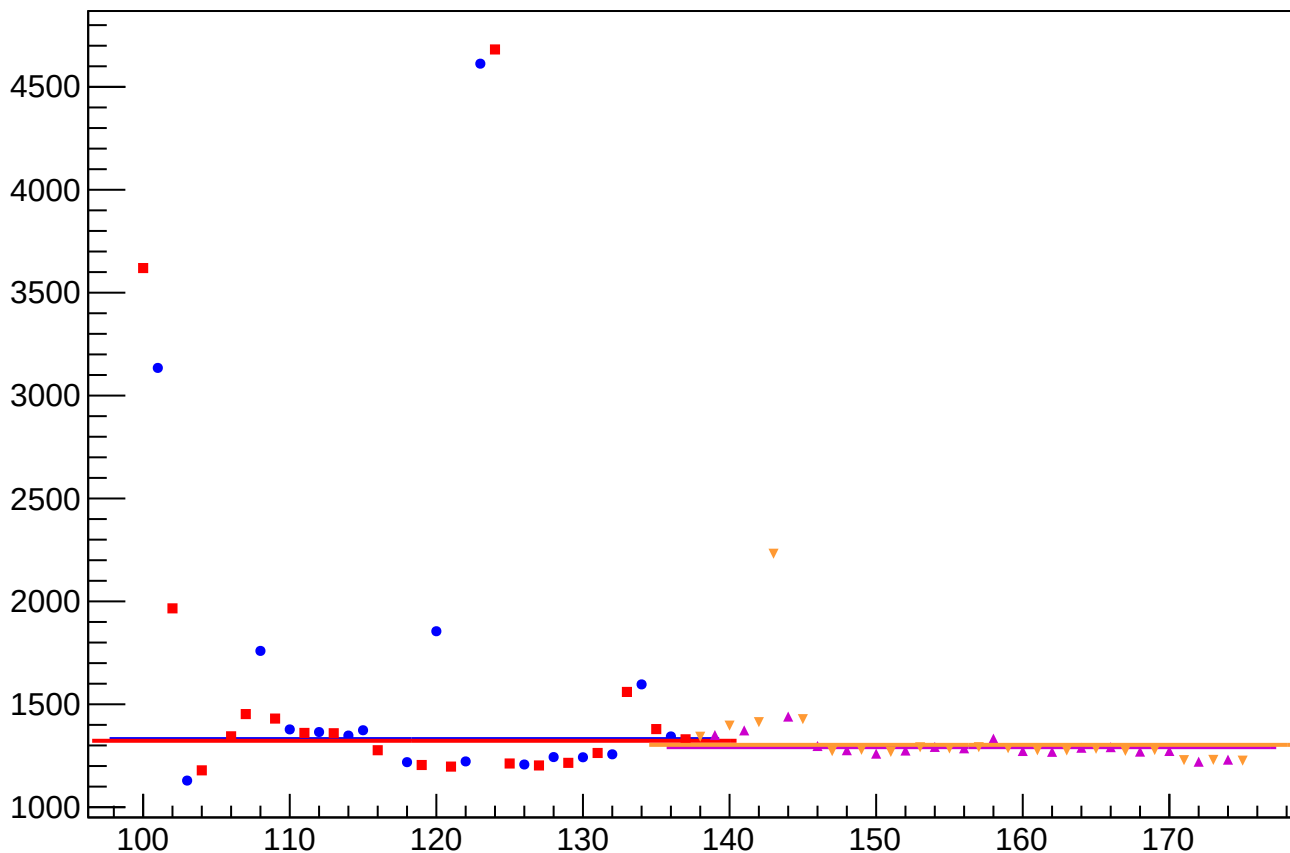
Right: -154.107 $\pm$ 366.889  $\chi^2$ /NDF: 36.8/35

In: 19.775 $\pm$ 288.269  $\chi^2$ /NDF:29.4/34

Out: -426.147 $\pm$ 281.654  $\chi^2$ /NDF:39.3/38

All: -208.361 $\pm$ 201.458  $\chi^2$ /NDF: 70.0/73

dit\_asym\_atl\_dd\_atr\_dd\_dd\_rms vs Slug, Sign Corrected



Right In: 1330.889+/-0.373  $\chi^2/\text{NDF}$ : 603474.5/16

Left Out: 1302.914+/-0.239  $\chi^2/\text{NDF}$ : 278281.6/19

Right Out: 1322.706+/-0.361  $\chi^2/\text{NDF}$ : 394413.6/18

Left In: 1291.715+/-0.243  $\chi^2/\text{NDF}$ : 41105.9/17

Left: 1297.418+/-0.170  $\chi^2/\text{NDF}$ : 320466.3/37

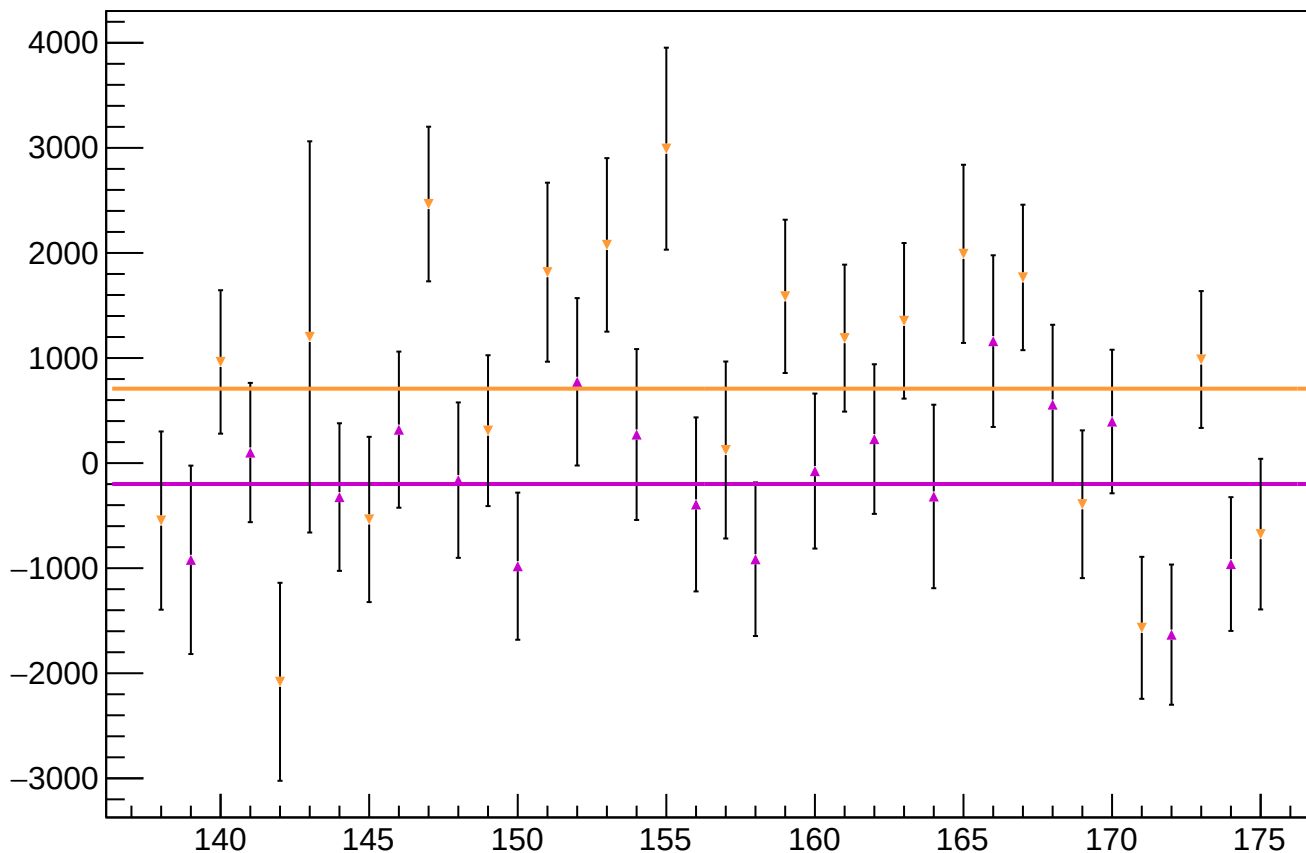
Right: 1326.657+/-0.259  $\chi^2/\text{NDF}$ : 998136.6/35

In: 1303.393+/-0.204  $\chi^2/\text{NDF}$ : 652308.3/34

Out: 1308.946+/-0.199  $\chi^2/\text{NDF}$ : 674787.7/38

All: 1306.234+/-0.142  $\chi^2/\text{NDF}$ : 1327475.6/73

asym\_atl\_dd\_atr\_dd\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 708.348+/-172.944  $\chi^2/\text{NDF}$ :55.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -198.948+/-174.454  $\chi^2/\text{NDF}$ :16.4/17

Left: 258.642+/-122.820  $\chi^2/\text{NDF}$ : 85.3/37

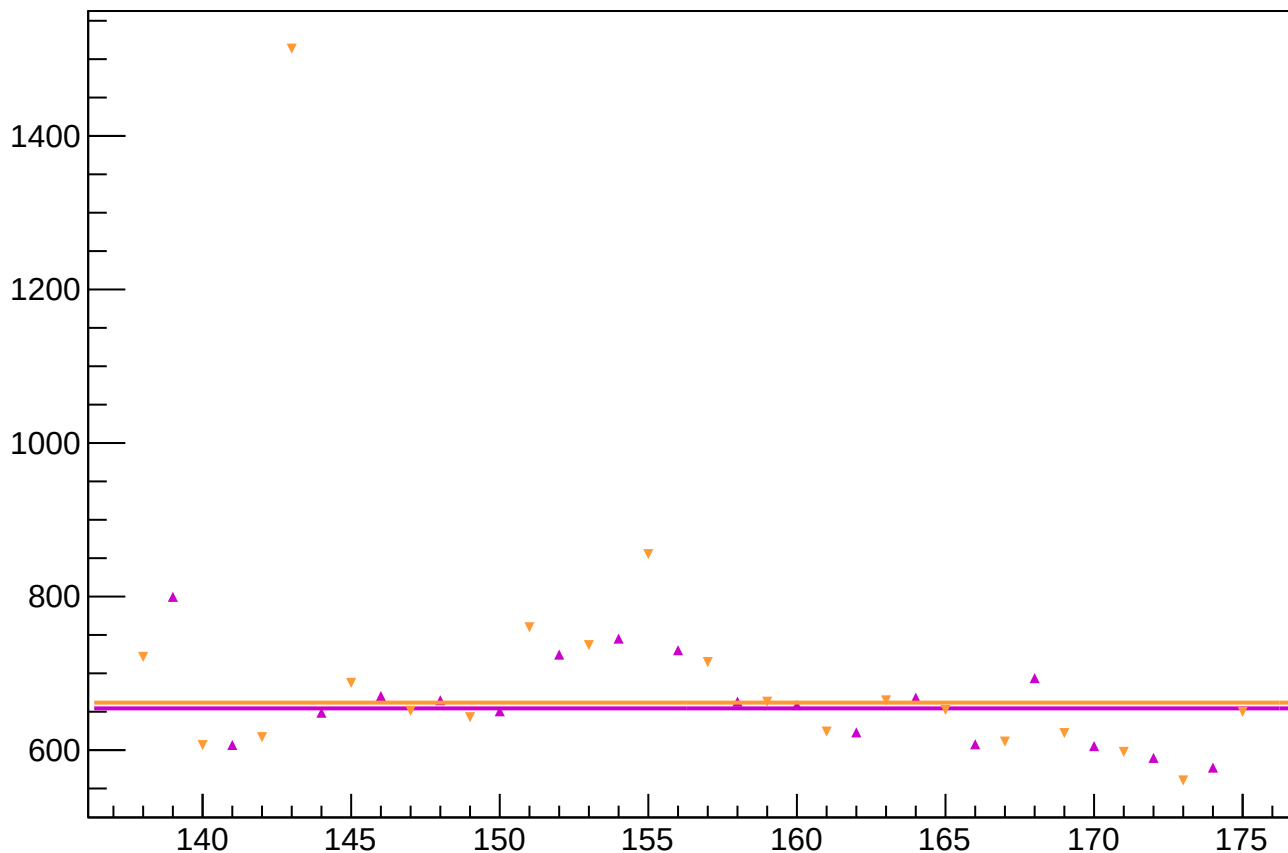
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -198.948+/-174.454  $\chi^2/\text{NDF}$ :16.4/17

Out: 708.348+/-172.944  $\chi^2/\text{NDF}$ :55.3/19

All: 258.642+/-122.820  $\chi^2/\text{NDF}$ : 85.3/37

asym\_atl\_dd\_atr\_dd\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 661.858+/-0.122  $\chi^2$ /NDF:672406.1/19

Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left In: 654.342+/-0.123  $\chi^2$ /NDF:196580.1/17

Left: 658.133+/-0.087  $\chi^2$ /NDF: 870858.9/37

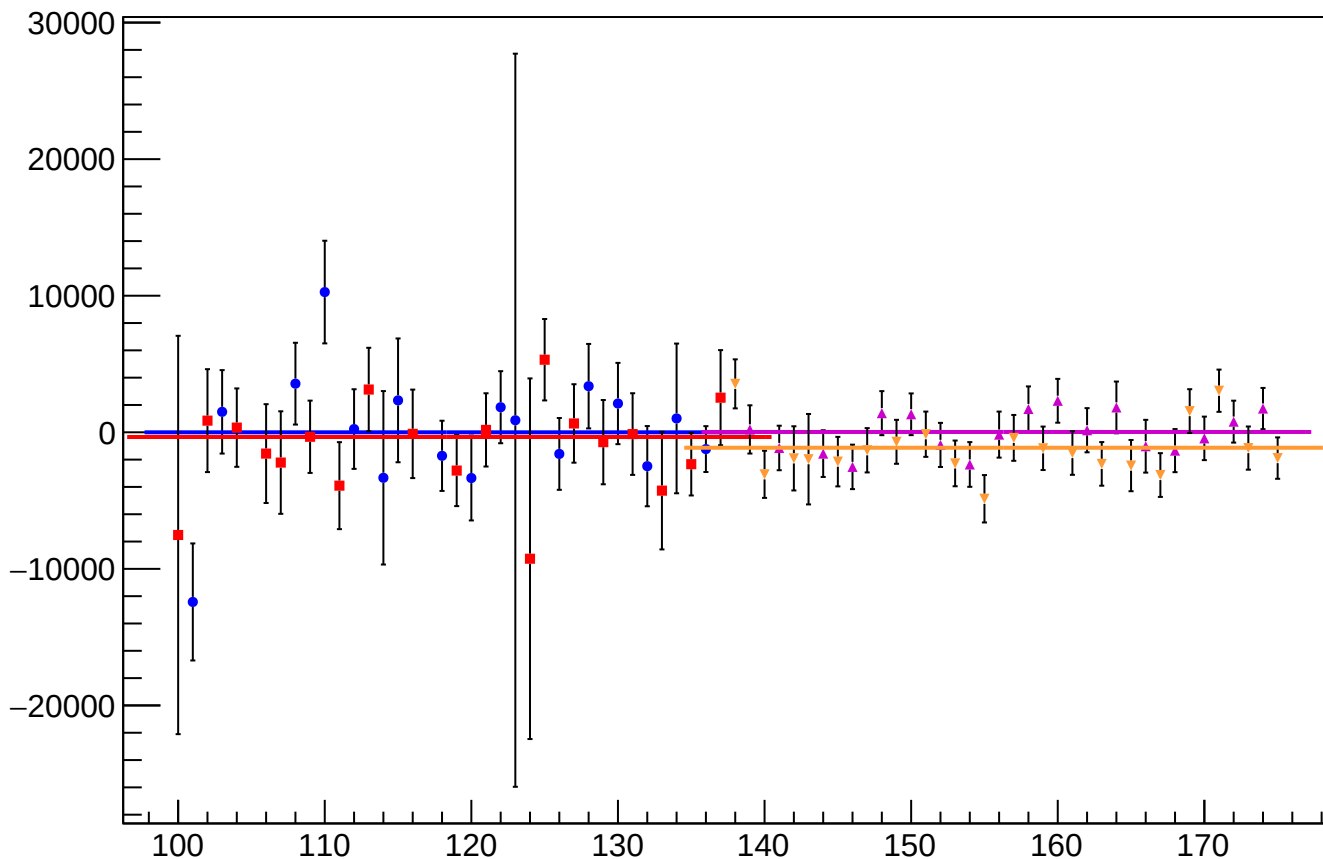
Right: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

In: 654.342+/-0.123  $\chi^2$ /NDF:196580.1/17

Out: 661.858+/-0.122  $\chi^2$ /NDF:672406.1/19

All: 658.133+/-0.087  $\chi^2$ /NDF: 870858.9/37

asym\_atl\_dd\_atr\_dd\_dd\_mean vs Slug, Sign Corrected



Right In:  $-2.204 \pm 745.061$   $\chi^2/\text{NDF}: 23.5/16$

Left Out:  $-1131.327 \pm 380.945$   $\chi^2/\text{NDF}: 27.3/19$

Right Out:  $-345.148 \pm 733.723$   $\chi^2/\text{NDF}: 10.7/18$

Left In:  $22.727 \pm 386.869$   $\chi^2/\text{NDF}: 14.4/17$

Left:  $-563.204 \pm 271.439$   $\chi^2/\text{NDF}: 46.2/37$

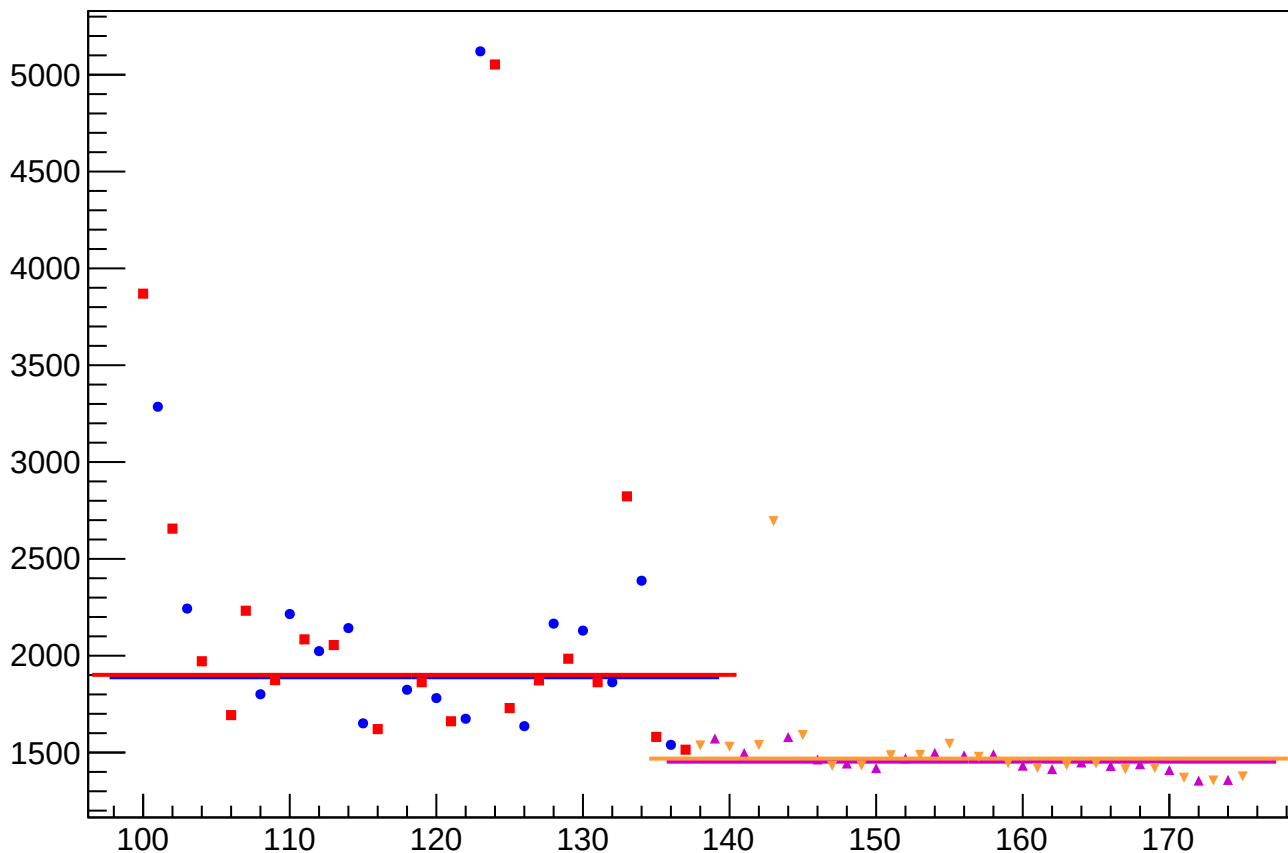
Right:  $-176.305 \pm 522.783$   $\chi^2/\text{NDF}: 34.3/35$

In:  $17.432 \pm 343.343$   $\chi^2/\text{NDF}: 37.9/34$

Out:  $-964.399 \pm 338.092$   $\chi^2/\text{NDF}: 38.9/38$

All:  $-481.048 \pm 240.902$   $\chi^2/\text{NDF}: 80.9/73$

asym\_atl\_dd\_atr\_dd\_dd\_rms vs Slug, Sign Corrected



Right In: 1888.810 $\pm$ 0.527  $\chi^2/\text{NDF}$ : 465842.8/16

Left Out: 1468.778 $\pm$ 0.269  $\chi^2/\text{NDF}$ :330367.4/19

Right Out: 1901.248 $\pm$ 0.519  $\chi^2/\text{NDF}$ : 461424.3/18

Left In: 1452.902 $\pm$ 0.274  $\chi^2/\text{NDF}$ :45622.9/17

Left: 1460.963 $\pm$ 0.192  $\chi^2/\text{NDF}$ : 377700.3/37

Right: 1895.125 $\pm$ 0.370  $\chi^2/\text{NDF}$ : 927550.0/35

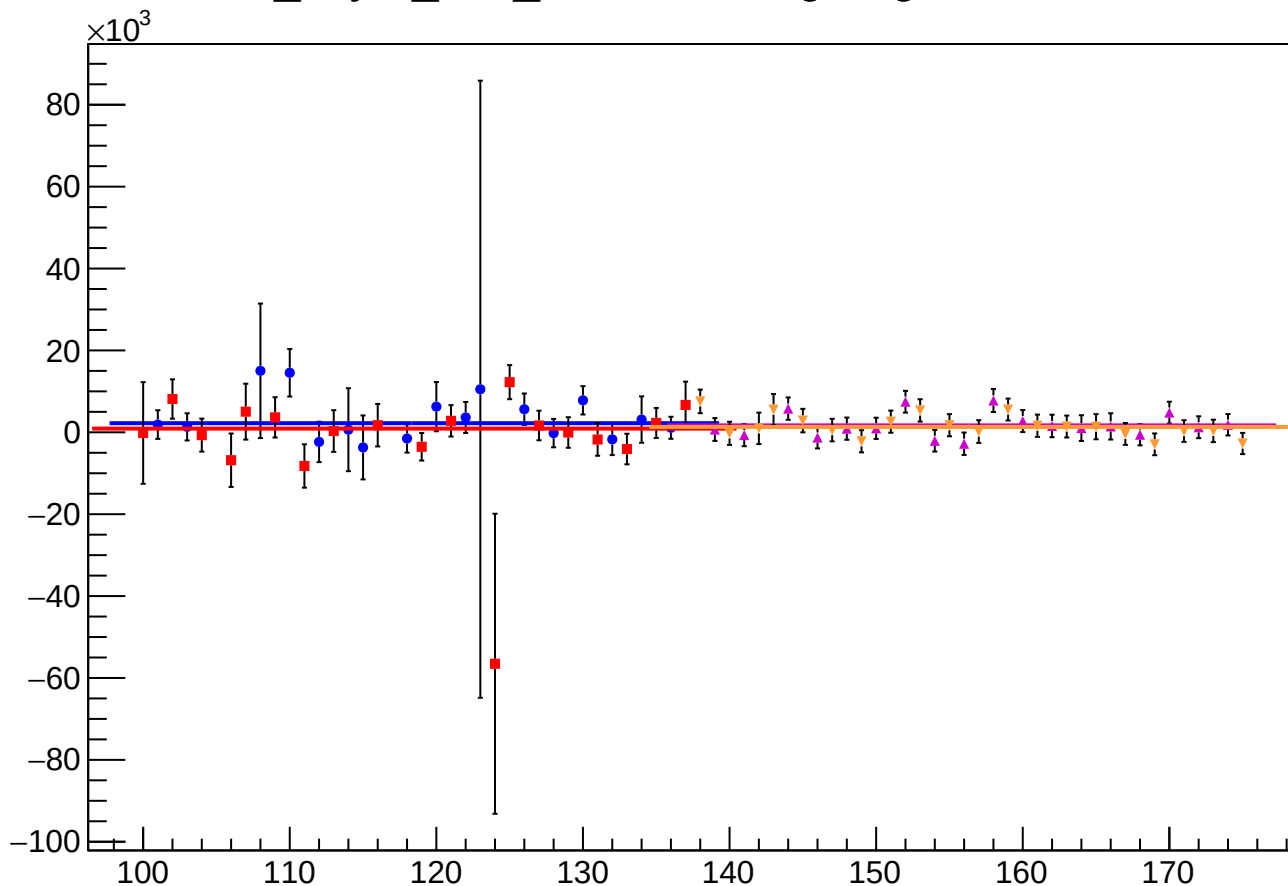
In: 1545.472 $\pm$ 0.243  $\chi^2/\text{NDF}$ :1050688.8/34

Out: 1560.605 $\pm$ 0.239  $\chi^2/\text{NDF}$ :1339101.8/38

All: 1553.156 $\pm$ 0.170  $\chi^2/\text{NDF}$ : 2391763.3/73



# dit\_asym\_atl1\_mean vs Slug, Sign Corrected



Right In: 2227.517+/-1039.288  $\chi^2/\text{NDF}$ : 13.6/16

Left Out: 1310.619+/-627.925  $\chi^2/\text{NDF}$ :19.1/19

Right Out: 907.837+/-1046.878  $\chi^2/\text{NDF}$ : 22.9/18

Left In: 1695.569+/-643.261  $\chi^2/\text{NDF}$ :21.1/17

Left: 1498.451+/-449.334  $\chi^2/\text{NDF}$ : 40.3/37

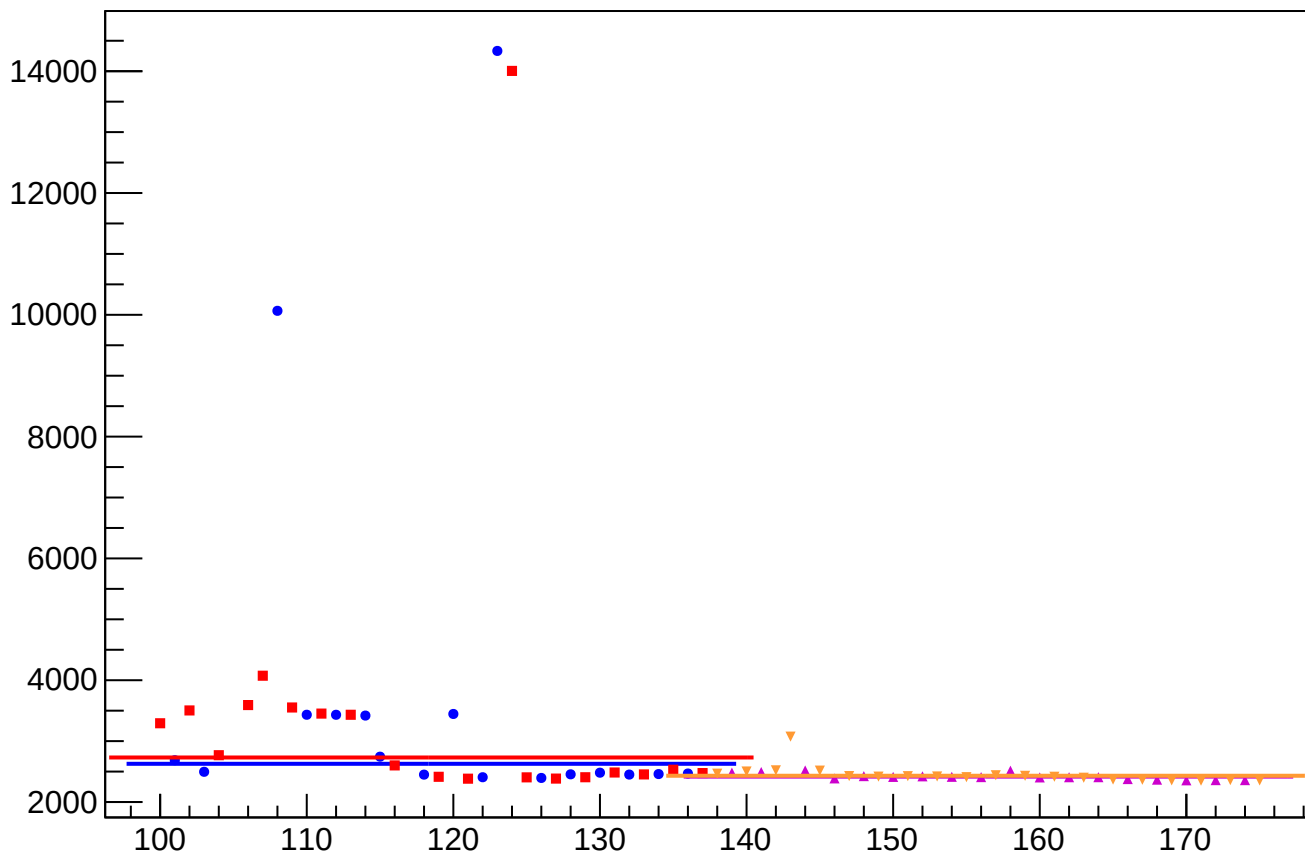
Right: 1572.479+/-737.556  $\chi^2/\text{NDF}$ : 37.3/35

In: 1842.909+/-546.968  $\chi^2/\text{NDF}$ :34.8/34

Out: 1204.051+/-538.487  $\chi^2/\text{NDF}$ :42.1/38

All: 1518.489+/-383.731  $\chi^2/\text{NDF}$ : 77.6/73

# dit\_asym\_atl1\_rms vs Slug, Sign Corrected



Right In: 2627.570+/-0.735  $\chi^2/\text{NDF}$ : 644396.7/16

Left Out: 2431.404+/-0.444  $\chi^2/\text{NDF}$ : 70419.6/19

Right Out: 2731.271+/-0.740  $\chi^2/\text{NDF}$ : 598207.5/18

Left In: 2417.092+/-0.455  $\chi^2/\text{NDF}$ : 12157.1/17

Left: 2424.421+/-0.318  $\chi^2/\text{NDF}$ : 83083.6/37

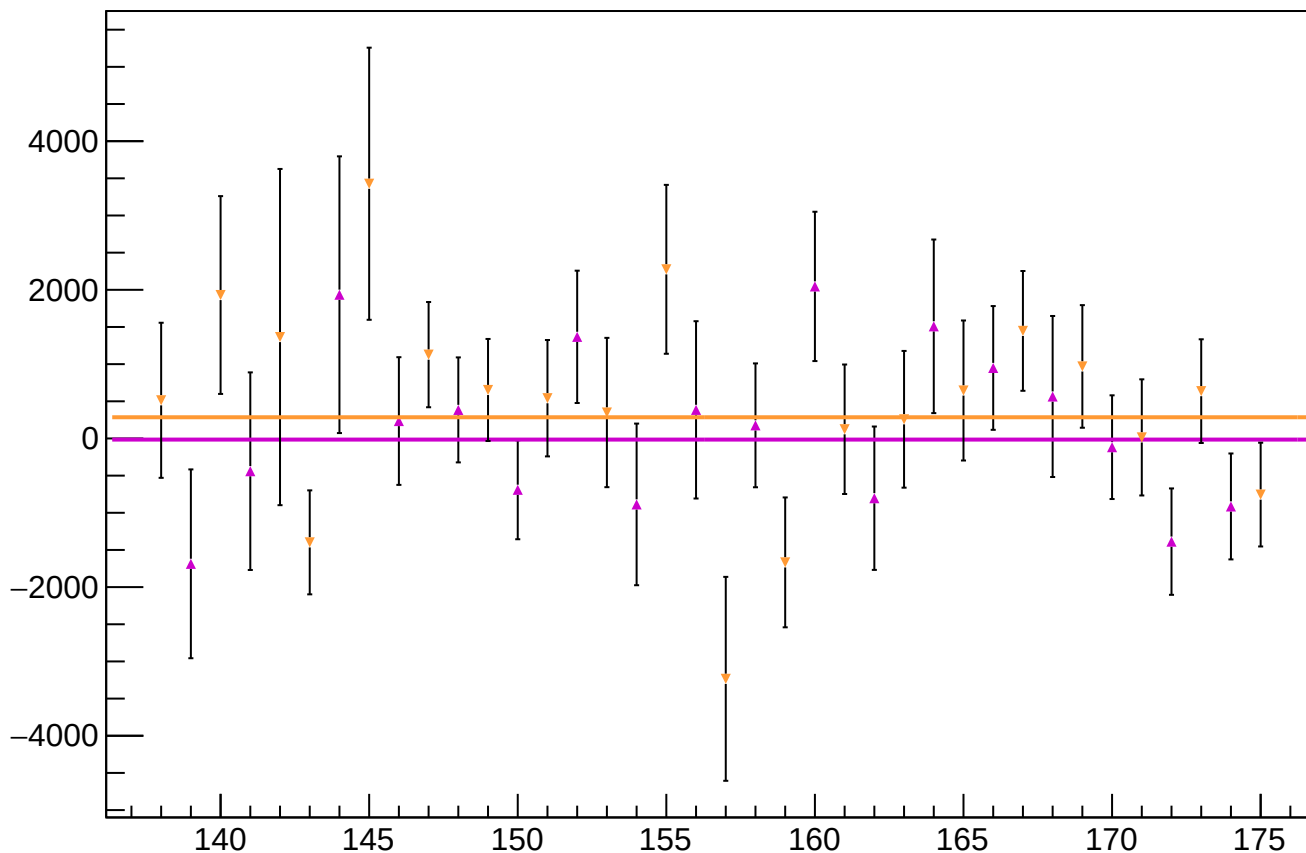
Right: 2679.043+/-0.522  $\chi^2/\text{NDF}$ : 1252488.0/35

In: 2475.391+/-0.387  $\chi^2/\text{NDF}$ : 715862.7/34

Out: 2510.743+/-0.381  $\chi^2/\text{NDF}$ : 789305.5/38

All: 2493.343+/-0.271  $\chi^2/\text{NDF}$ : 1509410.9/73

# asym\_atl1\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 285.291+/-197.042  $\chi^2/\text{NDF}$ :32.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -15.071+/-211.237  $\chi^2/\text{NDF}$ :21.1/17

Left: 145.541+/-144.087  $\chi^2/\text{NDF}$ : 54.7/37

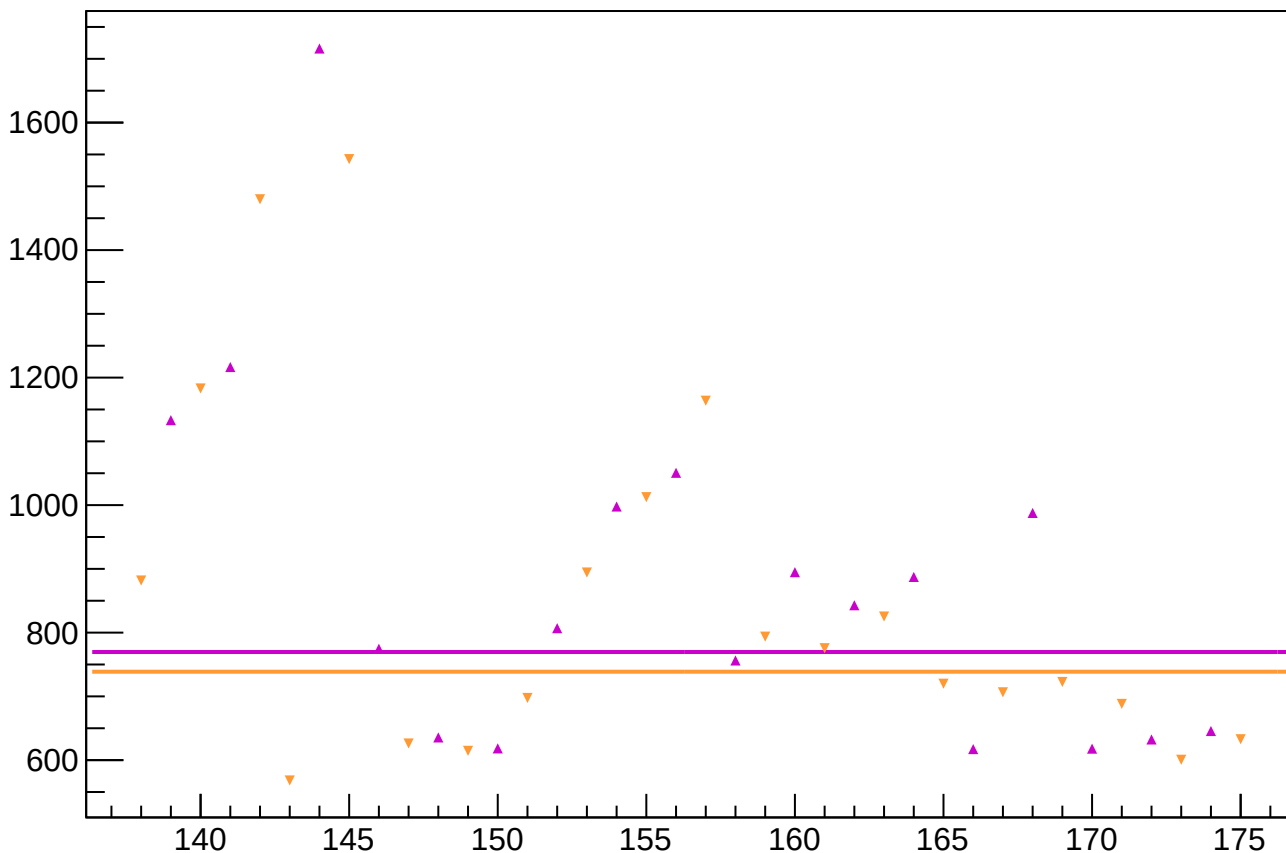
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -15.071+/-211.237  $\chi^2/\text{NDF}$ :21.1/17

Out: 285.291+/-197.042  $\chi^2/\text{NDF}$ :32.5/19

All: 145.541+/-144.087  $\chi^2/\text{NDF}$ : 54.7/37

# asym\_atl1\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 738.692+/-0.139  $\chi^2/\text{NDF}$ :1624162.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 769.584+/-0.149  $\chi^2/\text{NDF}$ :1724833.2/17

Left: 753.065+/-0.102  $\chi^2/\text{NDF}$ : 3371868.7/37

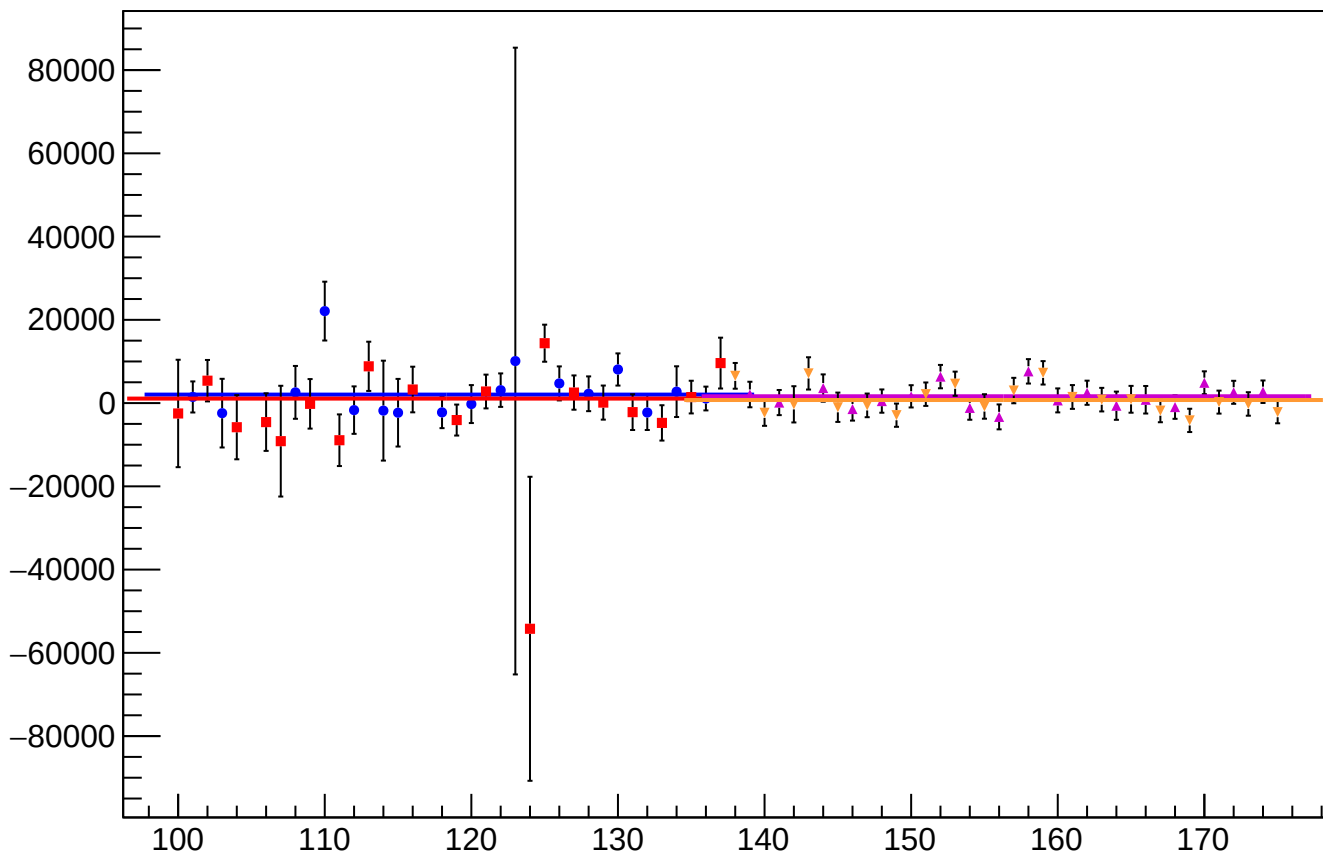
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 769.584+/-0.149  $\chi^2/\text{NDF}$ :1724833.2/17

Out: 738.692+/-0.139  $\chi^2/\text{NDF}$ :1624162.8/19

All: 753.065+/-0.102  $\chi^2/\text{NDF}$ : 3371868.7/37

# asym\_atl1\_mean vs Slug, Sign Corrected



Right In: 2037.803+/-1151.419  $\chi^2/\text{NDF}$ : 14.8/16

Left Out: 737.344+/-666.922  $\chi^2/\text{NDF}$ : 23.0/19

Right Out: 1080.125+/-1186.666  $\chi^2/\text{NDF}$ : 25.3/18

Left In: 1639.892+/-685.555  $\chi^2/\text{NDF}$ : 16.0/17

Left: 1176.185+/-478.037  $\chi^2/\text{NDF}$ : 39.8/37

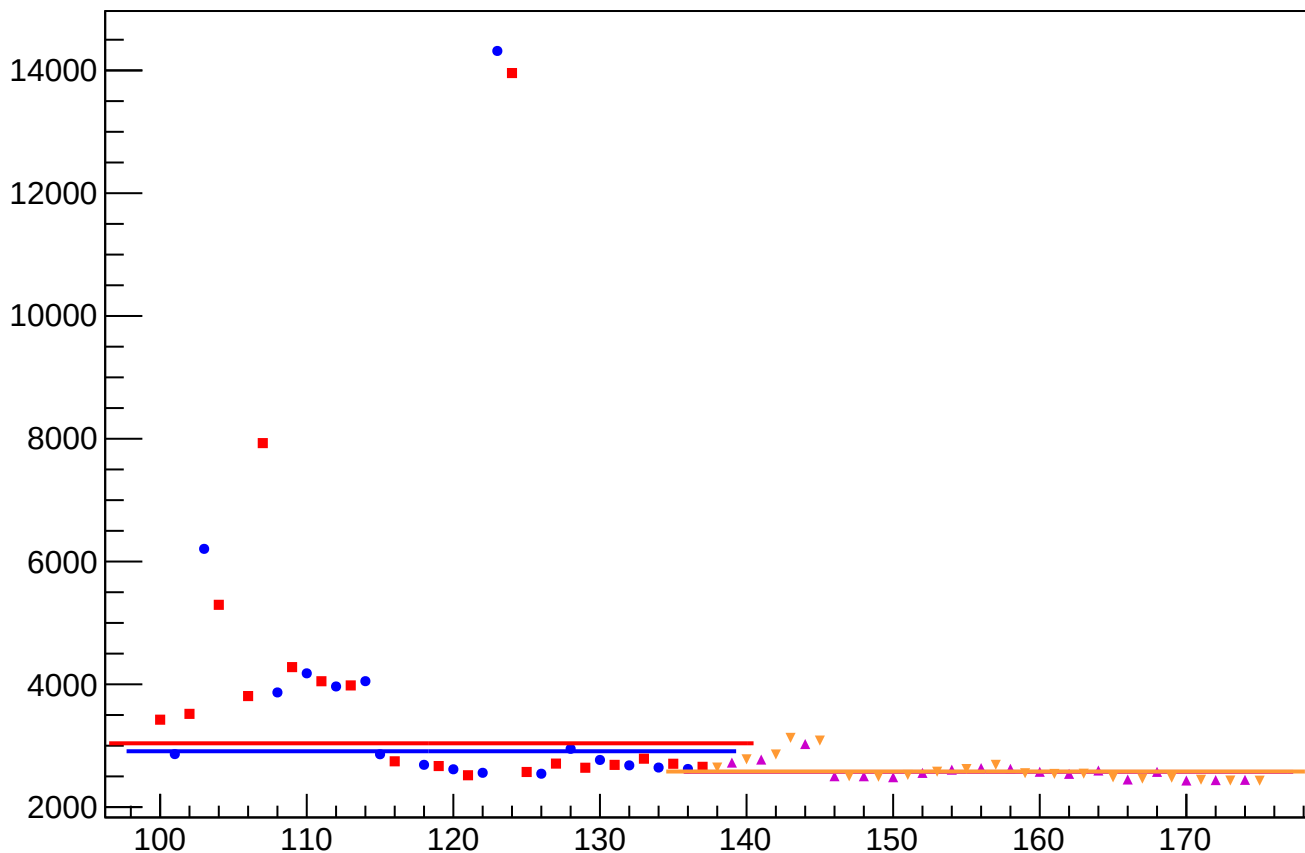
Right: 1573.398+/-826.356  $\chi^2/\text{NDF}$ : 40.5/35

In: 1744.033+/-589.051  $\chi^2/\text{NDF}$ : 30.9/34

Out: 819.625+/-581.393  $\chi^2/\text{NDF}$ : 48.4/38

All: 1275.782+/-413.788  $\chi^2/\text{NDF}$ : 80.5/73

# asym\_atl1\_rms vs Slug, Sign Corrected



Right In: 2909.732+/-0.814  $\chi^2/\text{NDF}$ : 641894.7/16

Left Out: 2579.497+/-0.472  $\chi^2/\text{NDF}$ :130053.2/19

Right Out: 3039.118+/-0.839  $\chi^2/\text{NDF}$ : 1011306.5/18

Left In: 2572.877+/-0.485  $\chi^2/\text{NDF}$ :76211.1/17

Left: 2576.278+/-0.338  $\chi^2/\text{NDF}$ : 206360.1/37

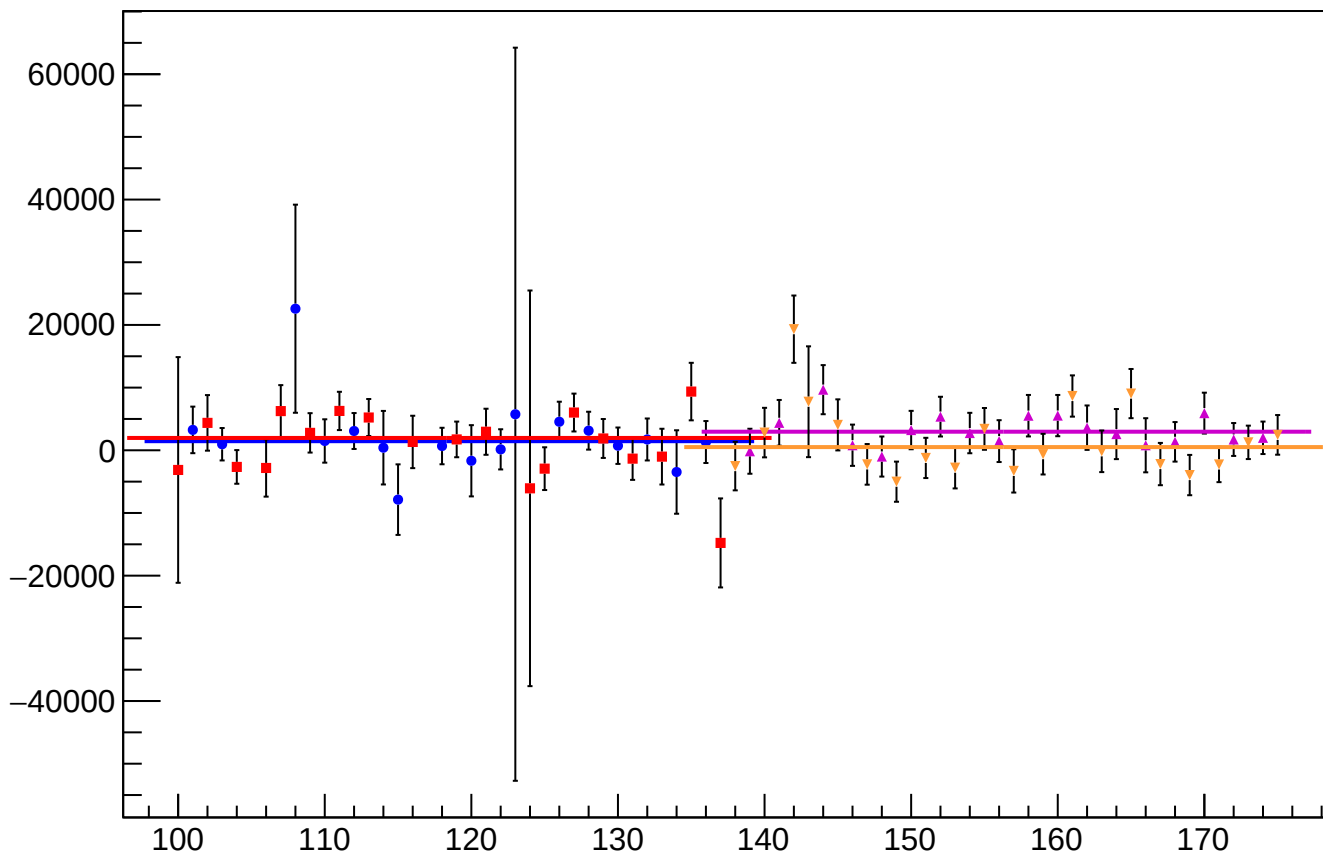
Right: 2972.475+/-0.584  $\chi^2/\text{NDF}$ : 1665447.8/35

In: 2661.039+/-0.417  $\chi^2/\text{NDF}$ :844483.7/34

Out: 2689.824+/-0.411  $\chi^2/\text{NDF}$ :1369374.5/38

All: 2675.620+/-0.293  $\chi^2/\text{NDF}$ : 2216277.5/73

# dit\_asym\_atl2\_mean vs Slug, Sign Corrected



Right In: 1451.980+/-889.008  $\chi^2/\text{NDF}$ : 7.4/16

Left Out: 510.990+/-769.878  $\chi^2/\text{NDF}$ :36.6/19

Right Out: 1969.182+/-850.490  $\chi^2/\text{NDF}$ : 22.4/18

Left In: 2964.985+/-774.155  $\chi^2/\text{NDF}$ :9.5/17

Left: 1731.190+/-545.892  $\chi^2/\text{NDF}$ : 51.2/37

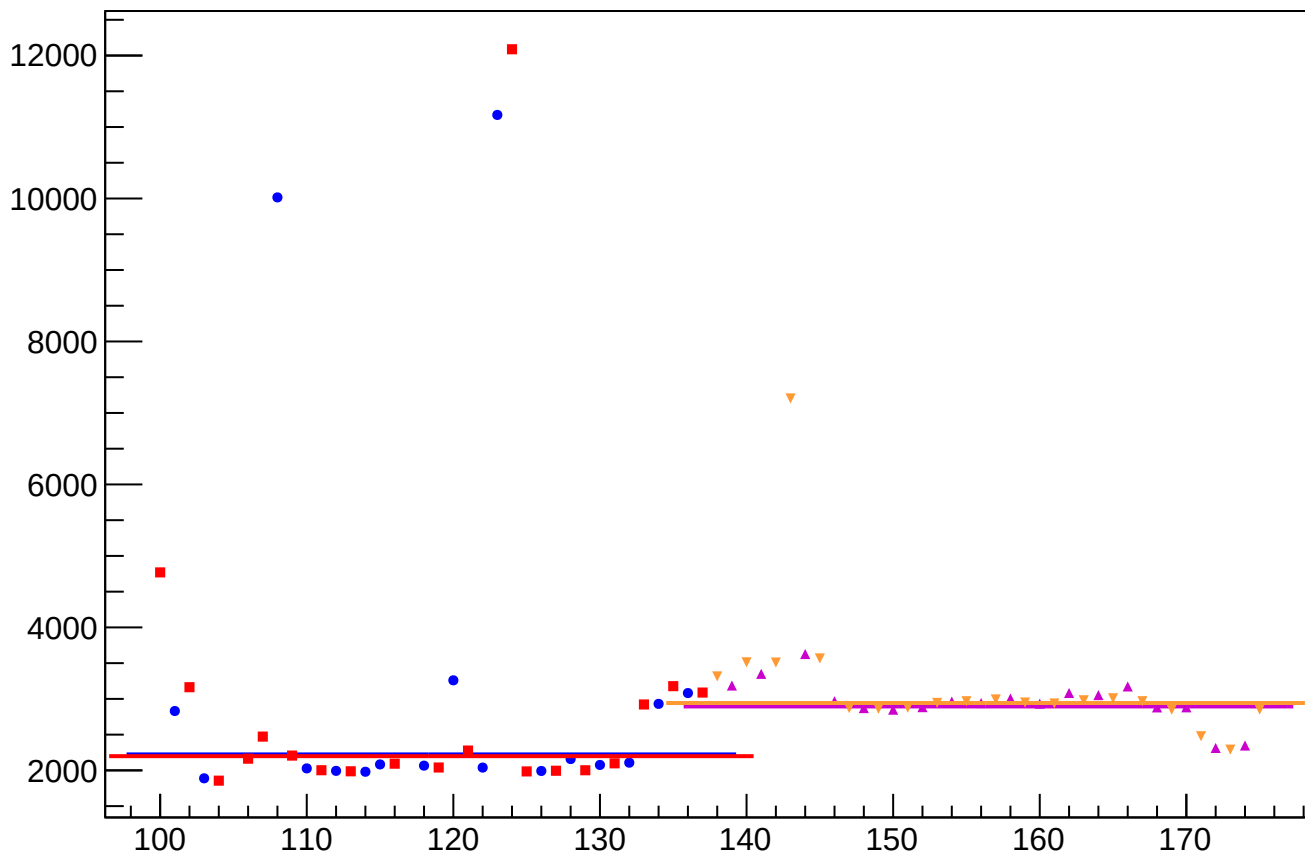
Right: 1722.028+/-614.553  $\chi^2/\text{NDF}$ : 30.0/35

In: 2312.471+/-583.822  $\chi^2/\text{NDF}$ :18.6/34

Out: 1167.720+/-570.763  $\chi^2/\text{NDF}$ :60.6/38

All: 1727.149+/-408.129  $\chi^2/\text{NDF}$ : 81.2/73

# dit\_asym\_atl2\_rms vs Slug, Sign Corrected



Right In:  $2223.132 \pm 0.629$   $\chi^2/\text{NDF}: 850289.4/16$

Left Out:  $2942.408 \pm 0.544$   $\chi^2/\text{NDF}: 775647.8/19$

Right Out:  $2198.760 \pm 0.601$   $\chi^2/\text{NDF}: 602418.1/18$

Left In:  $2894.254 \pm 0.547$   $\chi^2/\text{NDF}: 324345.7/17$

Left:  $2918.464 \pm 0.386$   $\chi^2/\text{NDF}: 1103884.2/37$

Right:  $2210.398 \pm 0.434$   $\chi^2/\text{NDF}: 1453492.9/35$

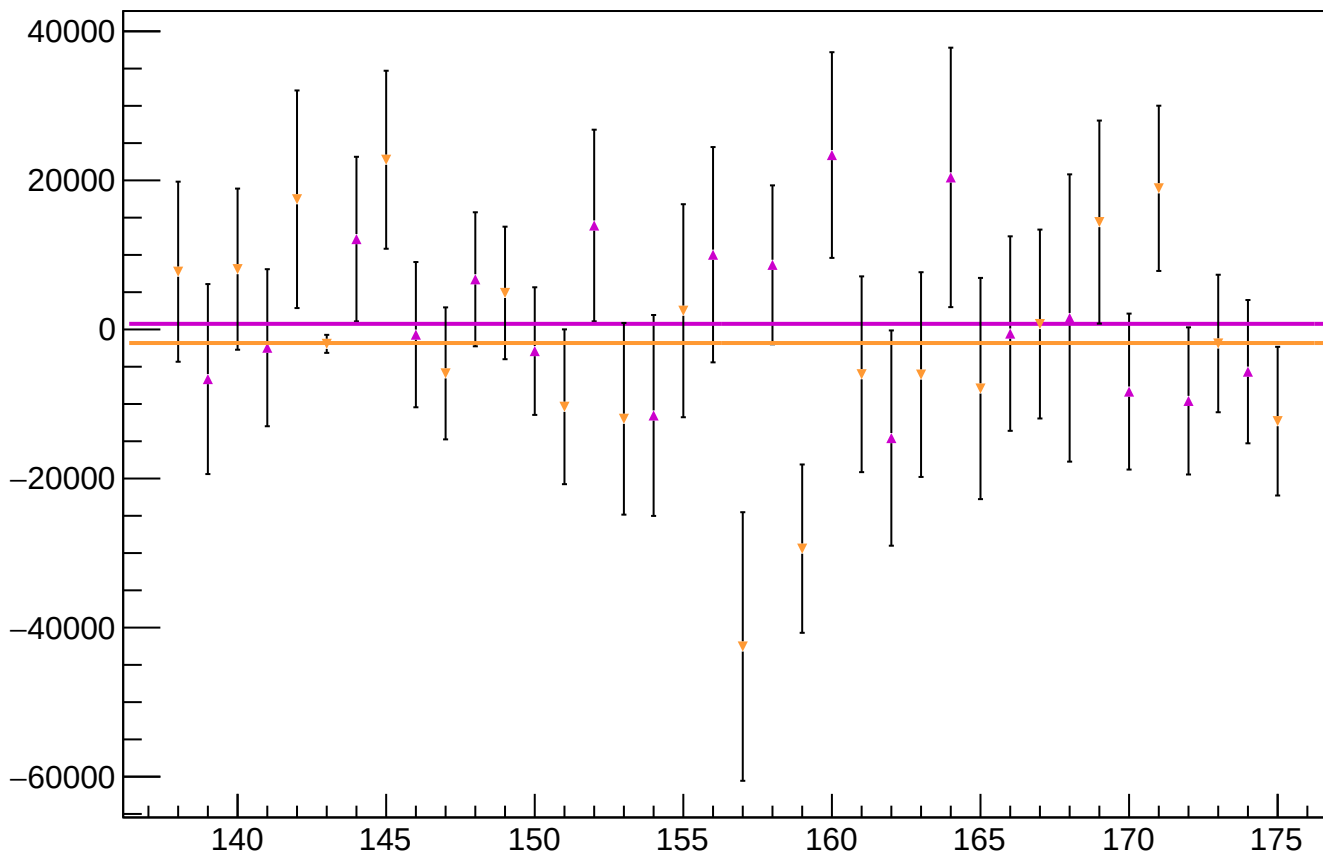
In:  $2604.818 \pm 0.413$   $\chi^2/\text{NDF}: 1822862.2/34$

Out:  $2607.222 \pm 0.403$   $\chi^2/\text{NDF}: 2219152.4/38$

All:  $2606.048 \pm 0.289$   $\chi^2/\text{NDF}: 4042032.0/73$



asym\_atl2\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1820.266+/-1100.713  $\chi^2/\text{NDF}$ : 27.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 753.364+/-2699.751  $\chi^2/\text{NDF}$ : 12.4/17

Left: -1453.436+/-1019.255  $\chi^2/\text{NDF}$ : 40.3/37

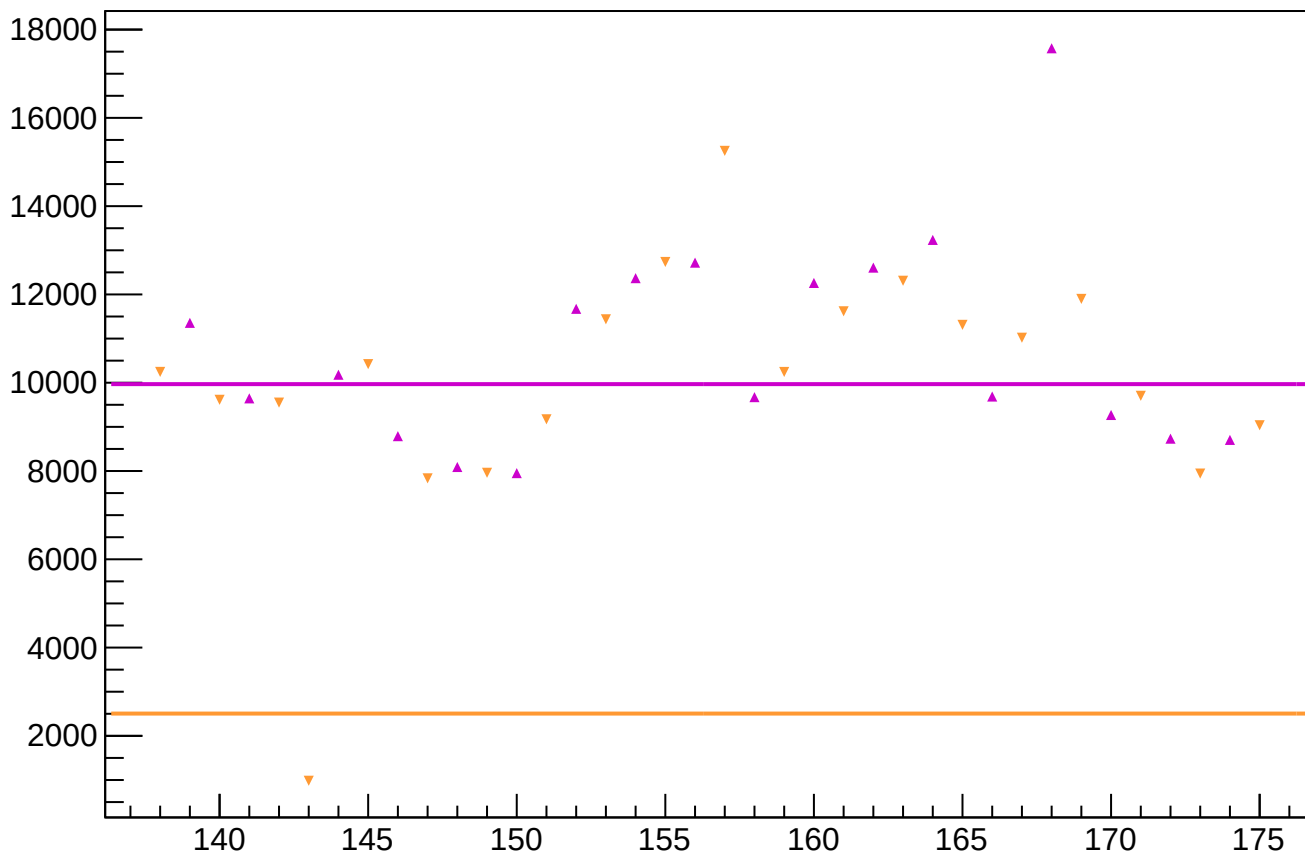
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 753.364+/-2699.751  $\chi^2/\text{NDF}$ : 12.4/17

Out: -1820.266+/-1100.713  $\chi^2/\text{NDF}$ : 27.1/19

All: -1453.436+/-1019.255  $\chi^2/\text{NDF}$ : 40.3/37

# asym\_atl2\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 2504.868+/-0.778  $\chi^2/\text{NDF}$ :19370038.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 9968.120+/-1.909  $\chi^2/\text{NDF}$ :1006480.9/17

Left: 3568.635+/-0.721  $\chi^2/\text{NDF}$ : 33482086.6/37

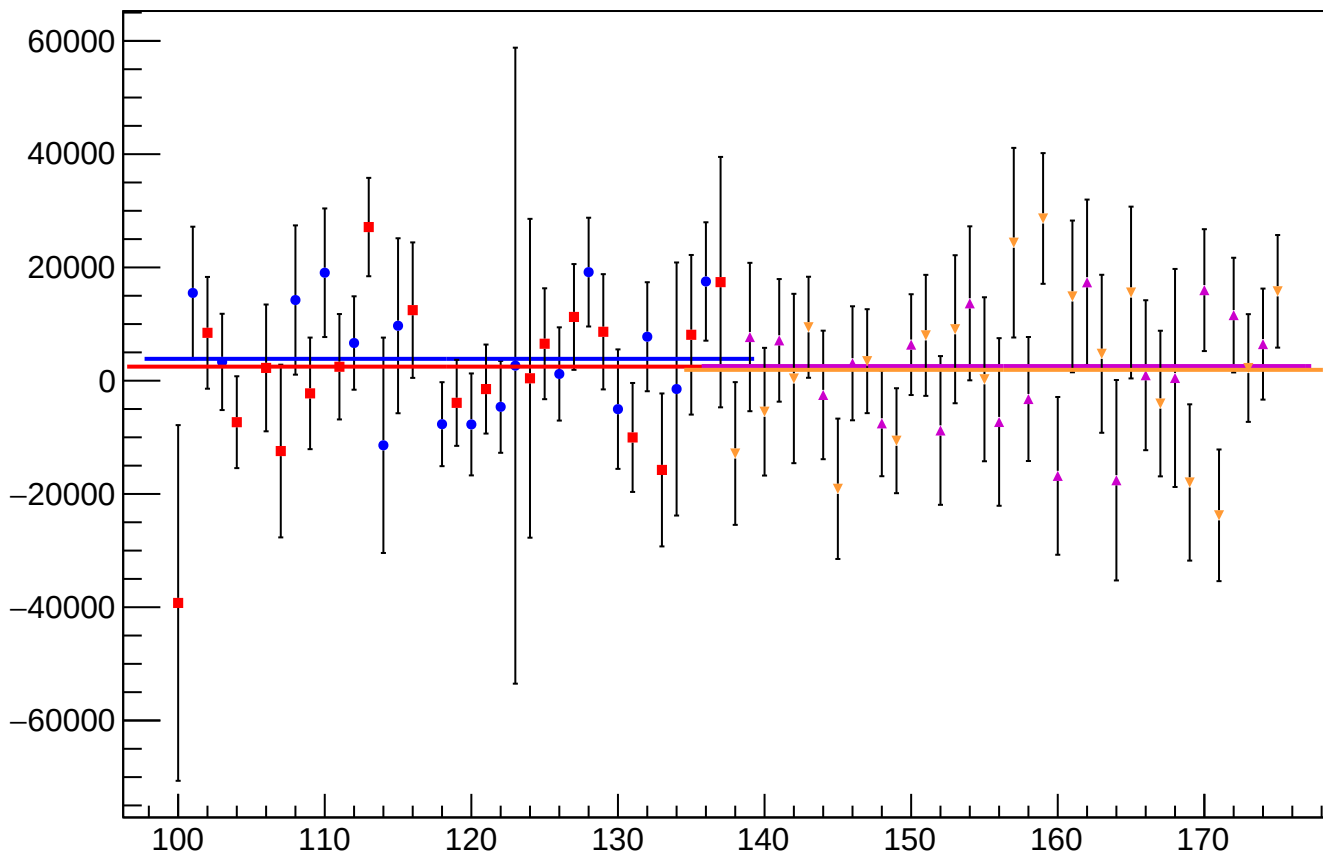
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 9968.120+/-1.909  $\chi^2/\text{NDF}$ :1006480.9/17

Out: 2504.868+/-0.778  $\chi^2/\text{NDF}$ :19370038.4/19

All: 3568.635+/-0.721  $\chi^2/\text{NDF}$ : 33482086.6/37

# asym\_atl2\_mean vs Slug, Sign Corrected



Right In: 3859.866+/-2508.782  $\chi^2/\text{NDF}$ : 14.8/16

Left Out: 1914.776+/-2611.580  $\chi^2/\text{NDF}$ : 26.0/19

Right Out: 2482.925+/-2421.310  $\chi^2/\text{NDF}$ : 20.0/18

Left In: 2585.681+/-2768.860  $\chi^2/\text{NDF}$ : 10.8/17

Left: 2230.633+/-1899.836  $\chi^2/\text{NDF}$ : 36.8/37

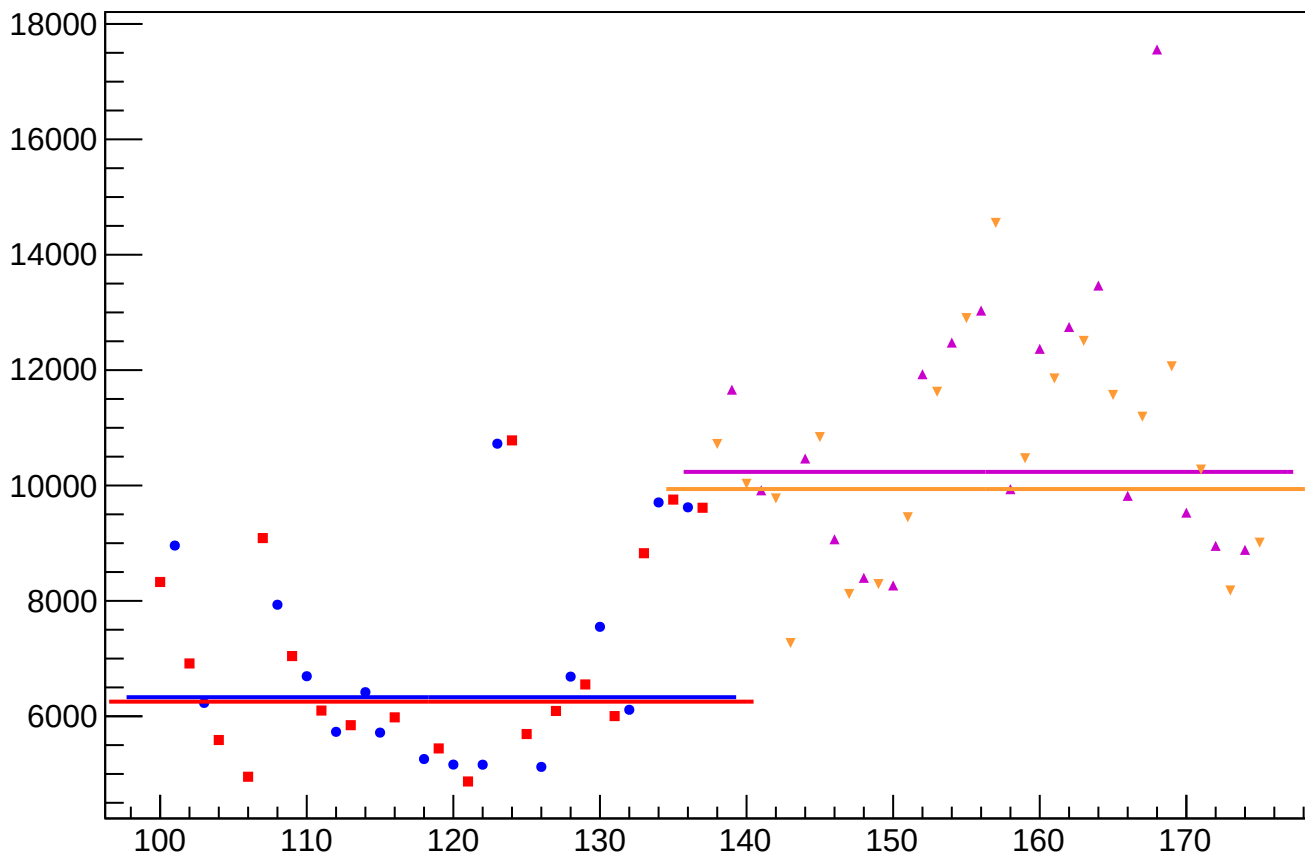
Right: 3146.972+/-1742.228  $\chi^2/\text{NDF}$ : 35.0/35

In: 3285.412+/-1859.141  $\chi^2/\text{NDF}$ : 25.7/34

Out: 2220.299+/-1775.583  $\chi^2/\text{NDF}$ : 46.0/38

All: 2728.383+/-1284.051  $\chi^2/\text{NDF}$ : 71.9/73

# asym\_atl2\_rms vs Slug, Sign Corrected



Right In: 6330.291+/-1.774  $\chi^2/\text{NDF}$ : 593395.6/16

Left Out: 9938.546+/-1.847  $\chi^2/\text{NDF}$ : 902687.8/19

Right Out: 6253.330+/-1.712  $\chi^2/\text{NDF}$ : 535355.5/18

Left In: 10235.774+/-1.958  $\chi^2/\text{NDF}$ : 931530.5/17

Left: 10078.479+/-1.343  $\chi^2/\text{NDF}$ : 1846414.8/37

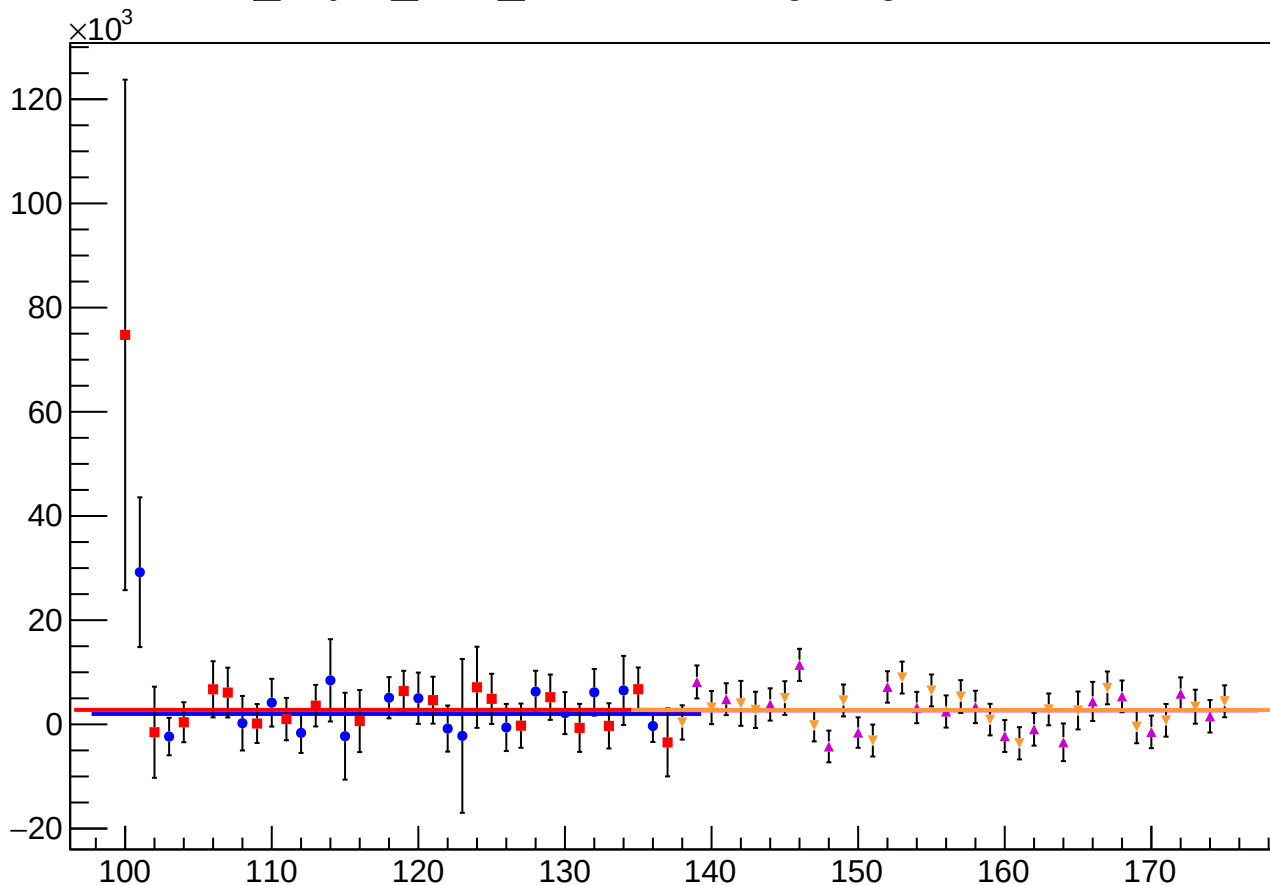
Right: 6290.444+/-1.232  $\chi^2/\text{NDF}$ : 1129725.5/35

In: 8091.031+/-1.315  $\chi^2/\text{NDF}$ : 3710059.4/34

Out: 7956.732+/-1.255  $\chi^2/\text{NDF}$ : 3579696.7/38

All: 8020.794+/-0.908  $\chi^2/\text{NDF}$ : 7295214.2/73

# dit\_asym\_atr1\_mean vs Slug, Sign Corrected



Right In:  $2005.383 \pm 1134.240$   $\chi^2/\text{NDF}$ : 12.1/16

Left Out:  $2750.343 \pm 715.229$   $\chi^2/\text{NDF}$ : 20.6/19

Right Out:  $2781.006 \pm 1086.164$   $\chi^2/\text{NDF}$ : 9.9/18

Left In:  $2690.558 \pm 737.108$   $\chi^2/\text{NDF}$ : 32.0/17

Left:  $2721.351 \pm 513.304$   $\chi^2/\text{NDF}$ : 52.6/37

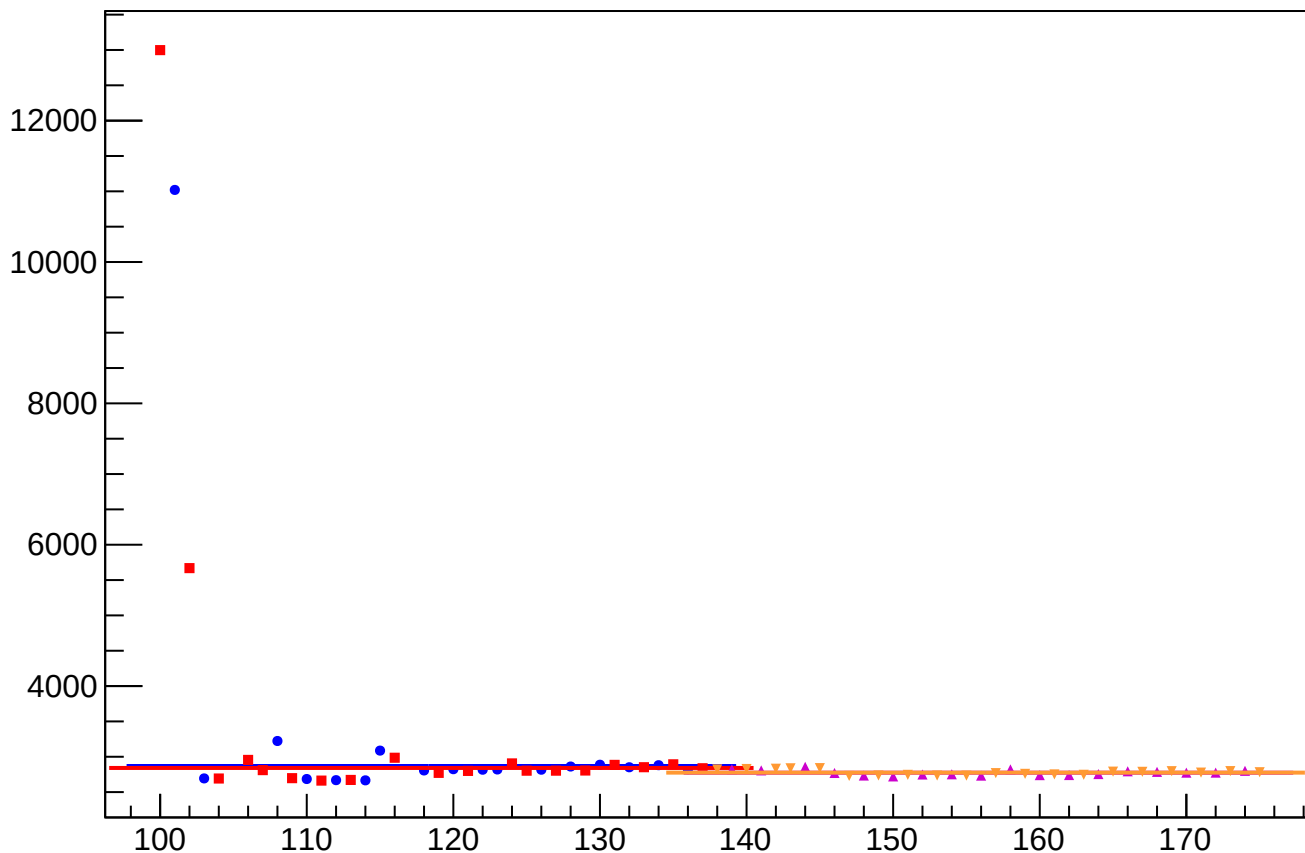
Right:  $2409.980 \pm 784.479$   $\chi^2/\text{NDF}$ : 22.2/35

In:  $2487.110 \pm 618.060$   $\chi^2/\text{NDF}$ : 44.3/34

Out:  $2759.618 \pm 597.351$   $\chi^2/\text{NDF}$ : 30.5/38

All:  $2628.006 \pm 429.526$   $\chi^2/\text{NDF}$ : 74.9/73

# dit\_asym\_atr1\_rms vs Slug, Sign Corrected



Right In: 2869.197 $\pm$ 0.802  $\chi^2$ /NDF: 669900.5/16

Left Out: 2775.541 $\pm$ 0.506  $\chi^2$ /NDF: 5030.5/19

Right Out: 2841.561 $\pm$ 0.768  $\chi^2$ /NDF: 312523.0/18

Left In: 2773.708 $\pm$ 0.521  $\chi^2$ /NDF: 4982.8/17

Left: 2774.652 $\pm$ 0.363  $\chi^2$ /NDF: 10019.6/37

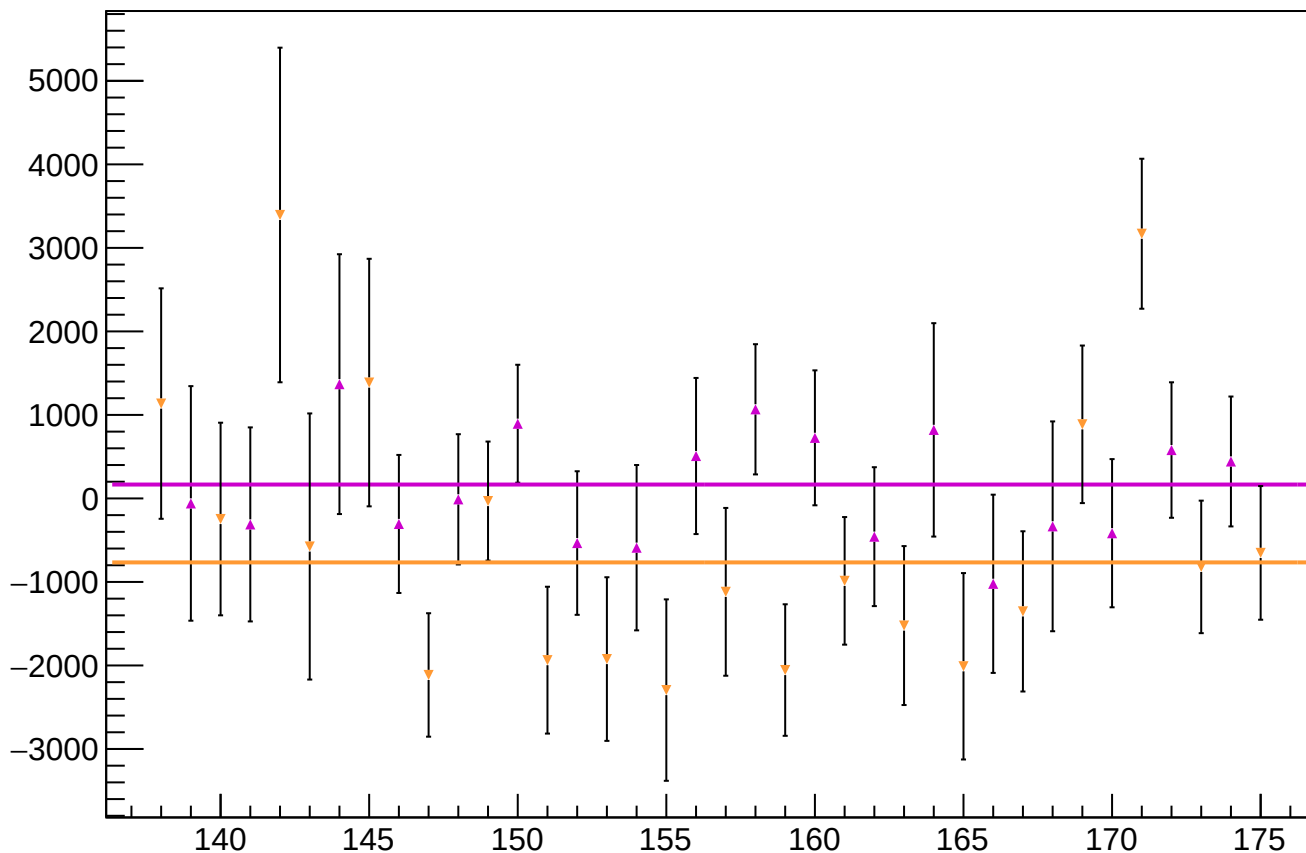
Right: 2854.781 $\pm$ 0.555  $\chi^2$ /NDF: 983042.8/35

In: 2802.062 $\pm$ 0.437  $\chi^2$ /NDF: 684849.2/34

Out: 2795.509 $\pm$ 0.422  $\chi^2$ /NDF: 322707.6/38

All: 2798.674 $\pm$ 0.304  $\chi^2$ /NDF: 1007673.0/73

# asym\_atr1\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -766.079+/-212.317  $\chi^2/\text{NDF}$ :45.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 166.302+/-215.740  $\chi^2/\text{NDF}$ :8.5/17

Left: -307.344+/-151.326  $\chi^2/\text{NDF}$ : 63.5/37

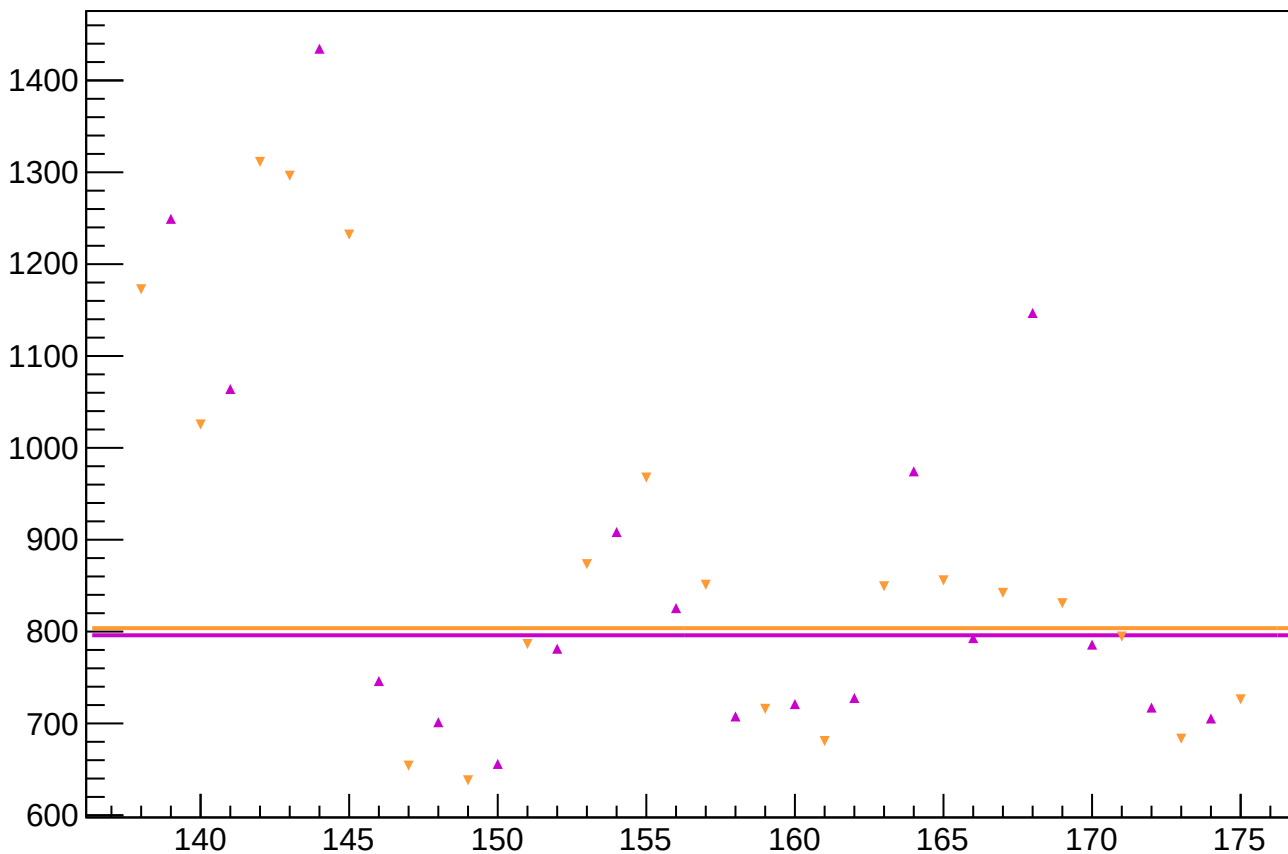
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 166.302+/-215.740  $\chi^2/\text{NDF}$ :8.5/17

Out: -766.079+/-212.317  $\chi^2/\text{NDF}$ :45.5/19

All: -307.344+/-151.326  $\chi^2/\text{NDF}$ : 63.5/37

# asym\_atr1\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 803.724+/-0.150  $\chi^2/\text{NDF}$ :1109967.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 795.969+/-0.153  $\chi^2/\text{NDF}$ :1093403.5/17

Left: 799.908+/-0.107  $\chi^2/\text{NDF}$ : 2204684.3/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

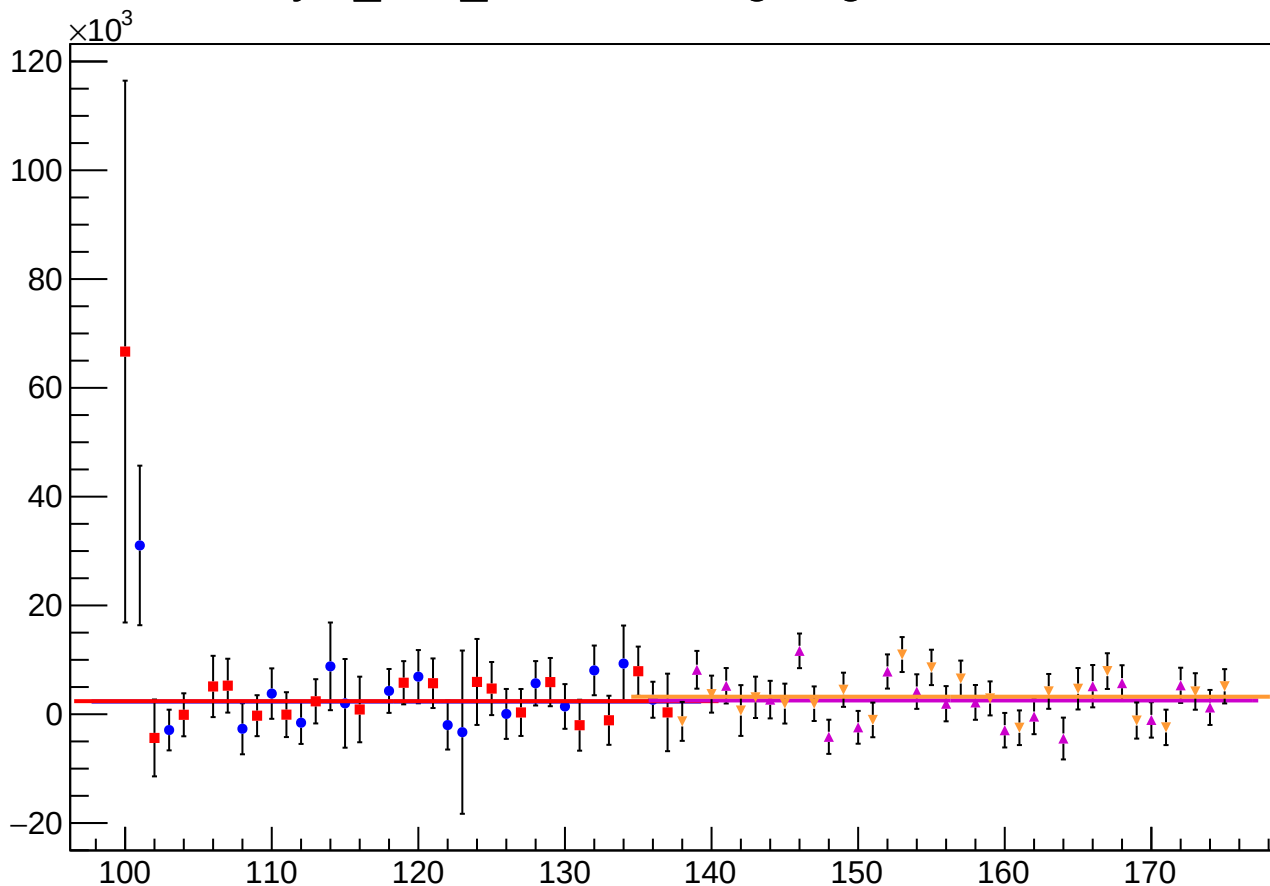
In: 795.969+/-0.153  $\chi^2/\text{NDF}$ :1093403.5/17

Out: 803.724+/-0.150  $\chi^2/\text{NDF}$ :1109967.9/19

All: 799.908+/-0.107  $\chi^2/\text{NDF}$ : 2204684.3/37



# asym\_atr1\_mean vs Slug, Sign Corrected



Right In: 2330.134+/-1156.555  $\chi^2/\text{NDF}$ : 14.4/16

Left Out: 3222.712+/-751.448  $\chi^2/\text{NDF}$ : 24.5/19

Right Out: 2403.750+/-1110.093  $\chi^2/\text{NDF}$ : 10.1/18

Left In: 2531.936+/-773.333  $\chi^2/\text{NDF}$ : 32.6/17

Left: 2887.236+/-538.925  $\chi^2/\text{NDF}$ : 57.4/37

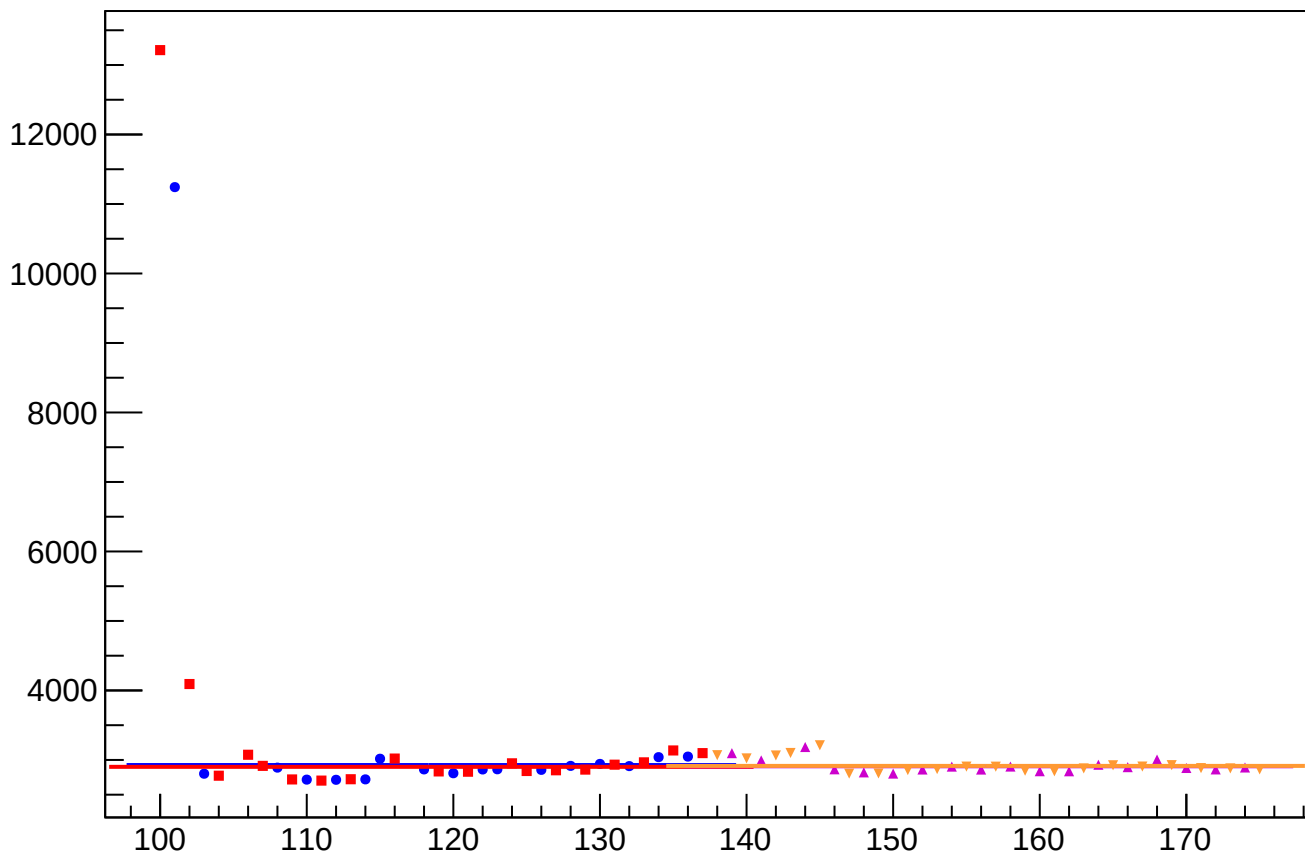
Right: 2368.450+/-800.876  $\chi^2/\text{NDF}$ : 24.5/35

In: 2469.587+/-642.862  $\chi^2/\text{NDF}$ : 47.0/34

Out: 2965.366+/-622.281  $\chi^2/\text{NDF}$ : 34.9/38

All: 2725.539+/-447.118  $\chi^2/\text{NDF}$ : 82.2/73

# asym\_atr1\_rms vs Slug, Sign Corrected



Right In: 2926.610+/-0.818  $\chi^2/\text{NDF}$ : 662794.4/16

Left Out: 2914.340+/-0.531  $\chi^2/\text{NDF}$ : 35050.9/19

Right Out: 2900.827+/-0.785  $\chi^2/\text{NDF}$ : 169866.6/18

Left In: 2908.720+/-0.547  $\chi^2/\text{NDF}$ : 29713.4/17

Left: 2911.611+/-0.381  $\chi^2/\text{NDF}$ : 64818.7/37

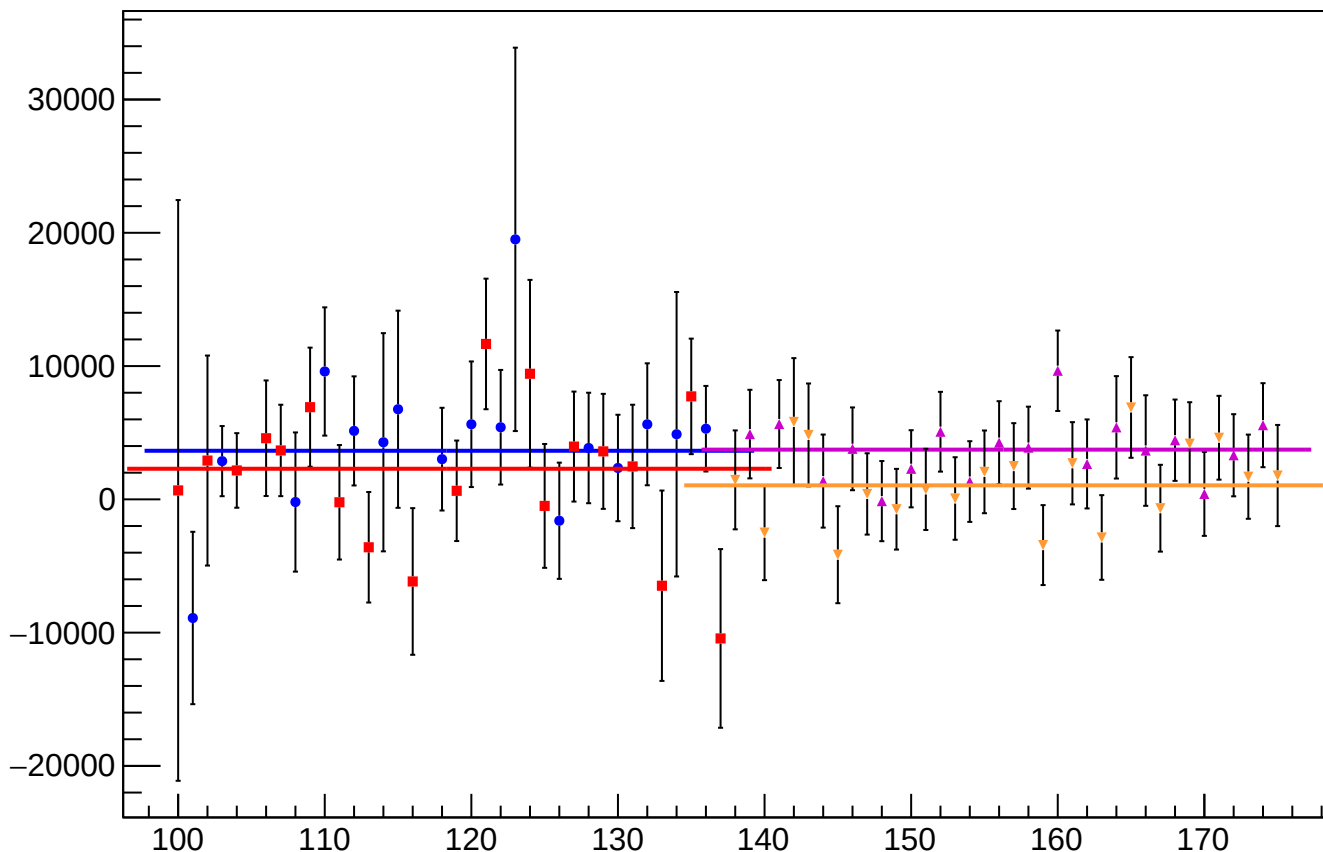
Right: 2913.190+/-0.566  $\chi^2/\text{NDF}$ : 833178.3/35

In: 2914.247+/-0.455  $\chi^2/\text{NDF}$ : 692838.5/34

Out: 2910.094+/-0.440  $\chi^2/\text{NDF}$ : 205120.7/38

All: 2912.103+/-0.316  $\chi^2/\text{NDF}$ : 898002.3/73

# dit\_asym\_atr2\_mean vs Slug, Sign Corrected



Right In: 3645.268+/-1091.486  $\chi^2/\text{NDF}$ : 9.9/16

Left Out: 1050.657+/-741.194  $\chi^2/\text{NDF}$ :14.9/19

Right Out: 2295.846+/-1046.865  $\chi^2/\text{NDF}$ : 18.4/18

Left In: 3730.436+/-752.109  $\chi^2/\text{NDF}$ :9.3/17

Left: 2370.959+/-527.920  $\chi^2/\text{NDF}$ : 30.7/37

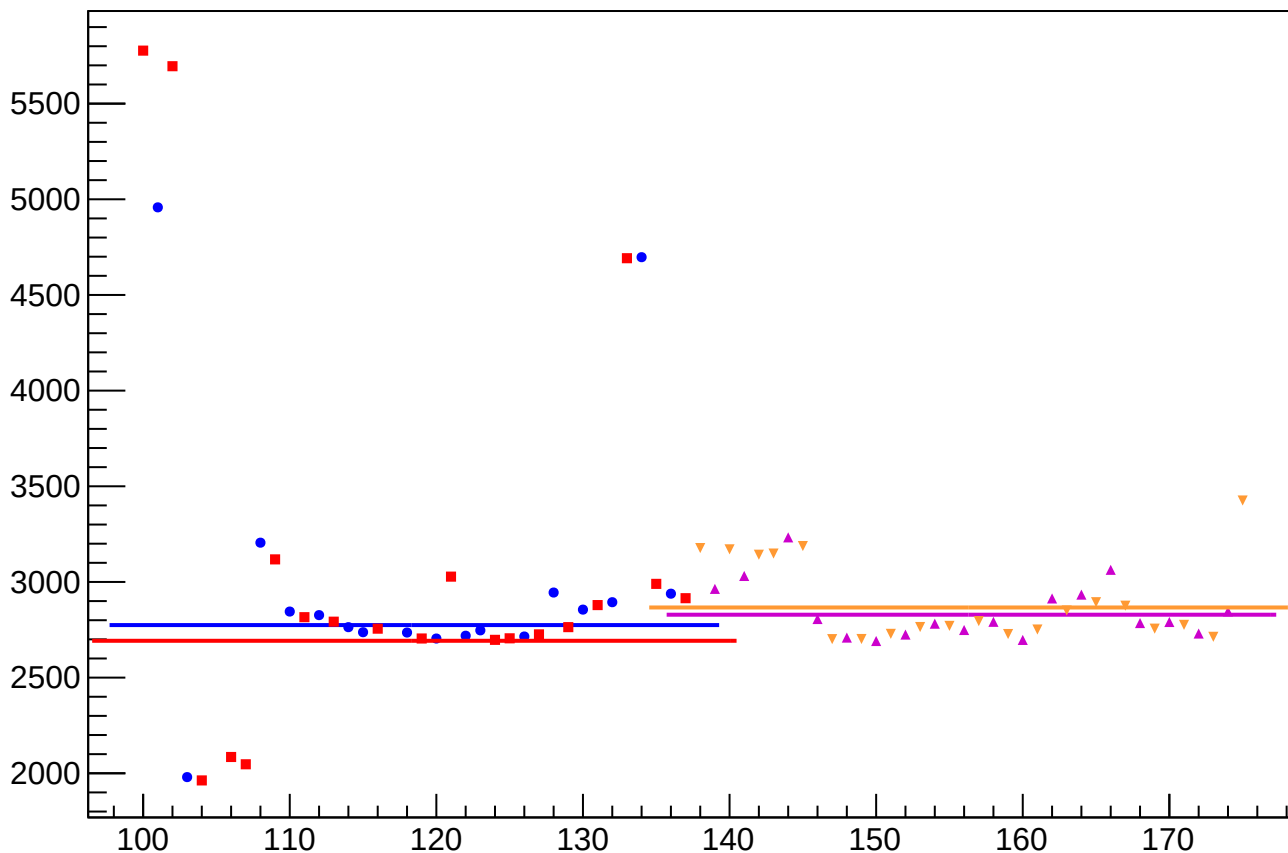
Right: 2942.410+/-755.528  $\chi^2/\text{NDF}$ : 29.1/35

In: 3703.016+/-619.316  $\chi^2/\text{NDF}$ :19.2/34

Out: 1466.429+/-604.924  $\chi^2/\text{NDF}$ :34.3/38

All: 2558.433+/-432.744  $\chi^2/\text{NDF}$ : 60.1/73

# dit\_asym\_atr2\_rms vs Slug, Sign Corrected



Right In: 2774.617 $\pm$ 0.772  $\chi^2/\text{NDF}$ : 501680.3/16

Left Out: 2866.615 $\pm$ 0.524  $\chi^2/\text{NDF}$ : 141909.7/19

Right Out: 2692.509 $\pm$ 0.740  $\chi^2/\text{NDF}$ : 780267.3/18

Left In: 2828.751 $\pm$ 0.532  $\chi^2/\text{NDF}$ : 65730.8/17

Left: 2847.960 $\pm$ 0.373  $\chi^2/\text{NDF}$ : 210212.2/37

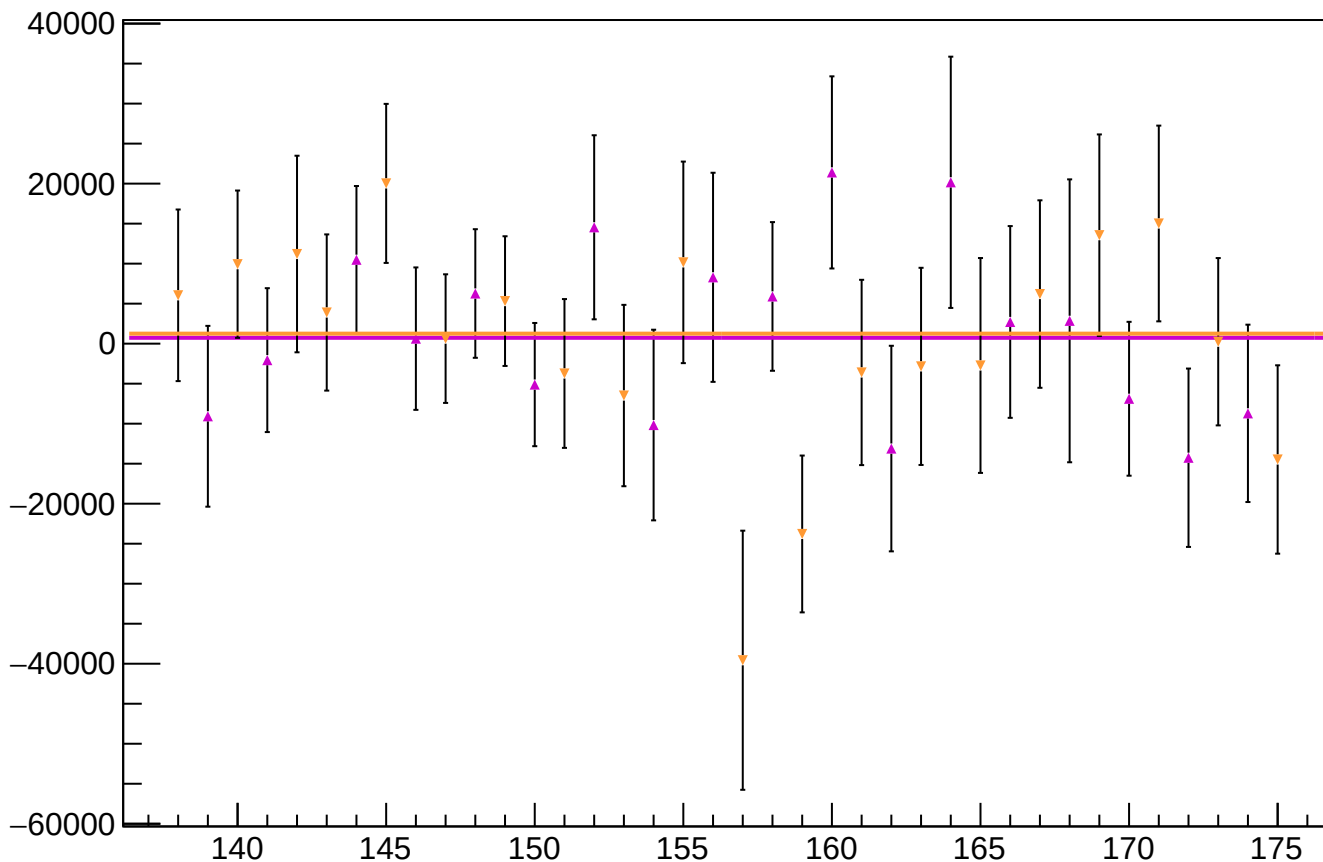
Right: 2731.837 $\pm$ 0.534  $\chi^2/\text{NDF}$ : 1287844.4/35

In: 2811.322 $\pm$ 0.438  $\chi^2/\text{NDF}$ : 570746.7/34

Out: 2808.456 $\pm$ 0.428  $\chi^2/\text{NDF}$ : 959041.0/38

All: 2809.855 $\pm$ 0.306  $\chi^2/\text{NDF}$ : 1529809.7/73

asym\_atr2\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1250.700+/-2393.385  $\chi^2/\text{NDF}$ :24.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 732.067+/-2475.132  $\chi^2/\text{NDF}$ :14.8/17

Left: 1000.089+/-1720.553  $\chi^2/\text{NDF}$ : 39.2/37

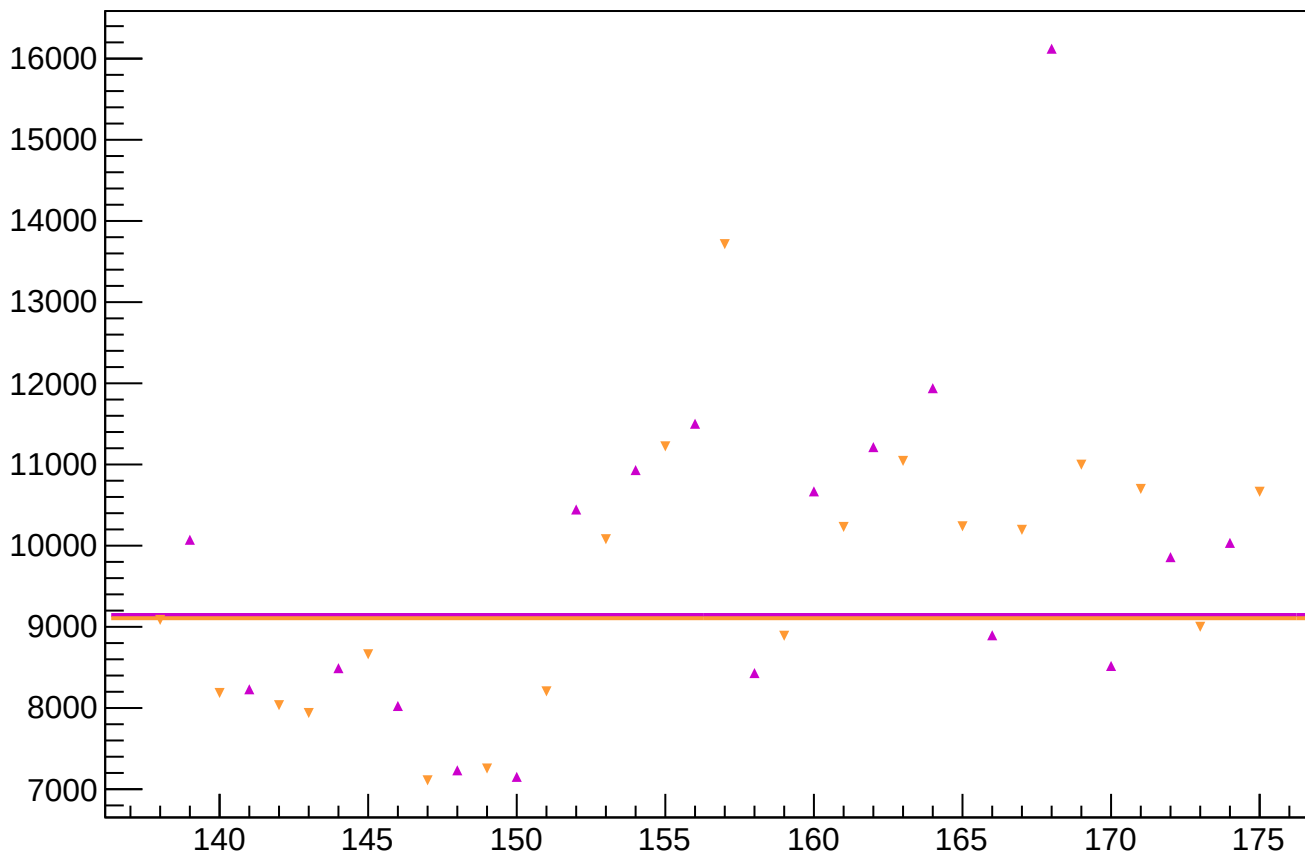
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 732.067+/-2475.132  $\chi^2/\text{NDF}$ :14.8/17

Out: 1250.700+/-2393.385  $\chi^2/\text{NDF}$ :24.3/19

All: 1000.089+/-1720.553  $\chi^2/\text{NDF}$ : 39.2/37

# asym\_atr2\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 9106.239+/-1.692  $\chi^2/\text{NDF}$ :762866.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 9145.639+/-1.750  $\chi^2/\text{NDF}$ :960120.5/17

Left: 9125.278+/-1.217  $\chi^2/\text{NDF}$ : 1723248.6/37

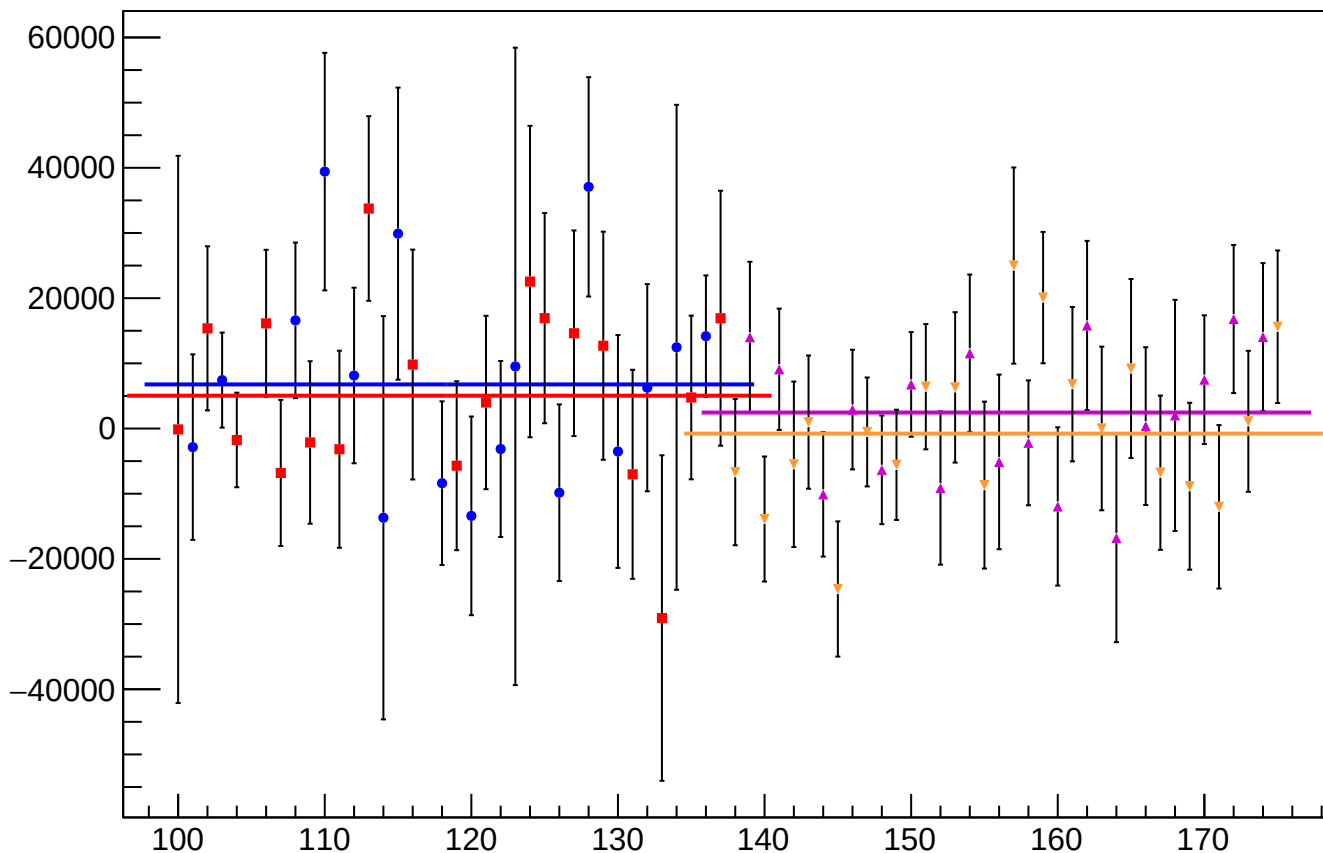
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 9145.639+/-1.750  $\chi^2/\text{NDF}$ :960120.5/17

Out: 9106.239+/-1.692  $\chi^2/\text{NDF}$ :762866.2/19

All: 9125.278+/-1.217  $\chi^2/\text{NDF}$ : 1723248.6/37

# asym\_atr2\_mean vs Slug, Sign Corrected



Right In: 6767.402 $\pm$ 3387.139  $\chi^2/\text{NDF}$ : 15.3/16

Left Out: -778.884 $\pm$ 2460.992  $\chi^2/\text{NDF}$ : 20.9/19

Right Out: 5041.440 $\pm$ 3167.616  $\chi^2/\text{NDF}$ : 13.6/18

Left In: 2456.308 $\pm$ 2541.930  $\chi^2/\text{NDF}$ : 13.6/17

Left: 786.386 $\pm$ 1768.106  $\chi^2/\text{NDF}$ : 35.3/37

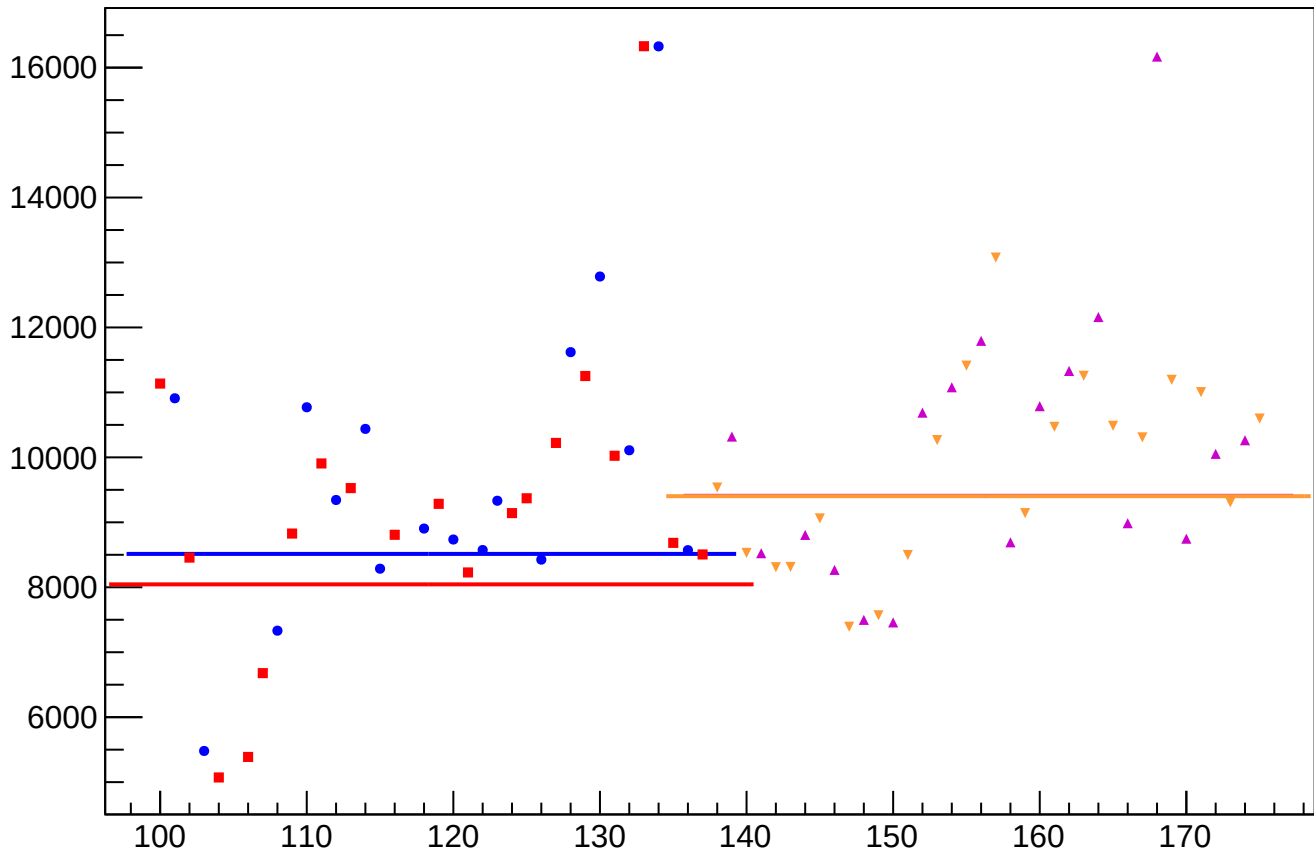
Right: 5846.682 $\pm$ 2313.559  $\chi^2/\text{NDF}$ : 29.1/35

In: 4009.534 $\pm$ 2033.090  $\chi^2/\text{NDF}$ : 30.0/34

Out: 1411.923 $\pm$ 1943.395  $\chi^2/\text{NDF}$ : 36.6/38

All: 2652.165 $\pm$ 1404.827  $\chi^2/\text{NDF}$ : 67.4/73

# asym\_atr2\_rms vs Slug, Sign Corrected



Right In: 8513.665+/-2.395     $\chi^2/\text{NDF}$ : 762614.5/16

Left Out: 9402.198+/-1.740     $\chi^2/\text{NDF}$ : 641861.8/19

Right Out: 8044.739+/-2.240     $\chi^2/\text{NDF}$ : 952310.5/18

Left In: 9407.931+/-1.797     $\chi^2/\text{NDF}$ : 878123.9/17

Left: 9404.972+/-1.250     $\chi^2/\text{NDF}$ : 1519991.0/37

Right: 8263.507+/-1.636     $\chi^2/\text{NDF}$ : 1735374.5/35

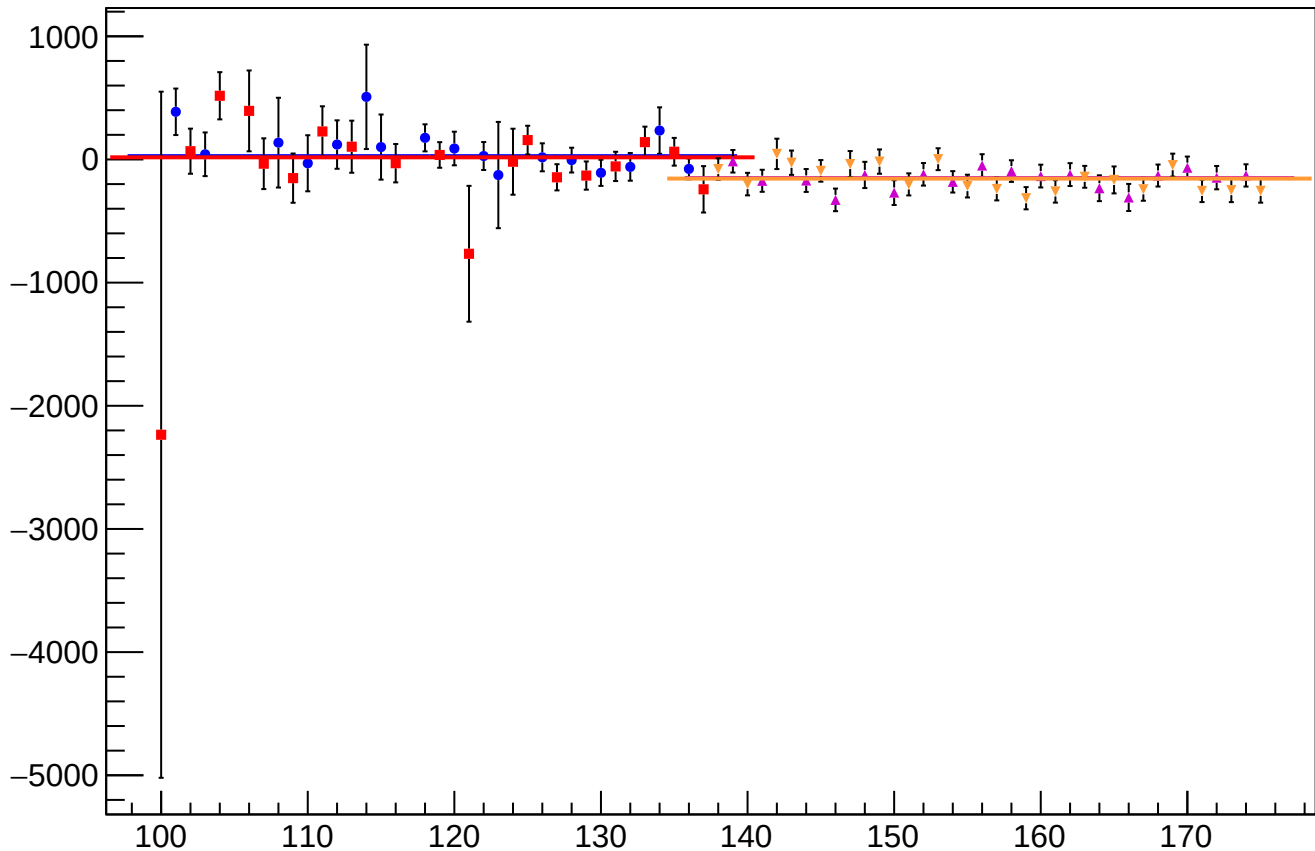
In: 9085.740+/-1.438     $\chi^2/\text{NDF}$ : 1729921.5/34

Out: 8891.219+/-1.374     $\chi^2/\text{NDF}$ : 1823227.4/38

All: 8984.093+/-0.993     $\chi^2/\text{NDF}$ : 3562715.9/73



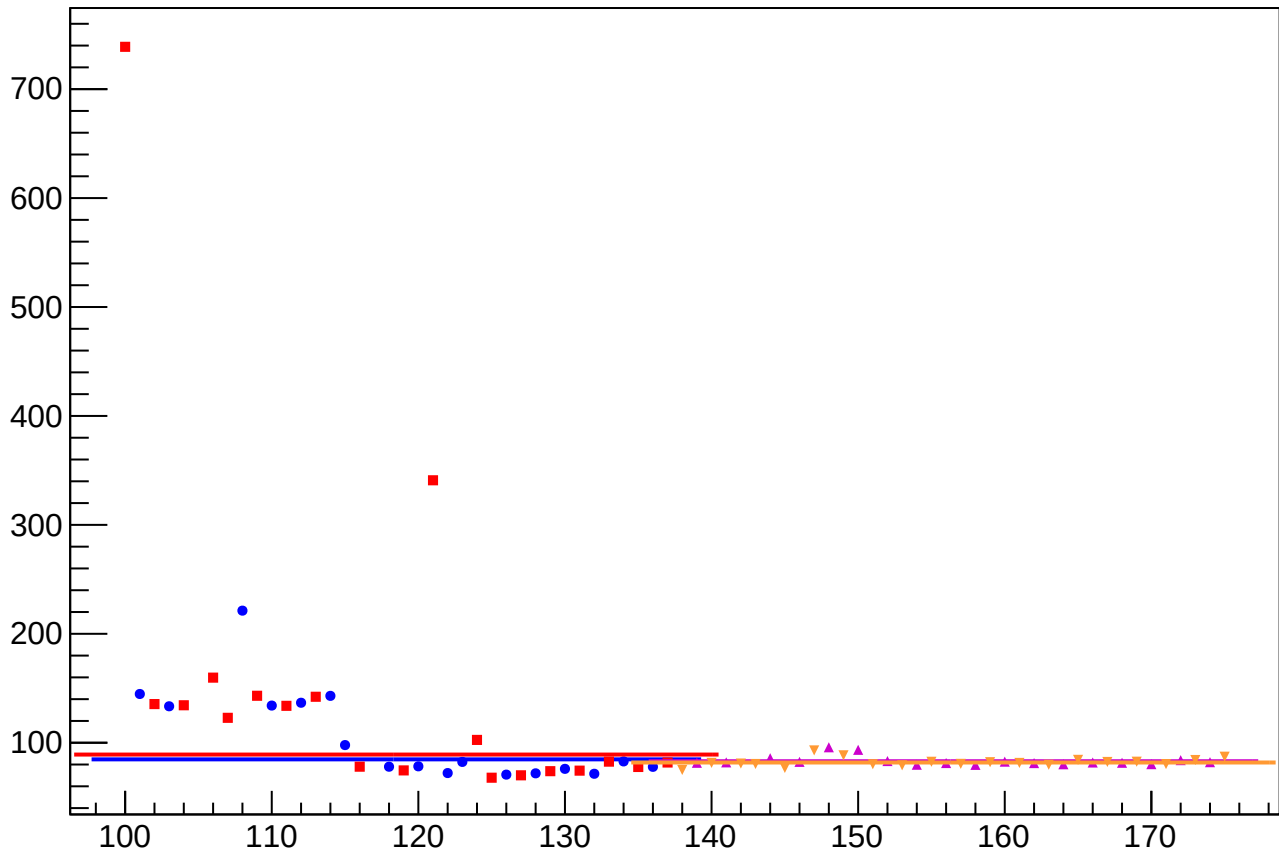
# dit\_asym\_sam1\_mean vs Slug, Sign Corrected



Right In:  $26.932 \pm 34.029$   $\chi^2/\text{NDF}: 12.6/16$   
 Left Out:  $-155.147 \pm 21.116$   $\chi^2/\text{NDF}: 23.7/19$   
 Right Out:  $17.368 \pm 35.548$   $\chi^2/\text{NDF}: 21.9/18$   
 Left In:  $-150.906 \pm 22.068$   $\chi^2/\text{NDF}: 13.1/17$

Left:  $-153.120 \pm 15.257$   $\chi^2/\text{NDF}: 36.8/37$   
 Right:  $22.359 \pm 24.581$   $\chi^2/\text{NDF}: 34.5/35$   
 In:  $-98.255 \pm 18.515$   $\chi^2/\text{NDF}: 44.9/34$   
 Out:  $-110.152 \pm 18.154$   $\chi^2/\text{NDF}: 62.9/38$   
 All:  $-104.321 \pm 12.963$   $\chi^2/\text{NDF}: 108.1/73$

# dit\_asym\_sam1\_rms vs Slug, Sign Corrected



Right In: 84.737+/-0.024  $\chi^2/\text{NDF}$ : 1064420.0/16

Left Out: 81.860+/-0.015  $\chi^2/\text{NDF}$ : 63185.3/19

Right Out: 89.143+/-0.025  $\chi^2/\text{NDF}$ : 1559269.8/18

Left In: 83.021+/-0.016  $\chi^2/\text{NDF}$ : 64502.0/17

Left: 82.415+/-0.011  $\chi^2/\text{NDF}$ : 130578.0/37

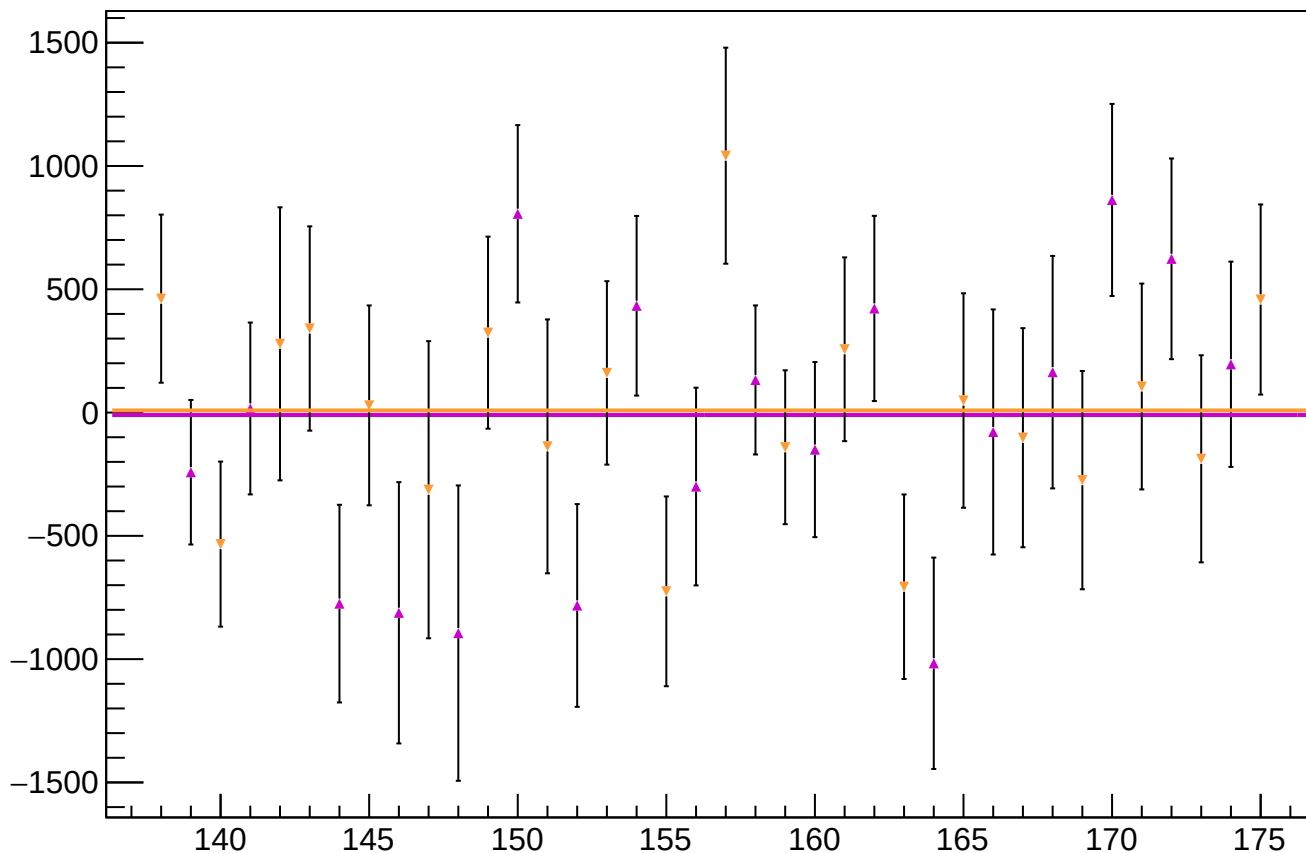
Right: 86.844+/-0.017  $\chi^2/\text{NDF}$ : 2639723.0/35

In: 83.529+/-0.013  $\chi^2/\text{NDF}$ : 1132500.9/34

Out: 83.760+/-0.013  $\chi^2/\text{NDF}$ : 1684508.2/38

All: 83.647+/-0.009  $\chi^2/\text{NDF}$ : 2817167.0/73

asym\_sam1\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 8.658 $\pm$ 90.085  $\chi^2$ /NDF:22.1/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: -9.948 $\pm$ 91.977  $\chi^2$ /NDF:34.5/17

Left: -0.452 $\pm$ 64.358  $\chi^2$ /NDF: 56.6/37

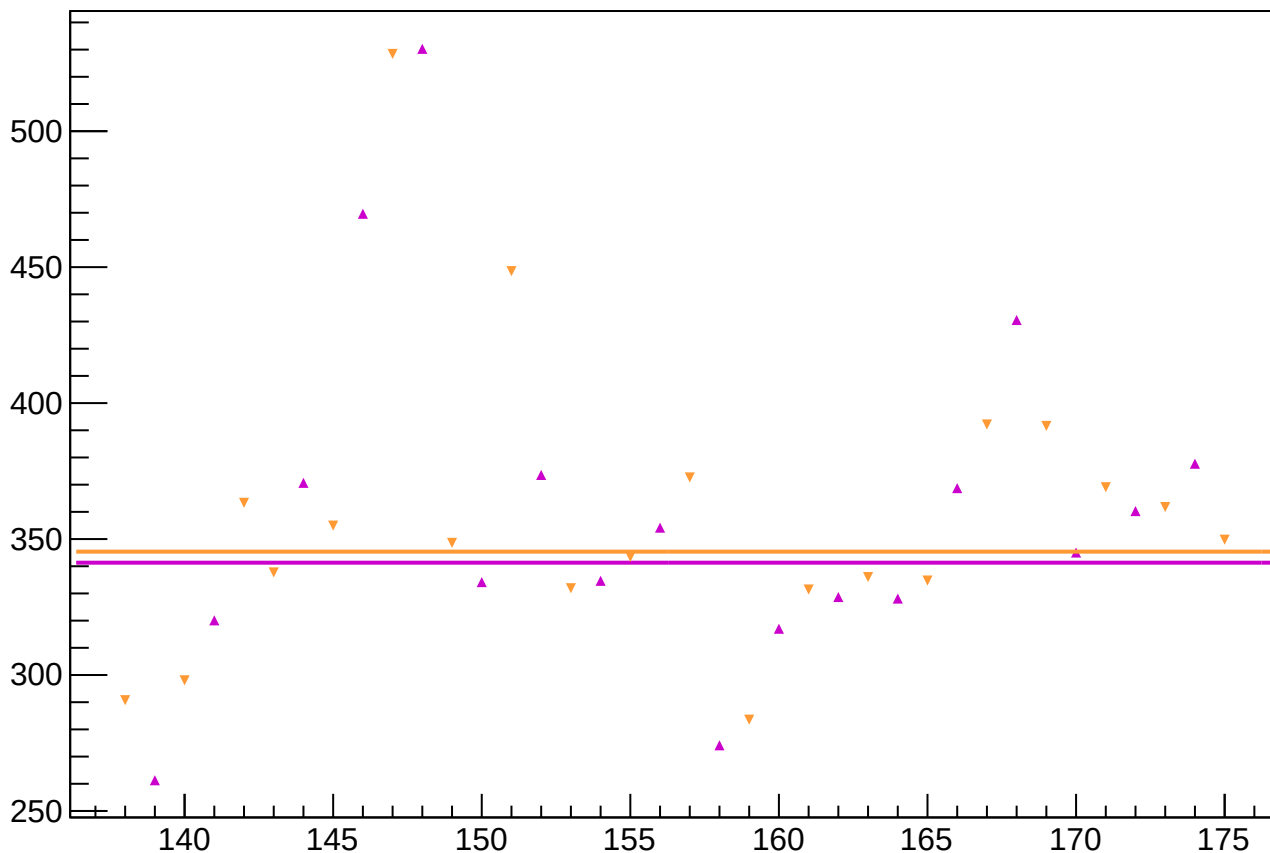
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: -9.948 $\pm$ 91.977  $\chi^2$ /NDF:34.5/17

Out: 8.658 $\pm$ 90.085  $\chi^2$ /NDF:22.1/19

All: -0.452 $\pm$ 64.358  $\chi^2$ /NDF: 56.6/37

asym\_sam1\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000 +/- 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 345.372 +/- 0.064  $\chi^2/\text{NDF}$ : 508095.1/19

Right Out: 0.000 +/- 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 341.310 +/- 0.065  $\chi^2/\text{NDF}$ : 709289.1/17

Left: 343.383 +/- 0.046  $\chi^2/\text{NDF}$ : 1219374.3/37

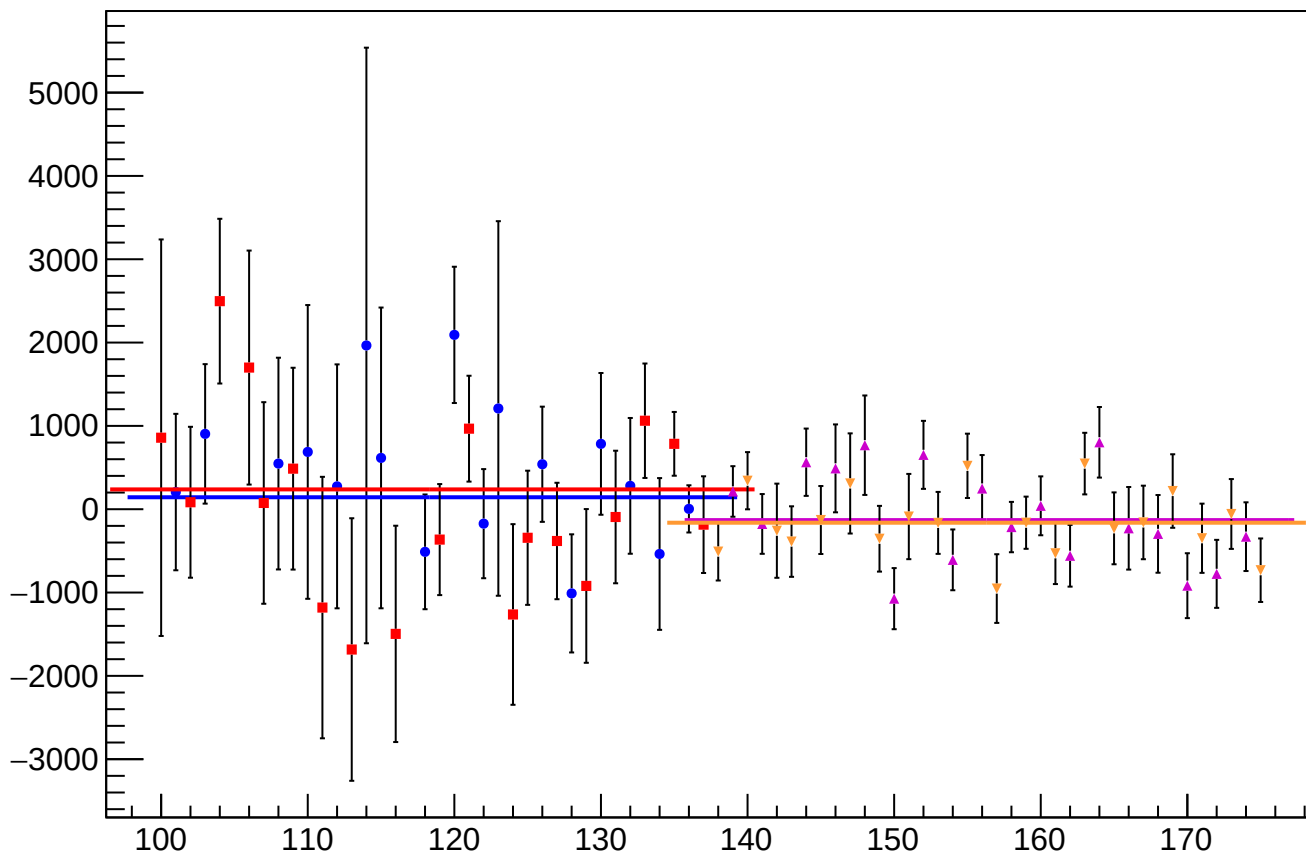
Right: 0.000 +/- 0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 341.310 +/- 0.065  $\chi^2/\text{NDF}$ : 709289.1/17

Out: 345.372 +/- 0.064  $\chi^2/\text{NDF}$ : 508095.1/19

All: 343.383 +/- 0.046  $\chi^2/\text{NDF}$ : 1219374.3/37

# asym\_sam1\_mean vs Slug, Sign Corrected



Right In: 143.486 $\pm$ 179.237  $\chi^2$ /NDF: 12.8/16

Left Out: -162.093 $\pm$ 90.078  $\chi^2$ /NDF:19.1/19

Right Out: 237.821 $\pm$ 183.995  $\chi^2$ /NDF: 21.7/18

Left In: -130.737 $\pm$ 92.333  $\chi^2$ /NDF:34.3/17

Left: -146.803 $\pm$ 64.477  $\chi^2$ /NDF: 53.4/37

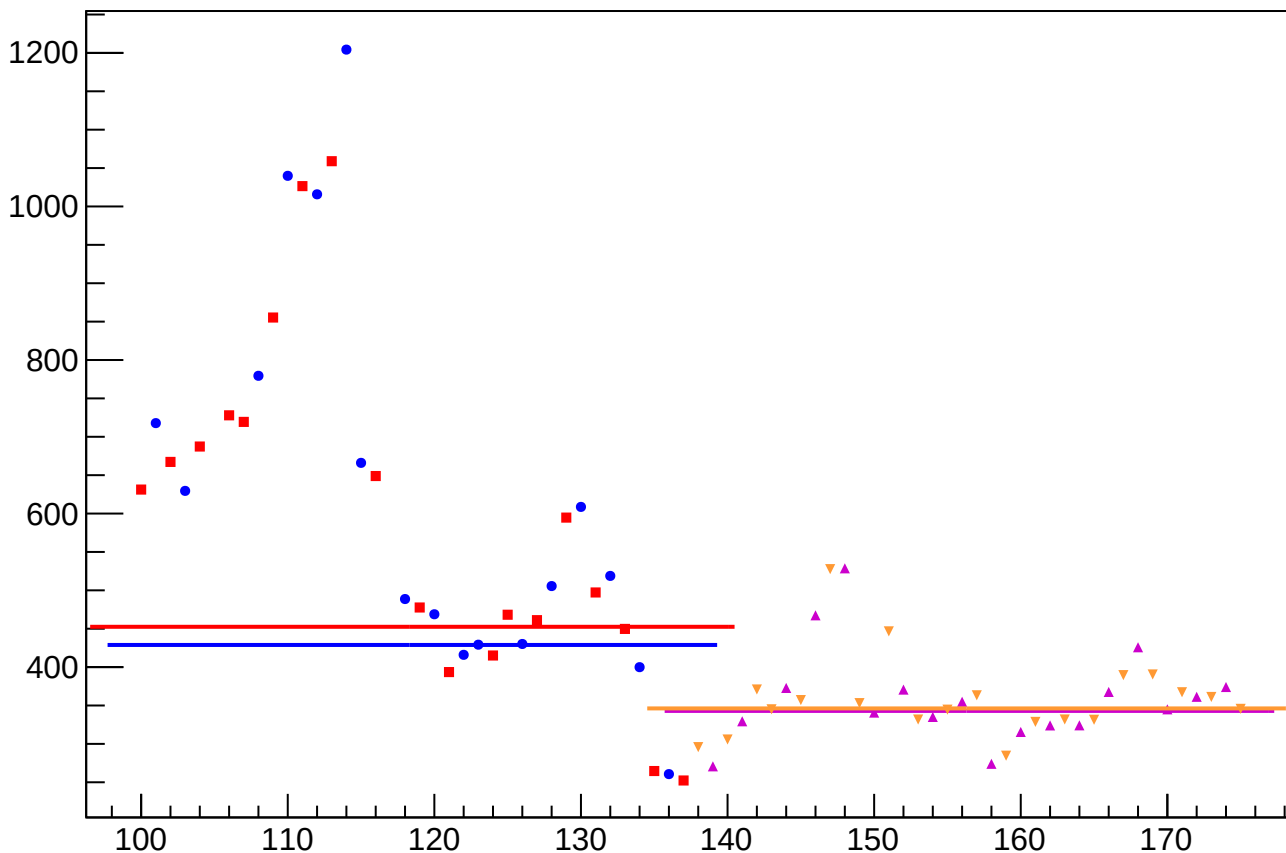
Right: 189.418 $\pm$ 128.389  $\chi^2$ /NDF: 34.6/35

In: -73.227 $\pm$ 82.082  $\chi^2$ /NDF:48.9/34

Out: -84.774 $\pm$ 80.903  $\chi^2$ /NDF:44.6/38

All: -79.084 $\pm$ 57.619  $\chi^2$ /NDF: 93.5/73

# asym\_sam1\_rms vs Slug, Sign Corrected



Right In: 428.856+/-0.127  $\chi^2/\text{NDF}$ : 2012329.6/16

Left Out: 346.198+/-0.064  $\chi^2/\text{NDF}$ : 475900.0/19

Right Out: 452.517+/-0.130  $\chi^2/\text{NDF}$ : 2039238.5/18

Left In: 342.959+/-0.065  $\chi^2/\text{NDF}$ : 652978.1/17

Left: 344.618+/-0.046  $\chi^2/\text{NDF}$ : 1130138.8/37

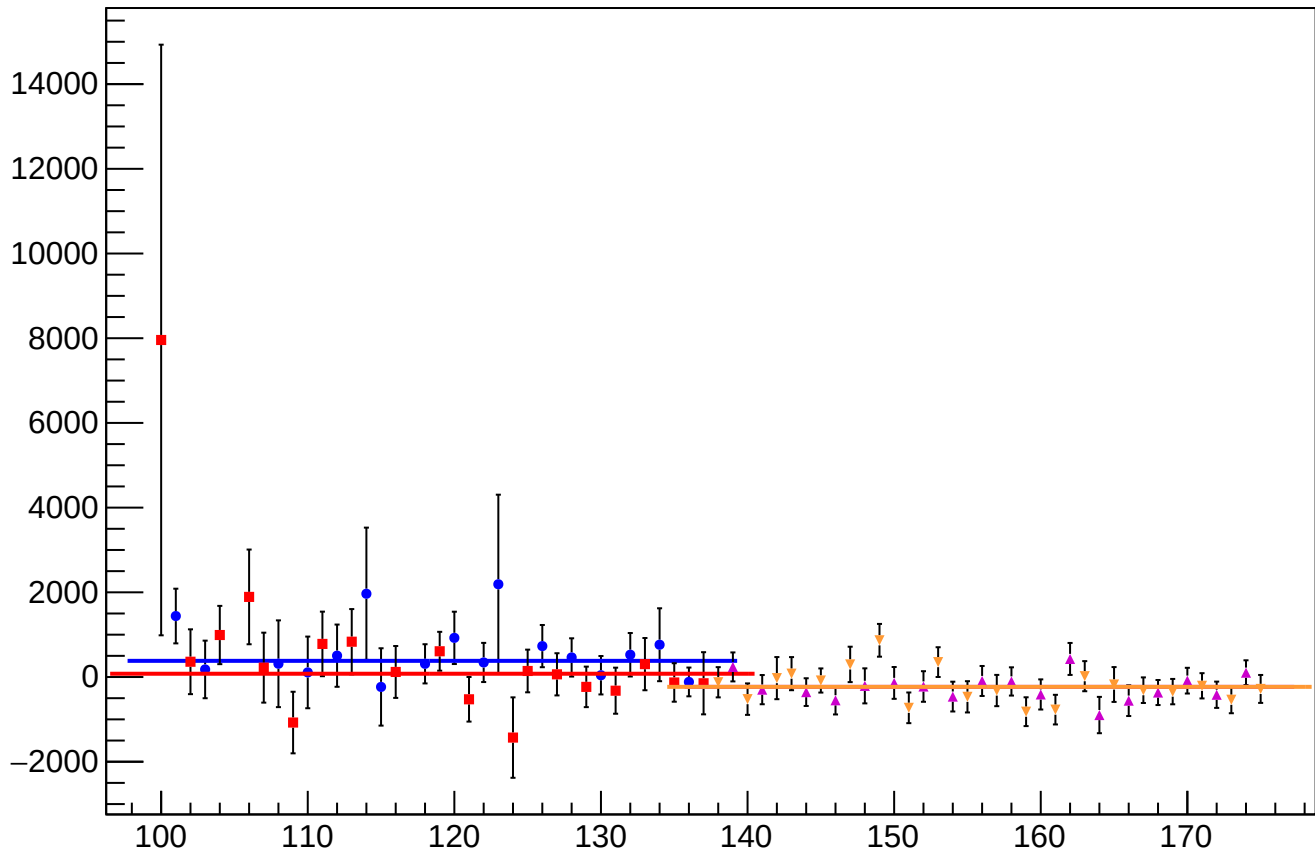
Right: 440.377+/-0.091  $\chi^2/\text{NDF}$ : 4068538.6/35

In: 360.973+/-0.058  $\chi^2/\text{NDF}$ : 3028309.7/34

Out: 366.753+/-0.057  $\chi^2/\text{NDF}$ : 3053825.7/38

All: 363.905+/-0.041  $\chi^2/\text{NDF}$ : 6087165.5/73

# dit\_asym\_sam2\_mean vs Slug, Sign Corrected



Right In:  $381.893 \pm 141.192$   $\chi^2/\text{NDF}: 9.4/16$

Left Out:  $-232.113 \pm 78.134$   $\chi^2/\text{NDF}: 23.6/19$

Right Out:  $77.490 \pm 143.469$   $\chi^2/\text{NDF}: 16.8/18$

Left In:  $-232.865 \pm 80.802$   $\chi^2/\text{NDF}: 12.4/17$

Left:  $-232.476 \pm 56.169$   $\chi^2/\text{NDF}: 36.0/37$

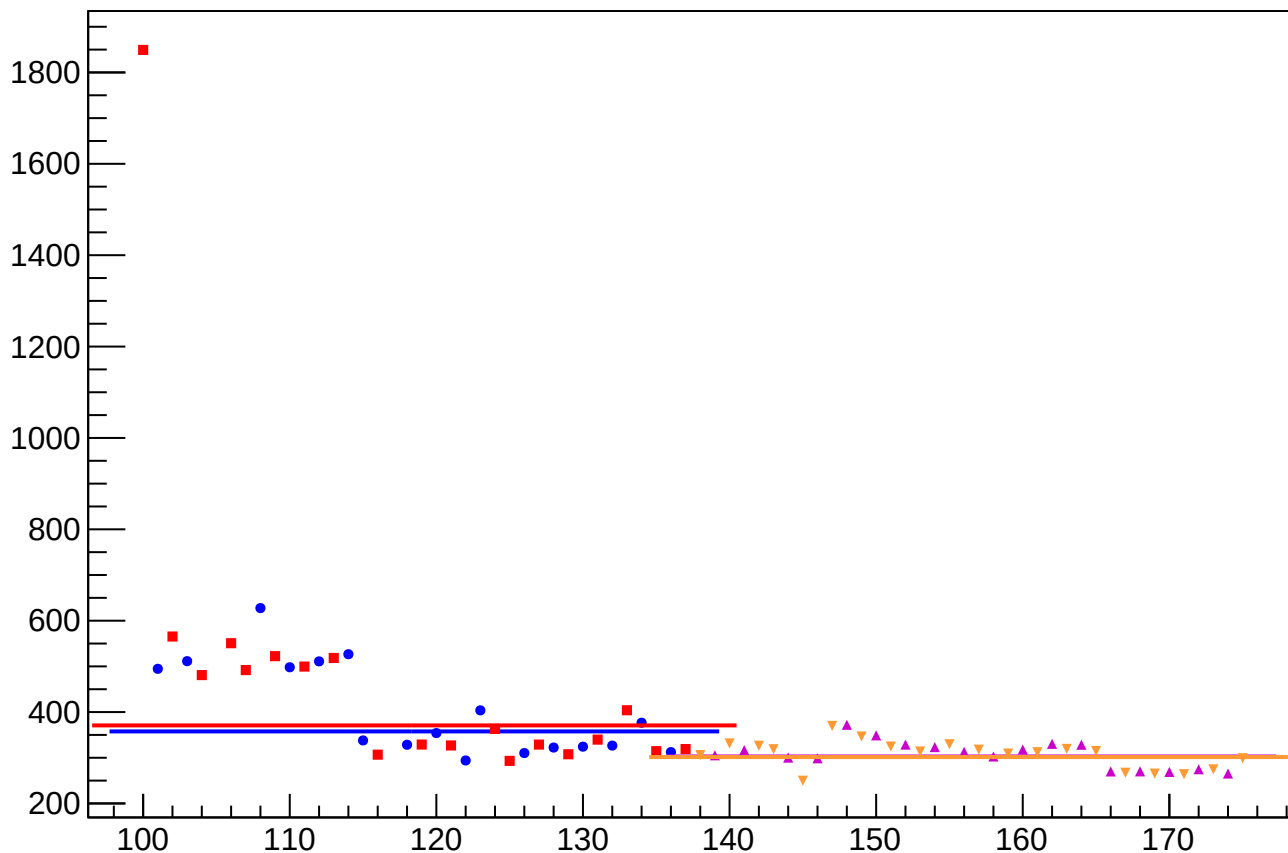
Right:  $232.126 \pm 100.633$   $\chi^2/\text{NDF}: 28.5/35$

In:  $-81.197 \pm 70.130$   $\chi^2/\text{NDF}: 36.1/34$

Out:  $-161.292 \pm 68.618$   $\chi^2/\text{NDF}: 43.9/38$

All:  $-122.118 \pm 49.046$   $\chi^2/\text{NDF}: 80.7/73$

# dit\_asym\_sam2\_rms vs Slug, Sign Corrected



Right In: 357.664 $\pm$ 0.100  $\chi^2$ /NDF: 629671.7/16

Left Out: 301.528 $\pm$ 0.055  $\chi^2$ /NDF:304986.5/19

Right Out: 370.794 $\pm$ 0.101  $\chi^2$ /NDF: 784786.3/18

Left In: 302.816 $\pm$ 0.057  $\chi^2$ /NDF:244711.4/17

Left: 302.150 $\pm$ 0.040  $\chi^2$ /NDF: 549960.7/37

Right: 364.124 $\pm$ 0.071  $\chi^2$ /NDF: 1422966.9/35

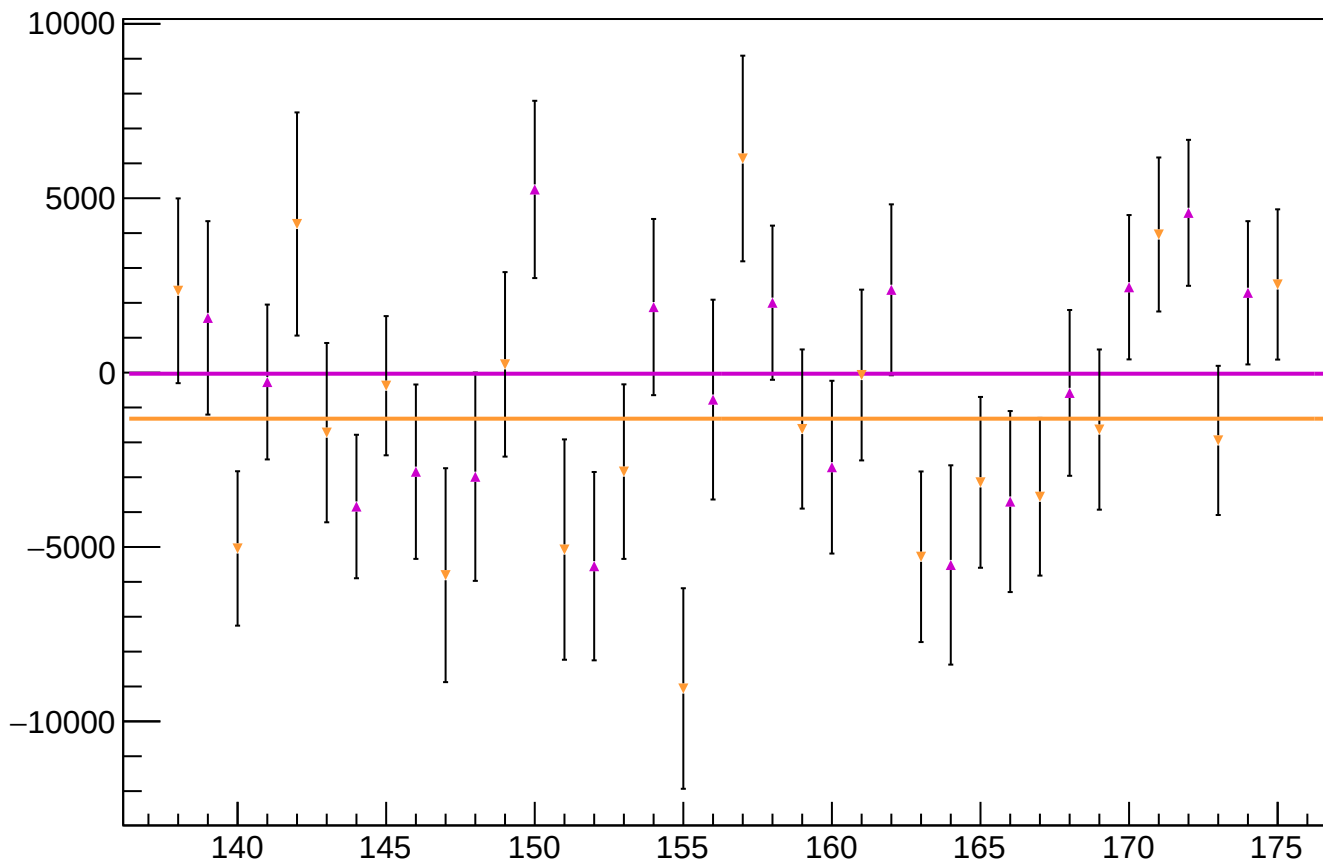
In: 316.348 $\pm$ 0.050  $\chi^2$ /NDF:1101730.7/34

Out: 317.372 $\pm$ 0.049  $\chi^2$ /NDF:1449318.4/38

All: 316.871 $\pm$ 0.035  $\chi^2$ /NDF: 2551267.1/73



asym\_sam2\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1321.072+/-549.738  $\chi^2/\text{NDF}$ :39.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -31.684+/-568.618  $\chi^2/\text{NDF}$ :31.4/17

Left: -698.139+/-395.229  $\chi^2/\text{NDF}$ : 73.5/37

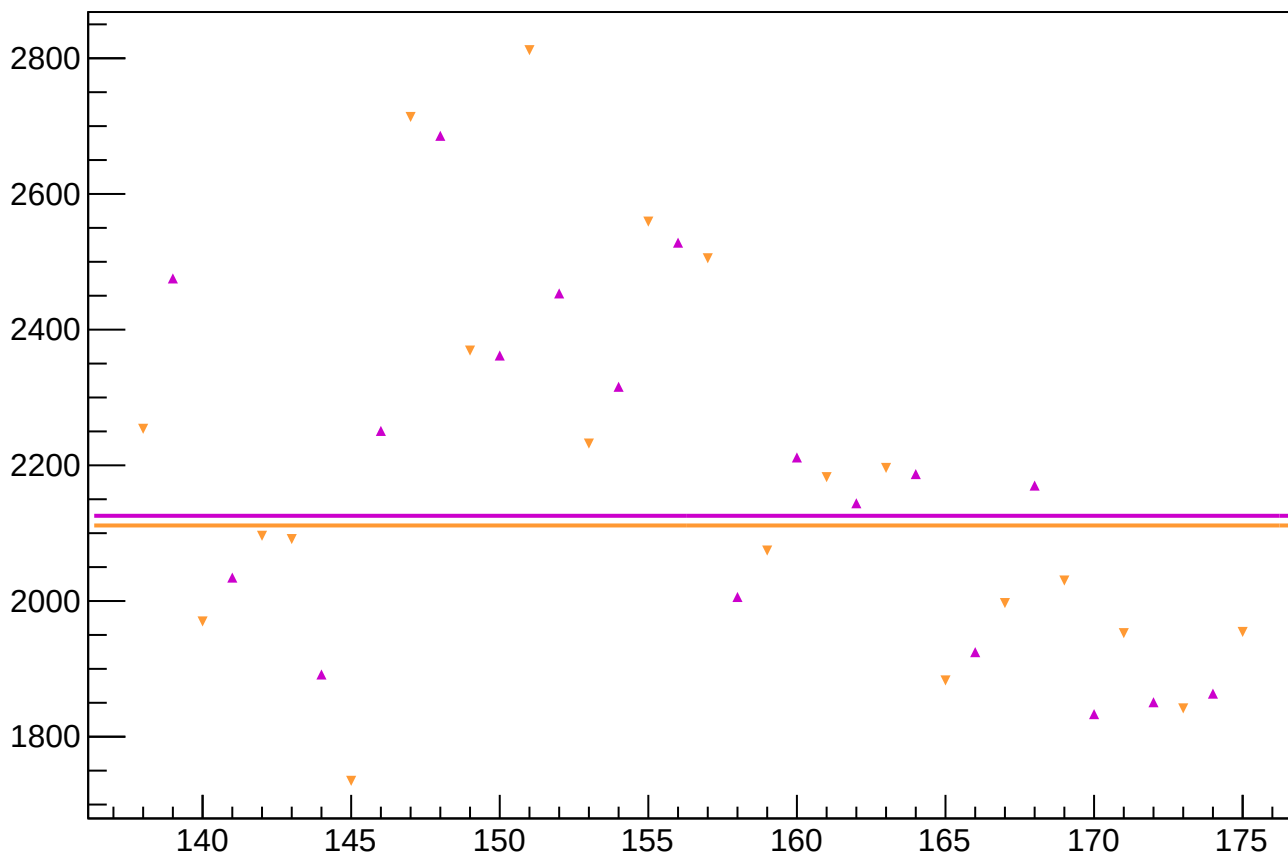
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -31.684+/-568.618  $\chi^2/\text{NDF}$ :31.4/17

Out: -1321.072+/-549.738  $\chi^2/\text{NDF}$ :39.4/19

All: -698.139+/-395.229  $\chi^2/\text{NDF}$ : 73.5/37

# asym\_sam2\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 2111.354+/-0.389  $\chi^2/\text{NDF}$ :450940.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 2125.628+/-0.402  $\chi^2/\text{NDF}$ :362996.2/17

Left: 2118.250+/-0.279  $\chi^2/\text{NDF}$ : 814588.4/37

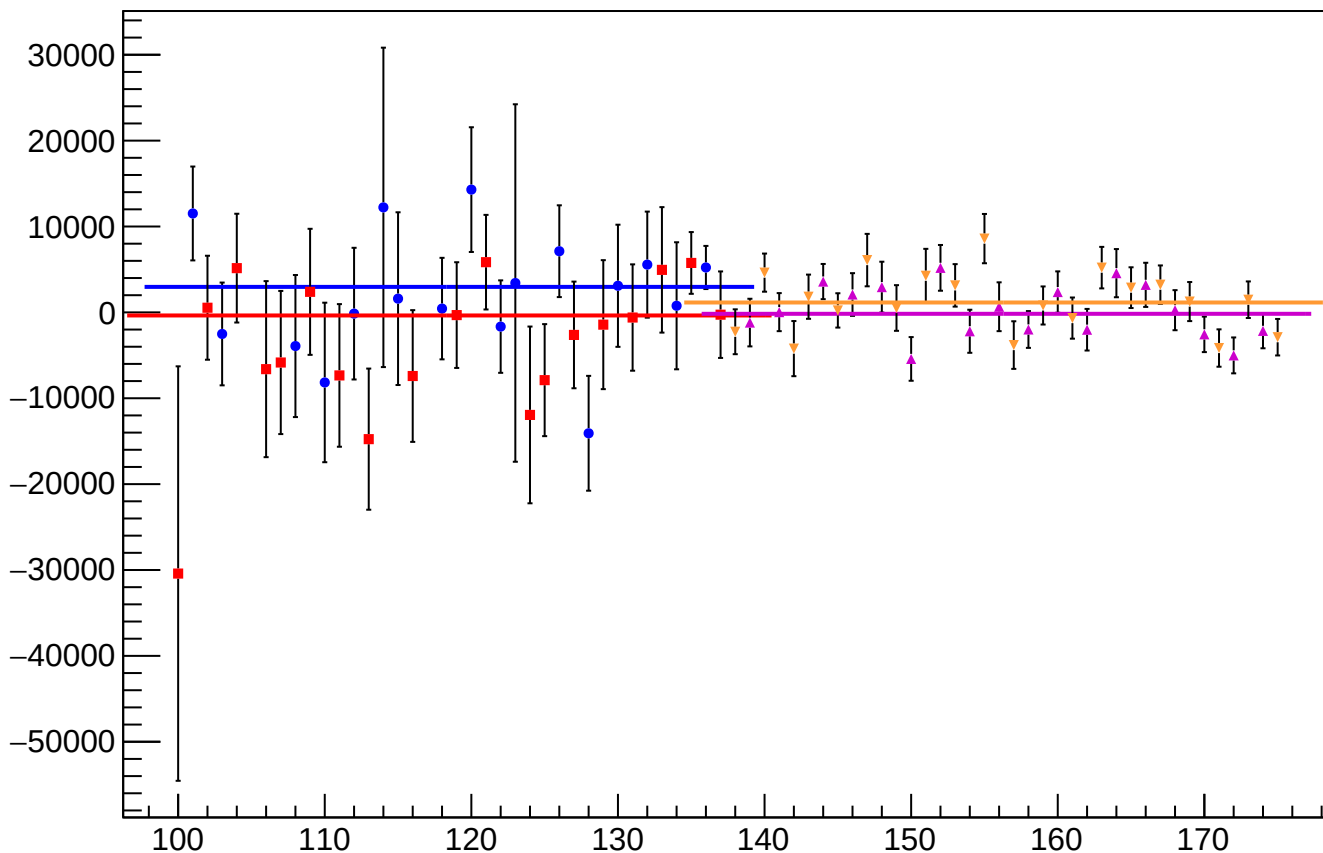
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 2125.628+/-0.402  $\chi^2/\text{NDF}$ :362996.2/17

Out: 2111.354+/-0.389  $\chi^2/\text{NDF}$ :450940.7/19

All: 2118.250+/-0.279  $\chi^2/\text{NDF}$ : 814588.4/37

# asym\_sam2\_mean vs Slug, Sign Corrected



Right In: 2969.125+/-1440.489  $\chi^2/\text{NDF}$ : 17.4/16

Left Out: 1151.436+/-543.557  $\chi^2/\text{NDF}$ : 35.8/19

Right Out: -358.685+/-1507.064  $\chi^2/\text{NDF}$ : 15.3/18

Left In: -166.317+/-563.006  $\chi^2/\text{NDF}$ : 29.1/17

Left: 515.712+/-391.048  $\chi^2/\text{NDF}$ : 67.8/37

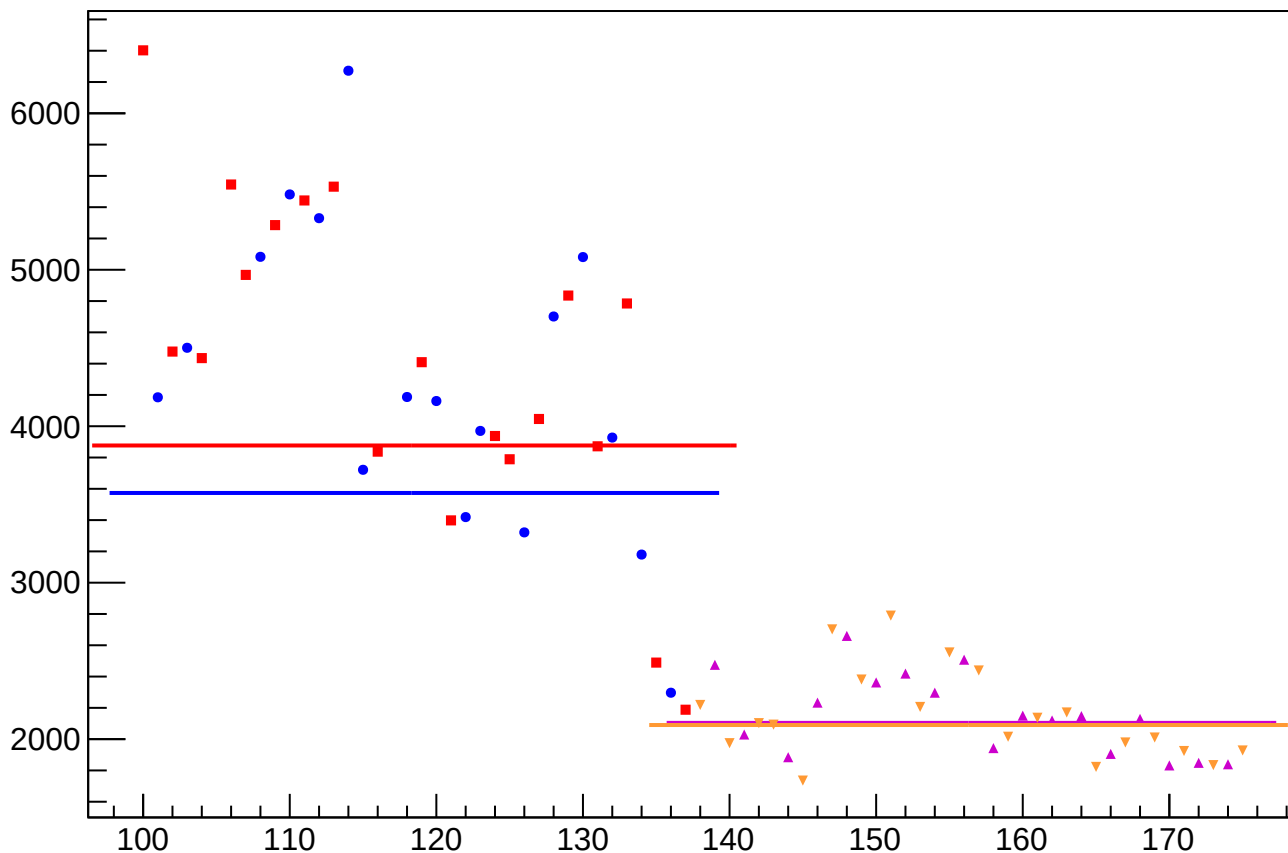
Right: 1380.346+/-1041.320  $\chi^2/\text{NDF}$ : 35.3/35

In: 249.178+/-524.377  $\chi^2/\text{NDF}$ : 50.6/34

Out: 977.605+/-511.317  $\chi^2/\text{NDF}$ : 52.1/38

All: 622.576+/-366.086  $\chi^2/\text{NDF}$ : 103.7/73

# asym\_sam2\_rms vs Slug, Sign Corrected



Right In: 3573.470+/-1.019  $\chi^2/\text{NDF}$ : 1088731.5/16

Left Out: 2090.308+/-0.384  $\chi^2/\text{NDF}$ : 455714.5/19

Right Out: 3876.914+/-1.066  $\chi^2/\text{NDF}$ : 988409.8/18

Left In: 2103.952+/-0.398  $\chi^2/\text{NDF}$ : 361065.7/17

Left: 2096.890+/-0.277  $\chi^2/\text{NDF}$ : 817388.2/37

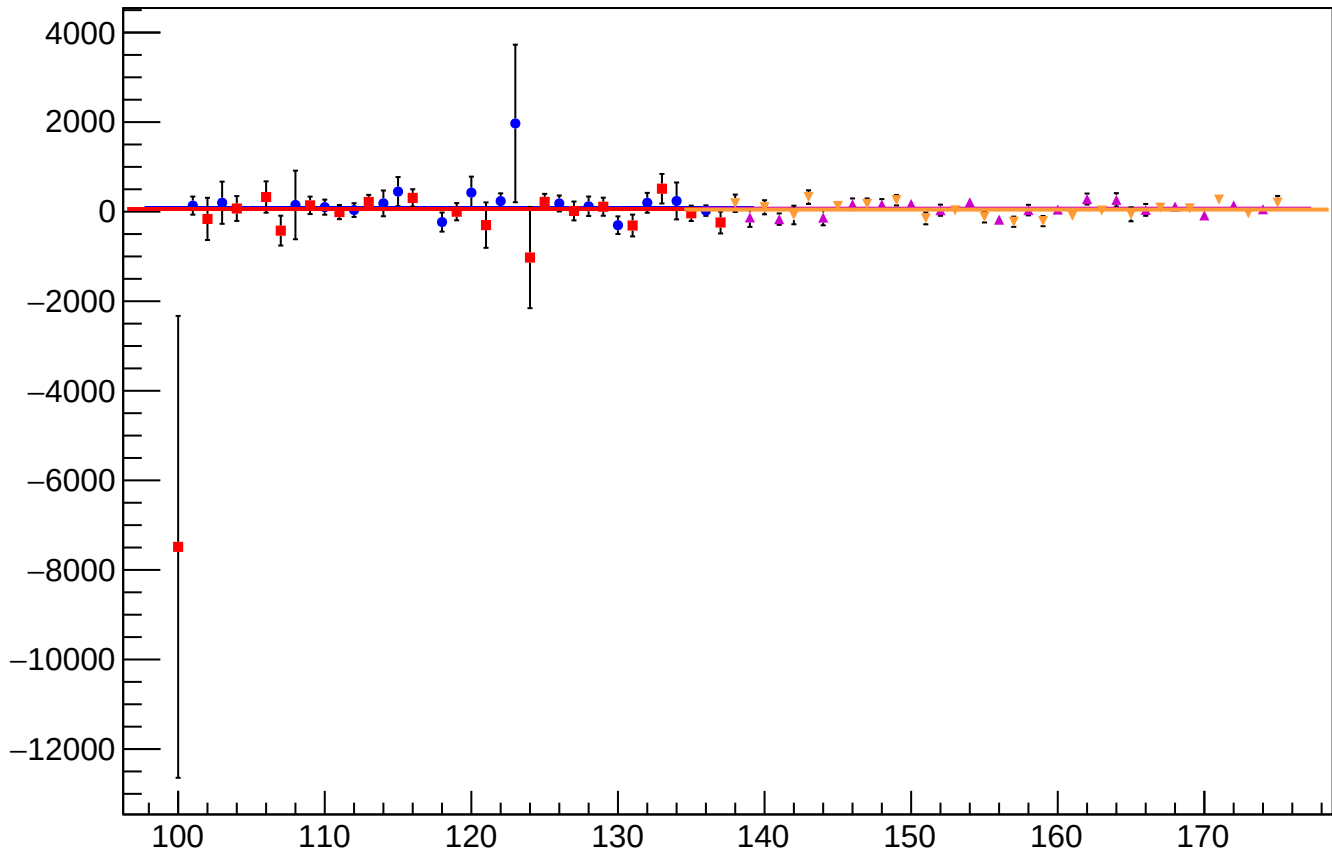
Right: 3718.342+/-0.736  $\chi^2/\text{NDF}$ : 2119512.7/35

In: 2298.686+/-0.371  $\chi^2/\text{NDF}$ : 3255397.1/34

Out: 2295.966+/-0.362  $\chi^2/\text{NDF}$ : 3931336.5/38

All: 2297.291+/-0.259  $\chi^2/\text{NDF}$ : 7186761.2/73

# dit\_asym\_sam3\_mean vs Slug, Sign Corrected



Right In: 81.851 $\pm$ 51.907  $\chi^2$ /NDF: 11.5/16

Left Out: 46.588 $\pm$ 25.387  $\chi^2$ /NDF:35.6/19

Right Out: 59.008 $\pm$ 53.165  $\chi^2$ /NDF: 16.4/18

Left In: 67.122 $\pm$ 26.110  $\chi^2$ /NDF:23.4/17

Left: 56.567 $\pm$ 18.202  $\chi^2$ /NDF: 59.3/37

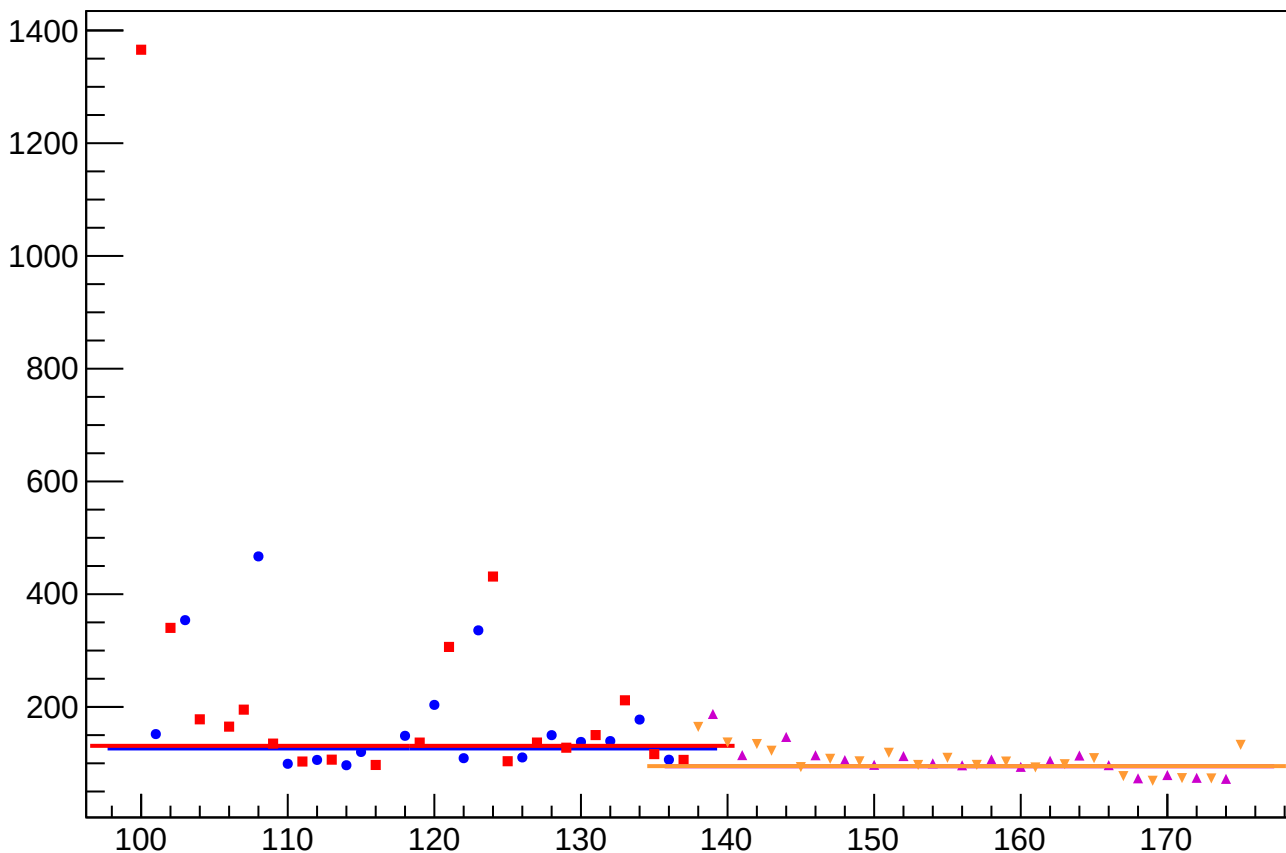
Right: 70.703 $\pm$ 37.141  $\chi^2$ /NDF: 28.1/35

In: 70.096 $\pm$ 23.325  $\chi^2$ /NDF:35.0/34

Out: 48.894 $\pm$ 22.909  $\chi^2$ /NDF:52.0/38

All: 59.304 $\pm$ 16.344  $\chi^2$ /NDF: 87.4/73

# dit\_asym\_sam3\_rms vs Slug, Sign Corrected



Right In: 126.339+/-0.037  $\chi^2/\text{NDF}$ : 1310585.0/16

Left Out: 95.022+/-0.018  $\chi^2/\text{NDF}$ :1382904.4/19

Right Out: 131.007+/-0.038  $\chi^2/\text{NDF}$ : 1429260.8/18

Left In: 94.697+/-0.018  $\chi^2/\text{NDF}$ :1257696.8/17

Left: 94.864+/-0.013  $\chi^2/\text{NDF}$ : 2640761.0/37

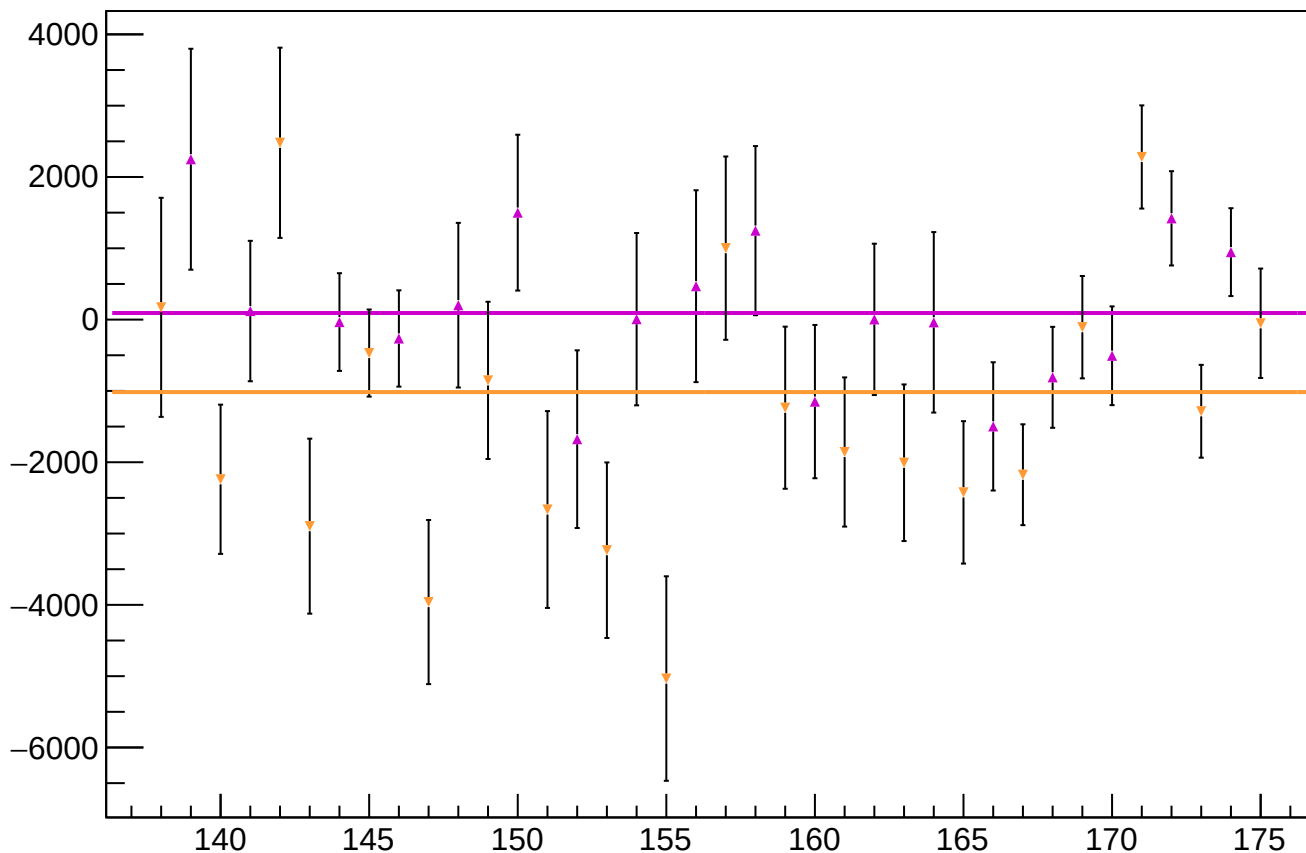
Right: 128.617+/-0.026  $\chi^2/\text{NDF}$ : 2747739.0/35

In: 101.086+/-0.016  $\chi^2/\text{NDF}$ :3161418.8/34

Out: 101.704+/-0.016  $\chi^2/\text{NDF}$ :3558277.7/38

All: 101.401+/-0.012  $\chi^2/\text{NDF}$ : 6720410.2/73

asym\_sam3\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1016.093+/-210.666  $\chi^2/\text{NDF}$ : 63.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 92.538+/-210.480  $\chi^2/\text{NDF}$ : 19.8/17

Left: -461.286+/-148.898  $\chi^2/\text{NDF}$ : 97.5/37

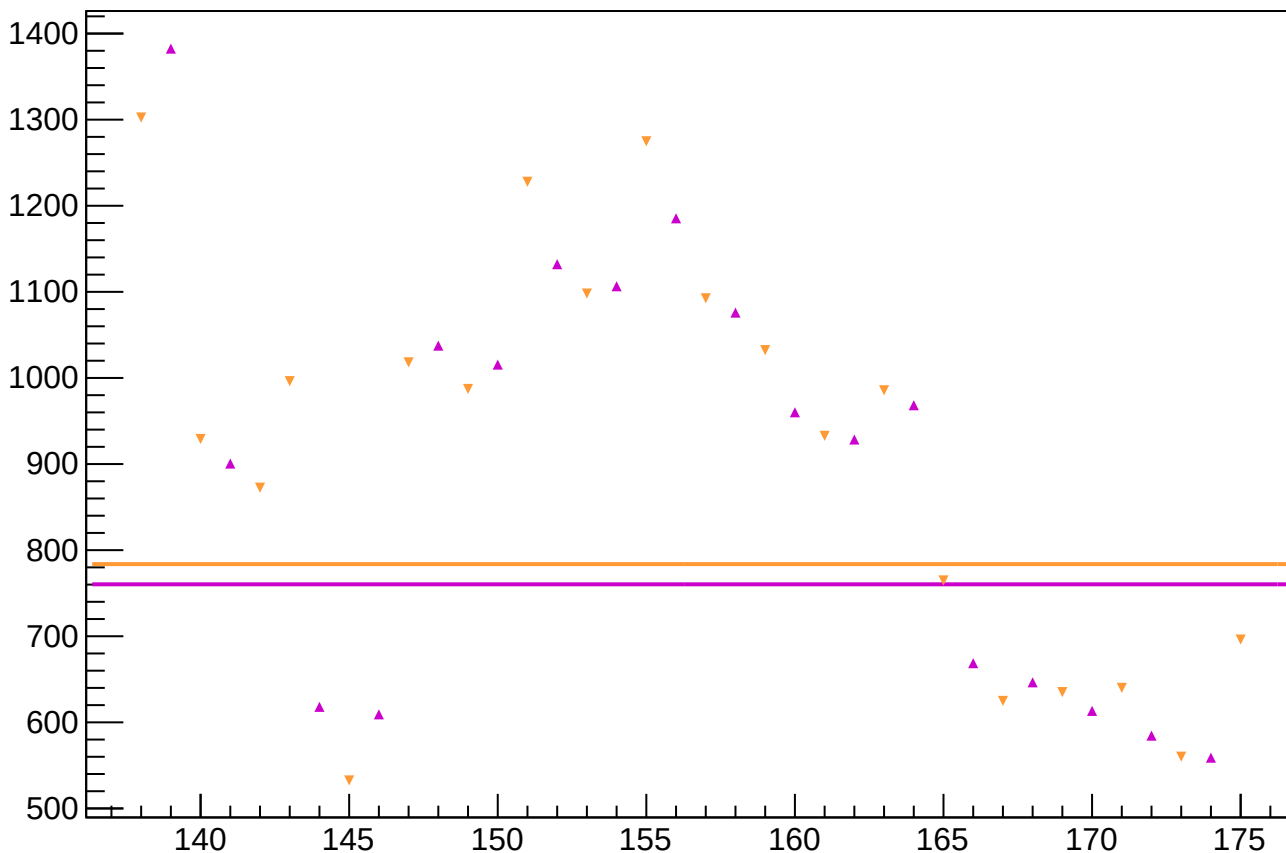
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 92.538+/-210.480  $\chi^2/\text{NDF}$ : 19.8/17

Out: -1016.093+/-210.666  $\chi^2/\text{NDF}$ : 63.8/19

All: -461.286+/-148.898  $\chi^2/\text{NDF}$ : 97.5/37

asym\_sam3\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 783.774+/-0.149  $\chi^2/\text{NDF}$ :2245169.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 760.319+/-0.149  $\chi^2/\text{NDF}$ :2148713.1/17

Left: 772.036+/-0.105  $\chi^2/\text{NDF}$ : 4406289.2/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

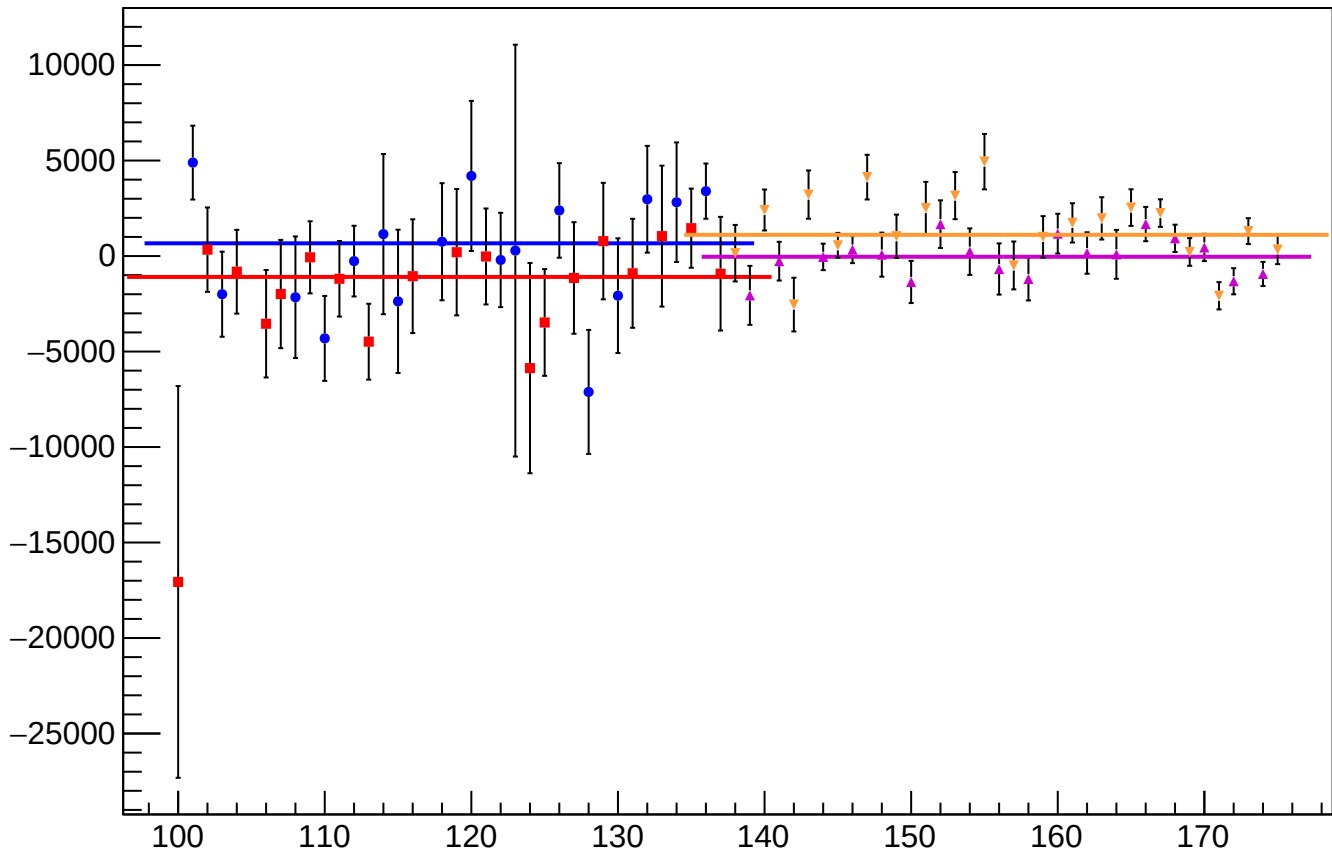
In: 760.319+/-0.149  $\chi^2/\text{NDF}$ :2148713.1/17

Out: 783.774+/-0.149  $\chi^2/\text{NDF}$ :2245169.6/19

All: 772.036+/-0.105  $\chi^2/\text{NDF}$ : 4406289.2/37



# asym\_sam3\_mean vs Slug, Sign Corrected



Right In: 666.453+/-618.839  $\chi^2/\text{NDF}$ : 25.6/16

Left Out: 1110.101+/-213.165  $\chi^2/\text{NDF}$ : 59.5/19

Right Out: -1094.278+/-602.639  $\chi^2/\text{NDF}$ : 11.0/18

Left In: -37.517+/-213.727  $\chi^2/\text{NDF}$ : 19.6/17

Left: 537.801+/-150.929  $\chi^2/\text{NDF}$ : 93.5/37

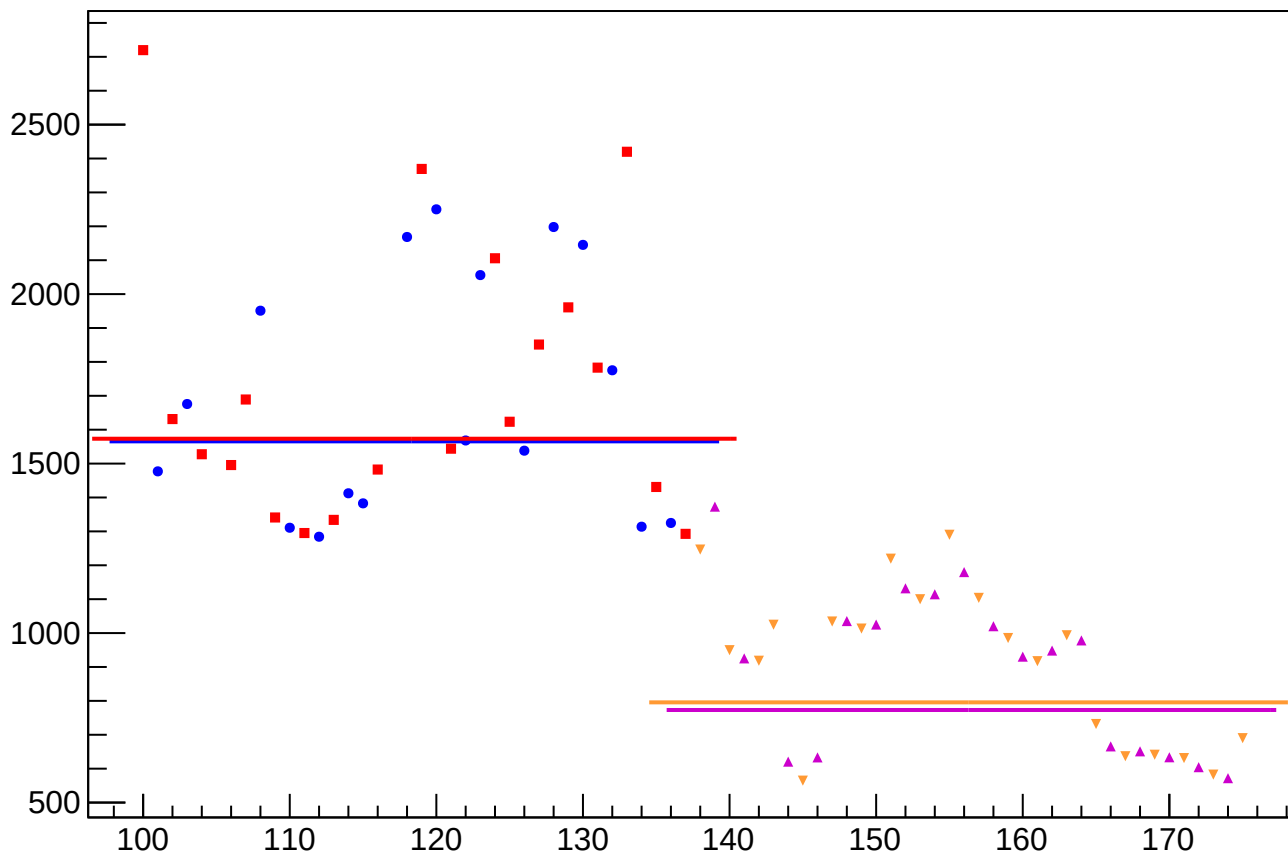
Right: -237.260+/-431.744  $\chi^2/\text{NDF}$ : 40.8/35

In: 37.504+/-202.018  $\chi^2/\text{NDF}$ : 46.4/34

Out: 864.965+/-200.964  $\chi^2/\text{NDF}$ : 82.4/38

All: 453.399+/-142.474  $\chi^2/\text{NDF}$ : 137.2/73

# asym\_sam3\_rms vs Slug, Sign Corrected



Right In: 1565.623 $\pm$ 0.438  $\chi^2$ /NDF: 490790.2/16

Left Out: 795.608 $\pm$ 0.151  $\chi^2$ /NDF: 2075005.4/19

Right Out: 1573.366 $\pm$ 0.426  $\chi^2$ /NDF: 462040.3/18

Left In: 773.082 $\pm$ 0.151  $\chi^2$ /NDF: 1970397.6/17

Left: 784.374 $\pm$ 0.107  $\chi^2$ /NDF: 4056541.2/37

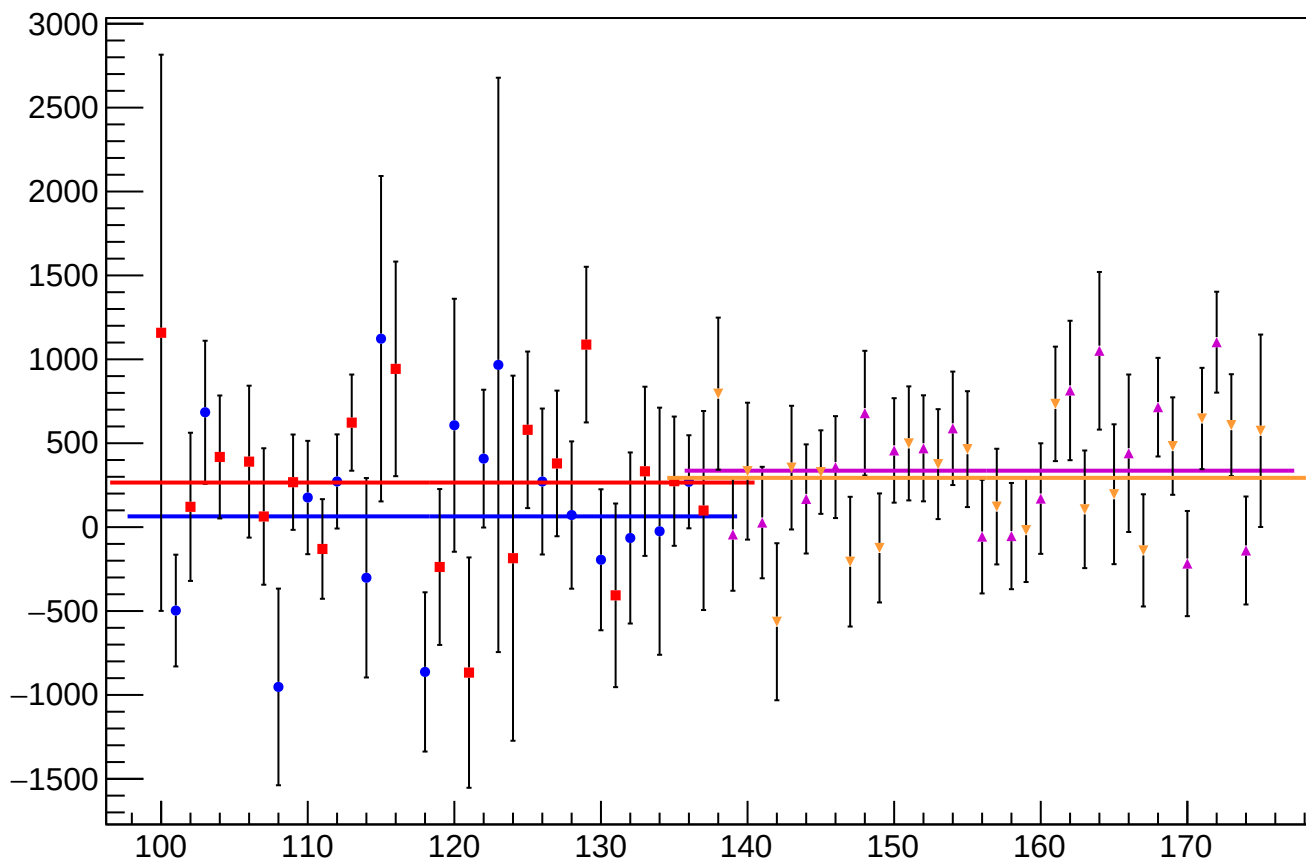
Right: 1569.597 $\pm$ 0.305  $\chi^2$ /NDF: 952991.2/35

In: 857.541 $\pm$ 0.143  $\chi^2$ /NDF: 5391945.2/34

Out: 882.098 $\pm$ 0.142  $\chi^2$ /NDF: 5497821.7/38

All: 869.883 $\pm$ 0.101  $\chi^2$ /NDF: 10904621.2/73

# dit\_asym\_sam4\_mean vs Slug, Sign Corrected



Right In: 64.087+/-105.336  $\chi^2/\text{NDF}$ : 16.8/16

Left Out: 293.535+/-77.028  $\chi^2/\text{NDF}$ :16.7/19

Right Out: 265.661+/-99.379  $\chi^2/\text{NDF}$ : 14.7/18

Left In: 336.392+/-79.099  $\chi^2/\text{NDF}$ :24.4/17

Left: 314.395+/-55.185  $\chi^2/\text{NDF}$ : 41.3/37

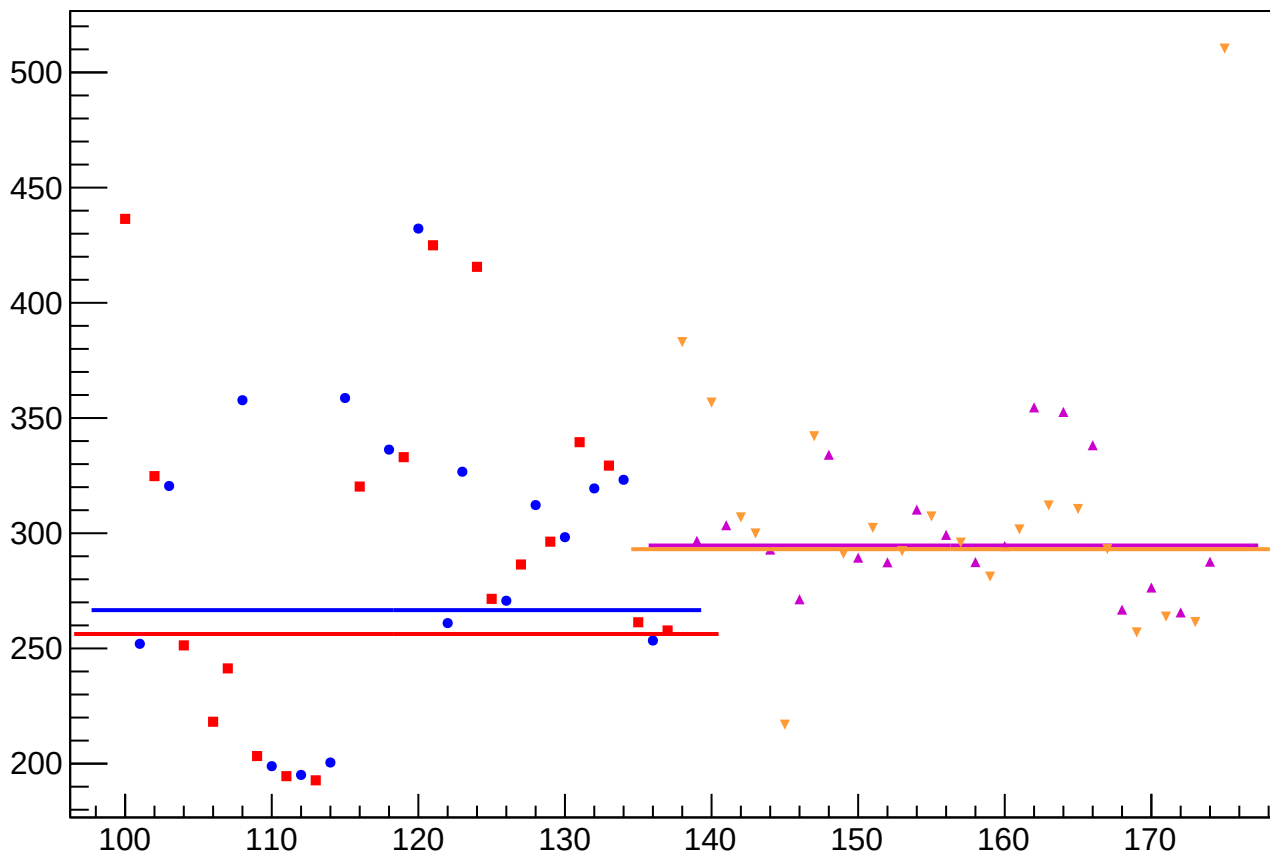
Right: 170.735+/-72.286  $\chi^2/\text{NDF}$ : 33.4/35

In: 238.208+/-63.252  $\chi^2/\text{NDF}$ :45.4/34

Out: 283.074+/-60.881  $\chi^2/\text{NDF}$ :31.4/38

All: 261.497+/-43.864  $\chi^2/\text{NDF}$ : 77.1/73

# dit\_asym\_sam4\_rms vs Slug, Sign Corrected



Right In: 266.624 $\pm$ 0.074  $\chi^2$ /NDF: 550752.5/16

Left Out: 293.075 $\pm$ 0.054  $\chi^2$ /NDF: 726395.3/19

Right Out: 256.268 $\pm$ 0.070  $\chi^2$ /NDF: 696896.2/18

Left In: 294.675 $\pm$ 0.056  $\chi^2$ /NDF: 176751.8/17

Left: 293.854 $\pm$ 0.039  $\chi^2$ /NDF: 903566.9/37

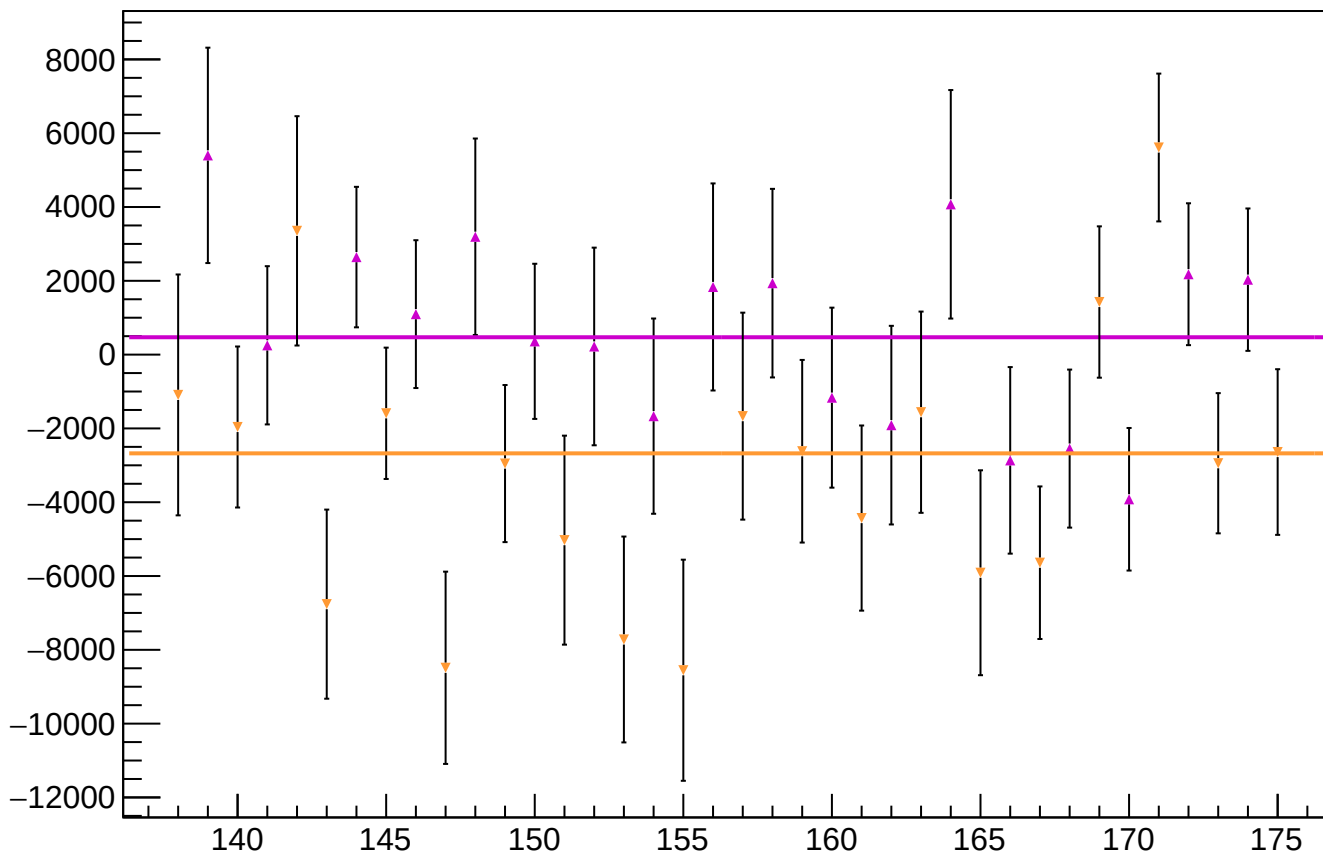
Right: 261.145 $\pm$ 0.051  $\chi^2$ /NDF: 1257876.6/35

In: 284.561 $\pm$ 0.045  $\chi^2$ /NDF: 818193.2/34

Out: 279.262 $\pm$ 0.043  $\chi^2$ /NDF: 1594676.6/38

All: 281.810 $\pm$ 0.031  $\chi^2$ /NDF: 2420156.7/73

asym\_sam4\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -2675.715+/-533.114  $\chi^2/\text{NDF}$ :45.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 470.673+/-543.745  $\chi^2/\text{NDF}$ :19.5/17

Left: -1133.581+/-380.671  $\chi^2/\text{NDF}$ : 81.7/37

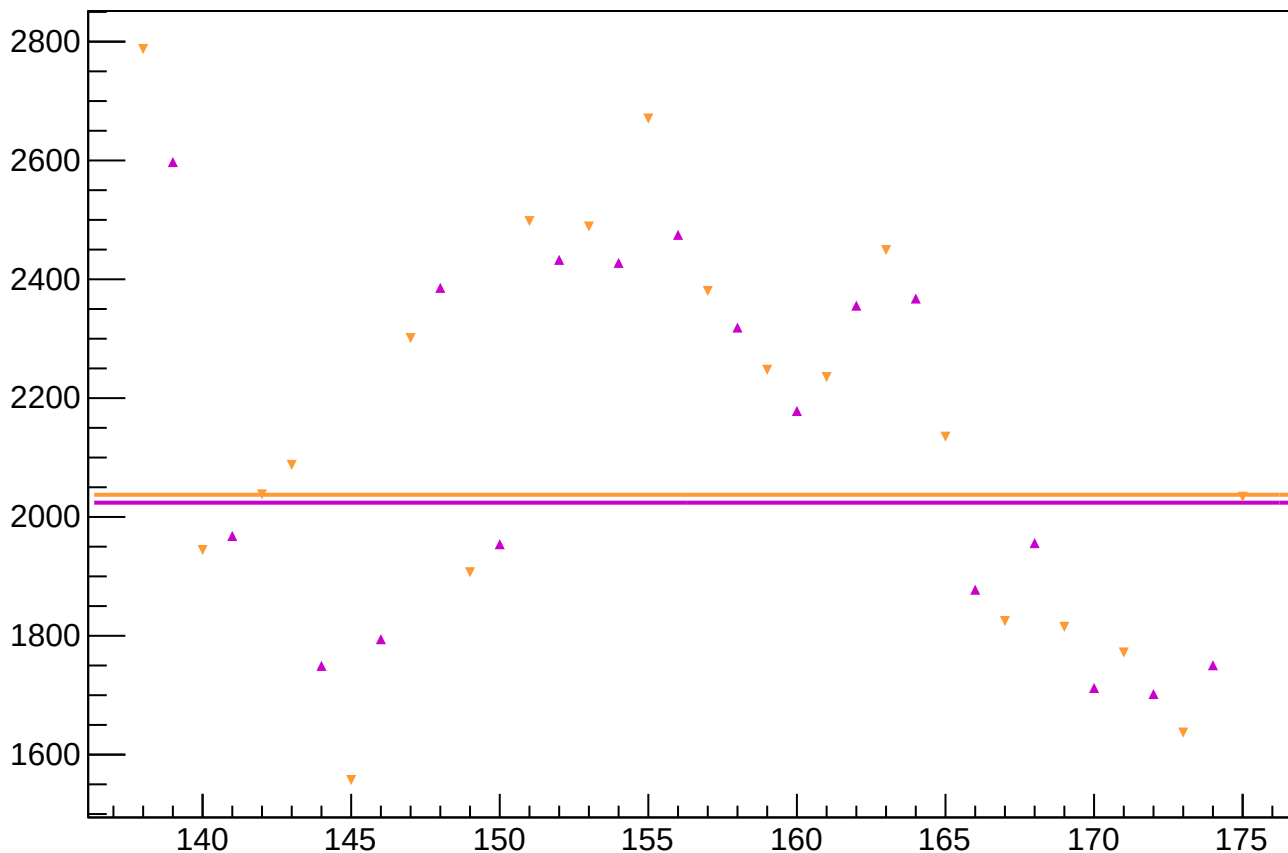
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 470.673+/-543.745  $\chi^2/\text{NDF}$ :19.5/17

Out: -2675.715+/-533.114  $\chi^2/\text{NDF}$ :45.2/19

All: -1133.581+/-380.671  $\chi^2/\text{NDF}$ : 81.7/37

# asym\_sam4\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 2037.393+/-0.377  $\chi^2/\text{NDF}$ : 751757.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 2024.054+/-0.384  $\chi^2/\text{NDF}$ : 577179.9/17

Left: 2030.855+/-0.269  $\chi^2/\text{NDF}$ : 1329551.1/37

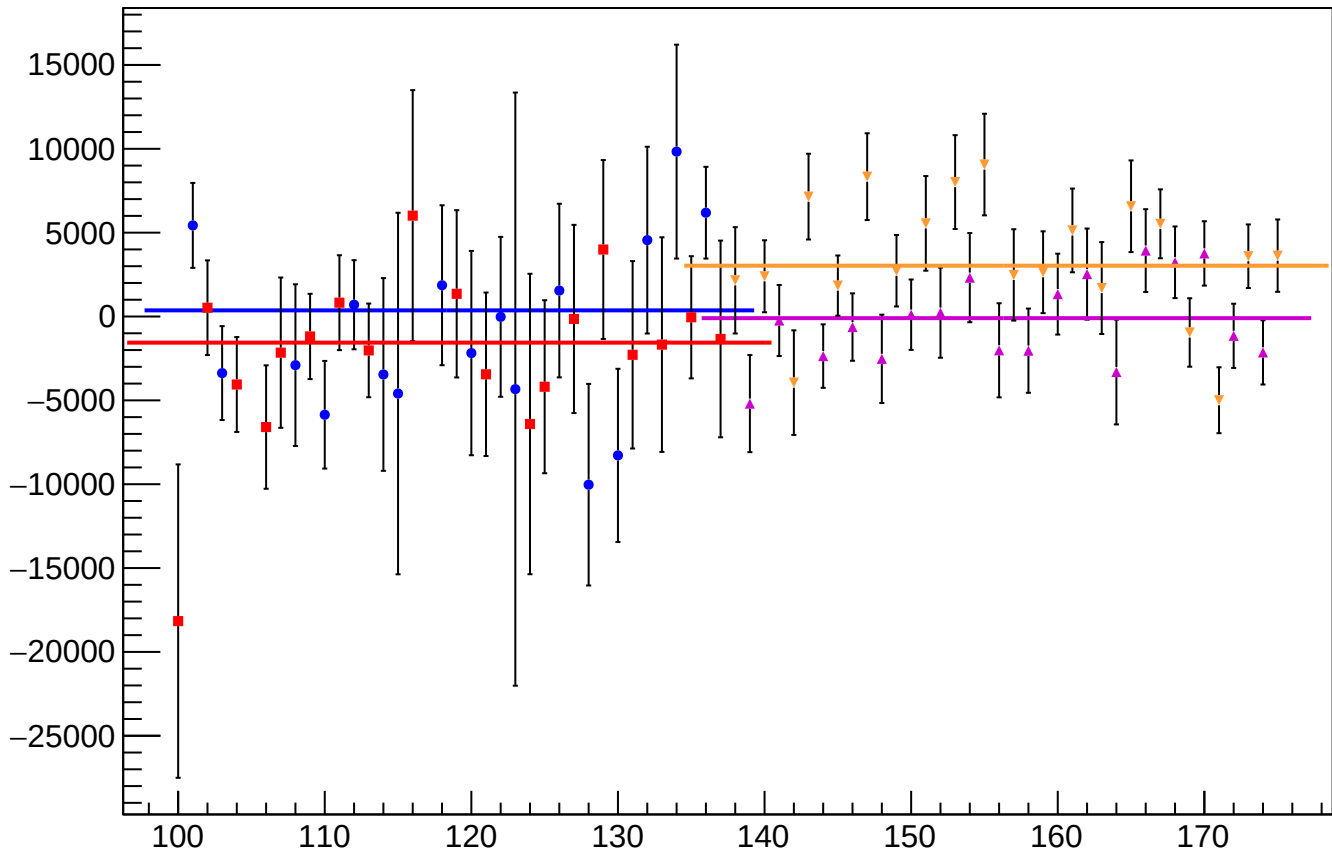
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 2024.054+/-0.384  $\chi^2/\text{NDF}$ : 577179.9/17

Out: 2037.393+/-0.377  $\chi^2/\text{NDF}$ : 751757.5/19

All: 2030.855+/-0.269  $\chi^2/\text{NDF}$ : 1329551.1/37

# asym\_sam4\_mean vs Slug, Sign Corrected



Right In:  $366.454 \pm 992.480$   $\chi^2/\text{NDF}$ : 24.2/16

Left Out:  $3030.014 \pm 529.010$   $\chi^2/\text{NDF}$ : 45.2/19

Right Out:  $-1557.388 \pm 924.003$   $\chi^2/\text{NDF}$ : 10.5/18

Left In:  $-97.748 \pm 541.065$   $\chi^2/\text{NDF}$ : 20.3/17

Left:  $1501.364 \pm 378.257$   $\chi^2/\text{NDF}$ : 82.5/37

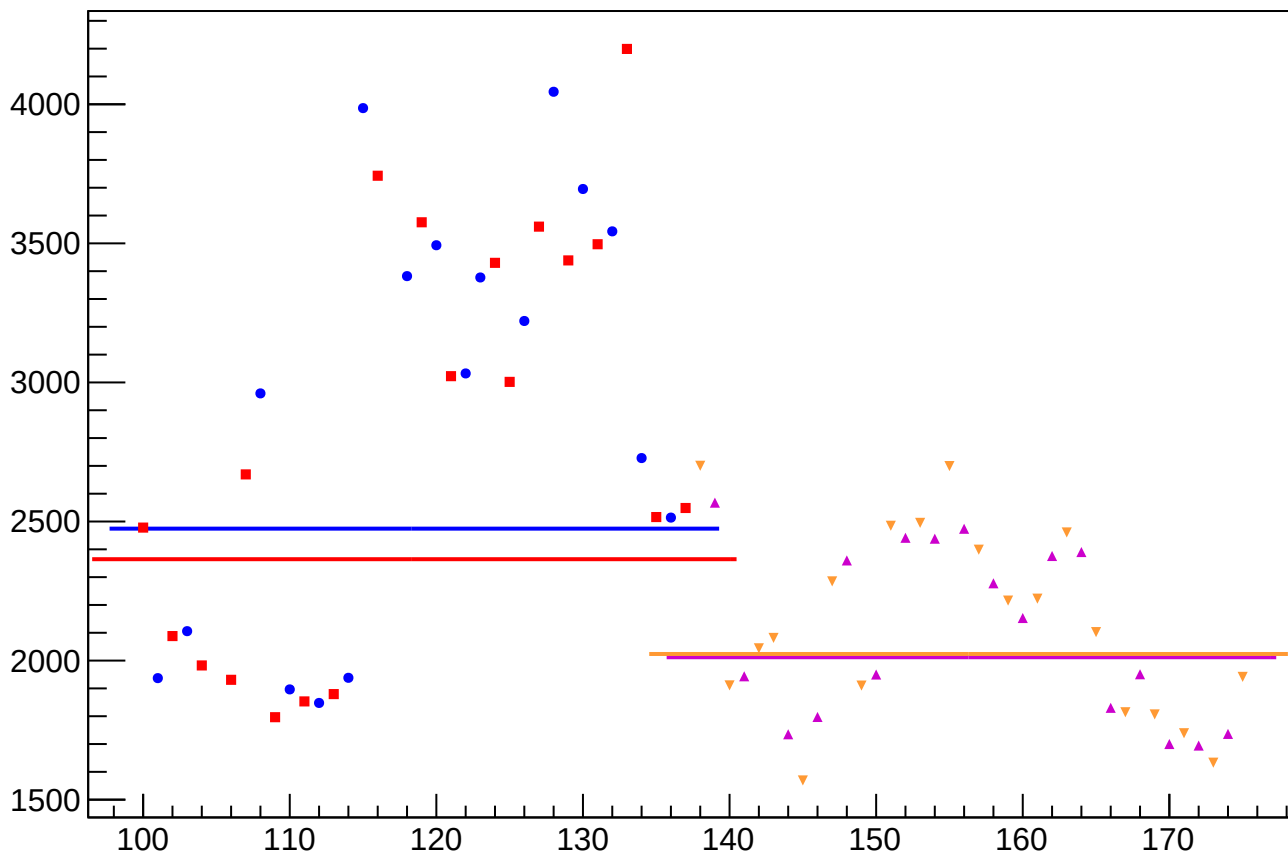
Right:  $-664.120 \pm 676.282$   $\chi^2/\text{NDF}$ : 36.7/35

In:  $8.606 \pm 475.056$   $\chi^2/\text{NDF}$ : 44.6/34

Out:  $1897.555 \pm 459.093$   $\chi^2/\text{NDF}$ : 74.3/38

All:  $985.350 \pm 330.127$   $\chi^2/\text{NDF}$ : 127.1/73

# asym\_sam4\_rms vs Slug, Sign Corrected



Right In: 2474.389+/-0.702  $\chi^2/\text{NDF}$ : 906262.1/16

Left Out: 2023.754+/-0.374  $\chi^2/\text{NDF}$ : 750603.0/19

Right Out: 2364.507+/-0.653  $\chi^2/\text{NDF}$ : 1023402.8/18

Left In: 2012.045+/-0.383  $\chi^2/\text{NDF}$ : 591077.5/17

Left: 2018.031+/-0.267  $\chi^2/\text{NDF}$ : 1342159.3/37

Right: 2415.527+/-0.478  $\chi^2/\text{NDF}$ : 1942797.3/35

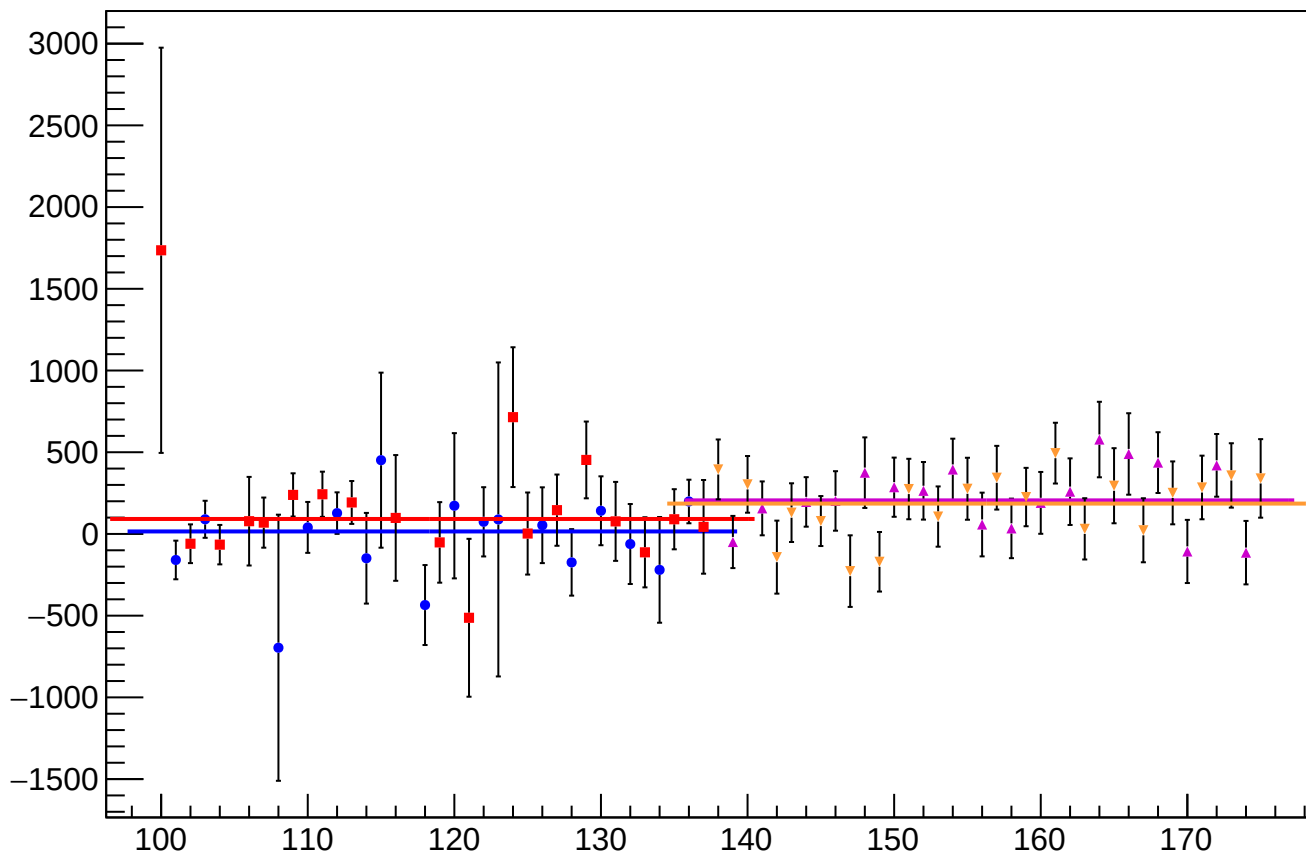
In: 2117.973+/-0.336  $\chi^2/\text{NDF}$ : 1831925.6/34

Out: 2107.873+/-0.325  $\chi^2/\text{NDF}$ : 1978856.6/38

All: 2112.751+/-0.233  $\chi^2/\text{NDF}$ : 3811249.6/73



# dit\_asym\_sam5\_mean vs Slug, Sign Corrected



Right In: 15.303+/-46.443  $\chi^2/\text{NDF}$ : 12.6/16

Left Out: 185.725+/-42.610  $\chi^2/\text{NDF}$ : 19.1/19

Right Out: 91.634+/-43.318  $\chi^2/\text{NDF}$ : 15.7/18

Left In: 205.368+/-44.077  $\chi^2/\text{NDF}$ : 18.1/17

Left: 195.214+/-30.635  $\chi^2/\text{NDF}$ : 37.3/37

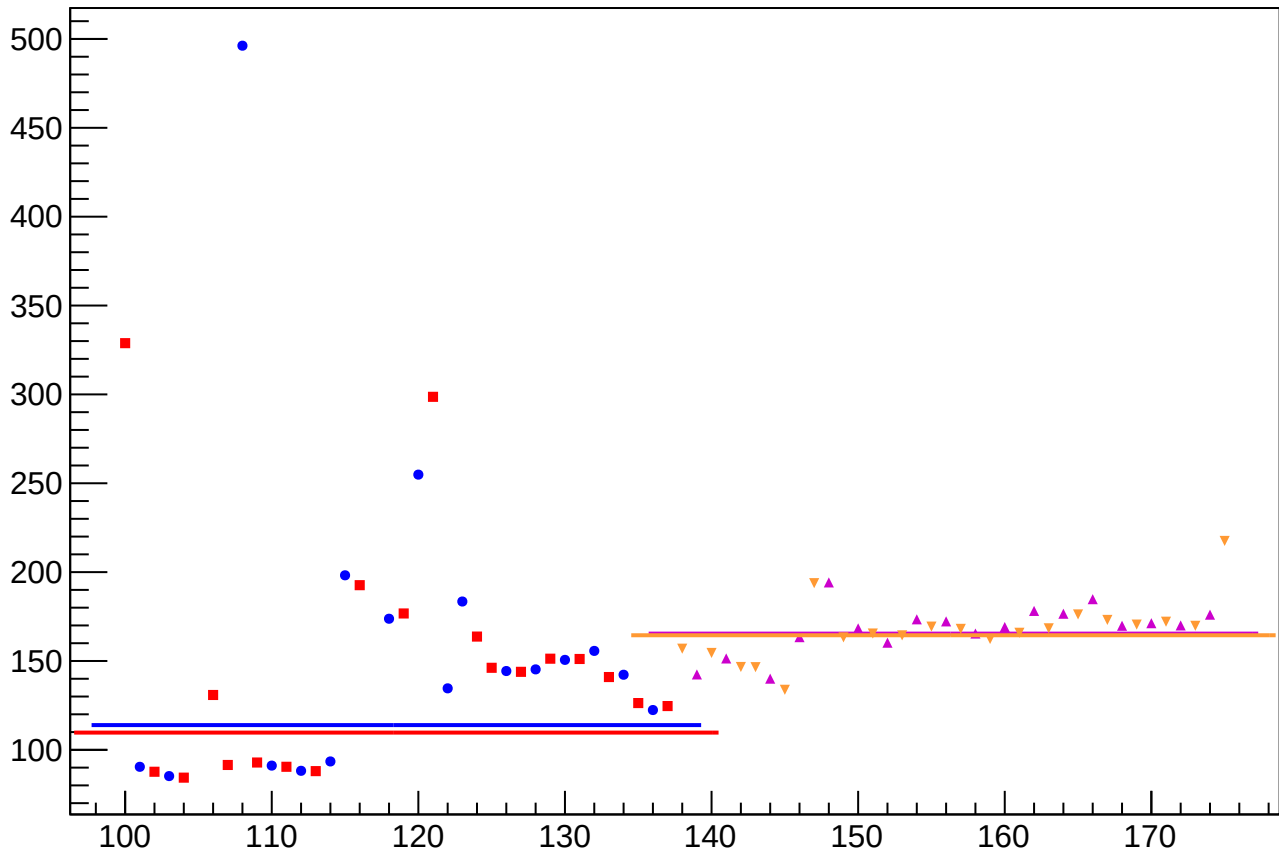
Right: 56.123+/-31.678  $\chi^2/\text{NDF}$ : 29.7/35

In: 115.301+/-31.971  $\chi^2/\text{NDF}$ : 39.5/34

Out: 139.455+/-30.377  $\chi^2/\text{NDF}$ : 37.2/38

All: 127.995+/-22.022  $\chi^2/\text{NDF}$ : 77.0/73

# dit\_asym\_sam5\_rms vs Slug, Sign Corrected



Right In: 113.932+/-0.033  $\chi^2/\text{NDF}$ : 1407849.3/16

Left Out: 164.479+/-0.030  $\chi^2/\text{NDF}$ :275643.8/19

Right Out: 109.709+/-0.031  $\chi^2/\text{NDF}$ : 1242014.6/18

Left In: 165.402+/-0.031  $\chi^2/\text{NDF}$ :191465.4/17

Left: 164.925+/-0.022  $\chi^2/\text{NDF}$ : 467562.5/37

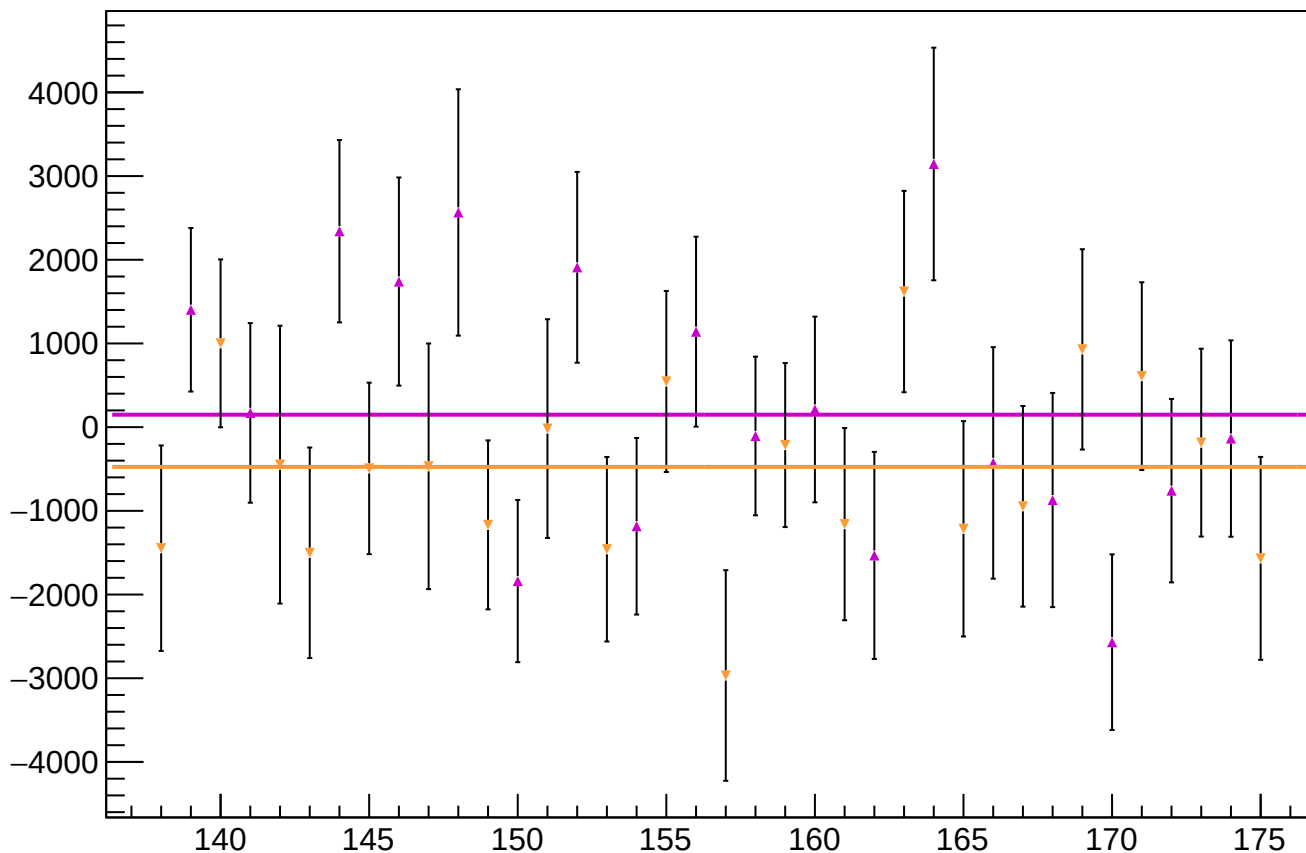
Right: 111.674+/-0.022  $\chi^2/\text{NDF}$ : 2658703.6/35

In: 141.012+/-0.023  $\chi^2/\text{NDF}$ :2891700.0/34

Out: 137.546+/-0.021  $\chi^2/\text{NDF}$ :3142623.0/38

All: 139.190+/-0.016  $\chi^2/\text{NDF}$ : 6046676.8/73

asym\_sam5\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -474.714+/-260.775  $\chi^2/\text{NDF}$ :16.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 148.752+/-266.553  $\chi^2/\text{NDF}$ :33.8/17

Left: -169.810+/-186.405  $\chi^2/\text{NDF}$ : 53.4/37

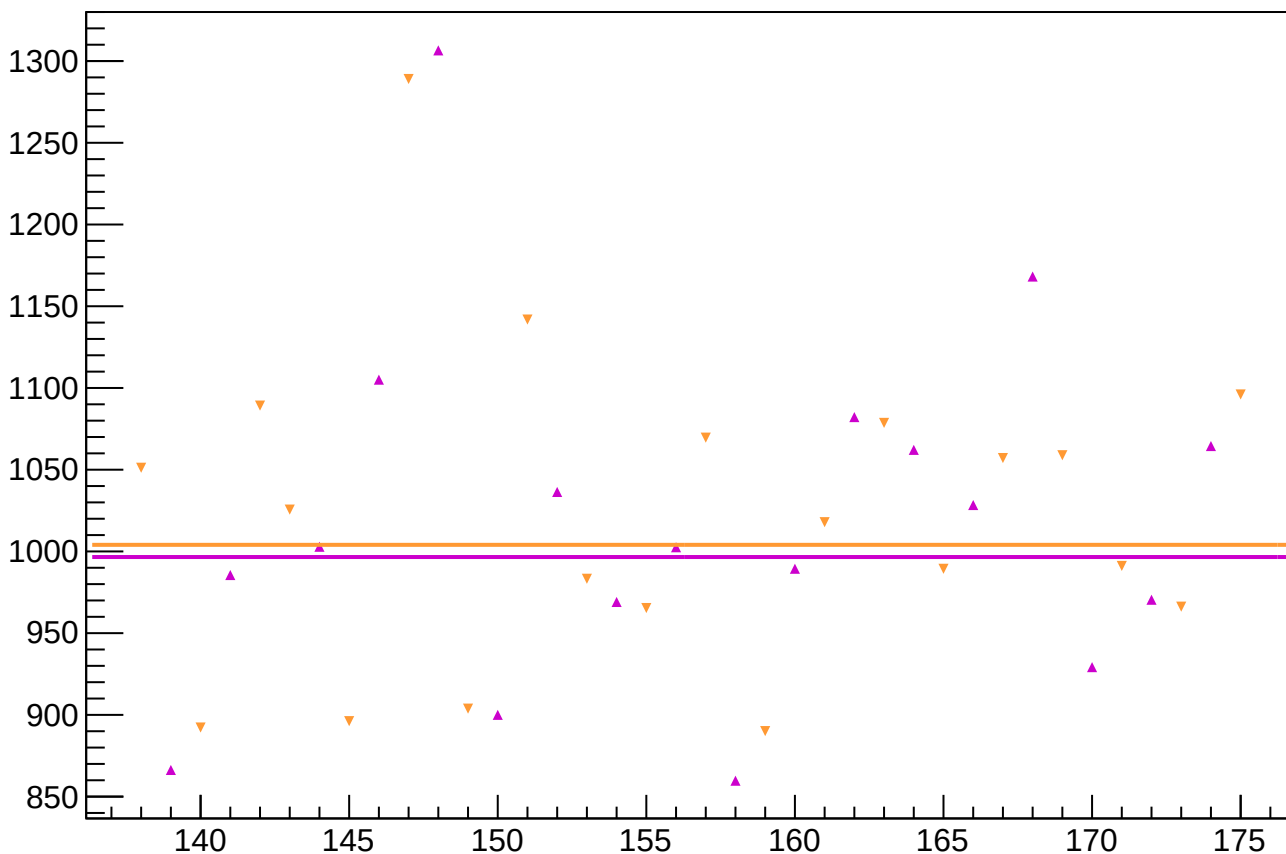
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 148.752+/-266.553  $\chi^2/\text{NDF}$ :33.8/17

Out: -474.714+/-260.775  $\chi^2/\text{NDF}$ :16.8/19

All: -169.810+/-186.405  $\chi^2/\text{NDF}$ : 53.4/37

# asym\_sam5\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 1004.034+/-0.184  $\chi^2$ /NDF:239373.9/19

Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left In: 996.576+/-0.188  $\chi^2$ /NDF:272385.8/17

Left: 1000.387+/-0.132  $\chi^2$ /NDF: 512559.6/37

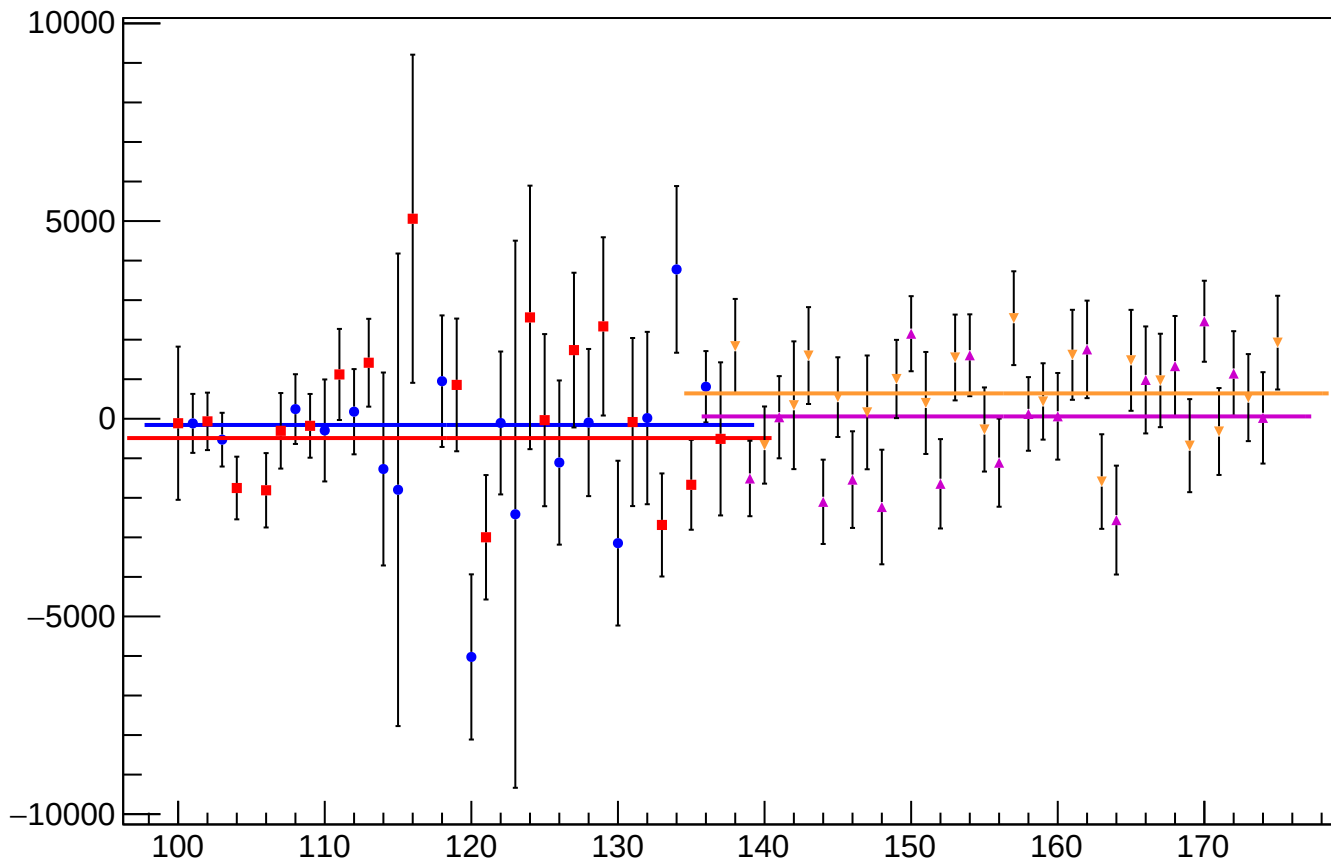
Right: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

In: 996.576+/-0.188  $\chi^2$ /NDF:272385.8/17

Out: 1004.034+/-0.184  $\chi^2$ /NDF:239373.9/19

All: 1000.387+/-0.132  $\chi^2$ /NDF: 512559.6/37

# asym\_sam5\_mean vs Slug, Sign Corrected



Right In: -157.178+/-312.499  $\chi^2/\text{NDF}$ : 16.2/16

Left Out: 641.301+/-255.734  $\chi^2/\text{NDF}$ :15.7/19

Right Out: -488.583+/-282.758  $\chi^2/\text{NDF}$ : 22.6/18

Left In: 58.763+/-261.797  $\chi^2/\text{NDF}$ :35.0/17

Left: 356.856+/-182.937  $\chi^2/\text{NDF}$ : 53.3/37

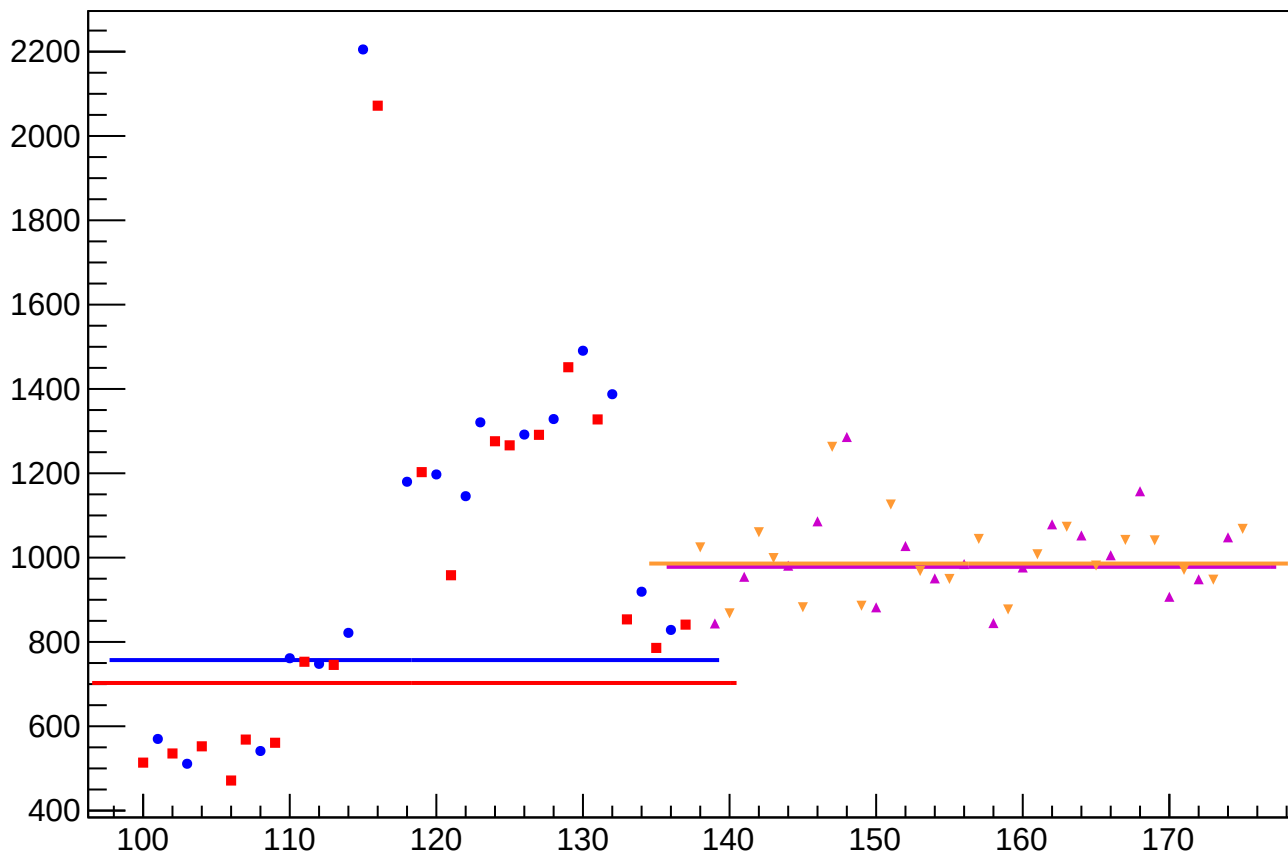
Right: -339.397+/-209.669  $\chi^2/\text{NDF}$ : 39.5/35

In: -30.290+/-200.681  $\chi^2/\text{NDF}$ :51.5/34

Out: 132.921+/-189.667  $\chi^2/\text{NDF}$ :47.1/38

All: 55.917+/-137.844  $\chi^2/\text{NDF}$ : 99.0/73

# asym\_sam5\_rms vs Slug, Sign Corrected



Right In: 756.985+/-0.221  $\chi^2/\text{NDF}$ : 1711285.9/16

Left Out: 985.905+/-0.181  $\chi^2/\text{NDF}$ : 240846.7/19

Right Out: 702.656+/-0.200  $\chi^2/\text{NDF}$ : 1689579.7/18

Left In: 978.158+/-0.185  $\chi^2/\text{NDF}$ : 291767.3/17

Left: 982.122+/-0.129  $\chi^2/\text{NDF}$ : 533510.2/37

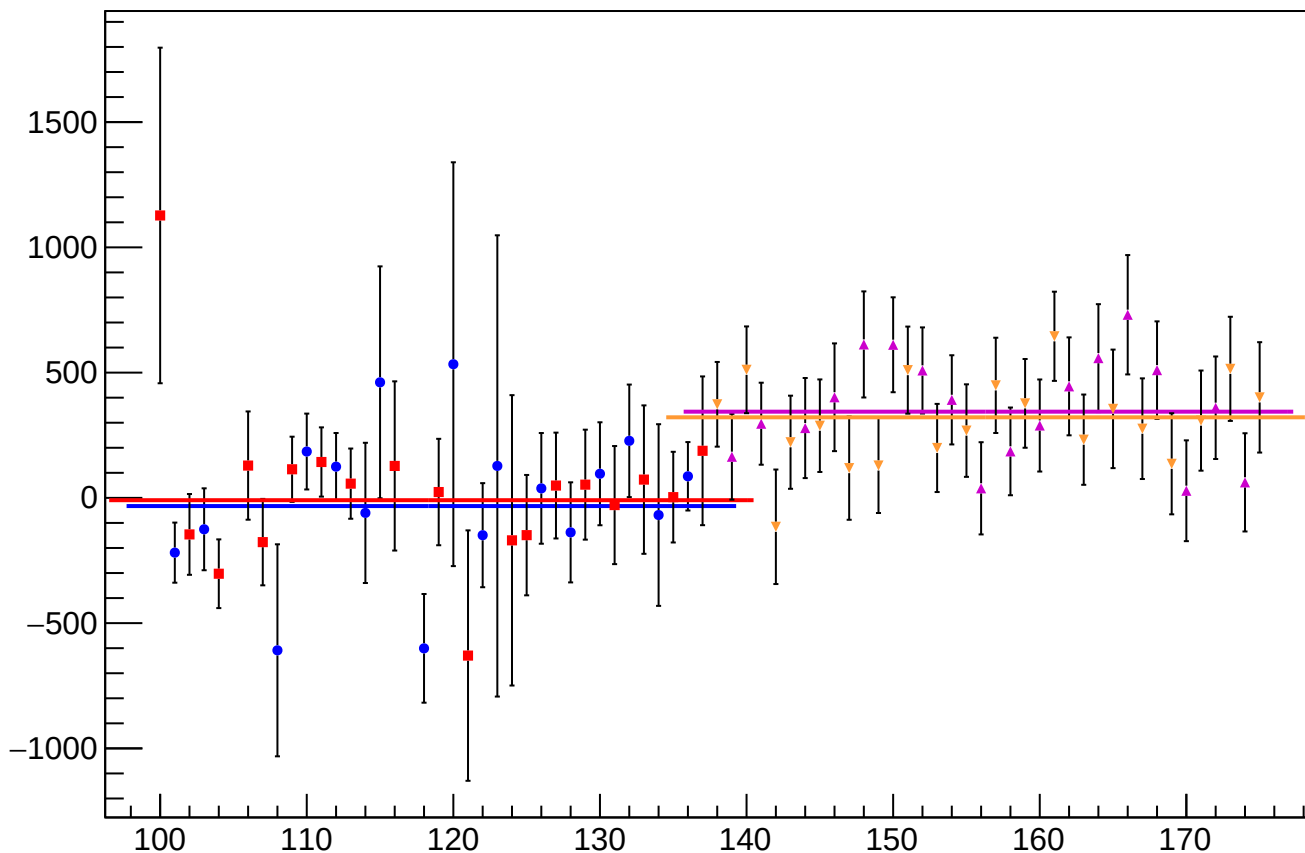
Right: 727.113+/-0.148  $\chi^2/\text{NDF}$ : 3434103.1/35

In: 886.947+/-0.142  $\chi^2/\text{NDF}$ : 2591734.8/34

Out: 858.460+/-0.134  $\chi^2/\text{NDF}$ : 3034368.7/38

All: 871.900+/-0.097  $\chi^2/\text{NDF}$ : 5647390.0/73

# dit\_asym\_sam6\_mean vs Slug, Sign Corrected



Right In:  $-32.694 \pm 48.431$   $\chi^2/\text{NDF}: 19.7/16$

Left Out:  $321.591 \pm 42.653$   $\chi^2/\text{NDF}: 15.0/19$

Right Out:  $-9.277 \pm 45.600$   $\chi^2/\text{NDF}: 14.7/18$

Left In:  $344.115 \pm 45.092$   $\chi^2/\text{NDF}: 18.8/17$

Left:  $332.227 \pm 30.987$   $\chi^2/\text{NDF}: 33.9/37$

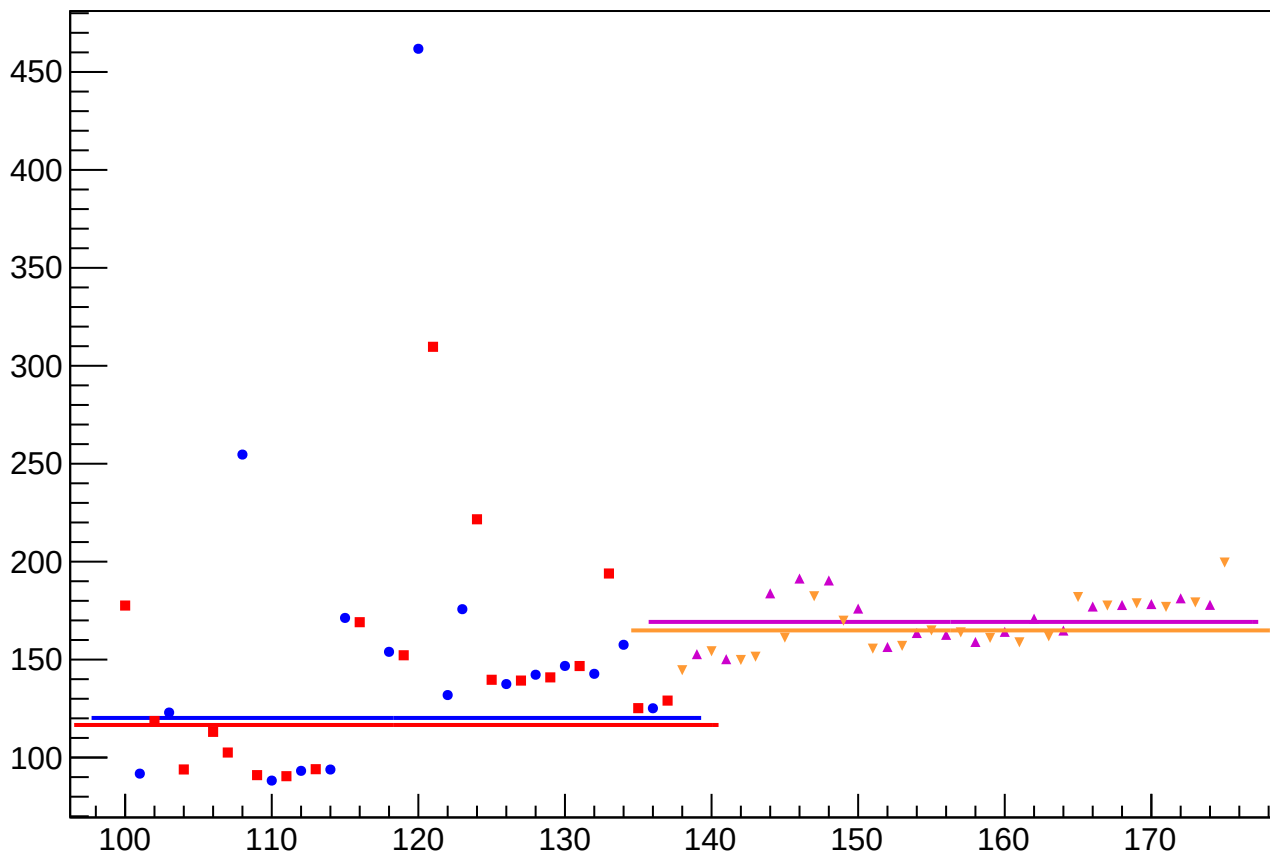
Right:  $-20.281 \pm 33.200$   $\chi^2/\text{NDF}: 34.6/35$

In:  $169.146 \pm 33.002$   $\chi^2/\text{NDF}: 70.9/34$

Out:  $167.193 \pm 31.150$   $\chi^2/\text{NDF}: 57.8/38$

All:  $168.113 \pm 22.653$   $\chi^2/\text{NDF}: 128.7/73$

# dit\_asym\_sam6\_rms vs Slug, Sign Corrected



Right In: 120.207 $\pm$ 0.034  $\chi^2$ /NDF: 1062326.6/16

Left Out: 164.895 $\pm$ 0.030  $\chi^2$ /NDF:179603.9/19

Right Out: 116.618 $\pm$ 0.032  $\chi^2$ /NDF: 997956.6/18

Left In: 169.238 $\pm$ 0.032  $\chi^2$ /NDF:146031.2/17

Left: 166.946 $\pm$ 0.022  $\chi^2$ /NDF: 335423.4/37

Right: 118.304 $\pm$ 0.023  $\chi^2$ /NDF: 2066104.2/35

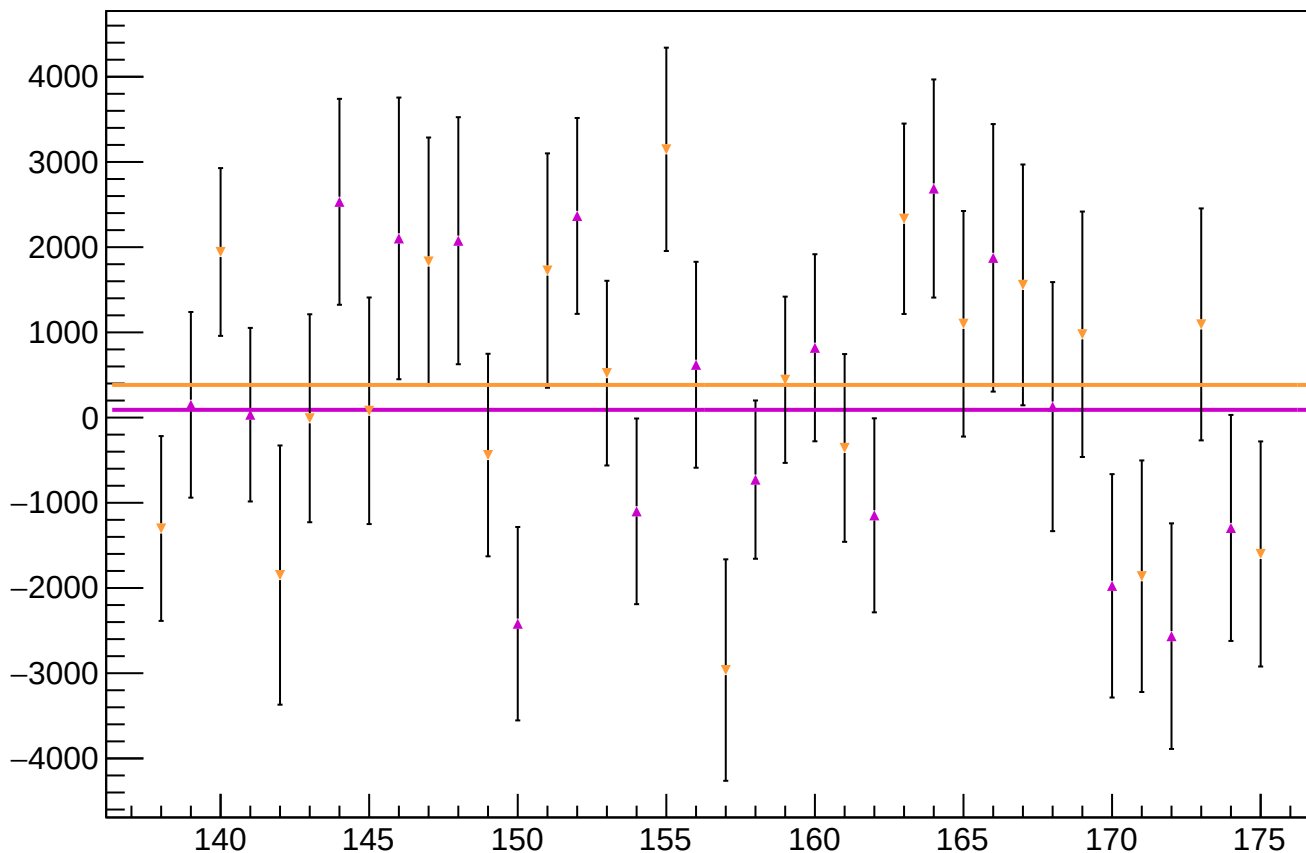
In: 146.470 $\pm$ 0.023  $\chi^2$ /NDF:2306370.3/34

Out: 142.367 $\pm$ 0.022  $\chi^2$ /NDF:2373228.5/38

All: 144.300 $\pm$ 0.016  $\chi^2$ /NDF: 4695951.5/73



asym\_sam6\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 383.221+/-274.317  $\chi^2/\text{NDF}$ :31.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 91.109+/-284.456  $\chi^2/\text{NDF}$ :33.1/17

Left: 242.464+/-197.458  $\chi^2/\text{NDF}$ : 65.2/37

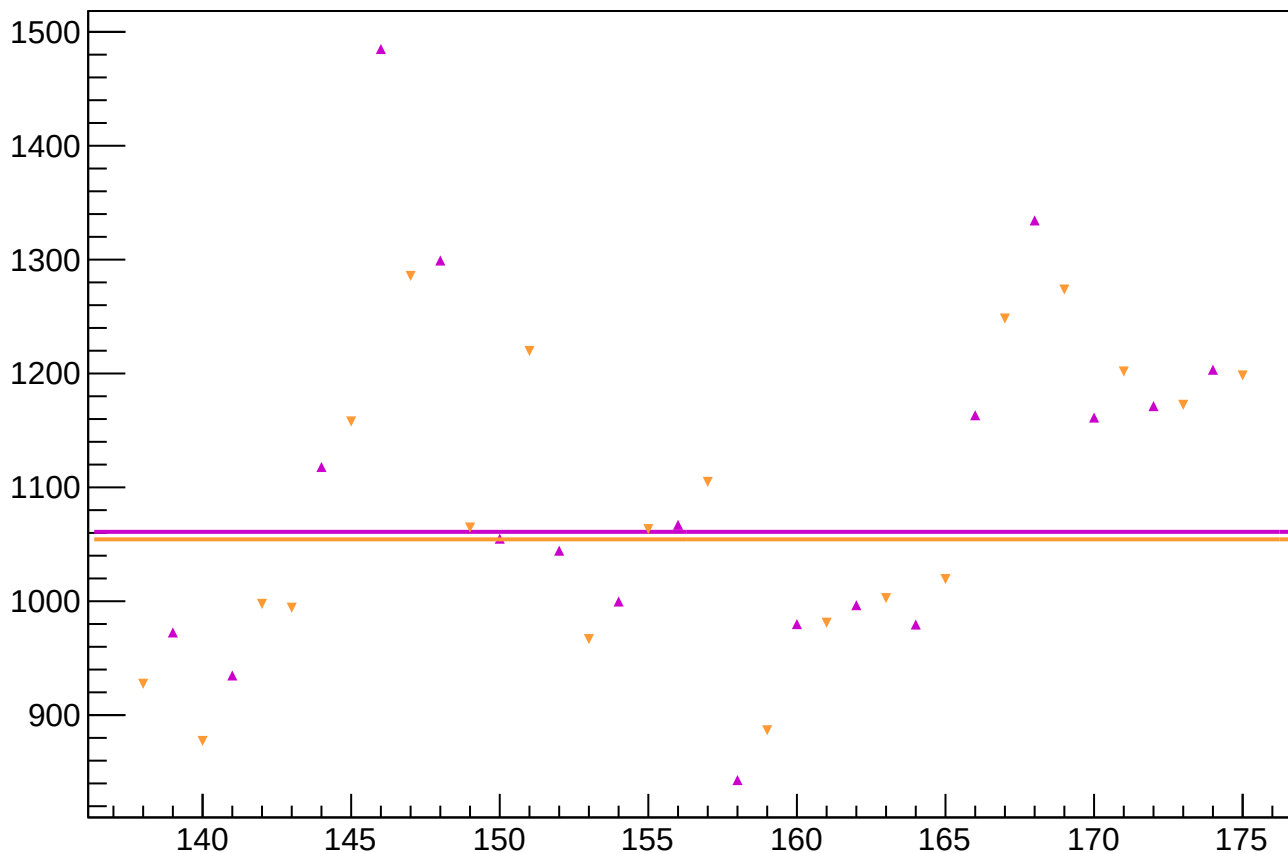
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 91.109+/-284.456  $\chi^2/\text{NDF}$ :33.1/17

Out: 383.221+/-274.317  $\chi^2/\text{NDF}$ :31.6/19

All: 242.464+/-197.458  $\chi^2/\text{NDF}$ : 65.2/37

# asym\_sam6\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1054.346+/-0.194  $\chi^2/\text{NDF}$ : 427562.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1060.938+/-0.201  $\chi^2/\text{NDF}$ : 503481.4/17

Left: 1057.523+/-0.140  $\chi^2/\text{NDF}$ : 931600.4/37

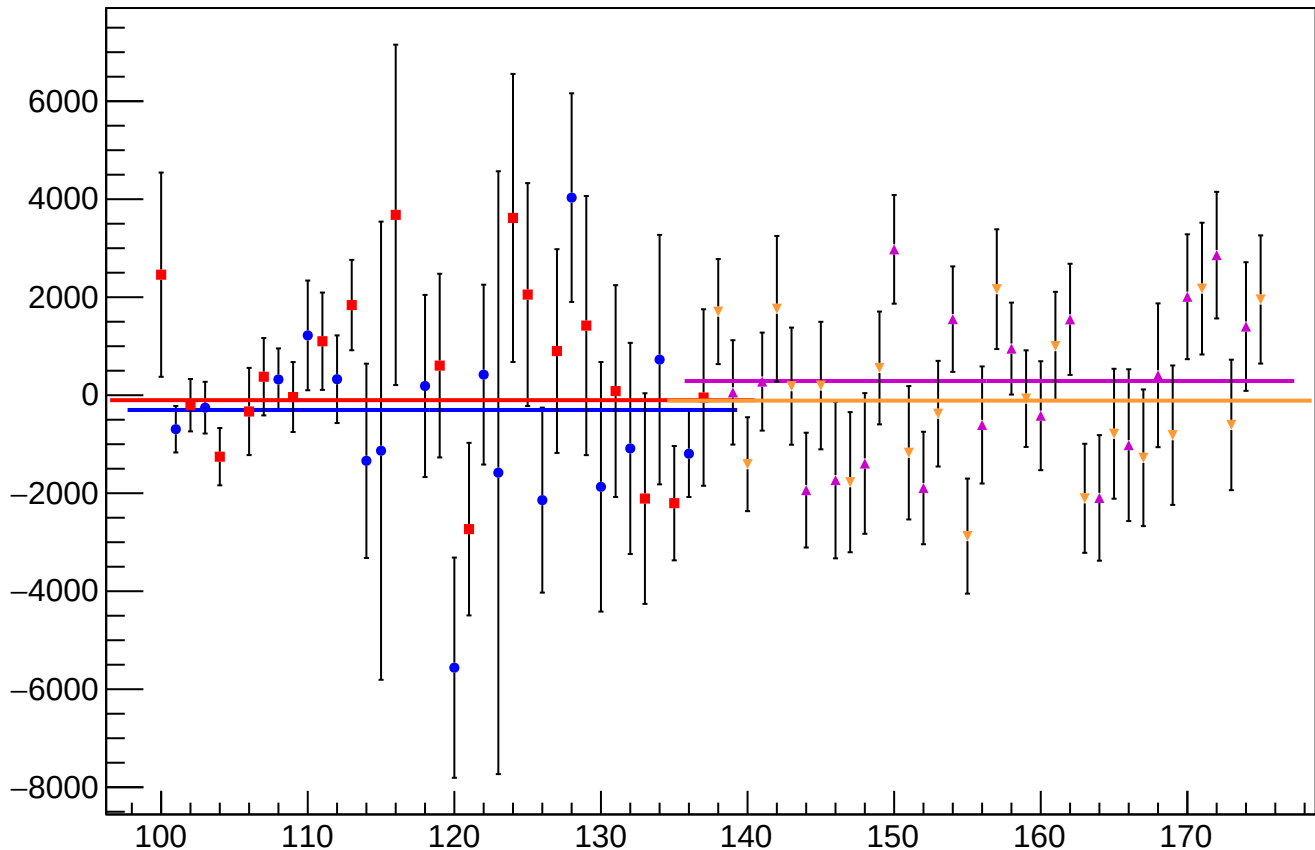
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 1060.938+/-0.201  $\chi^2/\text{NDF}$ : 503481.4/17

Out: 1054.346+/-0.194  $\chi^2/\text{NDF}$ : 427562.3/19

All: 1057.523+/-0.140  $\chi^2/\text{NDF}$ : 931600.4/37

# asym\_sam6\_mean vs Slug, Sign Corrected



Right In:  $-301.000 \pm 250.042$   $\chi^2/\text{NDF}: 16.8/16$

Left Out:  $-109.950 \pm 270.429$   $\chi^2/\text{NDF}: 28.7/19$

Right Out:  $-100.857 \pm 245.981$   $\chi^2/\text{NDF}: 22.5/18$

Left In:  $289.801 \pm 281.347$   $\chi^2/\text{NDF}: 30.9/17$

Left:  $82.018 \pm 194.968$   $\chi^2/\text{NDF}: 60.7/37$

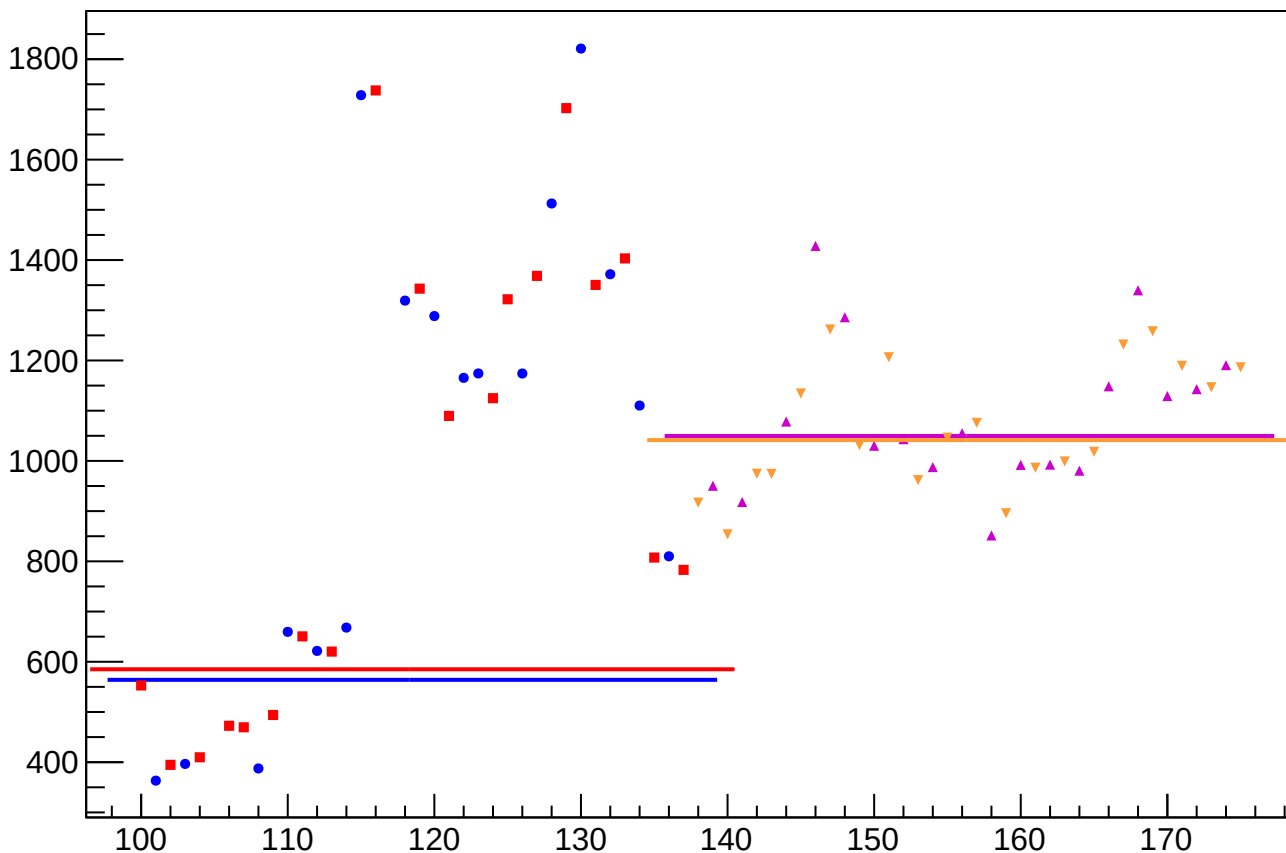
Right:  $-199.290 \pm 175.353$   $\chi^2/\text{NDF}: 39.7/35$

In:  $-40.284 \pm 186.899$   $\chi^2/\text{NDF}: 50.2/34$

Out:  $-104.974 \pm 181.965$   $\chi^2/\text{NDF}: 51.3/38$

All:  $-73.494 \pm 130.378$   $\chi^2/\text{NDF}: 101.5/73$

# asym\_sam6\_rms vs Slug, Sign Corrected



Right In: 564.003 $\pm$ 0.177  $\chi^2$ /NDF: 3261491.3/16

Left Out: 1041.446 $\pm$ 0.191  $\chi^2$ /NDF: 410962.8/19

Right Out: 585.070 $\pm$ 0.174  $\chi^2$ /NDF: 2820837.8/18

Left In: 1049.620 $\pm$ 0.199  $\chi^2$ /NDF: 460185.5/17

Left: 1045.371 $\pm$ 0.138  $\chi^2$ /NDF: 872026.0/37

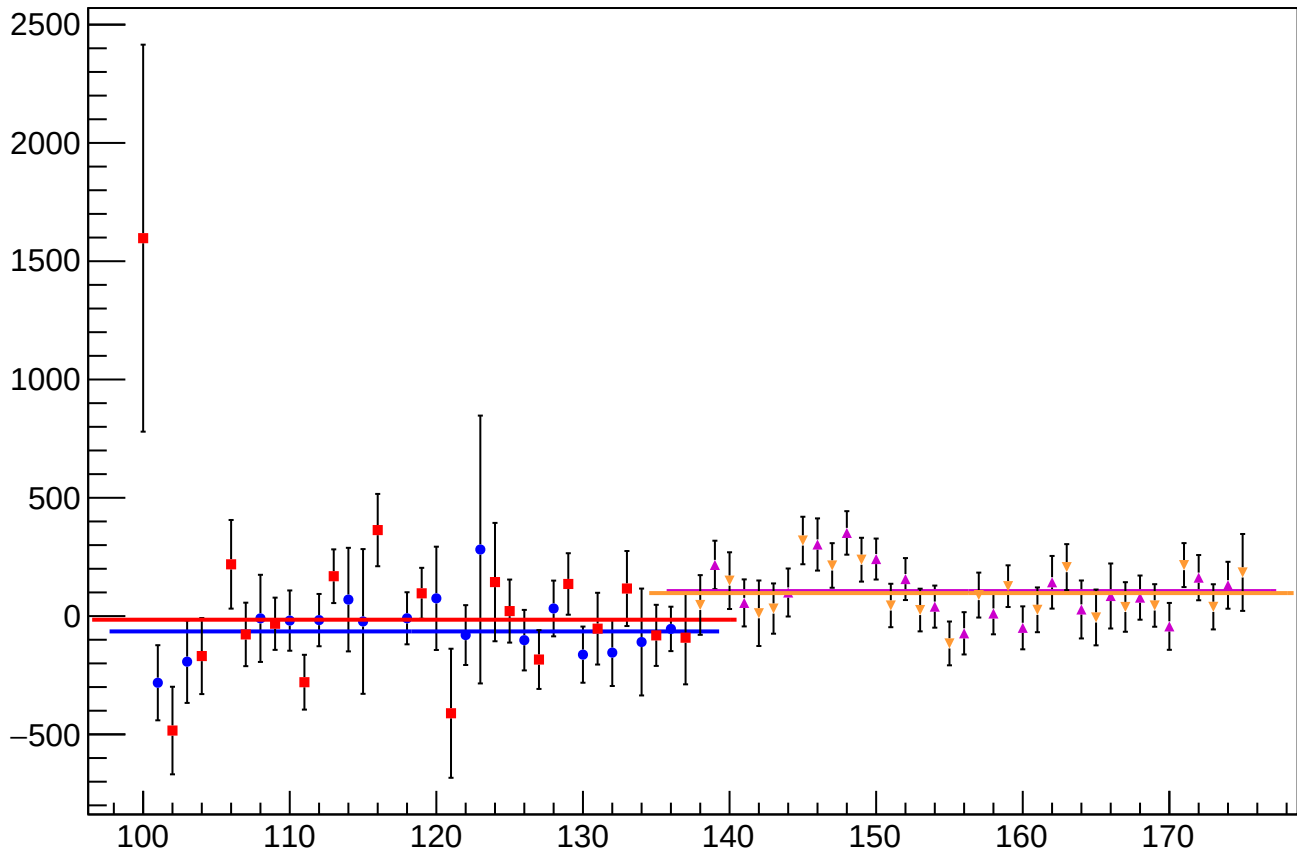
Right: 574.709 $\pm$ 0.124  $\chi^2$ /NDF: 6089543.5/35

In: 778.303 $\pm$ 0.132  $\chi^2$ /NDF: 7050705.0/34

Out: 791.700 $\pm$ 0.129  $\chi^2$ /NDF: 6348859.2/38

All: 785.181 $\pm$ 0.092  $\chi^2$ /NDF: 13404840.1/73

# dit\_asym\_sam7\_mean vs Slug, Sign Corrected



Right In:  $-64.797 \pm 34.629$   $\chi^2/\text{NDF}$ : 6.2/16

Left Out:  $97.204 \pm 22.550$   $\chi^2/\text{NDF}$ : 21.7/19

Right Out:  $-15.294 \pm 33.422$   $\chi^2/\text{NDF}$ : 35.0/18

Left In:  $105.718 \pm 23.037$   $\chi^2/\text{NDF}$ : 26.5/17

Left:  $101.370 \pm 16.115$   $\chi^2/\text{NDF}$ : 48.3/37

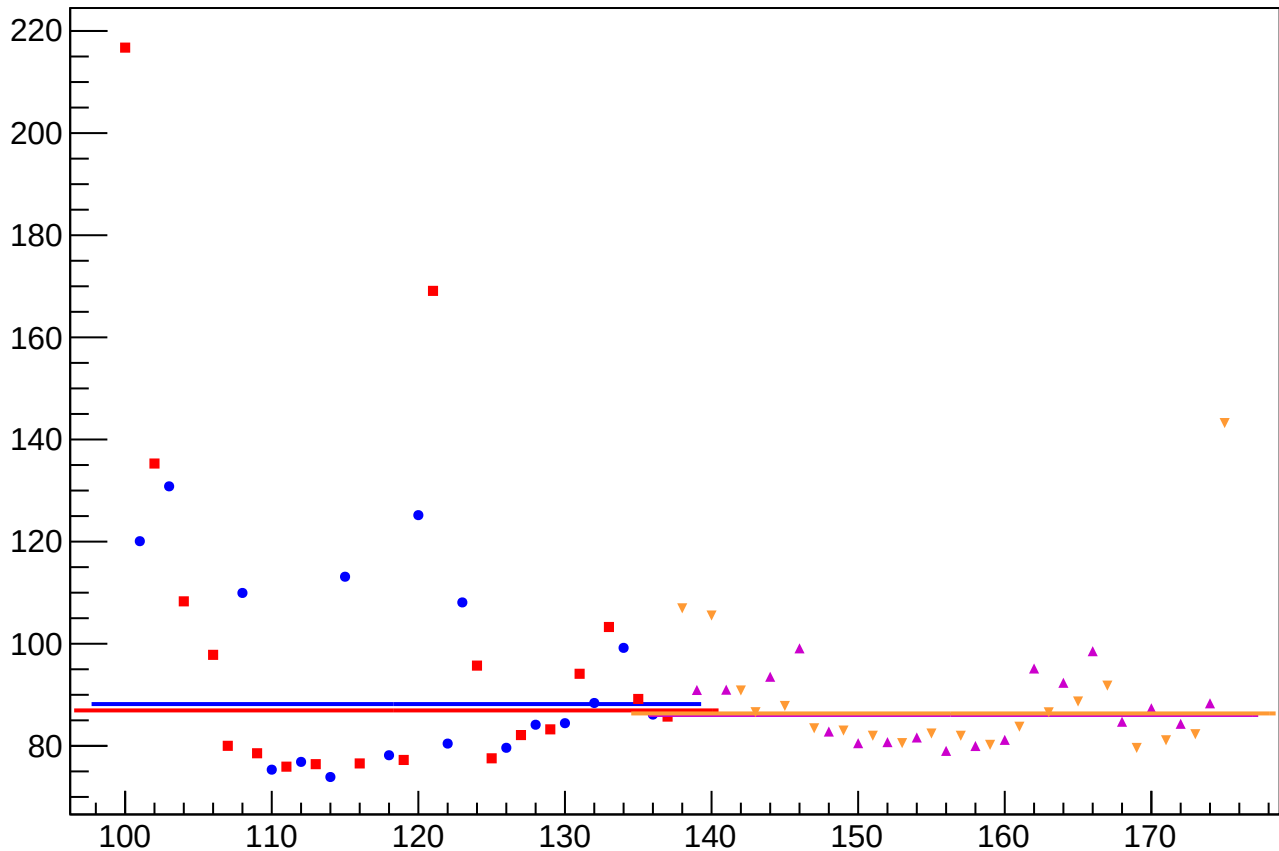
Right:  $-39.167 \pm 24.048$   $\chi^2/\text{NDF}$ : 42.2/35

In:  $53.406 \pm 19.181$   $\chi^2/\text{NDF}$ : 49.4/34

Out:  $62.012 \pm 18.693$   $\chi^2/\text{NDF}$ : 64.5/38

All:  $57.820 \pm 13.387$   $\chi^2/\text{NDF}$ : 114.0/73

# dit\_asym\_sam7\_rms vs Slug, Sign Corrected



Right In: 88.186 $\pm$ 0.024  $\chi^2$ /NDF: 394447.7/16

Left Out: 86.352 $\pm$ 0.016  $\chi^2$ /NDF: 415720.7/19

Right Out: 86.943 $\pm$ 0.024  $\chi^2$ /NDF: 531359.9/18

Left In: 86.053 $\pm$ 0.016  $\chi^2$ /NDF: 136423.4/17

Left: 86.206 $\pm$ 0.011  $\chi^2$ /NDF: 552316.5/37

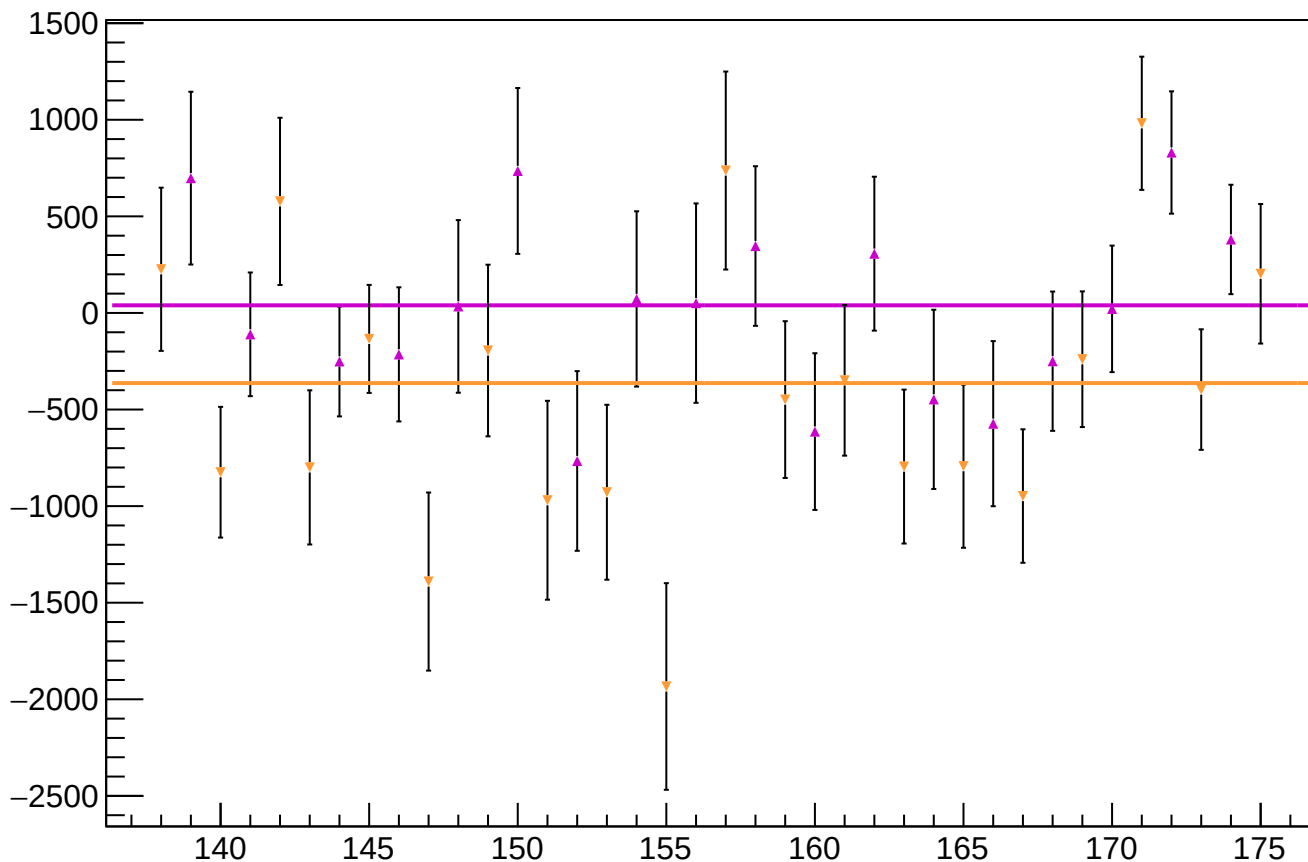
Right: 87.542 $\pm$ 0.017  $\chi^2$ /NDF: 927142.1/35

In: 86.707 $\pm$ 0.014  $\chi^2$ /NDF: 536131.7/34

Out: 86.537 $\pm$ 0.013  $\chi^2$ /NDF: 947509.9/38

All: 86.620 $\pm$ 0.009  $\chi^2$ /NDF: 1483722.5/73

asym\_sam7\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -363.054+/-87.080  $\chi^2/\text{NDF}$ :54.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 39.458+/-88.769  $\chi^2/\text{NDF}$ :24.7/17

Left: -165.665+/-62.163  $\chi^2/\text{NDF}$ : 89.8/37

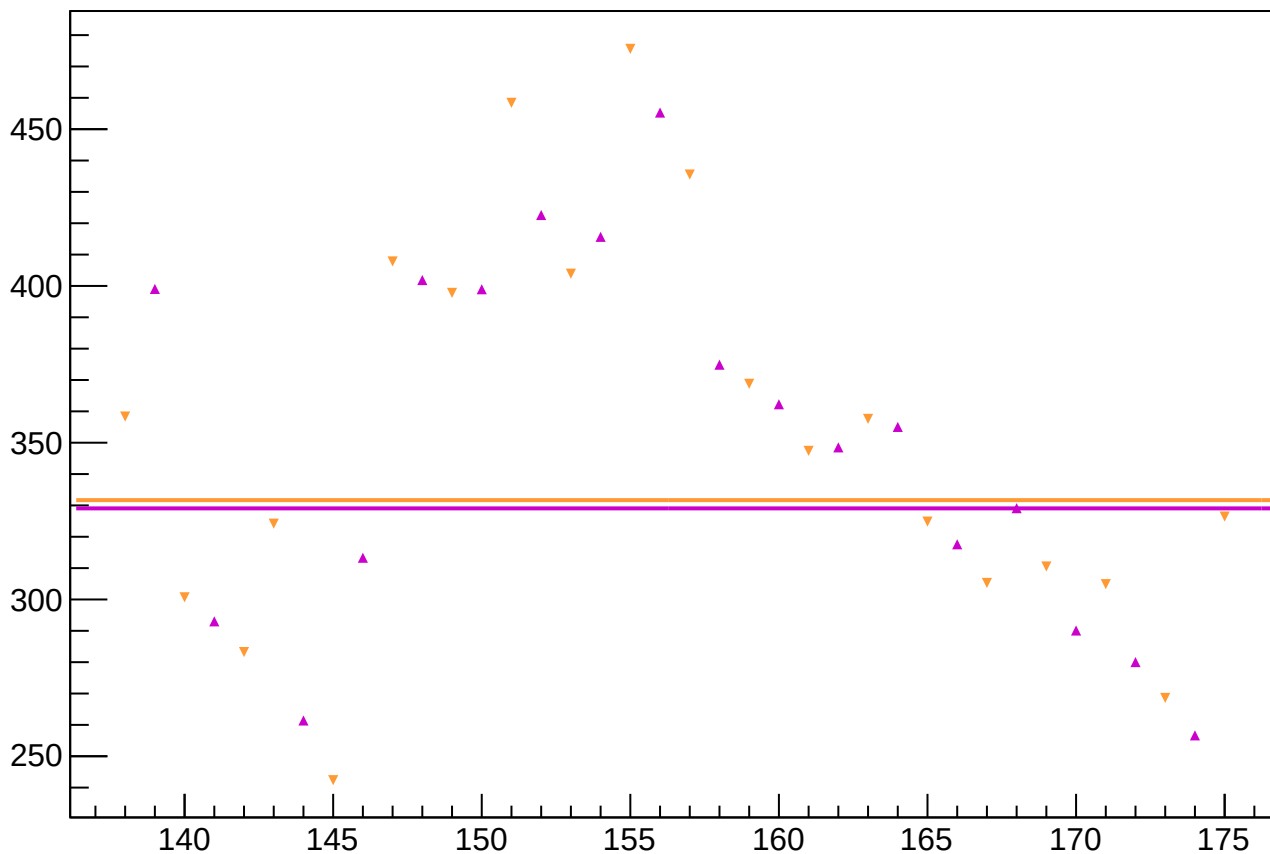
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 39.458+/-88.769  $\chi^2/\text{NDF}$ :24.7/17

Out: -363.054+/-87.080  $\chi^2/\text{NDF}$ :54.6/19

All: -165.665+/-62.163  $\chi^2/\text{NDF}$ : 89.8/37

# asym\_sam7\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 331.683+/-0.062  $\chi^2/\text{NDF}$ : 894792.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 329.054+/-0.063  $\chi^2/\text{NDF}$ : 828574.3/17

Left: 330.394+/-0.044  $\chi^2/\text{NDF}$ : 1724260.7/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

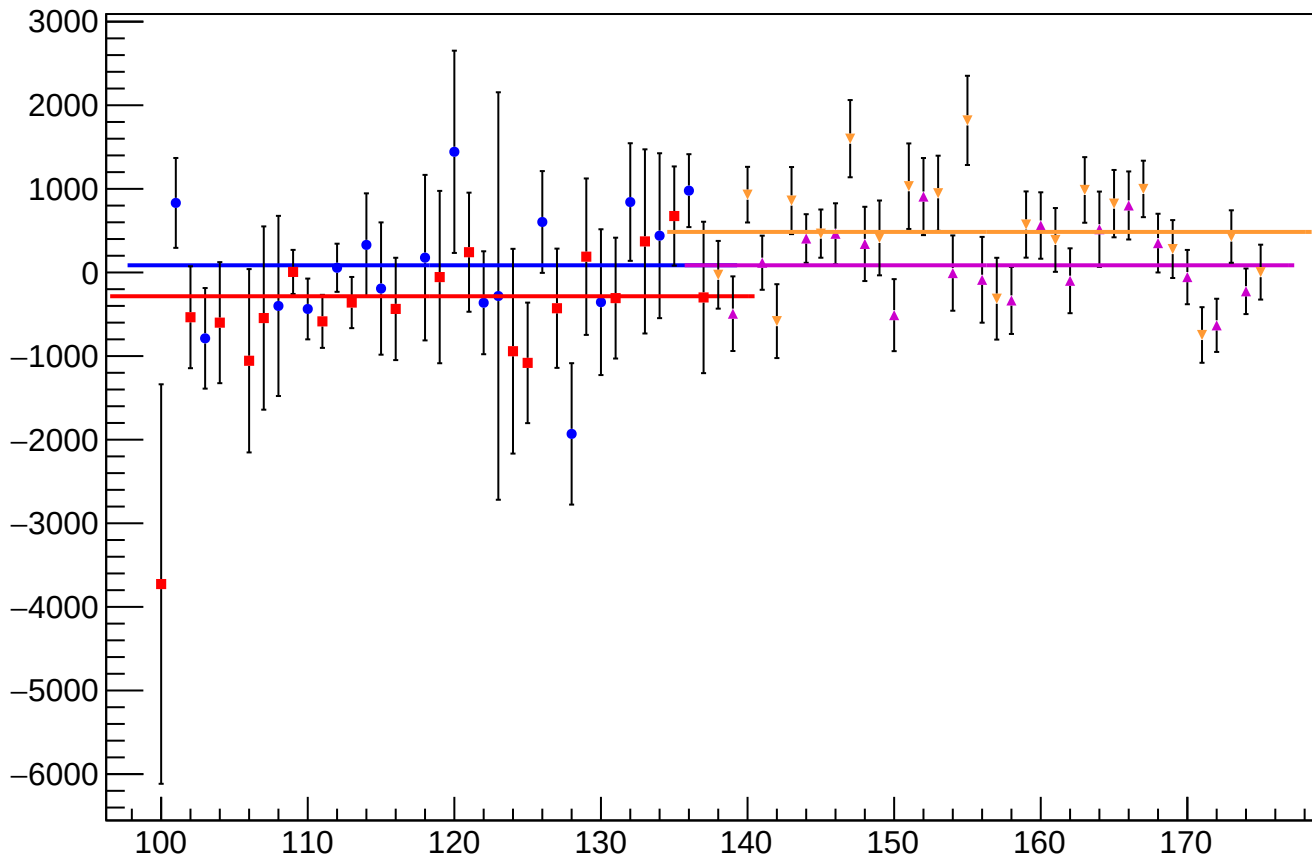
In: 329.054+/-0.063  $\chi^2/\text{NDF}$ : 828574.3/17

Out: 331.683+/-0.062  $\chi^2/\text{NDF}$ : 894792.3/19

All: 330.394+/-0.044  $\chi^2/\text{NDF}$ : 1724260.7/37



# asym\_sam7\_mean vs Slug, Sign Corrected



Right In: 85.810+/-142.601  $\chi^2/\text{NDF}$ : 20.6/16

Left Out: 484.983+/-85.714  $\chi^2/\text{NDF}$ : 48.1/19

Right Out: -284.456+/-129.599  $\chi^2/\text{NDF}$ : 10.6/18

Left In: 85.850+/-88.075  $\chi^2/\text{NDF}$ : 23.5/17

Left: 290.838+/-61.427  $\chi^2/\text{NDF}$ : 82.2/37

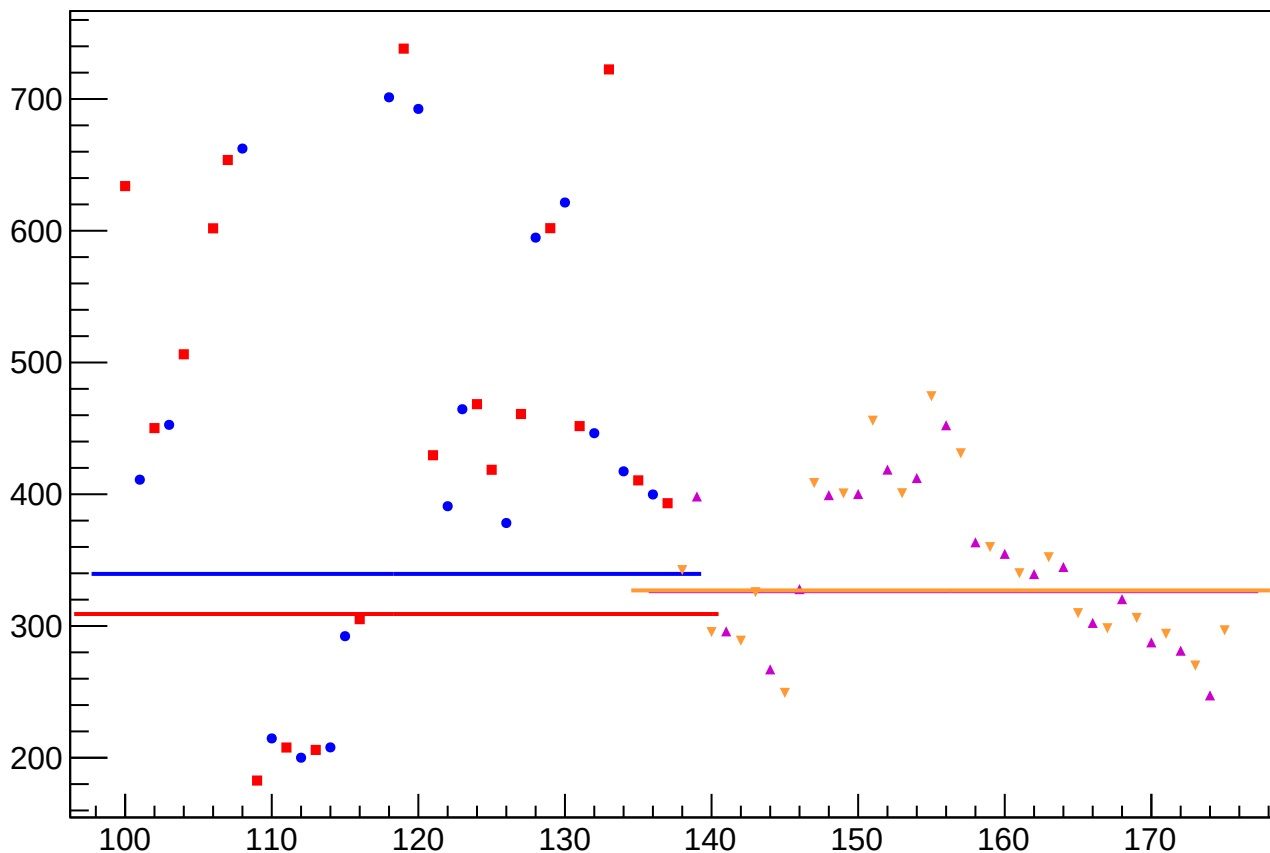
Right: -116.969+/-95.908  $\chi^2/\text{NDF}$ : 34.9/35

In: 85.839+/-74.934  $\chi^2/\text{NDF}$ : 44.0/34

Out: 250.836+/-71.492  $\chi^2/\text{NDF}$ : 83.2/38

All: 172.214+/-51.727  $\chi^2/\text{NDF}$ : 129.8/73

# asym\_sam7\_rms vs Slug, Sign Corrected



Right In: 339.553 $\pm$ 0.101  $\chi^2$ /NDF: 2042244.1/16

Left Out: 327.015 $\pm$ 0.061  $\chi^2$ /NDF: 873967.4/19

Right Out: 309.105 $\pm$ 0.092  $\chi^2$ /NDF: 2730308.7/18

Left In: 326.421 $\pm$ 0.062  $\chi^2$ /NDF: 816575.8/17

Left: 326.726 $\pm$ 0.043  $\chi^2$ /NDF: 1690589.8/37

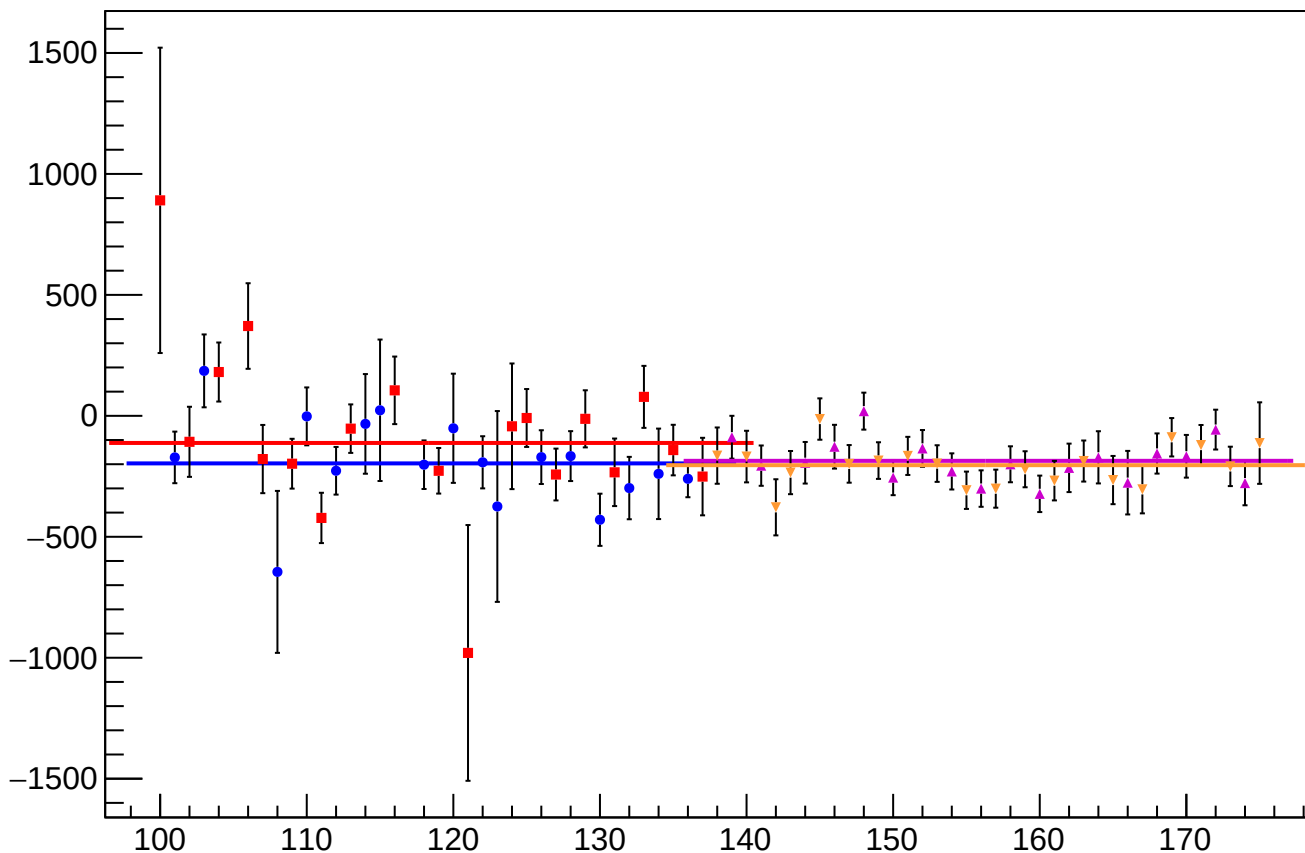
Right: 322.878 $\pm$ 0.068  $\chi^2$ /NDF: 4822487.1/35

In: 330.047 $\pm$ 0.053  $\chi^2$ /NDF: 2871096.0/34

Out: 321.564 $\pm$ 0.051  $\chi^2$ /NDF: 3630847.3/38

All: 325.607 $\pm$ 0.037  $\chi^2$ /NDF: 6515360.1/73

# dit\_asym\_sam8\_mean vs Slug, Sign Corrected



Right In:  $-196.599 \pm 30.399$   $\chi^2/\text{NDF}: 19.0/16$

Left Out:  $-203.970 \pm 19.371$   $\chi^2/\text{NDF}: 16.7/19$

Right Out:  $-112.097 \pm 29.622$   $\chi^2/\text{NDF}: 39.3/18$

Left In:  $-186.002 \pm 19.772$   $\chi^2/\text{NDF}: 20.5/17$

Left:  $-195.170 \pm 13.837$   $\chi^2/\text{NDF}: 37.6/37$

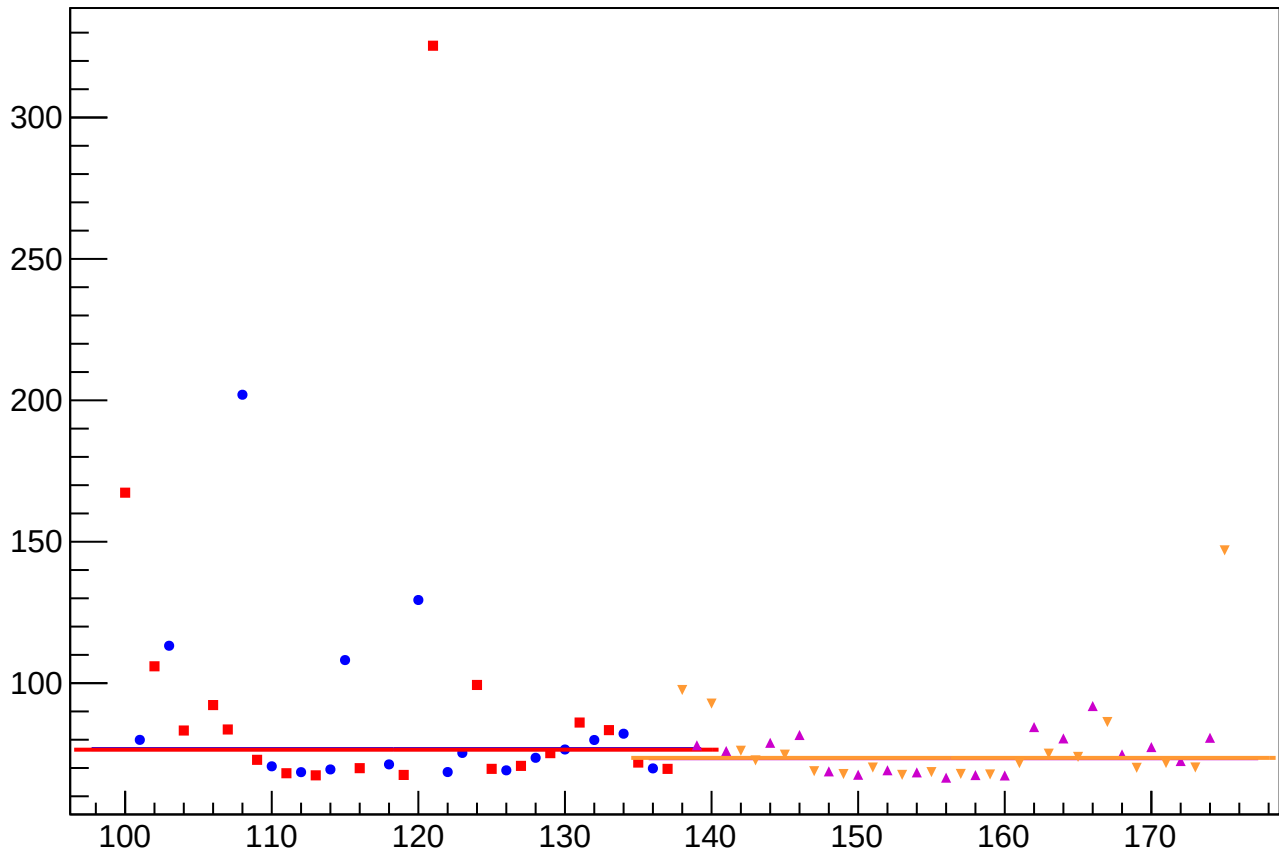
Right:  $-153.254 \pm 21.215$   $\chi^2/\text{NDF}: 62.3/35$

In:  $-189.152 \pm 16.575$   $\chi^2/\text{NDF}: 39.6/34$

Out:  $-176.450 \pm 16.212$   $\chi^2/\text{NDF}: 62.8/38$

All:  $-182.661 \pm 11.590$   $\chi^2/\text{NDF}: 102.7/73$

# dit\_asym\_sam8\_rms vs Slug, Sign Corrected



Right In: 76.692 $\pm$ 0.021  $\chi^2$ /NDF: 600348.1/16

Left Out: 73.578 $\pm$ 0.014  $\chi^2$ /NDF: 639748.6/19

Right Out: 76.479 $\pm$ 0.021  $\chi^2$ /NDF: 699361.8/18

Left In: 73.453 $\pm$ 0.014  $\chi^2$ /NDF: 199109.0/17

Left: 73.517 $\pm$ 0.010  $\chi^2$ /NDF: 838898.1/37

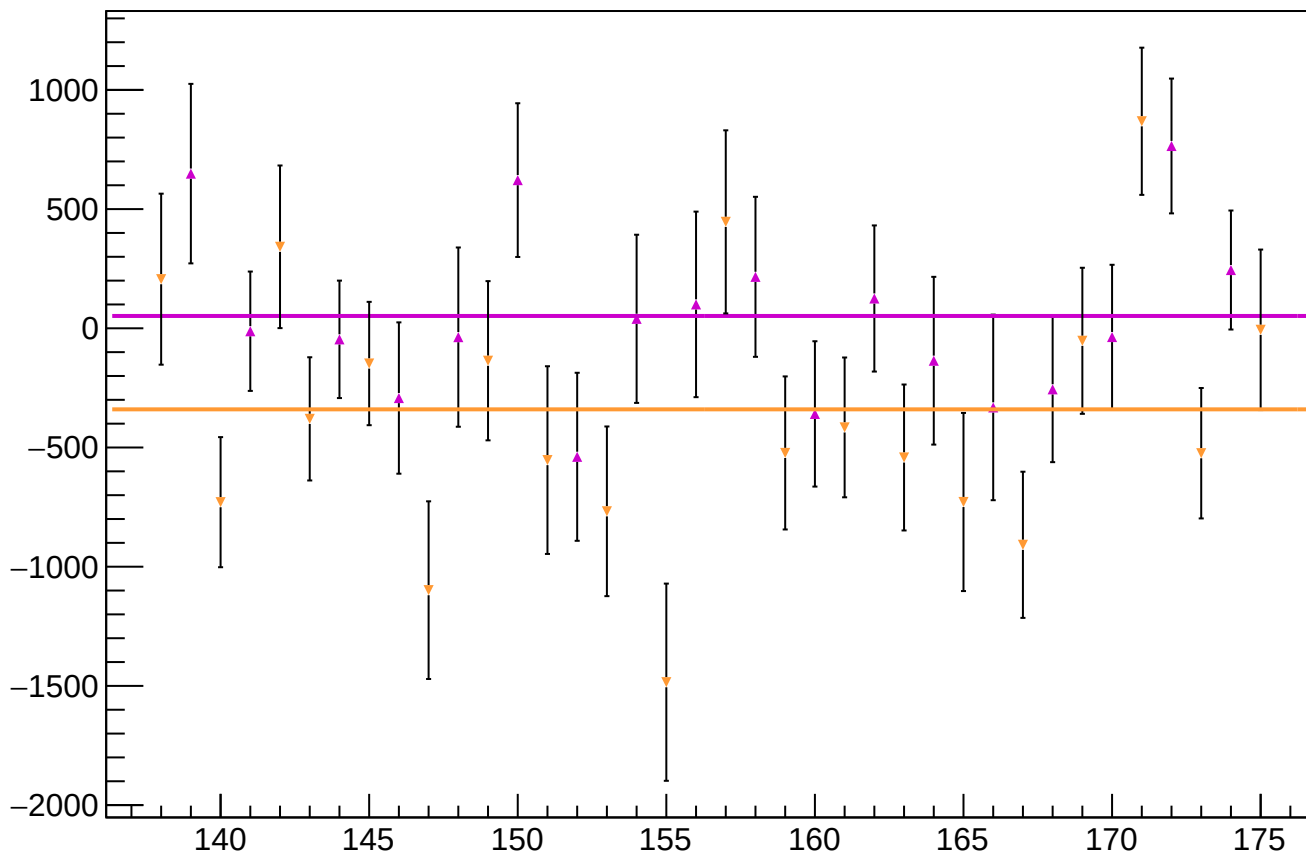
Right: 76.583 $\pm$ 0.015  $\chi^2$ /NDF: 1299760.4/35

In: 74.416 $\pm$ 0.012  $\chi^2$ /NDF: 815412.3/34

Out: 74.447 $\pm$ 0.011  $\chi^2$ /NDF: 1352548.5/38

All: 74.432 $\pm$ 0.008  $\chi^2$ /NDF: 2167964.3/73

asym\_sam8\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -339.962+/-71.428  $\chi^2/\text{NDF}$ :50.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 51.778+/-73.734  $\chi^2/\text{NDF}$ :21.3/17

Left: -150.316+/-51.303  $\chi^2/\text{NDF}$ : 85.9/37

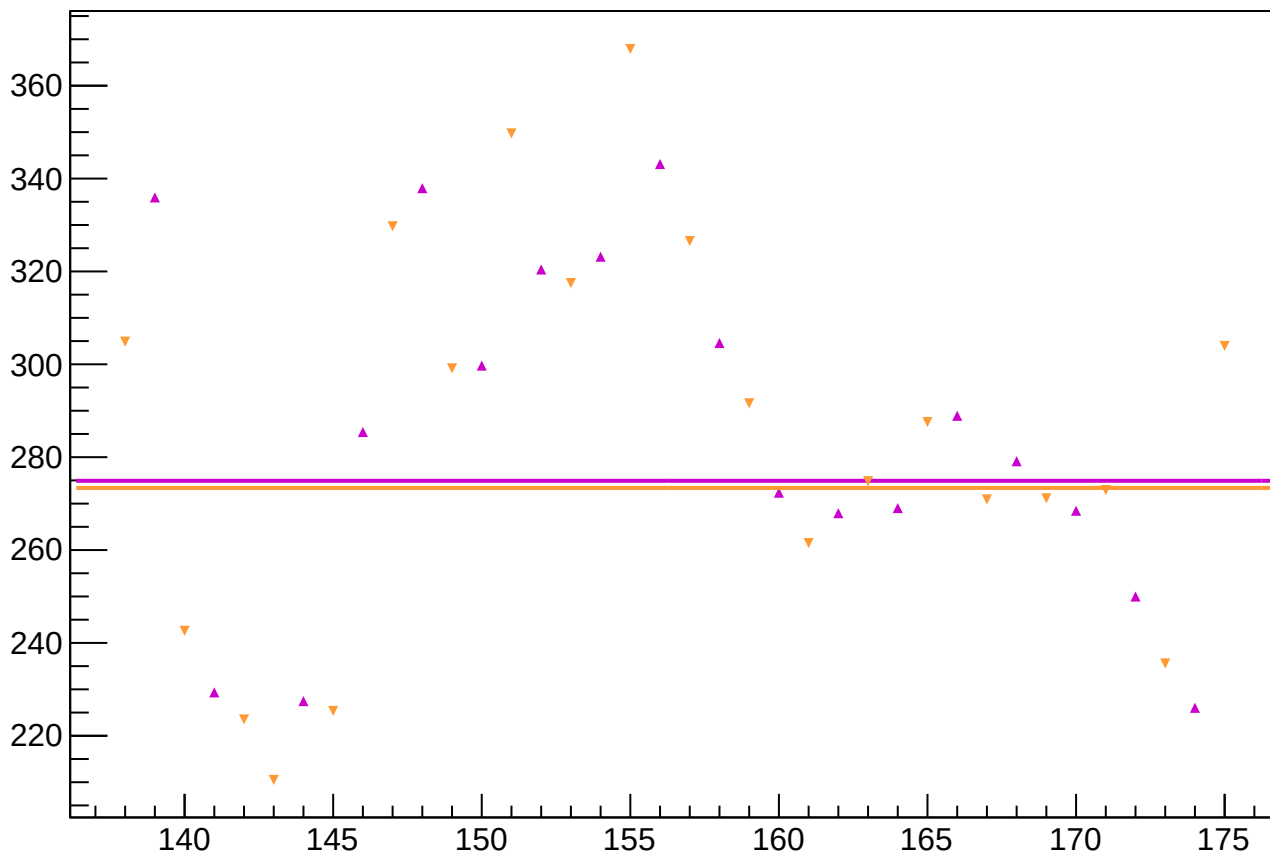
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 51.778+/-73.734  $\chi^2/\text{NDF}$ :21.3/17

Out: -339.962+/-71.428  $\chi^2/\text{NDF}$ :50.0/19

All: -150.316+/-51.303  $\chi^2/\text{NDF}$ : 85.9/37

# asym\_sam8\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 273.377+/-0.051  $\chi^2/\text{NDF}$ :644962.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 274.915+/-0.052  $\chi^2/\text{NDF}$ :509024.0/17

Left: 274.122+/-0.036  $\chi^2/\text{NDF}$ : 1154435.6/37

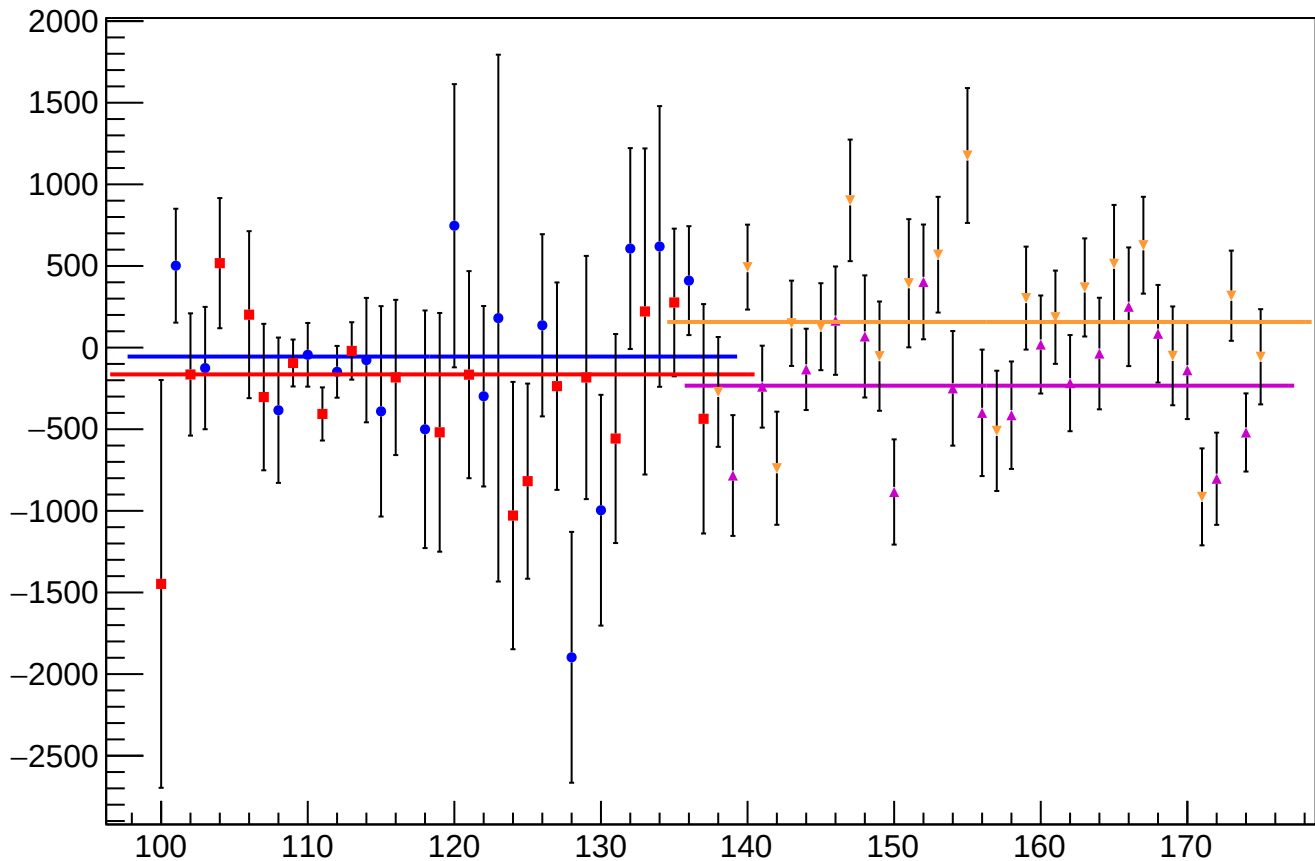
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 274.915+/-0.052  $\chi^2/\text{NDF}$ :509024.0/17

Out: 273.377+/-0.051  $\chi^2/\text{NDF}$ :644962.7/19

All: 274.122+/-0.036  $\chi^2/\text{NDF}$ : 1154435.6/37

# asym\_sam8\_mean vs Slug, Sign Corrected



Right In:  $-54.933 \pm 90.355$   $\chi^2/\text{NDF}: 16.5/16$

Left Out:  $157.061 \pm 70.003$   $\chi^2/\text{NDF}: 44.0/19$

Right Out:  $-164.141 \pm 76.903$   $\chi^2/\text{NDF}: 11.9/18$

Left In:  $-233.218 \pm 72.863$   $\chi^2/\text{NDF}: 21.9/17$

Left:  $-30.270 \pm 50.480$   $\chi^2/\text{NDF}: 80.8/37$

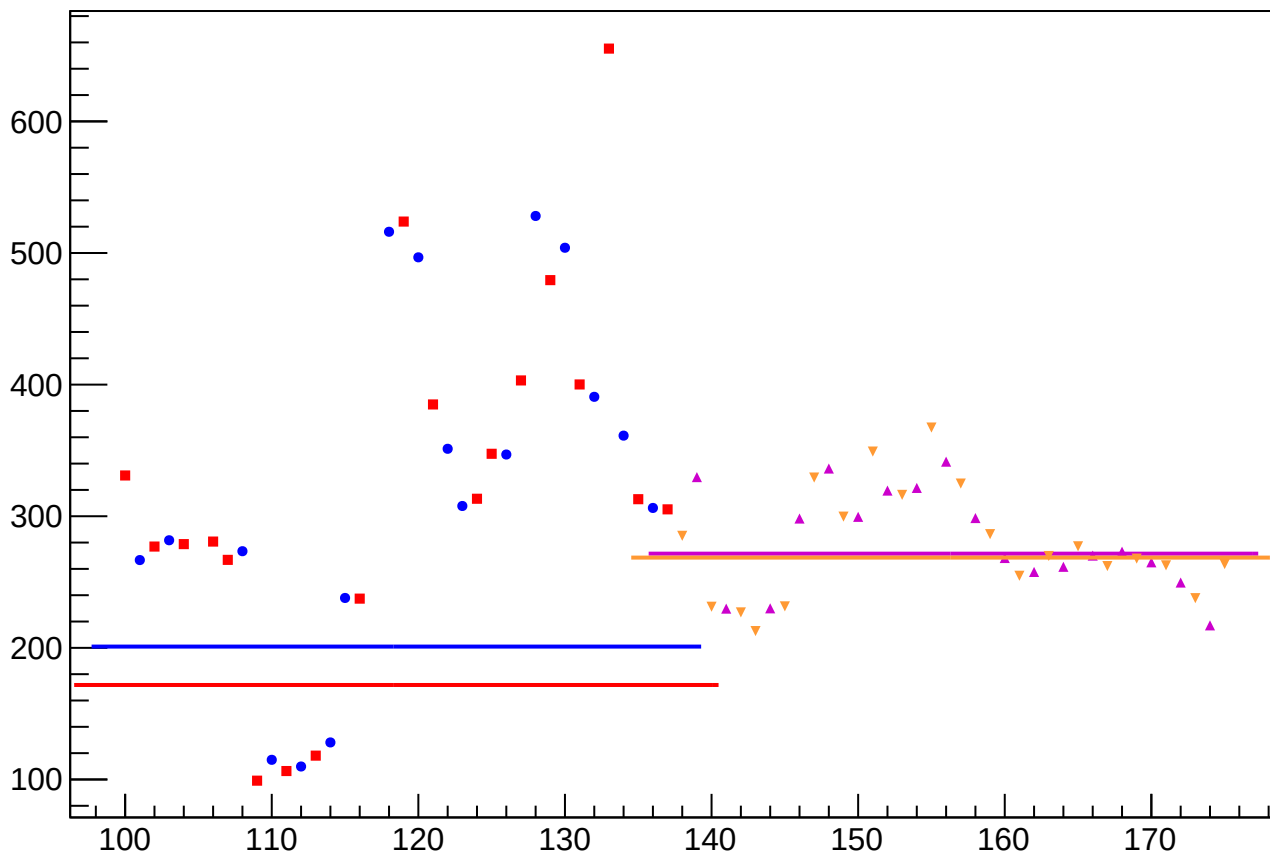
Right:  $-118.264 \pm 58.563$   $\chi^2/\text{NDF}: 29.3/35$

In:  $-162.966 \pm 56.719$   $\chi^2/\text{NDF}: 40.8/34$

Out:  $11.512 \pm 51.768$   $\chi^2/\text{NDF}: 65.5/38$

All:  $-67.780 \pm 38.236$   $\chi^2/\text{NDF}: 111.4/73$

# asym\_sam8\_rms vs Slug, Sign Corrected



Right In: 200.971+/-0.064  $\chi^2/\text{NDF}$ : 3436154.0/16

Left Out: 268.576+/-0.049  $\chi^2/\text{NDF}$ : 596439.9/19

Right Out: 171.794+/-0.054  $\chi^2/\text{NDF}$ : 4092634.7/18

Left In: 271.570+/-0.052  $\chi^2/\text{NDF}$ : 527725.2/17

Left: 270.013+/-0.036  $\chi^2/\text{NDF}$ : 1125920.7/37

Right: 184.051+/-0.041  $\chi^2/\text{NDF}$ : 7649725.9/35

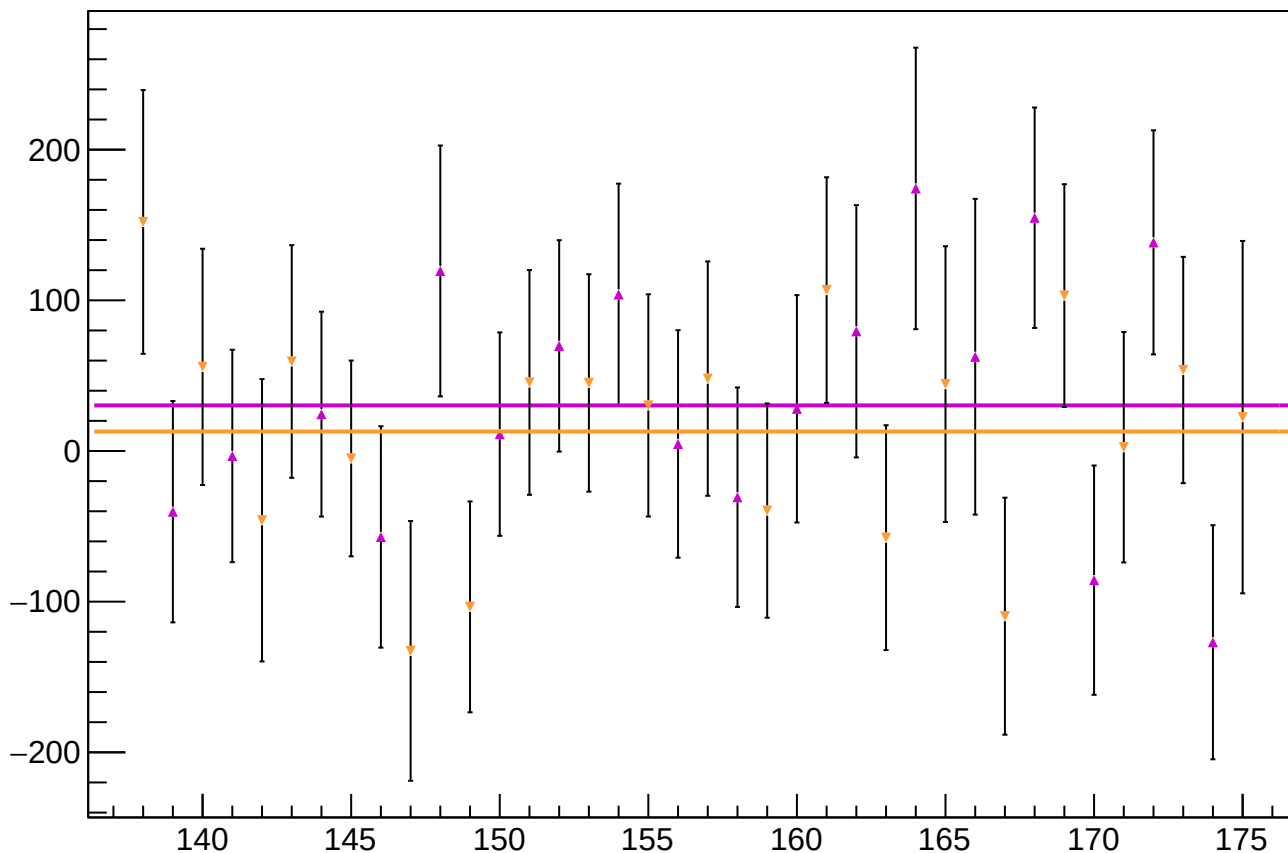
In: 243.751+/-0.040  $\chi^2/\text{NDF}$ : 4703767.8/34

Out: 224.721+/-0.037  $\chi^2/\text{NDF}$ : 6421344.6/38

All: 233.369+/-0.027  $\chi^2/\text{NDF}$ : 11247938.3/73



dit\_asym\_sam\_15\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 12.917 $\pm$ 17.375  $\chi^2$ /NDF:17.3/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 30.249 $\pm$ 17.863  $\chi^2$ /NDF:20.2/17

Left: 21.343 $\pm$ 12.455  $\chi^2$ /NDF: 38.0/37

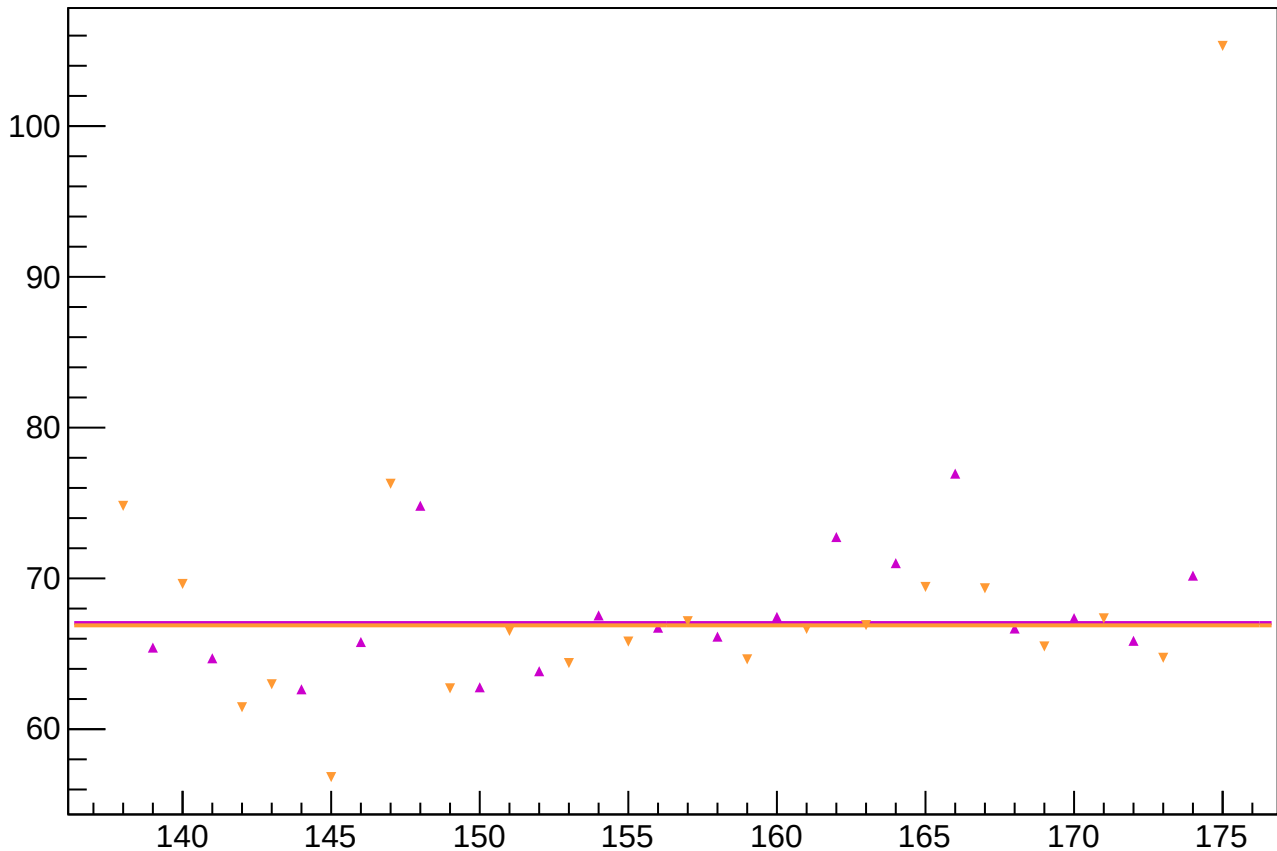
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 30.249 $\pm$ 17.863  $\chi^2$ /NDF:20.2/17

Out: 12.917 $\pm$ 17.375  $\chi^2$ /NDF:17.3/19

All: 21.343 $\pm$ 12.455  $\chi^2$ /NDF: 38.0/37

dit\_asym\_sam\_15\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 66.887+/-0.012  $\chi^2/\text{NDF}$ :336392.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 67.038+/-0.013  $\chi^2/\text{NDF}$ :76845.1/17

Left: 66.960+/-0.009  $\chi^2/\text{NDF}$ : 413311.4/37

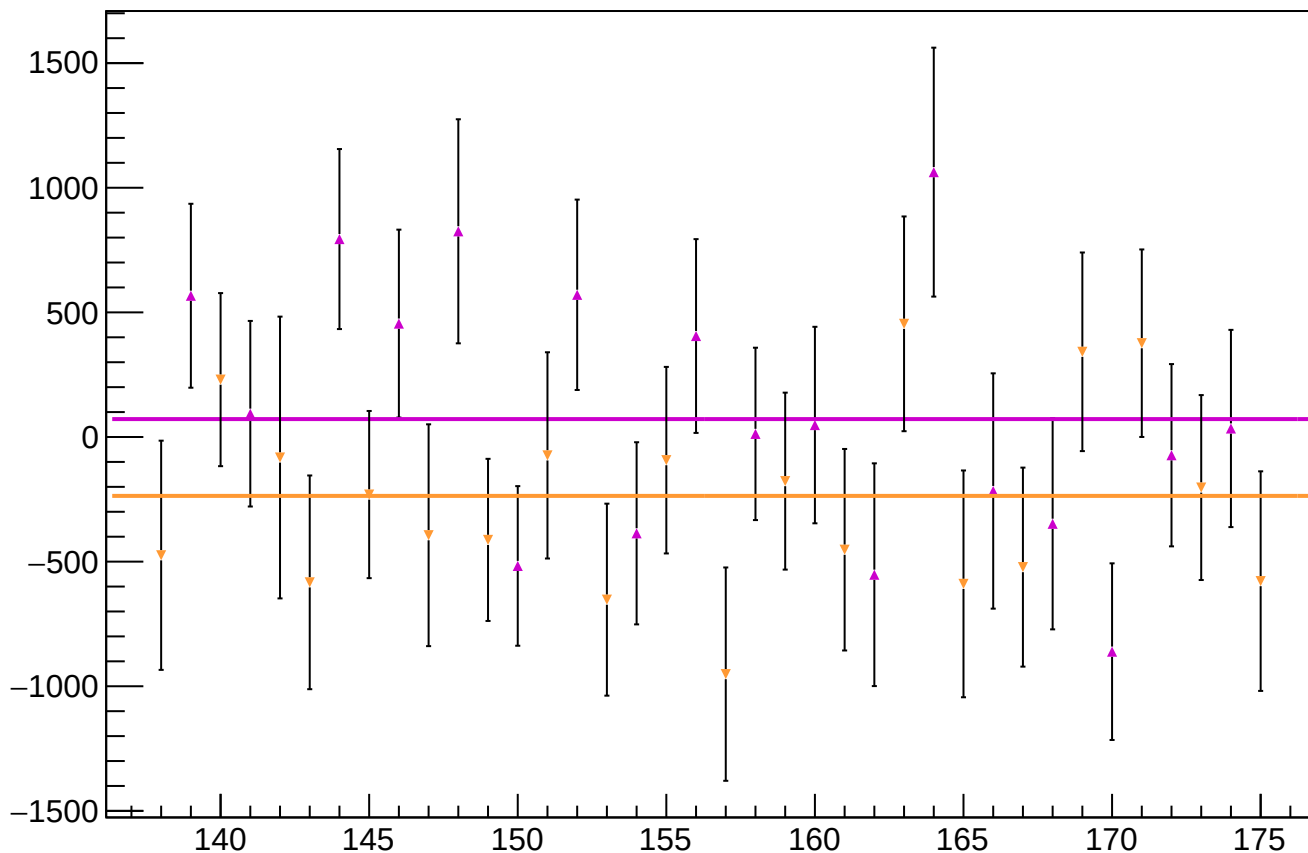
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 67.038+/-0.013  $\chi^2/\text{NDF}$ :76845.1/17

Out: 66.887+/-0.012  $\chi^2/\text{NDF}$ :336392.7/19

All: 66.960+/-0.009  $\chi^2/\text{NDF}$ : 413311.4/37

asym\_sam\_15\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -236.250+/-88.905  $\chi^2/\text{NDF}$ :16.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 71.884+/-91.042  $\chi^2/\text{NDF}$ :31.4/17

Left: -85.841+/-63.607  $\chi^2/\text{NDF}$ : 54.1/37

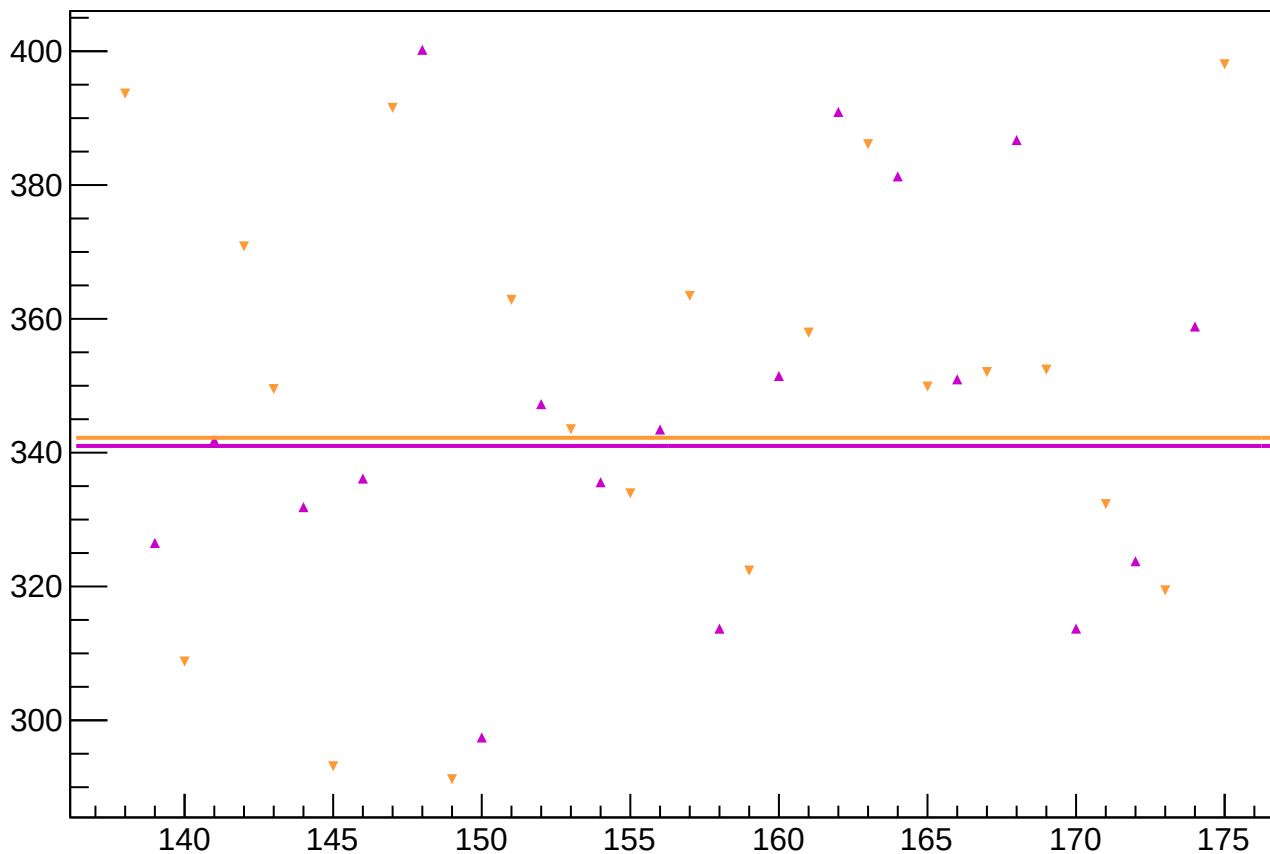
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 71.884+/-91.042  $\chi^2/\text{NDF}$ :31.4/17

Out: -236.250+/-88.905  $\chi^2/\text{NDF}$ :16.8/19

All: -85.841+/-63.607  $\chi^2/\text{NDF}$ : 54.1/37

asym\_sam\_15\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 342.225+/-0.063  $\chi^2/\text{NDF}$ :251048.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 341.002+/-0.064  $\chi^2/\text{NDF}$ :173954.5/17

Left: 341.628+/-0.045  $\chi^2/\text{NDF}$ : 425188.1/37

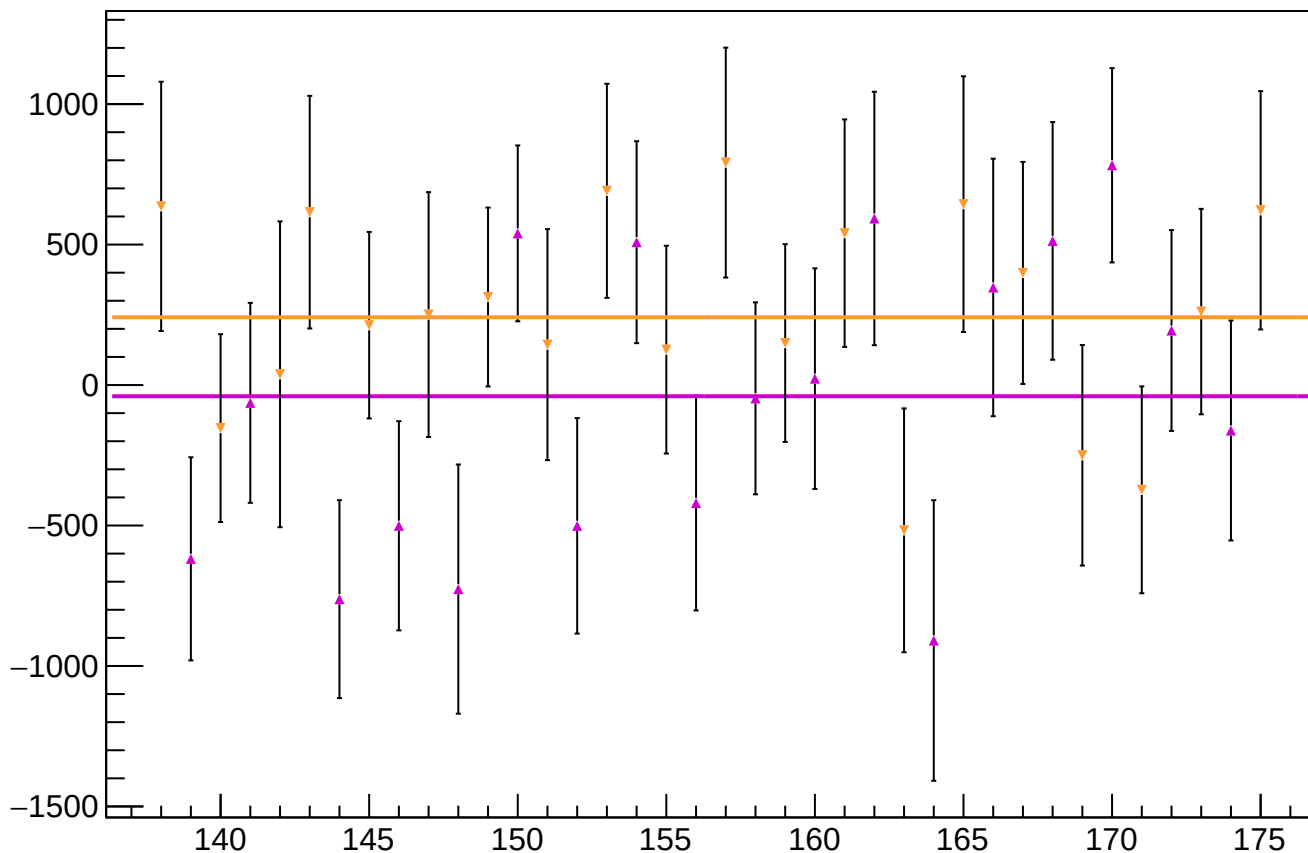
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 341.002+/-0.064  $\chi^2/\text{NDF}$ :173954.5/17

Out: 342.225+/-0.063  $\chi^2/\text{NDF}$ :251048.8/19

All: 341.628+/-0.045  $\chi^2/\text{NDF}$ : 425188.1/37

# asym\_sam\_15\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 241.306+/-87.318  $\chi^2/\text{NDF}$ :16.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -39.974+/-89.612  $\chi^2/\text{NDF}$ :32.5/17

Left: 104.313+/-62.538  $\chi^2/\text{NDF}$ : 53.9/37

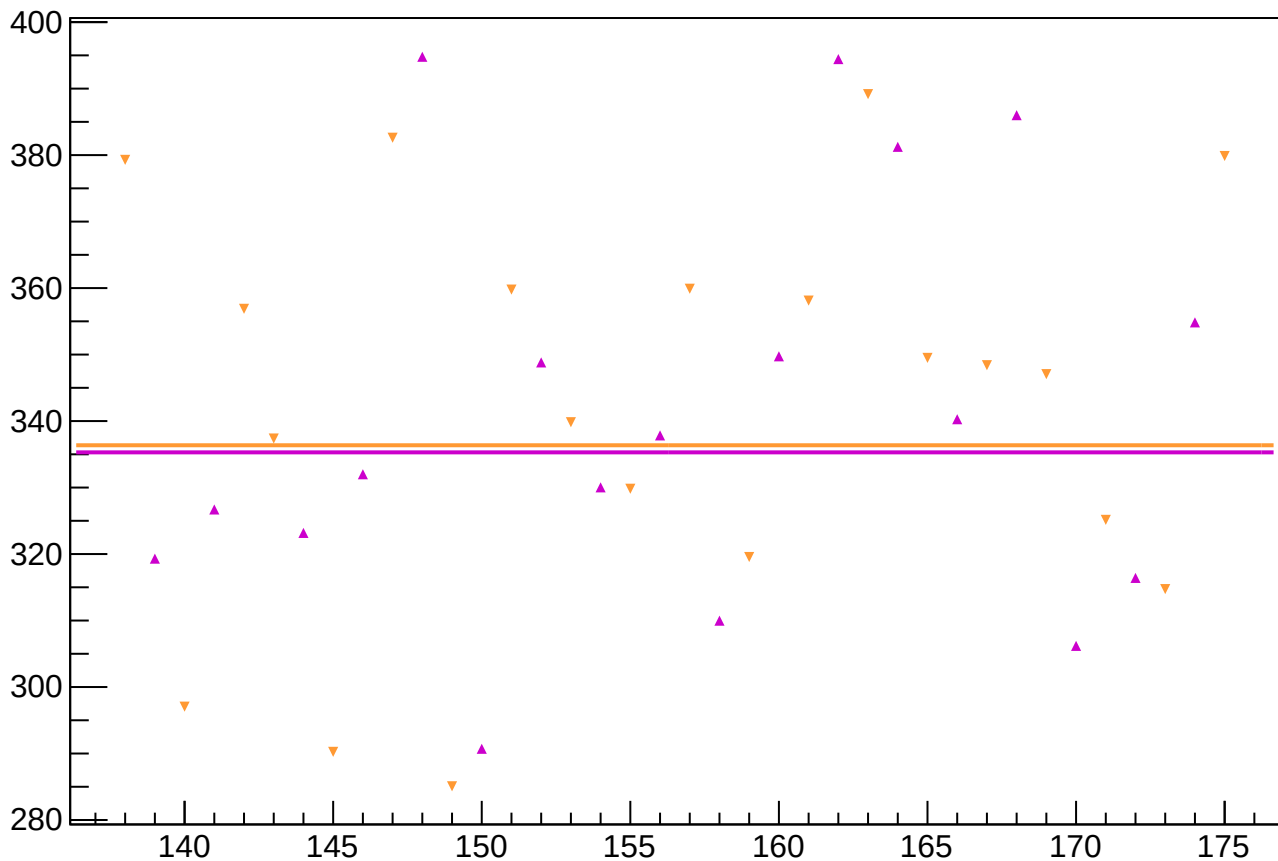
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -39.974+/-89.612  $\chi^2/\text{NDF}$ :32.5/17

Out: 241.306+/-87.318  $\chi^2/\text{NDF}$ :16.3/19

All: 104.313+/-62.538  $\chi^2/\text{NDF}$ : 53.9/37

# asym\_sam\_15\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 336.362+/-0.062  $\chi^2/\text{NDF}$ :251025.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 335.293+/-0.063  $\chi^2/\text{NDF}$ :205885.6/17

Left: 335.841+/-0.044  $\chi^2/\text{NDF}$ : 457056.7/37

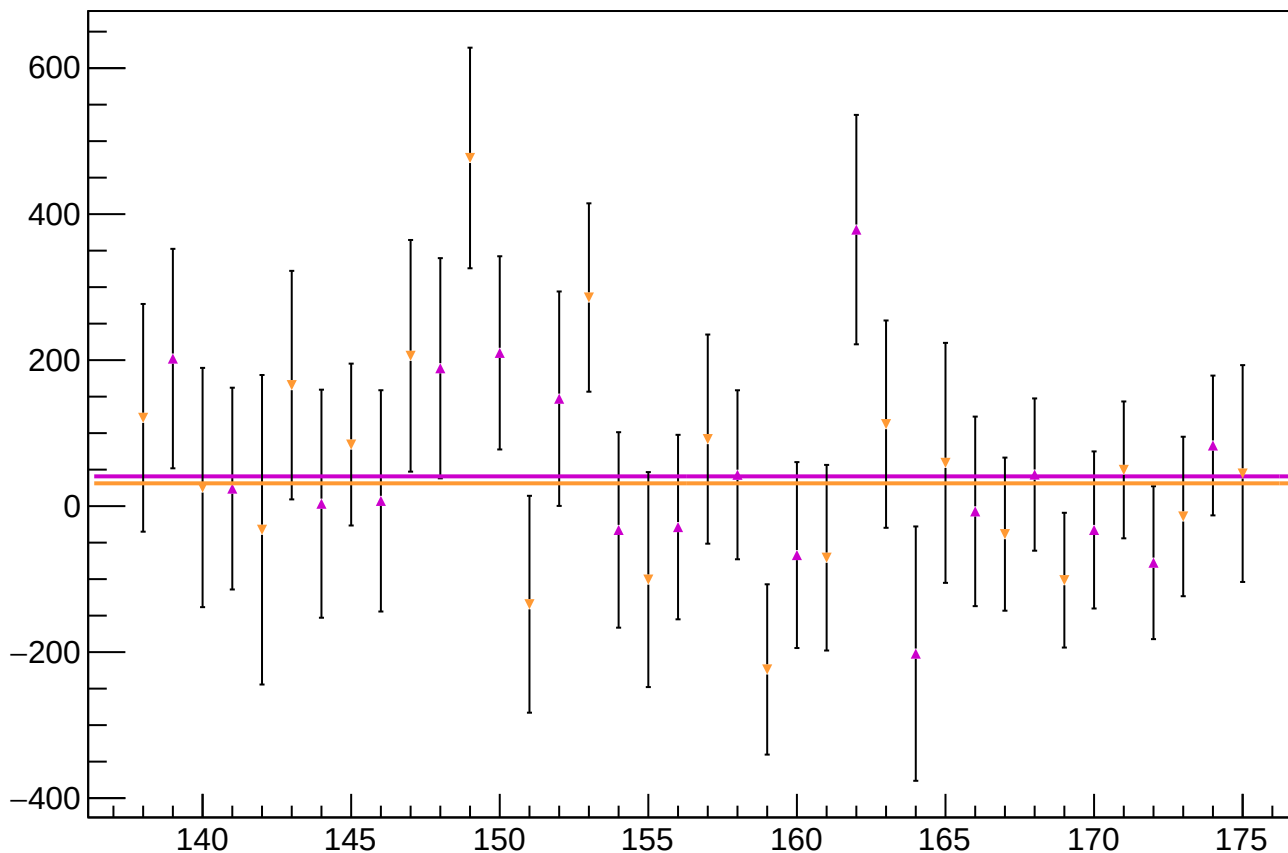
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 335.293+/-0.063  $\chi^2/\text{NDF}$ :205885.6/17

Out: 336.362+/-0.062  $\chi^2/\text{NDF}$ :251025.2/19

All: 335.841+/-0.044  $\chi^2/\text{NDF}$ : 457056.7/37

dit\_asym\_sam\_26\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 31.234 $\pm$ 29.116  $\chi^2$ /NDF:25.9/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 40.780 $\pm$ 30.227  $\chi^2$ /NDF:14.4/17

Left: 35.828 $\pm$ 20.970  $\chi^2$ /NDF: 40.3/37

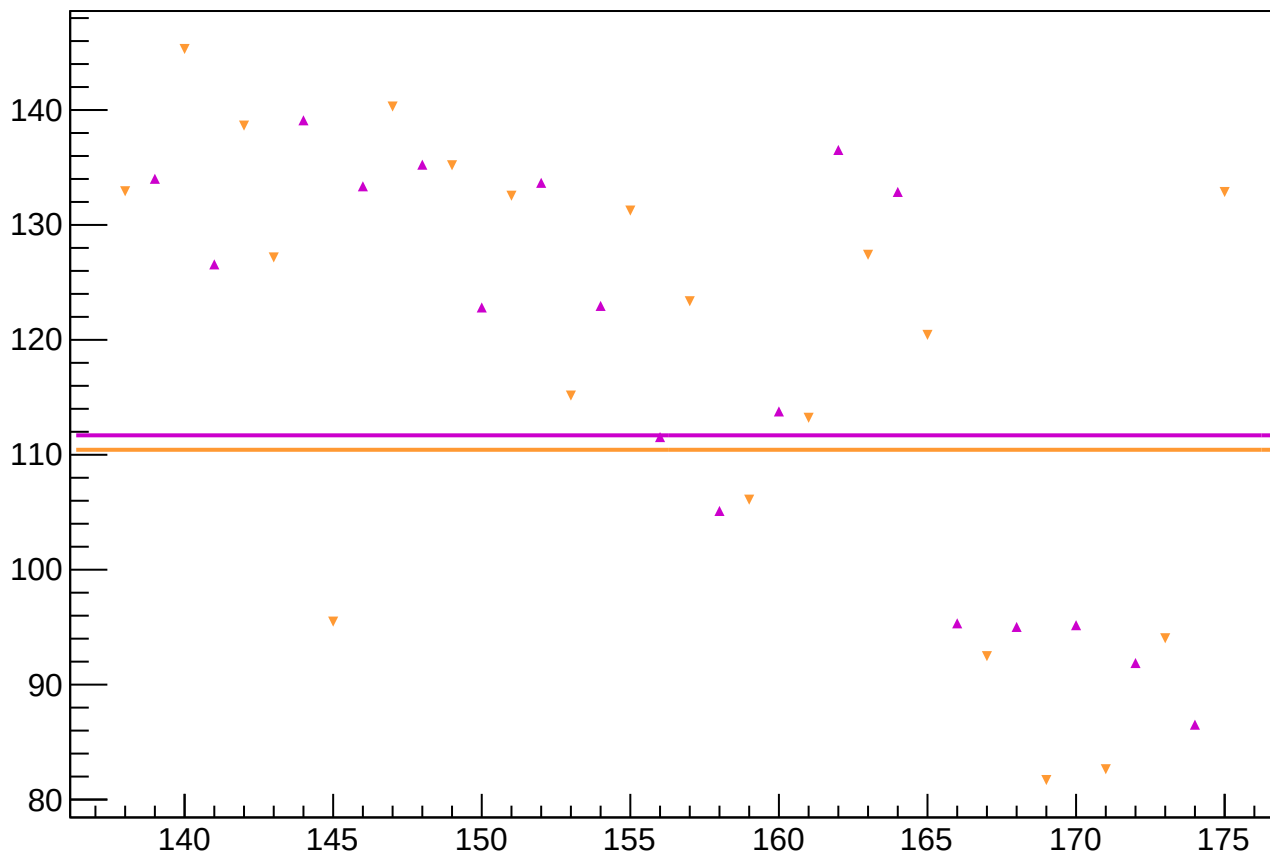
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 40.780 $\pm$ 30.227  $\chi^2$ /NDF:14.4/17

Out: 31.234 $\pm$ 29.116  $\chi^2$ /NDF:25.9/19

All: 35.828 $\pm$ 20.970  $\chi^2$ /NDF: 40.3/37

dit\_asym\_sam\_26\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 110.435+/-0.021  $\chi^2/\text{NDF}$ :1013233.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 111.692+/-0.021  $\chi^2/\text{NDF}$ :717901.9/17

Left: 111.040+/-0.015  $\chi^2/\text{NDF}$ : 1732930.8/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

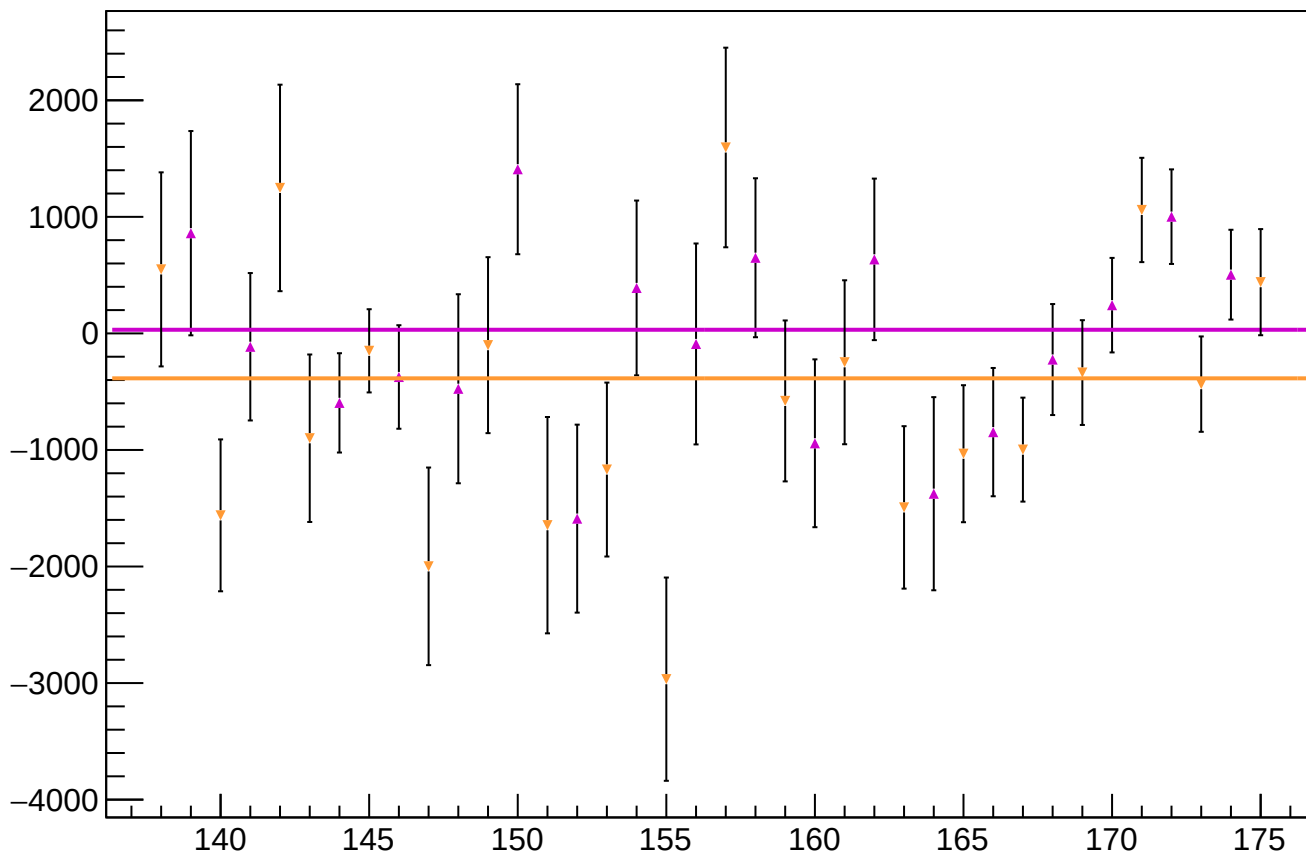
In: 111.692+/-0.021  $\chi^2/\text{NDF}$ :717901.9/17

Out: 110.435+/-0.021  $\chi^2/\text{NDF}$ :1013233.6/19

All: 111.040+/-0.015  $\chi^2/\text{NDF}$ : 1732930.8/37



asym\_sam\_26\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -385.468+/-130.763  $\chi^2/\text{NDF}$ :49.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 31.281+/-132.841  $\chi^2/\text{NDF}$ :28.8/17

Left: -180.379+/-93.189  $\chi^2/\text{NDF}$ : 83.0/37

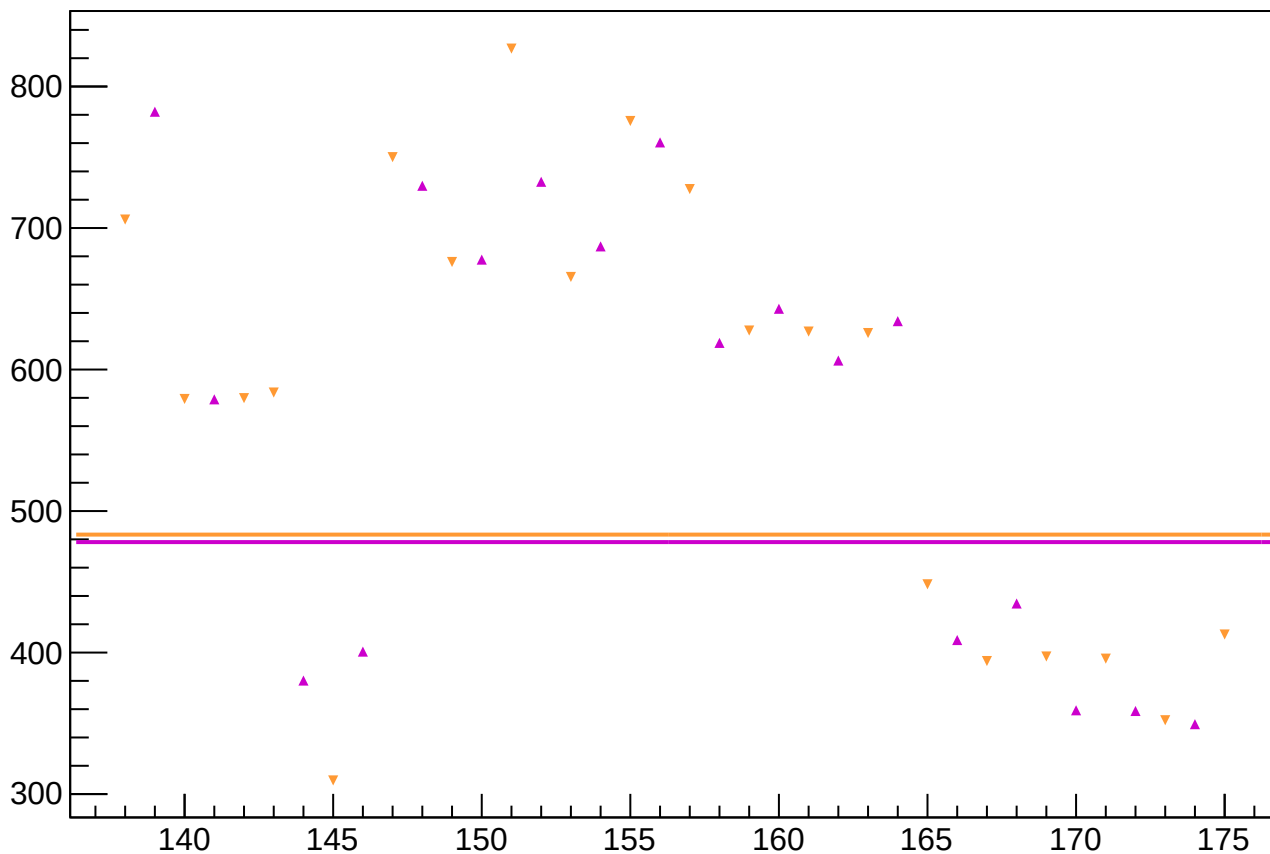
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 31.281+/-132.841  $\chi^2/\text{NDF}$ :28.8/17

Out: -385.468+/-130.763  $\chi^2/\text{NDF}$ :49.2/19

All: -180.379+/-93.189  $\chi^2/\text{NDF}$ : 83.0/37

asym\_sam\_26\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 483.361+/-0.092  $\chi^2/\text{NDF}$ :2576554.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 478.063+/-0.094  $\chi^2/\text{NDF}$ :2315838.9/17

Left: 480.754+/-0.066  $\chi^2/\text{NDF}$ : 4894009.1/37

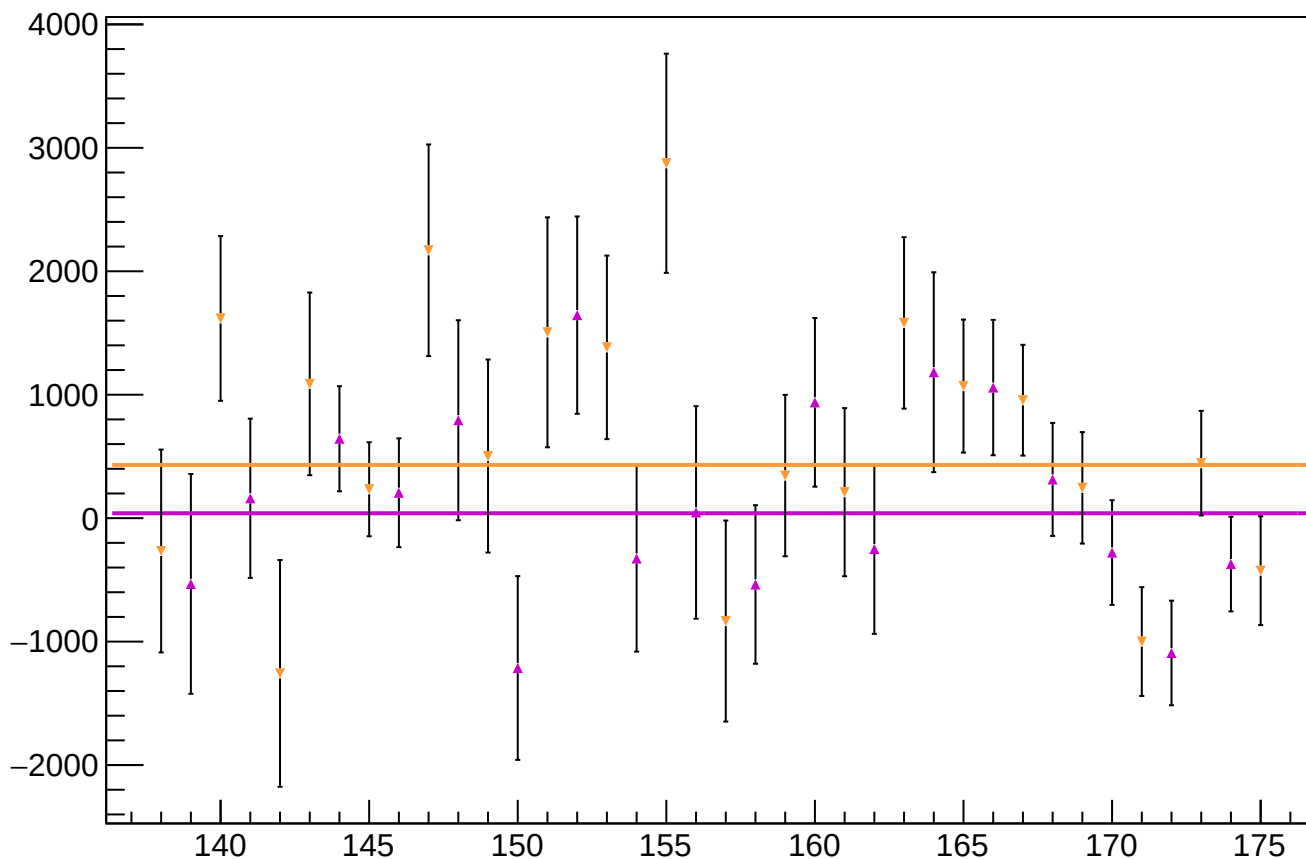
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 478.063+/-0.094  $\chi^2/\text{NDF}$ :2315838.9/17

Out: 483.361+/-0.092  $\chi^2/\text{NDF}$ :2576554.7/19

All: 480.754+/-0.066  $\chi^2/\text{NDF}$ : 4894009.1/37

# asym\_sam\_26\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 431.491+/-131.147  $\chi^2/\text{NDF}$ :45.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 39.871+/-132.958  $\chi^2/\text{NDF}$ :27.9/17

Left: 238.366+/-93.368  $\chi^2/\text{NDF}$ : 77.9/37

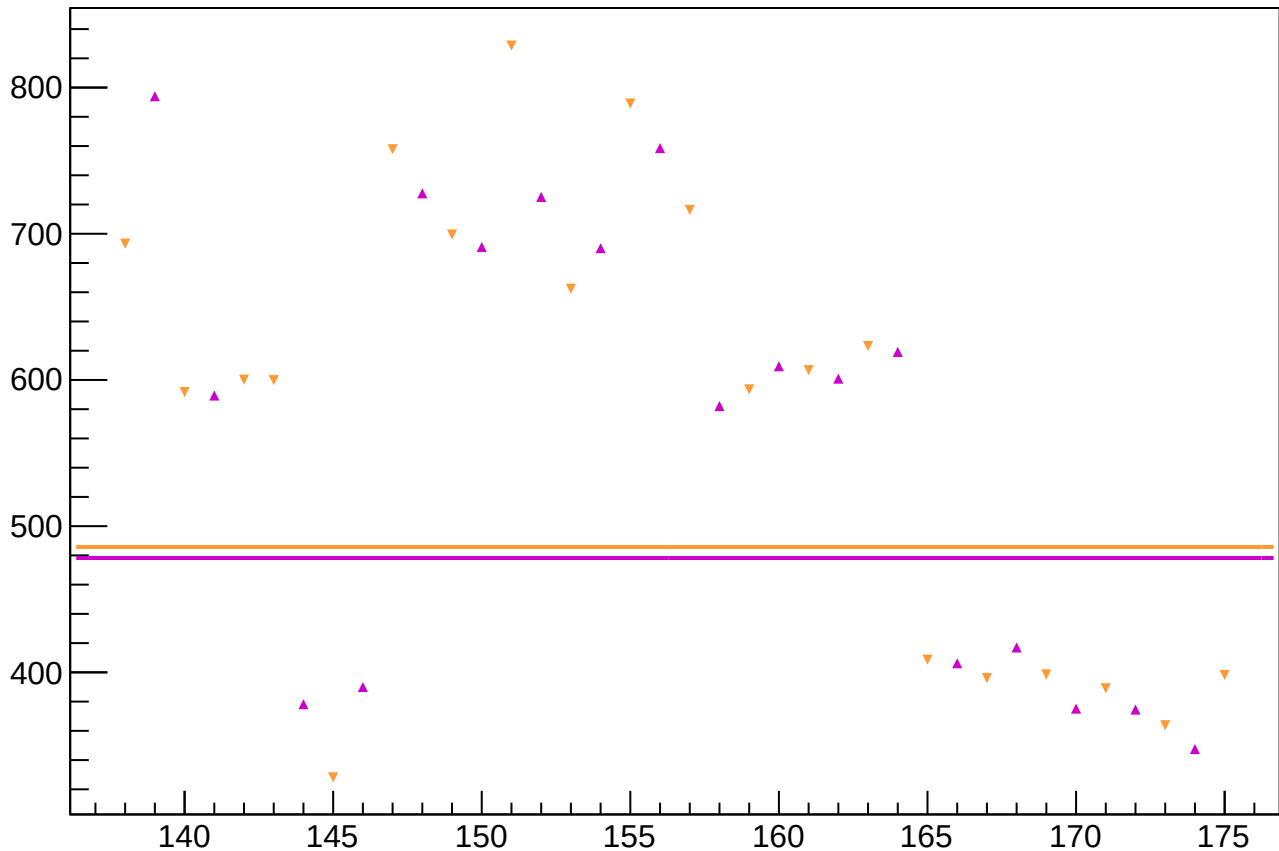
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 39.871+/-132.958  $\chi^2/\text{NDF}$ :27.9/17

Out: 431.491+/-131.147  $\chi^2/\text{NDF}$ :45.5/19

All: 238.366+/-93.368  $\chi^2/\text{NDF}$ : 77.9/37

# asym\_sam\_26\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 485.756+/-0.093  $\chi^2/\text{NDF}$ :2460303.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 478.210+/-0.094  $\chi^2/\text{NDF}$ :2205912.2/17

Left: 482.035+/-0.066  $\chi^2/\text{NDF}$ : 4669480.9/37

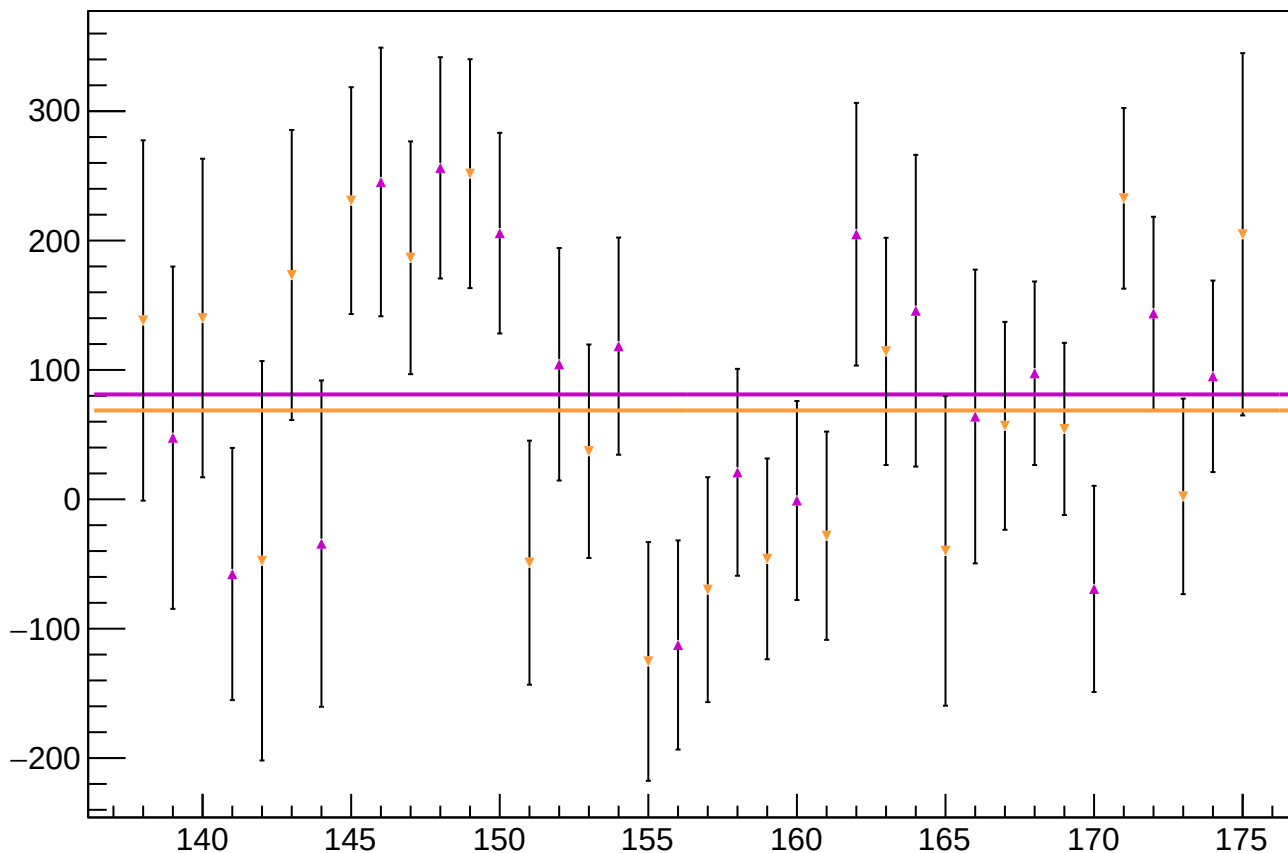
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 478.210+/-0.094  $\chi^2/\text{NDF}$ :2205912.2/17

Out: 485.756+/-0.093  $\chi^2/\text{NDF}$ :2460303.9/19

All: 482.035+/-0.066  $\chi^2/\text{NDF}$ : 4669480.9/37

dit\_asym\_sam\_37\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 68.698 $\pm$ 20.156  $\chi^2$ /NDF:32.1/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 81.061 $\pm$ 20.729  $\chi^2$ /NDF:26.1/17

Left: 74.706 $\pm$ 14.451  $\chi^2$ /NDF: 58.4/37

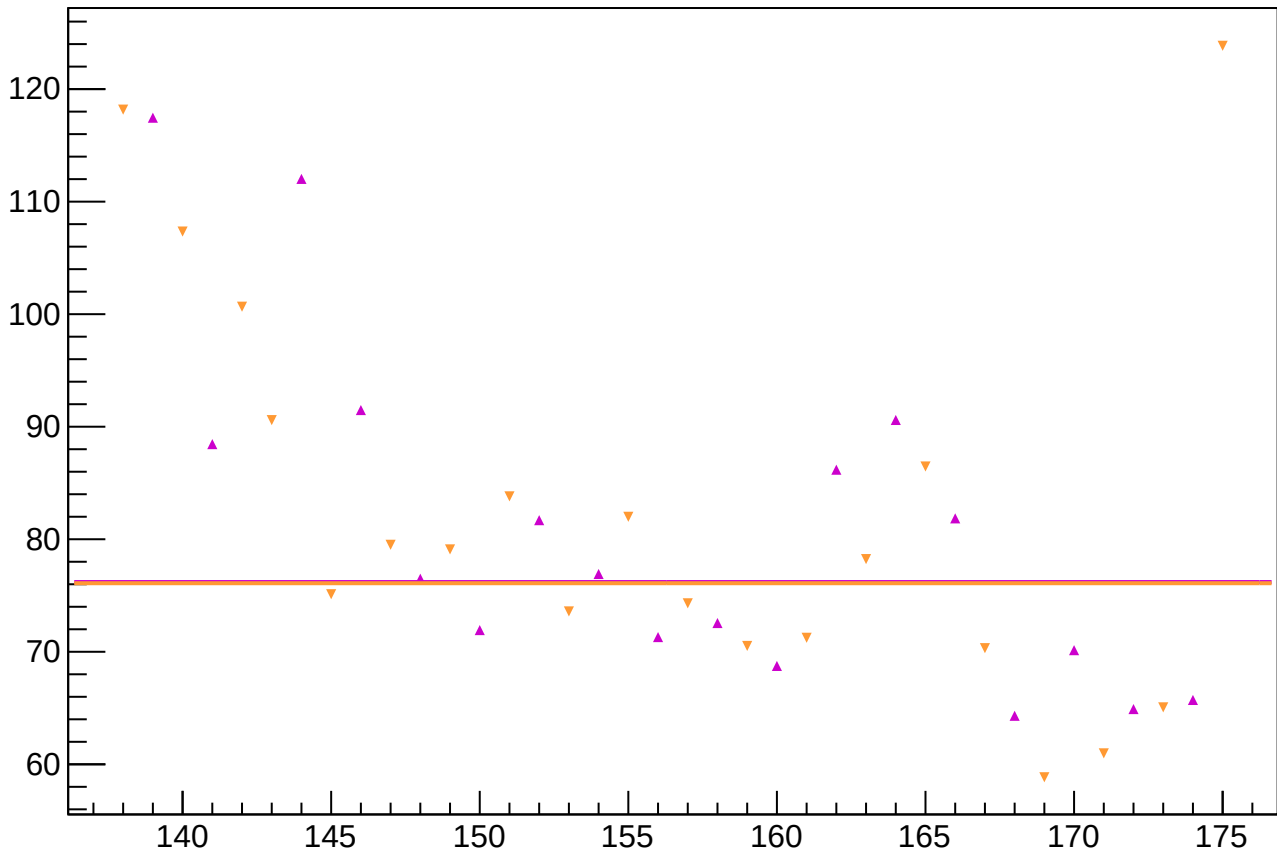
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 81.061 $\pm$ 20.729  $\chi^2$ /NDF:26.1/17

Out: 68.698 $\pm$ 20.156  $\chi^2$ /NDF:32.1/19

All: 74.706 $\pm$ 14.451  $\chi^2$ /NDF: 58.4/37

dit\_asym\_sam\_37\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 76.092+/-0.014  $\chi^2/\text{NDF}$ : 972738.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 76.197+/-0.015  $\chi^2/\text{NDF}$ : 681347.1/17

Left: 76.143+/-0.010  $\chi^2/\text{NDF}$ : 1654111.8/37

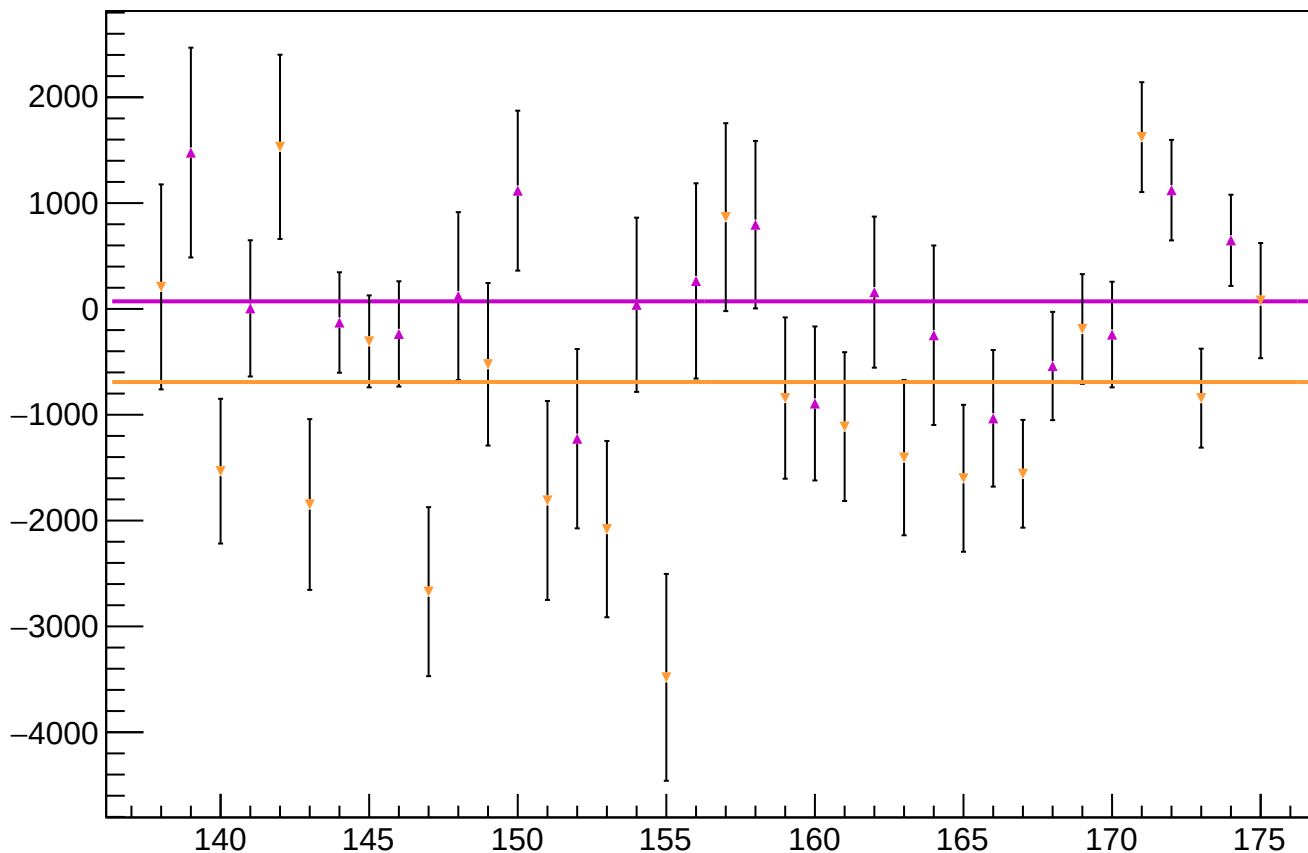
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 76.197+/-0.015  $\chi^2/\text{NDF}$ : 681347.1/17

Out: 76.092+/-0.014  $\chi^2/\text{NDF}$ : 972738.2/19

All: 76.143+/-0.010  $\chi^2/\text{NDF}$ : 1654111.8/37

asym\_sam\_37\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -690.900+/-146.765  $\chi^2/\text{NDF}$ :62.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 71.620+/-147.141  $\chi^2/\text{NDF}$ :21.1/17

Left: -310.616+/-103.911  $\chi^2/\text{NDF}$ : 96.8/37

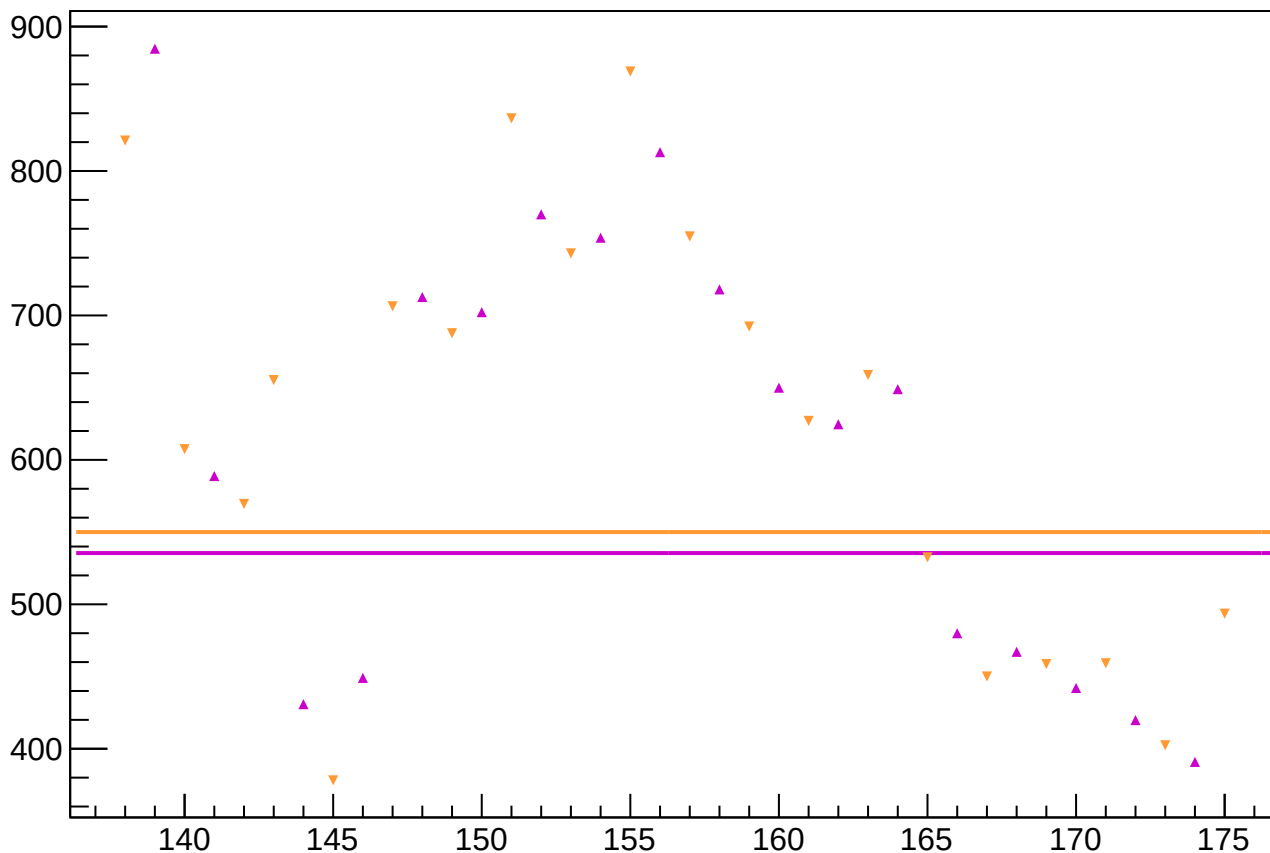
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 71.620+/-147.141  $\chi^2/\text{NDF}$ :21.1/17

Out: -690.900+/-146.765  $\chi^2/\text{NDF}$ :62.3/19

All: -310.616+/-103.911  $\chi^2/\text{NDF}$ : 96.8/37

asym\_sam\_37\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 550.027+/-0.104  $\chi^2/\text{NDF}$ :1832412.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 535.479+/-0.104  $\chi^2/\text{NDF}$ :1779060.1/17

Left: 542.772+/-0.073  $\chi^2/\text{NDF}$ : 3621273.8/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

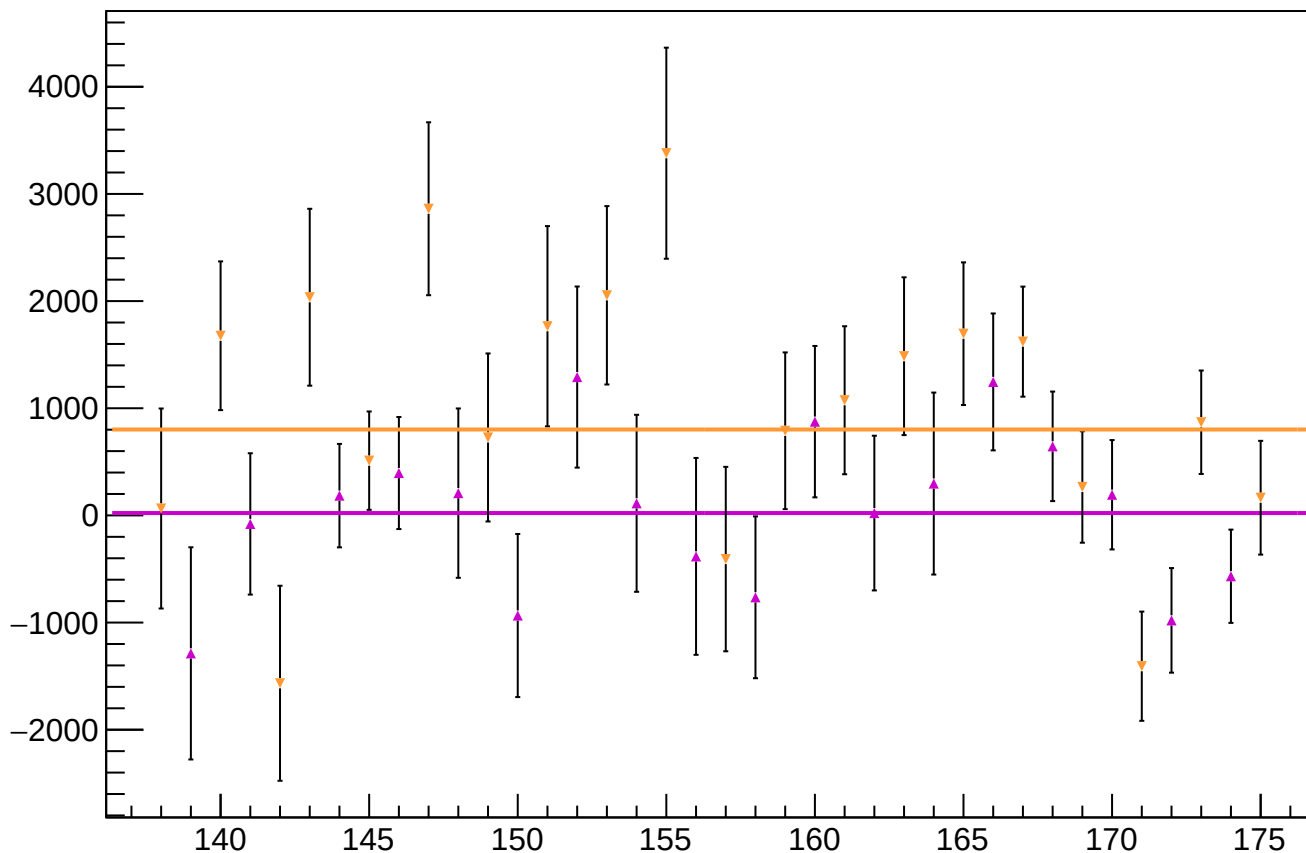
In: 535.479+/-0.104  $\chi^2/\text{NDF}$ :1779060.1/17

Out: 550.027+/-0.104  $\chi^2/\text{NDF}$ :1832412.9/19

All: 542.772+/-0.073  $\chi^2/\text{NDF}$ : 3621273.8/37



asym\_sam\_37\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 801.699+/-147.396  $\chi^2/\text{NDF}$ :57.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 22.065+/-148.562  $\chi^2/\text{NDF}$ :20.5/17

Left: 414.953+/-104.635  $\chi^2/\text{NDF}$ : 91.3/37

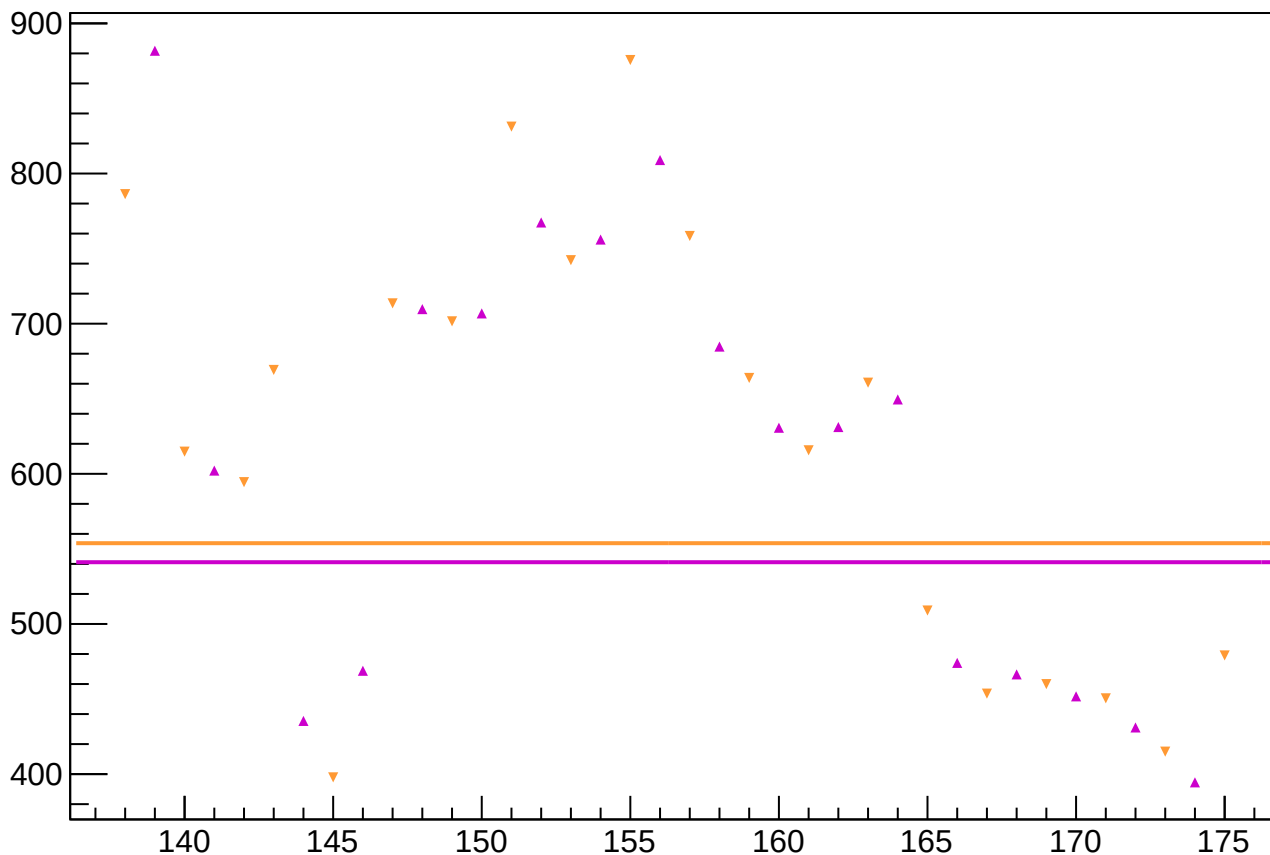
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 22.065+/-148.562  $\chi^2/\text{NDF}$ :20.5/17

Out: 801.699+/-147.396  $\chi^2/\text{NDF}$ :57.0/19

All: 414.953+/-104.635  $\chi^2/\text{NDF}$ : 91.3/37

# asym\_sam\_37\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 553.800+/-0.104  $\chi^2/\text{NDF}$ :1709640.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 541.134+/-0.105  $\chi^2/\text{NDF}$ :1645632.1/17

Left: 547.517+/-0.074  $\chi^2/\text{NDF}$ : 3362599.1/37

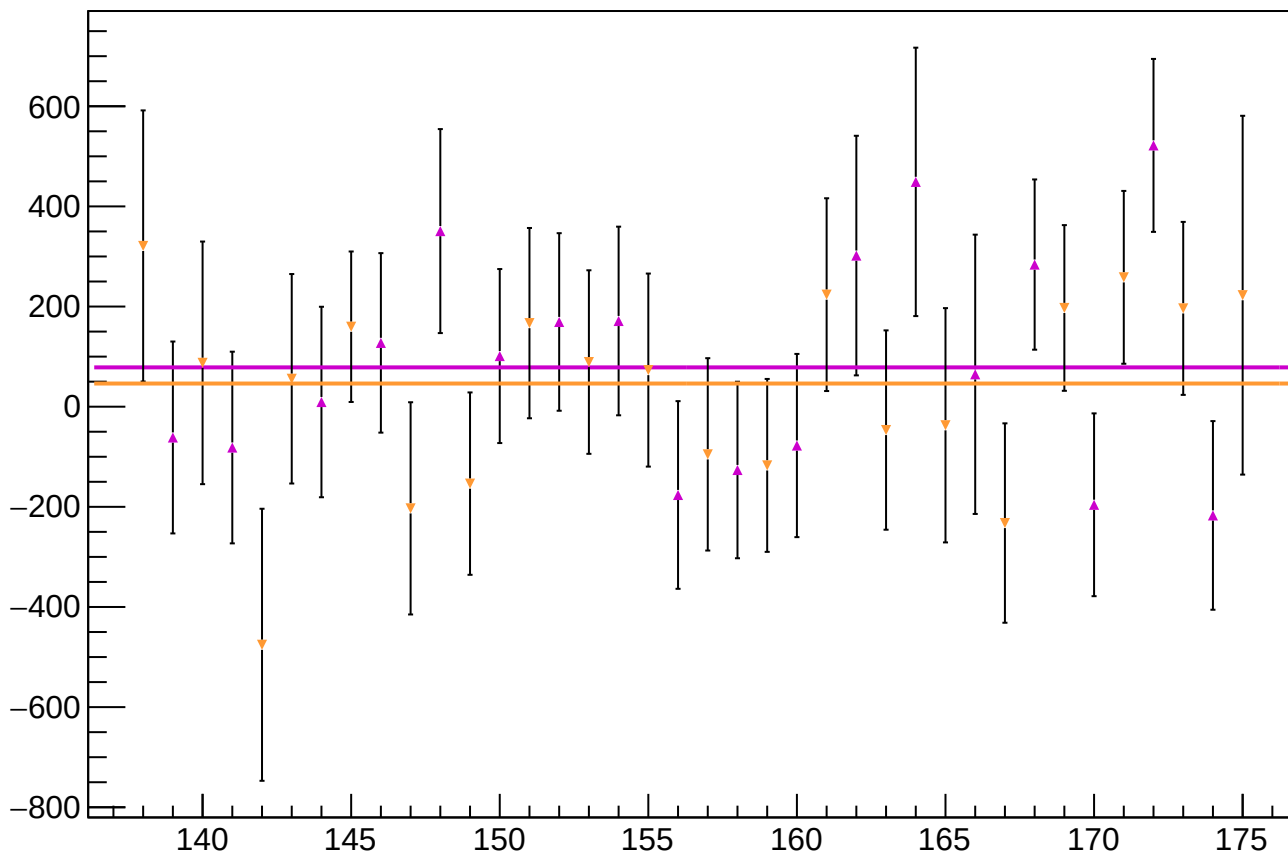
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 541.134+/-0.105  $\chi^2/\text{NDF}$ :1645632.1/17

Out: 553.800+/-0.104  $\chi^2/\text{NDF}$ :1709640.7/19

All: 547.517+/-0.074  $\chi^2/\text{NDF}$ : 3362599.1/37

dit\_asym\_sam\_48\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 46.251 $\pm$ 44.025  $\chi^2$ /NDF:16.3/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 78.512 $\pm$ 45.102  $\chi^2$ /NDF:23.2/17

Left: 61.992 $\pm$ 31.504  $\chi^2$ /NDF: 39.8/37

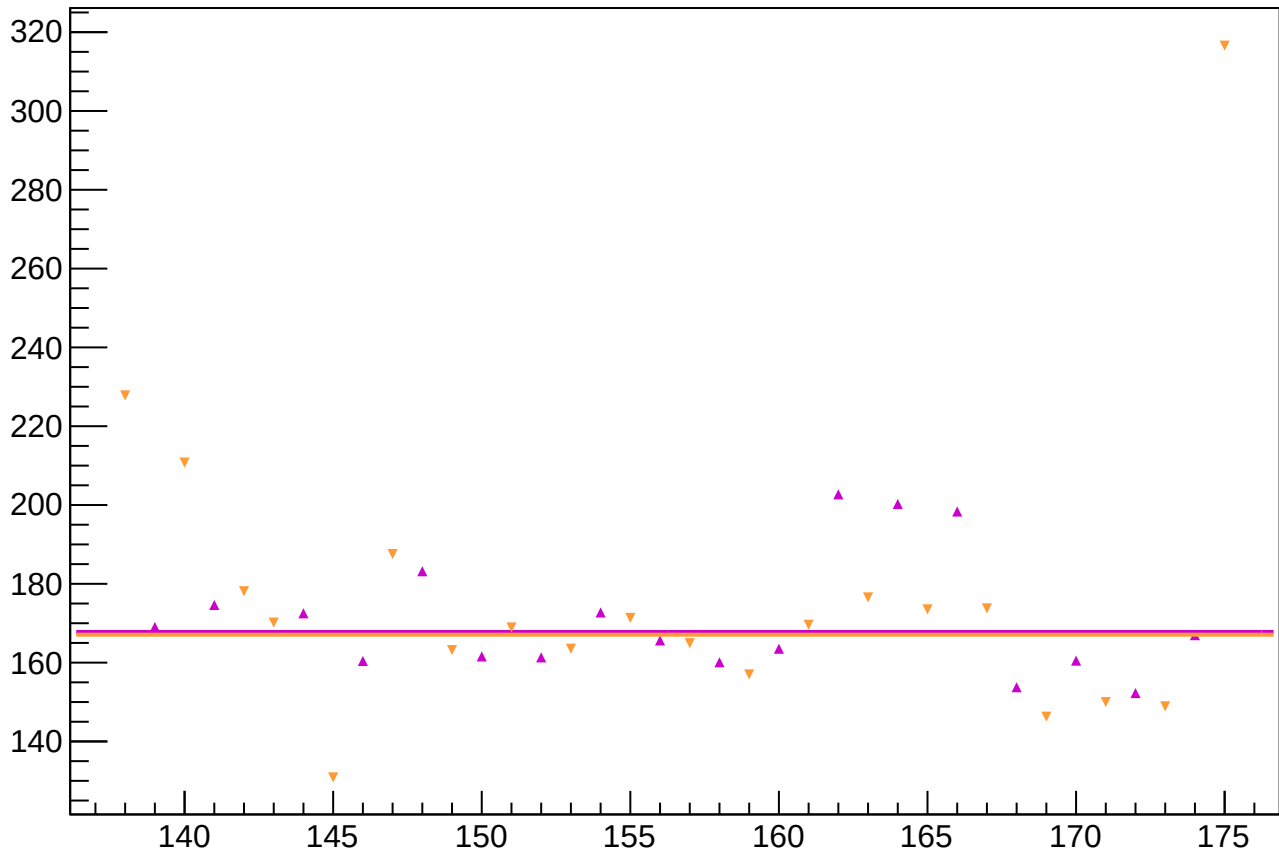
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 78.512 $\pm$ 45.102  $\chi^2$ /NDF:23.2/17

Out: 46.251 $\pm$ 44.025  $\chi^2$ /NDF:16.3/19

All: 61.992 $\pm$ 31.504  $\chi^2$ /NDF: 39.8/37

dit\_asym\_sam\_48\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 167.096+/-0.031  $\chi^2/\text{NDF}$ :744234.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 167.778+/-0.032  $\chi^2/\text{NDF}$ :159430.4/17

Left: 167.429+/-0.022  $\chi^2/\text{NDF}$ : 903899.3/37

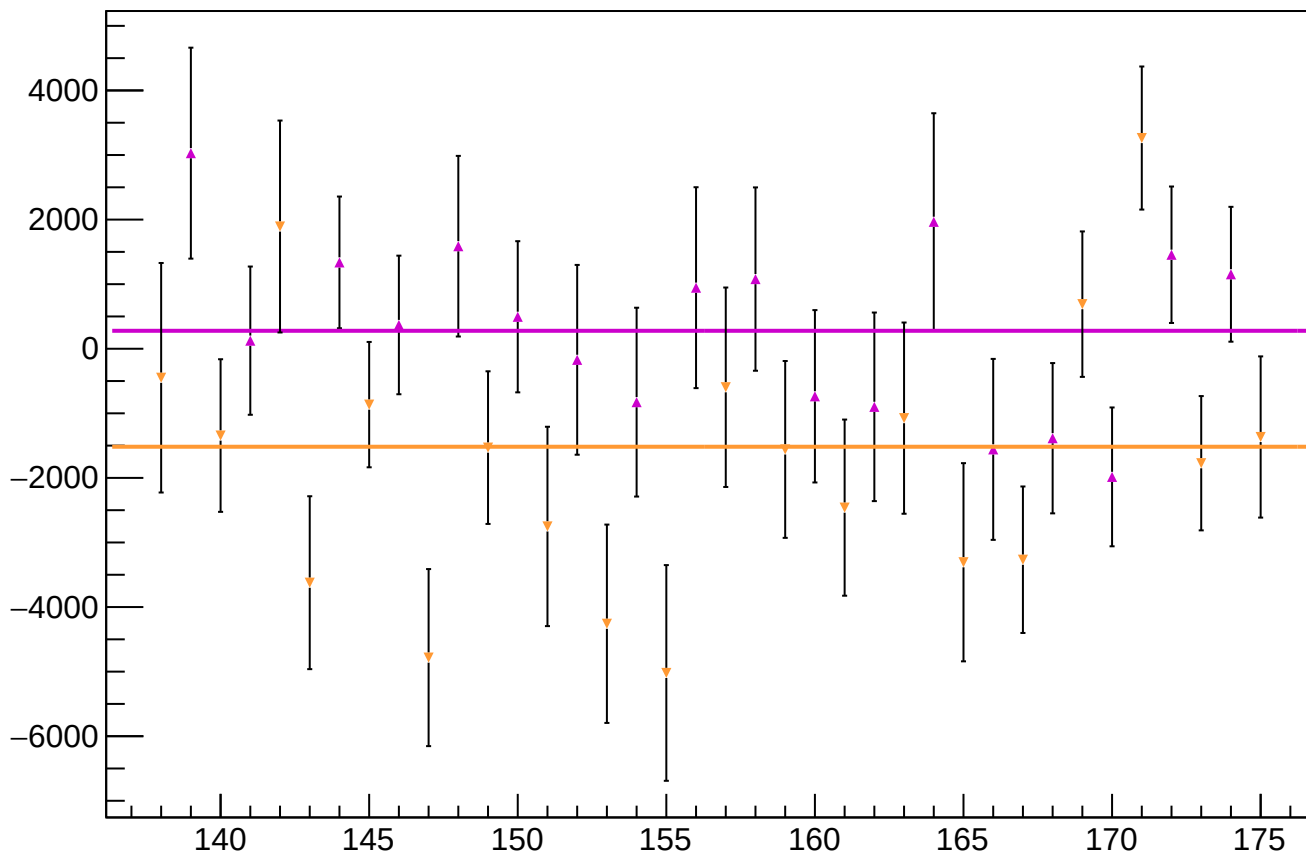
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 167.778+/-0.032  $\chi^2/\text{NDF}$ :159430.4/17

Out: 167.096+/-0.031  $\chi^2/\text{NDF}$ :744234.7/19

All: 167.429+/-0.022  $\chi^2/\text{NDF}$ : 903899.3/37

asym\_sam\_48\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1517.449+/-291.207  $\chi^2/\text{NDF}$ :48.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 278.010+/-296.751  $\chi^2/\text{NDF}$ :18.4/17

Left: -636.647+/-207.847  $\chi^2/\text{NDF}$ : 85.8/37

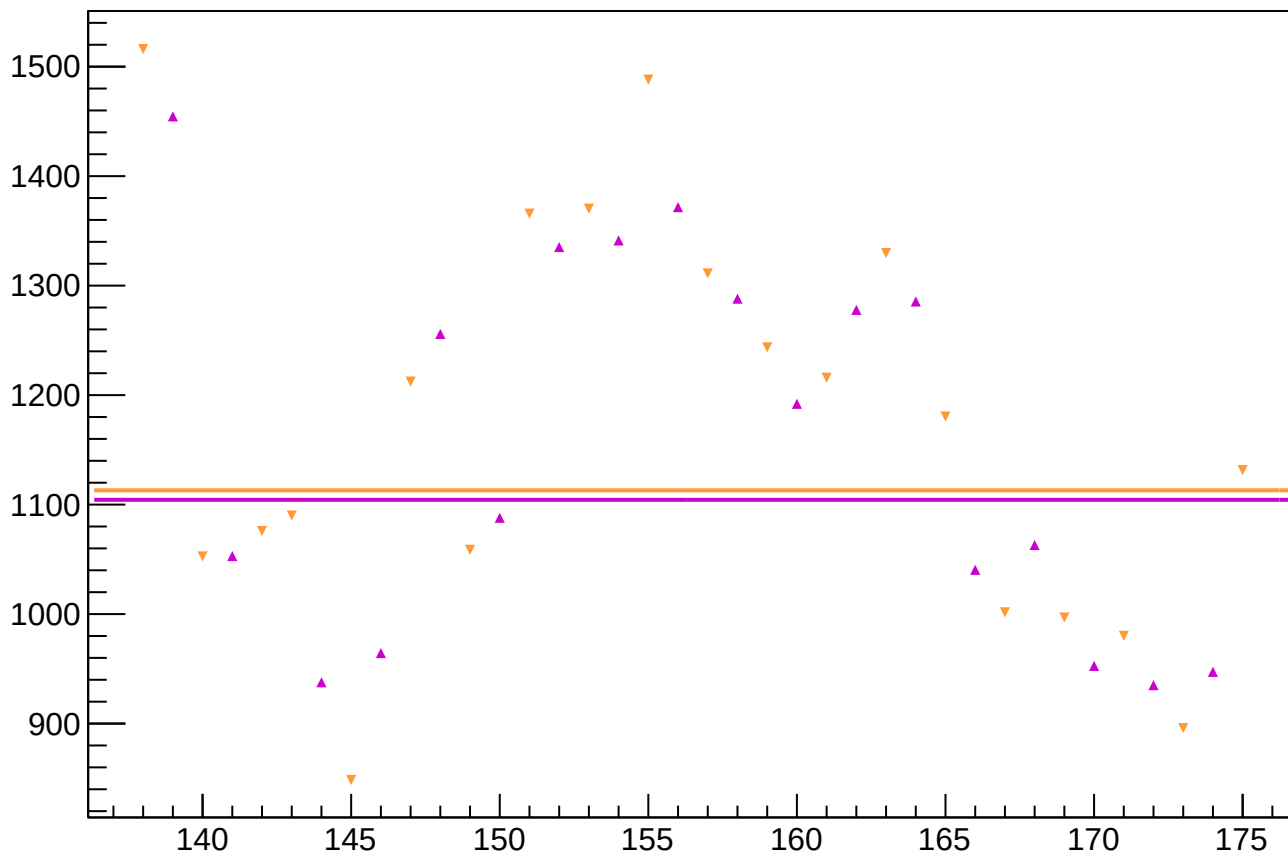
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 278.010+/-296.751  $\chi^2/\text{NDF}$ :18.4/17

Out: -1517.449+/-291.207  $\chi^2/\text{NDF}$ :48.7/19

All: -636.647+/-207.847  $\chi^2/\text{NDF}$ : 85.8/37

asym\_sam\_48\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1113.065+/-0.206  $\chi^2/\text{NDF}$ : 749901.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1104.378+/-0.210  $\chi^2/\text{NDF}$ : 604894.2/17

Left: 1108.804+/-0.147  $\chi^2/\text{NDF}$ : 1355668.5/37

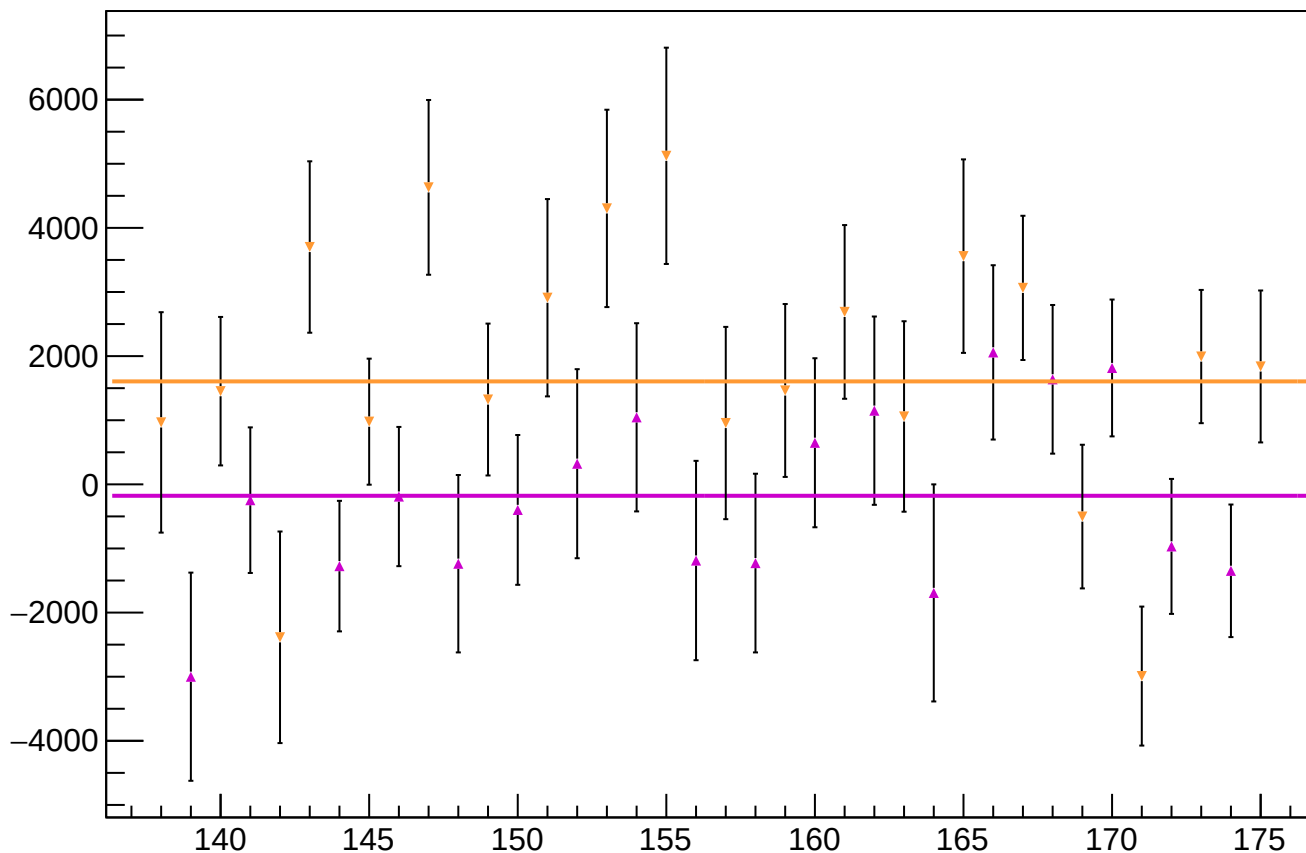
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 1104.378+/-0.210  $\chi^2/\text{NDF}$ : 604894.2/17

Out: 1113.065+/-0.206  $\chi^2/\text{NDF}$ : 749901.3/19

All: 1108.804+/-0.147  $\chi^2/\text{NDF}$ : 1355668.5/37

asym\_sam\_48\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1605.700+/-288.642  $\chi^2/\text{NDF}$ :48.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -178.227+/-295.324  $\chi^2/\text{NDF}$ :19.1/17

Left: 734.147+/-206.422  $\chi^2/\text{NDF}$ : 85.8/37

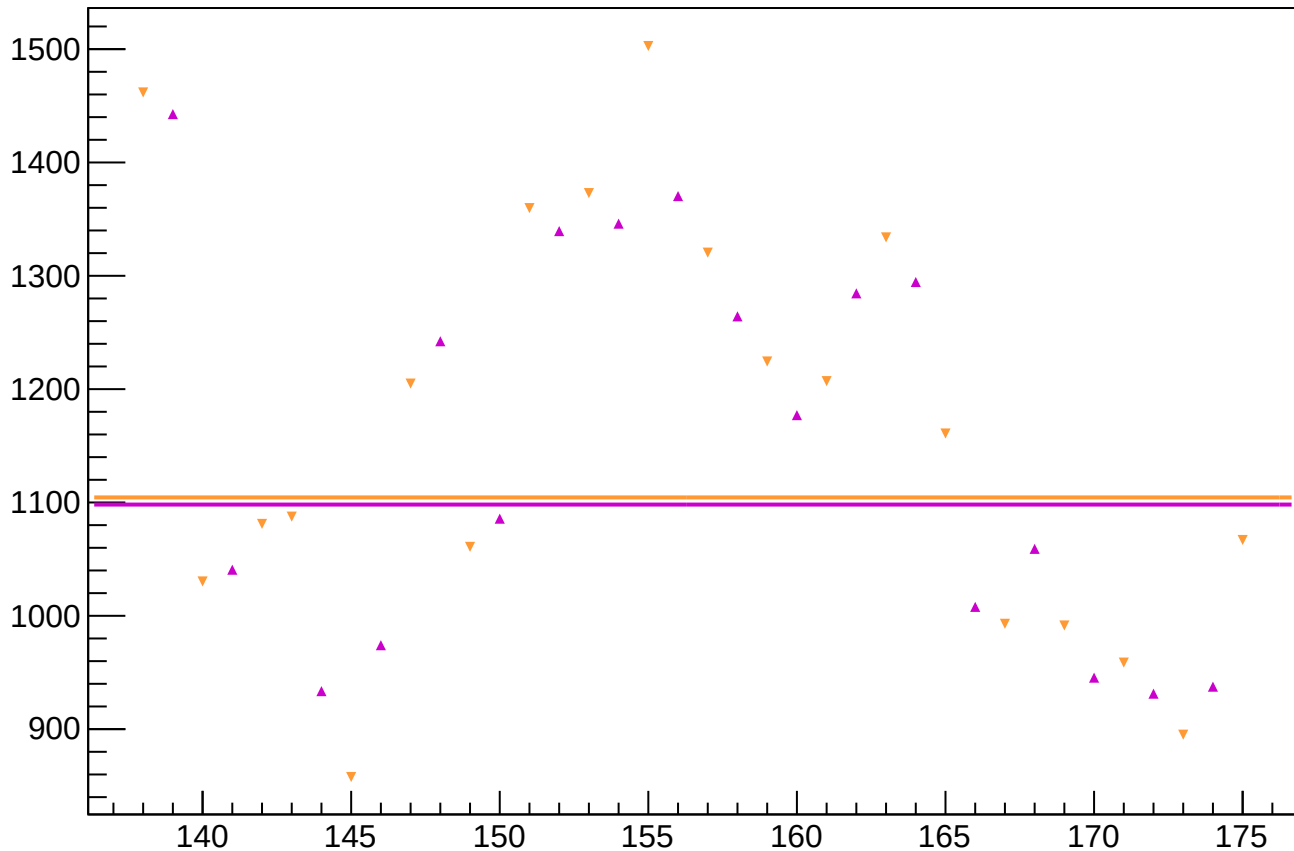
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -178.227+/-295.324  $\chi^2/\text{NDF}$ :19.1/17

Out: 1605.700+/-288.642  $\chi^2/\text{NDF}$ :48.0/19

All: 734.147+/-206.422  $\chi^2/\text{NDF}$ : 85.8/37

# asym\_sam\_48\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1104.456+/-0.204  $\chi^2/\text{NDF}$ : 741023.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1098.148+/-0.209  $\chi^2/\text{NDF}$ : 612794.9/17

Left: 1101.374+/-0.146  $\chi^2/\text{NDF}$ : 1354284.7/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

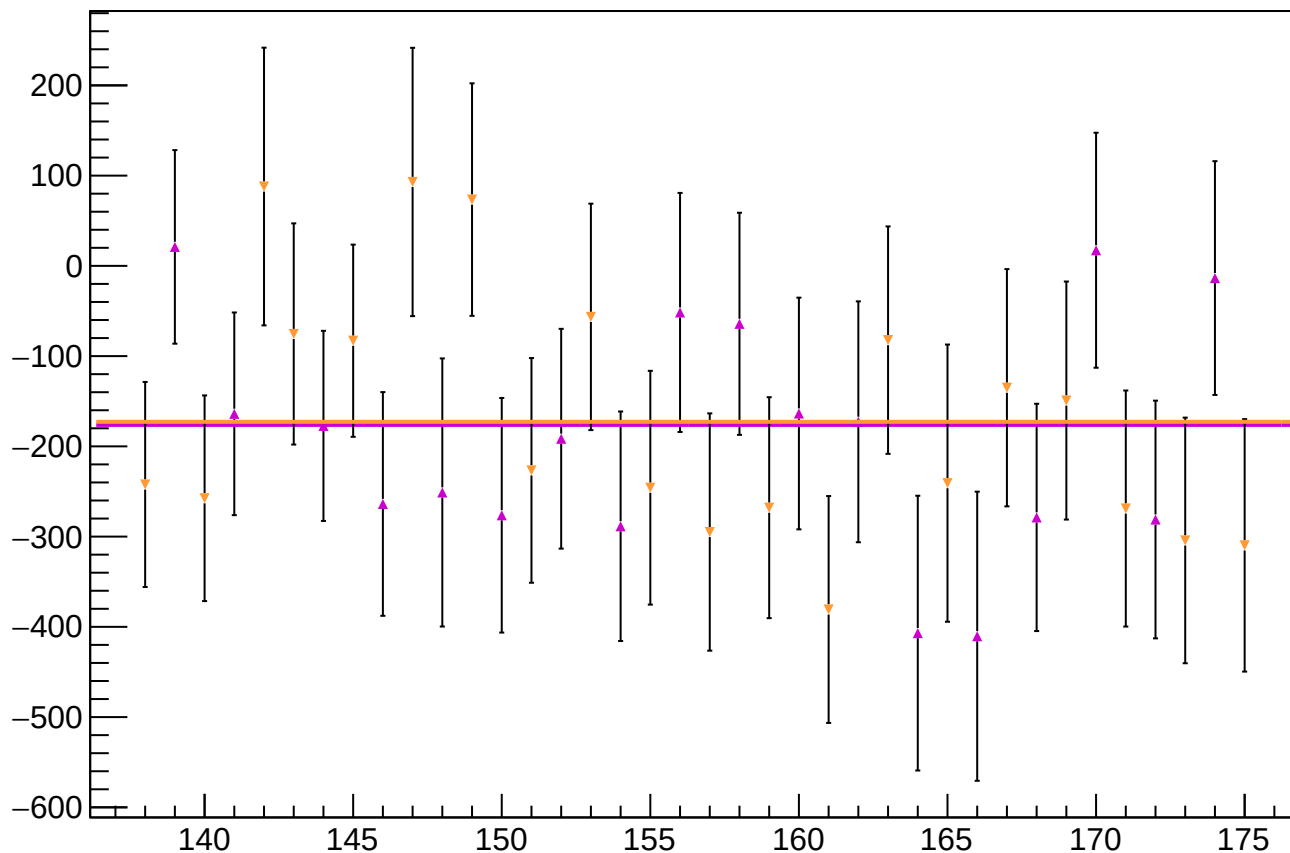
In: 1098.148+/-0.209  $\chi^2/\text{NDF}$ : 612794.9/17

Out: 1104.456+/-0.204  $\chi^2/\text{NDF}$ : 741023.1/19

All: 1101.374+/-0.146  $\chi^2/\text{NDF}$ : 1354284.7/37



# dit\_asym\_sam\_15\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -172.794+/-28.668  $\chi^2/\text{NDF}$ :20.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -176.216+/-29.927  $\chi^2/\text{NDF}$ :16.8/17

Left: -174.431+/-20.702  $\chi^2/\text{NDF}$ : 37.6/37

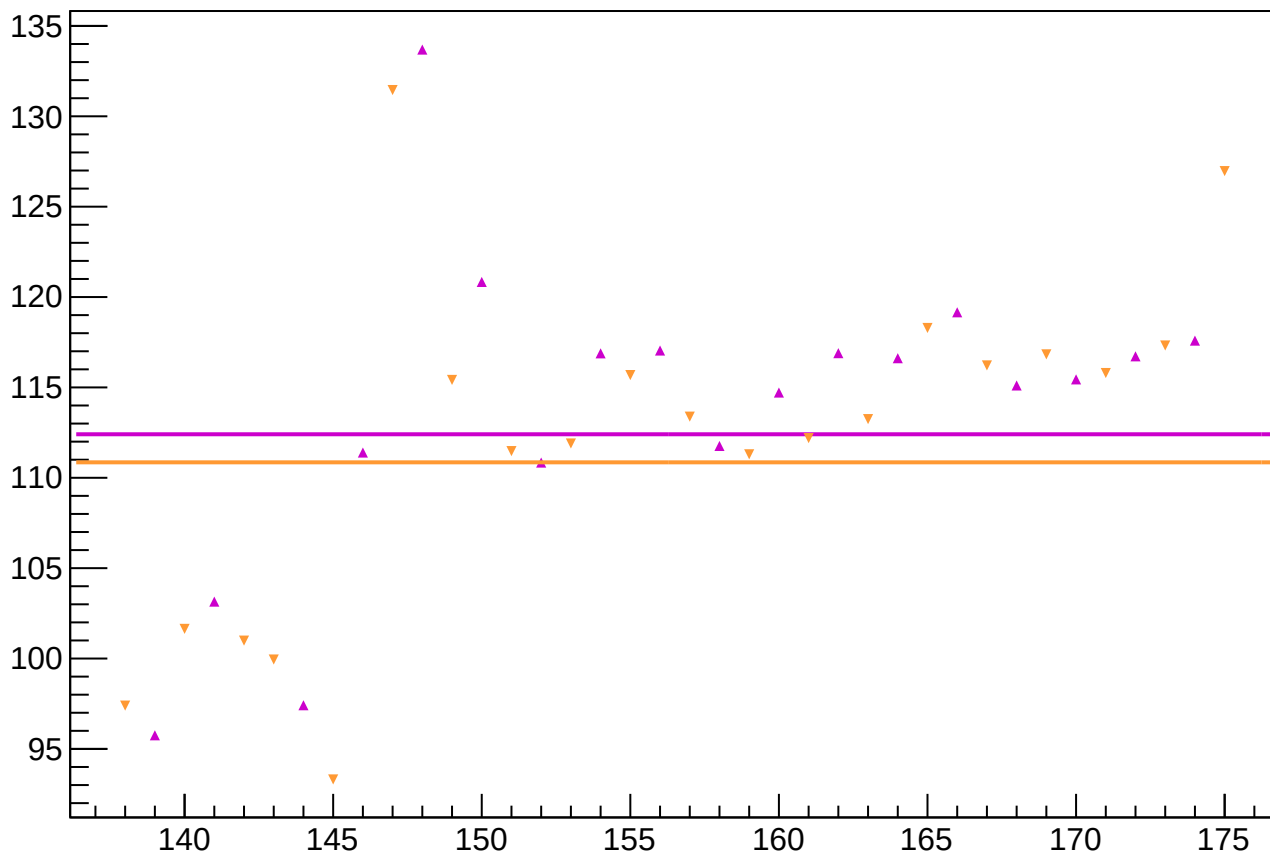
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -176.216+/-29.927  $\chi^2/\text{NDF}$ :16.8/17

Out: -172.794+/-28.668  $\chi^2/\text{NDF}$ :20.8/19

All: -174.431+/-20.702  $\chi^2/\text{NDF}$ : 37.6/37

dit\_asym\_sam\_15\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 110.855+/-0.020  $\chi^2/\text{NDF}$ :211087.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 112.408+/-0.021  $\chi^2/\text{NDF}$ :172598.1/17

Left: 111.598+/-0.015  $\chi^2/\text{NDF}$ : 386493.5/37

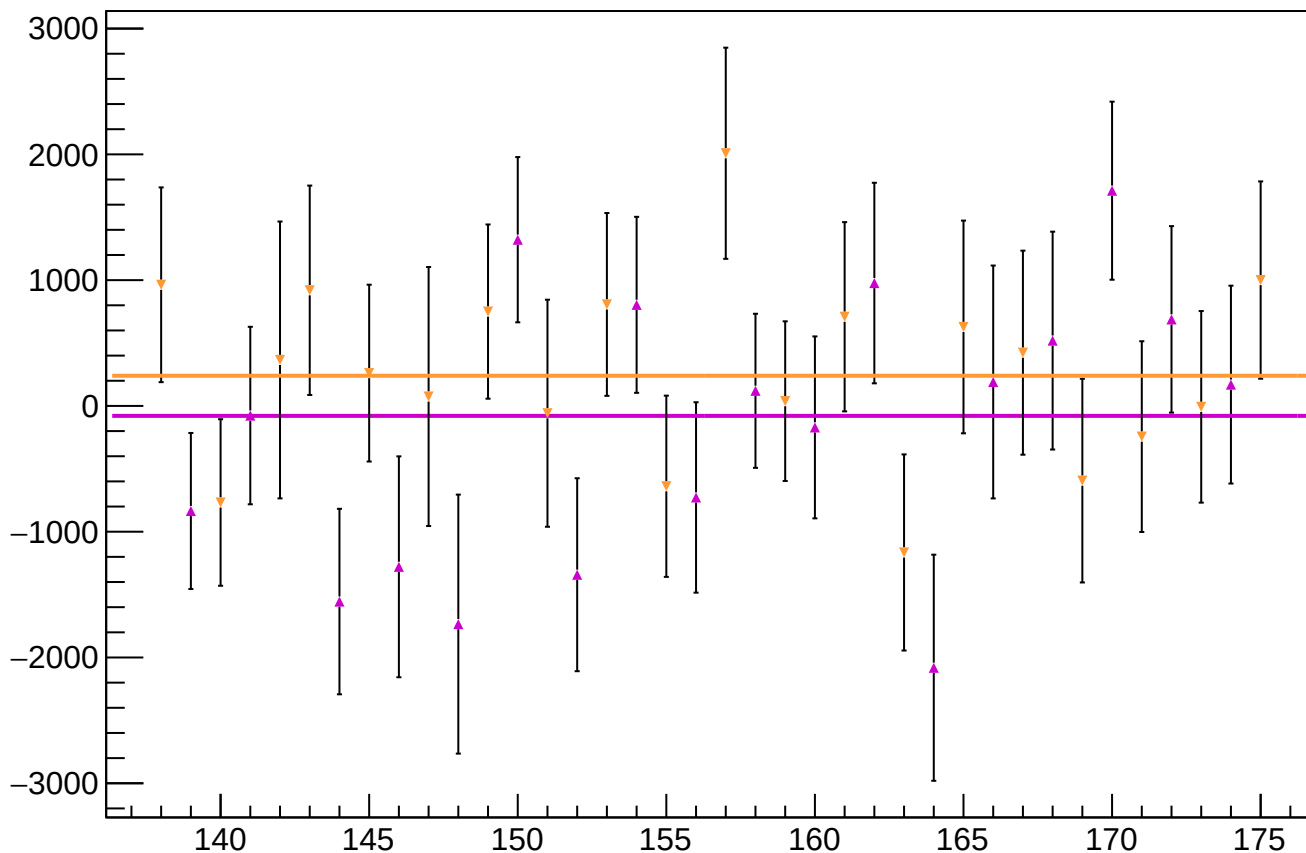
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 112.408+/-0.021  $\chi^2/\text{NDF}$ :172598.1/17

Out: 110.855+/-0.020  $\chi^2/\text{NDF}$ :211087.4/19

All: 111.598+/-0.015  $\chi^2/\text{NDF}$ : 386493.5/37

asym\_sam\_15\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 239.994+/-173.646  $\chi^2/\text{NDF}$ :17.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -79.043+/-177.295  $\chi^2/\text{NDF}$ :34.5/17

Left: 83.792+/-124.056  $\chi^2/\text{NDF}$ : 53.7/37

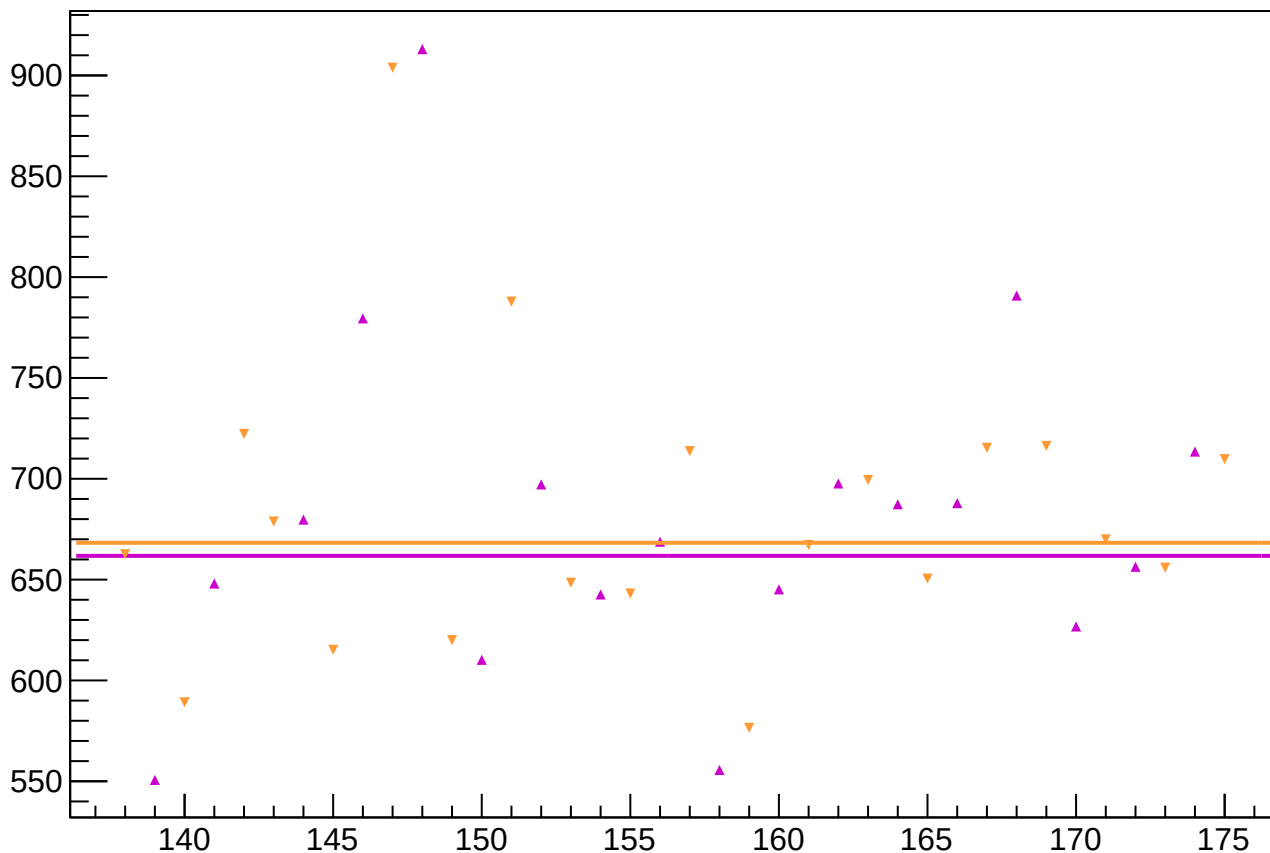
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -79.043+/-177.295  $\chi^2/\text{NDF}$ :34.5/17

Out: 239.994+/-173.646  $\chi^2/\text{NDF}$ :17.6/19

All: 83.792+/-124.056  $\chi^2/\text{NDF}$ : 53.7/37

asym\_sam\_15\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 668.259+/-0.123  $\chi^2/\text{NDF}$ :270318.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 661.793+/-0.125  $\chi^2/\text{NDF}$ :365935.9/17

Left: 665.093+/-0.088  $\chi^2/\text{NDF}$ : 637612.2/37

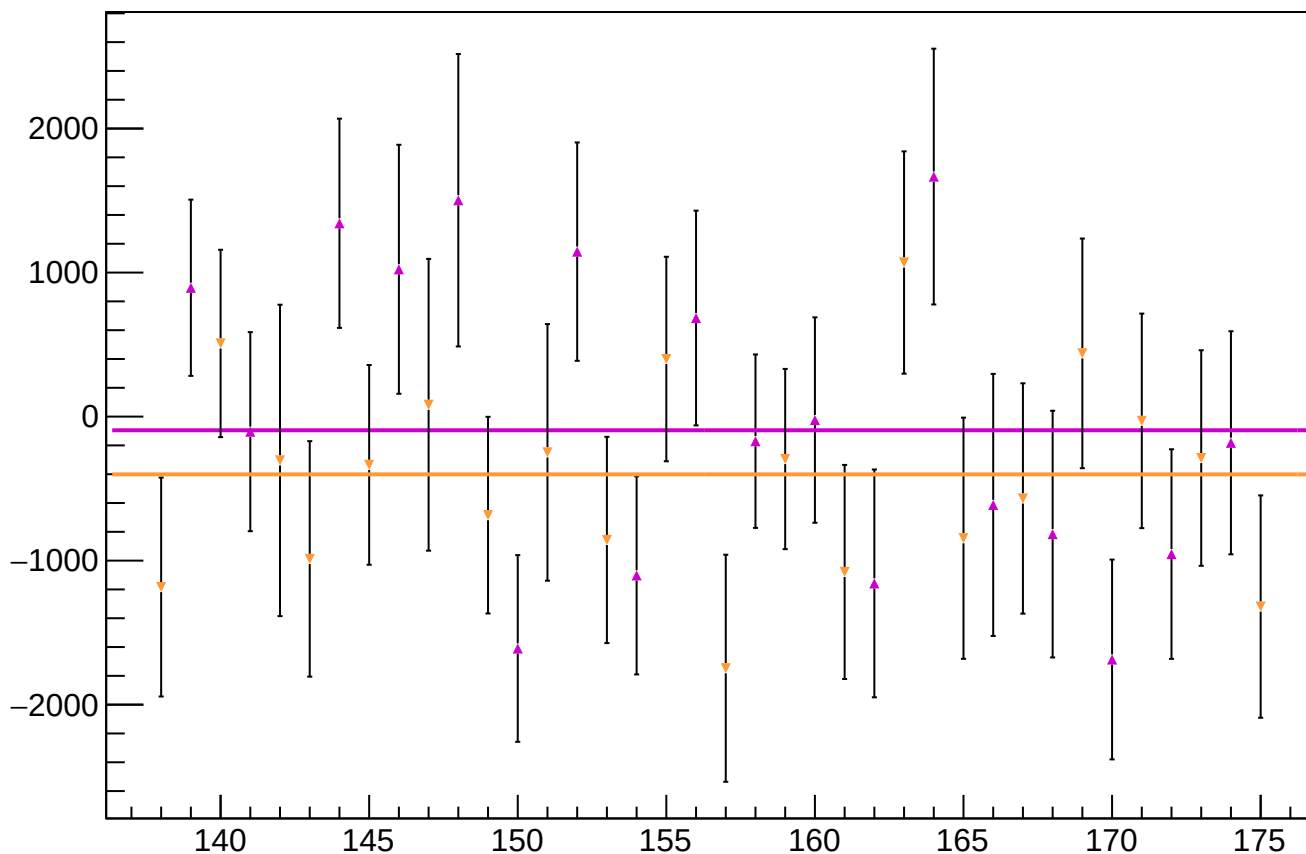
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 661.793+/-0.125  $\chi^2/\text{NDF}$ :365935.9/17

Out: 668.259+/-0.123  $\chi^2/\text{NDF}$ :270318.4/19

All: 665.093+/-0.088  $\chi^2/\text{NDF}$ : 637612.2/37

# asym\_sam\_15\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -401.111+/-170.686  $\chi^2/\text{NDF}$ :16.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -94.963+/-174.603  $\chi^2/\text{NDF}$ :35.5/17

Left: -251.510+/-122.054  $\chi^2/\text{NDF}$ : 53.3/37

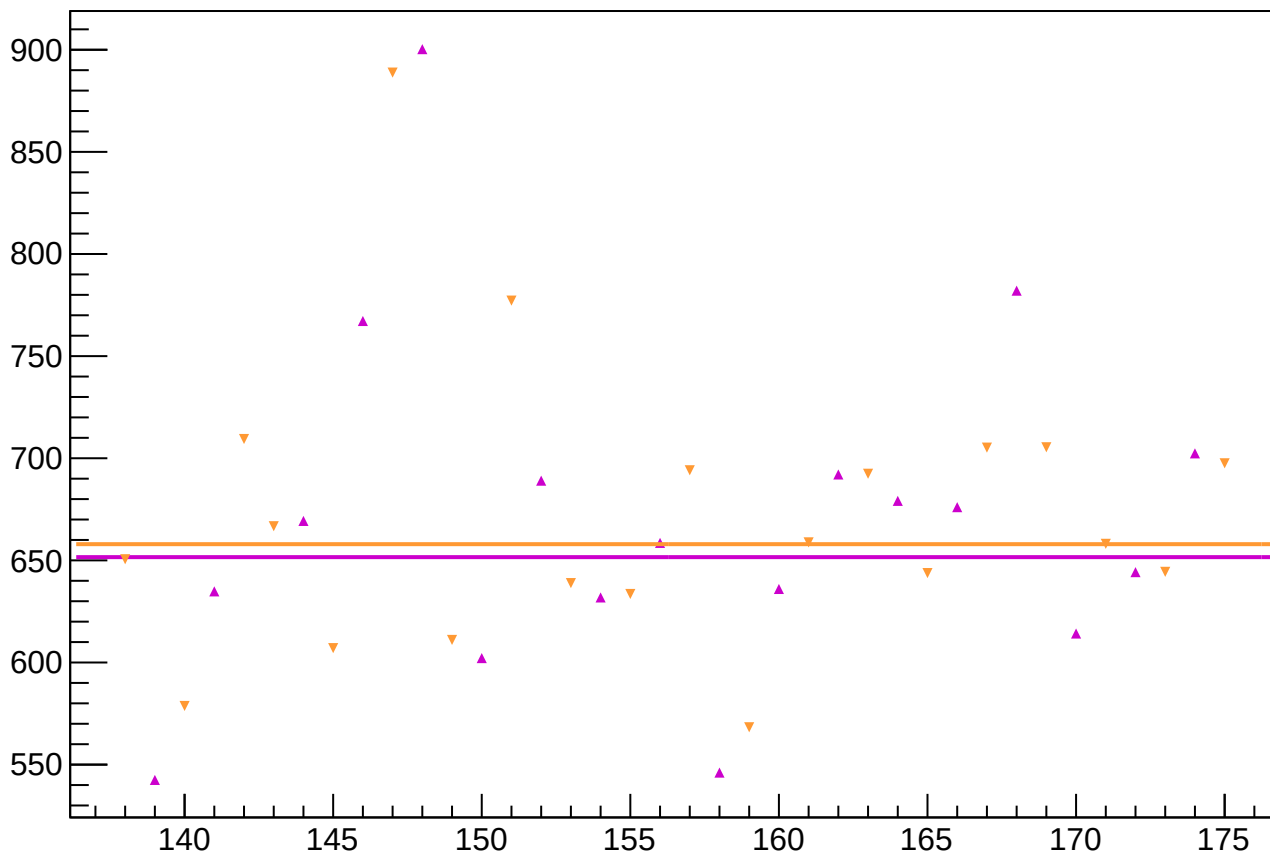
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -94.963+/-174.603  $\chi^2/\text{NDF}$ :35.5/17

Out: -401.111+/-170.686  $\chi^2/\text{NDF}$ :16.2/19

All: -251.510+/-122.054  $\chi^2/\text{NDF}$ : 53.3/37

# asym\_sam\_15\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 657.935+/-0.121  $\chi^2/\text{NDF}$ :268171.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 651.585+/-0.123  $\chi^2/\text{NDF}$ :372086.3/17

Left: 654.832+/-0.086  $\chi^2/\text{NDF}$ : 641610.3/37

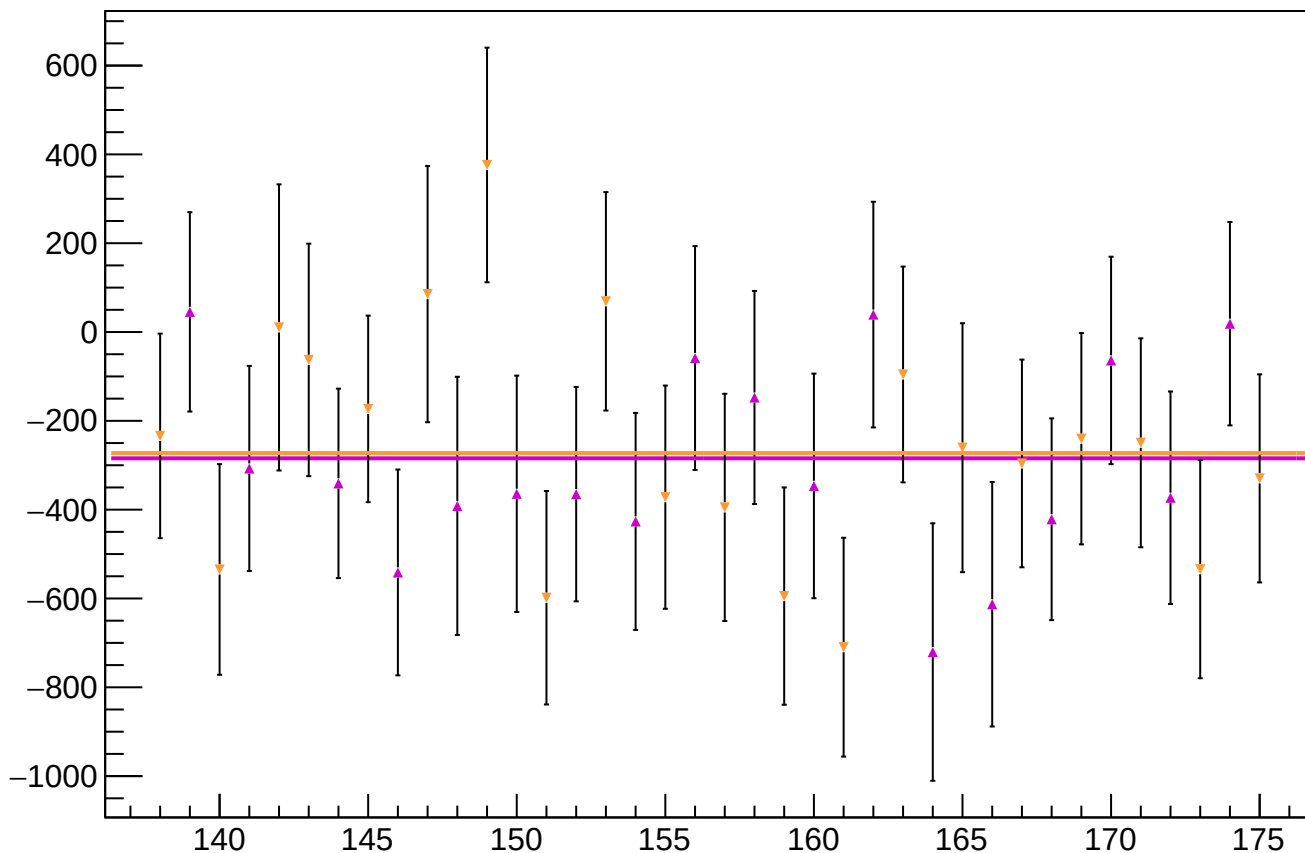
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 651.585+/-0.123  $\chi^2/\text{NDF}$ :372086.3/17

Out: 657.935+/-0.121  $\chi^2/\text{NDF}$ :268171.4/19

All: 654.832+/-0.086  $\chi^2/\text{NDF}$ : 641610.3/37

dit\_asym\_sam\_26\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: -272.468 $\pm$ 55.345  $\chi^2$ /NDF:21.3/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: -284.389 $\pm$ 57.482  $\chi^2$ /NDF:13.8/17

Left: -278.202 $\pm$ 39.869  $\chi^2$ /NDF: 35.1/37

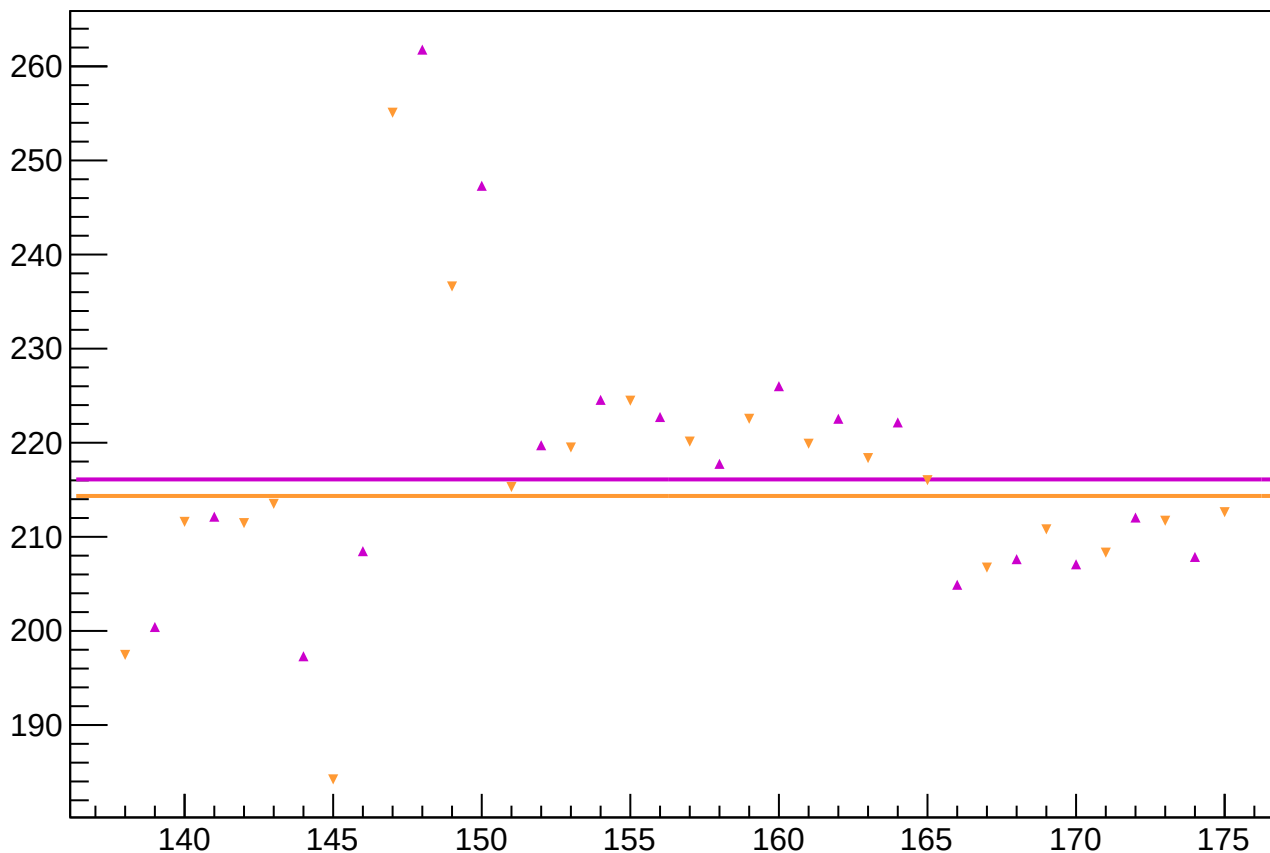
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: -284.389 $\pm$ 57.482  $\chi^2$ /NDF:13.8/17

Out: -272.468 $\pm$ 55.345  $\chi^2$ /NDF:21.3/19

All: -278.202 $\pm$ 39.869  $\chi^2$ /NDF: 35.1/37

dit\_asym\_sam\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 214.343+/-0.039  $\chi^2/\text{NDF}$ :119665.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 216.100+/-0.041  $\chi^2/\text{NDF}$ :126681.6/17

Left: 215.189+/-0.028  $\chi^2/\text{NDF}$ : 247316.3/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

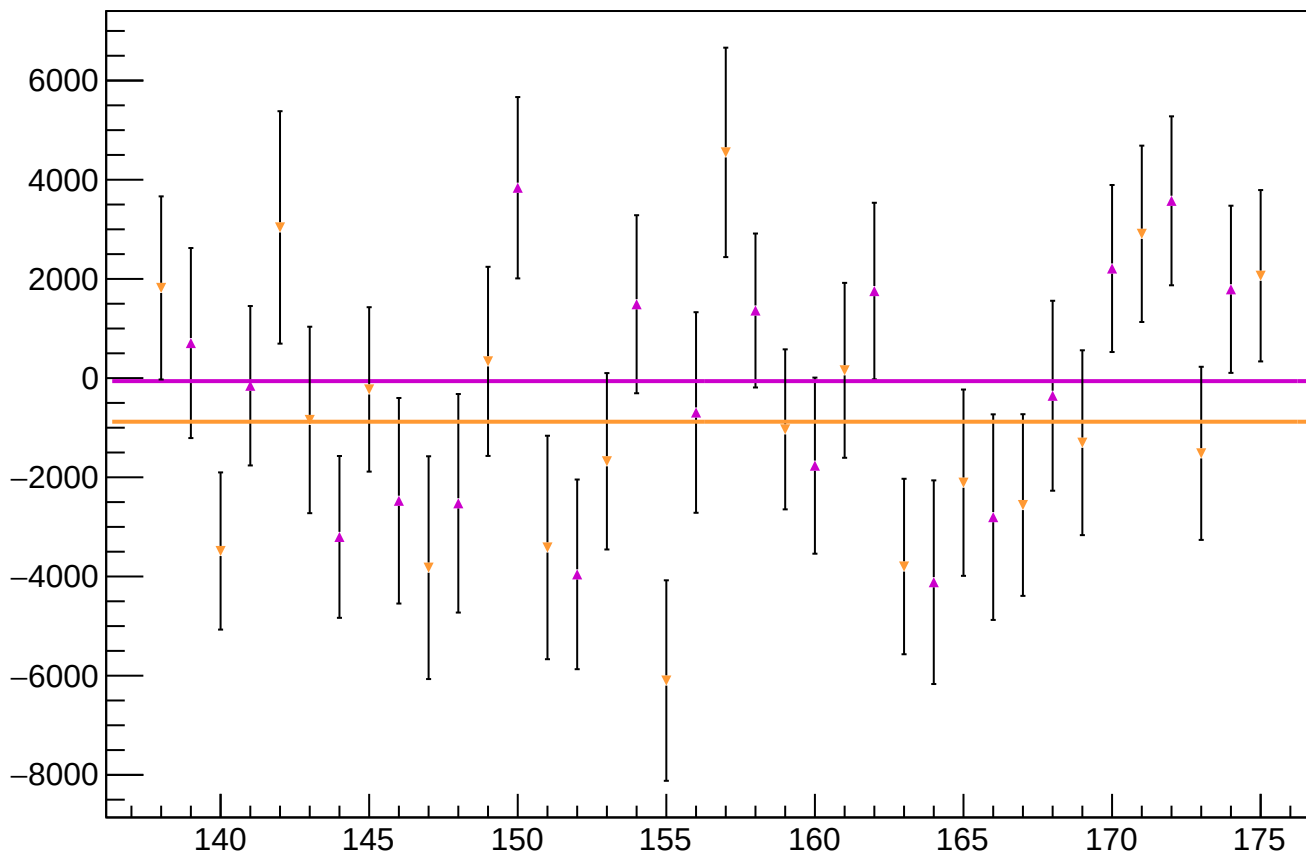
In: 216.100+/-0.041  $\chi^2/\text{NDF}$ :126681.6/17

Out: 214.343+/-0.039  $\chi^2/\text{NDF}$ :119665.0/19

All: 215.189+/-0.028  $\chi^2/\text{NDF}$ : 247316.3/37



asym\_sam\_26\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -879.136+/-413.421  $\chi^2/\text{NDF}$ :36.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -60.696+/-428.696  $\chi^2/\text{NDF}$ :32.1/17

Left: -484.757+/-297.587  $\chi^2/\text{NDF}$ : 70.6/37

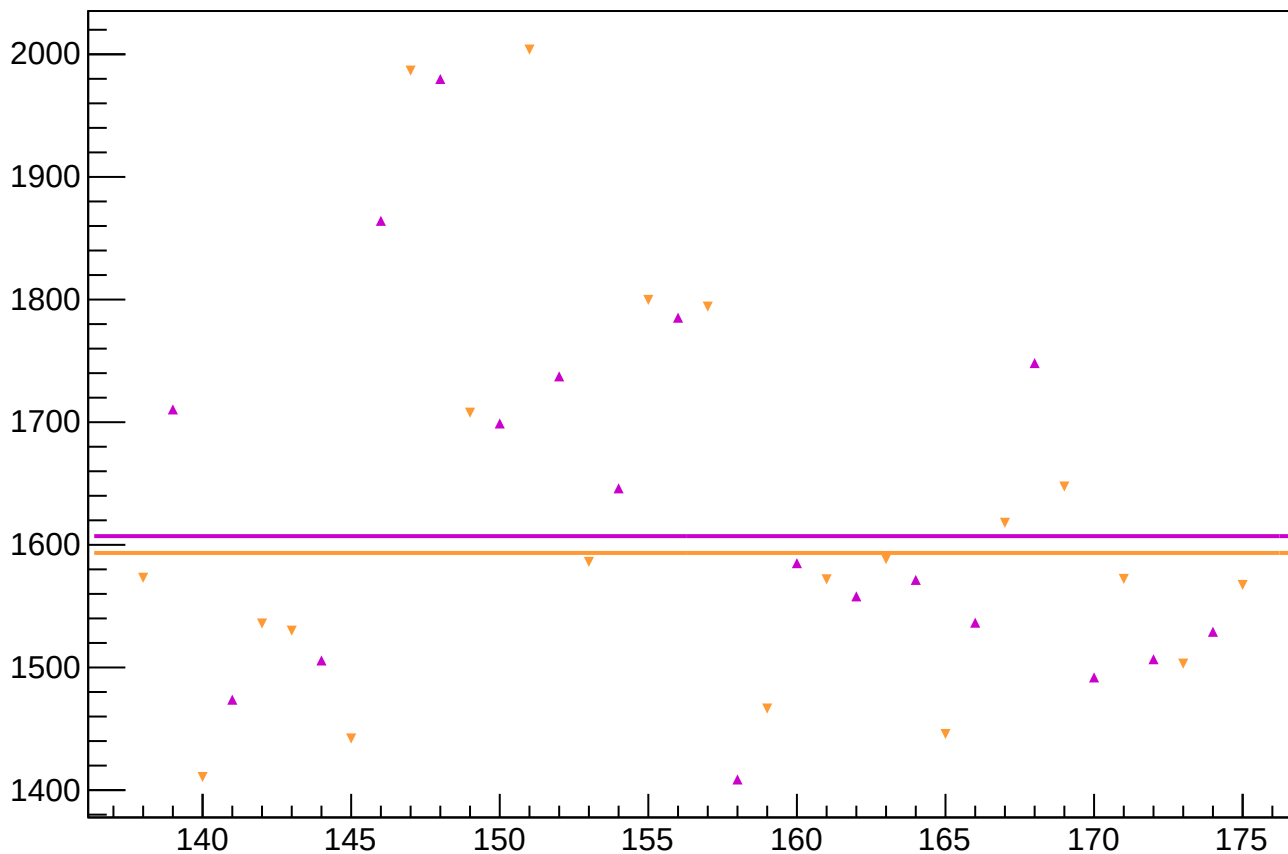
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -60.696+/-428.696  $\chi^2/\text{NDF}$ :32.1/17

Out: -879.136+/-413.421  $\chi^2/\text{NDF}$ :36.6/19

All: -484.757+/-297.587  $\chi^2/\text{NDF}$ : 70.6/37

asym\_sam\_26\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1593.401+/-0.292  $\chi^2/\text{NDF}$ : 253993.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1607.103+/-0.303  $\chi^2/\text{NDF}$ : 215008.3/17

Left: 1600.004+/-0.210  $\chi^2/\text{NDF}$ : 470060.5/37

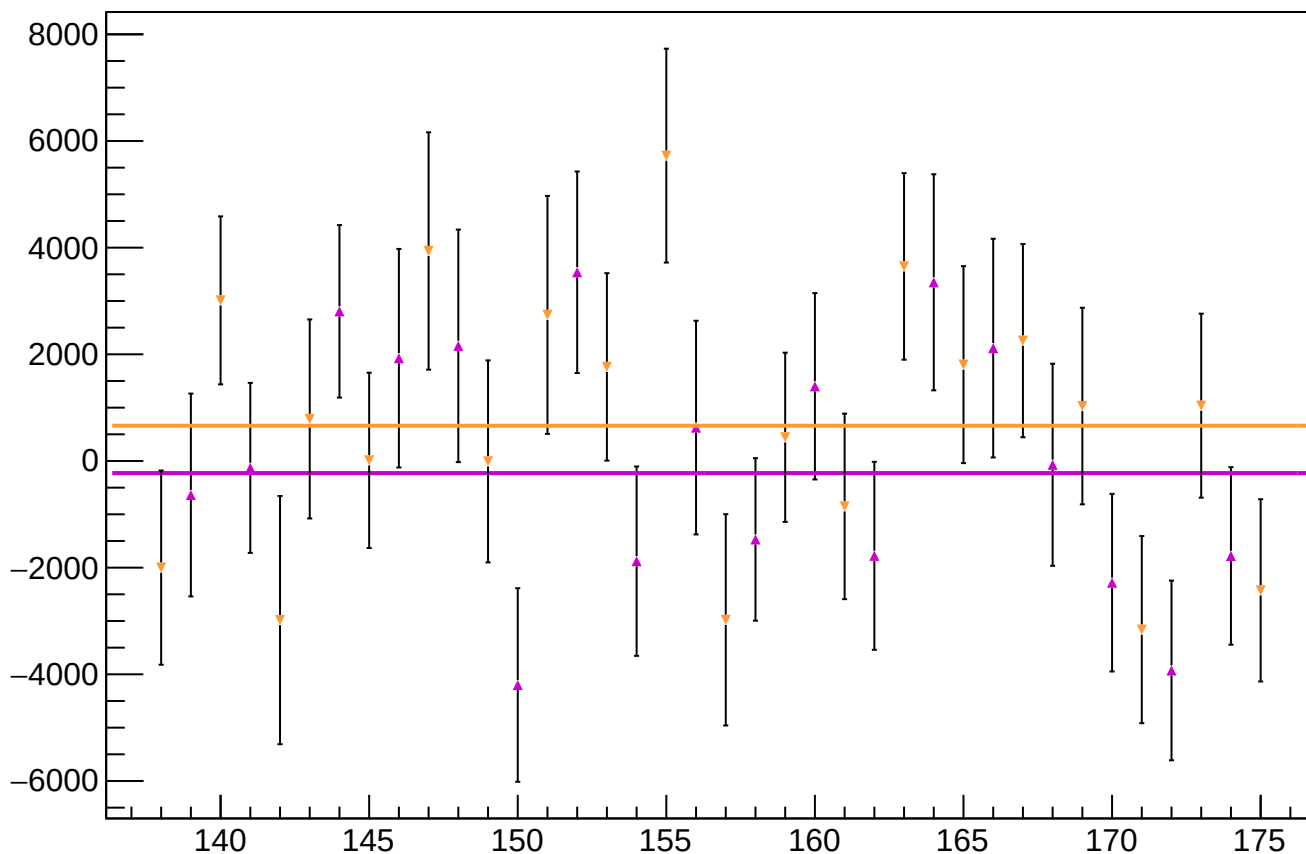
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 1607.103+/-0.303  $\chi^2/\text{NDF}$ : 215008.3/17

Out: 1593.401+/-0.292  $\chi^2/\text{NDF}$ : 253993.7/19

All: 1600.004+/-0.210  $\chi^2/\text{NDF}$ : 470060.5/37

# asym\_sam\_26\_dd\_mean vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $660.864 \pm 408.017$   $\chi^2/\text{NDF}: 33.2/19$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-226.458 \pm 423.852$   $\chi^2/\text{NDF}: 29.6/17$

Left:  $234.088 \pm 293.950$   $\chi^2/\text{NDF}: 65.2/37$

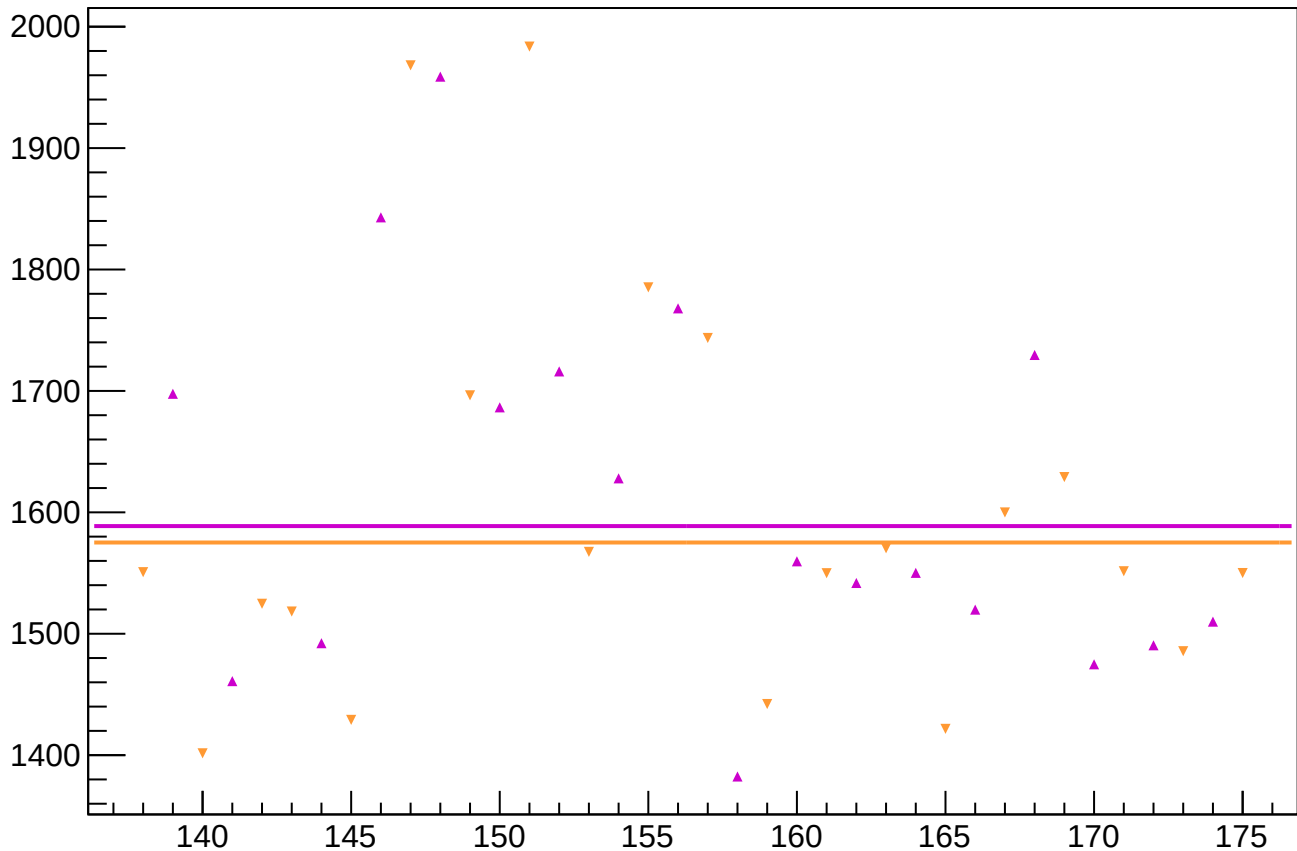
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

In:  $-226.458 \pm 423.852$   $\chi^2/\text{NDF}: 29.6/17$

Out:  $660.864 \pm 408.017$   $\chi^2/\text{NDF}: 33.2/19$

All:  $234.088 \pm 293.950$   $\chi^2/\text{NDF}: 65.2/37$

# asym\_sam\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1575.156+/-0.289  $\chi^2/\text{NDF}$ :253967.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 1588.678+/-0.300  $\chi^2/\text{NDF}$ :220199.5/17

Left: 1581.659+/-0.208  $\chi^2/\text{NDF}$ : 475223.3/37

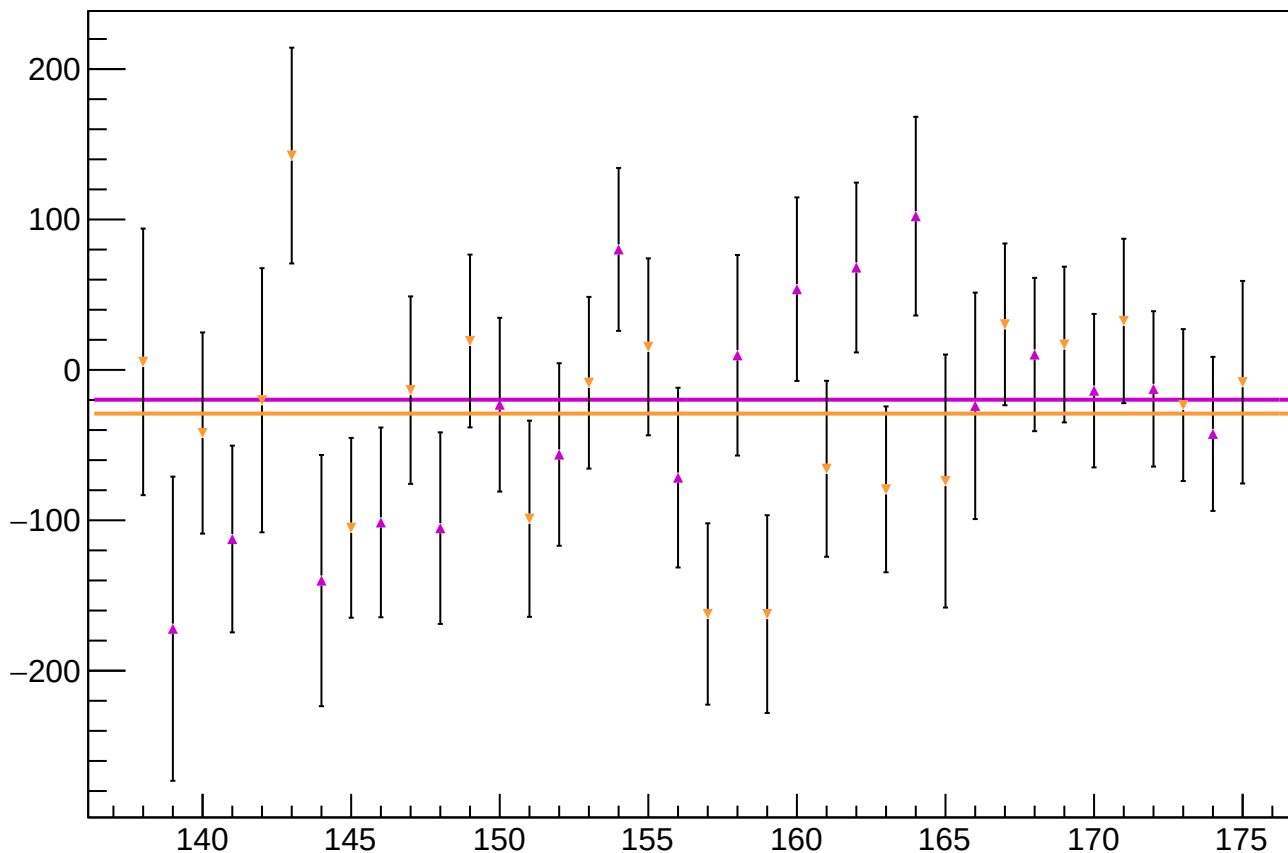
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 1588.678+/-0.300  $\chi^2/\text{NDF}$ :220199.5/17

Out: 1575.156+/-0.289  $\chi^2/\text{NDF}$ :253967.3/19

All: 1581.659+/-0.208  $\chi^2/\text{NDF}$ : 475223.3/37

# dit\_asym\_sam\_37\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -29.052+/-13.759  $\chi^2/\text{NDF}$ :24.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -19.813+/-14.244  $\chi^2/\text{NDF}$ :22.6/17

Left: -24.592+/-9.896  $\chi^2/\text{NDF}$ : 46.9/37

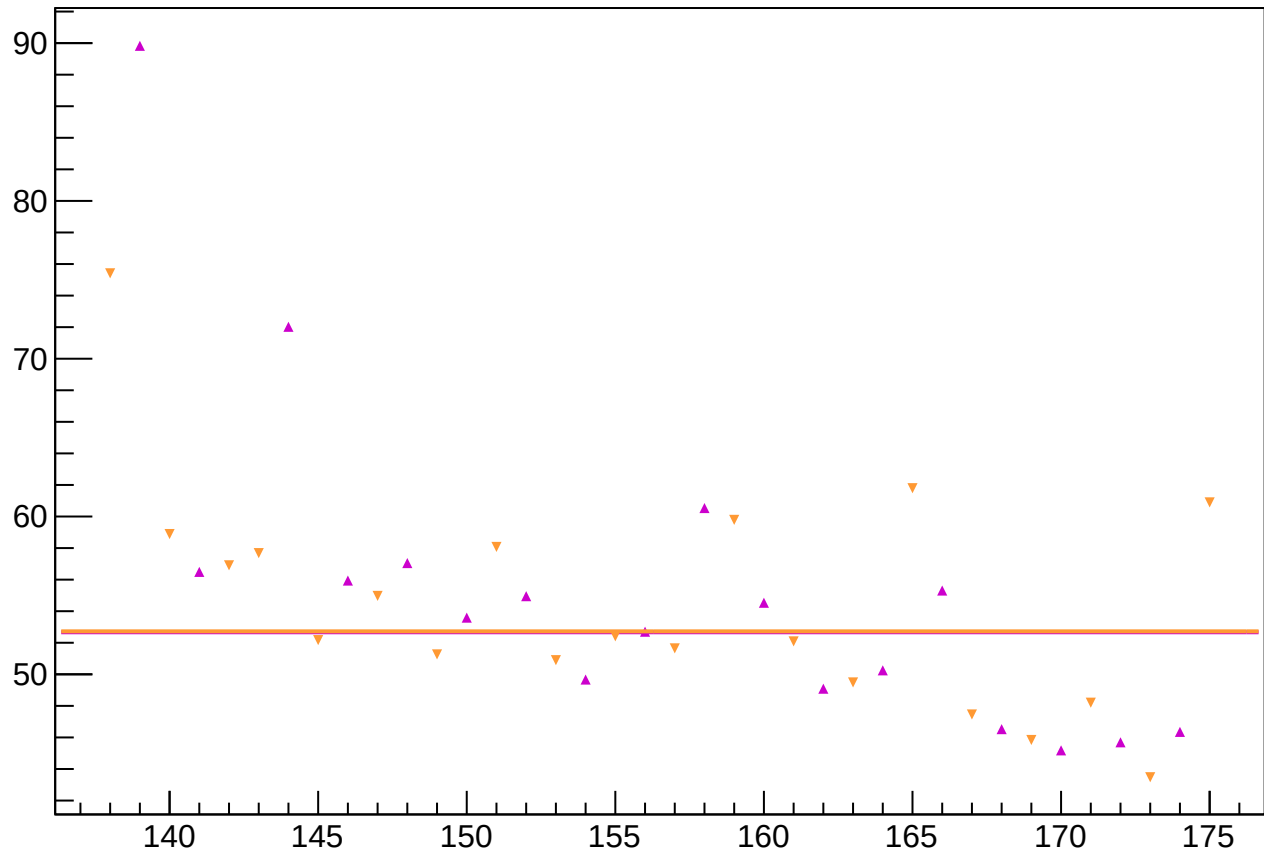
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -19.813+/-14.244  $\chi^2/\text{NDF}$ :22.6/17

Out: -29.052+/-13.759  $\chi^2/\text{NDF}$ :24.0/19

All: -24.592+/-9.896  $\chi^2/\text{NDF}$ : 46.9/37

dit\_asym\_sam\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 52.723+/-0.010  $\chi^2/\text{NDF}$ : 400746.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 52.666+/-0.010  $\chi^2/\text{NDF}$ : 591397.6/17

Left: 52.695+/-0.007  $\chi^2/\text{NDF}$ : 992160.4/37

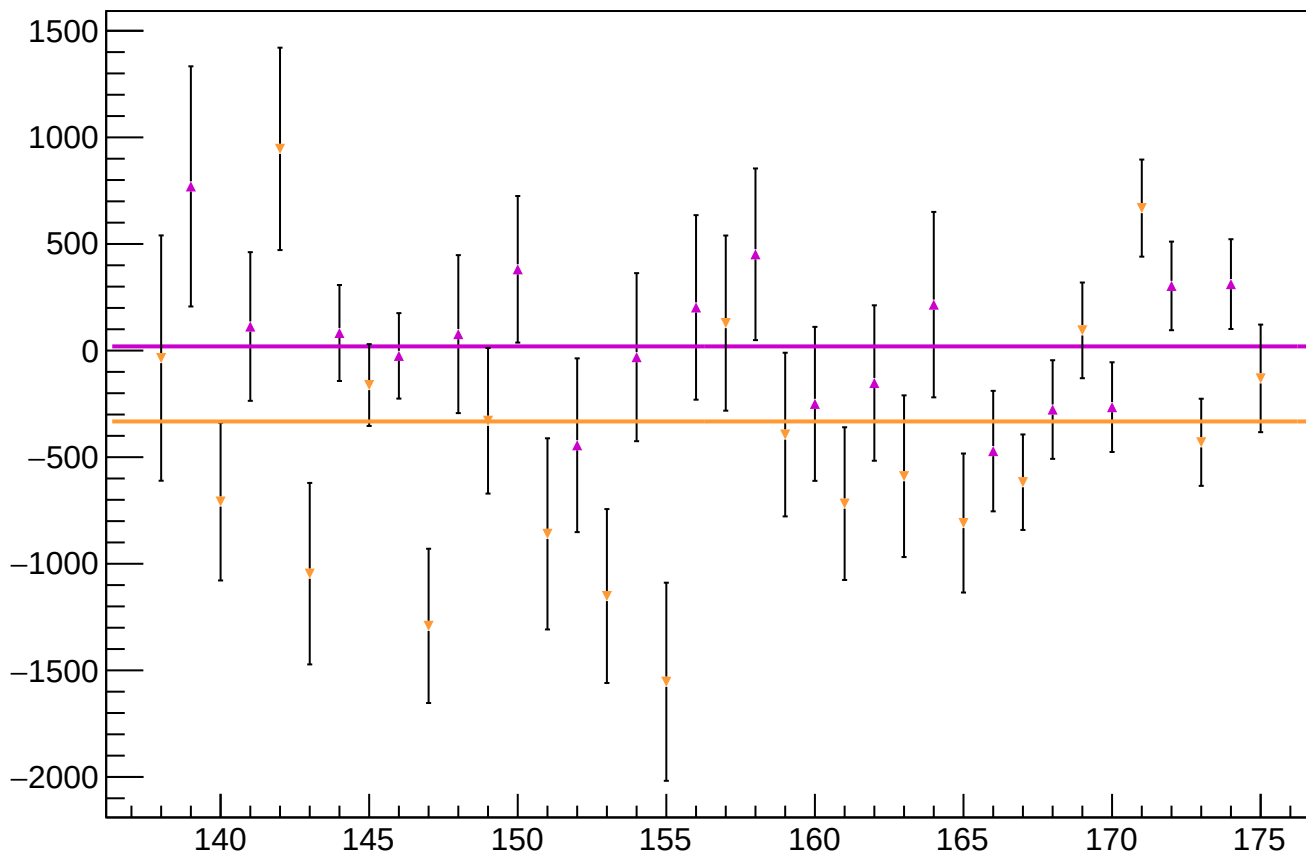
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 52.666+/-0.010  $\chi^2/\text{NDF}$ : 591397.6/17

Out: 52.723+/-0.010  $\chi^2/\text{NDF}$ : 400746.1/19

All: 52.695+/-0.007  $\chi^2/\text{NDF}$ : 992160.4/37

asym\_sam\_37\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -332.439+/-68.215  $\chi^2/\text{NDF}$ :62.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 19.579+/-68.091  $\chi^2/\text{NDF}$ :17.0/17

Left: -156.109+/-48.191  $\chi^2/\text{NDF}$ : 92.3/37

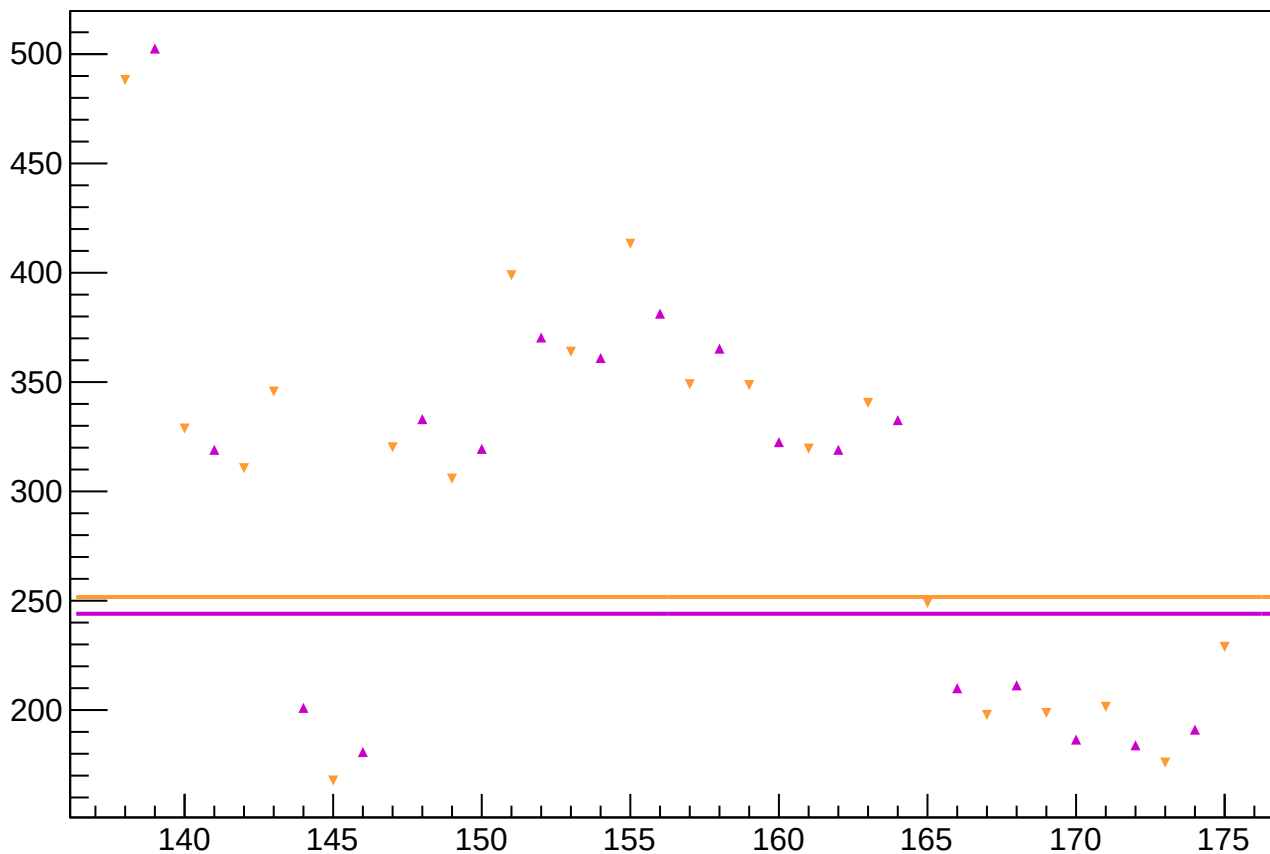
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 19.579+/-68.091  $\chi^2/\text{NDF}$ :17.0/17

Out: -332.439+/-68.215  $\chi^2/\text{NDF}$ :62.0/19

All: -156.109+/-48.191  $\chi^2/\text{NDF}$ : 92.3/37

asym\_sam\_37\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 251.707+/-0.048  $\chi^2/\text{NDF}$ :2703632.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 244.033+/-0.048  $\chi^2/\text{NDF}$ :2524001.0/17

Left: 247.863+/-0.034  $\chi^2/\text{NDF}$ : 5240312.3/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

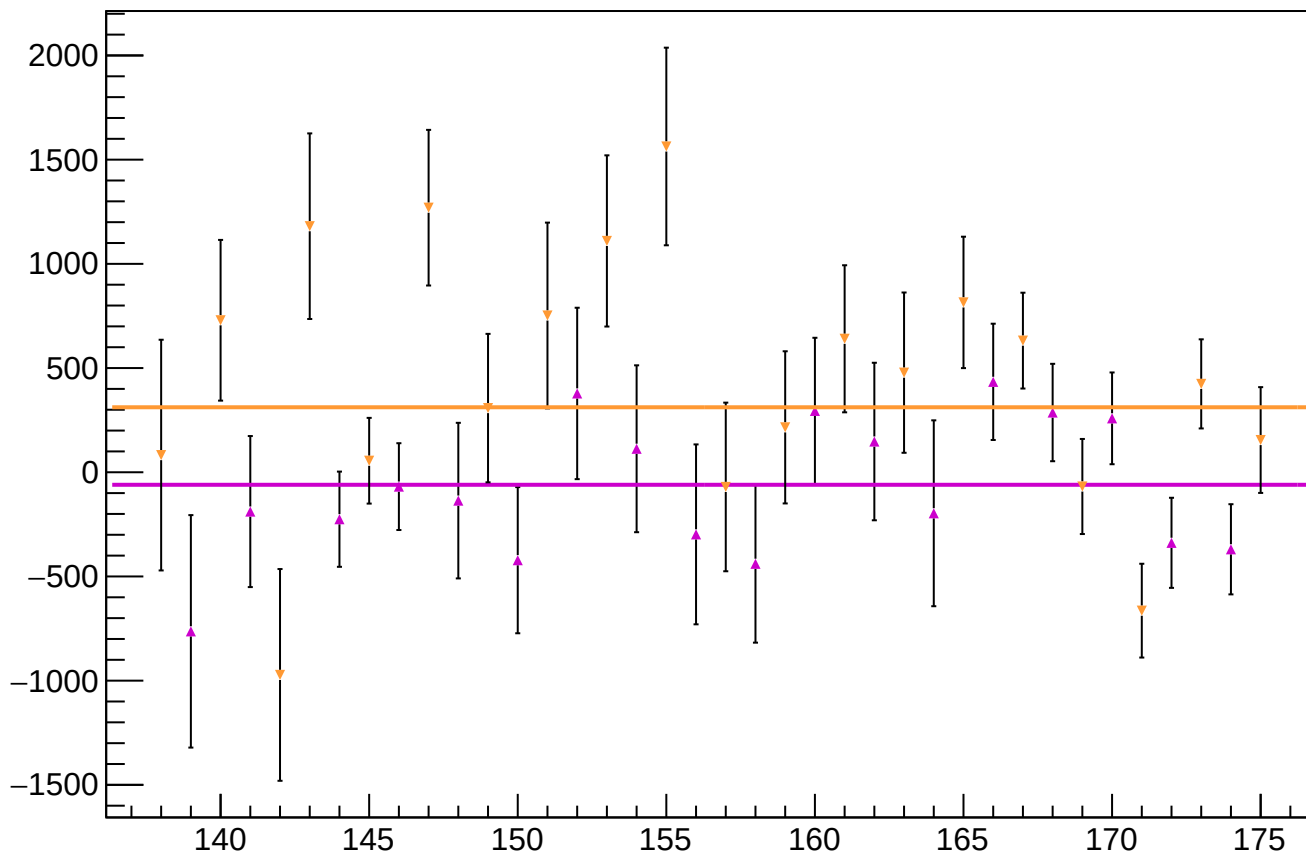
In: 244.033+/-0.048  $\chi^2/\text{NDF}$ :2524001.0/17

Out: 251.707+/-0.048  $\chi^2/\text{NDF}$ :2703632.3/19

All: 247.863+/-0.034  $\chi^2/\text{NDF}$ : 5240312.3/37



# asym\_sam\_37\_dd\_mean vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $311.840 \pm 69.546$   $\chi^2/\text{NDF}: 60.1/19$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-60.130 \pm 69.410$   $\chi^2/\text{NDF}: 18.5/17$

Left:  $125.491 \pm 49.128$   $\chi^2/\text{NDF}: 93.0/37$

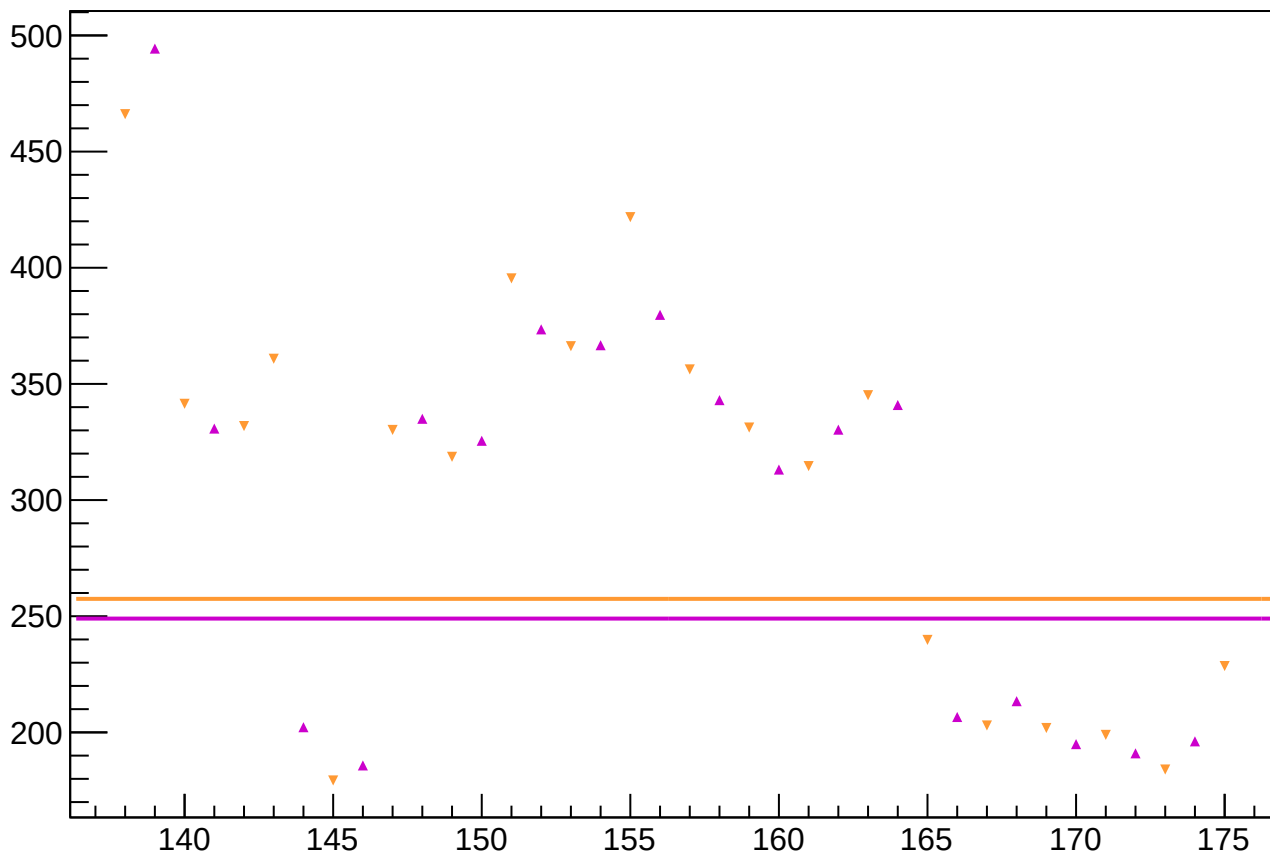
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

In:  $-60.130 \pm 69.410$   $\chi^2/\text{NDF}: 18.5/17$

Out:  $311.840 \pm 69.546$   $\chi^2/\text{NDF}: 60.1/19$

All:  $125.491 \pm 49.128$   $\chi^2/\text{NDF}: 93.0/37$

# asym\_sam\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 257.476+/-0.049  $\chi^2/\text{NDF}$ :2517350.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 248.986+/-0.049  $\chi^2/\text{NDF}$ :2342048.8/17

Left: 253.222+/-0.035  $\chi^2/\text{NDF}$ : 4874331.1/37

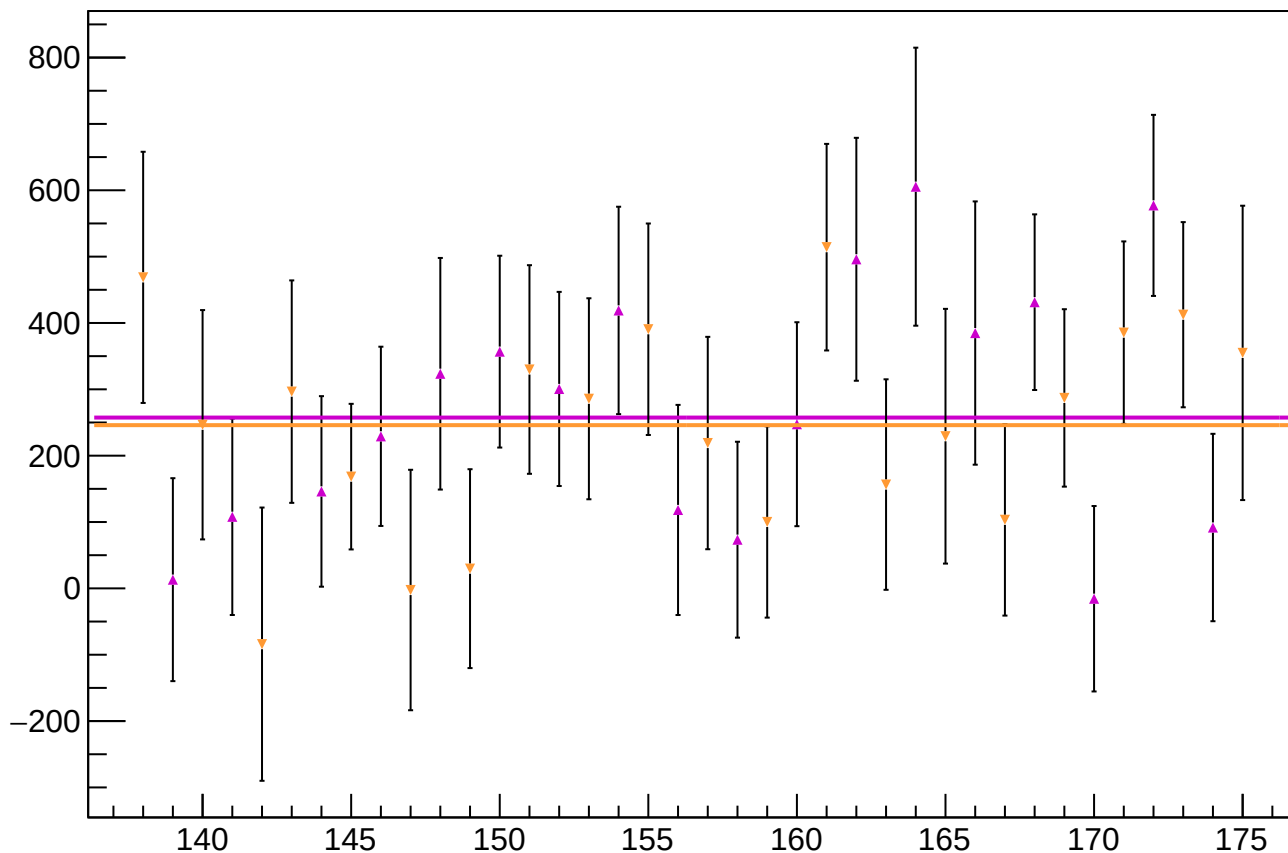
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 248.986+/-0.049  $\chi^2/\text{NDF}$ :2342048.8/17

Out: 257.476+/-0.049  $\chi^2/\text{NDF}$ :2517350.1/19

All: 253.222+/-0.035  $\chi^2/\text{NDF}$ : 4874331.1/37

dit\_asym\_sam\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 245.994+/-34.798  $\chi^2/\text{NDF}$ :17.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 257.425+/-35.845  $\chi^2/\text{NDF}$ :25.6/17

Left: 251.540+/-24.968  $\chi^2/\text{NDF}$ : 43.4/37

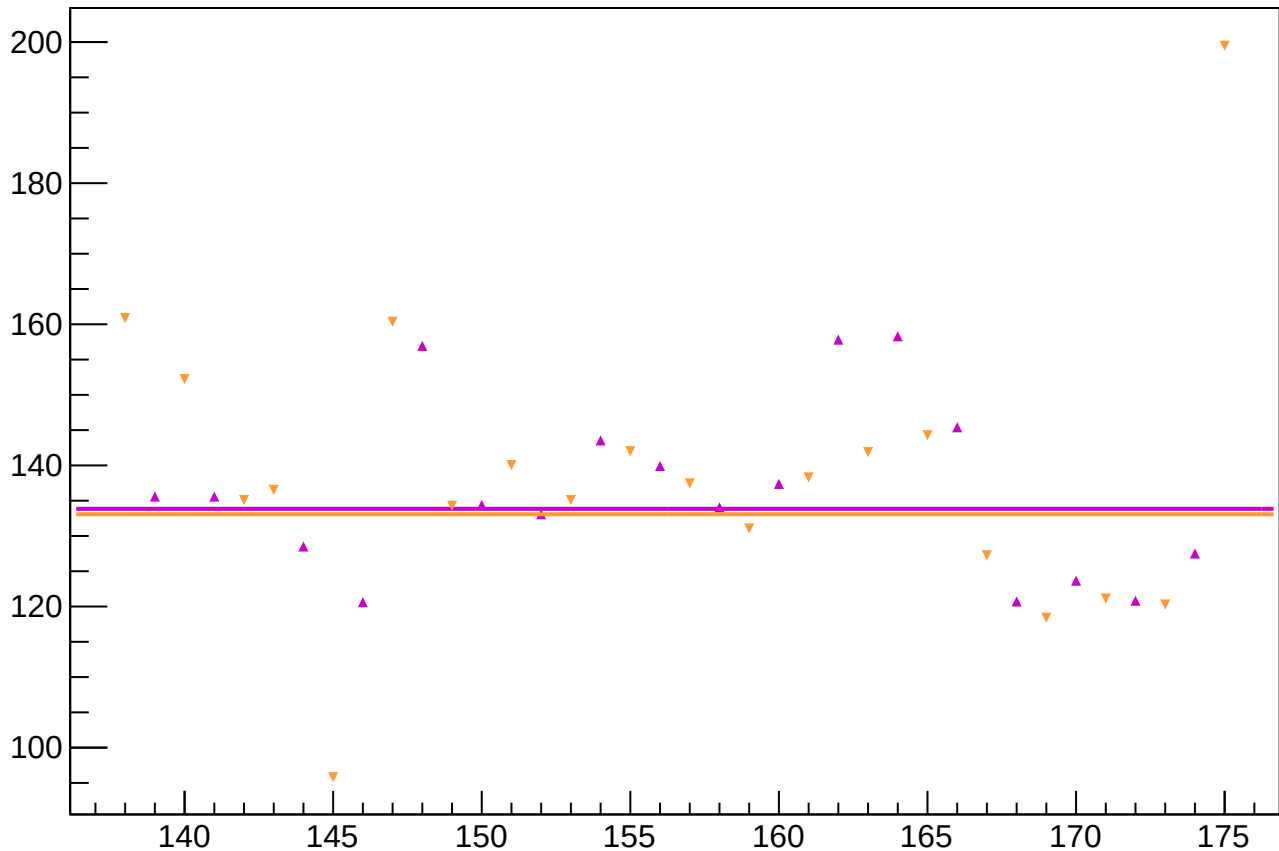
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 257.425+/-35.845  $\chi^2/\text{NDF}$ :25.6/17

Out: 245.994+/-34.798  $\chi^2/\text{NDF}$ :17.8/19

All: 251.540+/-24.968  $\chi^2/\text{NDF}$ : 43.4/37

# dit\_asym\_sam\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 133.077+/-0.025  $\chi^2/\text{NDF}$ :611016.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 133.842+/-0.025  $\chi^2/\text{NDF}$ :190166.9/17

Left: 133.448+/-0.018  $\chi^2/\text{NDF}$ : 801652.4/37

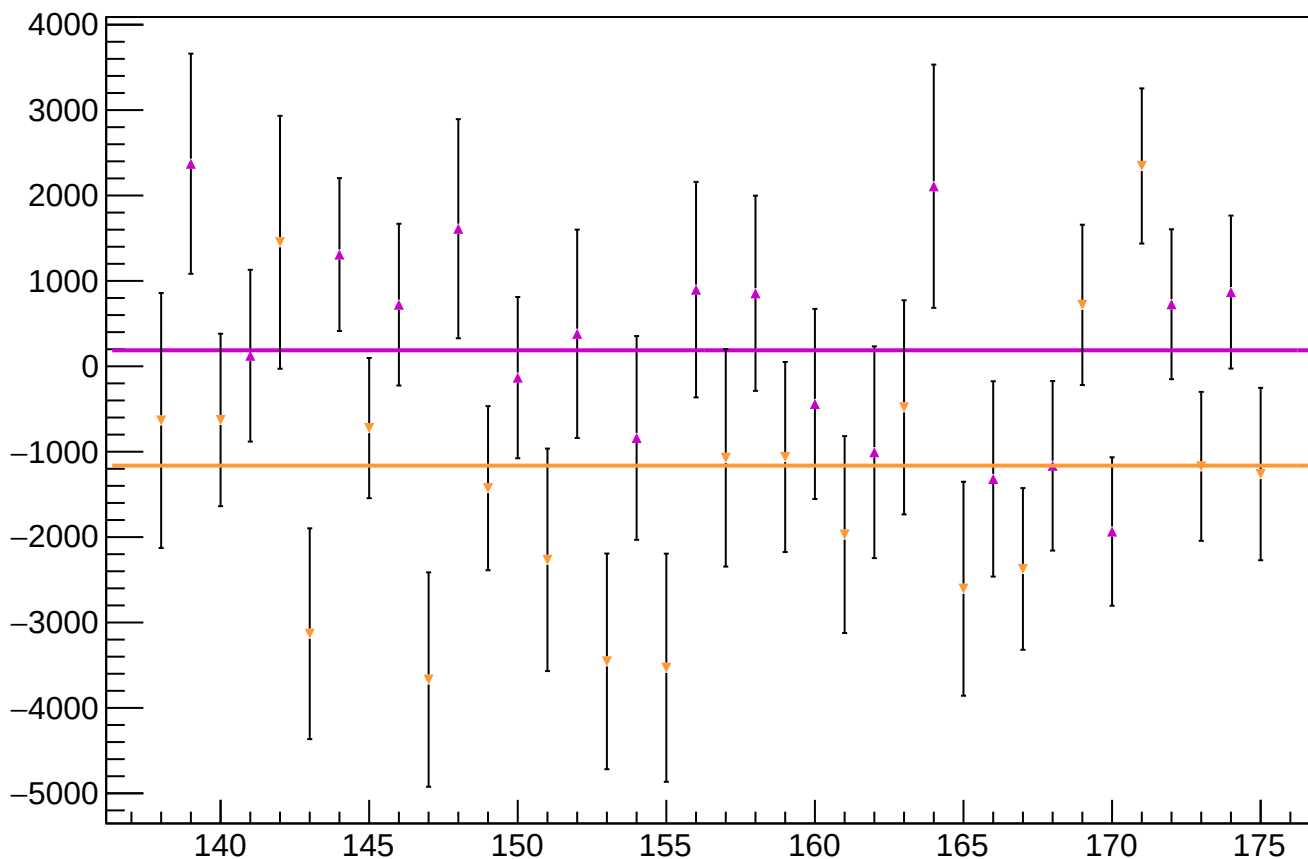
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 133.842+/-0.025  $\chi^2/\text{NDF}$ :190166.9/17

Out: 133.077+/-0.025  $\chi^2/\text{NDF}$ :611016.8/19

All: 133.448+/-0.018  $\chi^2/\text{NDF}$ : 801652.4/37

asym\_sam\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1162.986+/-244.481  $\chi^2/\text{NDF}$ :40.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 187.529+/-249.606  $\chi^2/\text{NDF}$ :21.1/17

Left: -501.735+/-174.658  $\chi^2/\text{NDF}$ : 76.3/37

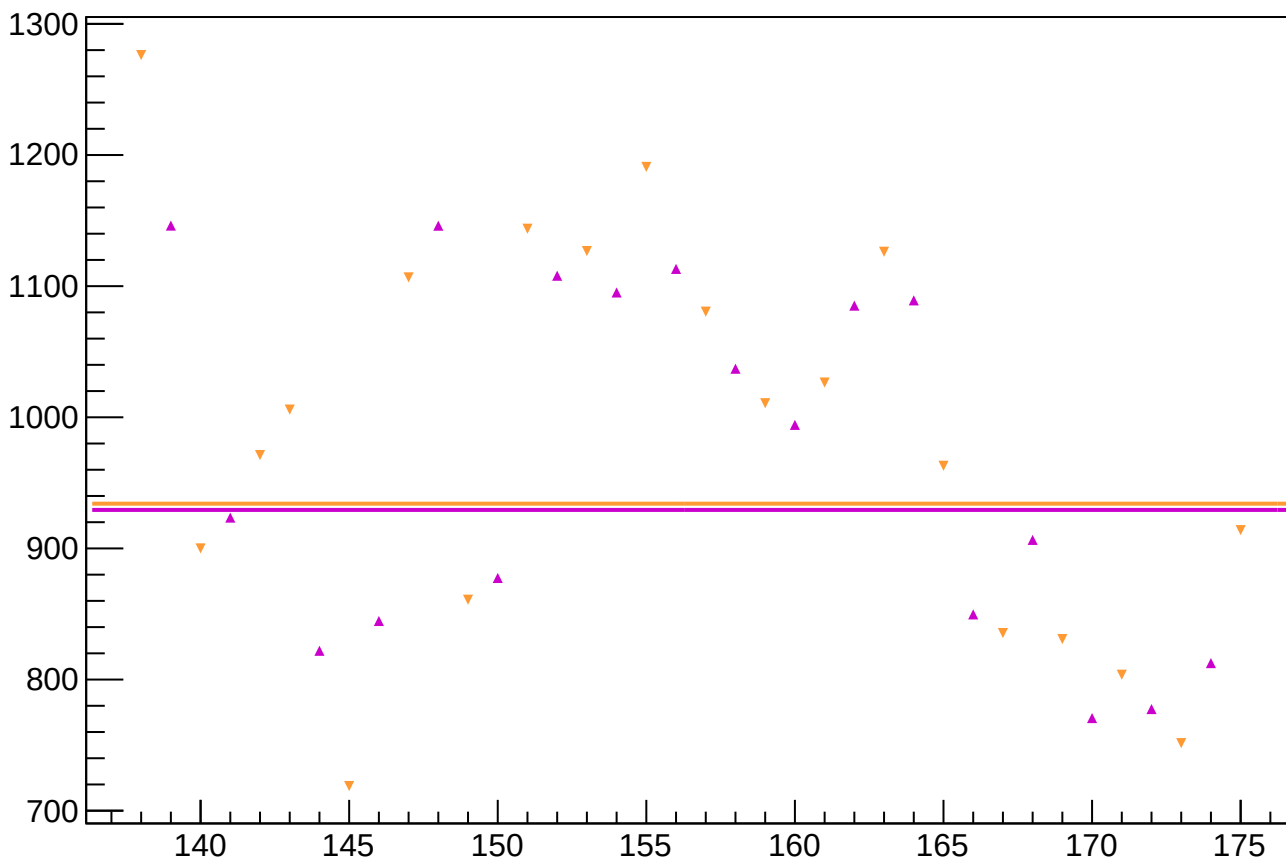
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 187.529+/-249.606  $\chi^2/\text{NDF}$ :21.1/17

Out: -1162.986+/-244.481  $\chi^2/\text{NDF}$ :40.3/19

All: -501.735+/-174.658  $\chi^2/\text{NDF}$ : 76.3/37

asym\_sam\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 934.133+/-0.173  $\chi^2/\text{NDF}$ : 747215.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 929.361+/-0.176  $\chi^2/\text{NDF}$ : 541176.4/17

Left: 931.797+/-0.124  $\chi^2/\text{NDF}$ : 1288764.8/37

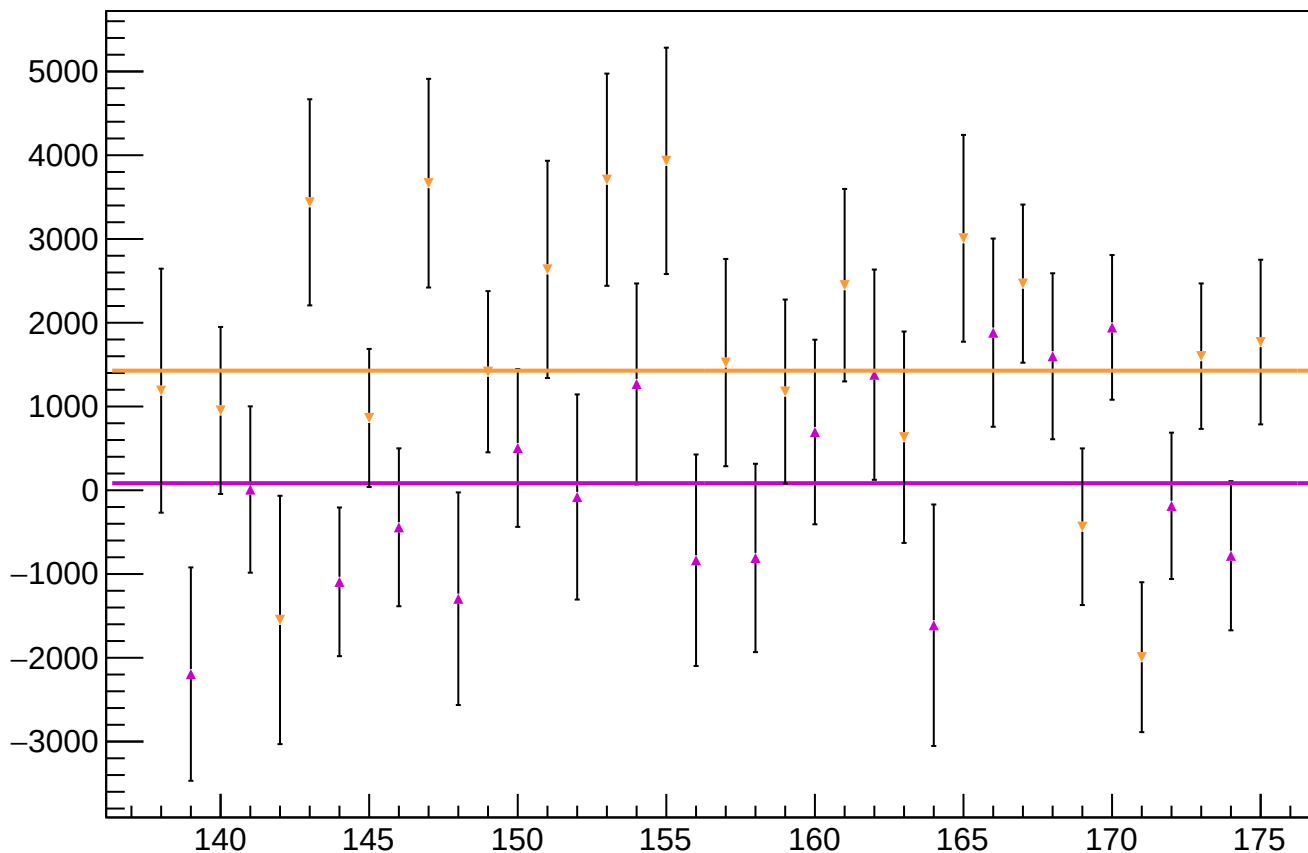
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 929.361+/-0.176  $\chi^2/\text{NDF}$ : 541176.4/17

Out: 934.133+/-0.173  $\chi^2/\text{NDF}$ : 747215.3/19

All: 931.797+/-0.124  $\chi^2/\text{NDF}$ : 1288764.8/37

# asym\_sam\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1428.234+/-242.878  $\chi^2/\text{NDF}$ :41.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 84.590+/-248.341  $\chi^2/\text{NDF}$ :22.1/17

Left: 771.354+/-173.640  $\chi^2/\text{NDF}$ : 78.1/37

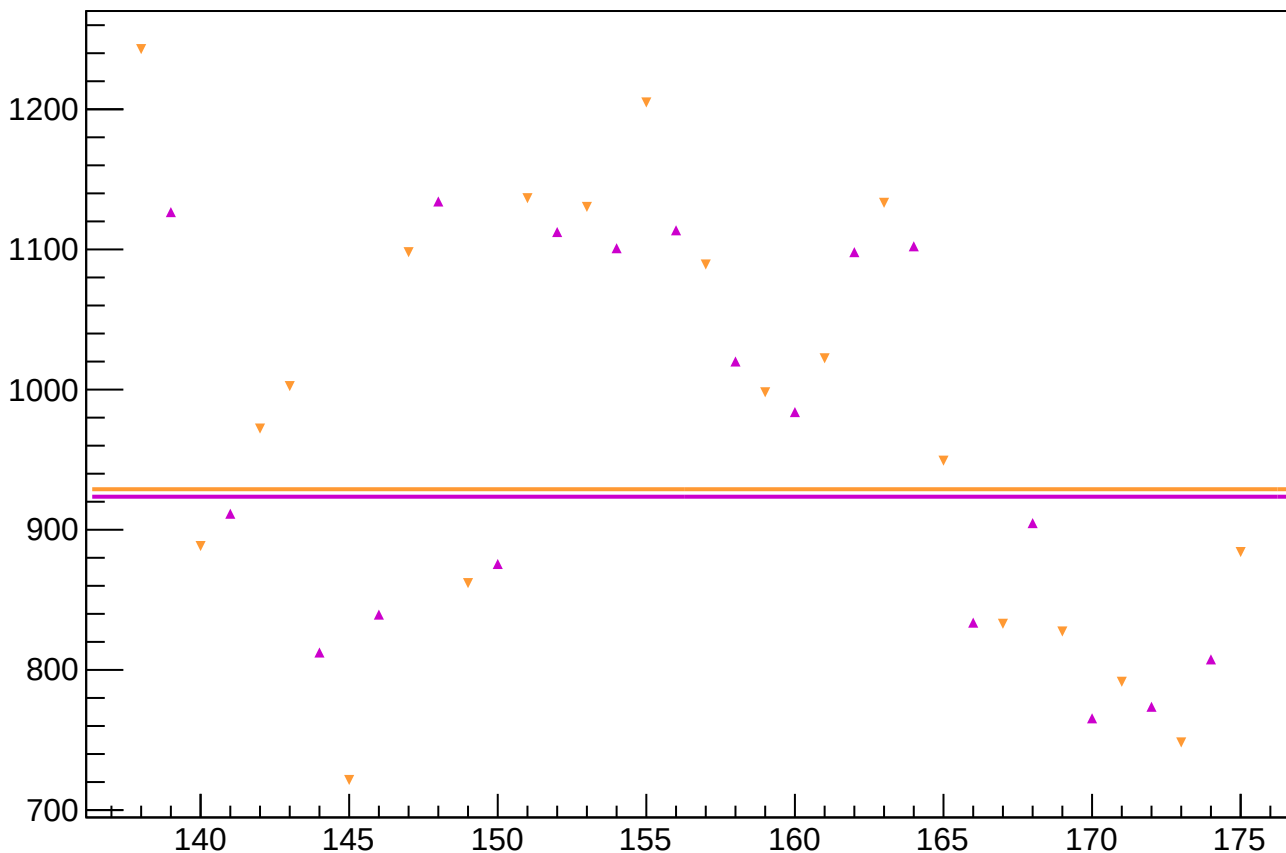
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 84.590+/-248.341  $\chi^2/\text{NDF}$ :22.1/17

Out: 1428.234+/-242.878  $\chi^2/\text{NDF}$ :41.0/19

All: 771.354+/-173.640  $\chi^2/\text{NDF}$ : 78.1/37

# asym\_sam\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 928.920+/-0.172  $\chi^2/\text{NDF}$ : 753312.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 923.582+/-0.176  $\chi^2/\text{NDF}$ : 558687.9/17

Left: 926.310+/-0.123  $\chi^2/\text{NDF}$ : 1312472.8/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

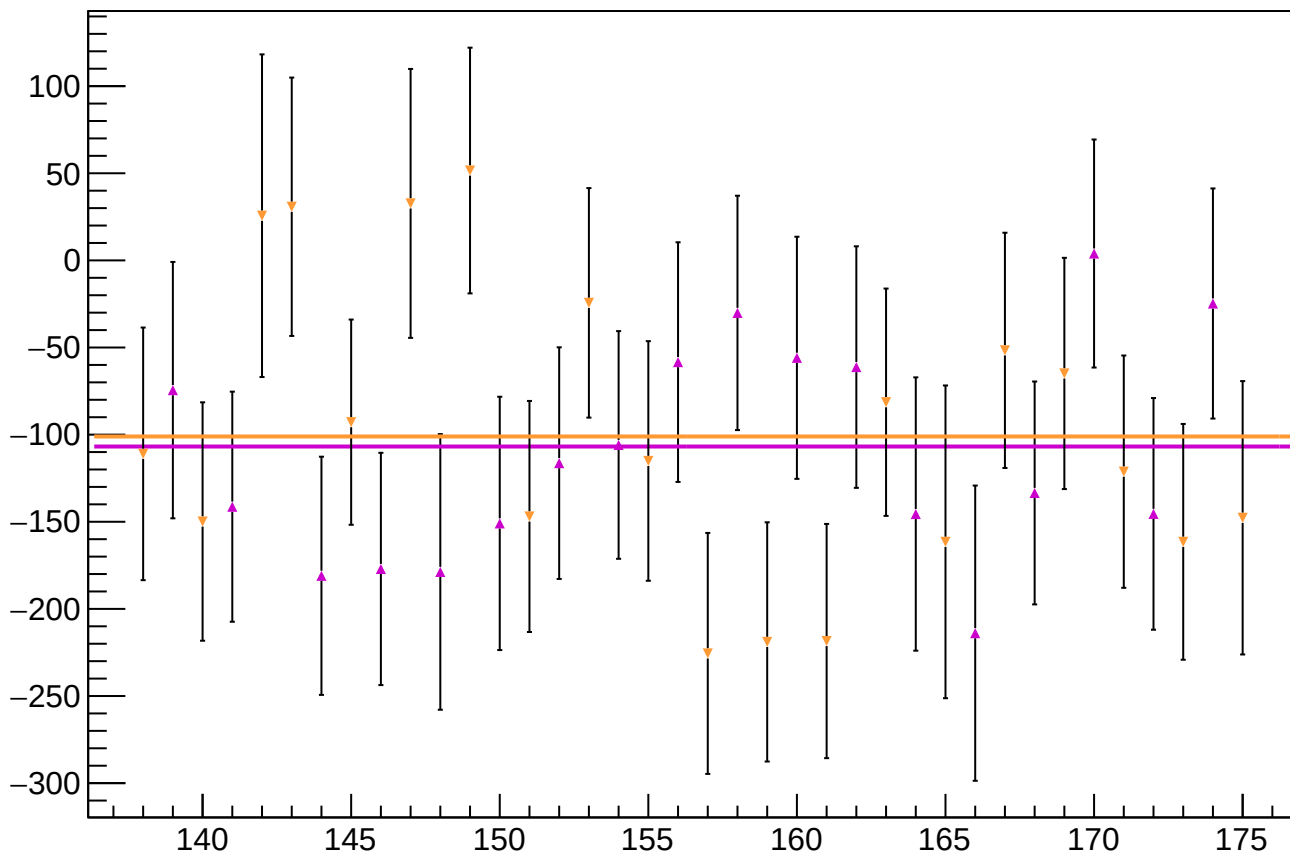
In: 923.582+/-0.176  $\chi^2/\text{NDF}$ : 558687.9/17

Out: 928.920+/-0.172  $\chi^2/\text{NDF}$ : 753312.5/19

All: 926.310+/-0.123  $\chi^2/\text{NDF}$ : 1312472.8/37



dit\_asym\_sam\_13\_57\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -101.050+/-15.648  $\chi^2/\text{NDF}$ :27.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -106.817+/-16.338  $\chi^2/\text{NDF}$ :13.5/17

Left: -103.809+/-11.301  $\chi^2/\text{NDF}$ : 40.6/37

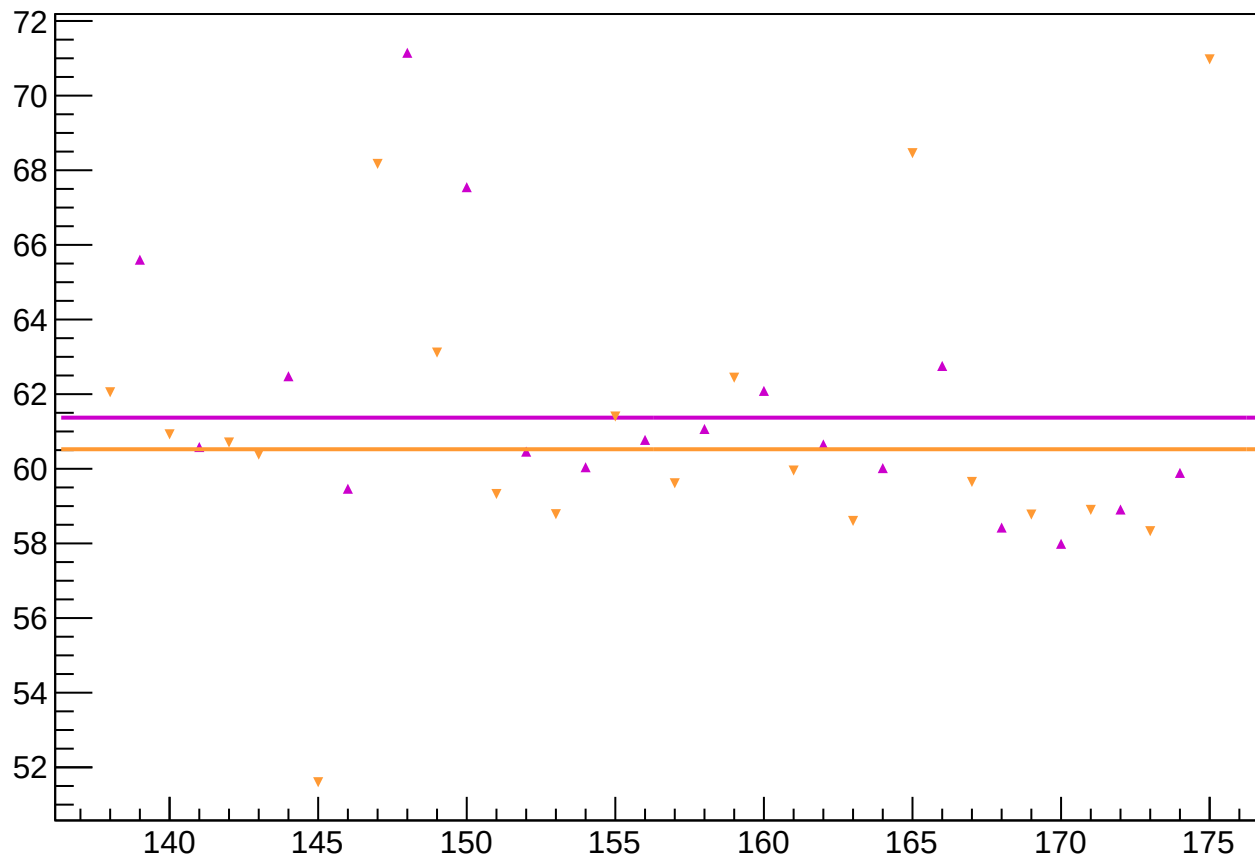
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -106.817+/-16.338  $\chi^2/\text{NDF}$ :13.5/17

Out: -101.050+/-15.648  $\chi^2/\text{NDF}$ :27.0/19

All: -103.809+/-11.301  $\chi^2/\text{NDF}$ : 40.6/37

dit\_asym\_sam\_13\_57\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 60.524+/-0.011  $\chi^2/\text{NDF}$ :131530.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 61.370+/-0.012  $\chi^2/\text{NDF}$ :70347.0/17

Left: 60.929+/-0.008  $\chi^2/\text{NDF}$ : 204677.9/37

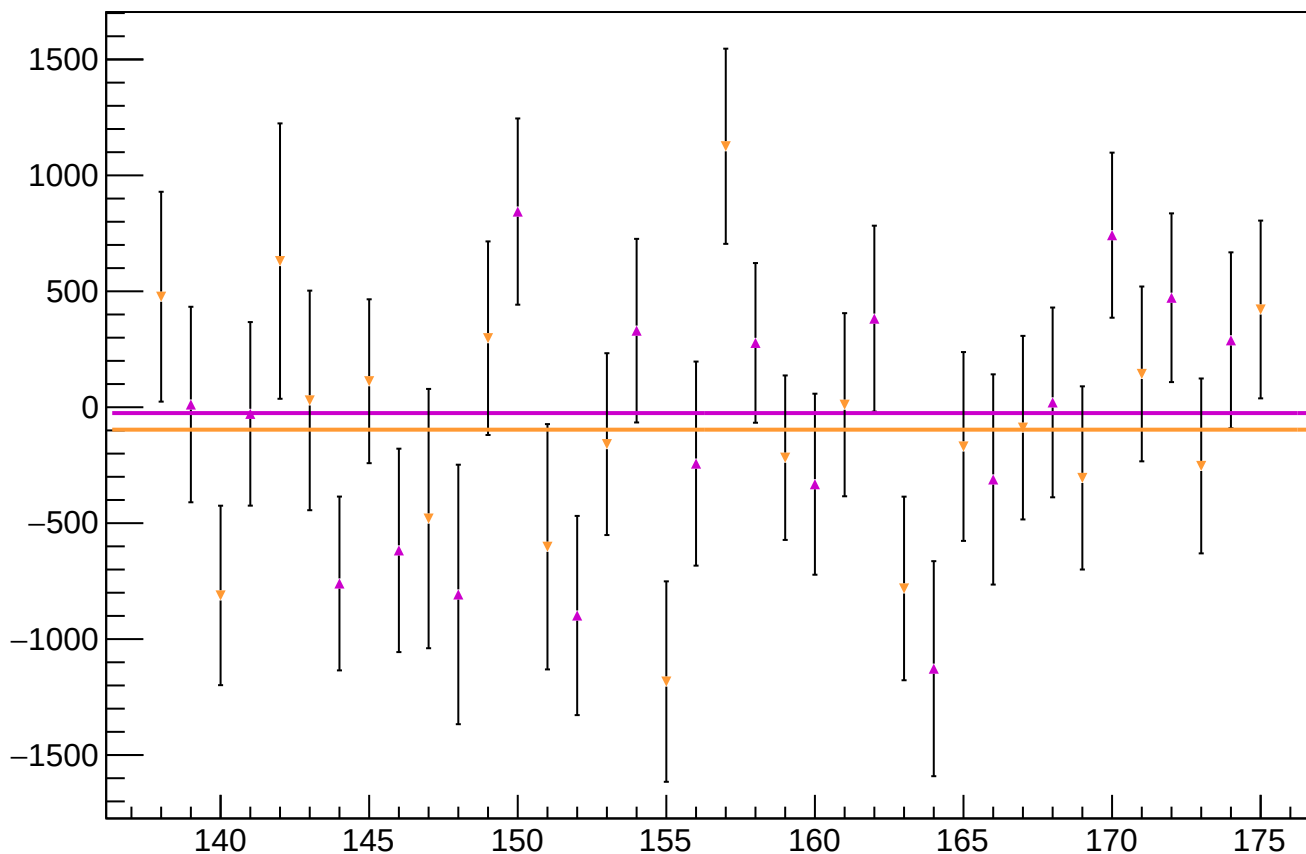
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 61.370+/-0.012  $\chi^2/\text{NDF}$ :70347.0/17

Out: 60.524+/-0.011  $\chi^2/\text{NDF}$ :131530.3/19

All: 60.929+/-0.008  $\chi^2/\text{NDF}$ : 204677.9/37

asym\_sam\_13\_57\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -96.752+/-92.331  $\chi^2/\text{NDF}$ :29.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -25.223+/-95.449  $\chi^2/\text{NDF}$ :33.2/17

Left: -62.175+/-66.363  $\chi^2/\text{NDF}$ : 63.4/37

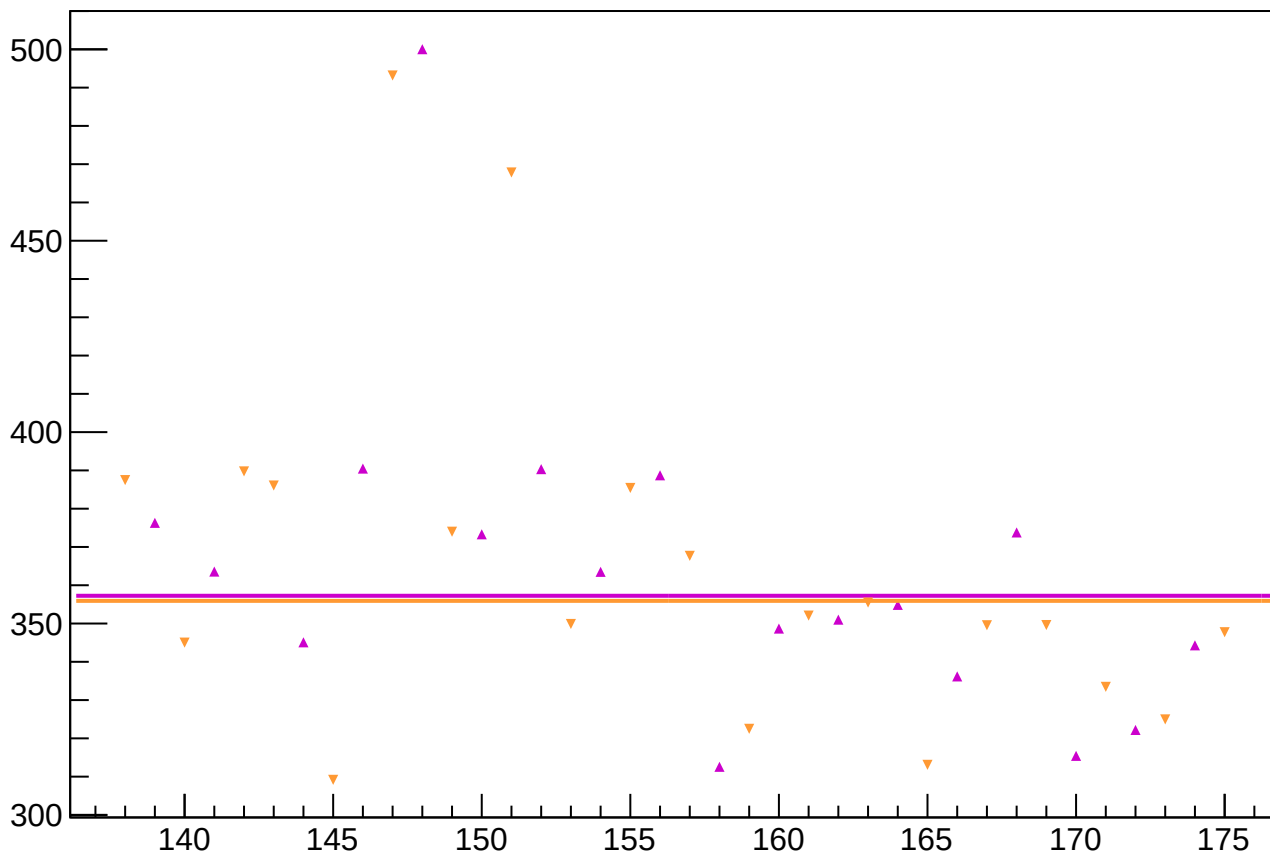
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -25.223+/-95.449  $\chi^2/\text{NDF}$ :33.2/17

Out: -96.752+/-92.331  $\chi^2/\text{NDF}$ :29.9/19

All: -62.175+/-66.363  $\chi^2/\text{NDF}$ : 63.4/37

asym\_sam\_13\_57\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 355.923+/-0.065  $\chi^2/\text{NDF}$ : 348610.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 357.250+/-0.067  $\chi^2/\text{NDF}$ : 265416.4/17

Left: 356.564+/-0.047  $\chi^2/\text{NDF}$ : 614226.9/37

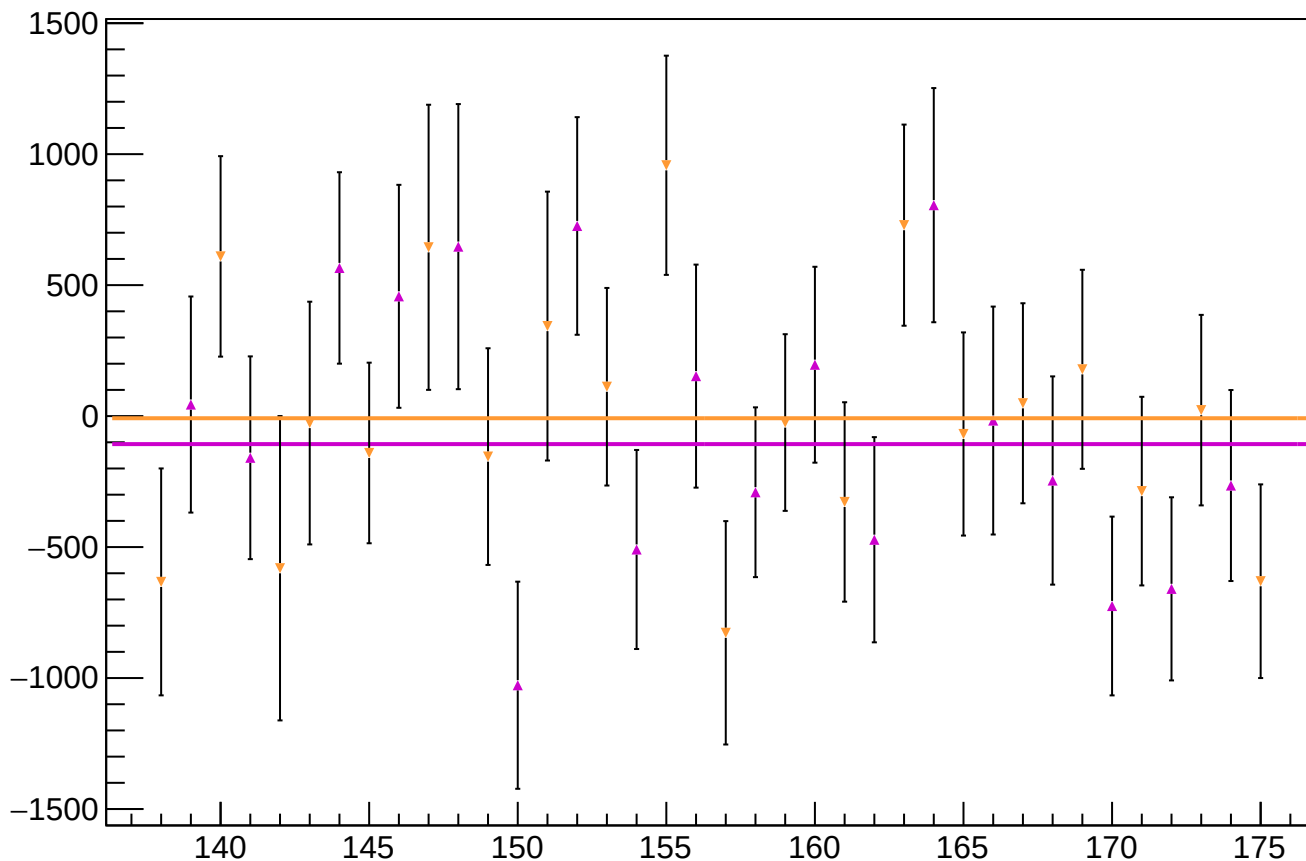
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 357.250+/-0.067  $\chi^2/\text{NDF}$ : 265416.4/17

Out: 355.923+/-0.065  $\chi^2/\text{NDF}$ : 348610.7/19

All: 356.564+/-0.047  $\chi^2/\text{NDF}$ : 614226.9/37

asym\_sam\_13\_57\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -8.159+/-89.455  $\chi^2/\text{NDF}$ :25.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -106.929+/-92.181  $\chi^2/\text{NDF}$ :30.3/17

Left: -56.062+/-64.196  $\chi^2/\text{NDF}$ : 56.0/37

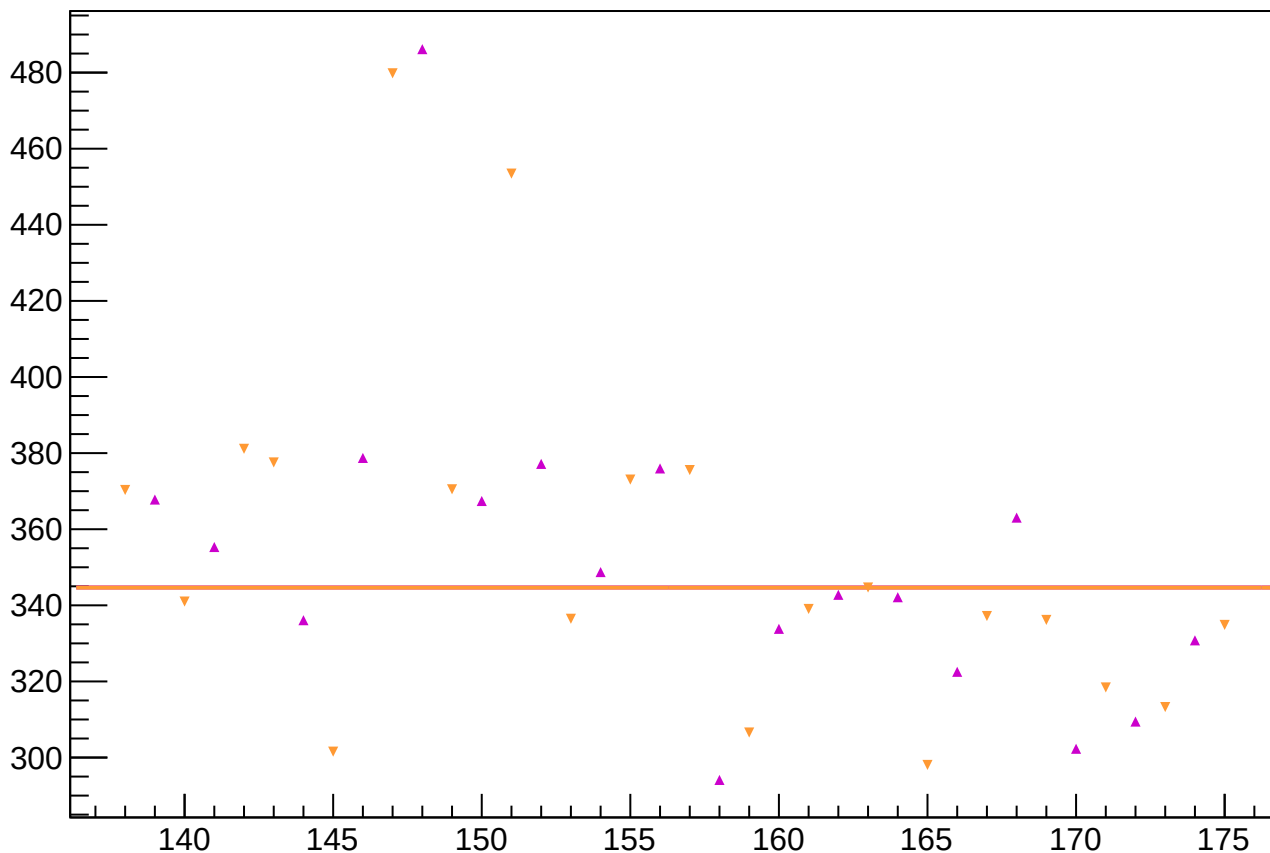
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -106.929+/-92.181  $\chi^2/\text{NDF}$ :30.3/17

Out: -8.159+/-89.455  $\chi^2/\text{NDF}$ :25.1/19

All: -56.062+/-64.196  $\chi^2/\text{NDF}$ : 56.0/37

# asym\_sam\_13\_57\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 344.660+/-0.063  $\chi^2/\text{NDF}$ :381609.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 344.694+/-0.065  $\chi^2/\text{NDF}$ :300756.6/17

Left: 344.676+/-0.045  $\chi^2/\text{NDF}$ : 682366.0/37

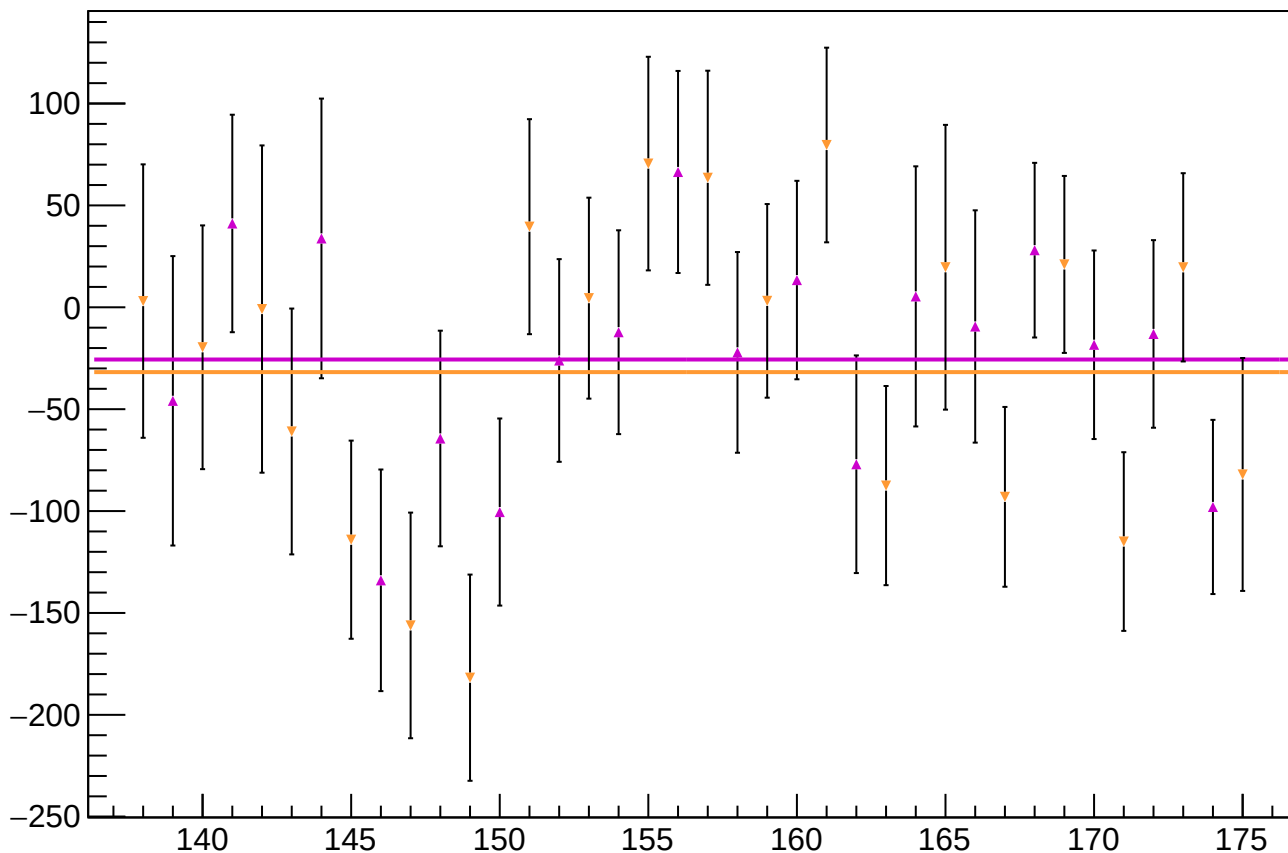
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 344.694+/-0.065  $\chi^2/\text{NDF}$ :300756.6/17

Out: 344.660+/-0.063  $\chi^2/\text{NDF}$ :381609.3/19

All: 344.676+/-0.045  $\chi^2/\text{NDF}$ : 682366.0/37

dit\_asym\_sam\_15\_37\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: -31.810 $\pm$ 11.615  $\chi^2$ /NDF:43.7/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: -25.626 $\pm$ 12.029  $\chi^2$ /NDF:19.5/17

Left: -28.826 $\pm$ 8.356  $\chi^2$ /NDF: 63.3/37

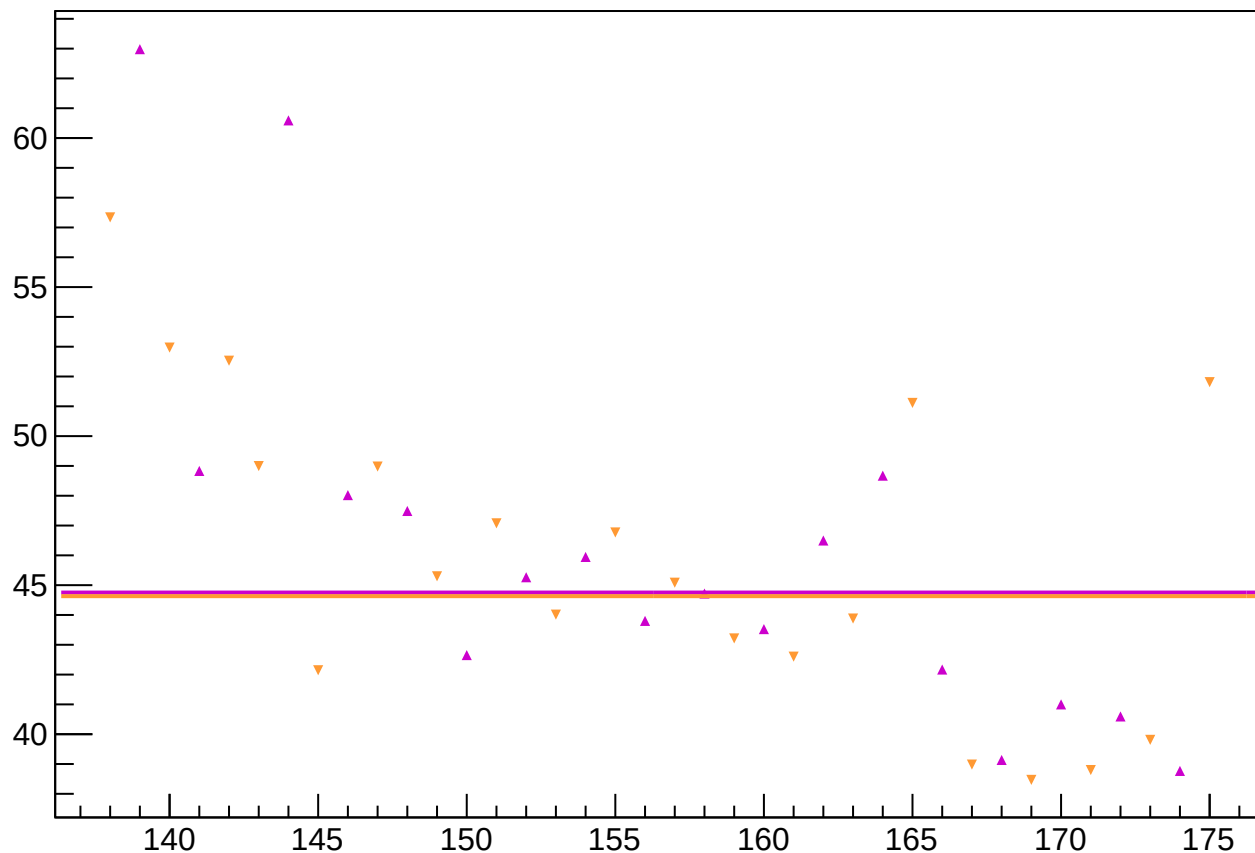
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: -25.626 $\pm$ 12.029  $\chi^2$ /NDF:19.5/17

Out: -31.810 $\pm$ 11.615  $\chi^2$ /NDF:43.7/19

All: -28.826 $\pm$ 8.356  $\chi^2$ /NDF: 63.3/37

dit\_asym\_sam\_15\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 44.631+/-0.008  $\chi^2/\text{NDF}$ :351348.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 44.752+/-0.009  $\chi^2/\text{NDF}$ :386947.3/17

Left: 44.689+/-0.006  $\chi^2/\text{NDF}$ : 738401.2/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

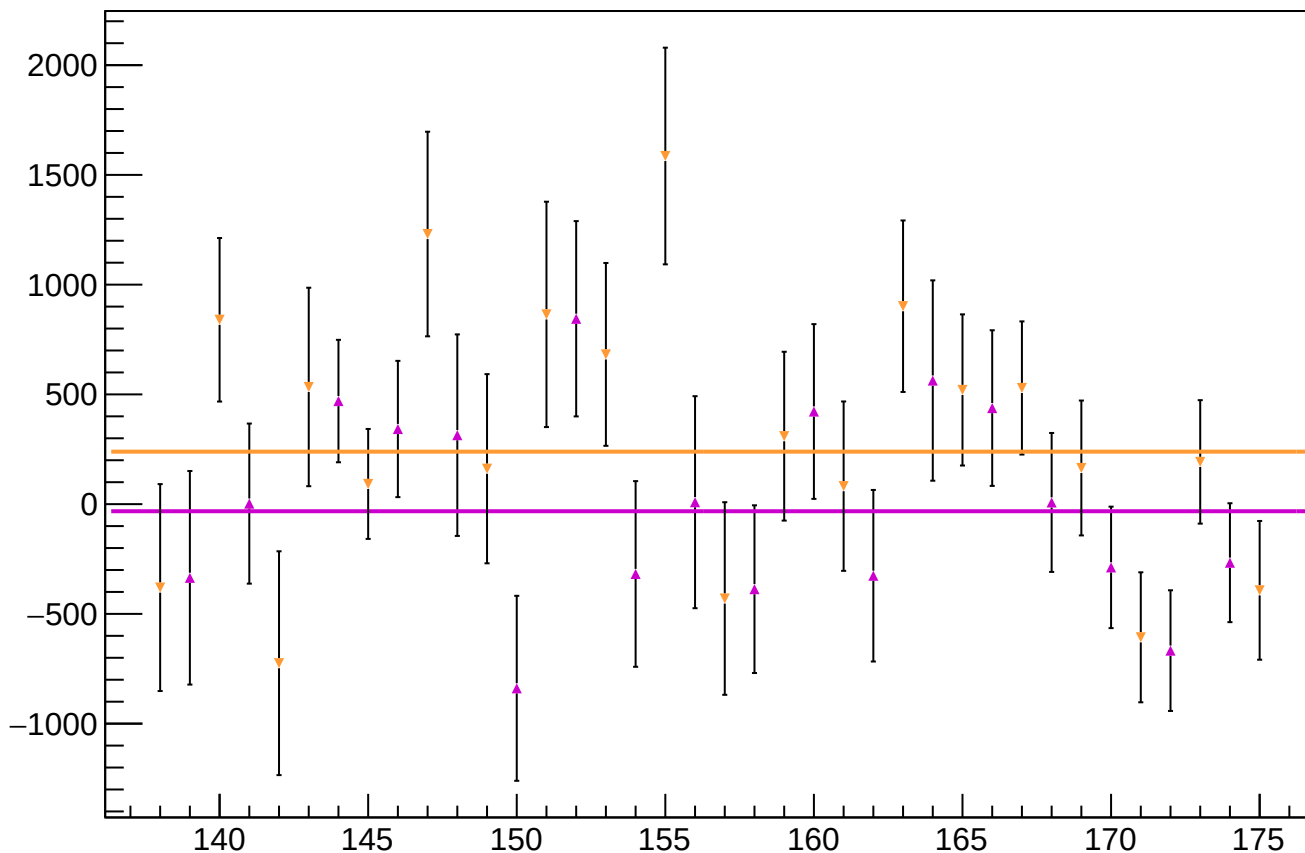
In: 44.752+/-0.009  $\chi^2/\text{NDF}$ :386947.3/17

Out: 44.631+/-0.008  $\chi^2/\text{NDF}$ :351348.8/19

All: 44.689+/-0.006  $\chi^2/\text{NDF}$ : 738401.2/37



asym\_sam\_15\_37\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 239.119+/-81.861  $\chi^2/\text{NDF}$ :42.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -32.317+/-83.724  $\chi^2/\text{NDF}$ :26.8/17

Left: 106.456+/-58.532  $\chi^2/\text{NDF}$ : 74.7/37

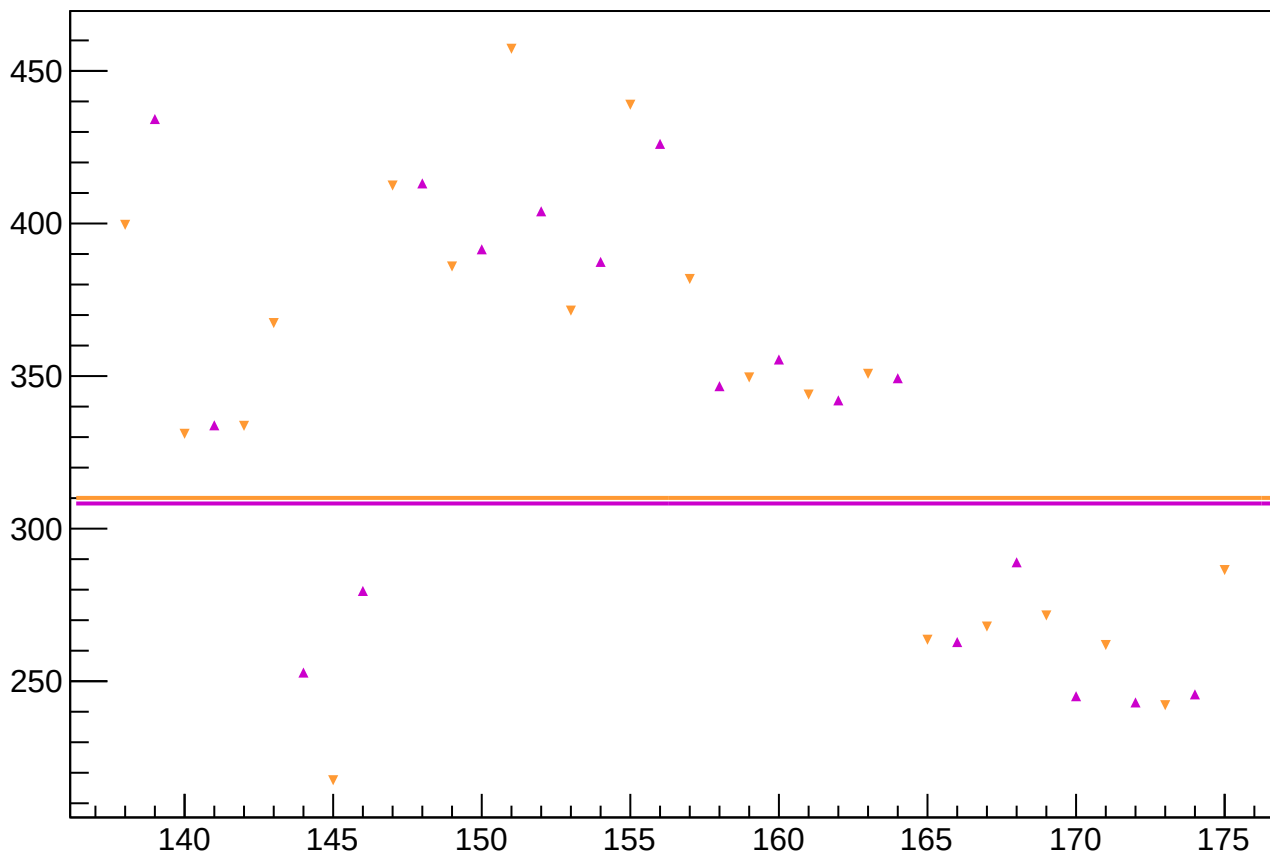
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -32.317+/-83.724  $\chi^2/\text{NDF}$ :26.8/17

Out: 239.119+/-81.861  $\chi^2/\text{NDF}$ :42.5/19

All: 106.456+/-58.532  $\chi^2/\text{NDF}$ : 74.7/37

asym\_sam\_15\_37\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 310.077+/-0.058  $\chi^2/\text{NDF}$ :1289461.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 308.245+/-0.059  $\chi^2/\text{NDF}$ :1147476.2/17

Left: 309.181+/-0.041  $\chi^2/\text{NDF}$ : 2437426.8/37

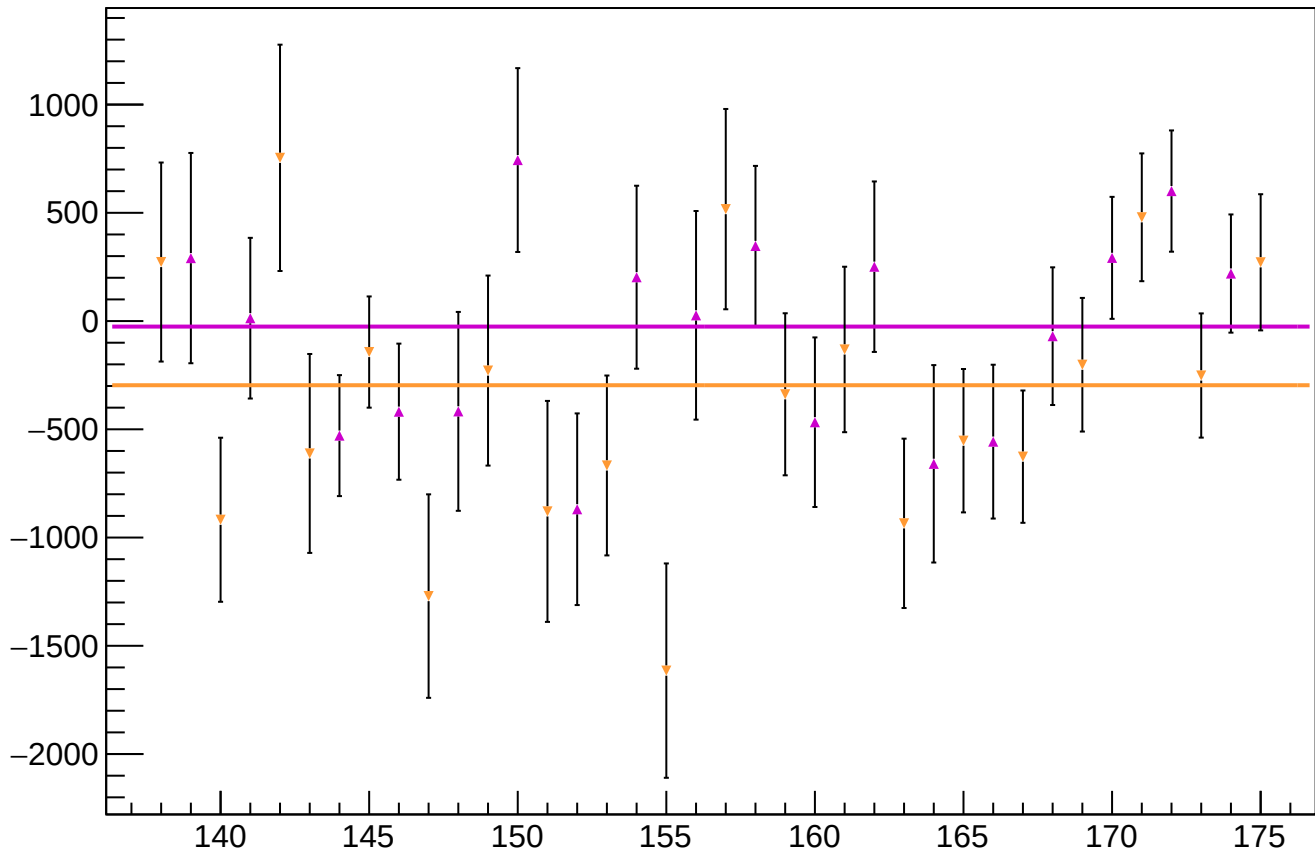
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 308.245+/-0.059  $\chi^2/\text{NDF}$ :1147476.2/17

Out: 310.077+/-0.058  $\chi^2/\text{NDF}$ :1289461.1/19

All: 309.181+/-0.041  $\chi^2/\text{NDF}$ : 2437426.8/37

asym\_sam\_15\_37\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -296.408+/-82.218  $\chi^2/\text{NDF}$ :40.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -25.504+/-84.098  $\chi^2/\text{NDF}$ :27.2/17

Left: -164.018+/-58.790  $\chi^2/\text{NDF}$ : 73.1/37

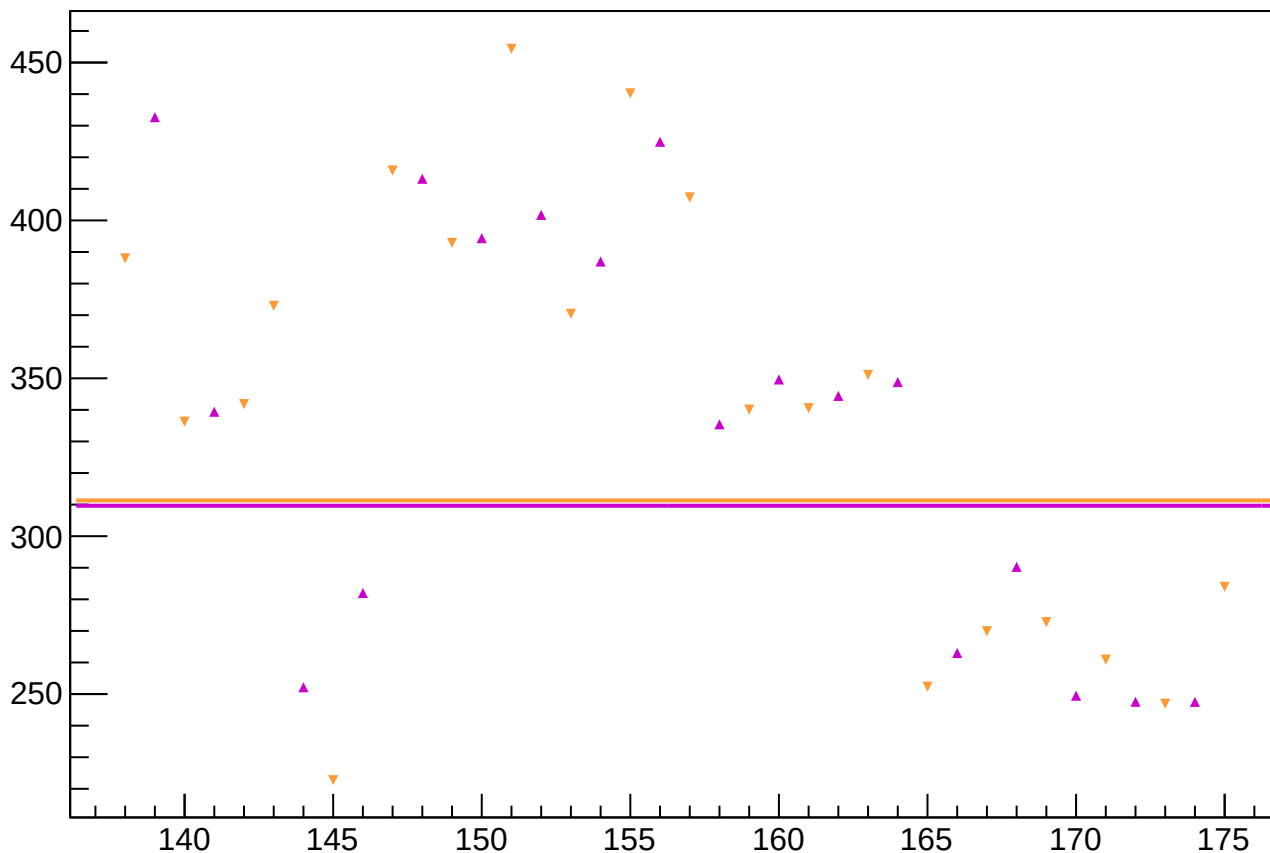
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -25.504+/-84.098  $\chi^2/\text{NDF}$ :27.2/17

Out: -296.408+/-82.218  $\chi^2/\text{NDF}$ :40.6/19

All: -164.018+/-58.790  $\chi^2/\text{NDF}$ : 73.1/37

# asym\_sam\_15\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 311.326+/-0.058  $\chi^2/\text{NDF}$ :1281890.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 309.647+/-0.059  $\chi^2/\text{NDF}$ :1086453.2/17

Left: 310.505+/-0.042  $\chi^2/\text{NDF}$ : 2368751.2/37

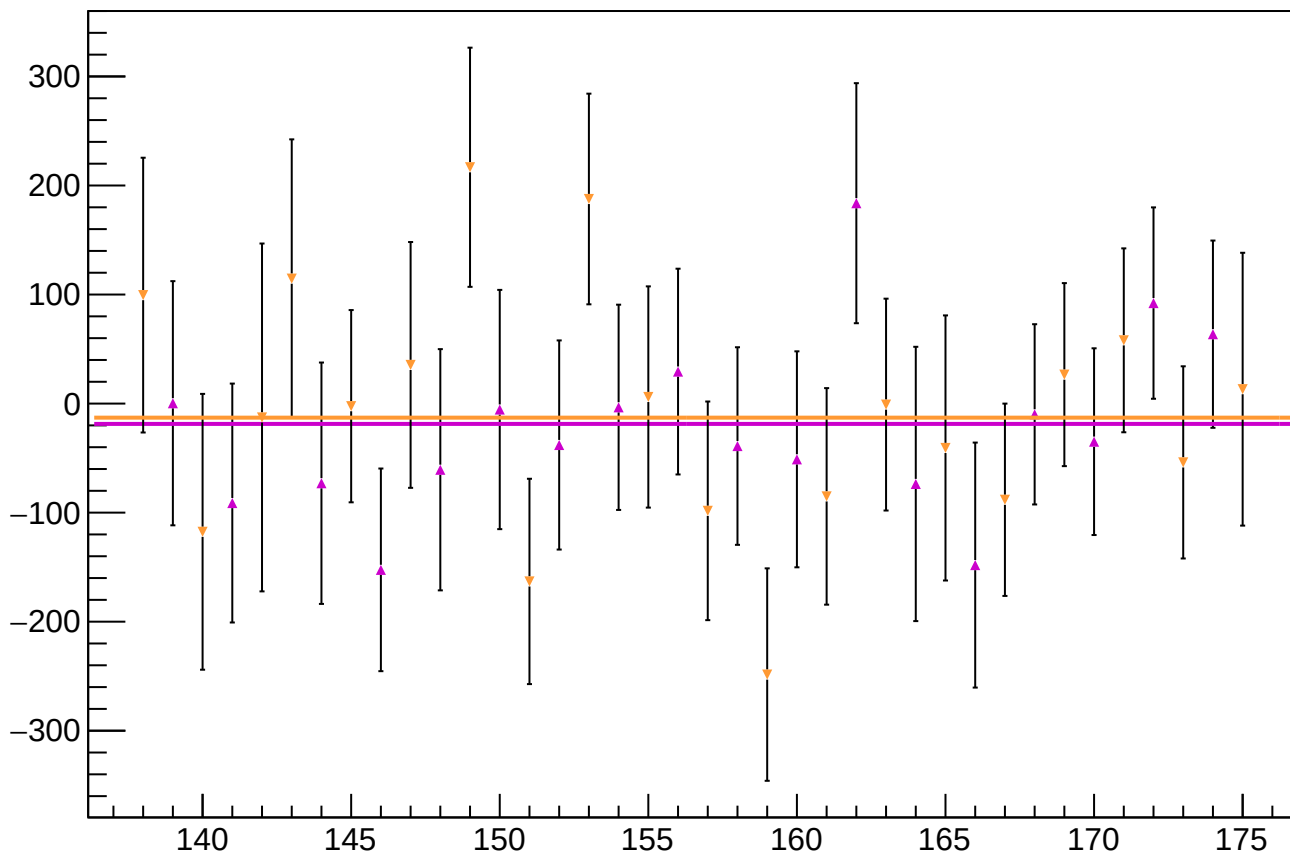
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 309.647+/-0.059  $\chi^2/\text{NDF}$ :1086453.2/17

Out: 311.326+/-0.058  $\chi^2/\text{NDF}$ :1281890.3/19

All: 310.505+/-0.042  $\chi^2/\text{NDF}$ : 2368751.2/37

dit\_asym\_sam\_24\_68\_dd\_mean vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-12.897 \pm 22.836$   $\chi^2/\text{NDF}: 23.0/19$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-18.643 \pm 23.209$   $\chi^2/\text{NDF}: 10.9/17$

Left:  $-15.723 \pm 16.278$   $\chi^2/\text{NDF}: 34.0/37$

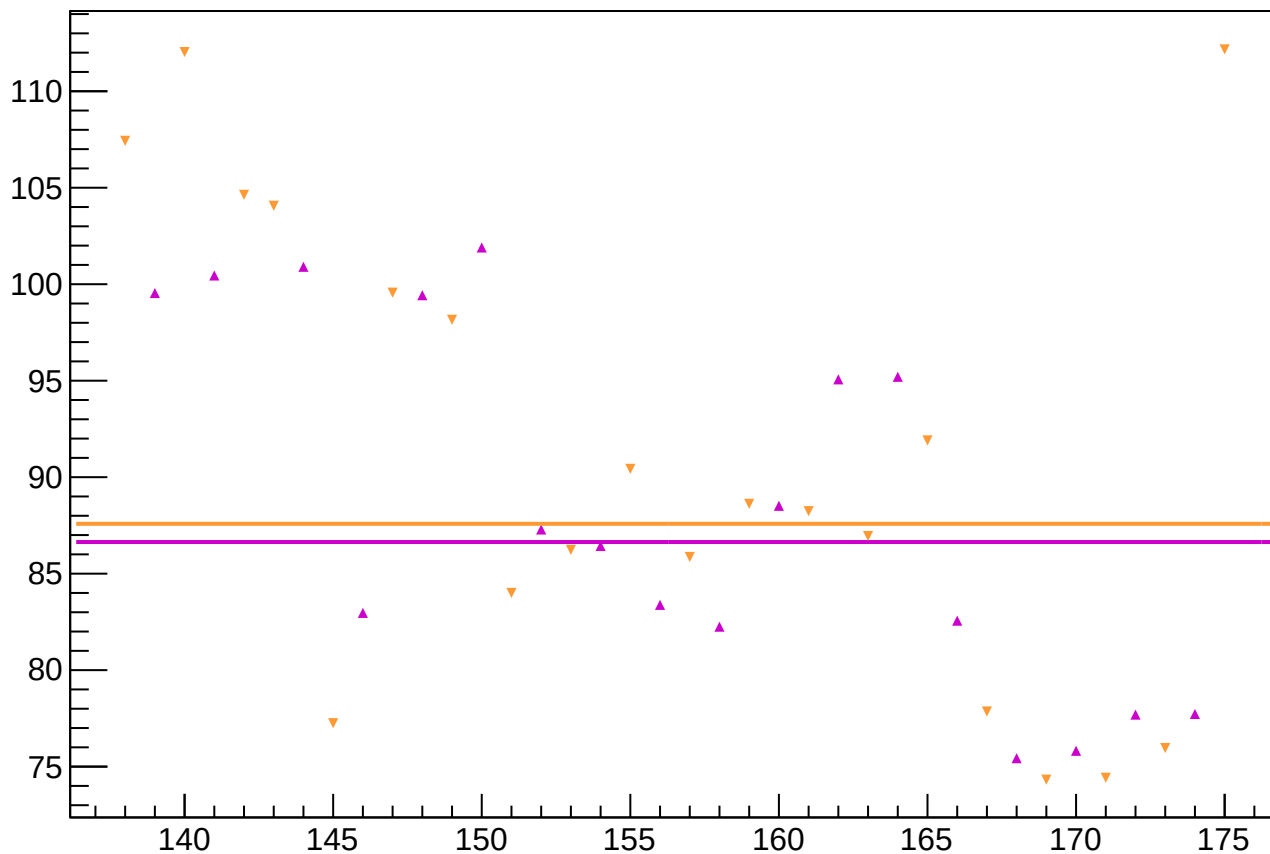
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

In:  $-18.643 \pm 23.209$   $\chi^2/\text{NDF}: 10.9/17$

Out:  $-12.897 \pm 22.836$   $\chi^2/\text{NDF}: 23.0/19$

All:  $-15.723 \pm 16.278$   $\chi^2/\text{NDF}: 34.0/37$

dit\_asym\_sam\_24\_68\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 87.584+/-0.016  $\chi^2/\text{NDF}$ :492543.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 86.640+/-0.016  $\chi^2/\text{NDF}$ :302678.8/17

Left: 87.119+/-0.012  $\chi^2/\text{NDF}$ : 796903.4/37

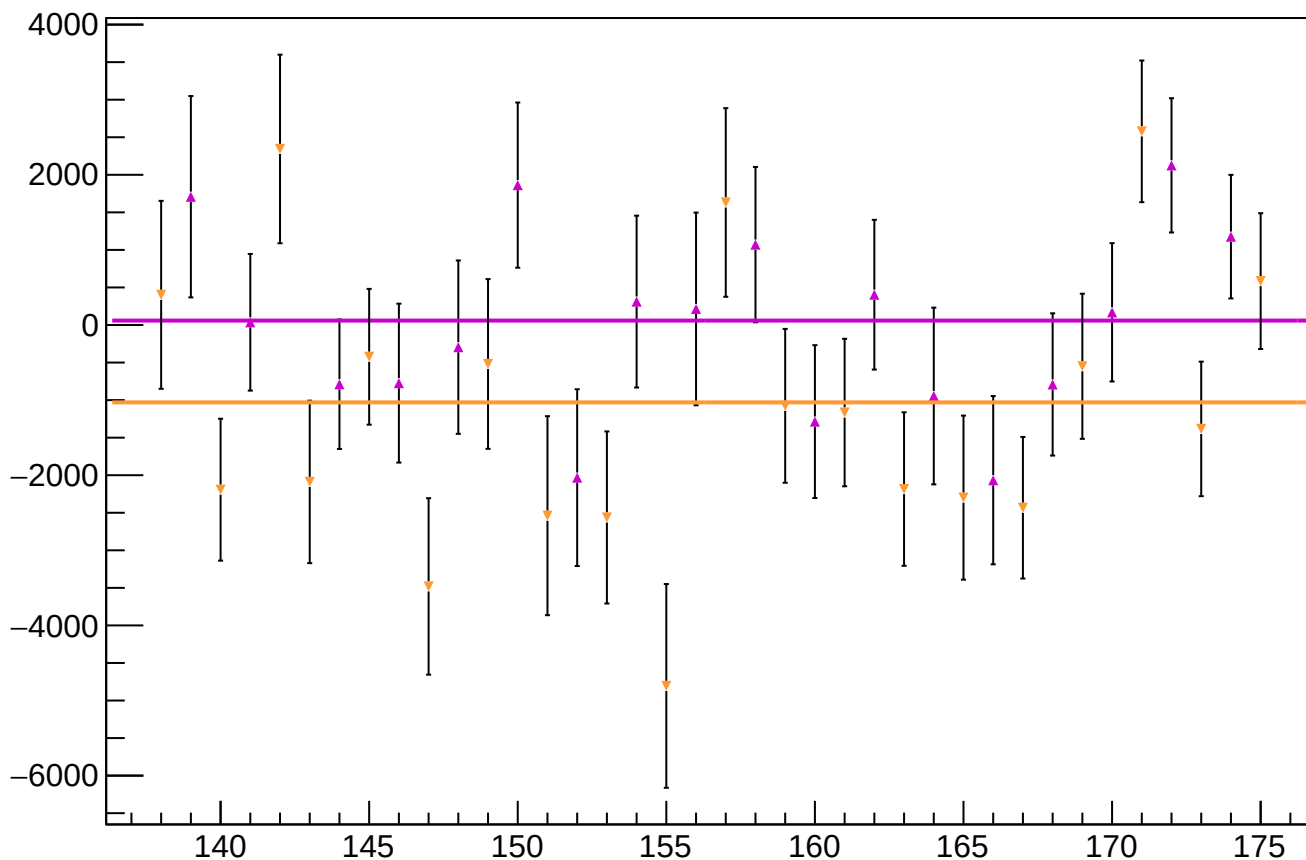
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 86.640+/-0.016  $\chi^2/\text{NDF}$ :302678.8/17

Out: 87.584+/-0.016  $\chi^2/\text{NDF}$ :492543.3/19

All: 87.119+/-0.012  $\chi^2/\text{NDF}$ : 796903.4/37

asym\_sam\_24\_68\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1030.118+/-235.282  $\chi^2/\text{NDF}$ :54.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 59.067+/-241.641  $\chi^2/\text{NDF}$ :24.3/17

Left: -500.046+/-168.573  $\chi^2/\text{NDF}$ : 89.1/37

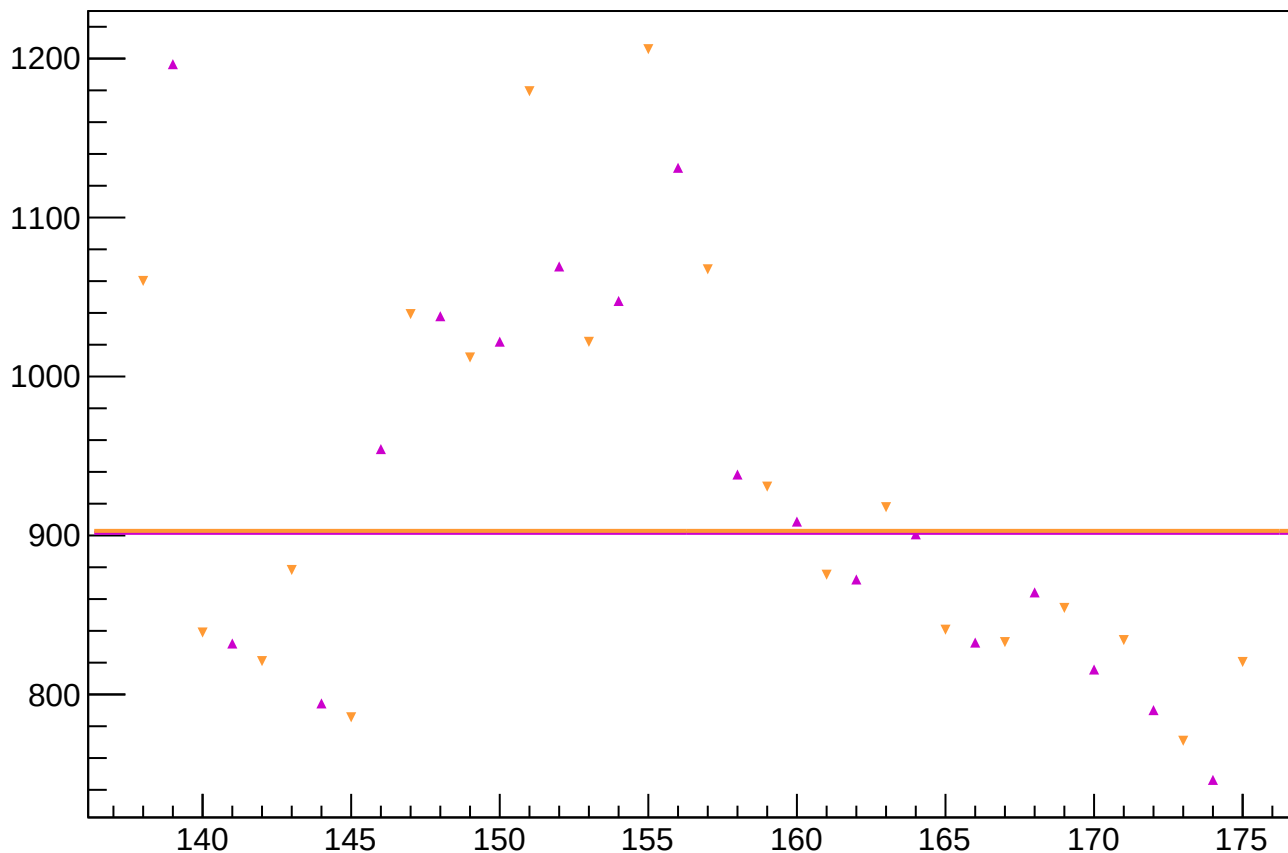
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 59.067+/-241.641  $\chi^2/\text{NDF}$ :24.3/17

Out: -1030.118+/-235.282  $\chi^2/\text{NDF}$ :54.4/19

All: -500.046+/-168.573  $\chi^2/\text{NDF}$ : 89.1/37

asym\_sam\_24\_68\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 902.907+/-0.166  $\chi^2/\text{NDF}$ :469044.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 901.655+/-0.171  $\chi^2/\text{NDF}$ :468309.1/17

Left: 902.297+/-0.119  $\chi^2/\text{NDF}$ : 937380.9/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

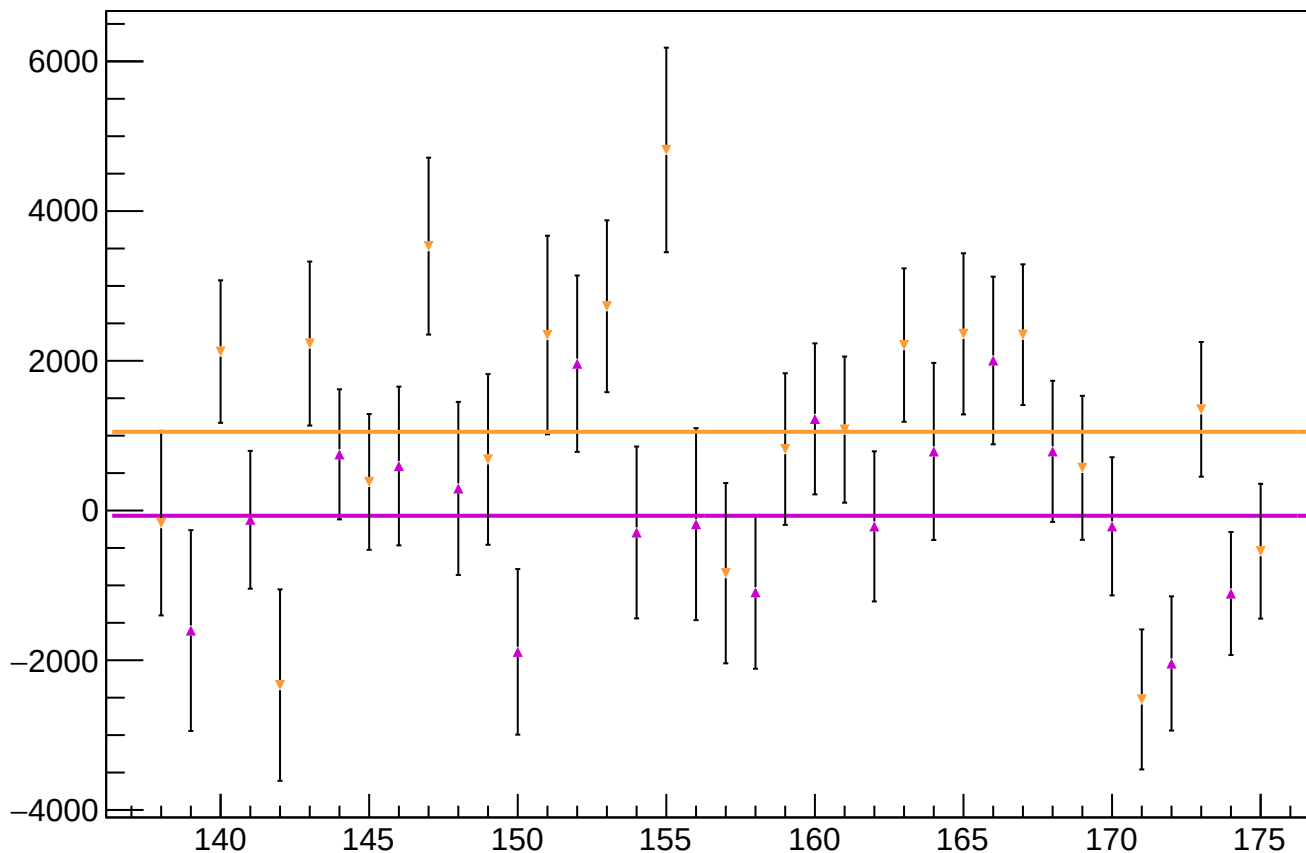
In: 901.655+/-0.171  $\chi^2/\text{NDF}$ :468309.1/17

Out: 902.907+/-0.166  $\chi^2/\text{NDF}$ :469044.3/19

All: 902.297+/-0.119  $\chi^2/\text{NDF}$ : 937380.9/37



asym\_sam\_24\_68\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1051.513+/-234.887  $\chi^2/\text{NDF}$ :51.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -69.752+/-241.996  $\chi^2/\text{NDF}$ :22.3/17

Left: 507.592+/-168.547  $\chi^2/\text{NDF}$ : 84.8/37

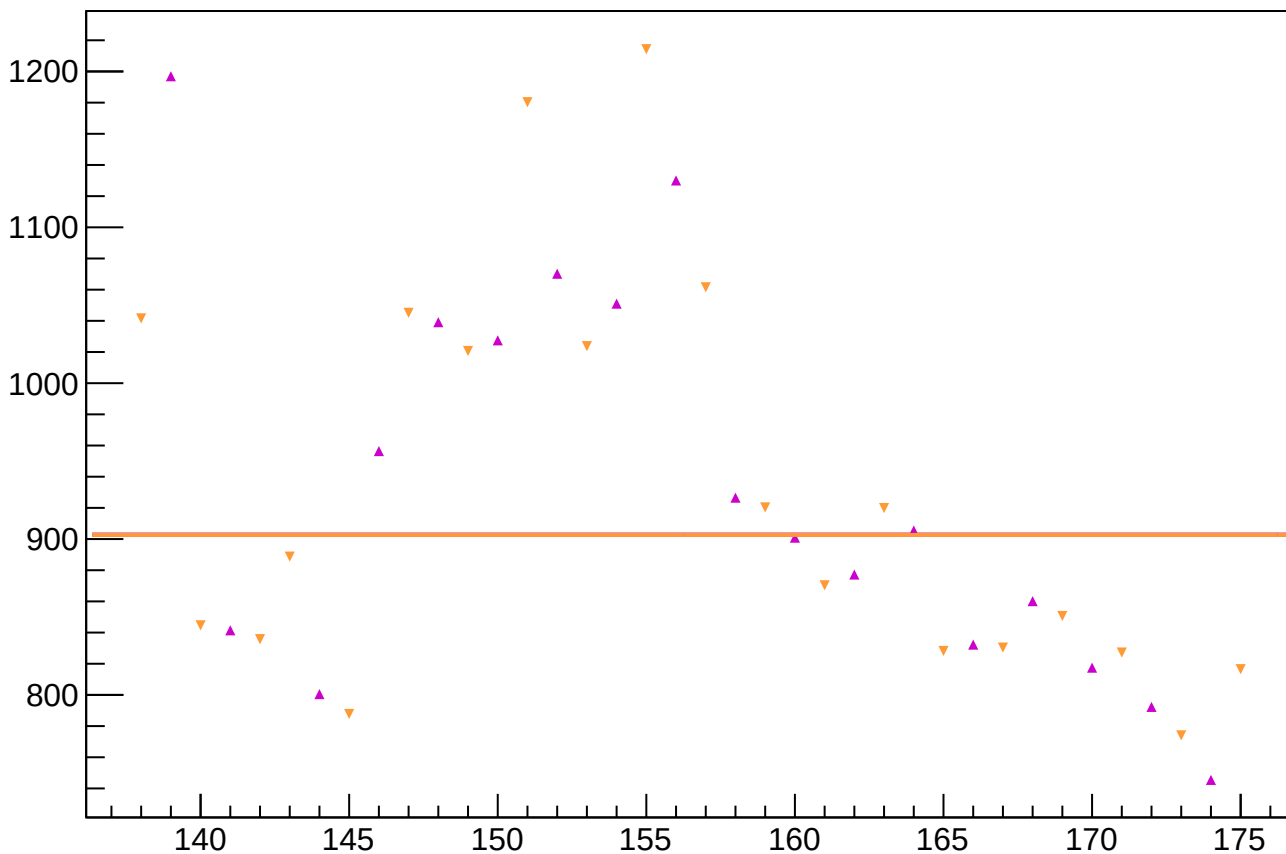
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -69.752+/-241.996  $\chi^2/\text{NDF}$ :22.3/17

Out: 1051.513+/-234.887  $\chi^2/\text{NDF}$ :51.4/19

All: 507.592+/-168.547  $\chi^2/\text{NDF}$ : 84.8/37

asym\_sam\_24\_68\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 902.665+/-0.166  $\chi^2/\text{NDF}$ : 472775.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 902.869+/-0.171  $\chi^2/\text{NDF}$ : 462867.9/17

Left: 902.764+/-0.119  $\chi^2/\text{NDF}$ : 935644.3/37

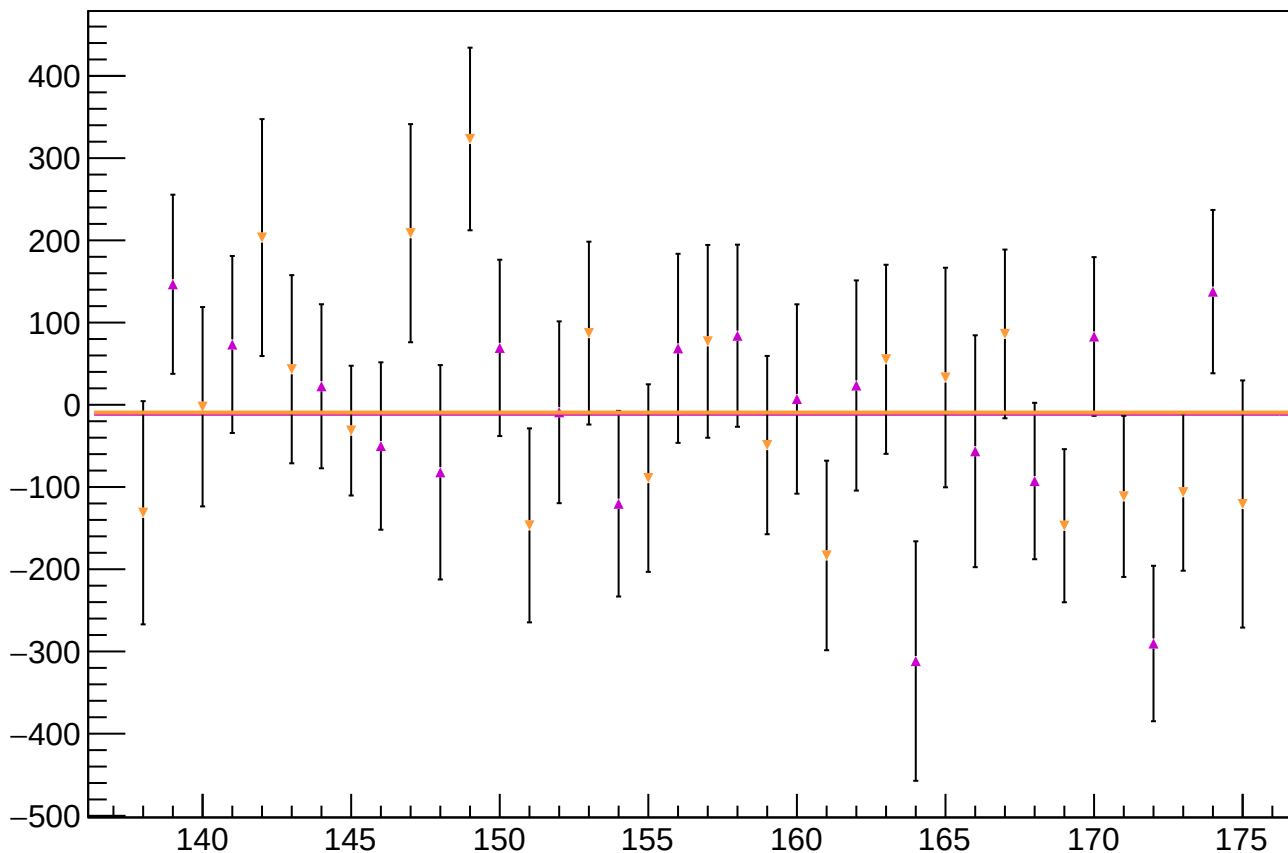
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 902.869+/-0.171  $\chi^2/\text{NDF}$ : 462867.9/17

Out: 902.665+/-0.166  $\chi^2/\text{NDF}$ : 472775.7/19

All: 902.764+/-0.119  $\chi^2/\text{NDF}$ : 935644.3/37

dit\_asym\_sam\_26\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -9.428+/-24.937  $\chi^2/\text{NDF}$ :26.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -10.872+/-25.855  $\chi^2/\text{NDF}$ :23.1/17

Left: -10.124+/-17.949  $\chi^2/\text{NDF}$ : 49.7/37

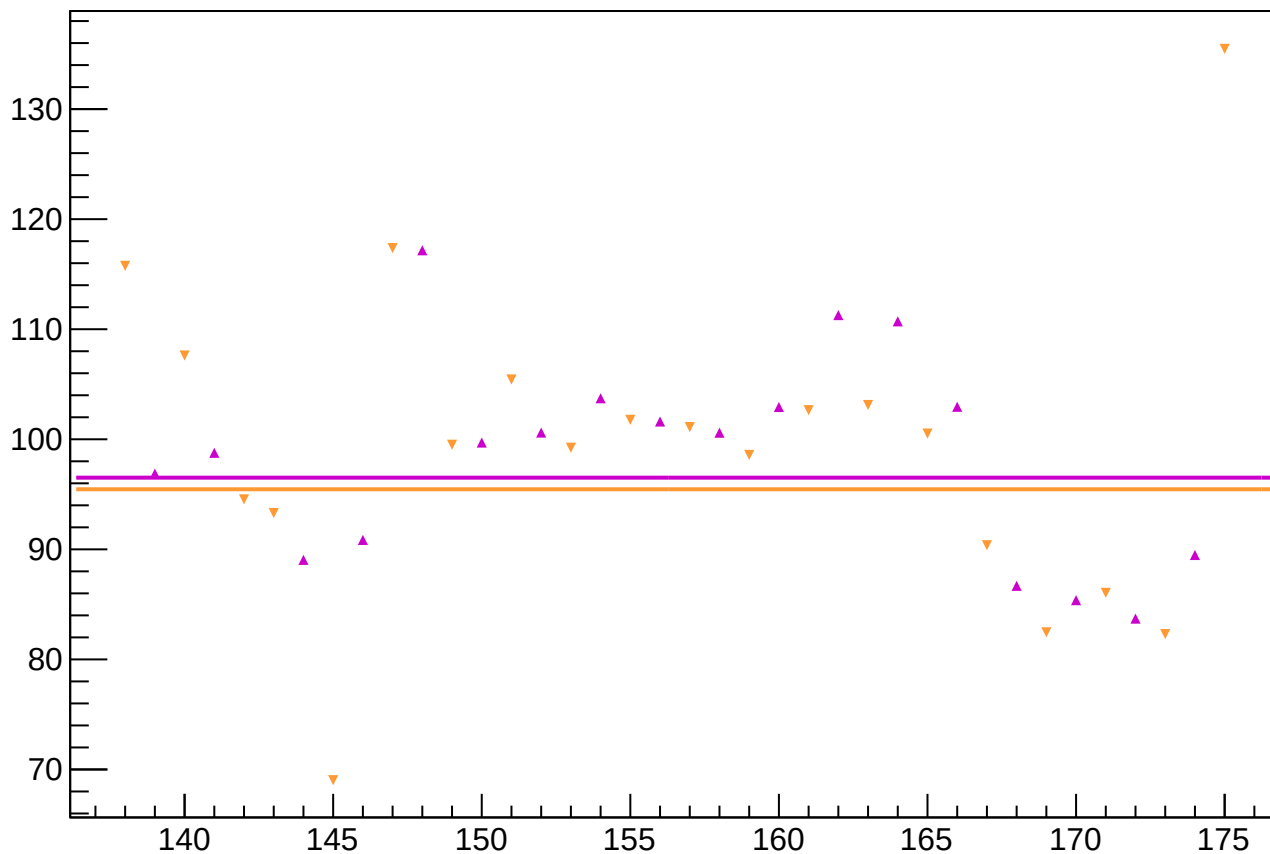
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -10.872+/-25.855  $\chi^2/\text{NDF}$ :23.1/17

Out: -9.428+/-24.937  $\chi^2/\text{NDF}$ :26.6/19

All: -10.124+/-17.949  $\chi^2/\text{NDF}$ : 49.7/37

dit\_asym\_sam\_26\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 95.459 $\pm$ 0.018  $\chi^2$ /NDF:637870.7/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 96.513 $\pm$ 0.018  $\chi^2$ /NDF:238634.9/17

Left: 95.967 $\pm$ 0.013  $\chi^2$ /NDF: 878229.0/37

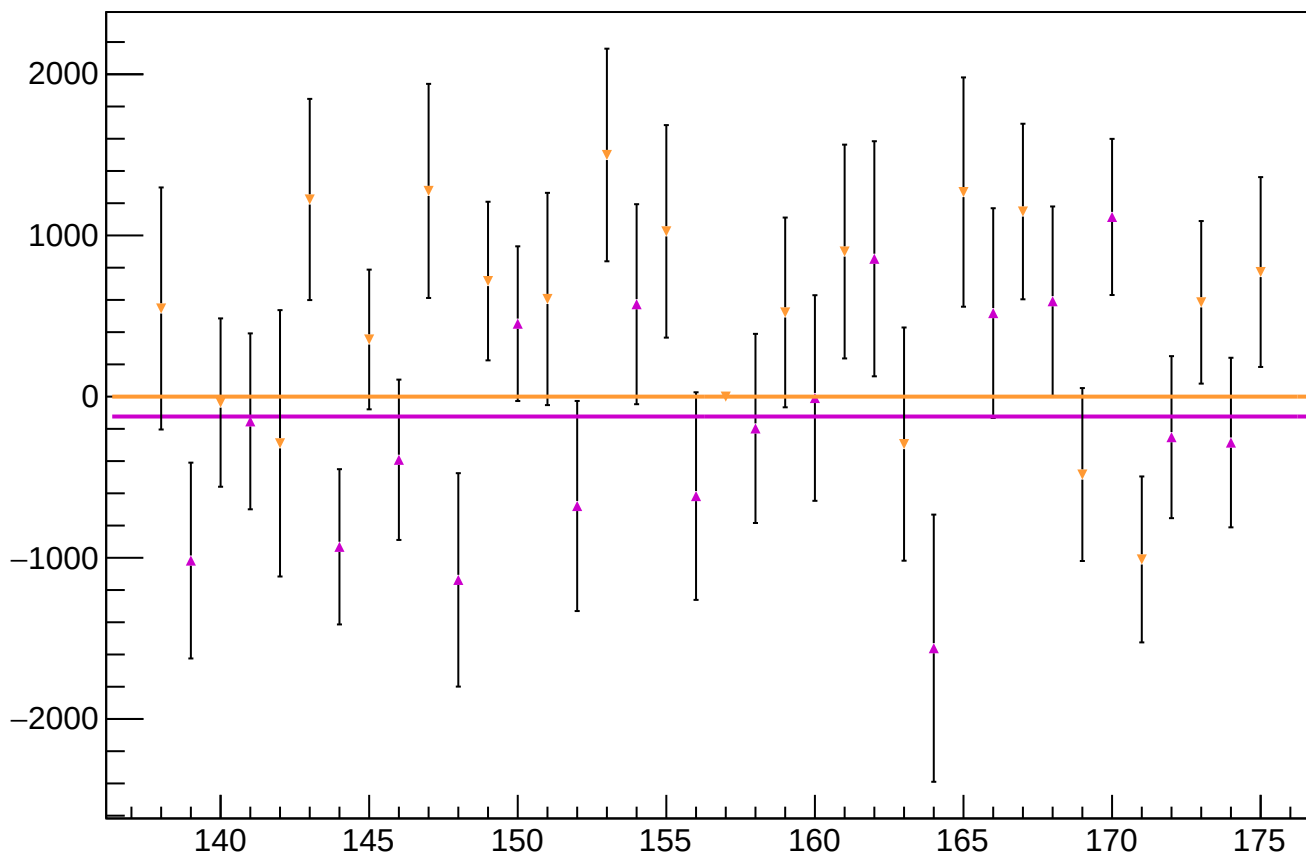
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 96.513 $\pm$ 0.018  $\chi^2$ /NDF:238634.9/17

Out: 95.459 $\pm$ 0.018  $\chi^2$ /NDF:637870.7/19

All: 95.967 $\pm$ 0.013  $\chi^2$ /NDF: 878229.0/37

asym\_sam\_26\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 37.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -123.462+/-135.840  $\chi^2/\text{NDF}$ : 25.6/17

Left: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 64.0/37

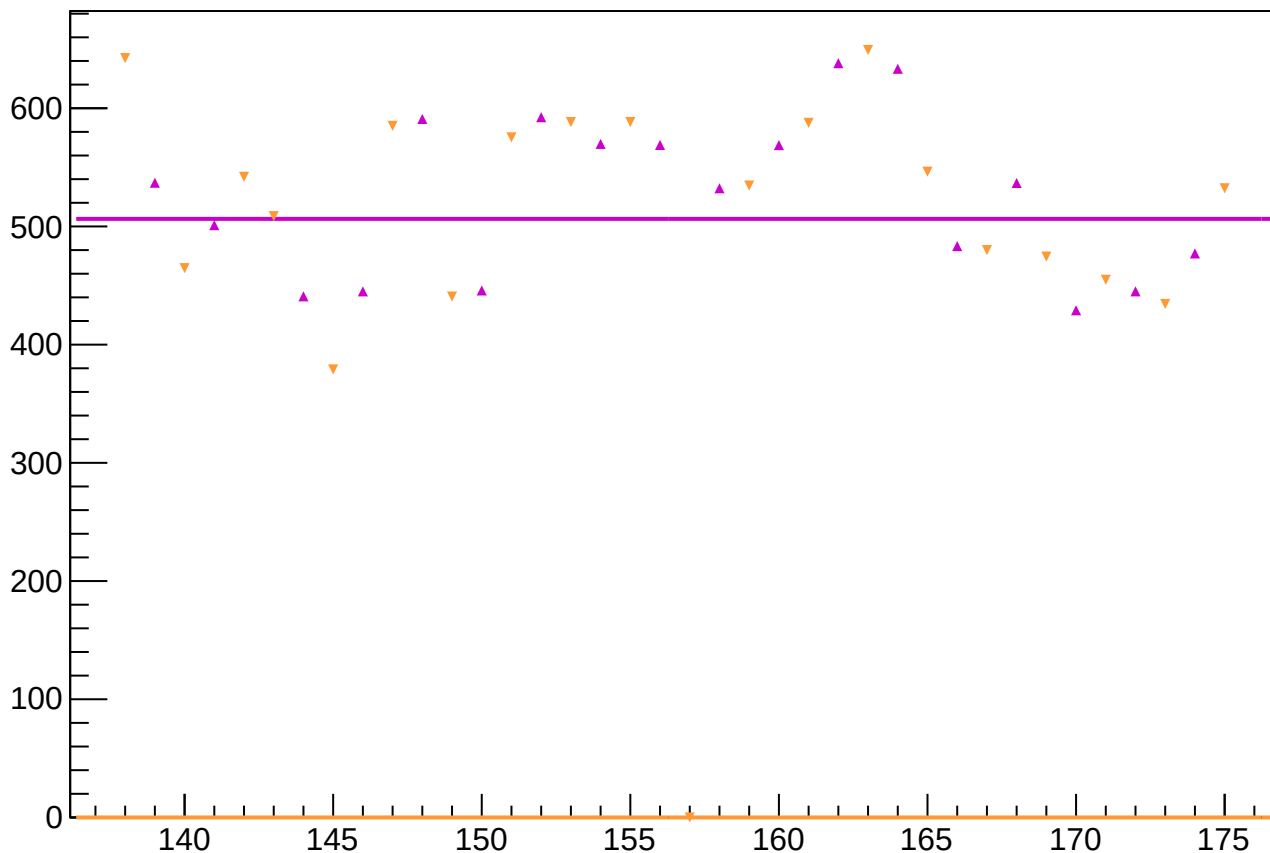
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -123.462+/-135.840  $\chi^2/\text{NDF}$ : 25.6/17

Out: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 37.6/19

All: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 64.0/37

asym\_sam\_26\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :28439629.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 506.397+/-0.096  $\chi^2/\text{NDF}$ :441676.1/17

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 56675757.5/37

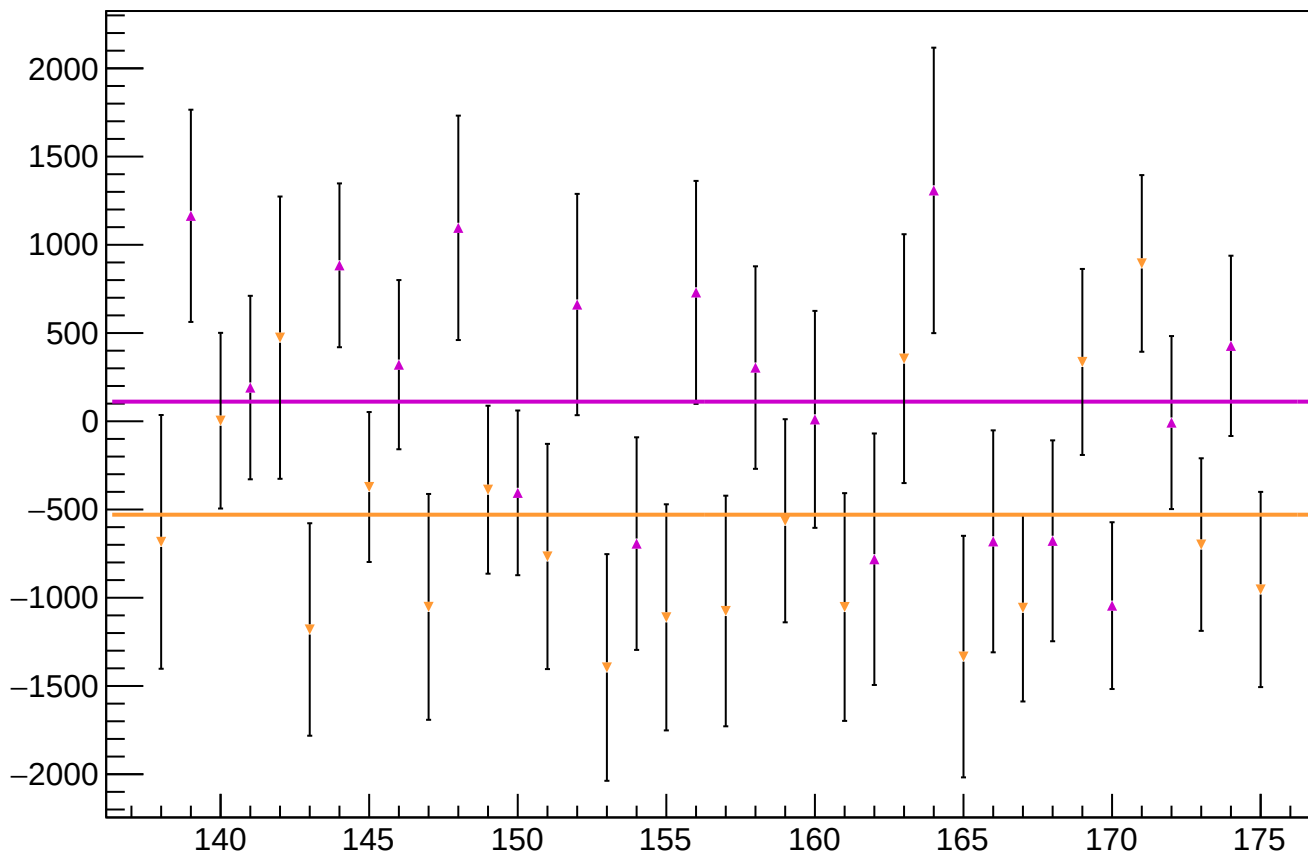
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 506.397+/-0.096  $\chi^2/\text{NDF}$ :441676.1/17

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :28439629.5/19

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 56675757.5/37

asym\_sam\_26\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -529.357+/-128.556  $\chi^2/\text{NDF}$ :24.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 111.233+/-131.765  $\chi^2/\text{NDF}$ :27.0/17

Left: -216.956+/-92.016  $\chi^2/\text{NDF}$ : 63.5/37

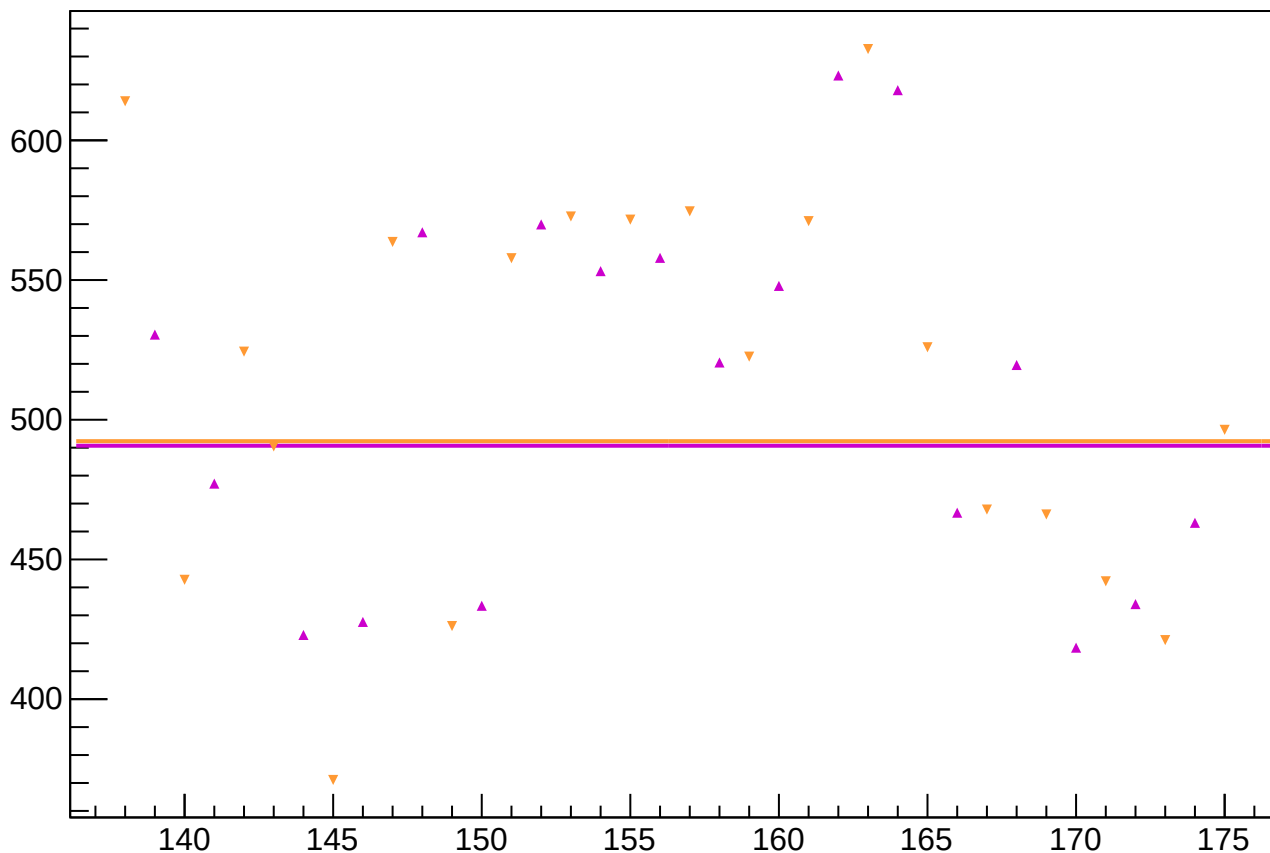
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 111.233+/-131.765  $\chi^2/\text{NDF}$ :27.0/17

Out: -529.357+/-128.556  $\chi^2/\text{NDF}$ :24.4/19

All: -216.956+/-92.016  $\chi^2/\text{NDF}$ : 63.5/37

asym\_sam\_26\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 492.336+/-0.091  $\chi^2/\text{NDF}$ : 612600.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 490.702+/-0.093  $\chi^2/\text{NDF}$ : 451161.9/17

Left: 491.539+/-0.065  $\chi^2/\text{NDF}$ : 1063919.6/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

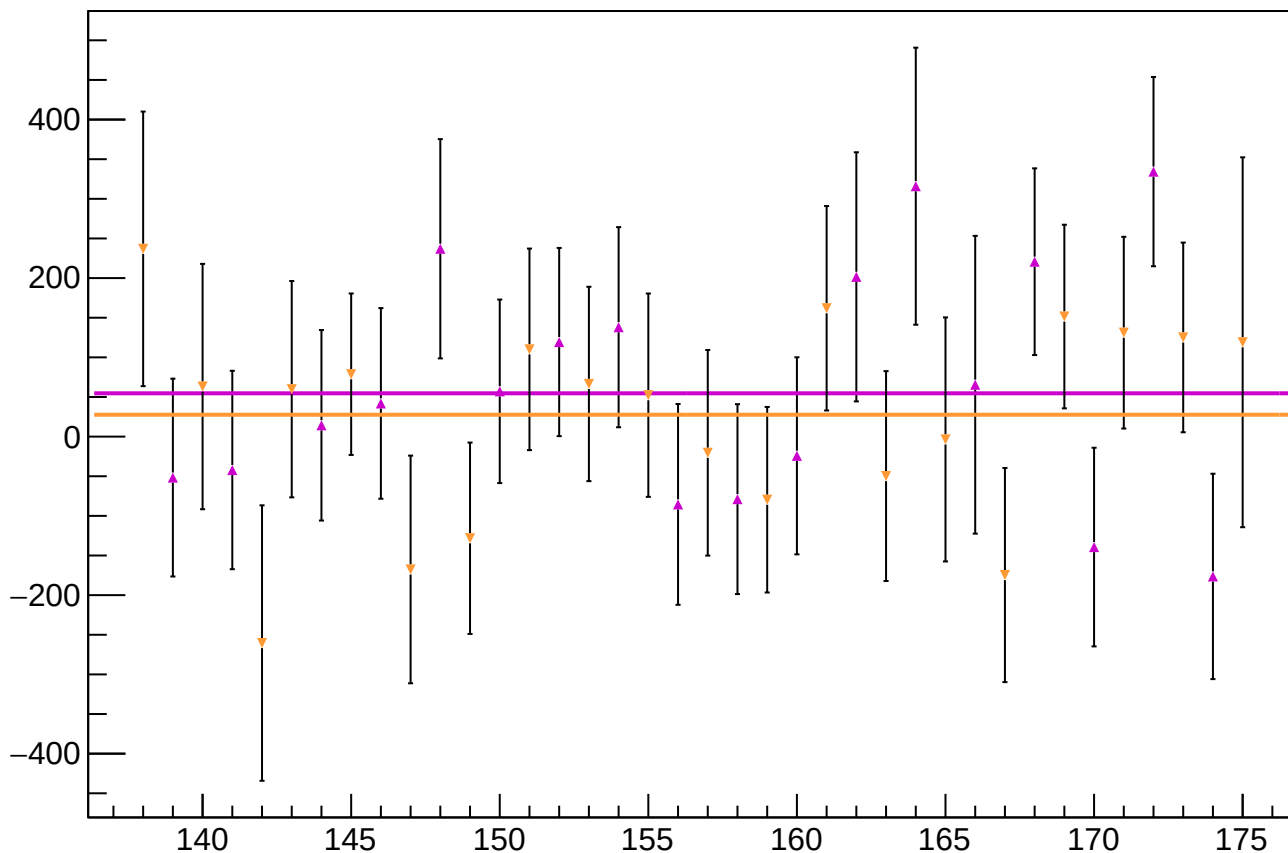
In: 490.702+/-0.093  $\chi^2/\text{NDF}$ : 451161.9/17

Out: 492.336+/-0.091  $\chi^2/\text{NDF}$ : 612600.2/19

All: 491.539+/-0.065  $\chi^2/\text{NDF}$ : 1063919.6/37



dit\_asym\_sam\_1548\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 27.600 $\pm$ 29.589  $\chi^2$ /NDF:16.0/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 54.645 $\pm$ 30.280  $\chi^2$ /NDF:23.0/17

Left: 40.810 $\pm$ 21.163  $\chi^2$ /NDF: 39.4/37

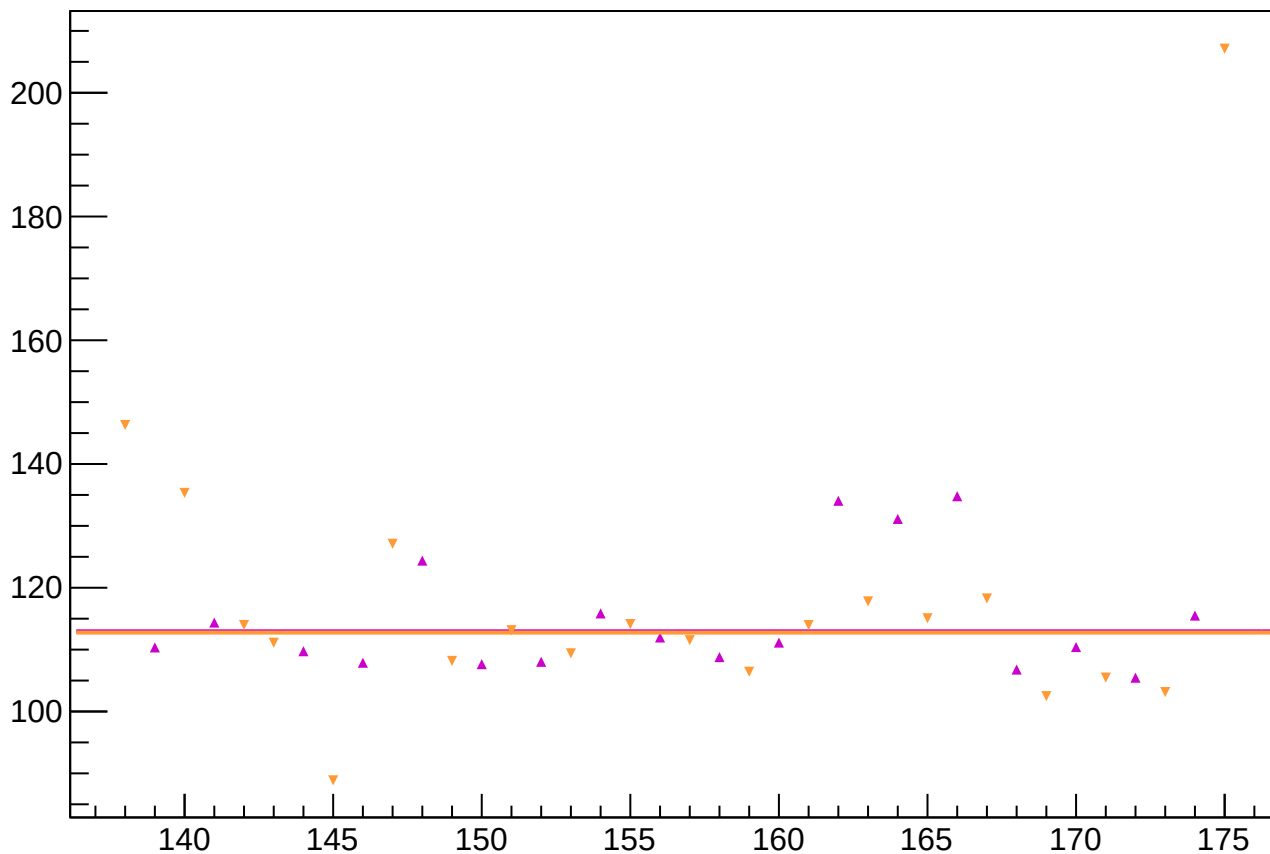
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 54.645 $\pm$ 30.280  $\chi^2$ /NDF:23.0/17

Out: 27.600 $\pm$ 29.589  $\chi^2$ /NDF:16.0/19

All: 40.810 $\pm$ 21.163  $\chi^2$ /NDF: 39.4/37

dit\_asym\_sam\_1548\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 112.756+/-0.021  $\chi^2/\text{NDF}$ : 628459.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 112.960+/-0.021  $\chi^2/\text{NDF}$ : 131095.6/17

Left: 112.856+/-0.015  $\chi^2/\text{NDF}$ : 759600.8/37

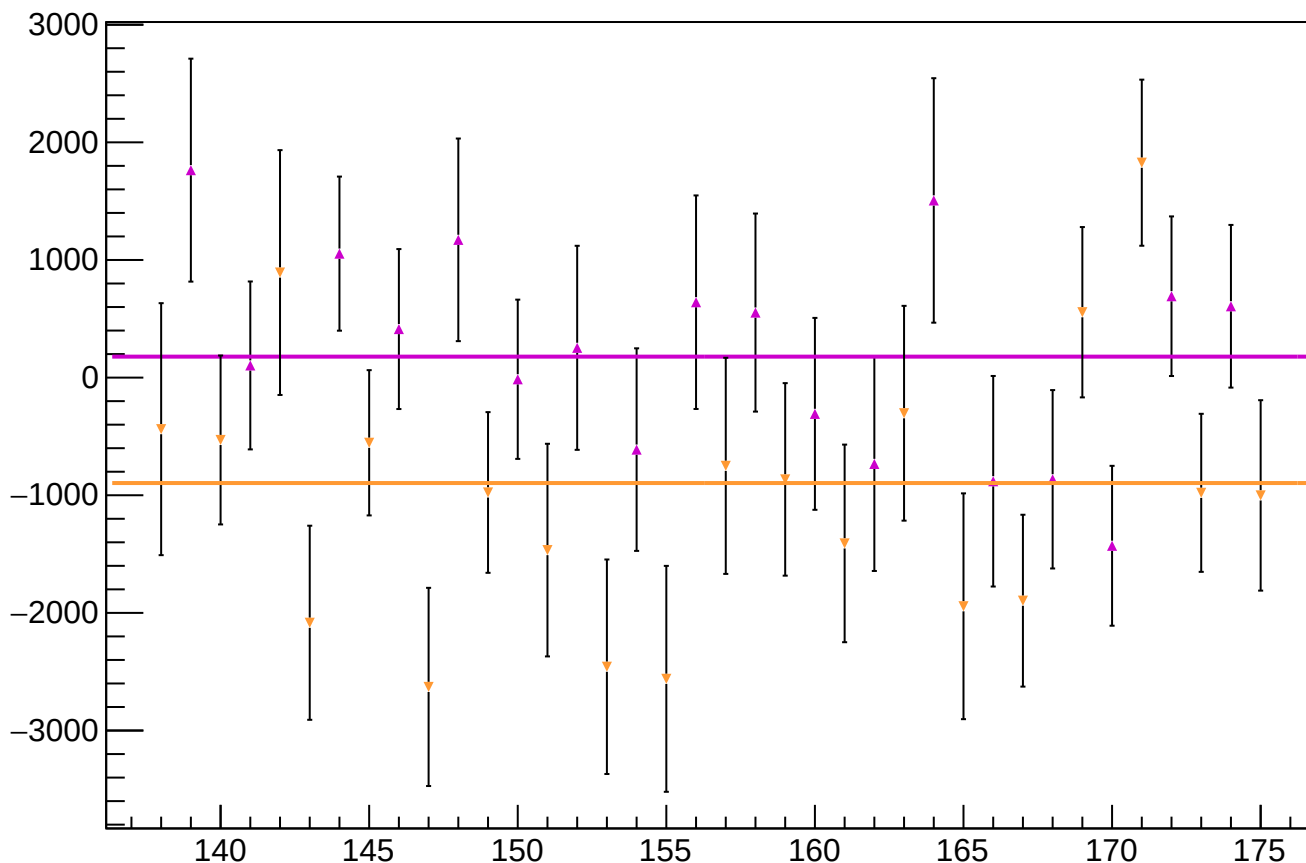
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 112.960+/-0.021  $\chi^2/\text{NDF}$ : 131095.6/17

Out: 112.756+/-0.021  $\chi^2/\text{NDF}$ : 628459.0/19

All: 112.856+/-0.015  $\chi^2/\text{NDF}$ : 759600.8/37

asym\_sam\_1548\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -896.174+/-180.173  $\chi^2/\text{NDF}$ :39.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 178.355+/-184.238  $\chi^2/\text{NDF}$ :20.3/17

Left: -370.893+/-128.814  $\chi^2/\text{NDF}$ : 76.8/37

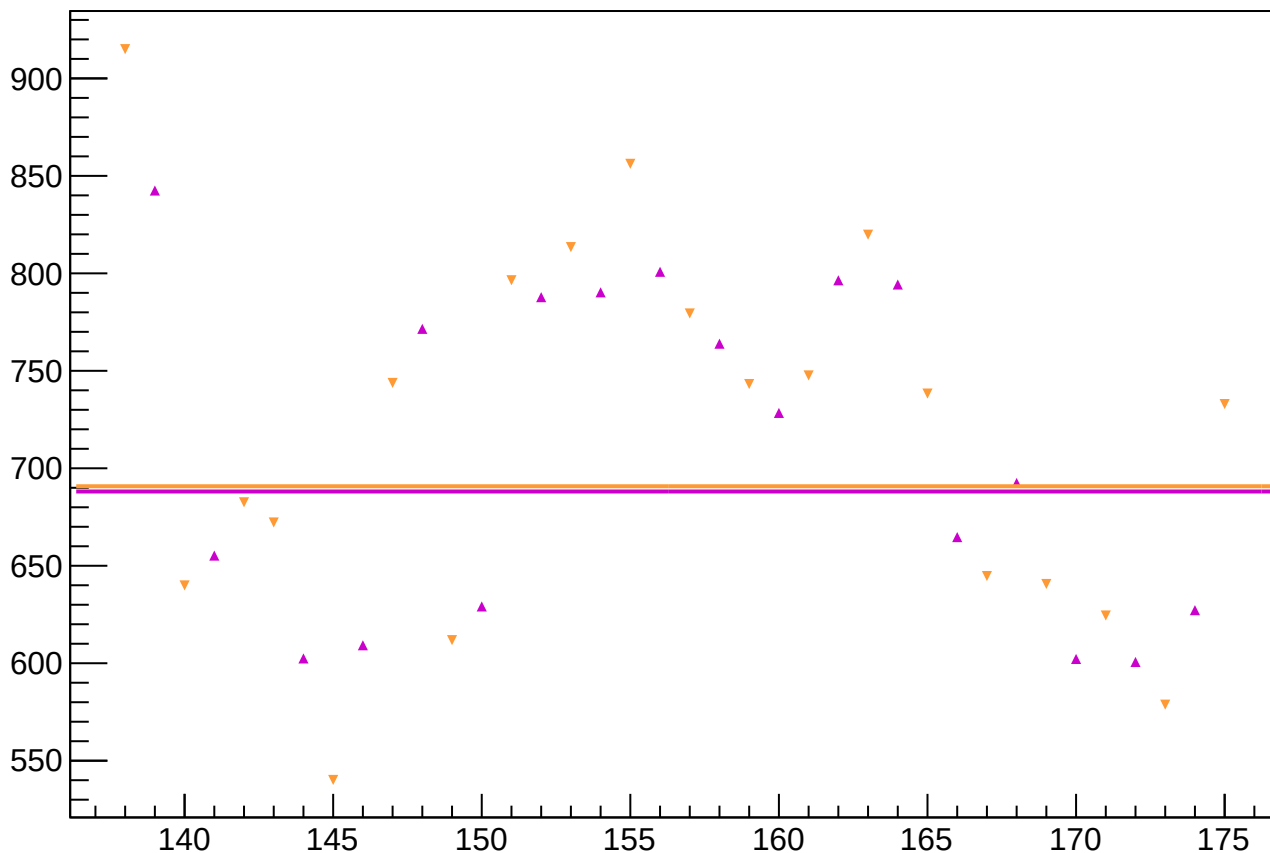
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 178.355+/-184.238  $\chi^2/\text{NDF}$ :20.3/17

Out: -896.174+/-180.173  $\chi^2/\text{NDF}$ :39.2/19

All: -370.893+/-128.814  $\chi^2/\text{NDF}$ : 76.8/37

asym\_sam\_1548\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 690.785+/-0.127  $\chi^2/\text{NDF}$ :552530.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 688.098+/-0.130  $\chi^2/\text{NDF}$ :390268.4/17

Left: 689.471+/-0.091  $\chi^2/\text{NDF}$ : 943016.6/37

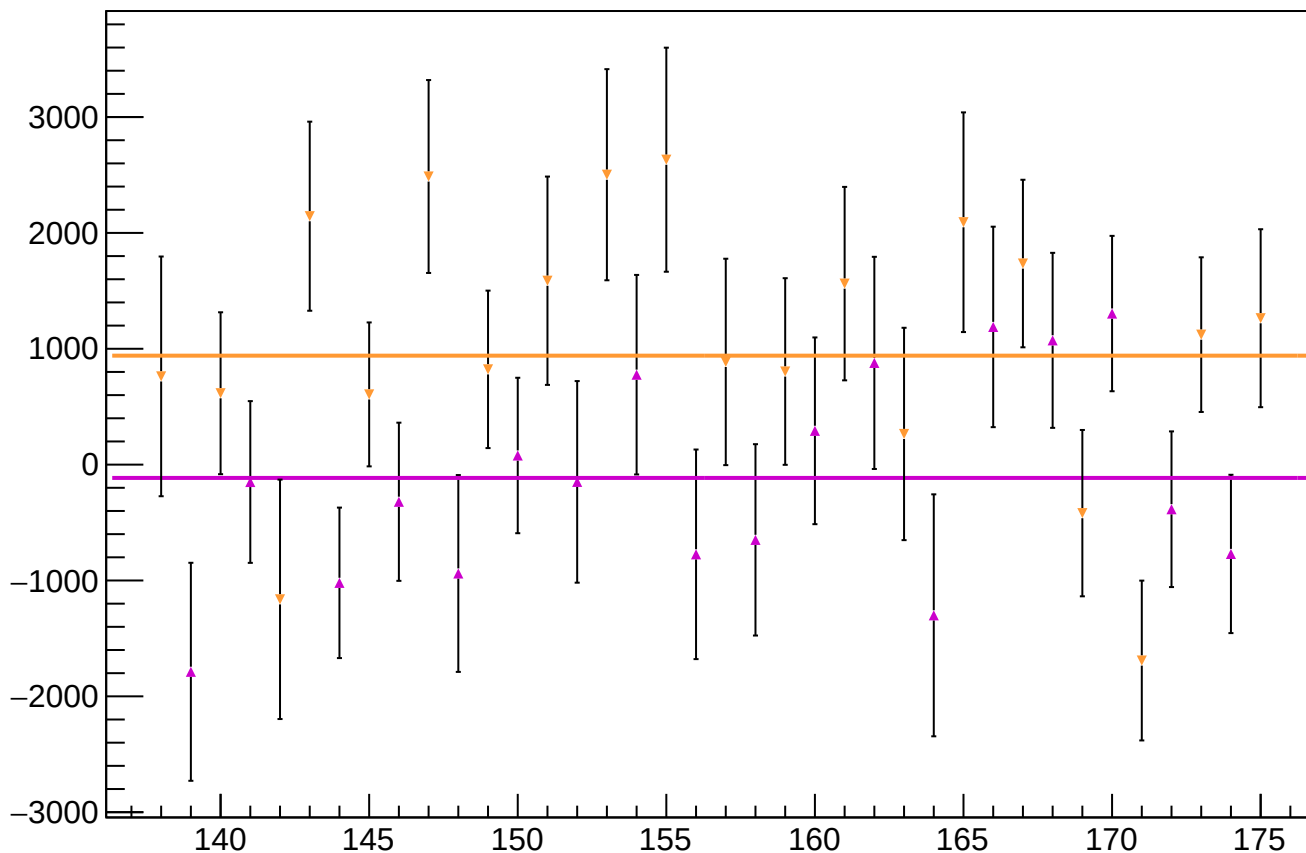
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 688.098+/-0.130  $\chi^2/\text{NDF}$ :390268.4/17

Out: 690.785+/-0.127  $\chi^2/\text{NDF}$ :552530.8/19

All: 689.471+/-0.091  $\chi^2/\text{NDF}$ : 943016.6/37

asym\_sam\_1548\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 940.568+/-177.984  $\chi^2/\text{NDF}$ :39.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -114.787+/-182.622  $\chi^2/\text{NDF}$ :21.3/17

Left: 426.463+/-127.462  $\chi^2/\text{NDF}$ : 77.5/37

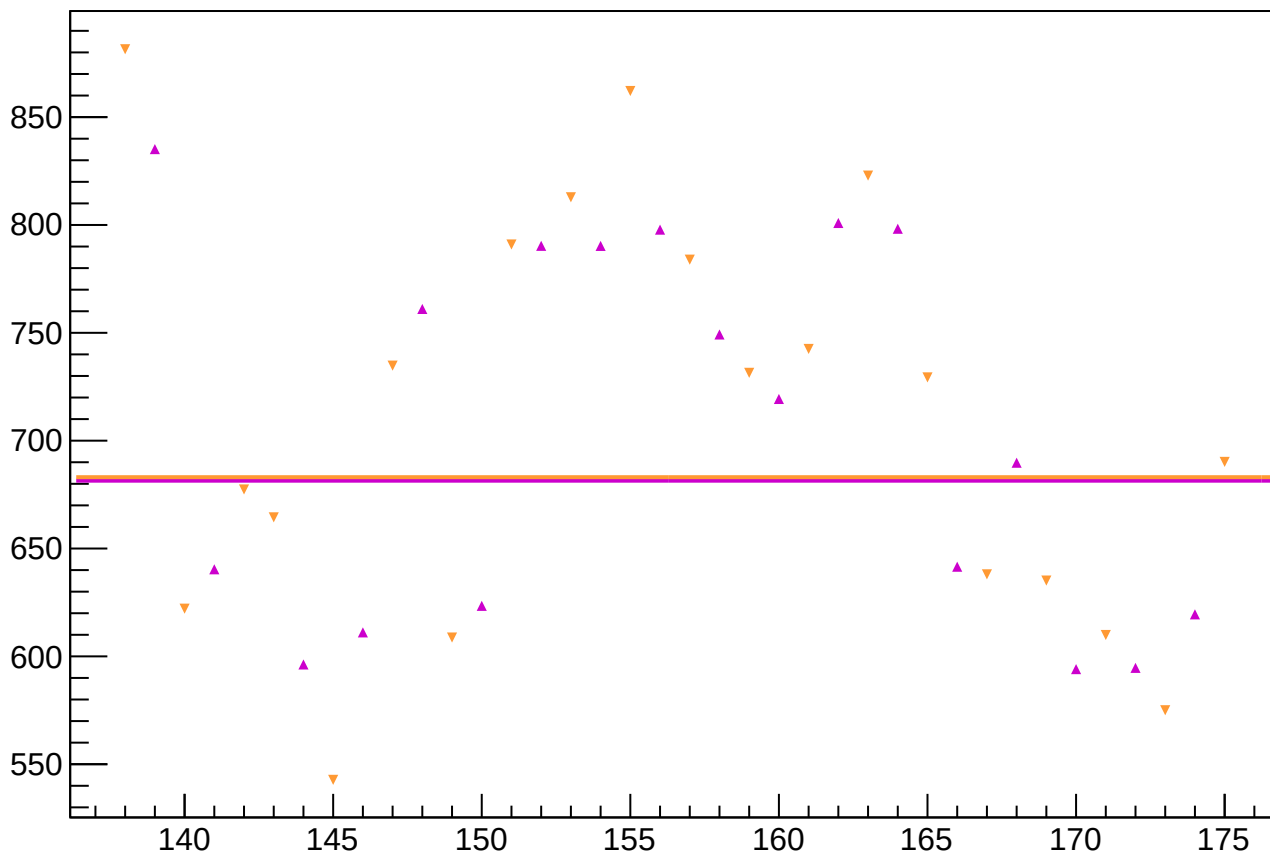
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -114.787+/-182.622  $\chi^2/\text{NDF}$ :21.3/17

Out: 940.568+/-177.984  $\chi^2/\text{NDF}$ :39.1/19

All: 426.463+/-127.462  $\chi^2/\text{NDF}$ : 77.5/37

asym\_sam\_1548\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 683.065+/-0.126  $\chi^2/\text{NDF}$ : 547591.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 681.454+/-0.129  $\chi^2/\text{NDF}$ : 410105.8/17

Left: 682.280+/-0.090  $\chi^2/\text{NDF}$ : 957777.1/37

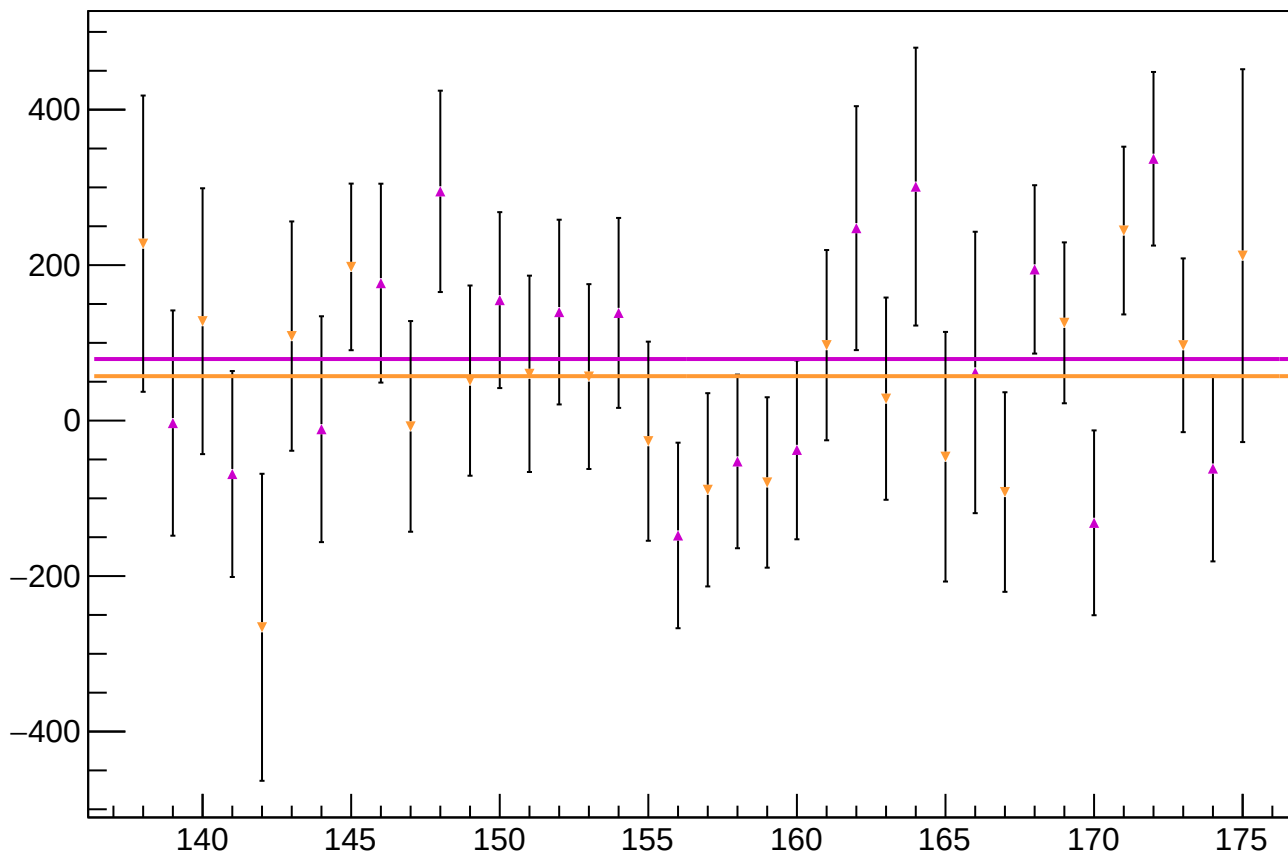
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 681.454+/-0.129  $\chi^2/\text{NDF}$ : 410105.8/17

Out: 683.065+/-0.126  $\chi^2/\text{NDF}$ : 547591.5/19

All: 682.280+/-0.090  $\chi^2/\text{NDF}$ : 957777.1/37

dit\_asym\_sam\_3748\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 57.160+/-29.037  $\chi^2/\text{NDF}$ :15.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 79.193+/-29.836  $\chi^2/\text{NDF}$ :26.0/17

Left: 67.877+/-20.809  $\chi^2/\text{NDF}$ : 41.3/37

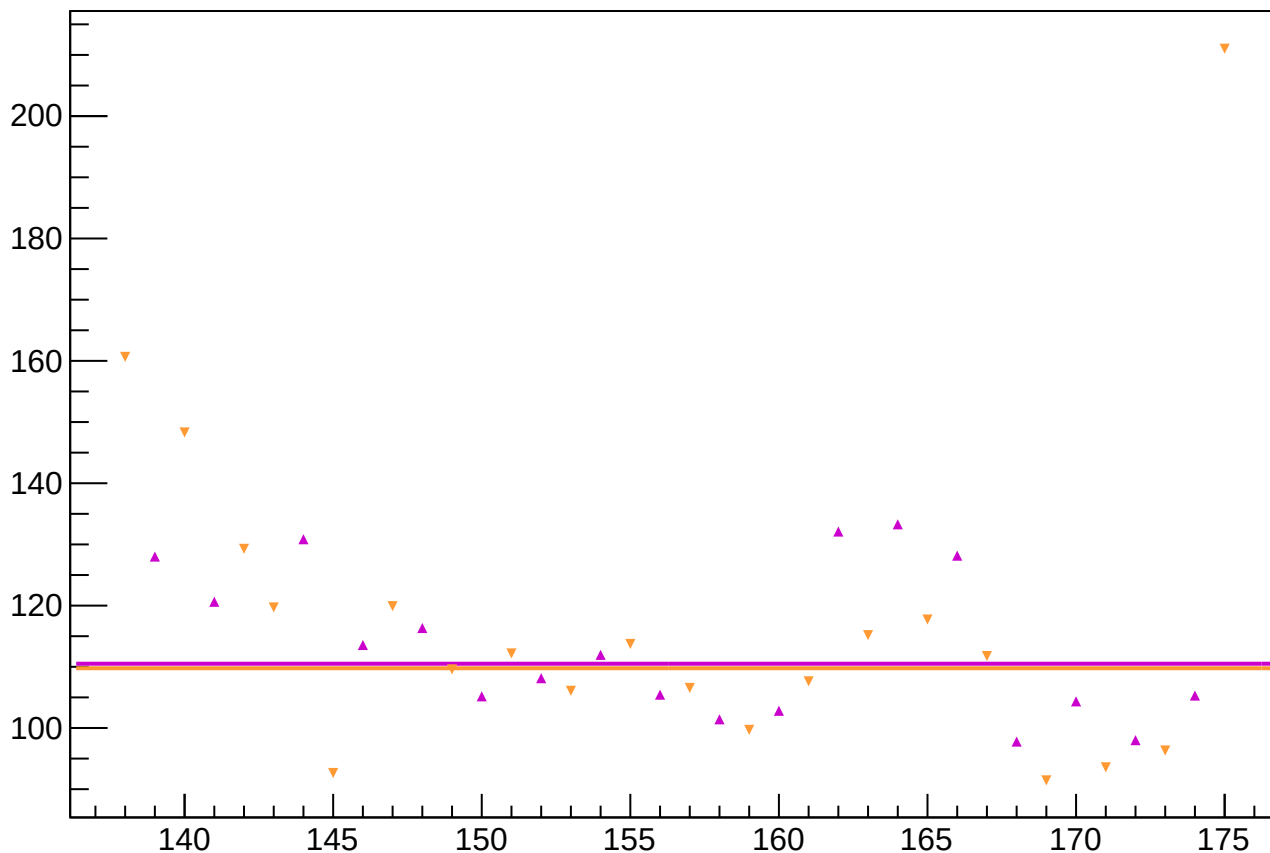
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 79.193+/-29.836  $\chi^2/\text{NDF}$ :26.0/17

Out: 57.160+/-29.037  $\chi^2/\text{NDF}$ :15.0/19

All: 67.877+/-20.809  $\chi^2/\text{NDF}$ : 41.3/37

dit\_asym\_sam\_3748\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 109.766+/-0.021  $\chi^2/\text{NDF}$ :860516.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 110.507+/-0.021  $\chi^2/\text{NDF}$ :267882.2/17

Left: 110.126+/-0.015  $\chi^2/\text{NDF}$ : 1129032.0/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

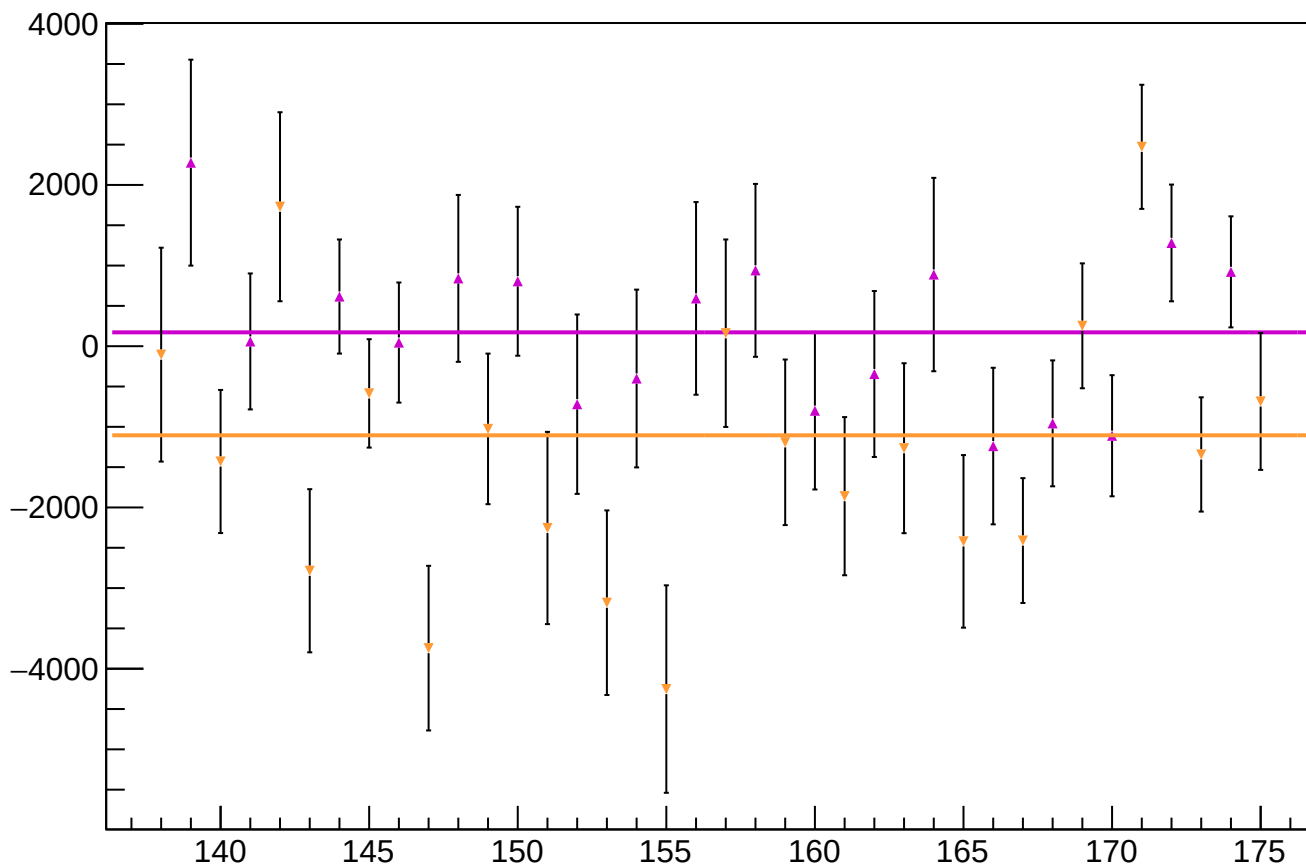
In: 110.507+/-0.021  $\chi^2/\text{NDF}$ :267882.2/17

Out: 109.766+/-0.021  $\chi^2/\text{NDF}$ :860516.4/19

All: 110.126+/-0.015  $\chi^2/\text{NDF}$ : 1129032.0/37



asym\_sam\_3748\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1104.963+/-209.254  $\chi^2/\text{NDF}$ : 58.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 171.884+/-211.747  $\chi^2/\text{NDF}$ : 17.8/17

Left: -474.099+/-148.838  $\chi^2/\text{NDF}$ : 94.2/37

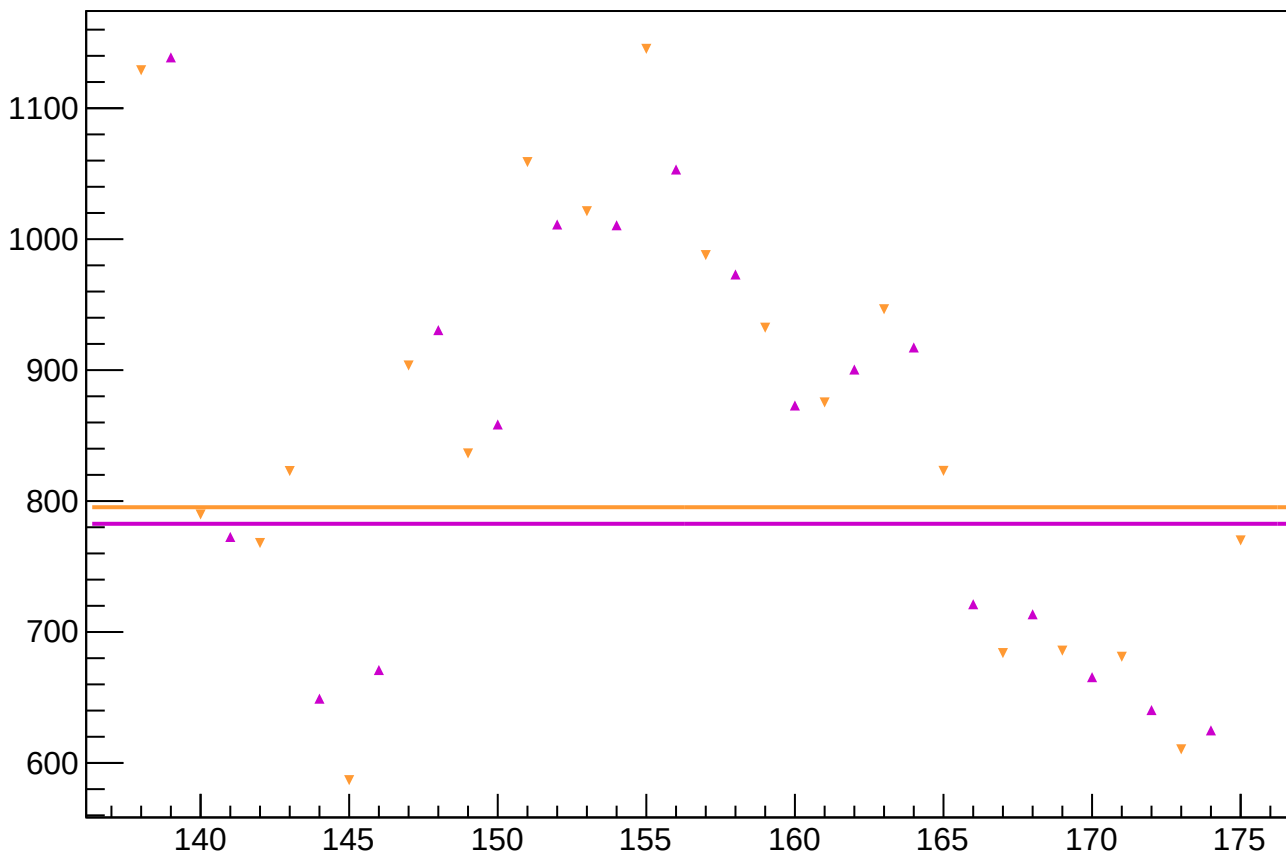
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 171.884+/-211.747  $\chi^2/\text{NDF}$ : 17.8/17

Out: -1104.963+/-209.254  $\chi^2/\text{NDF}$ : 58.0/19

All: -474.099+/-148.838  $\chi^2/\text{NDF}$ : 94.2/37

asym\_sam\_3748\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 795.290+/-0.148  $\chi^2/\text{NDF}$ :1081413.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 782.640+/-0.150  $\chi^2/\text{NDF}$ :984898.4/17

Left: 789.040+/-0.105  $\chi^2/\text{NDF}$ : 2069922.6/37

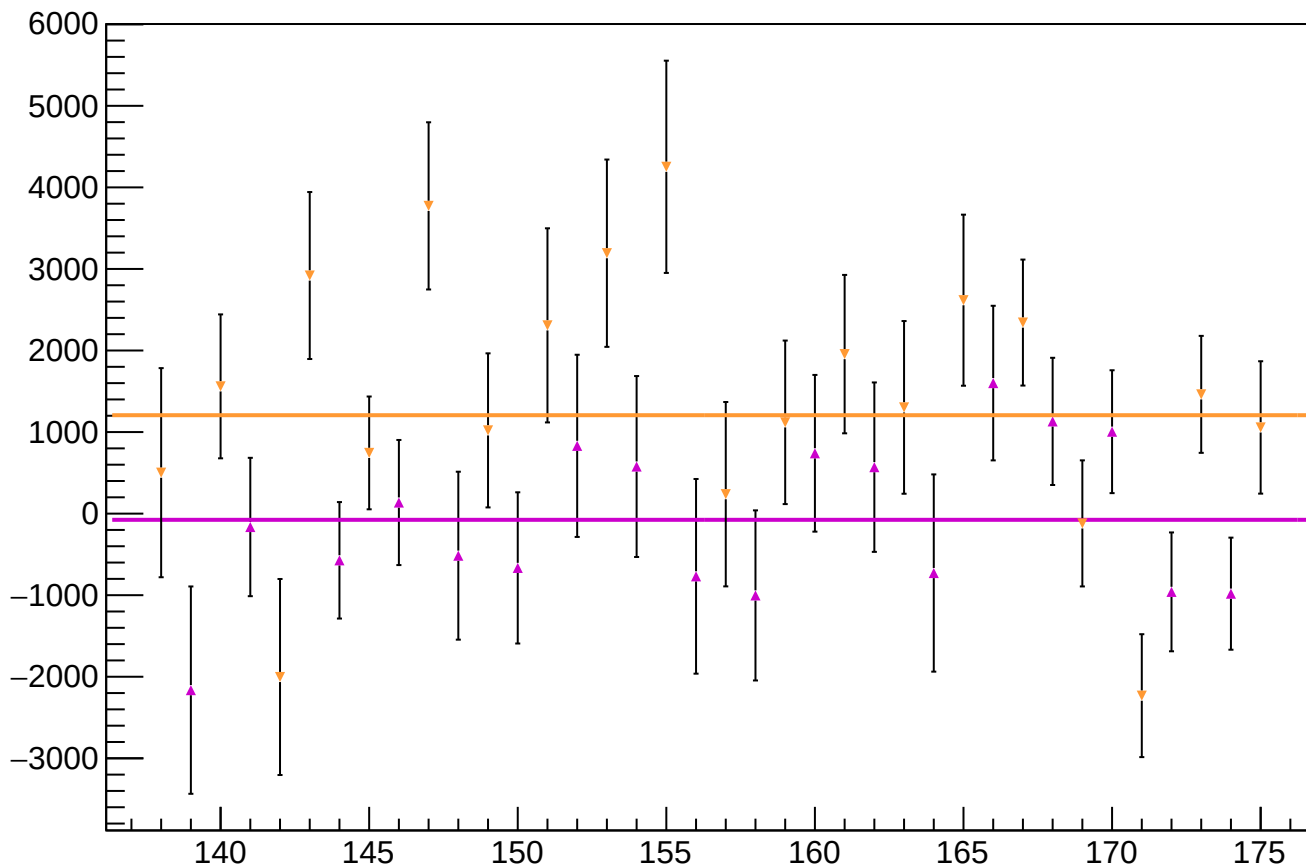
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 782.640+/-0.150  $\chi^2/\text{NDF}$ :984898.4/17

Out: 795.290+/-0.148  $\chi^2/\text{NDF}$ :1081413.2/19

All: 789.040+/-0.105  $\chi^2/\text{NDF}$ : 2069922.6/37

asym\_sam\_3748\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1206.702+/-208.638  $\chi^2/\text{NDF}$ :55.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -75.953+/-212.096  $\chi^2/\text{NDF}$ :18.2/17

Left: 575.917+/-148.737  $\chi^2/\text{NDF}$ : 92.5/37

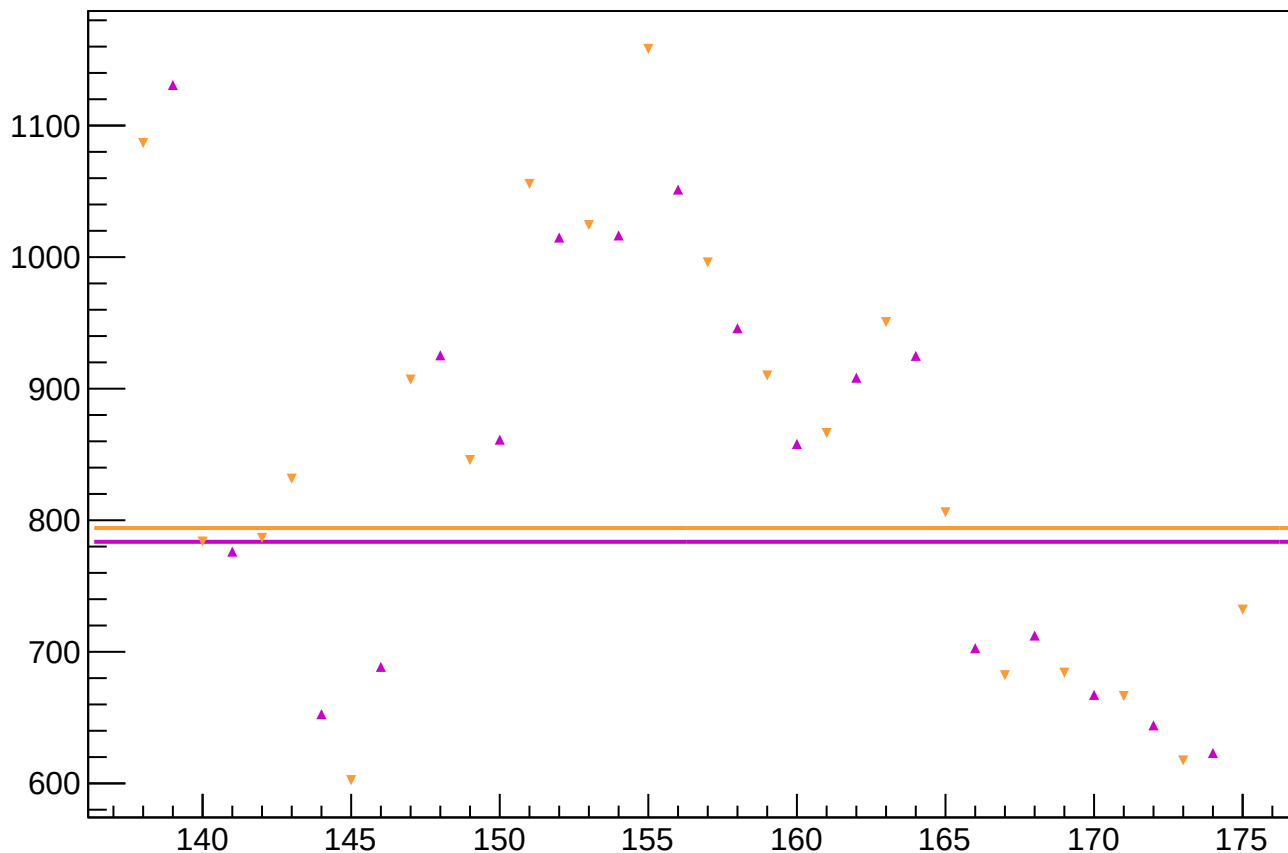
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -75.953+/-212.096  $\chi^2/\text{NDF}$ :18.2/17

Out: 1206.702+/-208.638  $\chi^2/\text{NDF}$ :55.7/19

All: 575.917+/-148.737  $\chi^2/\text{NDF}$ : 92.5/37

# asym\_sam\_3748\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 794.108+/-0.148  $\chi^2/\text{NDF}$ :1043197.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 783.618+/-0.150  $\chi^2/\text{NDF}$ :951896.4/17

Left: 788.949+/-0.105  $\chi^2/\text{NDF}$ : 1997580.7/37

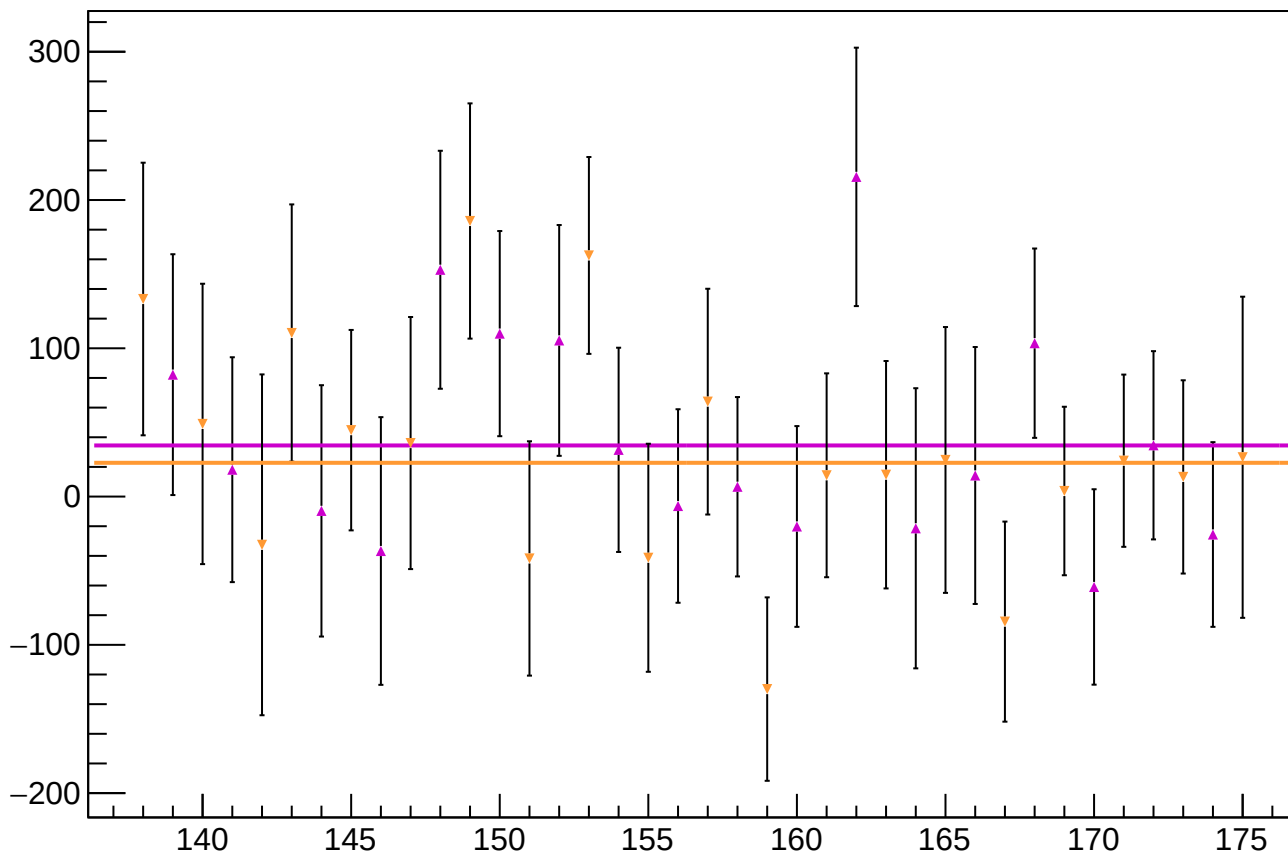
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 783.618+/-0.150  $\chi^2/\text{NDF}$ :951896.4/17

Out: 794.108+/-0.148  $\chi^2/\text{NDF}$ :1043197.7/19

All: 788.949+/-0.105  $\chi^2/\text{NDF}$ : 1997580.7/37

dit\_asym\_sam\_1526\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 22.772 $\pm$ 16.672  $\chi^2$ /NDF:22.0/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 34.474 $\pm$ 17.119  $\chi^2$ /NDF:15.7/17

Left: 28.468 $\pm$ 11.944  $\chi^2$ /NDF: 37.9/37

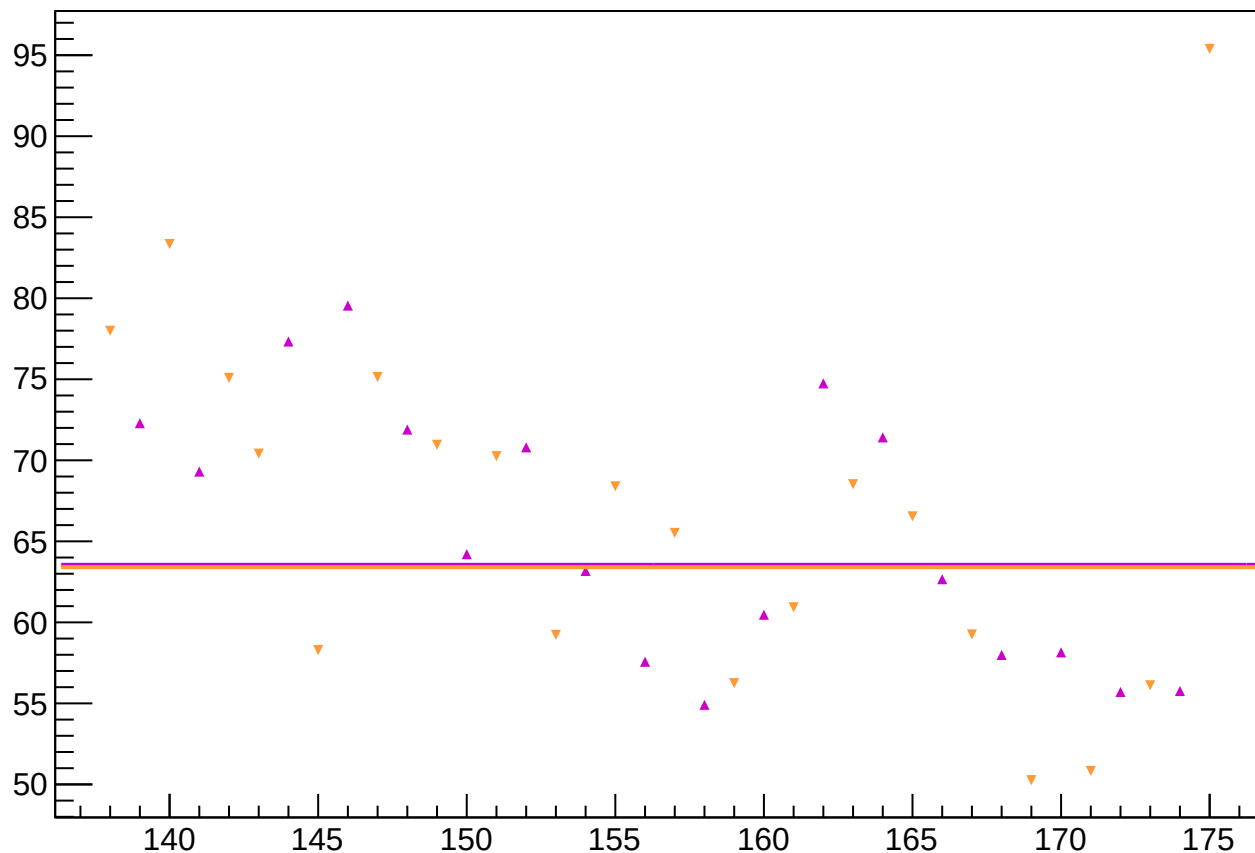
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 34.474 $\pm$ 17.119  $\chi^2$ /NDF:15.7/17

Out: 22.772 $\pm$ 16.672  $\chi^2$ /NDF:22.0/19

All: 28.468 $\pm$ 11.944  $\chi^2$ /NDF: 37.9/37

dit\_asym\_sam\_1526\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 63.405+/-0.012  $\chi^2/\text{NDF}$ : 722131.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 63.550+/-0.012  $\chi^2/\text{NDF}$ : 388849.7/17

Left: 63.476+/-0.008  $\chi^2/\text{NDF}$ : 1111054.1/37

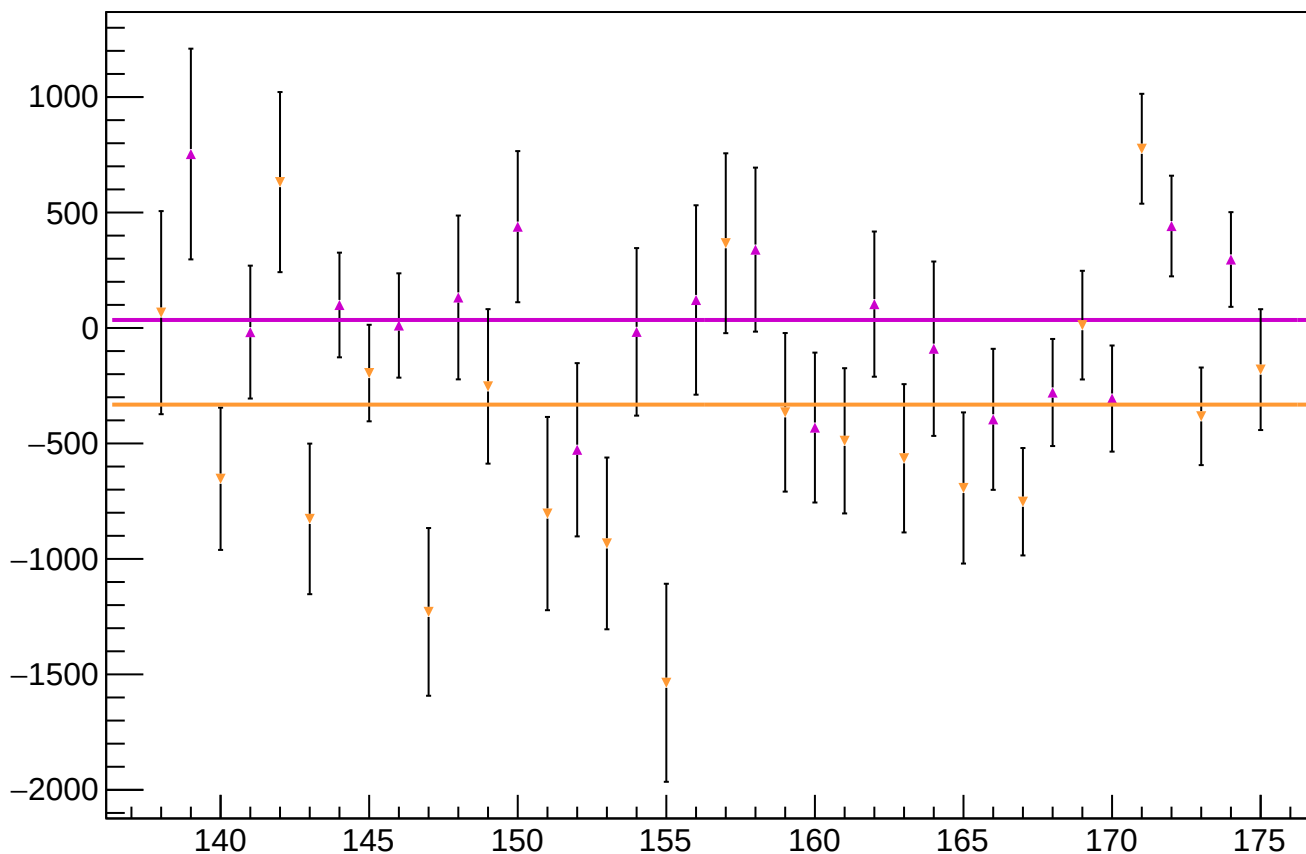
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 63.550+/-0.012  $\chi^2/\text{NDF}$ : 388849.7/17

Out: 63.405+/-0.012  $\chi^2/\text{NDF}$ : 722131.1/19

All: 63.476+/-0.008  $\chi^2/\text{NDF}$ : 1111054.1/37

asym\_sam\_1526\_avg\_correction\_mean vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-331.833 \pm 66.677$   $\chi^2/\text{NDF}$ : 61.4/19

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left In:  $34.693 \pm 67.182$   $\chi^2/\text{NDF}$ : 20.6/17

Left:  $-149.953 \pm 47.325$   $\chi^2/\text{NDF}$ : 97.0/37

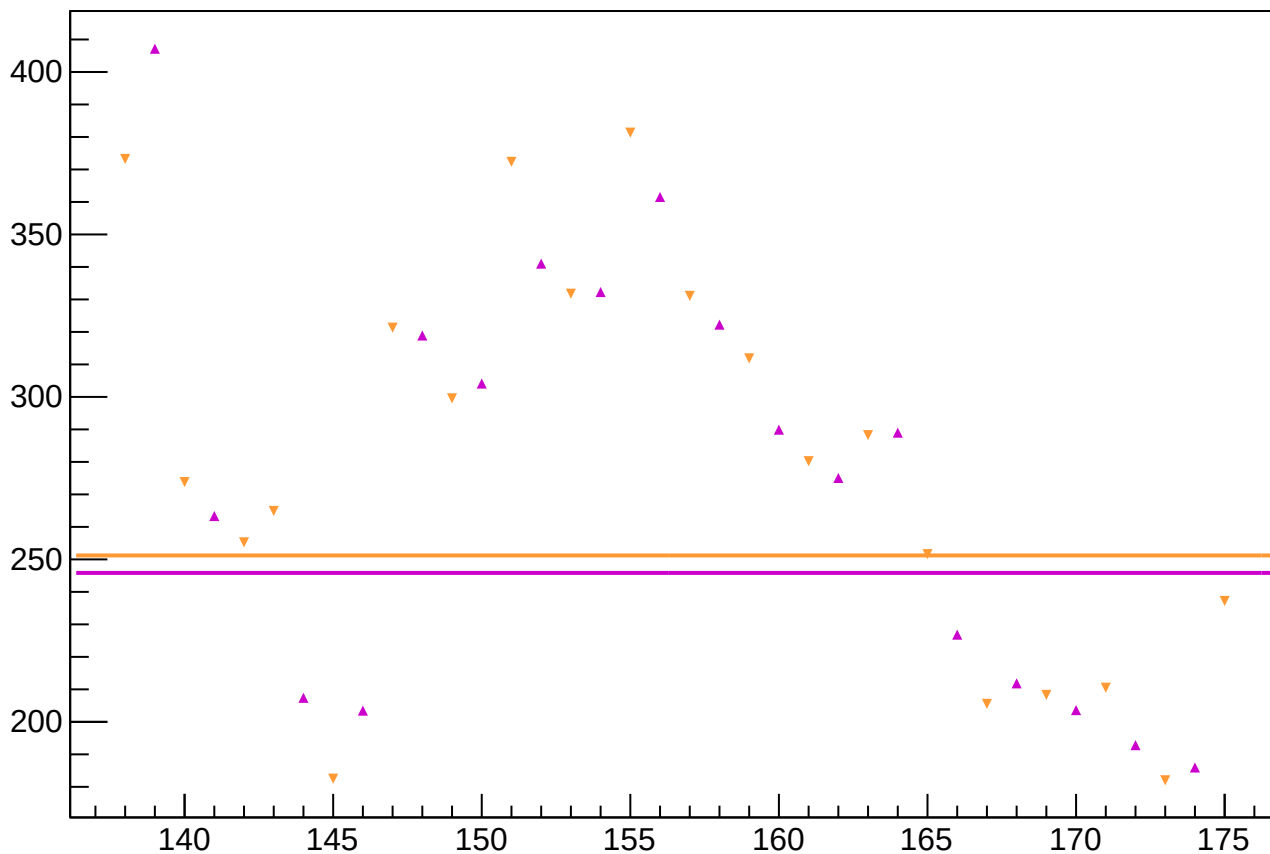
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

In:  $34.693 \pm 67.182$   $\chi^2/\text{NDF}$ : 20.6/17

Out:  $-331.833 \pm 66.677$   $\chi^2/\text{NDF}$ : 61.4/19

All:  $-149.953 \pm 47.325$   $\chi^2/\text{NDF}$ : 97.0/37

asym\_sam\_1526\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 251.215+/-0.047  $\chi^2/\text{NDF}$ :1559238.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 245.841+/-0.048  $\chi^2/\text{NDF}$ :1515264.0/17

Left: 248.548+/-0.033  $\chi^2/\text{NDF}$ : 3080949.8/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

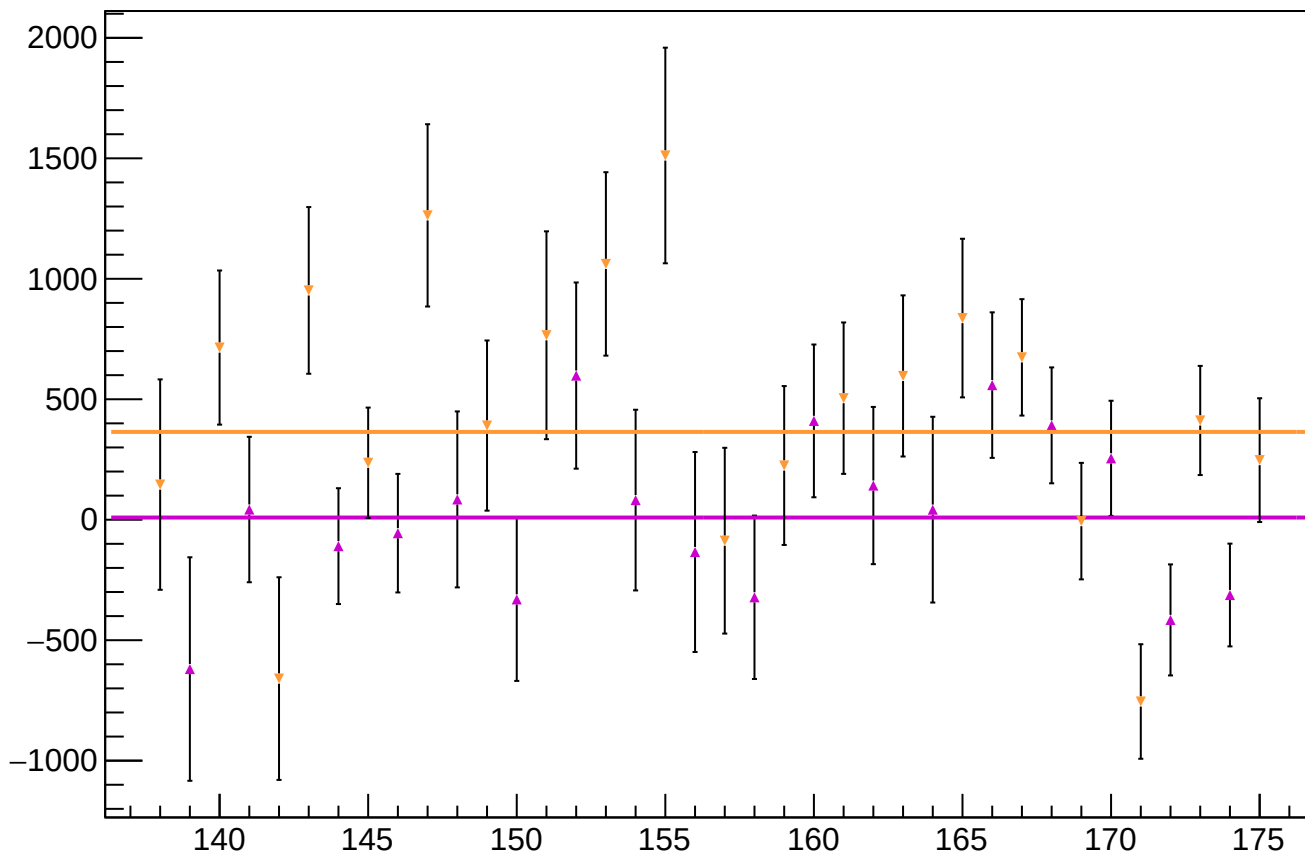
In: 245.841+/-0.048  $\chi^2/\text{NDF}$ :1515264.0/17

Out: 251.215+/-0.047  $\chi^2/\text{NDF}$ :1559238.1/19

All: 248.548+/-0.033  $\chi^2/\text{NDF}$ : 3080949.8/37



asym\_sam\_1526\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 364.442+/-68.817  $\chi^2/\text{NDF}$ :57.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 9.074+/-69.565  $\chi^2/\text{NDF}$ :21.0/17

Left: 188.679+/-48.923  $\chi^2/\text{NDF}$ : 91.9/37

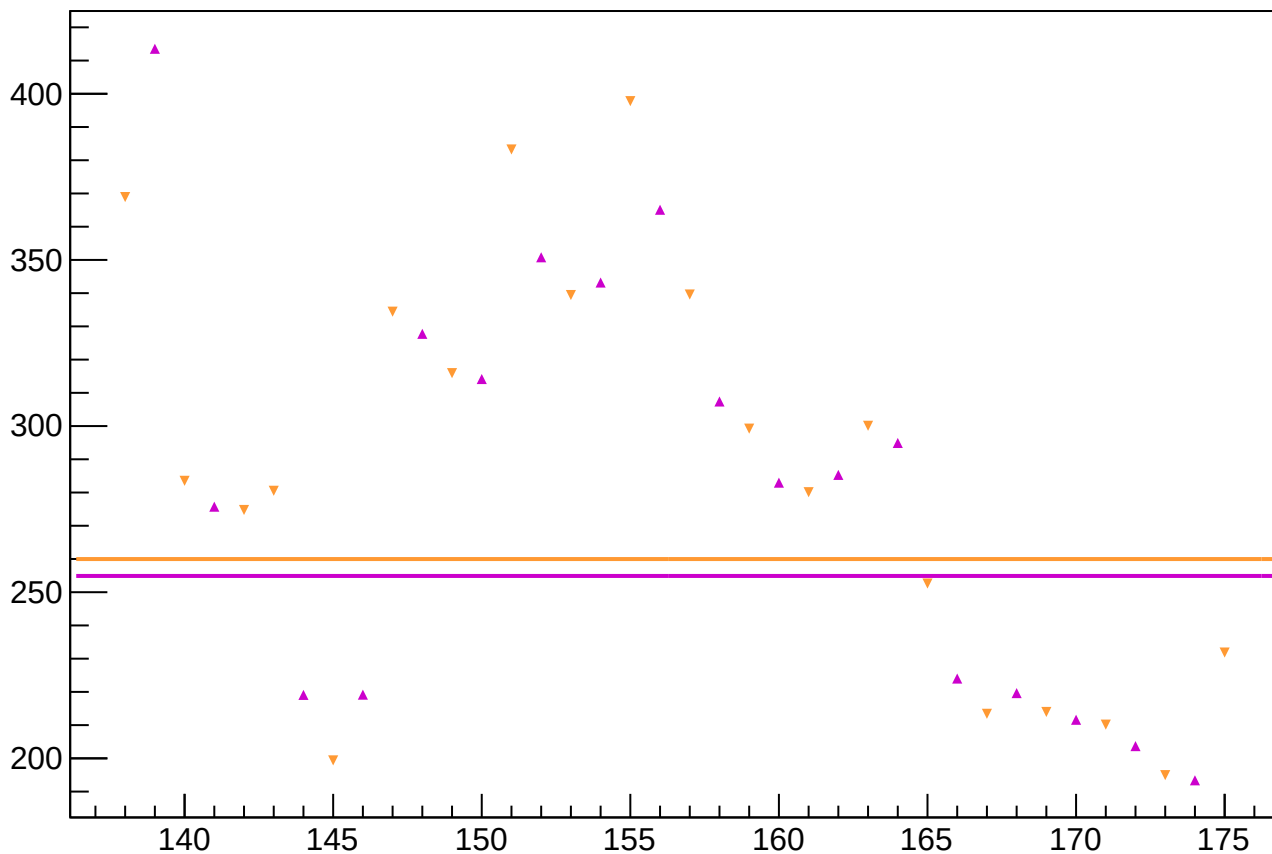
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 9.074+/-69.565  $\chi^2/\text{NDF}$ :21.0/17

Out: 364.442+/-68.817  $\chi^2/\text{NDF}$ :57.7/19

All: 188.679+/-48.923  $\chi^2/\text{NDF}$ : 91.9/37

asym\_sam\_1526\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 259.979+/-0.049  $\chi^2/\text{NDF}$ :1427592.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 254.895+/-0.049  $\chi^2/\text{NDF}$ :1343363.2/17

Left: 257.464+/-0.035  $\chi^2/\text{NDF}$ : 2776353.3/37

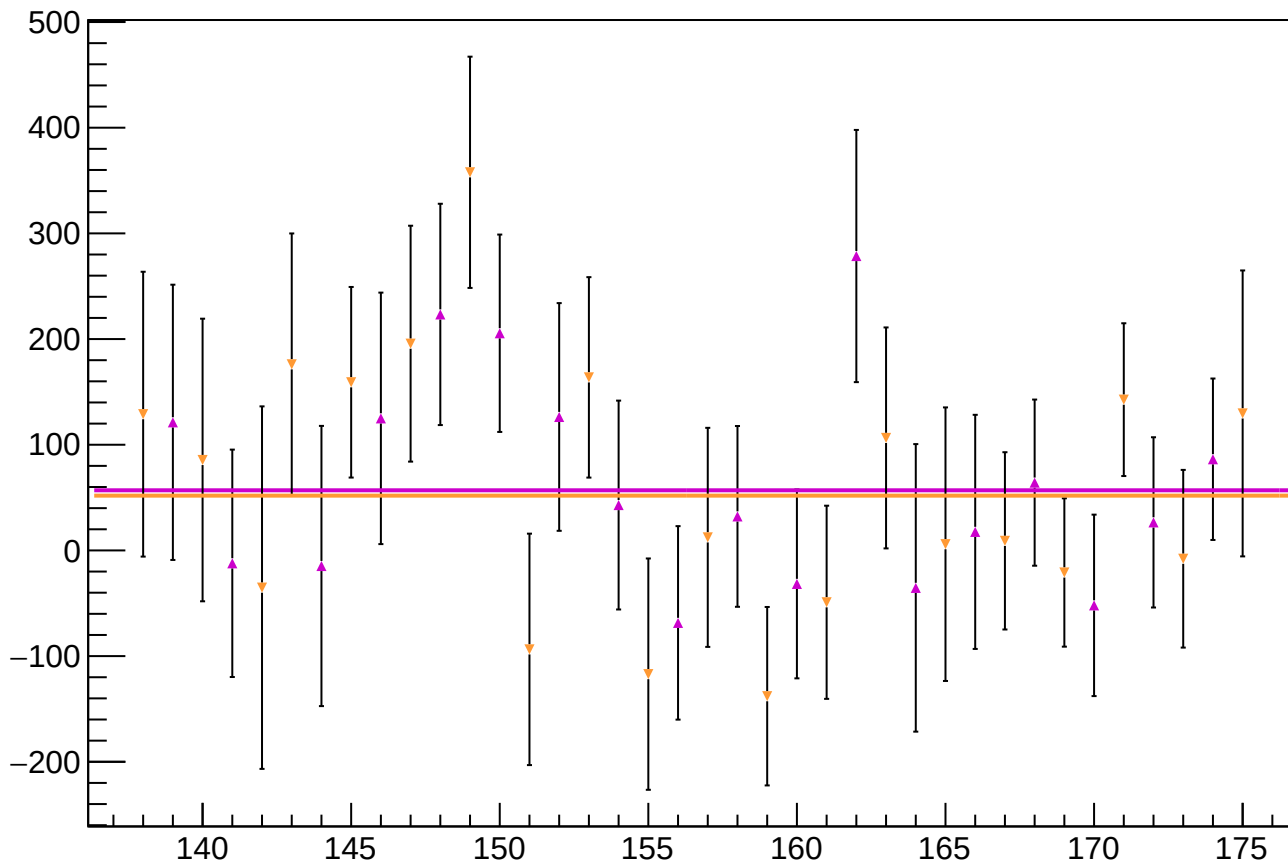
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 254.895+/-0.049  $\chi^2/\text{NDF}$ :1343363.2/17

Out: 259.979+/-0.049  $\chi^2/\text{NDF}$ :1427592.4/19

All: 257.464+/-0.035  $\chi^2/\text{NDF}$ : 2776353.3/37

dit\_asym\_sam\_3726\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 51.840 $\pm$ 22.294  $\chi^2$ /NDF:28.7/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 56.906 $\pm$ 23.079  $\chi^2$ /NDF:15.7/17

Left: 54.285 $\pm$ 16.035  $\chi^2$ /NDF: 44.3/37

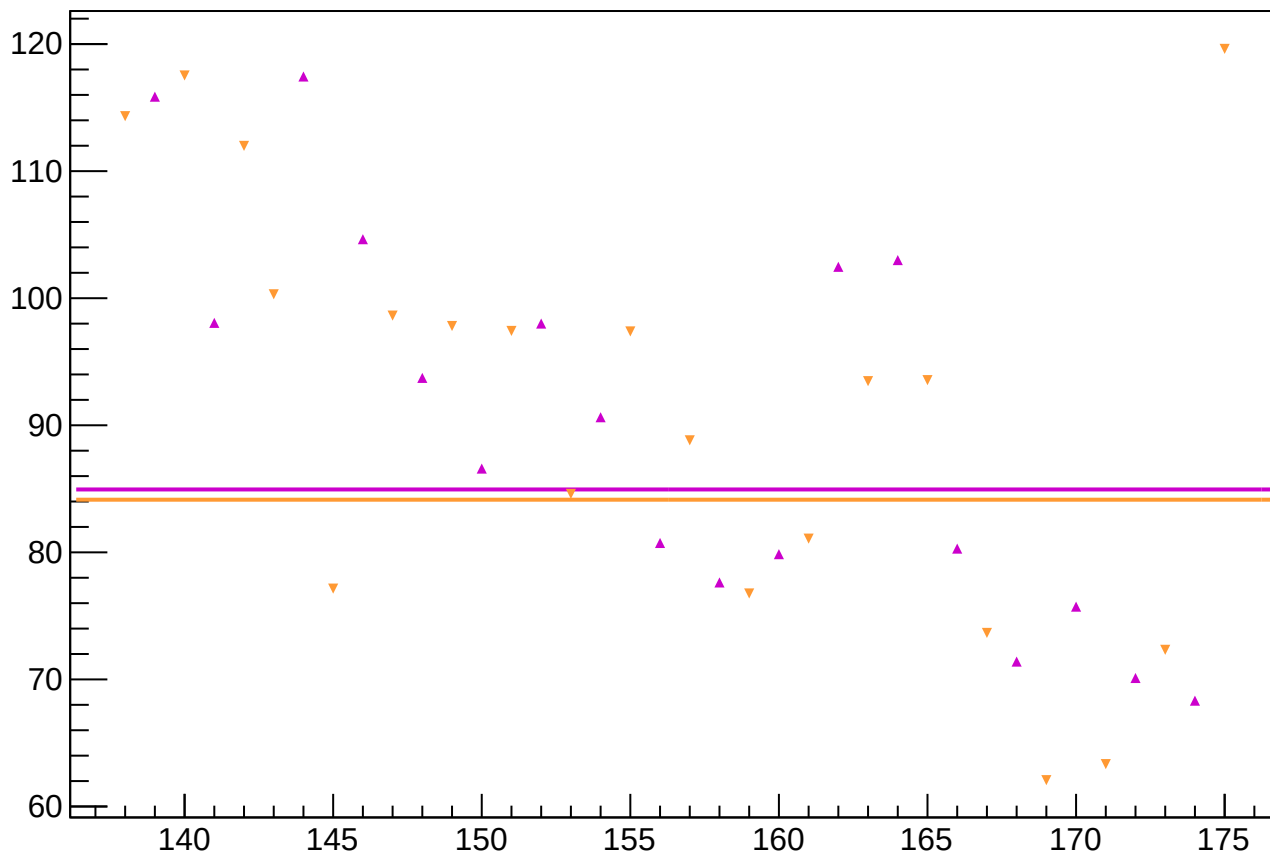
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 56.906 $\pm$ 23.079  $\chi^2$ /NDF:15.7/17

Out: 51.840 $\pm$ 22.294  $\chi^2$ /NDF:28.7/19

All: 54.285 $\pm$ 16.035  $\chi^2$ /NDF: 44.3/37

dit\_asym\_sam\_3726\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 84.143+/-0.016  $\chi^2/\text{NDF}$ :1067480.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 84.949+/-0.016  $\chi^2/\text{NDF}$ :720319.2/17

Left: 84.532+/-0.011  $\chi^2/\text{NDF}$ : 1789060.7/37

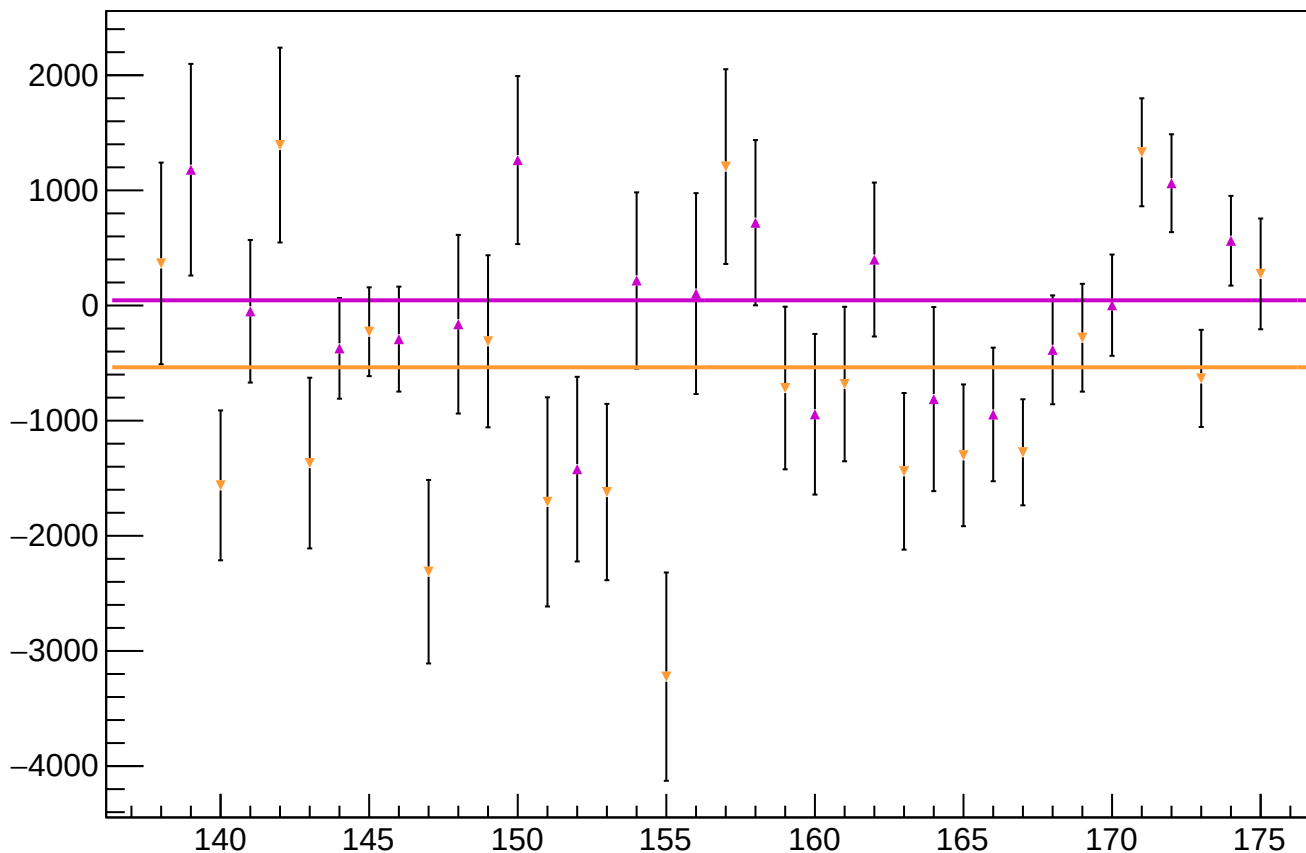
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 84.949+/-0.016  $\chi^2/\text{NDF}$ :720319.2/17

Out: 84.143+/-0.016  $\chi^2/\text{NDF}$ :1067480.2/19

All: 84.532+/-0.011  $\chi^2/\text{NDF}$ : 1789060.7/37

asym\_sam\_3726\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -536.401+/-134.465  $\chi^2/\text{NDF}$ :57.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 45.099+/-135.471  $\chi^2/\text{NDF}$ :24.8/17

Left: -247.818+/-95.435  $\chi^2/\text{NDF}$ : 91.6/37

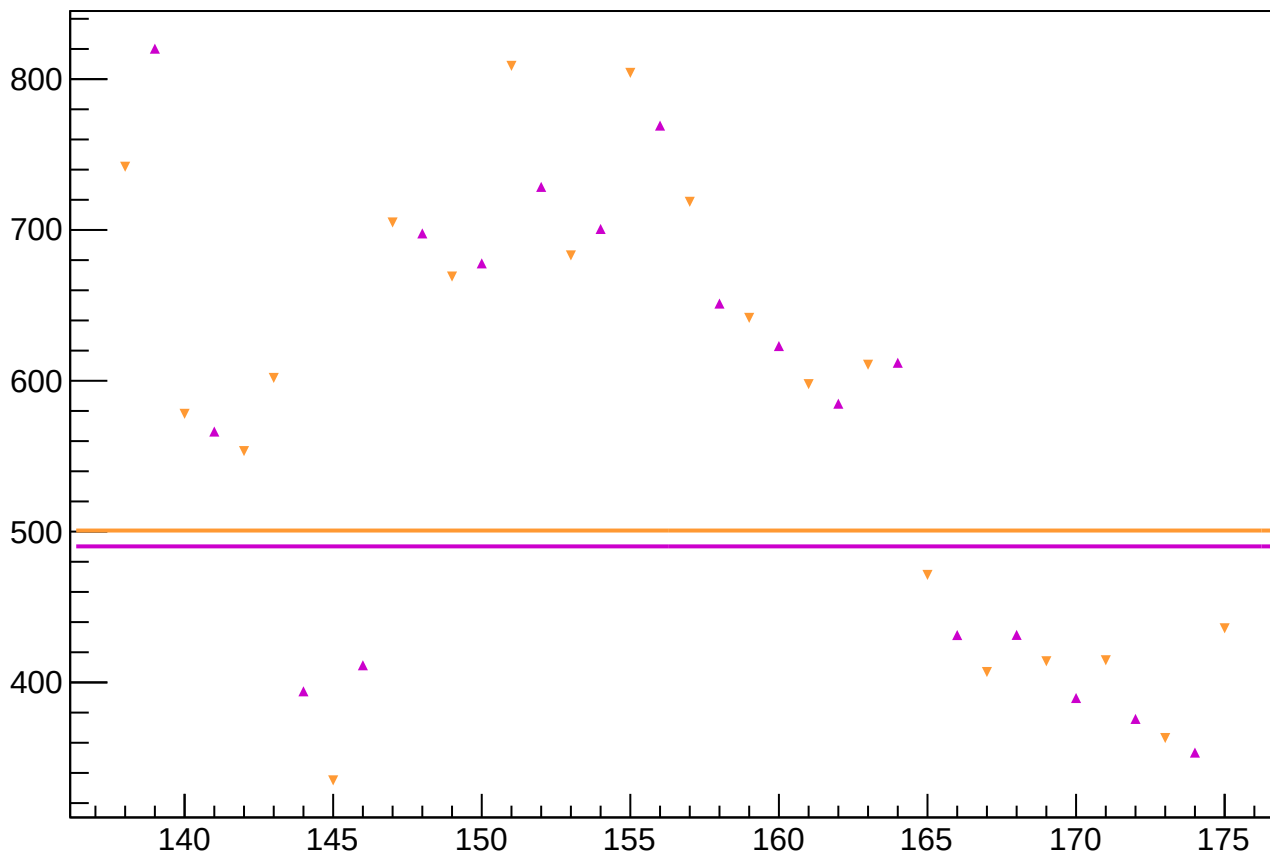
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 45.099+/-135.471  $\chi^2/\text{NDF}$ :24.8/17

Out: -536.401+/-134.465  $\chi^2/\text{NDF}$ :57.5/19

All: -247.818+/-95.435  $\chi^2/\text{NDF}$ : 91.6/37

asym\_sam\_3726\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 500.712+/-0.095  $\chi^2/\text{NDF}$ :2174652.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 490.205+/-0.096  $\chi^2/\text{NDF}$ :2059082.3/17

Left: 495.498+/-0.067  $\chi^2/\text{NDF}$ : 4239795.0/37

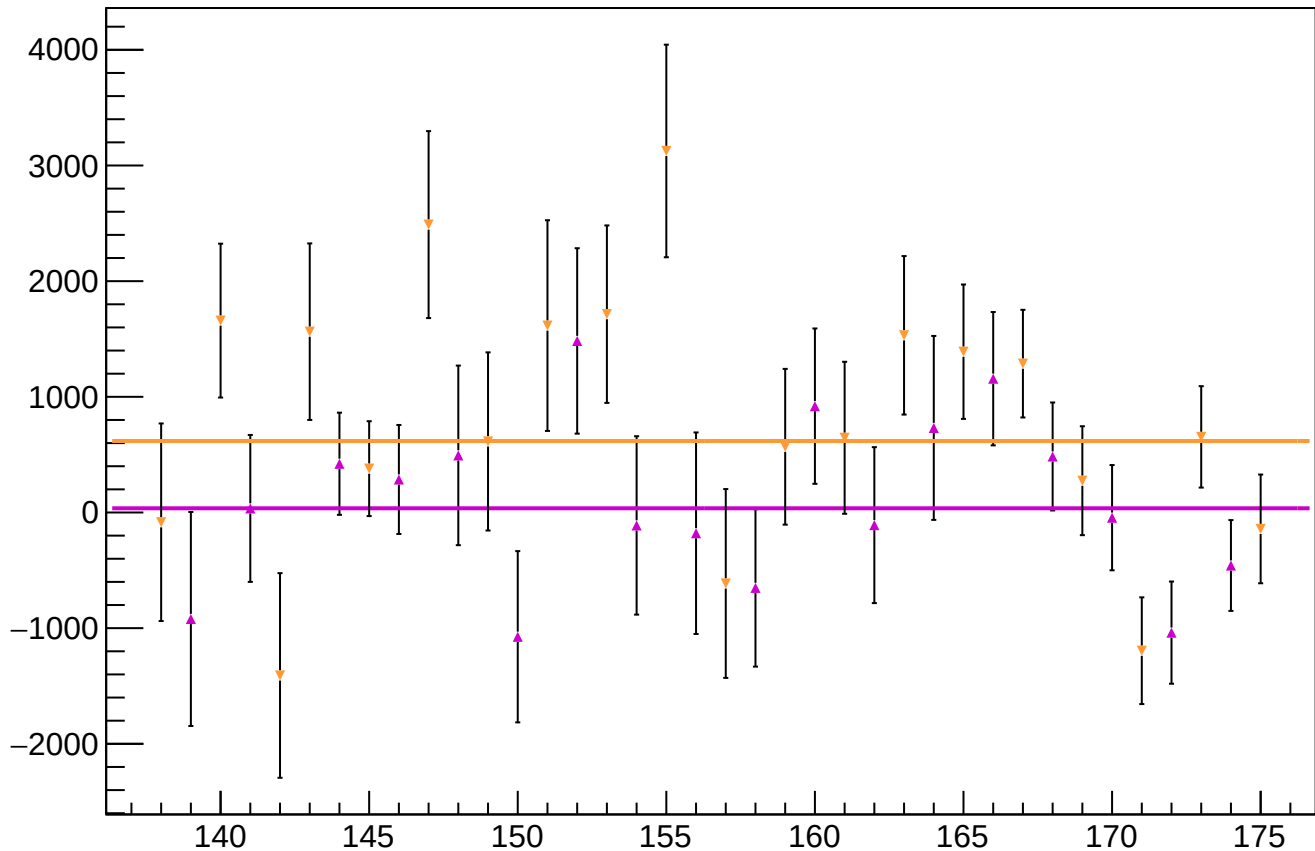
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 490.205+/-0.096  $\chi^2/\text{NDF}$ :2059082.3/17

Out: 500.712+/-0.095  $\chi^2/\text{NDF}$ :2174652.4/19

All: 495.498+/-0.067  $\chi^2/\text{NDF}$ : 4239795.0/37

asym\_sam\_3726\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 618.085+/-135.387  $\chi^2/\text{NDF}$ :52.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 36.327+/-136.697  $\chi^2/\text{NDF}$ :23.9/17

Left: 330.007+/-96.193  $\chi^2/\text{NDF}$ : 85.8/37

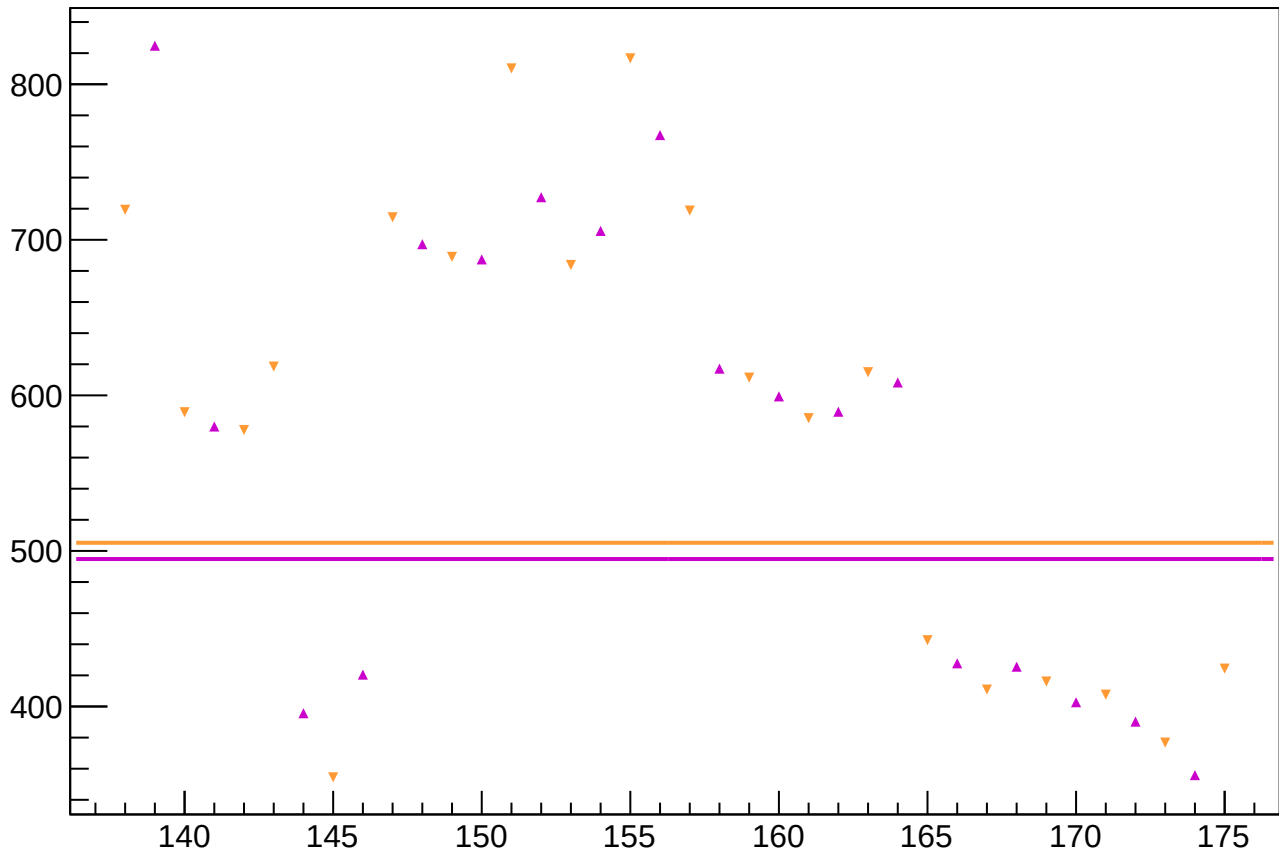
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 36.327+/-136.697  $\chi^2/\text{NDF}$ :23.9/17

Out: 618.085+/-135.387  $\chi^2/\text{NDF}$ :52.8/19

All: 330.007+/-96.193  $\chi^2/\text{NDF}$ : 85.8/37

# asym\_sam\_3726\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 505.240+/-0.096  $\chi^2/\text{NDF}$ :2061174.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 494.793+/-0.097  $\chi^2/\text{NDF}$ :1934397.0/17

Left: 500.067+/-0.068  $\chi^2/\text{NDF}$ : 4001467.7/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

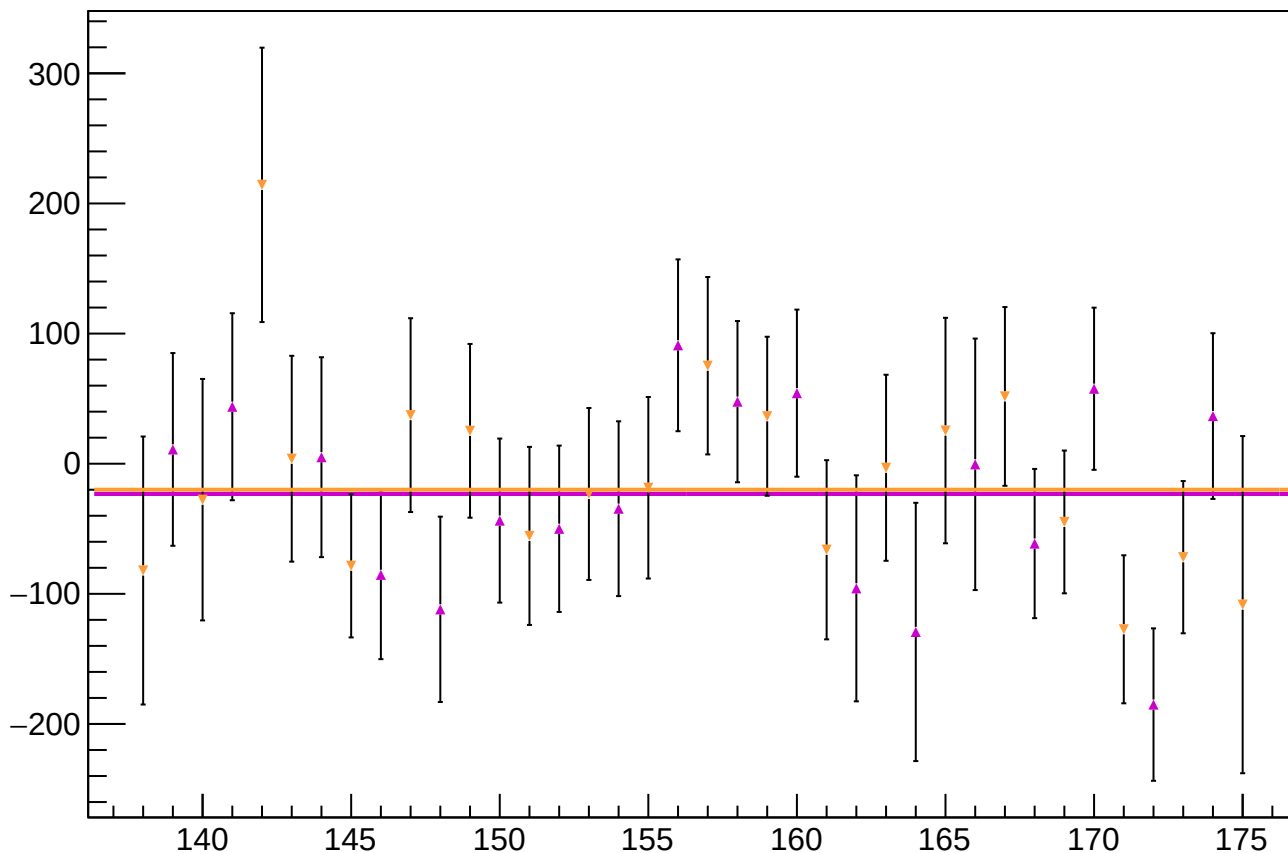
In: 494.793+/-0.097  $\chi^2/\text{NDF}$ :1934397.0/17

Out: 505.240+/-0.096  $\chi^2/\text{NDF}$ :2061174.1/19

All: 500.067+/-0.068  $\chi^2/\text{NDF}$ : 4001467.7/37



dit\_asym\_sam\_15\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -19.989+/-15.673  $\chi^2/\text{NDF}$ :17.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -23.282+/-16.070  $\chi^2/\text{NDF}$ :22.3/17

Left: -21.594+/-11.220  $\chi^2/\text{NDF}$ : 39.9/37

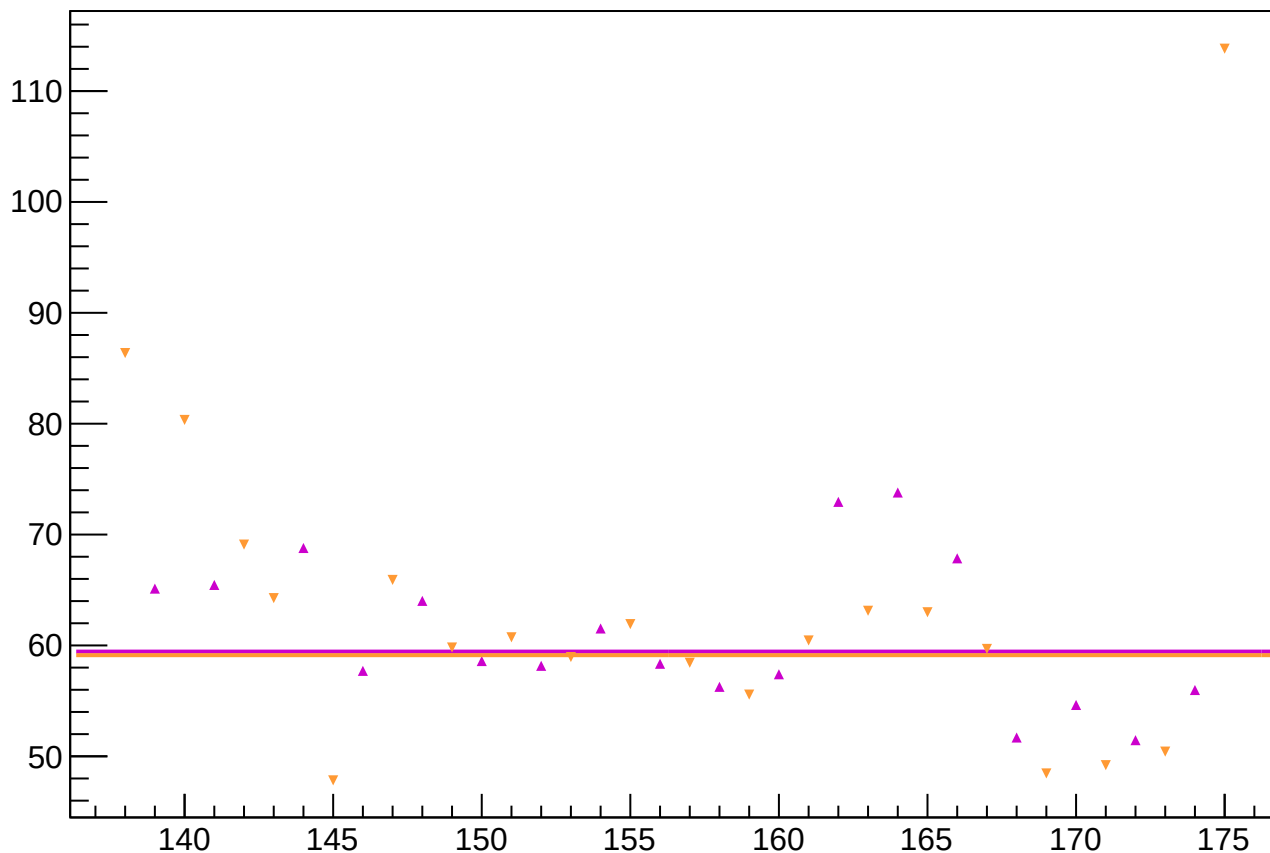
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -23.282+/-16.070  $\chi^2/\text{NDF}$ :22.3/17

Out: -19.989+/-15.673  $\chi^2/\text{NDF}$ :17.5/19

All: -21.594+/-11.220  $\chi^2/\text{NDF}$ : 39.9/37

dit\_asym\_sam\_15\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 59.121+/-0.011  $\chi^2/\text{NDF}$ : 931538.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 59.445+/-0.011  $\chi^2/\text{NDF}$ : 272916.4/17

Left: 59.279+/-0.008  $\chi^2/\text{NDF}$ : 1204871.9/37

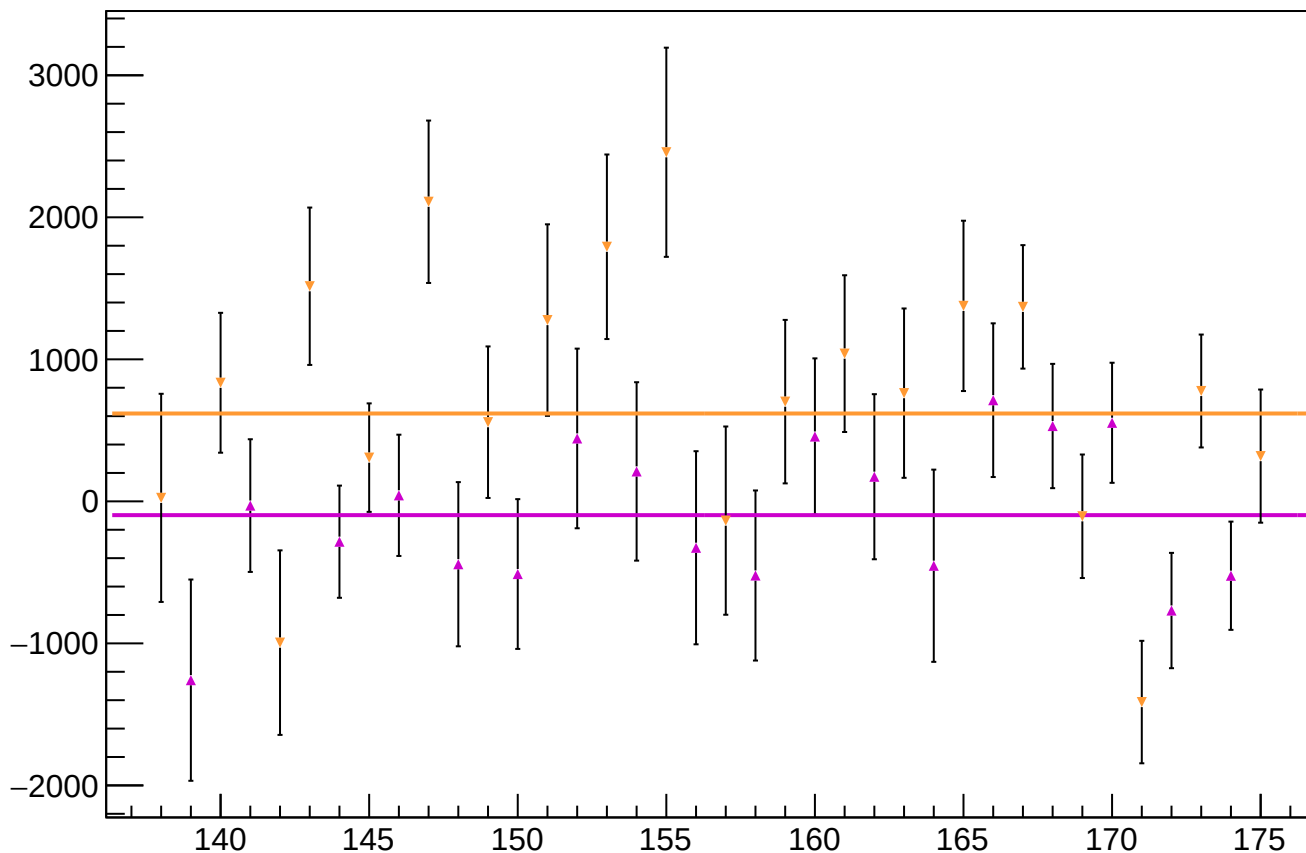
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 59.445+/-0.011  $\chi^2/\text{NDF}$ : 272916.4/17

Out: 59.121+/-0.011  $\chi^2/\text{NDF}$ : 931538.5/19

All: 59.279+/-0.008  $\chi^2/\text{NDF}$ : 1204871.9/37

asym\_sam\_15\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 618.600+/-117.475  $\chi^2/\text{NDF}$ : 59.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -97.059+/-118.948  $\chi^2/\text{NDF}$ : 17.8/17

Left: 265.229+/-83.583  $\chi^2/\text{NDF}$ : 95.7/37

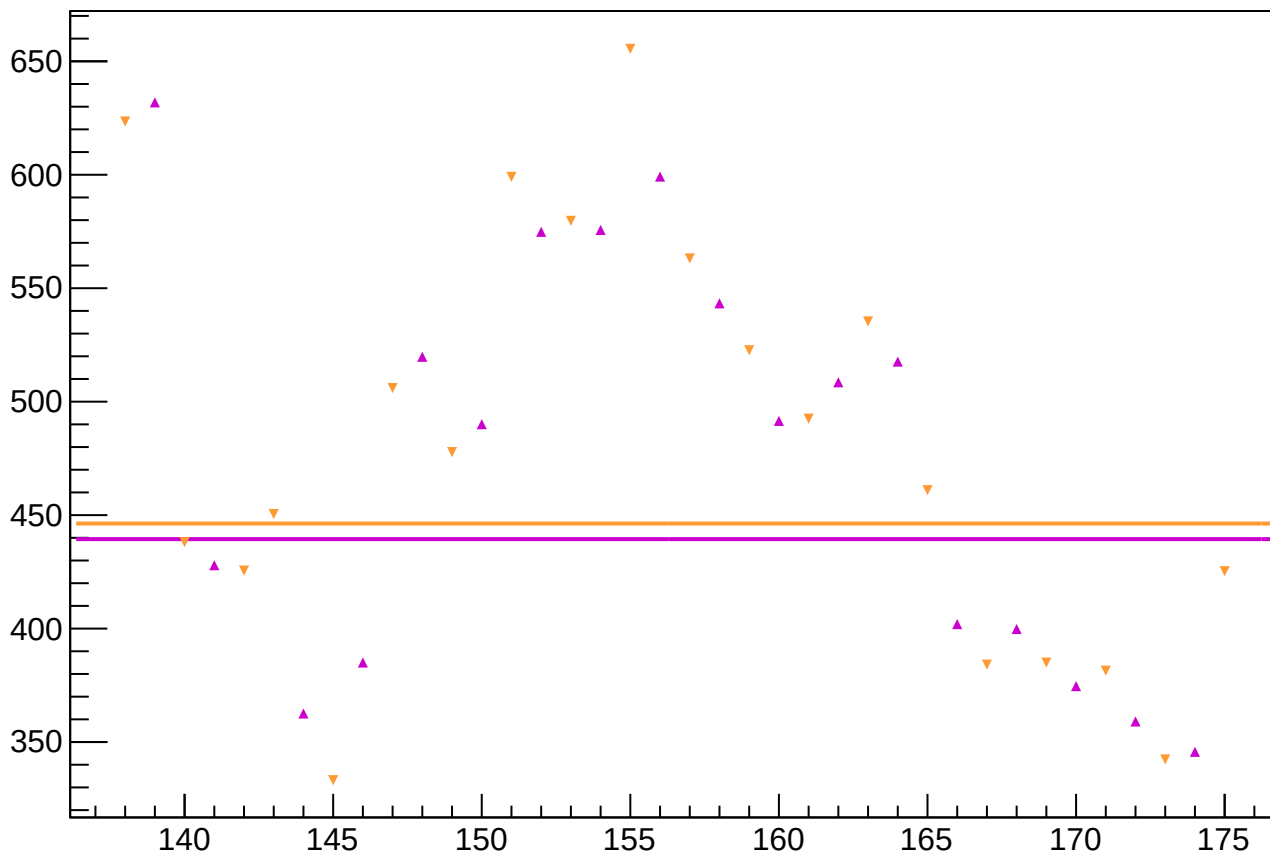
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -97.059+/-118.948  $\chi^2/\text{NDF}$ : 17.8/17

Out: 618.600+/-117.475  $\chi^2/\text{NDF}$ : 59.6/19

All: 265.229+/-83.583  $\chi^2/\text{NDF}$ : 95.7/37

asym\_sam\_15\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 446.308+/-0.083  $\chi^2/\text{NDF}$ :1095995.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 439.421+/-0.084  $\chi^2/\text{NDF}$ :1015735.6/17

Left: 442.907+/-0.059  $\chi^2/\text{NDF}$ : 2115125.1/37

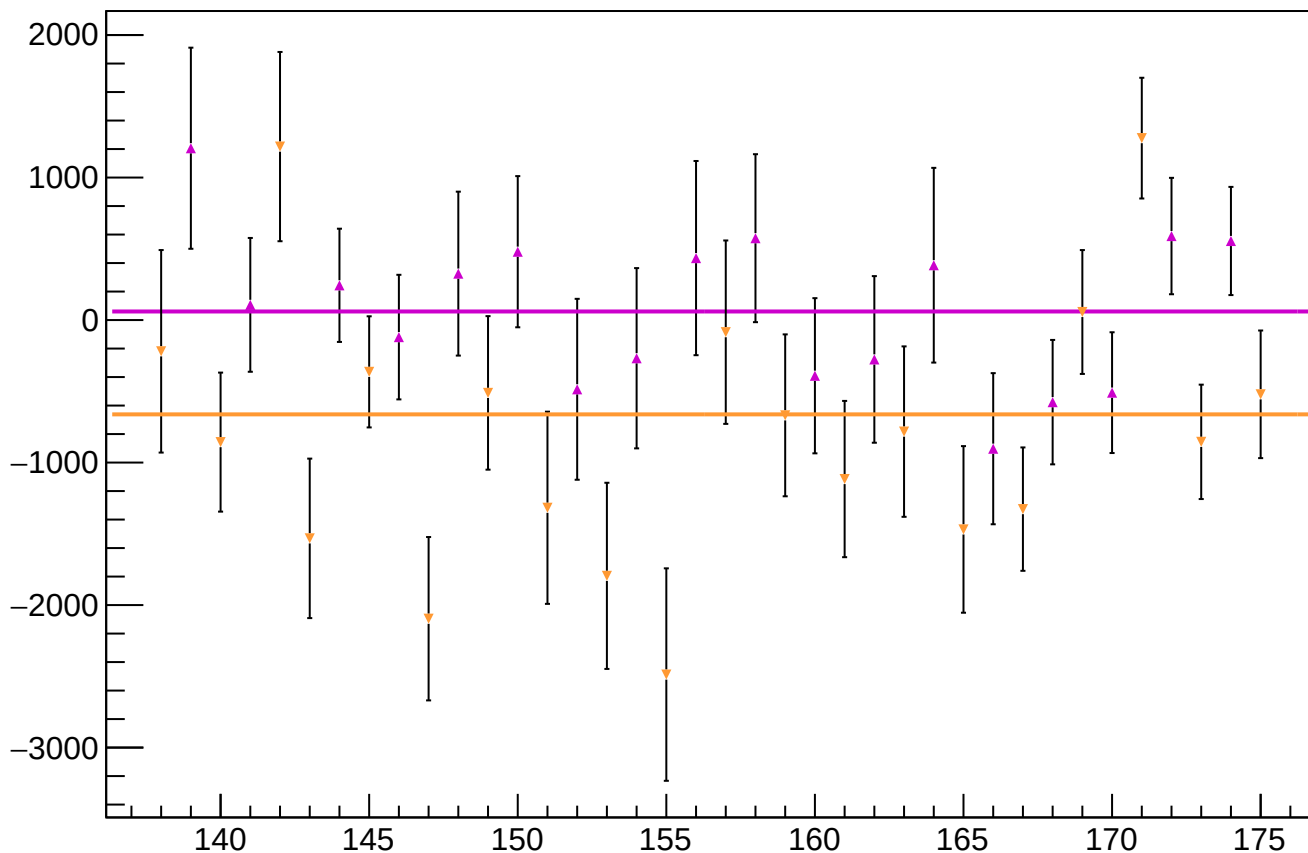
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 439.421+/-0.084  $\chi^2/\text{NDF}$ :1015735.6/17

Out: 446.308+/-0.083  $\chi^2/\text{NDF}$ :1095995.6/19

All: 442.907+/-0.059  $\chi^2/\text{NDF}$ : 2115125.1/37

asym\_sam\_15\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -661.820+/-117.027  $\chi^2/\text{NDF}$ :57.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 60.206+/-119.137  $\chi^2/\text{NDF}$ :17.8/17

Left: -307.258+/-83.487  $\chi^2/\text{NDF}$ : 94.1/37

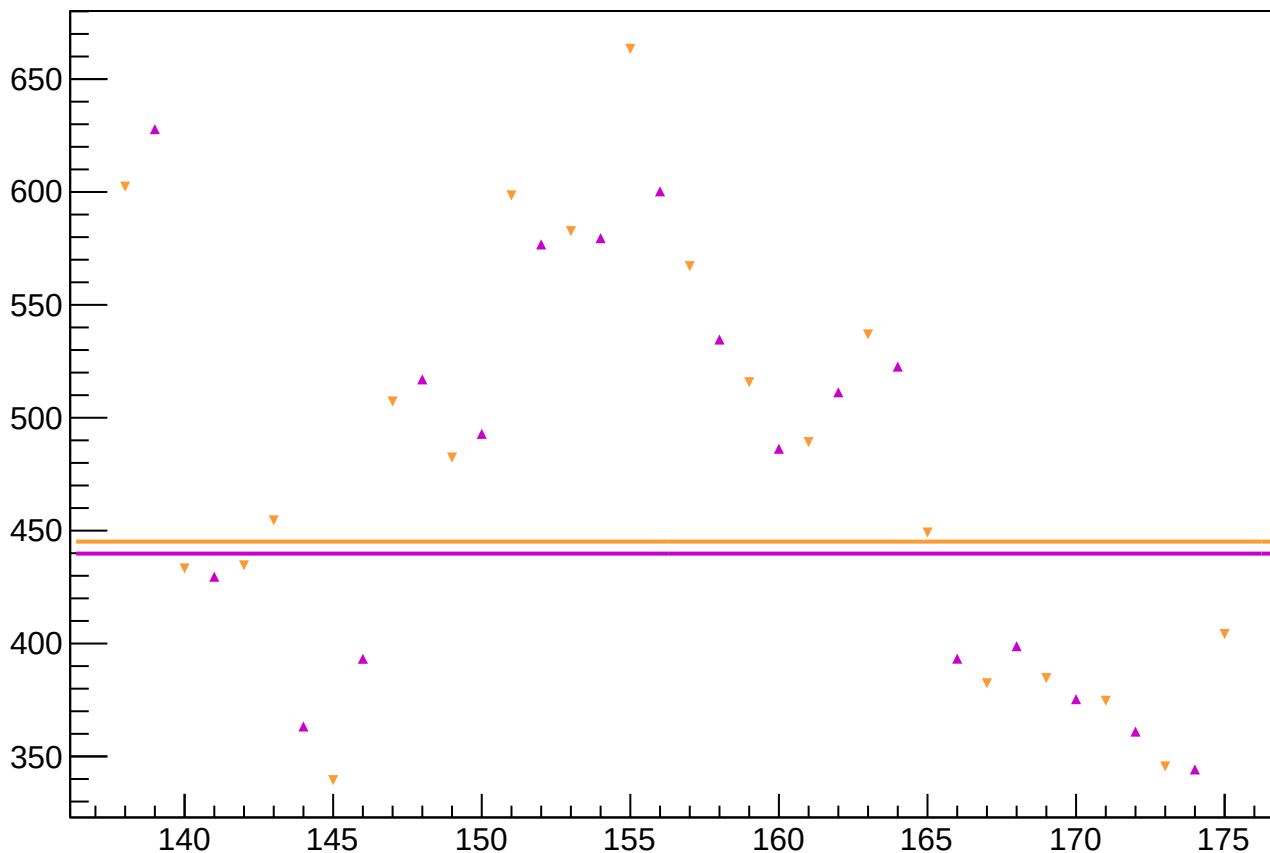
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 60.206+/-119.137  $\chi^2/\text{NDF}$ :17.8/17

Out: -661.820+/-117.027  $\chi^2/\text{NDF}$ :57.6/19

All: -307.258+/-83.487  $\chi^2/\text{NDF}$ : 94.1/37

asym\_sam\_15\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 445.136+/-0.083  $\chi^2/\text{NDF}$ :1082417.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 439.820+/-0.084  $\chi^2/\text{NDF}$ :1003890.3/17

Left: 442.526+/-0.059  $\chi^2/\text{NDF}$ : 2088334.3/37

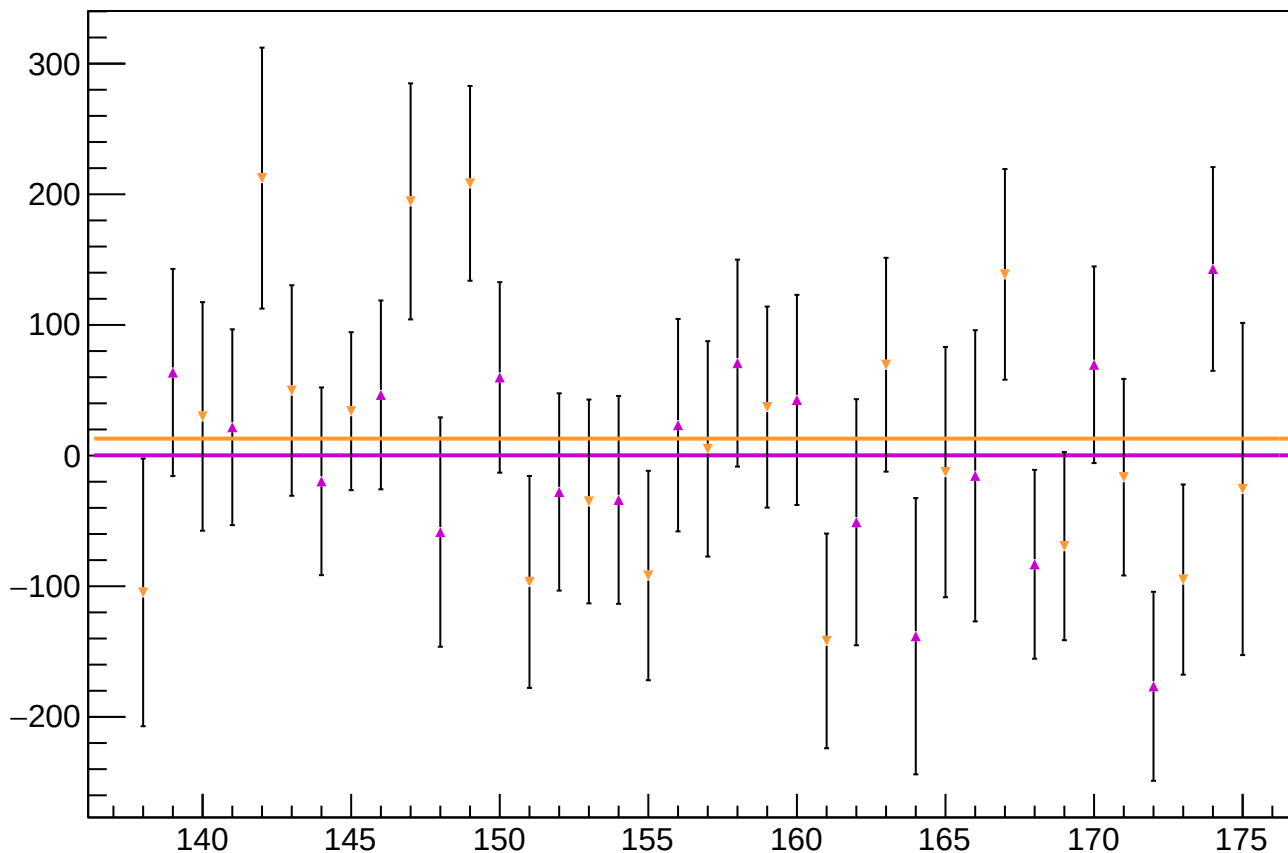
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 439.820+/-0.084  $\chi^2/\text{NDF}$ :1003890.3/17

Out: 445.136+/-0.083  $\chi^2/\text{NDF}$ :1082417.6/19

All: 442.526+/-0.059  $\chi^2/\text{NDF}$ : 2088334.3/37

dit\_asym\_sam\_37\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 13.026+/-18.180  $\chi^2/\text{NDF}$ :30.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.210+/-18.745  $\chi^2/\text{NDF}$ :17.3/17

Left: 6.814+/-13.051  $\chi^2/\text{NDF}$ : 48.5/37

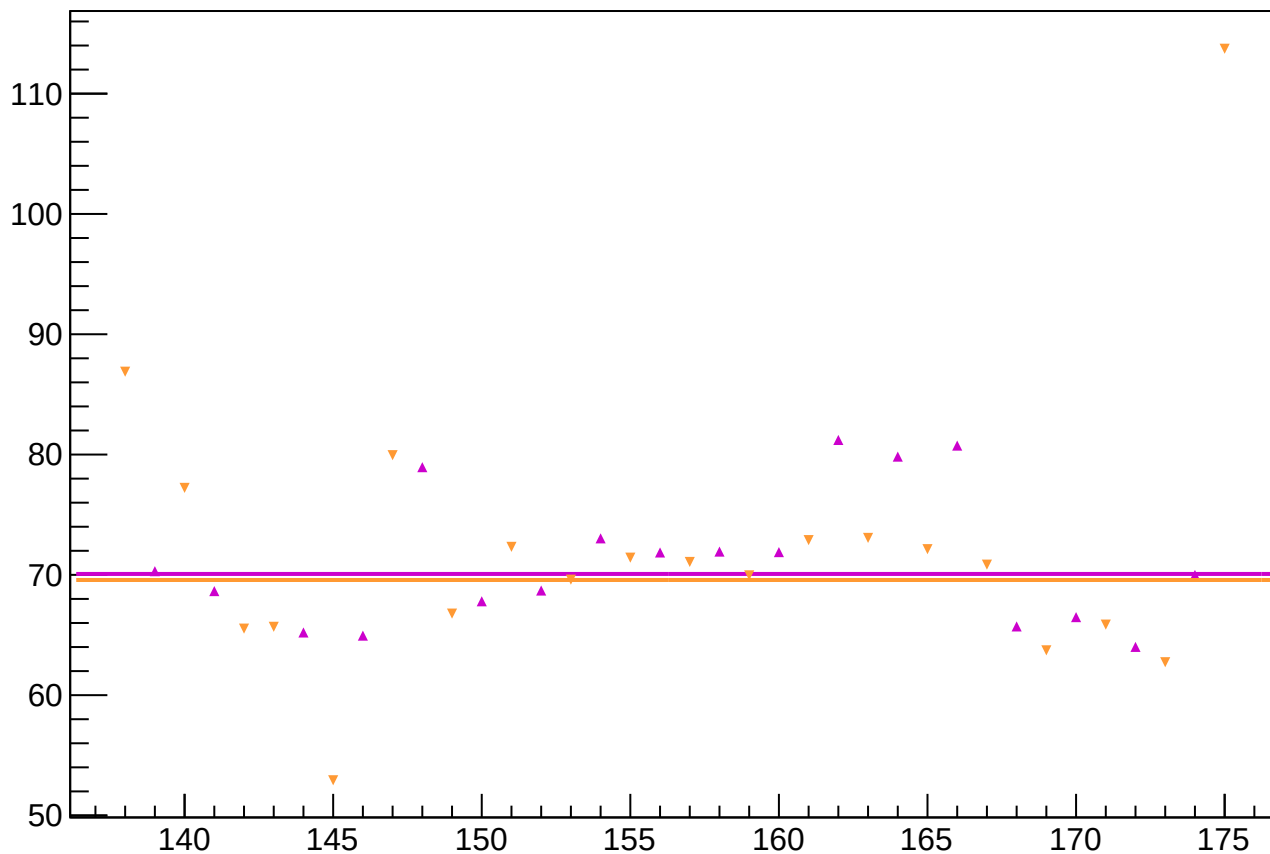
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.210+/-18.745  $\chi^2/\text{NDF}$ :17.3/17

Out: 13.026+/-18.180  $\chi^2/\text{NDF}$ :30.9/19

All: 6.814+/-13.051  $\chi^2/\text{NDF}$ : 48.5/37

dit\_asym\_sam\_37\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 69.574+/-0.013  $\chi^2/\text{NDF}$ :551252.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 70.076+/-0.013  $\chi^2/\text{NDF}$ :138108.3/17

Left: 69.817+/-0.009  $\chi^2/\text{NDF}$ : 690101.8/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

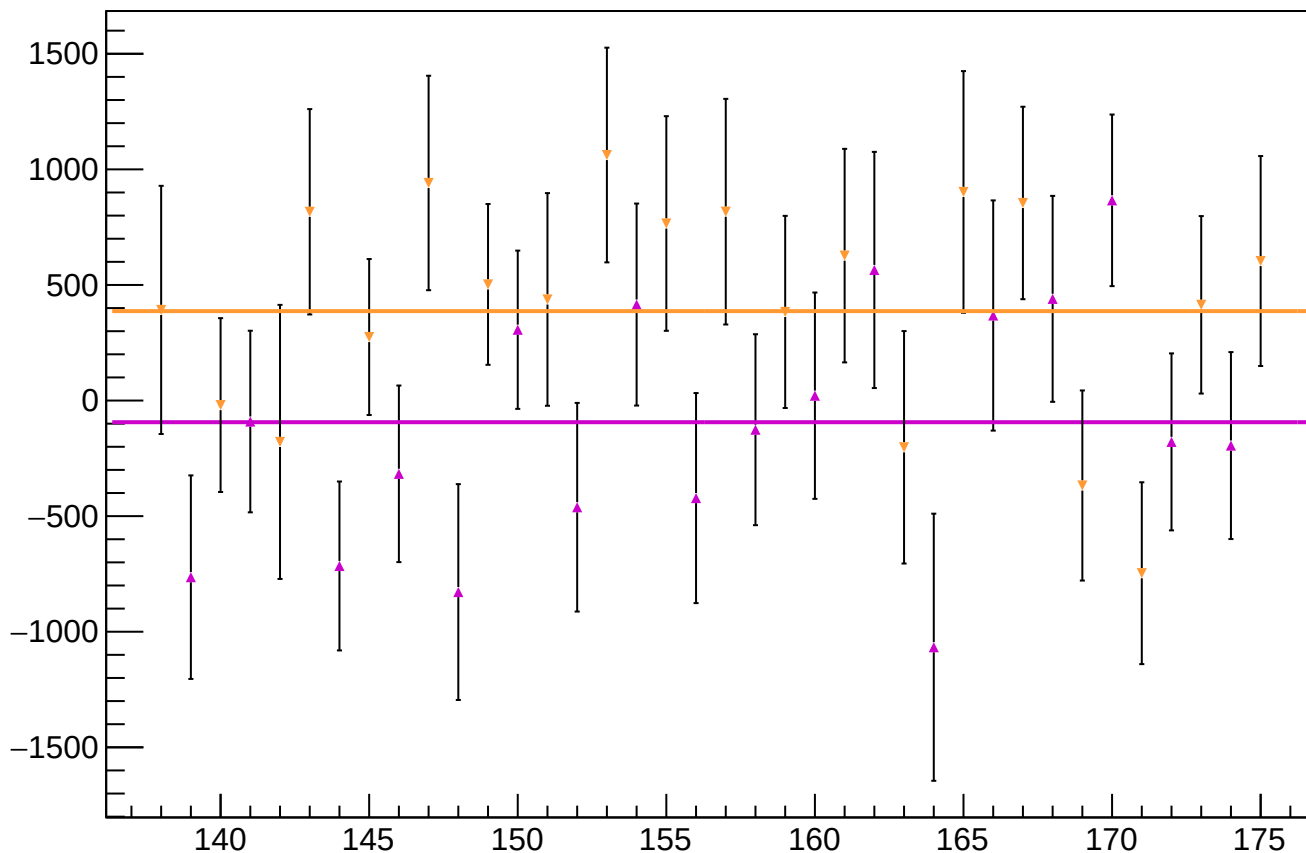
In: 70.076+/-0.013  $\chi^2/\text{NDF}$ :138108.3/17

Out: 69.574+/-0.013  $\chi^2/\text{NDF}$ :551252.7/19

All: 69.817+/-0.009  $\chi^2/\text{NDF}$ : 690101.8/37



asym\_sam\_37\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 386.824+/-97.018  $\chi^2/\text{NDF}$ :24.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -93.705+/-99.456  $\chi^2/\text{NDF}$ :25.6/17

Left: 152.521+/-69.448  $\chi^2/\text{NDF}$ : 61.6/37

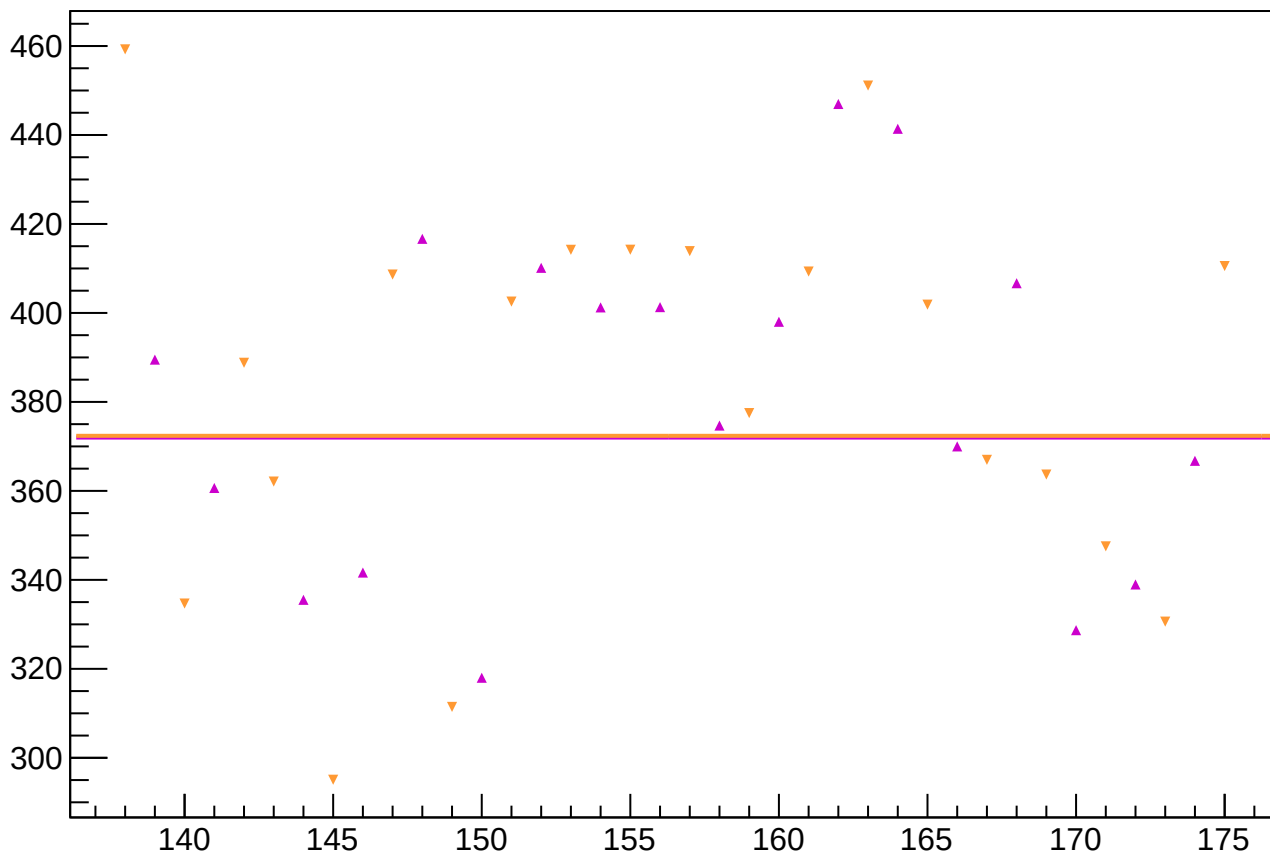
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -93.705+/-99.456  $\chi^2/\text{NDF}$ :25.6/17

Out: 386.824+/-97.018  $\chi^2/\text{NDF}$ :24.0/19

All: 152.521+/-69.448  $\chi^2/\text{NDF}$ : 61.6/37

asym\_sam\_37\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 372.382+/-0.069  $\chi^2/\text{NDF}$ :424778.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 371.984+/-0.070  $\chi^2/\text{NDF}$ :270524.7/17

Left: 372.188+/-0.049  $\chi^2/\text{NDF}$ : 695319.9/37

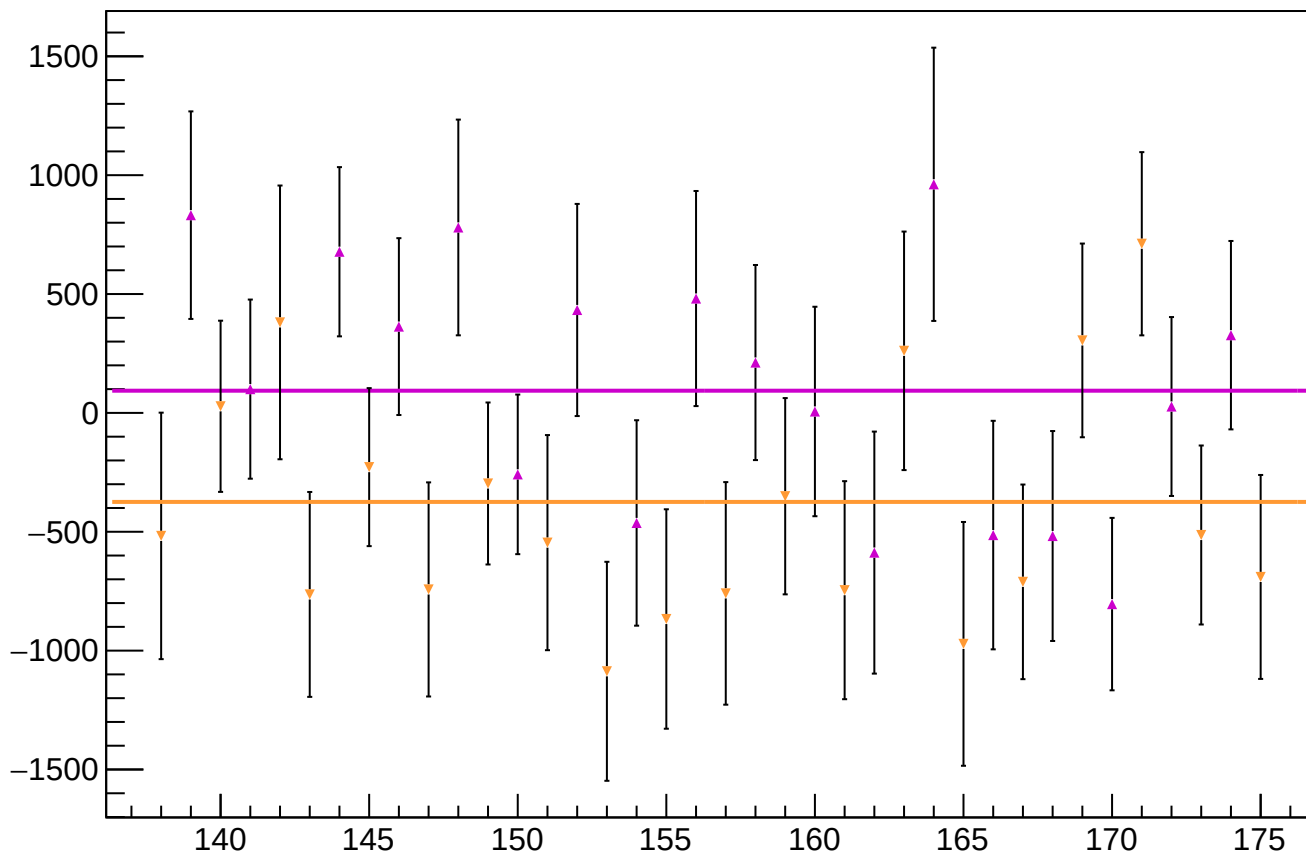
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 371.984+/-0.070  $\chi^2/\text{NDF}$ :270524.7/17

Out: 372.382+/-0.069  $\chi^2/\text{NDF}$ :424778.7/19

All: 372.188+/-0.049  $\chi^2/\text{NDF}$ : 695319.9/37

asym\_sam\_37\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -374.437+/-94.955  $\chi^2/\text{NDF}$ :24.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 93.376+/-97.645  $\chi^2/\text{NDF}$ :26.7/17

Left: -147.062+/-68.074  $\chi^2/\text{NDF}$ : 63.3/37

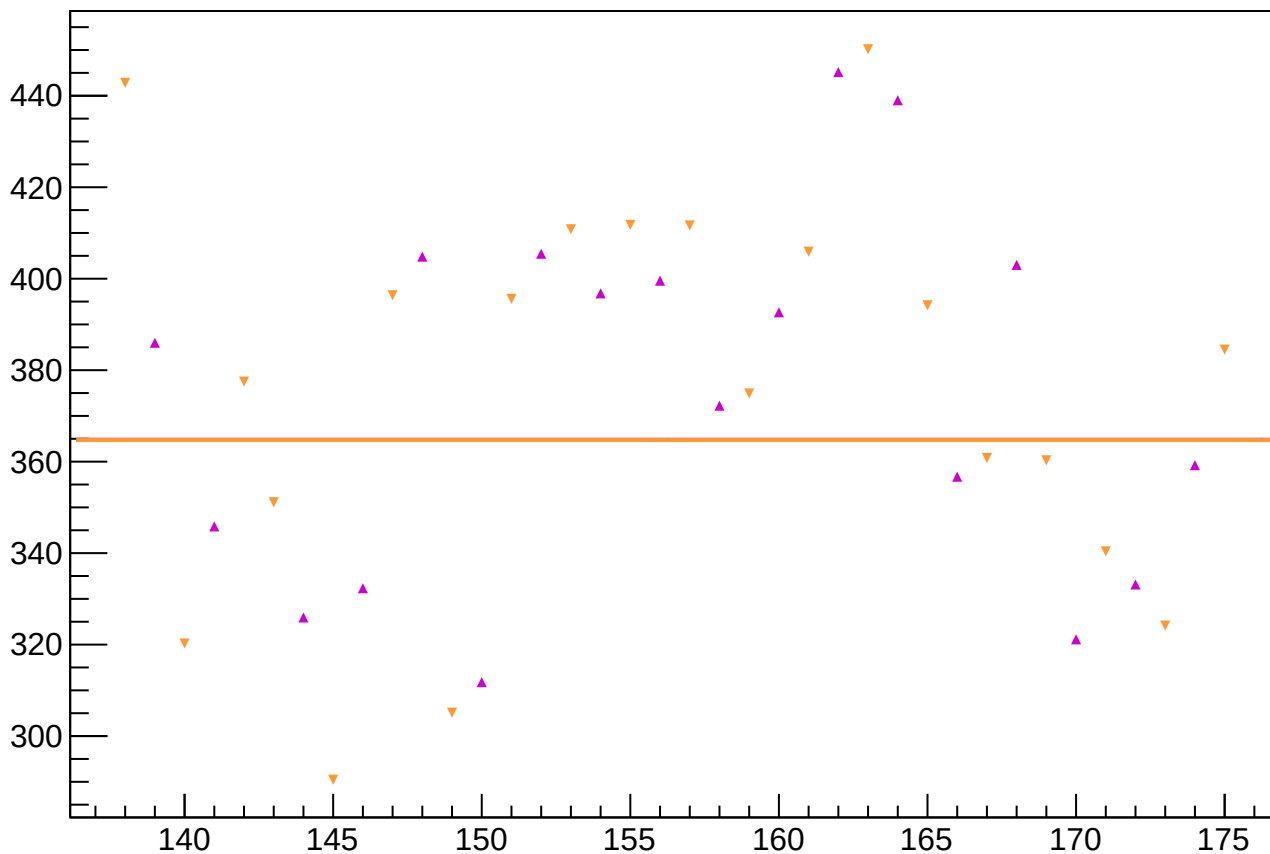
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 93.376+/-97.645  $\chi^2/\text{NDF}$ :26.7/17

Out: -374.437+/-94.955  $\chi^2/\text{NDF}$ :24.8/19

All: -147.062+/-68.074  $\chi^2/\text{NDF}$ : 63.3/37

# asym\_sam\_37\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 364.724+/-0.067  $\chi^2/\text{NDF}$ :437846.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 364.788+/-0.069  $\chi^2/\text{NDF}$ :304620.4/17

Left: 364.755+/-0.048  $\chi^2/\text{NDF}$ : 742467.0/37

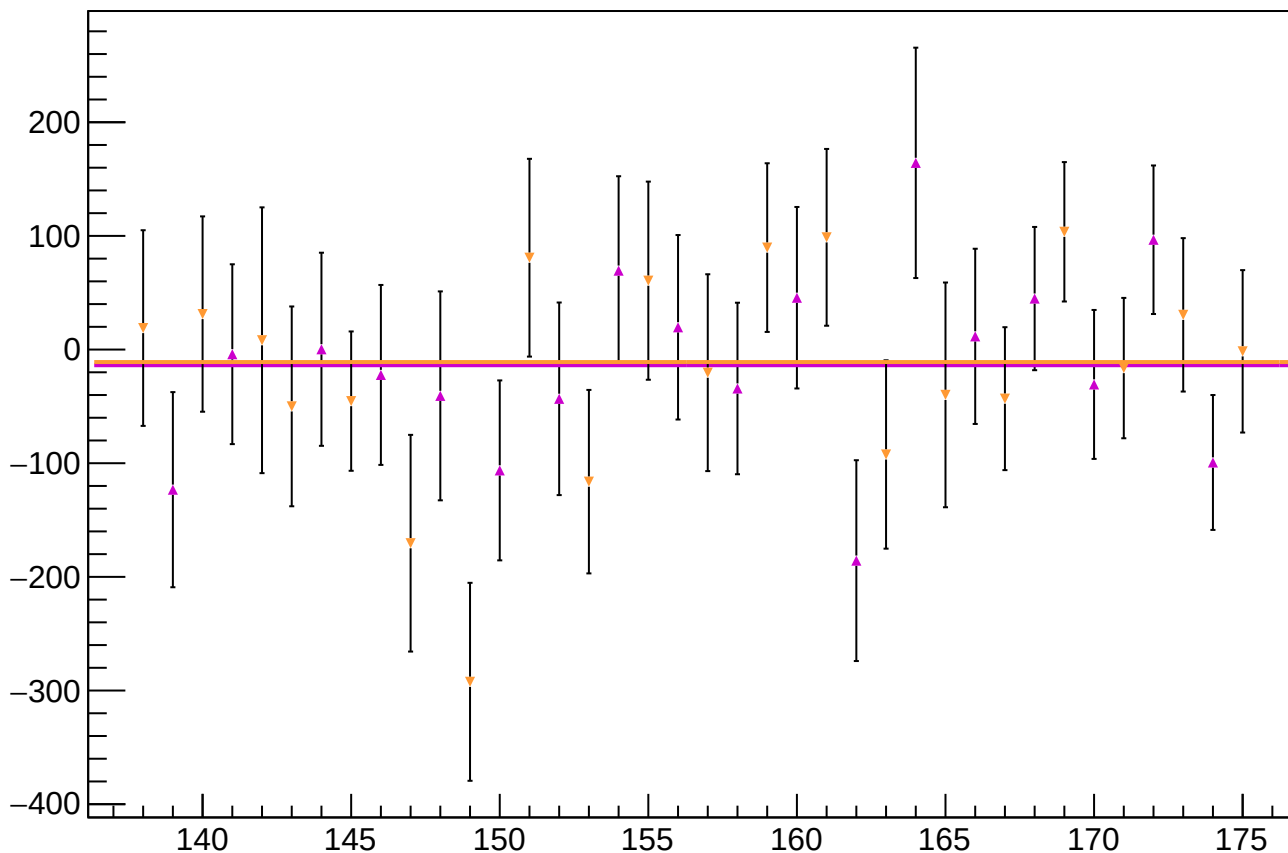
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 364.788+/-0.069  $\chi^2/\text{NDF}$ :304620.4/17

Out: 364.724+/-0.067  $\chi^2/\text{NDF}$ :437846.2/19

All: 364.755+/-0.048  $\chi^2/\text{NDF}$ : 742467.0/37

dit\_asym\_sam\_15\_26\_dd\_mean vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-10.991 \pm 17.347$   $\chi^2/\text{NDF}$ : 26.7/19

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left In:  $-13.778 \pm 18.146$   $\chi^2/\text{NDF}$ : 17.9/17

Left:  $-12.322 \pm 12.539$   $\chi^2/\text{NDF}$ : 44.6/37

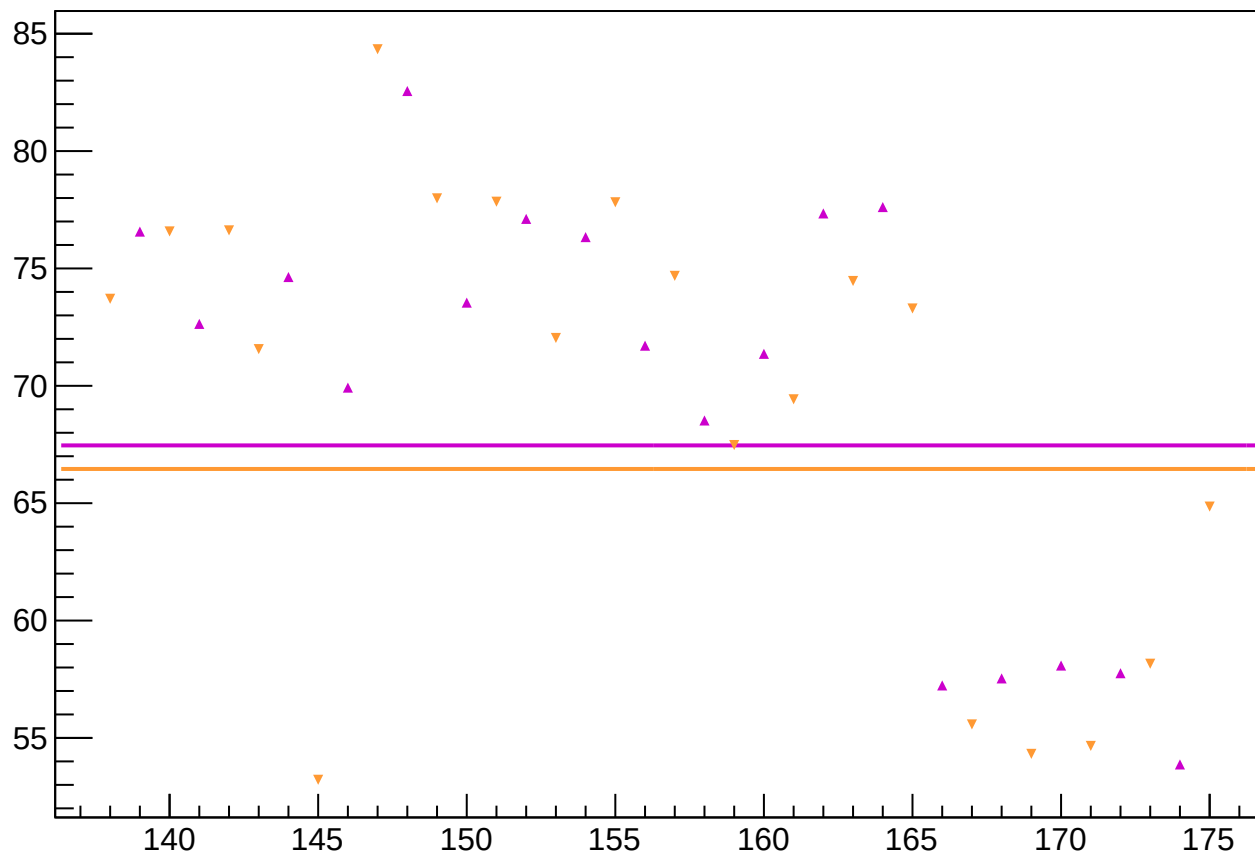
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

In:  $-13.778 \pm 18.146$   $\chi^2/\text{NDF}$ : 17.9/17

Out:  $-10.991 \pm 17.347$   $\chi^2/\text{NDF}$ : 26.7/19

All:  $-12.322 \pm 12.539$   $\chi^2/\text{NDF}$ : 44.6/37

dit\_asym\_sam\_15\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 66.458+/-0.012  $\chi^2/\text{NDF}$ :632368.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 67.462+/-0.013  $\chi^2/\text{NDF}$ :492377.3/17

Left: 66.937+/-0.009  $\chi^2/\text{NDF}$ : 1127942.7/37

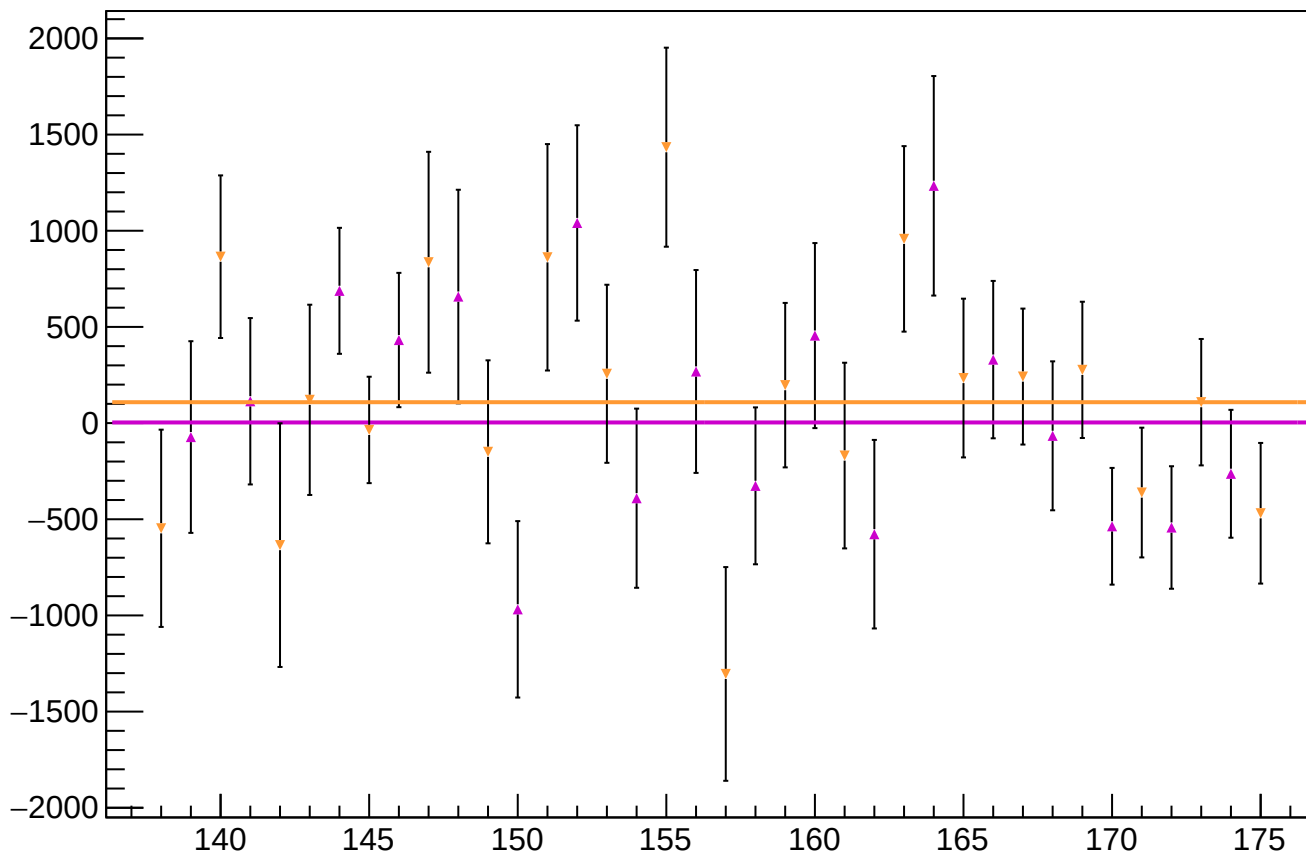
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 67.462+/-0.013  $\chi^2/\text{NDF}$ :492377.3/17

Out: 66.458+/-0.012  $\chi^2/\text{NDF}$ :632368.8/19

All: 66.937+/-0.009  $\chi^2/\text{NDF}$ : 1127942.7/37

asym\_sam\_15\_26\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 108.595+/-94.295  $\chi^2/\text{NDF}$ :31.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 3.268+/-96.695  $\chi^2/\text{NDF}$ :32.0/17

Left: 57.255+/-67.509  $\chi^2/\text{NDF}$ : 64.1/37

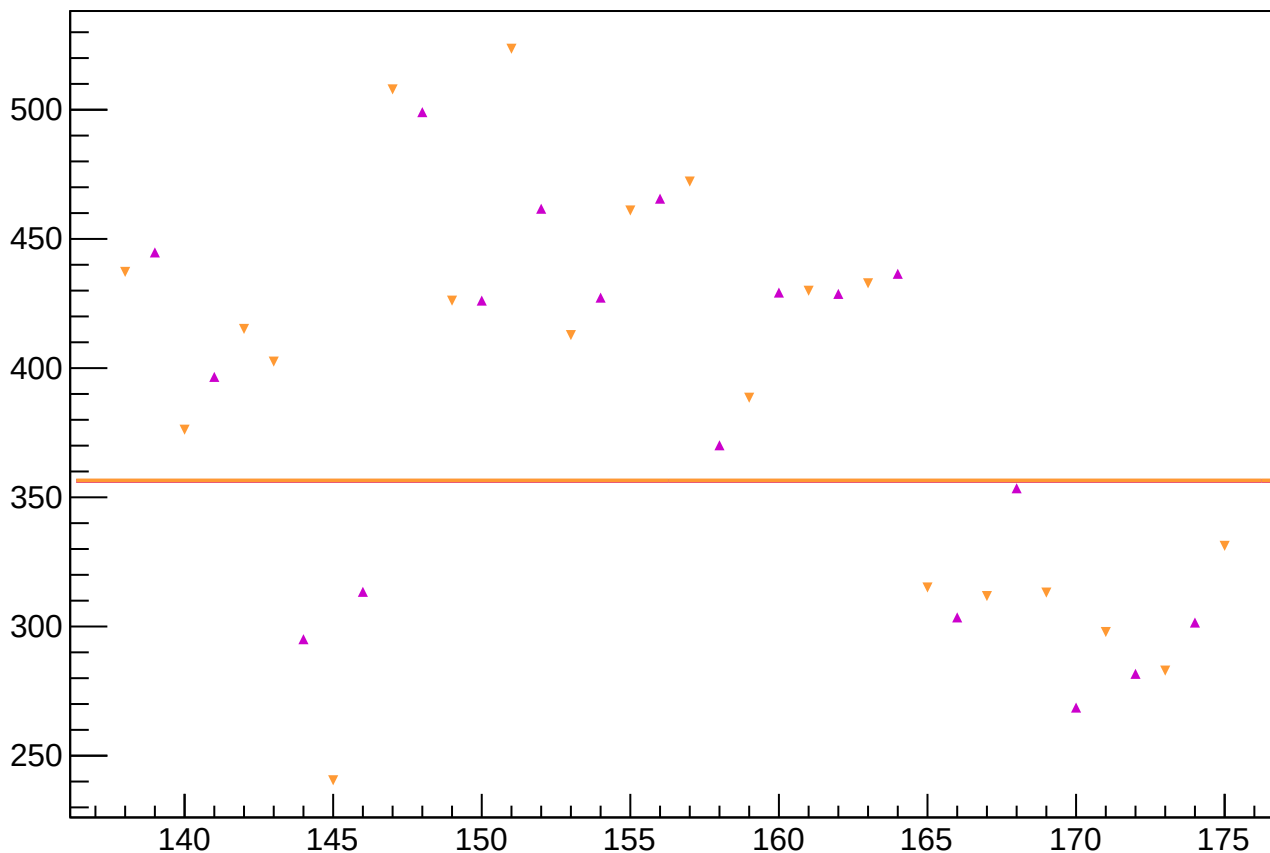
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 3.268+/-96.695  $\chi^2/\text{NDF}$ :32.0/17

Out: 108.595+/-94.295  $\chi^2/\text{NDF}$ :31.5/19

All: 57.255+/-67.509  $\chi^2/\text{NDF}$ : 64.1/37

asym\_sam\_15\_26\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 356.482+/-0.067  $\chi^2/\text{NDF}$ :1341192.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 356.323+/-0.068  $\chi^2/\text{NDF}$ :1073334.1/17

Left: 356.404+/-0.048  $\chi^2/\text{NDF}$ : 2414529.1/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

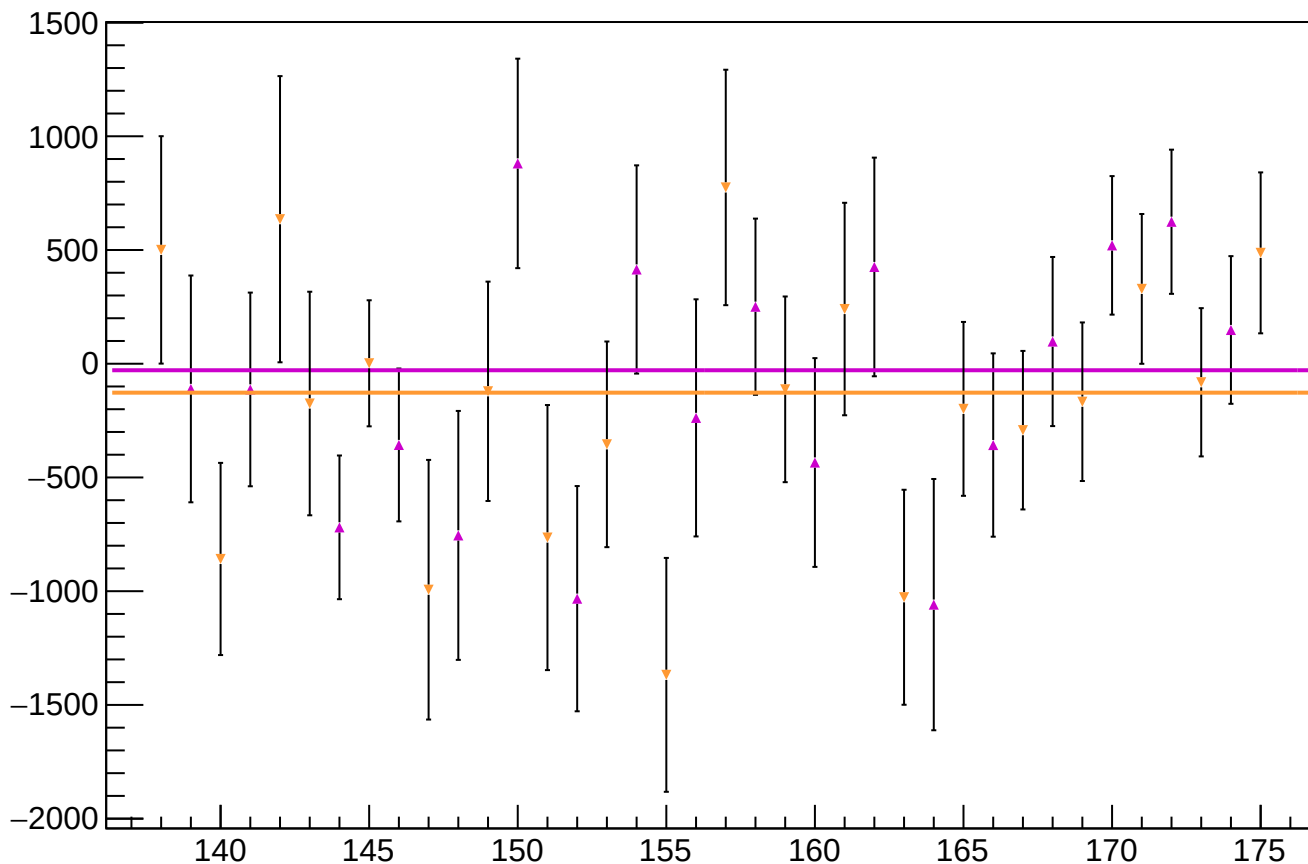
In: 356.323+/-0.068  $\chi^2/\text{NDF}$ :1073334.1/17

Out: 356.482+/-0.067  $\chi^2/\text{NDF}$ :1341192.2/19

All: 356.404+/-0.048  $\chi^2/\text{NDF}$ : 2414529.1/37



asym\_sam\_15\_26\_dd\_mean vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-127.214 \pm 92.441$   $\chi^2/\text{NDF}: 28.4/19$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-28.675 \pm 94.640$   $\chi^2/\text{NDF}: 30.9/17$

Left:  $-79.102 \pm 66.129$   $\chi^2/\text{NDF}: 59.8/37$

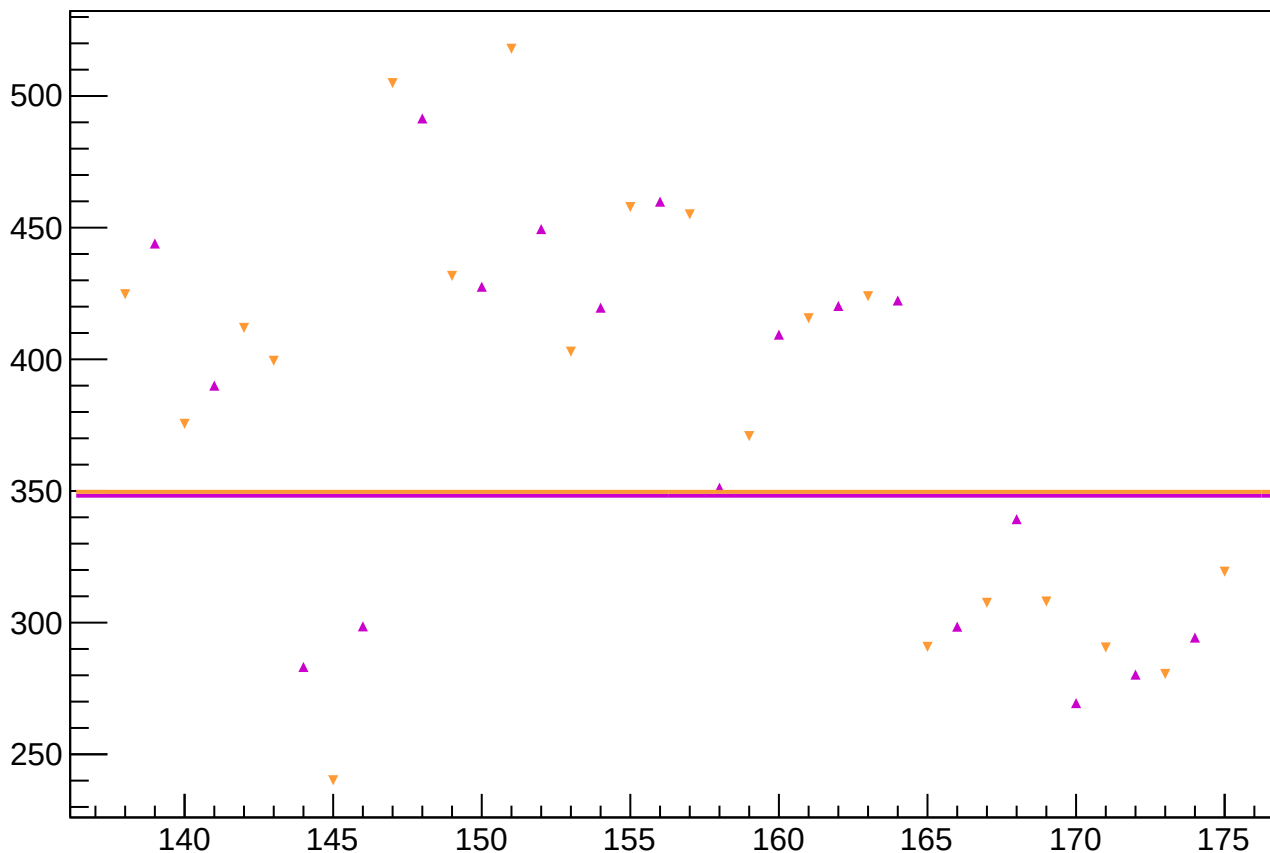
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

In:  $-28.675 \pm 94.640$   $\chi^2/\text{NDF}: 30.9/17$

Out:  $-127.214 \pm 92.441$   $\chi^2/\text{NDF}: 28.4/19$

All:  $-79.102 \pm 66.129$   $\chi^2/\text{NDF}: 59.8/37$

asym\_sam\_15\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 349.676+/-0.065  $\chi^2/\text{NDF}$ :1346009.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 348.208+/-0.067  $\chi^2/\text{NDF}$ :1071171.8/17

Left: 348.959+/-0.047  $\chi^2/\text{NDF}$ : 2417427.6/37

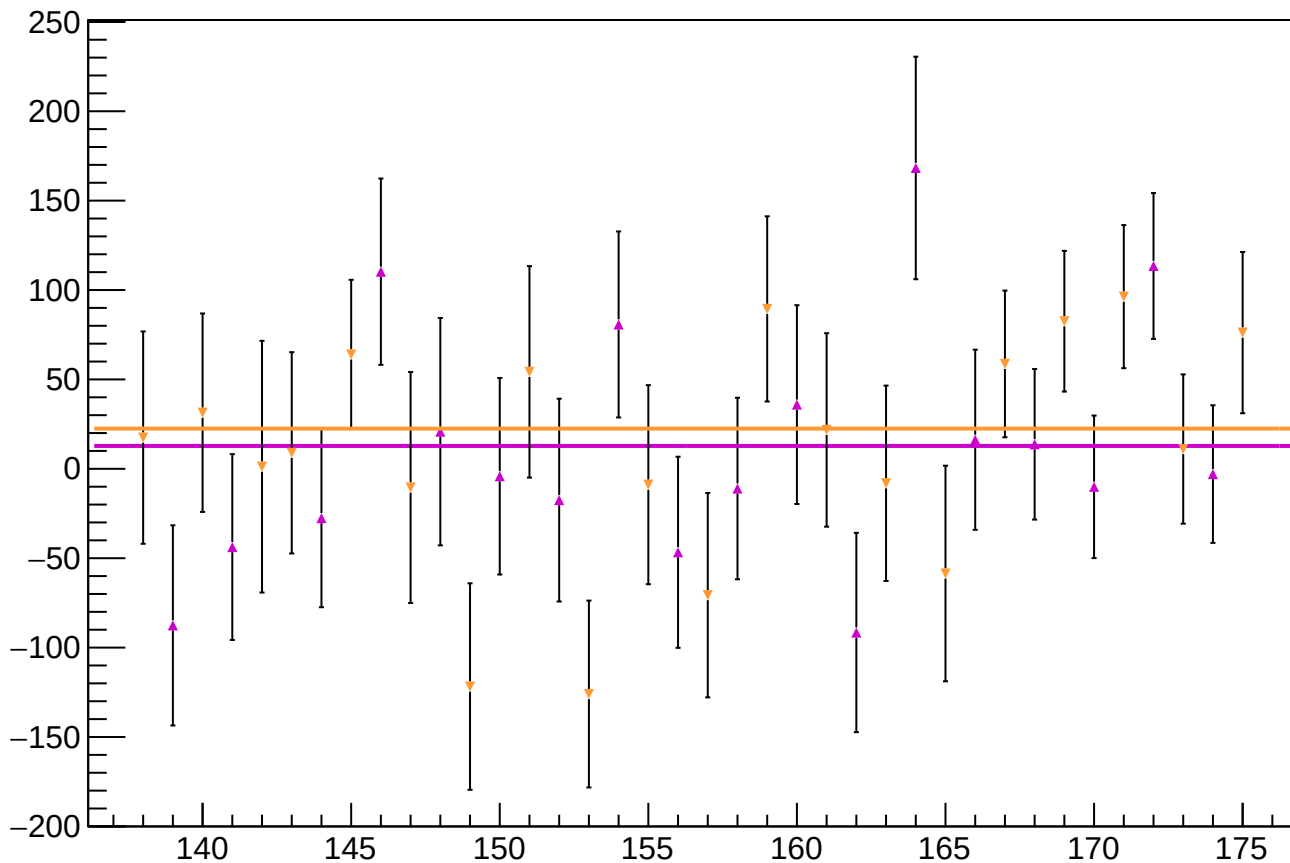
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 348.208+/-0.067  $\chi^2/\text{NDF}$ :1071171.8/17

Out: 349.676+/-0.065  $\chi^2/\text{NDF}$ :1346009.5/19

All: 348.959+/-0.047  $\chi^2/\text{NDF}$ : 2417427.6/37

dit\_asym\_sam\_37\_26\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 22.493+/-11.341  $\chi^2/\text{NDF}$ :30.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 12.799+/-11.766  $\chi^2/\text{NDF}$ :28.6/17

Left: 17.825+/-8.165  $\chi^2/\text{NDF}$ : 59.8/37

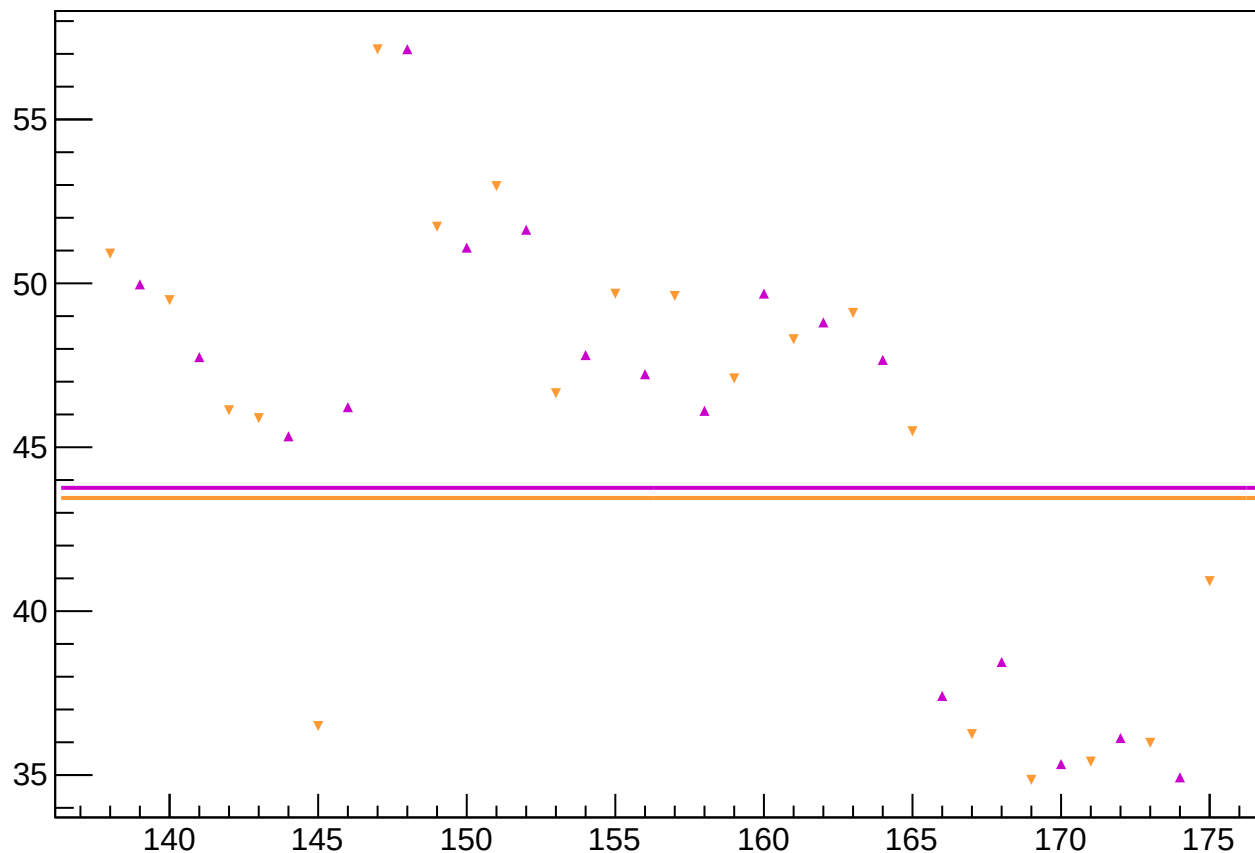
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 12.799+/-11.766  $\chi^2/\text{NDF}$ :28.6/17

Out: 22.493+/-11.341  $\chi^2/\text{NDF}$ :30.8/19

All: 17.825+/-8.165  $\chi^2/\text{NDF}$ : 59.8/37

dit\_asym\_sam\_37\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 43.453+/-0.008  $\chi^2/\text{NDF}$ : 713671.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 43.762+/-0.008  $\chi^2/\text{NDF}$ : 605528.4/17

Left: 43.602+/-0.006  $\chi^2/\text{NDF}$ : 1319912.9/37

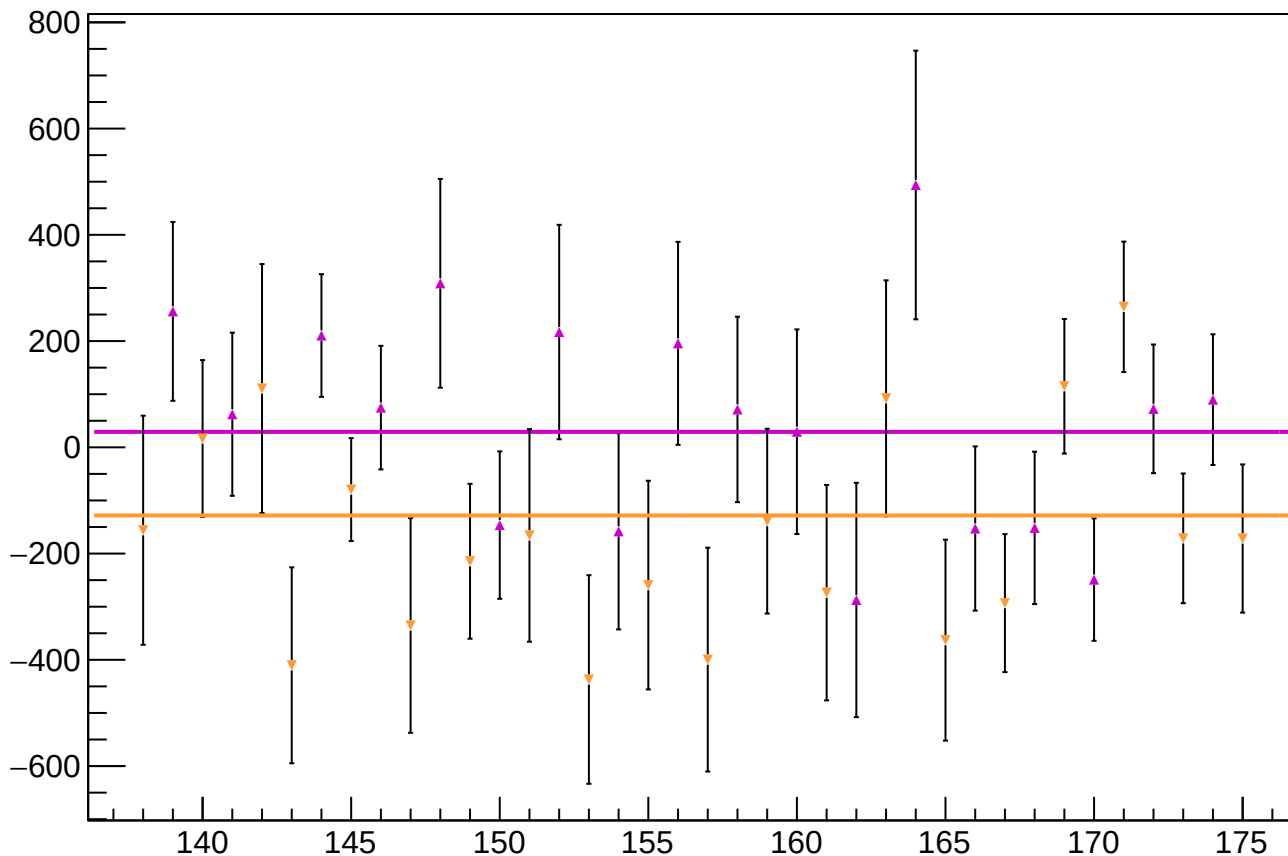
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 43.762+/-0.008  $\chi^2/\text{NDF}$ : 605528.4/17

Out: 43.453+/-0.008  $\chi^2/\text{NDF}$ : 713671.4/19

All: 43.602+/-0.006  $\chi^2/\text{NDF}$ : 1319912.9/37

asym\_sam\_37\_26\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -128.223+/-35.255  $\chi^2/\text{NDF}$ :29.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 29.084+/-35.766  $\chi^2/\text{NDF}$ :25.4/17

Left: -50.701+/-25.108  $\chi^2/\text{NDF}$ : 64.7/37

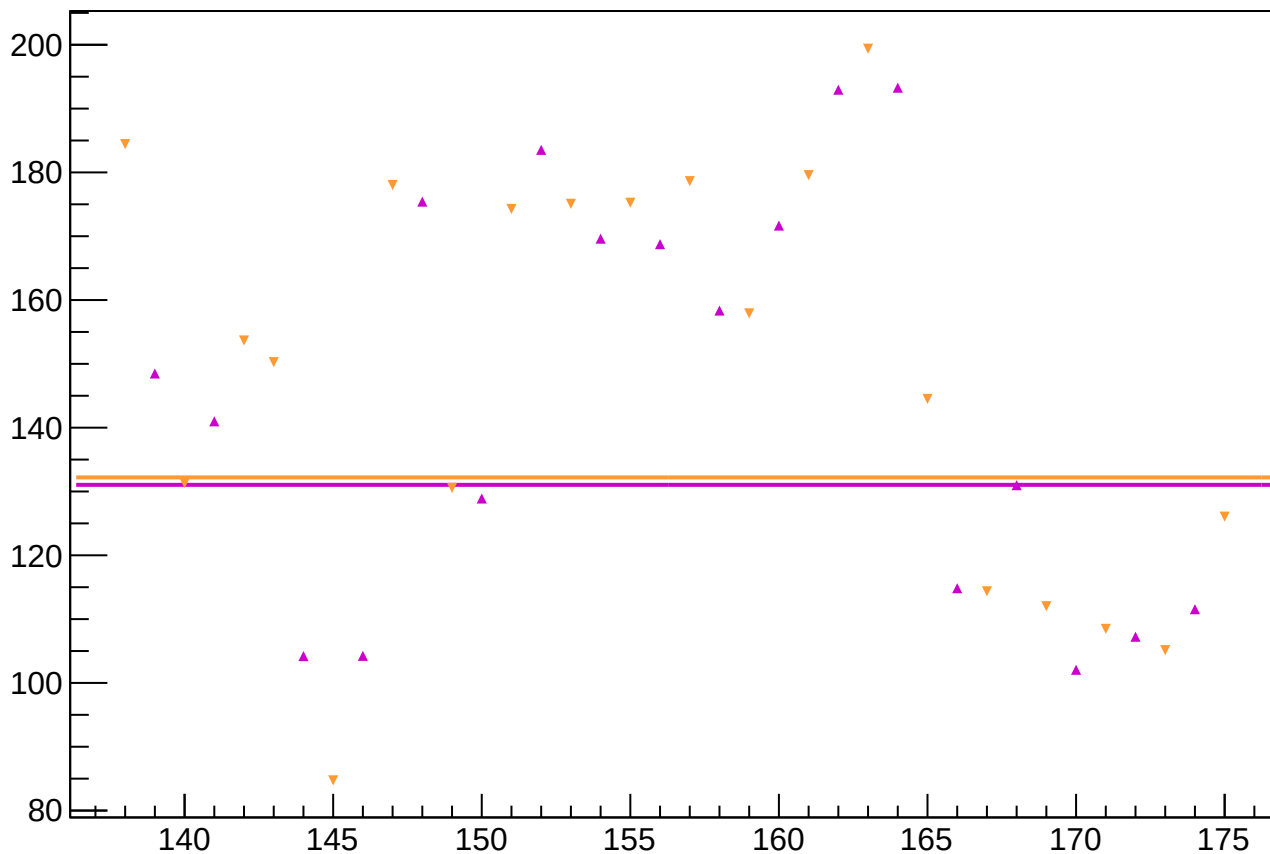
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 29.084+/-35.766  $\chi^2/\text{NDF}$ :25.4/17

Out: -128.223+/-35.255  $\chi^2/\text{NDF}$ :29.4/19

All: -50.701+/-25.108  $\chi^2/\text{NDF}$ : 64.7/37

asym\_sam\_37\_26\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 132.205 $\pm$ 0.025  $\chi^2/\text{NDF}$ :1723278.1/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 131.042 $\pm$ 0.025  $\chi^2/\text{NDF}$ :1339732.7/17

Left: 131.632 $\pm$ 0.018  $\chi^2/\text{NDF}$ : 3064082.9/37

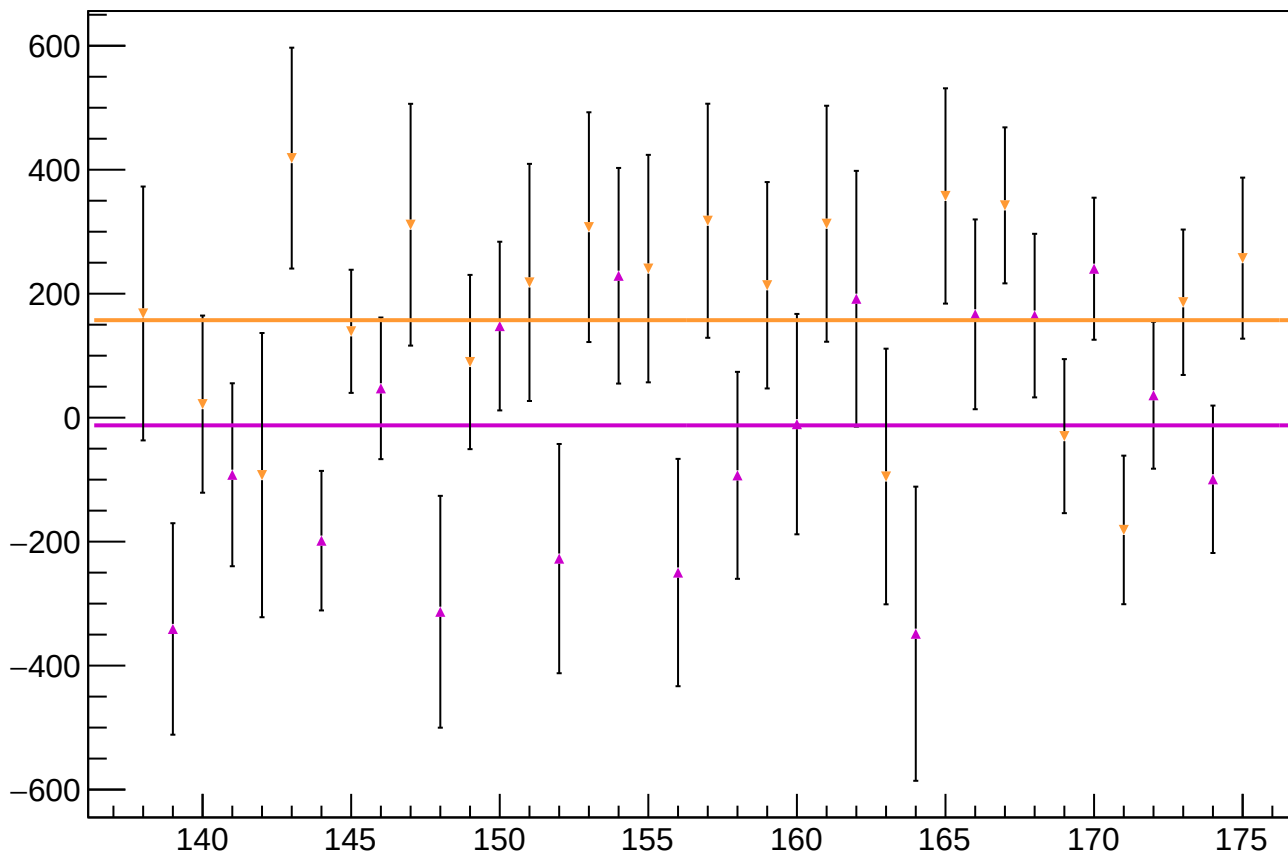
Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 131.042 $\pm$ 0.025  $\chi^2/\text{NDF}$ :1339732.7/17

Out: 132.205 $\pm$ 0.025  $\chi^2/\text{NDF}$ :1723278.1/19

All: 131.632 $\pm$ 0.018  $\chi^2/\text{NDF}$ : 3064082.9/37

asym\_sam\_37\_26\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 157.274+/-33.989  $\chi^2/\text{NDF}$ :23.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -12.422+/-34.557  $\chi^2/\text{NDF}$ :27.9/17

Left: 73.831+/-24.232  $\chi^2/\text{NDF}$ : 63.6/37

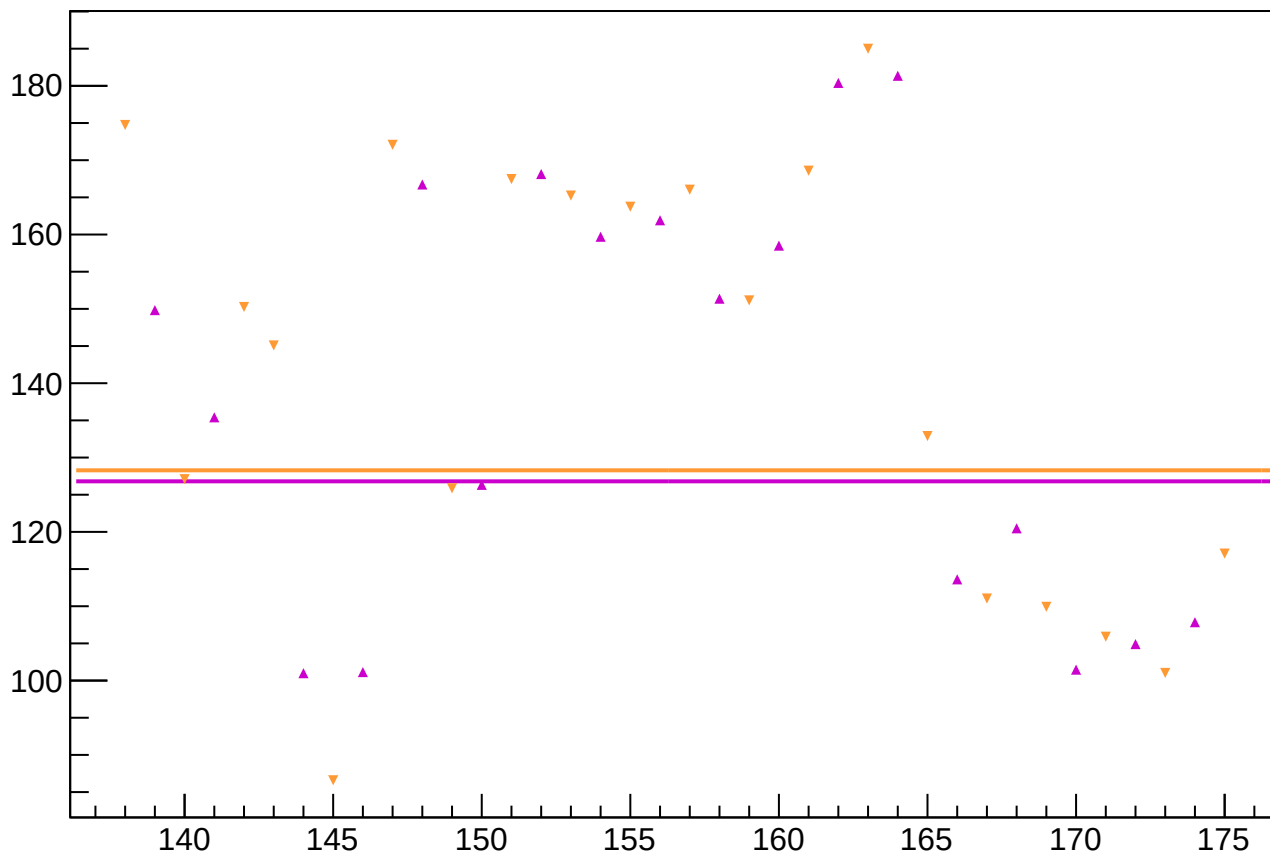
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -12.422+/-34.557  $\chi^2/\text{NDF}$ :27.9/17

Out: 157.274+/-33.989  $\chi^2/\text{NDF}$ :23.5/19

All: 73.831+/-24.232  $\chi^2/\text{NDF}$ : 63.6/37

asym\_sam\_37\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 128.282+/-0.024  $\chi^2/\text{NDF}$ :1464939.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 126.802+/-0.024  $\chi^2/\text{NDF}$ :1169229.1/17

Left: 127.554+/-0.017  $\chi^2/\text{NDF}$ : 2636033.4/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

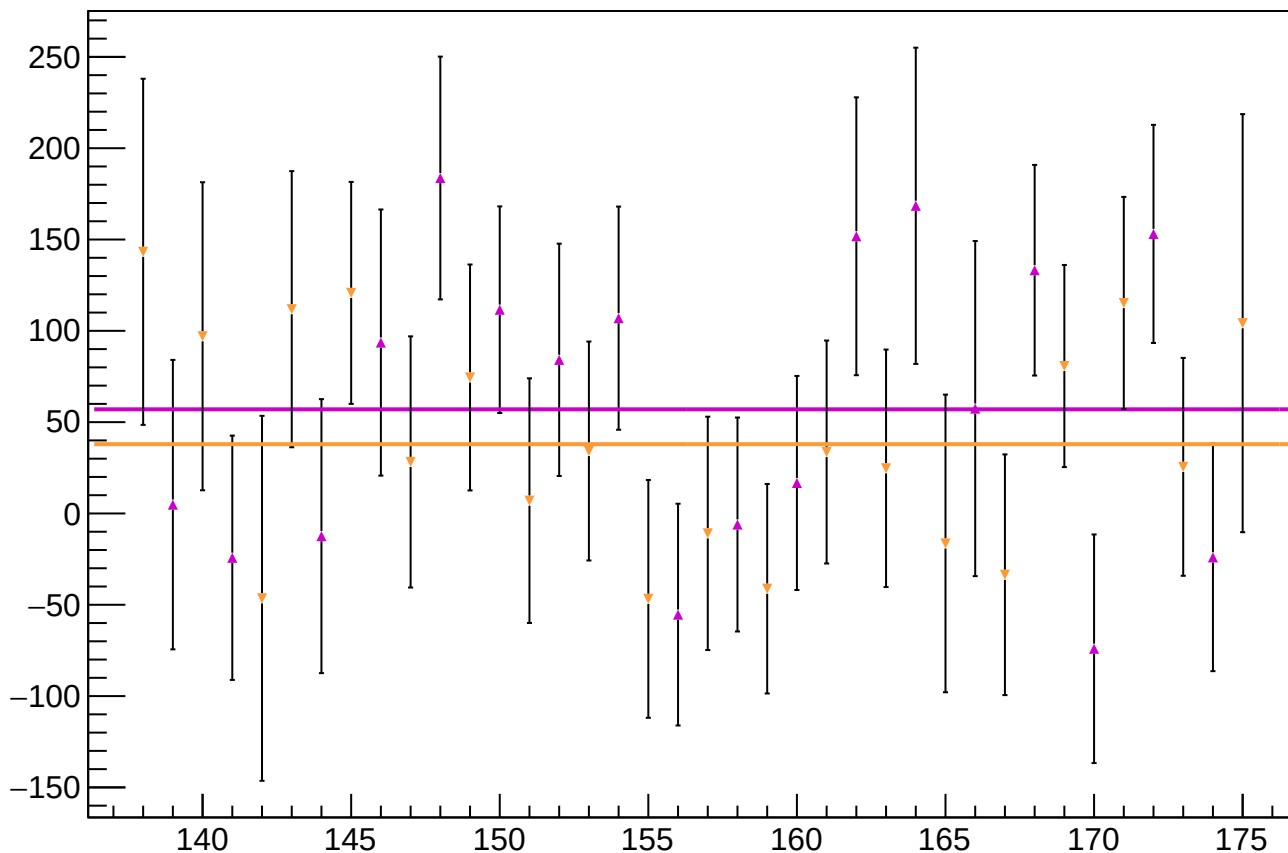
In: 126.802+/-0.024  $\chi^2/\text{NDF}$ :1169229.1/17

Out: 128.282+/-0.024  $\chi^2/\text{NDF}$ :1464939.5/19

All: 127.554+/-0.017  $\chi^2/\text{NDF}$ : 2636033.4/37



dit\_asym\_sam\_1357\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 37.941 $\pm$ 15.037  $\chi^2$ /NDF:14.4/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 57.028 $\pm$ 15.476  $\chi^2$ /NDF:27.1/17

Left: 47.210 $\pm$ 10.785  $\chi^2$ /NDF: 42.3/37

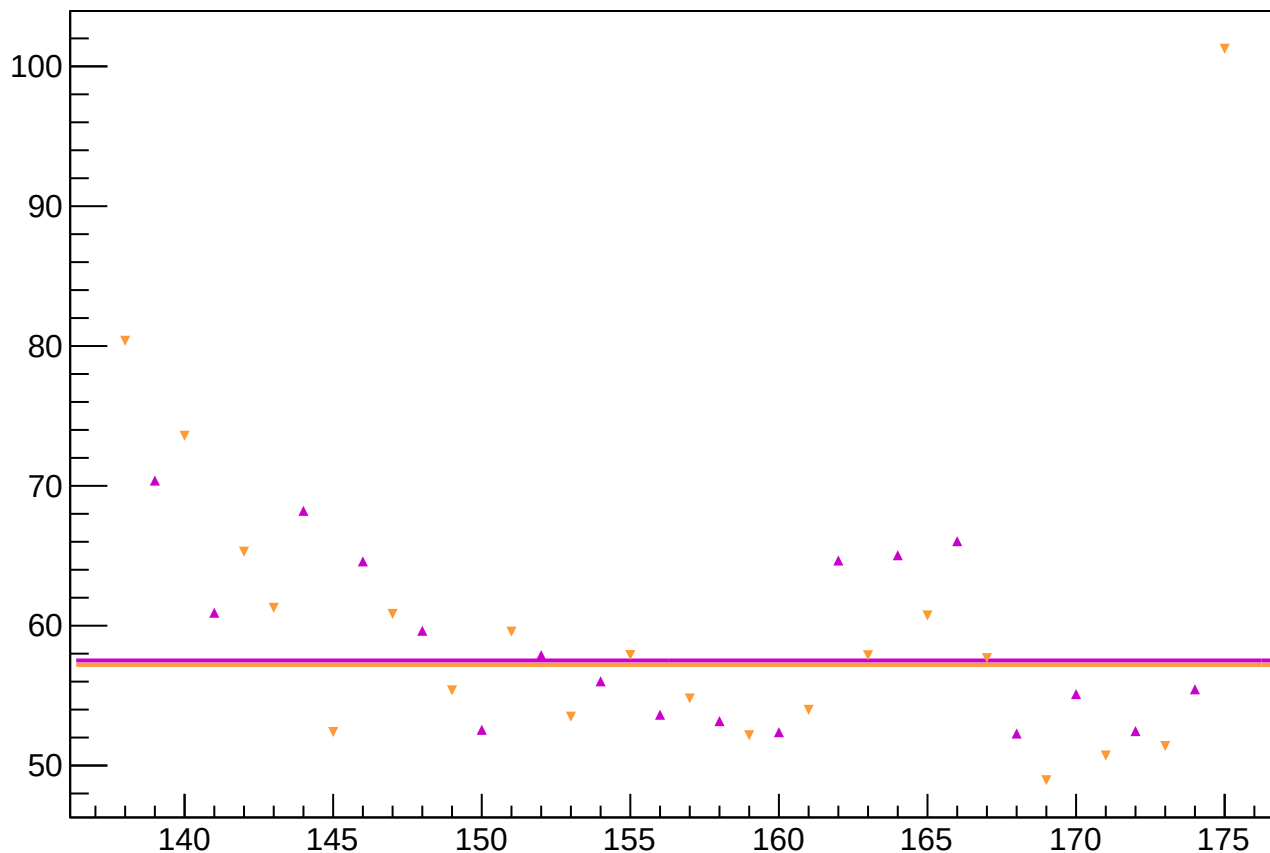
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 57.028 $\pm$ 15.476  $\chi^2$ /NDF:27.1/17

Out: 37.941 $\pm$ 15.037  $\chi^2$ /NDF:14.4/19

All: 47.210 $\pm$ 10.785  $\chi^2$ /NDF: 42.3/37

dit\_asym\_sam\_1357\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 57.199+/-0.011  $\chi^2/\text{NDF}$ :656749.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 57.511+/-0.011  $\chi^2/\text{NDF}$ :256596.7/17

Left: 57.350+/-0.008  $\chi^2/\text{NDF}$ : 913764.1/37

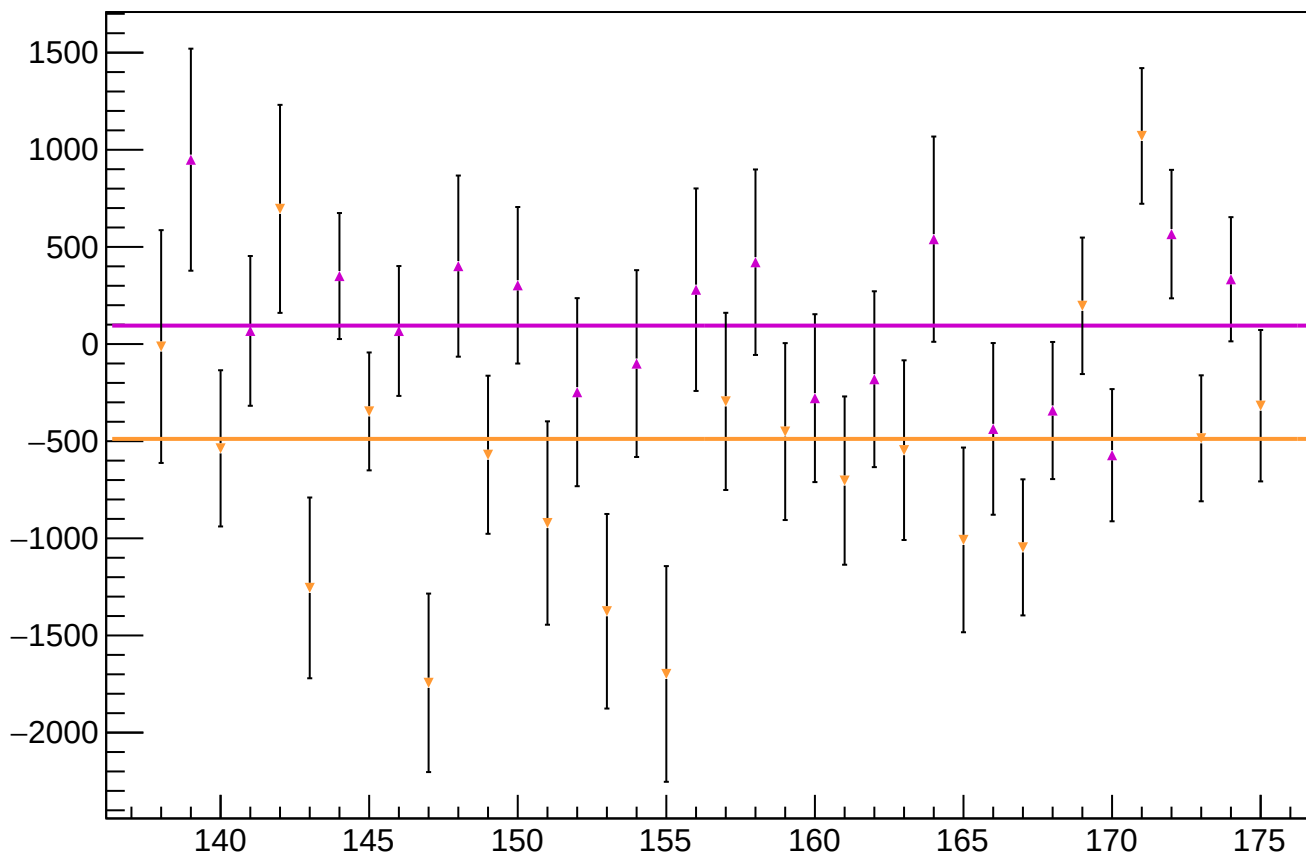
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 57.511+/-0.011  $\chi^2/\text{NDF}$ :256596.7/17

Out: 57.199+/-0.011  $\chi^2/\text{NDF}$ :656749.2/19

All: 57.350+/-0.008  $\chi^2/\text{NDF}$ : 913764.1/37

asym\_sam\_1357\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -488.195+/-93.569  $\chi^2/\text{NDF}$ :52.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 94.979+/-95.253  $\chi^2/\text{NDF}$ :16.1/17

Left: -201.809+/-66.751  $\chi^2/\text{NDF}$ : 87.8/37

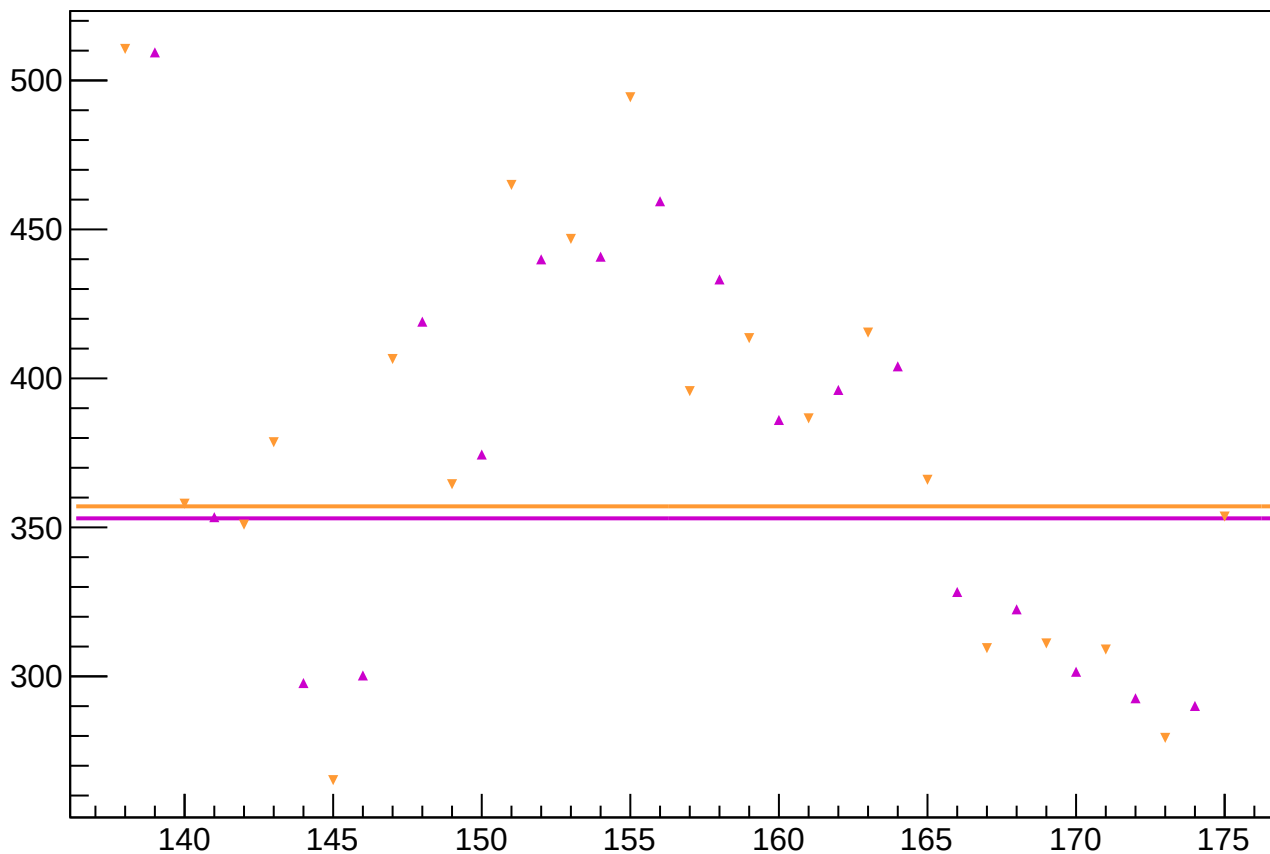
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 94.979+/-95.253  $\chi^2/\text{NDF}$ :16.1/17

Out: -488.195+/-93.569  $\chi^2/\text{NDF}$ :52.7/19

All: -201.809+/-66.751  $\chi^2/\text{NDF}$ : 87.8/37

asym\_sam\_1357\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 357.057+/-0.066  $\chi^2/\text{NDF}$ :925677.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 353.031+/-0.067  $\chi^2/\text{NDF}$ :834189.7/17

Left: 355.080+/-0.047  $\chi^2/\text{NDF}$ : 1761685.4/37

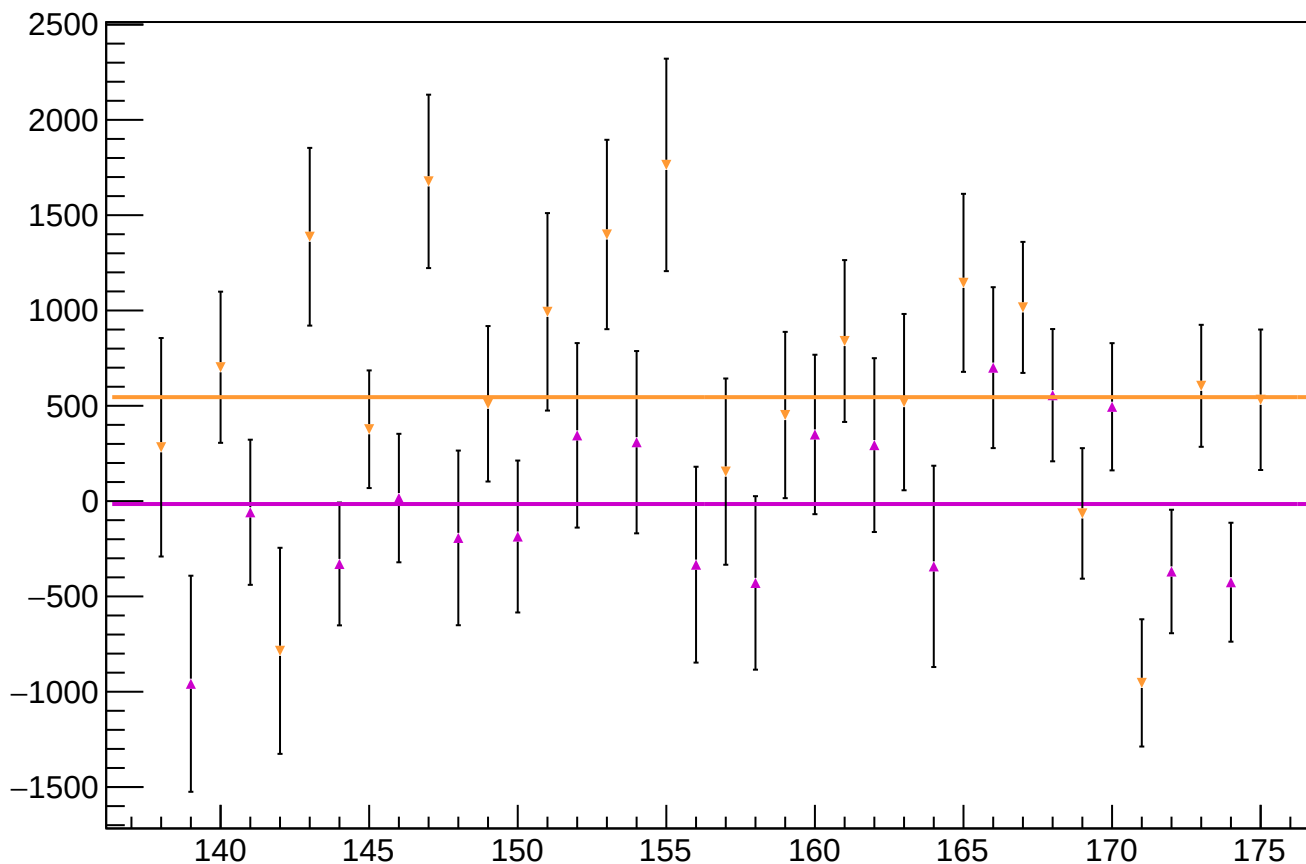
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 353.031+/-0.067  $\chi^2/\text{NDF}$ :834189.7/17

Out: 357.057+/-0.066  $\chi^2/\text{NDF}$ :925677.3/19

All: 355.080+/-0.047  $\chi^2/\text{NDF}$ : 1761685.4/37

asym\_sam\_1357\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 545.368+/-92.397  $\chi^2/\text{NDF}$ :52.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -15.304+/-93.827  $\chi^2/\text{NDF}$ :18.7/17

Left: 269.338+/-65.834  $\chi^2/\text{NDF}$ : 89.6/37

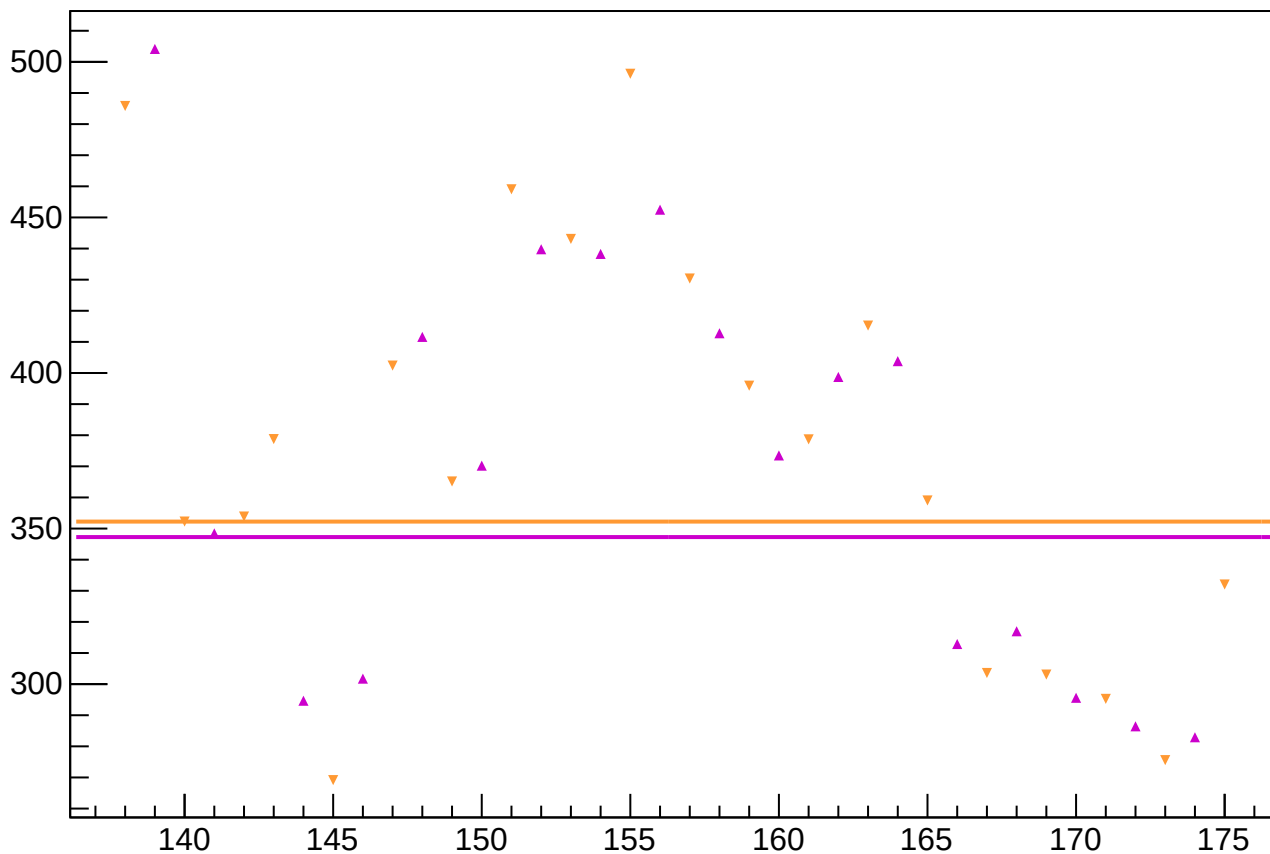
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -15.304+/-93.827  $\chi^2/\text{NDF}$ :18.7/17

Out: 545.368+/-92.397  $\chi^2/\text{NDF}$ :52.7/19

All: 269.338+/-65.834  $\chi^2/\text{NDF}$ : 89.6/37

# asym\_sam\_1357\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 352.242+/-0.065  $\chi^2/\text{NDF}$ :948846.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 347.265+/-0.066  $\chi^2/\text{NDF}$ :848328.8/17

Left: 349.792+/-0.047  $\chi^2/\text{NDF}$ : 1800031.9/37

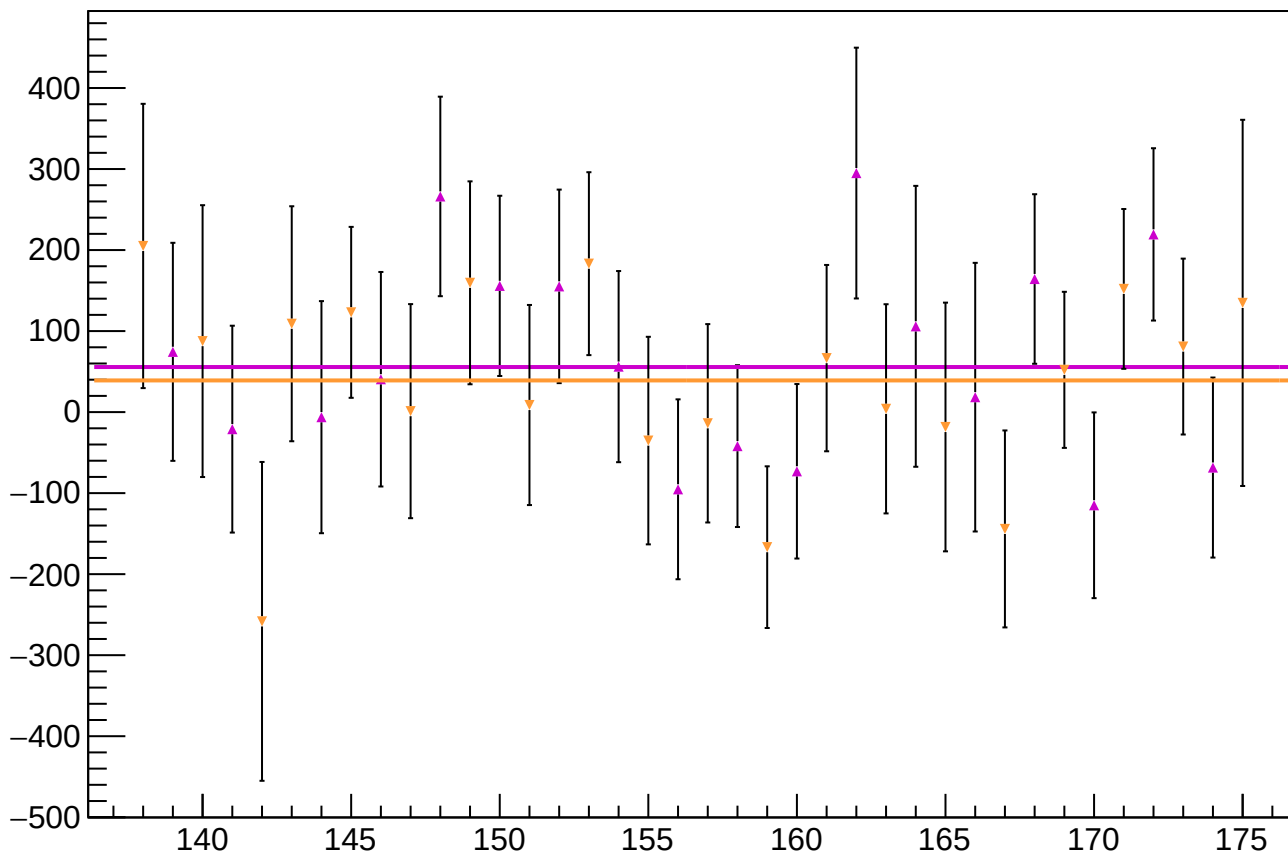
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 347.265+/-0.066  $\chi^2/\text{NDF}$ :848328.8/17

Out: 352.242+/-0.065  $\chi^2/\text{NDF}$ :948846.0/19

All: 349.792+/-0.047  $\chi^2/\text{NDF}$ : 1800031.9/37

dit\_asym\_sam\_2468\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 39.093 $\pm$ 27.892  $\chi^2$ /NDF:15.8/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 55.634 $\pm$ 28.546  $\chi^2$ /NDF:18.7/17

Left: 47.172 $\pm$ 19.950  $\chi^2$ /NDF: 34.7/37

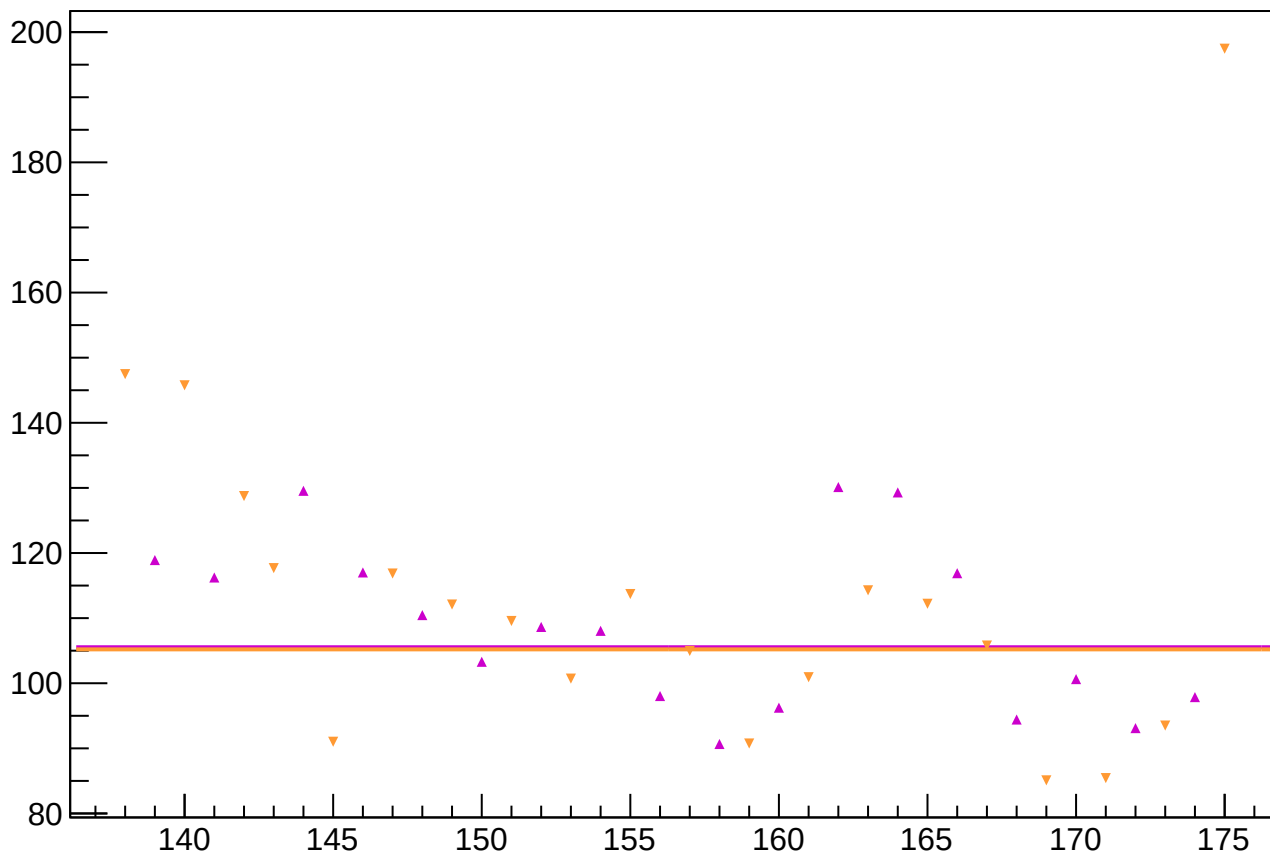
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 55.634 $\pm$ 28.546  $\chi^2$ /NDF:18.7/17

Out: 39.093 $\pm$ 27.892  $\chi^2$ /NDF:15.8/19

All: 47.172 $\pm$ 19.950  $\chi^2$ /NDF: 34.7/37

dit\_asym\_sam\_2468\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 105.203+/-0.020  $\chi^2/\text{NDF}$ :931750.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 105.528+/-0.020  $\chi^2/\text{NDF}$ :340338.0/17

Left: 105.362+/-0.014  $\chi^2/\text{NDF}$ : 1272220.7/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

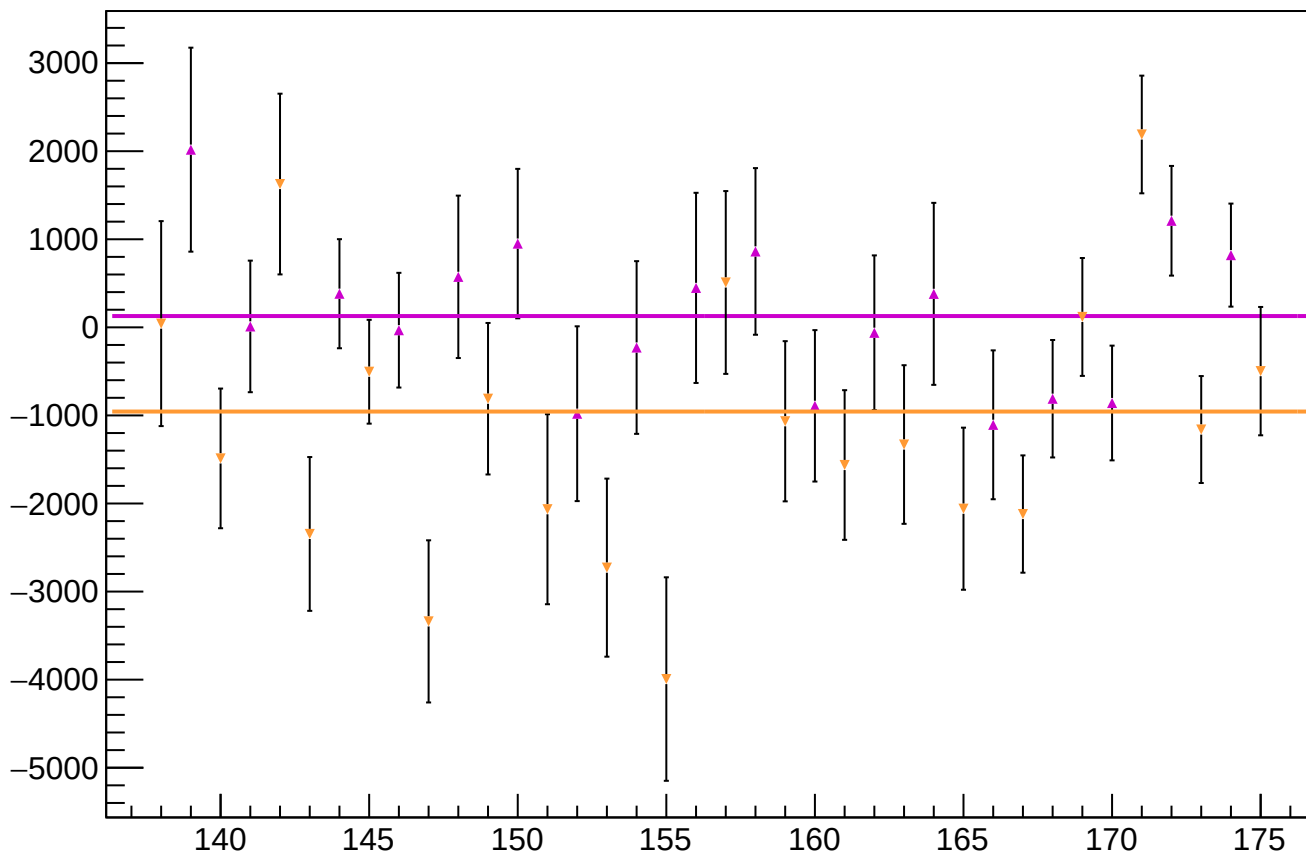
In: 105.528+/-0.020  $\chi^2/\text{NDF}$ :340338.0/17

Out: 105.203+/-0.020  $\chi^2/\text{NDF}$ :931750.0/19

All: 105.362+/-0.014  $\chi^2/\text{NDF}$ : 1272220.7/37



asym\_sam\_2468\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -955.981+/-183.029  $\chi^2/\text{NDF}$ :60.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 128.219+/-185.077  $\chi^2/\text{NDF}$ :18.5/17

Left: -419.911+/-130.139  $\chi^2/\text{NDF}$ : 96.7/37

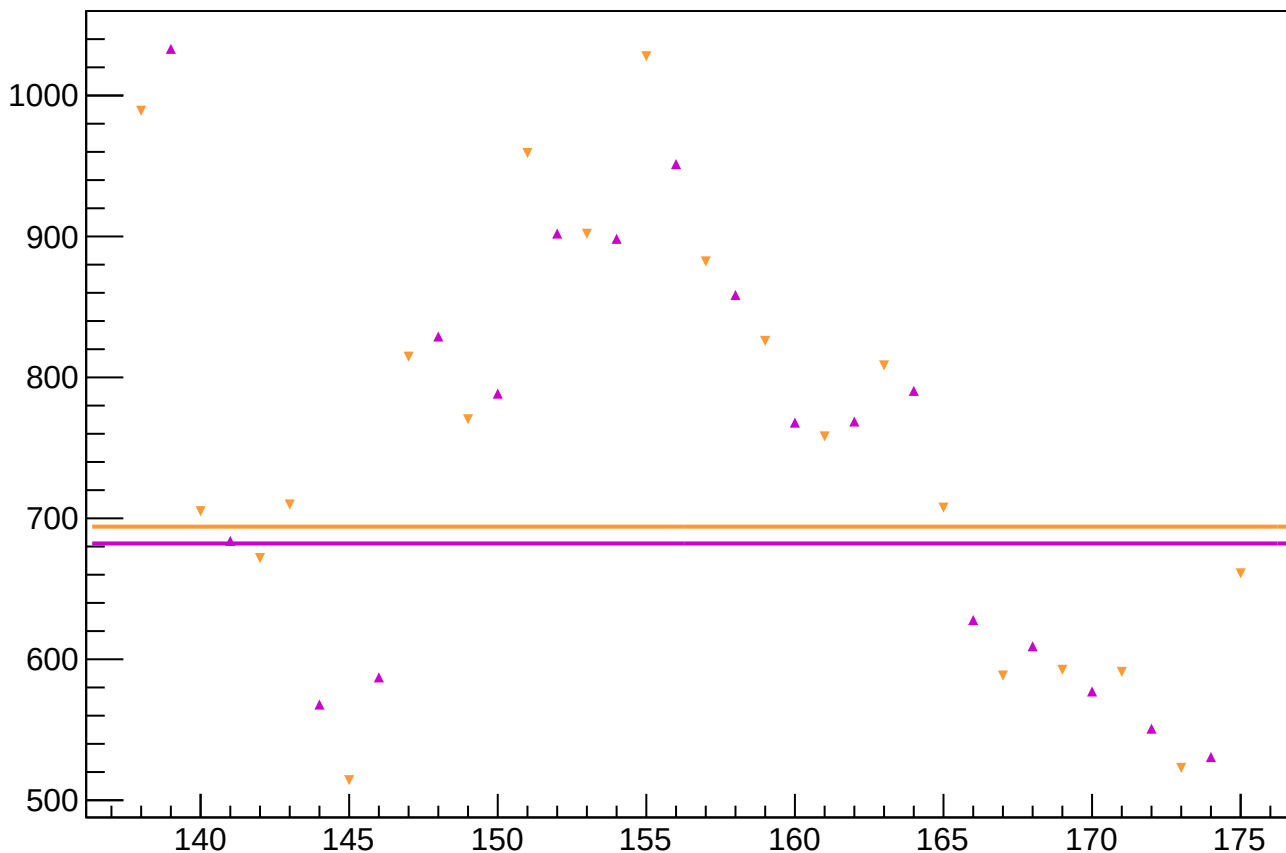
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 128.219+/-185.077  $\chi^2/\text{NDF}$ :18.5/17

Out: -955.981+/-183.029  $\chi^2/\text{NDF}$ :60.9/19

All: -419.911+/-130.139  $\chi^2/\text{NDF}$ : 96.7/37

asym\_sam\_2468\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 694.112+/-0.129  $\chi^2/\text{NDF}$ :1198165.0/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 682.176+/-0.131  $\chi^2/\text{NDF}$ :1134447.0/17

Left: 688.210+/-0.092  $\chi^2/\text{NDF}$ : 2336817.5/37

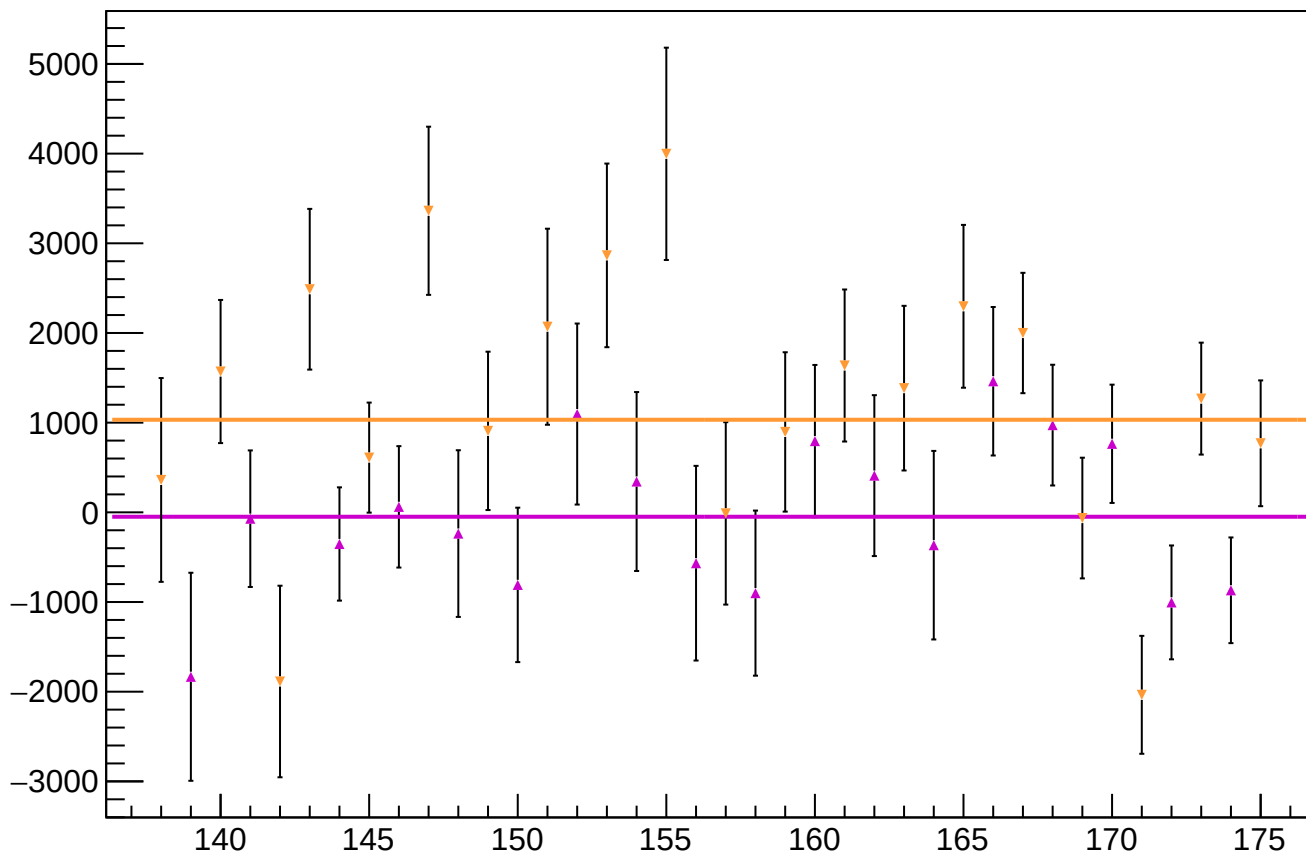
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 682.176+/-0.131  $\chi^2/\text{NDF}$ :1134447.0/17

Out: 694.112+/-0.129  $\chi^2/\text{NDF}$ :1198165.0/19

All: 688.210+/-0.092  $\chi^2/\text{NDF}$ : 2336817.5/37

asym\_sam\_2468\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1032.338+/-184.376  $\chi^2/\text{NDF}$ :58.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -49.221+/-187.186  $\chi^2/\text{NDF}$ :18.7/17

Left: 499.738+/-131.356  $\chi^2/\text{NDF}$ : 94.0/37

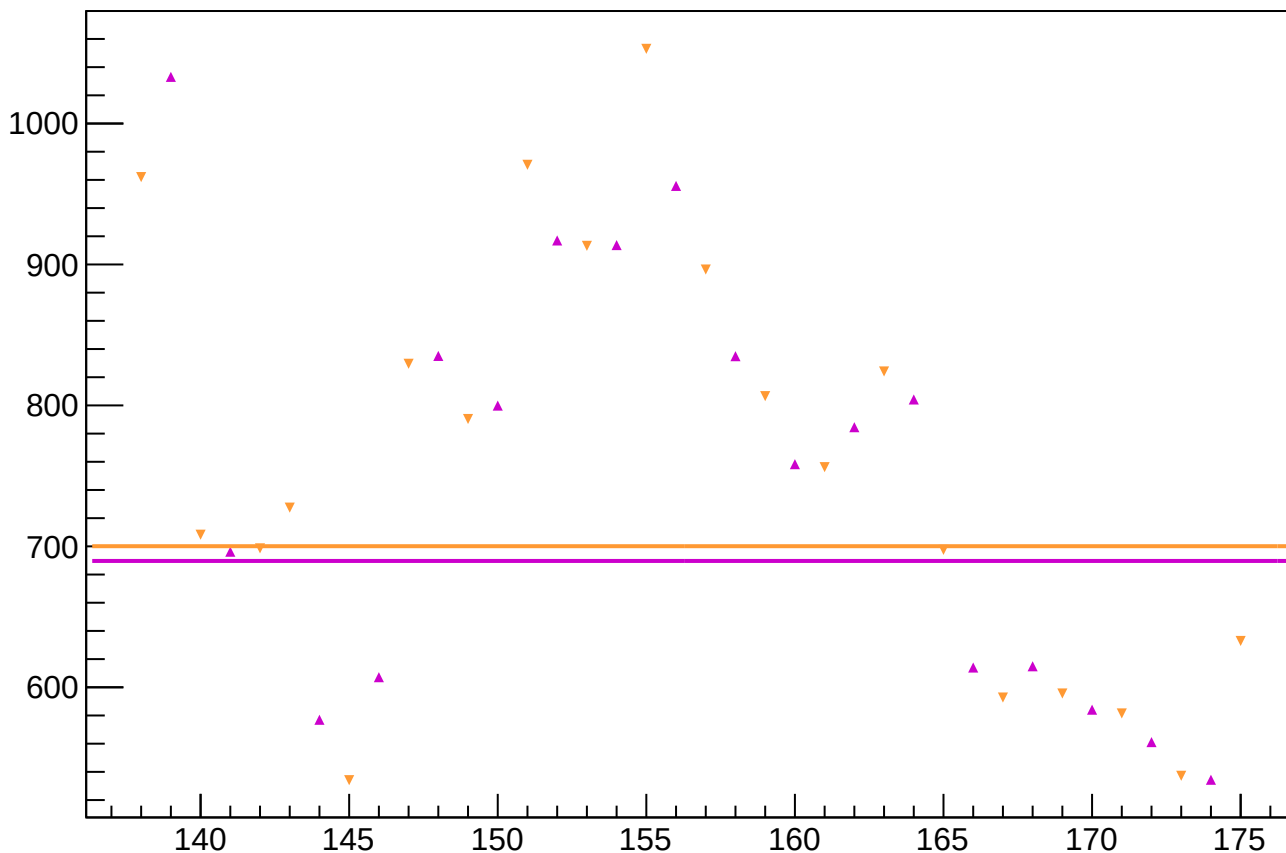
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -49.221+/-187.186  $\chi^2/\text{NDF}$ :18.7/17

Out: 1032.338+/-184.376  $\chi^2/\text{NDF}$ :58.4/19

All: 499.738+/-131.356  $\chi^2/\text{NDF}$ : 94.0/37

# asym\_sam\_2468\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 700.106+/-0.130  $\chi^2/\text{NDF}$ :1168357.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 689.647+/-0.132  $\chi^2/\text{NDF}$ :1095611.5/17

Left: 694.956+/-0.093  $\chi^2/\text{NDF}$ : 2267138.5/37

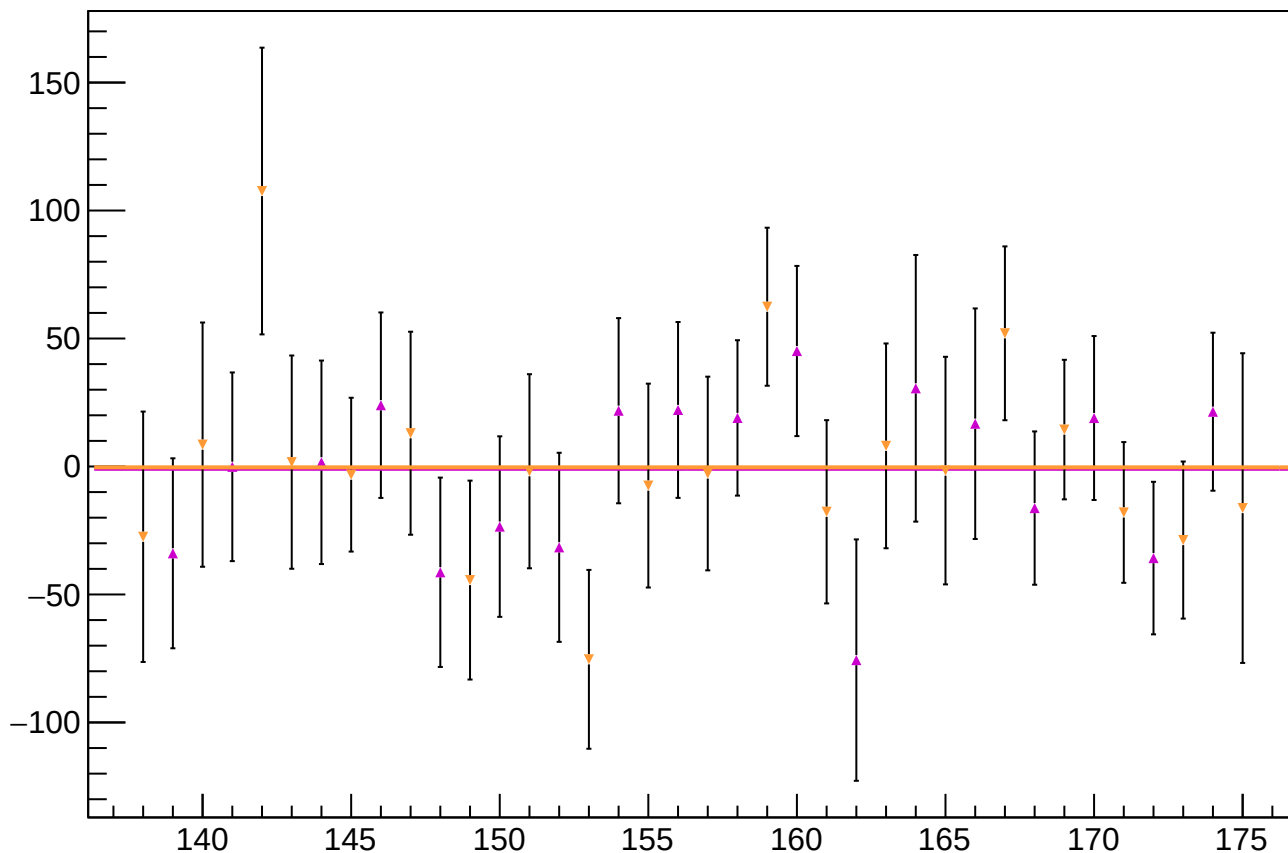
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 689.647+/-0.132  $\chi^2/\text{NDF}$ :1095611.5/17

Out: 700.106+/-0.130  $\chi^2/\text{NDF}$ :1168357.9/19

All: 694.956+/-0.093  $\chi^2/\text{NDF}$ : 2267138.5/37

dit\_asym\_sam\_1357\_2468\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -0.340+/-8.211  $\chi^2/\text{NDF}$ :18.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -0.900+/-8.361  $\chi^2/\text{NDF}$ :12.3/17

Left: -0.615+/-5.858  $\chi^2/\text{NDF}$ : 30.9/37

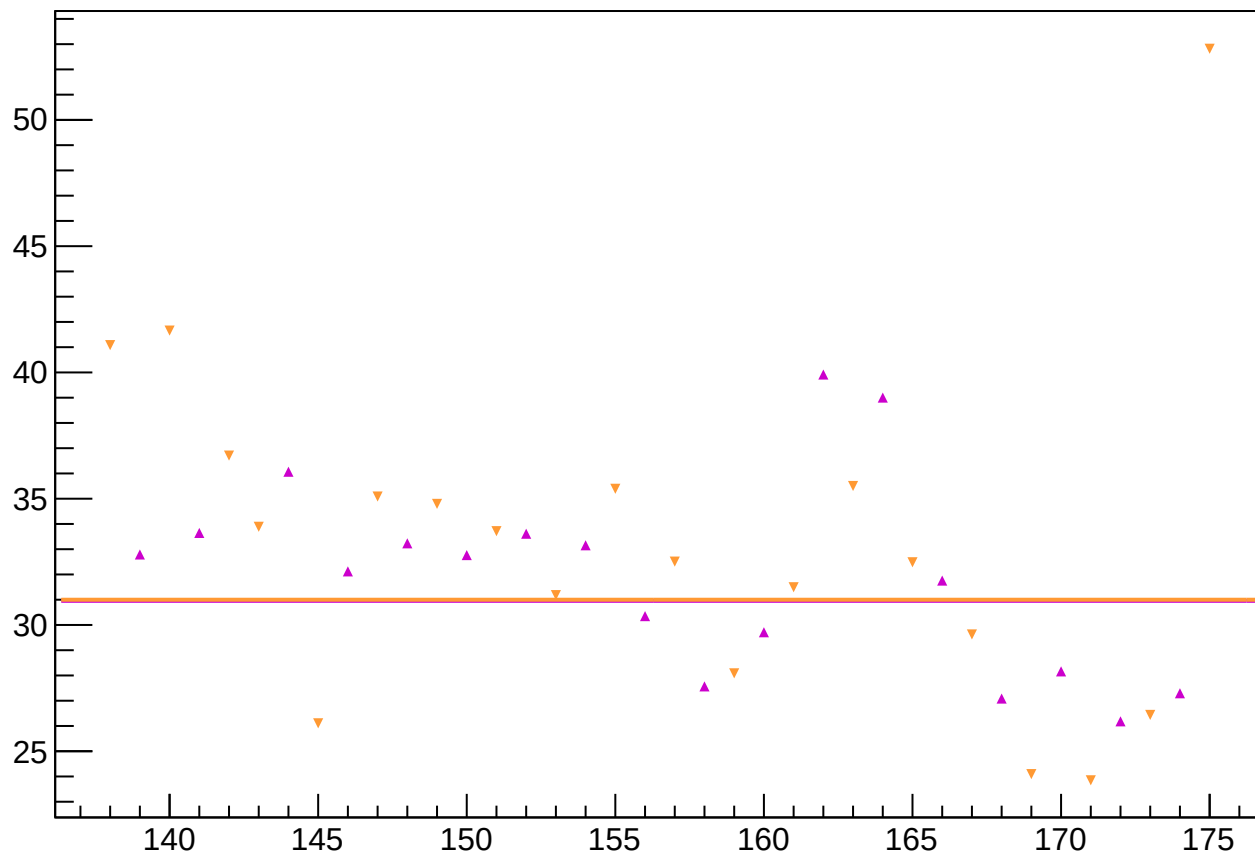
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -0.900+/-8.361  $\chi^2/\text{NDF}$ :12.3/17

Out: -0.340+/-8.211  $\chi^2/\text{NDF}$ :18.5/19

All: -0.615+/-5.858  $\chi^2/\text{NDF}$ : 30.9/37

dit\_asym\_sam\_1357\_2468\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 30.999+/-0.006  $\chi^2/\text{NDF}$ :963479.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 30.956+/-0.006  $\chi^2/\text{NDF}$ :358294.1/17

Left: 30.978+/-0.004  $\chi^2/\text{NDF}$ : 1321799.7/37

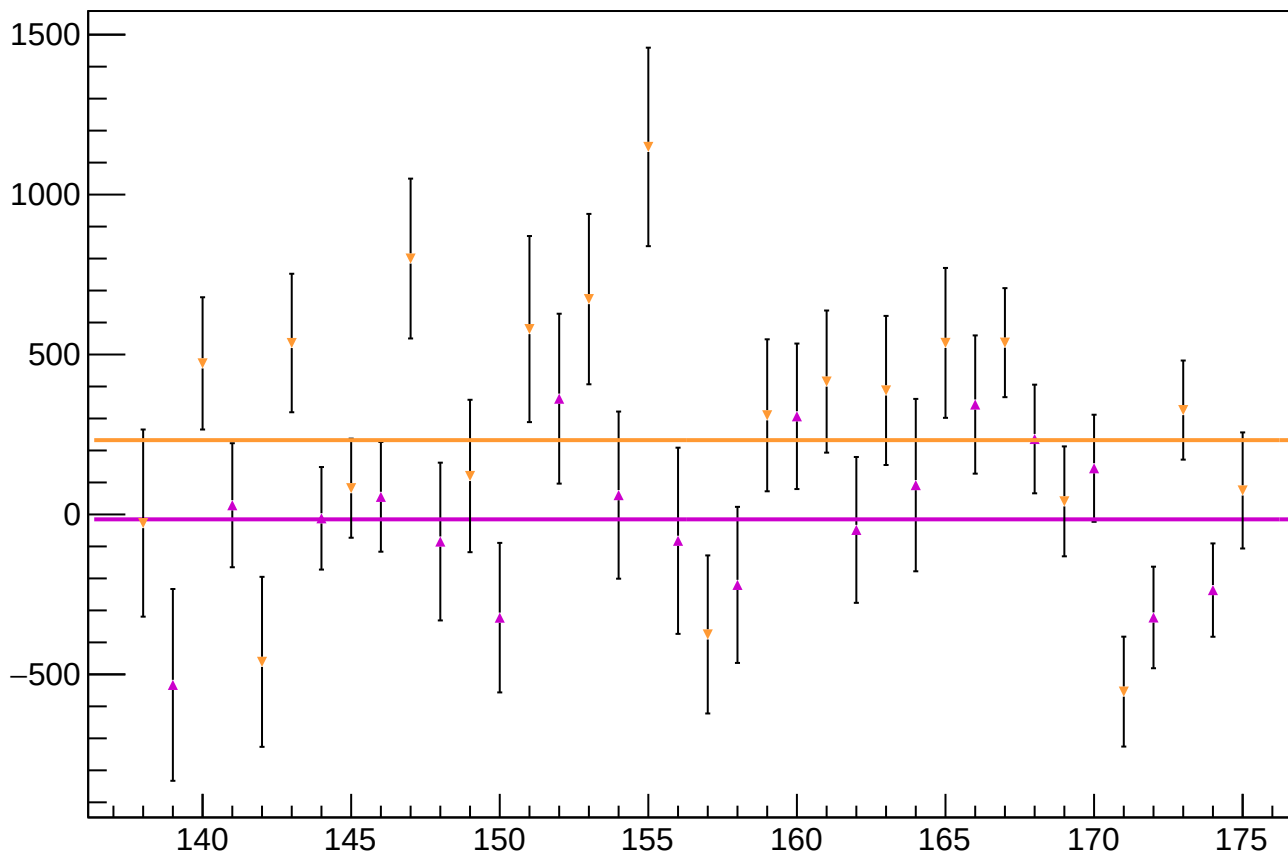
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 30.956+/-0.006  $\chi^2/\text{NDF}$ :358294.1/17

Out: 30.999+/-0.006  $\chi^2/\text{NDF}$ :963479.1/19

All: 30.978+/-0.004  $\chi^2/\text{NDF}$ : 1321799.7/37

asym\_sam\_1357\_2468\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 232.308+/-47.279  $\chi^2/\text{NDF}$ :65.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -15.316+/-48.026  $\chi^2/\text{NDF}$ :21.9/17

Left: 110.437+/-33.692  $\chi^2/\text{NDF}$ : 101.0/37

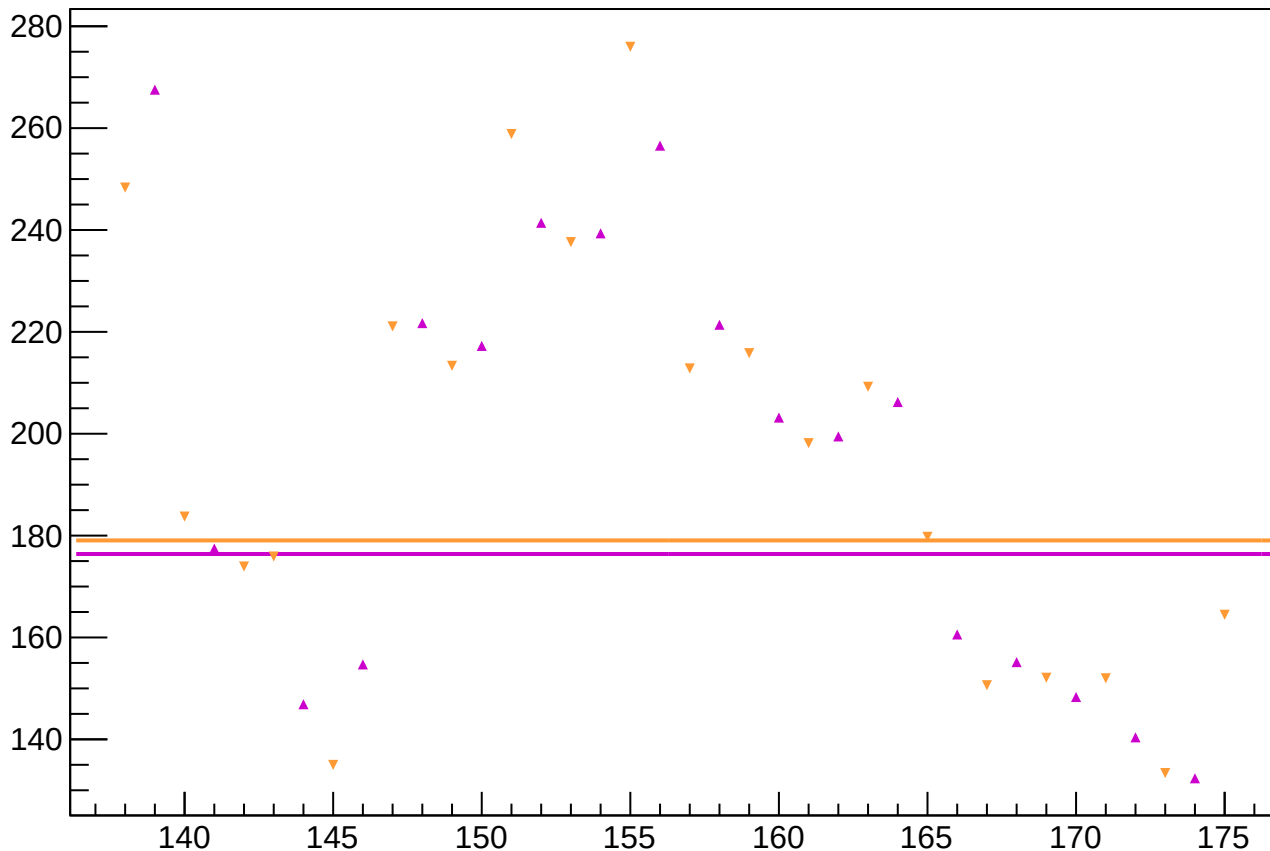
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -15.316+/-48.026  $\chi^2/\text{NDF}$ :21.9/17

Out: 232.308+/-47.279  $\chi^2/\text{NDF}$ :65.6/19

All: 110.437+/-33.692  $\chi^2/\text{NDF}$ : 101.0/37

asym\_sam\_1357\_2468\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 179.050+/-0.033  $\chi^2/\text{NDF}$ :1291415.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 176.386+/-0.034  $\chi^2/\text{NDF}$ :1325092.4/17

Left: 177.739+/-0.024  $\chi^2/\text{NDF}$ : 2619633.5/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

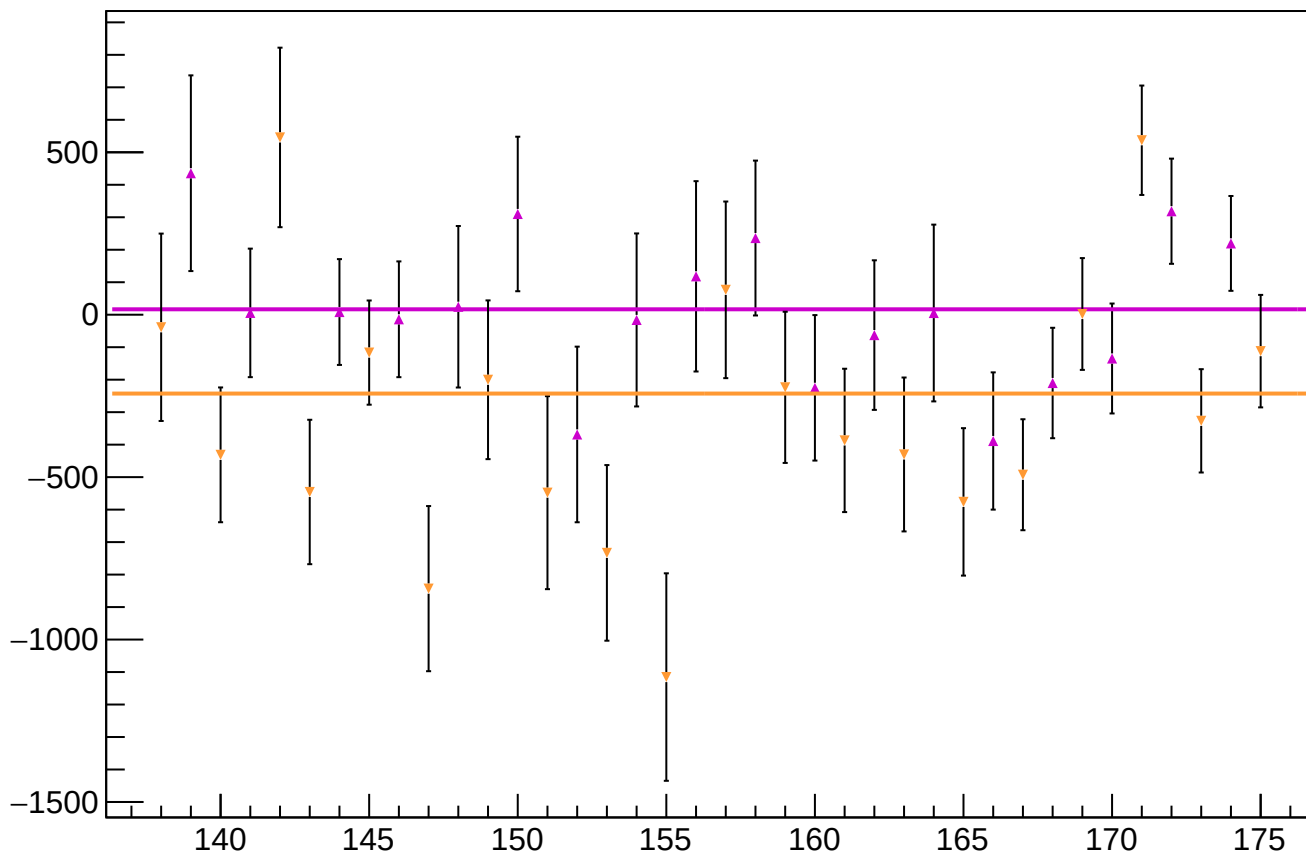
In: 176.386+/-0.034  $\chi^2/\text{NDF}$ :1325092.4/17

Out: 179.050+/-0.033  $\chi^2/\text{NDF}$ :1291415.7/19

All: 177.739+/-0.024  $\chi^2/\text{NDF}$ : 2619633.5/37



asym\_sam\_1357\_2468\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -242.730+/-47.645  $\chi^2/\text{NDF}$ :60.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 16.669+/-48.449  $\chi^2/\text{NDF}$ :19.5/17

Left: -115.201+/-33.971  $\chi^2/\text{NDF}$ : 94.5/37

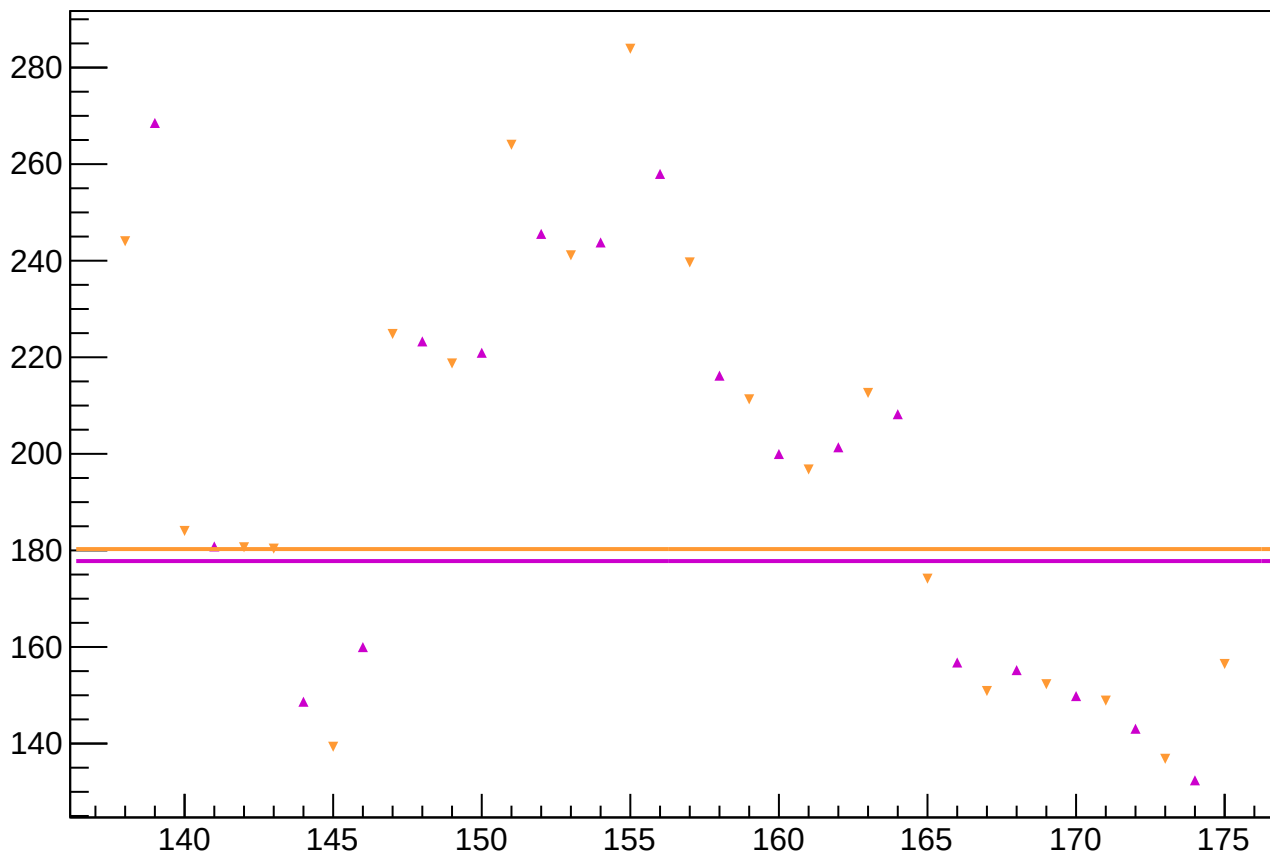
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 16.669+/-48.449  $\chi^2/\text{NDF}$ :19.5/17

Out: -242.730+/-47.645  $\chi^2/\text{NDF}$ :60.4/19

All: -115.201+/-33.971  $\chi^2/\text{NDF}$ : 94.5/37

asym\_sam\_1357\_2468\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 180.277+/-0.034  $\chi^2/\text{NDF}$ :1359826.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 177.792+/-0.034  $\chi^2/\text{NDF}$ :1309685.1/17

Left: 179.056+/-0.024  $\chi^2/\text{NDF}$ : 2672186.1/37

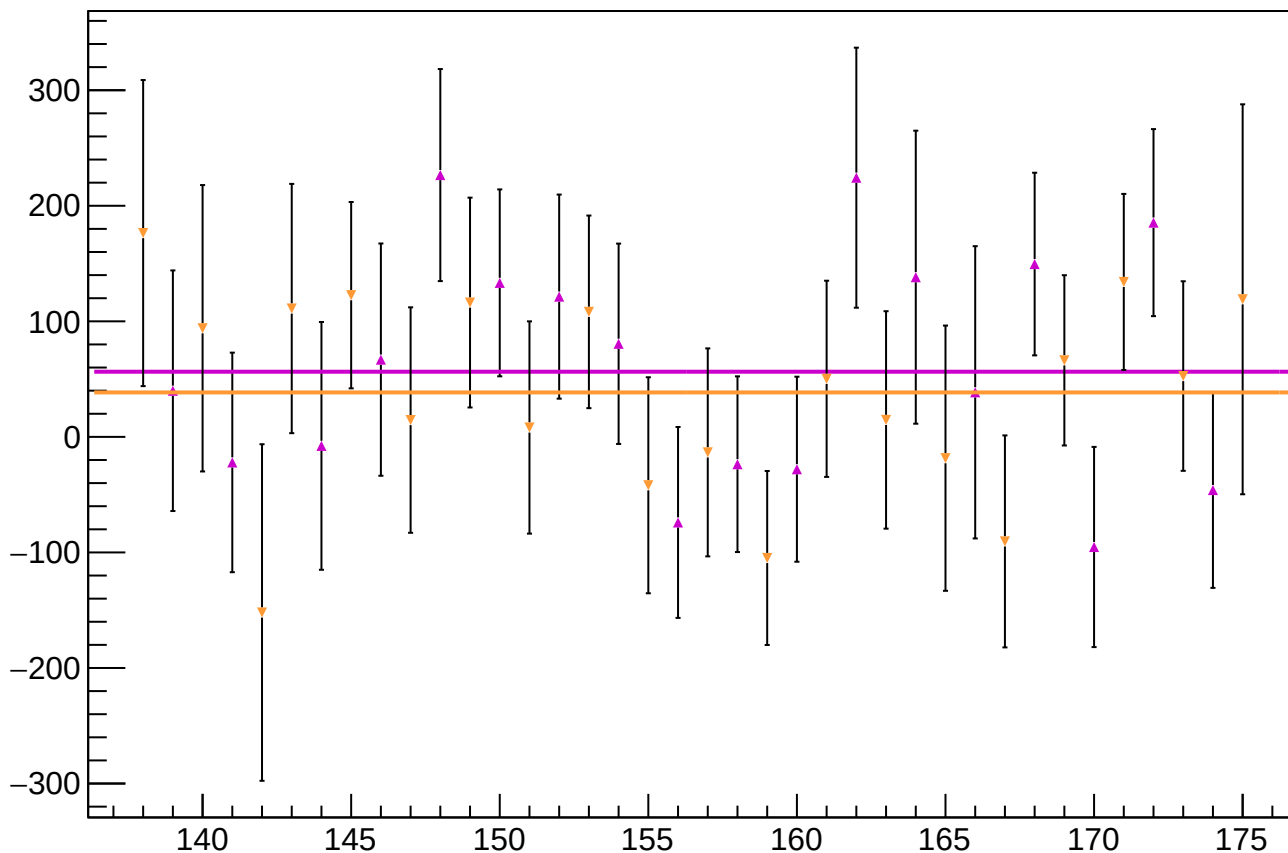
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 177.792+/-0.034  $\chi^2/\text{NDF}$ :1309685.1/17

Out: 180.277+/-0.034  $\chi^2/\text{NDF}$ :1359826.5/19

All: 179.056+/-0.024  $\chi^2/\text{NDF}$ : 2672186.1/37

dit\_asym\_sam\_12345678\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 38.470+/-20.856  $\chi^2/\text{NDF}$ :15.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 56.394+/-21.385  $\chi^2/\text{NDF}$ :21.9/17

Left: 47.208+/-14.931  $\chi^2/\text{NDF}$ : 37.3/37

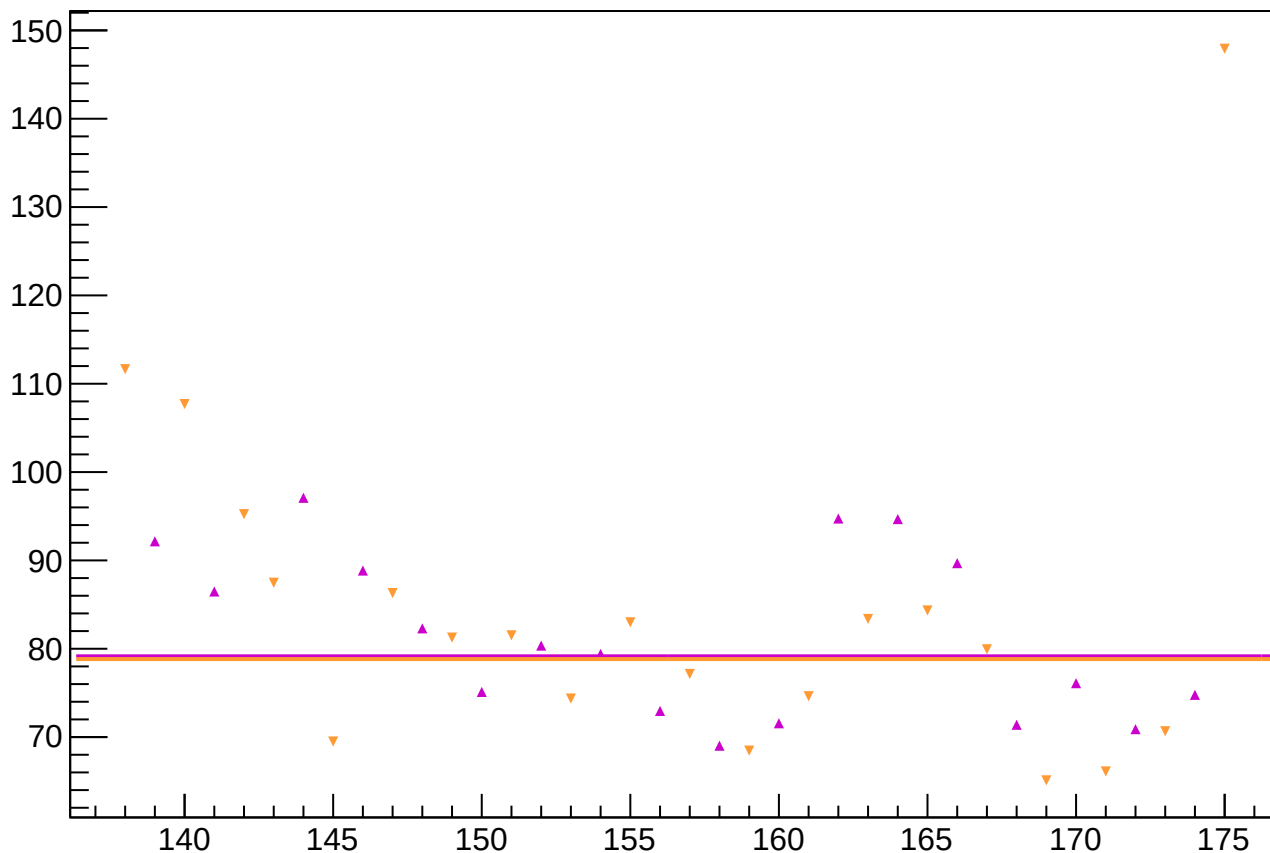
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 56.394+/-21.385  $\chi^2/\text{NDF}$ :21.9/17

Out: 38.470+/-20.856  $\chi^2/\text{NDF}$ :15.1/19

All: 47.208+/-14.931  $\chi^2/\text{NDF}$ : 37.3/37

dit\_asym\_sam\_12345678\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 78.831+/-0.015  $\chi^2/\text{NDF}$ :854316.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 79.142+/-0.015  $\chi^2/\text{NDF}$ :320336.1/17

Left: 78.982+/-0.011  $\chi^2/\text{NDF}$ : 1174868.6/37

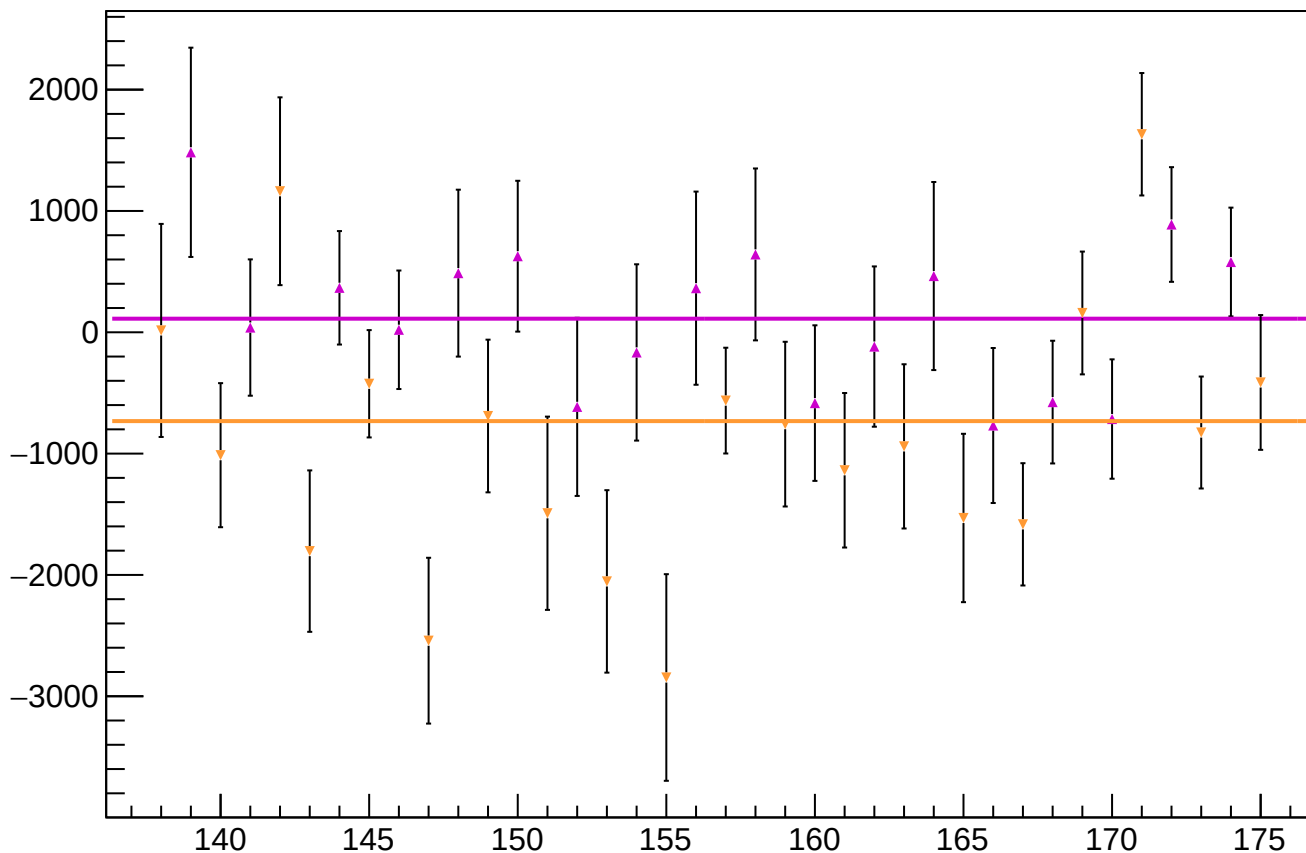
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 79.142+/-0.015  $\chi^2/\text{NDF}$ :320336.1/17

Out: 78.831+/-0.015  $\chi^2/\text{NDF}$ :854316.5/19

All: 78.982+/-0.011  $\chi^2/\text{NDF}$ : 1174868.6/37

asym\_sam\_12345678\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -732.122+/-133.121  $\chi^2/\text{NDF}$ :57.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 112.083+/-139.164  $\chi^2/\text{NDF}$ :17.5/17

Left: -328.747+/-96.196  $\chi^2/\text{NDF}$ : 94.2/37

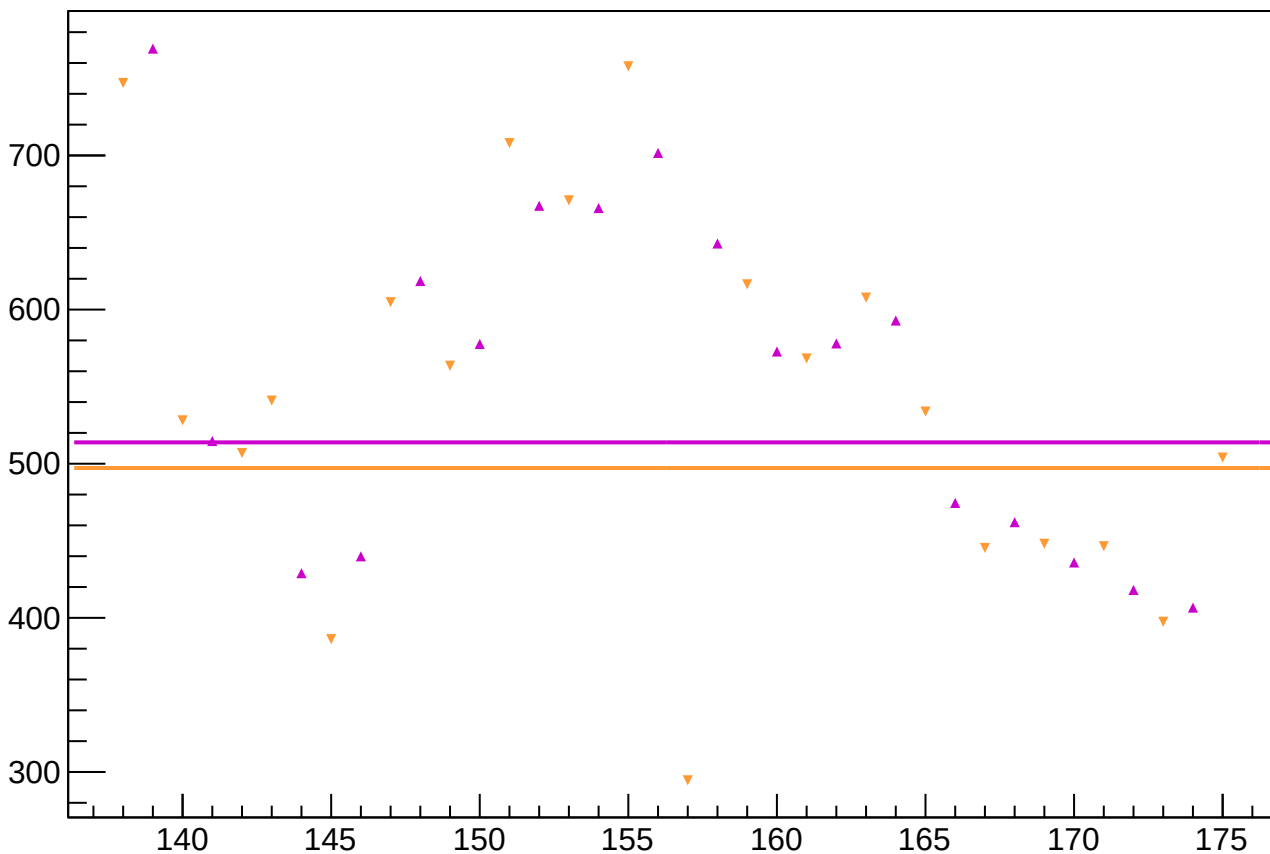
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 112.083+/-139.164  $\chi^2/\text{NDF}$ :17.5/17

Out: -732.122+/-133.121  $\chi^2/\text{NDF}$ :57.4/19

All: -328.747+/-96.196  $\chi^2/\text{NDF}$ : 94.2/37

asym\_sam\_12345678\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 497.205+/-0.094  $\chi^2/\text{NDF}$ :1539875.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 513.855+/-0.098  $\chi^2/\text{NDF}$ :1039061.0/17

Left: 505.161+/-0.068  $\chi^2/\text{NDF}$ : 2593885.2/37

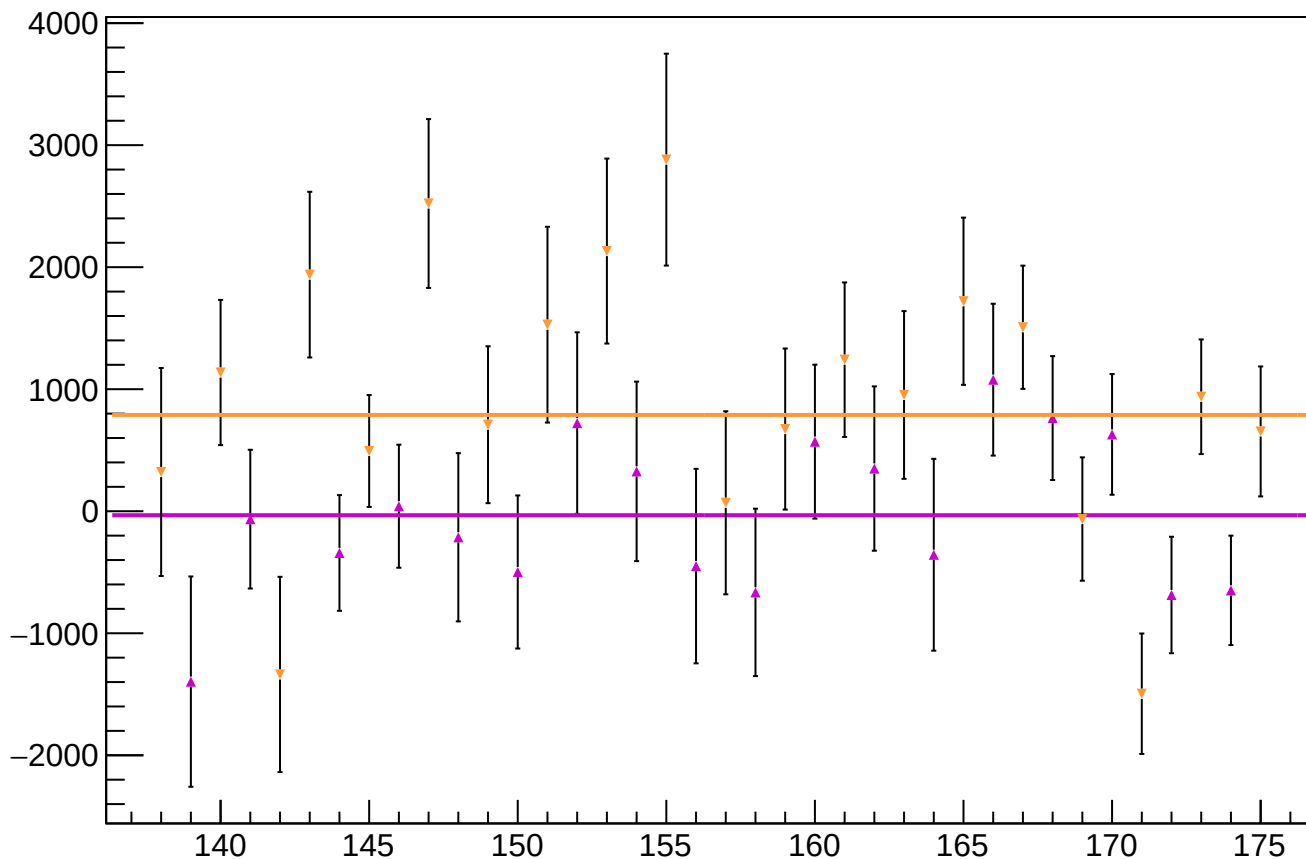
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 513.855+/-0.098  $\chi^2/\text{NDF}$ :1039061.0/17

Out: 497.205+/-0.094  $\chi^2/\text{NDF}$ :1539875.5/19

All: 505.161+/-0.068  $\chi^2/\text{NDF}$ : 2593885.2/37

asym\_sam\_12345678\_avg\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 789.187+/-137.835  $\chi^2/\text{NDF}$ :56.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -32.503+/-139.923  $\chi^2/\text{NDF}$ :18.6/17

Left: 384.520+/-98.194  $\chi^2/\text{NDF}$ : 93.0/37

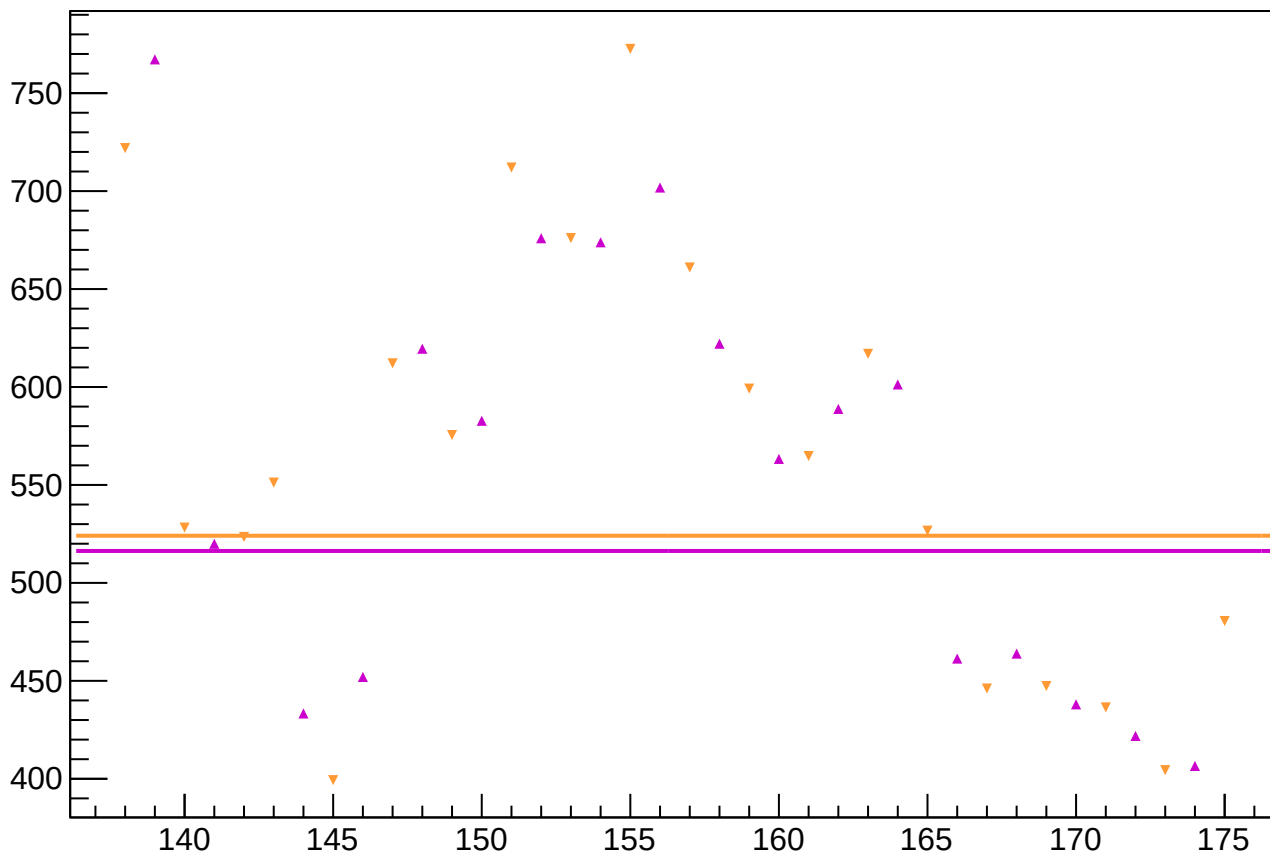
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -32.503+/-139.923  $\chi^2/\text{NDF}$ :18.6/17

Out: 789.187+/-137.835  $\chi^2/\text{NDF}$ :56.9/19

All: 384.520+/-98.194  $\chi^2/\text{NDF}$ : 93.0/37

asym\_sam\_12345678\_avg\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 524.078+/-0.097  $\chi^2/\text{NDF}$ :1095810.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 516.305+/-0.099  $\chi^2/\text{NDF}$ :1013350.1/17

Left: 520.250+/-0.069  $\chi^2/\text{NDF}$ : 2112293.6/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

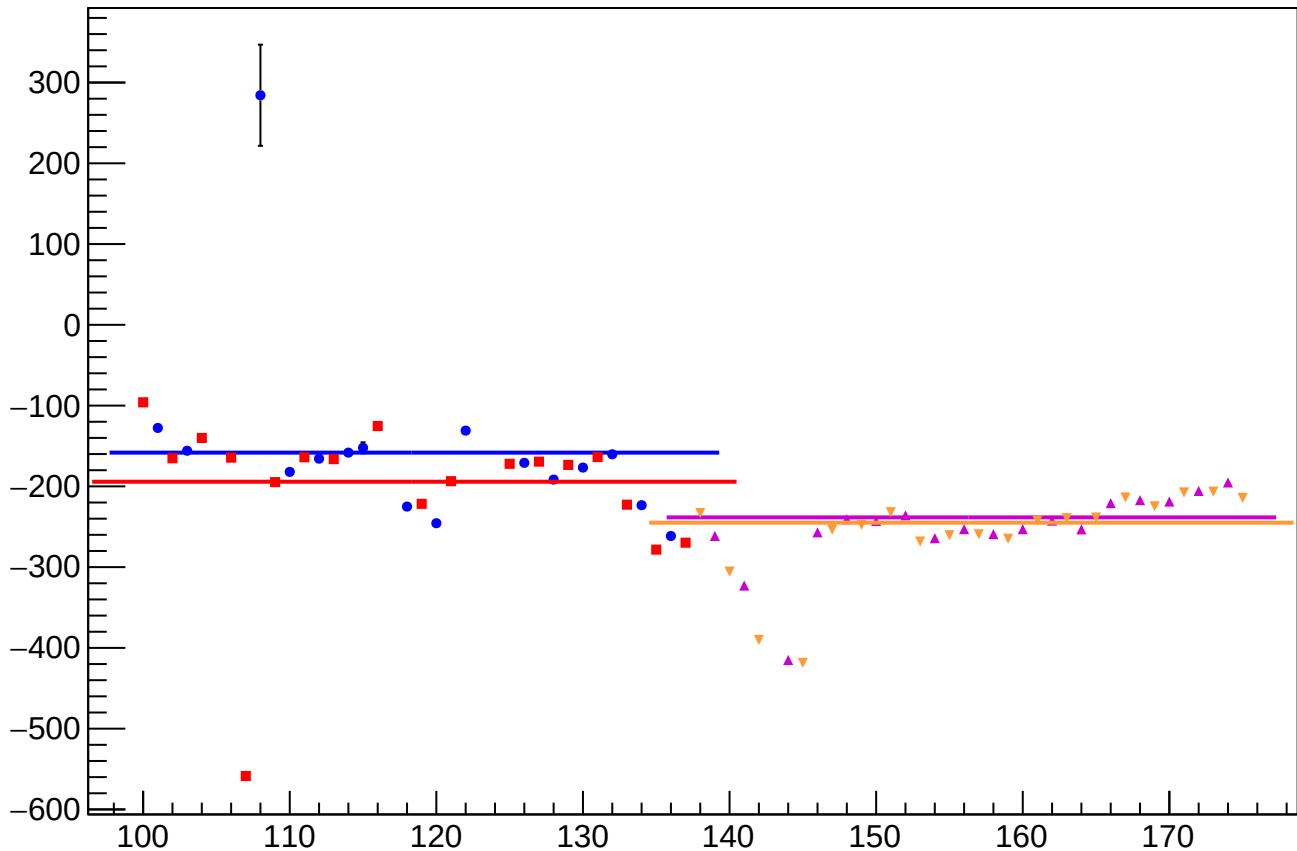
In: 516.305+/-0.099  $\chi^2/\text{NDF}$ :1013350.1/17

Out: 524.078+/-0.097  $\chi^2/\text{NDF}$ :1095810.9/19

All: 520.250+/-0.069  $\chi^2/\text{NDF}$ : 2112293.6/37



# dit\_usl\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-158.222 \pm 0.000$   $\chi^2/\text{NDF}: 117166.2/15$

Left Out:  $-244.959 \pm 0.126$   $\chi^2/\text{NDF}: 59829.9/18$

Right Out:  $-194.268 \pm 0.165$   $\chi^2/\text{NDF}: 176560.4/17$

Left In:  $-238.416 \pm 0.119$   $\chi^2/\text{NDF}: 97190.6/17$

Left:  $-241.501 \pm 0.087$   $\chi^2/\text{NDF}: 158440.7/36$

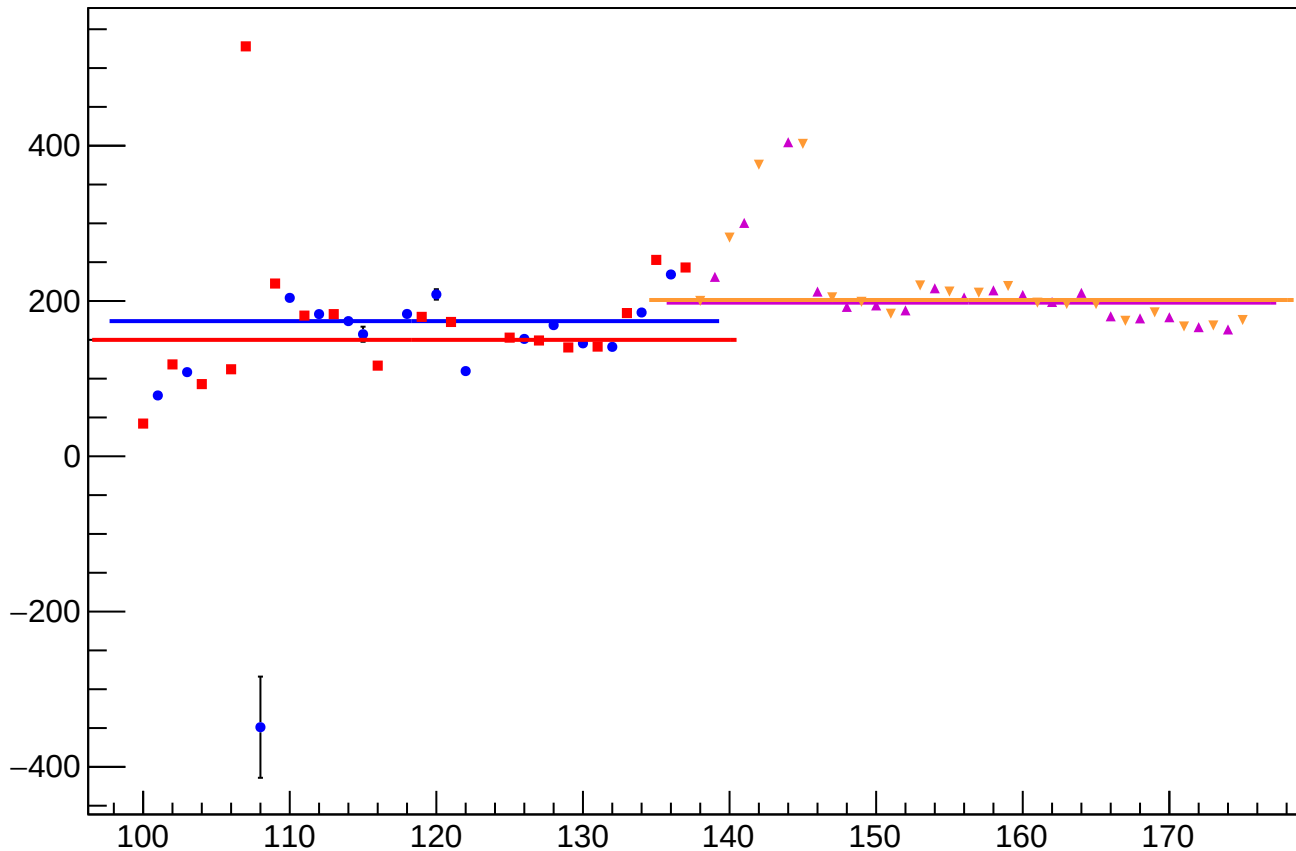
Right:  $-158.222 \pm 0.000$   $\chi^2/\text{NDF}: 341369.6/33$

In:  $-158.222 \pm 0.000$   $\chi^2/\text{NDF}: 666653.0/33$

Out:  $-226.266 \pm 0.100$   $\chi^2/\text{NDF}: 295865.1/36$

All:  $-158.222 \pm 0.000$   $\chi^2/\text{NDF}: 1422889.0/70$

# dit\_usl\_4eX\_slope vs Slug, Sign Corrected



Right In: 174.085+/-0.000  $\chi^2/\text{NDF}$ : 53377.4/15

Left Out: 201.298+/-0.126  $\chi^2/\text{NDF}$ : 59317.8/18

Right Out: 149.948+/-0.196  $\chi^2/\text{NDF}$ : 167846.4/17

Left In: 197.871+/-0.121  $\chi^2/\text{NDF}$ : 100411.6/17

Left: 199.514+/-0.087  $\chi^2/\text{NDF}$ : 160115.8/36

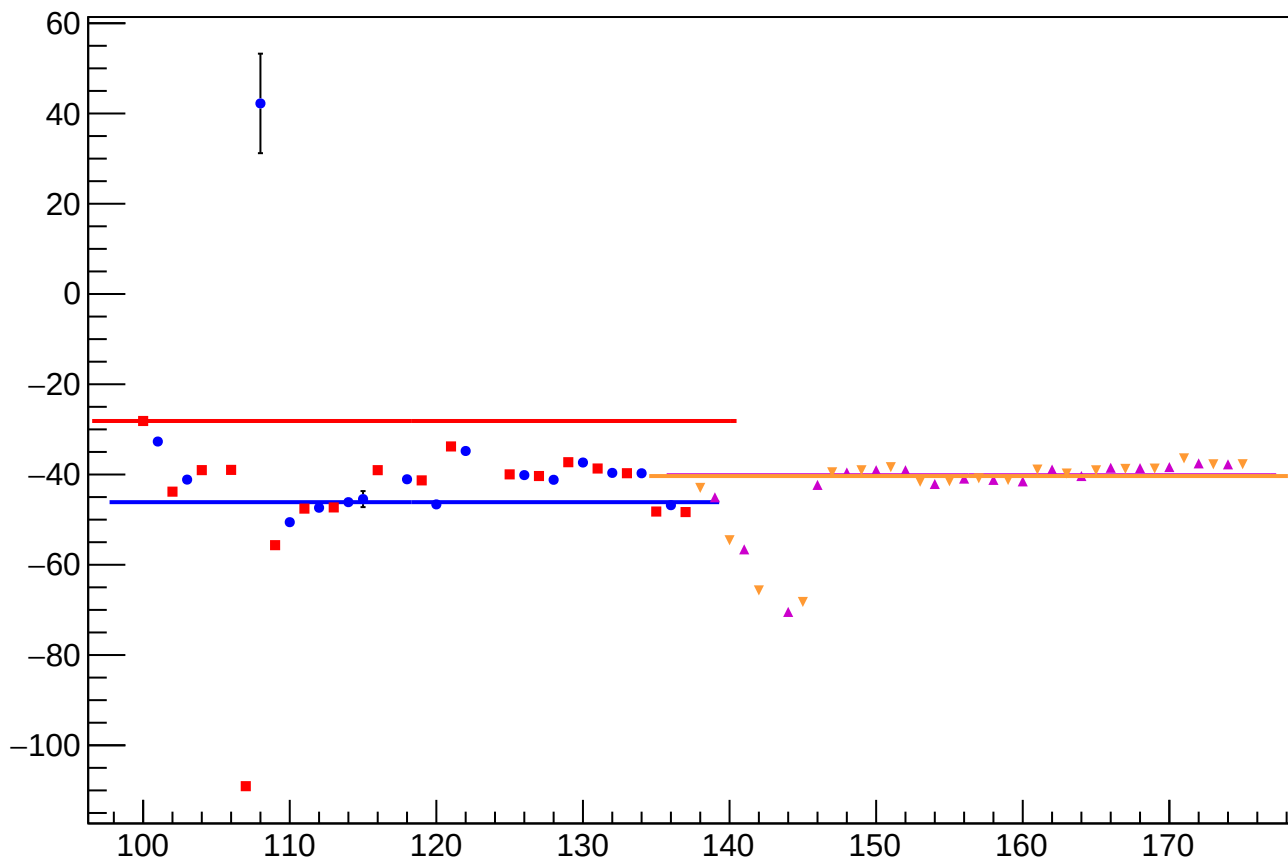
Right: 174.085+/-0.000  $\chi^2/\text{NDF}$ : 236460.5/33

In: 174.085+/-0.000  $\chi^2/\text{NDF}$ : 192599.5/33

Out: 186.273+/-0.106  $\chi^2/\text{NDF}$ : 275947.6/36

All: 174.085+/-0.000  $\chi^2/\text{NDF}$ : 481826.2/70

# dit\_usl\_11X12X\_slope vs Slug, Sign Corrected



Right In: -46.126 $\pm$ 0.000  $\chi^2$ /NDF: 201273.7/15

Left Out: -40.341 $\pm$ 0.007  $\chi^2$ /NDF:138069.9/18

Right Out: -28.139 $\pm$ 0.000  $\chi^2$ /NDF: 746939.9/17

Left In: -40.158 $\pm$ 0.008  $\chi^2$ /NDF:191798.6/17

Left: -40.260 $\pm$ 0.005  $\chi^2$ /NDF: 330176.3/36

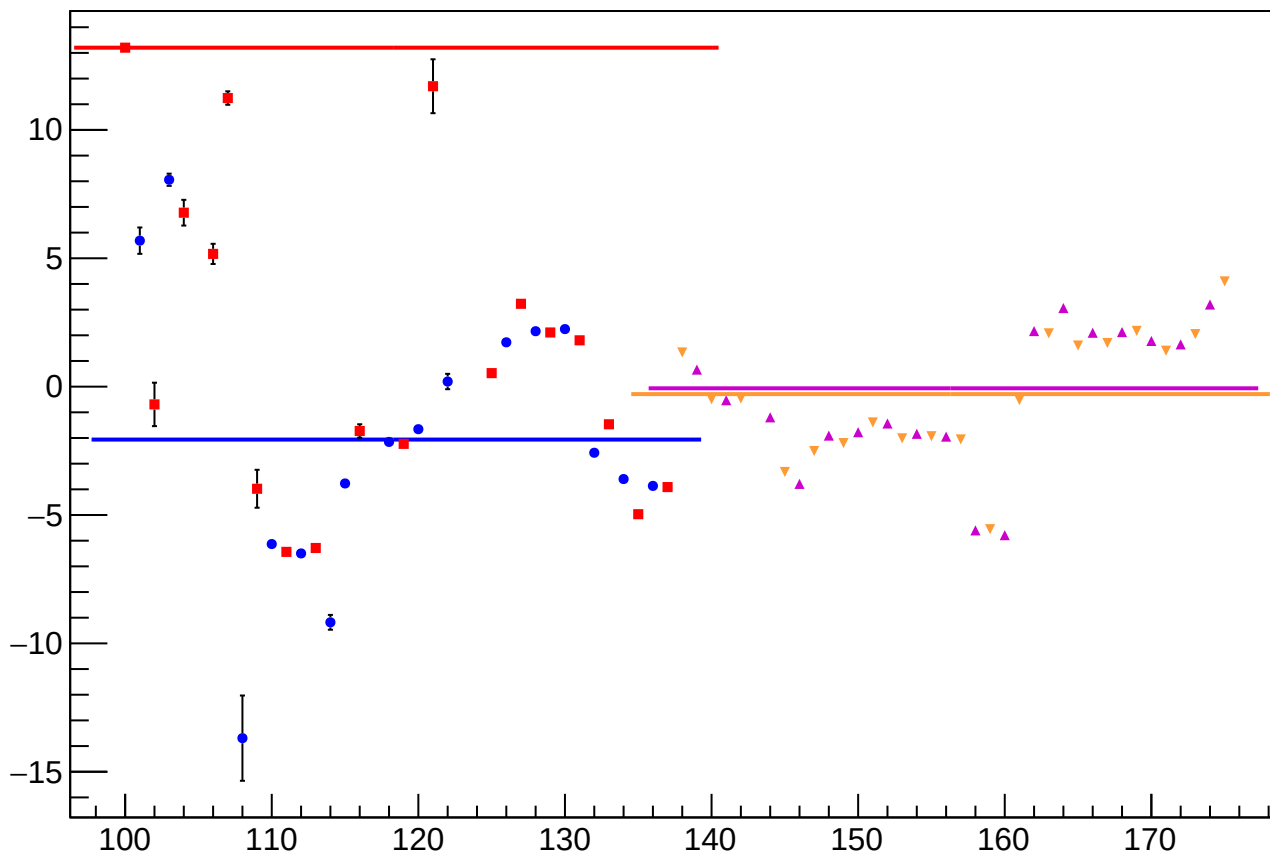
Right: -39.778 $\pm$ 0.000  $\chi^2$ /NDF: 248795993231659

In: -46.126 $\pm$ 0.000  $\chi^2$ /NDF:977762.4/33

Out: -28.139 $\pm$ 0.000  $\chi^2$ /NDF:3961362.4/36

All: -39.778 $\pm$ 0.000  $\chi^2$ /NDF: 248795993231

# dit\_usl\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-2.061 \pm 0.018$   $\chi^2/\text{NDF}$ : 25665.1/15

Left Out:  $-0.290 \pm 0.007$   $\chi^2/\text{NDF}$ : 150420.9/18

Right Out:  $13.204 \pm 0.000$   $\chi^2/\text{NDF}$ : 509721.0/17

Left In:  $-0.064 \pm 0.006$   $\chi^2/\text{NDF}$ : 249713.6/17

Left:  $-0.151 \pm 0.004$   $\chi^2/\text{NDF}$ : 400764.8/36

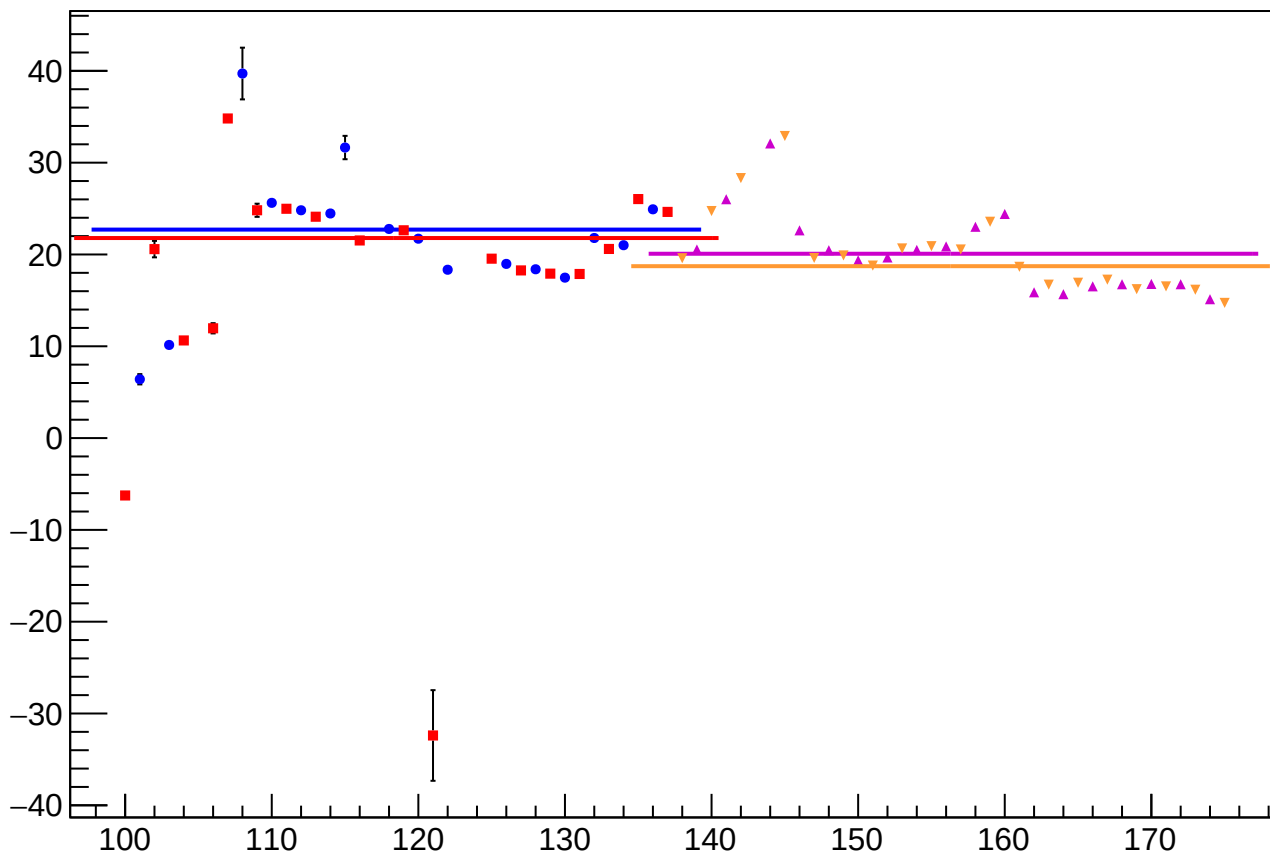
Right:  $13.204 \pm 0.000$   $\chi^2/\text{NDF}$ : 1268800.5/33

In:  $-0.242 \pm 0.005$   $\chi^2/\text{NDF}$ : 286808.1/33

Out:  $13.204 \pm 0.000$   $\chi^2/\text{NDF}$ : 4302152.7/36

All:  $13.204 \pm 0.000$   $\chi^2/\text{NDF}$ : 10972661.1/70

# dit\_usl\_4eY\_slope vs Slug, Sign Corrected



Right In:  $22.711 \pm 0.019$   $\chi^2/\text{NDF}$ : 22767.9/15

Left Out:  $18.725 \pm 0.008$   $\chi^2/\text{NDF}$ : 104183.1/18

Right Out:  $21.790 \pm 0.022$   $\chi^2/\text{NDF}$ : 26670.9/17

Left In:  $20.079 \pm 0.008$   $\chi^2/\text{NDF}$ : 135521.3/17

Left:  $19.446 \pm 0.006$   $\chi^2/\text{NDF}$ : 253884.6/36

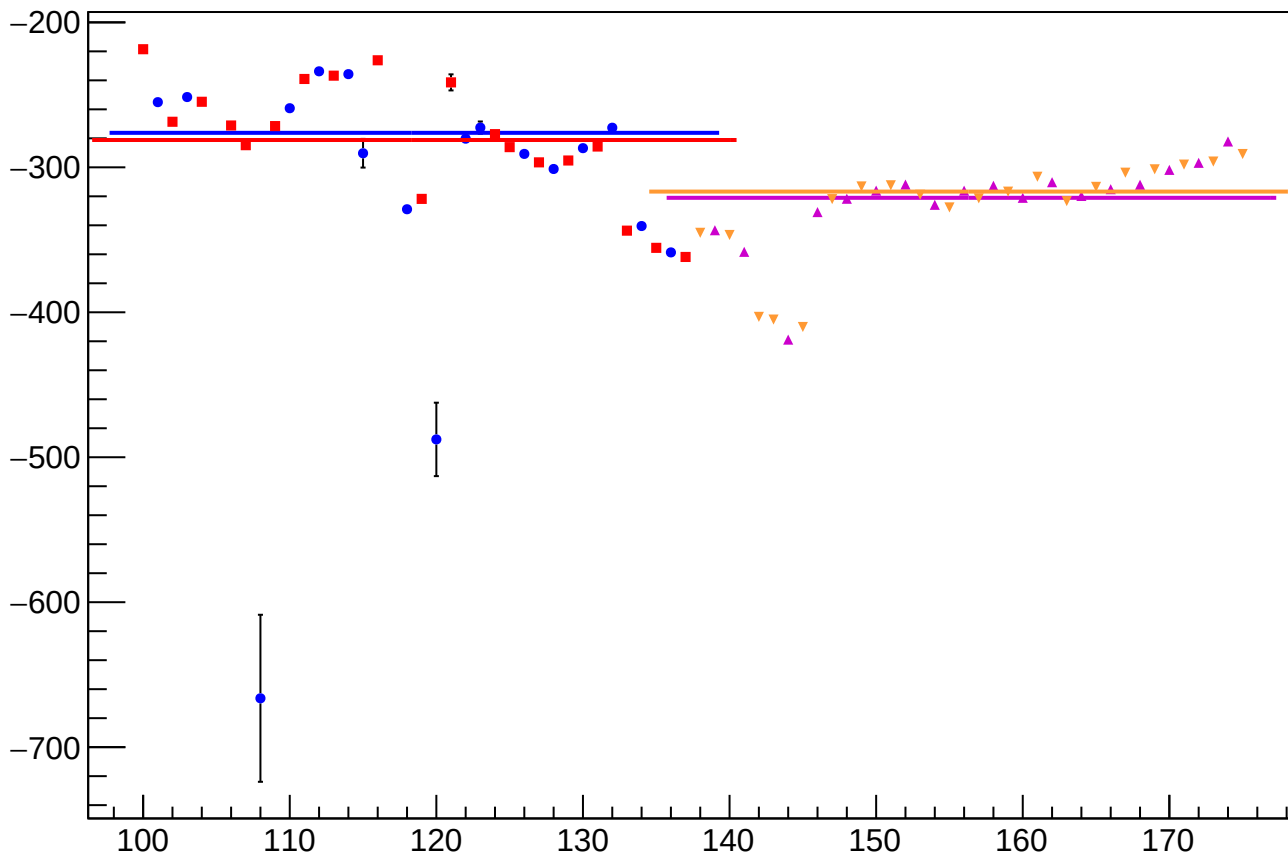
Right:  $22.313 \pm 0.014$   $\chi^2/\text{NDF}$ : 50478.1/33

In:  $20.465 \pm 0.007$   $\chi^2/\text{NDF}$ : 175087.6/33

Out:  $19.122 \pm 0.008$   $\chi^2/\text{NDF}$ : 148515.8/36

All:  $19.844 \pm 0.005$   $\chi^2/\text{NDF}$ : 339776.1/70

# dit\_usr\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-276.201 \pm 0.167$   $\chi^2/\text{NDF}$ : 58107.7/16

Left Out:  $-316.731 \pm 0.108$   $\chi^2/\text{NDF}$ : 47864.2/19

Right Out:  $-281.150 \pm 0.148$   $\chi^2/\text{NDF}$ : 77611.5/18

Left In:  $-321.031 \pm 0.104$   $\chi^2/\text{NDF}$ : 54448.6/17

Left:  $-318.964 \pm 0.075$   $\chi^2/\text{NDF}$ : 103137.8/37

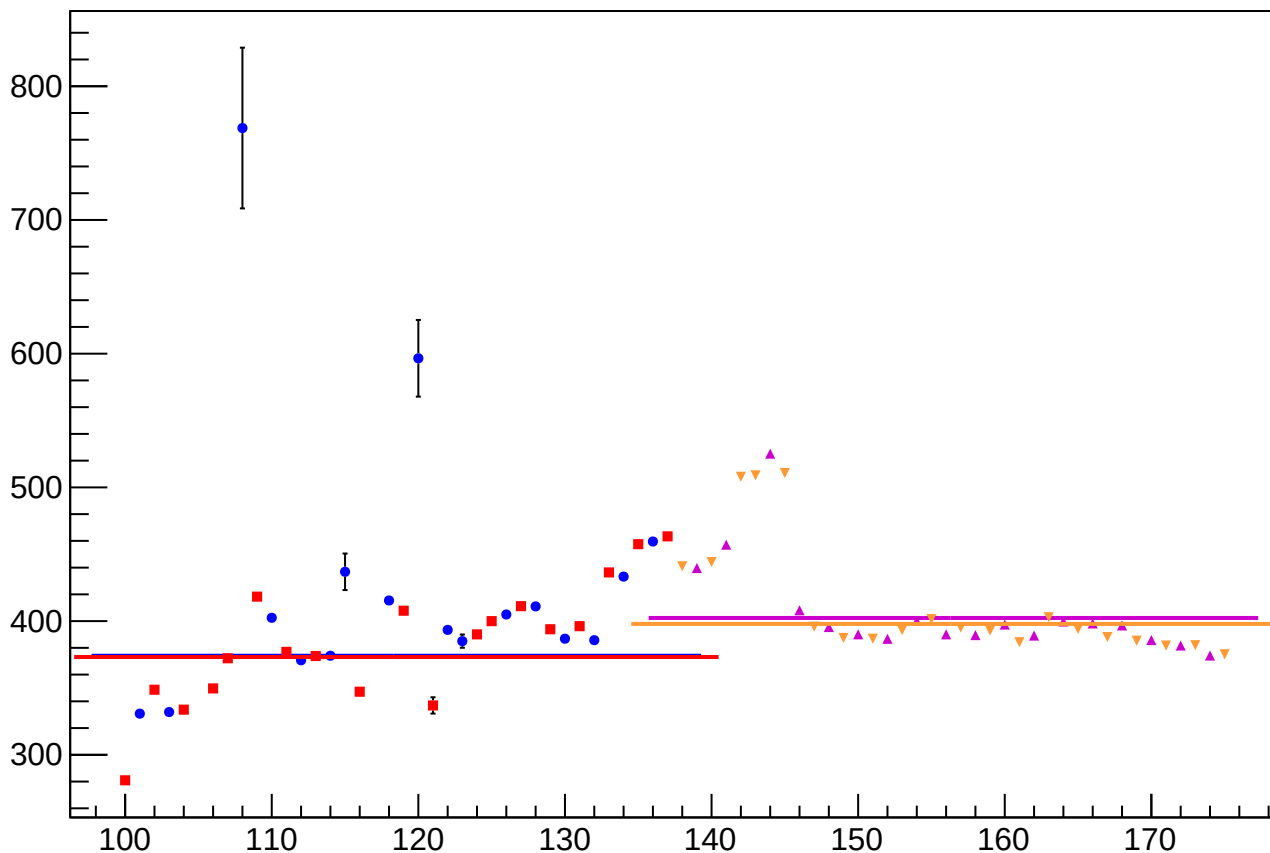
Right:  $-278.974 \pm 0.110$   $\chi^2/\text{NDF}$ : 136213.7/35

In:  $-308.486 \pm 0.088$   $\chi^2/\text{NDF}$ : 164723.4/34

Out:  $-304.334 \pm 0.087$   $\chi^2/\text{NDF}$ : 163363.5/38

All:  $-306.386 \pm 0.062$   $\chi^2/\text{NDF}$ : 329210.1/73

# dit\_usr\_4eX\_slope vs Slug, Sign Corrected



Right In: 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 35072.0/16

Left Out: 397.888 $\pm$ 0.109  $\chi^2$ /NDF:64482.1/19

Right Out: 373.134 $\pm$ 0.158  $\chi^2$ /NDF: 108219.4/18

Left In: 402.347 $\pm$ 0.106  $\chi^2$ /NDF:71695.8/17

Left: 400.183 $\pm$ 0.076  $\chi^2$ /NDF: 137043.5/37

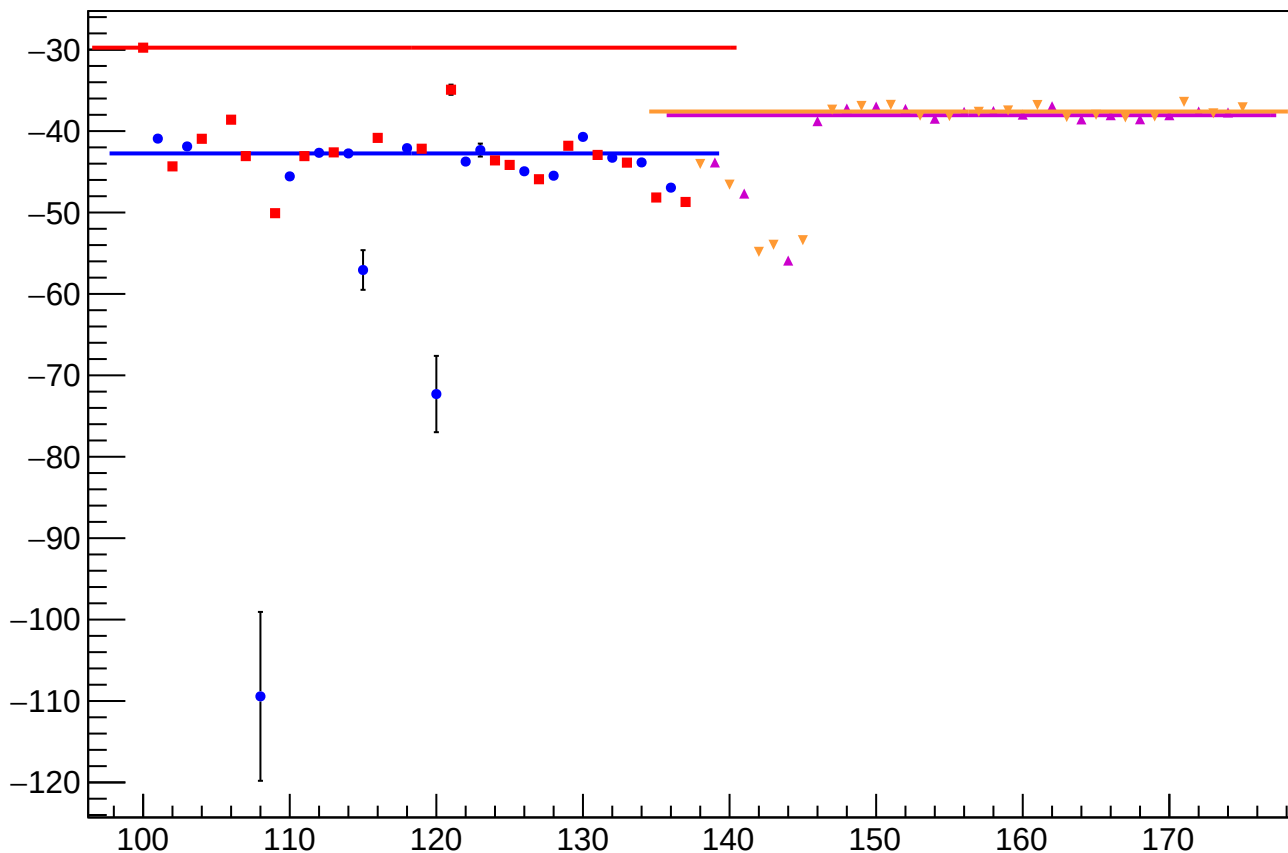
Right: 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 143328.3/35

In: 374.094 $\pm$ 0.000  $\chi^2$ /NDF:178368.4/34

Out: 389.931 $\pm$ 0.090  $\chi^2$ /NDF:189367.9/38

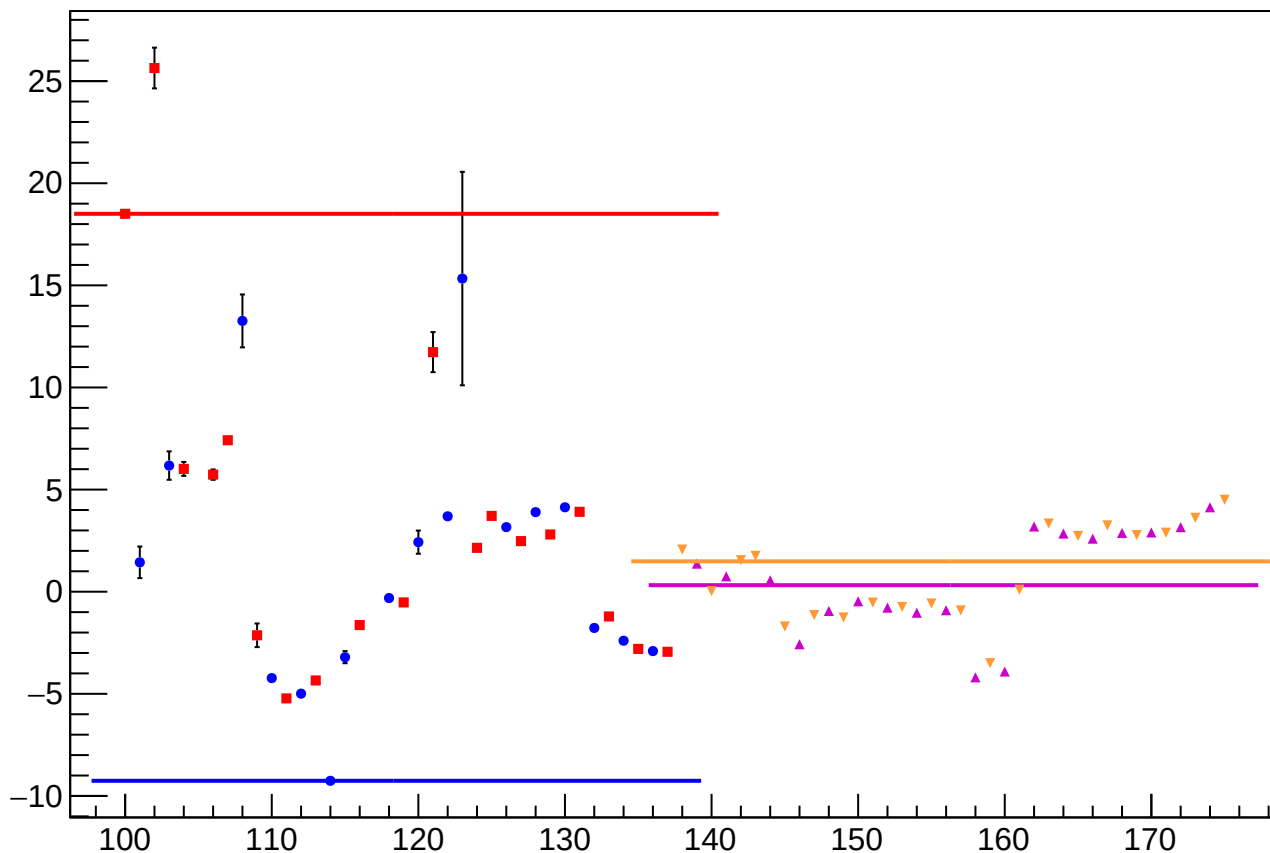
All: 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 399011.4/73

# dit\_usr\_11X12X\_slope vs Slug, Sign Corrected





# dit\_usr\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-9.259 \pm 0.000$   $\chi^2/\text{NDF}: 405850.5/16$

Left Out:  $1.488 \pm 0.005$   $\chi^2/\text{NDF}: 193135.7/19$

Right Out:  $18.504 \pm 0.000$   $\chi^2/\text{NDF}: 7366781.0/18$

Left In:  $0.320 \pm 0.006$   $\chi^2/\text{NDF}: 163435.4/17$

Left:  $0.985 \pm 0.004$   $\chi^2/\text{NDF}: 376827.9/37$

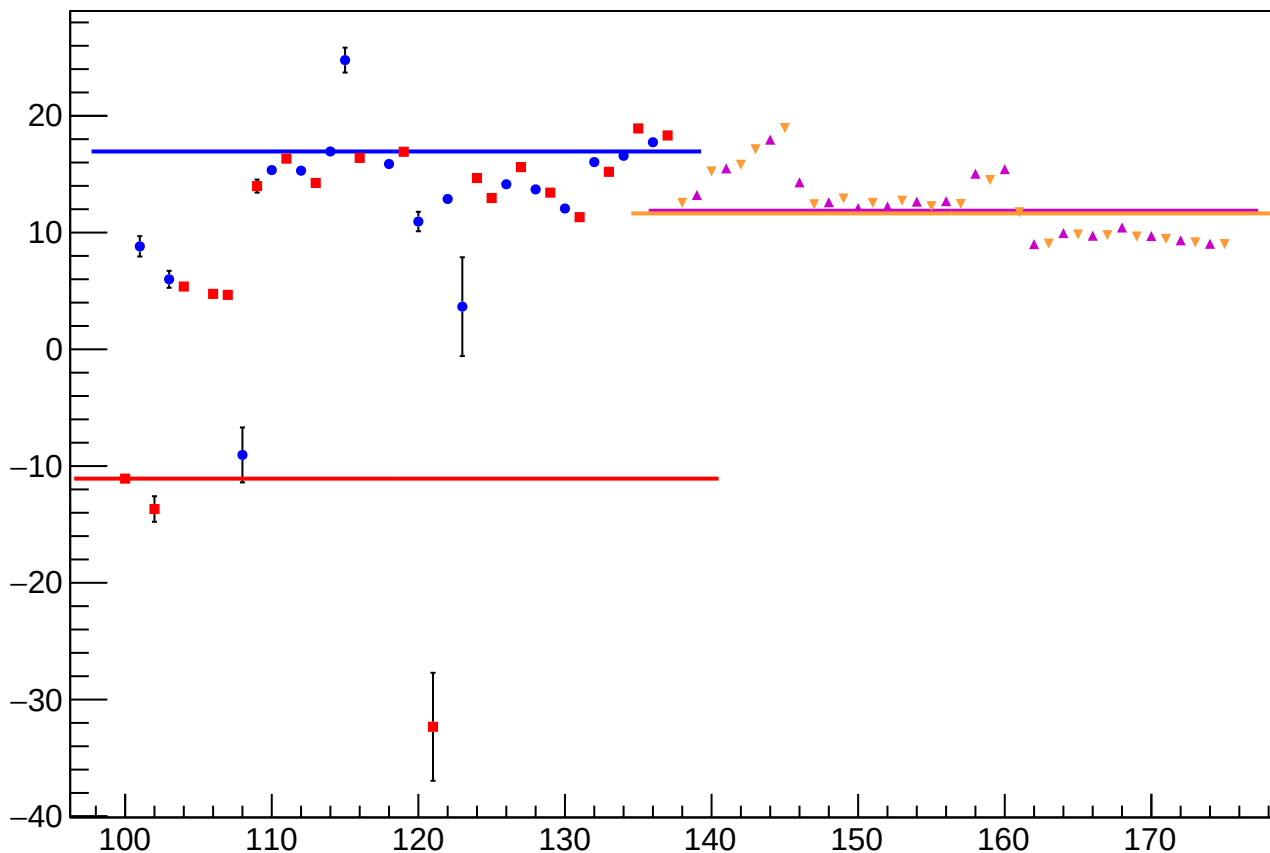
Right:  $6.039 \pm 0.000$   $\chi^2/\text{NDF}: 16450574505955581$

In:  $-9.259 \pm 0.000$   $\chi^2/\text{NDF}: 2965902.7/34$

Out:  $18.504 \pm 0.000$   $\chi^2/\text{NDF}: 17560948.4/38$

All:  $6.039 \pm 0.000$   $\chi^2/\text{NDF}: 16450574505955581$

# dit\_usr\_4eY\_slope vs Slug, Sign Corrected



Right In:  $16.947 \pm 0.000$   $\chi^2/\text{NDF}: 11231.8/16$

Left Out:  $11.641 \pm 0.008$   $\chi^2/\text{NDF}: 73314.0/19$

Right Out:  $-11.075 \pm 0.000$   $\chi^2/\text{NDF}: 2712010.0/18$

Left In:  $11.869 \pm 0.009$   $\chi^2/\text{NDF}: 65135.7/17$

Left:  $11.742 \pm 0.006$   $\chi^2/\text{NDF}: 138849.5/37$

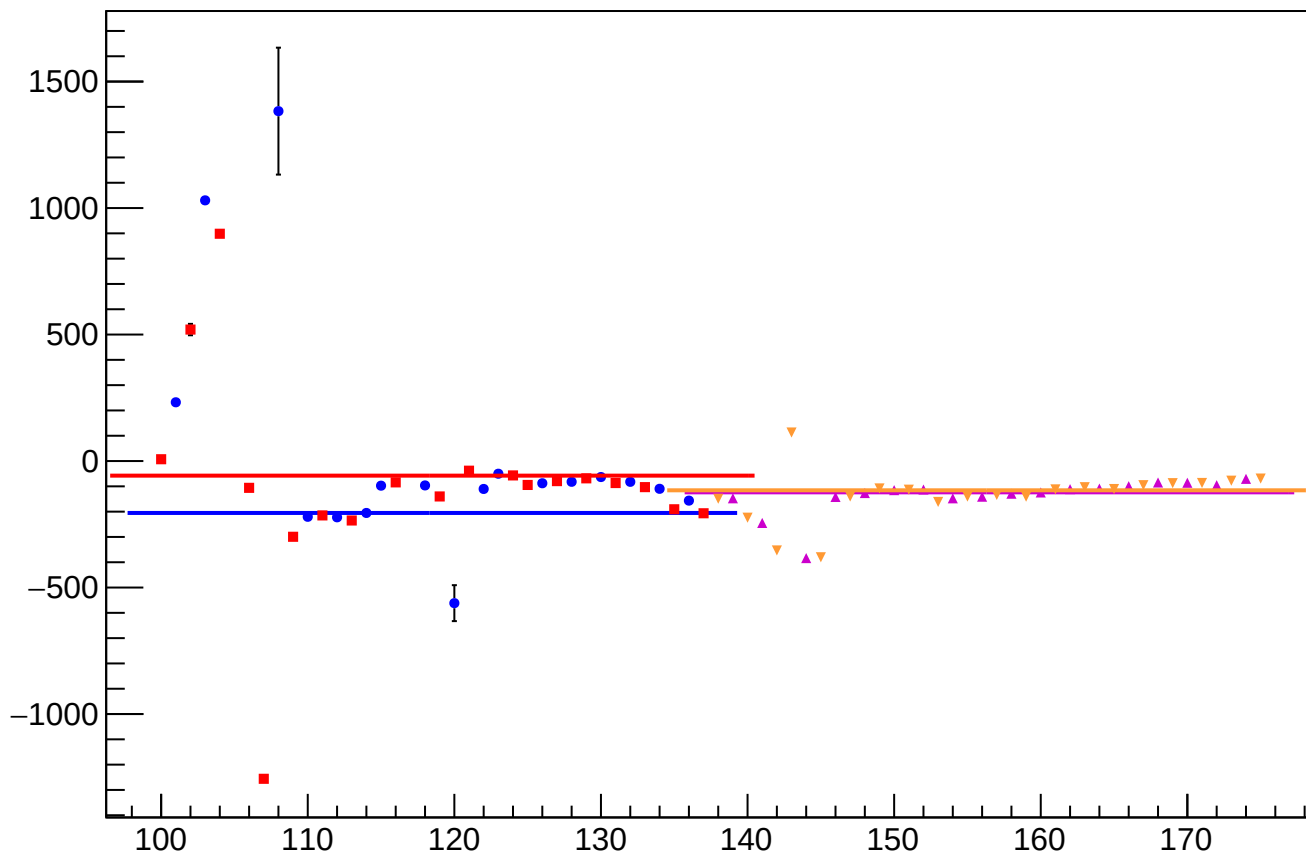
Right:  $-2.268 \pm 0.000$   $\chi^2/\text{NDF}: 4692527454635666$

In:  $16.947 \pm 0.000$   $\chi^2/\text{NDF}: 432232.9/34$

Out:  $-11.075 \pm 0.000$   $\chi^2/\text{NDF}: 11692018.7/38$

All:  $-2.268 \pm 0.000$   $\chi^2/\text{NDF}: 4692527454635$

# dit\_atl1\_4aX\_slope vs Slug, Sign Corrected



Right In: -205.160+/-0.000  $\chi^2/\text{NDF}$ : 582775.6/16

Left Out: -115.660+/-0.207  $\chi^2/\text{NDF}$ : 55634.8/19

Right Out: -57.684+/-0.283  $\chi^2/\text{NDF}$ : 114854.9/18

Left In: -123.712+/-0.241  $\chi^2/\text{NDF}$ : 59601.7/17

Left: -119.082+/-0.157  $\chi^2/\text{NDF}$ : 115877.7/37

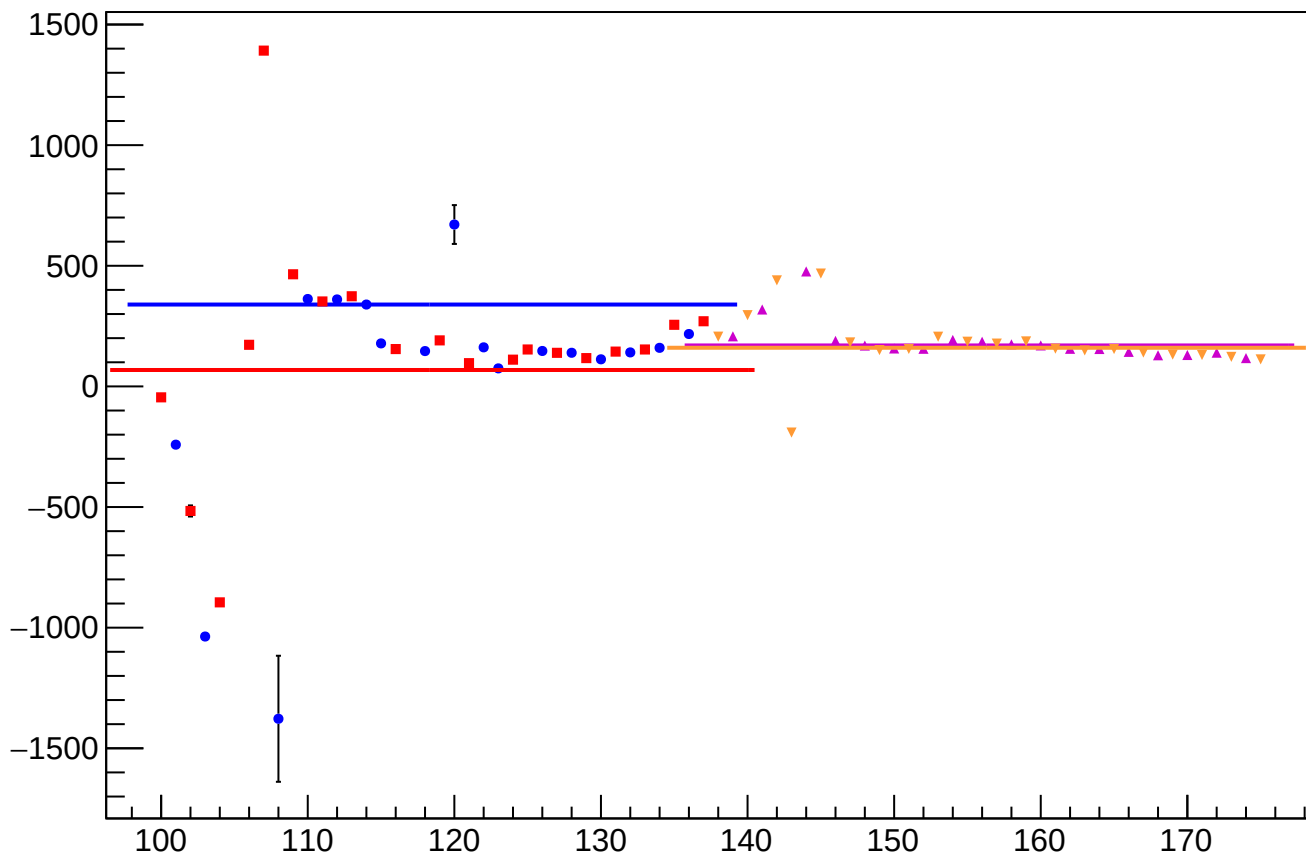
Right: -205.160+/-0.000  $\chi^2/\text{NDF}$ : 968522.3/35

In: -205.160+/-0.000  $\chi^2/\text{NDF}$ : 756465.7/34

Out: -95.444+/-0.167  $\chi^2/\text{NDF}$ : 197756.0/38

All: -205.160+/-0.000  $\chi^2/\text{NDF}$ : 1384200.2/73

# dit\_atl1\_4eX\_slope vs Slug, Sign Corrected



Right In: 339.325+/-0.000  $\chi^2/\text{NDF}$ : 1030606.3/16

Left Out: 160.174+/-0.212  $\chi^2/\text{NDF}$ : 89969.6/19

Right Out: 68.024+/-0.286  $\chi^2/\text{NDF}$ : 272330.9/18

Left In: 169.776+/-0.246  $\chi^2/\text{NDF}$ : 65139.0/17

Left: 164.259+/-0.161  $\chi^2/\text{NDF}$ : 155981.7/37

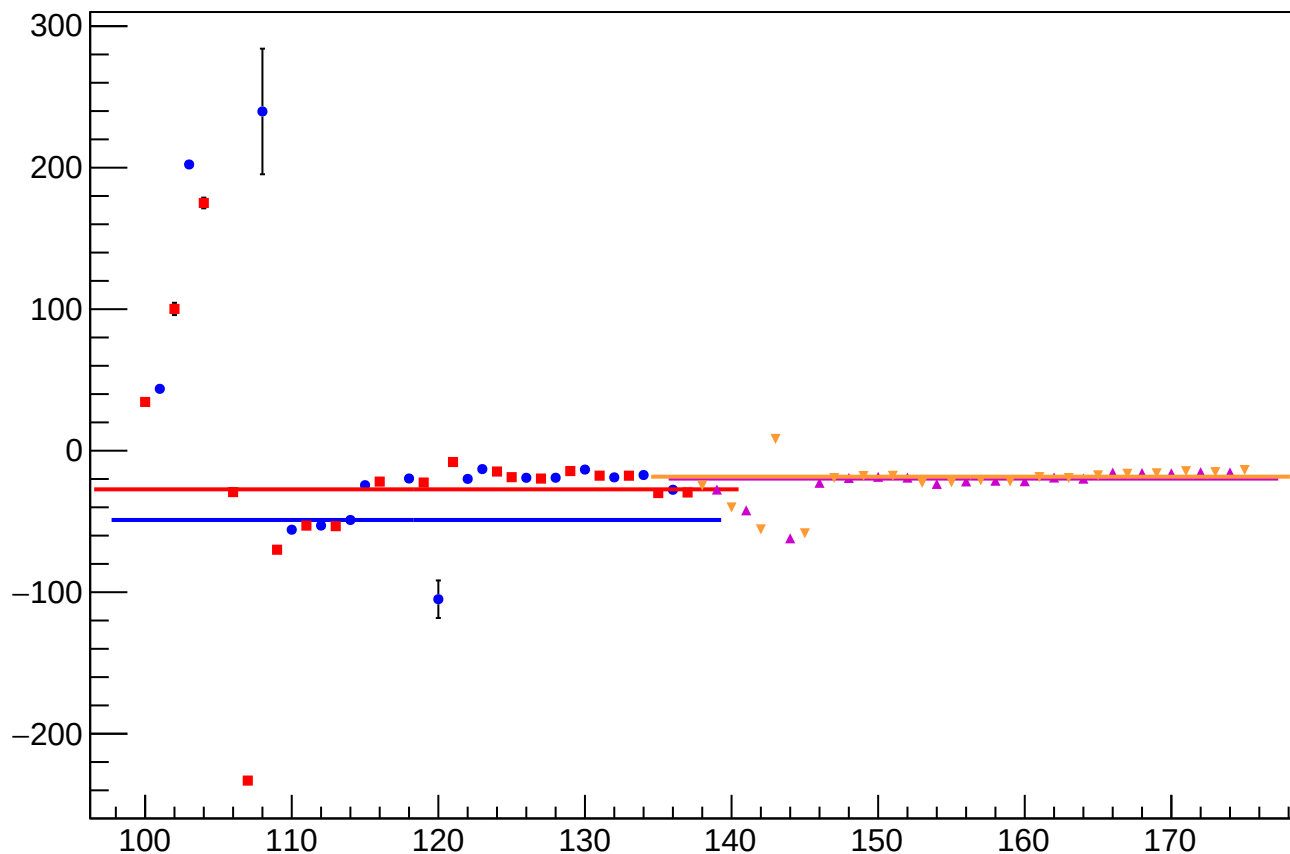
Right: 339.325+/-0.000  $\chi^2/\text{NDF}$ : 2202286.8/35

In: 339.325+/-0.000  $\chi^2/\text{NDF}$ : 1569603.0/34

Out: 127.515+/-0.170  $\chi^2/\text{NDF}$ : 429284.7/38

All: 339.325+/-0.000  $\chi^2/\text{NDF}$ : 3545608.8/73

# dit\_atl1\_11X12X\_slope vs Slug, Sign Corrected



Right In: -48.945 $\pm$ 0.000  $\chi^2$ /NDF: 5408370.4/16

Left Out: -18.356 $\pm$ 0.011  $\chi^2$ /NDF: 588294.9/19

Right Out: -27.303 $\pm$ 0.052  $\chi^2$ /NDF: 167879.9/18

Left In: -19.709 $\pm$ 0.014  $\chi^2$ /NDF: 165687.0/17

Left: -18.889 $\pm$ 0.009  $\chi^2$ /NDF: 759597.9/37

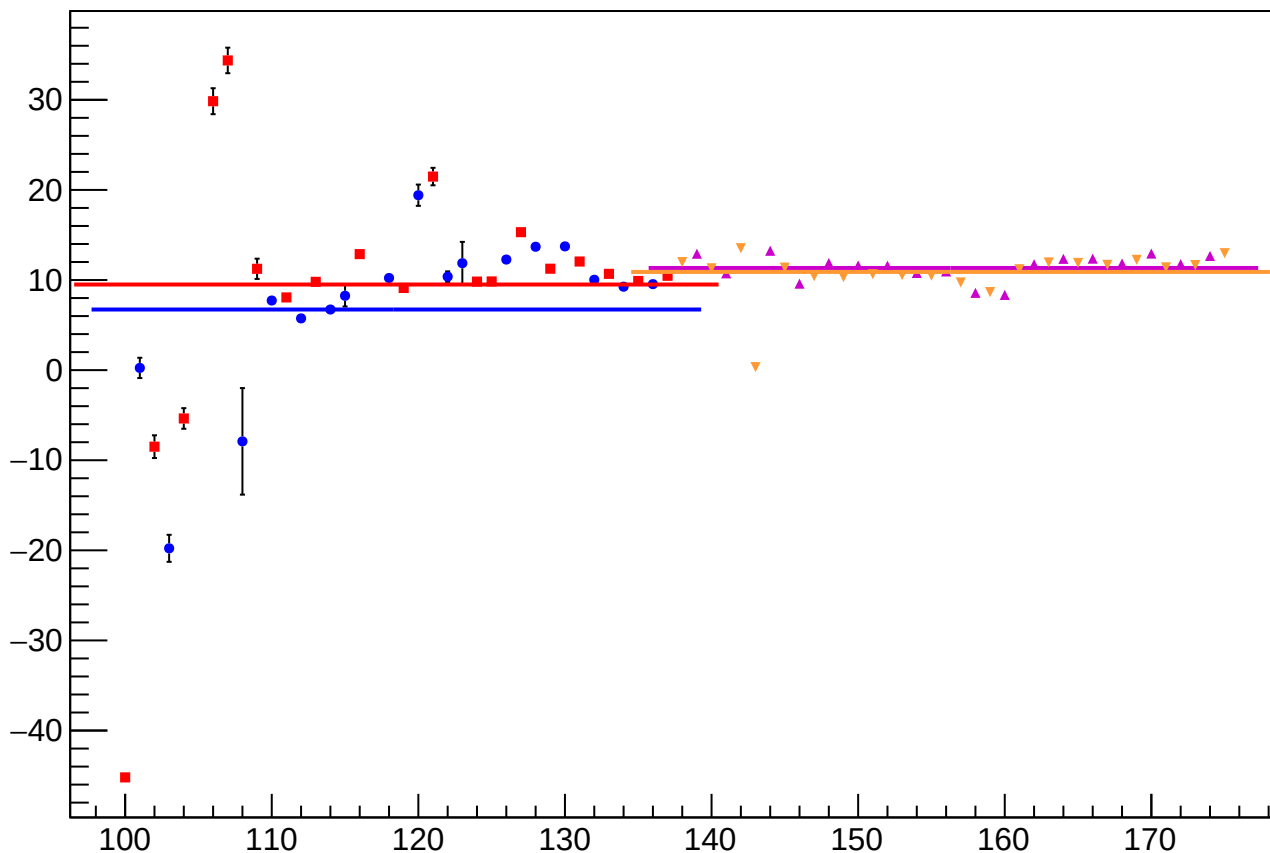
Right: -48.945 $\pm$ 0.000  $\chi^2$ /NDF: 5751523.0/35

In: -48.945 $\pm$ 0.000  $\chi^2$ /NDF: 9898125.7/34

Out: -18.766 $\pm$ 0.011  $\chi^2$ /NDF: 784758.0/38

All: -48.945 $\pm$ 0.000  $\chi^2$ /NDF: 18119514.6/73

# dit\_atl1\_4aY\_slope vs Slug, Sign Corrected



Right In:  $6.728 \pm 0.000$   $\chi^2/\text{NDF}$ : 13749.2/16

Left Out:  $10.899 \pm 0.014$   $\chi^2/\text{NDF}$ : 27766.3/19

Right Out:  $9.502 \pm 0.036$   $\chi^2/\text{NDF}$ : 26822.1/18

Left In:  $11.339 \pm 0.012$   $\chi^2/\text{NDF}$ : 13011.3/17

Left:  $11.152 \pm 0.009$   $\chi^2/\text{NDF}$ : 41354.3/37

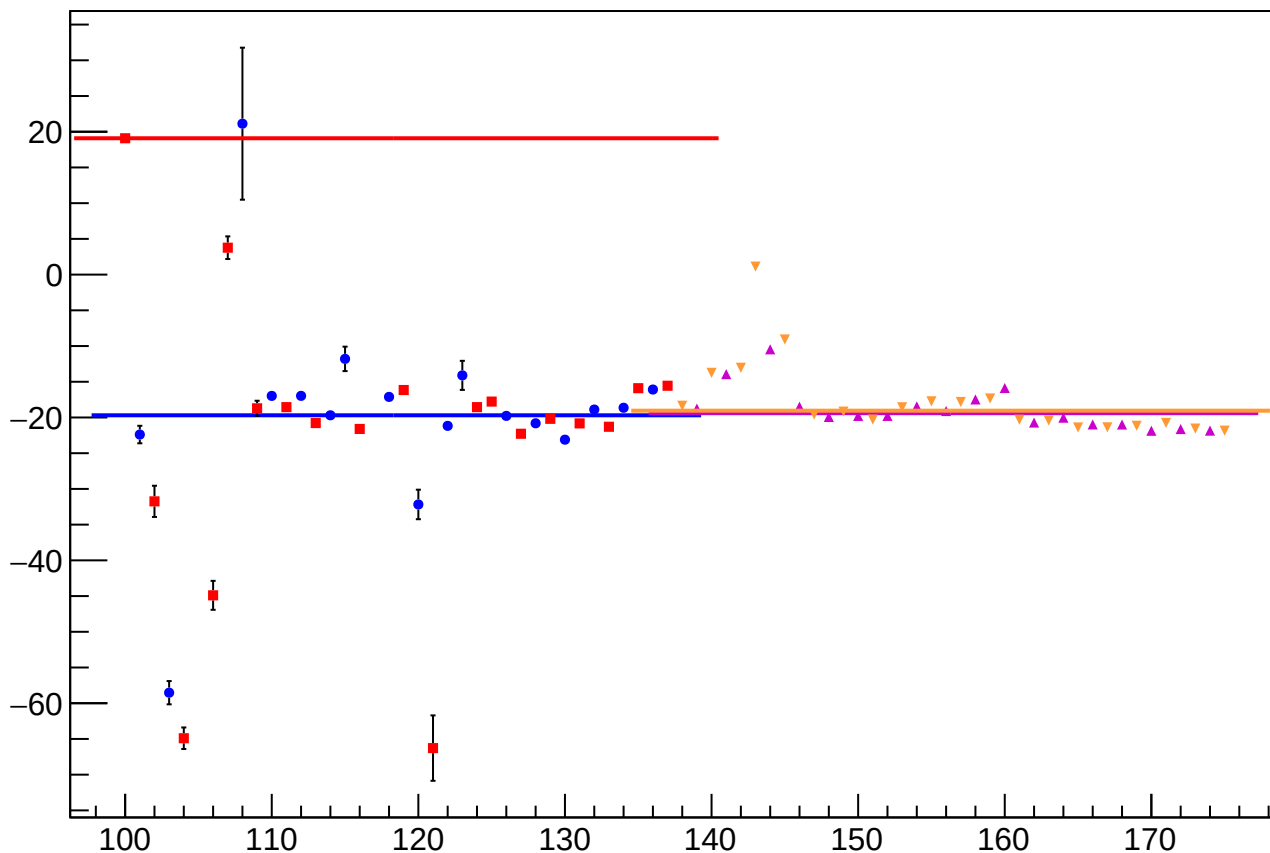
Right:  $6.728 \pm 0.000$   $\chi^2/\text{NDF}$ : 46635.2/35

In:  $6.728 \pm 0.000$   $\chi^2/\text{NDF}$ : 175913.2/34

Out:  $10.714 \pm 0.013$   $\chi^2/\text{NDF}$ : 55923.3/38

All:  $6.728 \pm 0.000$   $\chi^2/\text{NDF}$ : 326595.1/73

# dit\_atl1\_4eY\_slope vs Slug, Sign Corrected



Right In:  $-19.693 \pm 0.000$   $\chi^2/\text{NDF}$ : 7579.0/16

Left Out:  $-19.049 \pm 0.016$   $\chi^2/\text{NDF}$ : 52986.3/19

Right Out:  $19.086 \pm 0.000$   $\chi^2/\text{NDF}$ : 610746.9/18

Left In:  $-19.395 \pm 0.017$   $\chi^2/\text{NDF}$ : 15250.7/17

Left:  $-19.216 \pm 0.012$   $\chi^2/\text{NDF}$ : 68459.2/37

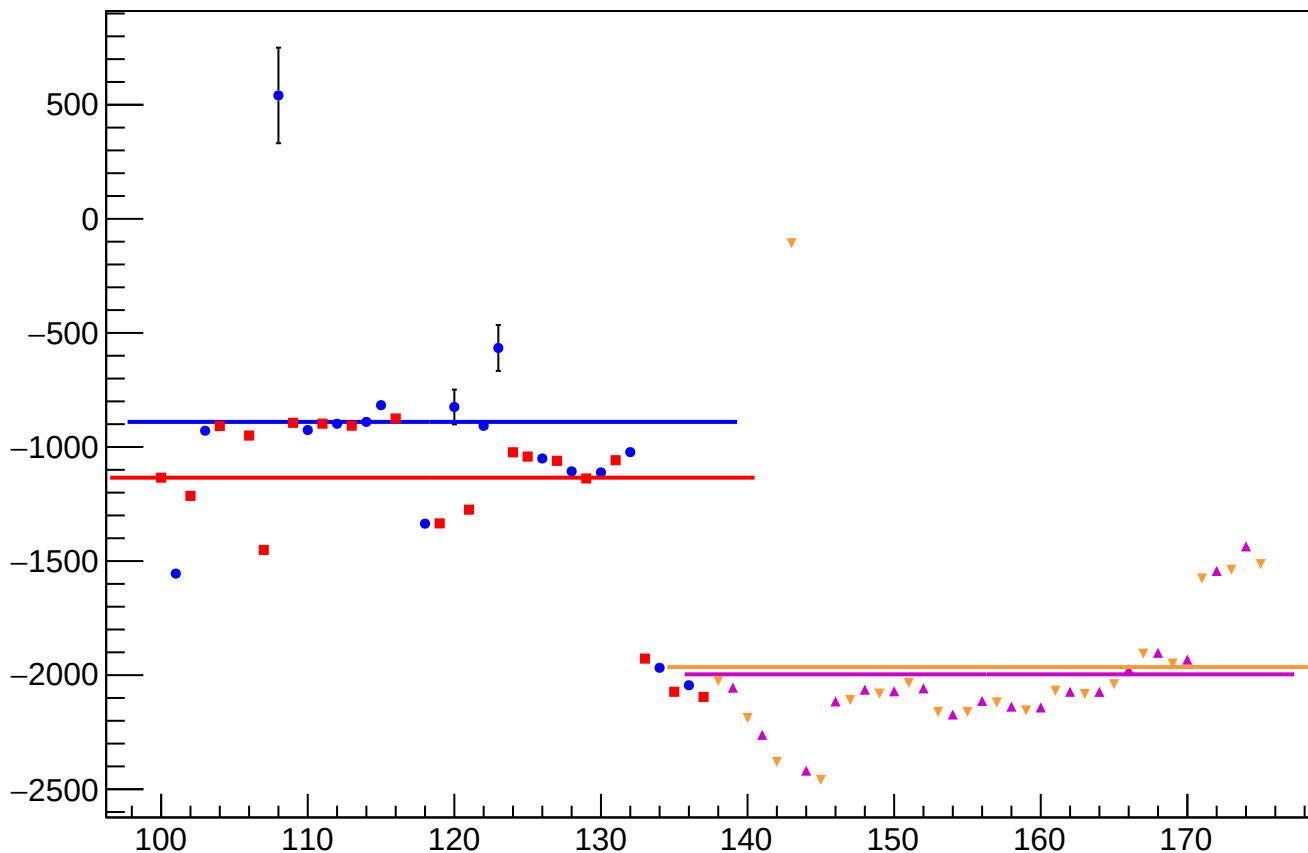
Right:  $-6.006 \pm 0.000$   $\chi^2/\text{NDF}$ : 4625637731292657

In:  $-19.693 \pm 0.000$   $\chi^2/\text{NDF}$ : 23150.2/34

Out:  $19.086 \pm 0.000$   $\chi^2/\text{NDF}$ : 6237630.4/38

All:  $-6.006 \pm 0.000$   $\chi^2/\text{NDF}$ : 4625637731292

# dit\_atl2\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-889.928 \pm 0.000$   $\chi^2/\text{NDF}: 775896.0/16$

Left Out:  $-1964.538 \pm 0.384$   $\chi^2/\text{NDF}: 560153.6/19$

Right Out:  $-1134.421 \pm 0.000$   $\chi^2/\text{NDF}: 733812.0/18$

Left In:  $-1996.473 \pm 0.403$   $\chi^2/\text{NDF}: 374284.6/17$

Left:  $-1979.747 \pm 0.278$   $\chi^2/\text{NDF}: 937724.4/37$

Right:  $-976.220 \pm 0.000$   $\chi^2/\text{NDF}: 44889787387498$

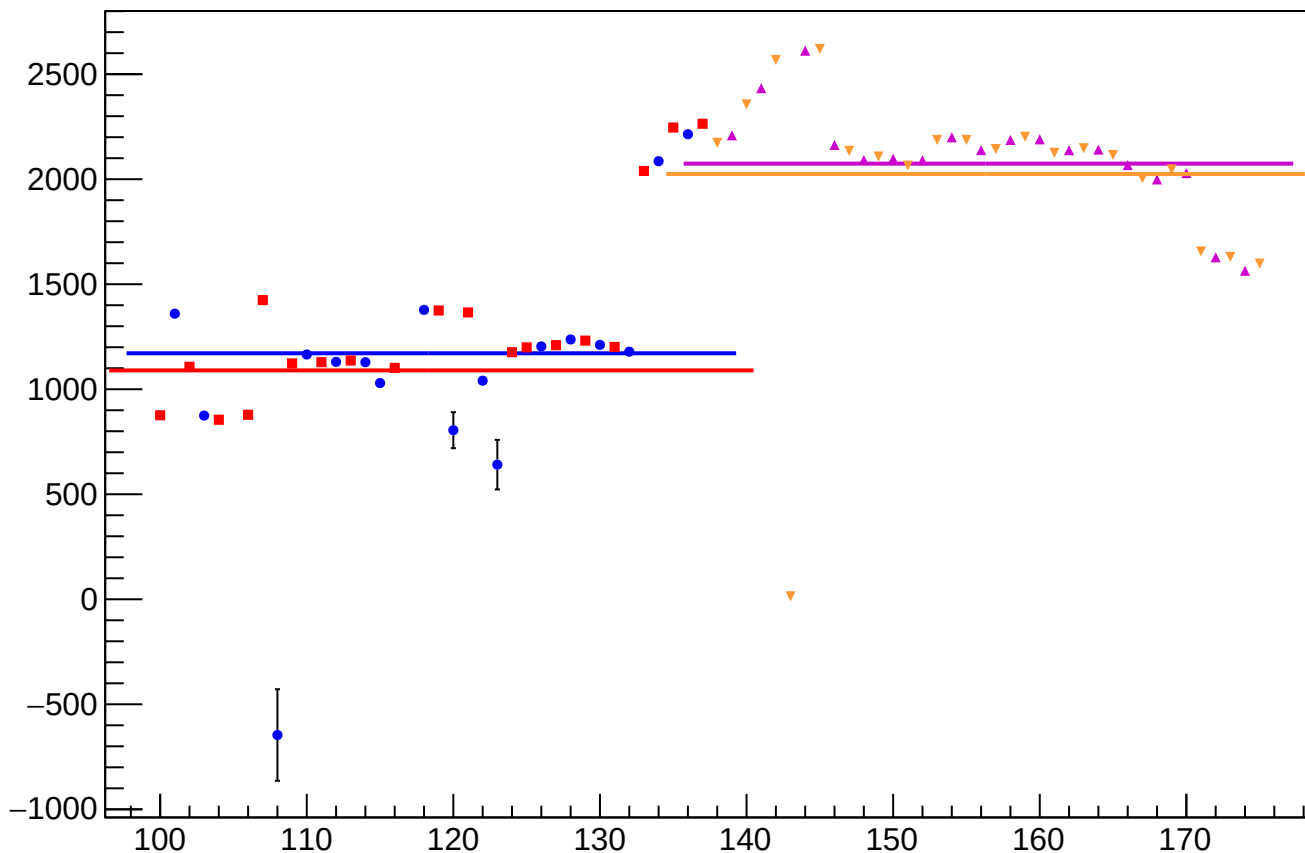
In:  $-889.928 \pm 0.000$   $\chi^2/\text{NDF}: 8683458.1/34$

Out:  $-1134.421 \pm 0.000$   $\chi^2/\text{NDF}: 5956450.1/38$

All:  $-976.220 \pm 0.000$   $\chi^2/\text{NDF}: 44889787387$



# dit\_atl2\_4eX\_slope vs Slug, Sign Corrected



Right In: 1171.188 $\pm$ 0.245  $\chi^2$ /NDF: 508989.2/16

Left Out: 2024.948 $\pm$ 0.383  $\chi^2$ /NDF: 566299.1/19

Right Out: 1089.705 $\pm$ 0.253  $\chi^2$ /NDF: 1100321.6/18

Left In: 2074.134 $\pm$ 0.408  $\chi^2$ /NDF: 318392.5/17

Left: 2047.968 $\pm$ 0.279  $\chi^2$ /NDF: 892429.2/37

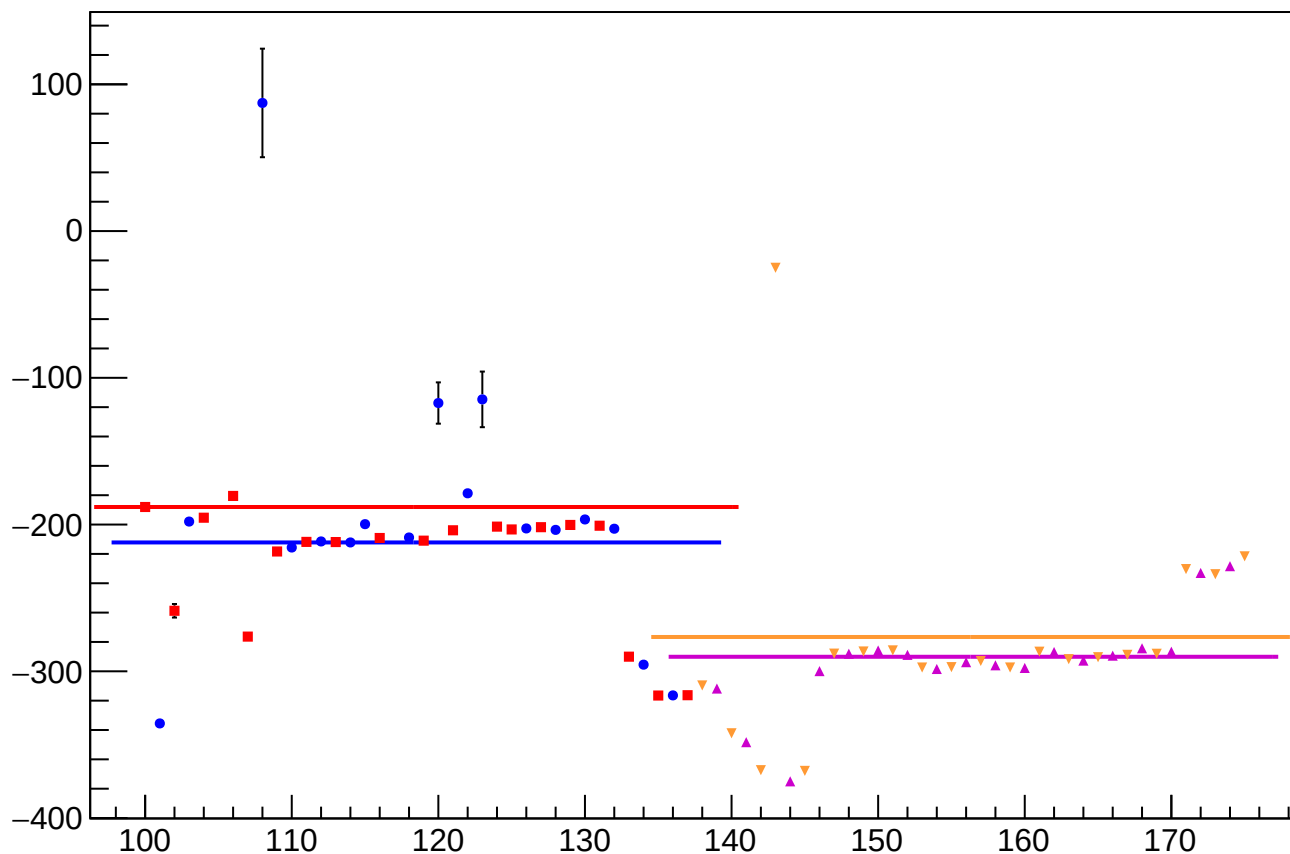
Right: 1131.764 $\pm$ 0.176  $\chi^2$ /NDF: 1662665.0/35

In: 1411.161 $\pm$ 0.210  $\chi^2$ /NDF: 4426289.9/34

Out: 1375.001 $\pm$ 0.211  $\chi^2$ /NDF: 5820492.4/38

All: 1393.169 $\pm$ 0.149  $\chi^2$ /NDF: 10261499.8/71

# dit\_atl2\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $-212.190 \pm 0.000$   $\chi^2/\text{NDF}: 1149195.1/16$

Left Out:  $-276.616 \pm 0.024$   $\chi^2/\text{NDF}: 6150209.4/19$

Right Out:  $-188.033 \pm 0.000$   $\chi^2/\text{NDF}: 602264.3/18$

Left In:  $-290.099 \pm 0.023$   $\chi^2/\text{NDF}: 887456.3/17$

Left:  $-283.423 \pm 0.017$   $\chi^2/\text{NDF}: 7201630.3/37$

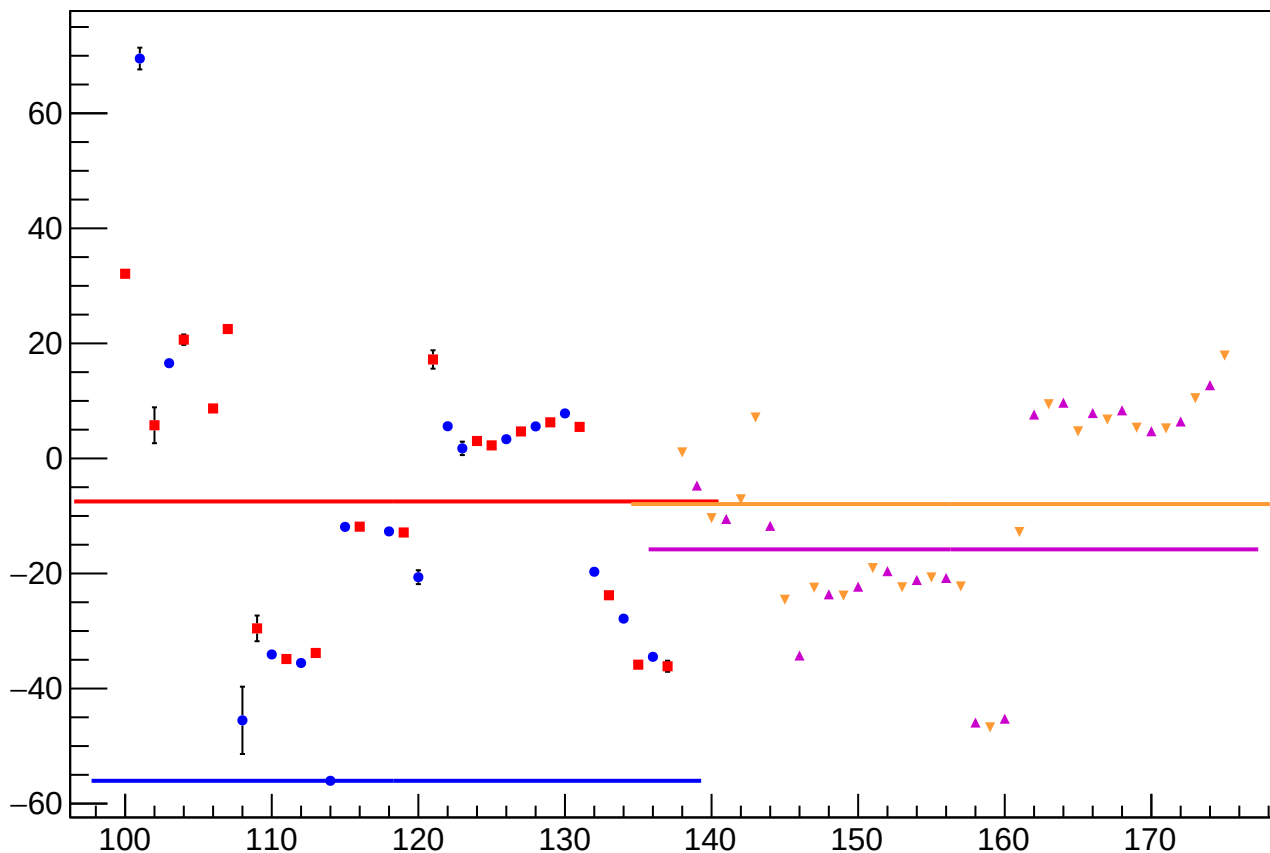
Right:  $-195.625 \pm 0.000$   $\chi^2/\text{NDF}: 13622303625661$

In:  $-212.190 \pm 0.000$   $\chi^2/\text{NDF}: 13094400.6/34$

Out:  $-188.033 \pm 0.000$   $\chi^2/\text{NDF}: 20771000.0/38$

All:  $-195.625 \pm 0.000$   $\chi^2/\text{NDF}: 13622303625$

# dit\_atl2\_4aY\_slope vs Slug, Sign Corrected



Right In: -56.037 $\pm$ 0.000  $\chi^2$ /NDF: 1585420.7/16

Left Out: -7.932 $\pm$ 0.019  $\chi^2$ /NDF: 1042165.1/19

Right Out: -7.476 $\pm$ 0.042  $\chi^2$ /NDF: 173893.8/18

Left In: -15.806 $\pm$ 0.020  $\chi^2$ /NDF: 1207709.6/17

Left: -11.654 $\pm$ 0.014  $\chi^2$ /NDF: 2328979.0/37

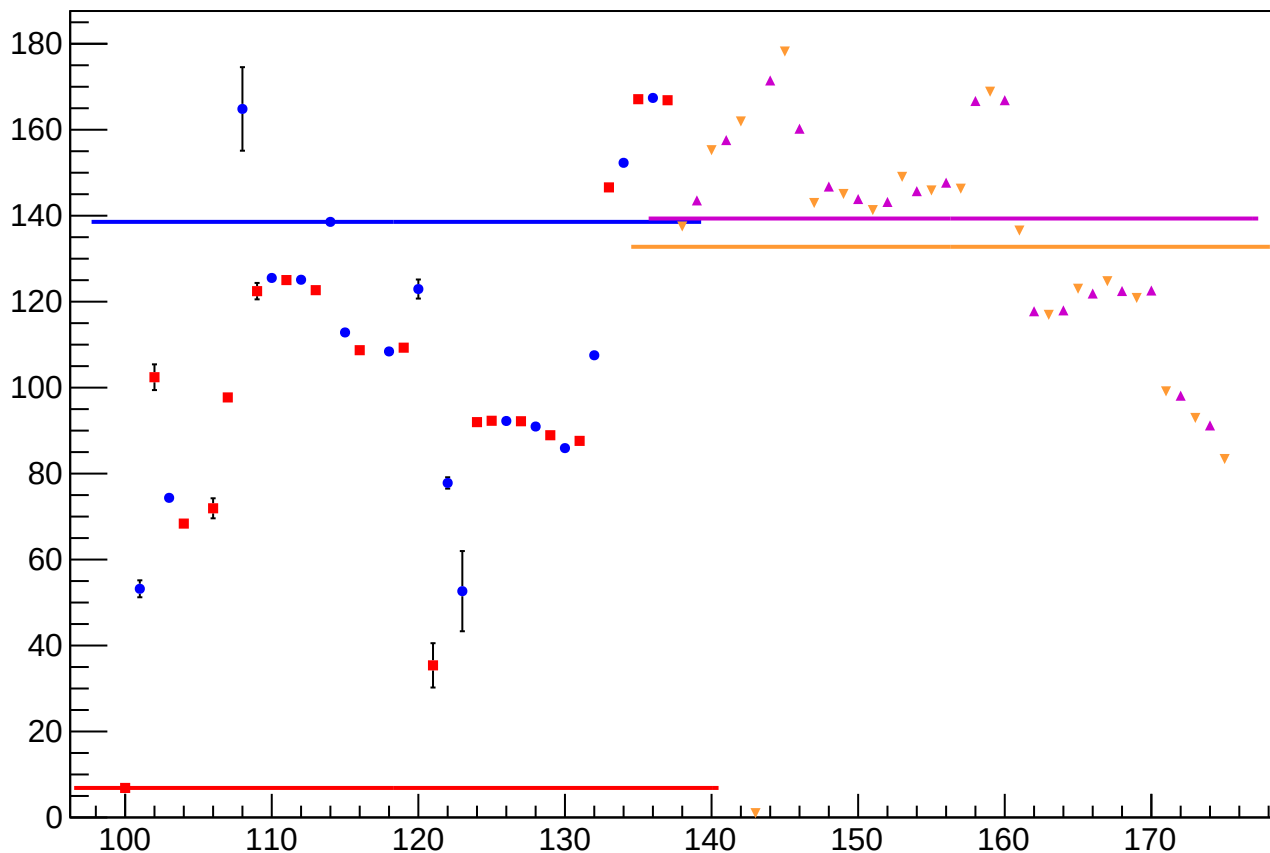
Right: -56.037 $\pm$ 0.000  $\chi^2$ /NDF: 3084882.3/35

In: -56.037 $\pm$ 0.000  $\chi^2$ /NDF: 6709287.2/34

Out: -7.854 $\pm$ 0.018  $\chi^2$ /NDF: 1216155.7/38

All: -56.037 $\pm$ 0.000  $\chi^2$ /NDF: 15497182.7/73

# dit\_atl2\_4eY\_slope vs Slug, Sign Corrected



Right In: 138.565 $\pm$ 0.000  $\chi^2$ /NDF: 901159.7/16

Left Out: 132.766 $\pm$ 0.027  $\chi^2$ /NDF: 842693.3/19

Right Out: 6.866 $\pm$ 0.000  $\chi^2$ /NDF: 8047391.7/18

Left In: 139.343 $\pm$ 0.029  $\chi^2$ /NDF: 498934.2/17

Left: 135.815 $\pm$ 0.020  $\chi^2$ /NDF: 1368527.3/37

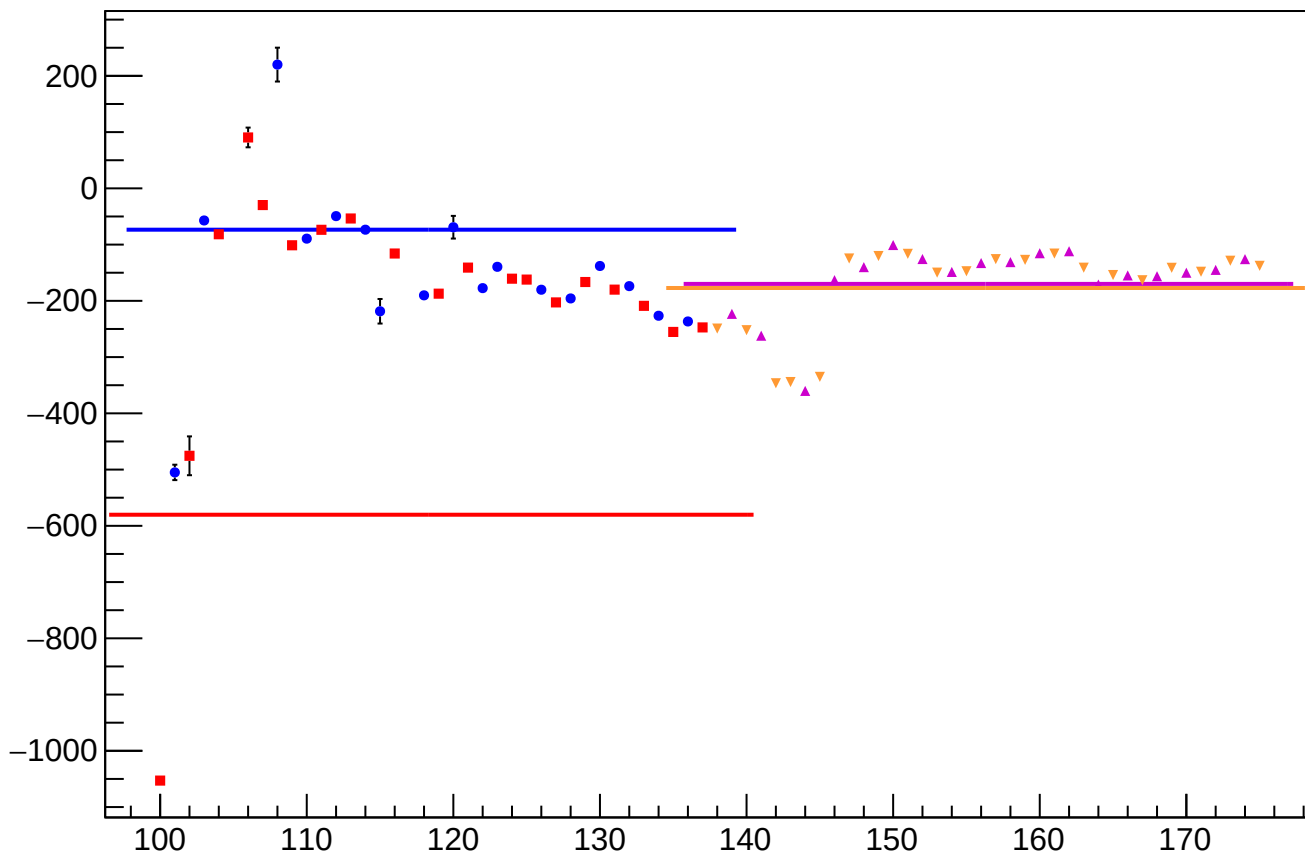
Right: 7.101 $\pm$ 0.000  $\chi^2$ /NDF: 23576822681928678

In: 138.565 $\pm$ 0.000  $\chi^2$ /NDF: 1400795.6/34

Out: 6.866 $\pm$ 0.000  $\chi^2$ /NDF: 30146888.5/38

All: 7.101 $\pm$ 0.000  $\chi^2$ /NDF: 23576822681928

# dit\_atr1\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-73.485 \pm 0.000$   $\chi^2/\text{NDF}: 98703.2/16$

Left Out:  $-177.148 \pm 0.259$   $\chi^2/\text{NDF}: 72491.0/19$

Right Out:  $-580.262 \pm 0.261$   $\chi^2/\text{NDF}: 3031609.5/18$

Left In:  $-169.867 \pm 0.270$   $\chi^2/\text{NDF}: 66533.6/17$

Left:  $-173.665 \pm 0.187$   $\chi^2/\text{NDF}: 139403.9/37$

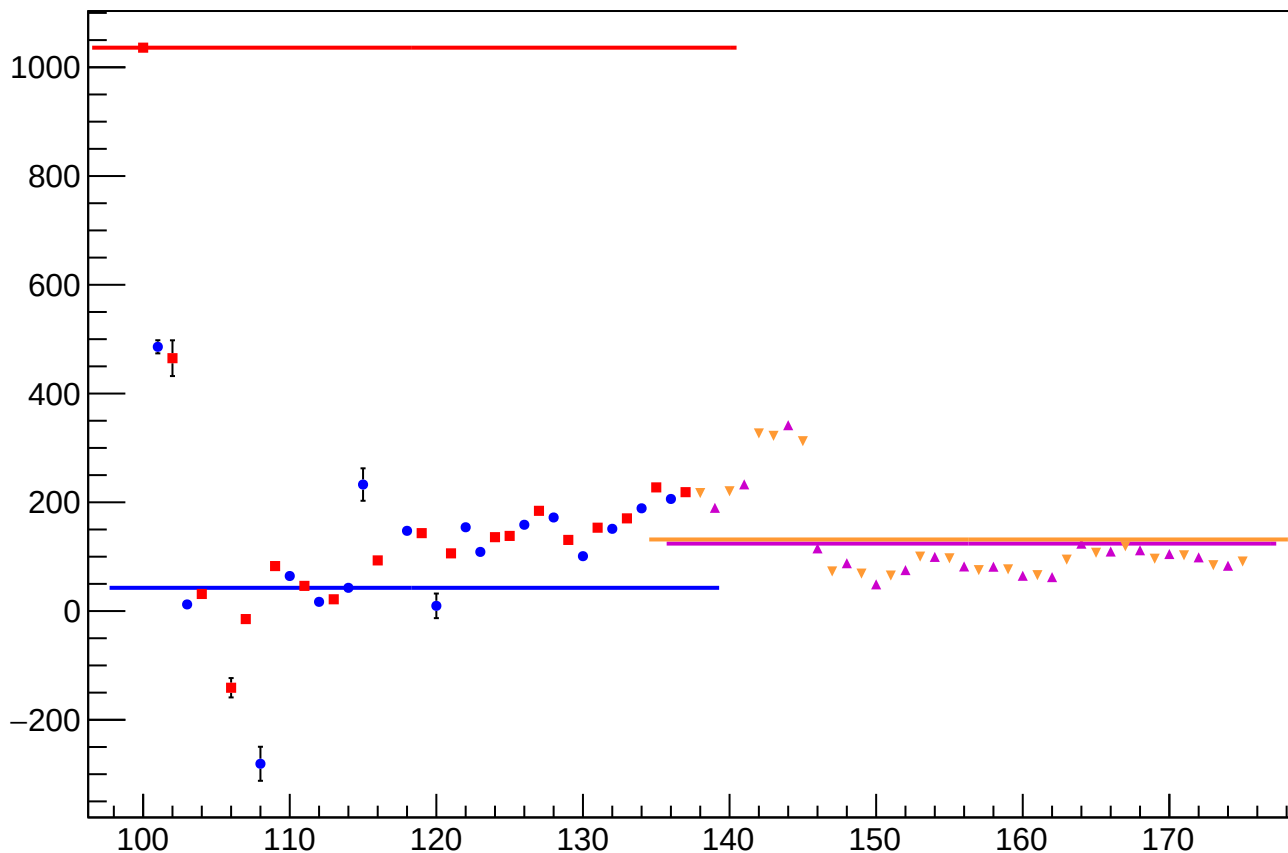
Right:  $-73.485 \pm 0.000$   $\chi^2/\text{NDF}: 6902096.9/35$

In:  $-73.485 \pm 0.000$   $\chi^2/\text{NDF}: 292627.5/34$

Out:  $-376.908 \pm 0.184$   $\chi^2/\text{NDF}: 4308008.3/38$

All:  $-73.485 \pm 0.000$   $\chi^2/\text{NDF}: 7329170.9/73$

# dit\_atr1\_4eX\_slope vs Slug, Sign Corrected



Right In: 42.743+/-0.000  $\chi^2/\text{NDF}$ : 84599.8/16

Left Out: 131.656+/-0.264  $\chi^2/\text{NDF}$ : 86511.0/19

Right Out: 1036.068+/-0.000  $\chi^2/\text{NDF}$ : 4933722.5/18

Left In: 124.072+/-0.277  $\chi^2/\text{NDF}$ : 74827.4/17

Left: 128.051+/-0.191  $\chi^2/\text{NDF}$ : 161732.2/37

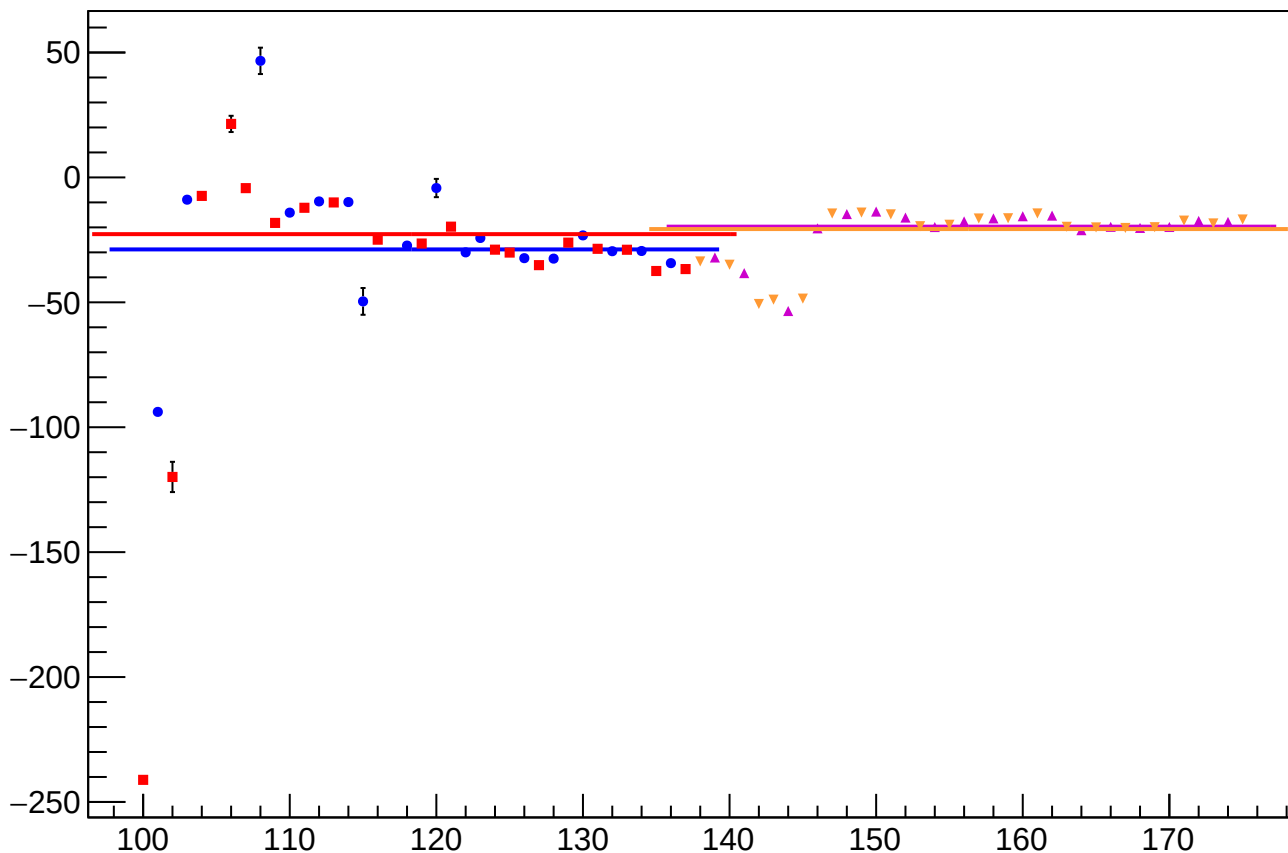
Right: 43.272+/-0.000  $\chi^2/\text{NDF}$ : 1144517497266833

In: 42.743+/-0.000  $\chi^2/\text{NDF}$ : 245717.2/34

Out: 1036.068+/-0.000  $\chi^2/\text{NDF}$ : 16799771.9/38

All: 43.272+/-0.000  $\chi^2/\text{NDF}$ : 1144517497266

# dit\_atr1\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $-28.822 \pm 0.035$   $\chi^2/\text{NDF}$ : 49503.4/16

Left Out:  $-20.674 \pm 0.014$   $\chi^2/\text{NDF}$ : 352568.8/19

Right Out:  $-22.707 \pm 0.038$   $\chi^2/\text{NDF}$ : 410174.9/18

Left In:  $-19.711 \pm 0.015$   $\chi^2/\text{NDF}$ : 203301.9/17

Left:  $-20.250 \pm 0.010$   $\chi^2/\text{NDF}$ : 558066.2/37

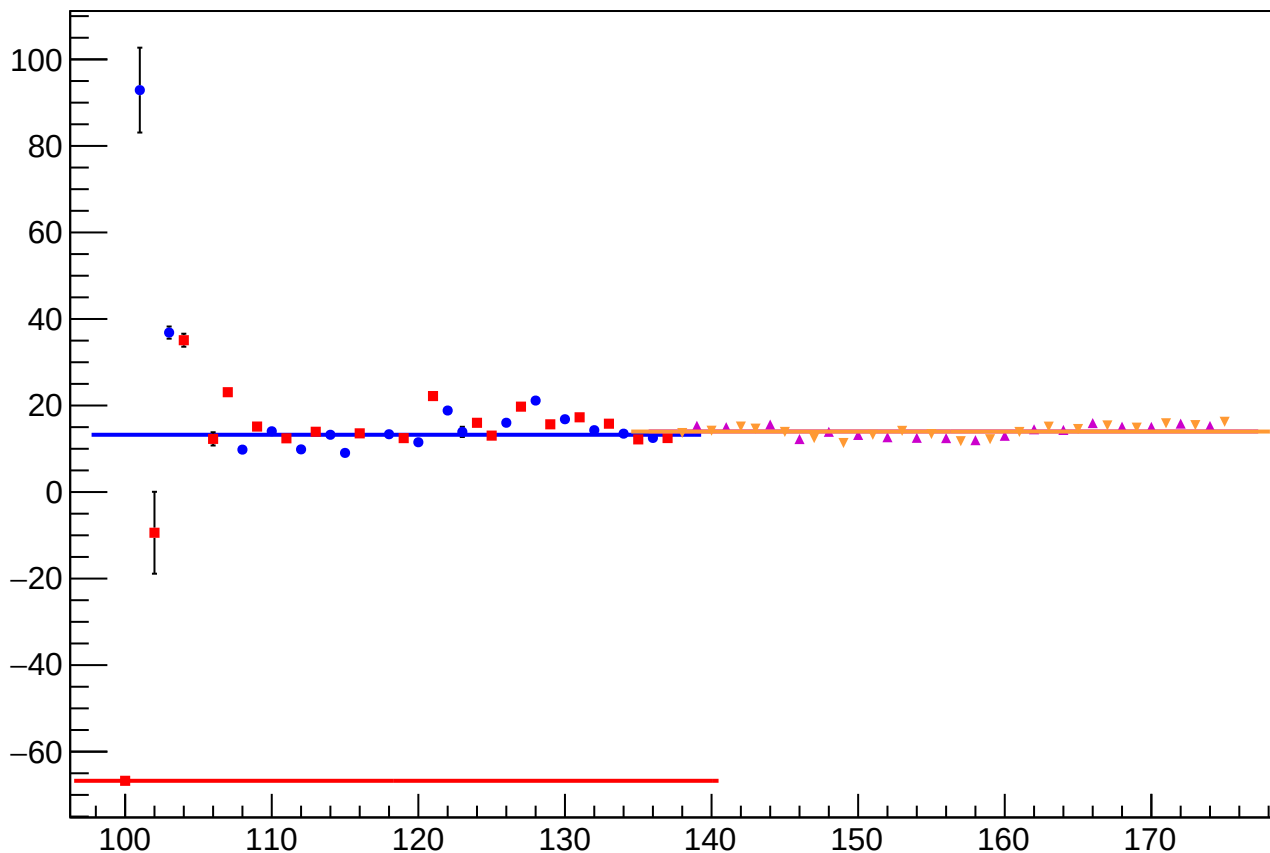
Right:  $-26.045 \pm 0.026$   $\chi^2/\text{NDF}$ : 473753.1/35

In:  $-21.204 \pm 0.014$   $\chi^2/\text{NDF}$ : 310323.8/34

Out:  $-20.905 \pm 0.013$   $\chi^2/\text{NDF}$ : 765268.8/38

All:  $-21.041 \pm 0.009$   $\chi^2/\text{NDF}$ : 1075838.4/73

# dit\_atr1\_4aY\_slope vs Slug, Sign Corrected



Right In: 13.238 $\pm$ 0.000  $\chi^2$ /NDF: 5756.1/16

Left Out: 13.984 $\pm$ 0.013  $\chi^2$ /NDF: 9052.4/19

Right Out: -66.739 $\pm$ 0.000  $\chi^2$ /NDF: 3023648.4/18

Left In: 14.005 $\pm$ 0.014  $\chi^2$ /NDF: 8731.1/17

Left: 13.994 $\pm$ 0.009  $\chi^2$ /NDF: 17784.7/37

Right: 12.562 $\pm$ 0.000  $\chi^2$ /NDF: 1884310027651005

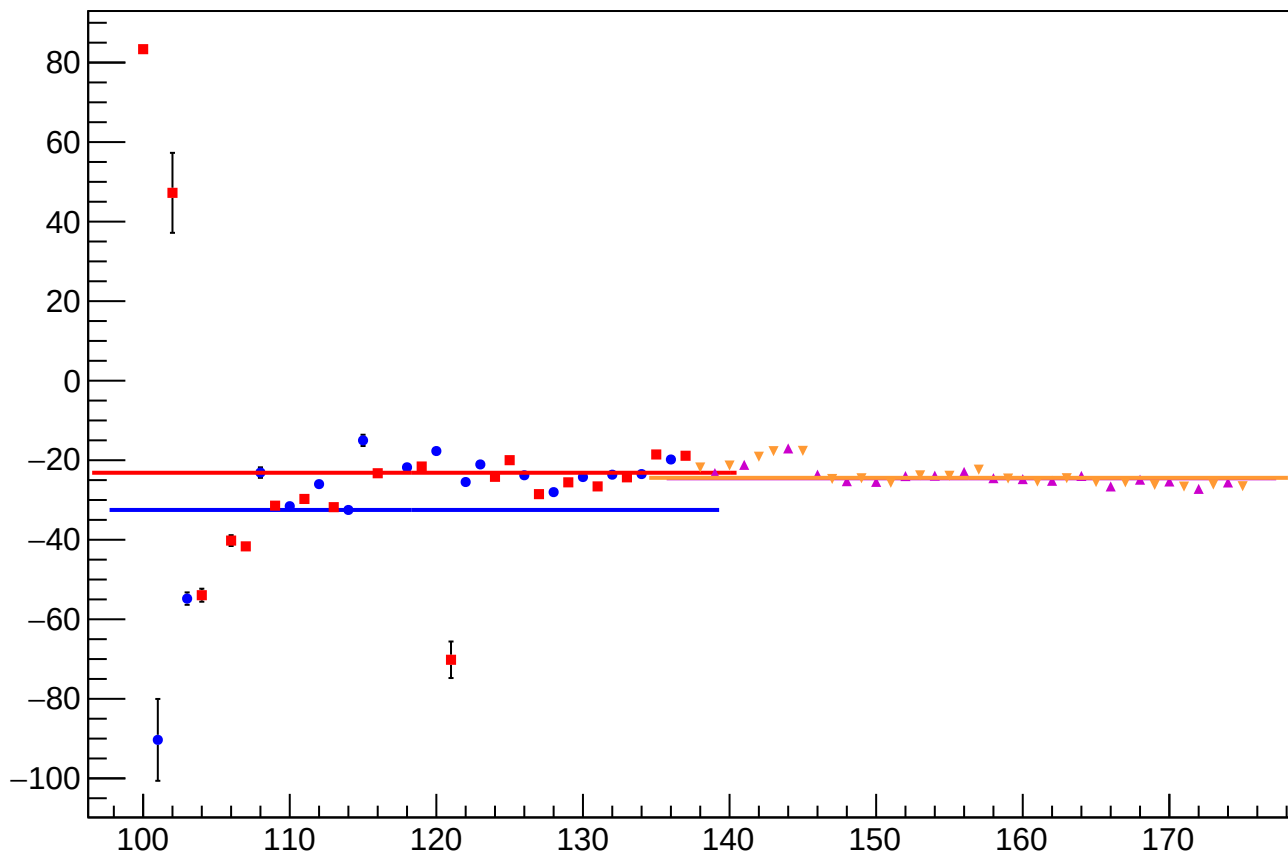
In: 13.238 $\pm$ 0.000  $\chi^2$ /NDF: 17665.4/34

Out: -66.739 $\pm$ 0.000  $\chi^2$ /NDF: 41292470.4/38

All: 12.562 $\pm$ 0.000  $\chi^2$ /NDF: 1884310027651



# dit\_atr1\_4eY\_slope vs Slug, Sign Corrected



Right In: -32.504 $\pm$ 0.000  $\chi^2$ /NDF: 74187.4/16

Left Out: -24.428 $\pm$ 0.017  $\chi^2$ /NDF:20417.4/19

Right Out: -23.151 $\pm$ 0.048  $\chi^2$ /NDF: 90749.4/18

Left In: -24.551 $\pm$ 0.017  $\chi^2$ /NDF:9803.4/17

Left: -24.489 $\pm$ 0.012  $\chi^2$ /NDF: 30247.4/37

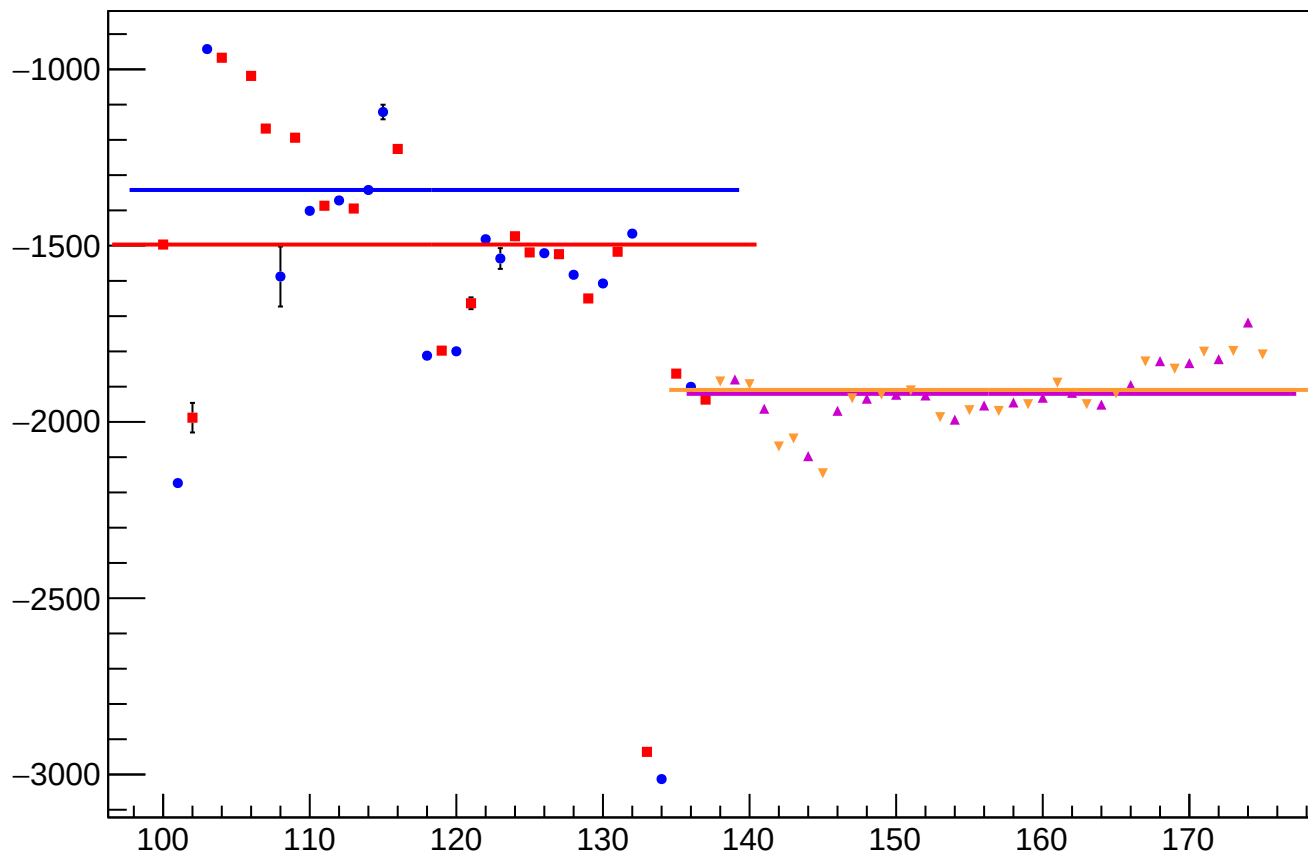
Right: -32.504 $\pm$ 0.000  $\chi^2$ /NDF: 203519.3/35

In: -32.504 $\pm$ 0.000  $\chi^2$ /NDF:306569.3/34

Out: -24.288 $\pm$ 0.016  $\chi^2$ /NDF:111807.5/38

All: -32.504 $\pm$ 0.000  $\chi^2$ /NDF: 690078.9/73

# dit\_atr2\_4aX\_slope vs Slug, Sign Corrected



Right In: -1342.107 $\pm$ 0.000  $\chi^2$ /NDF: 370901.4/16

Left Out: -1909.170 $\pm$ 0.342  $\chi^2$ /NDF: 51864.9/19

Right Out: -1496.932 $\pm$ 0.000  $\chi^2$ /NDF: 504712.5/18

Left In: -1920.339 $\pm$ 0.312  $\chi^2$ /NDF: 45233.5/17

Left: -1915.260 $\pm$ 0.231  $\chi^2$ /NDF: 97679.5/37

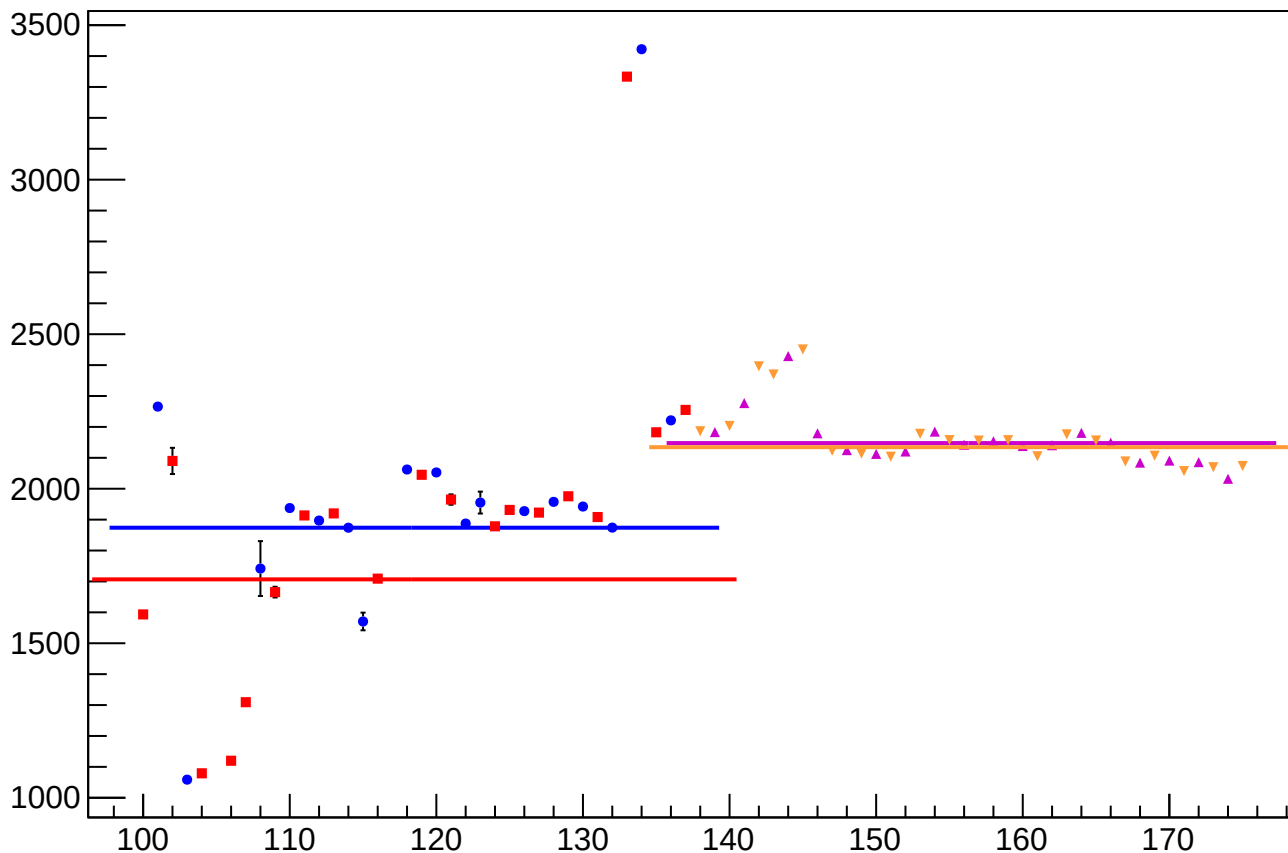
Right: -1396.751 $\pm$ 0.000  $\chi^2$ /NDF: 1800086126763

In: -1342.107 $\pm$ 0.000  $\chi^2$ /NDF: 3840932.2/34

Out: -1496.932 $\pm$ 0.000  $\chi^2$ /NDF: 2008499.5/38

All: -1396.751 $\pm$ 0.000  $\chi^2$ /NDF: 1800086126

# dit\_atr2\_4eX\_slope vs Slug, Sign Corrected



Right In: 1873.852 $\pm$ 0.000  $\chi^2$ /NDF: 201563.9/16

Left Out: 2134.424 $\pm$ 0.341  $\chi^2$ /NDF:43101.8/19

Right Out: 1706.739 $\pm$ 0.302  $\chi^2$ /NDF: 837936.9/18

Left In: 2147.701 $\pm$ 0.313  $\chi^2$ /NDF:47123.9/17

Left: 2141.631 $\pm$ 0.230  $\chi^2$ /NDF: 91049.5/37

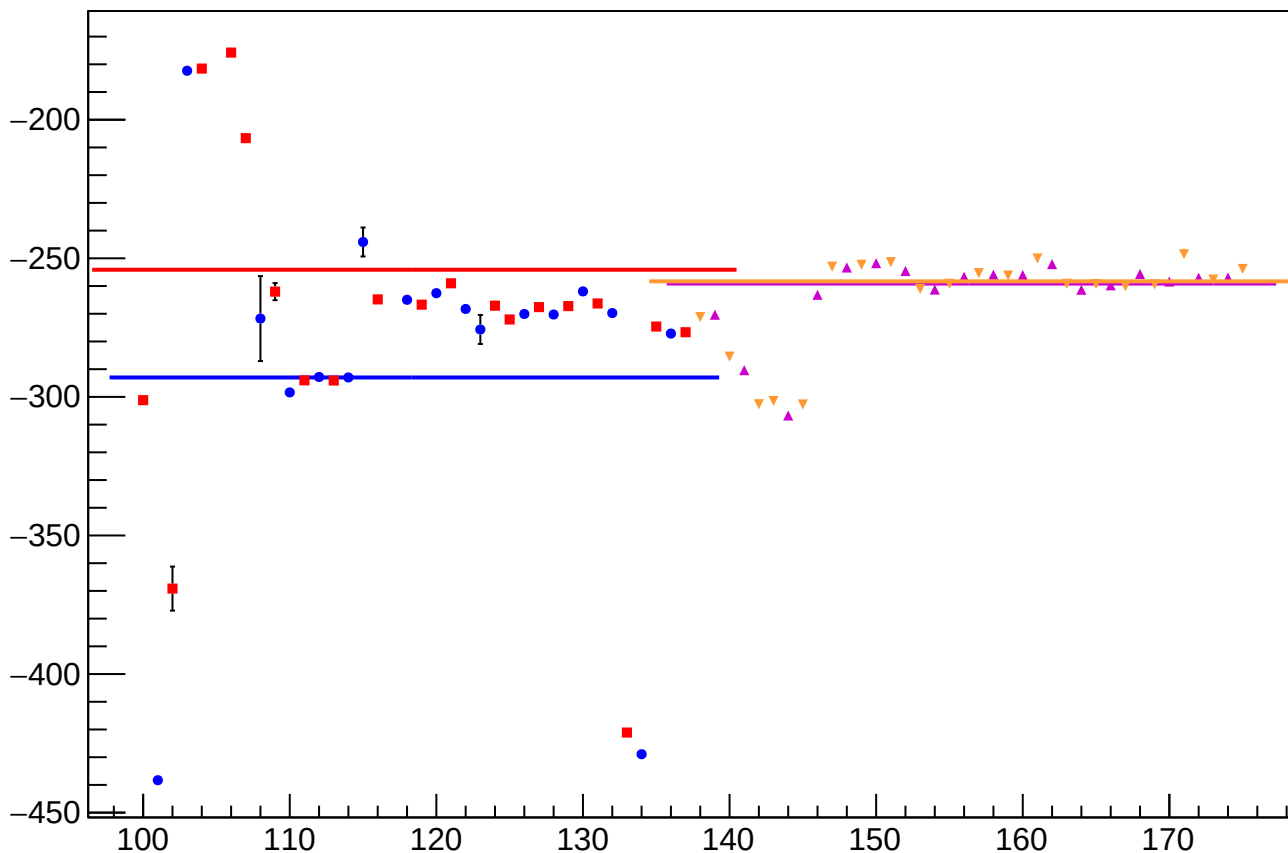
Right: 1873.852 $\pm$ 0.000  $\chi^2$ /NDF: 1344906.8/35

In: 1873.852 $\pm$ 0.000  $\chi^2$ /NDF:1015311.7/34

Out: 1895.141 $\pm$ 0.226  $\chi^2$ /NDF:1762226.1/38

All: 1873.852 $\pm$ 0.000  $\chi^2$ /NDF: 2786397.2/73

# dit\_atr2\_11X12X\_slope vs Slug, Sign Corrected



Right In: -292.986+/-0.000  $\chi^2/\text{NDF}$ : 1015592.4/16

Left Out: -258.309+/-0.021  $\chi^2/\text{NDF}$ : 214894.5/19

Right Out: -254.119+/-0.059  $\chi^2/\text{NDF}$ : 502658.5/18

Left In: -259.102+/-0.019  $\chi^2/\text{NDF}$ : 250241.1/17

Left: -258.755+/-0.014  $\chi^2/\text{NDF}$ : 465924.5/37

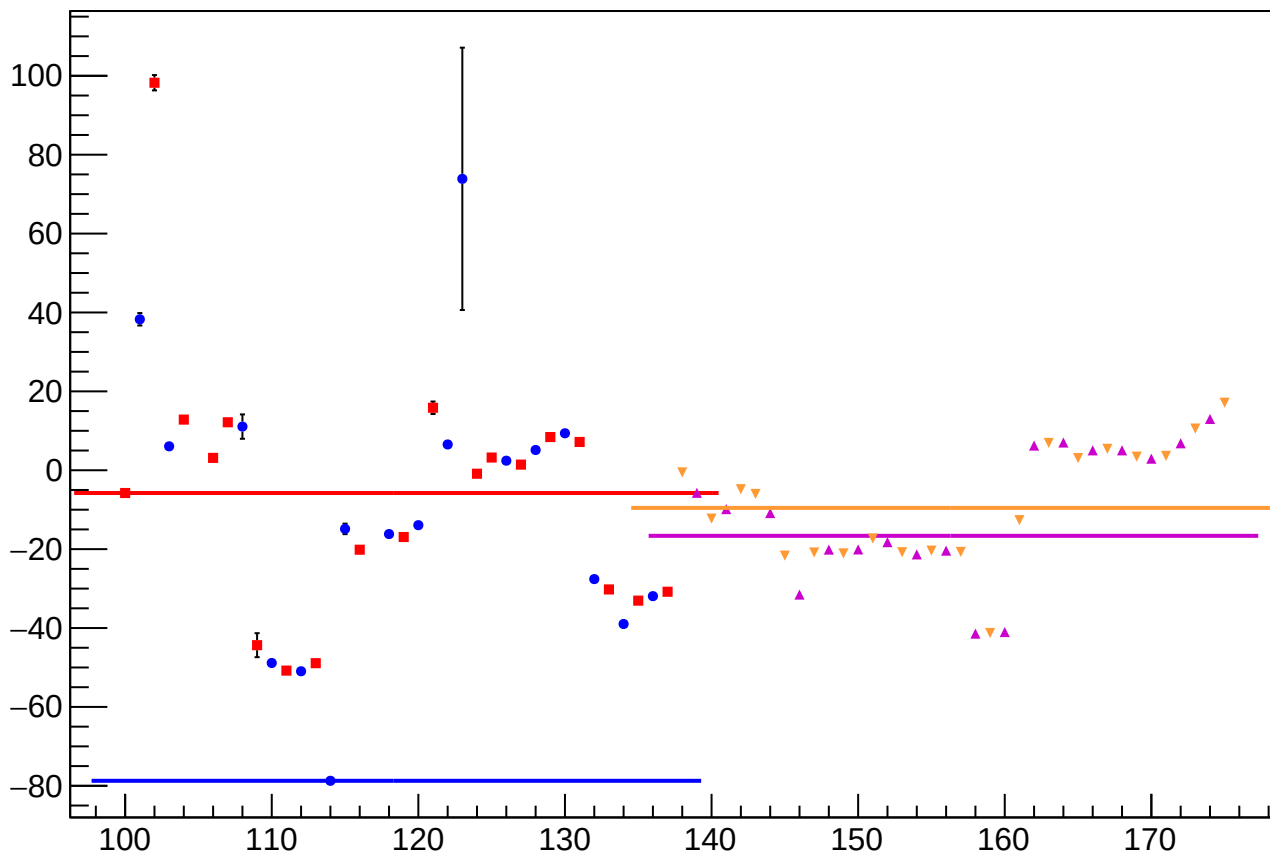
Right: -292.986+/-0.000  $\chi^2/\text{NDF}$ : 1952225.7/35

In: -292.986+/-0.000  $\chi^2/\text{NDF}$ : 4558200.5/34

Out: -257.829+/-0.020  $\chi^2/\text{NDF}$ : 722019.4/38

All: -292.986+/-0.000  $\chi^2/\text{NDF}$ : 8384705.4/73

# dit\_atr2\_4aY\_slope vs Slug, Sign Corrected



Right In: -78.728 $\pm$ 0.000  $\chi^2$ /NDF: 1399088.3/16

Left Out: -9.542 $\pm$ 0.019  $\chi^2$ /NDF: 820494.3/19

Right Out: -5.769 $\pm$ 0.000  $\chi^2$ /NDF: 111570.1/18

Left In: -16.623 $\pm$ 0.018  $\chi^2$ /NDF: 961230.7/17

Left: -13.252 $\pm$ 0.013  $\chi^2$ /NDF: 1857217.7/37

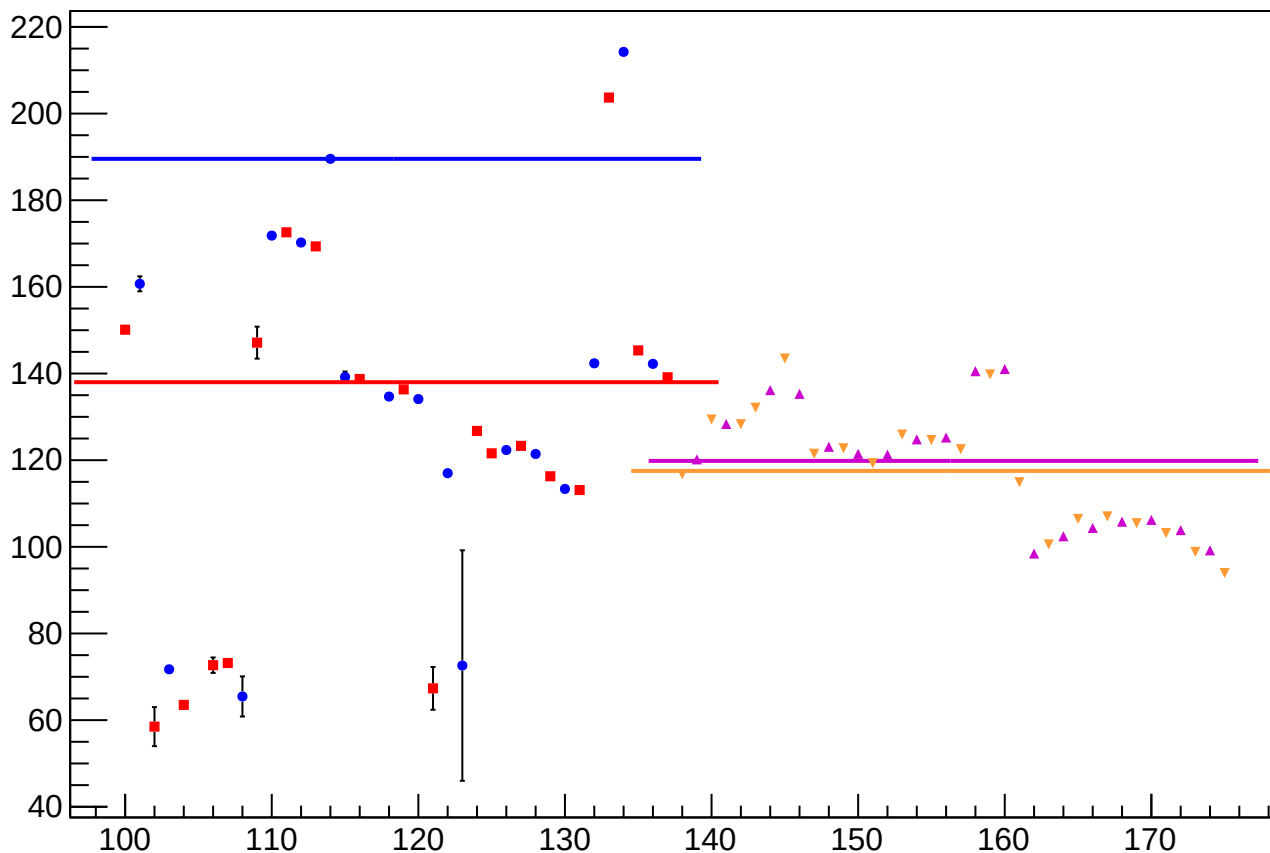
Right: -6.288 $\pm$ 0.000  $\chi^2$ /NDF: 2878797679293380

In: -78.728 $\pm$ 0.000  $\chi^2$ /NDF: 14559997.1/34

Out: -5.769 $\pm$ 0.000  $\chi^2$ /NDF: 972943.4/38

All: -6.288 $\pm$ 0.000  $\chi^2$ /NDF: 2878797679293

# dit\_atr2\_4eY\_slope vs Slug, Sign Corrected



Right In: 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 927391.8/16

Left Out: 117.524 $\pm$ 0.024  $\chi^2$ /NDF: 271805.5/19

Right Out: 138.002 $\pm$ 0.059  $\chi^2$ /NDF: 117357.8/18

Left In: 119.837 $\pm$ 0.025  $\chi^2$ /NDF: 296958.9/17

Left: 118.627 $\pm$ 0.017  $\chi^2$ /NDF: 573237.6/37

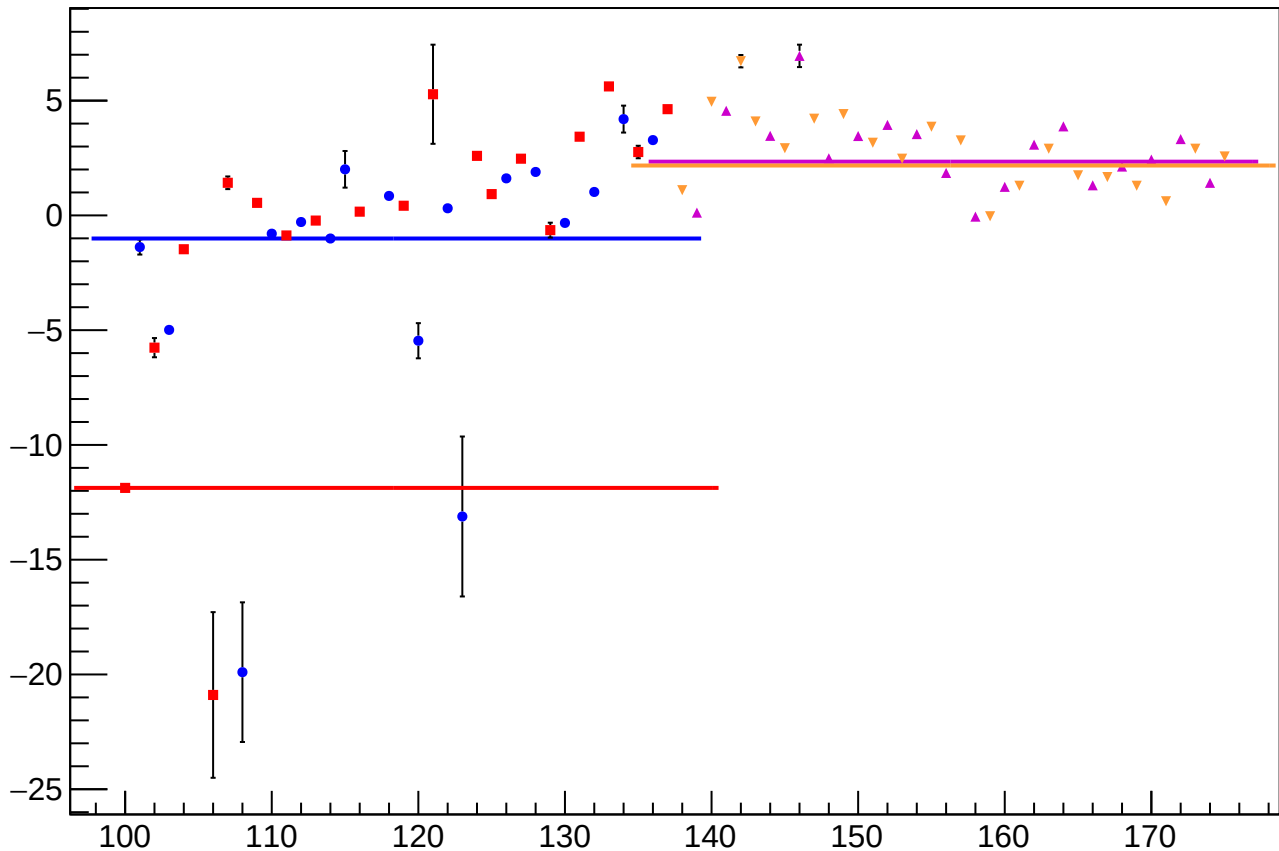
Right: 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 1806450.5/35

In: 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 8989992.3/34

Out: 120.402 $\pm$ 0.022  $\chi^2$ /NDF: 492469.1/38

All: 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 19234024.3/73

# dit\_sam1\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-1.007 \pm 0.000$   $\chi^2/\text{NDF}$ : 7057.7/16

Left Out:  $2.173 \pm 0.017$   $\chi^2/\text{NDF}$ : 5976.4/19

Right Out:  $-11.872 \pm 0.000$   $\chi^2/\text{NDF}$ : 503632.2/18

Left In:  $2.341 \pm 0.016$   $\chi^2/\text{NDF}$ : 7002.1/17

Left:  $2.265 \pm 0.012$   $\chi^2/\text{NDF}$ : 13030.7/37

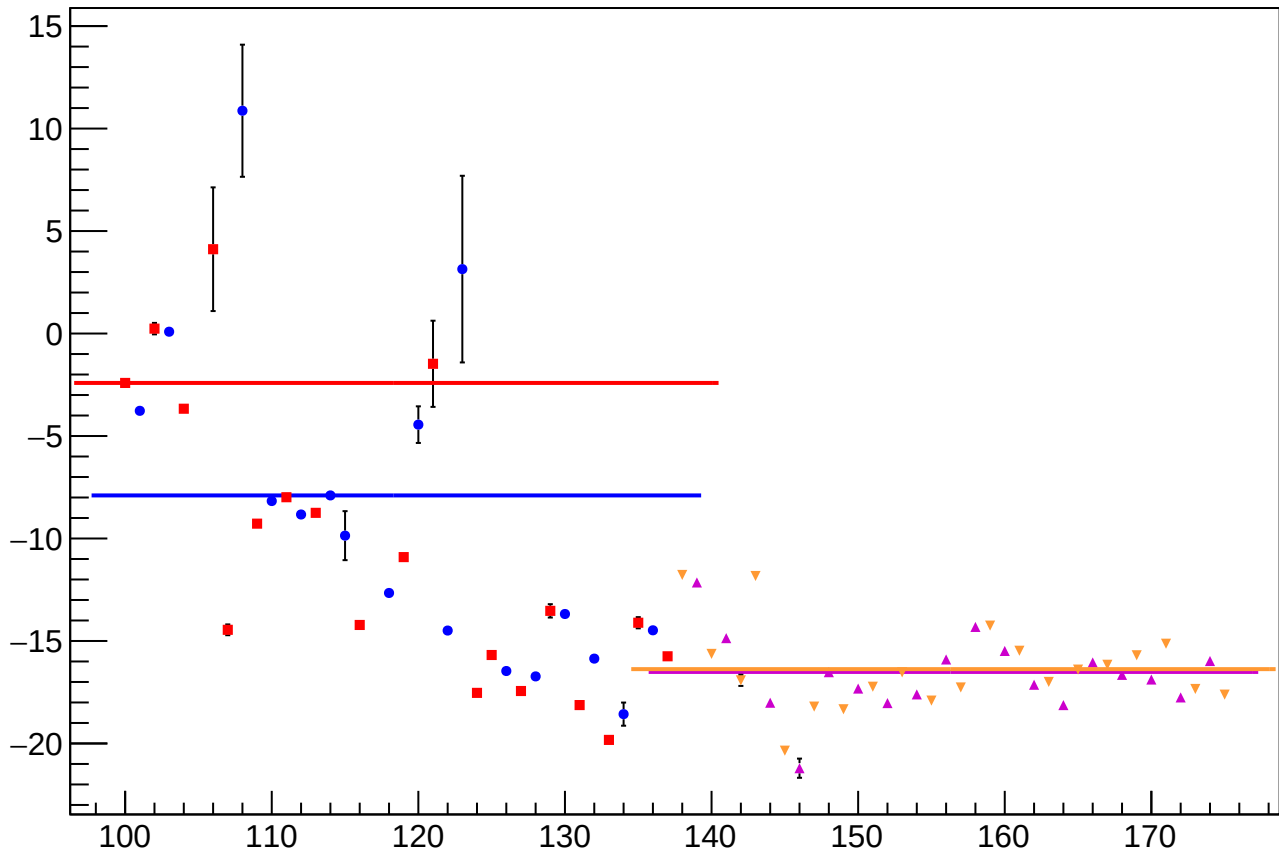
Right:  $-1.365 \pm 0.000$   $\chi^2/\text{NDF}$ : 2170760676638215

In:  $-1.007 \pm 0.000$   $\chi^2/\text{NDF}$ : 60115.4/34

Out:  $-11.872 \pm 0.000$   $\chi^2/\text{NDF}$ : 1172836.3/38

All:  $-1.365 \pm 0.000$   $\chi^2/\text{NDF}$ : 2170760676638

# dit\_sam1\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-7.899 \pm 0.000$   $\chi^2/\text{NDF}$ : 39443.5/16

Left Out:  $-16.373 \pm 0.017$   $\chi^2/\text{NDF}$ : 7577.1/19

Right Out:  $-2.410 \pm 0.000$   $\chi^2/\text{NDF}$ : 203043.8/18

Left In:  $-16.510 \pm 0.016$   $\chi^2/\text{NDF}$ : 5663.5/17

Left:  $-16.445 \pm 0.012$   $\chi^2/\text{NDF}$ : 13274.6/37

Right:  $-4.135 \pm 0.000$   $\chi^2/\text{NDF}$ : 2879850560728951

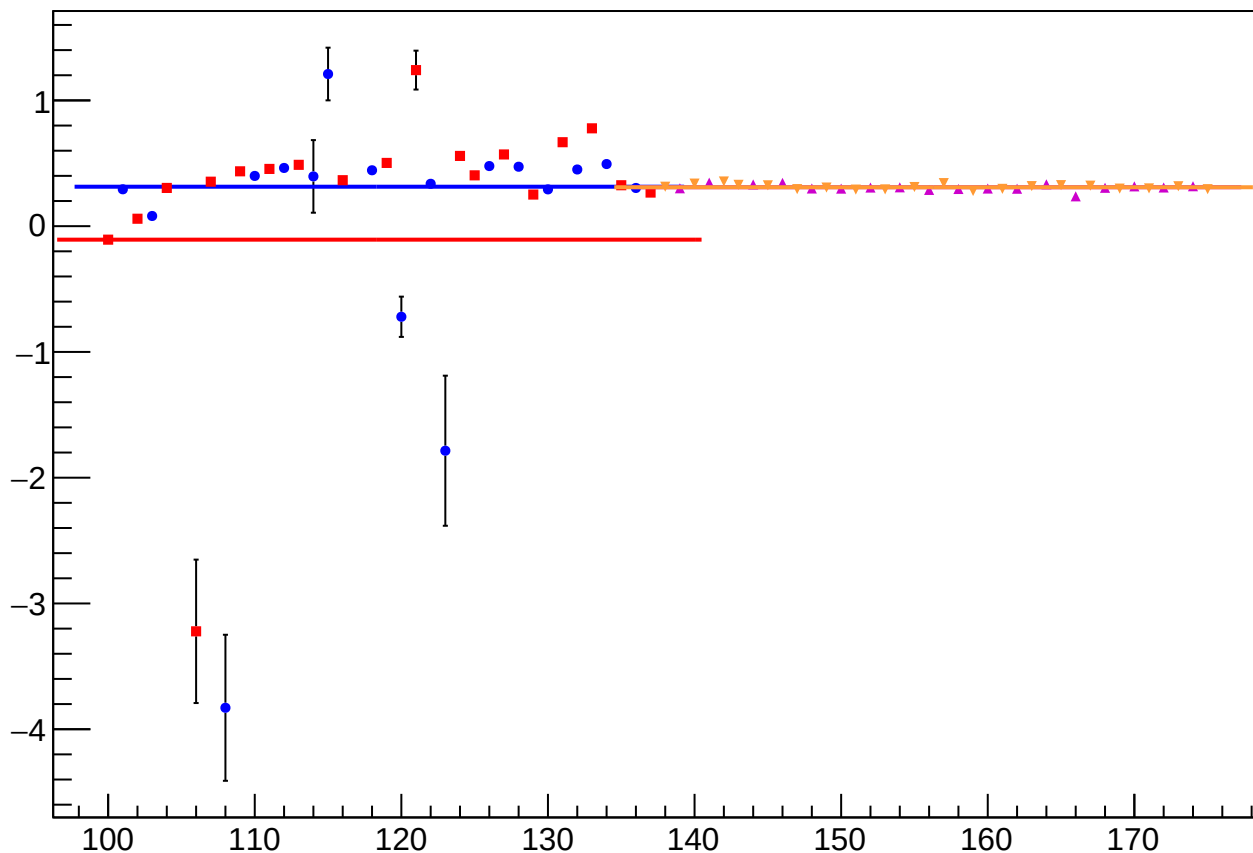
In:  $-7.899 \pm 0.000$   $\chi^2/\text{NDF}$ : 327458.1/34

Out:  $-2.410 \pm 0.000$   $\chi^2/\text{NDF}$ : 890359.5/38

All:  $-4.135 \pm 0.000$   $\chi^2/\text{NDF}$ : 2879850560728



# dit\_sam1\_11X12X\_slope vs Slug, Sign Corrected



Right In: 0.314 $\pm$ 0.001  $\chi^2$ /NDF: 2748.0/16

Left Out: 0.309 $\pm$ 0.000  $\chi^2$ /NDF:4448.4/19

Right Out: -0.107 $\pm$ 0.000  $\chi^2$ /NDF: 219932.8/18

Left In: 0.310 $\pm$ 0.000  $\chi^2$ /NDF:2824.9/17

Left: 0.310 $\pm$ 0.000  $\chi^2$ /NDF: 7273.9/37

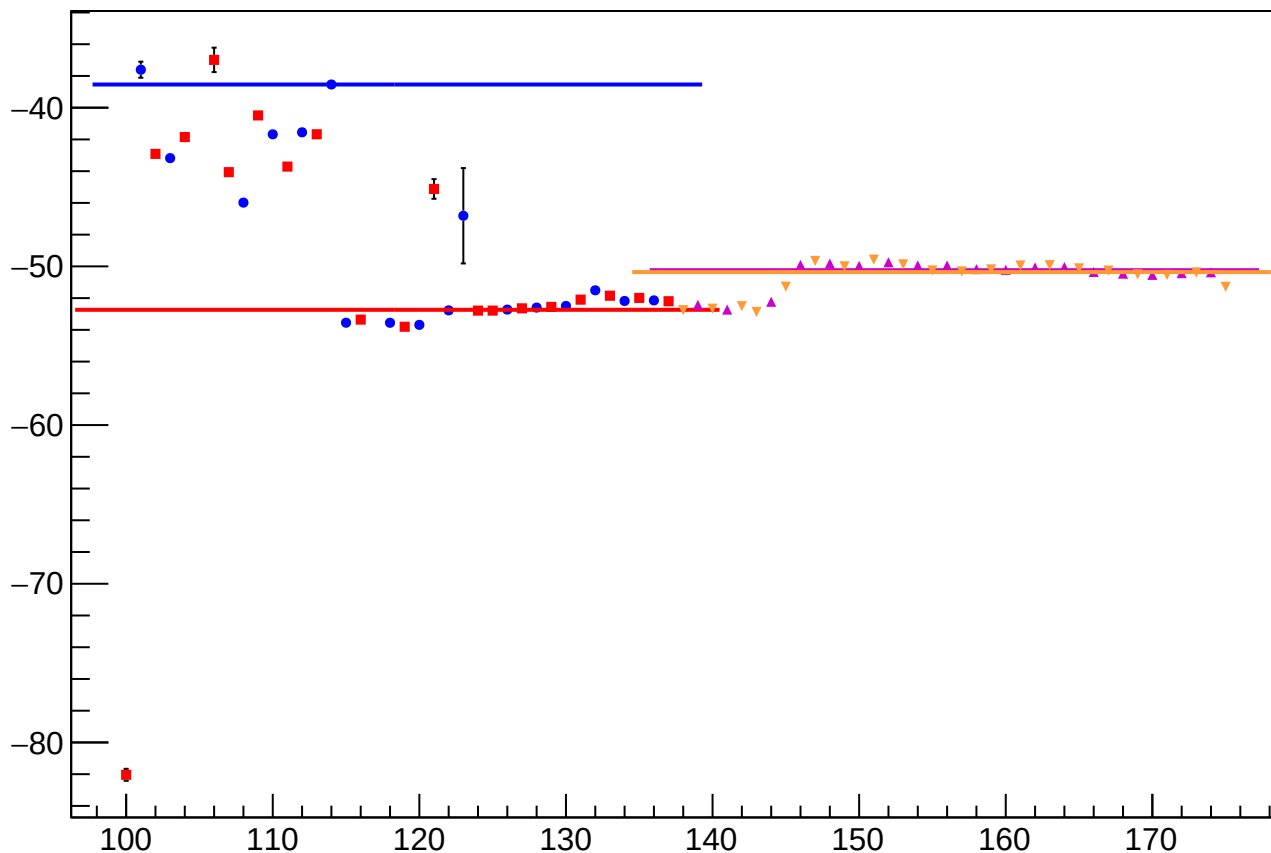
Right: -0.107 $\pm$ 0.000  $\chi^2$ /NDF: 409026.8/35

In: 0.310 $\pm$ 0.000  $\chi^2$ /NDF:5588.8/34

Out: -0.107 $\pm$ 0.000  $\chi^2$ /NDF:3126418.6/38

All: -0.107 $\pm$ 0.000  $\chi^2$ /NDF: 6075932.1/73

# dit\_sam1\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}$ : 14950854.6/16

Left Out:  $-50.360 \pm 0.001$   $\chi^2/\text{NDF}$ : 256841.6/19

Right Out:  $-52.737 \pm 0.002$   $\chi^2/\text{NDF}$ : 87430.2/18

Left In:  $-50.241 \pm 0.001$   $\chi^2/\text{NDF}$ : 166917.2/17

Left:  $-50.293 \pm 0.001$   $\chi^2/\text{NDF}$ : 427535.3/37

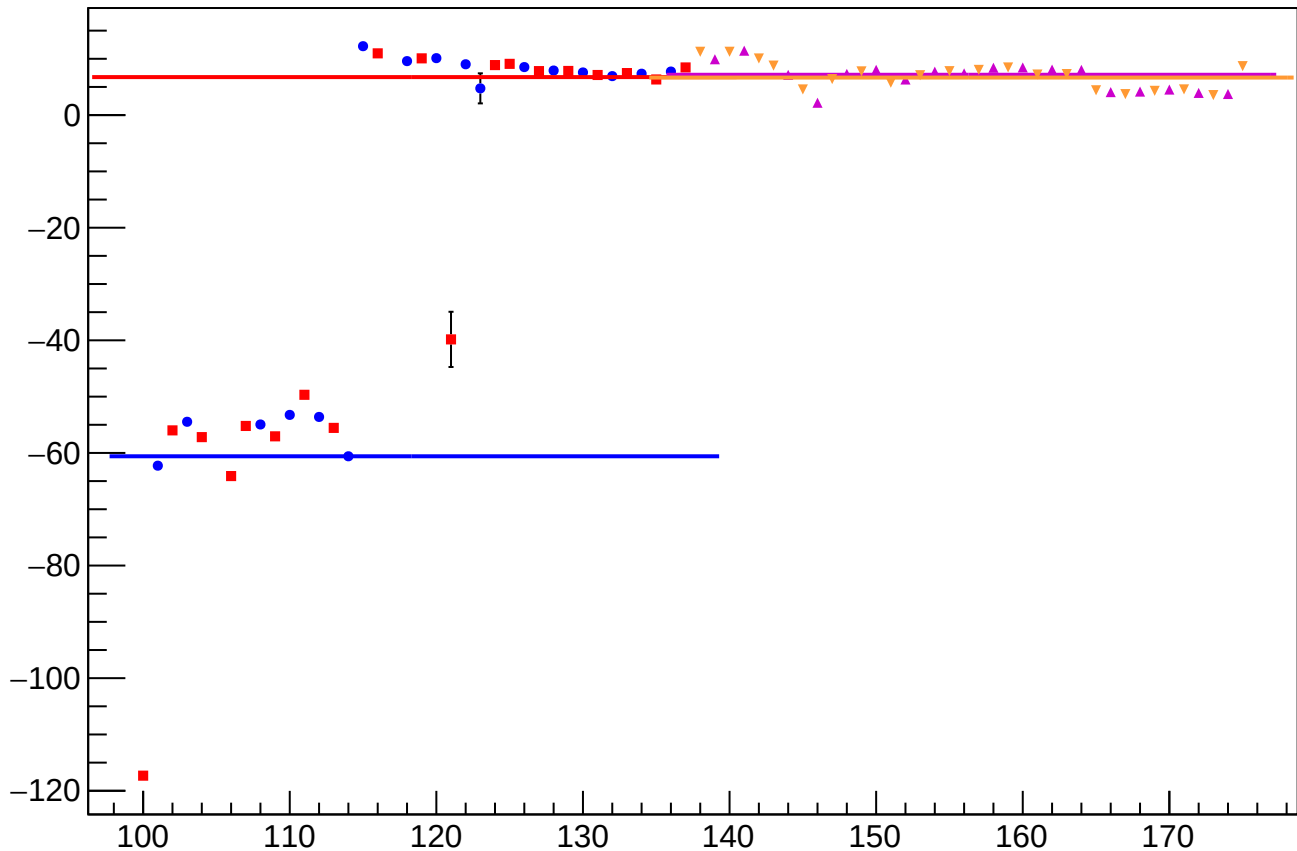
Right:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}$ : 72100834.2/35

In:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}$ : 99604949.8/34

Out:  $-51.246 \pm 0.001$   $\chi^2/\text{NDF}$ : 1347052.6/38

All:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}$ : 223527574.1/7

# dit\_sam1\_4eY\_slope vs Slug, Sign Corrected



Right In:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 26122838.1/16$

Left Out:  $6.664 \pm 0.004$   $\chi^2/\text{NDF}: 309819.9/19$

Right Out:  $6.748 \pm 0.011$   $\chi^2/\text{NDF}: 1266598.3/18$

Left In:  $7.162 \pm 0.003$   $\chi^2/\text{NDF}: 208262.1/17$

Left:  $6.931 \pm 0.003$   $\chi^2/\text{NDF}: 527561.6/37$

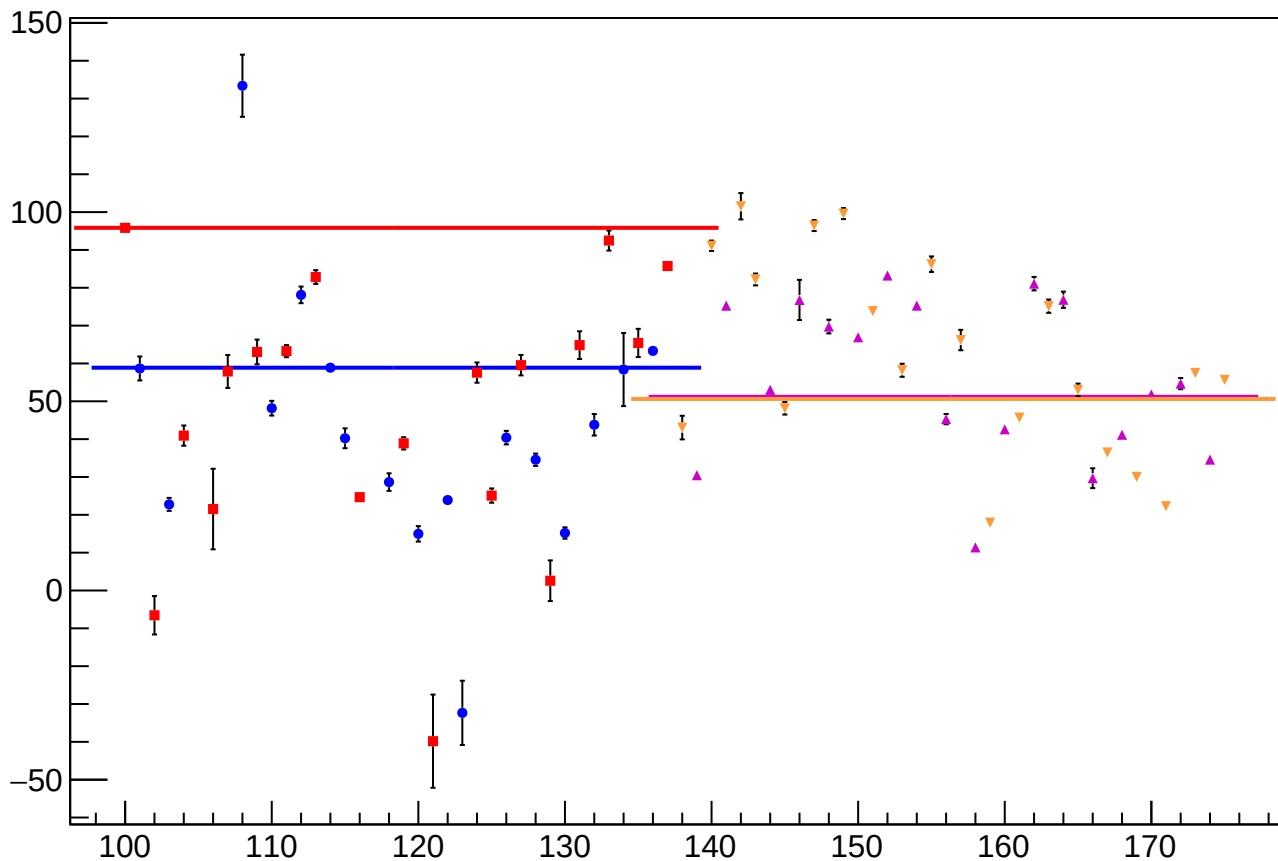
Right:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 64778482.9/35$

In:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 405181537.6/34$

Out:  $6.673 \pm 0.004$   $\chi^2/\text{NDF}: 1576471.0/38$

All:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 766416166.4/7$

# dit\_sam2\_4aX\_slope vs Slug, Sign Corrected



Right In: 58.880 $\pm$ 0.000  $\chi^2$ /NDF: 3814.7/16

Left Out: 50.622 $\pm$ 0.267  $\chi^2$ /NDF: 7734.8/19

Right Out: 95.846 $\pm$ 0.000  $\chi^2$ /NDF: 39385.0/18

Left In: 51.193 $\pm$ 0.238  $\chi^2$ /NDF: 6102.8/17

Left: 50.940 $\pm$ 0.178  $\chi^2$ /NDF: 13840.1/37

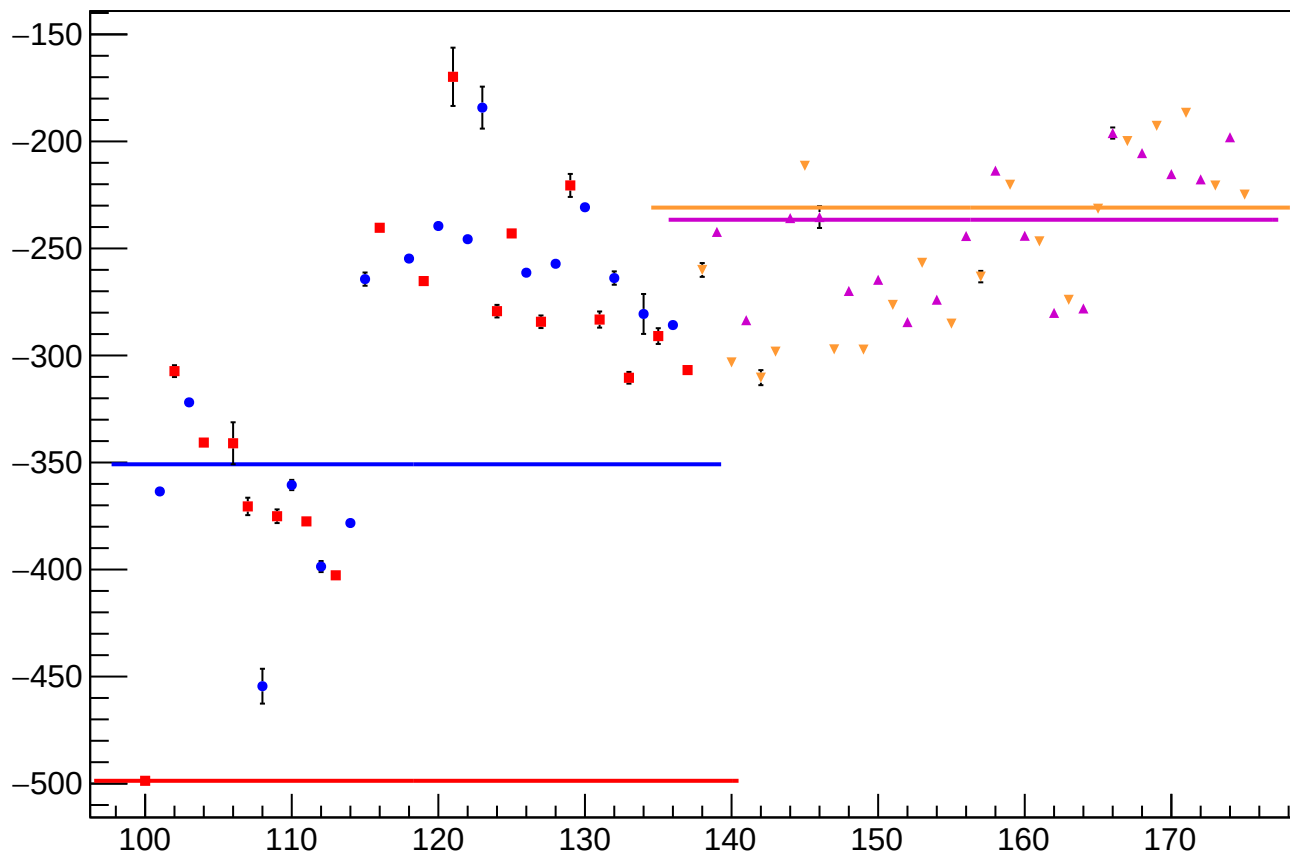
Right: 60.098 $\pm$ 0.000  $\chi^2$ /NDF: 9815233945666380

In: 58.880 $\pm$ 0.000  $\chi^2$ /NDF: 10957.7/34

Out: 95.846 $\pm$ 0.000  $\chi^2$ /NDF: 75782.1/38

All: 60.098 $\pm$ 0.000  $\chi^2$ /NDF: 9815233945666380

# dit\_sam2\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-350.833 \pm 0.245$   $\chi^2/\text{NDF}: 41301.1/16$

Left Out:  $-230.913 \pm 0.266$   $\chi^2/\text{NDF}: 19483.2/19$

Right Out:  $-498.692 \pm 0.000$   $\chi^2/\text{NDF}: 511870.8/18$

Left In:  $-236.594 \pm 0.243$   $\chi^2/\text{NDF}: 15355.7/17$

Left:  $-234.009 \pm 0.180$   $\chi^2/\text{NDF}: 35086.9/37$

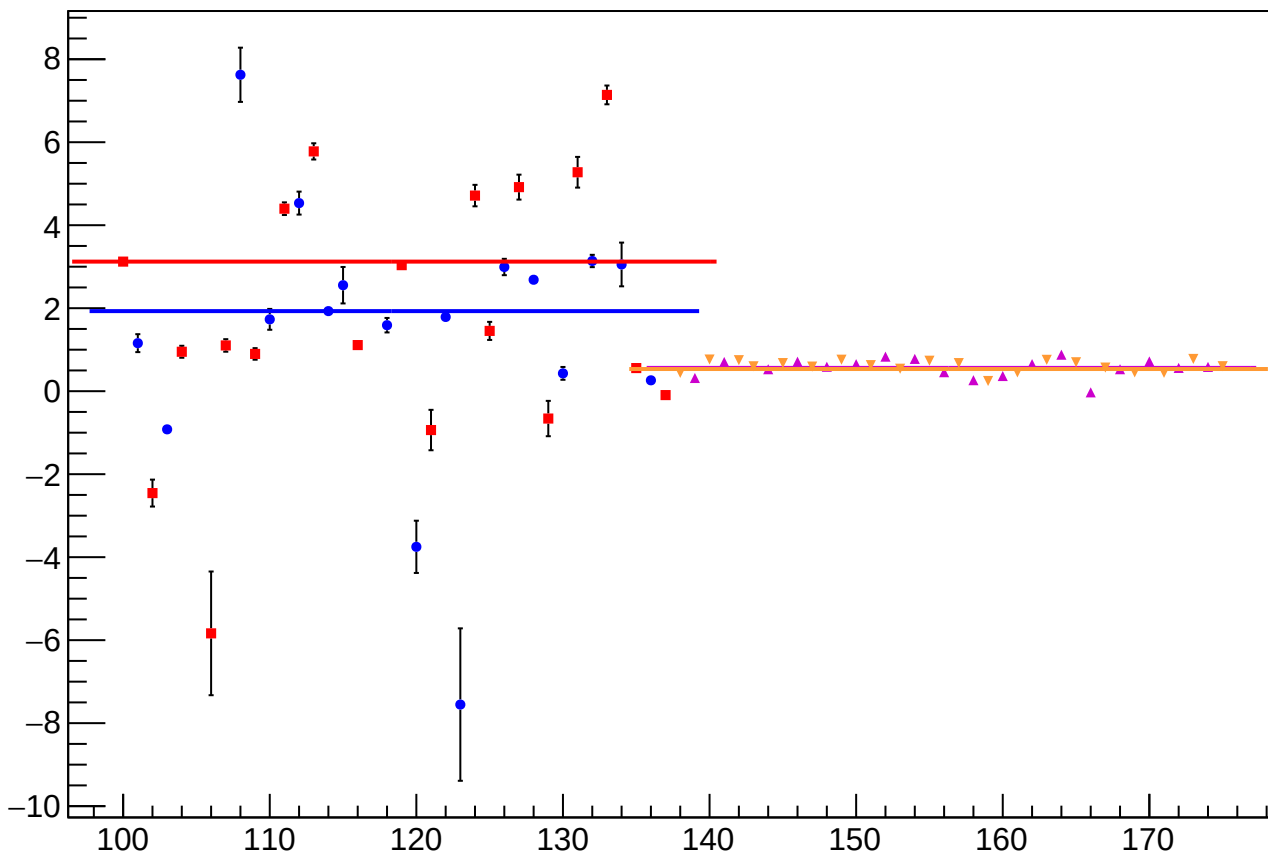
Right:  $-498.692 \pm 0.000$   $\chi^2/\text{NDF}: 918780.8/35$

In:  $-293.416 \pm 0.172$   $\chi^2/\text{NDF}: 166349.3/34$

Out:  $-498.692 \pm 0.000$   $\chi^2/\text{NDF}: 1543014.2/38$

All:  $-498.692 \pm 0.000$   $\chi^2/\text{NDF}: 3126123.6/73$

# dit\_sam2\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $1.930 \pm 0.000$   $\chi^2/\text{NDF}: 59970.9/16$

Left Out:  $0.534 \pm 0.002$   $\chi^2/\text{NDF}: 9347.5/19$

Right Out:  $3.123 \pm 0.000$   $\chi^2/\text{NDF}: 512565.5/18$

Left In:  $0.561 \pm 0.002$   $\chi^2/\text{NDF}: 13312.4/17$

Left:  $0.550 \pm 0.001$   $\chi^2/\text{NDF}: 22767.8/37$

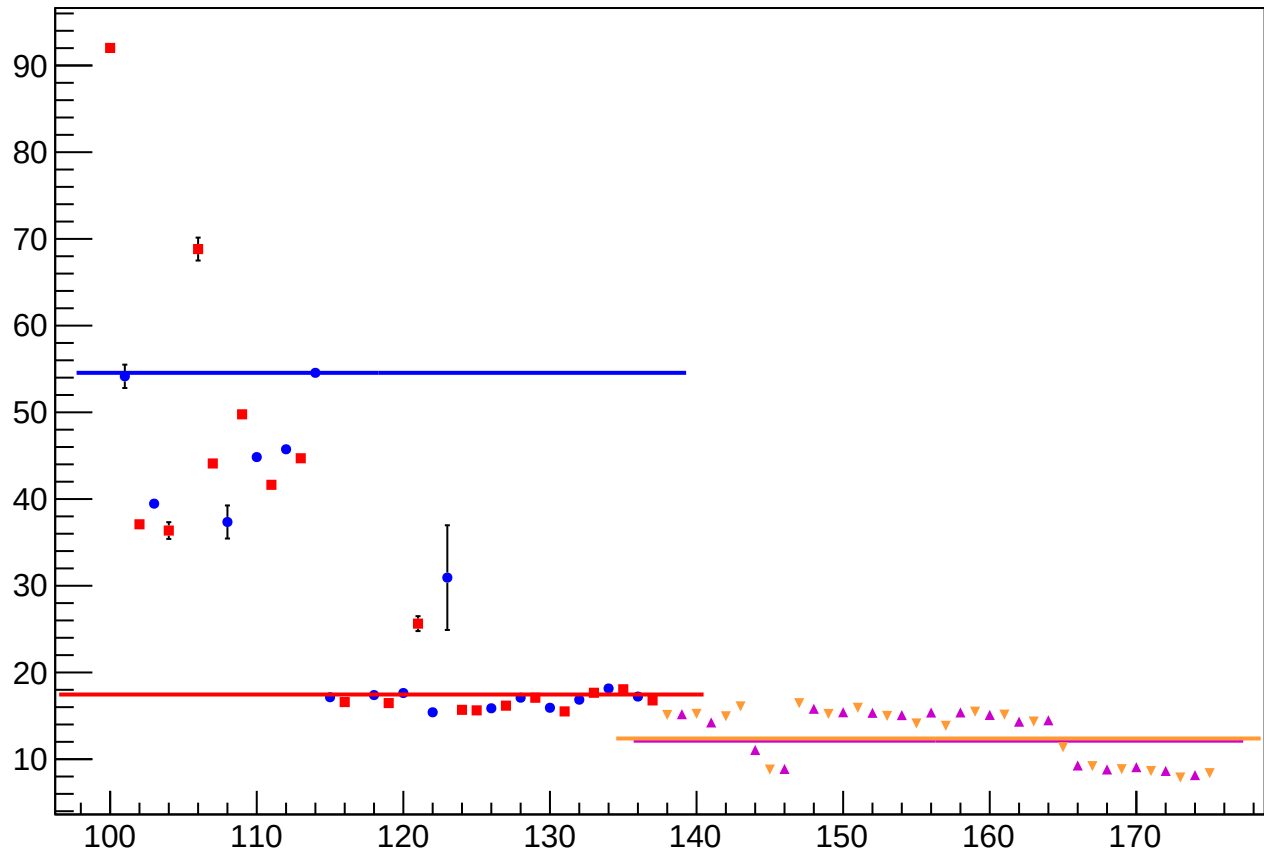
Right:  $2.073 \pm 0.000$   $\chi^2/\text{NDF}: 38099534578085305$

In:  $1.930 \pm 0.000$   $\chi^2/\text{NDF}: 713542.2/34$

Out:  $3.123 \pm 0.000$   $\chi^2/\text{NDF}: 2288184.8/38$

All:  $2.073 \pm 0.000$   $\chi^2/\text{NDF}: 38099534578085$

# dit\_sam2\_4aY\_slope vs Slug, Sign Corrected



Right In: 54.556+/-0.000  $\chi^2/\text{NDF}$ : 7238433.0/16

Left Out: 12.386+/-0.007  $\chi^2/\text{NDF}$ : 257219.9/19

Right Out: 17.458+/-0.018  $\chi^2/\text{NDF}$ : 99308.5/18

Left In: 12.135+/-0.006  $\chi^2/\text{NDF}$ : 313022.2/17

Left: 12.246+/-0.004  $\chi^2/\text{NDF}$ : 571068.7/37

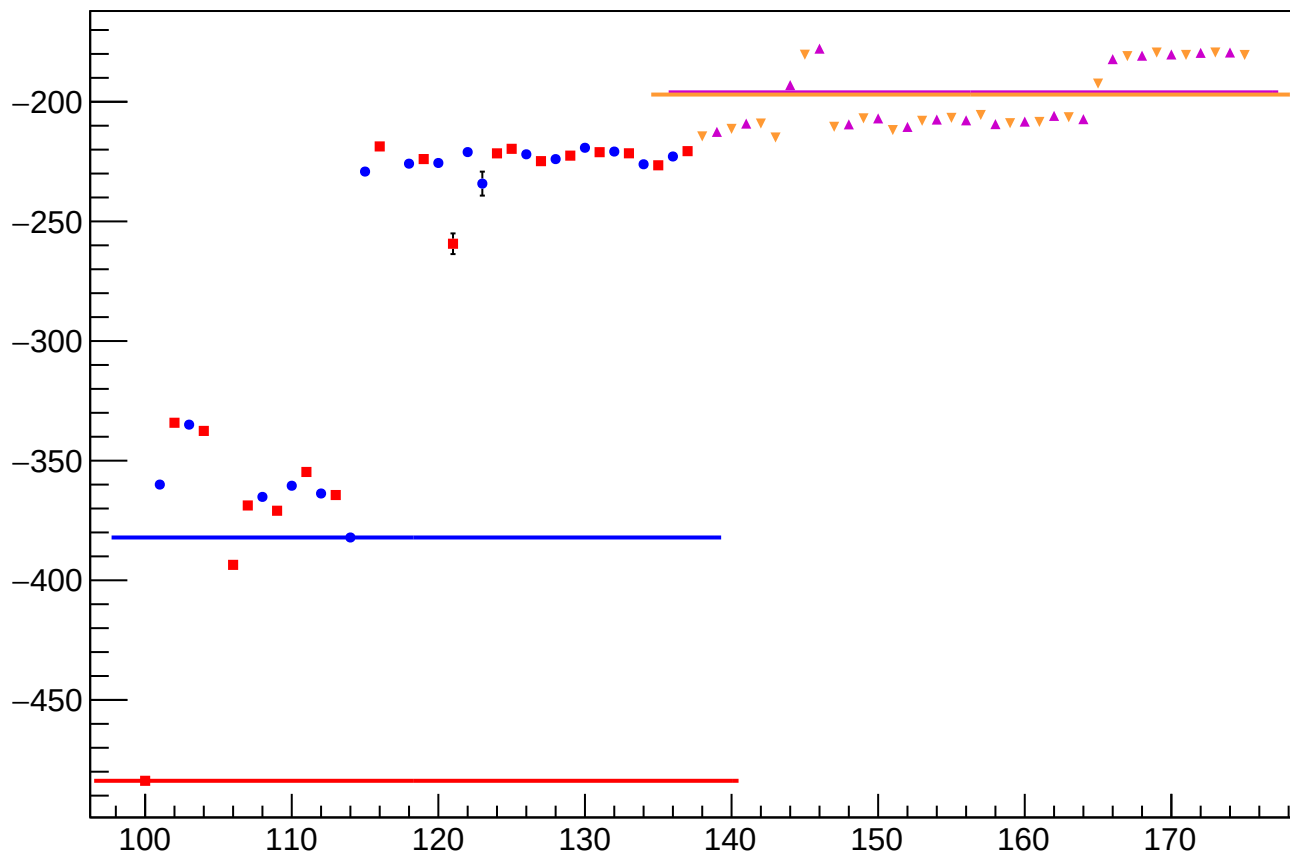
Right: 54.556+/-0.000  $\chi^2/\text{NDF}$ : 11453944.4/35

In: 54.556+/-0.000  $\chi^2/\text{NDF}$ : 60964260.4/34

Out: 12.956+/-0.006  $\chi^2/\text{NDF}$ : 424843.8/38

All: 54.556+/-0.000  $\chi^2/\text{NDF}$ : 107460190.1/73

# dit\_sam2\_4eY\_slope vs Slug, Sign Corrected



Right In:  $-382.108 \pm 0.000$   $\chi^2/\text{NDF}: 18398024.3/16$

Left Out:  $-196.983 \pm 0.014$   $\chi^2/\text{NDF}: 1051077.4/19$

Right Out:  $-483.800 \pm 0.000$   $\chi^2/\text{NDF}: 24338683.6/18$

Left In:  $-196.062 \pm 0.013$   $\chi^2/\text{NDF}: 1168081.6/17$

Left:  $-196.487 \pm 0.010$   $\chi^2/\text{NDF}: 2221486.8/37$

Right:  $-417.999 \pm 0.000$   $\chi^2/\text{NDF}: 12425488813367$

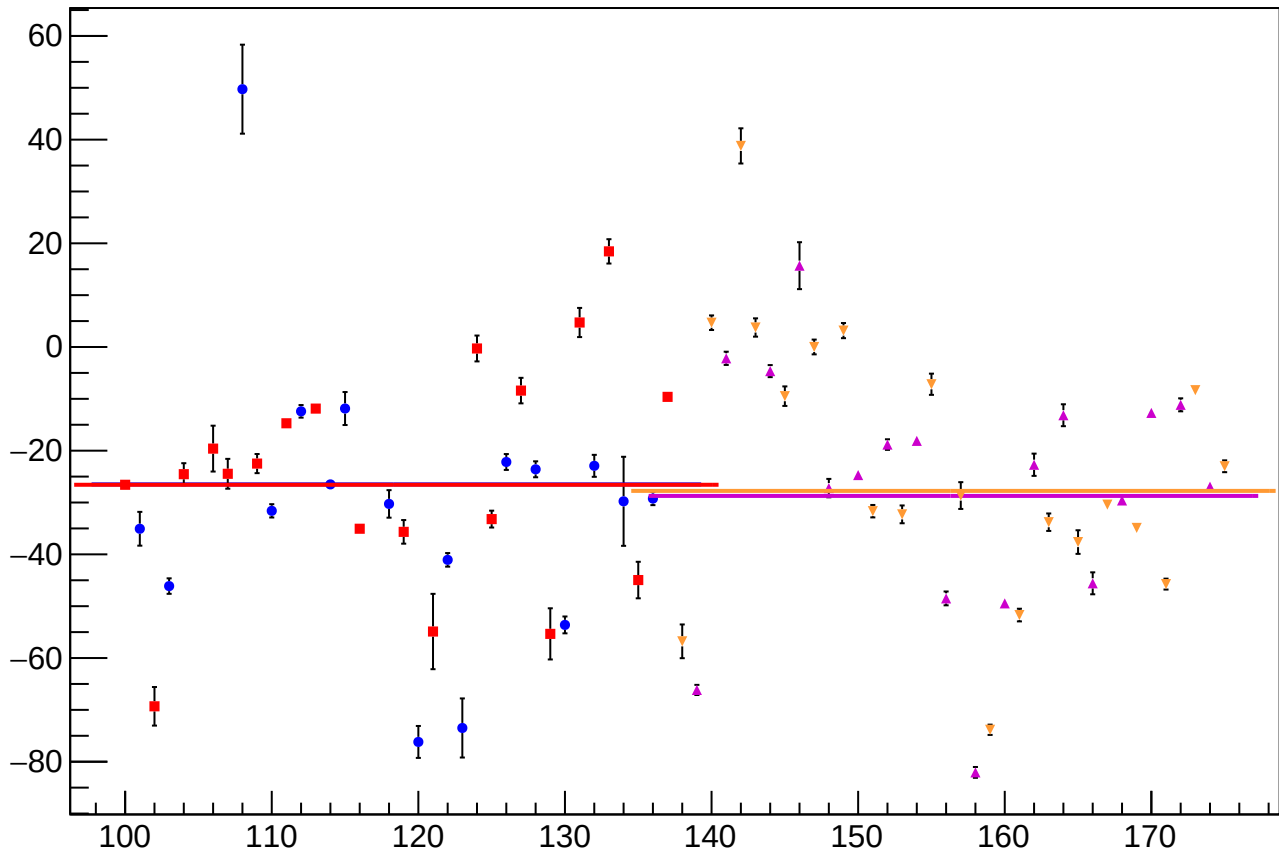
In:  $-382.108 \pm 0.000$   $\chi^2/\text{NDF}: 225191332.4/34$

Out:  $-483.800 \pm 0.000$   $\chi^2/\text{NDF}: 444059469.6/38$

All:  $-417.999 \pm 0.000$   $\chi^2/\text{NDF}: 12425488813$



# dit\_sam3\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-26.504 \pm 0.000$   $\chi^2/\text{NDF}: 1180.7/16$

Left Out:  $-27.757 \pm 0.274$   $\chi^2/\text{NDF}: 5964.7/19$

Right Out:  $-26.577 \pm 0.000$   $\chi^2/\text{NDF}: 2640.9/18$

Left In:  $-28.727 \pm 0.241$   $\chi^2/\text{NDF}: 7020.1/17$

Left:  $-28.305 \pm 0.181$   $\chi^2/\text{NDF}: 12991.9/37$

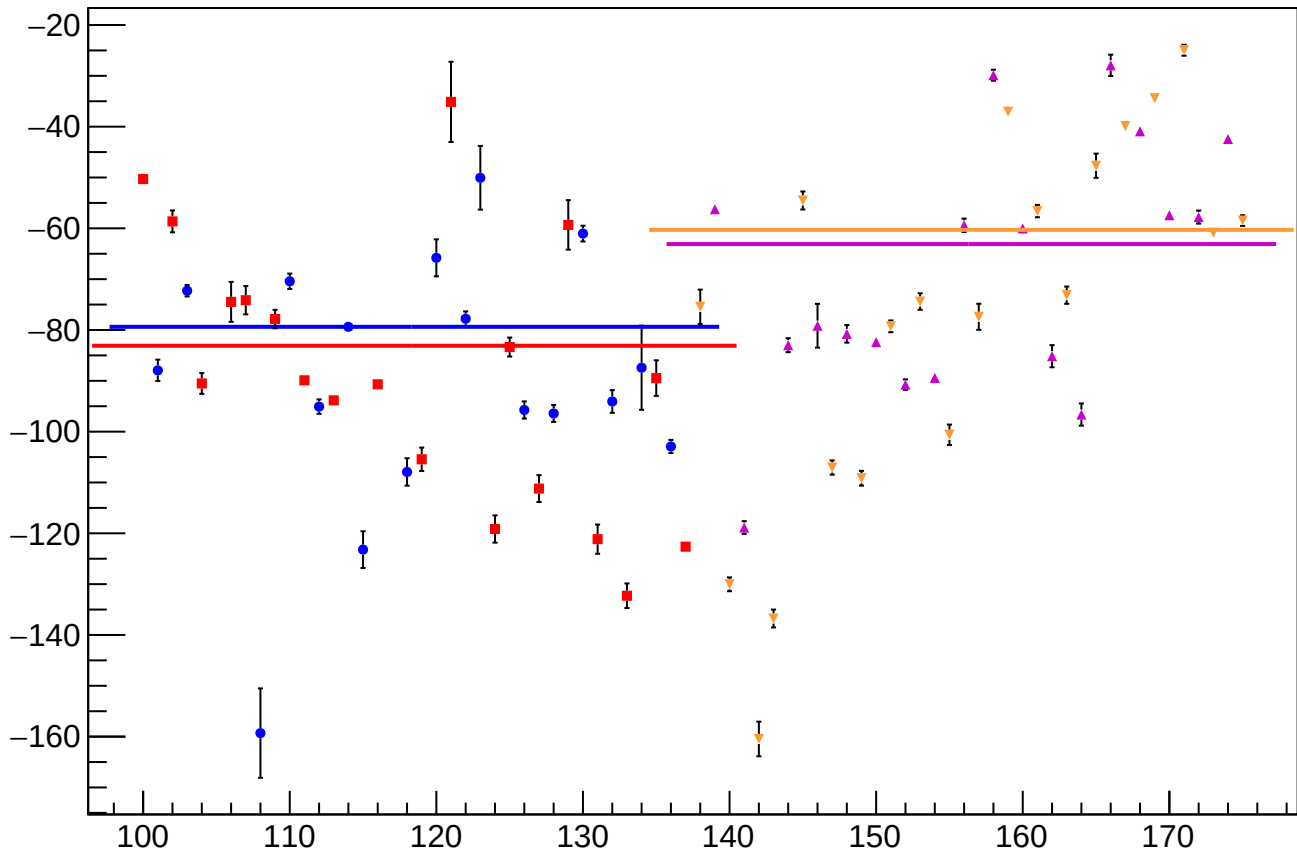
Right:  $-26.530 \pm 0.000$   $\chi^2/\text{NDF}: 412159279654659$

In:  $-26.504 \pm 0.000$   $\chi^2/\text{NDF}: 8286.2/34$

Out:  $-26.577 \pm 0.000$   $\chi^2/\text{NDF}: 8624.2/38$

All:  $-26.530 \pm 0.000$   $\chi^2/\text{NDF}: 412159279654$

# dit\_sam3\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}: 1304.6/16$

Left Out:  $-60.297 \pm 0.269$   $\chi^2/\text{NDF}: 12287.3/19$

Right Out:  $-83.099 \pm 0.178$   $\chi^2/\text{NDF}: 11915.8/18$

Left In:  $-63.097 \pm 0.241$   $\chi^2/\text{NDF}: 8076.1/17$

Left:  $-61.854 \pm 0.180$   $\chi^2/\text{NDF}: 20423.4/37$

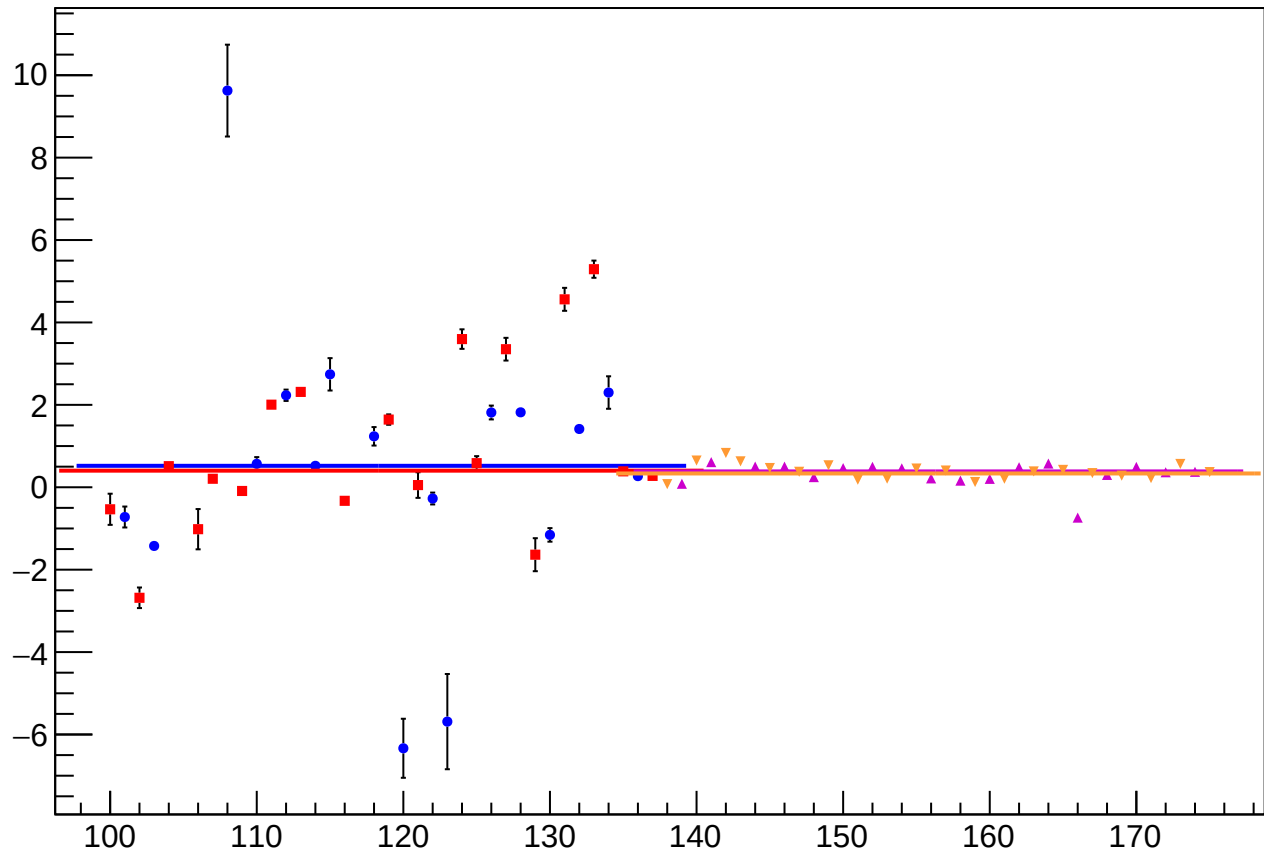
Right:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}: 13657.0/35$

In:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}: 13950.8/34$

Out:  $-76.163 \pm 0.149$   $\chi^2/\text{NDF}: 29184.4/38$

All:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}: 43602.5/73$

# dit\_sam3\_11X12X\_slope vs Slug, Sign Corrected



Right In: 0.521+/-0.000  $\chi^2/\text{NDF}$ : 3370.8/16

Left Out: 0.335+/-0.002  $\chi^2/\text{NDF}$ : 8746.3/19

Right Out: 0.403+/-0.011  $\chi^2/\text{NDF}$ : 2727.5/18

Left In: 0.385+/-0.002  $\chi^2/\text{NDF}$ : 9347.7/17

Left: 0.362+/-0.001  $\chi^2/\text{NDF}$ : 18512.0/37

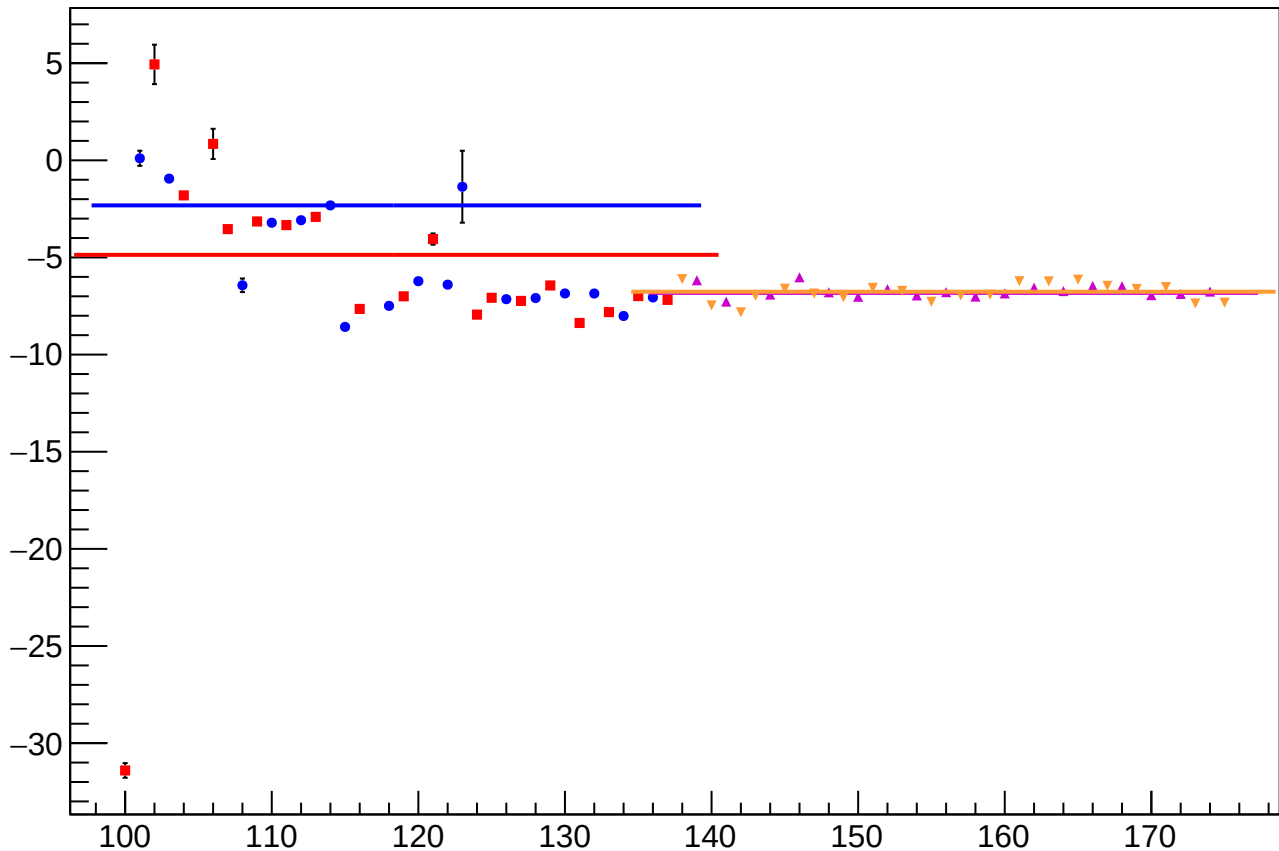
Right: 0.521+/-0.000  $\chi^2/\text{NDF}$ : 6215.1/35

In: 0.521+/-0.000  $\chi^2/\text{NDF}$ : 19615.8/34

Out: 0.337+/-0.002  $\chi^2/\text{NDF}$ : 11512.2/38

All: 0.521+/-0.000  $\chi^2/\text{NDF}$ : 41784.3/73

# dit\_sam3\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}$ : 270771.9/16

Left Out:  $-6.763 \pm 0.003$   $\chi^2/\text{NDF}$ : 10378.7/19

Right Out:  $-4.864 \pm 0.010$   $\chi^2/\text{NDF}$ : 49380.5/18

Left In:  $-6.823 \pm 0.002$   $\chi^2/\text{NDF}$ : 8141.9/17

Left:  $-6.795 \pm 0.002$   $\chi^2/\text{NDF}$ : 18802.7/37

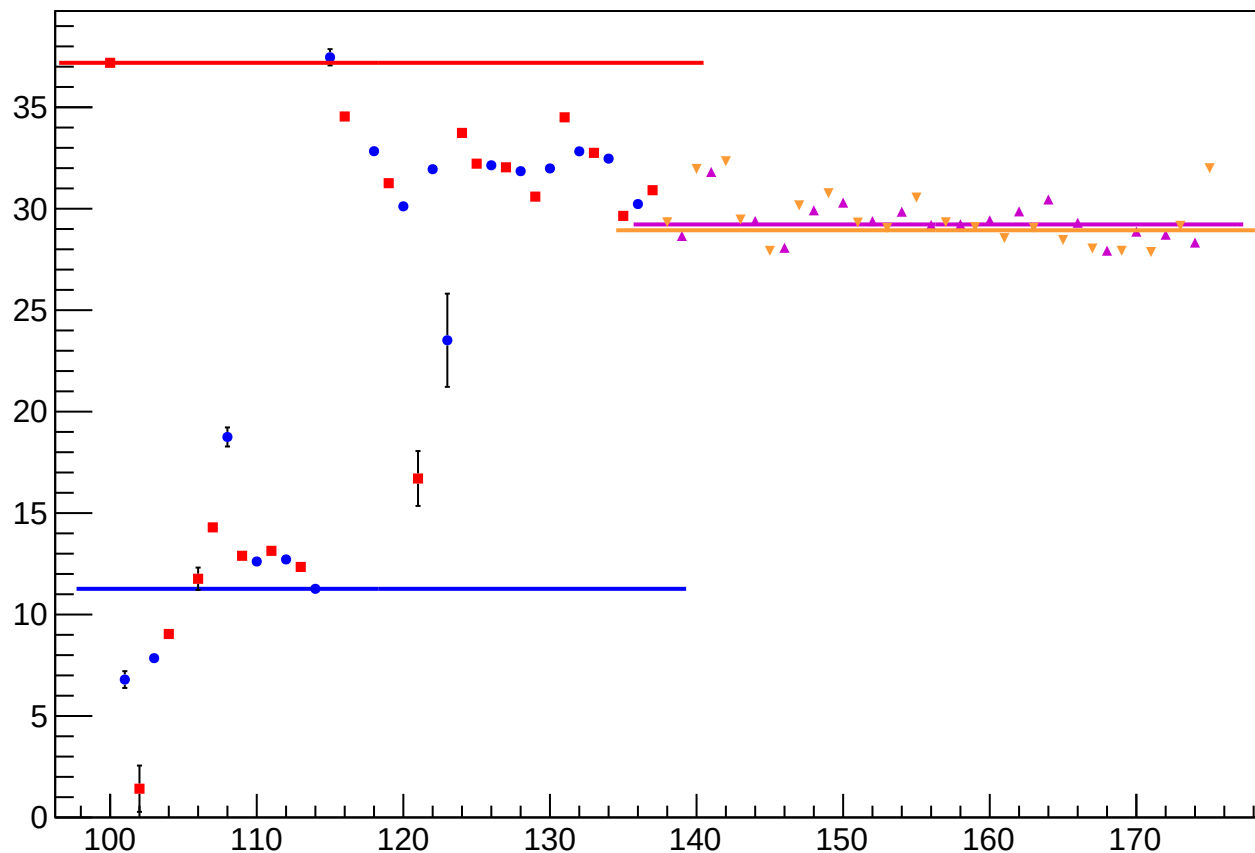
Right:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}$ : 381161.7/35

In:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}$ : 3645473.3/34

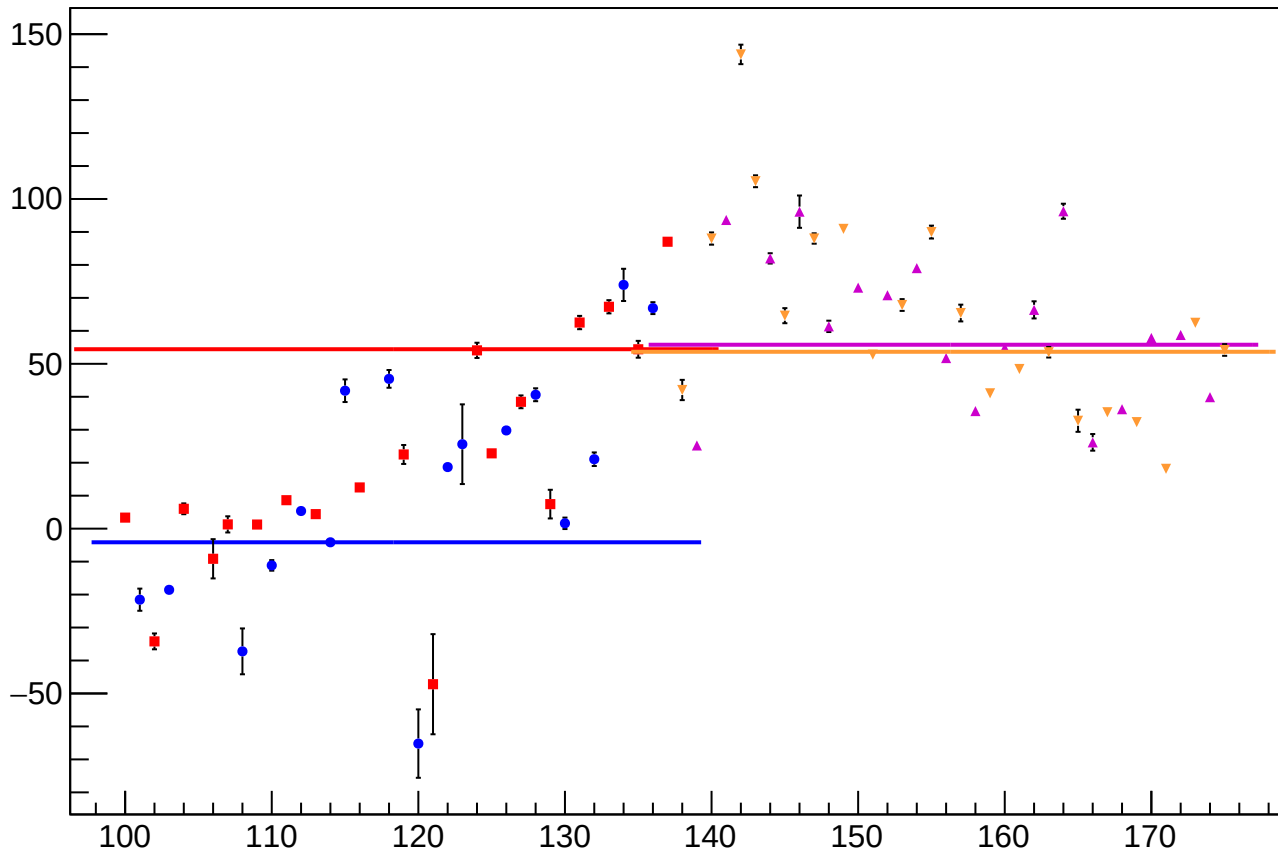
Out:  $-6.651 \pm 0.003$   $\chi^2/\text{NDF}$ : 91712.1/38

All:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}$ : 6717703.5/73

# dit\_sam3\_4eY\_slope vs Slug, Sign Corrected



# dit\_sam4\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}: 4654.2/16$

Left Out:  $53.653 \pm 0.304$   $\chi^2/\text{NDF}: 5937.5/19$

Right Out:  $54.427 \pm 0.170$   $\chi^2/\text{NDF}: 53998.7/18$

Left In:  $55.786 \pm 0.265$   $\chi^2/\text{NDF}: 5661.0/17$

Left:  $54.868 \pm 0.200$   $\chi^2/\text{NDF}: 11626.5/37$

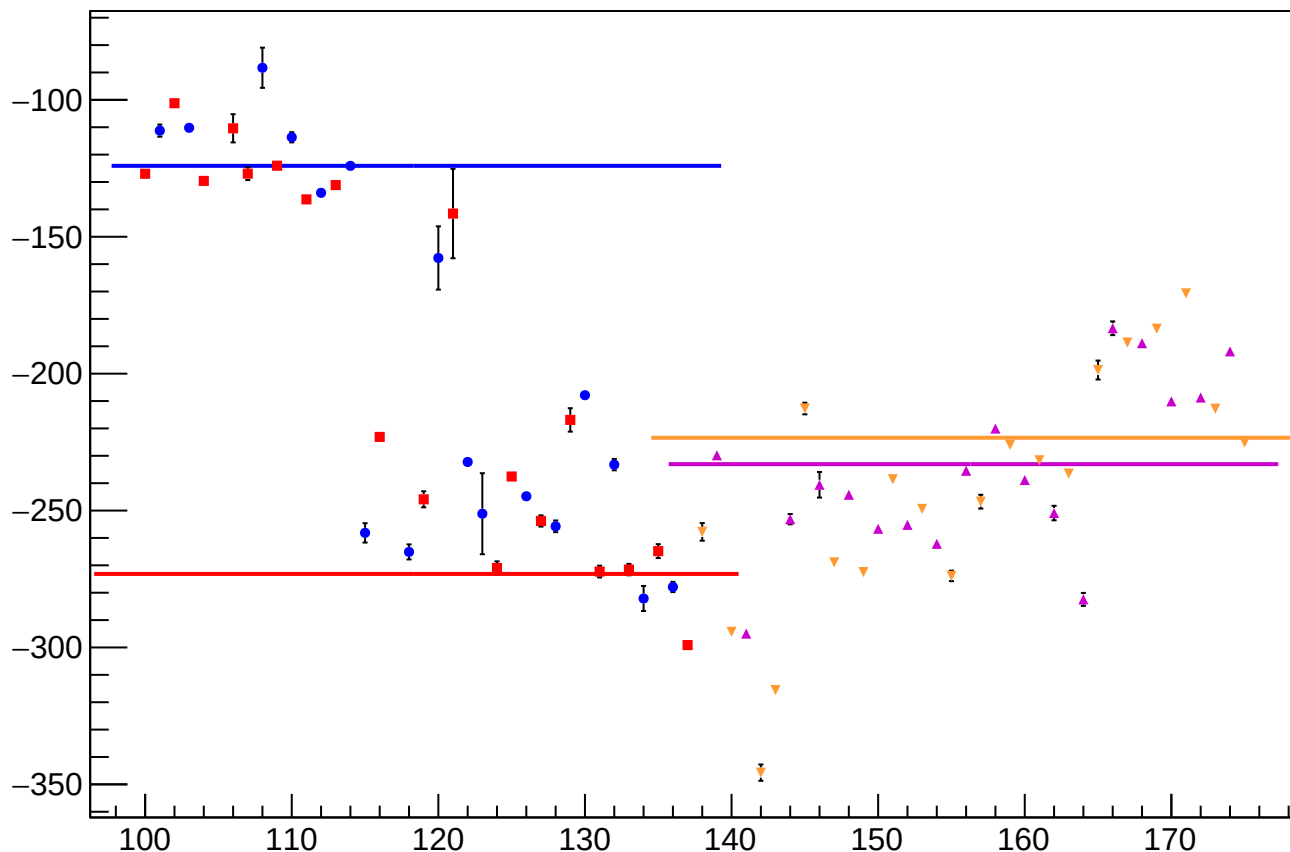
Right:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}: 177029.3/35$

In:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}: 61615.1/34$

Out:  $54.242 \pm 0.149$   $\chi^2/\text{NDF}: 59941.2/38$

All:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}: 275968.0/73$

# dit\_sam4\_4eX\_slope vs Slug, Sign Corrected



Right In: -124.095 $\pm$ 0.000  $\chi^2$ /NDF: 38152.5/16

Left Out: -223.408 $\pm$ 0.300  $\chi^2$ /NDF:15206.7/19

Right Out: -273.143 $\pm$ 0.113  $\chi^2$ /NDF: 280141.9/18

Left In: -233.049 $\pm$ 0.264  $\chi^2$ /NDF:10999.9/17

Left: -228.853 $\pm$ 0.198  $\chi^2$ /NDF: 26788.1/37

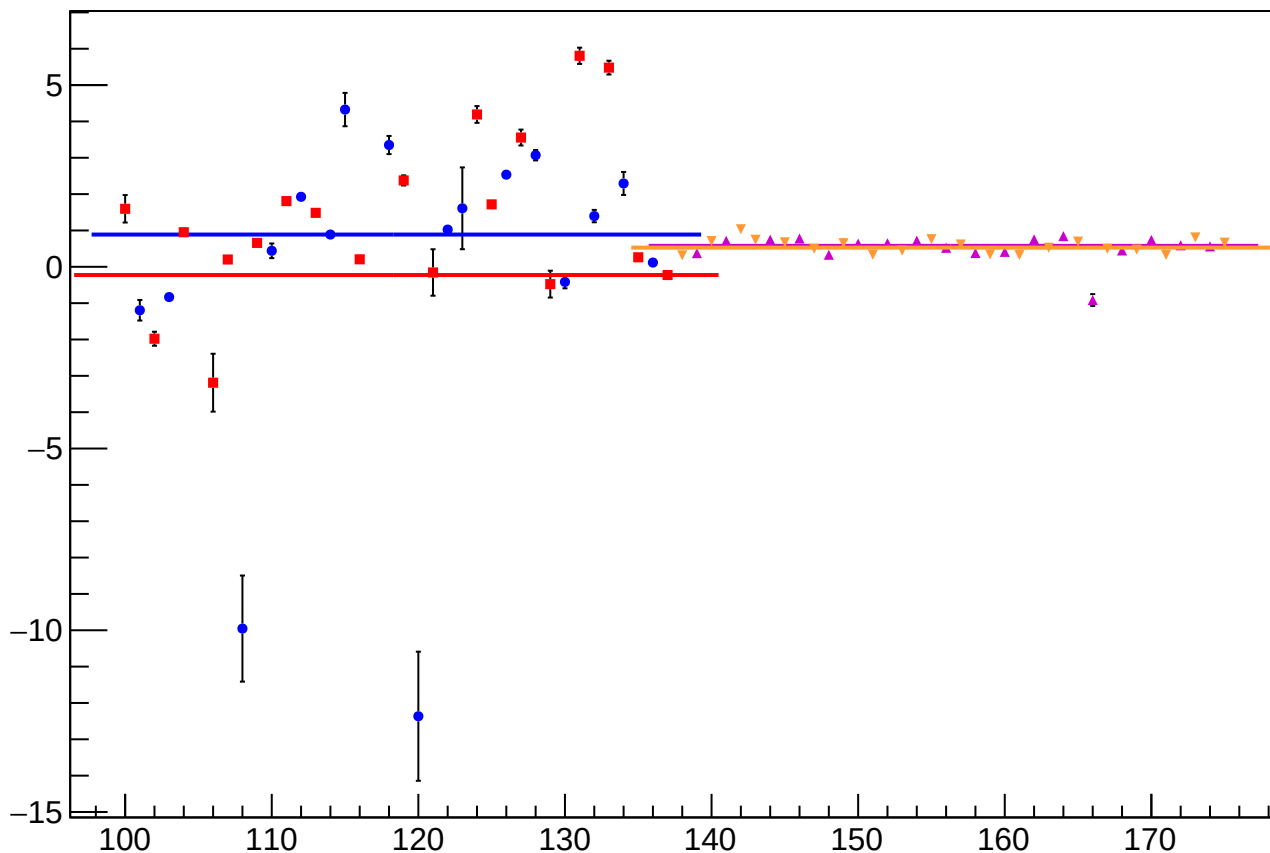
Right: -124.095 $\pm$ 0.000  $\chi^2$ /NDF: 2066776.4/35

In: -124.095 $\pm$ 0.000  $\chi^2$ /NDF:219749.9/34

Out: -267.007 $\pm$ 0.106  $\chi^2$ /NDF:319367.6/38

All: -124.095 $\pm$ 0.000  $\chi^2$ /NDF: 2372830.8/73

# dit\_sam4\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $0.888 \pm 0.000$   $\chi^2/\text{NDF}: 8672.0/16$

Left Out:  $0.528 \pm 0.002$   $\chi^2/\text{NDF}: 8608.9/19$

Right Out:  $-0.226 \pm 0.000$   $\chi^2/\text{NDF}: 5031.1/18$

Left In:  $0.576 \pm 0.002$   $\chi^2/\text{NDF}: 4908.0/17$

Left:  $0.552 \pm 0.001$   $\chi^2/\text{NDF}: 13784.4/37$

Right:  $0.888 \pm 0.000$   $\chi^2/\text{NDF}: 422220530.0/35$

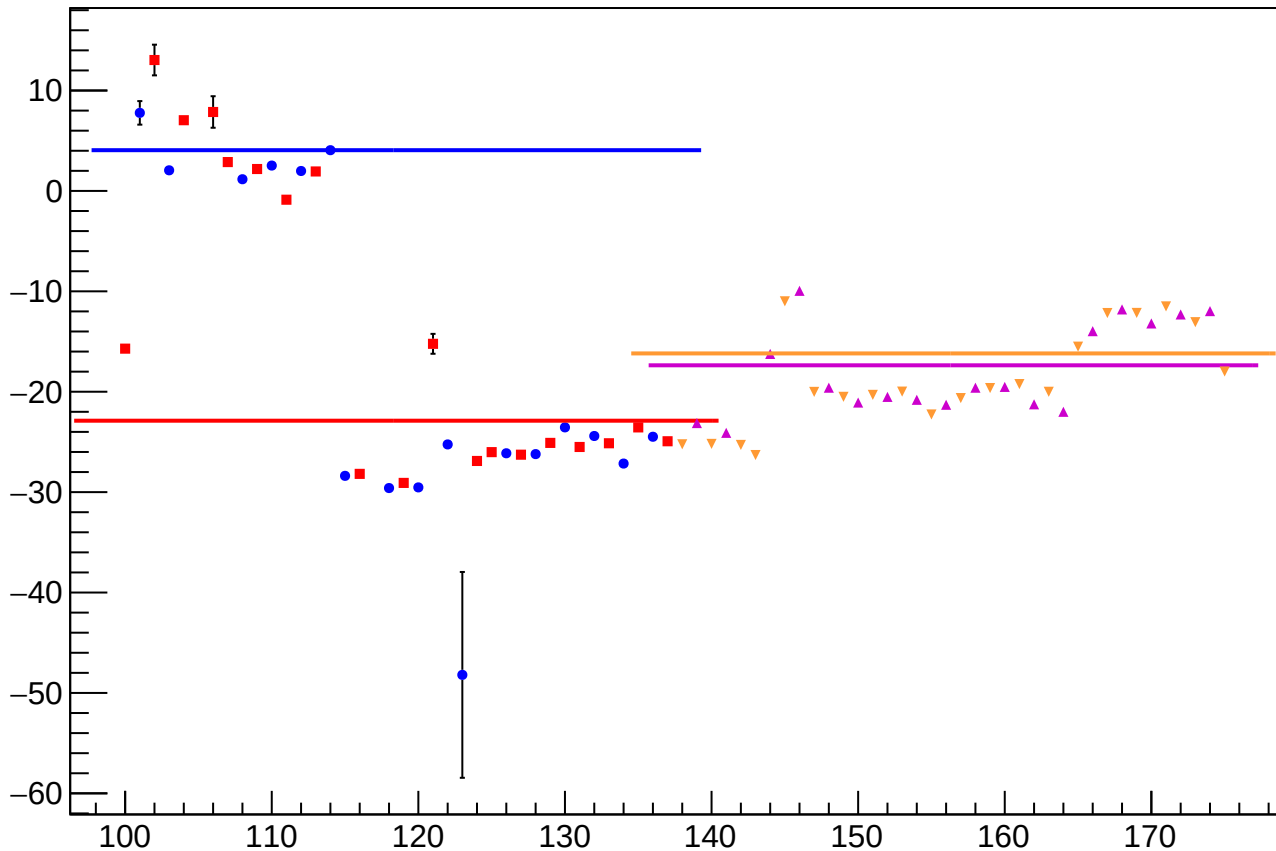
In:  $0.888 \pm 0.000$   $\chi^2/\text{NDF}: 35581.8/34$

Out:  $-0.225 \pm 0.000$   $\chi^2/\text{NDF}: 142401.7/38$

All:  $0.888 \pm 0.000$   $\chi^2/\text{NDF}: 422285415.1/73$



# dit\_sam4\_4aY\_slope vs Slug, Sign Corrected



Right In: 4.057+/-0.000  $\chi^2/\text{NDF}$ : 1247888.2/16

Left Out: -16.185+/-0.010  $\chi^2/\text{NDF}$ :178069.1/19

Right Out: -22.885+/-0.026  $\chi^2/\text{NDF}$ : 116508.9/18

Left In: -17.368+/-0.009  $\chi^2/\text{NDF}$ :167740.9/17

Left: -16.834+/-0.007  $\chi^2/\text{NDF}$ : 352813.4/37

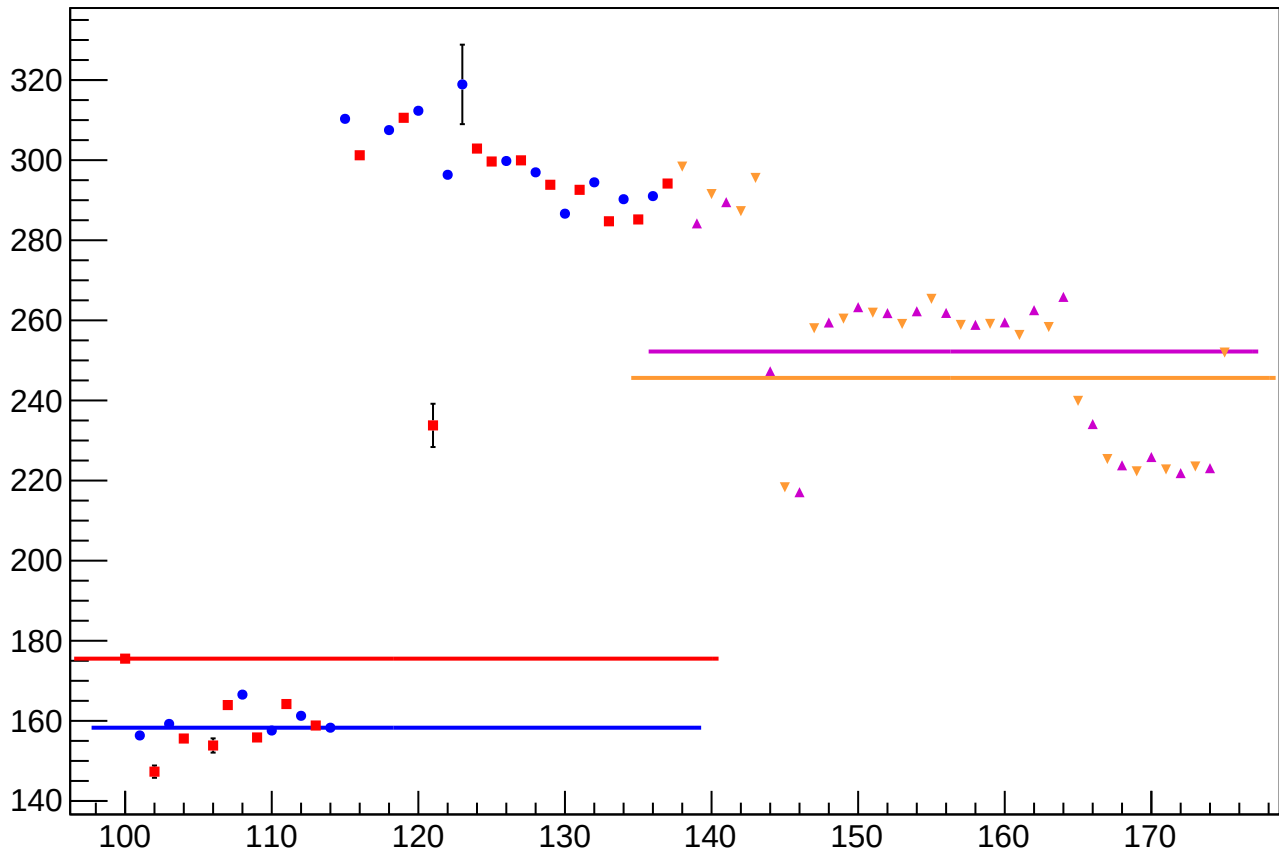
Right: 4.057+/-0.000  $\chi^2/\text{NDF}$ : 2412173.4/35

In: 4.057+/-0.000  $\chi^2/\text{NDF}$ :6507359.1/34

Out: -17.101+/-0.010  $\chi^2/\text{NDF}$ :350516.8/38

All: 4.057+/-0.000  $\chi^2/\text{NDF}$ : 11582351.4/73

# dit\_sam4\_4eY\_slope vs Slug, Sign Corrected



Right In:  $158.293 \pm 0.000$   $\chi^2/\text{NDF}: 2410913.3/16$

Left Out:  $245.629 \pm 0.028$   $\chi^2/\text{NDF}: 702300.4/19$

Right Out:  $175.536 \pm 0.000$   $\chi^2/\text{NDF}: 2100196.2/18$

Left In:  $252.221 \pm 0.029$   $\chi^2/\text{NDF}: 355781.2/17$

Left:  $248.834 \pm 0.020$   $\chi^2/\text{NDF}: 1085422.7/37$

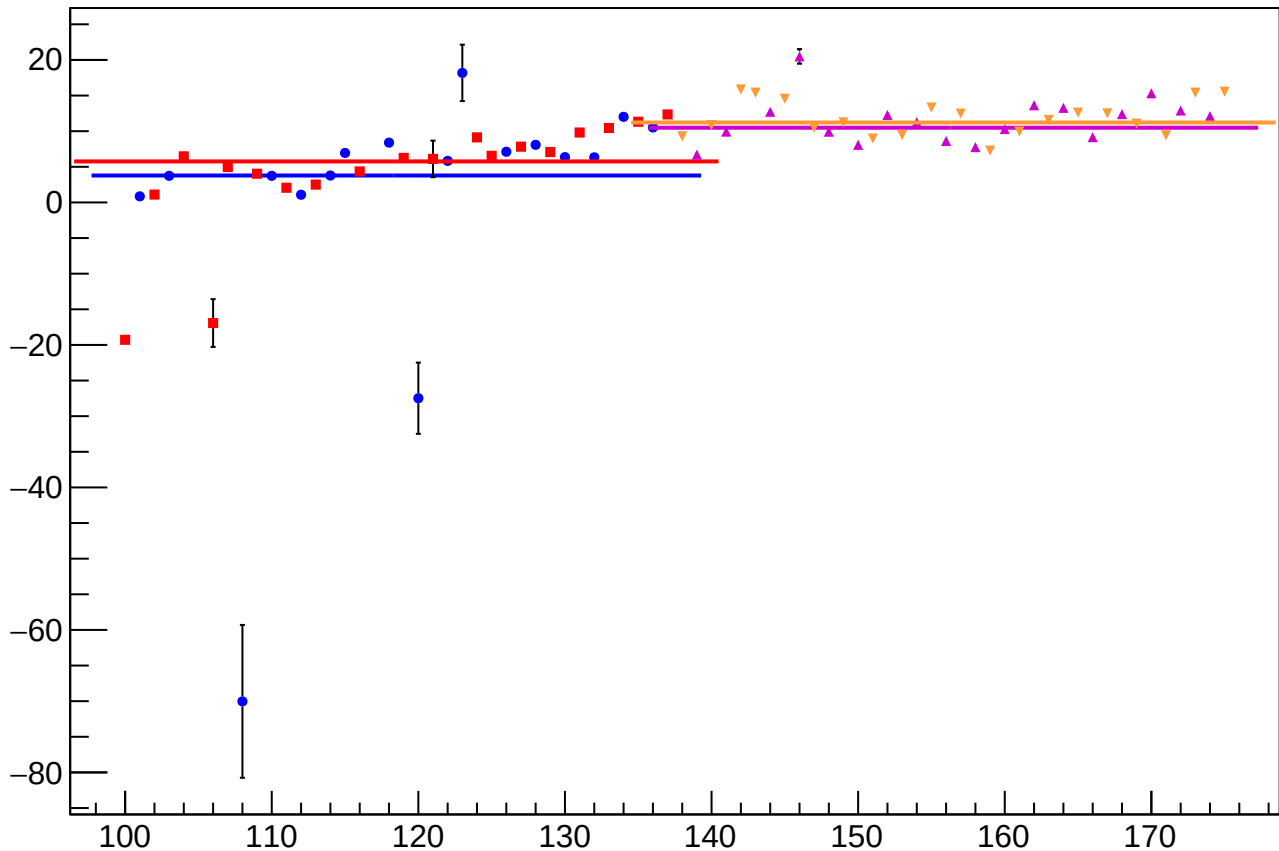
Right:  $172.618 \pm 0.000$   $\chi^2/\text{NDF}: 373727491225928$

In:  $158.293 \pm 0.000$   $\chi^2/\text{NDF}: 13571299.2/34$

Out:  $175.536 \pm 0.000$   $\chi^2/\text{NDF}: 9162129.6/38$

All:  $172.618 \pm 0.000$   $\chi^2/\text{NDF}: 373727491225$

# dit\_sam5\_4aX\_slope vs Slug, Sign Corrected



Right In:  $3.778 \pm 0.000$   $\chi^2/\text{NDF}: 6871.4/16$

Left Out:  $11.219 \pm 0.032$   $\chi^2/\text{NDF}: 3962.0/19$

Right Out:  $5.756 \pm 0.026$   $\chi^2/\text{NDF}: 22291.6/18$

Left In:  $10.484 \pm 0.029$   $\chi^2/\text{NDF}: 8408.3/17$

Left:  $10.819 \pm 0.022$   $\chi^2/\text{NDF}: 12658.3/37$

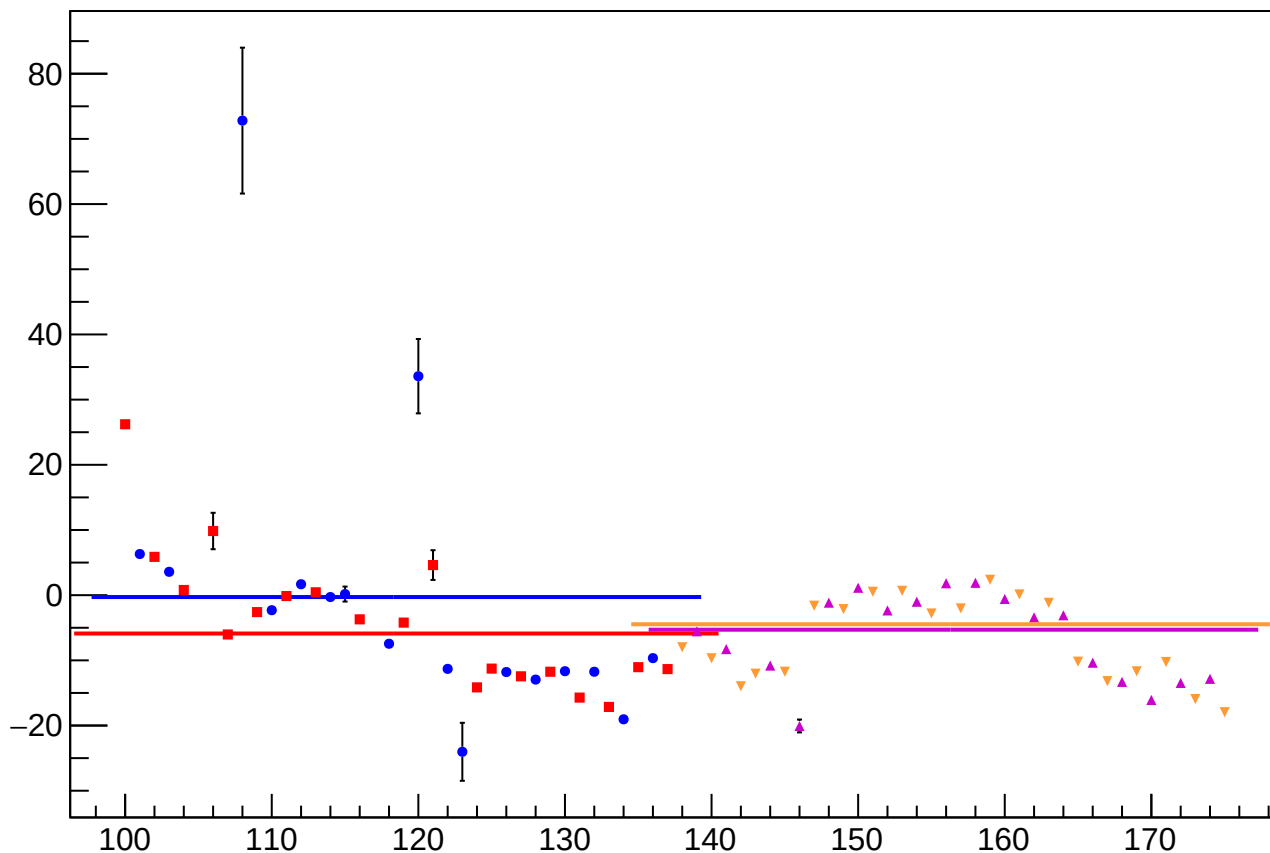
Right:  $3.778 \pm 0.000$   $\chi^2/\text{NDF}: 35056.1/35$

In:  $3.778 \pm 0.000$   $\chi^2/\text{NDF}: 67778.8/34$

Out:  $7.911 \pm 0.020$   $\chi^2/\text{NDF}: 43994.8/38$

All:  $3.778 \pm 0.000$   $\chi^2/\text{NDF}: 154272.3/73$

# dit\_sam5\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-0.287 \pm 0.000$   $\chi^2/\text{NDF}$ : 44276.5/16

Left Out:  $-4.464 \pm 0.032$   $\chi^2/\text{NDF}$ : 32696.2/19

Right Out:  $-5.882 \pm 0.027$   $\chi^2/\text{NDF}$ : 63493.9/18

Left In:  $-5.298 \pm 0.030$   $\chi^2/\text{NDF}$ : 46514.4/17

Left:  $-4.910 \pm 0.022$   $\chi^2/\text{NDF}$ : 79578.2/37

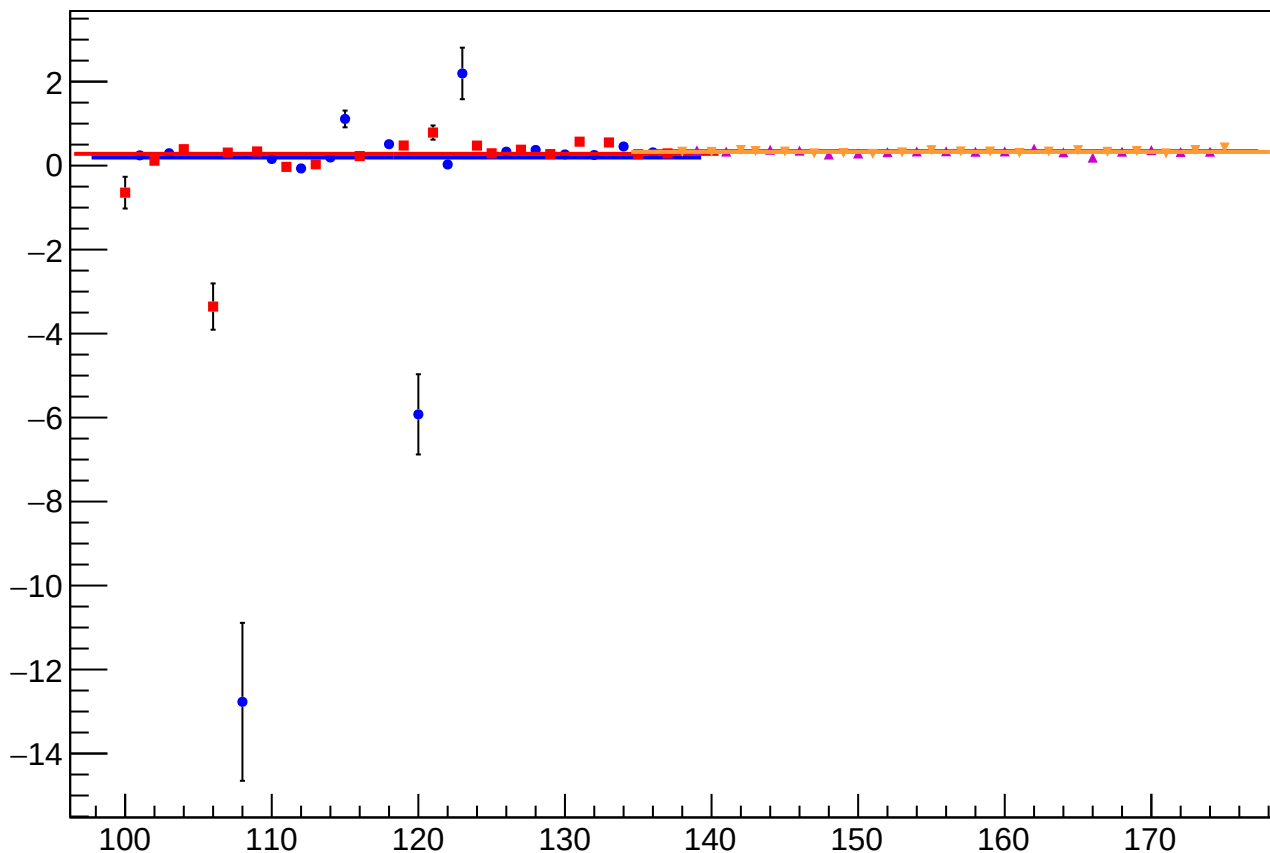
Right:  $-0.287 \pm 0.000$   $\chi^2/\text{NDF}$ : 150060.6/35

In:  $-0.287 \pm 0.000$   $\chi^2/\text{NDF}$ : 119297.6/34

Out:  $-5.284 \pm 0.021$   $\chi^2/\text{NDF}$ : 97336.7/38

All:  $-0.287 \pm 0.000$   $\chi^2/\text{NDF}$ : 274979.2/73

# dit\_sam5\_11X12X\_slope vs Slug, Sign Corrected



Right In: 0.193 $\pm$ 0.000  $\chi^2$ /NDF: 10027.5/16

Left Out: 0.325 $\pm$ 0.001  $\chi^2$ /NDF:2441.2/19

Right Out: 0.280 $\pm$ 0.001  $\chi^2$ /NDF: 6059.0/18

Left In: 0.343 $\pm$ 0.001  $\chi^2$ /NDF:3413.9/17

Left: 0.334 $\pm$ 0.000  $\chi^2$ /NDF: 6383.0/37

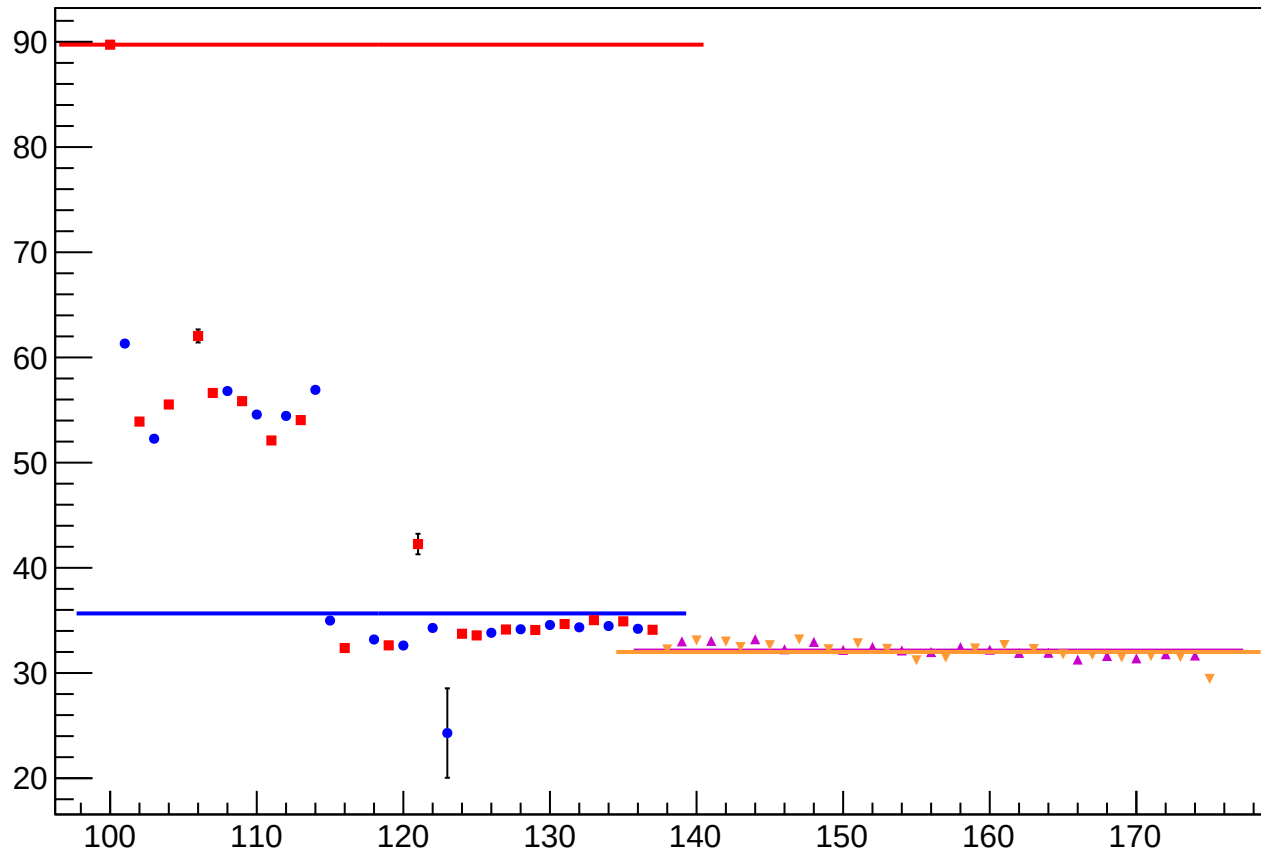
Right: 0.193 $\pm$ 0.000  $\chi^2$ /NDF: 19578.7/35

In: 0.193 $\pm$ 0.000  $\chi^2$ /NDF:87502.3/34

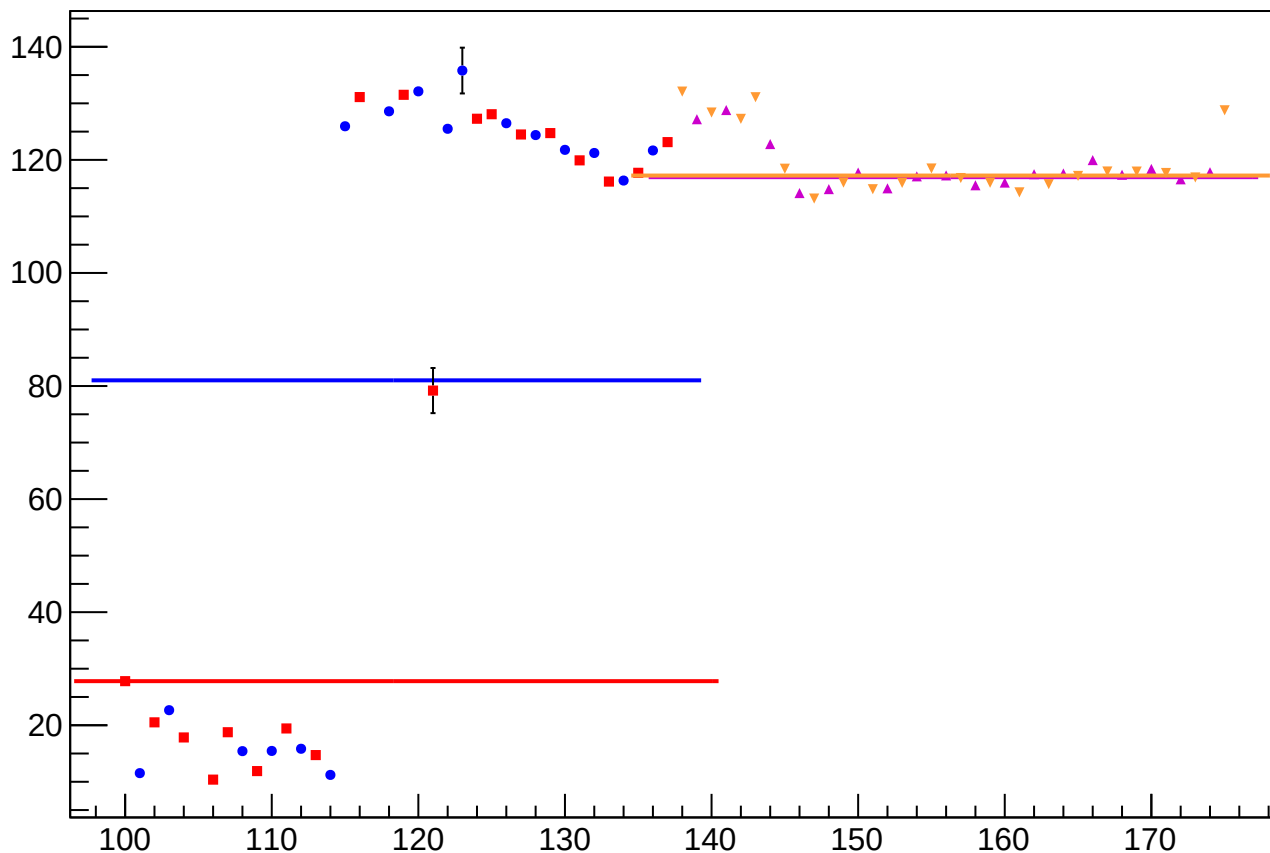
Out: 0.319 $\pm$ 0.001  $\chi^2$ /NDF:9297.3/38

All: 0.193 $\pm$ 0.000  $\chi^2$ /NDF: 153637.7/73

# dit\_sam5\_4aY\_slope vs Slug, Sign Corrected



# dit\_sam5\_4eY\_slope vs Slug, Sign Corrected



Right In: 81.005 $\pm$ 0.035  $\chi^2$ /NDF: 2228881.4/16

Left Out: 117.229 $\pm$ 0.008  $\chi^2$ /NDF: 143320.4/19

Right Out: 27.798 $\pm$ 0.000  $\chi^2$ /NDF: 9183707.8/18

Left In: 116.943 $\pm$ 0.009  $\chi^2$ /NDF: 43358.3/17

Left: 117.102 $\pm$ 0.006  $\chi^2$ /NDF: 187256.4/37

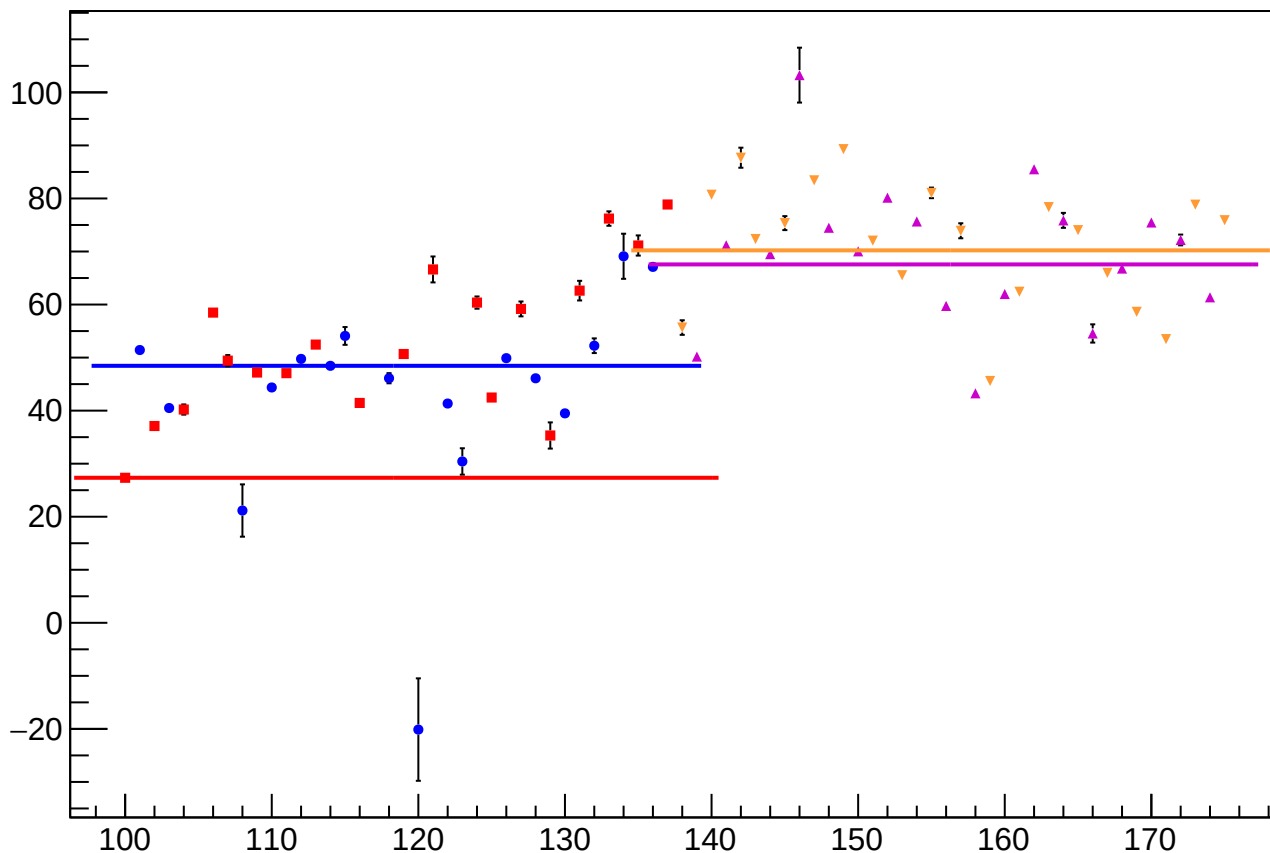
Right: 27.798 $\pm$ 0.000  $\chi^2$ /NDF: 13786729.0/35

In: 114.723 $\pm$ 0.009  $\chi^2$ /NDF: 3288419.9/34

Out: 27.798 $\pm$ 0.000  $\chi^2$ /NDF: 136974453.7/38

All: 27.798 $\pm$ 0.000  $\chi^2$ /NDF: 242821489.7/73

# dit\_sam6\_4aX\_slope vs Slug, Sign Corrected



Right In:  $48.450 \pm 0.000$   $\chi^2/\text{NDF}: 2751.4/16$

Left Out:  $70.215 \pm 0.161$   $\chi^2/\text{NDF}: 5186.1/19$

Right Out:  $27.342 \pm 0.000$   $\chi^2/\text{NDF}: 25810.4/18$

Left In:  $67.566 \pm 0.142$   $\chi^2/\text{NDF}: 5092.0/17$

Left:  $68.723 \pm 0.106$   $\chi^2/\text{NDF}: 10430.7/37$

Right:  $28.365 \pm 0.000$   $\chi^2/\text{NDF}: 1026290104888328$

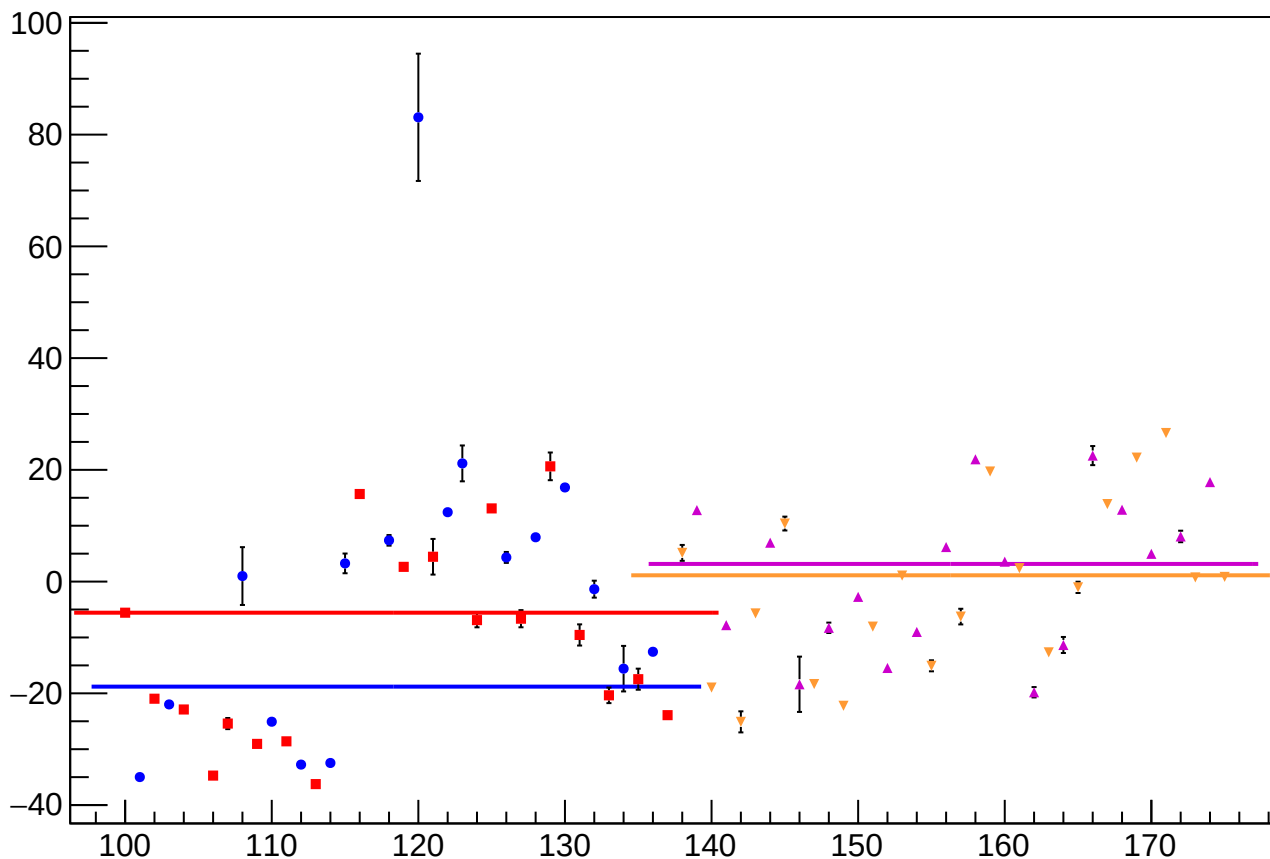
In:  $48.450 \pm 0.000$   $\chi^2/\text{NDF}: 26021.6/34$

Out:  $27.342 \pm 0.000$   $\chi^2/\text{NDF}: 101942.5/38$

All:  $28.365 \pm 0.000$   $\chi^2/\text{NDF}: 1026290104888$



# dit\_sam6\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-18.800 \pm 0.148$   $\chi^2/\text{NDF}: 11764.7/16$

Left Out:  $1.126 \pm 0.160$   $\chi^2/\text{NDF}: 8097.8/19$

Right Out:  $-5.568 \pm 0.000$   $\chi^2/\text{NDF}: 23097.3/18$

Left In:  $3.160 \pm 0.142$   $\chi^2/\text{NDF}: 5640.4/17$

Left:  $2.266 \pm 0.106$   $\chi^2/\text{NDF}: 13828.5/37$

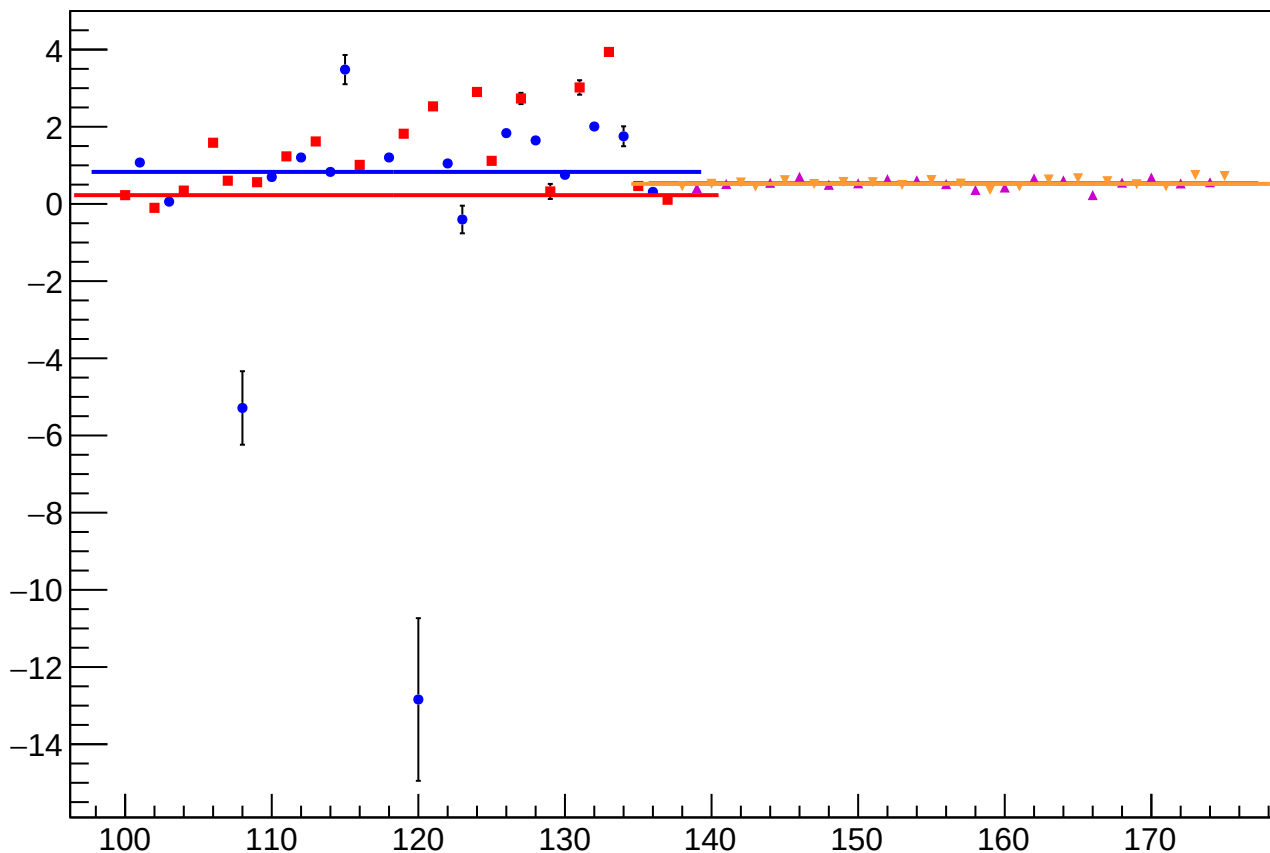
Right:  $-5.568 \pm 0.000$   $\chi^2/\text{NDF}: 42808.5/35$

In:  $-7.325 \pm 0.103$   $\chi^2/\text{NDF}: 28841.2/34$

Out:  $-5.568 \pm 0.000$   $\chi^2/\text{NDF}: 32940.0/38$

All:  $-5.568 \pm 0.000$   $\chi^2/\text{NDF}: 62074.8/73$

# dit\_sam6\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $0.830 \pm 0.000$   $\chi^2/\text{NDF}: 14882.7/16$

Left Out:  $0.520 \pm 0.001$   $\chi^2/\text{NDF}: 13496.6/19$

Right Out:  $0.227 \pm 0.000$   $\chi^2/\text{NDF}: 11819.9/18$

Left In:  $0.533 \pm 0.001$   $\chi^2/\text{NDF}: 9959.6/17$

Left:  $0.527 \pm 0.001$   $\chi^2/\text{NDF}: 23538.9/37$

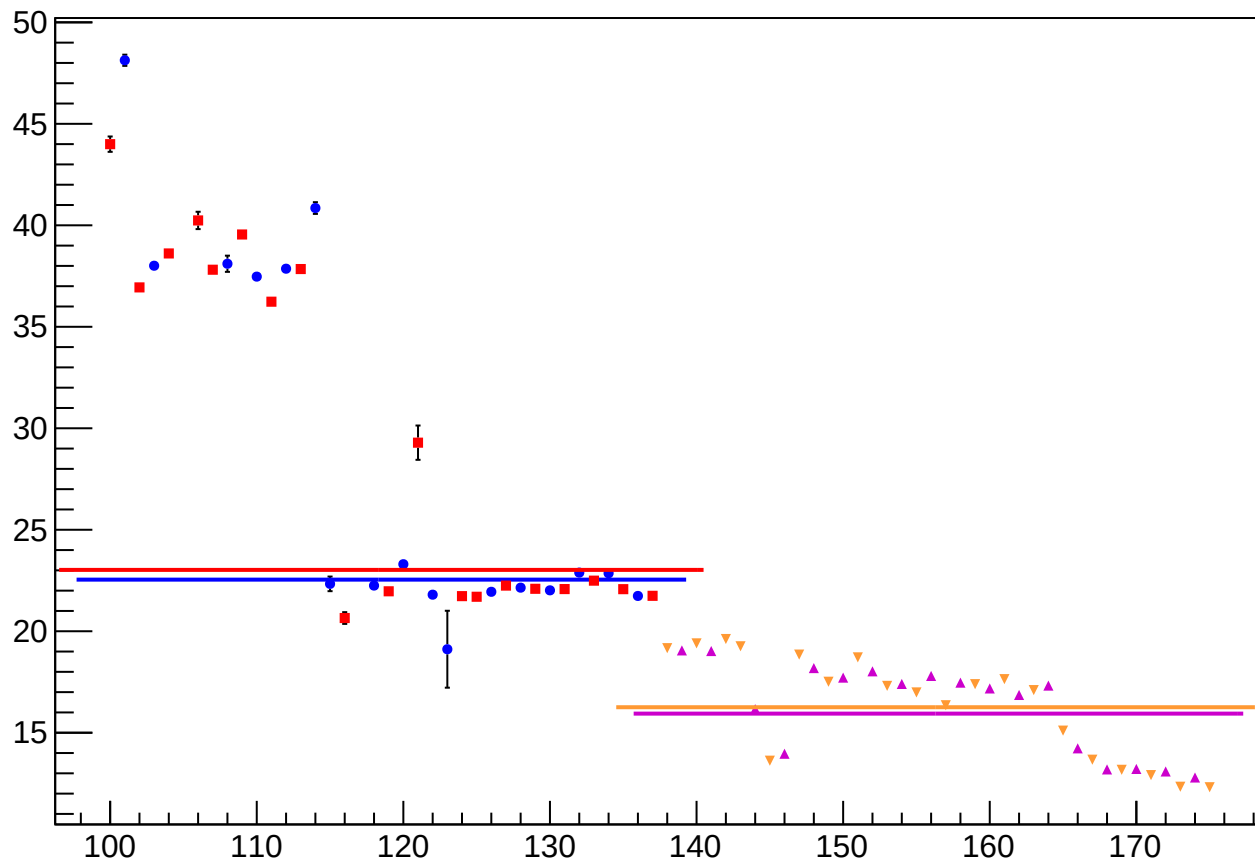
Right:  $0.289 \pm 0.000$   $\chi^2/\text{NDF}: 29066082561457147$

In:  $0.830 \pm 0.000$   $\chi^2/\text{NDF}: 107592.1/34$

Out:  $0.227 \pm 0.000$   $\chi^2/\text{NDF}: 102614.1/38$

All:  $0.289 \pm 0.000$   $\chi^2/\text{NDF}: 29066082561457$

# dit\_sam6\_4aY\_slope vs Slug, Sign Corrected



Right In: 22.543 $\pm$ 0.009  $\chi^2$ /NDF: 105452.8/16

Left Out: 16.256 $\pm$ 0.005  $\chi^2$ /NDF: 238977.1/19

Right Out: 23.023 $\pm$ 0.009  $\chi^2$ /NDF: 165838.0/18

Left In: 15.942 $\pm$ 0.005  $\chi^2$ /NDF: 186765.9/17

Left: 16.113 $\pm$ 0.004  $\chi^2$ /NDF: 427569.1/37

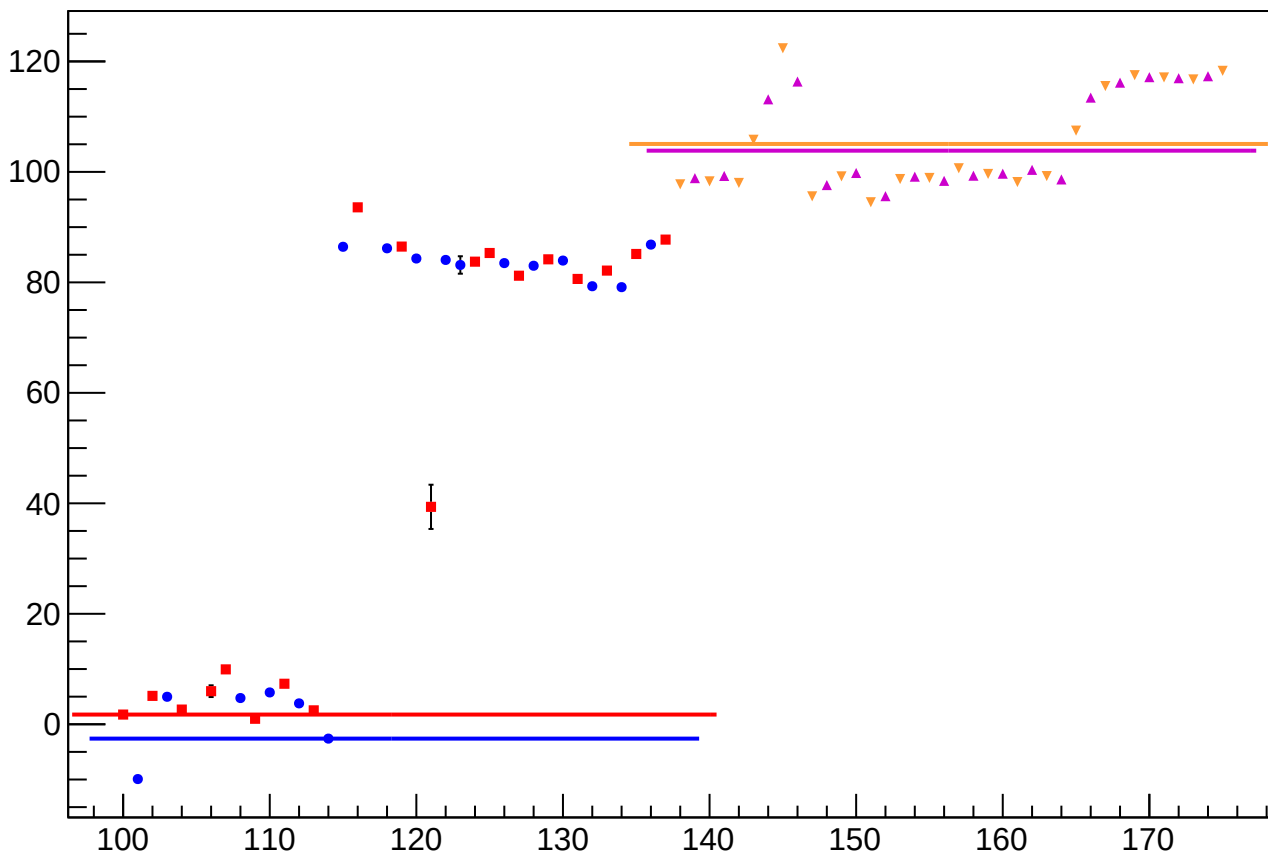
Right: 22.790 $\pm$ 0.006  $\chi^2$ /NDF: 272655.1/35

In: 17.623 $\pm$ 0.005  $\chi^2$ /NDF: 666902.8/34

Out: 17.821 $\pm$ 0.004  $\chi^2$ /NDF: 834957.4/38

All: 17.730 $\pm$ 0.003  $\chi^2$ /NDF: 1502811.6/73

# dit\_sam6\_4eY\_slope vs Slug, Sign Corrected



Right In: -2.596+/-0.000  $\chi^2/\text{NDF}$ : 7395182.7/16

Left Out: 105.057+/-0.011  $\chi^2/\text{NDF}$ : 701040.7/19

Right Out: 1.758+/-0.000  $\chi^2/\text{NDF}$ : 4230949.4/18

Left In: 103.842+/-0.011  $\chi^2/\text{NDF}$ : 556277.8/17

Left: 104.466+/-0.008  $\chi^2/\text{NDF}$ : 1263691.6/37

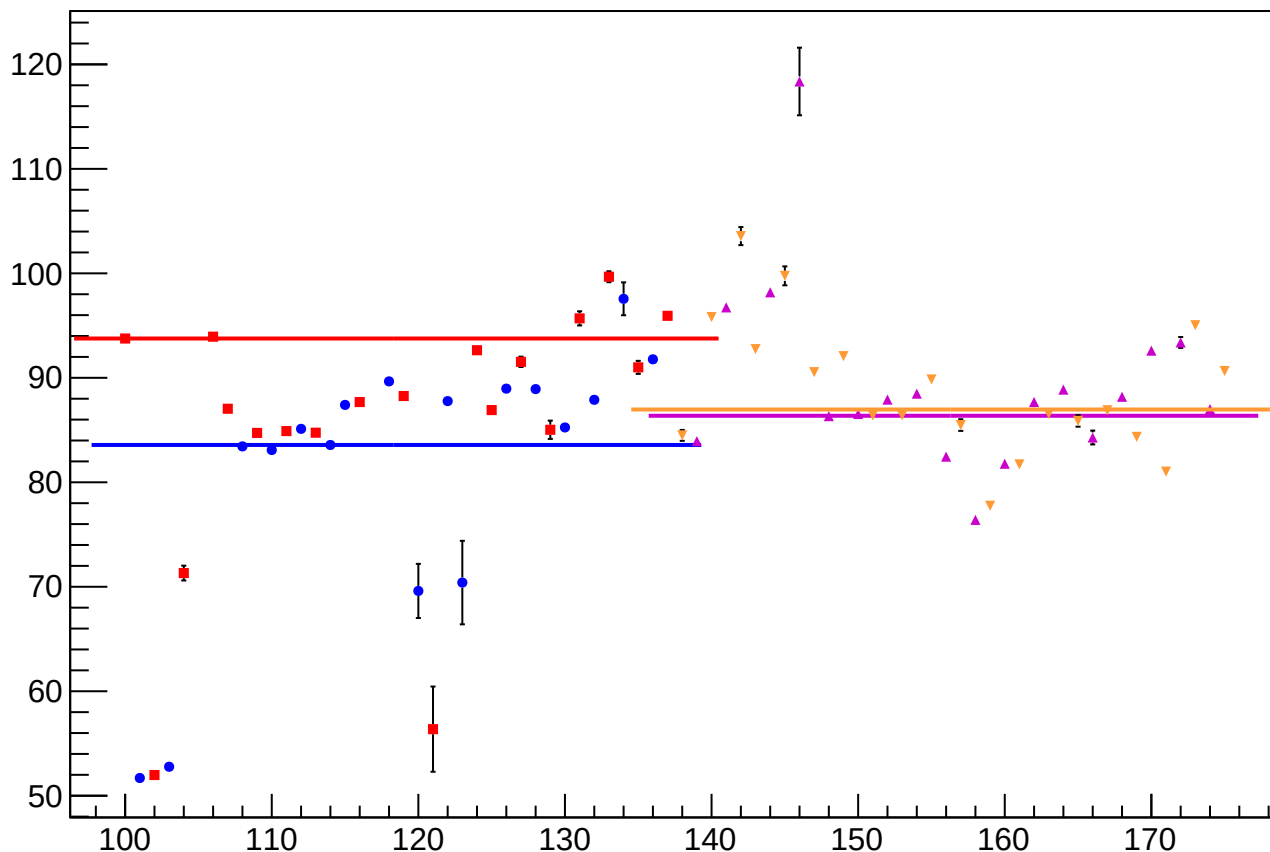
Right: -1.059+/-0.000  $\chi^2/\text{NDF}$ : 3731791751577379

In: -2.596+/-0.000  $\chi^2/\text{NDF}$ : 103345121.3/34

Out: 1.758+/-0.000  $\chi^2/\text{NDF}$ : 99640959.4/38

All: -1.059+/-0.000  $\chi^2/\text{NDF}$ : 3731791751577

# dit\_sam7\_4aX\_slope vs Slug, Sign Corrected



Right In: 83.573 $\pm$ 0.000  $\chi^2$ /NDF: 49468.0/16

Left Out: 86.968 $\pm$ 0.068  $\chi^2$ /NDF:6887.9/19

Right Out: 93.762 $\pm$ 0.000  $\chi^2$ /NDF: 82848.8/18

Left In: 86.368 $\pm$ 0.057  $\chi^2$ /NDF:7356.6/17

Left: 86.617 $\pm$ 0.044  $\chi^2$ /NDF: 14290.4/37

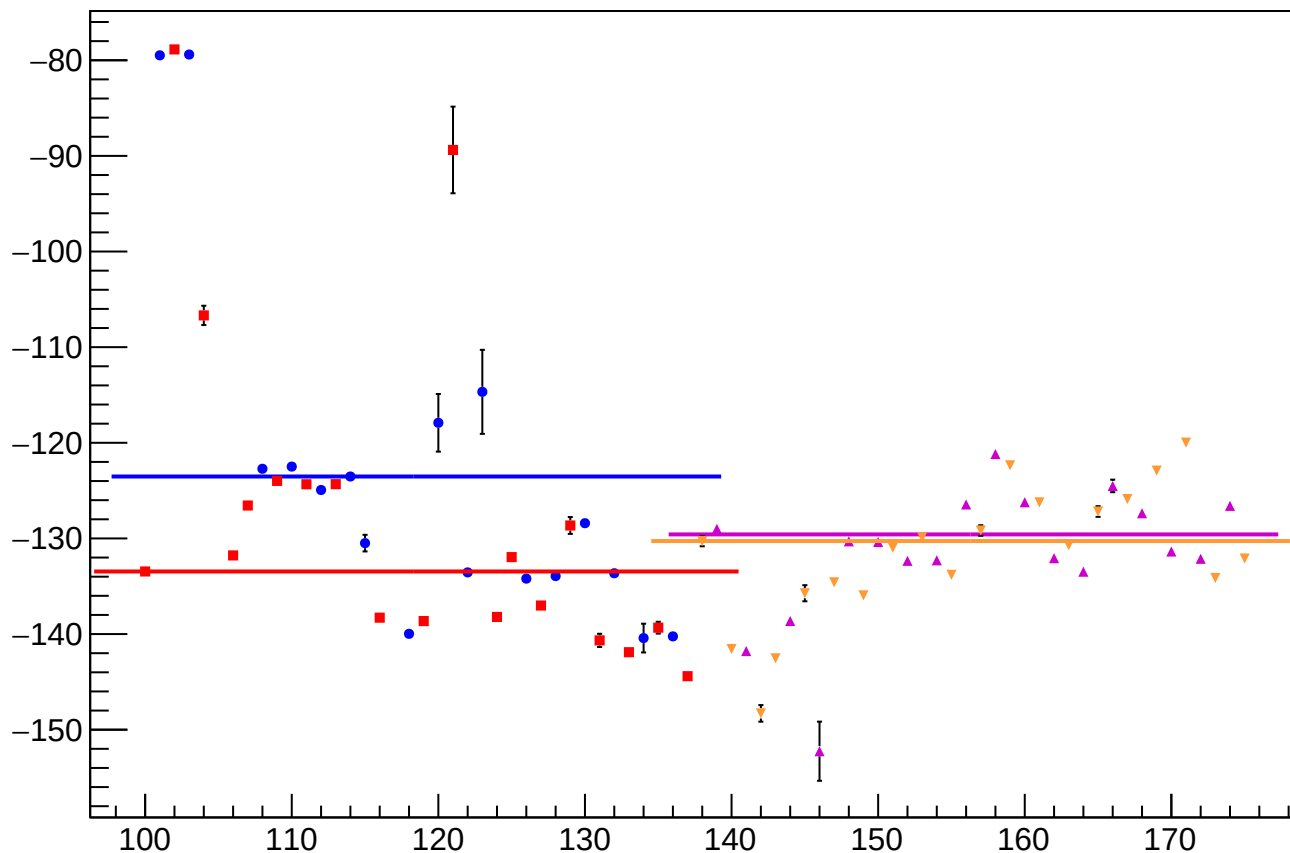
Right: 87.169 $\pm$ 0.000  $\chi^2$ /NDF: 1995684404141260

In: 83.573 $\pm$ 0.000  $\chi^2$ /NDF:59232.1/34

Out: 93.762 $\pm$ 0.000  $\chi^2$ /NDF:99801.8/38

All: 87.169 $\pm$ 0.000  $\chi^2$ /NDF: 1995684404141

# dit\_sam7\_4eX\_slope vs Slug, Sign Corrected



Right In: -123.524 $\pm$ 0.000  $\chi^2$ /NDF: 160356.5/16

Left Out: -130.274 $\pm$ 0.067  $\chi^2$ /NDF: 9421.6/19

Right Out: -133.456 $\pm$ 0.000  $\chi^2$ /NDF: 394896.3/18

Left In: -129.580 $\pm$ 0.056  $\chi^2$ /NDF: 5622.1/17

Left: -129.867 $\pm$ 0.043  $\chi^2$ /NDF: 15106.5/37

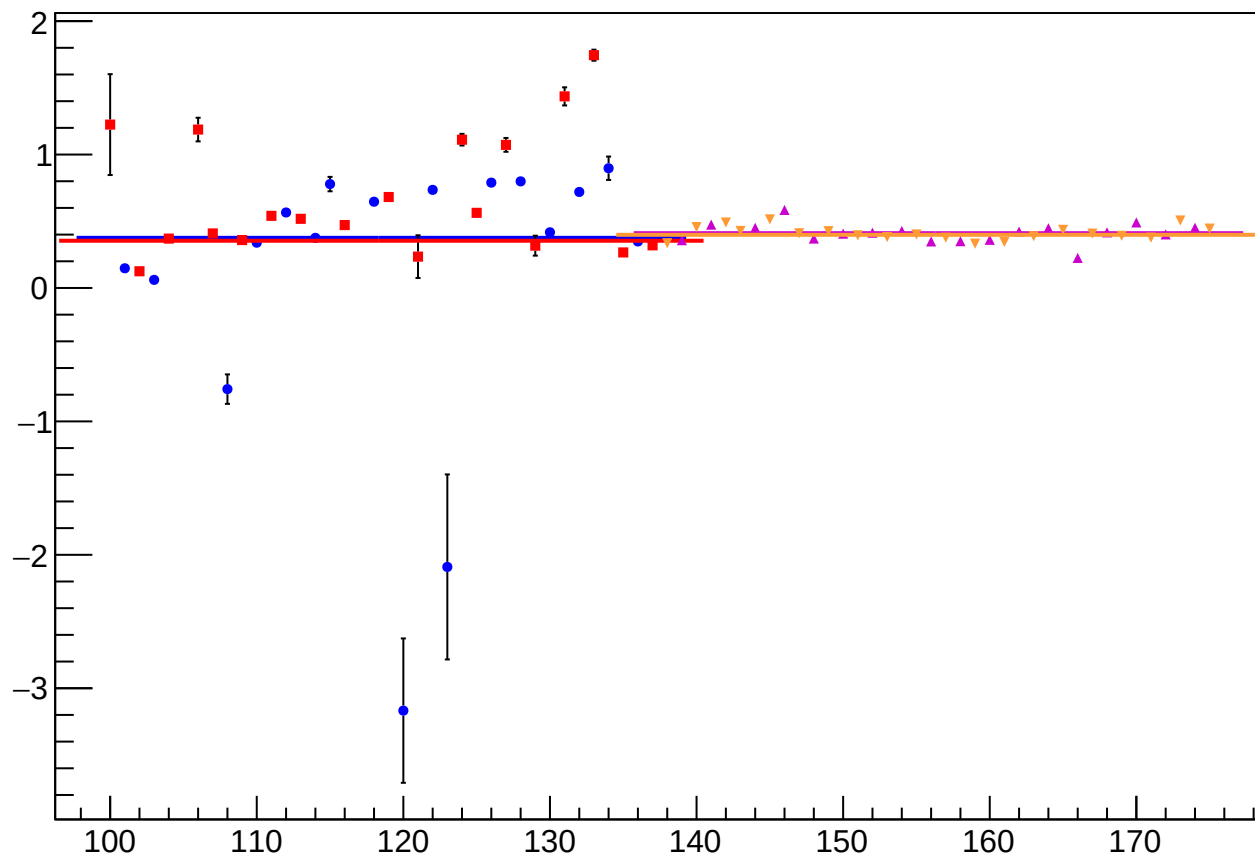
Right: -124.716 $\pm$ 0.000  $\chi^2$ /NDF: 64467869901657

In: -123.524 $\pm$ 0.000  $\chi^2$ /NDF: 177518.2/34

Out: -133.456 $\pm$ 0.000  $\chi^2$ /NDF: 406576.6/38

All: -124.716 $\pm$ 0.000  $\chi^2$ /NDF: 64467869901

# dit\_sam7\_11X12X\_slope vs Slug, Sign Corrected



Right In: 0.376 $\pm$ 0.000  $\chi^2$ /NDF: 3961.7/16

Left Out: 0.398 $\pm$ 0.001  $\chi^2$ /NDF: 7942.6/19

Right Out: 0.354 $\pm$ 0.002  $\chi^2$ /NDF: 4592.7/18

Left In: 0.411 $\pm$ 0.000  $\chi^2$ /NDF: 8008.0/17

Left: 0.405 $\pm$ 0.000  $\chi^2$ /NDF: 16249.1/37

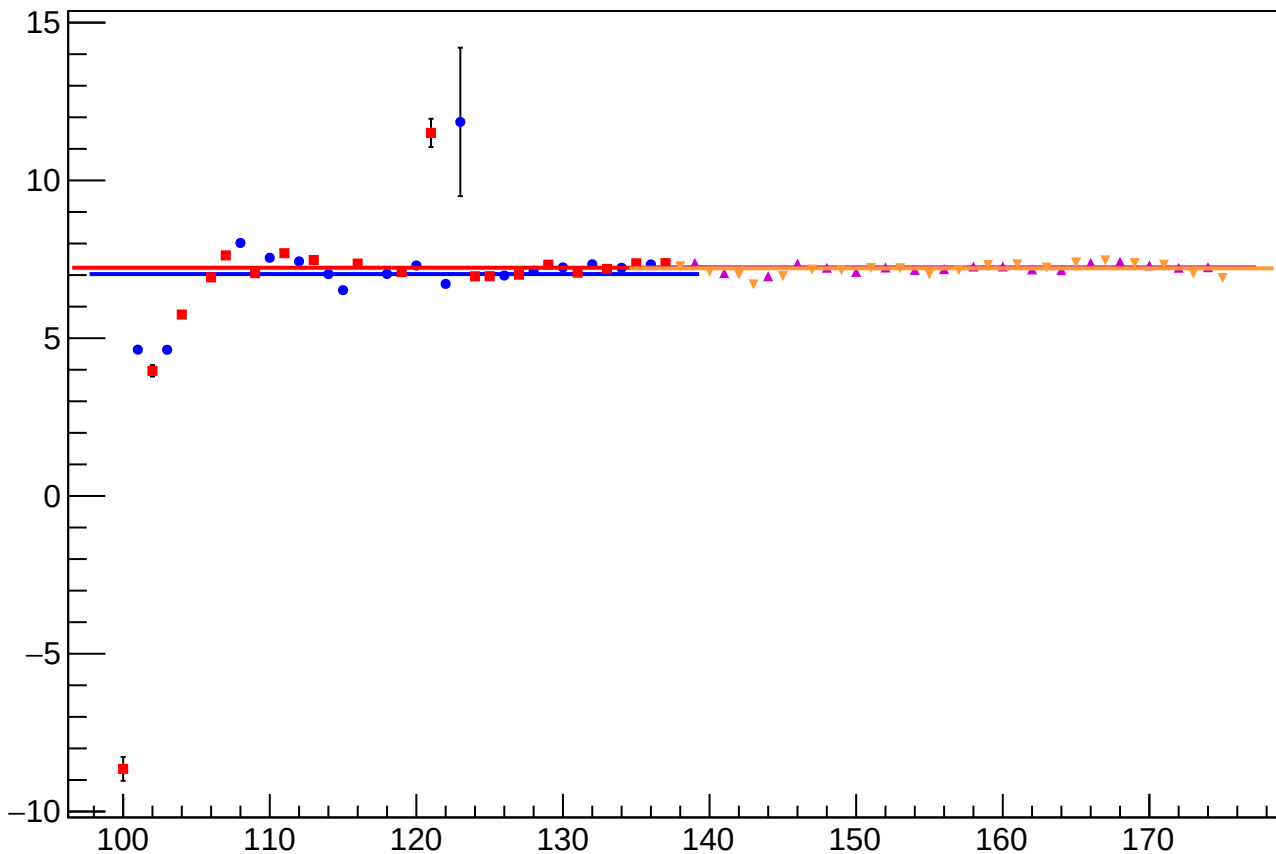
Right: 0.376 $\pm$ 0.000  $\chi^2$ /NDF: 8762.1/35

In: 0.376 $\pm$ 0.000  $\chi^2$ /NDF: 17422.3/34

Out: 0.394 $\pm$ 0.000  $\chi^2$ /NDF: 13311.1/38

All: 0.376 $\pm$ 0.000  $\chi^2$ /NDF: 32078.9/73

# dit\_sam7\_4aY\_slope vs Slug, Sign Corrected



Right In: 7.032 $\pm$ 0.000  $\chi^2$ /NDF: 19770.1/16

Left Out: 7.213 $\pm$ 0.001  $\chi^2$ /NDF: 30532.0/19

Right Out: 7.233 $\pm$ 0.002  $\chi^2$ /NDF: 10061.8/18

Left In: 7.244 $\pm$ 0.001  $\chi^2$ /NDF: 18003.3/17

Left: 7.230 $\pm$ 0.001  $\chi^2$ /NDF: 49132.3/37

Right: 7.032 $\pm$ 0.000  $\chi^2$ /NDF: 36990.7/35

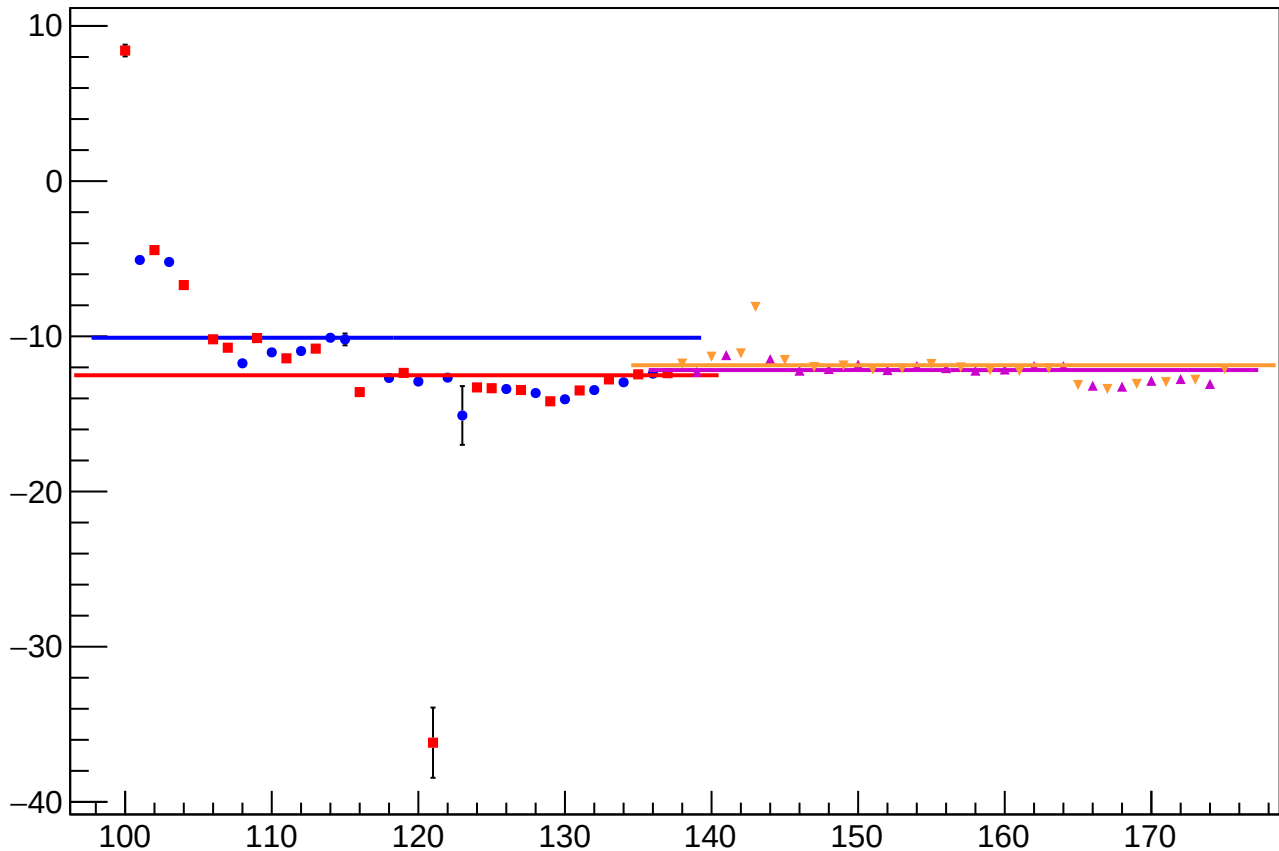
In: 7.032 $\pm$ 0.000  $\chi^2$ /NDF: 100459.2/34

Out: 7.216 $\pm$ 0.001  $\chi^2$ /NDF: 40655.6/38

All: 7.032 $\pm$ 0.000  $\chi^2$ /NDF: 186239.6/73



# dit\_sam7\_4eY\_slope vs Slug, Sign Corrected



Right In:  $-10.092 \pm 0.000$   $\chi^2/\text{NDF}: 543504.2/16$

Left Out:  $-11.863 \pm 0.002$   $\chi^2/\text{NDF}: 484171.9/19$

Right Out:  $-12.509 \pm 0.004$   $\chi^2/\text{NDF}: 103509.4/18$

Left In:  $-12.174 \pm 0.002$   $\chi^2/\text{NDF}: 47708.9/17$

Left:  $-12.020 \pm 0.001$   $\chi^2/\text{NDF}: 547649.1/37$

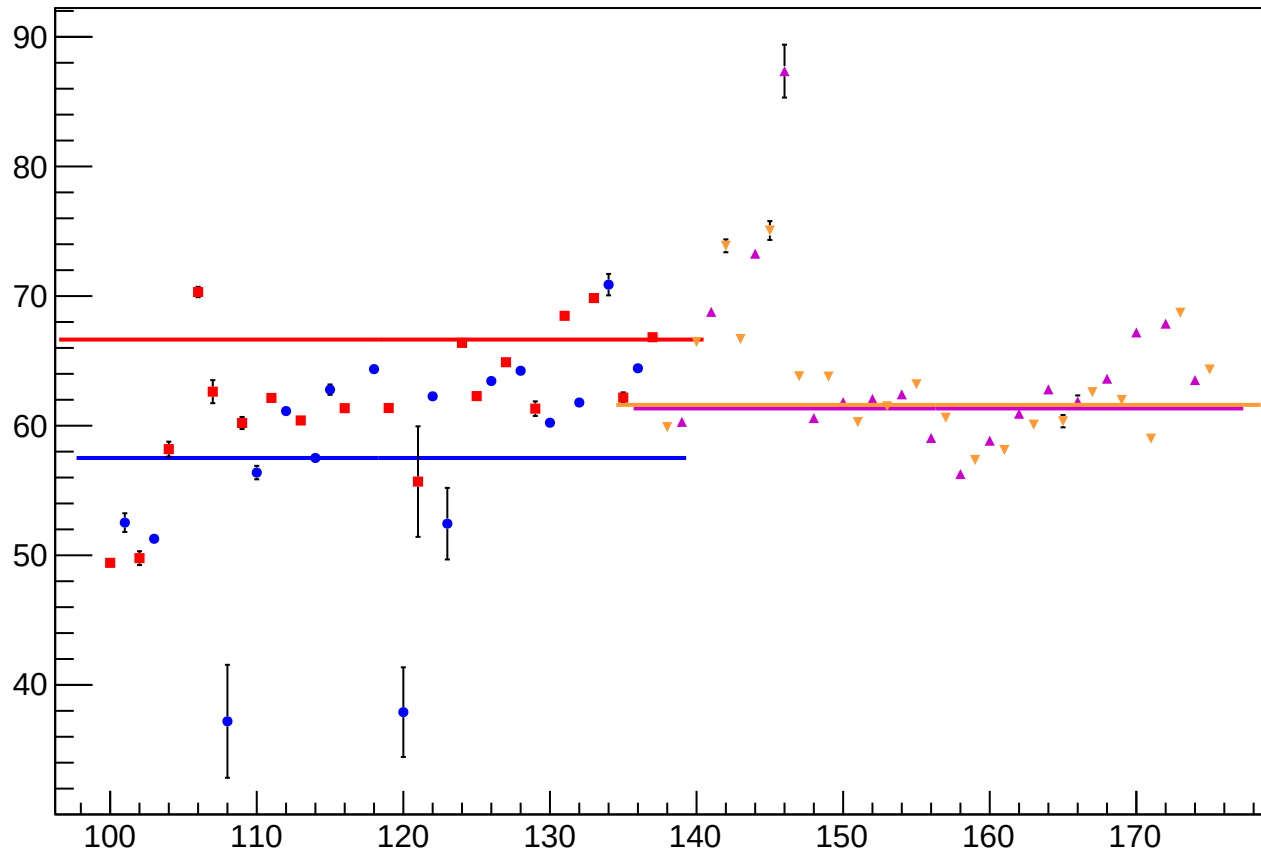
Right:  $-10.092 \pm 0.000$   $\chi^2/\text{NDF}: 1062248.5/35$

In:  $-10.092 \pm 0.000$   $\chi^2/\text{NDF}: 2011385.2/34$

Out:  $-11.979 \pm 0.002$   $\chi^2/\text{NDF}: 611998.9/38$

All:  $-10.092 \pm 0.000$   $\chi^2/\text{NDF}: 4025621.6/73$

# dit\_sam8\_4aX\_slope vs Slug, Sign Corrected



Right In: 57.510 $\pm$ 0.000  $\chi^2$ /NDF: 8108.6/16

Left Out: 61.607 $\pm$ 0.041  $\chi^2$ /NDF: 7073.6/19

Right Out: 66.645 $\pm$ 0.013  $\chi^2$ /NDF: 8163.8/18

Left In: 61.330 $\pm$ 0.035  $\chi^2$ /NDF: 7940.5/17

Left: 61.445 $\pm$ 0.027  $\chi^2$ /NDF: 15040.4/37

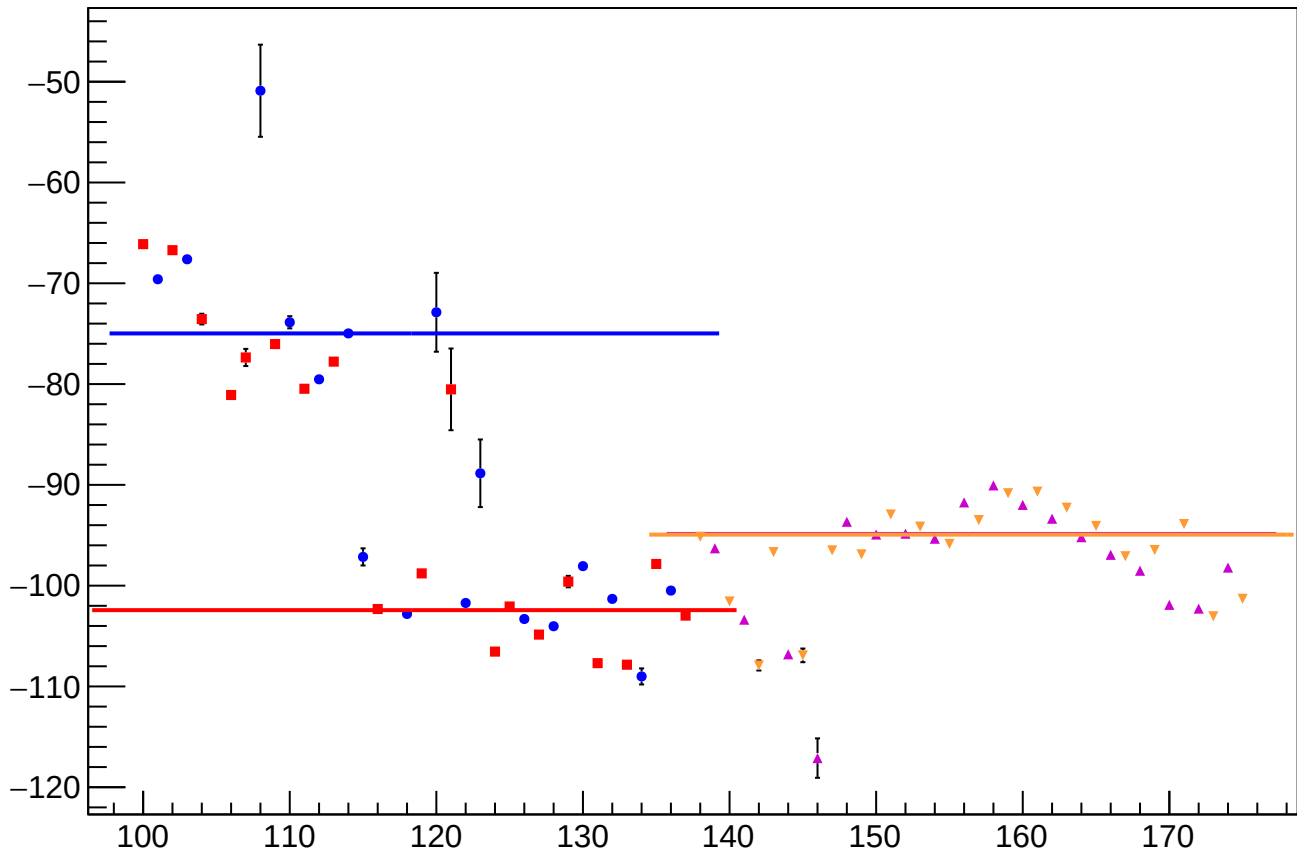
Right: 57.510 $\pm$ 0.000  $\chi^2$ /NDF: 504438.3/35

In: 57.510 $\pm$ 0.000  $\chi^2$ /NDF: 28031.9/34

Out: 66.188 $\pm$ 0.012  $\chi^2$ /NDF: 28712.2/38

All: 57.510 $\pm$ 0.000  $\chi^2$ /NDF: 541241.6/73

# dit\_sam8\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-74.974 \pm 0.000$   $\chi^2/\text{NDF}: 130544.0/16$

Left Out:  $-94.938 \pm 0.041$   $\chi^2/\text{NDF}: 8386.8/19$

Right Out:  $-102.430 \pm 0.018$   $\chi^2/\text{NDF}: 50377.5/18$

Left In:  $-94.871 \pm 0.035$   $\chi^2/\text{NDF}: 9598.6/17$

Left:  $-94.900 \pm 0.027$   $\chi^2/\text{NDF}: 17986.9/37$

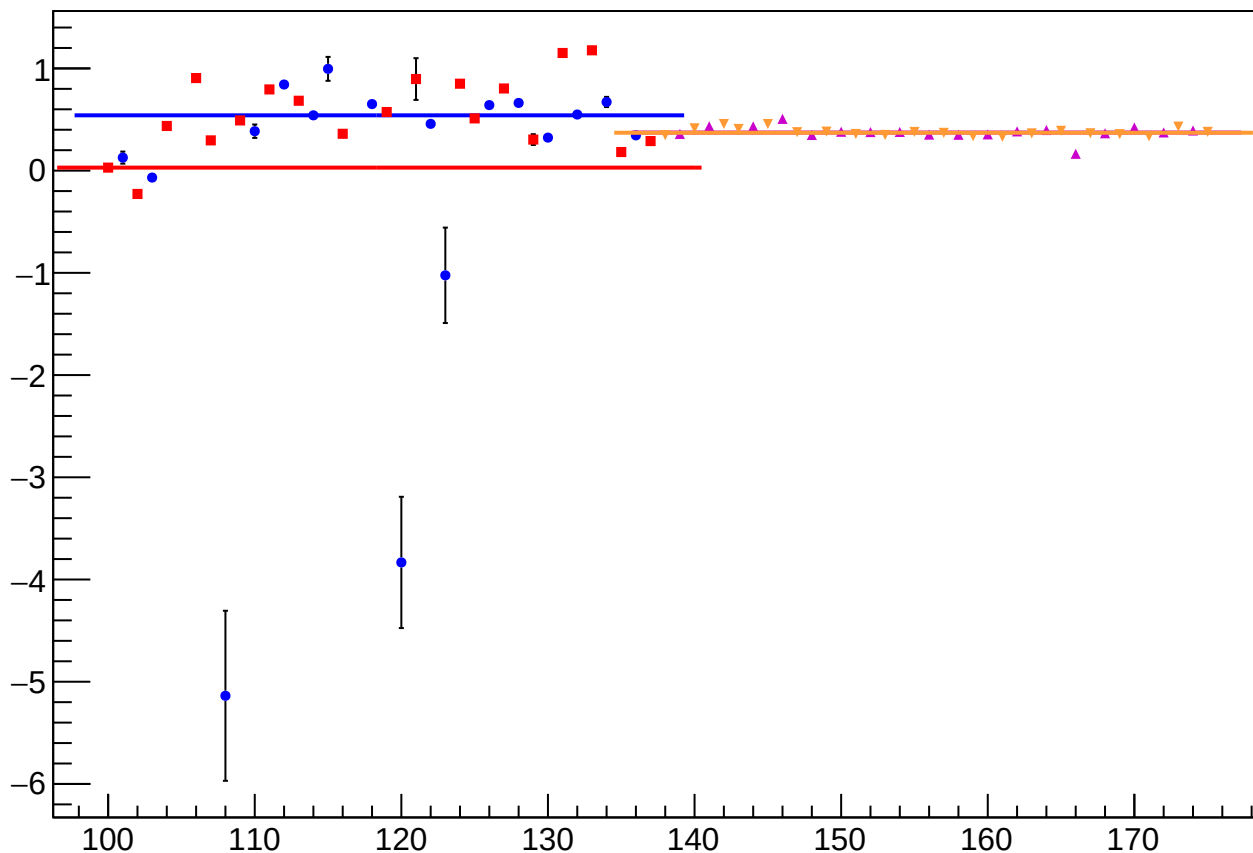
Right:  $-74.974 \pm 0.000$   $\chi^2/\text{NDF}: 2556524.2/35$

In:  $-74.974 \pm 0.000$   $\chi^2/\text{NDF}: 456966.0/34$

Out:  $-101.250 \pm 0.016$   $\chi^2/\text{NDF}: 86641.5/38$

All:  $-74.974 \pm 0.000$   $\chi^2/\text{NDF}: 3126255.2/73$

dit\_sam8\_11X12X\_slope vs Slug, Sign Corrected



Right In: 0.541+/-0.000  $\chi^2/\text{NDF}$ : 29180.5/16

Left Out: 0.371+/-0.000  $\chi^2/\text{NDF}$ : 6331.2/19

Right Out: 0.030+/-0.000  $\chi^2/\text{NDF}$ : 121659.5/18

Left In: 0.373+/-0.000  $\chi^2/\text{NDF}$ : 5885.4/17

Left: 0.372+/-0.000  $\chi^2/\text{NDF}$ : 12232.7/37

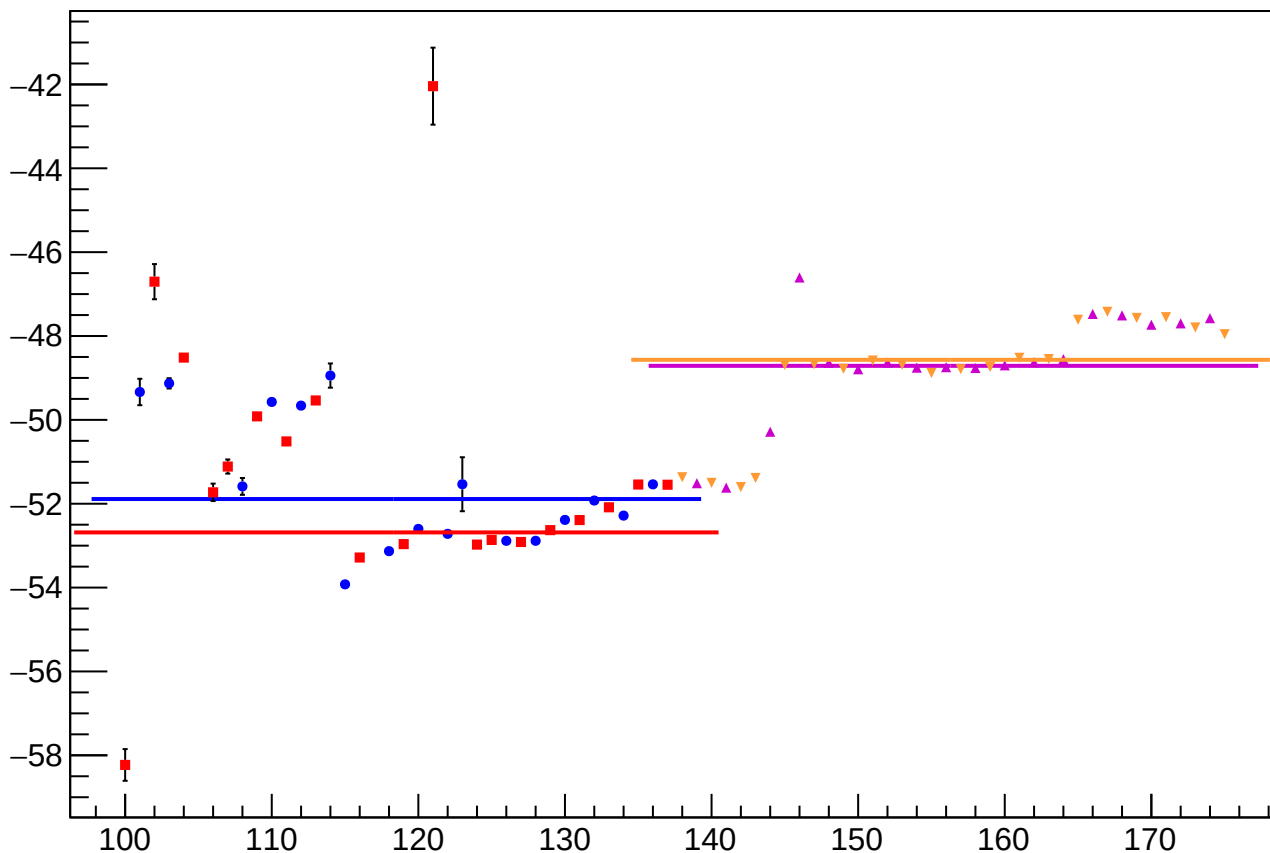
Right: 0.030+/-0.000  $\chi^2/\text{NDF}$ : 23314297700963382

In: 0.541+/-0.000  $\chi^2/\text{NDF}$ : 322662.6/34

Out: 0.030+/-0.000  $\chi^2/\text{NDF}$ : 942746.0/38

All: 0.030+/-0.000  $\chi^2/\text{NDF}$ : 23314297700963382

# dit\_sam8\_4aY\_slope vs Slug, Sign Corrected



Left: -48.650 +/- 0.001  $\chi^2/\text{NDF}$ : 1429710.3/37

Right: -52.231 +/- 0.002  $\chi^2/\text{NDF}$ : 188721.6/35

In: -49.209 +/- 0.001  $\chi^2/\text{NDF}$ : 2560965.2/34

Out: -49.223 +/- 0.001  $\chi^2/\text{NDF}$ : 2881862.4/38

All: -49.215 +/- 0.001  $\chi^2/\text{NDF}$ : 5442947.6/73

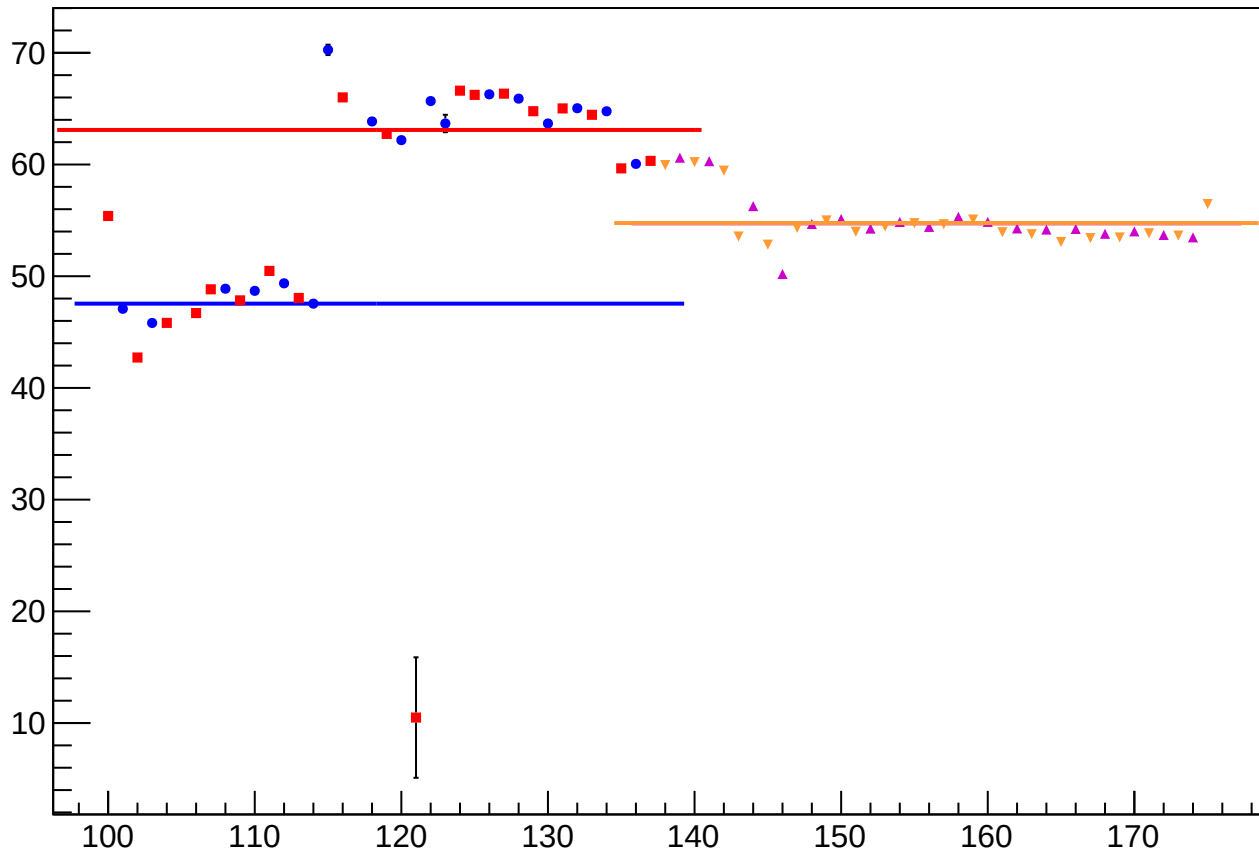
Right In: -51.888 +/- 0.002  $\chi^2/\text{NDF}$ : 77585.2/16

Left Out: -48.567 +/- 0.001  $\chi^2/\text{NDF}$ : 651313.2/19

Right Out: -52.684 +/- 0.003  $\chi^2/\text{NDF}$ : 56125.8/18

Left In: -48.711 +/- 0.001  $\chi^2/\text{NDF}$ : 768819.1/17

# dit\_sam8\_4eY\_slope vs Slug, Sign Corrected



Right In: 47.545+/-0.000  $\chi^2/\text{NDF}$ : 3491700.1/16

Left Out: 54.761+/-0.003  $\chi^2/\text{NDF}$ : 283396.4/19

Right Out: 63.095+/-0.007  $\chi^2/\text{NDF}$ : 333637.2/18

Left In: 54.736+/-0.003  $\chi^2/\text{NDF}$ : 93620.4/17

Left: 54.747+/-0.002  $\chi^2/\text{NDF}$ : 377055.4/37

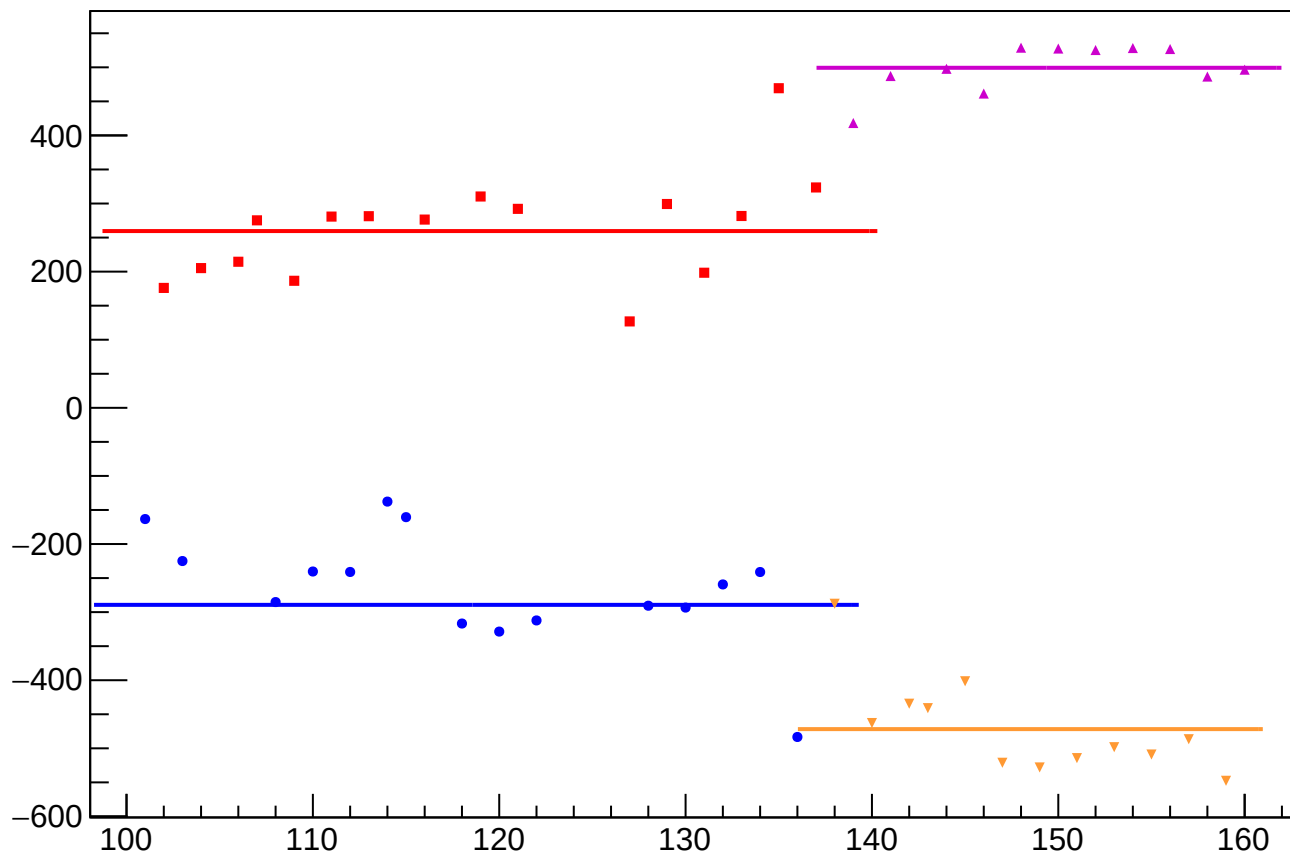
Right: 47.545+/-0.000  $\chi^2/\text{NDF}$ : 8155028.5/35

In: 47.545+/-0.000  $\chi^2/\text{NDF}$ : 11088193.3/34

Out: 55.906+/-0.003  $\chi^2/\text{NDF}$ : 1689888.1/38

All: 47.545+/-0.000  $\chi^2/\text{NDF}$ : 21884436.2/73

# dit\_4aX\_coil1\_mean vs Slug, Sign Corrected



Right In: -289.322+/-0.000

Left Out: -471.791+/-0.000

Right Out: 259.558+/-0.000

Left In: 499.323+/-0.000

$\chi^2/\text{NDF}$ : 53696816404891478649585392183934976.0/14

$\chi^2/\text{NDF}$ : 4407577357733372304653153526381281280.0/11

$\chi^2/\text{NDF}$ : 4299886792692123970784563983770714112.0/15

$\chi^2/\text{NDF}$ : 1018789461606644410107221718465511424.0/10

Left: 16.408+/-0.000  $\chi^2/\text{NDF}$ : 4387510726187305

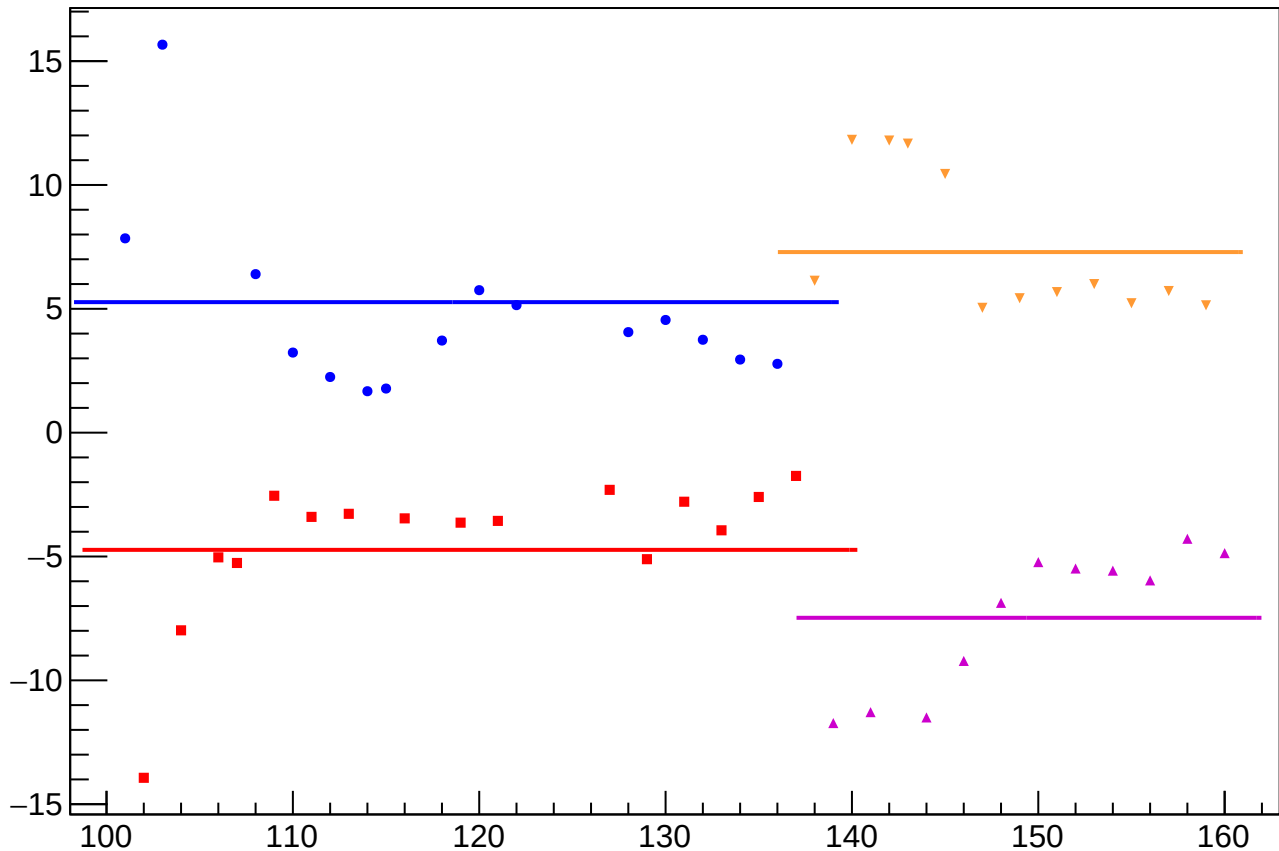
Right: -11.129+/-0.000  $\chi^2/\text{NDF}$ : 108768514077982

In: 173.938+/-0.000  $\chi^2/\text{NDF}$ : 2434992102571034

Out: -163.246+/-0.000  $\chi^2/\text{NDF}$ : 214955339400548

All: 4.918+/-0.000  $\chi^2/\text{NDF}$ : 54810108058073

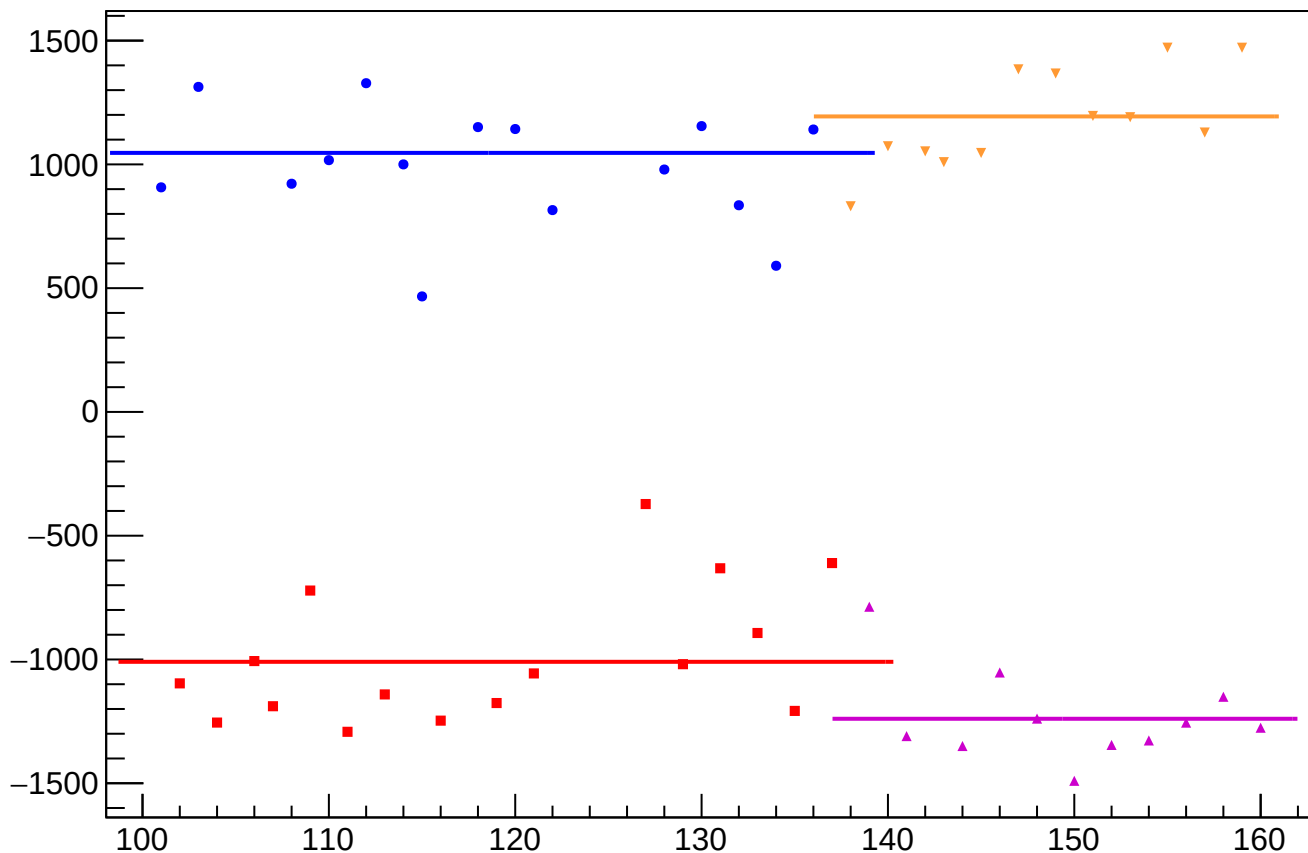
dit\_4aX\_coil1\_err\_mean vs Slug, Sign Corrected



Right In:  $5.270 \pm 0.000$   $\chi^2/\text{NDF}$ : 8709683292123798330550906790084608.0/14  
 Left Out:  $7.291 \pm 0.000$   $\chi^2/\text{NDF}$ : 6718053515172863885836432351166464.0/11  
 Right Out:  $-4.732 \pm 0.000$   $\chi^2/\text{NDF}$ : 6856893072575211562802281426452480.0/15  
 Left In:  $-7.475 \pm 0.000$   $\chi^2/\text{NDF}$ : 7057812139399579538870244550377472.0/10  
 All:  $0.007 \pm 0.000$   $\chi^2/\text{NDF}$ : 16250941727402.0/10

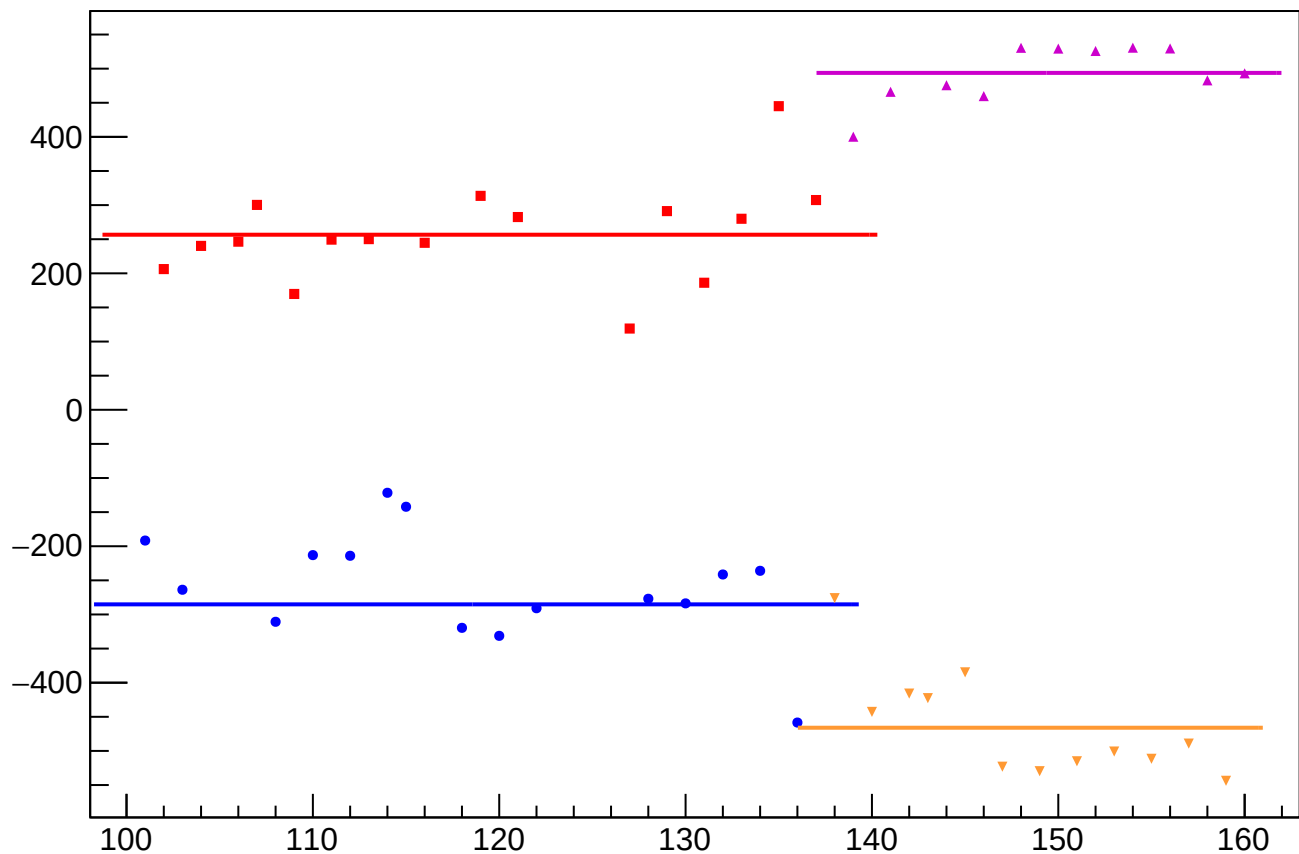


dit\_4aX\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

dit\_4eX\_coil1\_mean vs Slug, Sign Corrected



Right In: -285.187+/-0.000

Left Out: -466.012+/-0.000

Right Out: 256.599+/-0.000

Left In: 493.780+/-0.000

$\chi^2/\text{NDF}$ : 4479585262853549838092521921291747328.0/14

$\chi^2/\text{NDF}$ : 5190970068830574132794472761412026368.0/11

$\chi^2/\text{NDF}$ : 3648271535971039165952602563191767040.0/15

$\chi^2/\text{NDF}$ : 1451794731277142230901460532226686976.0/10

Left: 16.495+/-0.000  $\chi^2/\text{NDF}$ : 42992145233665256

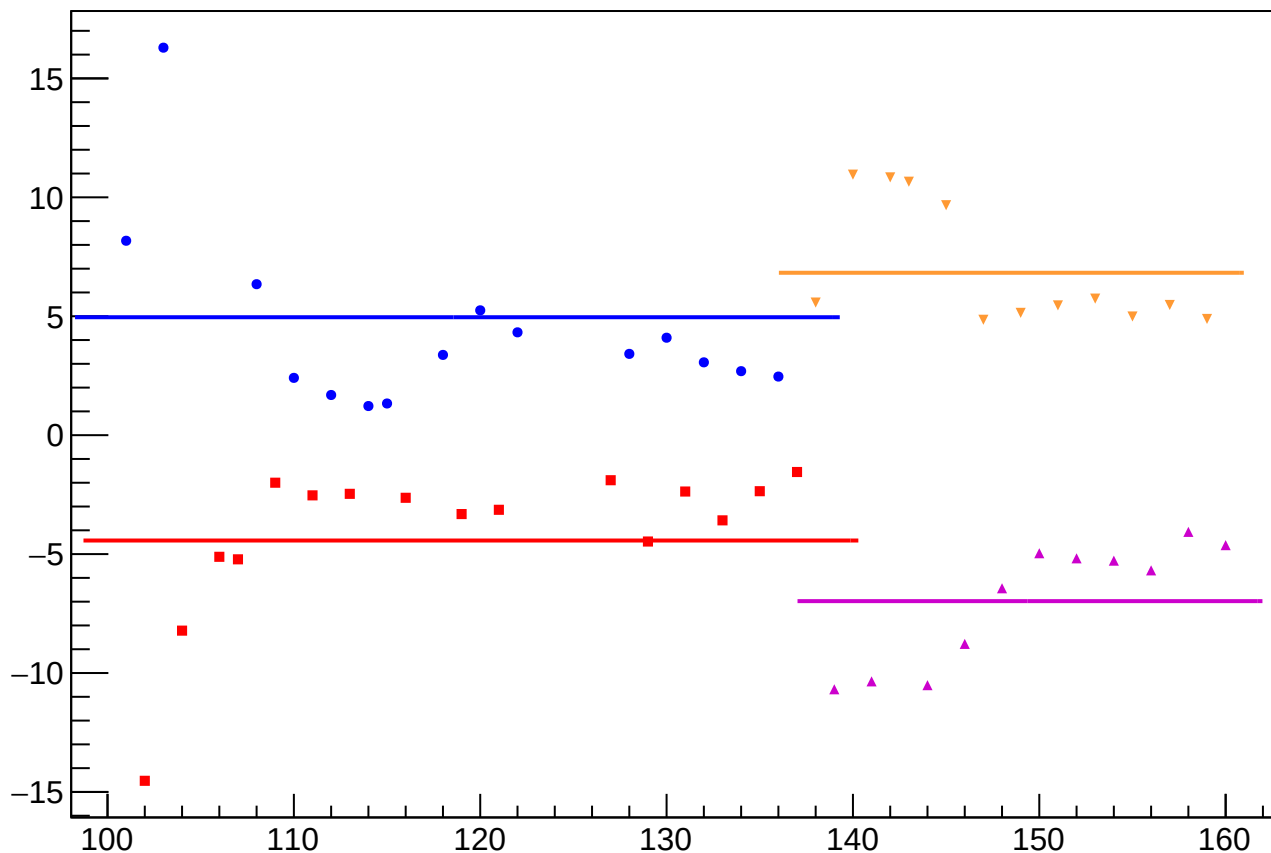
Right: -10.589+/-0.000  $\chi^2/\text{NDF}$ : 104681795299957

In: 172.388+/-0.000  $\chi^2/\text{NDF}$ : 23725794461997010

Out: -161.153+/-0.000  $\chi^2/\text{NDF}$ : 210188051150550

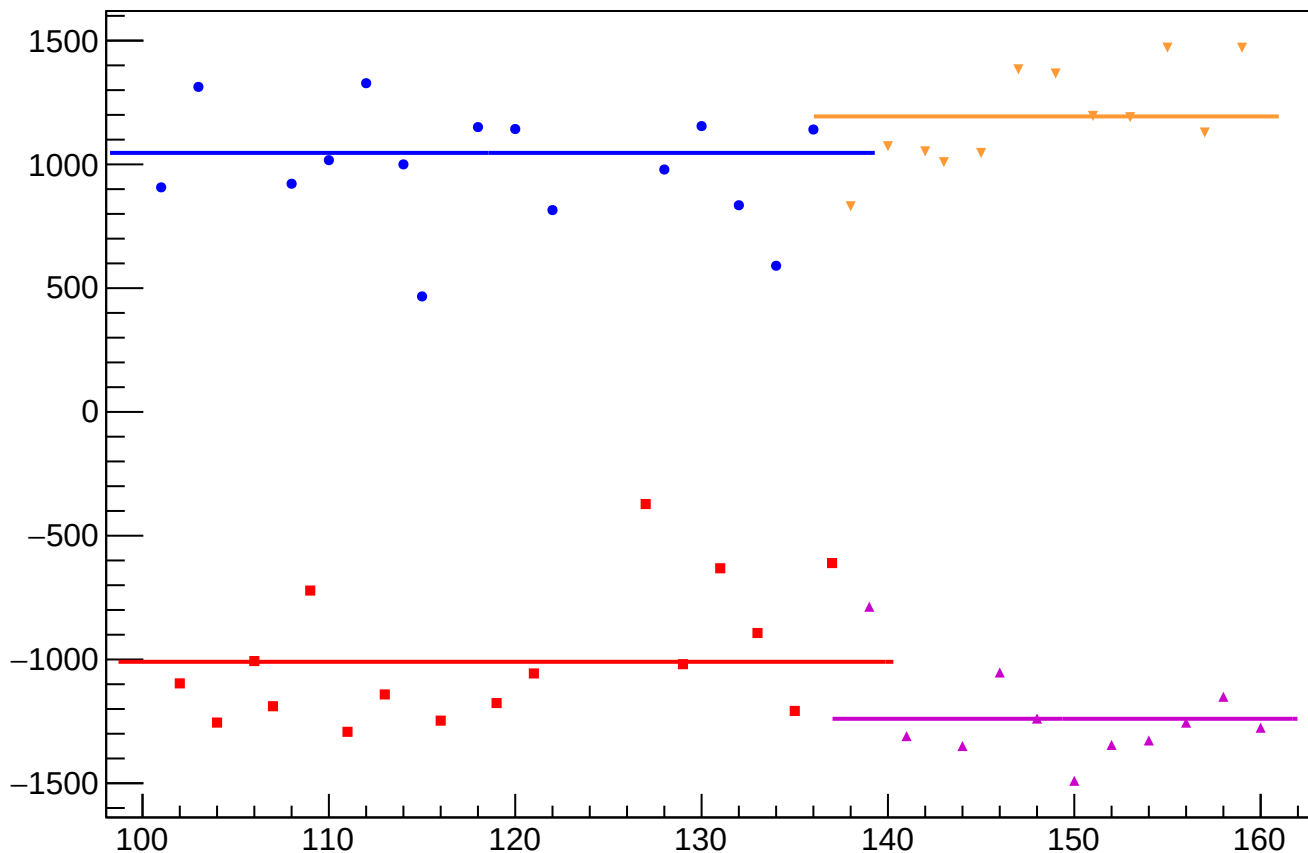
All: 5.194+/-0.000  $\chi^2/\text{NDF}$ : 53516578605527

# dit\_4eX\_coil1\_err\_mean vs Slug, Sign Corrected



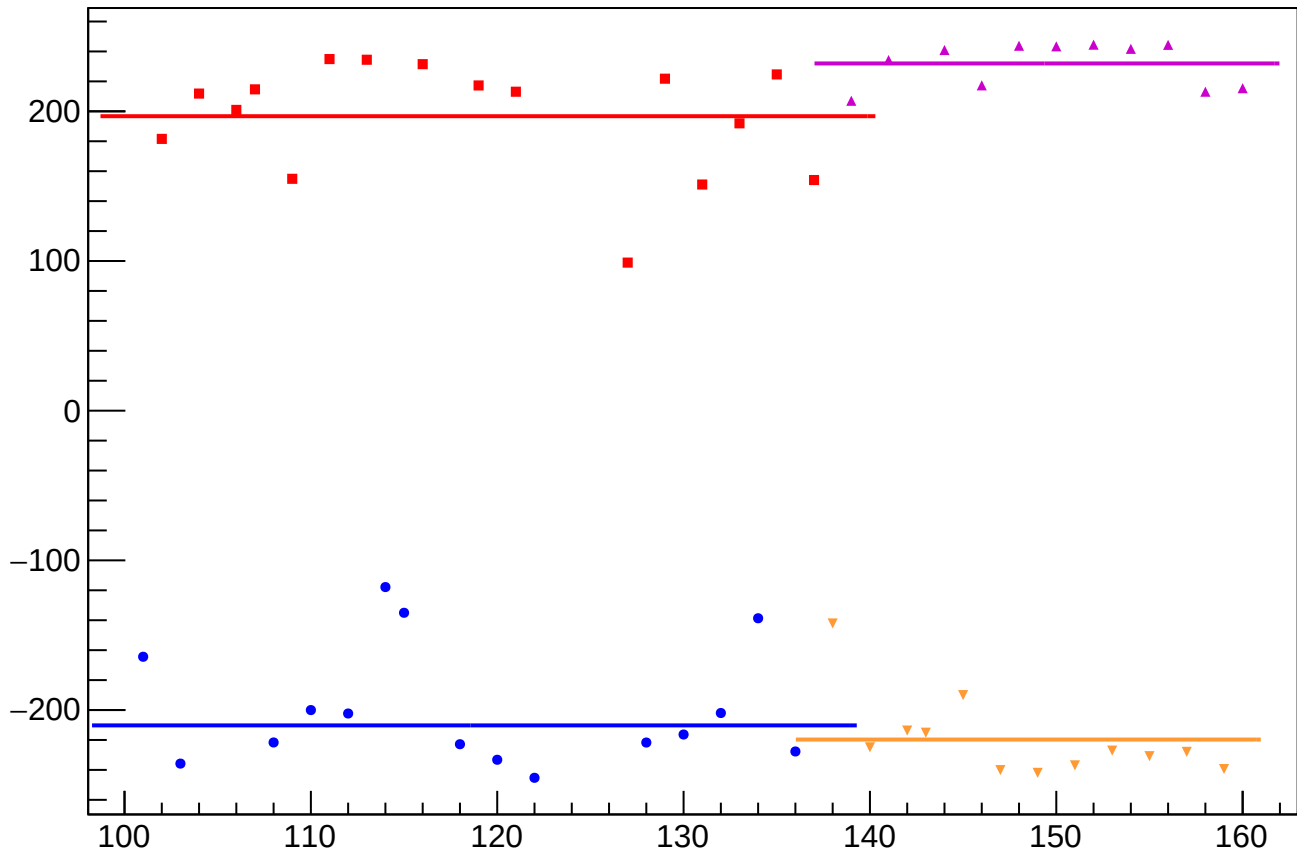
Right In:  $4.959 \pm 0.000$   $\chi^2/\text{NDF}$ : 10465467057143371817371681641463808.0/14  
 Left Out:  $6.828 \pm 0.000$   $\chi^2/\text{NDF}$ : 5374095498583312473439971131260928.0/11  
 Right Out:  $-4.429 \pm 0.000$   $\chi^2/\text{NDF}$ : 8371440400334524571131796772618240.0/15  
 Left In:  $-6.978 \pm 0.000$   $\chi^2/\text{NDF}$ : 5622697014277754941158413236699136.0/10  
 All:  $0.018 \pm 0.000$   $\chi^2/\text{NDF}$ : 14647689214070

dit\_4eX\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_11X12X\_coil1\_mean vs Slug, Sign Corrected



Right In: -210.261+/-0.000

Left Out: -219.729+/-0.000

Right Out: 196.736+/-0.000

Left In: 231.985+/-0.000

$\chi^2/\text{NDF}$ : 567711076568068409192467700494893056.0/14

$\chi^2/\text{NDF}$ : 691090878567021644145539364306288640.0/11

$\chi^2/\text{NDF}$ : 90958895093044840633640514790359040.0/15

$\chi^2/\text{NDF}$ : 182992027280401463139065105290887168.0/10

Left: 7.357+/-0.000  $\chi^2/\text{NDF}$ : 946302102045066653

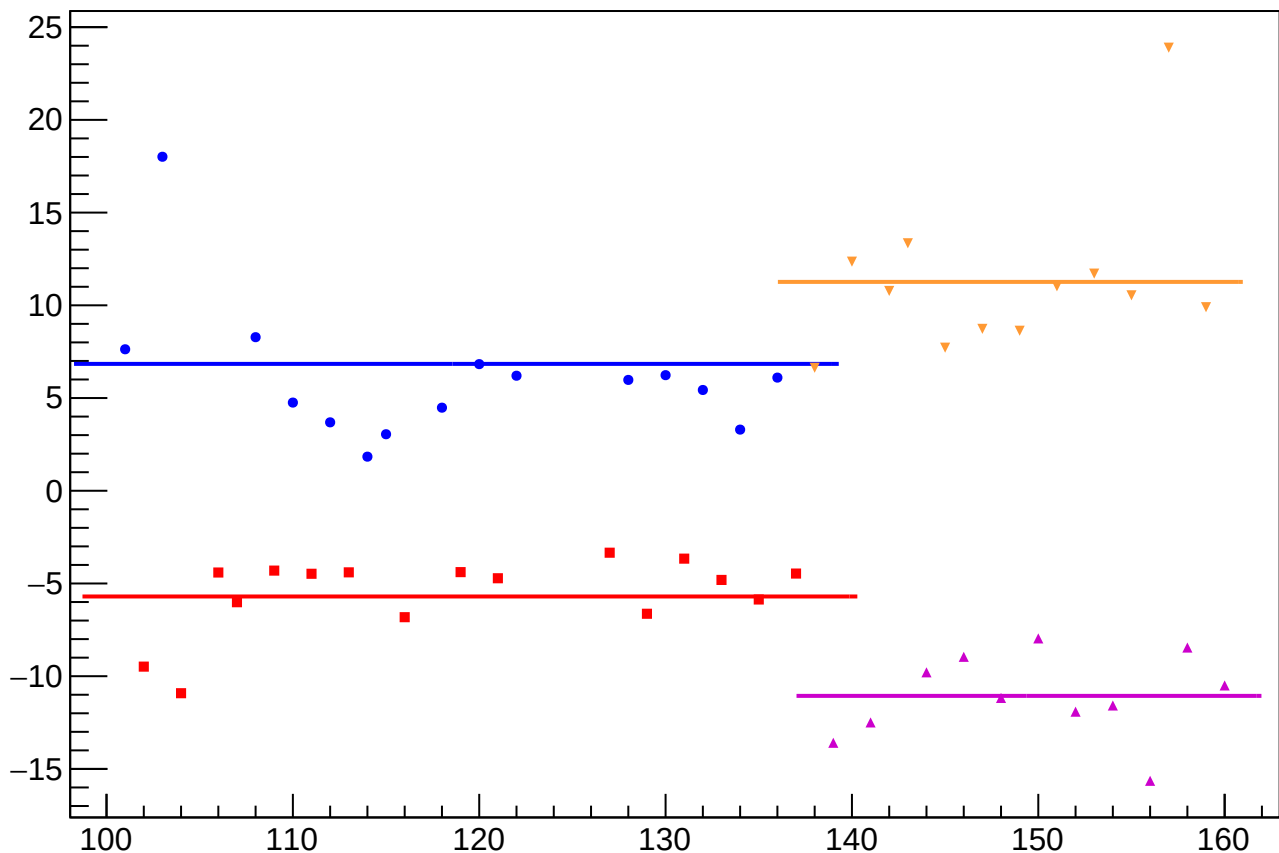
Right: -3.979+/-0.000  $\chi^2/\text{NDF}$ : 5596508618889263

In: 49.520+/-0.000  $\chi^2/\text{NDF}$ : 753125513421150554

Out: -44.029+/-0.000  $\chi^2/\text{NDF}$ : 6848097439733710

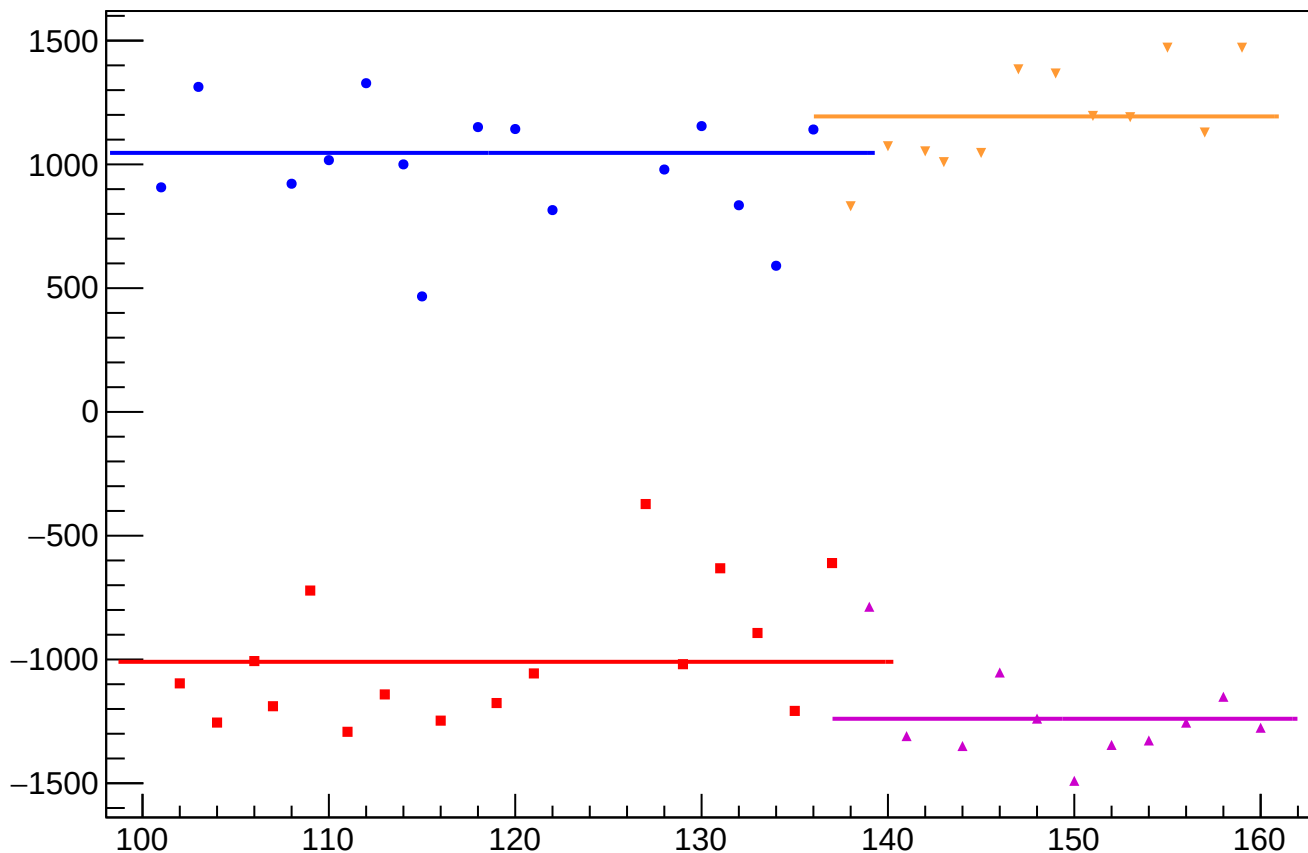
All: 2.627+/-0.000  $\chi^2/\text{NDF}$ : 15069384503153

dit\_11X12X\_coil1\_err\_mean vs Slug, Sign Corrected



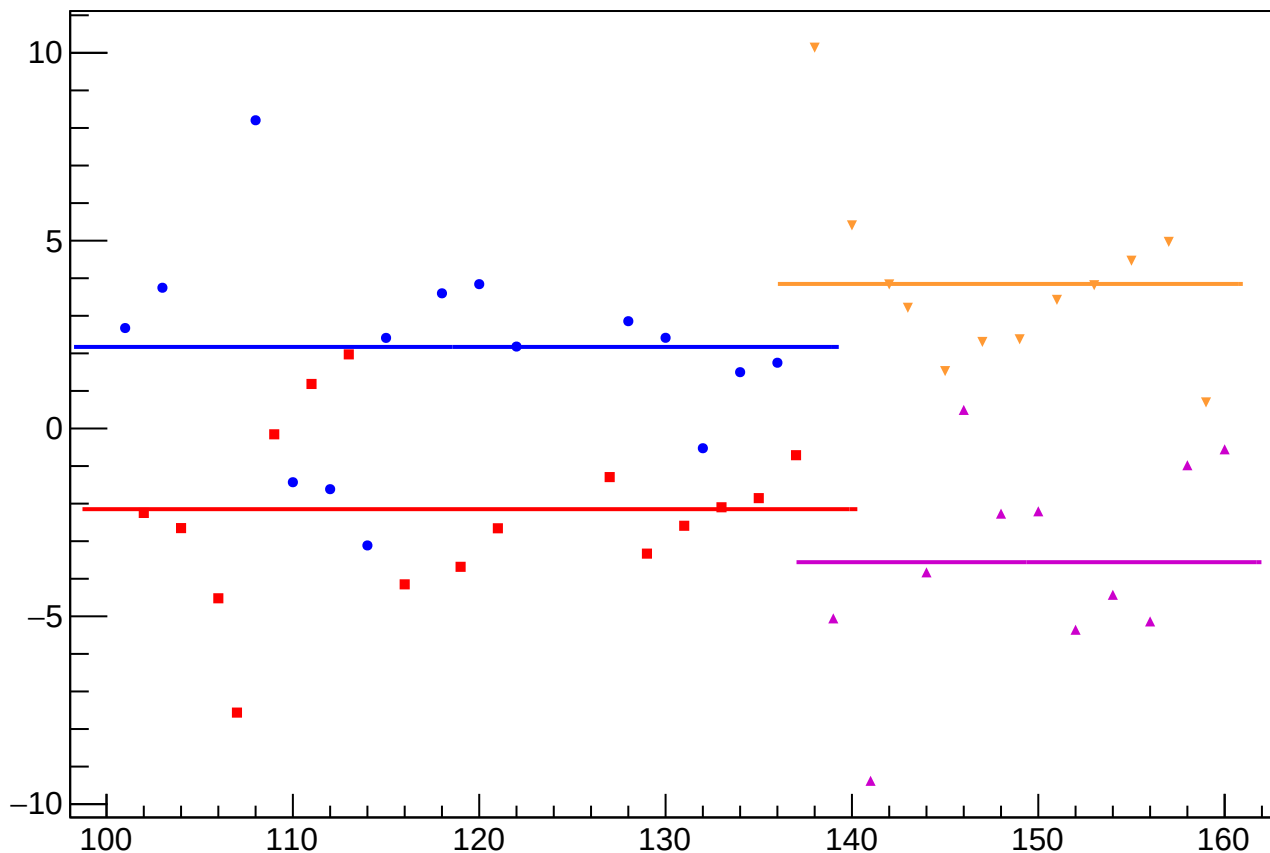
Right In:  $6.842 \pm 0.000$   $\chi^2/\text{NDF}: 9355934166823324467316647620771840.0/14$   
 Left Out:  $11.263 \pm 0.000$   $\chi^2/\text{NDF}: 16950484304495826735526537389408256.0/11$   
 Right Out:  $-5.701 \pm 0.000$   $\chi^2/\text{NDF}: 3174693398300953393137731791486976.0/15$   
 Left In:  $-11.061 \pm 0.000$   $\chi^2/\text{NDF}: 4417559387784954400311933713514496.0/10$   
 All:  $0.226 \pm 0.000$   $\chi^2/\text{NDF}: 31478743415470$

dit\_11X12X\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

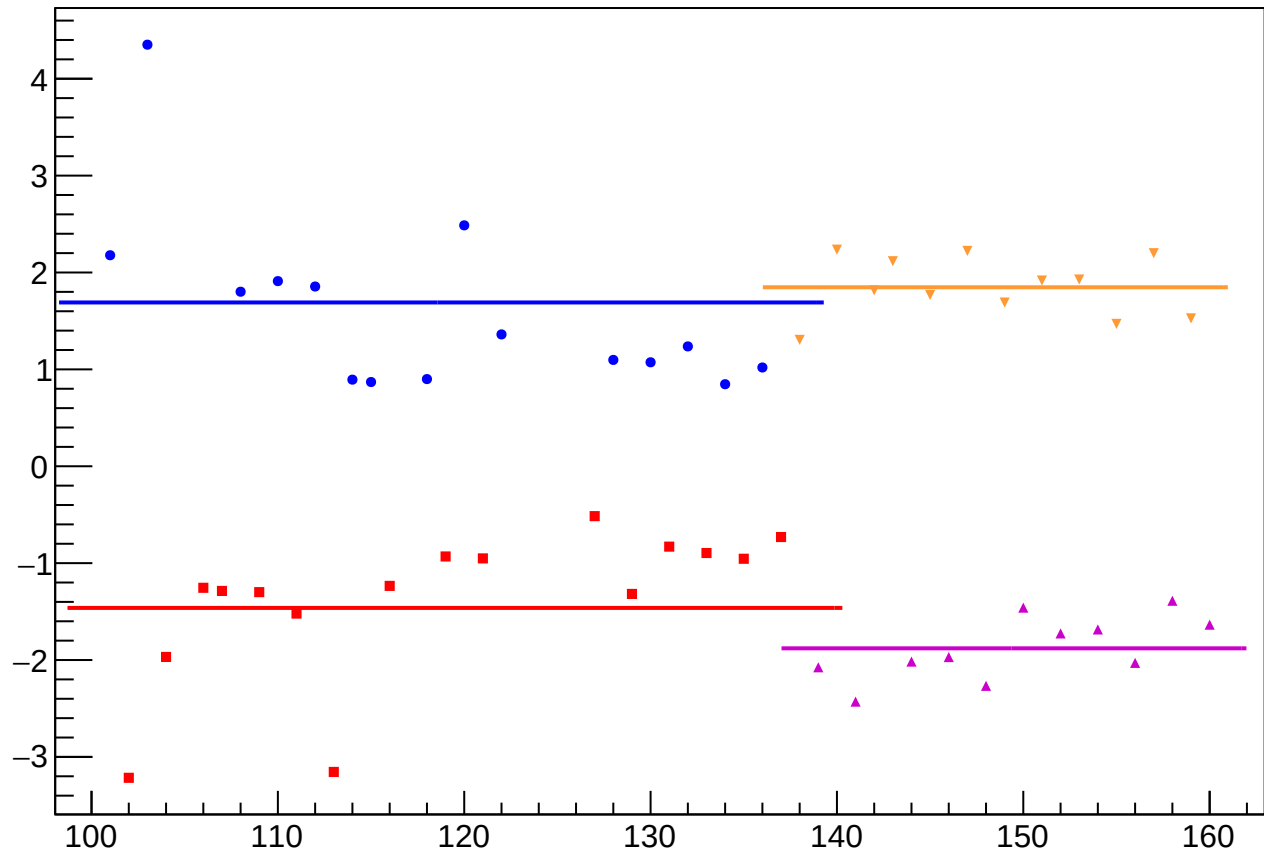
# dit\_4aY\_coil1\_mean vs Slug, Sign Corrected



Right In:  $2.171 \pm 0.000$   $\chi^2/\text{NDF}: 3599819246909975678410499691642880.0/14$   
 Left Out:  $3.848 \pm 0.000$   $\chi^2/\text{NDF}: 5039599457588936759406360166137856.0/11$   
 Right Out:  $-2.148 \pm 0.000$   $\chi^2/\text{NDF}: 3093887336239378959606321931878400.0/15$   
 Left In:  $-3.559 \pm 0.000$   $\chi^2/\text{NDF}: 6492667345109962540652165758713856.0/10$   
 All:  $0.065 \pm 0.000$   $\chi^2/\text{NDF}: 49586913800618$

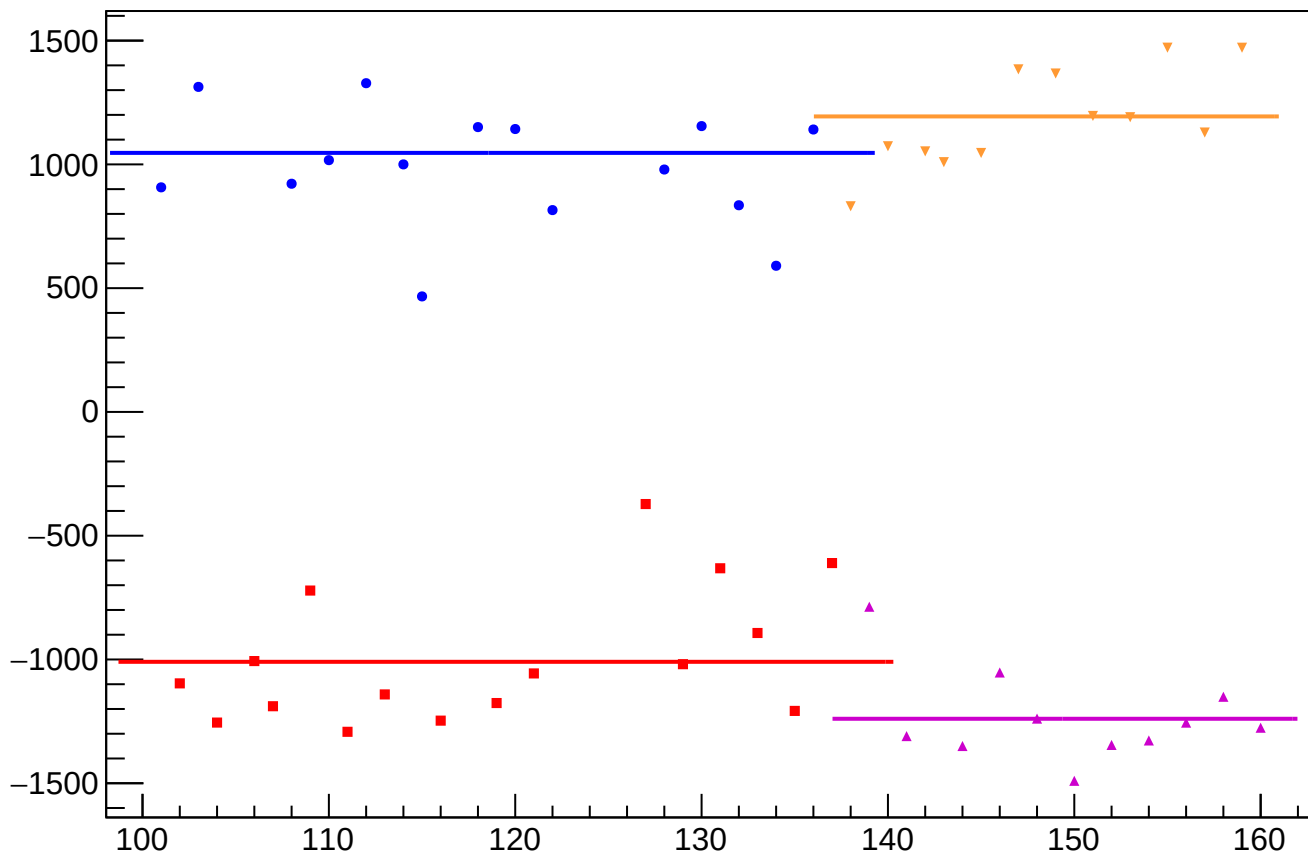


dit\_4aY\_coil1\_err\_mean vs Slug, Sign Corrected



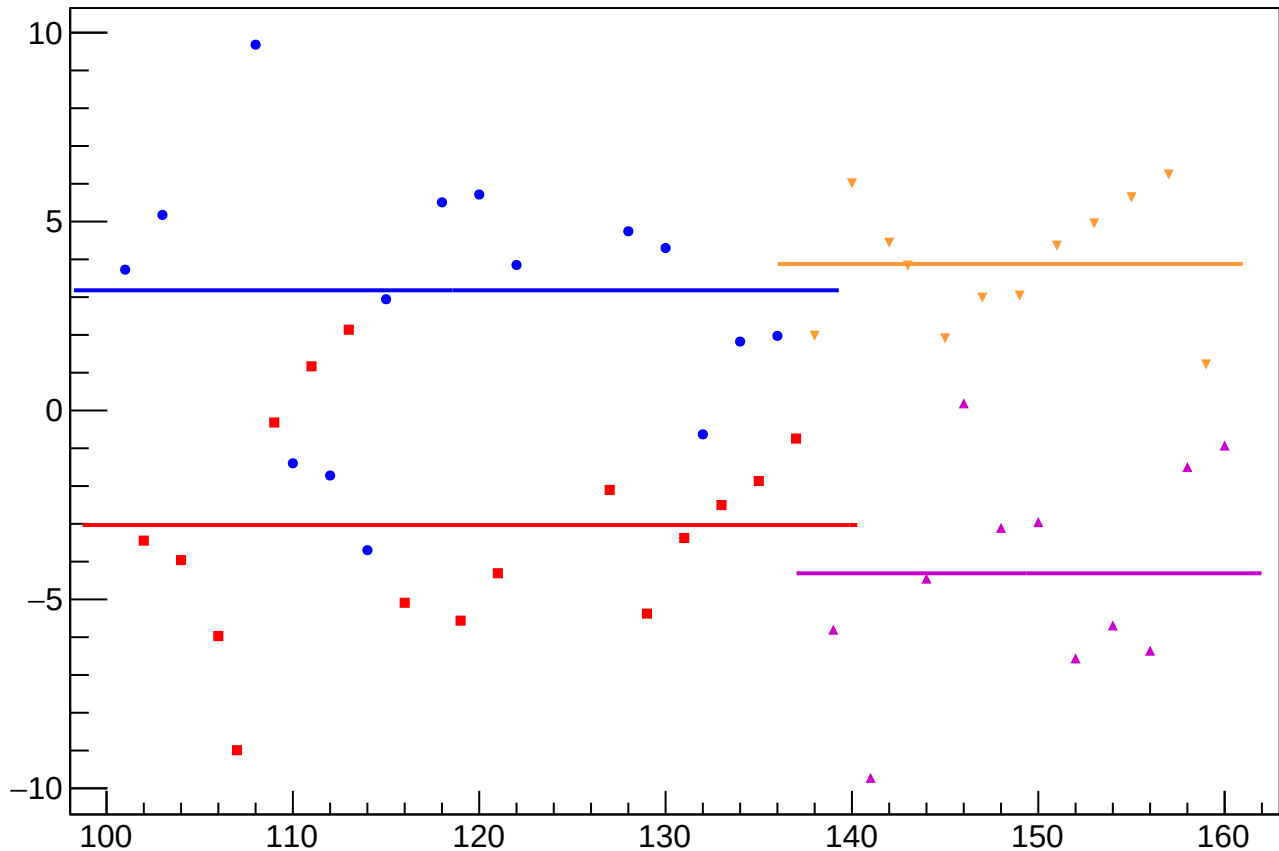
Right In: 1.691 $\pm$ 0.000  $\chi^2$ /NDF: 612163393317609859674079412355072.0/14  
 Left Out: 1.847 $\pm$ 0.000  $\chi^2$ /NDF: 84162850183102511254837045231616.0/11  
 Right Out: -1.462 $\pm$ 0.000  $\chi^2$ /NDF: 444384511662519040022371754835968.0/15  
 Left In: -1.879 $\pm$ 0.000  $\chi^2$ /NDF: 90968052268112309617342982127616.0/10  
 All: 0.024 $\pm$ 0.000  $\chi^2$ /NDF: 10893960400462.0/14

dit\_4aY\_coil1\_Ndata\_mean vs Slug, Sign Corrected



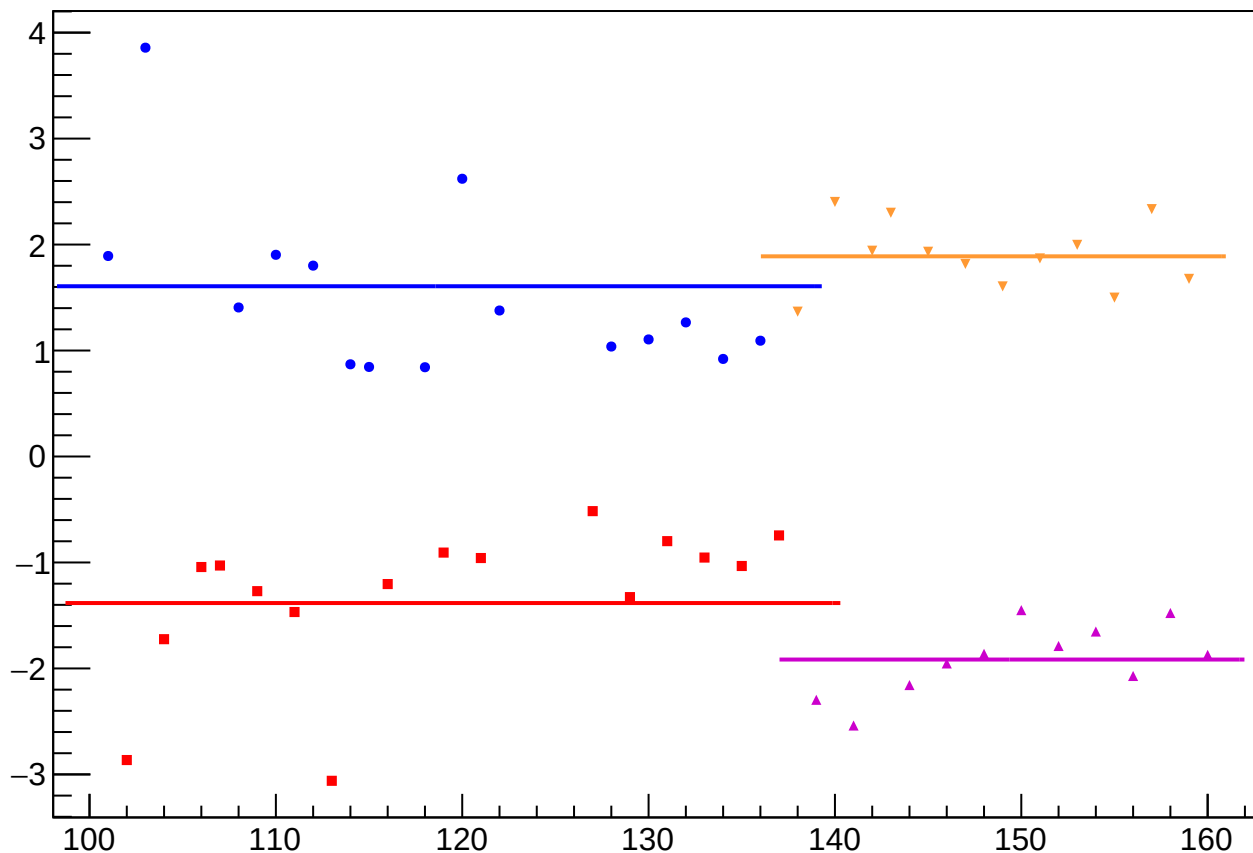
|                              |                                                                   |                       |                                         |
|------------------------------|-------------------------------------------------------------------|-----------------------|-----------------------------------------|
| Right In: 1046.490+/-0.000   | $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14 | Left: -29.533+/-0.000 | $\chi^2/\text{NDF}$ : 2784054454845267  |
| Left Out: 1193.726+/-0.000   | $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11 | Right: 4.462+/-0.000  | $\chi^2/\text{NDF}$ : 14598494086105576 |
| Right Out: -1009.445+/-0.000 | $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15 | In: -296.360+/-0.000  | $\chi^2/\text{NDF}$ : 2046292009130527  |
| Left In: -1239.553+/-0.000   | $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10 | Out: 264.242+/-0.000  | $\chi^2/\text{NDF}$ : 1950694116005569  |
|                              |                                                                   | All: -15.348+/-0.000  | $\chi^2/\text{NDF}$ : 424479012287      |

# dit\_4eY\_coil1\_mean vs Slug, Sign Corrected



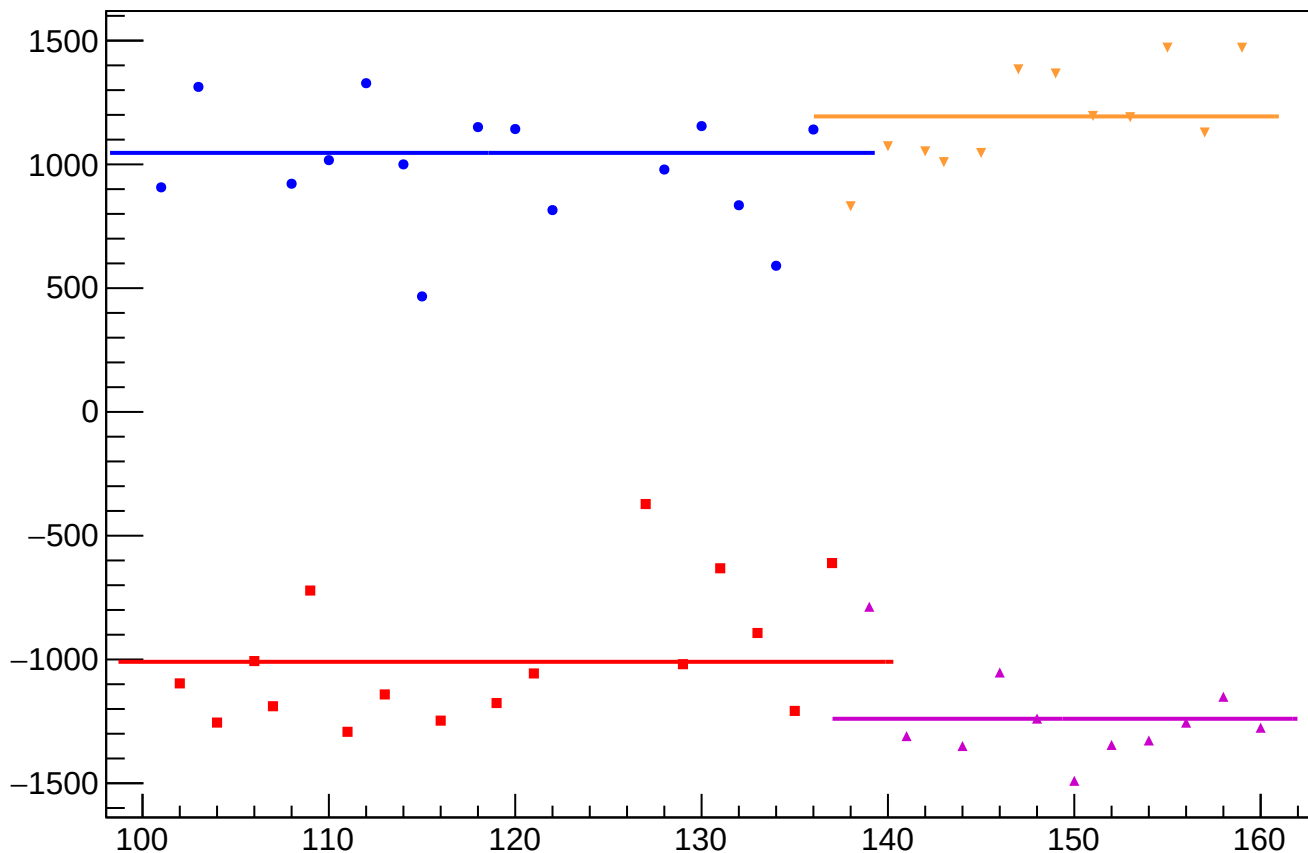
Left: -0.237 +/- 0.000  $\chi^2/\text{NDF}$ : 40330727078704471  
 Right In: 3.181 +/- 0.000  $\chi^2/\text{NDF}$ : 5833303227868252617704566394191872.0/14  
 Right: 0.032 +/- 0.000  $\chi^2/\text{NDF}$ : 23467771565313990  
 Left Out: 3.878 +/- 0.000  $\chi^2/\text{NDF}$ : 2463584640289158504459219897417728.0/11  
 In: -1.218 +/- 0.000  $\chi^2/\text{NDF}$ : 342914810766388262  
 Right Out: -3.032 +/- 0.000  $\chi^2/\text{NDF}$ : 4937209831371793945496546833334272.0/15  
 Out: 0.963 +/- 0.000  $\chi^2/\text{NDF}$ : 258114849490247466  
 Left In: -4.308 +/- 0.000  $\chi^2/\text{NDF}$ : 7073495667694280351803168107003904.0/10  
 All: -0.125 +/- 0.000  $\chi^2/\text{NDF}$ : 6385427084403

dit\_4eY\_coil1\_err\_mean vs Slug, Sign Corrected



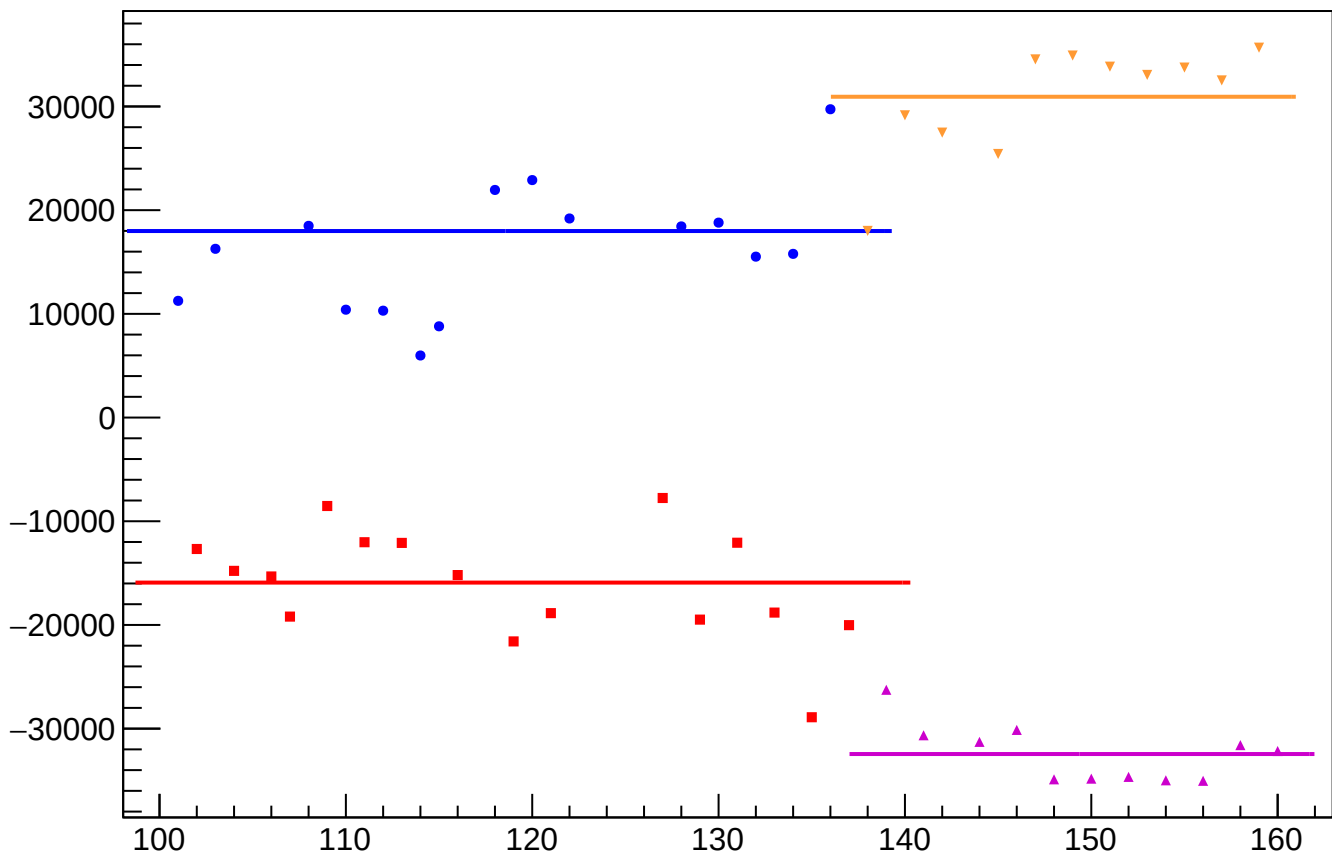
Right In:  $1.607 \pm 0.000$   $\chi^2/\text{NDF}$ : 460949628640148184181205735833600.0/14  
 Left Out:  $1.889 \pm 0.000$   $\chi^2/\text{NDF}$ : 94097326064066188177587241484288.0/11  
 Right Out:  $-1.383 \pm 0.000$   $\chi^2/\text{NDF}$ : 358348897016286200957650337792000.0/15  
 Left In:  $-1.916 \pm 0.000$   $\chi^2/\text{NDF}$ : 95276515809016209875699691945984.0/10  
 All:  $0.024 \pm 0.000$   $\chi^2/\text{NDF}$ : 10610919143090

dit\_4eY\_coil1\_Ndata\_mean vs Slug, Sign Corrected



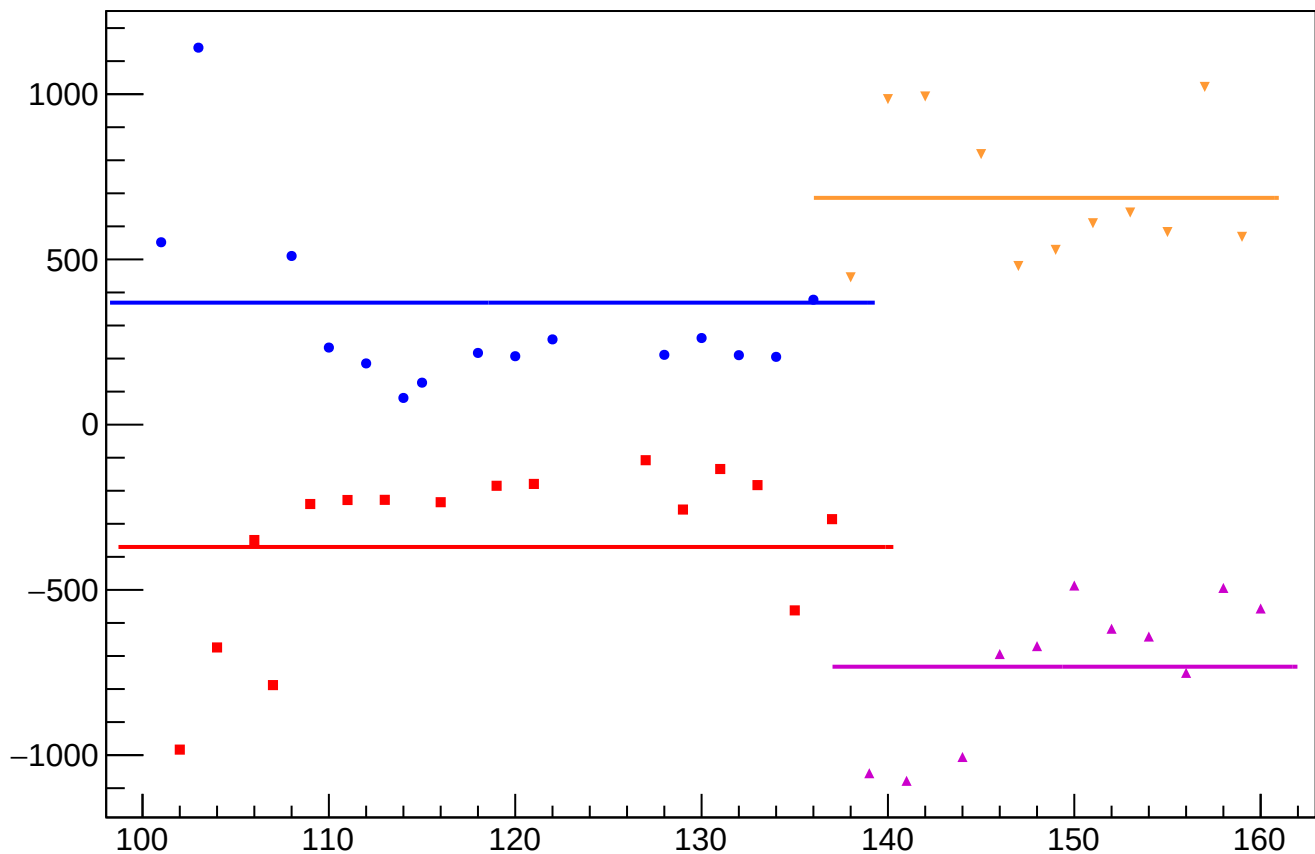
Right In:  $1046.490 \pm 0.000$   $\chi^2/\text{NDF}: 24866624766048512267031234680614551552.0/14$   
 Left Out:  $1193.726 \pm 0.000$   $\chi^2/\text{NDF}: 34388618994267285012310712301196935168.0/11$   
 Right Out:  $-1009.445 \pm 0.000$   $\chi^2/\text{NDF}: 44602783681728168935494176019868286976.0/15$   
 Left In:  $-1239.553 \pm 0.000$   $\chi^2/\text{NDF}: 29116180330425505242594030704390045696.0/10$   
 All:  $-15.348 \pm 0.000$   $\chi^2/\text{NDF}: 424479012287$

# dit\_usl\_coil1\_mean vs Slug, Sign Corrected



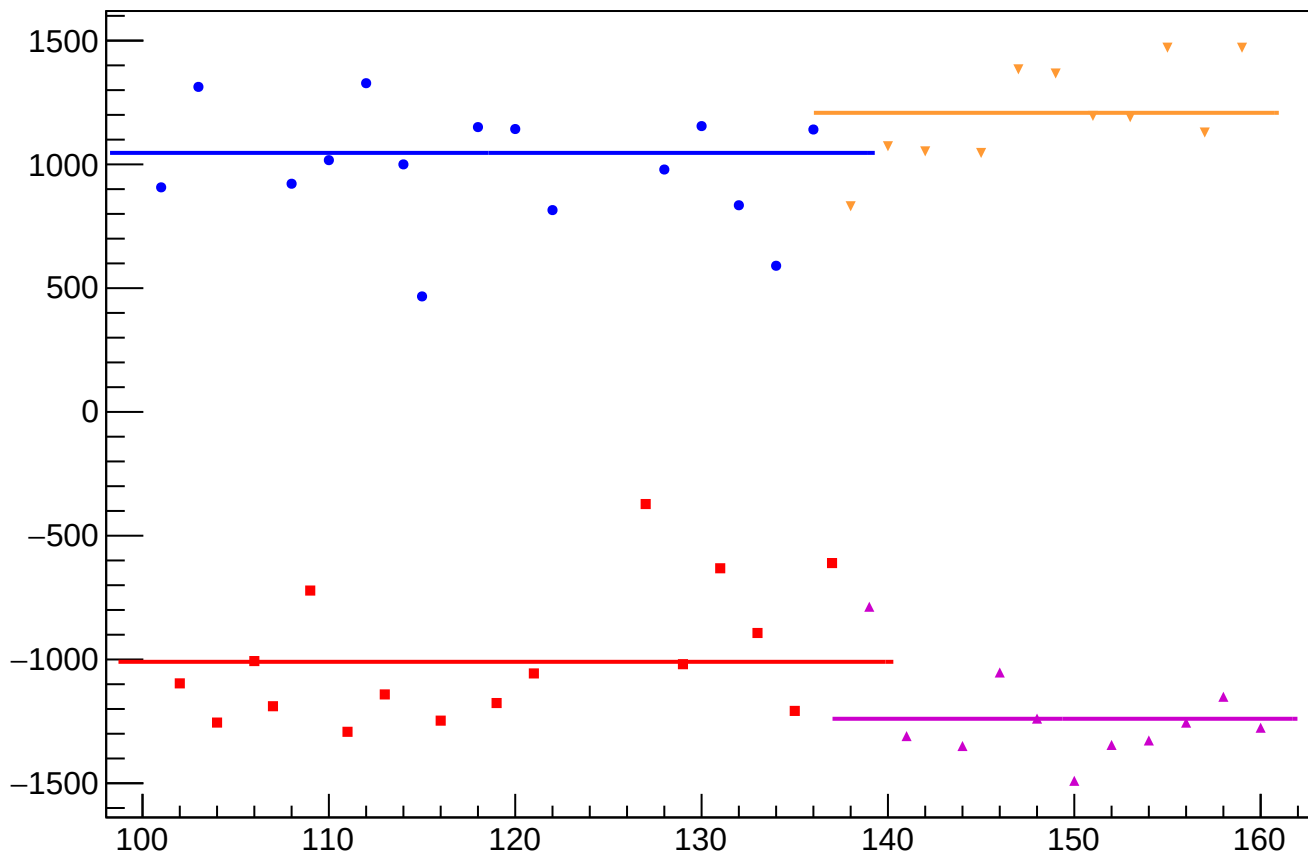
Right In: 17988.185+/-0.000  $\chi^2/\text{NDF}$ : 24815111809984217103544001237552952508416.0/14  
 Left Out: 30938.190+/-0.000  $\chi^2/\text{NDF}$ : 22231201695257869773275369100022395174912.0/10  
 Right Out: -15915.227+/-0.000  $\chi^2/\text{NDF}$ : 19954189674705952707042287416087223992320.0/15  
 Left In: -32448.675+/-0.000  $\chi^2/\text{NDF}$ : 6566176061380629796456552080625585094656.0/10  
 All: -880.808+/-0.000  $\chi^2/\text{NDF}$ : 22337383681

# dit\_usl\_coil1\_err\_mean vs Slug, Sign Corrected



Left:  $-53.927 \pm 0.000$   $\chi^2/\text{NDF}: 9637444088890032$   
 Right In:  $369.169 \pm 0.000$   $\chi^2/\text{NDF}: 48053036789565485994195833341370957824.0/14$   
 Left Out:  $686.240 \pm 0.000$   $\chi^2/\text{NDF}: 34417236167842983766159212562513657856.0/10$   
 Right Out:  $-370.091 \pm 0.000$   $\chi^2/\text{NDF}: 48214462907052107543037037125316902912.0/15$   
 Left In:  $-732.414 \pm 0.000$   $\chi^2/\text{NDF}: 39942105840529115736569596950263889920.0/10$   
 All:  $-33.290 \pm 0.000$   $\chi^2/\text{NDF}: 124154771081$

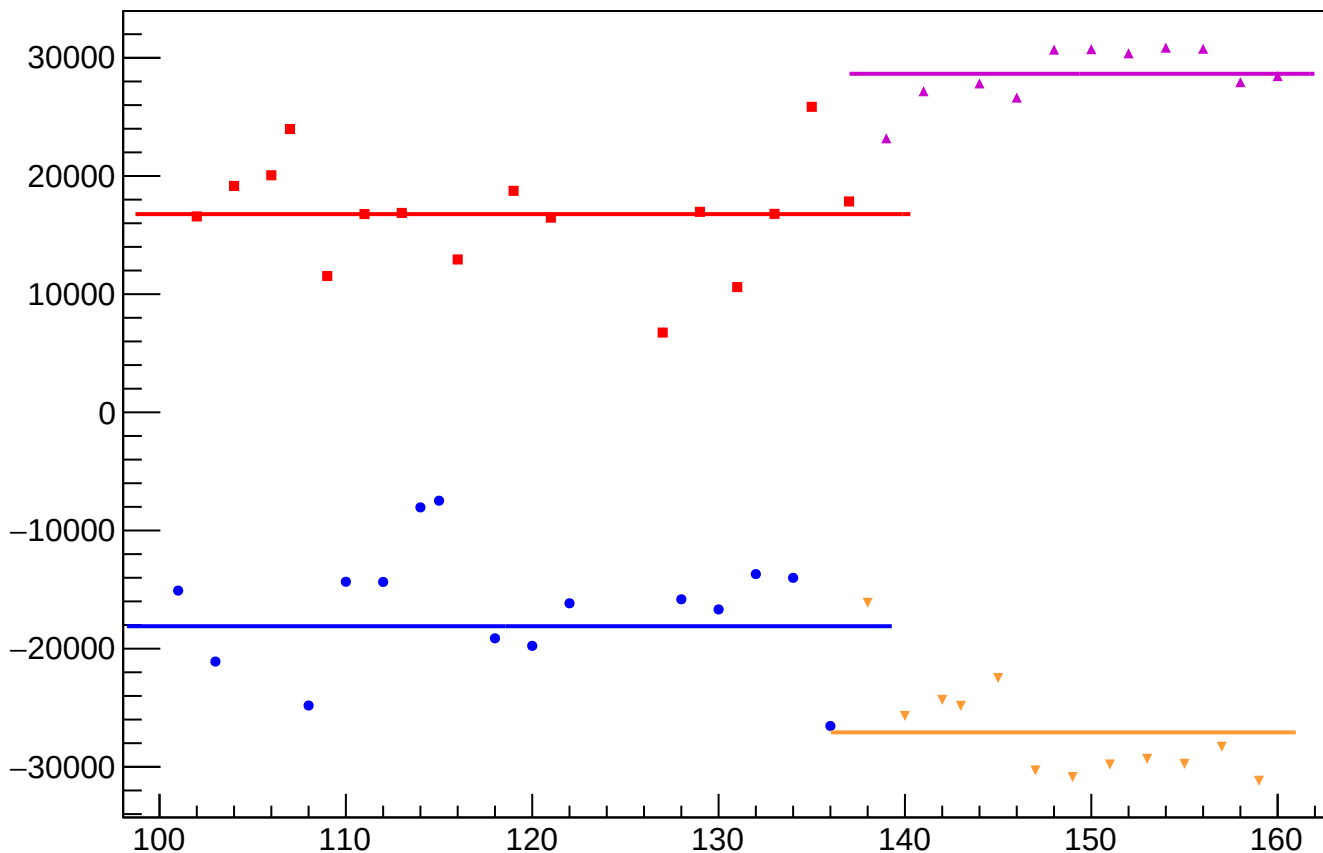
dit\_usl\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1208.342+/-0.000  $\chi^2/\text{NDF}$ : 31920270949065456215955115636701528064.0/10  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -37.580+/-0.000  $\chi^2/\text{NDF}$ : 417296815174



# dit\_usr\_coil1\_mean vs Slug, Sign Corrected



Right In: -18100.637+/-0.000

Left Out: -27085.326+/-0.000

Right Out: 16773.604+/-0.000

Left In: 28650.410+/-0.000

$\chi^2/\text{NDF}$ : 14634967546173586967632040765428699496448.0/14

$\chi^2/\text{NDF}$ : 16913671790830002451724713056210492850176.0/11

$\chi^2/\text{NDF}$ : 14234547931135812277474342886568366178304.0/15

$\chi^2/\text{NDF}$ : 4838827535981080826725947474344765554688.0/10

Left: 934.162+/-0.000  $\chi^2/\text{NDF}$ : 1449134260498682

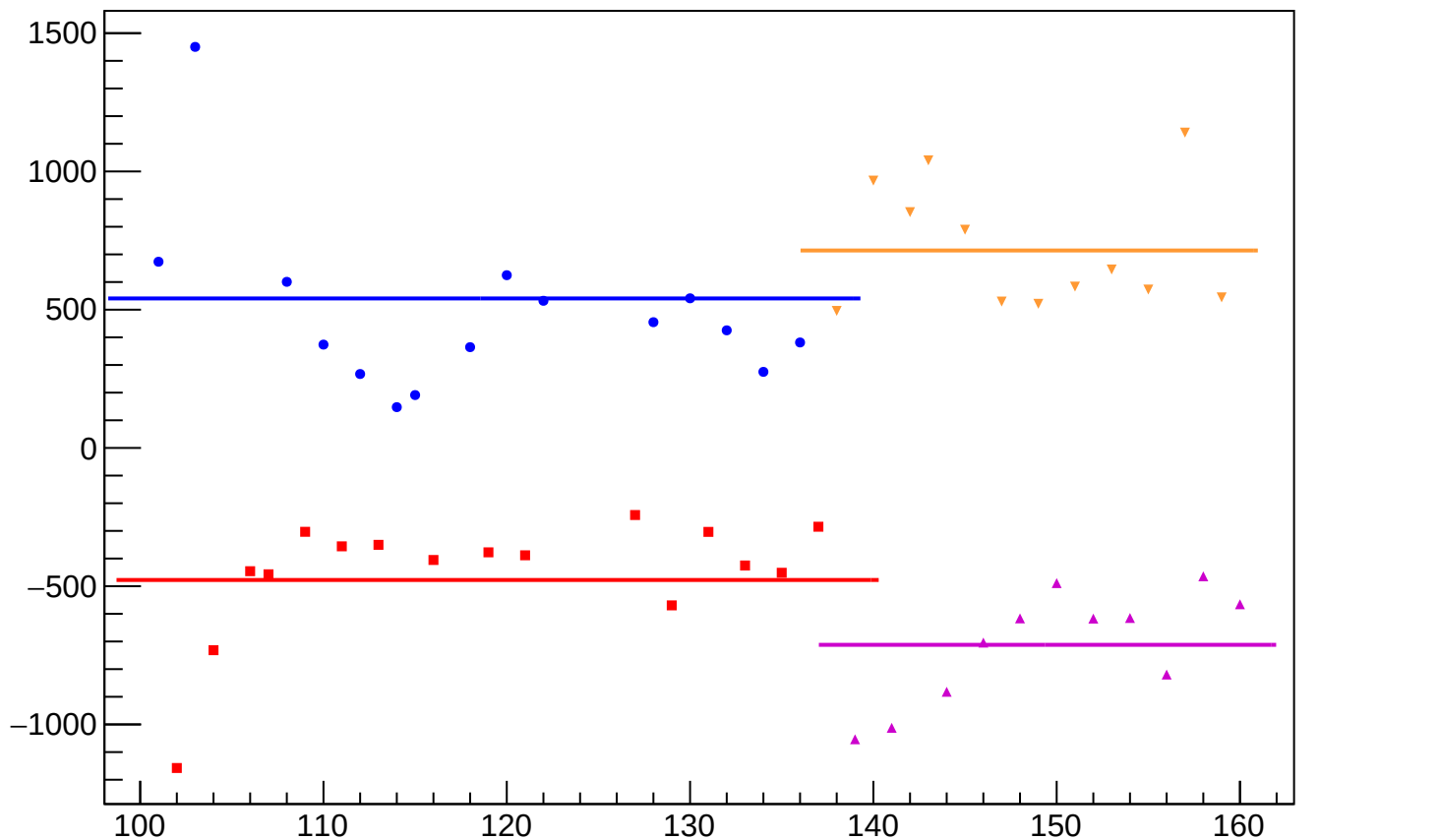
Right: -425.015+/-0.000  $\chi^2/\text{NDF}$ : 42892863582613

In: 9361.516+/-0.000  $\chi^2/\text{NDF}$ : 8527147862381255

Out: -8581.907+/-0.000  $\chi^2/\text{NDF}$ : 77289596182504

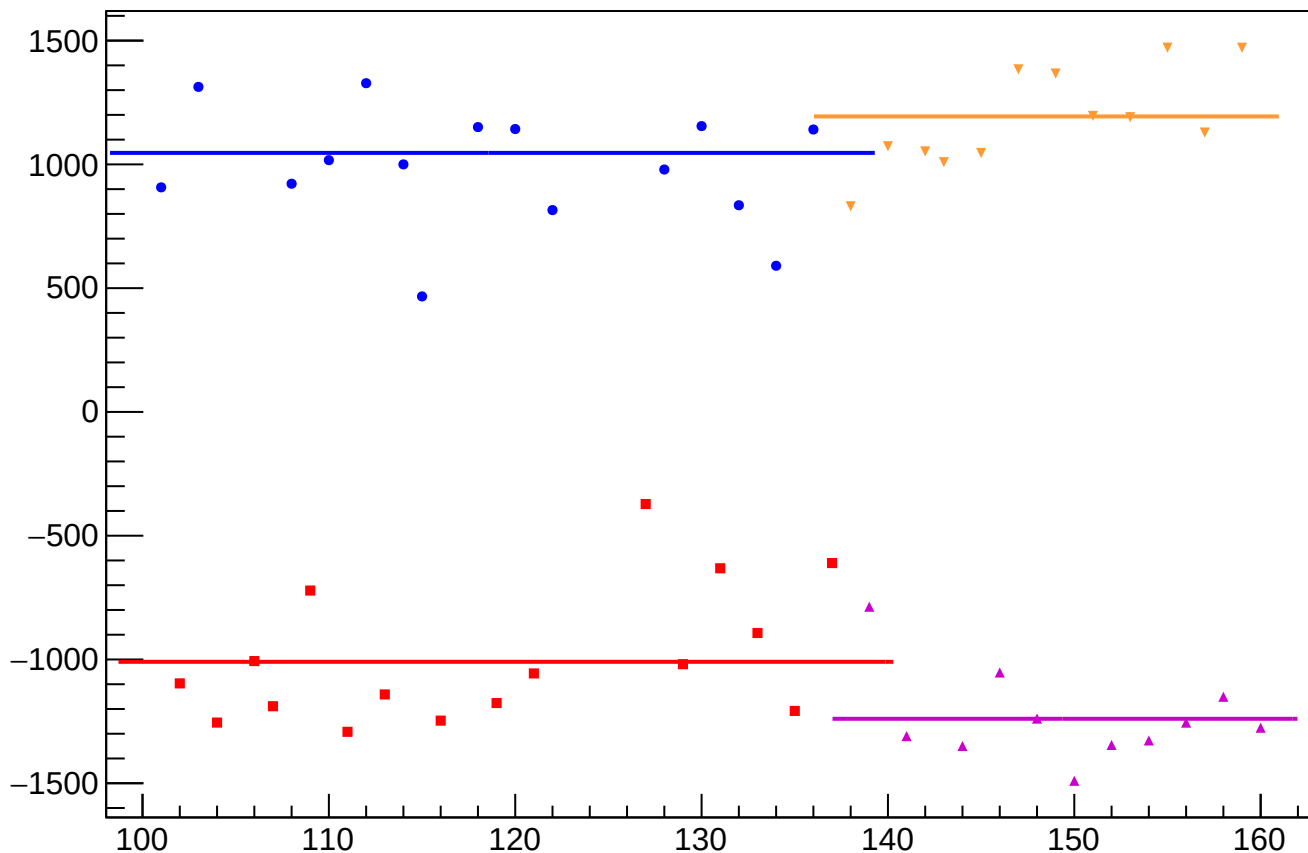
All: 367.048+/-0.000  $\chi^2/\text{NDF}$ : 18794796419

dit\_usr\_coil1\_err\_mean vs Slug, Sign Corrected



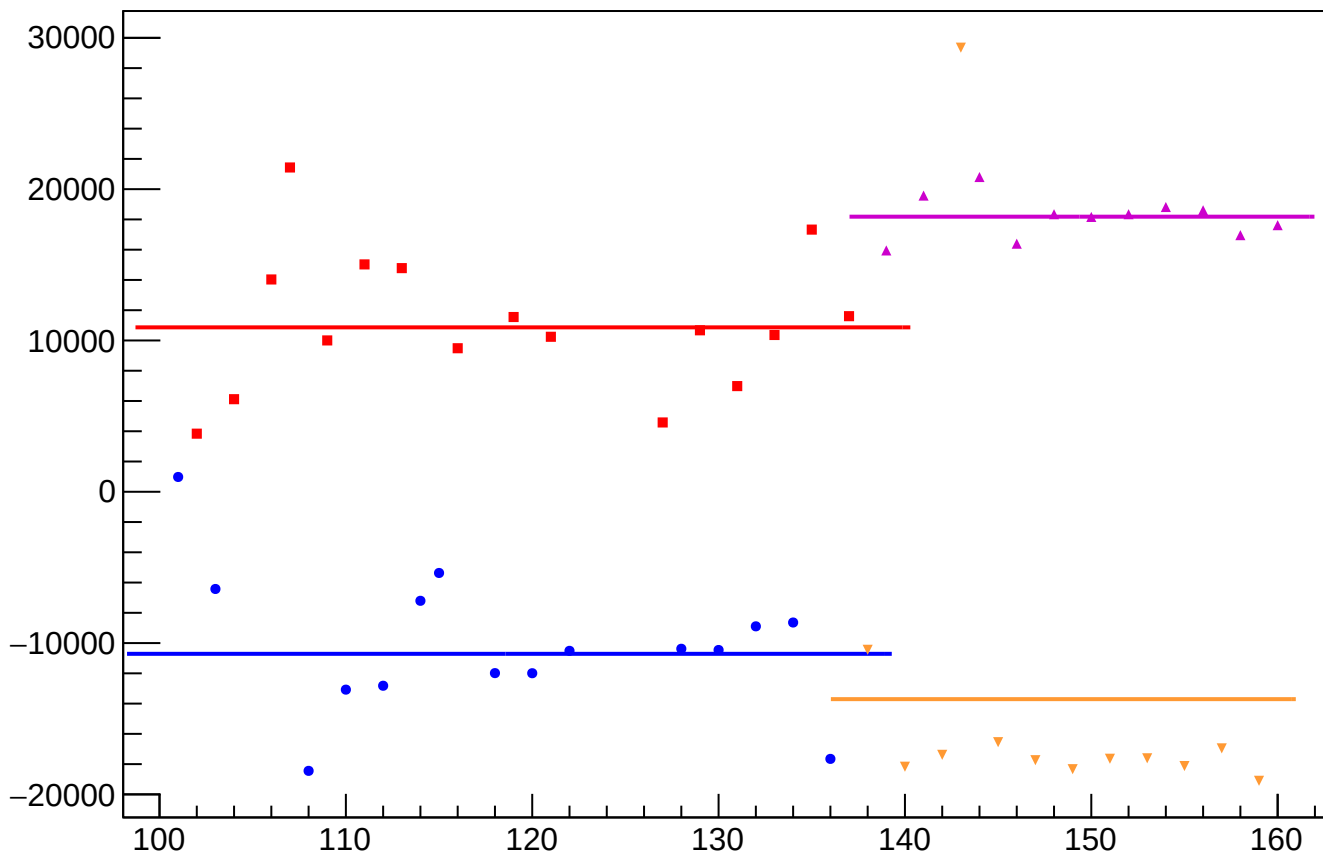
Left: -2.853 +/- 0.000  $\chi^2/\text{NDF}$ : 10119212919667896  
 Right: 24.595 +/- 0.000  $\chi^2/\text{NDF}$ : 4443717563002768  
 In: -195.221 +/- 0.000  $\chi^2/\text{NDF}$ : 6969405075379816  
 Out: 211.390 +/- 0.000  $\chi^2/\text{NDF}$ : 6295663774355160  
 All: 8.600 +/- 0.000  $\chi^2/\text{NDF}$ : 14568707976042

dit\_usr\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_atl1\_coil1\_mean vs Slug, Sign Corrected



Right In: -10710.292 +/- 0.000

$\chi^2/\text{NDF}$ : 16945226152053511840482618402250170564608.0/14

Left Out: -13705.488 +/- 0.000

$\chi^2/\text{NDF}$ : 138226511026527050662319693841079709204480.0/11

Right Out: 10866.264 +/- 0.000

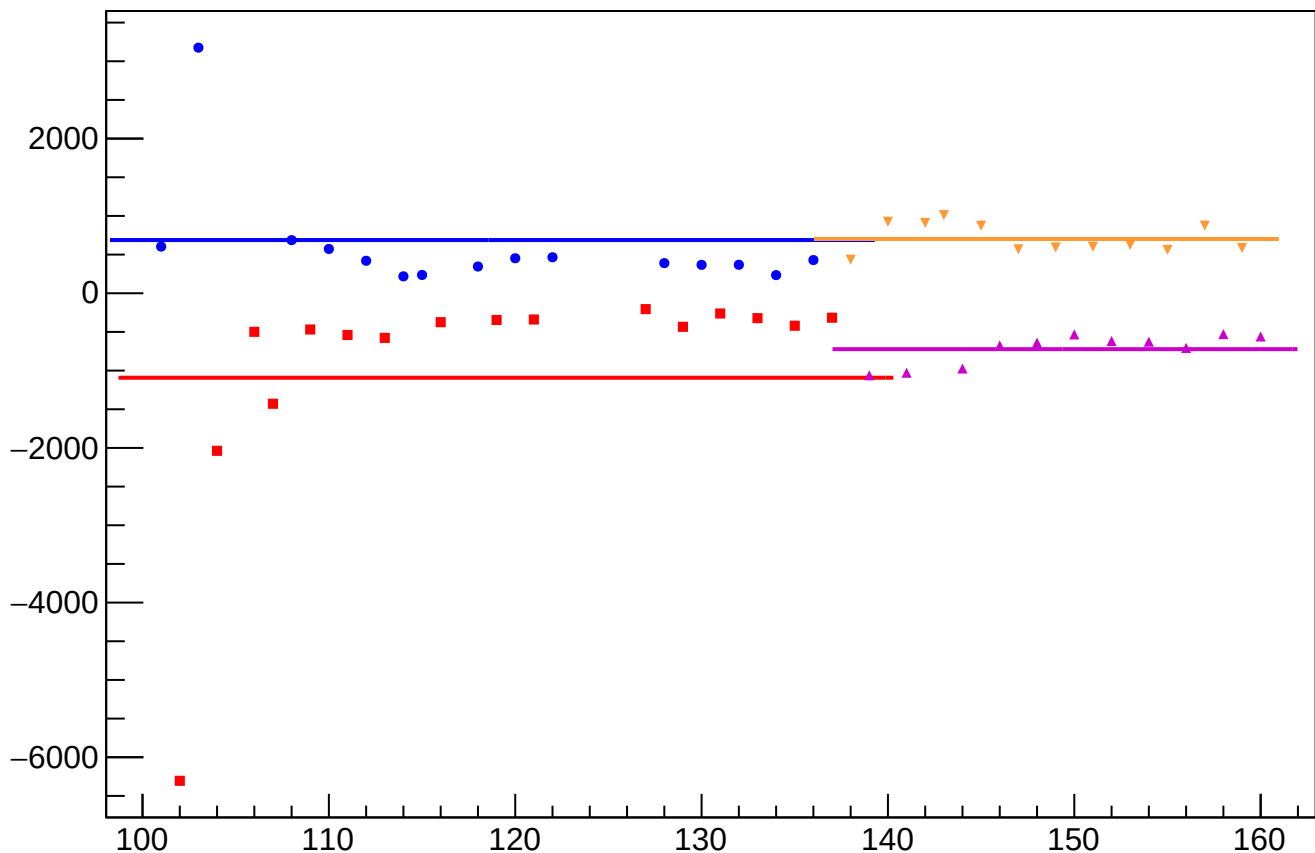
$\chi^2/\text{NDF}$ : 14234762838858382484525901644131626647552.0/15

Left In: 18181.504 +/- 0.000

$\chi^2/\text{NDF}$ : 1643617183572647868818914289162838343680.0/10

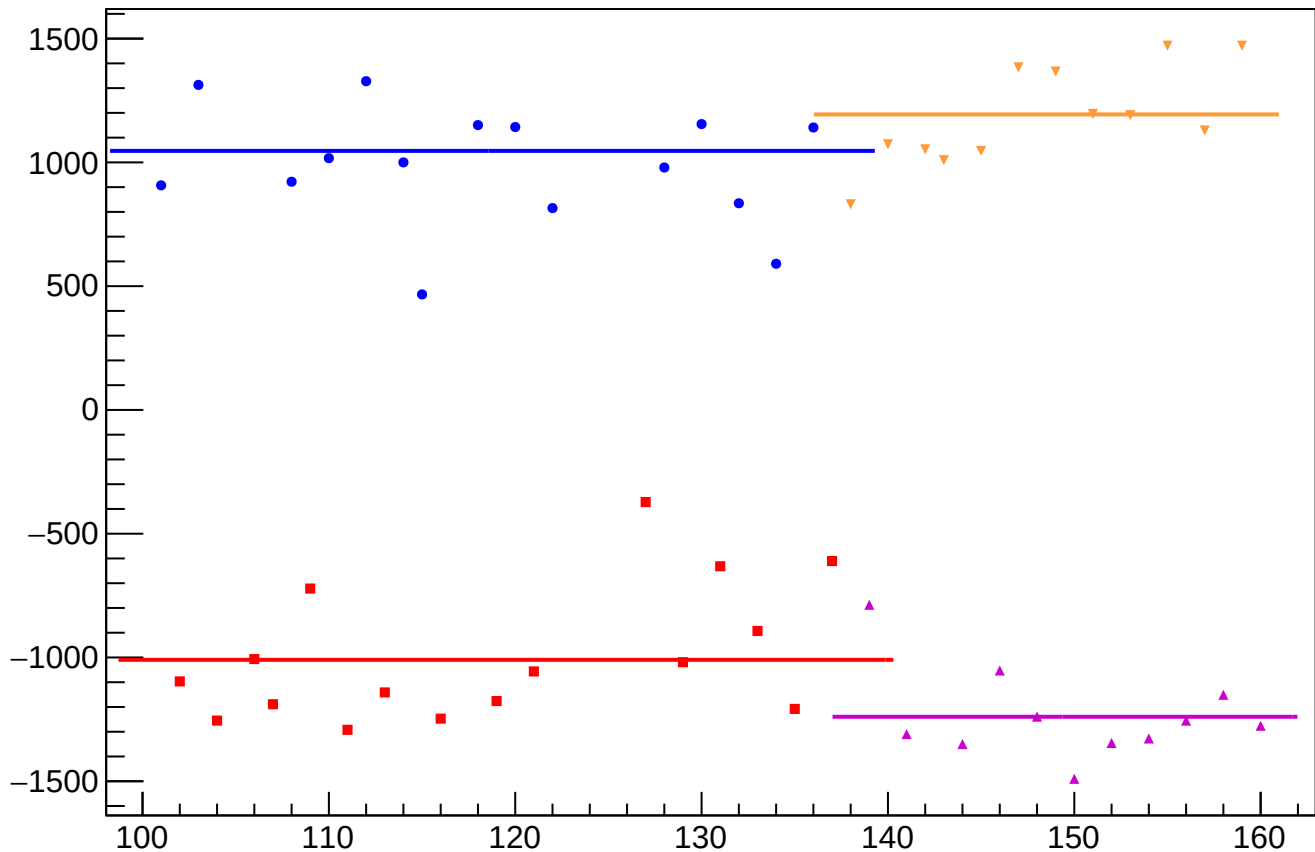
All: 1448.863 +/- 0.000  $\chi^2/\text{NDF}$ : 79476286142

dit\_atl1\_coil1\_err\_mean vs Slug, Sign Corrected



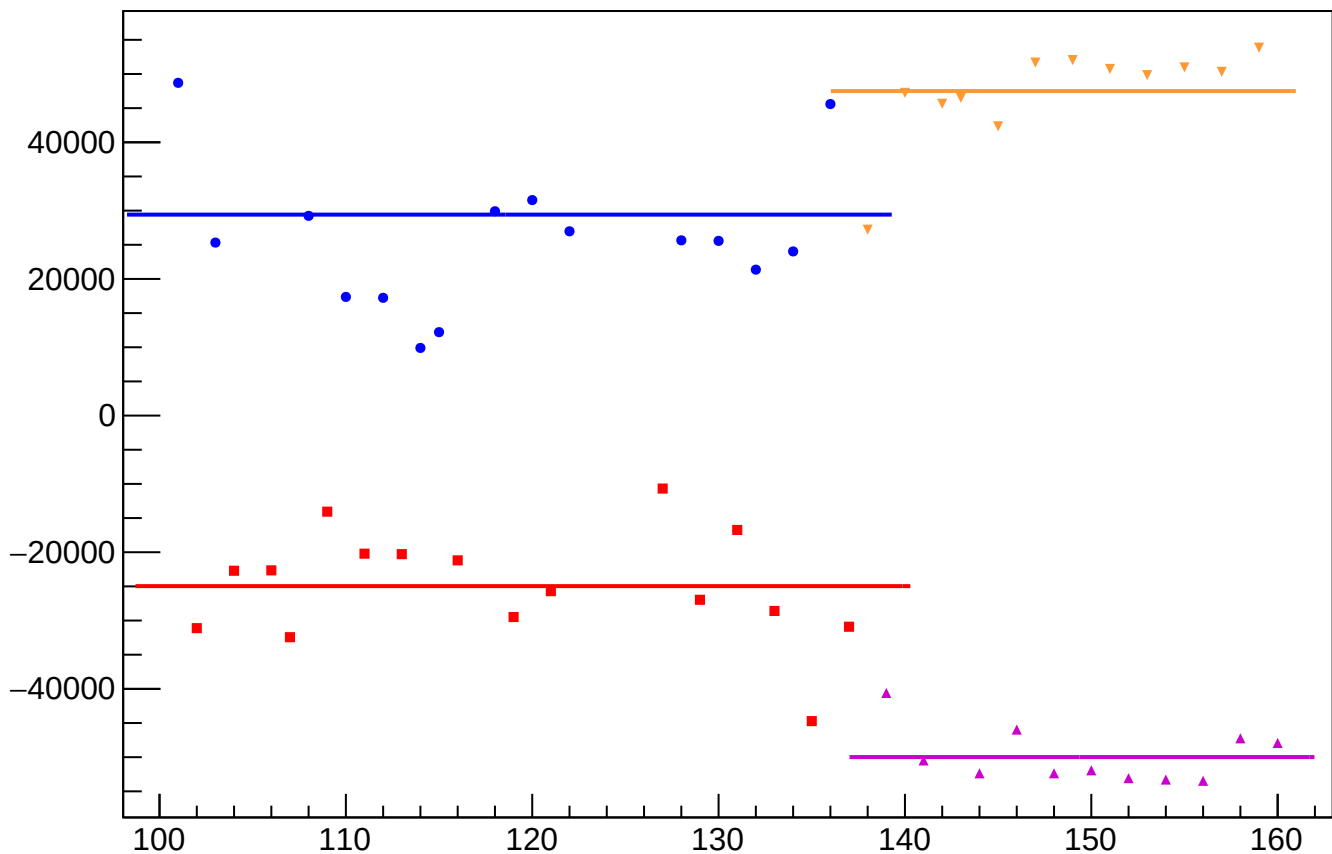
Right In:  $687.939 \pm 0.000$   $\chi^2/\text{NDF}: 409297141104301509817753390759024787456.0/14$   
 Left Out:  $701.825 \pm 0.000$   $\chi^2/\text{NDF}: 29011752452264624264282448573098885120.0/11$   
 Right Out:  $-1092.265 \pm 0.000$   $\chi^2/\text{NDF}: 1883198142929605813456233812946948456448.0/15$   
 Left In:  $-722.743 \pm 0.000$   $\chi^2/\text{NDF}: 33693137116513948077860330410535288832.0/10$   
 All:  $-97.785 \pm 0.000$   $\chi^2/\text{NDF}: 436080381727$

dit\_atl1\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_atl2\_coil1\_mean vs Slug, Sign Corrected



Right In: 29415.830+/-0.000

$\chi^2/\text{NDF}$ : 71764989638928082906774979753894809174016.0/14

Left Out: 47501.916+/-0.000

$\chi^2/\text{NDF}$ : 43591715334933801645565199836761766756352.0/11

Right Out: -24963.010+/-0.000

$\chi^2/\text{NDF}$ : 45631572920122171972835961685494315614208.0/15

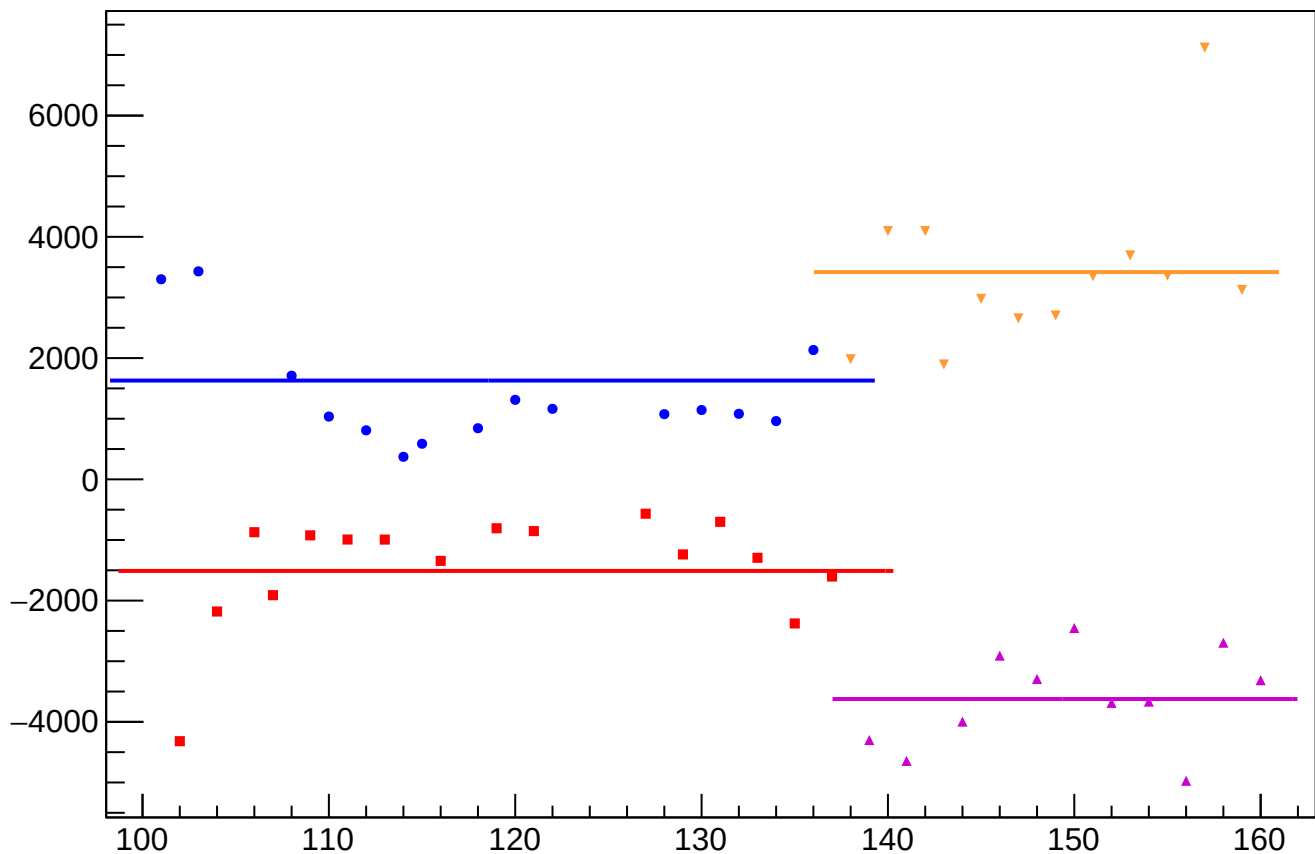
Left In: -49982.063+/-0.000

$\chi^2/\text{NDF}$ : 13505821019305603846121121344717970210816.0/10

All: -103.402+/-0.000

$\chi^2/\text{NDF}$ : 55223983268

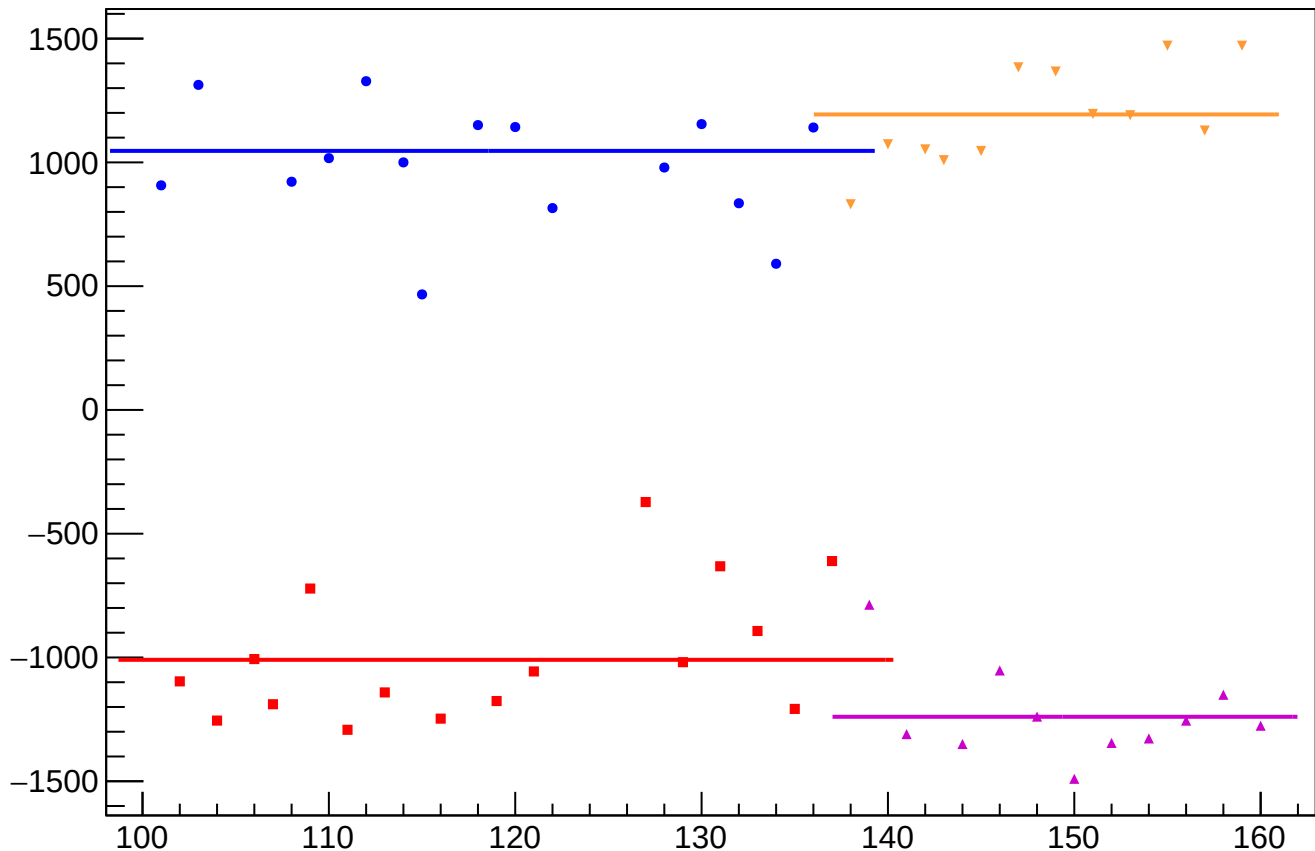
dit\_atl2\_coil1\_err\_mean vs Slug, Sign Corrected



Right In: 1629.542 $\pm$ 0.000  $\chi^2$ /NDF: 551738555355028902194697896437152219136.0/14  
 Left Out: 3418.927 $\pm$ 0.000  $\chi^2$ /NDF: 1575515144069936231955966928879934767104.0/11  
 Right Out: -1510.293 $\pm$ 0.000  $\chi^2$ /NDF: 688231904046816211321774524619745656832.0/15  
 Left In: -3623.095 $\pm$ 0.000  $\chi^2$ /NDF: 537714450371269509719141411292840984576.0/10  
 All: -54.735 $\pm$ 0.000  $\chi^2$ /NDF: 294015037802

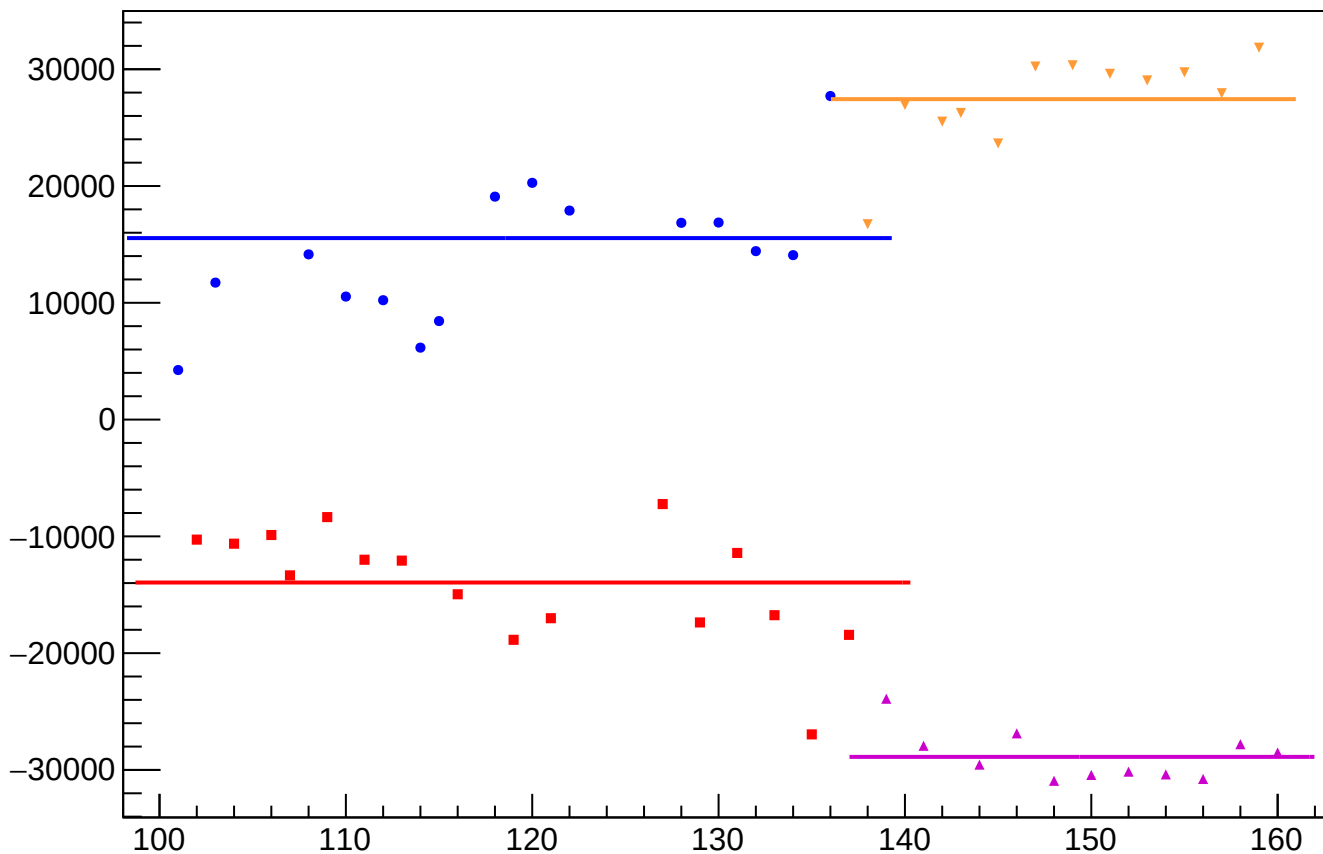


dit\_atl2\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_atr1\_coil1\_mean vs Slug, Sign Corrected



Right In: 15540.787+/-0.000

$\chi^2/\text{NDF}$ : 27383635886523601832377795383509714468864.0/14

Left Out: 27439.616+/-0.000

$\chi^2/\text{NDF}$ : 14247025908871725813351088668818926469120.0/11

Right Out: -13951.799+/-0.000

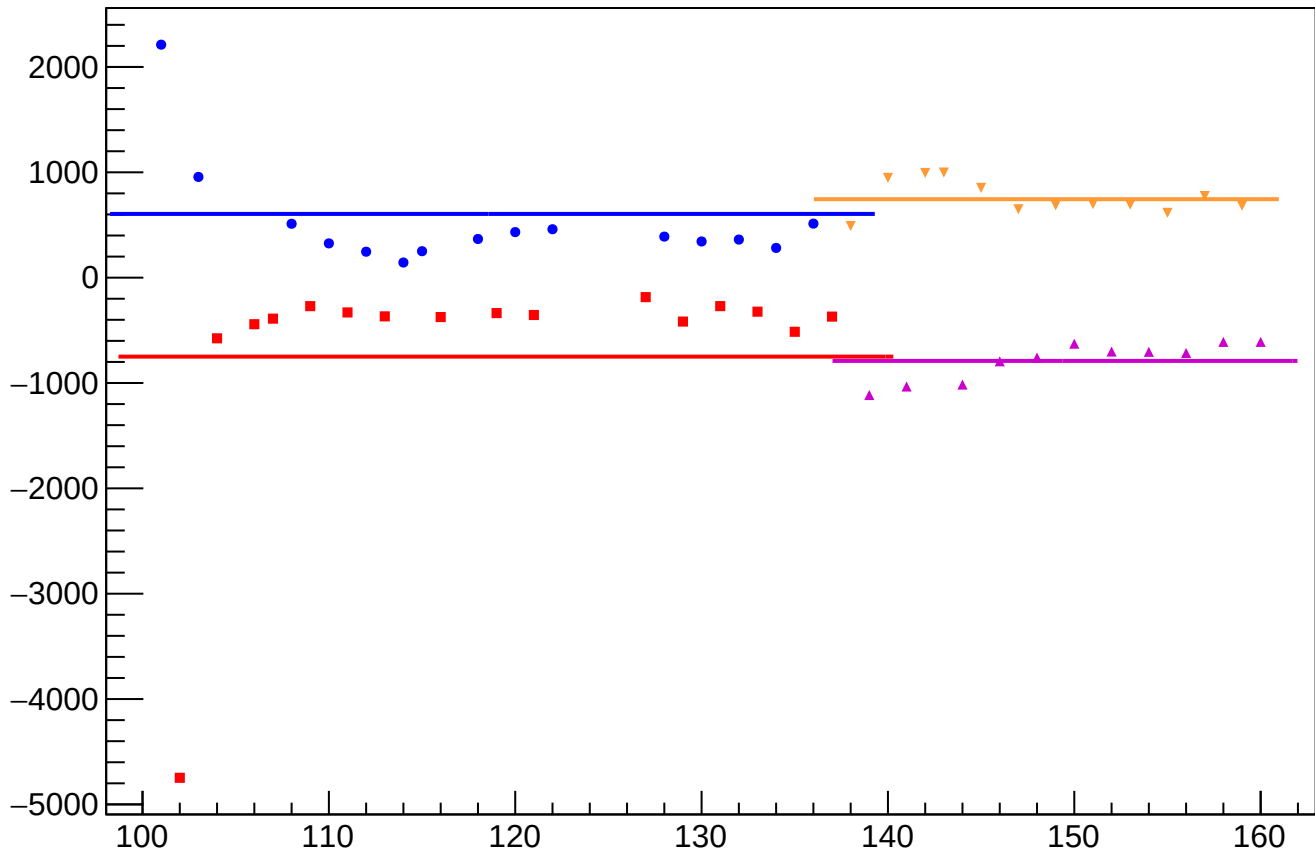
$\chi^2/\text{NDF}$ : 16954071035739584664612813430748100952064.0/15

Left In: -28881.771+/-0.000

$\chi^2/\text{NDF}$ : 3761764043421234560623243625754374701056.0/10

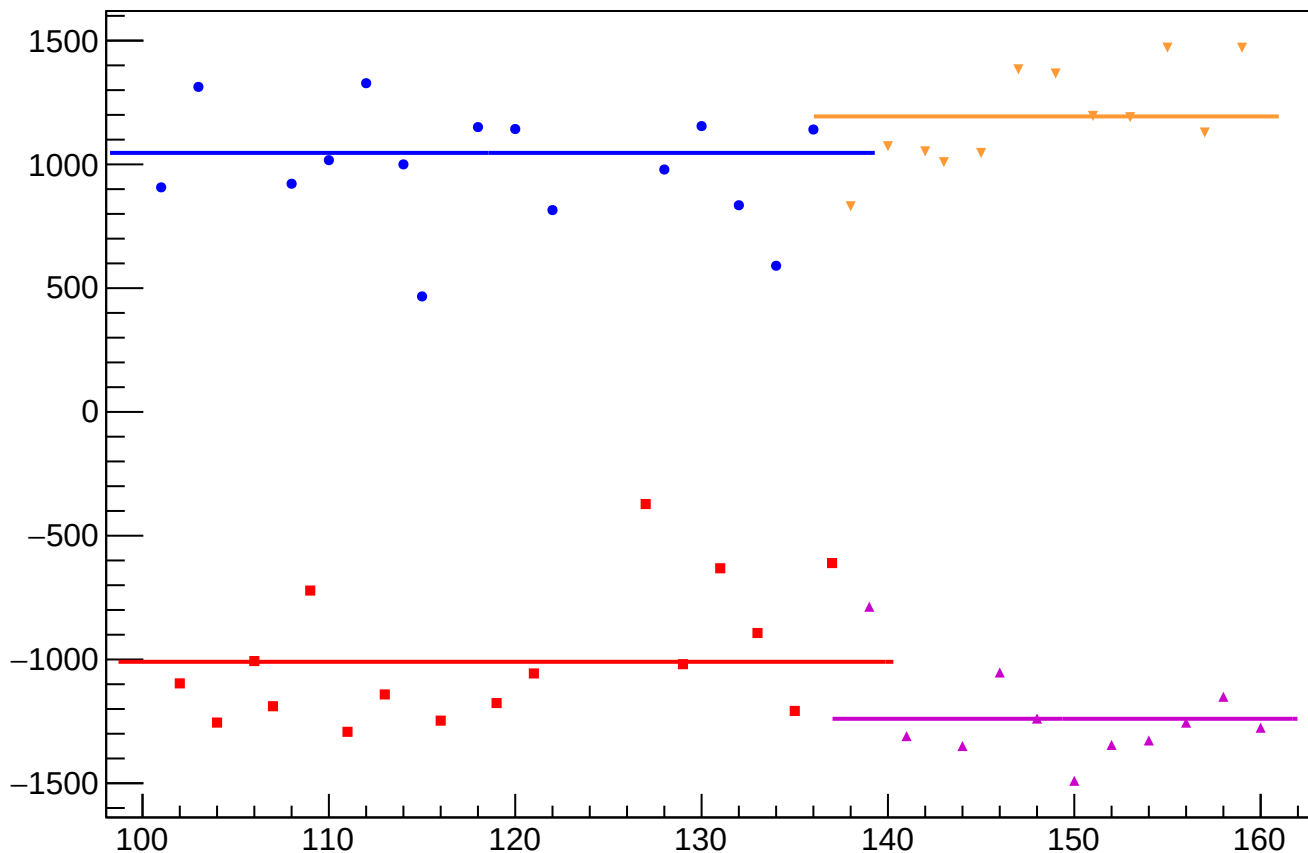
All: -262.152+/-0.000  $\chi^2/\text{NDF}$ : 18076481618

dit\_atr1\_coil1\_err\_mean vs Slug, Sign Corrected



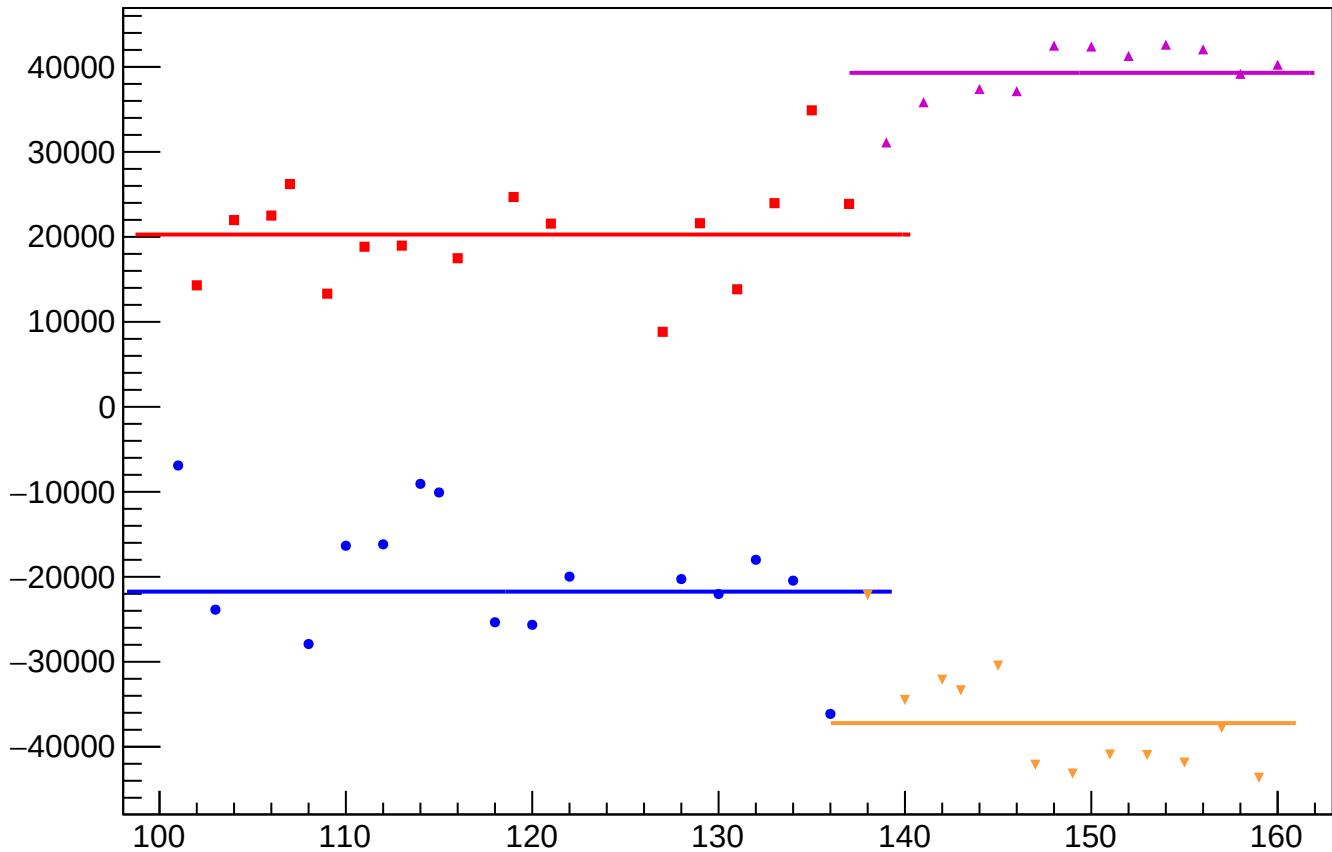
Right In: 605.034 +/- 0.000  $\chi^2/\text{NDF}$ : 189401522791607614448600157723362852864.0/14  
 Left Out: 744.985 +/- 0.000  $\chi^2/\text{NDF}$ : 19571453984278961719936247870544412672.0/11  
 Right Out: -749.582 +/- 0.000  $\chi^2/\text{NDF}$ : 1021358768377495935693748779804344188928.0/15  
 Left In: -790.283 +/- 0.000  $\chi^2/\text{NDF}$ : 27375995163011560101349166949437800448.0/10  
 All: -49.654 +/- 0.000  $\chi^2/\text{NDF}$ : 294663207457

dit\_atr1\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_atr2\_coil1\_mean vs Slug, Sign Corrected



Right In: -21743.360+/-0.000

Left Out: -37210.761+/-0.000

Right Out: 20275.415+/-0.000

Left In: 39301.203+/-0.000

$\chi^2/\text{NDF}$ : 41106858823579527325198675675398793068544.0/14

$\chi^2/\text{NDF}$ : 36234813568101266501920845904945520574464.0/11

$\chi^2/\text{NDF}$ : 25935869132092920231681532417627320745984.0/15

$\chi^2/\text{NDF}$ : 10890557195828480655850873156116452212736.0/10

Left: 1253.360+/-0.000  $\chi^2/\text{NDF}$ : 273699578436603

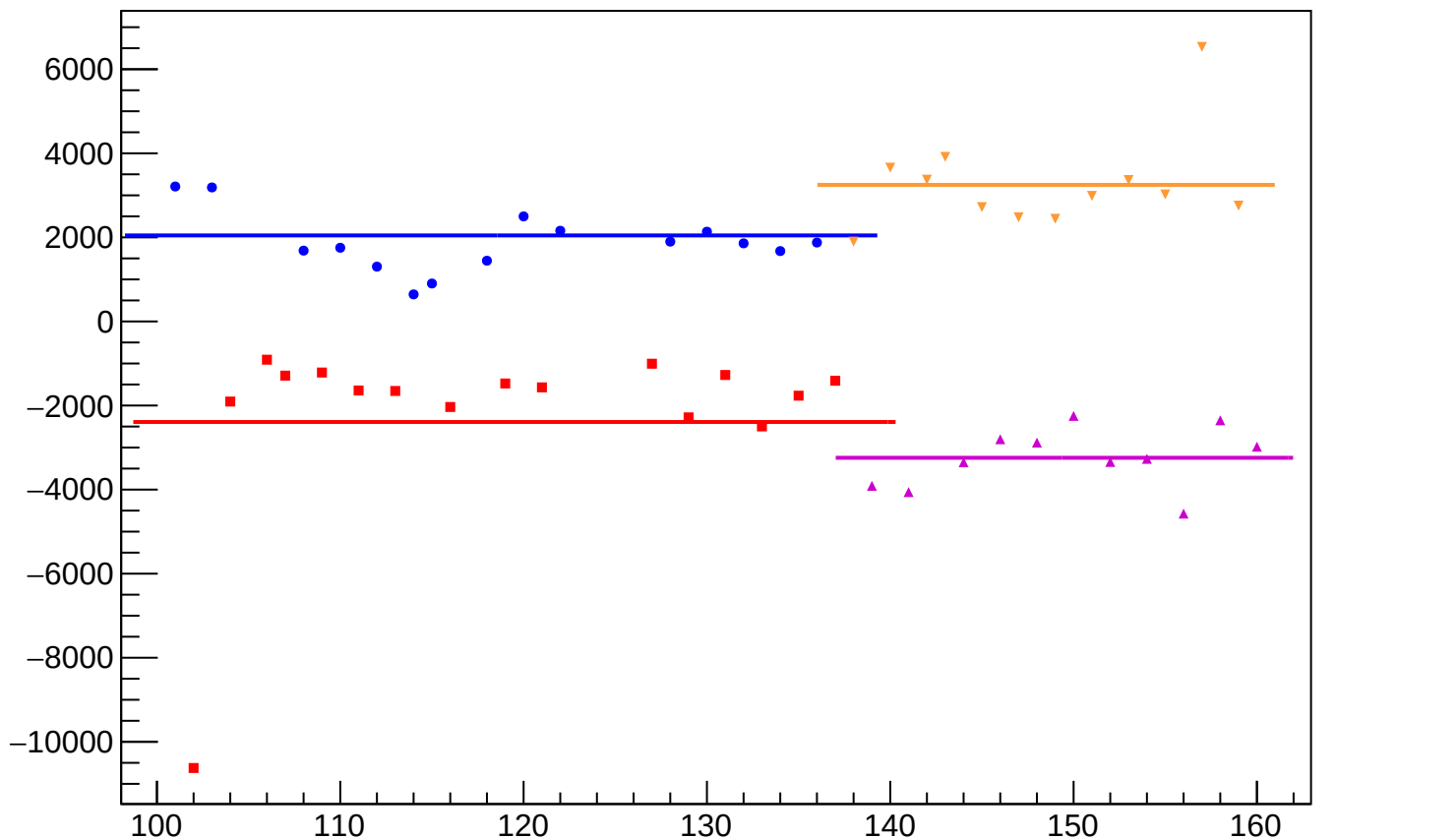
Right: -446.610+/-0.000  $\chi^2/\text{NDF}$ : 64780902874572

In: 14114.985+/-0.000  $\chi^2/\text{NDF}$ : 147263048816292

Out: -12958.212+/-0.000  $\chi^2/\text{NDF}$ : 1336456927560

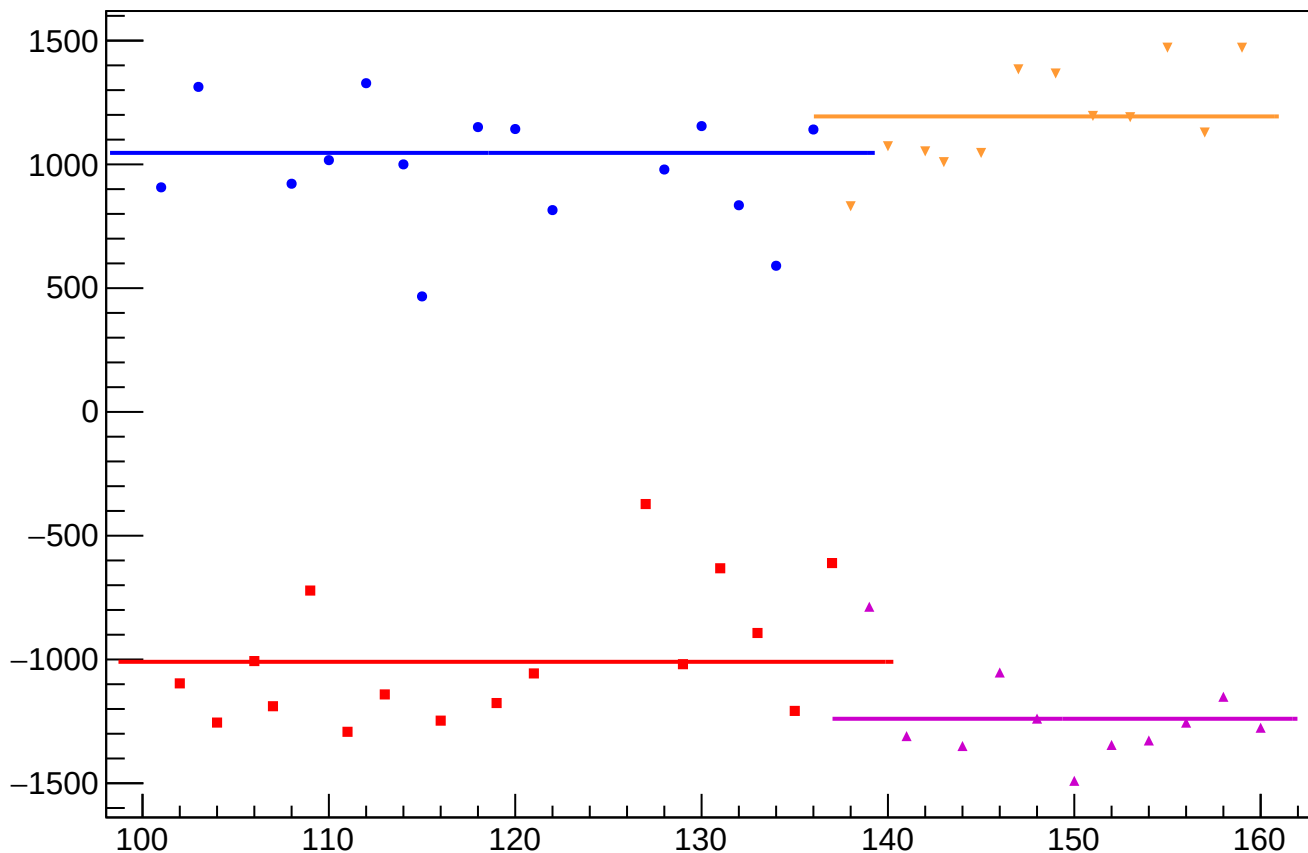
All: 544.051+/-0.000  $\chi^2/\text{NDF}$ : 338702108163

dit\_atr2\_coil1\_err\_mean vs Slug, Sign Corrected



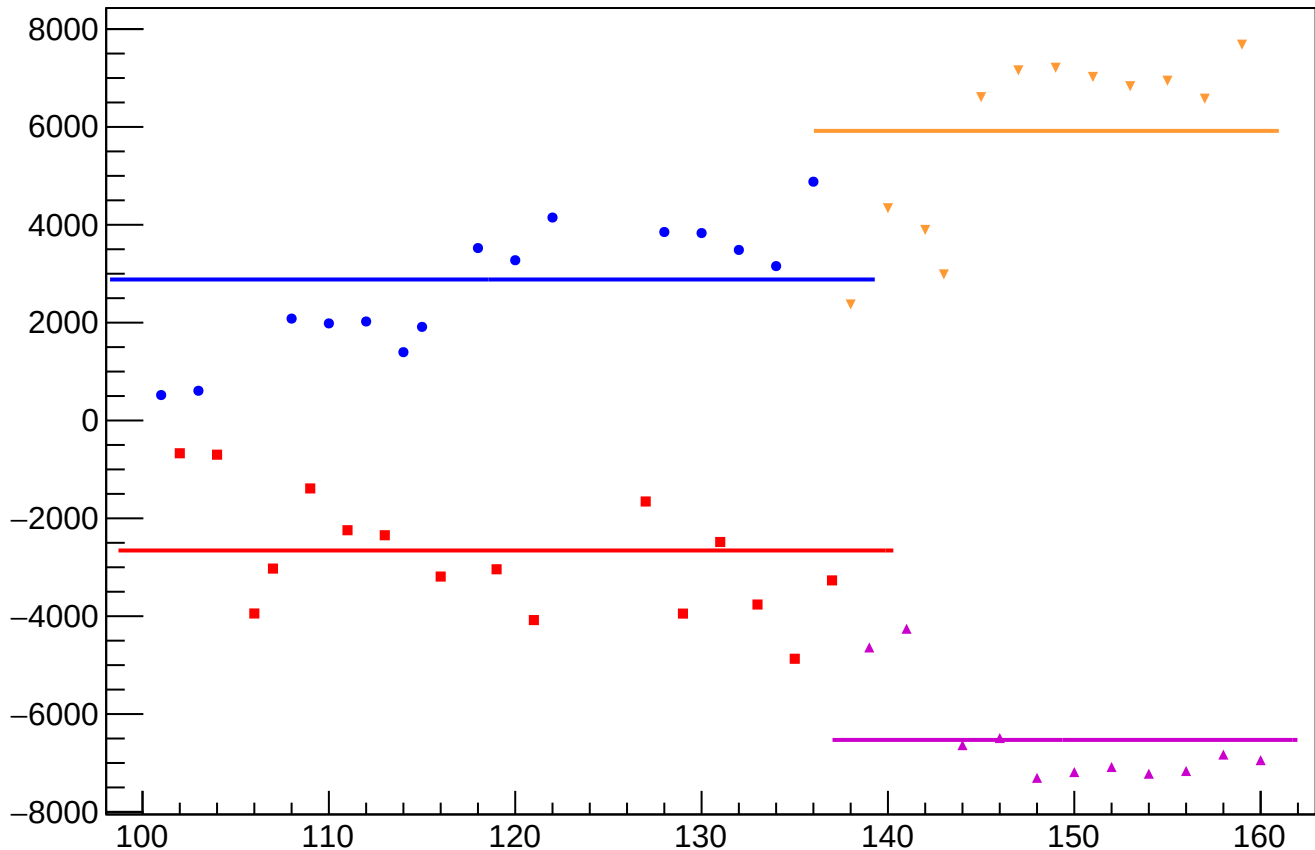
Right In: 2046.354+/-0.000  $\chi^2/\text{NDF}$ : 266555515927348892036833058355226345472.0/14  
 Left Out: 3249.314+/-0.000  $\chi^2/\text{NDF}$ : 1190726211956001849078073092083852247040.0/11  
 Right Out: -2391.939+/-0.000  $\chi^2/\text{NDF}$ : 4415294964789778815259357544579499819008.0/15  
 Left In: -3243.479+/-0.000  $\chi^2/\text{NDF}$ : 422752345809564414875941115453230809088.0/10  
 All: -93.355+/-0.000  $\chi^2/\text{NDF}$ : 321724014891

dit\_atr2\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

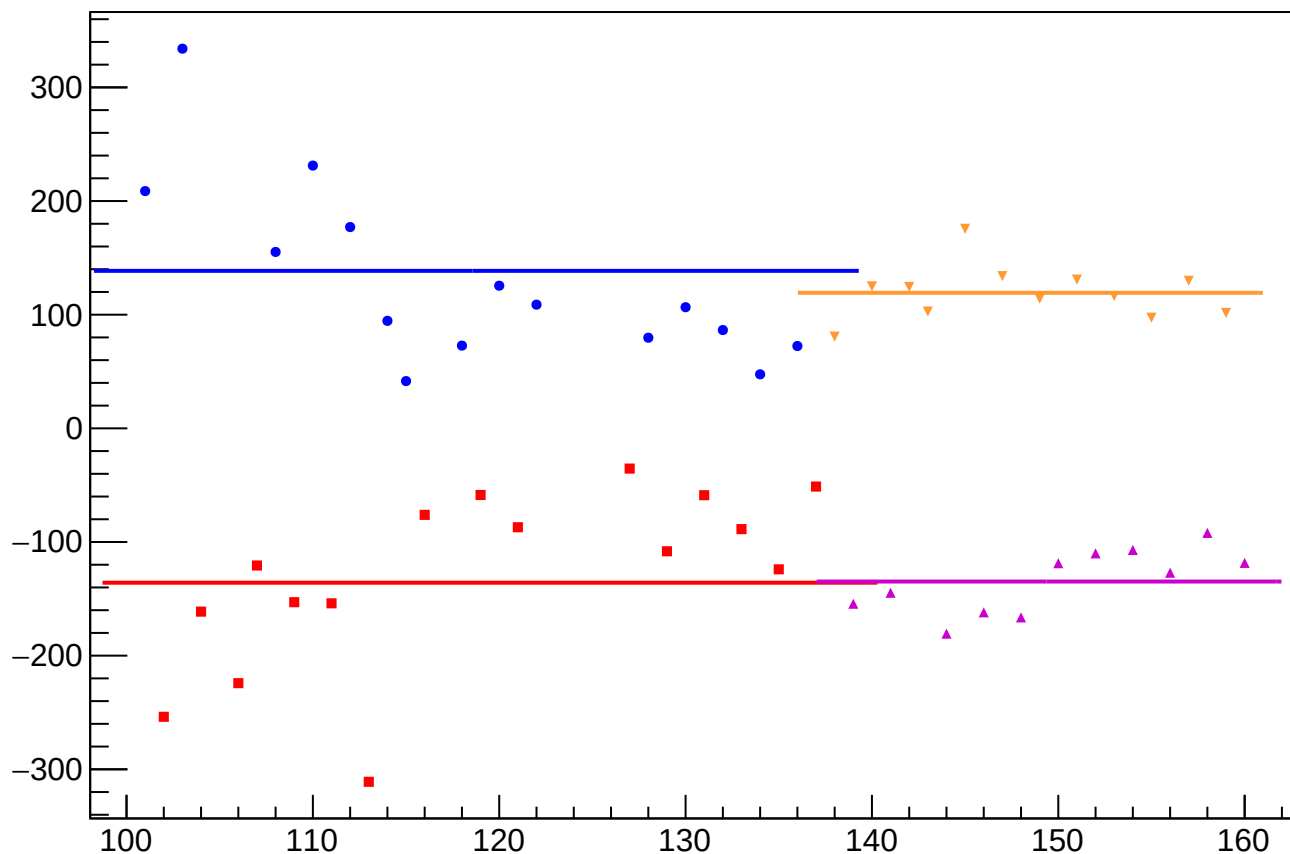
dit\_sam1\_coil1\_mean vs Slug, Sign Corrected



Right In: 2881.935 $\pm$ 0.000  $\chi^2$ /NDF: 1320319391496525533692082365878834823168.0/14  
 Left Out: 5919.511 $\pm$ 0.000  $\chi^2$ /NDF: 2779072700024845827027981240176985767936.0/11  
 Right Out: -2656.918 $\pm$ 0.000  $\chi^2$ /NDF: 1077696846216053561130716877125509447680.0/15  
 Left In: -6528.681 $\pm$ 0.000  $\chi^2$ /NDF: 940619832290547661204641528694924378112.0/10  
 All: -166.093 $\pm$ 0.000  $\chi^2$ /NDF: 87540894065

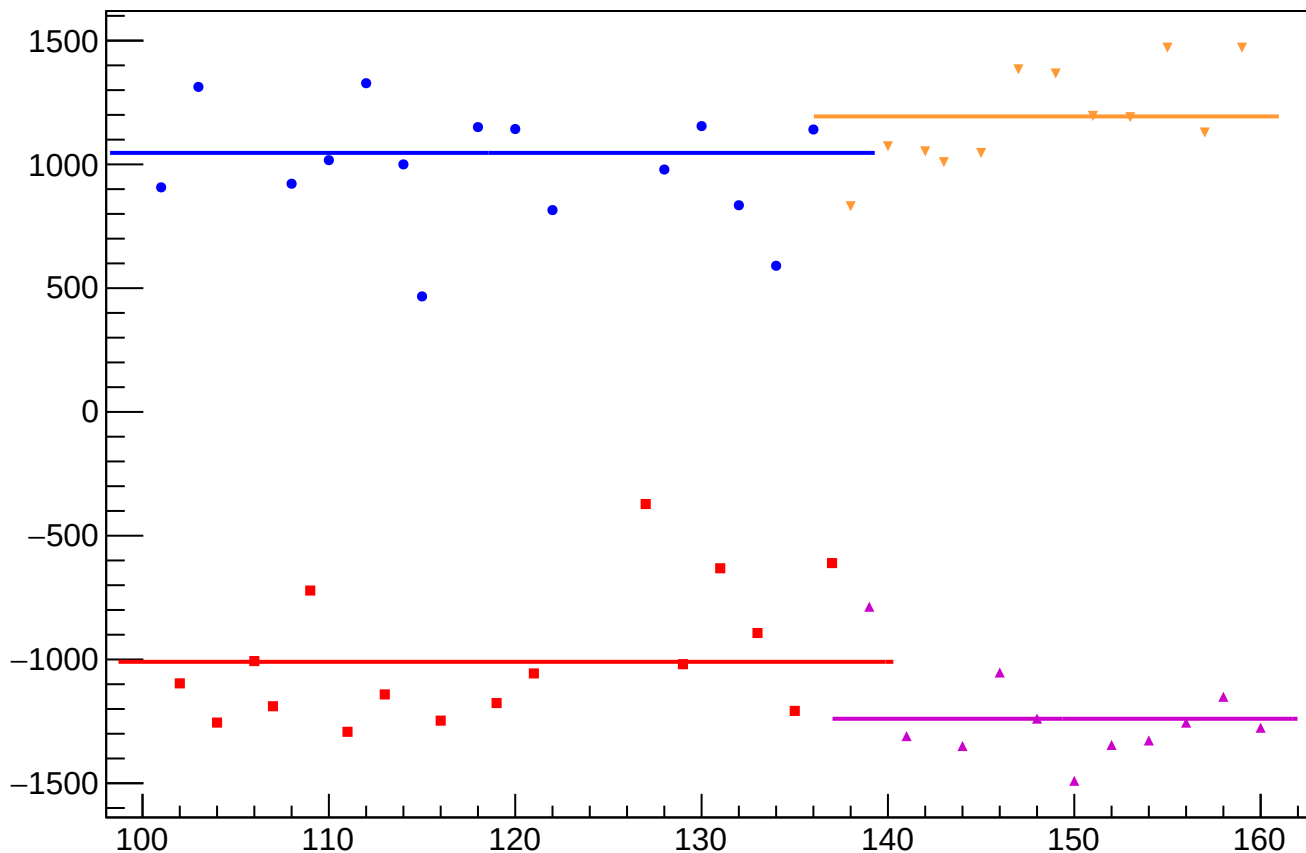


dit\_sam1\_coil1\_err\_mean vs Slug, Sign Corrected



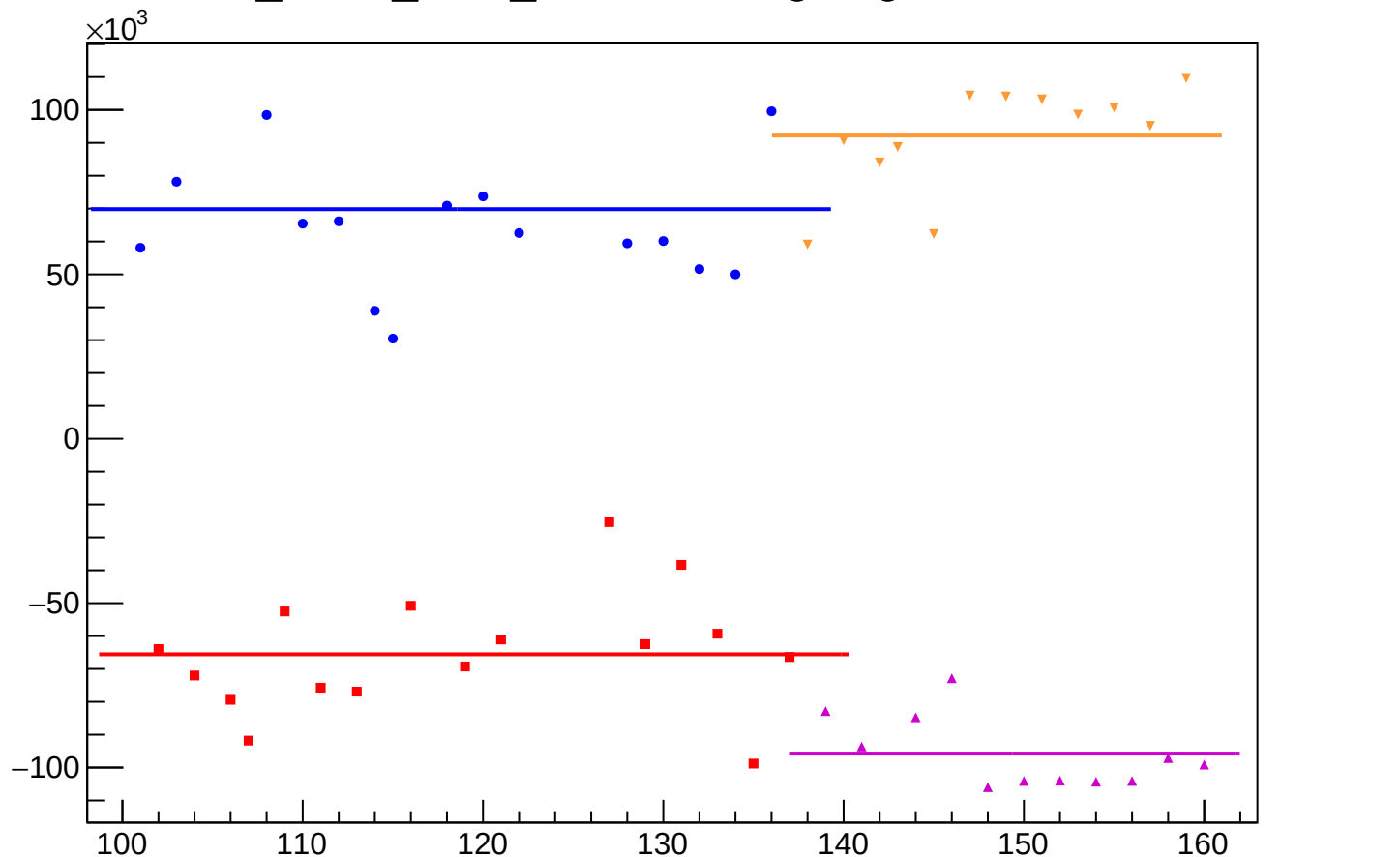
Right In: 138.577 $\pm$ 0.000  $\chi^2$ /NDF: 4242369889979811373883774021335515136.0/14  
 Left Out: 119.282 $\pm$ 0.000  $\chi^2$ /NDF: 487845779395217879153815293985292288.0/11  
 Right Out: -135.809 $\pm$ 0.000  $\chi^2$ /NDF: 3956401741862524263243160868173643776.0/15  
 Left In: -134.785 $\pm$ 0.000  $\chi^2$ /NDF: 689808602632315539029860685392642048.0/10  
 All: -5.125 $\pm$ 0.000  $\chi^2$ /NDF: 6384982584601

dit\_sam1\_coil1\_Ndata\_mean vs Slug, Sign Corrected



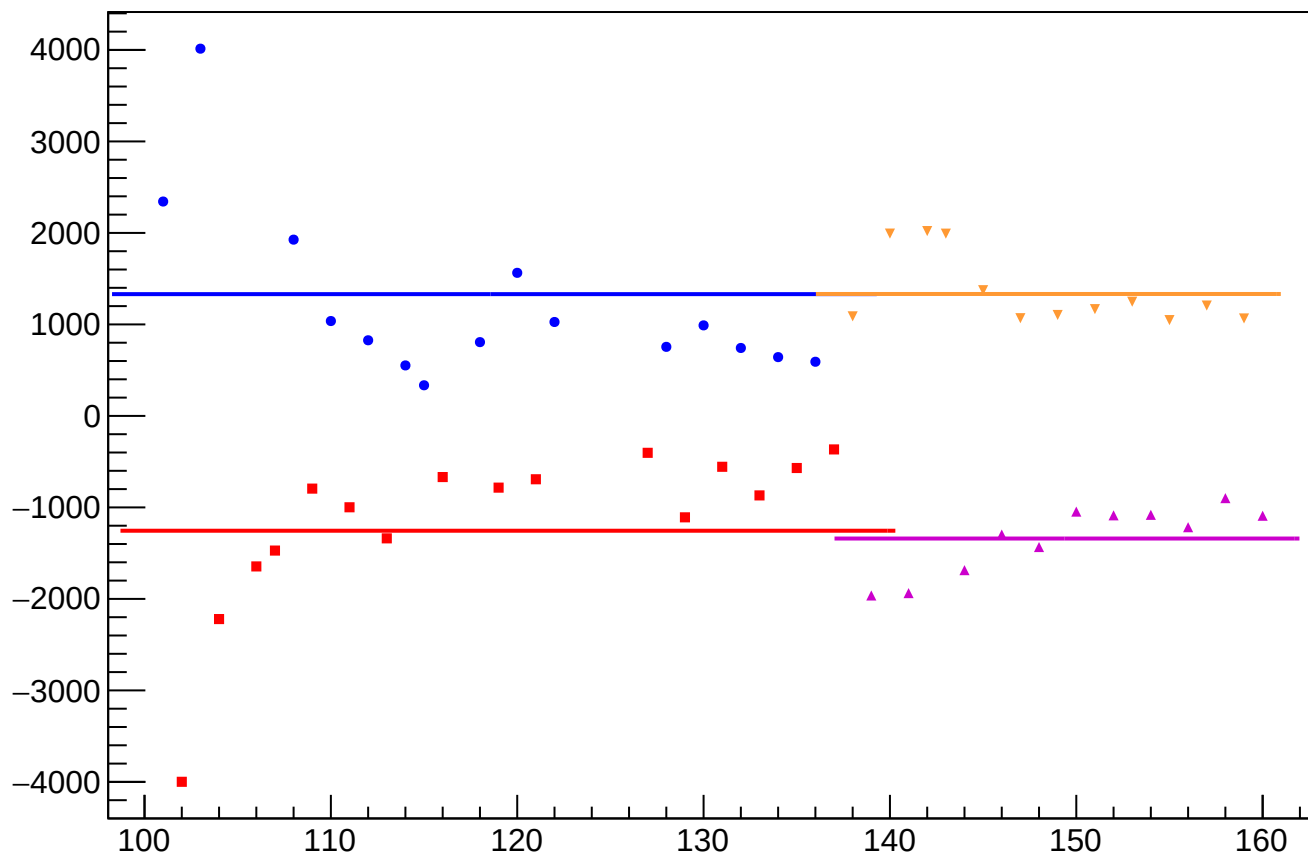
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

dit\_sam2\_coil1\_mean vs Slug, Sign Corrected



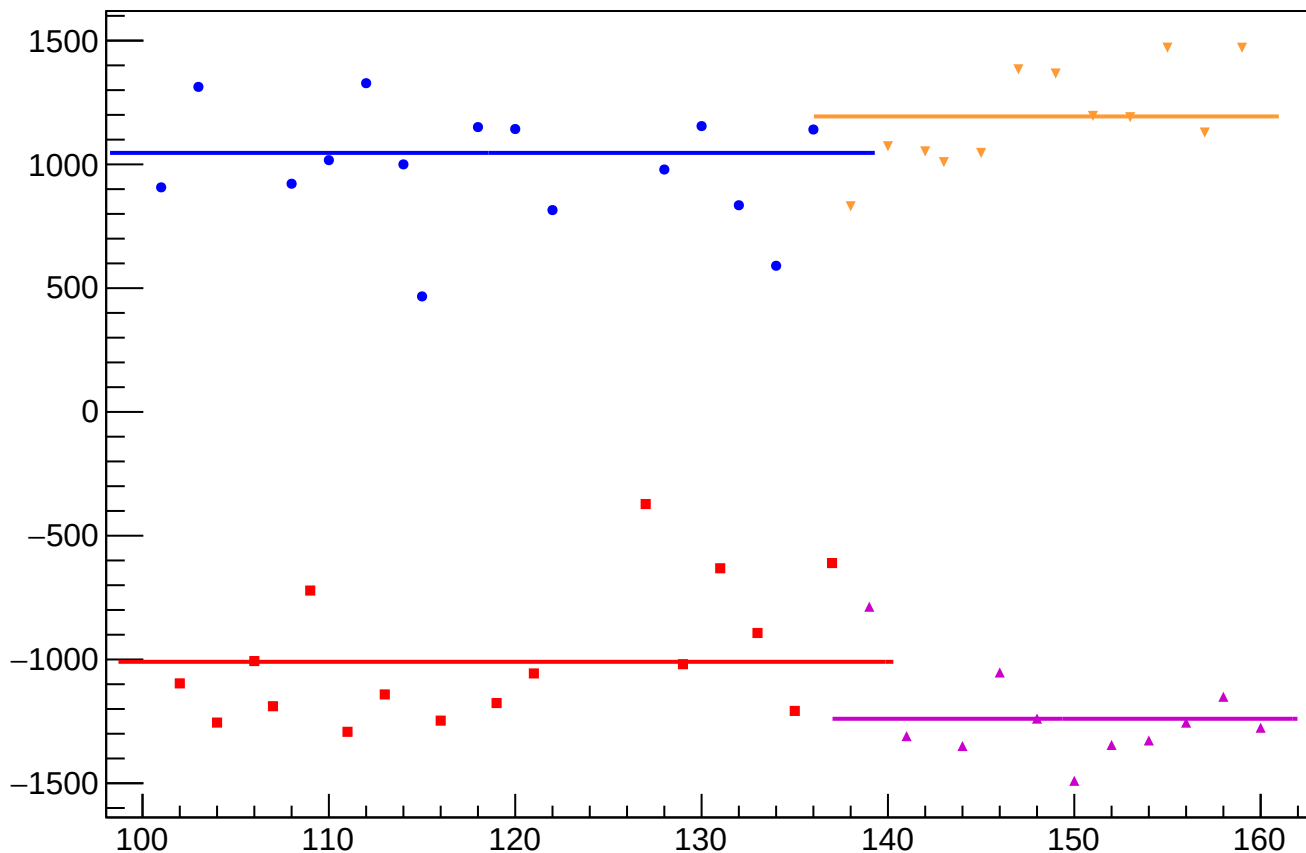
Right In:  $69827.797 \pm 0.000$   $\chi^2/\text{NDF}: 187803282116493131197684060541288926150656.0/14$   
 Left Out:  $92210.698 \pm 0.000$   $\chi^2/\text{NDF}: 226577476657807585202083767685360289579008.0/11$   
 Right Out:  $-65555.147 \pm 0.000$   $\chi^2/\text{NDF}: 212001467811386750910625783195999741673472.0/15$   
 Left In:  $-95749.411 \pm 0.000$   $\chi^2/\text{NDF}: 102376761881530271427340284738693826084864.0/10$   
 All:  $-824.008 \pm 0.000$   $\chi^2/\text{NDF}: 23000264296$

# dit\_sam2\_coil1\_err\_mean vs Slug, Sign Corrected



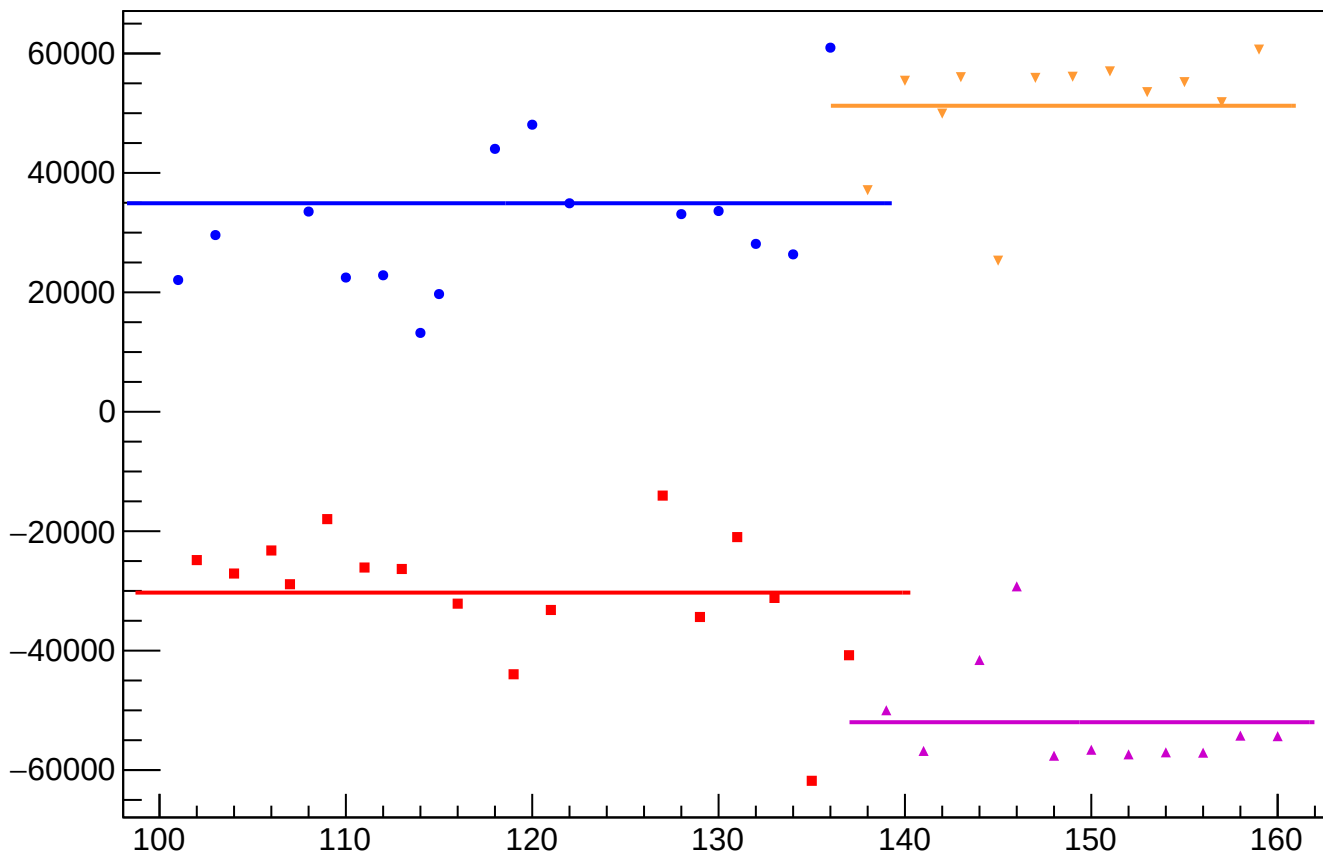
Right In: 1330.956+/-0.000  $\chi^2/\text{NDF}$ : 649481263842681659449409147059572834304.0/14  
 Left Out: 1332.669+/-0.000  $\chi^2/\text{NDF}$ : 117488793251165999850417206895273050112.0/11  
 Right Out: -1254.871+/-0.000  $\chi^2/\text{NDF}$ : 632140068983304062809817716800861765632.0/15  
 Left In: -1340.185+/-0.000  $\chi^2/\text{NDF}$ : 11420491168201277023830767366477709312.0/10  
 All: 2.067+/-0.000  $\chi^2/\text{NDF}$ : 69961590530550

dit\_sam2\_coil1\_Ndata\_mean vs Slug, Sign Corrected



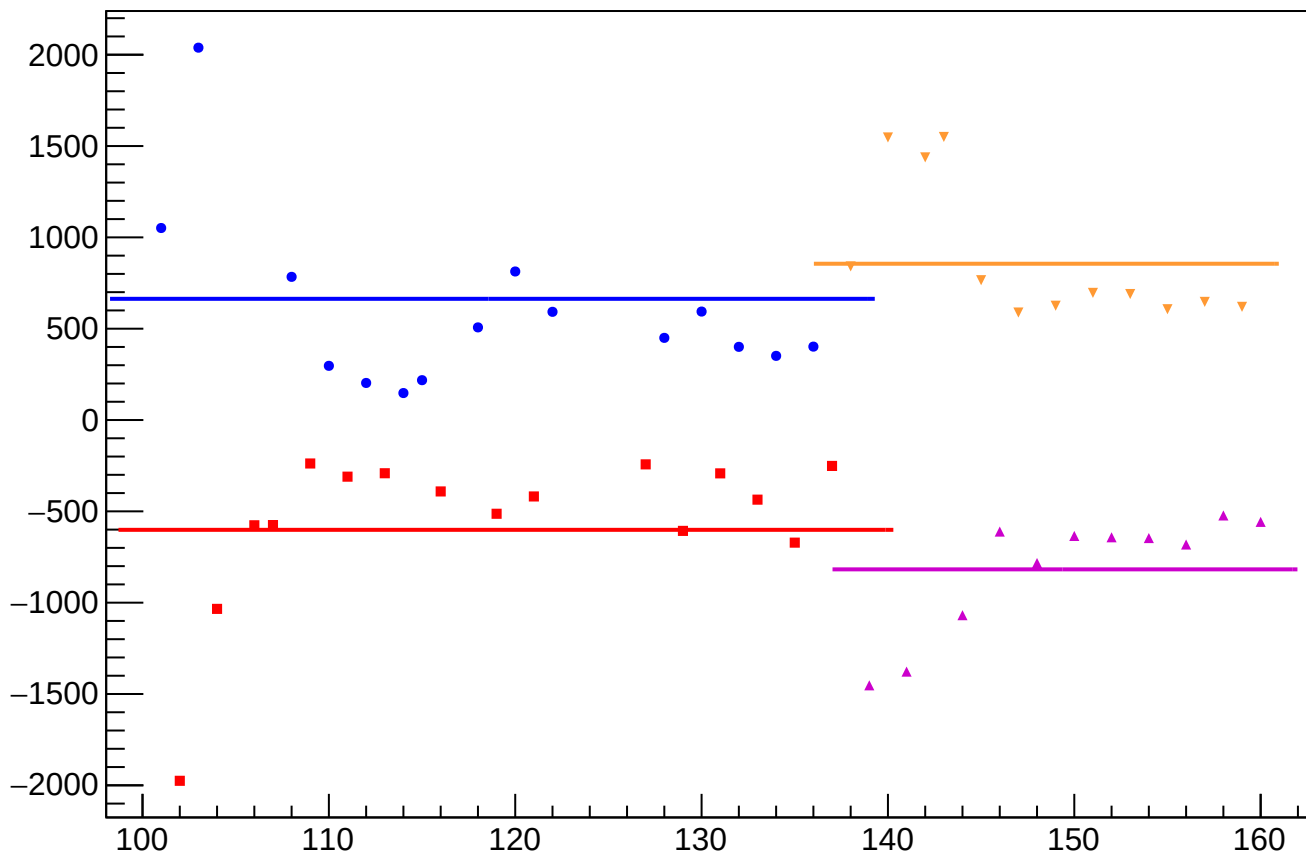
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_sam3\_coil1\_mean vs Slug, Sign Corrected



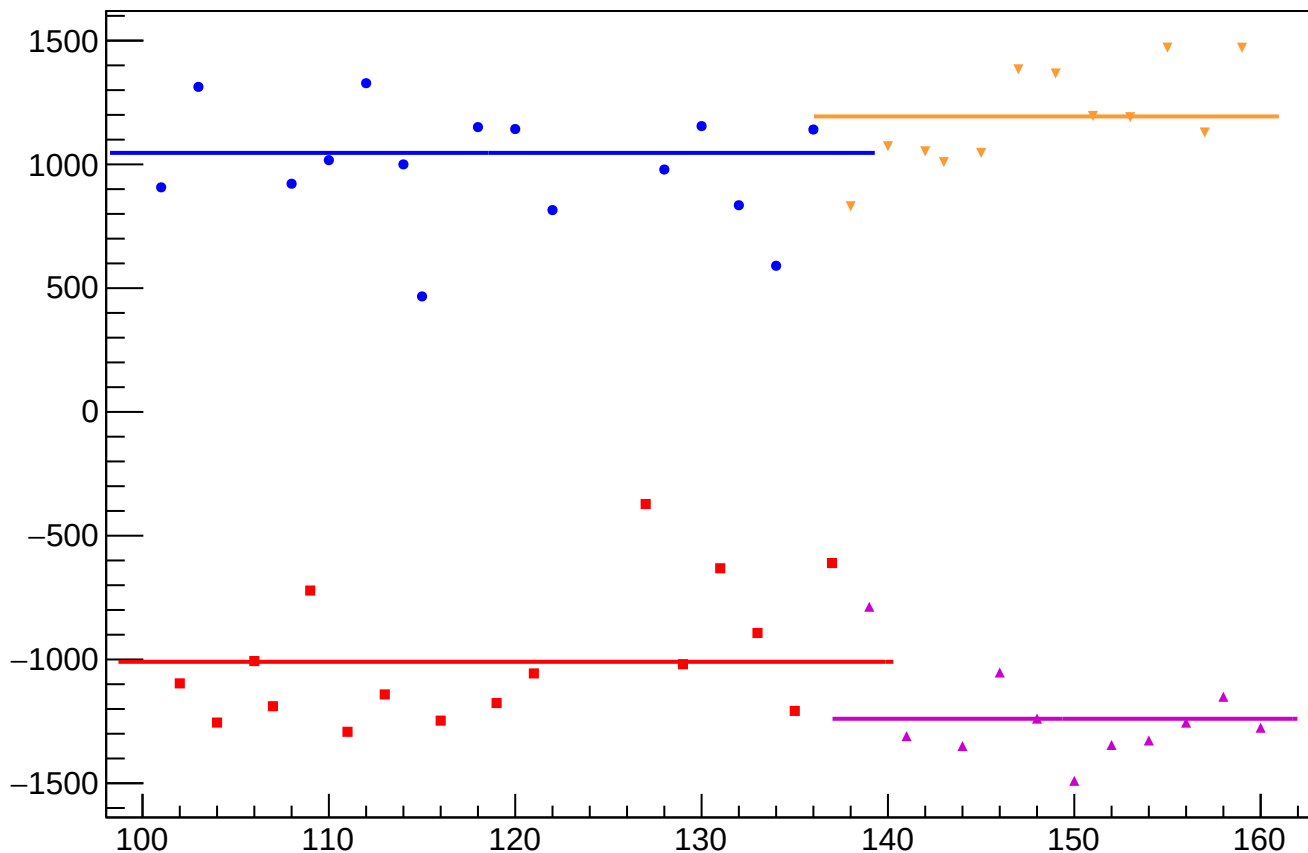
Right In: 34919.716+/-0.000  $\chi^2/\text{NDF}$ : 106387385440718622155122541848729997017088.0/14  
 Left Out: 51246.568+/-0.000  $\chi^2/\text{NDF}$ : 86168540614102445062046954668602534395904.0/11  
 Right Out: -30282.373+/-0.000  $\chi^2/\text{NDF}$ : 88346165266593126627598951693506073067520.0/15  
 Left In: -51985.374+/-0.000  $\chi^2/\text{NDF}$ : 67172587579518863379504132116294676774912.0/10  
 All: 402.483+/-0.000  $\chi^2/\text{NDF}$ : 664804674092

# dit\_sam3\_coil1\_err\_mean vs Slug, Sign Corrected



Right In:  $663.574 \pm 0.000$   $\chi^2/\text{NDF}: 157691812872720822886914966597312446464.0/14$   
 Left Out:  $855.627 \pm 0.000$   $\chi^2/\text{NDF}: 114895226746628689144721696446463606784.0/11$   
 Right Out:  $-601.216 \pm 0.000$   $\chi^2/\text{NDF}: 149717884331889332339995334350831878144.0/15$   
 Left In:  $-817.657 \pm 0.000$   $\chi^2/\text{NDF}: 90429548723715663326805299076811194368.0/10$   
 All:  $17.811 \pm 0.000$   $\chi^2/\text{NDF}: 2325491183866$

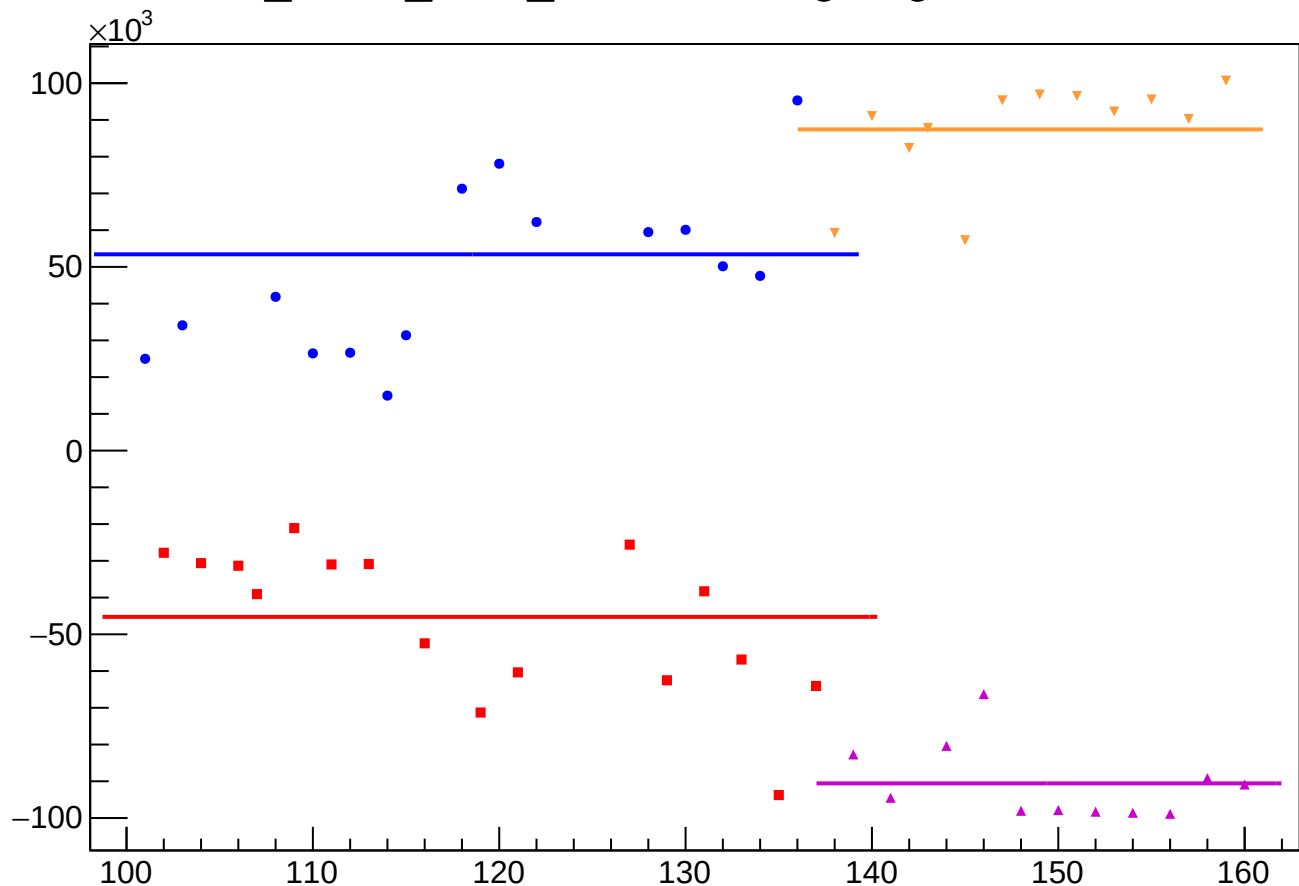
dit\_sam3\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

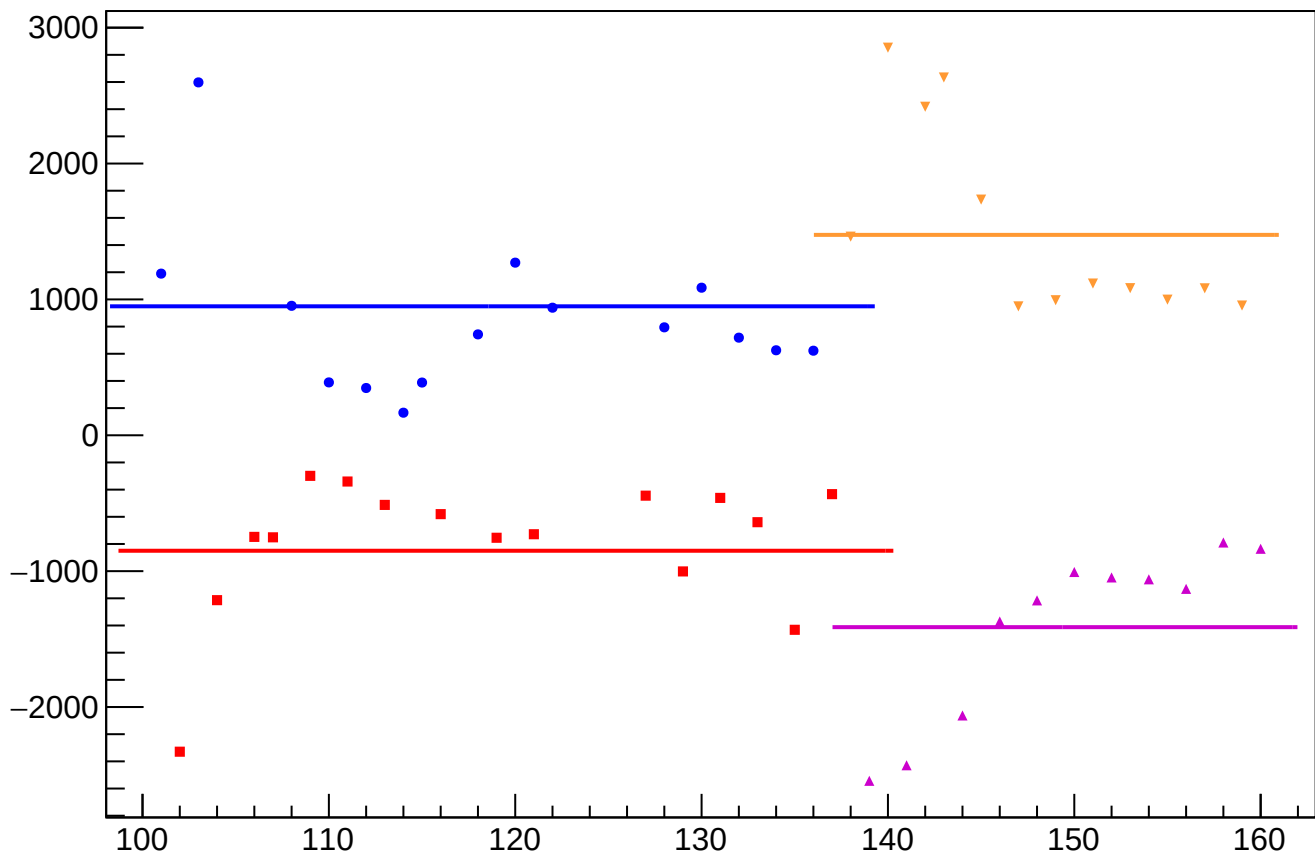


# dit\_sam4\_coil1\_mean vs Slug, Sign Corrected



Right In: 53422.452+/-0.000  $\chi^2/\text{NDF}$ : 360635757315133800133751123167777346551808.0/14  
 Left Out: 87421.965+/-0.000  $\chi^2/\text{NDF}$ : 176009447933973172298765808269588074332160.0/11  
 Right Out: -45247.617+/-0.000  $\chi^2/\text{NDF}$ : 286060196488034430215784613374055547928576.0/15  
 Left In: -90573.760+/-0.000  $\chi^2/\text{NDF}$ : 90574081394354221593949262312406685581312.0/10  
 All: 223.377+/-0.000  $\chi^2/\text{NDF}$ : 186963897473

# dit\_sam4\_coil1\_err\_mean vs Slug, Sign Corrected



Right In: 949.197+/-0.000

$\chi^2/\text{NDF}$ : 225691032183153732733308094067658194944.0/14

Left Out: 1474.996+/-0.000

$\chi^2/\text{NDF}$ : 407776279141254062636078508853738602496.0/11

Right Out: -849.827+/-0.000

$\chi^2/\text{NDF}$ : 204622224261577247702227312745197338624.0/15

Left In: -1412.186+/-0.000

$\chi^2/\text{NDF}$ : 332529390934897118157875972661756035072.0/10

Left: 23.551+/-0.000  $\chi^2/\text{NDF}$ : 45705013574232363

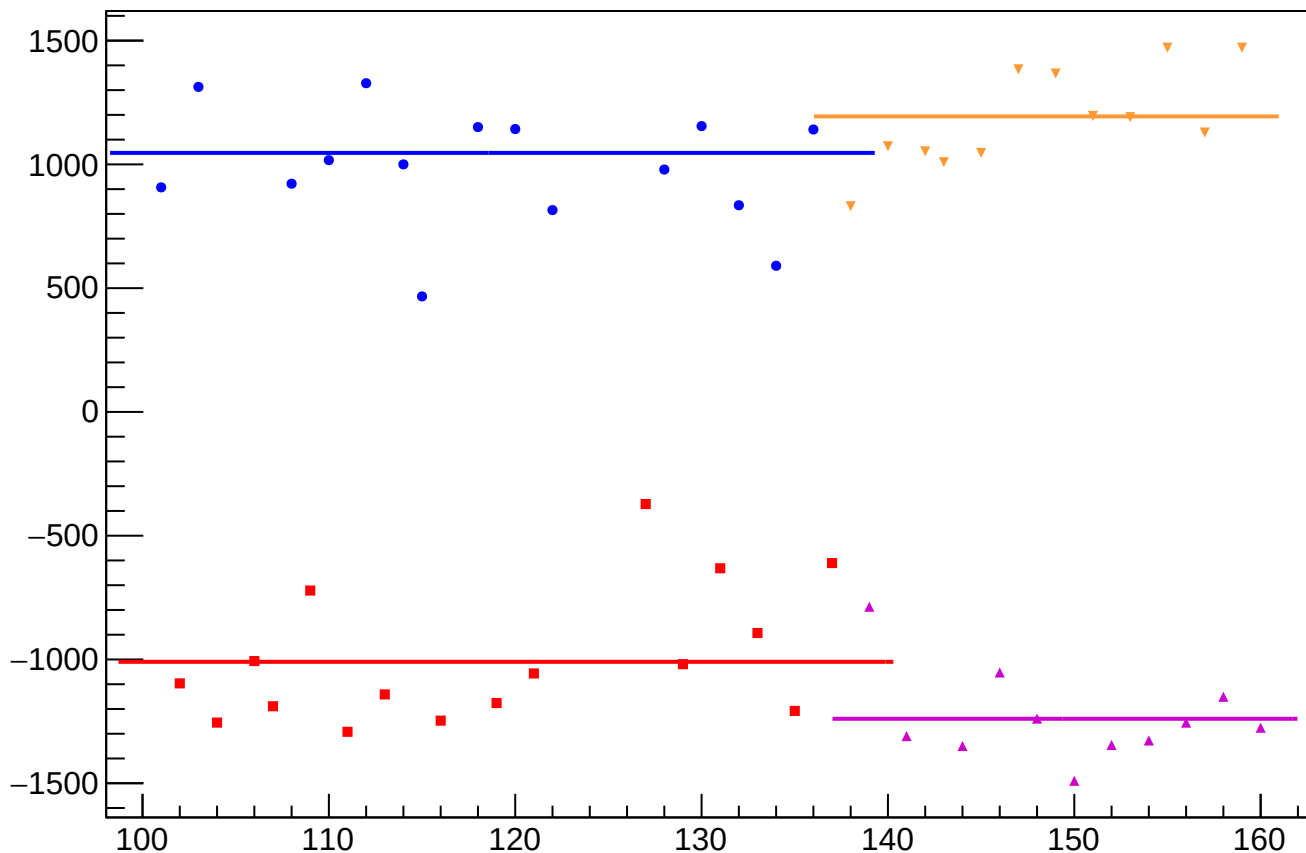
Right: 37.382+/-0.000  $\chi^2/\text{NDF}$ : 1494917928354426

In: -437.909+/-0.000  $\chi^2/\text{NDF}$ : 2684013086565036

Out: 494.188+/-0.000  $\chi^2/\text{NDF}$ : 2696503915470133

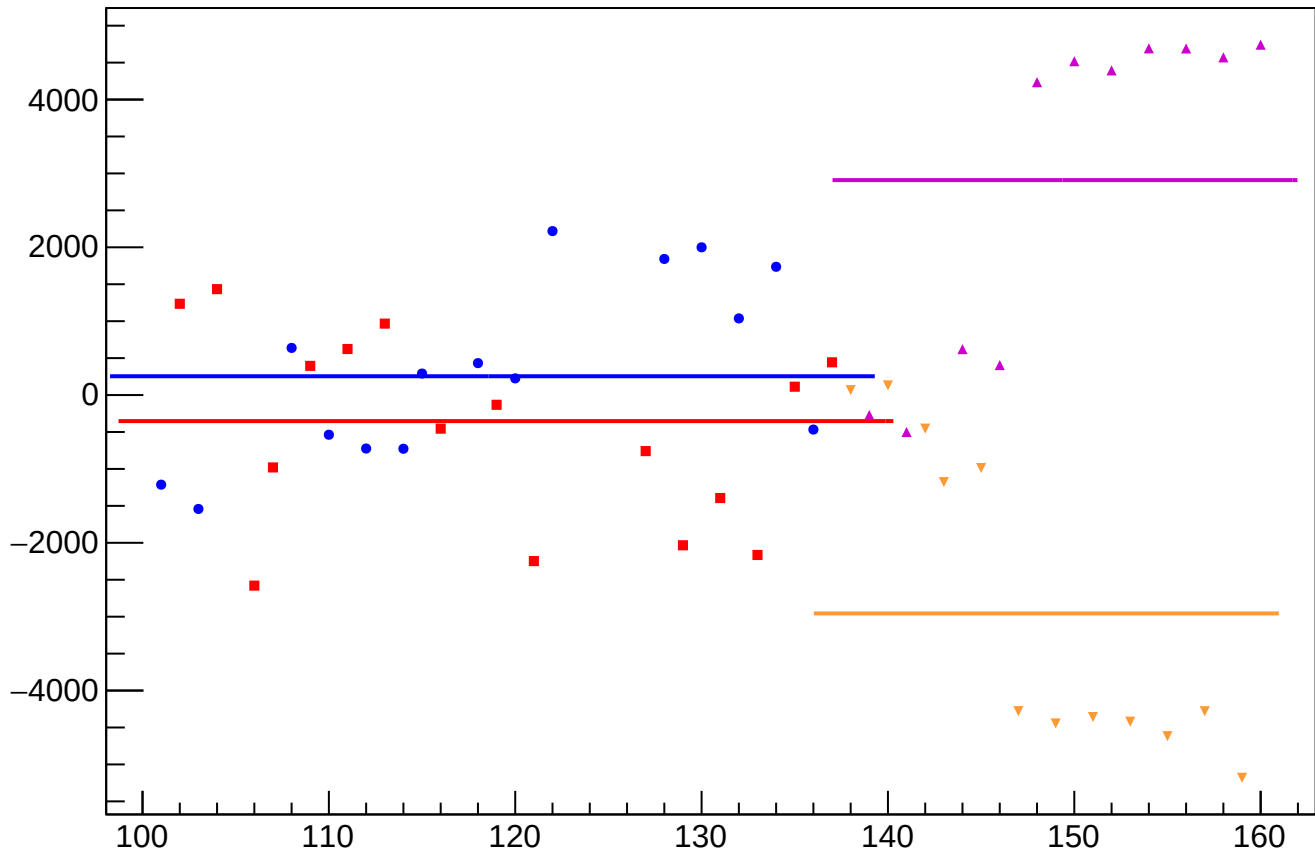
All: 29.322+/-0.000  $\chi^2/\text{NDF}$ : 6065565997163

dit\_sam4\_coil1\_Ndata\_mean vs Slug, Sign Corrected



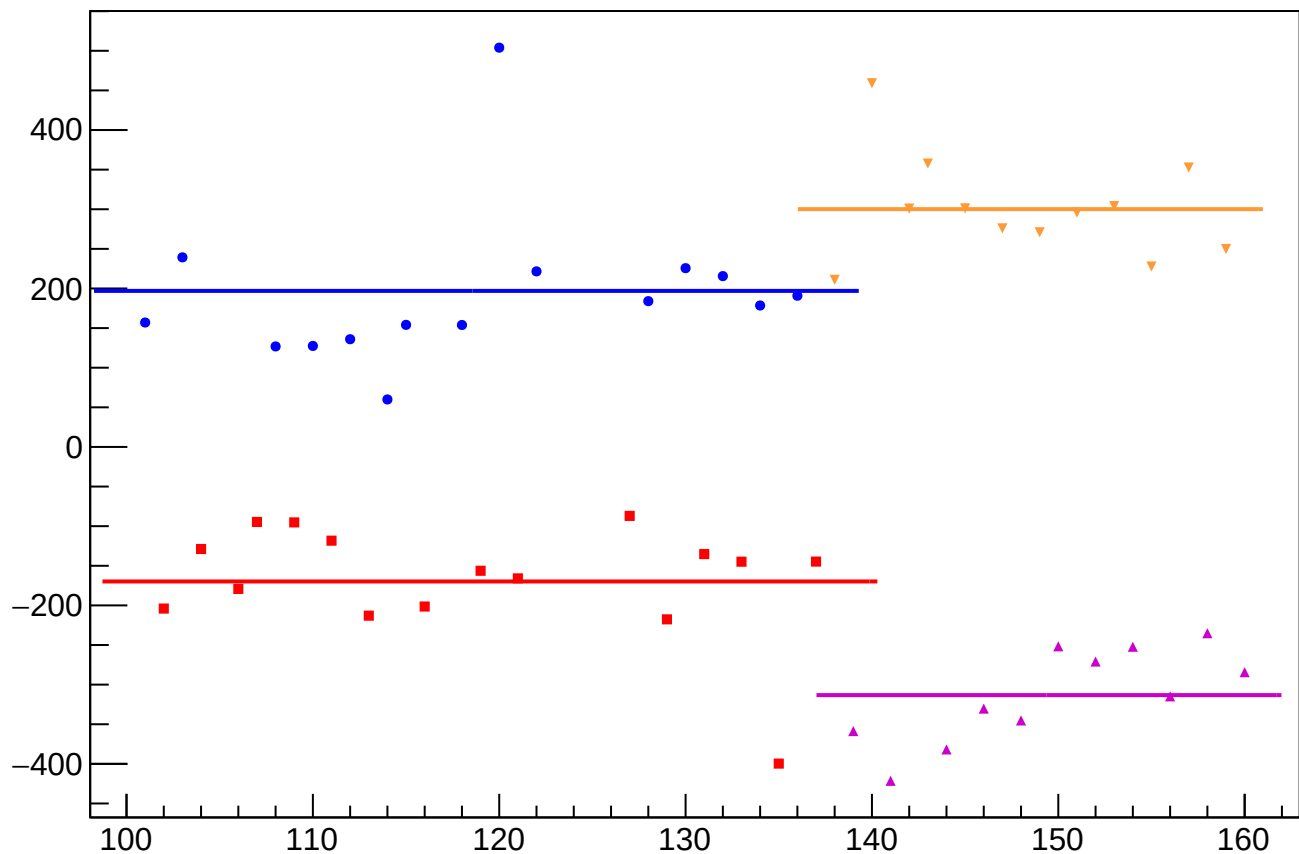
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_sam5\_coil1\_mean vs Slug, Sign Corrected



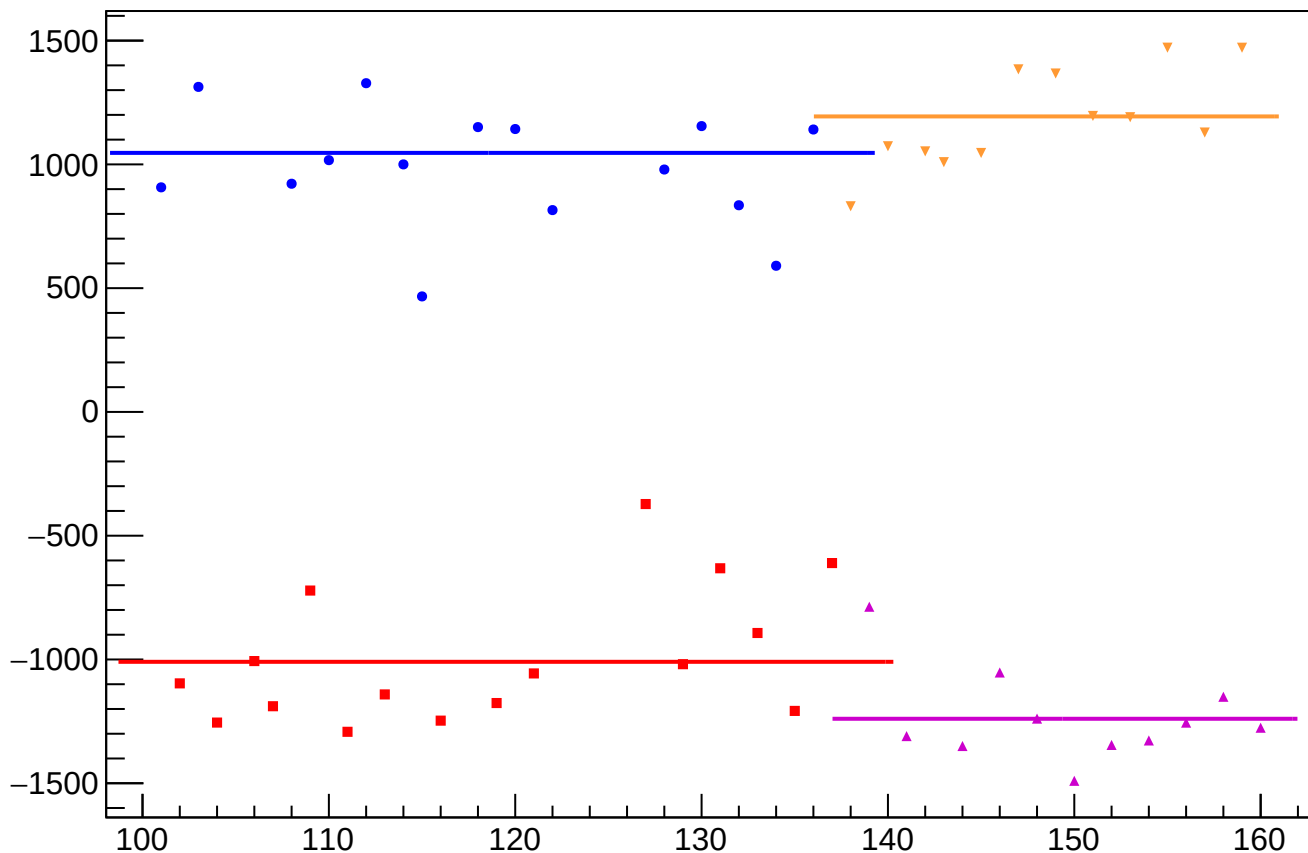
Left: -7.270 +/- 0.000  $\chi^2/\text{NDF}$ : 23893577266149002  
 Right In: 254.578 +/- 0.000  $\chi^2/\text{NDF}$ : 978402113531006640741569223967249530880.0/14  
 Right: -53.015 +/- 0.000  $\chi^2/\text{NDF}$ : 220036732540735  
 Left Out: -2955.997 +/- 0.000  $\chi^2/\text{NDF}$ : 3707818280907677847342876591435129290752.0/11  
 In: 1814.139 +/- 0.000  $\chi^2/\text{NDF}$ : 8042963130029704  
 Right Out: -352.308 +/- 0.000  $\chi^2/\text{NDF}$ : 1100813647101508513447529068154010468352.0/15  
 Out: -1857.540 +/- 0.000  $\chi^2/\text{NDF}$ : 74227087248686  
 Left In: 2909.545 +/- 0.000  $\chi^2/\text{NDF}$ : 4377323512278558404902073126276443406336.0/10  
 All: -26.357 +/- 0.000  $\chi^2/\text{NDF}$ : 260955494544

dit\_sam5\_coil1\_err\_mean vs Slug, Sign Corrected



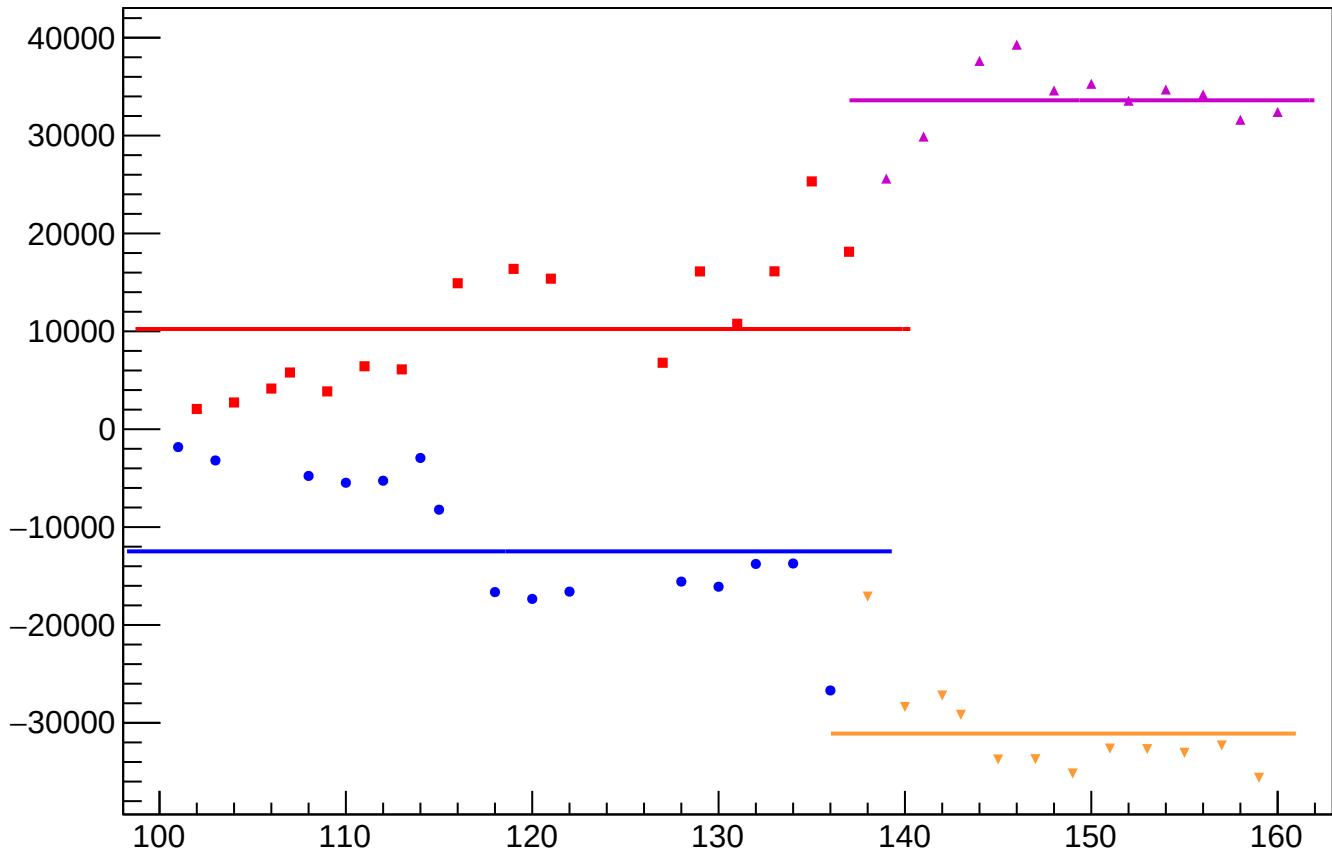
Right In:  $196.955 \pm 0.000$   $\chi^2/\text{NDF}: 4485245160329657914621372425838788608.0/14$   
 Left Out:  $300.154 \pm 0.000$   $\chi^2/\text{NDF}: 3873021428685352941137053448690204672.0/11$   
 Right Out:  $-169.778 \pm 0.000$   $\chi^2/\text{NDF}: 3892609445494845784493558646385410048.0/15$   
 Left In:  $-313.228 \pm 0.000$   $\chi^2/\text{NDF}: 3079061701843560714774529768142405632.0/10$   
 All:  $-0.159 \pm 0.000$   $\chi^2/\text{NDF}: 2327307530740$

dit\_sam5\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_sam6\_coil1\_mean vs Slug, Sign Corrected



Right In: -12479.653+/-0.000

Left Out: -31096.364+/-0.000

Right Out: 10238.098+/-0.000

Left In: 33603.125+/-0.000

$\chi^2/\text{NDF}$ : 41178633231253805317353333973475271901184.0/14

$\chi^2/\text{NDF}$ : 21759430970673179273891990313759368282112.0/11

$\chi^2/\text{NDF}$ : 31227861126159534031961501923223718068224.0/15

$\chi^2/\text{NDF}$ : 11377877741280377988076632069746943066112.0/10

Left: 1429.385+/-0.000  $\chi^2/\text{NDF}$ : 19565583595098

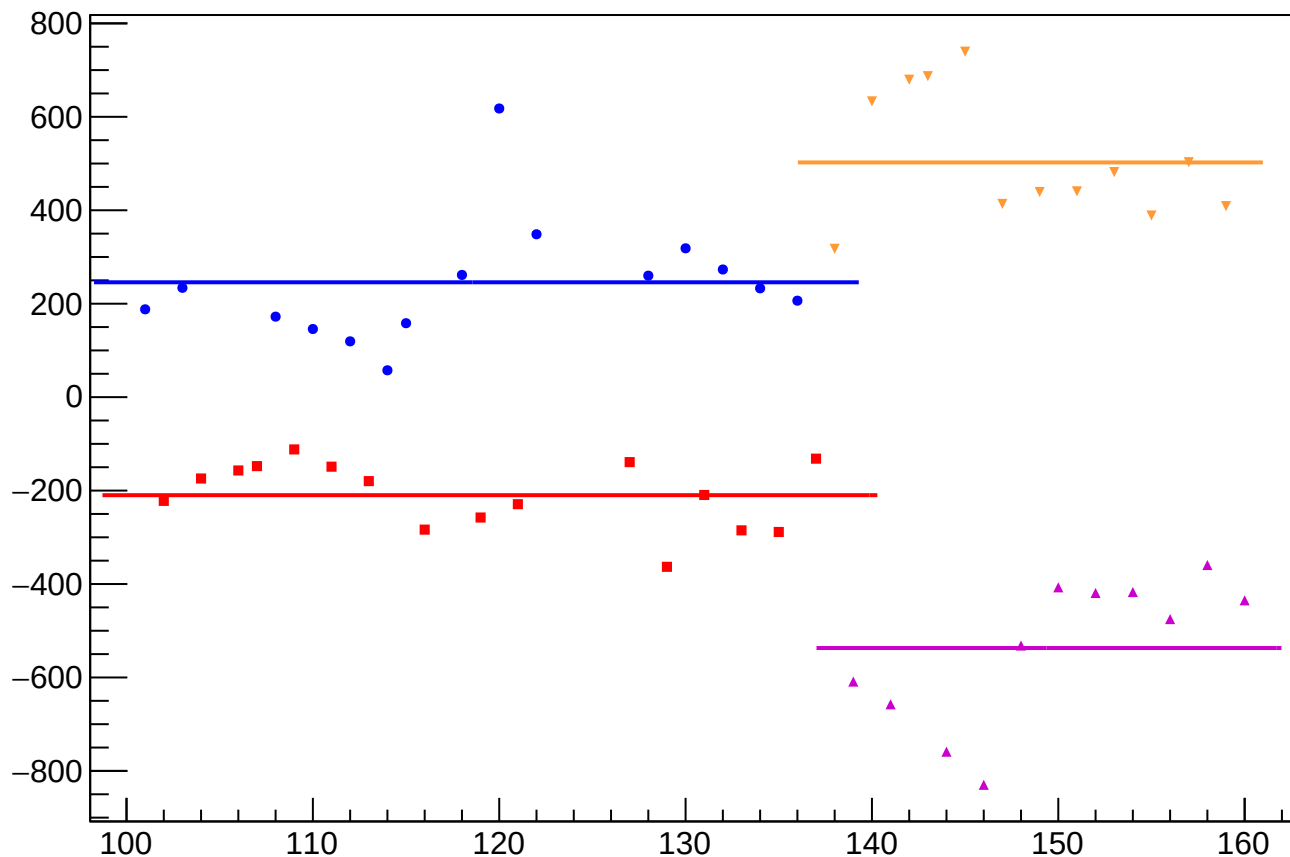
Right: -965.413+/-0.000  $\chi^2/\text{NDF}$ : 24217037814564

In: 14589.951+/-0.000  $\chi^2/\text{NDF}$ : 862146721459062

Out: -13657.980+/-0.000  $\chi^2/\text{NDF}$ : 7118042053110

All: 430.161+/-0.000  $\chi^2/\text{NDF}$ : 220312696497

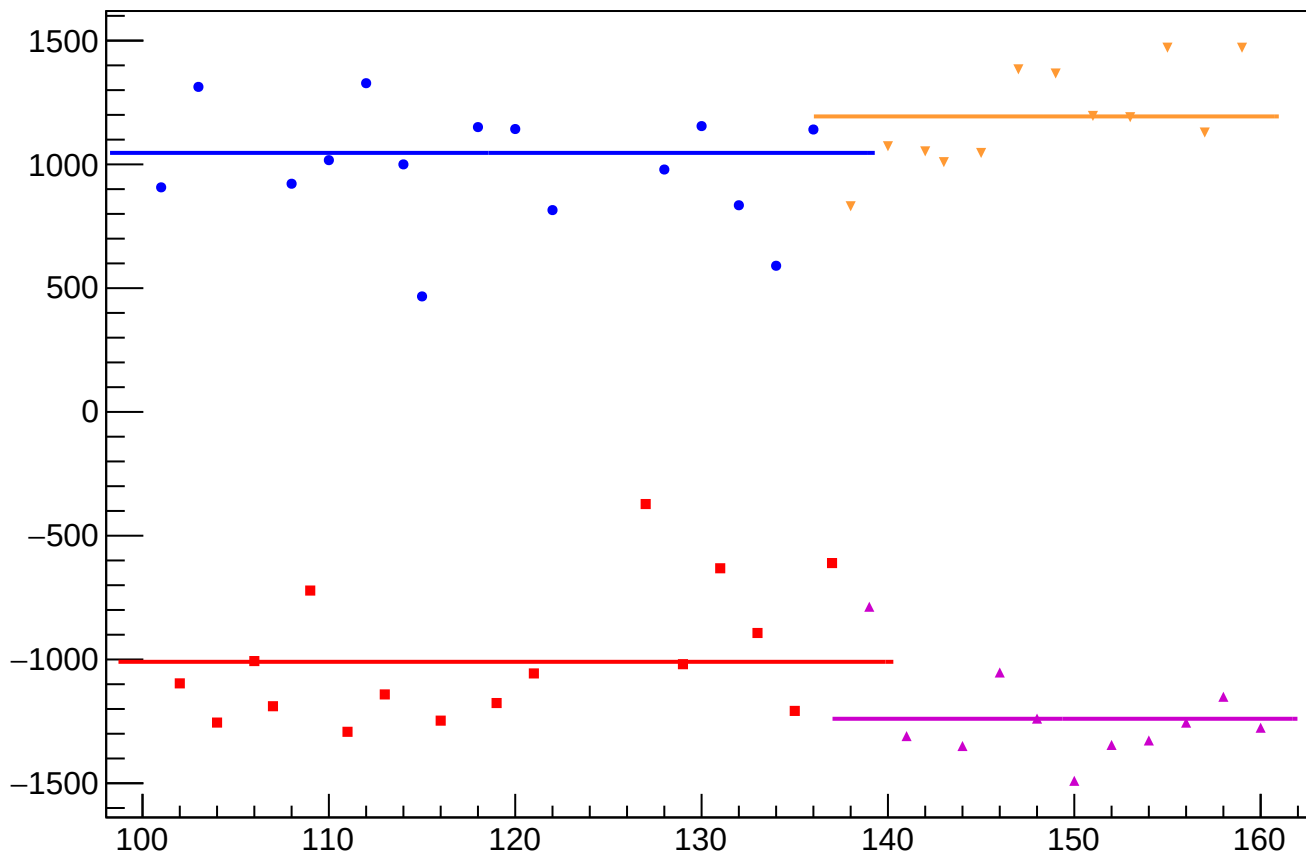
dit\_sam6\_coil1\_err\_mean vs Slug, Sign Corrected



Right In: 245.832 $\pm$ 0.000  $\chi^2$ /NDF: 7828269009300013139414476154059358208.0/14  
 Left Out: 502.365 $\pm$ 0.000  $\chi^2$ /NDF: 15191566092864942113763626663922368512.0/11  
 Right Out: -209.844 $\pm$ 0.000  $\chi^2$ /NDF: 3128489258838765241921217786024034304.0/15  
 Left In: -536.975 $\pm$ 0.000  $\chi^2$ /NDF: 20803022486400810956958367719555596288.0/10  
 All: -5.524 $\pm$ 0.000  $\chi^2$ /NDF: 6125424587177

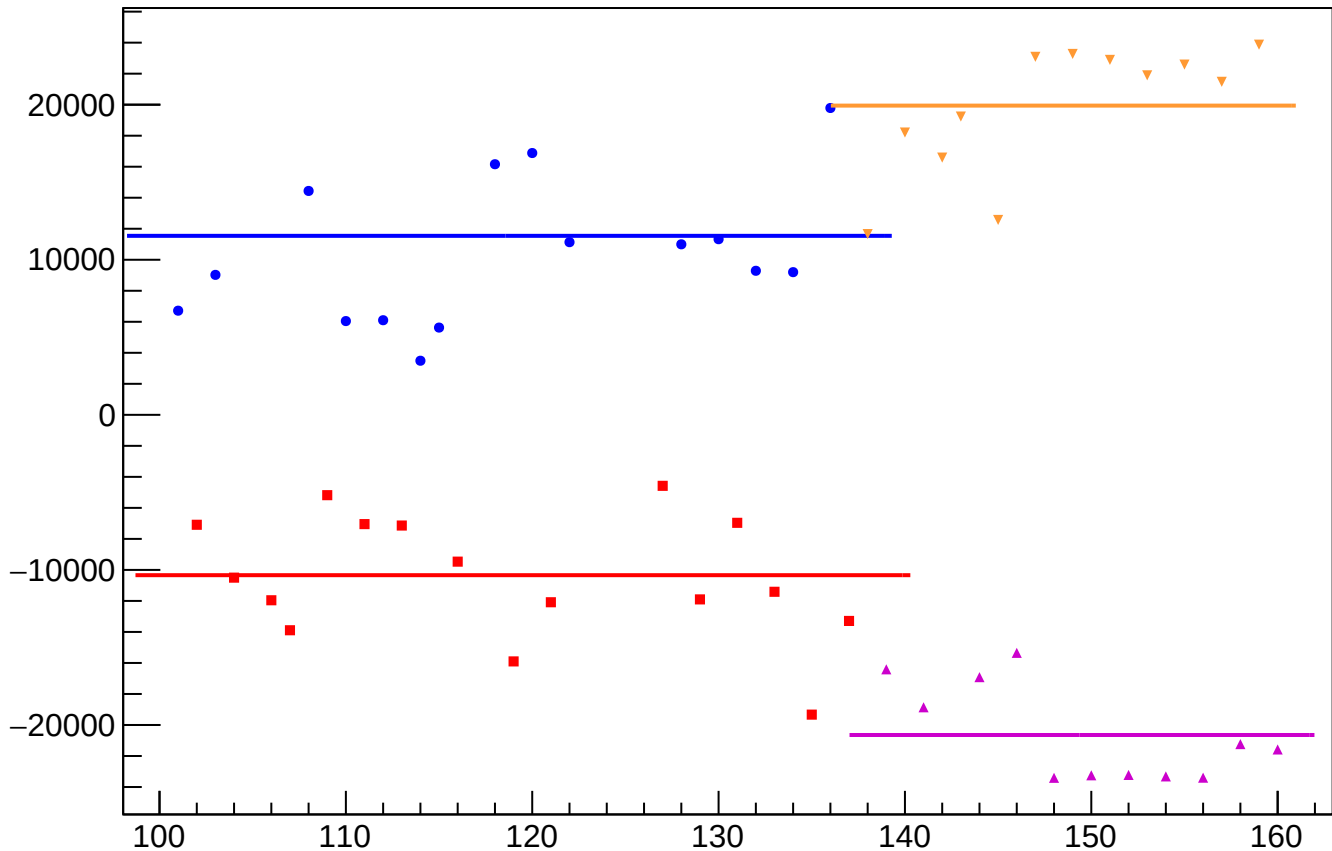


dit\_sam6\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_sam7\_coil1\_mean vs Slug, Sign Corrected



Right In: 11542.759+/-0.000

$\chi^2/\text{NDF}$ : 14233543123238566357226766219014687424512.0/14

Left Out: 19940.398+/-0.000

$\chi^2/\text{NDF}$ : 15069486743345866506868658008400293003264.0/11

Right Out: -10339.969+/-0.000

$\chi^2/\text{NDF}$ : 11260833863406751645923420062982418202624.0/15

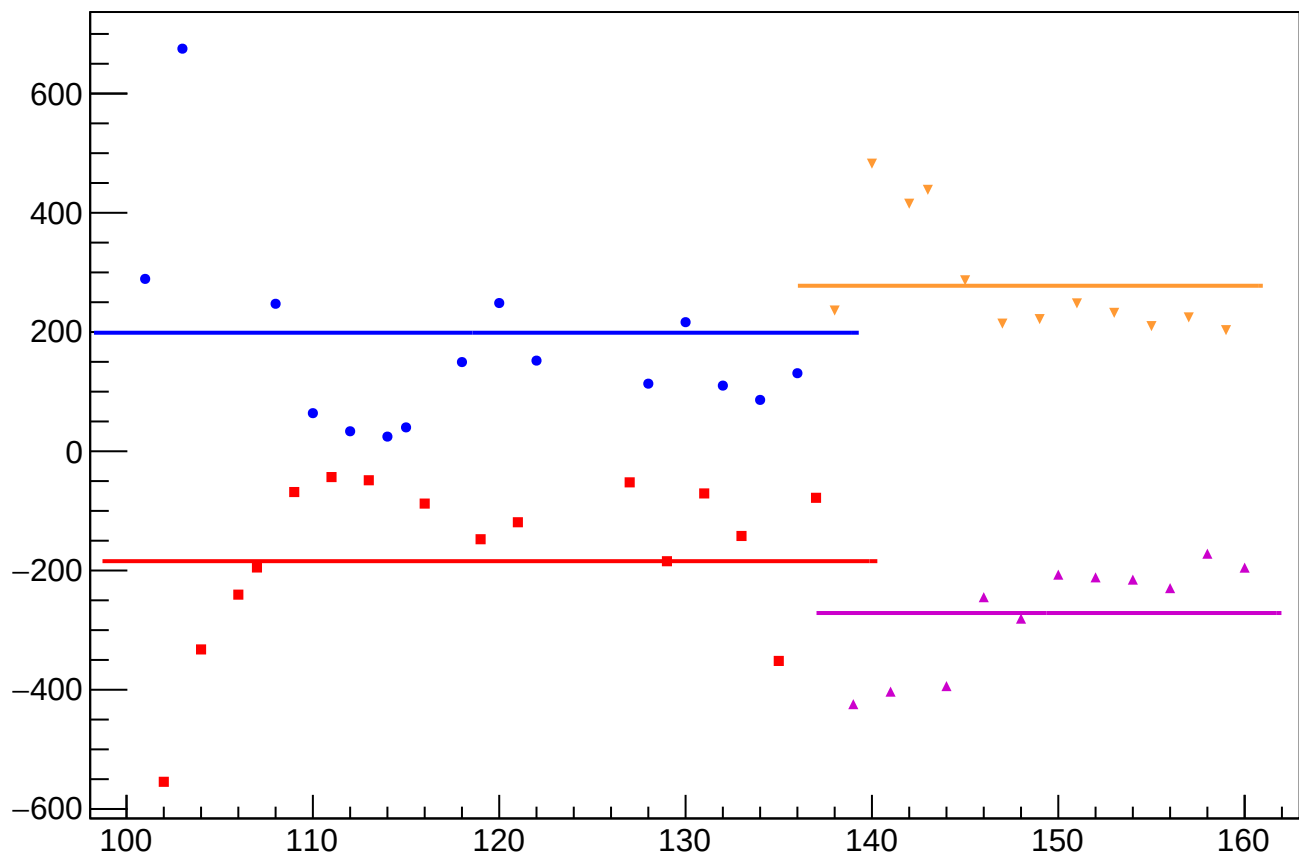
Left In: -20645.358+/-0.000

$\chi^2/\text{NDF}$ : 8456327376882782804888899010558833983488.0/10

All: -81.261+/-0.000

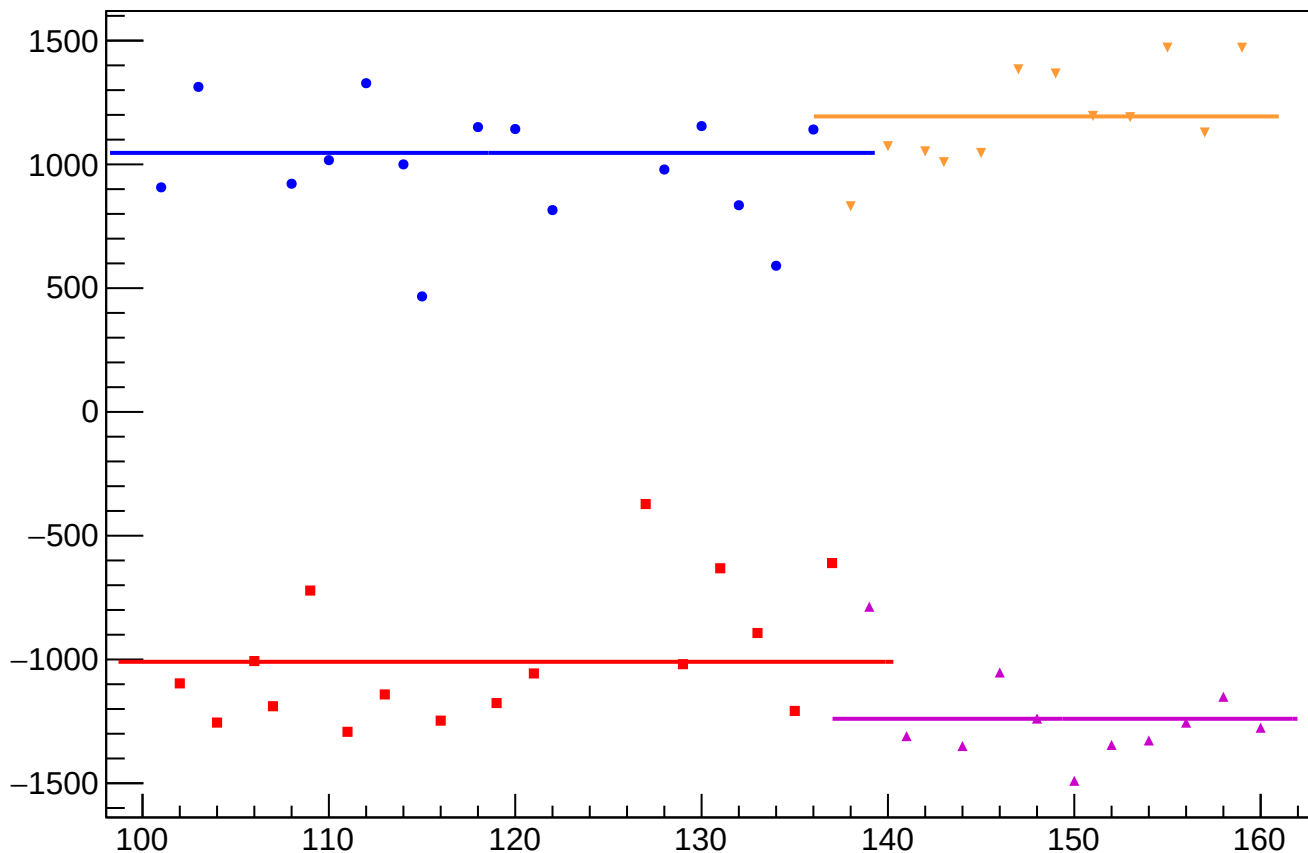
$\chi^2/\text{NDF}$ : 964042806490

dit\_sam7\_coil1\_err\_mean vs Slug, Sign Corrected



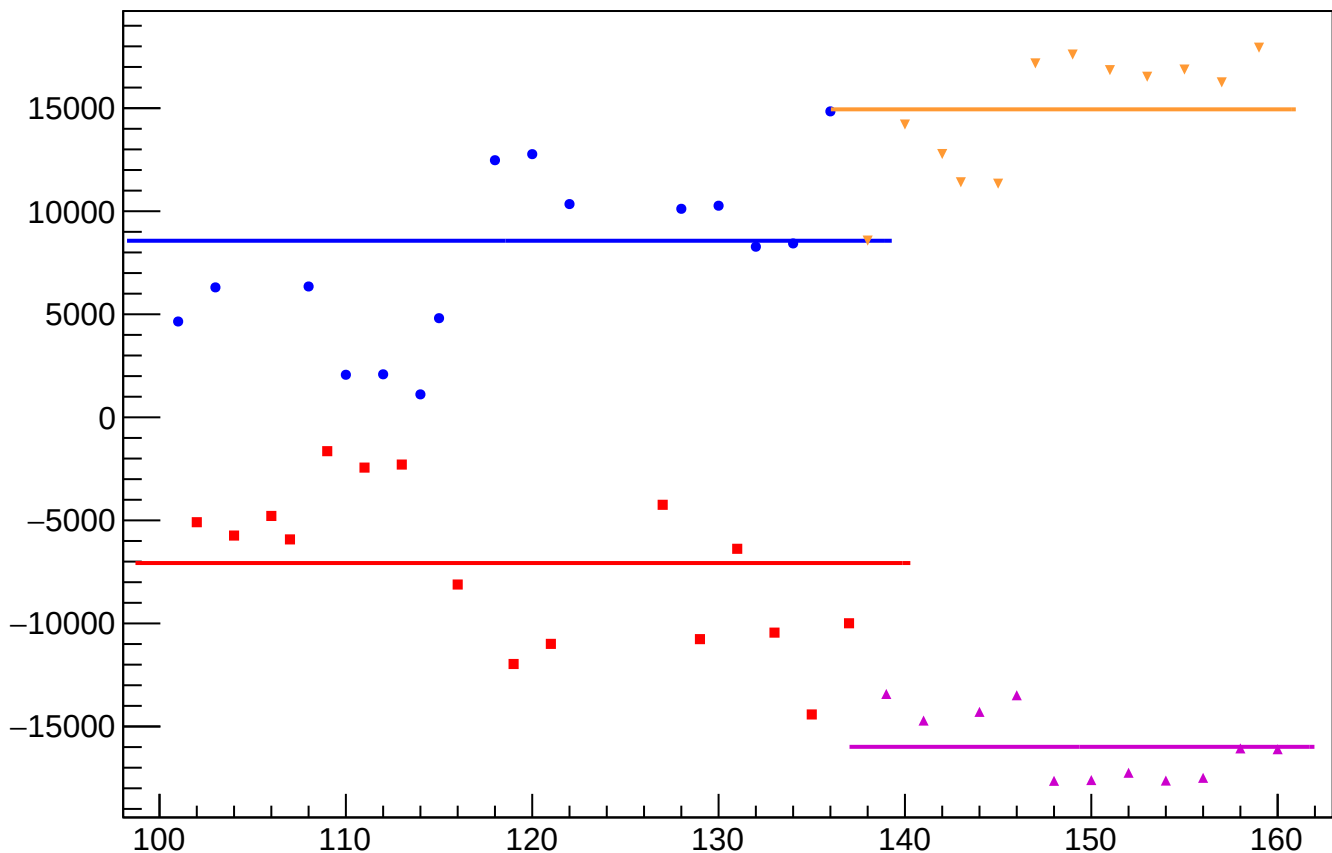
Right In: 198.850+/-0.000  $\chi^2/\text{NDF}$ : 18333995109503438037075916944440295424.0/14  
 Left Out: 277.638+/-0.000  $\chi^2/\text{NDF}$ : 8038613705890486227984688847014330368.0/11  
 Right Out: -184.328+/-0.000  $\chi^2/\text{NDF}$ : 14927434931395588601024961538372403200.0/15  
 Left In: -271.291+/-0.000  $\chi^2/\text{NDF}$ : 7112445981030520145066814103974051840.0/10  
 All: 2.915+/-0.000  $\chi^2/\text{NDF}$ : 2351696492796

dit\_sam7\_coil1\_Ndata\_mean vs Slug, Sign Corrected



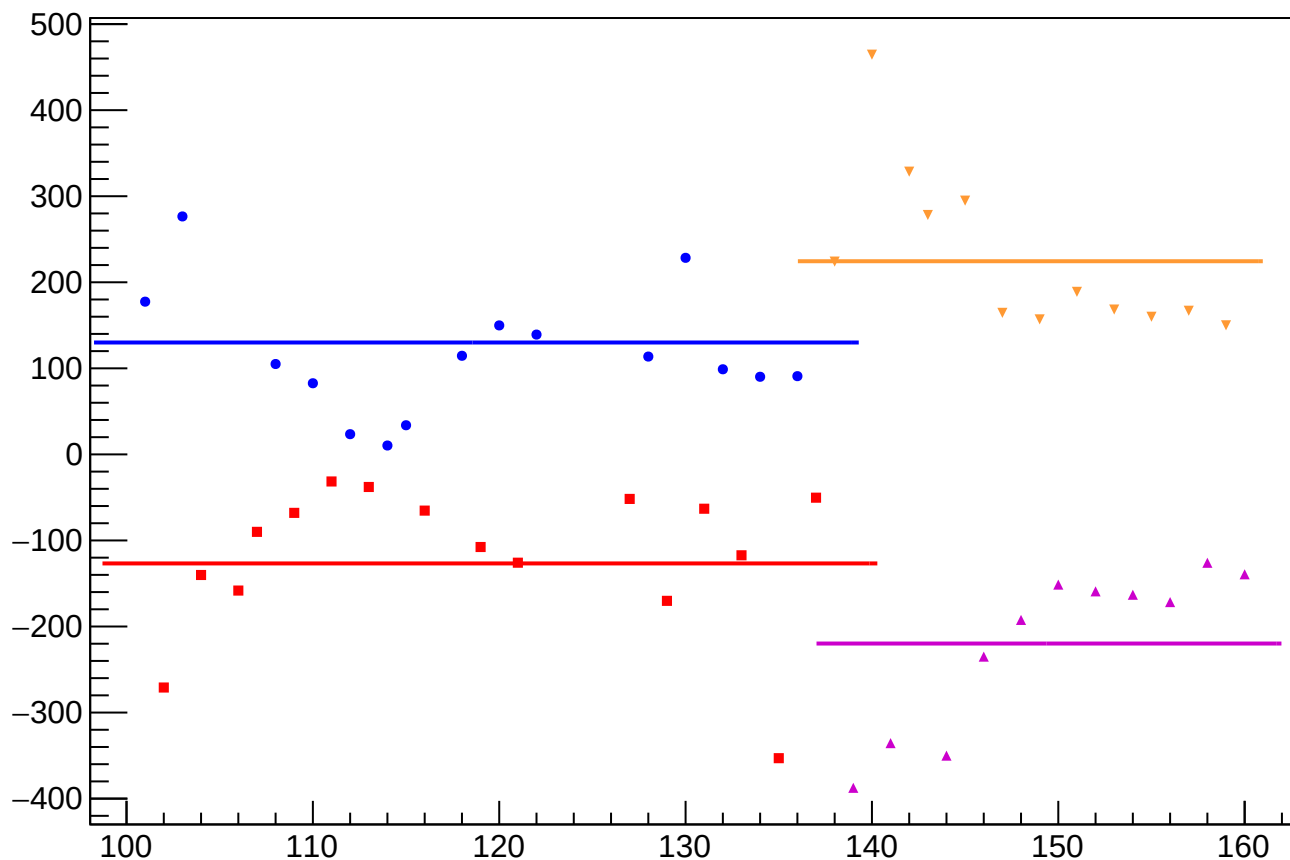
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_sam8\_coil1\_mean vs Slug, Sign Corrected



Right In: 8567.784 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 11106048878972501366429055679645708451840.0/14  
 Left Out: 14943.560 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 7900539606524387386359998406585036570624.0/11  
 Right Out: -7069.884 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 10076862363502652111378210539664387866624.0/15  
 Left In: -15987.436 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 2470393428254815728629083332629999124480.0/10  
 All: -85.320 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 552788797574

# dit\_sam8\_coil1\_err\_mean vs Slug, Sign Corrected



Right In: 130.021+/-0.000

$\chi^2/\text{NDF}$ : 3115259987552341725946418665378283520.0/14

Left Out: 224.458+/-0.000

$\chi^2/\text{NDF}$ : 7870394140048491055430374232164401152.0/11

Right Out: -126.709+/-0.000

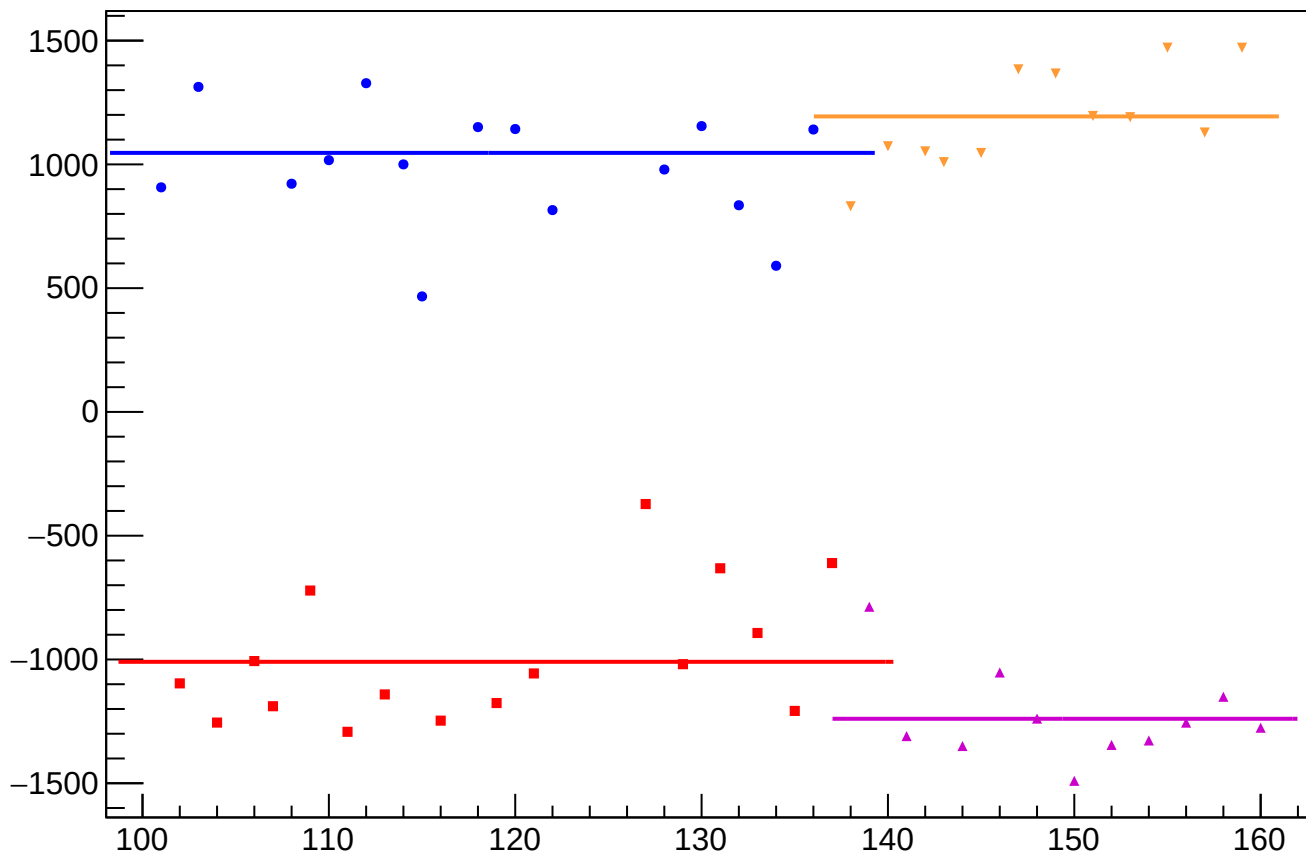
$\chi^2/\text{NDF}$ : 5397122581297664561308621600668516352.0/15

Left In: -219.787+/-0.000

$\chi^2/\text{NDF}$ : 7418609629454172879787970620999860224.0/10

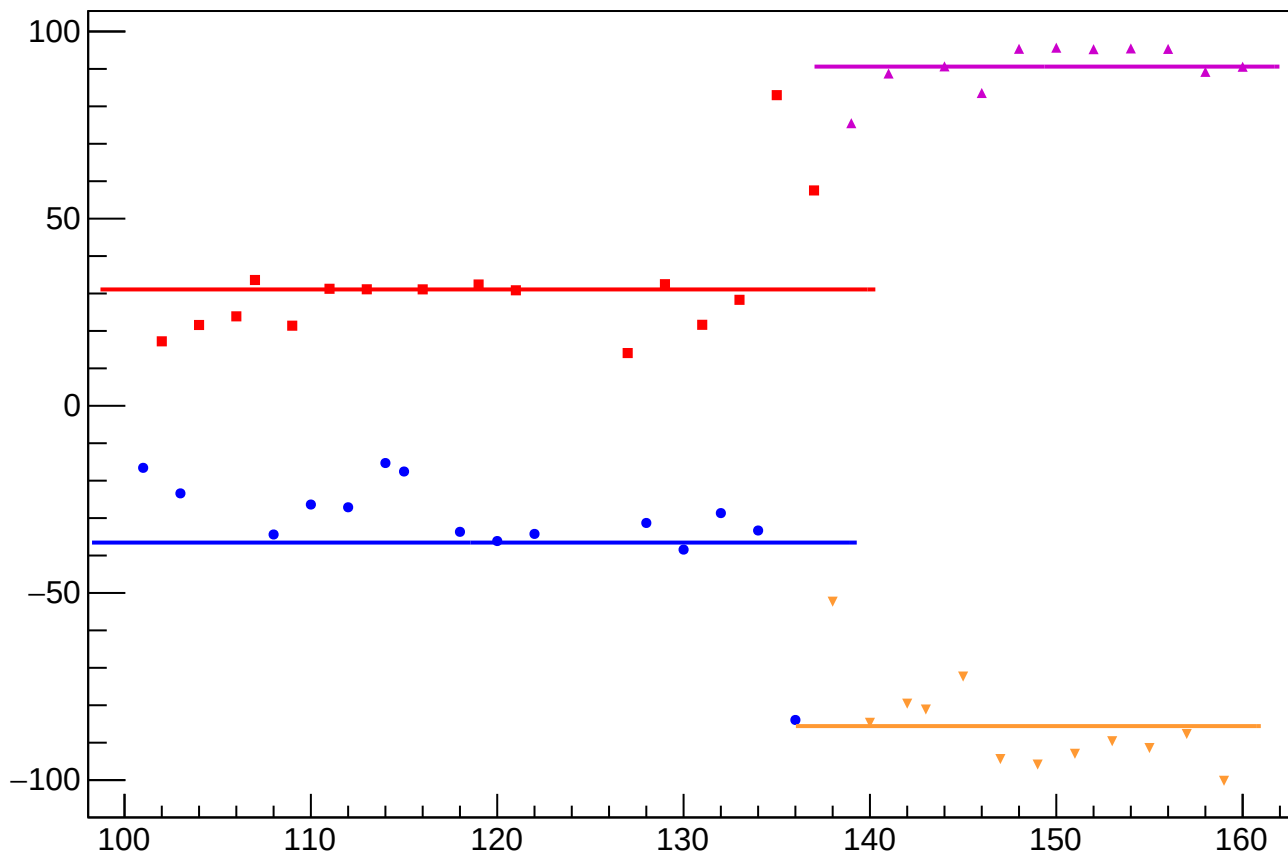
All: 0.615+/-0.000  $\chi^2/\text{NDF}$ : 1361639505758

dit\_sam8\_coil1\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

# dit\_4aX\_coil3\_mean vs Slug, Sign Corrected



Right In: -36.540 $\pm$ 0.000

Left Out: -85.570 $\pm$ 0.000

Right Out: 31.085 $\pm$ 0.000

Left In: 90.618 $\pm$ 0.000

$\chi^2$ /NDF: 254351867861444609202637633864335360.0/14

$\chi^2$ /NDF: 143557776257547990865591640732467200.0/11

$\chi^2$ /NDF: 181291079119381636178408498876383232.0/15

$\chi^2$ /NDF: 33089833083626408117297955498622976.0/10

Left: 3.003 $\pm$ 0.000  $\chi^2$ /NDF: 144401853367529279

Right: -2.265 $\pm$ 0.000  $\chi^2$ /NDF: 1939933040270060

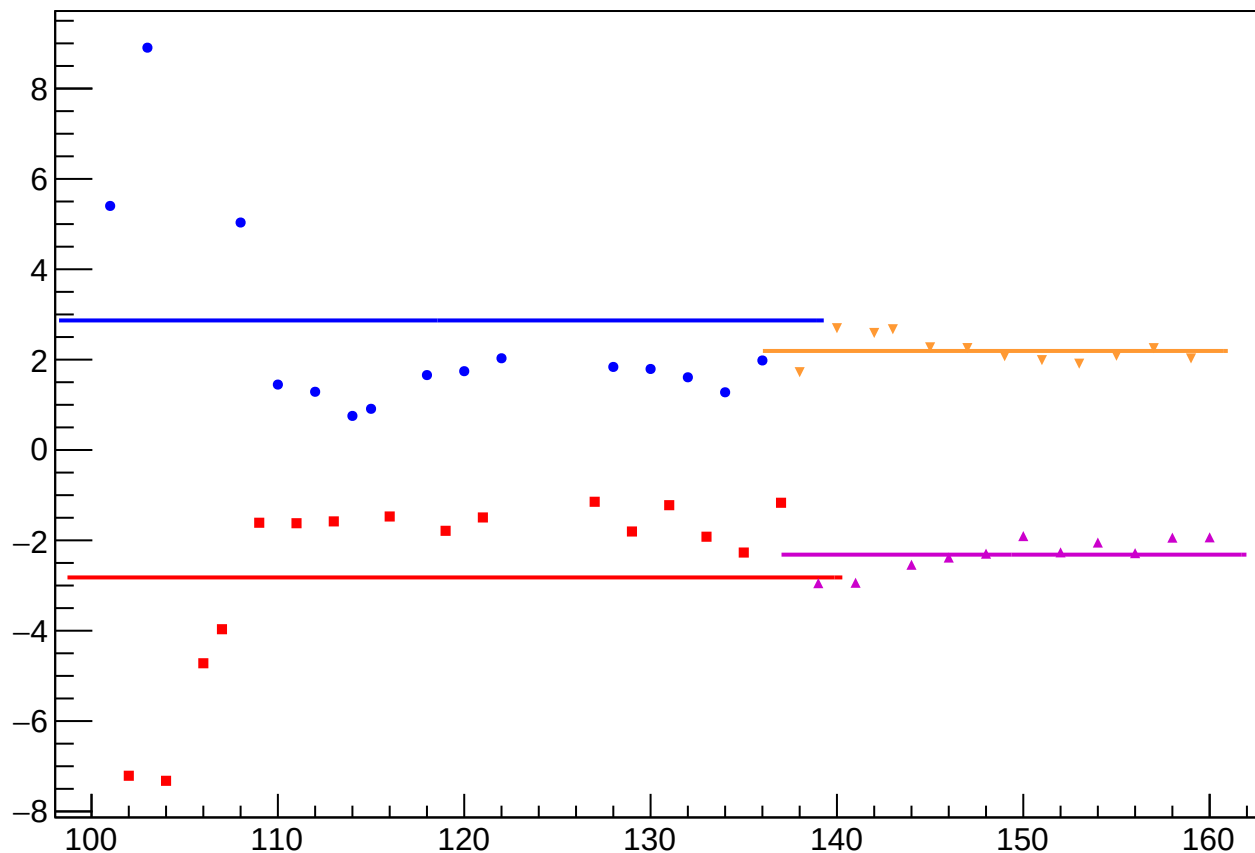
In: 38.154 $\pm$ 0.000  $\chi^2$ /NDF: 645160855456739365

Out: -36.355 $\pm$ 0.000  $\chi^2$ /NDF: 5572346140178000

All: 0.805 $\pm$ 0.000  $\chi^2$ /NDF: 16401400360245

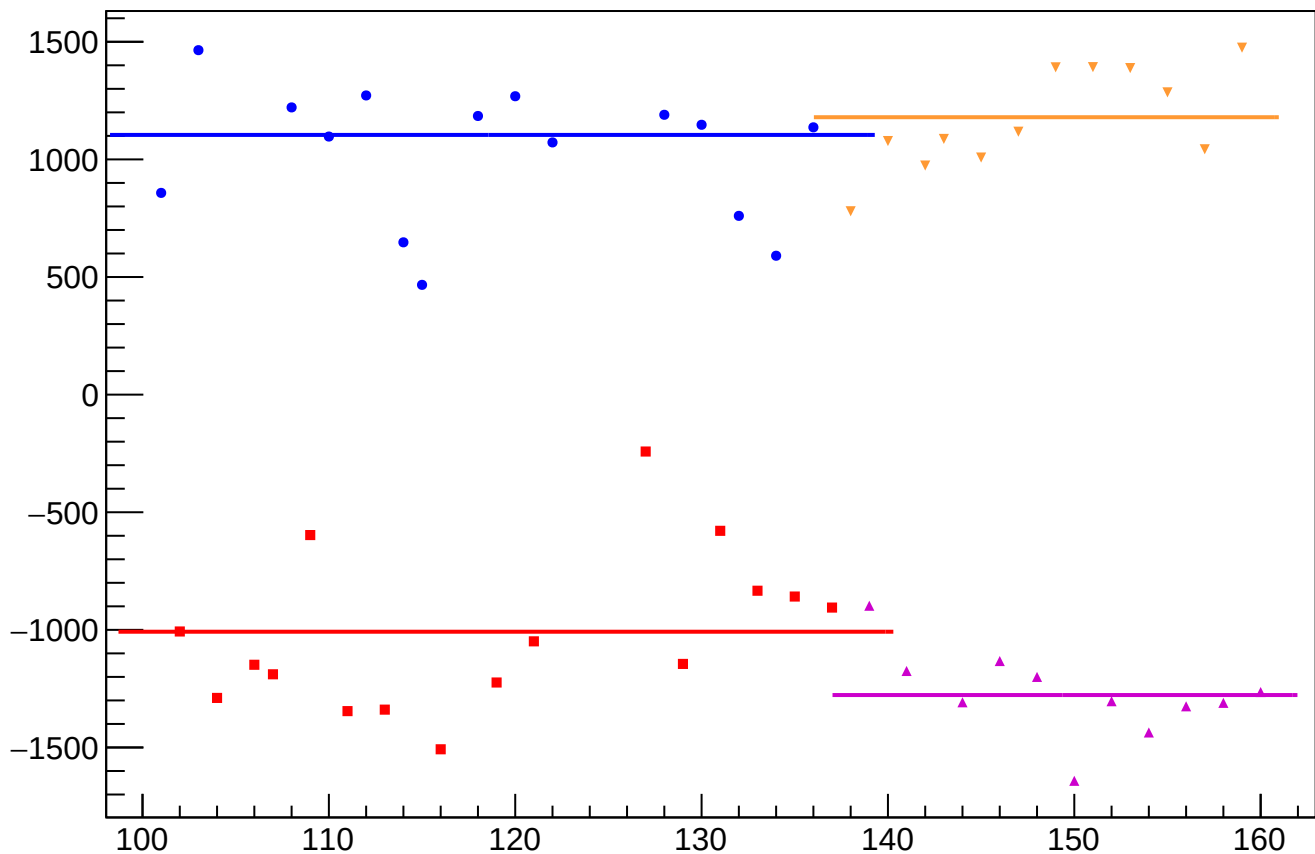


dit\_4aX\_coil3\_err\_mean vs Slug, Sign Corrected



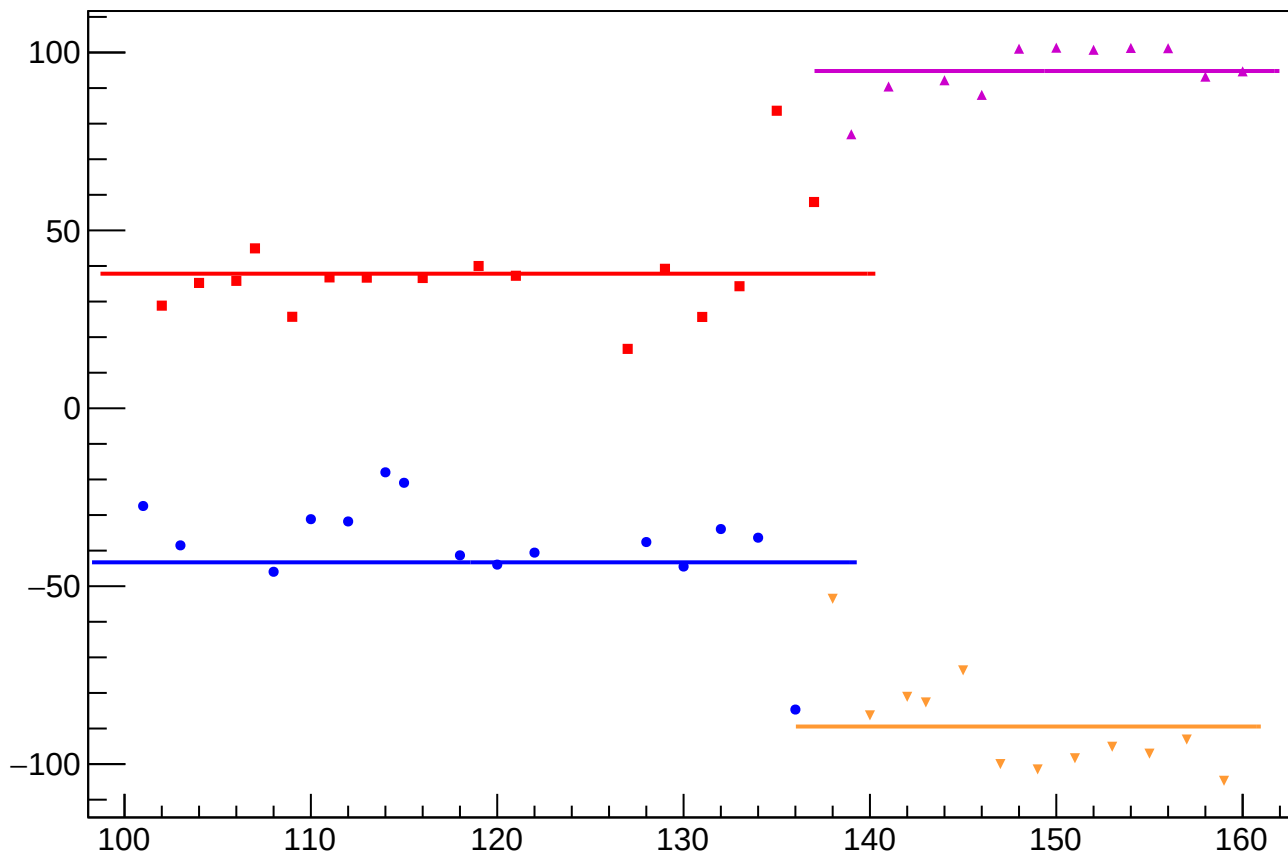
Right In:  $2.867 \pm 0.000$   $\chi^2/\text{NDF}$ : 3455499087584693564208174061322240.0/14  
 Left Out:  $2.192 \pm 0.000$   $\chi^2/\text{NDF}$ : 76043906789141561084580015898624.0/11  
 Right Out:  $-2.821 \pm 0.000$   $\chi^2/\text{NDF}$ : 3052948718107902490497172912472064.0/15  
 Left In:  $-2.317 \pm 0.000$   $\chi^2/\text{NDF}$ : 114372564725079889099013285216256.0/10  
 All:  $-0.050 \pm 0.000$   $\chi^2/\text{NDF}$ : 2668555650335

dit\_4aX\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906+/-0.000  $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_4eX\_coil3\_mean vs Slug, Sign Corrected



Right In: -43.289 +/- 0.000

$\chi^2/\text{NDF}$ : 199342736778845281087197523996573696.0/14

Left Out: -89.439 +/- 0.000

$\chi^2/\text{NDF}$ : 181119962985690841138788427972476928.0/11

Right Out: 37.832 +/- 0.000

$\chi^2/\text{NDF}$ : 148683933977204936634636843897323520.0/15

Left In: 94.799 +/- 0.000

$\chi^2/\text{NDF}$ : 49077050032611006982156968074936320.0/10

Left: 3.181 +/- 0.000  $\chi^2/\text{NDF}$ : 158268282831051271

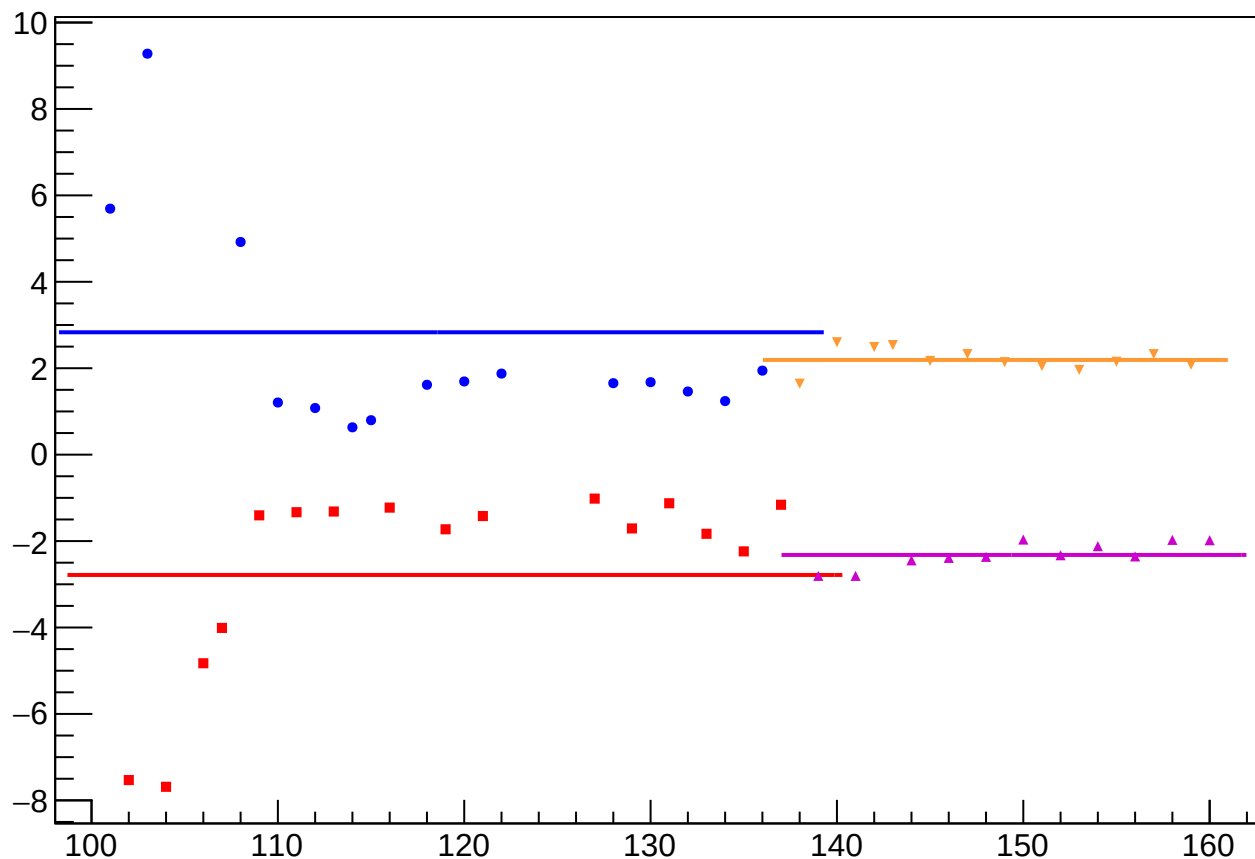
Right: -2.174 +/- 0.000  $\chi^2/\text{NDF}$ : 2512687101518028

In: 37.826 +/- 0.000  $\chi^2/\text{NDF}$ : 751790372998047563

Out: -35.745 +/- 0.000  $\chi^2/\text{NDF}$ : 6575776048743356

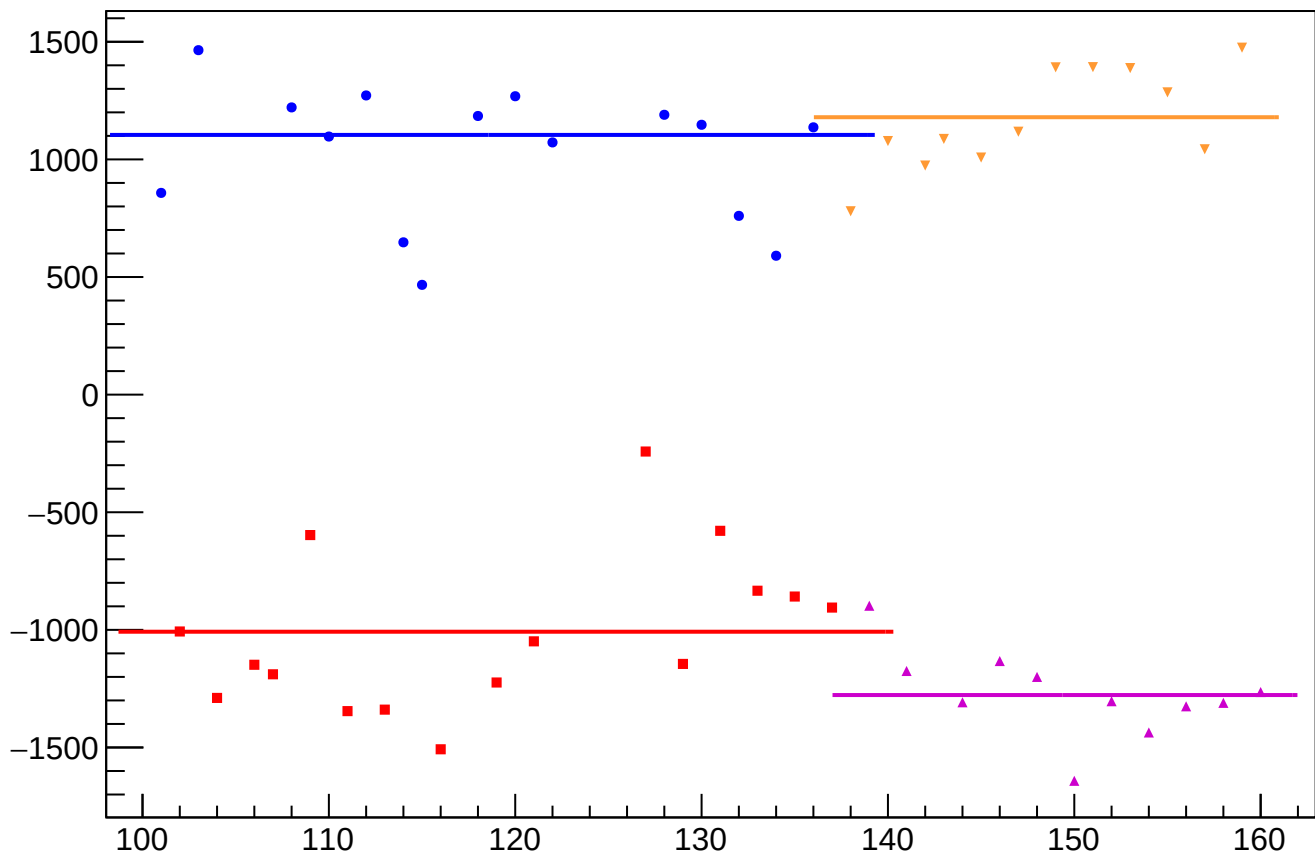
All: 0.947 +/- 0.000  $\chi^2/\text{NDF}$ : 1836150818238

# dit\_4eX\_coil3\_err\_mean vs Slug, Sign Corrected



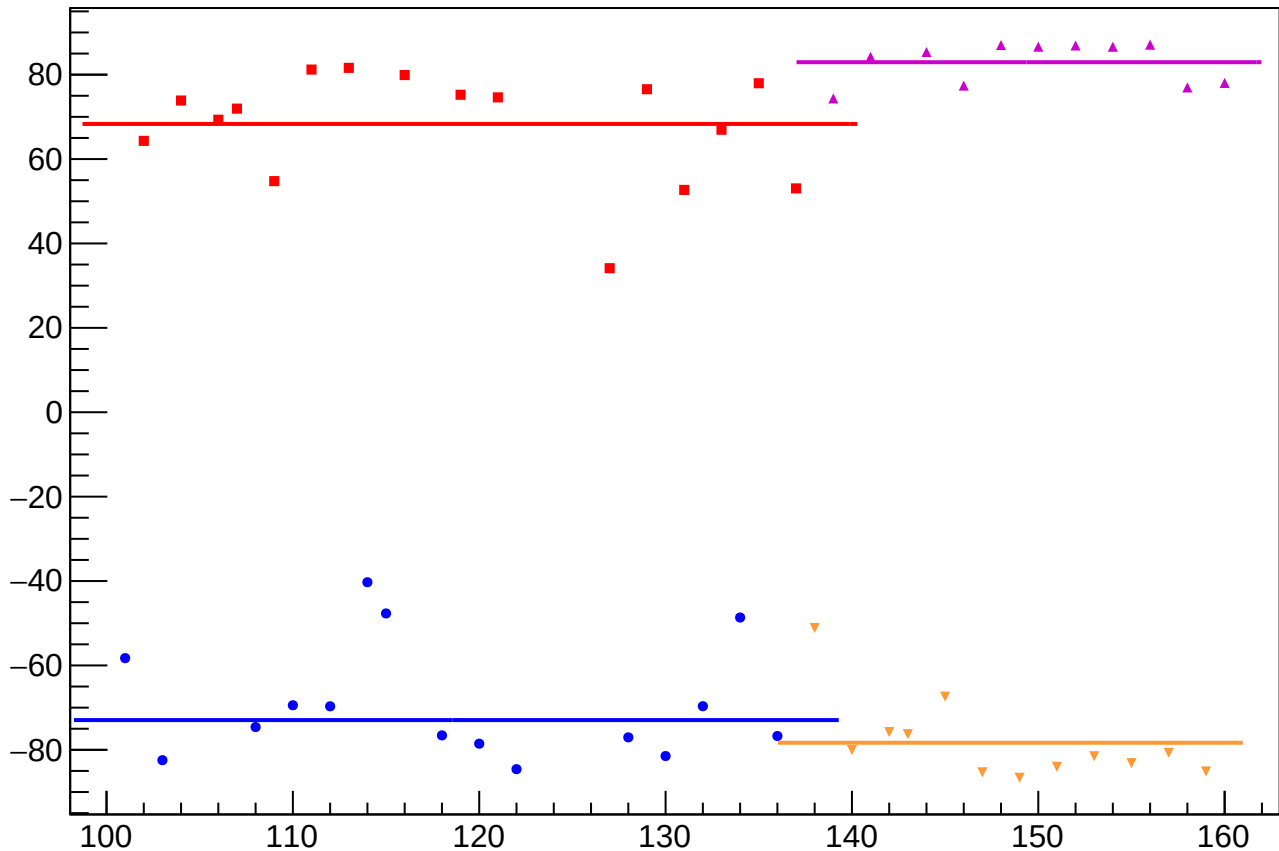
Right In: 2.832 +/- 0.000  $\chi^2/\text{NDF}$ : 3957672531929017328512564323155968.0/14  
 Left Out: 2.192 +/- 0.000  $\chi^2/\text{NDF}$ : 59601559247415008947816525463552.0/11  
 Right Out: -2.784 +/- 0.000  $\chi^2/\text{NDF}$ : 3589544956108116898091236897849344.0/15  
 Left In: -2.321 +/- 0.000  $\chi^2/\text{NDF}$ : 74619123224616324544404505231360.0/10  
 All: -0.051 +/- 0.000  $\chi^2/\text{NDF}$ : 2741558316748

dit\_4eX\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906+/-0.000  $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_11X12X\_coil3\_mean vs Slug, Sign Corrected



Right In: -72.949+/-0.000

Left Out: -78.317+/-0.000

Right Out: 68.324+/-0.000

Left In: 82.954+/-0.000

$\chi^2/\text{NDF}$ : 65755428464857980306879126291087360.0/14

$\chi^2/\text{NDF}$ : 86858932587671188594087415160766464.0/11

$\chi^2/\text{NDF}$ : 106694344898202364483367131372584960.0/15

$\chi^2/\text{NDF}$ : 20419157774877297849205303170564096.0/10

Left: 2.757+/-0.000  $\chi^2/\text{NDF}$ : 120577028568665653

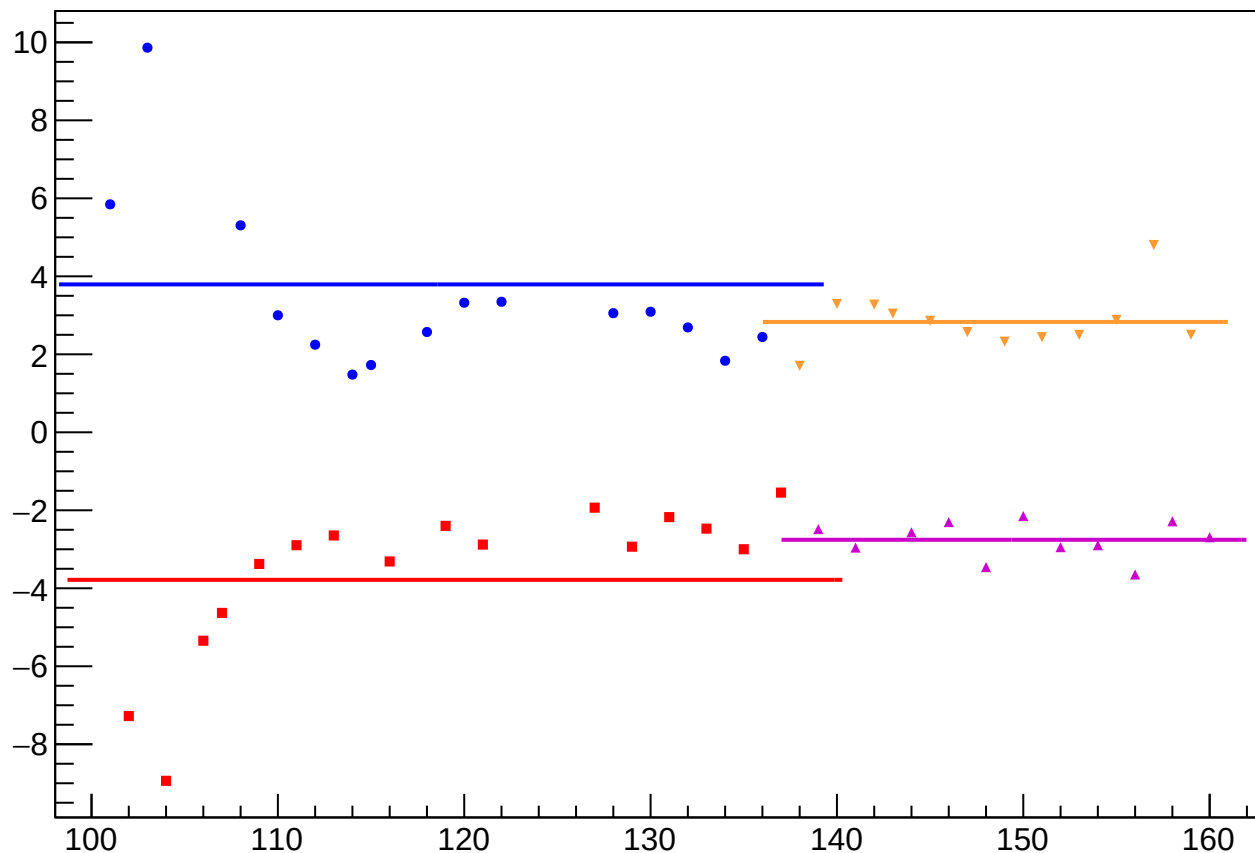
Right: -1.347+/-0.000  $\chi^2/\text{NDF}$ : 6737392391922205

In: 18.630+/-0.000  $\chi^2/\text{NDF}$ : 935227547229560147

Out: -16.451+/-0.000  $\chi^2/\text{NDF}$ : 8485315004637869

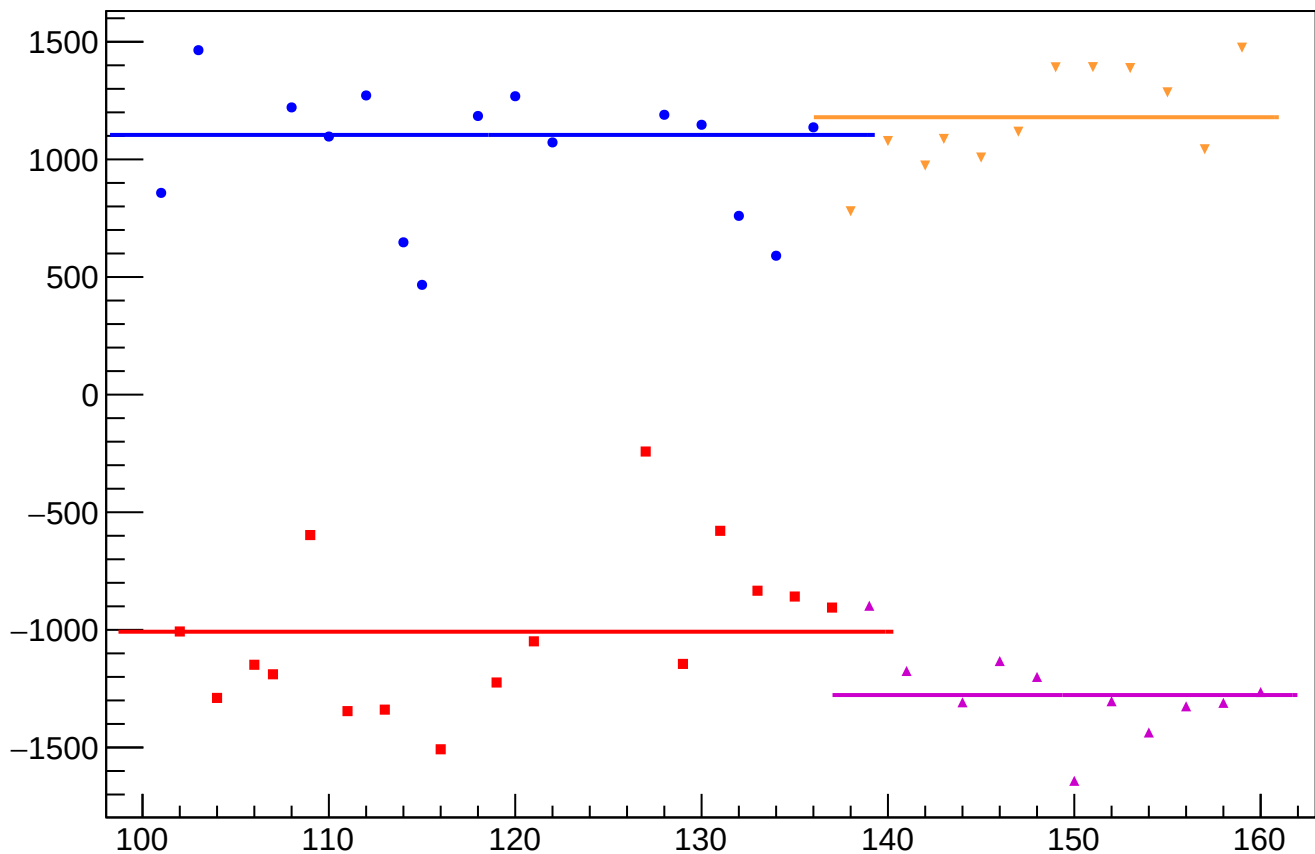
All: 1.045+/-0.000  $\chi^2/\text{NDF}$ : 18808011568652

dit\_11X12X\_coil3\_err\_mean vs Slug, Sign Corrected



Left: 0.021 +/- 0.000  $\chi^2/\text{NDF}$ : 150256032034489532  
 Right: -0.047 +/- 0.000  $\chi^2/\text{NDF}$ : 2496367810067656  
 In: -0.054 +/- 0.000  $\chi^2/\text{NDF}$ : 197504965685105857  
 Out: 0.040 +/- 0.000  $\chi^2/\text{NDF}$ : 202353432425896912  
 All: -0.007 +/- 0.000  $\chi^2/\text{NDF}$ : 3999287355304

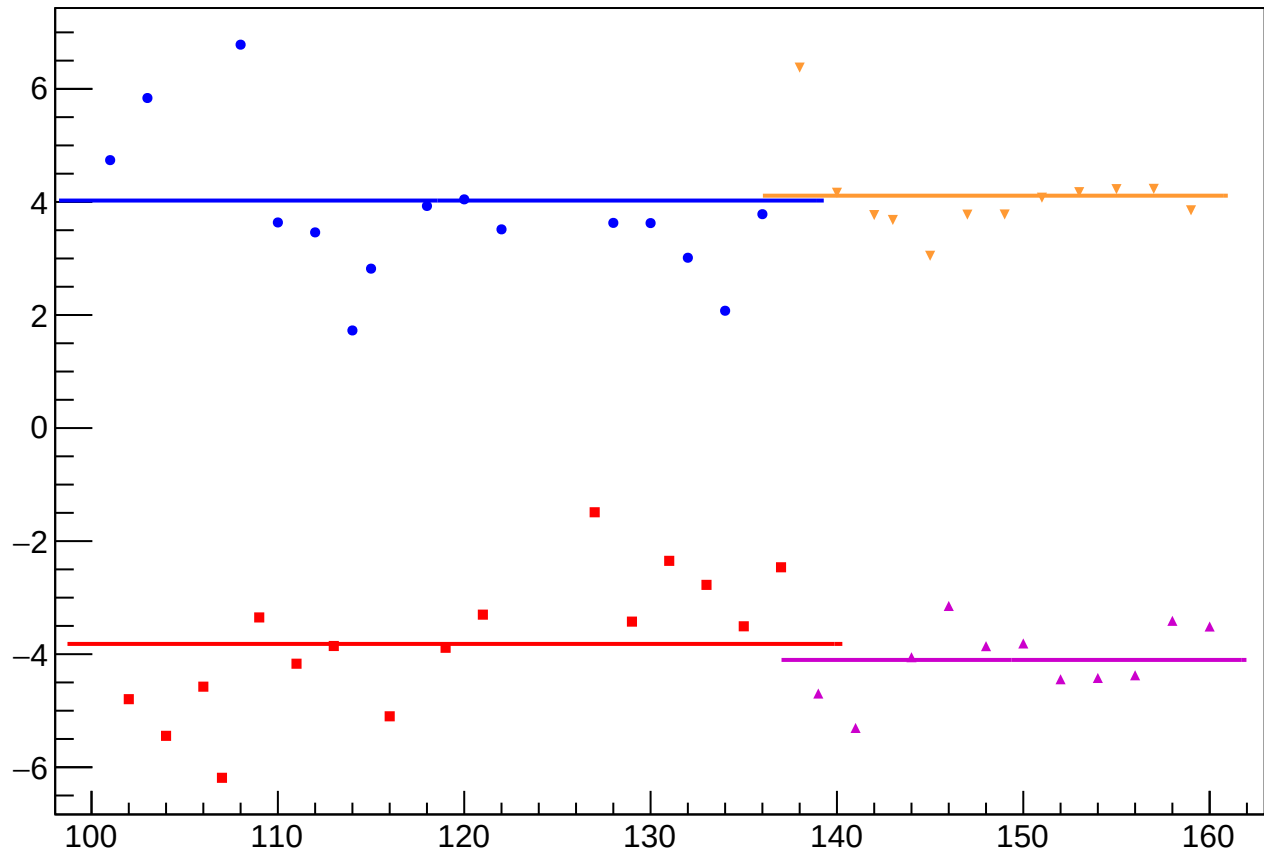
dit\_11X12X\_coil3\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1104.111+/-0.000   | $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14 | Left: -55.563+/-0.000              | $\chi^2/\text{NDF}$ : 2840892210996509 |
| Left Out: 1179.336+/-0.000   | $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11 | Right: 33.659+/-0.000              | $\chi^2/\text{NDF}$ : 1569083056347410 |
| Right Out: -1007.906+/-0.000 | $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15 | In: -294.641+/-0.000               | $\chi^2/\text{NDF}$ : 2223953426306853 |
| Left In: -1277.097+/-0.000   | $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10 | Out: 256.572+/-0.000               | $\chi^2/\text{NDF}$ : 1952554182211910 |
|                              | All: -18.335+/-0.000                                              | $\chi^2/\text{NDF}$ : 441608022845 |                                        |

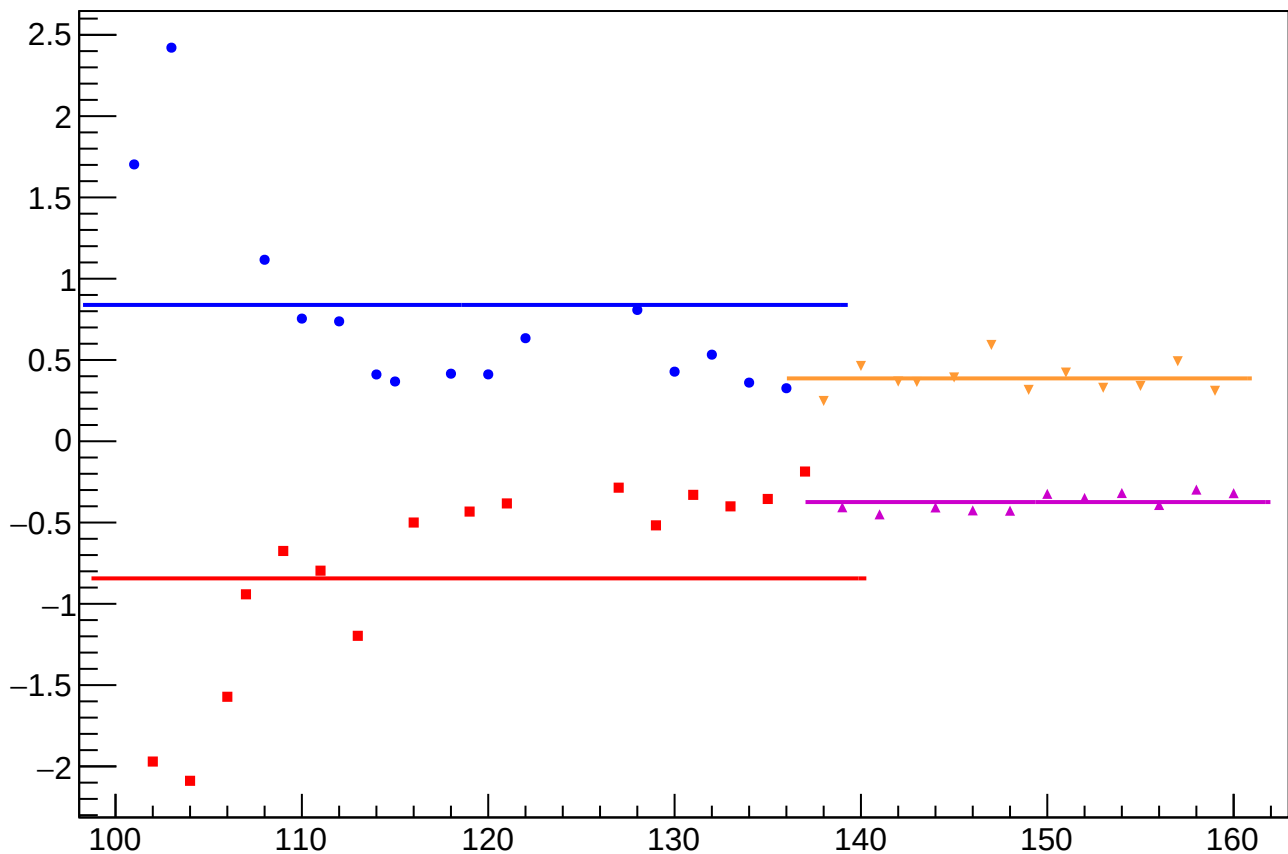


# dit\_4aY\_coil3\_mean vs Slug, Sign Corrected



Right In:  $4.025 \pm 0.000$   $\chi^2/\text{NDF}: 769001650442321928129473832550400.0/14$   
 Left Out:  $4.111 \pm 0.000$   $\chi^2/\text{NDF}: 532620096510613693690902891986944.0/11$   
 Right Out:  $-3.819 \pm 0.000$   $\chi^2/\text{NDF}: 888232240226434329114859171479552.0/15$   
 Left In:  $-4.102 \pm 0.000$   $\chi^2/\text{NDF}: 329978343606173709019066465779712.0/10$   
 All:  $0.010 \pm 0.000$   $\chi^2/\text{NDF}: 53749829914354$

dit\_4aY\_coil3\_err\_mean vs Slug, Sign Corrected



Left: 0.004 +/- 0.000  $\chi^2/\text{NDF}$ : 275948584383026105

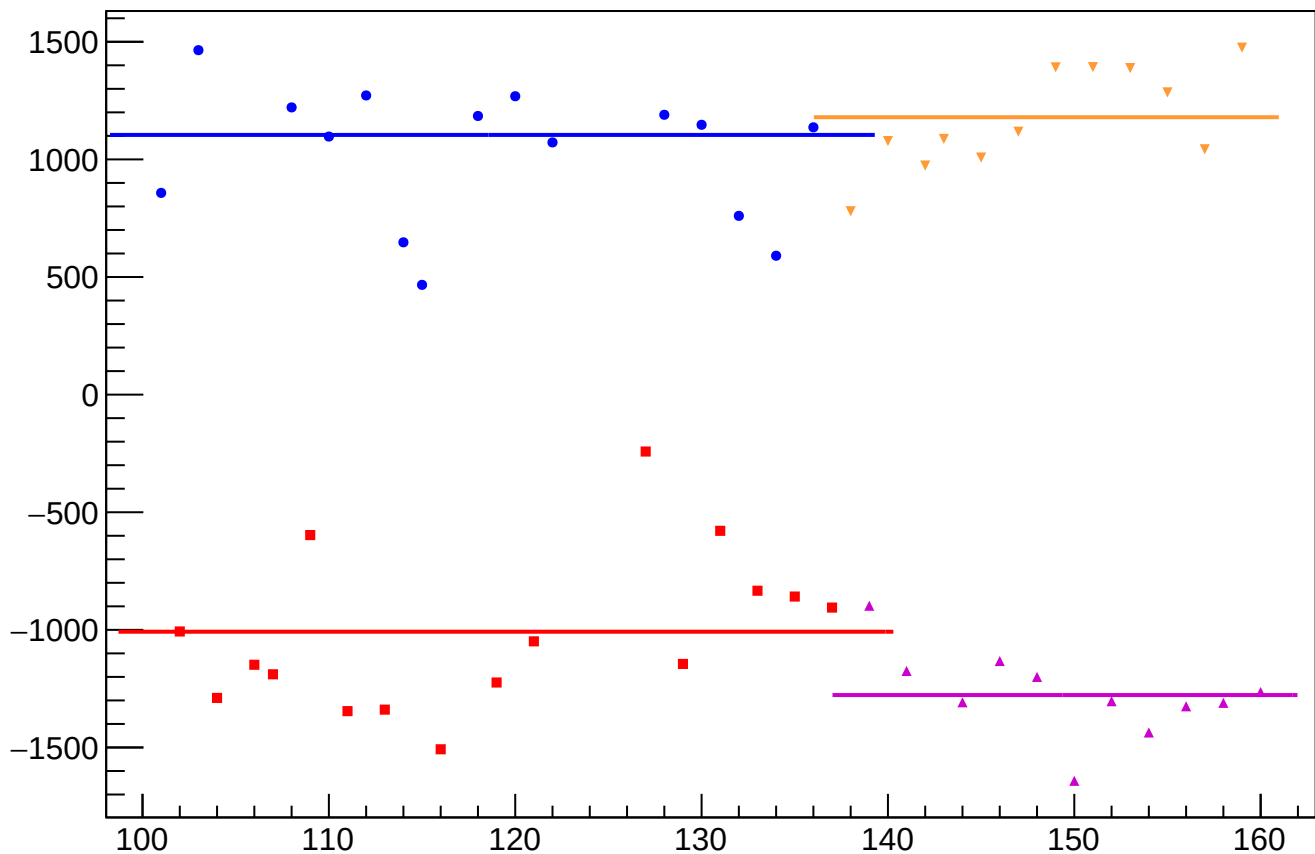
Right: -0.014 +/- 0.000  $\chi^2/\text{NDF}$ : 1442205906502244

In: 0.126 +/- 0.000  $\chi^2/\text{NDF}$ : 8214812118150652652

Out: -0.132 +/- 0.000  $\chi^2/\text{NDF}$ : 84416980230076205

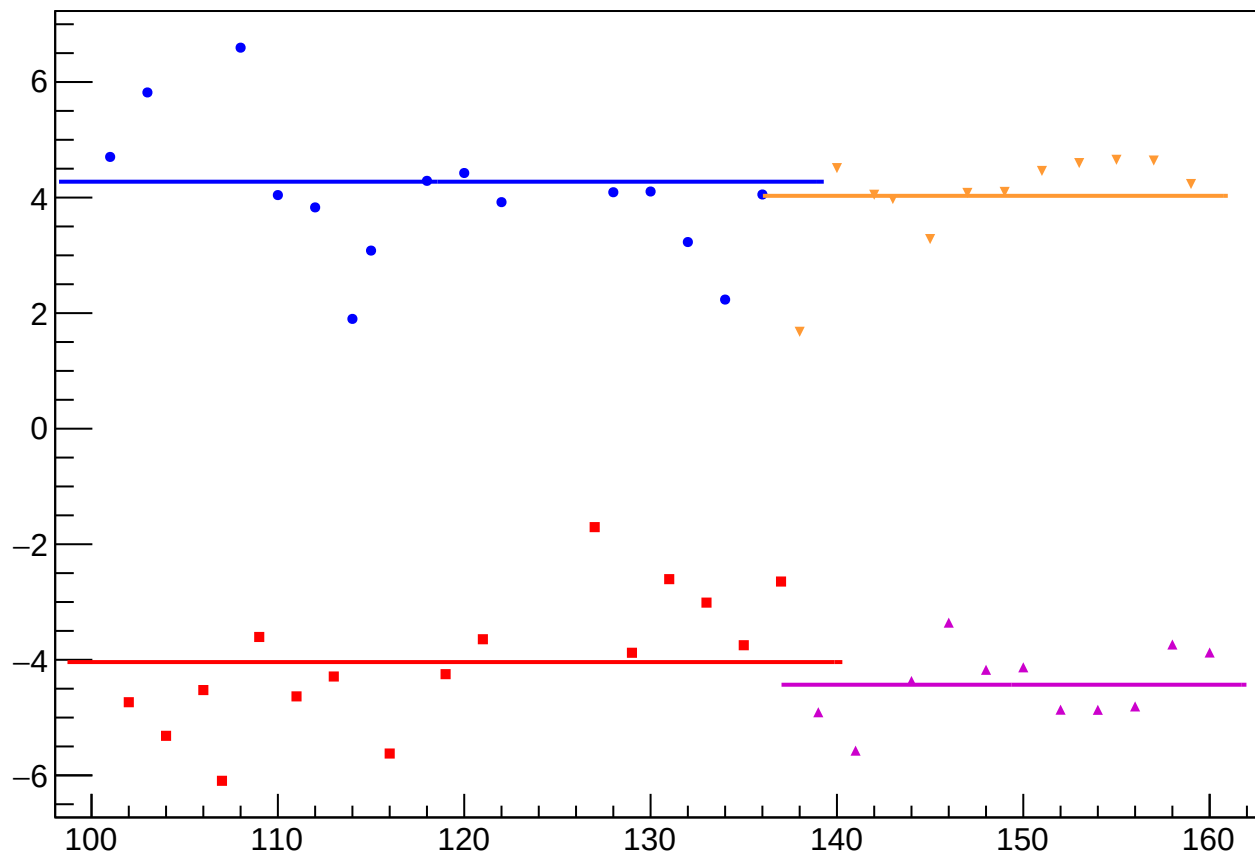
All: -0.003 +/- 0.000  $\chi^2/\text{NDF}$ : 1718408465884

dit\_4aY\_coil3\_Ndata\_mean vs Slug, Sign Corrected



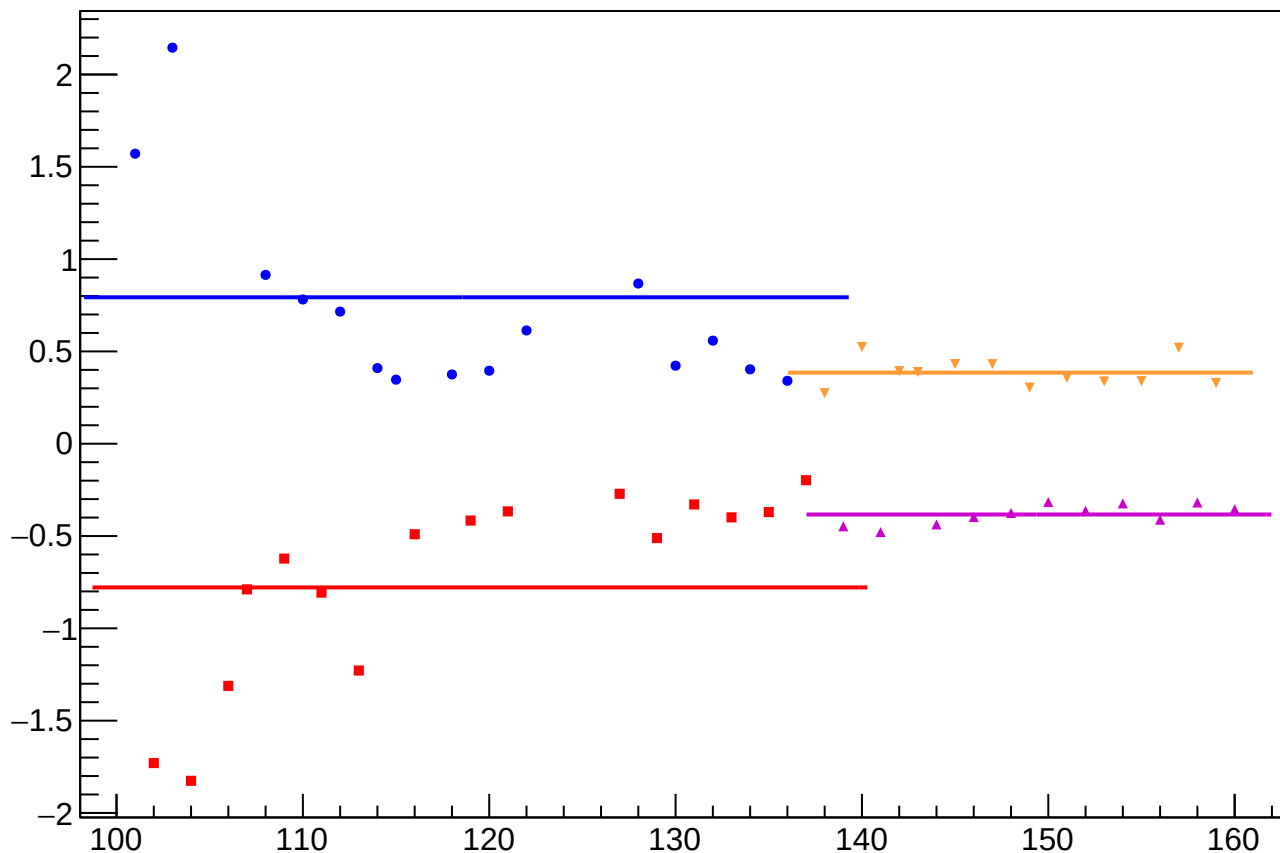
Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906+/-0.000  $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

dit\_4eY\_coil3\_mean vs Slug, Sign Corrected



Right In:  $4.275 \pm 0.000$   $\chi^2/\text{NDF}: 597188707898198851792415435522048.0/14$   
 Left Out:  $4.030 \pm 0.000$   $\chi^2/\text{NDF}: 600797720921367466879695481470976.0/11$   
 Right Out:  $-4.039 \pm 0.000$   $\chi^2/\text{NDF}: 772368848194464324973108765130752.0/15$   
 Left In:  $-4.432 \pm 0.000$   $\chi^2/\text{NDF}: 345602703191245770554210363899904.0/10$   
 All:  $-0.105 \pm 0.000$   $\chi^2/\text{NDF}: 5801697378090$

dit\_4eY\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 0.793+/-0.000

$\chi^2/\text{NDF}$ : 195508777173589483440314700005376.0/14

Left Out: 0.385+/-0.000

$\chi^2/\text{NDF}$ : 5547784180240414411423653822464.0/11

Right Out: -0.778+/-0.000

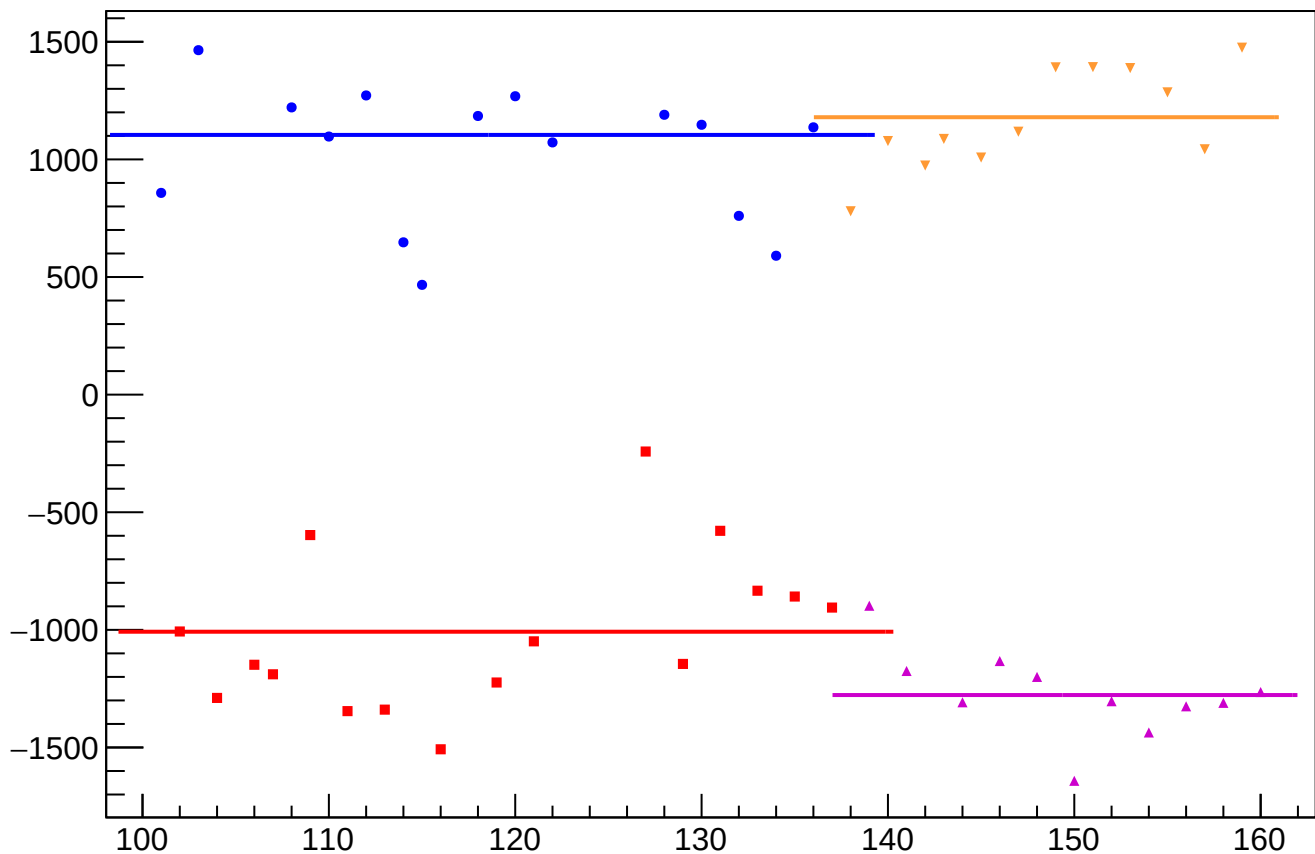
$\chi^2/\text{NDF}$ : 185814635772183306063903690063872.0/15

Left In: -0.383+/-0.000

$\chi^2/\text{NDF}$ : 2618375268437967875049691021312.0/10

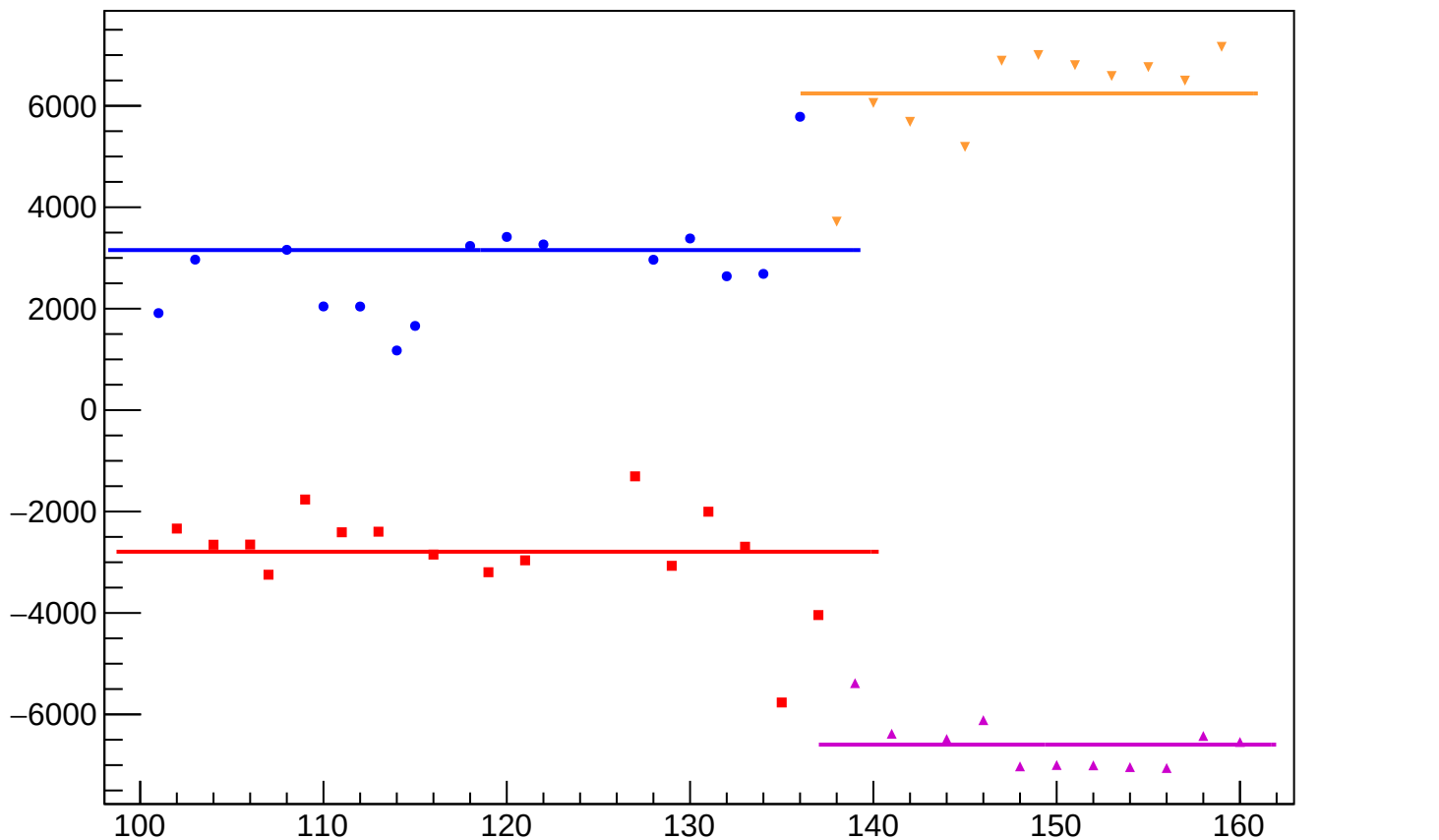
All: -0.002+/-0.000  $\chi^2/\text{NDF}$ : 1473239916142

dit\_4eY\_coil3\_Ndata\_mean vs Slug, Sign Corrected



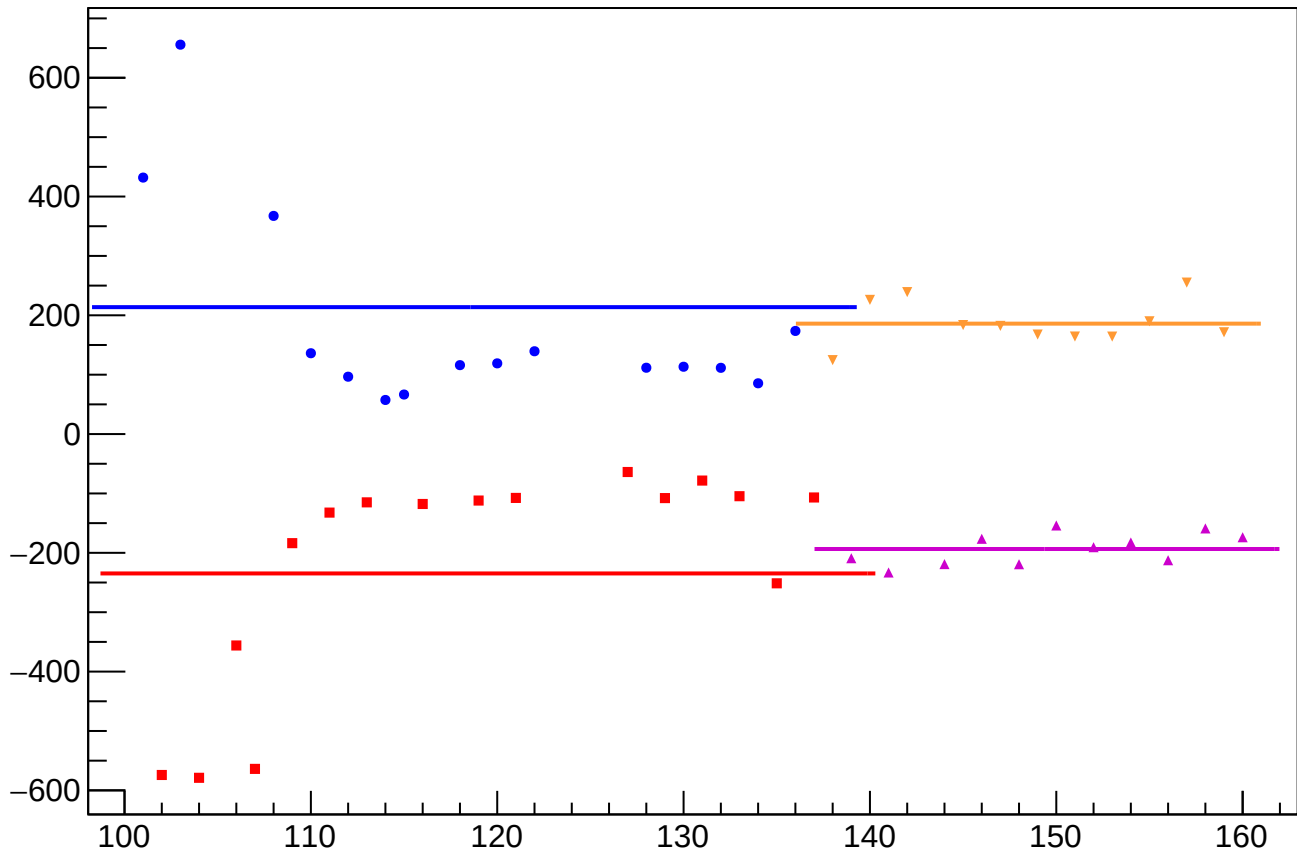
Right In: 1104.111 $\pm$ 0.000  $\chi^2$ /NDF: 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336 $\pm$ 0.000  $\chi^2$ /NDF: 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906 $\pm$ 0.000  $\chi^2$ /NDF: 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097 $\pm$ 0.000  $\chi^2$ /NDF: 29578729901602647998073818936097374208.0/10  
 All: -18.335 $\pm$ 0.000  $\chi^2$ /NDF: 441608022845

dit\_usl\_coil3\_mean vs Slug, Sign Corrected



Right In: 3155.434+/-0.000  $\chi^2/\text{NDF}$ : 903550534773622902110918214033612996608.0/14  
 Left Out: 6243.976+/-0.000  $\chi^2/\text{NDF}$ : 811230786168378302780139165688711348224.0/10  
 Right Out: -2792.245+/-0.000  $\chi^2/\text{NDF}$ : 674635749324173001973264427530986717184.0/15  
 Left In: -6595.861+/-0.000  $\chi^2/\text{NDF}$ : 225164805715400368671043826745864093696.0/10  
 All: -200.997+/-0.000  $\chi^2/\text{NDF}$ : 87373315799

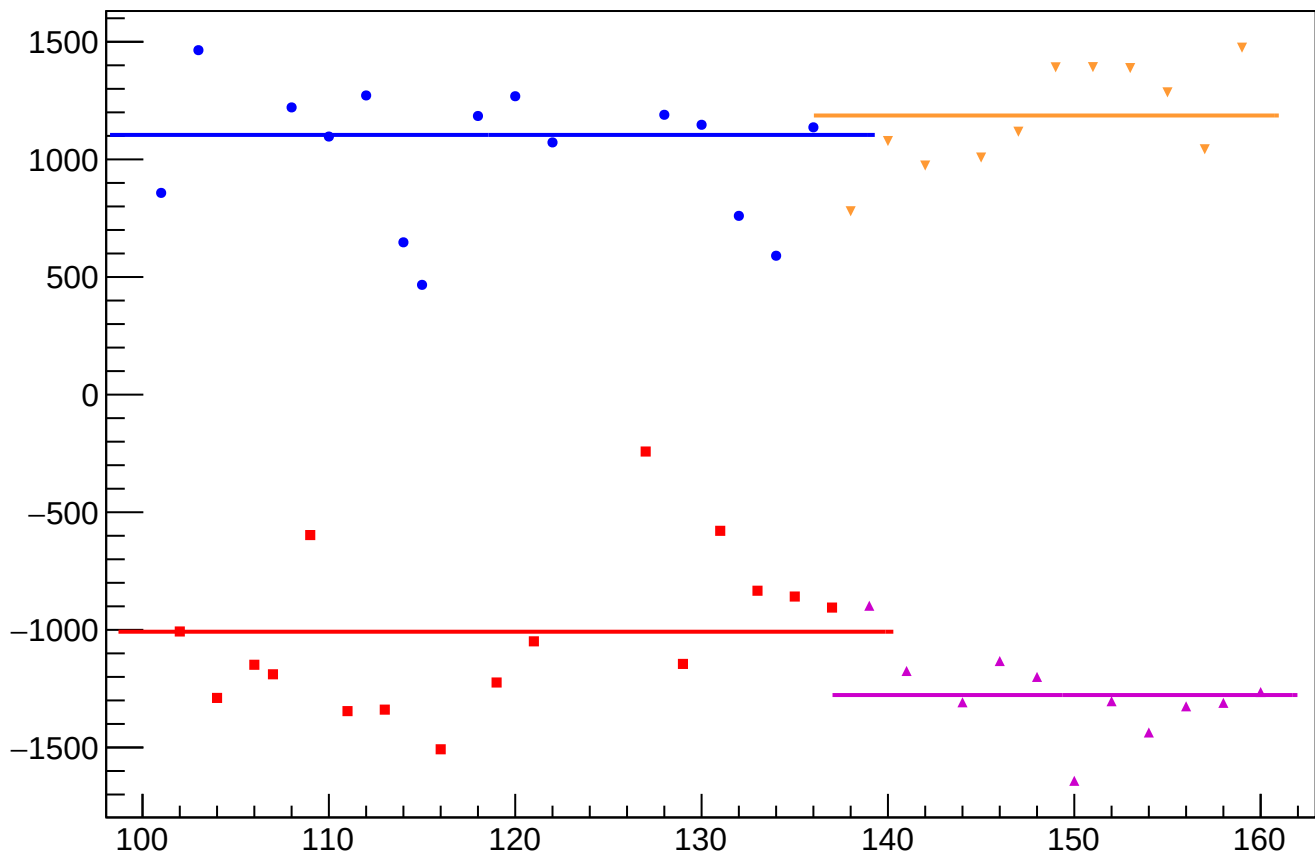
# dit\_usl\_coil3\_err\_mean vs Slug, Sign Corrected



Left: -12.048 +/- 0.000  $\chi^2/\text{NDF}$ : 6529786806410777  
 Right In: 213.739 +/- 0.000  $\chi^2/\text{NDF}$ : 19718138109054002114361149860507287552.0/14  
 Right: -13.554 +/- 0.000  $\chi^2/\text{NDF}$ : 109883652295878  
 Left Out: 185.948 +/- 0.000  $\chi^2/\text{NDF}$ : 1057706607595767583587974846640816128.0/10  
 In: -25.504 +/- 0.000  $\chi^2/\text{NDF}$ : 83555095892474159  
 Right Out: -234.712 +/- 0.000  $\chi^2/\text{NDF}$ : 24013134107167214895189050481067425792.0/15  
 Out: 0.624 +/- 0.000  $\chi^2/\text{NDF}$ : 911015055676819525  
 Left In: -193.543 +/- 0.000  $\chi^2/\text{NDF}$ : 598931150644293332680217057881489408.0/10  
 All: -12.690 +/- 0.000  $\chi^2/\text{NDF}$ : 175183232937

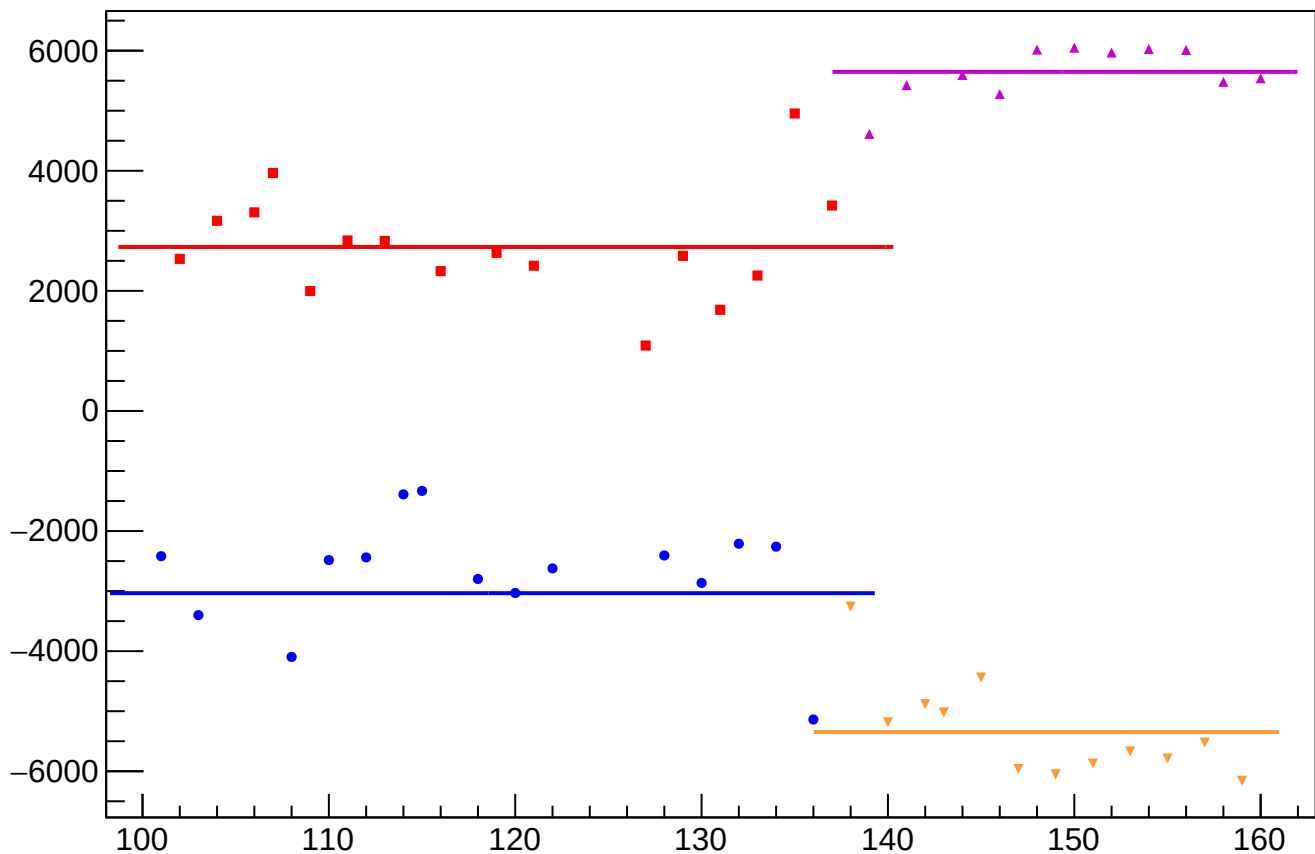


dit\_usl\_coil3\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                       |                                        |
|------------------------------|-------------------------------------------------------------------|-----------------------|----------------------------------------|
| Right In: 1104.111+/-0.000   | $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14 | Left: -98.791+/-0.000 | $\chi^2/\text{NDF}$ : 2750108583859337 |
| Left Out: 1186.635+/-0.000   | $\chi^2/\text{NDF}$ : 38127290182419373090636614603236179968.0/10 | Right: 33.659+/-0.000 | $\chi^2/\text{NDF}$ : 1569083056347410 |
| Right Out: -1007.906+/-0.000 | $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15 | In: -294.641+/-0.000  | $\chi^2/\text{NDF}$ : 2223953426306853 |
| Left In: -1277.097+/-0.000   | $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10 | Out: 219.820+/-0.000  | $\chi^2/\text{NDF}$ : 1904298614644718 |
|                              | All: -42.327+/-0.000                                              |                       | $\chi^2/\text{NDF}$ : 433243619432     |

# dit\_usr\_coil3\_mean vs Slug, Sign Corrected



Right In: -3034.527+/-0.000

Left Out: -5346.287+/-0.000

Right Out: 2731.035+/-0.000

Left In: 5647.632+/-0.000

$\chi^2/\text{NDF}$ : 630694553353463868547335175090919702528.0/14

$\chi^2/\text{NDF}$ : 595830455774800553383002095782337708032.0/11

$\chi^2/\text{NDF}$ : 528290847703567991555694629239211950080.0/15

$\chi^2/\text{NDF}$ : 164214312908035645215126356935491715072.0/10

Left: 180.580+/-0.000  $\chi^2/\text{NDF}$ : 5629644567862069

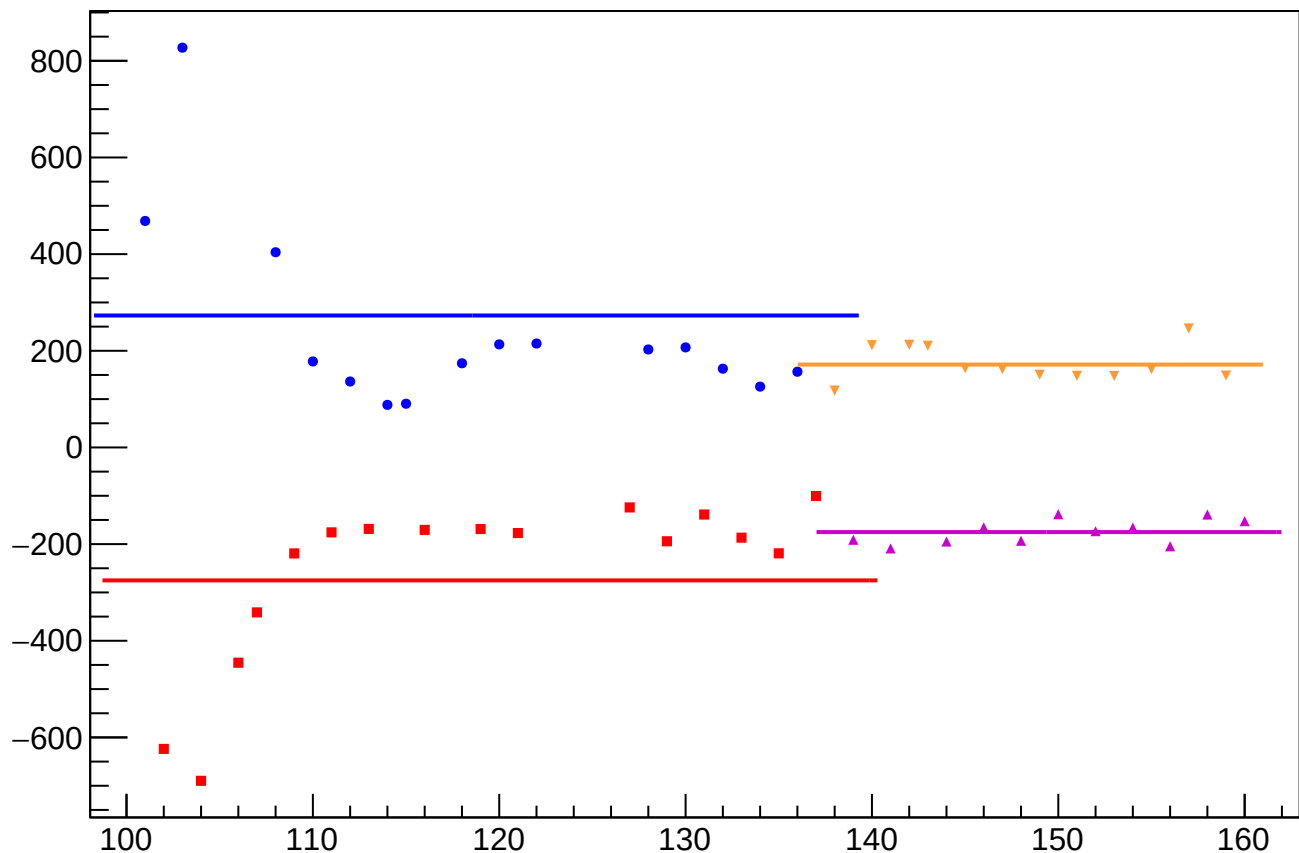
Right: -112.316+/-0.000  $\chi^2/\text{NDF}$ : 12093460154256

In: 2065.482+/-0.000  $\chi^2/\text{NDF}$ : 2953204271382502

Out: -1938.587+/-0.000  $\chi^2/\text{NDF}$ : 26282051967126

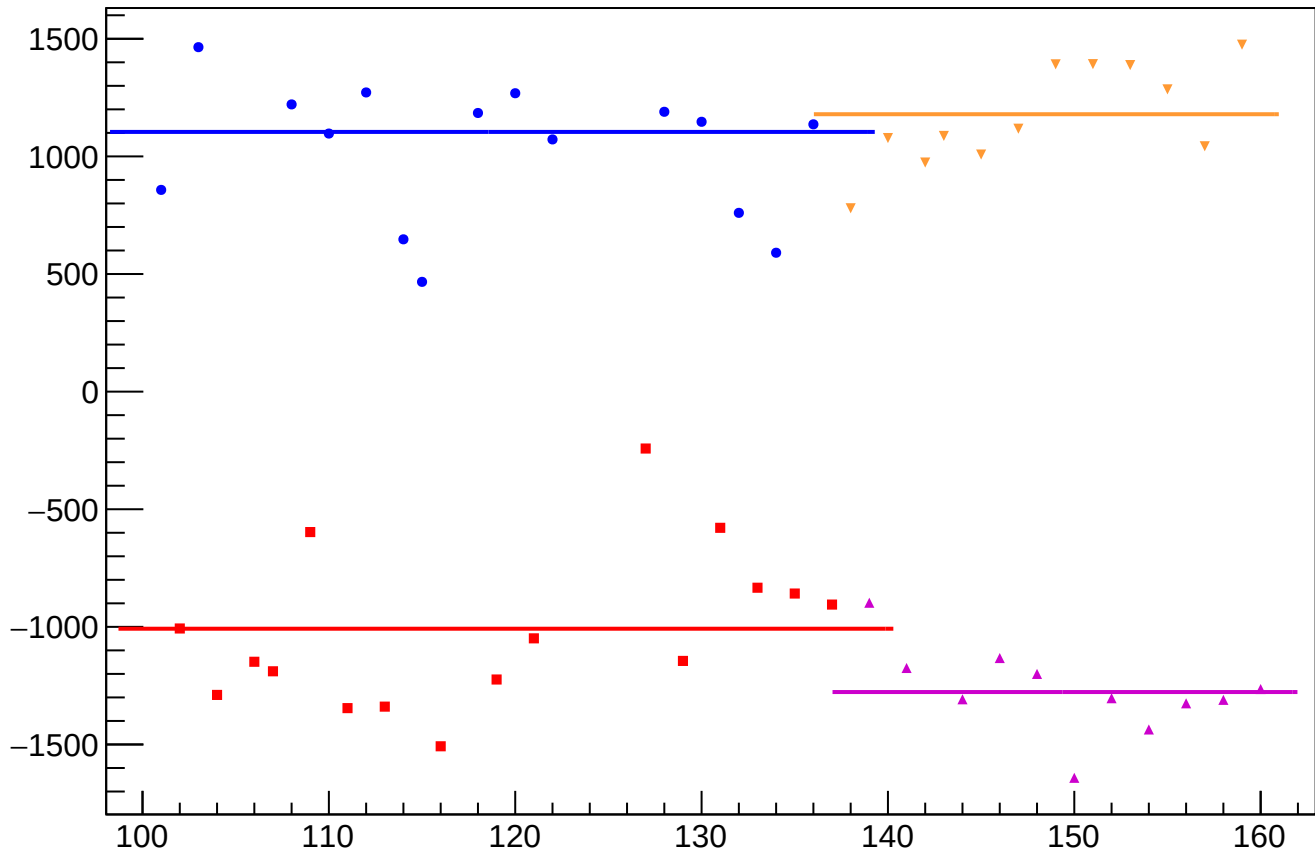
All: 58.370+/-0.000  $\chi^2/\text{NDF}$ : 6845569684778

dit\_usr\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 273.039+/-0.000  $\chi^2/\text{NDF}$ : 26485935053341175092913795212184125440.0/14  
 Left Out: 171.517+/-0.000  $\chi^2/\text{NDF}$ : 1162204446124418452265763444206075904.0/11  
 Right Out: -275.044+/-0.000  $\chi^2/\text{NDF}$ : 22264760088752901792561892991657050112.0/15  
 Left In: -175.100+/-0.000  $\chi^2/\text{NDF}$ : 532319905760316522814470909096624128.0/10  
 All: -3.576+/-0.000  $\chi^2/\text{NDF}$ : 2044639421545

dit\_usr\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111+/-0.000

$\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14

Left Out: 1179.336+/-0.000

$\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11

Right Out: -1007.906+/-0.000

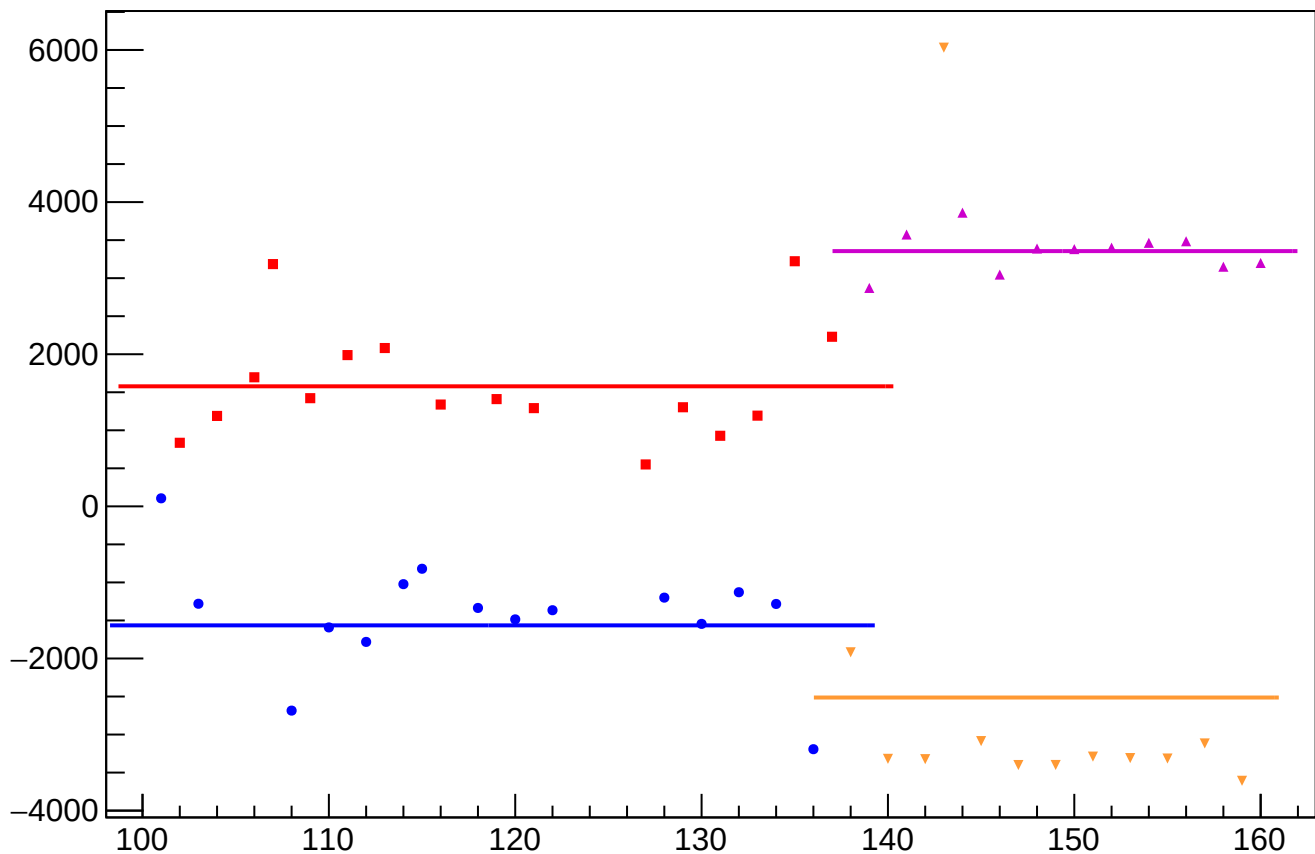
$\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15

Left In: -1277.097+/-0.000

$\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_atl1\_coil3\_mean vs Slug, Sign Corrected



Right In: -1564.595+/-0.000

Left Out: -2513.182+/-0.000

Right Out: 1578.178+/-0.000

Left In: 3355.712+/-0.000

$\chi^2/\text{NDF}$ : 483874800978571042578975757029039144960.0/14

$\chi^2/\text{NDF}$ : 5431127813565364988673729418683400323072.0/11

$\chi^2/\text{NDF}$ : 368450572556217564071963203581098590208.0/15

$\chi^2/\text{NDF}$ : 61603128430044333980990125877093203968.0/10

Left: 437.231+/-0.000  $\chi^2/\text{NDF}$ : 2131924326486959

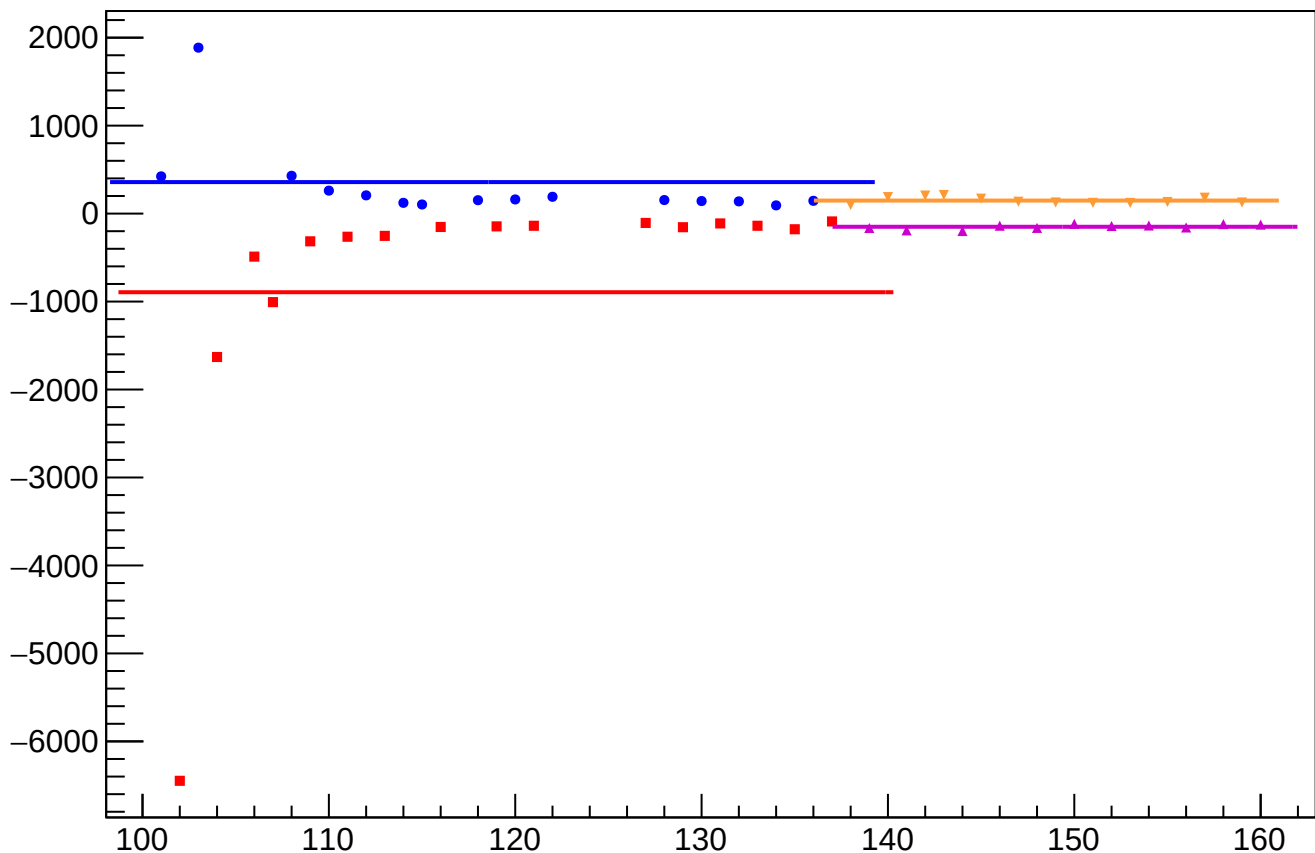
Right: 28.285+/-0.000  $\chi^2/\text{NDF}$ : 4101258280925694

In: 1325.655+/-0.000  $\chi^2/\text{NDF}$ : 9774855555761575

Out: -787.099+/-0.000  $\chi^2/\text{NDF}$ : 122542710245159

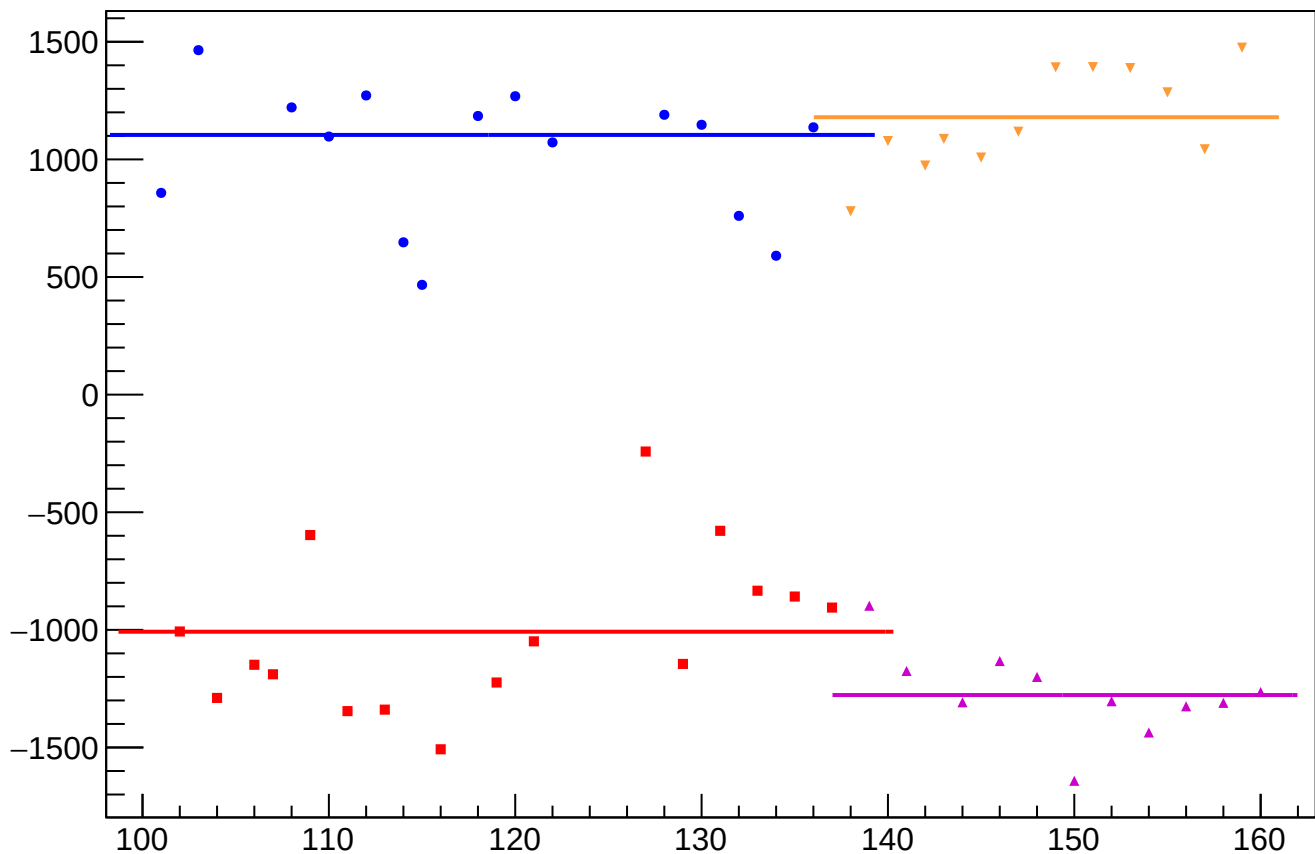
All: 266.599+/-0.000  $\chi^2/\text{NDF}$ : 255487557311

# dit\_atl1\_coil3\_err\_mean vs Slug, Sign Corrected



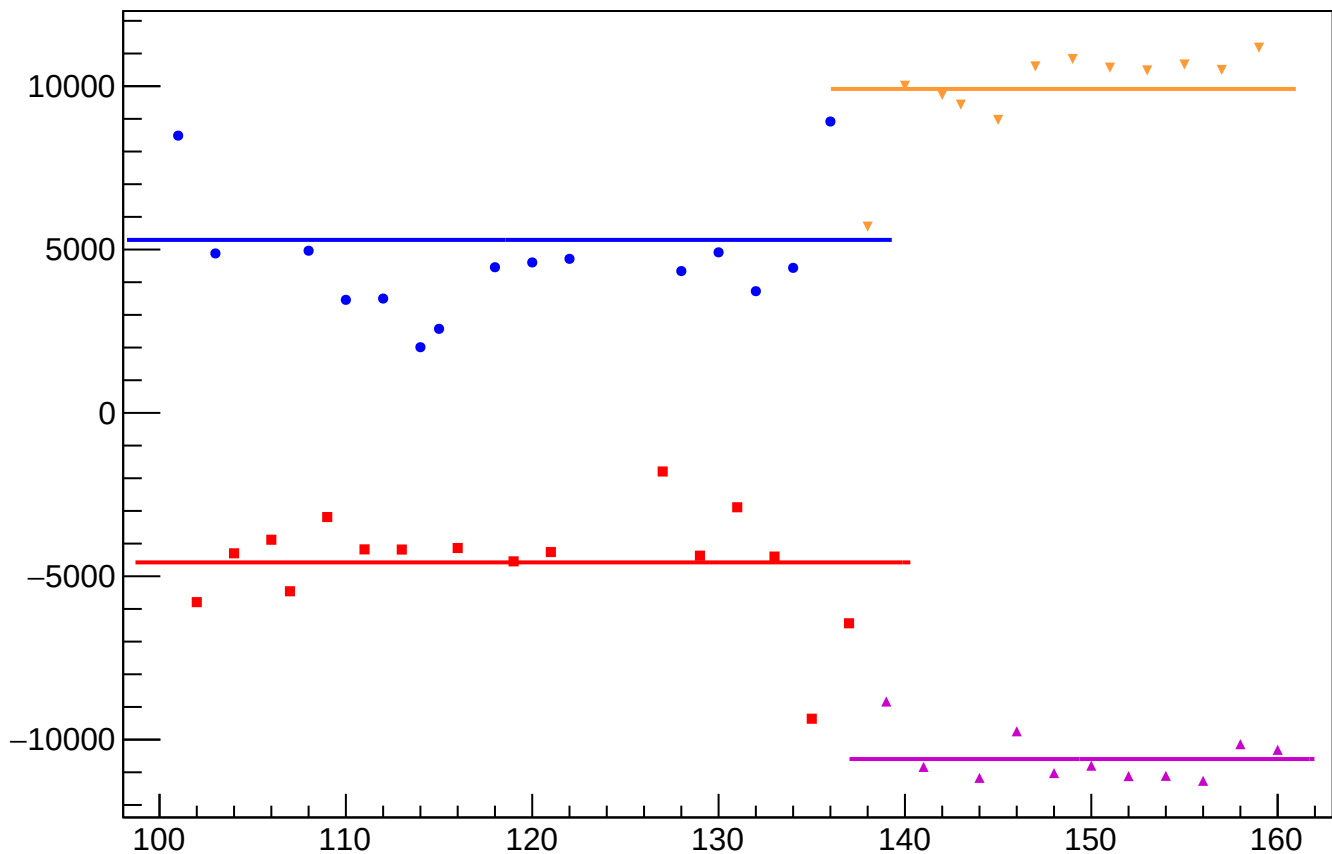
Right In:  $358.080 \pm 0.000$   $\chi^2/\text{NDF}: 157922789145697858165644452090202816512.0/14$   
 Left Out:  $148.359 \pm 0.000$   $\chi^2/\text{NDF}: 1090286331733366082581256970807803904.0/11$   
 Right Out:  $-893.897 \pm 0.000$   $\chi^2/\text{NDF}: 2075920155774201043572695656797803905024.0/15$   
 Left In:  $-149.829 \pm 0.000$   $\chi^2/\text{NDF}: 645756718172892804384604635004928000.0/10$   
 All:  $-116.258 \pm 0.000$   $\chi^2/\text{NDF}: 28499930865$

dit\_atl1\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111 $\pm$ 0.000  $\chi^2$ /NDF: 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336 $\pm$ 0.000  $\chi^2$ /NDF: 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906 $\pm$ 0.000  $\chi^2$ /NDF: 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097 $\pm$ 0.000  $\chi^2$ /NDF: 29578729901602647998073818936097374208.0/10  
 All: -18.335 $\pm$ 0.000  $\chi^2$ /NDF: 441608022845

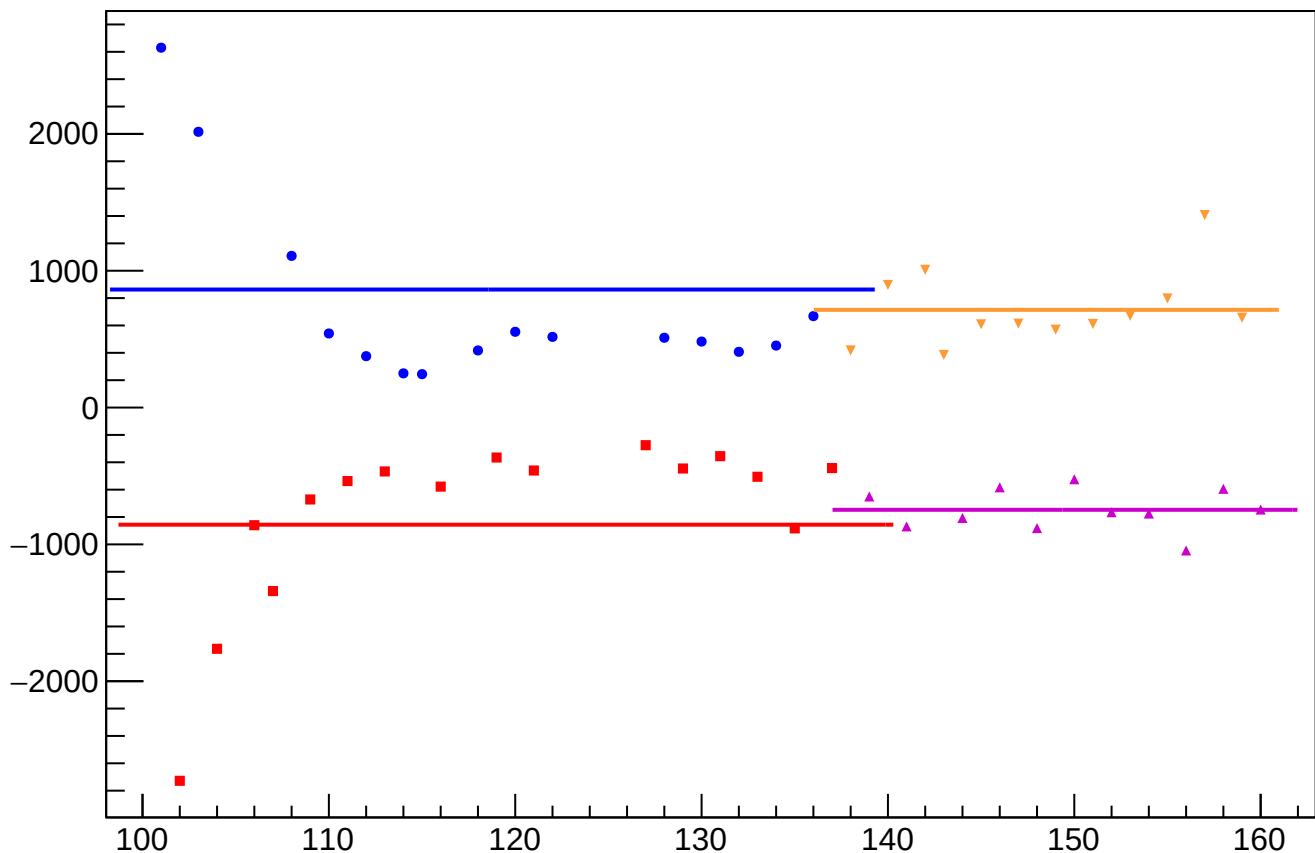
# dit\_atl2\_coil3\_mean vs Slug, Sign Corrected



Right In: 5295.485+/-0.000  $\chi^2/\text{NDF}$ : 2505645232968263275444048016093183213568.0/14  
 Left Out: 9916.420+/-0.000  $\chi^2/\text{NDF}$ : 1840714392757174837254481771479116546048.0/11  
 Right Out: -4575.270+/-0.000  $\chi^2/\text{NDF}$ : 1863322094770403739096100800072716910592.0/15  
 Left In: -10594.095+/-0.000  $\chi^2/\text{NDF}$ : 469955671378487676963254464485150162944.0/10  
 All: -107.886+/-0.000  $\chi^2/\text{NDF}$ : 23238819396



# dit\_atl2\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 862.683+/-0.000

$\chi^2/\text{NDF}$ : 337684000863819315026459106525759668224.0/14

Left Out: 714.221+/-0.000

$\chi^2/\text{NDF}$ : 63936823657083124140922251637065515008.0/11

Right Out: -856.059+/-0.000

$\chi^2/\text{NDF}$ : 327195216546444767148716224688288694272.0/15

Left In: -747.275+/-0.000

$\chi^2/\text{NDF}$ : 19678847395727730098310642242030665728.0/10

Left: -20.503+/-0.000  $\chi^2/\text{NDF}$ : 1065064961511877

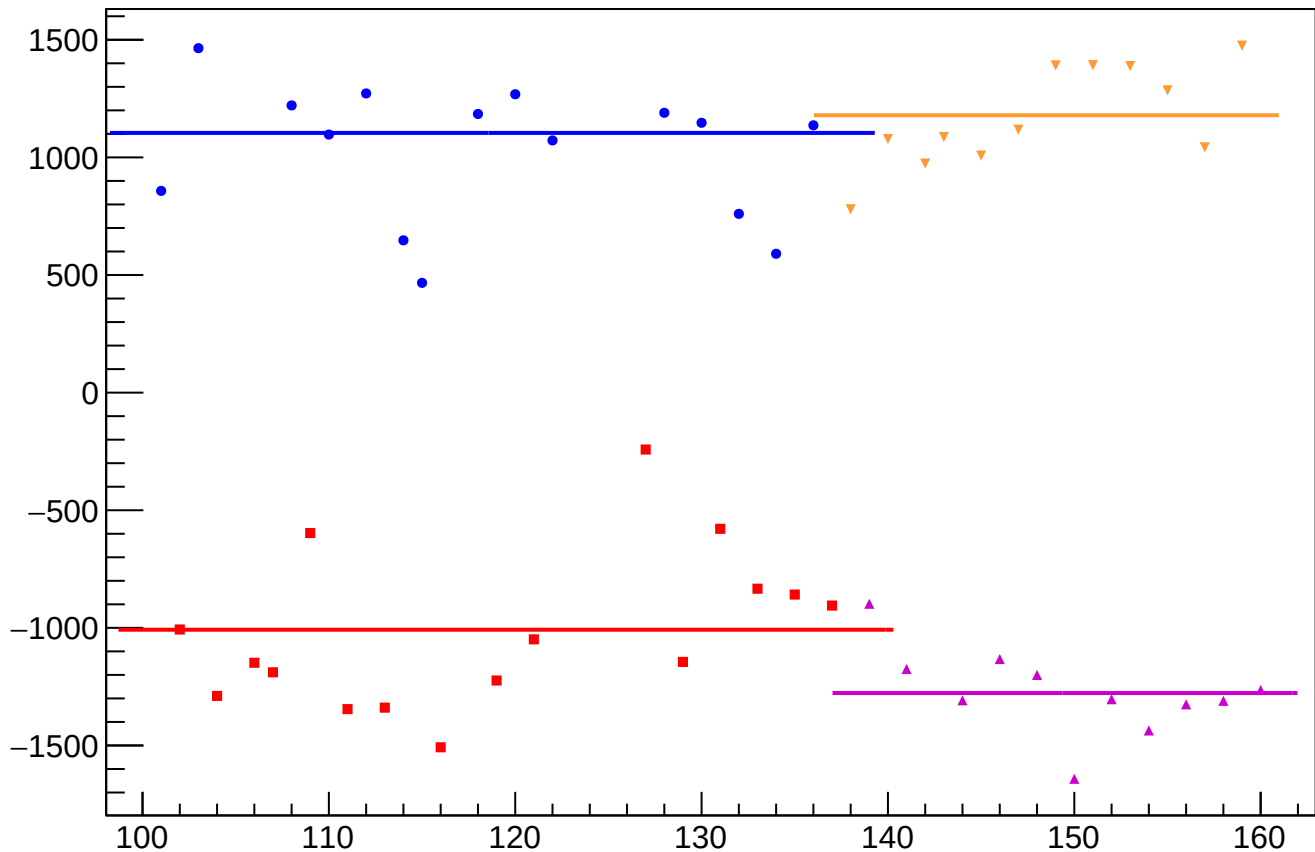
Right: -8.442+/-0.000  $\chi^2/\text{NDF}$ : 1636587396882894

In: -83.027+/-0.000  $\chi^2/\text{NDF}$ : 13454995318402178

Out: 51.744+/-0.000  $\chi^2/\text{NDF}$ : 13419429235658595

All: -15.471+/-0.000  $\chi^2/\text{NDF}$ : 270176391125

dit\_atl2\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111+/-0.000

$\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14

Left Out: 1179.336+/-0.000

$\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11

Right Out: -1007.906+/-0.000

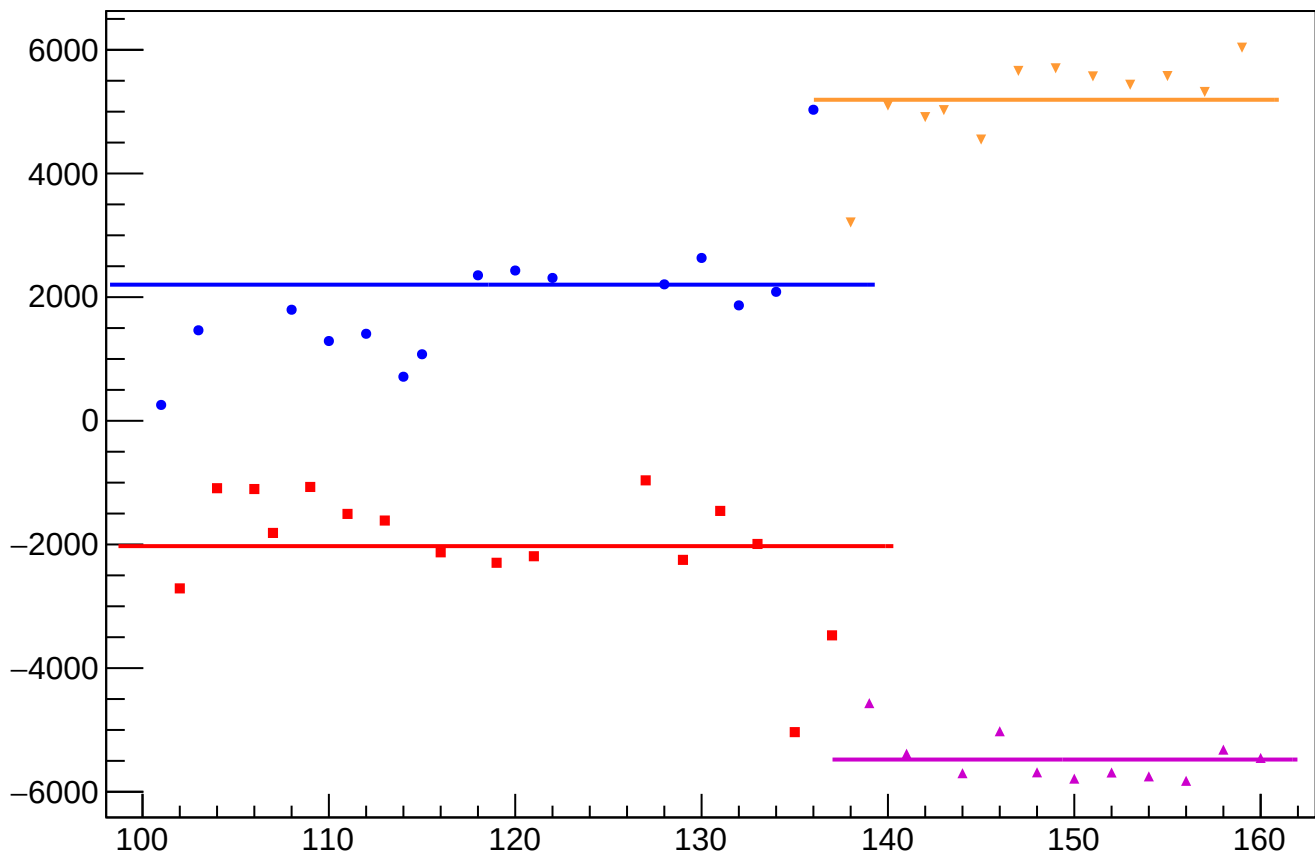
$\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15

Left In: -1277.097+/-0.000

$\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

Left: -55.563+/-0.000  $\chi^2/\text{NDF}$ : 2840892210996509  
 Right: 33.659+/-0.000  $\chi^2/\text{NDF}$ : 1569083056347410  
 In: -294.641+/-0.000  $\chi^2/\text{NDF}$ : 2223953426306853  
 Out: 256.572+/-0.000  $\chi^2/\text{NDF}$ : 1952554182211910  
 All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_atr1\_coil3\_mean vs Slug, Sign Corrected



Right In: 2201.844+/-0.000

$\chi^2/\text{NDF}$ : 1086544775216266395419904724422998622208.0/14

Left Out: 5192.476+/-0.000

$\chi^2/\text{NDF}$ : 470317118435532937200148346508624789504.0/11

Right Out: -2026.969+/-0.000

$\chi^2/\text{NDF}$ : 708626456603410705124518299956645199872.0/15

Left In: -5478.713+/-0.000

$\chi^2/\text{NDF}$ : 124186054771424011873849346802583601152.0/10

Left: -172.148+/-0.000  $\chi^2/\text{NDF}$ : 529181779614152

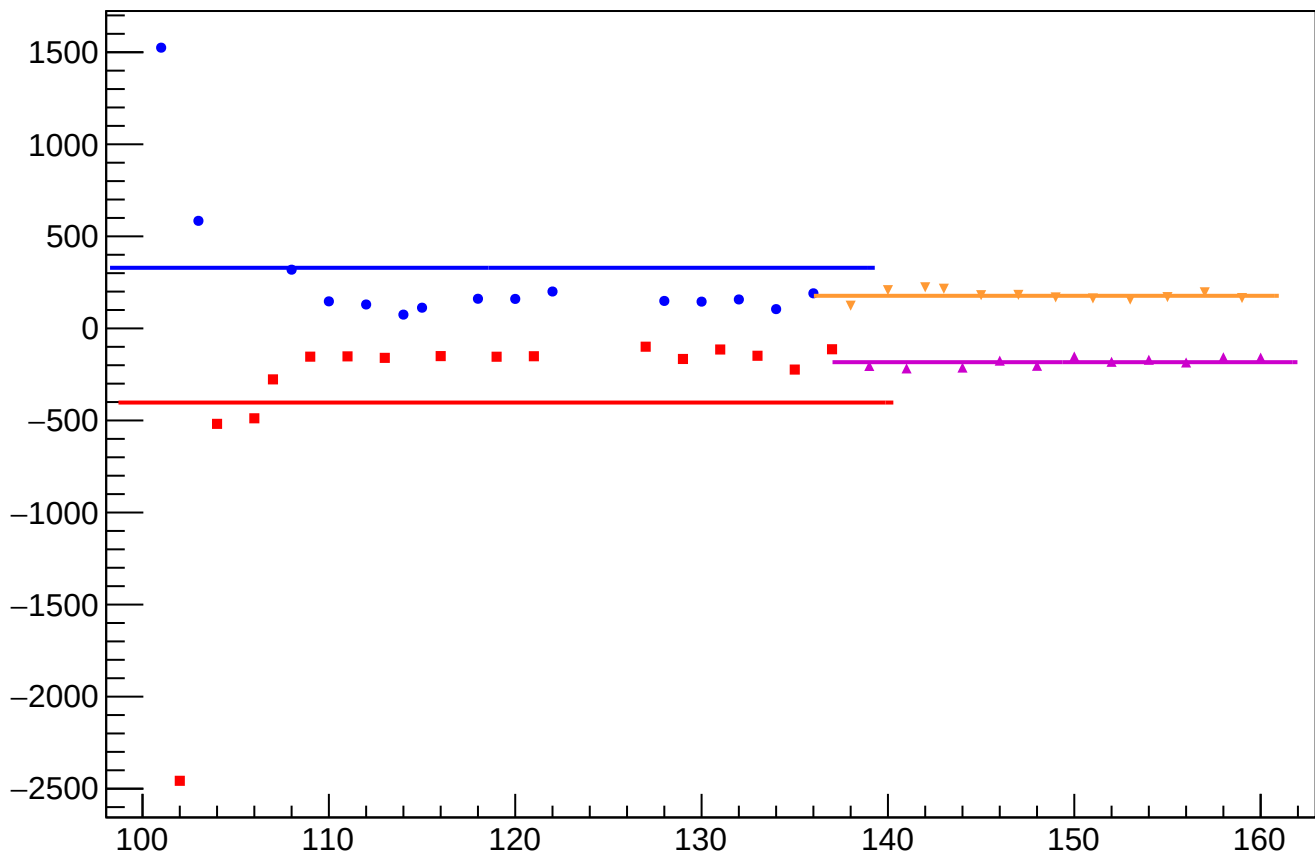
Right: 58.517+/-0.000  $\chi^2/\text{NDF}$ : 7677530711207331

In: -2309.812+/-0.000  $\chi^2/\text{NDF}$ : 236998936360445

Out: 2146.701+/-0.000  $\chi^2/\text{NDF}$ : 212767096674295

All: -75.903+/-0.000  $\chi^2/\text{NDF}$ : 606365125250

# dit\_atr1\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 329.229+/-0.000

$\chi^2/\text{NDF}$ : 103285029091922742033837903437132464128.0/14

Left Out: 177.101+/-0.000

$\chi^2/\text{NDF}$ : 604256347376555065664943941601984512.0/11

Right Out: -402.690+/-0.000

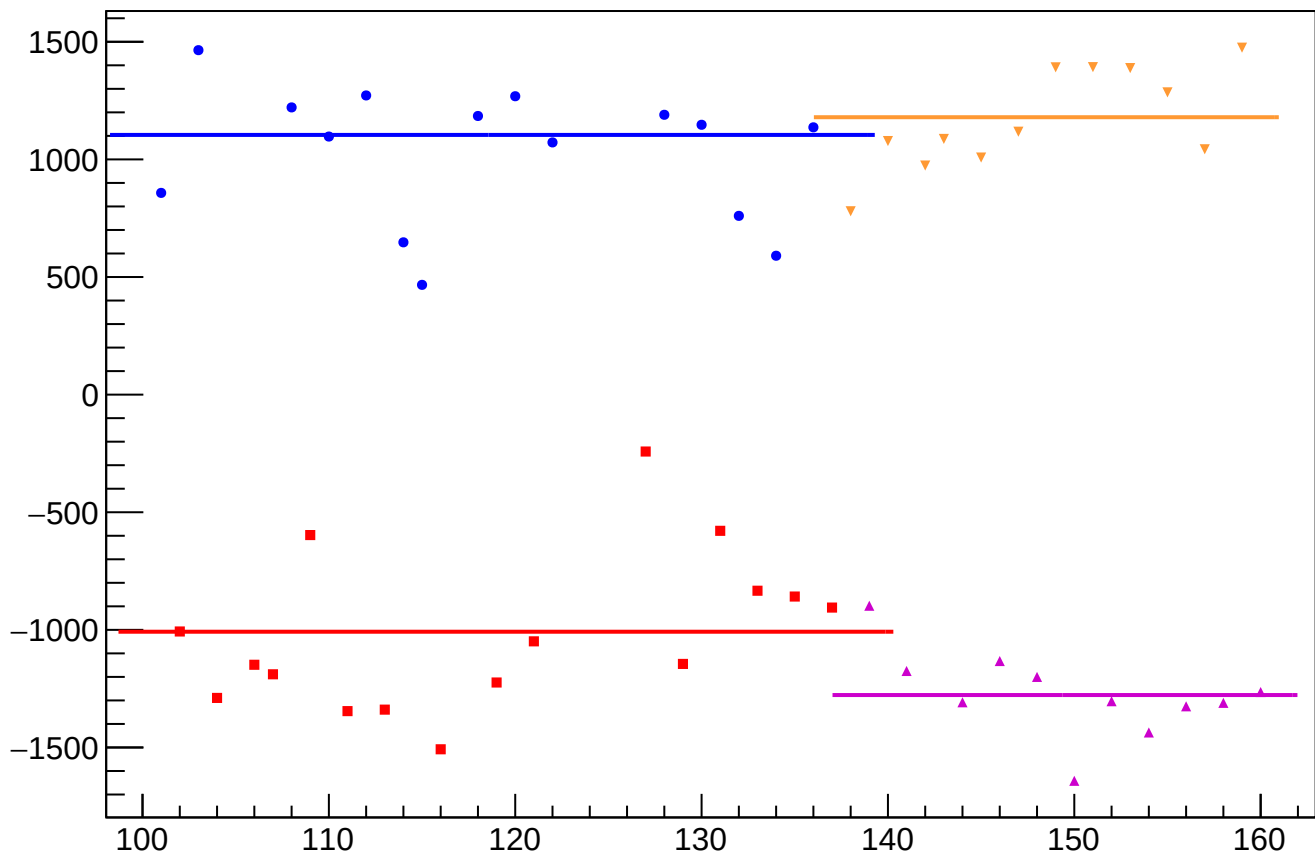
$\chi^2/\text{NDF}$ : 277636056793293374242116053515003494400.0/15

Left In: -183.411+/-0.000

$\chi^2/\text{NDF}$ : 452789814018275751637875535657304064.0/10

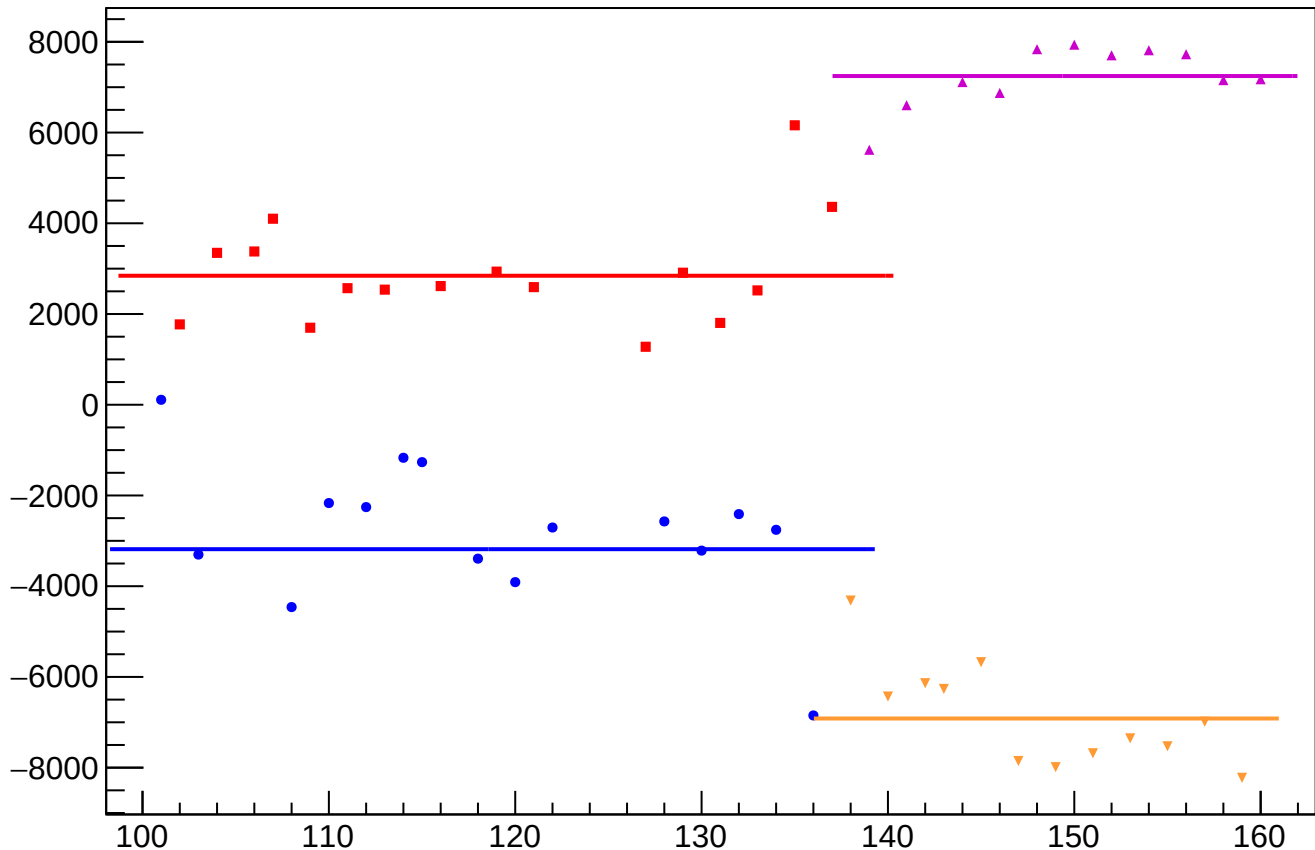
All: -19.824+/-0.000  $\chi^2/\text{NDF}$ : 618995356861

dit\_atr1\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906+/-0.000  $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_atr2\_coil3\_mean vs Slug, Sign Corrected



Right In: -3183.928+/-0.000

Left Out: -6916.269+/-0.000

Right Out: 2843.597+/-0.000

Left In: 7245.920+/-0.000

$\chi^2/\text{NDF}$ : 2134923281384422537296044119642733543424.0/14

$\chi^2/\text{NDF}$ : 1116807093678978049721043579861444067328.0/11

$\chi^2/\text{NDF}$ : 947077611563723244705531091944015396864.0/15

$\chi^2/\text{NDF}$ : 401760462783969098772010925007315140608.0/10

Left: 203.352+/-0.000  $\chi^2/\text{NDF}$ : 9367664182142015

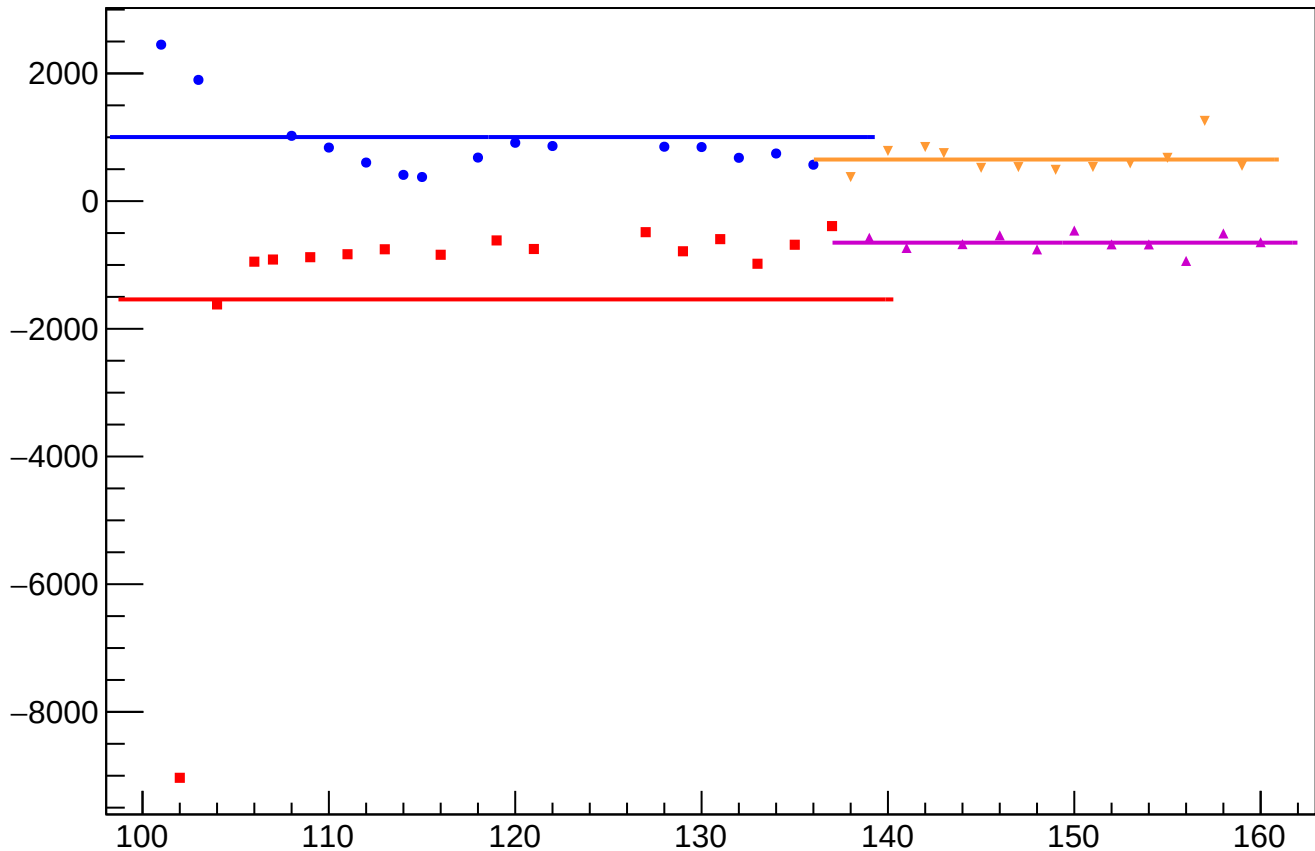
Right: -128.944+/-0.000  $\chi^2/\text{NDF}$ : 15032681342441

In: 2942.696+/-0.000  $\chi^2/\text{NDF}$ : 440076230139336

Out: -2798.729+/-0.000  $\chi^2/\text{NDF}$ : 38794467171221

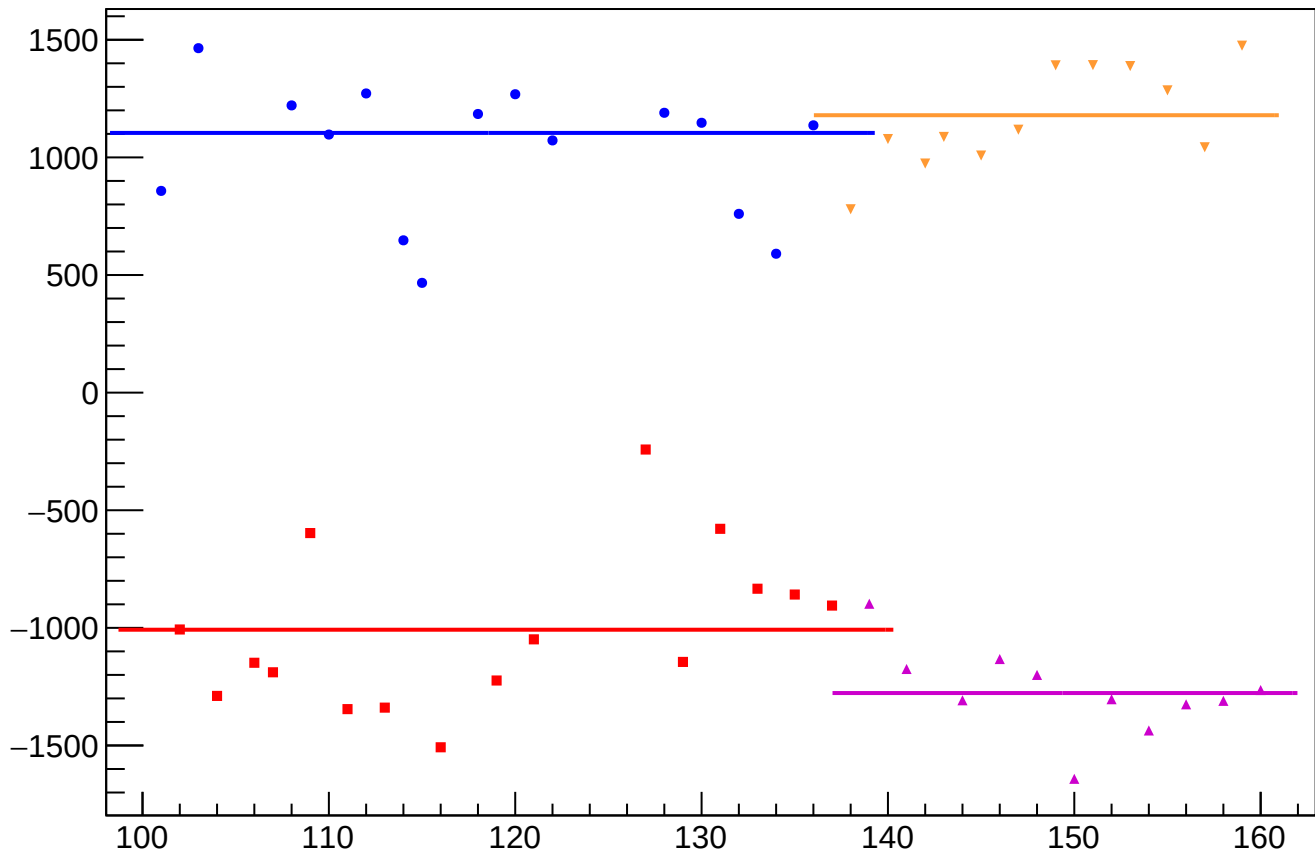
All: 64.702+/-0.000  $\chi^2/\text{NDF}$ : 1087940046919

# dit\_atr2\_coil3\_err\_mean vs Slug, Sign Corrected



Left:  $-3.137 \pm 0.000$   $\chi^2/\text{NDF}: 83969979485831992$   
 Right In:  $1003.407 \pm 0.000$   $\chi^2/\text{NDF}: 219815257294811198811064619822196195328.0/14$   
 Right:  $-285.472 \pm 0.000$   $\chi^2/\text{NDF}: 59617429830759$   
 Left Out:  $651.582 \pm 0.000$   $\chi^2/\text{NDF}: 45579416700188389340899783793497341952.0/11$   
 In:  $31.723 \pm 0.000$   $\chi^2/\text{NDF}: 127775317532397342$   
 Right Out:  $-1539.568 \pm 0.000$   $\chi^2/\text{NDF}: 3614774785297482293145354574125437288448.0/15$   
 Out:  $-272.831 \pm 0.000$   $\chi^2/\text{NDF}: 551168647234999$   
 Left In:  $-650.769 \pm 0.000$   $\chi^2/\text{NDF}: 14776465774858799846922535858394365952.0/10$   
 All:  $-120.940 \pm 0.000$   $\chi^2/\text{NDF}: 68625749232$

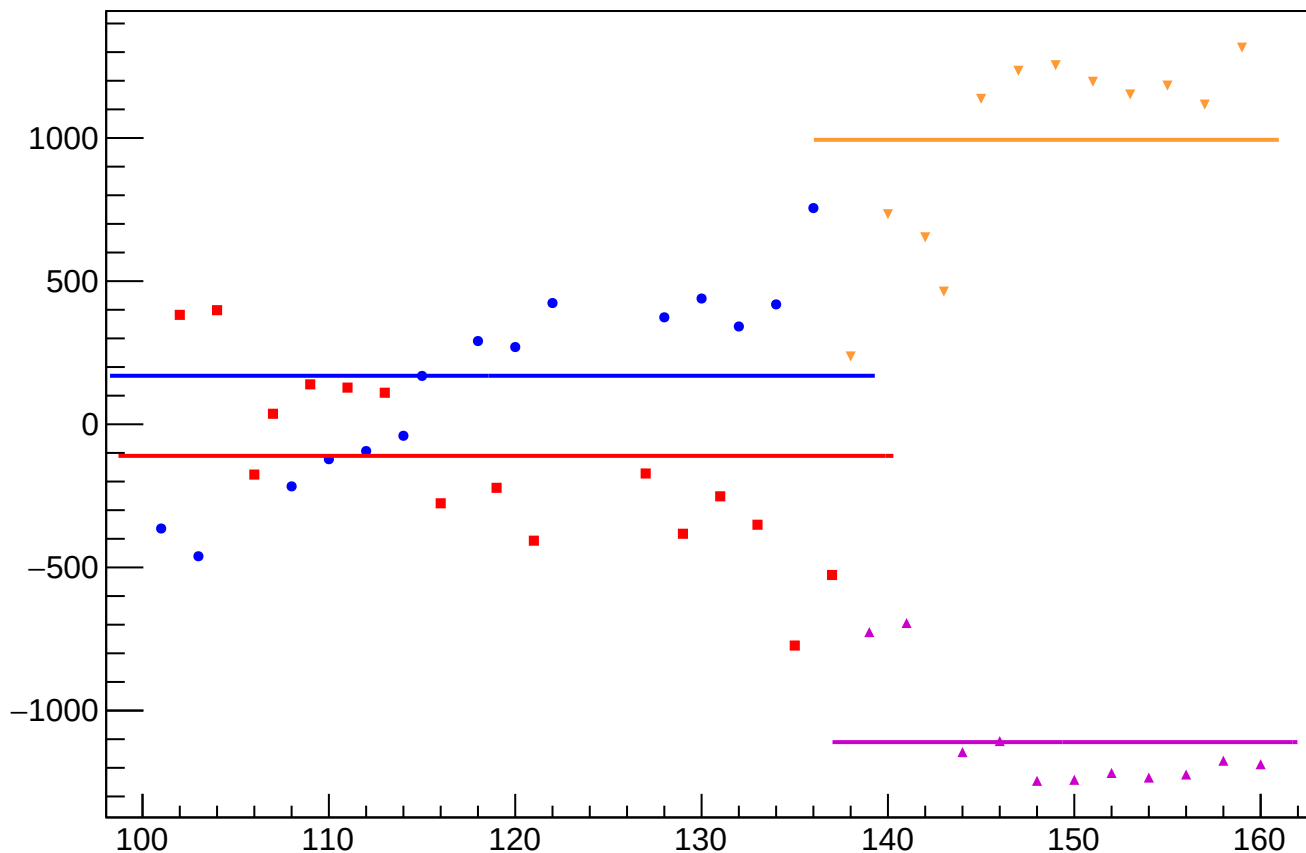
dit\_atr2\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906+/-0.000  $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845



# dit\_sam1\_coil3\_mean vs Slug, Sign Corrected



Right In: 169.489 +/- 0.000

$\chi^2/\text{NDF}$ : 95435894585210891032426613567490359296.0/14

Left Out: 993.680 +/- 0.000

$\chi^2/\text{NDF}$ : 103871744093271862136270527542037839872.0/11

Right Out: -110.289 +/- 0.000

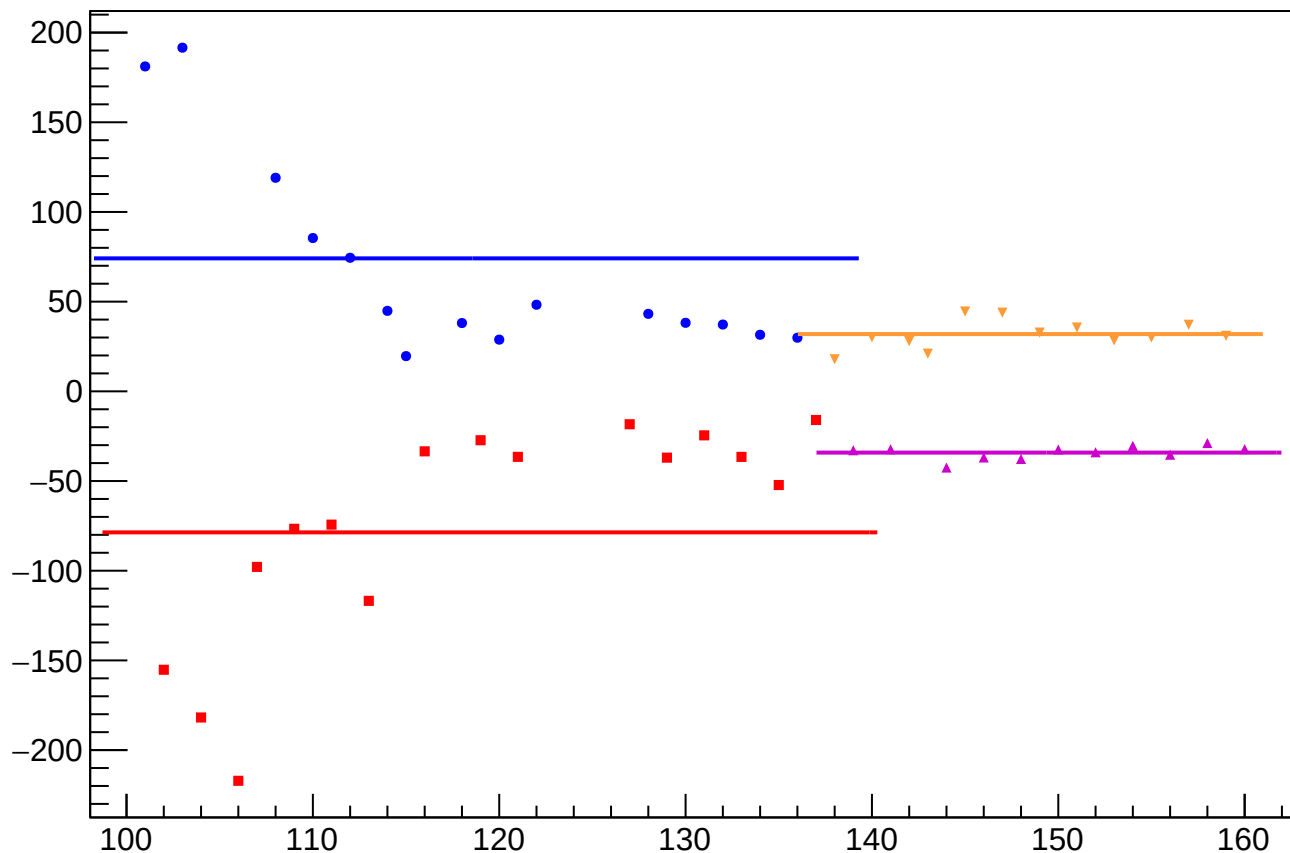
$\chi^2/\text{NDF}$ : 71770784102052938523592716508479881216.0/15

Left In: -1110.204 +/- 0.000

$\chi^2/\text{NDF}$ : 34078671675207101758695575343264169984.0/10

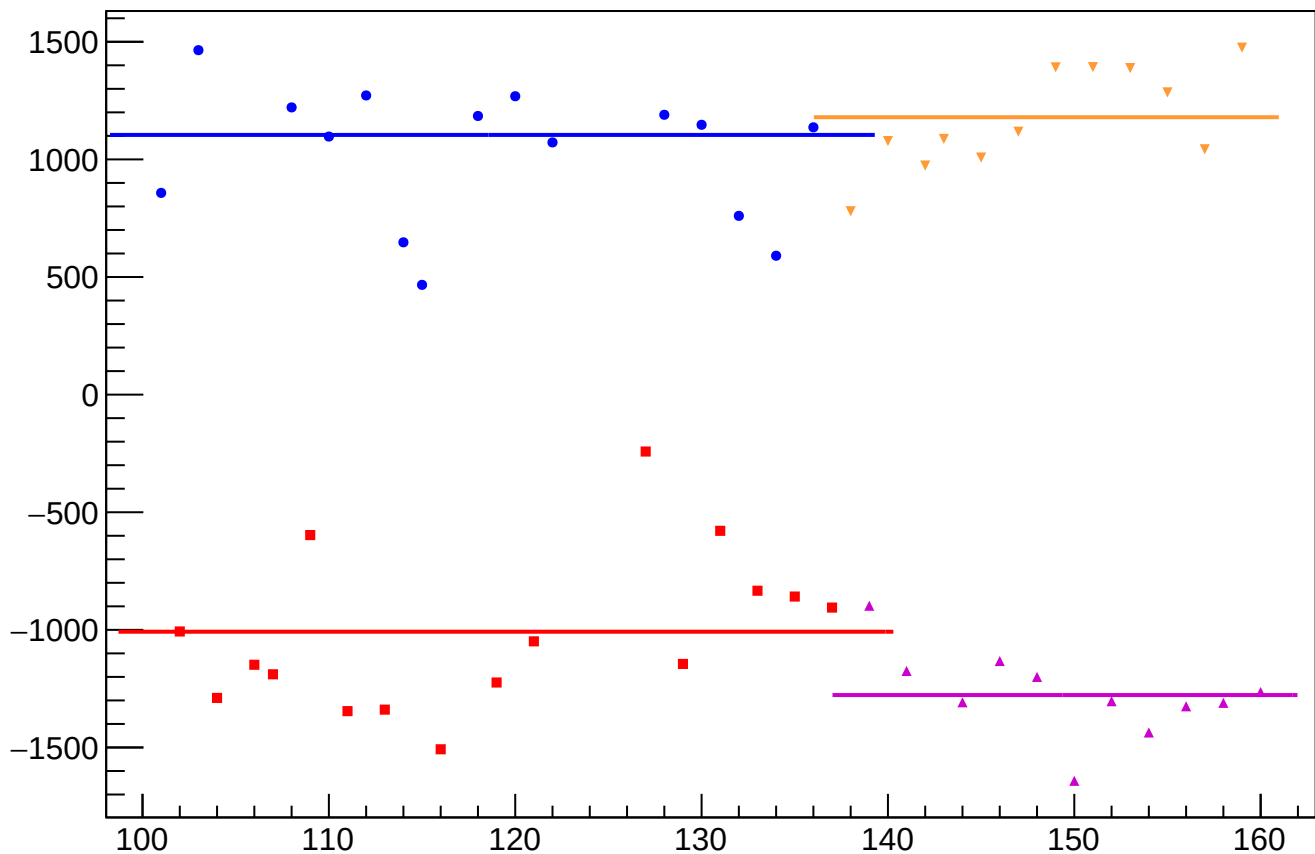
All: -25.735 +/- 0.000  $\chi^2/\text{NDF}$ : 237118807737

dit\_sam1\_coil3\_err\_mean vs Slug, Sign Corrected



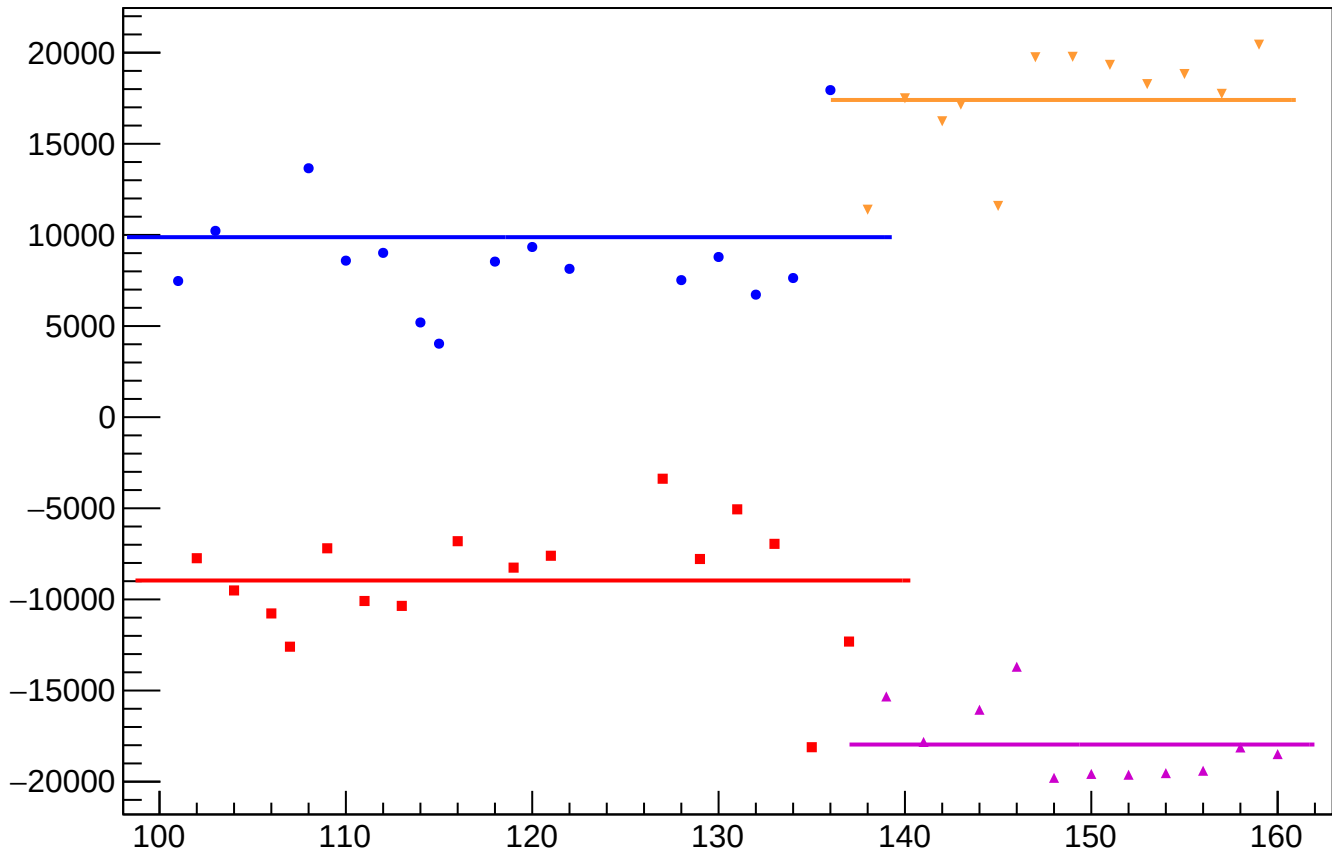
Right In: 74.129+/-0.000  $\chi^2/\text{NDF}$ : 2168375717401207322620658258081218560.0/14  
 Left Out: 31.916+/-0.000  $\chi^2/\text{NDF}$ : 52391134971476446801164737802403840.0/11  
 Right Out: -78.633+/-0.000  $\chi^2/\text{NDF}$ : 2343230336879830638767678903539466240.0/15  
 Left In: -34.158+/-0.000  $\chi^2/\text{NDF}$ : 12535781757096828038064244290224128.0/10  
 All: -2.134+/-0.000  $\chi^2/\text{NDF}$ : 1426173775487

dit\_sam1\_coil3\_Ndata\_mean vs Slug, Sign Corrected



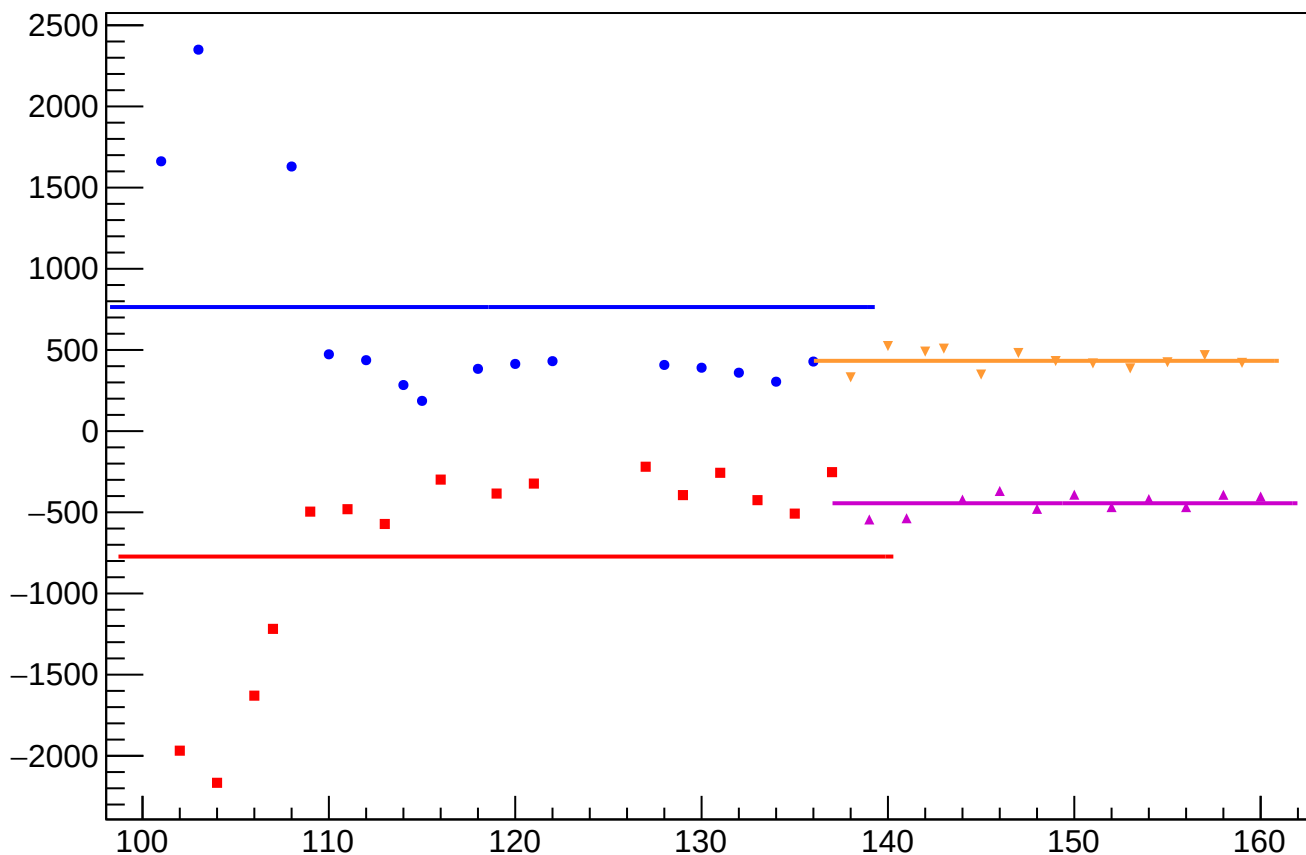
Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906+/-0.000  $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

dit\_sam2\_coil3\_mean vs Slug, Sign Corrected



Right In:  $9876.530 \pm 0.000$   $\chi^2/\text{NDF}: 8483360287053054122301651905797133697024.0/14$   
 Left Out:  $17405.049 \pm 0.000$   $\chi^2/\text{NDF}: 7689801671099378791544545422175664865280.0/11$   
 Right Out:  $-8961.593 \pm 0.000$   $\chi^2/\text{NDF}: 7583728644146461427304320888408335450112.0/15$   
 Left In:  $-17962.529 \pm 0.000$   $\chi^2/\text{NDF}: 3564698291142811133043344688261317525504.0/10$   
 All:  $-81.381 \pm 0.000$   $\chi^2/\text{NDF}: 719188962323$

dit\_sam2\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 764.284+/-0.000  $\chi^2/\text{NDF}$ : 290964758058269480005067205020030599168.0/14

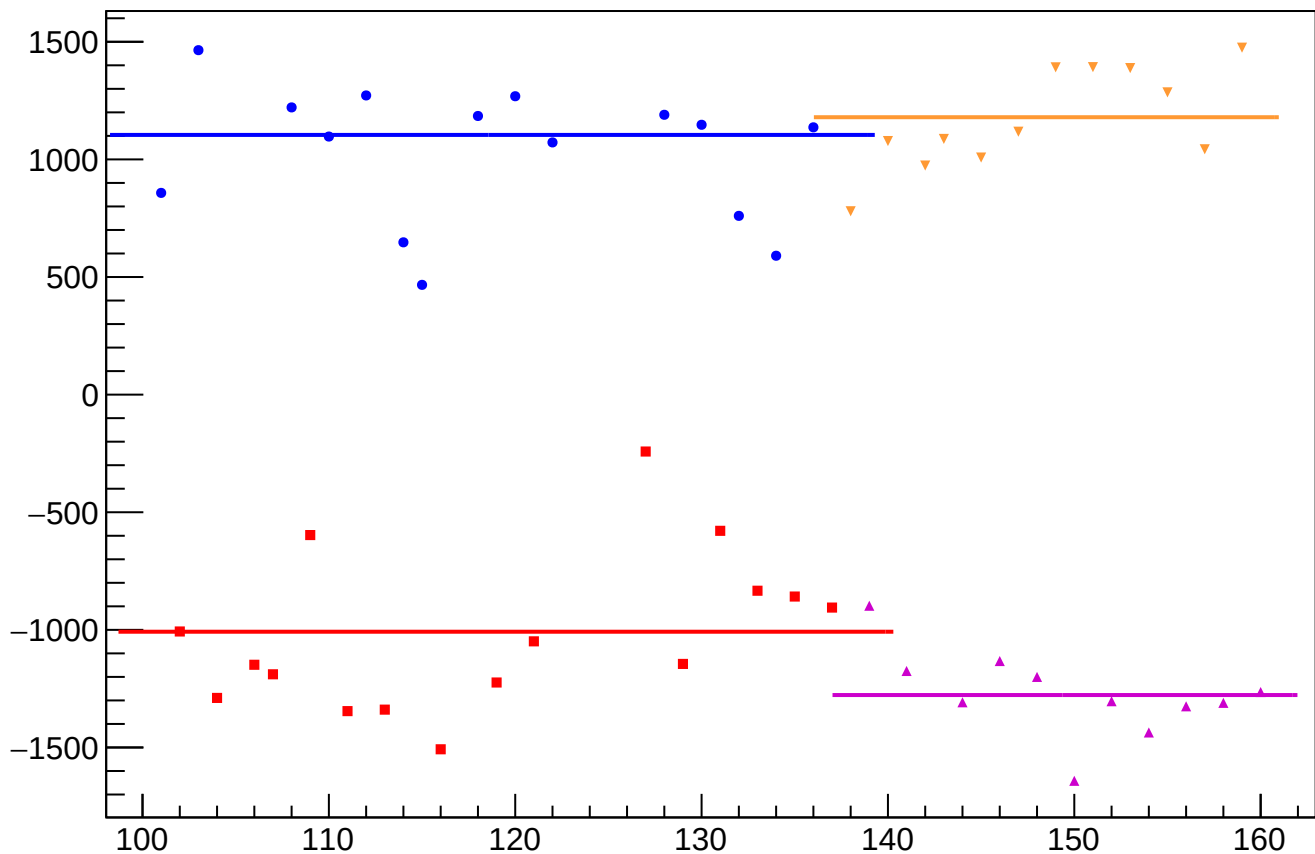
Left Out: 433.079+/-0.000  $\chi^2/\text{NDF}$ : 3070370524438239159273190119476035584.0/11

Right Out: -772.547+/-0.000  $\chi^2/\text{NDF}$ : 285902138904642401278625587631891677184.0/15

Left In: -444.245+/-0.000  $\chi^2/\text{NDF}$ : 2906625839452991270105053894151241728.0/10

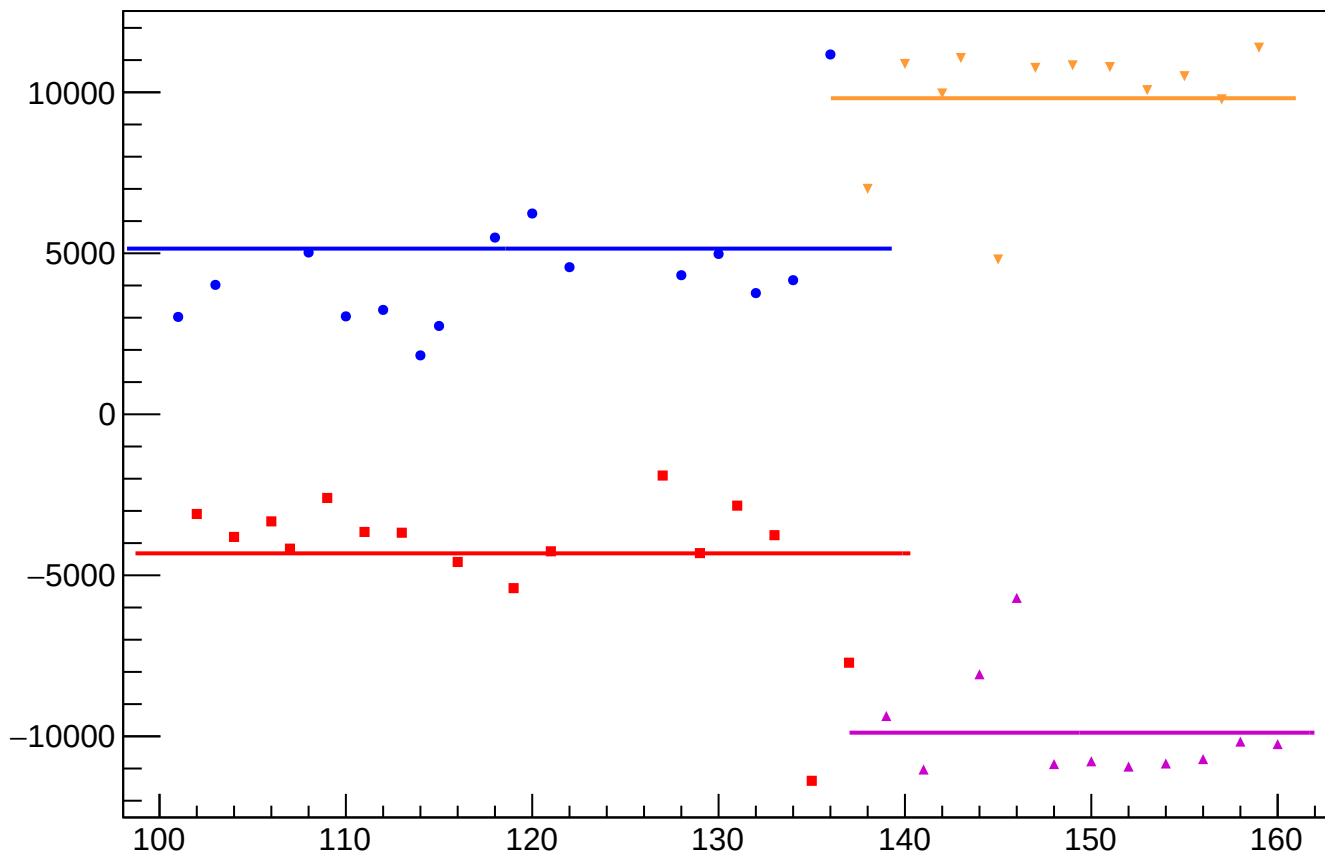
All: -10.754+/-0.000  $\chi^2/\text{NDF}$ : 171344684046

dit\_sam2\_coil3\_Ndata\_mean vs Slug, Sign Corrected



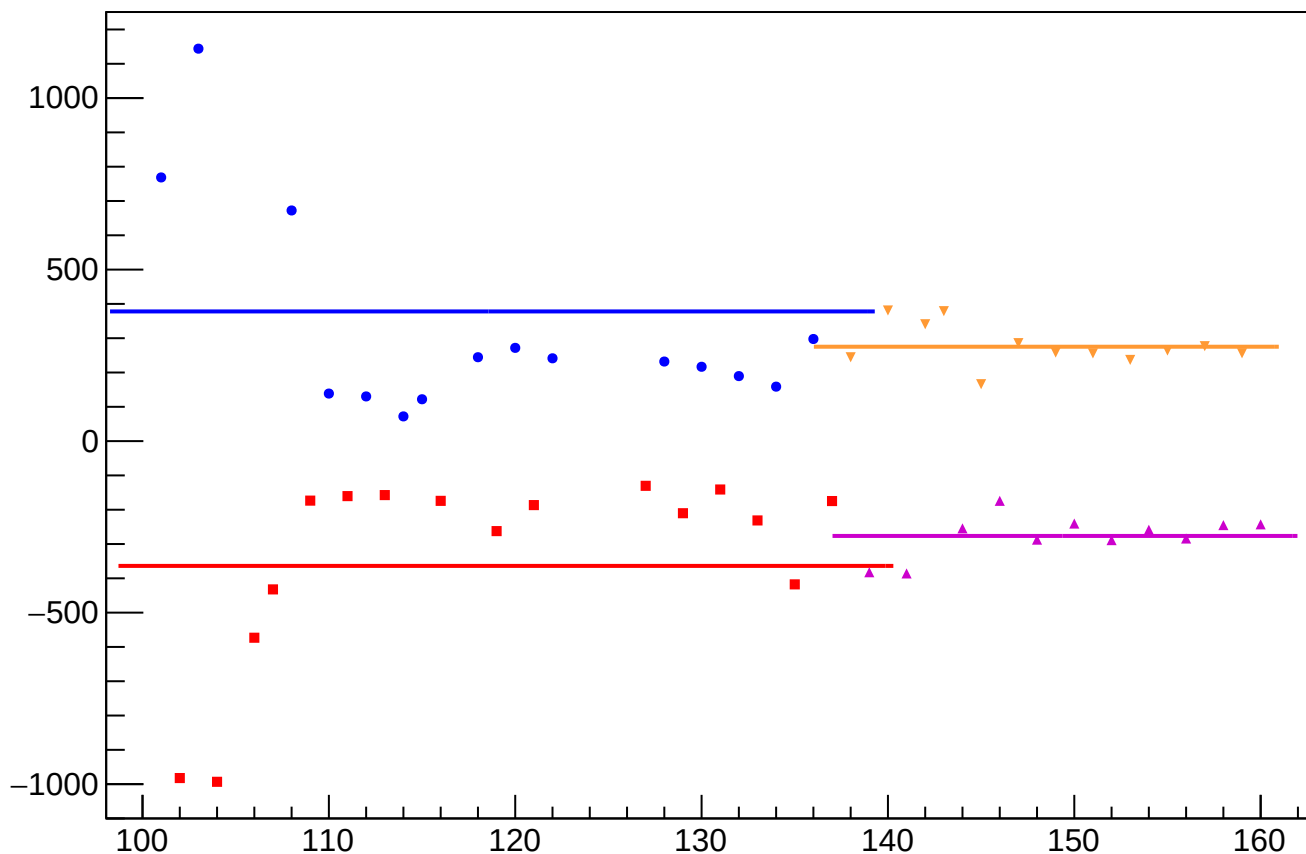
Right In: 1104.111 $\pm$ 0.000  $\chi^2$ /NDF: 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336 $\pm$ 0.000  $\chi^2$ /NDF: 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906 $\pm$ 0.000  $\chi^2$ /NDF: 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097 $\pm$ 0.000  $\chi^2$ /NDF: 29578729901602647998073818936097374208.0/10  
 All: -18.335 $\pm$ 0.000  $\chi^2$ /NDF: 441608022845

# dit\_sam3\_coil3\_mean vs Slug, Sign Corrected



Right In: 5145.657+/-0.000  $\chi^2/\text{NDF}$ : 4272867262459372237810540195851662262272.0/14  
 Left Out: 9815.736+/-0.000  $\chi^2/\text{NDF}$ : 3242126212507286714618316704208262266880.0/11  
 Right Out: -4318.126+/-0.000  $\chi^2/\text{NDF}$ : 3345176554564755427312533888908526616576.0/15  
 Left In: -9887.069+/-0.000  $\chi^2/\text{NDF}$ : 2278516780225824082632420288802127347712.0/10  
 All: 93.618+/-0.000  $\chi^2/\text{NDF}$ : 2211196592737

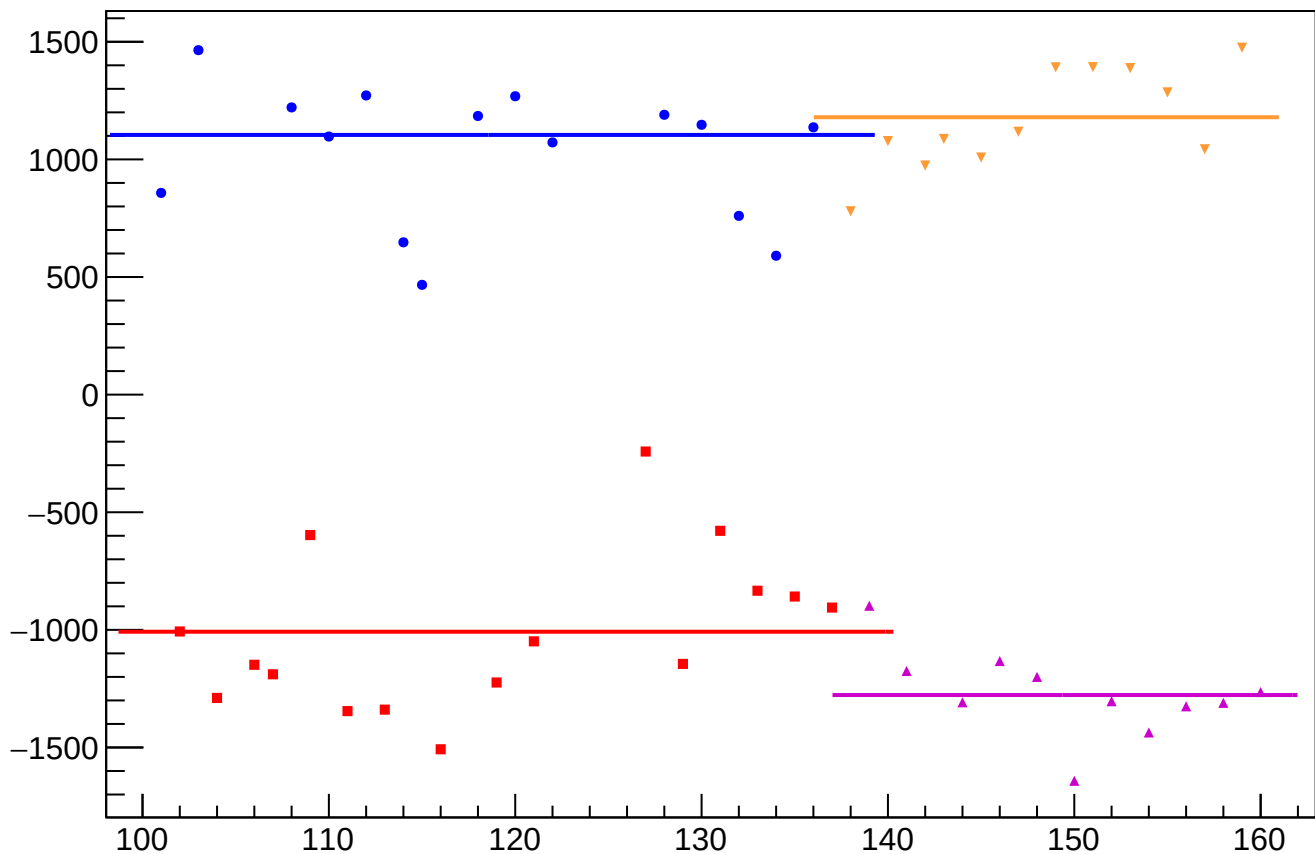
dit\_sam3\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 378.052 $\pm$ 0.000  $\chi^2$ /NDF: 61516590022593053040860760861331947520.0/14  
 Left Out: 275.181 $\pm$ 0.000  $\chi^2$ /NDF: 3063973924838483752648023856495198208.0/11  
 Right Out: -363.772 $\pm$ 0.000  $\chi^2$ /NDF: 59031337484709801804181439342706688000.0/15  
 Left In: -276.429 $\pm$ 0.000  $\chi^2$ /NDF: 3176476969276554988209041450490396672.0/10  
 All: -0.376 $\pm$ 0.000  $\chi^2$ /NDF: 4476277184699



dit\_sam3\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111+/-0.000

$\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14

Left Out: 1179.336+/-0.000

$\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11

Right Out: -1007.906+/-0.000

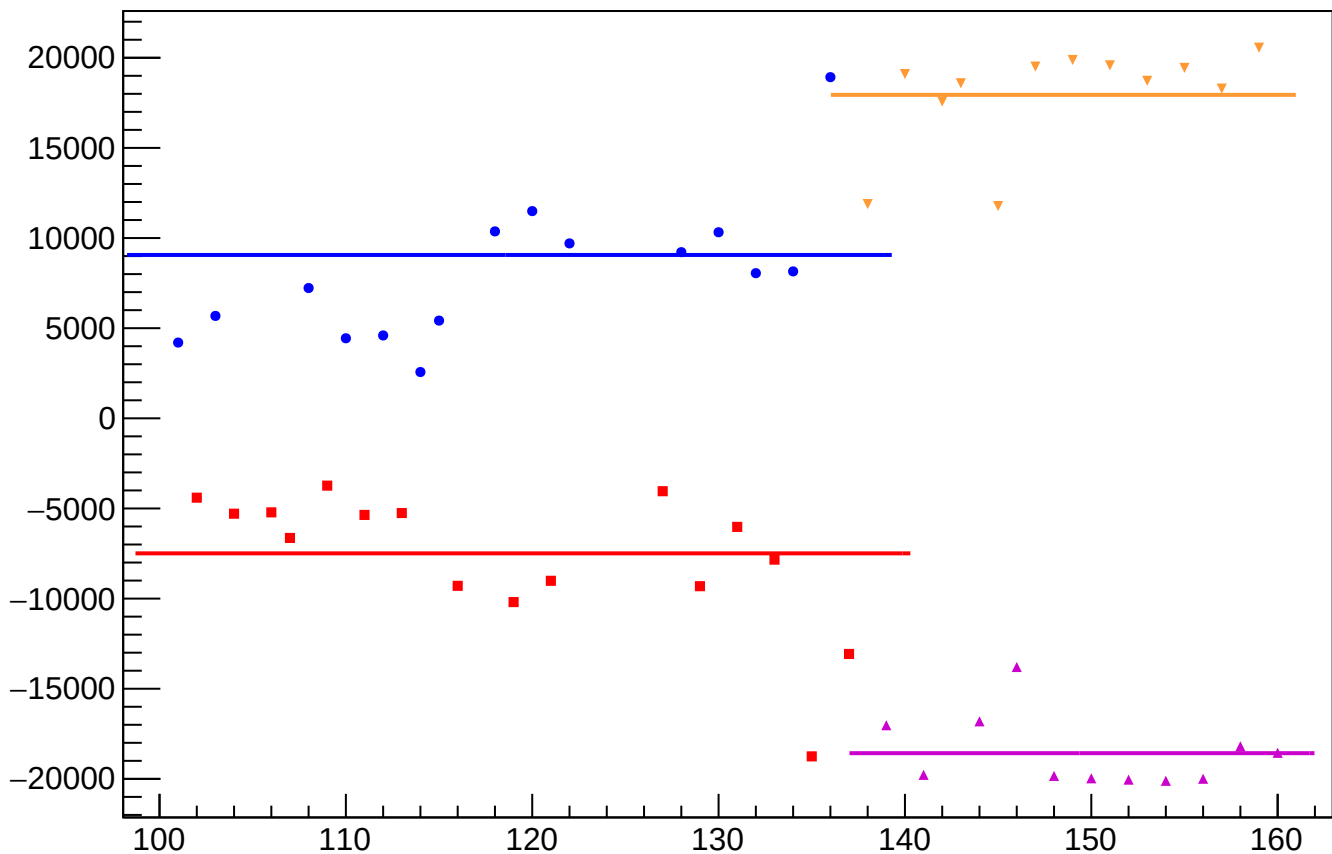
$\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15

Left In: -1277.097+/-0.000

$\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

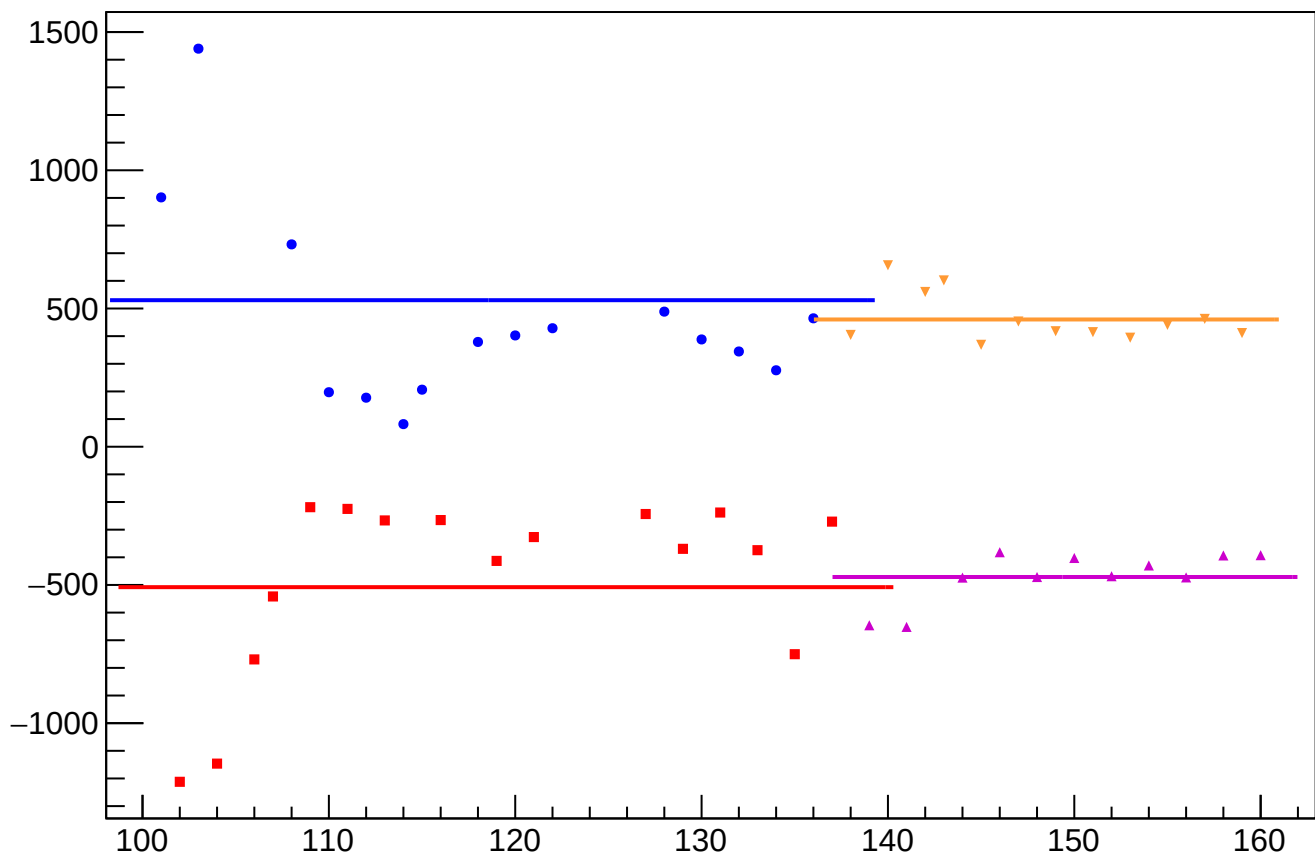
All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_sam4\_coil3\_mean vs Slug, Sign Corrected



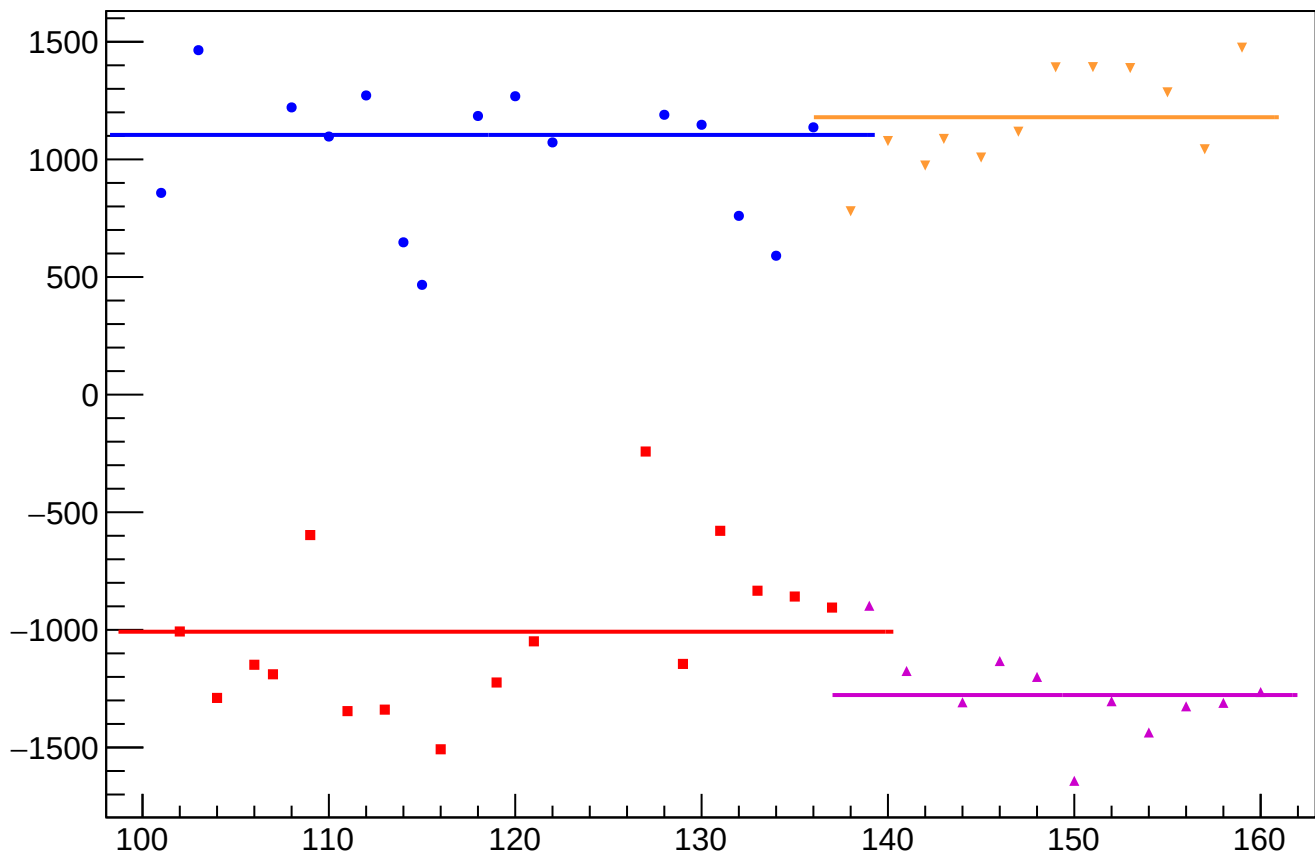
Right In: 9062.710 $\pm$ 0.000  $\chi^2$ /NDF: 13621066943114354594159252409175431446528.0/14  
 Left Out: 17943.531 $\pm$ 0.000  $\chi^2$ /NDF: 7473617733274816603280469921274378846208.0/11  
 Right Out: -7490.147 $\pm$ 0.000  $\chi^2$ /NDF: 10108202124204139932285006457388239159296.0/15  
 Left In: -18574.874 $\pm$ 0.000  $\chi^2$ /NDF: 3371752936319538414648384836142763081728.0/10  
 All: 38.990 $\pm$ 0.000  $\chi^2$ /NDF: 7383790559071

# dit\_sam4\_coil3\_err\_mean vs Slug, Sign Corrected



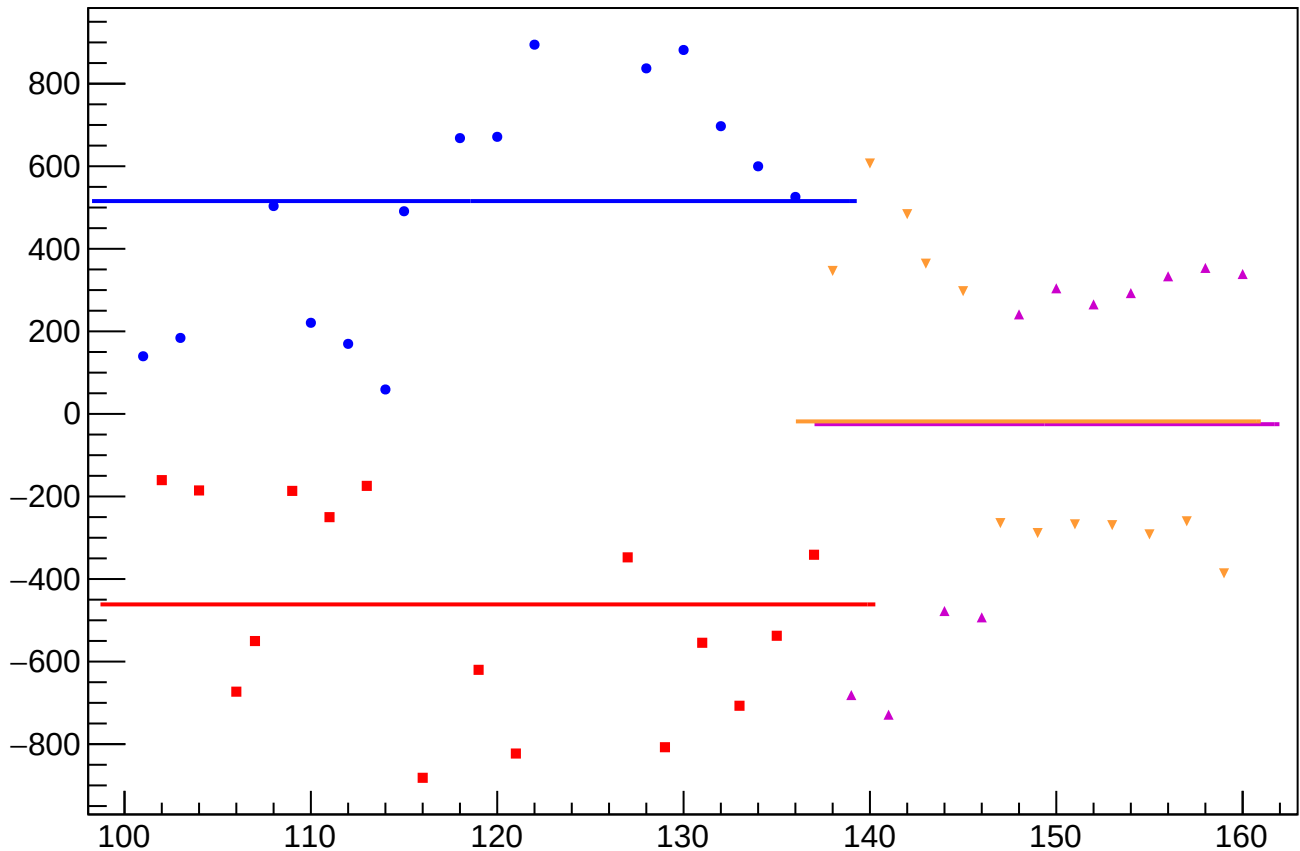
Right In: 530.057+/-0.000  $\chi^2/\text{NDF}$ : 78754676063063255524046471751880671232.0/14  
 Left Out: 460.312+/-0.000  $\chi^2/\text{NDF}$ : 6754606428371283053517529701630869504.0/11  
 Right Out: -507.987+/-0.000  $\chi^2/\text{NDF}$ : 76689734698308464337881841969555046400.0/15  
 Left In: -471.219+/-0.000  $\chi^2/\text{NDF}$ : 7445973219160336257467772011051745280.0/10  
 All: -3.012+/-0.000  $\chi^2/\text{NDF}$ : 9229168077860

dit\_sam4\_coil3\_Ndata\_mean vs Slug, Sign Corrected



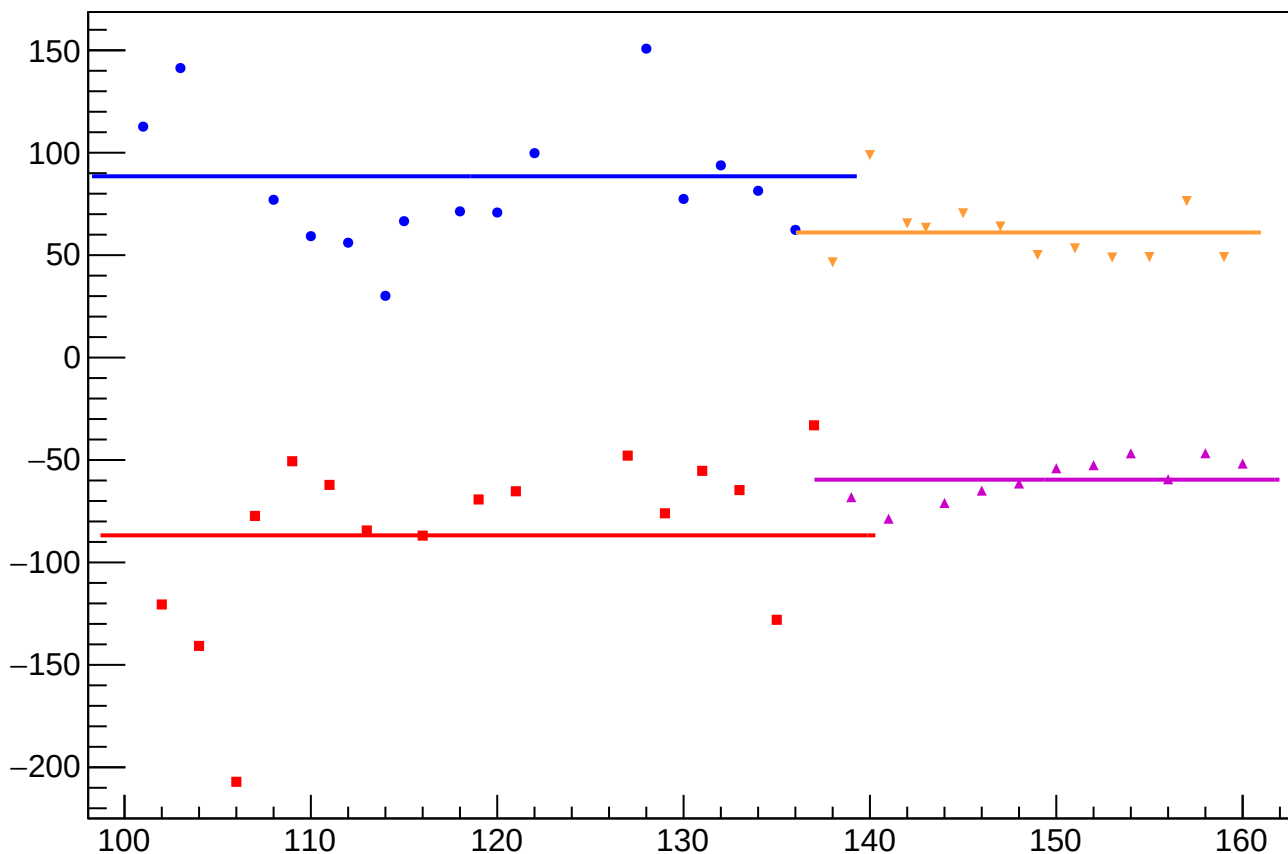
Left: -55.563 +/- 0.000  $\chi^2/\text{NDF}$ : 2840892210996509  
 Right In: 1104.111 +/- 0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Right: 33.659 +/- 0.000  $\chi^2/\text{NDF}$ : 1569083056347410  
 Left Out: 1179.336 +/- 0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 In: -294.641 +/- 0.000  $\chi^2/\text{NDF}$ : 2223953426306853  
 Right Out: -1007.906 +/- 0.000  $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Out: 256.572 +/- 0.000  $\chi^2/\text{NDF}$ : 1952554182211910  
 Left In: -1277.097 +/- 0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All: -18.335 +/- 0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_sam5\_coil3\_mean vs Slug, Sign Corrected



Left:  $-21.540 \pm 0.000$   $\chi^2/\text{NDF}: 2912056569899347$   
 Right In:  $515.635 \pm 0.000$   $\chi^2/\text{NDF}: 48465403420573957292673062371162324992.0/14$   
 Right:  $20.387 \pm 0.000$   $\chi^2/\text{NDF}: 4030056130167457$   
 Left Out:  $-18.146 \pm 0.000$   $\chi^2/\text{NDF}: 114014627327363890146179797072763420672.0/11$   
 In:  $198.120 \pm 0.000$   $\chi^2/\text{NDF}: 33702193102447450$   
 Right Out:  $-461.497 \pm 0.000$   $\chi^2/\text{NDF}: 40473746660091355928063306884368564224.0/15$   
 Out:  $-205.189 \pm 0.000$   $\chi^2/\text{NDF}: 230282610229259$   
 Left In:  $-24.898 \pm 0.000$   $\chi^2/\text{NDF}: 177170083146066340419686697250307702784.0/10$   
 All:  $-4.046 \pm 0.000$   $\chi^2/\text{NDF}: 6955593653745$

dit\_sam5\_coil3\_err\_mean vs Slug, Sign Corrected



Right In:  $88.493 \pm 0.000$   $\chi^2/\text{NDF}: 643231155193035512625817963208900608.0/14$

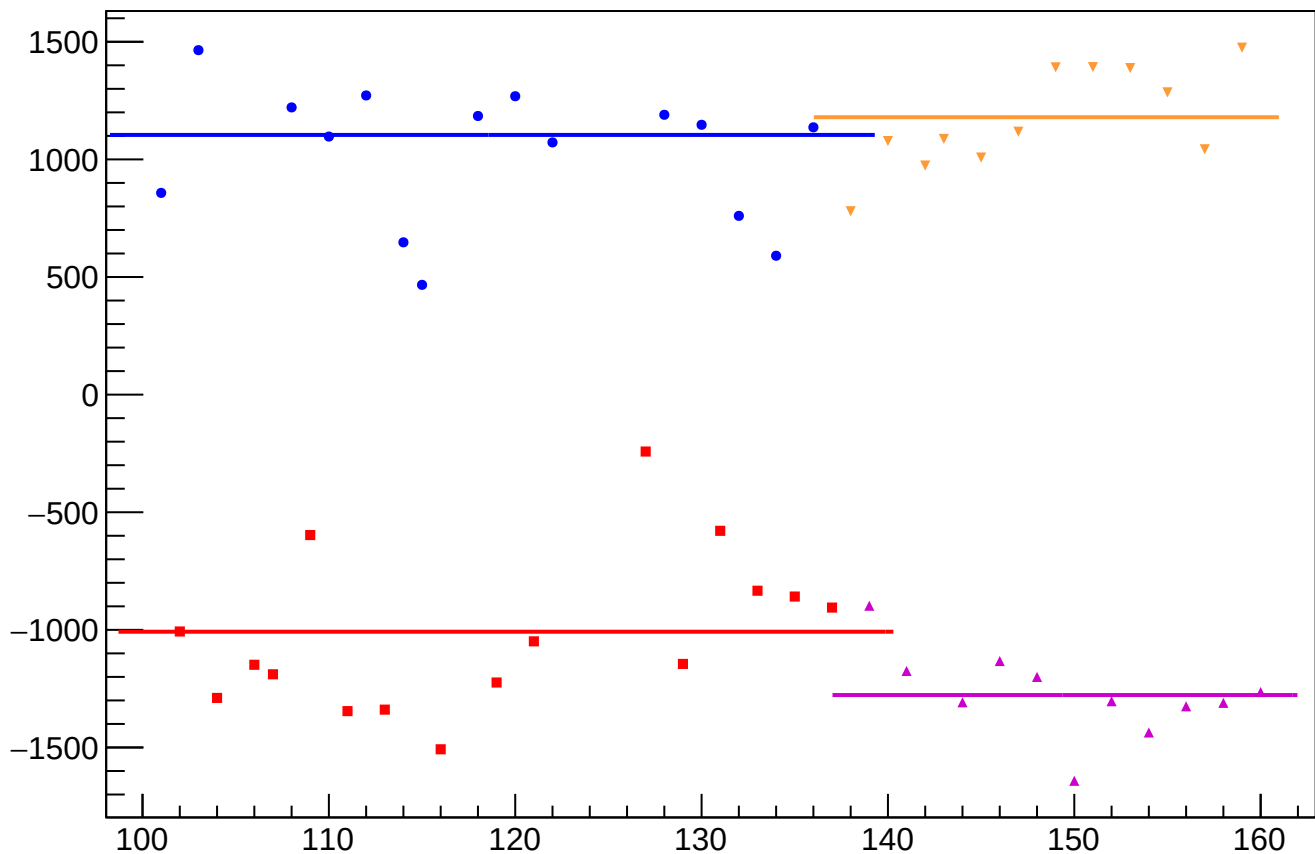
Left Out:  $61.067 \pm 0.000$   $\chi^2/\text{NDF}: 211507080213048507647331077961285632.0/11$

Right Out:  $-86.773 \pm 0.000$   $\chi^2/\text{NDF}: 1059206766314086021240525003228708864.0/15$

Left In:  $-59.604 \pm 0.000$   $\chi^2/\text{NDF}: 90862625181985664375323463168032768.0/10$

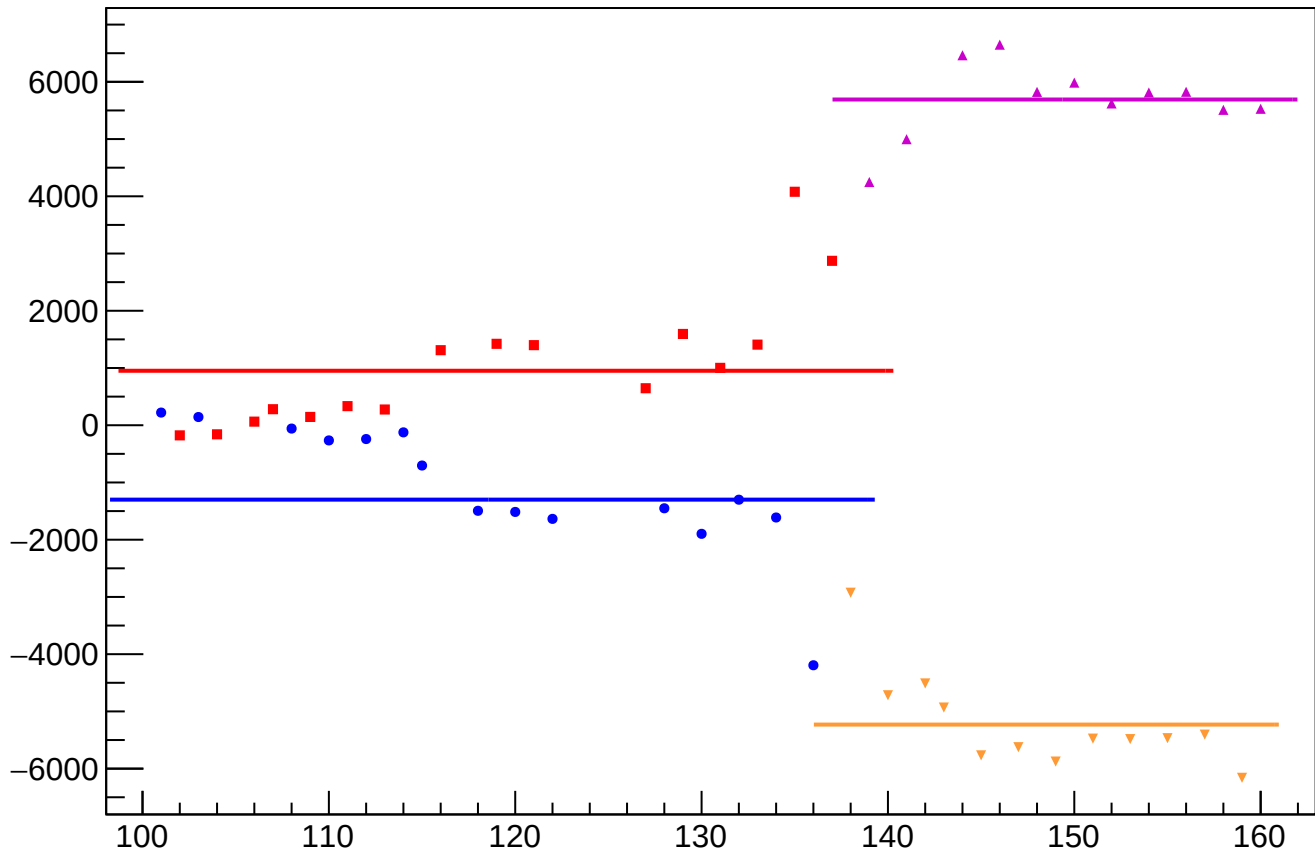
Left:  $0.403 \pm 0.000$   $\chi^2/\text{NDF}: 699320951326261037.0/11$   
 Right:  $-0.339 \pm 0.000$   $\chi^2/\text{NDF}: 1180687368969666.0/11$   
 In:  $1.499 \pm 0.000$   $\chi^2/\text{NDF}: 909555293268762402.0/11$   
 Out:  $-1.305 \pm 0.000$   $\chi^2/\text{NDF}: 96987555251915958.0/11$   
 All:  $0.094 \pm 0.000$   $\chi^2/\text{NDF}: 18800505371841.0/11$

dit\_sam5\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111 $\pm$ 0.000  $\chi^2$ /NDF: 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336 $\pm$ 0.000  $\chi^2$ /NDF: 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906 $\pm$ 0.000  $\chi^2$ /NDF: 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097 $\pm$ 0.000  $\chi^2$ /NDF: 29578729901602647998073818936097374208.0/10  
 All: -18.335 $\pm$ 0.000  $\chi^2$ /NDF: 441608022845

# dit\_sam6\_coil3\_mean vs Slug, Sign Corrected



Right In: -1299.904+/-0.000

Left Out: -5230.164+/-0.000

Right Out: 951.903+/-0.000

Left In: 5690.941+/-0.000

$\chi^2/\text{NDF}$ : 1199649252163216367086408691577524322304.0/14

$\chi^2/\text{NDF}$ : 621337546754048275745011650527081005056.0/11

$\chi^2/\text{NDF}$ : 841314696863657044174468284217089327104.0/15

$\chi^2/\text{NDF}$ : 35577462072294886968040460749891436544.0/10

Left: 260.098+/-0.000  $\chi^2/\text{NDF}$ : 5578029245557142

Right: -158.600+/-0.000  $\chi^2/\text{NDF}$ : 37088904648604

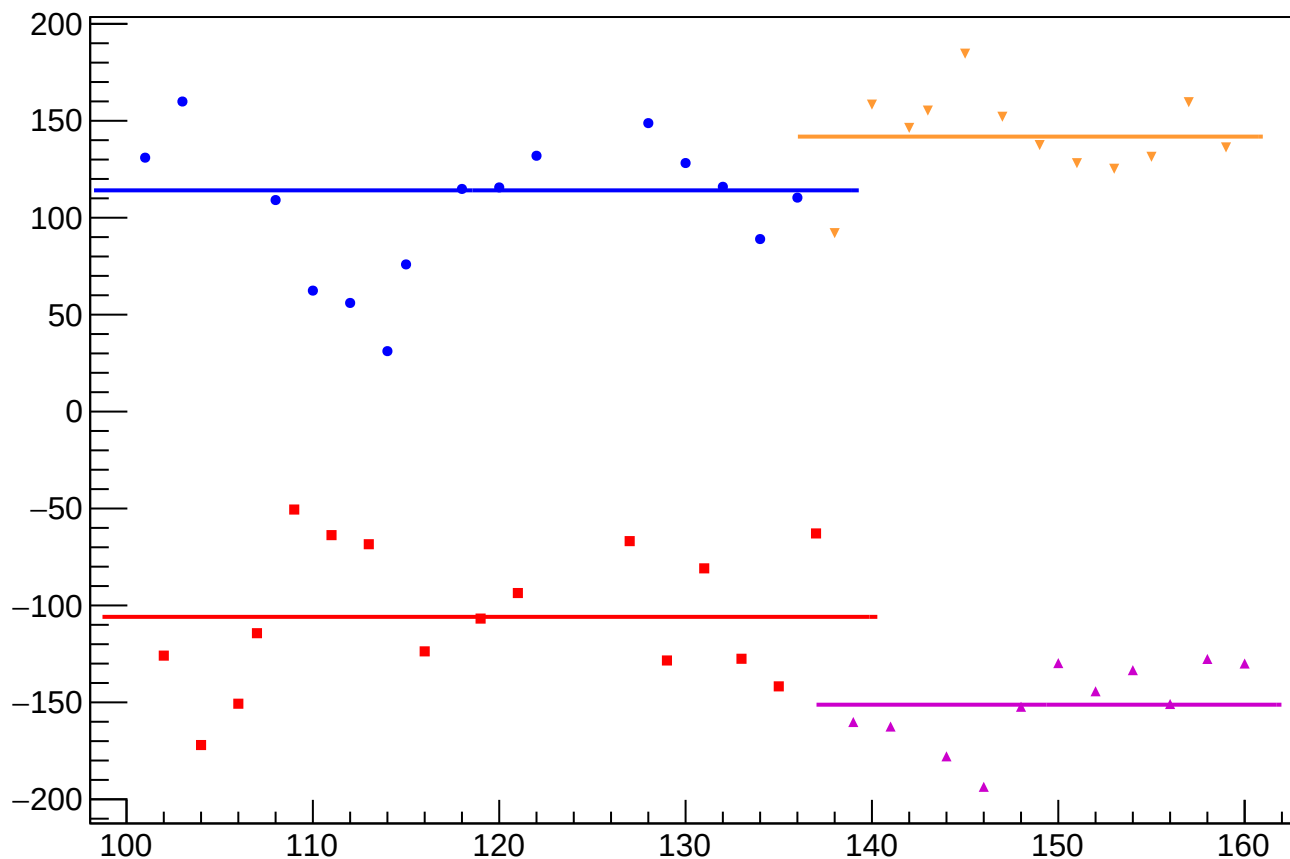
In: 2806.606+/-0.000  $\chi^2/\text{NDF}$ : 2018689735914814

Out: -2622.043+/-0.000  $\chi^2/\text{NDF}$ : 16199599941303

All: 85.397+/-0.000  $\chi^2/\text{NDF}$ : 5962362698239

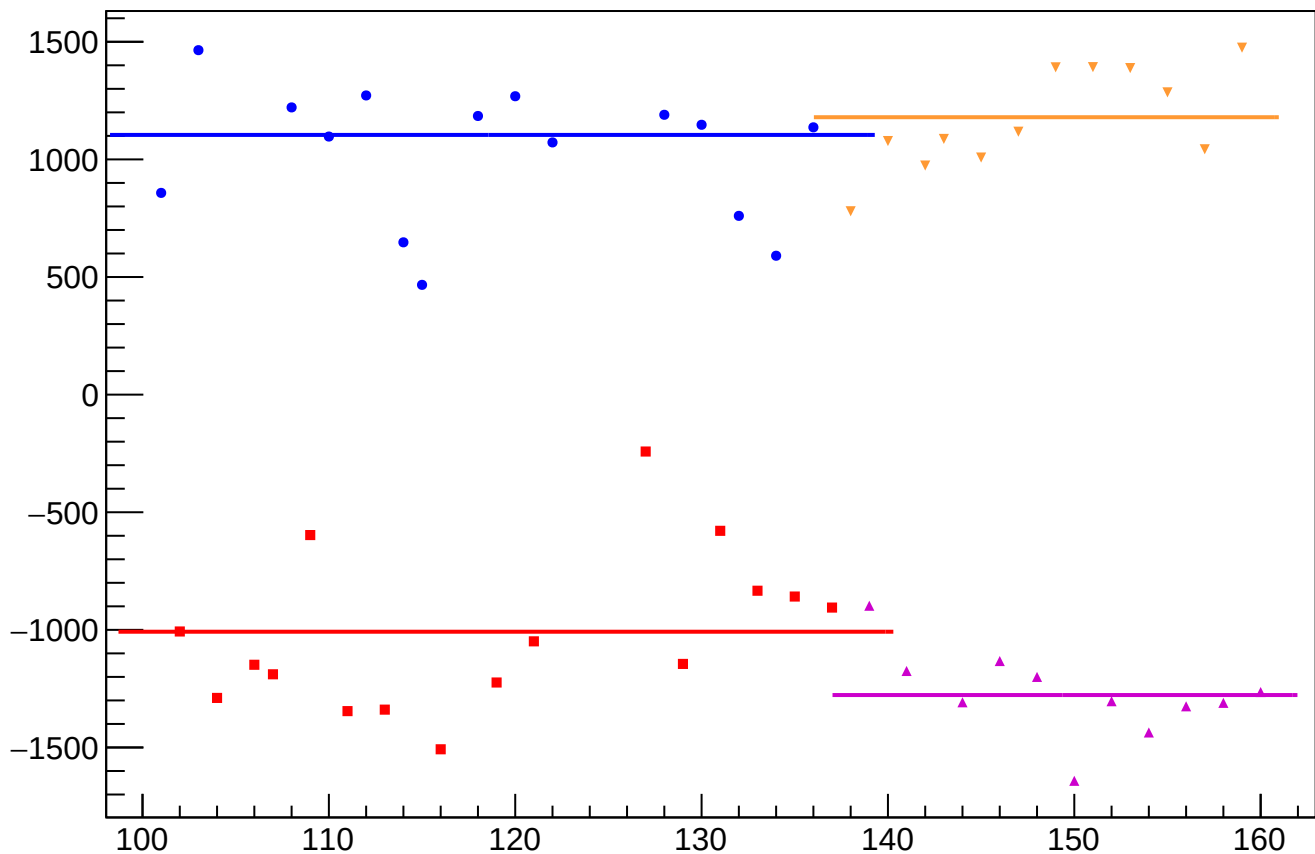


dit\_sam6\_coil3\_err\_mean vs Slug, Sign Corrected



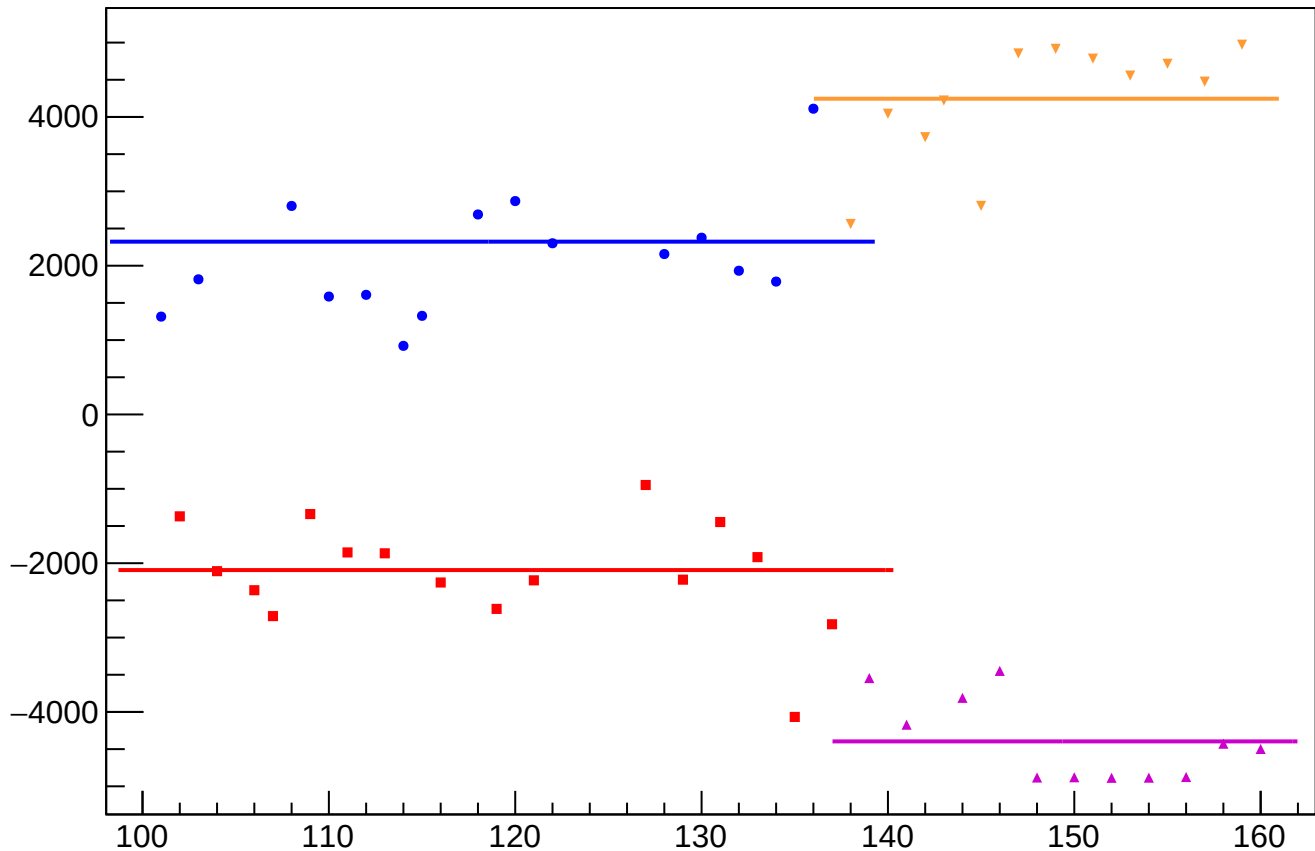
Right In:  $114.118 \pm 0.000$   $\chi^2/\text{NDF}: 607226770891525118881736460452495360.0/14$   
 Left Out:  $141.844 \pm 0.000$   $\chi^2/\text{NDF}: 455273254245846333149237795723673600.0/11$   
 Right Out:  $-105.890 \pm 0.000$   $\chi^2/\text{NDF}: 851861355270591521058611007535972352.0/15$   
 Left In:  $-151.203 \pm 0.000$   $\chi^2/\text{NDF}: 382227652604999337577431549784096768.0/10$   
 All:  $-2.103 \pm 0.000$   $\chi^2/\text{NDF}: 5772748991096$

dit\_sam6\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906+/-0.000  $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_sam7\_coil3\_mean vs Slug, Sign Corrected



Right In: 2323.372+/-0.000

$\chi^2/\text{NDF}$ : 476371189888349375964725620757728591872.0/14

Left Out: 4245.269+/-0.000

$\chi^2/\text{NDF}$ : 560100037882540295630660663570463719424.0/11

Right Out: -2092.458+/-0.000

$\chi^2/\text{NDF}$ : 367126080872166122663684022473339174912.0/15

Left In: -4396.069+/-0.000

$\chi^2/\text{NDF}$ : 270326441631367265143713722564756897792.0/10

Left: -98.908+/-0.000  $\chi^2/\text{NDF}$ : 3514152812963095

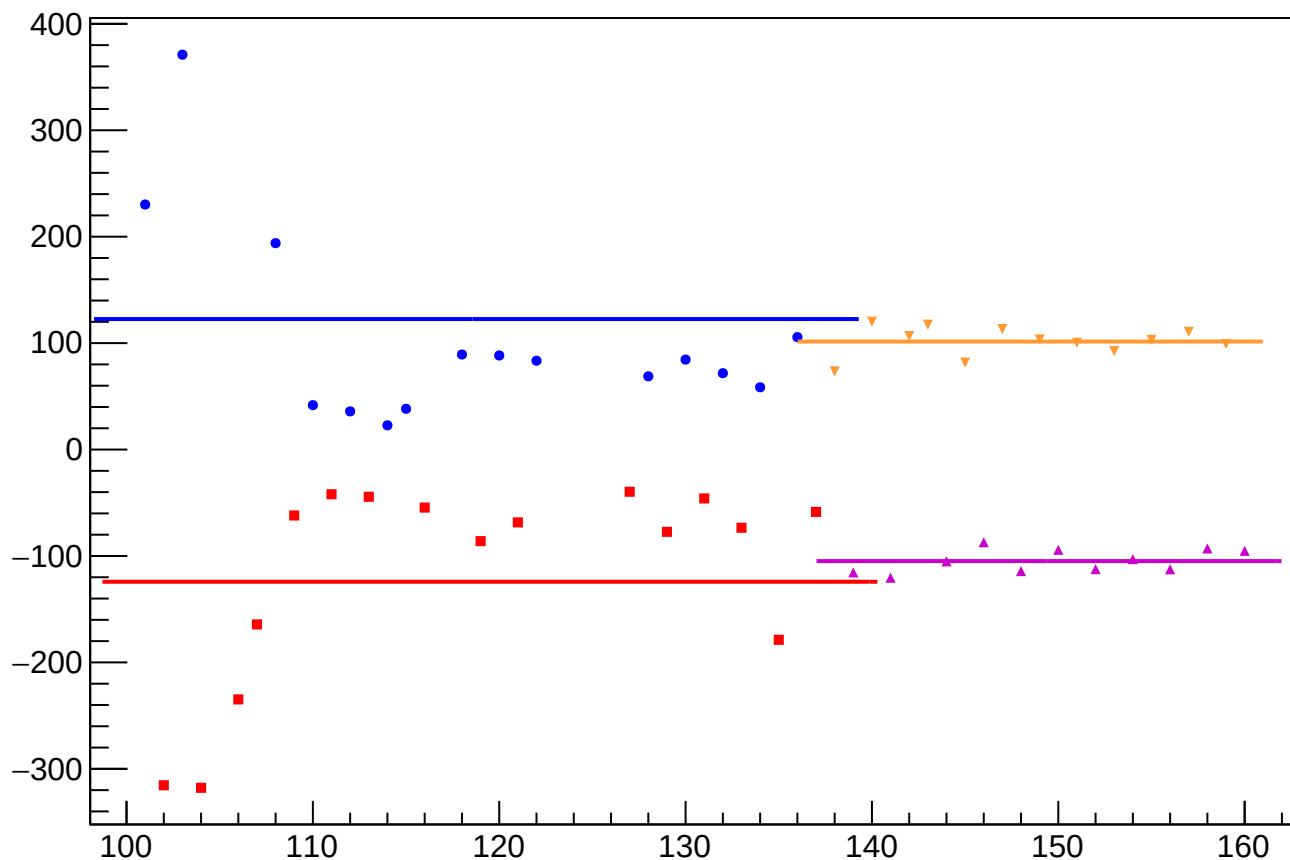
Right: 85.258+/-0.000  $\chi^2/\text{NDF}$ : 7257650695936348

In: -1623.712+/-0.000  $\chi^2/\text{NDF}$ : 179596063861387

Out: 1571.478+/-0.000  $\chi^2/\text{NDF}$ : 164156495758226

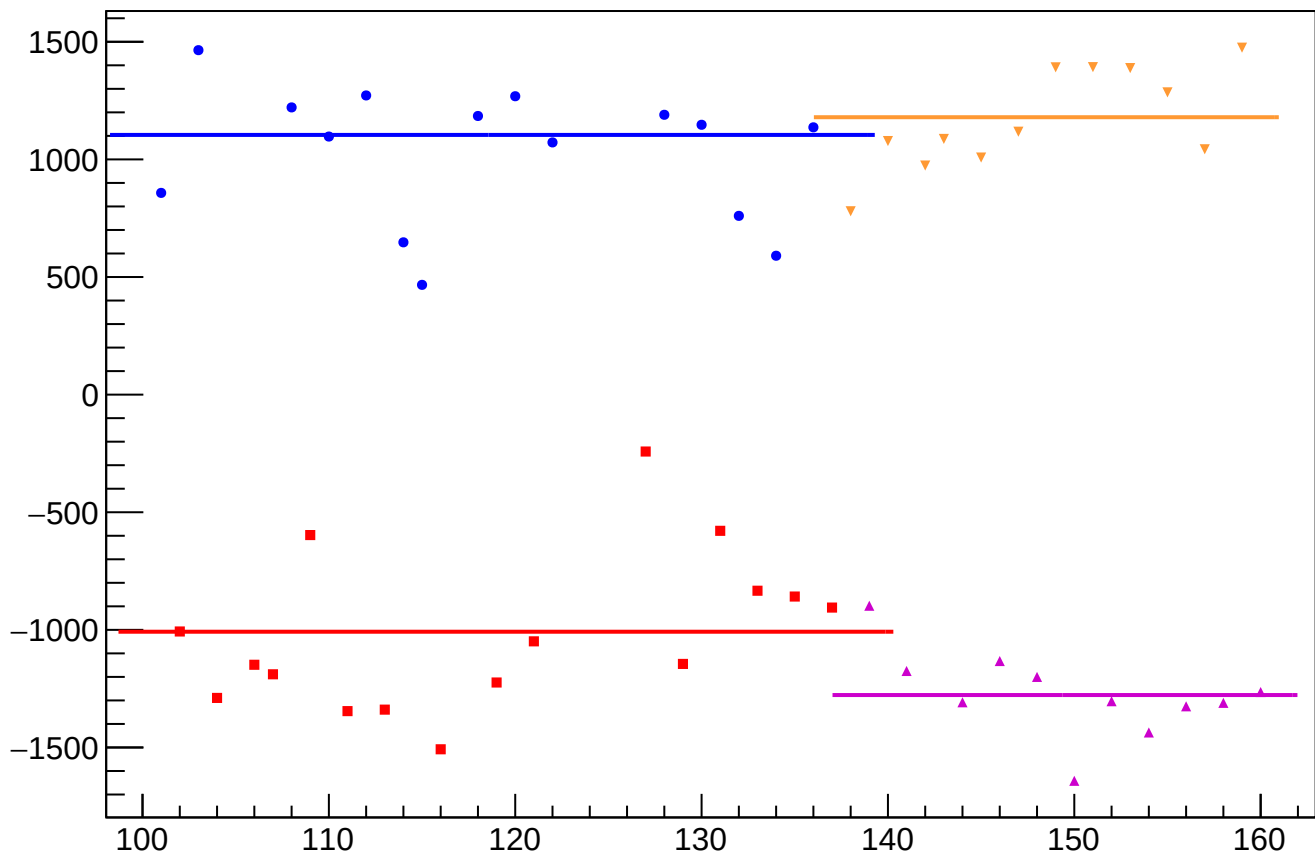
All: -22.065+/-0.000  $\chi^2/\text{NDF}$ : 424251896737

dit\_sam7\_coil3\_err\_mean vs Slug, Sign Corrected



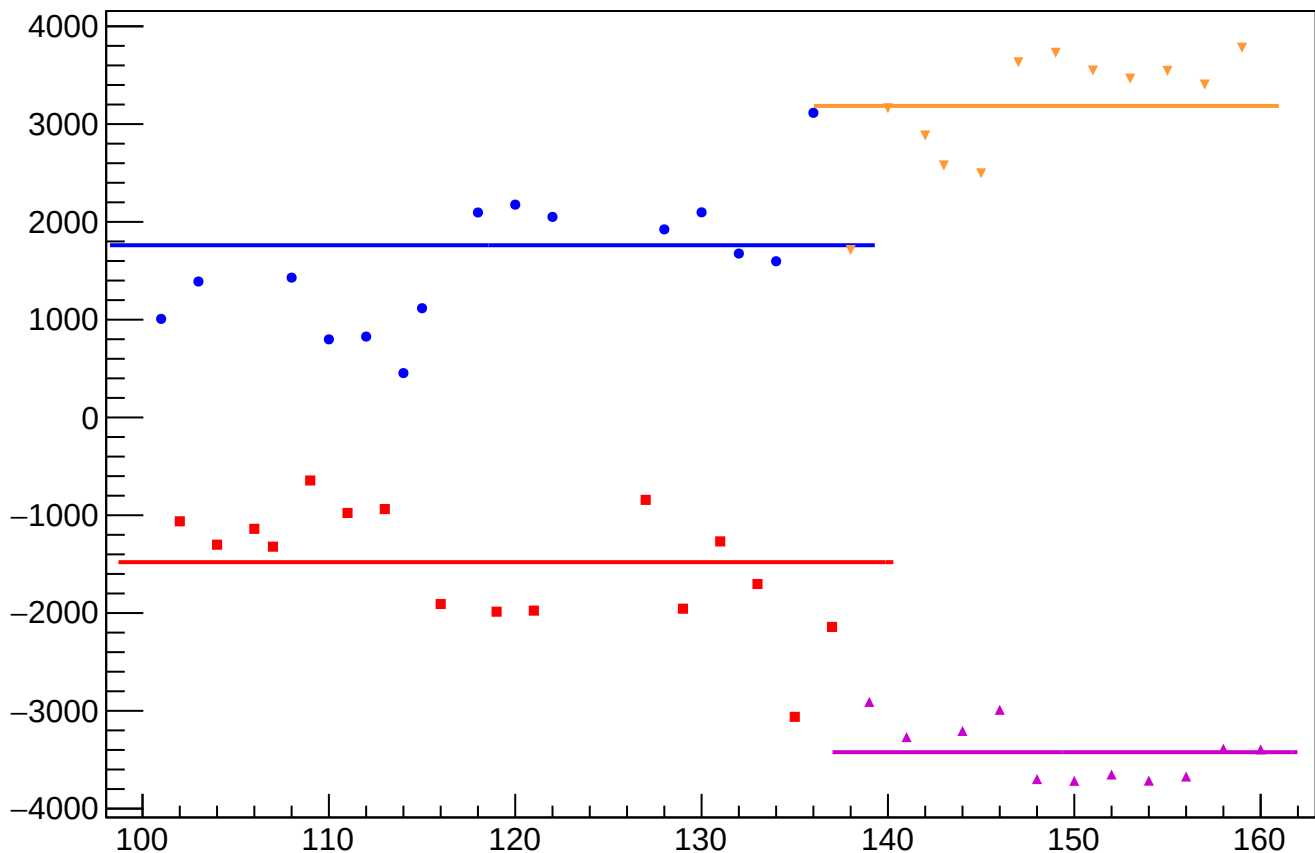
Right In:  $122.622 \pm 0.000$   $\chi^2/\text{NDF}: 5937504661187691145903235842749497344.0/14$   
 Left Out:  $101.470 \pm 0.000$   $\chi^2/\text{NDF}: 163606586609215515174601139620413440.0/11$   
 Right Out:  $-124.216 \pm 0.000$   $\chi^2/\text{NDF}: 6549627589629012958791202941129719808.0/15$   
 Left In:  $-104.786 \pm 0.000$   $\chi^2/\text{NDF}: 102013785381333837493435451846950912.0/10$   
 All:  $-2.330 \pm 0.000$   $\chi^2/\text{NDF}: 5234216215941$

dit\_sam7\_coil3\_Ndata\_mean vs Slug, Sign Corrected



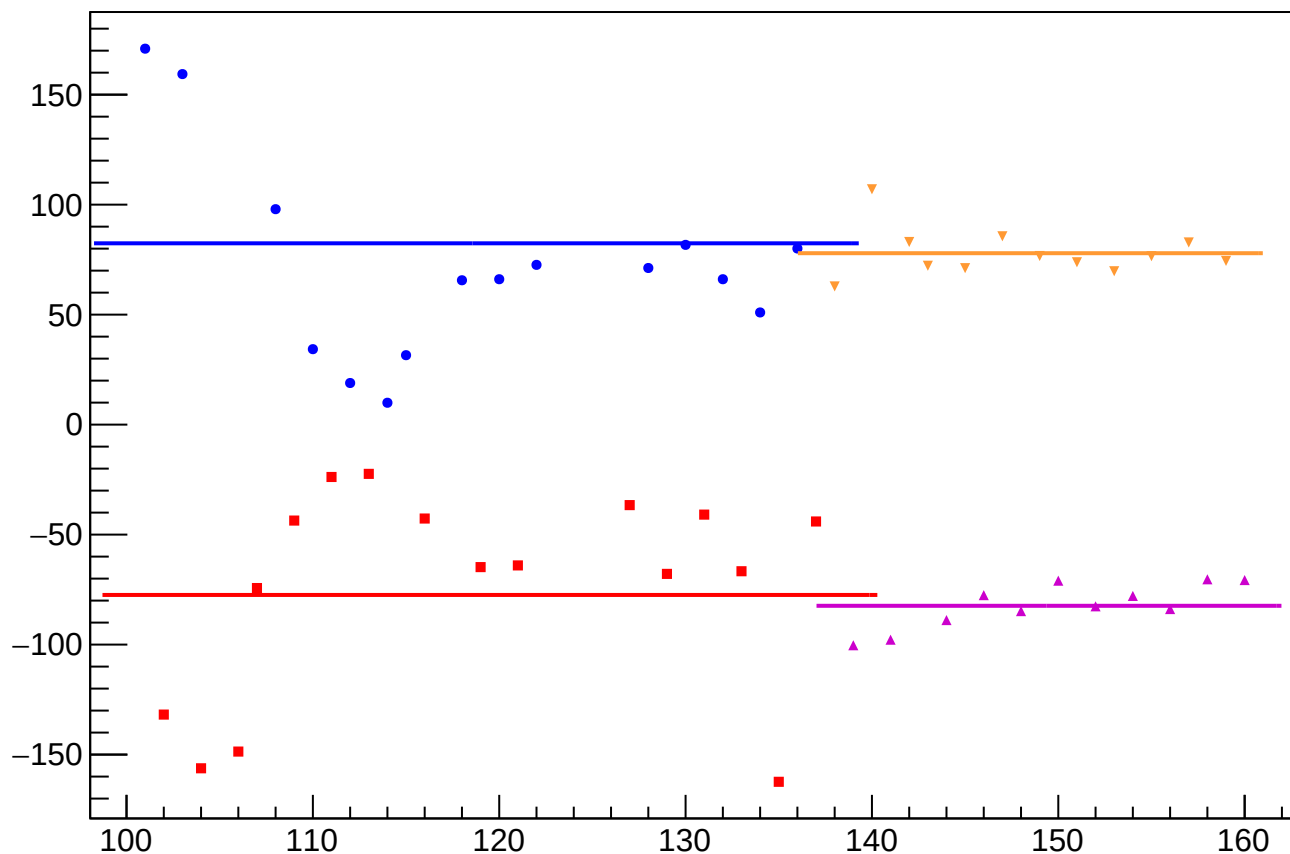
Right In: 1104.111 $\pm$ 0.000  $\chi^2$ /NDF: 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336 $\pm$ 0.000  $\chi^2$ /NDF: 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906 $\pm$ 0.000  $\chi^2$ /NDF: 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097 $\pm$ 0.000  $\chi^2$ /NDF: 29578729901602647998073818936097374208.0/10  
 All: -18.335 $\pm$ 0.000  $\chi^2$ /NDF: 441608022845

# dit\_sam8\_coil3\_mean vs Slug, Sign Corrected



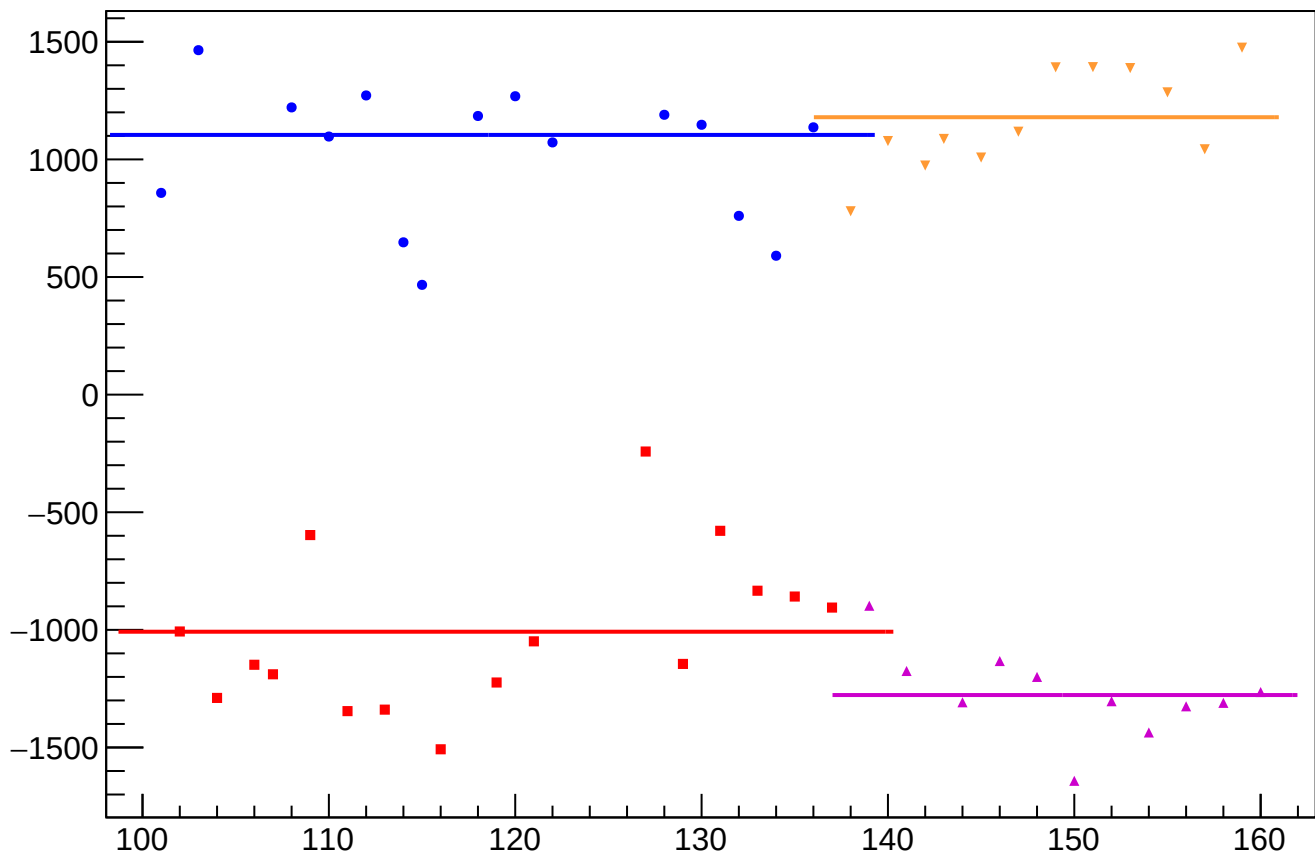
Right In: 1761.245 $\pm$ 0.000  $\chi^2$ /NDF: 332206925976055306953064744993096204288.0/14  
 Left Out: 3185.925 $\pm$ 0.000  $\chi^2$ /NDF: 334945906452981161805339150604505710592.0/11  
 Right Out: -1479.801 $\pm$ 0.000  $\chi^2$ /NDF: 263467768134780968832551238609236131840.0/15  
 Left In: -3423.018 $\pm$ 0.000  $\chi^2$ /NDF: 7453703884208882463869581727568494592.0/10  
 All: -30.093 $\pm$ 0.000  $\chi^2$ /NDF: 245798533014

dit\_sam8\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 82.422+/-0.000  $\chi^2/\text{NDF}$ : 1263633347129443757477527241185296384.0/14  
 Left Out: 77.927+/-0.000  $\chi^2/\text{NDF}$ : 108816585289567770159719515210907648.0/11  
 Right Out: -77.430+/-0.000  $\chi^2/\text{NDF}$ : 1515456409368458038568290276111024128.0/15  
 Left In: -82.361+/-0.000  $\chi^2/\text{NDF}$ : 88160536769186096496846966890692608.0/10  
 All: -0.961+/-0.000  $\chi^2/\text{NDF}$ : 2319921906530

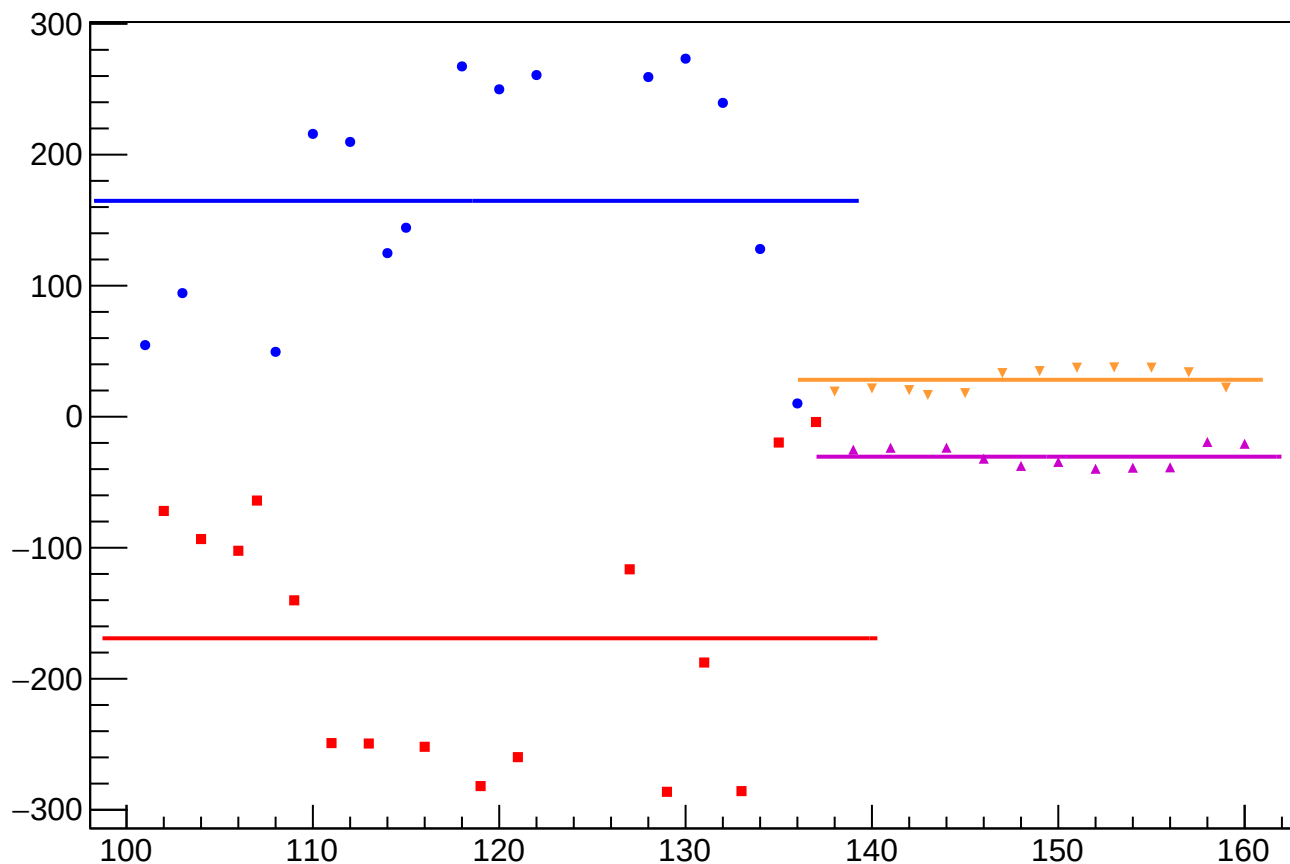
dit\_sam8\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111 $\pm$ 0.000  $\chi^2$ /NDF: 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336 $\pm$ 0.000  $\chi^2$ /NDF: 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906 $\pm$ 0.000  $\chi^2$ /NDF: 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097 $\pm$ 0.000  $\chi^2$ /NDF: 29578729901602647998073818936097374208.0/10  
 All: -18.335 $\pm$ 0.000  $\chi^2$ /NDF: 441608022845

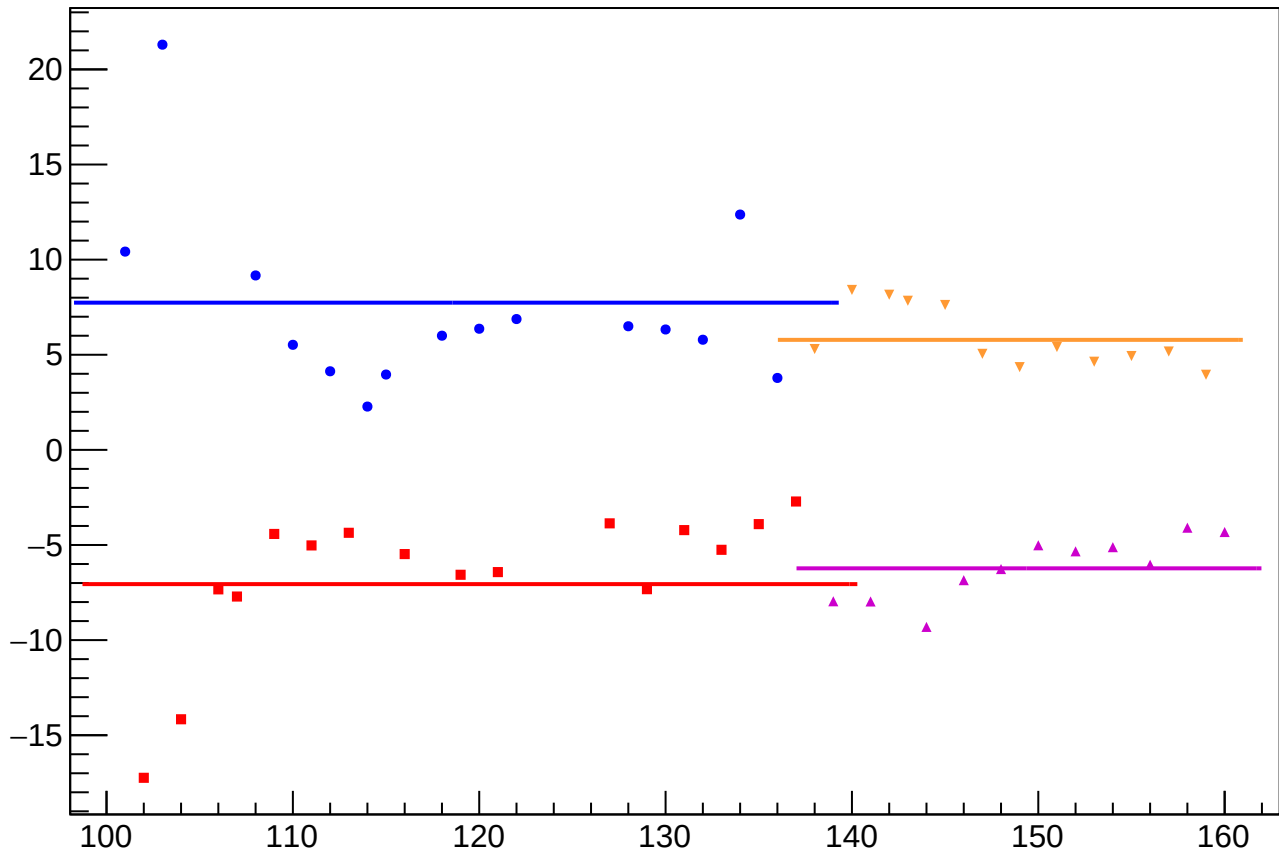


# dit\_4aX\_coil7\_mean vs Slug, Sign Corrected



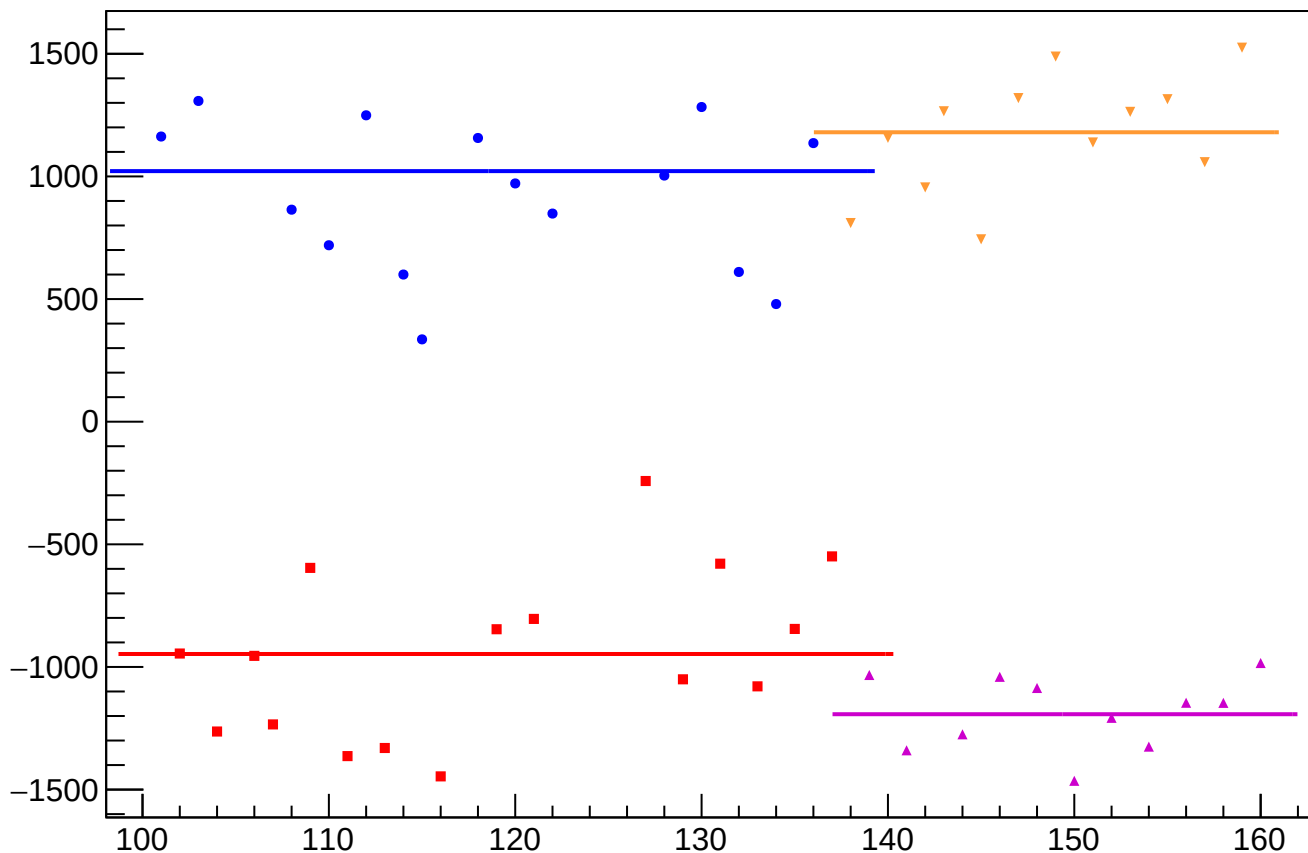
Left:  $-1.317 \pm 0.000$   $\chi^2/\text{NDF}: 16978934081589781$   
 Right In:  $164.752 \pm 0.000$   $\chi^2/\text{NDF}: 6369828943181833917425699916554960896.0/14$   
 Left Out:  $28.192 \pm 0.000$   $\chi^2/\text{NDF}: 62073928949862768083975059378536448.0/11$   
 Right Out:  $-169.108 \pm 0.000$   $\chi^2/\text{NDF}: 6040721802042936822766910687819071488.0/15$   
 In:  $50.054 \pm 0.000$   $\chi^2/\text{NDF}: 209572439496556085$   
 Out:  $-55.045 \pm 0.000$   $\chi^2/\text{NDF}: 2111323920107624$   
 Left In:  $-30.507 \pm 0.000$   $\chi^2/\text{NDF}: 52600700148274049801586699671699456.0/10$   
 All:  $-2.629 \pm 0.000$   $\chi^2/\text{NDF}: 5078015592202$

dit\_4aX\_coil7\_err\_mean vs Slug, Sign Corrected



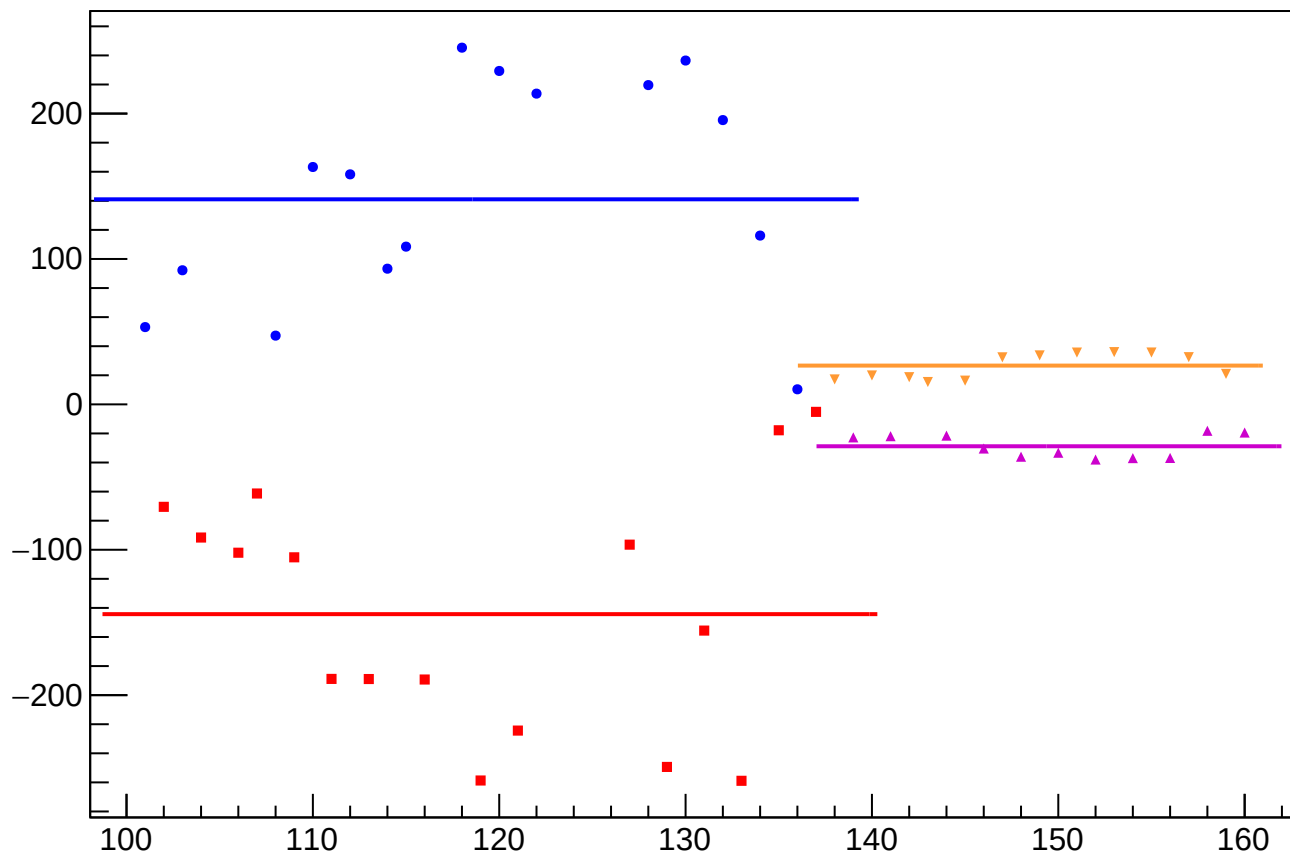
Right In: 7.738 $\pm$ 0.000  $\chi^2$ /NDF: 15127215479234506007469492768079872.0/14  
 Left Out: 5.783 $\pm$ 0.000  $\chi^2$ /NDF: 2082103650411209995862519006101504.0/11  
 Right Out: -7.057 $\pm$ 0.000  $\chi^2$ /NDF: 11292441204139394792341242753581056.0/15  
 Left In: -6.228 $\pm$ 0.000  $\chi^2$ /NDF: 2331911751655733809355489024147456.0/10  
 All: -0.049 $\pm$ 0.000  $\chi^2$ /NDF: 1693113496789

dit\_4aX\_coil7\_Ndata\_mean vs Slug, Sign Corrected



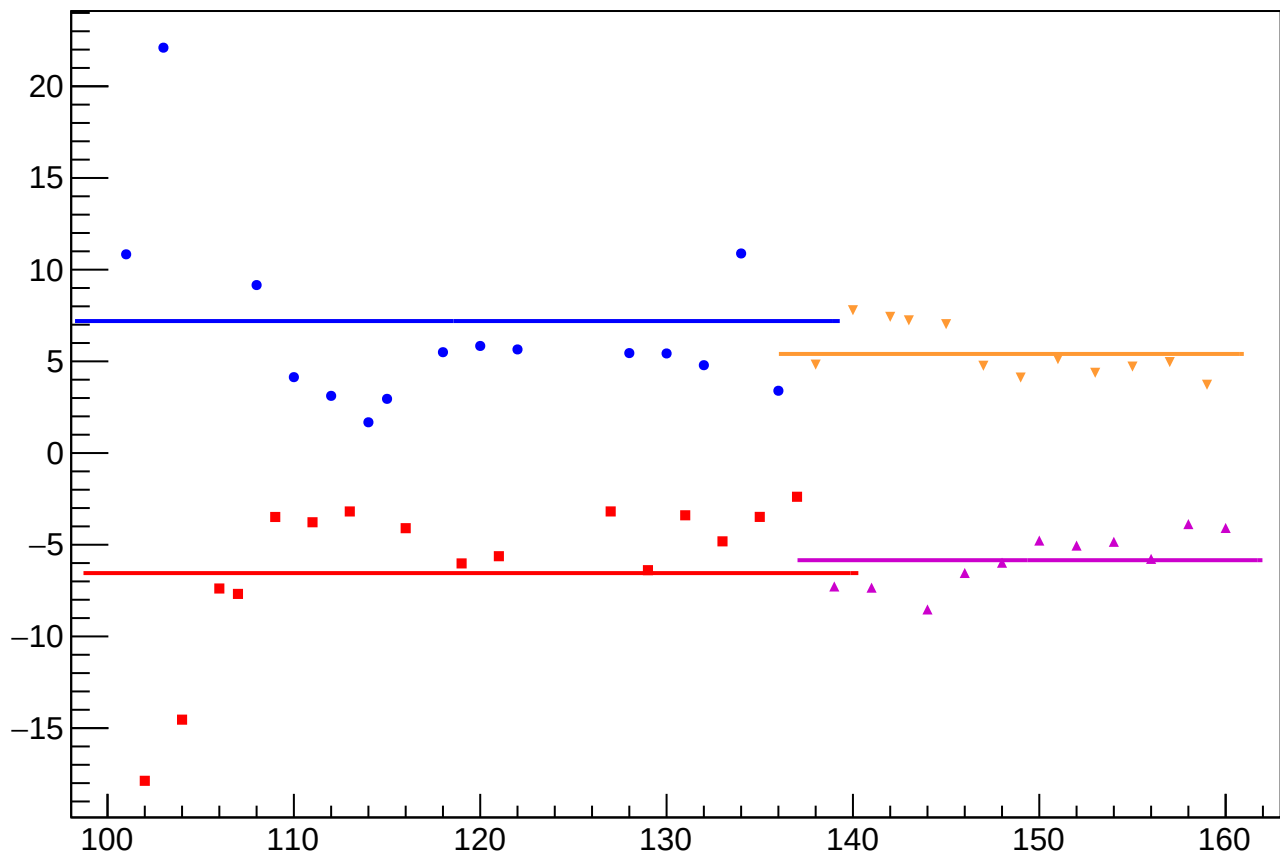
Right In: 1021.684+/-0.000  $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103+/-0.000  $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11  
 Right Out: -947.145+/-0.000  $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15  
 Left In: -1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10  
 All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_4eX\_coil7\_mean vs Slug, Sign Corrected



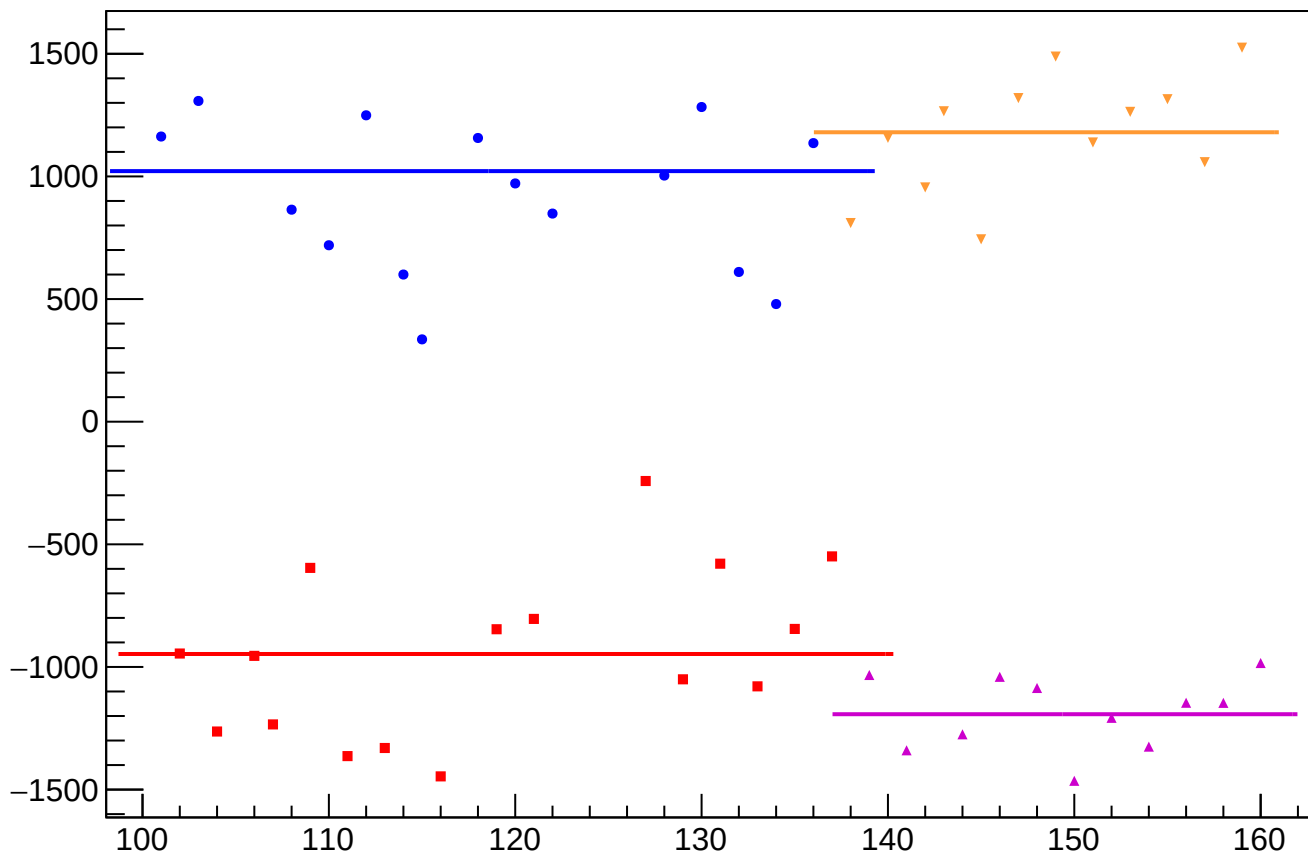
Left:  $-1.225 \pm 0.000$   $\chi^2/\text{NDF}: 15294237123103654$   
 Right In:  $141.032 \pm 0.000$   $\chi^2/\text{NDF}: 4507992585512923332587415612245934080.0/14$   
 Left Out:  $26.669 \pm 0.000$   $\chi^2/\text{NDF}: 62522343114115856238629096966324224.0/11$   
 Right Out:  $-144.283 \pm 0.000$   $\chi^2/\text{NDF}: 4268333571517740886065361663928827904.0/15$   
 In:  $41.261 \pm 0.000$   $\chi^2/\text{NDF}: 155582029133540229$   
 Out:  $-45.453 \pm 0.000$   $\chi^2/\text{NDF}: 1559993230161443$   
 Left In:  $-28.817 \pm 0.000$   $\chi^2/\text{NDF}: 52309797532132393990553277307027456.0/10$   
 All:  $-2.206 \pm 0.000$   $\chi^2/\text{NDF}: 3708705323759$

dit\_4eX\_coil7\_err\_mean vs Slug, Sign Corrected



Left:  $-0.250 \pm 0.000$   $\chi^2/\text{NDF}$ : 61618141302730381  
 Right In:  $7.198 \pm 0.000$   $\chi^2/\text{NDF}$ : 18212640728502785337831966963138560.0/14  
 Right:  $0.232 \pm 0.000$   $\chi^2/\text{NDF}$ : 94430884745367791  
 Left Out:  $5.404 \pm 0.000$   $\chi^2/\text{NDF}$ : 1657476673222734549536062415306752.0/11  
 In:  $-0.463 \pm 0.000$   $\chi^2/\text{NDF}$ : 848816588920174735  
 Right Out:  $-6.547 \pm 0.000$   $\chi^2/\text{NDF}$ : 14078912505116068936230809834094592.0/15  
 Out:  $0.362 \pm 0.000$   $\chi^2/\text{NDF}$ : 708086439927032717  
 Left In:  $-5.843 \pm 0.000$   $\chi^2/\text{NDF}$ : 1832786837102707862400537806766080.0/10  
 All:  $-0.049 \pm 0.000$   $\chi^2/\text{NDF}$ : 1562270252344

dit\_4eX\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

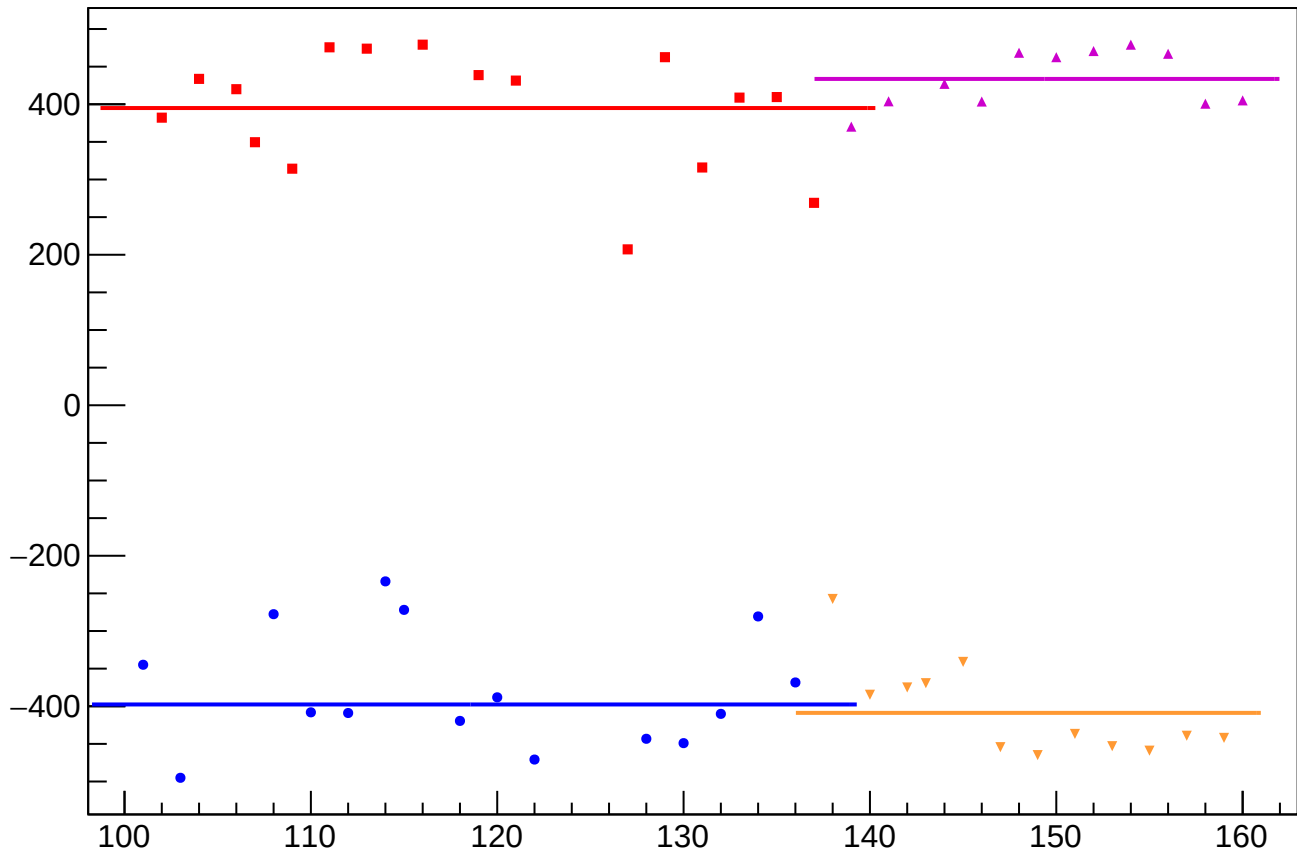
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_11X12X\_coil7\_mean vs Slug, Sign Corrected



Right In: -397.613+/-0.000

Left Out: -408.794+/-0.000

Right Out: 394.973+/-0.000

Left In: 433.664+/-0.000

$\chi^2/\text{NDF}$ : 2661280785384633207096106229474263040.0/14

$\chi^2/\text{NDF}$ : 3366573213961692909439105040404971520.0/11

$\chi^2/\text{NDF}$ : 3685595513427183501596165280874102784.0/15

$\chi^2/\text{NDF}$ : 1198237421385461104687495484599697408.0/10

Left: 14.727+/-0.000  $\chi^2/\text{NDF}$ : 3306788770143985

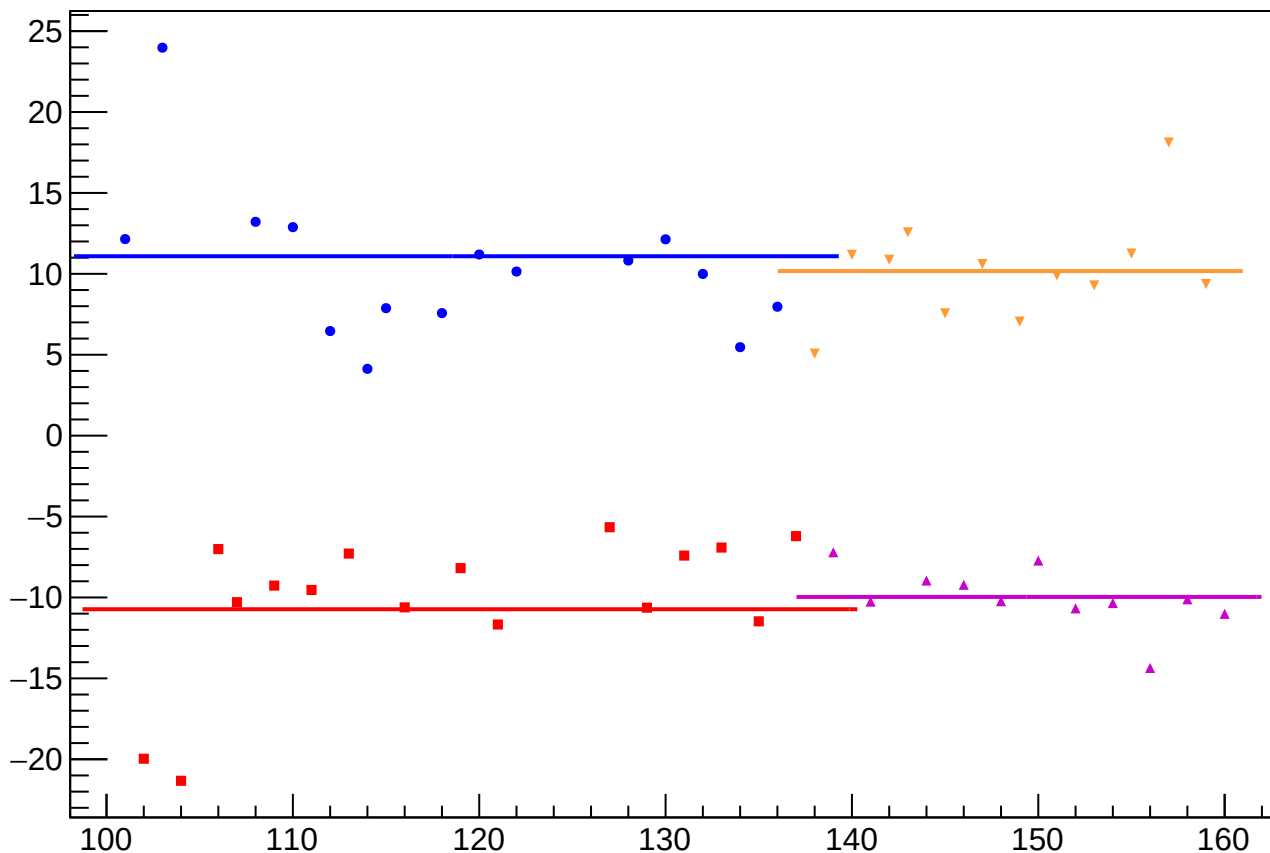
Right: 4.100+/-0.000  $\chi^2/\text{NDF}$ : 21298342988437283

In: 90.690+/-0.000  $\chi^2/\text{NDF}$ : 267298439260479340

Out: -69.697+/-0.000  $\chi^2/\text{NDF}$ : 2561673028781217

All: 10.293+/-0.000  $\chi^2/\text{NDF}$ : 5437489116587

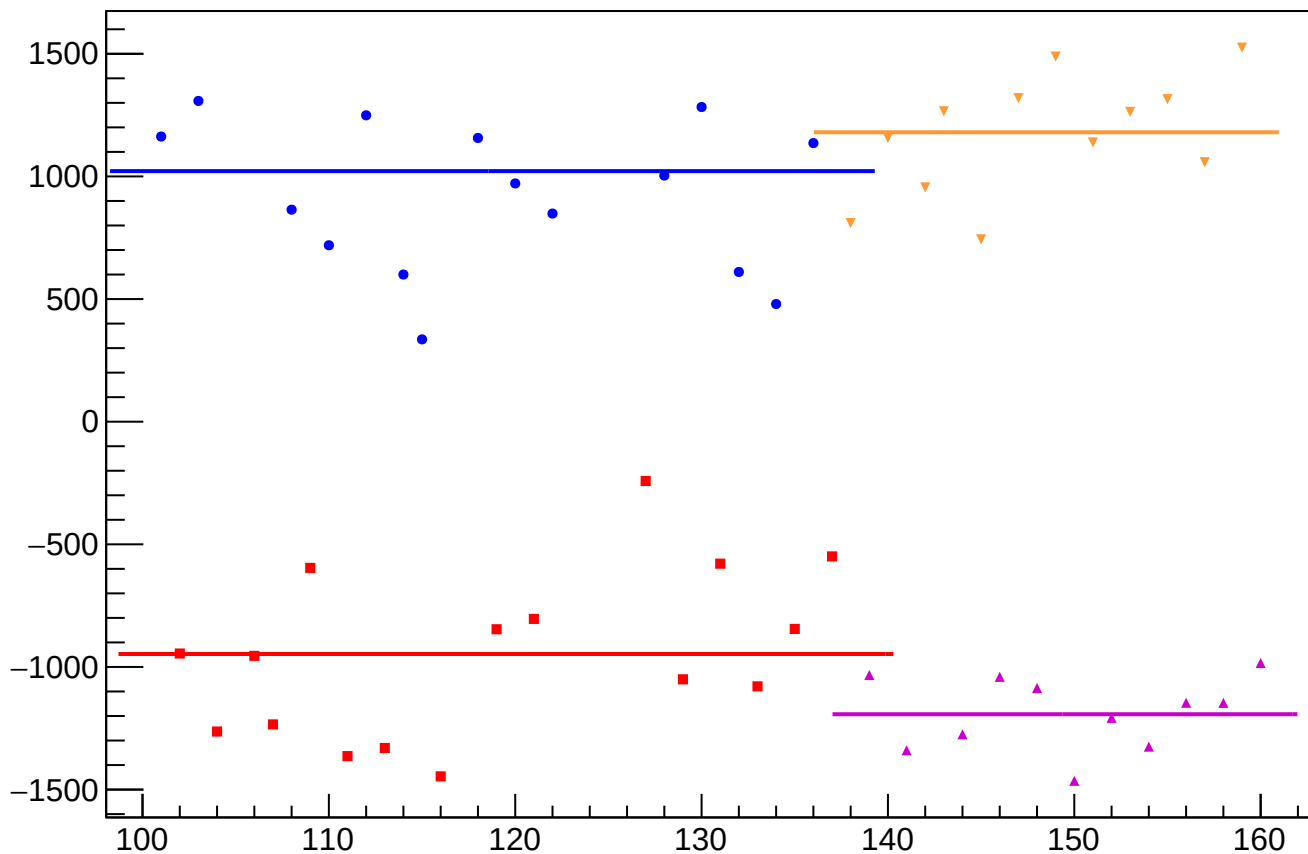
dit\_11X12X\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 11.089 $\pm$ 0.000  $\chi^2$ /NDF: 14235991122014984478163351266918400.0/14  
 Left Out: 10.171 $\pm$ 0.000  $\chi^2$ /NDF: 9089684940831859823552687731900416.0/11  
 Right Out: -10.728 $\pm$ 0.000  $\chi^2$ /NDF: 14767238290725260908081124437131264.0/15  
 Left In: -9.968 $\pm$ 0.000  $\chi^2$ /NDF: 2905664542402179840795878184976384.0/10  
 All: 0.040 $\pm$ 0.000  $\chi^2$ /NDF: 38392284563118



dit\_11X12X\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

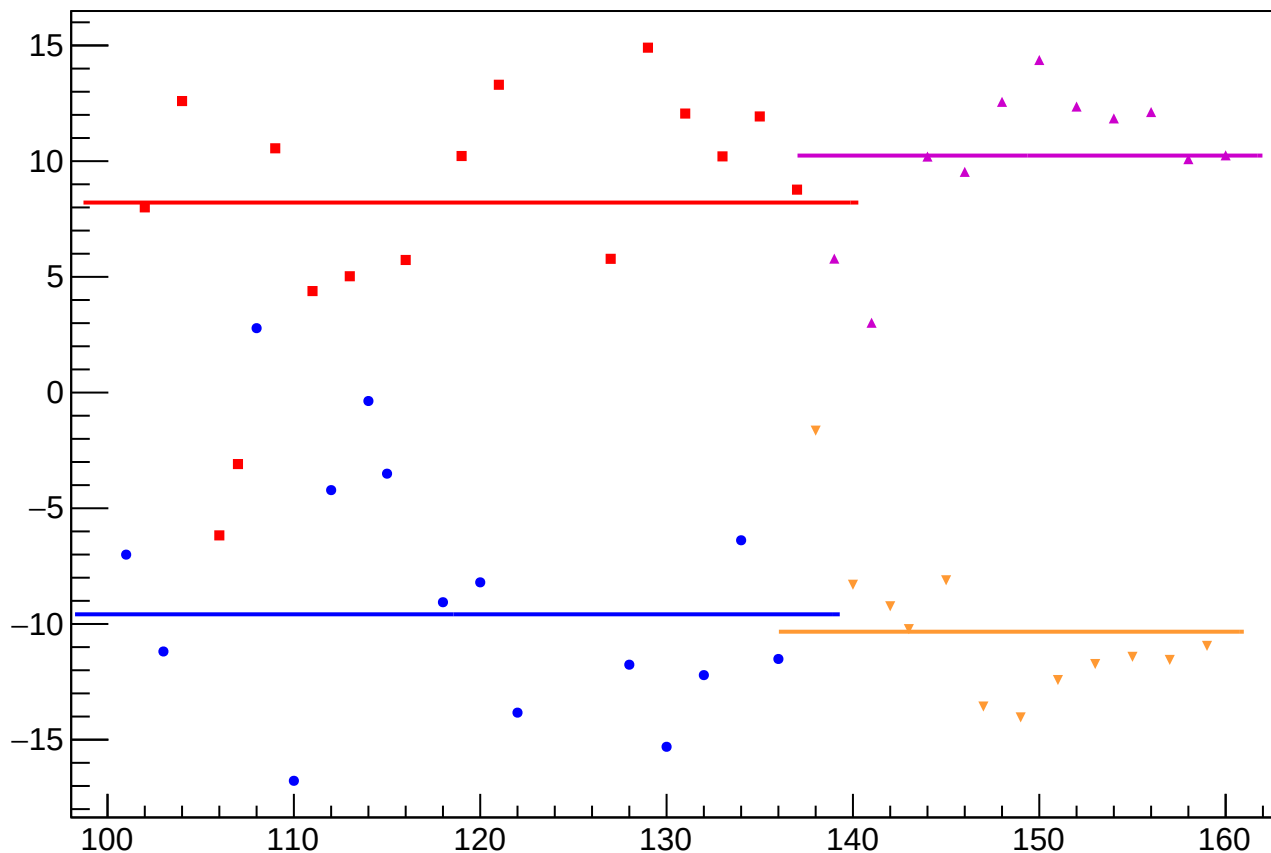
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

dit\_4aY\_coil7\_mean vs Slug, Sign Corrected



Right In:  $-9.582 \pm 0.000$

Left Out:  $-10.333 \pm 0.000$

Right Out:  $8.211 \pm 0.000$

Left In:  $10.241 \pm 0.000$

$\chi^2/\text{NDF}$ : 14702679983940002820806471963377664.0/14

$\chi^2/\text{NDF}$ : 9377692425026365375047041474887680.0/11

$\chi^2/\text{NDF}$ : 18304237293835961465605754204454912.0/15

$\chi^2/\text{NDF}$ : 8992829088408430483485977772818432.0/10

Left:  $0.010 \pm 0.000$   $\chi^2/\text{NDF}$ : 212884271856614194

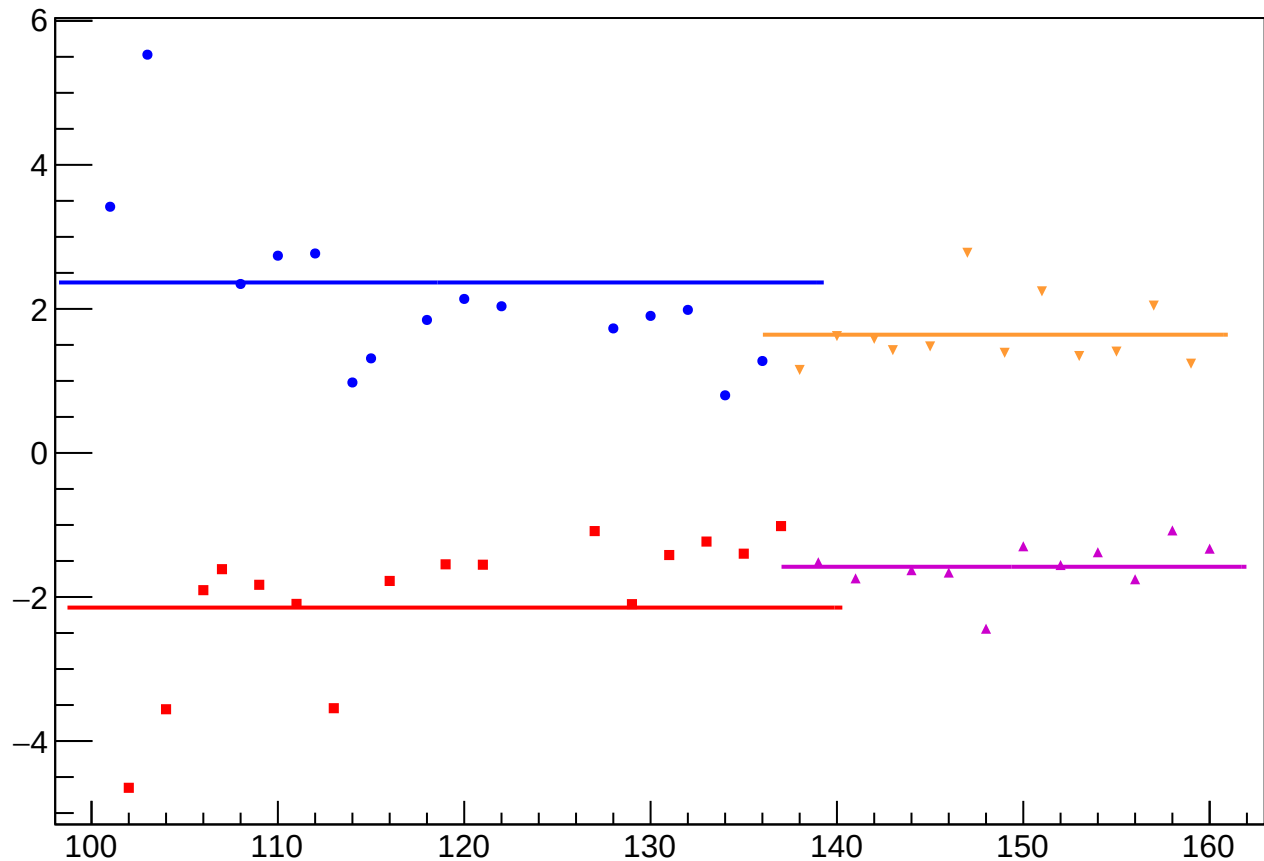
Right:  $-0.564 \pm 0.000$   $\chi^2/\text{NDF}$ : 1371493250181668

In:  $2.062 \pm 0.000$   $\chi^2/\text{NDF}$ : 1735093437250268156

Out:  $-2.510 \pm 0.000$   $\chi^2/\text{NDF}$ : 16029265277756400

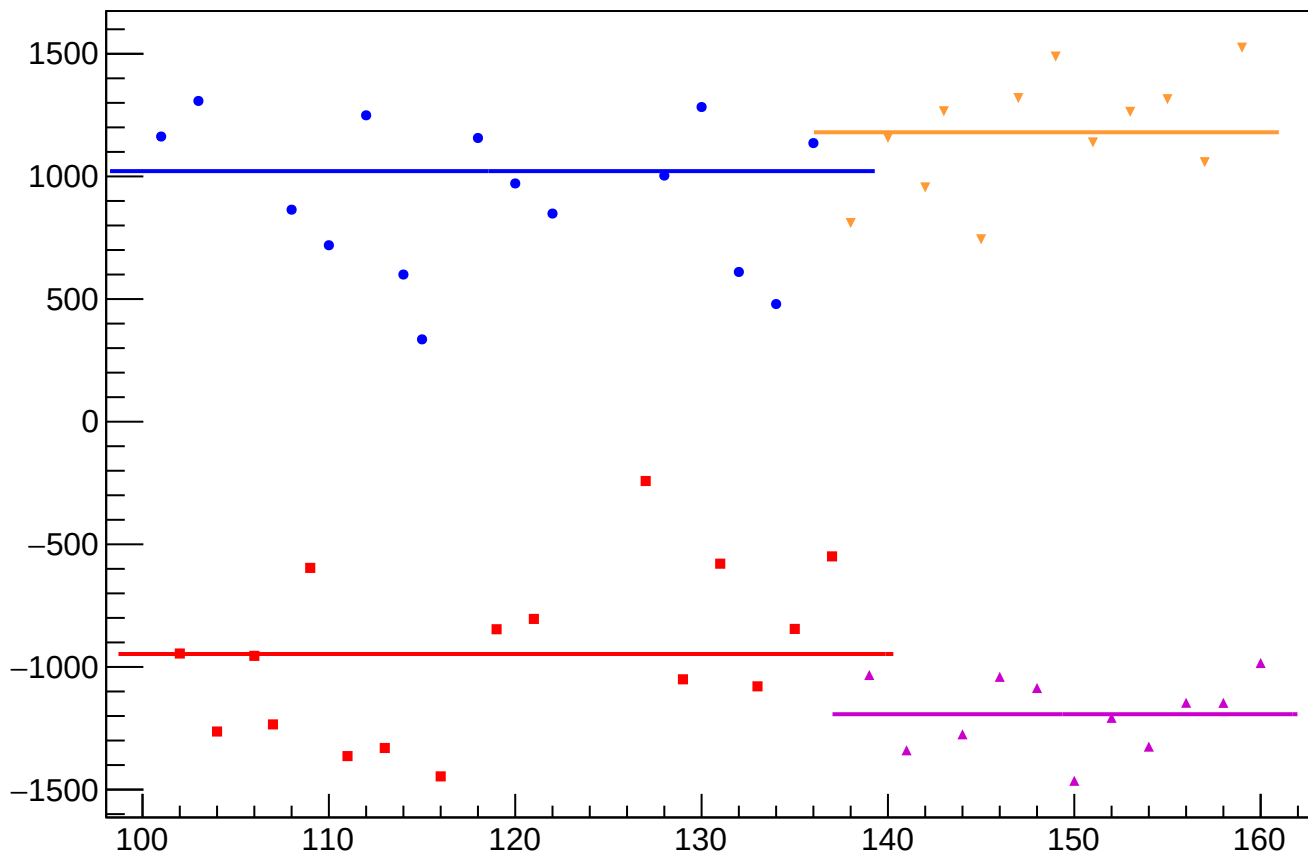
All:  $-0.229 \pm 0.000$   $\chi^2/\text{NDF}$ : 3502860386482

dit\_4aY\_coil7\_err\_mean vs Slug, Sign Corrected



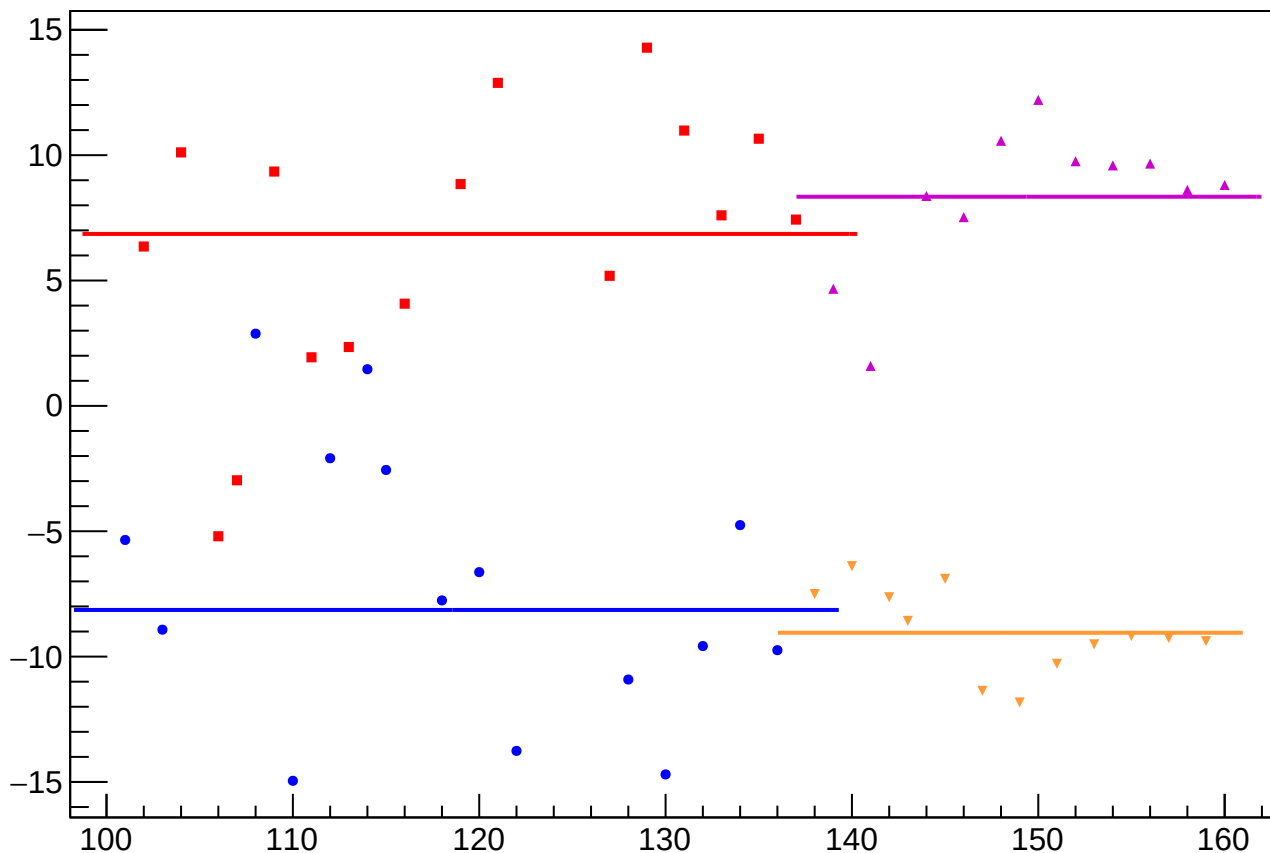
Right In: 2.367 $\pm$ 0.000  $\chi^2$ /NDF: 920633294546152876922066767446016.0/14  
 Left Out: 1.642 $\pm$ 0.000  $\chi^2$ /NDF: 195842148226043527039909915262976.0/11  
 Right Out: -2.147 $\pm$ 0.000  $\chi^2$ /NDF: 764171992480224478656127555338240.0/15  
 Left In: -1.580 $\pm$ 0.000  $\chi^2$ /NDF: 104159820106689813353171792166912.0/10  
 All: 0.046 $\pm$ 0.000  $\chi^2$ /NDF: 13461521258222

dit\_4aY\_coil7\_Ndata\_mean vs Slug, Sign Corrected



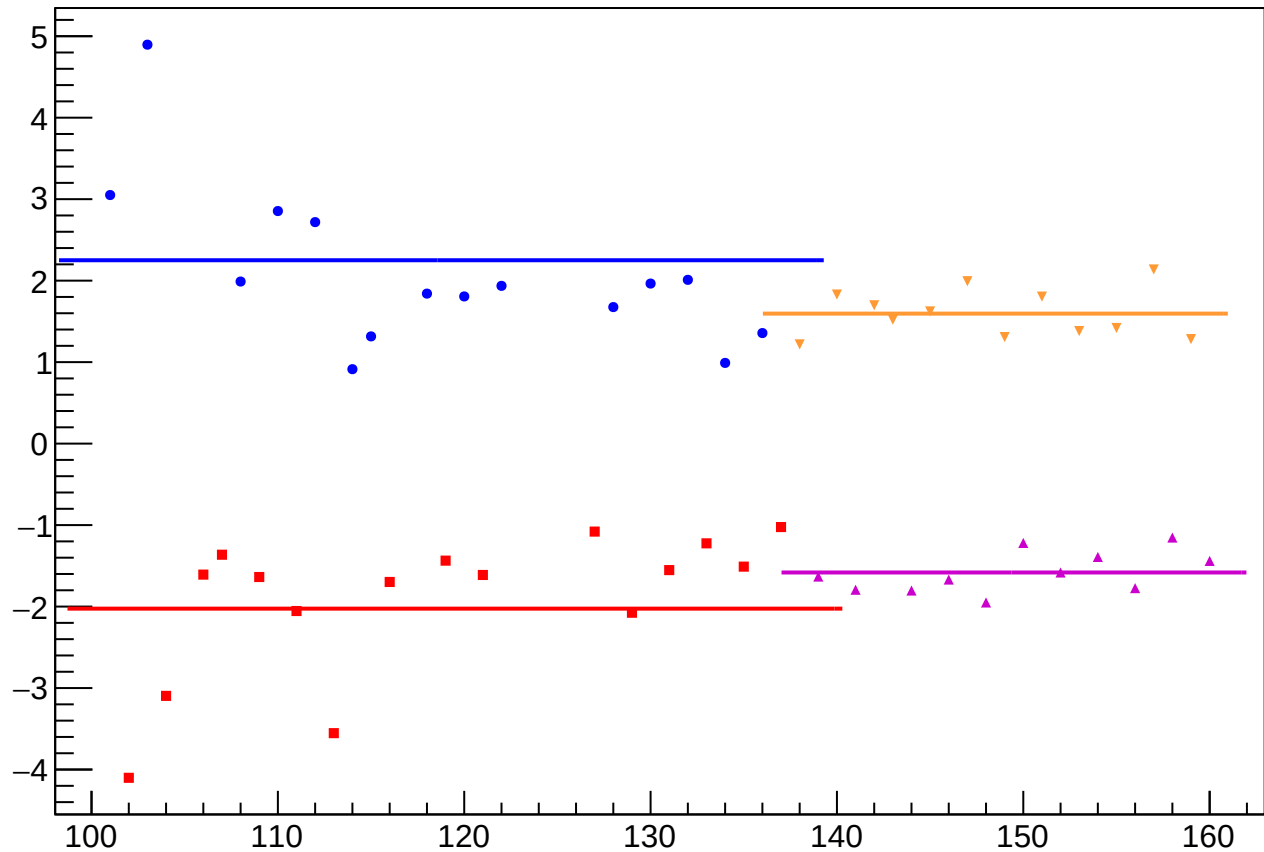
Right In: 1021.684+/-0.000  $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103+/-0.000  $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11  
 Right Out: -947.145+/-0.000  $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15  
 Left In: -1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10  
 All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

dit\_4eY\_coil7\_mean vs Slug, Sign Corrected



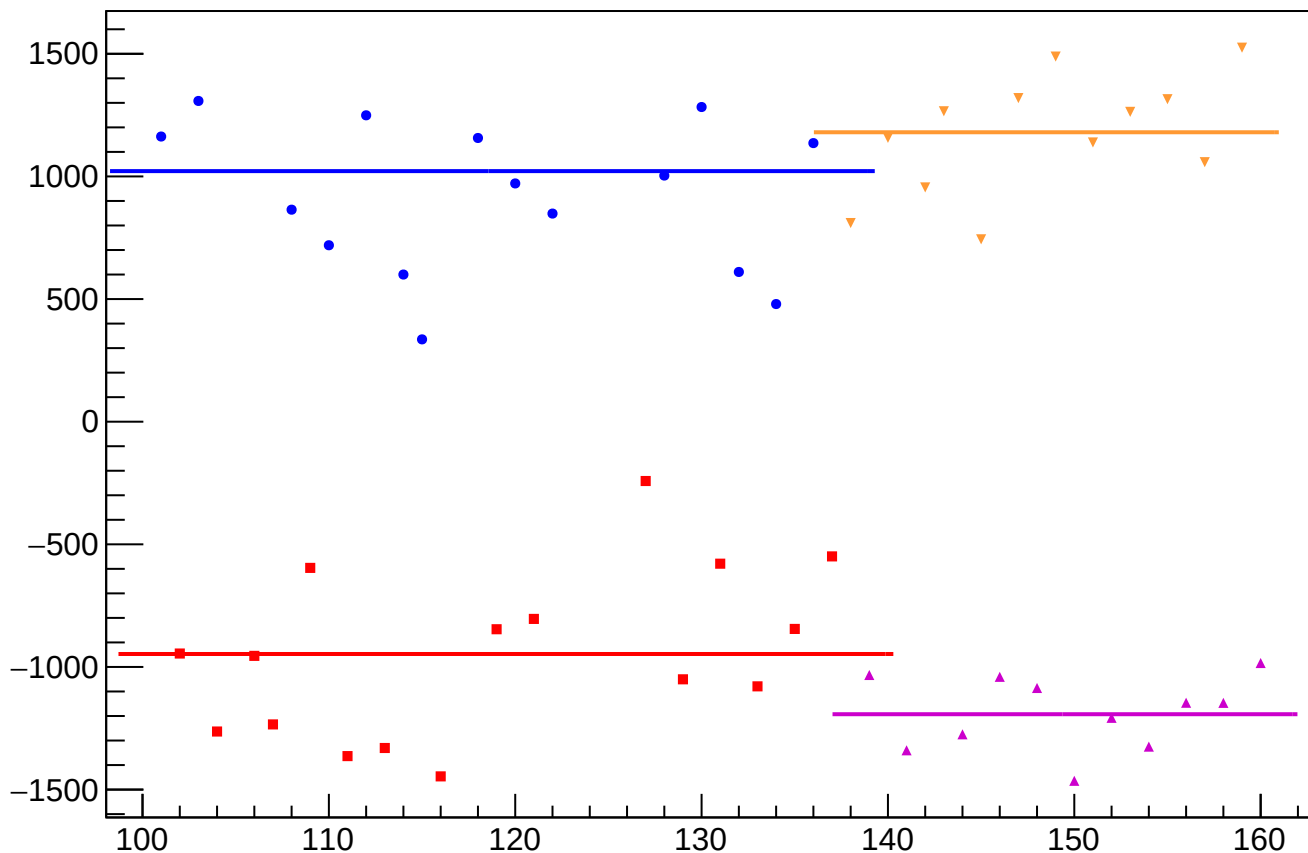
Right In:  $-8.139 \pm 0.000$   $\chi^2/\text{NDF}: 14676442649222120372533779893321728.0/14$   
 Left Out:  $-9.049 \pm 0.000$   $\chi^2/\text{NDF}: 2449058506184839792133889501167616.0/11$   
 Right Out:  $6.859 \pm 0.000$   $\chi^2/\text{NDF}: 16483631561591790731352632153079808.0/15$   
 Left In:  $8.343 \pm 0.000$   $\chi^2/\text{NDF}: 7268690948063694771204756789526528.0/10$   
 All:  $-0.402 \pm 0.000$   $\chi^2/\text{NDF}: 2538807042517$

dit\_4eY\_coil7\_err\_mean vs Slug, Sign Corrected



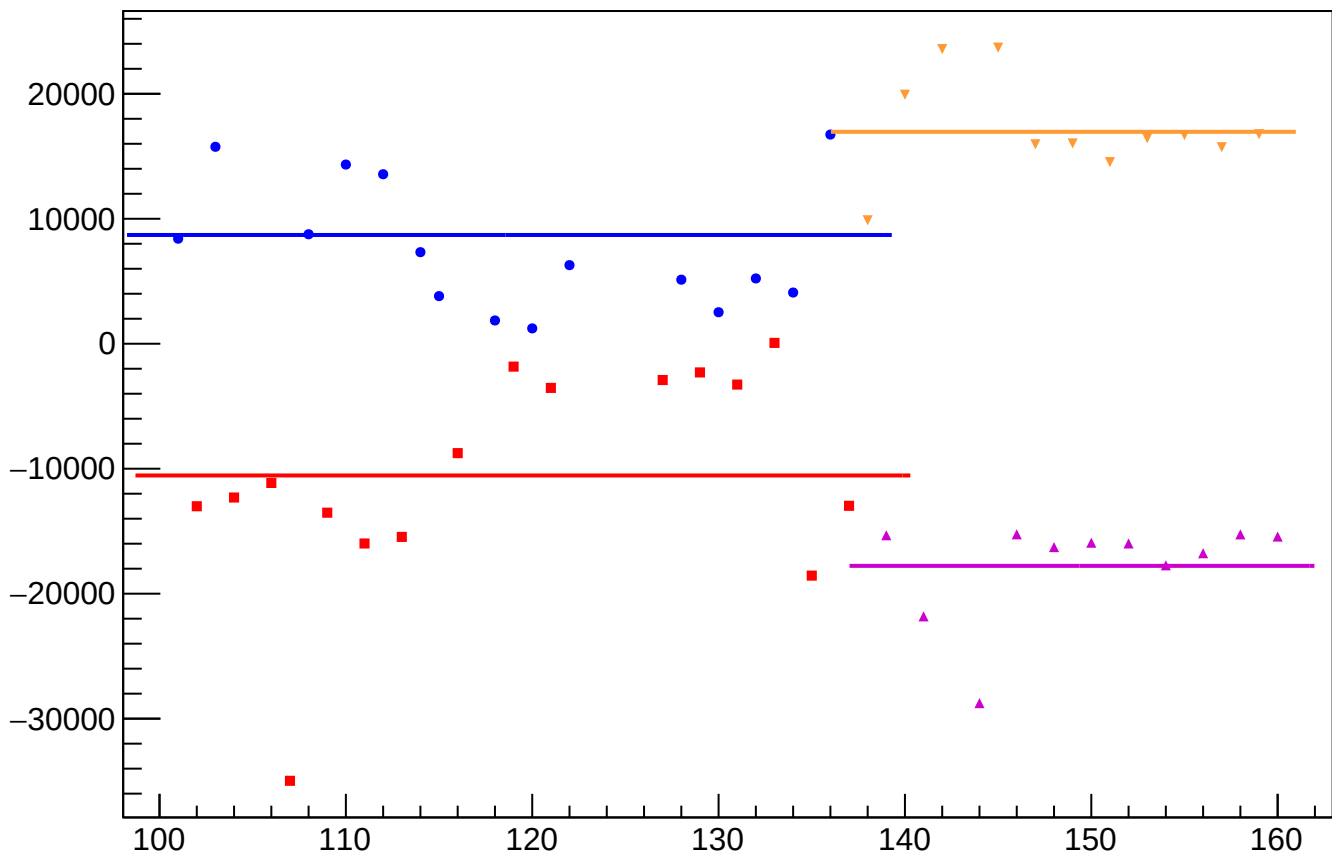
Right In:  $2.250 \pm 0.000$   $\chi^2/\text{NDF}: 656774588136274816295442701090816.0/14$   
 Left Out:  $1.595 \pm 0.000$   $\chi^2/\text{NDF}: 76549213292208781148545230045184.0/11$   
 Right Out:  $-2.025 \pm 0.000$   $\chi^2/\text{NDF}: 578717441762956454616505599918080.0/15$   
 Left In:  $-1.582 \pm 0.000$   $\chi^2/\text{NDF}: 54930988145763434904897999339520.0/10$   
 All:  $0.034 \pm 0.000$   $\chi^2/\text{NDF}: 12024014402929$

dit\_4eY\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684 $\pm$ 0.000  $\chi^2$ /NDF: 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103 $\pm$ 0.000  $\chi^2$ /NDF: 50788606804690292724539730503787347968.0/11  
 Right Out: -947.145 $\pm$ 0.000  $\chi^2$ /NDF: 67784656011936521511169668028018196480.0/15  
 Left In: -1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10  
 All: 2.504 $\pm$ 0.000  $\chi^2$ /NDF: 40413764320356

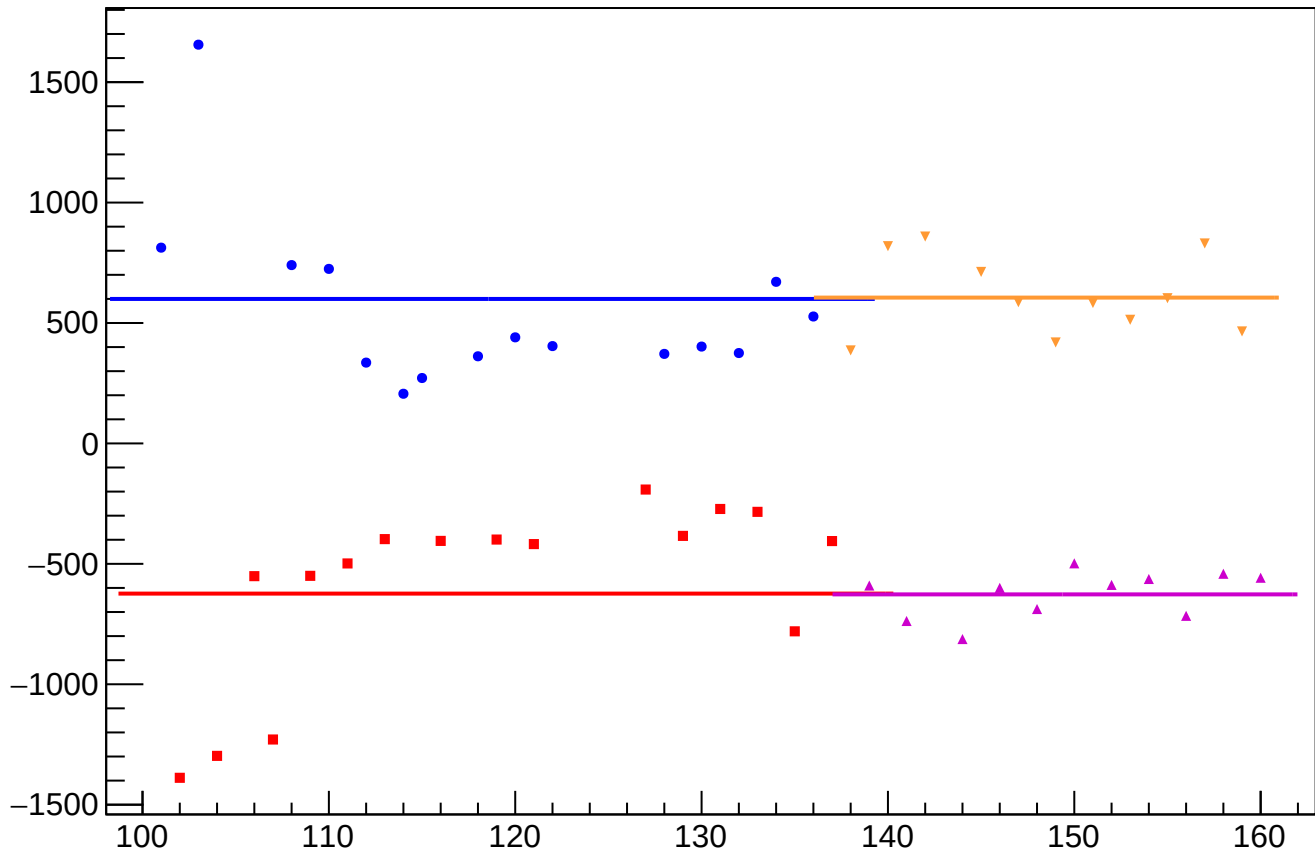
# dit\_usl\_coil7\_mean vs Slug, Sign Corrected



Left: -1162.779+/-0.000  $\chi^2/NDF: 55890843498990$   
 Right In: 8703.332+/-0.000  $\chi^2/NDF: 19501133067308426859536304500819191922688.0/14$   
 Left Out: 16957.575+/-0.000  $\chi^2/NDF: 10938008625550561770285254297697243889664.0/10$   
 Right: -1049.596+/-0.000  $\chi^2/NDF: 1875271262832$   
 In: -6849.259+/-0.000  $\chi^2/NDF: 301670600144202$   
 Right Out: -10539.327+/-0.000  $\chi^2/NDF: 46226684227836109273394062569753758662656.0/15$   
 Out: 4843.682+/-0.000  $\chi^2/NDF: 339295749801159$   
 Left In: -17773.103+/-0.000  $\chi^2/NDF: 14926066991142889452676587552618632445952.0/10$   
 All: -1114.529+/-0.000  $\chi^2/NDF: 7464452329$

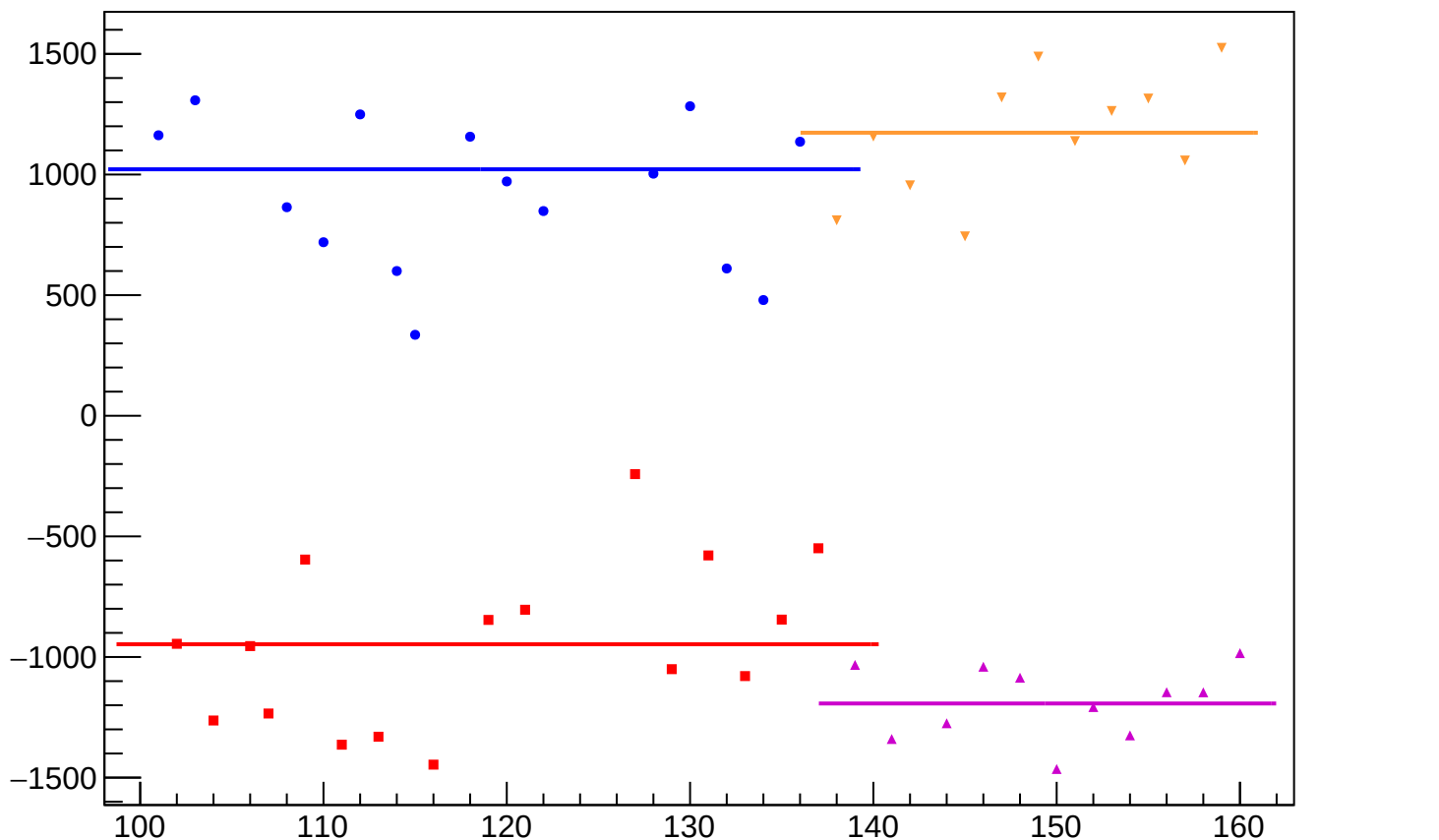


dit\_usl\_coil7\_err\_mean vs Slug, Sign Corrected



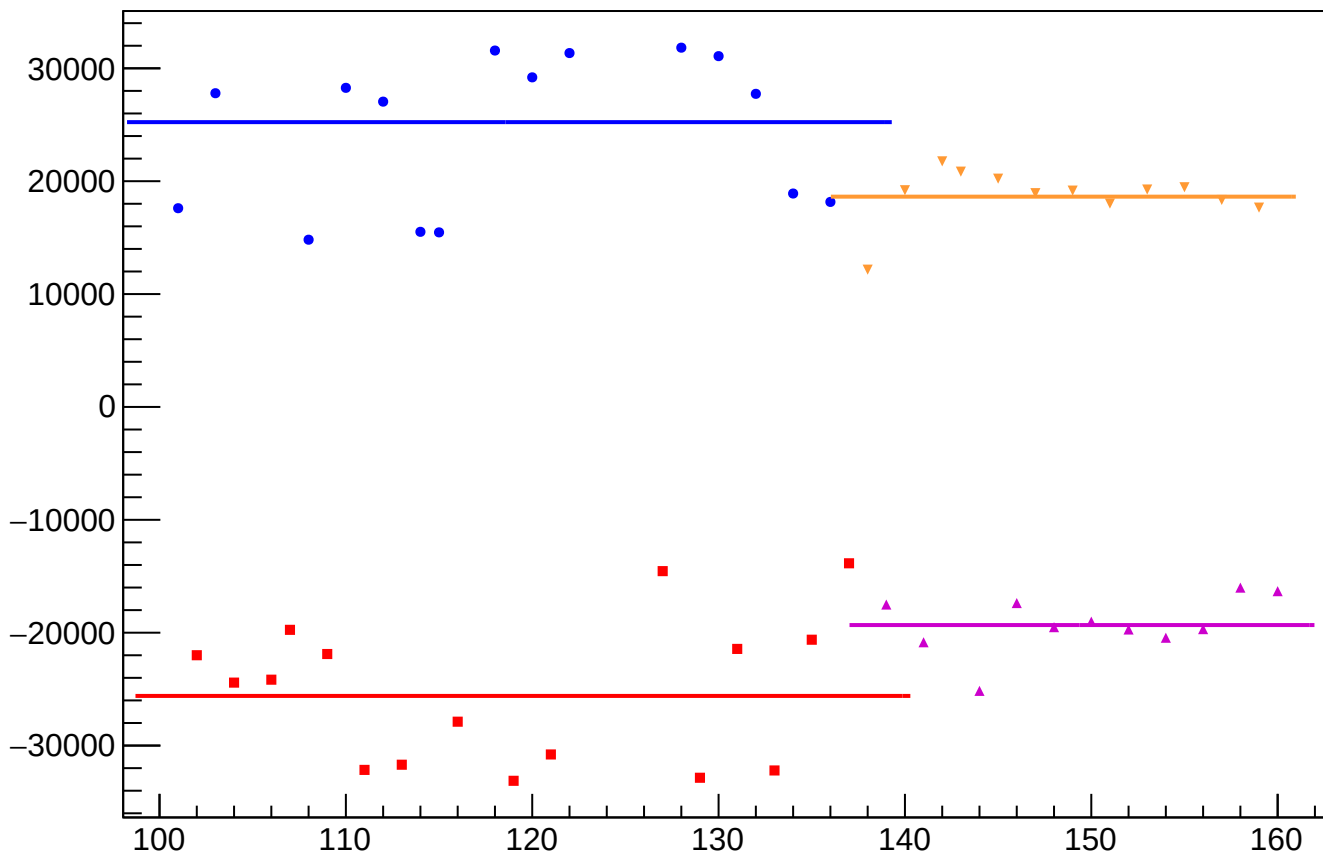
Right In: 599.849+/-0.000  $\chi^2/\text{NDF}$ : 89258961100373244309337208715638472704.0/14  
 Left Out: 605.454+/-0.000  $\chi^2/\text{NDF}$ : 20600036696576889686488913862706855936.0/10  
 Right Out: -623.569+/-0.000  $\chi^2/\text{NDF}$ : 101448845479297603044152618126879490048.0/15  
 Left In: -626.785+/-0.000  $\chi^2/\text{NDF}$ : 8170989429665370050254275774703992832.0/10  
 All: -30.110+/-0.000  $\chi^2/\text{NDF}$ : 138304886705

dit\_usl\_coil7\_Ndata\_mean vs Slug, Sign Corrected



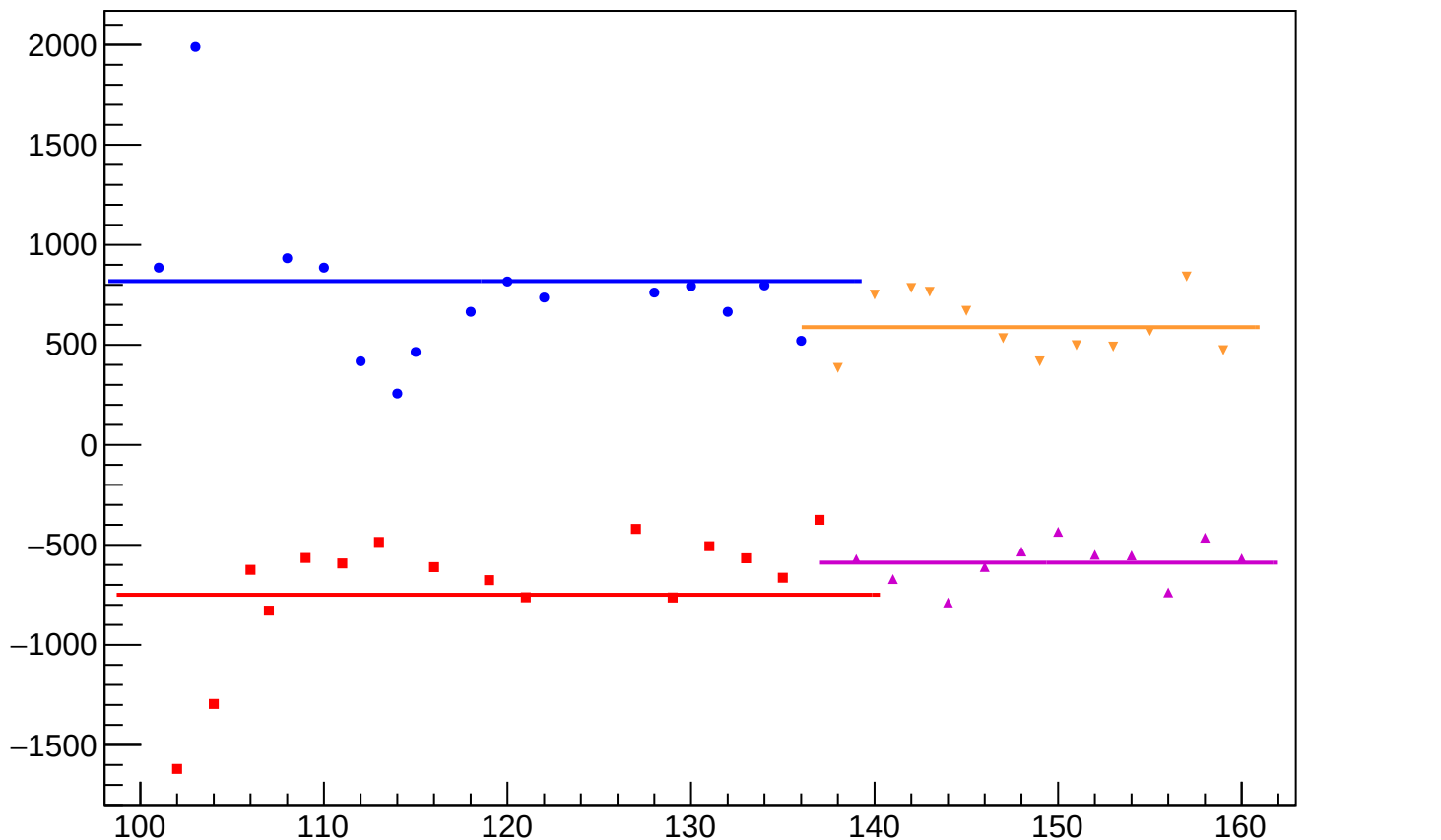
Right In: 1021.684 +/- 0.000  $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14  
 Left Out: 1173.334 +/- 0.000  $\chi^2/\text{NDF}$ : 50259225692125439679244442751924699136.0/10  
 Right Out: -947.145 +/- 0.000  $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15  
 Left In: -1192.687 +/- 0.000  $\chi^2/\text{NDF}$ : 1925528738372820562654022867381911552.0/10  
 All: -24.912 +/- 0.000  $\chi^2/\text{NDF}$ : 393215150522

# dit\_usr\_coil7\_mean vs Slug, Sign Corrected



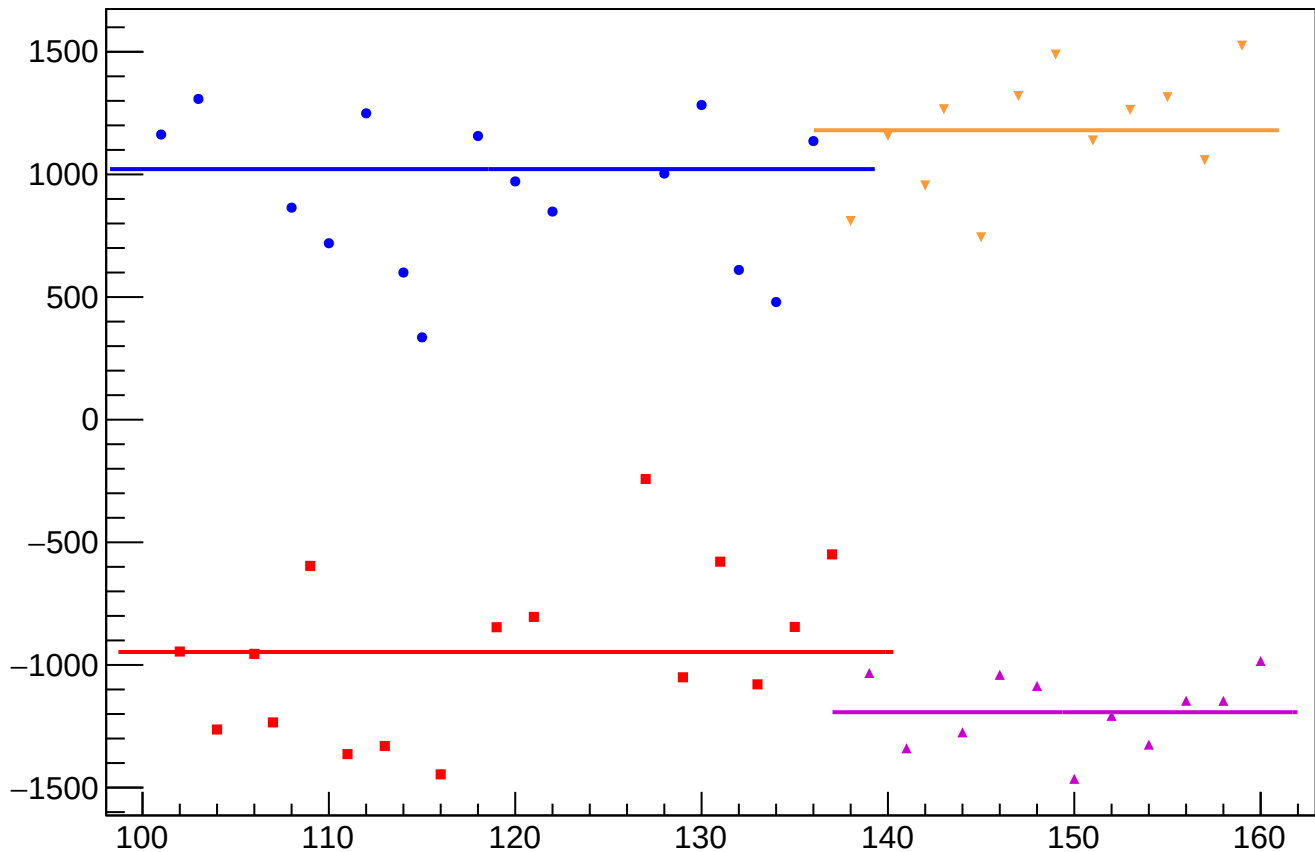
Right In: 25232.229+/-0.000  $\chi^2/\text{NDF}$ : 24534581974772031016304633863538632294400.0/14  
 Left Out: 18630.609+/-0.000  $\chi^2/\text{NDF}$ : 4499157177792733453337123782201790431232.0/11  
 Right Out: -25601.388+/-0.000  $\chi^2/\text{NDF}$ : 24359757587964510827650819847270483099648.0/15  
 Left In: -19322.974+/-0.000  $\chi^2/\text{NDF}$ : 5509841990831420617123513924011035721728.0/10  
 All: -483.976+/-0.000  $\chi^2/\text{NDF}$ : 15707826192

dit\_usr\_coil7\_err\_mean vs Slug, Sign Corrected



Right In:  $818.668 \pm 0.000$   $\chi^2/\text{NDF}: 105606527096911974489496802318373355520.0/14$   
 Left Out:  $588.391 \pm 0.000$   $\chi^2/\text{NDF}: 20060197377989114991296665666078113792.0/11$   
 Right Out:  $-749.661 \pm 0.000$   $\chi^2/\text{NDF}: 77972691834605708706145461250669150208.0/15$   
 Left In:  $-588.693 \pm 0.000$   $\chi^2/\text{NDF}: 9904386894828699094725074481582178304.0/10$   
 All:  $7.967 \pm 0.000$   $\chi^2/\text{NDF}: 16598147133155$

dit\_usr\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

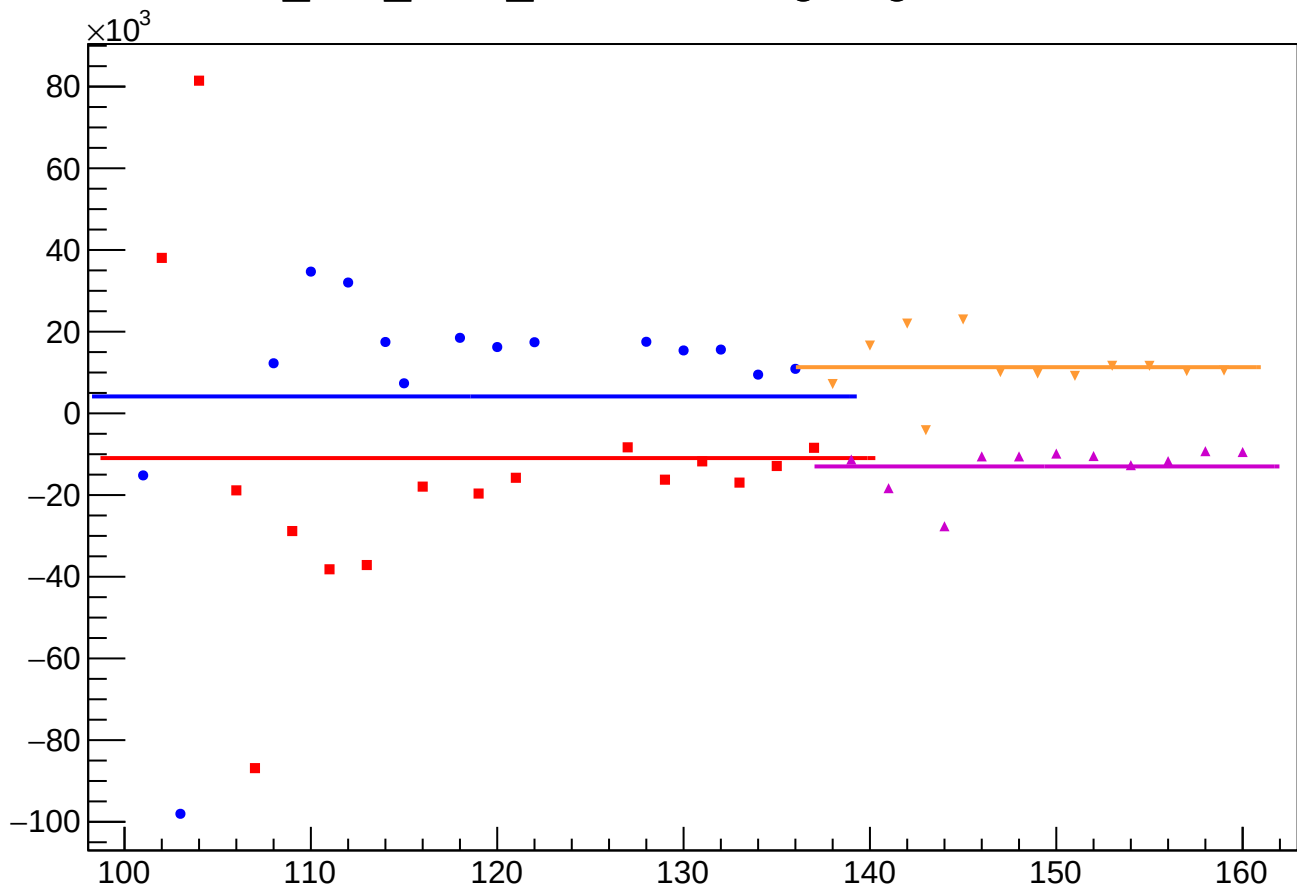
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

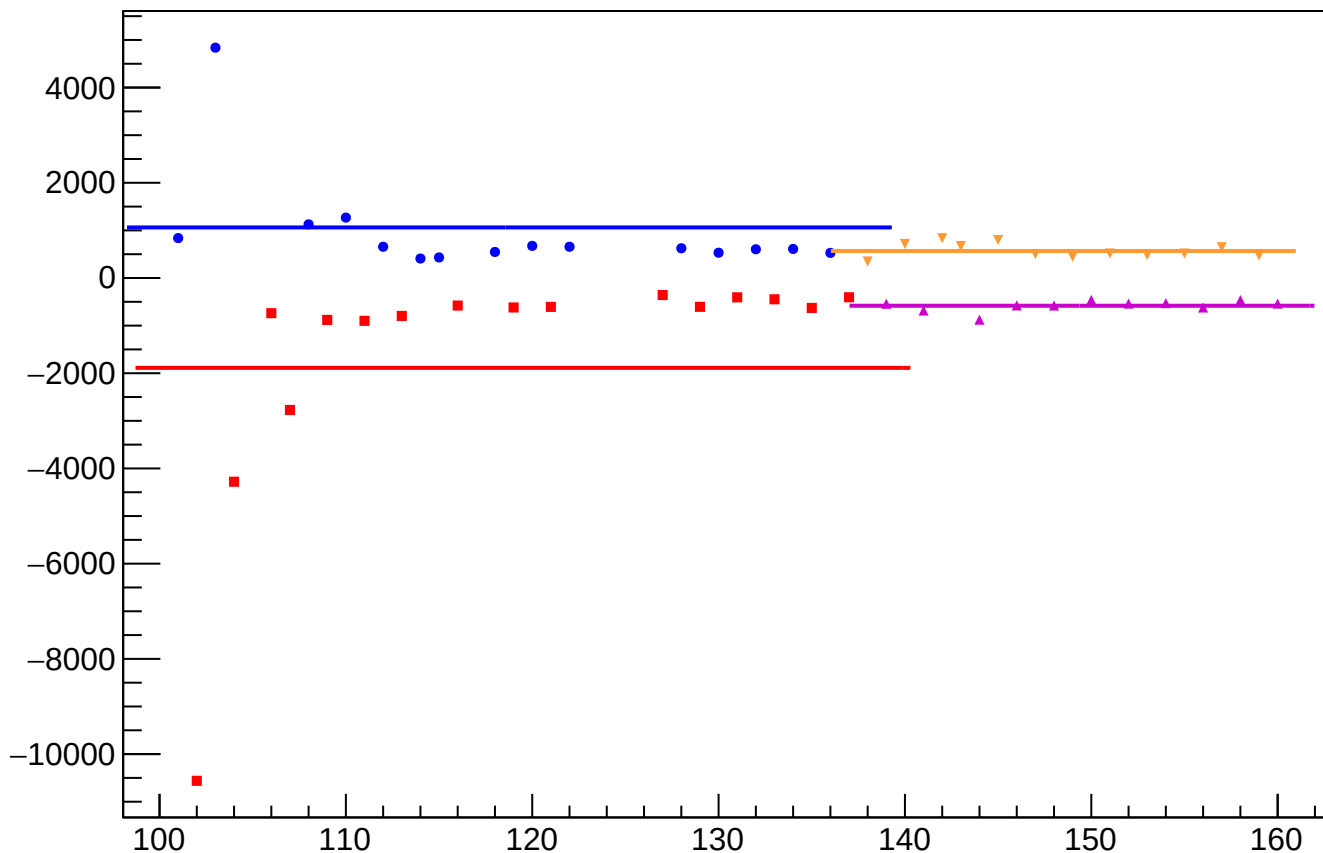
All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_atl1\_coil7\_mean vs Slug, Sign Corrected



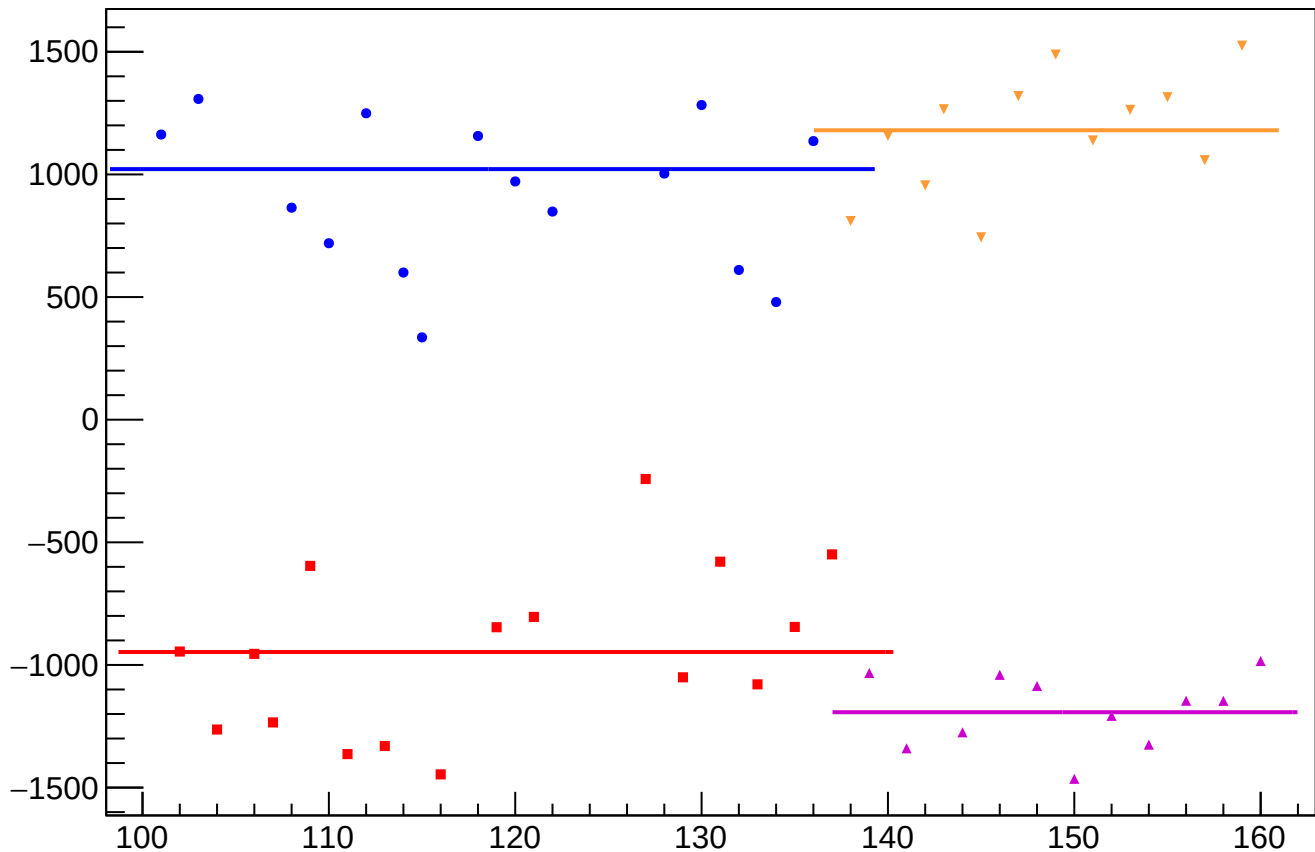
Left:  $-909.343 \pm 0.000$   $\chi^2/\text{NDF}: 334047502497759$   
 Right In:  $4145.268 \pm 0.000$   $\chi^2/\text{NDF}: 763693998395064689637972381933507648159744.0/14$   
 Right:  $-3504.625 \pm 0.000$   $\chi^2/\text{NDF}: 1712578788282$   
 Left Out:  $11307.773 \pm 0.000$   $\chi^2/\text{NDF}: 36281065862244259787300982388178548686848.0/11$   
 In:  $-5922.694 \pm 0.000$   $\chi^2/\text{NDF}: 902084767732052$   
 Right Out:  $-10948.073 \pm 0.000$   $\chi^2/\text{NDF}: 873949668510327201514601463115396191092736.0/15$   
 Out:  $1918.368 \pm 0.000$   $\chi^2/\text{NDF}: 110122853896245$   
 Left In:  $-12994.239 \pm 0.000$   $\chi^2/\text{NDF}: 26399397473209063315648711040224276250624.0/10$   
 All:  $-1992.219 \pm 0.000$   $\chi^2/\text{NDF}: 2051791747$

# dit\_atl1\_coil7\_err\_mean vs Slug, Sign Corrected



Left: -10.469+/-0.000  $\chi^2/\text{NDF}$ : 6372083040457971  
 Right In: 1062.141+/-0.000  $\chi^2/\text{NDF}$ : 952806231926530012715872184655778152448.0/14  
 Right: -432.638+/-0.000  $\chi^2/\text{NDF}$ : 93397475225812  
 Left Out: 567.733+/-0.000  $\chi^2/\text{NDF}$ : 17522884747687495168010192179255312384.0/11  
 In: 96.109+/-0.000  $\chi^2/\text{NDF}$ : 199572640986063157  
 Right Out: -1887.077+/-0.000  $\chi^2/\text{NDF}$ : 5525872718363845620366029387569058283520.0/15  
 Out: -467.914+/-0.000  $\chi^2/\text{NDF}$ : 786707402720723  
 Left In: -582.413+/-0.000  $\chi^2/\text{NDF}$ : 118601444625381813814678965729624064.0/10  
 All: -186.618+/-0.000  $\chi^2/\text{NDF}$ : 10113638171

dit\_atl1\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

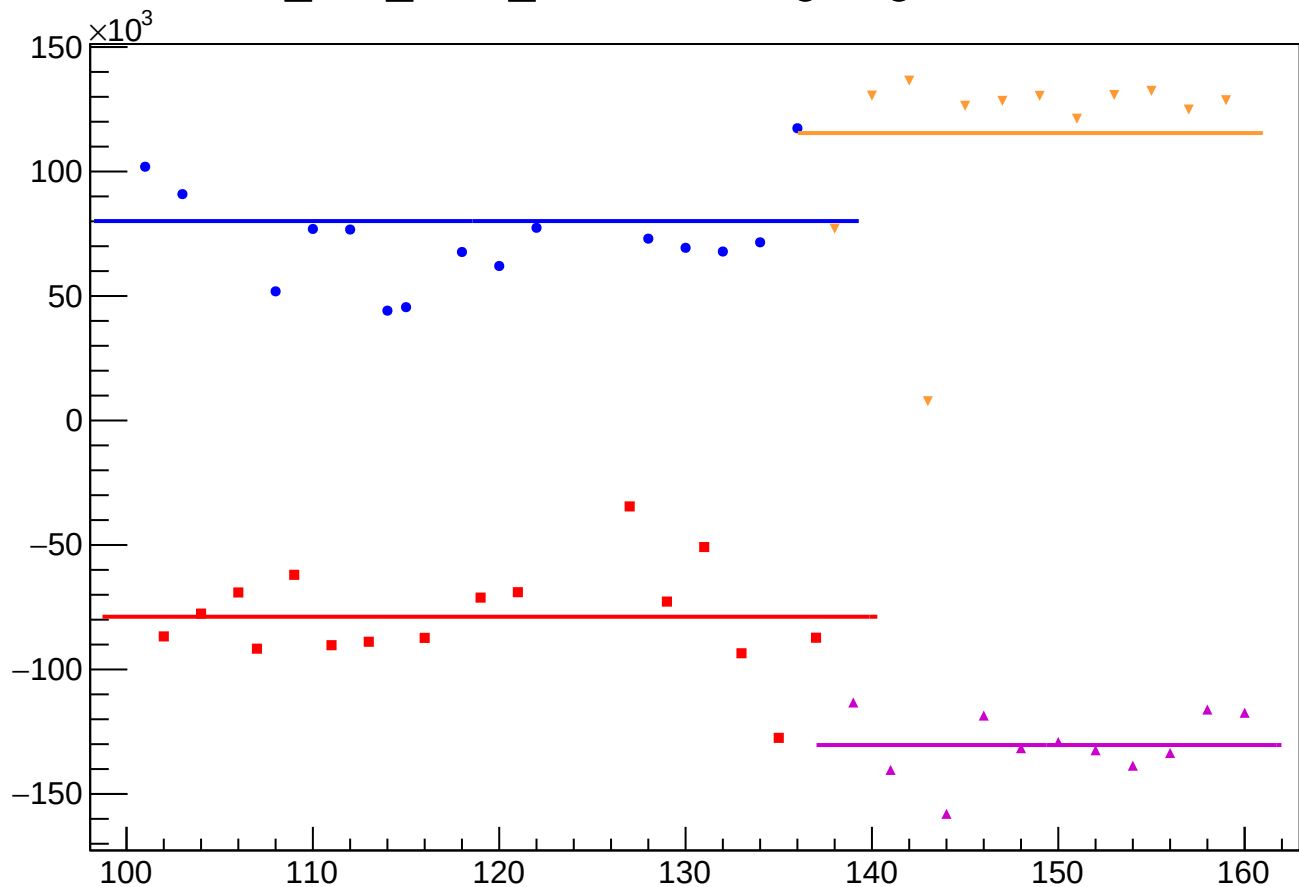
In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356



dit\_atl2\_coil7\_mean vs Slug, Sign Corrected



Right In: 80102.504+/-0.000

$\chi^2/\text{NDF}$ : 254521784097258654723607522631742465769472.0/14

Left Out: 115448.893+/-0.000

$\chi^2/\text{NDF}$ : 1038801657464811255416211206986838896017408.0/11

Right Out: -78815.832+/-0.000

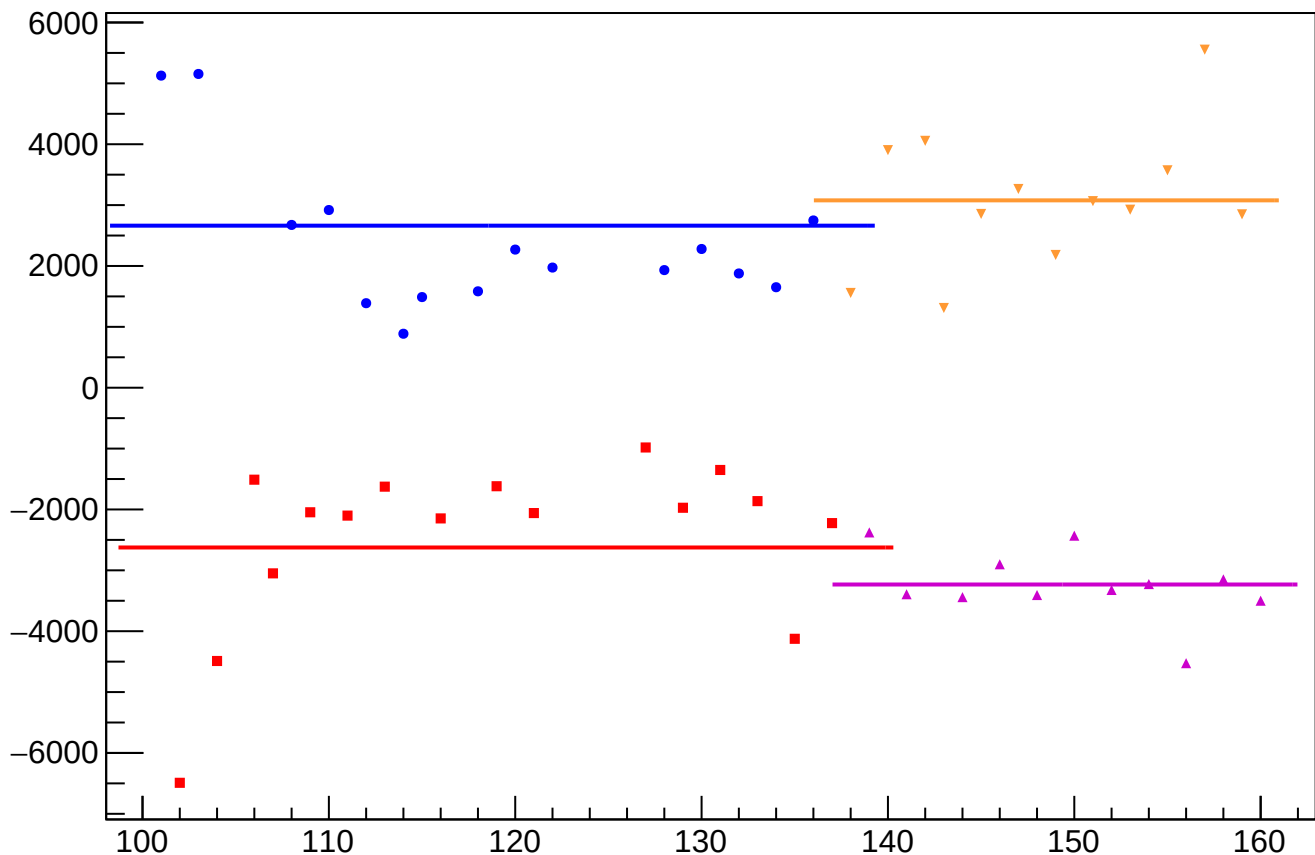
$\chi^2/\text{NDF}$ : 286076919217811099434470442231998185472000.0/15

Left In: -130346.244+/-0.000

$\chi^2/\text{NDF}$ : 148174871015439819820100459279999278514176.0/10

All: -4915.433+/-0.000  $\chi^2/\text{NDF}$ : 3784007443

# dit\_atl2\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 2662.183+/-0.000

Left Out: 3077.945+/-0.000

Right Out: -2624.696+/-0.000

Left In: -3232.879+/-0.000

$\chi^2/\text{NDF}$ : 1031389230165640157864439705583367487488.0/14

$\chi^2/\text{NDF}$ : 1073709891492389198093936322660595138560.0/11

$\chi^2/\text{NDF}$ : 1566705216866534713590934835660406652928.0/15

$\chi^2/\text{NDF}$ : 275721007613891276741007240283331493888.0/10

Left: -94.635+/-0.000  $\chi^2/\text{NDF}$ : 1964916620255589

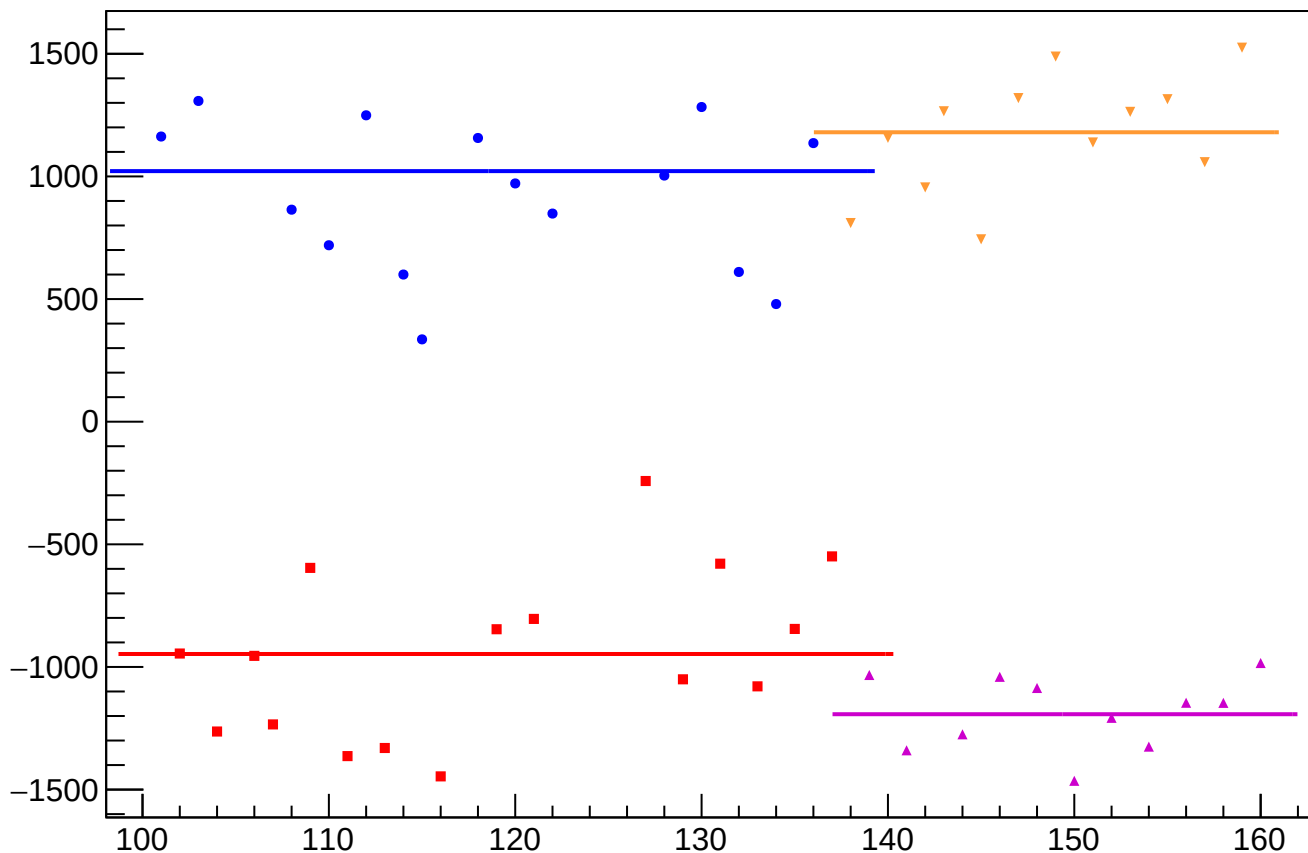
Right: -17.413+/-0.000  $\chi^2/\text{NDF}$ : 117922842657675

In: -800.651+/-0.000  $\chi^2/\text{NDF}$ : 145555206694384

Out: 672.087+/-0.000  $\chi^2/\text{NDF}$ : 1518026118358382

All: -62.414+/-0.000  $\chi^2/\text{NDF}$ : 314460236947

dit\_atl2\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

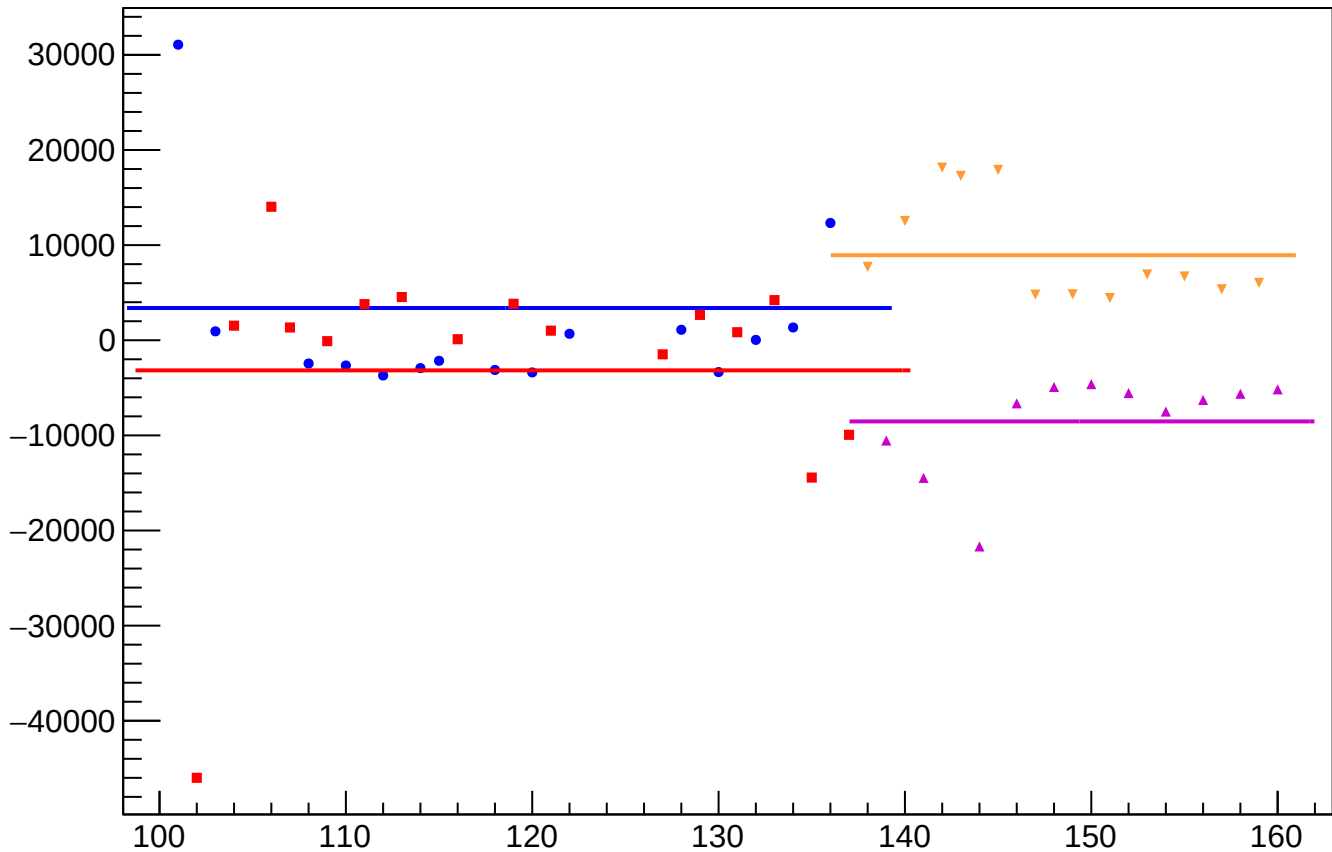
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_atr1\_coil7\_mean vs Slug, Sign Corrected



Right In: 3390.550+/-0.000

$\chi^2/\text{NDF}$ : 65871927441553256724179194556280173756416.0/14

Left Out: 8941.712+/-0.000

$\chi^2/\text{NDF}$ : 22757542723529976862924189628837264359424.0/11

Right Out: -3167.396+/-0.000

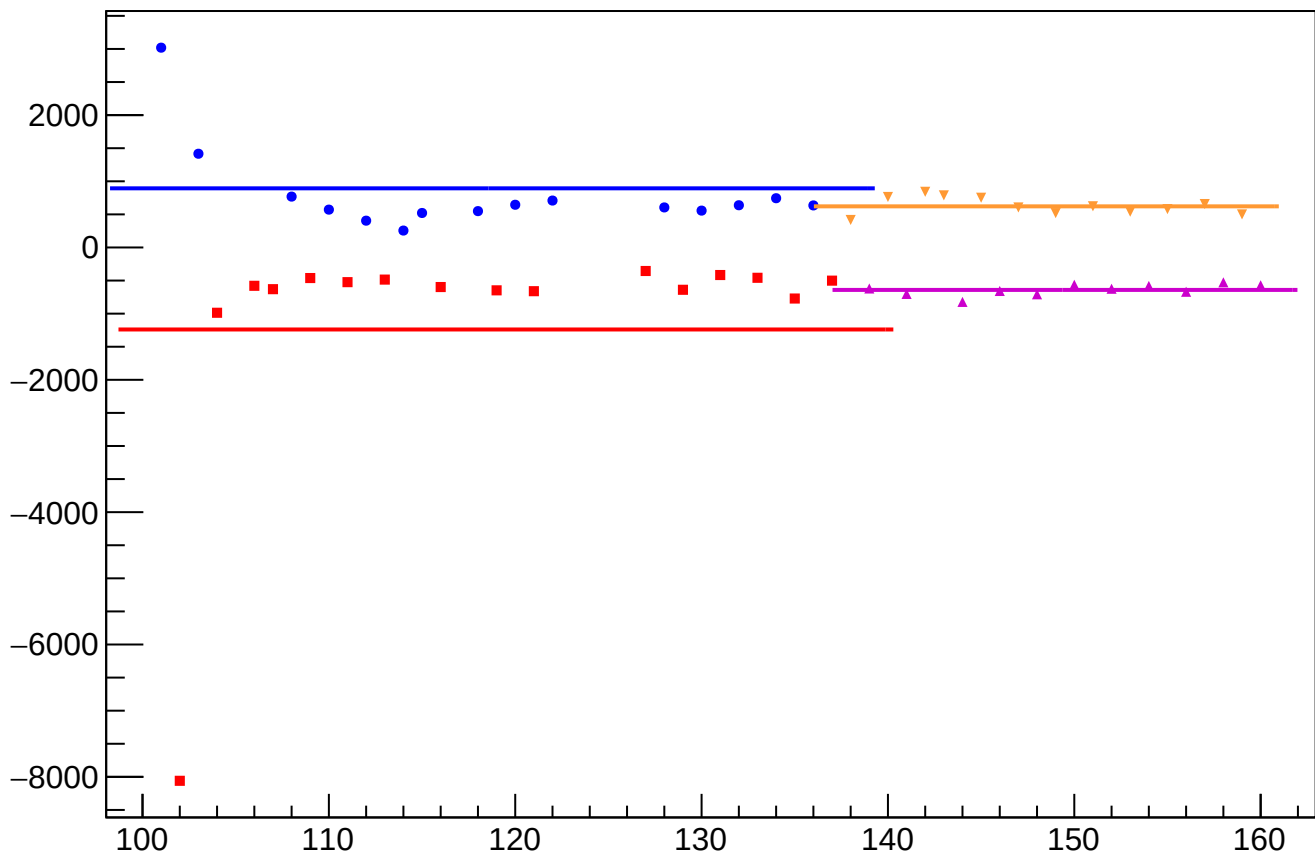
$\chi^2/\text{NDF}$ : 137753886677241144460462531881687568089088.0/15

Left In: -8532.821+/-0.000

$\chi^2/\text{NDF}$ : 24299515949380224586324737558095226470400.0/10

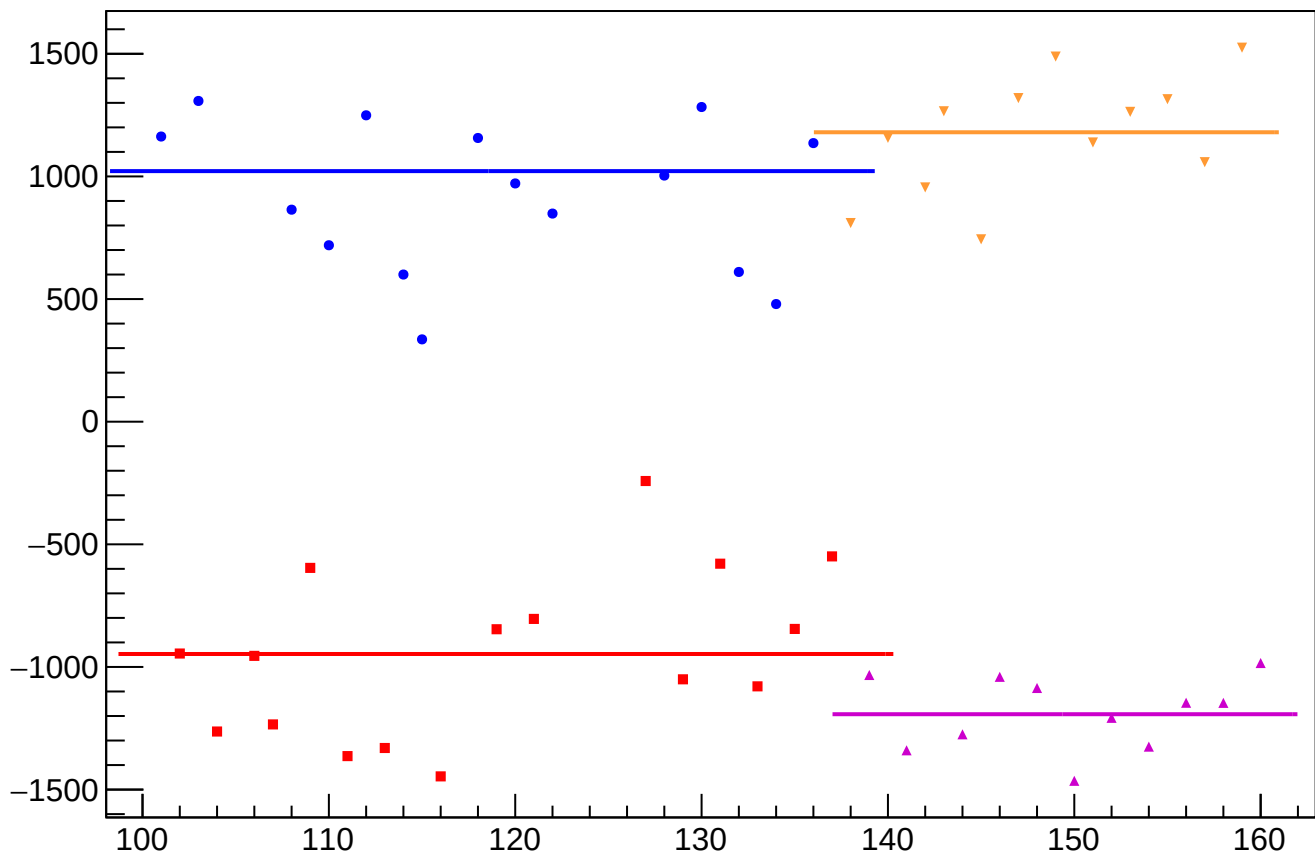
All: 119.281+/-0.000  $\chi^2/\text{NDF}$ : 405144112898

dit\_atr1\_coil7\_err\_mean vs Slug, Sign Corrected



Right In:  $893.683 \pm 0.000$   $\chi^2/\text{NDF}: 334583619078631008932404228227359309824.0/14$   
 Left Out:  $621.395 \pm 0.000$   $\chi^2/\text{NDF}: 13220761349033595391183034930255888384.0/11$   
 Right Out:  $-1239.298 \pm 0.000$   $\chi^2/\text{NDF}: 2970990859486483990408108918937565003776.0/15$   
 Left In:  $-641.490 \pm 0.000$   $\chi^2/\text{NDF}: 6047241871046466320943152926715543552.0/10$   
 All:  $-86.047 \pm 0.000$   $\chi^2/\text{NDF}: 557740460848$

dit\_atr1\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

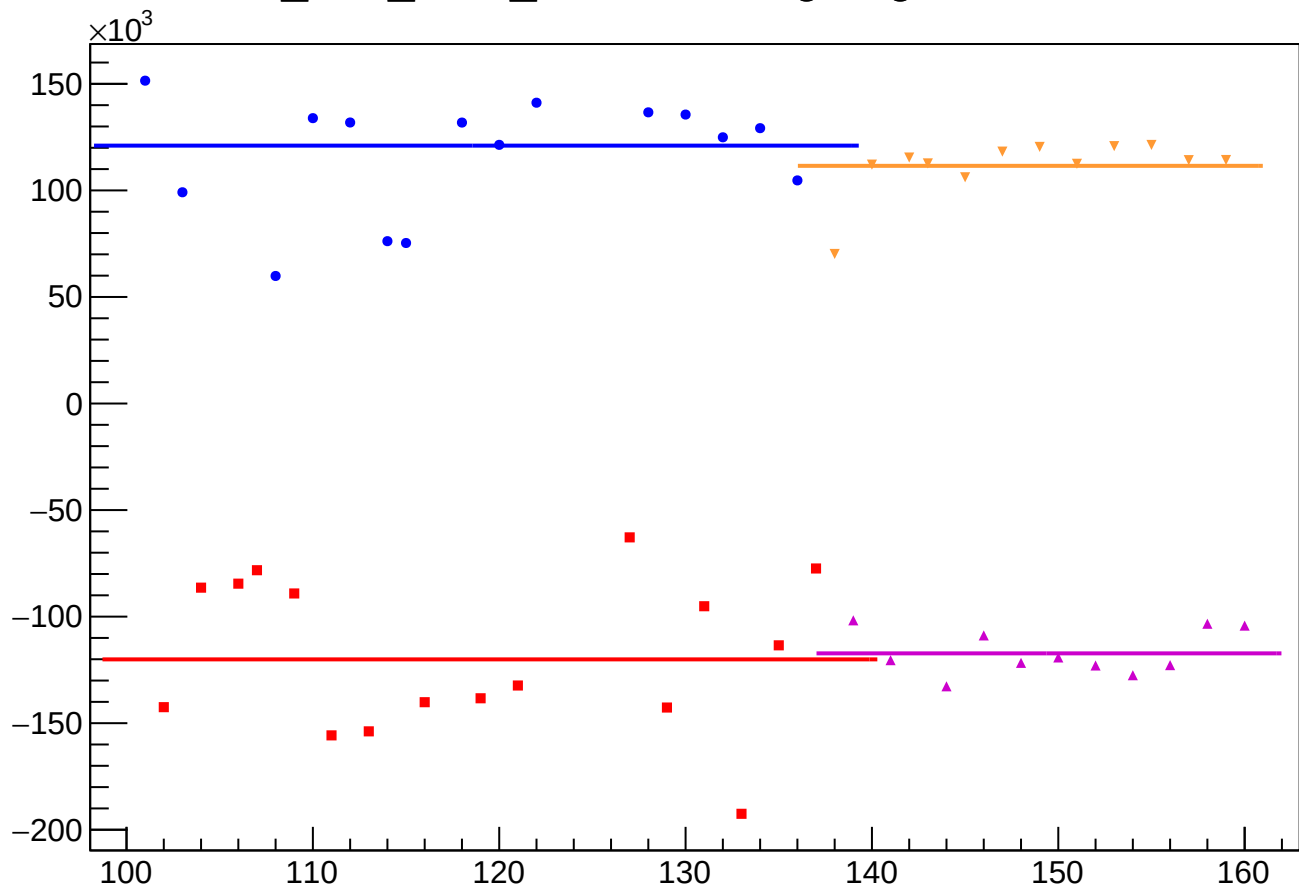
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

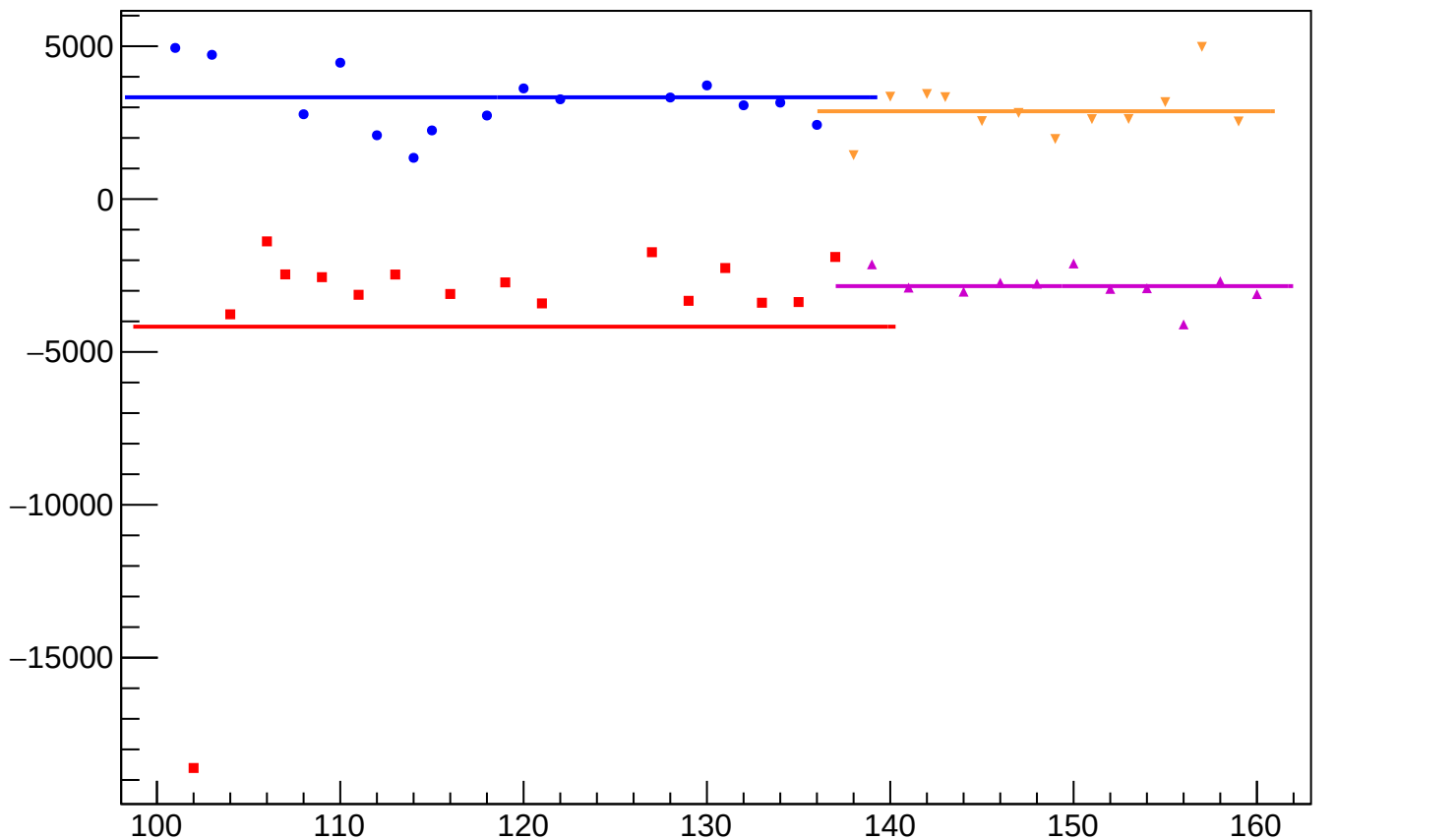
All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_atr2\_coil7\_mean vs Slug, Sign Corrected



Right In: 121016.482 $\pm$ 0.000  $\chi^2$ /NDF: 358713856404303554987784975983609668173824.0/14  
 Left Out: 111531.681 $\pm$ 0.000  $\chi^2$ /NDF: 162724299829921950370834246417372913074176.0/11  
 Right Out: -120060.693 $\pm$ 0.000  $\chi^2$ /NDF: 828419782346707601448620310014135952736256.0/15  
 Left In: -117237.465 $\pm$ 0.000  $\chi^2$ /NDF: 92299527706158063096544434206678792011776.0/10  
 All: -2513.712 $\pm$ 0.000  $\chi^2$ /NDF: 4461091057

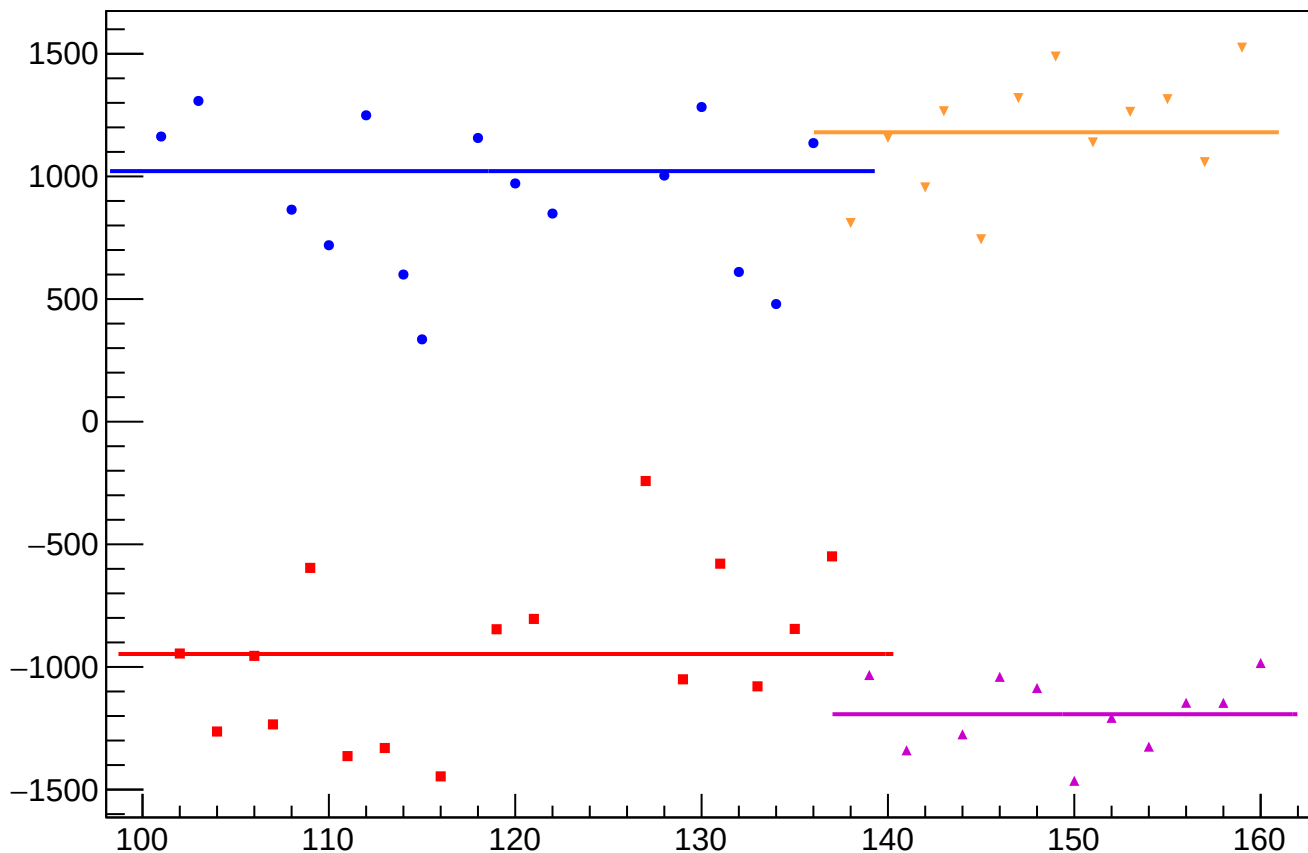
dit\_atr2\_coil7\_err\_mean vs Slug, Sign Corrected



Left:  $-2.554 \pm 0.000$   $\chi^2/\text{NDF}: 15921502408931202$   
 Right In:  $3329.488 \pm 0.000$   $\chi^2/\text{NDF}: 567034774398456376227526824513721335808.0/14$   
 Right:  $-473.285 \pm 0.000$   $\chi^2/\text{NDF}: 32582486462967$   
 Left Out:  $2872.567 \pm 0.000$   $\chi^2/\text{NDF}: 662883582778902790585902196636778496000.0/11$   
 In:  $298.400 \pm 0.000$   $\chi^2/\text{NDF}: 1533808541348253$   
 Right Out:  $-4173.434 \pm 0.000$   $\chi^2/\text{NDF}: 13498246551537992400095003154682468106240.0/15$   
 Out:  $-100.034 \pm 0.000$   $\chi^2/\text{NDF}: 333048130531602$   
 Left In:  $-2846.559 \pm 0.000$   $\chi^2/\text{NDF}: 229557109736682123603885764134616170496.0/10$   
 All:  $-198.965 \pm 0.000$   $\chi^2/\text{NDF}: 48673924762$



dit\_atr2\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

Left Out: 1180.103+/-0.000

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

Right Out: -947.145+/-0.000

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

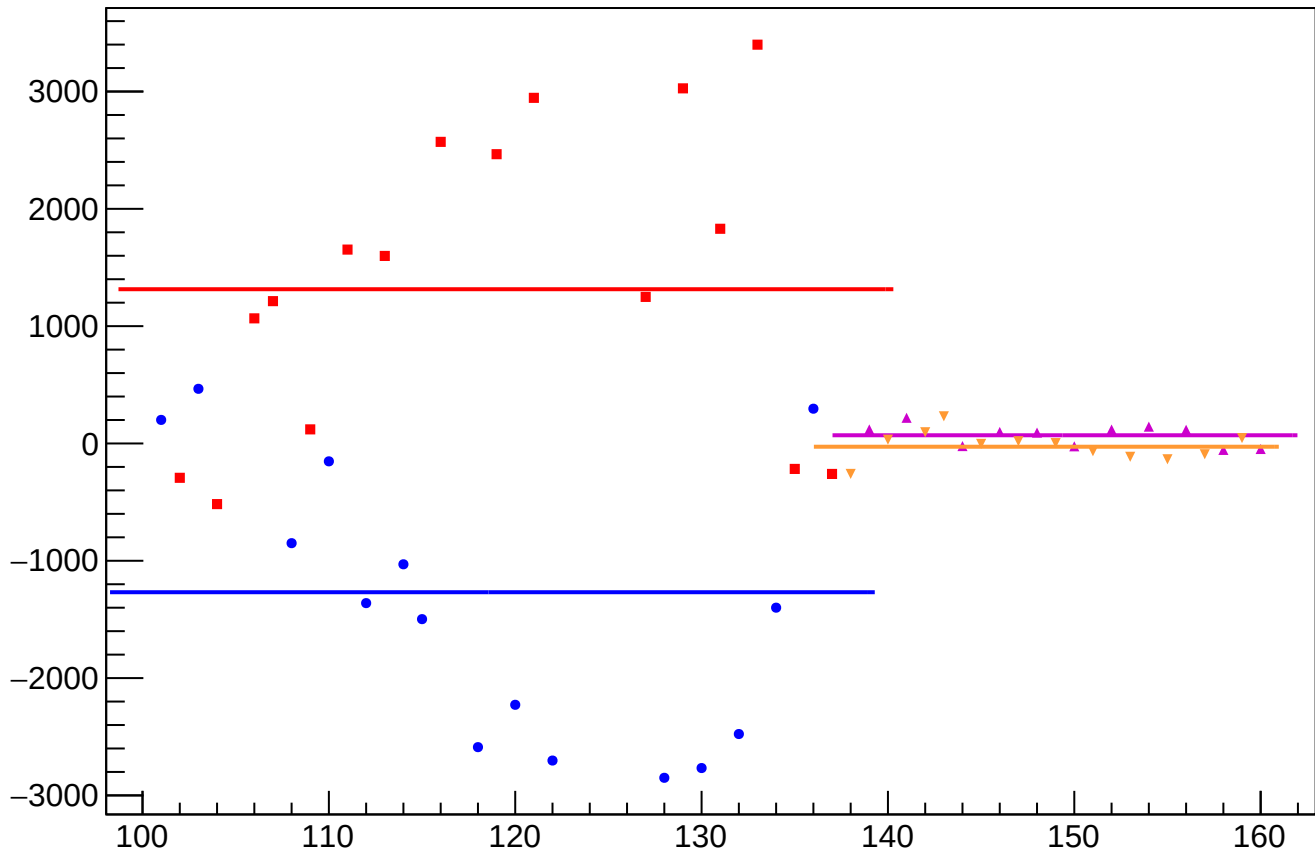
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

dit\_sam1\_coil7\_mean vs Slug, Sign Corrected



Right In: -1268.061+/-0.000

$\chi^2/\text{NDF}$ : 1092280760288833856070470490800647045120.0/14

Left Out: -27.745+/-0.000

$\chi^2/\text{NDF}$ : 12401866293776389782406733193877127168.0/11

Right Out: 1314.767+/-0.000

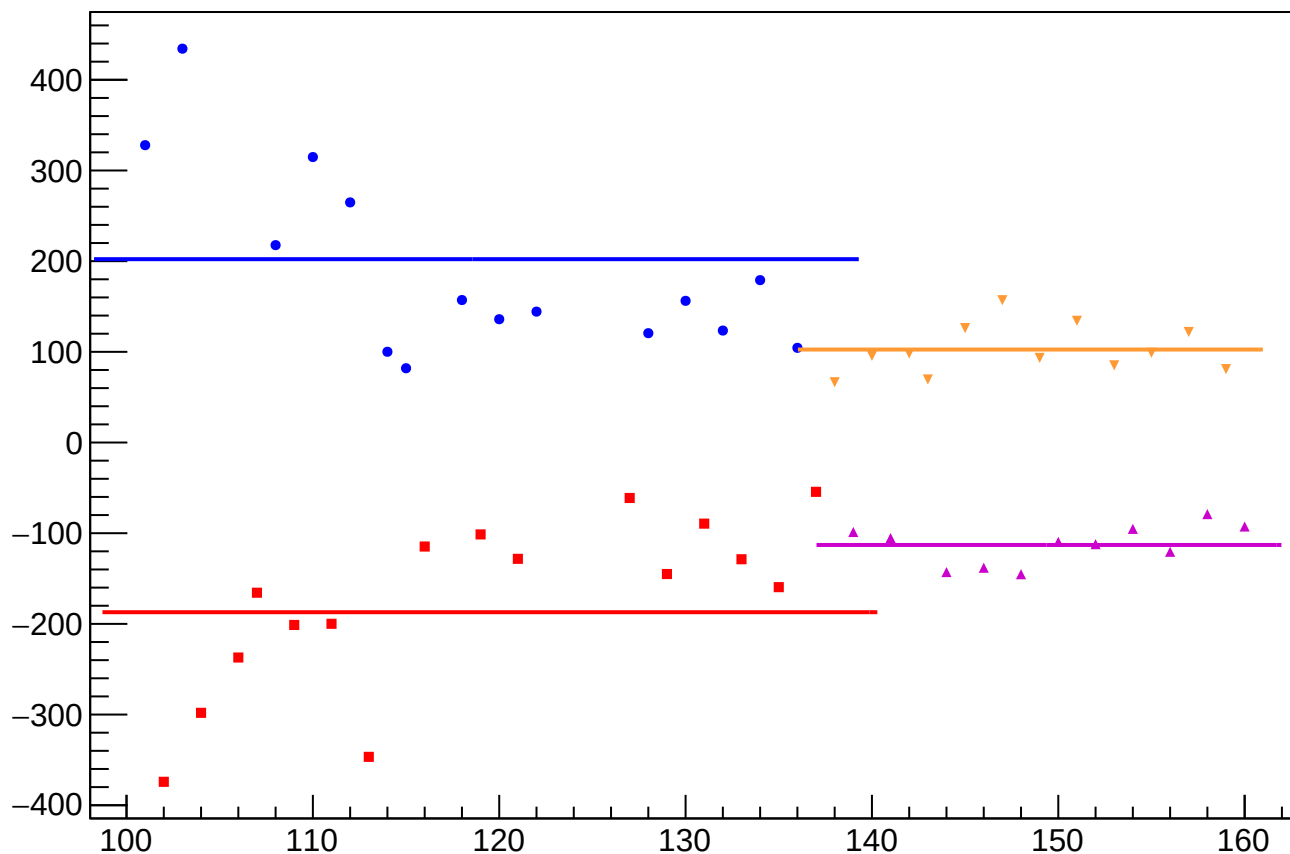
$\chi^2/\text{NDF}$ : 1098471313864079013714609379653260935168.0/15

Left In: 69.887+/-0.000

$\chi^2/\text{NDF}$ : 6896729055106095492675290775544659968.0/10

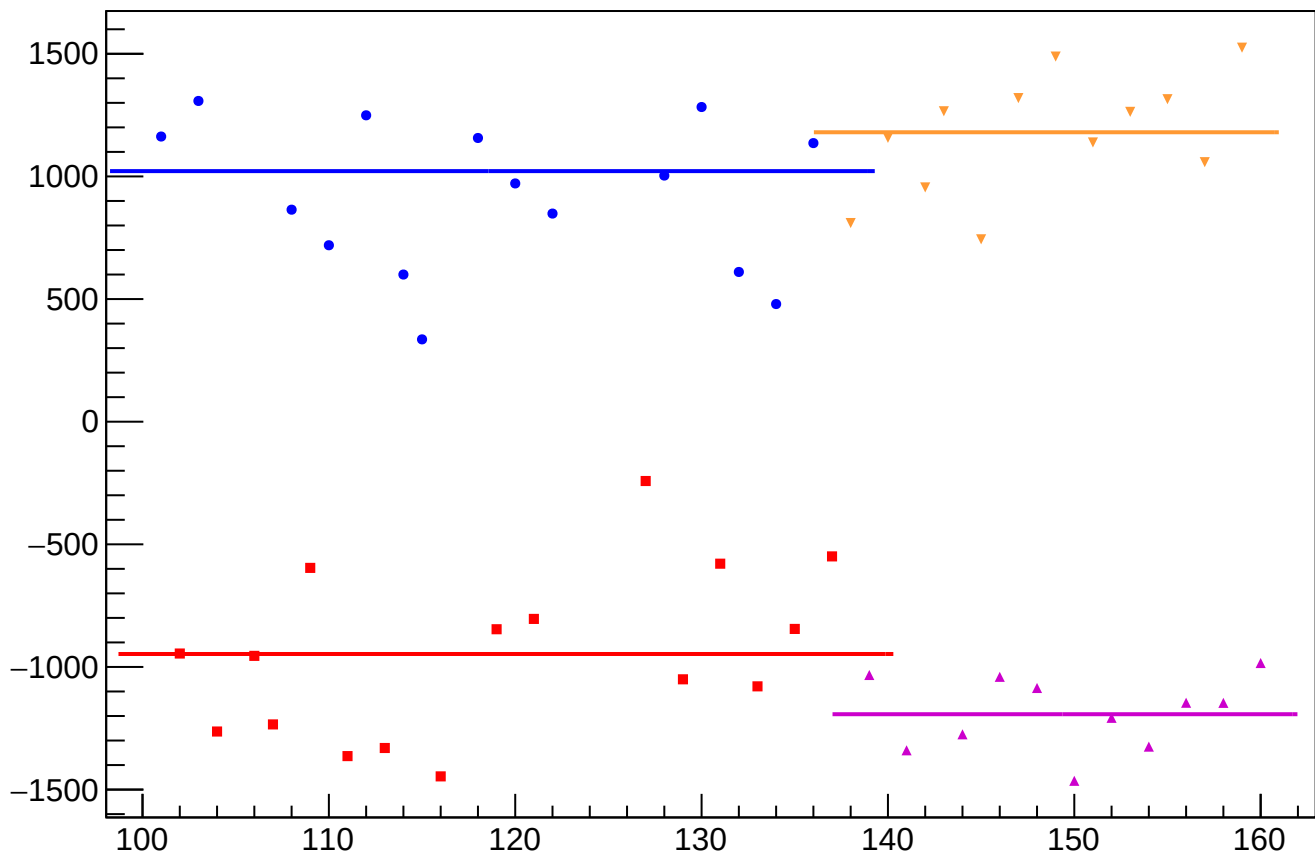
All: 29.548+/-0.000  $\chi^2/\text{NDF}$ : 4409076158029

# dit\_sam1\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 202.191+/-0.000  $\chi^2/\text{NDF}$ : 7027941052752849066369040650615128064.0/14  
 Left Out: 102.547+/-0.000  $\chi^2/\text{NDF}$ : 631914374783938330949359707000668160.0/11  
 Right Out: -187.126+/-0.000  $\chi^2/\text{NDF}$ : 6230029491605524746936515809941389312.0/15  
 Left In: -112.981+/-0.000  $\chi^2/\text{NDF}$ : 399082569166702797505998561799569408.0/10  
 All: -1.350+/-0.000  $\chi^2/\text{NDF}$ : 8557691672482

dit\_sam1\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684 +/- 0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

Left Out: 1180.103 +/- 0.000

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

Right Out: -947.145 +/- 0.000

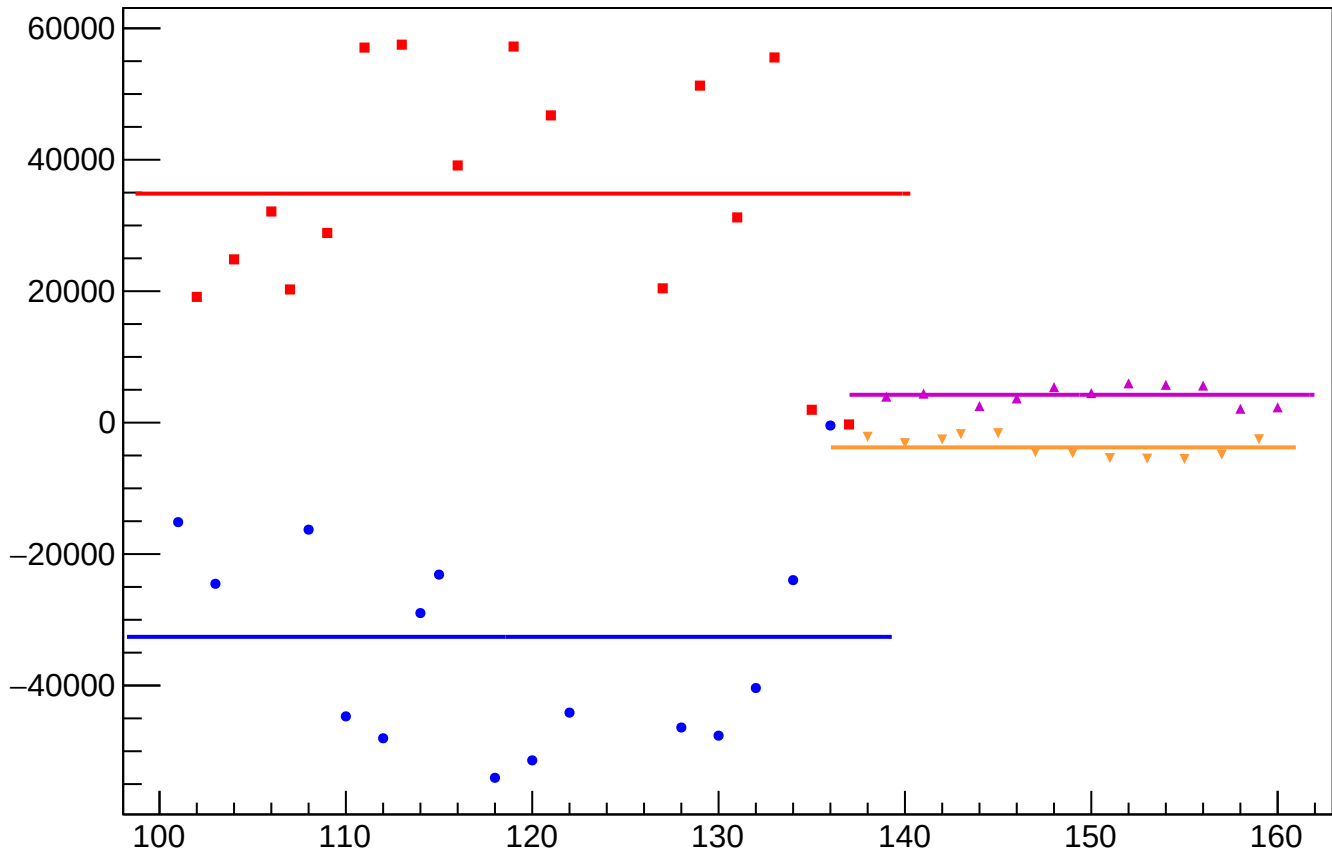
$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

Left In: -1192.687 +/- 0.000

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

All: 2.504 +/- 0.000  $\chi^2/\text{NDF}$ : 40413764320356

dit\_sam2\_coil7\_mean vs Slug, Sign Corrected



Right In: -32594.962+/-0.000

$\chi^2/\text{NDF}$ : 209150369207000564489724529020922520141824.0/14

Left Out: -3764.764+/-0.000

$\chi^2/\text{NDF}$ : 1969097651481267133720686593450373545984.0/11

Right Out: 34848.046+/-0.000

$\chi^2/\text{NDF}$ : 221127702024811719232559434097324967591936.0/15

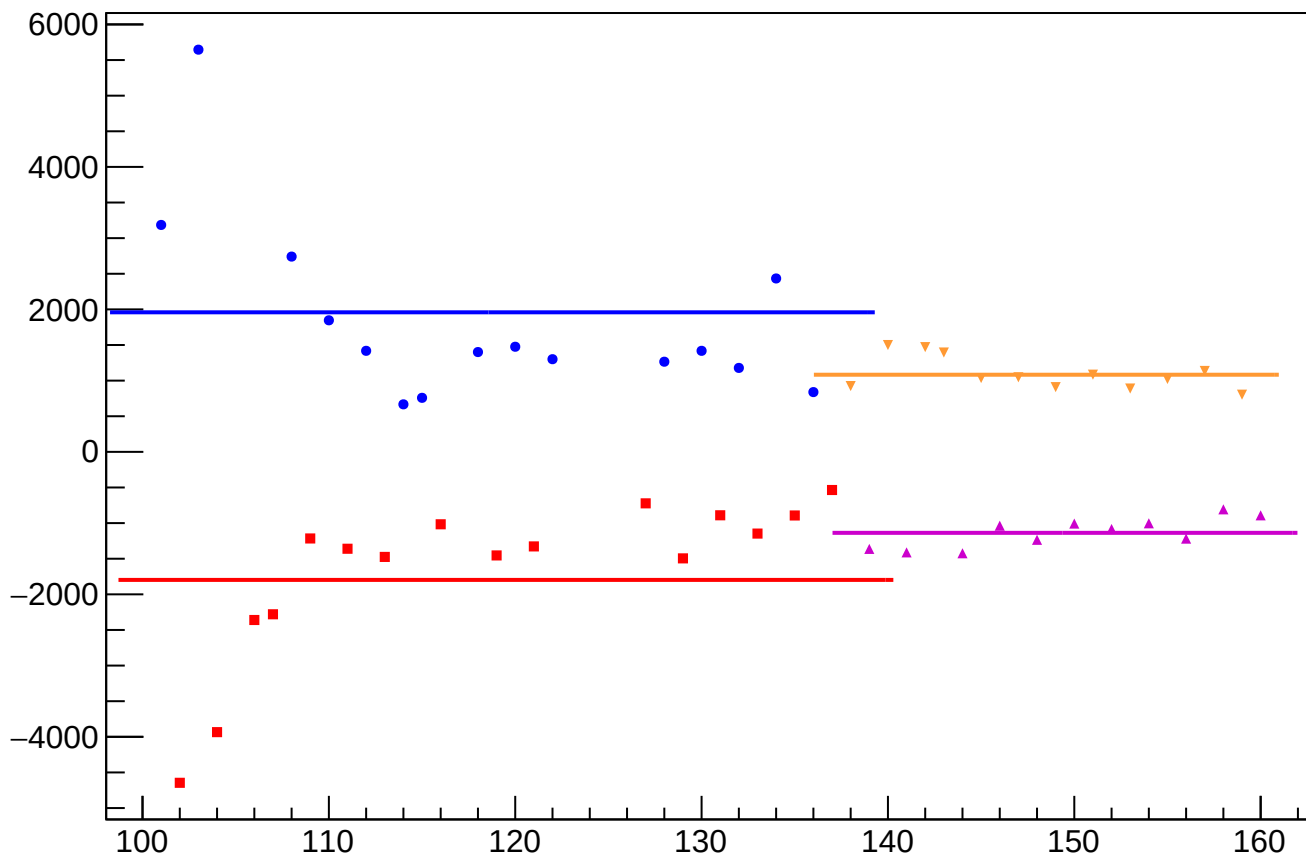
Left In: 4238.758+/-0.000

$\chi^2/\text{NDF}$ : 1676258877466067471746283067125033598976.0/10

All: 813.296+/-0.000

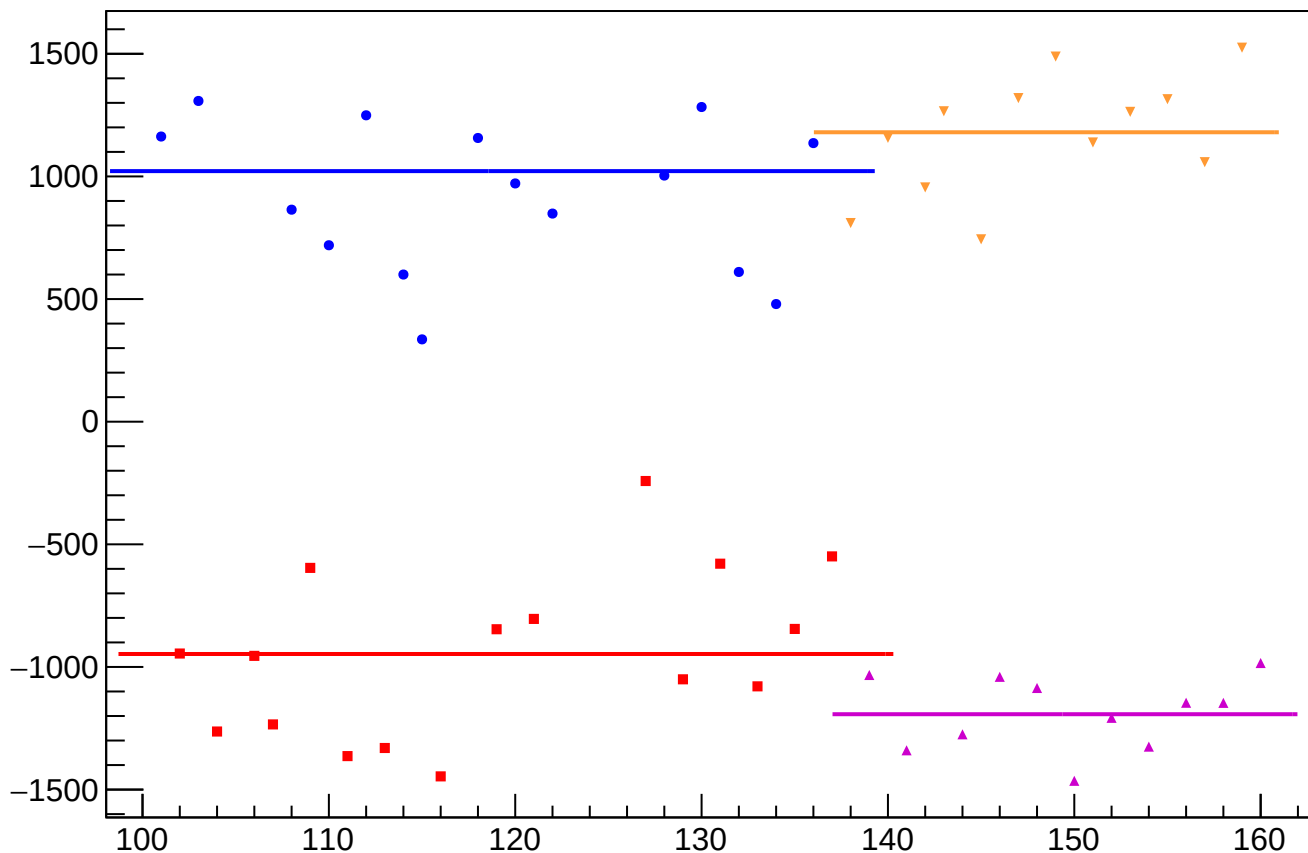
$\chi^2/\text{NDF}$ : 196090705413

# dit\_sam2\_coil7\_err\_mean vs Slug, Sign Corrected



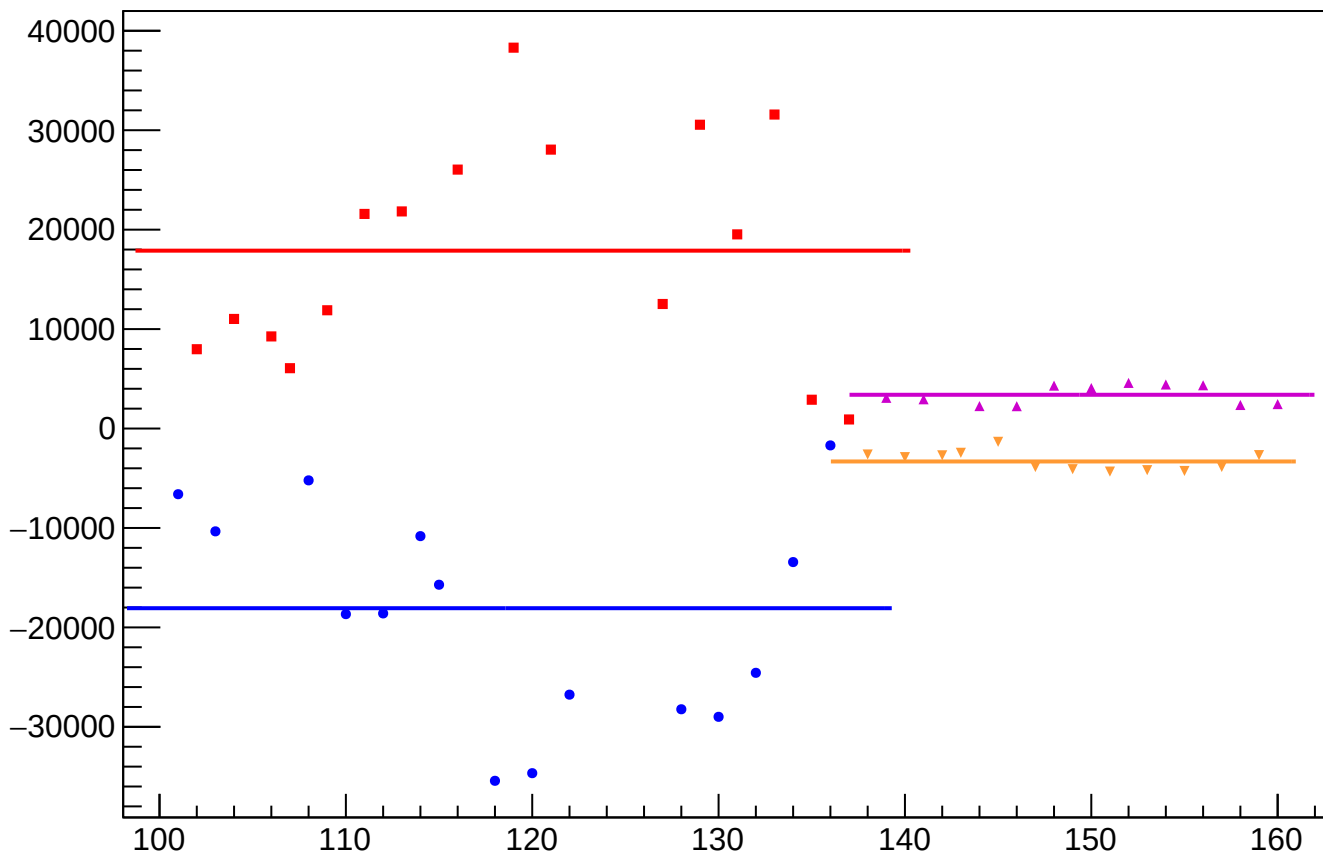
Right In: 1958.835 $\pm$ 0.000  $\chi^2$ /NDF: 1189322999631358431600643692981190131712.0/14  
 Left Out: 1082.769 $\pm$ 0.000  $\chi^2$ /NDF: 42435467592938018504955570075058831360.0/11  
 Right Out: -1797.392 $\pm$ 0.000  $\chi^2$ /NDF: 955096623879958195657195074614240215040.0/15  
 Left In: -1136.738 $\pm$ 0.000  $\chi^2$ /NDF: 36660640388160233770492299797174681600.0/10  
 All: 3.718 $\pm$ 0.000  $\chi^2$ /NDF: 91340604590309

dit\_sam2\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684 $\pm$ 0.000  $\chi^2$ /NDF: 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103 $\pm$ 0.000  $\chi^2$ /NDF: 50788606804690292724539730503787347968.0/11  
 Right Out: -947.145 $\pm$ 0.000  $\chi^2$ /NDF: 67784656011936521511169668028018196480.0/15  
 Left In: -1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10  
 All: 2.504 $\pm$ 0.000  $\chi^2$ /NDF: 40413764320356

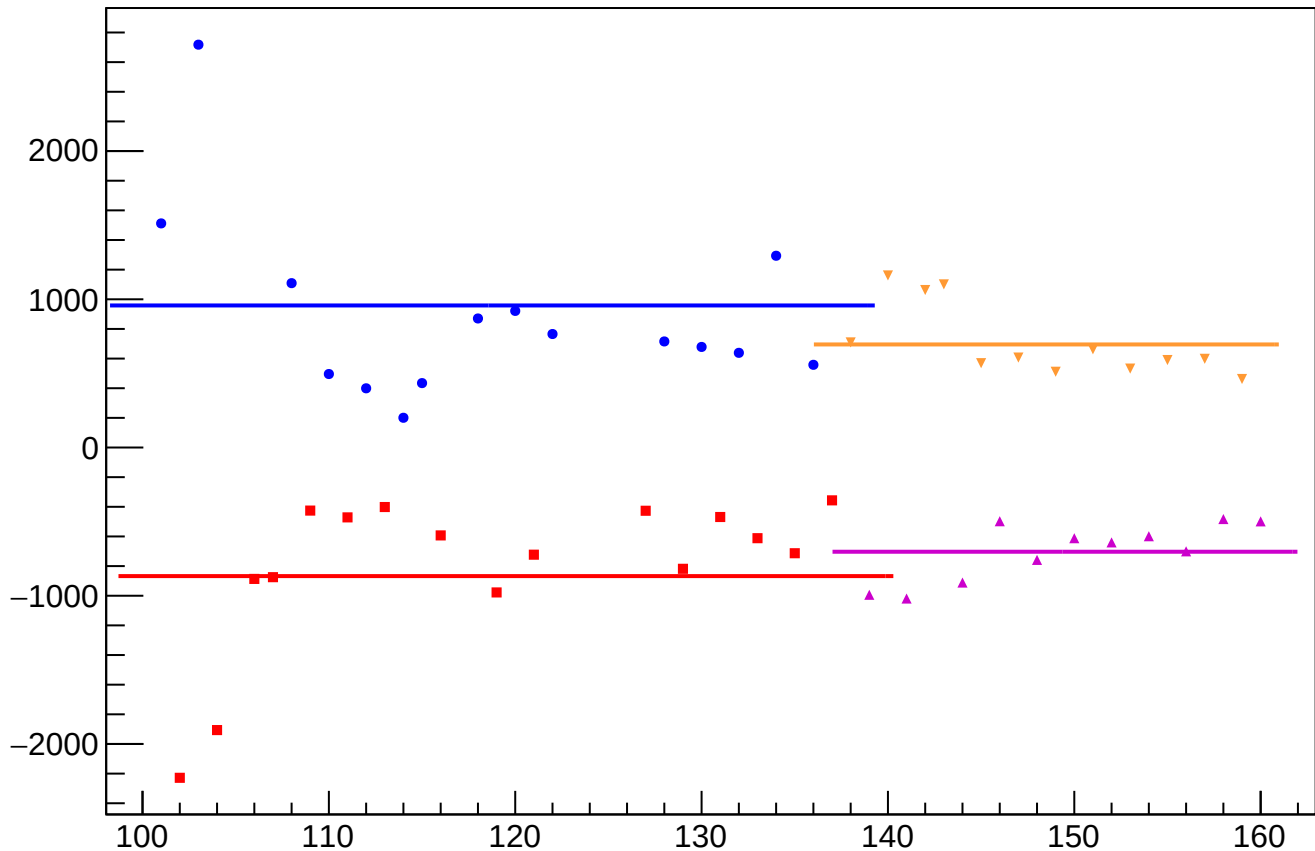
# dit\_sam3\_coil7\_mean vs Slug, Sign Corrected



Left: 59.413+/-0.000  $\chi^2/\text{NDF}$ : 2224729910575058  
 Right In: -18068.550+/-0.000  $\chi^2/\text{NDF}$ : 84312156443533553417760933497753760169984.0/14  
 Right: 155.704+/-0.000  $\chi^2/\text{NDF}$ : 587997392225656  
 Left Out: -3312.000+/-0.000  $\chi^2/\text{NDF}$ : 776933675153970093414497932746986356736.0/11  
 In: -5460.979+/-0.000  $\chi^2/\text{NDF}$ : 260733217471185  
 Right Out: 17888.149+/-0.000  $\chi^2/\text{NDF}$ : 78405915612914252869875231068795393015808.0/15  
 Out: 5632.022+/-0.000  $\chi^2/\text{NDF}$ : 252490604130367  
 Left In: 3394.339+/-0.000  $\chi^2/\text{NDF}$ : 804969095824057391704293669390893711360.0/10  
 All: 99.590+/-0.000  $\chi^2/\text{NDF}$ : 6102518020061



dit\_sam3\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 958.411+/-0.000

$\chi^2/\text{NDF}$ : 264733105058522822278137197070739570688.0/14

Left Out: 695.356+/-0.000

$\chi^2/\text{NDF}$ : 48004139750379541003610269806183317504.0/11

Right Out: -867.538+/-0.000

$\chi^2/\text{NDF}$ : 216129851545166714122252317604488151040.0/15

Left In: -703.169+/-0.000

$\chi^2/\text{NDF}$ : 32040531861451426969939944767733366784.0/10

Left: -7.711+/-0.000  $\chi^2/\text{NDF}$ : 97874173707649304

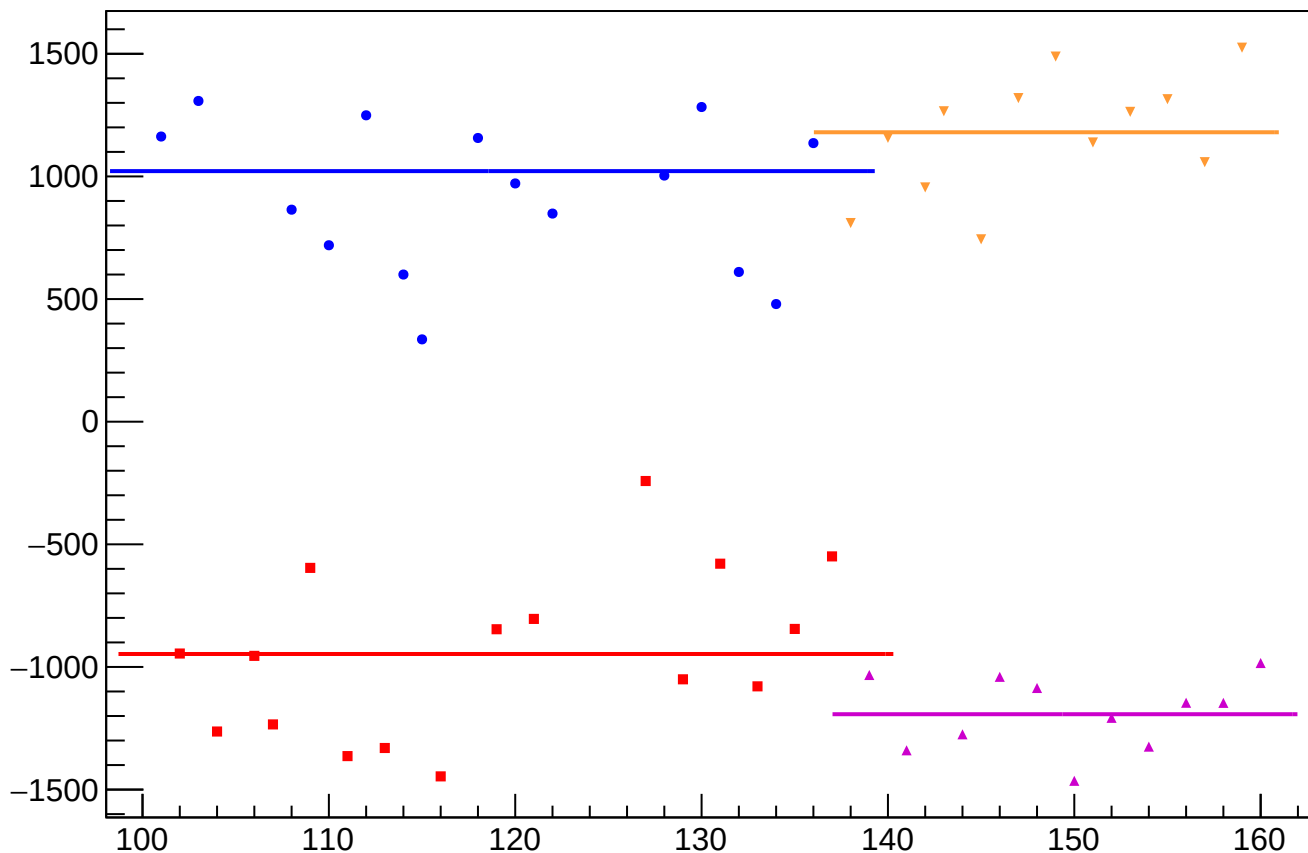
Right: 32.949+/-0.000  $\chi^2/\text{NDF}$ : 1577572239072451

In: -17.622+/-0.000  $\chi^2/\text{NDF}$ : 13492933316249203

Out: 35.995+/-0.000  $\chi^2/\text{NDF}$ : 12060217349509566

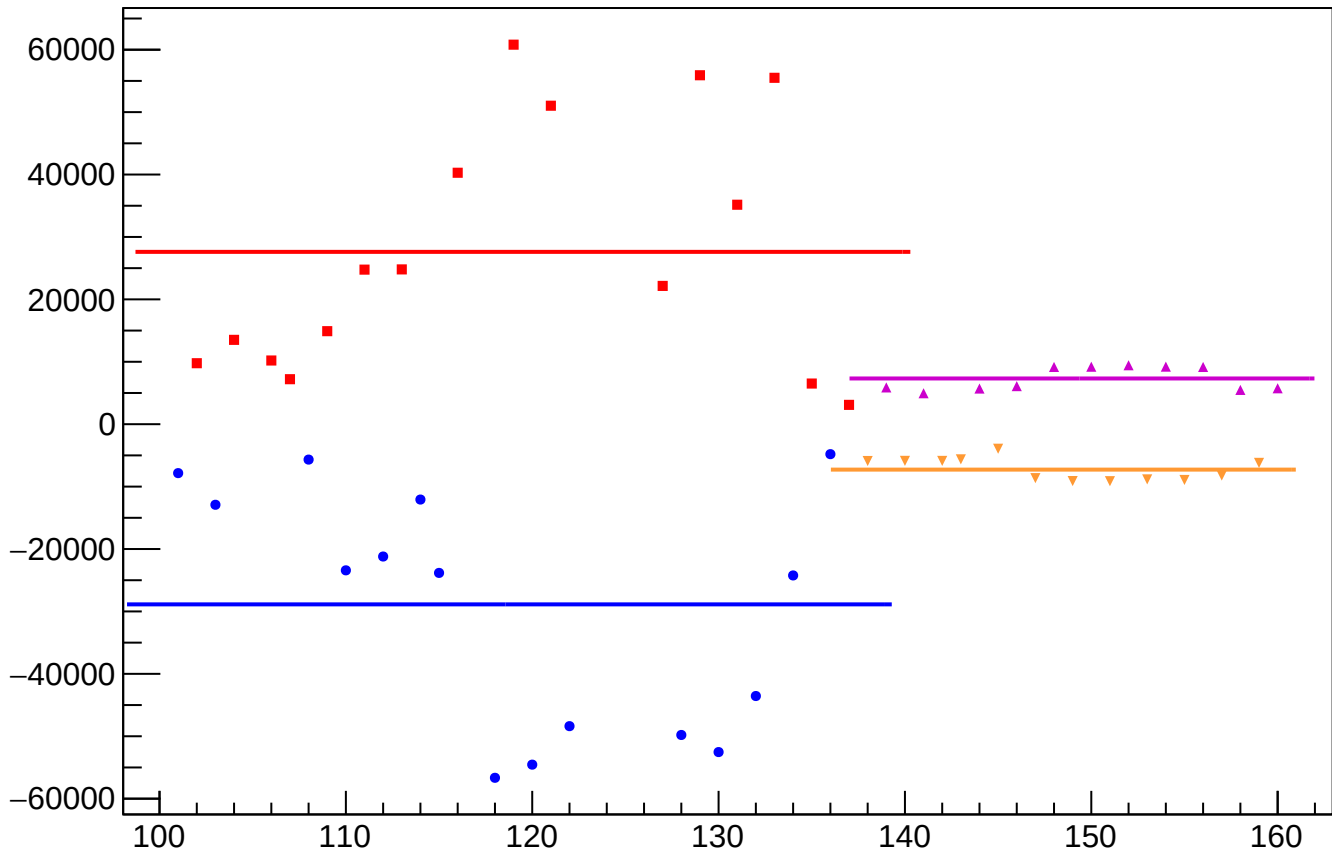
All: 9.254+/-0.000  $\chi^2/\text{NDF}$ : 25575818346098

dit\_sam3\_coil7\_Ndata\_mean vs Slug, Sign Corrected



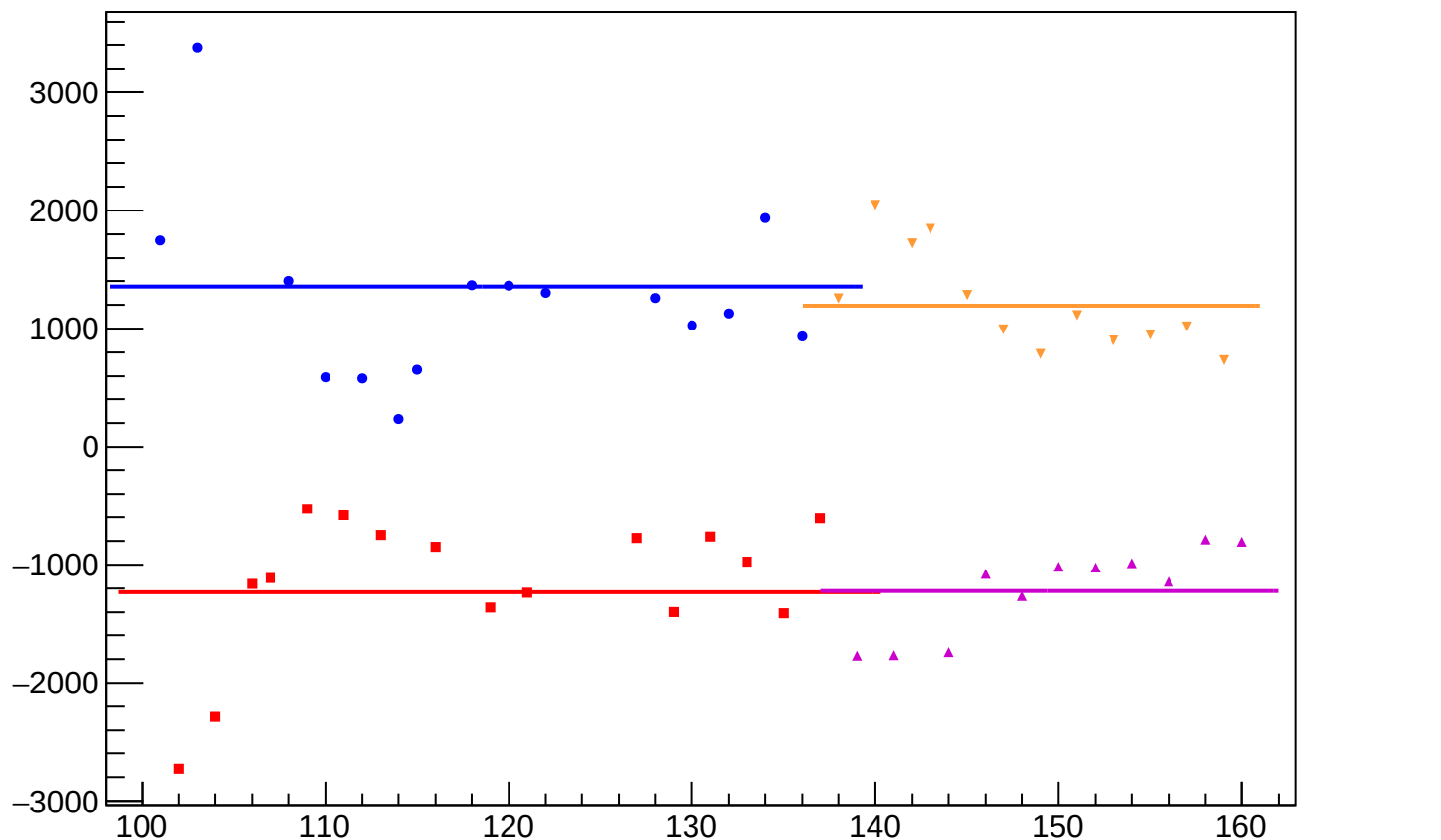
Right In: 1021.684+/-0.000  $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103+/-0.000  $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11  
 Right Out: -947.145+/-0.000  $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15  
 Left In: -1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10  
 All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_sam4\_coil7\_mean vs Slug, Sign Corrected



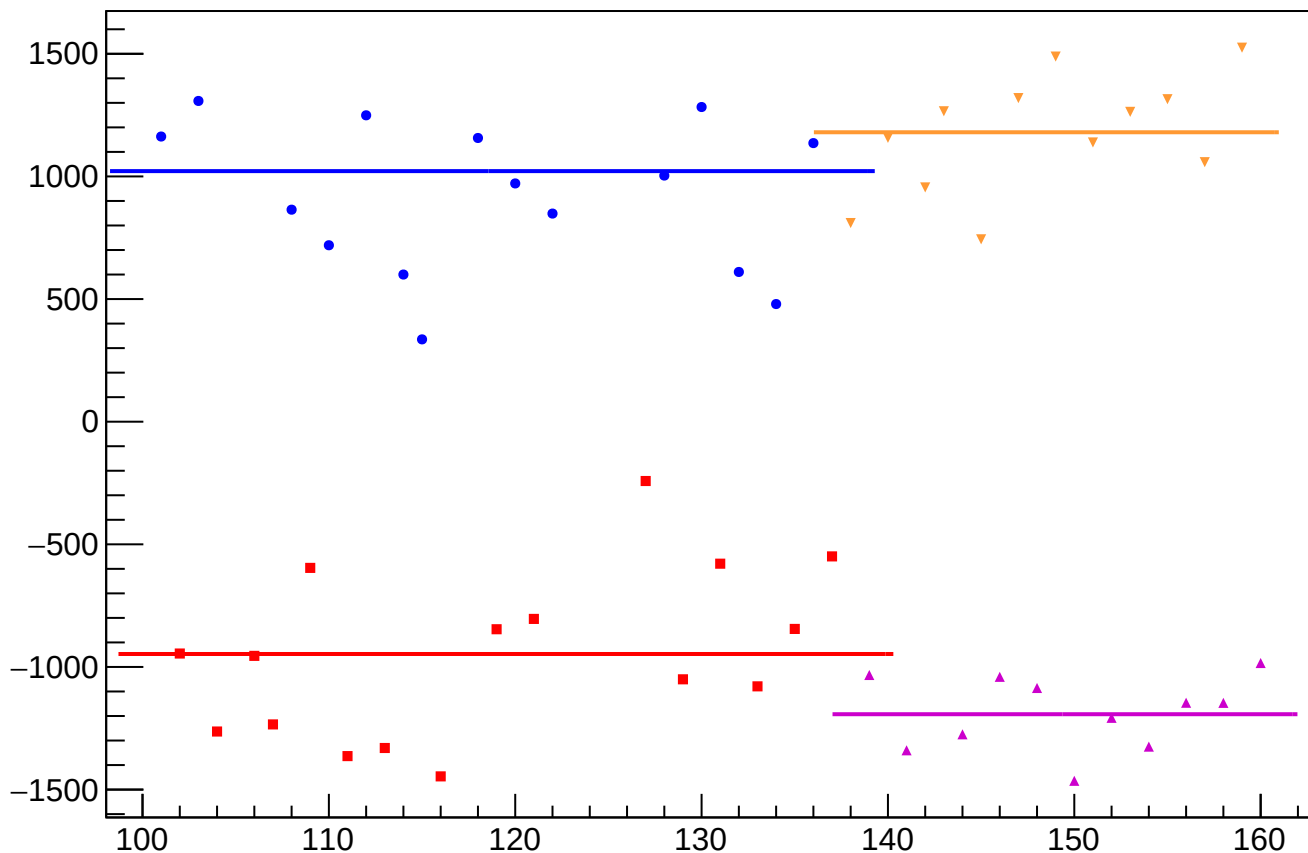
Right In: -28868.624+/-0.000  $\chi^2/\text{NDF}$ : 261450701095727362961367657926584124309504.0/14  
 Left Out: -7277.886+/-0.000  $\chi^2/\text{NDF}$ : 2738867305918098068317388239234104557568.0/11  
 Right Out: 27610.848+/-0.000  $\chi^2/\text{NDF}$ : 248097983477523504935751571384400118546432.0/15  
 Left In: 7325.095+/-0.000  $\chi^2/\text{NDF}$ : 3045991167952377112422516937599716687872.0/10  
 All: -64.332+/-0.000  $\chi^2/\text{NDF}$ : 166268033579

dit\_sam4\_coil7\_err\_mean vs Slug, Sign Corrected



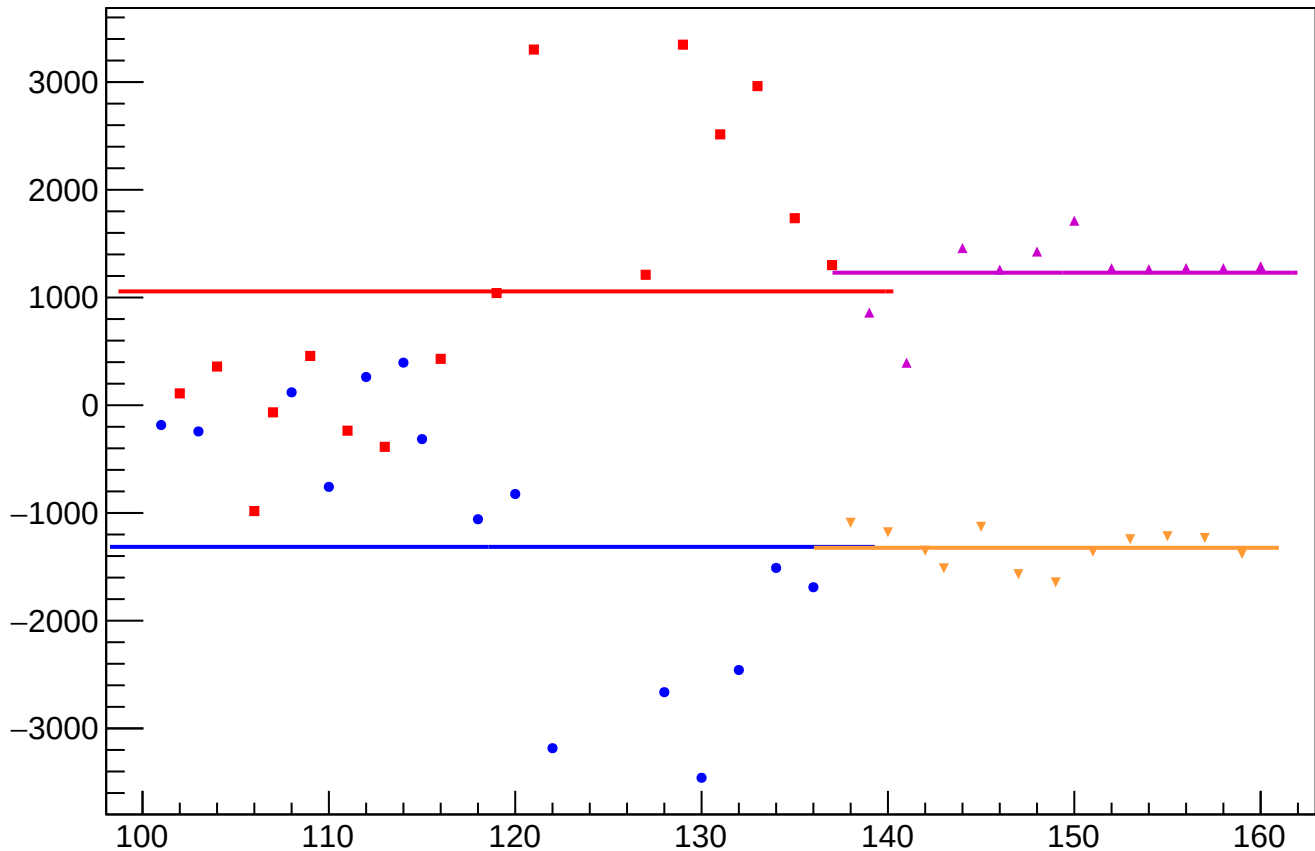
Right In: 1353.413 $\pm$ 0.000  $\chi^2$ /NDF: 352887966702770713373861839880553758720.0/14  
 Left Out: 1192.275 $\pm$ 0.000  $\chi^2$ /NDF: 150893742871936420702627399426239365120.0/11  
 Right Out: -1230.633 $\pm$ 0.000  $\chi^2$ /NDF: 276989454129150005656872744539903754240.0/15  
 Left In: -1220.761 $\pm$ 0.000  $\chi^2$ /NDF: 116296897250486719965341990830940880896.0/10  
 All: 6.116 $\pm$ 0.000  $\chi^2$ /NDF: 57721489770329

dit\_sam4\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684 $\pm$ 0.000  $\chi^2$ /NDF: 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103 $\pm$ 0.000  $\chi^2$ /NDF: 50788606804690292724539730503787347968.0/11  
 Right Out: -947.145 $\pm$ 0.000  $\chi^2$ /NDF: 67784656011936521511169668028018196480.0/15  
 Left In: -1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10  
 All: 2.504 $\pm$ 0.000  $\chi^2$ /NDF: 40413764320356

# dit\_sam5\_coil7\_mean vs Slug, Sign Corrected



Right In: -1314.782+/-0.000

Left Out: -1323.142+/-0.000

Right Out: 1056.765+/-0.000

Left In: 1230.430+/-0.000

$\chi^2/\text{NDF}$ : 966082368518203481544021644405645508608.0/14

$\chi^2/\text{NDF}$ : 27180584789293911694803613303409999872.0/11

$\chi^2/\text{NDF}$ : 1127141594187417021949832477353286041600.0/15

$\chi^2/\text{NDF}$ : 100431691068850056086409132460520505344.0/10

Left: -39.410+/-0.000  $\chi^2/\text{NDF}$ : 3123799611158754

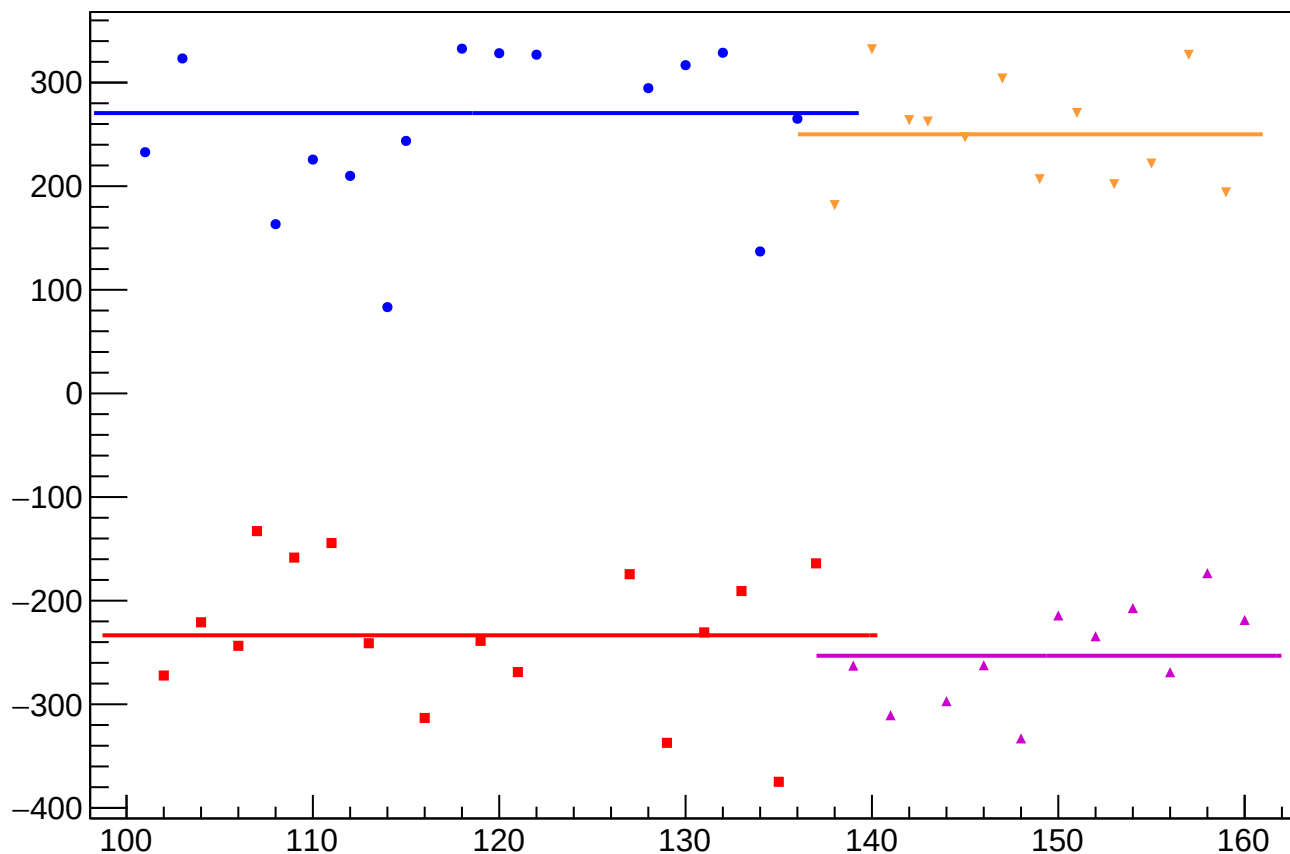
Right: -112.789+/-0.000  $\chi^2/\text{NDF}$ : 39432514405702

In: 180.308+/-0.000  $\chi^2/\text{NDF}$ : 35361660763294785

Out: -319.095+/-0.000  $\chi^2/\text{NDF}$ : 333836126374439

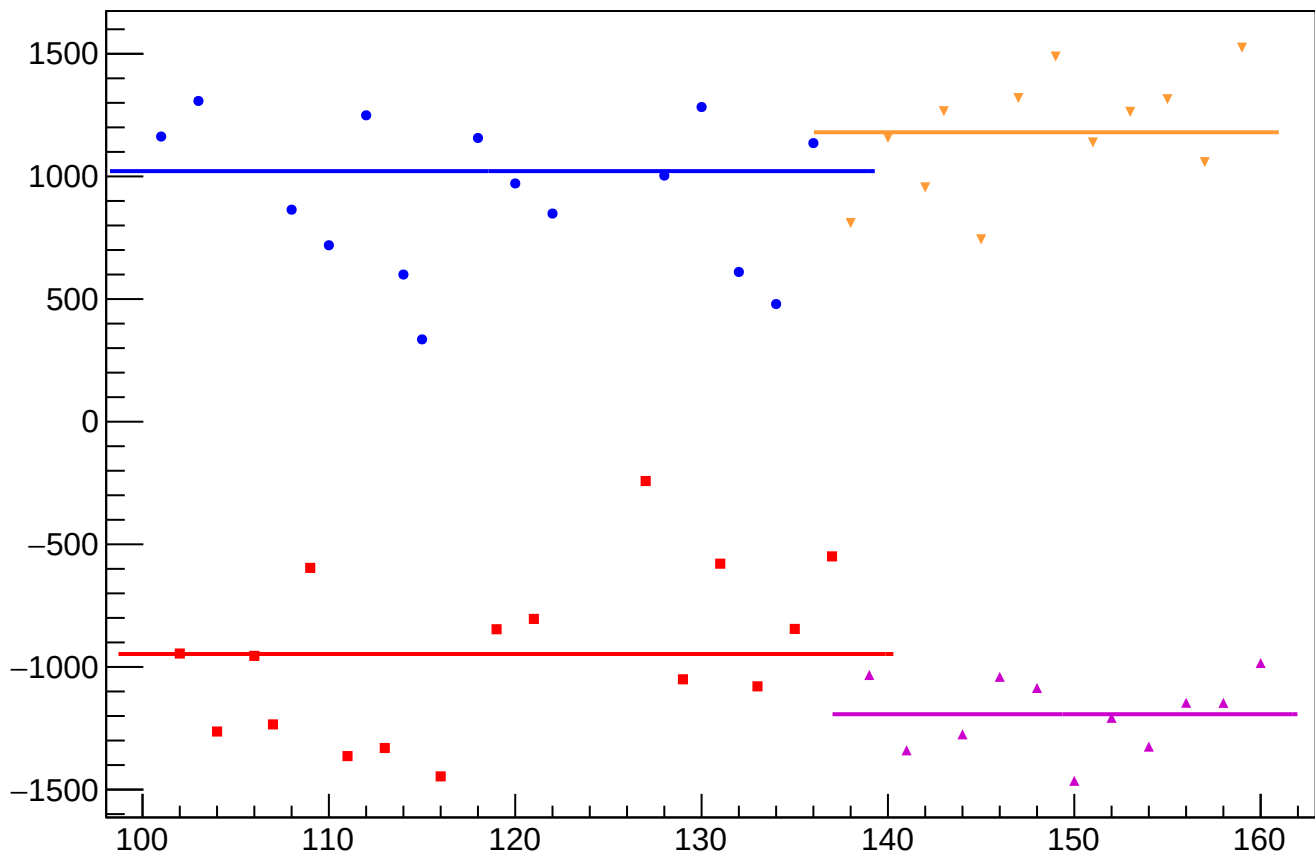
All: -70.027+/-0.000  $\chi^2/\text{NDF}$ : 707118050555

dit\_sam5\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 270.538 $\pm$ 0.000  $\chi^2$ /NDF: 2473839905347950323907848405170257920.0/14  
 Left Out: 250.055 $\pm$ 0.000  $\chi^2$ /NDF: 2329396041694824766683600755668025344.0/11  
 Right Out: -233.421 $\pm$ 0.000  $\chi^2$ /NDF: 3048529087317888615064010247743995904.0/15  
 Left In: -253.145 $\pm$ 0.000  $\chi^2$ /NDF: 1980196841930298045035907903943344128.0/10  
 All: 4.607 $\pm$ 0.000  $\chi^2$ /NDF: 20997016075743

dit\_sam5\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

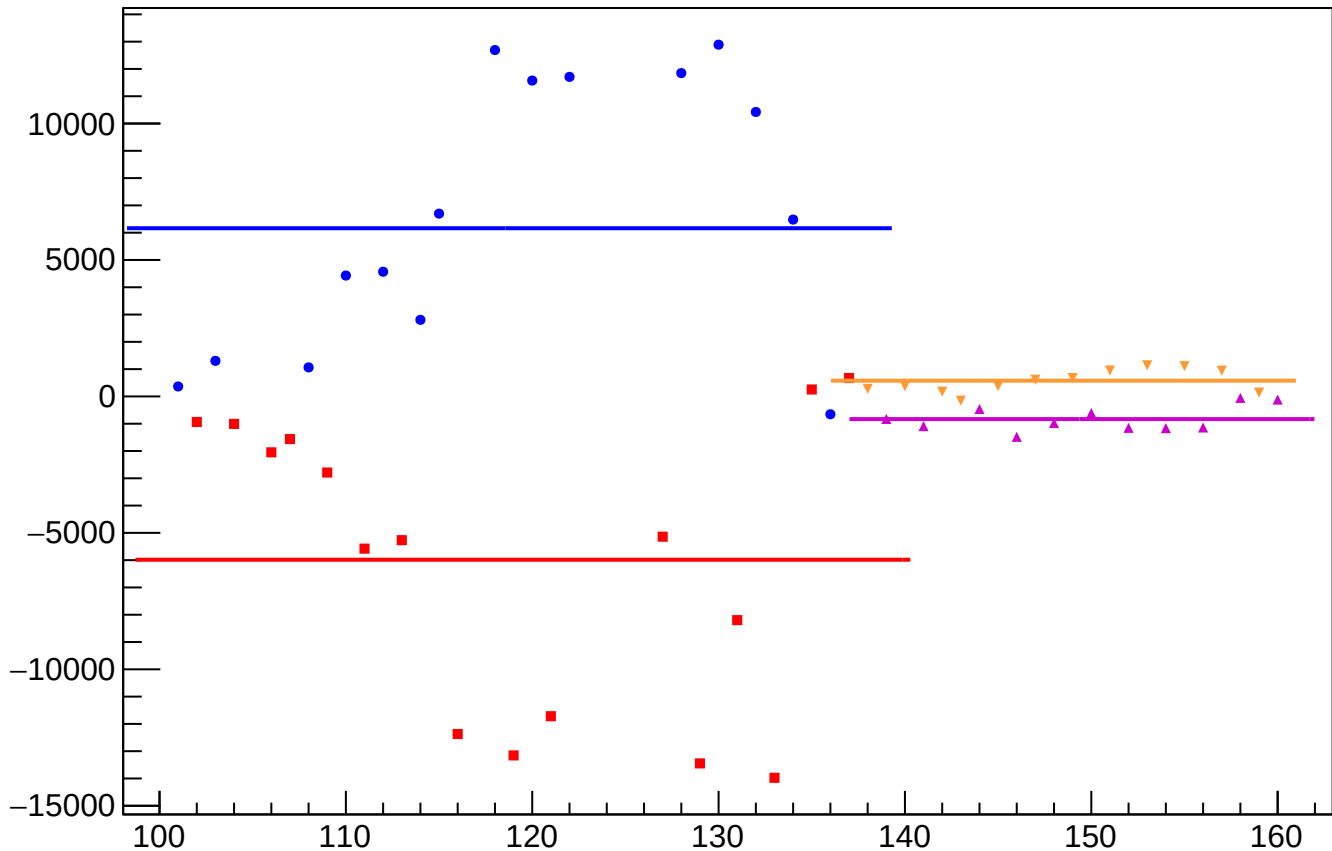
In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

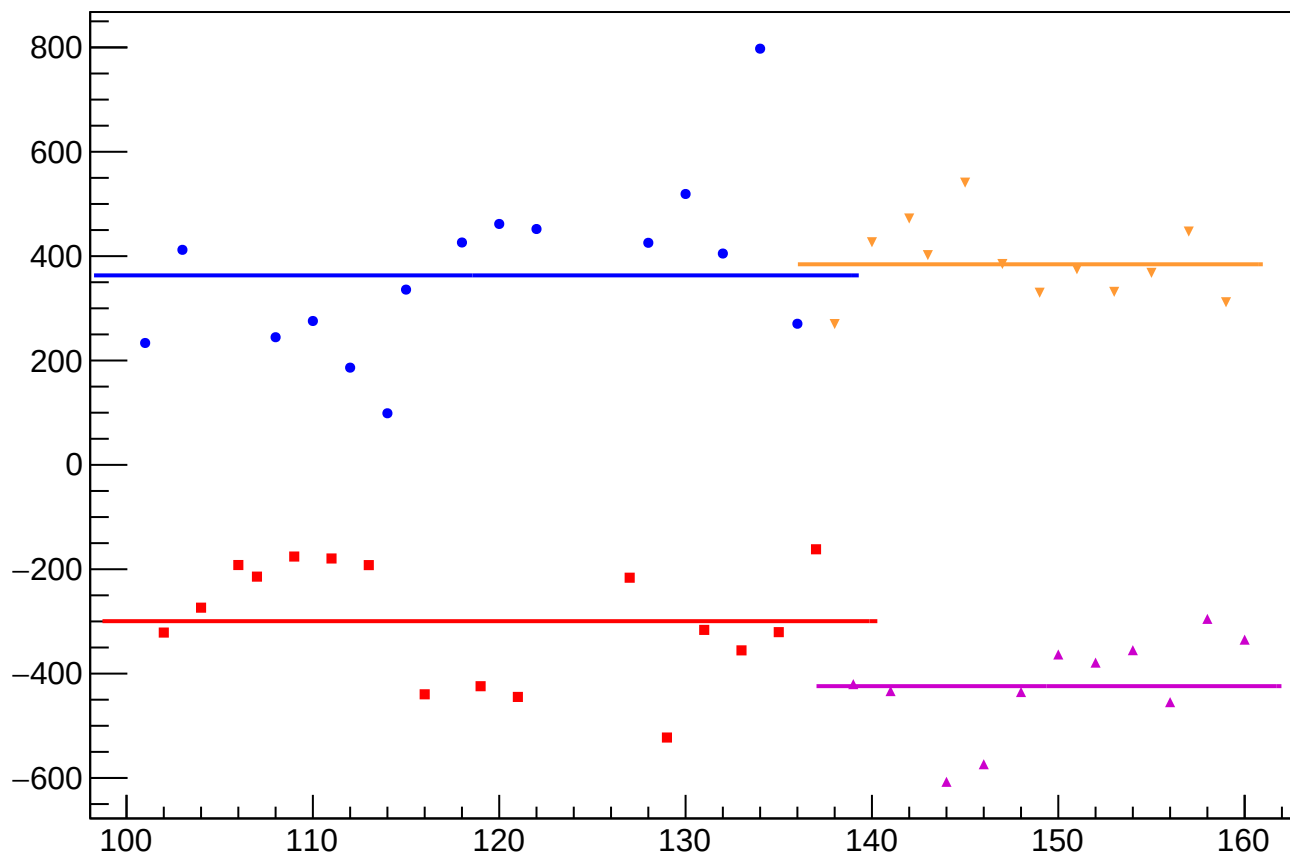


dit\_sam6\_coil7\_mean vs Slug, Sign Corrected



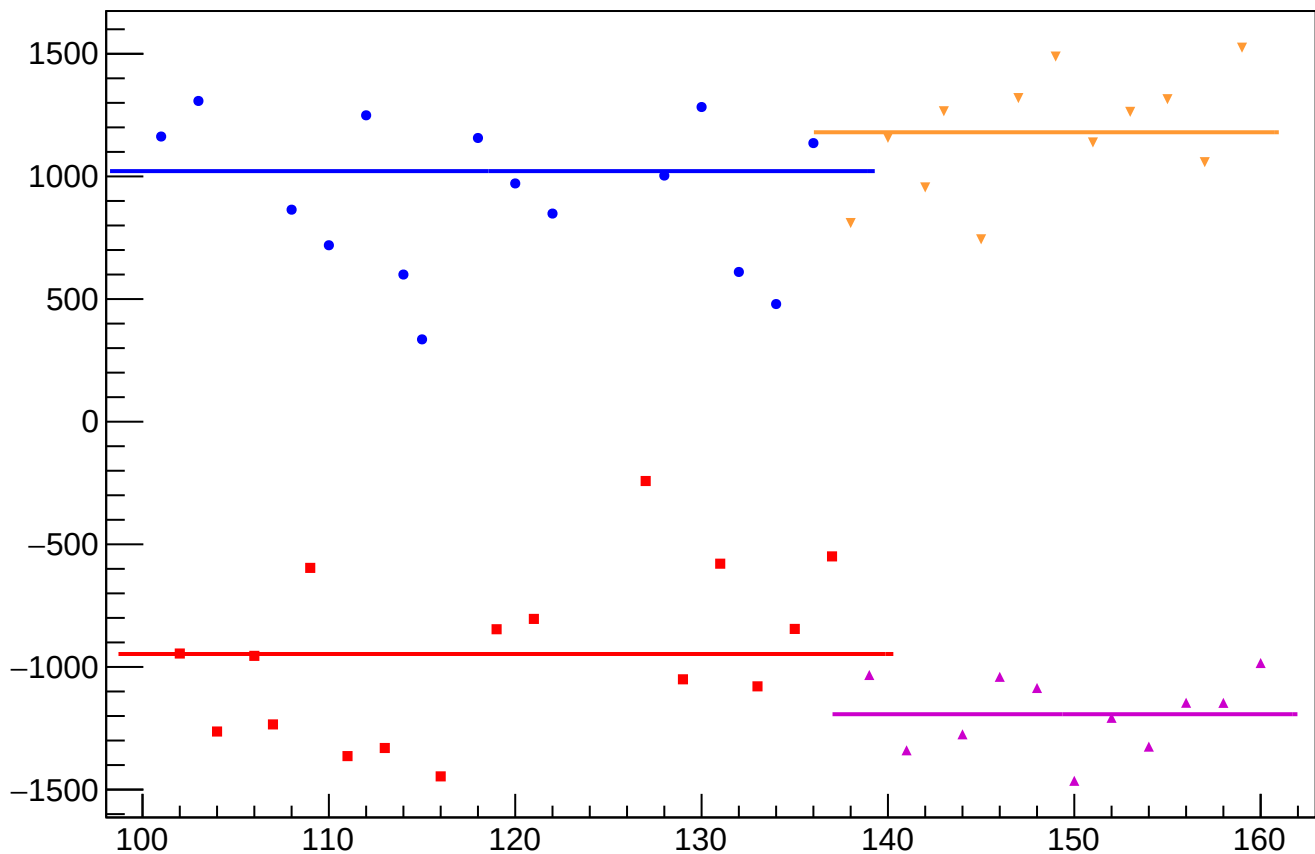
Right In: 6163.445+/-0.000  $\chi^2/\text{NDF}$ : 18200622549026770504746300139009854144512.0/14  
 Left Out: 577.285+/-0.000  $\chi^2/\text{NDF}$ : 143964932817712353720884813497116917760.0/11  
 Right Out: -5983.876+/-0.000  $\chi^2/\text{NDF}$ : 17505201913276273559161088764155841740800.0/15  
 Left In: -830.587+/-0.000  $\chi^2/\text{NDF}$ : 172337092403726273197356020615128023040.0/10  
 All: -73.239+/-0.000  $\chi^2/\text{NDF}$ : 854846167938

dit\_sam6\_coil7\_err\_mean vs Slug, Sign Corrected



Left:  $-22.018 \pm 0.000$   $\chi^2/\text{NDF}$ : 3128182165483401  
 Right In:  $363.133 \pm 0.000$   $\chi^2/\text{NDF}$ : 11502791697076456426435998277995331584.0/14  
 Right:  $27.278 \pm 0.000$   $\chi^2/\text{NDF}$ : 1636258096450768  
 Left Out:  $384.397 \pm 0.000$   $\chi^2/\text{NDF}$ : 4703352228141784942428920611126378496.0/11  
 In:  $-99.259 \pm 0.000$   $\chi^2/\text{NDF}$ : 25553843980228518  
 Right Out:  $-299.514 \pm 0.000$   $\chi^2/\text{NDF}$ : 7685497318744225218354652828984672256.0/15  
 Out:  $95.865 \pm 0.000$   $\chi^2/\text{NDF}$ : 19274864098076935  
 Left In:  $-424.034 \pm 0.000$   $\chi^2/\text{NDF}$ : 7812894231718086106241094868881375232.0/10  
 All:  $-1.449 \pm 0.000$   $\chi^2/\text{NDF}$ : 4783076167376

dit\_sam6\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

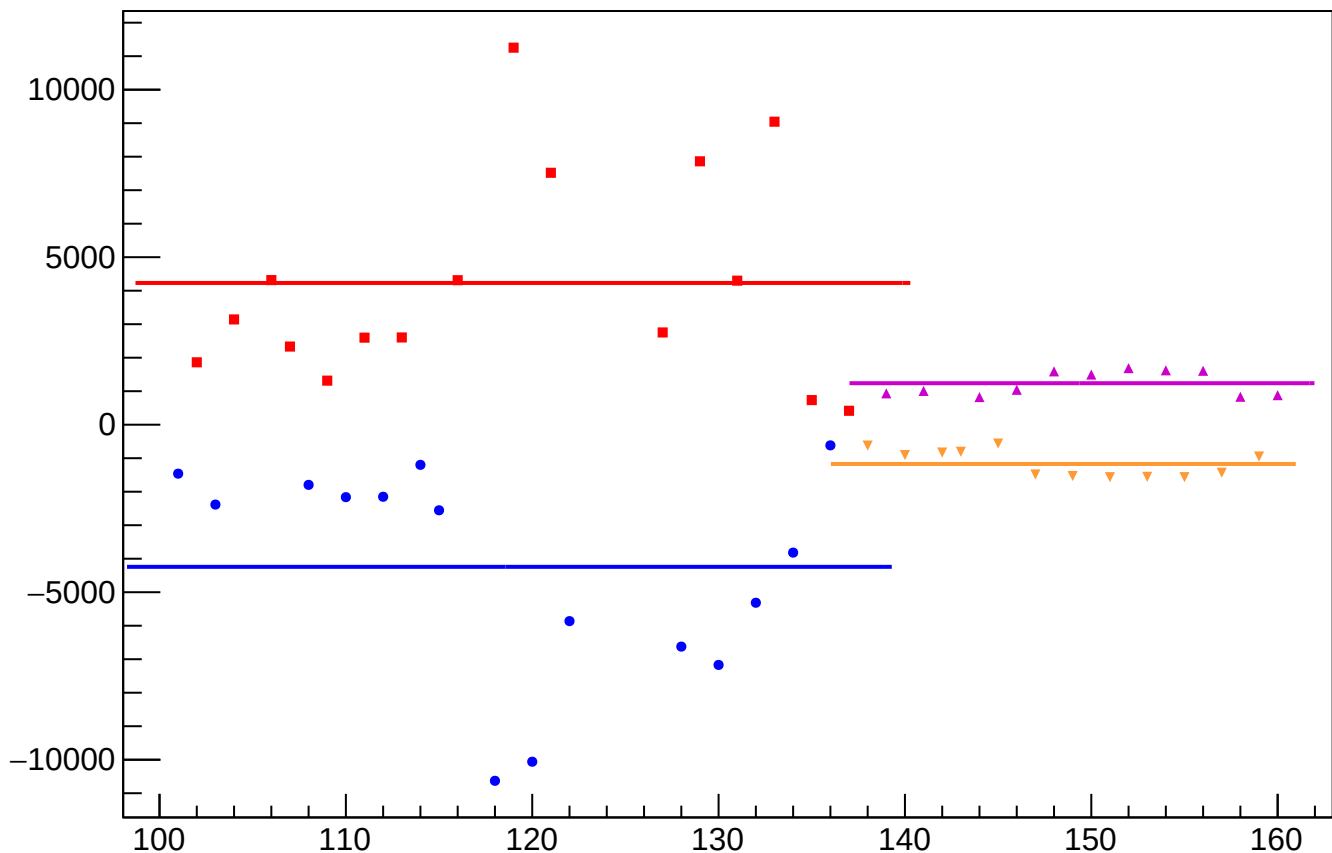
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

dit\_sam7\_coil7\_mean vs Slug, Sign Corrected



Right In: -4242.174+/-0.000

Left Out: -1171.784+/-0.000

Right Out: 4230.978+/-0.000

Left In: 1238.776+/-0.000

$\chi^2/\text{NDF}$ : 6783472272174151371145601081742110752768.0/14

$\chi^2/\text{NDF}$ : 137401425112319786783295403719378599936.0/11

$\chi^2/\text{NDF}$ : 6682409528103016752204343573740930465792.0/15

$\chi^2/\text{NDF}$ : 111339045659652616720712870833504124928.0/10

Left: 40.054+/-0.000  $\chi^2/\text{NDF}$ : 29187236314249197

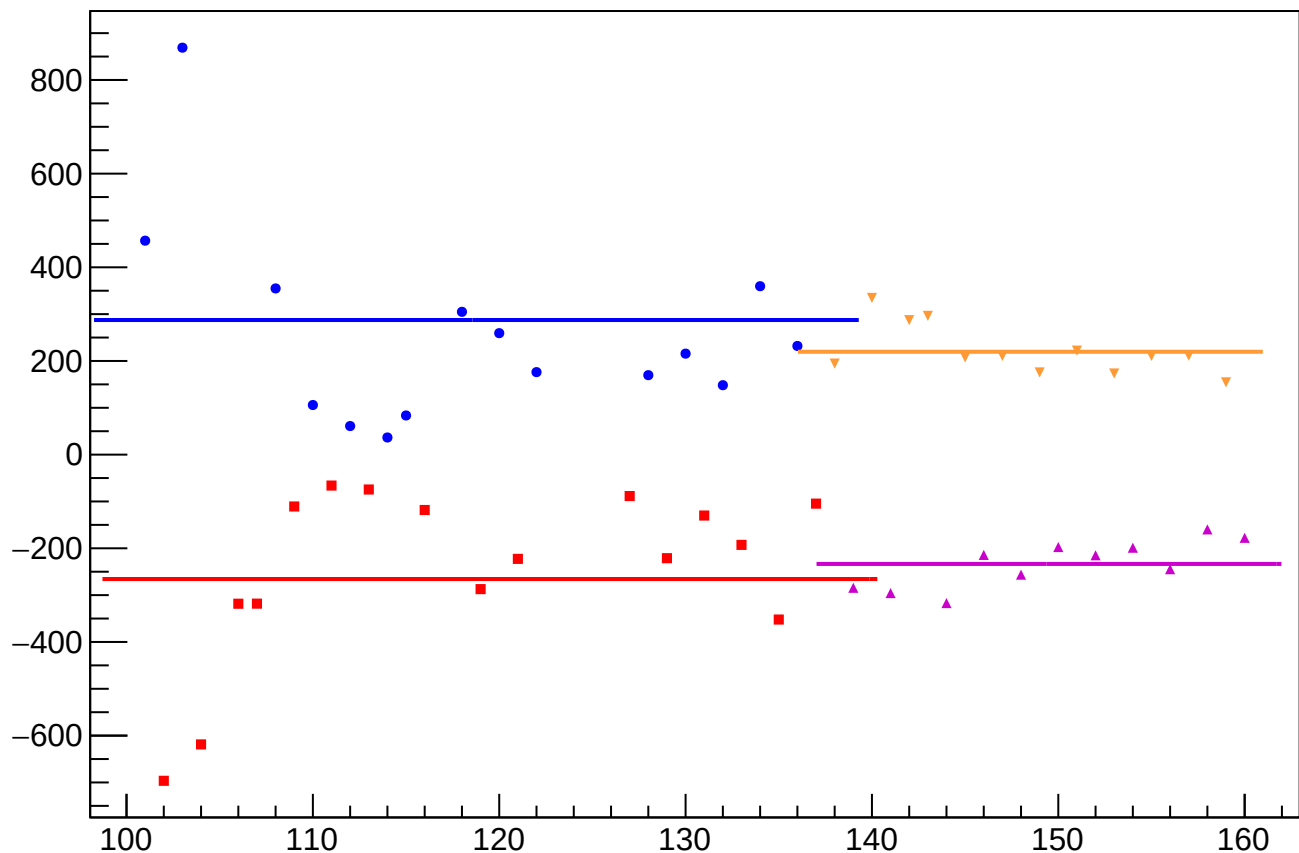
Right: 52.349+/-0.000  $\chi^2/\text{NDF}$ : 3708179263230228

In: -1022.595+/-0.000  $\chi^2/\text{NDF}$ : 183472960455815

Out: 1107.560+/-0.000  $\chi^2/\text{NDF}$ : 180754931945864

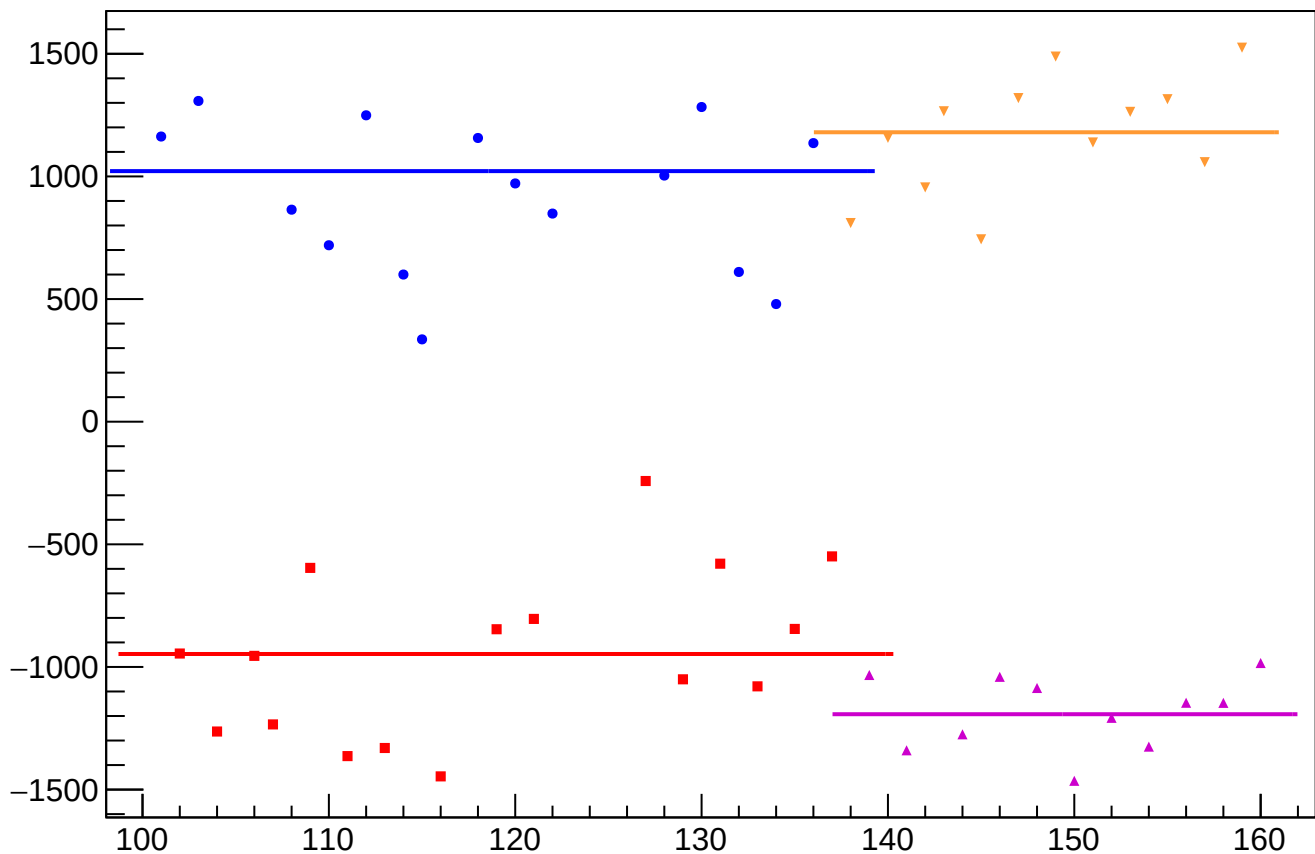
All: 45.184+/-0.000  $\chi^2/\text{NDF}$ : 4000063219777

dit\_sam7\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 287.460 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 29517044144826155936619151581366976512.0/14  
 Left Out: 219.672 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 2455507522676926762328692419180101632.0/11  
 Right Out: -265.593 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 25843263106329059274985499259066908672.0/15  
 Left In: -233.397 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 2171341737989359237753599766499950592.0/10  
 All: -1.734 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 2550962914121

dit\_sam7\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

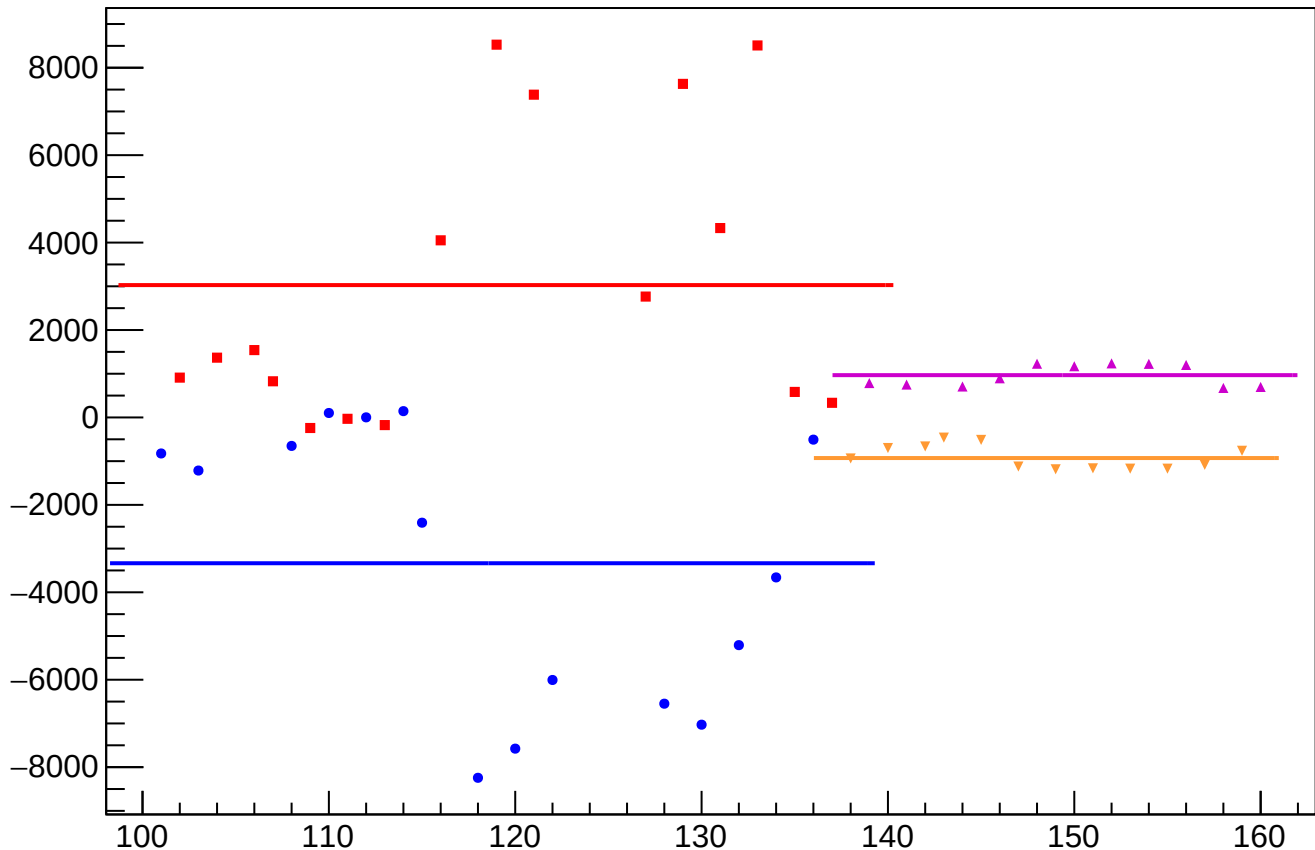
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

dit\_sam8\_coil7\_mean vs Slug, Sign Corrected



Right In: -3335.273+/-0.000

$\chi^2/\text{NDF}$ : 6338087251589637529030075517152423575552.0/14

Left Out: -928.862+/-0.000

$\chi^2/\text{NDF}$ : 62250510021534104734591710459968094208.0/11

Right Out: 3027.603+/-0.000

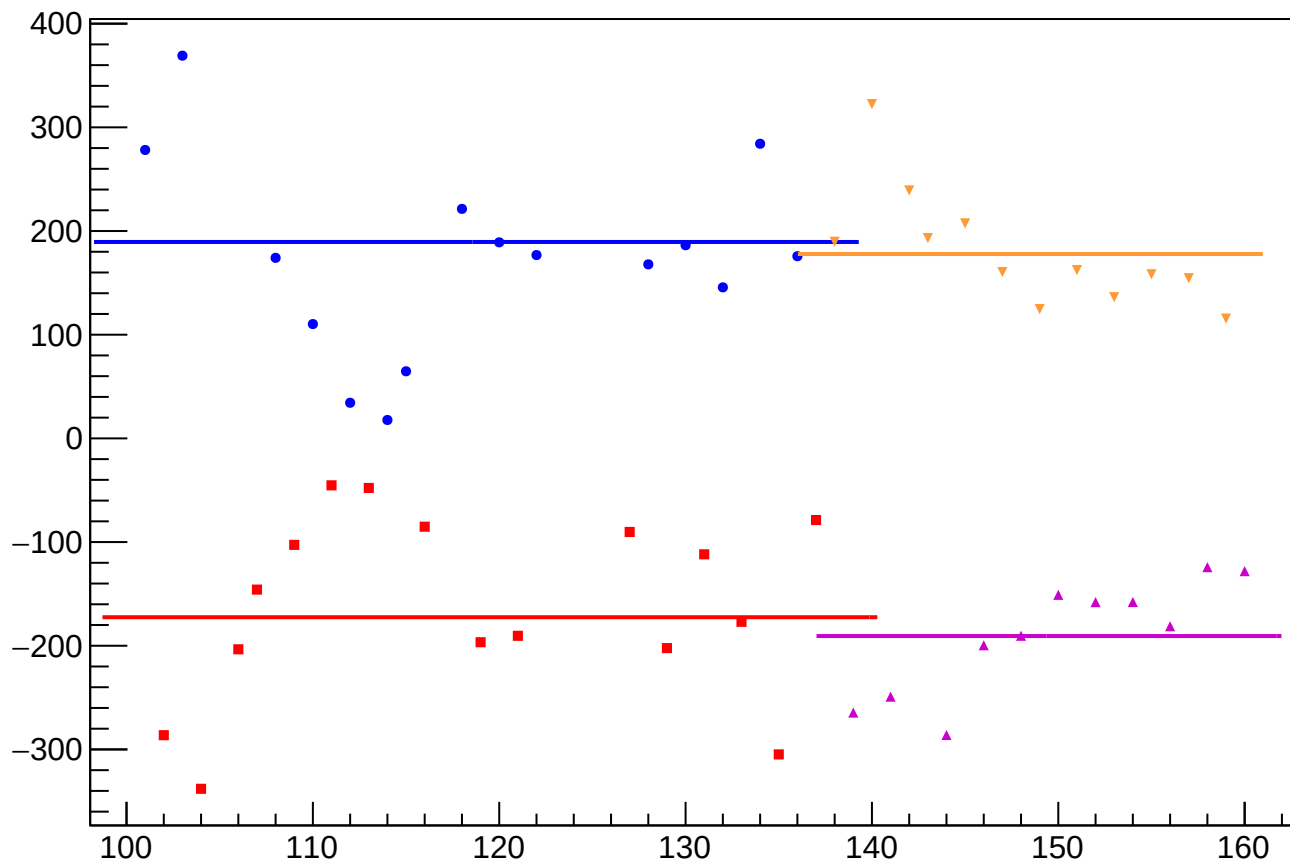
$\chi^2/\text{NDF}$ : 7086157086694396583090903767581326311424.0/15

Left In: 967.568+/-0.000

$\chi^2/\text{NDF}$ : 51461881619401718567497787720865939456.0/10

All: -31.746+/-0.000  $\chi^2/\text{NDF}$ : 285218808380

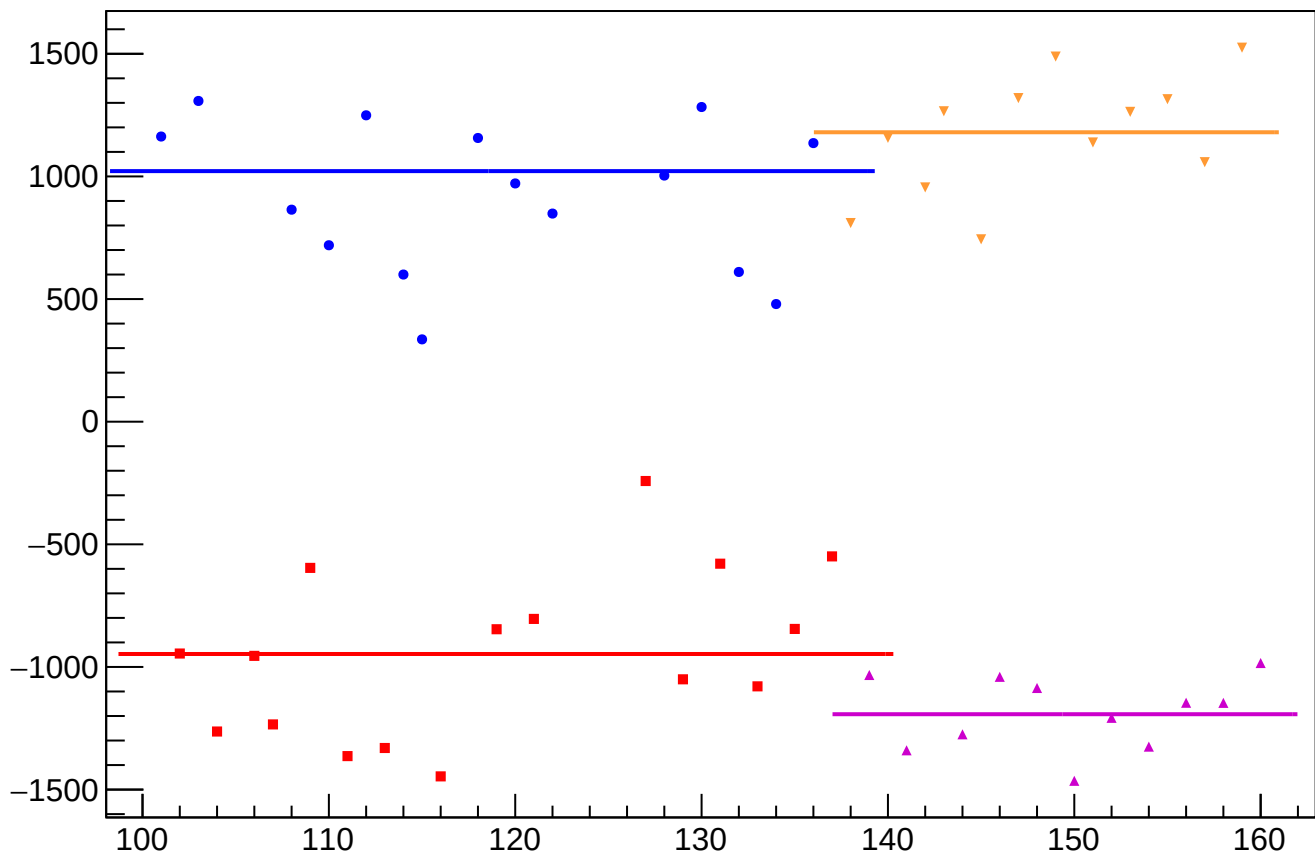
dit\_sam8\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 189.442 +/- 0.000  $\chi^2/\text{NDF}$ : 4707234253929700721726064108794544128.0/14  
 Left Out: 177.811 +/- 0.000  $\chi^2/\text{NDF}$ : 2793392529927944860081581234505908224.0/11  
 Right Out: -172.485 +/- 0.000  $\chi^2/\text{NDF}$ : 5594813408996728261938711470404534272.0/15  
 Left In: -190.641 +/- 0.000  $\chi^2/\text{NDF}$ : 2536070386684067132001548898091925504.0/10  
 All: -1.818 +/- 0.000  $\chi^2/\text{NDF}$ : 1212358862395



dit\_sam8\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684+/-0.000

Left Out: 1180.103+/-0.000

Right Out: -947.145+/-0.000

Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14

$\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11

$\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

Left: -12.747+/-0.000  $\chi^2/\text{NDF}$ : 2657013306605046

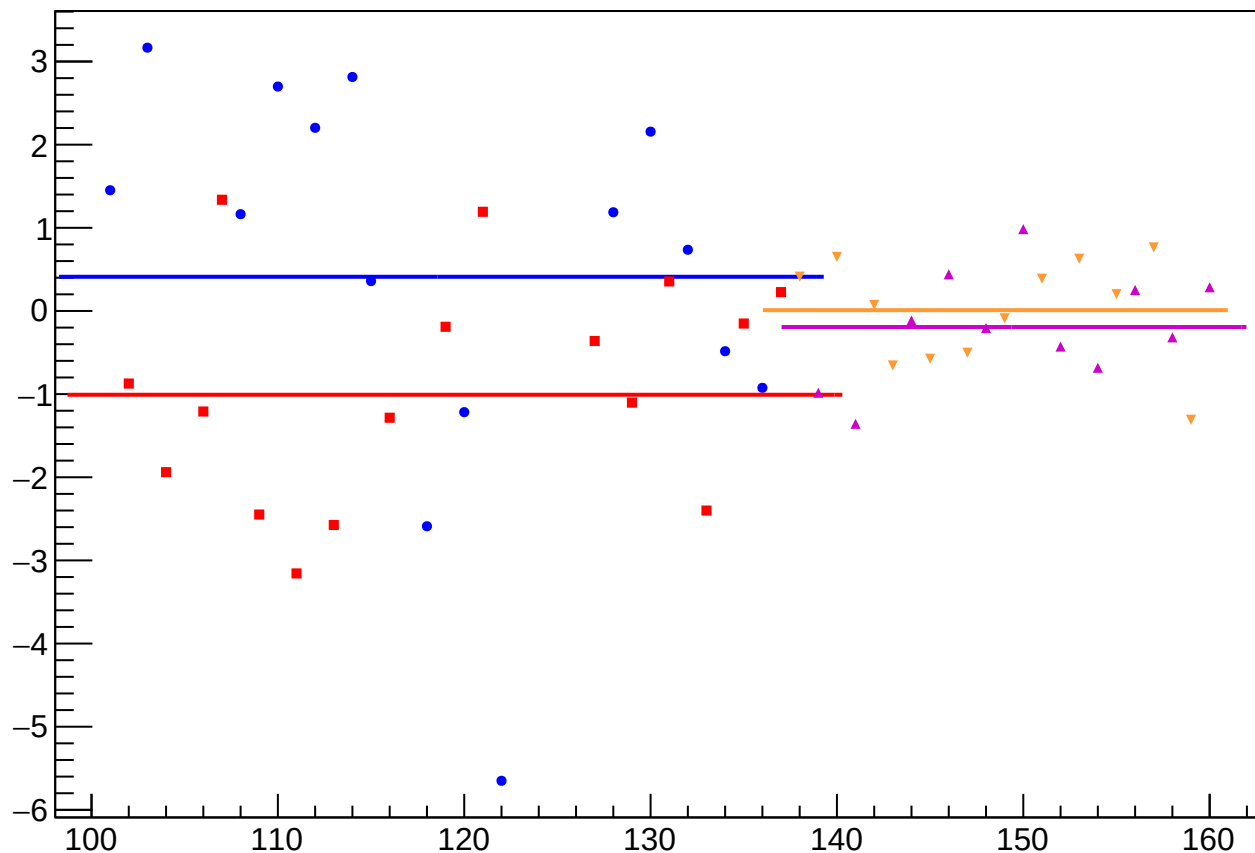
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

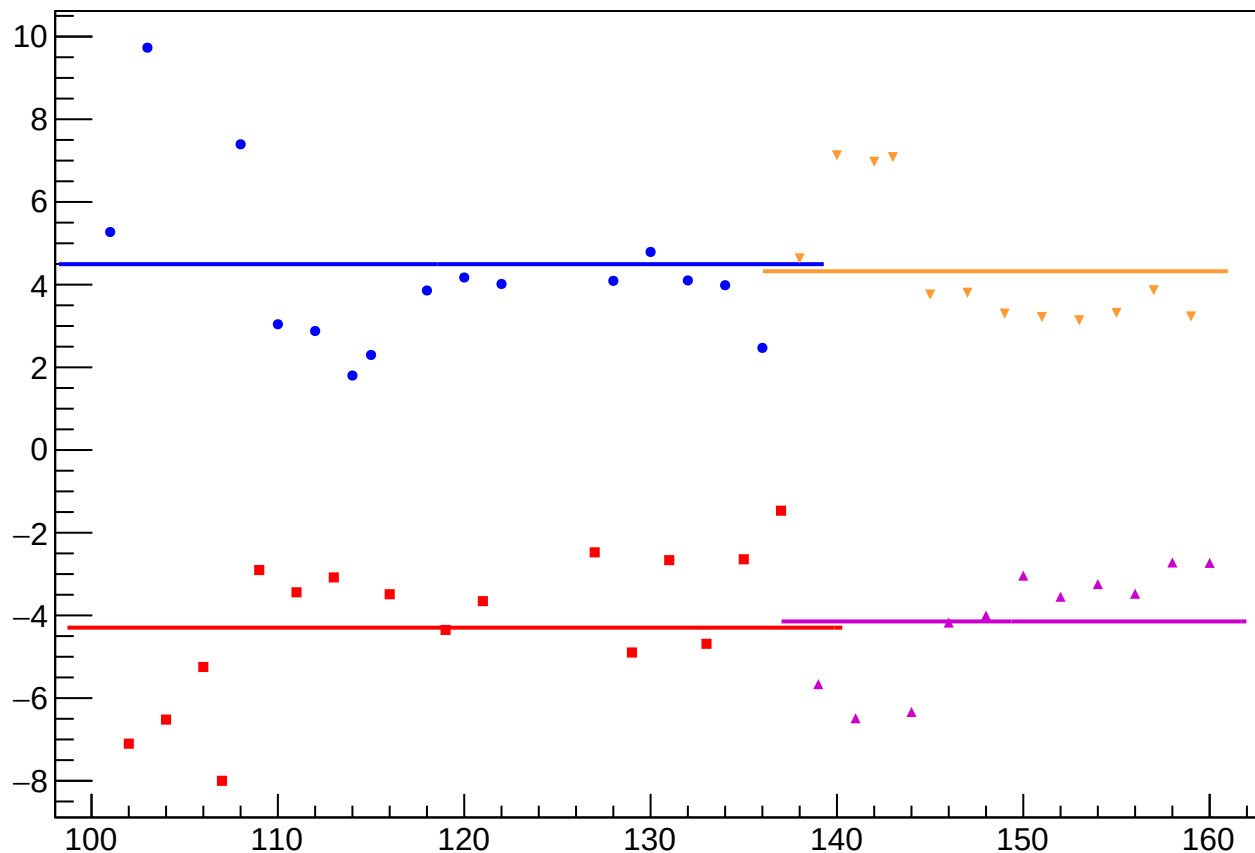
All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_4aX\_coil4\_mean vs Slug, Sign Corrected



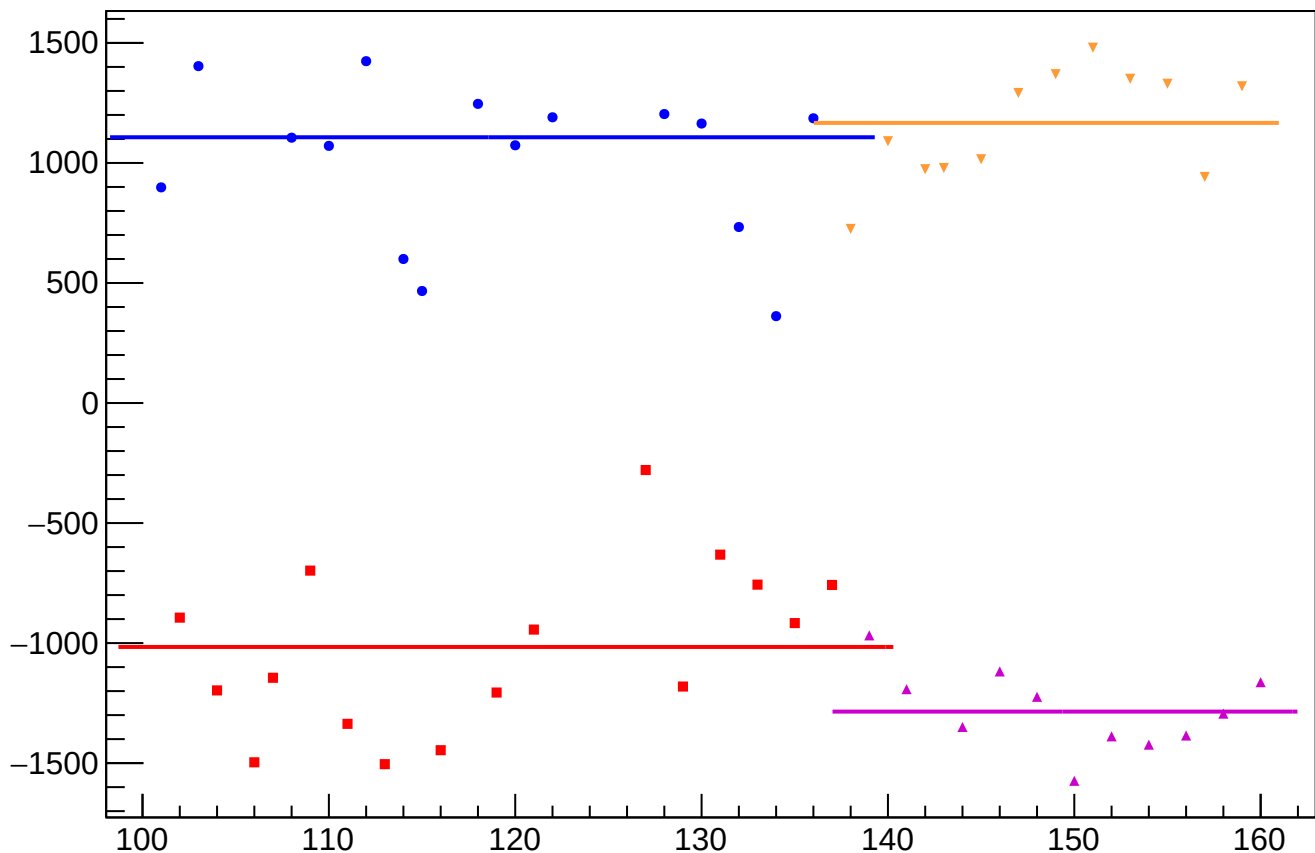
|                           |                                                               |                       |                                           |
|---------------------------|---------------------------------------------------------------|-----------------------|-------------------------------------------|
| Right In: 0.411+/-0.000   | $\chi^2/\text{NDF}$ : 3385573506255563170053089820409856.0/14 | Left: -0.092+/-0.000  | $\chi^2/\text{NDF}$ : 75962986262153938   |
| Left Out: 0.010+/-0.000   | $\chi^2/\text{NDF}$ : 354573516648160349272665694928896.0/11  | Right: -0.308+/-0.000 | $\chi^2/\text{NDF}$ : 5176319865553172    |
| Right Out: -1.008+/-0.000 | $\chi^2/\text{NDF}$ : 1128402228144096394498047410700288.0/15 | In: 0.056+/-0.000     | $\chi^2/\text{NDF}$ : 3911027921110747740 |
| Left In: -0.193+/-0.000   | $\chi^2/\text{NDF}$ : 386133523330033860307880234713088.0/10  | Out: -0.420+/-0.000   | $\chi^2/\text{NDF}$ : 18821275639677026   |
|                           | All: -0.182+/-0.000                                           |                       | $\chi^2/\text{NDF}$ : 5971597389441       |

dit\_4aX\_coil4\_err\_mean vs Slug, Sign Corrected



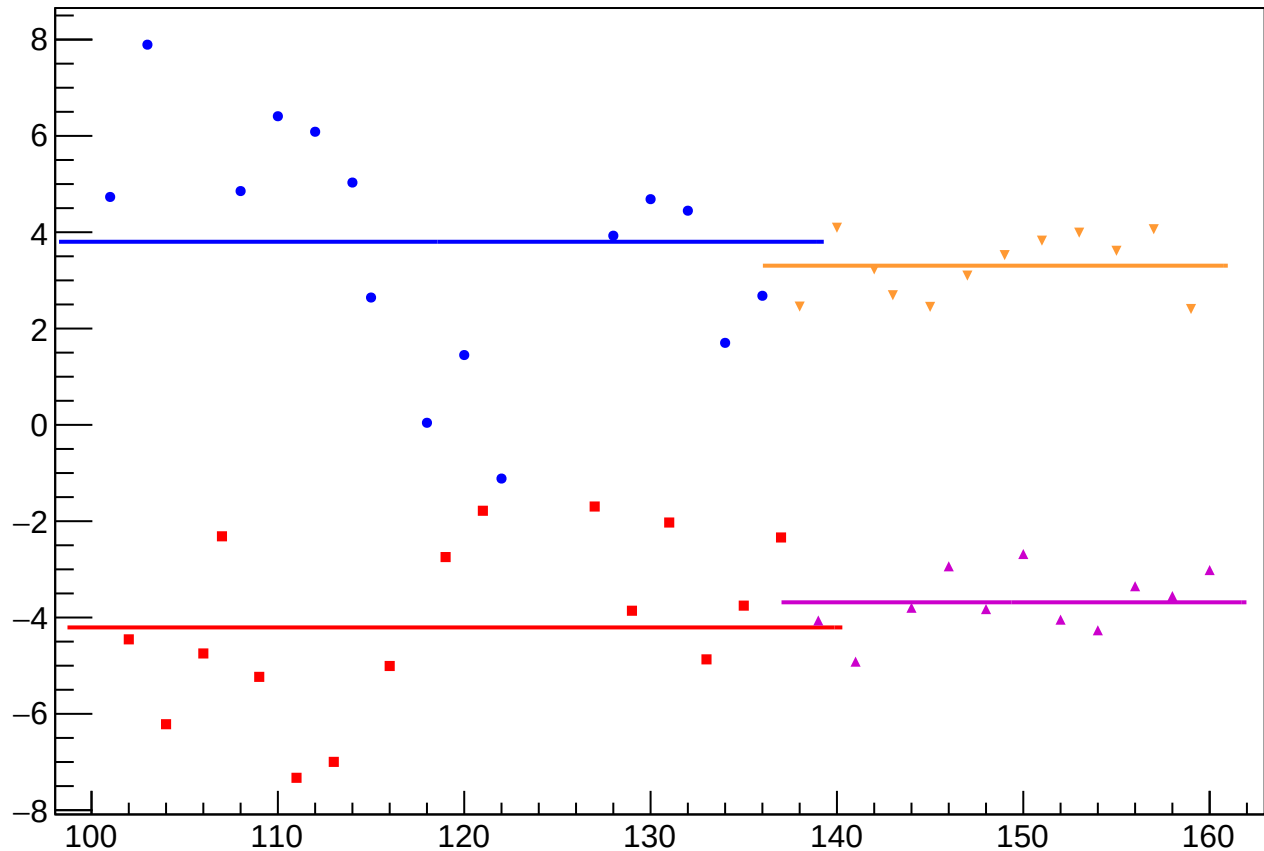
Right In: 4.495 $\pm$ 0.000  $\chi^2$ /NDF: 2742240072441097531500728791597056.0/14  
 Left Out: 4.324 $\pm$ 0.000  $\chi^2$ /NDF: 2025534969388950058407109119180800.0/11  
 Right Out: -4.296 $\pm$ 0.000  $\chi^2$ /NDF: 2011925707062051890381007475441664.0/15  
 Left In: -4.145 $\pm$ 0.000  $\chi^2$ /NDF: 1645942604303349608571849827942400.0/10  
 All: 0.055 $\pm$ 0.000  $\chi^2$ /NDF: 66802270544338

dit\_4aX\_coil4\_Ndata\_mean vs Slug, Sign Corrected



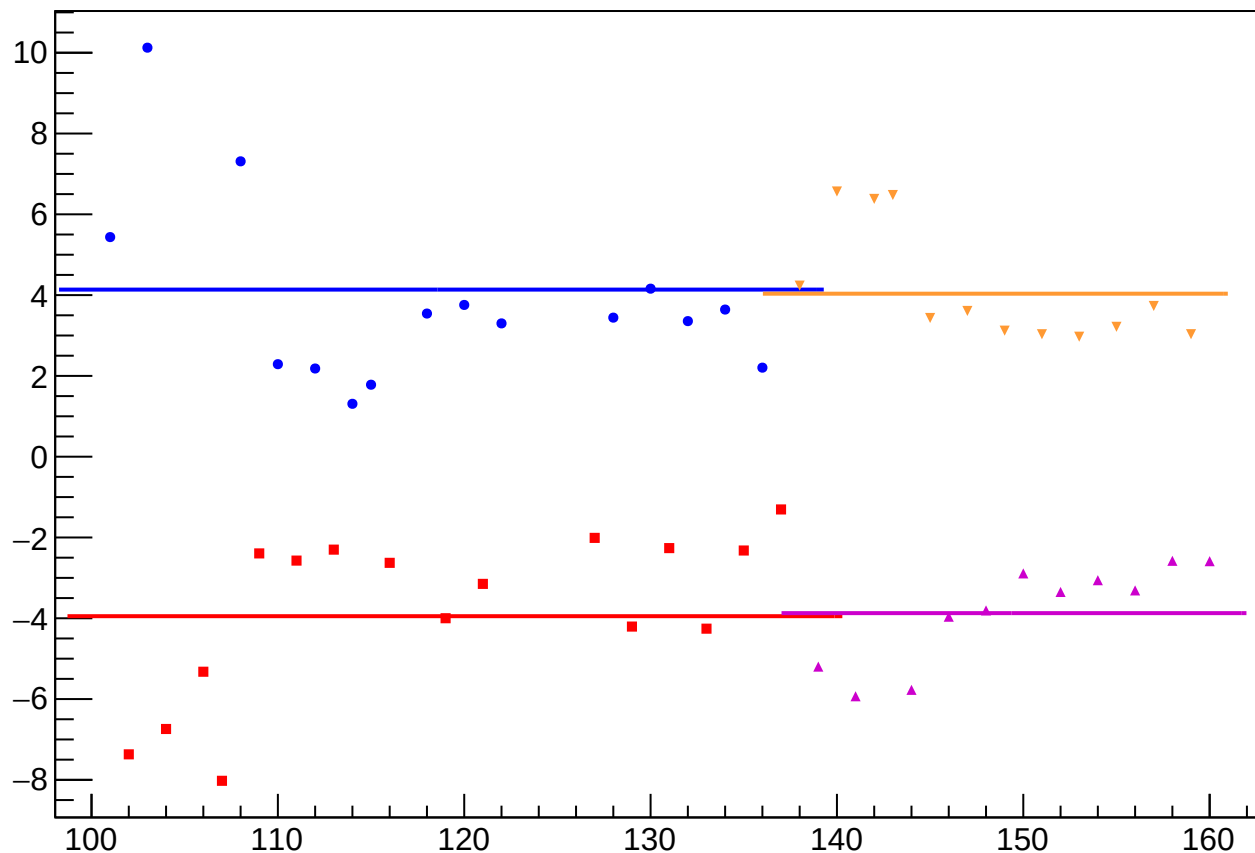
|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

# dit\_4eX\_coil4\_mean vs Slug, Sign Corrected



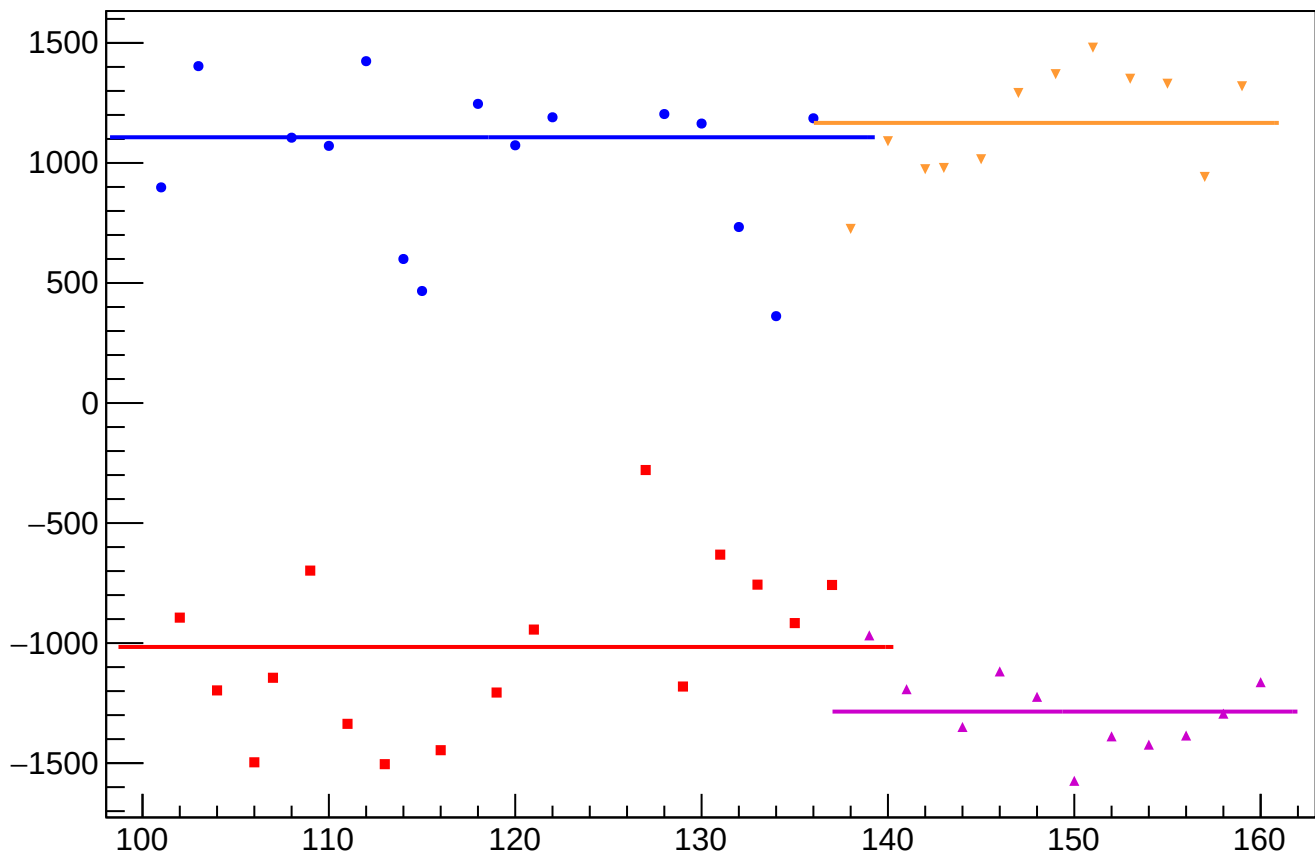
Right In:  $3.802 \pm 0.000$   $\chi^2/\text{NDF}: 3795476074398338930564700657680384.0/14$   
 Left Out:  $3.305 \pm 0.000$   $\chi^2/\text{NDF}: 375514605339805624898679558111232.0/11$   
 Right Out:  $-4.206 \pm 0.000$   $\chi^2/\text{NDF}: 2096427813341454573332265183477760.0/15$   
 Left In:  $-3.684 \pm 0.000$   $\chi^2/\text{NDF}: 366001419656422310601850072596480.0/10$   
 All:  $-0.229 \pm 0.000$   $\chi^2/\text{NDF}: 5017617766780$

dit\_4eX\_coil4\_err\_mean vs Slug, Sign Corrected



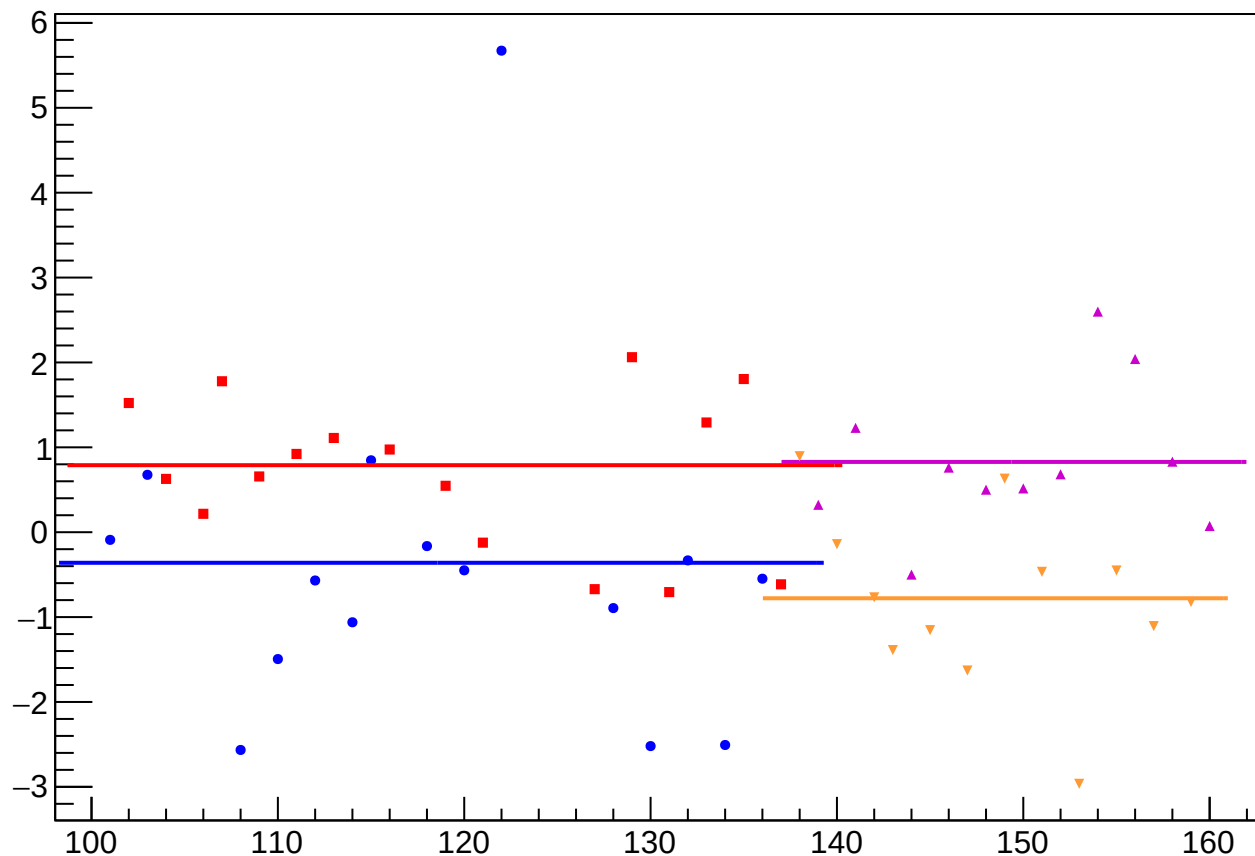
Right In: 4.136 $\pm$ 0.000  $\chi^2$ /NDF: 3507600624388663919898505496231936.0/14  
 Left Out: 4.035 $\pm$ 0.000  $\chi^2$ /NDF: 16092990613525785486150138363904.0/11  
 Right Out: -3.948 $\pm$ 0.000  $\chi^2$ /NDF: 2670176783942302028345551100051456.0/15  
 Left In: -3.873 $\pm$ 0.000  $\chi^2$ /NDF: 1278598291391127694323835331411968.0/10  
 All: 0.051 $\pm$ 0.000  $\chi^2$ /NDF: 59300481694443

dit\_4eX\_coil4\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

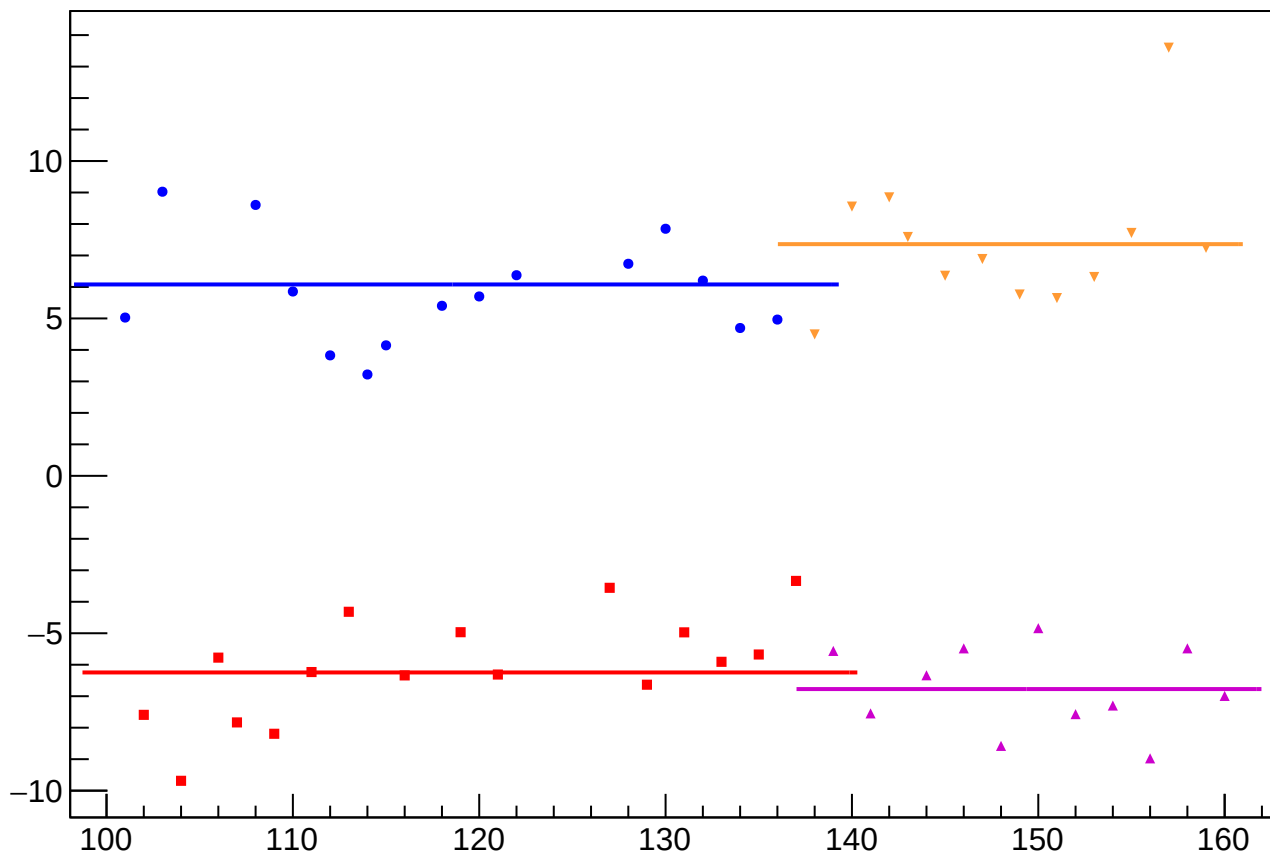
dit\_11X12X\_coil4\_mean vs Slug, Sign Corrected



Right In:  $-0.360 \pm 0.000$   $\chi^2/\text{NDF}$ : 2180256348790896849346212178952192.0/14  
 Left Out:  $-0.778 \pm 0.000$   $\chi^2/\text{NDF}$ : 941792568376434225486843988672512.0/11  
 Right Out:  $0.790 \pm 0.000$   $\chi^2/\text{NDF}$ : 463078369073343959803422903894016.0/15  
 Left In:  $0.828 \pm 0.000$   $\chi^2/\text{NDF}$ : 650173977459122524537180454387712.0/10  
 All:  $0.110 \pm 0.000$   $\chi^2/\text{NDF}$ : 58843184622867

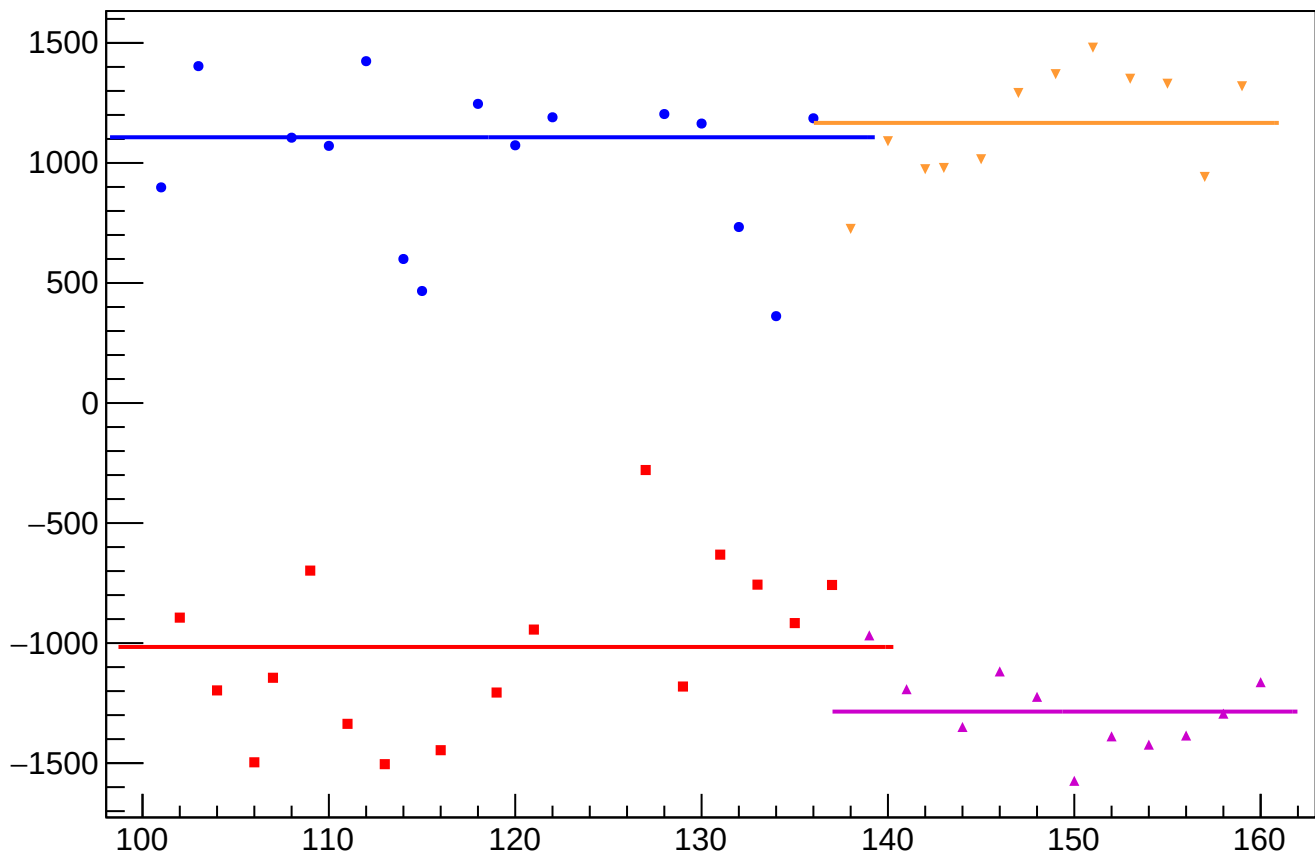


dit\_11X12X\_coil4\_err\_mean vs Slug, Sign Corrected



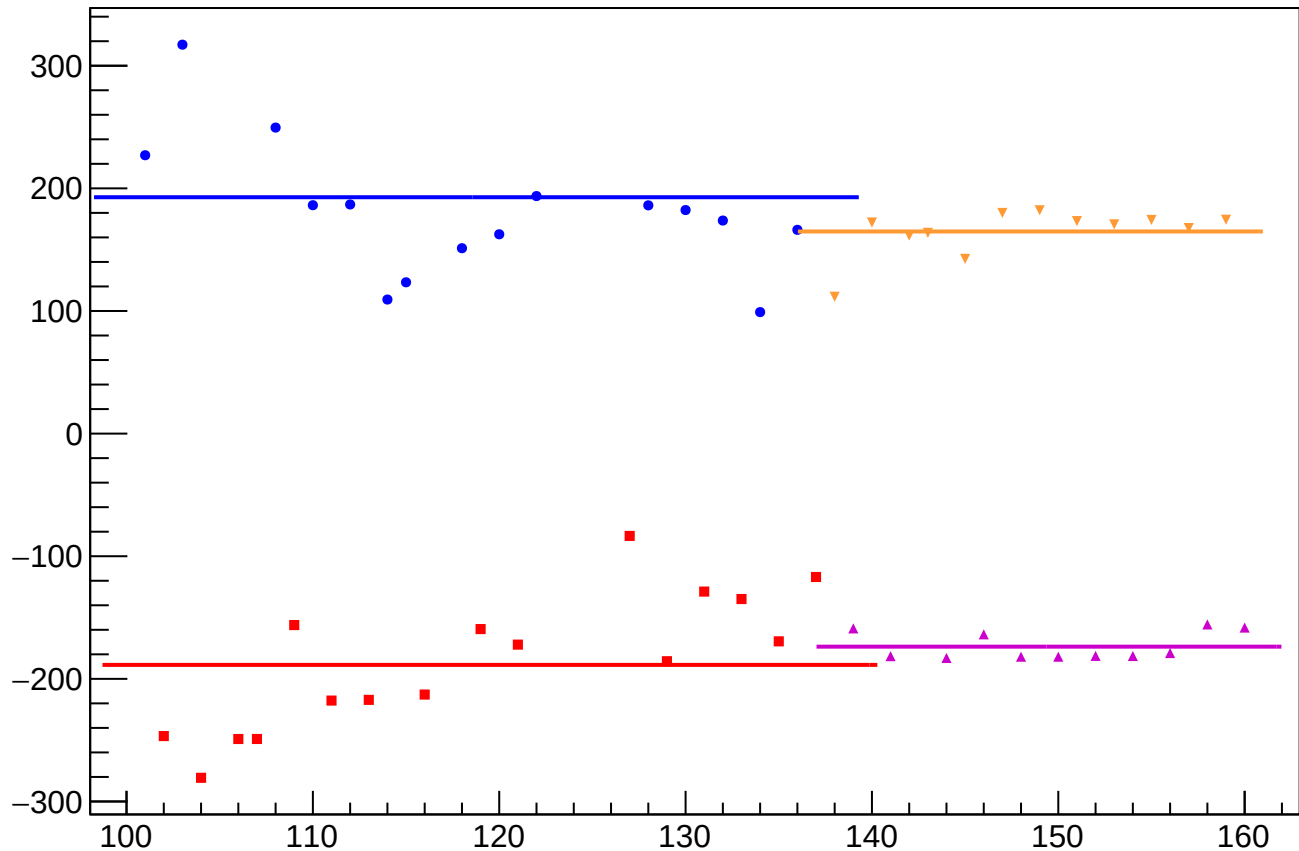
Right In:  $6.079 \pm 0.000$   $\chi^2/\text{NDF}: 1590295171022705157509900448825344.0/14$   
 Left Out:  $7.360 \pm 0.000$   $\chi^2/\text{NDF}: 4580380755239365503585140070154240.0/11$   
 Right Out:  $-6.245 \pm 0.000$   $\chi^2/\text{NDF}: 1816529163105006938510976985595904.0/15$   
 Left In:  $-6.773 \pm 0.000$   $\chi^2/\text{NDF}: 1545880653062872635060205832372224.0/10$   
 All:  $0.079 \pm 0.000$   $\chi^2/\text{NDF}: 15140907690746$

dit\_11X12X\_coil4\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1107.052+/-0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869+/-0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: -1016.106+/-0.000  $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  
 Left In: -1285.364+/-0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10  
 All: -25.499+/-0.000  $\chi^2/\text{NDF}$ : 443493791328

# dit\_4aY\_coil4\_mean vs Slug, Sign Corrected



Right In: 192.771 $\pm$ 0.000

$\chi^2$ /NDF: 1640576279746948433391816936236515328.0/14

Left Out: 164.832 $\pm$ 0.000

$\chi^2$ /NDF: 331248867631864480349687016910225408.0/11

Right Out: -188.612 $\pm$ 0.000

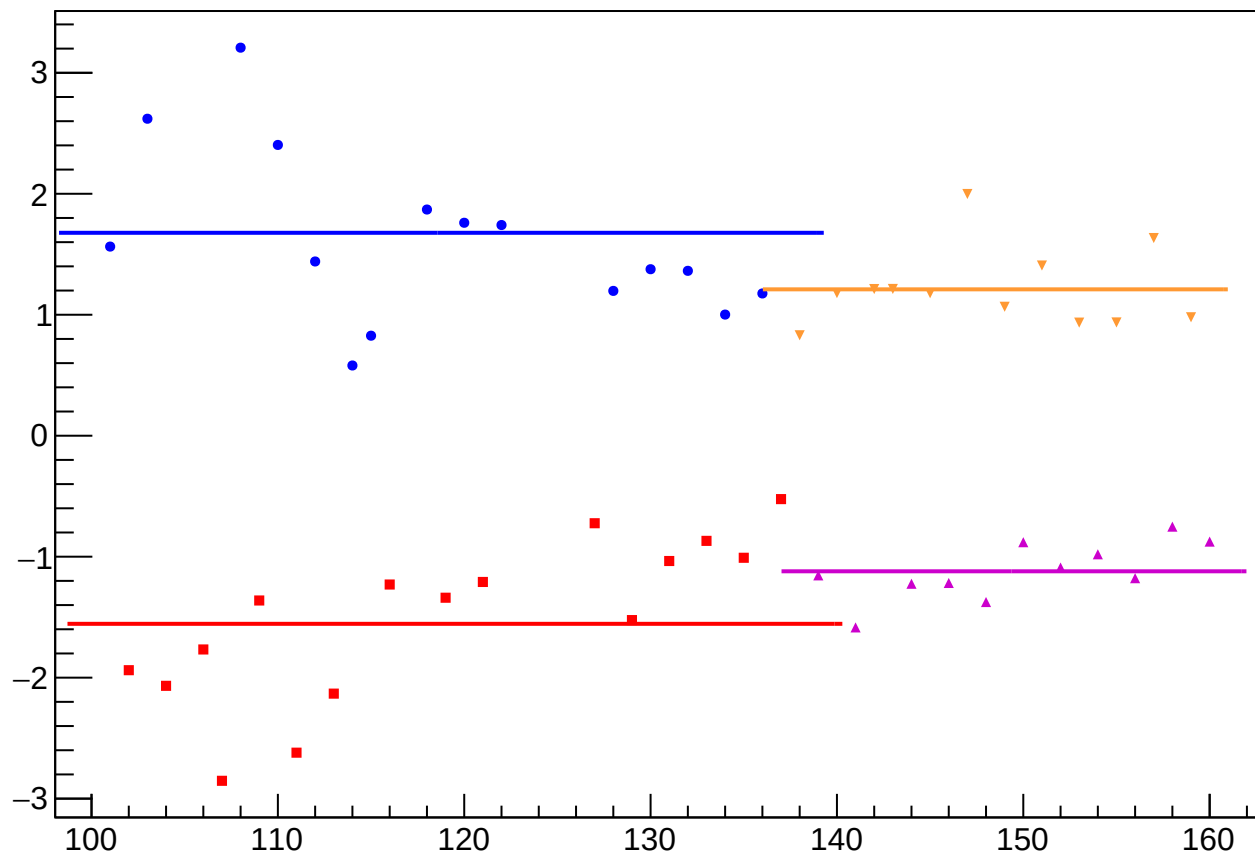
$\chi^2$ /NDF: 1922342257287674563344204730019610624.0/15

Left In: -173.738 $\pm$ 0.000

$\chi^2$ /NDF: 107568156923900649458795541002452992.0/10

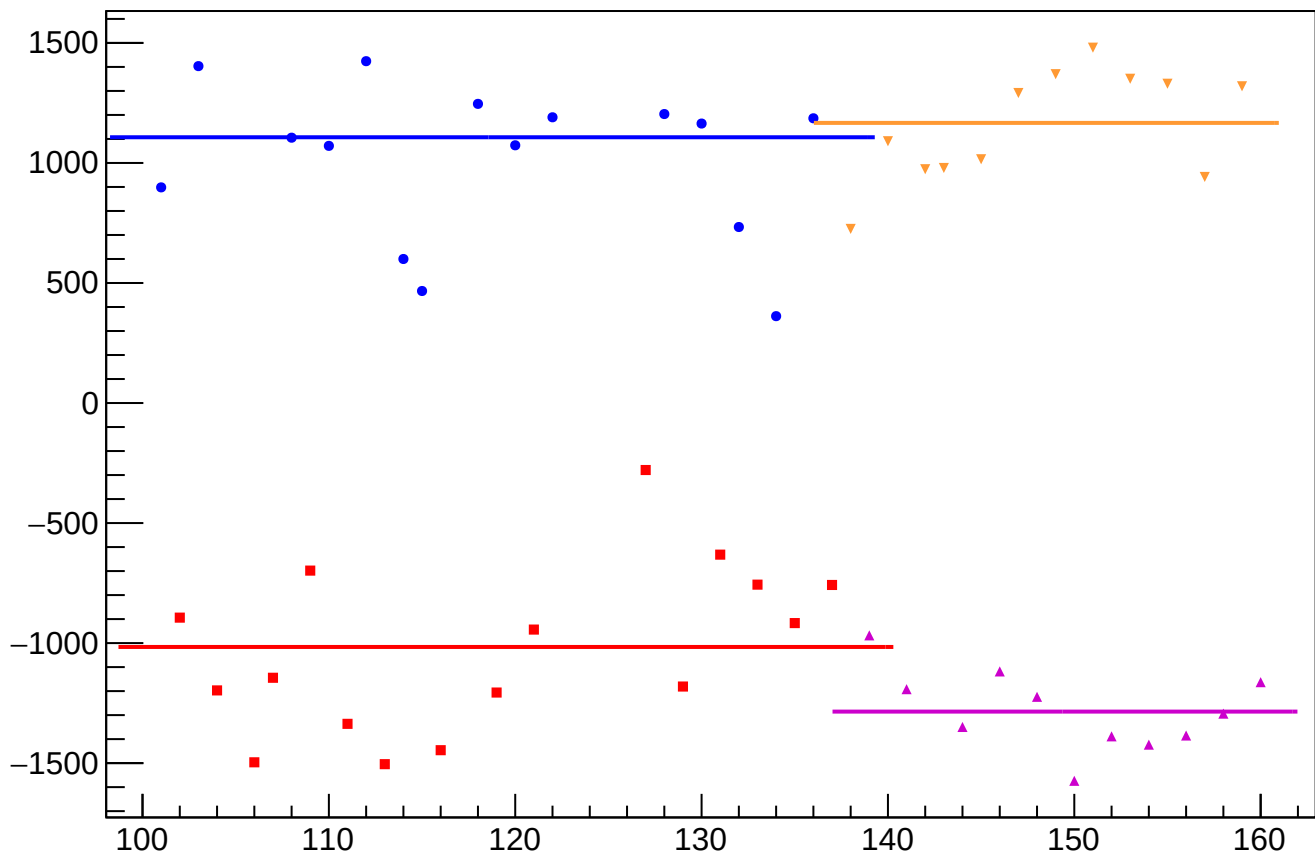
All: -3.352 $\pm$ 0.000  $\chi^2$ /NDF: 1045358110774

dit\_4aY\_coil4\_err\_mean vs Slug, Sign Corrected



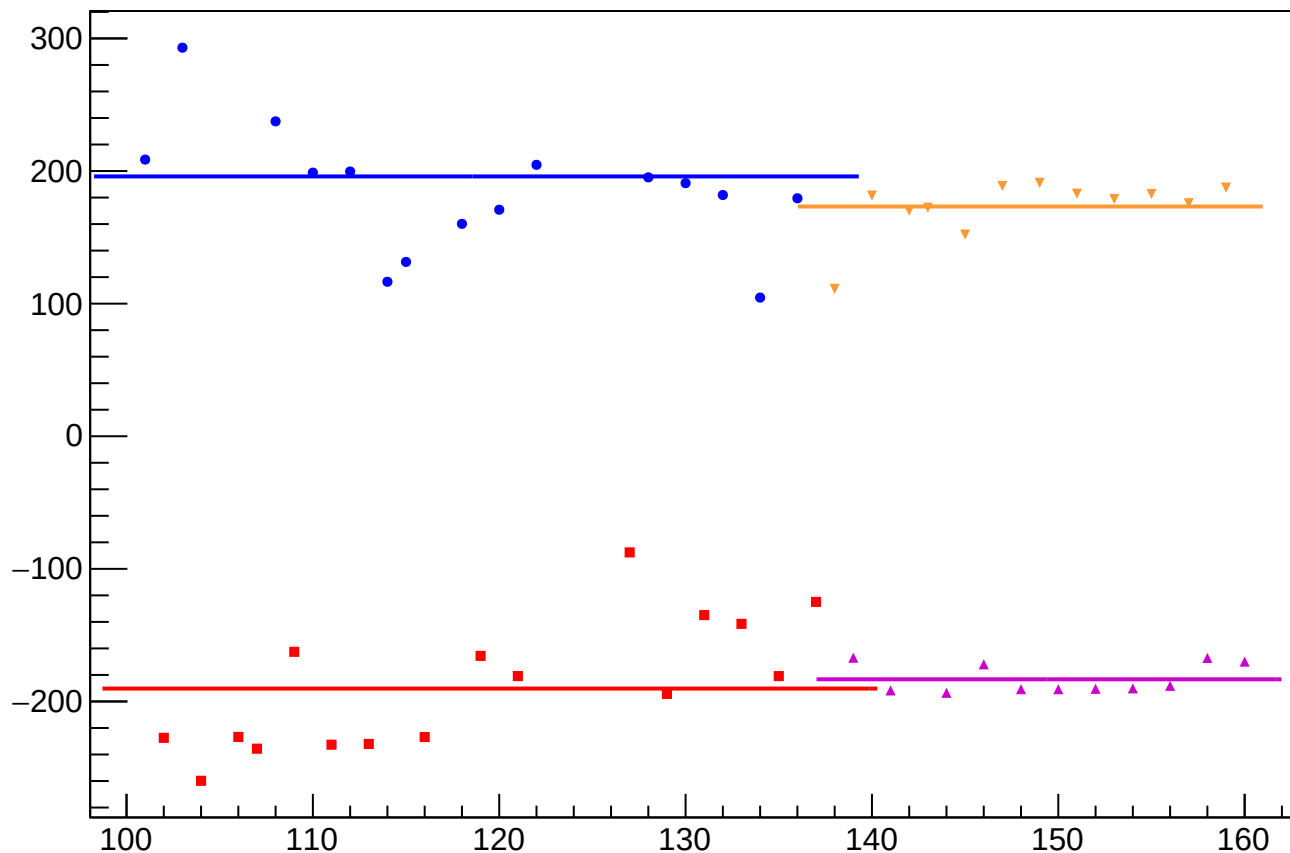
Right In: 1.677 $\pm$ 0.000  $\chi^2$ /NDF: 241879924044788593292791559225344.0/14  
 Left Out: 1.210 $\pm$ 0.000  $\chi^2$ /NDF: 95500502458420026672384705560576.0/11  
 Right Out: -1.555 $\pm$ 0.000  $\chi^2$ /NDF: 255645951433890296827677195108352.0/15  
 Left In: -1.121 $\pm$ 0.000  $\chi^2$ /NDF: 48374896563348957372285351624704.0/10  
 All: 0.039 $\pm$ 0.000  $\chi^2$ /NDF: 65745148787562

dit\_4aY\_coil4\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

dit\_4eY\_coil4\_mean vs Slug, Sign Corrected



Right In: 195.940 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 1057891079869089572370479093183938560.0/14

Left Out: 173.245 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 421189743022312956779621222954565632.0/11

Right Out: -190.268 $\pm$ 0.000

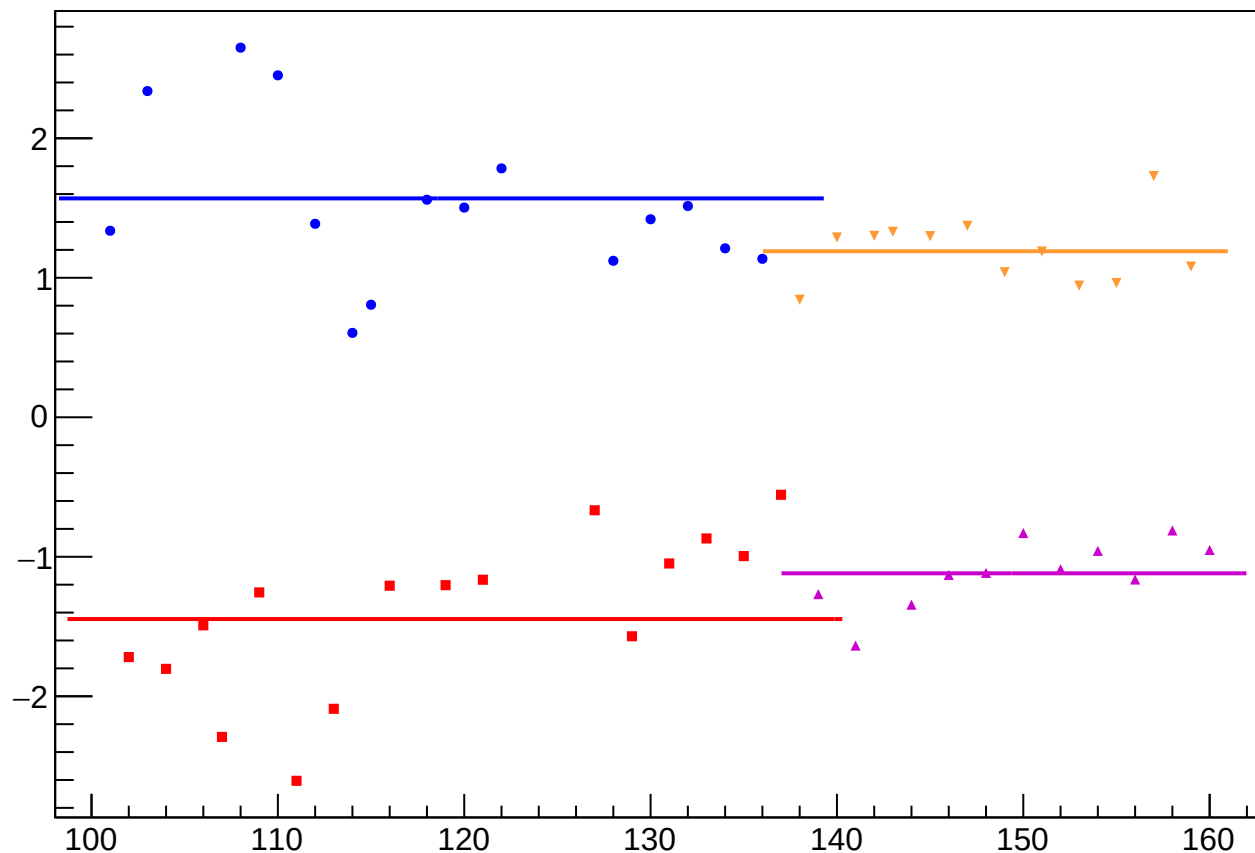
$\chi^2/\text{NDF}$ : 1468473073667973330267084234323656704.0/15

Left In: -183.290 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 101738841511111417821042611832487936.0/10

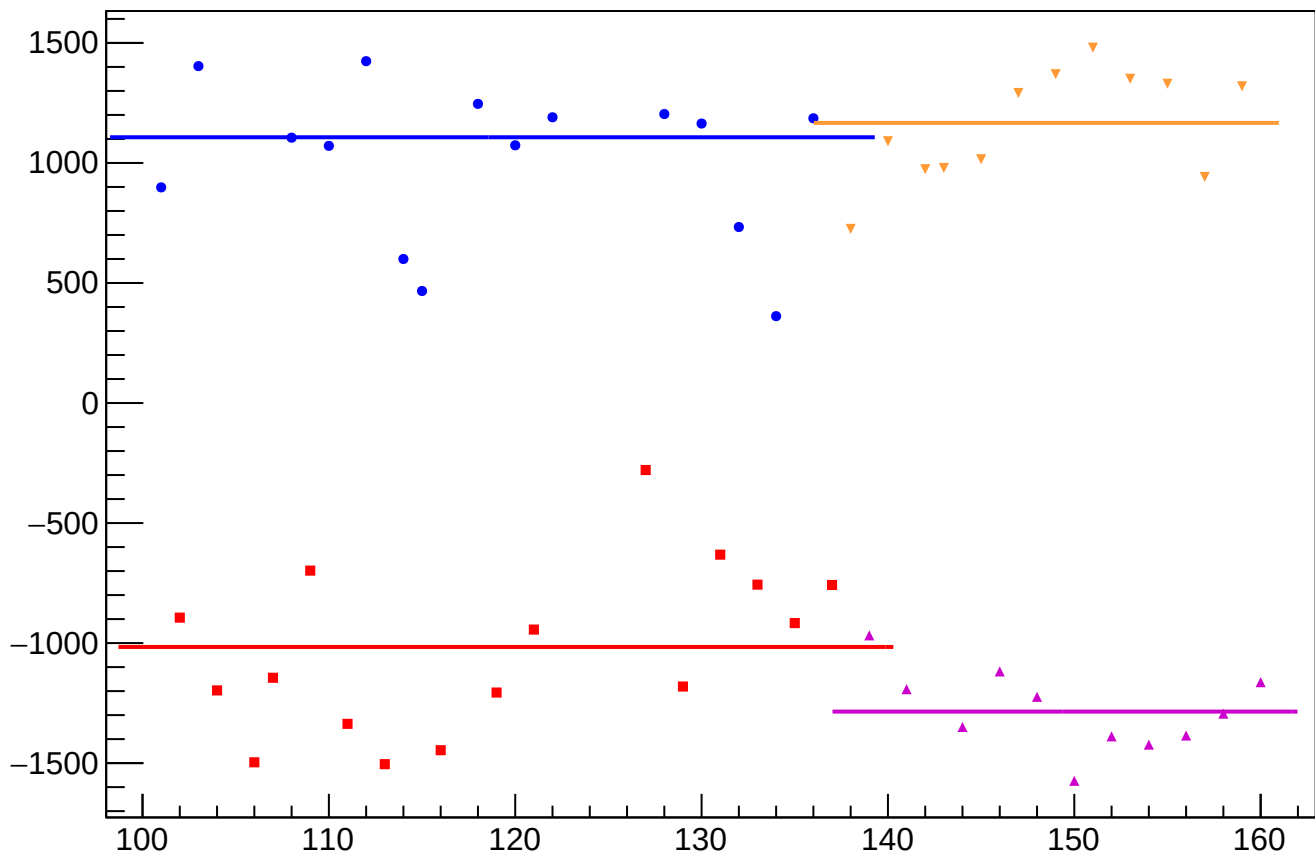
All: -3.411 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 1105507050353

dit\_4eY\_coil4\_err\_mean vs Slug, Sign Corrected



Right In: 1.569 +/- 0.000  $\chi^2/\text{NDF}$ : 162849195668123380789610540957696.0/14  
 Left Out: 1.190 +/- 0.000  $\chi^2/\text{NDF}$ : 50745822936032217336144814145536.0/11  
 Right Out: -1.446 +/- 0.000  $\chi^2/\text{NDF}$ : 196296653917523352443271052787712.0/15  
 Left In: -1.118 +/- 0.000  $\chi^2/\text{NDF}$ : 48973496995723480911801365823488.0/10  
 All: 0.034 +/- 0.000  $\chi^2/\text{NDF}$ : 58987559316177

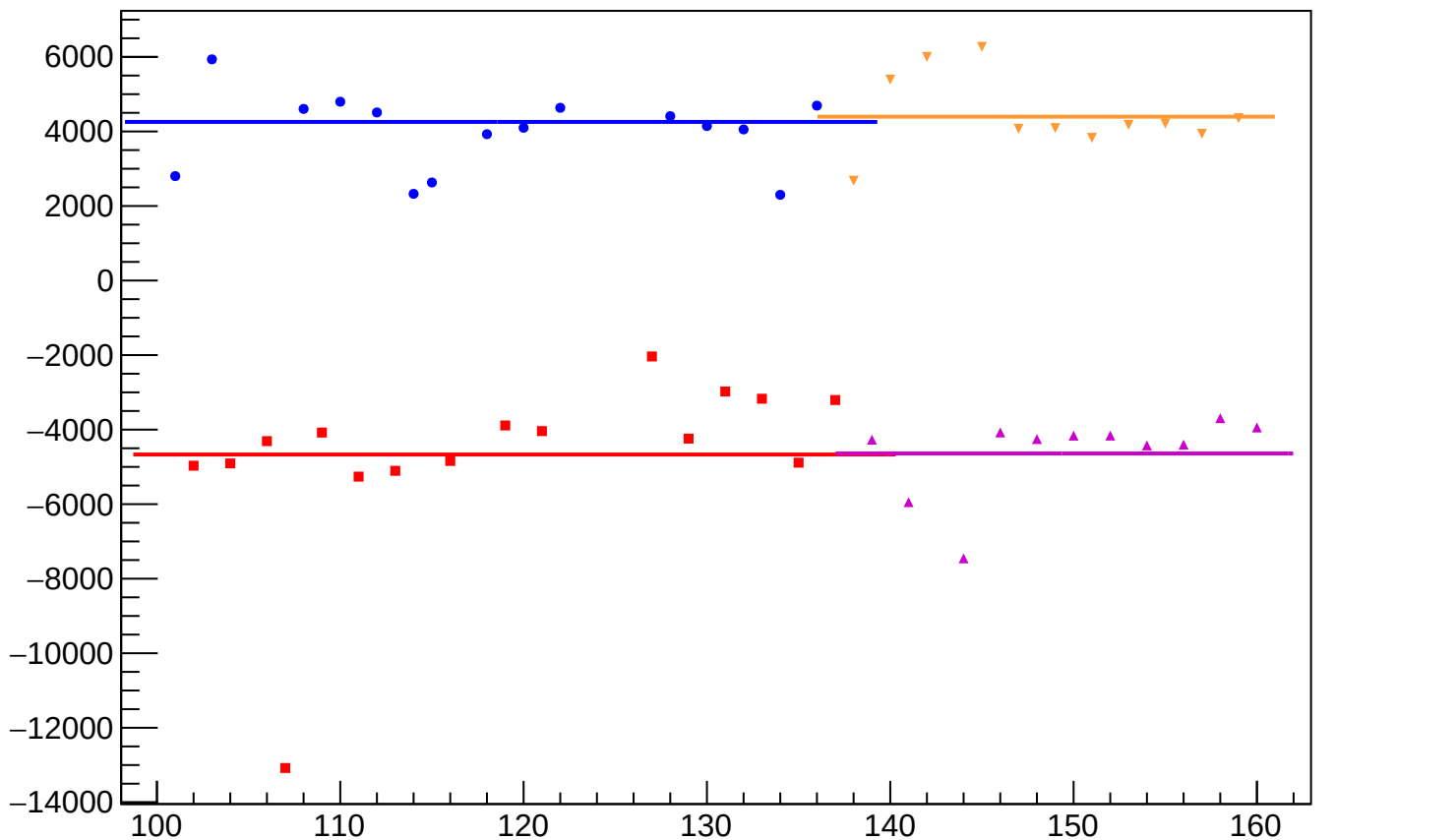
dit\_4eY\_coil4\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

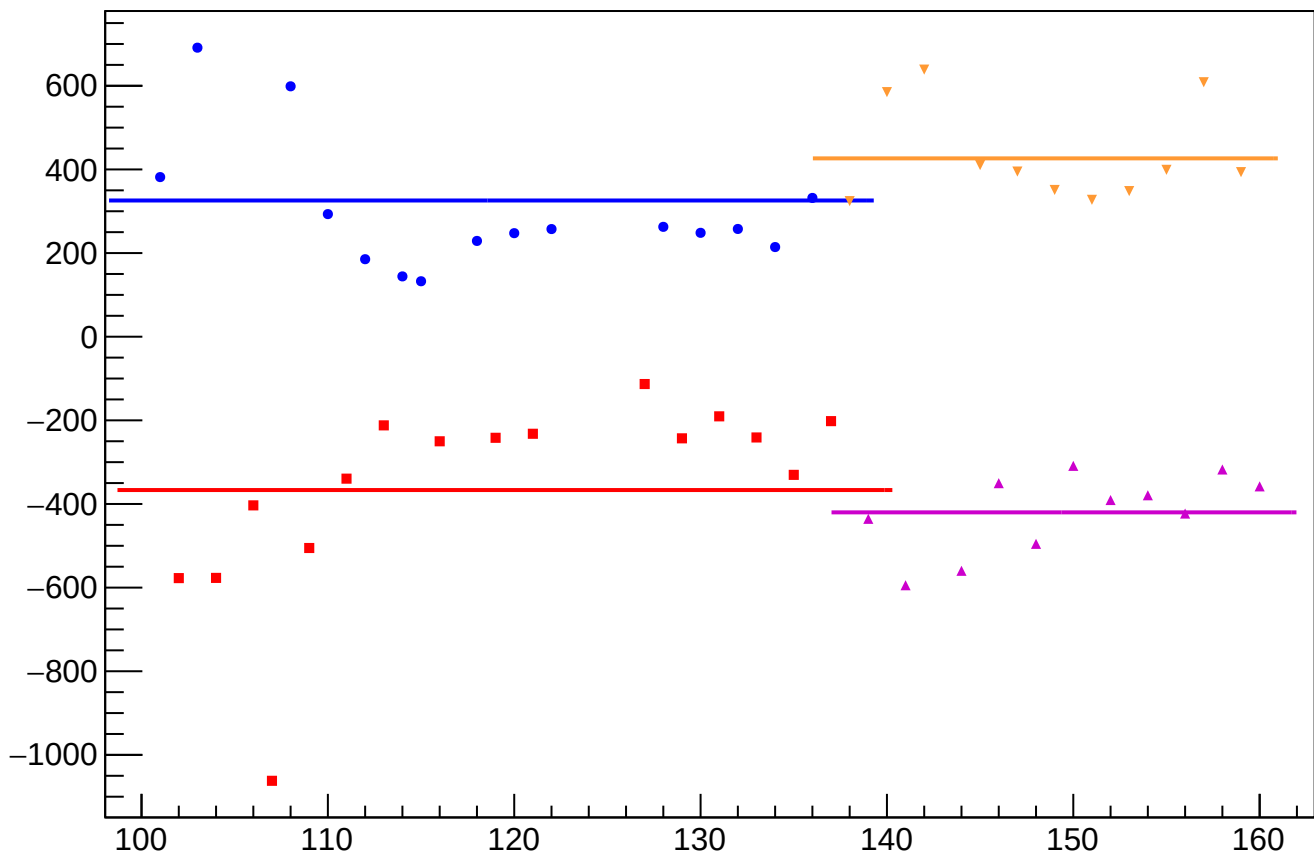


# dit\_usl\_coil4\_mean vs Slug, Sign Corrected



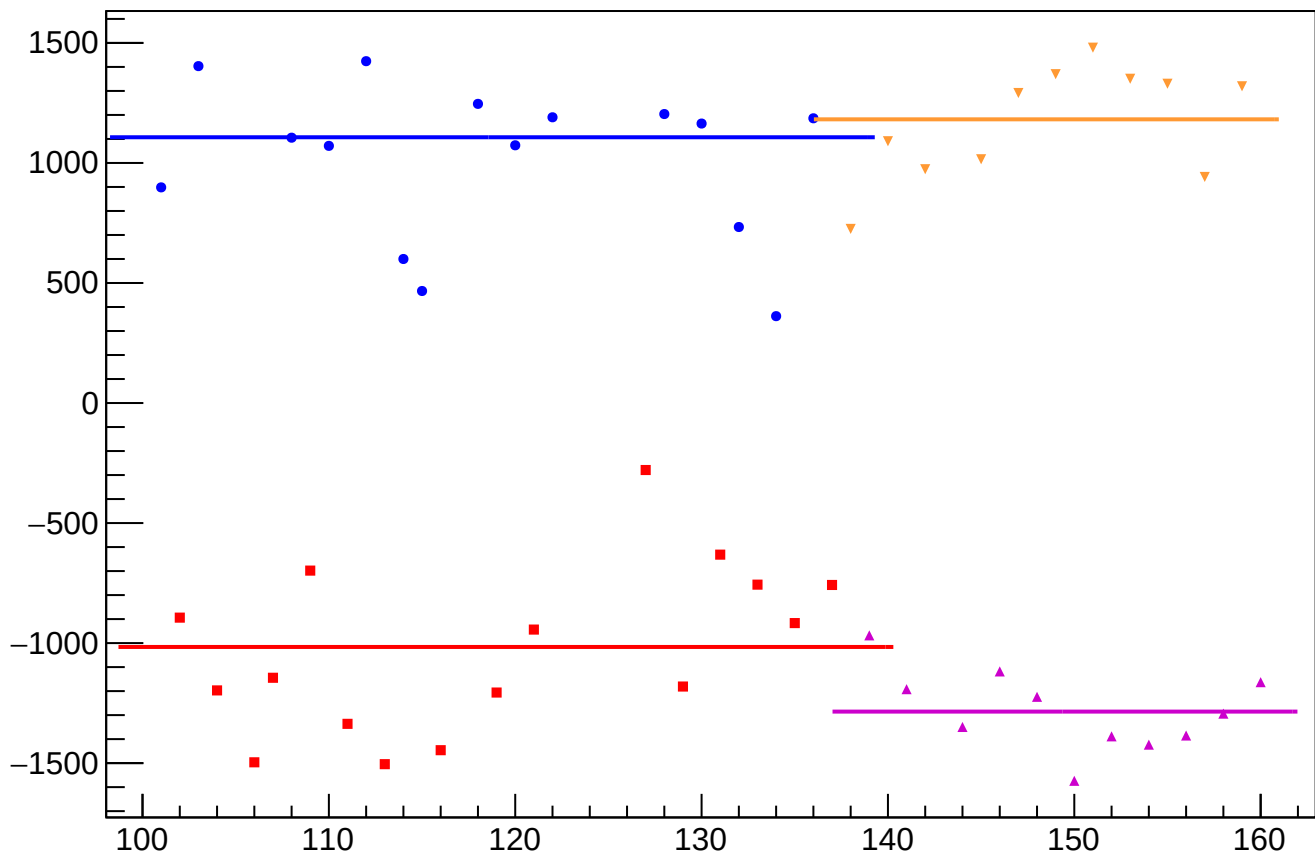
Right In: 4256.386+/-0.000  $\chi^2/\text{NDF}$ : 498605412551624859672454954159576186880.0/14  
 Left Out: 4396.403+/-0.000  $\chi^2/\text{NDF}$ : 767686308157486440179100240552638021632.0/10  
 Right Out: -4667.832+/-0.000  $\chi^2/\text{NDF}$ : 3201925535782807450320951772159309512704.0/15  
 Left In: -4639.846+/-0.000  $\chi^2/\text{NDF}$ : 1058446303743243170530981239939506634752.0/10  
 All: -296.246+/-0.000  $\chi^2/\text{NDF}$ : 67809743893

# dit\_usl\_coil4\_err\_mean vs Slug, Sign Corrected



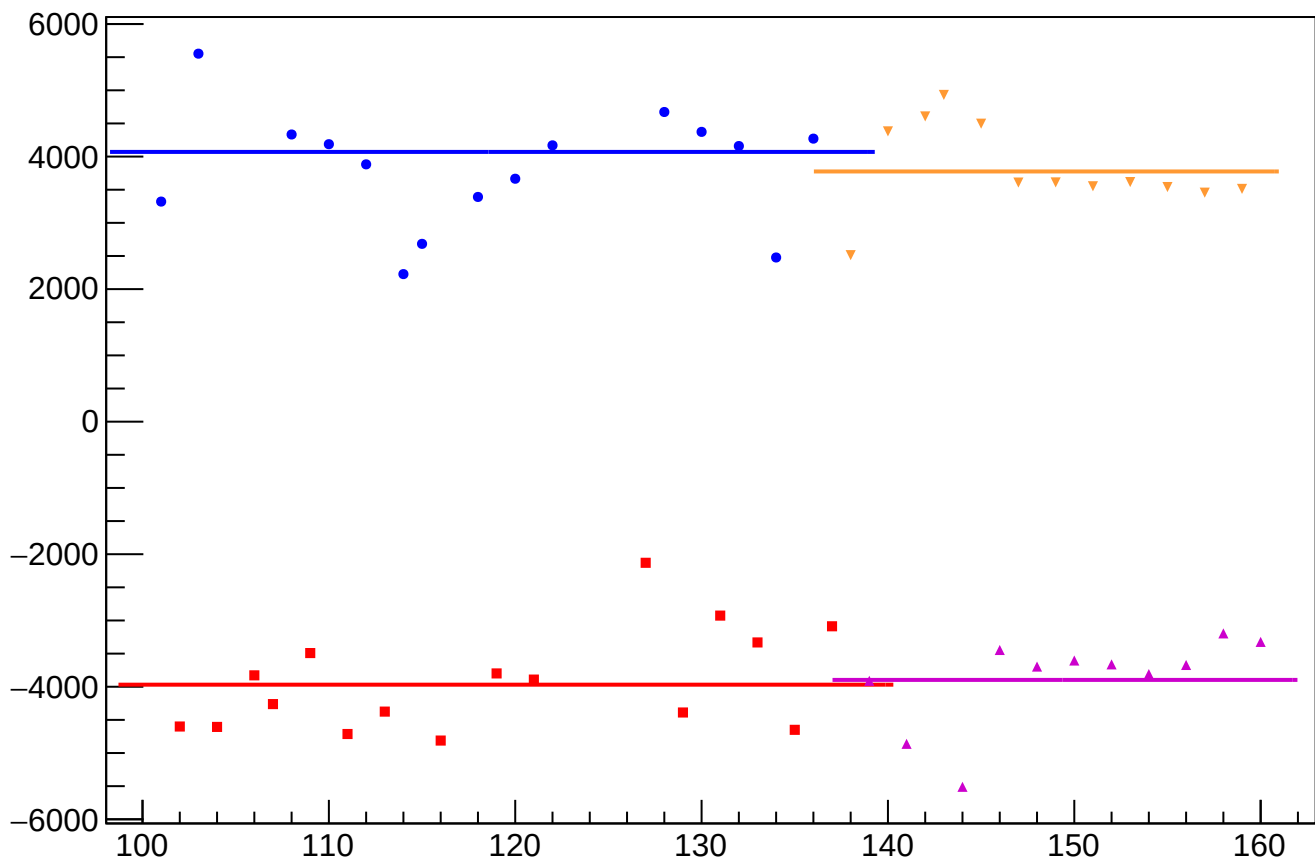
Right In: 325.732 +/- 0.000  $\chi^2/\text{NDF}$ : 14633359567940244123897242769854300160.0/14  
 Left Out: 426.446 +/- 0.000  $\chi^2/\text{NDF}$ : 9564737566607591468000084323542761472.0/10  
 Right Out: -366.682 +/- 0.000  $\chi^2/\text{NDF}$ : 32097250699947956409117440115398934528.0/15  
 Left In: -420.062 +/- 0.000  $\chi^2/\text{NDF}$ : 7706514276709269263404419491802644480.0/10  
 All: -19.474 +/- 0.000  $\chi^2/\text{NDF}$ : 538446931474

dit\_usl\_coil4\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1107.052 $\pm$ 0.000  $\chi^2$ /NDF: 40633831787810179240542210398269472768.0/14  
 Left Out: 1181.721 $\pm$ 0.000  $\chi^2$ /NDF: 42102883856321275256821029062509068288.0/10  
 Right Out: -1016.106 $\pm$ 0.000  $\chi^2$ /NDF: 7256766433509192712184310037150171136.0/15  
 Left In: -1285.364 $\pm$ 0.000  $\chi^2$ /NDF: 24002572803732345959736048095514853376.0/10  
 All: -47.303 $\pm$ 0.000  $\chi^2$ /NDF: 436585203886

# dit\_usr\_coil4\_mean vs Slug, Sign Corrected



Right In: 4070.444+/-0.000

$\chi^2/\text{NDF}$ : 343281875282695739956383156295247593472.0/14

Left Out: 3775.469+/-0.000

$\chi^2/\text{NDF}$ : 344611737456116155441573311529372090368.0/11

Right Out: -3968.723+/-0.000

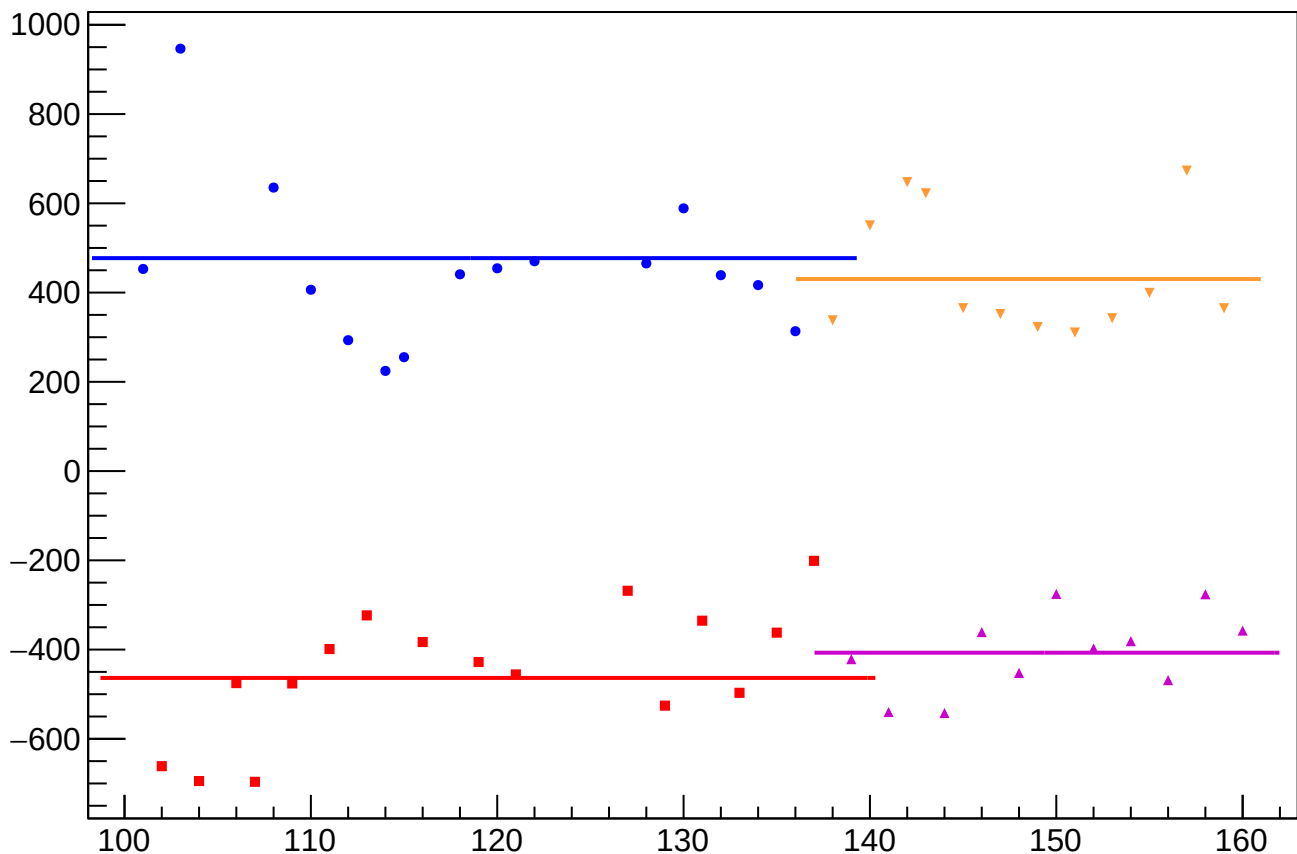
$\chi^2/\text{NDF}$ : 359955880326194784467353369492594884608.0/15

Left In: -3896.757+/-0.000

$\chi^2/\text{NDF}$ : 412530714584693730225130204014353317888.0/10

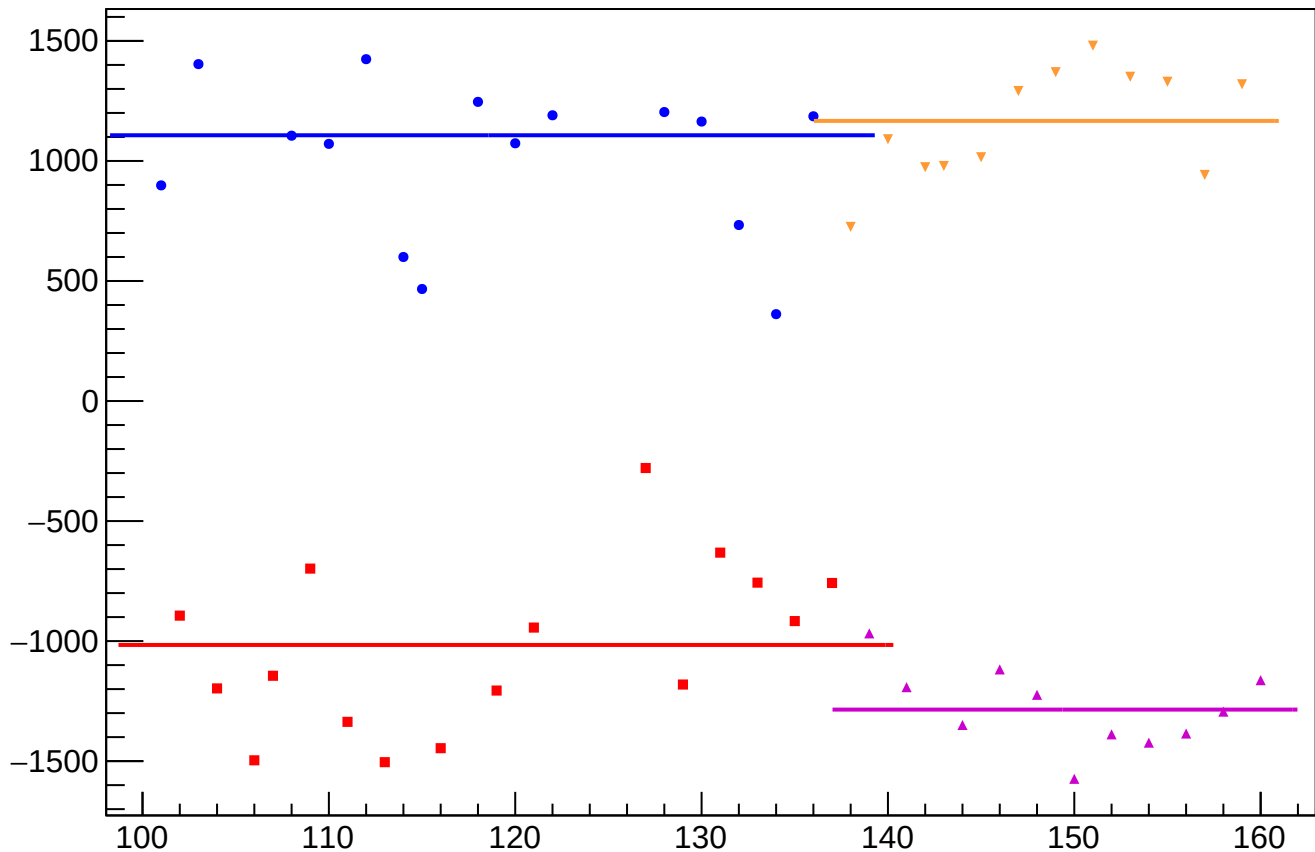
All: -49.222+/-0.000  $\chi^2/\text{NDF}$ : 497704442491

dit\_usr\_coil4\_err\_mean vs Slug, Sign Corrected



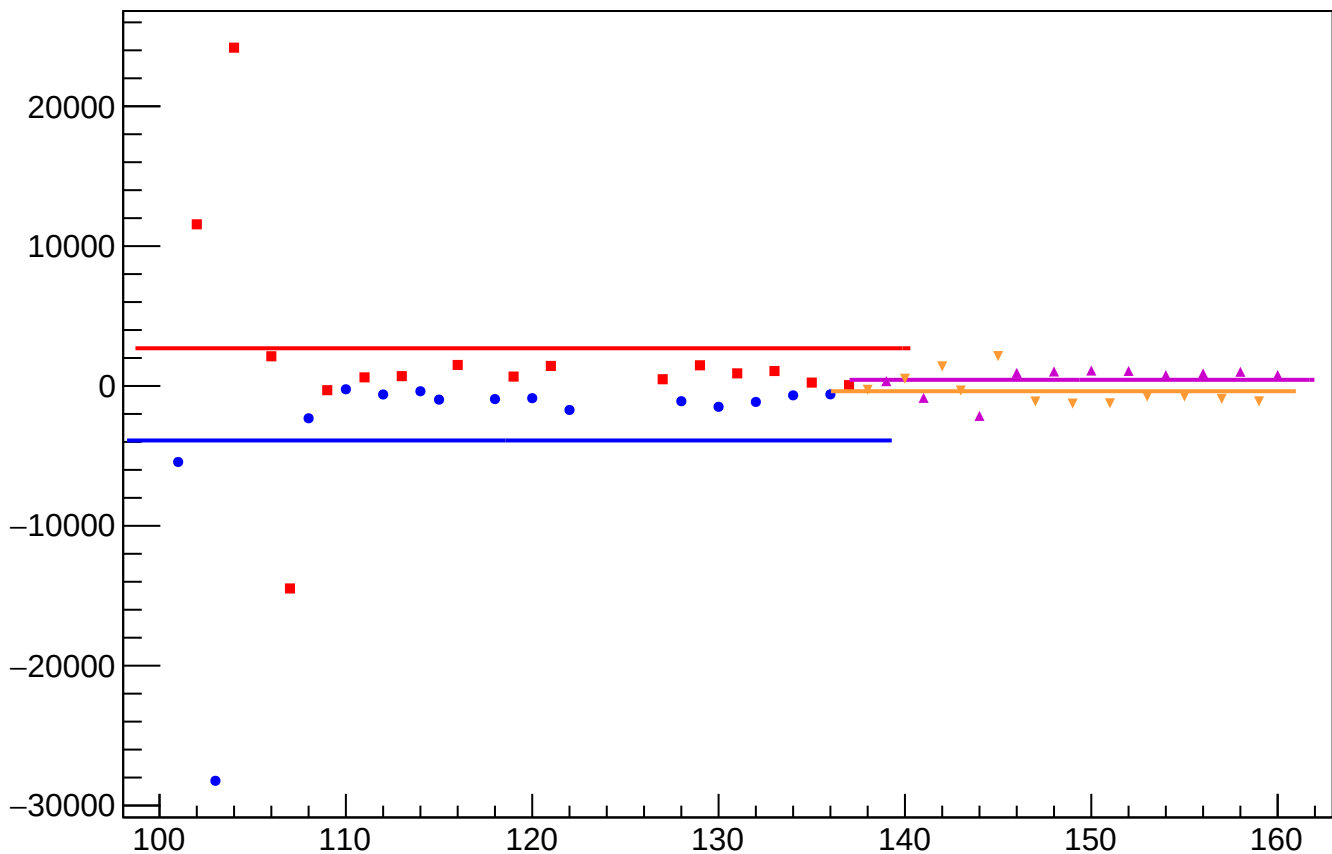
Right In: 477.186 $\pm$ 0.000  $\chi^2$ /NDF: 20455719931758379978892605184974782464.0/14  
 Left Out: 430.385 $\pm$ 0.000  $\chi^2$ /NDF: 15124863187063515916775500602167787520.0/11  
 Right Out: -463.513 $\pm$ 0.000  $\chi^2$ /NDF: 12556777931069903370031832388184571904.0/15  
 Left In: -406.990 $\pm$ 0.000  $\chi^2$ /NDF: 7014219134688394471330081136711827456.0/10  
 All: 5.658 $\pm$ 0.000  $\chi^2$ /NDF: 66848676133618

dit\_usr\_coil4\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1107.052+/-0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869+/-0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: -1016.106+/-0.000  $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  
 Left In: -1285.364+/-0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10  
 All: -25.499+/-0.000  $\chi^2/\text{NDF}$ : 443493791328

# dit\_atl1\_coil4\_mean vs Slug, Sign Corrected



Right In: -3896.522+/-0.000

$\chi^2/\text{NDF}$ : 39618598516481020448248440670012984786944.0/14

Left Out: -375.430+/-0.000

$\chi^2/\text{NDF}$ : 958630071854954411455962799285737619456.0/11

Right Out: 2695.992+/-0.000

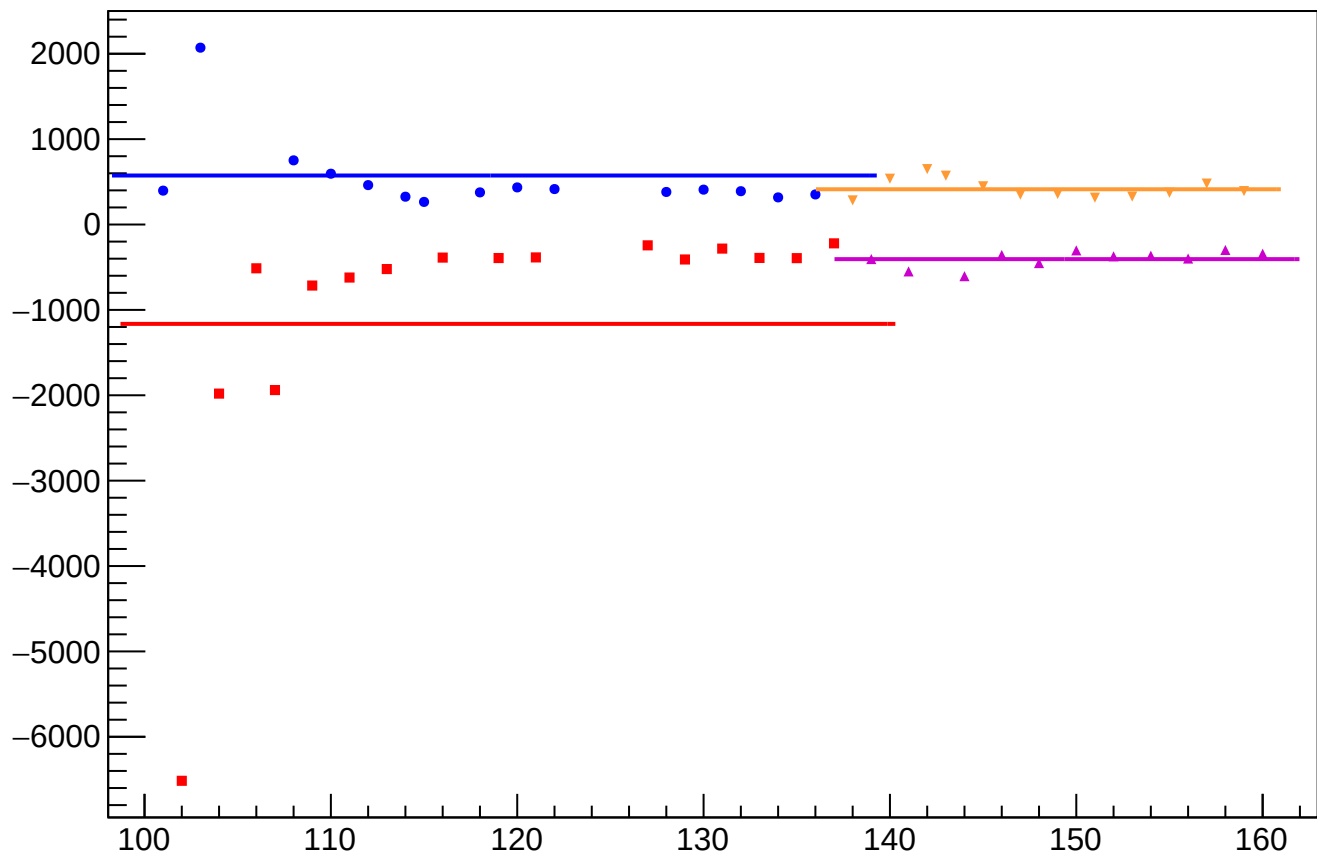
$\chi^2/\text{NDF}$ : 40822463071462352124212058386591729582080.0/15

Left In: 439.289+/-0.000

$\chi^2/\text{NDF}$ : 921031566733723872829454078558930468864.0/10

All: -211.749+/-0.000  $\chi^2/\text{NDF}$ : 97188137344

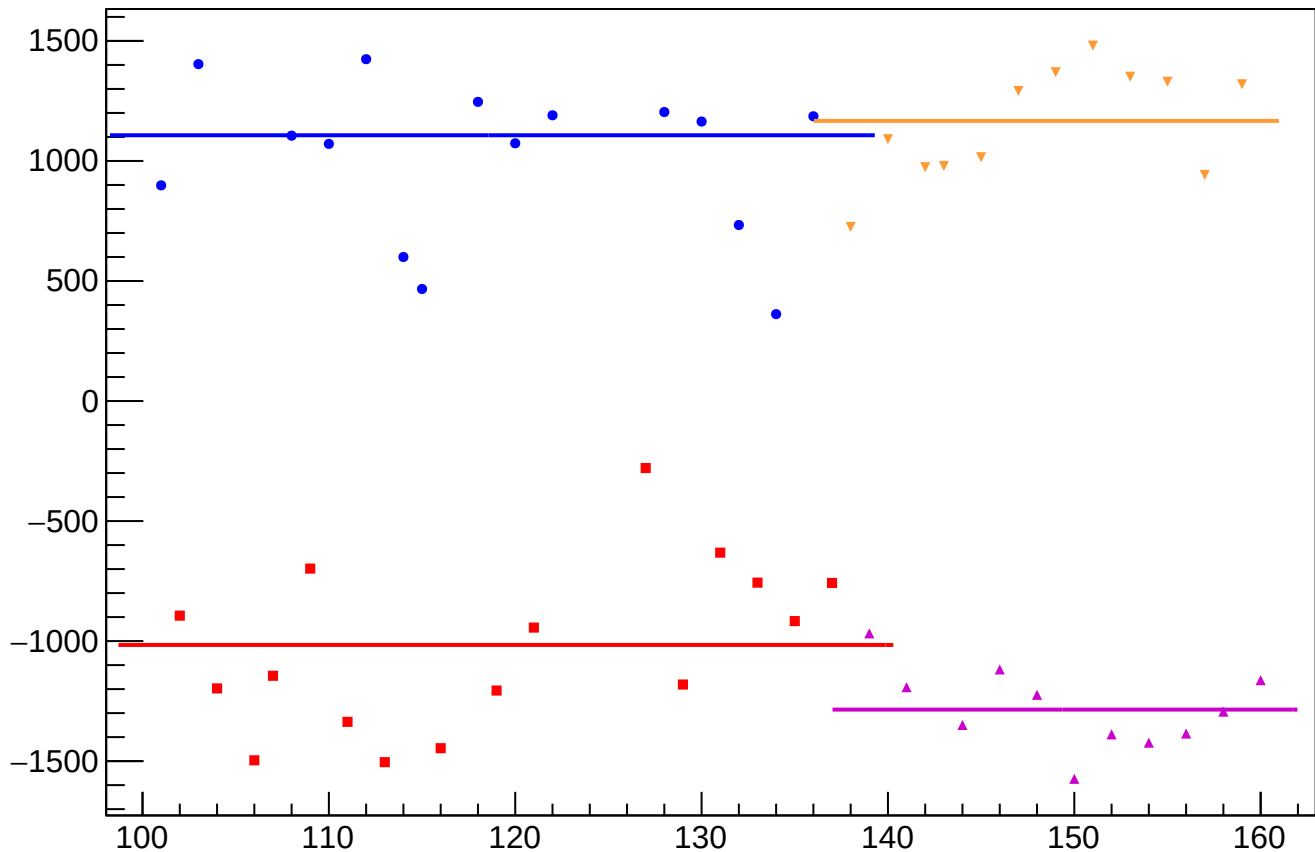
dit\_atl1\_coil4\_err\_mean vs Slug, Sign Corrected



Left: 1.597 +/- 0.000  $\chi^2/\text{NDF}$ : 32522110250256488  
 Right: -306.705 +/- 0.000  $\chi^2/\text{NDF}$ : 31486221730071  
 In: -1.272 +/- 0.000  $\chi^2/\text{NDF}$ : 525907060137574620  
 Out: -252.175 +/- 0.000  $\chi^2/\text{NDF}$ : 297119265978560  
 All: -127.041 +/- 0.000  $\chi^2/\text{NDF}$ : 35467372325

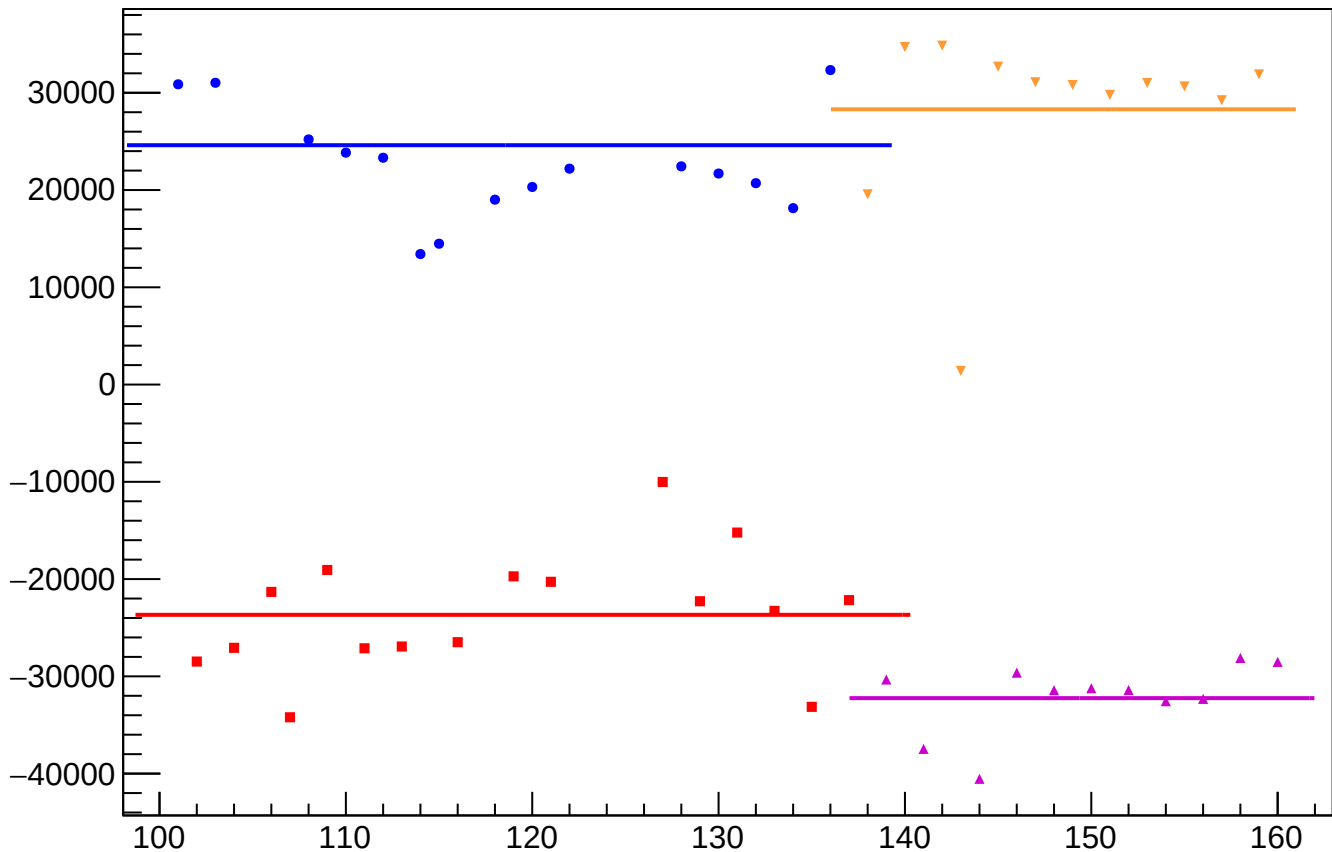


dit\_atl1\_coil4\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1107.052 +/- 0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869 +/- 0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: -1016.106 +/- 0.000  $\chi^2/\text{NDF}$ : 72567664333509192712184310037150171136.0/15  
 Left In: -1285.364 +/- 0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10  
 All: -25.499 +/- 0.000  $\chi^2/\text{NDF}$ : 443493791328

# dit\_atl2\_coil4\_mean vs Slug, Sign Corrected



Right In: 24608.761+/-0.000

$\chi^2/\text{NDF}$ : 17555600427140701787636759084167268925440.0/14

Left Out: 28302.359+/-0.000

$\chi^2/\text{NDF}$ : 64743960576526073147852789326823934656512.0/11

Right Out: -23673.937+/-0.000

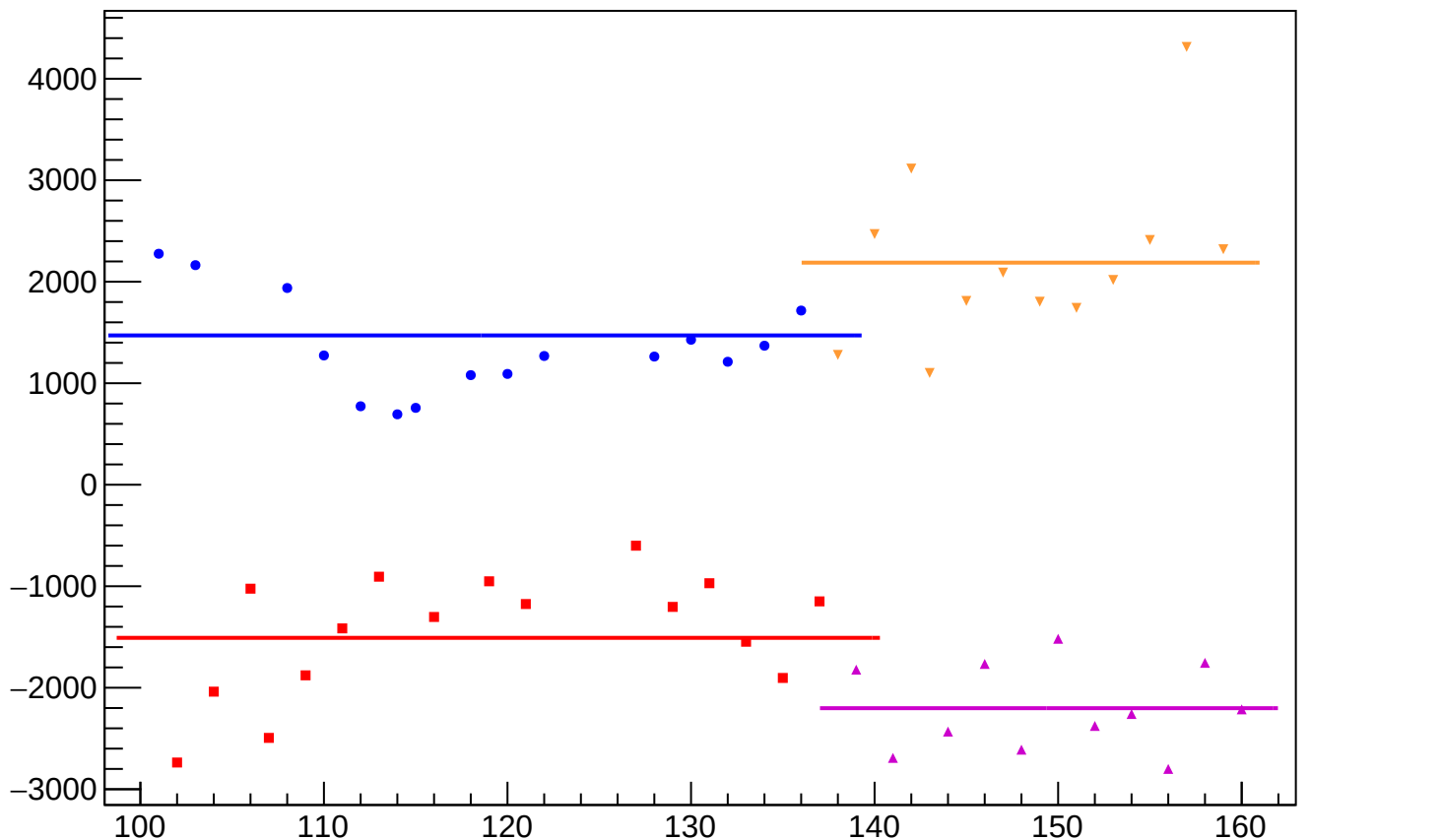
$\chi^2/\text{NDF}$ : 24824229344827567313624871677295341862912.0/15

Left In: -32239.303+/-0.000

$\chi^2/\text{NDF}$ : 11931397875663177142812829998803541032960.0/10

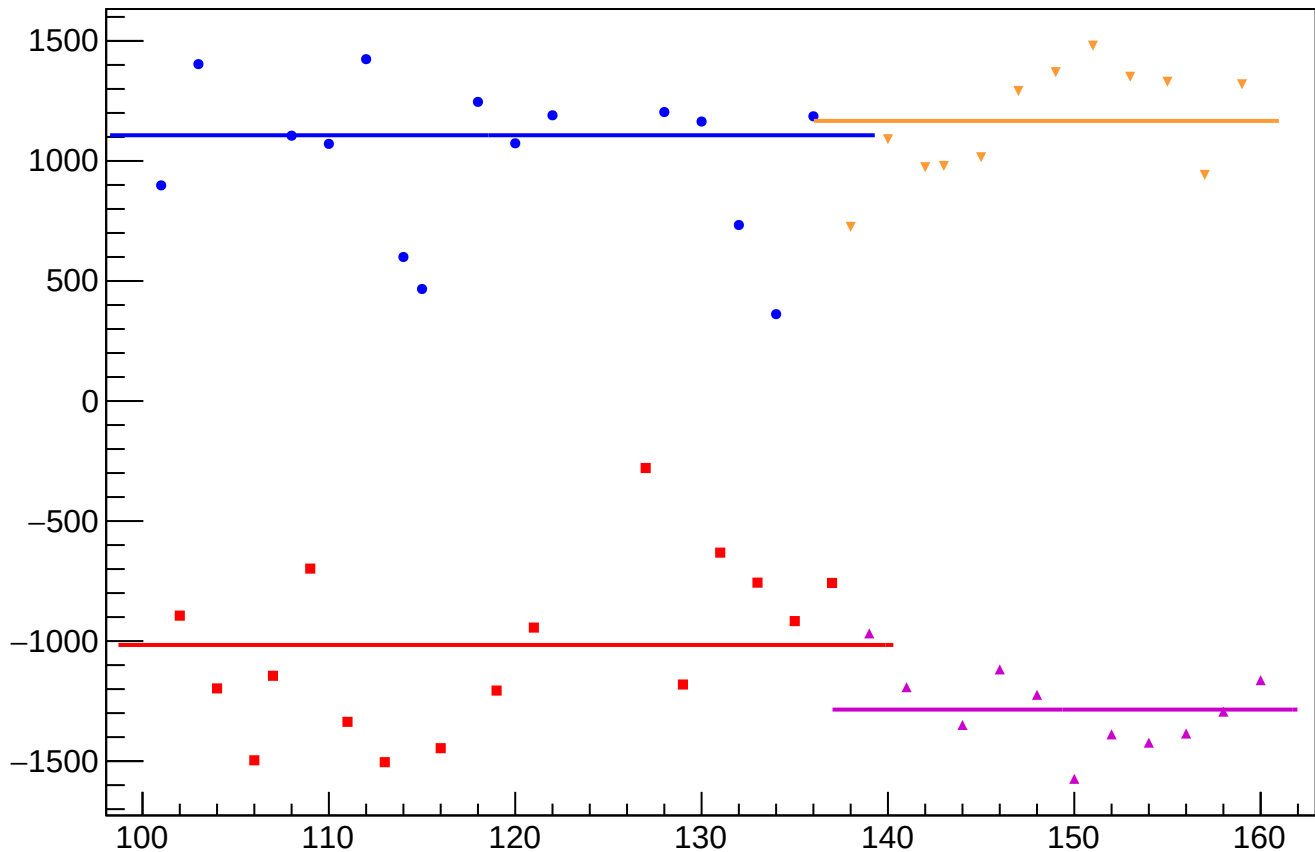
All: -1185.856+/-0.000  $\chi^2/\text{NDF}$ : 2573988051

dit\_atl2\_coil4\_err\_mean vs Slug, Sign Corrected



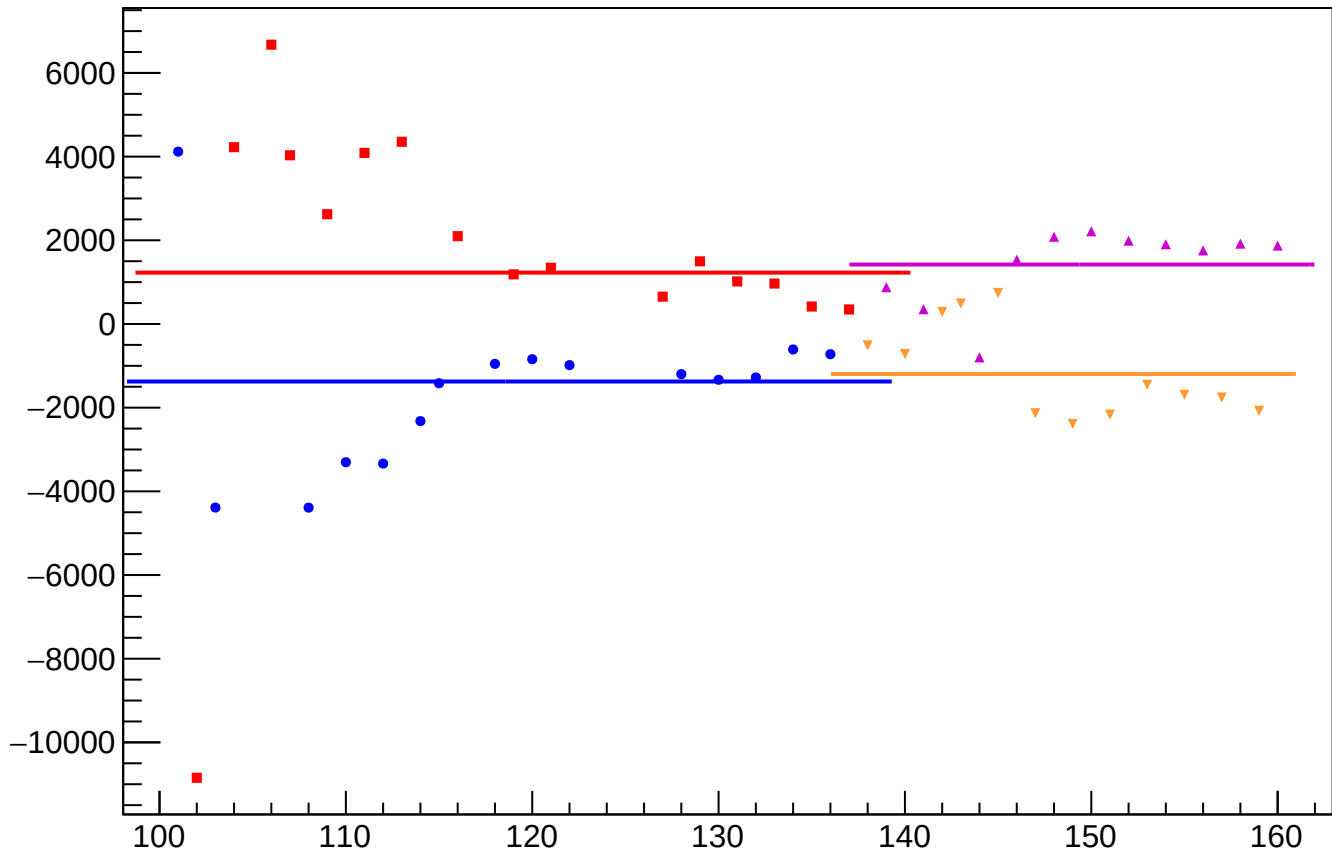
Left: -18.662 +/- 0.000  $\chi^2/\text{NDF}$ : 9604851757835687  
 Right: -39.055 +/- 0.000  $\chi^2/\text{NDF}$ : 330947344548199  
 In: -686.275 +/- 0.000  $\chi^2/\text{NDF}$ : 5438324784011715  
 Out: 628.599 +/- 0.000  $\chi^2/\text{NDF}$ : 6113094829757836  
 All: -27.171 +/- 0.000  $\chi^2/\text{NDF}$ : 129146441419

dit\_atl2\_coil4\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

# dit\_atr1\_coil4\_mean vs Slug, Sign Corrected



Right In: -1374.510+/-0.000

Left Out: -1194.978+/-0.000

Right Out: 1227.879+/-0.000

Left In: 1420.806+/-0.000

$\chi^2/\text{NDF}$ : 3072775774026573120755024580495322120192.0/14

$\chi^2/\text{NDF}$ : 1012982164343735644721296583058593415168.0/11

$\chi^2/\text{NDF}$ : 11115312999926623396466450218448622452736.0/15

$\chi^2/\text{NDF}$ : 747987085785920162637916932217361137664.0/10

Left: 120.030+/-0.000  $\chi^2/\text{NDF}$ : 4904926728039627

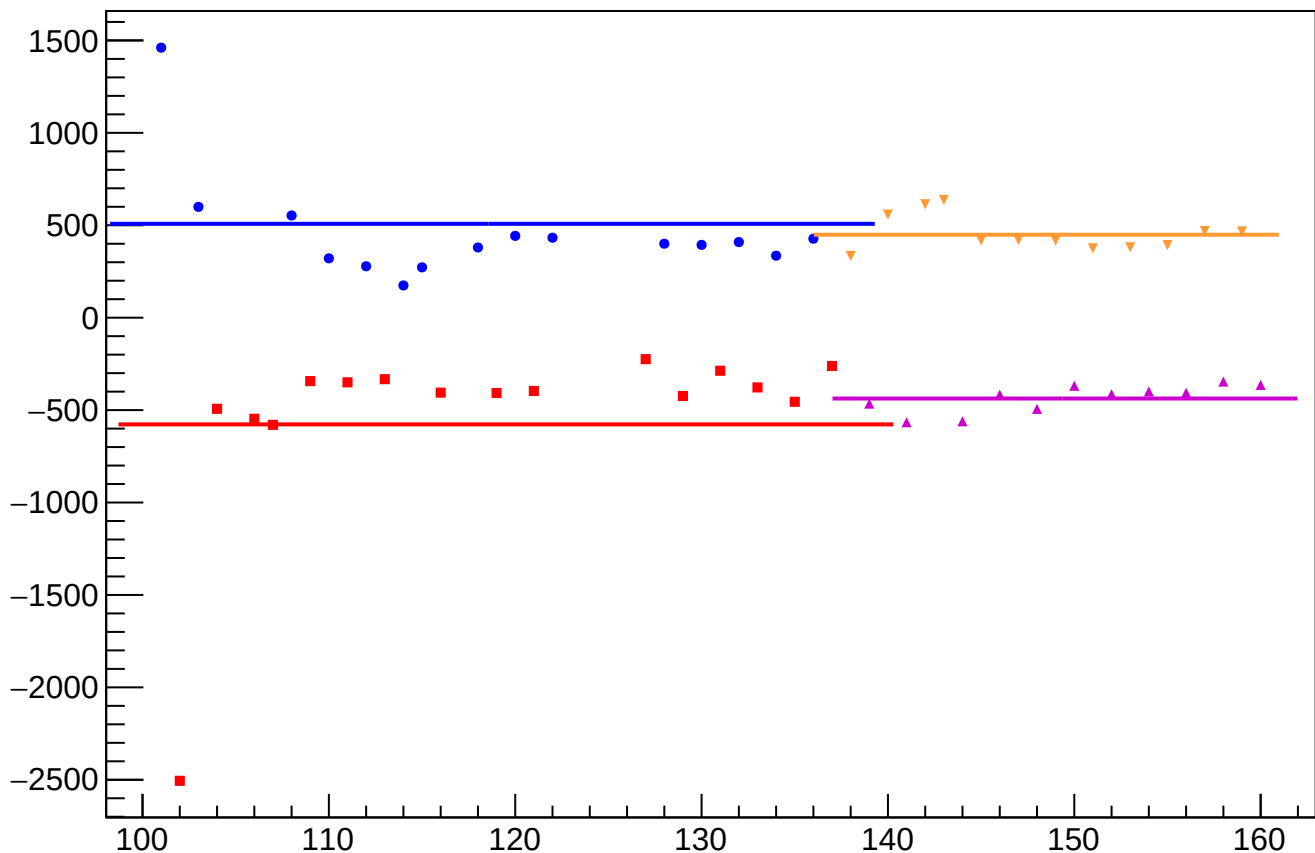
Right: -55.518+/-0.000  $\chi^2/\text{NDF}$ : 164158010761557

In: 267.494+/-0.000  $\chi^2/\text{NDF}$ : 67996212905624210

Out: -172.811+/-0.000  $\chi^2/\text{NDF}$ : 143918754957920

All: 46.783+/-0.000  $\chi^2/\text{NDF}$ : 2134436142325

# dit\_atr1\_coil4\_err\_mean vs Slug, Sign Corrected



Right In: 507.809+/-0.000

$\chi^2/\text{NDF}$ : 64139927968444054596859613468220719104.0/14

Left Out: 448.905+/-0.000

$\chi^2/\text{NDF}$ : 6972444969041725929744111494148128768.0/11

Right Out: -577.250+/-0.000

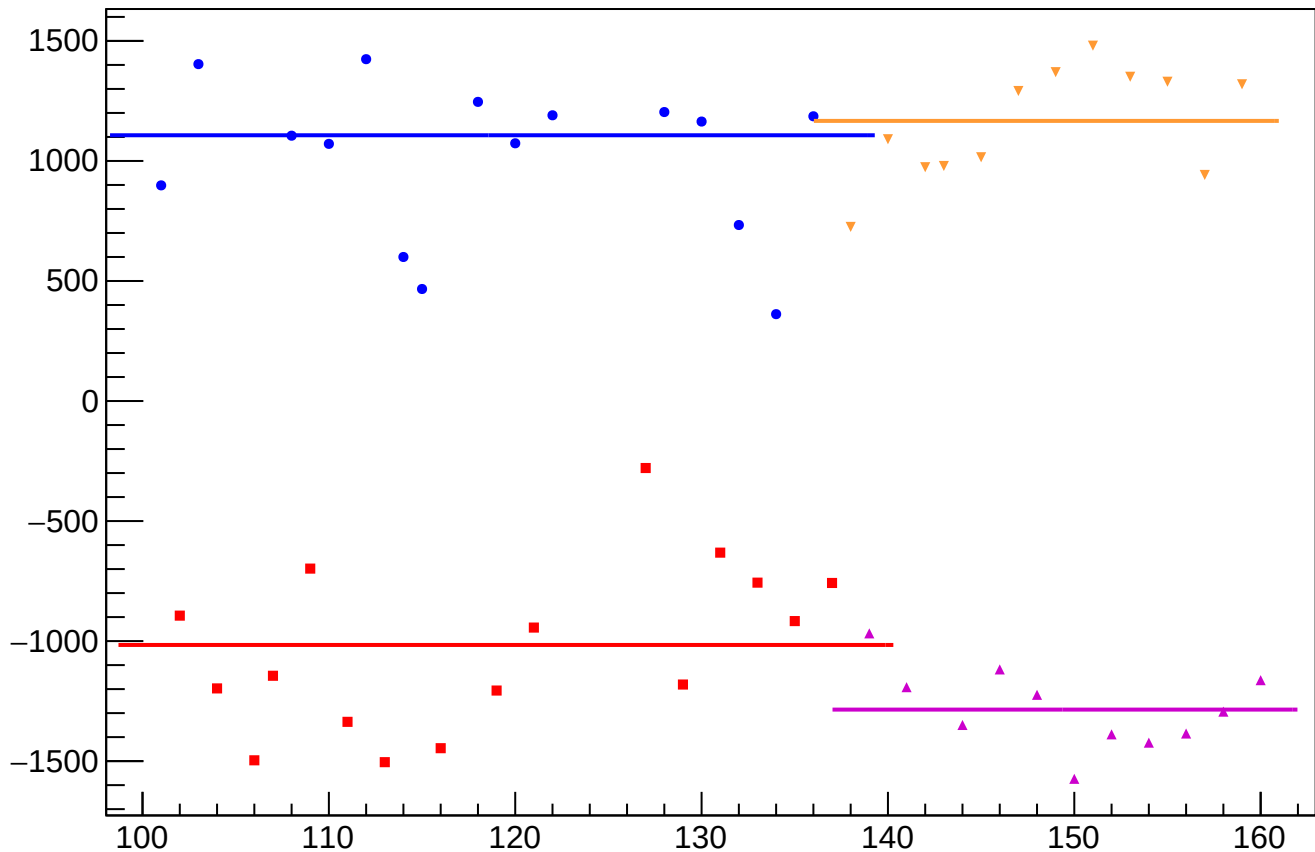
$\chi^2/\text{NDF}$ : 241288780642623391683958641535574081536.0/15

Left In: -437.315+/-0.000

$\chi^2/\text{NDF}$ : 4874677524968742275560761293986070528.0/10

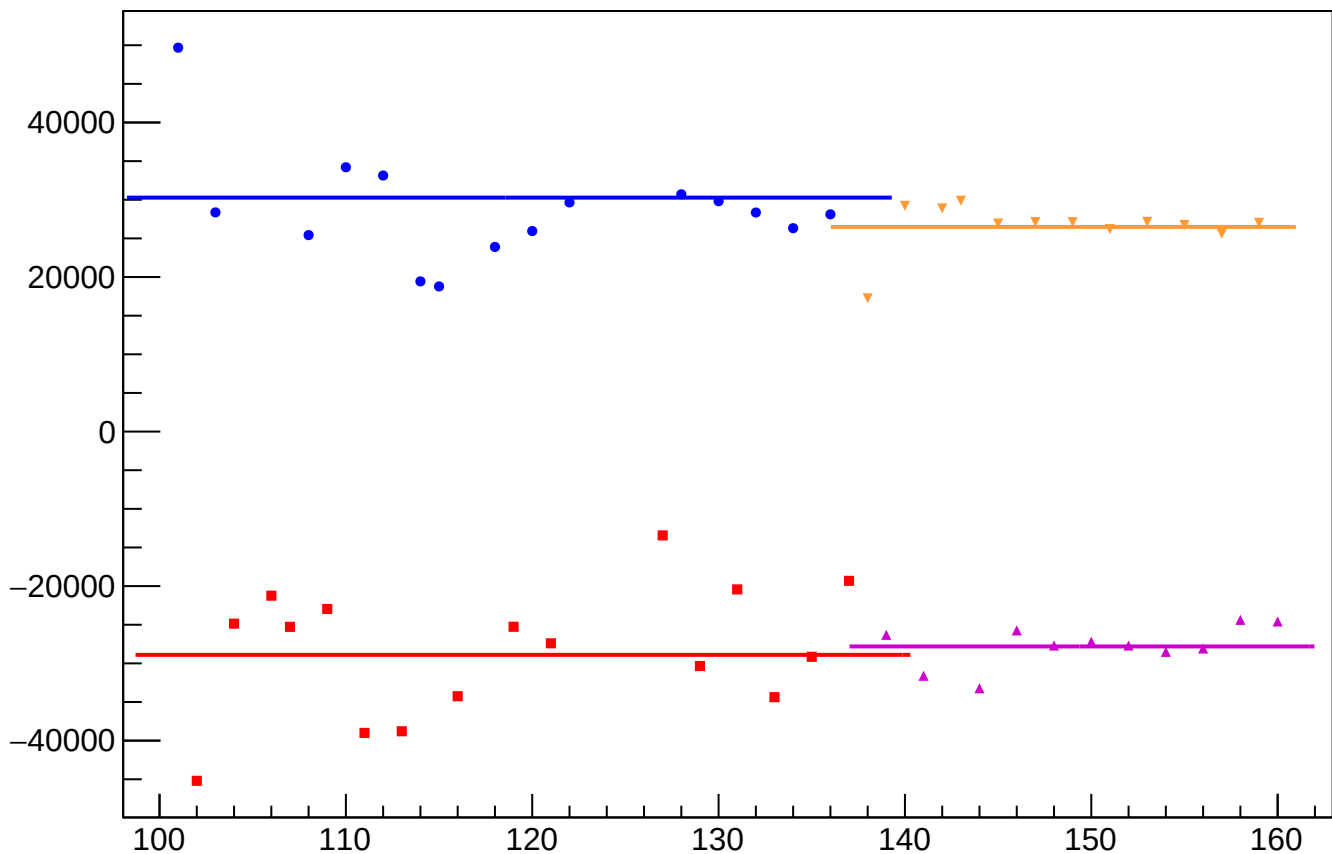
All: -15.611+/-0.000  $\chi^2/\text{NDF}$ : 106701634148

dit\_atr1\_coil4\_Ndata\_mean vs Slug, Sign Corrected



Left: -65.918 +/- 0.000  $\chi^2/\text{NDF}$ : 2831749902088431  
 Right: 30.953 +/- 0.000  $\chi^2/\text{NDF}$ : 1595991371539270  
 In: -298.283 +/- 0.000  $\chi^2/\text{NDF}$ : 2246669587664541  
 Out: 245.904 +/- 0.000  $\chi^2/\text{NDF}$ : 1954763504813796  
 All: -25.499 +/- 0.000  $\chi^2/\text{NDF}$ : 443493791328

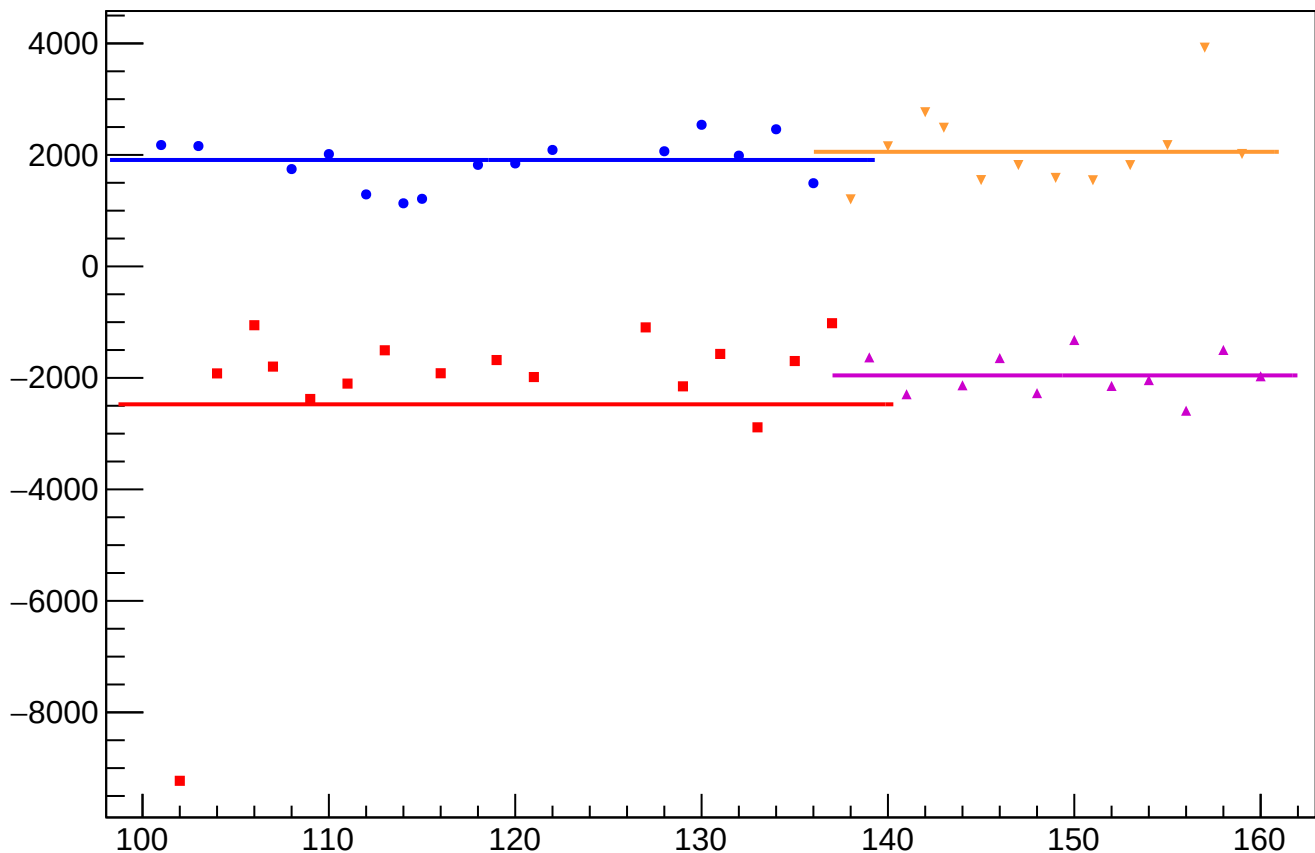
dit\_atr2\_coil4\_mean vs Slug, Sign Corrected



Right In: 30277.649+/-0.000  $\chi^2/\text{NDF}$ : 30975974641524142453090022540760519278592.0/14  
 Left Out: 26486.725+/-0.000  $\chi^2/\text{NDF}$ : 8520993483340987429131750717035884052480.0/11  
 Right Out: -28896.318+/-0.000  $\chi^2/\text{NDF}$ : 46969504058010359146250560228409714147328.0/15  
 Left In: -27807.237+/-0.000  $\chi^2/\text{NDF}$ : 6193058620219899678835139815803642183680.0/10  
 All: -351.512+/-0.000  $\chi^2/\text{NDF}$ : 25998642244

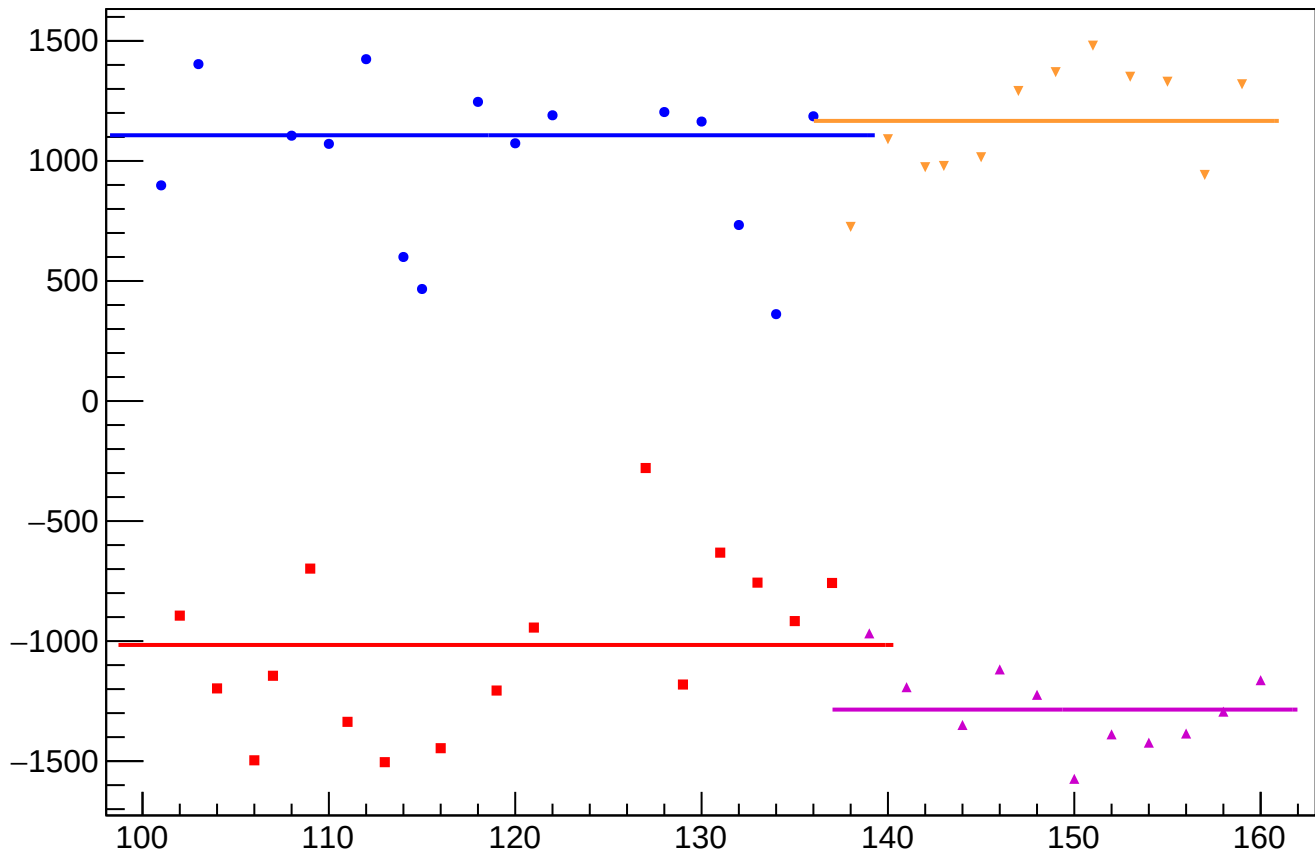


dit\_atr2\_coil4\_err\_mean vs Slug, Sign Corrected



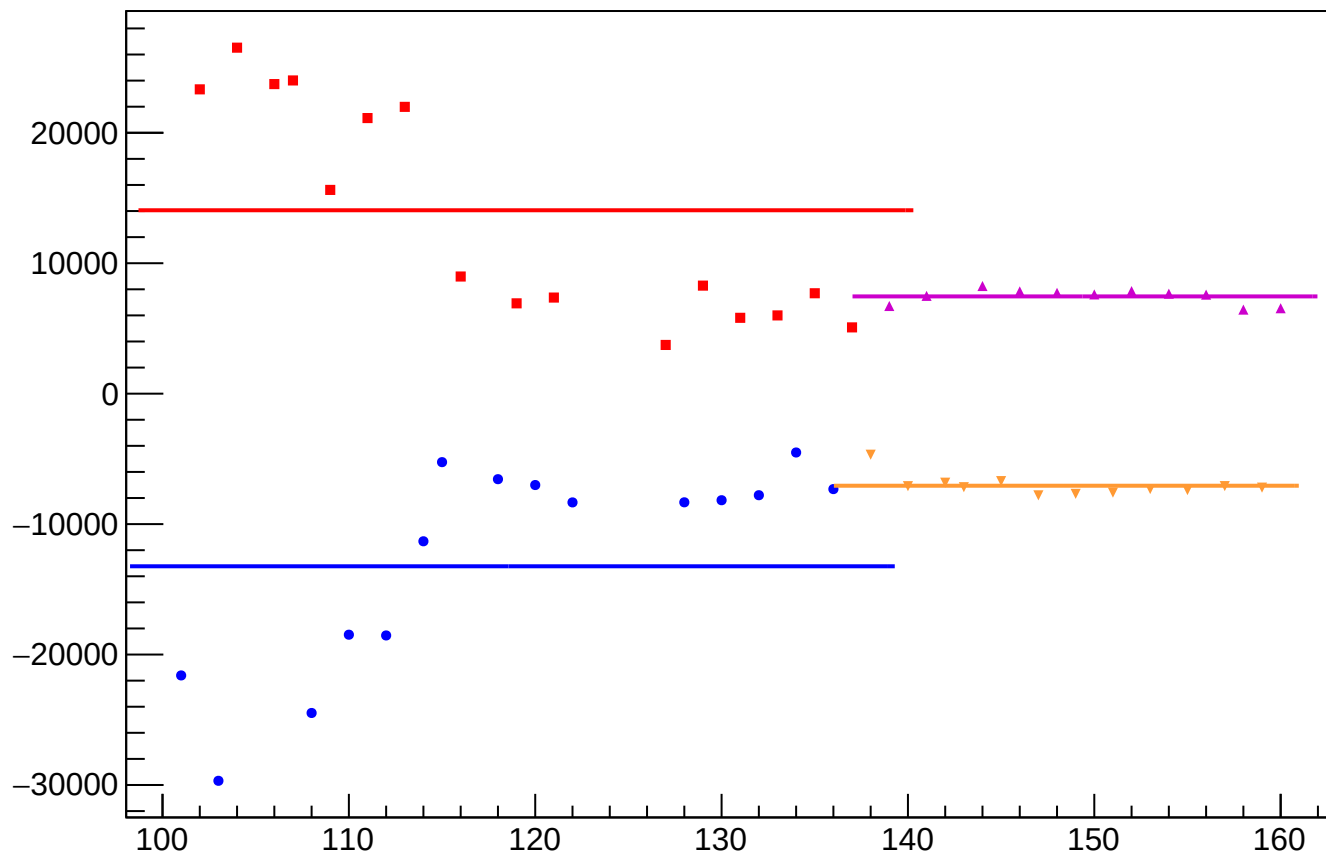
Right In: 1909.434+/-0.000  $\chi^2/\text{NDF}$ : 87636974094211671524177650165869445120.0/14  
 Left Out: 2055.788+/-0.000  $\chi^2/\text{NDF}$ : 438010168588723075505721290768963862528.0/11  
 Right Out: -2473.977+/-0.000  $\chi^2/\text{NDF}$ : 3033908025746418121738753286600386412544.0/15  
 Left In: -1955.312+/-0.000  $\chi^2/\text{NDF}$ : 126909052383838166035294082177347616768.0/10  
 All: -107.368+/-0.000  $\chi^2/\text{NDF}$ : 17494221106

dit\_atr2\_coil4\_Ndata\_mean vs Slug, Sign Corrected



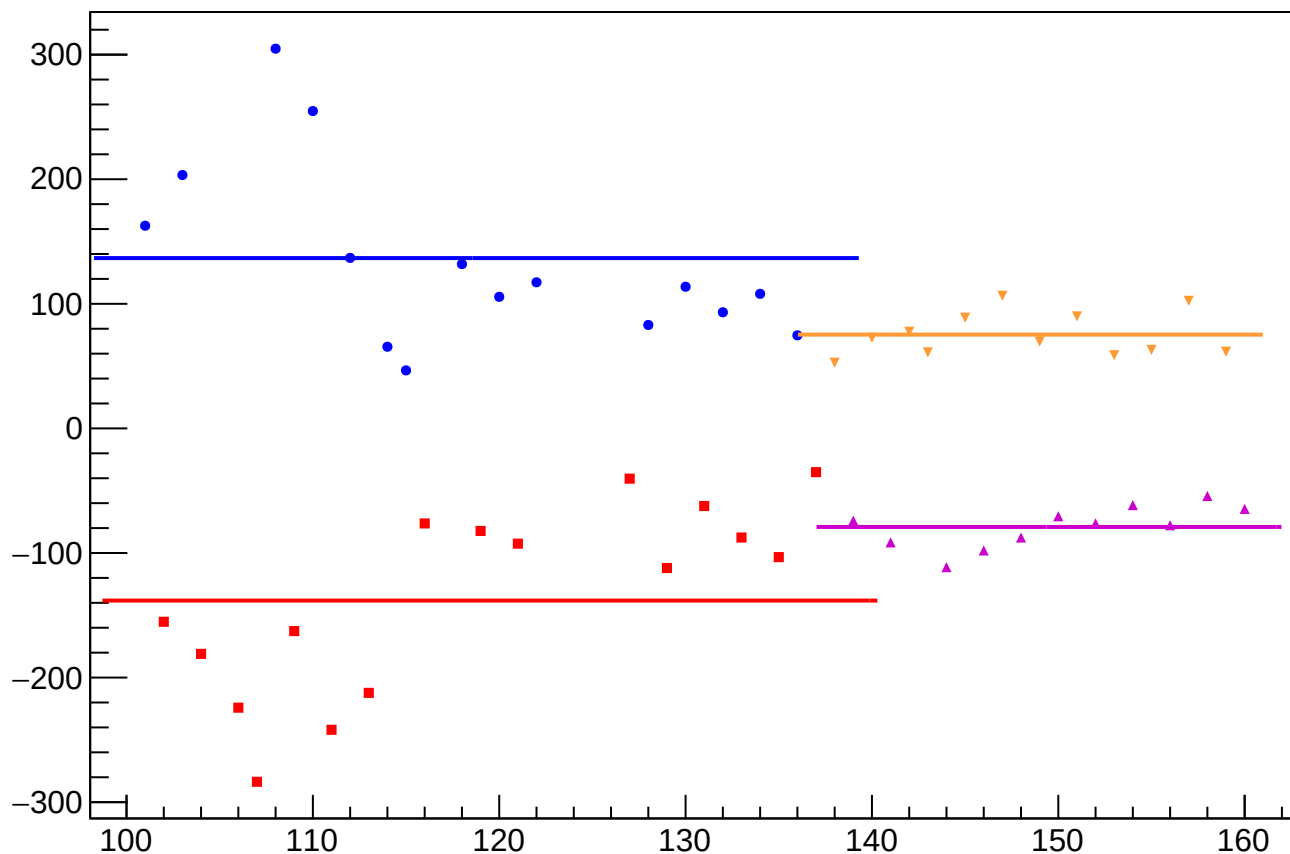
Right In: 1107.052+/-0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869+/-0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: -1016.106+/-0.000  $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  
 Left In: -1285.364+/-0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10  
 All: -25.499+/-0.000  $\chi^2/\text{NDF}$ : 443493791328

dit\_sam1\_coil4\_mean vs Slug, Sign Corrected



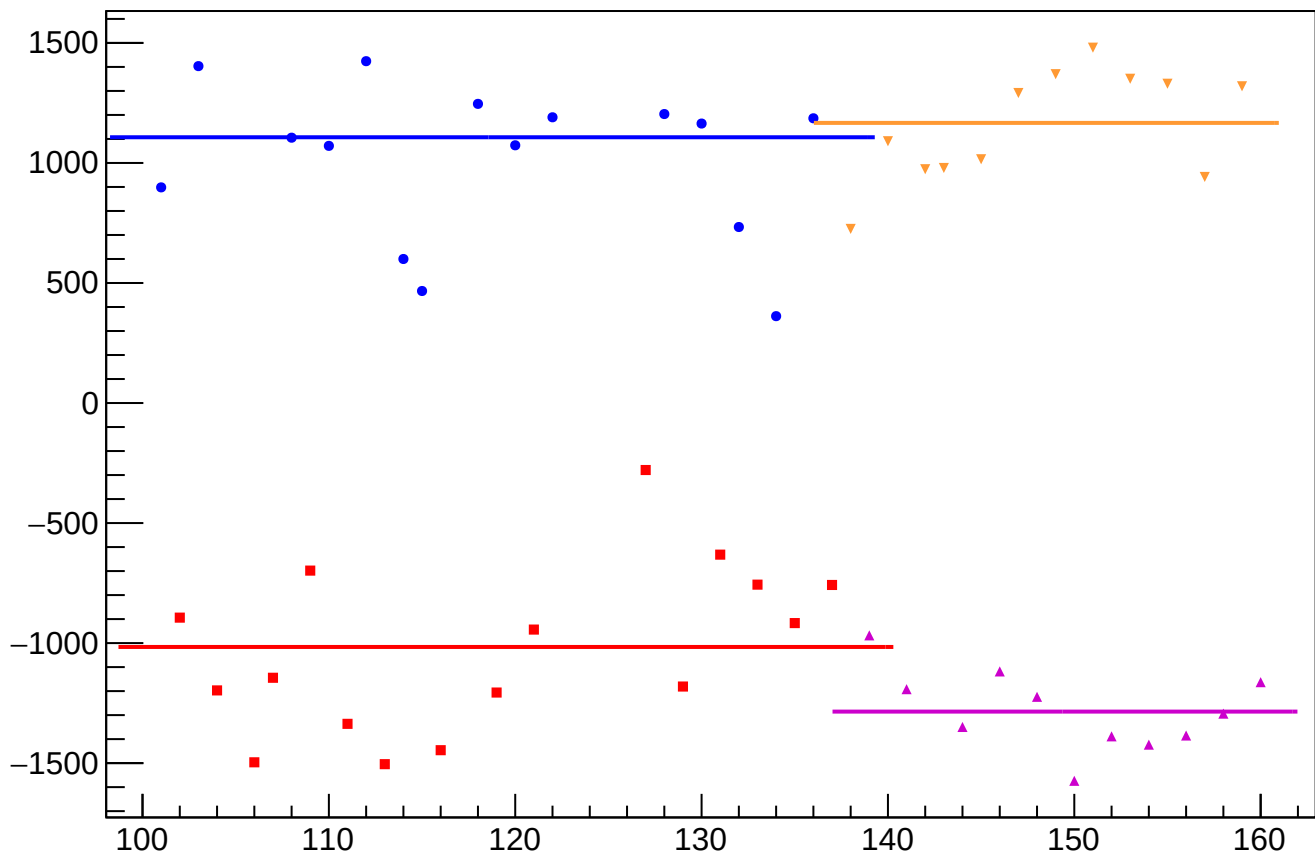
Left: 238.790+/-0.000  $\chi^2/\text{NDF}$ : 9764033800523105  
 Right In: -13233.367+/-0.000  $\chi^2/\text{NDF}$ : 41257043836213043367596866559499640504320.0/14  
 Right: 600.026+/-0.000  $\chi^2/\text{NDF}$ : 330784909470012  
 Left Out: -7057.509+/-0.000  $\chi^2/\text{NDF}$ : 567022768290026836186795118569021505536.0/11  
 In: -1080.099+/-0.000  $\chi^2/\text{NDF}$ : 204729341611961  
 Right Out: 14060.103+/-0.000  $\chi^2/\text{NDF}$ : 44490594754280161766405556915711386845184.0/15  
 Out: 1851.692+/-0.000  $\chi^2/\text{NDF}$ : 217018548162785  
 Left In: 7456.124+/-0.000  $\chi^2/\text{NDF}$ : 284554324589778558842129447316923351040.0/10  
 All: 389.515+/-0.000  $\chi^2/\text{NDF}$ : 428525321735

dit\_sam1\_coil4\_err\_mean vs Slug, Sign Corrected



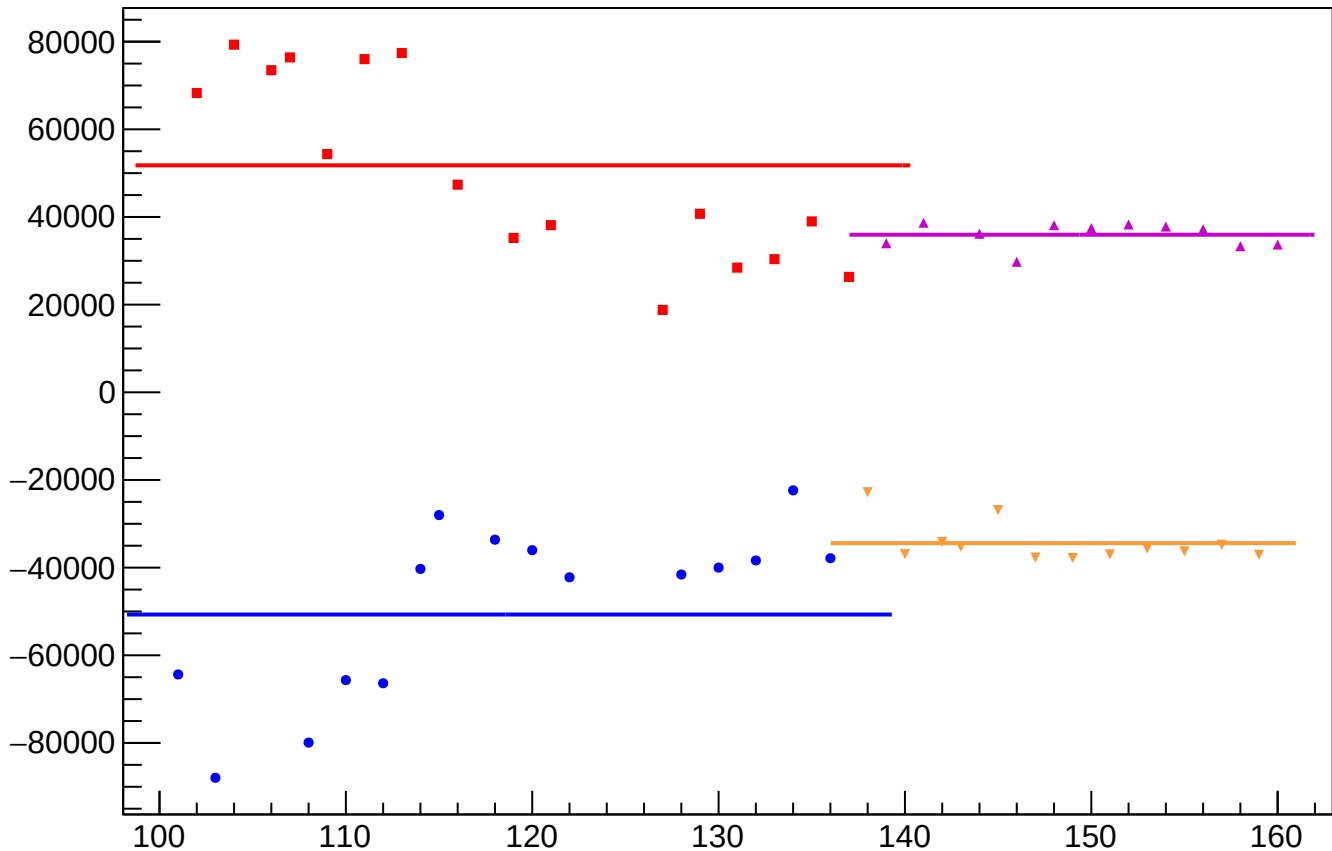
Right In: 136.711+/-0.000  $\chi^2/\text{NDF}$ : 2687065030885227126291764267456659456.0/14  
 Left Out: 75.280+/-0.000  $\chi^2/\text{NDF}$ : 271565230291715258223184233837363200.0/11  
 Right Out: -138.179+/-0.000  $\chi^2/\text{NDF}$ : 3230883352878636334641613561898467328.0/15  
 Left In: -79.096+/-0.000  $\chi^2/\text{NDF}$ : 243975342218114768326270780809674752.0/10  
 All: -2.448+/-0.000  $\chi^2/\text{NDF}$ : 4224006616846

dit\_sam1\_coil4\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

# dit\_sam2\_coil4\_mean vs Slug, Sign Corrected



Right In: -50695.424+/-0.000

Left Out: -34404.656+/-0.000

Right Out: 51783.912+/-0.000

Left In: 35949.660+/-0.000

$\chi^2/\text{NDF}$ : 226613585253908576683077761132188355526656.0/14

$\chi^2/\text{NDF}$ : 18820007226442898256054839449855820038144.0/11

$\chi^2/\text{NDF}$ : 281789617729131996271154198472617478848512.0/15

$\chi^2/\text{NDF}$ : 6535777806152232441815832130596699635712.0/10

Left: 963.890+/-0.000  $\chi^2/\text{NDF}$ : 2299689310411856

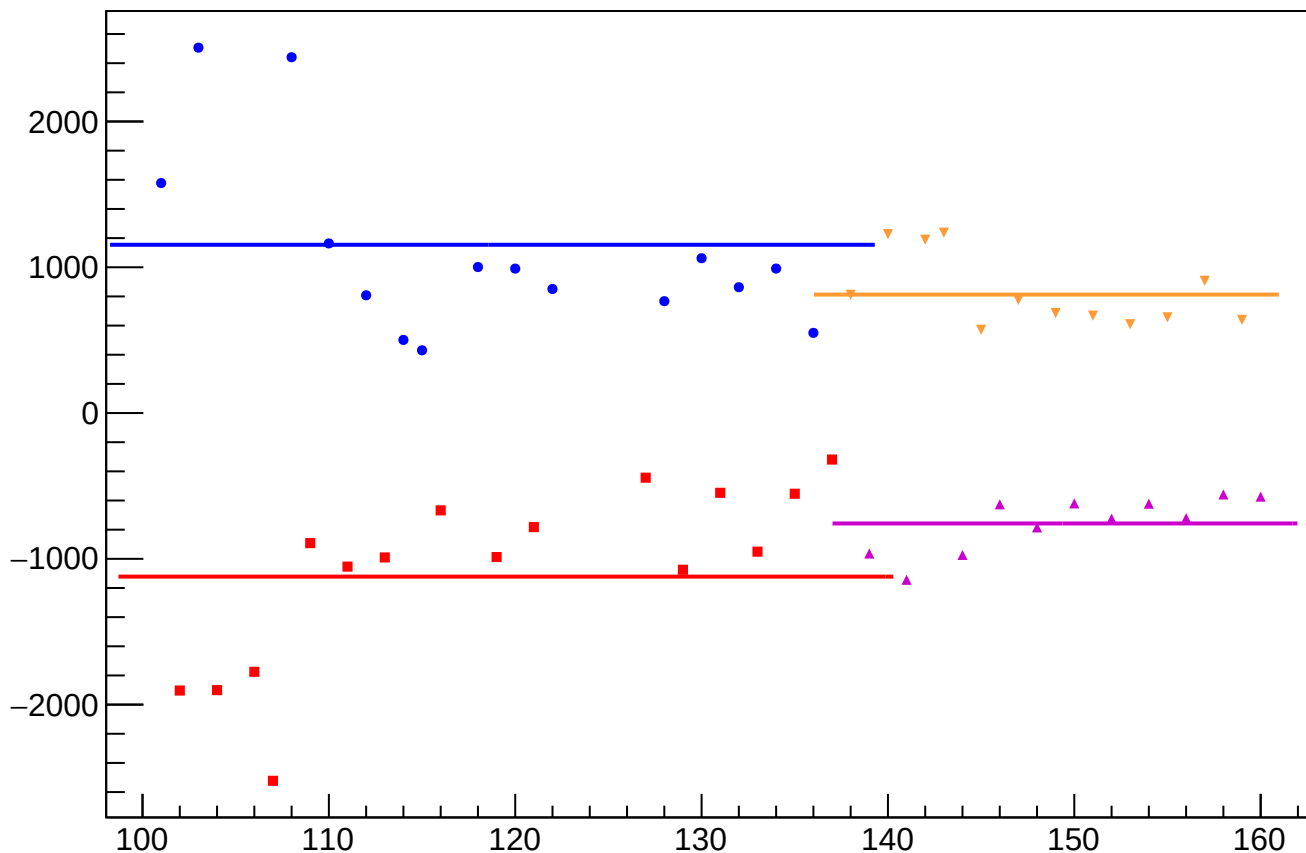
Right: 1245.090+/-0.000  $\chi^2/\text{NDF}$ : 39629195371379

In: 200.989+/-0.000  $\chi^2/\text{NDF}$ : 309519005844449410

Out: 1956.998+/-0.000  $\chi^2/\text{NDF}$ : 316504805338211

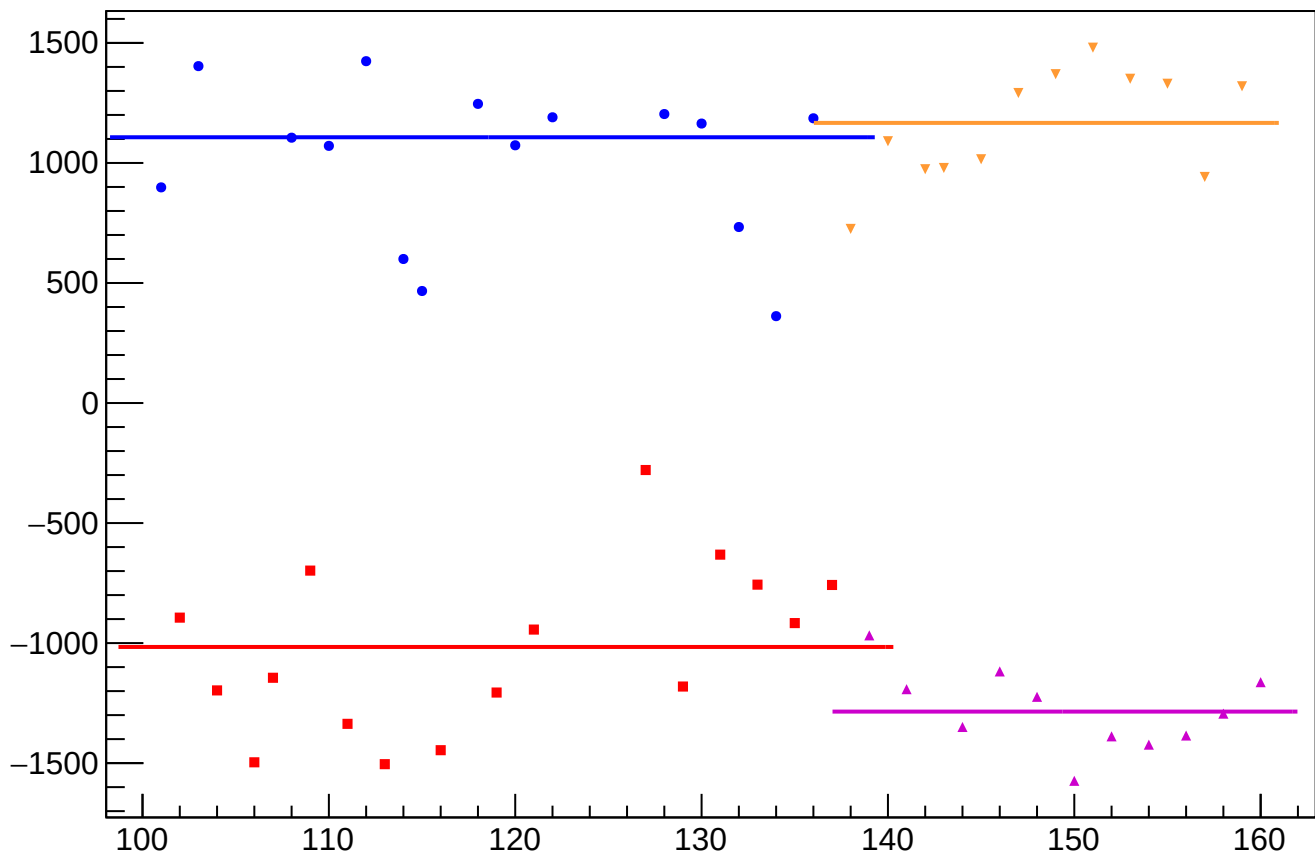
All: 1081.220+/-0.000  $\chi^2/\text{NDF}$ : 6262669489

dit\_sam2\_coil4\_err\_mean vs Slug, Sign Corrected



Left: 23.438+/-0.000  $\chi^2/\text{NDF}$ : 12126636203520677  
 Right In: 1154.331+/-0.000  $\chi^2/\text{NDF}$ : 249270472563470703232737910394663731200.0/14  
 Right: 0.631+/-0.000  $\chi^2/\text{NDF}$ : 21797856278979973  
 Left Out: 812.768+/-0.000  $\chi^2/\text{NDF}$ : 48869150953187834312923483015749828608.0/11  
 In: 31.386+/-0.000  $\chi^2/\text{NDF}$ : 167352264529272497  
 Right Out: -1121.934+/-0.000  $\chi^2/\text{NDF}$ : 226159335639567338179811644002797617152.0/15  
 Out: -3.453+/-0.000  $\chi^2/\text{NDF}$ : 17183684725504016  
 Left In: -757.349+/-0.000  $\chi^2/\text{NDF}$ : 31036557490853362173363612241828511744.0/10  
 All: 13.922+/-0.000  $\chi^2/\text{NDF}$ : 3392848168342

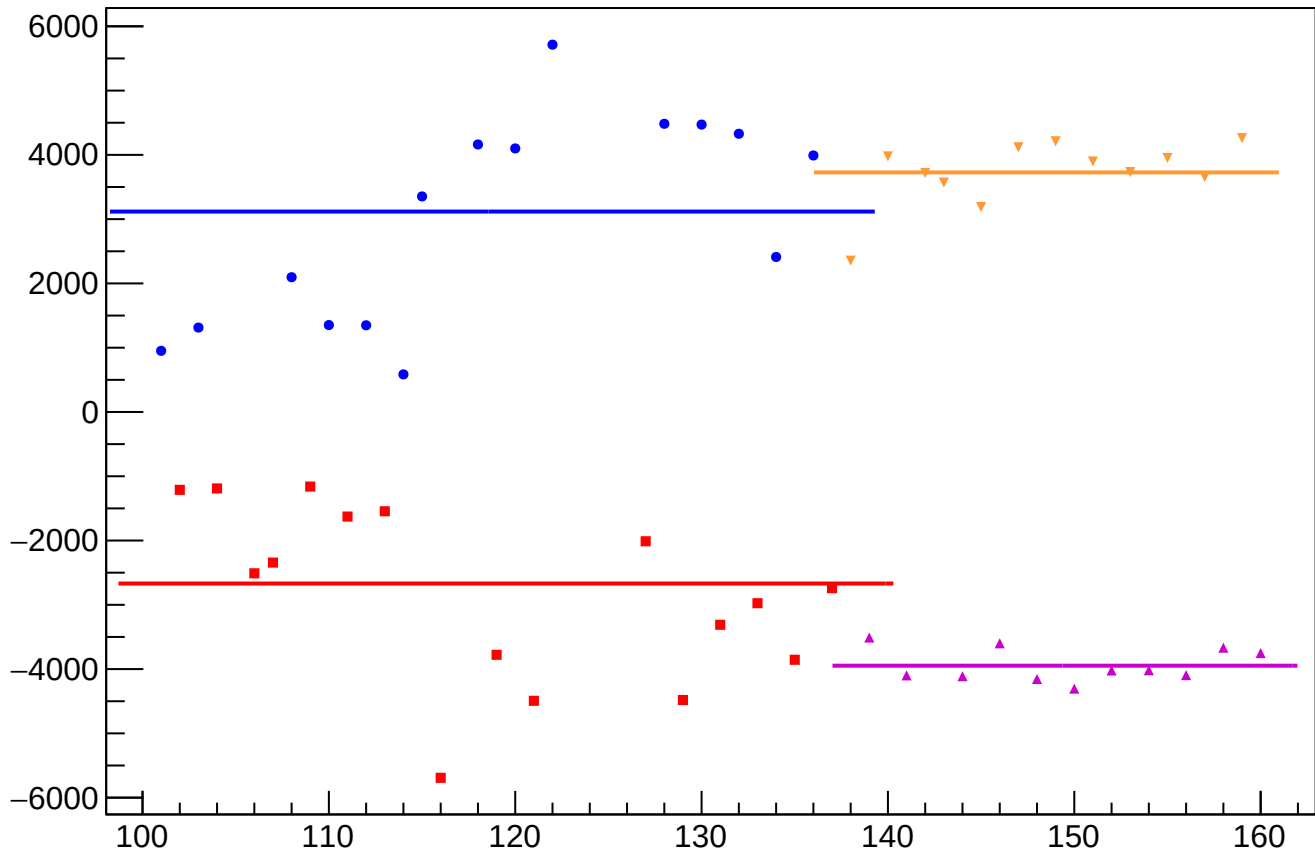
dit\_sam2\_coil4\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |



# dit\_sam3\_coil4\_mean vs Slug, Sign Corrected



Right In: 3117.914 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 1552738593335565674554918493159210090496.0/14

Left Out: 3727.095 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 237477678561542860292825834329185714176.0/11

Right Out: -2668.794 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 1136406286131098596000054422131257114624.0/15

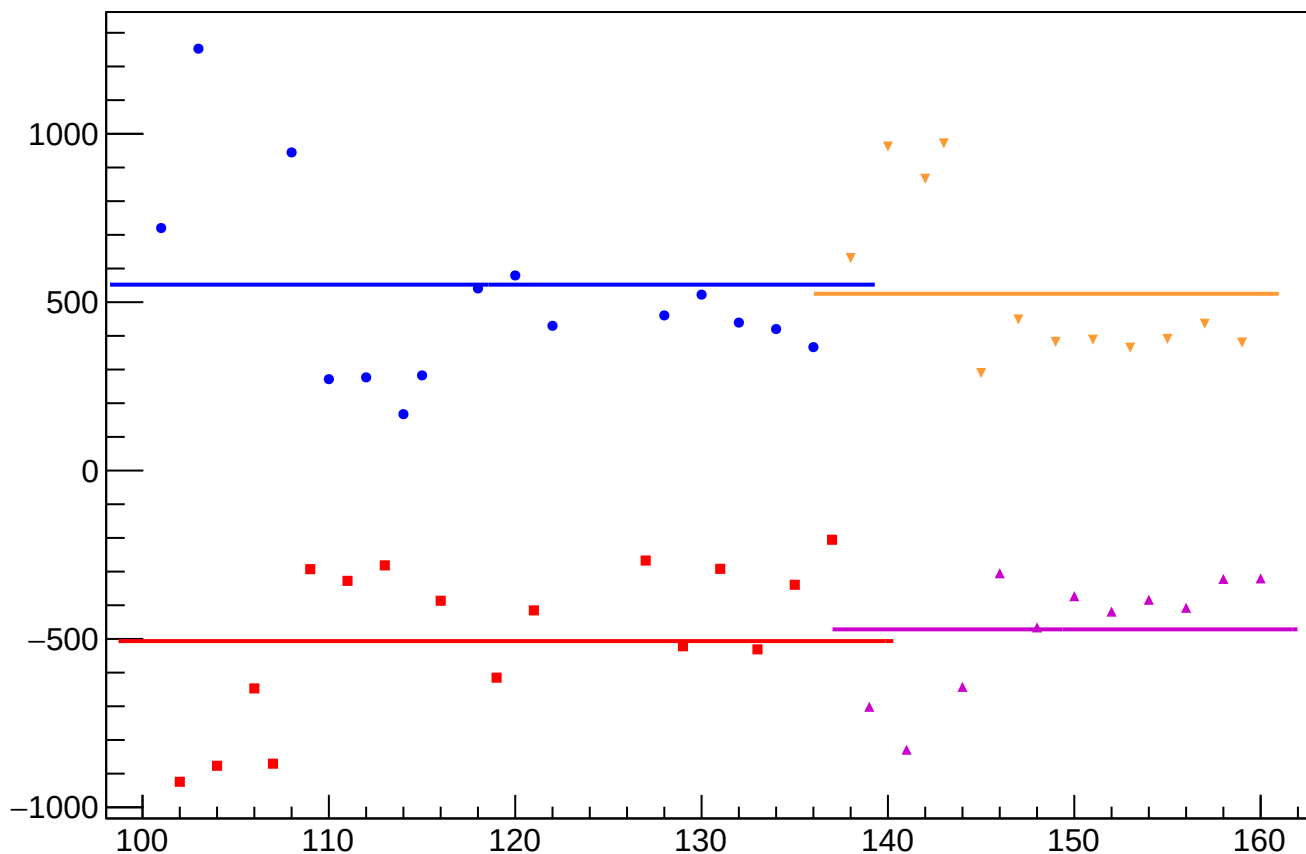
Left In: -3947.046 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 56963661018859057070812095134472077312.0/10

All: 0.930 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 41135190376945

# dit\_sam3\_coil4\_err\_mean vs Slug, Sign Corrected



Right In: 552.108+/-0.000  $\chi^2/\text{NDF}$ : 50739041741159119848523988236001869824.0/14

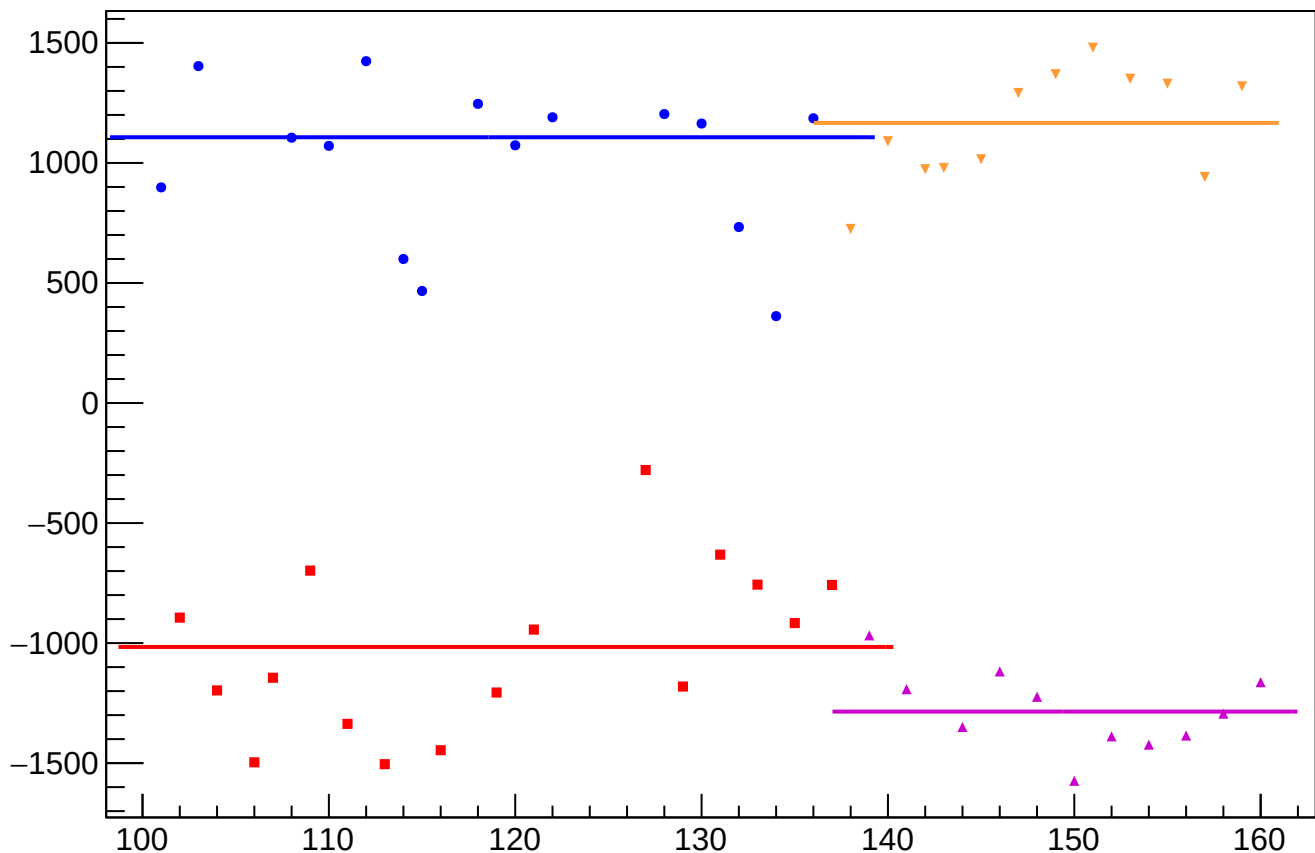
Left Out: 524.984+/-0.000  $\chi^2/\text{NDF}$ : 49120612413638370088062361036096798720.0/11

Right Out: -506.345+/-0.000  $\chi^2/\text{NDF}$ : 37181653297314883501659131806010572800.0/15

Left In: -471.540+/-0.000  $\chi^2/\text{NDF}$ : 25680884477827715914944205366363160576.0/10

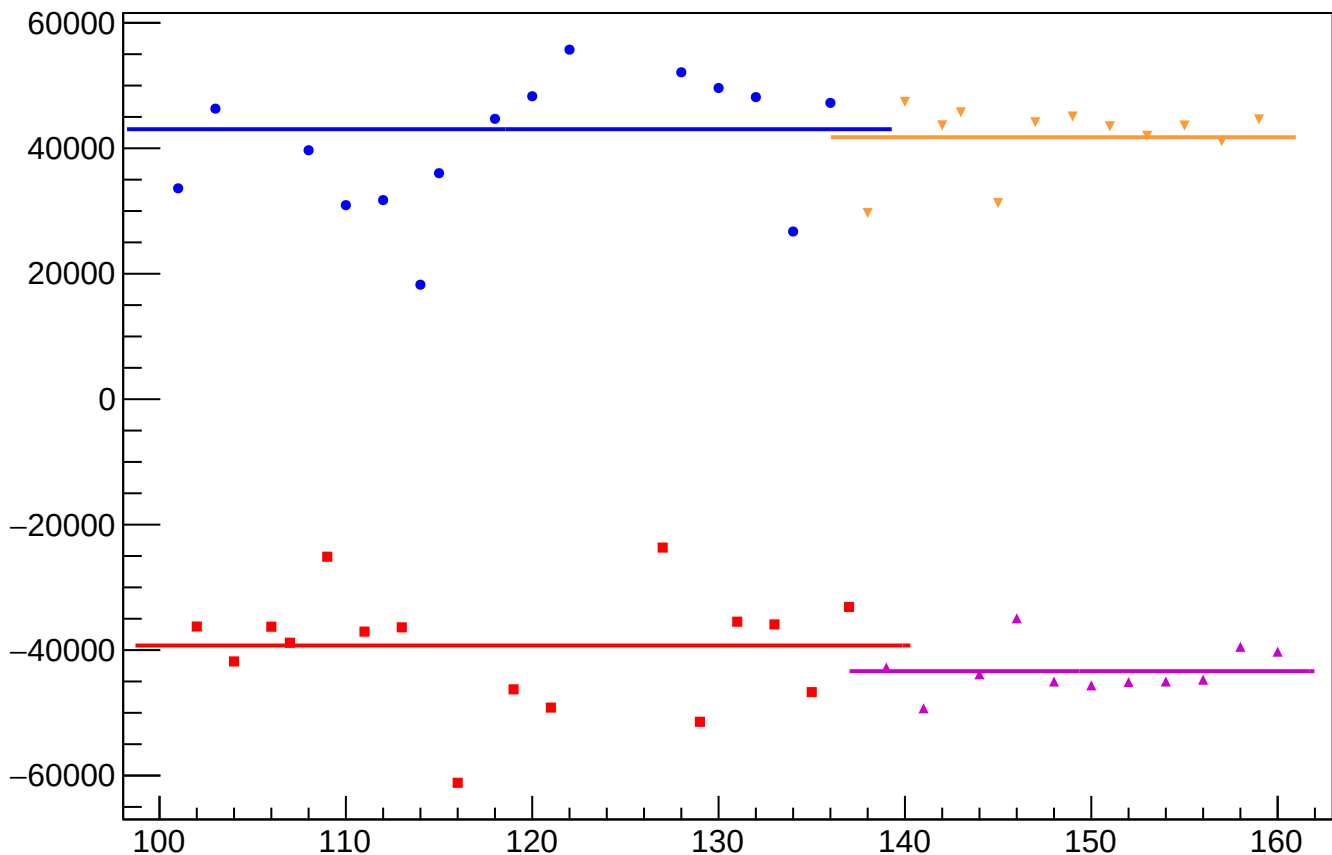
All: 20.520+/-0.000  $\chi^2/\text{NDF}$ : 9875911626514

dit\_sam3\_coil4\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

dit\_sam4\_coil4\_mean vs Slug, Sign Corrected



Right In: 43039.927+/-0.000

$\chi^2/\text{NDF}$ : 48397052922561722652666786407552179503104.0/14

Left Out: 41759.238+/-0.000

$\chi^2/\text{NDF}$ : 26338532629522543185974017898719754584064.0/11

Right Out: -39269.627+/-0.000

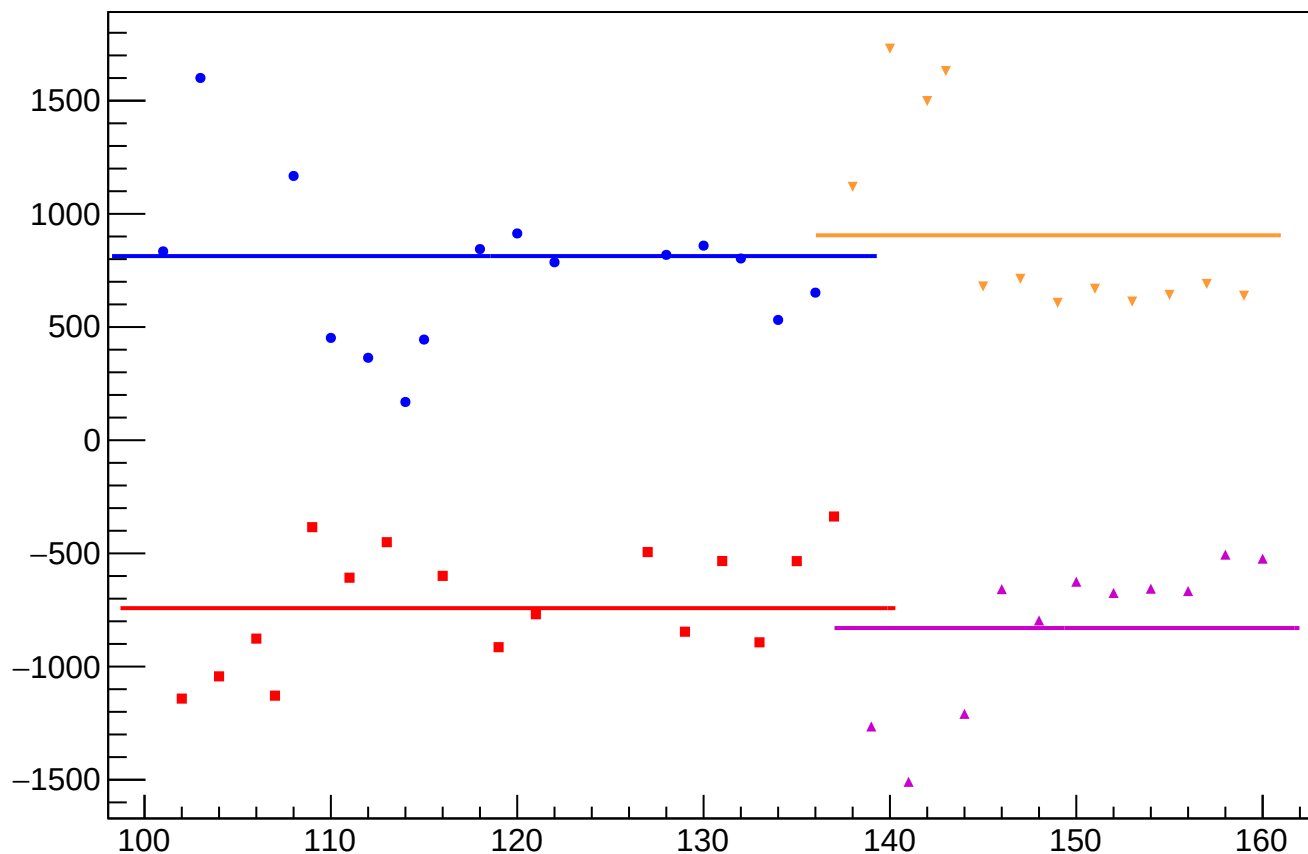
$\chi^2/\text{NDF}$ : 51873036517757666237545716605051585167360.0/15

Left In: -43364.892+/-0.000

$\chi^2/\text{NDF}$ : 12209695723681592241000188414954802511872.0/10

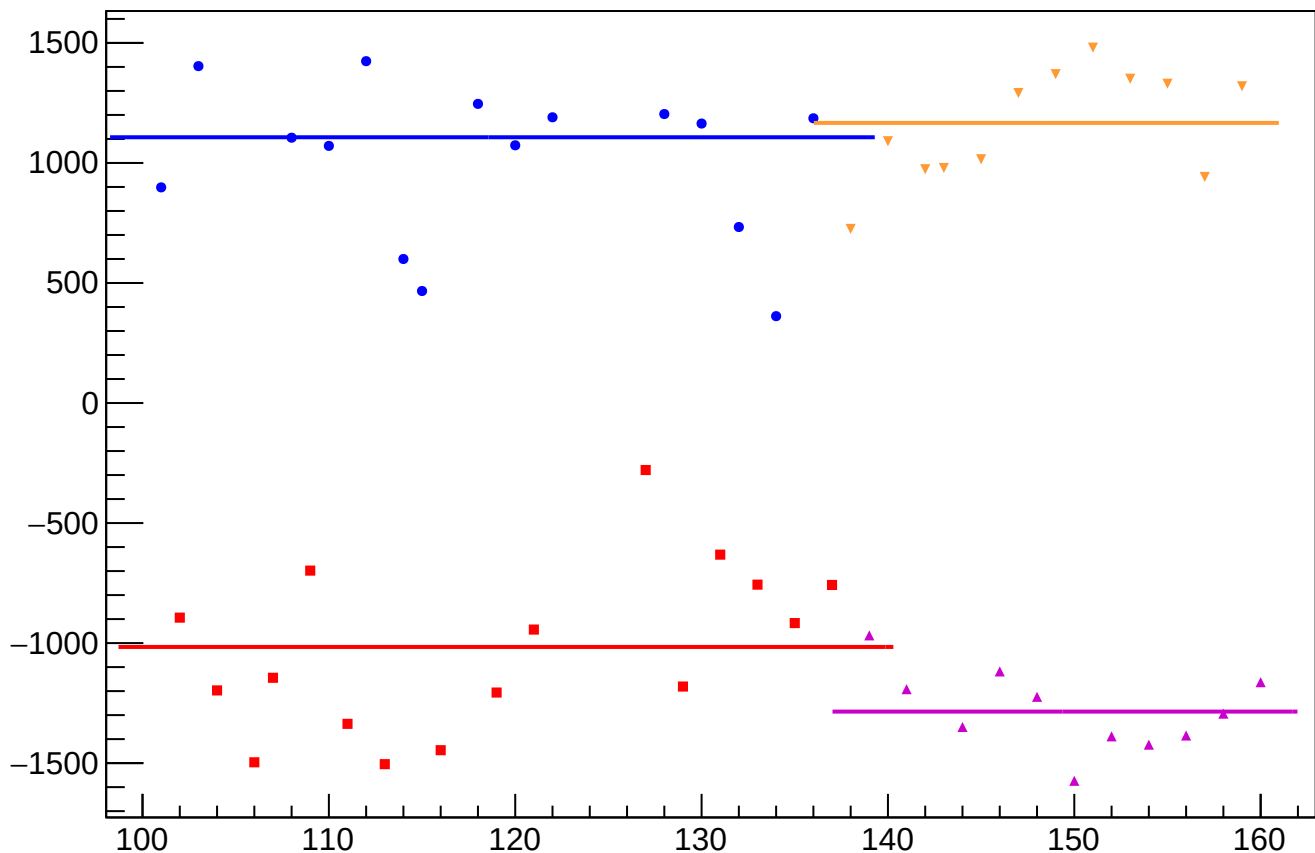
All: -51.092+/-0.000  $\chi^2/\text{NDF}$ : 570108278214

# dit\_sam4\_coil4\_err\_mean vs Slug, Sign Corrected



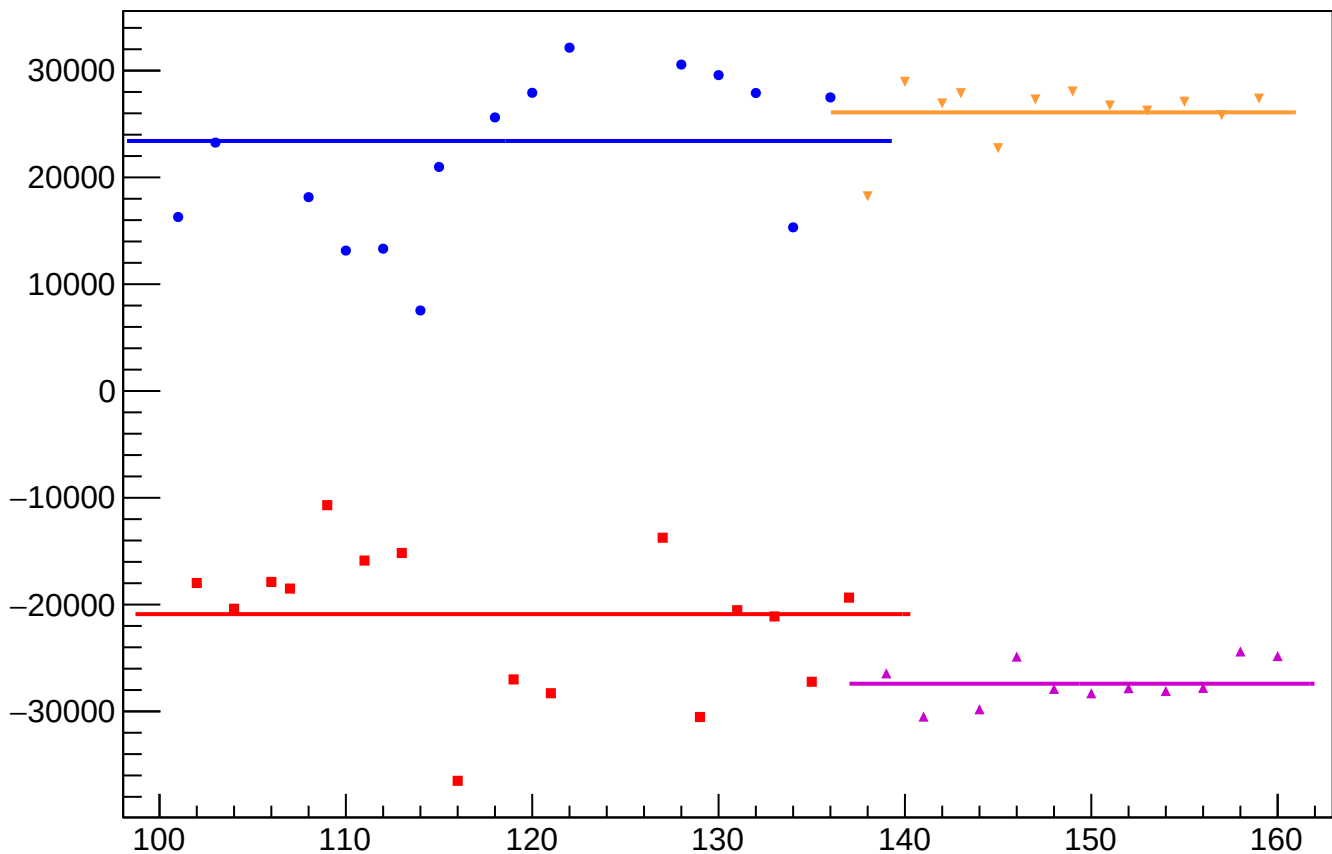
Right In: 813.500+/-0.000  $\chi^2/\text{NDF}$ : 67120916816548237638948787518351343616.0/14  
 Left Out: 905.383+/-0.000  $\chi^2/\text{NDF}$ : 151600119297269061553878773288042233856.0/11  
 Right Out: -741.911+/-0.000  $\chi^2/\text{NDF}$ : 44074134397215409235604746432671645696.0/15  
 Left In: -829.715+/-0.000  $\chi^2/\text{NDF}$ : 96077836071623048341749512260917657600.0/10  
 All: 29.794+/-0.000  $\chi^2/\text{NDF}$ : 2538038020154

dit\_sam4\_coil4\_Ndata\_mean vs Slug, Sign Corrected



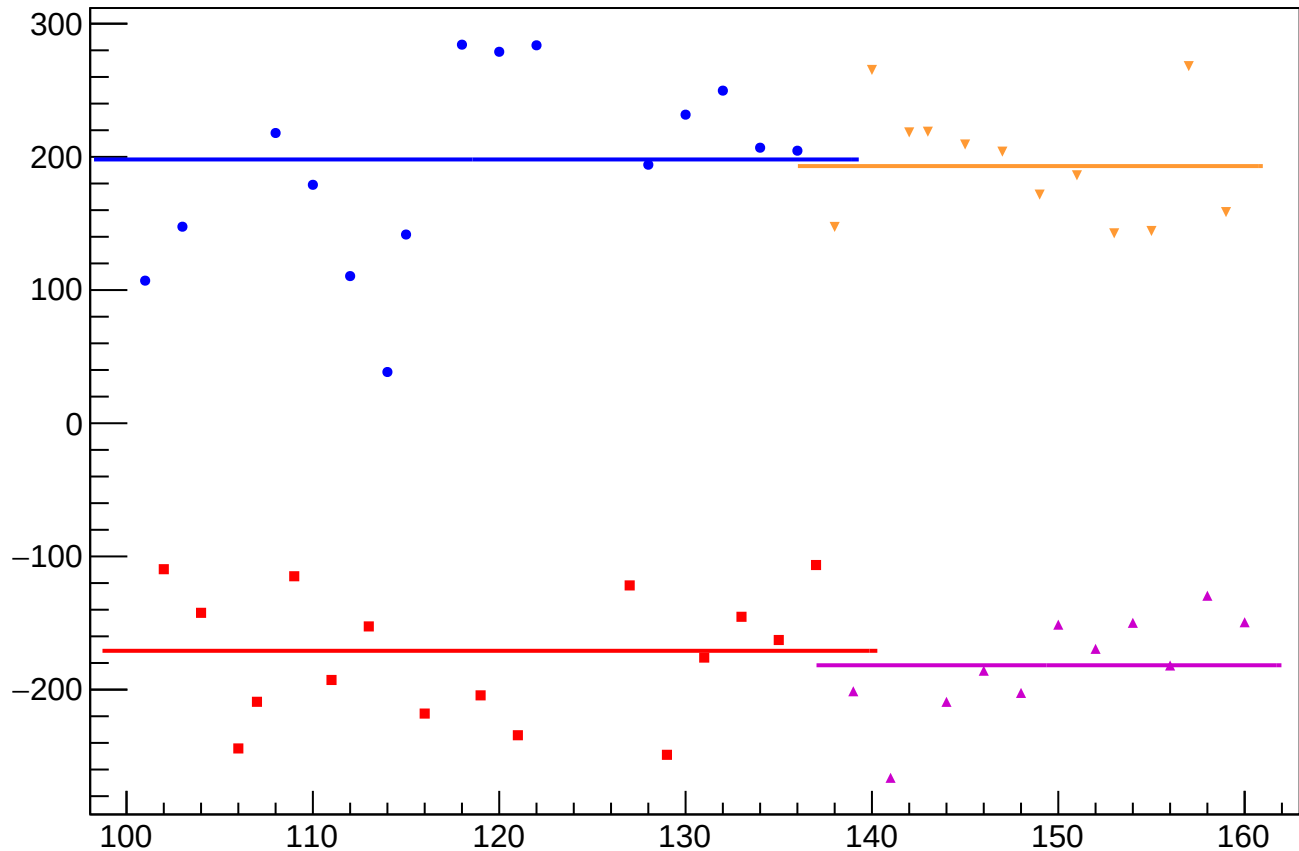
|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

dit\_sam5\_coil4\_mean vs Slug, Sign Corrected



Right In: 23411.506+/-0.000  $\chi^2/\text{NDF}$ : 28427457471780319352885746571315708428288.0/14  
 Left Out: 26089.435+/-0.000  $\chi^2/\text{NDF}$ : 7297474697325231234633060364075485102080.0/11  
 Right Out: -20894.122+/-0.000  $\chi^2/\text{NDF}$ : 27408965804578649107002909409987218374656.0/15  
 Left In: -27407.255+/-0.000  $\chi^2/\text{NDF}$ : 3322659858866093858426557456838465421312.0/10  
 All: -70.029+/-0.000  $\chi^2/\text{NDF}$ : 202953713345

dit\_sam5\_coil4\_err\_mean vs Slug, Sign Corrected



Right In: 198.056+/-0.000

$\chi^2/\text{NDF}$ : 2482928792293864415922382990034862080.0/14

Left Out: 193.084+/-0.000

$\chi^2/\text{NDF}$ : 1682749705439949881122511912389574656.0/11

Right Out: -170.851+/-0.000

$\chi^2/\text{NDF}$ : 1418314816915016425155520631536615424.0/15

Left In: -181.711+/-0.000

$\chi^2/\text{NDF}$ : 1228549704796737698218369408017891328.0/10

Left: 4.667+/-0.000  $\chi^2/\text{NDF}$ : 674560123353217064

Right: 11.079+/-0.000  $\chi^2/\text{NDF}$ : 4866728486717223

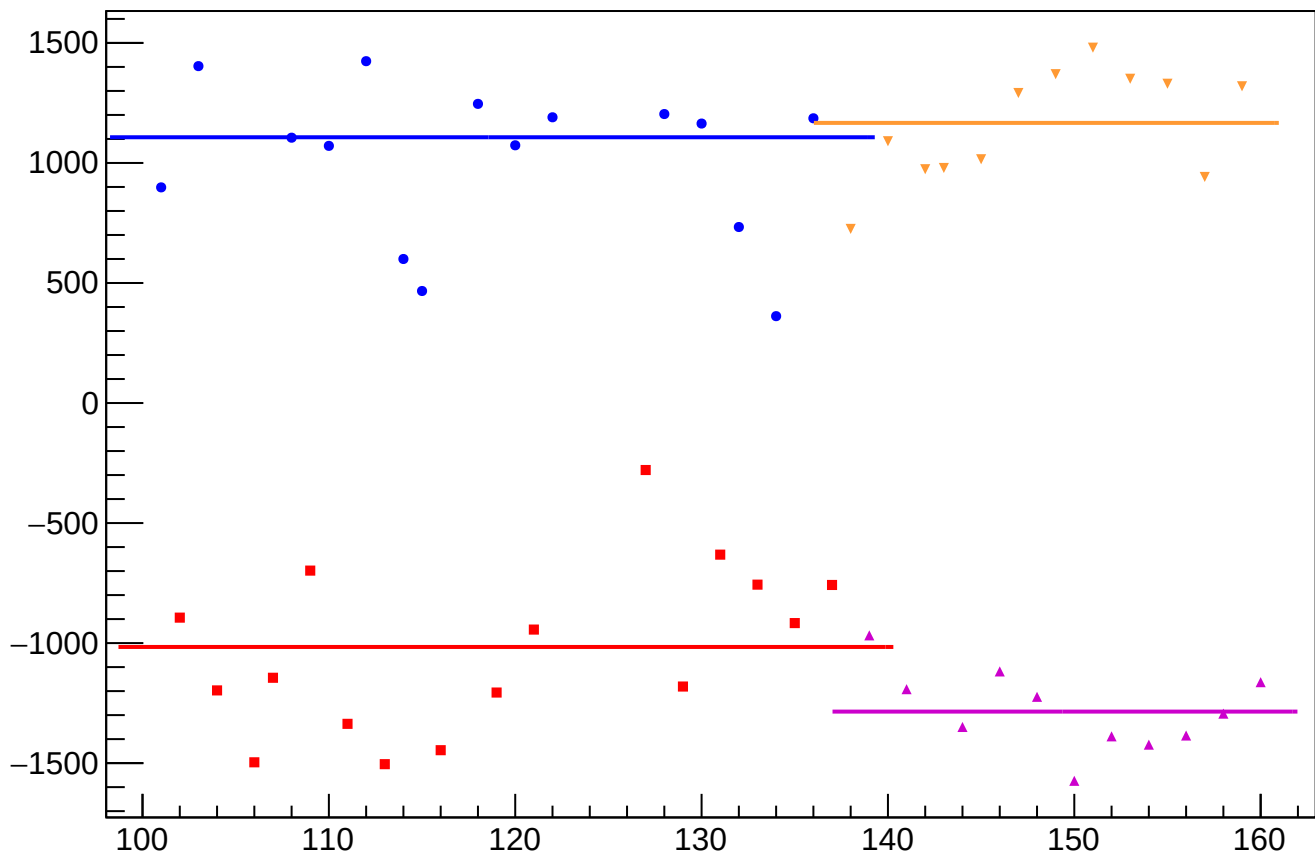
In: -25.024+/-0.000  $\chi^2/\text{NDF}$ : 58693744329544084

Out: 39.545+/-0.000  $\chi^2/\text{NDF}$ : 54173699833422240

All: 7.342+/-0.000  $\chi^2/\text{NDF}$ : 11615483338933

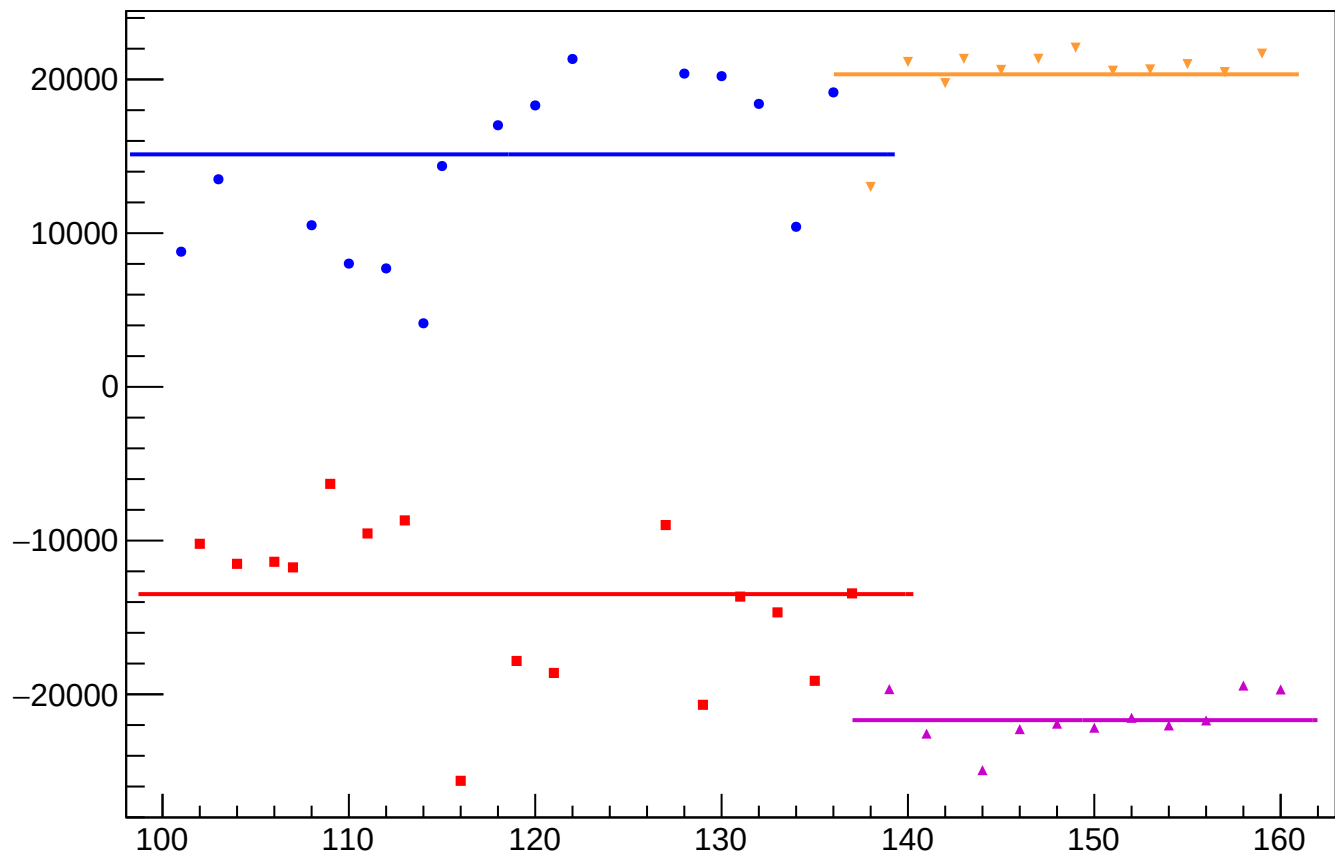


dit\_sam5\_coil4\_Ndata\_mean vs Slug, Sign Corrected



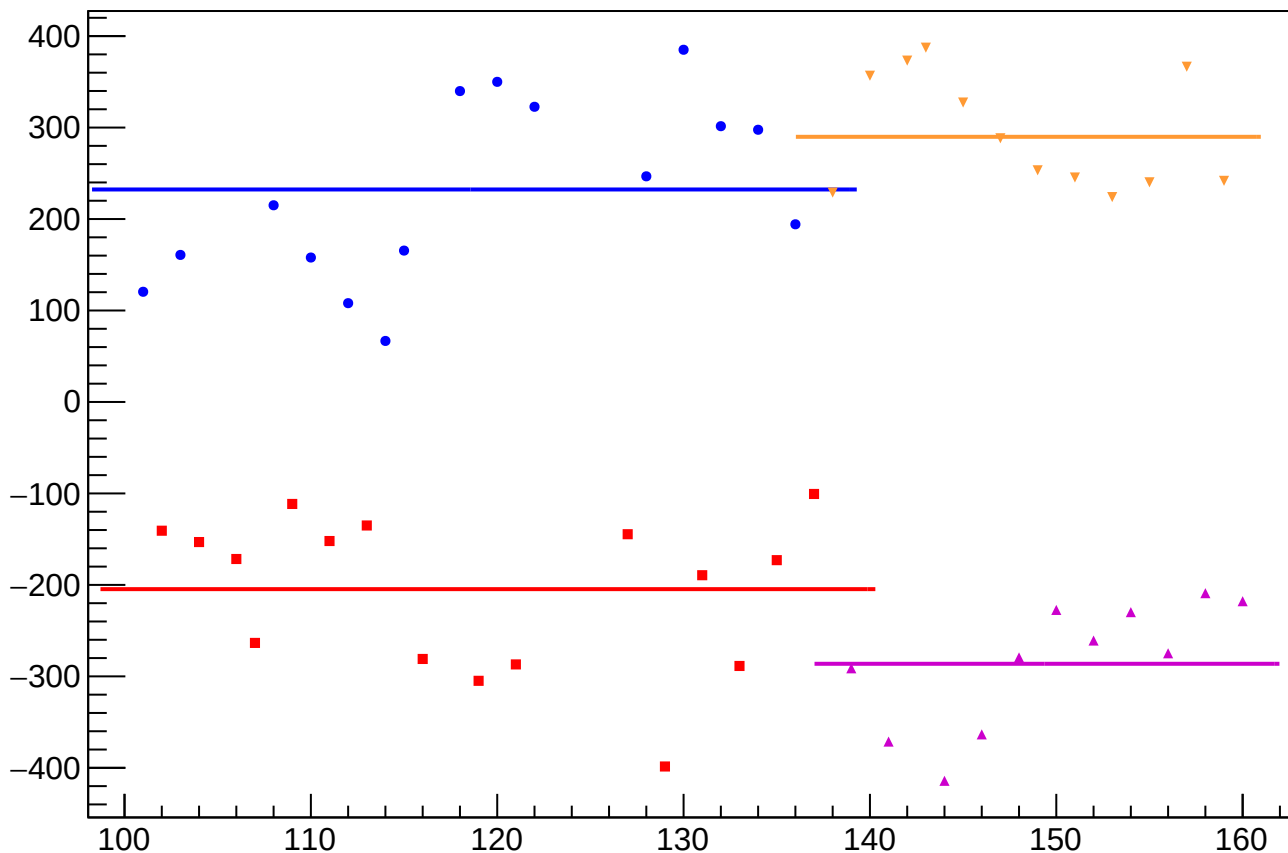
|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

# dit\_sam6\_coil4\_mean vs Slug, Sign Corrected



Right In: 15125.834 $\pm$ 0.000  $\chi^2$ /NDF: 16615438767664069151744668380763246297088.0/14  
 Left Out: 20333.061 $\pm$ 0.000  $\chi^2$ /NDF: 4855949225776942763226853940369054236672.0/11  
 Right Out: -13482.244 $\pm$ 0.000  $\chi^2$ /NDF: 15910426475407825250252248749810022088704.0/15  
 Left In: -21681.241 $\pm$ 0.000  $\chi^2$ /NDF: 2108874573649202621711530332866310307840.0/10  
 All: -198.174 $\pm$ 0.000  $\chi^2$ /NDF: 11213217633

# dit\_sam6\_coil4\_err\_mean vs Slug, Sign Corrected



Right In: 232.312 $\pm$ 0.000  $\chi^2$ /NDF: 5478184144885833956204804001180418048.0/14

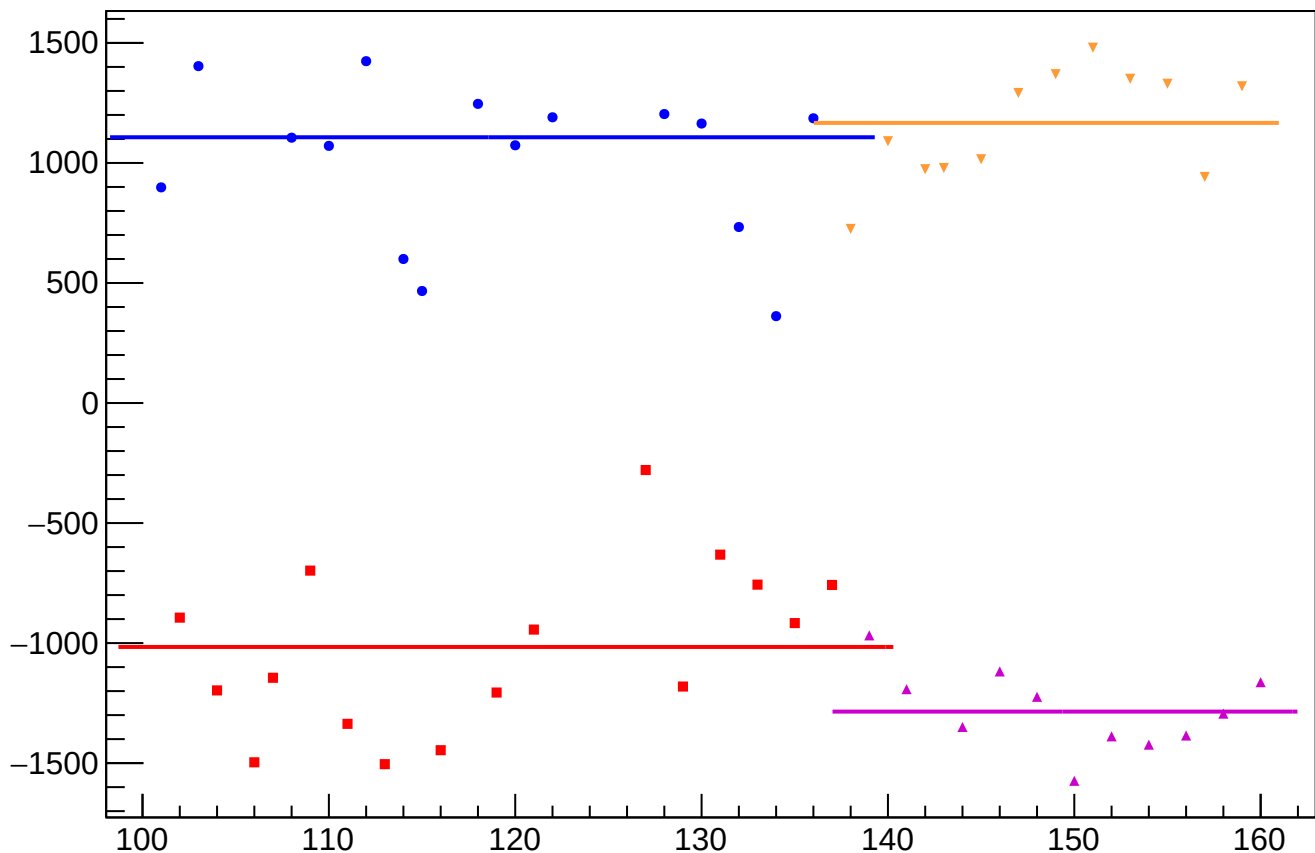
Left Out: 289.897 $\pm$ 0.000  $\chi^2$ /NDF: 3202390993231935504147250998086205440.0/11

Right Out: -204.637 $\pm$ 0.000  $\chi^2$ /NDF: 4555067046835230017930882867882098688.0/15

Left In: -286.246 $\pm$ 0.000  $\chi^2$ /NDF: 4067110443230234744644750983181631488.0/10

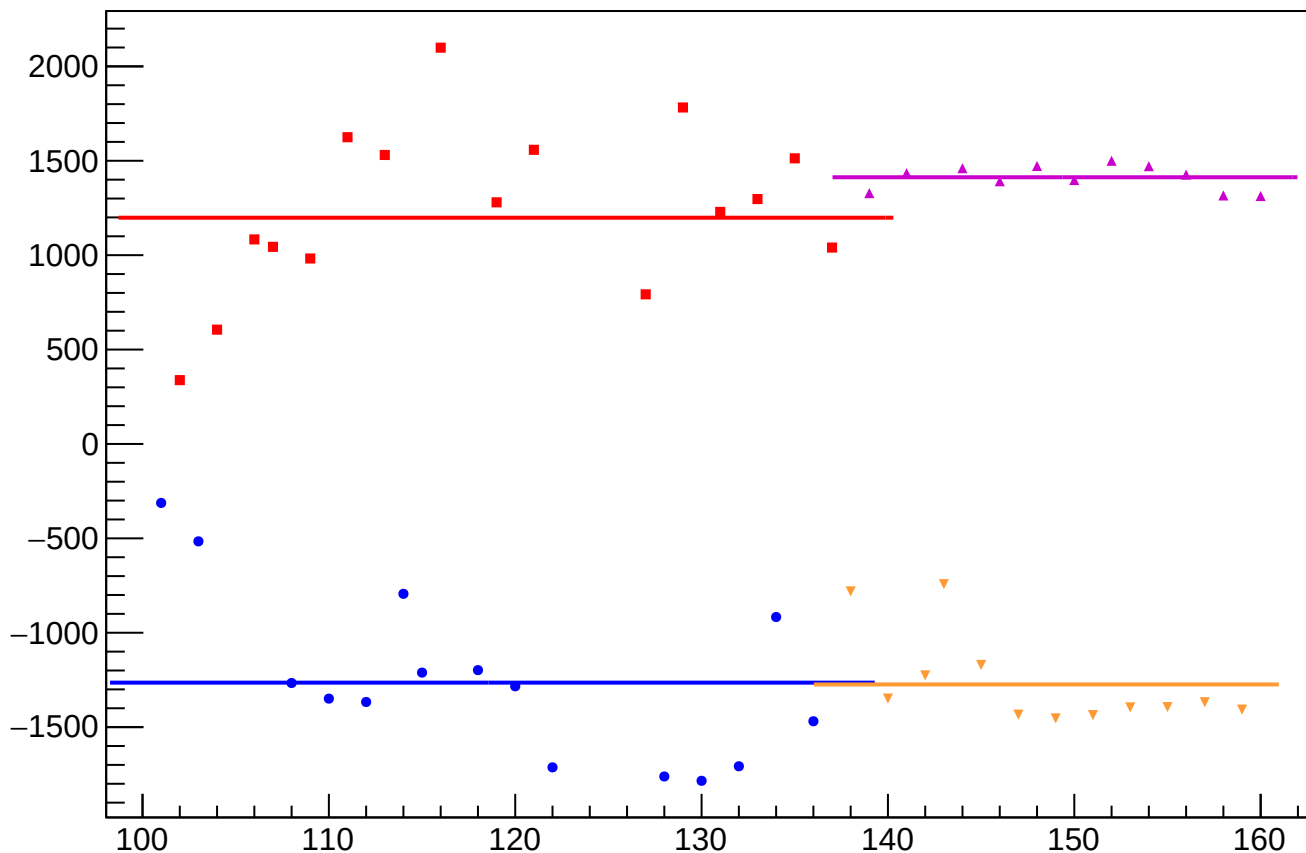
All: 4.677 $\pm$ 0.000  $\chi^2$ /NDF: 2327138069389

dit\_sam6\_coil4\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -65.918+/-0.000              | $\chi^2/\text{NDF}$ : 2831749902088431 |
| Left Out: 1166.869+/-0.000   | $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11 | Right: 30.953+/-0.000              | $\chi^2/\text{NDF}$ : 1595991371539270 |
| Right Out: -1016.106+/-0.000 | $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  | In: -298.283+/-0.000               | $\chi^2/\text{NDF}$ : 2246669587664541 |
| Left In: -1285.364+/-0.000   | $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10 | Out: 245.904+/-0.000               | $\chi^2/\text{NDF}$ : 1954763504813796 |
|                              | All: -25.499+/-0.000                                              | $\chi^2/\text{NDF}$ : 443493791328 |                                        |

# dit\_sam7\_coil4\_mean vs Slug, Sign Corrected



Right In: -1264.303+/-0.000

Left Out: -1273.912+/-0.000

Right Out: 1198.483+/-0.000

Left In: 1412.771+/-0.000

$\chi^2/\text{NDF}$ : 140215251538502657549173994543931981824.0/14

$\chi^2/\text{NDF}$ : 50517219487332482659121972372719009792.0/11

$\chi^2/\text{NDF}$ : 131164763898016793515492217696167133184.0/15

$\chi^2/\text{NDF}$ : 3642959557366432228461510163957809152.0/10

Left: 76.739+/-0.000  $\chi^2/\text{NDF}$ : 33708552711057657

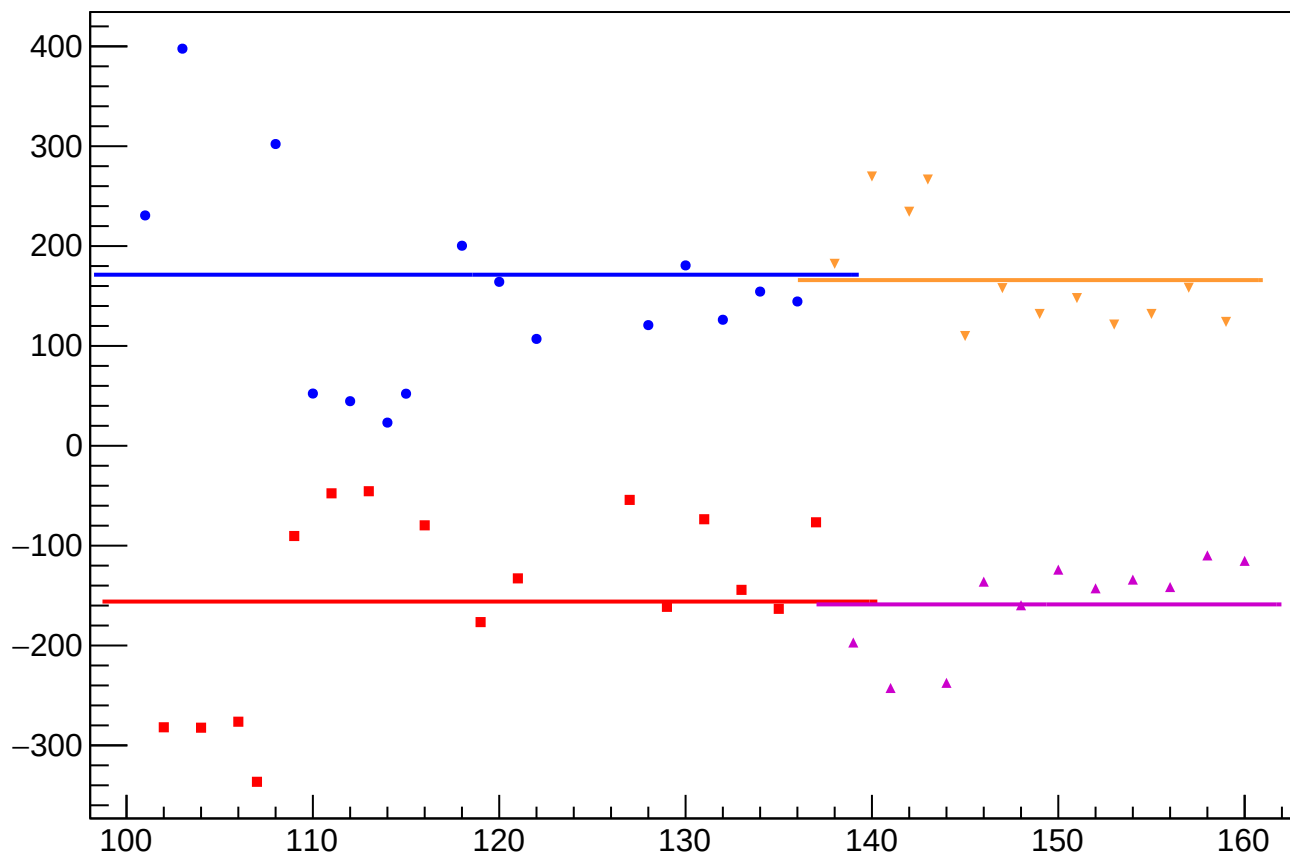
Right: -16.067+/-0.000  $\chi^2/\text{NDF}$ : 226649511001664

In: 308.244+/-0.000  $\chi^2/\text{NDF}$ : 28760344161485338

Out: -230.846+/-0.000  $\chi^2/\text{NDF}$ : 253877034127960

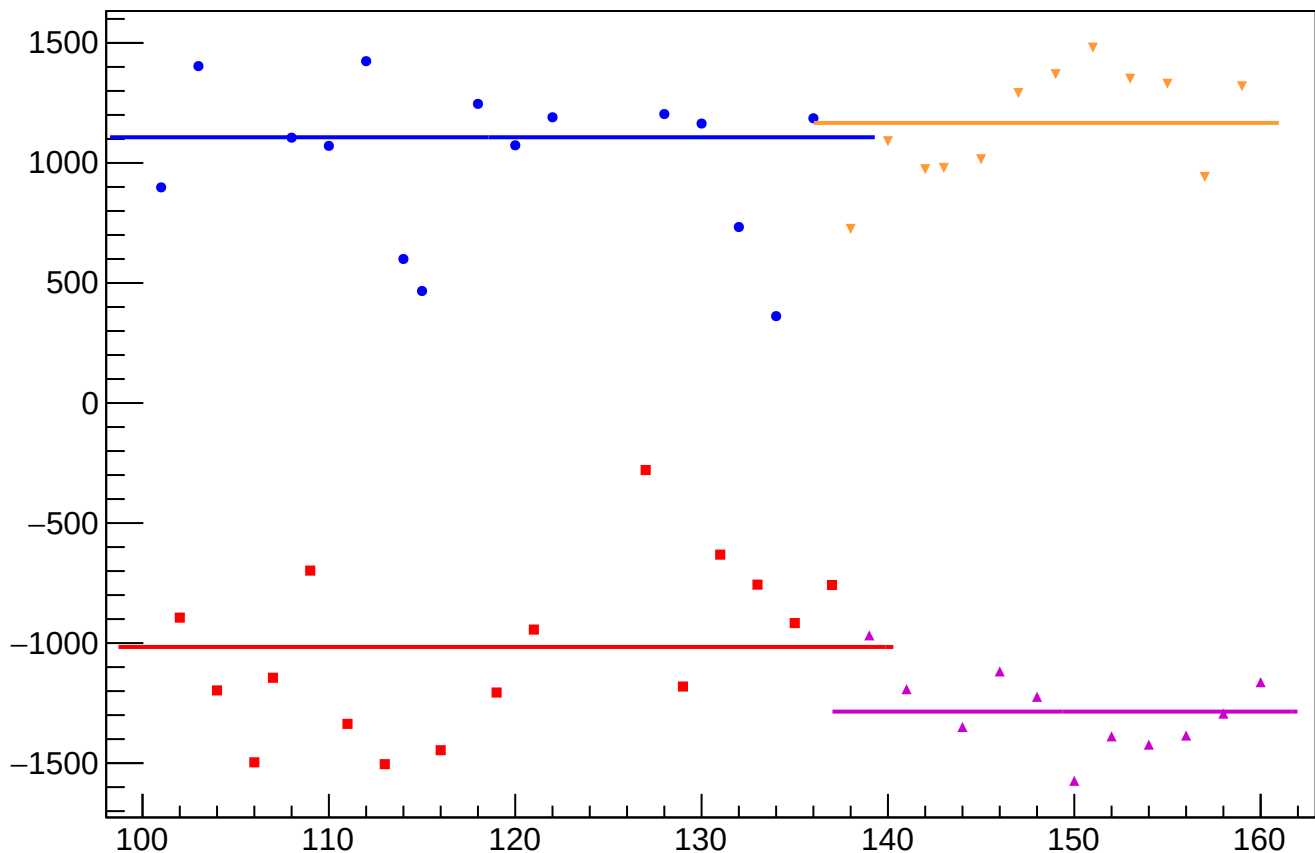
All: 38.016+/-0.000  $\chi^2/\text{NDF}$ : 5643955595721

# dit\_sam7\_coil4\_err\_mean vs Slug, Sign Corrected



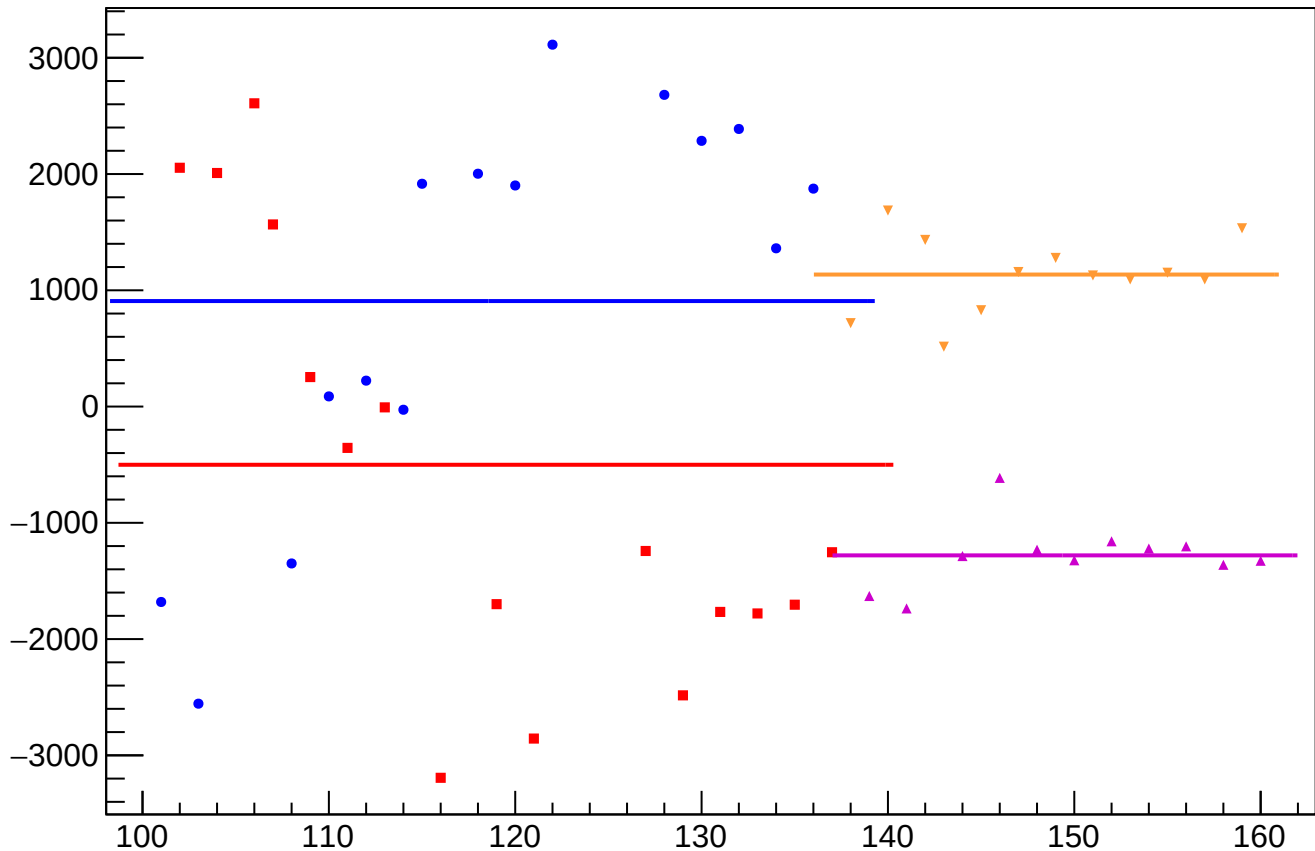
Right In: 171.323+/-0.000  $\chi^2/\text{NDF}$ : 6120975075187305509795143064993398784.0/14  
 Left Out: 165.917+/-0.000  $\chi^2/\text{NDF}$ : 2574923375517186479088669940447707136.0/11  
 Right Out: -155.993+/-0.000  $\chi^2/\text{NDF}$ : 5680659281504595852021524727244783616.0/15  
 Left In: -158.834+/-0.000  $\chi^2/\text{NDF}$ : 1853310895668256586520412981739651072.0/10  
 All: 3.813+/-0.000  $\chi^2/\text{NDF}$ : 99935728912409

dit\_sam7\_coil4\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1107.052+/-0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869+/-0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: -1016.106+/-0.000  $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  
 Left In: -1285.364+/-0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10  
 All: -25.499+/-0.000  $\chi^2/\text{NDF}$ : 443493791328

# dit\_sam8\_coil4\_mean vs Slug, Sign Corrected



Right In: 907.442+/-0.000

$\chi^2/\text{NDF}$ : 2107238007691848638499662178406566461440.0/14

Left Out: 1135.509+/-0.000

$\chi^2/\text{NDF}$ : 90454761773489591793478678074609369088.0/11

Right Out: -500.689+/-0.000

$\chi^2/\text{NDF}$ : 2074232918749953174436803426379074895872.0/15

Left In: -1279.995+/-0.000

$\chi^2/\text{NDF}$ : 67592304703884032028559239448782438400.0/10

Left: -78.814+/-0.000  $\chi^2/\text{NDF}$ : 2838993659503494

Right: 193.746+/-0.000  $\chi^2/\text{NDF}$ : 483370034209518

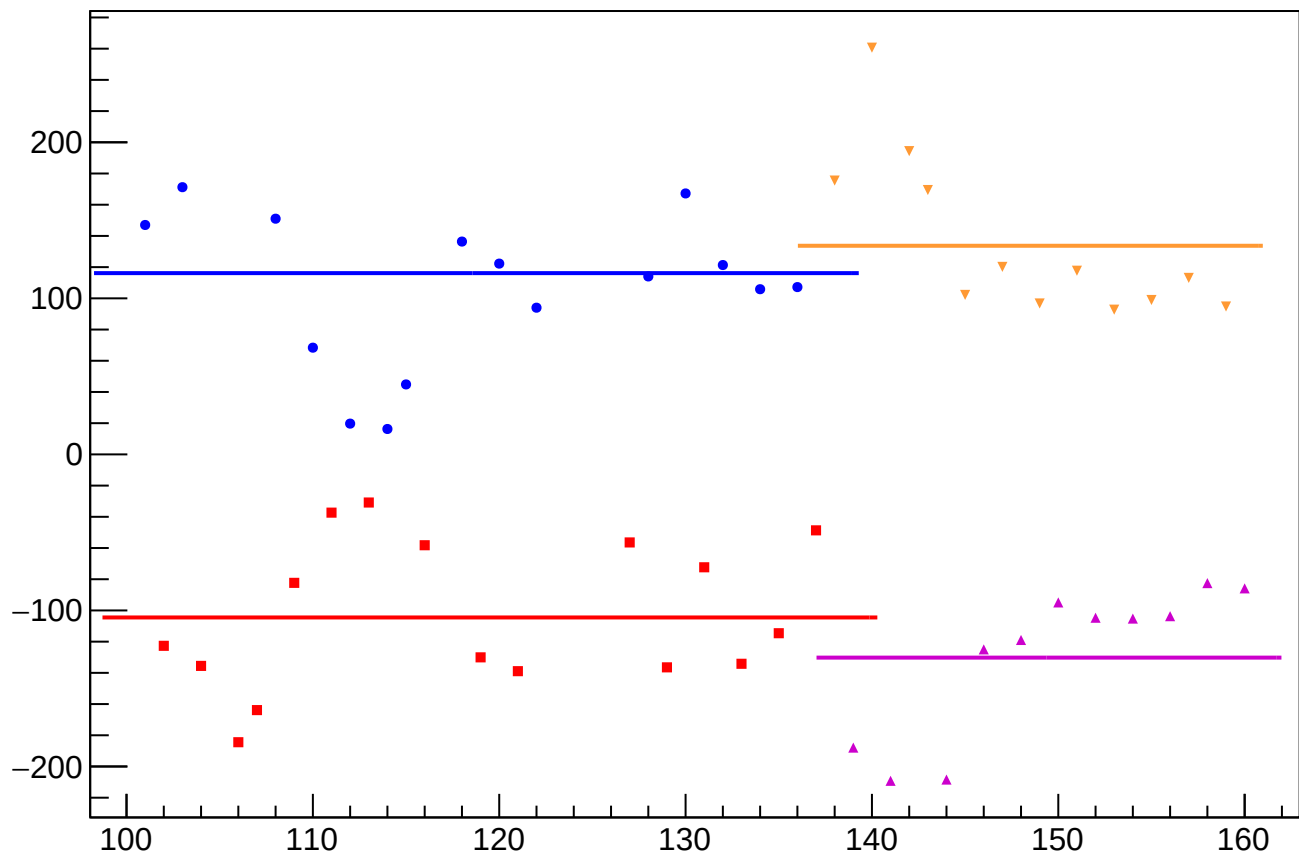
In: -377.486+/-0.000  $\chi^2/\text{NDF}$ : 3998973168088028

Out: 445.222+/-0.000  $\chi^2/\text{NDF}$ : 3197001629965650

All: 34.911+/-0.000  $\chi^2/\text{NDF}$ : 7729666433906



dit\_sam8\_coil4\_err\_mean vs Slug, Sign Corrected



Right In: 116.159 +/- 0.000

$\chi^2/\text{NDF}$ : 1198526427485199785396504127288115200.0/14

Left Out: 133.695 +/- 0.000

$\chi^2/\text{NDF}$ : 2332238004384262852879386446827356160.0/11

Right Out: -104.501 +/- 0.000

$\chi^2/\text{NDF}$ : 1285986383644058507445602420764180480.0/15

Left In: -130.237 +/- 0.000

$\chi^2/\text{NDF}$ : 1968814259217478663576054483231178752.0/10

Left: 1.011 +/- 0.000  $\chi^2/\text{NDF}$ : 363089448385334354

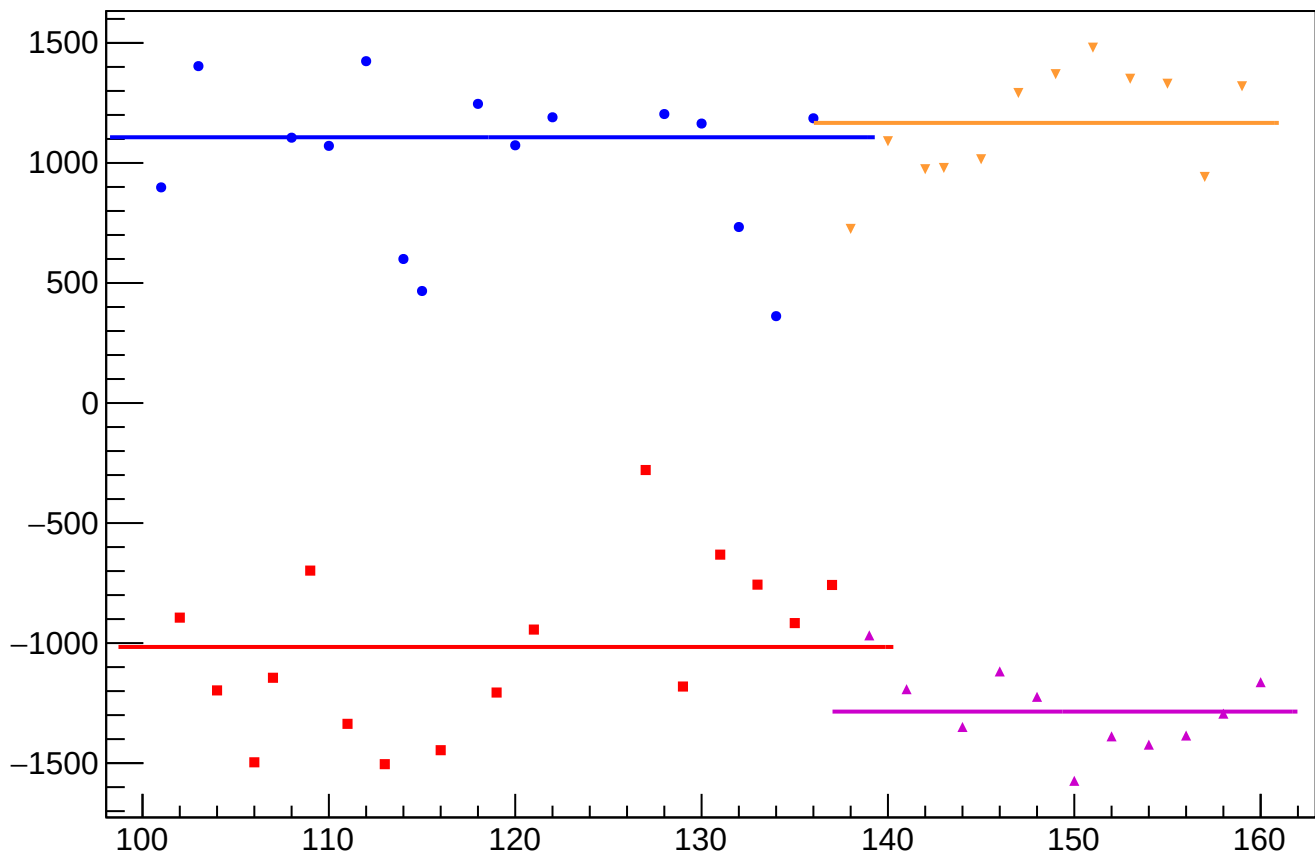
Right: 4.320 +/- 0.000  $\chi^2/\text{NDF}$ : 18500756430901072

In: -28.577 +/- 0.000  $\chi^2/\text{NDF}$ : 26312198647459661

Out: 33.204 +/- 0.000  $\chi^2/\text{NDF}$ : 25496298495933120

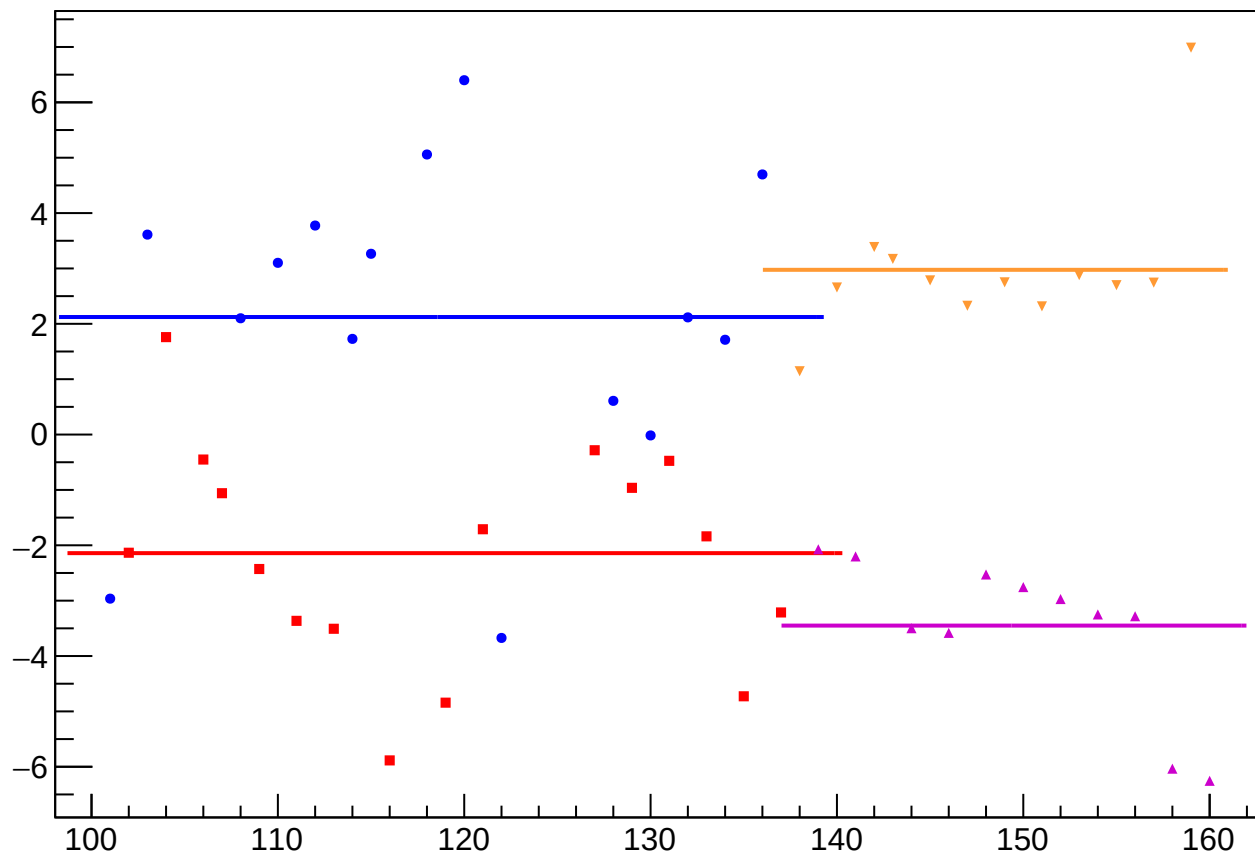
All: 2.392 +/- 0.000  $\chi^2/\text{NDF}$ : 54818097492999

dit\_sam8\_coil4\_Ndata\_mean vs Slug, Sign Corrected



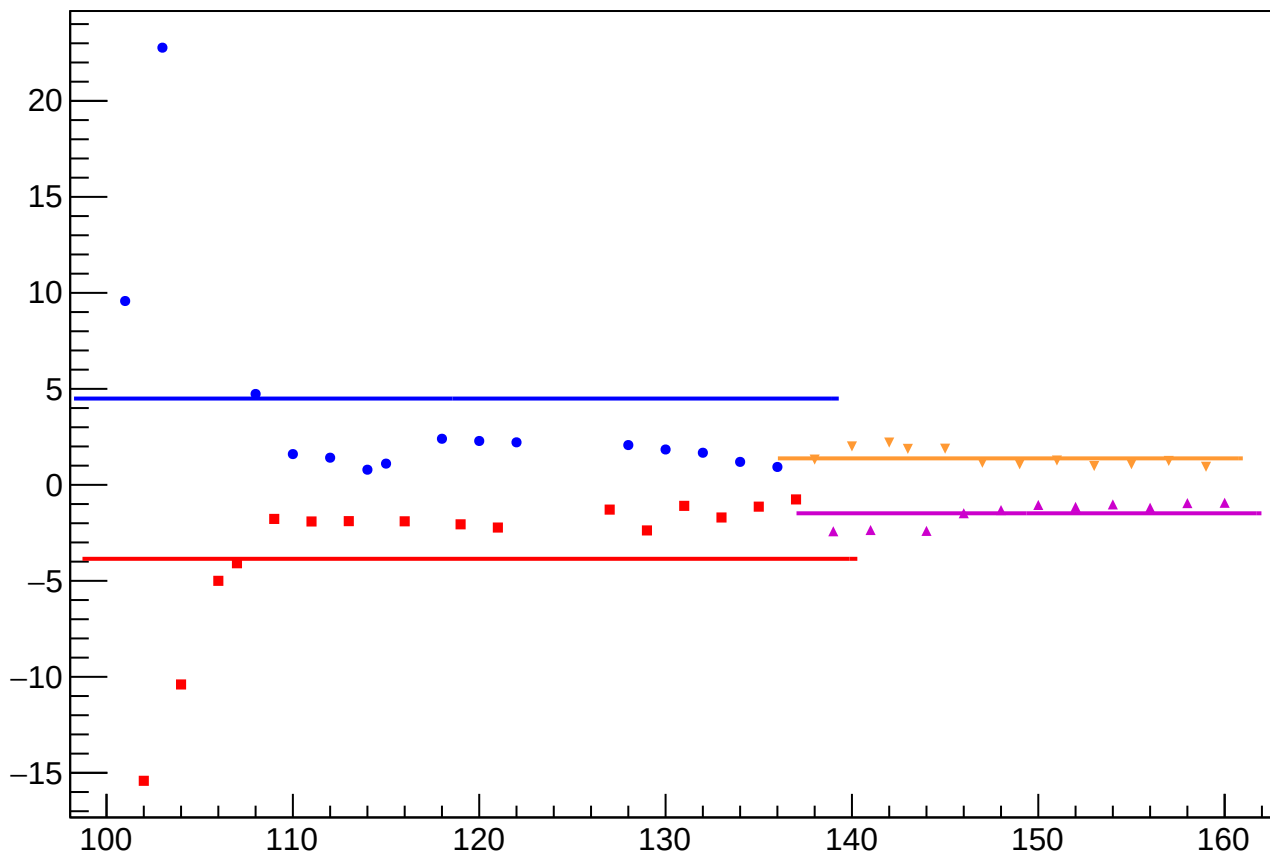
Right In: 1107.052+/-0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869+/-0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: -1016.106+/-0.000  $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  
 Left In: -1285.364+/-0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10  
 All: -25.499+/-0.000  $\chi^2/\text{NDF}$ : 443493791328

dit\_4aX\_coil6\_mean vs Slug, Sign Corrected



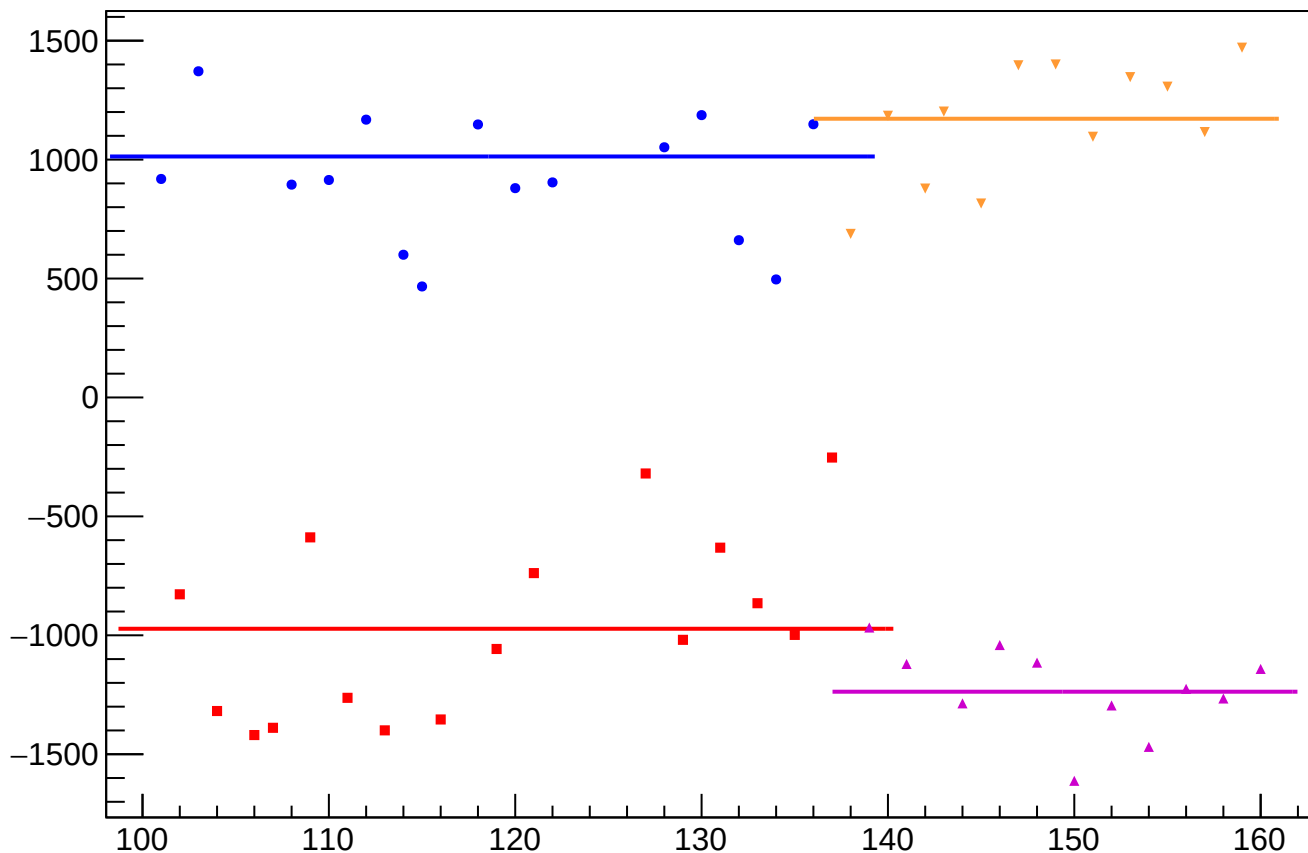
Right In:  $2.123 \pm 0.000$   $\chi^2/\text{NDF}: 5263705922821075971022013849403392.0/14$   
 Left Out:  $2.975 \pm 0.000$   $\chi^2/\text{NDF}: 1653073452461549310648226194391040.0/11$   
 Right Out:  $-2.142 \pm 0.000$   $\chi^2/\text{NDF}: 2472949940993672466161692257026048.0/15$   
 Left In:  $-3.450 \pm 0.000$   $\chi^2/\text{NDF}: 1551935058842125730993767819771904.0/10$   
 All:  $-0.165 \pm 0.000$   $\chi^2/\text{NDF}: 3593171973560$

dit\_4aX\_coil6\_err\_mean vs Slug, Sign Corrected



Right In:  $4.495 \pm 0.000$   $\chi^2/\text{NDF}$ : 25270242219816061532329198634401792.0/14  
 Left Out:  $1.379 \pm 0.000$   $\chi^2/\text{NDF}$ : 150384329501224226849656085151744.0/11  
 Right Out:  $-3.852 \pm 0.000$   $\chi^2/\text{NDF}$ : 12314971476556806550518847638601728.0/15  
 Left In:  $-1.482 \pm 0.000$   $\chi^2/\text{NDF}$ : 310337710475779495774509405831168.0/10  
 All:  $0.076 \pm 0.000$   $\chi^2/\text{NDF}$ : 64807335162416

dit\_4aX\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

Left Out: 1171.807+/-0.000

Right Out: -972.465+/-0.000

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -39.225+/-0.000  $\chi^2/\text{NDF}$ : 2749183771125436

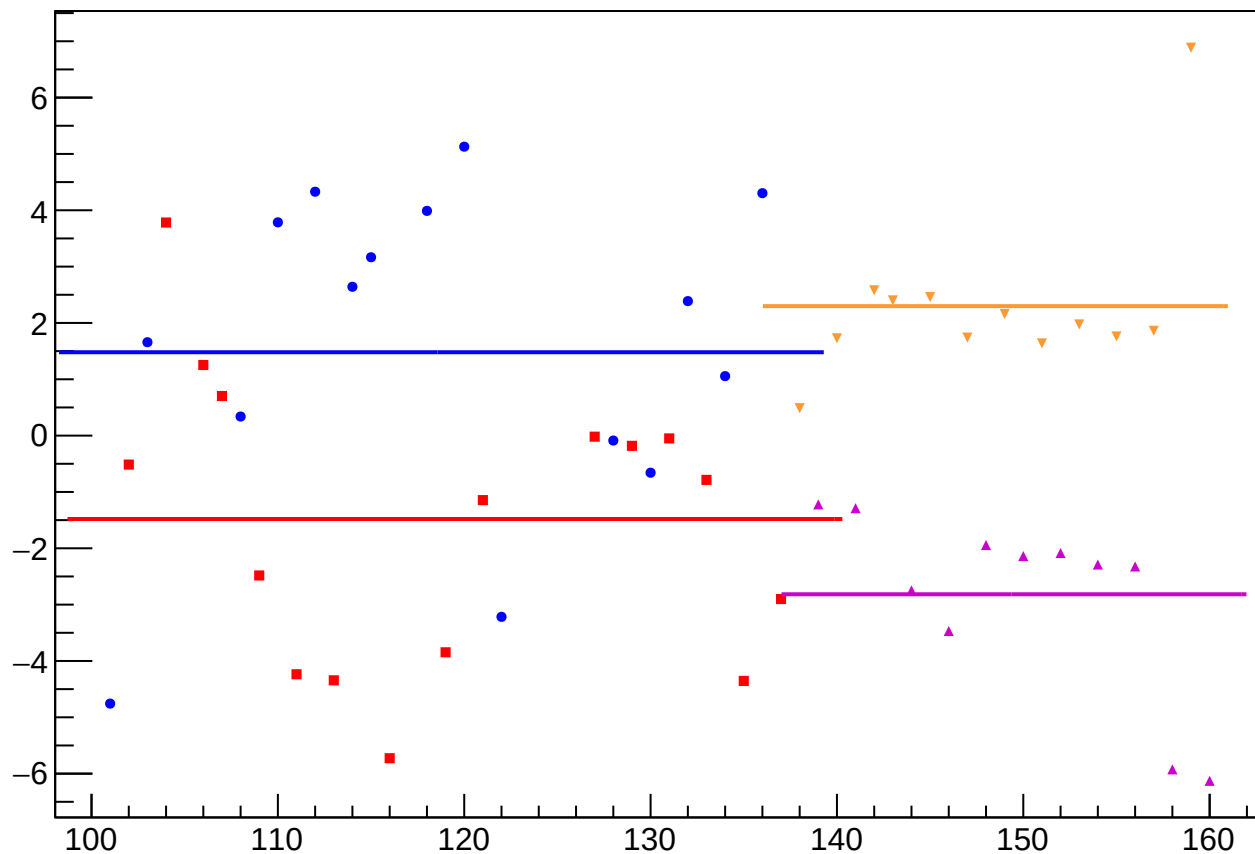
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: 308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

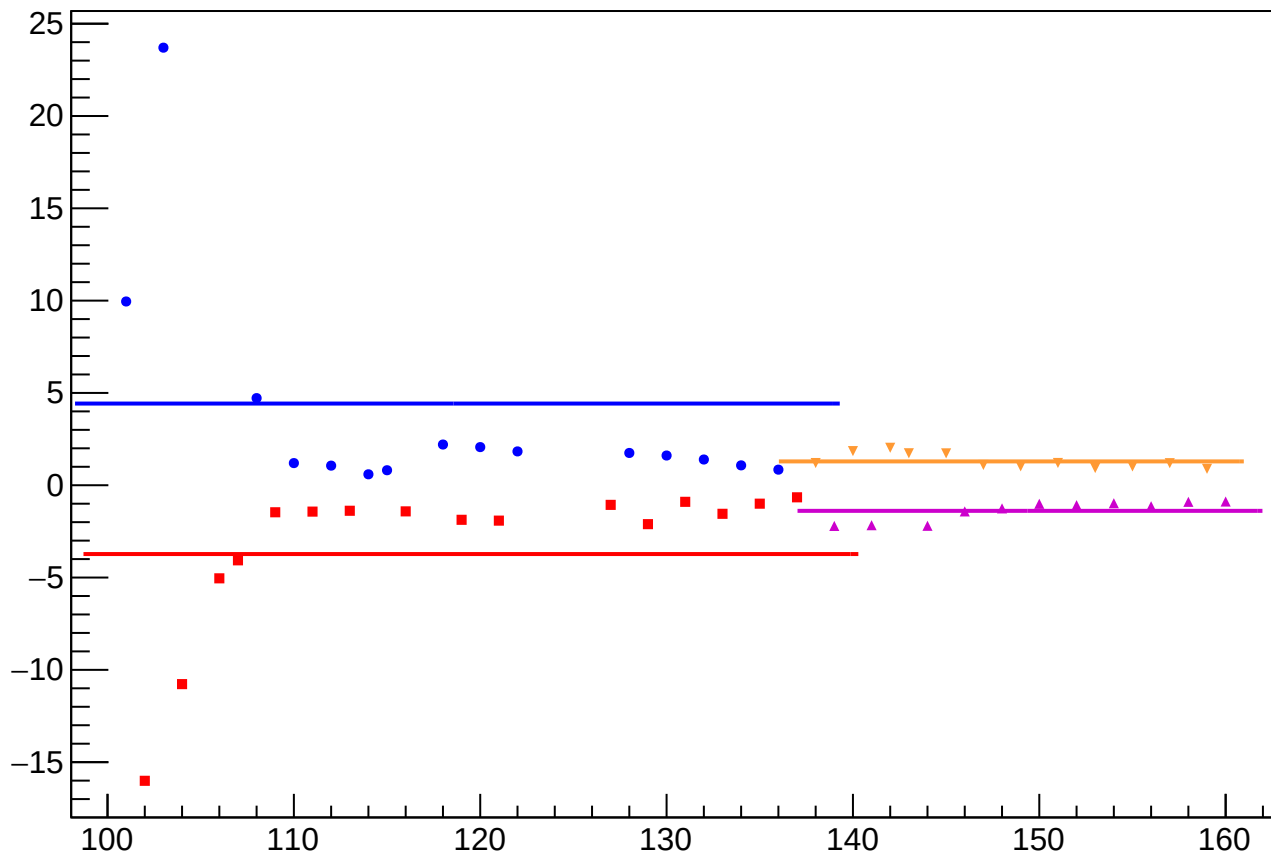
All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

dit\_4eX\_coil6\_mean vs Slug, Sign Corrected



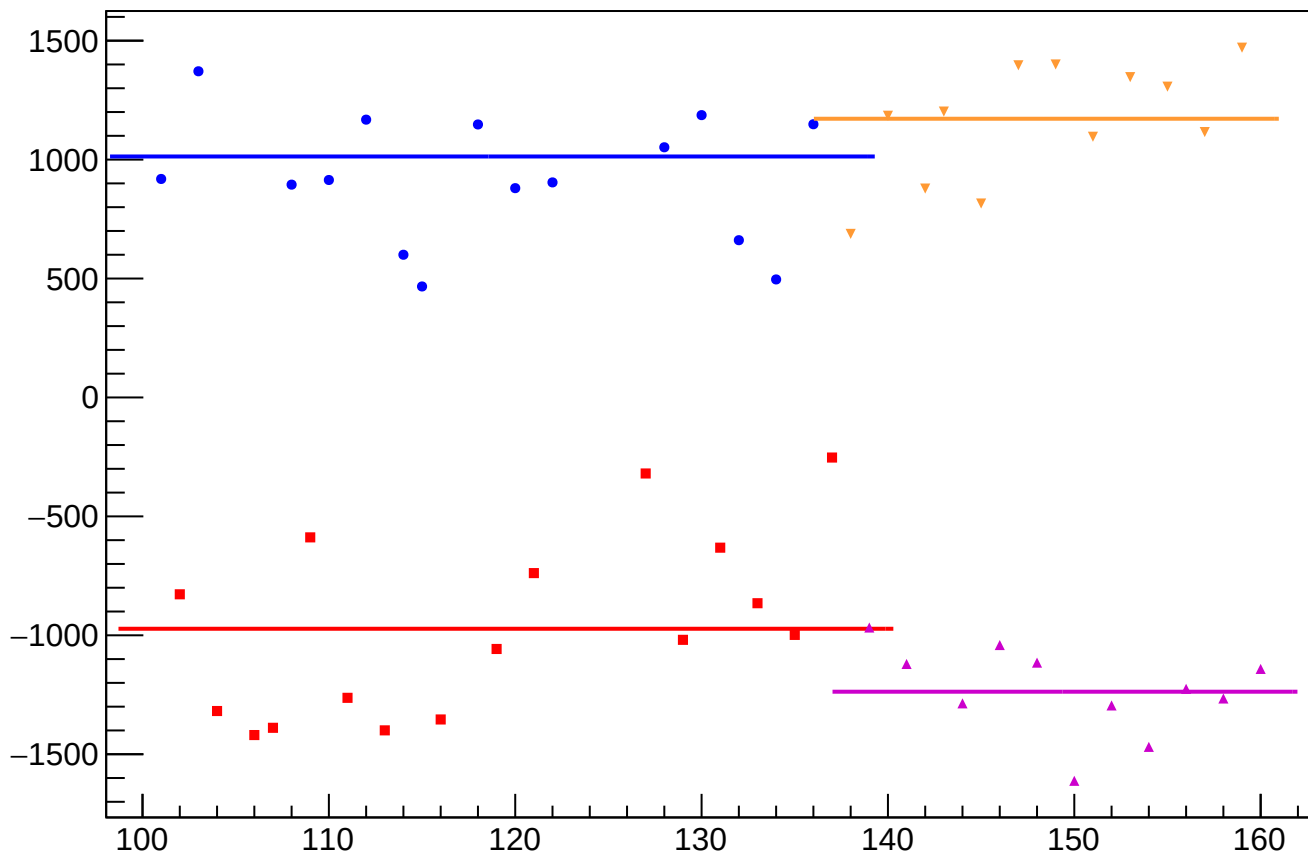
Right In:  $1.480 \pm 0.000$   $\chi^2/\text{NDF}$ : 5799670695902784459055767987683328.0/14  
 Left Out:  $2.298 \pm 0.000$   $\chi^2/\text{NDF}$ : 2079870991739780462593334803693568.0/11  
 Right Out:  $-1.480 \pm 0.000$   $\chi^2/\text{NDF}$ : 4092645800613765572662987820367872.0/15  
 Left In:  $-2.816 \pm 0.000$   $\chi^2/\text{NDF}$ : 2230790234579581781884760219451392.0/10  
 All:  $-0.168 \pm 0.000$   $\chi^2/\text{NDF}$ : 2915247501265

# dit\_4eX\_coil6\_err\_mean vs Slug, Sign Corrected



Right In:  $4.424 \pm 0.000$   $\chi^2/\text{NDF}$ : 28257459272876210608839830473277440.0/14  
 Left Out:  $1.291 \pm 0.000$   $\chi^2/\text{NDF}$ : 119201725618452190917490324275200.0/11  
 Right Out:  $-3.727 \pm 0.000$   $\chi^2/\text{NDF}$ : 13991816814749842519794284853460992.0/15  
 Left In:  $-1.387 \pm 0.000$   $\chi^2/\text{NDF}$ : 245381205913734368947829561360384.0/10  
 All:  $0.090 \pm 0.000$   $\chi^2/\text{NDF}$ : 67859501931783

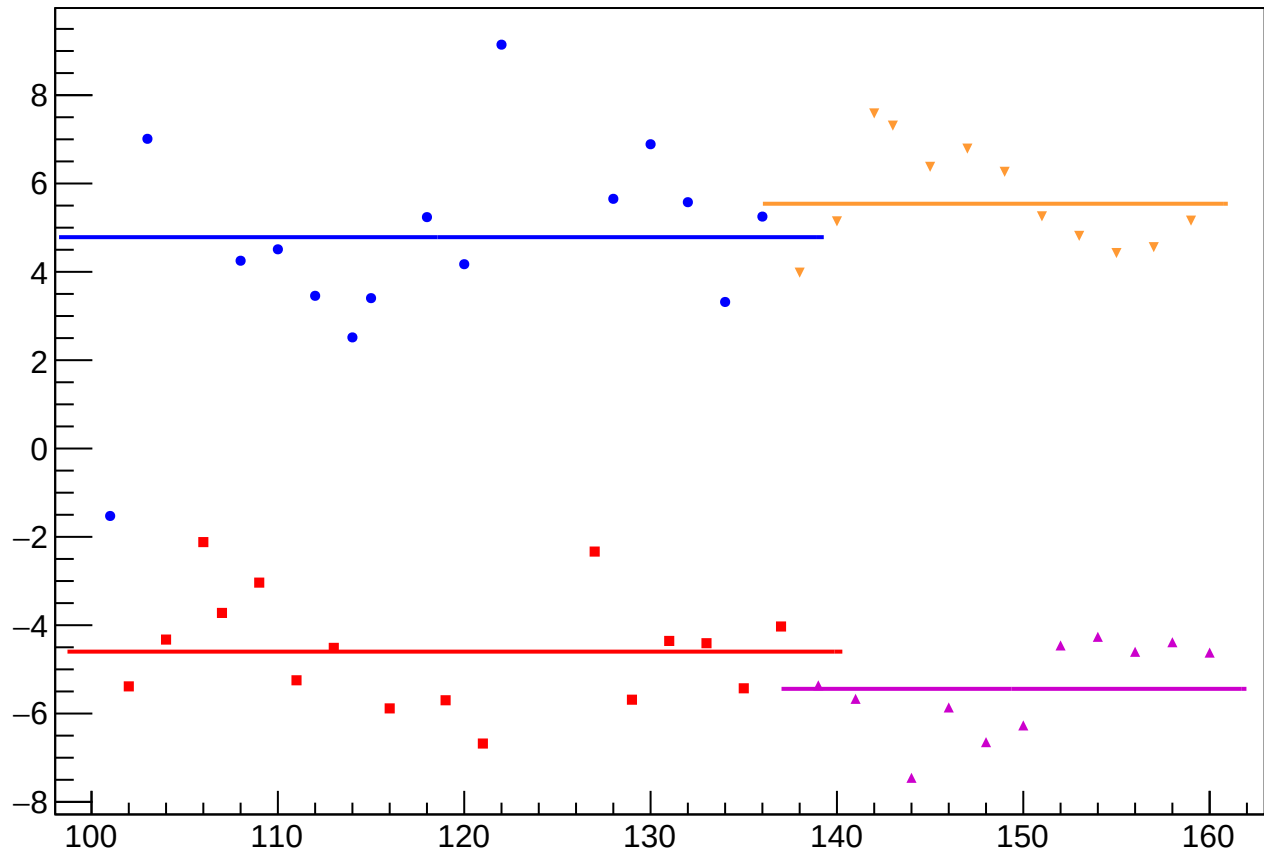
dit\_4eX\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Left: -39.225 +/- 0.000  $\chi^2/\text{NDF}$ : 2749183771125436  
 Right: 6.761 +/- 0.000  $\chi^2/\text{NDF}$ : 14074954421733032  
 In: 308.706 +/- 0.000  $\chi^2/\text{NDF}$ : 1992534711877389  
 Out: 267.171 +/- 0.000  $\chi^2/\text{NDF}$ : 1904273666999186  
 All: -20.037 +/- 0.000  $\chi^2/\text{NDF}$ : 415830099668



dit\_11X12X\_coil6\_mean vs Slug, Sign Corrected



Right In: 4.785 $\pm$ 0.000

$\chi^2$ /NDF: 3996556073154779711808159470321664.0/14

Left Out: 5.542 $\pm$ 0.000

$\chi^2$ /NDF: 1063589592141187742244511087067136.0/11

Right Out: -4.598 $\pm$ 0.000

$\chi^2$ /NDF: 989607156792948633247632779640832.0/15

Left In: -5.441 $\pm$ 0.000

$\chi^2$ /NDF: 969147874620390855399339032838144.0/10

Left: 0.021 $\pm$ 0.000  $\chi^2$ /NDF: 574569475069085613

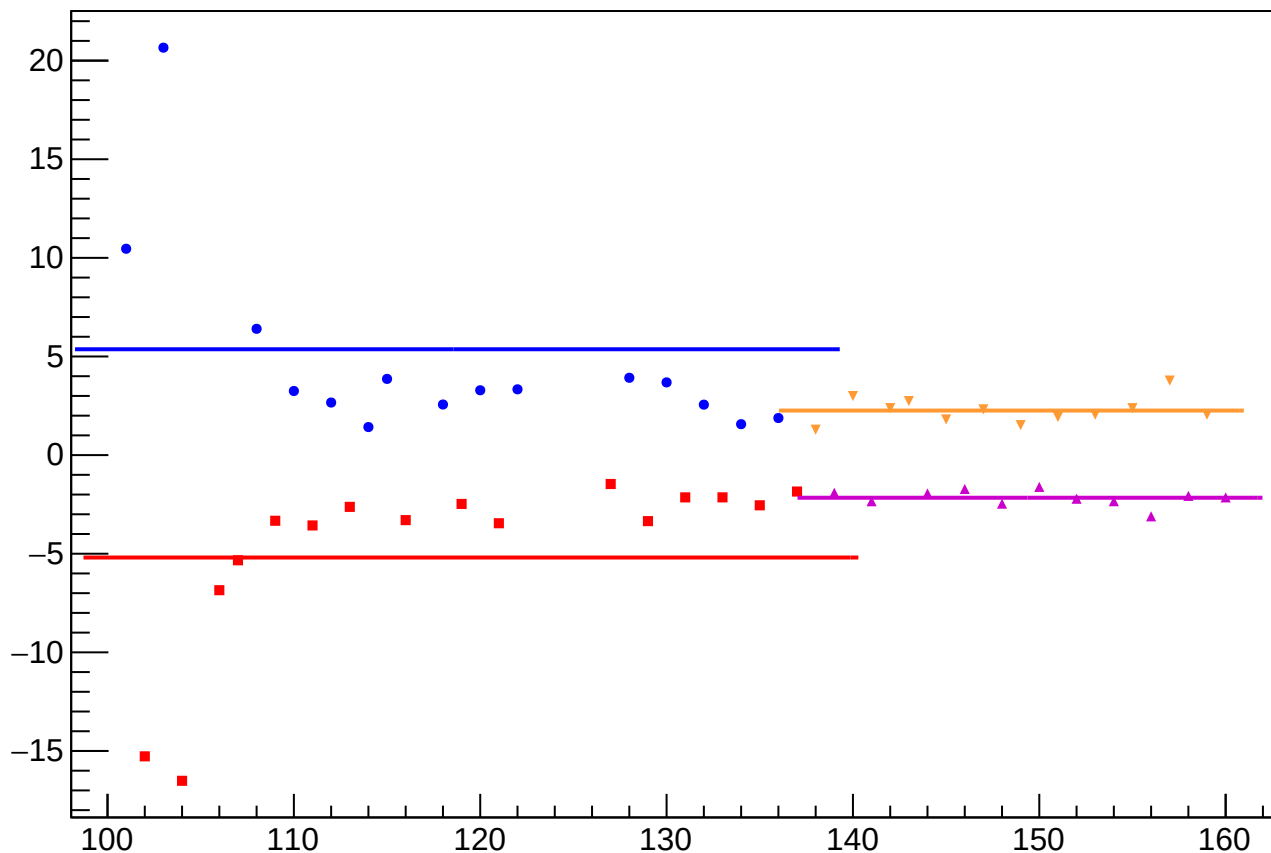
Right: 0.029 $\pm$ 0.000  $\chi^2$ /NDF: 33948566568426742

In: -1.222 $\pm$ 0.000  $\chi^2$ /NDF: 448312824685683470

Out: 1.264 $\pm$ 0.000  $\chi^2$ /NDF: 417024451094656984

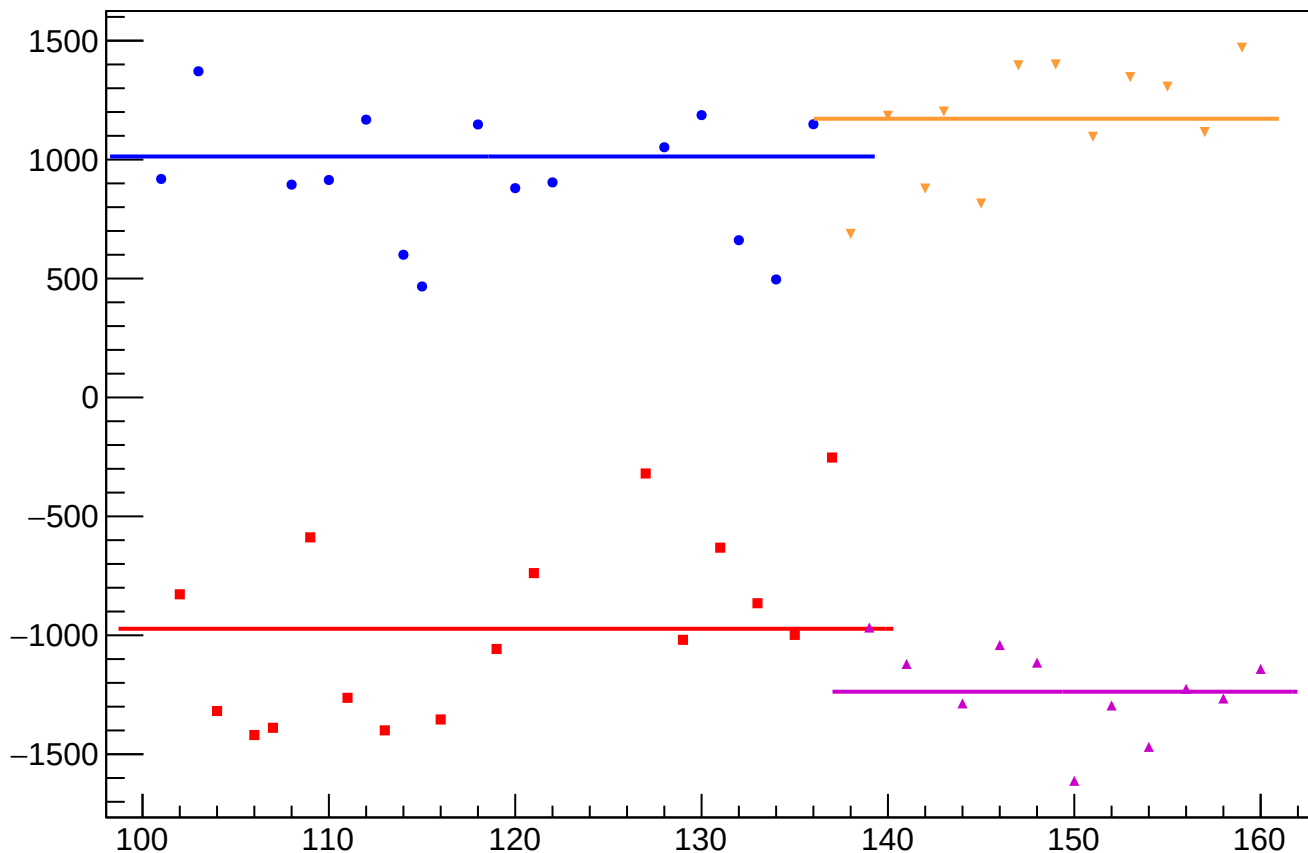
All: 0.024 $\pm$ 0.000  $\chi^2$ /NDF: 91405570612349

dit\_11X12X\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 5.366 $\pm$ 0.000  $\chi^2$ /NDF: 18780724722063497096153009301225472.0/14  
 Left Out: 2.259 $\pm$ 0.000  $\chi^2$ /NDF: 395399614951959116127821516242944.0/11  
 Right Out: -5.192 $\pm$ 0.000  $\chi^2$ /NDF: 15749573754945345754432436952891392.0/15  
 Left In: -2.162 $\pm$ 0.000  $\chi^2$ /NDF: 138367938839103248546751049629696.0/10  
 All: 0.027 $\pm$ 0.000  $\chi^2$ /NDF: 80711946071260

dit\_11X12X\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

Left Out: 1171.807+/-0.000

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

Right Out: -972.465+/-0.000

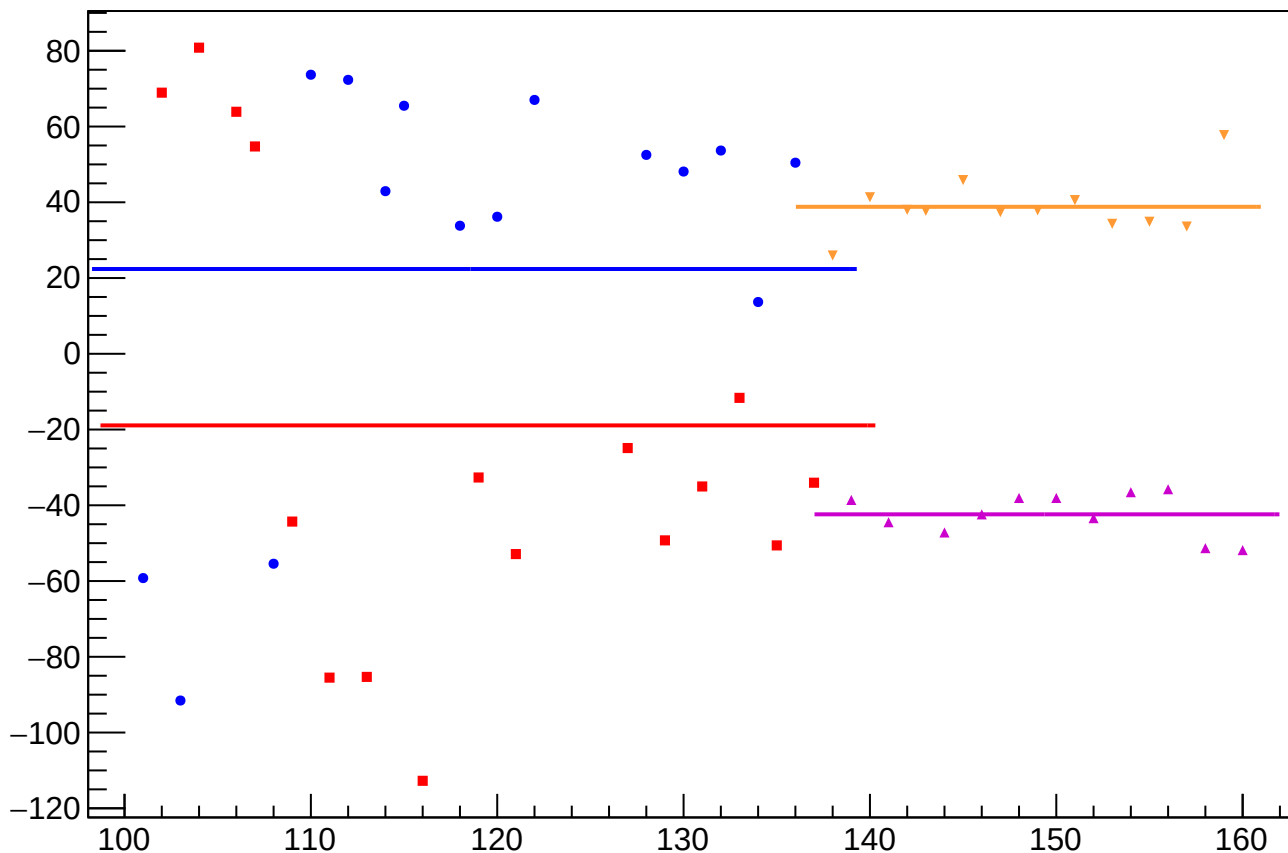
$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

# dit\_4aY\_coil6\_mean vs Slug, Sign Corrected



Right In: 22.385 $\pm$ 0.000

$\chi^2$ /NDF: 1922260860023592637794094183323009024.0/14

Left Out: 38.806 $\pm$ 0.000

$\chi^2$ /NDF: 51649905292188588204172531766132736.0/11

Right Out: -18.907 $\pm$ 0.000

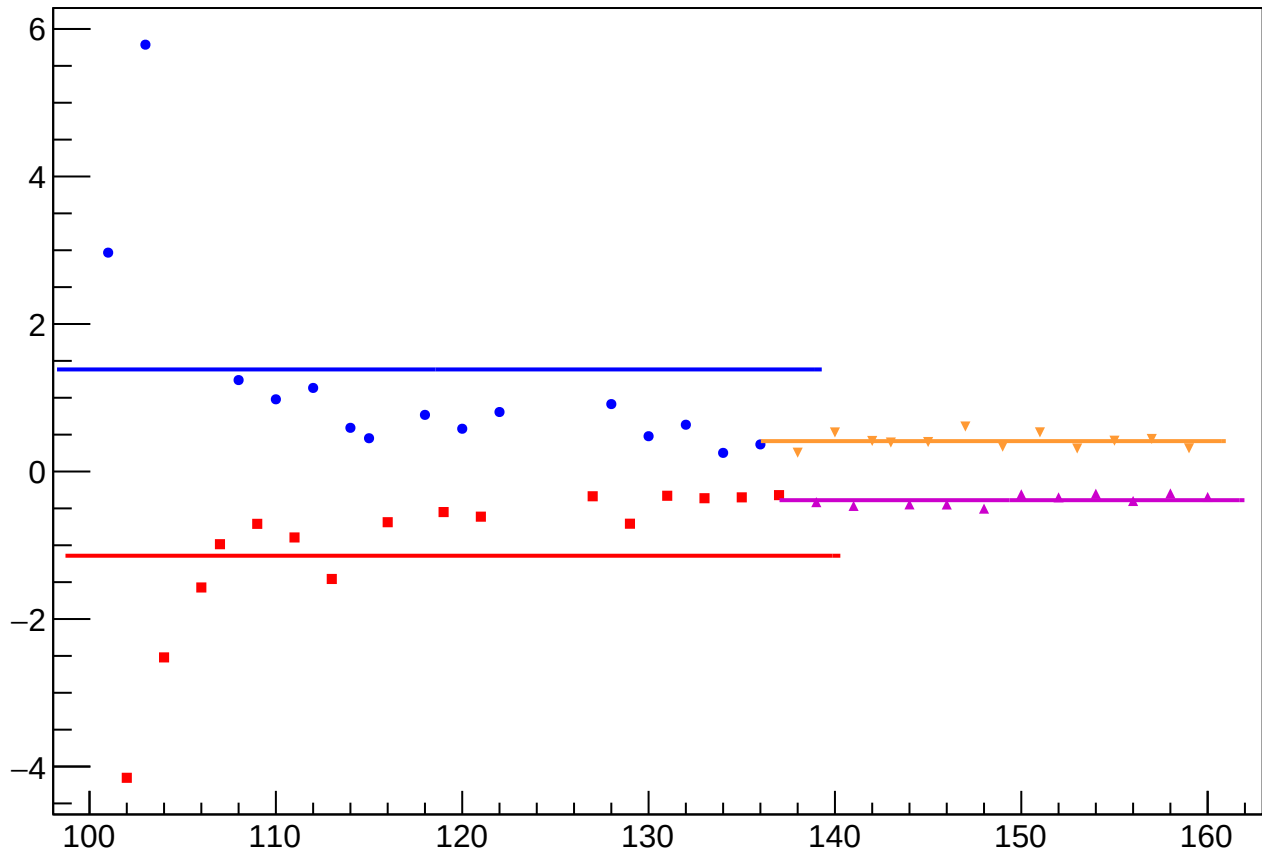
$\chi^2$ /NDF: 2182221808408156293593993992757837824.0/15

Left In: -42.386 $\pm$ 0.000

$\chi^2$ /NDF: 26555660128562986553016927486214144.0/10

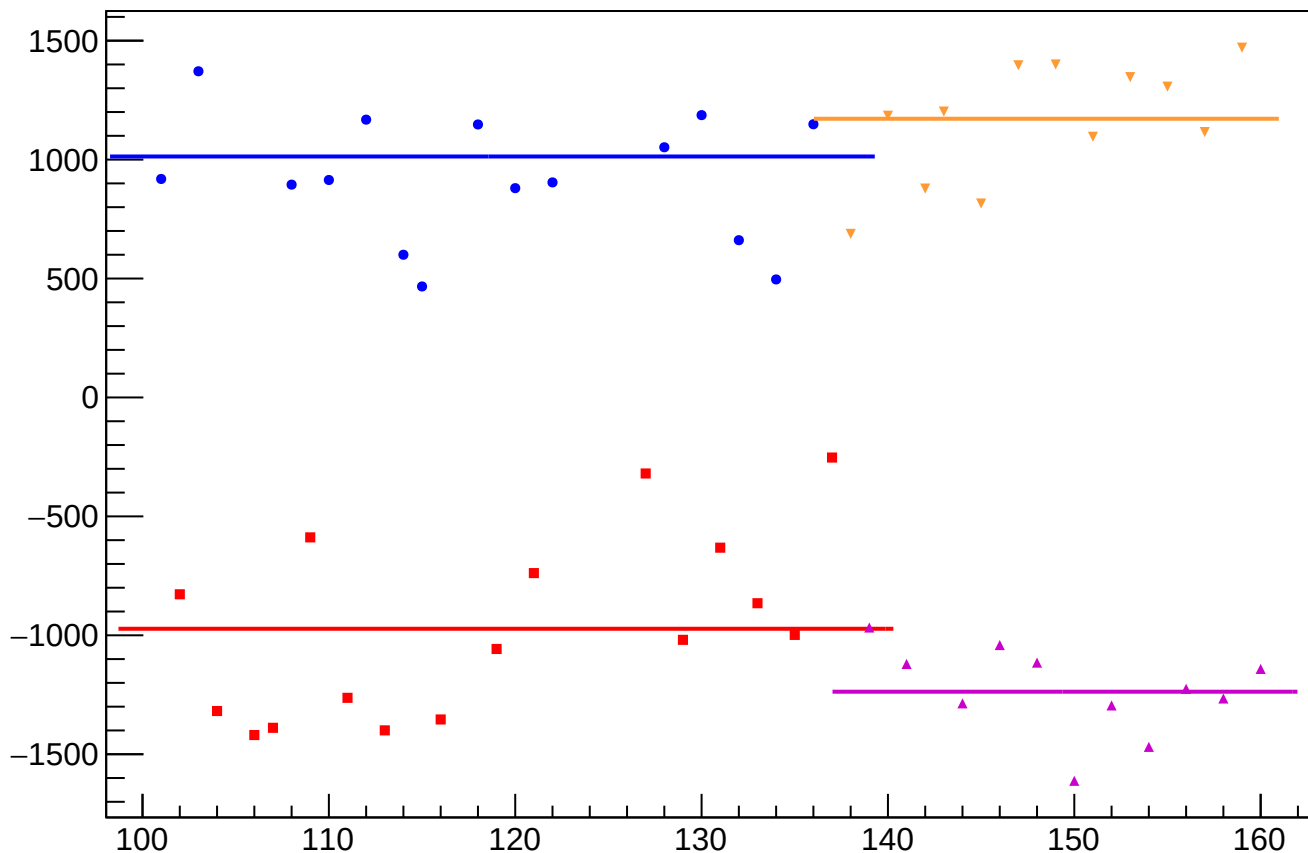
All: -0.564 $\pm$ 0.000  $\chi^2$ /NDF: 7781760585963

dit\_4aY\_coil6\_err\_mean vs Slug, Sign Corrected



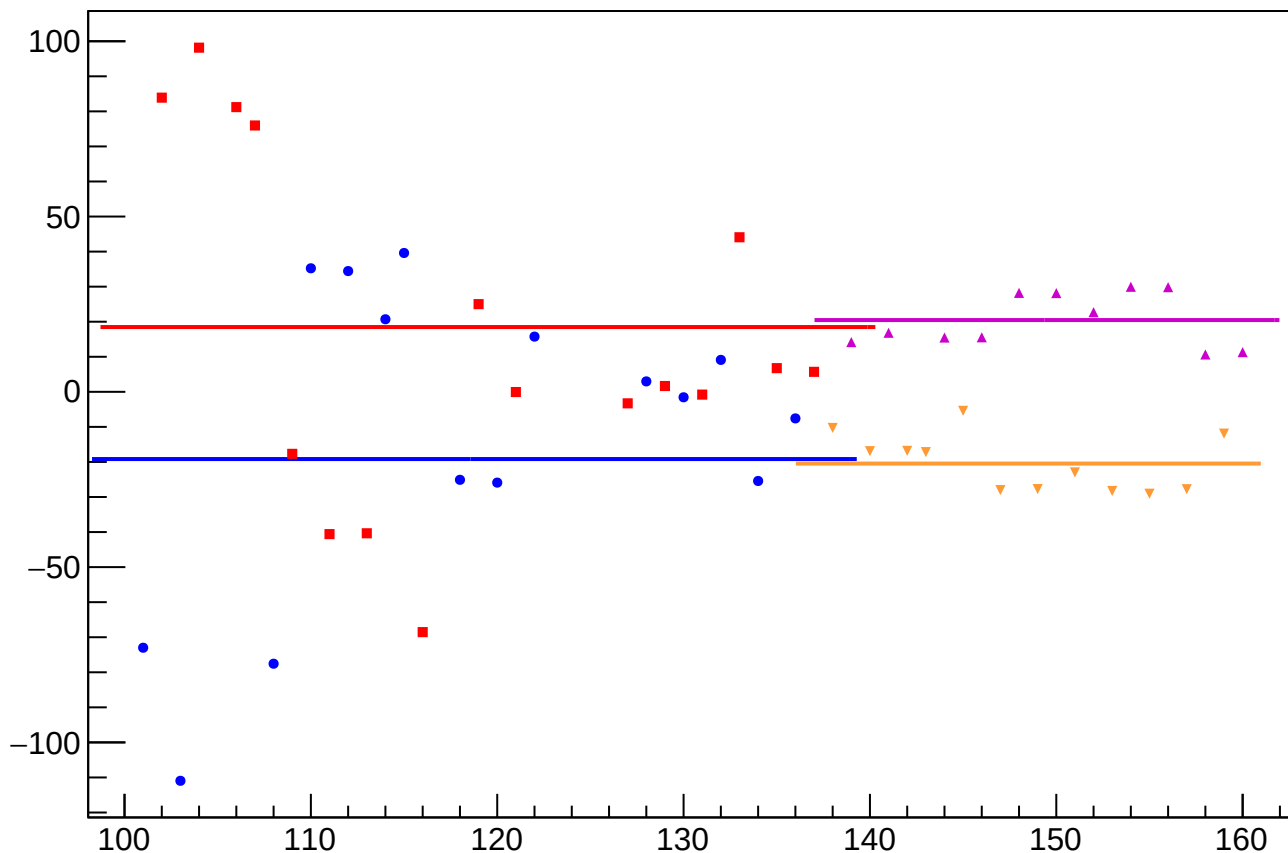
Right In: 1.384+/-0.000  $\chi^2/\text{NDF}$ : 1571159324102064120487940936695808.0/14  
 Left Out: 0.412+/-0.000  $\chi^2/\text{NDF}$ : 9382414275472018674983467220992.0/11  
 Right Out: -1.142+/-0.000  $\chi^2/\text{NDF}$ : 810680738285448955223066212827136.0/15  
 Left In: -0.389+/-0.000  $\chi^2/\text{NDF}$ : 4468112130112640641394154668032.0/10  
 All: 0.049+/-0.000  $\chi^2/\text{NDF}$ : 47956046375431.0/10

dit\_4aY\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146 +/- 0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807 +/- 0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: -972.465 +/- 0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: -1237.150 +/- 0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10  
 All: -20.037 +/- 0.000  $\chi^2/\text{NDF}$ : 415830099668

# dit\_4eY\_coil6\_mean vs Slug, Sign Corrected



Right In:  $-19.175 \pm 0.000$

$\chi^2/\text{NDF}$ : 1246364705689764961102868160463241216.0/14

Left Out:  $-20.466 \pm 0.000$

$\chi^2/\text{NDF}$ : 58628381923673457294433589512896512.0/11

Right Out:  $18.479 \pm 0.000$

$\chi^2/\text{NDF}$ : 1489398115046175180640331393369374720.0/15

Left In:  $20.473 \pm 0.000$

$\chi^2/\text{NDF}$ : 48484953363349820110348478937300992.0/10

Left:  $0.115 \pm 0.000$   $\chi^2/\text{NDF}$ : 877202582639736103

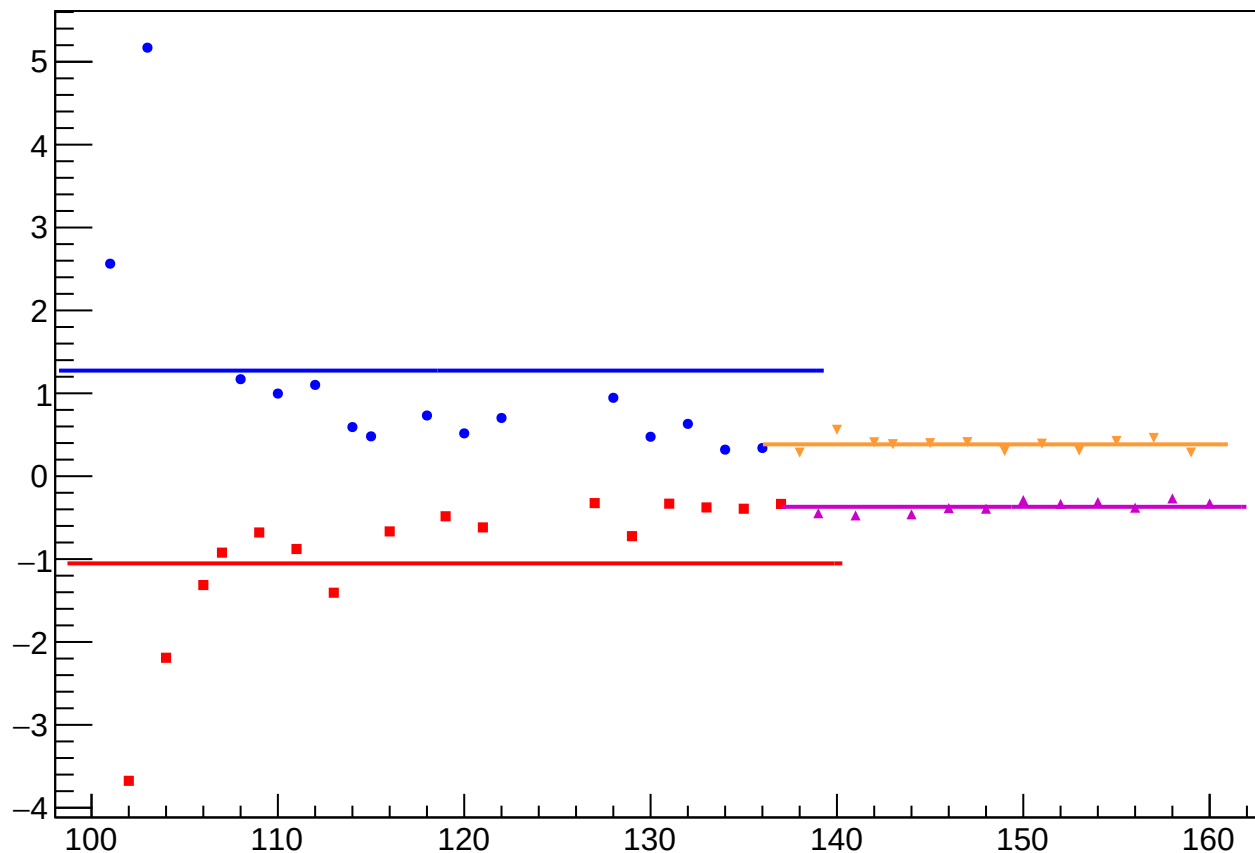
Right:  $-0.091 \pm 0.000$   $\chi^2/\text{NDF}$ : 3202145485356183

In:  $4.115 \pm 0.000$   $\chi^2/\text{NDF}$ : 1894138593068178389

Out:  $-4.035 \pm 0.000$   $\chi^2/\text{NDF}$ : 21328659955407988

All:  $0.029 \pm 0.000$   $\chi^2/\text{NDF}$ : 40793804983027

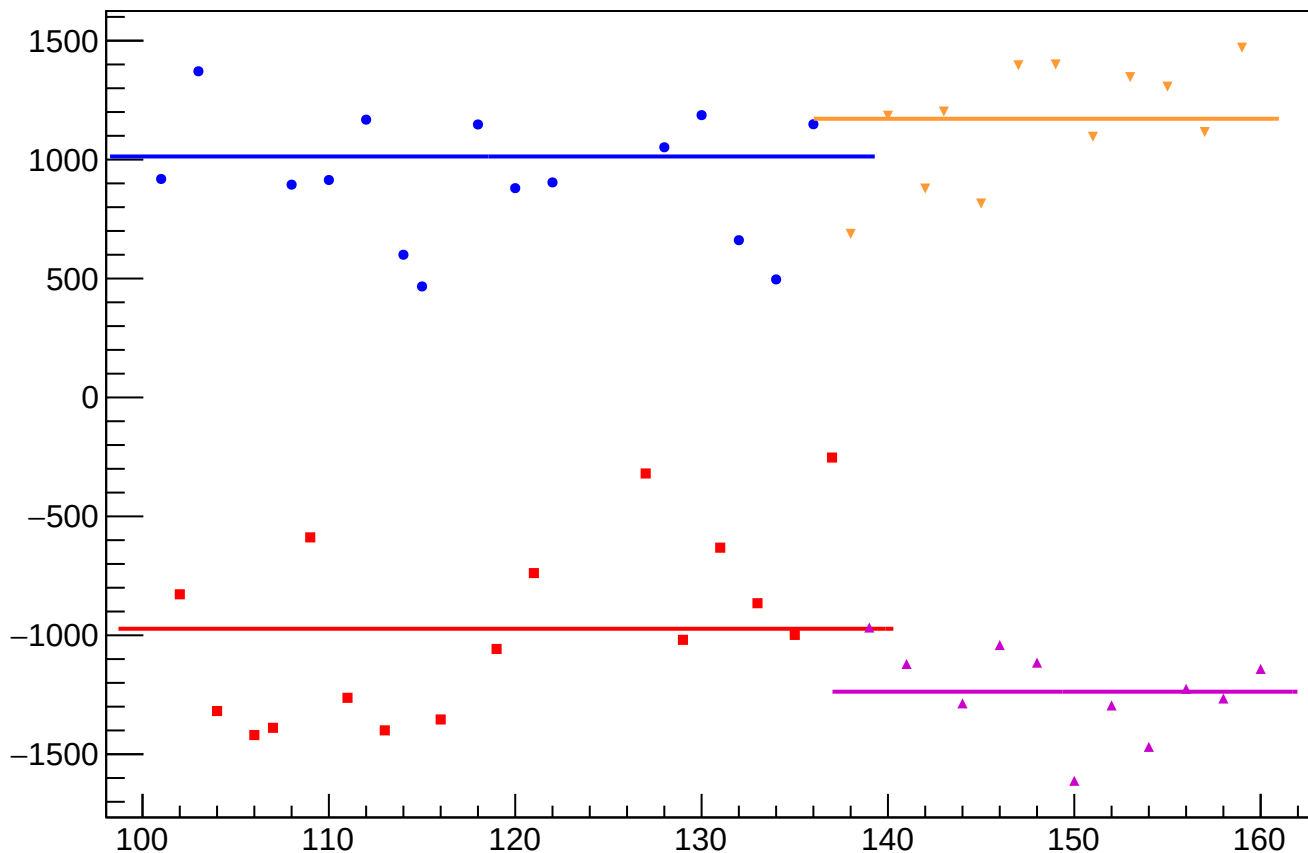
dit\_4eY\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 1.274+/-0.000  $\chi^2/\text{NDF}$ : 1212041476631073599154045304438784.0/14  
 Left Out: 0.384+/-0.000  $\chi^2/\text{NDF}$ : 5822322029078598268260129439744.0/11  
 Right Out: -1.052+/-0.000  $\chi^2/\text{NDF}$ : 607316121057753919194559126962176.0/15  
 Left In: -0.369+/-0.000  $\chi^2/\text{NDF}$ : 4166350638848138676707816112128.0/10  
 All: 0.043+/-0.000  $\chi^2/\text{NDF}$ : 38758828381997



dit\_4eY\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

Left Out: 1171.807+/-0.000

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

Right Out: -972.465+/-0.000

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -39.225+/-0.000  $\chi^2/\text{NDF}$ : 2749183771125436

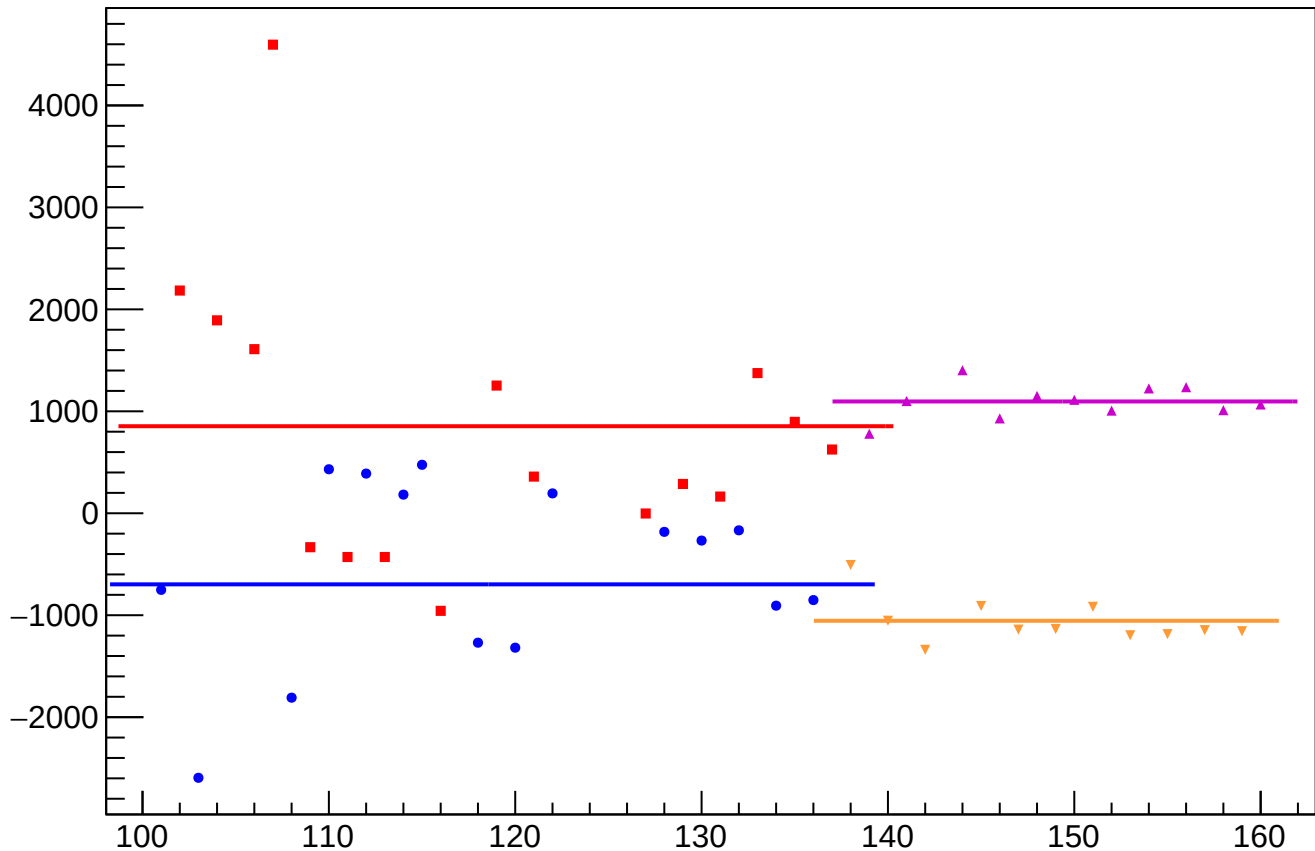
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: -308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

# dit\_usl\_coil6\_mean vs Slug, Sign Corrected



Right In: -697.283+/-0.000

$\chi^2/\text{NDF}$ : 490435790698133828475769692944364208128.0/14

Left Out: -1054.675+/-0.000

$\chi^2/\text{NDF}$ : 35893414561751289831028004535805149184.0/10

Right Out: 853.734+/-0.000

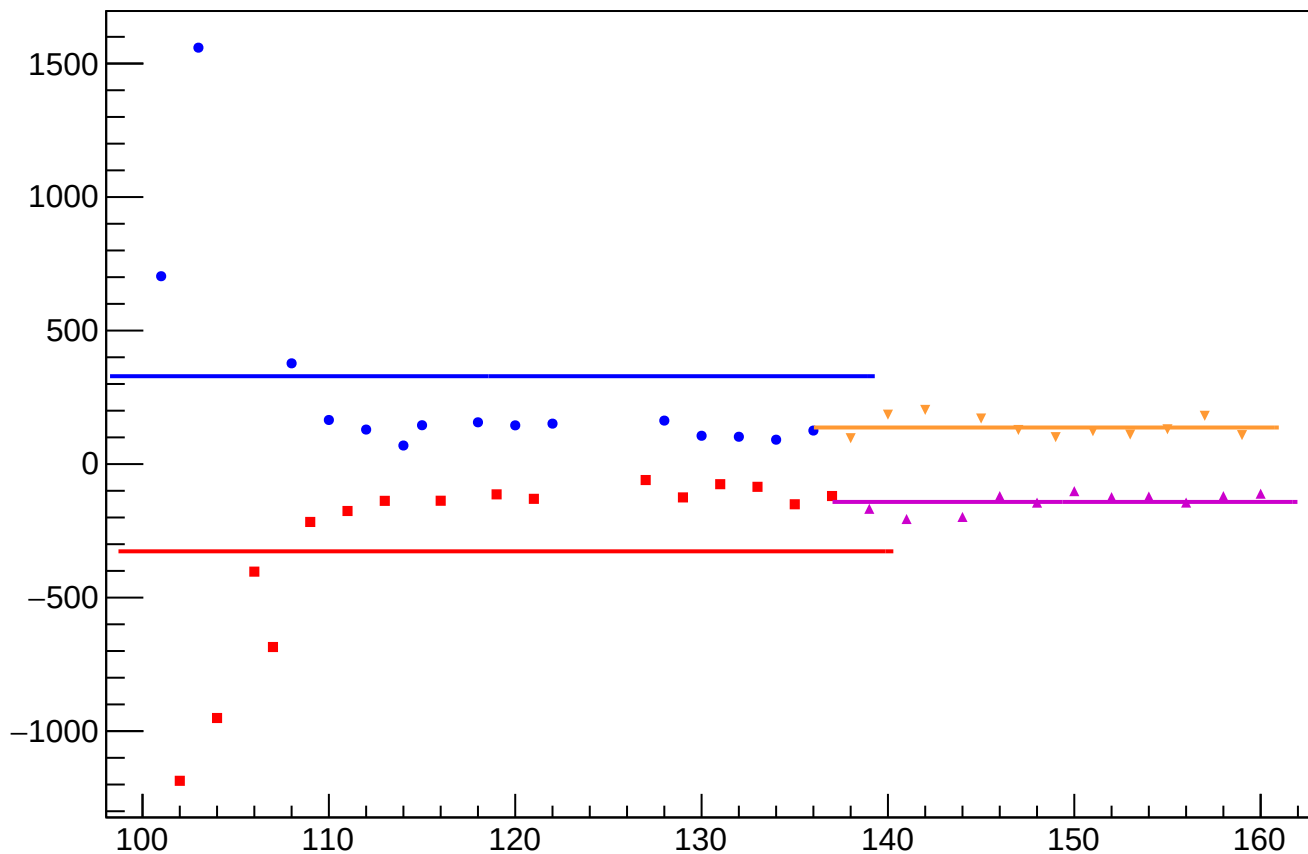
$\chi^2/\text{NDF}$ : 1078379020126412317155932275156201766912.0/15

Left In: 1096.508+/-0.000

$\chi^2/\text{NDF}$ : 23397092464085092375008014674557927424.0/10

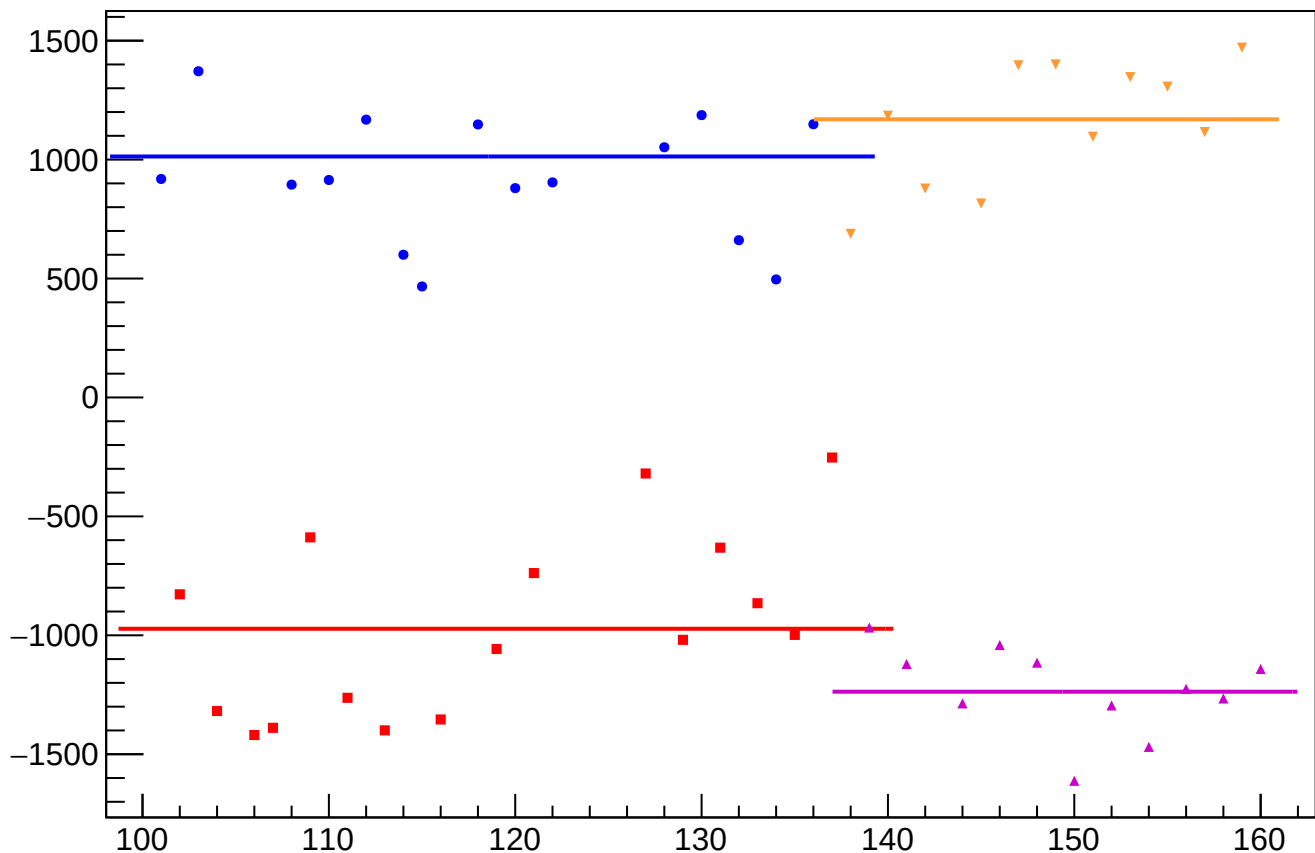
All: 76.698+/-0.000  $\chi^2/\text{NDF}$ : 4464746513505

# dit\_usl\_coil6\_err\_mean vs Slug, Sign Corrected



Right In:  $329.108 \pm 0.000$   $\chi^2/\text{NDF}: 116863820700538623524207945698672377856.0/14$   
 Left Out:  $137.012 \pm 0.000$   $\chi^2/\text{NDF}: 1014362817438194132709655172622581760.0/10$   
 Right Out:  $-326.695 \pm 0.000$   $\chi^2/\text{NDF}: 87569123354318020688611028415151079424.0/15$   
 Left In:  $-141.688 \pm 0.000$   $\chi^2/\text{NDF}: 1044882408057849194081424130600599552.0/10$   
 All:  $-6.215 \pm 0.000$   $\chi^2/\text{NDF}: 3823059515642$

dit\_usl\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

Left Out: 1169.420+/-0.000

Right Out: -972.465+/-0.000

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

$\chi^2/\text{NDF}$ : 52359058528484212152975817930553950208.0/10

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -86.182+/-0.000  $\chi^2/\text{NDF}$ : 2642058453366472

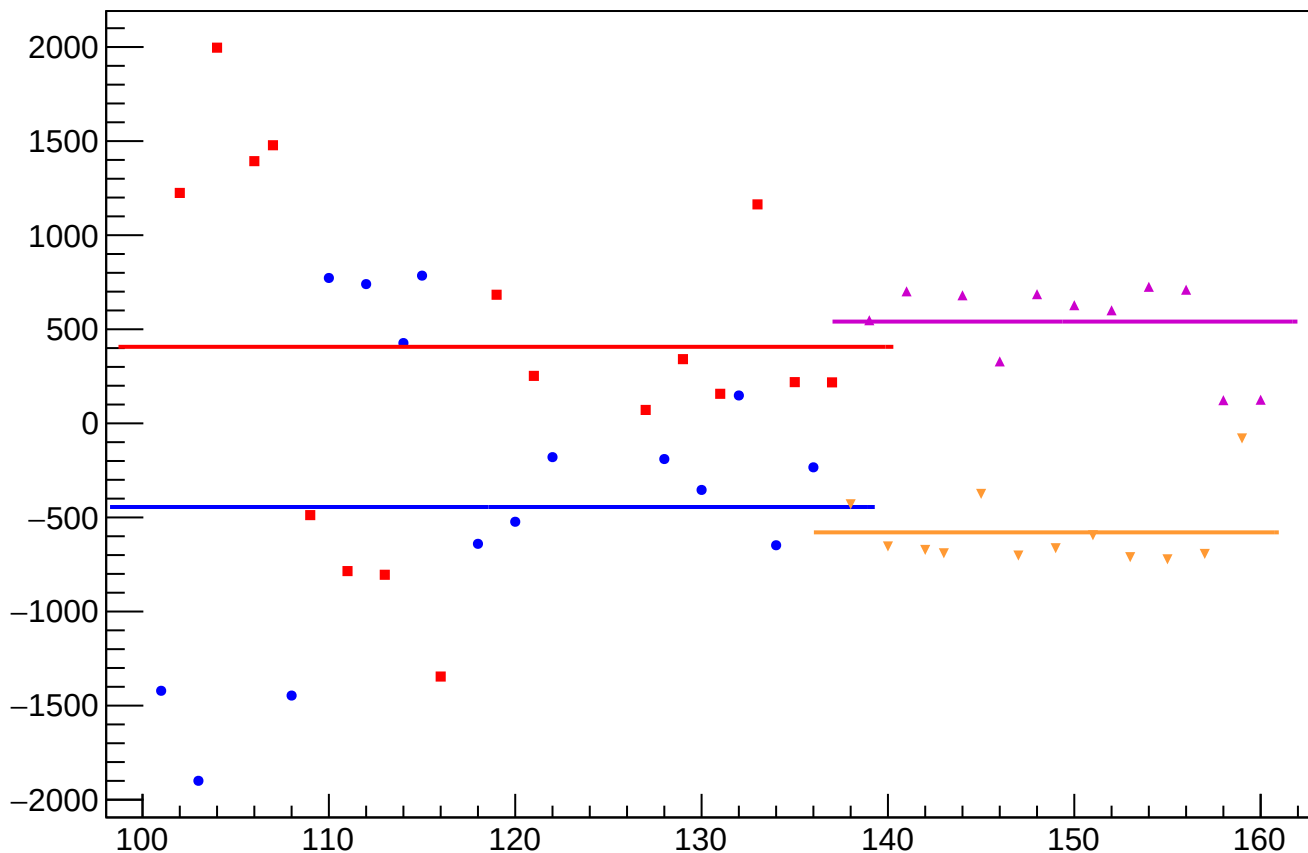
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: 308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 225.803+/-0.000  $\chi^2/\text{NDF}$ : 1843132897386969

All: -46.560+/-0.000  $\chi^2/\text{NDF}$ : 405607578172

# dit\_usr\_coil6\_mean vs Slug, Sign Corrected



Right In: -444.512 +/- 0.000

$\chi^2/\text{NDF}$ : 396481903501593703066535851229953654784.0/14

Left Out: -579.272 +/- 0.000

$\chi^2/\text{NDF}$ : 32584581524528860941595597407042666496.0/11

Right Out: 406.729 +/- 0.000

$\chi^2/\text{NDF}$ : 529122421866774810012941782239129108480.0/15

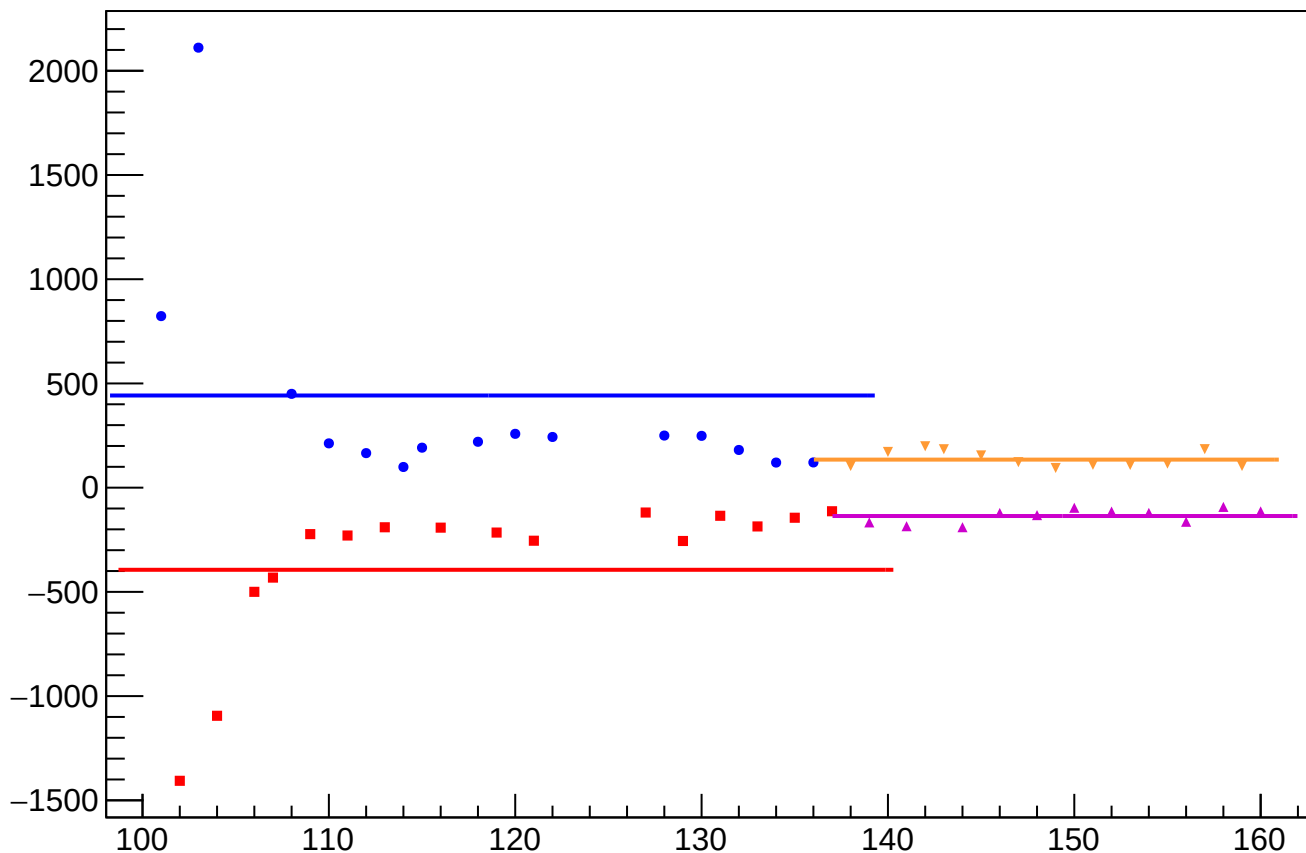
Left In: 540.842 +/- 0.000

$\chi^2/\text{NDF}$ : 42670193317497817911030367466366697472.0/10

All: -14.875 +/- 0.000

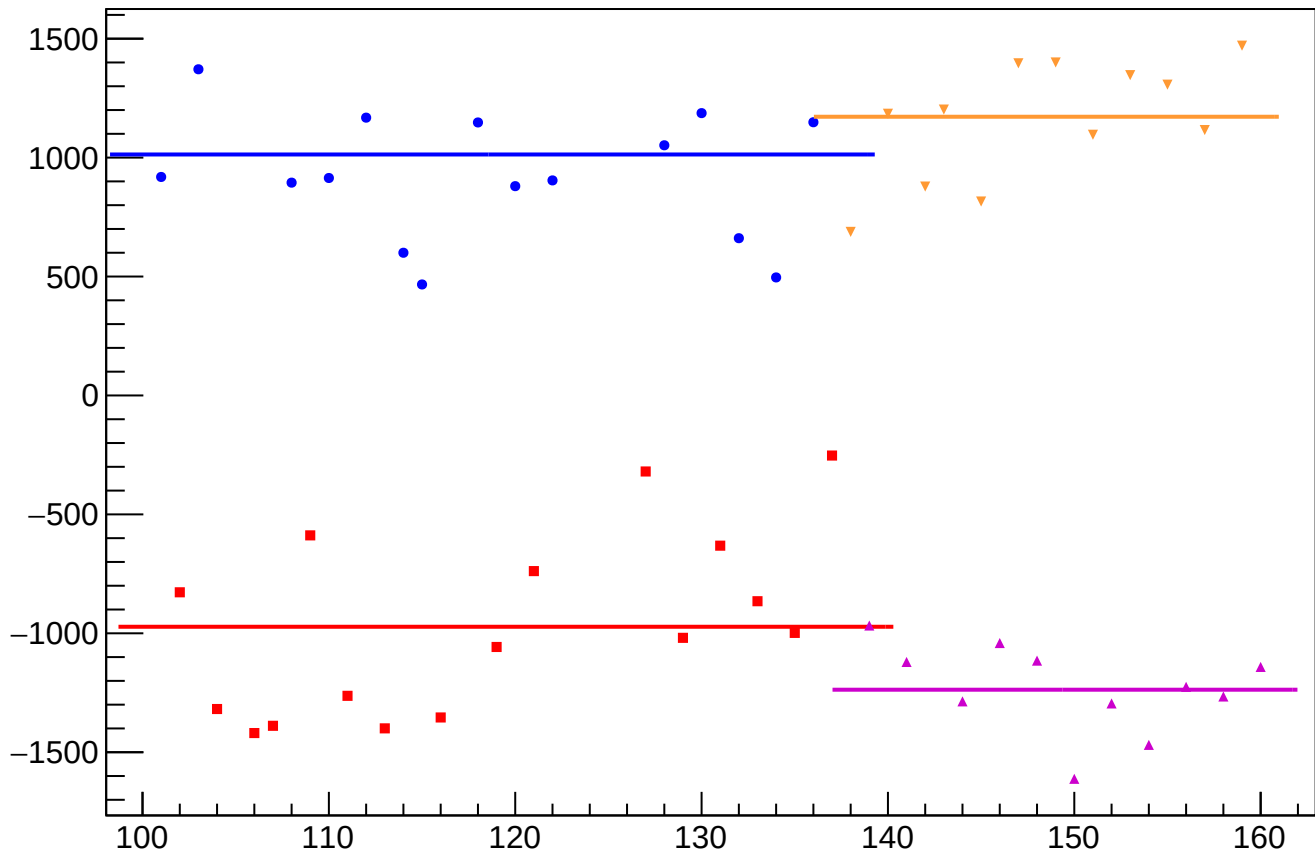
$\chi^2/\text{NDF}$ : 181571626575

dit\_usr\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 442.162 $\pm$ 0.000  $\chi^2$ /NDF: 204015999343694089140945697316947361792.0/14  
 Left Out: 134.562 $\pm$ 0.000  $\chi^2$ /NDF: 1123122265403287497024317633834516480.0/11  
 Right Out: -394.033 $\pm$ 0.000  $\chi^2$ /NDF: 105882611624182009489804426207740035072.0/15  
 Left In: -136.040 $\pm$ 0.000  $\chi^2$ /NDF: 1011093061479650527261127450495549440.0/10  
 All: 6.795 $\pm$ 0.000  $\chi^2$ /NDF: 57598156309211

dit\_usr\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

Left Out: 1171.807+/-0.000

Right Out: -972.465+/-0.000

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -39.225+/-0.000  $\chi^2/\text{NDF}$ : 2749183771125436

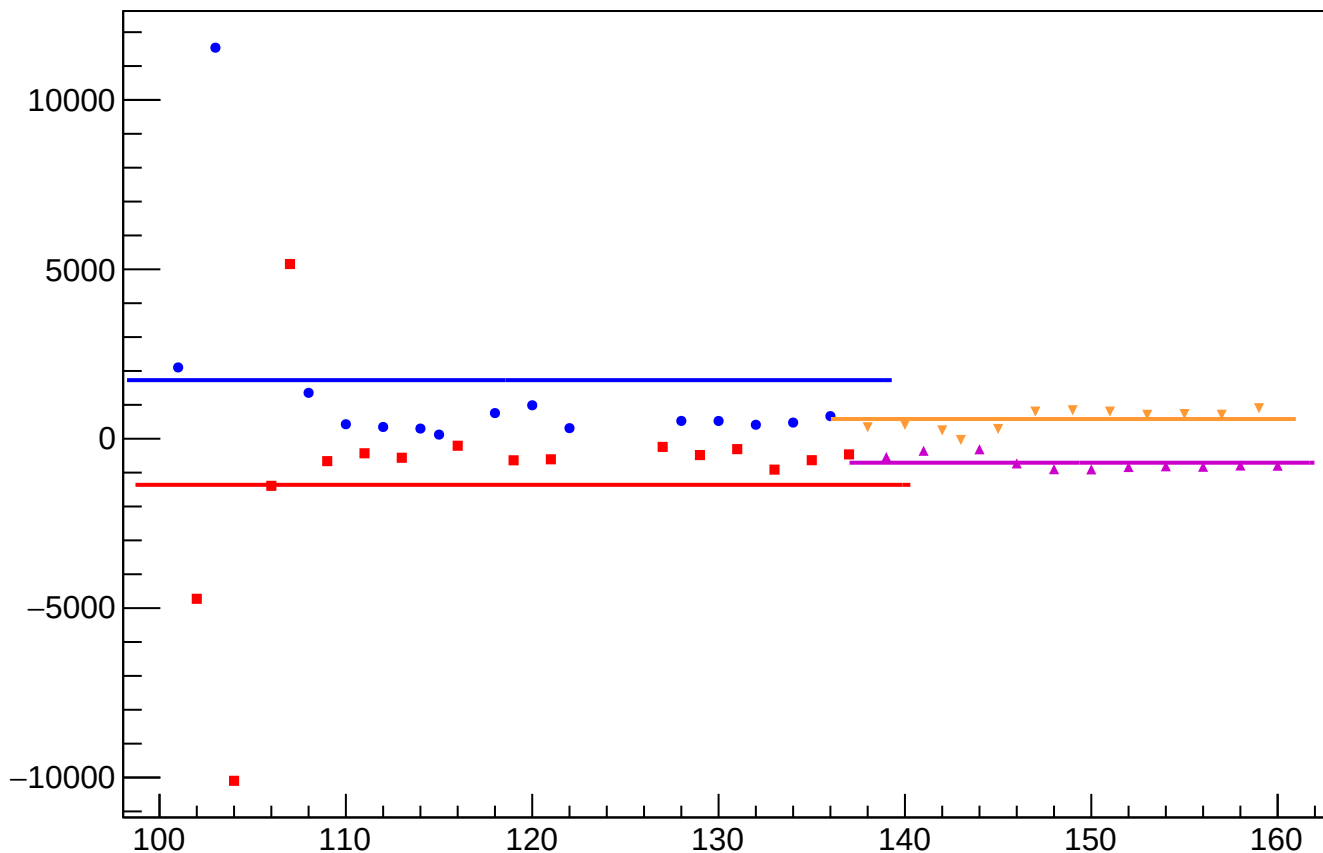
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: -308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

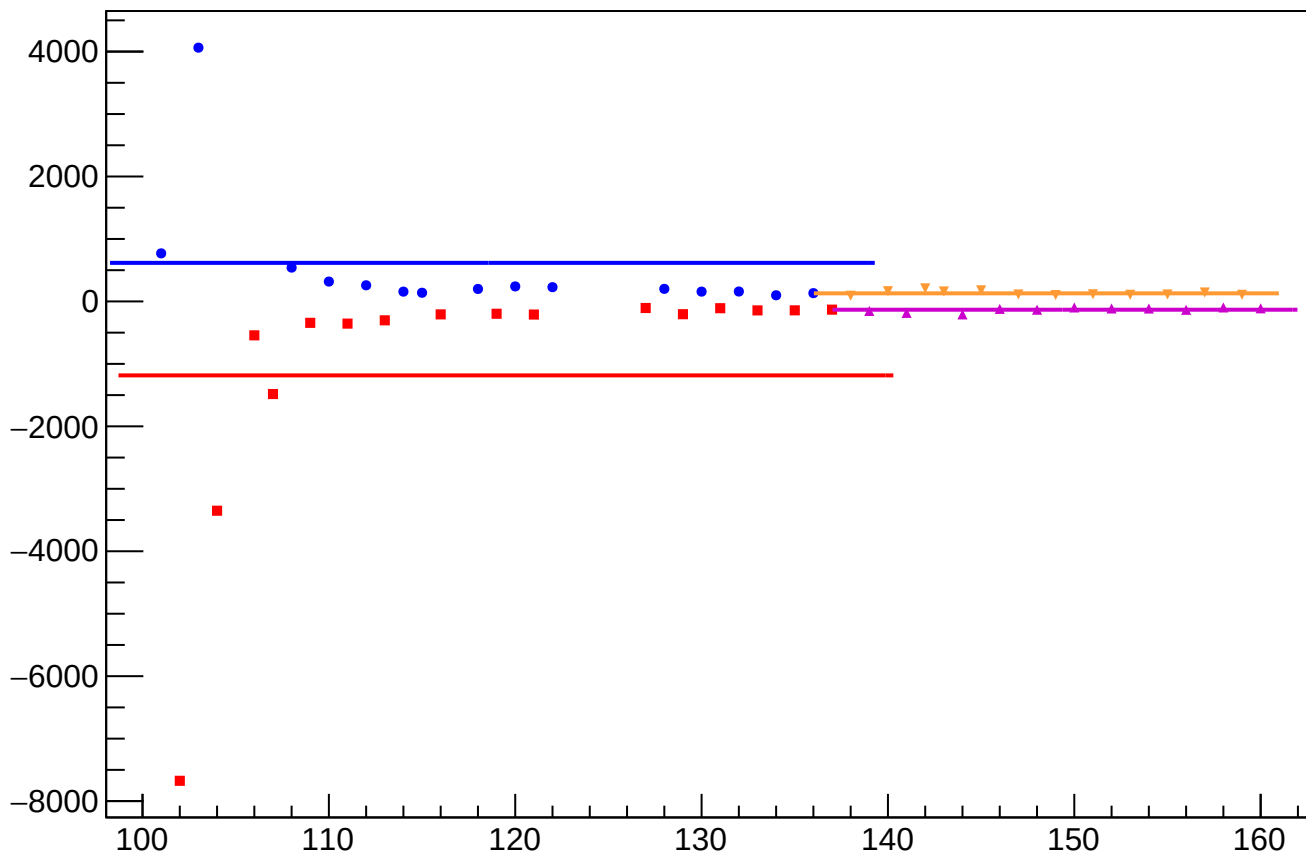
# dit\_atl1\_coil6\_mean vs Slug, Sign Corrected



Left: -66.378 +/- 0.000  $\chi^2/\text{NDF}$ : 8728806118871986  
 Right In: 1729.013 +/- 0.000  $\chi^2/\text{NDF}$ : 6413121297273347408075624116507964866560.0/14  
 Right: 162.918 +/- 0.000  $\chi^2/\text{NDF}$ : 159853161210173  
 Left Out: 582.152 +/- 0.000  $\chi^2/\text{NDF}$ : 70083772647831486125732989768801714176.0/11  
 In: 297.546 +/- 0.000  $\chi^2/\text{NDF}$ : 87151740911002983  
 Right Out: -1360.914 +/- 0.000  $\chi^2/\text{NDF}$ : 6431605933148863413038417850186506174464.0/15  
 Out: -237.598 +/- 0.000  $\chi^2/\text{NDF}$ : 795753517913564  
 Left In: -707.889 +/- 0.000  $\chi^2/\text{NDF}$ : 38116486188817980699032426002432131072.0/10  
 All: 29.296 +/- 0.000  $\chi^2/\text{NDF}$ : 1689851779226

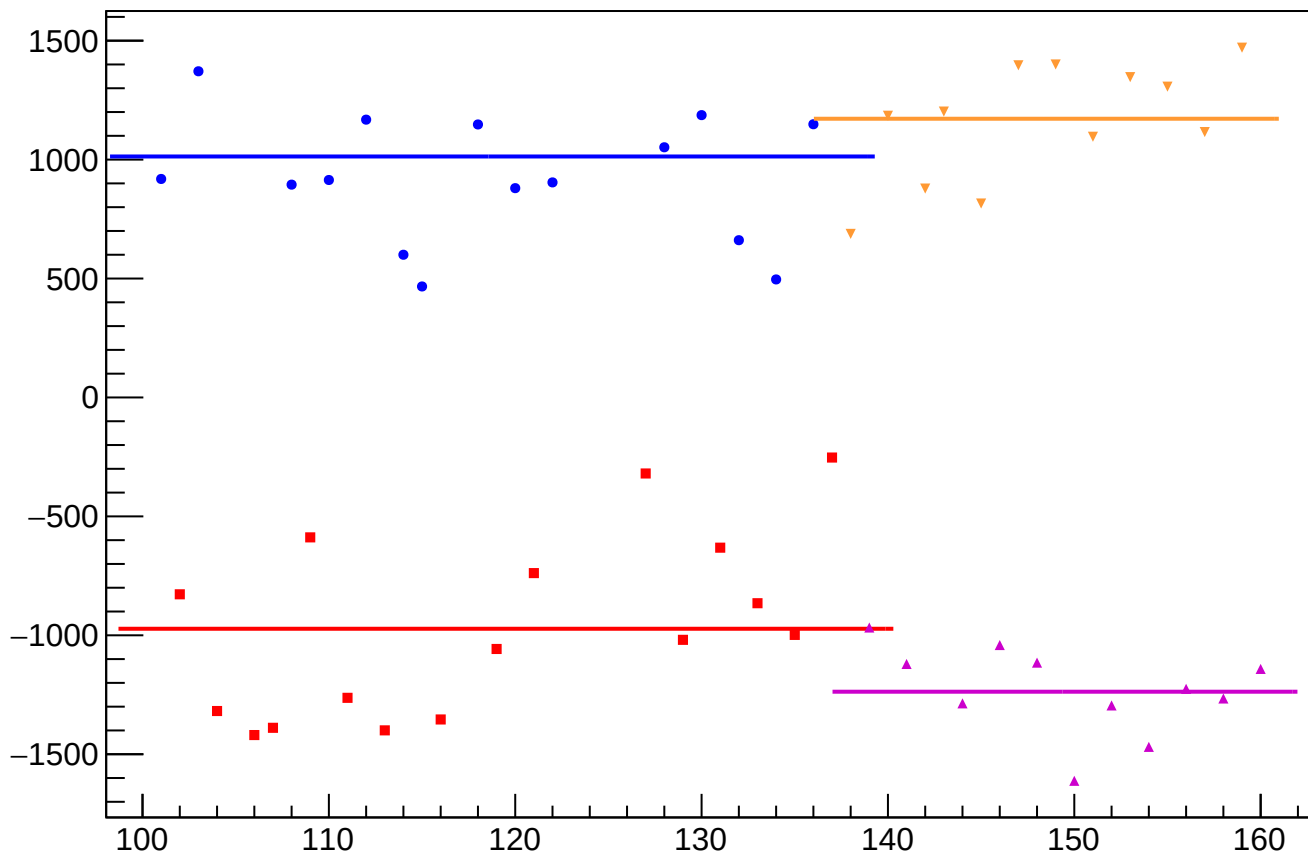


# dit\_atl1\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 617.343+/-0.000  $\chi^2/\text{NDF}$ : 792366012985954198345317750268755968000.0/14  
 Left Out: 129.339+/-0.000  $\chi^2/\text{NDF}$ : 987271298758703212489370439899938816.0/11  
 Right Out: -1184.322+/-0.000  $\chi^2/\text{NDF}$ : 3167423043121242666563535820496559931392.0/15  
 Left In: -132.869+/-0.000  $\chi^2/\text{NDF}$ : 1091839085664014112201463155711279104.0/10  
 All: -124.871+/-0.000  $\chi^2/\text{NDF}$ : 51271793033

dit\_atl1\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

Left Out: 1171.807+/-0.000

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

Right Out: -972.465+/-0.000

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -39.225+/-0.000  $\chi^2/\text{NDF}$ : 2749183771125436

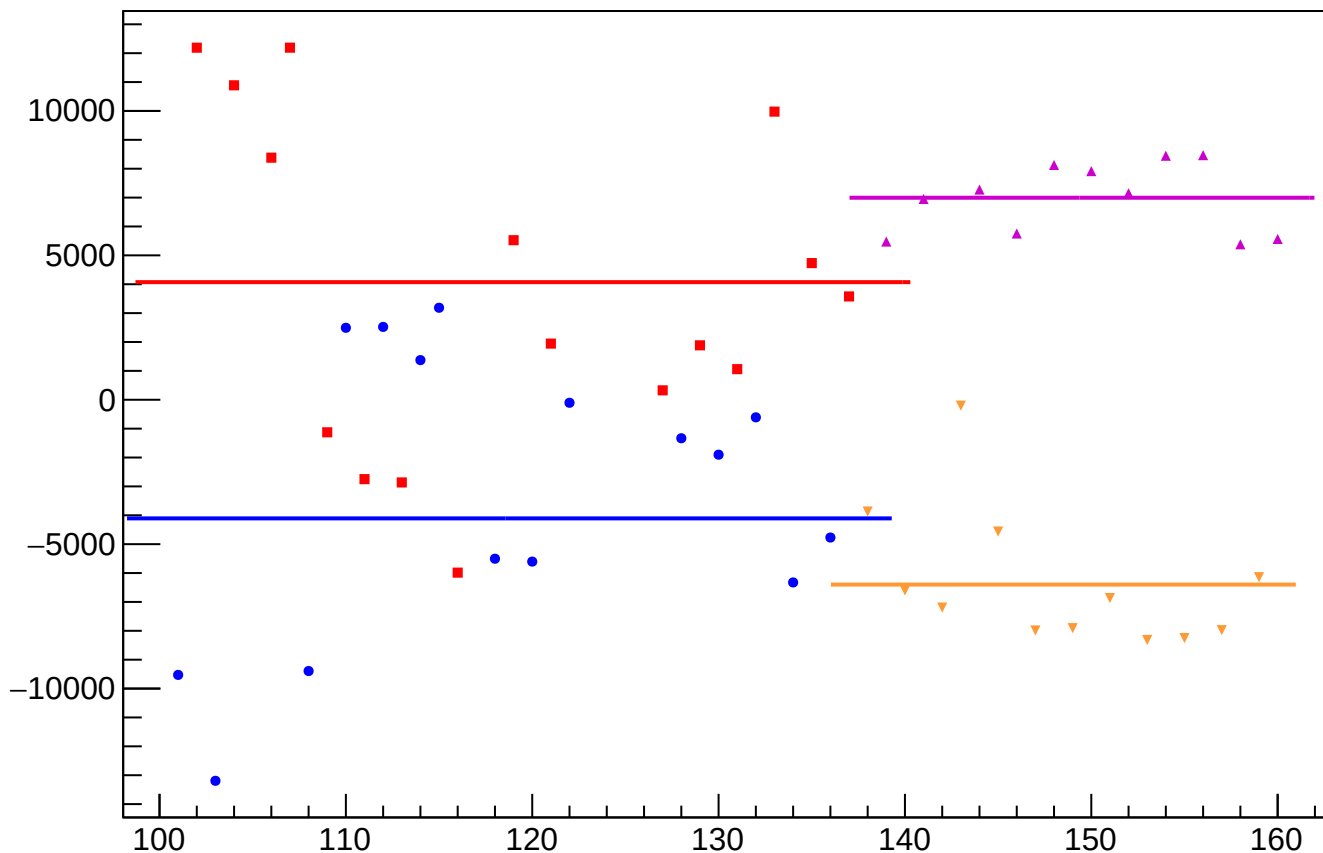
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: 308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

# dit\_atl2\_coil6\_mean vs Slug, Sign Corrected



Right In: -4107.443+/-0.000

Left Out: -6398.906+/-0.000

Right Out: 4072.120+/-0.000

Left In: 6994.812+/-0.000

$\chi^2/\text{NDF}$ : 14527436324982031454277780831211819630592.0/14

$\chi^2/\text{NDF}$ : 4560292812943761149136938286094472970240.0/11

$\chi^2/\text{NDF}$ : 20367171423690168095778854678764929941504.0/15

$\chi^2/\text{NDF}$ : 1231738289385705389055875270097690951680.0/10

Left: 334.389+/-0.000  $\chi^2/\text{NDF}$ : 8822007925031666

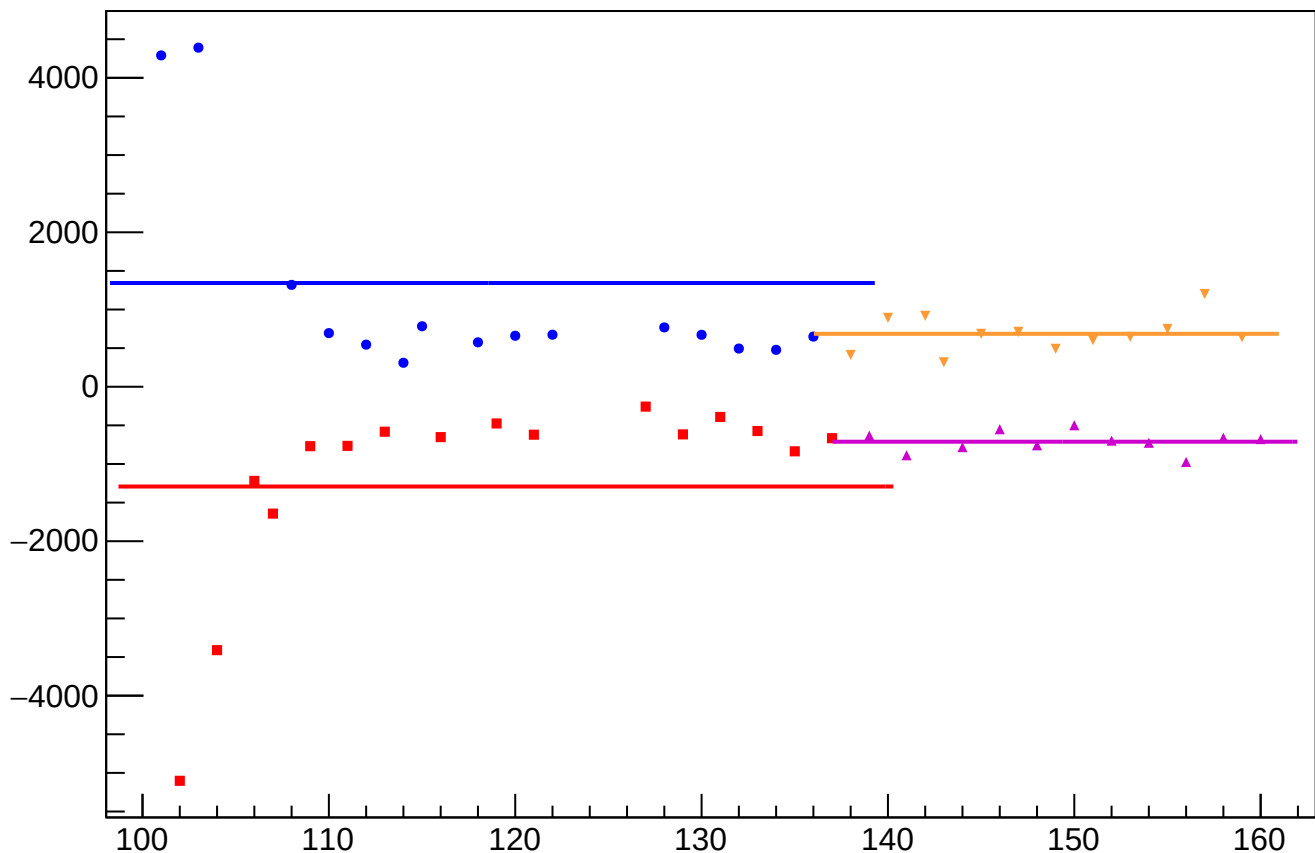
Right: 38.278+/-0.000  $\chi^2/\text{NDF}$ : 5690231407009786

In: 2414.162+/-0.000  $\chi^2/\text{NDF}$ : 6274970680925114

Out: -1981.339+/-0.000  $\chi^2/\text{NDF}$ : 67205872968541

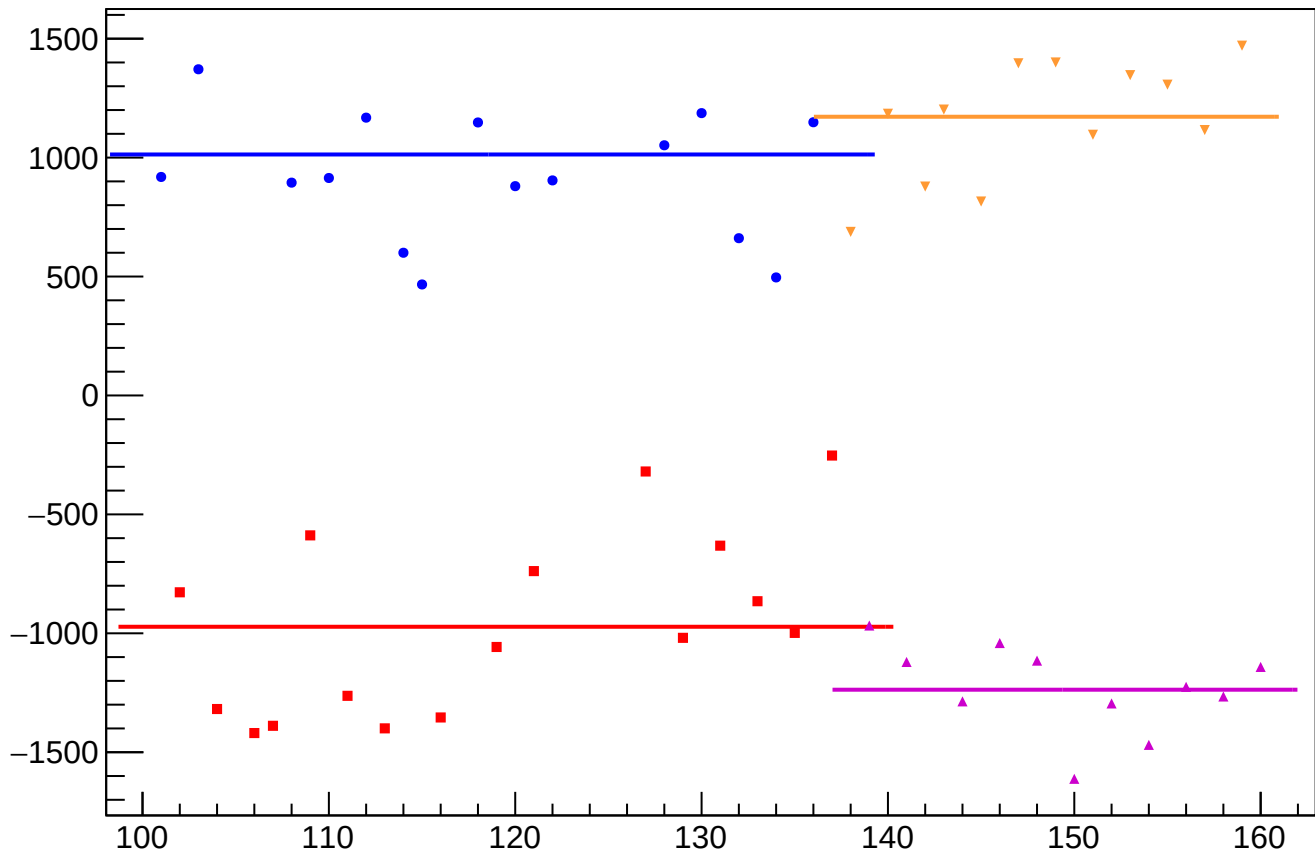
All: 210.837+/-0.000  $\chi^2/\text{NDF}$ : 145189636575

dit\_atl2\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 1343.321 +/- 0.000  $\chi^2/\text{NDF}$ : 1317478352429773686550511077330771771392.0/14  
 Left Out: 685.307 +/- 0.000  $\chi^2/\text{NDF}$ : 46333249080985813233742212153458294784.0/11  
 Right Out: -1291.796 +/- 0.000  $\chi^2/\text{NDF}$ : 1323568917008872977905960011586991030272.0/15  
 Left In: -711.726 +/- 0.000  $\chi^2/\text{NDF}$ : 15873419979583207307068429247017123840.0/10  
 All: -6.683 +/- 0.000  $\chi^2/\text{NDF}$ : 5884601406998

dit\_atl2\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

Left Out: 1171.807+/-0.000

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

Right Out: -972.465+/-0.000

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -39.225+/-0.000  $\chi^2/\text{NDF}$ : 2749183771125436

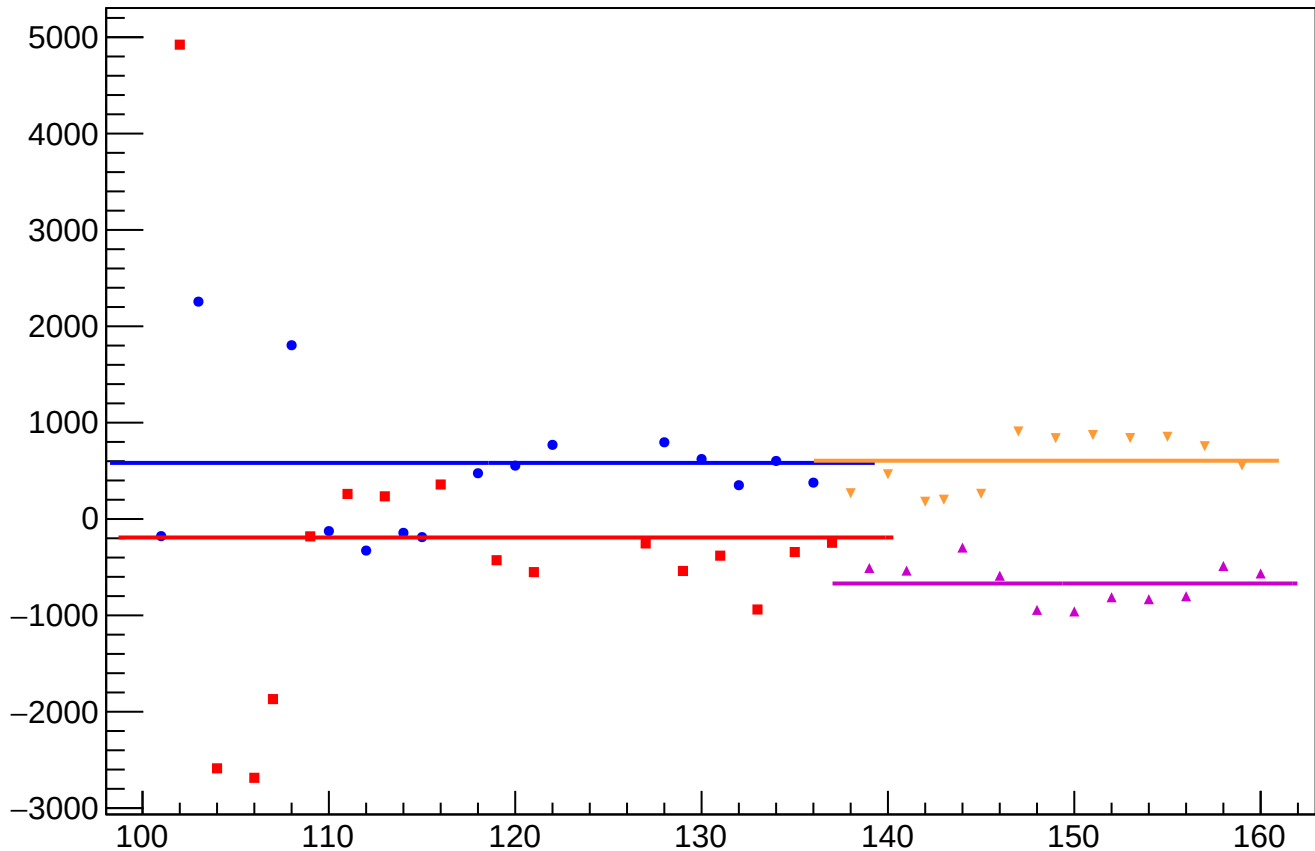
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: 308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

# dit\_atr1\_coil6\_mean vs Slug, Sign Corrected



Right In: 582.390+/-0.000

$\chi^2/\text{NDF}$ : 338796567623032040072791996460490031104.0/14

Left Out: 605.074+/-0.000

$\chi^2/\text{NDF}$ : 67912515245446196729937130882705915904.0/11

Right Out: -191.587+/-0.000

$\chi^2/\text{NDF}$ : 2168762120552346223416743005020716269568.0/15

Left In: -669.155+/-0.000

$\chi^2/\text{NDF}$ : 39481195240563617253842230522616479744.0/10

Left: -35.507+/-0.000  $\chi^2/\text{NDF}$ : 8534436967394536

Right: 190.108+/-0.000

$\chi^2/\text{NDF}$ : 270460615635385

In: -152.784+/-0.000

$\chi^2/\text{NDF}$ : 9754243982311555

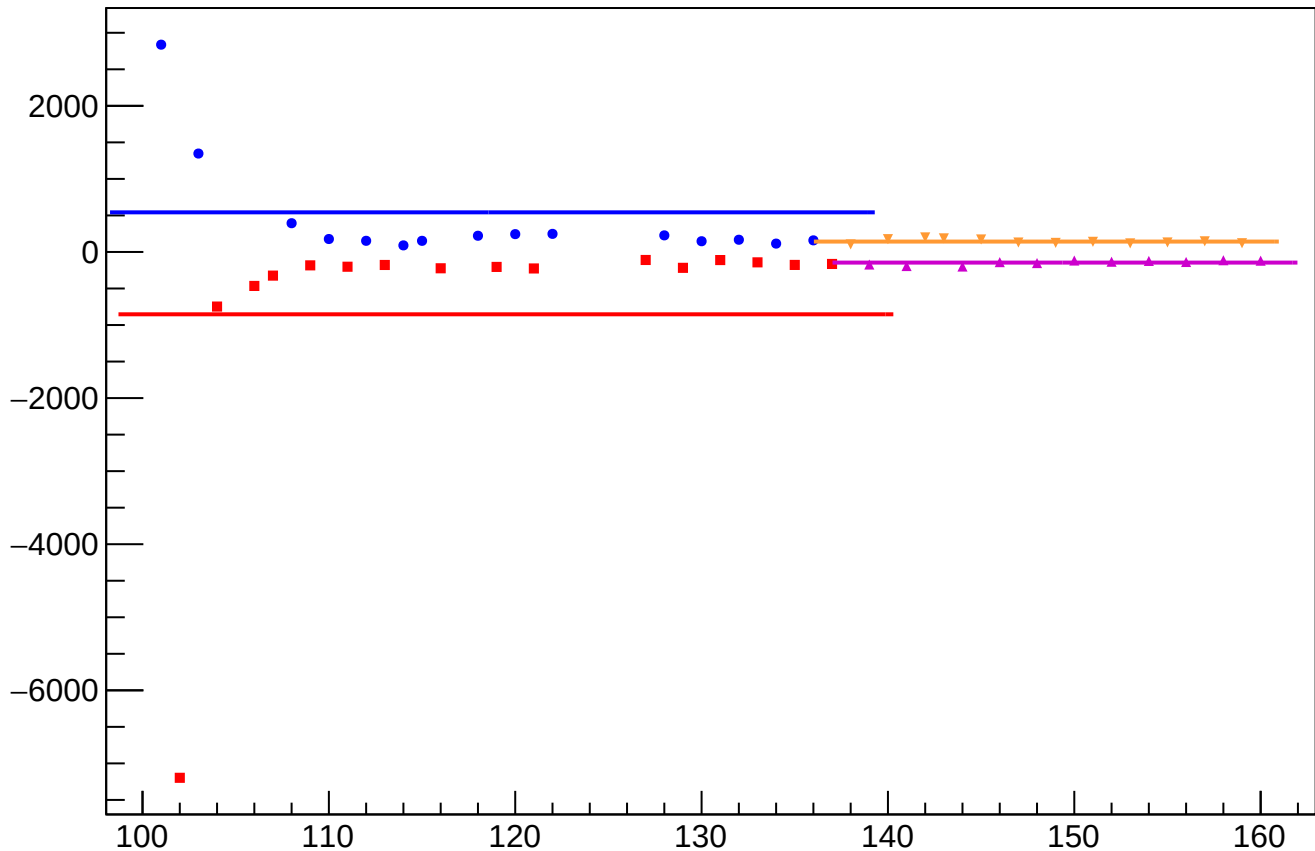
Out: 268.975+/-0.000

$\chi^2/\text{NDF}$ : 2481404905102664

All: 58.630+/-0.000

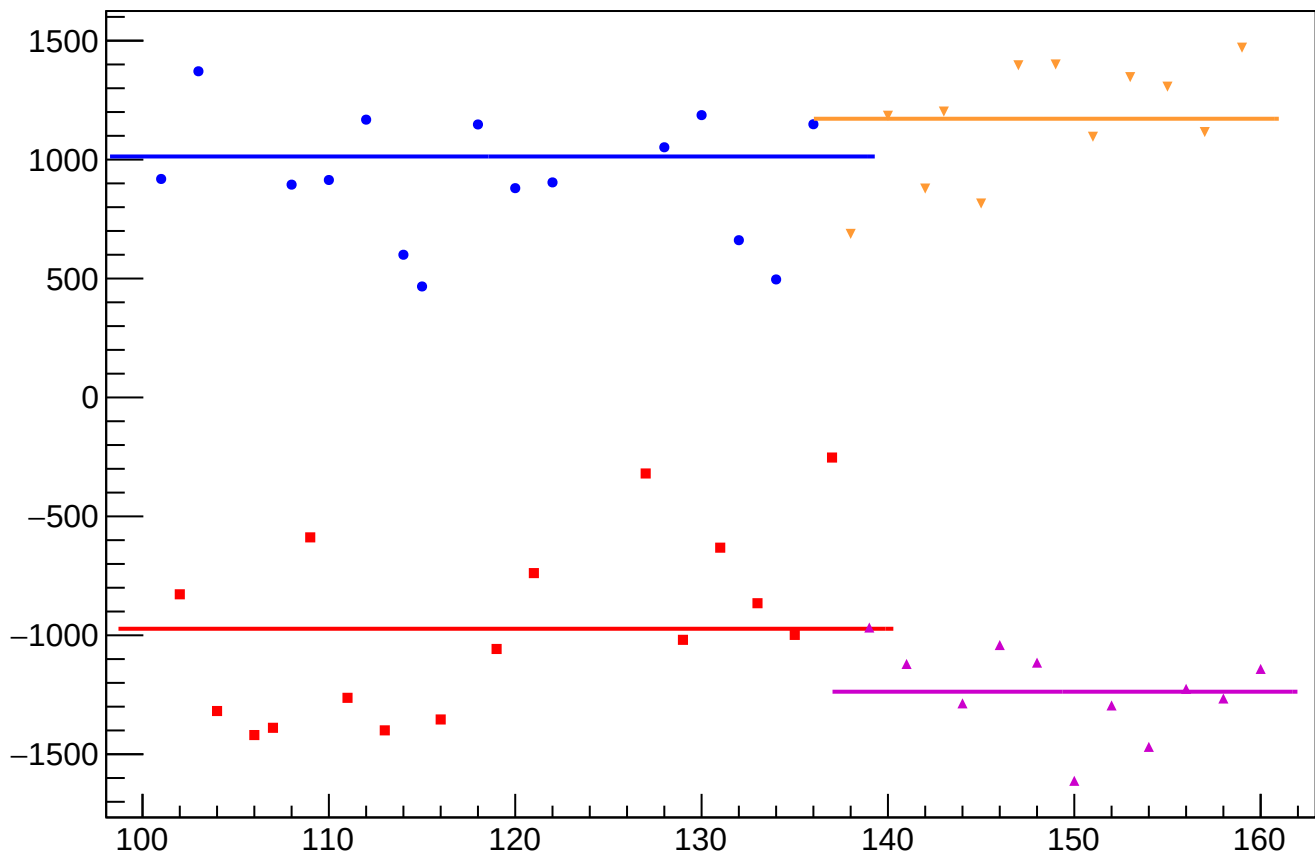
$\chi^2/\text{NDF}$ : 3597086809072

dit\_atr1\_coil6\_err\_mean vs Slug, Sign Corrected



Left: -2.367 +/- 0.000  $\chi^2/\text{NDF}$ : 39549748395756711  
 Right In: 542.328 +/- 0.000  $\chi^2/\text{NDF}$ : 414378812003795549649034048462817067008.0/14  
 Right: -164.982 +/- 0.000  $\chi^2/\text{NDF}$ : 36290648240362  
 Left Out: 142.333 +/- 0.000  $\chi^2/\text{NDF}$ : 699754234994212847043453967042347008.0/11  
 In: 138.288 +/- 0.000  $\chi^2/\text{NDF}$ : 5955245908966435  
 Right Out: -853.203 +/- 0.000  $\chi^2/\text{NDF}$ : 2574076381441046787772449137133917044736.0/15  
 Out: -277.669 +/- 0.000  $\chi^2/\text{NDF}$ : 295694420364328  
 Left In: -145.502 +/- 0.000  $\chi^2/\text{NDF}$ : 782066035610550272928661281894825984.0/10  
 All: -70.218 +/- 0.000  $\chi^2/\text{NDF}$ : 368889410963

dit\_atr1\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

Left Out: 1171.807+/-0.000

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

Right Out: -972.465+/-0.000

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -39.225+/-0.000  $\chi^2/\text{NDF}$ : 2749183771125436

Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

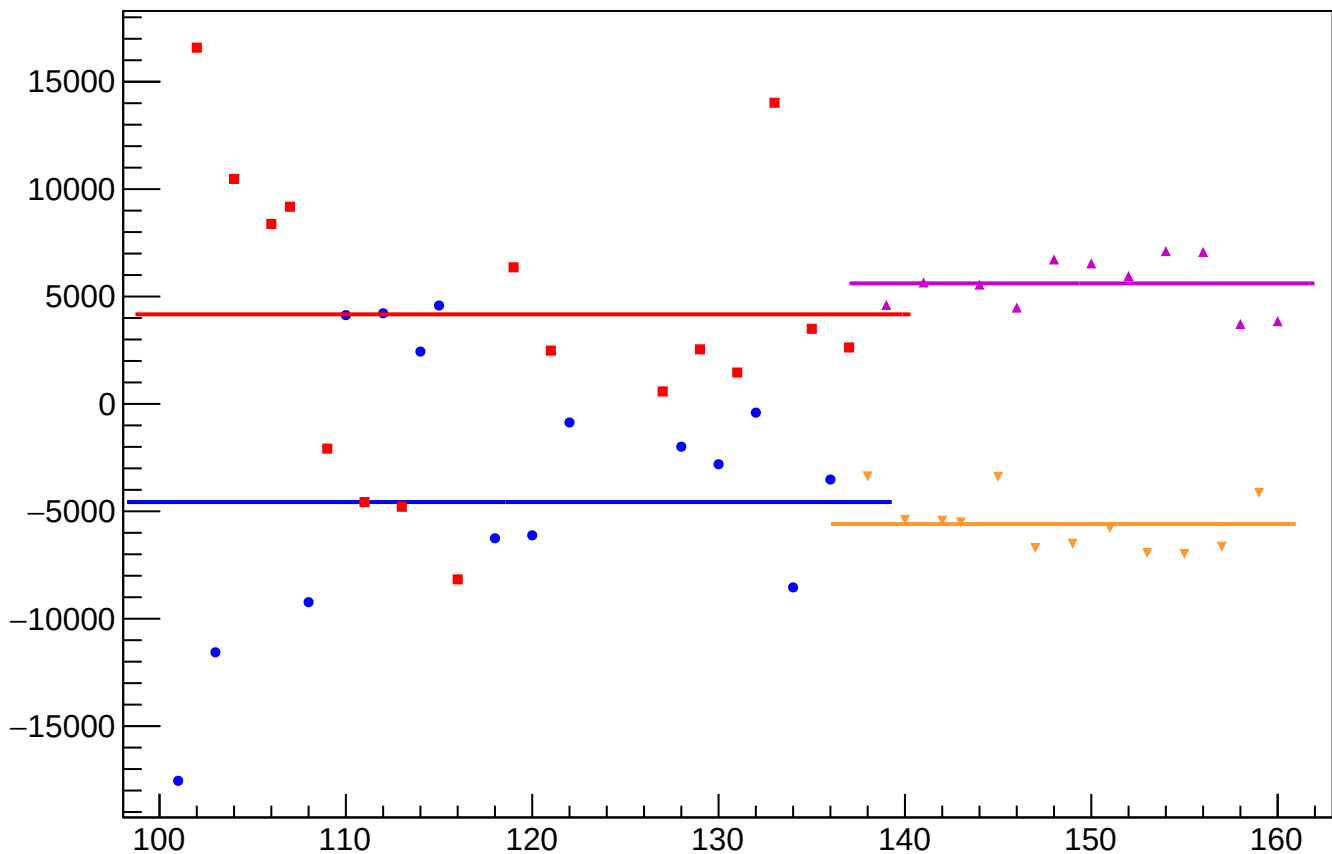
In: -308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668



# dit\_atr2\_coil6\_mean vs Slug, Sign Corrected



Right In: -4568.297+/-0.000

Left Out: -5592.357+/-0.000

Right Out: 4170.773+/-0.000

Left In: 5613.024+/-0.000

$\chi^2/\text{NDF}$ : 24195052148165719540713110921977756909568.0/14

$\chi^2/\text{NDF}$ : 1502507998590915650067934753088681803776.0/11

$\chi^2/\text{NDF}$ : 30967248832187912041113909559481103024128.0/15

$\chi^2/\text{NDF}$ : 1272210659936261957248133173503170969600.0/10

Left: 40.816+/-0.000  $\chi^2/\text{NDF}$ : 60468092890171926

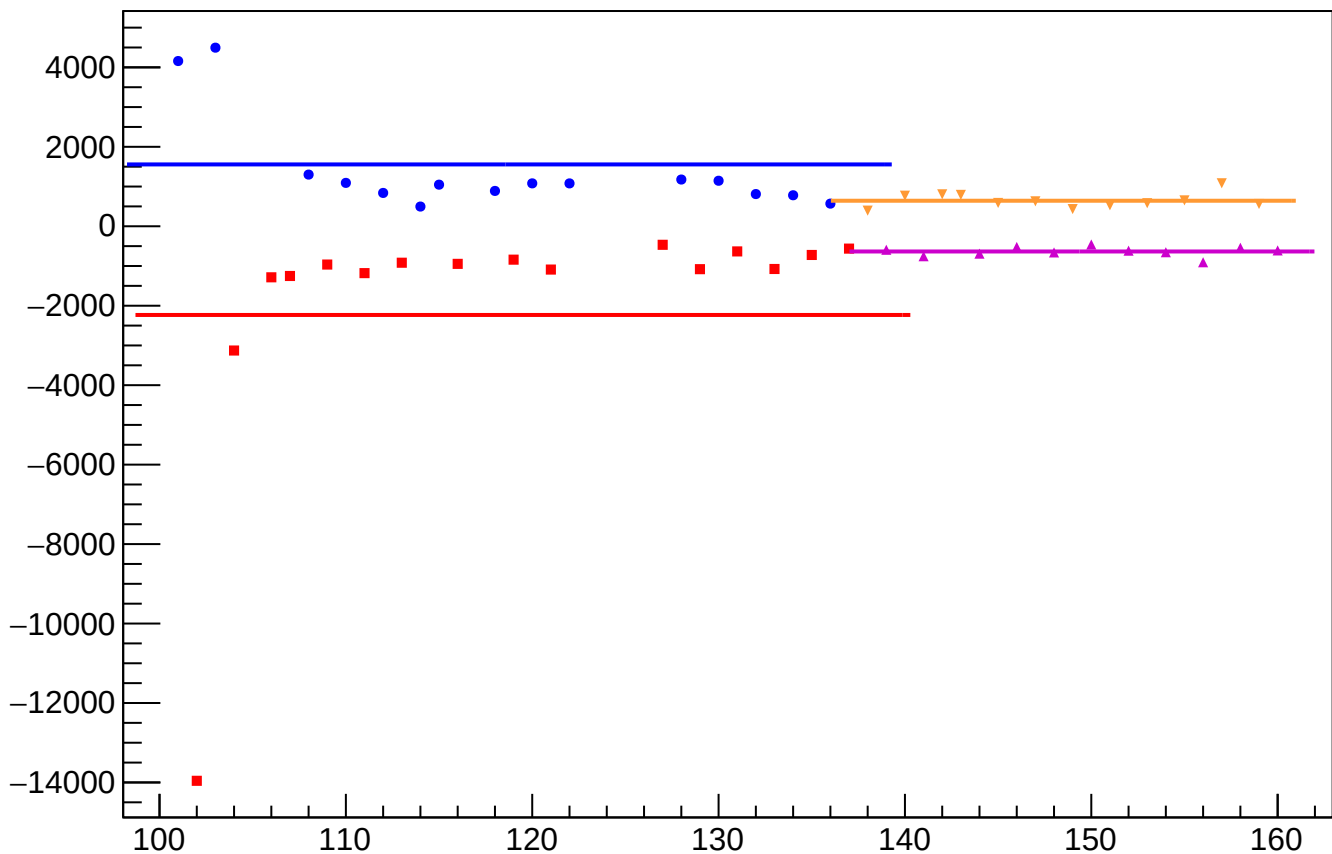
Right: -138.996+/-0.000  $\chi^2/\text{NDF}$ : 80283768430562

In: 1412.339+/-0.000  $\chi^2/\text{NDF}$ : 6498537450862054

Out: -1473.440+/-0.000  $\chi^2/\text{NDF}$ : 69224914404037

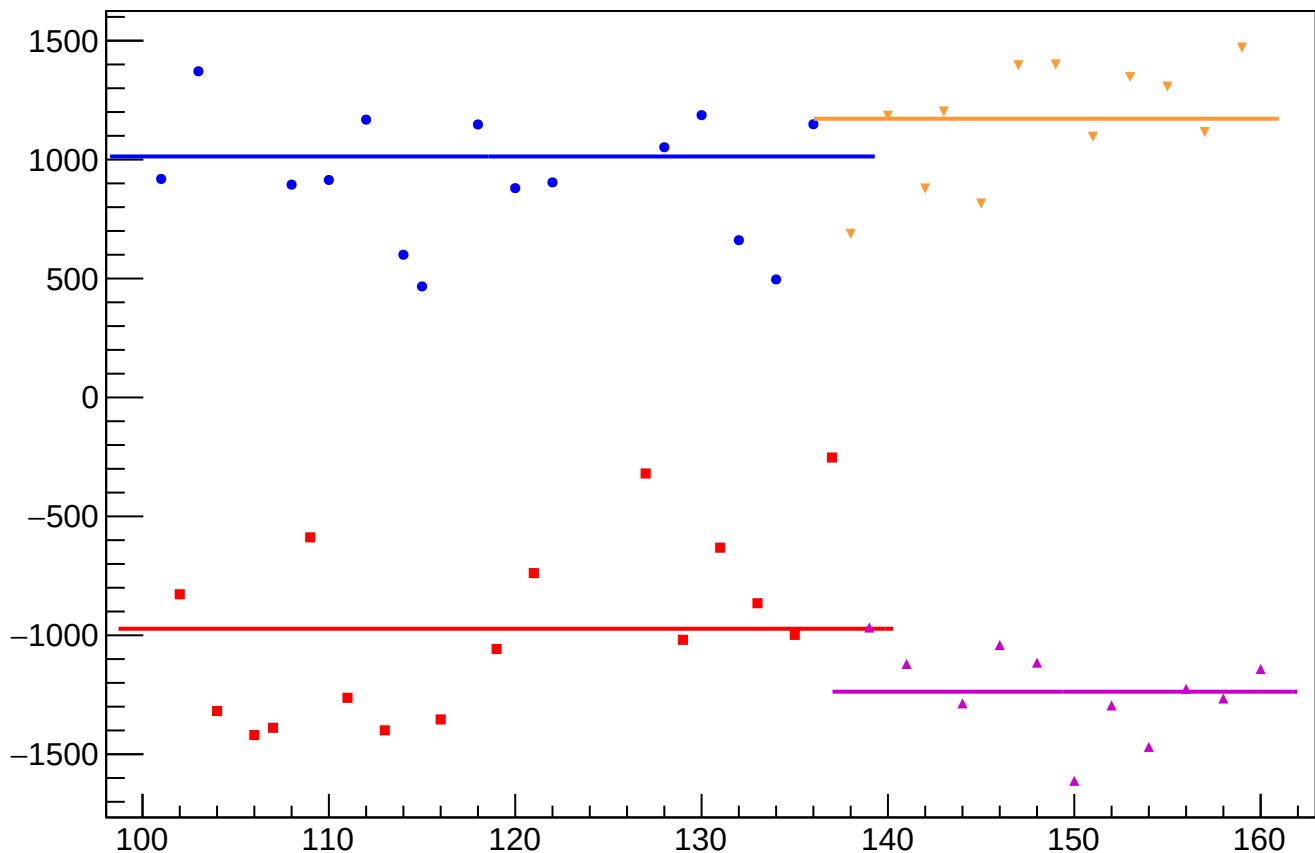
All: -34.210+/-0.000  $\chi^2/\text{NDF}$ : 140776657149

dit\_atr2\_coil6\_err\_mean vs Slug, Sign Corrected



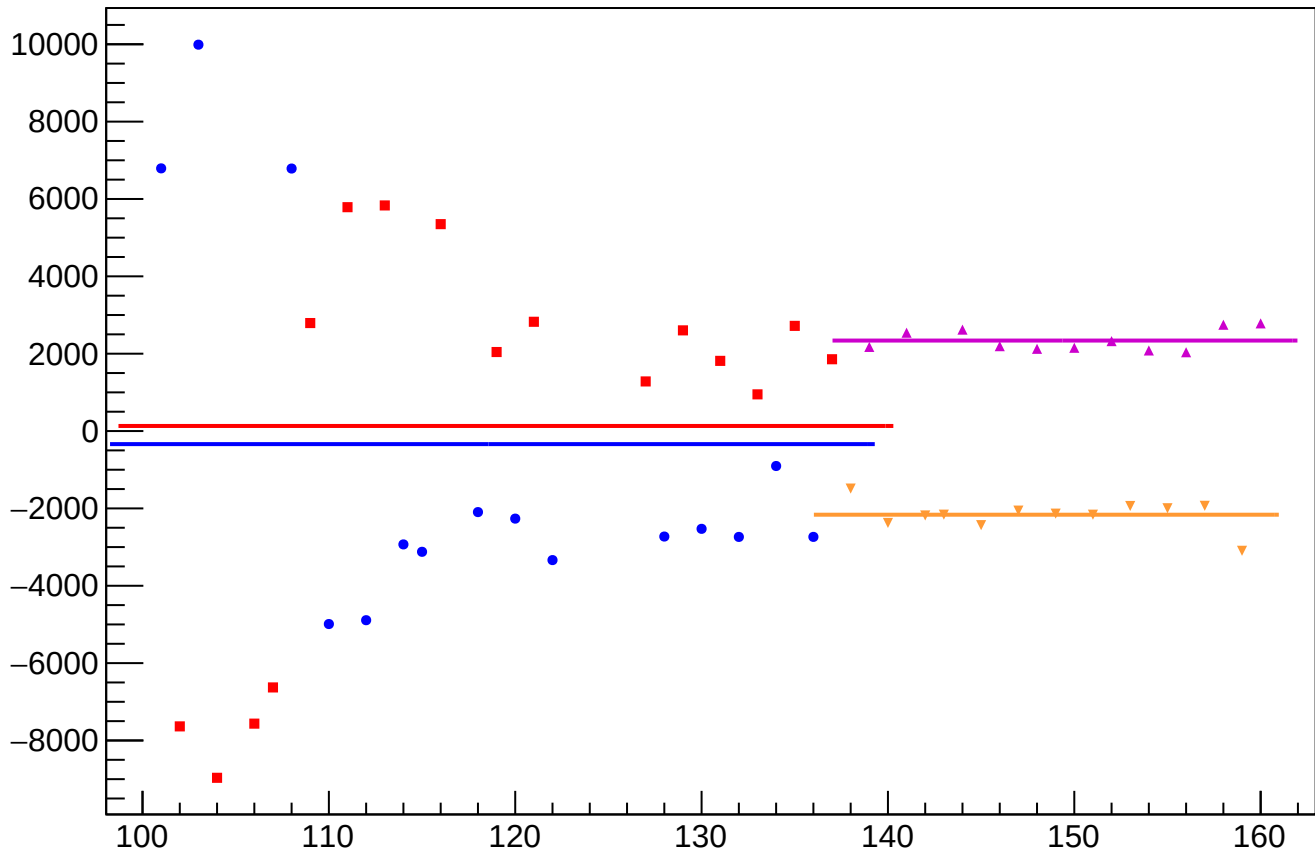
Right In: 1556.763 $\pm$ 0.000  $\chi^2$ /NDF: 1139364239218600567191855131756930793472.0/14  
 Left Out: 642.639 $\pm$ 0.000  $\chi^2$ /NDF: 29931346030134316080818937490076336128.0/11  
 Right Out: -2232.520 $\pm$ 0.000  $\chi^2$ /NDF: 8990395725533930134878595569706942332928.0/15  
 Left In: -634.562 $\pm$ 0.000  $\chi^2$ /NDF: 12308442809403031190669556314642841600.0/10  
 All: -151.463 $\pm$ 0.000  $\chi^2$ /NDF: 15746462164

dit\_atr2\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807+/-0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: -972.465+/-0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: -1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10  
 All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

dit\_sam1\_coil6\_mean vs Slug, Sign Corrected



Right In: -337.865+/-0.000

$\chi^2/\text{NDF}$ : 15152515933007079891661097940762081886208.0/14

Left Out: -2162.857+/-0.000

$\chi^2/\text{NDF}$ : 126332275232930257638482620391759020032.0/11

Right Out: 131.545+/-0.000

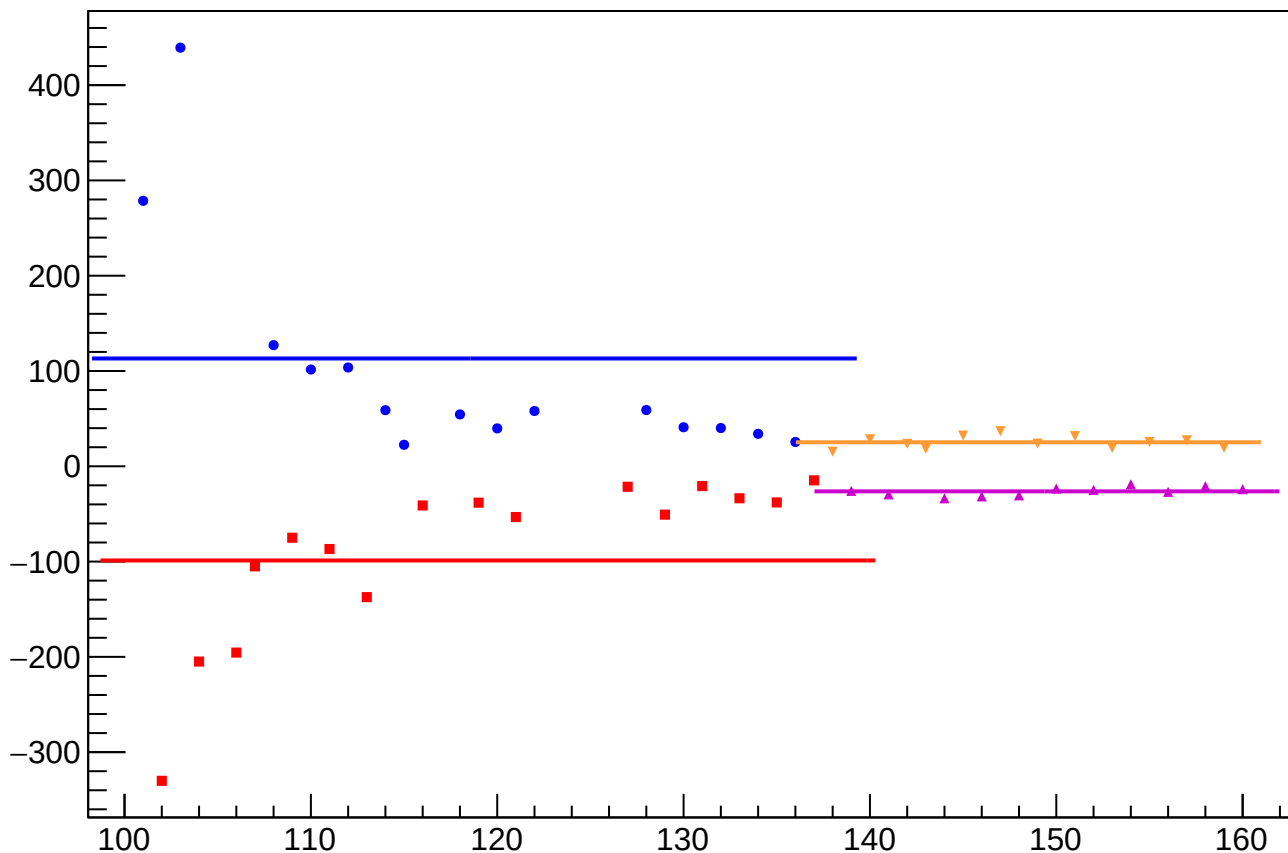
$\chi^2/\text{NDF}$ : 16473217651078877976377424419956902068224.0/15

Left In: 2339.639+/-0.000

$\chi^2/\text{NDF}$ : 62860144247456957543810906284181422080.0/10

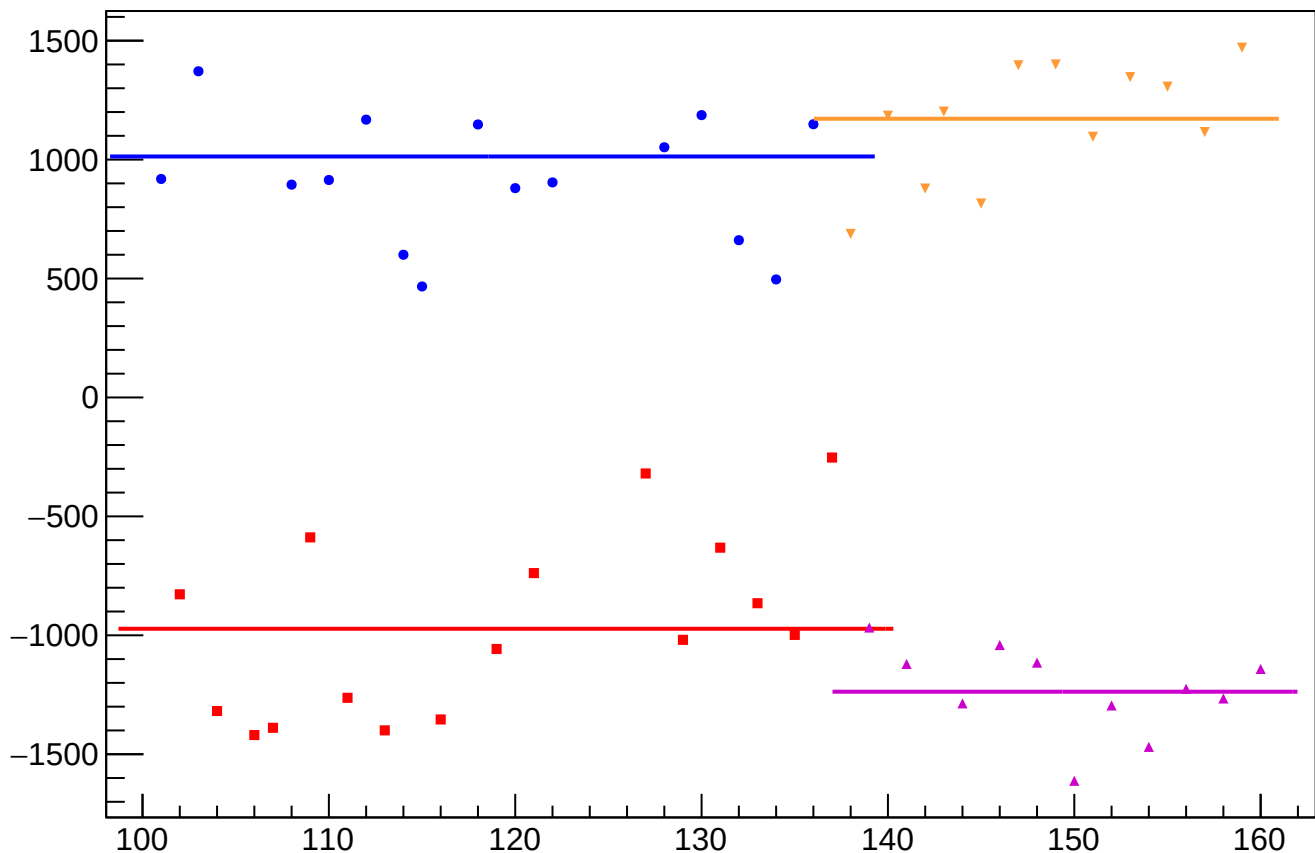
Left: 100.639+/-0.000  $\chi^2/\text{NDF}$ : 9504114139630339  
 Right: -99.949+/-0.000  $\chi^2/\text{NDF}$ : 316982138957514  
 In: 1234.934+/-0.000  $\chi^2/\text{NDF}$ : 1794842889484232  
 Out: -1194.883+/-0.000  $\chi^2/\text{NDF}$ : 18629471707312  
 All: 16.944+/-0.000  $\chi^2/\text{NDF}$ : 4123318495094

dit\_sam1\_coil6\_err\_mean vs Slug, Sign Corrected



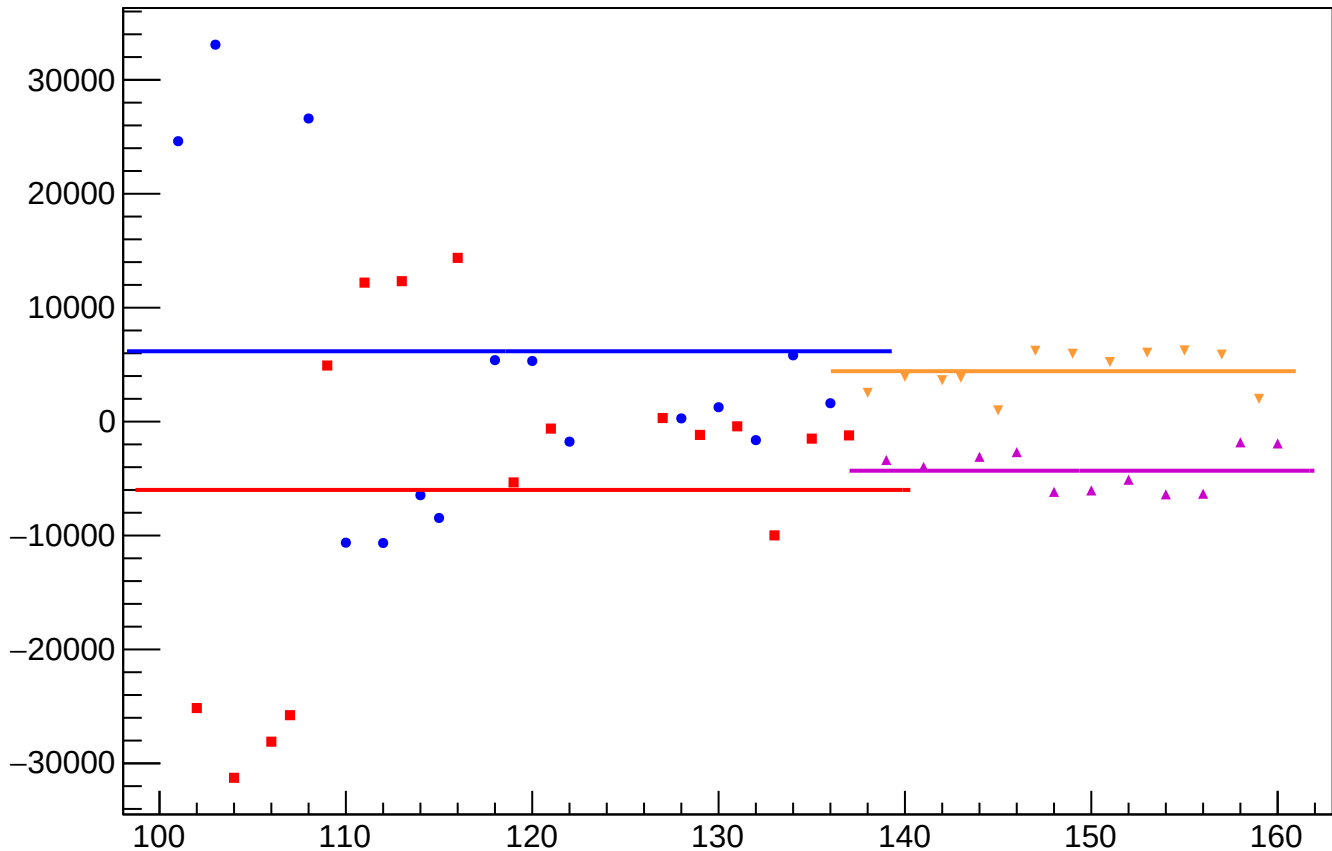
Left: -0.703 +/- 0.000  $\chi^2/\text{NDF}$ : 12737969644467641  
 Right In: 113.134 +/- 0.000  $\chi^2/\text{NDF}$ : 9989638354332004017458192433874468864.0/14  
 Right: 5.701 +/- 0.000  $\chi^2/\text{NDF}$ : 30279176036436111  
 Left Out: 25.204 +/- 0.000  $\chi^2/\text{NDF}$ : 35340998729966912863138320392126464.0/11  
 In: 31.211 +/- 0.000  $\chi^2/\text{NDF}$ : 174228215351618200  
 Right Out: -98.833 +/- 0.000  $\chi^2/\text{NDF}$ : 5510365308590426333953610701260980224.0/15  
 Out: -27.125 +/- 0.000  $\chi^2/\text{NDF}$ : 1147829075591207  
 Left In: -26.331 +/- 0.000  $\chi^2/\text{NDF}$ : 18142873408814573481950758043648000.0/10  
 All: 1.969 +/- 0.000  $\chi^2/\text{NDF}$ : 31584425444526

dit\_sam1\_coil6\_Ndata\_mean vs Slug, Sign Corrected



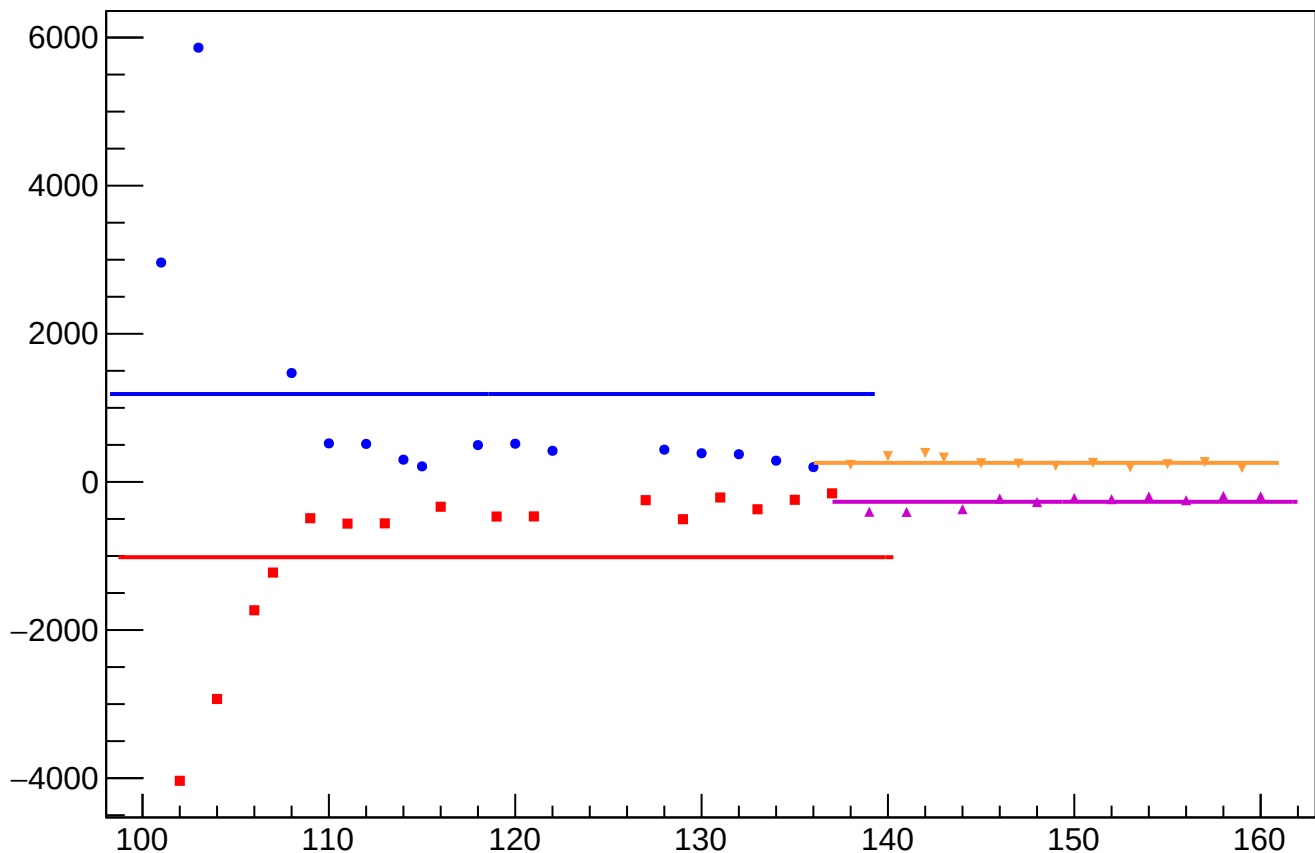
Right In: 1013.146+/-0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807+/-0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: -972.465+/-0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: -1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10  
 All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

dit\_sam2\_coil6\_mean vs Slug, Sign Corrected



Right In: 6175.493+/-0.000  $\chi^2/\text{NDF}$ : 117260877162921223967478349050708452442112.0/14  
 Left Out: 4428.101+/-0.000  $\chi^2/\text{NDF}$ : 2900138976874387724183278190835470958592.0/11  
 Right Out: -5996.727+/-0.000  $\chi^2/\text{NDF}$ : 137057710785025136543407710107916356812800.0/15  
 Left In: -4310.541+/-0.000  $\chi^2/\text{NDF}$ : 2687248811790643780000086030830396243968.0/10  
 All: 22.962+/-0.000  $\chi^2/\text{NDF}$ : 3437312552543

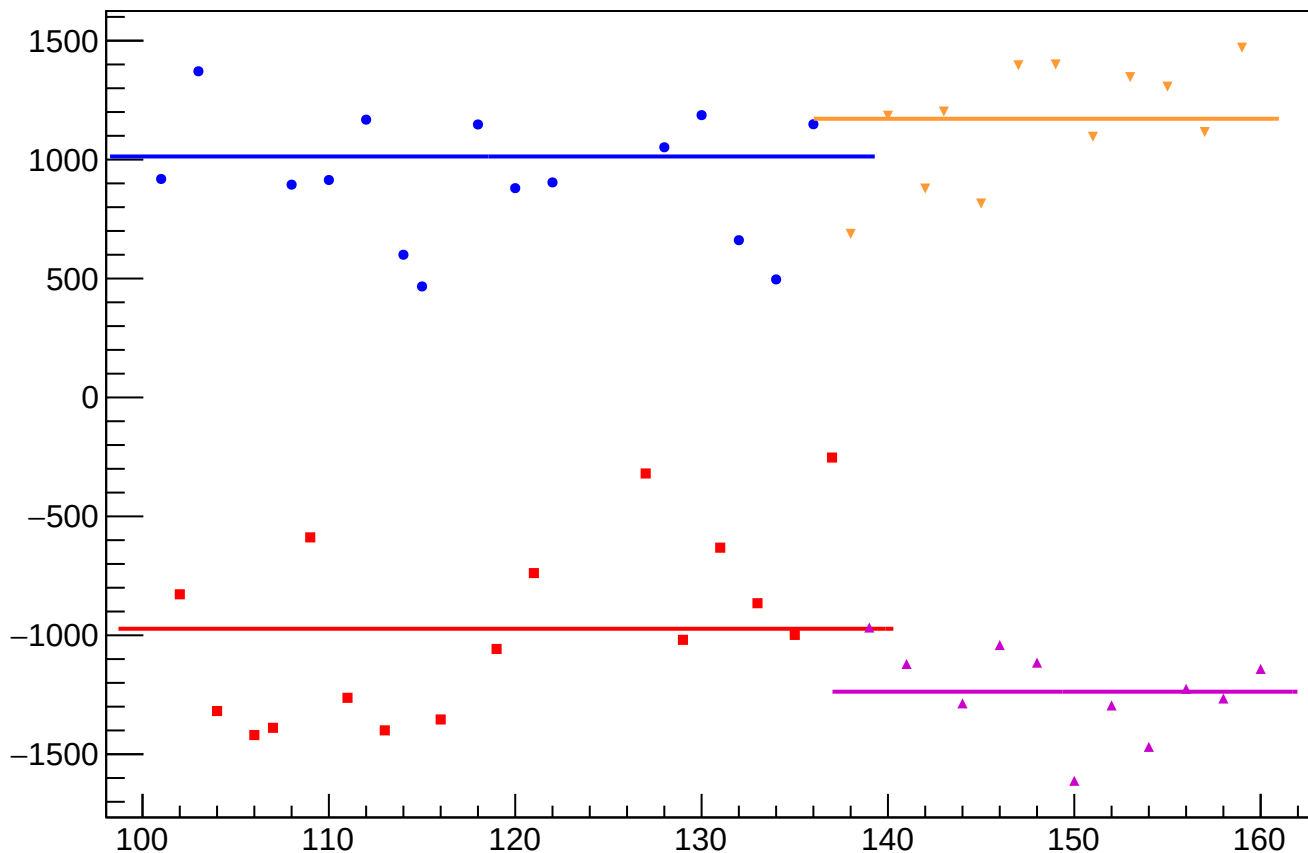
# dit\_sam2\_coil6\_err\_mean vs Slug, Sign Corrected



Left:  $-7.049 \pm 0.000$   $\chi^2/\text{NDF}: 13564373740521632$   
 Right In:  $1186.846 \pm 0.000$   $\chi^2/\text{NDF}: 1796463312802023303623210264680353234944.0/14$   
 Left Out:  $257.255 \pm 0.000$   $\chi^2/\text{NDF}: 2781253601465669157863687249484316672.0/11$   
 Right Out:  $-1016.732 \pm 0.000$   $\chi^2/\text{NDF}: 927646003466094249558391691024825057280.0/15$   
 Out:  $-280.221 \pm 0.000$   $\chi^2/\text{NDF}: 155627640866420$   
 Left In:  $-268.493 \pm 0.000$   $\chi^2/\text{NDF}: 5855734975706547823556607966386847744.0/10$   
 All:  $25.094 \pm 0.000$   $\chi^2/\text{NDF}: 4461548431254$

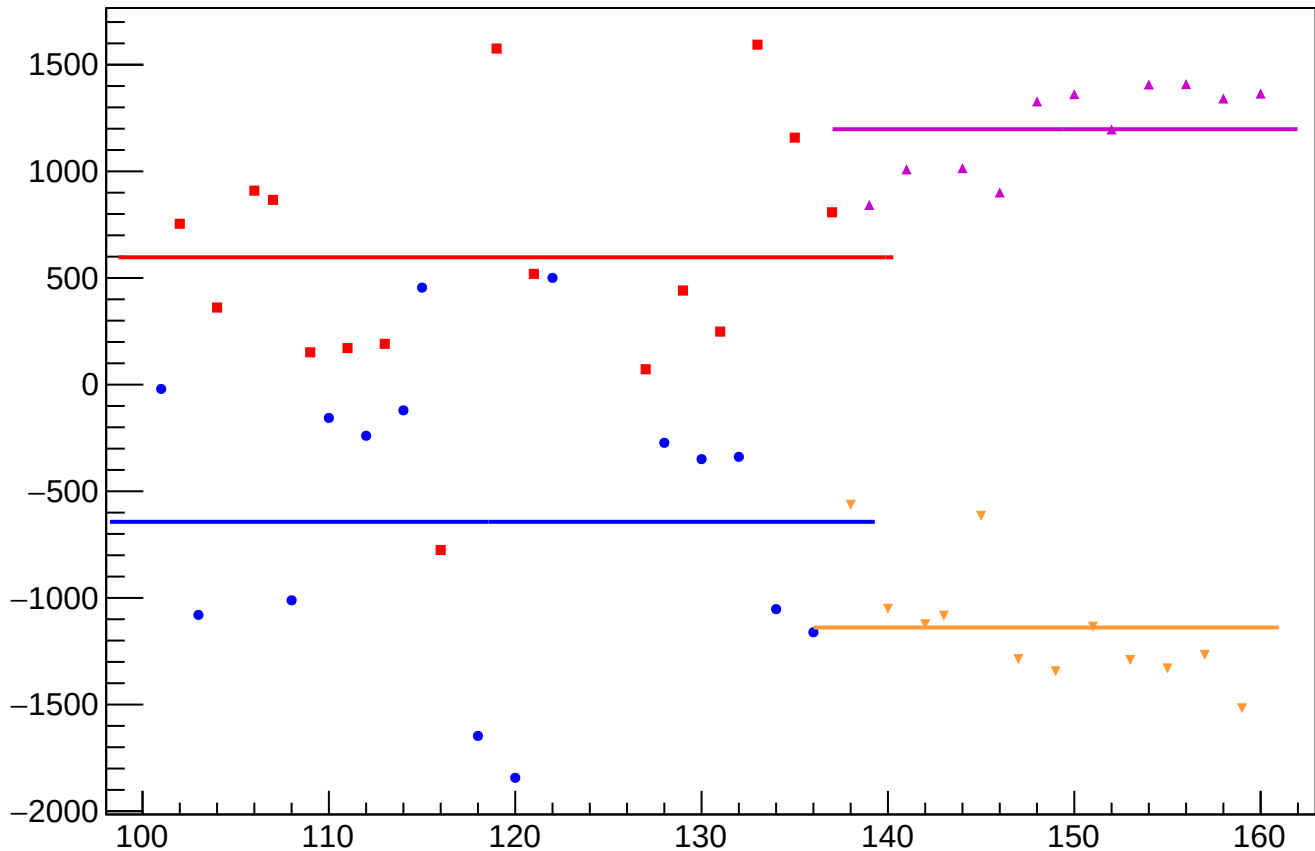


dit\_sam2\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807+/-0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: -972.465+/-0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: -1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10  
 All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

# dit\_sam3\_coil6\_mean vs Slug, Sign Corrected



Right In: -643.217+/-0.000

$\chi^2/\text{NDF}$ : 272726964608206694027285159784925364224.0/14

Left Out: -1138.759+/-0.000

$\chi^2/\text{NDF}$ : 71006185953424254270590791718170263552.0/11

Right Out: 597.043+/-0.000

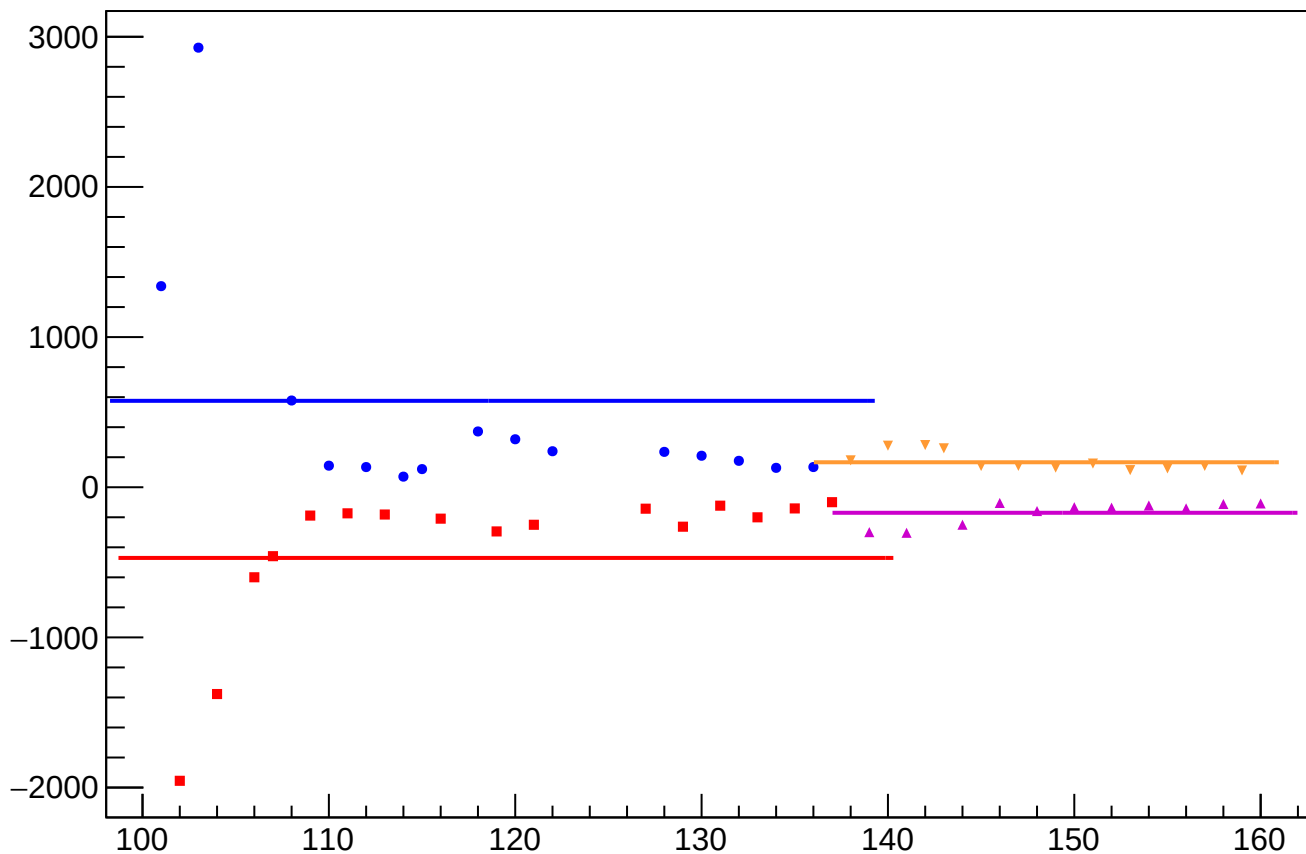
$\chi^2/\text{NDF}$ : 210733370798031449363504004319005376512.0/15

Left In: 1197.503+/-0.000

$\chi^2/\text{NDF}$ : 38624722141560961102710570239066636288.0/10

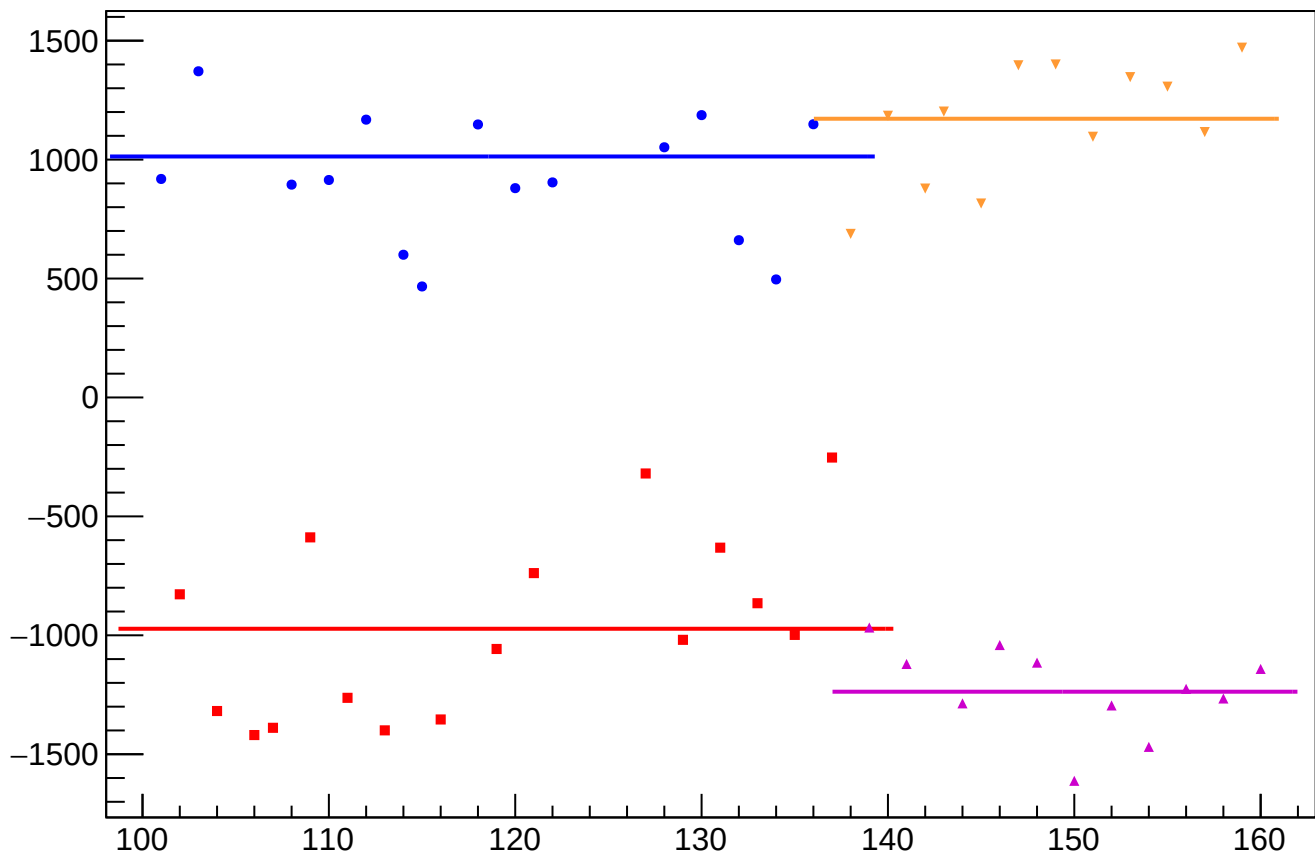
All: 14.726+/-0.000  $\chi^2/\text{NDF}$ : 3608953170188

dit\_sam3\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 575.526+/-0.000  $\chi^2/\text{NDF}$ : 432680039285849719493276471277131923456.0/14  
 Left Out: 166.360+/-0.000  $\chi^2/\text{NDF}$ : 3052716209295405049807129095543193600.0/11  
 Right Out: -470.716+/-0.000  $\chi^2/\text{NDF}$ : 209310604291868219806073768764512403456.0/15  
 Left In: -170.082+/-0.000  $\chi^2/\text{NDF}$ : 4851165358478650186983079637734653952.0/10  
 All: 17.262+/-0.000  $\chi^2/\text{NDF}$ : 1063737364413

dit\_sam3\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

Left Out: 1171.807+/-0.000

Right Out: -972.465+/-0.000

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -39.225+/-0.000  $\chi^2/\text{NDF}$ : 2749183771125436

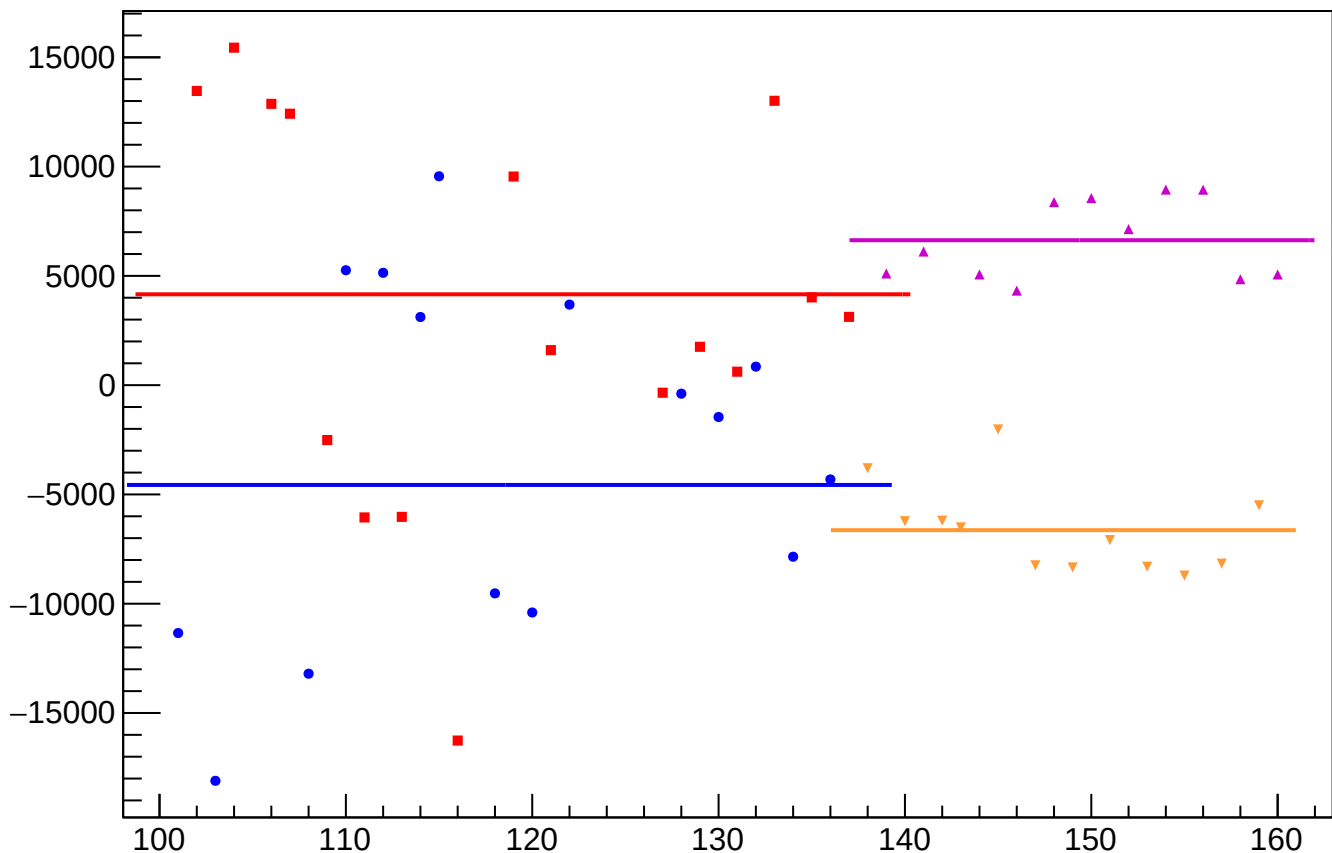
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: -308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

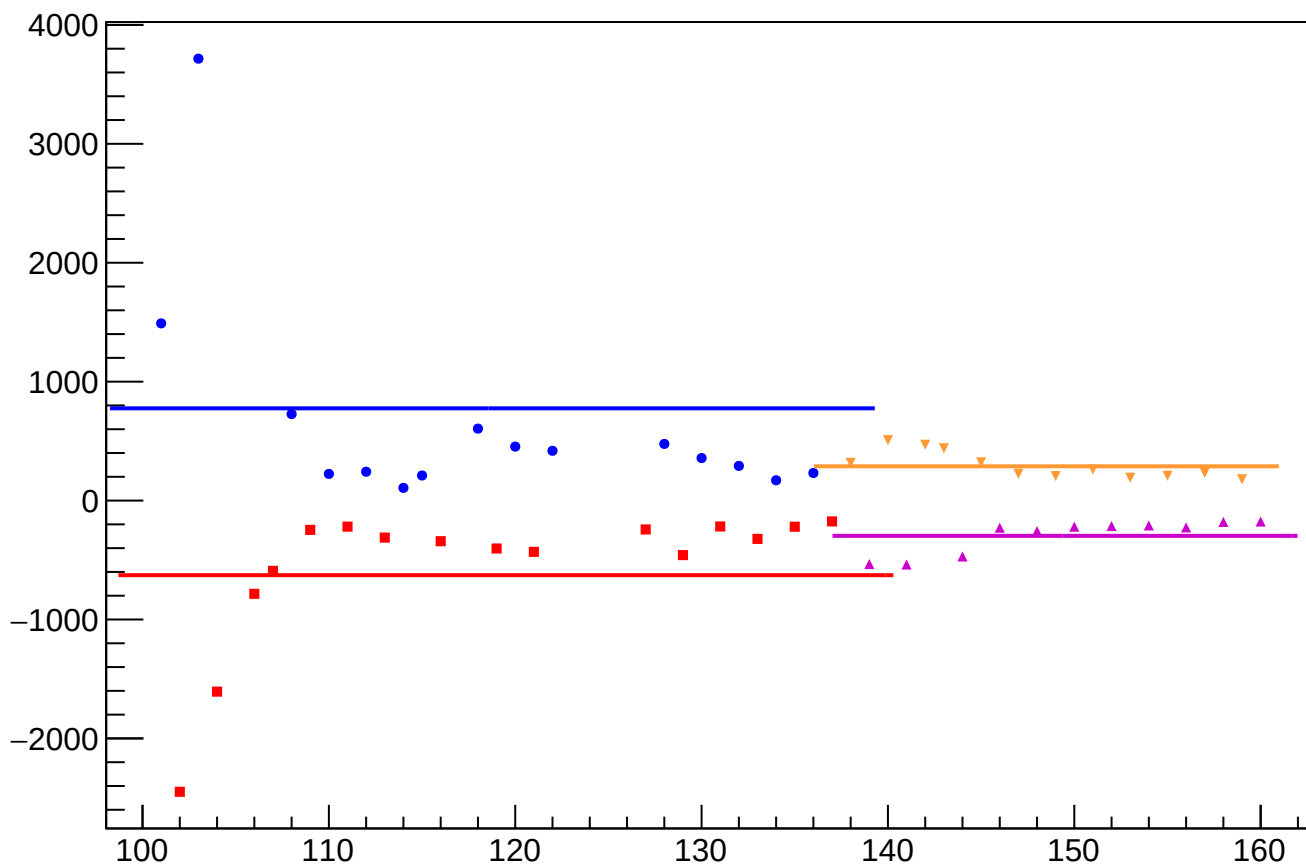
All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

dit\_sam4\_coil6\_mean vs Slug, Sign Corrected



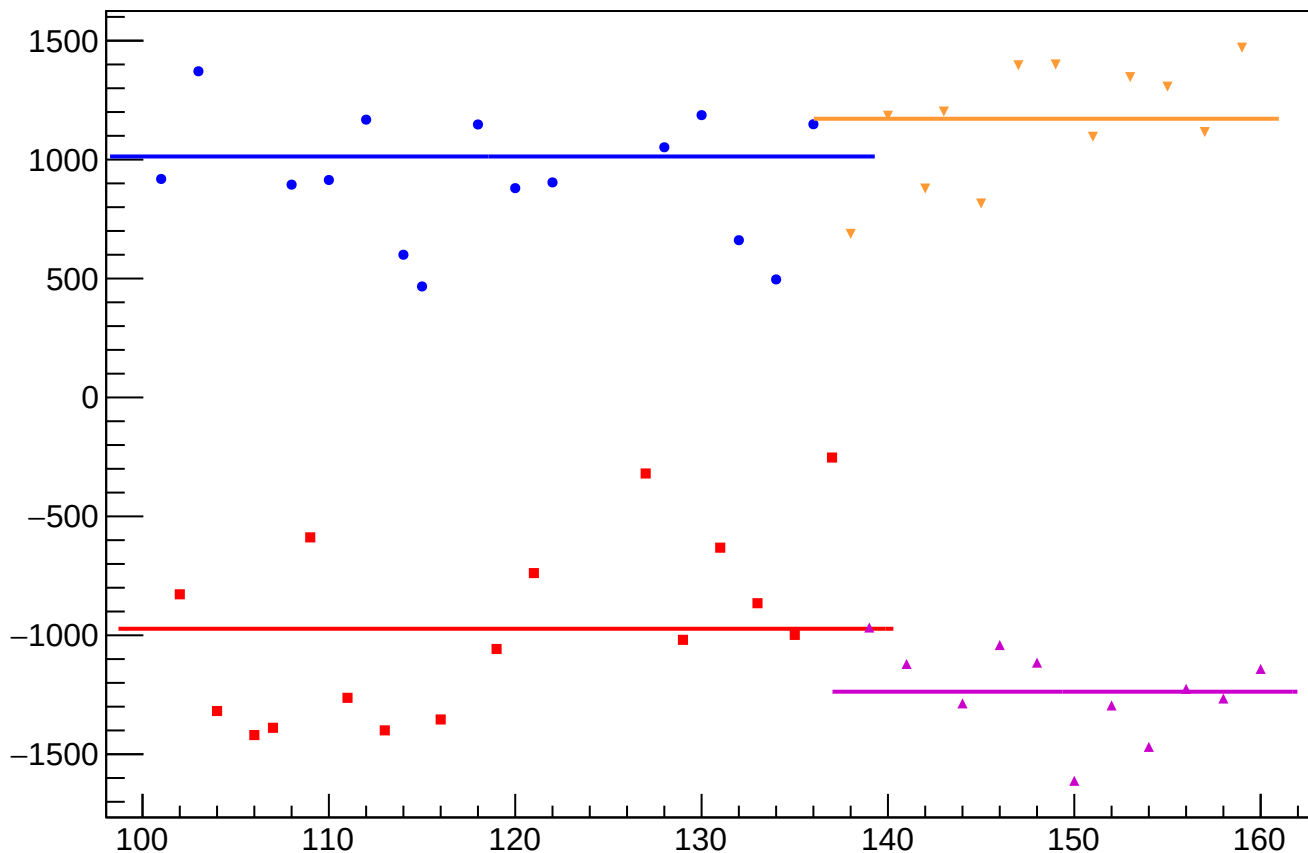
Left: 34.548+/-0.000  $\chi^2/\text{NDF}$ : 87332790427800314  
 Right In: -4565.412+/-0.000  $\chi^2/\text{NDF}$ : 35667768247432289984899042725155487875072.0/14  
 Right: -144.626+/-0.000  $\chi^2/\text{NDF}$ : 10623220696347  
 Left Out: -6634.457+/-0.000  $\chi^2/\text{NDF}$ : 3640150880403299784339543756995645407232.0/11  
 In: 2011.723+/-0.000  $\chi^2/\text{NDF}$ : 8629308418563650  
 Right Out: 4156.859+/-0.000  $\chi^2/\text{NDF}$ : 45539455441659927157708443099930682195968.0/15  
 Out: -2081.764+/-0.000  $\chi^2/\text{NDF}$ : 94084012188749  
 Left In: 6631.377+/-0.000  $\chi^2/\text{NDF}$ : 2831140540306304869921468245145345327104.0/10  
 All: -40.212+/-0.000  $\chi^2/\text{NDF}$ : 193589617431

# dit\_sam4\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 775.824 +/- 0.000  $\chi^2/\text{NDF}$ : 641856726975740612716432458612629045248.0/14  
 Left Out: 288.226 +/- 0.000  $\chi^2/\text{NDF}$ : 10607349218435095296400376728725225472.0/11  
 Right Out: -627.315 +/- 0.000  $\chi^2/\text{NDF}$ : 297517676171111924966086193860621369344.0/15  
 Left In: -296.514 +/- 0.000  $\chi^2/\text{NDF}$ : 17061879022016484064295210228444561408.0/10  
 All: 23.637 +/- 0.000  $\chi^2/\text{NDF}$ : 1775565410854

dit\_sam4\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

Left Out: 1171.807+/-0.000

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

Right Out: -972.465+/-0.000

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -39.225+/-0.000  $\chi^2/\text{NDF}$ : 2749183771125436

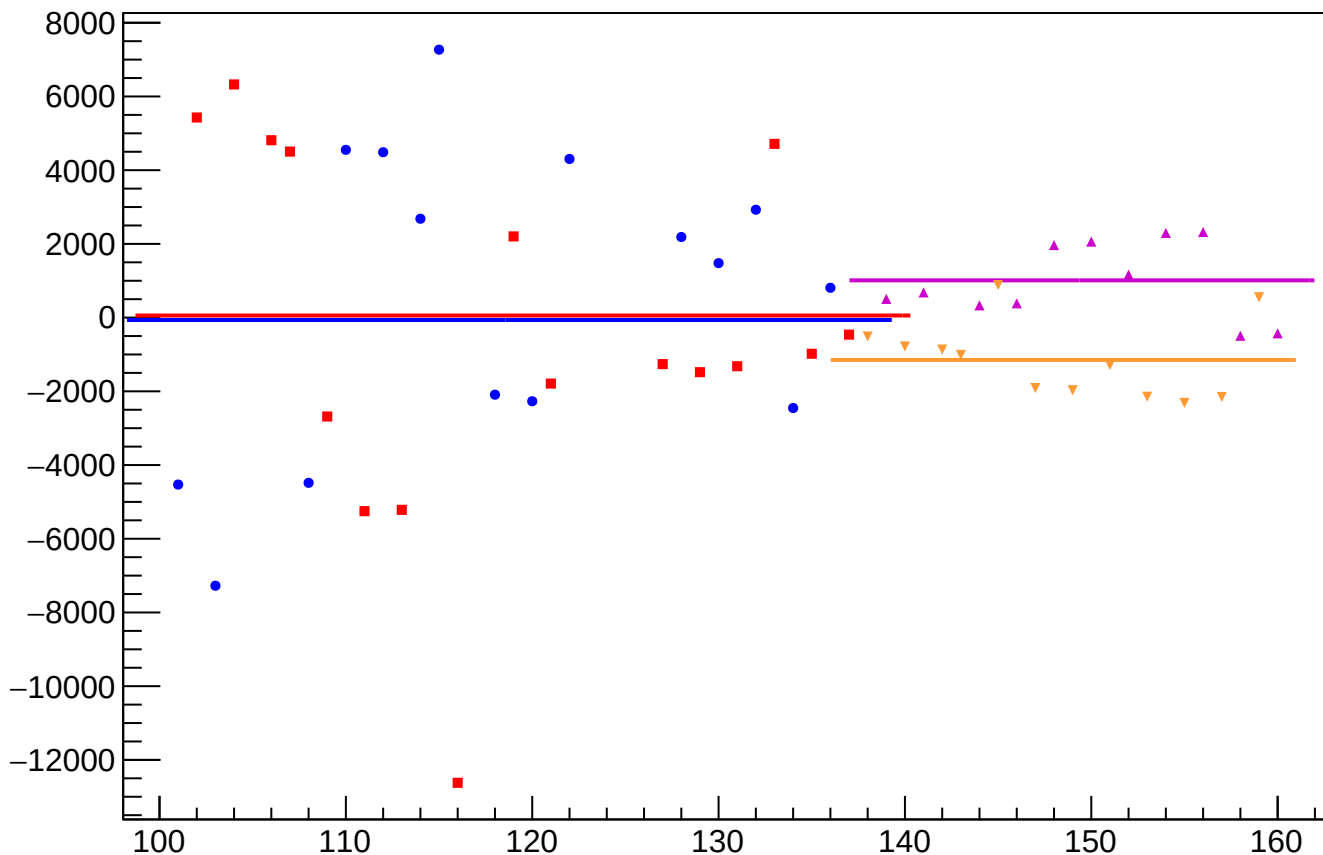
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: -308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

# dit\_sam5\_coil6\_mean vs Slug, Sign Corrected



Right In: -64.751+/-0.000

χ²/NDF: 9614223448851814191683817349989558910976.0/14

Left Out: -1149.036+/-0.000

χ²/NDF: 977384281251527862797157265716912586752.0/11

Right Out: 57.229+/-0.000

χ²/NDF: 13780958977008702301942505454387177979904.0/15

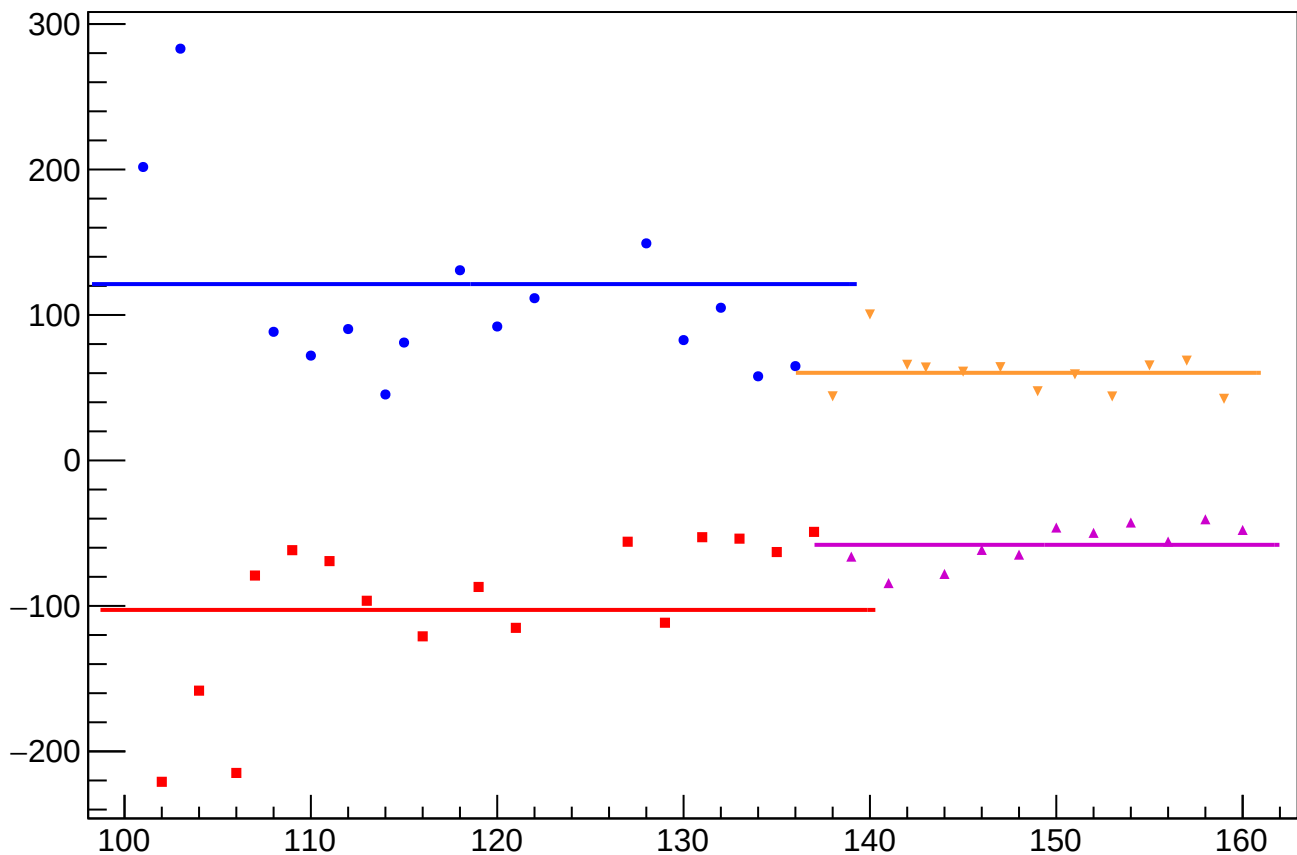
Left In: 1011.284+/-0.000

χ²/NDF: 903909408421874171739001543159795679232.0/10

All: -37.934+/-0.000 χ²/NDF: 274285540726

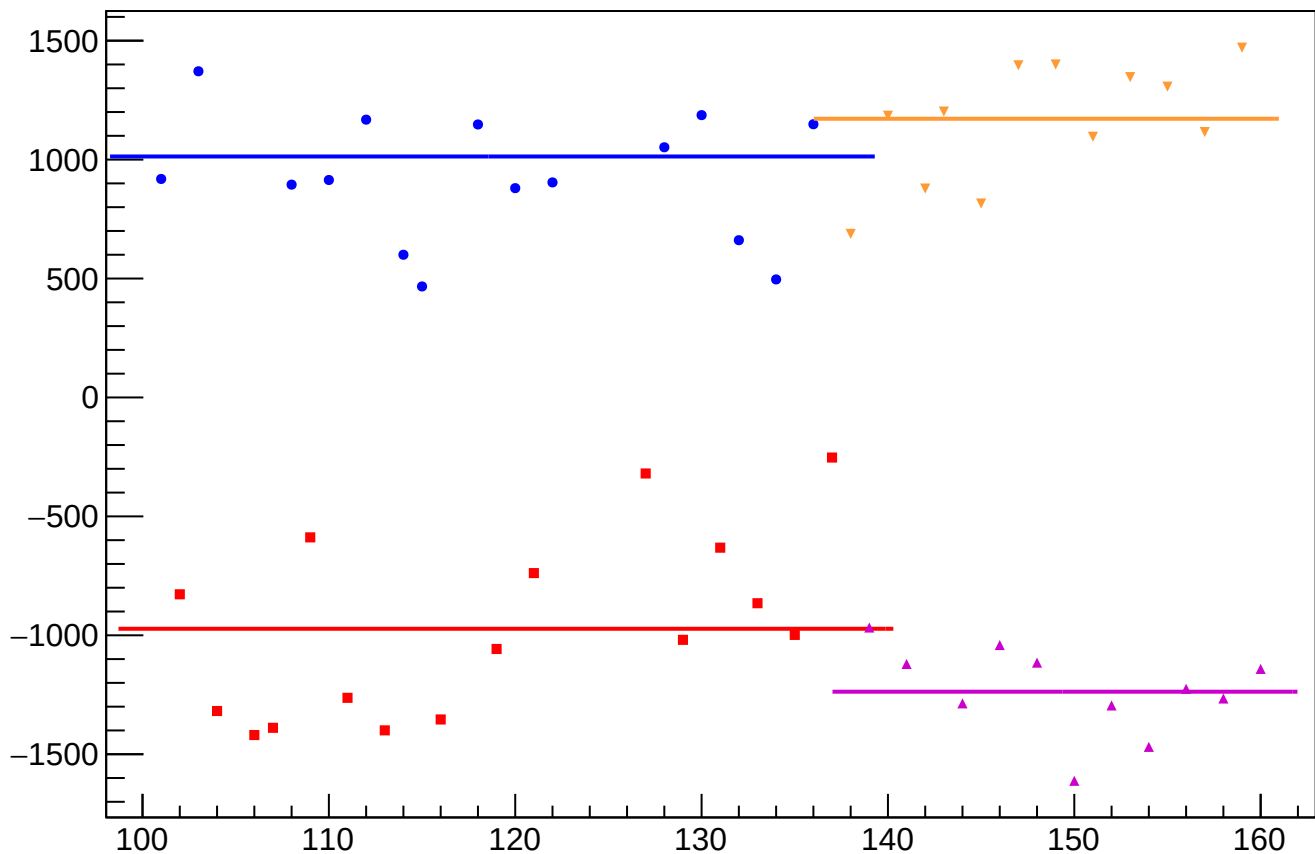


dit\_sam5\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 121.228+/-0.000  $\chi^2/\text{NDF}$ : 2723170857684362574800637594861305856.0/14  
 Left Out: 60.239+/-0.000  $\chi^2/\text{NDF}$ : 225102554491032869548797845500329984.0/11  
 Right Out: -102.749+/-0.000  $\chi^2/\text{NDF}$ : 1967668024846010333654427670555918336.0/15  
 Left In: -58.011+/-0.000  $\chi^2/\text{NDF}$ : 177427701786540438757655027214450688.0/10  
 All: 3.678+/-0.000  $\chi^2/\text{NDF}$ : 28056421642135

dit\_sam5\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000

Left Out: 1171.807+/-0.000

Right Out: -972.465+/-0.000

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

Left: -39.225+/-0.000  $\chi^2/\text{NDF}$ : 2749183771125436

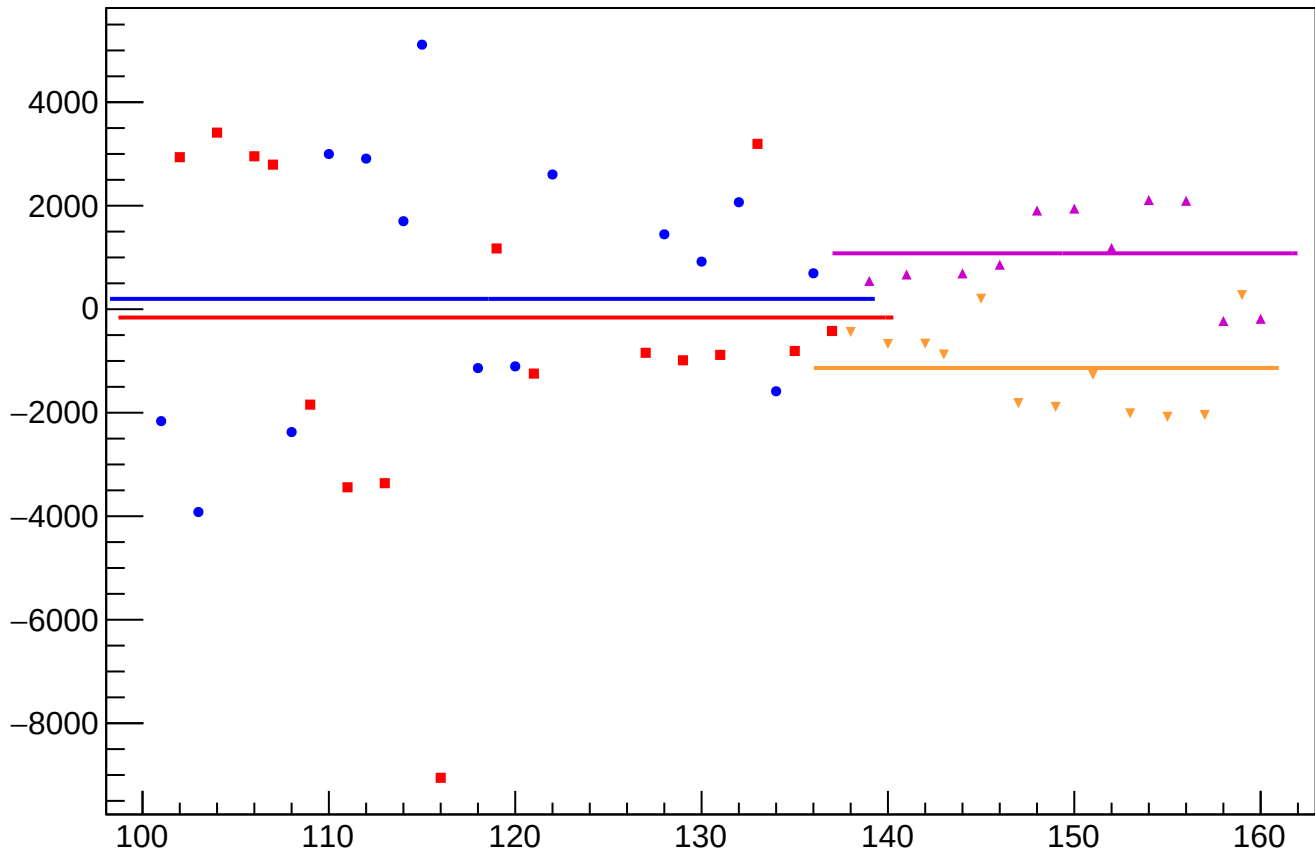
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: -308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

dit\_sam6\_coil6\_mean vs Slug, Sign Corrected



Right In: 199.503+/-0.000

$\chi^2/\text{NDF}$ : 3268159745923533825045181664876849790976.0/14

Left Out: -1135.455+/-0.000

$\chi^2/\text{NDF}$ : 654697592596579349133010058178925166592.0/11

Right Out: -160.512+/-0.000

$\chi^2/\text{NDF}$ : 5680576709461197901526729703706251493376.0/15

Left In: 1079.555+/-0.000

$\chi^2/\text{NDF}$ : 614734398575877452858032752710912049152.0/10

Left: -21.924+/-0.000  $\chi^2/\text{NDF}$ : 3523794568652633

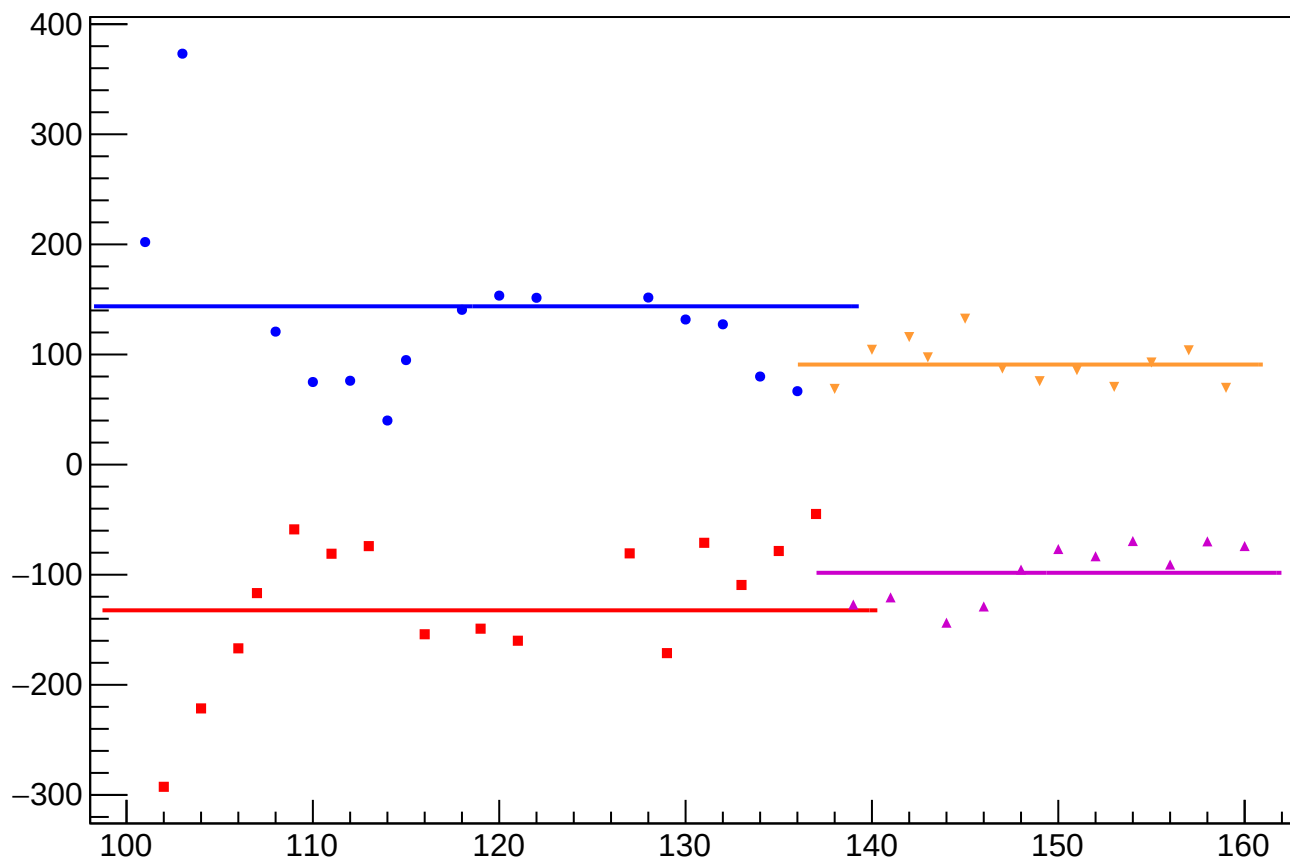
Right: 17.033+/-0.000  $\chi^2/\text{NDF}$ : 8991370549930185

In: 716.457+/-0.000  $\chi^2/\text{NDF}$ : 41781537377410598

Out: -724.141+/-0.000  $\chi^2/\text{NDF}$ : 670179463757753

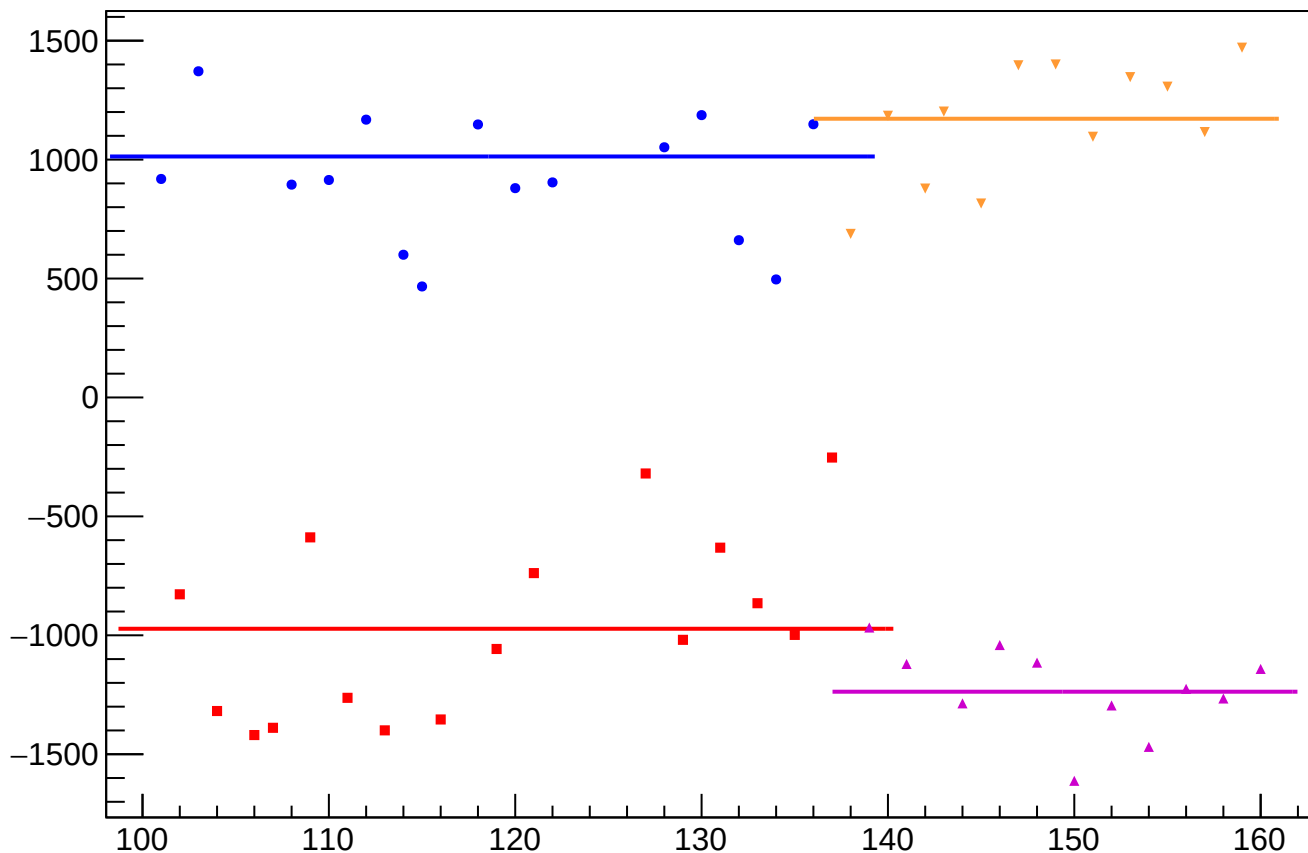
All: -5.669+/-0.000  $\chi^2/\text{NDF}$ : 1251632905272

dit\_sam6\_coil6\_err\_mean vs Slug, Sign Corrected



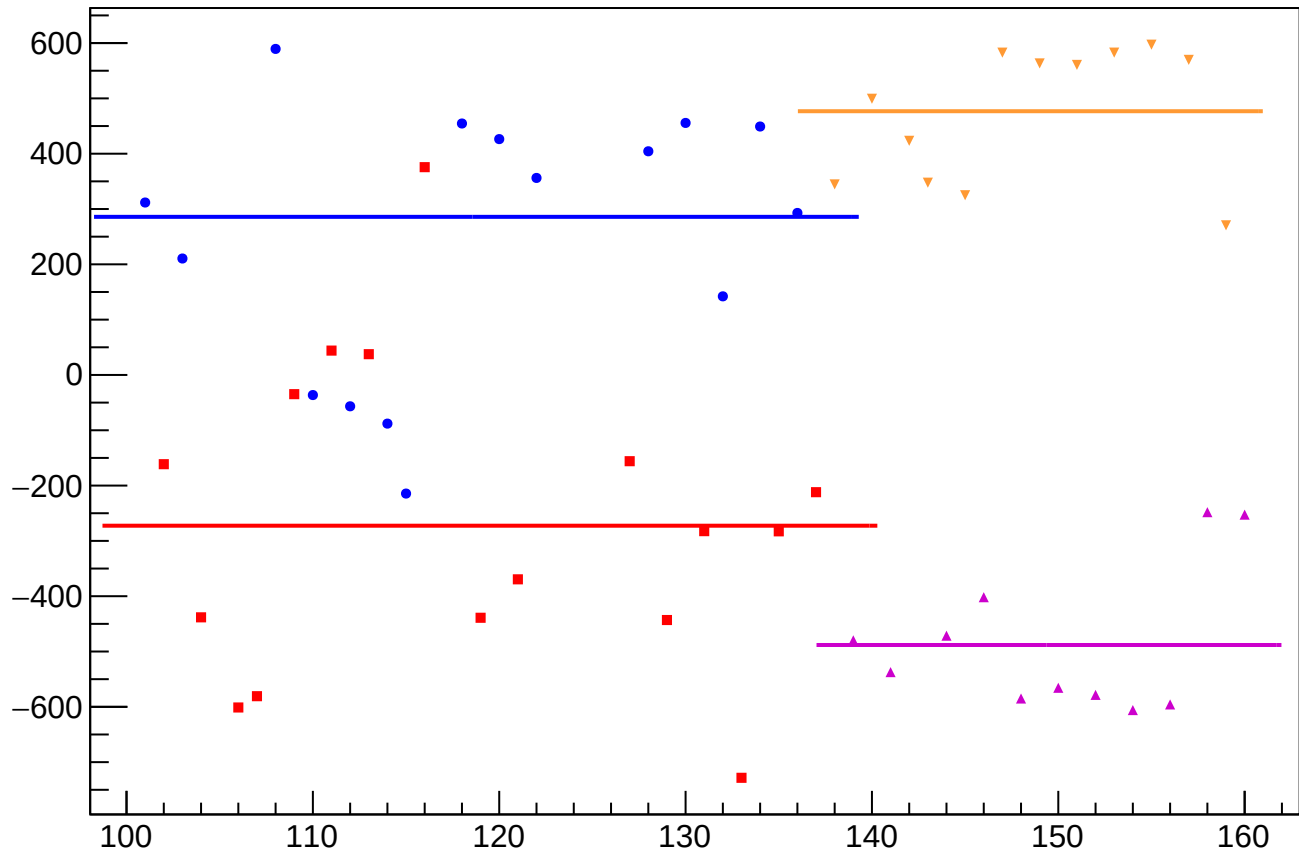
Left: -4.202+/-0.000  $\chi^2/\text{NDF}$ : 17384612750229045  
 Right In: 143.764+/-0.000  $\chi^2/\text{NDF}$ : 4514785869565777849900508591821946880.0/14  
 Right: 3.823+/-0.000  $\chi^2/\text{NDF}$ : 32765016379949297  
 Left Out: 90.882+/-0.000  $\chi^2/\text{NDF}$ : 326242734851411629220497356388040704.0/11  
 In: 1.598+/-0.000  $\chi^2/\text{NDF}$ : 2746595414560194970  
 Right Out: -132.341+/-0.000  $\chi^2/\text{NDF}$ : 3174087908796245287682359914282352640.0/15  
 Out: -3.293+/-0.000  $\chi^2/\text{NDF}$ : 22714212497857002  
 Left In: -98.257+/-0.000  $\chi^2/\text{NDF}$ : 620993776773093393033369428470792192.0/10  
 All: -0.854+/-0.000  $\chi^2/\text{NDF}$ : 5019902274084

dit\_sam6\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807+/-0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: -972.465+/-0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: -1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10  
 All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

# dit\_sam7\_coil6\_mean vs Slug, Sign Corrected



Right In: 285.856+/-0.000

$\chi^2/\text{NDF}$ : 24108244802355530064663311301086281728.0/14

Left Out: 476.795+/-0.000

$\chi^2/\text{NDF}$ : 12695994824288000465906190934597435392.0/11

Right Out: -272.539+/-0.000

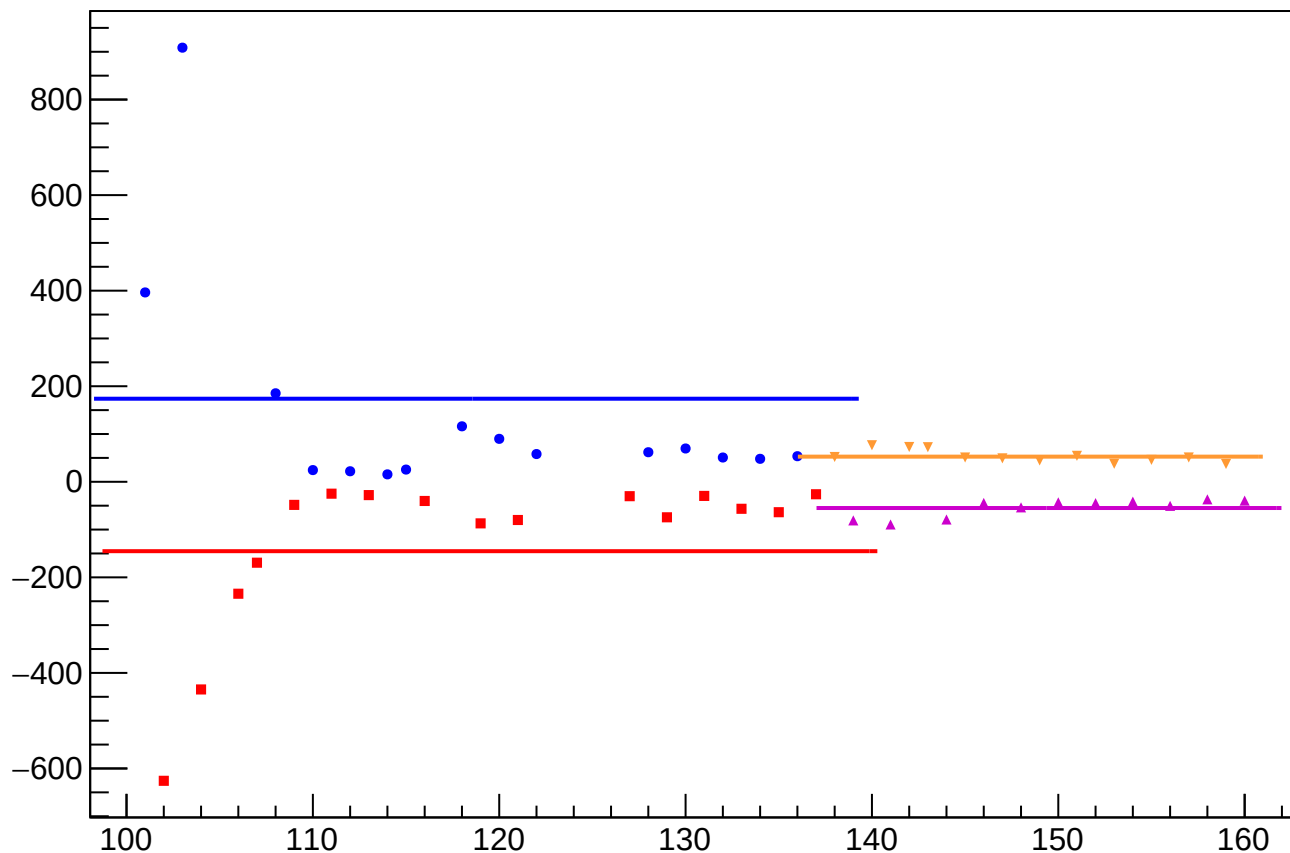
$\chi^2/\text{NDF}$ : 44149952665075593650338713333575712768.0/15

Left In: -488.203+/-0.000

$\chi^2/\text{NDF}$ : 13828831980358883653289432391973076992.0/10

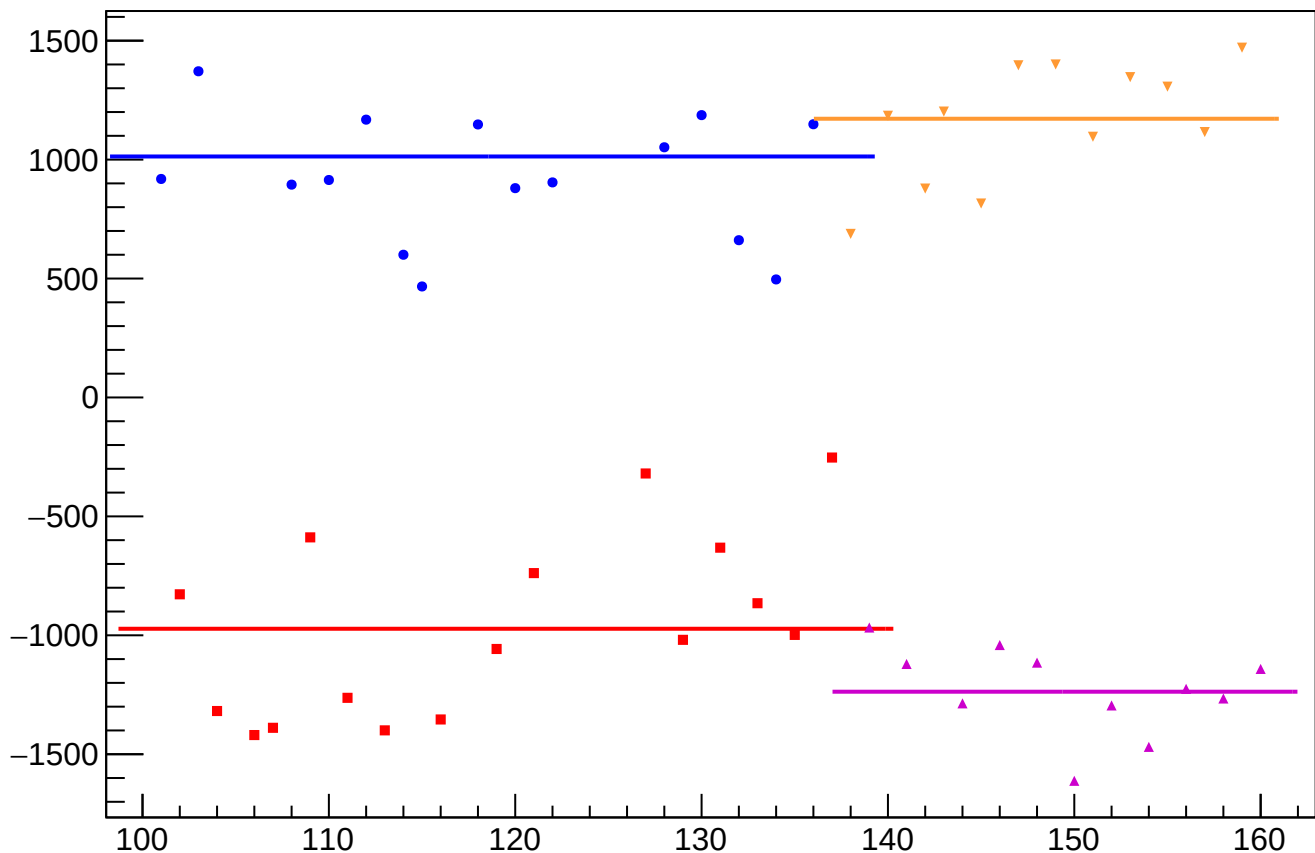
All: -3.669+/-0.000  $\chi^2/\text{NDF}$ : 6253273590333

dit\_sam7\_coil6\_err\_mean vs Slug, Sign Corrected



Left: -1.410 +/- 0.000  $\chi^2/\text{NDF}$ : 57550913372035412  
 Right: 12.139 +/- 0.000  $\chi^2/\text{NDF}$ : 9772897307710637  
 Right In: 173.871 +/- 0.000  $\chi^2/\text{NDF}$ : 41705473404466232613073704554990665728.0/14  
 Left Out: 52.656 +/- 0.000  $\chi^2/\text{NDF}$ : 140159423385887976692066167541465088.0/11  
 Right Out: -145.228 +/- 0.000  $\chi^2/\text{NDF}$ : 22529615719408594720785265744437837824.0/15  
 Out: -30.828 +/- 0.000  $\chi^2/\text{NDF}$ : 3776923807481634  
 Left In: -54.891 +/- 0.000  $\chi^2/\text{NDF}$ : 300358274506113612486338175884591104.0/10  
 All: 4.243 +/- 0.000  $\chi^2/\text{NDF}$ : 10362485342555

dit\_sam7\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146 +/- 0.000

$\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14

Left Out: 1171.807 +/- 0.000

$\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11

Right Out: -972.465 +/- 0.000

$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

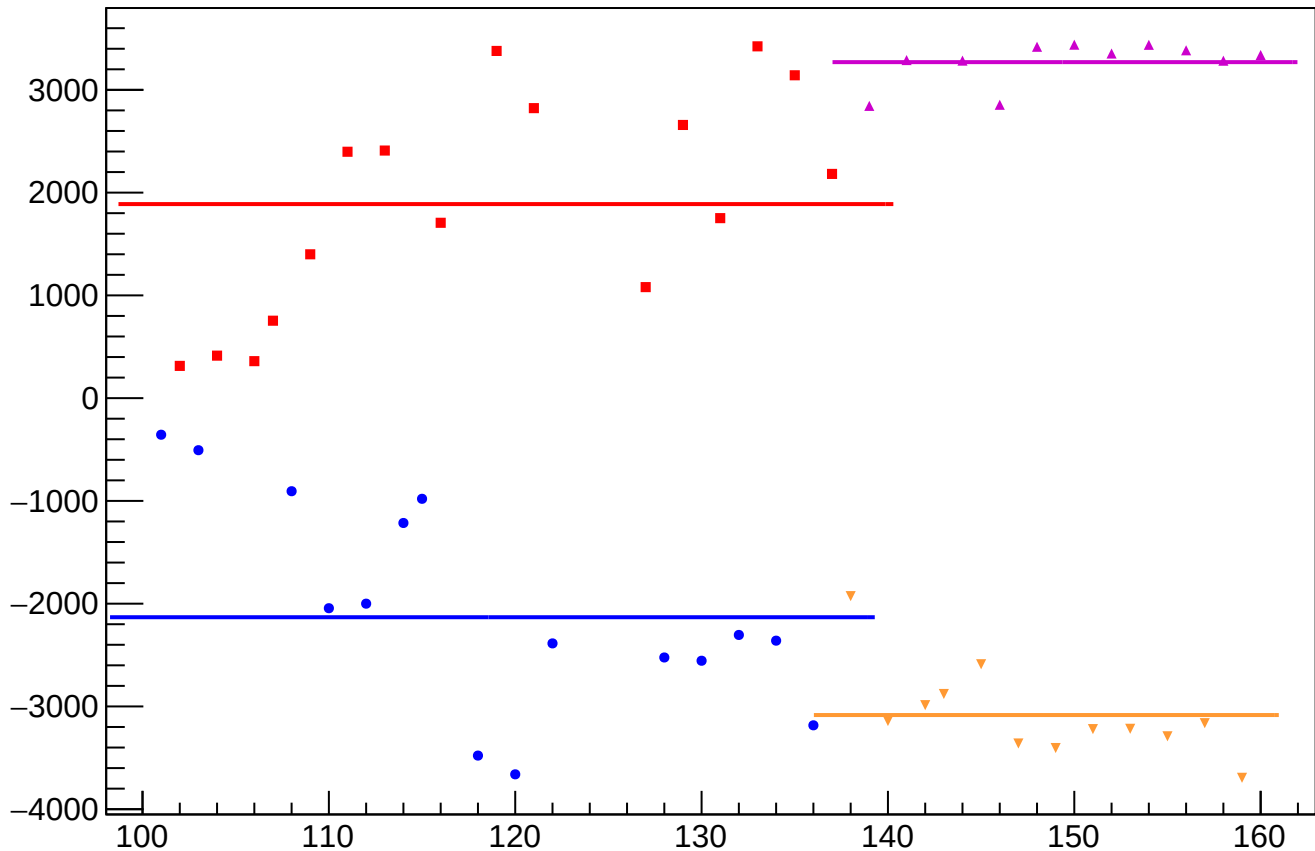
Left In: -1237.150 +/- 0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

All: -20.037 +/- 0.000  $\chi^2/\text{NDF}$ : 415830099668



dit\_sam8\_coil6\_mean vs Slug, Sign Corrected



Right In: -2131.905+/-0.000

Left Out: -3083.729+/-0.000

Right Out: 1888.448+/-0.000

Left In: 3269.755+/-0.000

$\chi^2/\text{NDF}$ : 722433384570495071131450661983670501376.0/14

$\chi^2/\text{NDF}$ : 178322677856663824149309206068860026880.0/11

$\chi^2/\text{NDF}$ : 791986665551980691032719862611769819136.0/15

$\chi^2/\text{NDF}$ : 38098096180391062431092176239781216256.0/10

Left: 110.297+/-0.000  $\chi^2/\text{NDF}$ : 1876439765485971

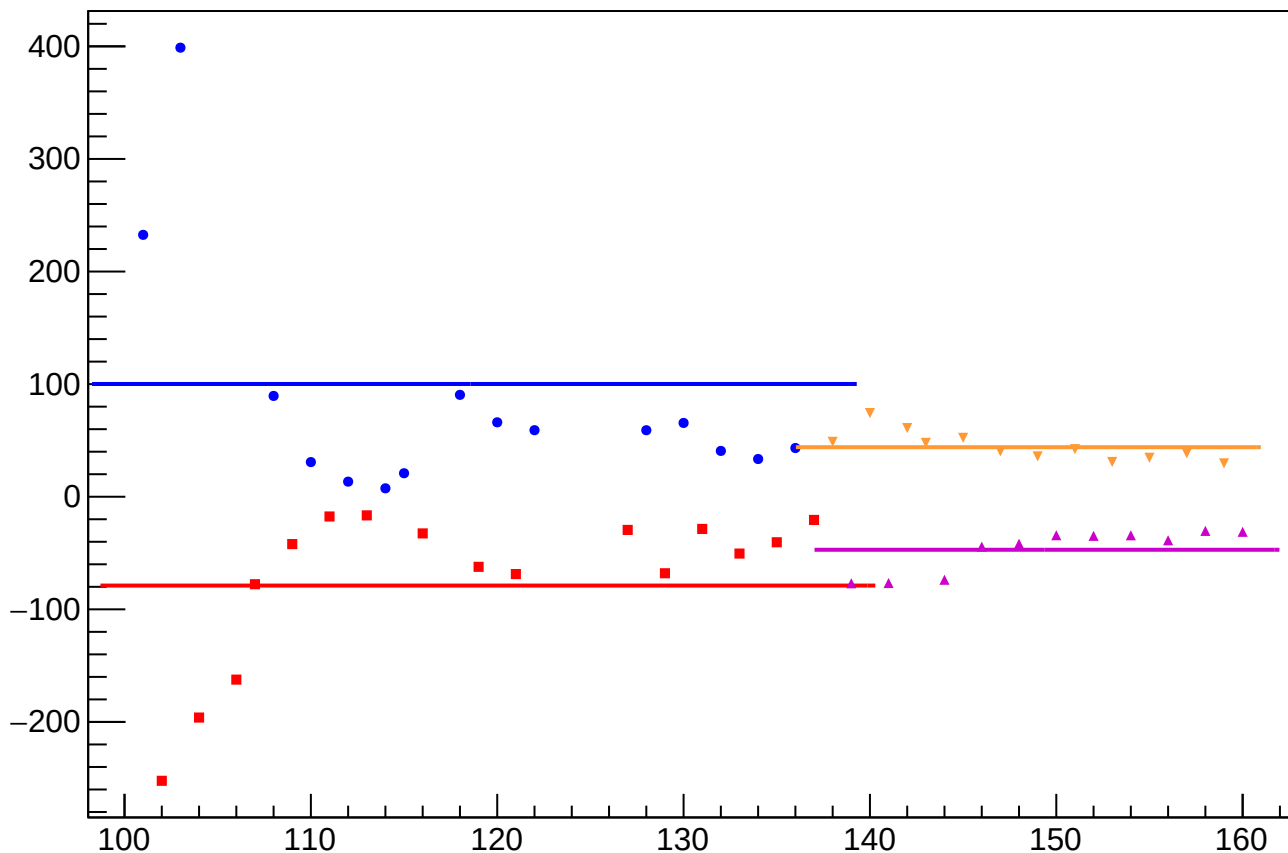
Right: -94.234+/-0.000  $\chi^2/\text{NDF}$ : 683113062504059

In: 1041.098+/-0.000  $\chi^2/\text{NDF}$ : 1188405782367471

Out: -986.042+/-0.000  $\chi^2/\text{NDF}$ : 105033900940683

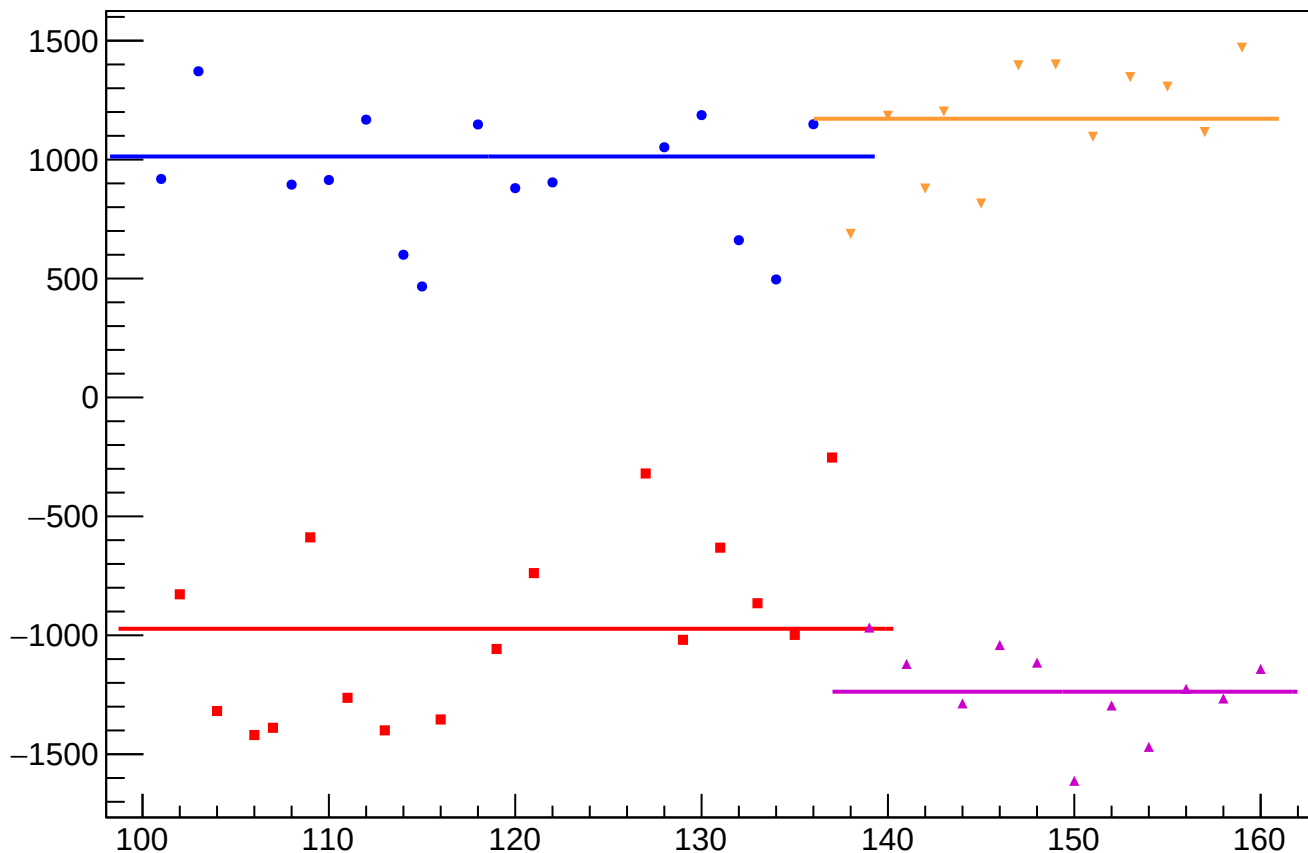
All: 24.957+/-0.000  $\chi^2/\text{NDF}$ : 2562760992420

# dit\_sam8\_coil6\_err\_mean vs Slug, Sign Corrected



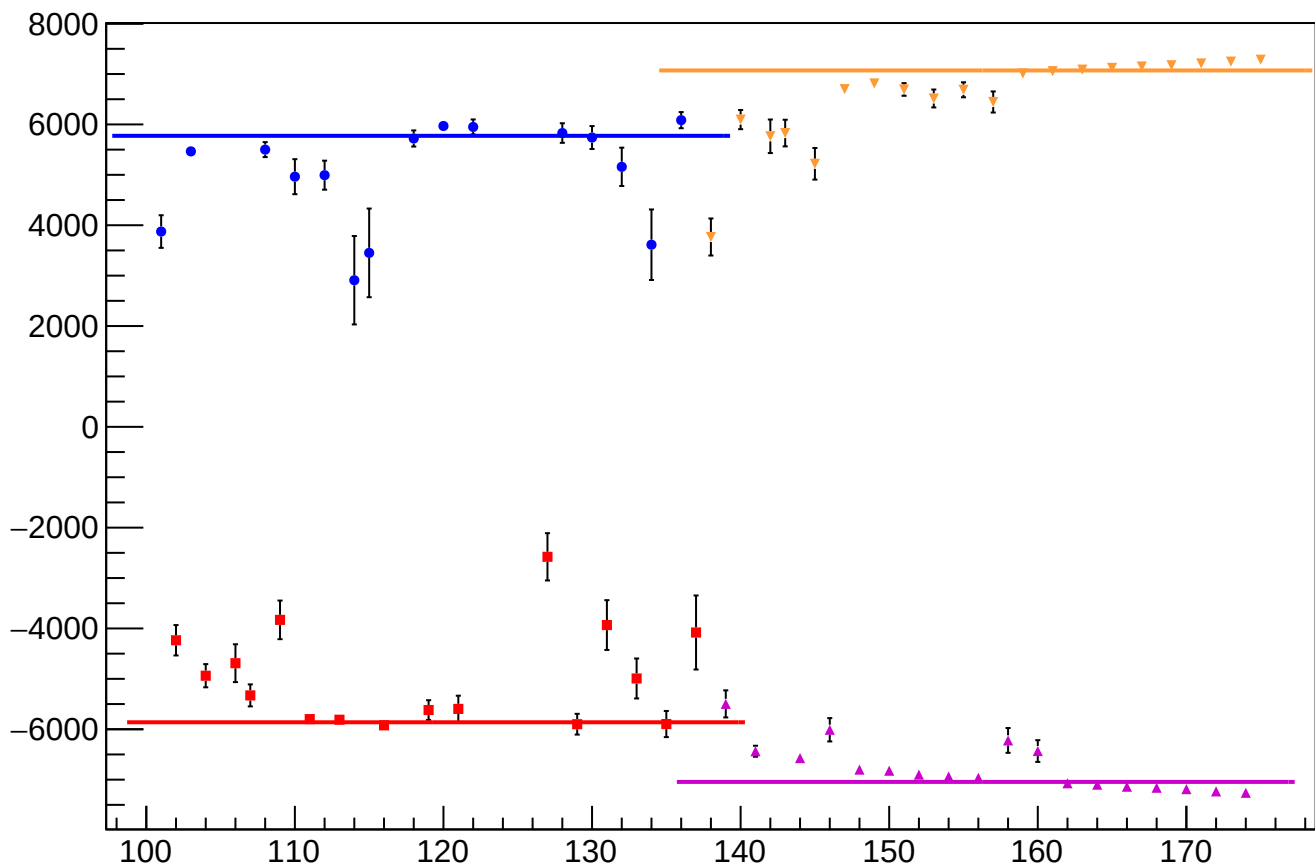
Right In: 100.135+/-0.000  $\chi^2/\text{NDF}$ : 7813910768784473081480373577053110272.0/14  
 Left Out: 43.994+/-0.000  $\chi^2/\text{NDF}$ : 144038877087981194806470678002270208.0/11  
 Right Out: -78.881+/-0.000  $\chi^2/\text{NDF}$ : 3525129078433901202304301512966275072.0/15  
 Left In: -47.092+/-0.000  $\chi^2/\text{NDF}$ : 302550156086866534805447117402800128.0/10  
 All: 2.876+/-0.000  $\chi^2/\text{NDF}$ : 26235515689479

dit\_sam8\_coil6\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1013.146+/-0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807+/-0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: -972.465+/-0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: -1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10  
 All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

# dit\_run\_mean vs Slug, Sign Corrected



Right In: 5774.117 $\pm$ 0.181  $\chi^2/\text{NDF}$ : 1828526.5/14

Left Out: 7071.193 $\pm$ 0.142  $\chi^2/\text{NDF}$ : 1110200.8/19

Right Out: -5861.461 $\pm$ 0.140  $\chi^2/\text{NDF}$ : 180020.4/15

Left In: -7044.825 $\pm$ 0.115  $\chi^2/\text{NDF}$ : 2007521.4/17

Left: -1473.912 $\pm$ 0.089  $\chi^2/\text{NDF}$ : 5993837224.8/37

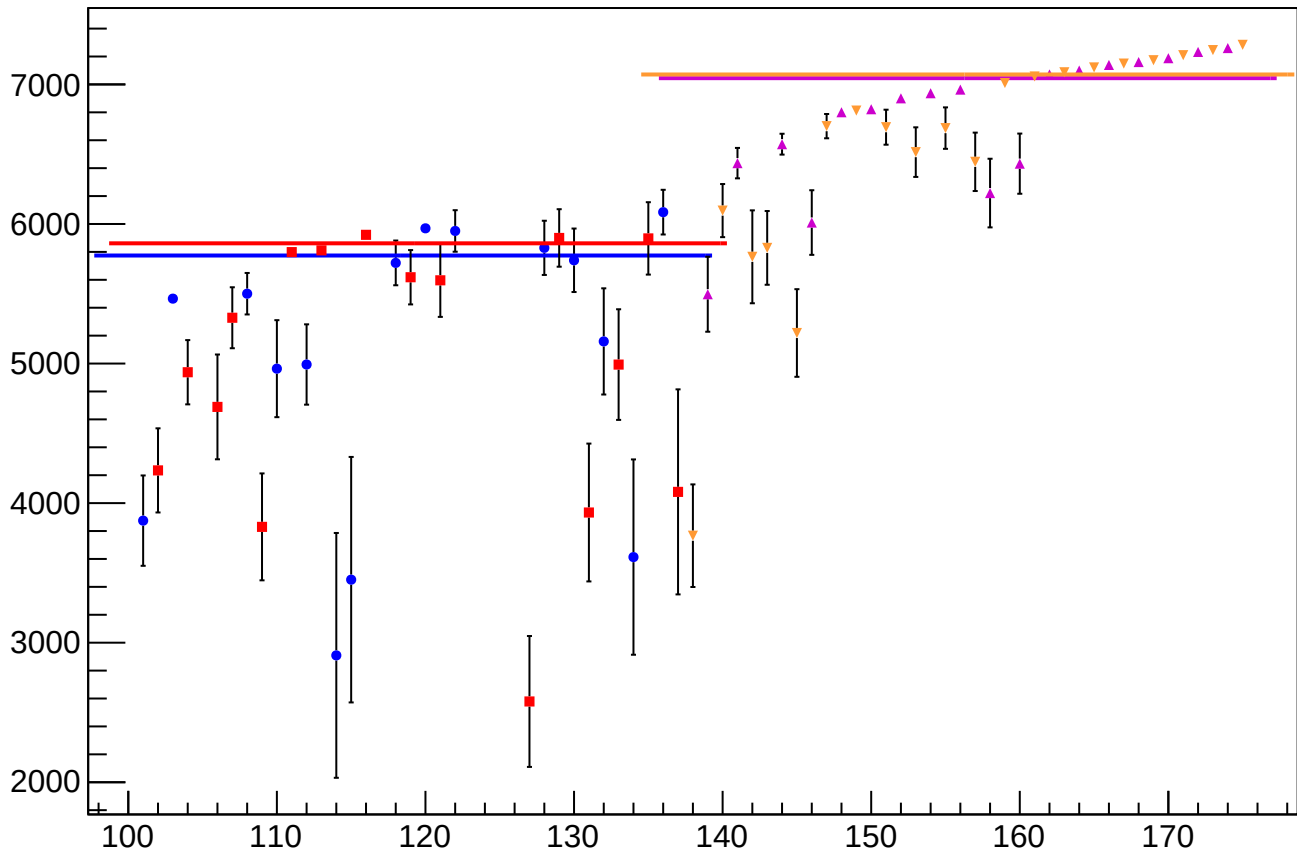
Right: -1536.191 $\pm$ 0.111  $\chi^2/\text{NDF}$ : 2585354230.9/30

In: -3390.948 $\pm$ 0.097  $\chi^2/\text{NDF}$ : 3572014617.6/32

Out: 498.179 $\pm$ 0.100  $\chi^2/\text{NDF}$ : 4223128279.7/35

All: -1498.429 $\pm$ 0.069  $\chi^2/\text{NDF}$ : 8579383602

# dit\_run\_rms vs Slug, Sign Corrected



Right In: 5774.117 $\pm$ 0.181  $\chi^2$ /NDF: 1828526.5/14

Left Out: 7071.193 $\pm$ 0.142  $\chi^2$ /NDF: 1110200.8/19

Right Out: 5861.461 $\pm$ 0.140  $\chi^2$ /NDF: 180020.4/15

Left In: 7044.825 $\pm$ 0.115  $\chi^2$ /NDF: 2007521.4/17

Left: 7055.231 $\pm$ 0.089  $\chi^2$ /NDF: 3138625.4/37

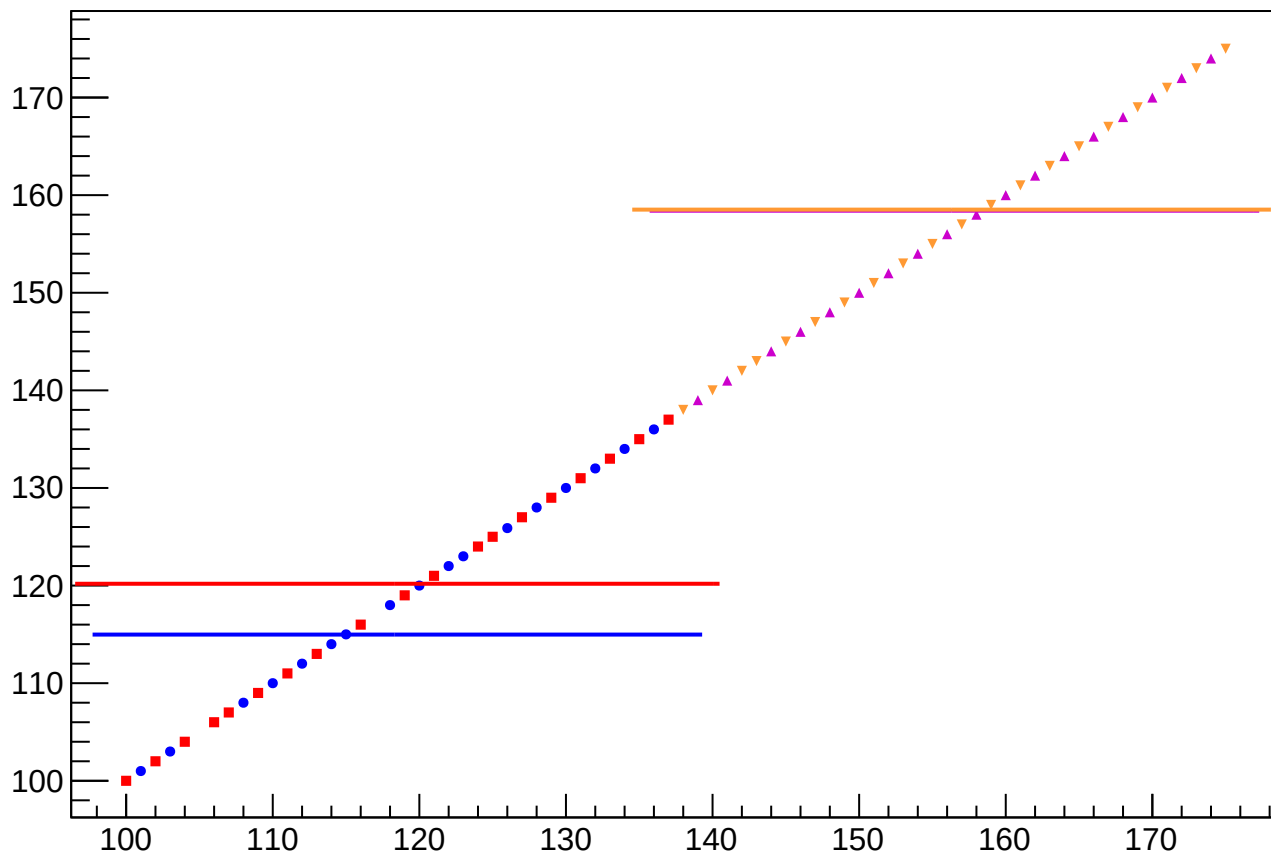
Right: 5828.993 $\pm$ 0.111  $\chi^2$ /NDF: 2154118.4/30

In: 6682.626 $\pm$ 0.097  $\chi^2$ /NDF: 38897819.4/32

Out: 6456.347 $\pm$ 0.100  $\chi^2$ /NDF: 38230869.3/35

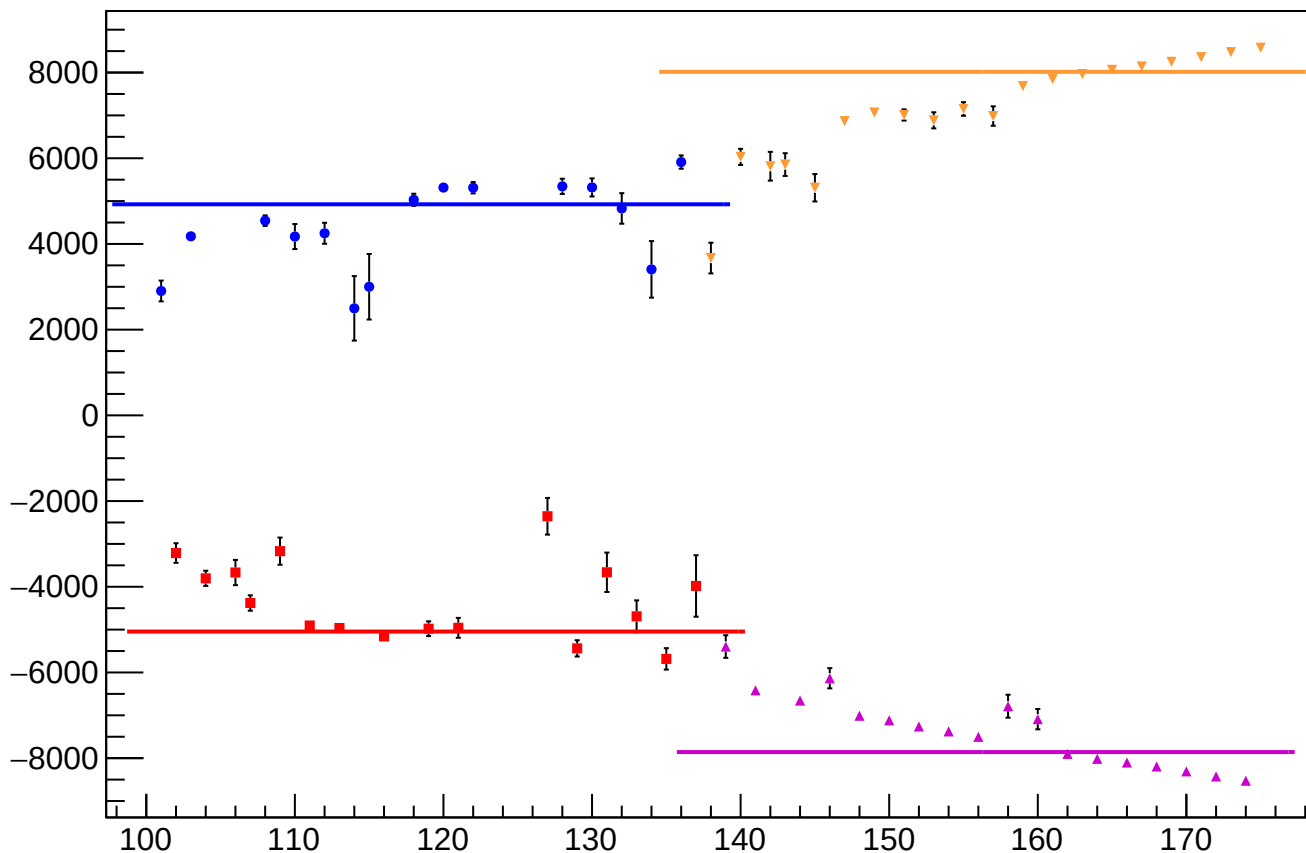
All: 6572.515 $\pm$ 0.069  $\chi^2$ /NDF: 79783479.7/6

# dit\_slug\_slope vs Slug, Sign Corrected



Right In: 114.980+/-0.000  $\chi^2/\text{NDF}$ : 112344936246012934714934440230912.0/16  
 Left Out: 158.516+/-0.000  $\chi^2/\text{NDF}$ : 81132188890785263948948767244288.0/19  
 Right Out: 120.186+/-0.000  $\chi^2/\text{NDF}$ : 52233253644261695528198041763840.0/18  
 Left In: 158.404+/-0.000  $\chi^2/\text{NDF}$ : 87797270339182933586970960461824.0/17  
 All: 134.747+/-0.000  $\chi^2/\text{NDF}$ : 216460428087.0/20

# dit\_cyclenum\_mean vs Slug, Sign Corrected



Right In: 4925.305+/-0.939  $\chi^2/\text{NDF}$ : 330994.6/14

Left Out: 8016.556+/-0.524  $\chi^2/\text{NDF}$ : 721960.3/19

Right Out: -5045.221+/-0.668  $\chi^2/\text{NDF}$ : 30179.9/15

Left In: -7857.566+/-0.468  $\chi^2/\text{NDF}$ : 1171564.9/17

Left: -817.273+/-0.349  $\chi^2/\text{NDF}$ : 512016247.9/37

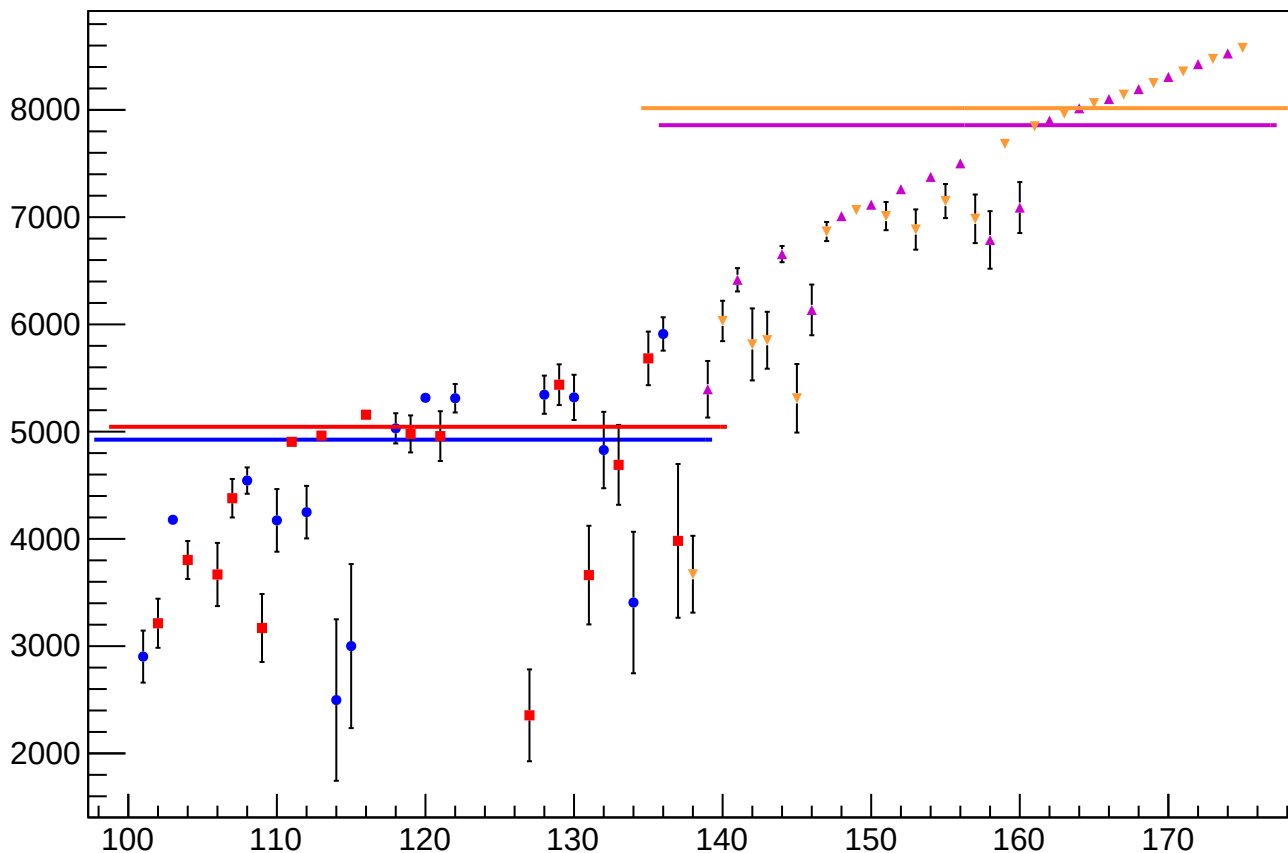
Right: -1694.510+/-0.544  $\chi^2/\text{NDF}$ : 75266282.5/30

In: -5312.213+/-0.419  $\chi^2/\text{NDF}$ : 150017641.1/32

Out: 3035.861+/-0.412  $\chi^2/\text{NDF}$ : 237413950.6/35

All: -1073.111+/-0.294  $\chi^2/\text{NDF}$ : 589123372.0

# dit\_cyclenum\_rms vs Slug, Sign Corrected



Right In: 4925.305 $\pm$ 0.939  $\chi^2$ /NDF: 330994.6/14

Left Out: 8016.556 $\pm$ 0.524  $\chi^2$ /NDF: 721960.3/19

Right Out: 5045.221 $\pm$ 0.668  $\chi^2$ /NDF: 30179.9/15

Left In: 7857.566 $\pm$ 0.468  $\chi^2$ /NDF: 1171564.9/17

Left: 7928.079 $\pm$ 0.349  $\chi^2$ /NDF: 1944697.9/37

Right: 5004.922 $\pm$ 0.544  $\chi^2$ /NDF: 372009.4/30

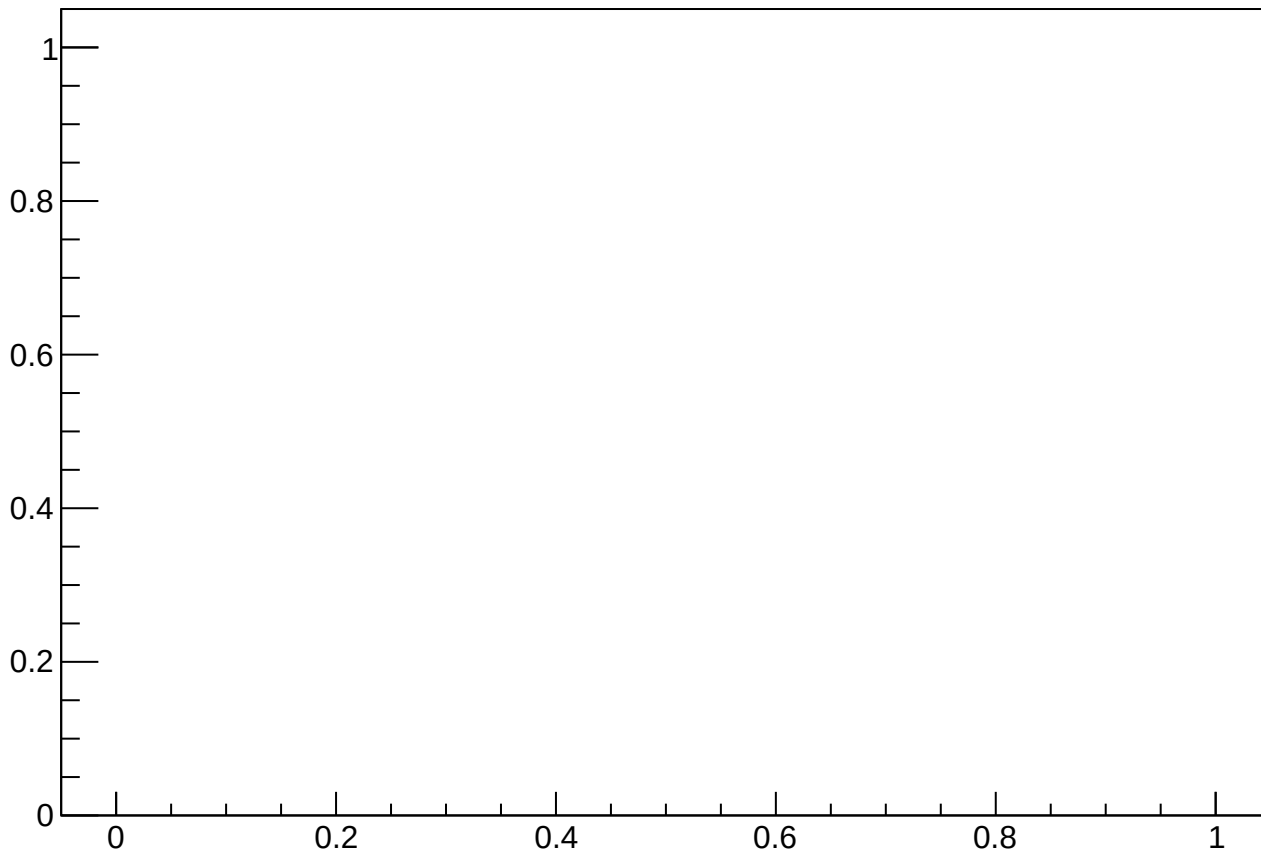
In: 7273.688 $\pm$ 0.419  $\chi^2$ /NDF: 9317375.3/32

Out: 6883.532 $\pm$ 0.412  $\chi^2$ /NDF: 12999059.2/35

All: 7075.569 $\pm$ 0.294  $\chi^2$ /NDF: 22756981.6/66



# dit\_scandata1\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# dit\_scandata1\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# dit\_scandata2\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# dit\_scandata2\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

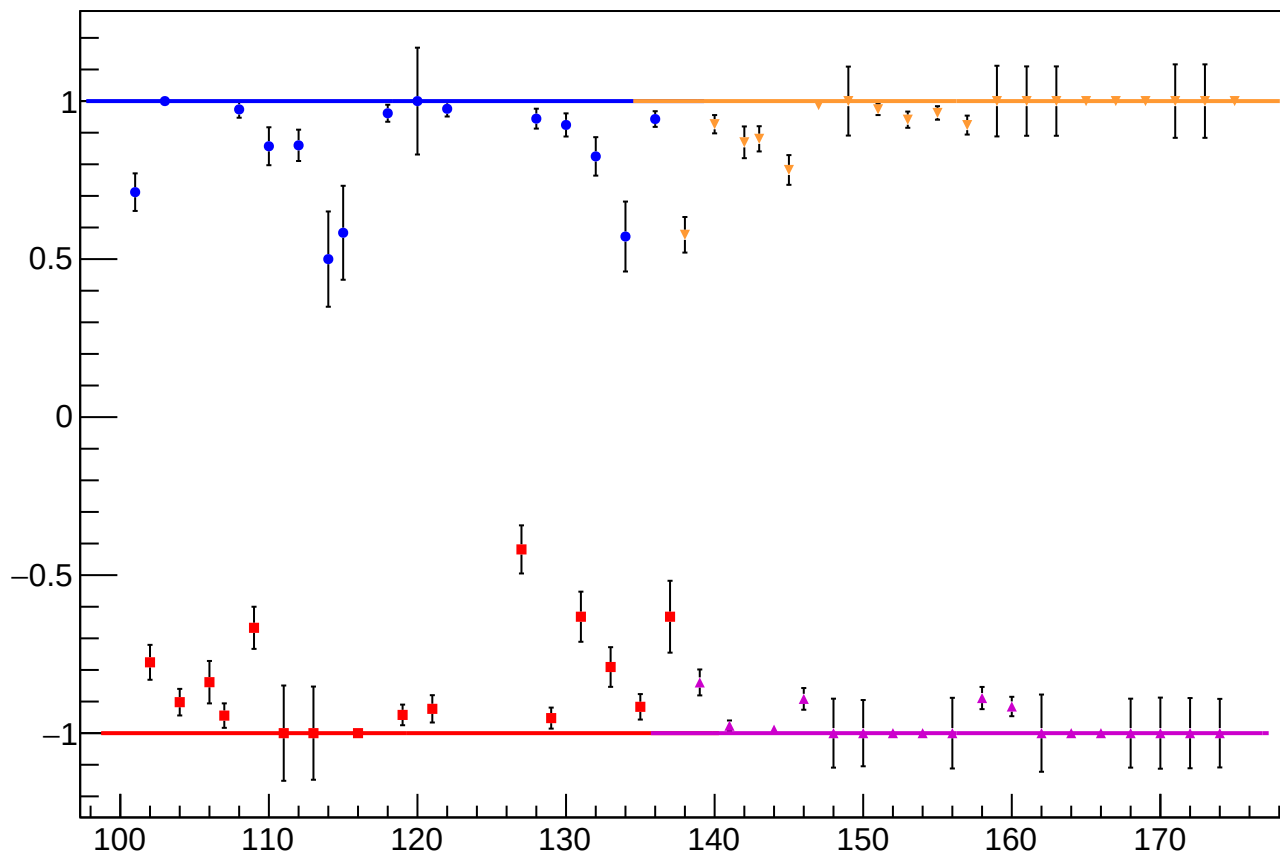
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

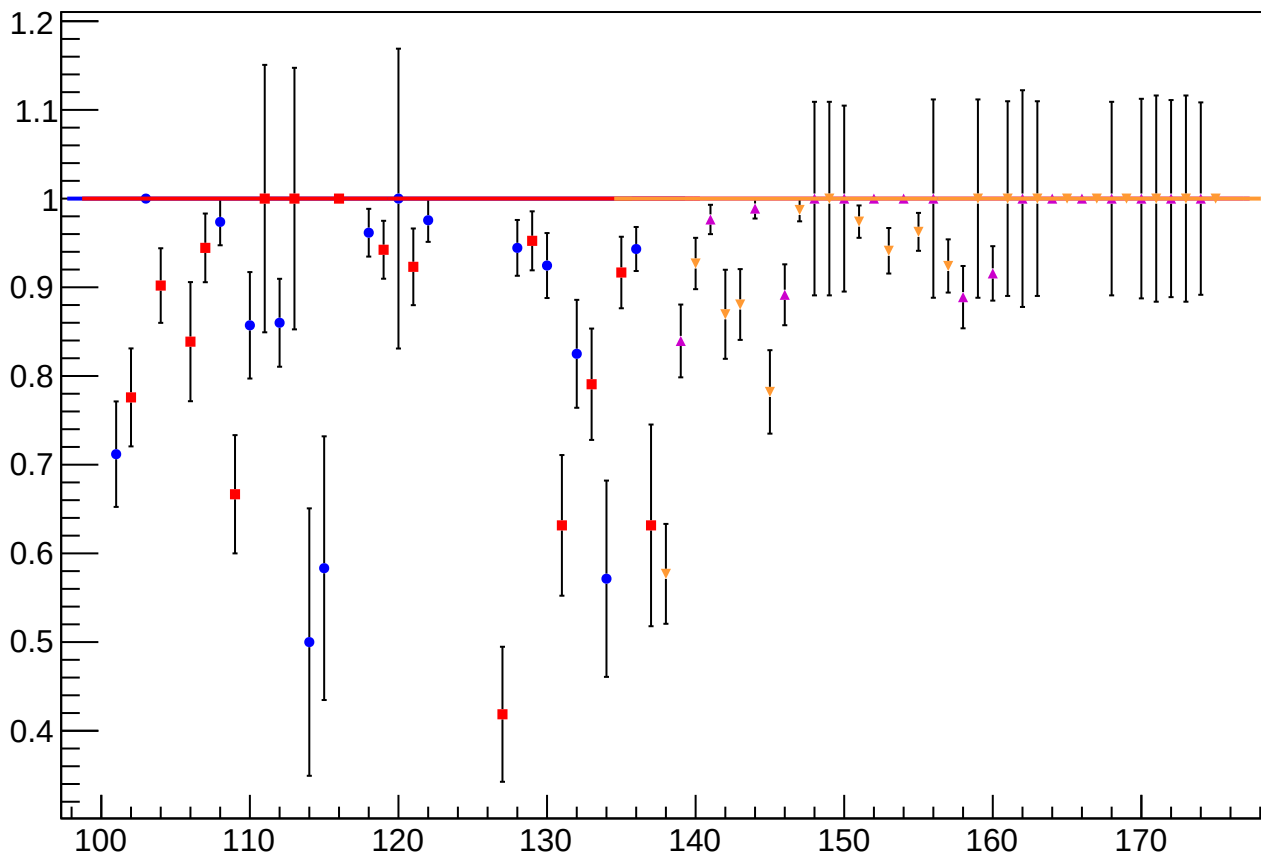
# dit\_flag\_mean vs Slug, Sign Corrected



Right In:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}: 95.9/14$   
 Left Out:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}: 1596.8/19$   
 Right Out:  $-1.000 \pm 0.000$   $\chi^2/\text{NDF}: 168.9/15$   
 Left In:  $-1.000 \pm 0.000$   $\chi^2/\text{NDF}: 1081.3/17$

Left:  $-0.149 \pm 0.000$   $\chi^2/\text{NDF}: 22036737626399208$   
 Right:  $0.398 \pm 0.000$   $\chi^2/\text{NDF}: 14173250084479480$   
 In:  $-0.833 \pm 0.000$   $\chi^2/\text{NDF}: 431339244237658838$   
 Out:  $0.900 \pm 0.000$   $\chi^2/\text{NDF}: 192642163504562978$   
 All:  $-0.111 \pm 0.000$   $\chi^2/\text{NDF}: 2392121657686$

# dit\_flag\_rms vs Slug, Sign Corrected



Right In:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 95.9/14

Left Out:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 1596.8/19

Right Out:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 168.9/15

Left In:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 1081.3/17

Left:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 690.6/37

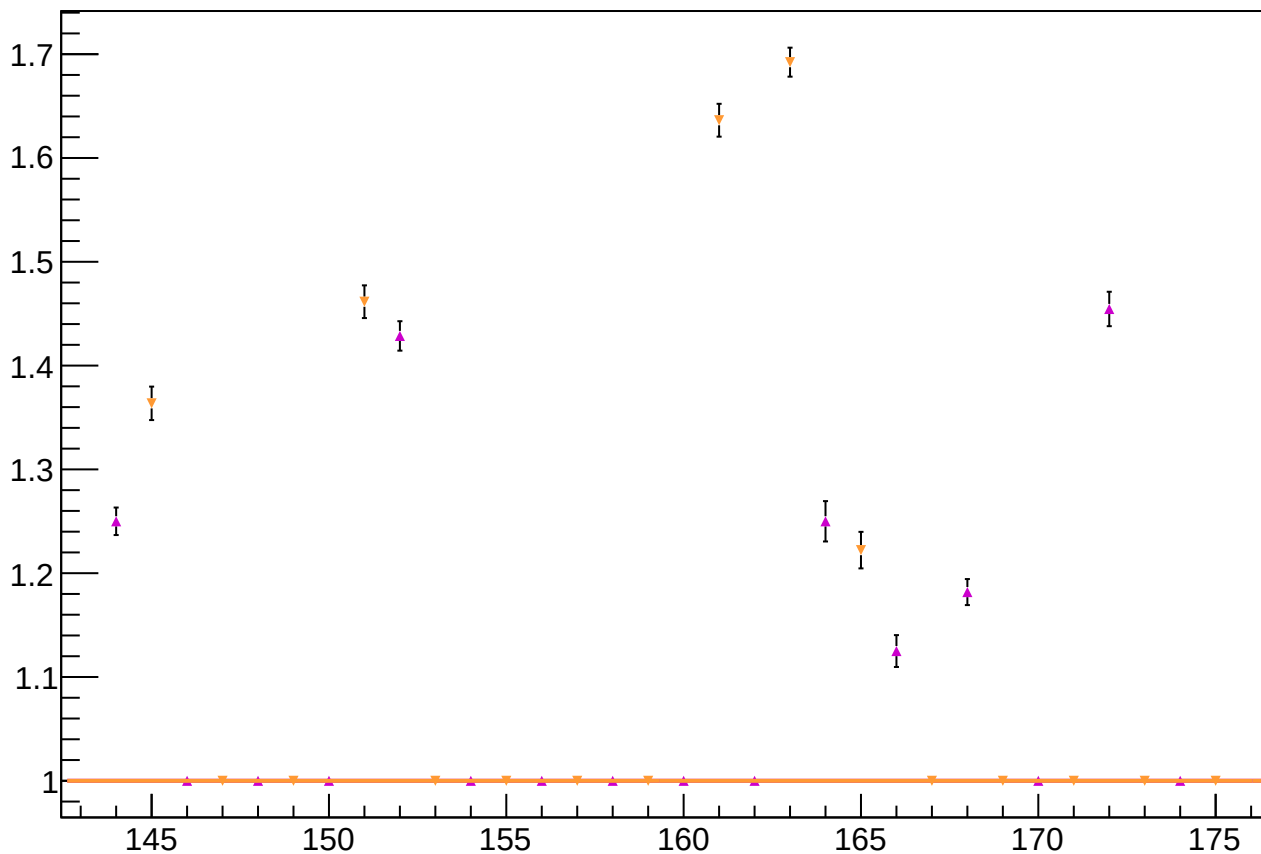
Right:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 347.8/30

In:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 491.7/32

Out:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 607.7/35

All:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 1287.4/68

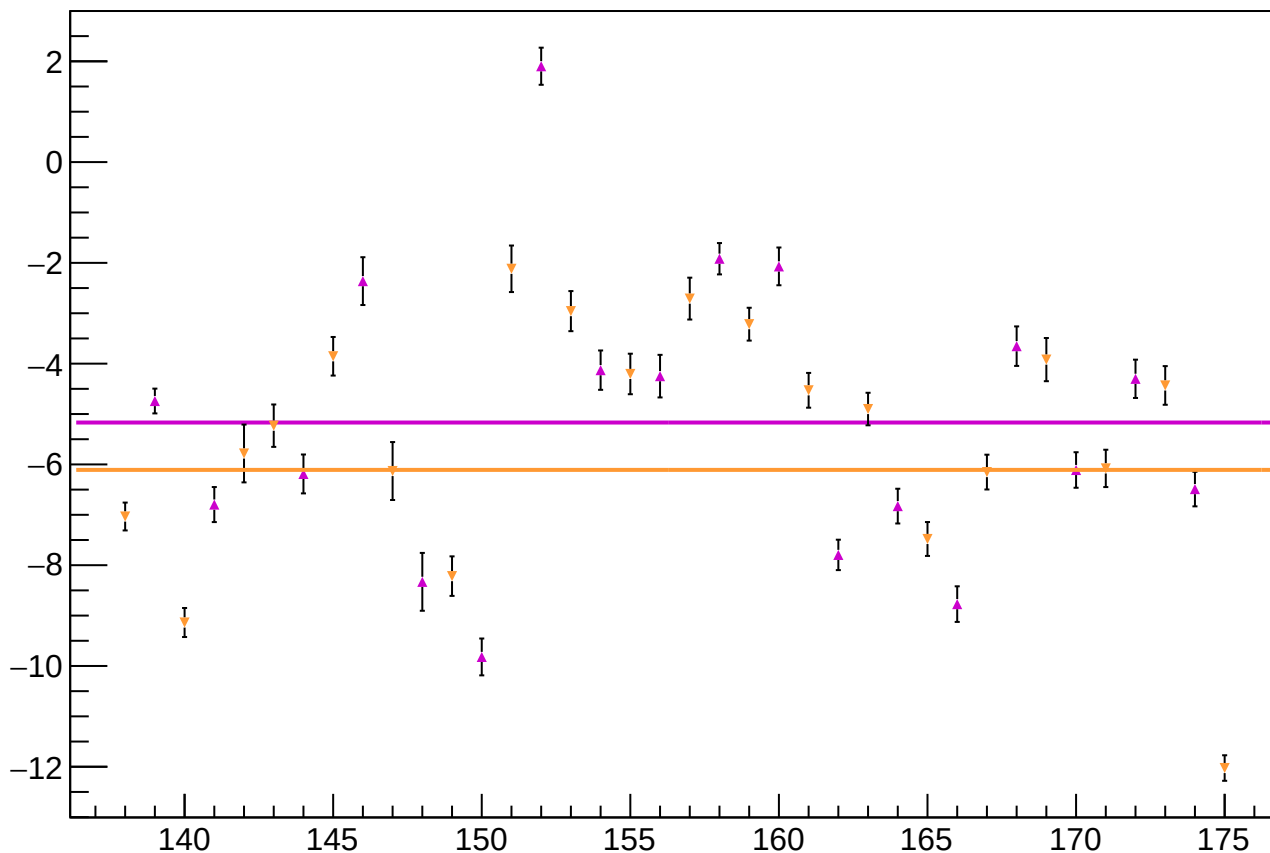
# dit\_segment\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
Left Out: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 6485.6/15  
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
Left In: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 3288.0/15

Left: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 12161.4/31  
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
In: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 3288.0/15  
Out: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 6485.6/15  
All: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 12161.4/31

reg\_asym\_sam1\_diff\_bpm1X\_slope vs Slug, Sign Corrected

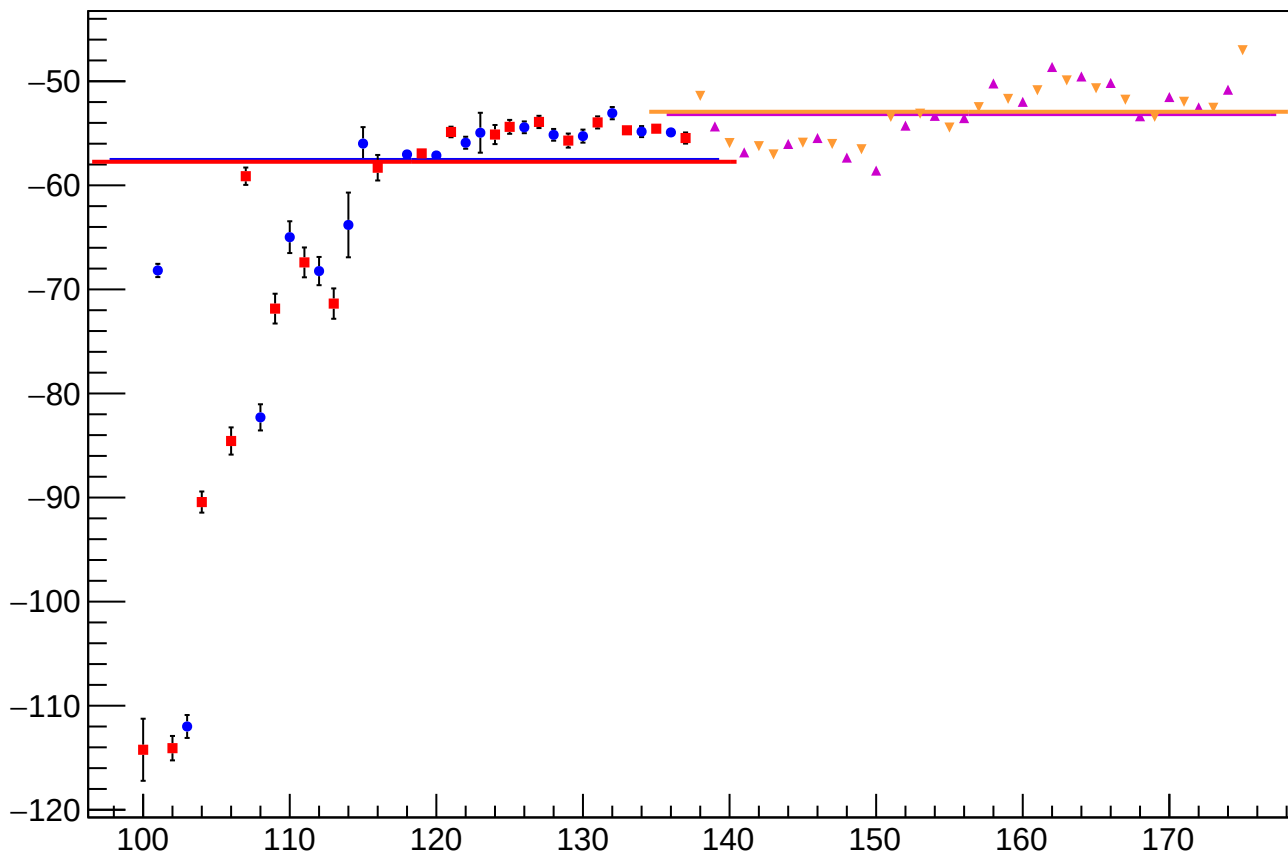


Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -6.109 $\pm$ 0.081  $\chi^2/\text{NDF}$ :1137.6/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -5.169 $\pm$ 0.084  $\chi^2/\text{NDF}$ :1062.1/17

Left: -5.658 $\pm$ 0.058  $\chi^2/\text{NDF}$ : 2264.4/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: -5.169 $\pm$ 0.084  $\chi^2/\text{NDF}$ :1062.1/17  
 Out: -6.109 $\pm$ 0.081  $\chi^2/\text{NDF}$ :1137.6/19  
 All: -5.658 $\pm$ 0.058  $\chi^2/\text{NDF}$ : 2264.4/37



reg\_asym\_sam1\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -57.563+/-0.141  $\chi^2/\text{NDF}$ : 3455.9/16

Left Out: -52.932+/-0.062  $\chi^2/\text{NDF}$ :1818.3/19

Right Out: -57.736+/-0.143  $\chi^2/\text{NDF}$ : 4698.4/18

Left In: -53.158+/-0.066  $\chi^2/\text{NDF}$ :1990.3/17

Left: -53.039+/-0.045  $\chi^2/\text{NDF}$ : 3814.9/37

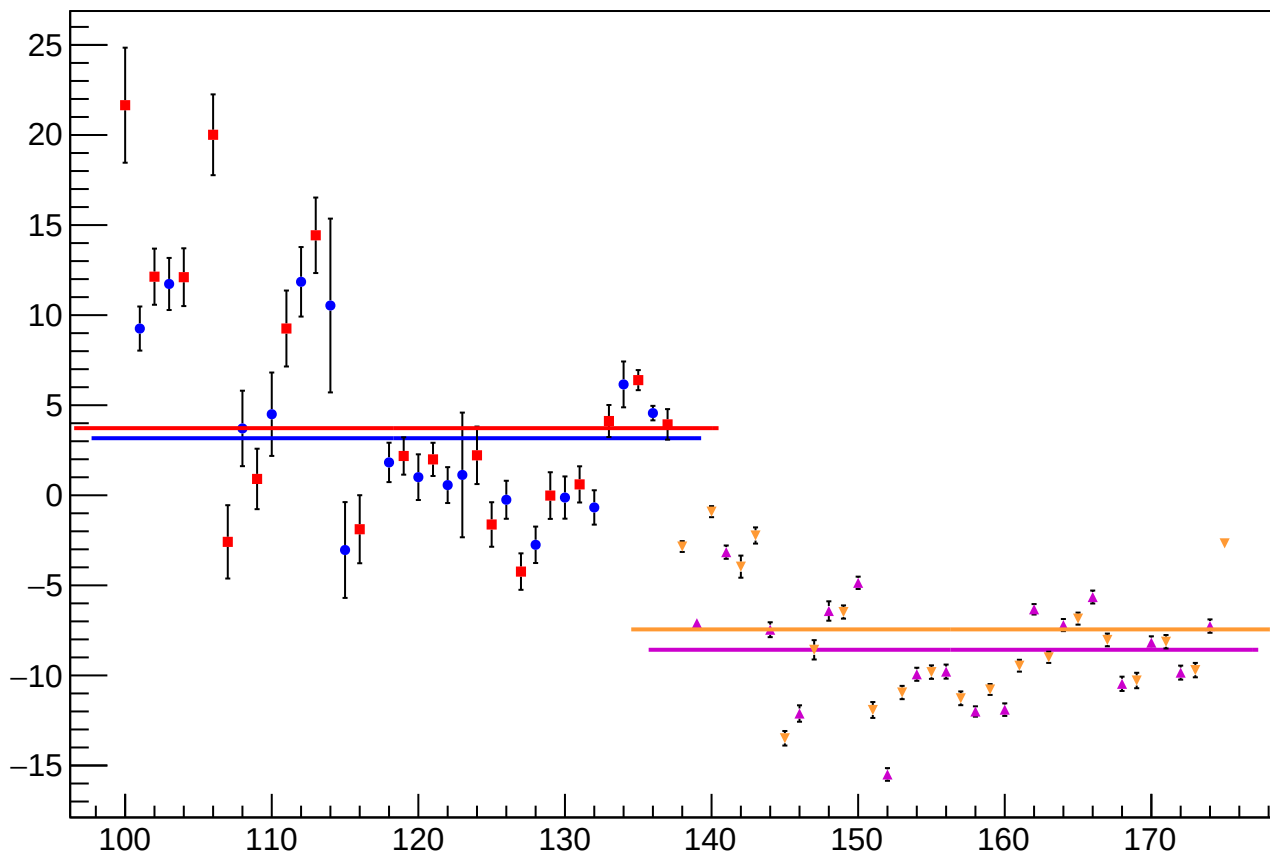
Right: -57.649+/-0.101  $\chi^2/\text{NDF}$ : 8155.1/35

In: -53.937+/-0.059  $\chi^2/\text{NDF}$ :6244.5/34

Out: -53.691+/-0.057  $\chi^2/\text{NDF}$ :7466.8/38

All: -53.808+/-0.041  $\chi^2/\text{NDF}$ : 13720.2/73

reg\_asym\_sam1\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $3.168 \pm 0.258$   $\chi^2/\text{NDF}: 186.2/16$

Left Out:  $-7.445 \pm 0.080$   $\chi^2/\text{NDF}: 2049.7/19$

Right Out:  $3.726 \pm 0.267$   $\chi^2/\text{NDF}: 323.3/18$

Left In:  $-8.576 \pm 0.084$   $\chi^2/\text{NDF}: 1279.7/17$

Left:  $-7.989 \pm 0.058$   $\chi^2/\text{NDF}: 3424.6/37$

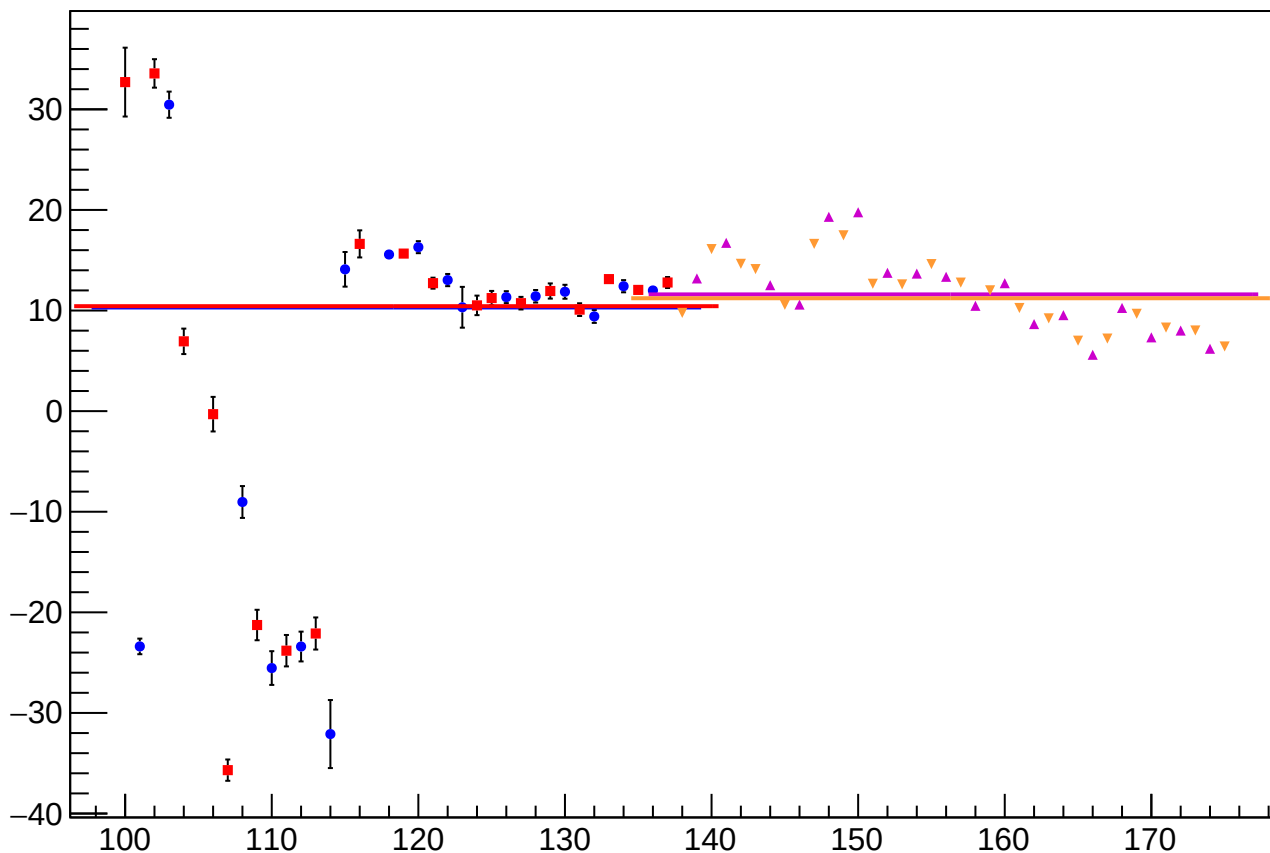
Right:  $3.437 \pm 0.185$   $\chi^2/\text{NDF}: 511.7/35$

In:  $-7.459 \pm 0.079$   $\chi^2/\text{NDF}: 3344.9/34$

Out:  $-6.517 \pm 0.077$   $\chi^2/\text{NDF}: 3977.0/38$

All:  $-6.973 \pm 0.055$   $\chi^2/\text{NDF}: 7394.4/73$

reg\_asym\_sam1\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $10.306 \pm 0.157$   $\chi^2/\text{NDF}$ : 3712.3/16

Left Out:  $11.222 \pm 0.070$   $\chi^2/\text{NDF}$ : 2197.6/19

Right Out:  $10.433 \pm 0.160$   $\chi^2/\text{NDF}$ : 3828.5/18

Left In:  $11.603 \pm 0.073$   $\chi^2/\text{NDF}$ : 2789.6/17

Left:  $11.403 \pm 0.051$   $\chi^2/\text{NDF}$ : 5001.4/37

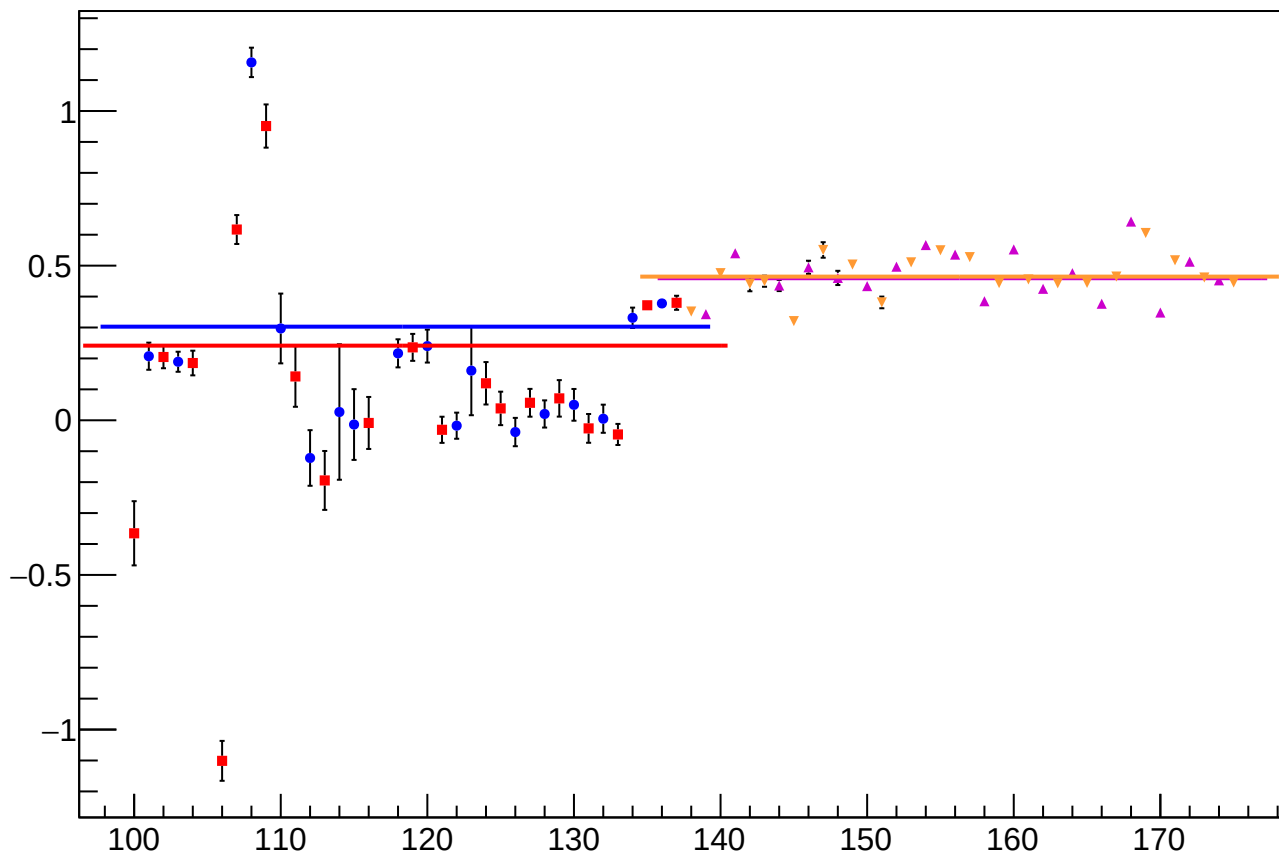
Right:  $10.368 \pm 0.112$   $\chi^2/\text{NDF}$ : 7541.1/35

In:  $11.370 \pm 0.066$   $\chi^2/\text{NDF}$ : 6558.1/34

Out:  $11.096 \pm 0.064$   $\chi^2/\text{NDF}$ : 6046.5/38

All:  $11.228 \pm 0.046$   $\chi^2/\text{NDF}$ : 12613.5/73

reg\_asym\_sam1\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.303 $\pm$ 0.008  $\chi^2$ /NDF: 646.6/16

Left Out: 0.465 $\pm$ 0.003  $\chi^2$ /NDF:404.3/19

Right Out: 0.241 $\pm$ 0.008  $\chi^2$ /NDF: 986.7/18

Left In: 0.459 $\pm$ 0.003  $\chi^2$ /NDF:684.7/17

Left: 0.462 $\pm$ 0.002  $\chi^2$ /NDF: 1090.4/37

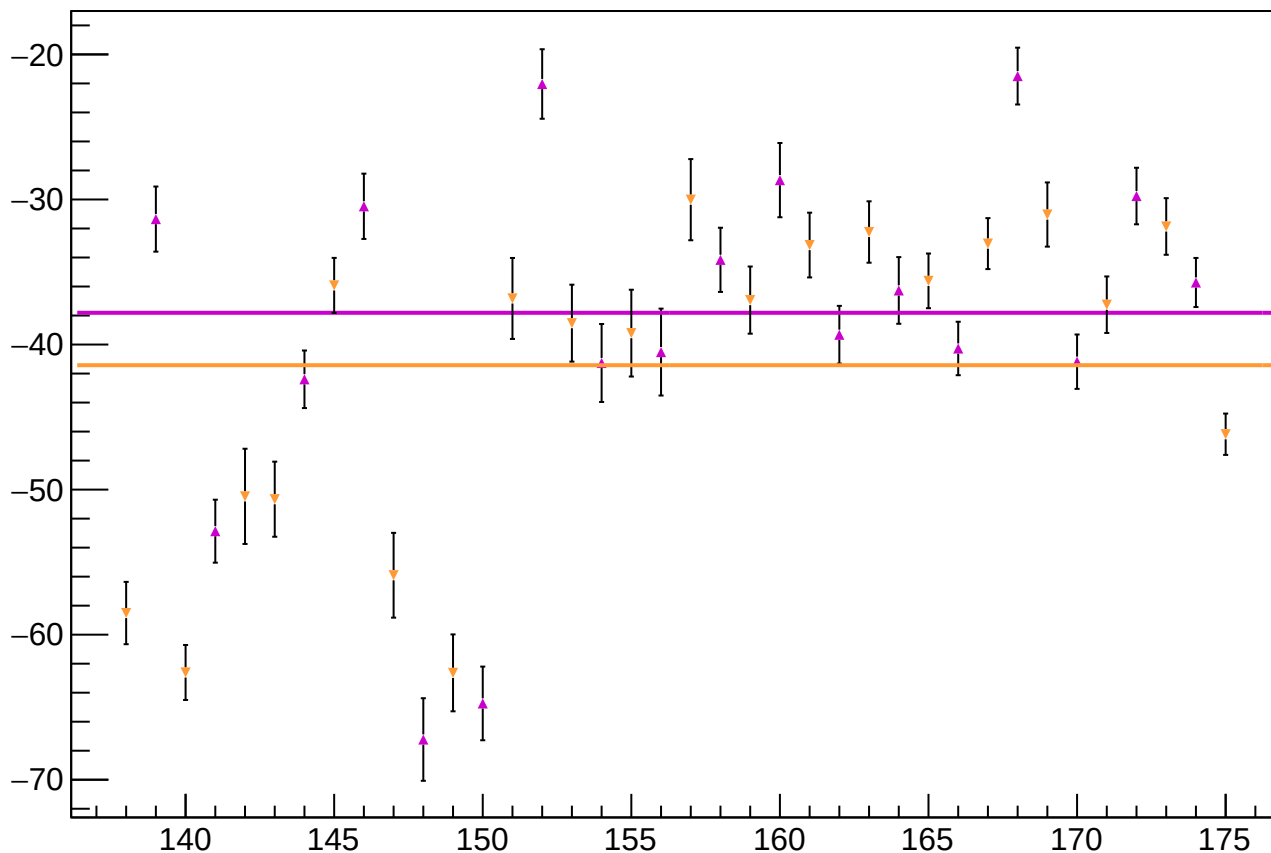
Right: 0.273 $\pm$ 0.006  $\chi^2$ /NDF: 1660.4/35

In: 0.439 $\pm$ 0.003  $\chi^2$ /NDF:1648.6/34

Out: 0.438 $\pm$ 0.003  $\chi^2$ /NDF:1998.4/38

All: 0.438 $\pm$ 0.002  $\chi^2$ /NDF: 3647.1/73

reg\_asym\_sam2\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-41.425 \pm 0.487$   $\chi^2/\text{NDF}: 457.0/19$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-37.811 \pm 0.512$   $\chi^2/\text{NDF}: 447.0/17$

Left:  $-39.710 \pm 0.353$   $\chi^2/\text{NDF}: 930.1/37$

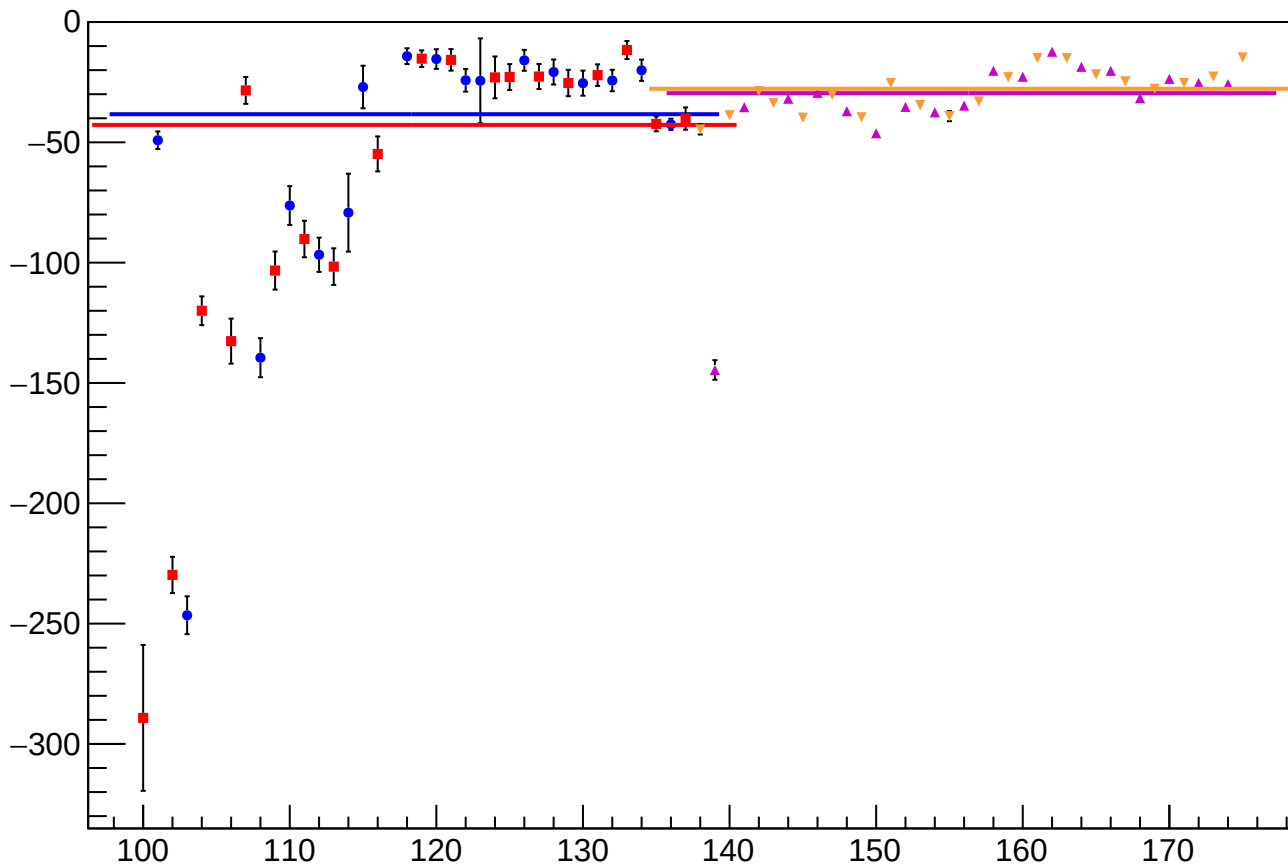
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

In:  $-37.811 \pm 0.512$   $\chi^2/\text{NDF}: 447.0/17$

Out:  $-41.425 \pm 0.487$   $\chi^2/\text{NDF}: 457.0/19$

All:  $-39.710 \pm 0.353$   $\chi^2/\text{NDF}: 930.1/37$

reg\_asym\_sam2\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-38.309 \pm 1.137$   $\chi^2/\text{NDF}: 1132.7/16$

Left Out:  $-27.743 \pm 0.365$   $\chi^2/\text{NDF}: 553.7/19$

Right Out:  $-42.756 \pm 1.211$   $\chi^2/\text{NDF}: 1341.6/18$

Left In:  $-29.548 \pm 0.384$   $\chi^2/\text{NDF}: 1243.7/17$

Left:  $-28.601 \pm 0.265$   $\chi^2/\text{NDF}: 1809.0/37$

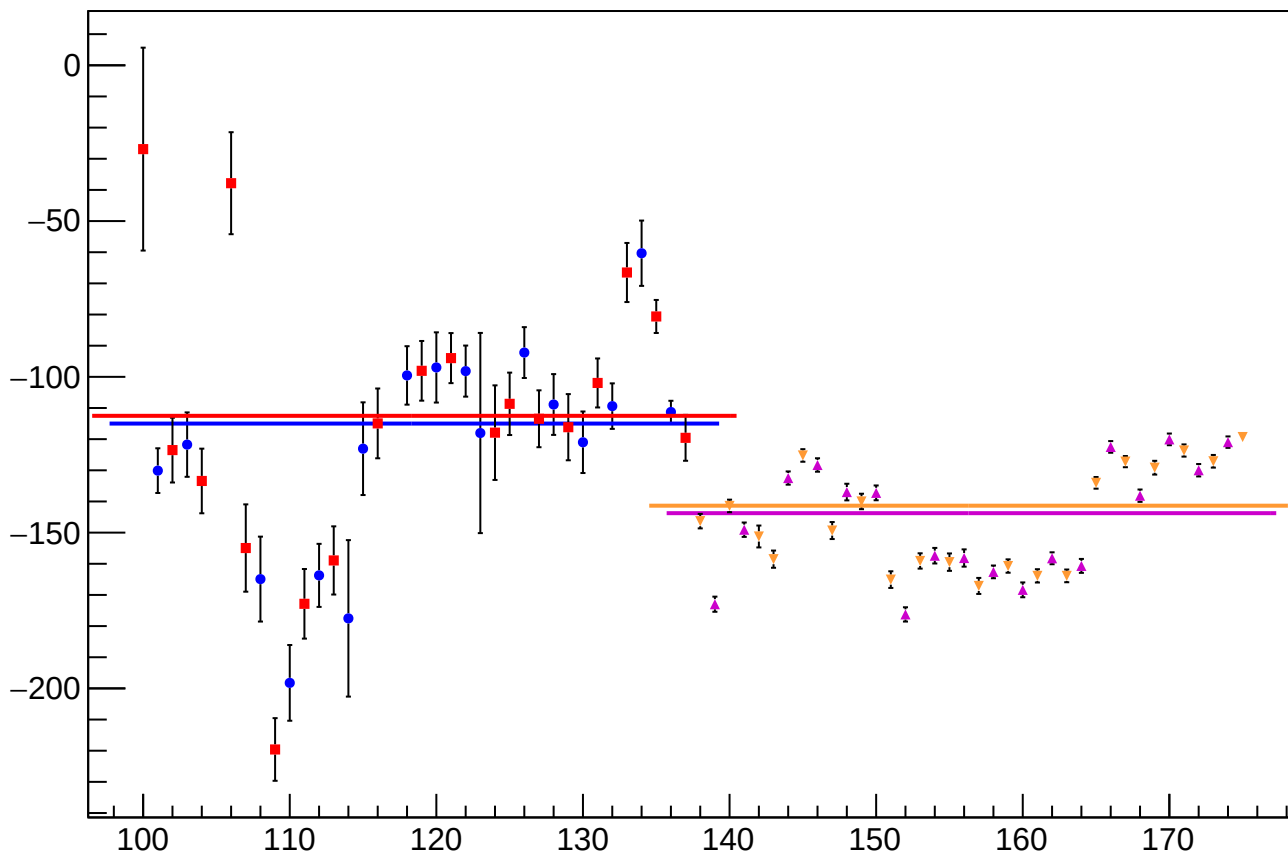
Right:  $-40.393 \pm 0.829$   $\chi^2/\text{NDF}: 2481.4/35$

In:  $-30.444 \pm 0.364$   $\chi^2/\text{NDF}: 2429.6/34$

Out:  $-28.995 \pm 0.350$   $\chi^2/\text{NDF}: 2036.2/38$

All:  $-29.692 \pm 0.252$   $\chi^2/\text{NDF}: 4474.1/73$

reg\_asym\_sam2\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-114.996 \pm 2.072$   $\chi^2/\text{NDF}: 141.8/16$

Left Out:  $-141.354 \pm 0.486$   $\chi^2/\text{NDF}: 1189.6/19$

Right Out:  $-112.510 \pm 2.207$   $\chi^2/\text{NDF}: 273.1/18$

Left In:  $-143.756 \pm 0.509$   $\chi^2/\text{NDF}: 1306.0/17$

Left:  $-142.497 \pm 0.352$   $\chi^2/\text{NDF}: 2507.2/37$

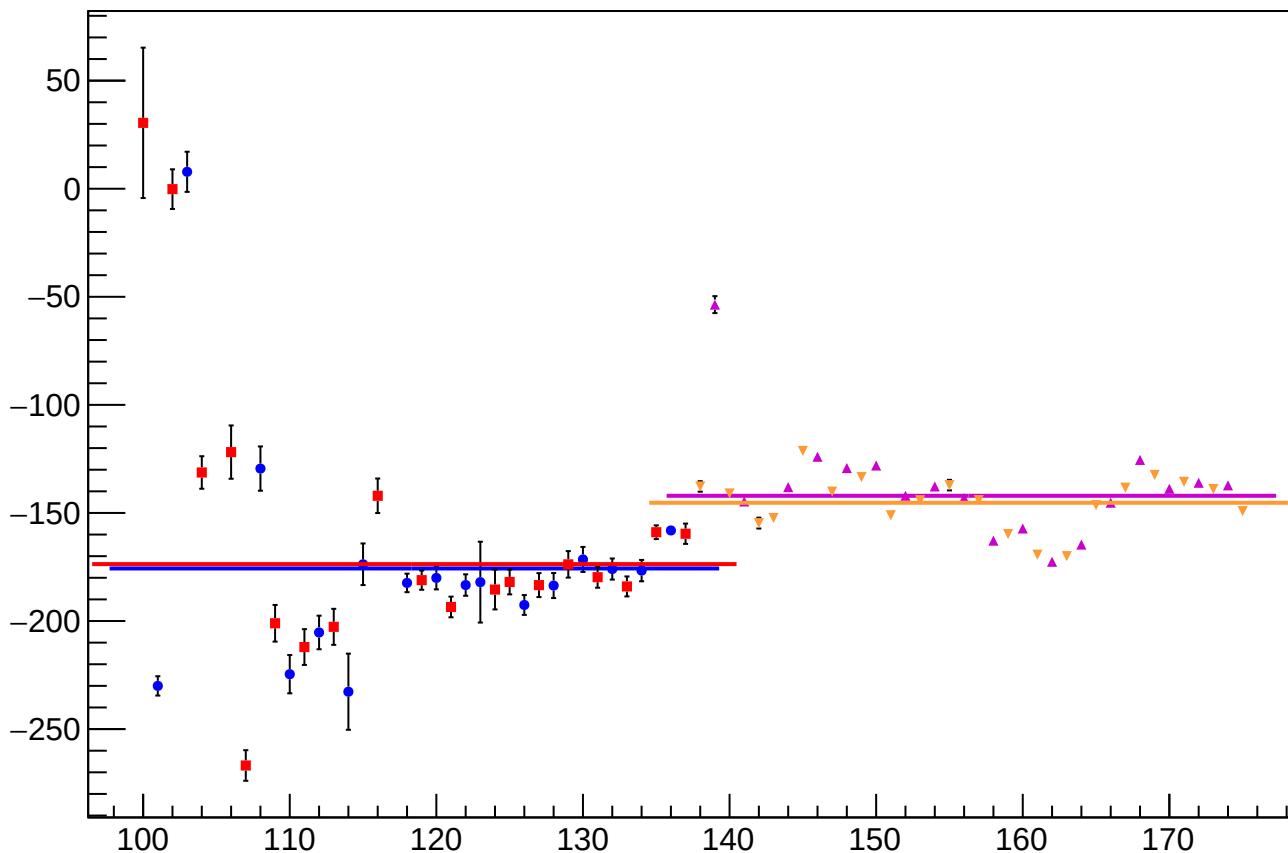
Right:  $-113.831 \pm 1.511$   $\chi^2/\text{NDF}: 415.6/35$

In:  $-142.116 \pm 0.495$   $\chi^2/\text{NDF}: 1629.4/34$

Out:  $-140.021 \pm 0.474$   $\chi^2/\text{NDF}: 1625.7/38$

All:  $-141.025 \pm 0.342$   $\chi^2/\text{NDF}: 3264.4/73$

reg\_asym\_sam2\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-175.696 \pm 1.268$   $\chi^2/\text{NDF}: 692.9/16$

Left Out:  $-145.293 \pm 0.414$   $\chi^2/\text{NDF}: 909.6/19$

Right Out:  $-173.666 \pm 1.356$   $\chi^2/\text{NDF}: 737.7/18$

Left In:  $-142.058 \pm 0.436$   $\chi^2/\text{NDF}: 1524.7/17$

Left:  $-143.756 \pm 0.300$   $\chi^2/\text{NDF}: 2463.2/37$

Right:  $-174.749 \pm 0.926$   $\chi^2/\text{NDF}: 1431.8/35$

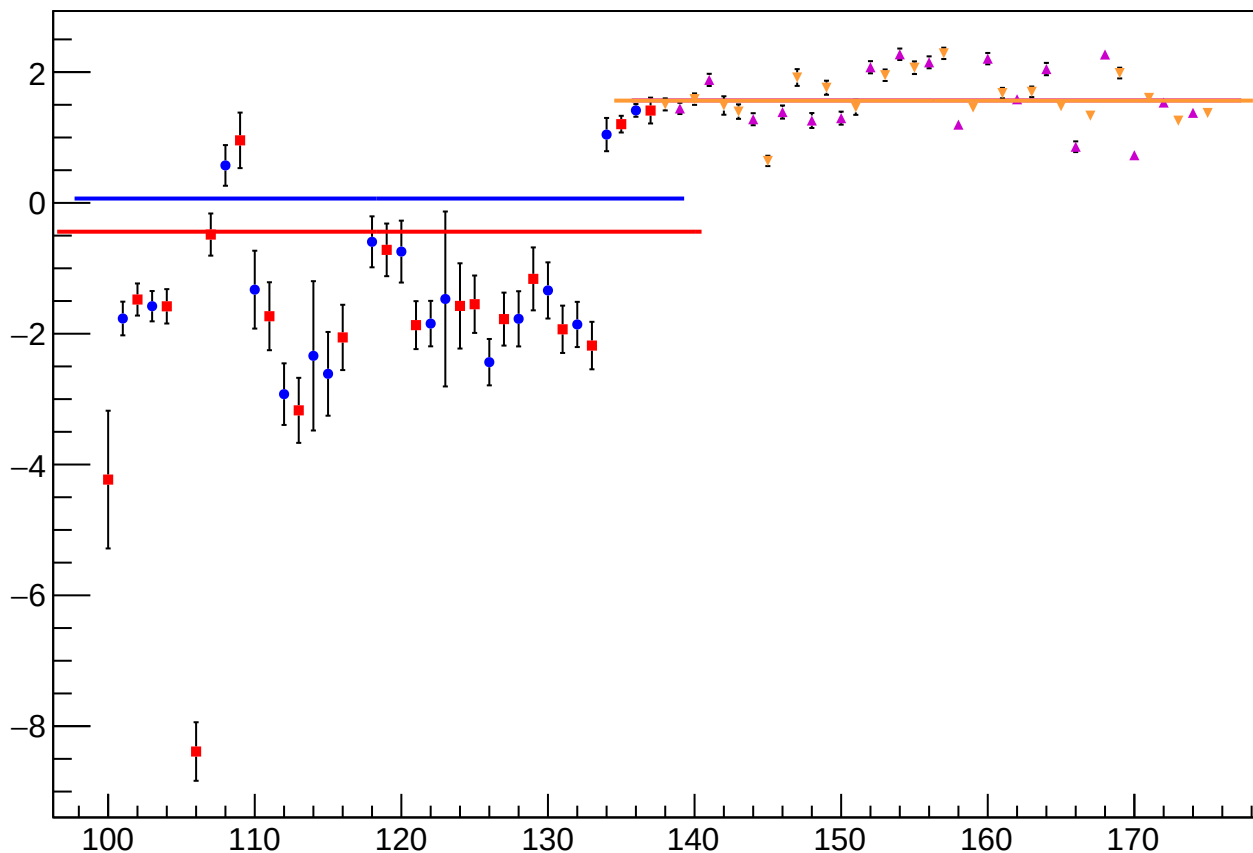
In:  $-145.610 \pm 0.412$   $\chi^2/\text{NDF}: 2847.5/34$

Out:  $-147.717 \pm 0.396$   $\chi^2/\text{NDF}: 2047.8/38$

All:  $-146.704 \pm 0.286$   $\chi^2/\text{NDF}: 4908.9/73$



reg\_asym\_sam2\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.067 \pm 0.067$   $\chi^2/\text{NDF}$ : 526.1/16

Left Out:  $1.564 \pm 0.019$   $\chi^2/\text{NDF}$ : 336.0/19

Right Out:  $-0.440 \pm 0.071$   $\chi^2/\text{NDF}$ : 754.9/18

Left In:  $1.567 \pm 0.020$   $\chi^2/\text{NDF}$ : 600.5/17

Left:  $1.566 \pm 0.014$   $\chi^2/\text{NDF}$ : 936.6/37

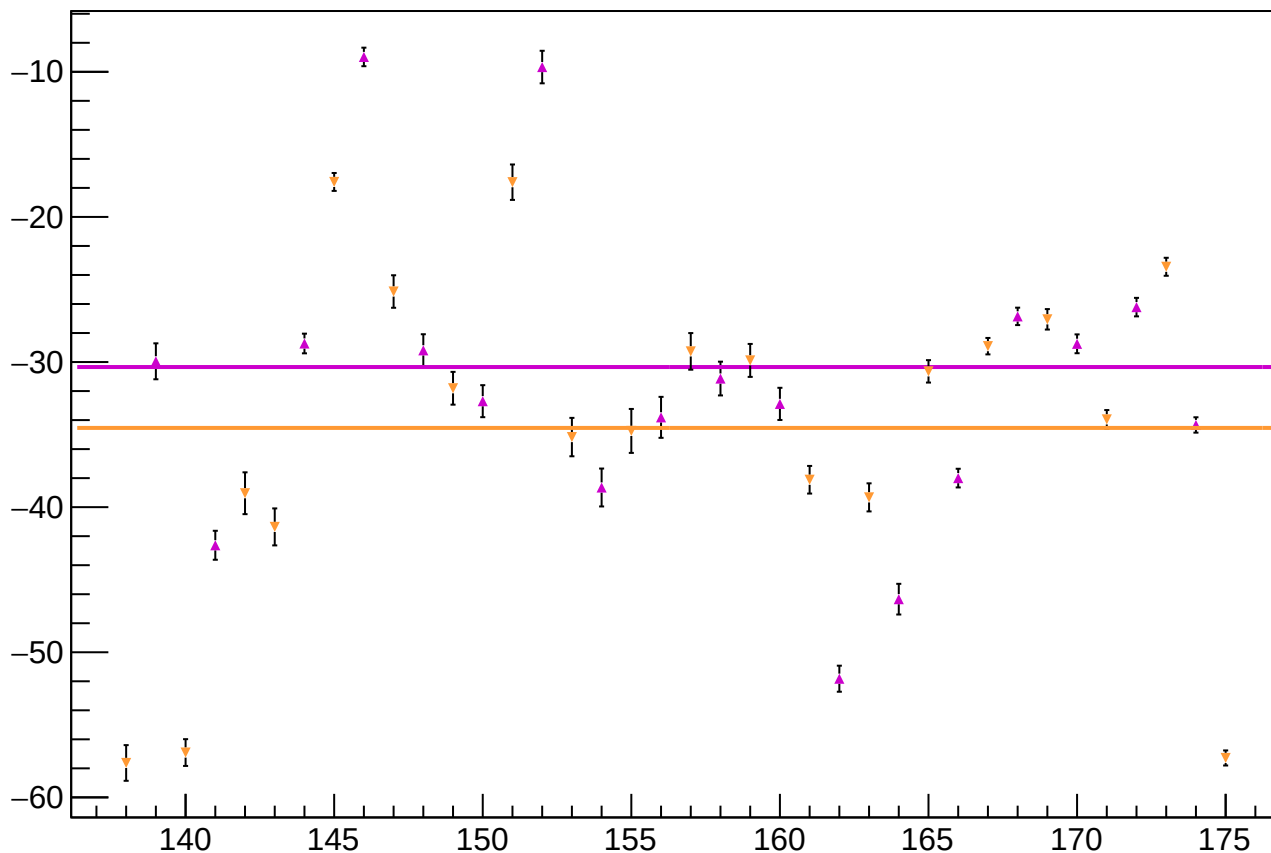
Right:  $-0.172 \pm 0.049$   $\chi^2/\text{NDF}$ : 1308.0/35

In:  $1.448 \pm 0.019$   $\chi^2/\text{NDF}$ : 1588.6/34

Out:  $1.428 \pm 0.019$   $\chi^2/\text{NDF}$ : 1831.4/38

All:  $1.438 \pm 0.013$   $\chi^2/\text{NDF}$ : 3420.7/73

reg\_asym\_sam3\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: -34.539 $\pm$ 0.189  $\chi^2$ /NDF:4552.8/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: -30.344 $\pm$ 0.192  $\chi^2$ /NDF:2756.6/17

Left: -32.474 $\pm$ 0.135  $\chi^2$ /NDF: 7551.4/37

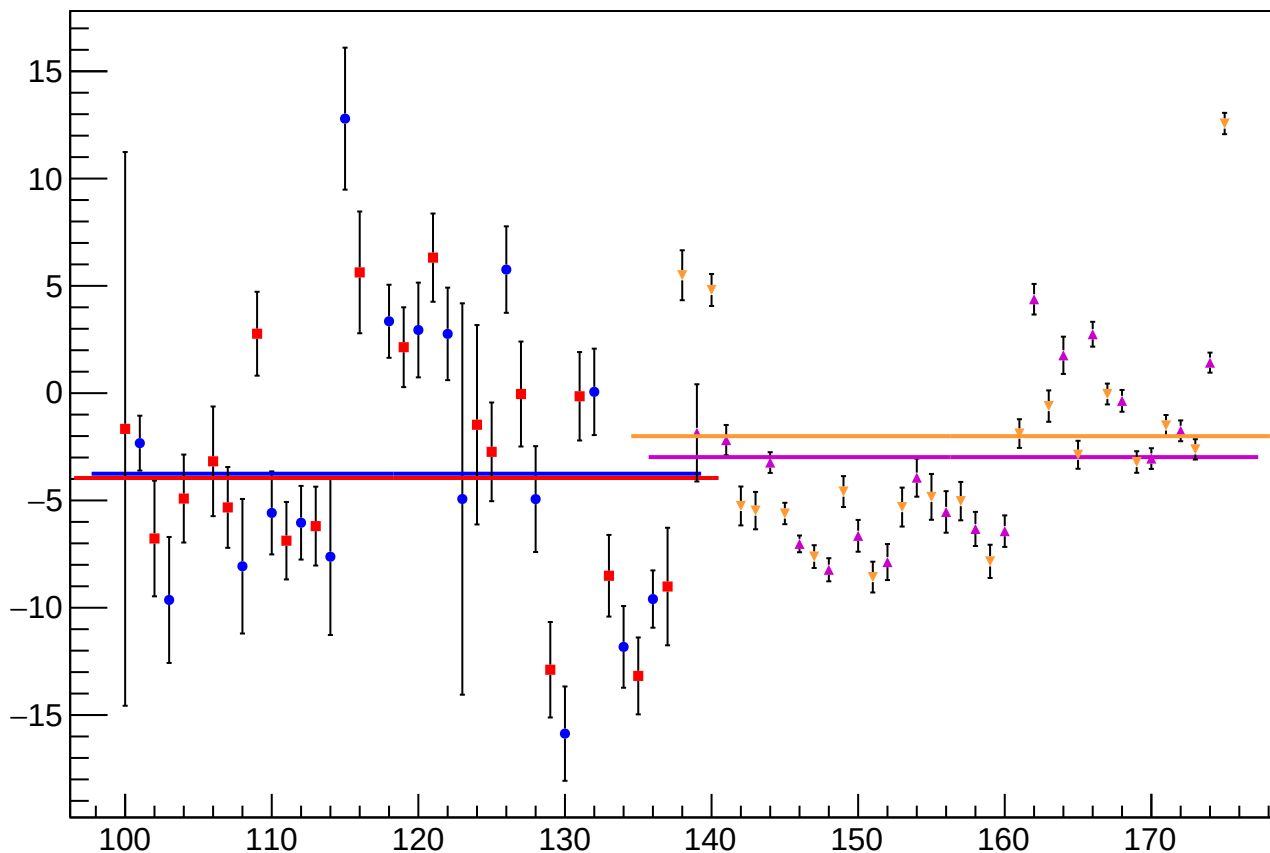
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: -30.344 $\pm$ 0.192  $\chi^2$ /NDF:2756.6/17

Out: -34.539 $\pm$ 0.189  $\chi^2$ /NDF:4552.8/19

All: -32.474 $\pm$ 0.135  $\chi^2$ /NDF: 7551.4/37

reg\_asym\_sam3\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-3.754 \pm 0.495$   $\chi^2/\text{NDF}: 165.3/16$

Left Out:  $-2.004 \pm 0.143$   $\chi^2/\text{NDF}: 1394.8/19$

Right Out:  $-3.954 \pm 0.507$   $\chi^2/\text{NDF}: 123.3/18$

Left In:  $-2.980 \pm 0.143$   $\chi^2/\text{NDF}: 666.2/17$

Left:  $-2.492 \pm 0.101$   $\chi^2/\text{NDF}: 2084.2/37$

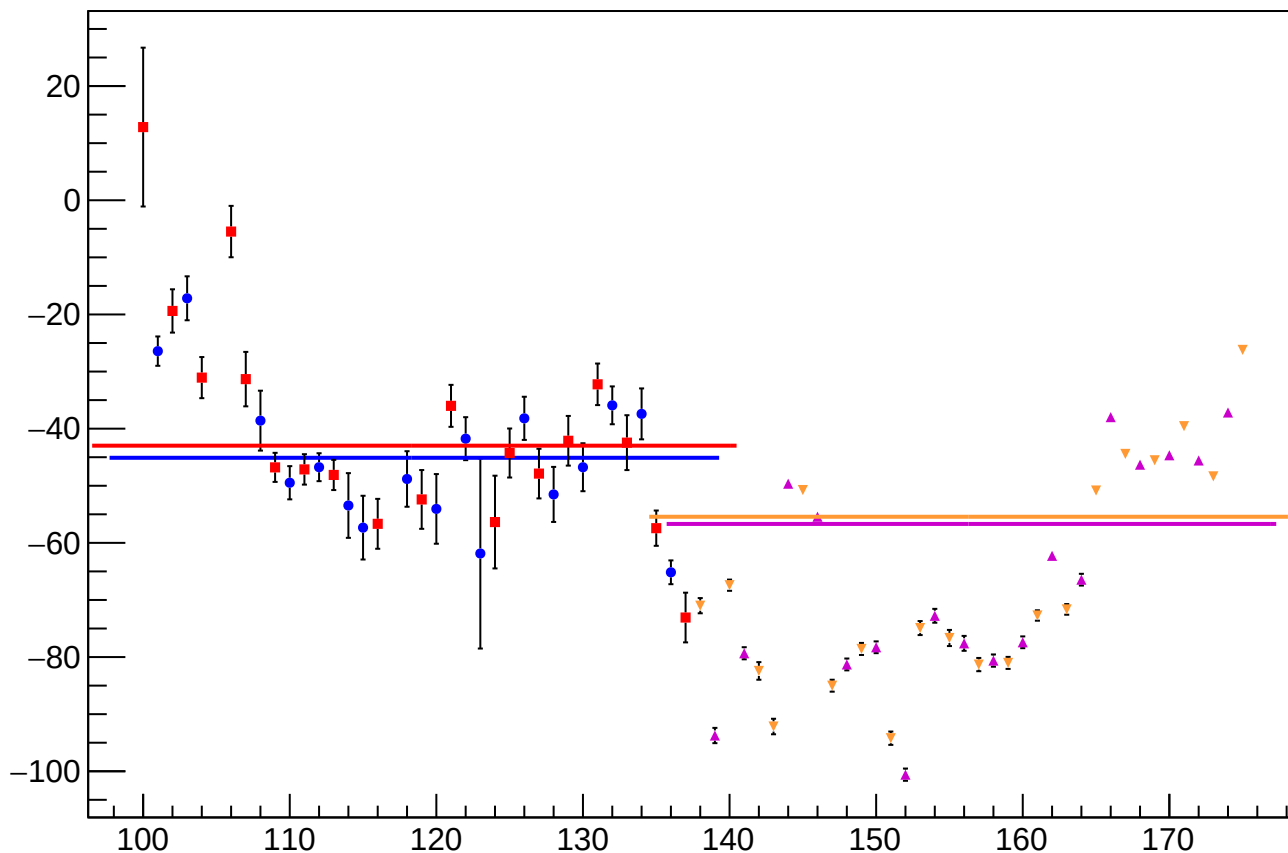
Right:  $-3.852 \pm 0.354$   $\chi^2/\text{NDF}: 288.7/35$

In:  $-3.040 \pm 0.138$   $\chi^2/\text{NDF}: 833.7/34$

Out:  $-2.148 \pm 0.138$   $\chi^2/\text{NDF}: 1531.8/38$

All:  $-2.594 \pm 0.097$   $\chi^2/\text{NDF}: 2386.6/73$

reg\_asym\_sam3\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-45.101 \pm 0.881$   $\chi^2/\text{NDF}$ : 229.9/16

Left Out:  $-55.426 \pm 0.190$   $\chi^2/\text{NDF}$ : 10443.7/19

Right Out:  $-42.979 \pm 0.877$   $\chi^2/\text{NDF}$ : 248.9/18

Left In:  $-56.687 \pm 0.193$   $\chi^2/\text{NDF}$ : 8354.5/17

Left:  $-56.047 \pm 0.135$   $\chi^2/\text{NDF}$ : 18819.9/37

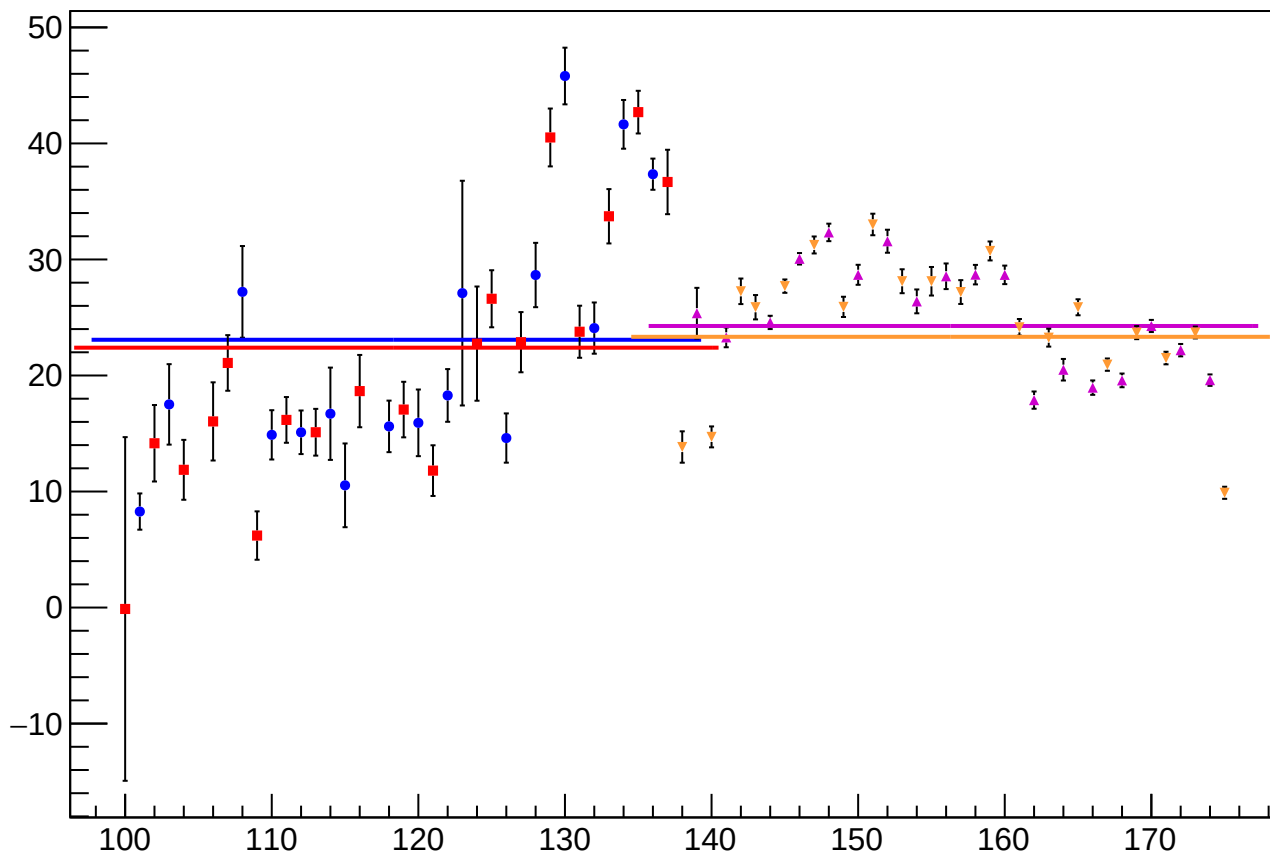
Right:  $-44.036 \pm 0.622$   $\chi^2/\text{NDF}$ : 481.6/35

In:  $-56.157 \pm 0.188$   $\chi^2/\text{NDF}$ : 8749.5/34

Out:  $-54.870 \pm 0.186$   $\chi^2/\text{NDF}$ : 10884.9/38

All:  $-55.503 \pm 0.132$   $\chi^2/\text{NDF}$ : 19658.0/73

reg\_asym\_sam3\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 23.079+/-0.556  $\chi^2/\text{NDF}$ : 461.1/16

Left Out: 23.333+/-0.162  $\chi^2/\text{NDF}$ :1295.9/19

Right Out: 22.397+/-0.572  $\chi^2/\text{NDF}$ : 370.3/18

Left In: 24.267+/-0.164  $\chi^2/\text{NDF}$ :742.6/17

Left: 23.794+/-0.115  $\chi^2/\text{NDF}$ : 2055.0/37

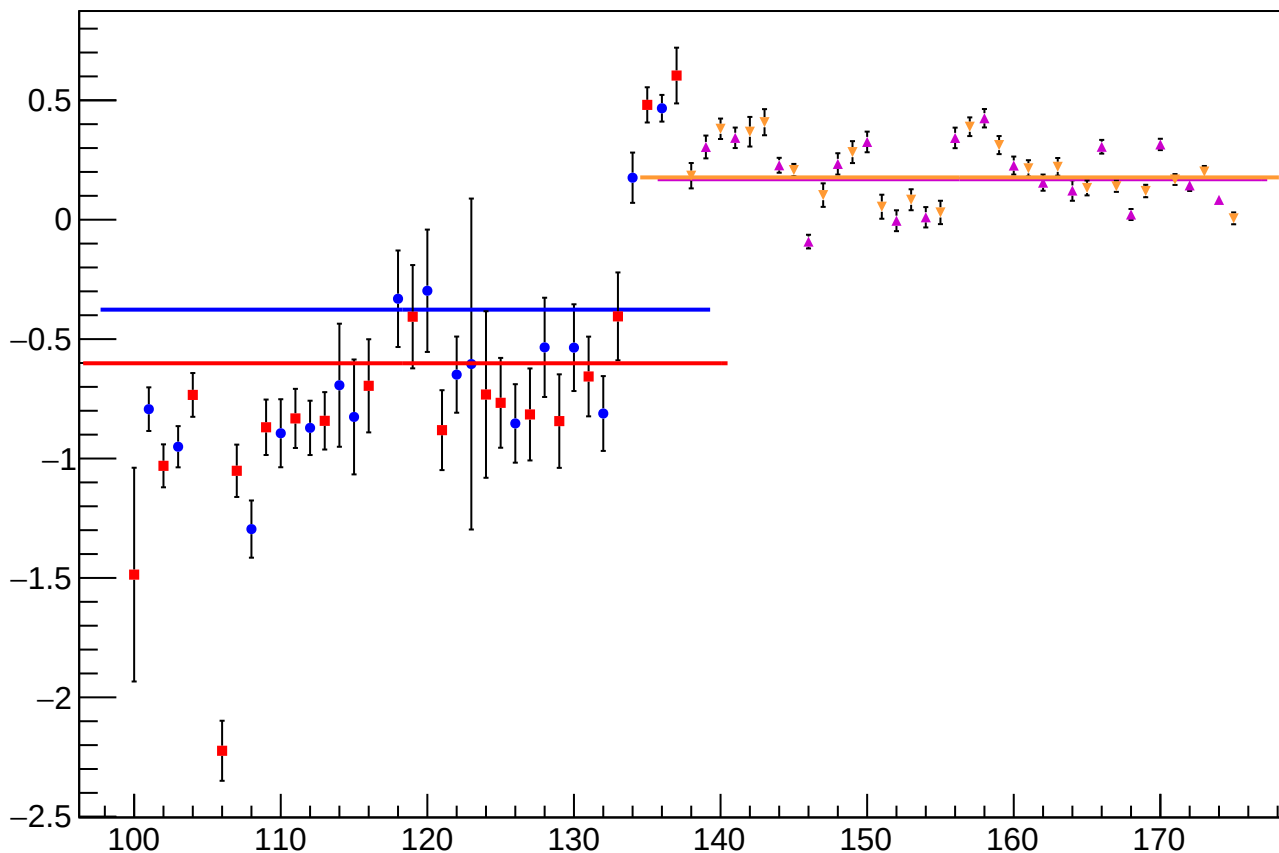
Right: 22.748+/-0.399  $\chi^2/\text{NDF}$ : 832.1/35

In: 24.172+/-0.157  $\chi^2/\text{NDF}$ :1207.9/34

Out: 23.264+/-0.156  $\chi^2/\text{NDF}$ :1668.7/38

All: 23.714+/-0.111  $\chi^2/\text{NDF}$ : 2893.5/73

reg\_asym\_sam3\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.377 \pm 0.030$   $\chi^2/\text{NDF}: 437.1/16$

Left Out:  $0.177 \pm 0.007$   $\chi^2/\text{NDF}: 181.5/19$

Right Out:  $-0.601 \pm 0.030$   $\chi^2/\text{NDF}: 555.6/18$

Left In:  $0.169 \pm 0.008$   $\chi^2/\text{NDF}: 338.8/17$

Left:  $0.173 \pm 0.005$   $\chi^2/\text{NDF}: 520.8/37$

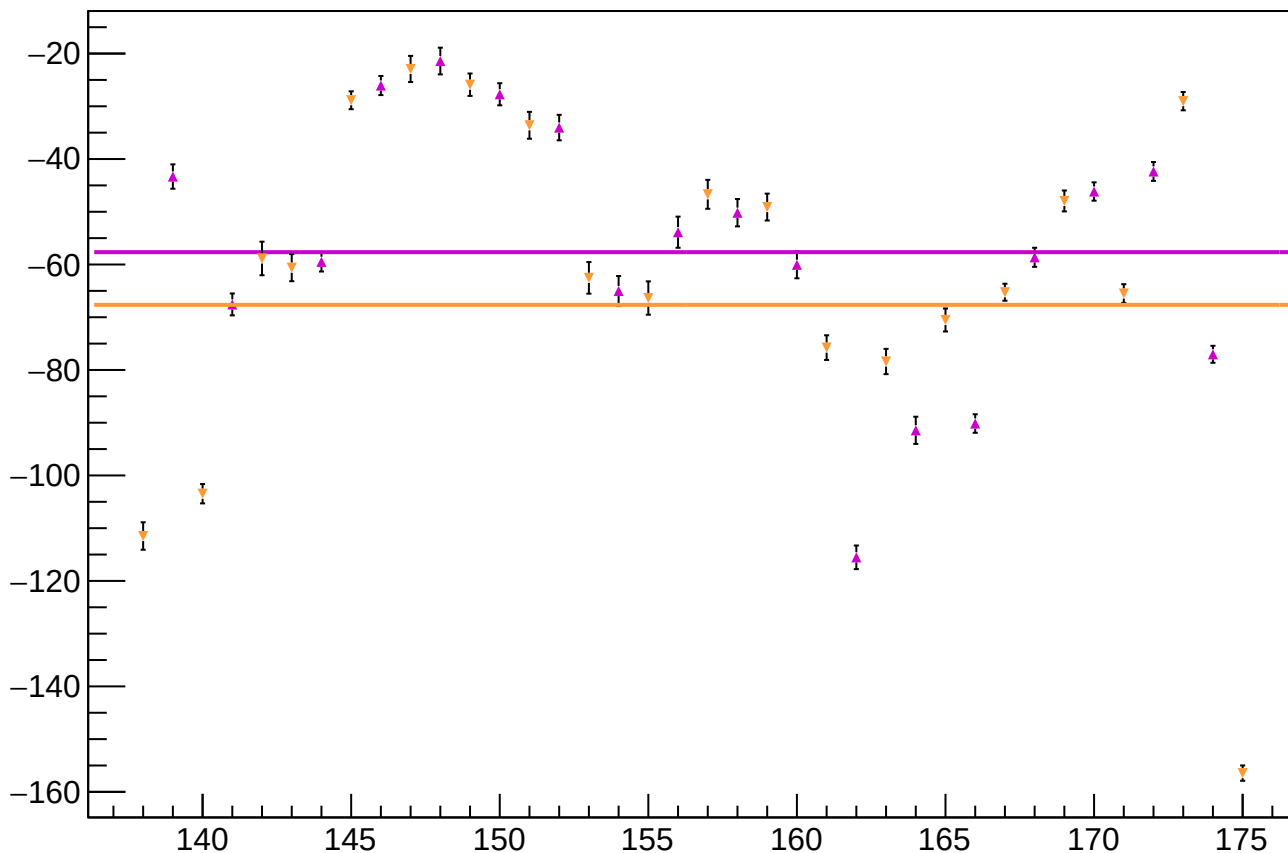
Right:  $-0.489 \pm 0.021$   $\chi^2/\text{NDF}: 1020.5/35$

In:  $0.137 \pm 0.007$   $\chi^2/\text{NDF}: 1086.3/34$

Out:  $0.132 \pm 0.007$   $\chi^2/\text{NDF}: 1363.8/38$

All:  $0.135 \pm 0.005$   $\chi^2/\text{NDF}: 2450.4/73$

reg\_asym\_sam4\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -67.650+/-0.476  $\chi^2/\text{NDF}$ : 6563.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -57.660+/-0.492  $\chi^2/\text{NDF}$ : 2331.1/17

Left: -62.823+/-0.342  $\chi^2/\text{NDF}$ : 9107.6/37

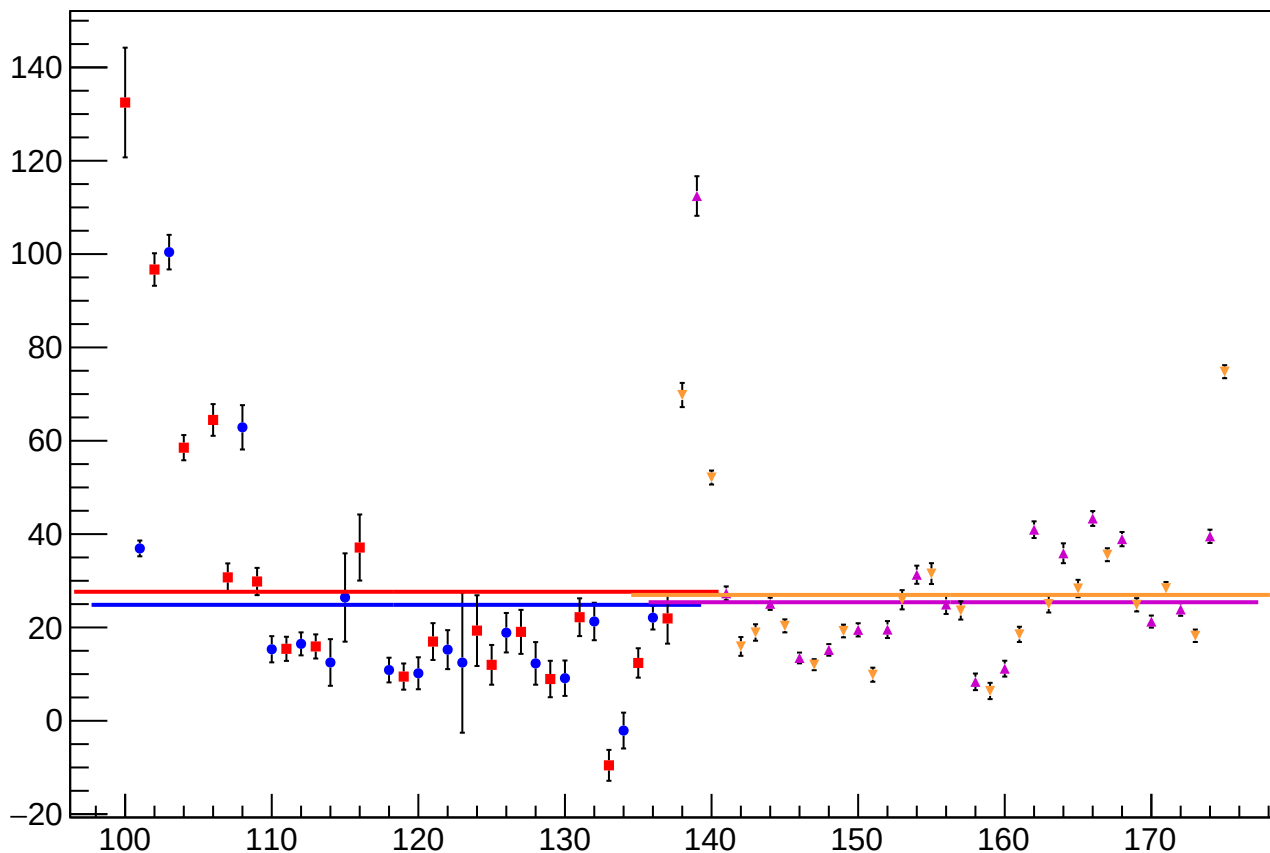
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -57.660+/-0.492  $\chi^2/\text{NDF}$ : 2331.1/17

Out: -67.650+/-0.476  $\chi^2/\text{NDF}$ : 6563.8/19

All: -62.823+/-0.342  $\chi^2/\text{NDF}$ : 9107.6/37

reg\_asym\_sam4\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 24.848 $\pm$ 0.801  $\chi^2$ /NDF: 690.8/16

Left Out: 26.972 $\pm$ 0.354  $\chi^2$ /NDF:2376.2/19

Right Out: 27.648 $\pm$ 0.810  $\chi^2$ /NDF: 1009.2/18

Left In: 25.406 $\pm$ 0.367  $\chi^2$ /NDF:1211.1/17

Left: 26.217 $\pm$ 0.255  $\chi^2$ /NDF: 3596.7/37

Right: 26.231 $\pm$ 0.570  $\chi^2$ /NDF: 1706.0/35

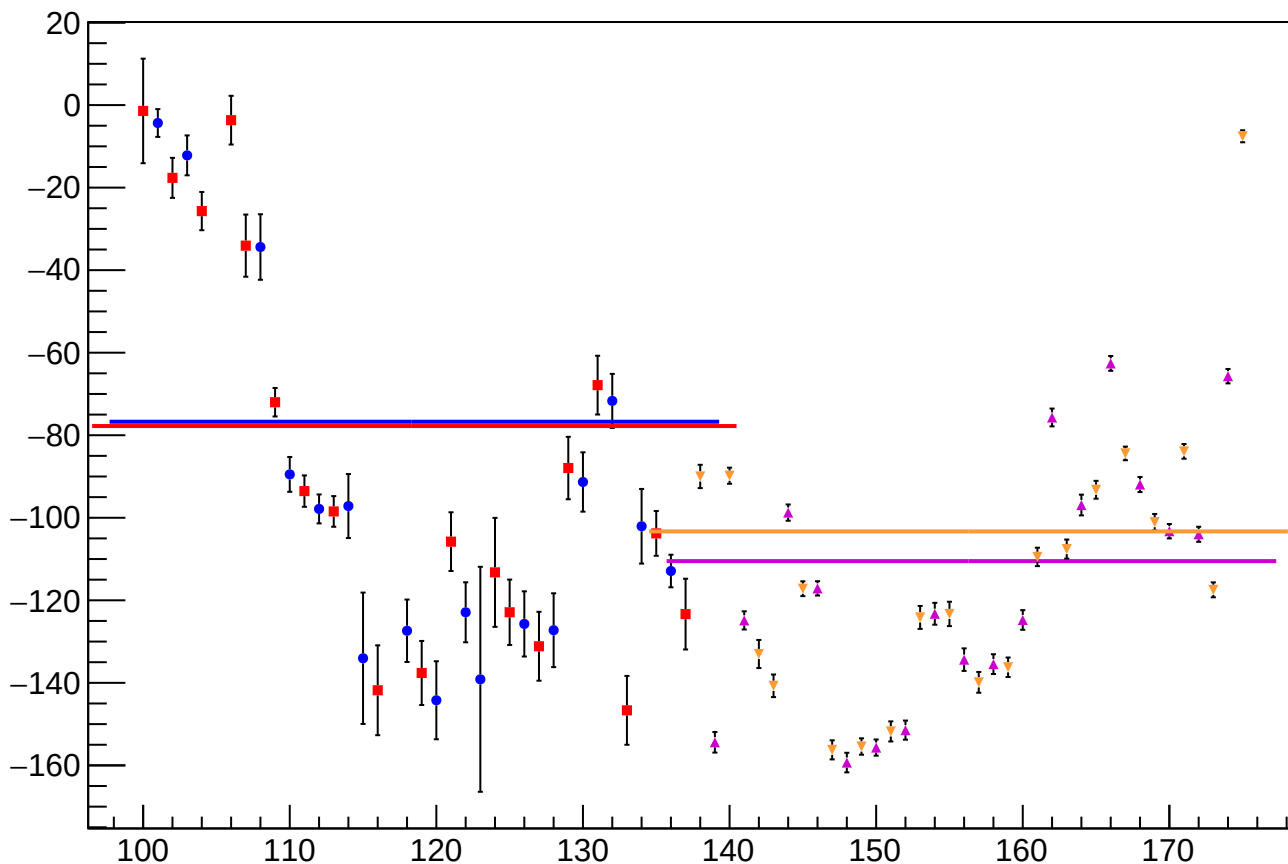
In: 25.309 $\pm$ 0.333  $\chi^2$ /NDF:1902.3/34

Out: 27.080 $\pm$ 0.324  $\chi^2$ /NDF:3386.0/38

All: 26.219 $\pm$ 0.232  $\chi^2$ /NDF: 5302.7/73



reg\_asym\_sam4\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-76.728 \pm 1.412$   $\chi^2/\text{NDF}: 1042.0/16$

Left Out:  $-103.305 \pm 0.475$   $\chi^2/\text{NDF}: 7178.7/19$

Right Out:  $-77.773 \pm 1.352$   $\chi^2/\text{NDF}: 871.8/18$

Left In:  $-110.504 \pm 0.491$   $\chi^2/\text{NDF}: 3708.0/17$

Left:  $-106.788 \pm 0.342$   $\chi^2/\text{NDF}: 10997.7/37$

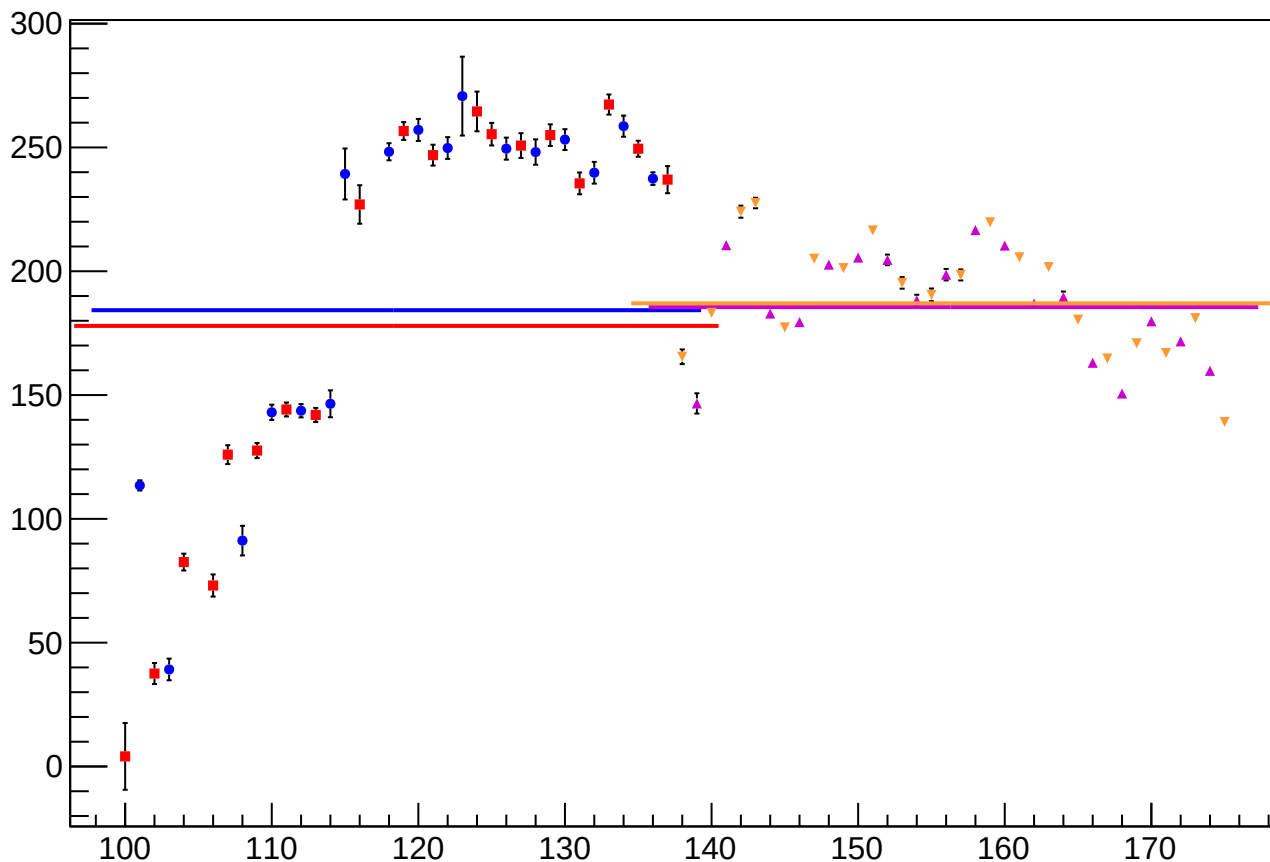
Right:  $-77.273 \pm 0.977$   $\chi^2/\text{NDF}: 1914.1/35$

In:  $-106.860 \pm 0.464$   $\chi^2/\text{NDF}: 5260.4/34$

Out:  $-100.497 \pm 0.448$   $\chi^2/\text{NDF}: 8367.8/38$

All:  $-103.571 \pm 0.322$   $\chi^2/\text{NDF}: 13725.4/73$

reg\_asym\_sam4\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 184.271 $\pm$ 0.914  $\chi^2$ /NDF: 5401.0/16

Left Out: 187.050 $\pm$ 0.404  $\chi^2$ /NDF:3237.8/19

Right Out: 177.930 $\pm$ 0.924  $\chi^2$ /NDF: 6330.9/18

Left In: 185.515 $\pm$ 0.419  $\chi^2$ /NDF:2081.0/17

Left: 186.310 $\pm$ 0.291  $\chi^2$ /NDF: 5325.8/37

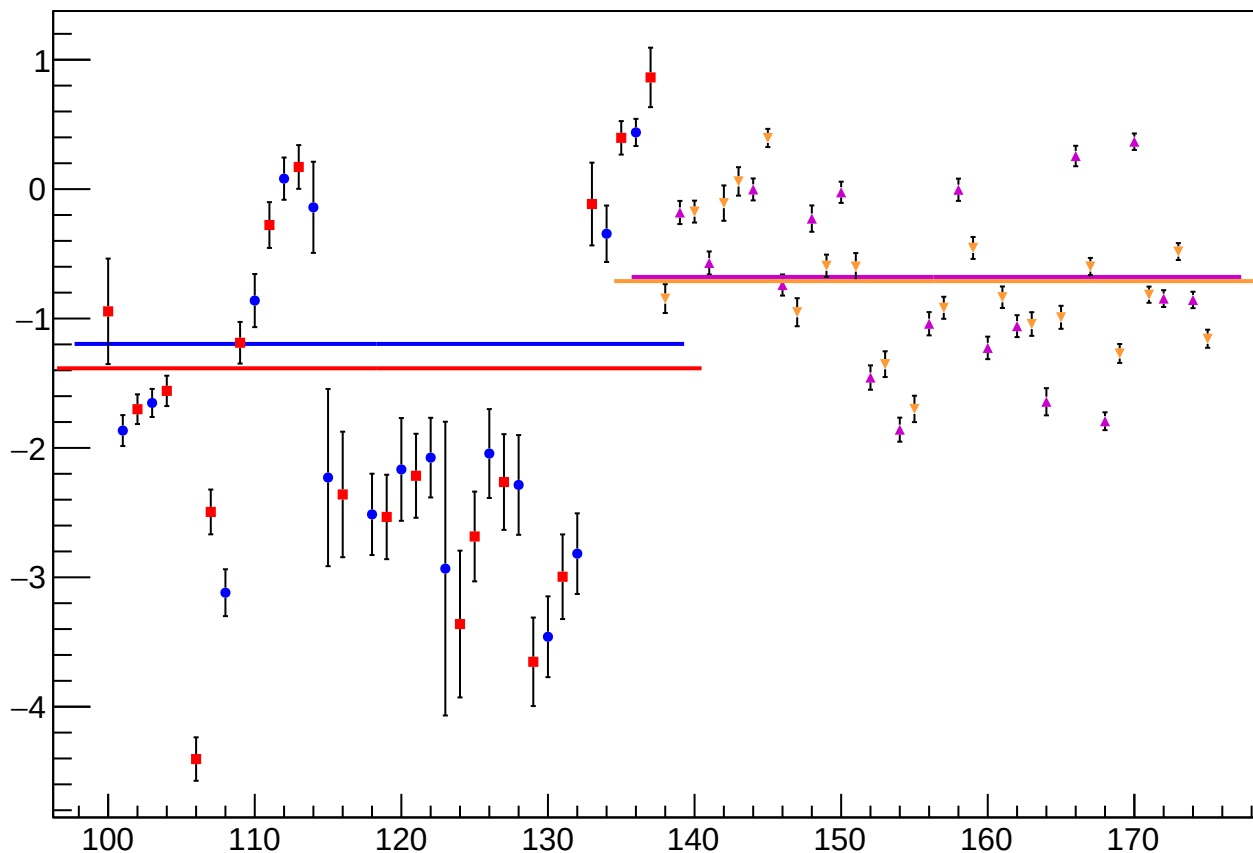
Right: 181.136 $\pm$ 0.650  $\chi^2$ /NDF: 11755.7/35

In: 185.298 $\pm$ 0.381  $\chi^2$ /NDF:7483.6/34

Out: 185.586 $\pm$ 0.370  $\chi^2$ /NDF:9650.5/38

All: 185.446 $\pm$ 0.265  $\chi^2$ /NDF: 17134.4/73

reg\_asym\_sam4\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-1.196 \pm 0.048$   $\chi^2/\text{NDF}$ : 623.1/16

Left Out:  $-0.711 \pm 0.019$   $\chi^2/\text{NDF}$ : 658.4/19

Right Out:  $-1.385 \pm 0.046$   $\chi^2/\text{NDF}$ : 924.4/18

Left In:  $-0.679 \pm 0.019$   $\chi^2/\text{NDF}$ : 1318.3/17

Left:  $-0.695 \pm 0.013$   $\chi^2/\text{NDF}$ : 1978.1/37

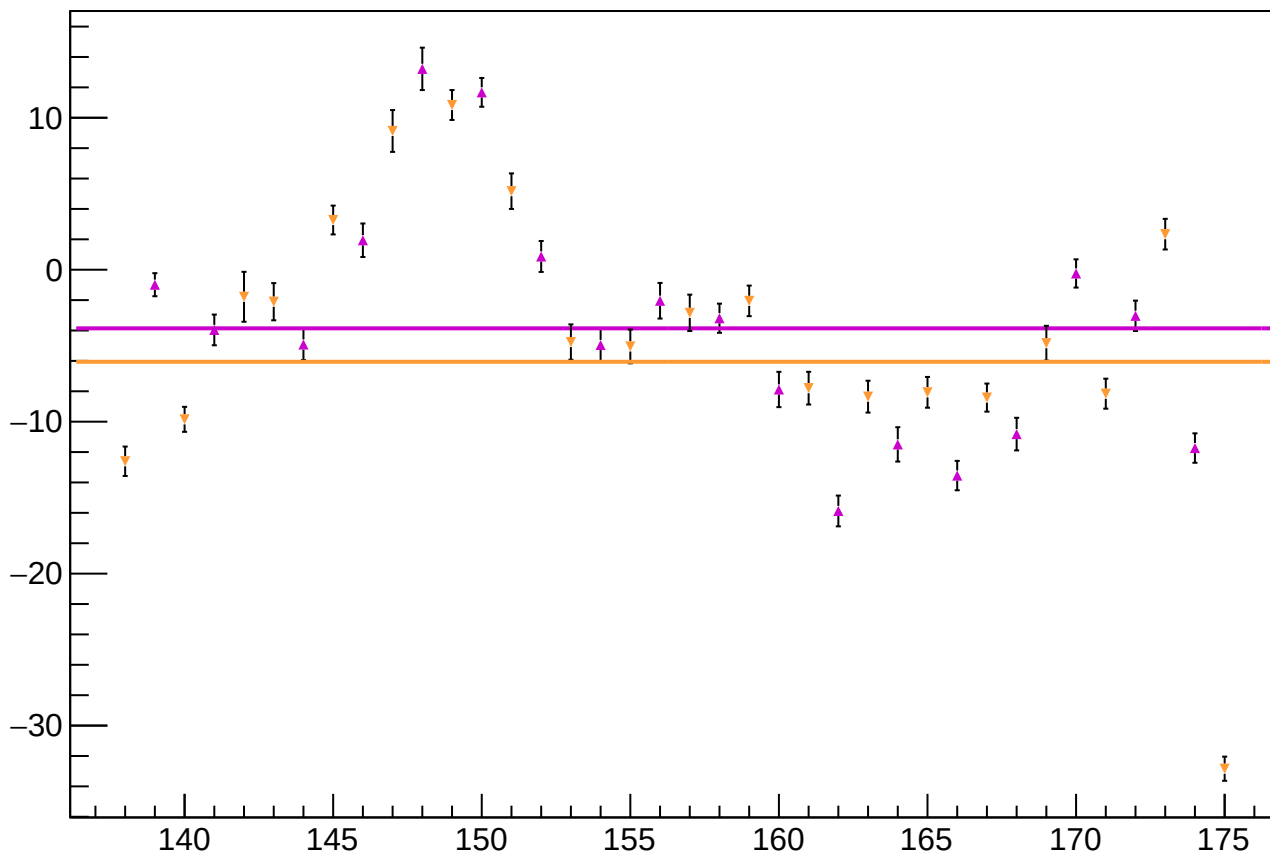
Right:  $-1.295 \pm 0.033$   $\chi^2/\text{NDF}$ : 1555.6/35

In:  $-0.749 \pm 0.018$   $\chi^2/\text{NDF}$ : 2041.4/34

Out:  $-0.808 \pm 0.017$   $\chi^2/\text{NDF}$ : 1768.4/38

All:  $-0.779 \pm 0.012$   $\chi^2/\text{NDF}$ : 3815.4/73

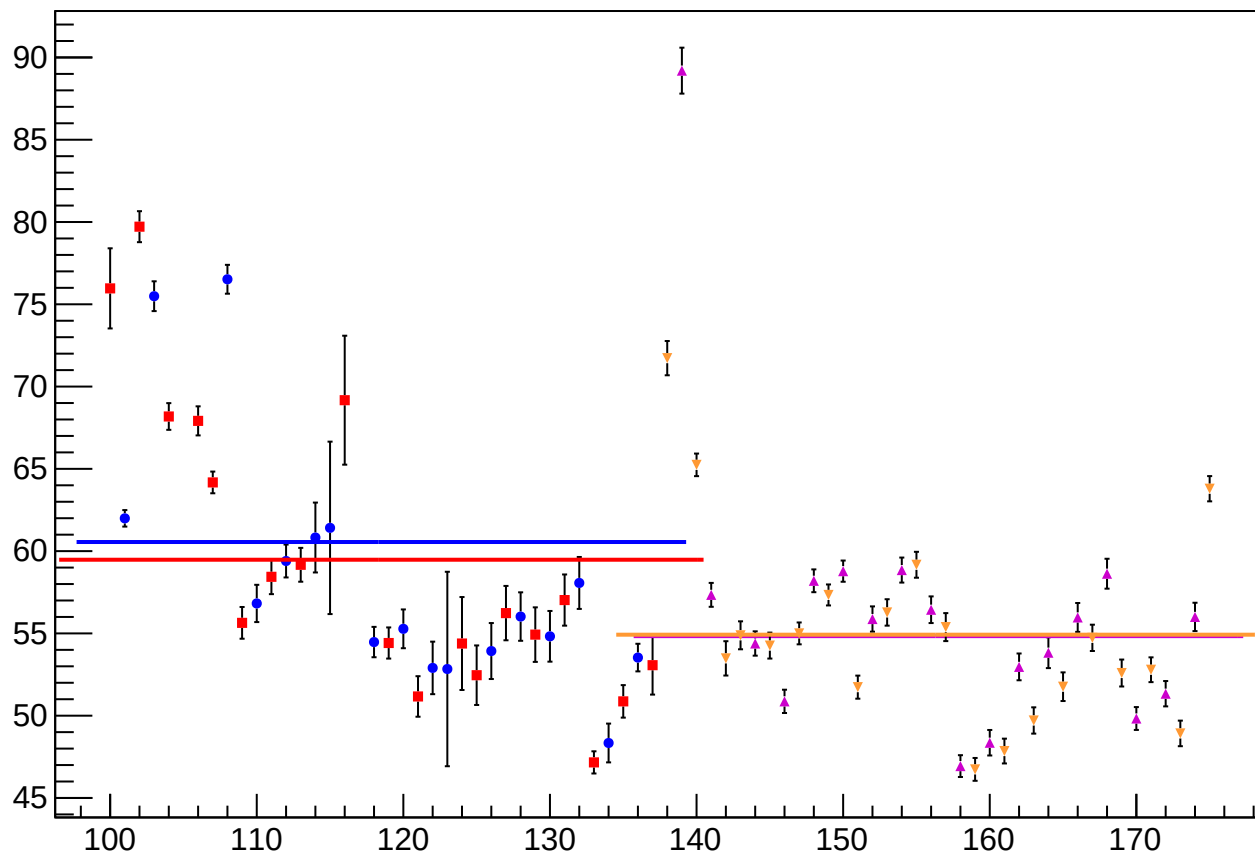
reg\_asym\_sam5\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: -6.058 $\pm$ 0.232  $\chi^2$ /NDF:1942.8/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: -3.858 $\pm$ 0.240  $\chi^2$ /NDF:909.7/17

Left: -4.993 $\pm$ 0.167  $\chi^2$ /NDF: 2895.9/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: -3.858 $\pm$ 0.240  $\chi^2$ /NDF:909.7/17  
 Out: -6.058 $\pm$ 0.232  $\chi^2$ /NDF:1942.8/19  
 All: -4.993 $\pm$ 0.167  $\chi^2$ /NDF: 2895.9/37

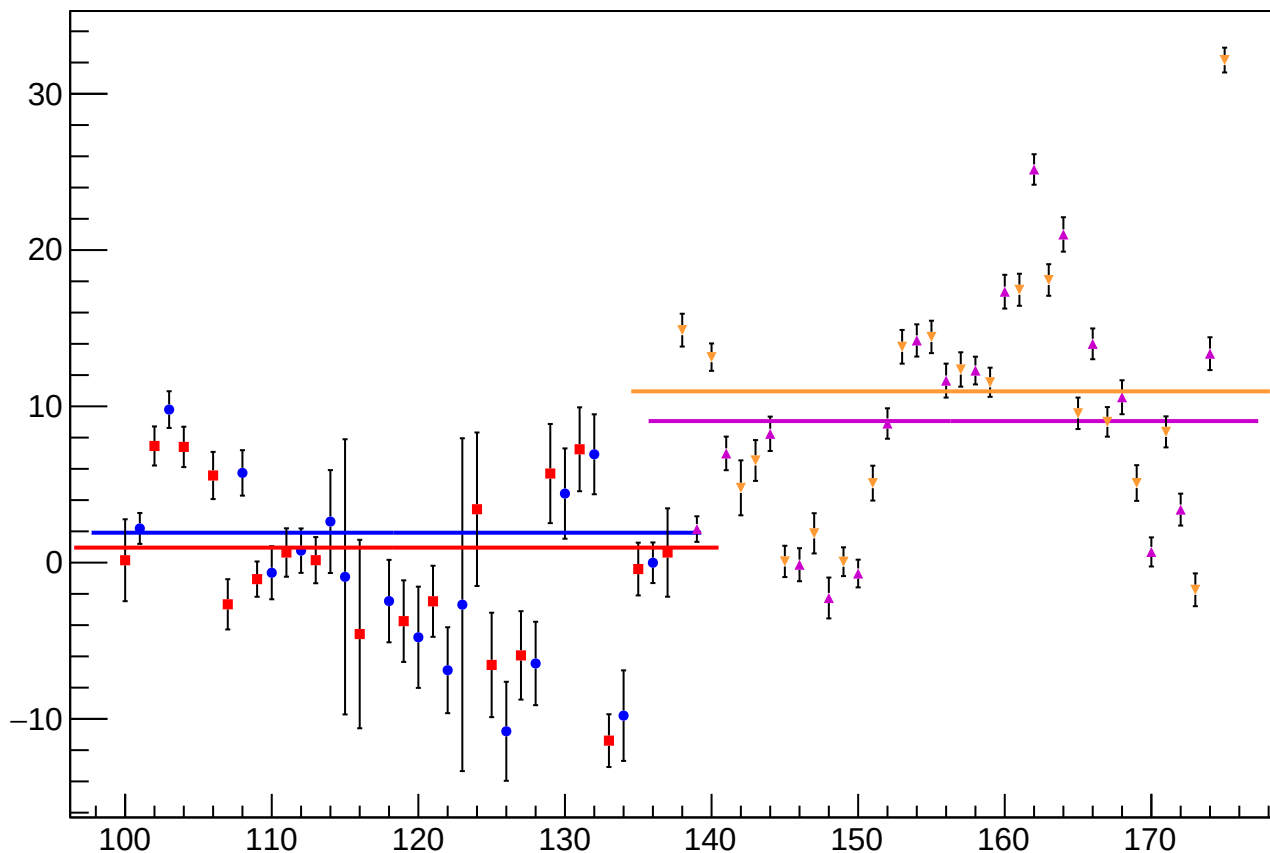
reg\_asym\_sam5\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 60.554 $\pm$ 0.262  $\chi^2$ /NDF: 930.8/16  
 Left Out: 54.922 $\pm$ 0.174  $\chi^2$ /NDF:1049.0/19  
 Right Out: 59.477 $\pm$ 0.248  $\chi^2$ /NDF: 1317.0/18  
 Left In: 54.834 $\pm$ 0.183  $\chi^2$ /NDF:1056.0/17

Left: 54.880 $\pm$ 0.126  $\chi^2$ /NDF: 2105.1/37  
 Right: 59.987 $\pm$ 0.180  $\chi^2$ /NDF: 2256.7/35  
 In: 56.713 $\pm$ 0.150  $\chi^2$ /NDF:2307.9/34  
 Out: 56.421 $\pm$ 0.142  $\chi^2$ /NDF:2592.5/38  
 All: 56.559 $\pm$ 0.103  $\chi^2$ /NDF: 4902.5/73

reg\_asym\_sam5\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $1.914 \pm 0.458$   $\chi^2/\text{NDF}$ : 121.6/16

Left Out:  $10.960 \pm 0.231$   $\chi^2/\text{NDF}$ : 1389.2/19

Right Out:  $0.960 \pm 0.424$   $\chi^2/\text{NDF}$ : 149.5/18

Left In:  $9.058 \pm 0.238$   $\chi^2/\text{NDF}$ : 995.5/17

Left:  $10.038 \pm 0.166$   $\chi^2/\text{NDF}$ : 2417.6/37

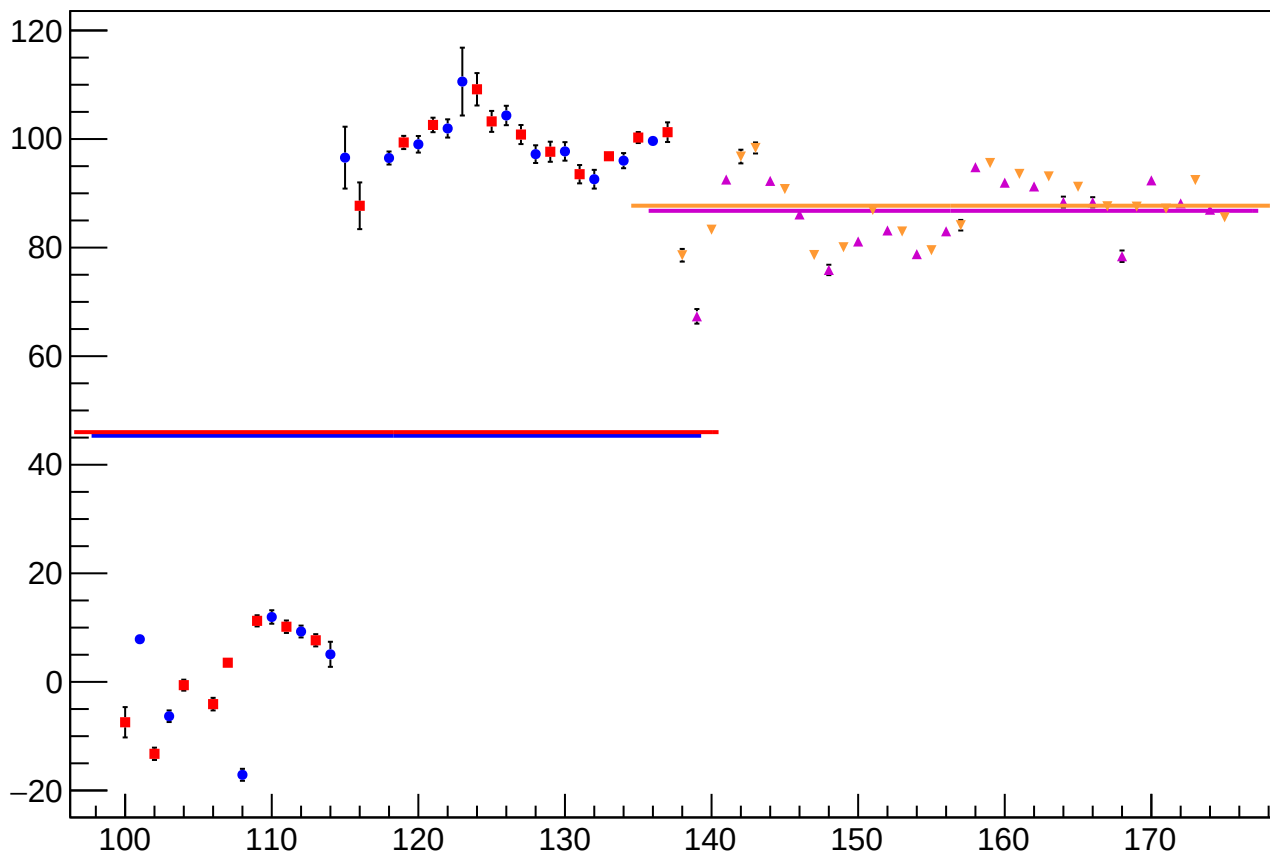
Right:  $1.401 \pm 0.311$   $\chi^2/\text{NDF}$ : 273.4/35

In:  $7.539 \pm 0.211$   $\chi^2/\text{NDF}$ : 1308.9/34

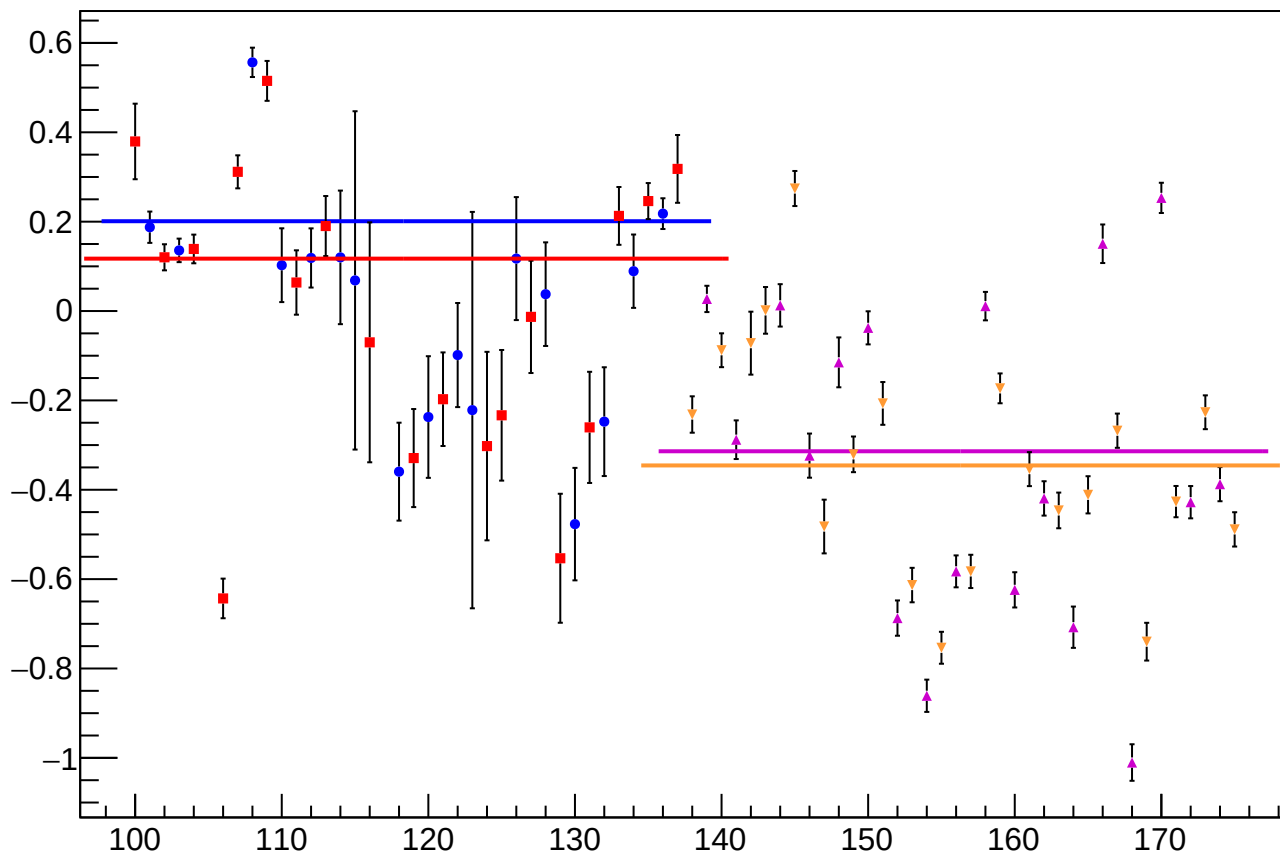
Out:  $8.676 \pm 0.203$   $\chi^2/\text{NDF}$ : 1967.4/38

All:  $8.131 \pm 0.146$   $\chi^2/\text{NDF}$ : 3291.4/73

reg\_asym\_sam5\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



reg\_asym\_sam5\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.201 \pm 0.014$   $\chi^2/\text{NDF}$ : 217.8/16

Left Out:  $-0.346 \pm 0.009$   $\chi^2/\text{NDF}$ : 752.0/19

Right Out:  $0.117 \pm 0.013$   $\chi^2/\text{NDF}$ : 500.1/18

Left In:  $-0.314 \pm 0.009$   $\chi^2/\text{NDF}$ : 1572.5/17

Left:  $-0.330 \pm 0.006$   $\chi^2/\text{NDF}$ : 2330.6/37

Right:  $0.156 \pm 0.010$   $\chi^2/\text{NDF}$ : 737.1/35

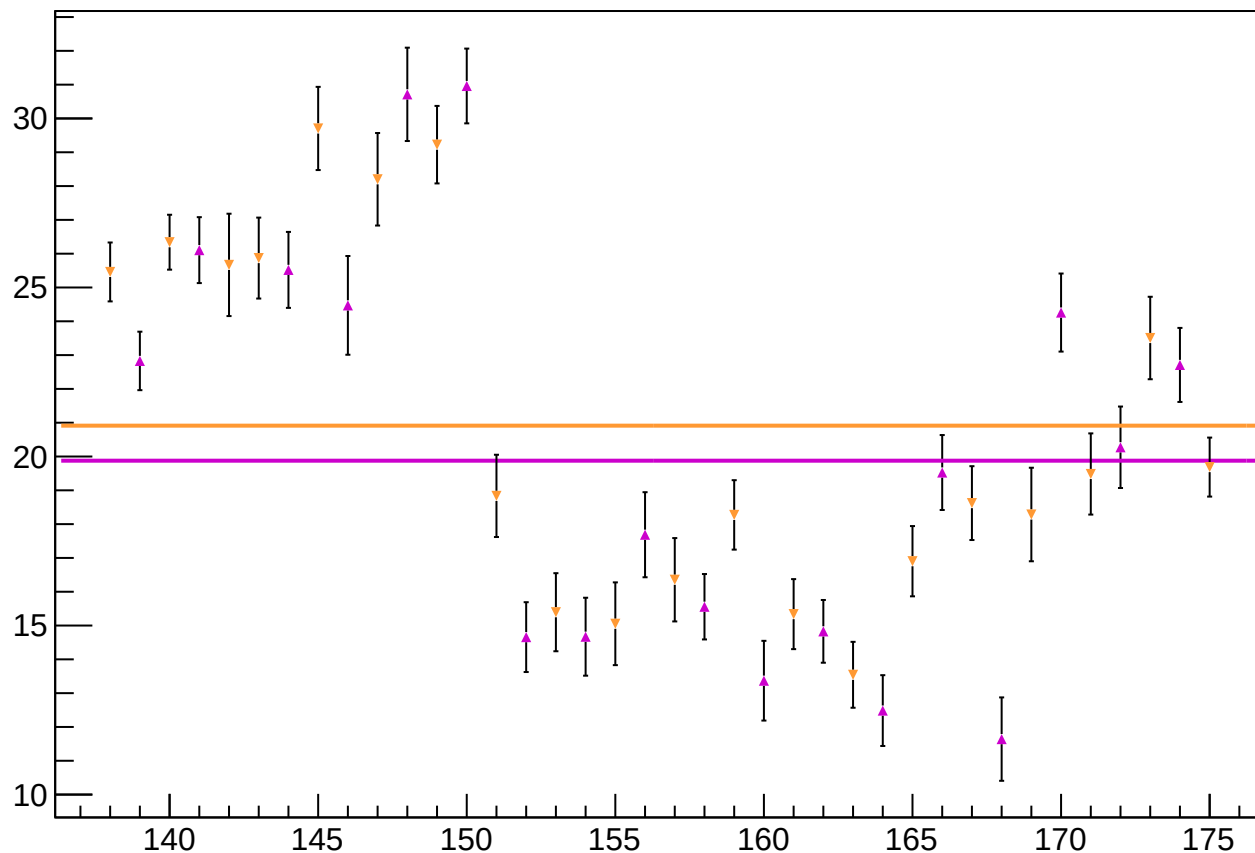
In:  $-0.161 \pm 0.008$   $\chi^2/\text{NDF}$ : 2736.5/34

Out:  $-0.195 \pm 0.007$   $\chi^2/\text{NDF}$ : 2105.5/38

All:  $-0.179 \pm 0.005$   $\chi^2/\text{NDF}$ : 4852.4/73



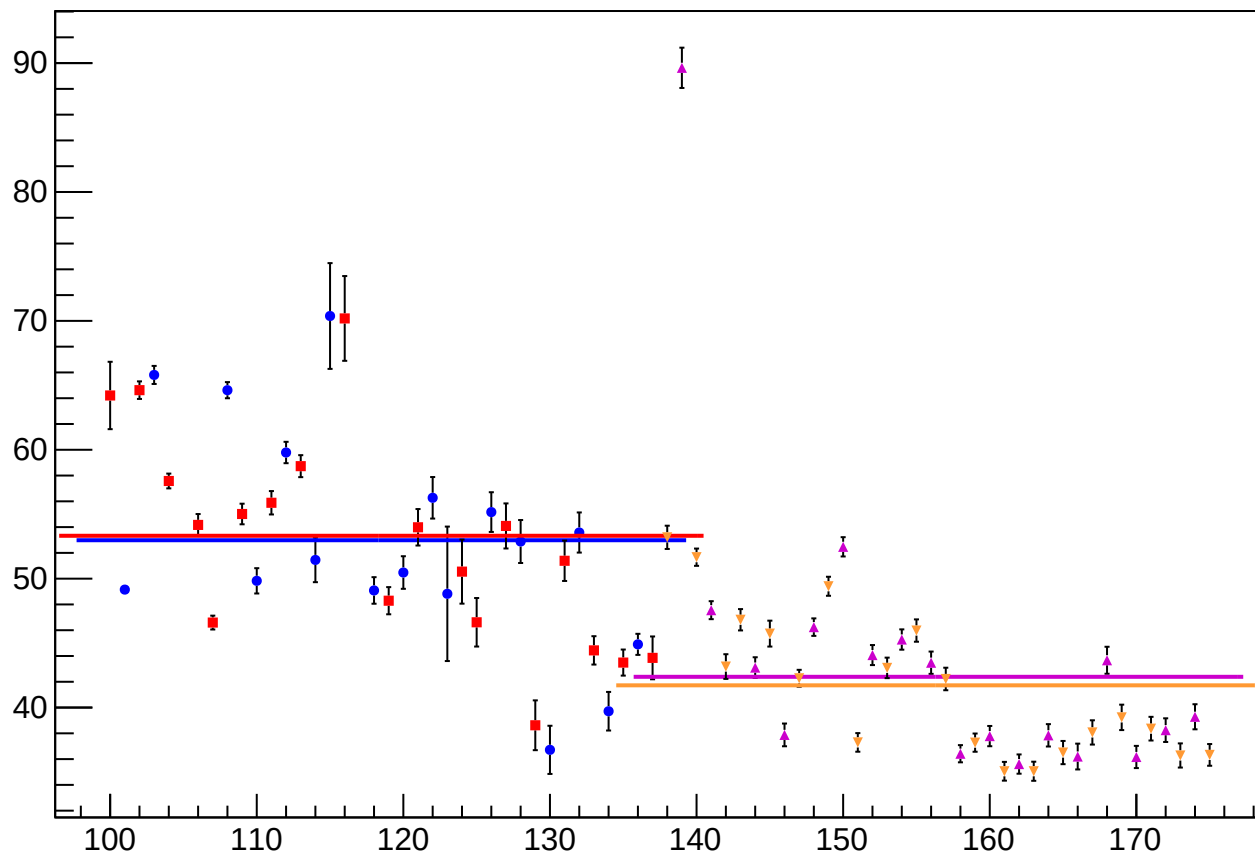
reg\_asym\_sam6\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 20.913 $\pm$ 0.246  $\chi^2$ /NDF:416.8/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 19.877 $\pm$ 0.259  $\chi^2$ /NDF:494.3/17

Left: 20.422 $\pm$ 0.178  $\chi^2$ /NDF: 919.6/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 19.877 $\pm$ 0.259  $\chi^2$ /NDF:494.3/17  
 Out: 20.913 $\pm$ 0.246  $\chi^2$ /NDF:416.8/19  
 All: 20.422 $\pm$ 0.178  $\chi^2$ /NDF: 919.6/37

reg\_asym\_sam6\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 52.981 $\pm$ 0.210  $\chi^2$ /NDF: 1197.8/16

Left Out: 41.724 $\pm$ 0.182  $\chi^2$ /NDF: 959.3/19

Right Out: 53.328 $\pm$ 0.227  $\chi^2$ /NDF: 872.7/18

Left In: 42.385 $\pm$ 0.195  $\chi^2$ /NDF: 1575.0/17

Left: 42.032 $\pm$ 0.133  $\chi^2$ /NDF: 2540.5/37

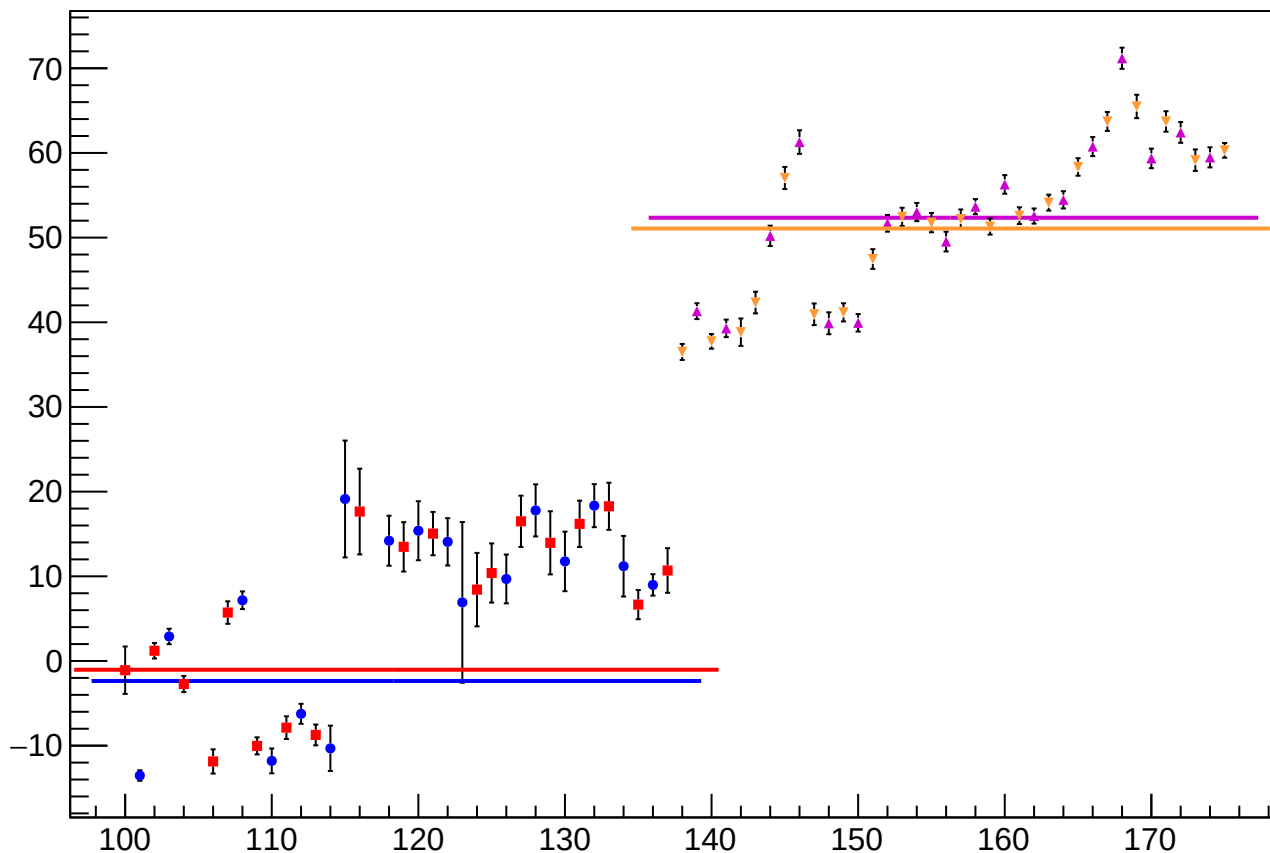
Right: 53.141 $\pm$ 0.154  $\chi^2$ /NDF: 2071.7/35

In: 47.283 $\pm$ 0.143  $\chi^2$ /NDF: 4139.8/34

Out: 46.278 $\pm$ 0.142  $\chi^2$ /NDF: 3424.0/38

All: 46.777 $\pm$ 0.101  $\chi^2$ /NDF: 7588.7/73

reg\_asym\_sam6\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.361 \pm 0.364$   $\chi^2/\text{NDF}$ : 840.8/16

Left Out:  $51.077 \pm 0.244$   $\chi^2/\text{NDF}$ : 1322.2/19

Right Out:  $-1.035 \pm 0.377$   $\chi^2/\text{NDF}$ : 507.7/18

Left In:  $52.347 \pm 0.256$   $\chi^2/\text{NDF}$ : 1027.3/17

Left:  $51.682 \pm 0.177$   $\chi^2/\text{NDF}$ : 2362.4/37

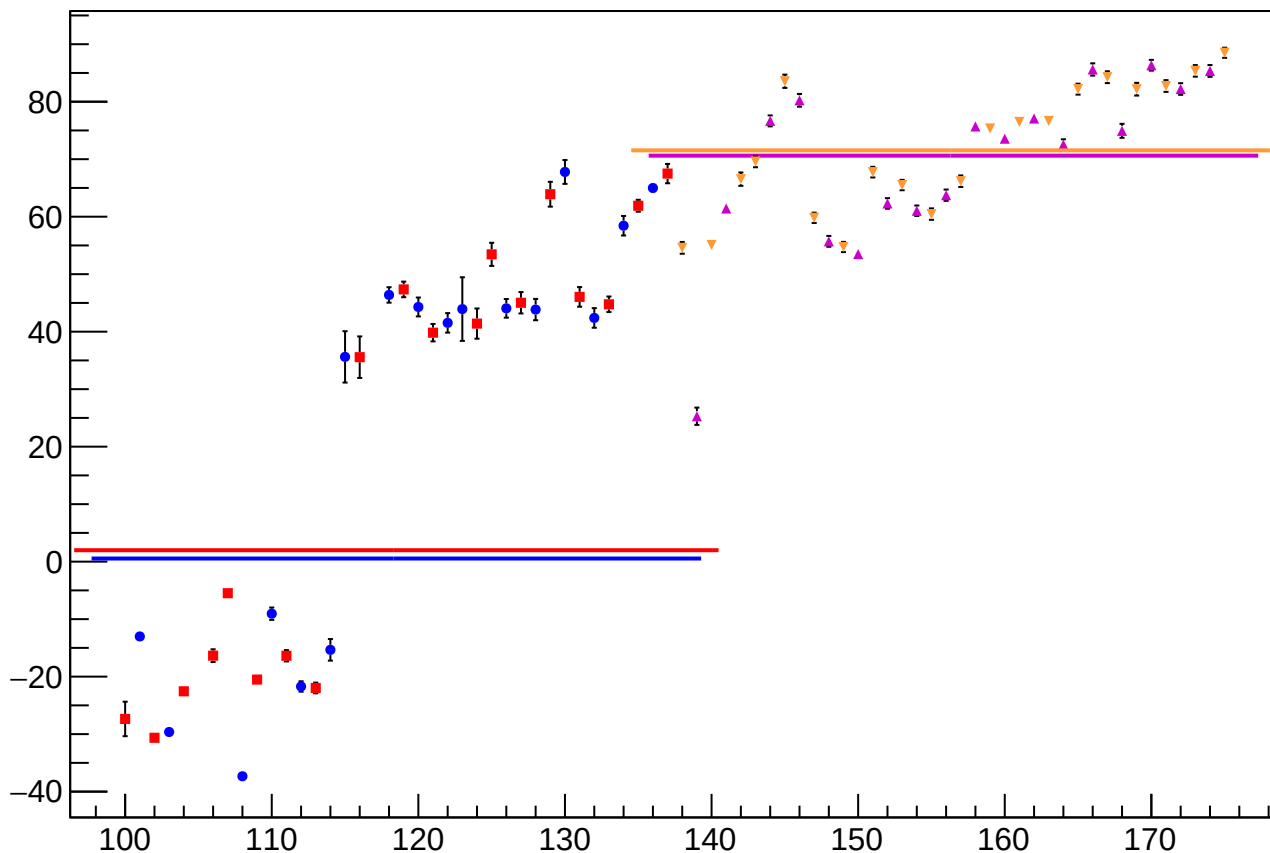
Right:  $-1.721 \pm 0.262$   $\chi^2/\text{NDF}$ : 1355.0/35

In:  $34.250 \pm 0.209$   $\chi^2/\text{NDF}$ : 17000.3/34

Out:  $35.696 \pm 0.205$   $\chi^2/\text{NDF}$ : 15303.9/38

All:  $34.989 \pm 0.146$   $\chi^2/\text{NDF}$ : 32328.6/73

reg\_asym\_sam6\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.541+/-0.247  $\chi^2/\text{NDF}$ : 18423.8/16

Left Out: 71.537+/-0.208  $\chi^2/\text{NDF}$ : 2719.2/19

Right Out: 1.990+/-0.267  $\chi^2/\text{NDF}$ : 15476.7/18

Left In: 70.615+/-0.221  $\chi^2/\text{NDF}$ : 2991.3/17

Left: 71.103+/-0.151  $\chi^2/\text{NDF}$ : 5719.7/37

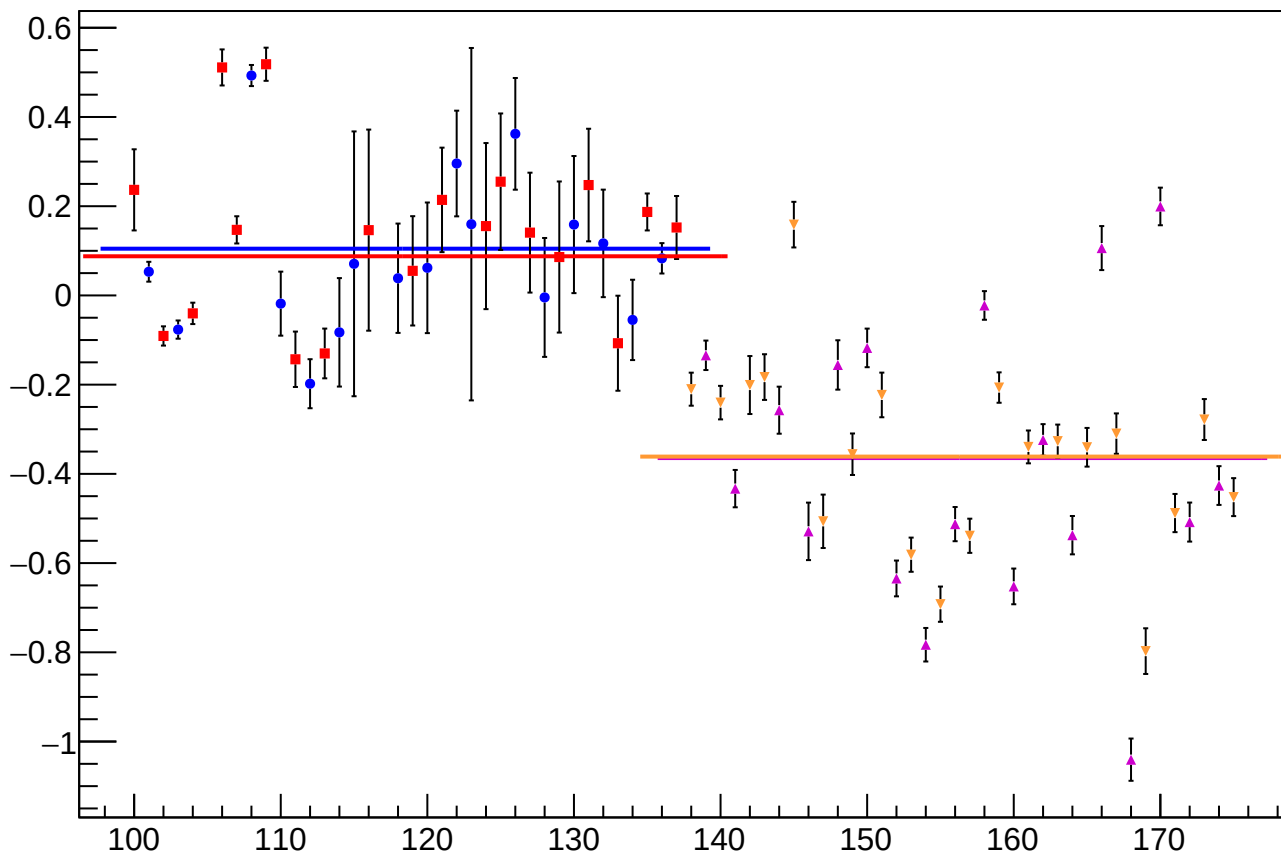
Right: 1.210+/-0.181  $\chi^2/\text{NDF}$ : 33916.4/35

In: 39.453+/-0.165  $\chi^2/\text{NDF}$ : 66216.0/34

Out: 45.207+/-0.164  $\chi^2/\text{NDF}$ : 60509.7/38

All: 42.340+/-0.116  $\chi^2/\text{NDF}$ : 127339.3/73

reg\_asym\_sam6\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.105 \pm 0.011$   $\chi^2/\text{NDF}: 400.7/16$

Left Out:  $-0.361 \pm 0.010$   $\chi^2/\text{NDF}: 399.2/19$

Right Out:  $0.088 \pm 0.011$   $\chi^2/\text{NDF}: 391.0/18$

Left In:  $-0.365 \pm 0.010$   $\chi^2/\text{NDF}: 962.3/17$

Left:  $-0.363 \pm 0.007$   $\chi^2/\text{NDF}: 1361.5/37$

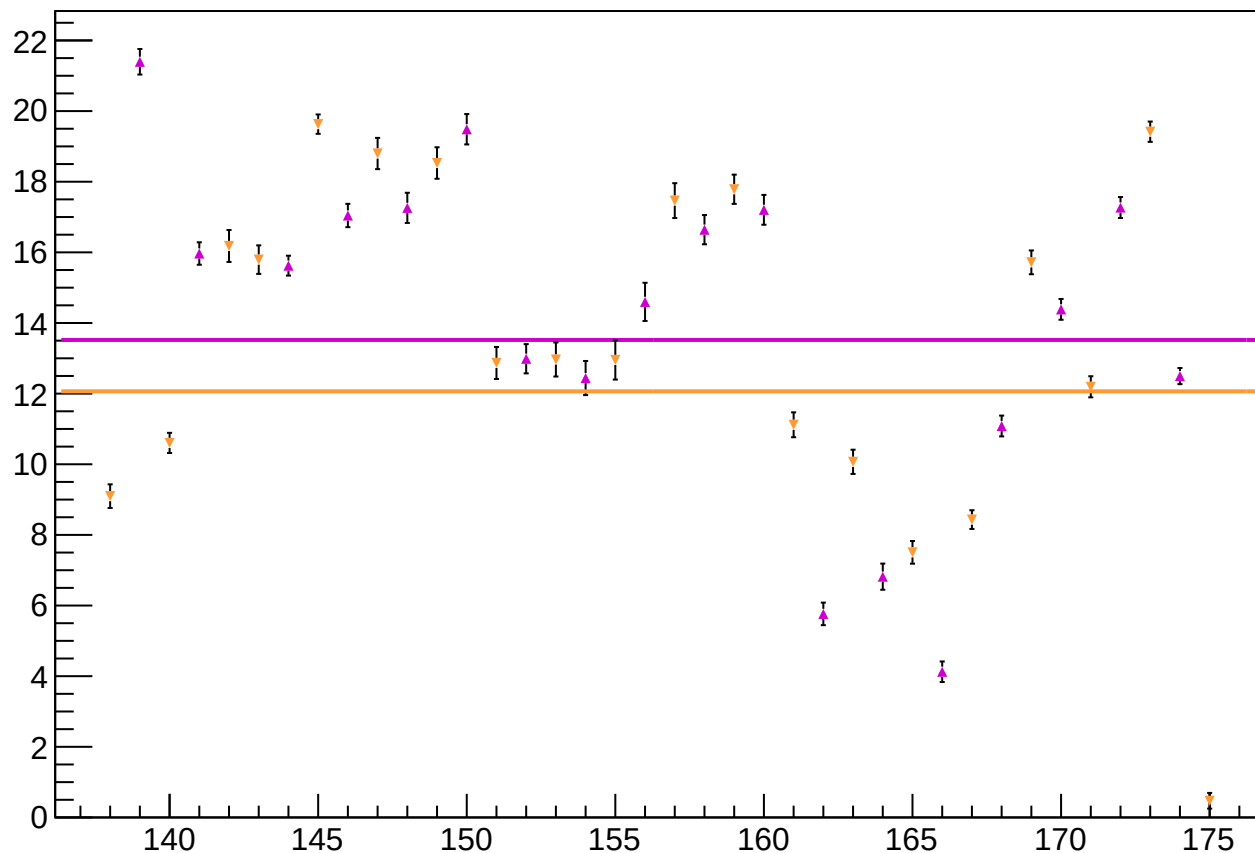
Right:  $0.096 \pm 0.008$   $\chi^2/\text{NDF}: 792.9/35$

In:  $-0.157 \pm 0.007$   $\chi^2/\text{NDF}: 2372.7/34$

Out:  $-0.167 \pm 0.007$   $\chi^2/\text{NDF}: 1736.8/38$

All:  $-0.162 \pm 0.005$   $\chi^2/\text{NDF}: 4110.5/73$

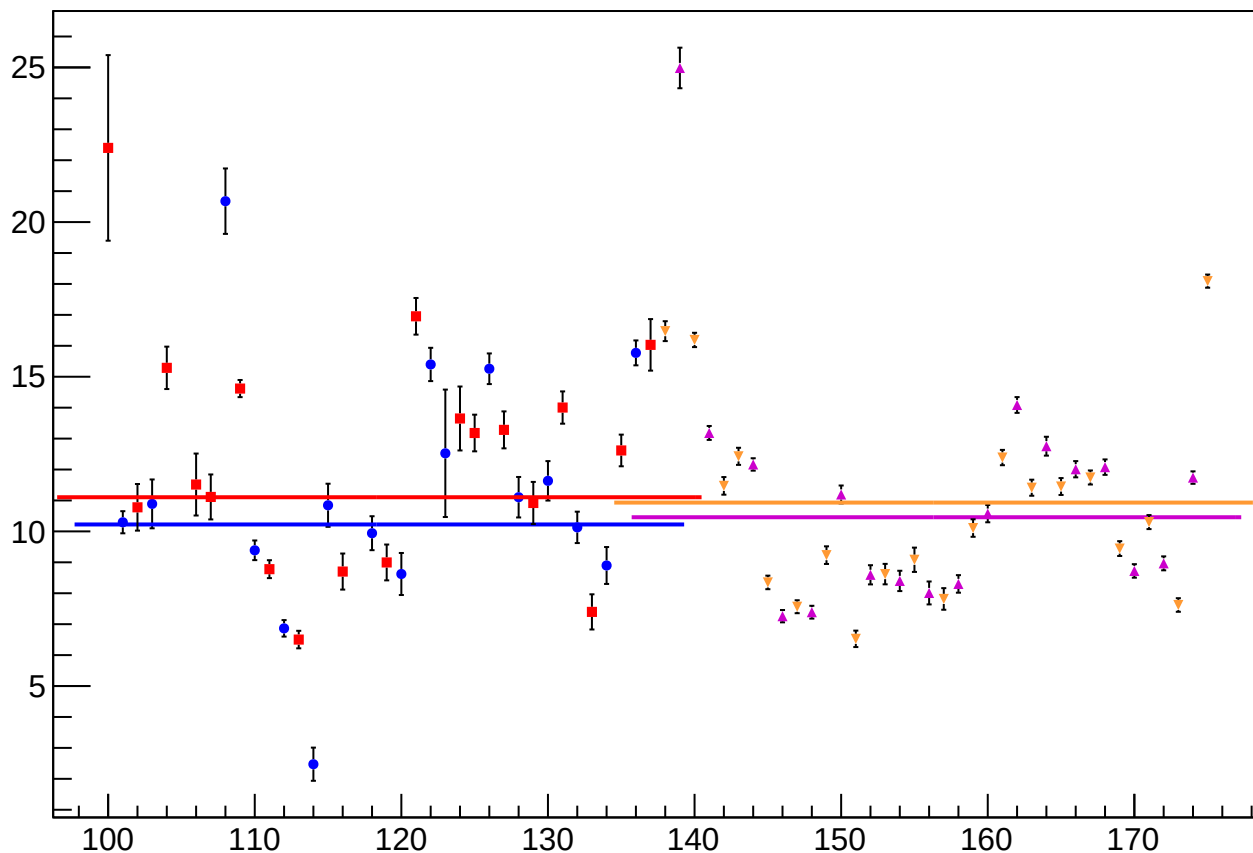
reg\_asym\_sam7\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 12.064+/-0.076  $\chi^2/\text{NDF}$ :5716.4/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 13.520+/-0.080  $\chi^2/\text{NDF}$ :3329.2/17

Left: 12.763+/-0.055  $\chi^2/\text{NDF}$ : 9219.3/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 13.520+/-0.080  $\chi^2/\text{NDF}$ :3329.2/17  
 Out: 12.064+/-0.076  $\chi^2/\text{NDF}$ :5716.4/19  
 All: 12.763+/-0.055  $\chi^2/\text{NDF}$ : 9219.3/37

reg\_asym\_sam7\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 10.224 $\pm$ 0.119  $\chi^2$ /NDF: 877.6/16

Left Out: 10.931 $\pm$ 0.057  $\chi^2$ /NDF:3170.6/19

Right Out: 11.104 $\pm$ 0.116  $\chi^2$ /NDF: 817.2/18

Left In: 10.457 $\pm$ 0.060  $\chi^2$ /NDF:1852.9/17

Left: 10.703 $\pm$ 0.041  $\chi^2$ /NDF: 5056.3/37

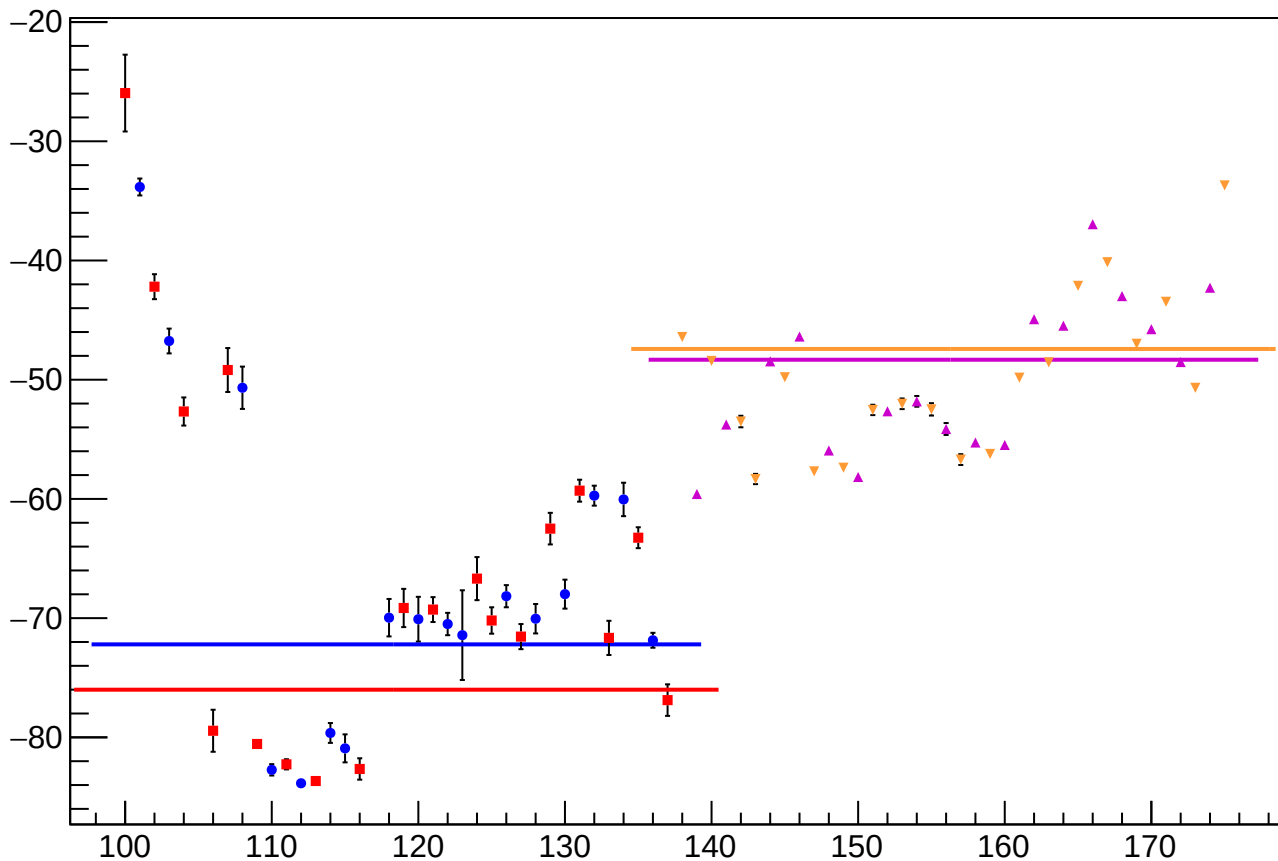
Right: 10.673 $\pm$ 0.083  $\chi^2$ /NDF: 1722.7/35

In: 10.411 $\pm$ 0.053  $\chi^2$ /NDF:2733.6/34

Out: 10.965 $\pm$ 0.051  $\chi^2$ /NDF:3989.6/38

All: 10.697 $\pm$ 0.037  $\chi^2$ /NDF: 6779.2/73

reg\_asym\_sam7\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-72.201 \pm 0.198$   $\chi^2/\text{NDF}: 5566.9/16$

Left Out:  $-47.420 \pm 0.077$   $\chi^2/\text{NDF}: 8488.6/19$

Right Out:  $-76.003 \pm 0.181$   $\chi^2/\text{NDF}: 3465.4/18$

Left In:  $-48.324 \pm 0.080$   $\chi^2/\text{NDF}: 5705.9/17$

Left:  $-47.855 \pm 0.055$   $\chi^2/\text{NDF}: 14261.1/37$

Right:  $-74.270 \pm 0.133$   $\chi^2/\text{NDF}: 9233.6/35$

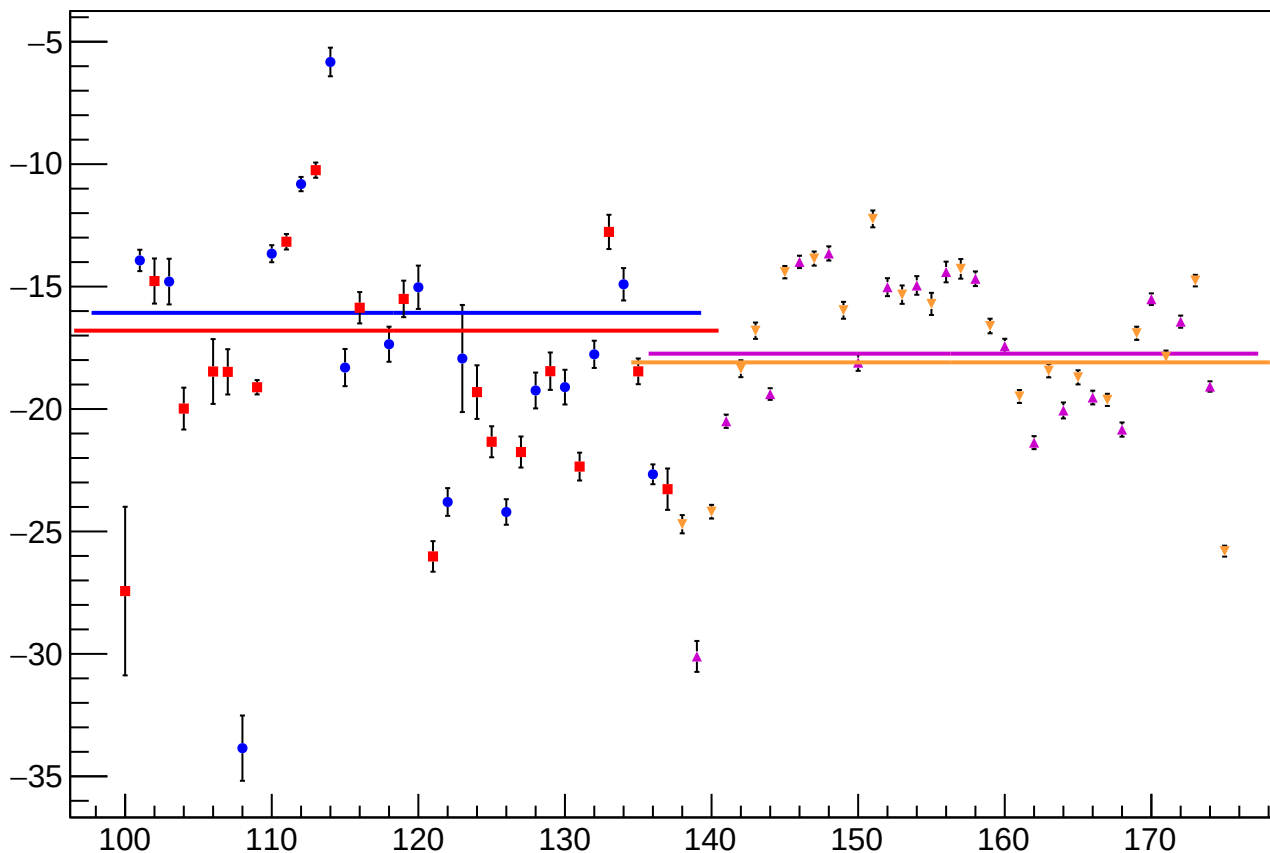
In:  $-51.673 \pm 0.074$   $\chi^2/\text{NDF}: 23814.2/34$

Out:  $-51.785 \pm 0.071$   $\chi^2/\text{NDF}: 33098.8/38$

All:  $-51.731 \pm 0.051$   $\chi^2/\text{NDF}: 56914.2/73$



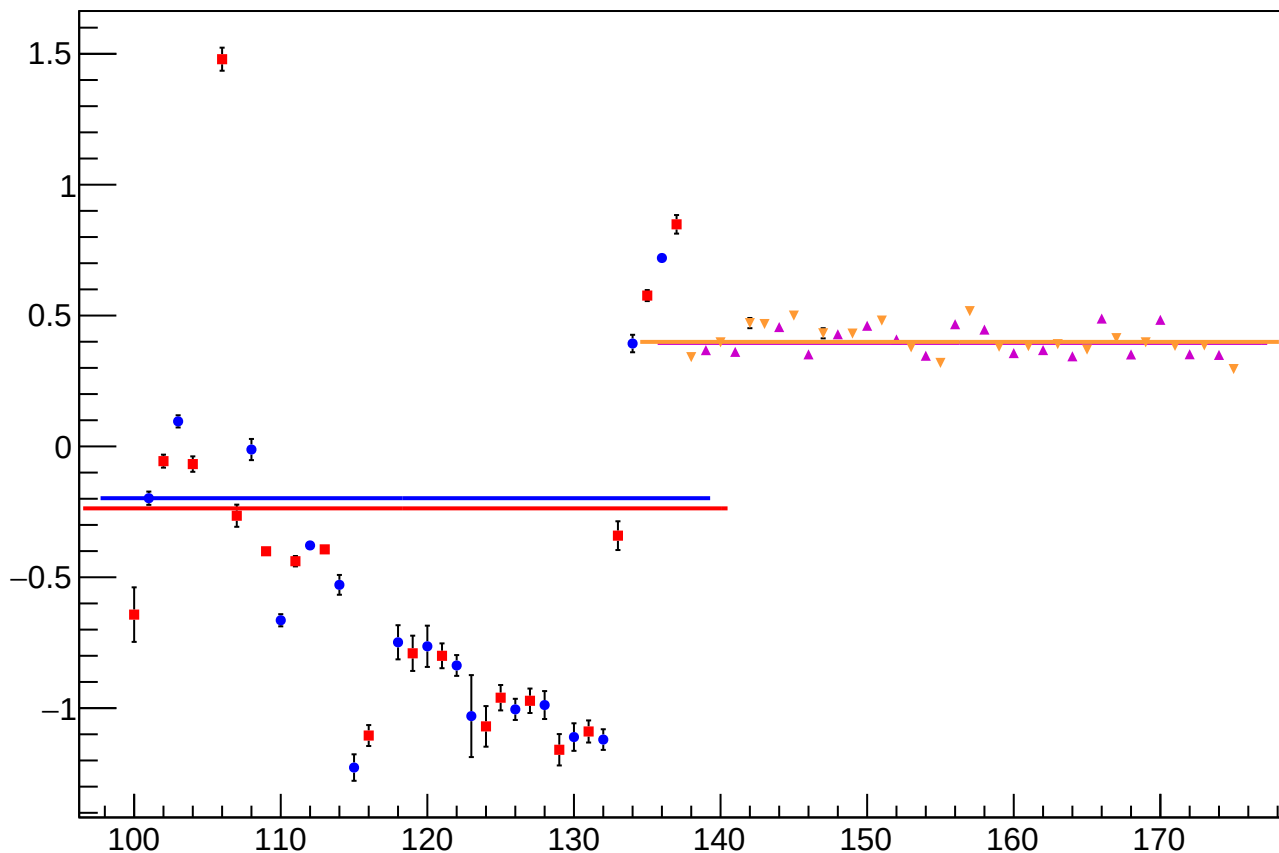
reg\_asym\_sam7\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-16.072 \pm 0.132$   $\chi^2/\text{NDF}: 1640.9/16$   
 Left Out:  $-18.095 \pm 0.065$   $\chi^2/\text{NDF}: 3238.1/19$   
 Right Out:  $-16.799 \pm 0.128$   $\chi^2/\text{NDF}: 1215.8/18$   
 Left In:  $-17.739 \pm 0.068$   $\chi^2/\text{NDF}: 1776.6/17$

Left:  $-17.924 \pm 0.047$   $\chi^2/\text{NDF}: 5029.0/37$   
 Right:  $-16.447 \pm 0.092$   $\chi^2/\text{NDF}: 2872.2/35$   
 In:  $-17.389 \pm 0.060$   $\chi^2/\text{NDF}: 3543.3/34$   
 Out:  $-17.828 \pm 0.058$   $\chi^2/\text{NDF}: 4535.1/38$   
 All:  $-17.617 \pm 0.042$   $\chi^2/\text{NDF}: 8105.6/73$

reg\_asym\_sam7\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.198 \pm 0.008$   $\chi^2/\text{NDF}$ : 6338.8/16

Left Out:  $0.399 \pm 0.003$   $\chi^2/\text{NDF}$ : 336.4/19

Right Out:  $-0.237 \pm 0.007$   $\chi^2/\text{NDF}$ : 6221.9/18

Left In:  $0.395 \pm 0.003$   $\chi^2/\text{NDF}$ : 301.3/17

Left:  $0.397 \pm 0.002$   $\chi^2/\text{NDF}$ : 638.6/37

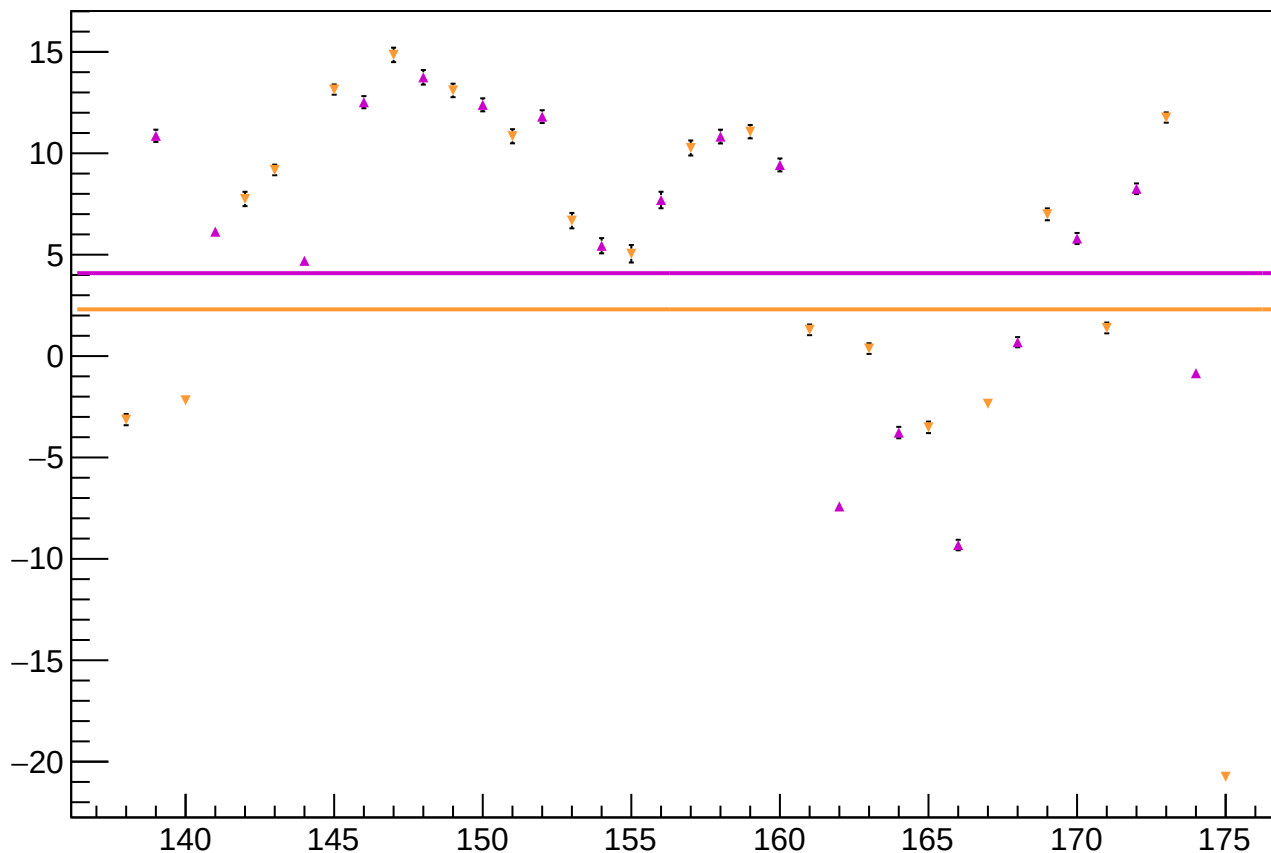
Right:  $-0.218 \pm 0.005$   $\chi^2/\text{NDF}$ : 12574.6/35

In:  $0.309 \pm 0.003$   $\chi^2/\text{NDF}$ : 11939.9/34

Out:  $0.302 \pm 0.003$   $\chi^2/\text{NDF}$ : 13226.5/38

All:  $0.306 \pm 0.002$   $\chi^2/\text{NDF}$ : 25169.6/73

reg\_asym\_sam8\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 2.305 $\pm$ 0.063  $\chi^2$ /NDF:23946.1/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 4.089 $\pm$ 0.066  $\chi^2$ /NDF:10893.7/17

Left: 3.153 $\pm$ 0.046  $\chi^2$ /NDF: 35220.5/37

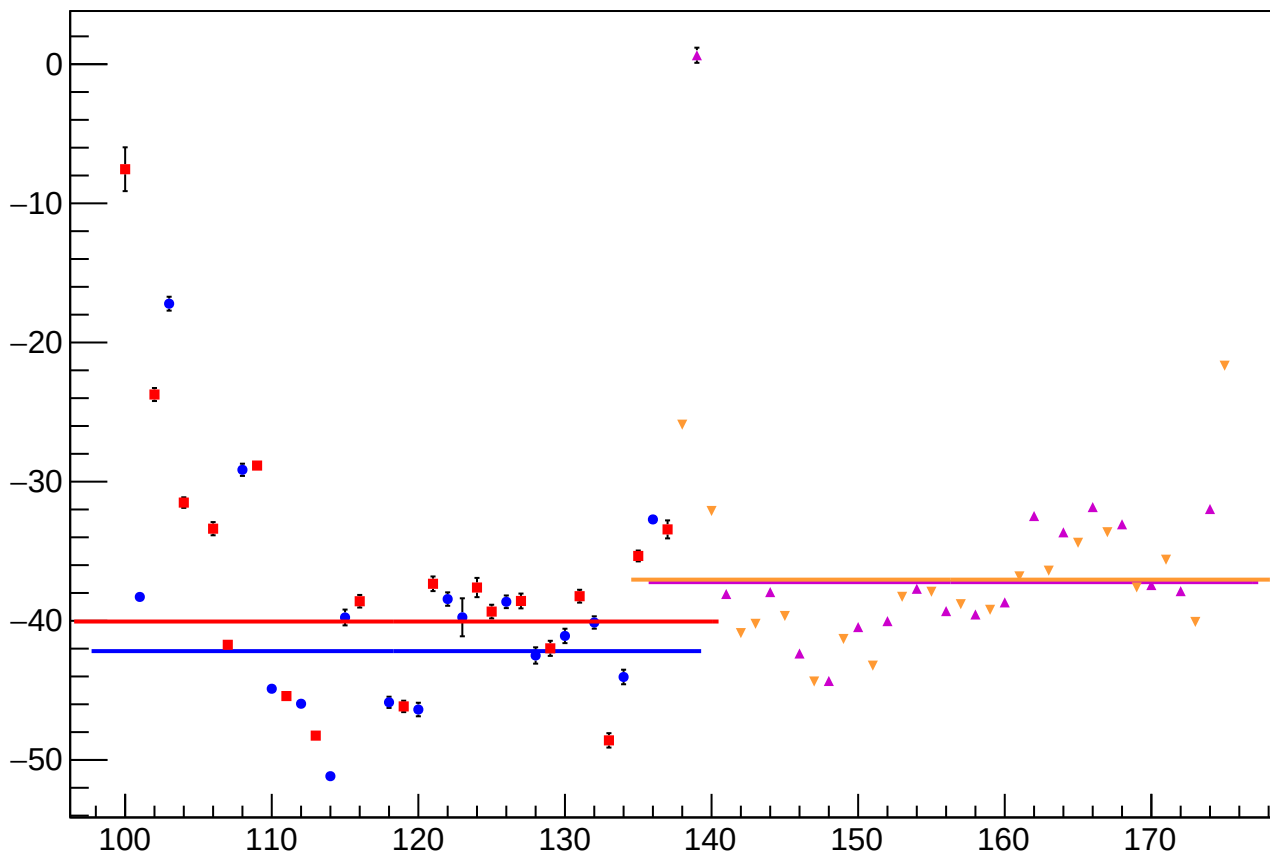
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 4.089 $\pm$ 0.066  $\chi^2$ /NDF:10893.7/17

Out: 2.305 $\pm$ 0.063  $\chi^2$ /NDF:23946.1/19

All: 3.153 $\pm$ 0.046  $\chi^2$ /NDF: 35220.5/37

reg\_asym\_sam8\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-42.179 \pm 0.078$   $\chi^2/\text{NDF}: 6573.8/16$

Left Out:  $-37.042 \pm 0.047$   $\chi^2/\text{NDF}: 13855.3/19$

Right Out:  $-40.052 \pm 0.073$   $\chi^2/\text{NDF}: 11313.5/18$

Left In:  $-37.222 \pm 0.050$   $\chi^2/\text{NDF}: 10467.7/17$

Left:  $-37.127 \pm 0.034$   $\chi^2/\text{NDF}: 24330.0/37$

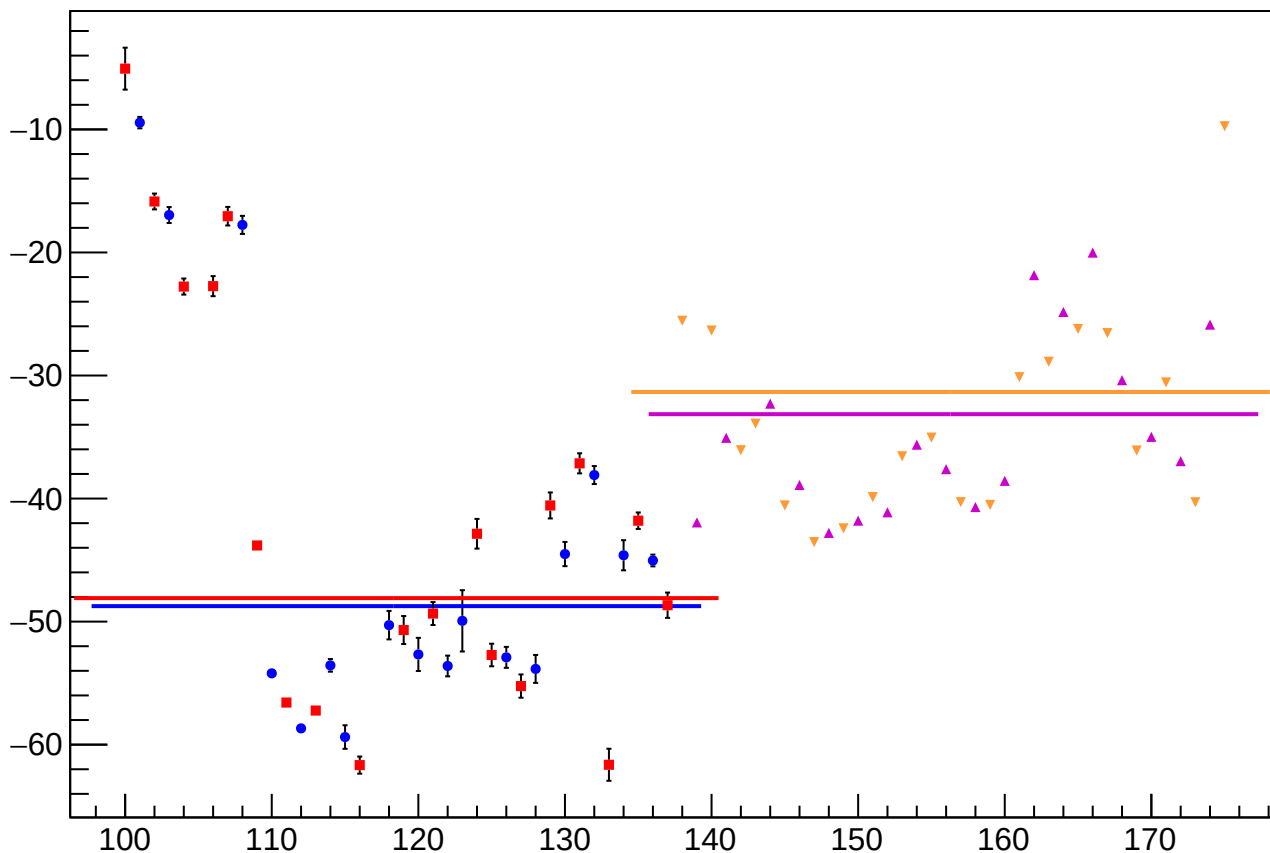
Right:  $-41.045 \pm 0.053$   $\chi^2/\text{NDF}: 18285.9/35$

In:  $-38.657 \pm 0.042$   $\chi^2/\text{NDF}: 19927.6/34$

Out:  $-37.923 \pm 0.039$   $\chi^2/\text{NDF}: 26378.9/38$

All:  $-38.268 \pm 0.029$   $\chi^2/\text{NDF}: 46469.9/73$

reg\_asym\_sam8\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-48.743 \pm 0.124$   $\chi^2/\text{NDF}: 14658.5/16$

Left Out:  $-31.336 \pm 0.063$   $\chi^2/\text{NDF}: 21538.9/19$

Right Out:  $-48.091 \pm 0.107$   $\chi^2/\text{NDF}: 11731.5/18$

Left In:  $-33.142 \pm 0.066$   $\chi^2/\text{NDF}: 11844.4/17$

Left:  $-32.197 \pm 0.046$   $\chi^2/\text{NDF}: 33773.5/37$

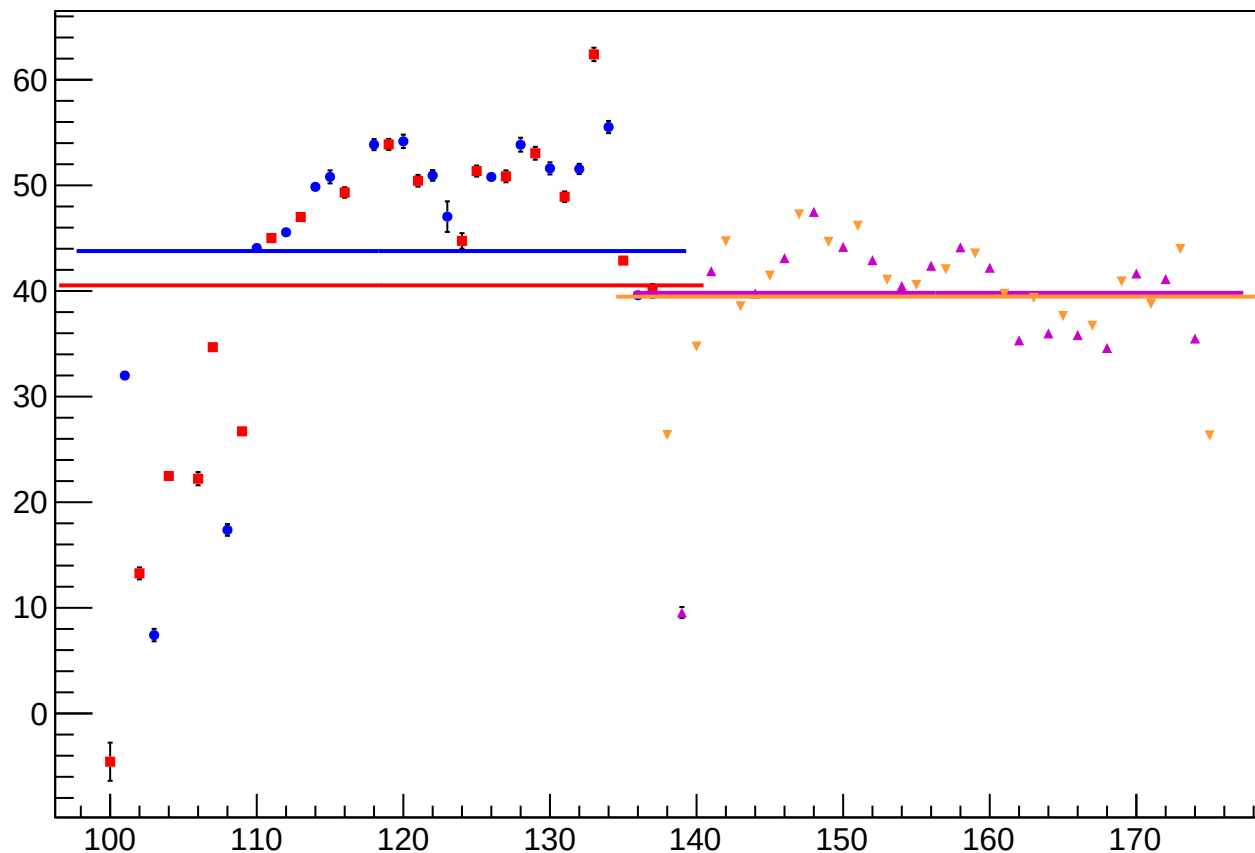
Right:  $-48.369 \pm 0.081$   $\chi^2/\text{NDF}: 26405.8/35$

In:  $-36.580 \pm 0.058$   $\chi^2/\text{NDF}: 38758.7/34$

Out:  $-35.649 \pm 0.054$   $\chi^2/\text{NDF}: 51403.7/38$

All:  $-36.082 \pm 0.040$   $\chi^2/\text{NDF}: 90298.6/73$

reg\_asym\_sam8\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 43.782 $\pm$ 0.087  $\chi^2$ /NDF: 10638.7/16

Left Out: 39.463 $\pm$ 0.053  $\chi^2$ /NDF:10366.8/19

Right Out: 40.530 $\pm$ 0.080  $\chi^2$ /NDF: 17580.7/18

Left In: 39.822 $\pm$ 0.056  $\chi^2$ /NDF:7583.0/17

Left: 39.632 $\pm$ 0.039  $\chi^2$ /NDF: 17971.0/37

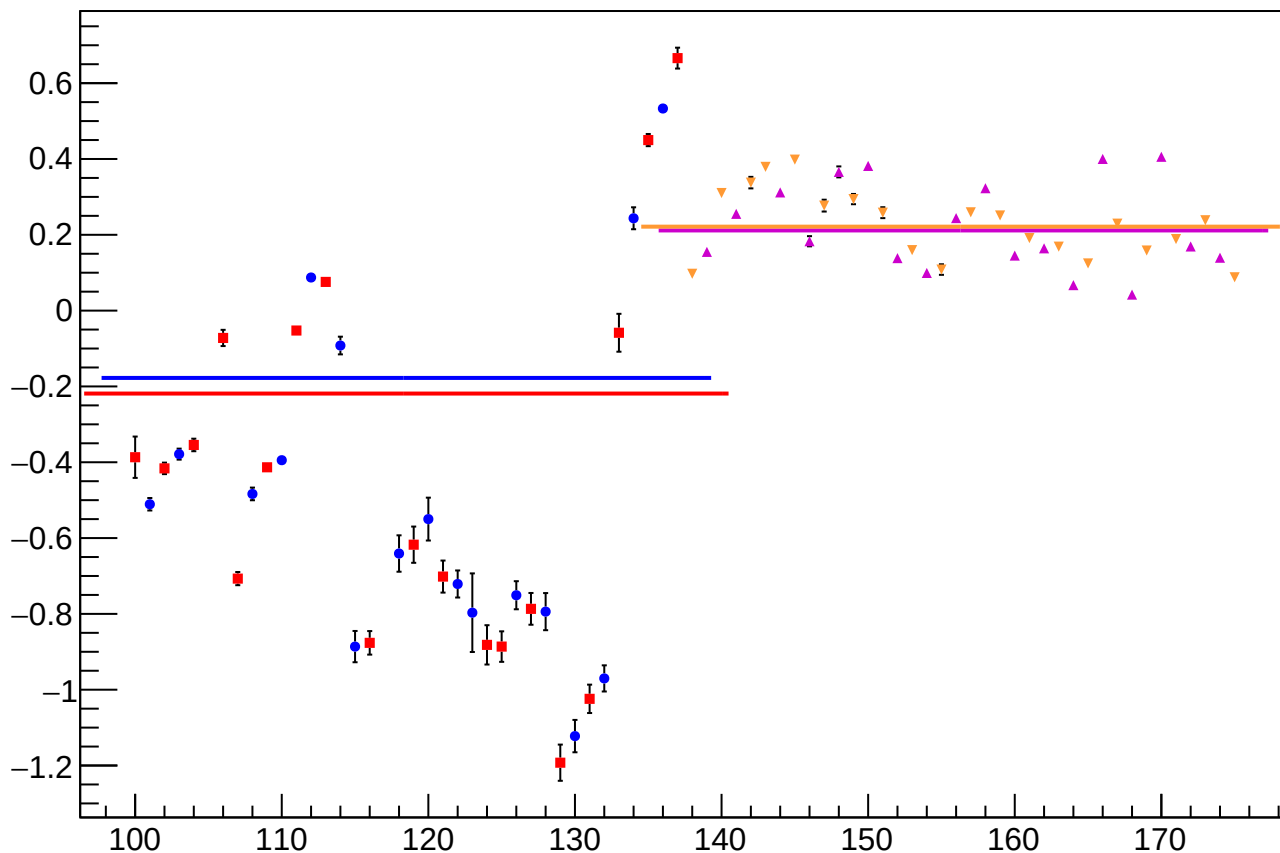
Right: 42.031 $\pm$ 0.059  $\chi^2$ /NDF: 28978.3/35

In: 41.003 $\pm$ 0.047  $\chi^2$ /NDF:19688.5/34

Out: 39.792 $\pm$ 0.044  $\chi^2$ /NDF:28070.2/38

All: 40.360 $\pm$ 0.032  $\chi^2$ /NDF: 48106.8/73

reg\_asym\_sam8\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.178 \pm 0.005$   $\chi^2/\text{NDF}$ : 7375.8/16

Left Out:  $0.221 \pm 0.002$   $\chi^2/\text{NDF}$ : 1229.8/19

Right Out:  $-0.219 \pm 0.004$   $\chi^2/\text{NDF}$ : 7470.0/18

Left In:  $0.212 \pm 0.003$   $\chi^2/\text{NDF}$ : 1922.6/17

Left:  $0.217 \pm 0.002$   $\chi^2/\text{NDF}$ : 3160.2/37

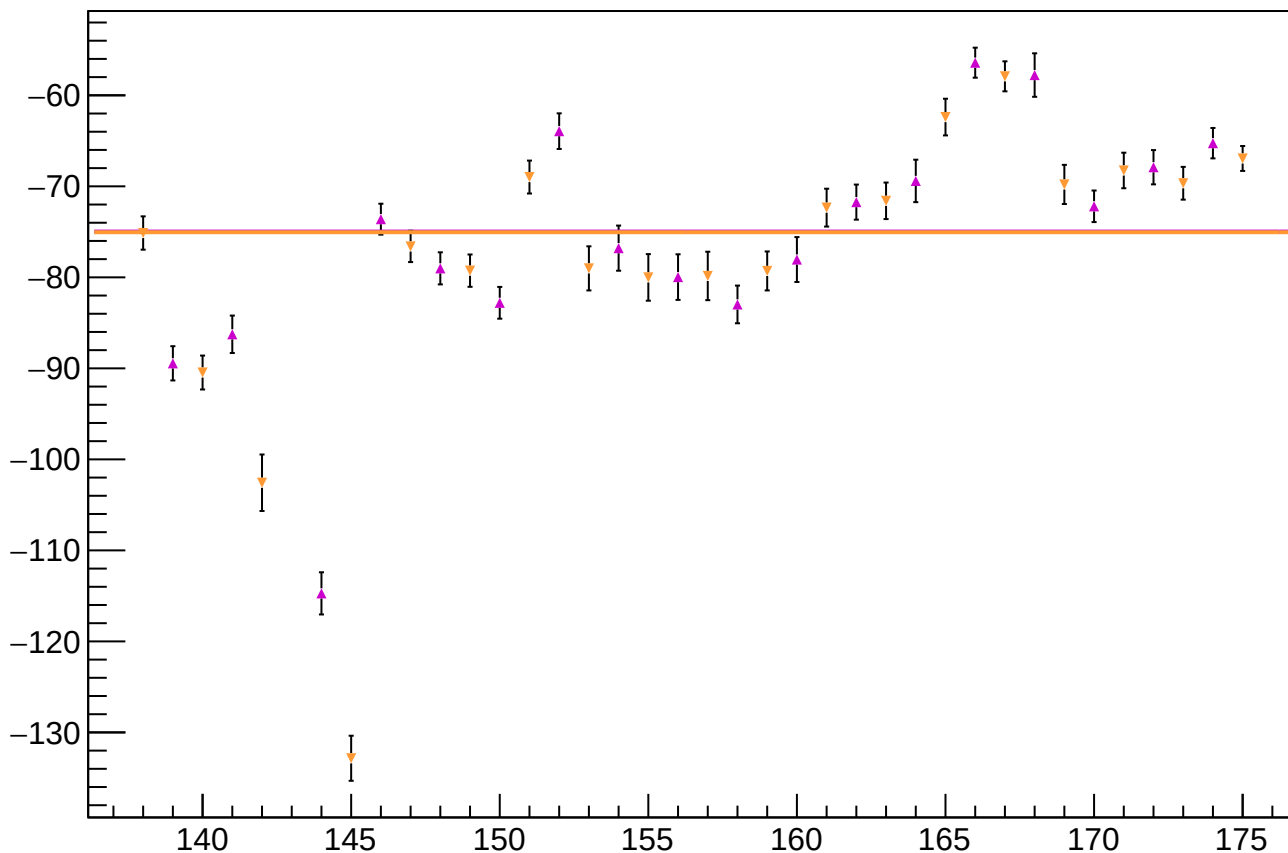
Right:  $-0.201 \pm 0.003$   $\chi^2/\text{NDF}$ : 14886.5/35

In:  $0.126 \pm 0.002$   $\chi^2/\text{NDF}$ : 14348.1/34

Out:  $0.110 \pm 0.002$   $\chi^2/\text{NDF}$ : 16537.8/38

All:  $0.118 \pm 0.002$   $\chi^2/\text{NDF}$ : 30910.4/73

reg\_asym\_usl\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-75.042 \pm 0.451$   $\chi^2/\text{NDF}: 937.8/18$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-74.974 \pm 0.464$   $\chi^2/\text{NDF}: 699.6/17$

Left:  $-75.009 \pm 0.323$   $\chi^2/\text{NDF}: 1637.4/36$

Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

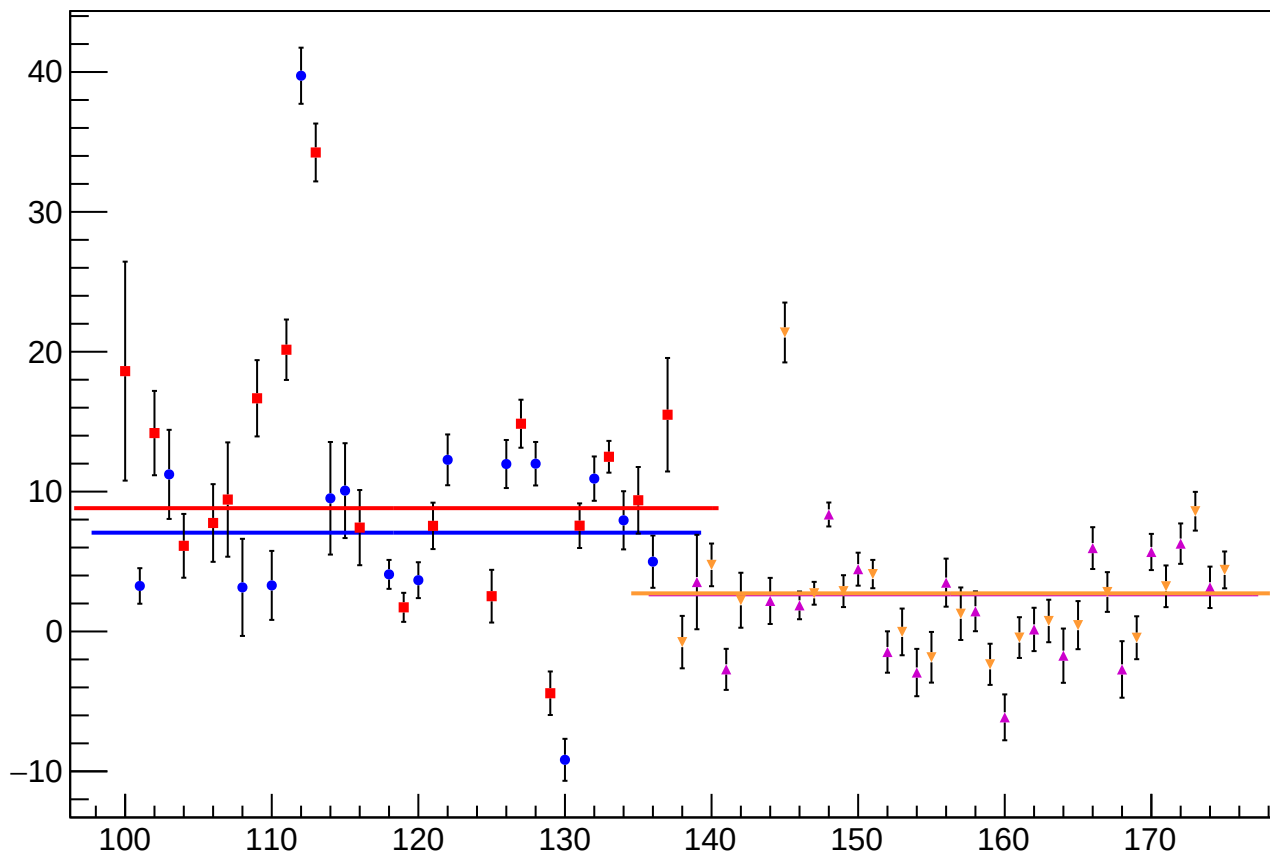
In:  $-74.974 \pm 0.464$   $\chi^2/\text{NDF}: 699.6/17$

Out:  $-75.042 \pm 0.451$   $\chi^2/\text{NDF}: 937.8/18$

All:  $-75.009 \pm 0.323$   $\chi^2/\text{NDF}: 1637.4/36$



reg\_asym\_usl\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $7.063 \pm 0.434$   $\chi^2/\text{NDF}: 446.9/15$

Left Out:  $2.725 \pm 0.323$   $\chi^2/\text{NDF}: 136.9/18$

Right Out:  $8.816 \pm 0.449$   $\chi^2/\text{NDF}: 350.4/17$

Left In:  $2.655 \pm 0.334$   $\chi^2/\text{NDF}: 140.9/17$

Left:  $2.691 \pm 0.233$   $\chi^2/\text{NDF}: 277.8/36$

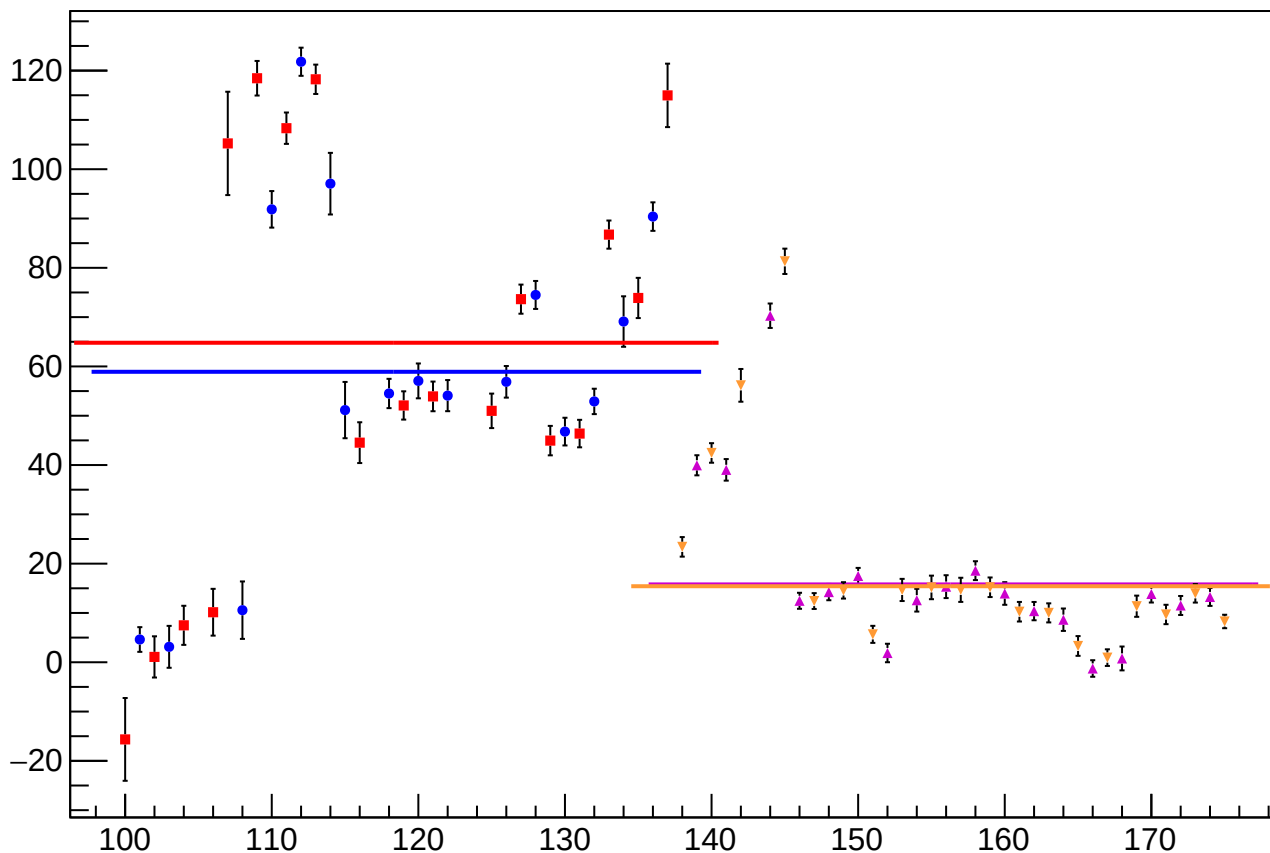
Right:  $7.909 \pm 0.312$   $\chi^2/\text{NDF}: 805.1/33$

In:  $4.300 \pm 0.265$   $\chi^2/\text{NDF}: 652.6/33$

Out:  $4.806 \pm 0.262$   $\chi^2/\text{NDF}: 608.4/36$

All:  $4.555 \pm 0.186$   $\chi^2/\text{NDF}: 1262.8/70$

# reg\_asym\_usl\_diff\_bpm4eX\_slope vs Slug, Sign Corrected

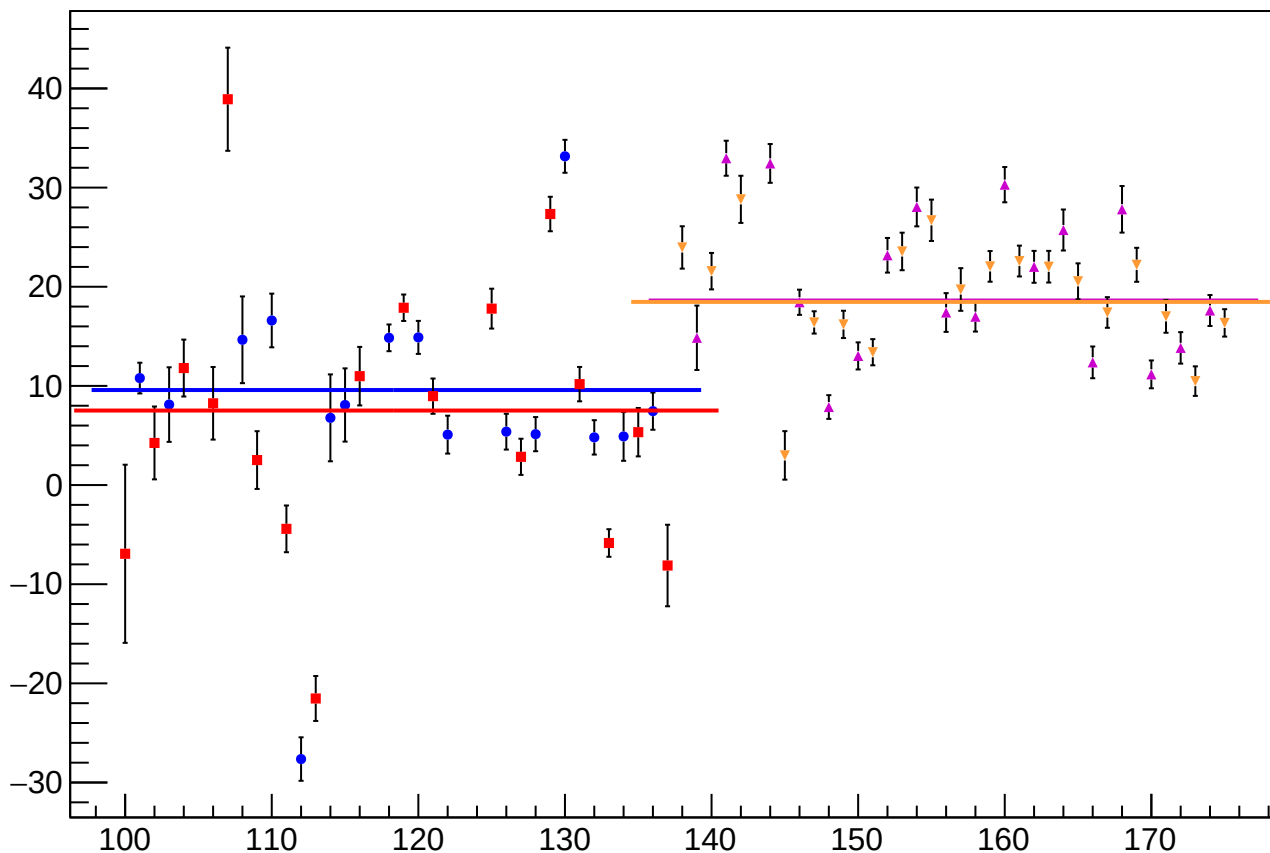


Right In: 58.913 $\pm$ 0.831  $\chi^2$ /NDF: 1496.7/15  
 Left Out: 15.420 $\pm$ 0.445  $\chi^2$ /NDF:1211.2/18  
 Right Out: 64.803 $\pm$ 0.840  $\chi^2$ /NDF: 1718.2/17  
 Left In: 15.786 $\pm$ 0.458  $\chi^2$ /NDF:971.0/17

Left: 15.598 $\pm$ 0.319  $\chi^2$ /NDF: 2182.5/36  
 Right: 61.827 $\pm$ 0.591  $\chi^2$ /NDF: 3239.7/33  
 In: 25.823 $\pm$ 0.401  $\chi^2$ /NDF:4532.2/33  
 Out: 26.241 $\pm$ 0.393  $\chi^2$ /NDF:5626.7/36

All: 26.036 $\pm$ 0.281  $\chi^2$ /NDF: 10159.4/70

reg\_asym\_usl\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $9.583 \pm 0.501$   $\chi^2/\text{NDF}: 554.4/15$

Left Out:  $18.472 \pm 0.375$   $\chi^2/\text{NDF}: 168.3/18$

Right Out:  $7.516 \pm 0.516$   $\chi^2/\text{NDF}: 569.8/17$

Left In:  $18.609 \pm 0.388$   $\chi^2/\text{NDF}: 373.8/17$

Left:  $18.538 \pm 0.270$   $\chi^2/\text{NDF}: 542.2/36$

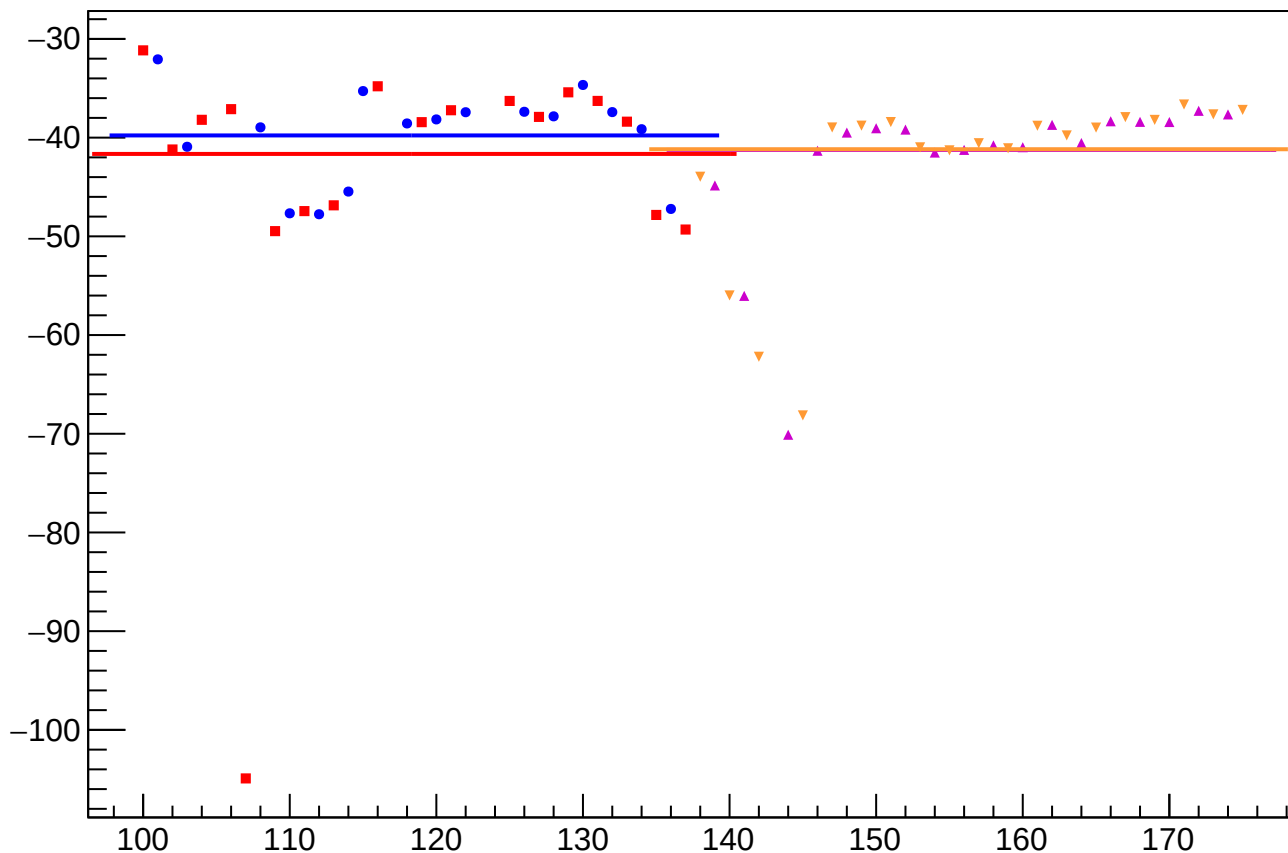
Right:  $8.579 \pm 0.359$   $\chi^2/\text{NDF}: 1132.5/33$

In:  $15.227 \pm 0.307$   $\chi^2/\text{NDF}: 1131.1/33$

Out:  $14.680 \pm 0.303$   $\chi^2/\text{NDF}: 1033.3/36$

All:  $14.951 \pm 0.216$   $\chi^2/\text{NDF}: 2166.0/70$

reg\_asym\_usl\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-39.777 \pm 0.031$   $\chi^2/\text{NDF}$ : 26158.0/15

Left Out:  $-41.176 \pm 0.018$   $\chi^2/\text{NDF}$ : 145229.0/18

Right Out:  $-41.651 \pm 0.031$   $\chi^2/\text{NDF}$ : 94457.5/17

Left In:  $-41.246 \pm 0.018$   $\chi^2/\text{NDF}$ : 115349.0/17

Left:  $-41.211 \pm 0.013$   $\chi^2/\text{NDF}$ : 260585.6/36

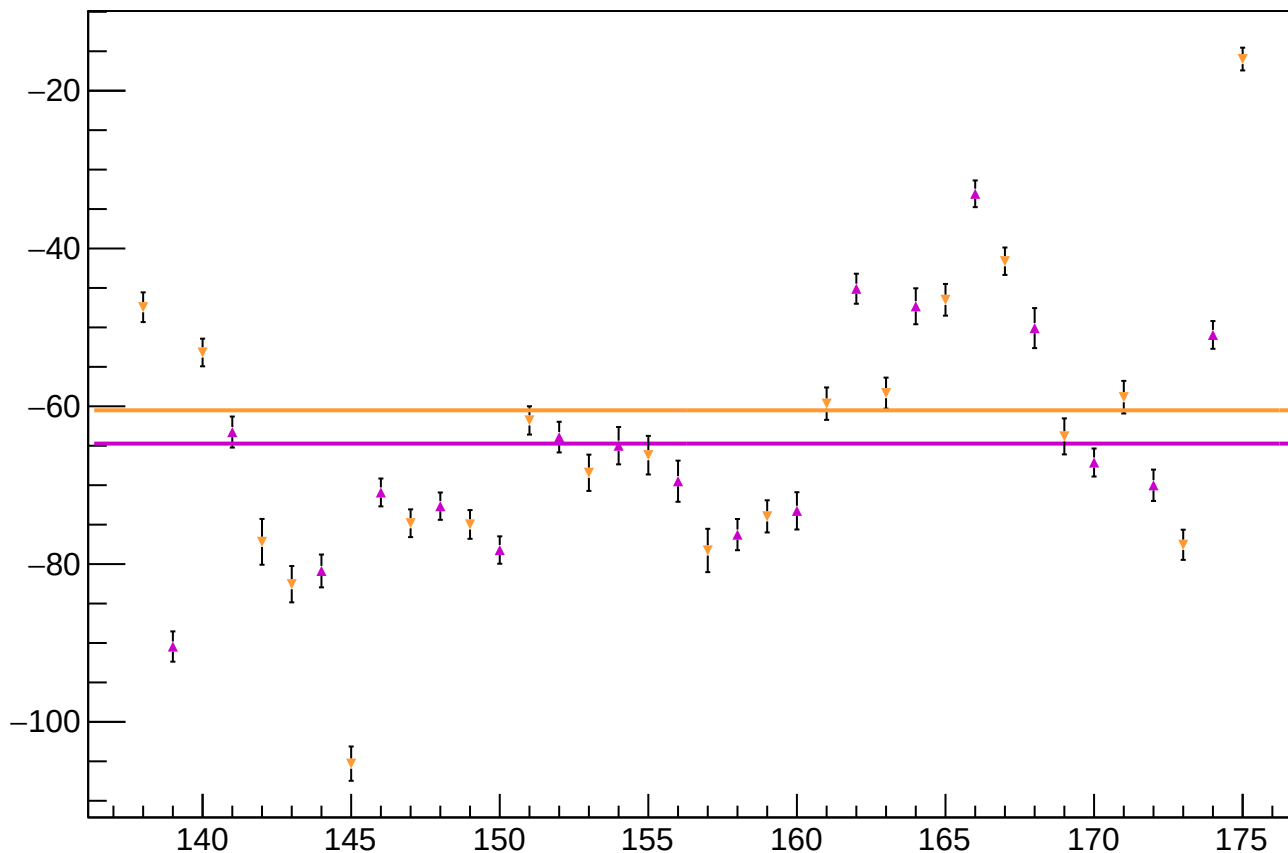
Right:  $-40.710 \pm 0.022$   $\chi^2/\text{NDF}$ : 122427.7/33

In:  $-40.881 \pm 0.015$   $\chi^2/\text{NDF}$ : 143187.4/33

Out:  $-41.293 \pm 0.015$   $\chi^2/\text{NDF}$ : 239861.1/36

All:  $-41.087 \pm 0.011$   $\chi^2/\text{NDF}$ : 383403.3/70

reg\_asym\_usr\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -60.509 $\pm$ 0.445  $\chi^2/\text{NDF}$ :2048.6/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -64.729 $\pm$ 0.464  $\chi^2/\text{NDF}$ :1002.4/17

Left: -62.531 $\pm$ 0.321  $\chi^2/\text{NDF}$ : 3093.9/37

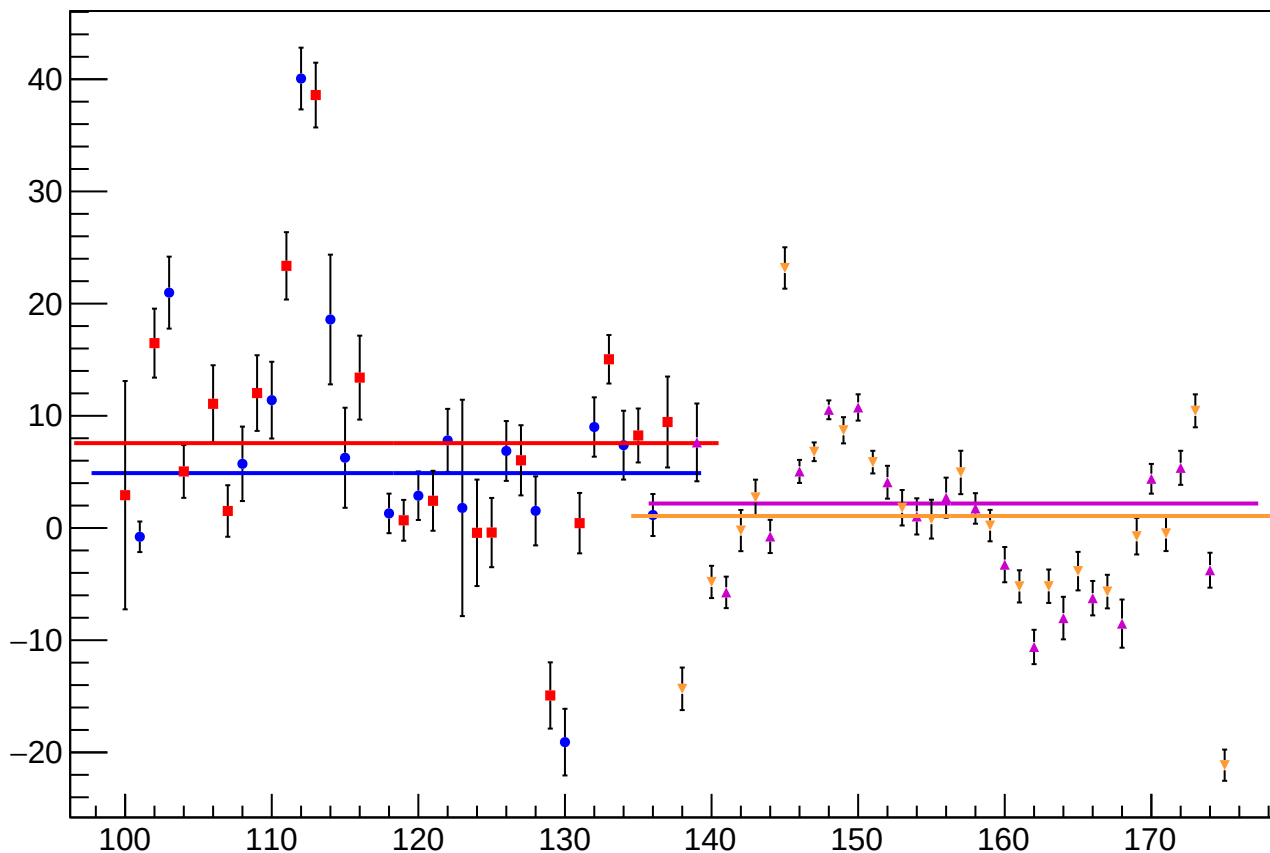
Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -64.729 $\pm$ 0.464  $\chi^2/\text{NDF}$ :1002.4/17

Out: -60.509 $\pm$ 0.445  $\chi^2/\text{NDF}$ :2048.6/19

All: -62.531 $\pm$ 0.321  $\chi^2/\text{NDF}$ : 3093.9/37

reg\_asym\_usr\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $4.894 \pm 0.621$   $\chi^2/\text{NDF}: 295.4/16$

Left Out:  $1.070 \pm 0.318$   $\chi^2/\text{NDF}: 708.3/19$

Right Out:  $7.565 \pm 0.652$   $\chi^2/\text{NDF}: 270.2/18$

Left In:  $2.183 \pm 0.333$   $\chi^2/\text{NDF}: 388.5/17$

Left:  $1.601 \pm 0.230$   $\chi^2/\text{NDF}: 1102.6/37$

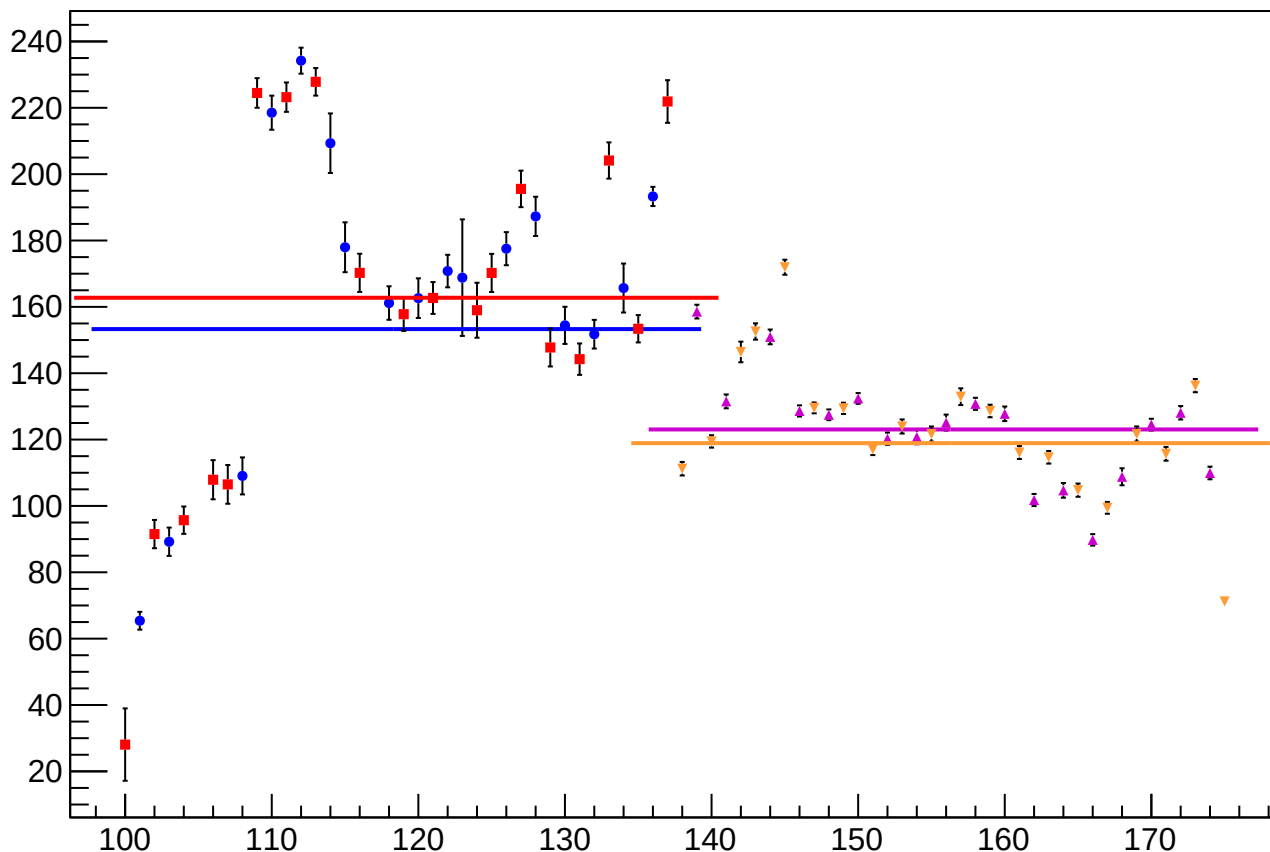
Right:  $6.165 \pm 0.450$   $\chi^2/\text{NDF}: 574.4/35$

In:  $2.789 \pm 0.294$   $\chi^2/\text{NDF}: 698.6/34$

Out:  $2.319 \pm 0.286$   $\chi^2/\text{NDF}: 1058.8/38$

All:  $2.547 \pm 0.205$   $\chi^2/\text{NDF}: 1758.7/73$

# reg\_asym\_usr\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 153.298 $\pm$ 1.145  $\chi^2$ /NDF: 2266.8/16

Left Out: 118.924 $\pm$ 0.440  $\chi^2$ /NDF:2324.2/19

Right Out: 162.747 $\pm$ 1.177  $\chi^2$ /NDF: 1708.7/18

Left In: 123.052 $\pm$ 0.458  $\chi^2$ /NDF:1204.3/17

Left: 120.908 $\pm$ 0.317  $\chi^2$ /NDF: 3570.6/37

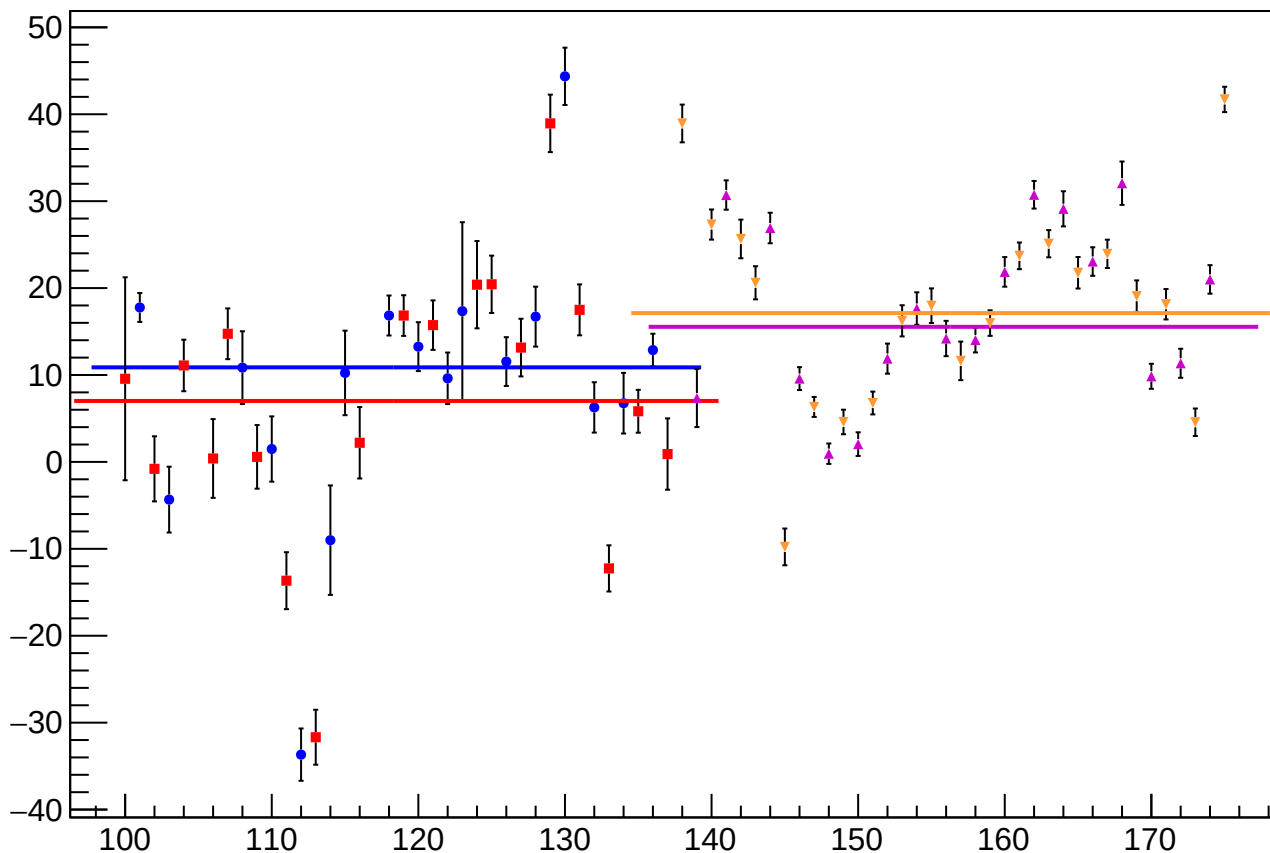
Right: 157.893 $\pm$ 0.820  $\chi^2$ /NDF: 4008.6/35

In: 127.224 $\pm$ 0.425  $\chi^2$ /NDF:4072.9/34

Out: 124.311 $\pm$ 0.413  $\chi^2$ /NDF:5249.5/38

All: 125.723 $\pm$ 0.296  $\chi^2$ /NDF: 9346.6/73

reg\_asym\_usr\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 10.878+/-0.713  $\chi^2/\text{NDF}$ : 388.1/16

Left Out: 17.123+/-0.369  $\chi^2/\text{NDF}$ : 969.3/19

Right Out: 7.014+/-0.748  $\chi^2/\text{NDF}$ : 424.5/18

Left In: 15.543+/-0.387  $\chi^2/\text{NDF}$ : 657.5/17

Left: 16.369+/-0.267  $\chi^2/\text{NDF}$ : 1635.6/37

Right: 9.038+/-0.516  $\chi^2/\text{NDF}$ : 826.6/35

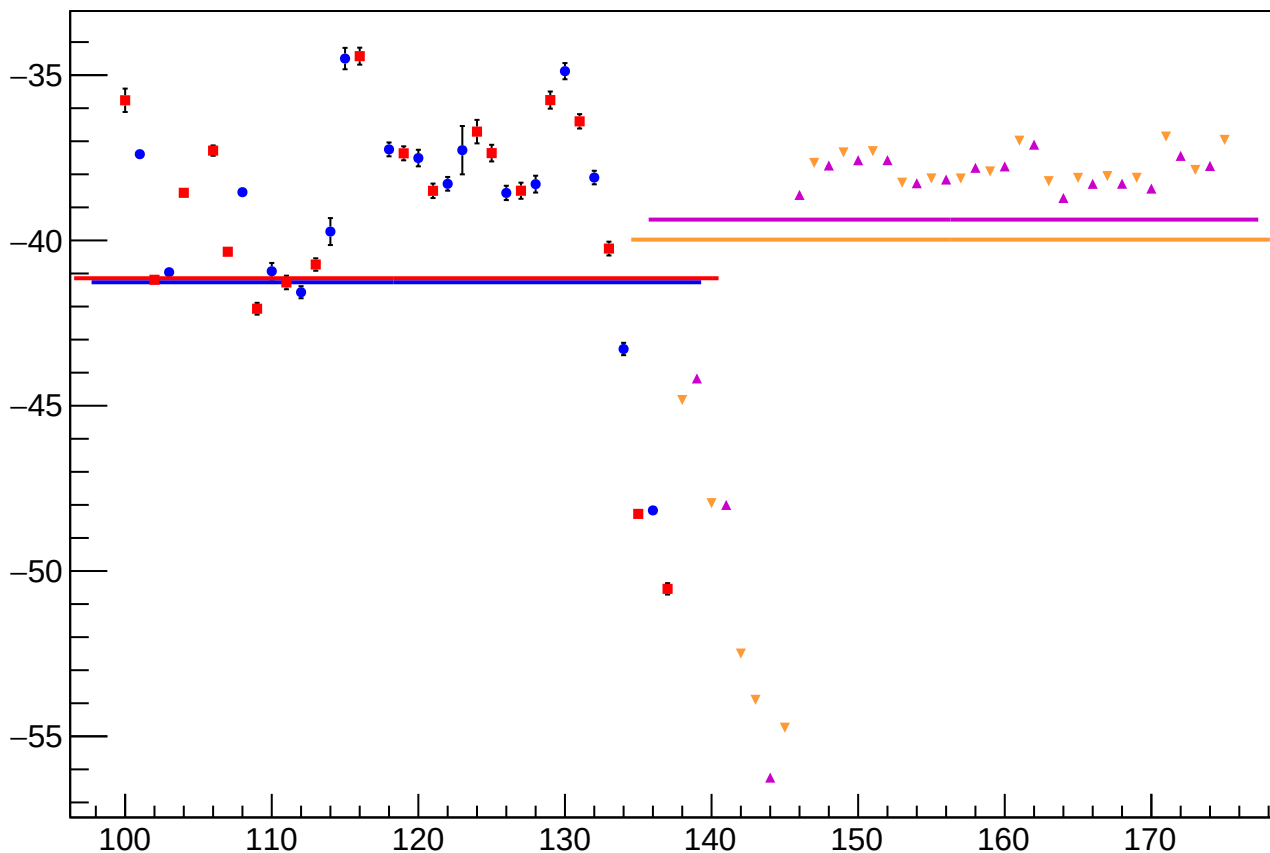
In: 14.484+/-0.340  $\chi^2/\text{NDF}$ : 1078.7/34

Out: 15.141+/-0.331  $\chi^2/\text{NDF}$ : 1540.7/38

All: 14.821+/-0.237  $\chi^2/\text{NDF}$ : 2621.3/73



reg\_asym\_usr\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-41.265 \pm 0.038$   $\chi^2/\text{NDF}: 12570.1/16$

Left Out:  $-39.975 \pm 0.018$   $\chi^2/\text{NDF}: 84589.4/19$

Right Out:  $-41.144 \pm 0.039$   $\chi^2/\text{NDF}: 12218.7/18$

Left In:  $-39.370 \pm 0.018$   $\chi^2/\text{NDF}: 50913.2/17$

Left:  $-39.678 \pm 0.013$   $\chi^2/\text{NDF}: 136084.5/37$

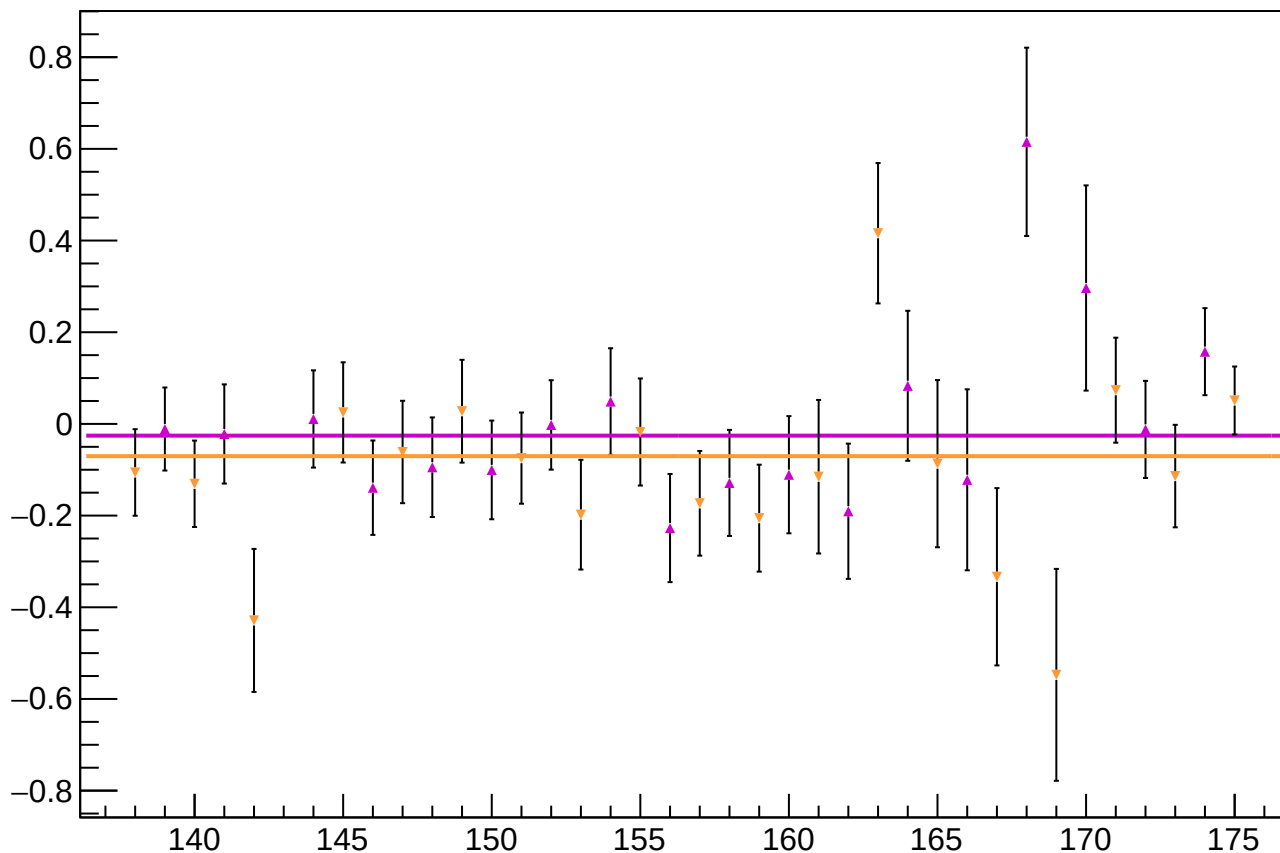
Right:  $-41.205 \pm 0.027$   $\chi^2/\text{NDF}: 24793.7/35$

In:  $-39.707 \pm 0.016$   $\chi^2/\text{NDF}: 65476.8/34$

Out:  $-40.176 \pm 0.016$   $\chi^2/\text{NDF}: 97566.2/38$

All:  $-39.945 \pm 0.011$   $\chi^2/\text{NDF}: 163466.3/73$

reg\_asym\_dsl\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: -0.070 $\pm$ 0.027  $\chi^2$ /NDF:31.6/18

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: -0.026 $\pm$ 0.028  $\chi^2$ /NDF:24.4/17

Left: -0.049 $\pm$ 0.019  $\chi^2$ /NDF: 57.3/36

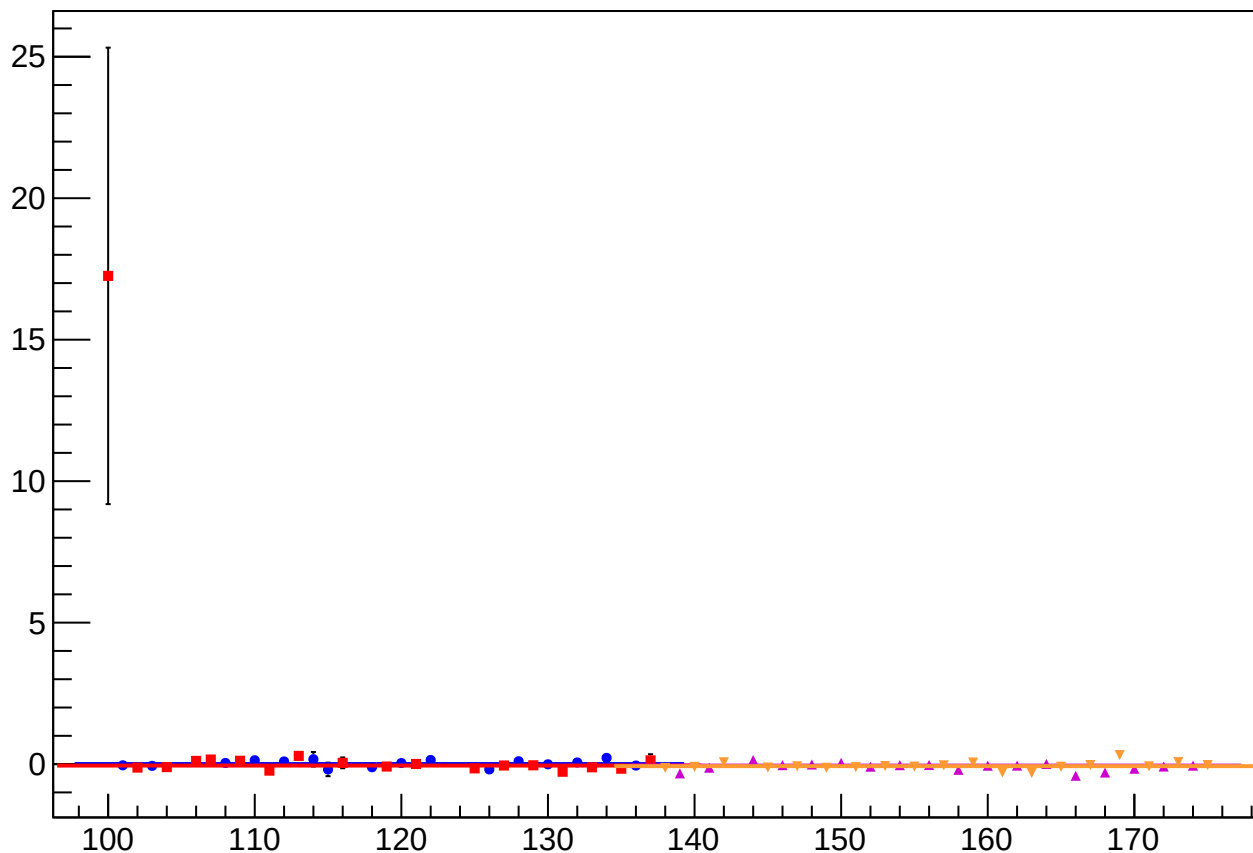
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: -0.026 $\pm$ 0.028  $\chi^2$ /NDF:24.4/17

Out: -0.070 $\pm$ 0.027  $\chi^2$ /NDF:31.6/18

All: -0.049 $\pm$ 0.019  $\chi^2$ /NDF: 57.3/36

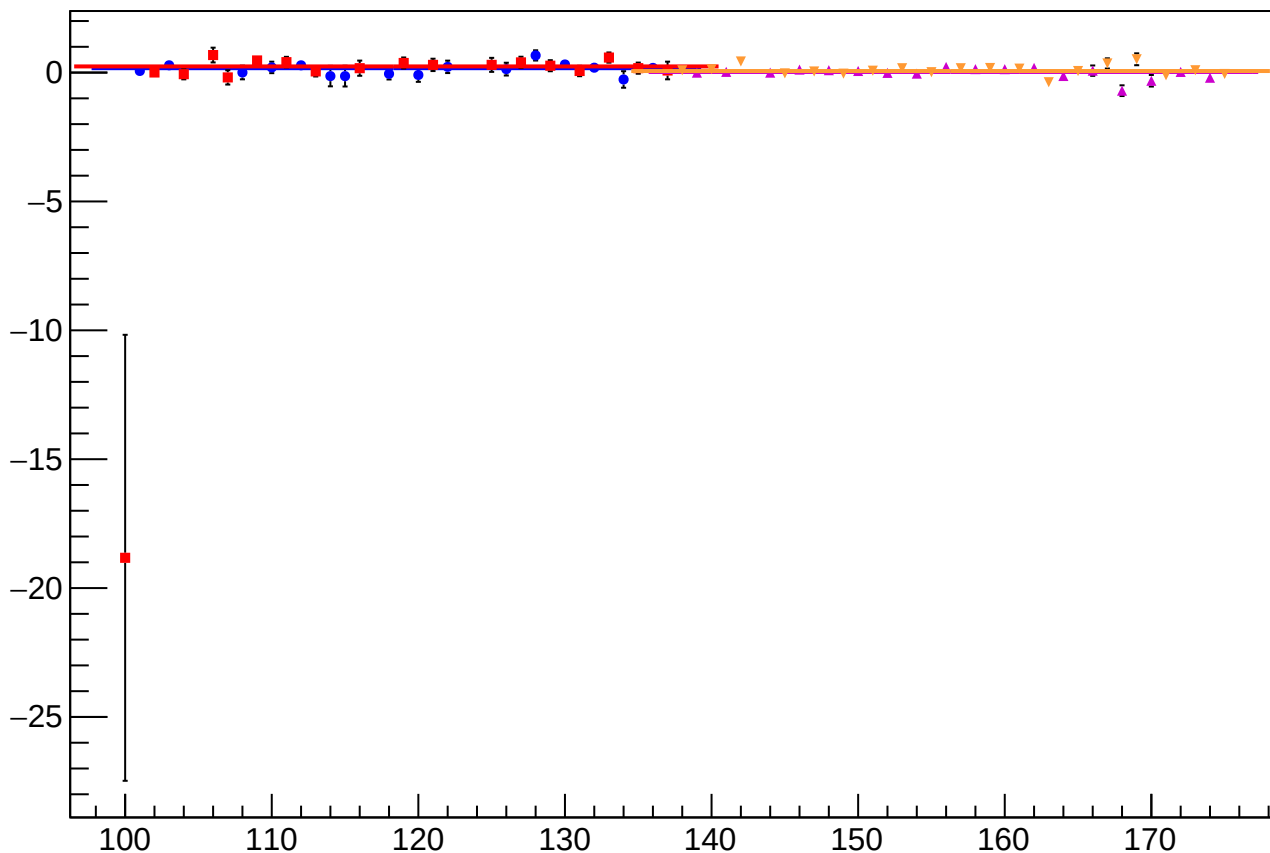
reg\_asym\_dsl\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $0.002 \pm 0.028$   $\chi^2/\text{NDF}: 12.5/15$   
 Left Out:  $-0.071 \pm 0.019$   $\chi^2/\text{NDF}: 23.0/18$   
 Right Out:  $-0.051 \pm 0.029$   $\chi^2/\text{NDF}: 25.8/17$   
 Left In:  $-0.053 \pm 0.020$   $\chi^2/\text{NDF}: 23.5/17$

Left:  $-0.062 \pm 0.014$   $\chi^2/\text{NDF}: 47.0/36$   
 Right:  $-0.024 \pm 0.020$   $\chi^2/\text{NDF}: 40.0/33$   
 In:  $-0.034 \pm 0.016$   $\chi^2/\text{NDF}: 38.5/33$   
 Out:  $-0.065 \pm 0.016$   $\chi^2/\text{NDF}: 49.1/36$   
 All:  $-0.050 \pm 0.012$   $\chi^2/\text{NDF}: 89.4/70$

reg\_asym\_dsl\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $0.171 \pm 0.052$   $\chi^2/\text{NDF}$ : 13.7/15

Left Out:  $0.060 \pm 0.026$   $\chi^2/\text{NDF}$ : 30.1/18

Right Out:  $0.239 \pm 0.054$   $\chi^2/\text{NDF}$ : 21.8/17

Left In:  $0.022 \pm 0.027$   $\chi^2/\text{NDF}$ : 28.7/17

Left:  $0.042 \pm 0.019$   $\chi^2/\text{NDF}$ : 59.7/36

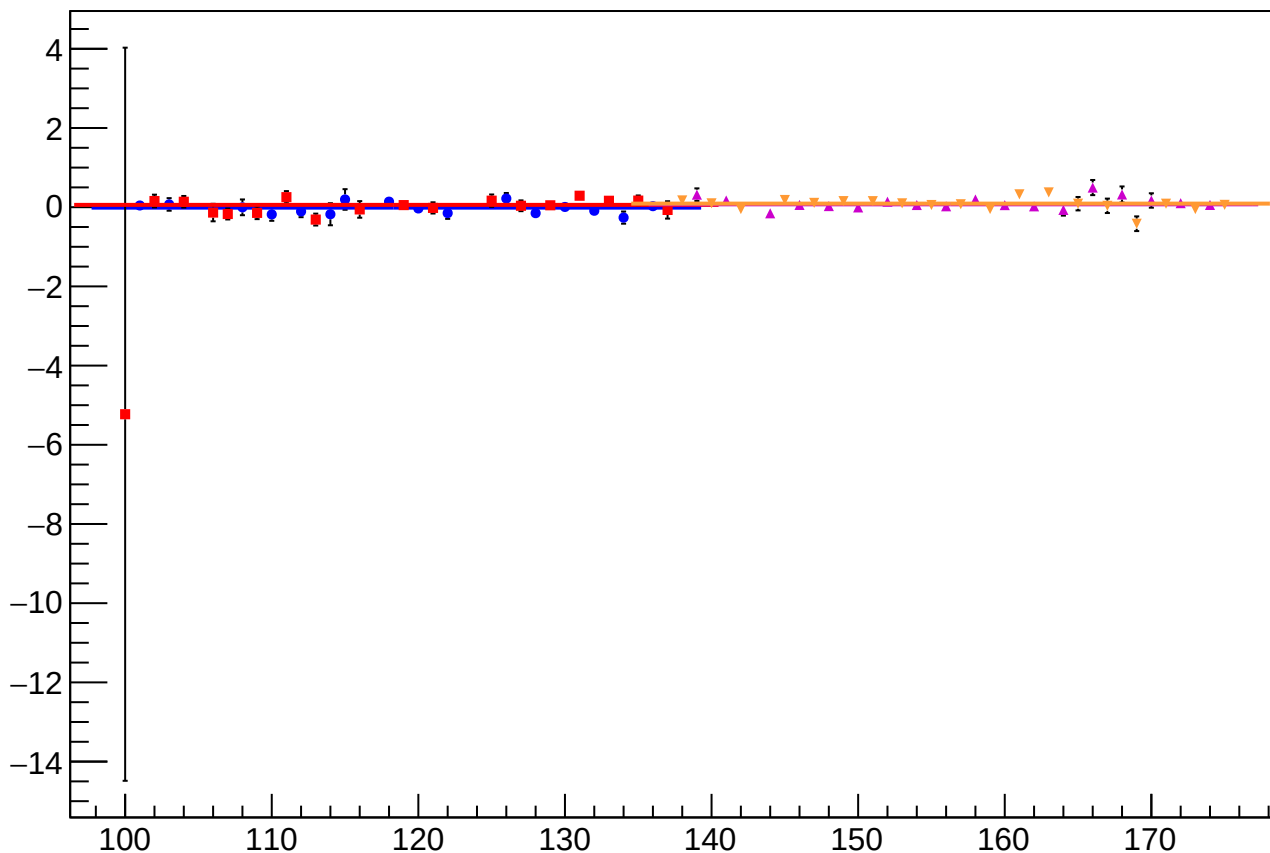
Right:  $0.204 \pm 0.038$   $\chi^2/\text{NDF}$ : 36.3/33

In:  $0.054 \pm 0.024$   $\chi^2/\text{NDF}$ : 48.6/33

Out:  $0.095 \pm 0.024$   $\chi^2/\text{NDF}$ : 60.7/36

All:  $0.075 \pm 0.017$   $\chi^2/\text{NDF}$ : 110.8/70

reg\_asym\_dsl\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -0.011 $\pm$ 0.033  $\chi^2$ /NDF: 13.8/15

Left Out: 0.090 $\pm$ 0.023  $\chi^2$ /NDF:25.4/18

Right Out: 0.059 $\pm$ 0.034  $\chi^2$ /NDF: 20.6/17

Left In: 0.072 $\pm$ 0.023  $\chi^2$ /NDF:22.1/17

Left: 0.082 $\pm$ 0.016  $\chi^2$ /NDF: 47.9/36

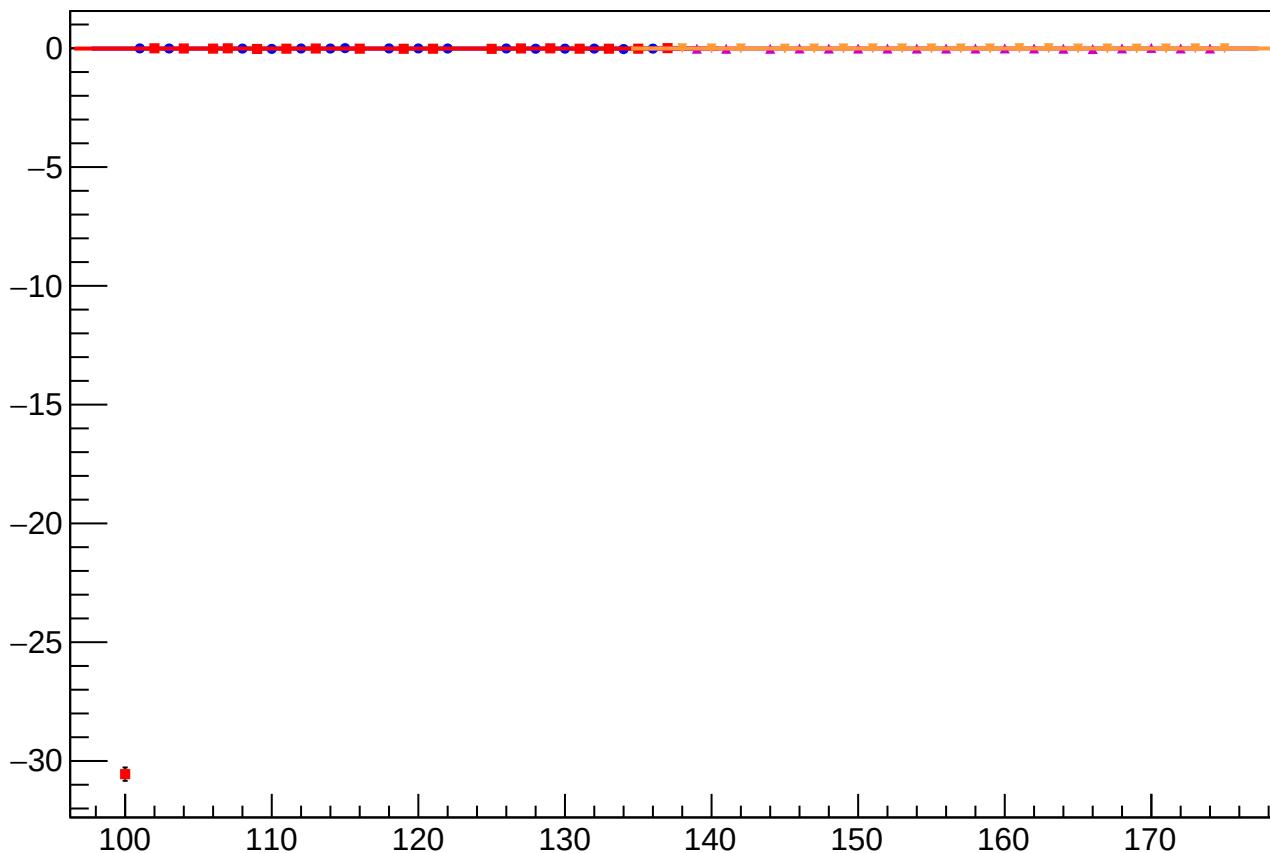
Right: 0.022 $\pm$ 0.023  $\chi^2$ /NDF: 36.5/33

In: 0.044 $\pm$ 0.019  $\chi^2$ /NDF:40.2/33

Out: 0.081 $\pm$ 0.019  $\chi^2$ /NDF:46.6/36

All: 0.062 $\pm$ 0.013  $\chi^2$ /NDF: 88.7/70

reg\_asym\_dsl\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.012 $\pm$ 0.002  $\chi^2$ /NDF: 12.9/15

Left Out: -0.008 $\pm$ 0.001  $\chi^2$ /NDF:15.2/18

Right Out: -0.012 $\pm$ 0.002  $\chi^2$ /NDF: 11891.5/17

Left In: -0.010 $\pm$ 0.001  $\chi^2$ /NDF:31.4/17

Left: -0.009 $\pm$ 0.001  $\chi^2$ /NDF: 47.9/36

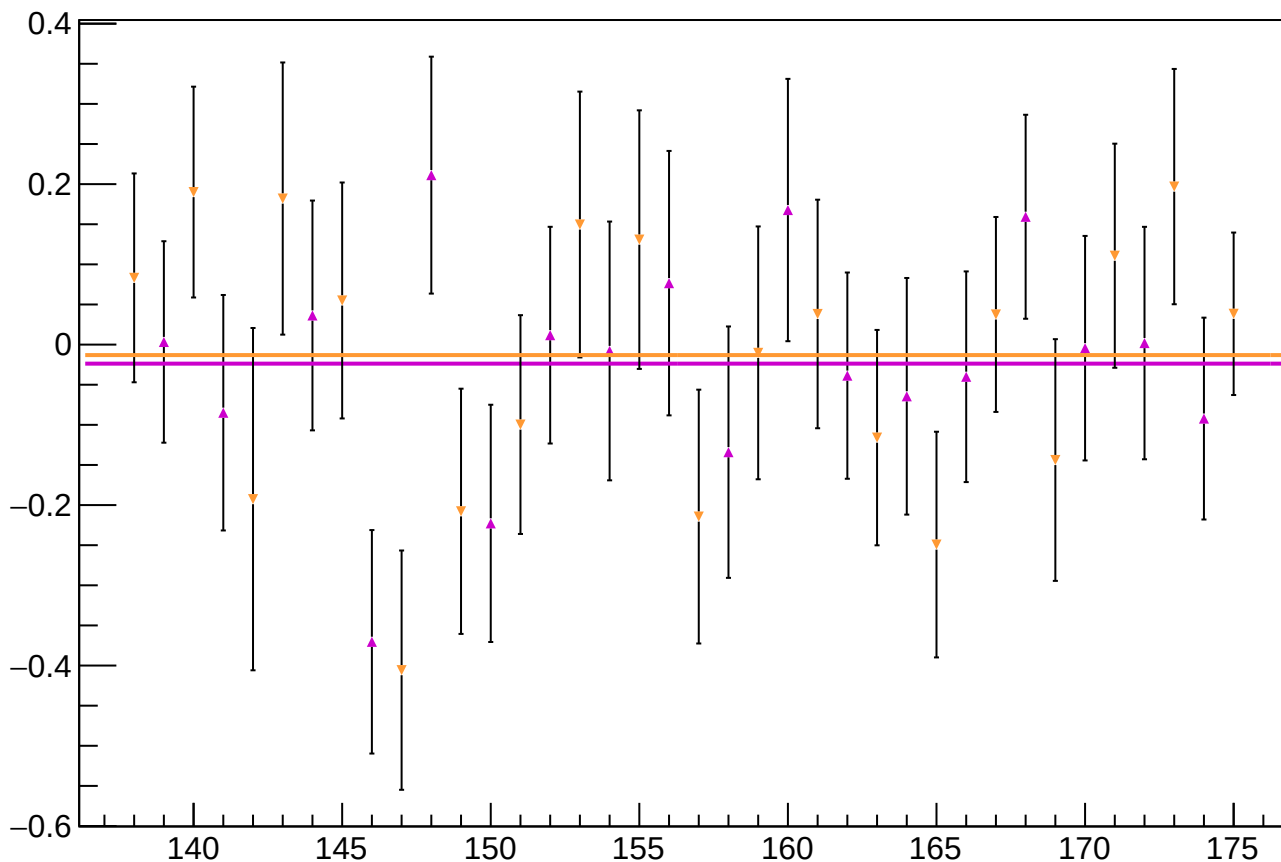
Right: -0.012 $\pm$ 0.001  $\chi^2$ /NDF: 11904.4/33

In: -0.010 $\pm$ 0.001  $\chi^2$ /NDF:45.3/33

Out: -0.009 $\pm$ 0.001  $\chi^2$ /NDF:11910.5/36

All: -0.010 $\pm$ 0.001  $\chi^2$ /NDF: 11956.7/70

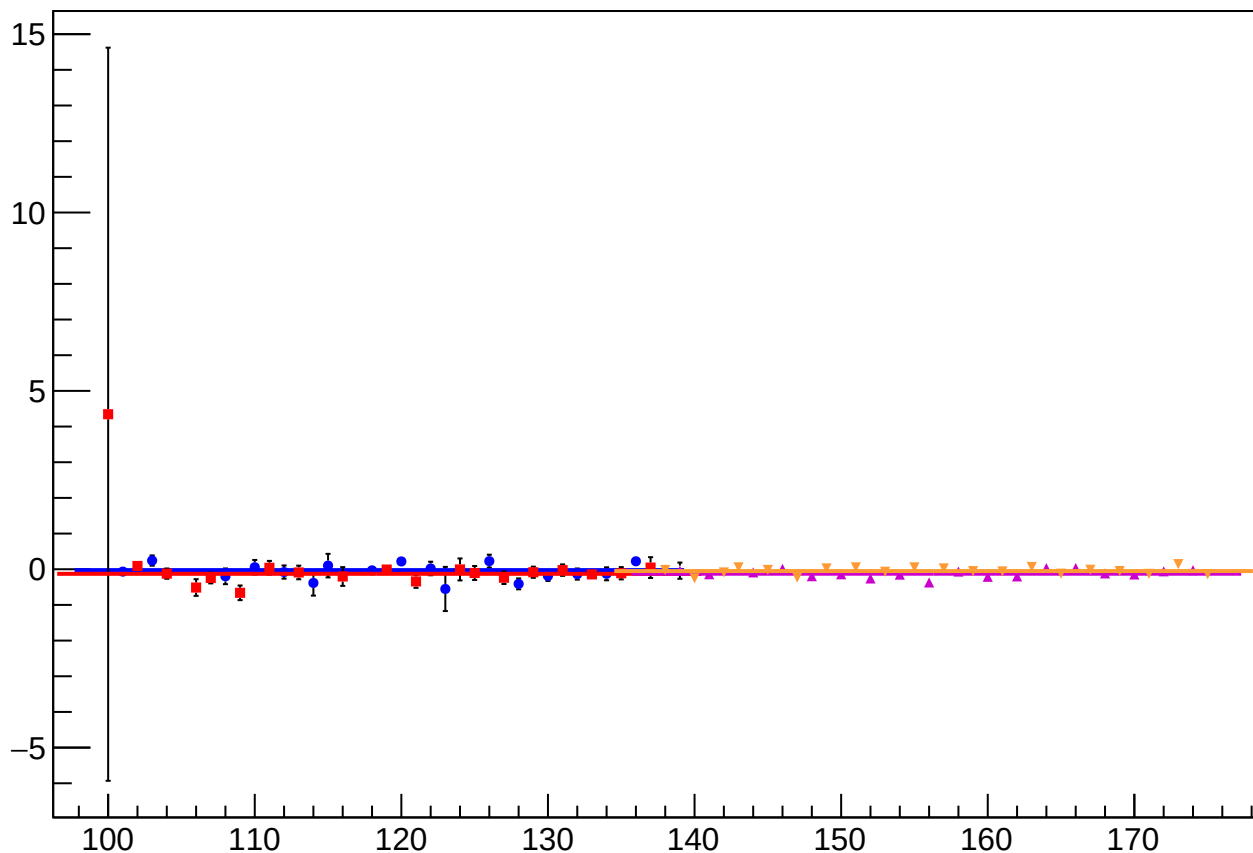
reg\_asym\_dsr\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: -0.013 $\pm$ 0.032  $\chi^2$ /NDF:25.1/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: -0.024 $\pm$ 0.033  $\chi^2$ /NDF:15.8/17

Left: -0.018 $\pm$ 0.023  $\chi^2$ /NDF: 40.9/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: -0.024 $\pm$ 0.033  $\chi^2$ /NDF:15.8/17  
 Out: -0.013 $\pm$ 0.032  $\chi^2$ /NDF:25.1/19  
 All: -0.018 $\pm$ 0.023  $\chi^2$ /NDF: 40.9/37

reg\_asym\_dsr\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-0.024 \pm 0.037$   $\chi^2/\text{NDF}: 23.4/16$

Left Out:  $-0.051 \pm 0.023$   $\chi^2/\text{NDF}: 20.8/19$

Right Out:  $-0.128 \pm 0.039$   $\chi^2/\text{NDF}: 17.6/18$

Left In:  $-0.125 \pm 0.025$   $\chi^2/\text{NDF}: 16.6/17$

Left:  $-0.086 \pm 0.017$   $\chi^2/\text{NDF}: 42.1/37$

Right:  $-0.072 \pm 0.027$   $\chi^2/\text{NDF}: 44.7/35$

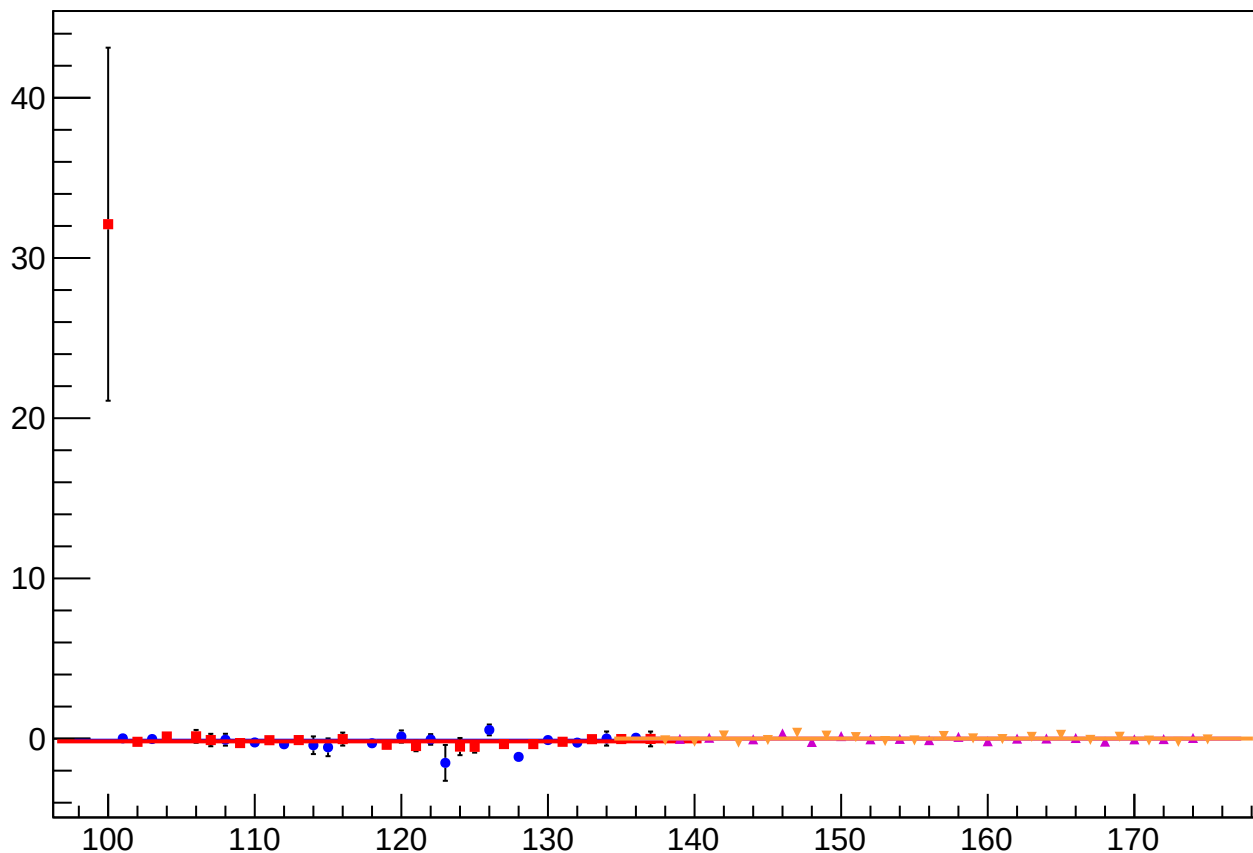
In:  $-0.093 \pm 0.020$   $\chi^2/\text{NDF}: 45.1/34$

Out:  $-0.071 \pm 0.020$   $\chi^2/\text{NDF}: 41.2/38$

All:  $-0.082 \pm 0.014$   $\chi^2/\text{NDF}: 87.0/73$



reg\_asym\_dsr\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-0.129 \pm 0.067$   $\chi^2/\text{NDF}: 23.7/16$

Left Out:  $0.004 \pm 0.032$   $\chi^2/\text{NDF}: 24.7/19$

Right Out:  $-0.172 \pm 0.071$   $\chi^2/\text{NDF}: 15.0/18$

Left In:  $-0.004 \pm 0.033$   $\chi^2/\text{NDF}: 14.3/17$

Left:  $0.000 \pm 0.023$   $\chi^2/\text{NDF}: 39.0/37$

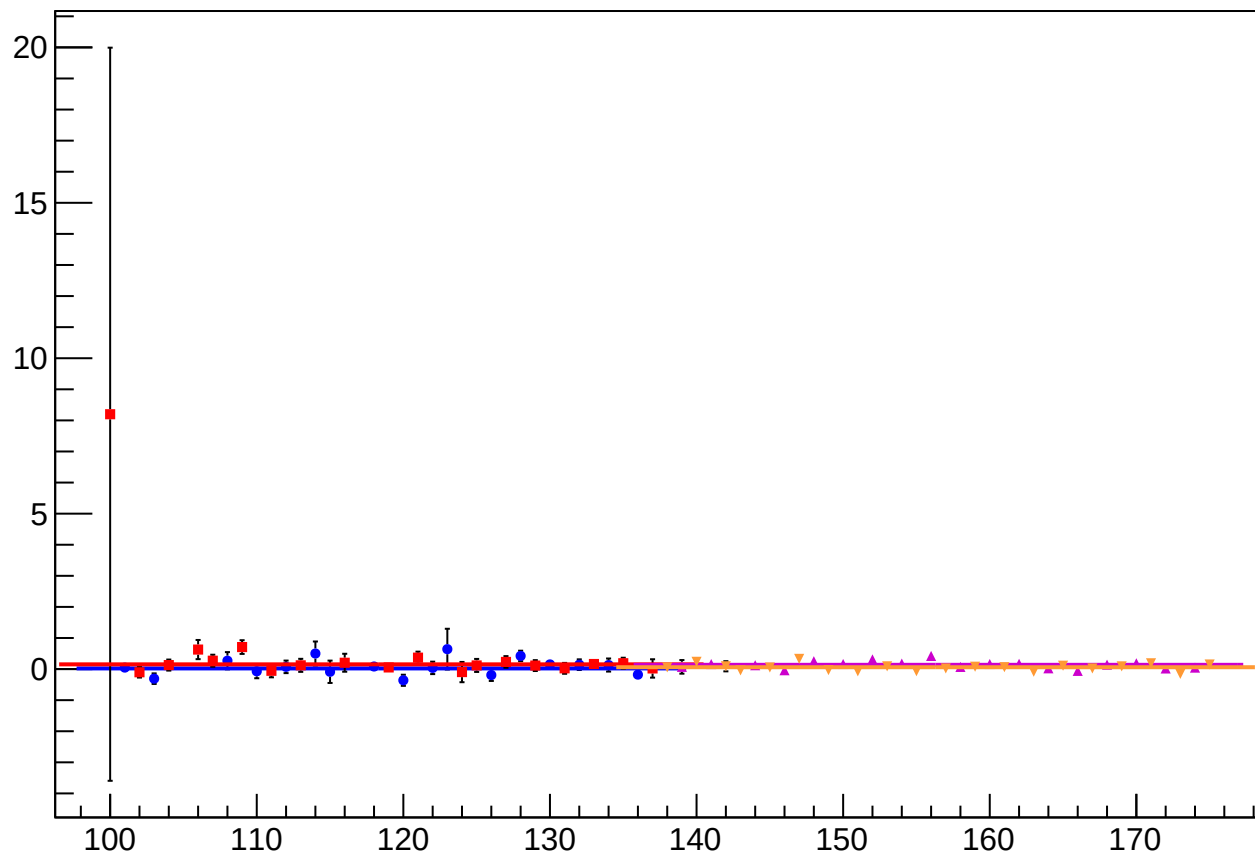
Right:  $-0.149 \pm 0.049$   $\chi^2/\text{NDF}: 39.0/35$

In:  $-0.028 \pm 0.030$   $\chi^2/\text{NDF}: 40.9/34$

Out:  $-0.025 \pm 0.029$   $\chi^2/\text{NDF}: 44.8/38$

All:  $-0.027 \pm 0.021$   $\chi^2/\text{NDF}: 85.7/73$

reg\_asym\_dsr\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.021+/-0.042  $\chi^2/\text{NDF}$ : 22.5/16

Left Out: 0.059+/-0.027  $\chi^2/\text{NDF}$ :20.5/19

Right Out: 0.152+/-0.045  $\chi^2/\text{NDF}$ : 16.2/18

Left In: 0.137+/-0.028  $\chi^2/\text{NDF}$ :16.6/17

Left: 0.096+/-0.020  $\chi^2/\text{NDF}$ : 41.0/37

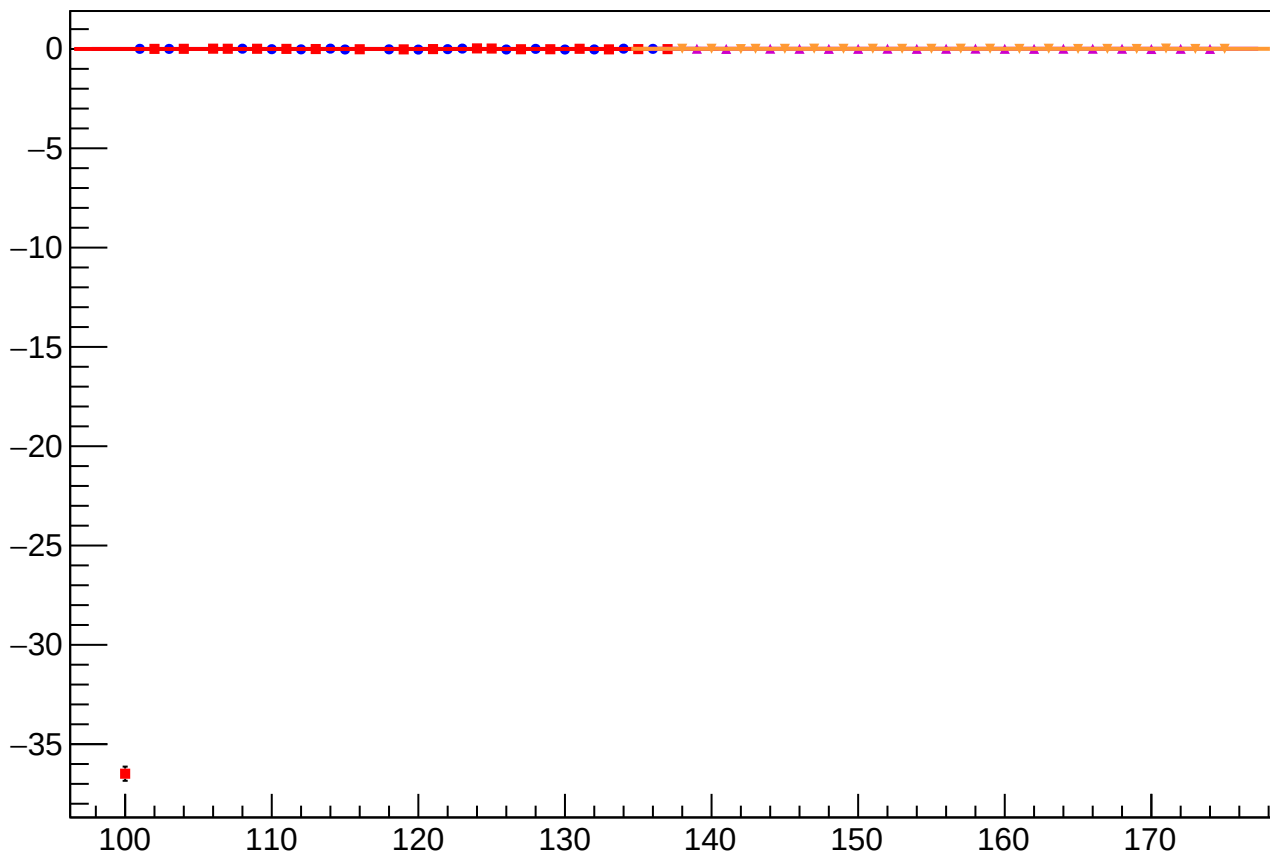
Right: 0.082+/-0.031  $\chi^2/\text{NDF}$ : 43.2/35

In: 0.101+/-0.024  $\chi^2/\text{NDF}$ :44.3/34

Out: 0.084+/-0.023  $\chi^2/\text{NDF}$ :39.8/38

All: 0.092+/-0.017  $\chi^2/\text{NDF}$ : 84.4/73

reg\_asym\_dsr\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.001 $\pm$ 0.002  $\chi^2$ /NDF: 32.4/16

Left Out: 0.009 $\pm$ 0.001  $\chi^2$ /NDF:18.7/19

Right Out: 0.001 $\pm$ 0.002  $\chi^2$ /NDF: 10449.1/18

Left In: 0.010 $\pm$ 0.001  $\chi^2$ /NDF:11.4/17

Left: 0.010 $\pm$ 0.001  $\chi^2$ /NDF: 30.3/37

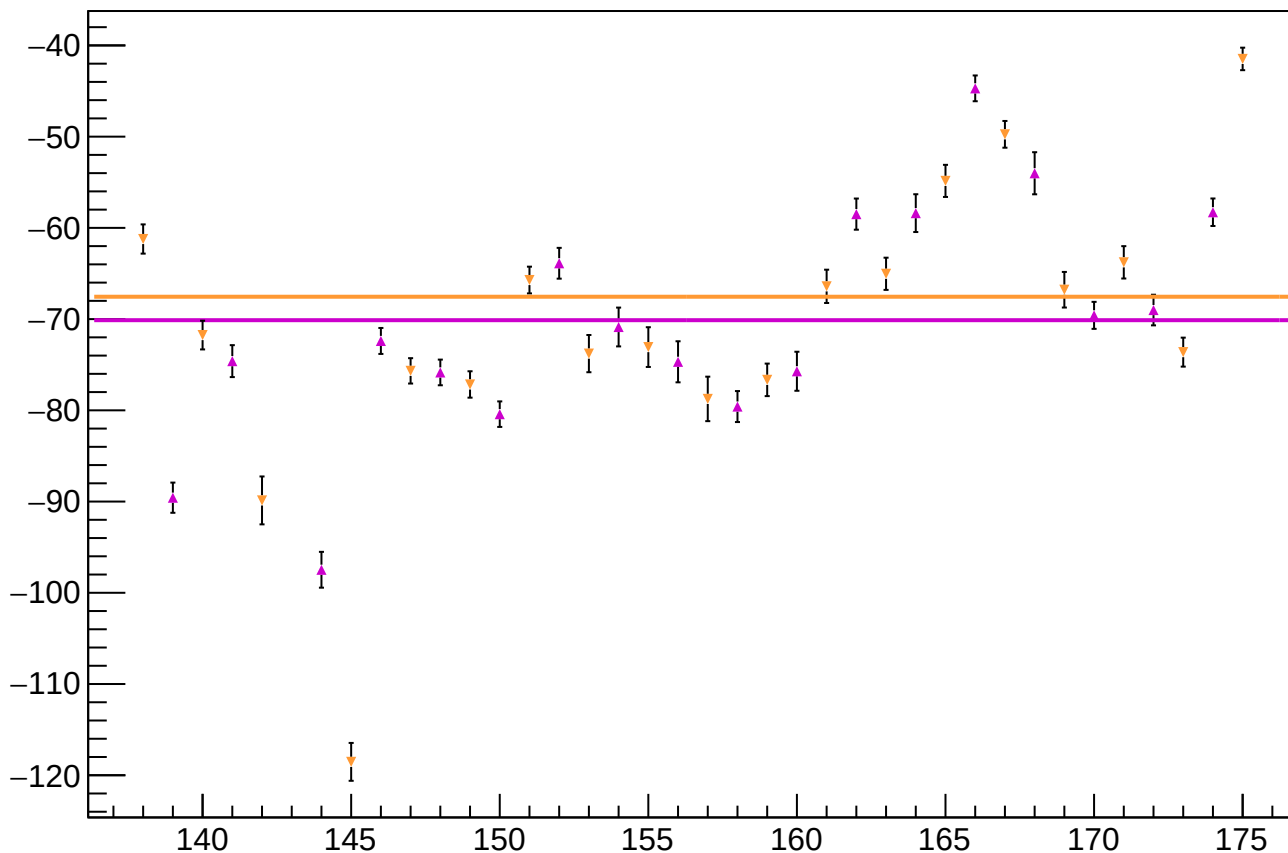
Right: 0.001 $\pm$ 0.002  $\chi^2$ /NDF: 10481.5/35

In: 0.008 $\pm$ 0.001  $\chi^2$ /NDF:56.0/34

Out: 0.007 $\pm$ 0.001  $\chi^2$ /NDF:10478.4/38

All: 0.008 $\pm$ 0.001  $\chi^2$ /NDF: 10534.5/73

reg\_asym\_us\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-67.547 \pm 0.389$   $\chi^2/\text{NDF}$ : 1509.5/18

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left In:  $-70.119 \pm 0.398$   $\chi^2/\text{NDF}$ : 981.1/17

Left:  $-68.803 \pm 0.278$   $\chi^2/\text{NDF}$ : 2512.0/36

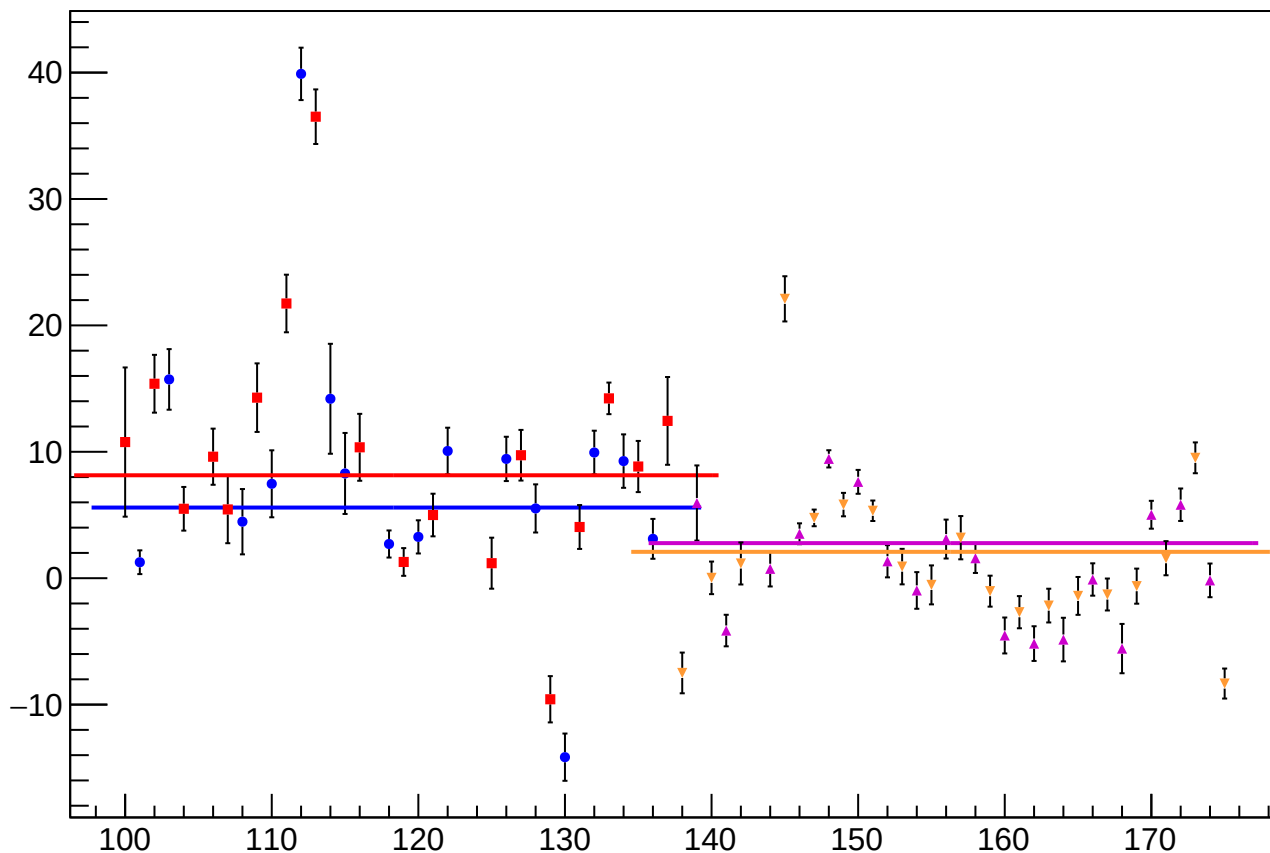
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

In:  $-70.119 \pm 0.398$   $\chi^2/\text{NDF}$ : 981.1/17

Out:  $-67.547 \pm 0.389$   $\chi^2/\text{NDF}$ : 1509.5/18

All:  $-68.803 \pm 0.278$   $\chi^2/\text{NDF}$ : 2512.0/36

reg\_asym\_us\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $5.589 \pm 0.424$   $\chi^2/\text{NDF}$ : 462.8/15

Left Out:  $2.085 \pm 0.274$   $\chi^2/\text{NDF}$ : 377.8/18

Right Out:  $8.142 \pm 0.454$   $\chi^2/\text{NDF}$ : 407.7/17

Left In:  $2.775 \pm 0.283$   $\chi^2/\text{NDF}$ : 283.2/17

Left:  $2.419 \pm 0.197$   $\chi^2/\text{NDF}$ : 664.1/36

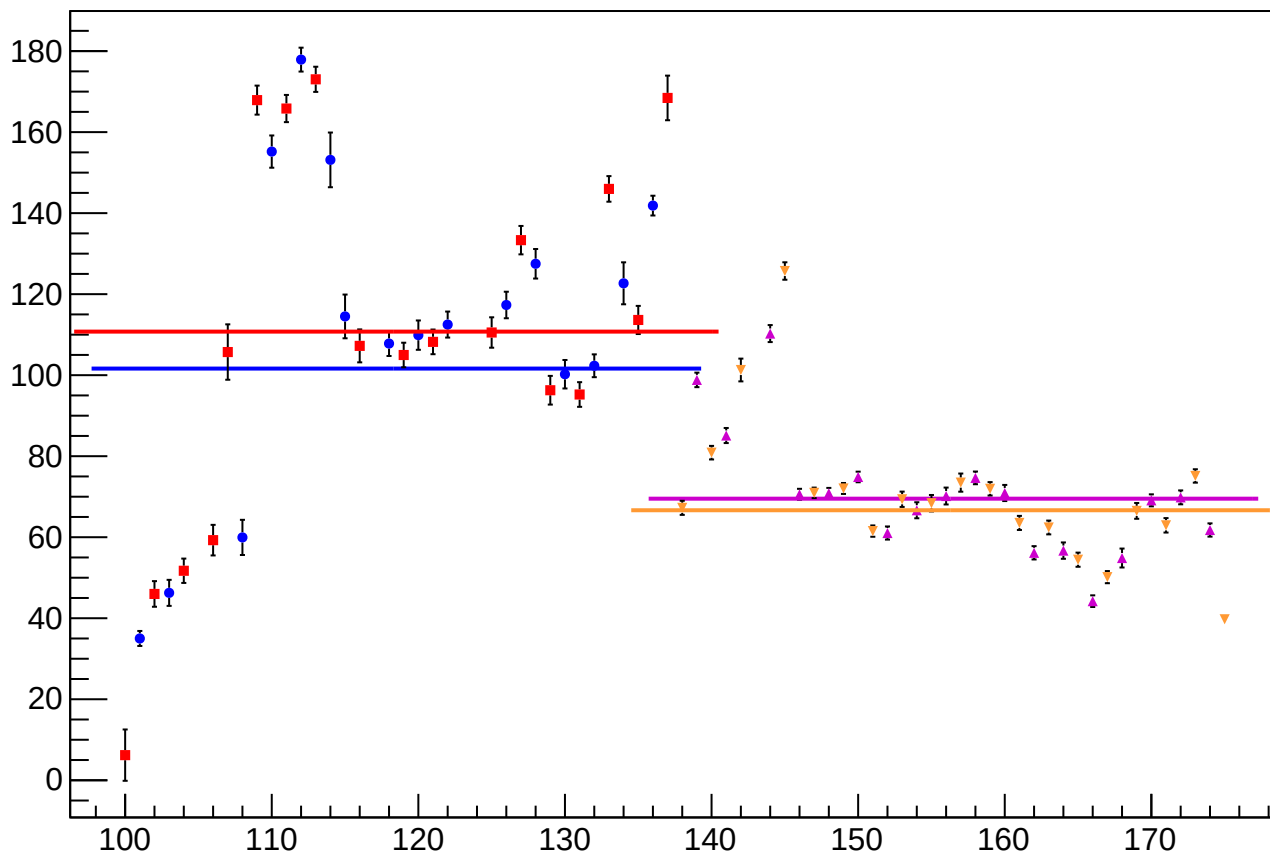
Right:  $6.778 \pm 0.310$   $\chi^2/\text{NDF}$ : 887.4/33

In:  $3.644 \pm 0.235$   $\chi^2/\text{NDF}$ : 776.5/33

Out:  $3.707 \pm 0.235$   $\chi^2/\text{NDF}$ : 916.0/36

All:  $3.676 \pm 0.166$   $\chi^2/\text{NDF}$ : 1692.6/70

reg\_asym\_us\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 101.631 $\pm$ 0.807  $\chi^2$ /NDF: 2978.9/15

Left Out: 66.656 $\pm$ 0.383  $\chi^2$ /NDF:1725.8/18

Right Out: 110.756 $\pm$ 0.836  $\chi^2$ /NDF: 2513.0/17

Left In: 69.513 $\pm$ 0.392  $\chi^2$ /NDF:1251.3/17

Left: 68.051 $\pm$ 0.274  $\chi^2$ /NDF: 3004.3/36

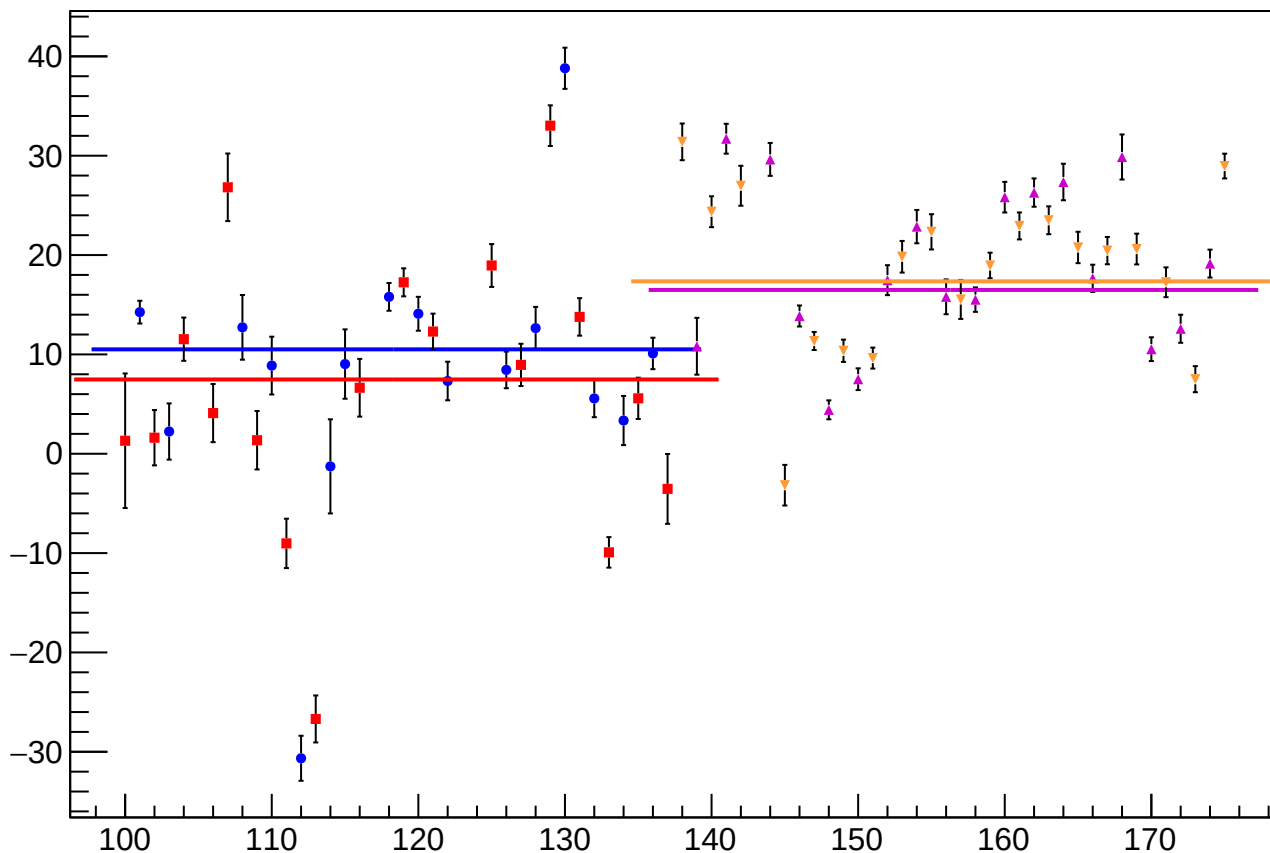
Right: 106.031 $\pm$ 0.581  $\chi^2$ /NDF: 5553.5/33

In: 75.647 $\pm$ 0.353  $\chi^2$ /NDF:5511.8/33

Out: 74.305 $\pm$ 0.348  $\chi^2$ /NDF:6537.7/36

All: 74.968 $\pm$ 0.248  $\chi^2$ /NDF: 12056.8/70

reg\_asym\_us\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 10.508 $\pm$ 0.492  $\chi^2$ /NDF: 581.5/15

Left Out: 17.354 $\pm$ 0.320  $\chi^2$ /NDF: 543.7/18

Right Out: 7.477 $\pm$ 0.524  $\chi^2$ /NDF: 689.3/17

Left In: 16.487 $\pm$ 0.330  $\chi^2$ /NDF: 609.1/17

Left: 16.934 $\pm$ 0.230  $\chi^2$ /NDF: 1156.4/36

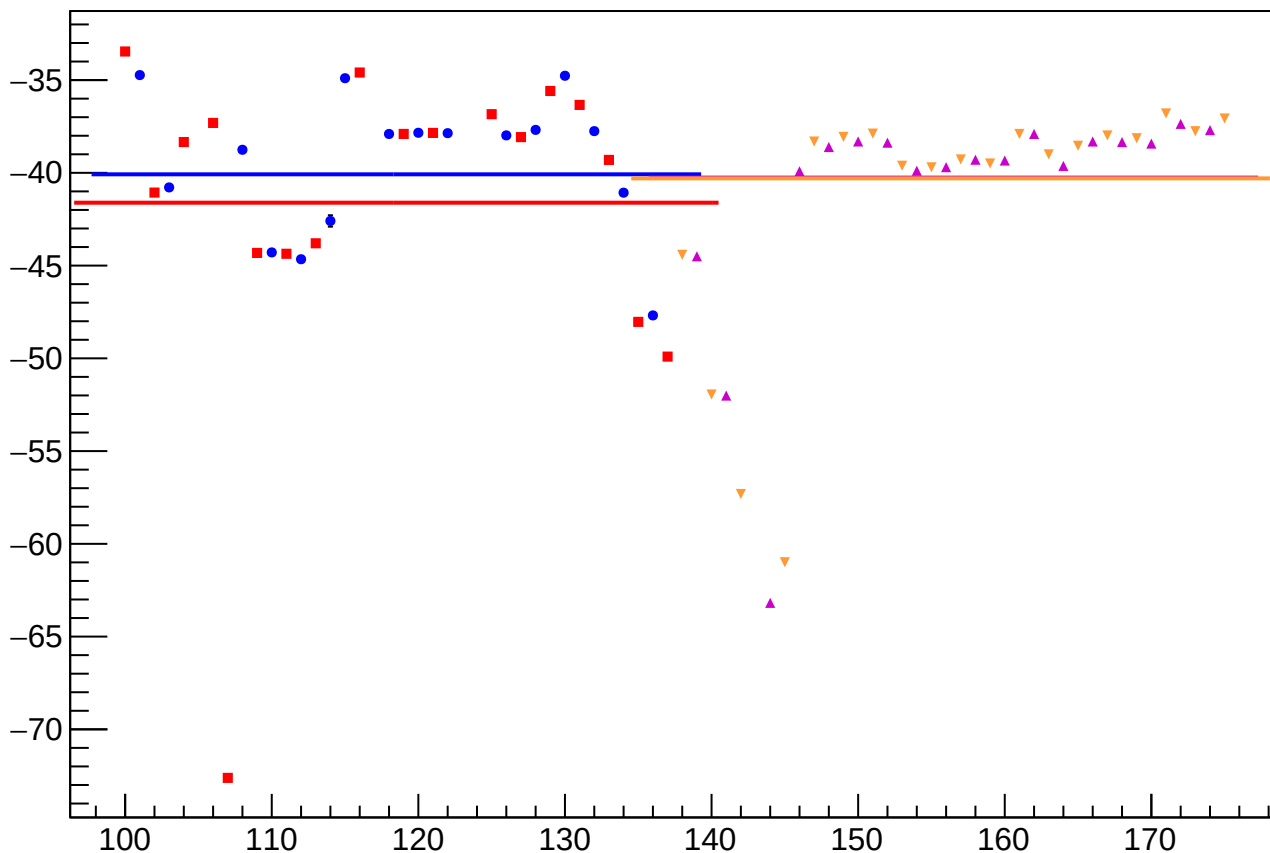
Right: 9.088 $\pm$ 0.359  $\chi^2$ /NDF: 1288.6/33

In: 14.632 $\pm$ 0.274  $\chi^2$ /NDF: 1292.5/33

Out: 14.666 $\pm$ 0.273  $\chi^2$ /NDF: 1491.6/36

All: 14.649 $\pm$ 0.194  $\chi^2$ /NDF: 2784.1/70

reg\_asym\_us\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-40.080 \pm 0.028$   $\chi^2/\text{NDF}$ : 25123.9/15

Left Out:  $-40.299 \pm 0.015$   $\chi^2/\text{NDF}$ : 127409.0/18

Right Out:  $-41.609 \pm 0.029$   $\chi^2/\text{NDF}$ : 61784.6/17

Left In:  $-40.257 \pm 0.015$   $\chi^2/\text{NDF}$ : 102350.8/17

Left:  $-40.278 \pm 0.011$   $\chi^2/\text{NDF}$ : 229763.4/36

Right:  $-40.834 \pm 0.020$   $\chi^2/\text{NDF}$ : 88360.5/33

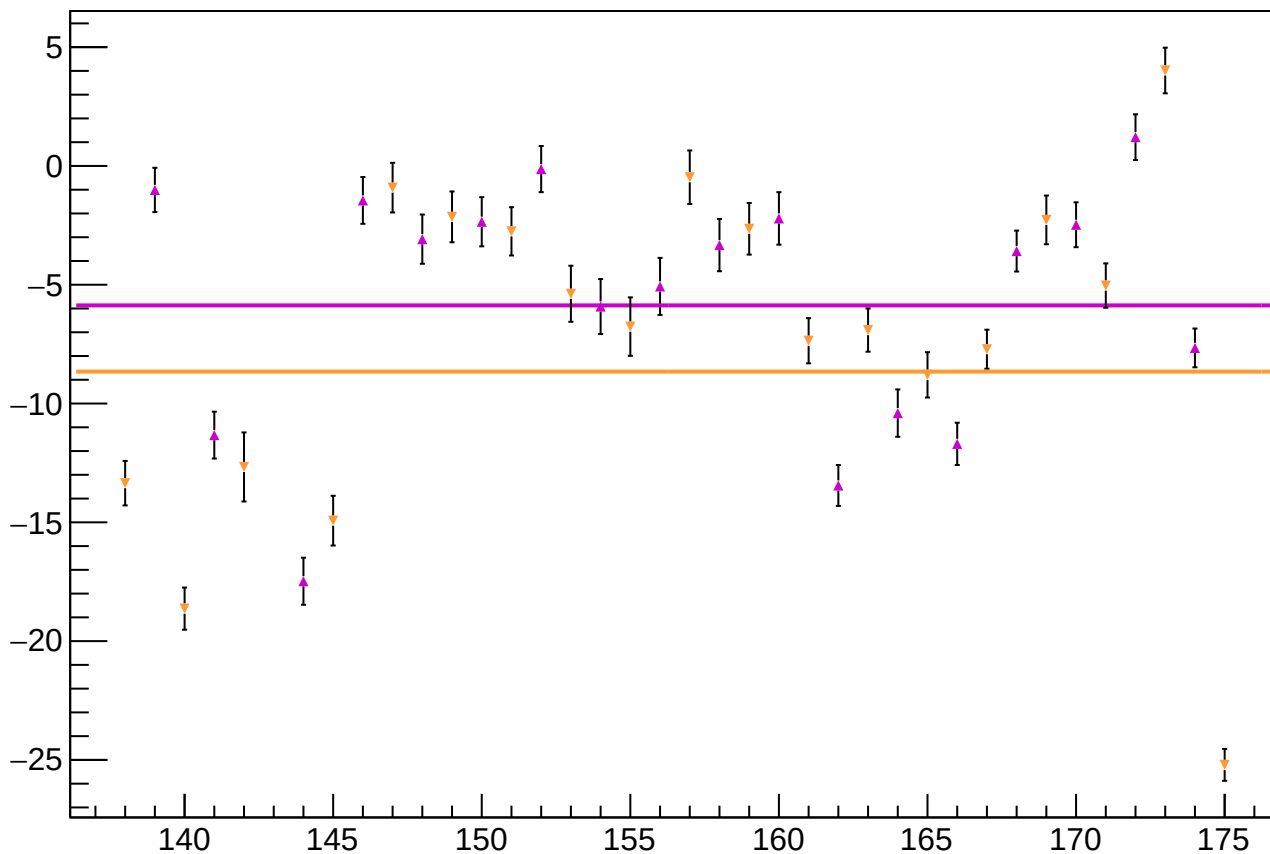
In:  $-40.217 \pm 0.013$   $\chi^2/\text{NDF}$ : 127505.4/33

Out:  $-40.593 \pm 0.014$   $\chi^2/\text{NDF}$ : 190826.2/36

All:  $-40.404 \pm 0.010$   $\chi^2/\text{NDF}$ : 318718.2/70



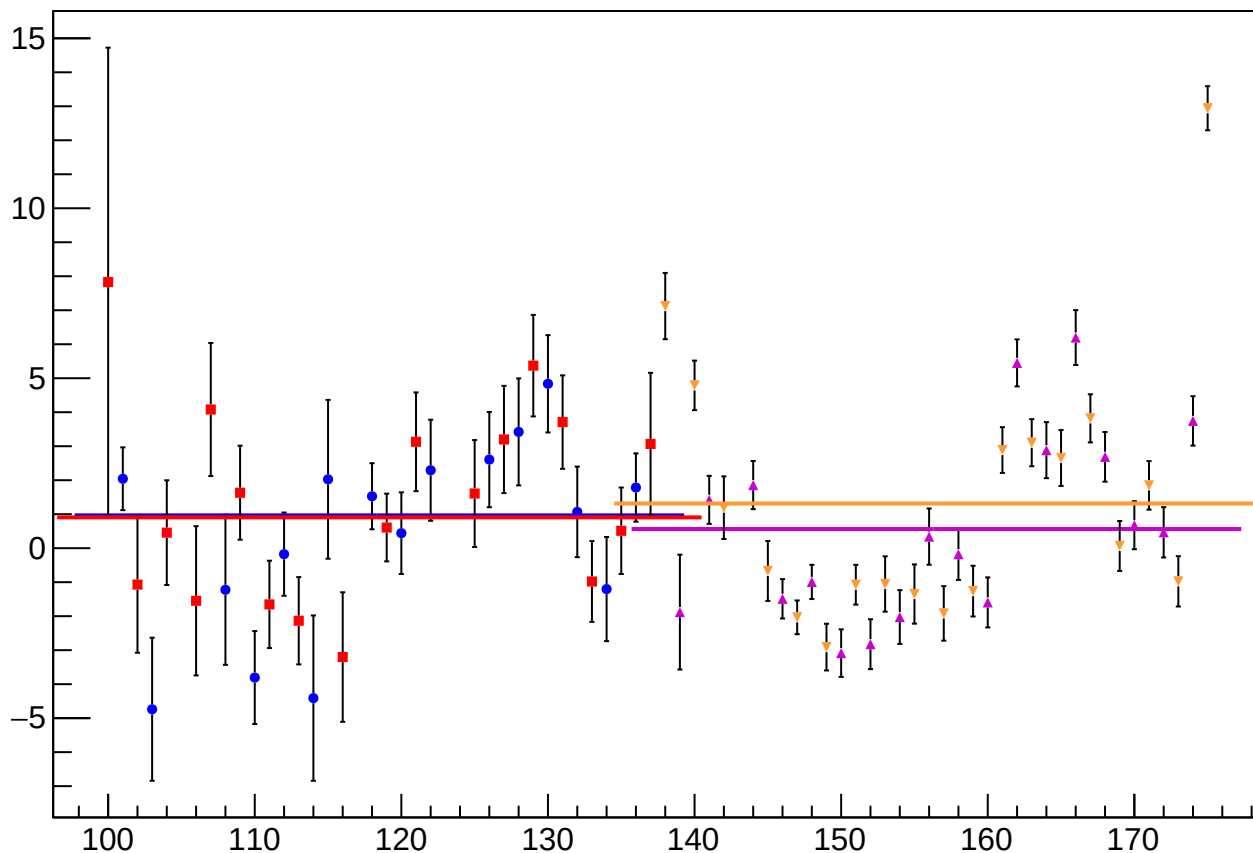
reg\_asym\_us\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: -8.656 $\pm$ 0.224  $\chi^2$ /NDF:1257.6/18  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: -5.870 $\pm$ 0.230  $\chi^2$ /NDF:505.8/17

Left: -7.297 $\pm$ 0.161  $\chi^2$ /NDF: 1838.6/36  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: -5.870 $\pm$ 0.230  $\chi^2$ /NDF:505.8/17  
 Out: -8.656 $\pm$ 0.224  $\chi^2$ /NDF:1257.6/18  
 All: -7.297 $\pm$ 0.161  $\chi^2$ /NDF: 1838.6/36

reg\_asym\_us\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.965 $\pm$ 0.338  $\chi^2/\text{NDF}$ : 42.9/15

Left Out: 1.315 $\pm$ 0.166  $\chi^2/\text{NDF}$ :570.9/18

Right Out: 0.906 $\pm$ 0.354  $\chi^2/\text{NDF}$ : 42.0/17

Left In: 0.564 $\pm$ 0.170  $\chi^2/\text{NDF}$ :232.1/17

Left: 0.950 $\pm$ 0.119  $\chi^2/\text{NDF}$ : 813.0/36

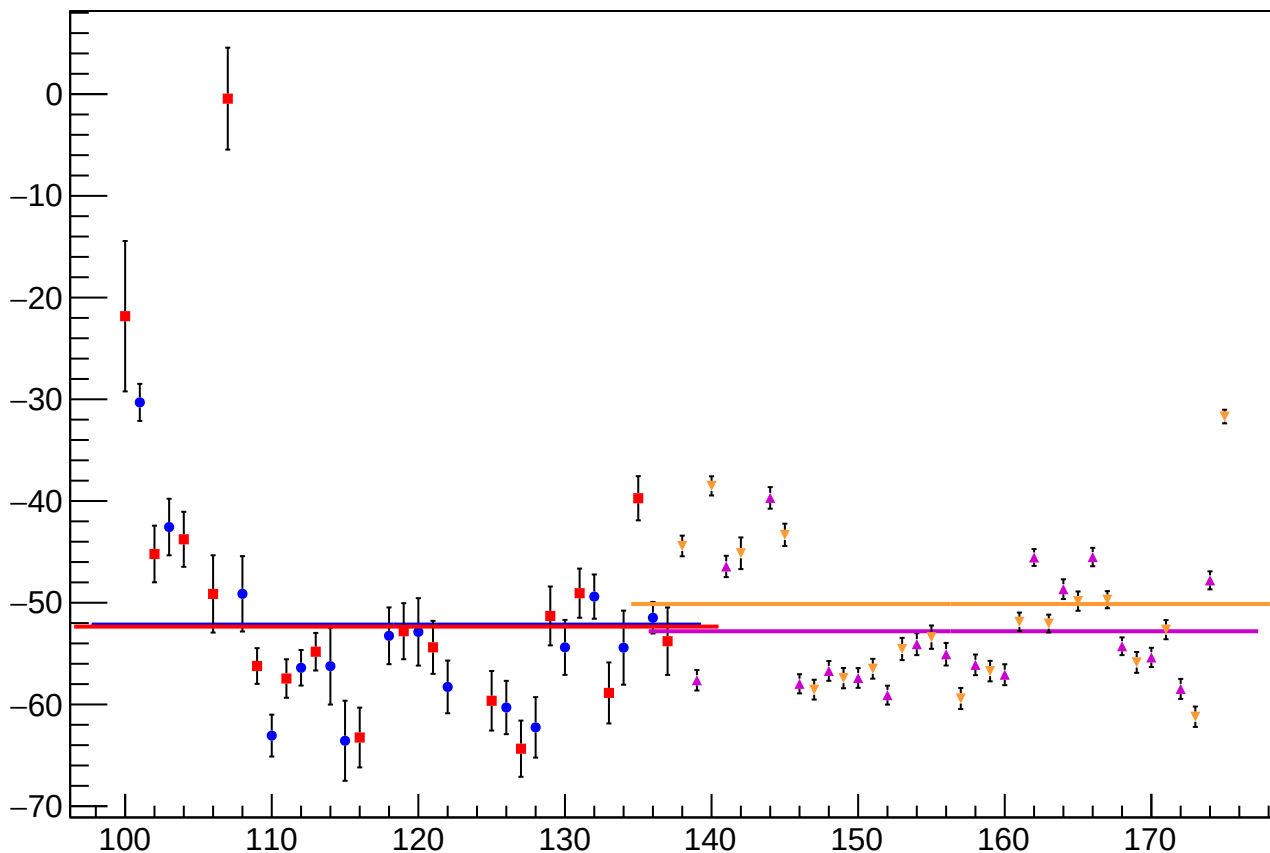
Right: 0.937 $\pm$ 0.244  $\chi^2/\text{NDF}$ : 84.9/33

In: 0.645 $\pm$ 0.152  $\chi^2/\text{NDF}$ :276.2/33

Out: 1.241 $\pm$ 0.150  $\chi^2/\text{NDF}$ :614.0/36

All: 0.948 $\pm$ 0.107  $\chi^2/\text{NDF}$ : 898.0/70

reg\_asym\_us\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Left: -51.430  $\pm$  0.159  $\chi^2/\text{NDF}$ : 2140.8/36

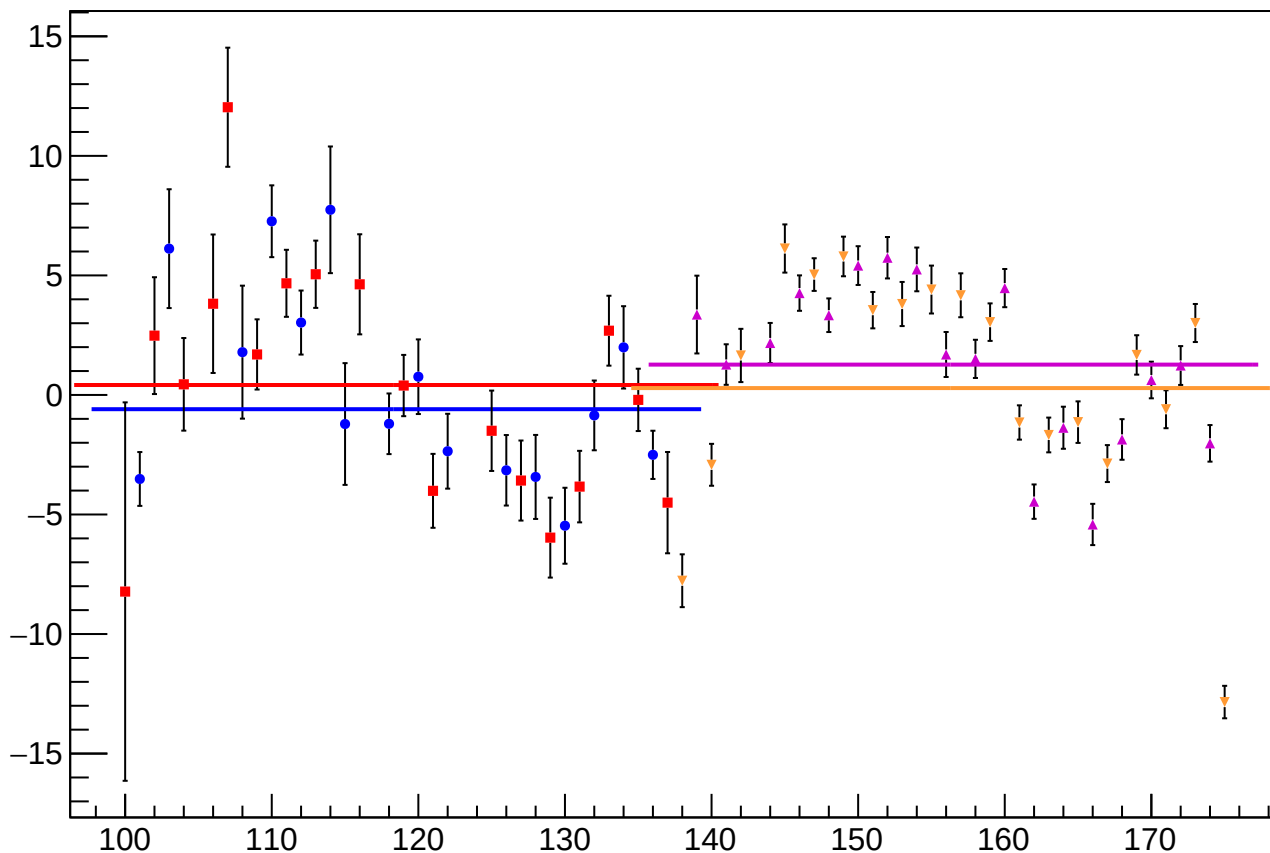
Right: -52.246  $\pm$  0.434  $\chi^2/\text{NDF}$ : 466.0/33

In: -52.723  $\pm$  0.214  $\chi^2/\text{NDF}$ : 826.7/33

Out: -50.382  $\pm$  0.209  $\chi^2/\text{NDF}$ : 1721.8/36

All: -51.526  $\pm$  0.149  $\chi^2/\text{NDF}$ : 2610.0/70

reg\_asym\_us\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-0.596 \pm 0.384$   $\chi^2/\text{NDF}$ : 82.6/15

Left Out:  $0.287 \pm 0.189$   $\chi^2/\text{NDF}$ : 694.4/18

Right Out:  $0.416 \pm 0.400$   $\chi^2/\text{NDF}$ : 95.8/17

Left In:  $1.269 \pm 0.195$   $\chi^2/\text{NDF}$ : 281.2/17

Left:  $0.763 \pm 0.136$   $\chi^2/\text{NDF}$ : 988.6/36

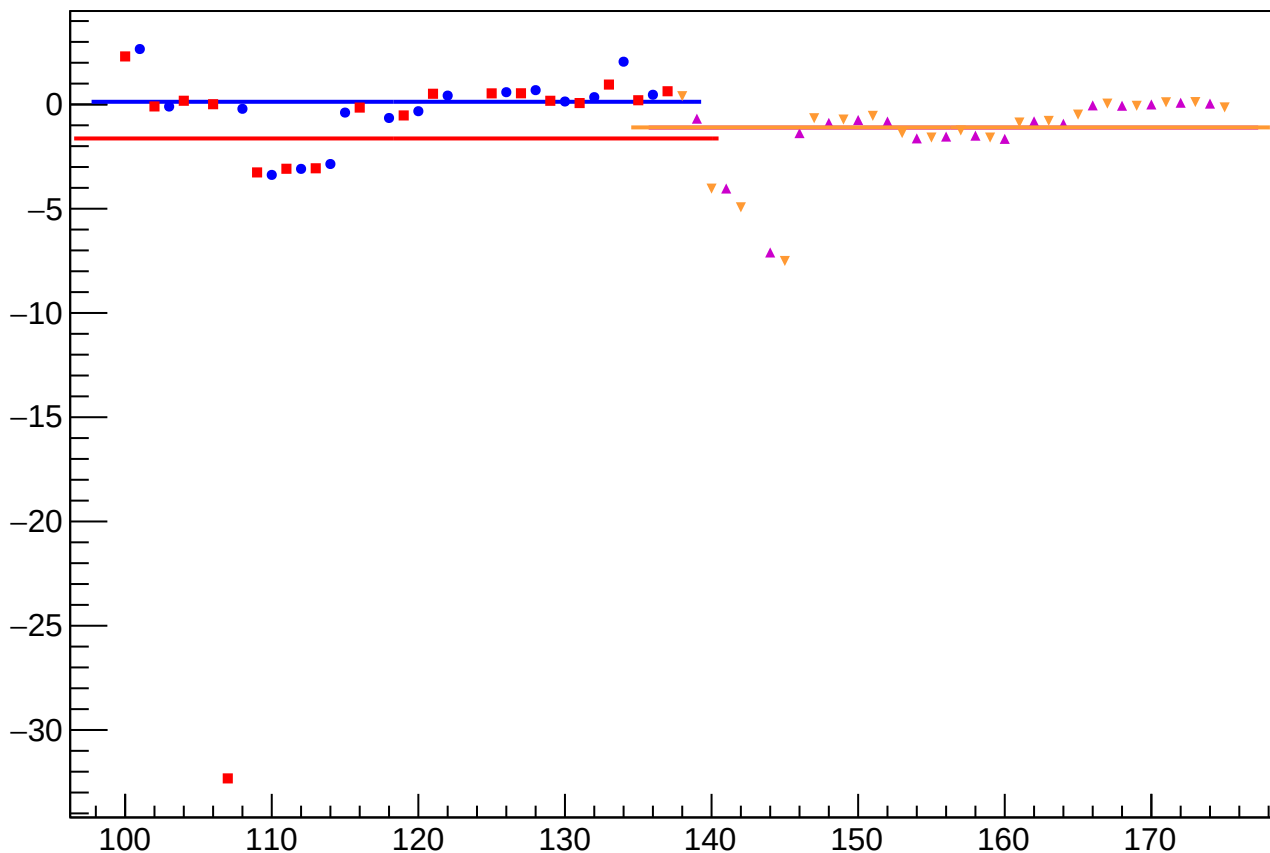
Right:  $-0.111 \pm 0.277$   $\chi^2/\text{NDF}$ : 181.7/33

In:  $0.885 \pm 0.174$   $\chi^2/\text{NDF}$ : 382.5/33

Out:  $0.311 \pm 0.171$   $\chi^2/\text{NDF}$ : 790.2/36

All:  $0.593 \pm 0.122$   $\chi^2/\text{NDF}$ : 1178.3/70

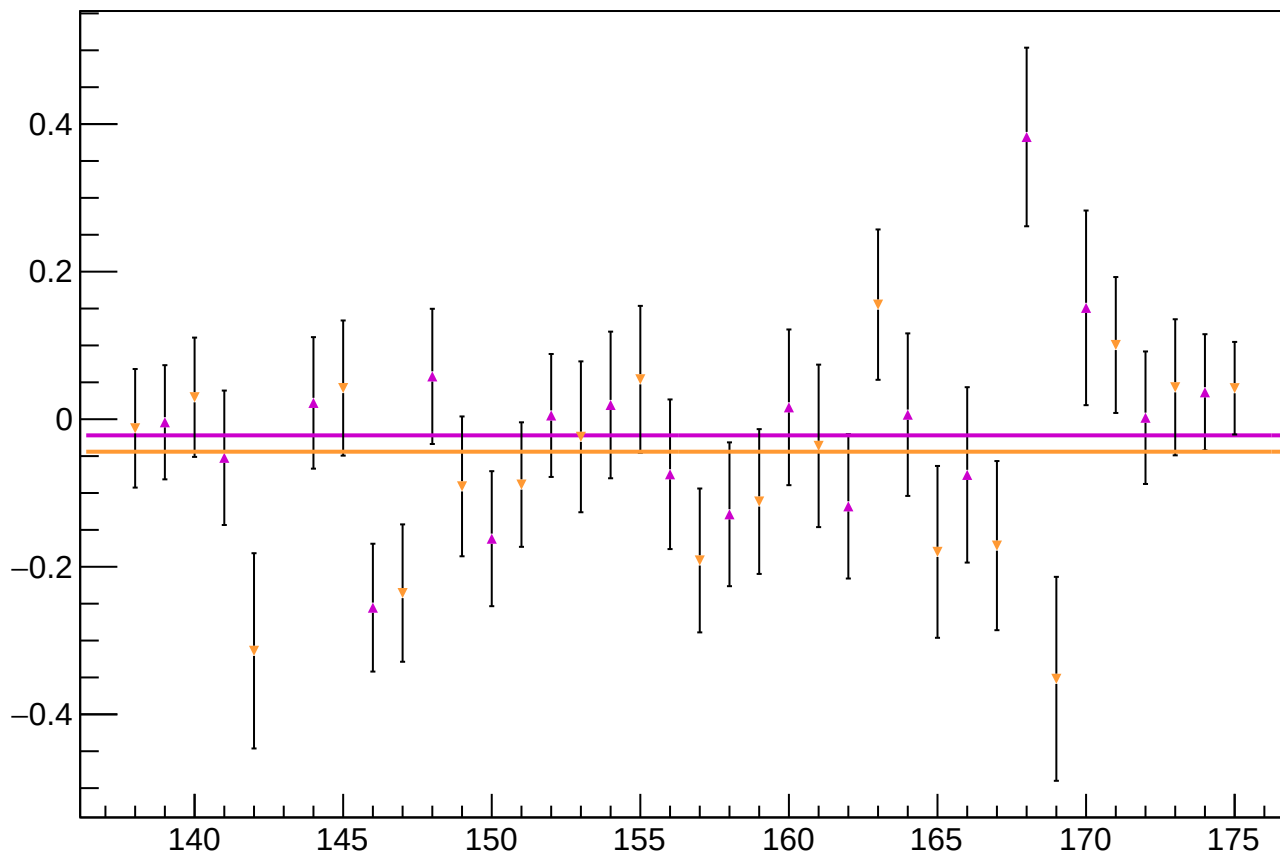
reg\_asym\_us\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.128 \pm 0.021$   $\chi^2/\text{NDF}: 5252.9/15$   
 Left Out:  $-1.100 \pm 0.009$   $\chi^2/\text{NDF}: 38595.2/18$   
 Right Out:  $-1.631 \pm 0.022$   $\chi^2/\text{NDF}: 77878.6/17$   
 Left In:  $-1.110 \pm 0.009$   $\chi^2/\text{NDF}: 27772.8/17$

Left:  $-1.105 \pm 0.006$   $\chi^2/\text{NDF}: 66368.7/36$   
 Right:  $-0.739 \pm 0.015$   $\chi^2/\text{NDF}: 86433.1/33$   
 In:  $-0.931 \pm 0.008$   $\chi^2/\text{NDF}: 35864.9/33$   
 Out:  $-1.174 \pm 0.008$   $\chi^2/\text{NDF}: 116983.9/36$   
 All:  $-1.053 \pm 0.006$   $\chi^2/\text{NDF}: 153292.7/70$

reg\_asym\_ds\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -0.044+/-0.022  $\chi^2/\text{NDF}$ : 31.2/18

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -0.022+/-0.022  $\chi^2/\text{NDF}$ : 27.4/17

Left: -0.033+/-0.016  $\chi^2/\text{NDF}$ : 59.1/36

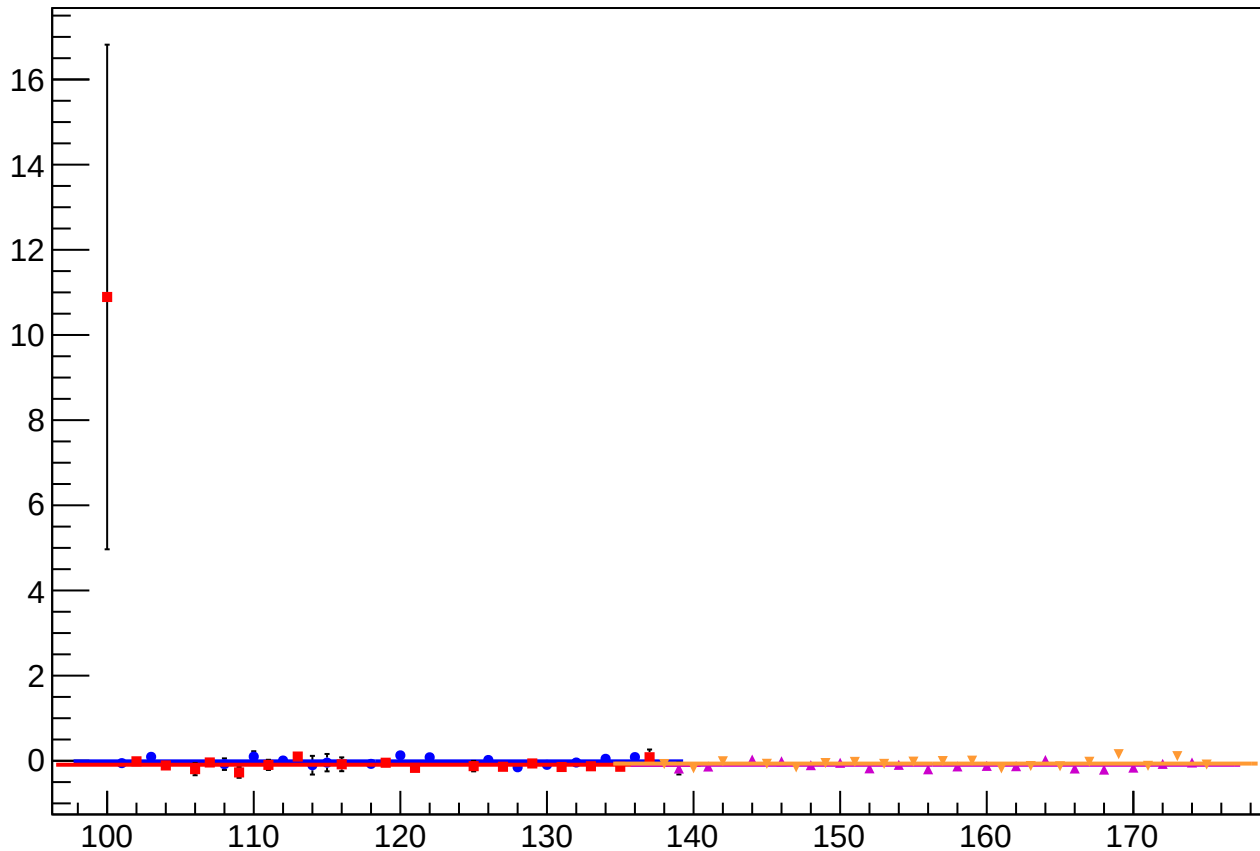
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -0.022+/-0.022  $\chi^2/\text{NDF}$ : 27.4/17

Out: -0.044+/-0.022  $\chi^2/\text{NDF}$ : 31.2/18

All: -0.033+/-0.016  $\chi^2/\text{NDF}$ : 59.1/36

reg\_asym\_ds\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -0.013 $\pm$ 0.023  $\chi^2$ /NDF: 12.2/15

Left Out: -0.066 $\pm$ 0.016  $\chi^2$ /NDF: 25.1/18

Right Out: -0.092 $\pm$ 0.025  $\chi^2$ /NDF: 12.7/17

Left In: -0.094 $\pm$ 0.016  $\chi^2$ /NDF: 16.8/17

Left: -0.079 $\pm$ 0.011  $\chi^2$ /NDF: 43.5/36

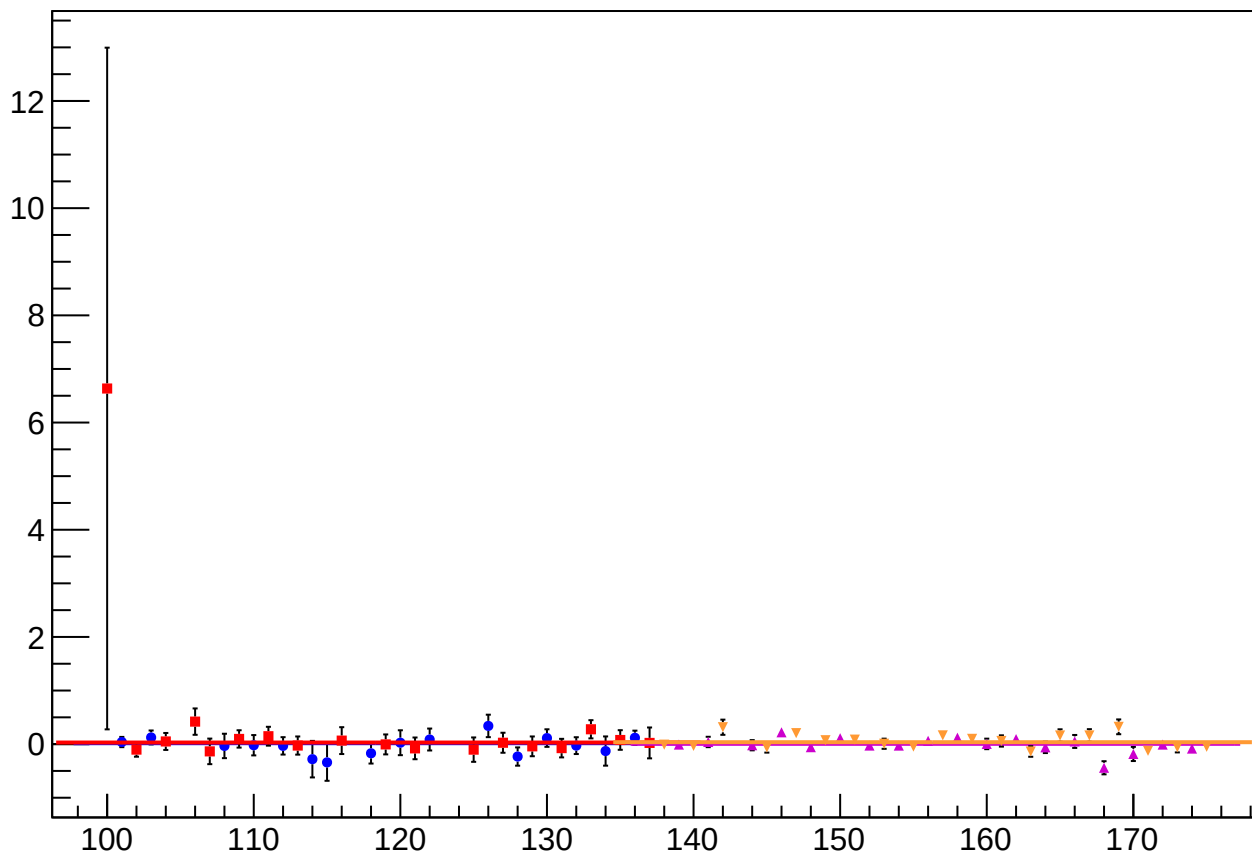
Right: -0.050 $\pm$ 0.017  $\chi^2$ /NDF: 30.3/33

In: -0.067 $\pm$ 0.013  $\chi^2$ /NDF: 37.1/33

Out: -0.073 $\pm$ 0.013  $\chi^2$ /NDF: 38.6/36

All: -0.070 $\pm$ 0.009  $\chi^2$ /NDF: 75.9/70

reg\_asym\_ds\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.017 $\pm$ 0.043  $\chi^2$ /NDF: 9.6/15

Left Out: 0.036 $\pm$ 0.021  $\chi^2$ /NDF: 29.1/18

Right Out: 0.030 $\pm$ 0.045  $\chi^2$ /NDF: 9.2/17

Left In: 0.006 $\pm$ 0.022  $\chi^2$ /NDF: 29.0/17

Left: 0.021 $\pm$ 0.015  $\chi^2$ /NDF: 59.2/36

Right: 0.023 $\pm$ 0.031  $\chi^2$ /NDF: 18.9/33

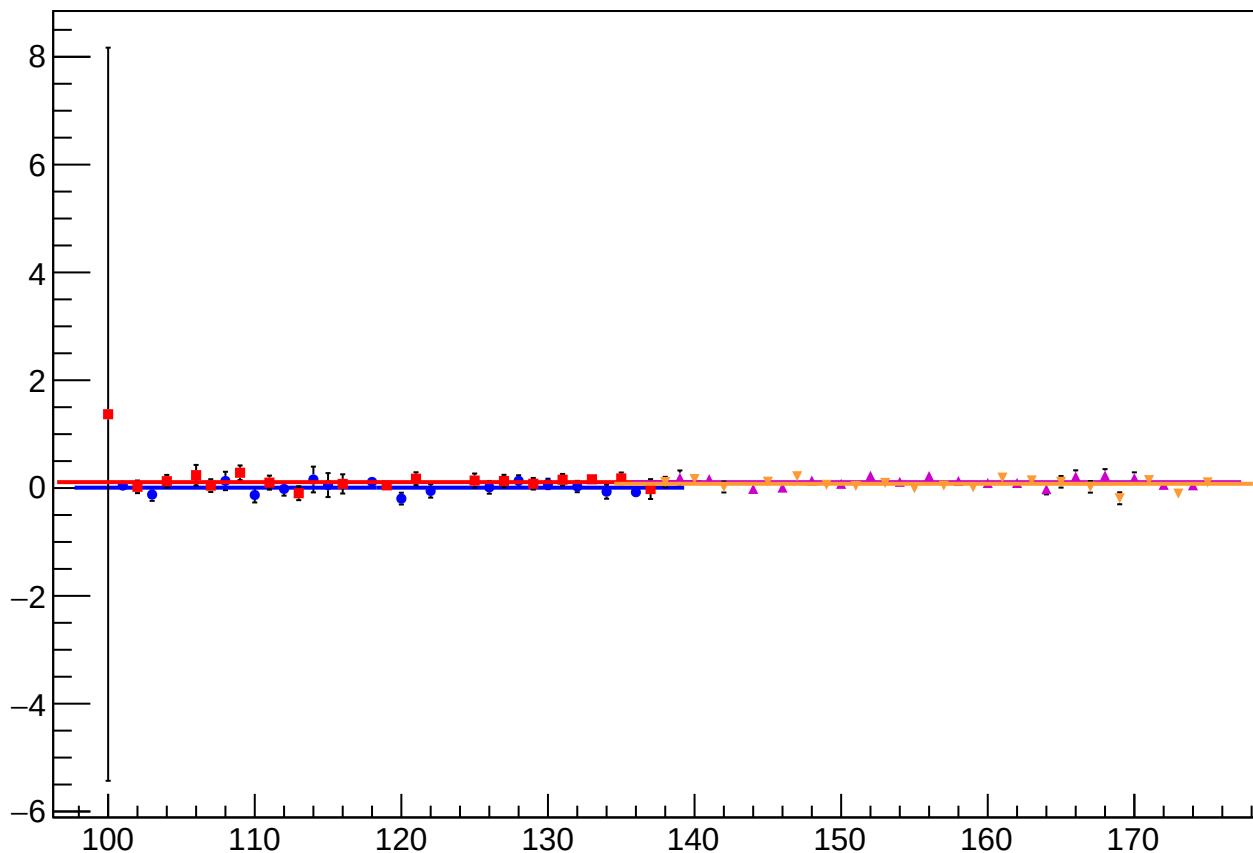
In: 0.008 $\pm$ 0.020  $\chi^2$ /NDF: 38.7/33

Out: 0.035 $\pm$ 0.019  $\chi^2$ /NDF: 38.4/36

All: 0.022 $\pm$ 0.014  $\chi^2$ /NDF: 78.0/70



reg\_asym\_ds\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.007 $\pm$ 0.027  $\chi^2$ /NDF: 12.1/15

Left Out: 0.079 $\pm$ 0.018  $\chi^2$ /NDF:25.0/18

Right Out: 0.110 $\pm$ 0.029  $\chi^2$ /NDF: 8.0/17

Left In: 0.109 $\pm$ 0.019  $\chi^2$ /NDF:16.3/17

Left: 0.094 $\pm$ 0.013  $\chi^2$ /NDF: 42.7/36

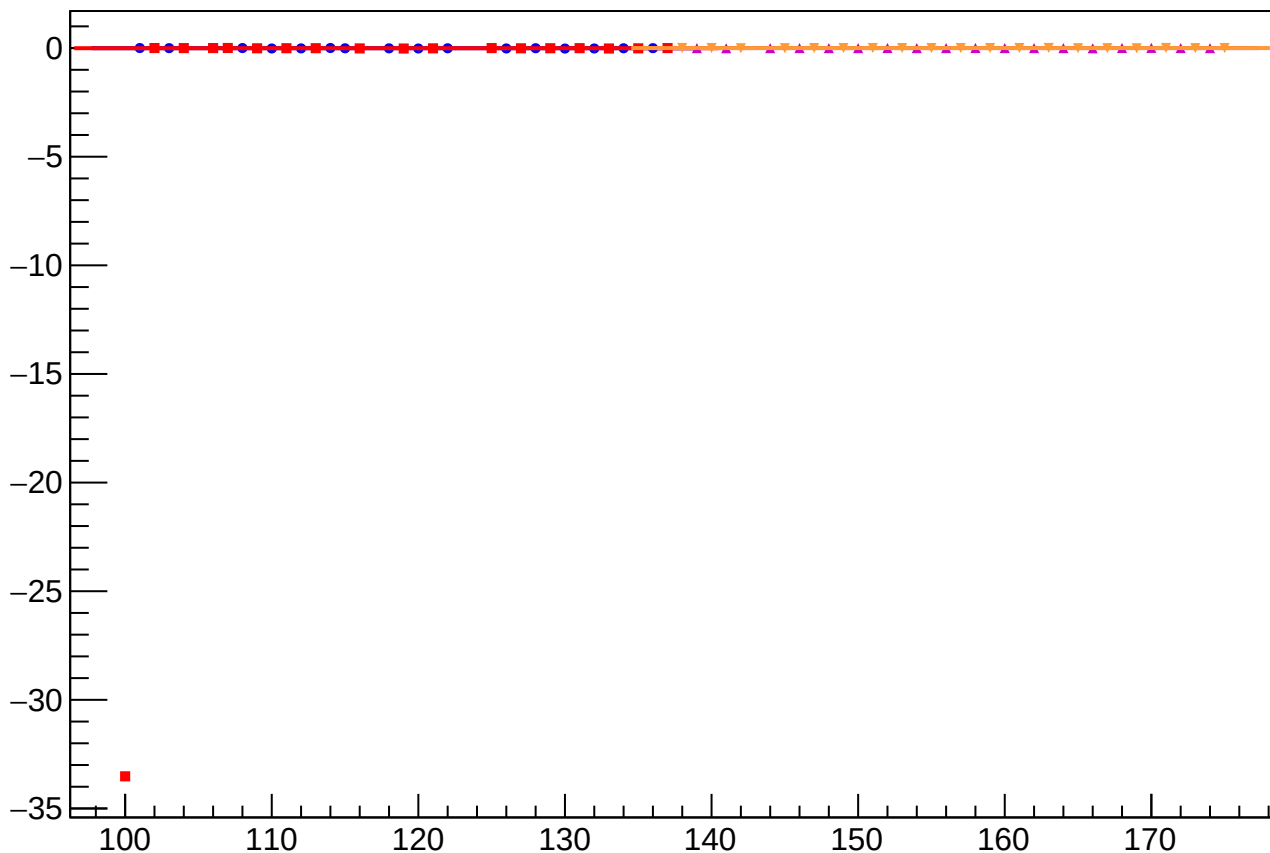
Right: 0.055 $\pm$ 0.020  $\chi^2$ /NDF: 27.0/33

In: 0.075 $\pm$ 0.015  $\chi^2$ /NDF:38.1/33

Out: 0.088 $\pm$ 0.015  $\chi^2$ /NDF:33.8/36

All: 0.082 $\pm$ 0.011  $\chi^2$ /NDF: 72.3/70

reg\_asym\_ds\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.005 $\pm$ 0.001  $\chi^2$ /NDF: 22.6/15

Left Out: 0.001 $\pm$ 0.001  $\chi^2$ /NDF:18.7/18

Right Out: -0.006 $\pm$ 0.001  $\chi^2$ /NDF: 26508.9/17

Left In: 0.000 $\pm$ 0.001  $\chi^2$ /NDF:15.5/17

Left: 0.001 $\pm$ 0.001  $\chi^2$ /NDF: 34.5/36

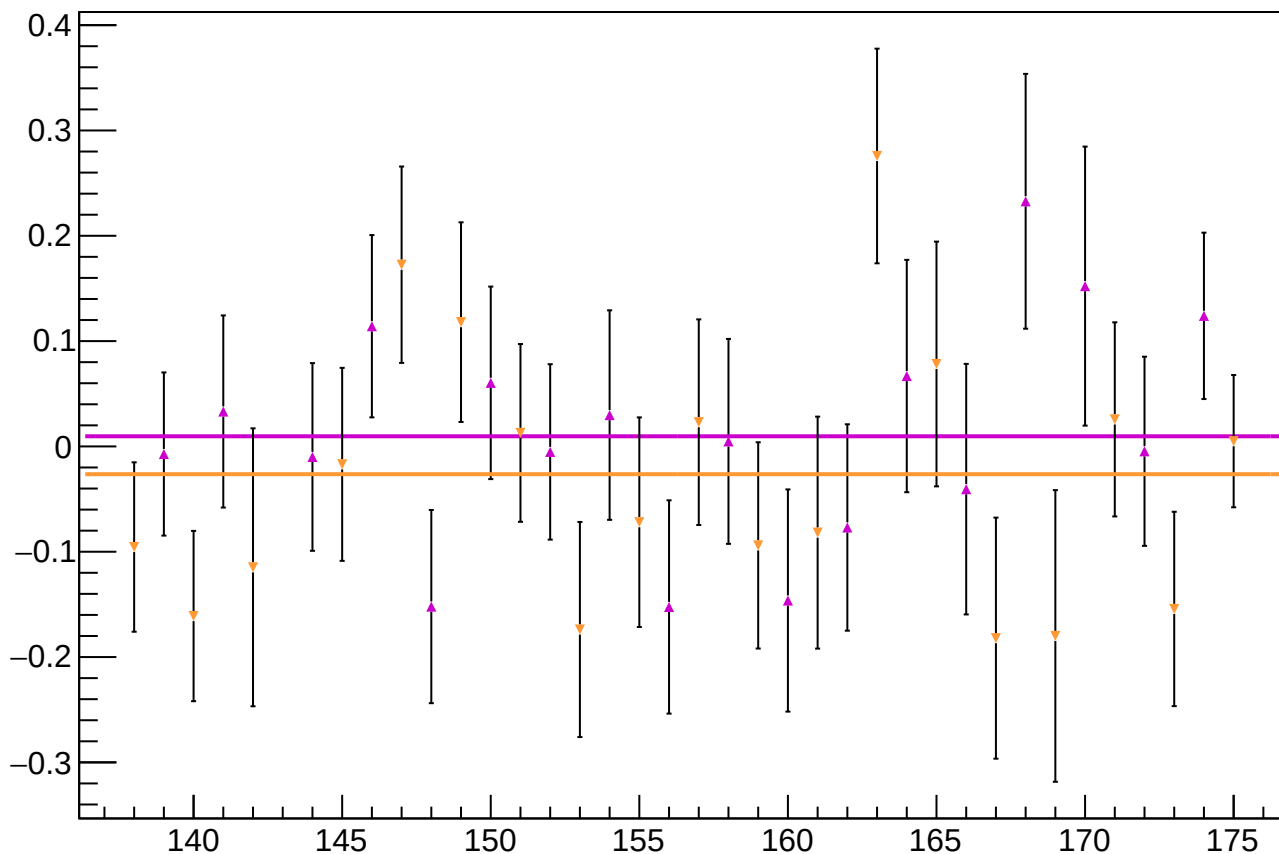
Right: -0.006 $\pm$ 0.001  $\chi^2$ /NDF: 26531.6/33

In: -0.001 $\pm$ 0.001  $\chi^2$ /NDF:50.1/33

Out: -0.001 $\pm$ 0.001  $\chi^2$ /NDF:26544.3/36

All: -0.001 $\pm$ 0.001  $\chi^2$ /NDF: 26594.5/70

reg\_asym\_ds\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: -0.026 $\pm$ 0.022  $\chi^2$ /NDF:29.5/18

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 0.010 $\pm$ 0.022  $\chi^2$ /NDF:17.8/17

Left: -0.009 $\pm$ 0.016  $\chi^2$ /NDF: 48.6/36

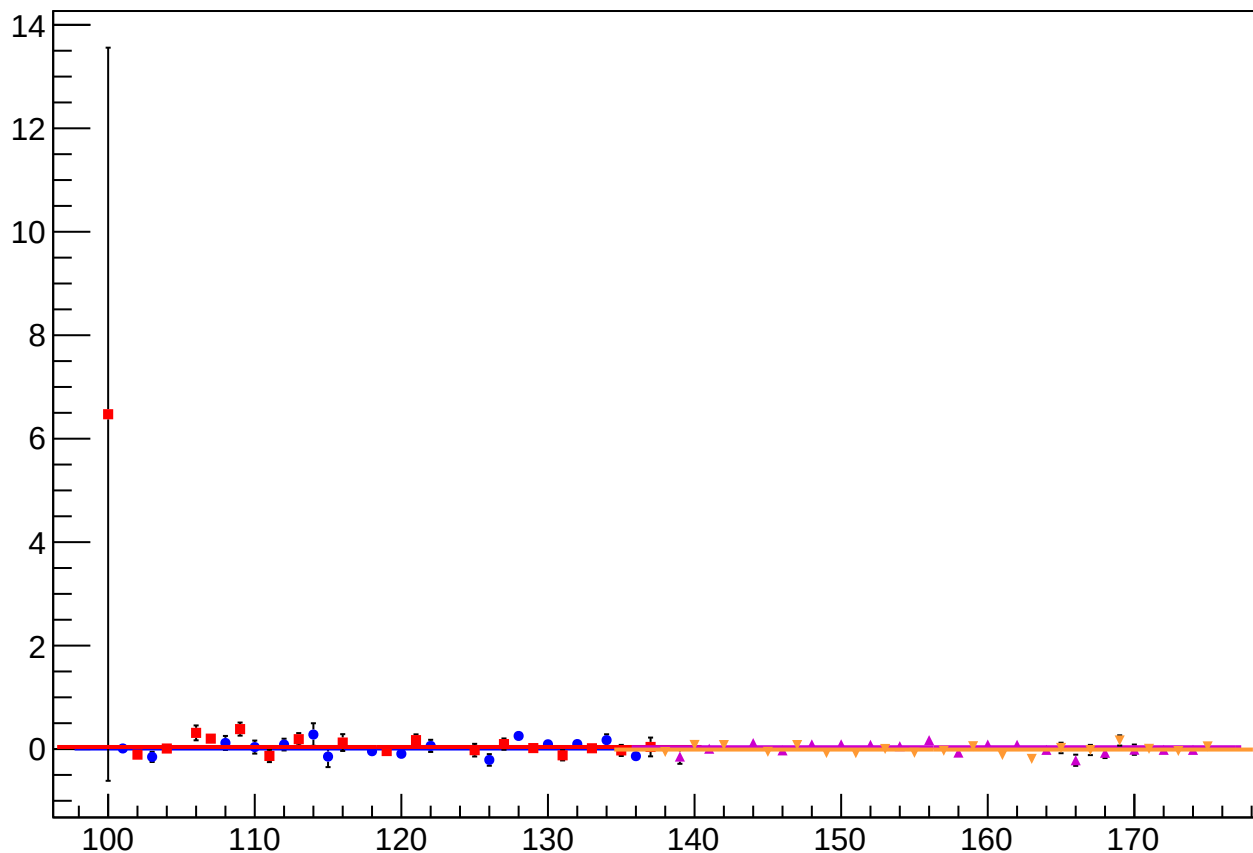
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 0.010 $\pm$ 0.022  $\chi^2$ /NDF:17.8/17

Out: -0.026 $\pm$ 0.022  $\chi^2$ /NDF:29.5/18

All: -0.009 $\pm$ 0.016  $\chi^2$ /NDF: 48.6/36

reg\_asym\_ds\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.010 $\pm$ 0.023  $\chi^2$ /NDF: 25.4/15

Left Out: -0.010 $\pm$ 0.016  $\chi^2$ /NDF: 24.2/18

Right Out: 0.040 $\pm$ 0.025  $\chi^2$ /NDF: 27.9/17

Left In: 0.035 $\pm$ 0.016  $\chi^2$ /NDF: 23.1/17

Left: 0.012 $\pm$ 0.011  $\chi^2$ /NDF: 51.2/36

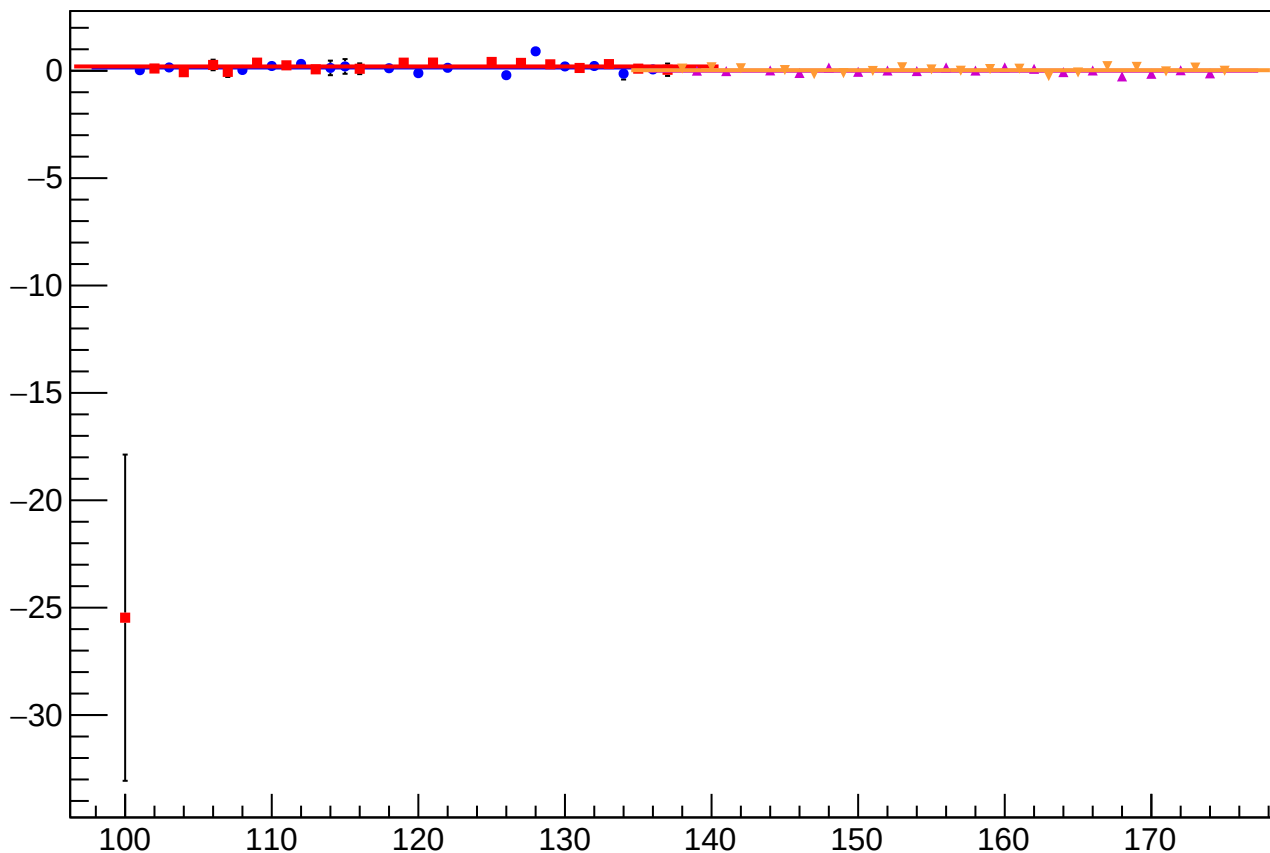
Right: 0.024 $\pm$ 0.017  $\chi^2$ /NDF: 54.1/33

In: 0.027 $\pm$ 0.013  $\chi^2$ /NDF: 49.3/33

Out: 0.005 $\pm$ 0.013  $\chi^2$ /NDF: 55.0/36

All: 0.016 $\pm$ 0.009  $\chi^2$ /NDF: 105.7/70

reg\_asym\_ds\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.152 $\pm$ 0.043  $\chi^2$ /NDF: 28.7/15

Left Out: 0.026 $\pm$ 0.021  $\chi^2$ /NDF:28.5/18

Right Out: 0.200 $\pm$ 0.045  $\chi^2$ /NDF: 22.9/17

Left In: 0.001 $\pm$ 0.022  $\chi^2$ /NDF:19.4/17

Left: 0.014 $\pm$ 0.015  $\chi^2$ /NDF: 48.5/36

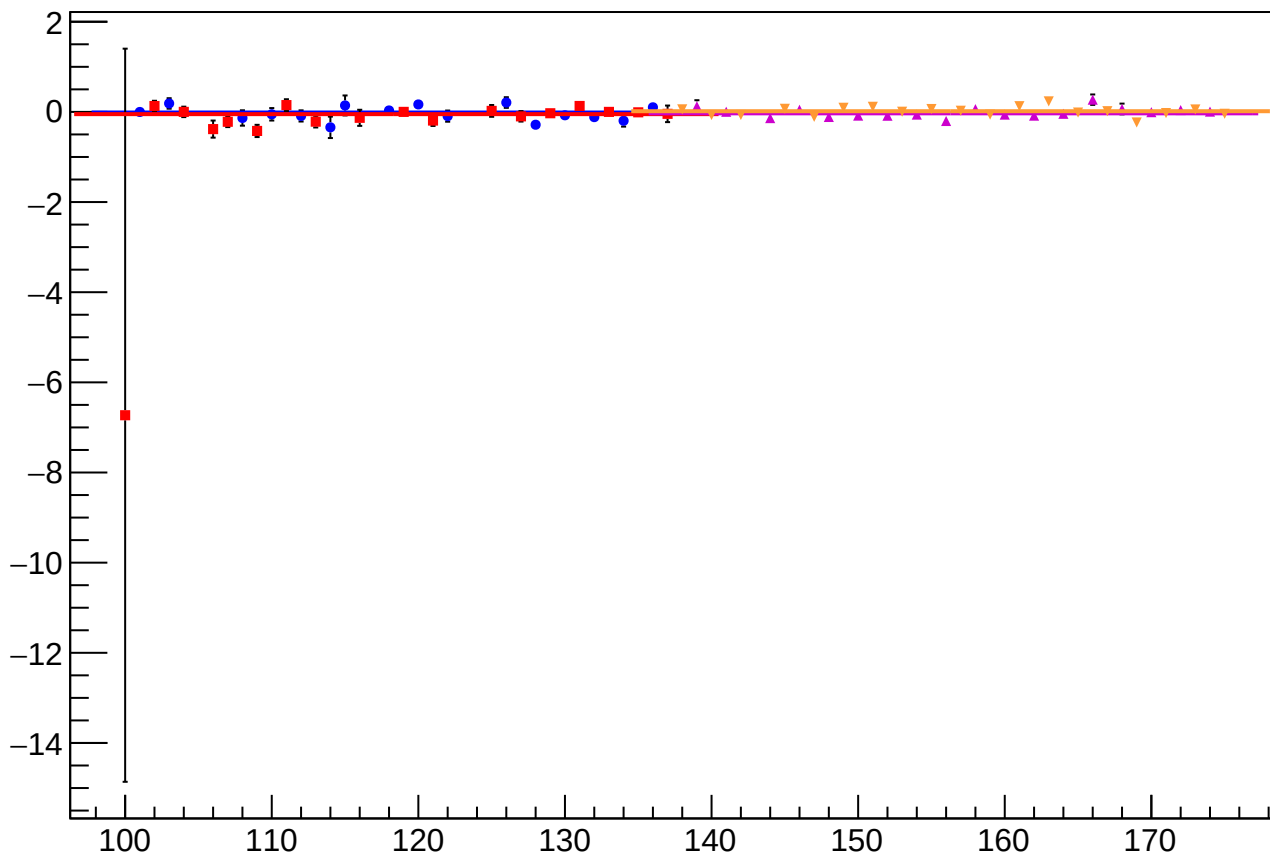
Right: 0.175 $\pm$ 0.031  $\chi^2$ /NDF: 52.2/33

In: 0.033 $\pm$ 0.020  $\chi^2$ /NDF:57.9/33

Out: 0.058 $\pm$ 0.019  $\chi^2$ /NDF:63.7/36

All: 0.046 $\pm$ 0.014  $\chi^2$ /NDF: 122.4/70

reg\_asym\_ds\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-0.014 \pm 0.027$   $\chi^2/\text{NDF}: 25.2/15$

Left Out:  $0.015 \pm 0.018$   $\chi^2/\text{NDF}: 27.0/18$

Right Out:  $-0.050 \pm 0.029$   $\chi^2/\text{NDF}: 25.7/17$

Left In:  $-0.032 \pm 0.019$   $\chi^2/\text{NDF}: 23.5/17$

Left:  $-0.008 \pm 0.013$   $\chi^2/\text{NDF}: 53.7/36$

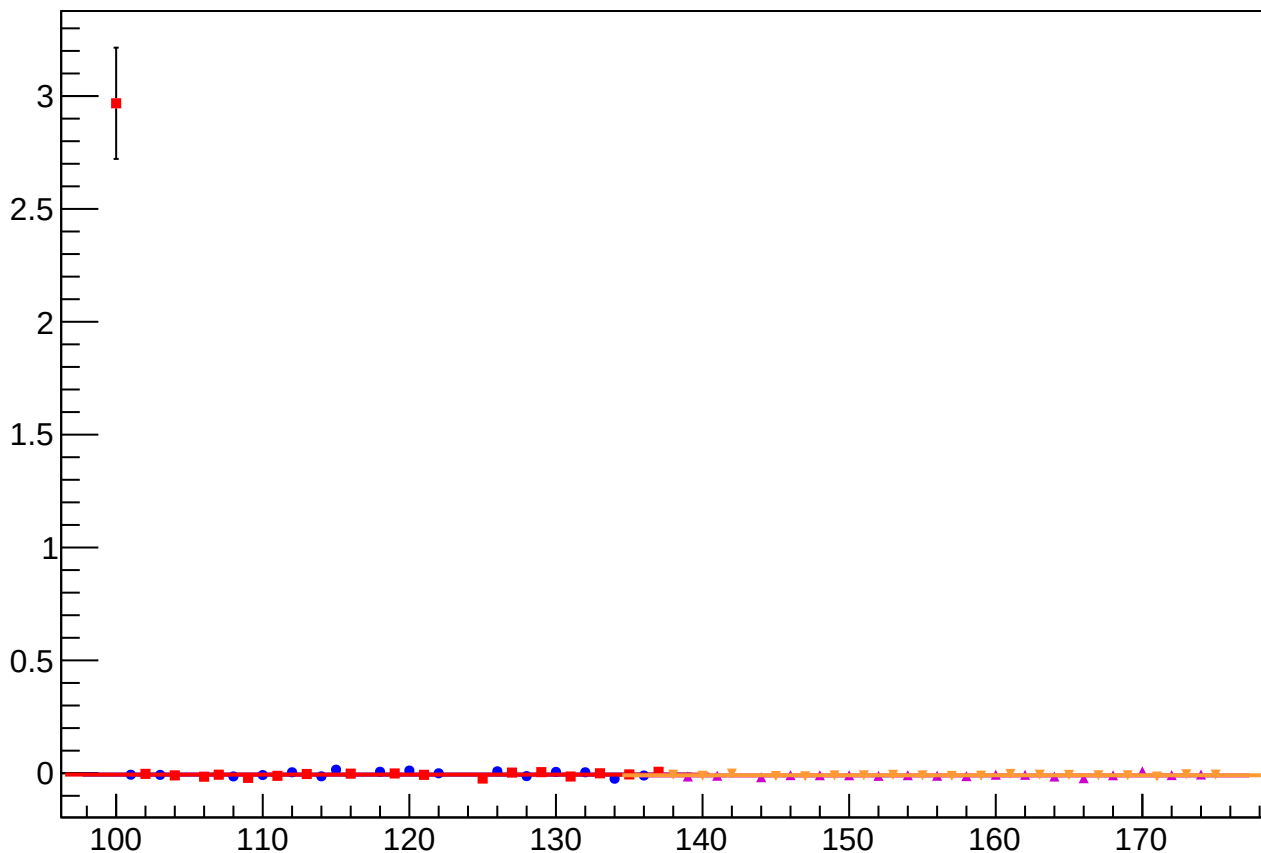
Right:  $-0.031 \pm 0.020$   $\chi^2/\text{NDF}: 51.8/33$

In:  $-0.026 \pm 0.015$   $\chi^2/\text{NDF}: 48.9/33$

Out:  $-0.004 \pm 0.015$   $\chi^2/\text{NDF}: 56.4/36$

All:  $-0.015 \pm 0.011$   $\chi^2/\text{NDF}: 106.4/70$

reg\_asym\_ds\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.006 \pm 0.001$   $\chi^2/\text{NDF}$ : 29.0/15

Left Out:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 15.1/18

Right Out:  $-0.006 \pm 0.001$   $\chi^2/\text{NDF}$ : 165.9/17

Left In:  $-0.010 \pm 0.001$   $\chi^2/\text{NDF}$ : 32.1/17

Left:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 47.6/36

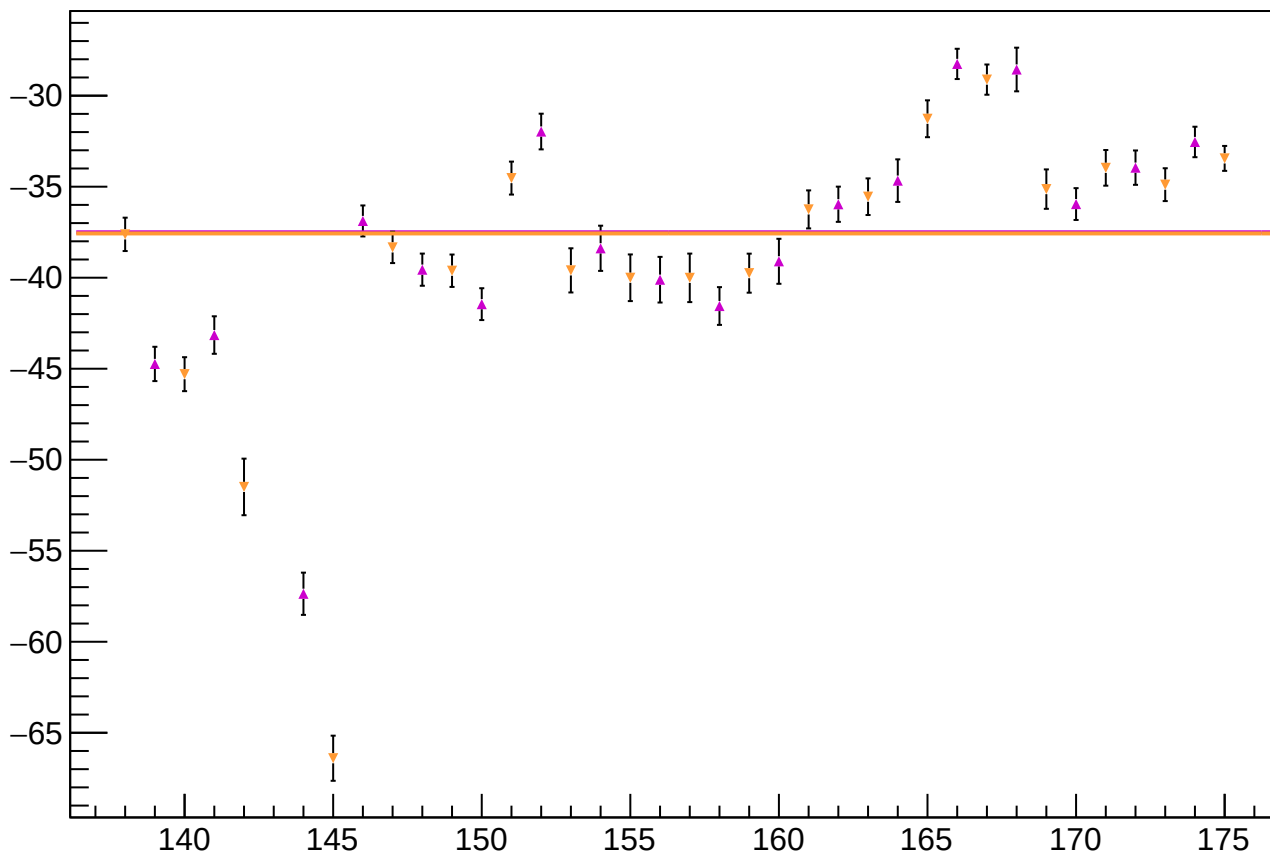
Right:  $-0.006 \pm 0.001$   $\chi^2/\text{NDF}$ : 194.8/33

In:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 66.2/33

Out:  $-0.008 \pm 0.001$   $\chi^2/\text{NDF}$ : 184.1/36

All:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 250.6/70

reg\_asym\_left\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -37.568+/-0.226  $\chi^2/\text{NDF}$ :932.8/18

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -37.505+/-0.233  $\chi^2/\text{NDF}$ :702.0/17

Left: -37.537+/-0.162  $\chi^2/\text{NDF}$ : 1634.8/36

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

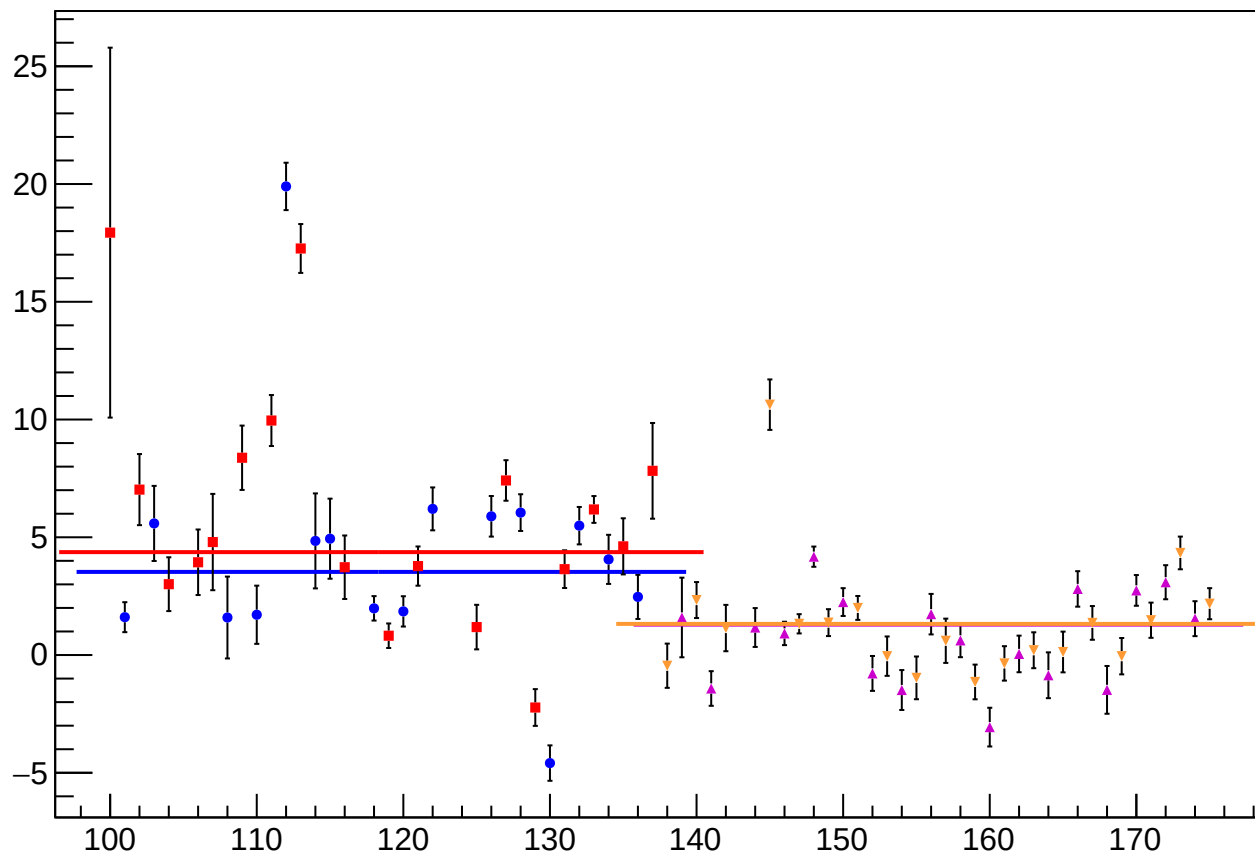
In: -37.505+/-0.233  $\chi^2/\text{NDF}$ :702.0/17

Out: -37.568+/-0.226  $\chi^2/\text{NDF}$ :932.8/18

All: -37.537+/-0.162  $\chi^2/\text{NDF}$ : 1634.8/36



reg\_asym\_left\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 3.530 $\pm$ 0.217  $\chi^2$ /NDF: 446.6/15

Left Out: 1.322 $\pm$ 0.162  $\chi^2$ /NDF:136.6/18

Right Out: 4.370 $\pm$ 0.225  $\chi^2$ /NDF: 353.8/17

Left In: 1.291 $\pm$ 0.168  $\chi^2$ /NDF:140.0/17

Left: 1.307 $\pm$ 0.117  $\chi^2$ /NDF: 276.6/36

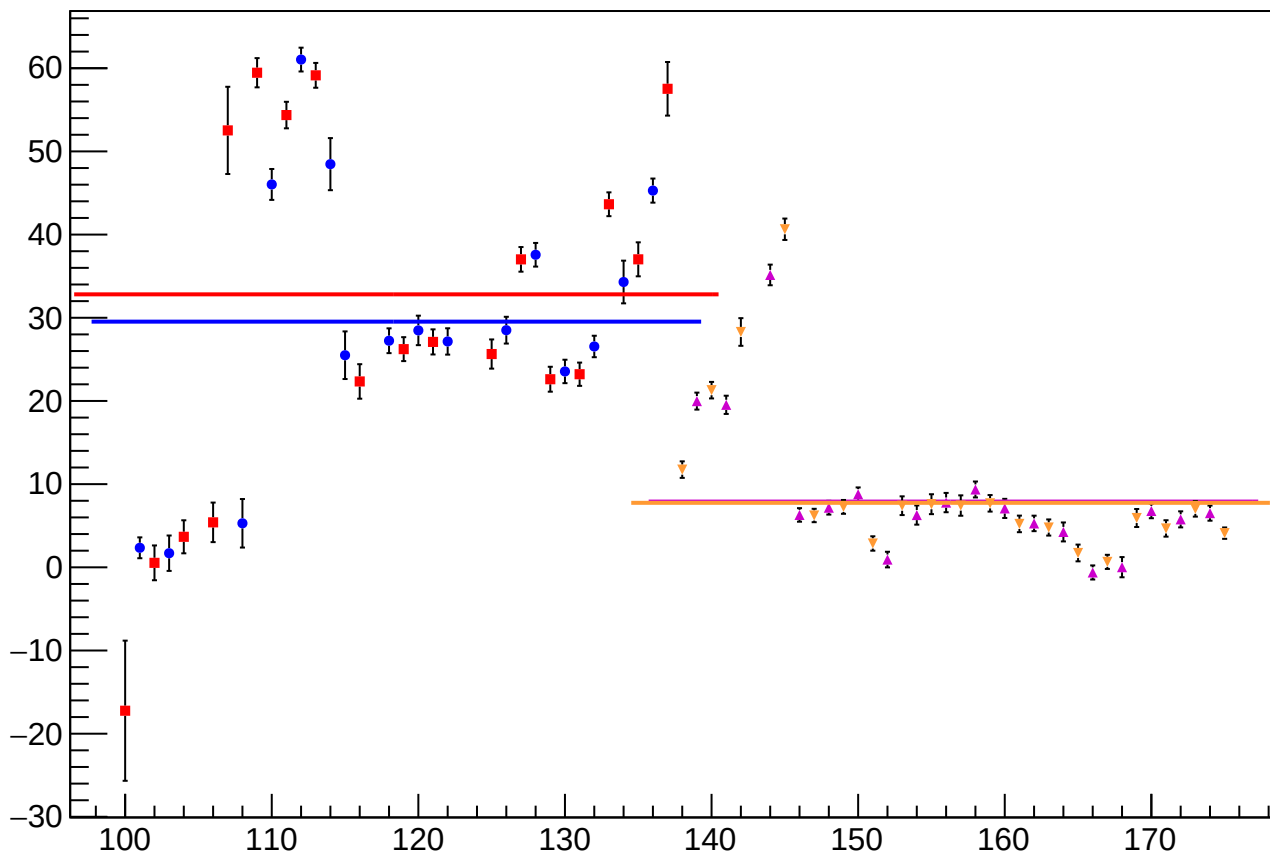
Right: 3.934 $\pm$ 0.156  $\chi^2$ /NDF: 807.6/33

In: 2.126 $\pm$ 0.133  $\chi^2$ /NDF:653.2/33

Out: 2.361 $\pm$ 0.132  $\chi^2$ /NDF:610.8/36

All: 2.245 $\pm$ 0.093  $\chi^2$ /NDF: 1265.6/70

reg\_asym\_left\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 29.535 $\pm$ 0.417  $\chi^2$ /NDF: 1494.9/15

Left Out: 7.754 $\pm$ 0.223  $\chi^2$ /NDF:1207.2/18

Right Out: 32.816 $\pm$ 0.423  $\chi^2$ /NDF: 1659.3/17

Left In: 7.905 $\pm$ 0.230  $\chi^2$ /NDF:971.1/17

Left: 7.828 $\pm$ 0.160  $\chi^2$ /NDF: 2178.5/36

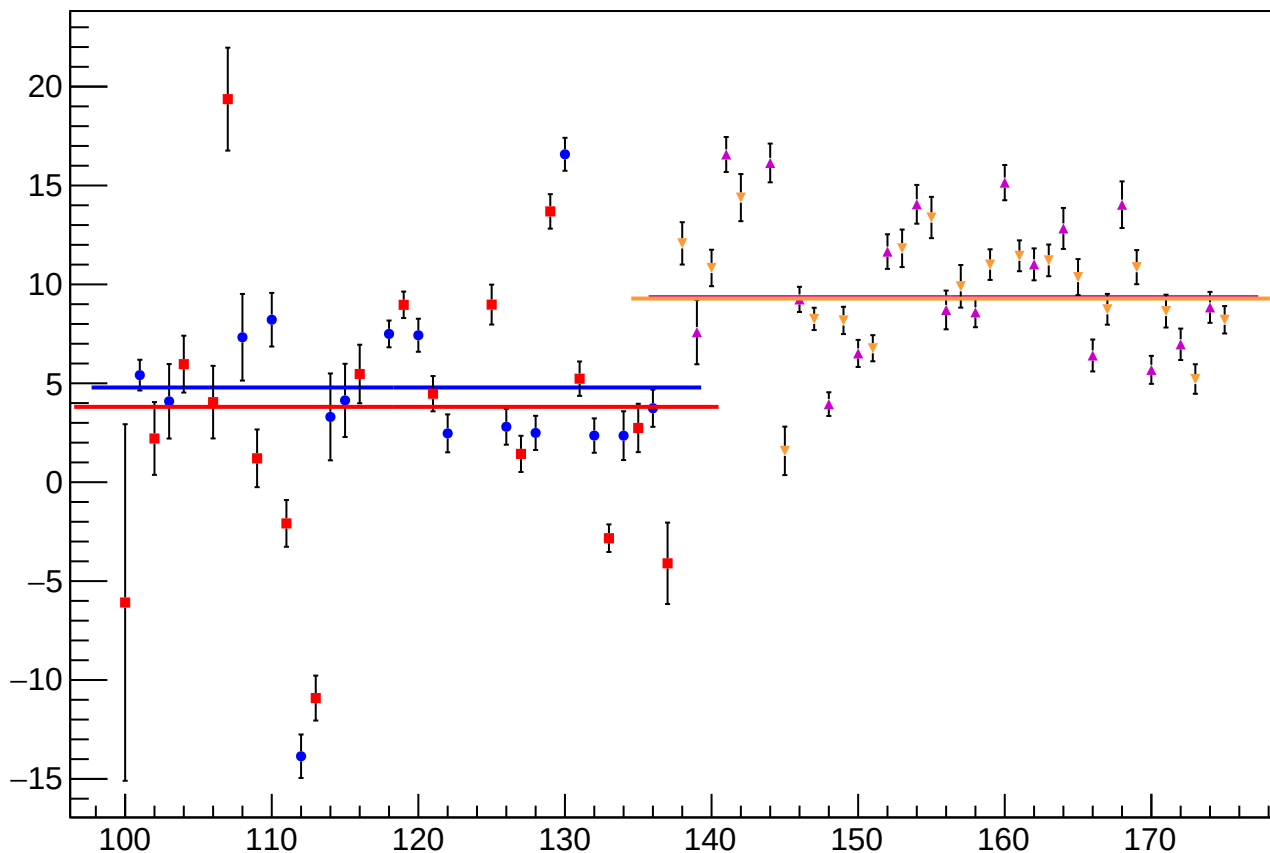
Right: 31.152 $\pm$ 0.297  $\chi^2$ /NDF: 3184.7/33

In: 12.942 $\pm$ 0.201  $\chi^2$ /NDF:4532.3/33

Out: 13.215 $\pm$ 0.197  $\chi^2$ /NDF:5613.9/36

All: 13.081 $\pm$ 0.141  $\chi^2$ /NDF: 10147.1/70

reg\_asym\_left\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $4.789 \pm 0.251$   $\chi^2/\text{NDF}: 553.9/15$

Left Out:  $9.285 \pm 0.188$   $\chi^2/\text{NDF}: 167.2/18$

Right Out:  $3.809 \pm 0.259$   $\chi^2/\text{NDF}: 567.6/17$

Left In:  $9.357 \pm 0.195$   $\chi^2/\text{NDF}: 368.7/17$

Left:  $9.320 \pm 0.135$   $\chi^2/\text{NDF}: 535.9/36$

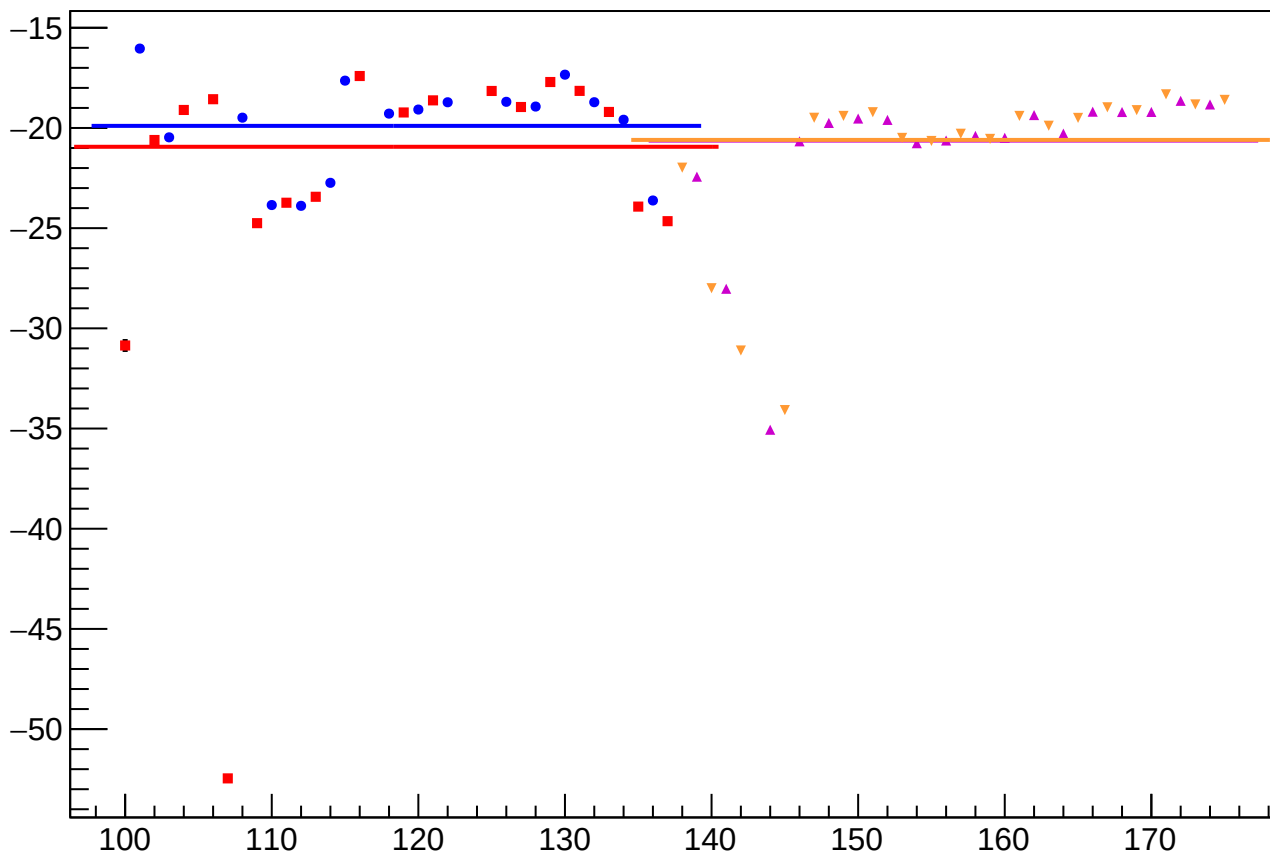
Right:  $4.313 \pm 0.180$   $\chi^2/\text{NDF}: 1128.9/33$

In:  $7.645 \pm 0.154$   $\chi^2/\text{NDF}: 1129.4/33$

Out:  $7.393 \pm 0.152$   $\chi^2/\text{NDF}: 1027.7/36$

All:  $7.518 \pm 0.108$   $\chi^2/\text{NDF}: 2158.4/70$

reg\_asym\_left\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -19.895 $\pm$ 0.016  $\chi^2$ /NDF: 26073.6/15

Left Out: -20.596 $\pm$ 0.009  $\chi^2$ /NDF:144816.0/18

Right Out: -20.938 $\pm$ 0.016  $\chi^2$ /NDF: 94065.2/17

Left In: -20.631 $\pm$ 0.009  $\chi^2$ /NDF:115079.5/17

Left: -20.613 $\pm$ 0.006  $\chi^2$ /NDF: 259903.3/36

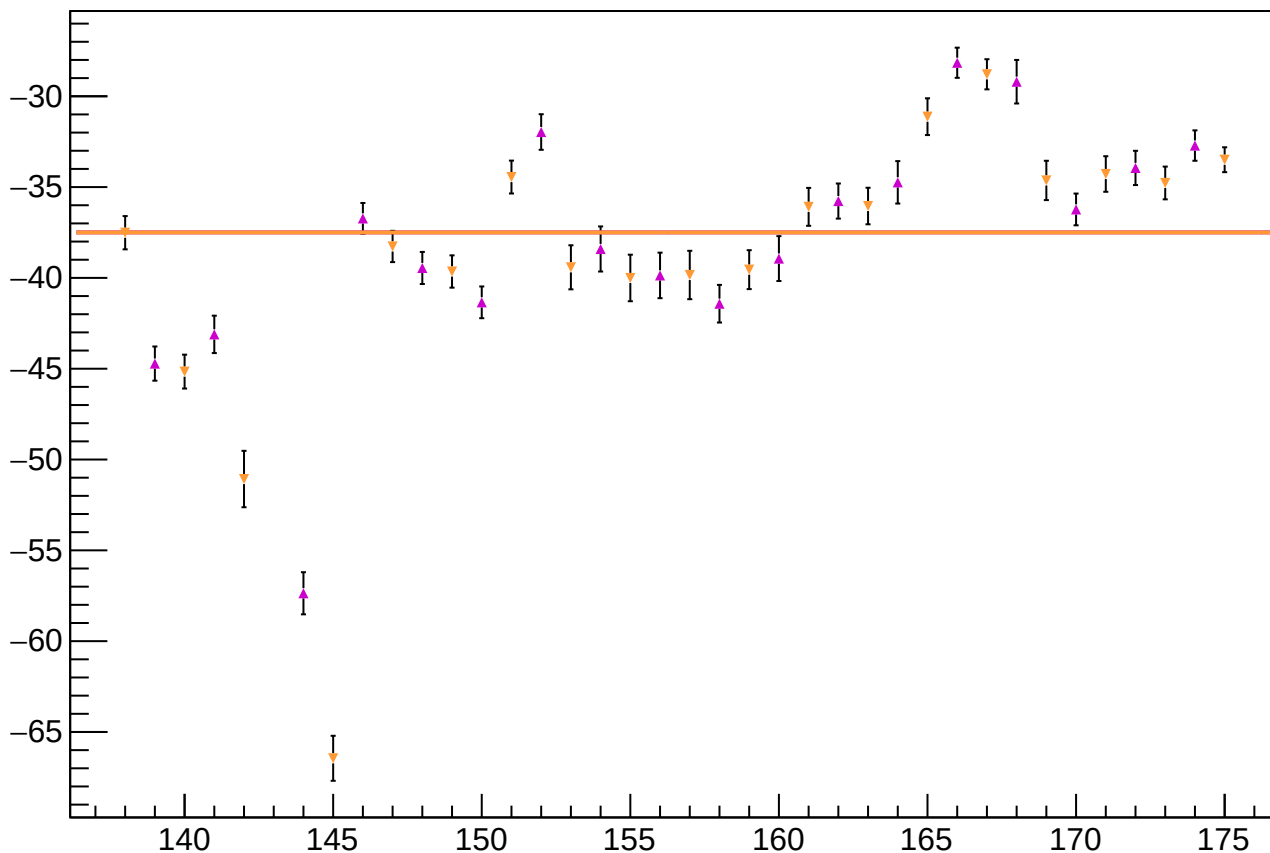
Right: -20.412 $\pm$ 0.011  $\chi^2$ /NDF: 122364.1/33

In: -20.448 $\pm$ 0.008  $\chi^2$ /NDF:142831.2/33

Out: -20.679 $\pm$ 0.008  $\chi^2$ /NDF:239240.9/36

All: -20.564 $\pm$ 0.005  $\chi^2$ /NDF: 382517.1/70

reg\_asym\_left\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -37.498+/-0.226  $\chi^2/\text{NDF}$ :936.1/18

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -37.493+/-0.232  $\chi^2/\text{NDF}$ :690.9/17

Left: -37.496+/-0.162  $\chi^2/\text{NDF}$ : 1627.1/36

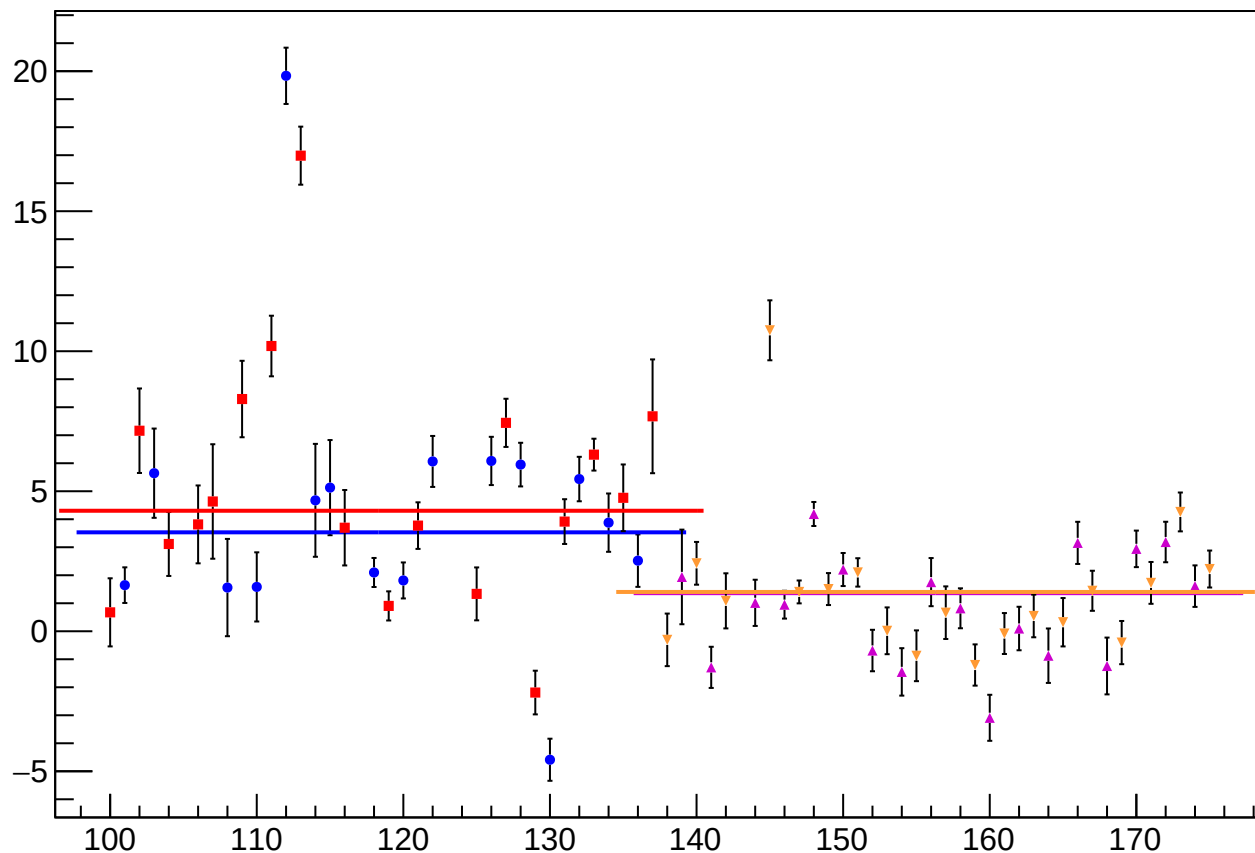
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -37.493+/-0.232  $\chi^2/\text{NDF}$ :690.9/17

Out: -37.498+/-0.226  $\chi^2/\text{NDF}$ :936.1/18

All: -37.496+/-0.162  $\chi^2/\text{NDF}$ : 1627.1/36

reg\_asym\_left\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $3.532 \pm 0.217$   $\chi^2/\text{NDF}: 443.2/15$

Left Out:  $1.404 \pm 0.162$   $\chi^2/\text{NDF}: 136.7/18$

Right Out:  $4.303 \pm 0.222$   $\chi^2/\text{NDF}: 352.8/17$

Left In:  $1.360 \pm 0.168$   $\chi^2/\text{NDF}: 140.9/17$

Left:  $1.383 \pm 0.117$   $\chi^2/\text{NDF}: 277.6/36$

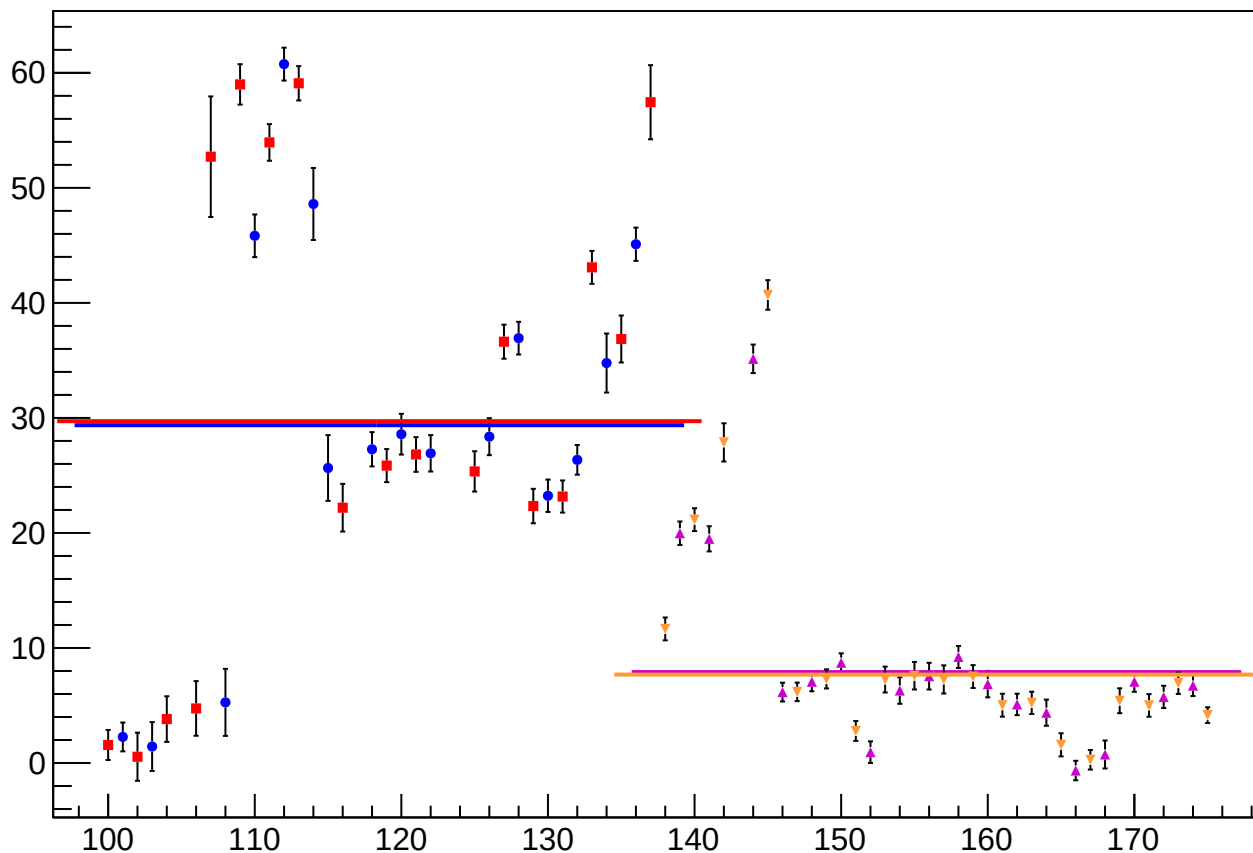
Right:  $3.910 \pm 0.155$   $\chi^2/\text{NDF}: 802.2/33$

In:  $2.171 \pm 0.133$   $\chi^2/\text{NDF}: 646.8/33$

Out:  $2.414 \pm 0.131$   $\chi^2/\text{NDF}: 601.1/36$

All:  $2.294 \pm 0.093$   $\chi^2/\text{NDF}: 1249.6/70$

reg\_asym\_left\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 29.367 $\pm$ 0.416  $\chi^2$ /NDF: 1488.7/15

Left Out: 7.687 $\pm$ 0.223  $\chi^2$ /NDF:1208.4/18

Right Out: 29.719 $\pm$ 0.402  $\chi^2$ /NDF: 2129.5/17

Left In: 7.903 $\pm$ 0.229  $\chi^2$ /NDF:964.2/17

Left: 7.792 $\pm$ 0.160  $\chi^2$ /NDF: 2173.0/36

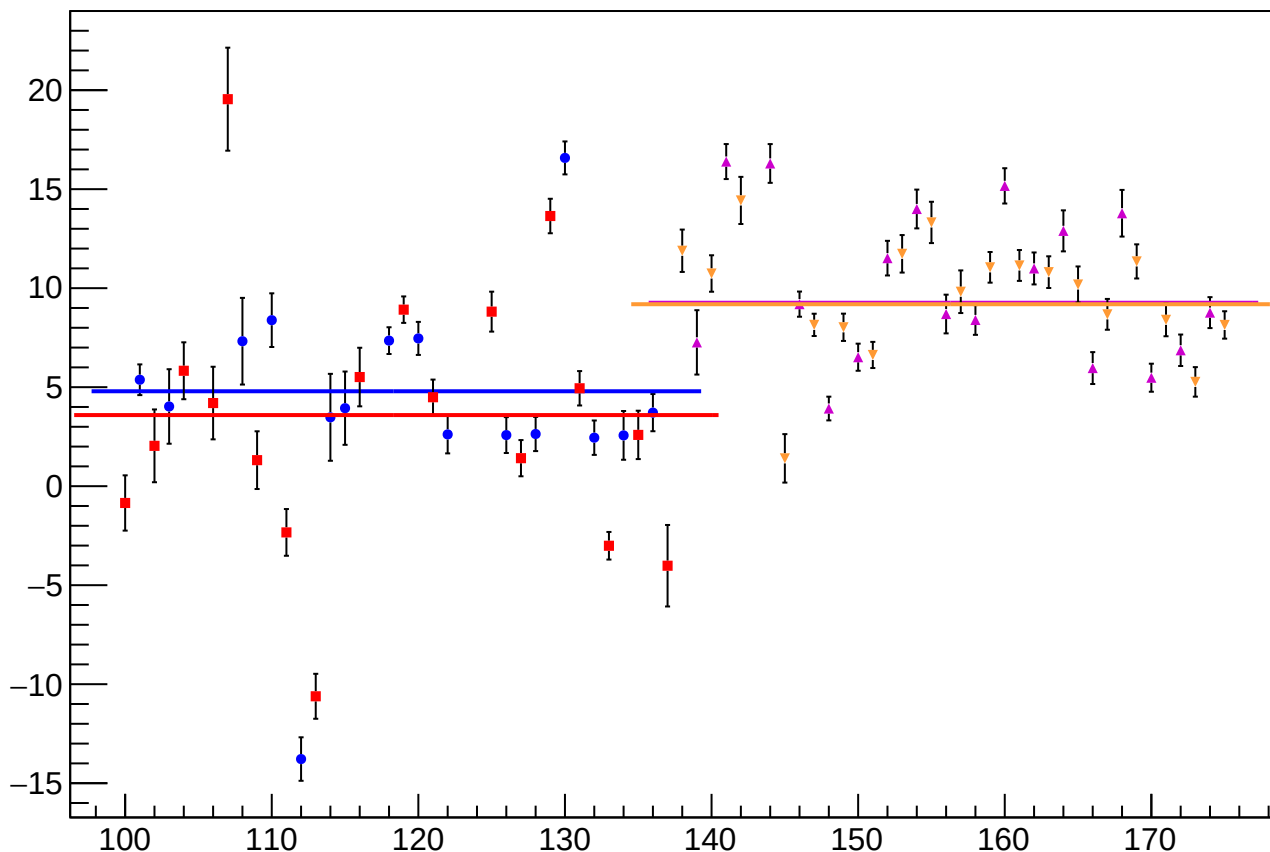
Right: 29.549 $\pm$ 0.289  $\chi^2$ /NDF: 3618.6/33

In: 12.902 $\pm$ 0.201  $\chi^2$ /NDF:4490.4/33

Out: 12.865 $\pm$ 0.195  $\chi^2$ /NDF:5630.5/36

All: 12.883 $\pm$ 0.140  $\chi^2$ /NDF: 10120.9/70

reg\_asym\_left\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 4.794 $\pm$ 0.251  $\chi^2$ /NDF: 550.0/15

Left Out: 9.189 $\pm$ 0.188  $\chi^2$ /NDF:168.6/18

Right Out: 3.591 $\pm$ 0.254  $\chi^2$ /NDF: 573.3/17

Left In: 9.264 $\pm$ 0.194  $\chi^2$ /NDF:375.9/17

Left: 9.226 $\pm$ 0.135  $\chi^2$ /NDF: 544.6/36

Right: 4.201 $\pm$ 0.179  $\chi^2$ /NDF: 1134.6/33

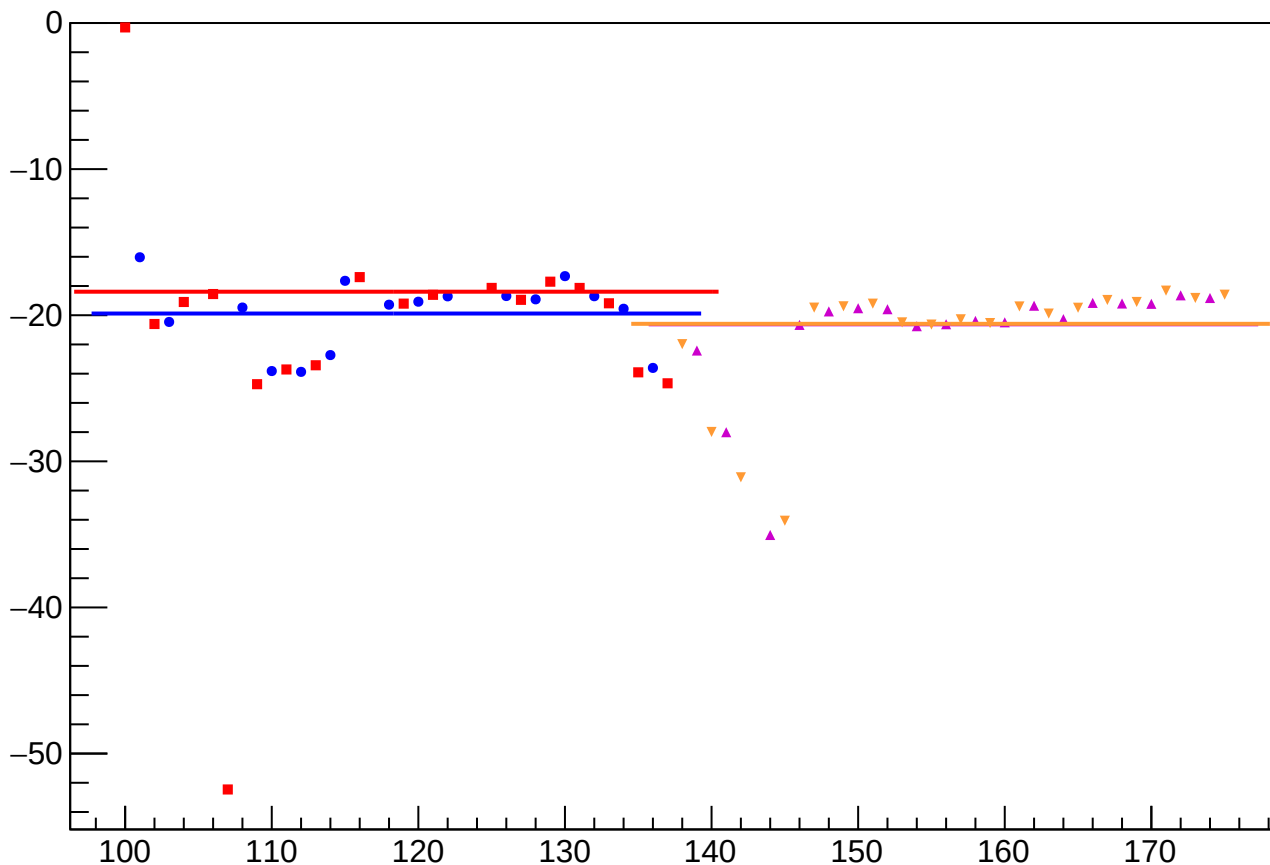
In: 7.589 $\pm$ 0.154  $\chi^2$ /NDF:1124.1/33

Out: 7.213 $\pm$ 0.151  $\chi^2$ /NDF:1055.0/36

All: 7.398 $\pm$ 0.108  $\chi^2$ /NDF: 2182.1/70



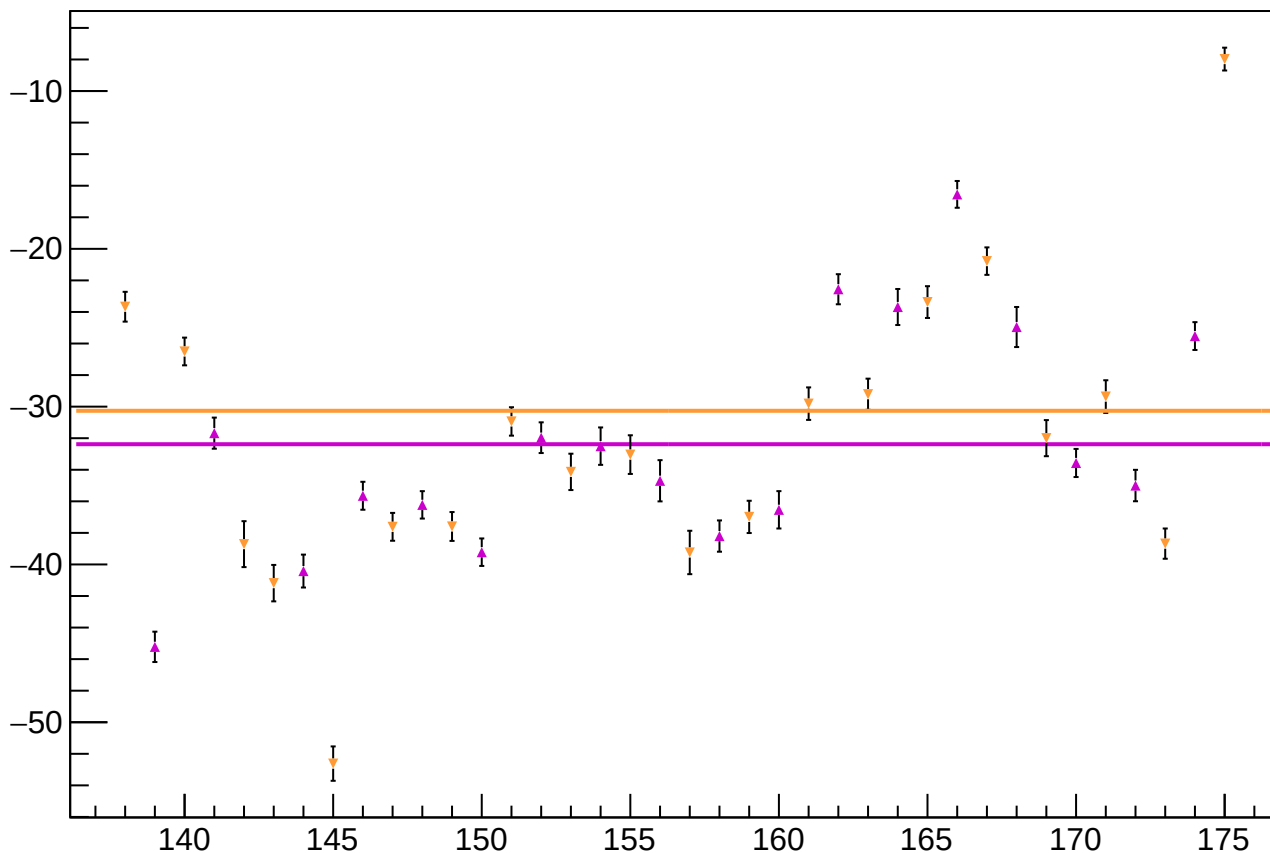
reg\_asym\_left\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-19.883 \pm 0.016$   $\chi^2/\text{NDF}$ : 26063.5/15  
 Left Out:  $-20.588 \pm 0.009$   $\chi^2/\text{NDF}$ : 144895.8/18  
 Right Out:  $-18.390 \pm 0.015$   $\chi^2/\text{NDF}$ : 301247.7/17  
 Left In:  $-20.623 \pm 0.009$   $\chi^2/\text{NDF}$ : 114970.3/17

Left:  $-20.605 \pm 0.006$   $\chi^2/\text{NDF}$ : 259873.5/36  
 Right:  $-19.096 \pm 0.011$   $\chi^2/\text{NDF}$ : 332167.8/33  
 In:  $-20.439 \pm 0.008$   $\chi^2/\text{NDF}$ : 142730.1/33  
 Out:  $-19.999 \pm 0.008$   $\chi^2/\text{NDF}$ : 462434.1/36  
 All:  $-20.215 \pm 0.005$   $\chi^2/\text{NDF}$ : 606792.9/70

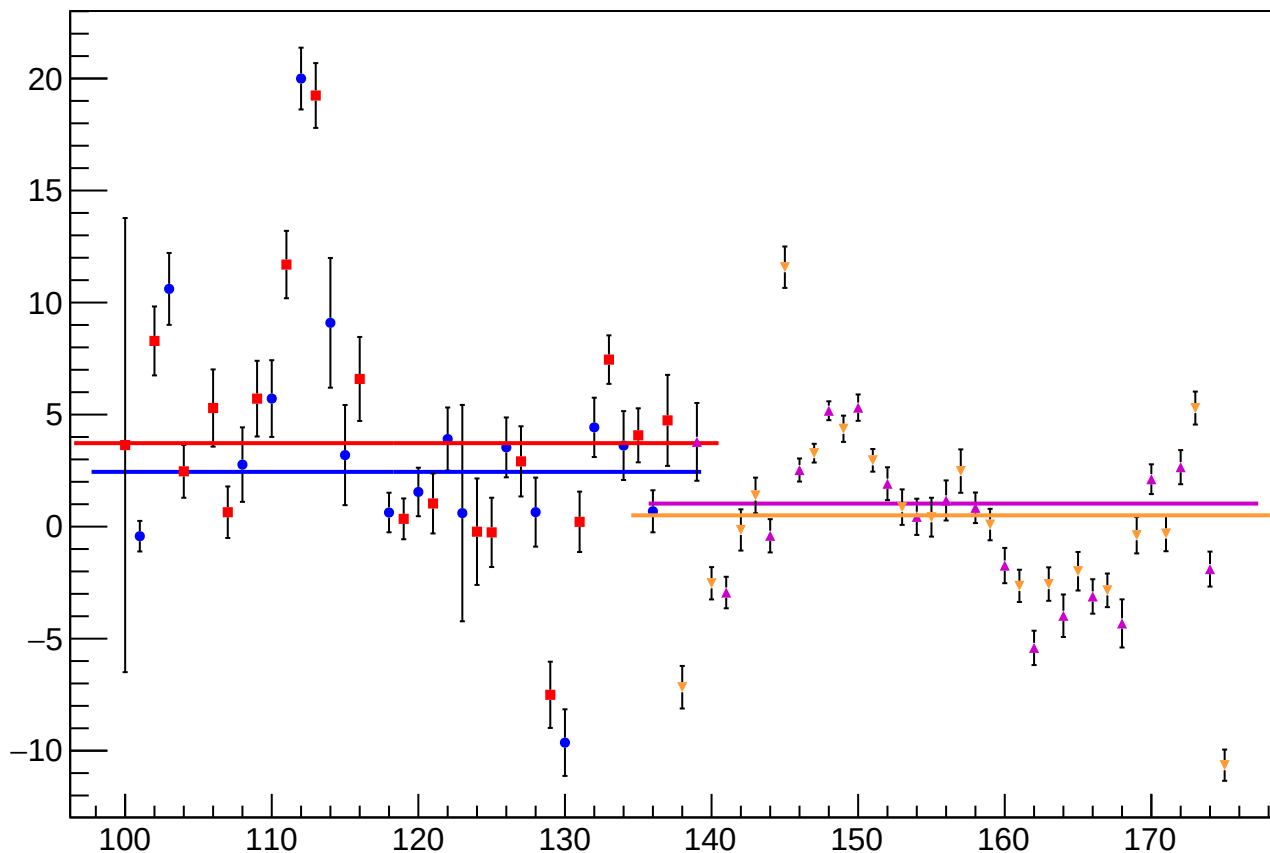
reg\_asym\_right\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -30.262+/-0.223  $\chi^2/\text{NDF}$ :2044.5/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -32.381+/-0.233  $\chi^2/\text{NDF}$ :998.8/17

Left: -31.277+/-0.161  $\chi^2/\text{NDF}$ : 3086.4/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: -32.381+/-0.233  $\chi^2/\text{NDF}$ :998.8/17  
 Out: -30.262+/-0.223  $\chi^2/\text{NDF}$ :2044.5/19  
 All: -31.277+/-0.161  $\chi^2/\text{NDF}$ : 3086.4/37

reg\_asym\_right\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $2.444 \pm 0.311$   $\chi^2/\text{NDF}: 295.3/16$

Left Out:  $0.504 \pm 0.159$   $\chi^2/\text{NDF}: 708.7/19$

Right Out:  $3.726 \pm 0.327$   $\chi^2/\text{NDF}: 269.1/18$

Left In:  $1.028 \pm 0.167$   $\chi^2/\text{NDF}: 384.4/17$

Left:  $0.754 \pm 0.115$   $\chi^2/\text{NDF}: 1098.2/37$

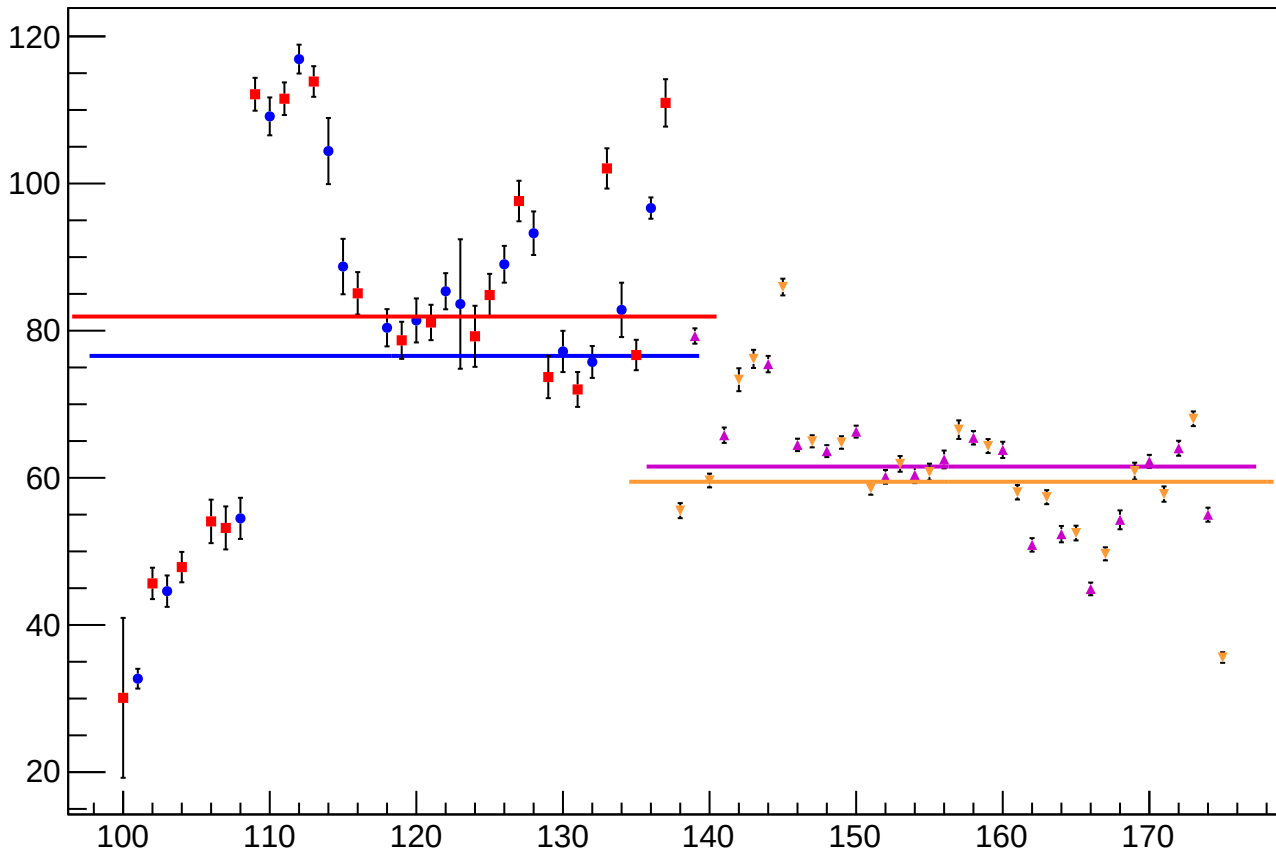
Right:  $3.053 \pm 0.225$   $\chi^2/\text{NDF}: 572.5/35$

In:  $1.345 \pm 0.147$   $\chi^2/\text{NDF}: 695.7/34$

Out:  $1.123 \pm 0.143$   $\chi^2/\text{NDF}: 1056.3/38$

All:  $1.231 \pm 0.103$   $\chi^2/\text{NDF}: 1753.2/73$

reg\_asym\_right\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 76.572 $\pm$ 0.573  $\chi^2/\text{NDF}$ : 2253.6/16

Left Out: 59.466 $\pm$ 0.221  $\chi^2/\text{NDF}$ :2315.8/19

Right Out: 81.923 $\pm$ 0.592  $\chi^2/\text{NDF}$ : 1570.6/18

Left In: 61.530 $\pm$ 0.230  $\chi^2/\text{NDF}$ :1200.5/17

Left: 60.458 $\pm$ 0.159  $\chi^2/\text{NDF}$ : 3558.3/37

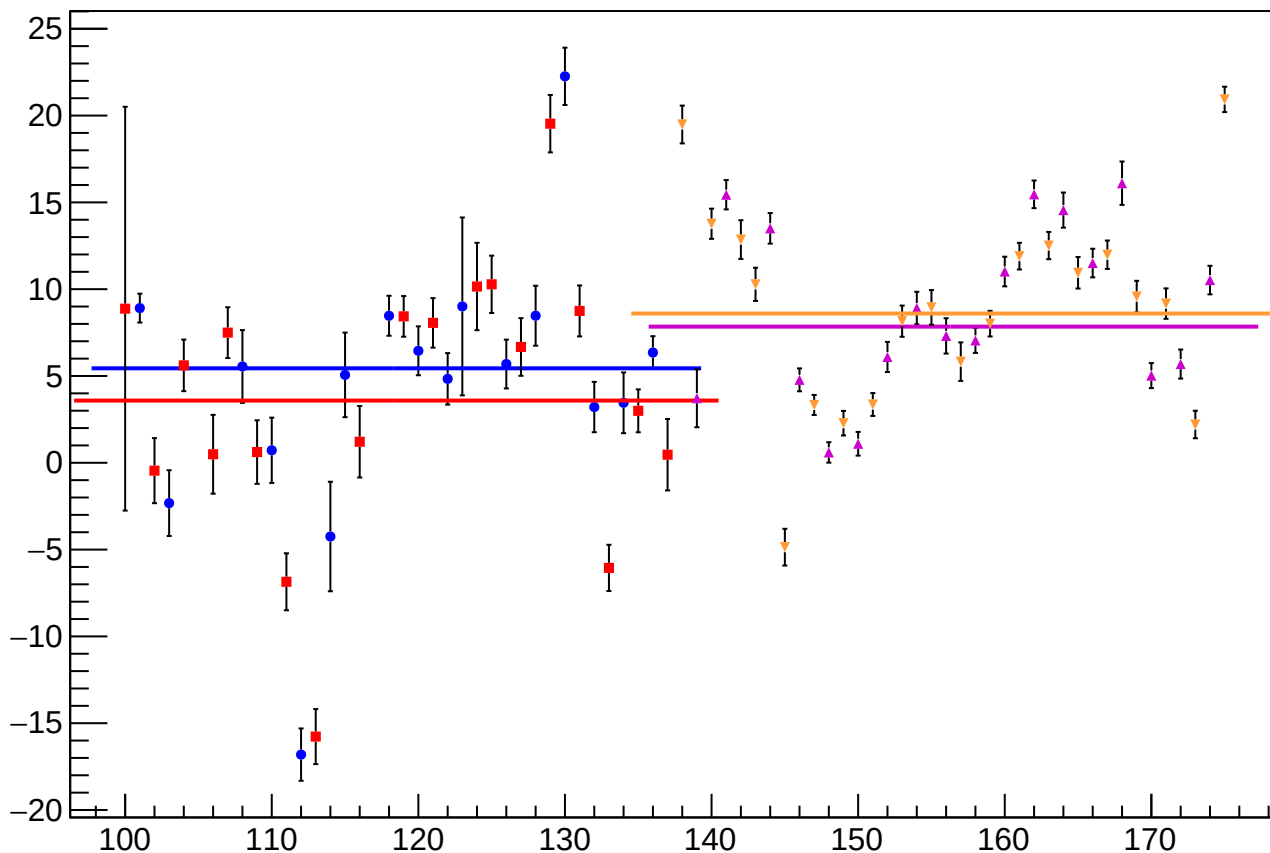
Right: 79.162 $\pm$ 0.412  $\chi^2/\text{NDF}$ : 3866.3/35

In: 63.607 $\pm$ 0.213  $\chi^2/\text{NDF}$ :4047.5/34

Out: 62.209 $\pm$ 0.207  $\chi^2/\text{NDF}$ :5150.0/38

All: 62.887 $\pm$ 0.148  $\chi^2/\text{NDF}$ : 9219.7/73

reg\_asym\_right\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 5.442 $\pm$ 0.357  $\chi^2$ /NDF: 387.5/16

Left Out: 8.597 $\pm$ 0.185  $\chi^2$ /NDF:967.3/19

Right Out: 3.585 $\pm$ 0.375  $\chi^2$ /NDF: 423.2/18

Left In: 7.843 $\pm$ 0.194  $\chi^2$ /NDF:651.2/17

Left: 8.237 $\pm$ 0.134  $\chi^2$ /NDF: 1626.4/37

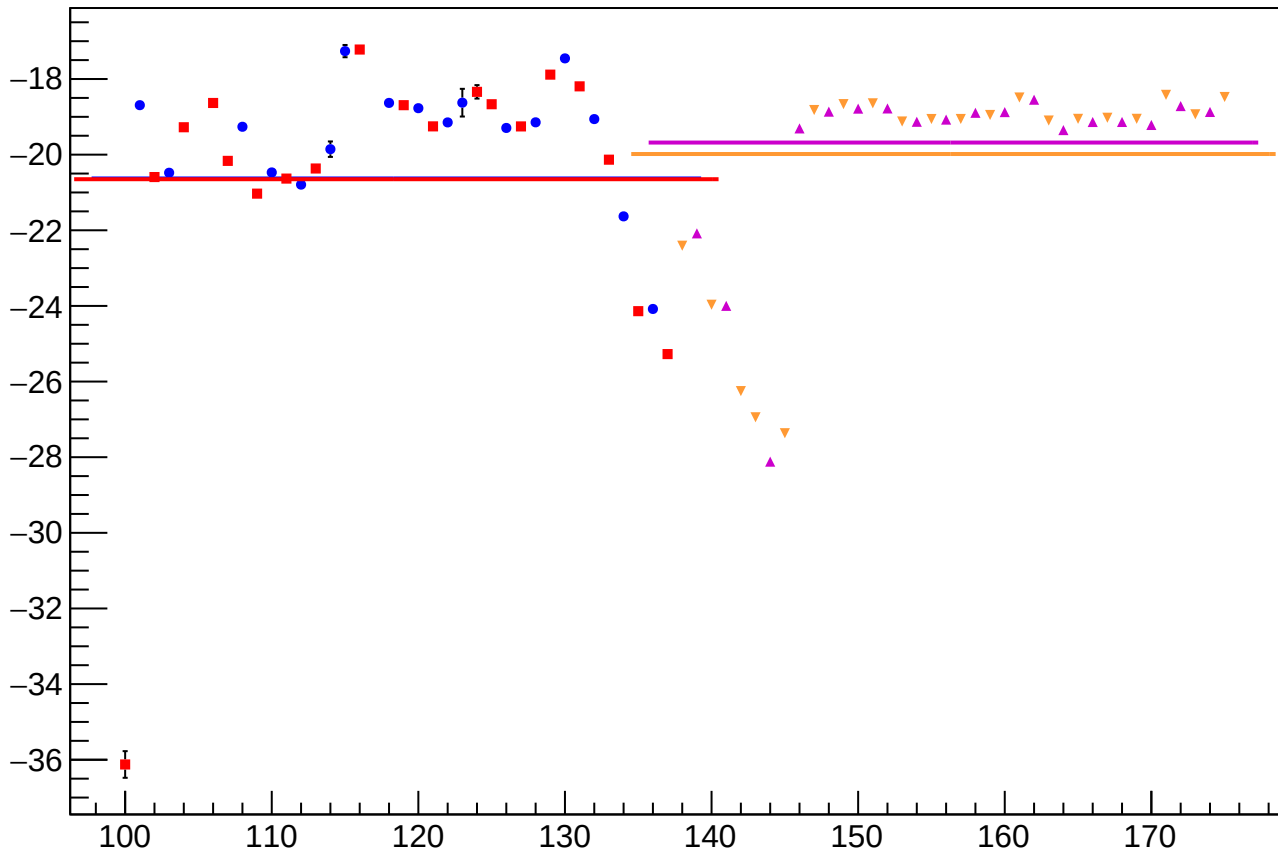
Right: 4.559 $\pm$ 0.259  $\chi^2$ /NDF: 823.5/35

In: 7.297 $\pm$ 0.170  $\chi^2$ /NDF:1073.5/34

Out: 7.616 $\pm$ 0.166  $\chi^2$ /NDF:1534.0/38

All: 7.460 $\pm$ 0.119  $\chi^2$ /NDF: 2609.3/73

reg\_asym\_right\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-20.630 \pm 0.019$   $\chi^2/\text{NDF}: 12490.5/16$

Left Out:  $-19.983 \pm 0.009$   $\chi^2/\text{NDF}: 84237.8/19$

Right Out:  $-20.650 \pm 0.019$   $\chi^2/\text{NDF}: 13885.7/18$

Left In:  $-19.680 \pm 0.009$   $\chi^2/\text{NDF}: 50689.5/17$

Left:  $-19.834 \pm 0.006$   $\chi^2/\text{NDF}: 135507.5/37$

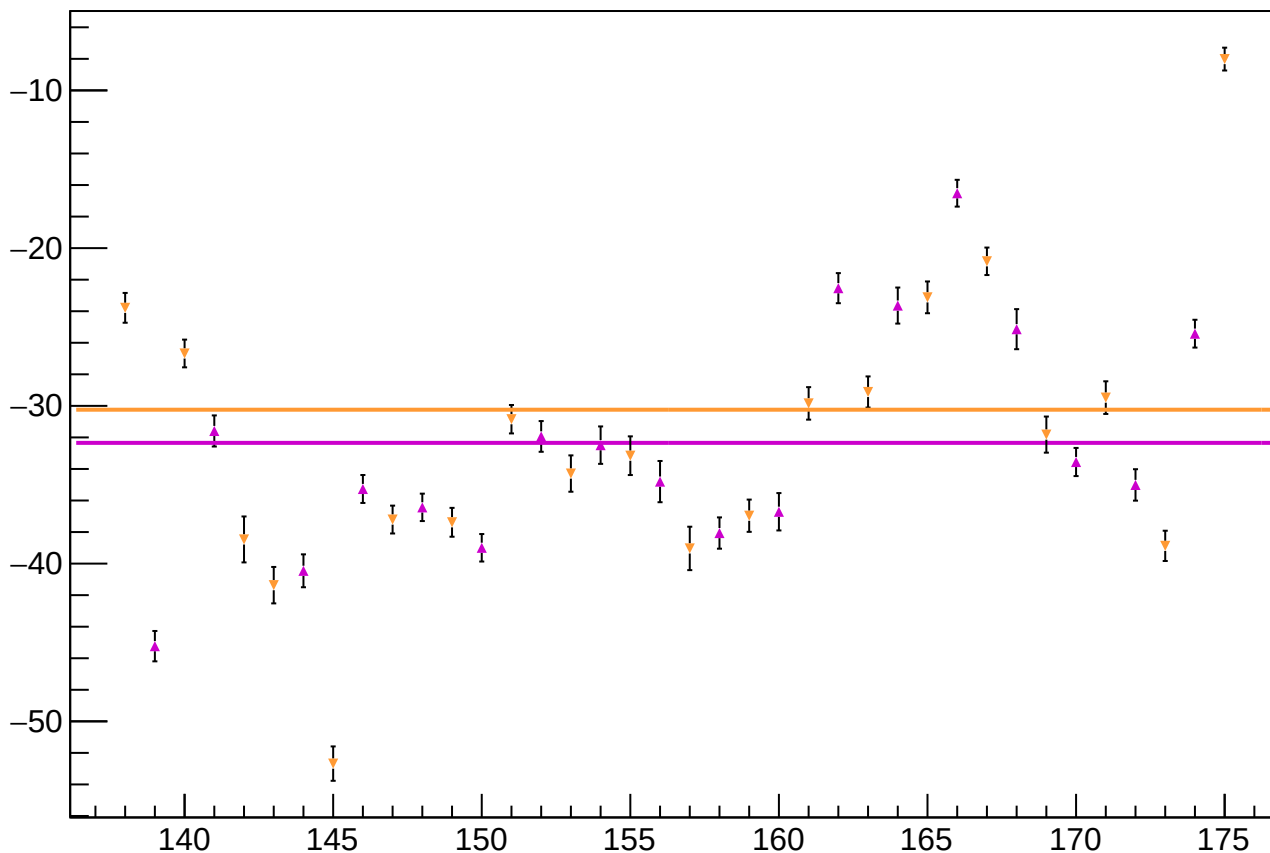
Right:  $-20.640 \pm 0.014$   $\chi^2/\text{NDF}: 26376.6/35$

In:  $-19.849 \pm 0.008$   $\chi^2/\text{NDF}: 65176.6/34$

Out:  $-20.097 \pm 0.008$   $\chi^2/\text{NDF}: 99098.6/38$

All:  $-19.975 \pm 0.006$   $\chi^2/\text{NDF}: 164744.3/73$

reg\_asym\_right\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -30.244+/-0.223  $\chi^2/\text{NDF}$ :2032.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -32.345+/-0.233  $\chi^2/\text{NDF}$ :995.8/17

Left: -31.250+/-0.161  $\chi^2/\text{NDF}$ : 3070.4/37

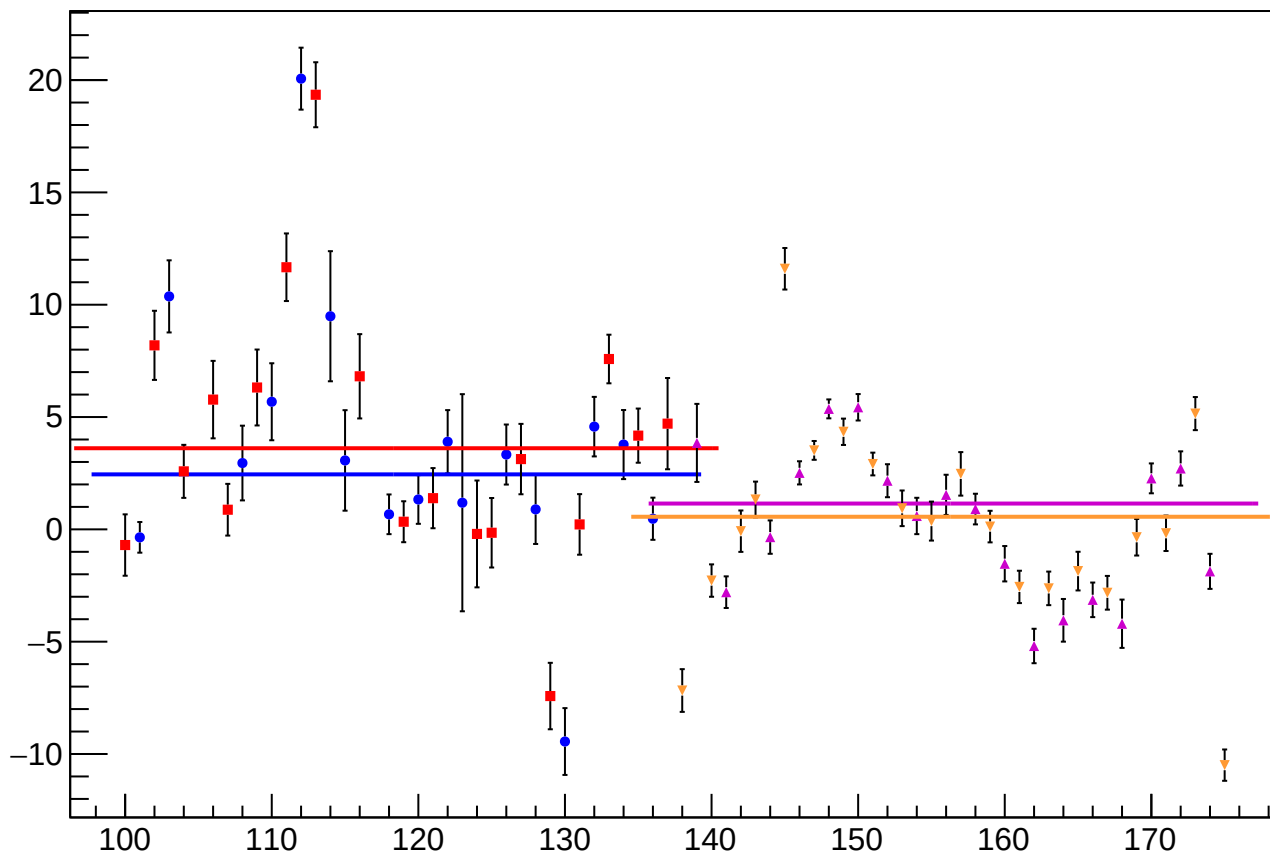
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -32.345+/-0.233  $\chi^2/\text{NDF}$ :995.8/17

Out: -30.244+/-0.223  $\chi^2/\text{NDF}$ :2032.2/19

All: -31.250+/-0.161  $\chi^2/\text{NDF}$ : 3070.4/37

reg\_asym\_right\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $2.448 \pm 0.311$   $\chi^2/\text{NDF}: 293.4/16$

Left Out:  $0.561 \pm 0.159$   $\chi^2/\text{NDF}: 700.8/19$

Right Out:  $3.611 \pm 0.318$   $\chi^2/\text{NDF}: 279.4/18$

Left In:  $1.149 \pm 0.167$   $\chi^2/\text{NDF}: 388.3/17$

Left:  $0.841 \pm 0.115$   $\chi^2/\text{NDF}: 1095.6/37$

Right:  $3.017 \pm 0.223$   $\chi^2/\text{NDF}: 579.6/35$

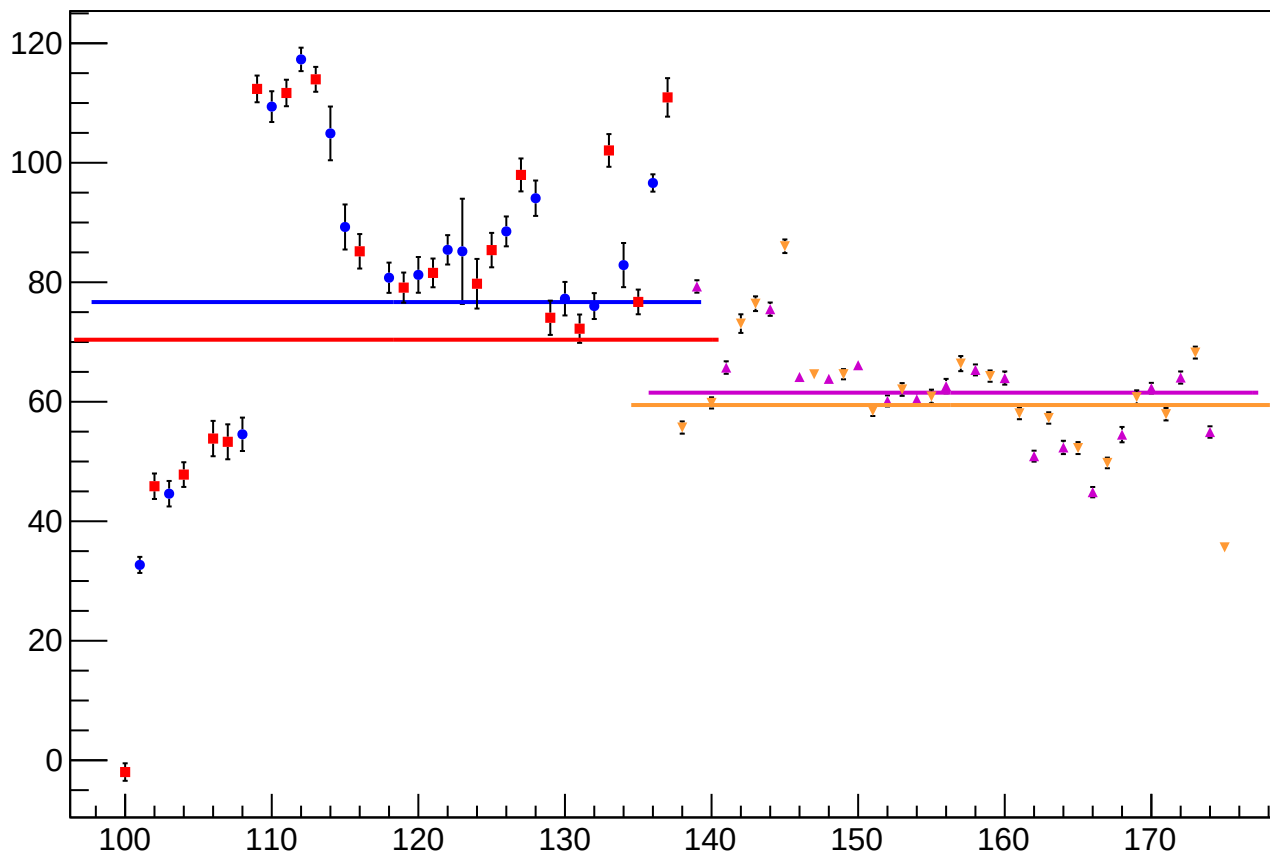
In:  $1.440 \pm 0.147$   $\chi^2/\text{NDF}: 695.2/34$

Out:  $1.173 \pm 0.143$   $\chi^2/\text{NDF}: 1053.7/38$

All:  $1.302 \pm 0.102$   $\chi^2/\text{NDF}: 1750.6/73$



reg\_asym\_right\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 76.687 $\pm$ 0.574  $\chi^2$ /NDF: 2265.1/16

Left Out: 59.455 $\pm$ 0.221  $\chi^2$ /NDF:2309.7/19

Right Out: 70.386 $\pm$ 0.550  $\chi^2$ /NDF: 4391.1/18

Left In: 61.521 $\pm$ 0.230  $\chi^2$ /NDF:1196.3/17

Left: 60.448 $\pm$ 0.159  $\chi^2$ /NDF: 3548.1/37

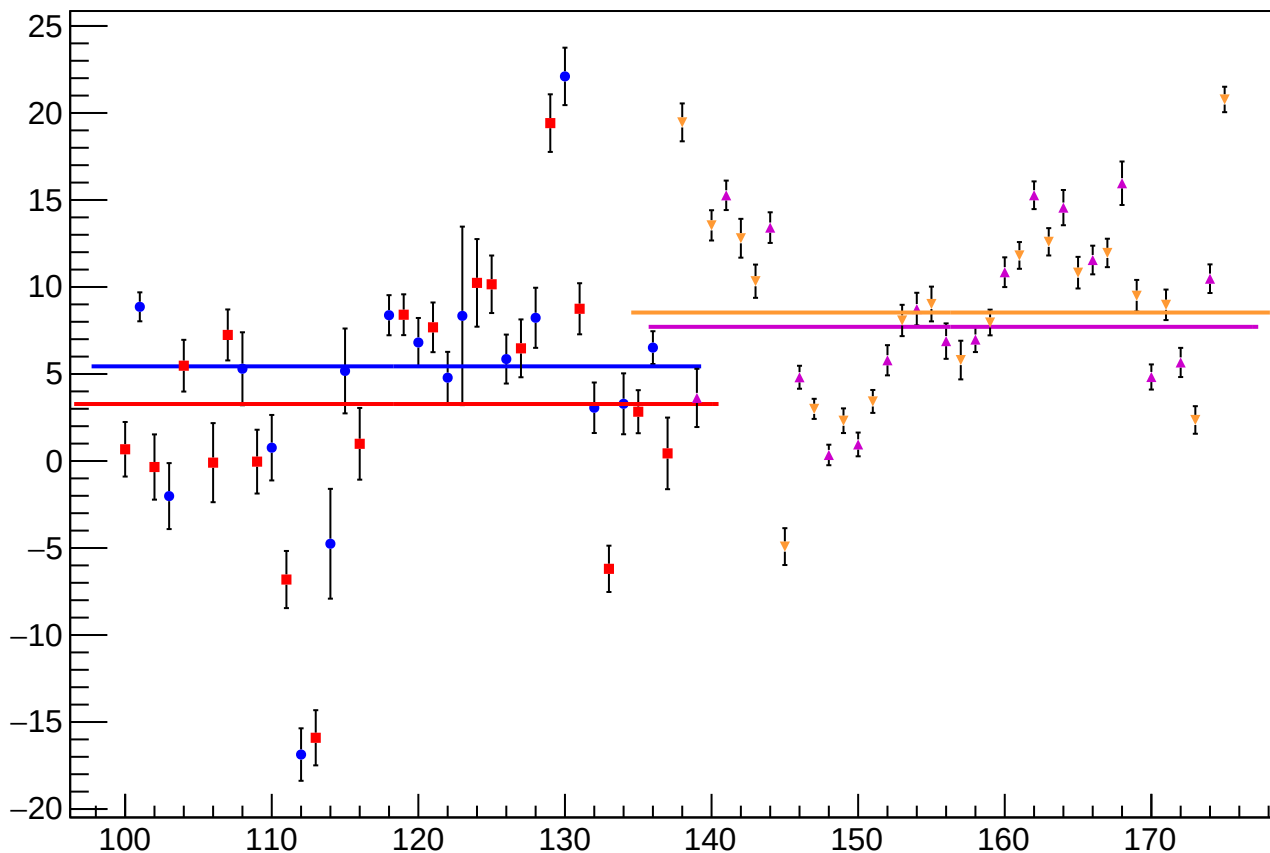
Right: 73.402 $\pm$ 0.397  $\chi^2$ /NDF: 6719.1/35

In: 63.616 $\pm$ 0.213  $\chi^2$ /NDF:4063.8/34

Out: 60.974 $\pm$ 0.205  $\chi^2$ /NDF:7041.3/38

All: 62.243 $\pm$ 0.148  $\chi^2$ /NDF: 11184.9/73

reg\_asym\_right\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $5.439 \pm 0.357$   $\chi^2/\text{NDF}: 385.9/16$

Left Out:  $8.532 \pm 0.185$   $\chi^2/\text{NDF}: 961.3/19$

Right Out:  $3.275 \pm 0.365$   $\chi^2/\text{NDF}: 425.8/18$

Left In:  $7.710 \pm 0.194$   $\chi^2/\text{NDF}: 656.6/17$

Left:  $8.140 \pm 0.134$   $\chi^2/\text{NDF}: 1627.2/37$

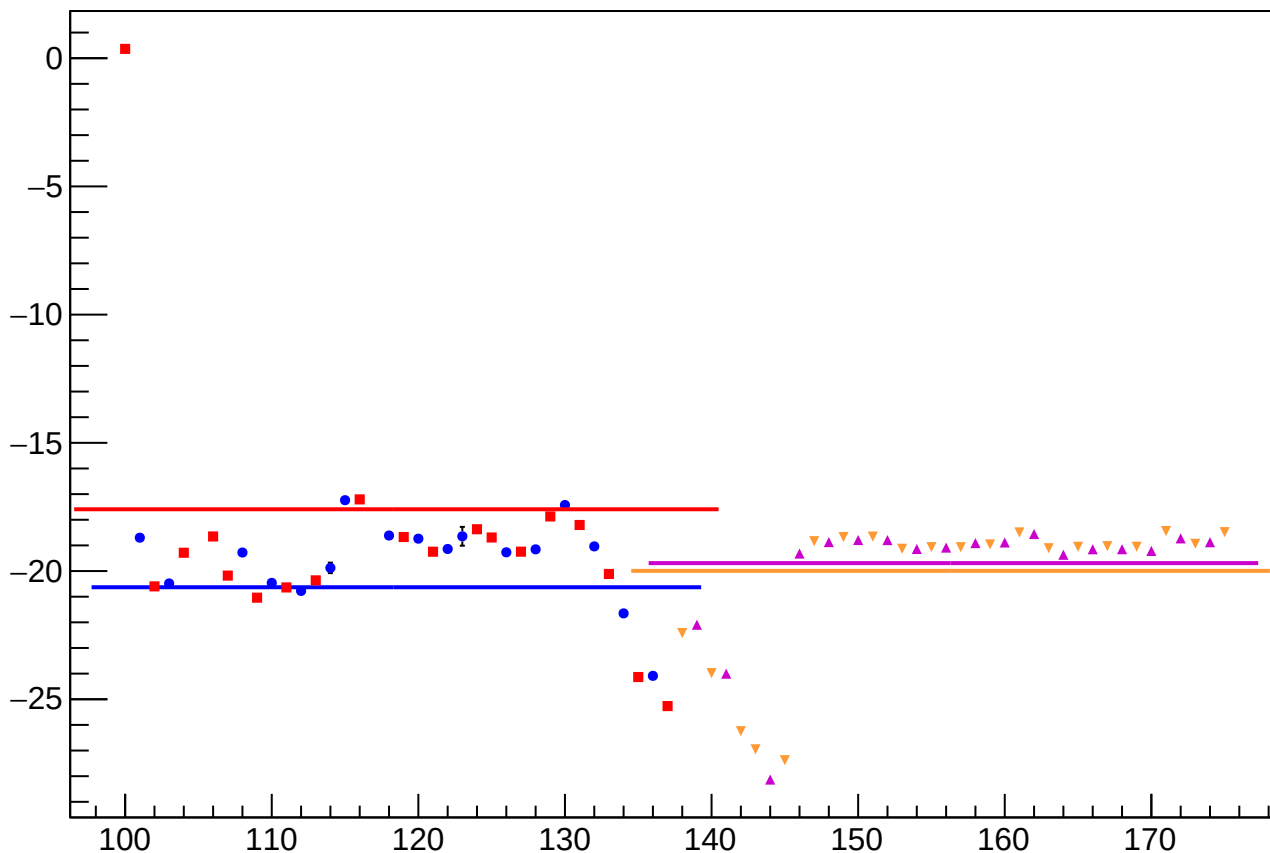
Right:  $4.381 \pm 0.256$   $\chi^2/\text{NDF}: 829.6/35$

In:  $7.194 \pm 0.170$   $\chi^2/\text{NDF}: 1073.7/34$

Out:  $7.457 \pm 0.165$   $\chi^2/\text{NDF}: 1551.8/38$

All:  $7.329 \pm 0.119$   $\chi^2/\text{NDF}: 2626.7/73$

reg\_asym\_right\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-20.632 \pm 0.019$   $\chi^2/\text{NDF}: 12530.8/16$

Left Out:  $-19.992 \pm 0.009$   $\chi^2/\text{NDF}: 84090.0/19$

Right Out:  $-17.591 \pm 0.018$   $\chi^2/\text{NDF}: 178680.7/18$

Left In:  $-19.690 \pm 0.009$   $\chi^2/\text{NDF}: 50632.3/17$

Left:  $-19.844 \pm 0.006$   $\chi^2/\text{NDF}: 135298.2/37$

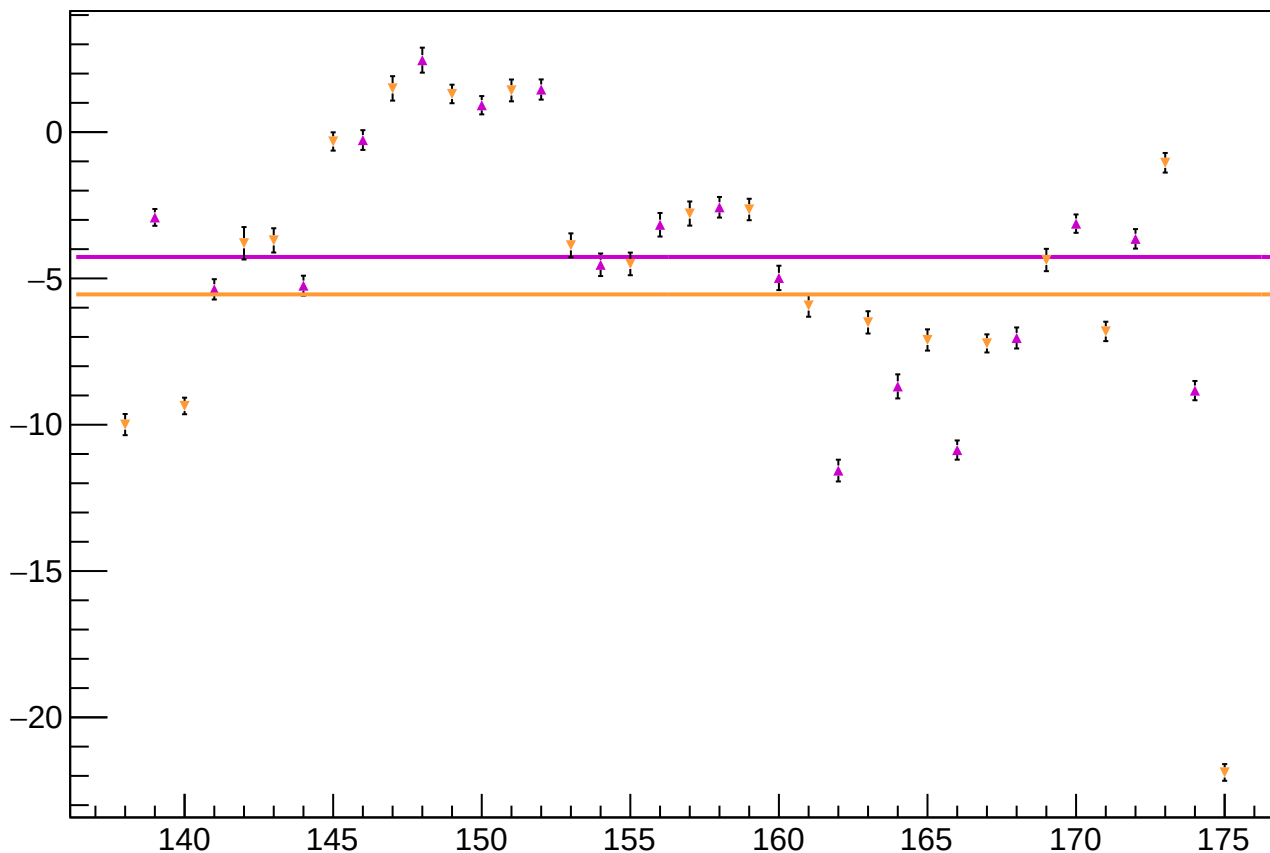
Right:  $-19.007 \pm 0.013$   $\chi^2/\text{NDF}: 204486.4/35$

In:  $-19.858 \pm 0.008$   $\chi^2/\text{NDF}: 65119.9/34$

Out:  $-19.528 \pm 0.008$   $\chi^2/\text{NDF}: 277108.4/38$

All:  $-19.688 \pm 0.006$   $\chi^2/\text{NDF}: 343072.5/73$

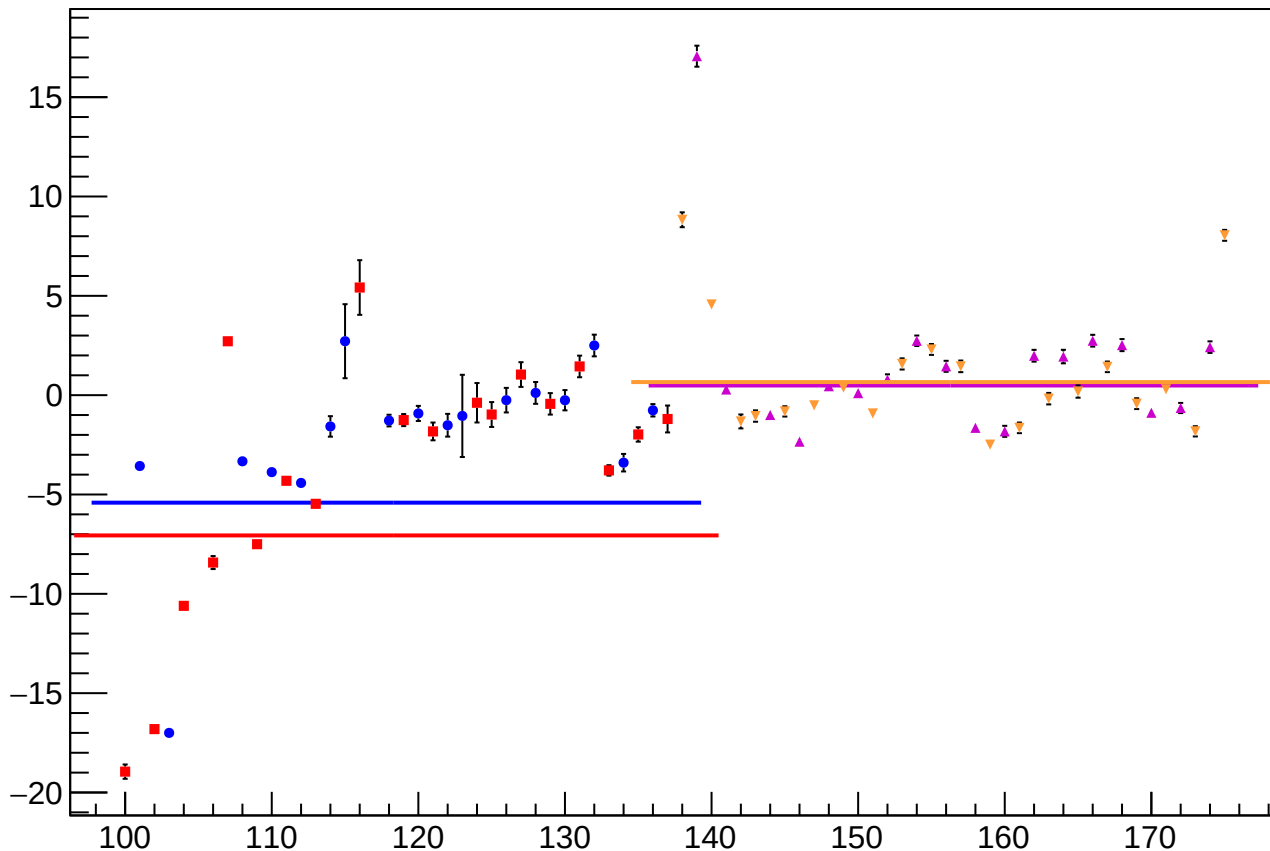
reg\_asym\_sam\_15\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: -5.546 $\pm$ 0.080  $\chi^2$ /NDF:5400.7/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: -4.267 $\pm$ 0.082  $\chi^2$ /NDF:2187.0/17

Left: -4.927 $\pm$ 0.057  $\chi^2$ /NDF: 7712.1/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: -4.267 $\pm$ 0.082  $\chi^2$ /NDF:2187.0/17  
 Out: -5.546 $\pm$ 0.080  $\chi^2$ /NDF:5400.7/19  
 All: -4.927 $\pm$ 0.057  $\chi^2$ /NDF: 7712.1/37

reg\_asym\_sam\_15\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -5.411 $\pm$ 0.055  $\chi^2/\text{NDF}$ : 9261.2/16

Left Out: 0.659 $\pm$ 0.059  $\chi^2/\text{NDF}$ : 2072.9/19

Right Out: -7.060 $\pm$ 0.059  $\chi^2/\text{NDF}$ : 12329.4/18

Left In: 0.487 $\pm$ 0.062  $\chi^2/\text{NDF}$ : 1674.7/17

Left: 0.577 $\pm$ 0.043  $\chi^2/\text{NDF}$ : 3751.7/37

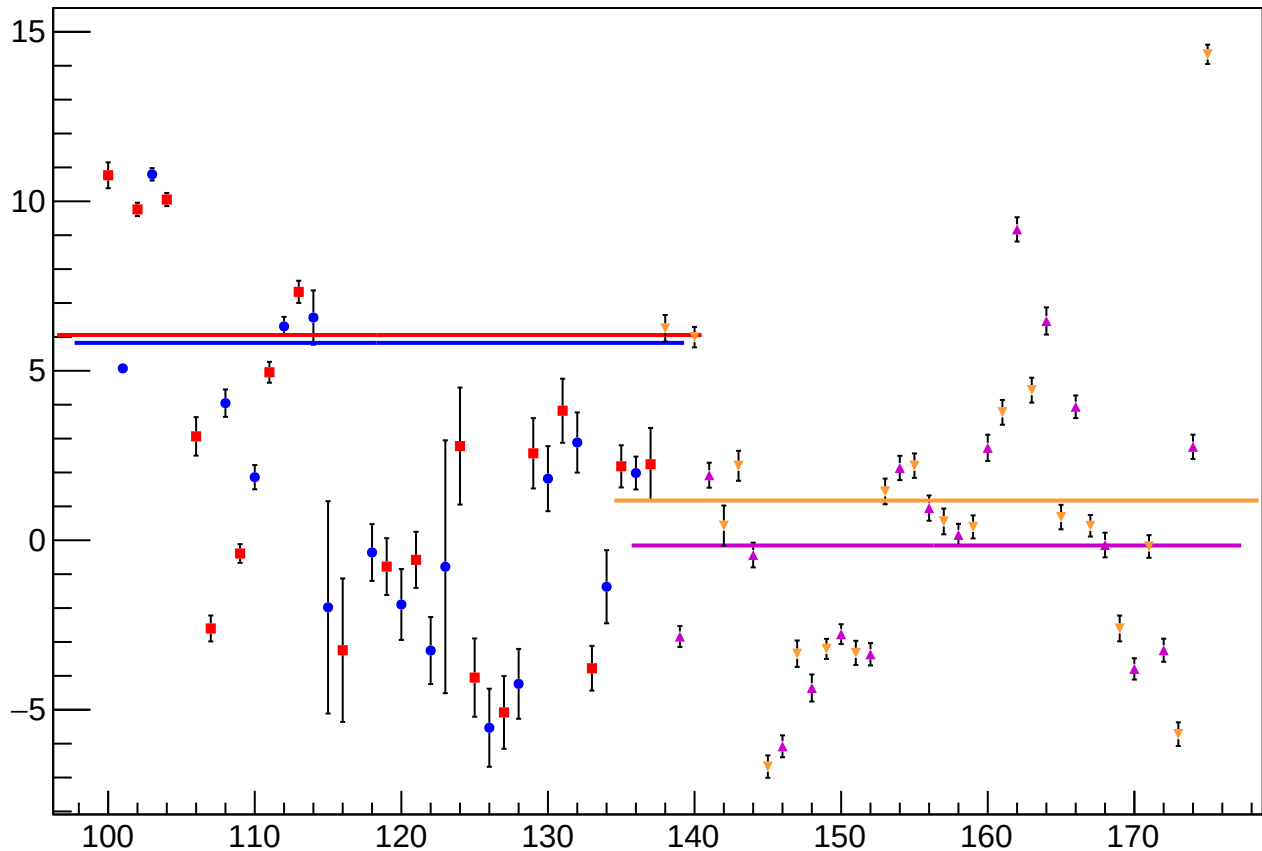
Right: -6.173 $\pm$ 0.040  $\chi^2/\text{NDF}$ : 22010.3/35

In: -2.814 $\pm$ 0.041  $\chi^2/\text{NDF}$ : 16048.1/34

Out: -3.179 $\pm$ 0.042  $\chi^2/\text{NDF}$ : 22997.6/38

All: -2.993 $\pm$ 0.029  $\chi^2/\text{NDF}$ : 39084.7/73

reg\_asym\_sam\_15\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $5.824 \pm 0.090$   $\chi^2/\text{NDF}$ : 1452.6/16

Left Out:  $1.172 \pm 0.079$   $\chi^2/\text{NDF}$ : 4287.9/19

Right Out:  $6.056 \pm 0.093$   $\chi^2/\text{NDF}$ : 2668.9/18

Left In:  $-0.154 \pm 0.082$   $\chi^2/\text{NDF}$ : 2218.3/17

Left:  $0.529 \pm 0.057$   $\chi^2/\text{NDF}$ : 6642.3/37

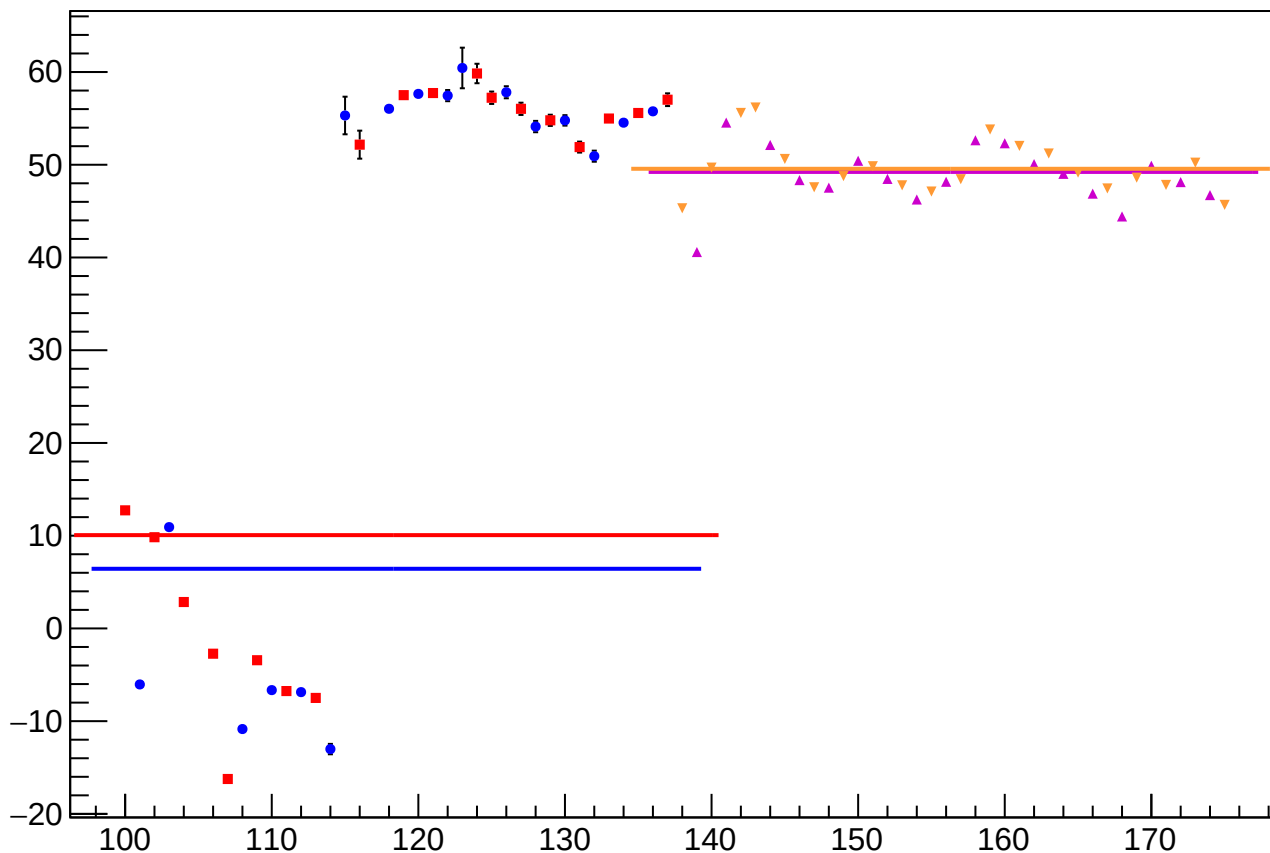
Right:  $5.935 \pm 0.065$   $\chi^2/\text{NDF}$ : 4124.7/35

In:  $2.557 \pm 0.060$   $\chi^2/\text{NDF}$ : 6104.5/34

Out:  $3.216 \pm 0.060$   $\chi^2/\text{NDF}$ : 8549.4/38

All:  $2.886 \pm 0.043$   $\chi^2/\text{NDF}$ : 14713.6/73

reg\_asym\_sam\_15\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $6.432 \pm 0.065$   $\chi^2/\text{NDF}: 123486.3/16$

Left Out:  $49.565 \pm 0.067$   $\chi^2/\text{NDF}: 1499.7/19$

Right Out:  $10.060 \pm 0.070$   $\chi^2/\text{NDF}: 121816.0/18$

Left In:  $49.227 \pm 0.070$   $\chi^2/\text{NDF}: 1506.6/17$

Left:  $49.403 \pm 0.049$   $\chi^2/\text{NDF}: 3018.3/37$

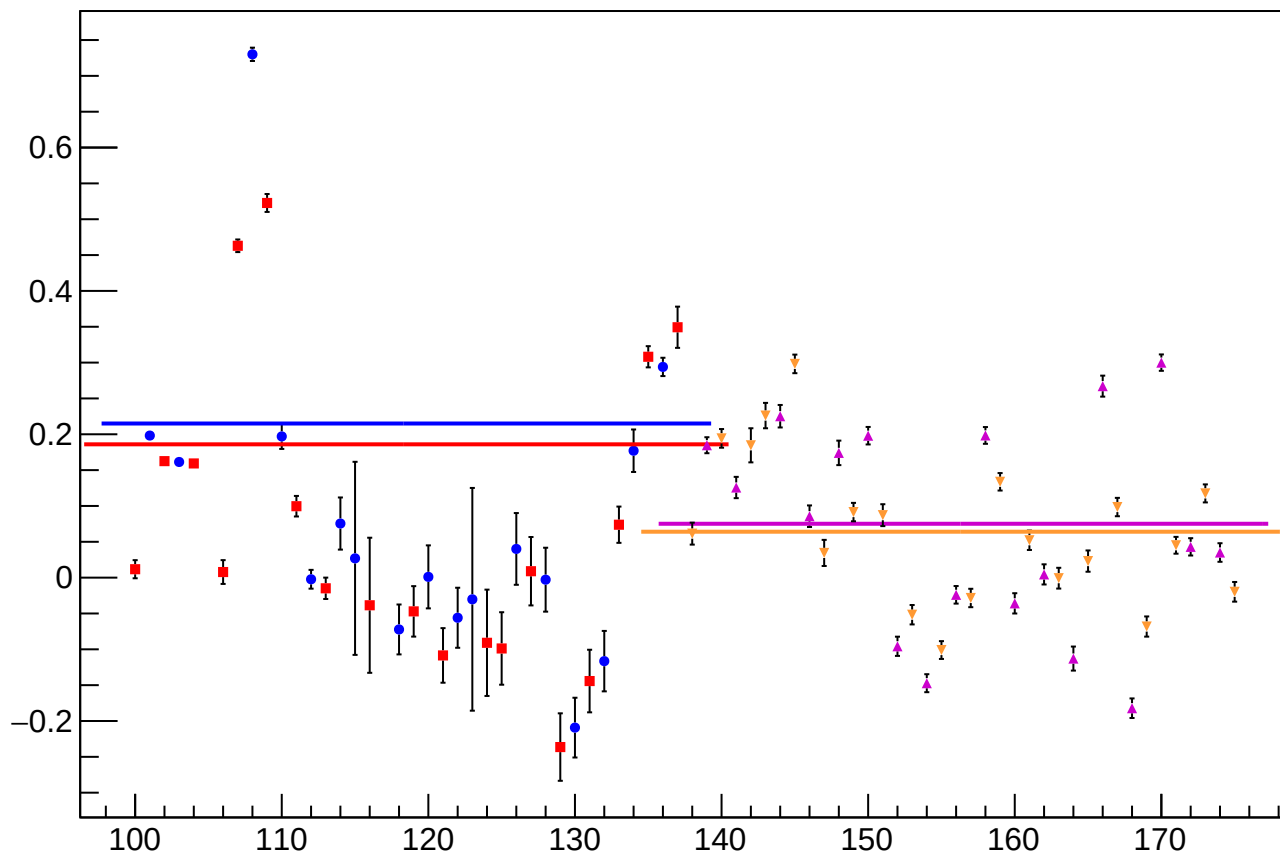
Right:  $8.110 \pm 0.047$   $\chi^2/\text{NDF}: 246756.9/35$

In:  $26.041 \pm 0.048$   $\chi^2/\text{NDF}: 325459.7/34$

Out:  $30.524 \pm 0.048$   $\chi^2/\text{NDF}: 289522.5/38$

All:  $28.245 \pm 0.034$   $\chi^2/\text{NDF}: 619338.6/73$

reg\_asym\_sam\_15\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.215 \pm 0.003$   $\chi^2/\text{NDF}: 3930.1/16$

Left Out:  $0.064 \pm 0.003$   $\chi^2/\text{NDF}: 1061.4/19$

Right Out:  $0.186 \pm 0.003$   $\chi^2/\text{NDF}: 2720.3/18$

Left In:  $0.075 \pm 0.003$   $\chi^2/\text{NDF}: 2131.2/17$

Left:  $0.070 \pm 0.002$   $\chi^2/\text{NDF}: 3198.9/37$

Right:  $0.200 \pm 0.002$   $\chi^2/\text{NDF}: 6707.1/35$

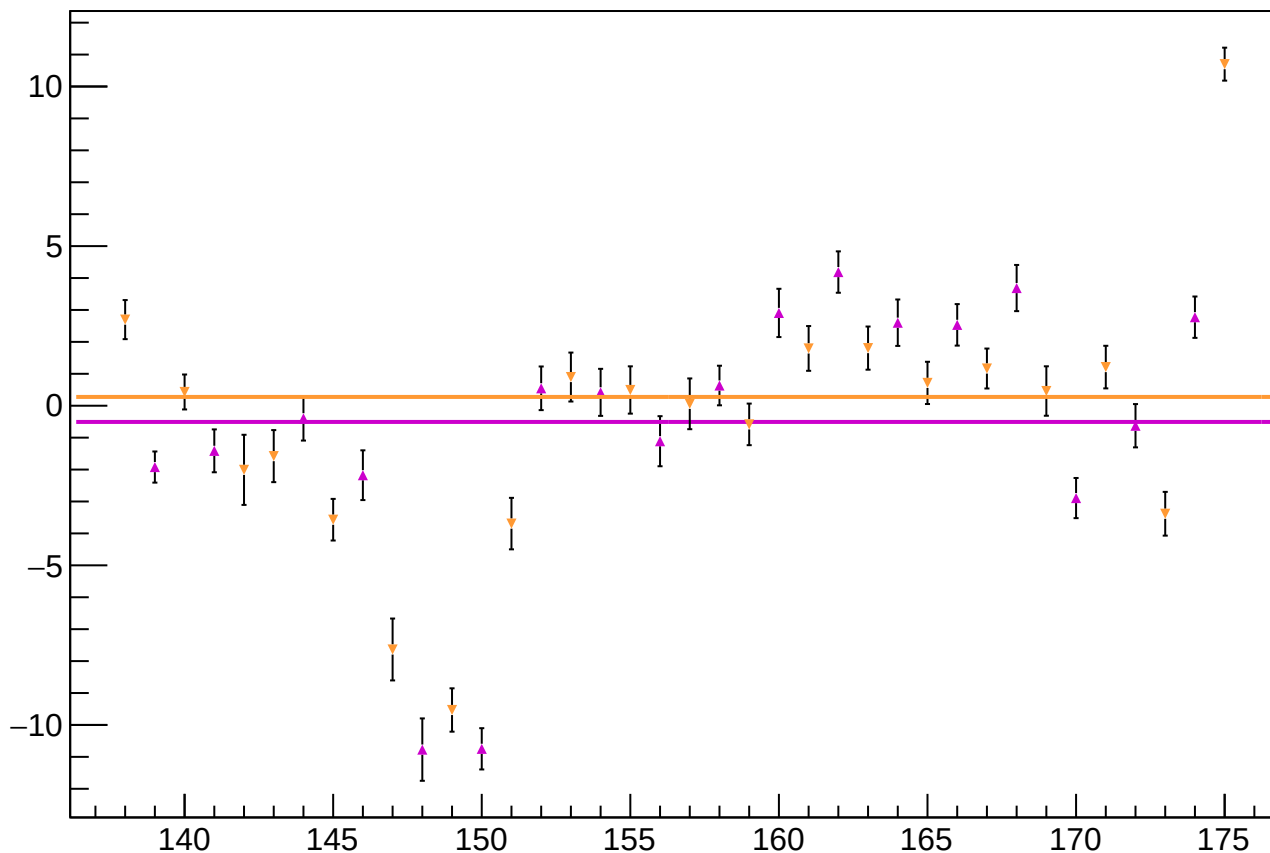
In:  $0.154 \pm 0.002$   $\chi^2/\text{NDF}: 7176.0/34$

Out:  $0.134 \pm 0.002$   $\chi^2/\text{NDF}: 4664.3/38$

All:  $0.144 \pm 0.001$   $\chi^2/\text{NDF}: 11888.9/73$



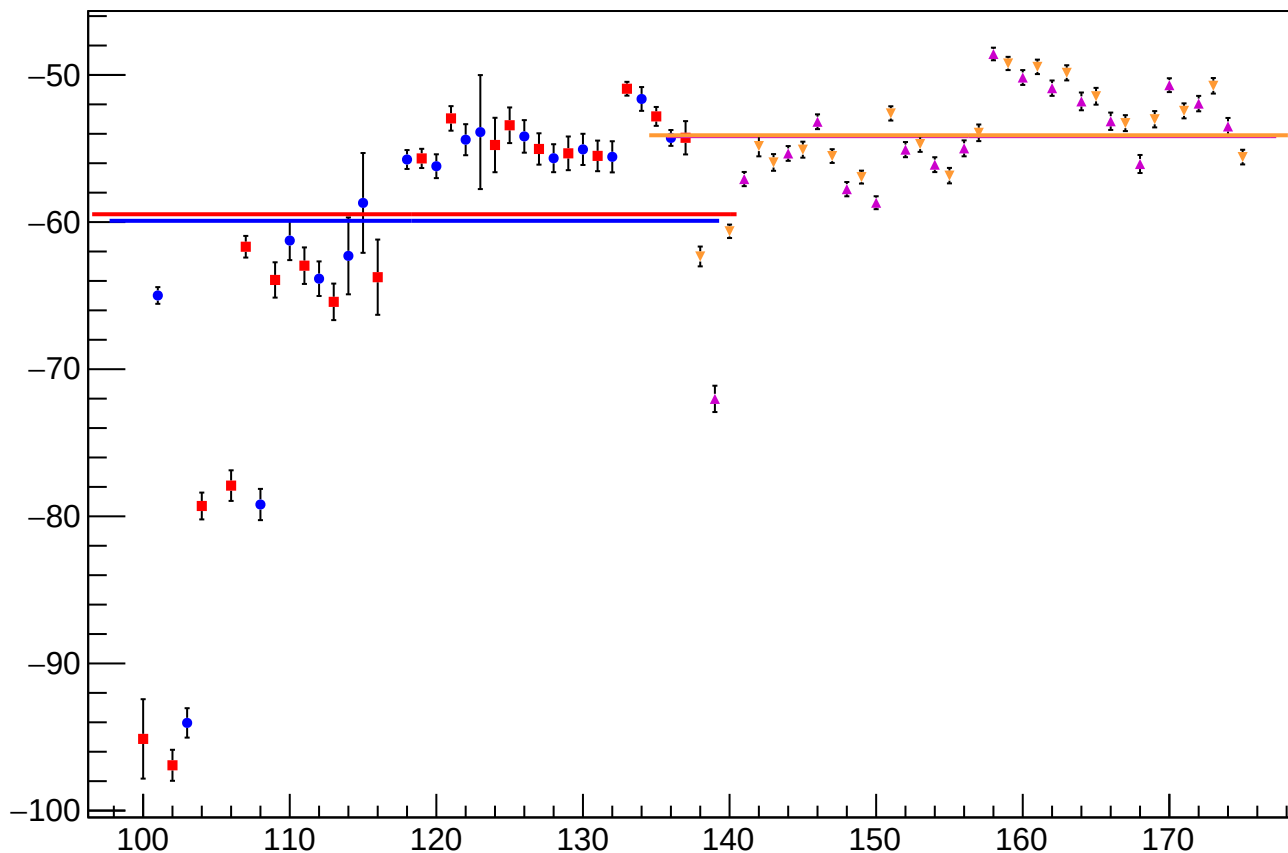
reg\_asym\_sam\_15\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 0.275+/-0.155  $\chi^2/\text{NDF}$ :812.6/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -0.508+/-0.160  $\chi^2/\text{NDF}$ :570.7/17

Left: -0.104+/-0.111  $\chi^2/\text{NDF}$ : 1395.7/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: -0.508+/-0.160  $\chi^2/\text{NDF}$ :570.7/17  
 Out: 0.275+/-0.155  $\chi^2/\text{NDF}$ :812.6/19  
 All: -0.104+/-0.111  $\chi^2/\text{NDF}$ : 1395.7/37

reg\_asym\_sam\_15\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-59.914 \pm 0.223$   $\chi^2/\text{NDF}$ : 1979.5/16

Left Out:  $-54.100 \pm 0.116$   $\chi^2/\text{NDF}$ : 819.8/19

Right Out:  $-59.468 \pm 0.212$   $\chi^2/\text{NDF}$ : 2912.7/18

Left In:  $-54.160 \pm 0.123$   $\chi^2/\text{NDF}$ : 996.7/17

Left:  $-54.129 \pm 0.084$   $\chi^2/\text{NDF}$ : 1816.7/37

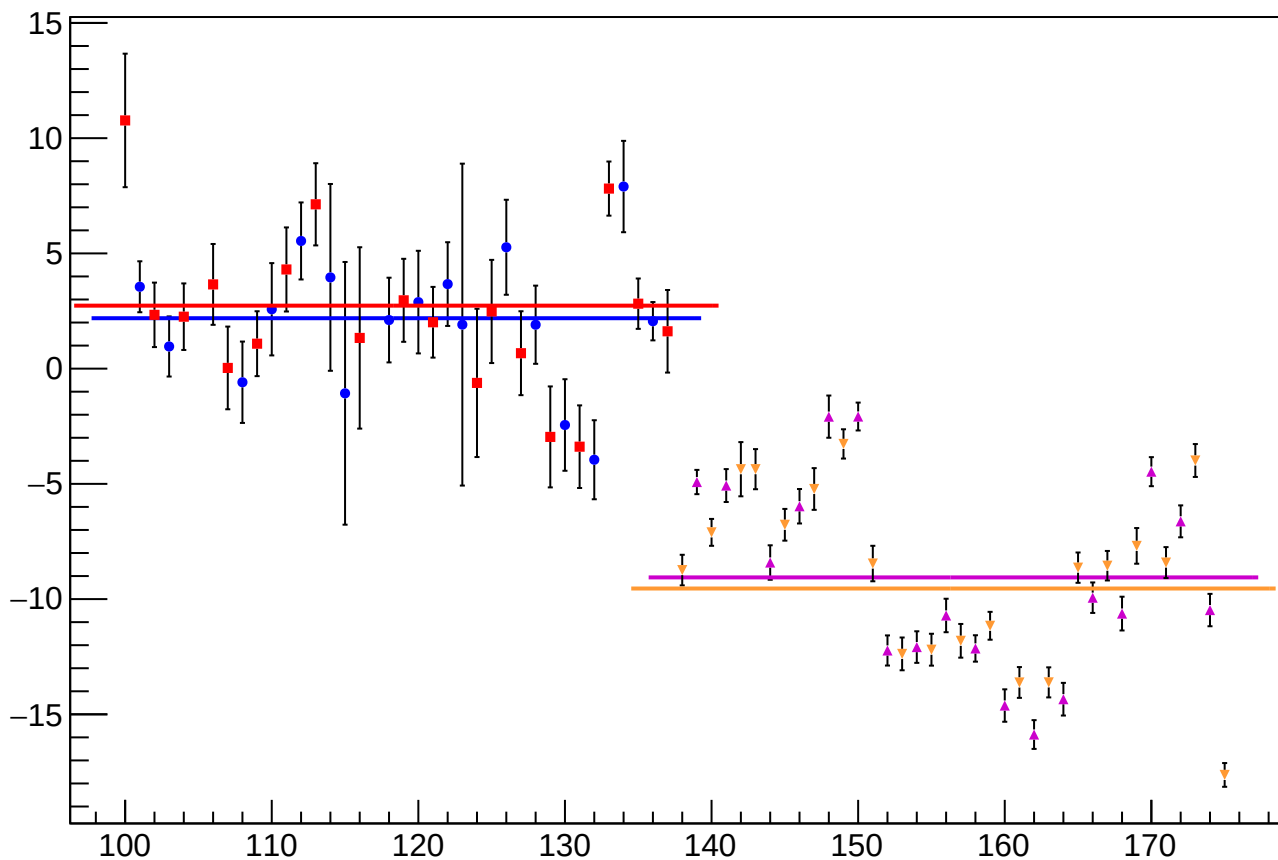
Right:  $-59.680 \pm 0.154$   $\chi^2/\text{NDF}$ : 4894.3/35

In:  $-55.498 \pm 0.108$   $\chi^2/\text{NDF}$ : 3487.3/34

Out:  $-55.342 \pm 0.102$   $\chi^2/\text{NDF}$ : 4224.9/38

All:  $-55.416 \pm 0.074$   $\chi^2/\text{NDF}$ : 7713.3/73

reg\_asym\_sam\_15\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $2.188 \pm 0.404$   $\chi^2/\text{NDF}: 39.1/16$

Left Out:  $-9.541 \pm 0.154$   $\chi^2/\text{NDF}: 655.7/19$

Right Out:  $2.733 \pm 0.388$   $\chi^2/\text{NDF}: 58.9/18$

Left In:  $-9.059 \pm 0.158$   $\chi^2/\text{NDF}: 692.2/17$

Left:  $-9.307 \pm 0.110$   $\chi^2/\text{NDF}: 1352.7/37$

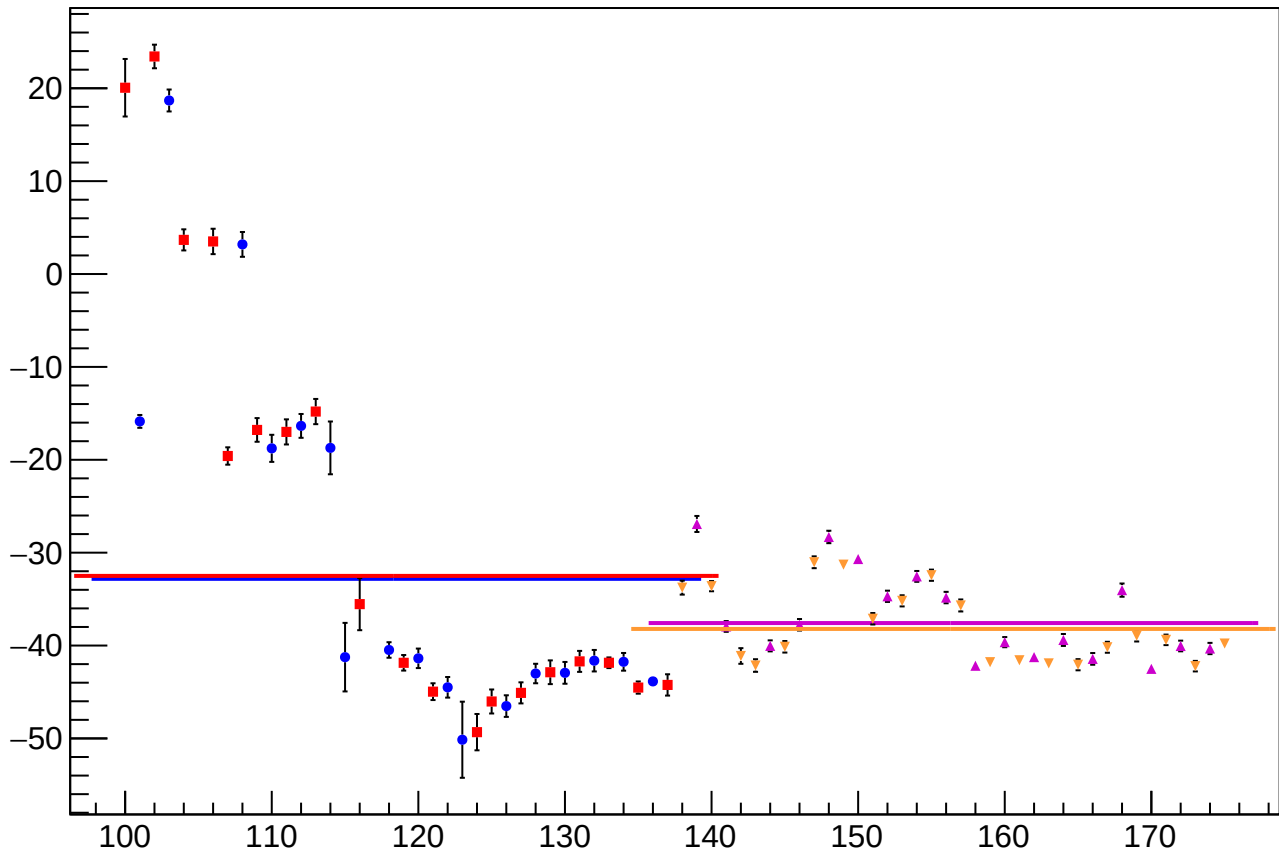
Right:  $2.472 \pm 0.280$   $\chi^2/\text{NDF}: 98.9/35$

In:  $-7.560 \pm 0.148$   $\chi^2/\text{NDF}: 1402.7/34$

Out:  $-7.875 \pm 0.143$   $\chi^2/\text{NDF}: 1581.1/38$

All:  $-7.723 \pm 0.103$   $\chi^2/\text{NDF}: 2986.1/73$

reg\_asym\_sam\_15\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-32.817 \pm 0.254$   $\chi^2/\text{NDF}: 4666.6/16$

Left Out:  $-38.212 \pm 0.132$   $\chi^2/\text{NDF}: 856.0/19$

Right Out:  $-32.501 \pm 0.244$   $\chi^2/\text{NDF}: 6037.9/18$

Left In:  $-37.578 \pm 0.138$   $\chi^2/\text{NDF}: 1027.4/17$

Left:  $-37.910 \pm 0.095$   $\chi^2/\text{NDF}: 1894.4/37$

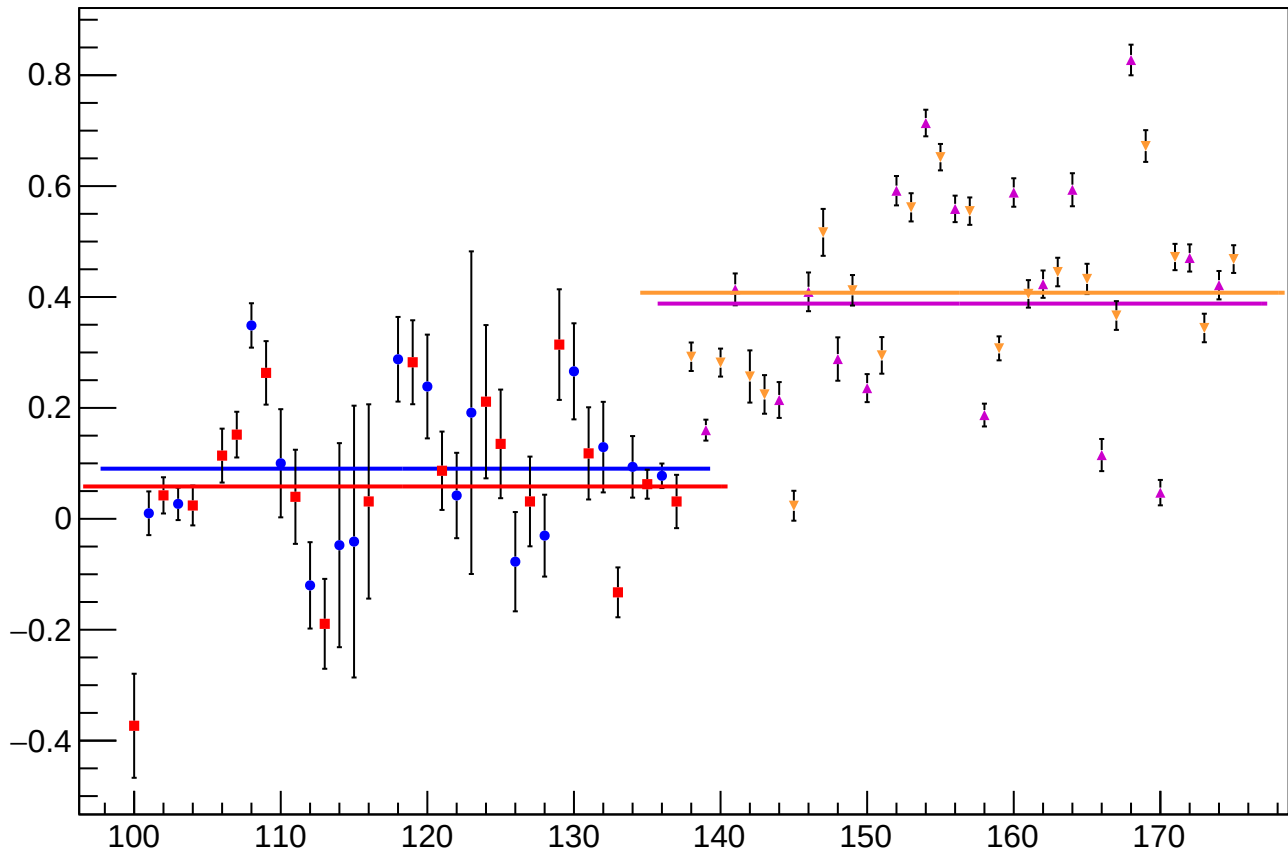
Right:  $-32.652 \pm 0.176$   $\chi^2/\text{NDF}: 10705.2/35$

In:  $-36.489 \pm 0.121$   $\chi^2/\text{NDF}: 5965.0/34$

Out:  $-36.919 \pm 0.116$   $\chi^2/\text{NDF}: 7317.8/38$

All:  $-36.714 \pm 0.084$   $\chi^2/\text{NDF}: 13289.4/73$

reg\_asym\_sam\_15\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.090 \pm 0.013$   $\chi^2/\text{NDF}: 79.2/16$

Left Out:  $0.408 \pm 0.006$   $\chi^2/\text{NDF}: 613.3/19$

Right Out:  $0.058 \pm 0.012$   $\chi^2/\text{NDF}: 87.3/18$

Left In:  $0.388 \pm 0.006$   $\chi^2/\text{NDF}: 1295.8/17$

Left:  $0.398 \pm 0.004$   $\chi^2/\text{NDF}: 1914.4/37$

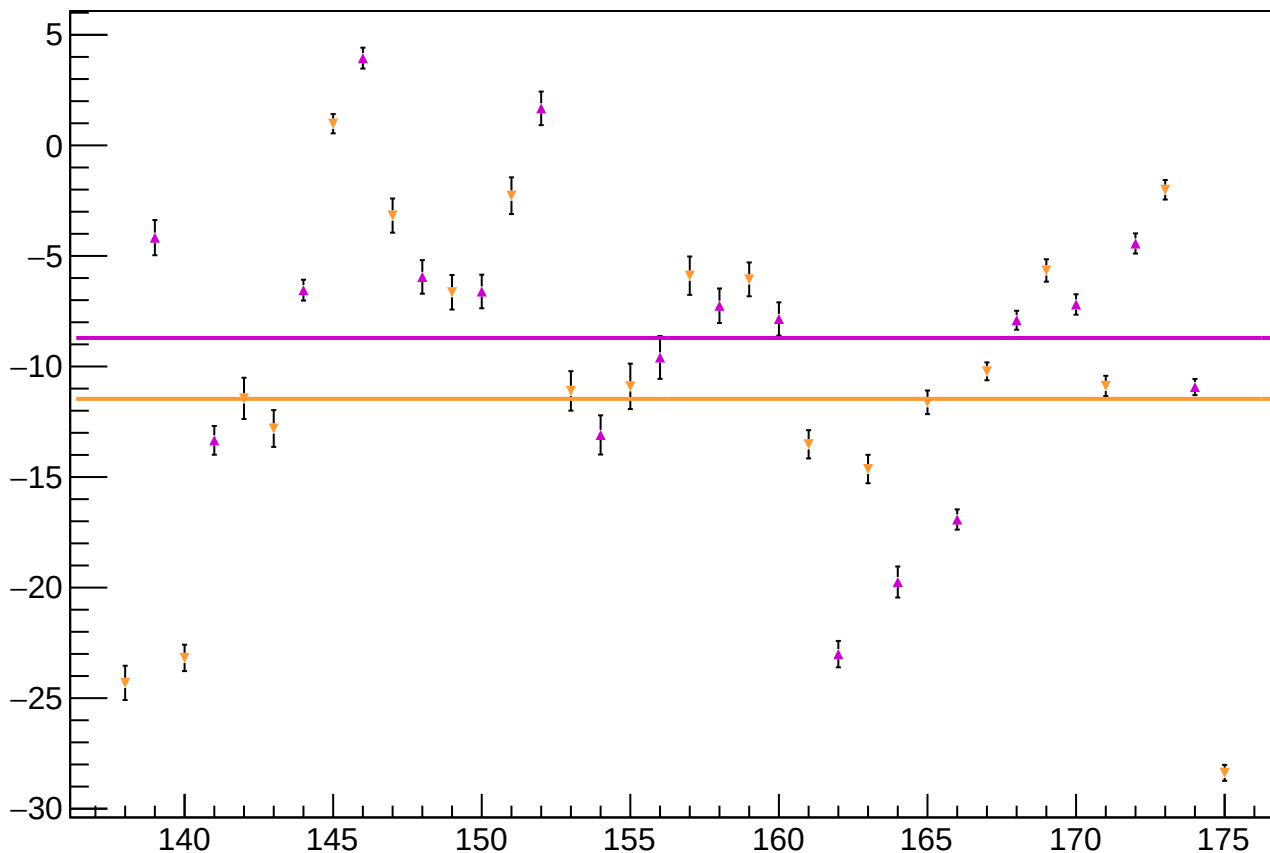
Right:  $0.074 \pm 0.009$   $\chi^2/\text{NDF}: 169.9/35$

In:  $0.333 \pm 0.005$   $\chi^2/\text{NDF}: 1821.3/34$

Out:  $0.339 \pm 0.005$   $\chi^2/\text{NDF}: 1365.6/38$

All:  $0.336 \pm 0.004$   $\chi^2/\text{NDF}: 3187.5/73$

reg\_asym\_sam\_37\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-11.465 \pm 0.131$   $\chi^2/\text{NDF}$ : 4684.0/19

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left In:  $-8.710 \pm 0.134$   $\chi^2/\text{NDF}$ : 2342.9/17

Left:  $-10.116 \pm 0.094$   $\chi^2/\text{NDF}$ : 7243.5/37

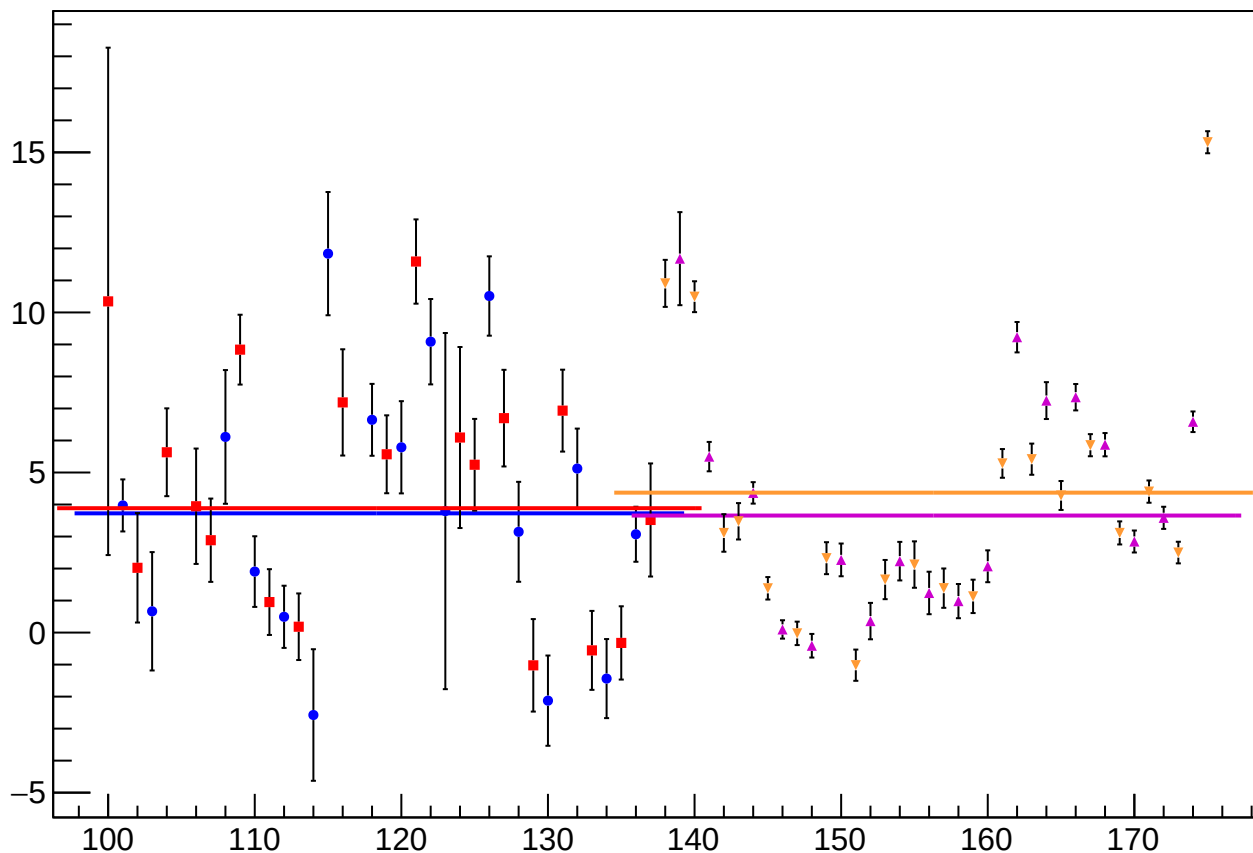
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

In:  $-8.710 \pm 0.134$   $\chi^2/\text{NDF}$ : 2342.9/17

Out:  $-11.465 \pm 0.131$   $\chi^2/\text{NDF}$ : 4684.0/19

All:  $-10.116 \pm 0.094$   $\chi^2/\text{NDF}$ : 7243.5/37

reg\_asym\_sam\_37\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $3.725 \pm 0.308$   $\chi^2/\text{NDF}: 136.8/16$

Left Out:  $4.371 \pm 0.099$   $\chi^2/\text{NDF}: 1773.6/19$

Right Out:  $3.885 \pm 0.316$   $\chi^2/\text{NDF}: 134.4/18$

Left In:  $3.656 \pm 0.100$   $\chi^2/\text{NDF}: 803.7/17$

Left:  $4.017 \pm 0.070$   $\chi^2/\text{NDF}: 2603.2/37$

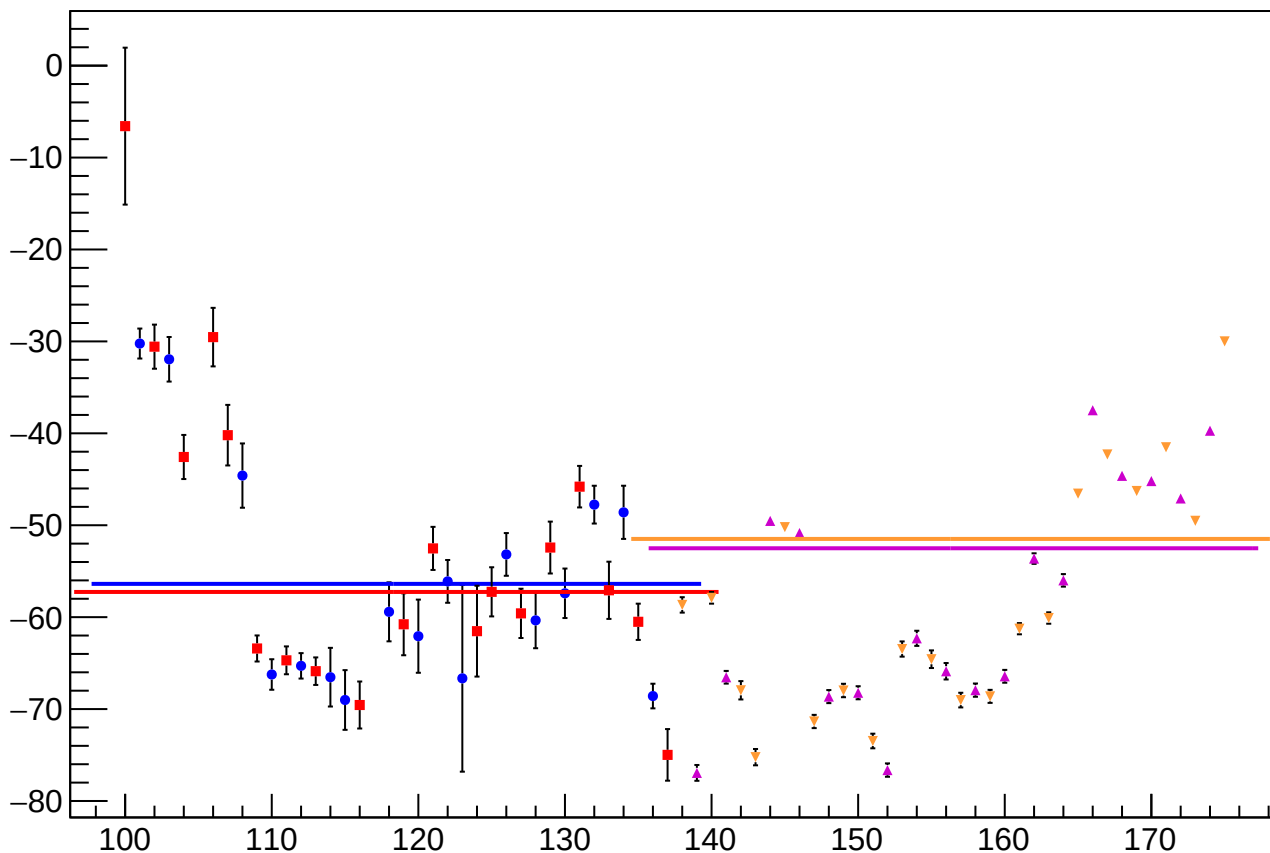
Right:  $3.803 \pm 0.221$   $\chi^2/\text{NDF}: 271.3/35$

In:  $3.662 \pm 0.095$   $\chi^2/\text{NDF}: 940.5/34$

Out:  $4.328 \pm 0.094$   $\chi^2/\text{NDF}: 1910.1/38$

All:  $3.997 \pm 0.067$   $\chi^2/\text{NDF}: 2875.3/73$

reg\_asym\_sam\_37\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -56.379 $\pm$ 0.542  $\chi^2$ /NDF: 587.4/16

Left Out: -51.488 $\pm$ 0.131  $\chi^2$ /NDF: 9814.8/19

Right Out: -57.258 $\pm$ 0.536  $\chi^2$ /NDF: 476.1/18

Left In: -52.506 $\pm$ 0.134  $\chi^2$ /NDF: 7418.9/17

Left: -51.986 $\pm$ 0.094  $\chi^2$ /NDF: 17263.0/37

Right: -56.823 $\pm$ 0.381  $\chi^2$ /NDF: 1064.8/35

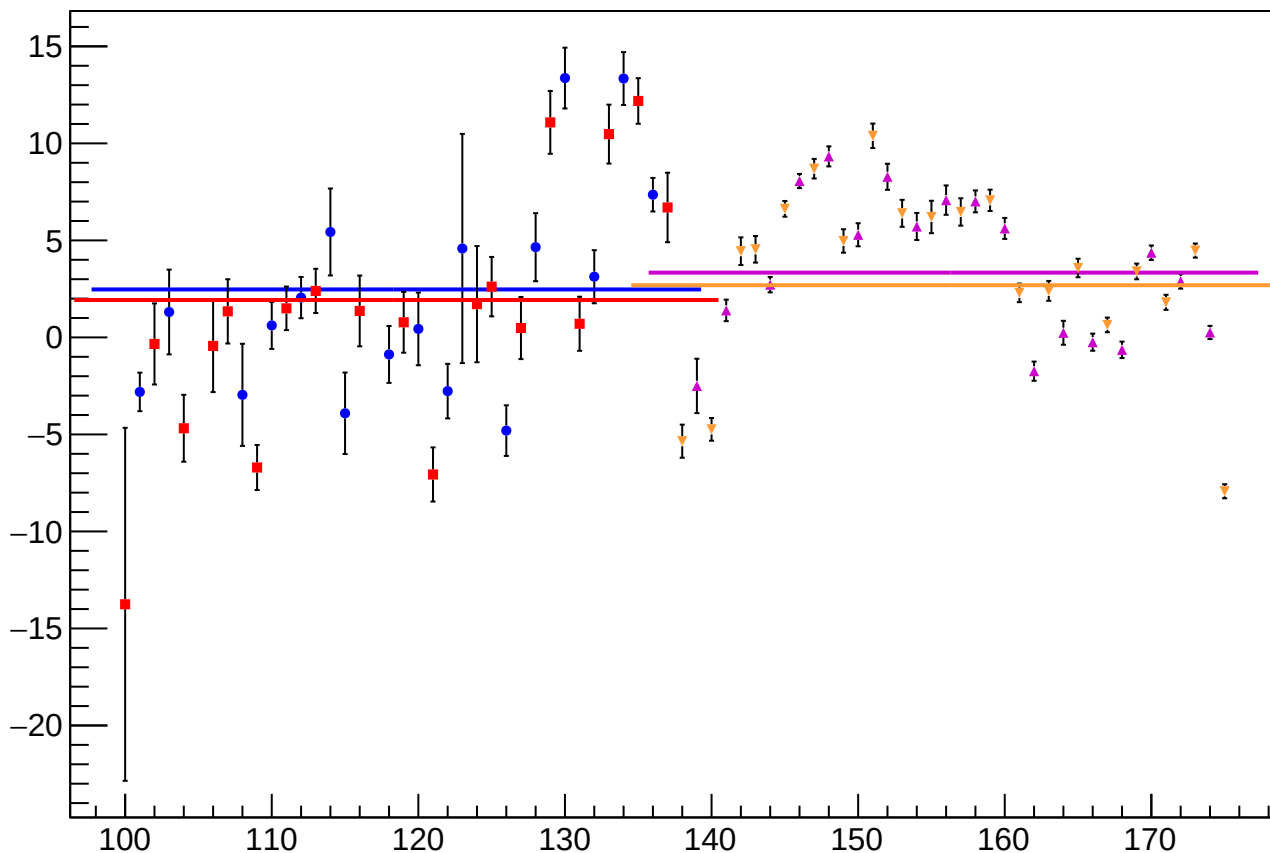
In: -52.730 $\pm$ 0.130  $\chi^2$ /NDF: 8054.4/34

Out: -51.815 $\pm$ 0.128  $\chi^2$ /NDF: 10400.2/38

All: -52.263 $\pm$ 0.091  $\chi^2$ /NDF: 18479.7/73



reg\_asym\_sam\_37\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 2.473+/-0.345  $\chi^2/\text{NDF}$ : 243.6/16

Left Out: 2.690+/-0.112  $\chi^2/\text{NDF}$ :1727.6/19

Right Out: 1.928+/-0.355  $\chi^2/\text{NDF}$ : 266.6/18

Left In: 3.338+/-0.114  $\chi^2/\text{NDF}$ :871.7/17

Left: 3.008+/-0.080  $\chi^2/\text{NDF}$ : 2615.8/37

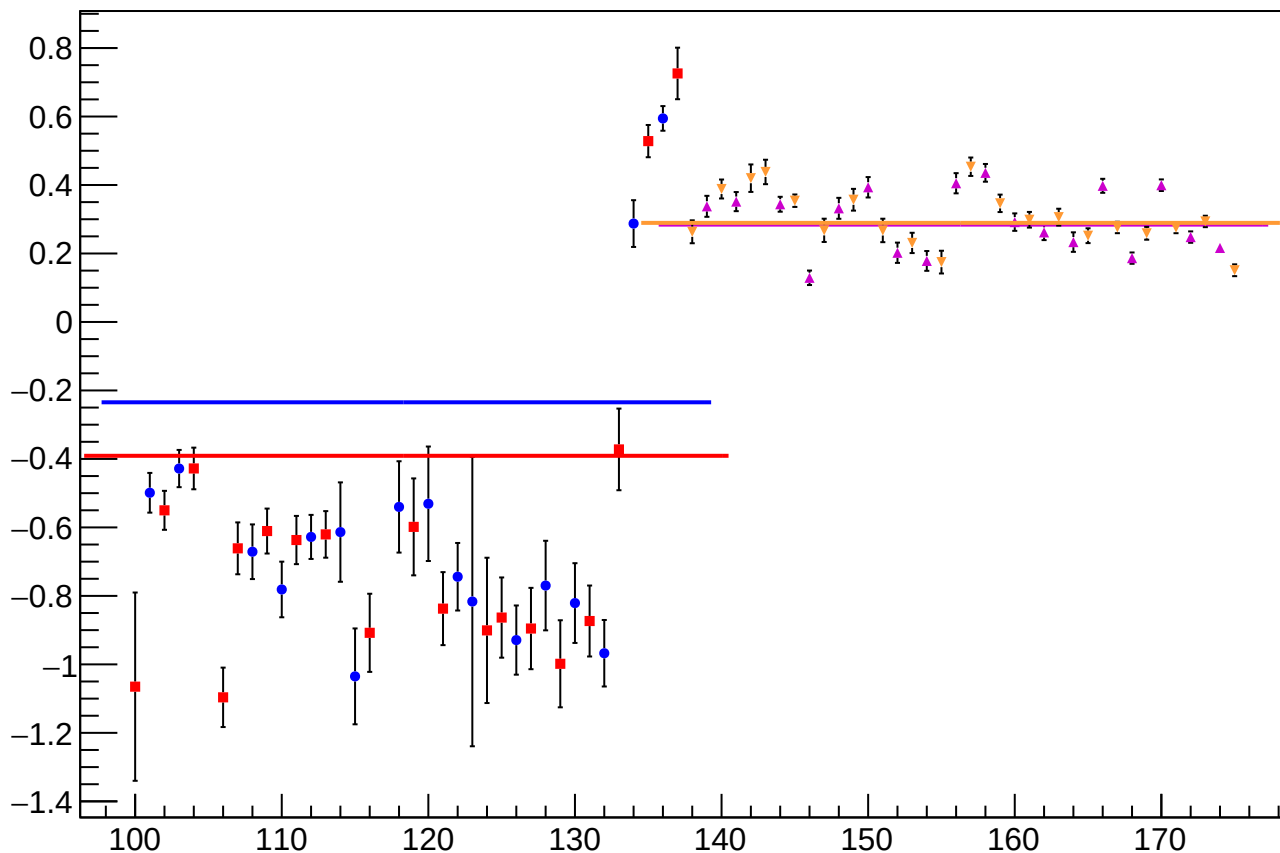
Right: 2.208+/-0.248  $\chi^2/\text{NDF}$ : 511.4/35

In: 3.253+/-0.108  $\chi^2/\text{NDF}$ :1121.0/34

Out: 2.621+/-0.107  $\chi^2/\text{NDF}$ :1998.4/38

All: 2.933+/-0.076  $\chi^2/\text{NDF}$ : 3136.7/73

reg\_asym\_sam\_37\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.235 \pm 0.019$   $\chi^2/\text{NDF}$ : 958.4/16

Left Out:  $0.289 \pm 0.005$   $\chi^2/\text{NDF}$ : 189.2/19

Right Out:  $-0.391 \pm 0.019$   $\chi^2/\text{NDF}$ : 853.3/18

Left In:  $0.284 \pm 0.005$   $\chi^2/\text{NDF}$ : 301.4/17

Left:  $0.287 \pm 0.004$   $\chi^2/\text{NDF}$ : 491.2/37

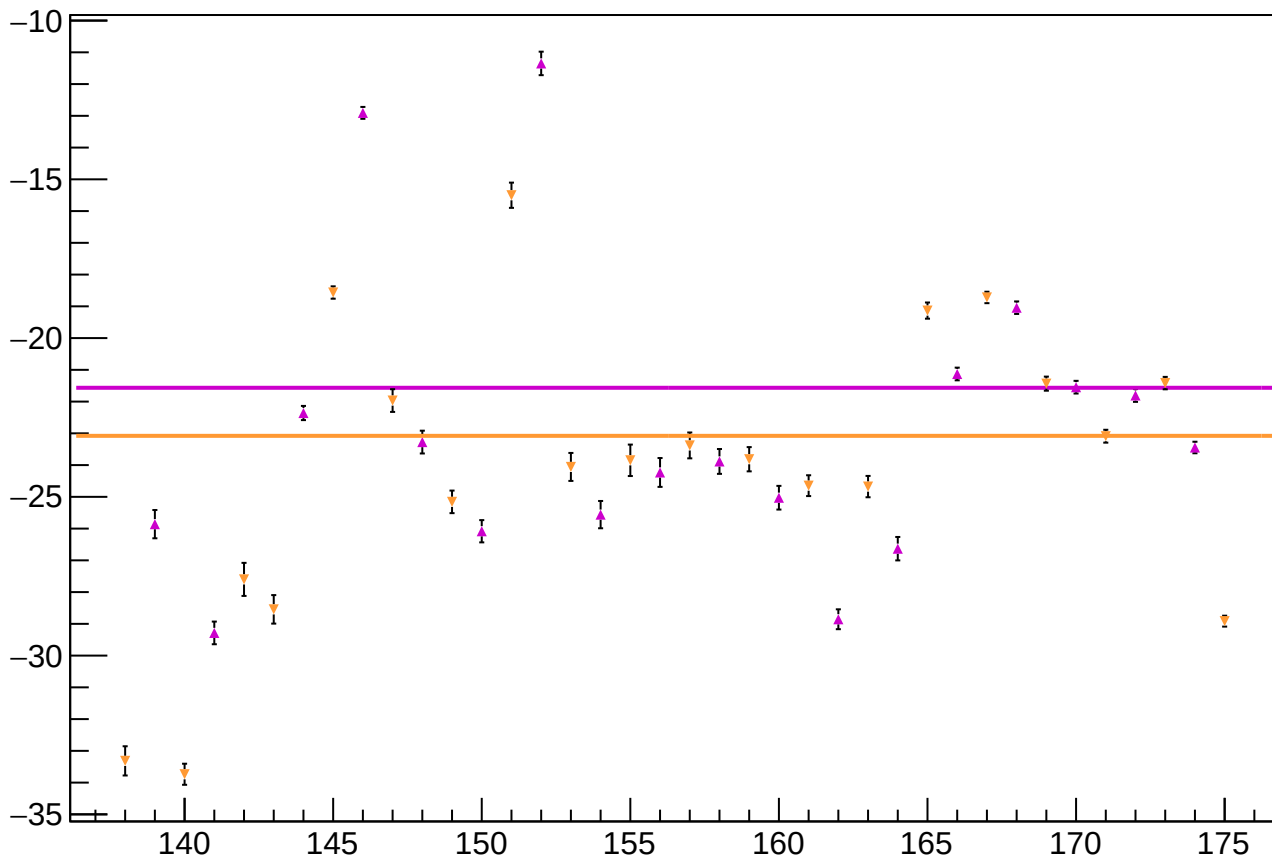
Right:  $-0.312 \pm 0.013$   $\chi^2/\text{NDF}$ : 1845.8/35

In:  $0.247 \pm 0.005$   $\chi^2/\text{NDF}$ : 1962.0/34

Out:  $0.242 \pm 0.005$   $\chi^2/\text{NDF}$ : 2240.6/38

All:  $0.245 \pm 0.004$   $\chi^2/\text{NDF}$ : 4203.1/73

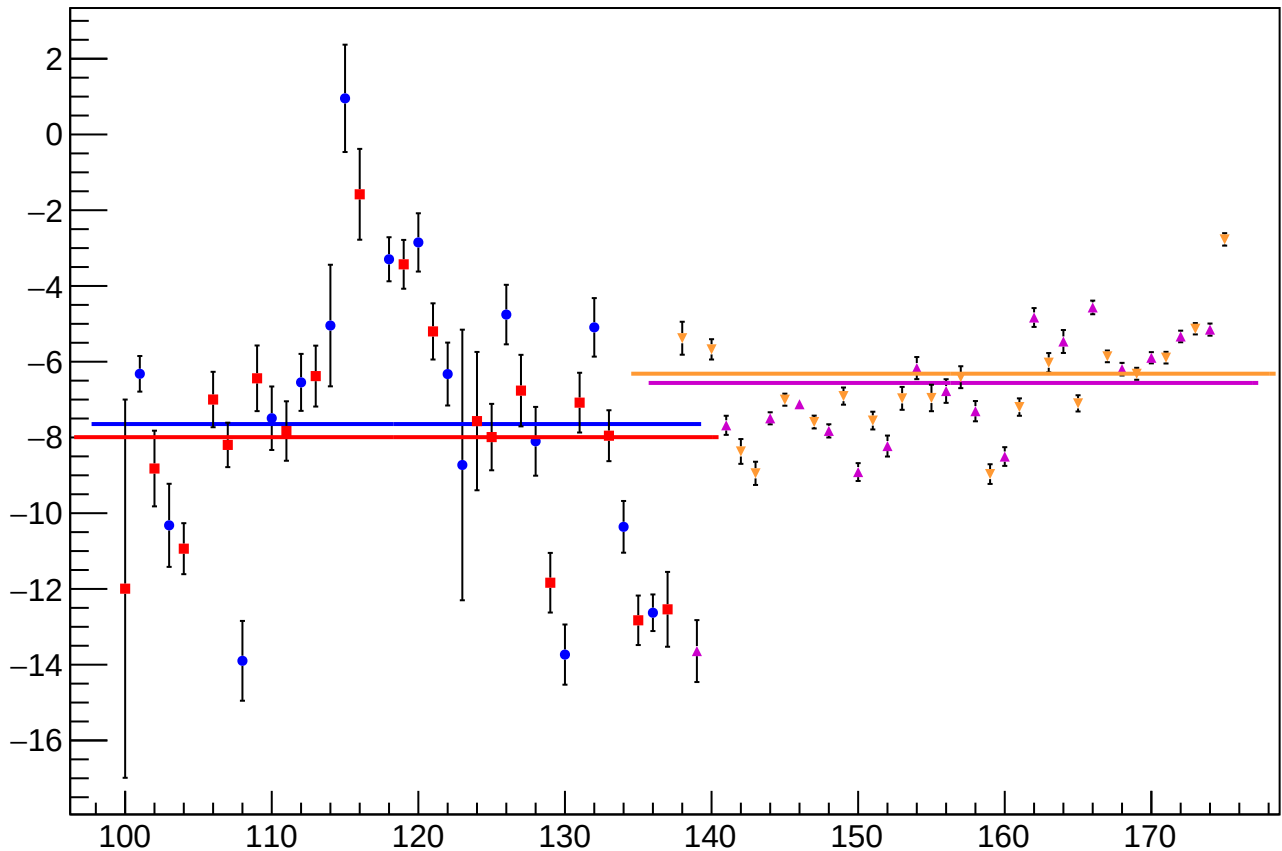
reg\_asym\_sam\_37\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -23.079+/-0.062  $\chi^2/\text{NDF}$ :4854.0/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -21.565+/-0.062  $\chi^2/\text{NDF}$ :4909.2/17

Left: -22.329+/-0.044  $\chi^2/\text{NDF}$ : 10060.2/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: -21.565+/-0.062  $\chi^2/\text{NDF}$ :4909.2/17  
 Out: -23.079+/-0.062  $\chi^2/\text{NDF}$ :4854.0/19  
 All: -22.329+/-0.044  $\chi^2/\text{NDF}$ : 10060.2/37

reg\_asym\_sam\_37\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-7.646 \pm 0.186$   $\chi^2/\text{NDF}$ : 393.6/16

Left Out:  $-6.316 \pm 0.047$   $\chi^2/\text{NDF}$ : 918.8/19

Right Out:  $-7.992 \pm 0.186$   $\chi^2/\text{NDF}$ : 225.5/18

Left In:  $-6.561 \pm 0.046$   $\chi^2/\text{NDF}$ : 762.7/17

Left:  $-6.440 \pm 0.033$   $\chi^2/\text{NDF}$ : 1695.2/37

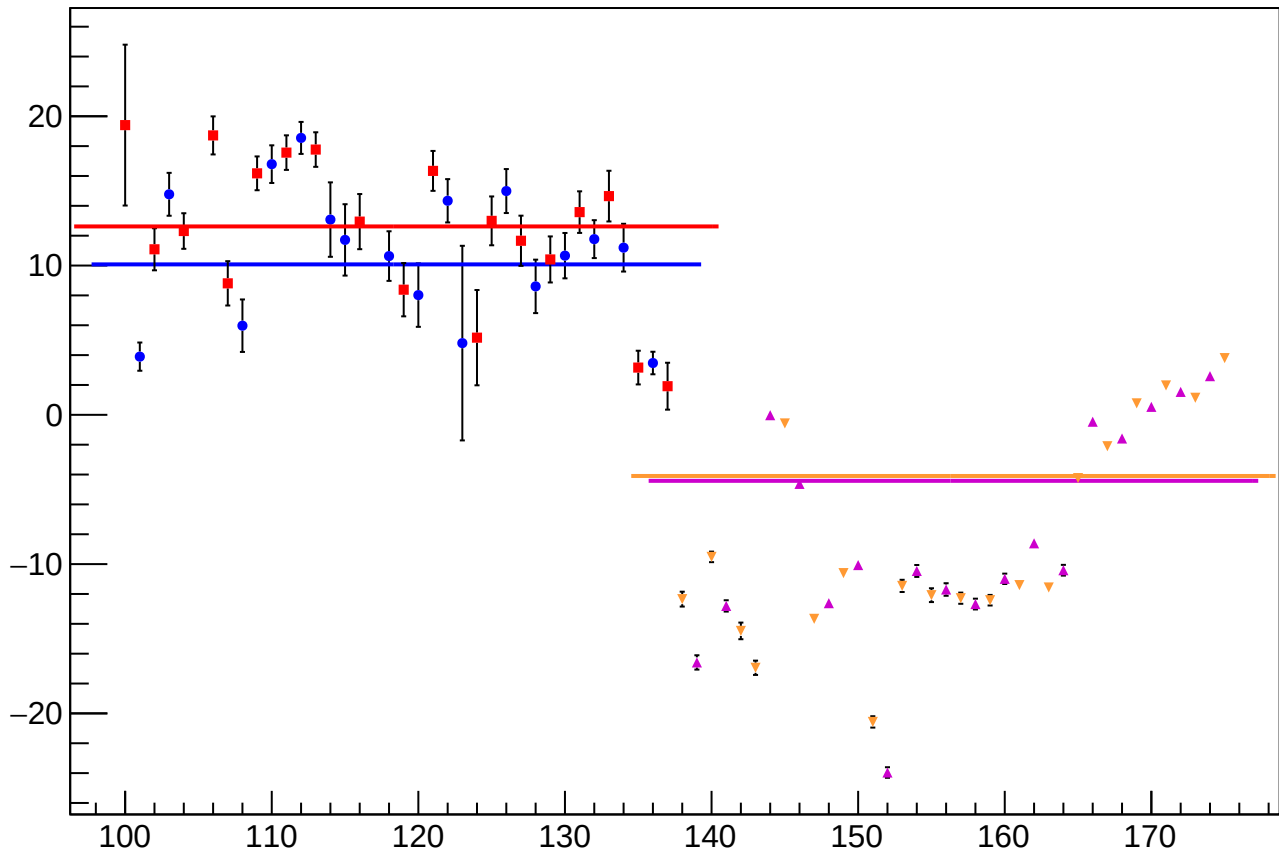
Right:  $-7.819 \pm 0.131$   $\chi^2/\text{NDF}$ : 620.8/35

In:  $-6.624 \pm 0.045$   $\chi^2/\text{NDF}$ : 1188.5/34

Out:  $-6.416 \pm 0.045$   $\chi^2/\text{NDF}$ : 1220.7/38

All:  $-6.521 \pm 0.032$   $\chi^2/\text{NDF}$ : 2419.8/73

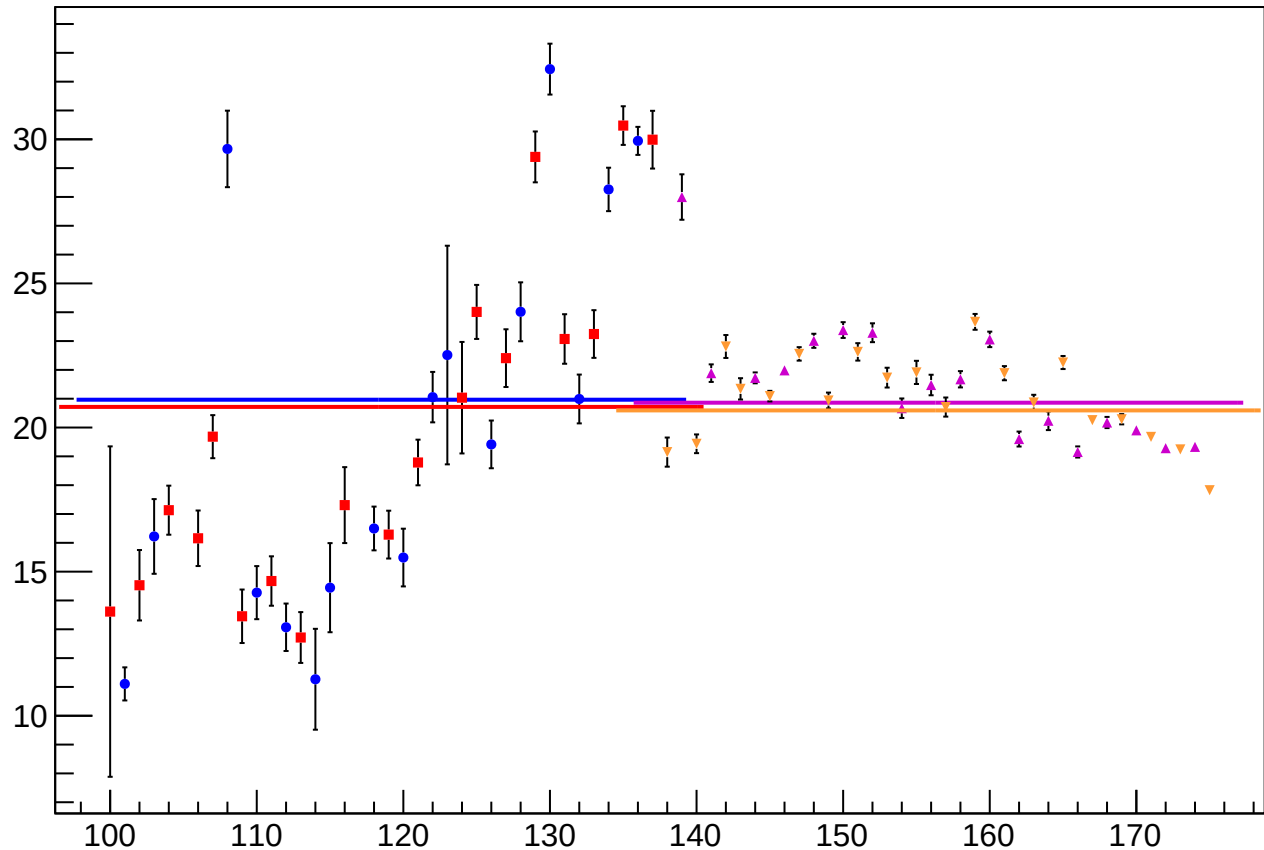
reg\_asym\_sam\_37\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $10.077 \pm 0.337$   $\chi^2/\text{NDF}: 252.8/16$   
 Left Out:  $-4.096 \pm 0.062$   $\chi^2/\text{NDF}: 11915.1/19$   
 Right Out:  $12.620 \pm 0.332$   $\chi^2/\text{NDF}: 220.0/18$   
 Left In:  $-4.421 \pm 0.063$   $\chi^2/\text{NDF}: 10574.9/17$

Left:  $-4.257 \pm 0.044$   $\chi^2/\text{NDF}: 22503.6/37$   
 Right:  $11.365 \pm 0.237$   $\chi^2/\text{NDF}: 501.6/35$   
 In:  $-3.938 \pm 0.061$   $\chi^2/\text{NDF}: 12619.3/34$   
 Out:  $-3.535 \pm 0.061$   $\chi^2/\text{NDF}: 14578.6/38$   
 All:  $-3.735 \pm 0.043$   $\chi^2/\text{NDF}: 27219.6/73$

reg\_asym\_sam\_37\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 20.965 $\pm$ 0.209  $\chi^2$ /NDF: 1225.5/16

Left Out: 20.594 $\pm$ 0.053  $\chi^2$ /NDF: 772.2/19

Right Out: 20.716 $\pm$ 0.213  $\chi^2$ /NDF: 729.9/18

Left In: 20.862 $\pm$ 0.053  $\chi^2$ /NDF: 791.2/17

Left: 20.727 $\pm$ 0.037  $\chi^2$ /NDF: 1576.2/37

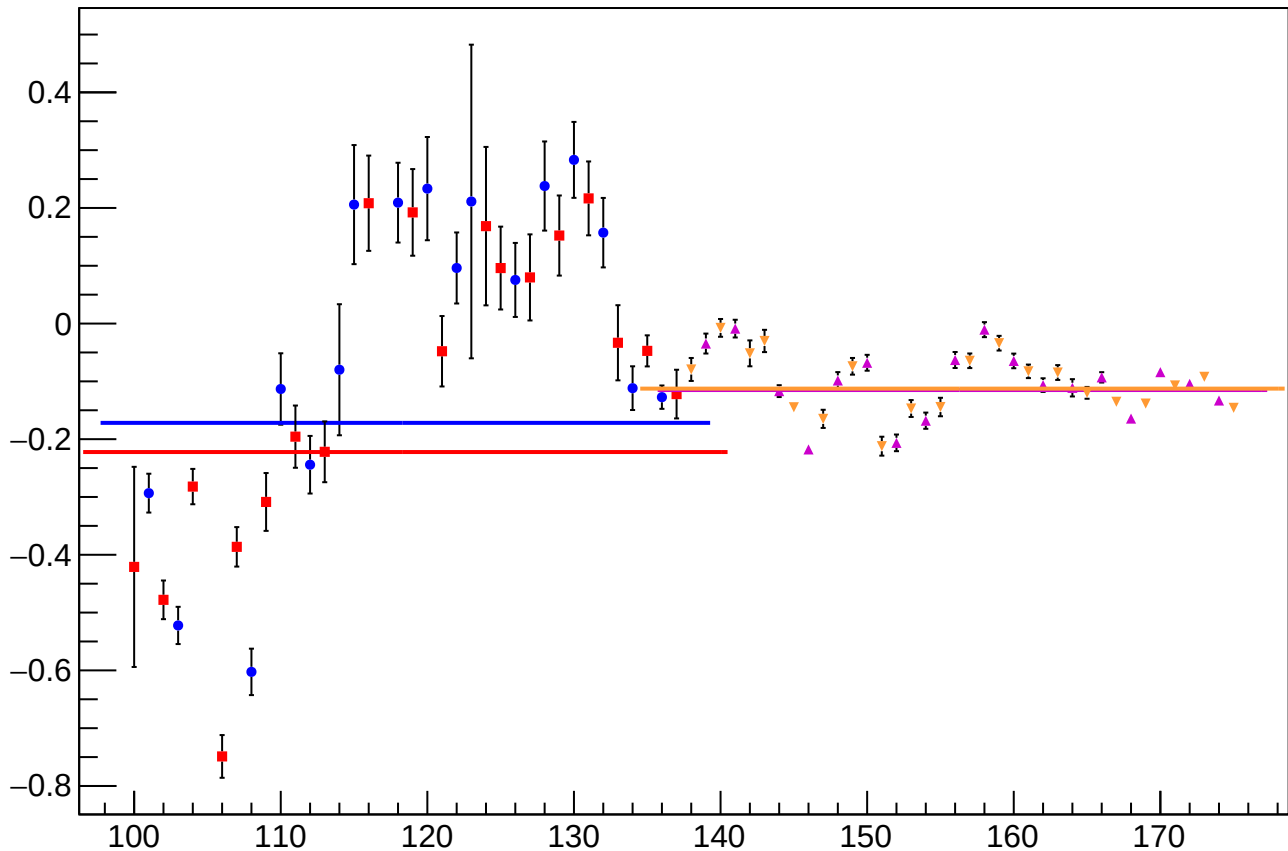
Right: 20.842 $\pm$ 0.149  $\chi^2$ /NDF: 1956.1/35

In: 20.868 $\pm$ 0.051  $\chi^2$ /NDF: 2016.9/34

Out: 20.601 $\pm$ 0.051  $\chi^2$ /NDF: 1502.4/38

All: 20.734 $\pm$ 0.036  $\chi^2$ /NDF: 3532.8/73

reg\_asym\_sam\_37\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.172 \pm 0.011$   $\chi^2/\text{NDF}$ : 464.2/16

Left Out:  $-0.113 \pm 0.002$   $\chi^2/\text{NDF}$ : 263.8/19

Right Out:  $-0.222 \pm 0.011$   $\chi^2/\text{NDF}$ : 536.1/18

Left In:  $-0.115 \pm 0.002$   $\chi^2/\text{NDF}$ : 455.9/17

Left:  $-0.114 \pm 0.002$   $\chi^2/\text{NDF}$ : 720.2/37

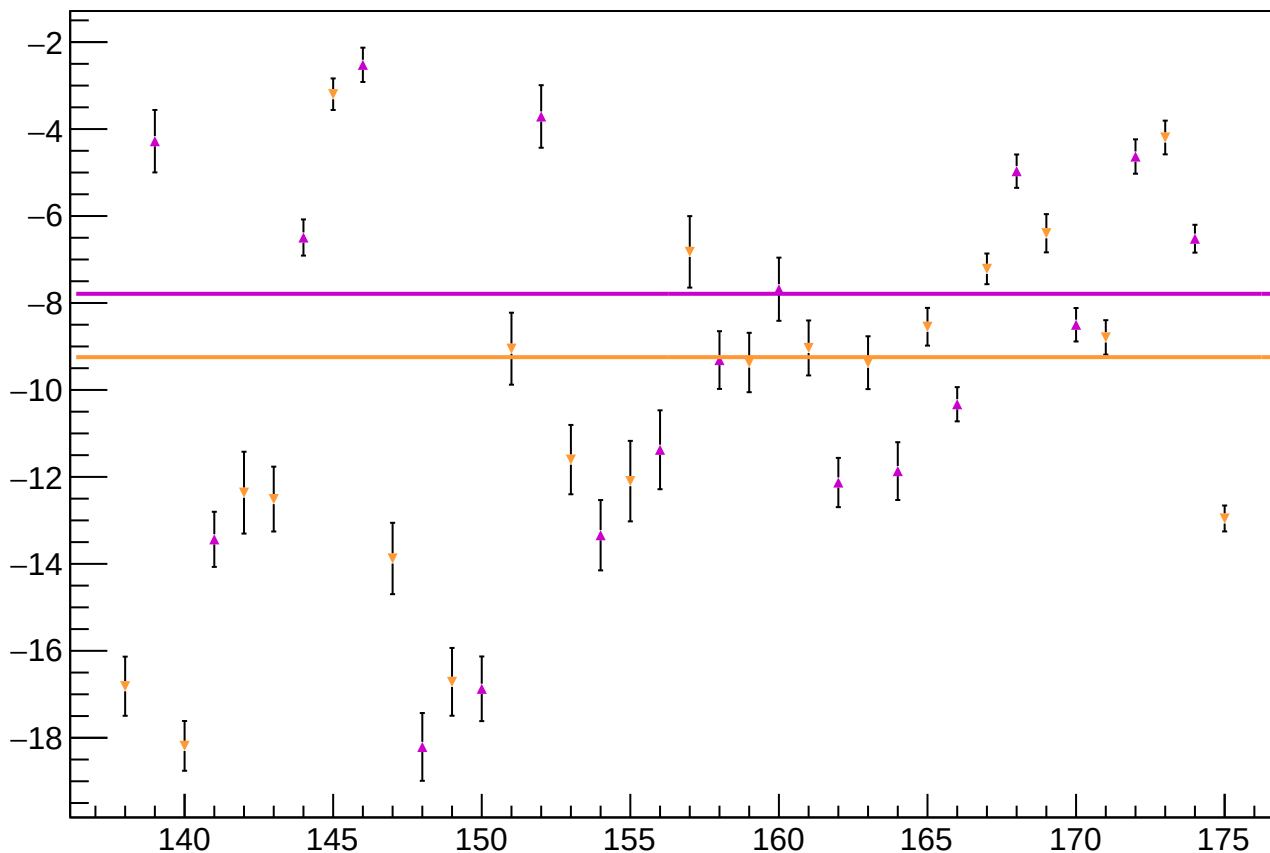
Right:  $-0.198 \pm 0.008$   $\chi^2/\text{NDF}$ : 1010.7/35

In:  $-0.118 \pm 0.002$   $\chi^2/\text{NDF}$ : 944.7/34

Out:  $-0.118 \pm 0.002$   $\chi^2/\text{NDF}$ : 895.7/38

All:  $-0.118 \pm 0.002$   $\chi^2/\text{NDF}$ : 1840.4/73

reg\_asym\_sam\_26\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected

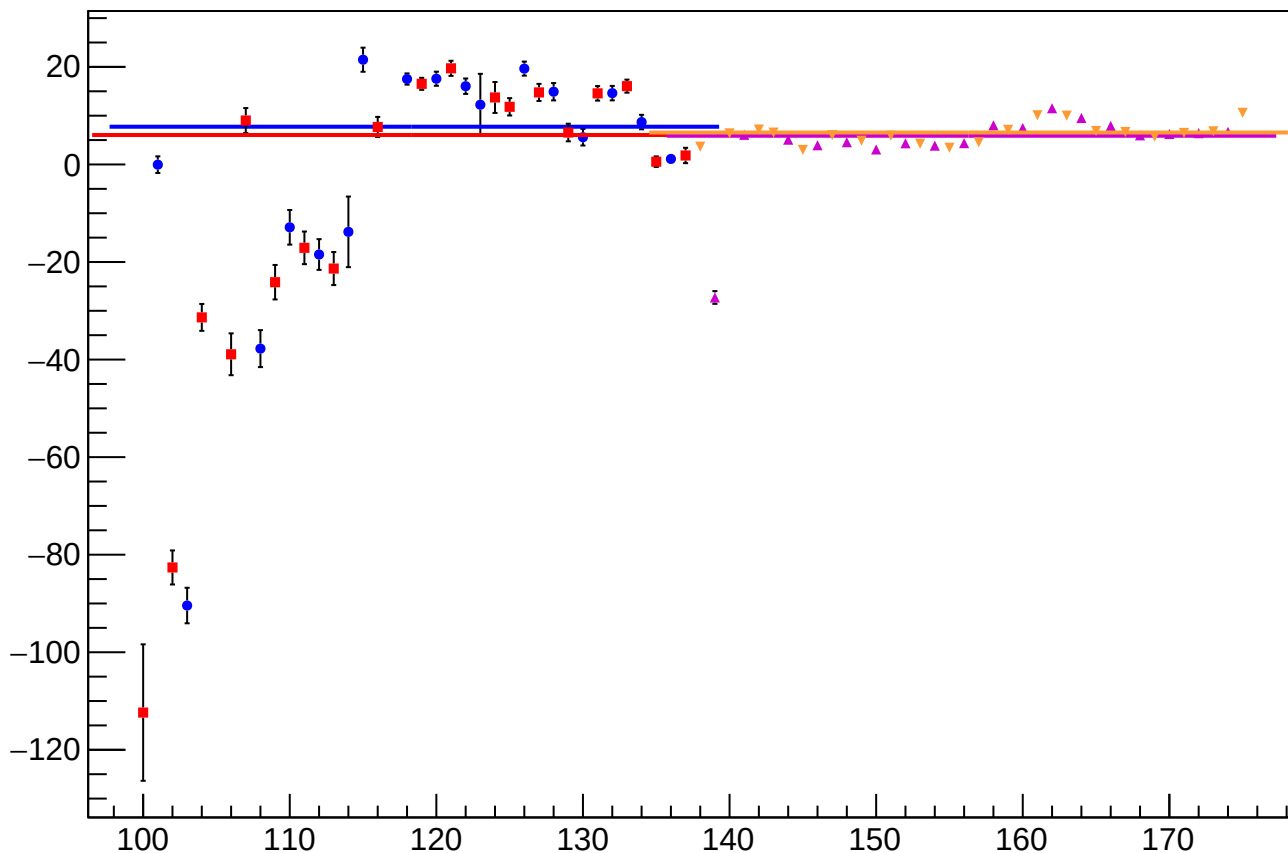


Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -9.246 $\pm$ 0.116  $\chi^2/\text{NDF}$ :1230.9/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -7.789 $\pm$ 0.119  $\chi^2/\text{NDF}$ :994.2/17

Left: -8.539 $\pm$ 0.083  $\chi^2/\text{NDF}$ : 2302.1/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: -7.789 $\pm$ 0.119  $\chi^2/\text{NDF}$ :994.2/17  
 Out: -9.246 $\pm$ 0.116  $\chi^2/\text{NDF}$ :1230.9/19  
 All: -8.539 $\pm$ 0.083  $\chi^2/\text{NDF}$ : 2302.1/37



reg\_asym\_sam\_26\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $7.736 \pm 0.403$   $\chi^2/\text{NDF}: 1358.4/16$

Left Out:  $6.553 \pm 0.089$   $\chi^2/\text{NDF}: 572.0/19$

Right Out:  $6.040 \pm 0.434$   $\chi^2/\text{NDF}: 1512.1/18$

Left In:  $5.883 \pm 0.090$   $\chi^2/\text{NDF}: 1061.1/17$

Left:  $6.223 \pm 0.063$   $\chi^2/\text{NDF}: 1661.3/37$

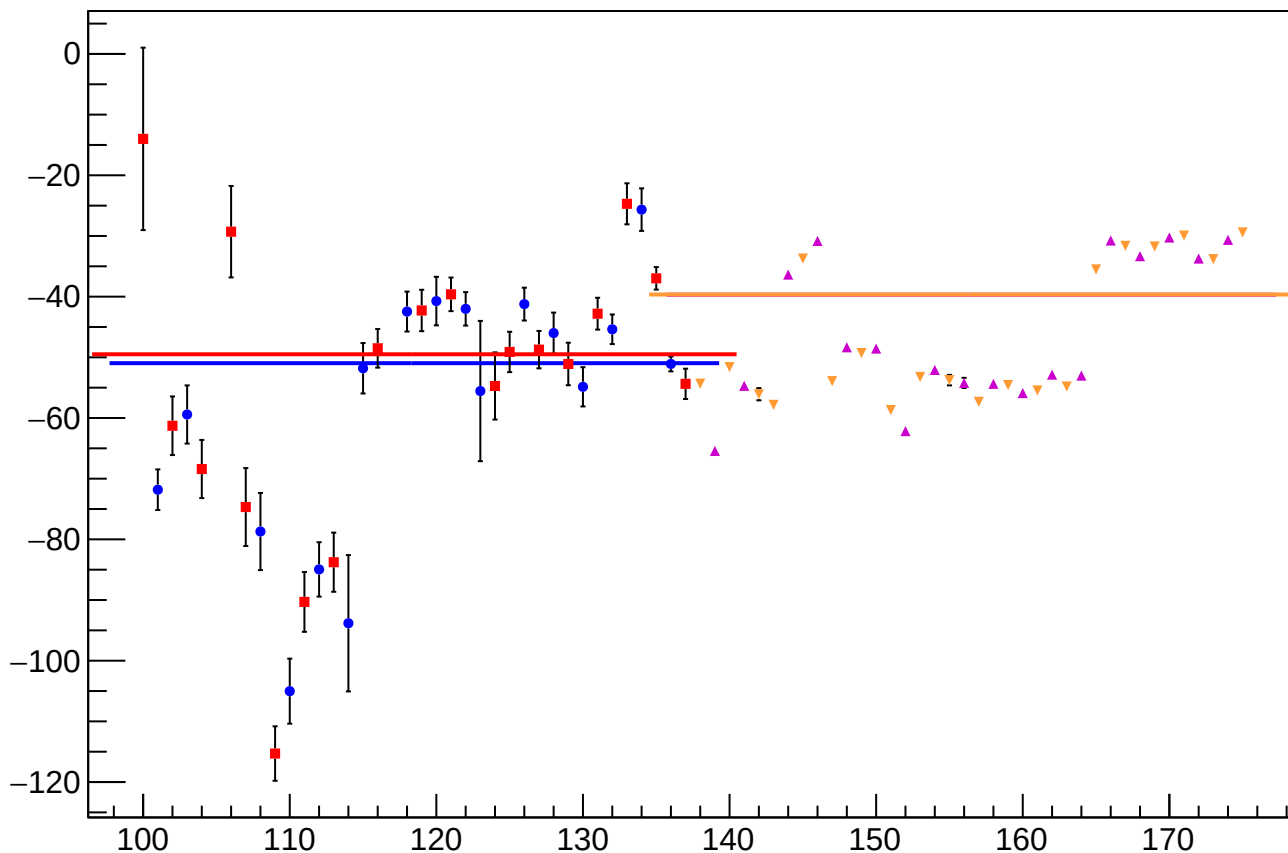
Right:  $6.952 \pm 0.295$   $\chi^2/\text{NDF}: 2878.8/35$

In:  $5.971 \pm 0.088$   $\chi^2/\text{NDF}: 2439.8/34$

Out:  $6.533 \pm 0.087$   $\chi^2/\text{NDF}: 2085.5/38$

All:  $6.255 \pm 0.062$   $\chi^2/\text{NDF}: 4545.9/73$

reg\_asym\_sam\_26\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-50.966 \pm 0.738$   $\chi^2/\text{NDF}$ : 332.7/16

Left Out:  $-39.646 \pm 0.116$   $\chi^2/\text{NDF}$ : 8853.8/19

Right Out:  $-49.497 \pm 0.797$   $\chi^2/\text{NDF}$ : 510.4/18

Left In:  $-39.683 \pm 0.120$   $\chi^2/\text{NDF}$ : 8555.0/17

Left:  $-39.664 \pm 0.083$   $\chi^2/\text{NDF}$ : 17408.9/37

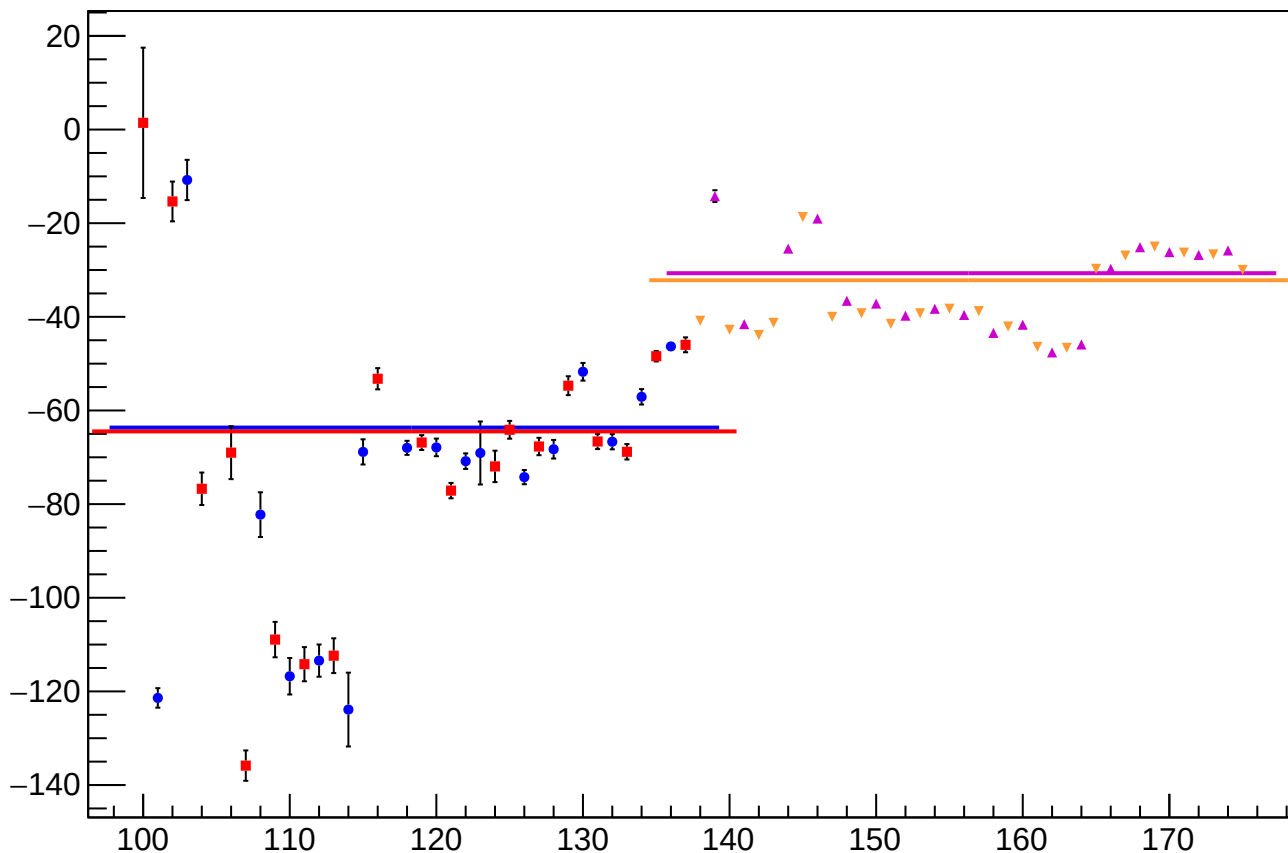
Right:  $-50.288 \pm 0.541$   $\chi^2/\text{NDF}$ : 844.9/35

In:  $-39.973 \pm 0.118$   $\chi^2/\text{NDF}$ : 9115.6/34

Out:  $-39.851 \pm 0.115$   $\chi^2/\text{NDF}$ : 9513.7/38

All:  $-39.910 \pm 0.082$   $\chi^2/\text{NDF}$ : 18629.9/73

reg\_asym\_sam\_26\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-63.656 \pm 0.445$   $\chi^2/\text{NDF}$ : 2014.7/16

Left Out:  $-32.186 \pm 0.100$   $\chi^2/\text{NDF}$ : 7039.6/19

Right Out:  $-64.470 \pm 0.483$   $\chi^2/\text{NDF}$ : 1606.8/18

Left In:  $-30.682 \pm 0.102$   $\chi^2/\text{NDF}$ : 6880.7/17

Left:  $-31.453 \pm 0.071$   $\chi^2/\text{NDF}$ : 14031.3/37

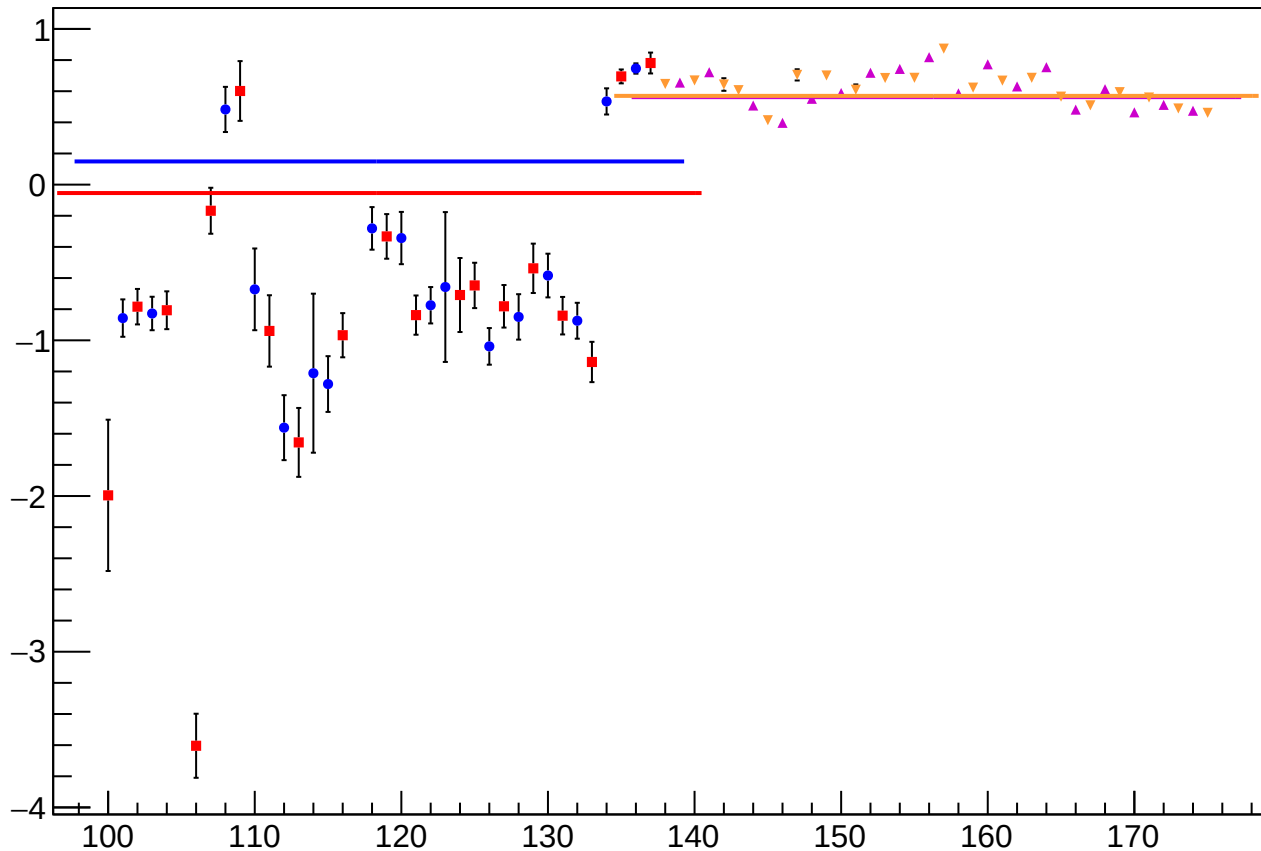
Right:  $-64.030 \pm 0.327$   $\chi^2/\text{NDF}$ : 3623.1/35

In:  $-32.331 \pm 0.100$   $\chi^2/\text{NDF}$ : 14103.1/34

Out:  $-33.507 \pm 0.098$   $\chi^2/\text{NDF}$ : 12940.1/38

All:  $-32.931 \pm 0.070$   $\chi^2/\text{NDF}$ : 27114.2/73

reg\_asym\_sam\_26\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.149 \pm 0.024$   $\chi^2/\text{NDF}: 989.9/16$

Left Out:  $0.570 \pm 0.005$   $\chi^2/\text{NDF}: 496.2/19$

Right Out:  $-0.054 \pm 0.026$   $\chi^2/\text{NDF}: 1167.9/18$

Left In:  $0.562 \pm 0.005$   $\chi^2/\text{NDF}: 579.5/17$

Left:  $0.566 \pm 0.003$   $\chi^2/\text{NDF}: 1077.3/37$

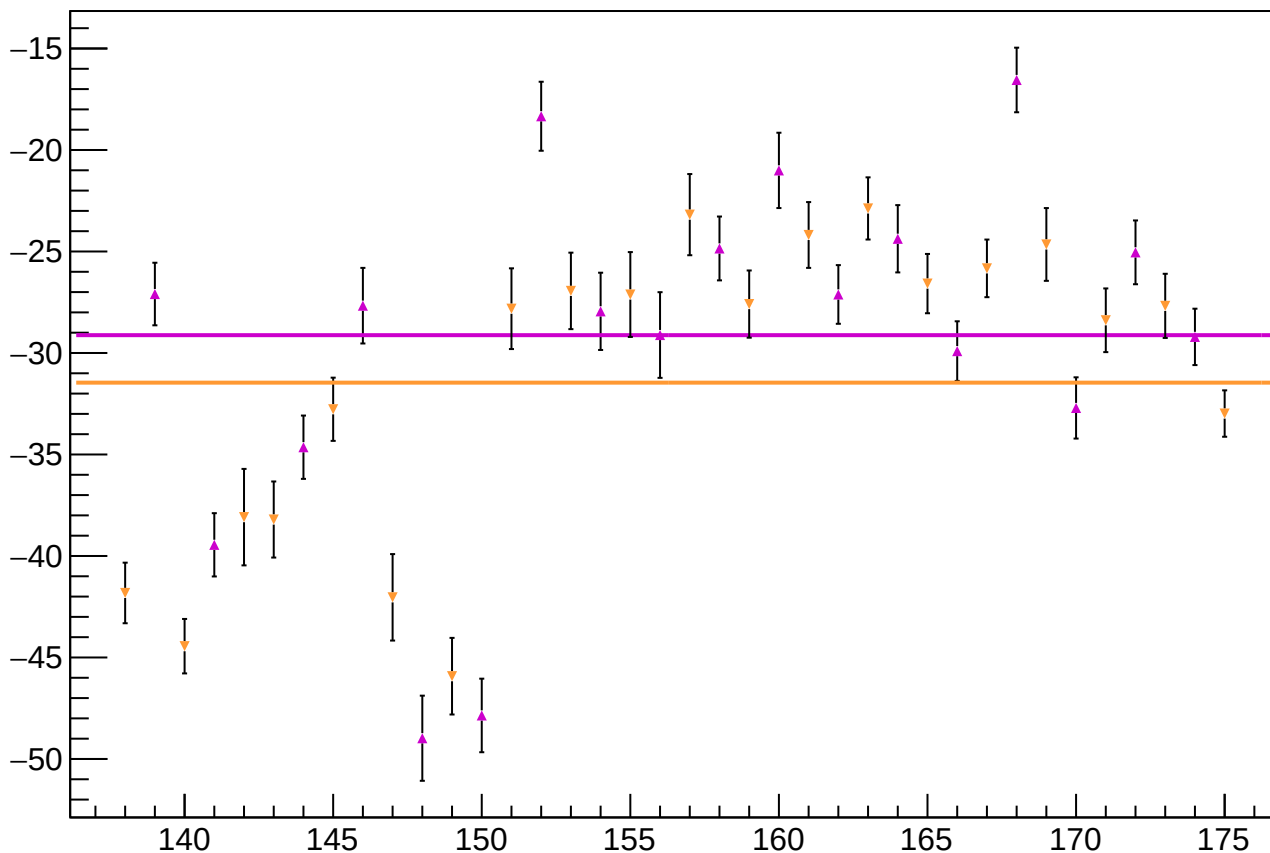
Right:  $0.056 \pm 0.018$   $\chi^2/\text{NDF}: 2190.5/35$

In:  $0.547 \pm 0.005$   $\chi^2/\text{NDF}: 1855.2/34$

Out:  $0.551 \pm 0.005$   $\chi^2/\text{NDF}: 2214.6/38$

All:  $0.549 \pm 0.003$   $\chi^2/\text{NDF}: 4070.4/73$

reg\_asym\_sam\_26\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: -31.461 $\pm$ 0.367  $\chi^2$ /NDF:386.8/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: -29.122 $\pm$ 0.387  $\chi^2$ /NDF:407.7/17

Left: -30.353 $\pm$ 0.266  $\chi^2$ /NDF: 813.8/37

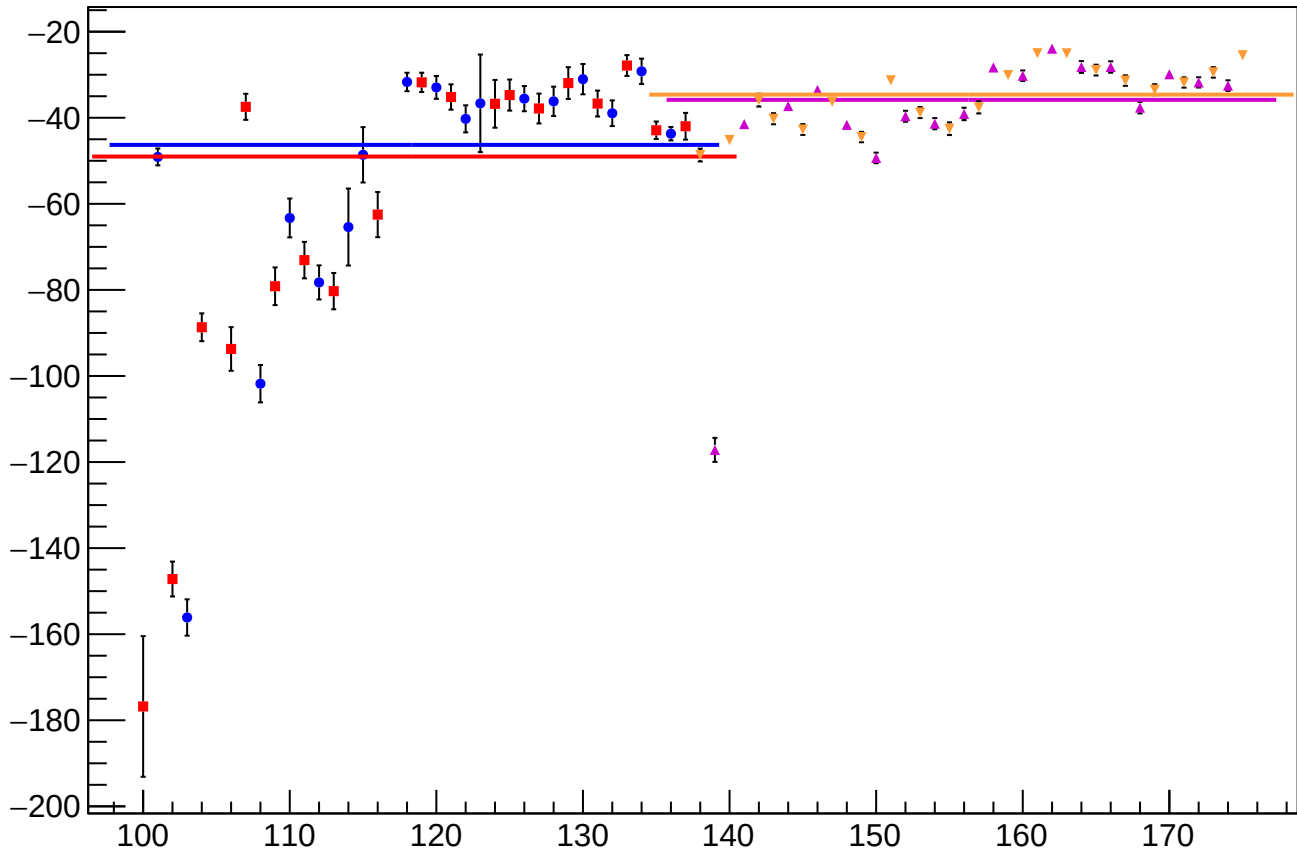
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: -29.122 $\pm$ 0.387  $\chi^2$ /NDF:407.7/17

Out: -31.461 $\pm$ 0.367  $\chi^2$ /NDF:386.8/19

All: -30.353 $\pm$ 0.266  $\chi^2$ /NDF: 813.8/37

reg\_asym\_sam\_26\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-46.300 \pm 0.723$   $\chi^2/\text{NDF}: 1084.0/16$

Left Out:  $-34.624 \pm 0.274$   $\chi^2/\text{NDF}: 640.1/19$

Right Out:  $-49.008 \pm 0.764$   $\chi^2/\text{NDF}: 1271.7/18$

Left In:  $-35.838 \pm 0.290$   $\chi^2/\text{NDF}: 1353.4/17$

Left:  $-35.197 \pm 0.199$   $\chi^2/\text{NDF}: 2002.8/37$

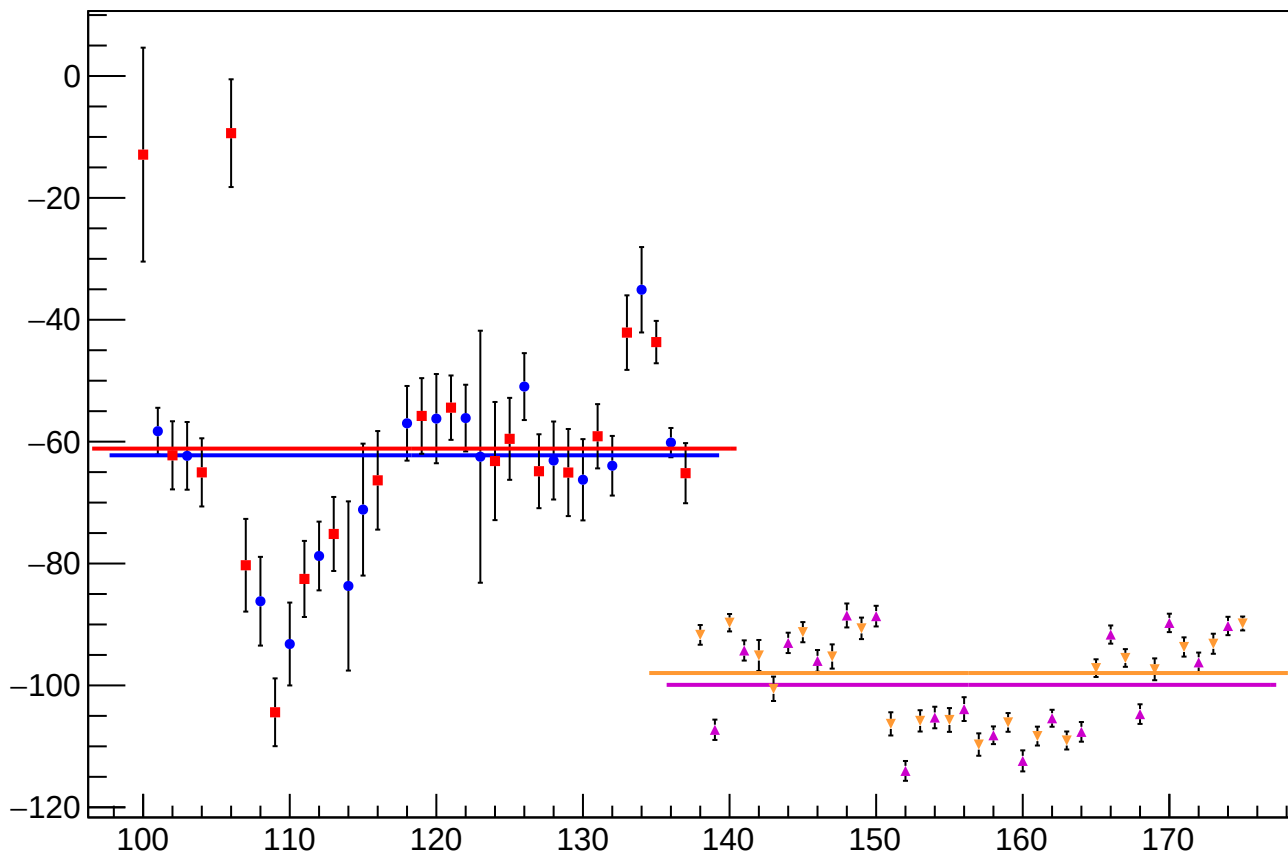
Right:  $-47.580 \pm 0.525$   $\chi^2/\text{NDF}: 2362.3/35$

In:  $-37.290 \pm 0.269$   $\chi^2/\text{NDF}: 2617.9/34$

Out:  $-36.265 \pm 0.258$   $\chi^2/\text{NDF}: 2226.0/38$

All:  $-36.756 \pm 0.186$   $\chi^2/\text{NDF}: 4851.4/73$

reg\_asym\_sam\_26\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-62.242 \pm 1.310$   $\chi^2/\text{NDF}: 67.4/16$

Left Out:  $-97.967 \pm 0.366$   $\chi^2/\text{NDF}: 381.1/19$

Right Out:  $-61.142 \pm 1.379$   $\chi^2/\text{NDF}: 165.6/18$

Left In:  $-99.909 \pm 0.384$   $\chi^2/\text{NDF}: 473.8/17$

Left:  $-98.890 \pm 0.265$   $\chi^2/\text{NDF}: 868.3/37$

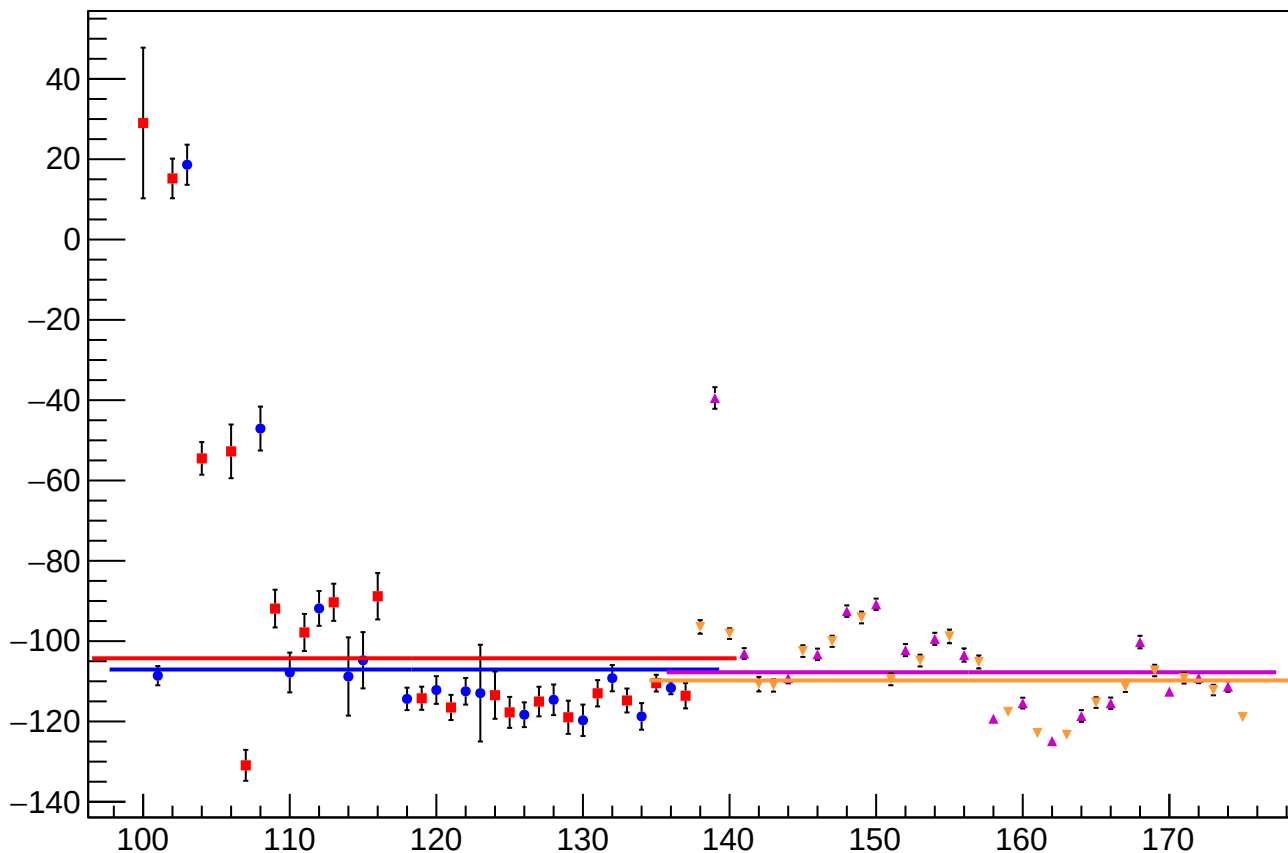
Right:  $-61.720 \pm 0.950$   $\chi^2/\text{NDF}: 233.3/35$

In:  $-96.927 \pm 0.369$   $\chi^2/\text{NDF}: 1302.3/34$

Out:  $-95.548 \pm 0.354$   $\chi^2/\text{NDF}: 1212.5/38$

All:  $-96.208 \pm 0.255$   $\chi^2/\text{NDF}: 2522.1/73$

reg\_asym\_sam\_26\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-107.066 \pm 0.811$   $\chi^2/\text{NDF}$ : 828.4/16

Left Out:  $-109.787 \pm 0.312$   $\chi^2/\text{NDF}$ : 759.6/19

Right Out:  $-104.269 \pm 0.861$   $\chi^2/\text{NDF}$ : 1018.6/18

Left In:  $-107.753 \pm 0.329$   $\chi^2/\text{NDF}$ : 1445.1/17

Left:  $-108.825 \pm 0.226$   $\chi^2/\text{NDF}$ : 2224.8/37

Right:  $-105.751 \pm 0.590$   $\chi^2/\text{NDF}$ : 1852.6/35

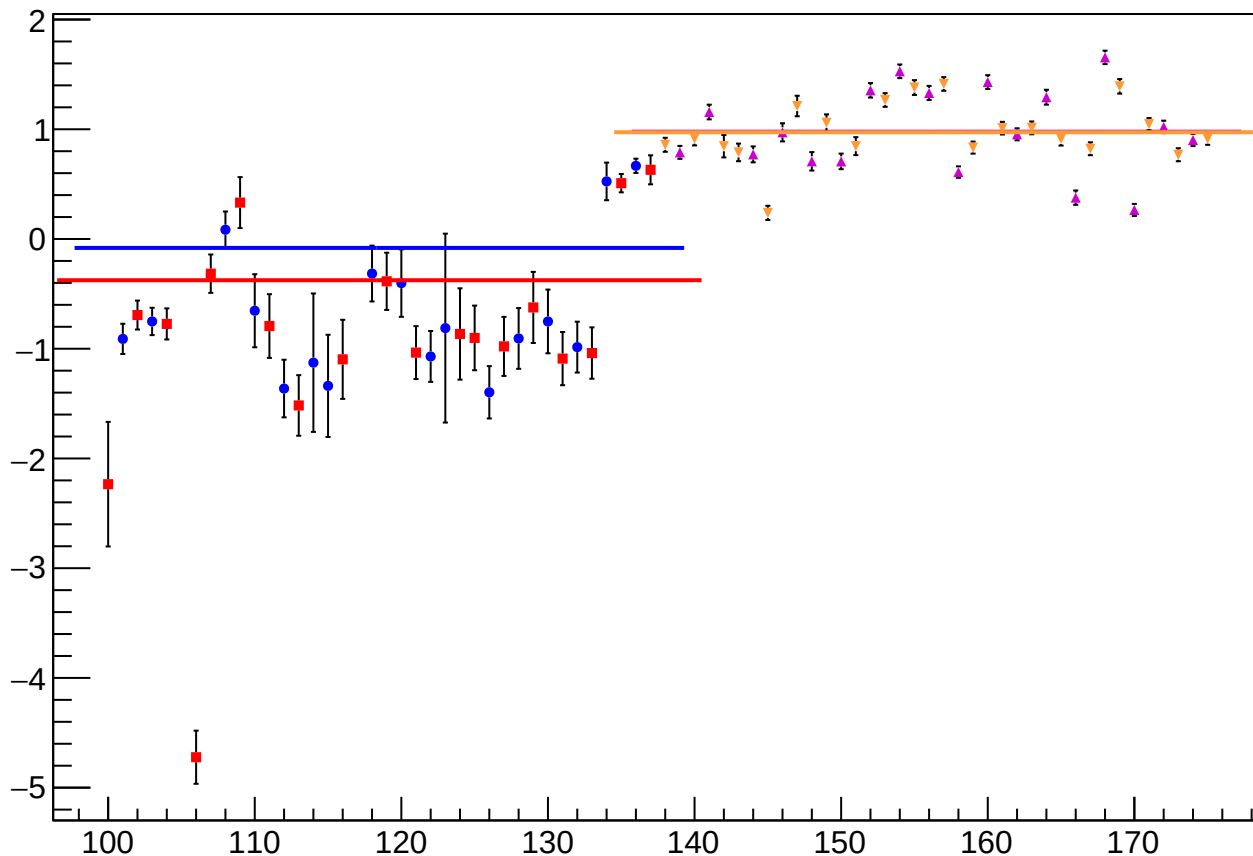
In:  $-107.656 \pm 0.305$   $\chi^2/\text{NDF}$ : 2274.0/34

Out:  $-109.147 \pm 0.293$   $\chi^2/\text{NDF}$ : 1814.5/38

All:  $-108.431 \pm 0.211$   $\chi^2/\text{NDF}$ : 4101.0/73



reg\_asym\_sam\_26\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.081 \pm 0.042$   $\chi^2/\text{NDF}$ : 329.0/16

Left Out:  $0.973 \pm 0.014$   $\chi^2/\text{NDF}$ : 327.6/19

Right Out:  $-0.376 \pm 0.044$   $\chi^2/\text{NDF}$ : 583.0/18

Left In:  $0.978 \pm 0.015$   $\chi^2/\text{NDF}$ : 691.5/17

Left:  $0.975 \pm 0.010$   $\chi^2/\text{NDF}$ : 1019.2/37

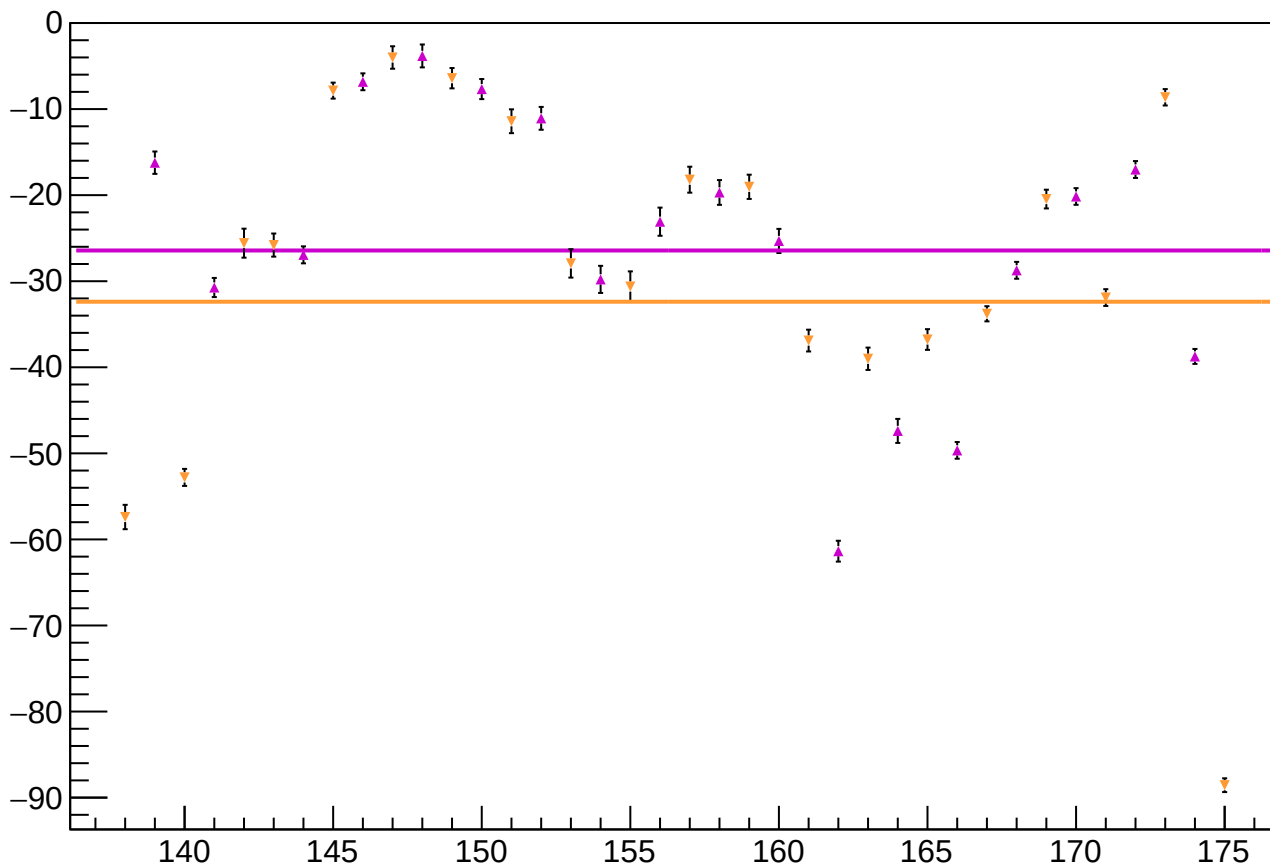
Right:  $-0.223 \pm 0.030$   $\chi^2/\text{NDF}$ : 935.4/35

In:  $0.861 \pm 0.014$   $\chi^2/\text{NDF}$ : 1582.2/34

Out:  $0.841 \pm 0.014$   $\chi^2/\text{NDF}$ : 1762.8/38

All:  $0.851 \pm 0.010$   $\chi^2/\text{NDF}$ : 3346.1/73

reg\_asym\_sam\_48\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -32.383+/-0.260  $\chi^2/\text{NDF}$ :8574.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -26.429+/-0.269  $\chi^2/\text{NDF}$ :3160.5/17

Left: -29.507+/-0.187  $\chi^2/\text{NDF}$ : 11988.8/37

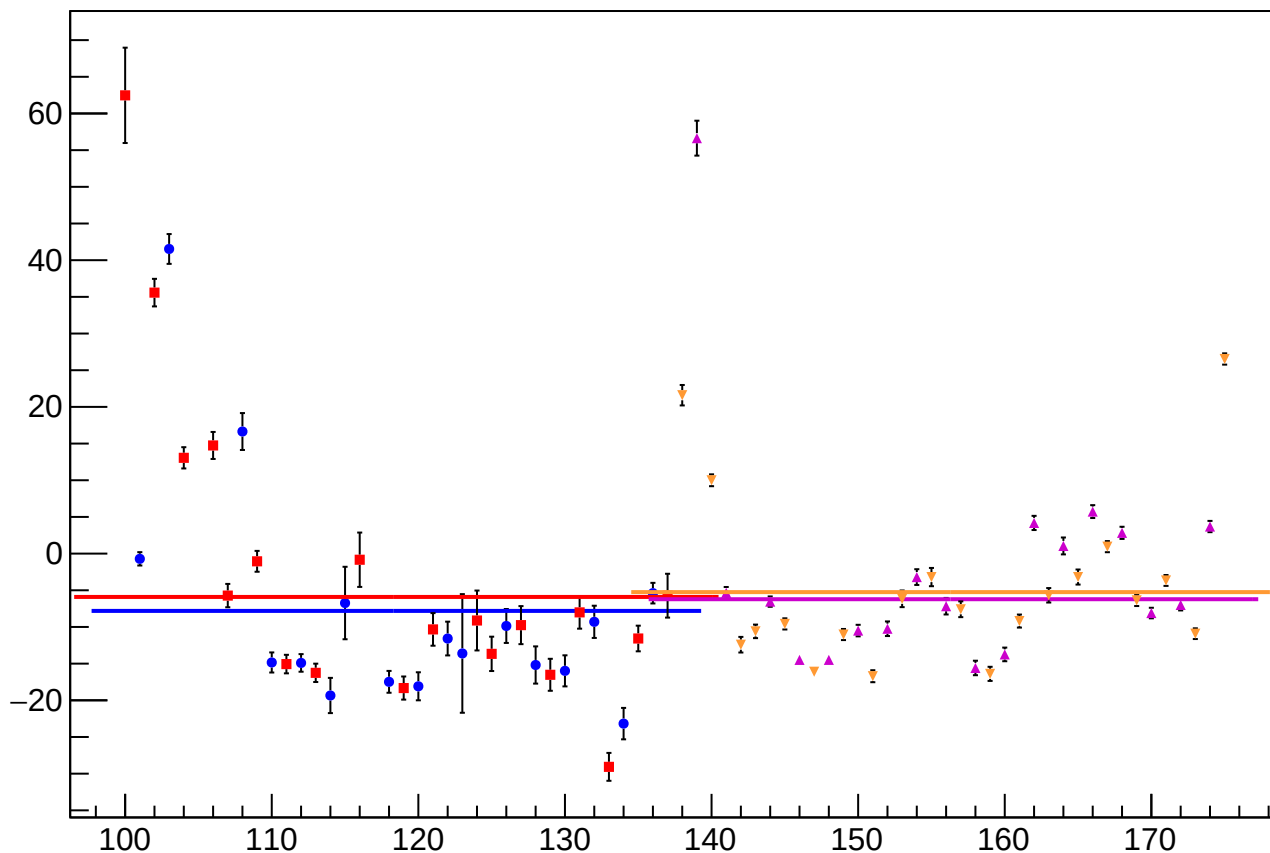
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -26.429+/-0.269  $\chi^2/\text{NDF}$ :3160.5/17

Out: -32.383+/-0.260  $\chi^2/\text{NDF}$ :8574.8/19

All: -29.507+/-0.187  $\chi^2/\text{NDF}$ : 11988.8/37

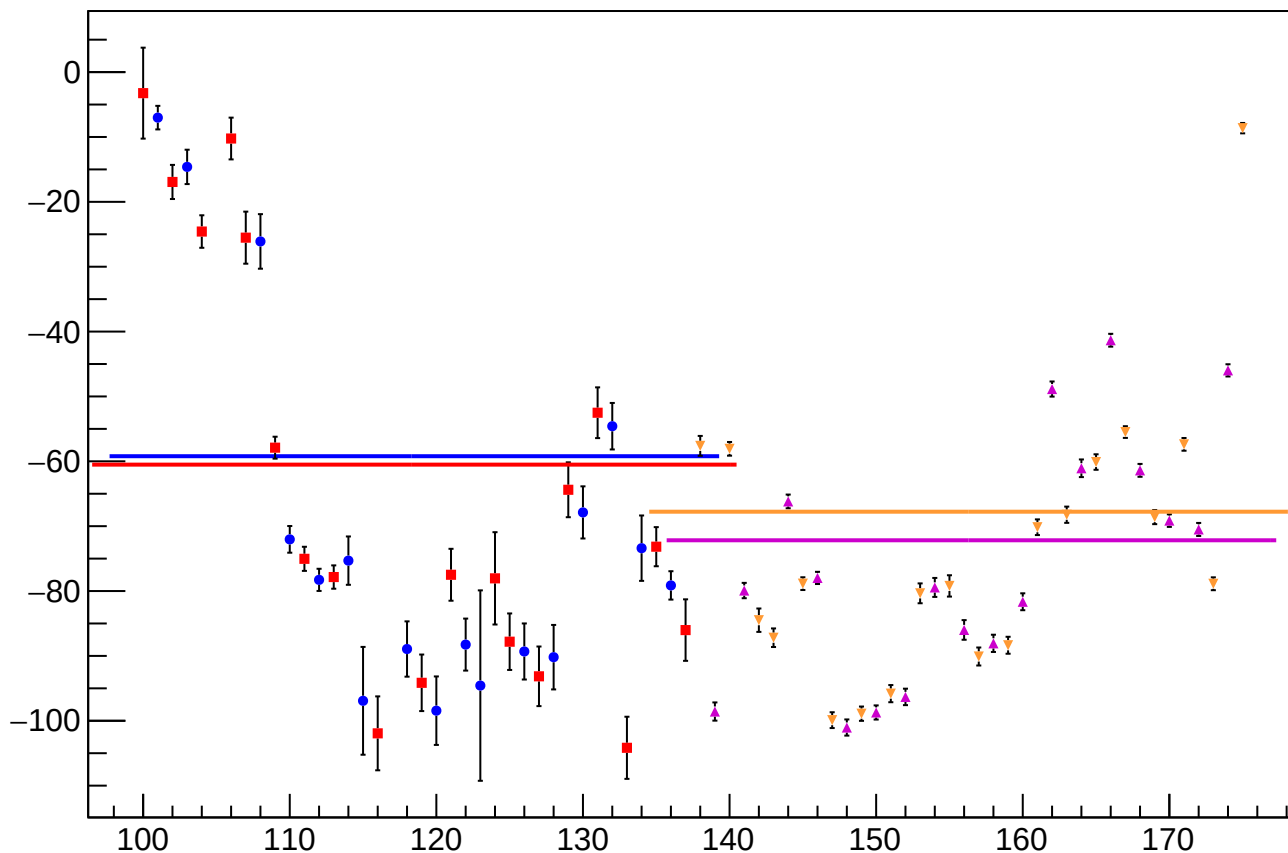
reg\_asym\_sam\_48\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-7.812 \pm 0.427$   $\chi^2/\text{NDF}$ : 982.8/16  
 Left Out:  $-5.250 \pm 0.192$   $\chi^2/\text{NDF}$ : 3407.2/19  
 Right Out:  $-5.908 \pm 0.429$   $\chi^2/\text{NDF}$ : 1293.1/18  
 Left In:  $-6.219 \pm 0.199$   $\chi^2/\text{NDF}$ : 1884.9/17

Left:  $-5.718 \pm 0.138$   $\chi^2/\text{NDF}$ : 5304.3/37  
 Right:  $-6.864 \pm 0.303$   $\chi^2/\text{NDF}$ : 2285.7/35  
 In:  $-6.503 \pm 0.180$   $\chi^2/\text{NDF}$ : 2879.1/34  
 Out:  $-5.360 \pm 0.176$   $\chi^2/\text{NDF}$ : 4702.2/38  
 All:  $-5.916 \pm 0.126$   $\chi^2/\text{NDF}$ : 7601.9/73

reg\_asym\_sam\_48\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-59.214 \pm 0.744$   $\chi^2/\text{NDF}$ : 1720.4/16

Left Out:  $-67.769 \pm 0.260$   $\chi^2/\text{NDF}$ : 9010.7/19

Right Out:  $-60.513 \pm 0.704$   $\chi^2/\text{NDF}$ : 1383.9/18

Left In:  $-72.175 \pm 0.268$   $\chi^2/\text{NDF}$ : 4602.5/17

Left:  $-69.901 \pm 0.187$   $\chi^2/\text{NDF}$ : 13752.5/37

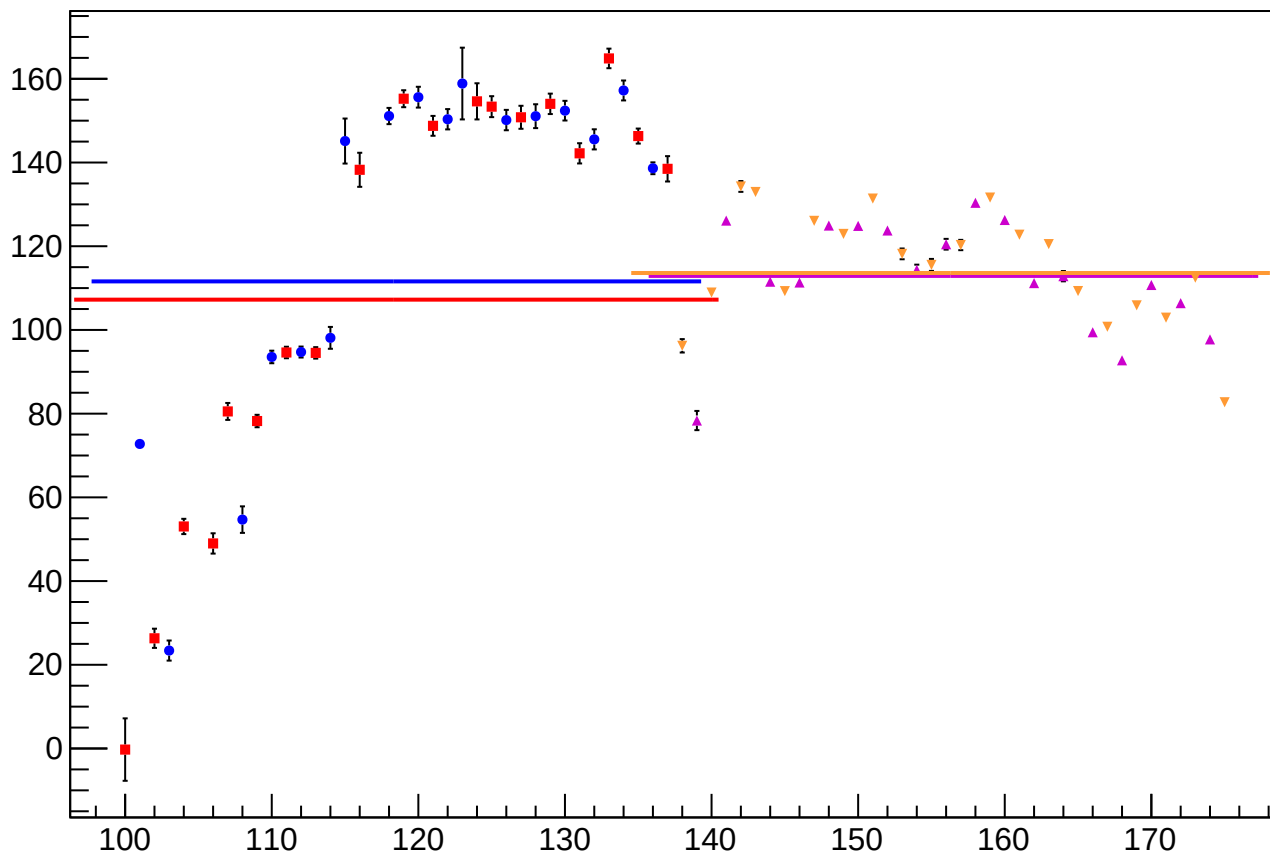
Right:  $-59.899 \pm 0.511$   $\chi^2/\text{NDF}$ : 3105.9/35

In:  $-70.683 \pm 0.252$   $\chi^2/\text{NDF}$ : 6591.6/34

Out:  $-66.900 \pm 0.244$   $\chi^2/\text{NDF}$ : 10488.1/38

All:  $-68.726 \pm 0.175$   $\chi^2/\text{NDF}$ : 17196.1/73

reg\_asym\_sam\_48\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 111.599 $\pm$ 0.487  $\chi^2$ /NDF: 5959.5/16

Left Out: 113.607 $\pm$ 0.220  $\chi^2$ /NDF:3793.0/19

Right Out: 107.238 $\pm$ 0.488  $\chi^2$ /NDF: 7037.4/18

Left In: 112.909 $\pm$ 0.228  $\chi^2$ /NDF:2415.9/17

Left: 113.270 $\pm$ 0.158  $\chi^2$ /NDF: 6213.7/37

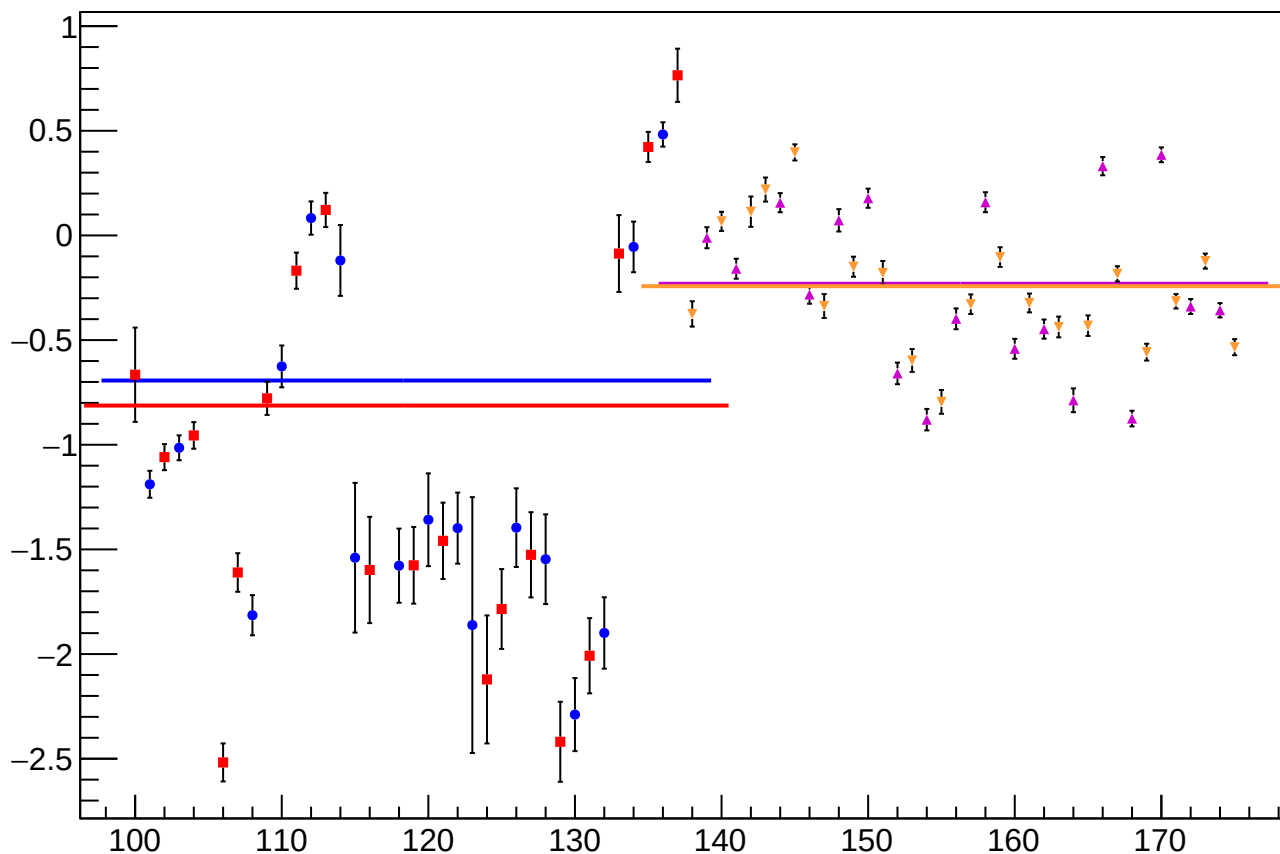
Right: 109.423 $\pm$ 0.344  $\chi^2$ /NDF: 13037.0/35

In: 112.672 $\pm$ 0.207  $\chi^2$ /NDF:8381.3/34

Out: 112.528 $\pm$ 0.201  $\chi^2$ /NDF:10972.1/38

All: 112.598 $\pm$ 0.144  $\chi^2$ /NDF: 19353.6/73

reg\_asym\_sam\_48\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.693 \pm 0.026$   $\chi^2/\text{NDF}$ : 993.1/16

Left Out:  $-0.242 \pm 0.010$   $\chi^2/\text{NDF}$ : 740.5/19

Right Out:  $-0.813 \pm 0.024$   $\chi^2/\text{NDF}$ : 1310.7/18

Left In:  $-0.231 \pm 0.010$   $\chi^2/\text{NDF}$ : 1463.8/17

Left:  $-0.237 \pm 0.007$   $\chi^2/\text{NDF}$ : 2204.9/37

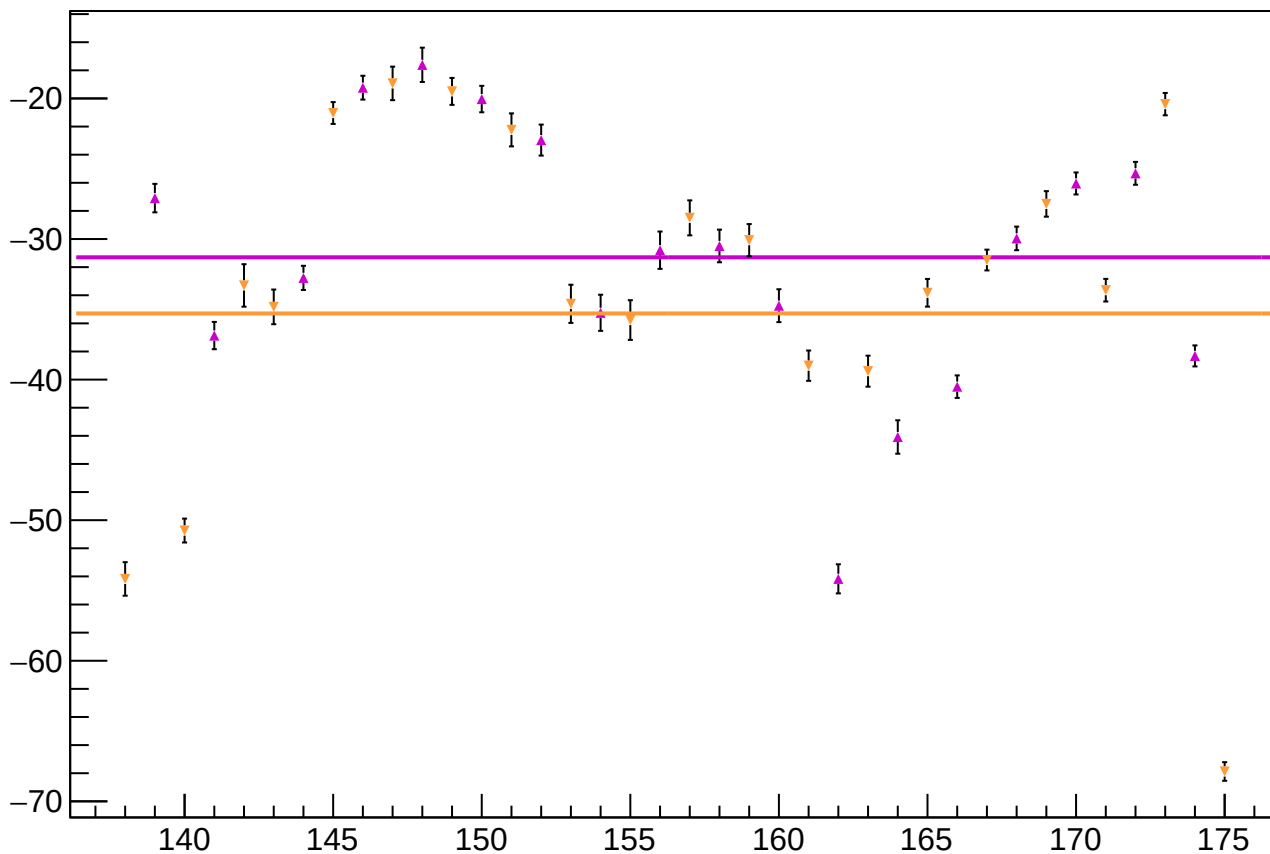
Right:  $-0.756 \pm 0.018$   $\chi^2/\text{NDF}$ : 2315.2/35

In:  $-0.296 \pm 0.010$   $\chi^2/\text{NDF}$ : 2732.9/34

Out:  $-0.329 \pm 0.009$   $\chi^2/\text{NDF}$ : 2517.6/38

All:  $-0.313 \pm 0.007$   $\chi^2/\text{NDF}$ : 5256.2/73

reg\_asym\_sam\_48\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



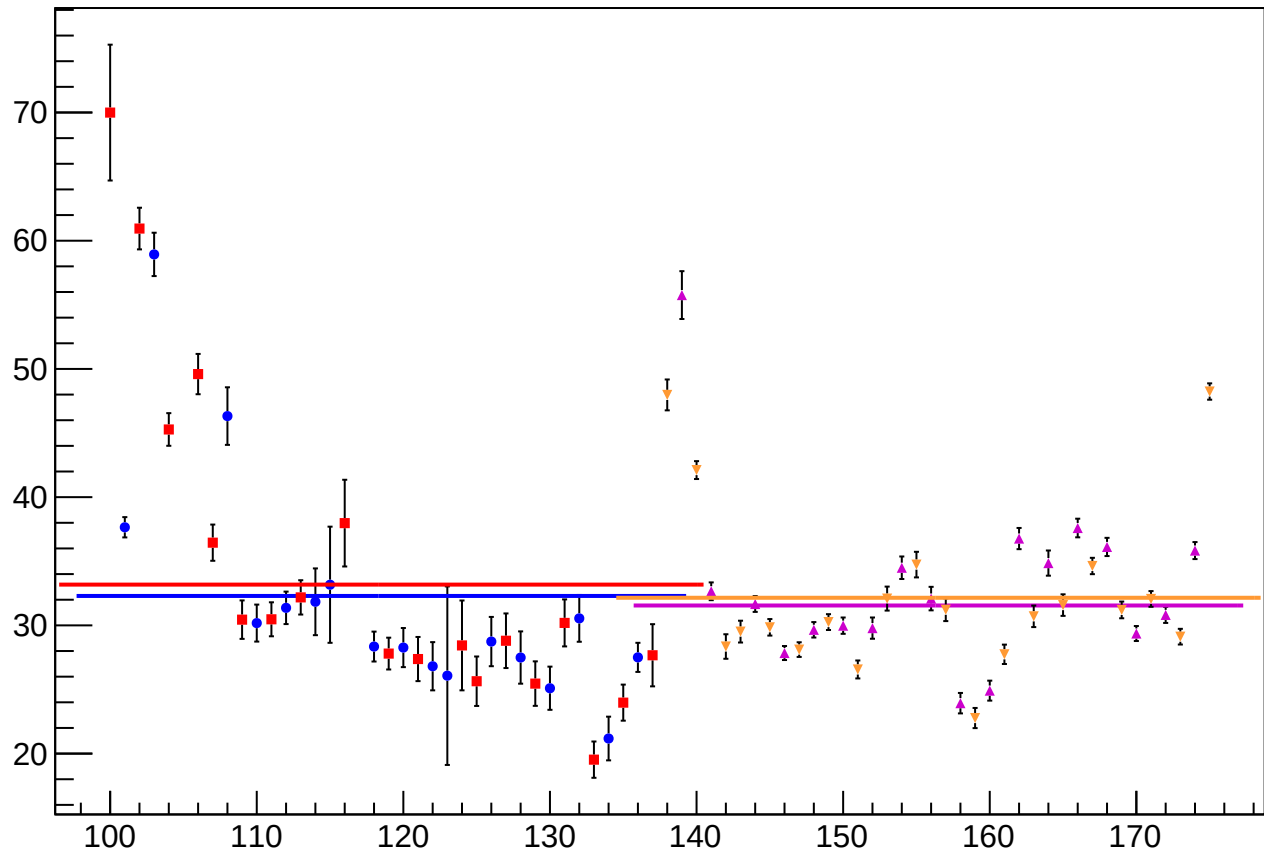
Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -35.293+/-0.218  $\chi^2/\text{NDF}$ : 4456.8/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -31.301+/-0.226  $\chi^2/\text{NDF}$ : 1526.0/17

Left: -33.364+/-0.157  $\chi^2/\text{NDF}$ : 6144.3/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -31.301+/-0.226  $\chi^2/\text{NDF}$ : 1526.0/17  
 Out: -35.293+/-0.218  $\chi^2/\text{NDF}$ : 4456.8/19

All: -33.364+/-0.157  $\chi^2/\text{NDF}$ : 6144.3/37

reg\_asym\_sam\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 32.295+/-0.373  $\chi^2/\text{NDF}$ : 452.2/16

Left Out: 32.153+/-0.163  $\chi^2/\text{NDF}$ :1404.2/19

Right Out: 33.180+/-0.379  $\chi^2/\text{NDF}$ : 770.3/18

Left In: 31.551+/-0.169  $\chi^2/\text{NDF}$ :632.0/17

Left: 31.863+/-0.117  $\chi^2/\text{NDF}$ : 2042.8/37

Right: 32.730+/-0.266  $\chi^2/\text{NDF}$ : 1225.3/35

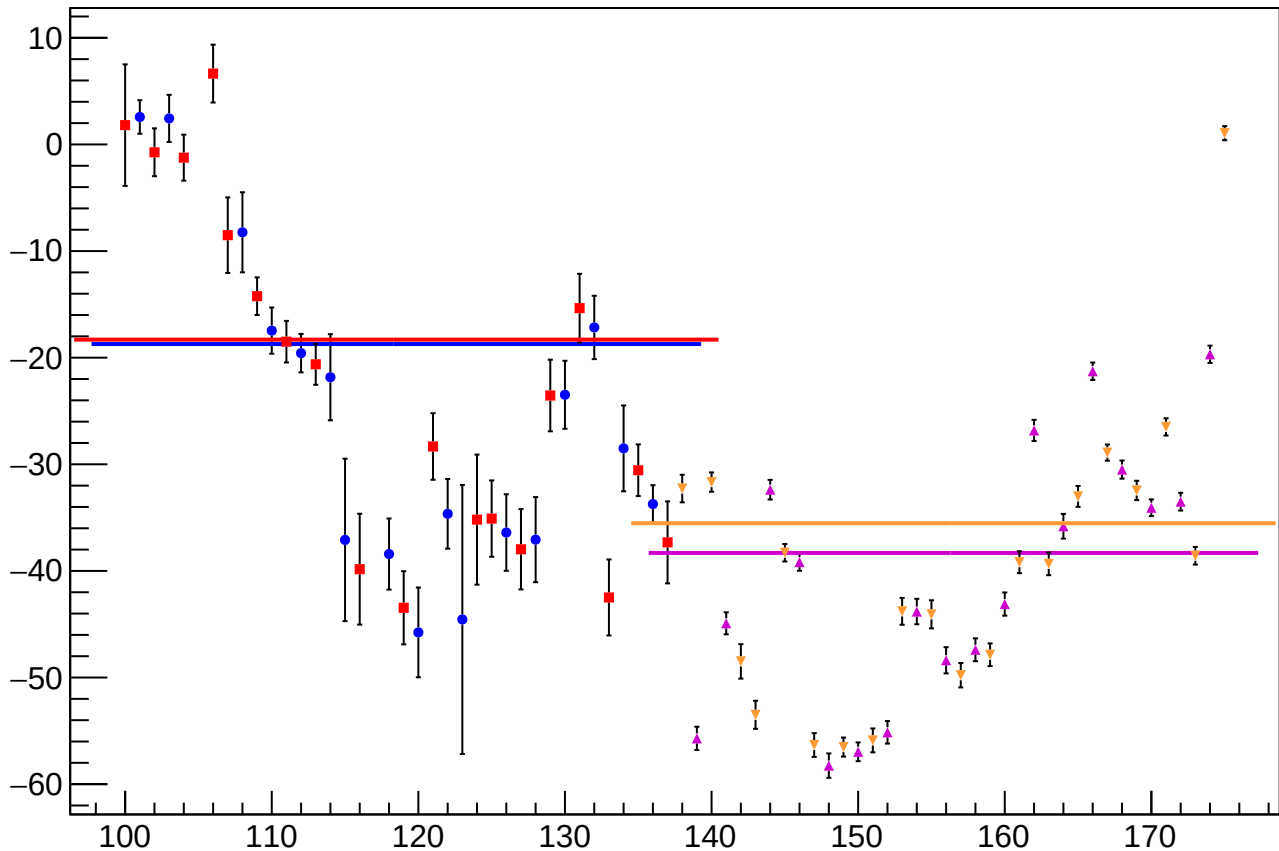
In: 31.678+/-0.154  $\chi^2/\text{NDF}$ :1087.5/34

Out: 32.313+/-0.150  $\chi^2/\text{NDF}$ :2180.7/38

All: 32.005+/-0.107  $\chi^2/\text{NDF}$ : 3276.9/73



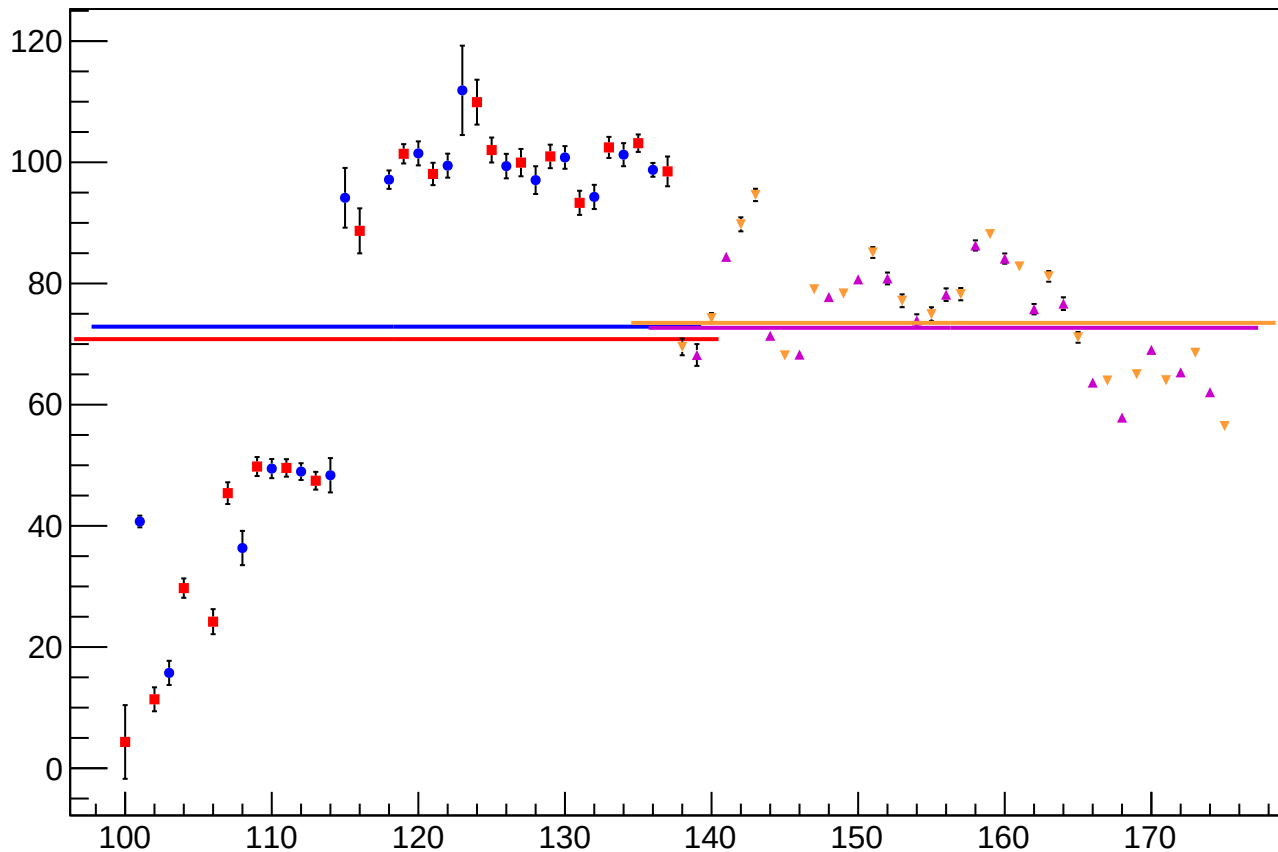
reg\_asym\_sam\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-18.721 \pm 0.665$   $\chi^2/\text{NDF}: 519.6/16$   
 Left Out:  $-35.526 \pm 0.218$   $\chi^2/\text{NDF}: 5198.5/19$   
 Right Out:  $-18.306 \pm 0.644$   $\chi^2/\text{NDF}: 472.6/18$   
 Left In:  $-38.313 \pm 0.225$   $\chi^2/\text{NDF}: 2770.8/17$

Left:  $-36.874 \pm 0.157$   $\chi^2/\text{NDF}: 8048.4/37$   
 Right:  $-18.506 \pm 0.463$   $\chi^2/\text{NDF}: 992.4/35$   
 In:  $-36.299 \pm 0.213$   $\chi^2/\text{NDF}: 4068.3/34$   
 Out:  $-33.754 \pm 0.206$   $\chi^2/\text{NDF}: 6313.5/38$   
 All:  $-34.985 \pm 0.148$   $\chi^2/\text{NDF}: 10455.2/73$

reg\_asym\_sam\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 72.875 $\pm$ 0.426  $\chi^2$ /NDF: 4737.9/16

Left Out: 73.502 $\pm$ 0.186  $\chi^2$ /NDF: 2729.6/19

Right Out: 70.815 $\pm$ 0.433  $\chi^2$ /NDF: 5489.3/18

Left In: 72.684 $\pm$ 0.193  $\chi^2$ /NDF: 1810.3/17

Left: 73.108 $\pm$ 0.134  $\chi^2$ /NDF: 4549.1/37

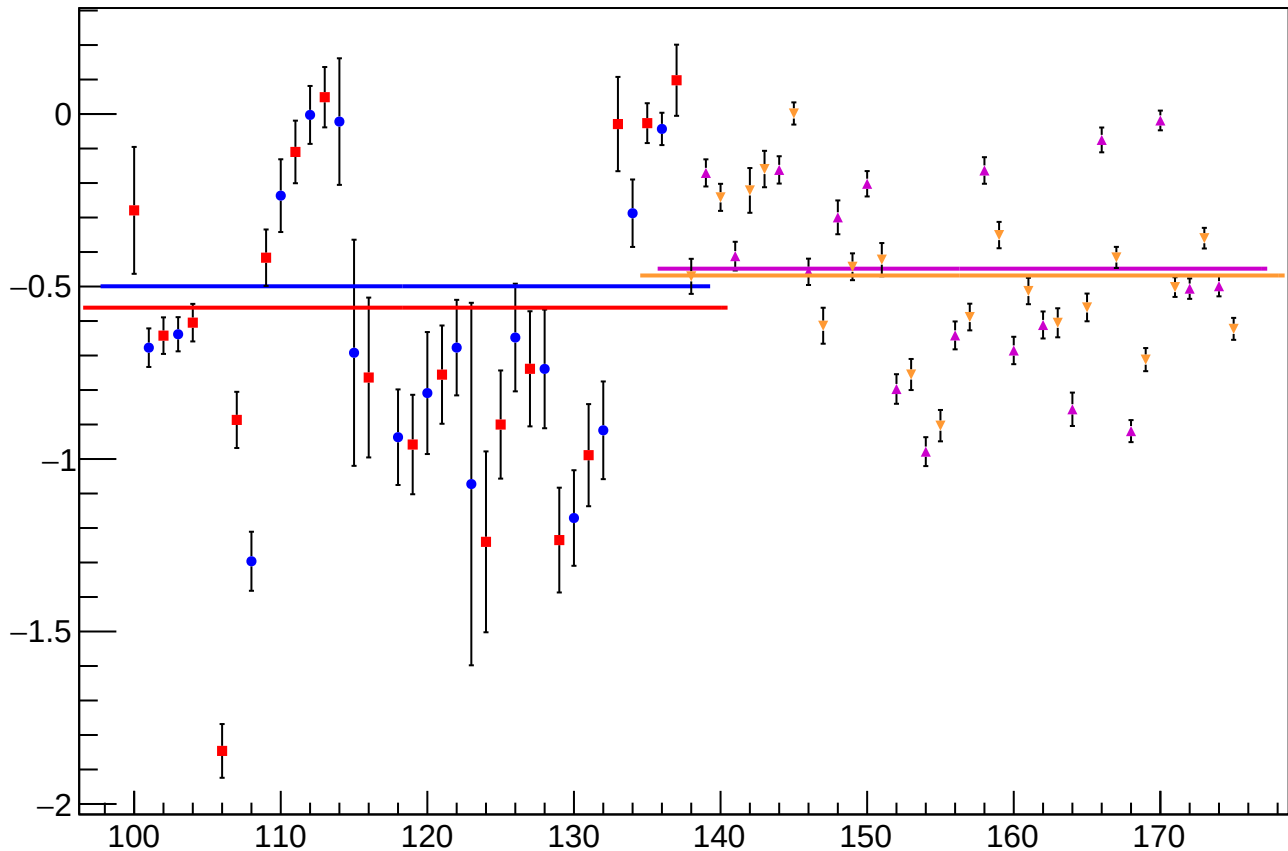
Right: 71.863 $\pm$ 0.304  $\chi^2$ /NDF: 10238.7/35

In: 72.717 $\pm$ 0.176  $\chi^2$ /NDF: 6548.4/34

Out: 73.084 $\pm$ 0.171  $\chi^2$ /NDF: 8251.3/38

All: 72.906 $\pm$ 0.122  $\chi^2$ /NDF: 14801.9/73

reg\_asym\_sam\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.499 \pm 0.022$   $\chi^2/\text{NDF}$ : 303.5/16

Left Out:  $-0.468 \pm 0.009$   $\chi^2/\text{NDF}$ : 566.8/19

Right Out:  $-0.561 \pm 0.021$   $\chi^2/\text{NDF}$ : 562.3/18

Left In:  $-0.448 \pm 0.009$   $\chi^2/\text{NDF}$ : 1142.1/17

Left:  $-0.458 \pm 0.006$   $\chi^2/\text{NDF}$ : 1711.5/37

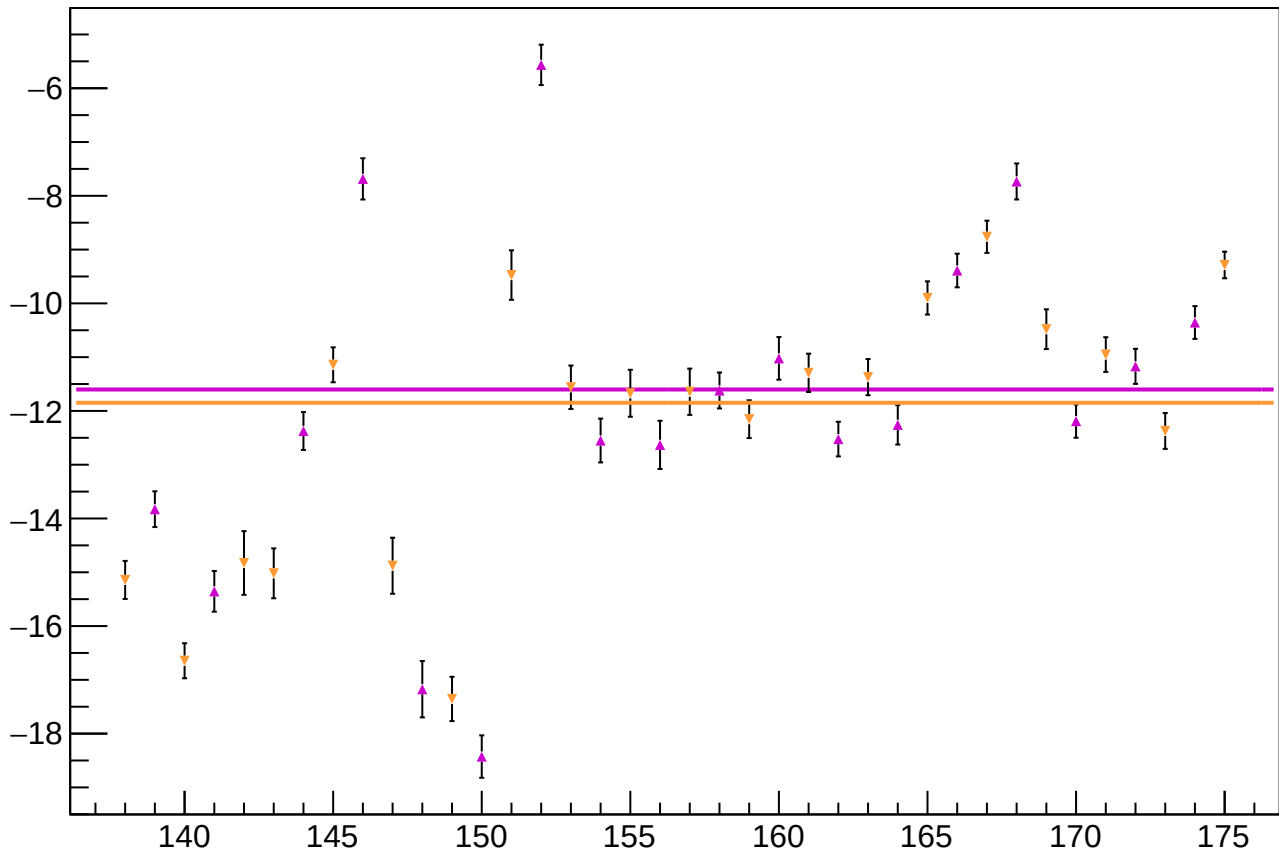
Right:  $-0.532 \pm 0.015$   $\chi^2/\text{NDF}$ : 869.9/35

In:  $-0.455 \pm 0.008$   $\chi^2/\text{NDF}$ : 1450.1/34

Out:  $-0.481 \pm 0.008$   $\chi^2/\text{NDF}$ : 1145.5/38

All:  $-0.468 \pm 0.006$   $\chi^2/\text{NDF}$ : 2600.8/73

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -11.848+/-0.081  $\chi^2/\text{NDF}$ : 903.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -11.601+/-0.084  $\chi^2/\text{NDF}$ : 1153.4/17

Left: -11.730+/-0.058  $\chi^2/\text{NDF}$ : 2061.4/37

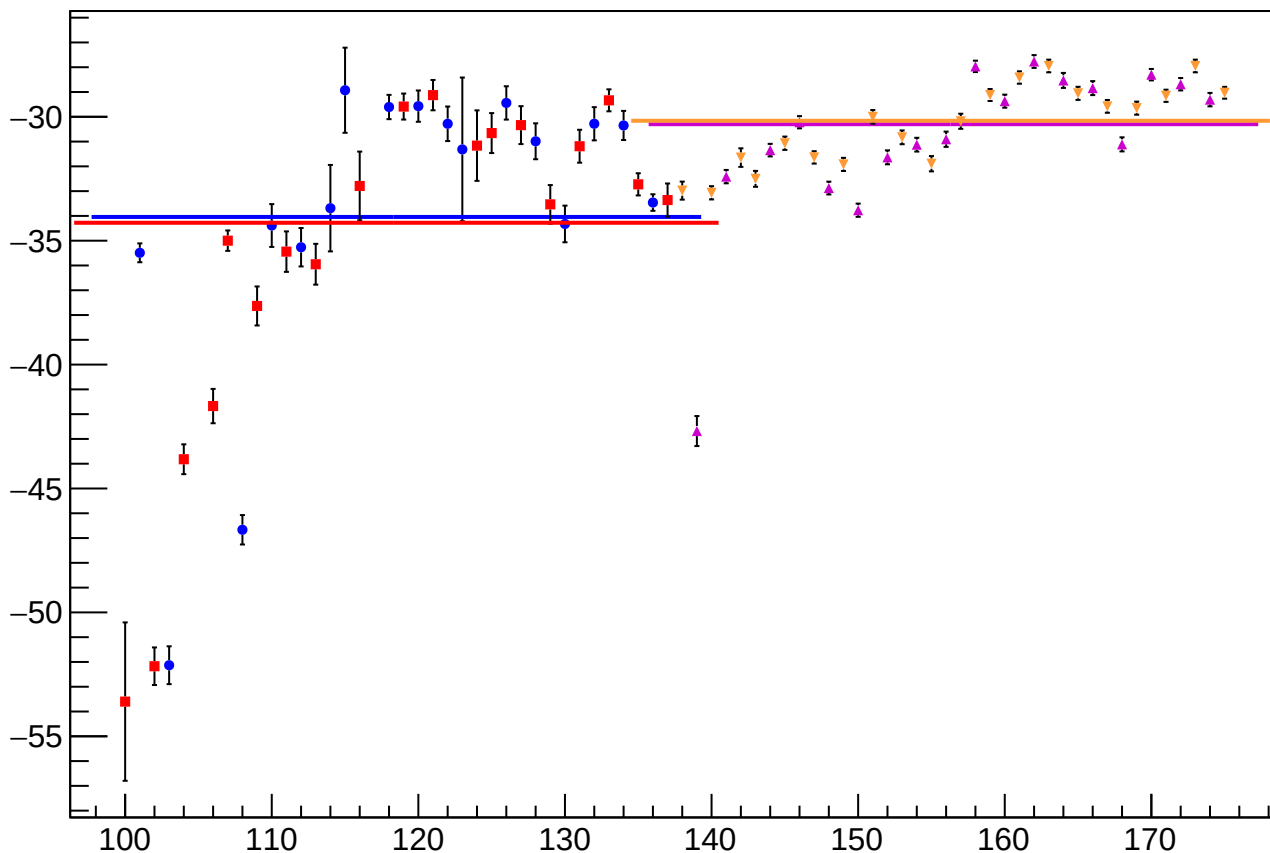
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -11.601+/-0.084  $\chi^2/\text{NDF}$ : 1153.4/17

Out: -11.848+/-0.081  $\chi^2/\text{NDF}$ : 903.5/19

All: -11.730+/-0.058  $\chi^2/\text{NDF}$ : 2061.4/37

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-34.042 \pm 0.151$   $\chi^2/\text{NDF}$ : 1340.8/16

Left Out:  $-30.160 \pm 0.061$   $\chi^2/\text{NDF}$ : 656.7/19

Right Out:  $-34.277 \pm 0.151$   $\chi^2/\text{NDF}$ : 1349.5/18

Left In:  $-30.298 \pm 0.064$   $\chi^2/\text{NDF}$ : 1209.8/17

Left:  $-30.226 \pm 0.044$   $\chi^2/\text{NDF}$ : 1869.0/37

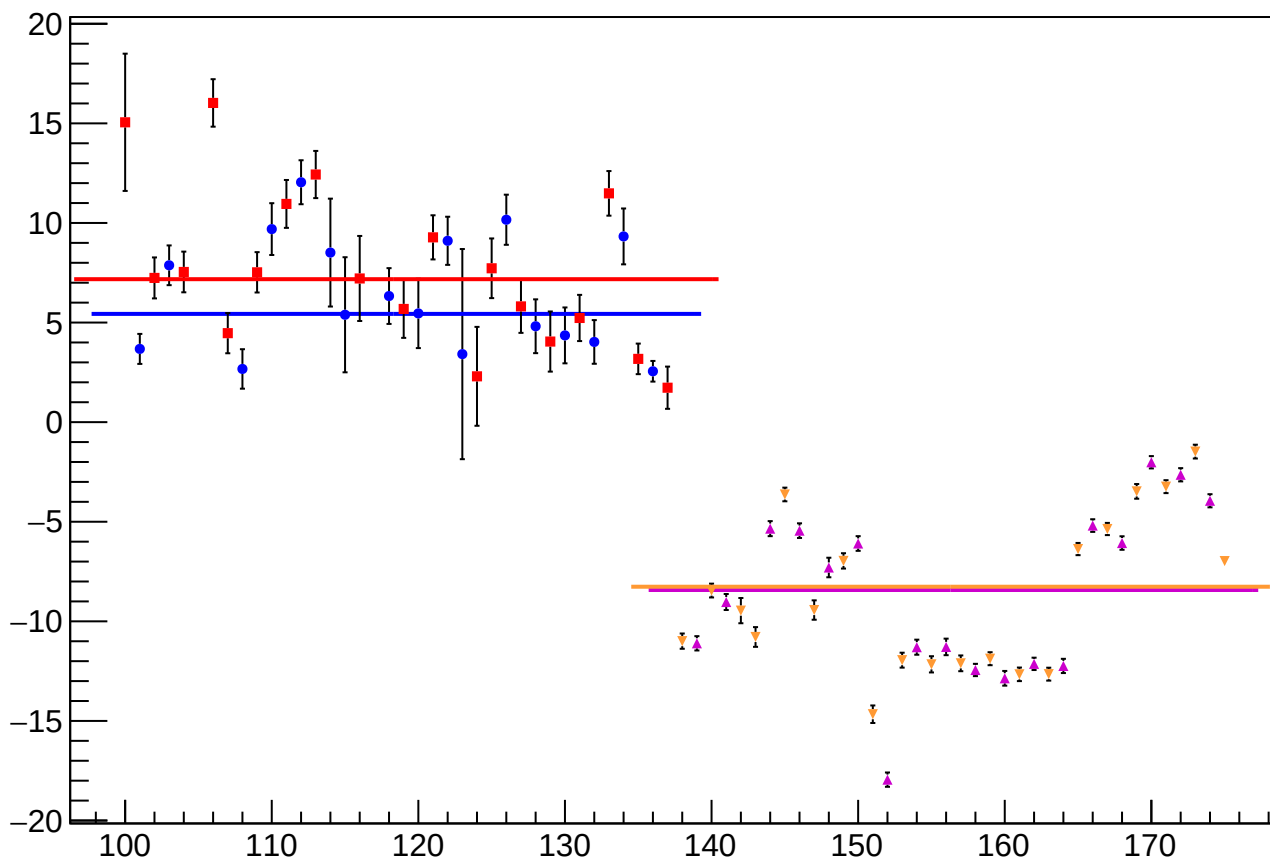
Right:  $-34.159 \pm 0.107$   $\chi^2/\text{NDF}$ : 2691.4/35

In:  $-30.867 \pm 0.059$   $\chi^2/\text{NDF}$ : 3073.9/34

Out:  $-30.735 \pm 0.056$   $\chi^2/\text{NDF}$ : 2647.1/38

All:  $-30.798 \pm 0.041$   $\chi^2/\text{NDF}$ : 5723.7/73

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $5.435 \pm 0.270$   $\chi^2/\text{NDF}$ : 132.0/16

Left Out:  $-8.262 \pm 0.080$   $\chi^2/\text{NDF}$ : 2191.5/19

Right Out:  $7.177 \pm 0.274$   $\chi^2/\text{NDF}$ : 182.6/18

Left In:  $-8.427 \pm 0.083$   $\chi^2/\text{NDF}$ : 2679.9/17

Left:  $-8.341 \pm 0.058$   $\chi^2/\text{NDF}$ : 4873.5/37

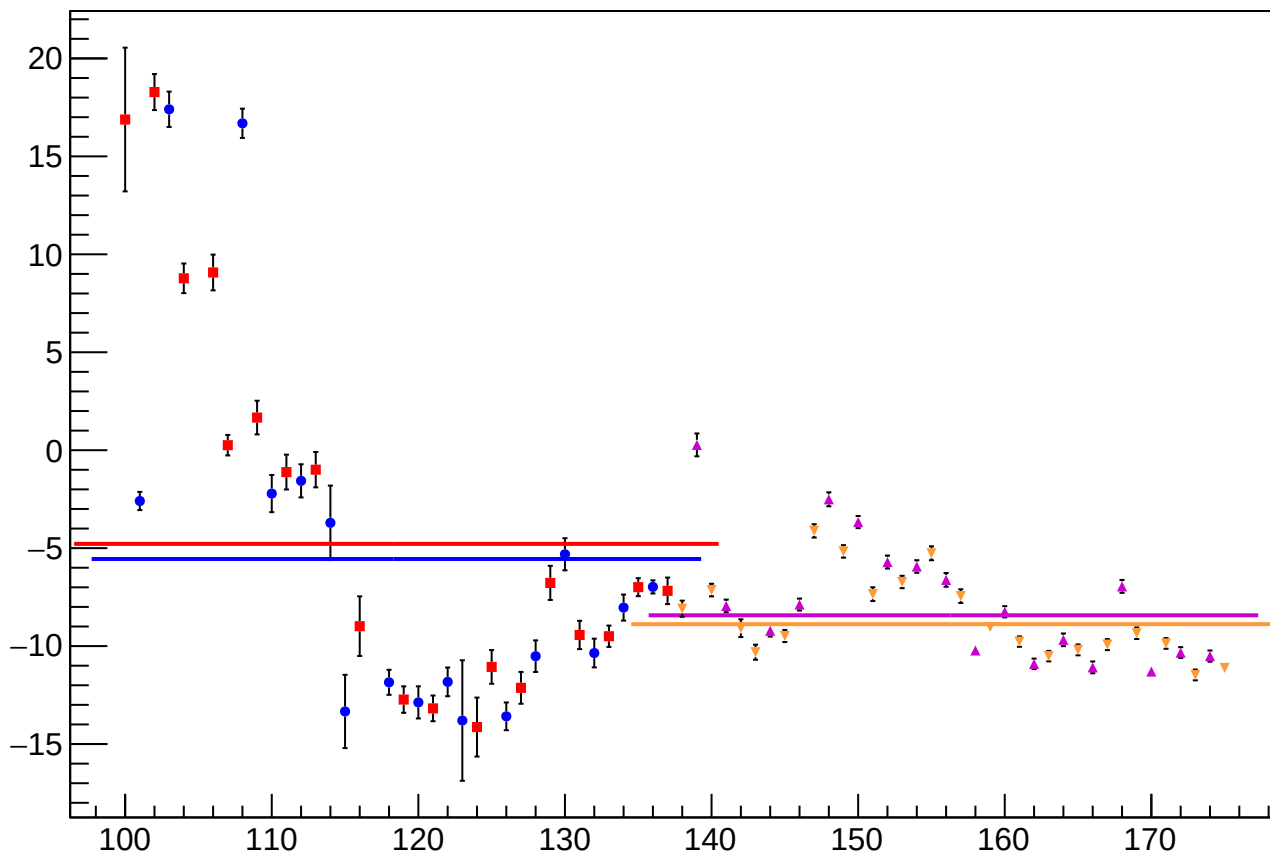
Right:  $6.291 \pm 0.192$   $\chi^2/\text{NDF}$ : 335.1/35

In:  $-7.215 \pm 0.080$   $\chi^2/\text{NDF}$ : 5224.9/34

Out:  $-7.050 \pm 0.077$   $\chi^2/\text{NDF}$ : 5296.5/38

All:  $-7.129 \pm 0.055$   $\chi^2/\text{NDF}$ : 10523.5/73

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-5.553 \pm 0.170$   $\chi^2/\text{NDF}: 2125.3/16$

Left Out:  $-8.880 \pm 0.069$   $\chi^2/\text{NDF}: 832.8/19$

Right Out:  $-4.782 \pm 0.173$   $\chi^2/\text{NDF}: 2040.4/18$

Left In:  $-8.428 \pm 0.072$   $\chi^2/\text{NDF}: 1383.3/17$

Left:  $-8.665 \pm 0.050$   $\chi^2/\text{NDF}: 2236.8/37$

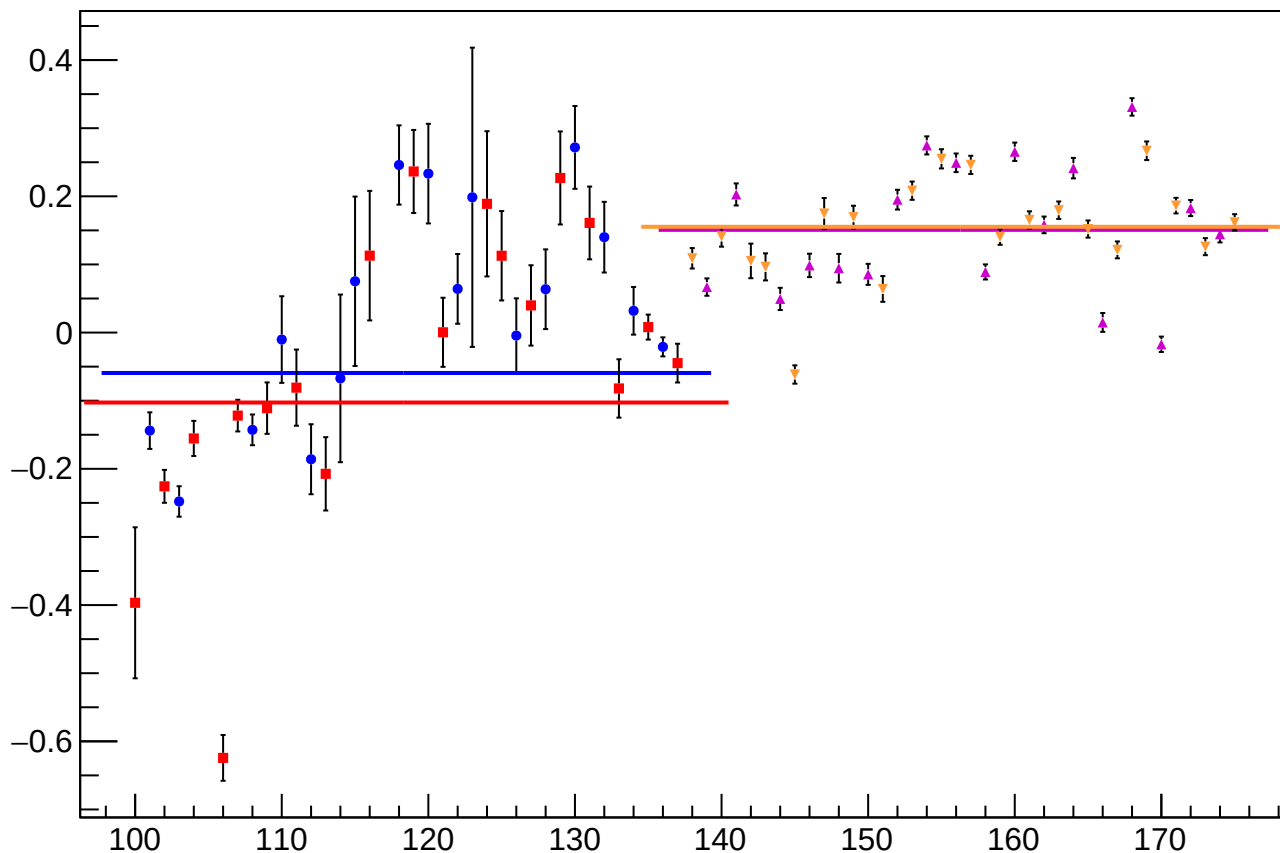
Right:  $-5.174 \pm 0.121$   $\chi^2/\text{NDF}: 4175.8/35$

In:  $-7.992 \pm 0.066$   $\chi^2/\text{NDF}: 3751.6/34$

Out:  $-8.323 \pm 0.064$   $\chi^2/\text{NDF}: 3359.0/38$

All:  $-8.163 \pm 0.046$   $\chi^2/\text{NDF}: 7123.5/73$

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.059 $\pm$ 0.008  $\chi^2$ /NDF: 217.6/16

Left Out: 0.155 $\pm$ 0.003  $\chi^2$ /NDF:513.1/19

Right Out: -0.103 $\pm$ 0.008  $\chi^2$ /NDF: 435.5/18

Left In: 0.151 $\pm$ 0.003  $\chi^2$ /NDF:939.4/17

Left: 0.153 $\pm$ 0.002  $\chi^2$ /NDF: 1453.5/37

Right: -0.081 $\pm$ 0.006  $\chi^2$ /NDF: 666.4/35

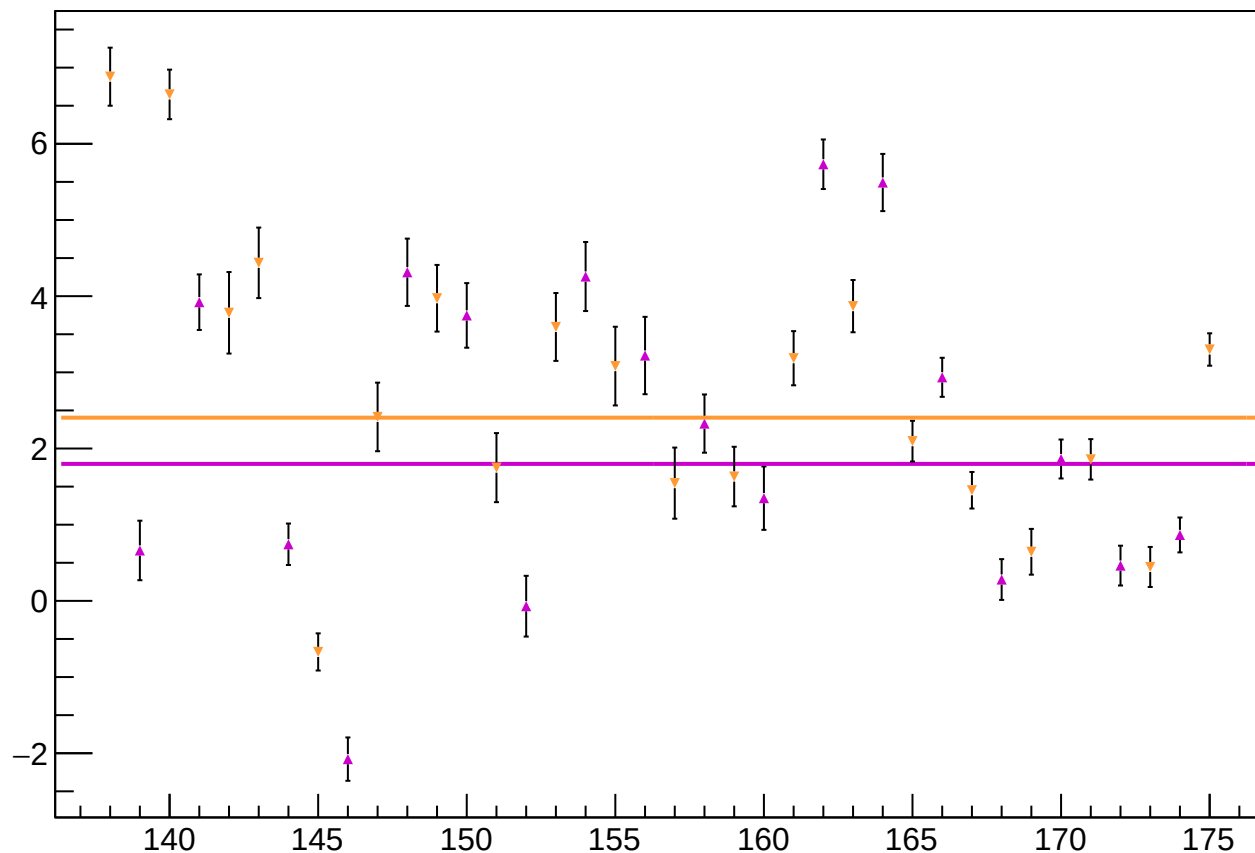
In: 0.124 $\pm$ 0.003  $\chi^2$ /NDF:1704.1/34

Out: 0.124 $\pm$ 0.003  $\chi^2$ /NDF:1772.9/38

All: 0.124 $\pm$ 0.002  $\chi^2$ /NDF: 3476.9/73



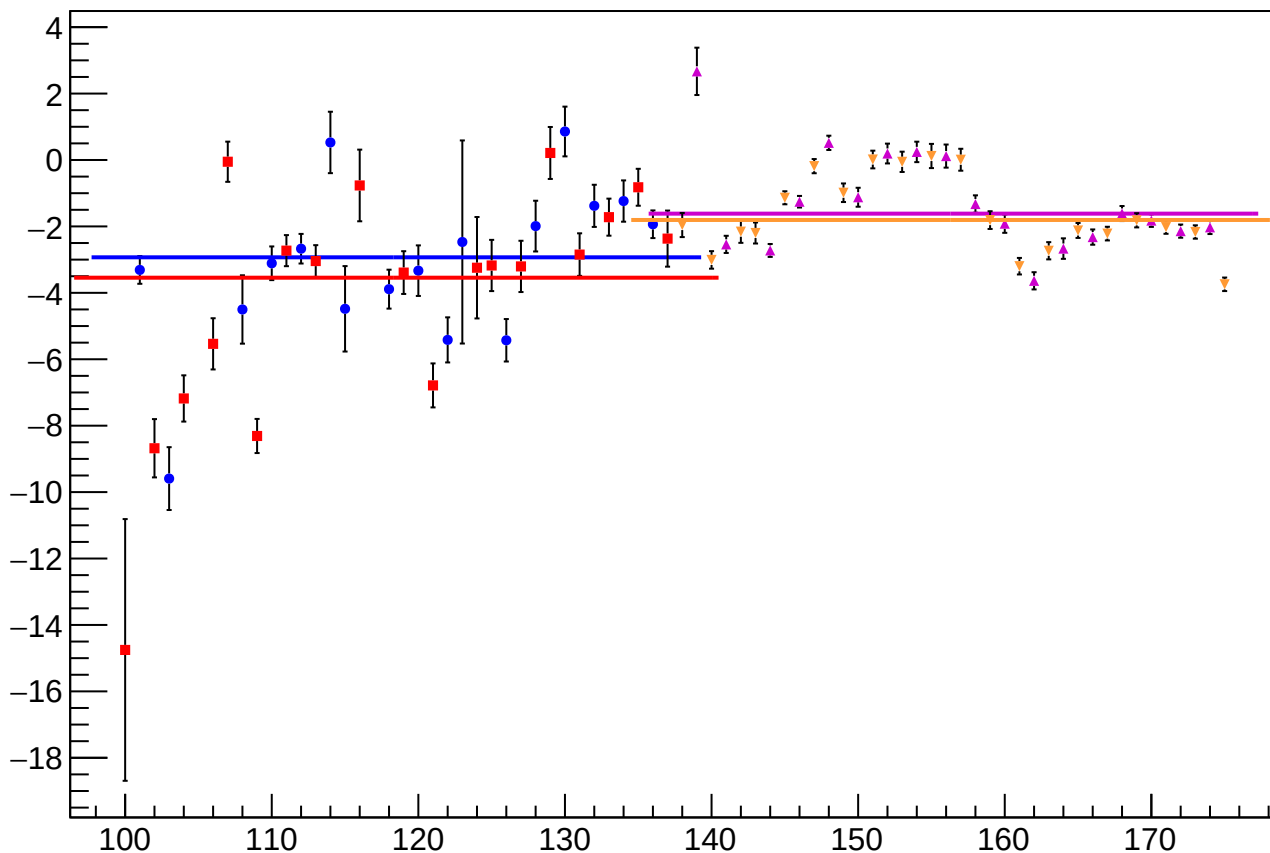
reg\_asym\_sam\_15\_37\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 2.405 $\pm$ 0.073  $\chi^2/\text{NDF}$ :676.2/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 1.798 $\pm$ 0.076  $\chi^2/\text{NDF}$ :696.4/17

Left: 2.113 $\pm$ 0.053  $\chi^2/\text{NDF}$ : 1405.7/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 1.798 $\pm$ 0.076  $\chi^2/\text{NDF}$ :696.4/17  
 Out: 2.405 $\pm$ 0.073  $\chi^2/\text{NDF}$ :676.2/19  
 All: 2.113 $\pm$ 0.053  $\chi^2/\text{NDF}$ : 1405.7/37

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-2.930 \pm 0.154$   $\chi^2/\text{NDF}: 146.5/16$

Left Out:  $-1.806 \pm 0.055$   $\chi^2/\text{NDF}: 383.8/19$

Right Out:  $-3.544 \pm 0.155$   $\chi^2/\text{NDF}: 291.7/18$

Left In:  $-1.615 \pm 0.057$   $\chi^2/\text{NDF}: 381.4/17$

Left:  $-1.713 \pm 0.040$   $\chi^2/\text{NDF}: 771.0/37$

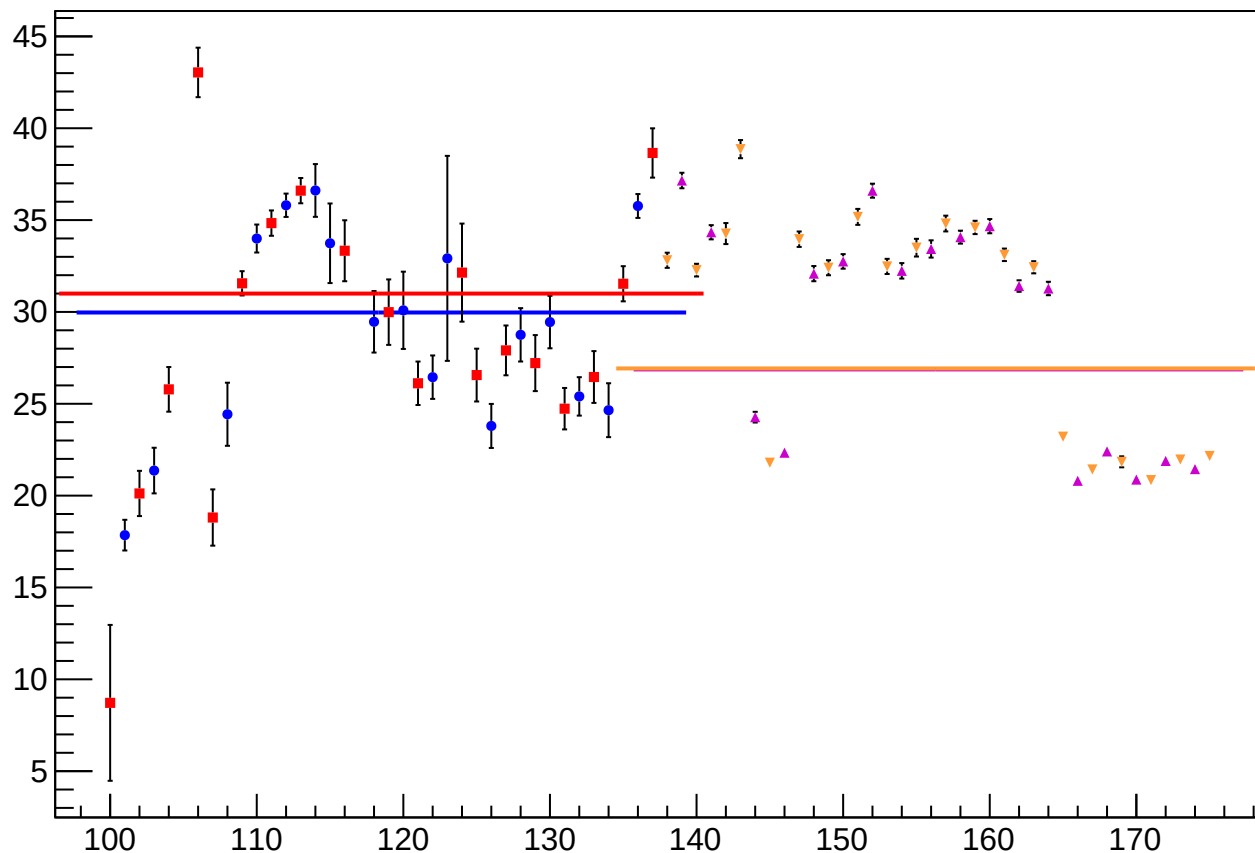
Right:  $-3.236 \pm 0.109$   $\chi^2/\text{NDF}: 446.1/35$

In:  $-1.773 \pm 0.053$   $\chi^2/\text{NDF}: 592.2/34$

Out:  $-2.003 \pm 0.052$   $\chi^2/\text{NDF}: 787.5/38$

All:  $-1.891 \pm 0.037$   $\chi^2/\text{NDF}: 1389.2/73$

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 29.969 $\pm$ 0.267  $\chi^2/\text{NDF}$ : 554.3/16

Left Out: 26.923 $\pm$ 0.073  $\chi^2/\text{NDF}$ : 6490.5/19

Right Out: 31.000 $\pm$ 0.260  $\chi^2/\text{NDF}$ : 479.5/18

Left In: 26.871 $\pm$ 0.076  $\chi^2/\text{NDF}$ : 6070.5/17

Left: 26.898 $\pm$ 0.053  $\chi^2/\text{NDF}$ : 12561.2/37

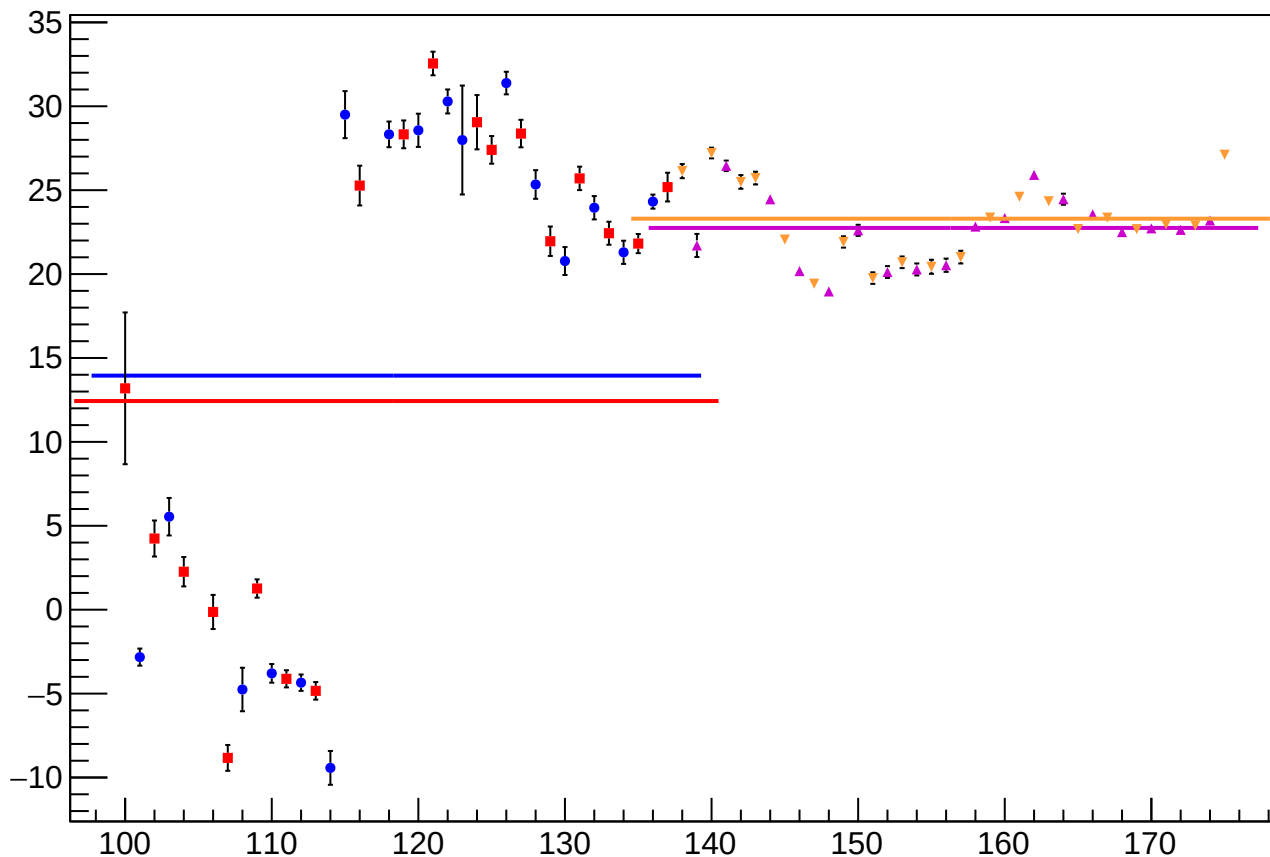
Right: 30.497 $\pm$ 0.186  $\chi^2/\text{NDF}$ : 1041.5/35

In: 27.104 $\pm$ 0.073  $\chi^2/\text{NDF}$ : 6749.5/34

Out: 27.224 $\pm$ 0.071  $\chi^2/\text{NDF}$ : 7197.7/38

All: 27.166 $\pm$ 0.051  $\chi^2/\text{NDF}$ : 13948.7/73

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 13.948 $\pm$ 0.172  $\chi^2$ /NDF: 7391.9/16

Left Out: 23.301 $\pm$ 0.063  $\chi^2$ /NDF:1104.0/19

Right Out: 12.435 $\pm$ 0.174  $\chi^2$ /NDF: 6962.9/18

Left In: 22.751 $\pm$ 0.065  $\chi^2$ /NDF:812.5/17

Left: 23.035 $\pm$ 0.045  $\chi^2$ /NDF: 1953.9/37

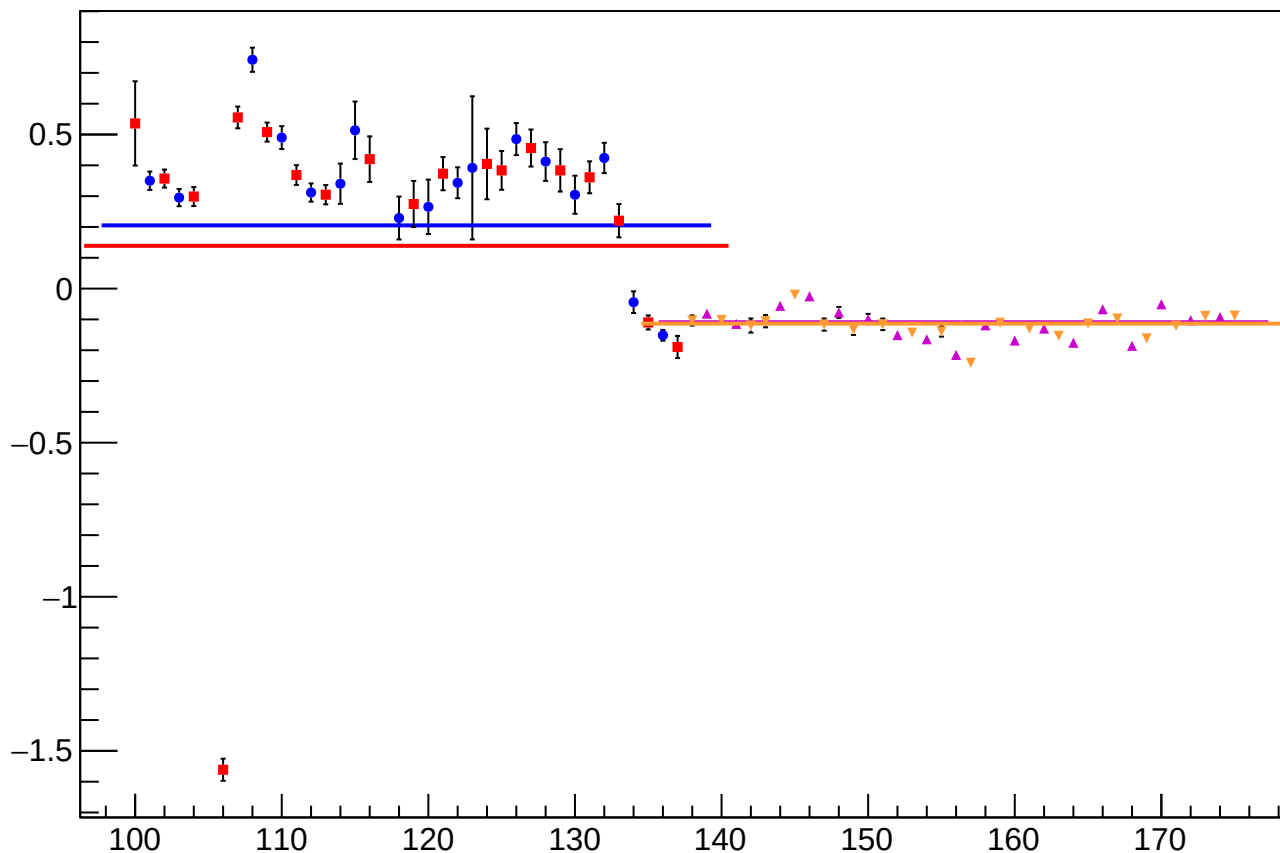
Right: 13.199 $\pm$ 0.122  $\chi^2$ /NDF: 14393.1/35

In: 21.658 $\pm$ 0.061  $\chi^2$ /NDF:10499.6/34

Out: 22.053 $\pm$ 0.059  $\chi^2$ /NDF:11531.7/38

All: 21.861 $\pm$ 0.042  $\chi^2$ /NDF: 22053.0/73

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.205 \pm 0.009$   $\chi^2/\text{NDF}$ : 846.2/16

Left Out:  $-0.114 \pm 0.003$   $\chi^2/\text{NDF}$ : 216.1/19

Right Out:  $0.139 \pm 0.009$   $\chi^2/\text{NDF}$ : 3016.8/18

Left In:  $-0.109 \pm 0.003$   $\chi^2/\text{NDF}$ : 289.2/17

Left:  $-0.111 \pm 0.002$   $\chi^2/\text{NDF}$ : 506.5/37

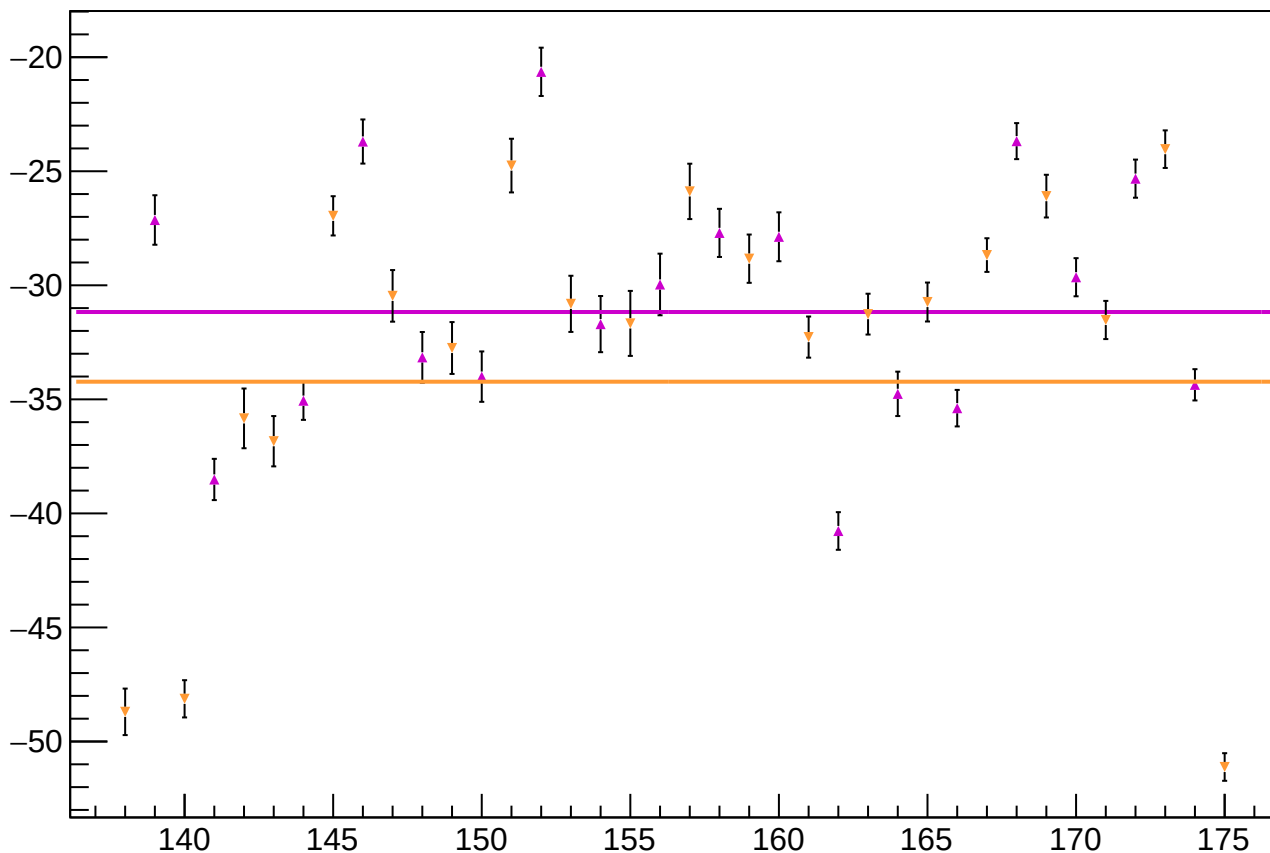
Right:  $0.171 \pm 0.007$   $\chi^2/\text{NDF}$ : 3888.5/35

In:  $-0.081 \pm 0.003$   $\chi^2/\text{NDF}$ : 2160.9/34

Out:  $-0.091 \pm 0.003$   $\chi^2/\text{NDF}$ : 3919.0/38

All:  $-0.086 \pm 0.002$   $\chi^2/\text{NDF}$ : 6086.6/73

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-34.226 \pm 0.210$   $\chi^2/\text{NDF}$ : 1838.9/19

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left In:  $-31.171 \pm 0.220$   $\chi^2/\text{NDF}$ : 631.2/17

Left:  $-32.767 \pm 0.152$   $\chi^2/\text{NDF}$ : 2571.2/37

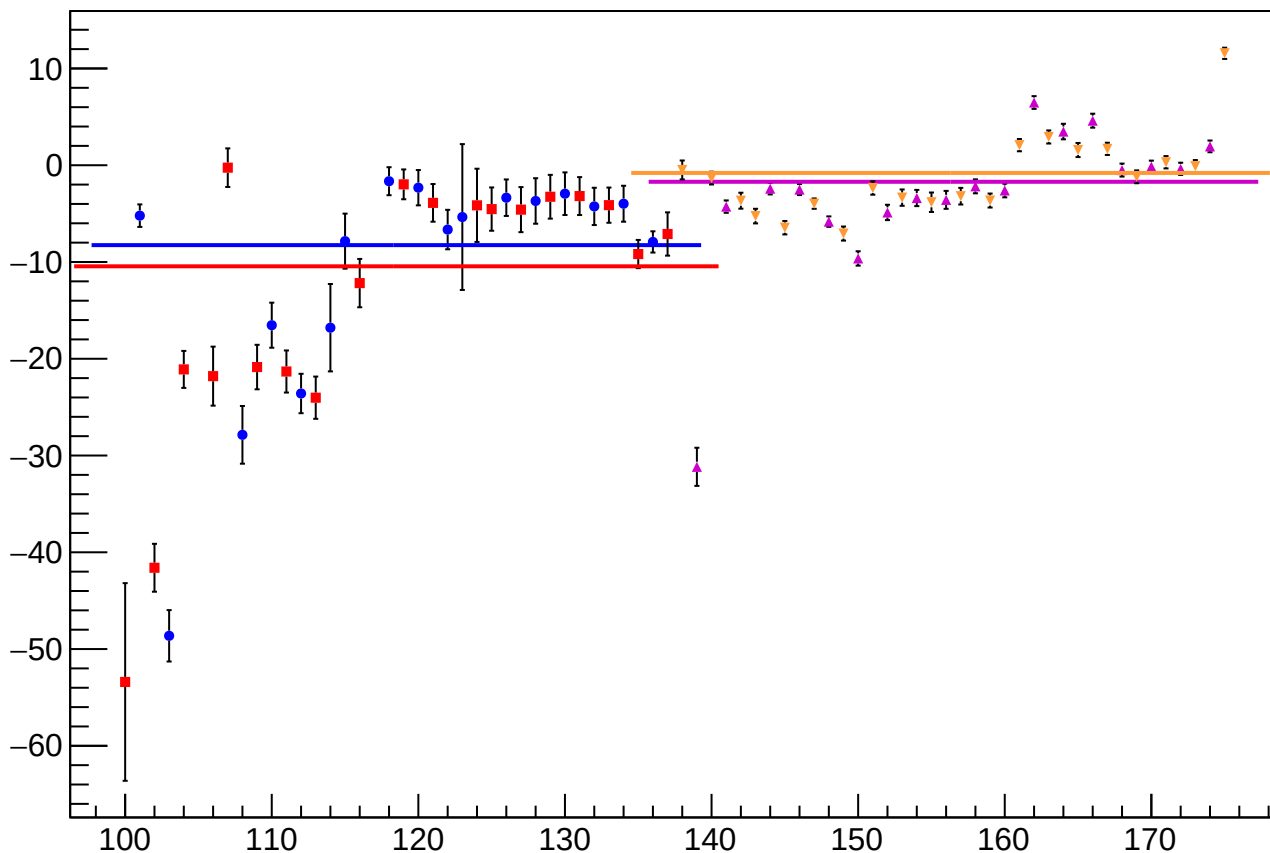
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

In:  $-31.171 \pm 0.220$   $\chi^2/\text{NDF}$ : 631.2/17

Out:  $-34.226 \pm 0.210$   $\chi^2/\text{NDF}$ : 1838.9/19

All:  $-32.767 \pm 0.152$   $\chi^2/\text{NDF}$ : 2571.2/37

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-8.257 \pm 0.462$   $\chi^2/\text{NDF}: 412.1/16$

Left Out:  $-0.796 \pm 0.156$   $\chi^2/\text{NDF}: 803.4/19$

Right Out:  $-10.446 \pm 0.491$   $\chi^2/\text{NDF}: 428.4/18$

Left In:  $-1.710 \pm 0.163$   $\chi^2/\text{NDF}: 763.9/17$

Left:  $-1.234 \pm 0.113$   $\chi^2/\text{NDF}: 1583.8/37$

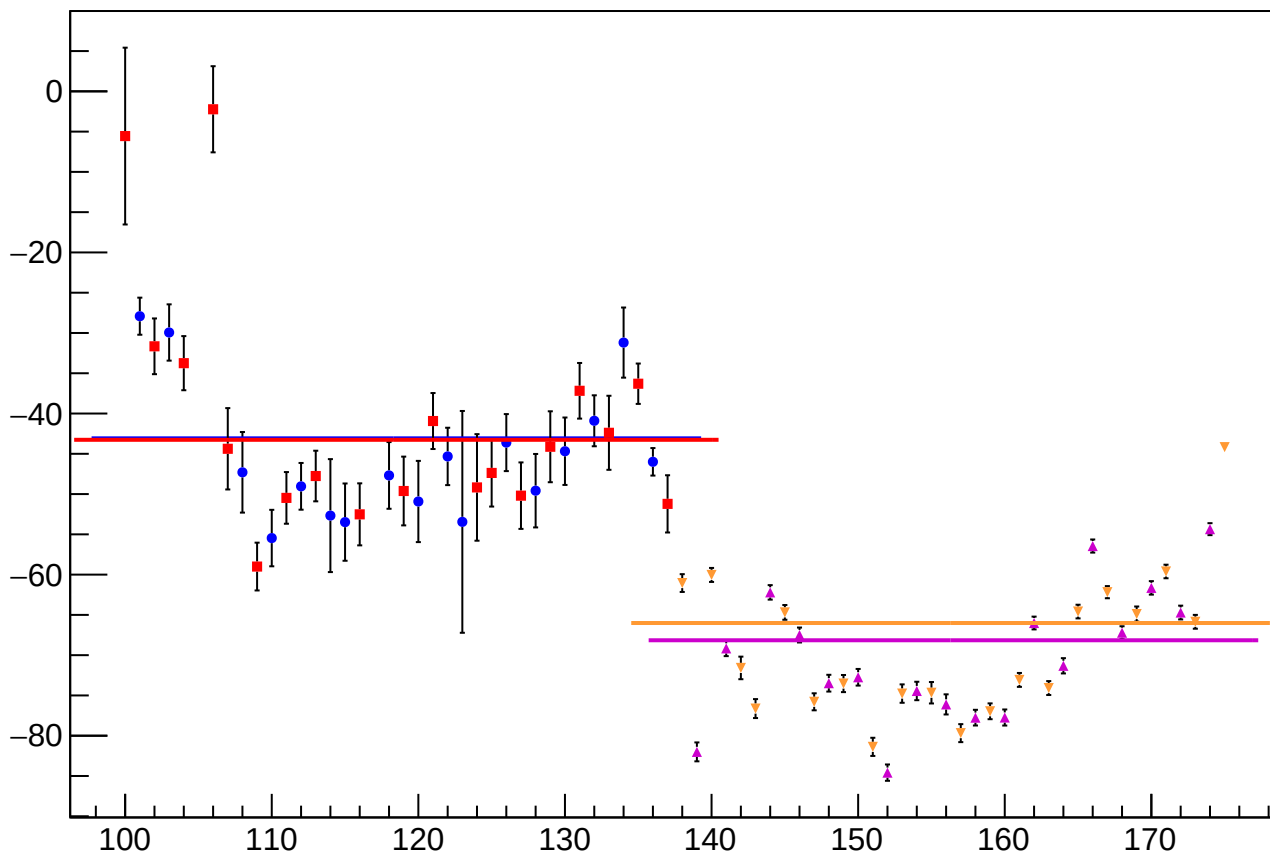
Right:  $-9.285 \pm 0.337$   $\chi^2/\text{NDF}: 851.1/35$

In:  $-2.434 \pm 0.154$   $\chi^2/\text{NDF}: 1354.6/34$

Out:  $-1.683 \pm 0.149$   $\chi^2/\text{NDF}: 1582.3/38$

All:  $-2.046 \pm 0.107$   $\chi^2/\text{NDF}: 2949.2/73$

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-43.082 \pm 0.834$   $\chi^2/\text{NDF}: 99.2/16$

Left Out:  $-66.007 \pm 0.210$   $\chi^2/\text{NDF}: 2406.9/19$

Right Out:  $-43.262 \pm 0.866$   $\chi^2/\text{NDF}: 154.2/18$

Left In:  $-68.150 \pm 0.219$   $\chi^2/\text{NDF}: 1401.3/17$

Left:  $-67.032 \pm 0.151$   $\chi^2/\text{NDF}: 3858.3/37$

Right:  $-43.169 \pm 0.601$   $\chi^2/\text{NDF}: 253.4/35$

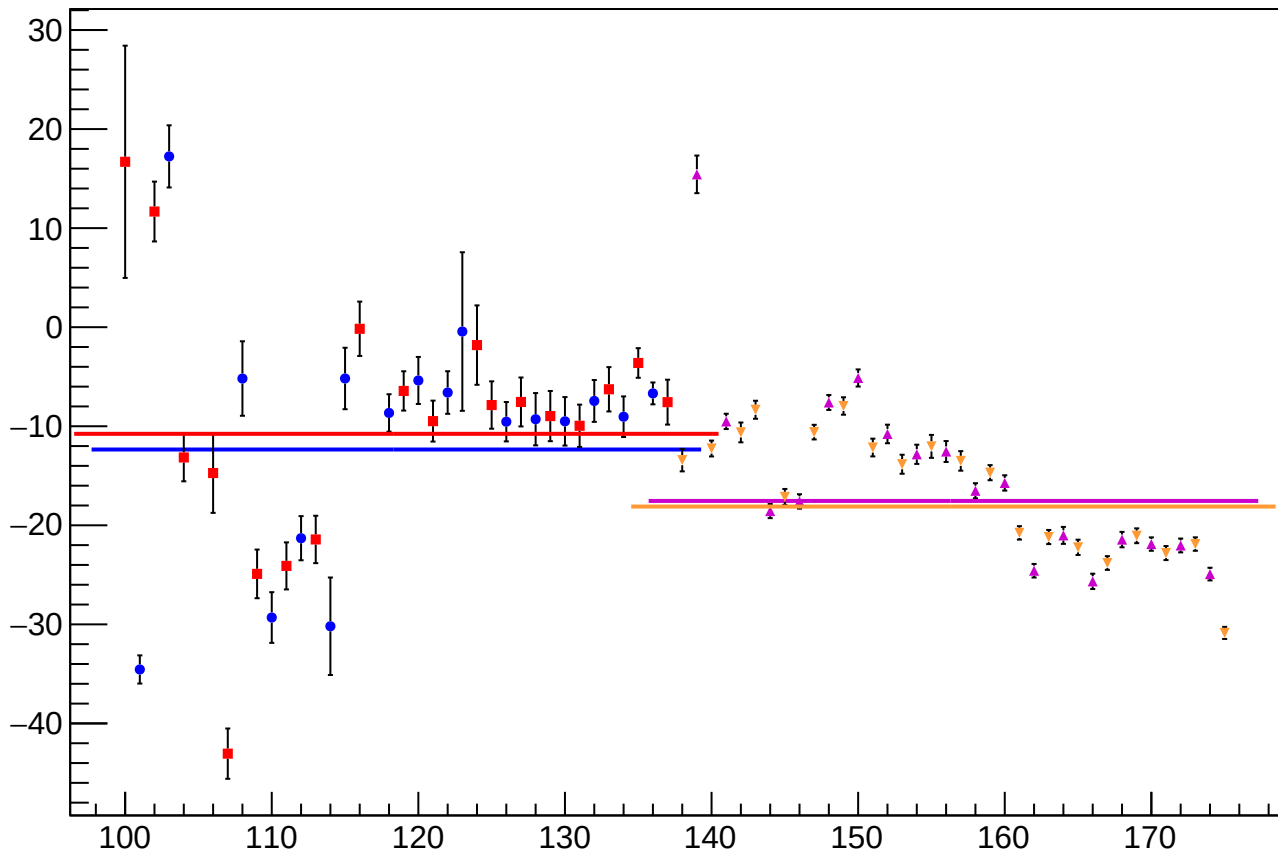
In:  $-66.536 \pm 0.212$   $\chi^2/\text{NDF}: 2345.3/34$

Out:  $-64.750 \pm 0.204$   $\chi^2/\text{NDF}: 3212.1/38$

All:  $-65.609 \pm 0.147$   $\chi^2/\text{NDF}: 5594.4/73$



reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-12.348 \pm 0.520$   $\chi^2/\text{NDF}$ : 475.9/16

Left Out:  $-18.108 \pm 0.178$   $\chi^2/\text{NDF}$ : 1272.1/19

Right Out:  $-10.765 \pm 0.554$   $\chi^2/\text{NDF}$ : 366.6/18

Left In:  $-17.540 \pm 0.186$   $\chi^2/\text{NDF}$ : 1370.0/17

Left:  $-17.836 \pm 0.129$   $\chi^2/\text{NDF}$ : 2646.9/37

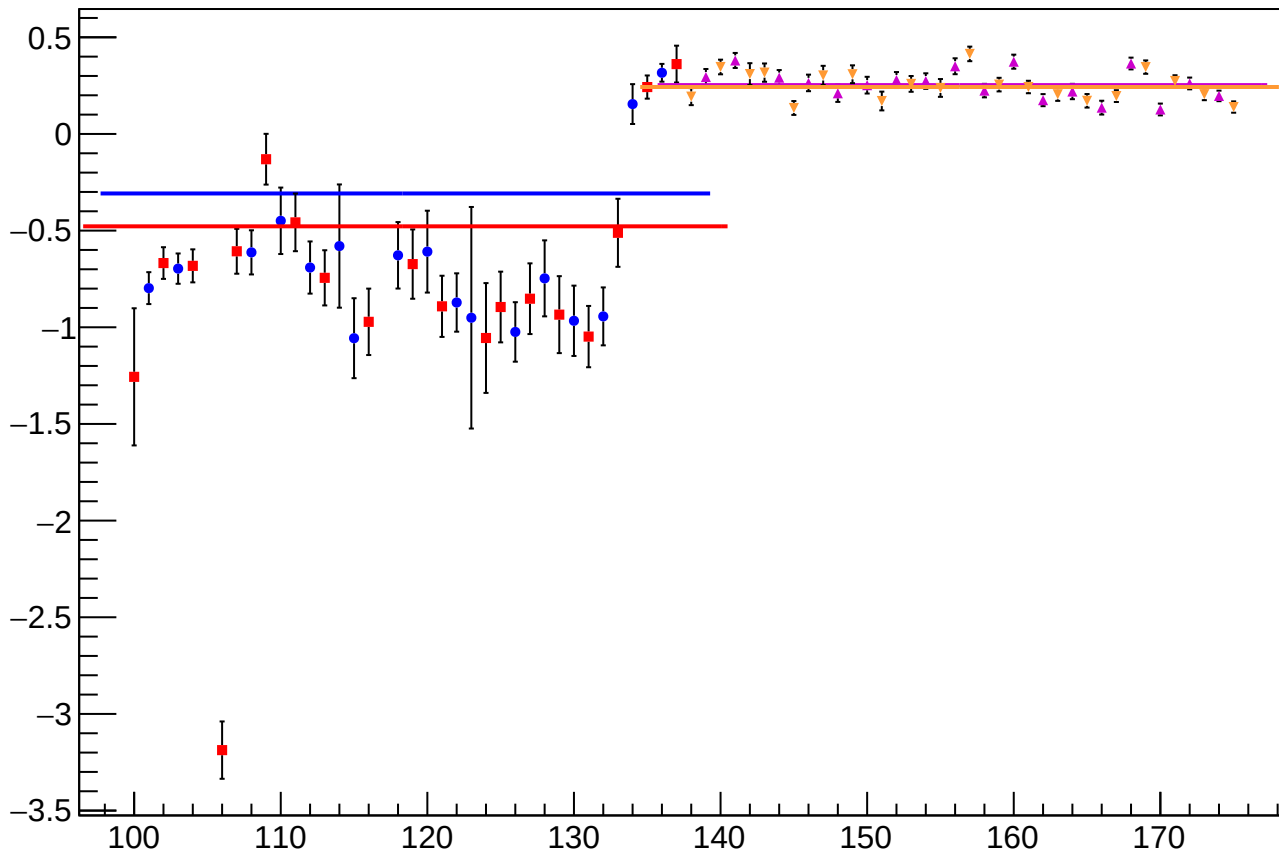
Right:  $-11.606 \pm 0.379$   $\chi^2/\text{NDF}$ : 846.9/35

In:  $-16.950 \pm 0.175$   $\chi^2/\text{NDF}$ : 1934.4/34

Out:  $-17.420 \pm 0.169$   $\chi^2/\text{NDF}$ : 1798.2/38

All:  $-17.193 \pm 0.122$   $\chi^2/\text{NDF}$ : 3736.3/73

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.308 \pm 0.028$   $\chi^2/\text{NDF}$ : 372.4/16

Left Out:  $0.243 \pm 0.008$   $\chi^2/\text{NDF}$ : 80.0/19

Right Out:  $-0.478 \pm 0.029$   $\chi^2/\text{NDF}$ : 631.2/18

Left In:  $0.253 \pm 0.008$   $\chi^2/\text{NDF}$ : 84.0/17

Left:  $0.248 \pm 0.006$   $\chi^2/\text{NDF}$ : 164.6/37

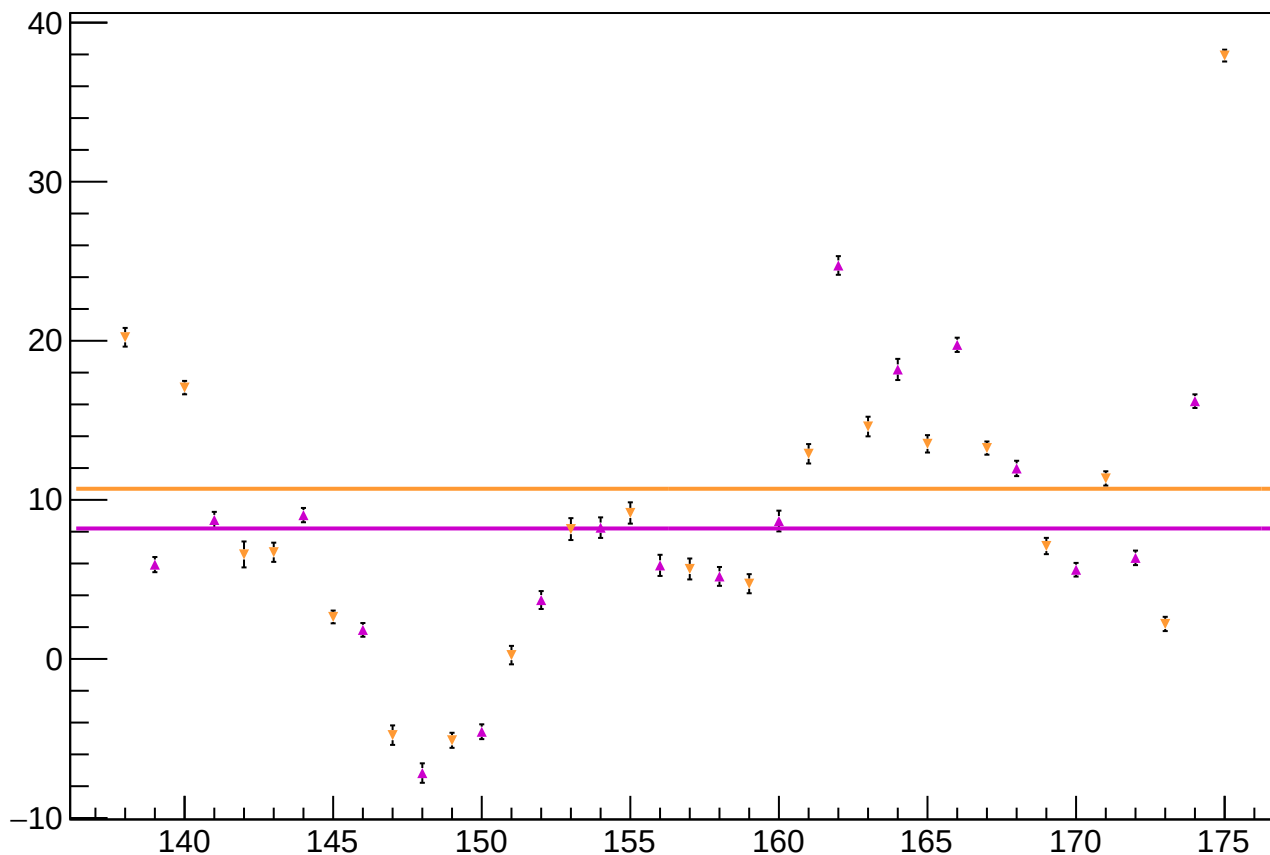
Right:  $-0.390 \pm 0.020$   $\chi^2/\text{NDF}$ : 1022.0/35

In:  $0.204 \pm 0.008$   $\chi^2/\text{NDF}$ : 835.3/34

Out:  $0.187 \pm 0.008$   $\chi^2/\text{NDF}$ : 1299.4/38

All:  $0.195 \pm 0.006$   $\chi^2/\text{NDF}$ : 2137.1/73

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 10.698 $\pm$ 0.116  $\chi^2$ /NDF:9086.7/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 8.202 $\pm$ 0.120  $\chi^2$ /NDF:3875.1/17

Left: 9.493 $\pm$ 0.084  $\chi^2$ /NDF: 13184.1/37

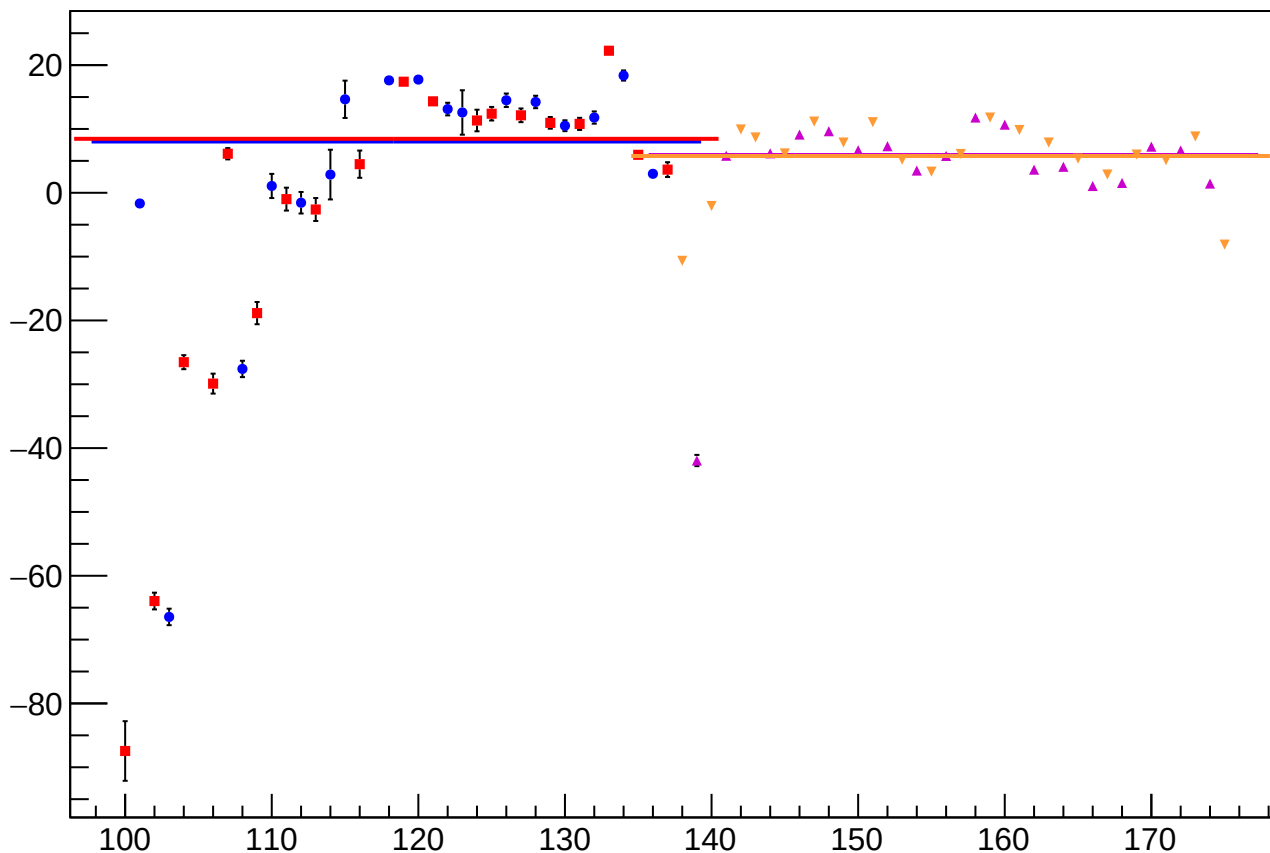
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 8.202 $\pm$ 0.120  $\chi^2$ /NDF:3875.1/17

Out: 10.698 $\pm$ 0.116  $\chi^2$ /NDF:9086.7/19

All: 9.493 $\pm$ 0.084  $\chi^2$ /NDF: 13184.1/37

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $8.036 \pm 0.215$   $\chi^2/\text{NDF}: 5369.4/16$

Left Out:  $5.764 \pm 0.086$   $\chi^2/\text{NDF}: 4001.1/19$

Right Out:  $8.454 \pm 0.213$   $\chi^2/\text{NDF}: 6704.4/18$

Left In:  $5.920 \pm 0.090$   $\chi^2/\text{NDF}: 4074.6/17$

Left:  $5.839 \pm 0.062$   $\chi^2/\text{NDF}: 8077.3/37$

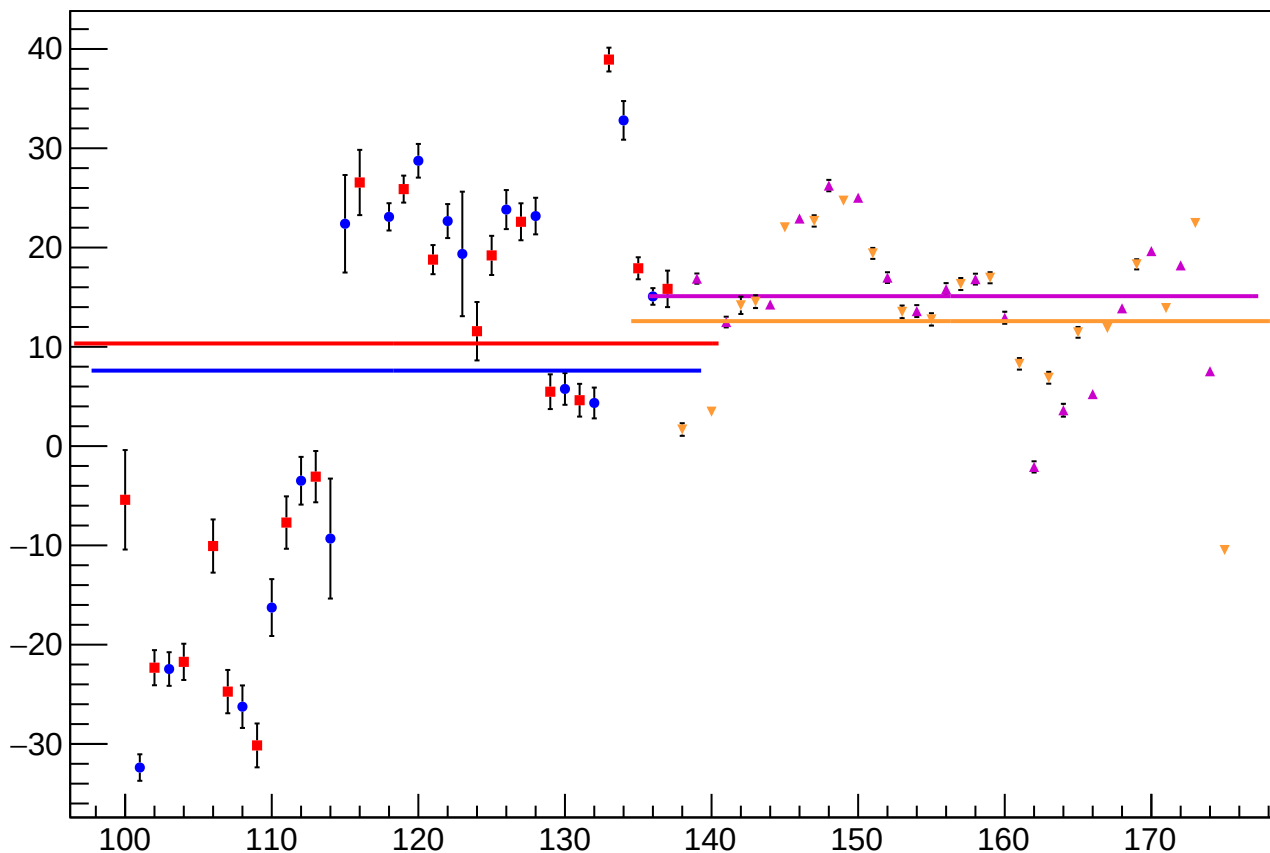
Right:  $8.247 \pm 0.151$   $\chi^2/\text{NDF}: 12075.7/35$

In:  $6.234 \pm 0.083$   $\chi^2/\text{NDF}: 9526.4/34$

Out:  $6.142 \pm 0.080$   $\chi^2/\text{NDF}: 10842.2/38$

All:  $6.186 \pm 0.058$   $\chi^2/\text{NDF}: 20369.2/73$

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Left: 13.805 ± 0.083  $\chi^2/\text{NDF}$ : 10787.0/37

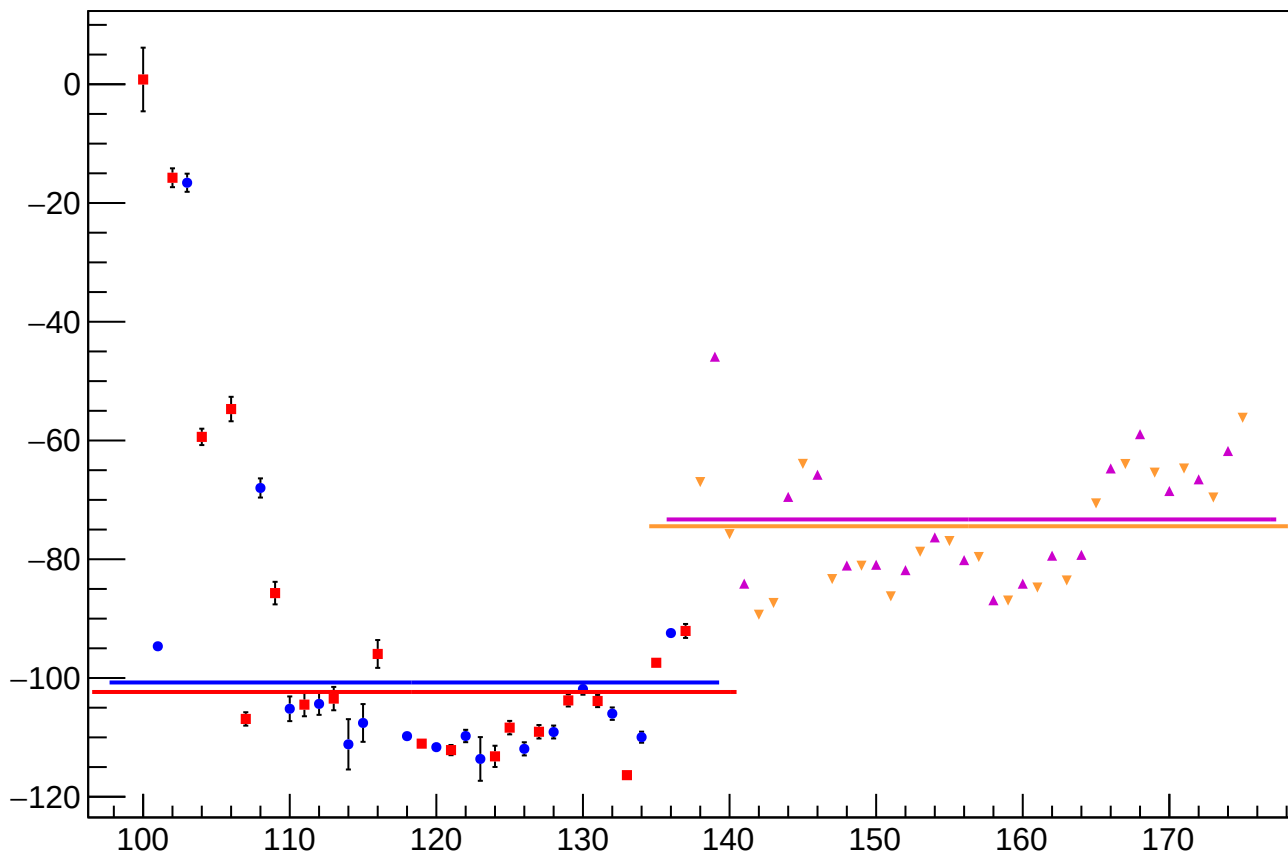
Right: 8.969 ± 0.294  $\chi^2/\text{NDF}$ : 4628.4/35

In: 14.527 ± 0.115  $\chi^2/\text{NDF}$ : 6089.1/34

Out: 12.426 ± 0.112  $\chi^2/\text{NDF}$ : 9405.1/38

All: 13.446 ± 0.080  $\chi^2/\text{NDF}$ : 15665.5/73

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -100.753+/-0.248  $\chi^2$ /NDF: 4522.6/16

Left Out: -74.441+/-0.099  $\chi^2$ /NDF: 9979.7/19

Right Out: -102.354+/-0.246  $\chi^2$ /NDF: 6078.9/18

Left In: -73.293+/-0.103  $\chi^2$ /NDF: 7940.4/17

Left: -73.890+/-0.071  $\chi^2$ /NDF: 17984.9/37

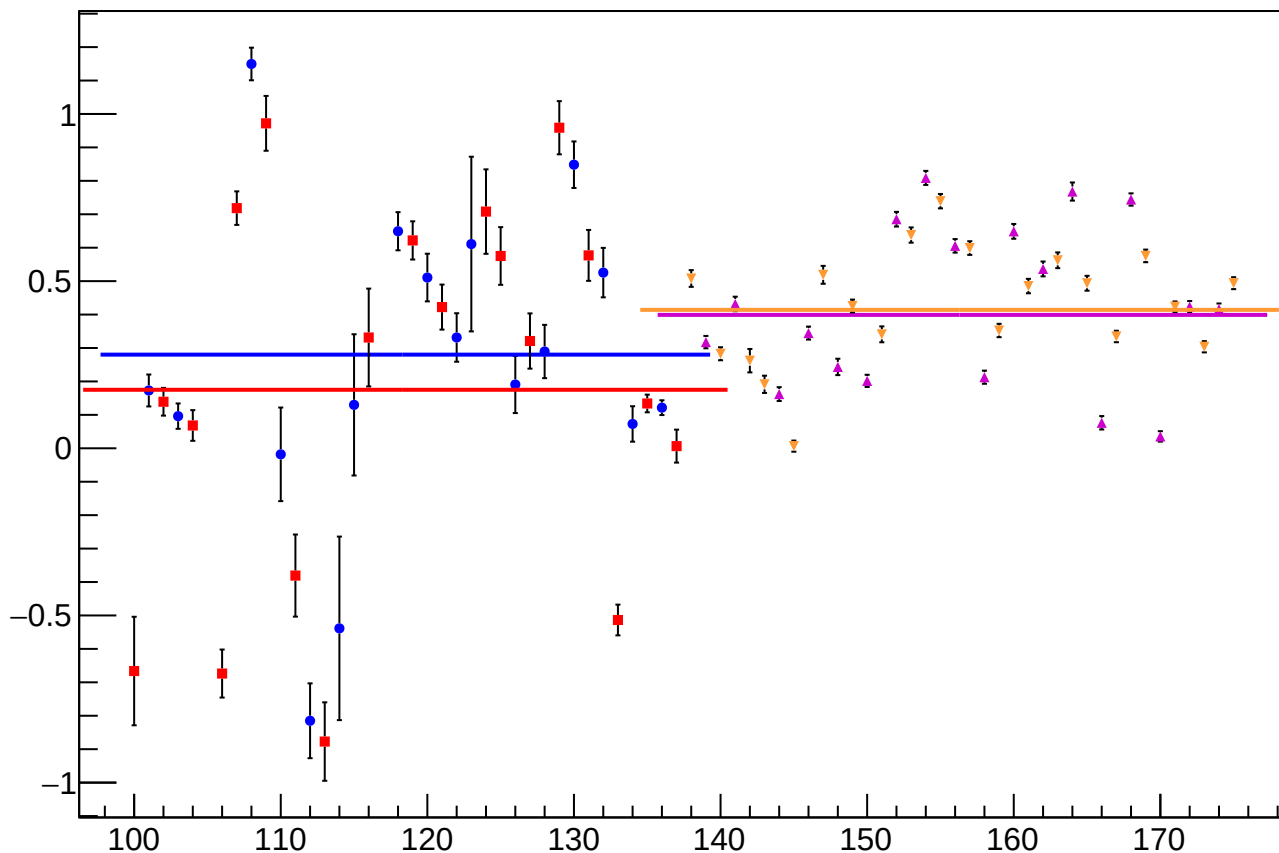
Right: -101.559+/-0.175  $\chi^2$ /NDF: 10622.5/35

In: -77.317+/-0.095  $\chi^2$ /NDF: 22925.7/34

Out: -78.312+/-0.092  $\chi^2$ /NDF: 27127.9/38

All: -77.832+/-0.066  $\chi^2$ /NDF: 50110.4/73

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.280 \pm 0.013$   $\chi^2/\text{NDF}$ : 656.0/16

Left Out:  $0.414 \pm 0.005$   $\chi^2/\text{NDF}$ : 1412.0/19

Right Out:  $0.175 \pm 0.013$   $\chi^2/\text{NDF}$ : 966.7/18

Left In:  $0.399 \pm 0.005$   $\chi^2/\text{NDF}$ : 2564.9/17

Left:  $0.407 \pm 0.003$   $\chi^2/\text{NDF}$ : 3982.3/37

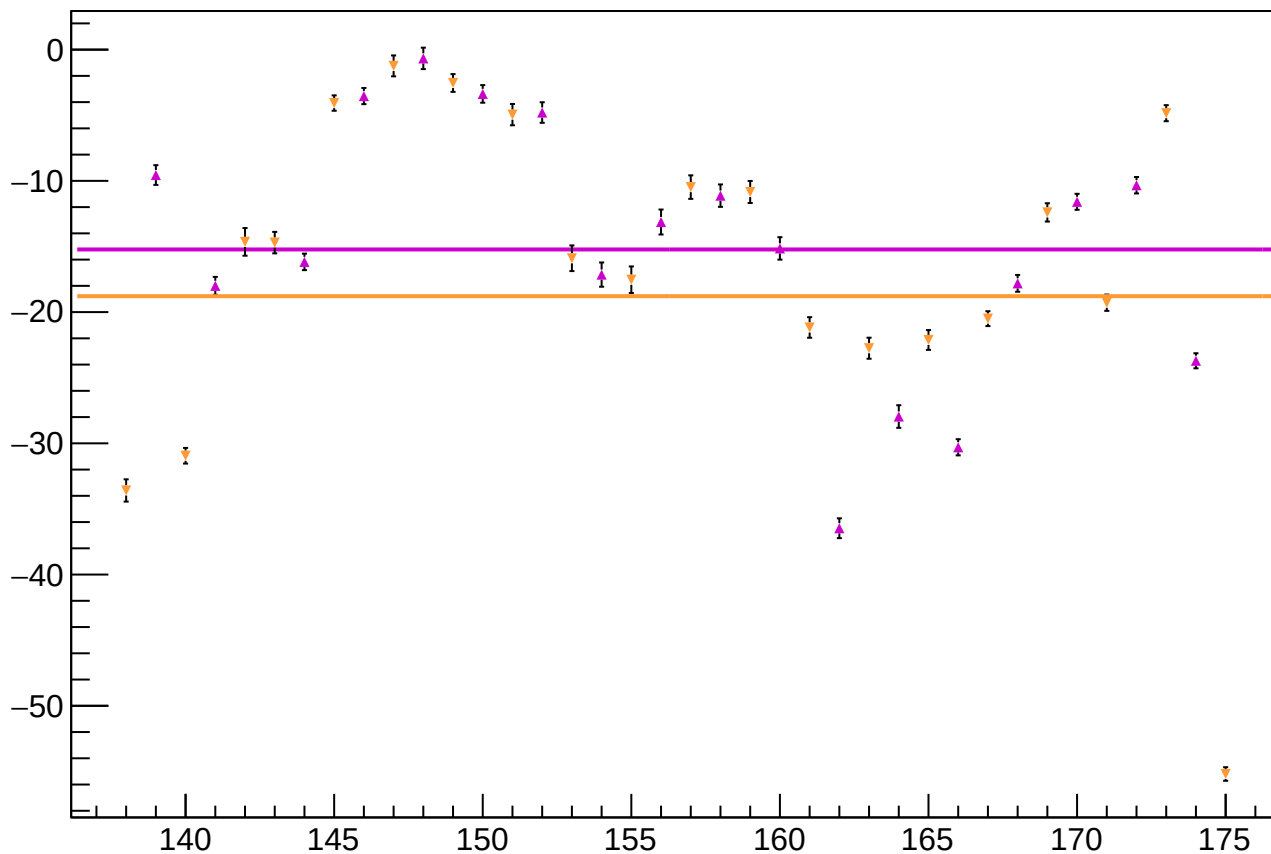
Right:  $0.227 \pm 0.010$   $\chi^2/\text{NDF}$ : 1653.2/35

In:  $0.386 \pm 0.004$   $\chi^2/\text{NDF}$ : 3290.5/34

Out:  $0.389 \pm 0.004$   $\chi^2/\text{NDF}$ : 2662.2/38

All:  $0.388 \pm 0.003$   $\chi^2/\text{NDF}$ : 5953.0/73

reg\_asym\_sam\_1548\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -18.787+/-0.161  $\chi^2/\text{NDF}$ :8529.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -15.228+/-0.167  $\chi^2/\text{NDF}$ :3213.7/17

Left: -17.071+/-0.116  $\chi^2/\text{NDF}$ : 11978.4/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

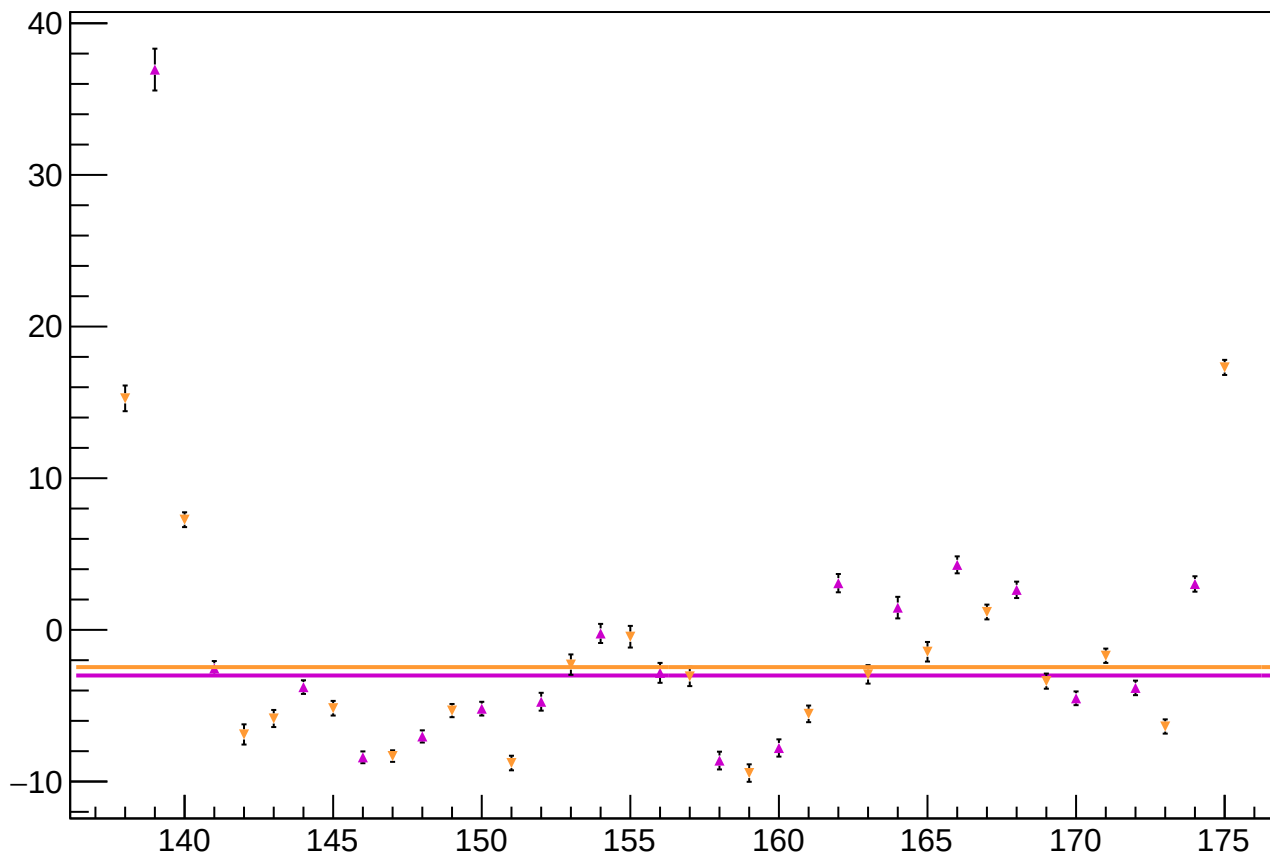
In: -15.228+/-0.167  $\chi^2/\text{NDF}$ :3213.7/17

Out: -18.787+/-0.161  $\chi^2/\text{NDF}$ :8529.2/19

All: -17.071+/-0.116  $\chi^2/\text{NDF}$ : 11978.4/37



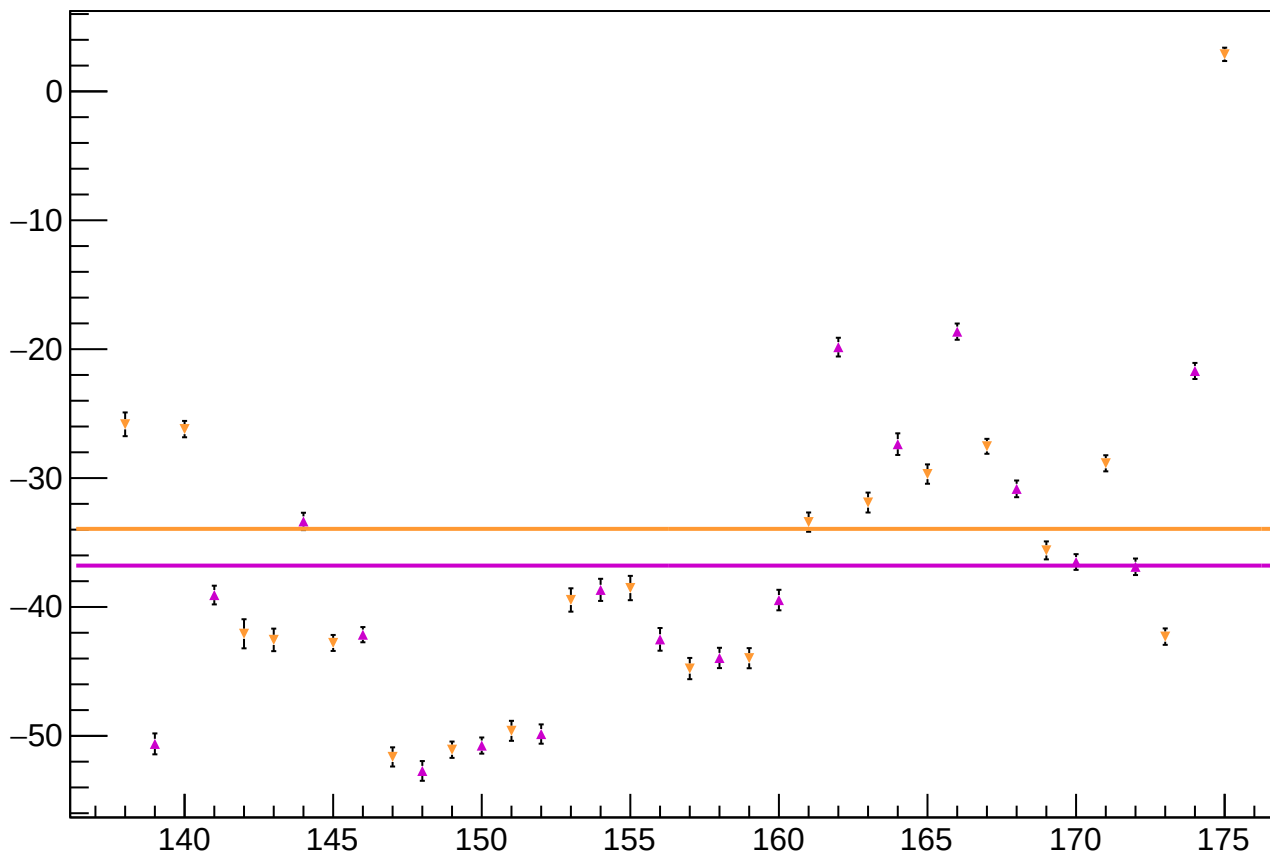
reg\_asym\_sam\_1548\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -2.456+/-0.119  $\chi^2/\text{NDF}$ : 3293.7/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -3.009+/-0.124  $\chi^2/\text{NDF}$ : 1924.4/17

Left: -2.721+/-0.086  $\chi^2/\text{NDF}$ : 5228.5/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: -3.009+/-0.124  $\chi^2/\text{NDF}$ : 1924.4/17  
 Out: -2.456+/-0.119  $\chi^2/\text{NDF}$ : 3293.7/19  
 All: -2.721+/-0.086  $\chi^2/\text{NDF}$ : 5228.5/37

reg\_asym\_sam\_1548\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -33.940+/-0.161  $\chi^2/\text{NDF}$ : 8133.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -36.789+/-0.166  $\chi^2/\text{NDF}$ : 3955.4/17

Left: -35.317+/-0.115  $\chi^2/\text{NDF}$ : 12241.0/37

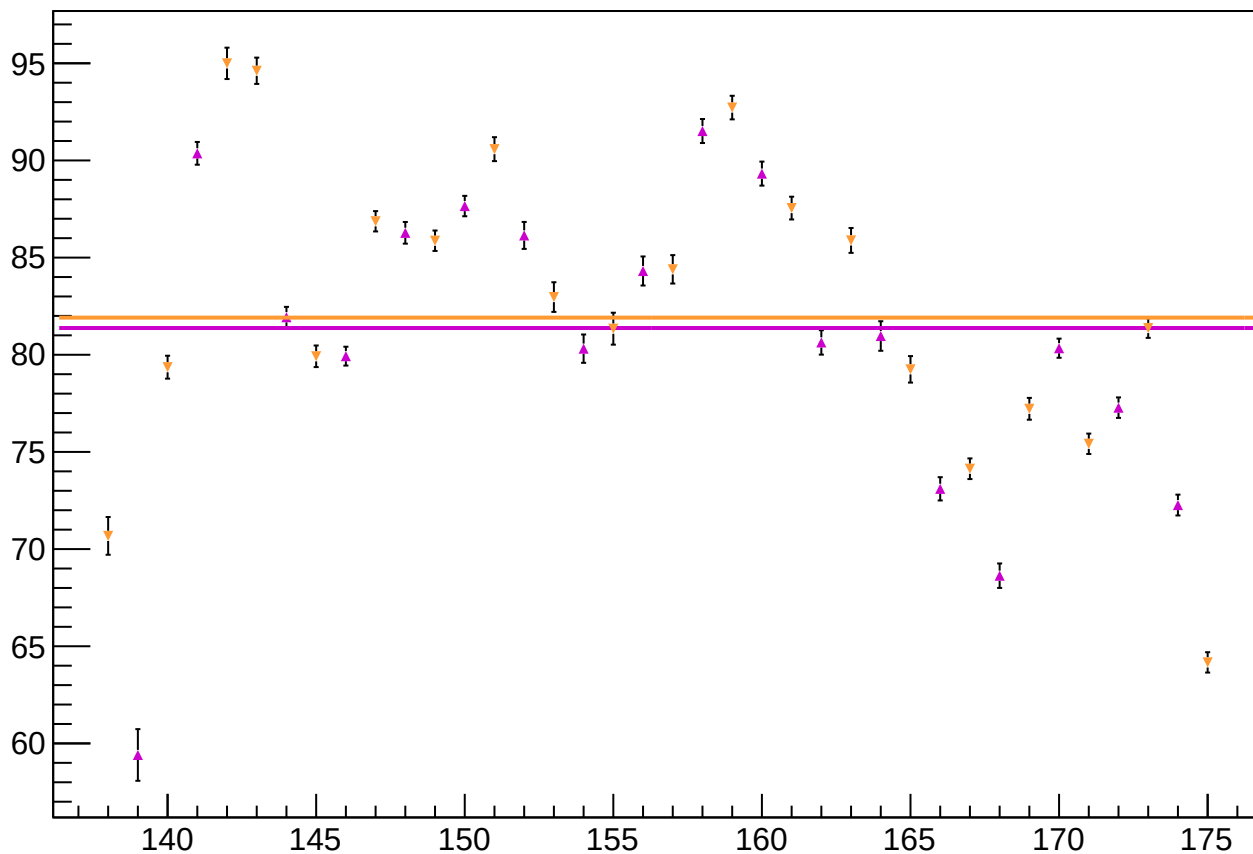
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -36.789+/-0.166  $\chi^2/\text{NDF}$ : 3955.4/17

Out: -33.940+/-0.161  $\chi^2/\text{NDF}$ : 8133.4/19

All: -35.317+/-0.115  $\chi^2/\text{NDF}$ : 12241.0/37

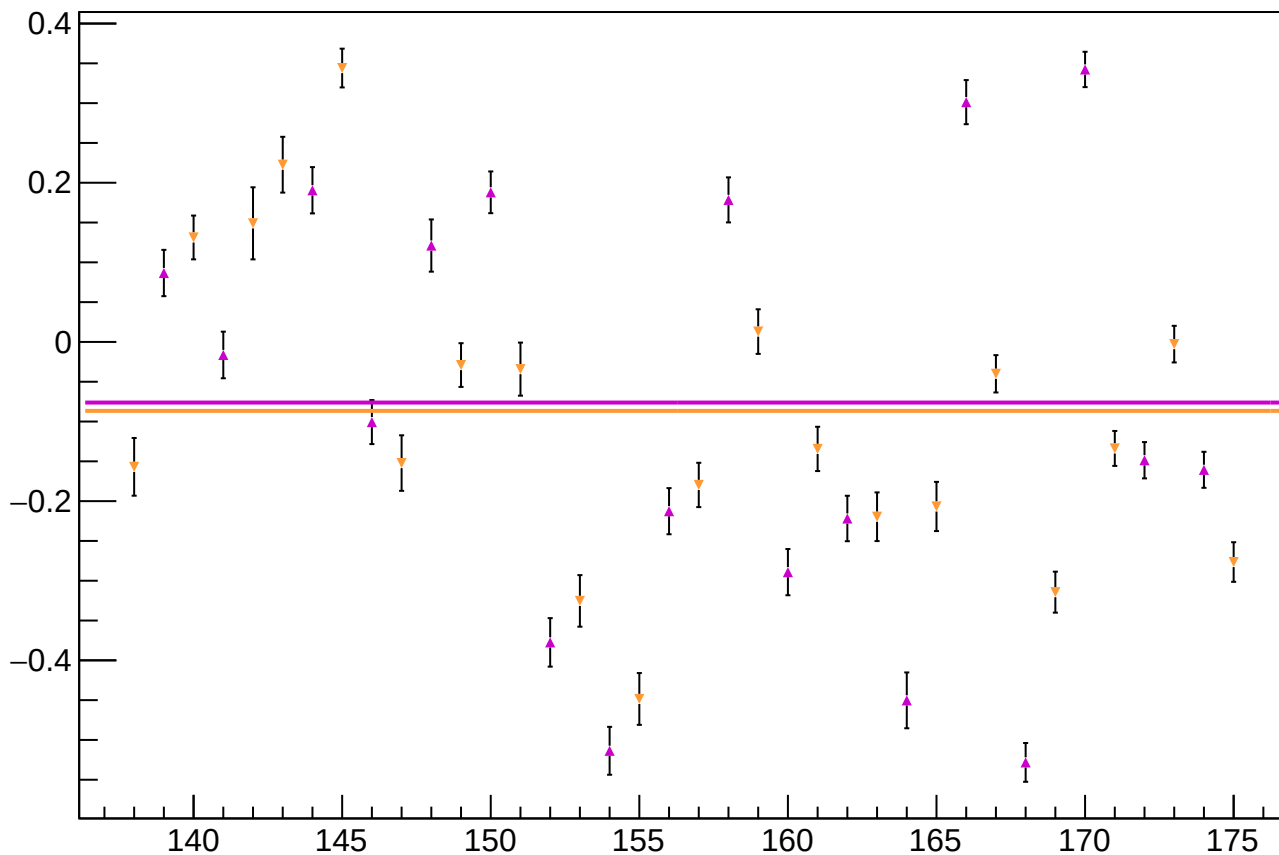
reg\_asym\_sam\_1548\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 81.912 $\pm$ 0.136  $\chi^2/\text{NDF}$ :3187.8/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 81.377 $\pm$ 0.142  $\chi^2/\text{NDF}$ :2195.3/17

Left: 81.655 $\pm$ 0.098  $\chi^2/\text{NDF}$ : 5390.5/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 81.377 $\pm$ 0.142  $\chi^2/\text{NDF}$ :2195.3/17  
 Out: 81.912 $\pm$ 0.136  $\chi^2/\text{NDF}$ :3187.8/19  
 All: 81.655 $\pm$ 0.098  $\chi^2/\text{NDF}$ : 5390.5/37

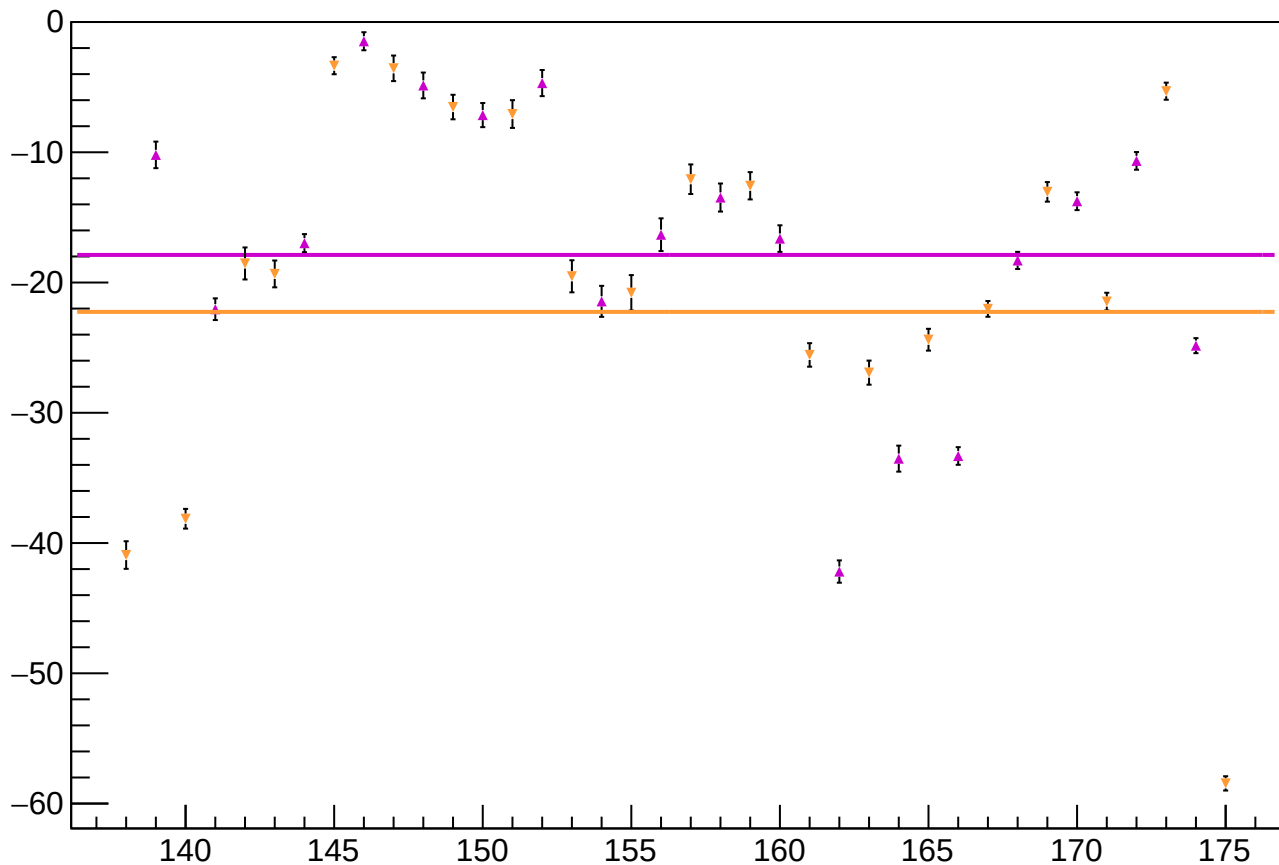
reg\_asym\_sam\_1548\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: -0.087 $\pm$ 0.006  $\chi^2$ /NDF:892.0/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: -0.076 $\pm$ 0.006  $\chi^2$ /NDF:1772.6/17

Left: -0.081 $\pm$ 0.005  $\chi^2$ /NDF: 2666.0/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: -0.076 $\pm$ 0.006  $\chi^2$ /NDF:1772.6/17  
 Out: -0.087 $\pm$ 0.006  $\chi^2$ /NDF:892.0/19  
 All: -0.081 $\pm$ 0.005  $\chi^2$ /NDF: 2666.0/37

reg\_asym\_sam\_3748\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-22.252 \pm 0.187$   $\chi^2/\text{NDF}: 7827.9/19$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-17.881 \pm 0.192$   $\chi^2/\text{NDF}: 3018.8/17$

Left:  $-20.128 \pm 0.134$   $\chi^2/\text{NDF}: 11112.7/37$

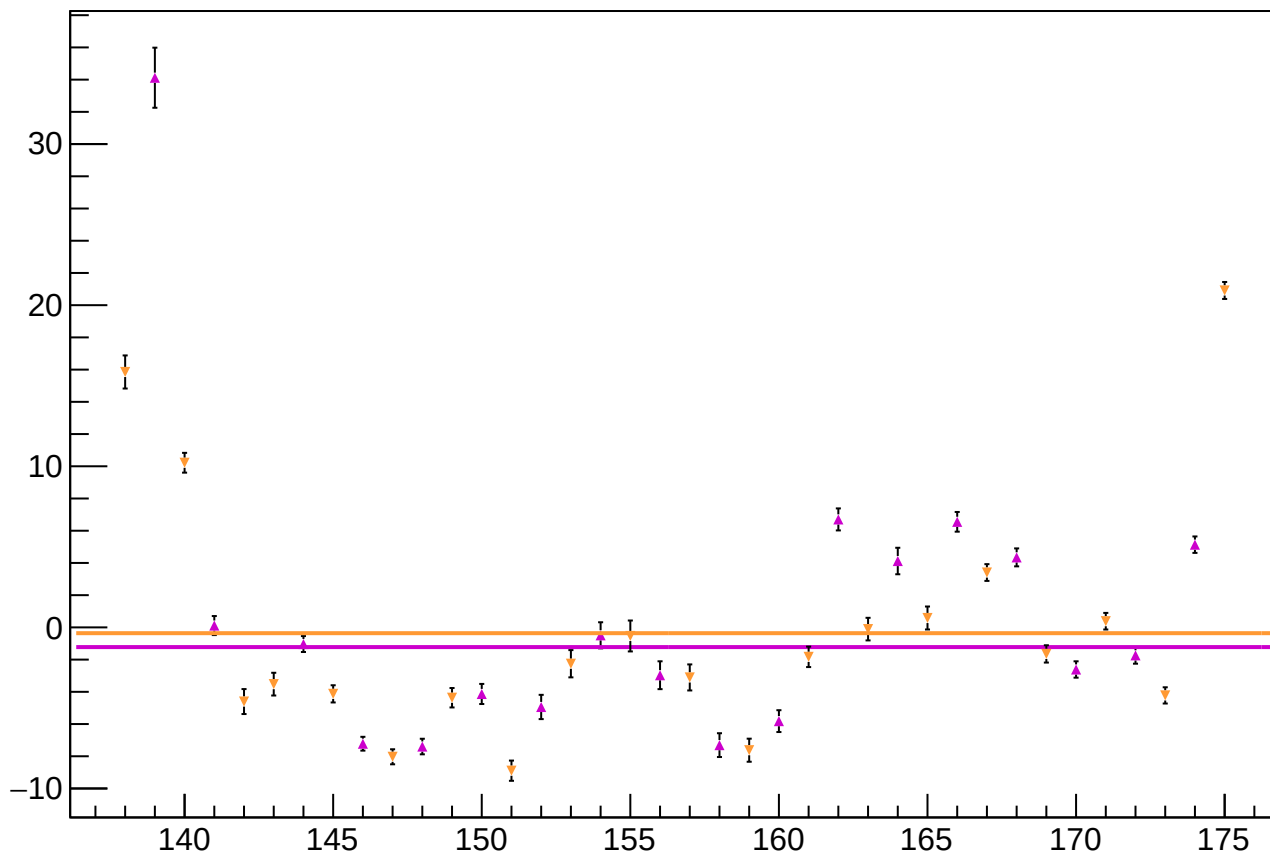
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

In:  $-17.881 \pm 0.192$   $\chi^2/\text{NDF}: 3018.8/17$

Out:  $-22.252 \pm 0.187$   $\chi^2/\text{NDF}: 7827.9/19$

All:  $-20.128 \pm 0.134$   $\chi^2/\text{NDF}: 11112.7/37$

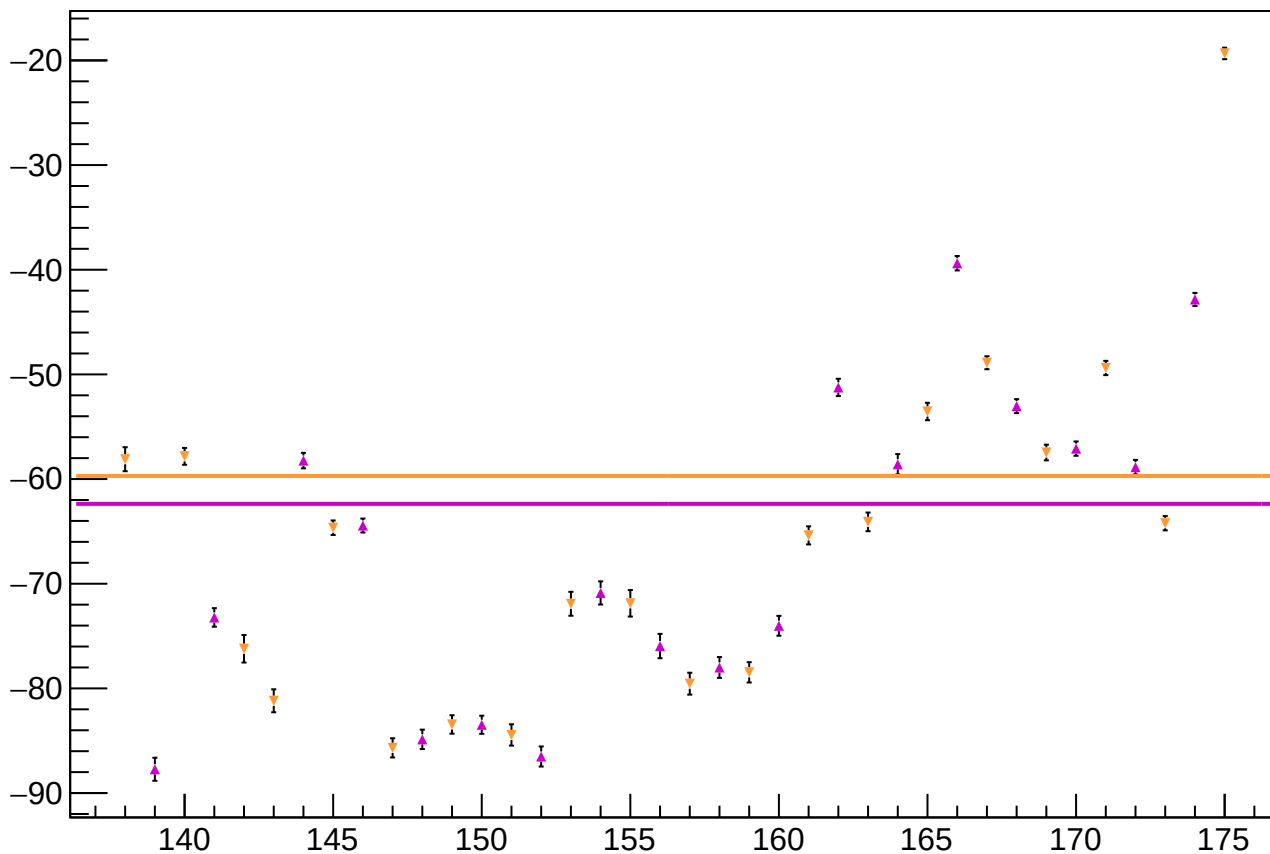
reg\_asym\_sam\_3748\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -0.360+/-0.139  $\chi^2/\text{NDF}$ :3022.9/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -1.223+/-0.143  $\chi^2/\text{NDF}$ :1490.4/17

Left: -0.781+/-0.100  $\chi^2/\text{NDF}$ : 4532.1/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: -1.223+/-0.143  $\chi^2/\text{NDF}$ :1490.4/17  
 Out: -0.360+/-0.139  $\chi^2/\text{NDF}$ :3022.9/19  
 All: -0.781+/-0.100  $\chi^2/\text{NDF}$ : 4532.1/37

reg\_asym\_sam\_3748\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -59.703+/-0.187  $\chi^2/\text{NDF}$ : 9751.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -62.370+/-0.192  $\chi^2/\text{NDF}$ : 5689.8/17

Left: -61.000+/-0.134  $\chi^2/\text{NDF}$ : 15540.0/37

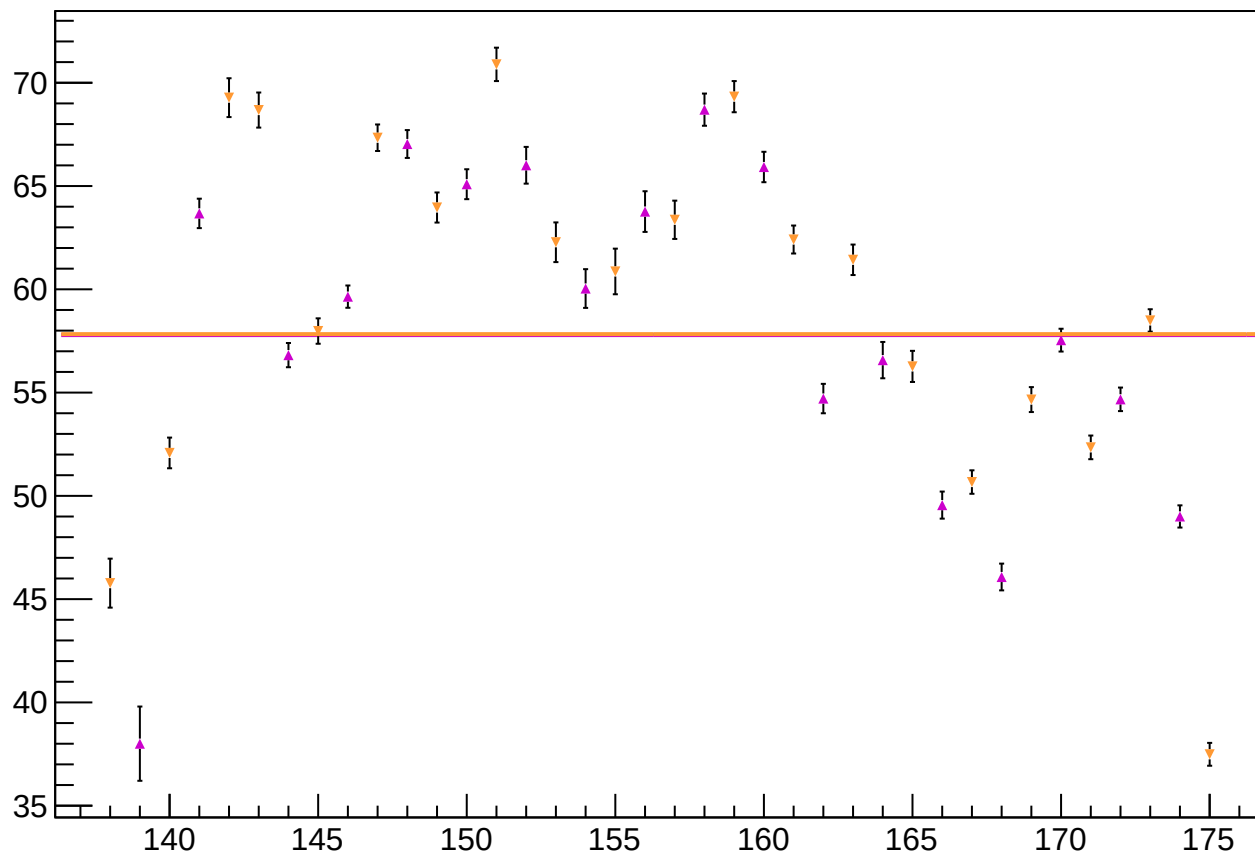
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -62.370+/-0.192  $\chi^2/\text{NDF}$ : 5689.8/17

Out: -59.703+/-0.187  $\chi^2/\text{NDF}$ : 9751.3/19

All: -61.000+/-0.134  $\chi^2/\text{NDF}$ : 15540.0/37

reg\_asym\_sam\_3748\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 57.830+/-0.159  $\chi^2/\text{NDF}$ :3027.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 57.784+/-0.163  $\chi^2/\text{NDF}$ :1742.5/17

Left: 57.808+/-0.114  $\chi^2/\text{NDF}$ : 4769.8/37

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

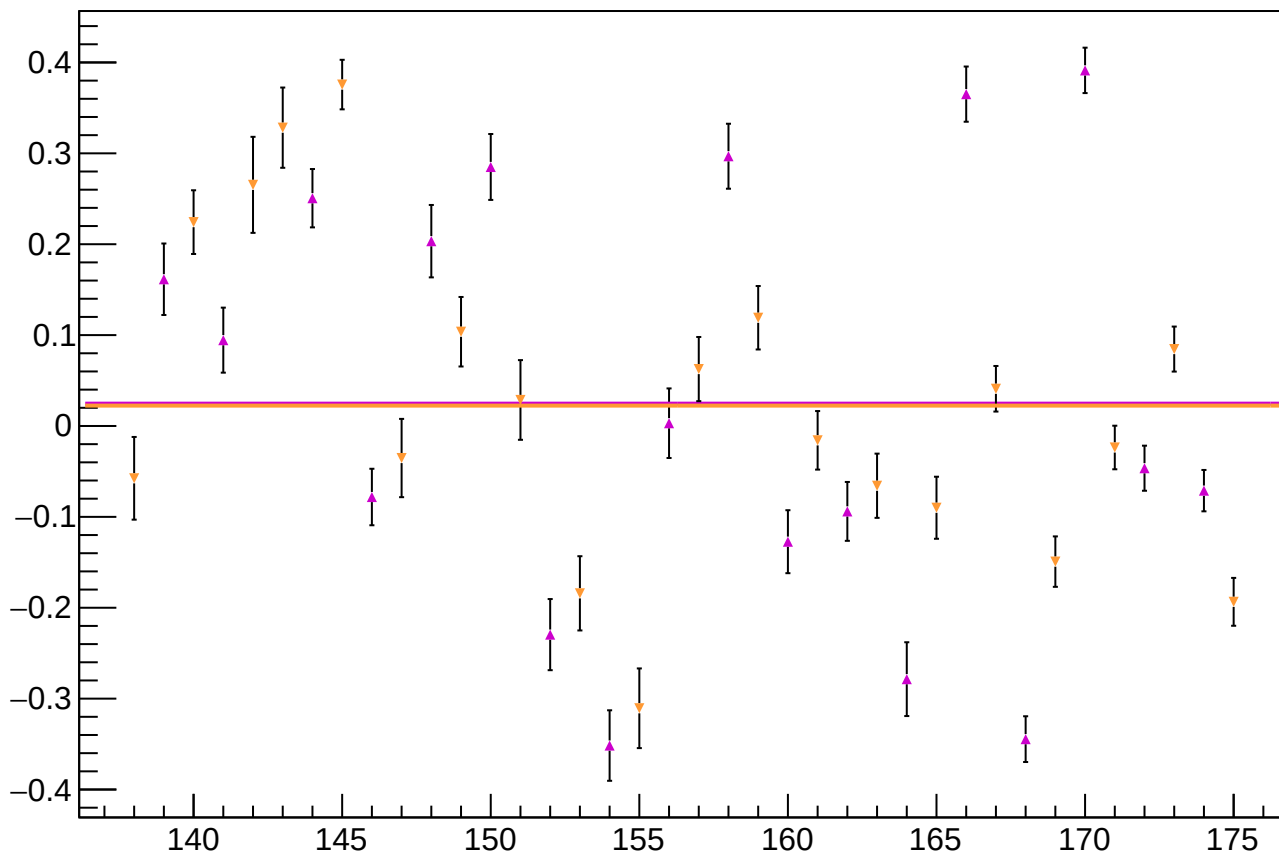
In: 57.784+/-0.163  $\chi^2/\text{NDF}$ :1742.5/17

Out: 57.830+/-0.159  $\chi^2/\text{NDF}$ :3027.3/19

All: 57.808+/-0.114  $\chi^2/\text{NDF}$ : 4769.8/37



reg\_asym\_sam\_3748\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: 0.022 $\pm$ 0.007  $\chi^2$ /NDF:506.5/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: 0.025 $\pm$ 0.007  $\chi^2$ /NDF:1013.2/17

Left: 0.023 $\pm$ 0.005  $\chi^2$ /NDF: 1519.7/37

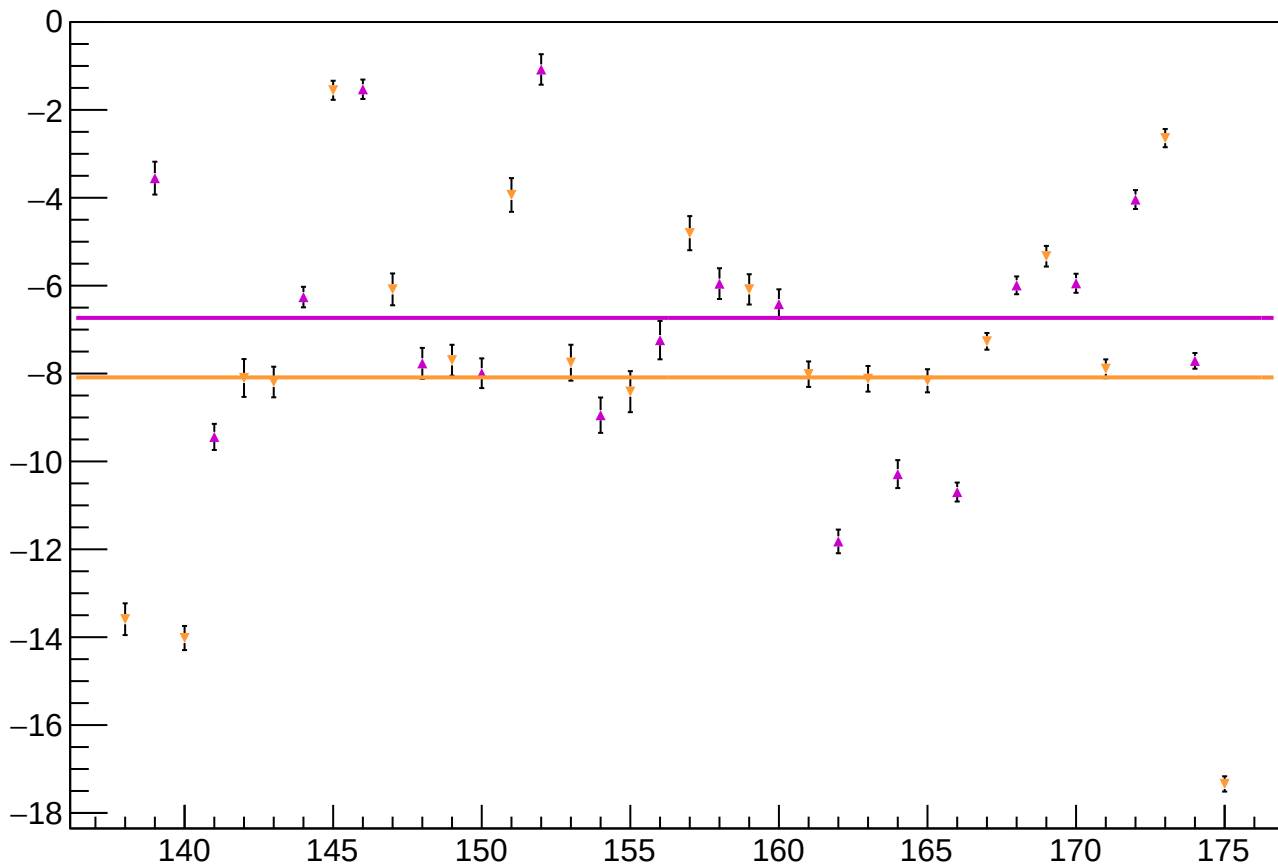
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 0.025 $\pm$ 0.007  $\chi^2$ /NDF:1013.2/17

Out: 0.022 $\pm$ 0.007  $\chi^2$ /NDF:506.5/19

All: 0.023 $\pm$ 0.005  $\chi^2$ /NDF: 1519.7/37

reg\_asym\_sam\_1526\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -8.088+/-0.061  $\chi^2/\text{NDF}$ : 5533.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -6.733+/-0.063  $\chi^2/\text{NDF}$ : 2072.2/17

Left: -7.425+/-0.044  $\chi^2/\text{NDF}$ : 7844.6/37

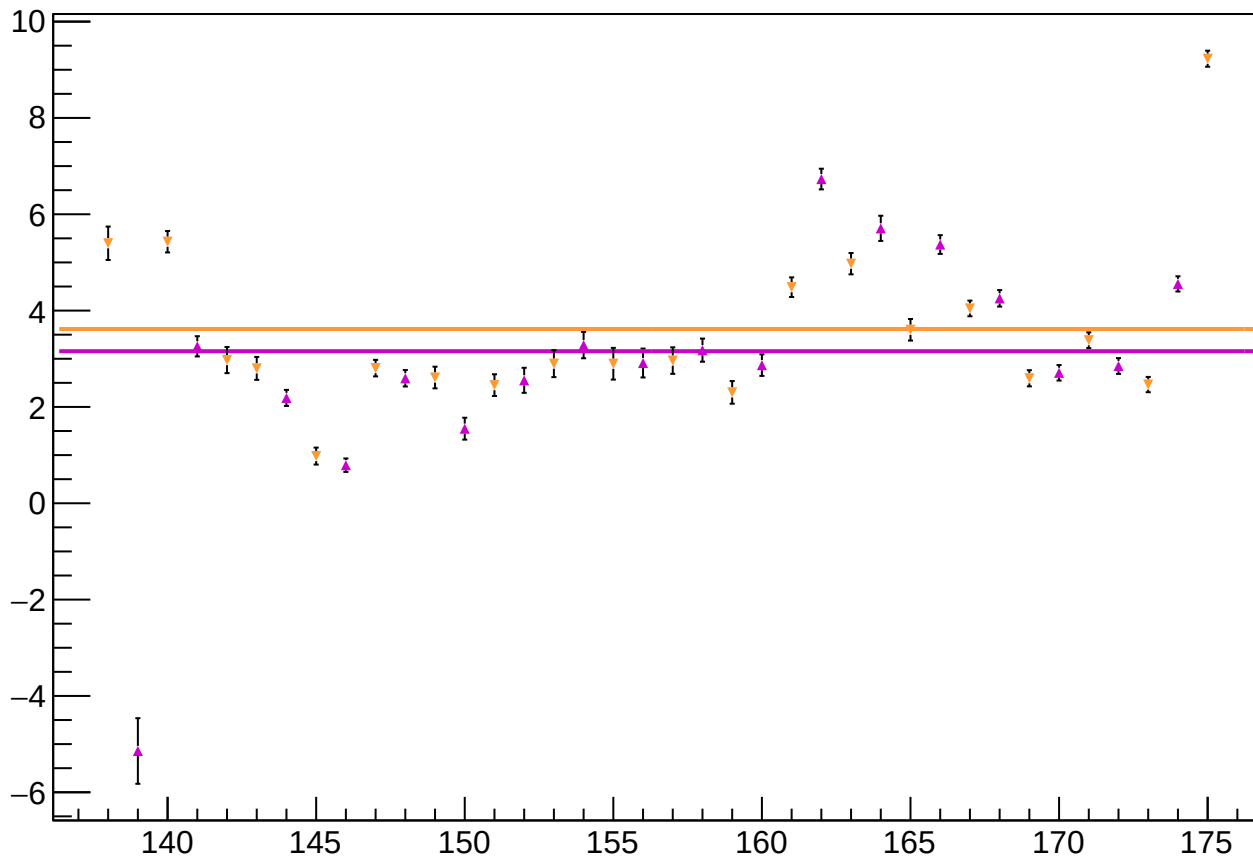
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -6.733+/-0.063  $\chi^2/\text{NDF}$ : 2072.2/17

Out: -8.088+/-0.061  $\chi^2/\text{NDF}$ : 5533.8/19

All: -7.425+/-0.044  $\chi^2/\text{NDF}$ : 7844.6/37

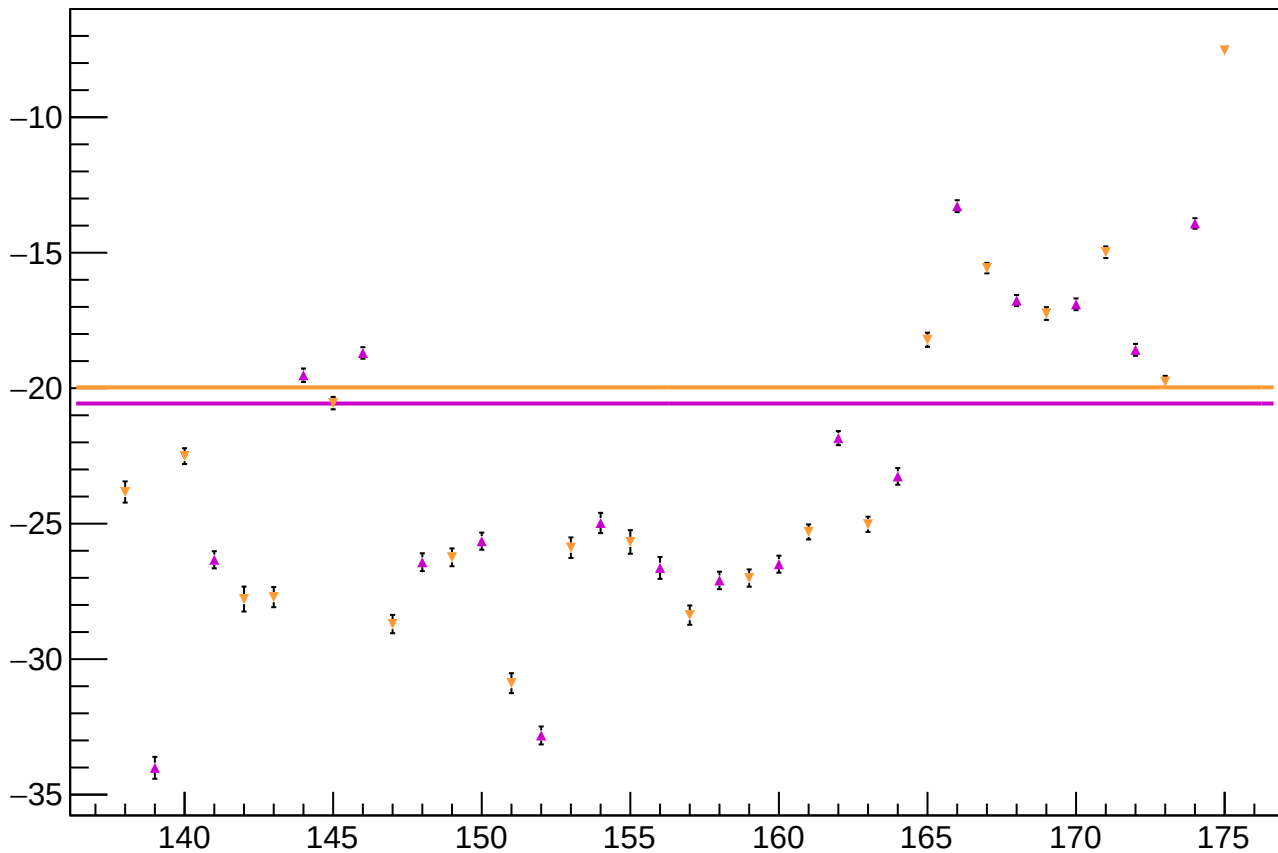
reg\_asym\_sam\_1526\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 3.618+/-0.046  $\chi^2/\text{NDF}$ :1738.6/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 3.157+/-0.047  $\chi^2/\text{NDF}$ :1171.4/17

Left: 3.391+/-0.033  $\chi^2/\text{NDF}$ : 2959.0/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 3.157+/-0.047  $\chi^2/\text{NDF}$ :1171.4/17  
 Out: 3.618+/-0.046  $\chi^2/\text{NDF}$ :1738.6/19  
 All: 3.391+/-0.033  $\chi^2/\text{NDF}$ : 2959.0/37

reg\_asym\_sam\_1526\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -19.969+/-0.061  $\chi^2/\text{NDF}$ :11269.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -20.566+/-0.063  $\chi^2/\text{NDF}$ :7674.5/17

Left: -20.261+/-0.044  $\chi^2/\text{NDF}$ : 18989.9/37

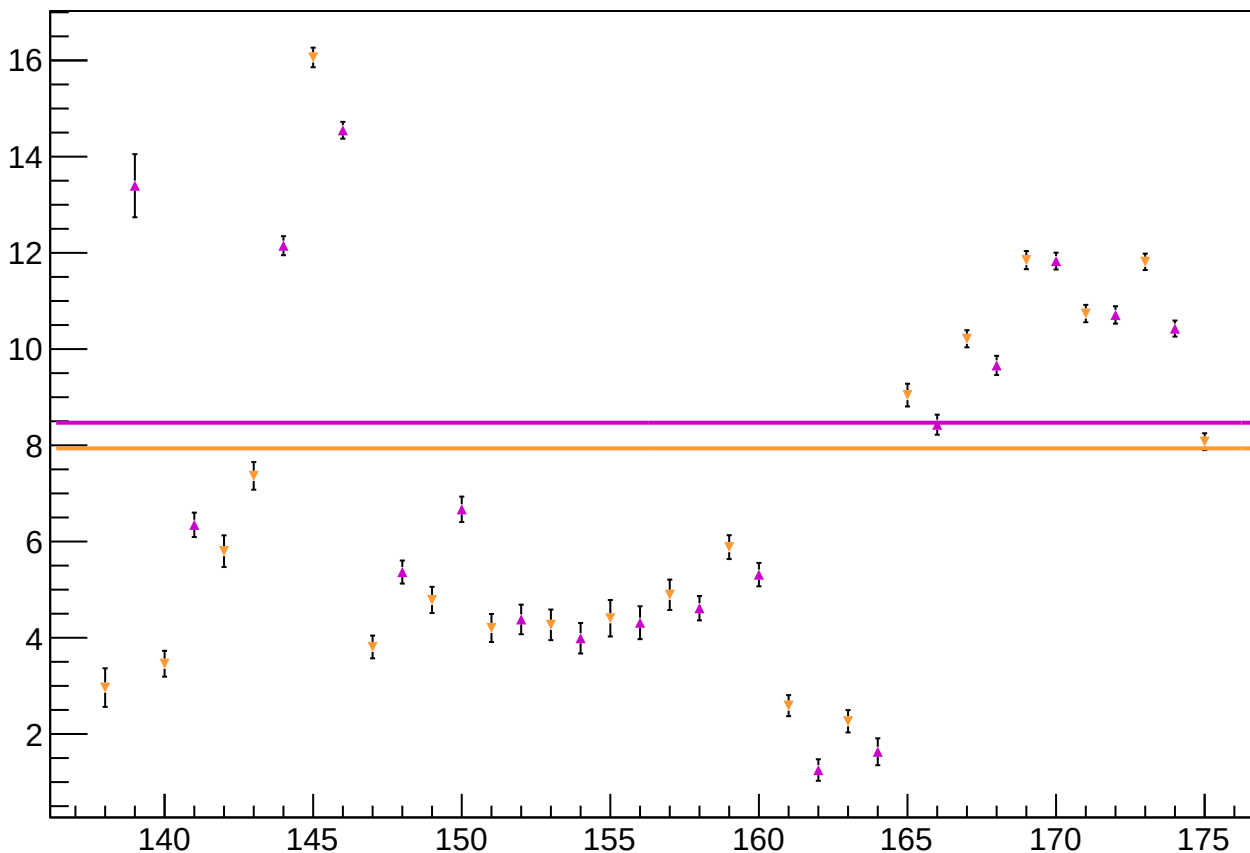
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -20.566+/-0.063  $\chi^2/\text{NDF}$ :7674.5/17

Out: -19.969+/-0.061  $\chi^2/\text{NDF}$ :11269.1/19

All: -20.261+/-0.044  $\chi^2/\text{NDF}$ : 18989.9/37

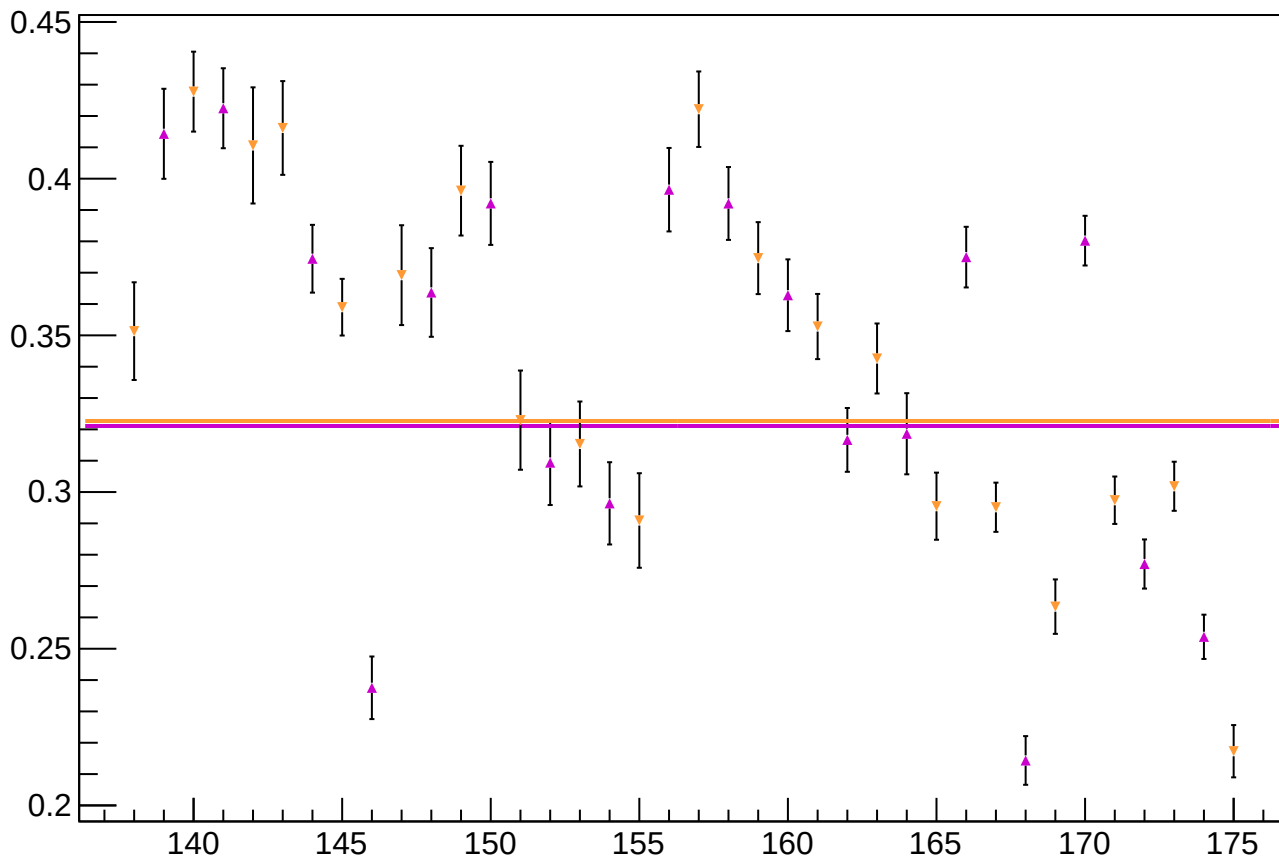
reg\_asym\_sam\_1526\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 7.937 $\pm$ 0.052  $\chi^2/\text{NDF}$ :5625.1/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 8.470 $\pm$ 0.053  $\chi^2/\text{NDF}$ :5158.7/17

Left: 8.197 $\pm$ 0.037  $\chi^2/\text{NDF}$ : 10834.6/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 8.470 $\pm$ 0.053  $\chi^2/\text{NDF}$ :5158.7/17  
 Out: 7.937 $\pm$ 0.052  $\chi^2/\text{NDF}$ :5625.1/19  
 All: 8.197 $\pm$ 0.037  $\chi^2/\text{NDF}$ : 10834.6/37

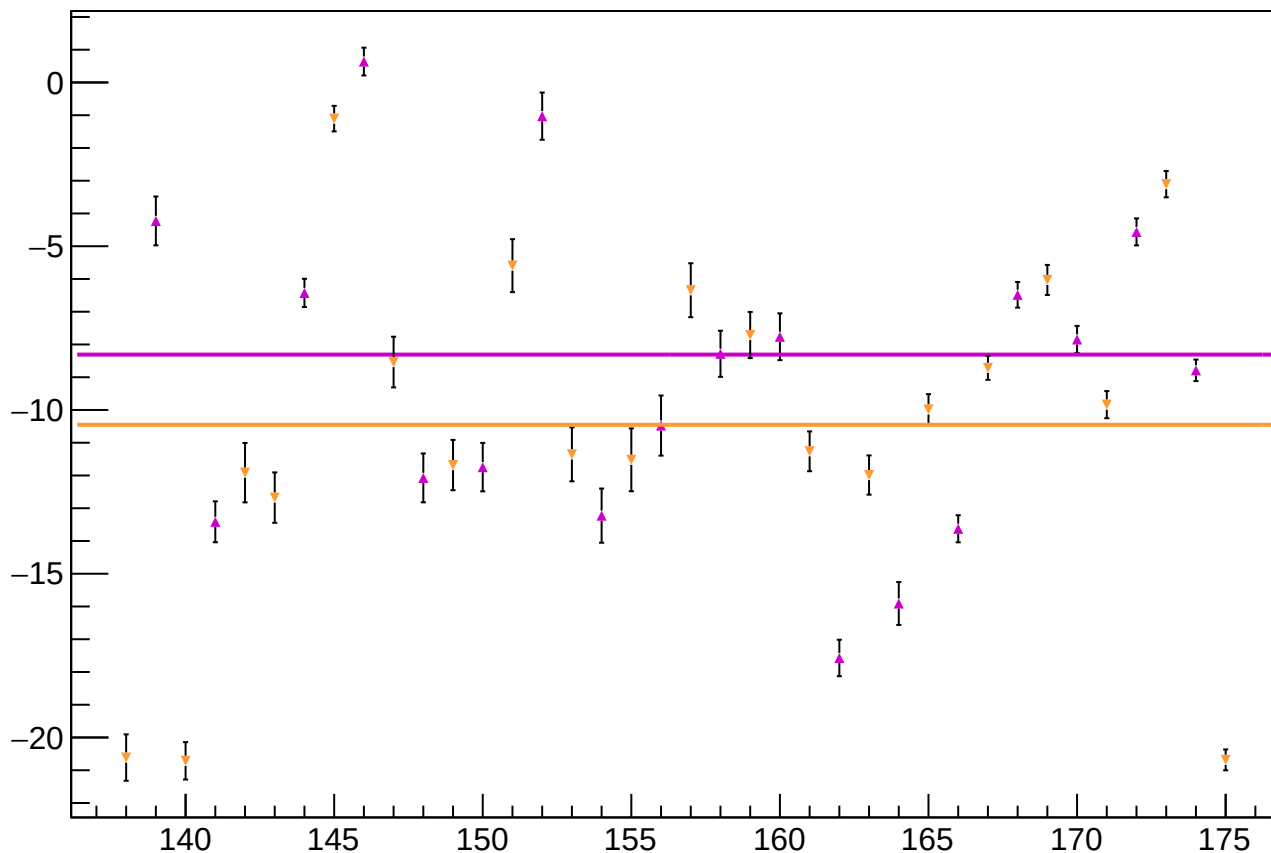
reg\_asym\_sam\_1526\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 0.323 $\pm$ 0.002  $\chi^2$ /NDF:531.9/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 0.321 $\pm$ 0.002  $\chi^2$ /NDF:722.2/17

Left: 0.322 $\pm$ 0.002  $\chi^2$ /NDF: 1254.3/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 0.321 $\pm$ 0.002  $\chi^2$ /NDF:722.2/17  
 Out: 0.323 $\pm$ 0.002  $\chi^2$ /NDF:531.9/19  
 All: 0.322 $\pm$ 0.002  $\chi^2$ /NDF: 1254.3/37

reg\_asym\_sam\_3726\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left Out: -10.452 $\pm$ 0.120  $\chi^2$ /NDF:2693.4/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left In: -8.309 $\pm$ 0.123  $\chi^2$ /NDF:1435.8/17

Left: -9.406 $\pm$ 0.086  $\chi^2$ /NDF: 4285.4/37

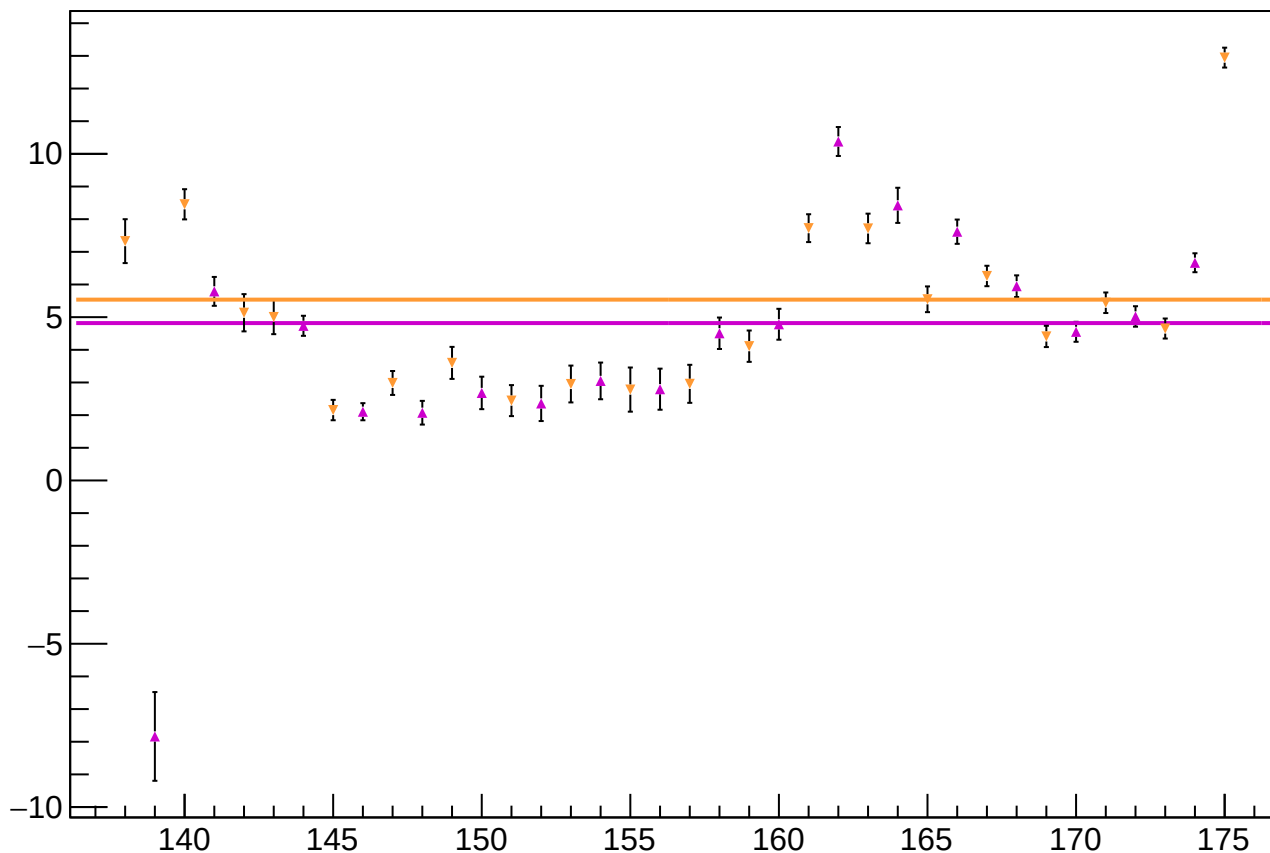
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: -8.309 $\pm$ 0.123  $\chi^2$ /NDF:1435.8/17

Out: -10.452 $\pm$ 0.120  $\chi^2$ /NDF:2693.4/19

All: -9.406 $\pm$ 0.086  $\chi^2$ /NDF: 4285.4/37

reg\_asym\_sam\_3726\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected

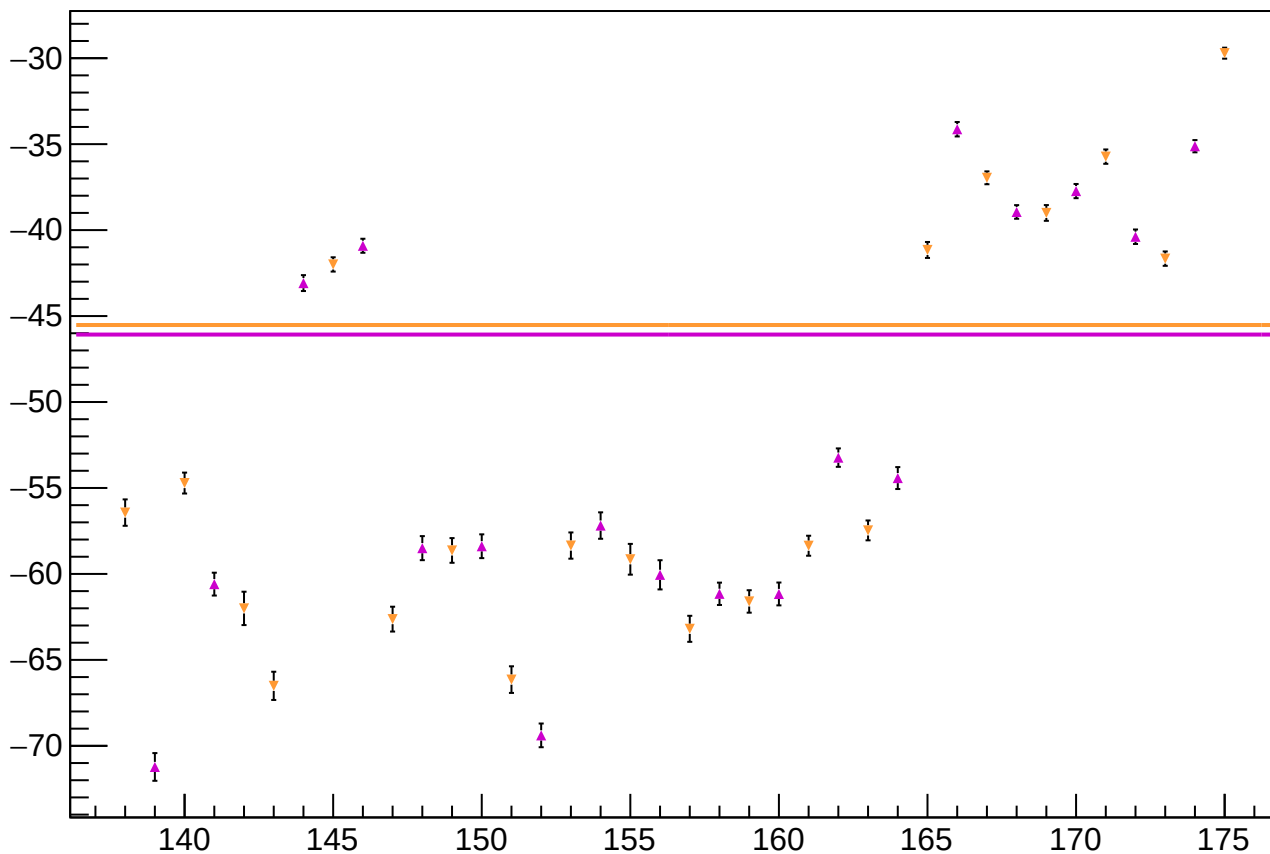


Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 5.537 $\pm$ 0.091  $\chi^2$ /NDF:1005.7/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 4.819 $\pm$ 0.092  $\chi^2$ /NDF:628.6/17

Left: 5.181 $\pm$ 0.065  $\chi^2$ /NDF: 1665.0/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 4.819 $\pm$ 0.092  $\chi^2$ /NDF:628.6/17  
 Out: 5.537 $\pm$ 0.091  $\chi^2$ /NDF:1005.7/19  
 All: 5.181 $\pm$ 0.065  $\chi^2$ /NDF: 1665.0/37



reg\_asym\_sam\_3726\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -45.521+/-0.120  $\chi^2/\text{NDF}$ :9523.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -46.076+/-0.123  $\chi^2/\text{NDF}$ :7977.7/17

Left: -45.792+/-0.086  $\chi^2/\text{NDF}$ : 17511.6/37

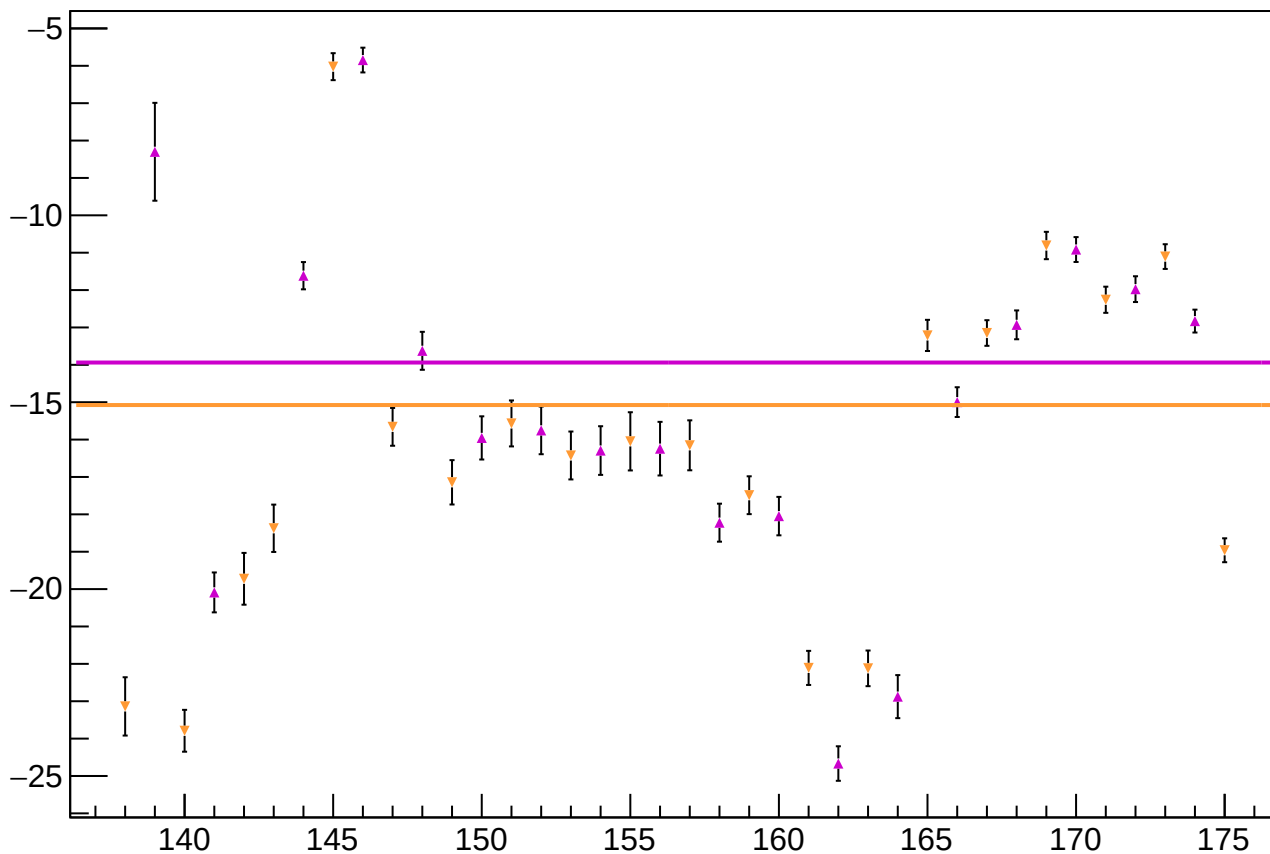
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -46.076+/-0.123  $\chi^2/\text{NDF}$ :7977.7/17

Out: -45.521+/-0.120  $\chi^2/\text{NDF}$ :9523.5/19

All: -45.792+/-0.086  $\chi^2/\text{NDF}$ : 17511.6/37

reg\_asym\_sam\_3726\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -15.076+/-0.103  $\chi^2/\text{NDF}$ :2096.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -13.938+/-0.105  $\chi^2/\text{NDF}$ :1890.6/17

Left: -14.519+/-0.073  $\chi^2/\text{NDF}$ : 4046.9/37

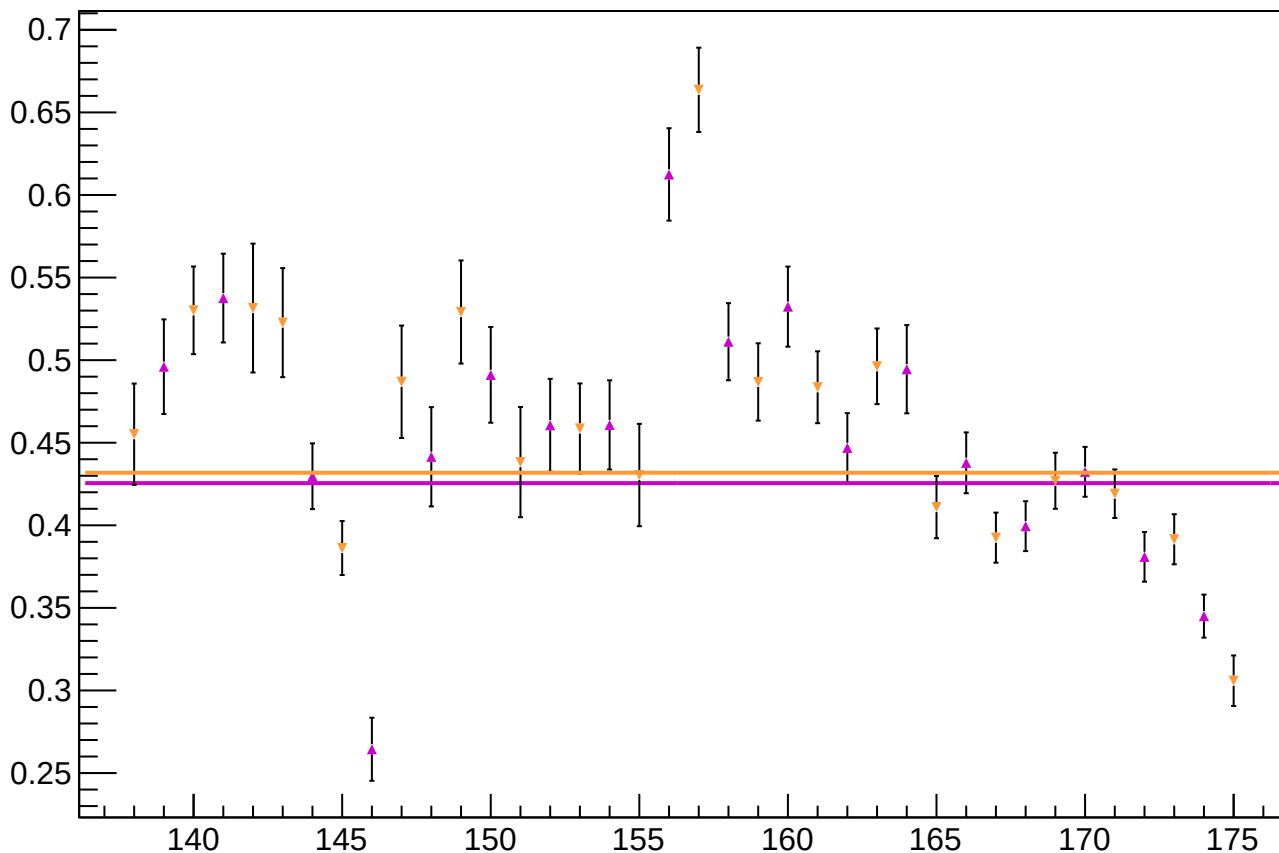
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -13.938+/-0.105  $\chi^2/\text{NDF}$ :1890.6/17

Out: -15.076+/-0.103  $\chi^2/\text{NDF}$ :2096.3/19

All: -14.519+/-0.073  $\chi^2/\text{NDF}$ : 4046.9/37

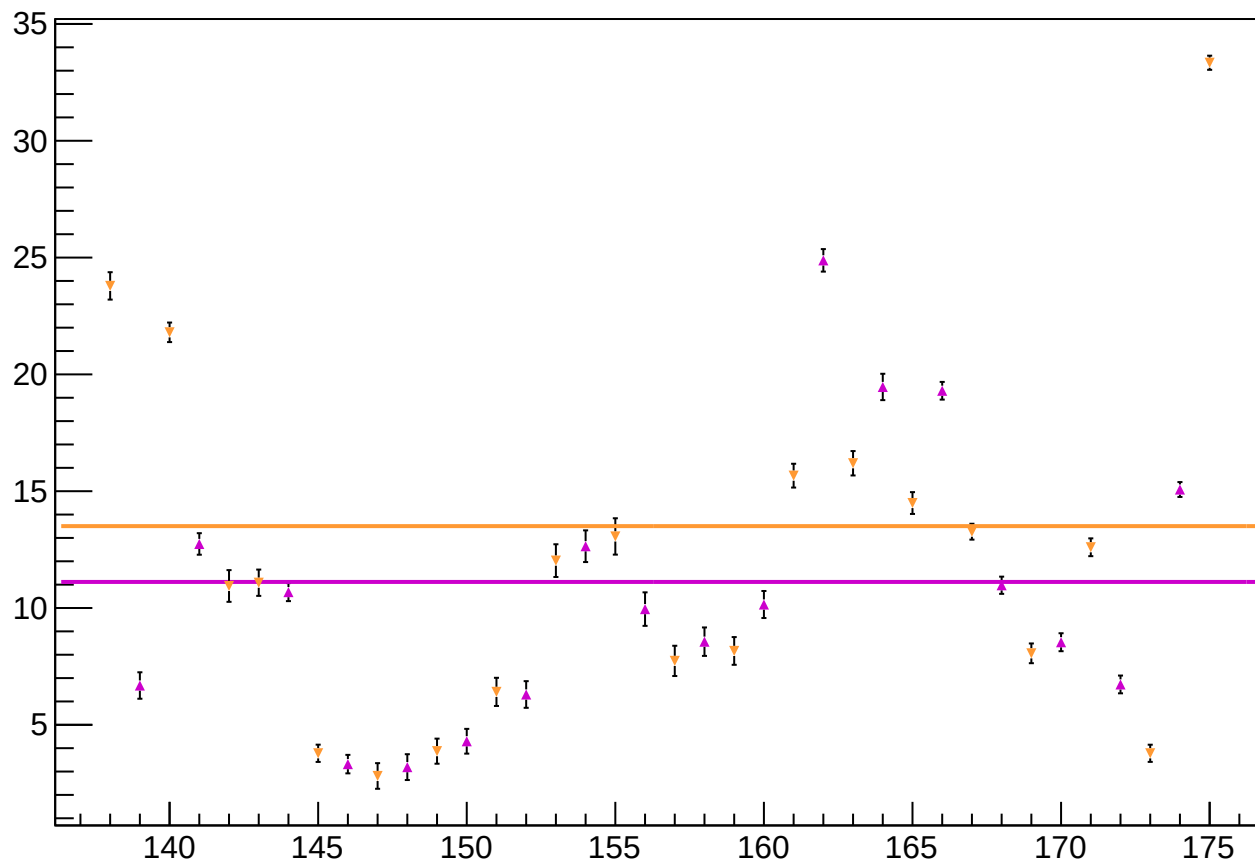
reg\_asym\_sam\_3726\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 0.432 $\pm$ 0.005  $\chi^2$ /NDF:234.6/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 0.426 $\pm$ 0.005  $\chi^2$ /NDF:239.3/17

Left: 0.429 $\pm$ 0.003  $\chi^2$ /NDF: 474.8/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 0.426 $\pm$ 0.005  $\chi^2$ /NDF:239.3/17  
 Out: 0.432 $\pm$ 0.005  $\chi^2$ /NDF:234.6/19  
 All: 0.429 $\pm$ 0.003  $\chi^2$ /NDF: 474.8/37

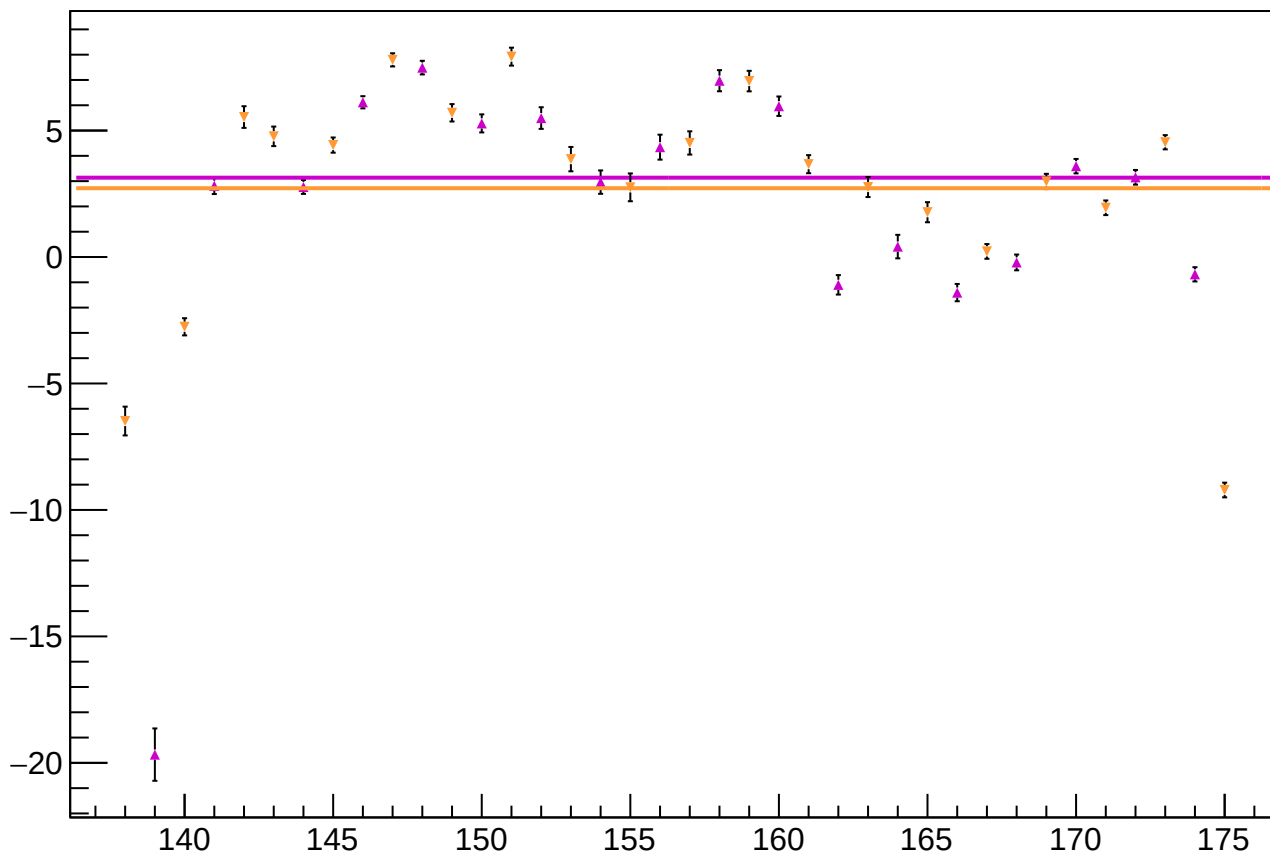
reg\_asym\_sam\_15\_48\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 13.505+/-0.105  $\chi^2/\text{NDF}$ : 7641.8/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 11.116+/-0.108  $\chi^2/\text{NDF}$ : 2767.5/17

Left: 12.346+/-0.075  $\chi^2/\text{NDF}$ : 10661.9/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 11.116+/-0.108  $\chi^2/\text{NDF}$ : 2767.5/17  
 Out: 13.505+/-0.105  $\chi^2/\text{NDF}$ : 7641.8/19  
 All: 12.346+/-0.075  $\chi^2/\text{NDF}$ : 10661.9/37

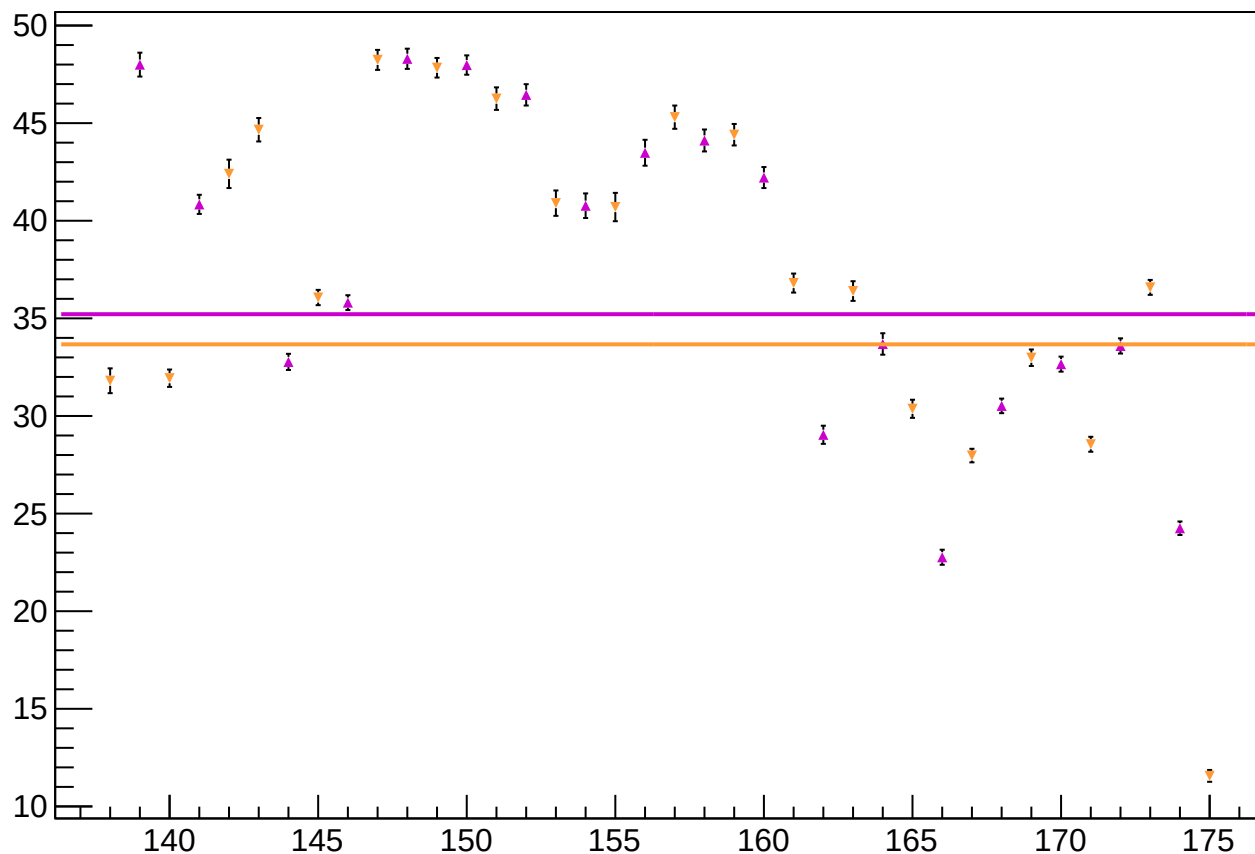
reg\_asym\_sam\_15\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 2.720 $\pm$ 0.078  $\chi^2$ /NDF:3247.7/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 3.137 $\pm$ 0.080  $\chi^2$ /NDF:1747.0/17

Left: 2.923 $\pm$ 0.056  $\chi^2$ /NDF: 5008.6/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 3.137 $\pm$ 0.080  $\chi^2$ /NDF:1747.0/17  
 Out: 2.720 $\pm$ 0.078  $\chi^2$ /NDF:3247.7/19  
 All: 2.923 $\pm$ 0.056  $\chi^2$ /NDF: 5008.6/37

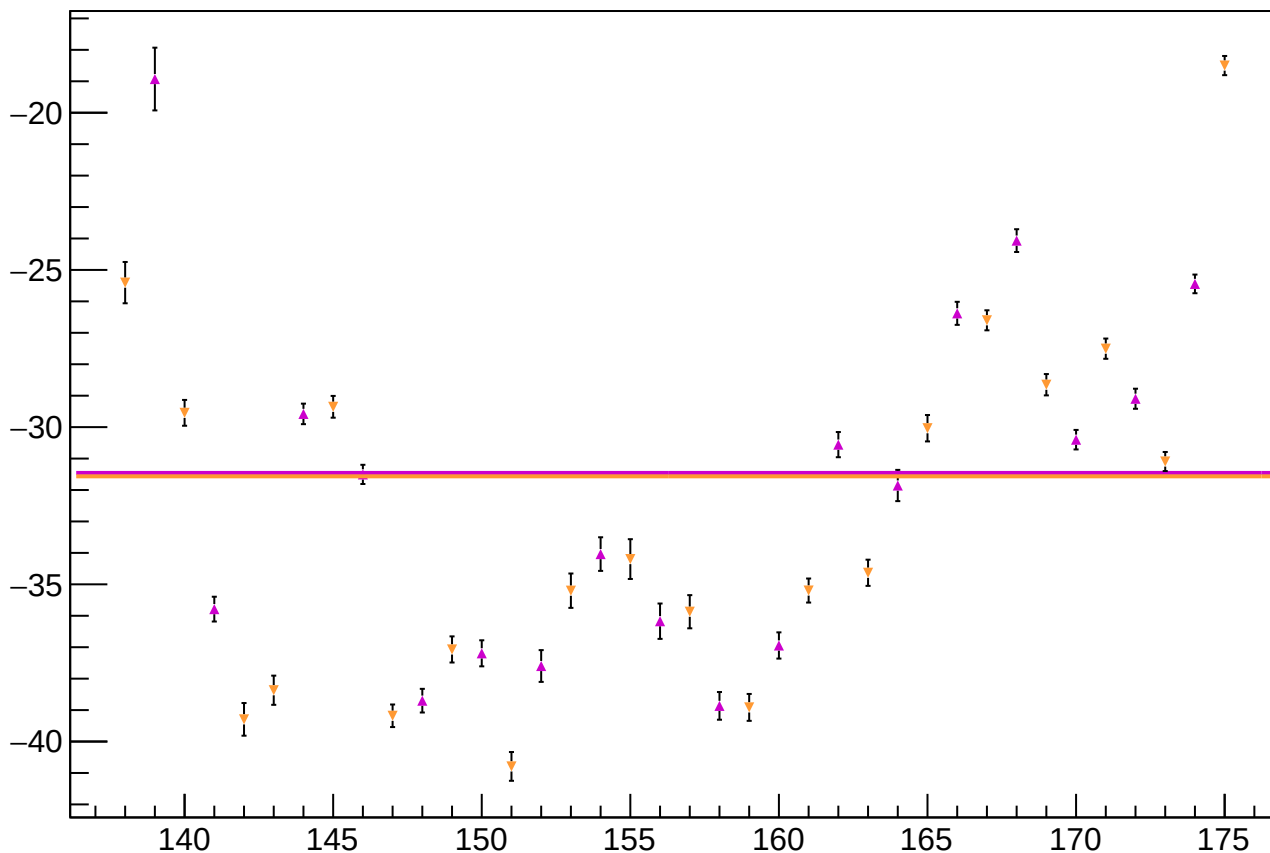
reg\_asym\_sam\_15\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 33.669 $\pm$ 0.105  $\chi^2$ /NDF:9536.4/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 35.213 $\pm$ 0.108  $\chi^2$ /NDF:5435.2/17

Left: 34.418 $\pm$ 0.075  $\chi^2$ /NDF: 15076.9/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 35.213 $\pm$ 0.108  $\chi^2$ /NDF:5435.2/17  
 Out: 33.669 $\pm$ 0.105  $\chi^2$ /NDF:9536.4/19  
 All: 34.418 $\pm$ 0.075  $\chi^2$ /NDF: 15076.9/37

reg\_asym\_sam\_15\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -31.565+/-0.089  $\chi^2/\text{NDF}$ : 4513.5/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -31.457+/-0.092  $\chi^2/\text{NDF}$ : 2660.4/17

Left: -31.512+/-0.064  $\chi^2/\text{NDF}$ : 7174.6/37

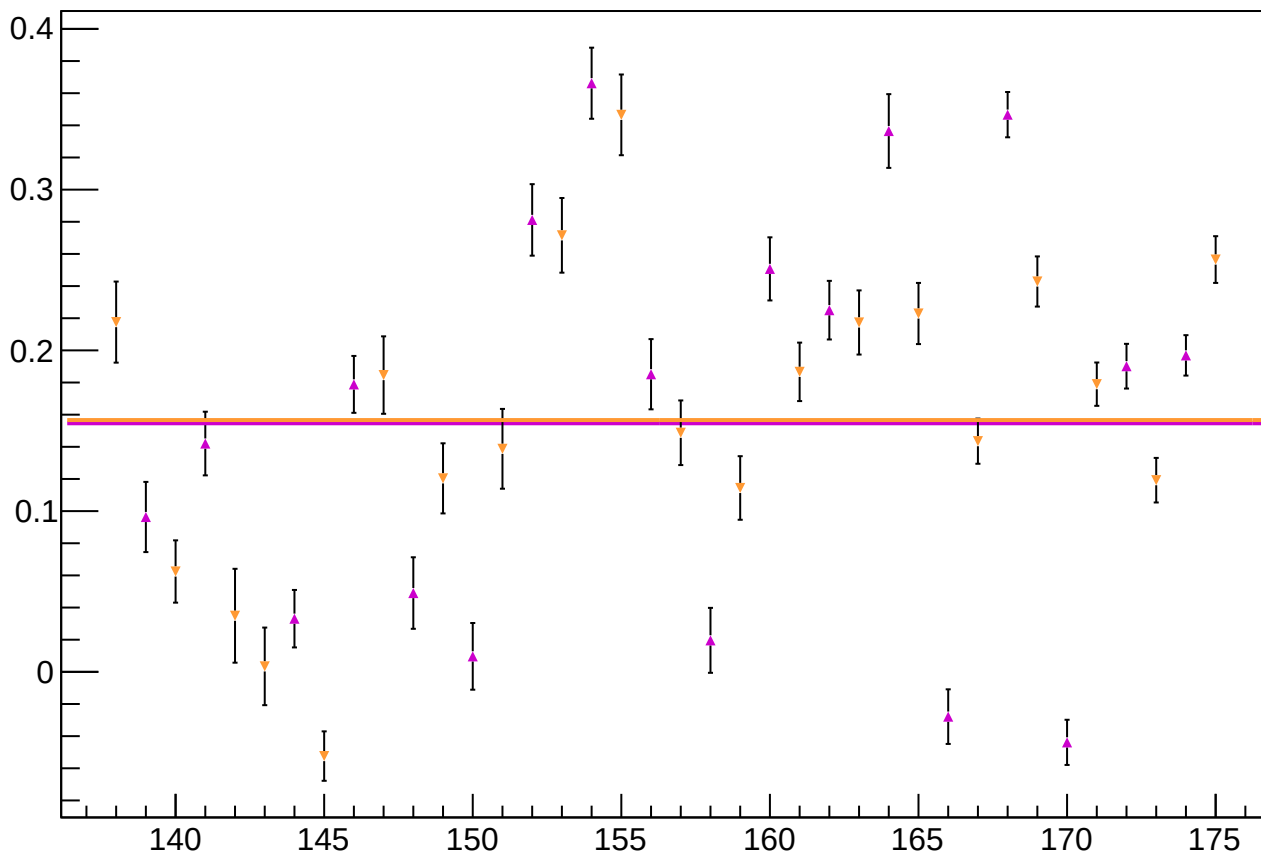
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -31.457+/-0.092  $\chi^2/\text{NDF}$ : 2660.4/17

Out: -31.565+/-0.089  $\chi^2/\text{NDF}$ : 4513.5/19

All: -31.512+/-0.064  $\chi^2/\text{NDF}$ : 7174.6/37

reg\_asym\_sam\_15\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected

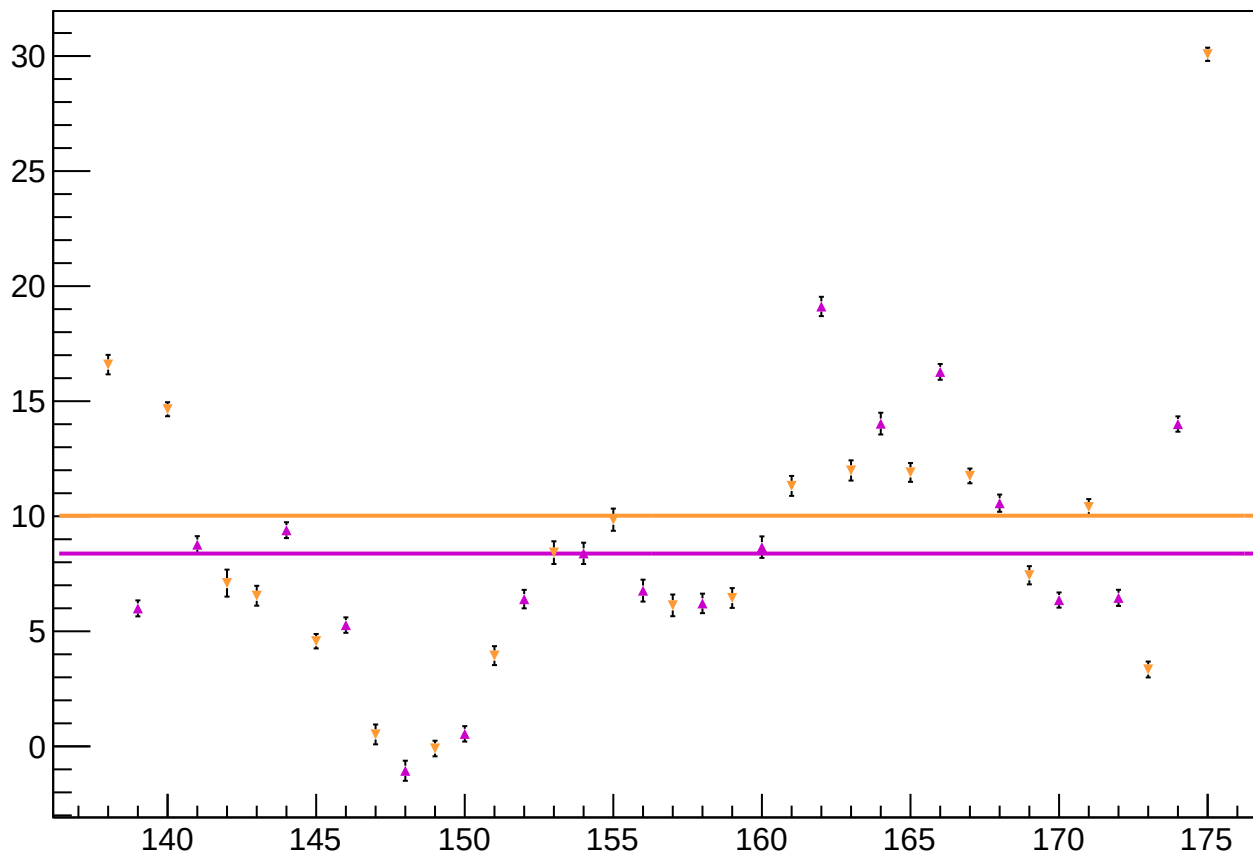


Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 0.157 $\pm$ 0.004  $\chi^2$ /NDF:475.6/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 0.155 $\pm$ 0.004  $\chi^2$ /NDF:917.4/17

Left: 0.156 $\pm$ 0.003  $\chi^2$ /NDF: 1393.1/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 0.155 $\pm$ 0.004  $\chi^2$ /NDF:917.4/17  
 Out: 0.157 $\pm$ 0.004  $\chi^2$ /NDF:475.6/19  
 All: 0.156 $\pm$ 0.003  $\chi^2$ /NDF: 1393.1/37



reg\_asym\_sam\_37\_48\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 10.024+/-0.086  $\chi^2/\text{NDF}$ : 7916.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 8.378+/-0.090  $\chi^2/\text{NDF}$ : 2933.7/17

Left: 9.232+/-0.062  $\chi^2/\text{NDF}$ : 11025.5/37

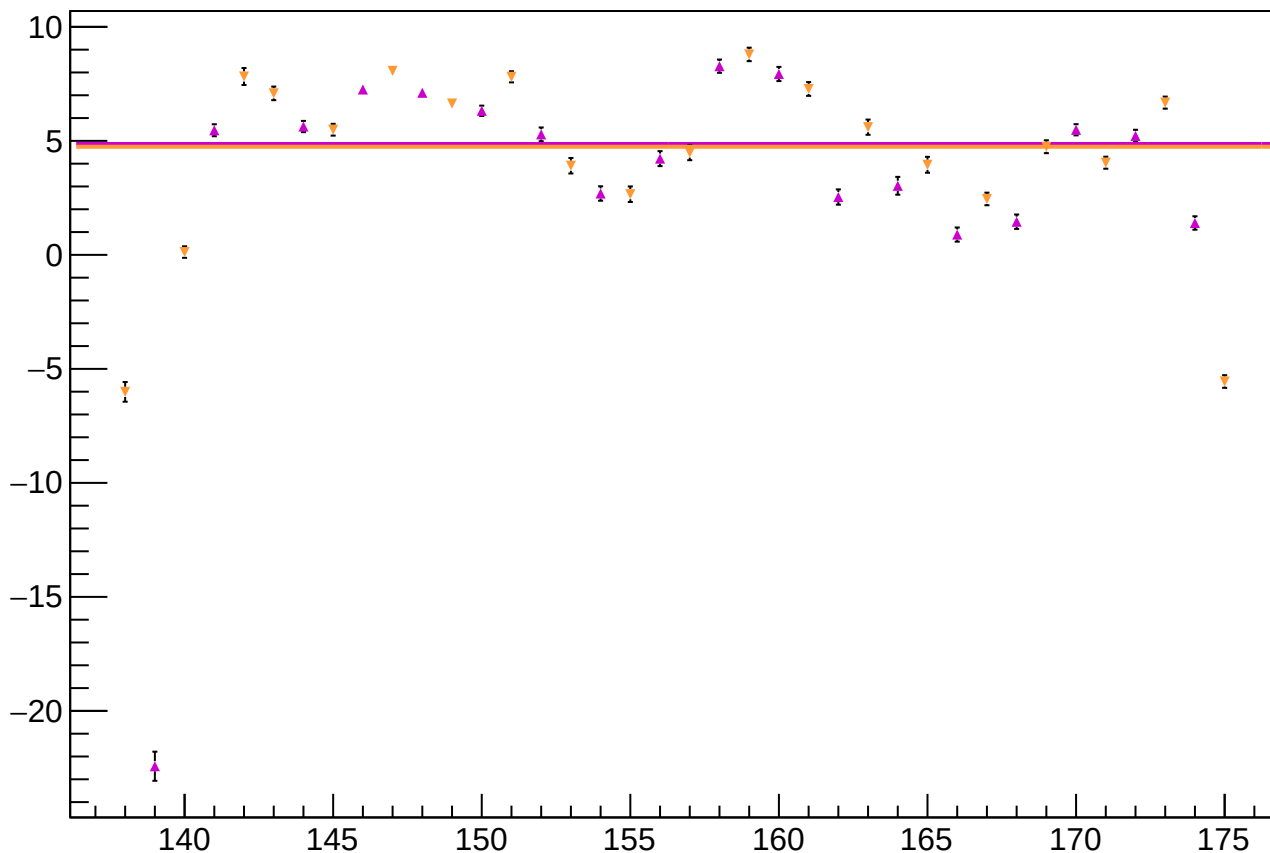
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 8.378+/-0.090  $\chi^2/\text{NDF}$ : 2933.7/17

Out: 10.024+/-0.086  $\chi^2/\text{NDF}$ : 7916.6/19

All: 9.232+/-0.062  $\chi^2/\text{NDF}$ : 11025.5/37

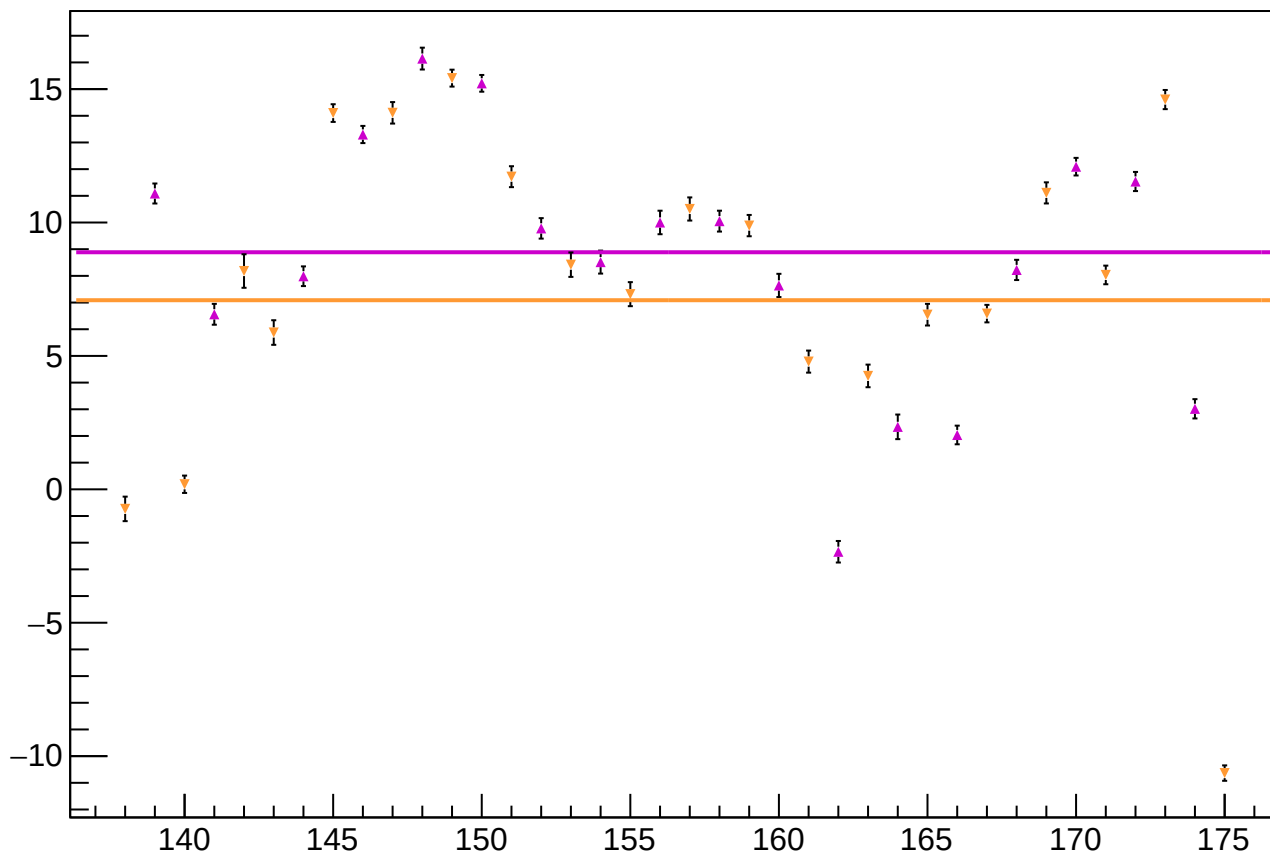
reg\_asym\_sam\_37\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 4.743+/-0.063  $\chi^2/\text{NDF}$ :3400.0/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 4.863+/-0.067  $\chi^2/\text{NDF}$ :2896.7/17

Left: 4.800+/-0.046  $\chi^2/\text{NDF}$ : 6298.4/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 4.863+/-0.067  $\chi^2/\text{NDF}$ :2896.7/17  
 Out: 4.743+/-0.063  $\chi^2/\text{NDF}$ :3400.0/19  
 All: 4.800+/-0.046  $\chi^2/\text{NDF}$ : 6298.4/37

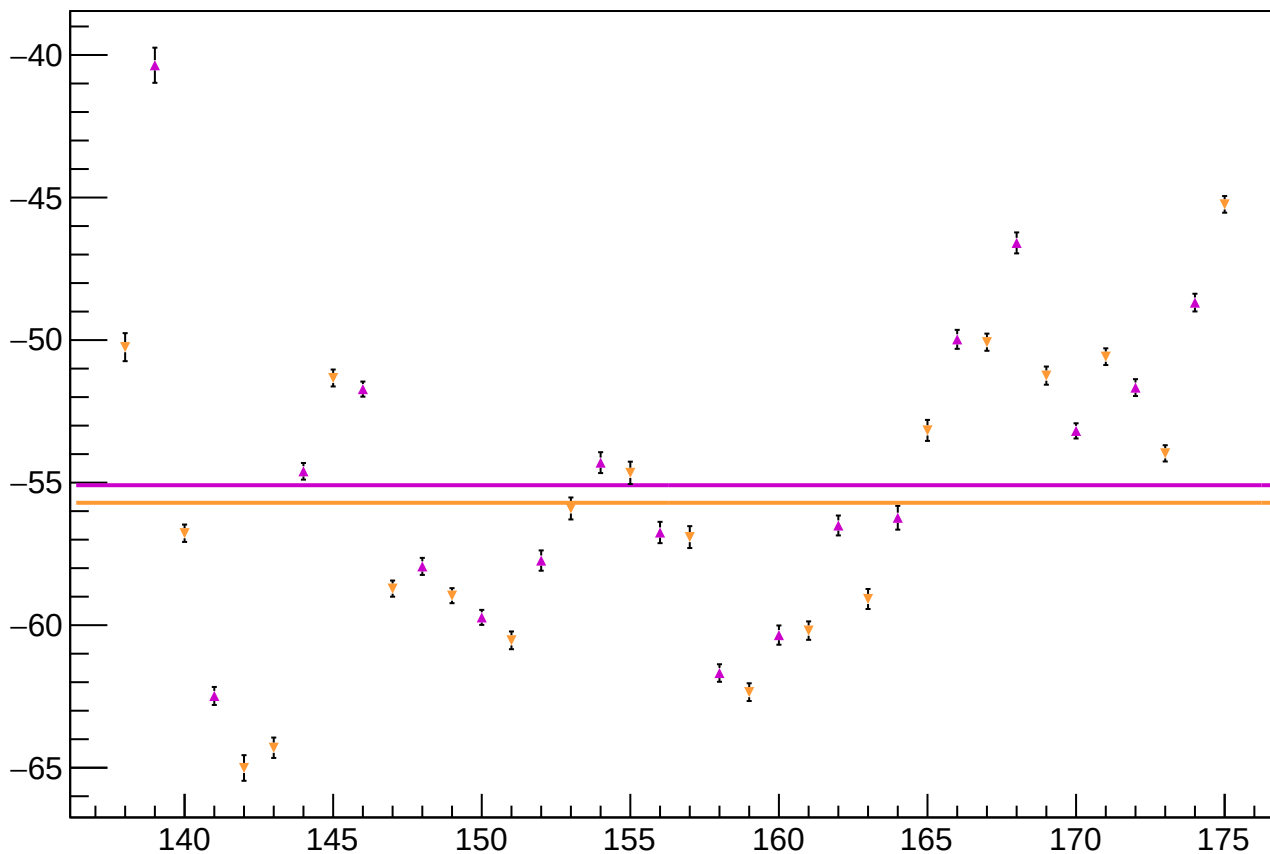
reg\_asym\_sam\_37\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 7.088 $\pm$ 0.086  $\chi^2$ /NDF:6843.7/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 8.885 $\pm$ 0.089  $\chi^2$ /NDF:2789.3/17

Left: 7.956 $\pm$ 0.062  $\chi^2$ /NDF: 9844.5/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 8.885 $\pm$ 0.089  $\chi^2$ /NDF:2789.3/17  
 Out: 7.088 $\pm$ 0.086  $\chi^2$ /NDF:6843.7/19  
 All: 7.956 $\pm$ 0.062  $\chi^2$ /NDF: 9844.5/37

reg\_asym\_sam\_37\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -55.707+/-0.073  $\chi^2/\text{NDF}$ : 4839.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -55.091+/-0.076  $\chi^2/\text{NDF}$ : 3869.9/17

Left: -55.412+/-0.053  $\chi^2/\text{NDF}$ : 8743.7/37

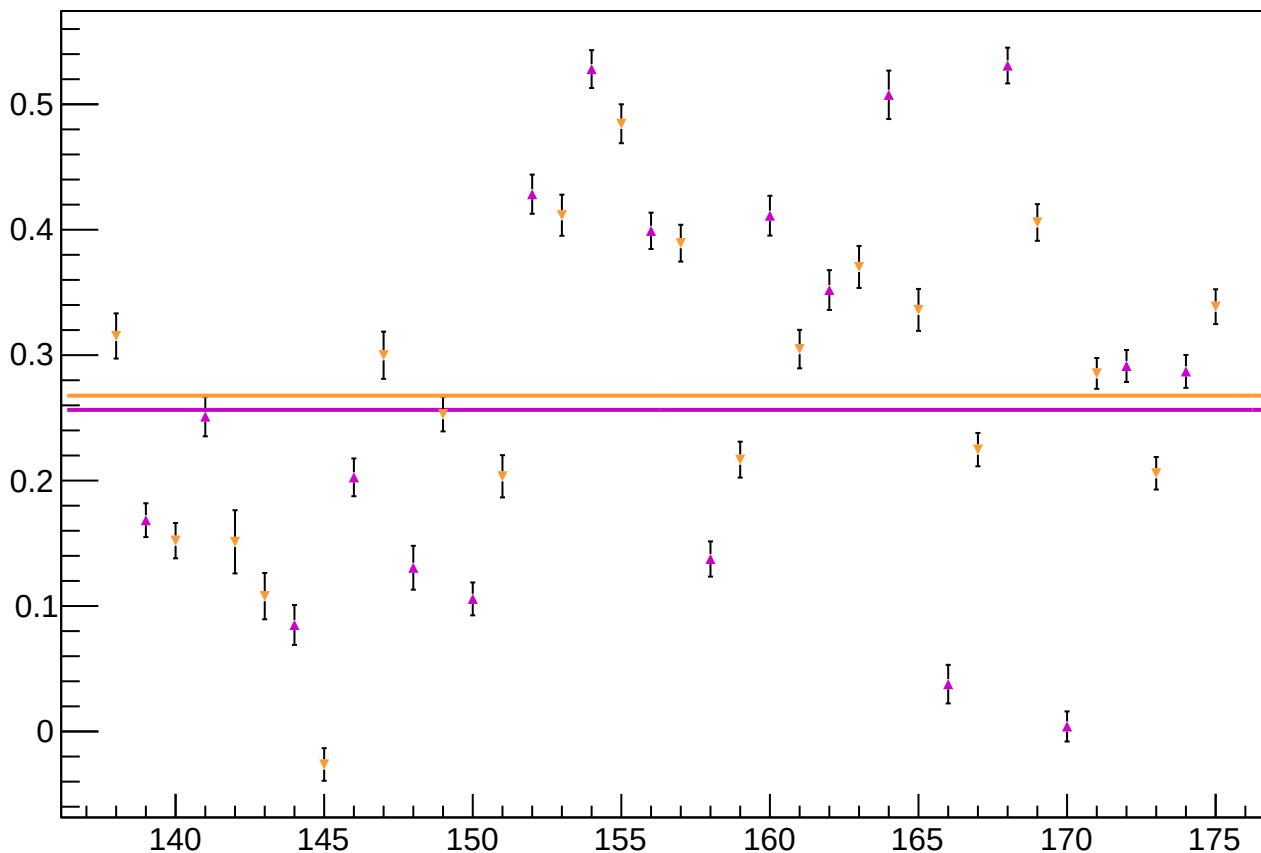
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -55.091+/-0.076  $\chi^2/\text{NDF}$ : 3869.9/17

Out: -55.707+/-0.073  $\chi^2/\text{NDF}$ : 4839.7/19

All: -55.412+/-0.053  $\chi^2/\text{NDF}$ : 8743.7/37

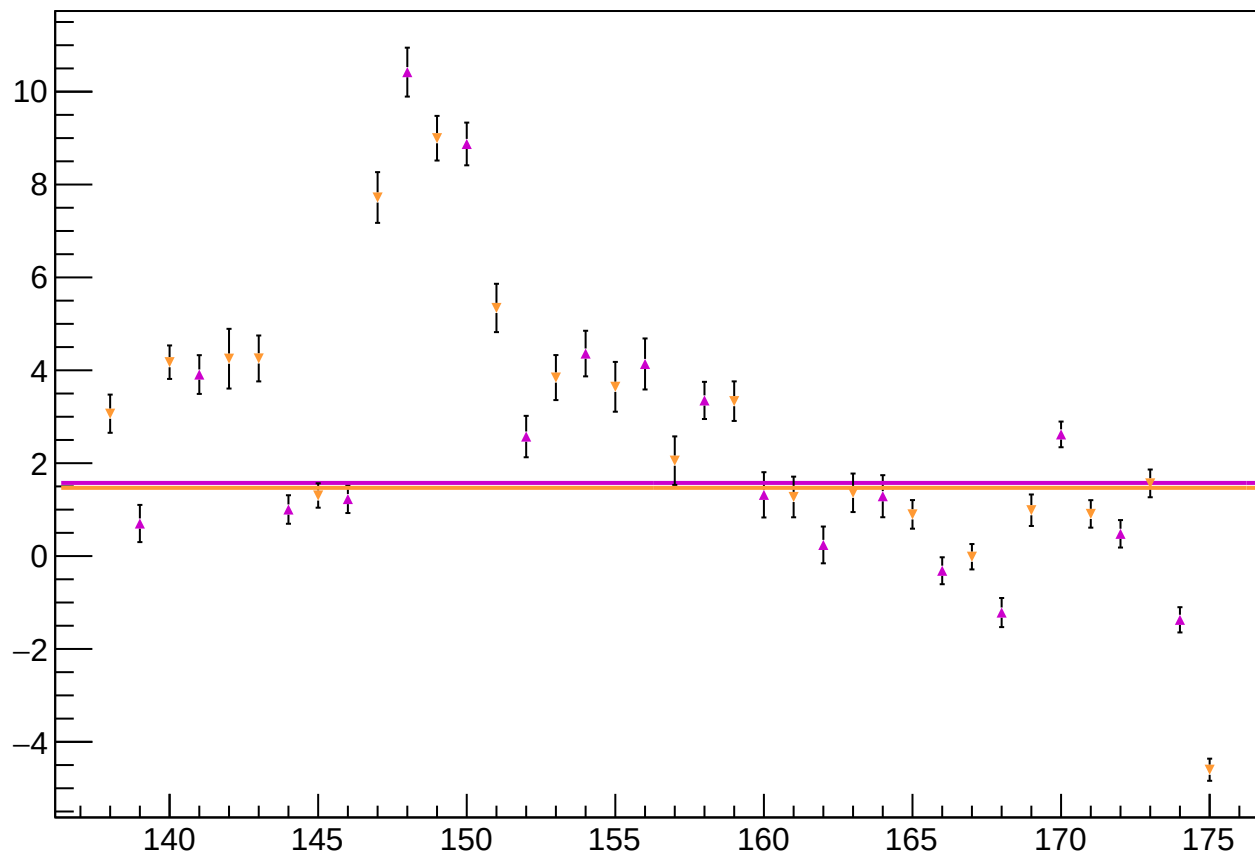
reg\_asym\_sam\_37\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 0.268+/-0.003  $\chi^2/\text{NDF}$ :1264.6/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 0.256+/-0.003  $\chi^2/\text{NDF}$ :2299.3/17

Left: 0.262+/-0.002  $\chi^2/\text{NDF}$ : 3569.4/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 0.256+/-0.003  $\chi^2/\text{NDF}$ :2299.3/17  
 Out: 0.268+/-0.003  $\chi^2/\text{NDF}$ :1264.6/19  
 All: 0.262+/-0.002  $\chi^2/\text{NDF}$ : 3569.4/37

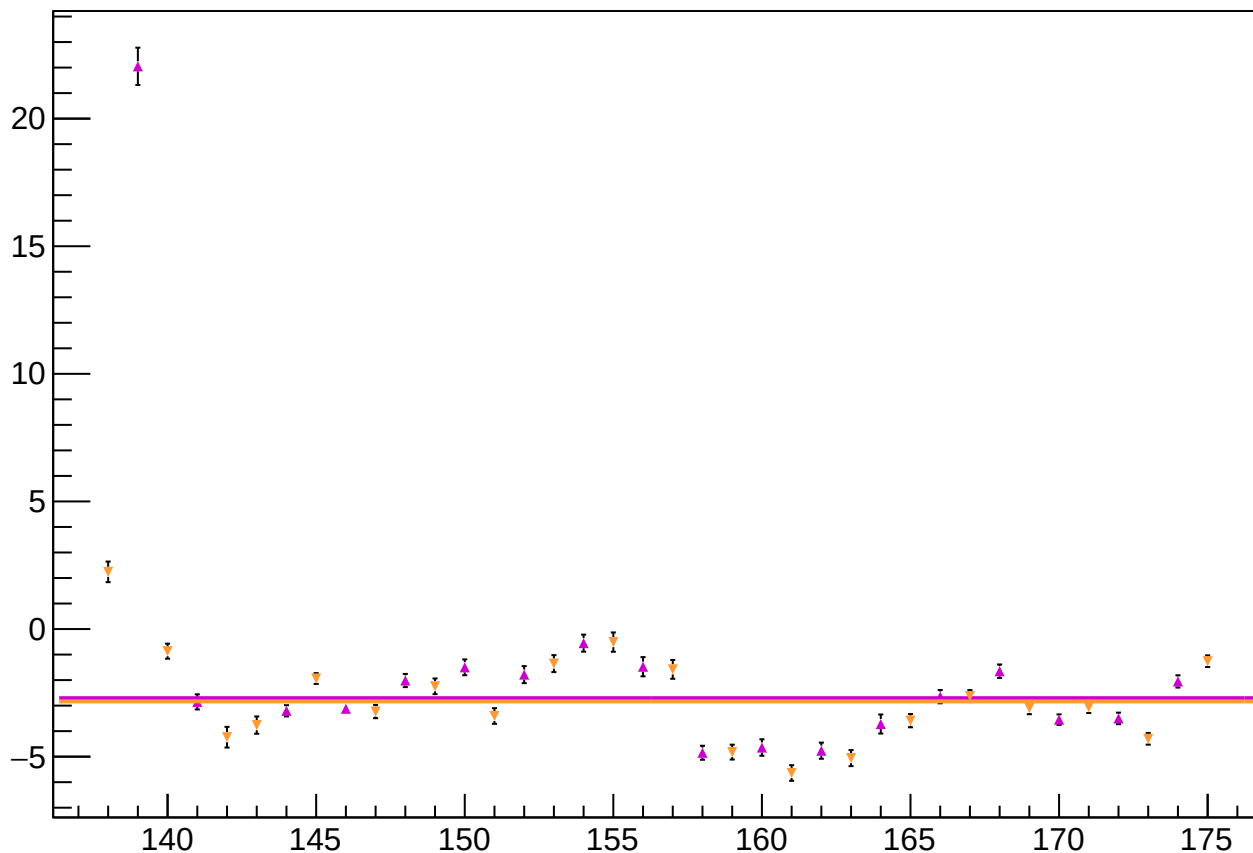
reg\_asym\_sam\_15\_26\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 1.469 $\pm$ 0.083  $\chi^2$ /NDF:1302.8/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 1.575 $\pm$ 0.086  $\chi^2$ /NDF:932.8/17

Left: 1.520 $\pm$ 0.059  $\chi^2$ /NDF: 2236.4/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 1.575 $\pm$ 0.086  $\chi^2$ /NDF:932.8/17  
 Out: 1.469 $\pm$ 0.083  $\chi^2$ /NDF:1302.8/19  
 All: 1.520 $\pm$ 0.059  $\chi^2$ /NDF: 2236.4/37

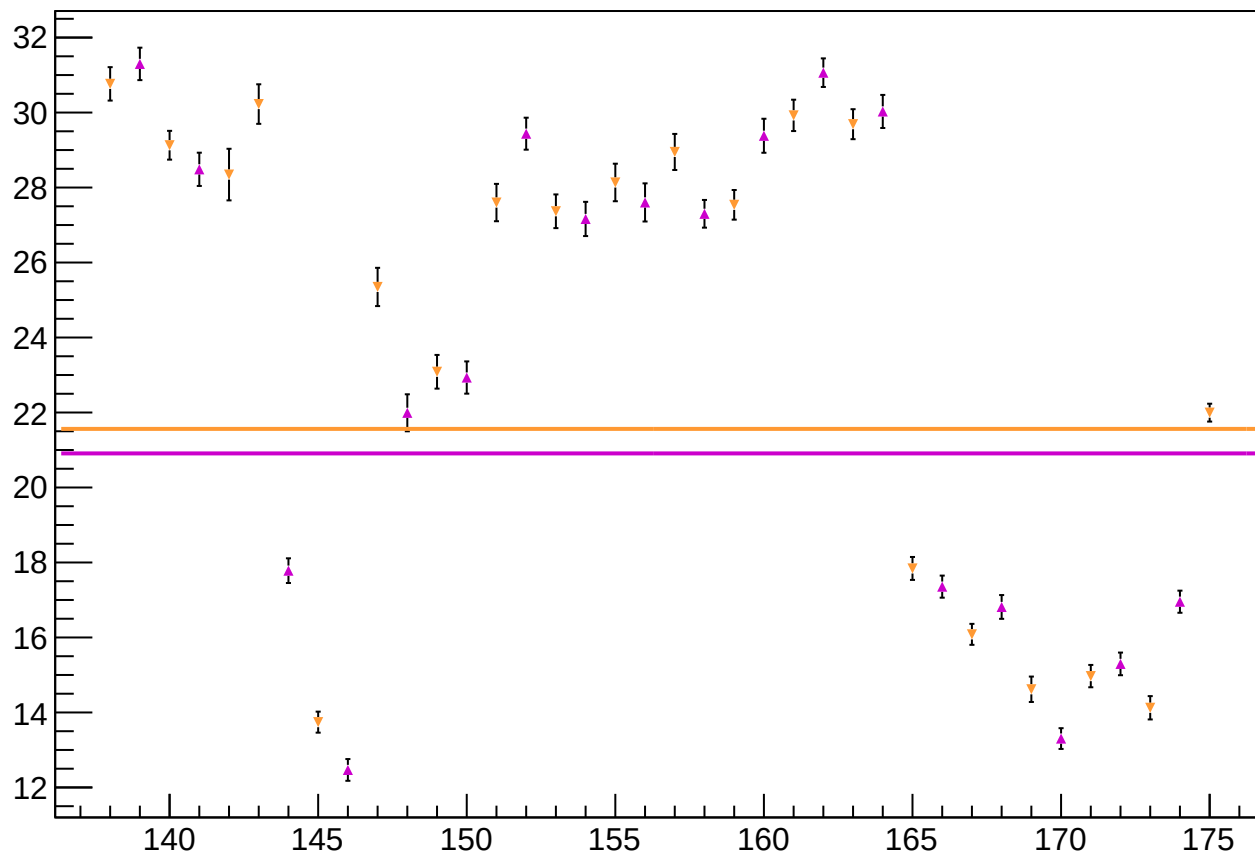
reg\_asym\_sam\_15\_26\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -2.835+/-0.063  $\chi^2/\text{NDF}$ :598.9/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -2.709+/-0.065  $\chi^2/\text{NDF}$ :1437.8/17

Left: -2.774+/-0.045  $\chi^2/\text{NDF}$ : 2038.7/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: -2.709+/-0.065  $\chi^2/\text{NDF}$ :1437.8/17  
 Out: -2.835+/-0.063  $\chi^2/\text{NDF}$ :598.9/19  
 All: -2.774+/-0.045  $\chi^2/\text{NDF}$ : 2038.7/37

reg\_asym\_sam\_15\_26\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected

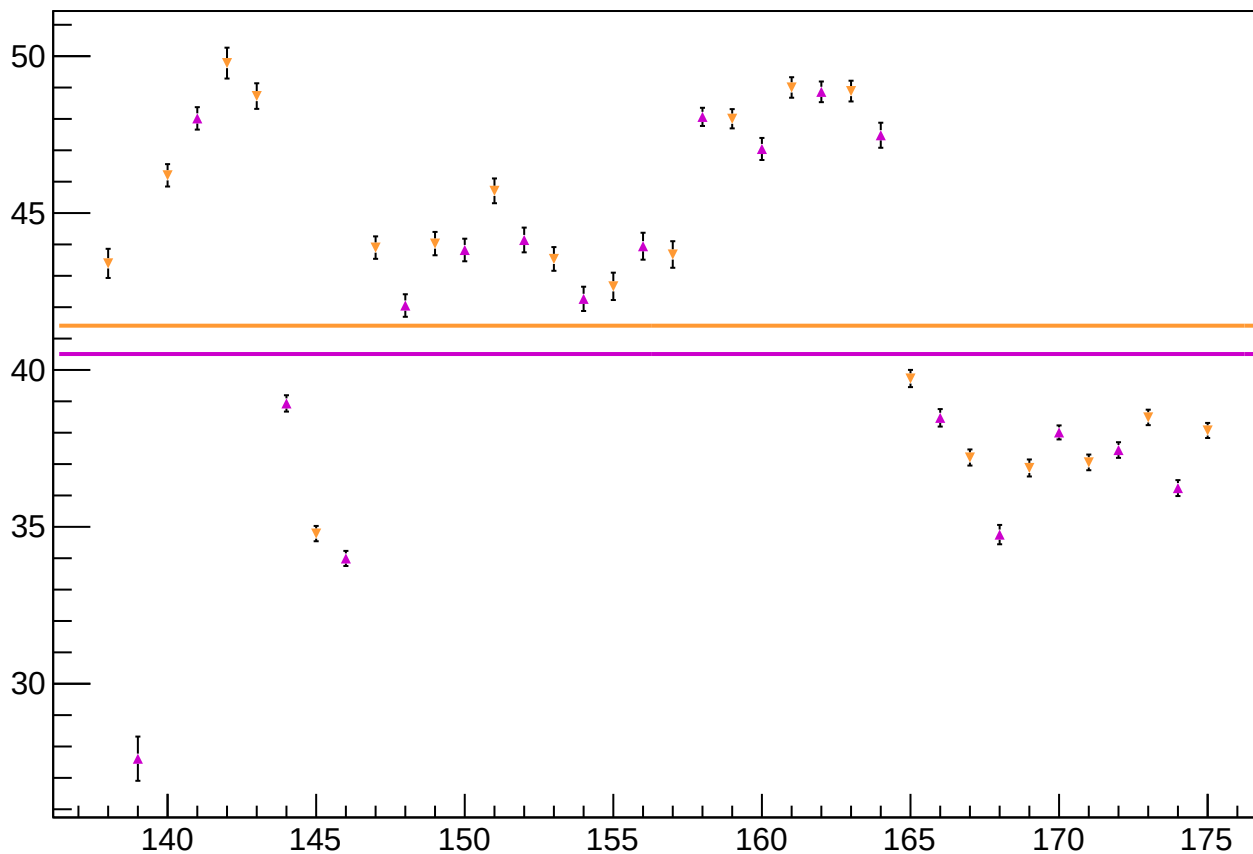


Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 21.563+/-0.083  $\chi^2/\text{NDF}$ :5806.3/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 20.909+/-0.086  $\chi^2/\text{NDF}$ :5969.4/17

Left: 21.247+/-0.060  $\chi^2/\text{NDF}$ : 11805.9/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 20.909+/-0.086  $\chi^2/\text{NDF}$ :5969.4/17  
 Out: 21.563+/-0.083  $\chi^2/\text{NDF}$ :5806.3/19  
 All: 21.247+/-0.060  $\chi^2/\text{NDF}$ : 11805.9/37



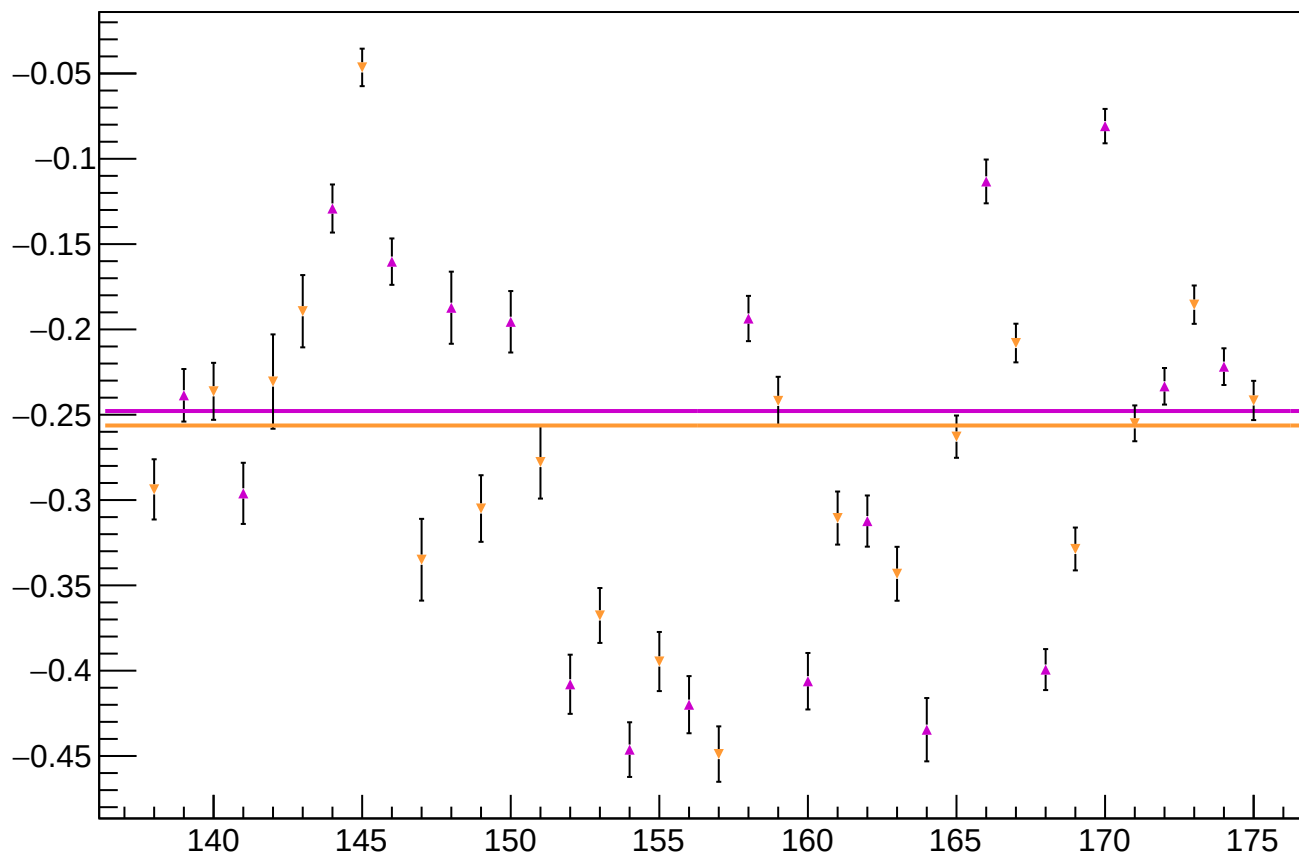
reg\_asym\_sam\_15\_26\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 41.411+/-0.071  $\chi^2/\text{NDF}$ :4568.5/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 40.508+/-0.073  $\chi^2/\text{NDF}$ :4756.0/17

Left: 40.975+/-0.051  $\chi^2/\text{NDF}$ : 9403.2/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 40.508+/-0.073  $\chi^2/\text{NDF}$ :4756.0/17  
 Out: 41.411+/-0.071  $\chi^2/\text{NDF}$ :4568.5/19  
 All: 40.975+/-0.051  $\chi^2/\text{NDF}$ : 9403.2/37

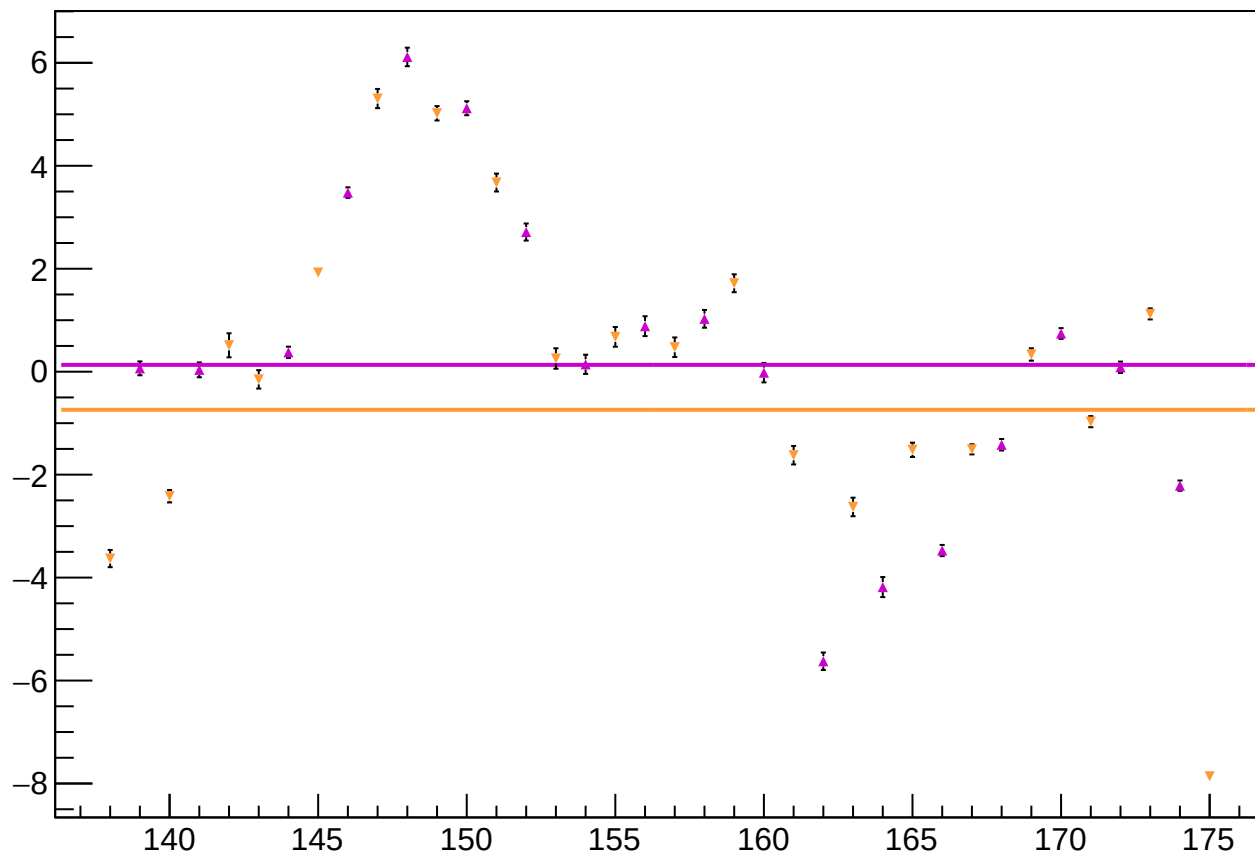
reg\_asym\_sam\_15\_26\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: -0.256 $\pm$ 0.003  $\chi^2$ /NDF:788.5/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: -0.248 $\pm$ 0.003  $\chi^2$ /NDF:1260.1/17

Left: -0.252 $\pm$ 0.002  $\chi^2$ /NDF: 2051.9/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: -0.248 $\pm$ 0.003  $\chi^2$ /NDF:1260.1/17  
 Out: -0.256 $\pm$ 0.003  $\chi^2$ /NDF:788.5/19  
 All: -0.252 $\pm$ 0.002  $\chi^2$ /NDF: 2051.9/37

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



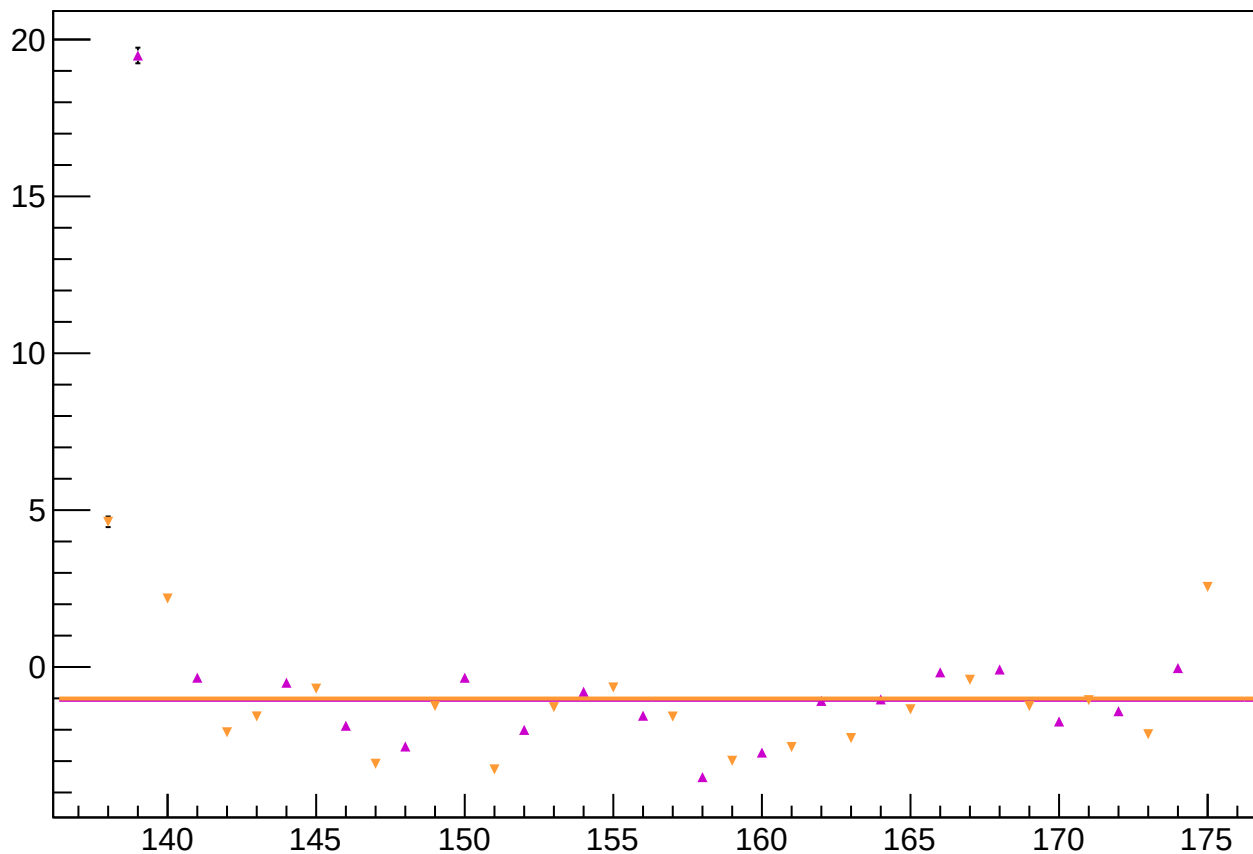
Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -0.740+/-0.030  $\chi^2/\text{NDF}$ :12268.7/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 0.133+/-0.031  $\chi^2/\text{NDF}$ :7332.9/17

Left: -0.316+/-0.022  $\chi^2/\text{NDF}$ : 20001.5/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.133+/-0.031  $\chi^2/\text{NDF}$ :7332.9/17  
 Out: -0.740+/-0.030  $\chi^2/\text{NDF}$ :12268.7/19

All: -0.316+/-0.022  $\chi^2/\text{NDF}$ : 20001.5/37

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



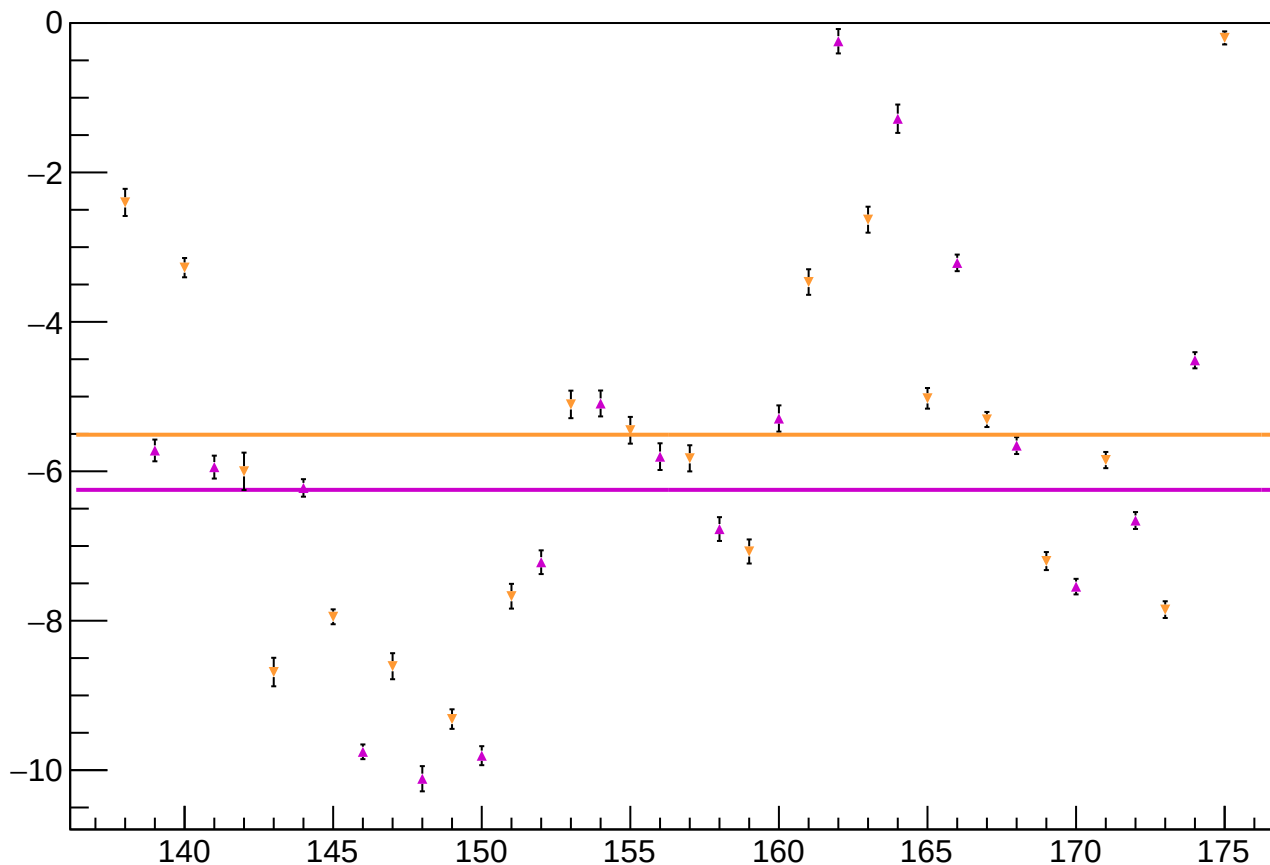
Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -1.005+/-0.023  $\chi^2/\text{NDF}$ : 5833.1/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -1.046+/-0.024  $\chi^2/\text{NDF}$ : 8481.9/17

Left: -1.025+/-0.016  $\chi^2/\text{NDF}$ : 14316.5/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -1.046+/-0.024  $\chi^2/\text{NDF}$ : 8481.9/17  
 Out: -1.005+/-0.023  $\chi^2/\text{NDF}$ : 5833.1/19

All: -1.025+/-0.016  $\chi^2/\text{NDF}$ : 14316.5/37

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



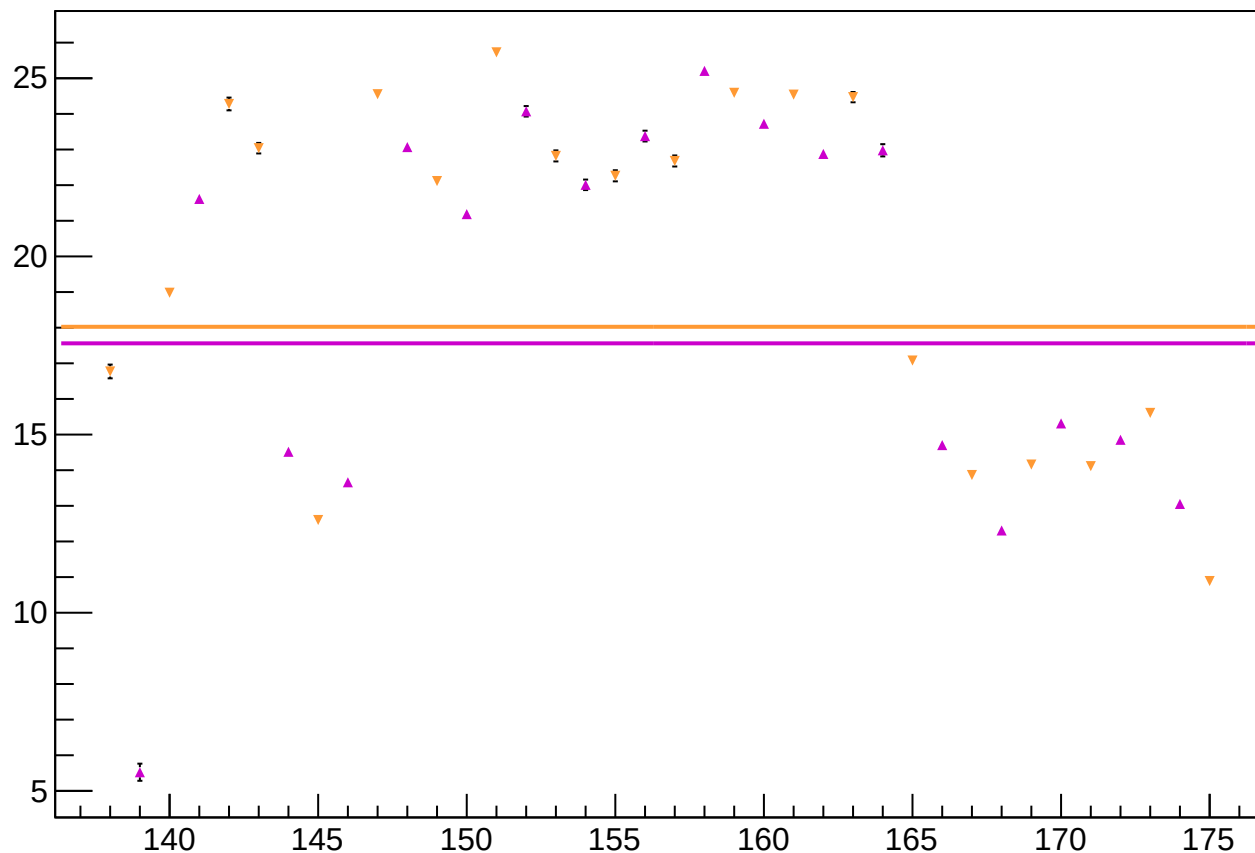
Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -5.510 $\pm$ 0.030  $\chi^2/\text{NDF}$ : 7664.9/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -6.248 $\pm$ 0.031  $\chi^2/\text{NDF}$ : 5961.4/17

Left: -5.869 $\pm$ 0.022  $\chi^2/\text{NDF}$ : 13911.5/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -6.248 $\pm$ 0.031  $\chi^2/\text{NDF}$ : 5961.4/17  
 Out: -5.510 $\pm$ 0.030  $\chi^2/\text{NDF}$ : 7664.9/19

All: -5.869 $\pm$ 0.022  $\chi^2/\text{NDF}$ : 13911.5/37

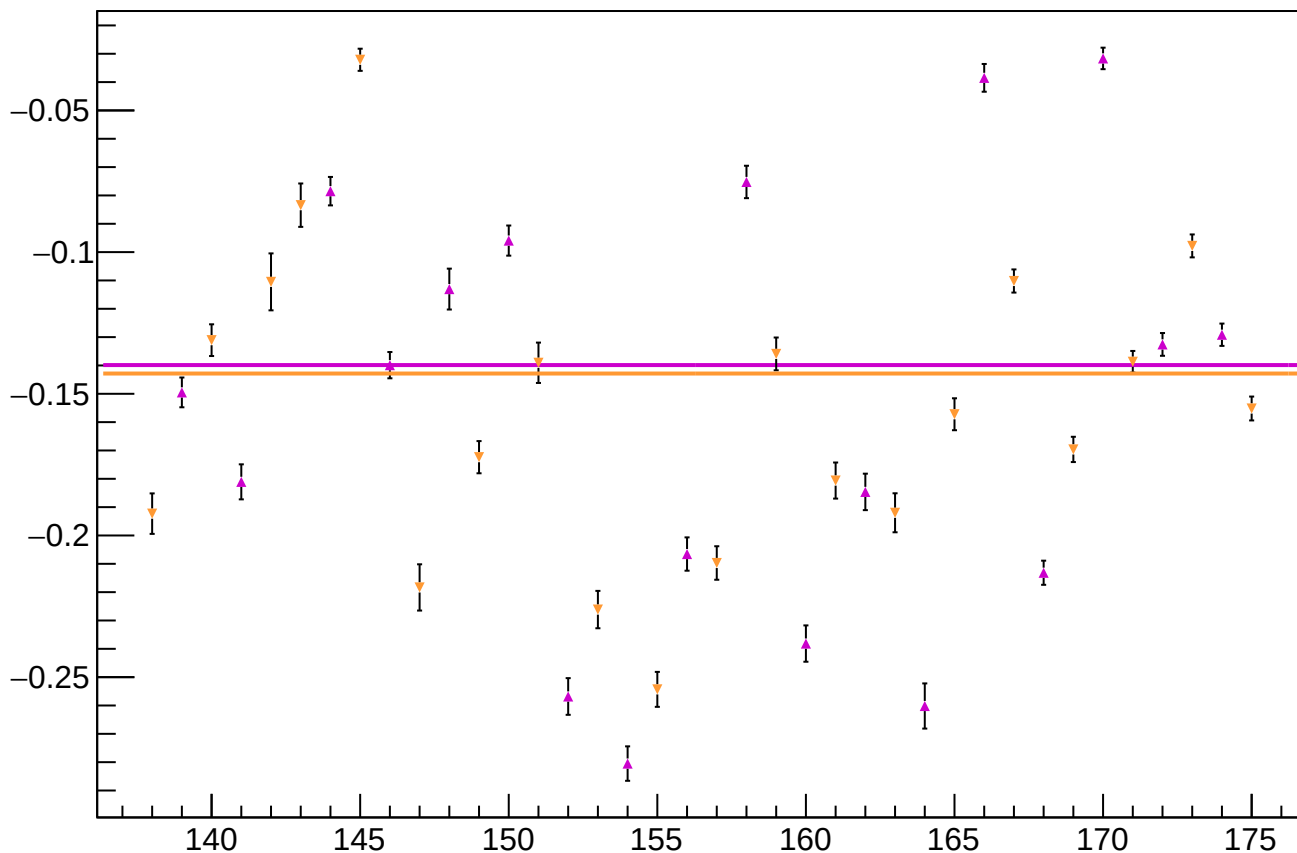
reg\_asym\_sam\_37\_26\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 18.025+/-0.026  $\chi^2/\text{NDF}$ :36412.5/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 17.560+/-0.027  $\chi^2/\text{NDF}$ :29506.1/17

Left: 17.799+/-0.019  $\chi^2/\text{NDF}$ : 66071.9/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 17.560+/-0.027  $\chi^2/\text{NDF}$ :29506.1/17  
 Out: 18.025+/-0.026  $\chi^2/\text{NDF}$ :36412.5/19  
 All: 17.799+/-0.019  $\chi^2/\text{NDF}$ : 66071.9/37

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -0.143+/-0.001  $\chi^2/\text{NDF}$ :1980.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -0.140+/-0.001  $\chi^2/\text{NDF}$ :3457.1/17

Left: -0.141+/-0.001  $\chi^2/\text{NDF}$ : 5440.5/37

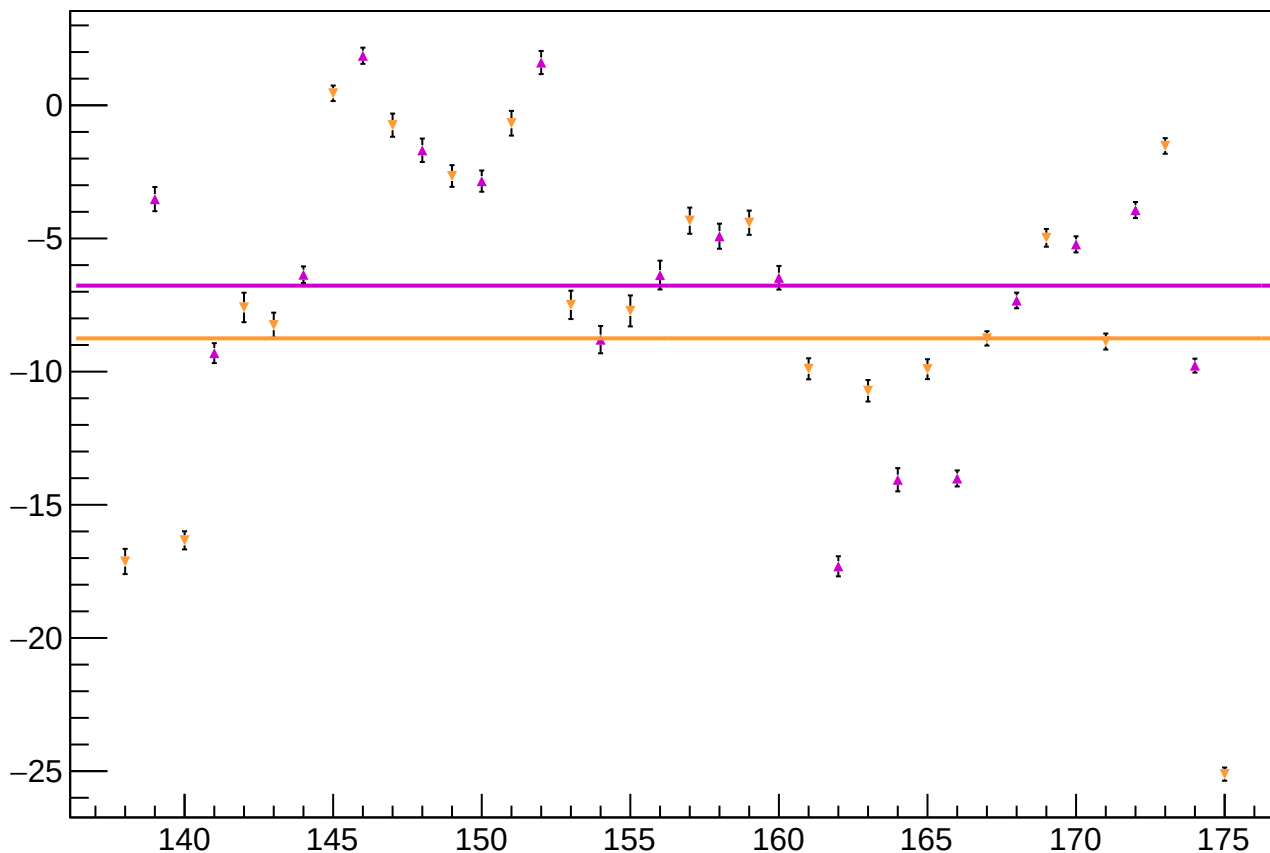
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -0.140+/-0.001  $\chi^2/\text{NDF}$ :3457.1/17

Out: -0.143+/-0.001  $\chi^2/\text{NDF}$ :1980.3/19

All: -0.141+/-0.001  $\chi^2/\text{NDF}$ : 5440.5/37

reg\_asym\_sam\_1357\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$   
 Left Out:  $-8.750 \pm 0.083$   $\chi^2/\text{NDF}: 7942.6/19$   
 Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$   
 Left In:  $-6.771 \pm 0.085$   $\chi^2/\text{NDF}: 3429.3/17$

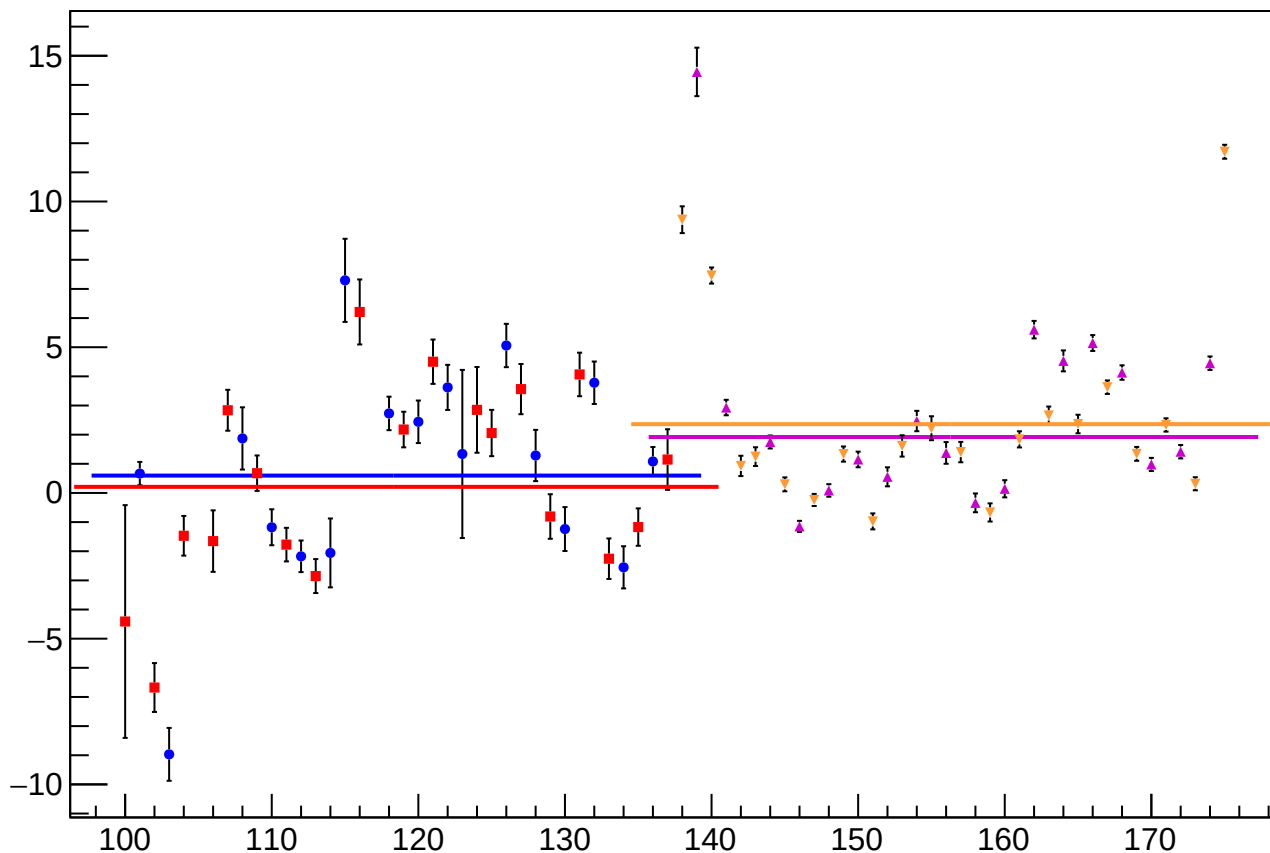
Left:  $-7.786 \pm 0.059$   $\chi^2/\text{NDF}: 11649.0/37$   
 Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

In:  $-6.771 \pm 0.085$   $\chi^2/\text{NDF}: 3429.3/17$   
 Out:  $-8.750 \pm 0.083$   $\chi^2/\text{NDF}: 7942.6/19$

All:  $-7.786 \pm 0.059$   $\chi^2/\text{NDF}: 11649.0/37$



reg\_asym\_sam\_1357\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.596±/0.169  $\chi^2/\text{NDF}$ : 291.2/16

Left Out: 2.361±/0.062  $\chi^2/\text{NDF}$ :2768.6/19

Right Out: 0.209±/0.175  $\chi^2/\text{NDF}$ : 273.5/18

Left In: 1.919±/0.063  $\chi^2/\text{NDF}$ :1252.9/17

Left: 2.145±/0.044  $\chi^2/\text{NDF}$ : 4046.6/37

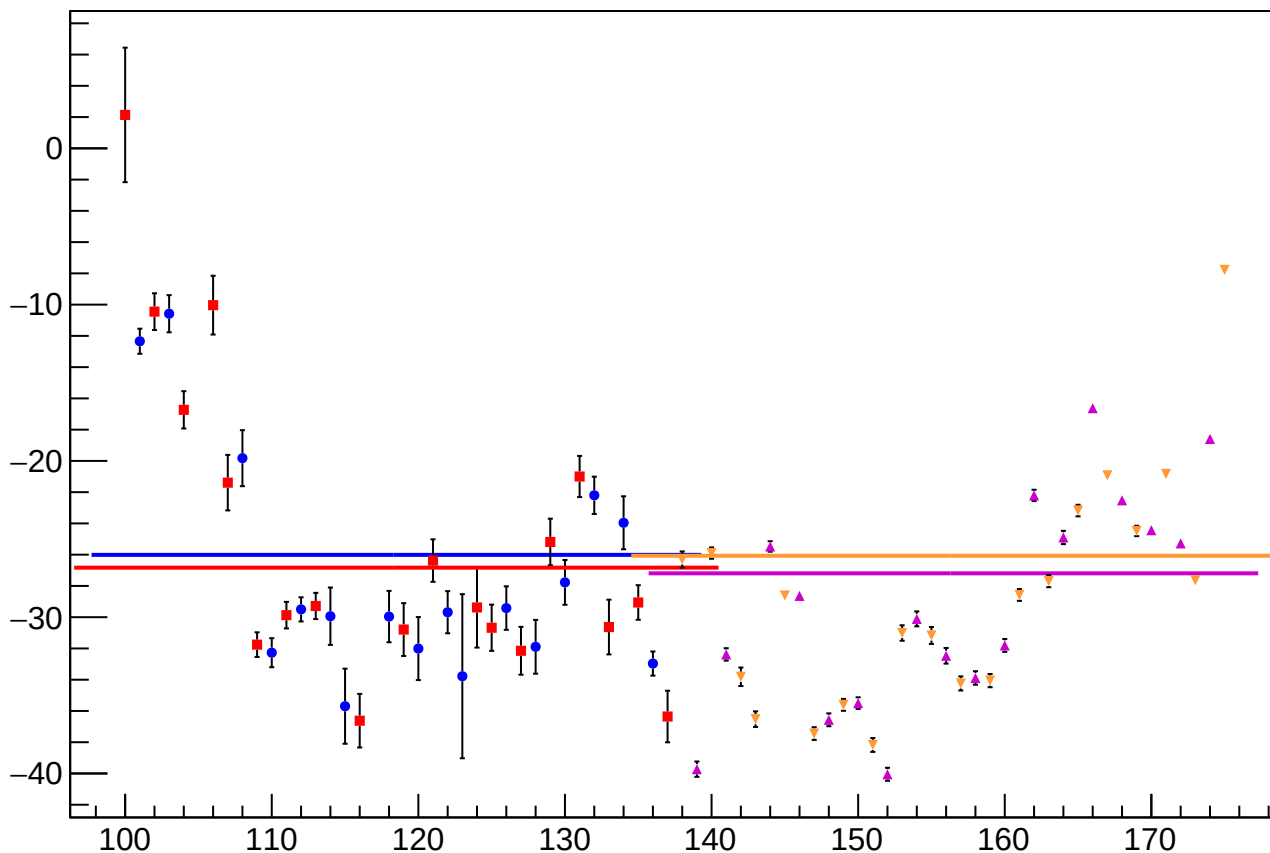
Right: 0.409±/0.121  $\chi^2/\text{NDF}$ : 567.2/35

In: 1.756±/0.059  $\chi^2/\text{NDF}$ :1597.8/34

Out: 2.122±/0.058  $\chi^2/\text{NDF}$ :3177.0/38

All: 1.943±/0.041  $\chi^2/\text{NDF}$ : 4794.3/73

reg\_asym\_sam\_1357\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-26.012 \pm 0.300$   $\chi^2/\text{NDF}$ : 692.9/16

Left Out:  $-26.069 \pm 0.083$   $\chi^2/\text{NDF}$ : 9889.9/19

Right Out:  $-26.829 \pm 0.297$   $\chi^2/\text{NDF}$ : 581.6/18

Left In:  $-27.193 \pm 0.085$   $\chi^2/\text{NDF}$ : 6034.7/17

Left:  $-26.616 \pm 0.059$   $\chi^2/\text{NDF}$ : 16014.2/37

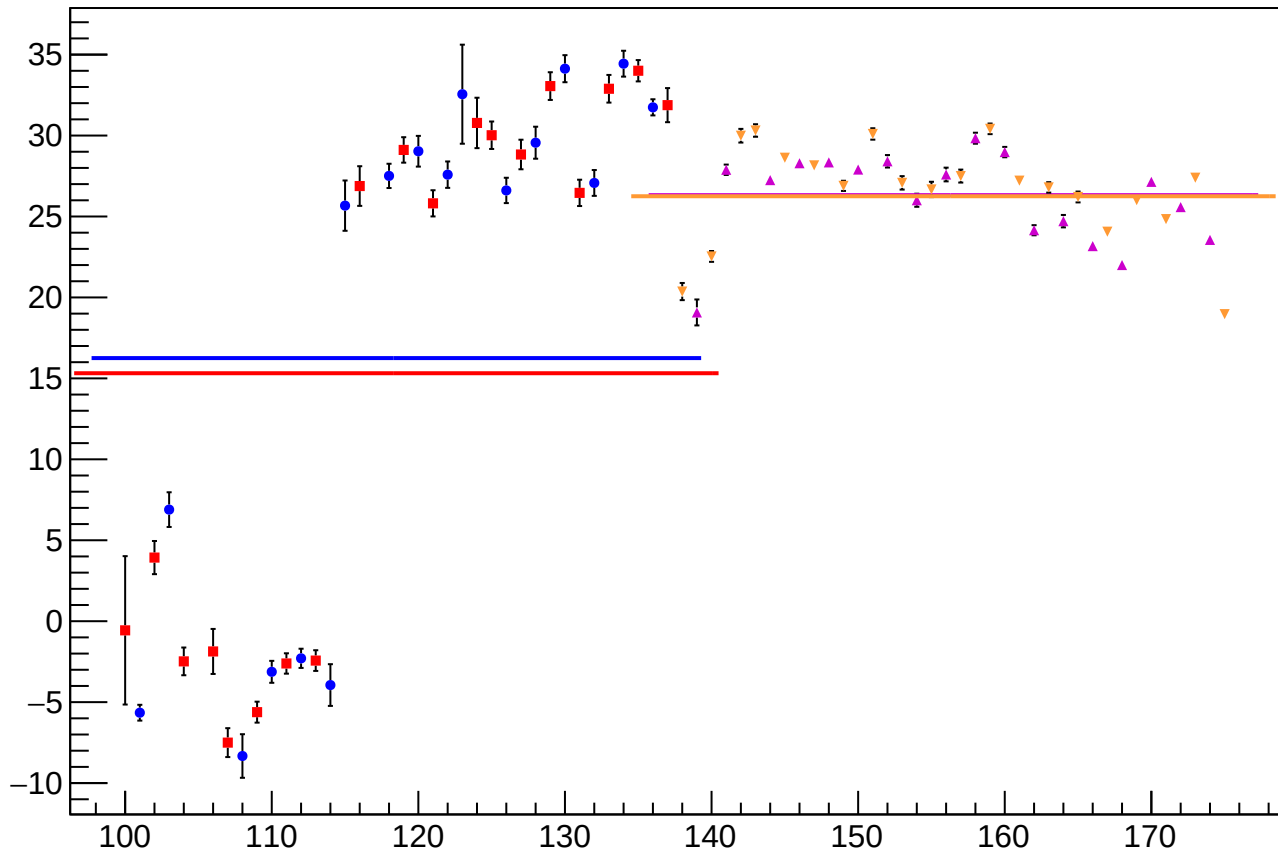
Right:  $-26.423 \pm 0.211$   $\chi^2/\text{NDF}$ : 1278.3/35

In:  $-27.105 \pm 0.082$   $\chi^2/\text{NDF}$ : 6742.0/34

Out:  $-26.123 \pm 0.080$   $\chi^2/\text{NDF}$ : 10477.6/38

All:  $-26.602 \pm 0.057$   $\chi^2/\text{NDF}$ : 17293.3/73

reg\_asym\_sam\_1357\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 16.253 $\pm$ 0.191  $\chi^2$ /NDF: 7611.3/16

Left Out: 26.250 $\pm$ 0.070  $\chi^2$ /NDF:1836.3/19

Right Out: 15.318 $\pm$ 0.197  $\chi^2$ /NDF: 7280.1/18

Left In: 26.320 $\pm$ 0.072  $\chi^2$ /NDF:1026.0/17

Left: 26.284 $\pm$ 0.050  $\chi^2$ /NDF: 2862.8/37

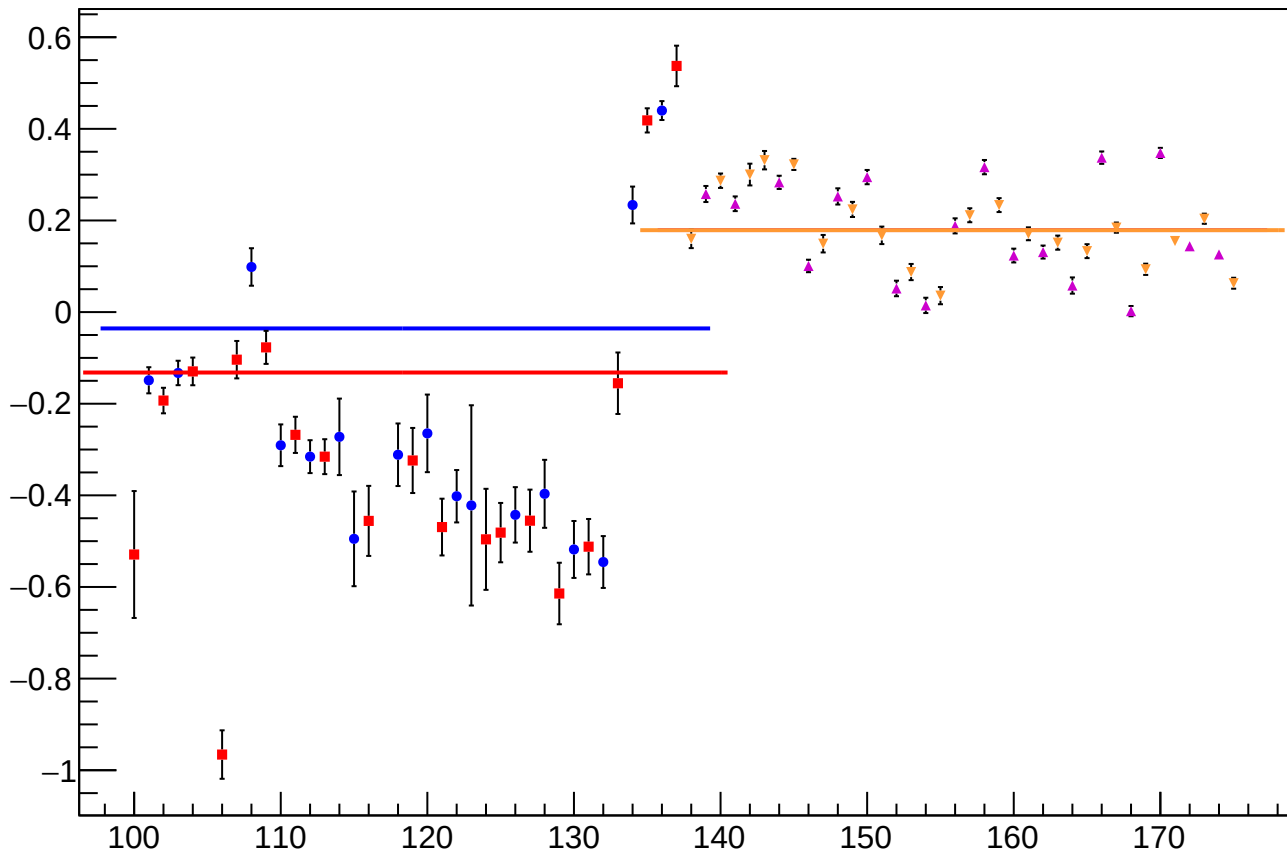
Right: 15.800 $\pm$ 0.137  $\chi^2$ /NDF: 14903.0/35

In: 25.057 $\pm$ 0.068  $\chi^2$ /NDF:11066.1/34

Out: 25.015 $\pm$ 0.066  $\chi^2$ /NDF:11848.2/38

All: 25.035 $\pm$ 0.047  $\chi^2$ /NDF: 22914.4/73

reg\_asym\_sam\_1357\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.036 \pm 0.010$   $\chi^2/\text{NDF}$ : 1014.5/16

Left Out:  $0.179 \pm 0.003$   $\chi^2/\text{NDF}$ : 549.1/19

Right Out:  $-0.132 \pm 0.010$   $\chi^2/\text{NDF}$ : 1171.3/18

Left In:  $0.179 \pm 0.003$   $\chi^2/\text{NDF}$ : 1147.0/17

Left:  $0.179 \pm 0.002$   $\chi^2/\text{NDF}$ : 1696.1/37

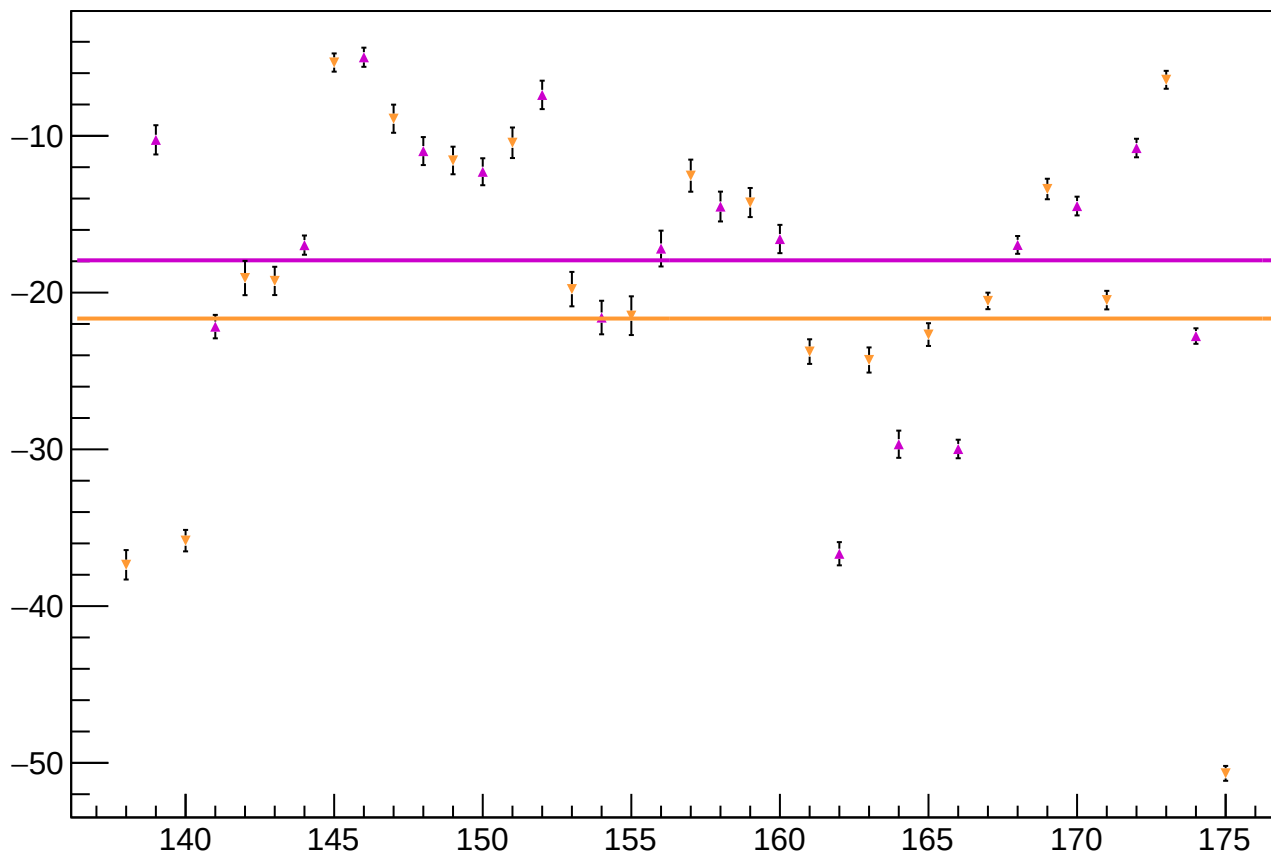
Right:  $-0.084 \pm 0.007$   $\chi^2/\text{NDF}$ : 2229.1/35

In:  $0.159 \pm 0.003$   $\chi^2/\text{NDF}$ : 2554.7/34

Out:  $0.151 \pm 0.003$   $\chi^2/\text{NDF}$ : 2538.7/38

All:  $0.155 \pm 0.002$   $\chi^2/\text{NDF}$ : 5097.0/73

reg\_asym\_sam\_2468\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -21.655+/-0.165  $\chi^2/\text{NDF}$ : 6757.2/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -17.941+/-0.169  $\chi^2/\text{NDF}$ : 2333.6/17

Left: -19.848+/-0.118  $\chi^2/\text{NDF}$ : 9338.1/37

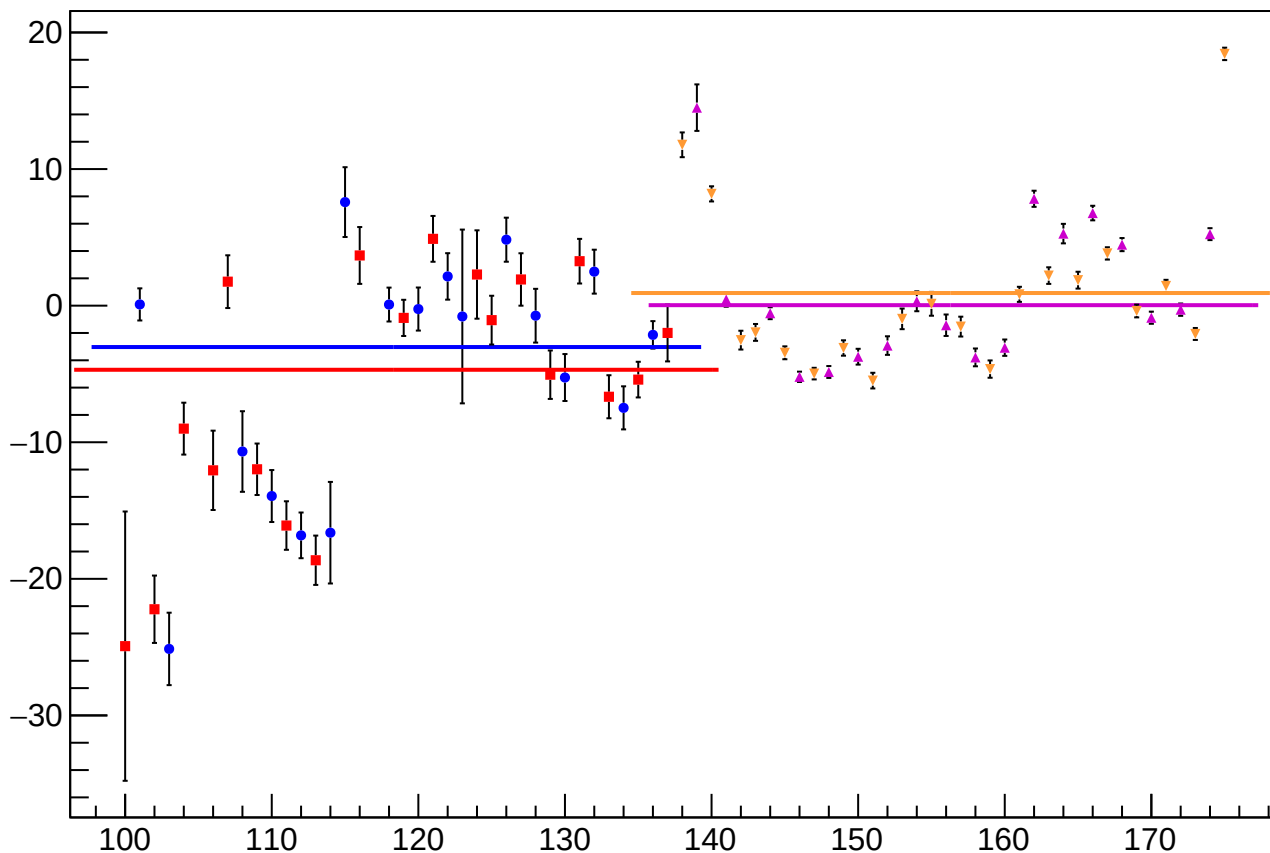
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -17.941+/-0.169  $\chi^2/\text{NDF}$ : 2333.6/17

Out: -21.655+/-0.165  $\chi^2/\text{NDF}$ : 6757.2/19

All: -19.848+/-0.118  $\chi^2/\text{NDF}$ : 9338.1/37

reg\_asym\_sam\_2468\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-3.030 \pm 0.408$   $\chi^2/\text{NDF}$ : 280.8/16

Left Out:  $0.925 \pm 0.123$   $\chi^2/\text{NDF}$ : 2495.2/19

Right Out:  $-4.694 \pm 0.427$   $\chi^2/\text{NDF}$ : 298.3/18

Left In:  $0.035 \pm 0.126$   $\chi^2/\text{NDF}$ : 1139.5/17

Left:  $0.490 \pm 0.088$   $\chi^2/\text{NDF}$ : 3660.2/37

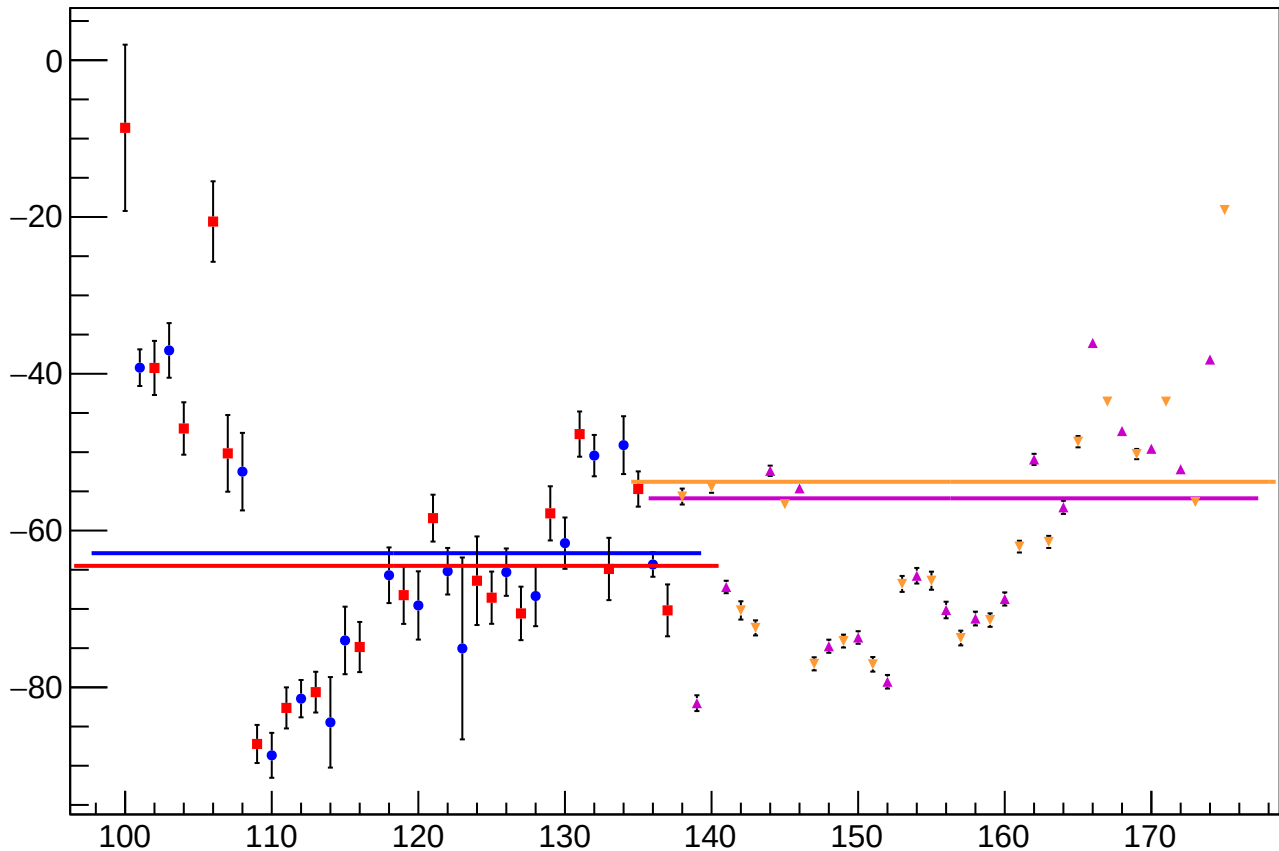
Right:  $-3.824 \pm 0.295$   $\chi^2/\text{NDF}$ : 587.0/35

In:  $-0.232 \pm 0.120$   $\chi^2/\text{NDF}$ : 1472.0/34

Out:  $0.493 \pm 0.118$   $\chi^2/\text{NDF}$ : 2953.6/38

All:  $0.137 \pm 0.084$   $\chi^2/\text{NDF}$ : 4444.0/73

reg\_asym\_sam\_2468\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-62.887 \pm 0.738$   $\chi^2/\text{NDF}$ : 368.7/16

Left Out:  $-53.779 \pm 0.165$   $\chi^2/\text{NDF}$ : 10035.6/19

Right Out:  $-64.502 \pm 0.751$   $\chi^2/\text{NDF}$ : 444.1/18

Left In:  $-55.889 \pm 0.169$   $\chi^2/\text{NDF}$ : 6039.9/17

Left:  $-54.806 \pm 0.118$   $\chi^2/\text{NDF}$ : 16155.1/37

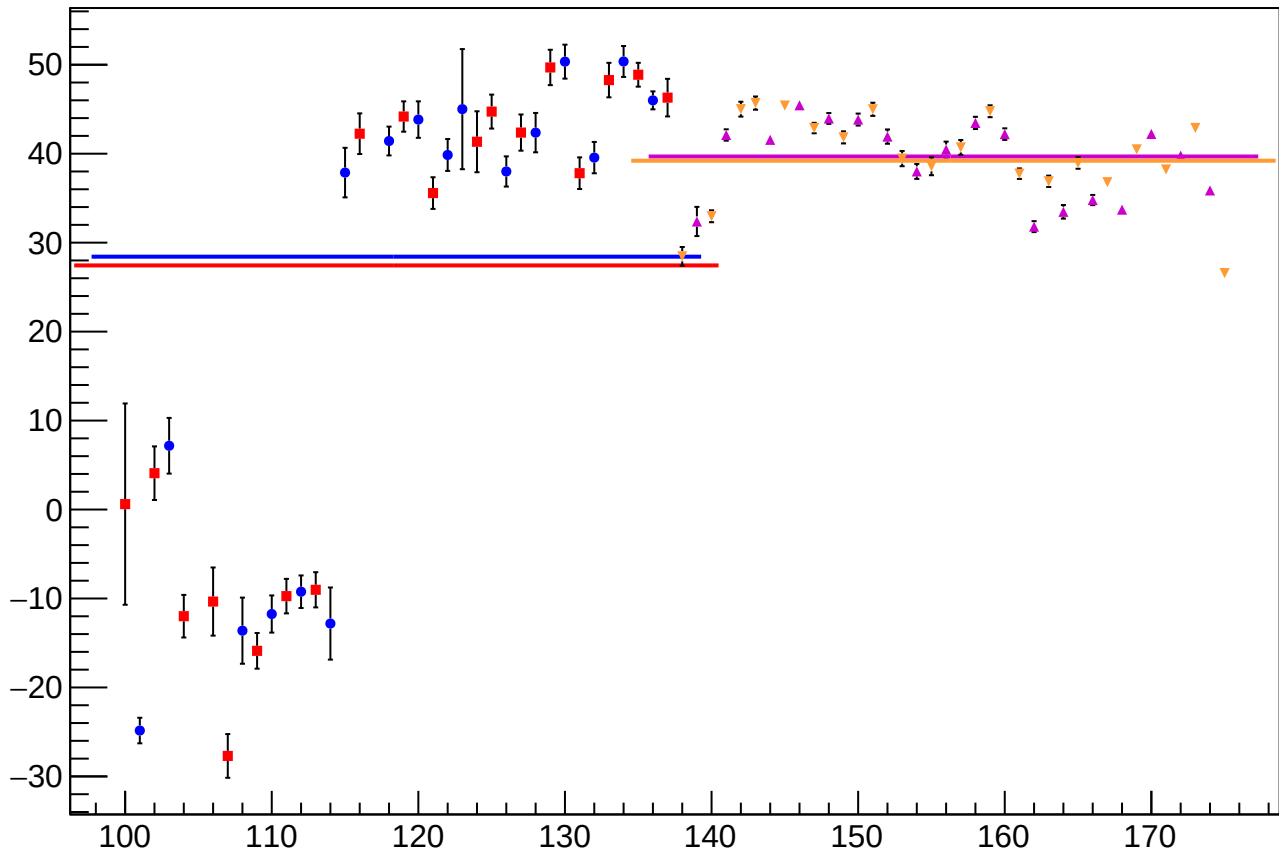
Right:  $-63.680 \pm 0.526$   $\chi^2/\text{NDF}$ : 815.2/35

In:  $-56.239 \pm 0.165$   $\chi^2/\text{NDF}$ : 6494.0/34

Out:  $-54.272 \pm 0.161$   $\chi^2/\text{NDF}$ : 10674.0/38

All:  $-55.232 \pm 0.115$   $\chi^2/\text{NDF}$ : 17240.8/73

reg\_asym\_sam\_2468\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $28.425 \pm 0.457$   $\chi^2/\text{NDF}: 3330.3/16$

Left Out:  $39.212 \pm 0.140$   $\chi^2/\text{NDF}: 1445.4/19$

Right Out:  $27.441 \pm 0.479$   $\chi^2/\text{NDF}: 3033.0/18$

Left In:  $39.686 \pm 0.144$   $\chi^2/\text{NDF}: 852.9/17$

Left:  $39.442 \pm 0.100$   $\chi^2/\text{NDF}: 2303.9/37$

Right:  $27.956 \pm 0.331$   $\chi^2/\text{NDF}: 6365.5/35$

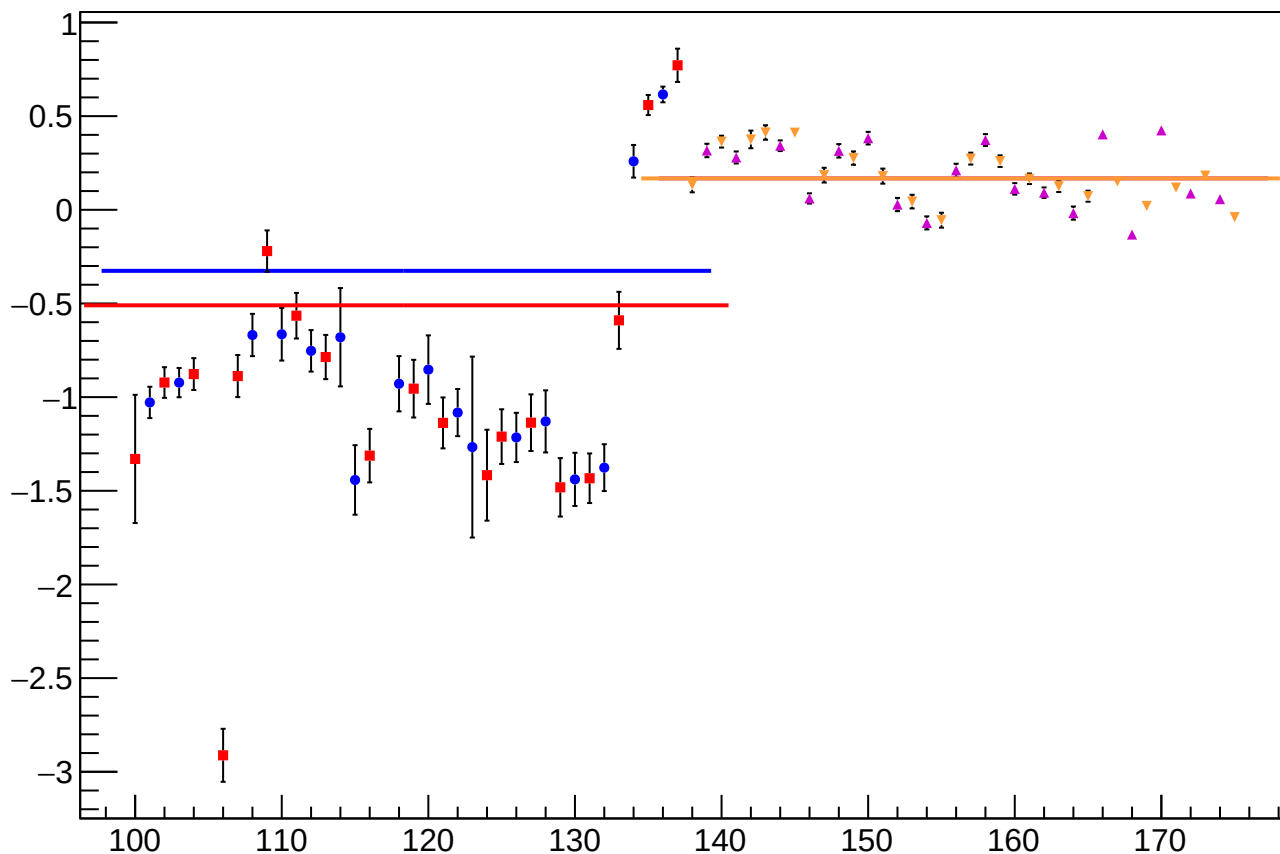
In:  $38.669 \pm 0.137$   $\chi^2/\text{NDF}: 4735.3/34$

Out:  $38.283 \pm 0.134$   $\chi^2/\text{NDF}: 5035.4/38$

All:  $38.472 \pm 0.096$   $\chi^2/\text{NDF}: 9774.8/73$



reg\_asym\_sam\_2468\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.326 \pm 0.025$   $\chi^2/\text{NDF}$ : 1013.0/16

Left Out:  $0.168 \pm 0.007$   $\chi^2/\text{NDF}$ : 410.7/19

Right Out:  $-0.510 \pm 0.026$   $\chi^2/\text{NDF}$ : 1169.4/18

Left In:  $0.168 \pm 0.007$   $\chi^2/\text{NDF}$ : 735.6/17

Left:  $0.168 \pm 0.005$   $\chi^2/\text{NDF}$ : 1146.3/37

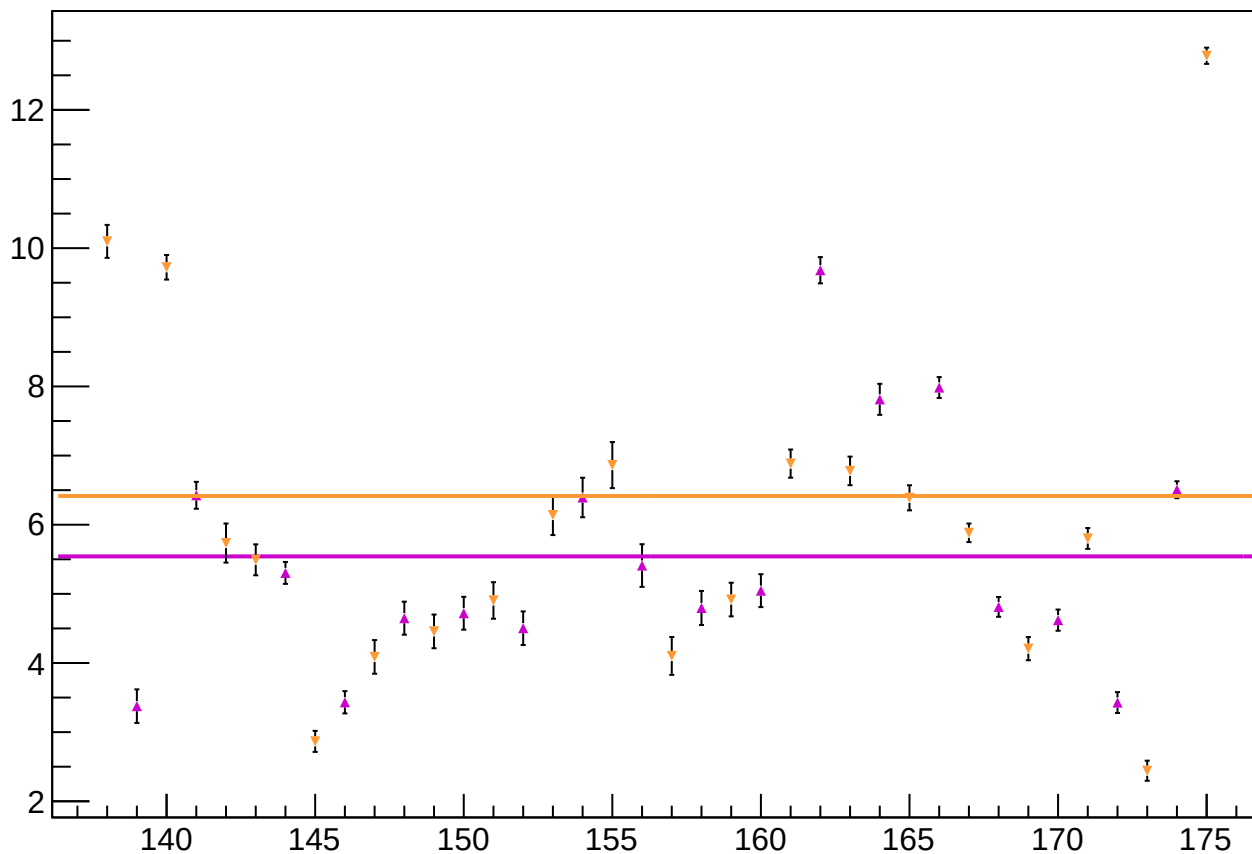
Right:  $-0.415 \pm 0.018$   $\chi^2/\text{NDF}$ : 2208.8/35

In:  $0.135 \pm 0.006$   $\chi^2/\text{NDF}$ : 2115.9/34

Out:  $0.127 \pm 0.006$   $\chi^2/\text{NDF}$ : 2233.0/38

All:  $0.131 \pm 0.004$   $\chi^2/\text{NDF}$ : 4349.8/73

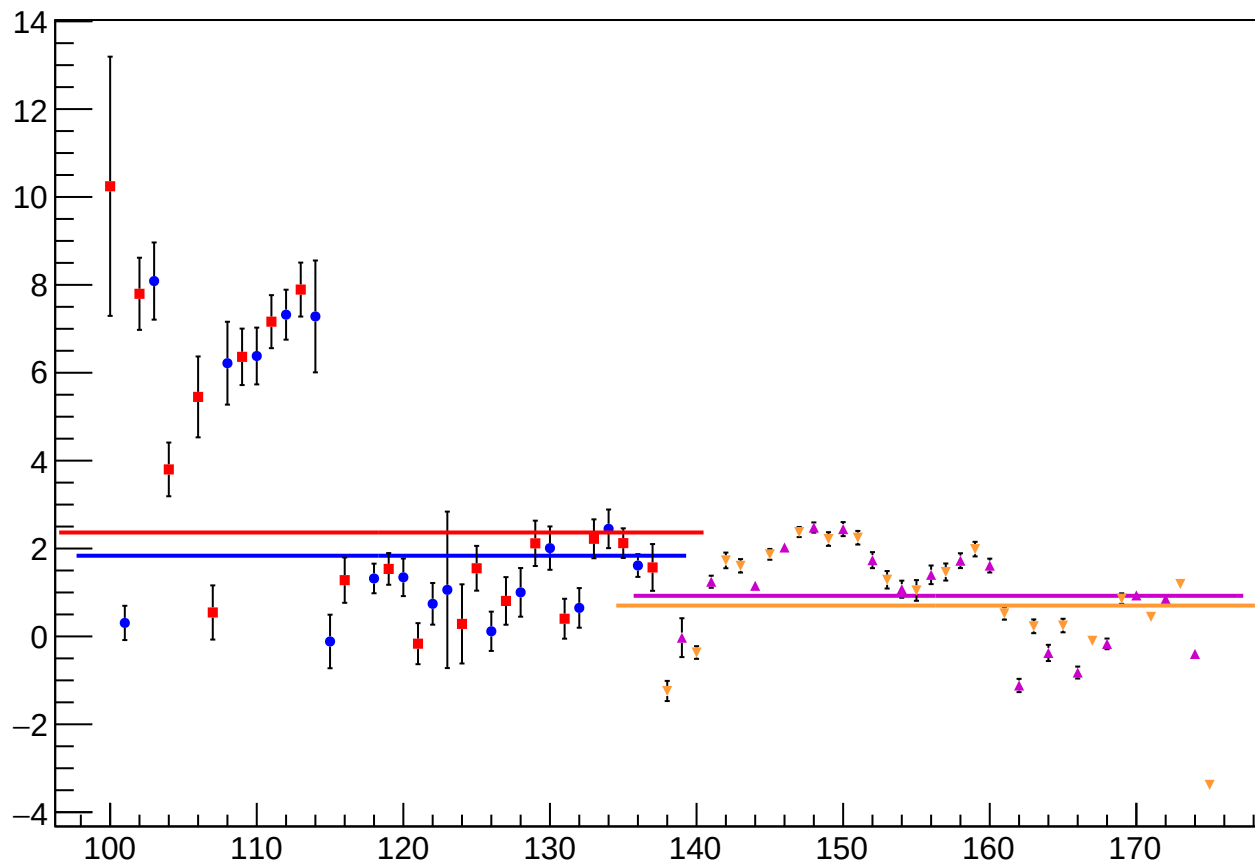
reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 6.416 $\pm$ 0.042  $\chi^2/\text{NDF}$ :5365.9/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 5.542 $\pm$ 0.044  $\chi^2/\text{NDF}$ :1501.3/17

Left: 5.992 $\pm$ 0.030  $\chi^2/\text{NDF}$ : 7073.4/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 5.542 $\pm$ 0.044  $\chi^2/\text{NDF}$ :1501.3/17  
 Out: 6.416 $\pm$ 0.042  $\chi^2/\text{NDF}$ :5365.9/19  
 All: 5.992 $\pm$ 0.030  $\chi^2/\text{NDF}$ : 7073.4/37

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.836 $\pm$ 0.116  $\chi^2$ /NDF: 294.9/16

Left Out: 0.702 $\pm$ 0.032  $\chi^2$ /NDF:2189.3/19

Right Out: 2.365 $\pm$ 0.123  $\chi^2$ /NDF: 336.4/18

Left In: 0.924 $\pm$ 0.033  $\chi^2$ /NDF:1103.9/17

Left: 0.811 $\pm$ 0.023  $\chi^2$ /NDF: 3317.0/37

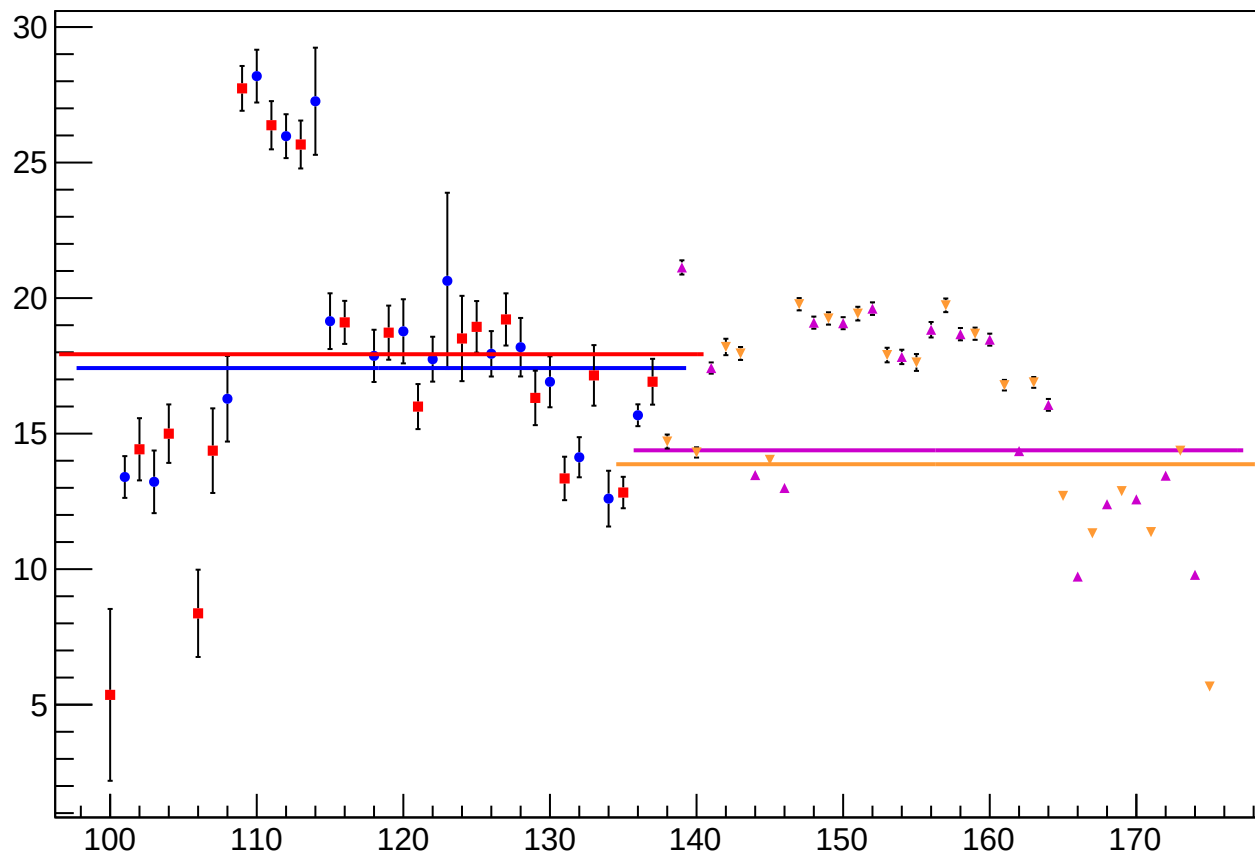
Right: 2.086 $\pm$ 0.084  $\chi^2$ /NDF: 641.1/35

In: 0.991 $\pm$ 0.031  $\chi^2$ /NDF:1456.0/34

Out: 0.807 $\pm$ 0.031  $\chi^2$ /NDF:2698.0/38

All: 0.898 $\pm$ 0.022  $\chi^2$ /NDF: 4171.4/73

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $17.418 \pm 0.212$   $\chi^2/\text{NDF}: 366.8/16$

Left Out:  $13.871 \pm 0.043$   $\chi^2/\text{NDF}: 9629.6/19$

Right Out:  $17.929 \pm 0.219$   $\chi^2/\text{NDF}: 506.3/18$

Left In:  $14.384 \pm 0.044$   $\chi^2/\text{NDF}: 6025.5/17$

Left:  $14.120 \pm 0.031$   $\chi^2/\text{NDF}: 15725.7/37$

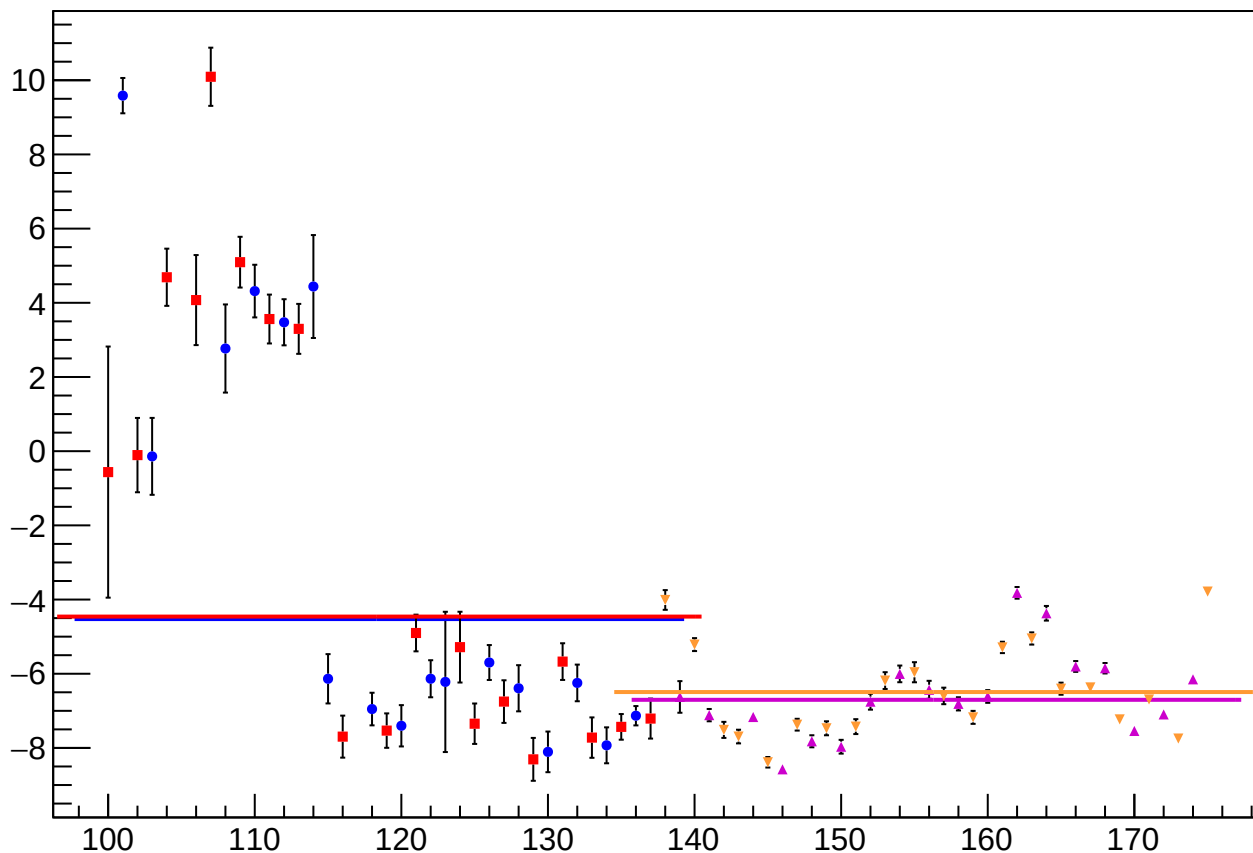
Right:  $17.665 \pm 0.152$   $\chi^2/\text{NDF}: 876.0/35$

In:  $14.509 \pm 0.043$   $\chi^2/\text{NDF}: 6589.3/34$

Out:  $14.019 \pm 0.042$   $\chi^2/\text{NDF}: 10467.1/38$

All:  $14.257 \pm 0.030$   $\chi^2/\text{NDF}: 17123.4/73$

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-4.526 \pm 0.130$   $\chi^2/\text{NDF}: 1590.2/16$

Left Out:  $-6.493 \pm 0.036$   $\chi^2/\text{NDF}: 1292.5/19$

Right Out:  $-4.459 \pm 0.137$   $\chi^2/\text{NDF}: 1338.9/18$

Left In:  $-6.703 \pm 0.037$   $\chi^2/\text{NDF}: 978.8/17$

Left:  $-6.595 \pm 0.026$   $\chi^2/\text{NDF}: 2287.6/37$

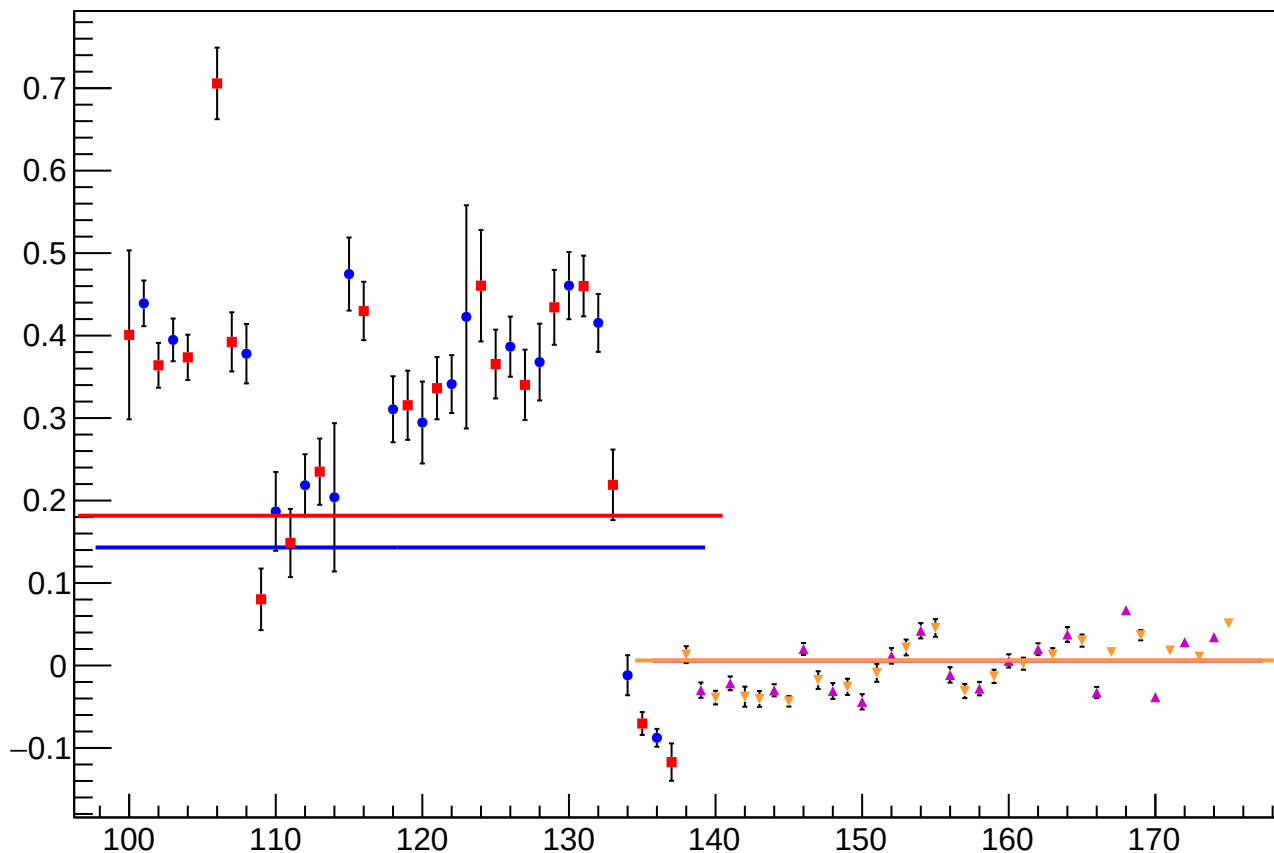
Right:  $-4.494 \pm 0.094$   $\chi^2/\text{NDF}: 2929.2/35$

In:  $-6.537 \pm 0.036$   $\chi^2/\text{NDF}: 2829.9/34$

Out:  $-6.361 \pm 0.035$   $\chi^2/\text{NDF}: 2837.6/38$

All:  $-6.447 \pm 0.025$   $\chi^2/\text{NDF}: 5679.9/73$

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.143 \pm 0.007$   $\chi^2/\text{NDF}: 1060.4/16$

Left Out:  $0.006 \pm 0.002$   $\chi^2/\text{NDF}: 294.7/19$

Right Out:  $0.182 \pm 0.007$   $\chi^2/\text{NDF}: 1007.8/18$

Left In:  $0.006 \pm 0.002$   $\chi^2/\text{NDF}: 419.1/17$

Left:  $0.006 \pm 0.001$   $\chi^2/\text{NDF}: 713.8/37$

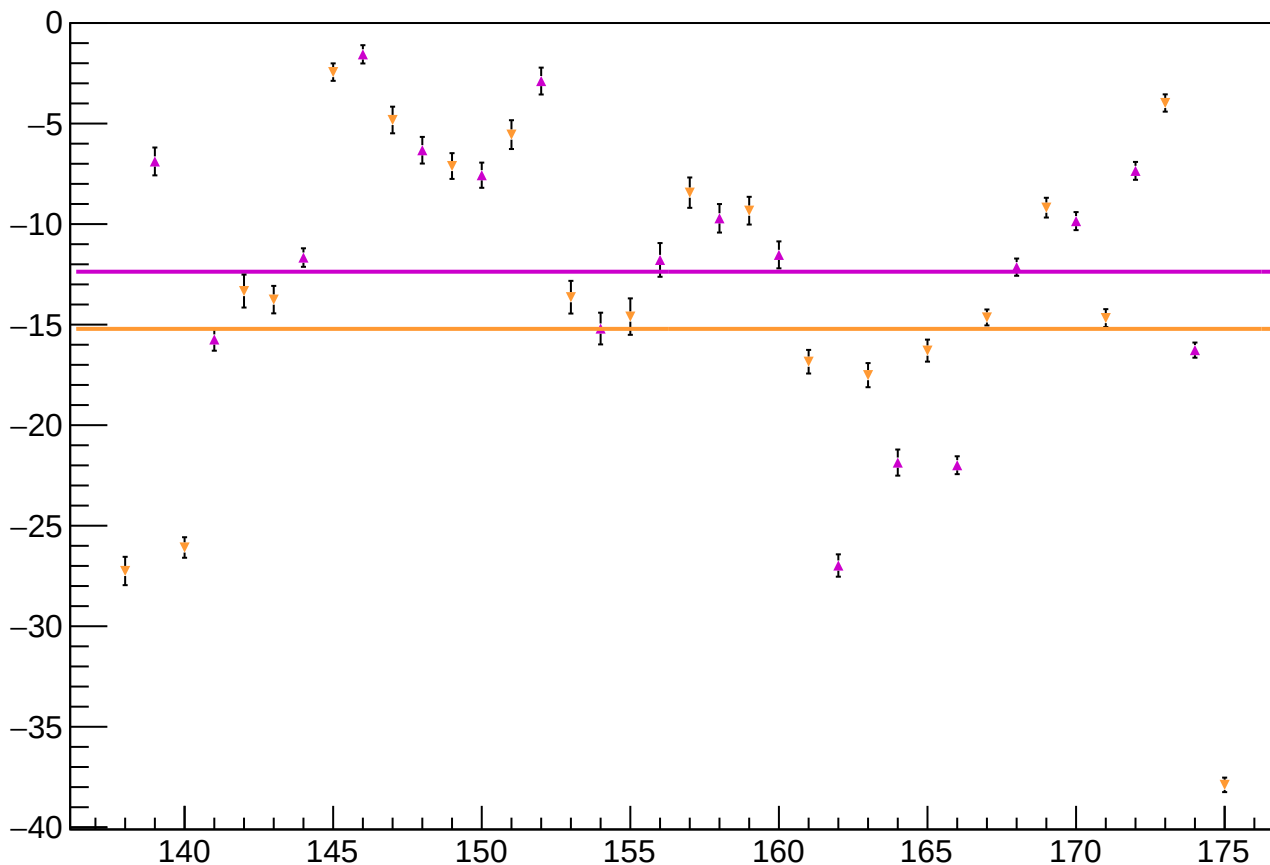
Right:  $0.161 \pm 0.005$   $\chi^2/\text{NDF}: 2082.4/35$

In:  $0.013 \pm 0.002$   $\chi^2/\text{NDF}: 1837.6/34$

Out:  $0.015 \pm 0.002$   $\chi^2/\text{NDF}: 1839.3/38$

All:  $0.014 \pm 0.001$   $\chi^2/\text{NDF}: 3677.2/73$

reg\_asym\_sam\_12345678\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



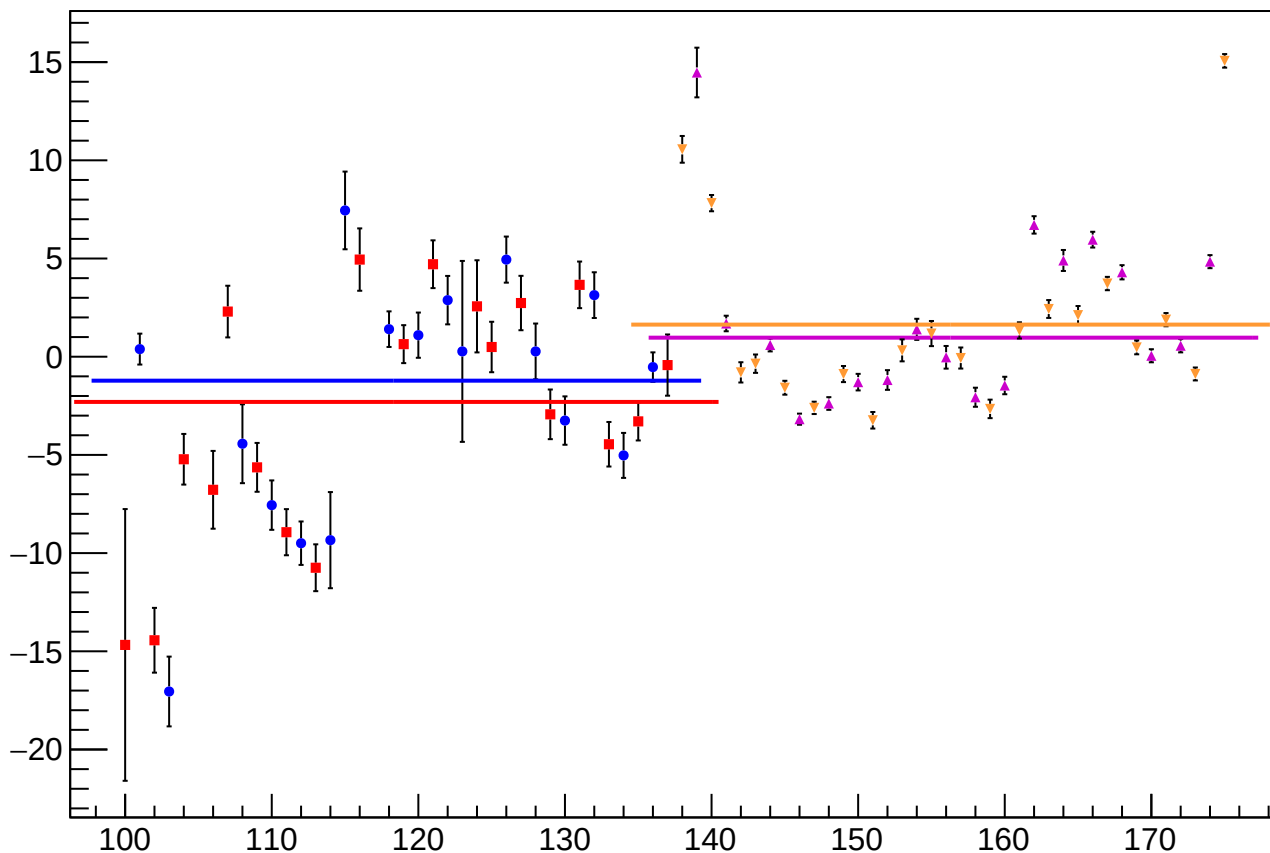
Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -15.211+/-0.123  $\chi^2/\text{NDF}$ :7185.3/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -12.368+/-0.127  $\chi^2/\text{NDF}$ :2678.9/17

Left: -13.827+/-0.088  $\chi^2/\text{NDF}$ : 10122.8/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -12.368+/-0.127  $\chi^2/\text{NDF}$ :2678.9/17  
 Out: -15.211+/-0.123  $\chi^2/\text{NDF}$ :7185.3/19

All: -13.827+/-0.088  $\chi^2/\text{NDF}$ : 10122.8/37

reg\_asym\_sam\_12345678\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-1.220 \pm 0.290$   $\chi^2/\text{NDF}: 278.6/16$

Left Out:  $1.635 \pm 0.092$   $\chi^2/\text{NDF}: 2590.9/19$

Right Out:  $-2.302 \pm 0.302$   $\chi^2/\text{NDF}: 286.2/18$

Left In:  $0.969 \pm 0.094$   $\chi^2/\text{NDF}: 1167.0/17$

Left:  $1.310 \pm 0.066$   $\chi^2/\text{NDF}: 3783.4/37$

Right:  $-1.738 \pm 0.209$   $\chi^2/\text{NDF}: 571.5/35$

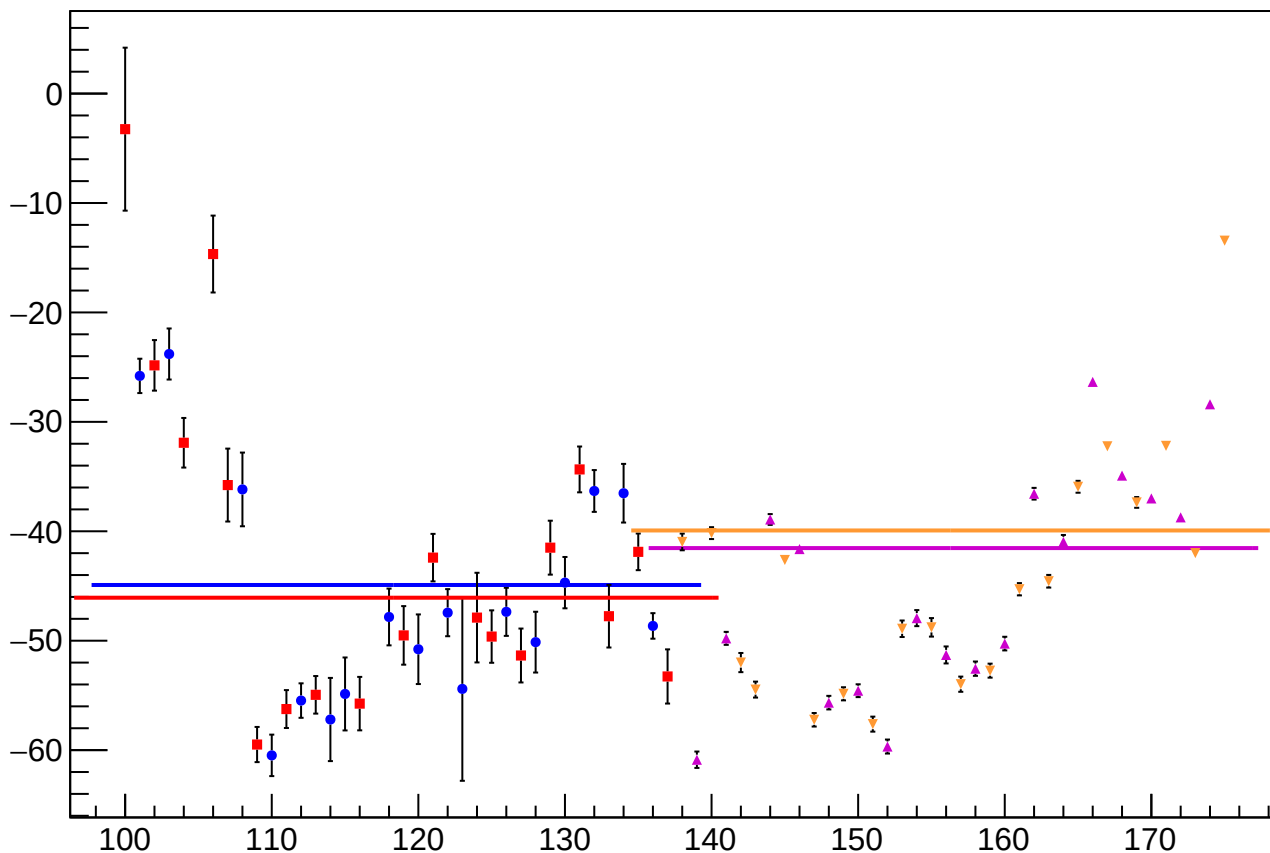
In:  $0.761 \pm 0.090$   $\chi^2/\text{NDF}: 1497.2/34$

Out:  $1.301 \pm 0.088$   $\chi^2/\text{NDF}: 3032.2/38$

All:  $1.035 \pm 0.063$   $\chi^2/\text{NDF}: 4547.9/73$



reg\_asym\_sam\_12345678\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-44.908 \pm 0.523$   $\chi^2/\text{NDF}: 421.2/16$   
 Left Out:  $-39.925 \pm 0.123$   $\chi^2/\text{NDF}: 10048.1/19$   
 Right Out:  $-46.071 \pm 0.528$   $\chi^2/\text{NDF}: 454.0/18$   
 Left In:  $-41.536 \pm 0.127$   $\chi^2/\text{NDF}: 6038.6/17$

Left:  $-40.710 \pm 0.088$   $\chi^2/\text{NDF}: 16169.6/37$

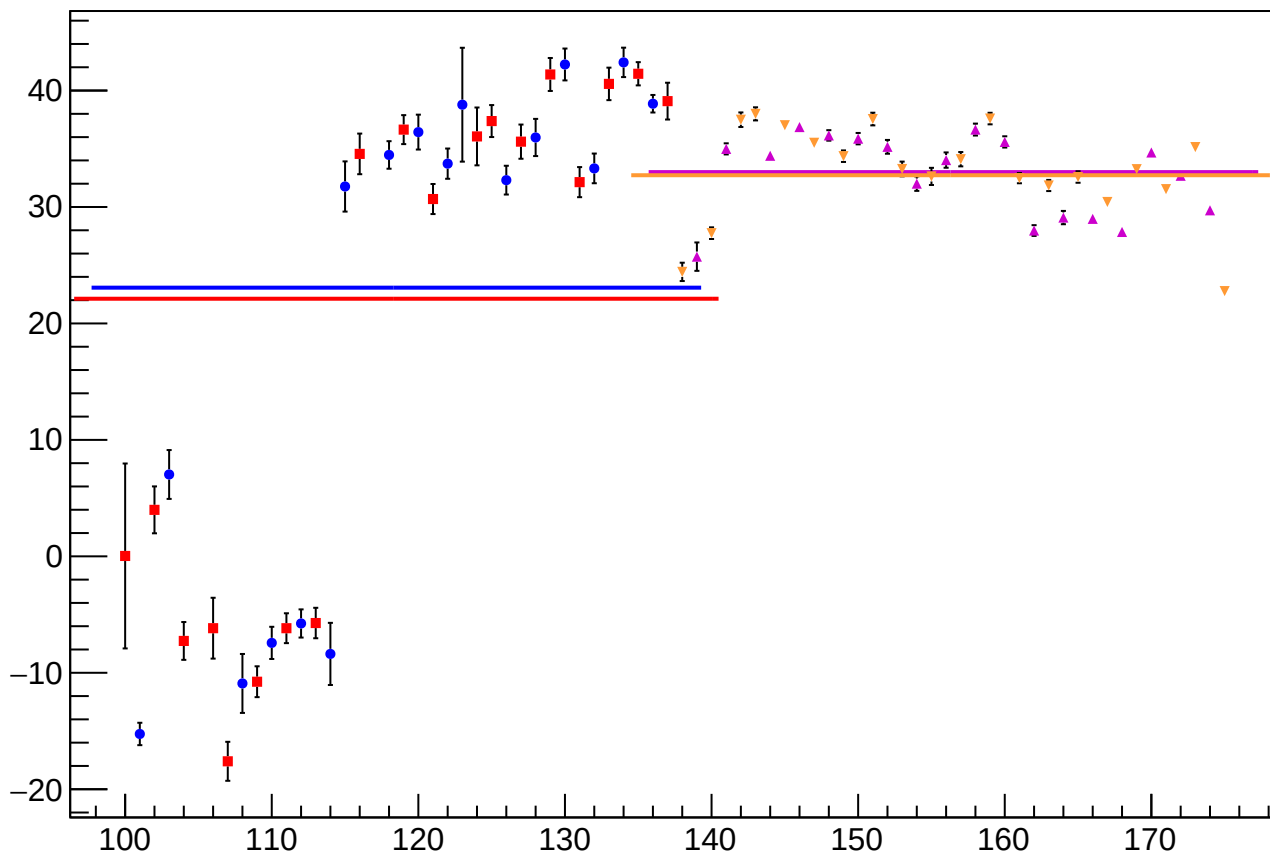
Right:  $-45.483 \pm 0.371$   $\chi^2/\text{NDF}: 877.6/35$

In:  $-41.723 \pm 0.123$   $\chi^2/\text{NDF}: 6499.1/34$

Out:  $-40.244 \pm 0.120$   $\chi^2/\text{NDF}: 10630.4/38$

All:  $-40.966 \pm 0.086$   $\chi^2/\text{NDF}: 17203.4/73$

reg\_asym\_sam\_12345678\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 23.073 $\pm$ 0.326  $\chi^2$ /NDF: 4346.0/16

Left Out: 32.727 $\pm$ 0.105  $\chi^2$ /NDF:1549.9/19

Right Out: 22.122 $\pm$ 0.340  $\chi^2$ /NDF: 4034.4/18

Left In: 32.996 $\pm$ 0.108  $\chi^2$ /NDF:875.7/17

Left: 32.858 $\pm$ 0.075  $\chi^2$ /NDF: 2428.8/37

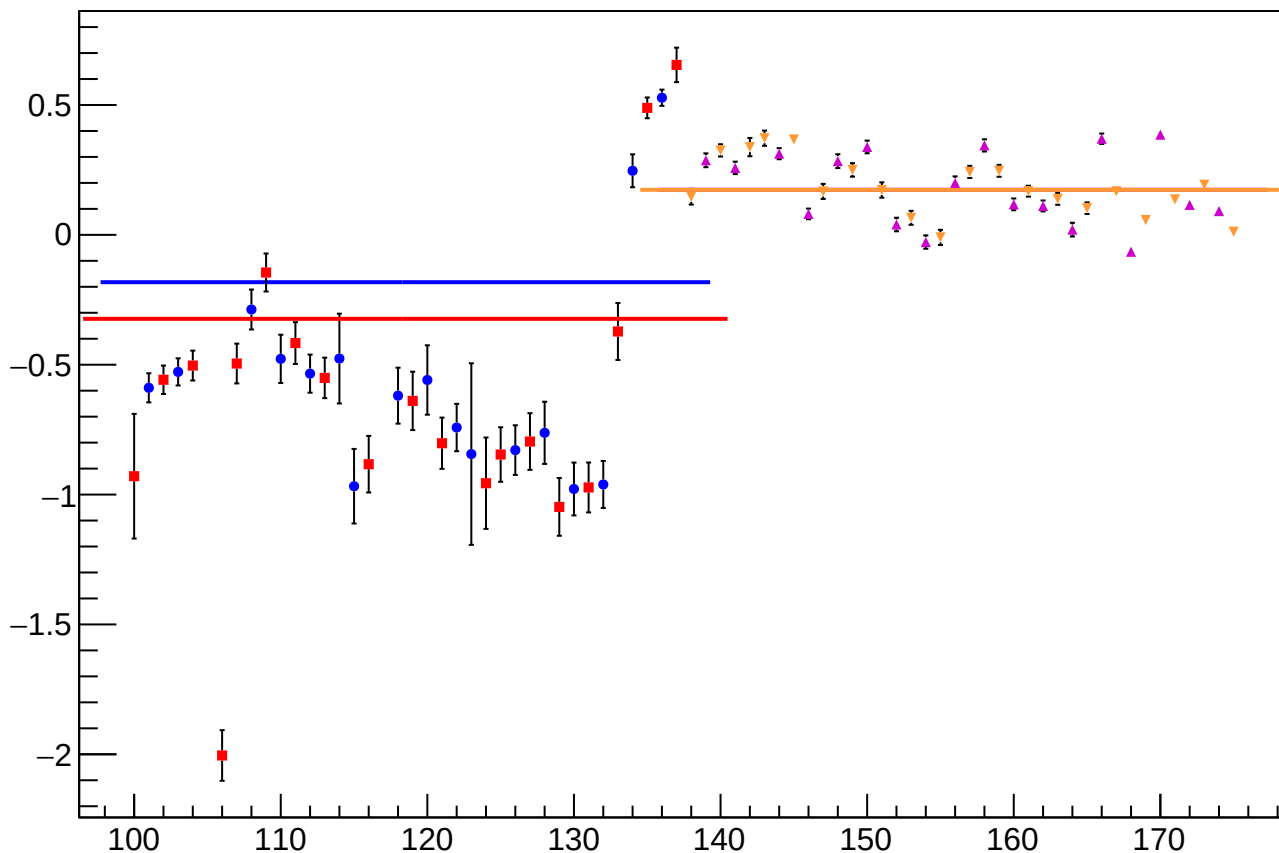
Right: 22.617 $\pm$ 0.235  $\chi^2$ /NDF: 8384.4/35

In: 32.019 $\pm$ 0.102  $\chi^2$ /NDF:6056.9/34

Out: 31.807 $\pm$ 0.100  $\chi^2$ /NDF:6473.4/38

All: 31.911 $\pm$ 0.072  $\chi^2$ /NDF: 12532.6/73

reg\_asym\_sam\_12345678\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.182 \pm 0.018$   $\chi^2/\text{NDF}$ : 998.1/16

Left Out:  $0.173 \pm 0.005$   $\chi^2/\text{NDF}$ : 455.4/19

Right Out:  $-0.323 \pm 0.018$   $\chi^2/\text{NDF}$ : 1184.5/18

Left In:  $0.174 \pm 0.005$   $\chi^2/\text{NDF}$ : 865.3/17

Left:  $0.173 \pm 0.003$   $\chi^2/\text{NDF}$ : 1320.7/37

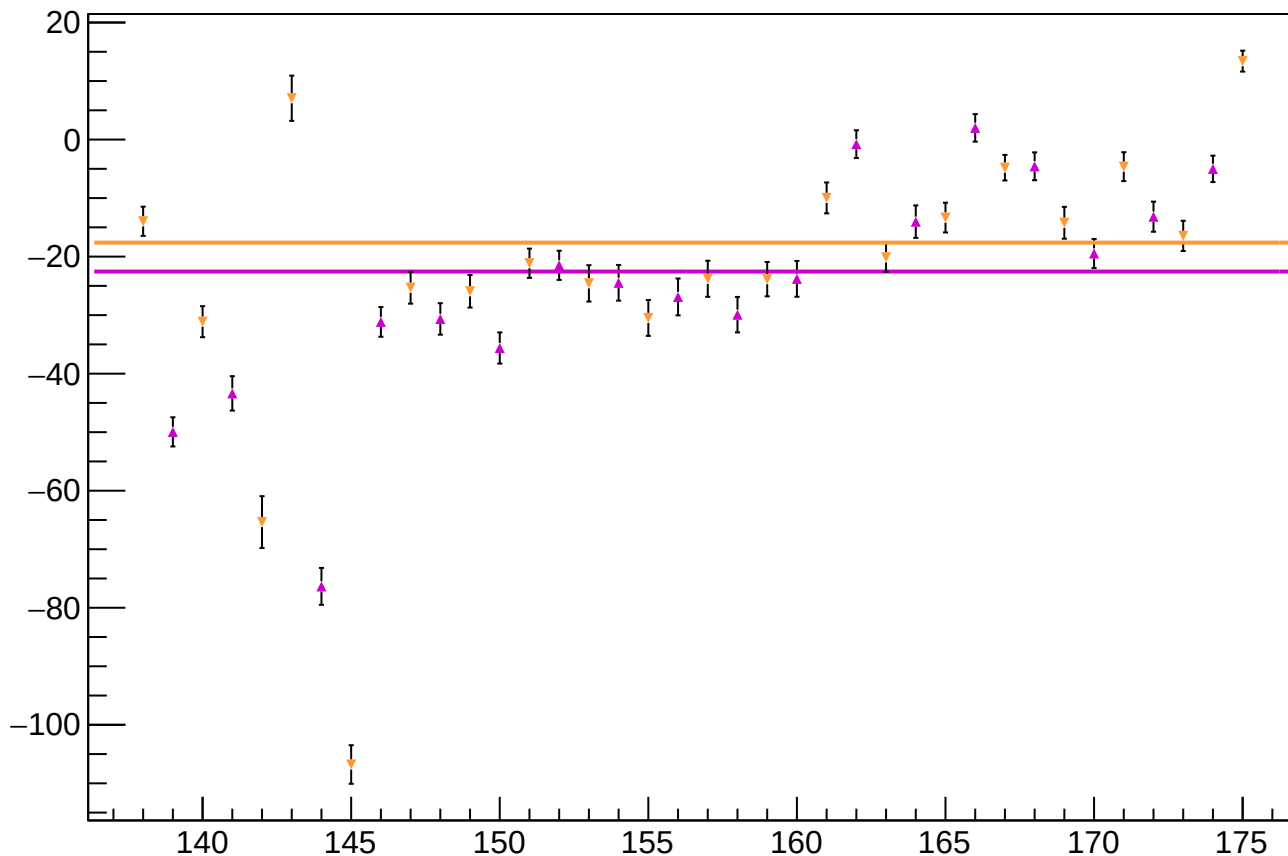
Right:  $-0.251 \pm 0.013$   $\chi^2/\text{NDF}$ : 2213.4/35

In:  $0.148 \pm 0.005$   $\chi^2/\text{NDF}$ : 2237.3/34

Out:  $0.140 \pm 0.005$   $\chi^2/\text{NDF}$ : 2337.6/38

All:  $0.144 \pm 0.003$   $\chi^2/\text{NDF}$ : 4576.3/73

reg\_asym\_atl1\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-17.604 \pm 0.597$   $\chi^2/\text{NDF}$ : 1343.9/19

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left In:  $-22.550 \pm 0.624$   $\chi^2/\text{NDF}$ : 849.8/17

Left:  $-19.970 \pm 0.431$   $\chi^2/\text{NDF}$ : 2226.5/37

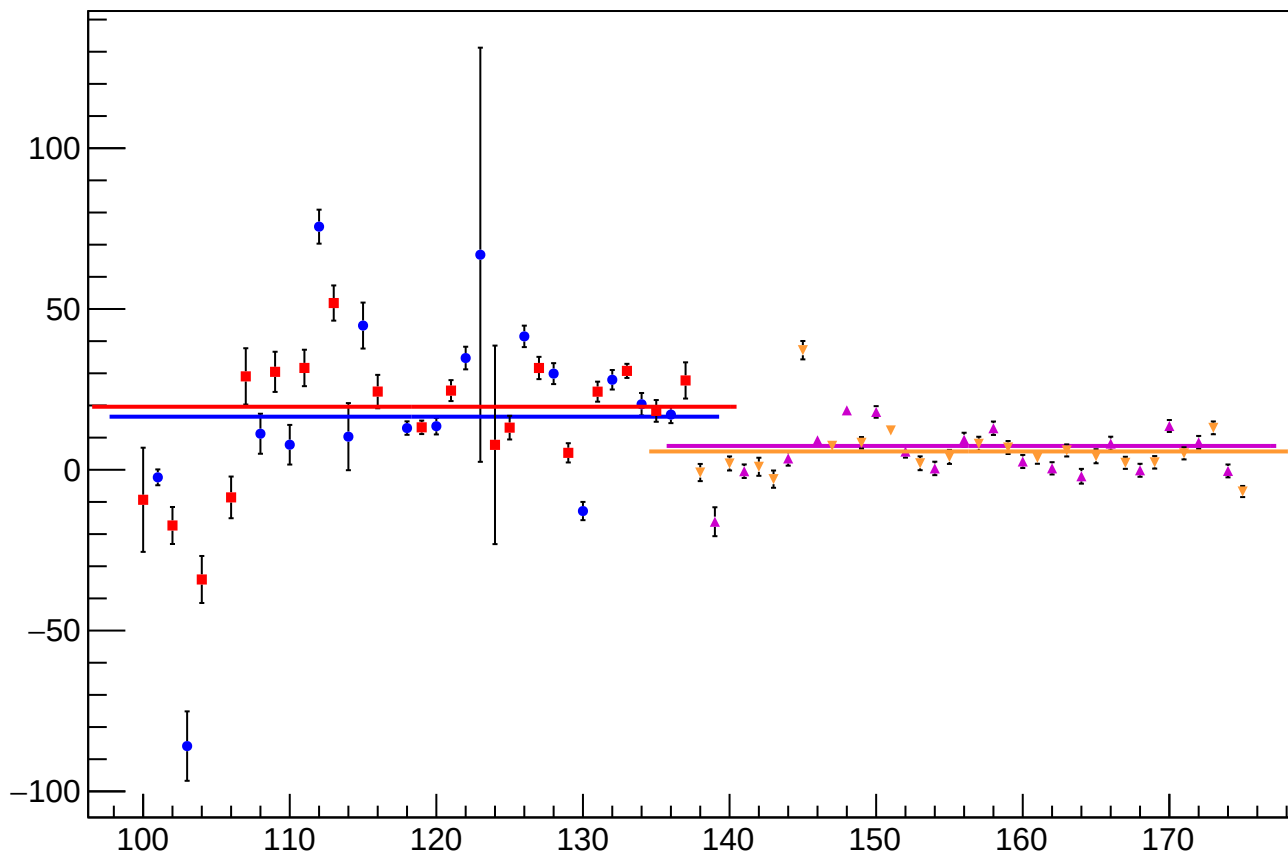
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

In:  $-22.550 \pm 0.624$   $\chi^2/\text{NDF}$ : 849.8/17

Out:  $-17.604 \pm 0.597$   $\chi^2/\text{NDF}$ : 1343.9/19

All:  $-19.970 \pm 0.431$   $\chi^2/\text{NDF}$ : 2226.5/37

reg\_asym\_atl1\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $16.512 \pm 0.847$   $\chi^2/\text{NDF}: 519.6/16$

Left Out:  $5.703 \pm 0.438$   $\chi^2/\text{NDF}: 247.6/19$

Right Out:  $19.604 \pm 0.898$   $\chi^2/\text{NDF}: 242.0/18$

Left In:  $7.417 \pm 0.460$   $\chi^2/\text{NDF}: 247.9/17$

Left:  $6.518 \pm 0.317$   $\chi^2/\text{NDF}: 502.8/37$

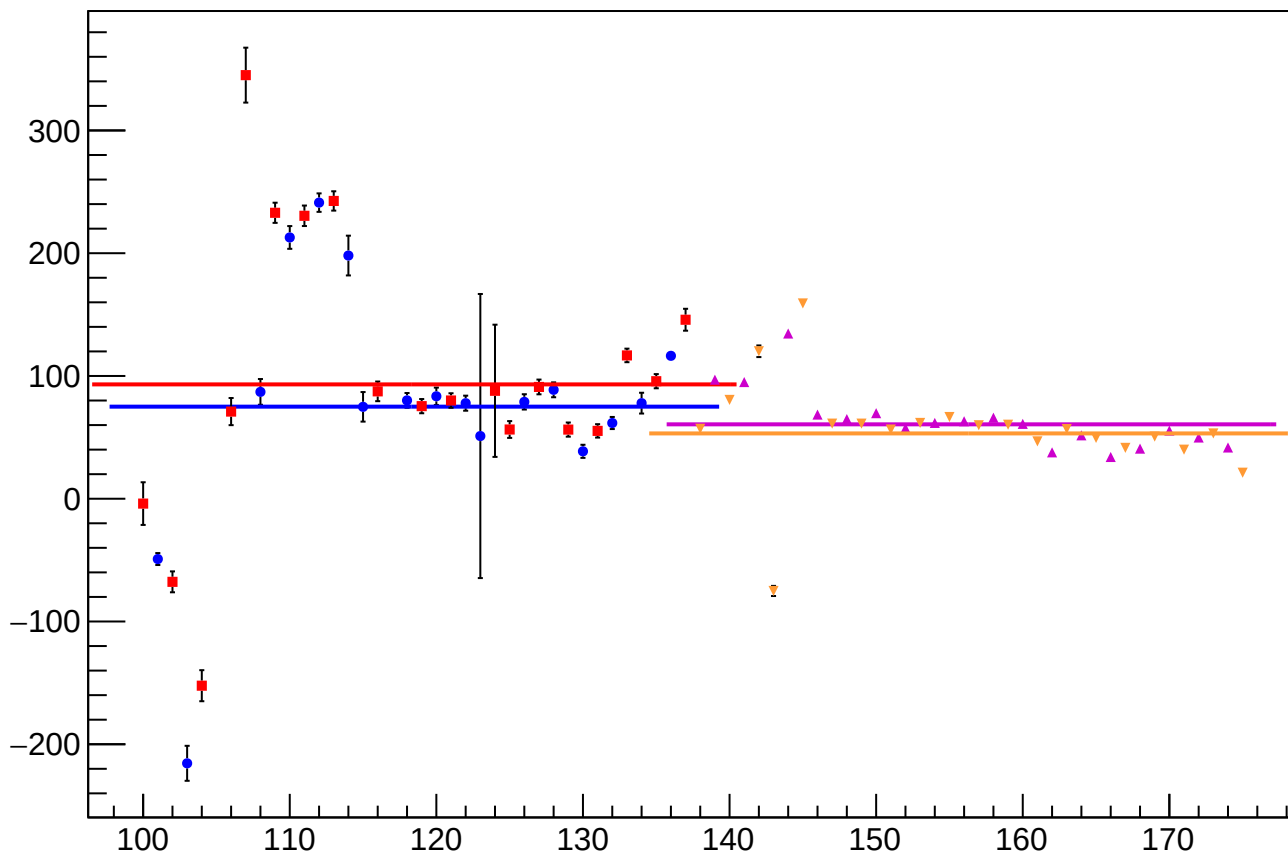
Right:  $17.968 \pm 0.616$   $\chi^2/\text{NDF}: 767.9/35$

In:  $9.485 \pm 0.404$   $\chi^2/\text{NDF}: 856.6/34$

Out:  $8.370 \pm 0.394$   $\chi^2/\text{NDF}: 683.0/38$

All:  $8.913 \pm 0.282$   $\chi^2/\text{NDF}: 1543.5/73$

reg\_asym\_atl1\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 75.009+/-1.636  $\chi^2/\text{NDF}$ : 1999.3/16

Left Out: 53.201+/-0.590  $\chi^2/\text{NDF}$ : 2672.0/19

Right Out: 93.140+/-1.711  $\chi^2/\text{NDF}$ : 2002.3/18

Left In: 60.605+/-0.616  $\chi^2/\text{NDF}$ : 1199.4/17

Left: 56.744+/-0.426  $\chi^2/\text{NDF}$ : 3946.6/37

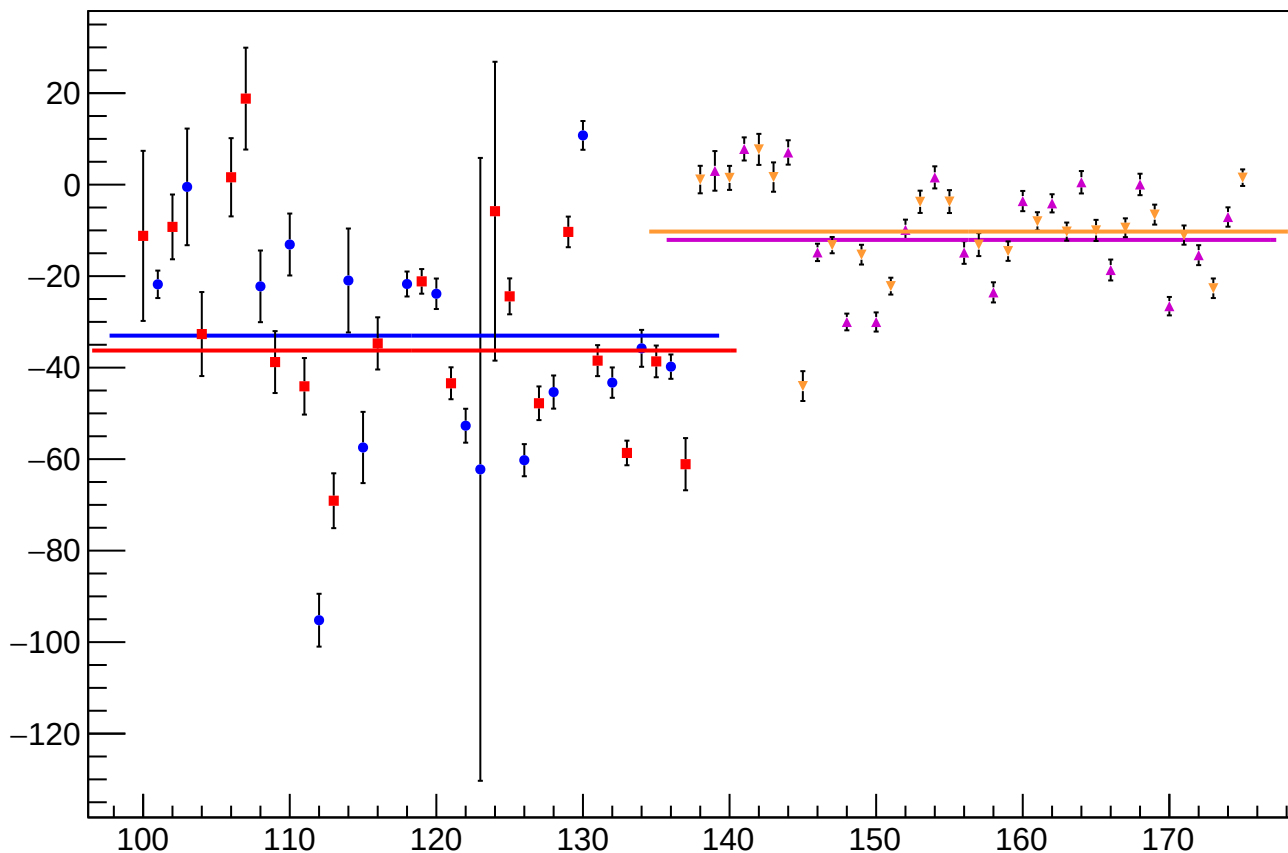
Right: 83.668+/-1.183  $\chi^2/\text{NDF}$ : 4060.3/35

In: 62.396+/-0.577  $\chi^2/\text{NDF}$ : 3266.6/34

Out: 57.451+/-0.558  $\chi^2/\text{NDF}$ : 5161.1/38

All: 59.842+/-0.401  $\chi^2/\text{NDF}$ : 8465.7/73

reg\_asym\_atl1\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-33.005 \pm 0.972$   $\chi^2/\text{NDF}: 493.1/16$

Left Out:  $-10.256 \pm 0.503$   $\chi^2/\text{NDF}: 333.1/19$

Right Out:  $-36.260 \pm 1.025$   $\chi^2/\text{NDF}: 297.1/18$

Left In:  $-12.079 \pm 0.529$   $\chi^2/\text{NDF}: 510.9/17$

Left:  $-11.121 \pm 0.364$   $\chi^2/\text{NDF}: 850.2/37$

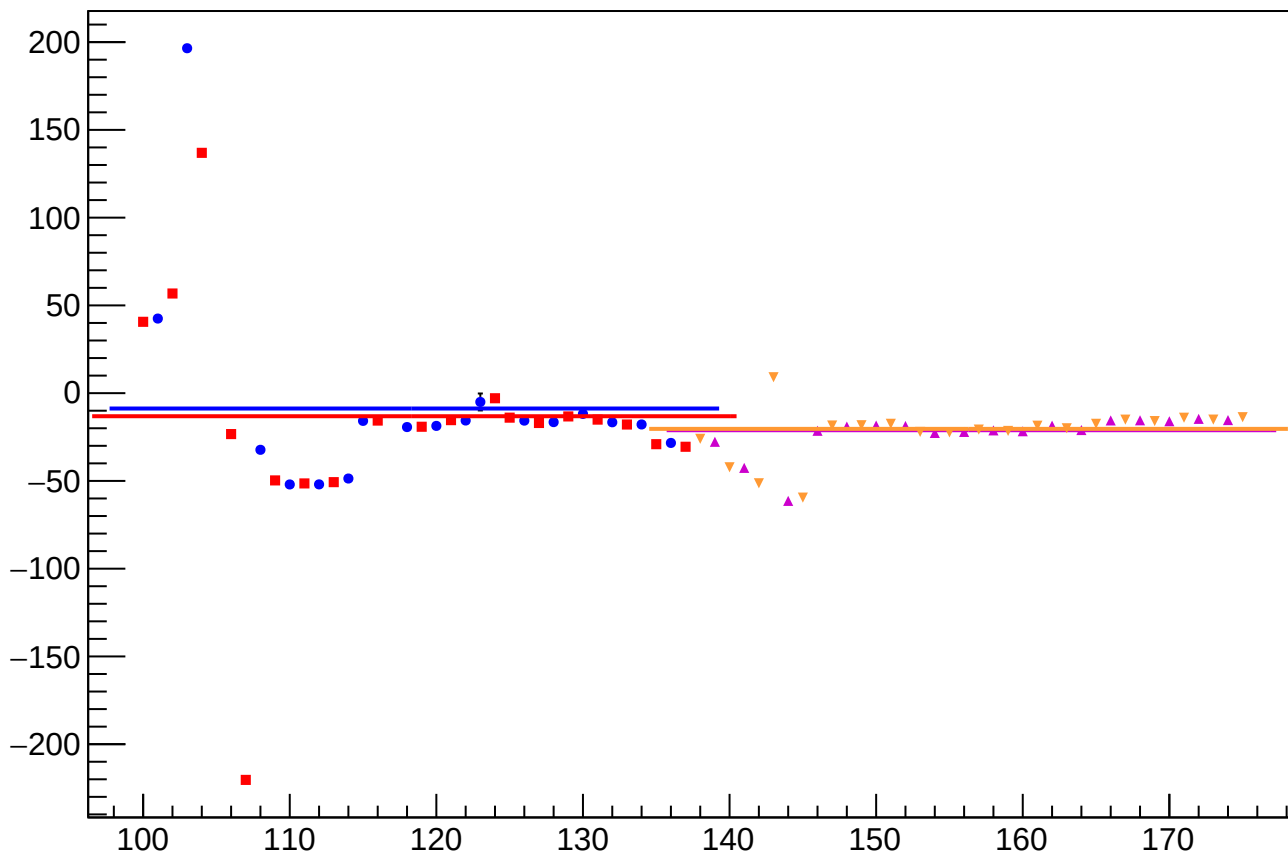
Right:  $-34.545 \pm 0.705$   $\chi^2/\text{NDF}: 795.4/35$

In:  $-16.858 \pm 0.464$   $\chi^2/\text{NDF}: 1361.8/34$

Out:  $-15.293 \pm 0.451$   $\chi^2/\text{NDF}: 1148.8/38$

All:  $-16.053 \pm 0.324$   $\chi^2/\text{NDF}: 2516.4/73$

reg\_asym\_atl1\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-8.751 \pm 0.059$   $\chi^2/\text{NDF}$ : 576012.4/16

Left Out:  $-20.344 \pm 0.023$   $\chi^2/\text{NDF}$ : 199609.6/19

Right Out:  $-13.143 \pm 0.062$   $\chi^2/\text{NDF}$ : 558628.0/18

Left In:  $-21.114 \pm 0.024$   $\chi^2/\text{NDF}$ : 129733.7/17

Left:  $-20.721 \pm 0.017$   $\chi^2/\text{NDF}$ : 329875.0/37

Right:  $-10.840 \pm 0.043$   $\chi^2/\text{NDF}$ : 1137294.9/35

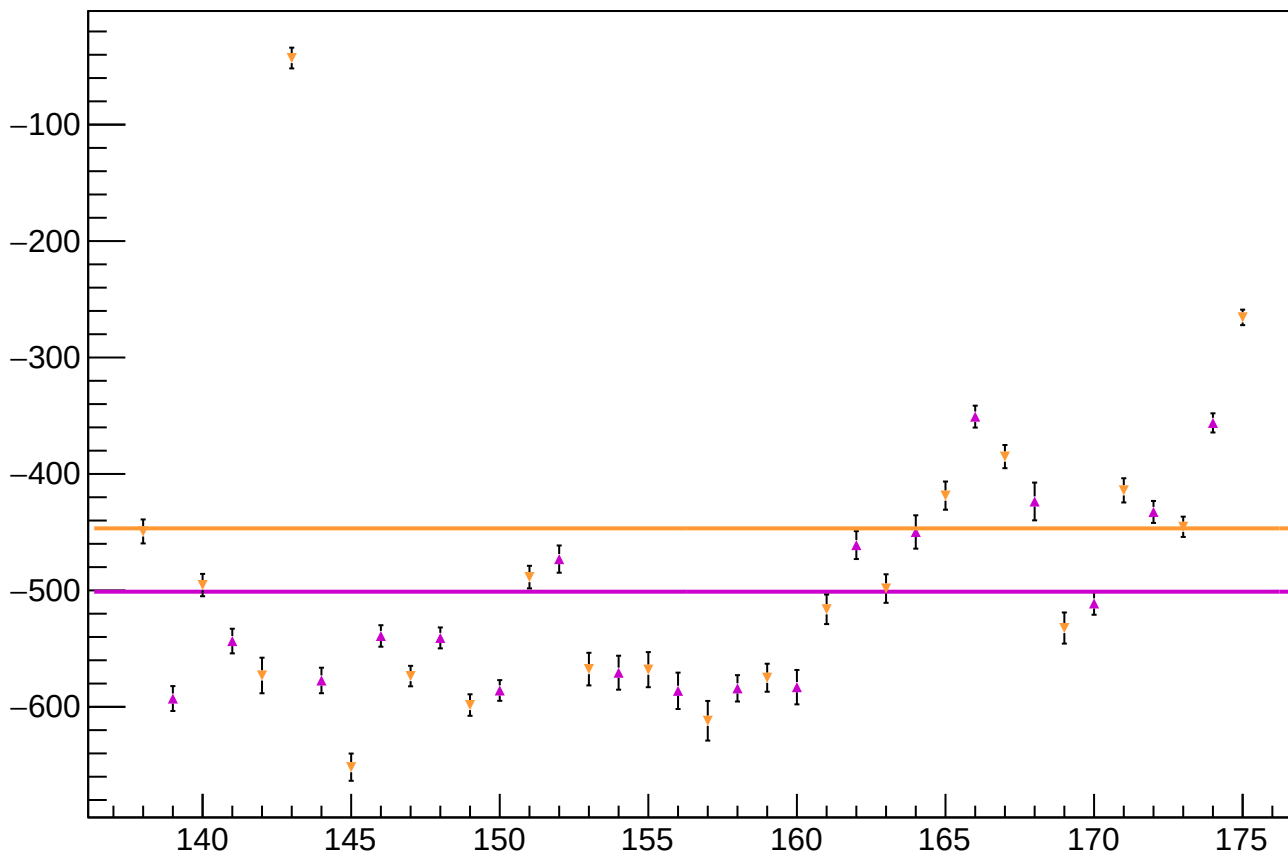
In:  $-19.366 \pm 0.022$   $\chi^2/\text{NDF}$ : 743695.5/34

Out:  $-19.443 \pm 0.022$   $\chi^2/\text{NDF}$ : 770142.1/38

All:  $-19.405 \pm 0.016$   $\chi^2/\text{NDF}$ : 1513843.7/73



reg\_asym\_atl2\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -446.722+/-2.356  $\chi^2/\text{NDF}$ :4190.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -501.111+/-2.541  $\chi^2/\text{NDF}$ :1074.9/17

Left: -471.864+/-1.728  $\chi^2/\text{NDF}$ : 5511.6/37

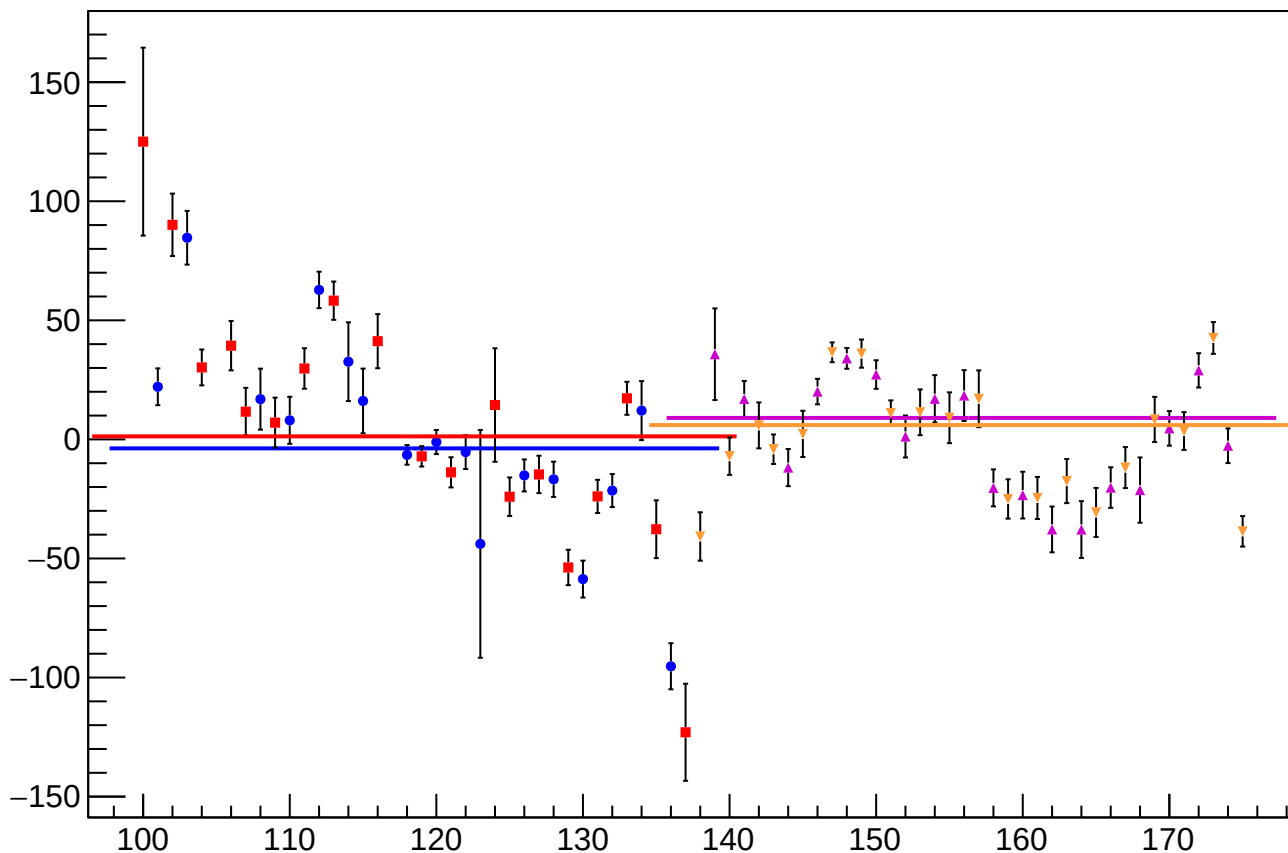
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -501.111+/-2.541  $\chi^2/\text{NDF}$ :1074.9/17

Out: -446.722+/-2.356  $\chi^2/\text{NDF}$ :4190.4/19

All: -471.864+/-1.728  $\chi^2/\text{NDF}$ : 5511.6/37

reg\_asym\_atl2\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-3.773 \pm 1.889$   $\chi^2/\text{NDF}$ : 314.3/16

Left Out:  $6.010 \pm 1.672$   $\chi^2/\text{NDF}$ : 237.0/19

Right Out:  $1.265 \pm 1.920$   $\chi^2/\text{NDF}$ : 303.7/18

Left In:  $9.014 \pm 1.811$   $\chi^2/\text{NDF}$ : 150.5/17

Left:  $7.393 \pm 1.229$   $\chi^2/\text{NDF}$ : 389.1/37

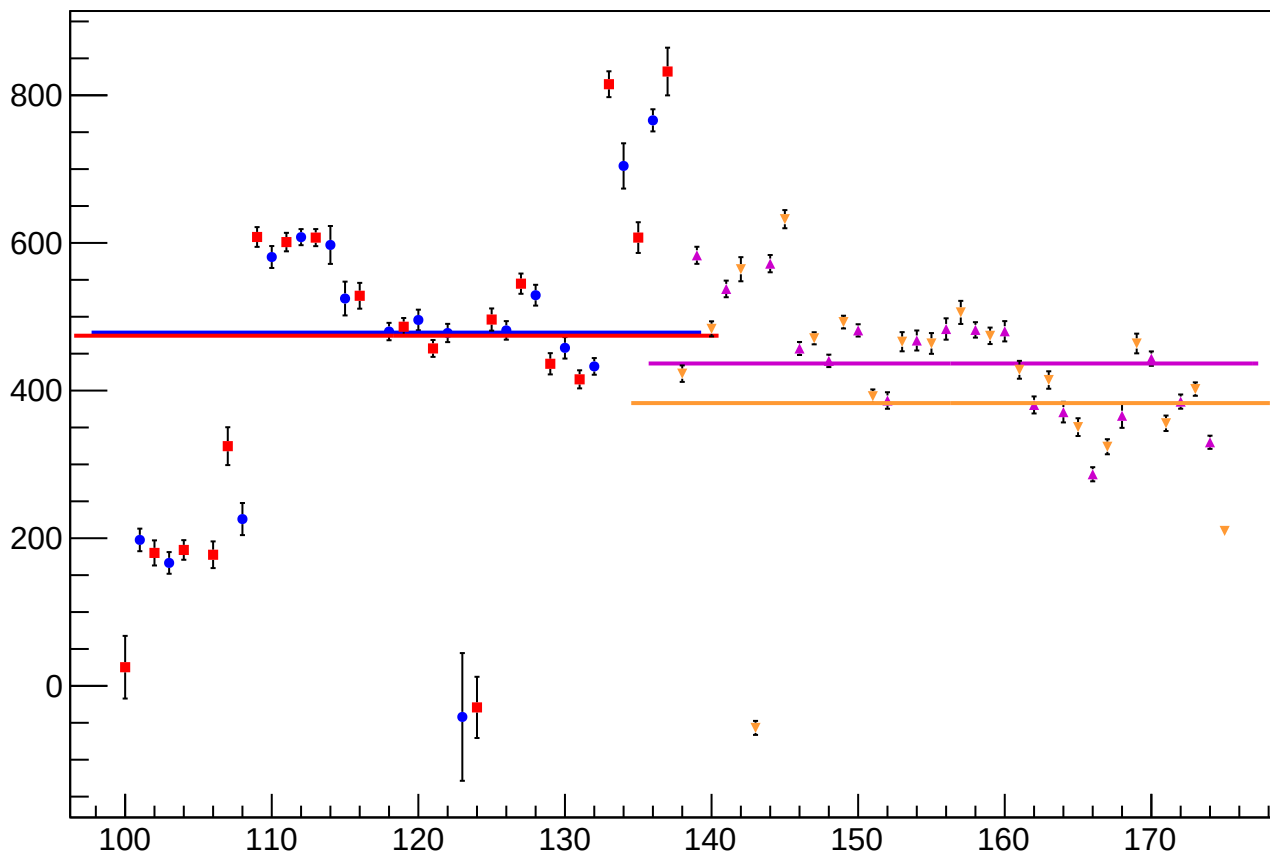
Right:  $-1.296 \pm 1.346$   $\chi^2/\text{NDF}$ : 621.6/35

In:  $2.890 \pm 1.307$   $\chi^2/\text{NDF}$ : 488.8/34

Out:  $3.964 \pm 1.261$   $\chi^2/\text{NDF}$ : 544.2/38

All:  $3.446 \pm 0.908$   $\chi^2/\text{NDF}$ : 1033.4/73

reg\_asym\_atl2\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 478.526 $\pm$ 3.630  $\chi^2$ /NDF: 1629.0/16

Left Out: 383.054 $\pm$ 2.343  $\chi^2$ /NDF: 4056.3/19

Right Out: 474.328 $\pm$ 3.533  $\chi^2$ /NDF: 2287.1/18

Left In: 436.693 $\pm$ 2.517  $\chi^2$ /NDF: 955.5/17

Left: 407.950 $\pm$ 1.715  $\chi^2$ /NDF: 5255.1/37

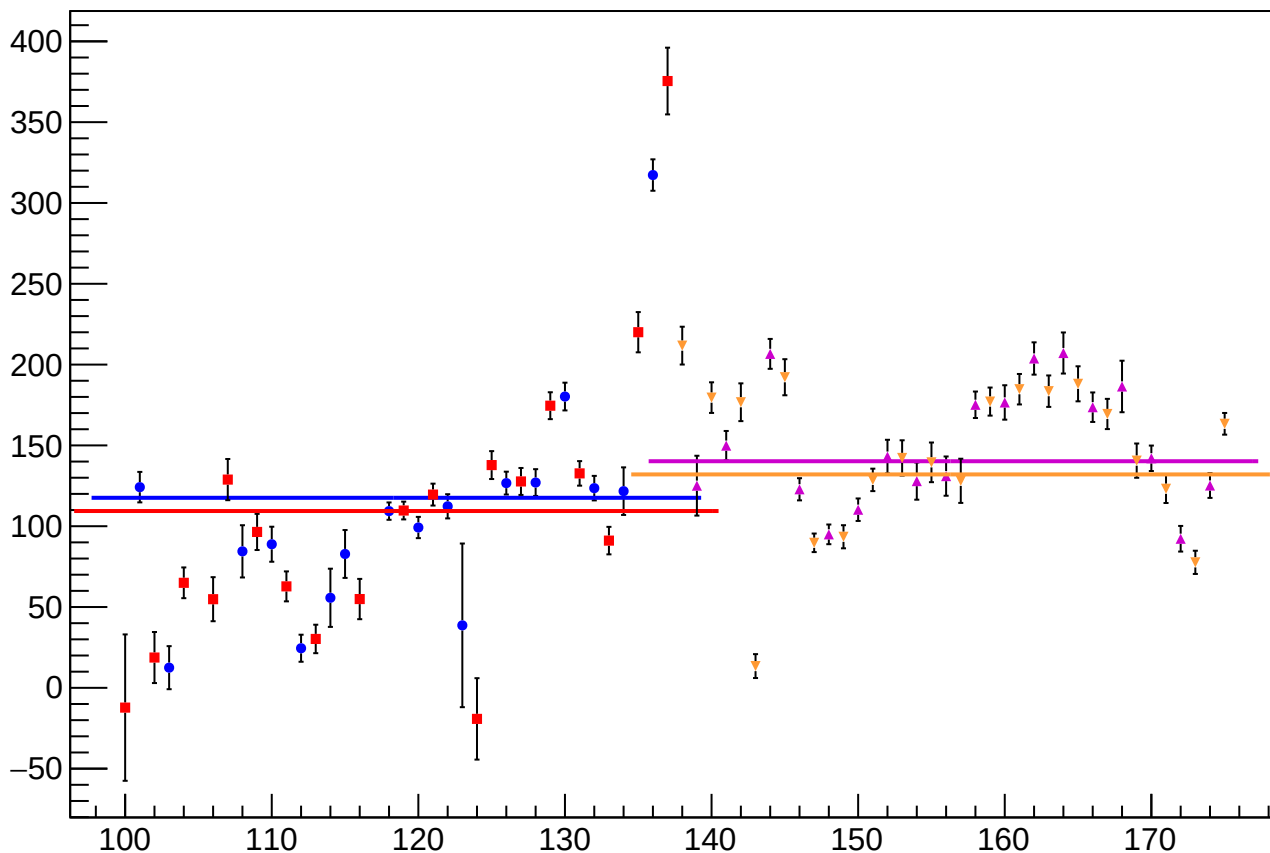
Right: 476.370 $\pm$ 2.532  $\chi^2$ /NDF: 3916.8/35

In: 450.276 $\pm$ 2.068  $\chi^2$ /NDF: 2674.2/34

Out: 410.932 $\pm$ 1.952  $\chi^2$ /NDF: 6807.0/38

All: 429.469 $\pm$ 1.420  $\chi^2$ /NDF: 9672.6/73

reg\_asym\_atl2\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 117.585 $\pm$ 2.193  $\chi^2$ /NDF: 706.9/16

Left Out: 132.050 $\pm$ 1.956  $\chi^2$ /NDF:667.0/19

Right Out: 109.400 $\pm$ 2.210  $\chi^2$ /NDF: 571.2/18

Left In: 140.210 $\pm$ 2.113  $\chi^2$ /NDF:295.7/17

Left: 135.816 $\pm$ 1.435  $\chi^2$ /NDF: 970.8/37

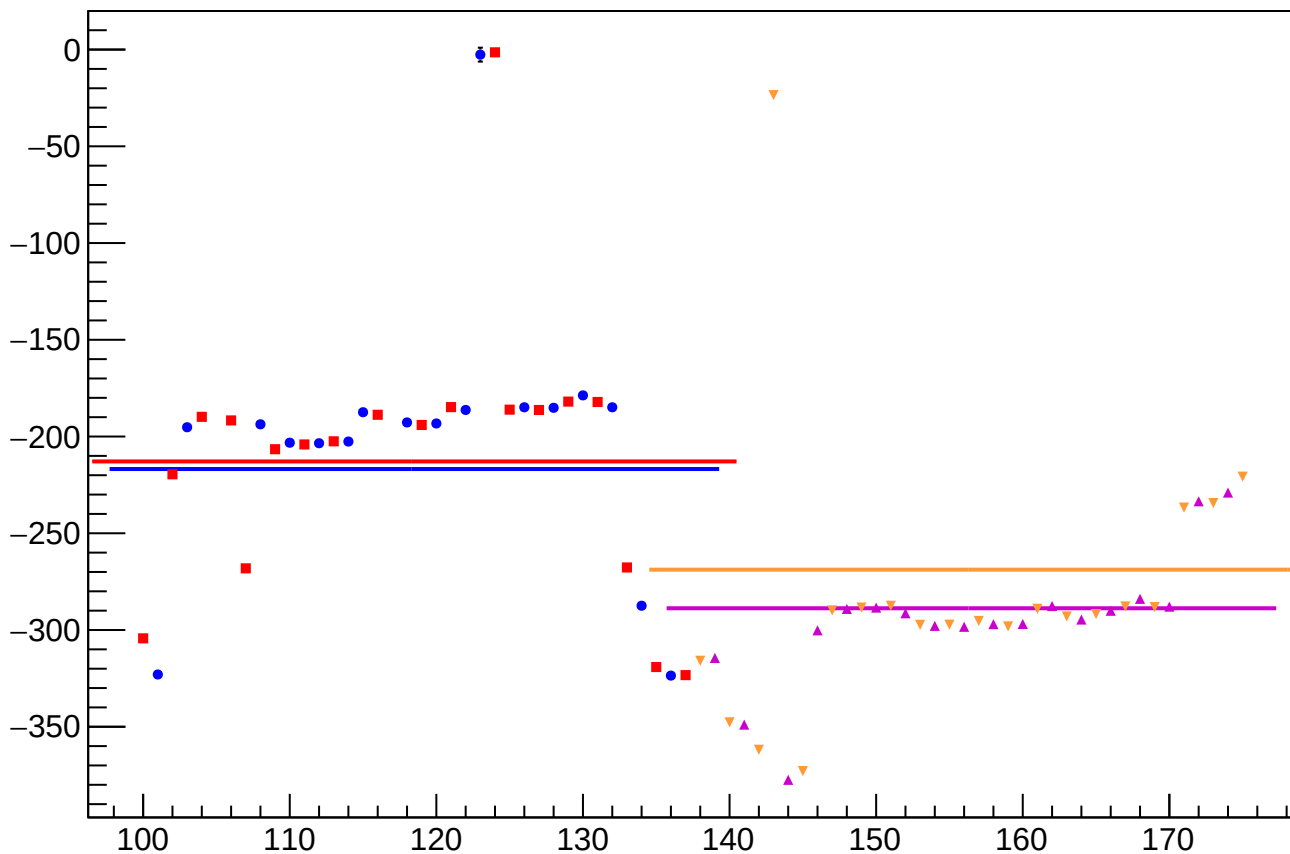
Right: 113.524 $\pm$ 1.557  $\chi^2$ /NDF: 1285.0/35

In: 129.319 $\pm$ 1.521  $\chi^2$ /NDF:1057.8/34

Out: 122.102 $\pm$ 1.464  $\chi^2$ /NDF:1297.2/38

All: 125.573 $\pm$ 1.055  $\chi^2$ /NDF: 2366.6/73

reg\_asym\_atl2\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-216.796 \pm 0.136$   $\chi^2/\text{NDF}: 146976.1/16$

Left Out:  $-268.811 \pm 0.095$   $\chi^2/\text{NDF}: 598623.8/19$

Right Out:  $-212.869 \pm 0.130$   $\chi^2/\text{NDF}: 116393.6/18$

Left In:  $-288.755 \pm 0.099$   $\chi^2/\text{NDF}: 113586.1/17$

Left:  $-278.365 \pm 0.068$   $\chi^2/\text{NDF}: 733496.6/37$

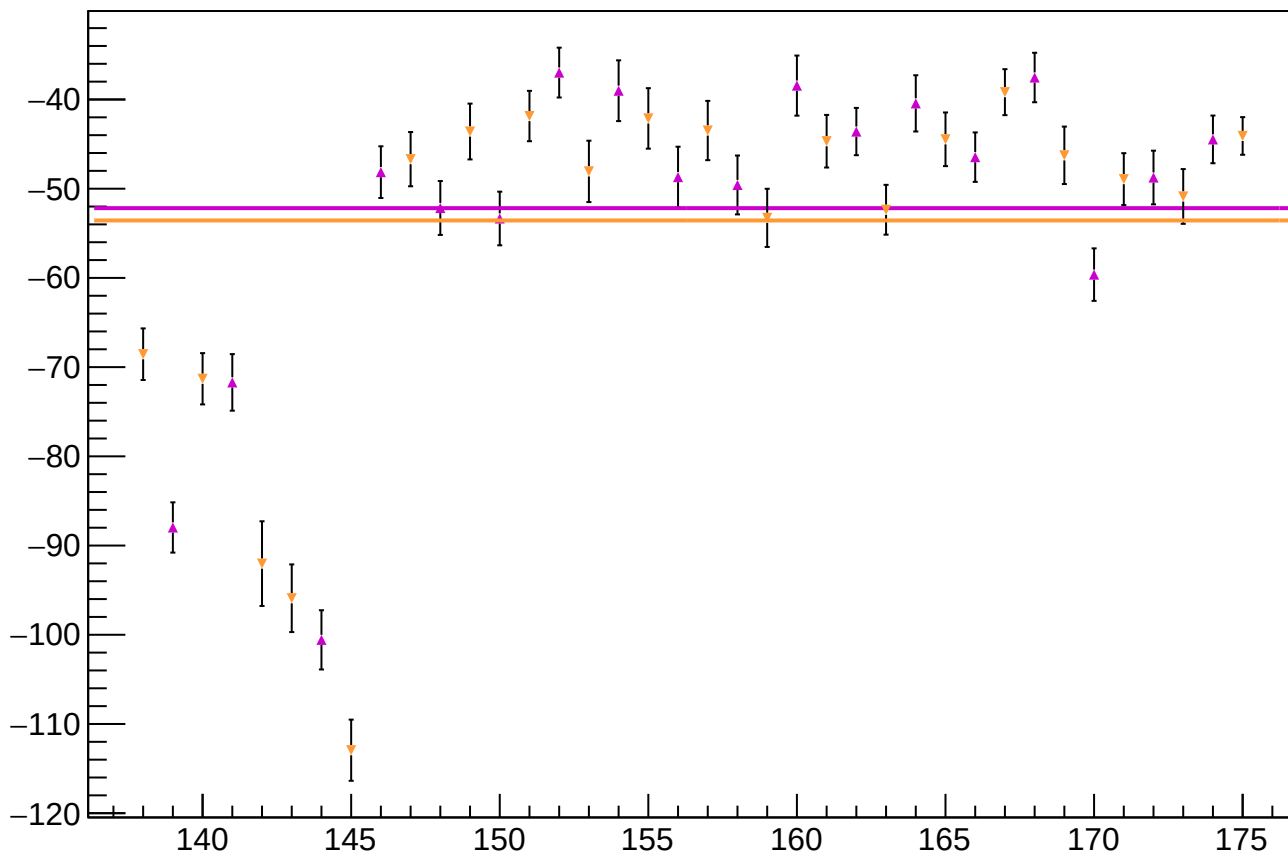
Right:  $-214.751 \pm 0.094$   $\chi^2/\text{NDF}: 263806.1/35$

In:  $-263.858 \pm 0.080$   $\chi^2/\text{NDF}: 444602.4/34$

Out:  $-249.470 \pm 0.077$   $\chi^2/\text{NDF}: 835893.5/38$

All:  $-256.364 \pm 0.055$   $\chi^2/\text{NDF}: 1297431.9/73$

# reg\_asym\_atr1\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -53.559+/-0.677  $\chi^2/\text{NDF}$ :689.1/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -52.181+/-0.706  $\chi^2/\text{NDF}$ :549.2/17

Left: -52.899+/-0.489  $\chi^2/\text{NDF}$ : 1240.3/37

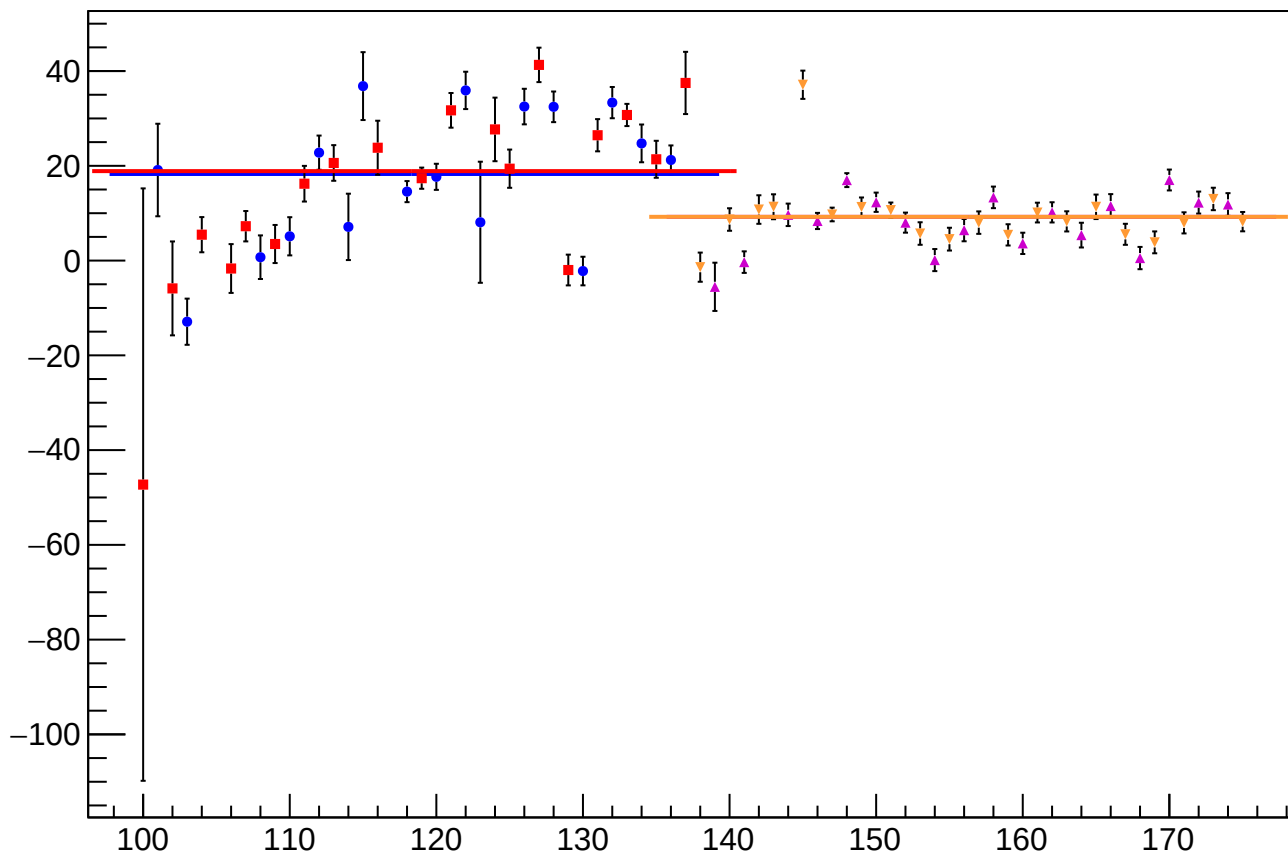
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -52.181+/-0.706  $\chi^2/\text{NDF}$ :549.2/17

Out: -53.559+/-0.677  $\chi^2/\text{NDF}$ :689.1/19

All: -52.899+/-0.489  $\chi^2/\text{NDF}$ : 1240.3/37

reg\_asym\_atr1\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 18.279+/-0.906  $\chi^2/\text{NDF}$ : 204.6/16

Left Out: 9.236+/-0.494  $\chi^2/\text{NDF}$ :123.8/19

Right Out: 18.882+/-0.864  $\chi^2/\text{NDF}$ : 198.4/18

Left In: 9.223+/-0.519  $\chi^2/\text{NDF}$ :115.2/17

Left: 9.230+/-0.358  $\chi^2/\text{NDF}$ : 239.0/37

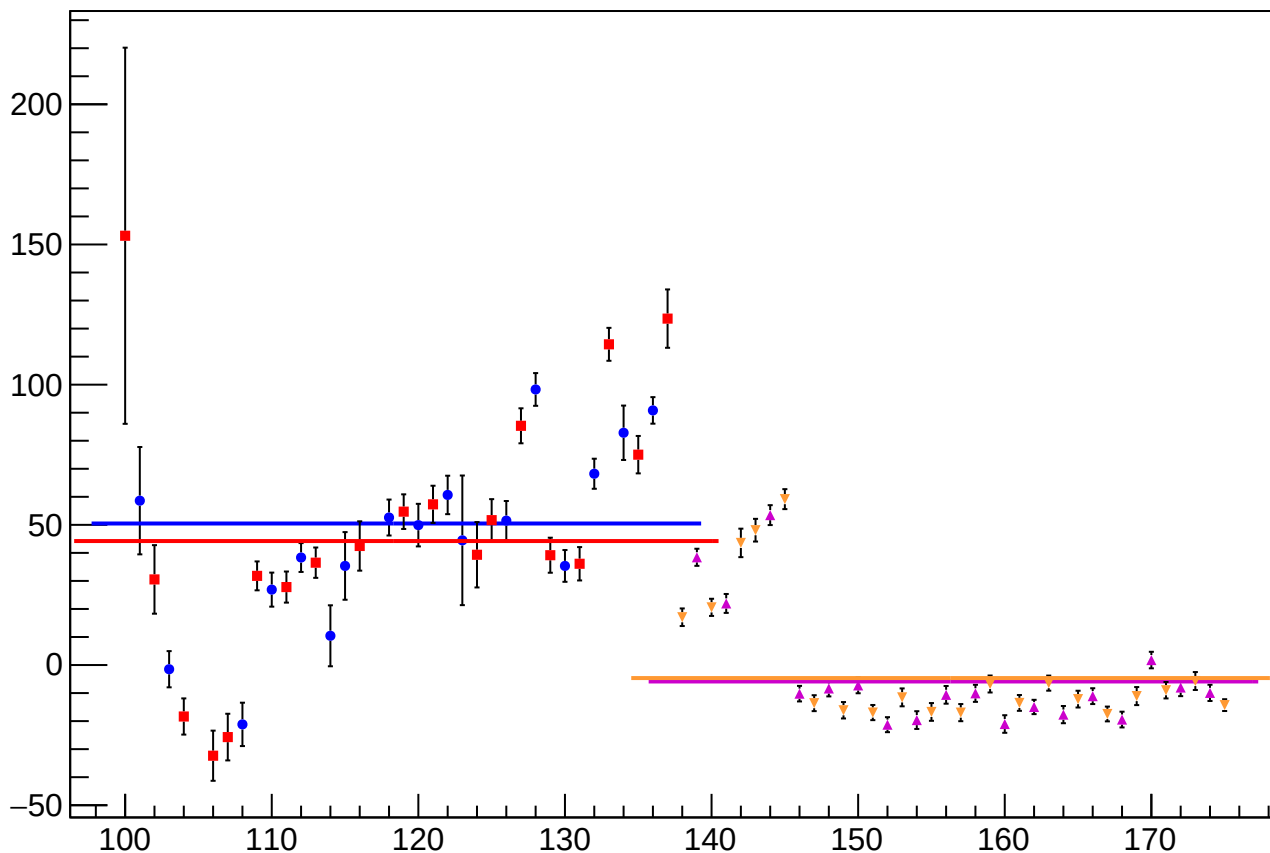
Right: 18.595+/-0.625  $\chi^2/\text{NDF}$ : 403.2/35

In: 11.464+/-0.450  $\chi^2/\text{NDF}$ :395.1/34

Out: 11.608+/-0.429  $\chi^2/\text{NDF}$ :416.1/38

All: 11.540+/-0.311  $\chi^2/\text{NDF}$ : 811.3/73

reg\_asym\_atr1\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 50.482 $\pm$ 1.668  $\chi^2$ /NDF: 357.9/16

Left Out: -4.648 $\pm$ 0.669  $\chi^2$ /NDF: 846.4/19

Right Out: 44.222 $\pm$ 1.602  $\chi^2$ /NDF: 534.4/18

Left In: -5.865 $\pm$ 0.697  $\chi^2$ /NDF: 705.0/17

Left: -5.231 $\pm$ 0.483  $\chi^2$ /NDF: 1553.0/37

Right: 47.226 $\pm$ 1.156  $\chi^2$ /NDF: 899.6/35

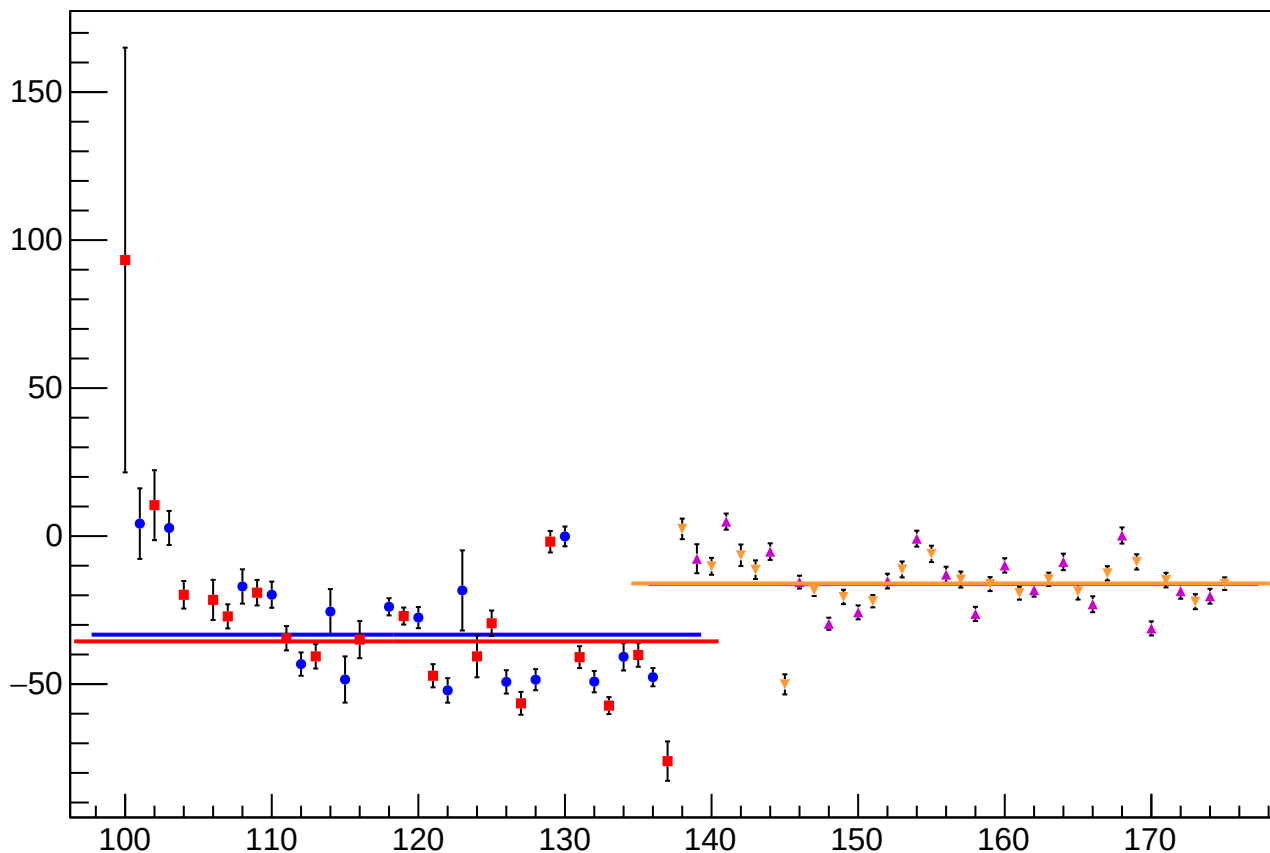
In: 2.515 $\pm$ 0.643  $\chi^2$ /NDF: 2034.4/34

Out: 2.604 $\pm$ 0.617  $\chi^2$ /NDF: 2172.8/38

All: 2.561 $\pm$ 0.445  $\chi^2$ /NDF: 4207.2/73



reg\_asym\_atr1\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-33.292 \pm 1.033$   $\chi^2/\text{NDF}$ : 289.1/16

Left Out:  $-15.996 \pm 0.568$   $\chi^2/\text{NDF}$ : 191.0/19

Right Out:  $-35.566 \pm 0.992$   $\chi^2/\text{NDF}$ : 287.6/18

Left In:  $-16.195 \pm 0.597$   $\chi^2/\text{NDF}$ : 289.2/17

Left:  $-16.090 \pm 0.412$   $\chi^2/\text{NDF}$ : 480.3/37

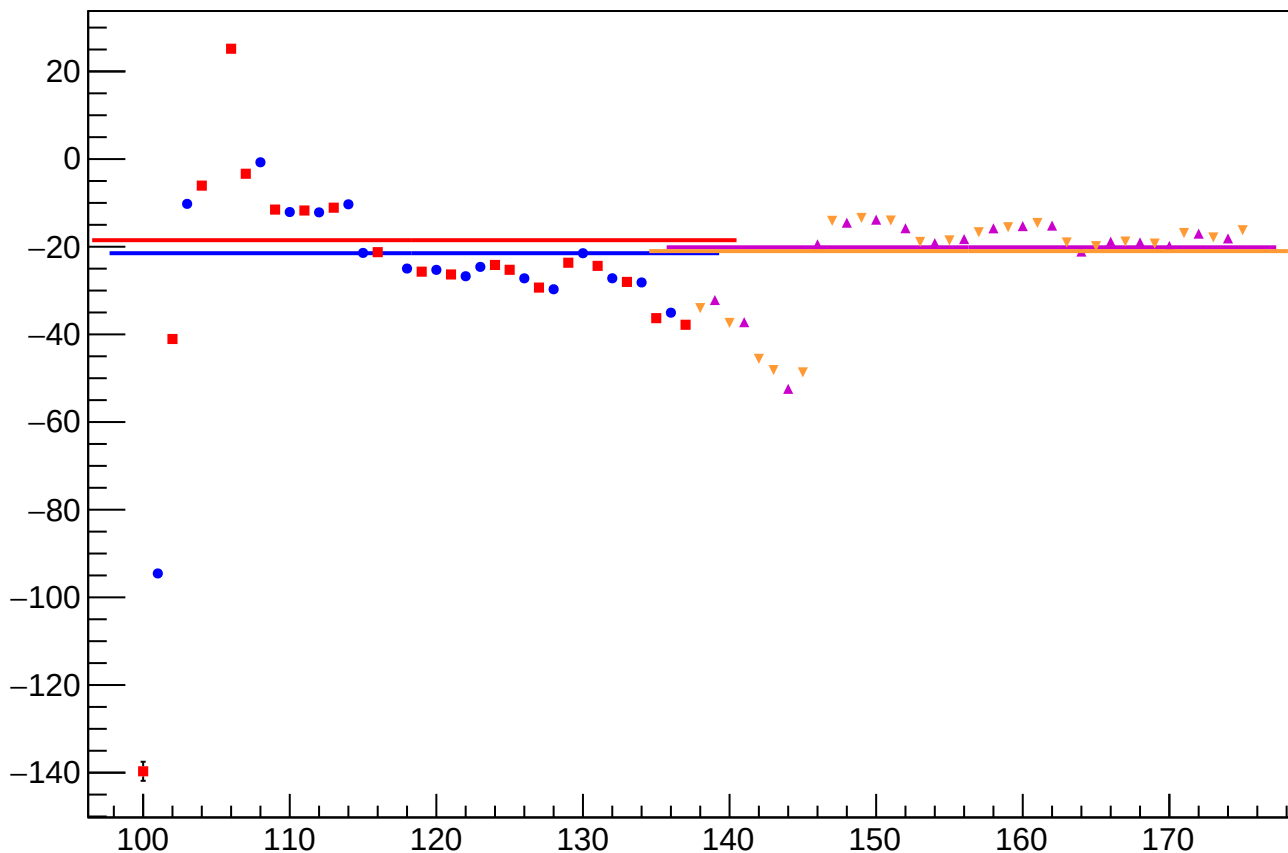
Right:  $-34.474 \pm 0.716$   $\chi^2/\text{NDF}$ : 579.3/35

In:  $-20.479 \pm 0.517$   $\chi^2/\text{NDF}$ : 783.6/34

Out:  $-20.825 \pm 0.493$   $\chi^2/\text{NDF}$ : 771.5/38

All:  $-20.661 \pm 0.357$   $\chi^2/\text{NDF}$ : 1555.3/73

reg\_asym\_atr1\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-21.476 \pm 0.059$   $\chi^2/\text{NDF}: 49009.8/16$

Left Out:  $-21.001 \pm 0.026$   $\chi^2/\text{NDF}: 131983.7/19$

Right Out:  $-18.506 \pm 0.057$   $\chi^2/\text{NDF}: 80734.5/18$

Left In:  $-20.129 \pm 0.027$   $\chi^2/\text{NDF}: 85797.2/17$

Left:  $-20.574 \pm 0.019$   $\chi^2/\text{NDF}: 218313.9/37$

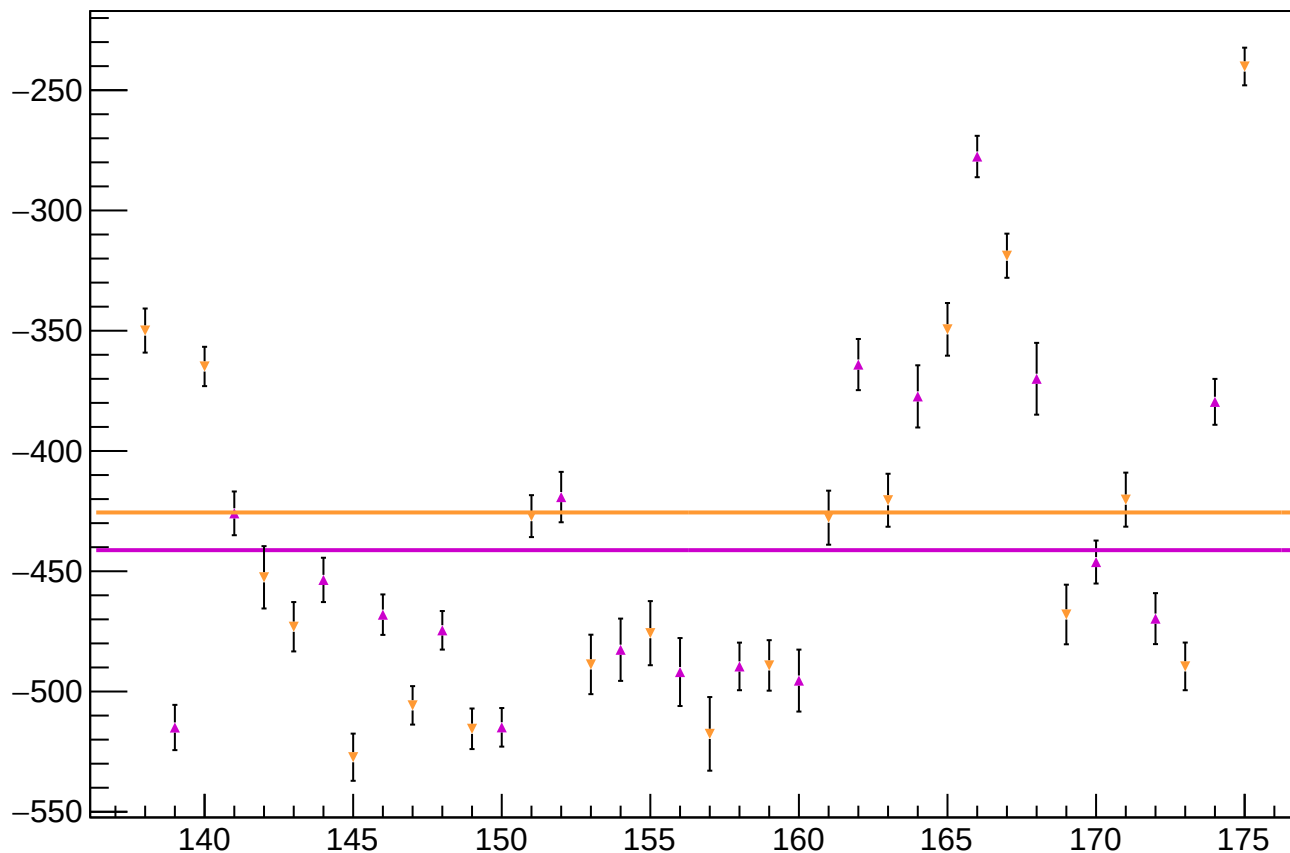
Right:  $-19.957 \pm 0.041$   $\chi^2/\text{NDF}: 131054.3/35$

In:  $-20.364 \pm 0.025$   $\chi^2/\text{NDF}: 135242.1/34$

Out:  $-20.564 \pm 0.024$   $\chi^2/\text{NDF}: 214279.0/38$

All:  $-20.466 \pm 0.017$   $\chi^2/\text{NDF}: 349555.0/73$

# reg\_asym\_atr2\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -425.555+/-2.245  $\chi^2/\text{NDF}$ :1382.5/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -441.229+/-2.344  $\chi^2/\text{NDF}$ :757.7/17

Left: -433.053+/-1.621  $\chi^2/\text{NDF}$ : 2163.5/37

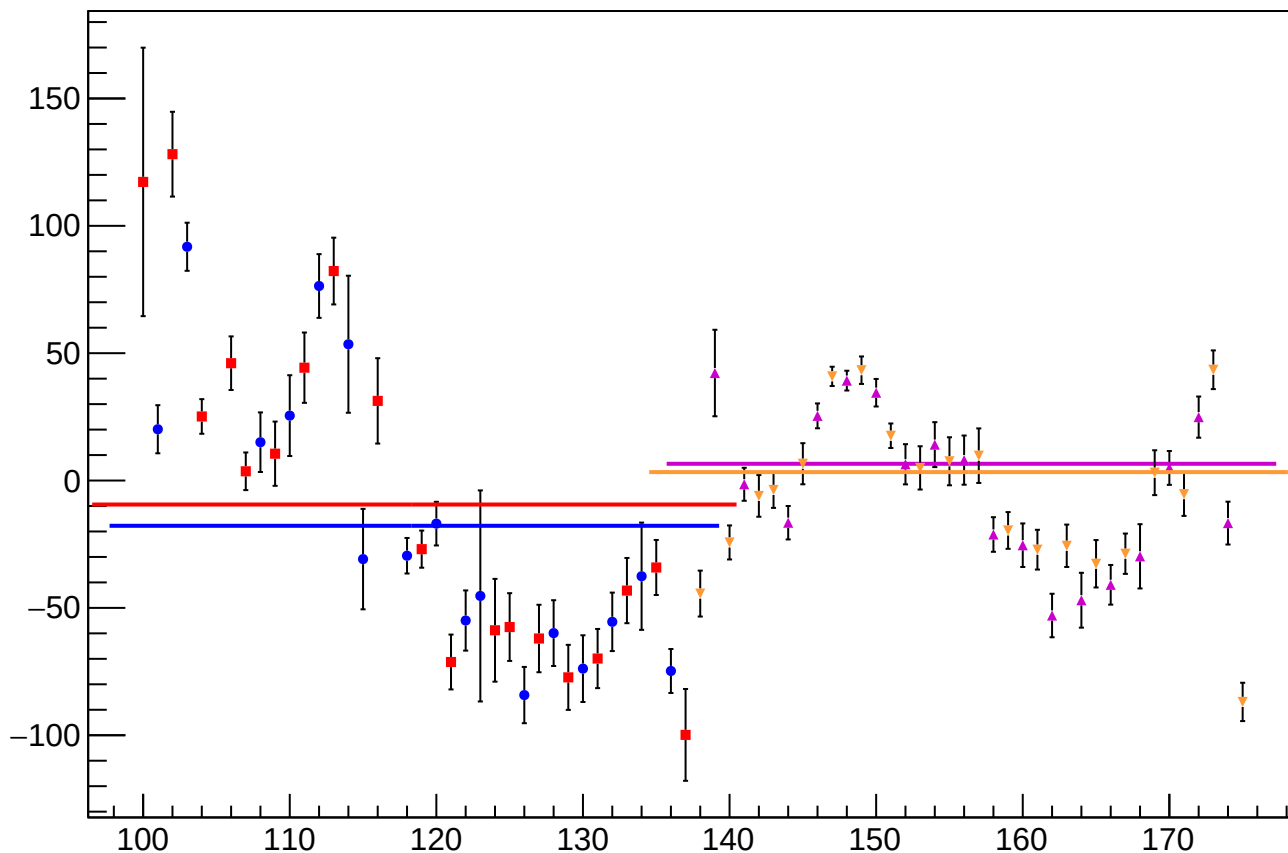
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -441.229+/-2.344  $\chi^2/\text{NDF}$ :757.7/17

Out: -425.555+/-2.245  $\chi^2/\text{NDF}$ :1382.5/19

All: -433.053+/-1.621  $\chi^2/\text{NDF}$ : 2163.5/37

reg\_asym\_atr2\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-17.765 \pm 2.781$   $\chi^2/\text{NDF}$ : 363.9/16

Left Out:  $3.308 \pm 1.571$   $\chi^2/\text{NDF}$ : 451.8/19

Right Out:  $-9.417 \pm 2.613$   $\chi^2/\text{NDF}$ : 369.6/18

Left In:  $6.579 \pm 1.655$   $\chi^2/\text{NDF}$ : 293.7/17

Left:  $4.858 \pm 1.139$   $\chi^2/\text{NDF}$ : 747.6/37

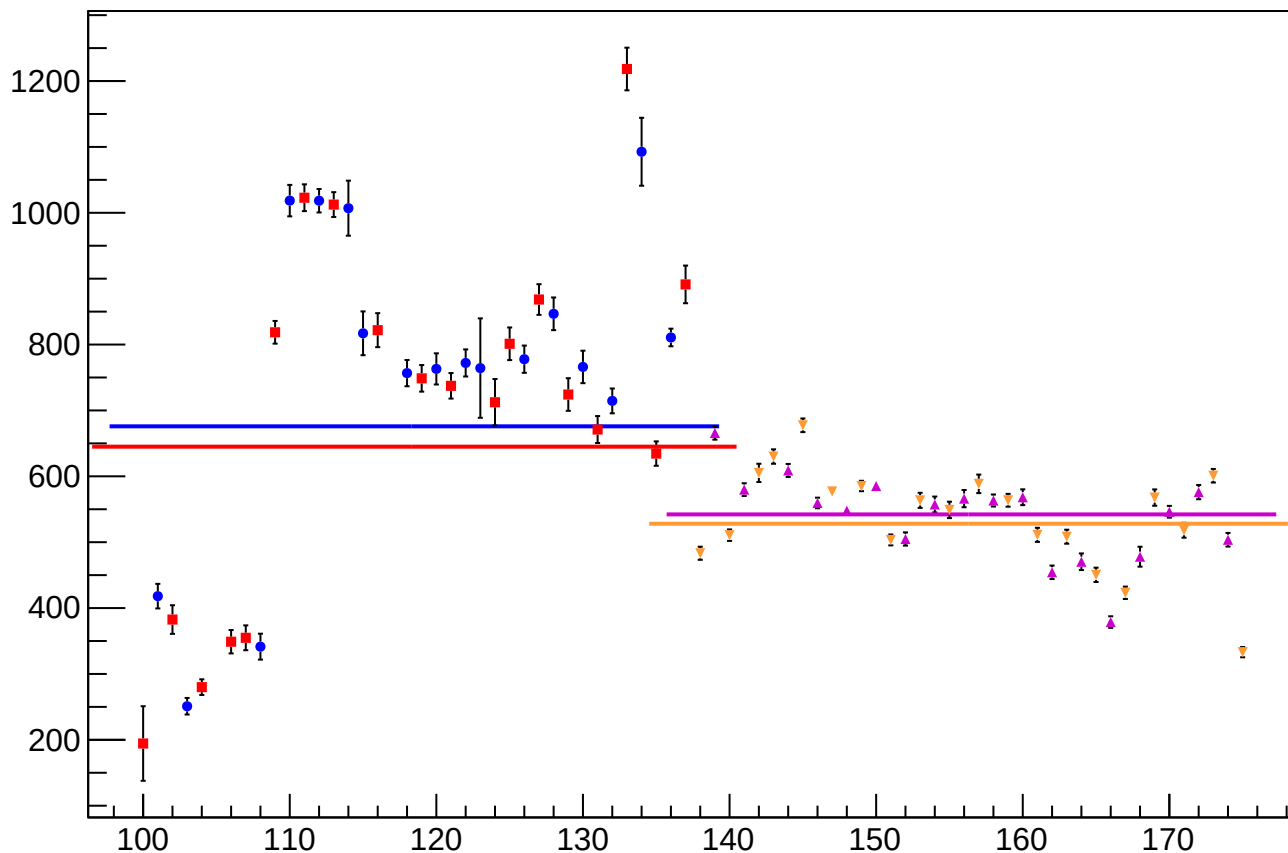
Right:  $-13.331 \pm 1.905$   $\chi^2/\text{NDF}$ : 738.2/35

In:  $0.214 \pm 1.422$   $\chi^2/\text{NDF}$ : 714.1/34

Out:  $-0.069 \pm 1.346$   $\chi^2/\text{NDF}$ : 838.8/38

All:  $0.065 \pm 0.978$   $\chi^2/\text{NDF}$ : 1553.0/73

reg\_asym\_atr2\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 675.871+/-5.037  $\chi^2/\text{NDF}$ : 2586.4/16

Left Out: 528.047+/-2.226  $\chi^2/\text{NDF}$ :1364.1/19

Right Out: 645.014+/-4.761  $\chi^2/\text{NDF}$ : 3123.3/18

Left In: 542.183+/-2.314  $\chi^2/\text{NDF}$ :770.9/17

Left: 534.841+/-1.604  $\chi^2/\text{NDF}$ : 2154.4/37

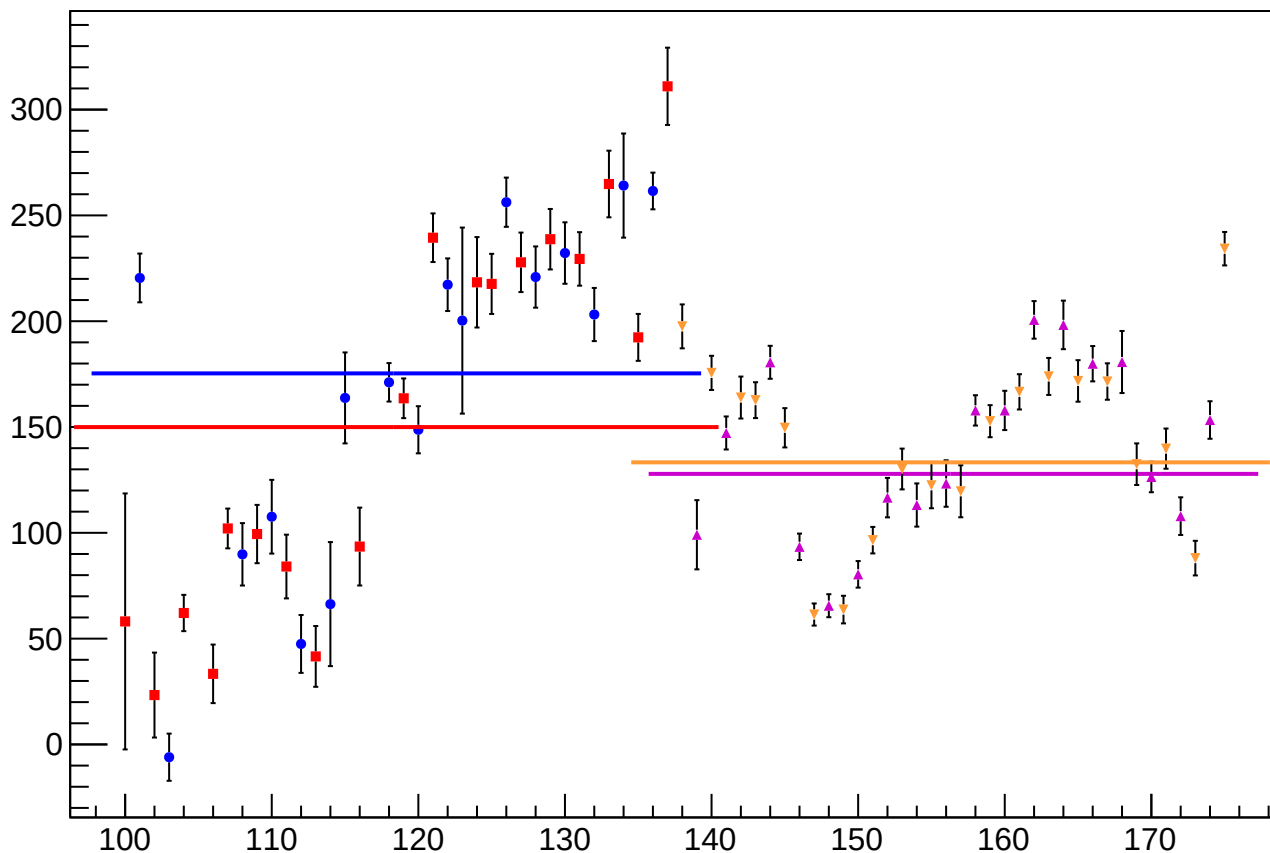
Right: 659.573+/-3.460  $\chi^2/\text{NDF}$ : 5729.5/35

In: 565.474+/-2.102  $\chi^2/\text{NDF}$ :3939.0/34

Out: 549.026+/-2.016  $\chi^2/\text{NDF}$ :4982.7/38

All: 556.906+/-1.455  $\chi^2/\text{NDF}$ : 8953.6/73

reg\_asym\_atr2\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 175.341 $\pm$ 3.203  $\chi^2$ /NDF: 638.5/16

Left Out: 133.301 $\pm$ 1.848  $\chi^2$ /NDF:703.8/19

Right Out: 149.966 $\pm$ 3.045  $\chi^2$ /NDF: 693.2/18

Left In: 127.854 $\pm$ 1.940  $\chi^2$ /NDF:475.9/17

Left: 130.710 $\pm$ 1.338  $\chi^2$ /NDF: 1183.8/37

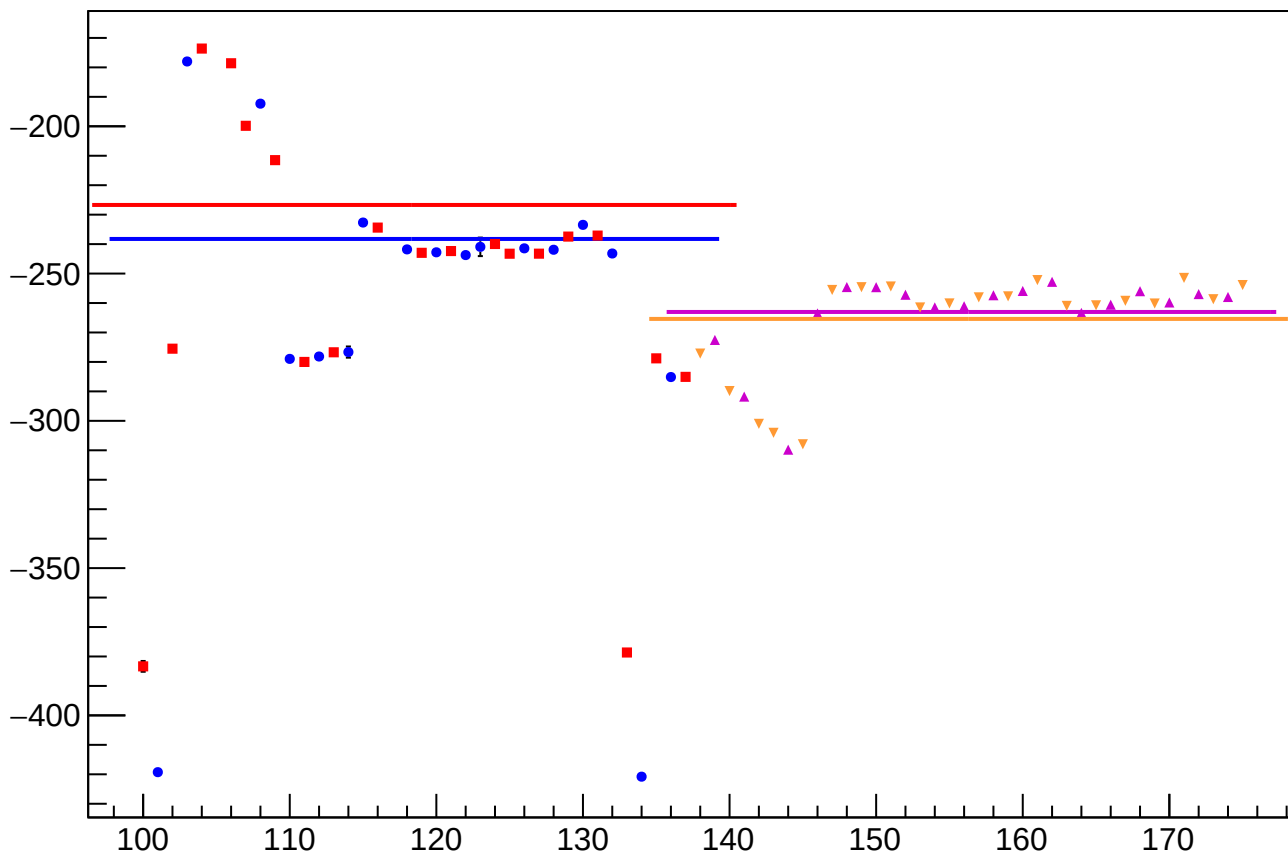
Right: 162.013 $\pm$ 2.207  $\chi^2$ /NDF: 1364.6/35

In: 140.598 $\pm$ 1.659  $\chi^2$ /NDF:1275.2/34

Out: 137.785 $\pm$ 1.580  $\chi^2$ /NDF:1418.9/38

All: 139.122 $\pm$ 1.144  $\chi^2$ /NDF: 2695.6/73

reg\_asym\_atr2\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-238.248 \pm 0.160$   $\chi^2/\text{NDF}: 167125.9/16$

Left Out:  $-265.396 \pm 0.090$   $\chi^2/\text{NDF}: 35502.5/19$

Right Out:  $-226.706 \pm 0.151$   $\chi^2/\text{NDF}: 102831.3/18$

Left In:  $-263.035 \pm 0.091$   $\chi^2/\text{NDF}: 21419.1/17$

Left:  $-264.235 \pm 0.064$   $\chi^2/\text{NDF}: 57263.0/37$

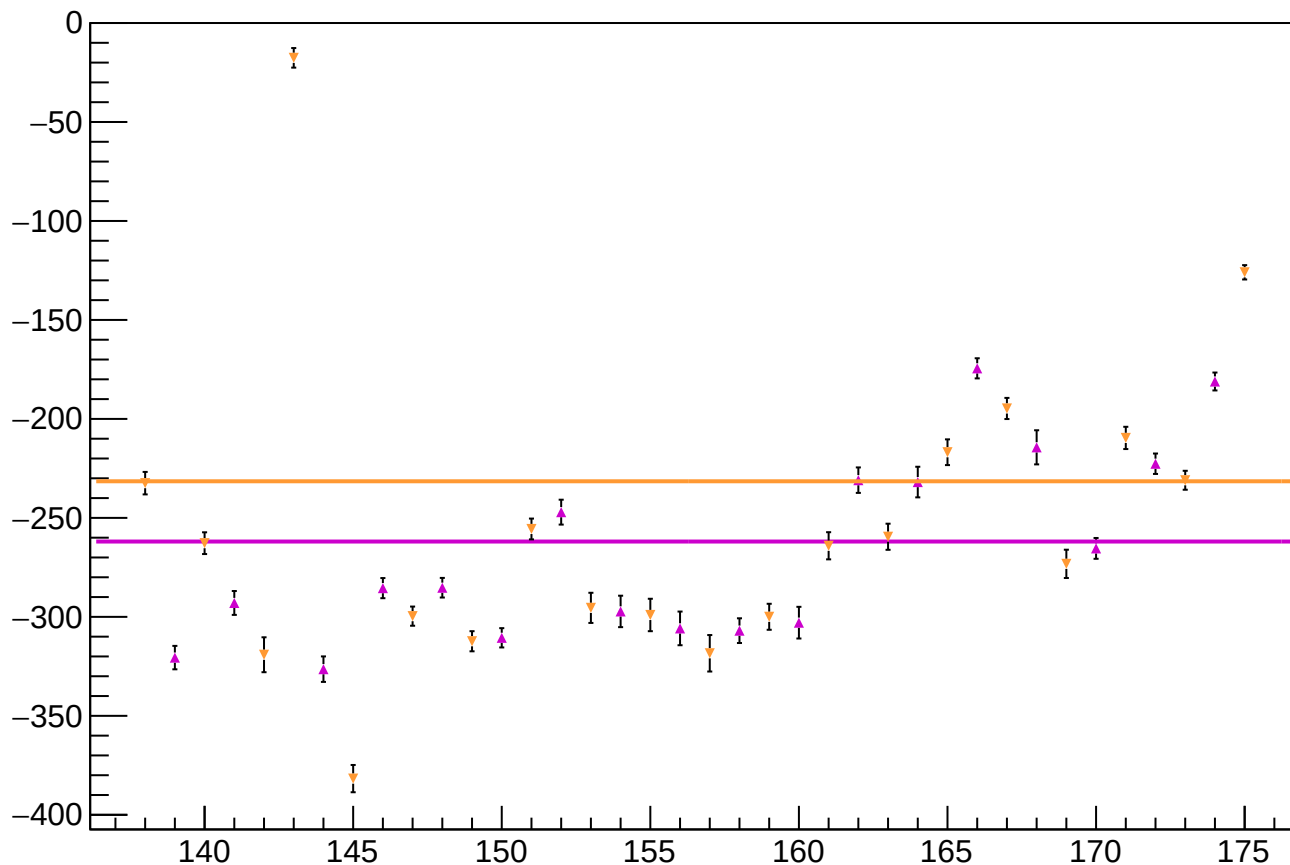
Right:  $-232.150 \pm 0.110$   $\chi^2/\text{NDF}: 272709.4/35$

In:  $-256.957 \pm 0.079$   $\chi^2/\text{NDF}: 206676.9/34$

Out:  $-255.331 \pm 0.077$   $\chi^2/\text{NDF}: 186842.5/38$

All:  $-256.122 \pm 0.055$   $\chi^2/\text{NDF}: 393735.8/73$

reg\_asym\_atl\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-231.508 \pm 1.293$   $\chi^2/\text{NDF}: 4276.3/19$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-261.945 \pm 1.395$   $\chi^2/\text{NDF}: 1240.9/17$

Left:  $-245.574 \pm 0.949$   $\chi^2/\text{NDF}: 5773.1/37$

Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

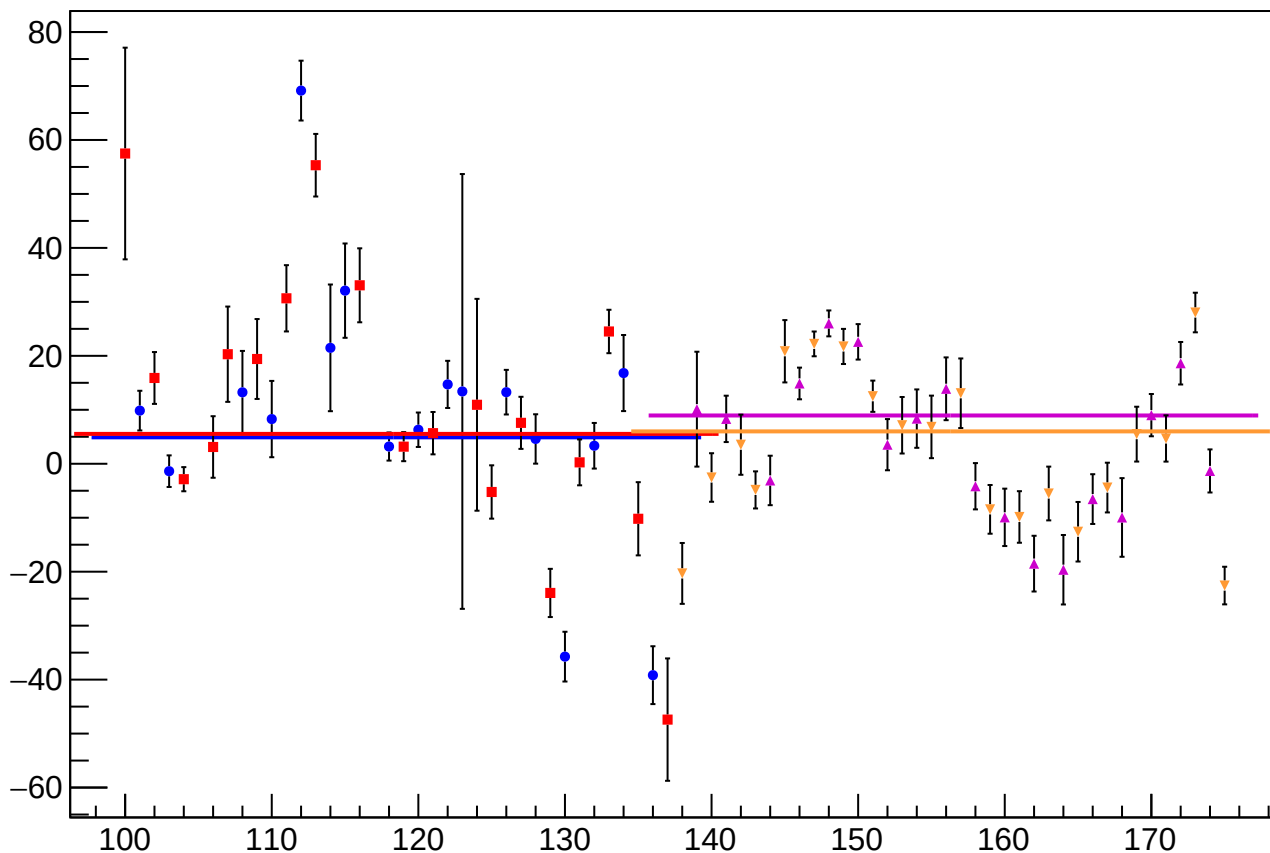
In:  $-261.945 \pm 1.395$   $\chi^2/\text{NDF}: 1240.9/17$

Out:  $-231.508 \pm 1.293$   $\chi^2/\text{NDF}: 4276.3/19$

All:  $-245.574 \pm 0.949$   $\chi^2/\text{NDF}: 5773.1/37$



reg\_asym\_atl\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $4.896 \pm 1.089$   $\chi^2/\text{NDF}$ : 312.0/16

Left Out:  $5.999 \pm 0.919$   $\chi^2/\text{NDF}$ : 268.1/19

Right Out:  $5.534 \pm 1.071$   $\chi^2/\text{NDF}$ : 239.1/18

Left In:  $8.947 \pm 0.995$   $\chi^2/\text{NDF}$ : 181.4/17

Left:  $7.356 \pm 0.675$   $\chi^2/\text{NDF}$ : 454.3/37

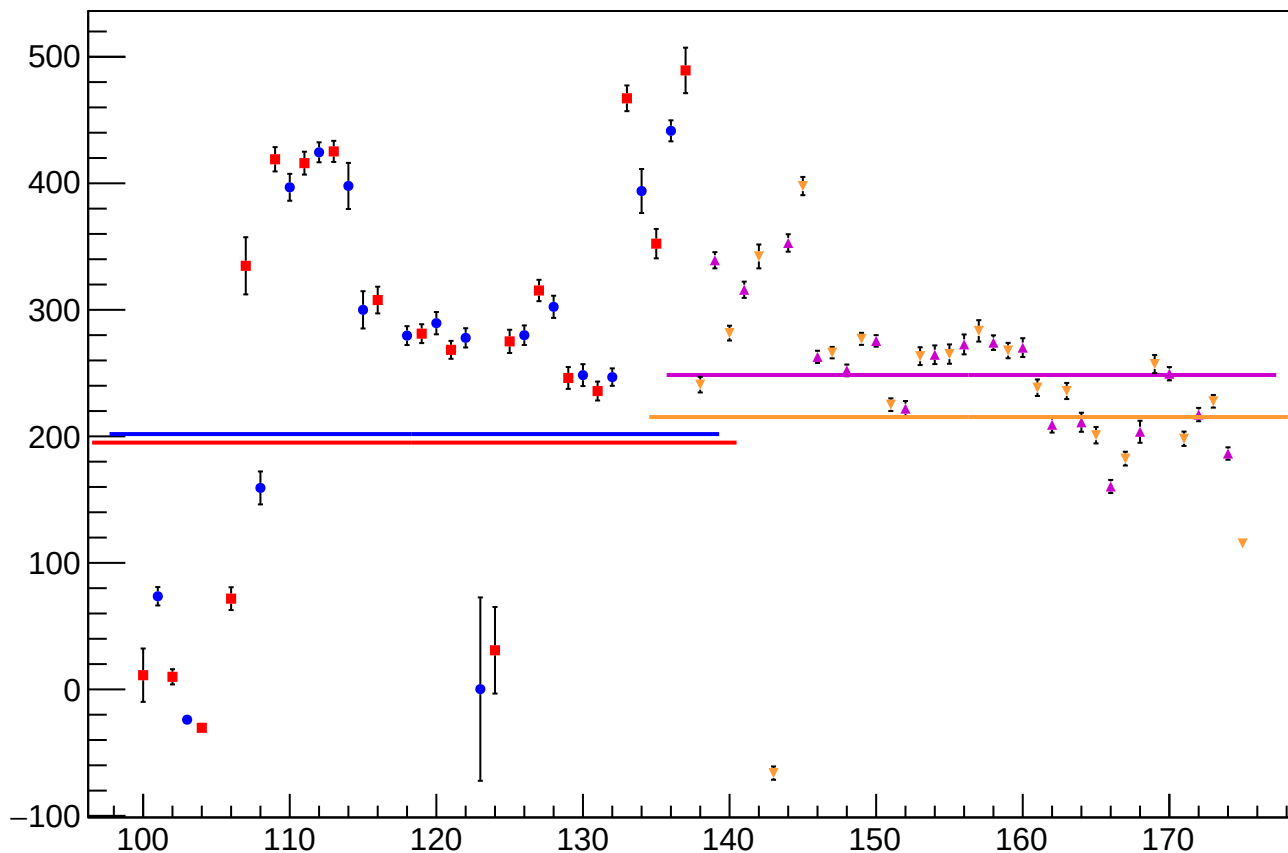
Right:  $5.220 \pm 0.764$   $\chi^2/\text{NDF}$ : 551.3/35

In:  $7.104 \pm 0.734$   $\chi^2/\text{NDF}$ : 500.9/34

Out:  $5.802 \pm 0.697$   $\chi^2/\text{NDF}$ : 507.4/38

All:  $6.419 \pm 0.506$   $\chi^2/\text{NDF}$ : 1009.9/73

reg\_asym\_atl\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 201.807 $\pm$ 1.970  $\chi^2$ /NDF: 6754.2/16

Left Out: 215.275 $\pm$ 1.285  $\chi^2$ /NDF:5210.9/19

Right Out: 195.053 $\pm$ 1.924  $\chi^2$ /NDF: 8257.1/18

Left In: 248.515 $\pm$ 1.381  $\chi^2$ /NDF:1222.1/17

Left: 230.696 $\pm$ 0.941  $\chi^2$ /NDF: 6743.7/37

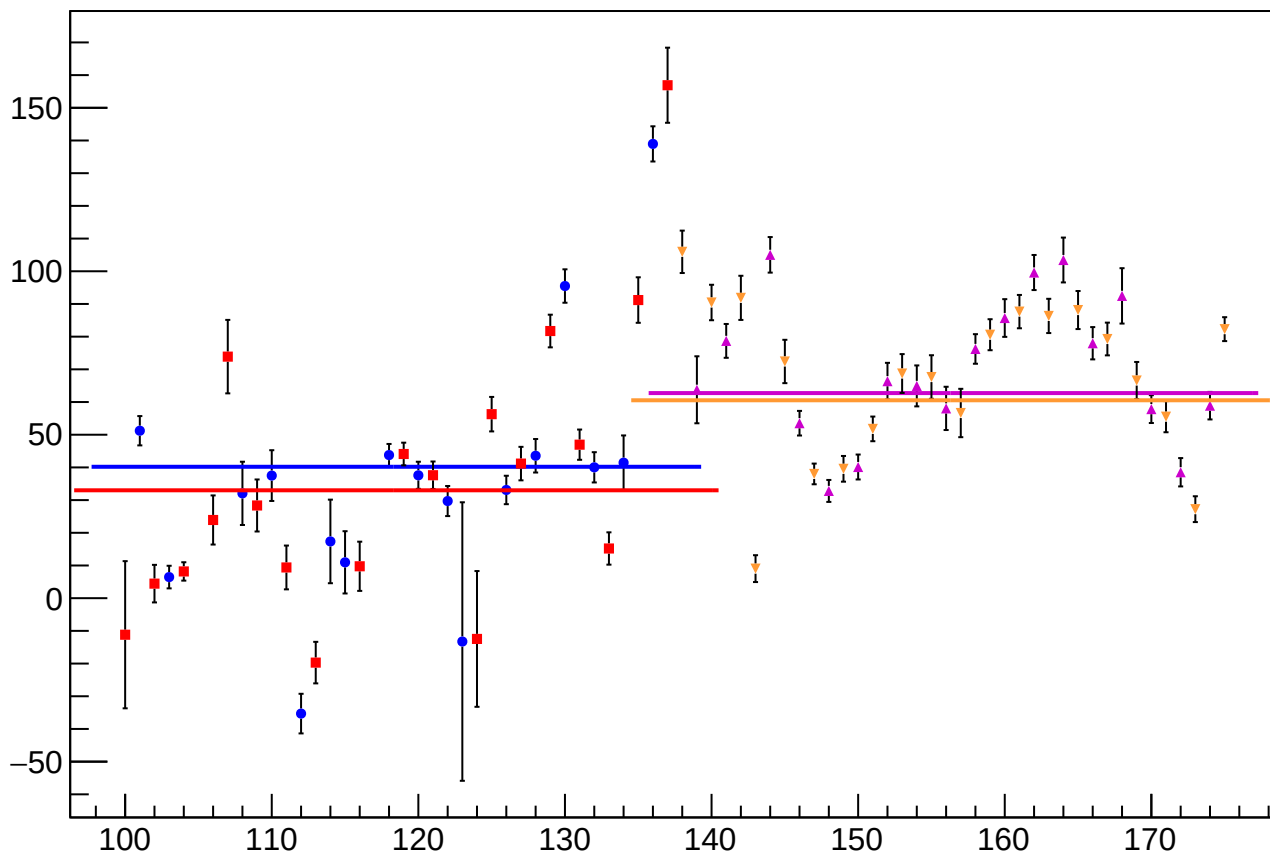
Right: 198.351 $\pm$ 1.377  $\chi^2$ /NDF: 15017.4/35

In: 233.133 $\pm$ 1.131  $\chi^2$ /NDF:8353.2/34

Out: 209.042 $\pm$ 1.068  $\chi^2$ /NDF:13544.4/38

All: 220.404 $\pm$ 0.777  $\chi^2$ /NDF: 22137.4/73

reg\_asym\_atl\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 40.196 $\pm$ 1.268  $\chi^2$ /NDF: 735.0/16

Left Out: 60.536 $\pm$ 1.073  $\chi^2$ /NDF:564.8/19

Right Out: 32.999 $\pm$ 1.253  $\chi^2$ /NDF: 554.1/18

Left In: 62.739 $\pm$ 1.160  $\chi^2$ /NDF:354.0/17

Left: 61.552 $\pm$ 0.788  $\chi^2$ /NDF: 920.8/37

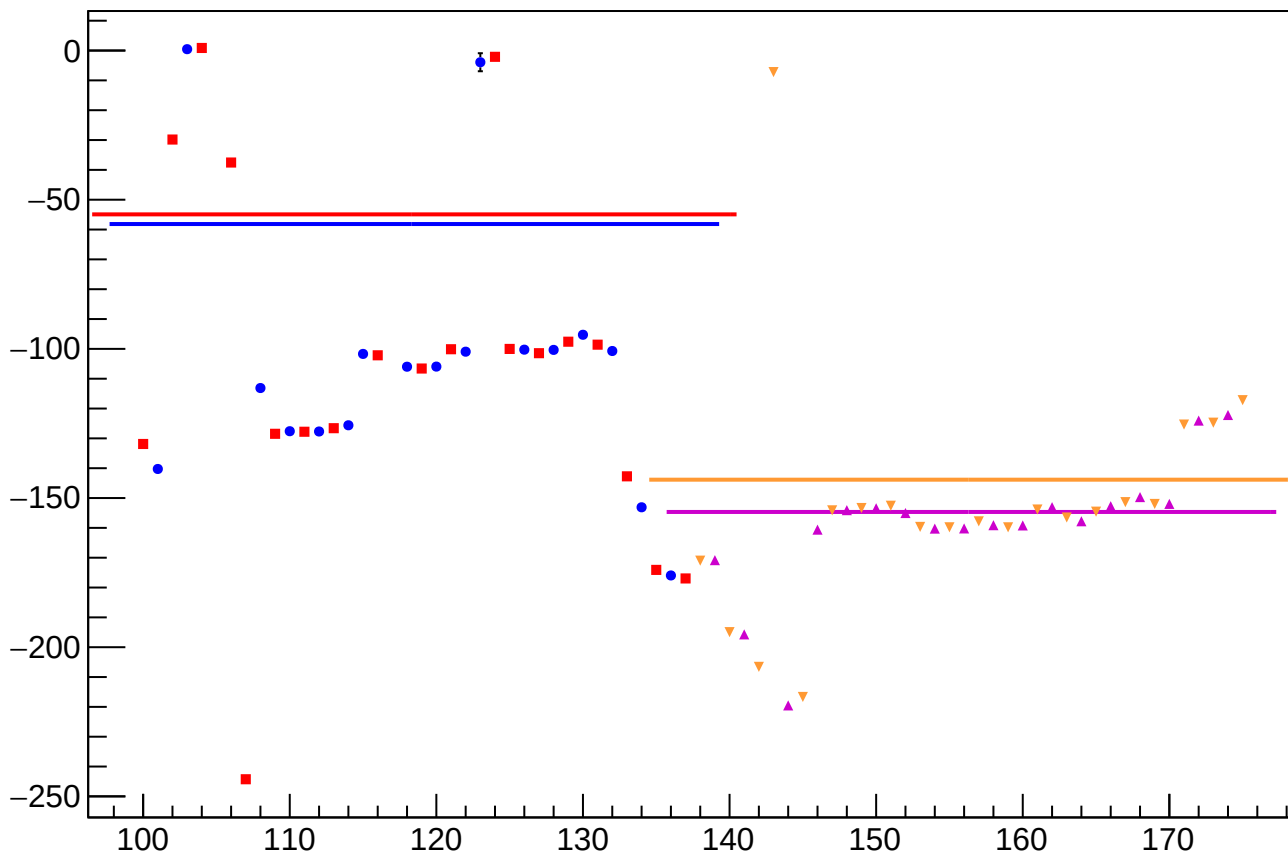
Right: 36.555 $\pm$ 0.891  $\chi^2$ /NDF: 1305.3/35

In: 52.467 $\pm$ 0.856  $\chi^2$ /NDF:1261.2/34

Out: 48.880 $\pm$ 0.815  $\chi^2$ /NDF:1397.6/38

All: 50.586 $\pm$ 0.590  $\chi^2$ /NDF: 2668.0/73

reg\_asym\_atl\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-58.155 \pm 0.062$   $\chi^2/\text{NDF}: 1105509.3/16$

Left Out:  $-143.846 \pm 0.052$   $\chi^2/\text{NDF}: 635158.3/19$

Right Out:  $-54.914 \pm 0.060$   $\chi^2/\text{NDF}: 1003885.5/18$

Left In:  $-154.664 \pm 0.054$   $\chi^2/\text{NDF}: 139102.7/17$

Left:  $-149.027 \pm 0.037$   $\chi^2/\text{NDF}: 795121.4/37$

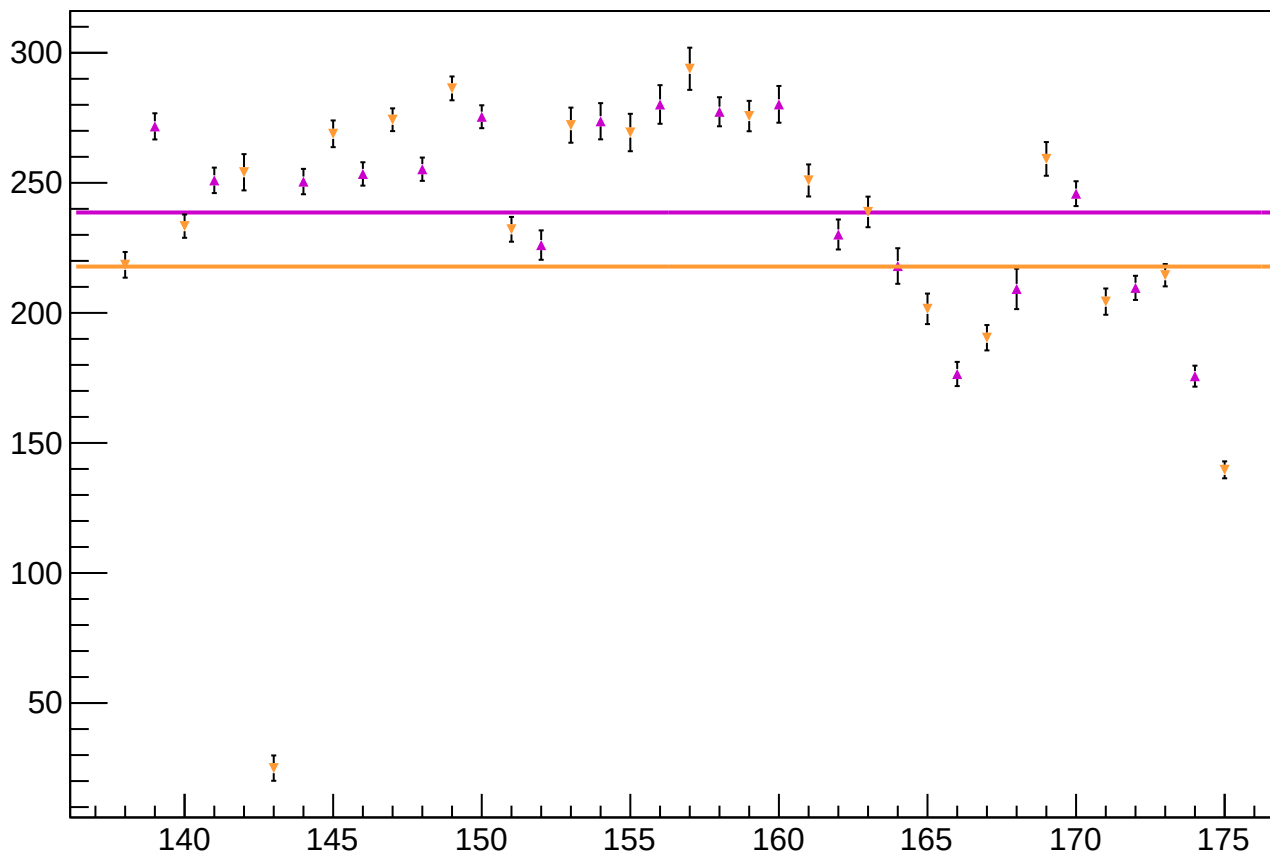
Right:  $-56.499 \pm 0.043$   $\chi^2/\text{NDF}: 2110811.0/35$

In:  $-112.647 \pm 0.041$   $\chi^2/\text{NDF}: 2631726.4/34$

Out:  $-105.998 \pm 0.039$   $\chi^2/\text{NDF}: 2891766.3/38$

All:  $-109.211 \pm 0.028$   $\chi^2/\text{NDF}: 5537332.3/73$

reg\_asym\_atl\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 217.813+/-1.148  $\chi^2/\text{NDF}$ :3110.8/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 238.605+/-1.229  $\chi^2/\text{NDF}$ :782.8/17

Left: 227.503+/-0.839  $\chi^2/\text{NDF}$ : 4046.4/37

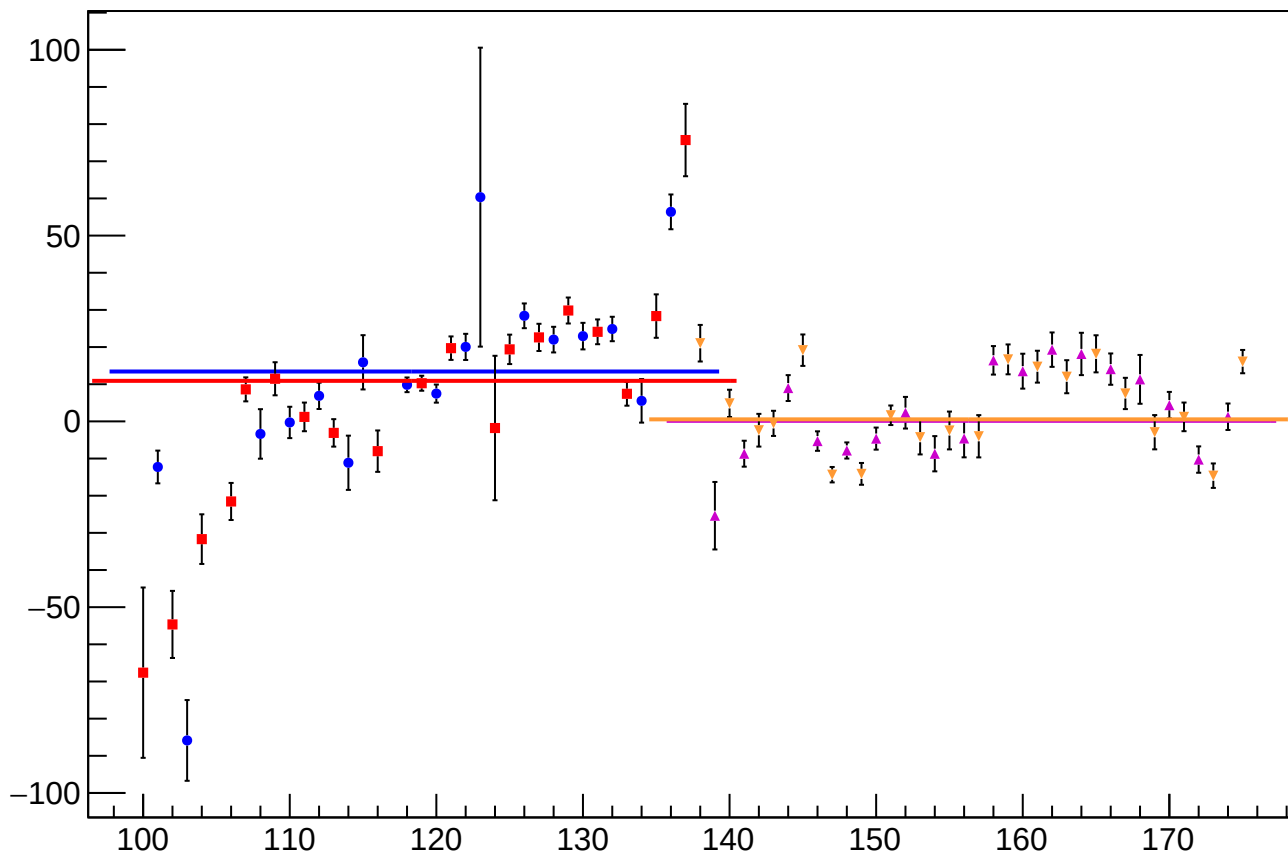
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 238.605+/-1.229  $\chi^2/\text{NDF}$ :782.8/17

Out: 217.813+/-1.148  $\chi^2/\text{NDF}$ :3110.8/19

All: 227.503+/-0.839  $\chi^2/\text{NDF}$ : 4046.4/37

reg\_asym\_atl\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 13.423+/-0.920  $\chi^2/\text{NDF}$ : 295.2/16

Left Out: 0.545+/-0.819  $\chi^2/\text{NDF}$ :212.5/19

Right Out: 10.908+/-0.916  $\chi^2/\text{NDF}$ : 302.6/18

Left In: 0.149+/-0.879  $\chi^2/\text{NDF}$ :122.9/17

Left: 0.361+/-0.599  $\chi^2/\text{NDF}$ : 335.6/37

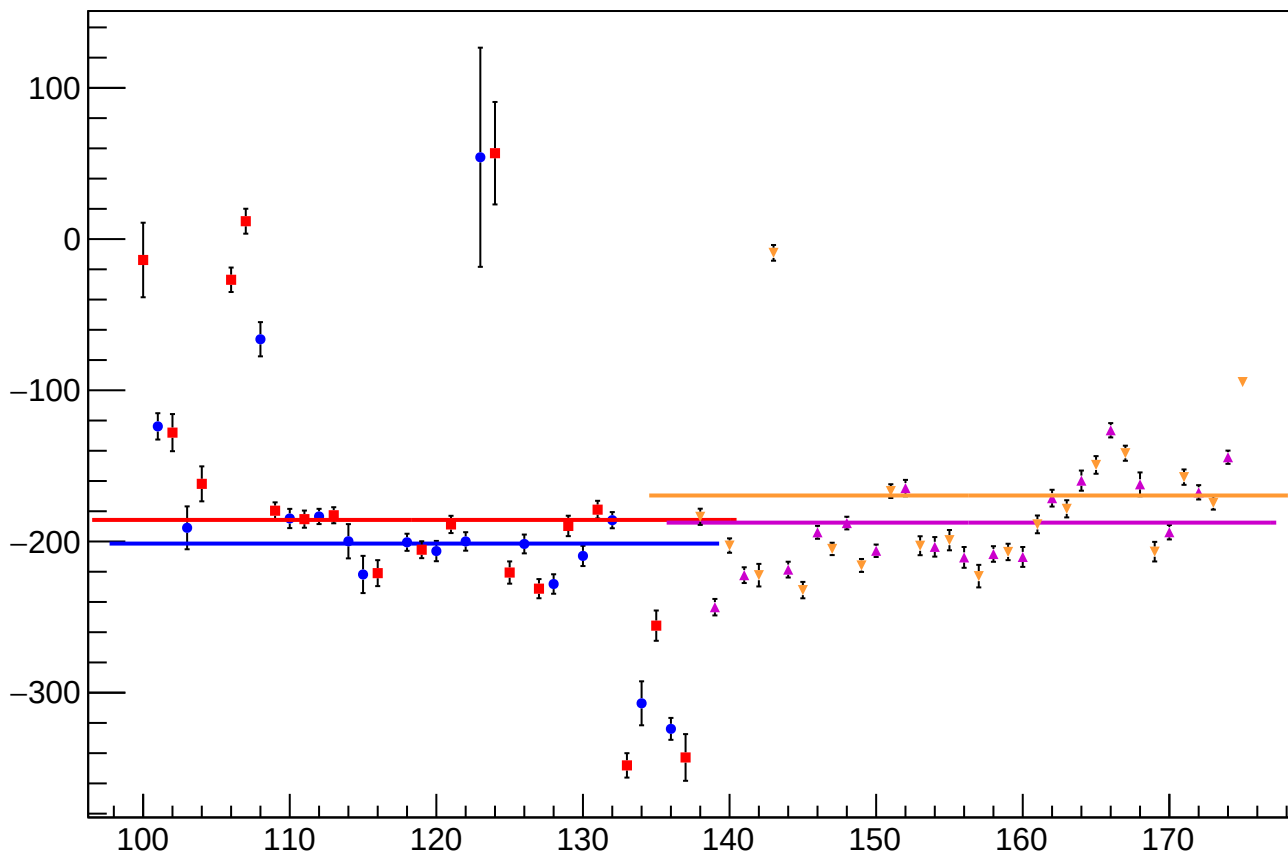
Right: 12.160+/-0.649  $\chi^2/\text{NDF}$ : 601.6/35

In: 6.489+/-0.635  $\chi^2/\text{NDF}$ :527.0/34

Out: 5.149+/-0.611  $\chi^2/\text{NDF}$ :586.2/38

All: 5.793+/-0.440  $\chi^2/\text{NDF}$ : 1115.5/73

reg\_asym\_atl\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-201.384 \pm 1.779$   $\chi^2/\text{NDF}$ : 623.5/16

Left Out:  $-169.579 \pm 1.142$   $\chi^2/\text{NDF}$ : 2156.1/19

Right Out:  $-185.739 \pm 1.700$   $\chi^2/\text{NDF}$ : 1749.3/18

Left In:  $-187.535 \pm 1.219$   $\chi^2/\text{NDF}$ : 590.9/17

Left:  $-177.974 \pm 0.833$   $\chi^2/\text{NDF}$ : 2862.5/37

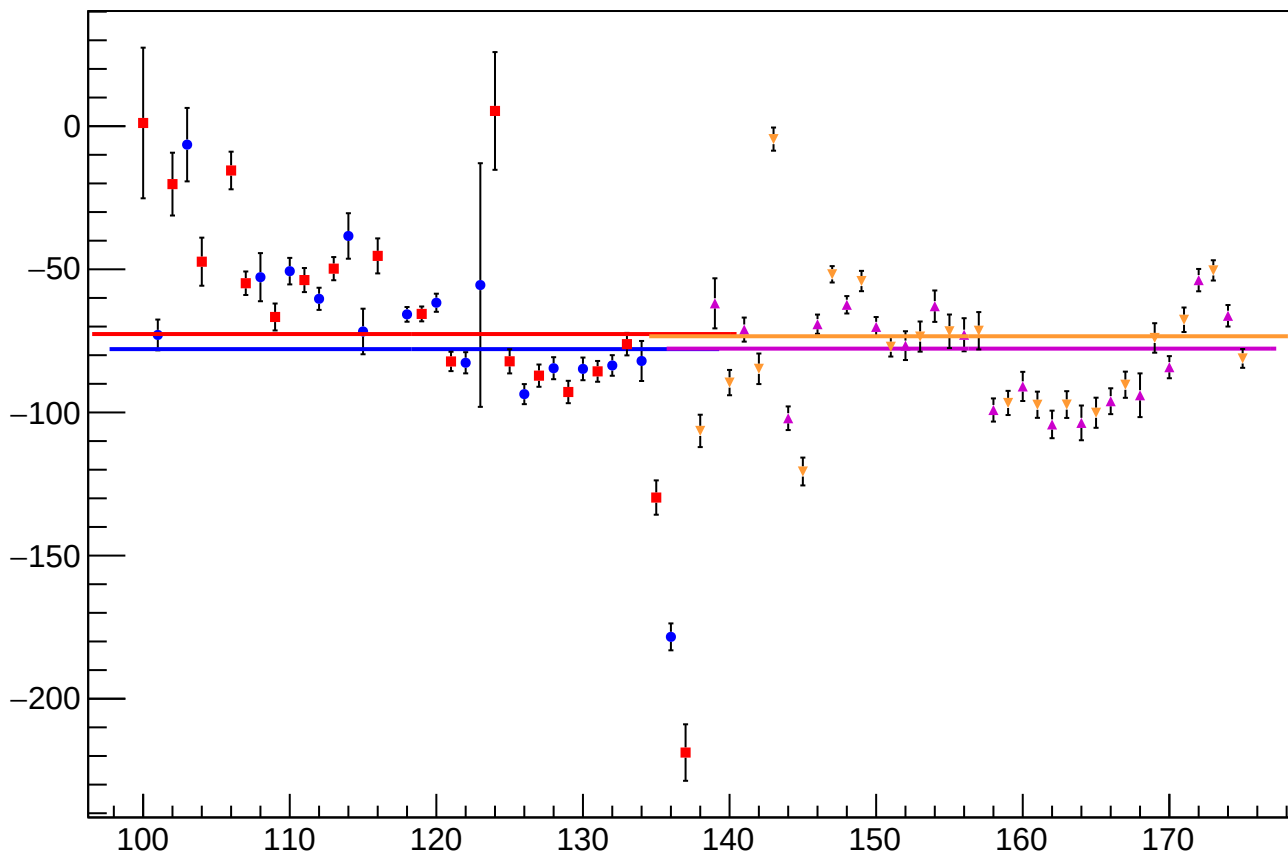
Right:  $-193.204 \pm 1.229$   $\chi^2/\text{NDF}$ : 2413.2/35

In:  $-191.957 \pm 1.006$   $\chi^2/\text{NDF}$ : 1255.6/34

Out:  $-174.604 \pm 0.948$   $\chi^2/\text{NDF}$ : 3967.6/38

All:  $-182.770 \pm 0.690$   $\chi^2/\text{NDF}$ : 5380.9/73

reg\_asym\_atl\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-77.877 \pm 1.066$   $\chi^2/\text{NDF}$ : 658.2/16

Left Out:  $-73.385 \pm 0.956$   $\chi^2/\text{NDF}$ : 697.2/19

Right Out:  $-72.612 \pm 1.054$   $\chi^2/\text{NDF}$ : 606.9/18

Left In:  $-77.708 \pm 1.025$   $\chi^2/\text{NDF}$ : 239.5/17

Left:  $-75.396 \pm 0.699$   $\chi^2/\text{NDF}$ : 946.2/37

Right:  $-75.215 \pm 0.749$   $\chi^2/\text{NDF}$ : 1277.4/35

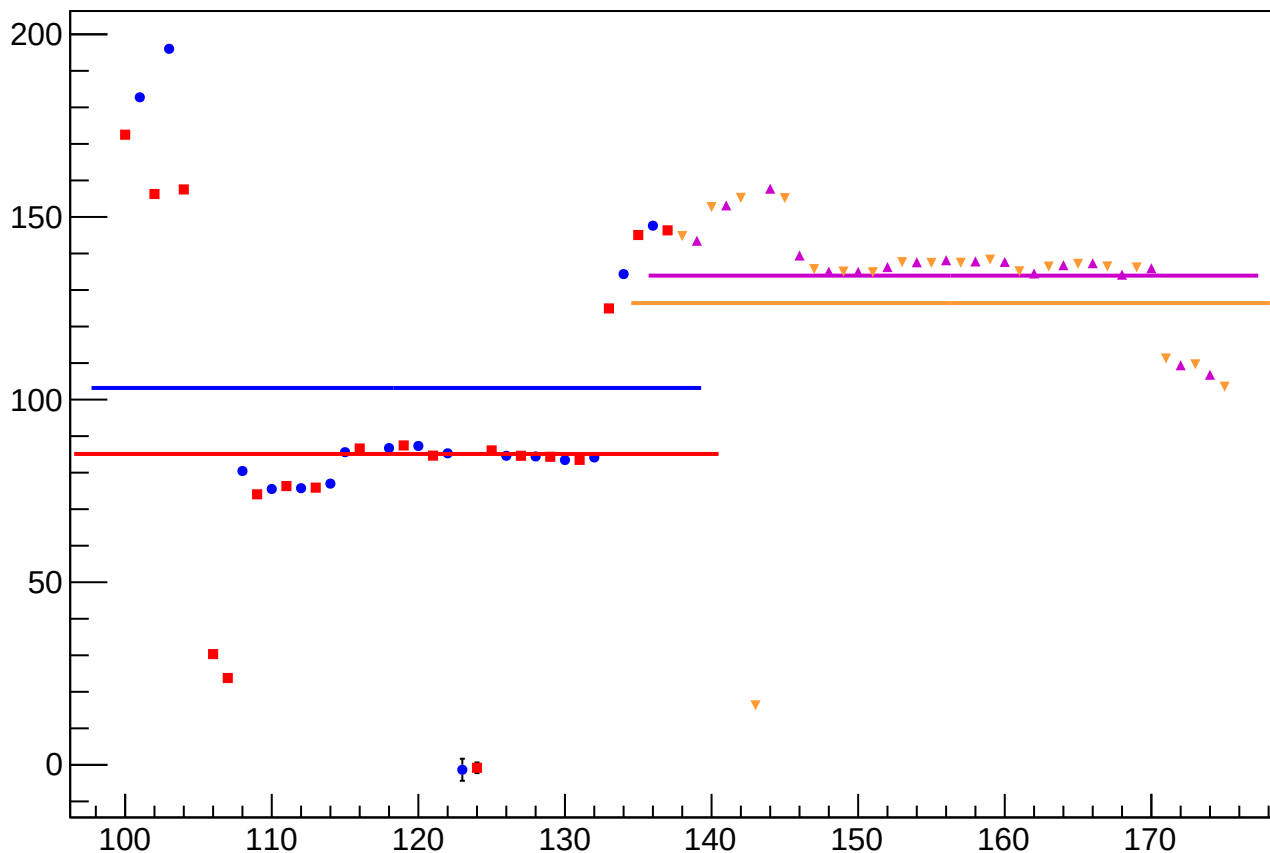
In:  $-77.789 \pm 0.739$   $\chi^2/\text{NDF}$ : 897.7/34

Out:  $-73.036 \pm 0.708$   $\chi^2/\text{NDF}$ : 1304.4/38

All:  $-75.312 \pm 0.511$   $\chi^2/\text{NDF}$ : 2223.6/73



reg\_asym\_atl\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 103.188 $\pm$ 0.070  $\chi^2$ /NDF: 273587.8/16

Left Out: 126.430 $\pm$ 0.046  $\chi^2$ /NDF: 396332.7/19

Right Out: 85.121 $\pm$ 0.064  $\chi^2$ /NDF: 423521.4/18

Left In: 133.937 $\pm$ 0.048  $\chi^2$ /NDF: 74580.0/17

Left: 130.047 $\pm$ 0.033  $\chi^2$ /NDF: 483717.9/37

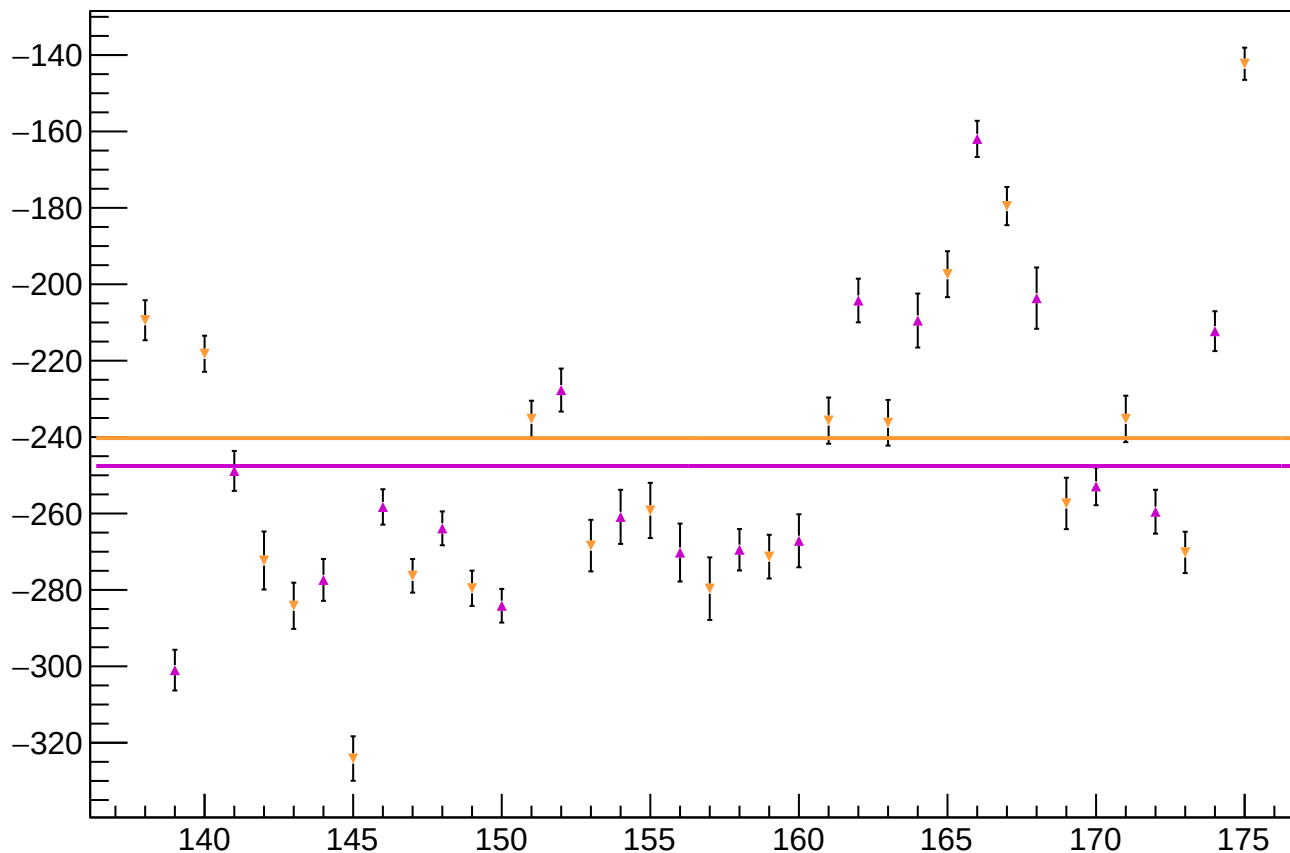
Right: 93.266 $\pm$ 0.047  $\chi^2$ /NDF: 733347.5/35

In: 124.235 $\pm$ 0.040  $\chi^2$ /NDF: 478990.7/34

Out: 112.261 $\pm$ 0.037  $\chi^2$ /NDF: 1095931.5/38

All: 117.908 $\pm$ 0.027  $\chi^2$ /NDF: 1623459.4/73

reg\_asym\_atr\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -240.267+/-1.243  $\chi^2/\text{NDF}$ :1330.6/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -247.571+/-1.295  $\chi^2/\text{NDF}$ :761.8/17

Left: -243.769+/-0.897  $\chi^2/\text{NDF}$ : 2109.0/37

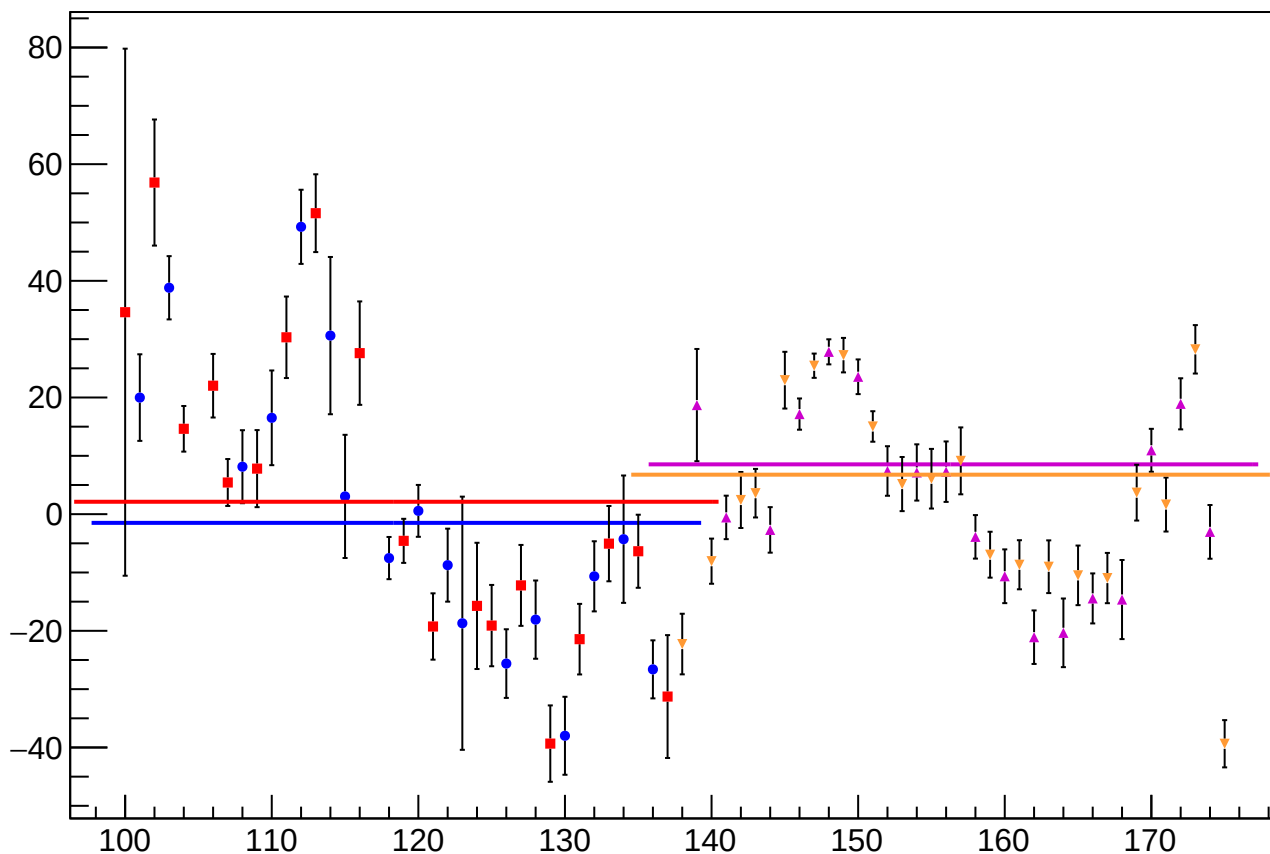
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -247.571+/-1.295  $\chi^2/\text{NDF}$ :761.8/17

Out: -240.267+/-1.243  $\chi^2/\text{NDF}$ :1330.6/19

All: -243.769+/-0.897  $\chi^2/\text{NDF}$ : 2109.0/37

reg\_asym\_atr\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-1.492 \pm 1.513$   $\chi^2/\text{NDF}$ : 226.1/16

Left Out:  $6.769 \pm 0.869$   $\chi^2/\text{NDF}$ : 421.6/19

Right Out:  $2.127 \pm 1.402$   $\chi^2/\text{NDF}$ : 232.6/18

Left In:  $8.538 \pm 0.914$   $\chi^2/\text{NDF}$ : 278.9/17

Left:  $7.609 \pm 0.630$   $\chi^2/\text{NDF}$ : 702.5/37

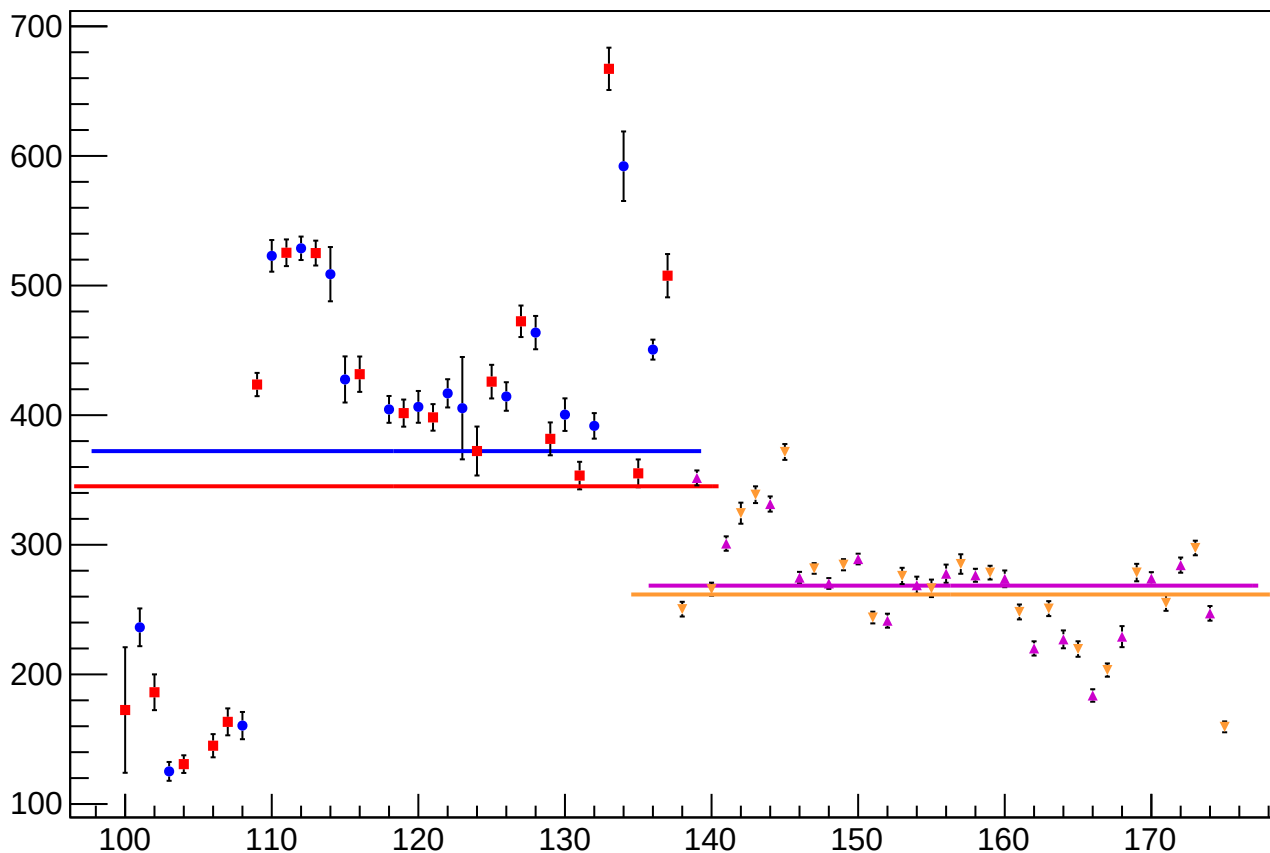
Right:  $0.455 \pm 1.029$   $\chi^2/\text{NDF}$ : 461.8/35

In:  $5.858 \pm 0.782$   $\chi^2/\text{NDF}$ : 537.2/34

Out:  $5.482 \pm 0.738$   $\chi^2/\text{NDF}$ : 662.1/38

All:  $5.659 \pm 0.537$   $\chi^2/\text{NDF}$ : 1199.5/73

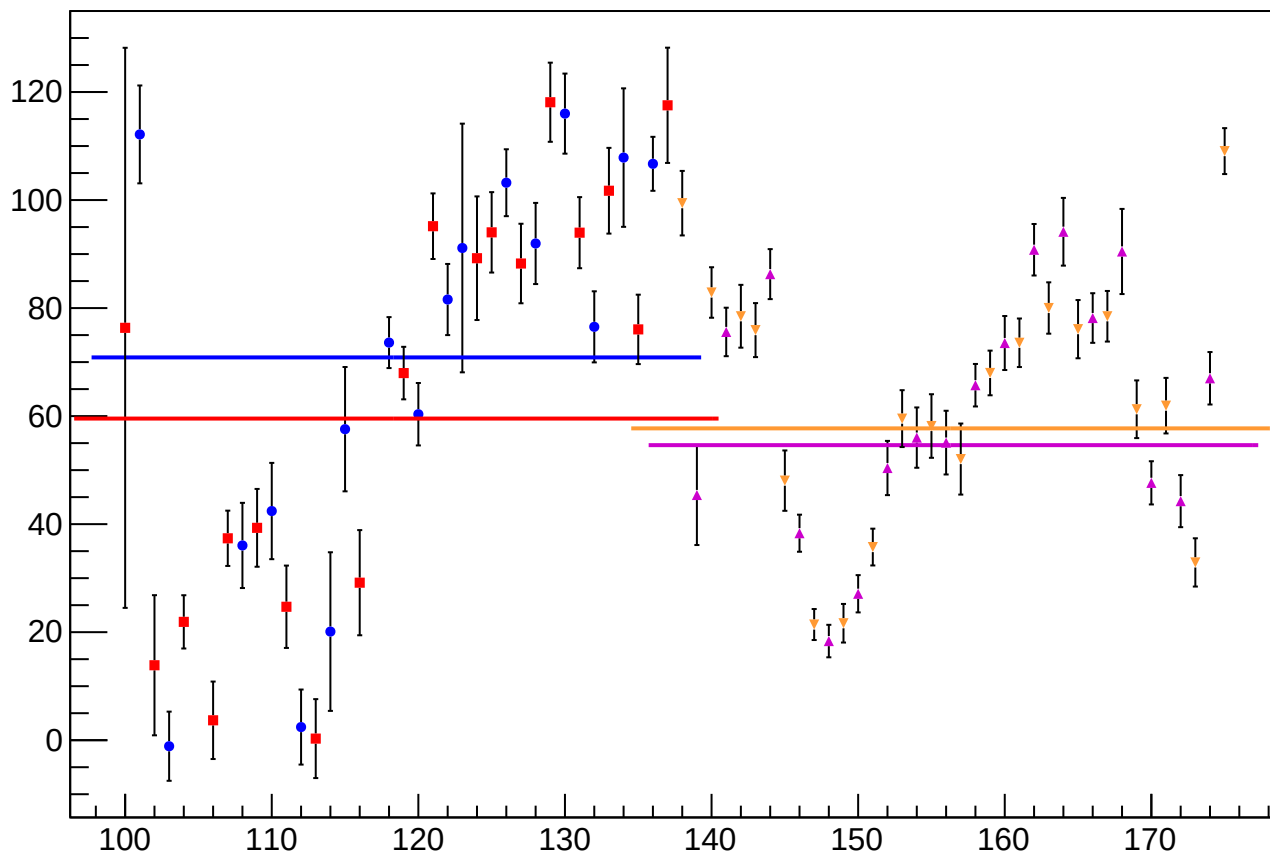
reg\_asym\_atr\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 372.263+/-2.759  $\chi^2/\text{NDF}$ : 2433.1/16  
 Left Out: 261.656+/-1.229  $\chi^2/\text{NDF}$ :1450.2/19  
 Right Out: 345.135+/-2.562  $\chi^2/\text{NDF}$ : 3416.5/18  
 Left In: 268.486+/-1.276  $\chi^2/\text{NDF}$ :882.6/17

Left: 264.943+/-0.885  $\chi^2/\text{NDF}$ : 2347.6/37  
 Right: 357.695+/-1.878  $\chi^2/\text{NDF}$ : 5901.5/35  
 In: 286.763+/-1.158  $\chi^2/\text{NDF}$ :4481.0/34  
 Out: 277.267+/-1.108  $\chi^2/\text{NDF}$ :5729.7/38  
 All: 281.805+/-0.801  $\chi^2/\text{NDF}$ : 10245.8/73

reg\_asym\_atr\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 70.867 $\pm$ 1.743  $\chi^2$ /NDF: 427.0/16

Left Out: 57.729 $\pm$ 1.021  $\chi^2$ /NDF: 660.7/19

Right Out: 59.546 $\pm$ 1.633  $\chi^2$ /NDF: 490.9/18

Left In: 54.625 $\pm$ 1.070  $\chi^2$ /NDF: 482.7/17

Left: 56.250 $\pm$ 0.739  $\chi^2$ /NDF: 1147.8/37

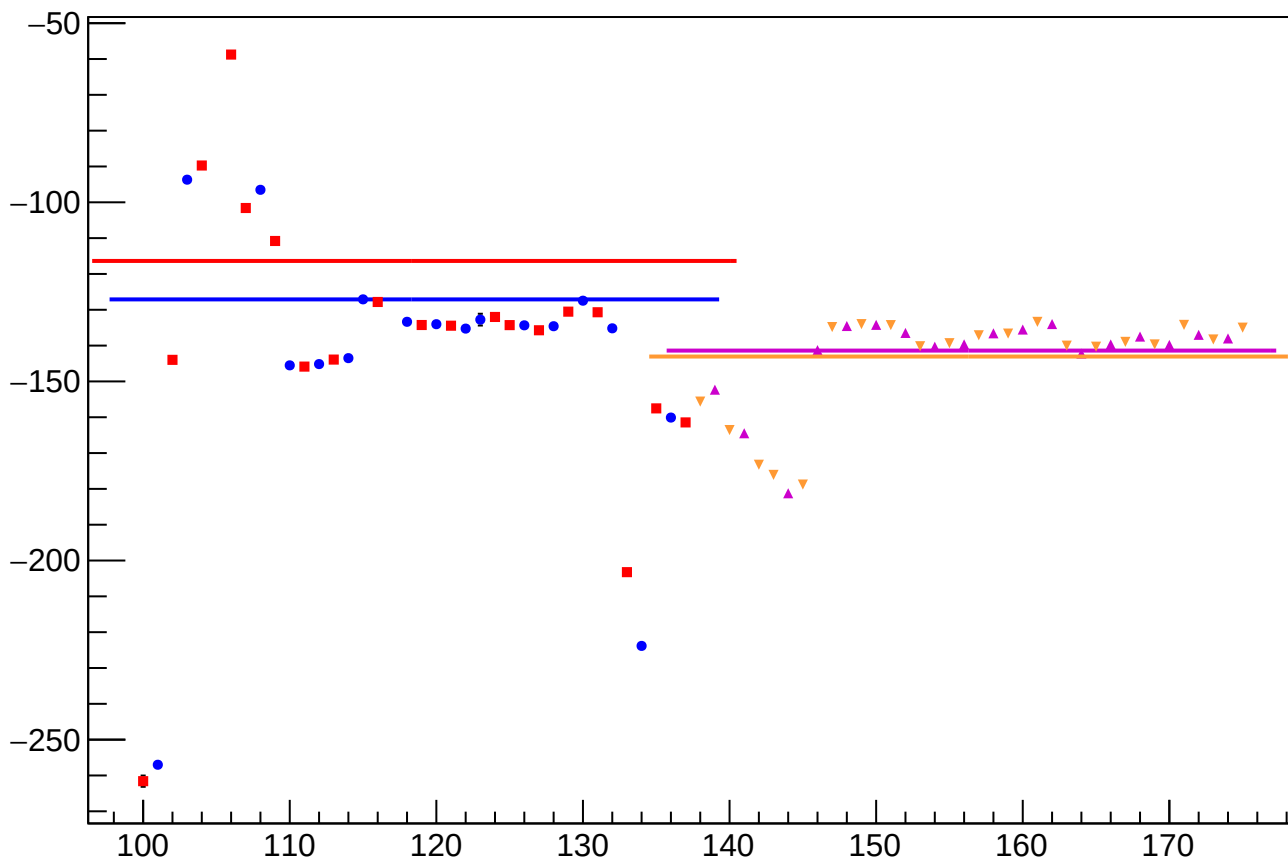
Right: 64.838 $\pm$ 1.192  $\chi^2$ /NDF: 940.3/35

In: 59.070 $\pm$ 0.912  $\chi^2$ /NDF: 972.7/34

Out: 58.239 $\pm$ 0.866  $\chi^2$ /NDF: 1152.4/38

All: 58.633 $\pm$ 0.628  $\chi^2$ /NDF: 2125.6/73

reg\_asym\_atr\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -127.105+/-0.089  $\chi^2/\text{NDF}$ : 167064.7/16

Left Out: -143.055+/-0.049  $\chi^2/\text{NDF}$ : 73370.4/19

Right Out: -116.369+/-0.083  $\chi^2/\text{NDF}$ : 167595.6/18

Left In: -141.393+/-0.050  $\chi^2/\text{NDF}$ : 44804.3/17

Left: -142.237+/-0.035  $\chi^2/\text{NDF}$ : 118731.7/37

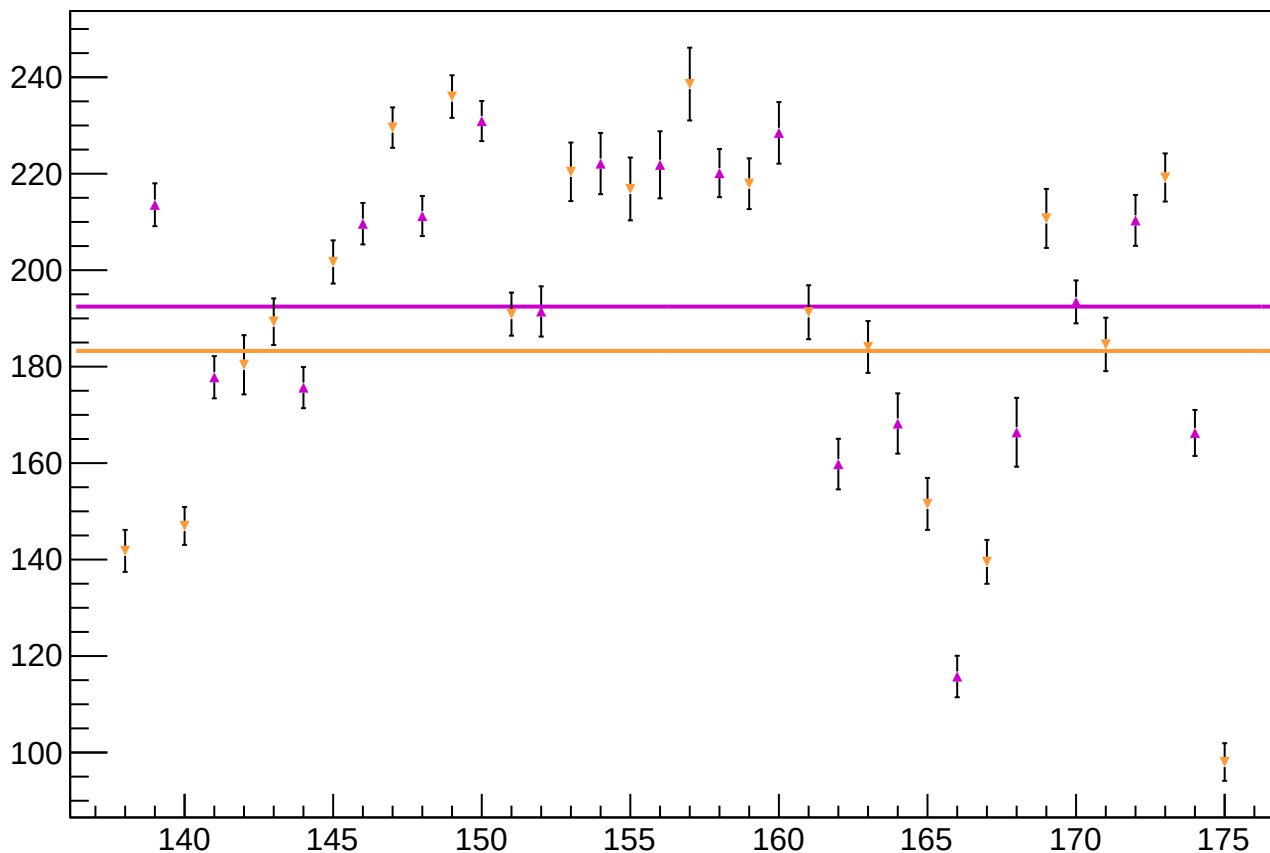
Right: -121.332+/-0.061  $\chi^2/\text{NDF}$ : 342408.2/35

In: -137.970+/-0.044  $\chi^2/\text{NDF}$ : 231278.6/34

Out: -136.060+/-0.042  $\chi^2/\text{NDF}$ : 317386.8/38

All: -136.986+/-0.030  $\chi^2/\text{NDF}$ : 549646.0/73

# reg\_asym\_atr\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 183.256 $\pm$ 1.108  $\chi^2/\text{NDF}$ :1303.8/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 192.452 $\pm$ 1.162  $\chi^2/\text{NDF}$ :700.2/17

Left: 187.636 $\pm$ 0.802  $\chi^2/\text{NDF}$ : 2036.8/37

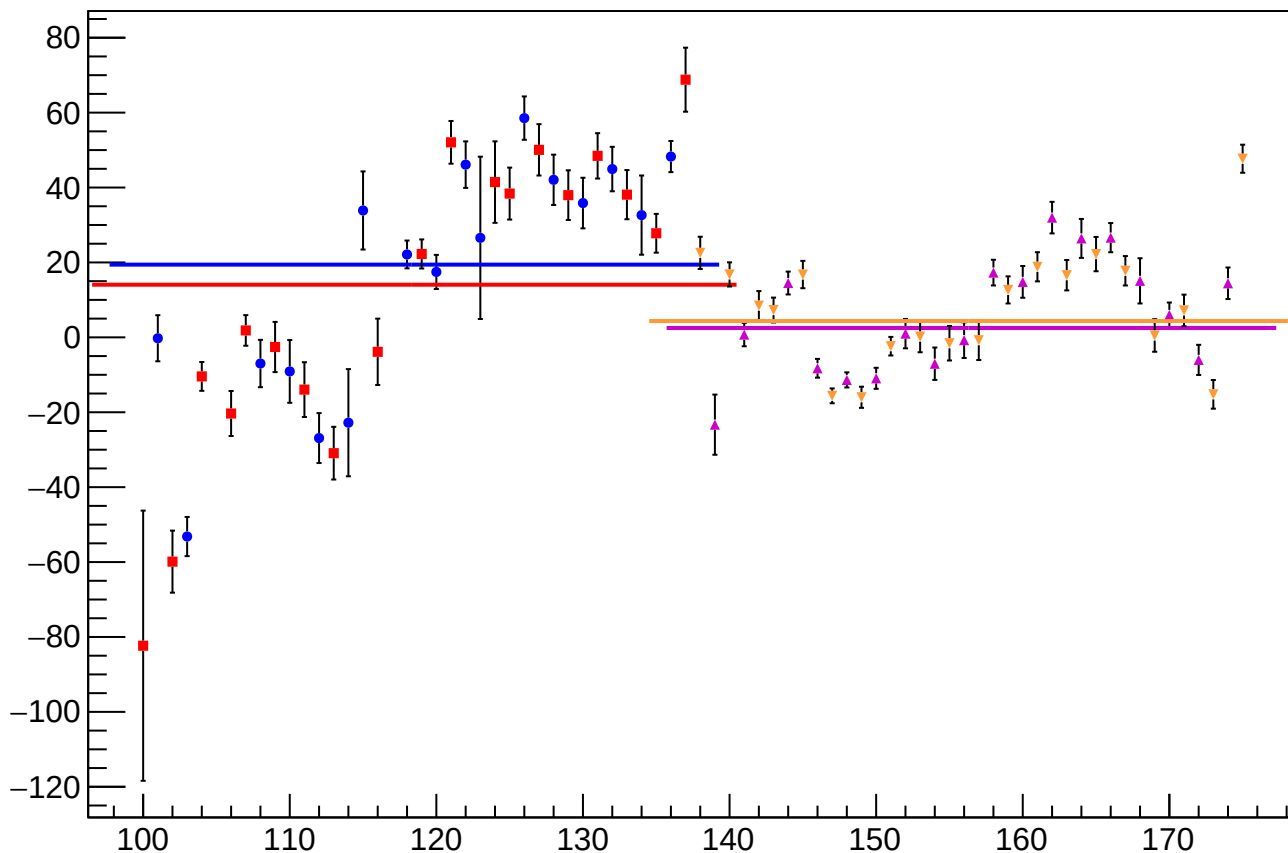
Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 192.452 $\pm$ 1.162  $\chi^2/\text{NDF}$ :700.2/17

Out: 183.256 $\pm$ 1.108  $\chi^2/\text{NDF}$ :1303.8/19

All: 187.636 $\pm$ 0.802  $\chi^2/\text{NDF}$ : 2036.8/37

reg\_asym\_atr\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Left: 3.479  $\pm$  0.569  $\chi^2/\text{NDF}$ : 702.9/37

Right: 16.572  $\pm$  1.014  $\chi^2/\text{NDF}$ : 884.6/35

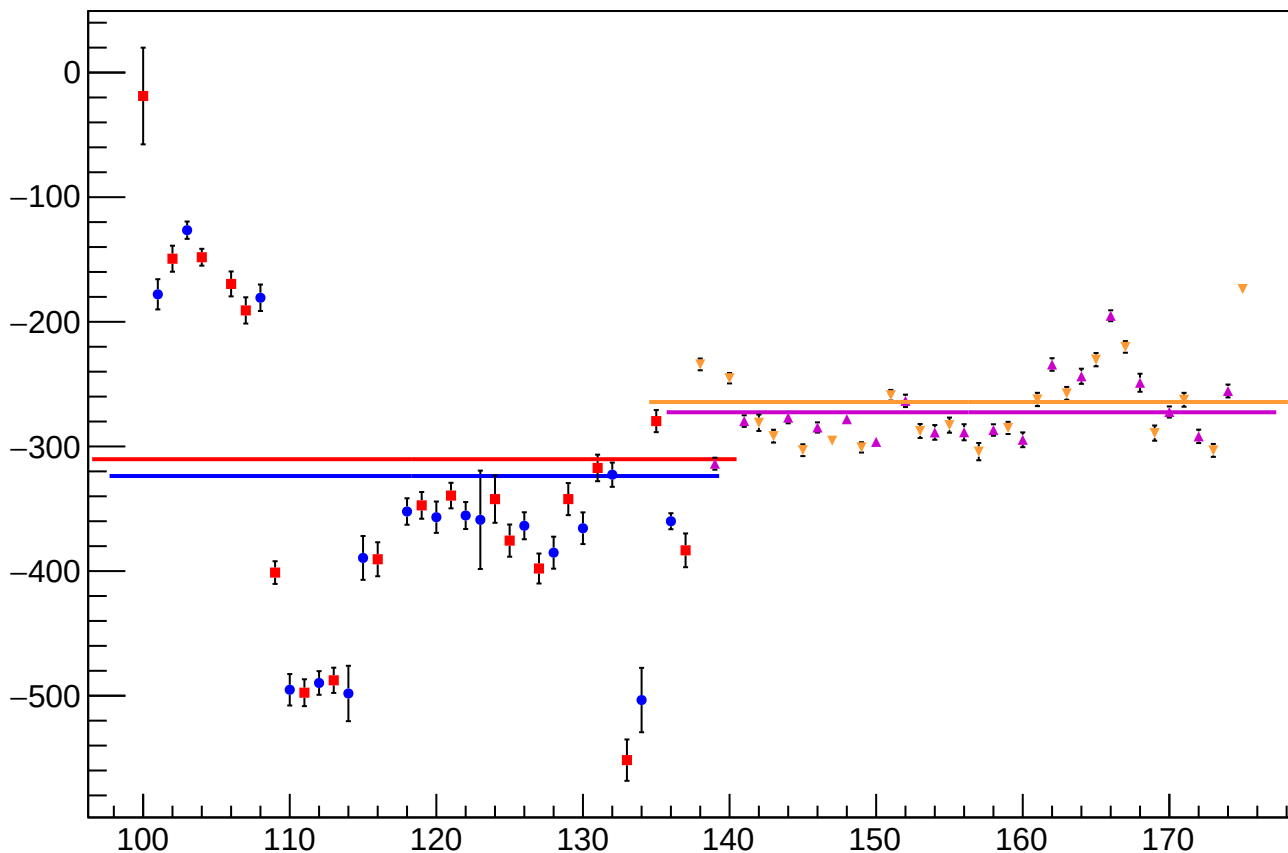
In: 6.538  $\pm$  0.723  $\chi^2/\text{NDF}$ : 814.2/34

Out: 6.688  $\pm$  0.683  $\chi^2/\text{NDF}$ : 900.1/38

All: 6.617  $\pm$  0.496  $\chi^2/\text{NDF}$ : 1714.3/73



reg\_asym\_atr\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-323.721 \pm 2.668$   $\chi^2/\text{NDF}: 1850.8/16$

Left Out:  $-264.331 \pm 1.102$   $\chi^2/\text{NDF}: 1131.0/19$

Right Out:  $-310.223 \pm 2.523$   $\chi^2/\text{NDF}: 2300.0/18$

Left In:  $-272.572 \pm 1.150$   $\chi^2/\text{NDF}: 592.6/17$

Left:  $-268.278 \pm 0.796$   $\chi^2/\text{NDF}: 1750.3/37$

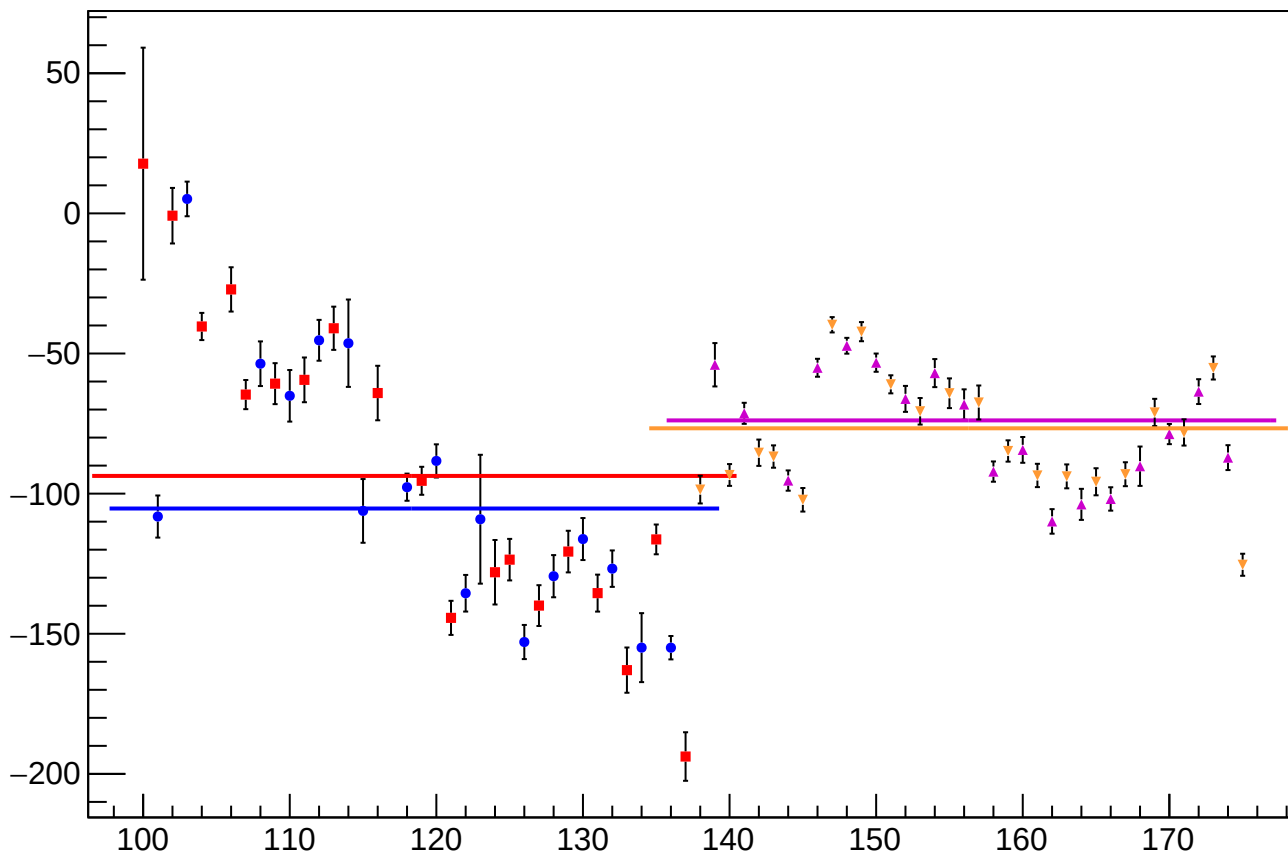
Right:  $-316.595 \pm 1.833$   $\chi^2/\text{NDF}: 4164.2/35$

In:  $-280.581 \pm 1.056$   $\chi^2/\text{NDF}: 2753.3/34$

Out:  $-271.685 \pm 1.010$   $\chi^2/\text{NDF}: 3708.8/38$

All:  $-275.936 \pm 0.730$   $\chi^2/\text{NDF}: 6499.2/73$

reg\_asym\_atr\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-105.309 \pm 1.693$   $\chi^2/\text{NDF}$ : 737.5/16

Left Out:  $-76.690 \pm 0.918$   $\chi^2/\text{NDF}$ : 651.4/19

Right Out:  $-93.680 \pm 1.612$   $\chi^2/\text{NDF}$ : 826.5/18

Left In:  $-73.867 \pm 0.968$   $\chi^2/\text{NDF}$ : 415.4/17

Left:  $-75.353 \pm 0.666$   $\chi^2/\text{NDF}$ : 1071.2/37

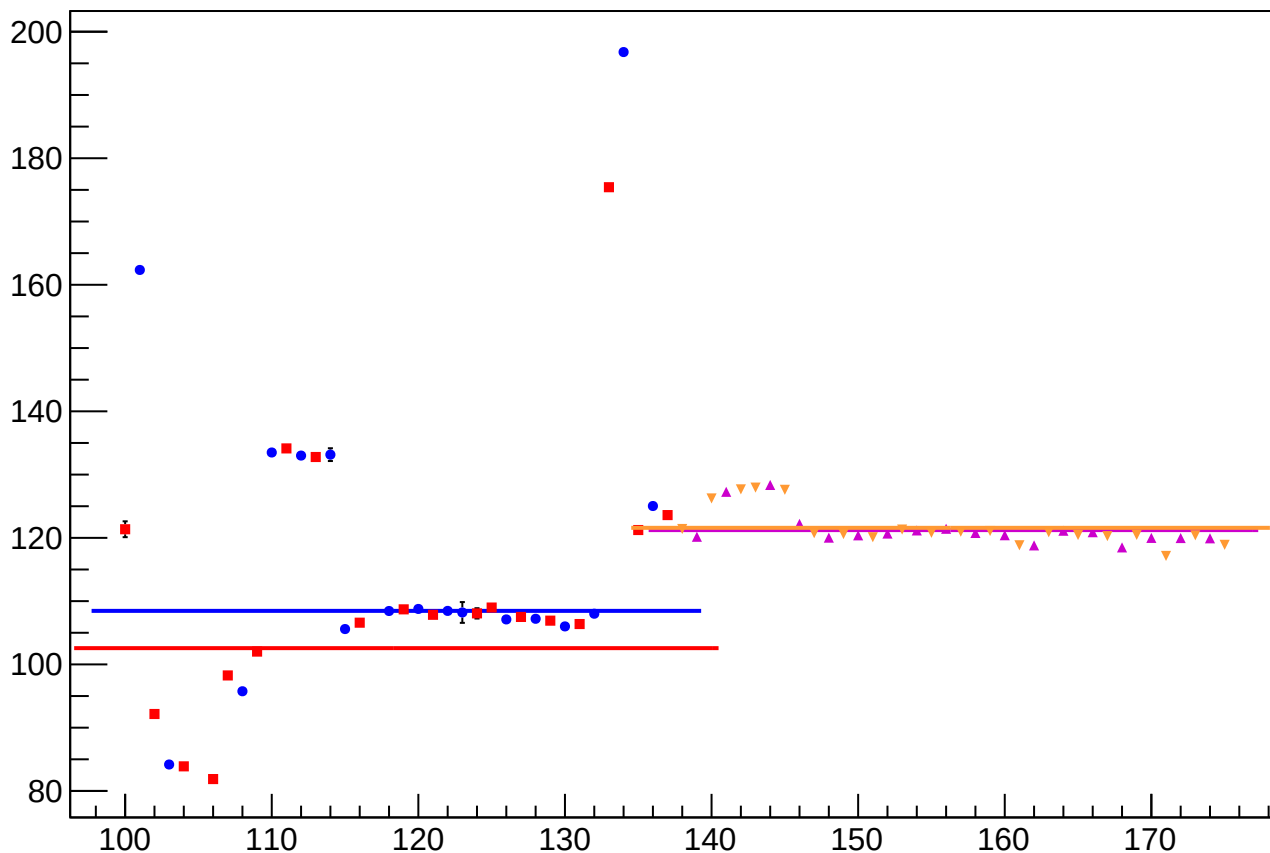
Right:  $-99.207 \pm 1.167$   $\chi^2/\text{NDF}$ : 1588.8/35

In:  $-81.611 \pm 0.840$   $\chi^2/\text{NDF}$ : 1412.7/34

Out:  $-80.855 \pm 0.798$   $\chi^2/\text{NDF}$ : 1561.8/38

All:  $-81.213 \pm 0.579$   $\chi^2/\text{NDF}$ : 2974.9/73

reg\_asym\_atr\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 108.461+/-0.085  $\chi^2/\text{NDF}$ : 73302.1/16

Left Out: 121.586+/-0.044  $\chi^2/\text{NDF}$ : 4351.6/19

Right Out: 102.570+/-0.079  $\chi^2/\text{NDF}$ : 53143.8/18

Left In: 121.227+/-0.045  $\chi^2/\text{NDF}$ : 2880.9/17

Left: 121.411+/-0.032  $\chi^2/\text{NDF}$ : 7264.7/37

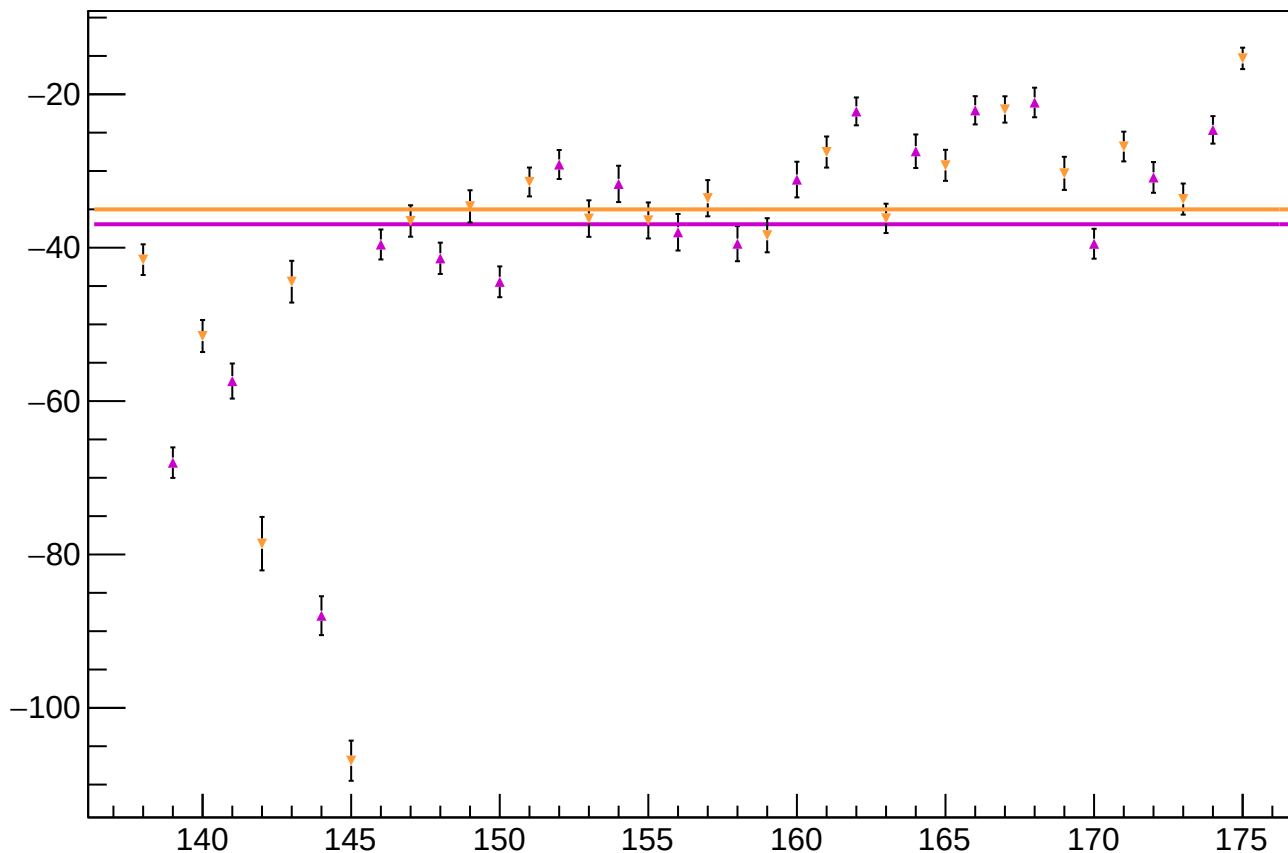
Right: 105.327+/-0.058  $\chi^2/\text{NDF}$ : 129018.0/35

In: 118.397+/-0.040  $\chi^2/\text{NDF}$ : 93856.7/34

Out: 117.086+/-0.039  $\chi^2/\text{NDF}$ : 101216.2/38

All: 117.721+/-0.028  $\chi^2/\text{NDF}$ : 195629.6/73

reg\_asym\_at1\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-35.004 \pm 0.463$   $\chi^2/\text{NDF}$ : 1303.7/19

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left In:  $-36.945 \pm 0.485$   $\chi^2/\text{NDF}$ : 1054.6/17

Left:  $-35.930 \pm 0.335$   $\chi^2/\text{NDF}$ : 2366.7/37

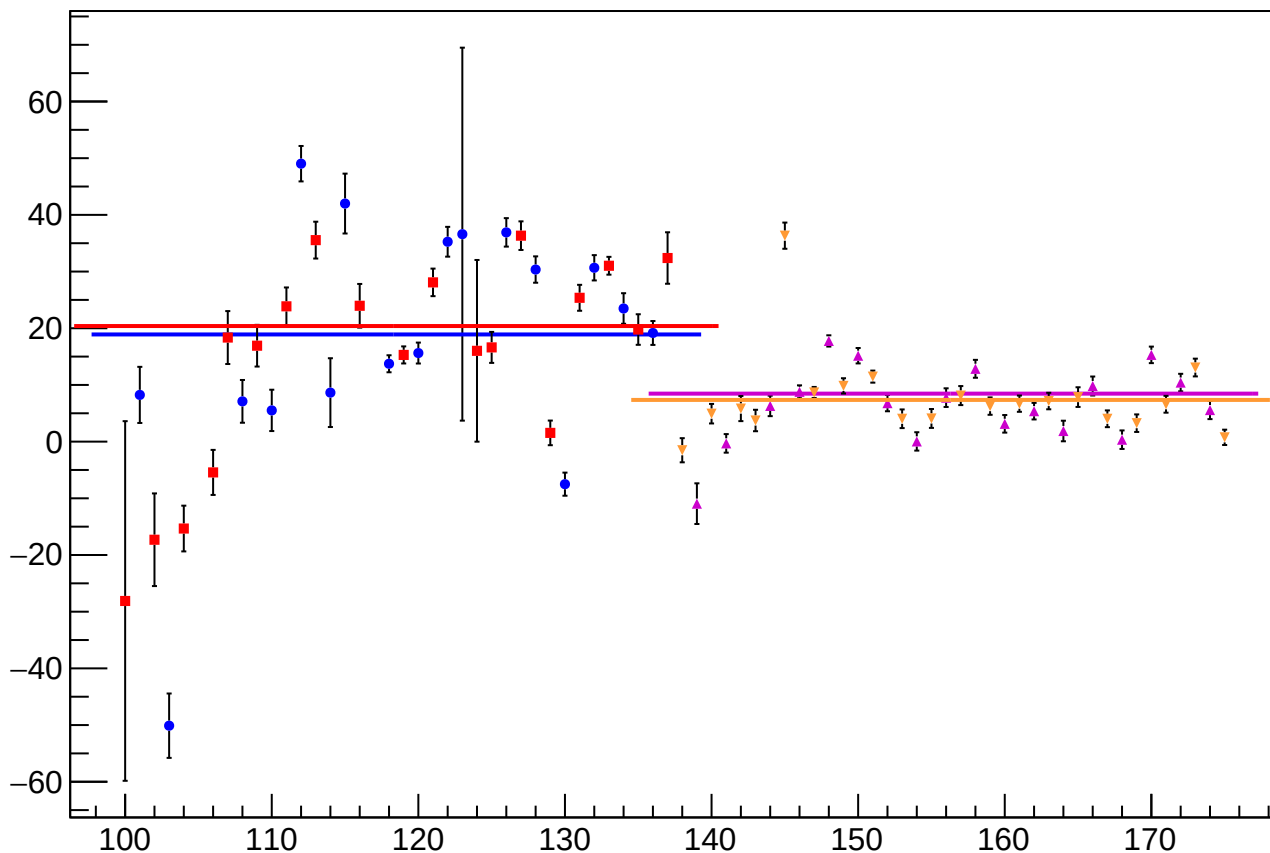
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

In:  $-36.945 \pm 0.485$   $\chi^2/\text{NDF}$ : 1054.6/17

Out:  $-35.004 \pm 0.463$   $\chi^2/\text{NDF}$ : 1303.7/19

All:  $-35.930 \pm 0.335$   $\chi^2/\text{NDF}$ : 2366.7/37

reg\_asym\_at1\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 18.906 $\pm$ 0.644  $\chi^2$ /NDF: 618.9/16

Left Out: 7.356 $\pm$ 0.337  $\chi^2$ /NDF:259.3/19

Right Out: 20.390 $\pm$ 0.644  $\chi^2$ /NDF: 365.3/18

Left In: 8.466 $\pm$ 0.355  $\chi^2$ /NDF:289.4/17

Left: 7.882 $\pm$ 0.245  $\chi^2$ /NDF: 553.9/37

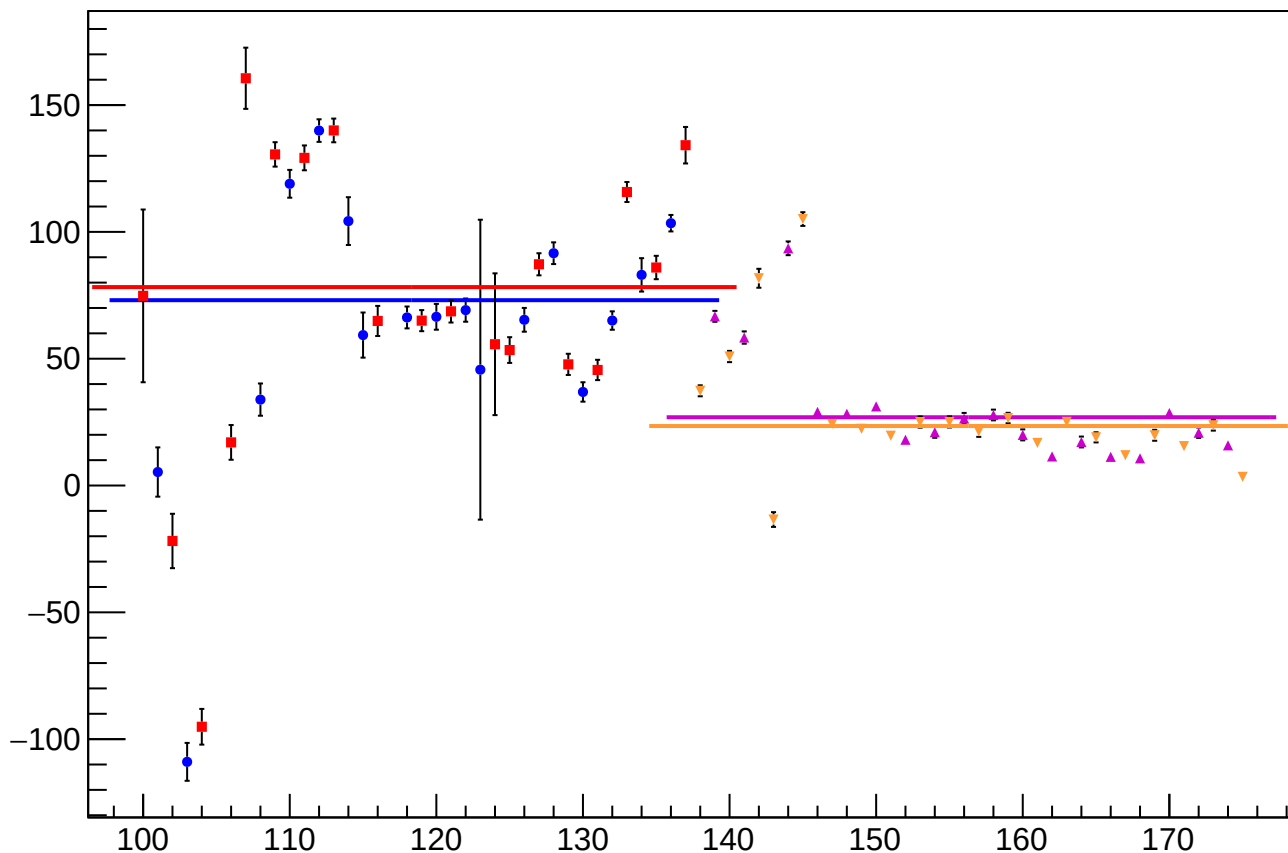
Right: 19.648 $\pm$ 0.455  $\chi^2$ /NDF: 986.9/35

In: 10.905 $\pm$ 0.311  $\chi^2$ /NDF:1110.1/34

Out: 10.161 $\pm$ 0.299  $\chi^2$ /NDF:946.3/38

All: 10.518 $\pm$ 0.215  $\chi^2$ /NDF: 2059.4/73

reg\_asym\_at1\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 73.071 $\pm$ 1.228  $\chi^2$ /NDF: 1200.0/16

Left Out: 23.455 $\pm$ 0.457  $\chi^2$ /NDF:1803.9/19

Right Out: 78.241 $\pm$ 1.223  $\chi^2$ /NDF: 1542.7/18

Left In: 26.917 $\pm$ 0.478  $\chi^2$ /NDF:1439.8/17

Left: 25.108 $\pm$ 0.330  $\chi^2$ /NDF: 3271.1/37

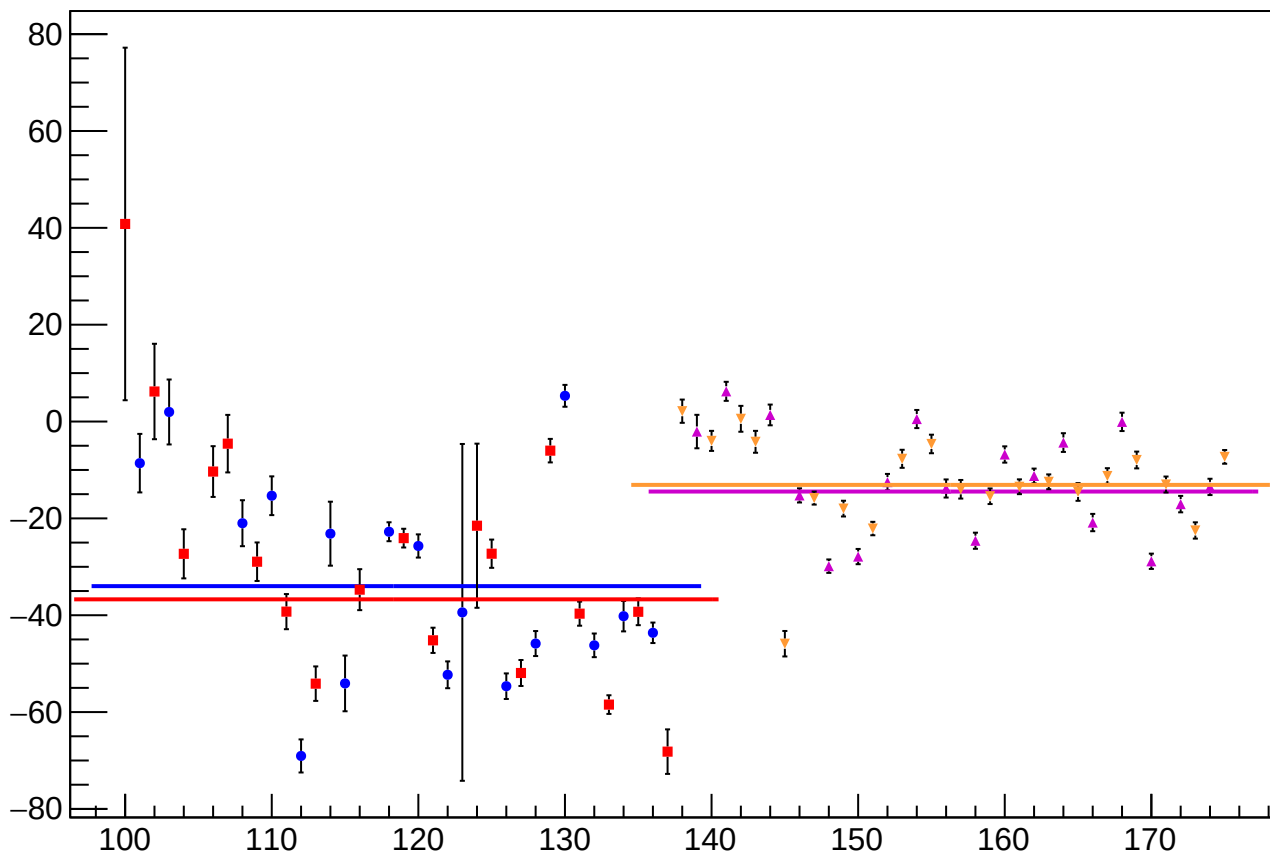
Right: 75.667 $\pm$ 0.866  $\chi^2$ /NDF: 2751.5/35

In: 32.992 $\pm$ 0.445  $\chi^2$ /NDF:3866.8/34

Out: 30.171 $\pm$ 0.428  $\chi^2$ /NDF:5108.5/38

All: 31.525 $\pm$ 0.309  $\chi^2$ /NDF: 8996.2/73

reg\_asym\_at1\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-33.991 \pm 0.736$   $\chi^2/\text{NDF}$ : 719.8/16

Left Out:  $-13.082 \pm 0.388$   $\chi^2/\text{NDF}$ : 401.0/19

Right Out:  $-36.719 \pm 0.737$   $\chi^2/\text{NDF}$ : 542.9/18

Left In:  $-14.457 \pm 0.409$   $\chi^2/\text{NDF}$ : 685.7/17

Left:  $-13.733 \pm 0.281$   $\chi^2/\text{NDF}$ : 1092.6/37

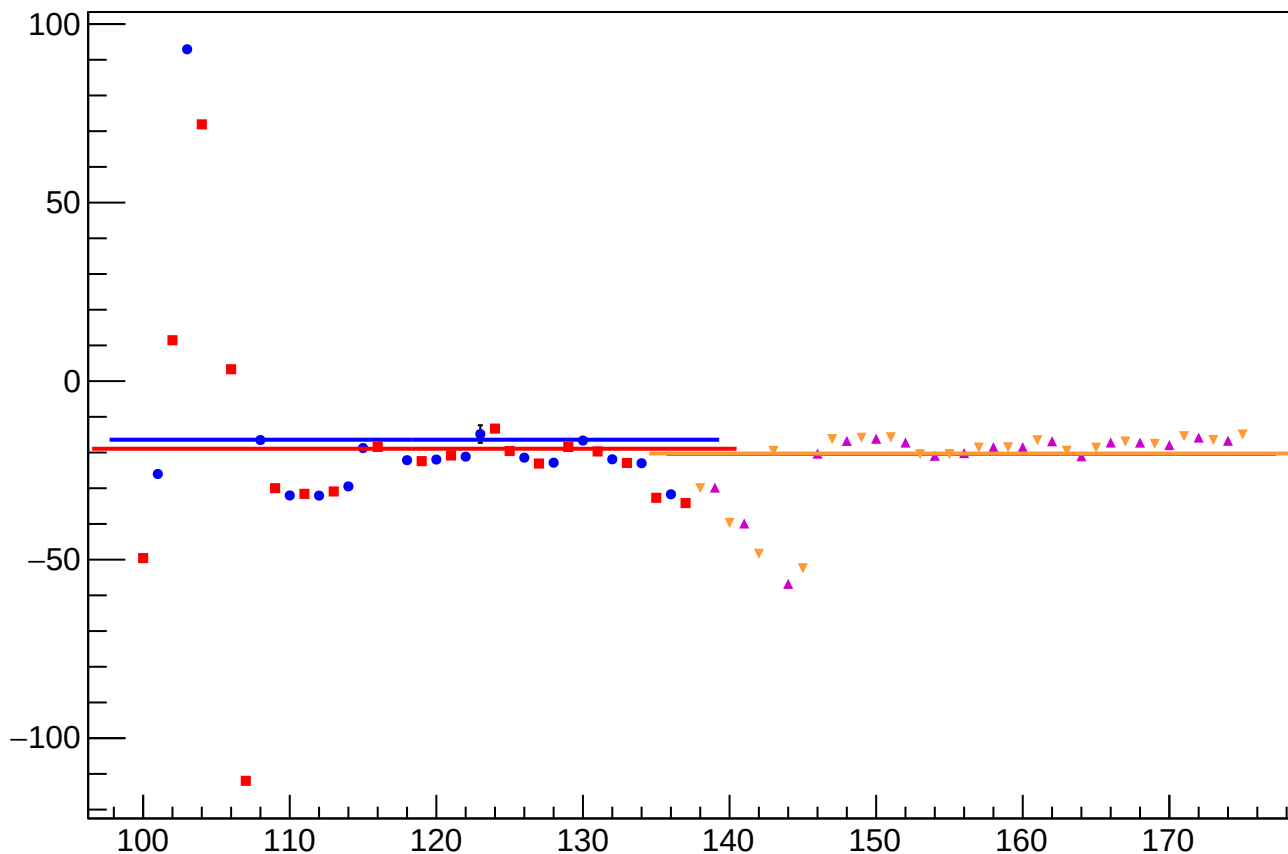
Right:  $-35.354 \pm 0.521$   $\chi^2/\text{NDF}$ : 1269.6/35

In:  $-19.063 \pm 0.358$   $\chi^2/\text{NDF}$ : 1943.4/34

Out:  $-18.210 \pm 0.343$   $\chi^2/\text{NDF}$ : 1749.8/38

All:  $-18.619 \pm 0.248$   $\chi^2/\text{NDF}$ : 3696.2/73

reg\_asym\_at1\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-16.408 \pm 0.044$   $\chi^2/\text{NDF}: 474368.4/16$

Left Out:  $-20.280 \pm 0.018$   $\chi^2/\text{NDF}: 208086.2/19$

Right Out:  $-18.934 \pm 0.045$   $\chi^2/\text{NDF}: 434152.2/18$

Left In:  $-20.396 \pm 0.019$   $\chi^2/\text{NDF}: 170452.1/17$

Left:  $-20.337 \pm 0.013$   $\chi^2/\text{NDF}: 378558.6/37$

Right:  $-17.648 \pm 0.032$   $\chi^2/\text{NDF}: 910108.0/35$

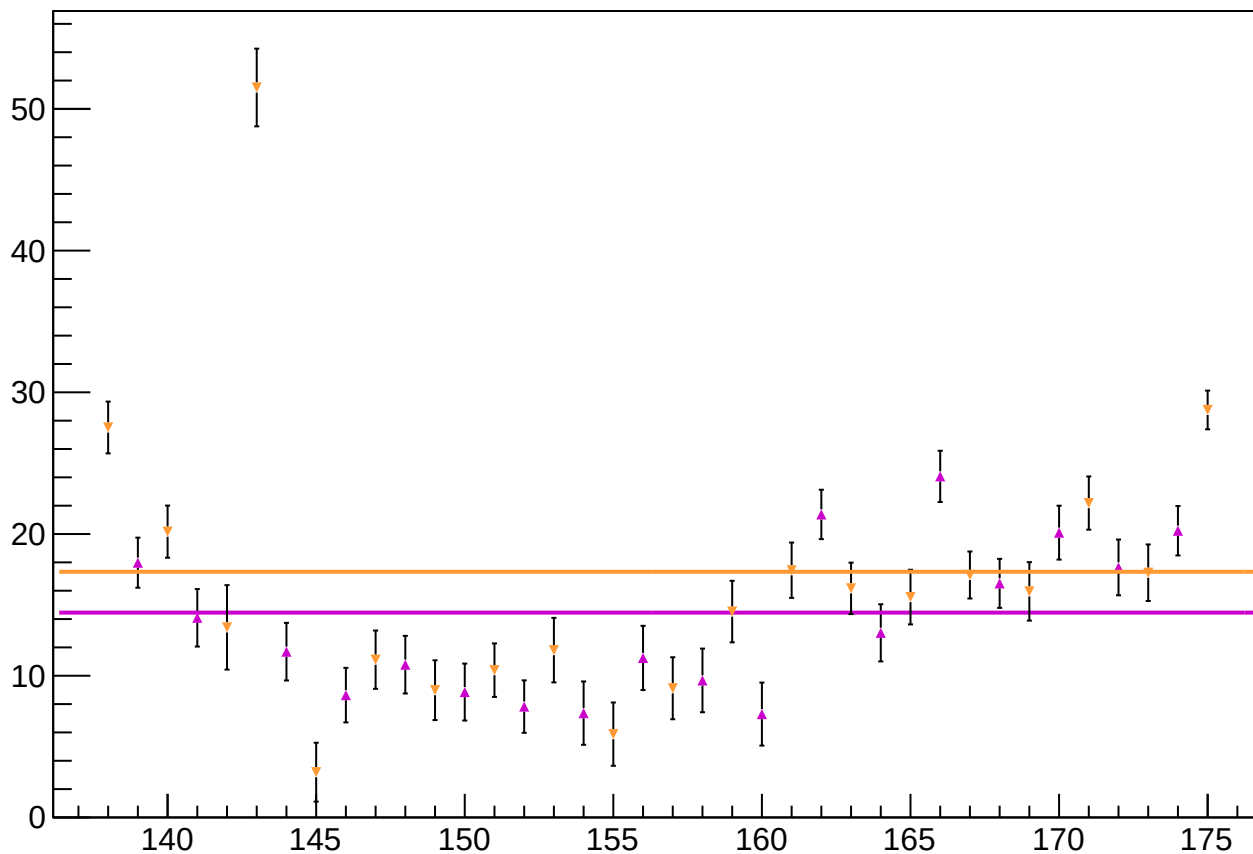
In:  $-19.806 \pm 0.017$   $\chi^2/\text{NDF}: 651687.7/34$

Out:  $-20.094 \pm 0.017$   $\chi^2/\text{NDF}: 643000.9/38$

All:  $-19.953 \pm 0.012$   $\chi^2/\text{NDF}: 1294833.5/73$



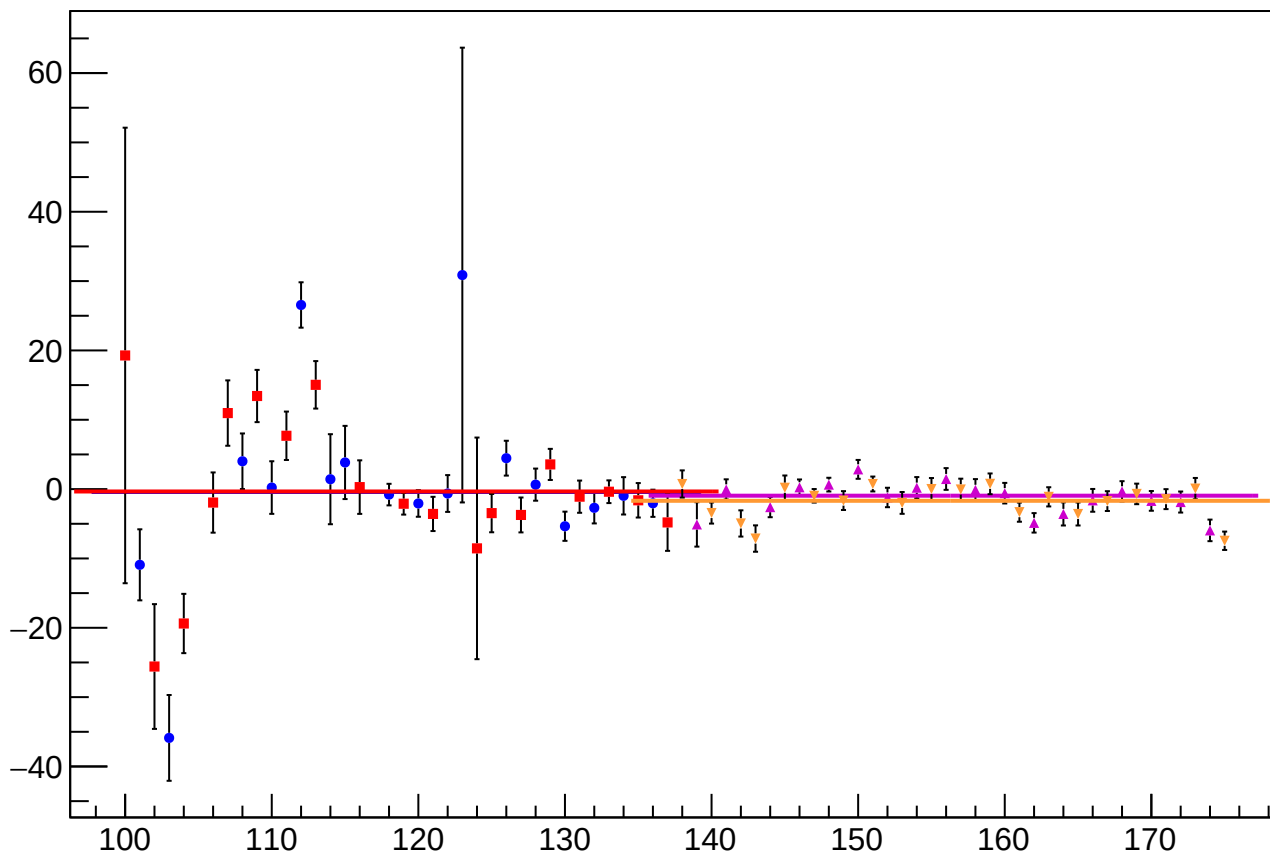
reg\_asym\_at1\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: 17.338 $\pm$ 0.441  $\chi^2/\text{NDF}$ :401.3/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: 14.455 $\pm$ 0.460  $\chi^2/\text{NDF}$ :134.3/17

Left: 15.955 $\pm$ 0.318  $\chi^2/\text{NDF}$ : 556.1/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: 14.455 $\pm$ 0.460  $\chi^2/\text{NDF}$ :134.3/17  
 Out: 17.338 $\pm$ 0.441  $\chi^2/\text{NDF}$ :401.3/19  
 All: 15.955 $\pm$ 0.318  $\chi^2/\text{NDF}$ : 556.1/37

reg\_asym\_at1\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-0.414 \pm 0.653$   $\chi^2/\text{NDF}$ : 119.9/16

Left Out:  $-1.685 \pm 0.324$   $\chi^2/\text{NDF}$ : 49.4/19

Right Out:  $-0.342 \pm 0.658$   $\chi^2/\text{NDF}$ : 83.7/18

Left In:  $-0.949 \pm 0.340$   $\chi^2/\text{NDF}$ : 39.8/17

Left:  $-1.335 \pm 0.235$   $\chi^2/\text{NDF}$ : 91.6/37

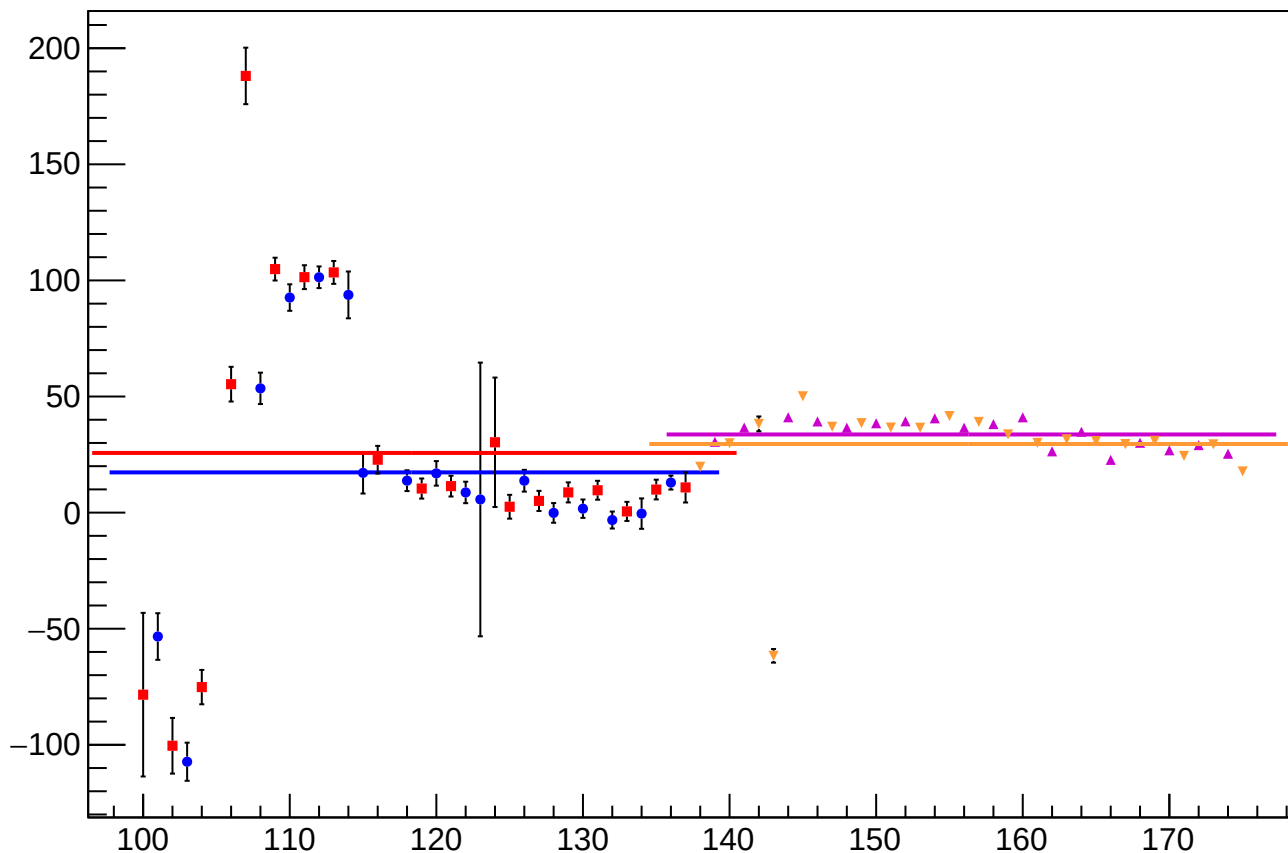
Right:  $-0.378 \pm 0.463$   $\chi^2/\text{NDF}$ : 203.7/35

In:  $-0.835 \pm 0.302$   $\chi^2/\text{NDF}$ : 160.3/34

Out:  $-1.423 \pm 0.291$   $\chi^2/\text{NDF}$ : 136.4/38

All:  $-1.139 \pm 0.209$   $\chi^2/\text{NDF}$ : 298.7/73

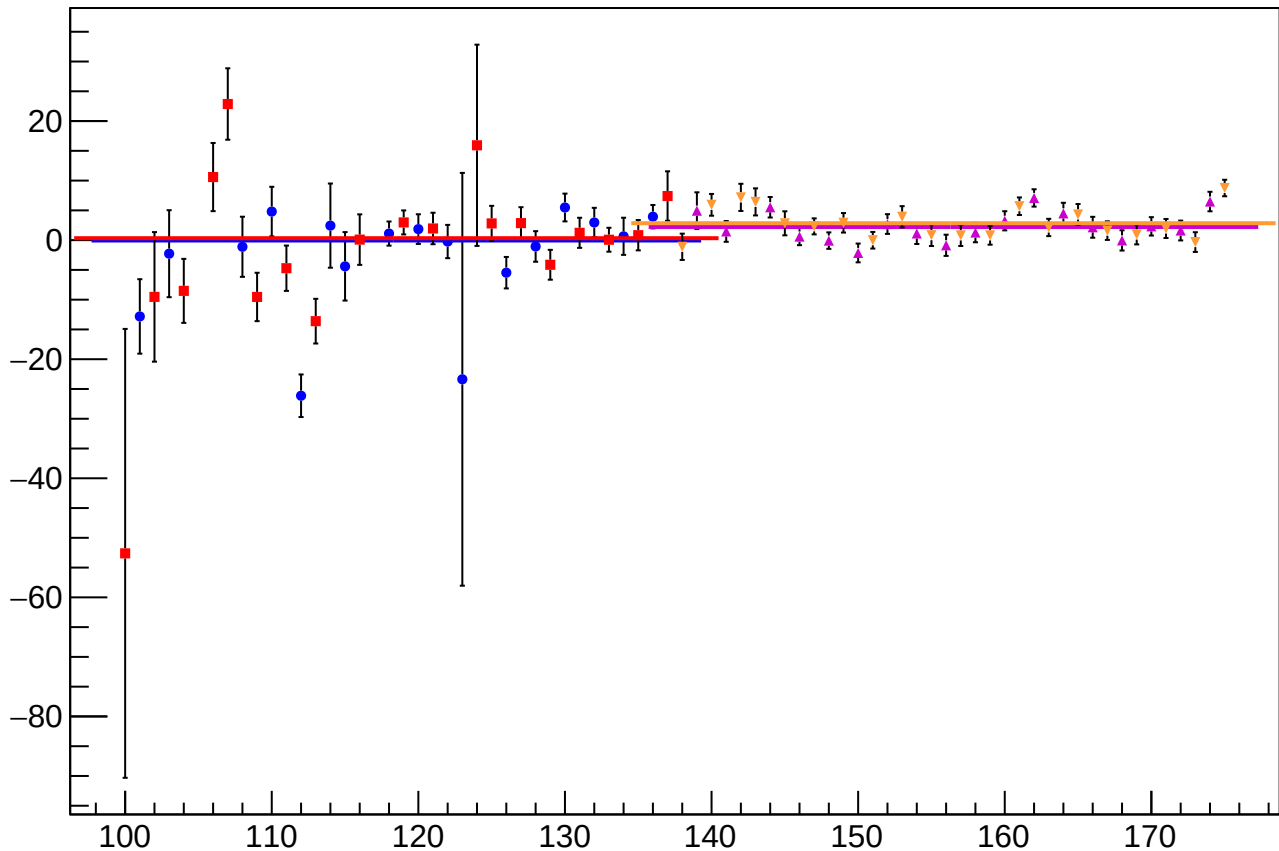
reg\_asym\_at1\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $17.328 \pm 1.239$   $\chi^2/\text{NDF}: 943.2/16$   
 Left Out:  $29.547 \pm 0.437$   $\chi^2/\text{NDF}: 1299.0/19$   
 Right Out:  $25.701 \pm 1.243$   $\chi^2/\text{NDF}: 1379.1/18$   
 Left In:  $33.660 \pm 0.455$   $\chi^2/\text{NDF}: 171.1/17$

Left:  $31.521 \pm 0.315$   $\chi^2/\text{NDF}: 1512.6/37$   
 Right:  $21.501 \pm 0.877$   $\chi^2/\text{NDF}: 2345.0/35$   
 In:  $31.720 \pm 0.427$   $\chi^2/\text{NDF}: 1267.5/34$   
 Out:  $29.124 \pm 0.412$   $\chi^2/\text{NDF}: 2686.6/38$   
 All:  $30.376 \pm 0.297$   $\chi^2/\text{NDF}: 3973.2/73$

reg\_asym\_at1\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-0.059 \pm 0.744$   $\chi^2/\text{NDF}$ : 76.5/16

Left Out:  $2.843 \pm 0.372$   $\chi^2/\text{NDF}$ : 49.9/19

Right Out:  $0.326 \pm 0.749$   $\chi^2/\text{NDF}$ : 55.1/18

Left In:  $2.210 \pm 0.391$   $\chi^2/\text{NDF}$ : 42.1/17

Left:  $2.542 \pm 0.270$   $\chi^2/\text{NDF}$ : 93.3/37

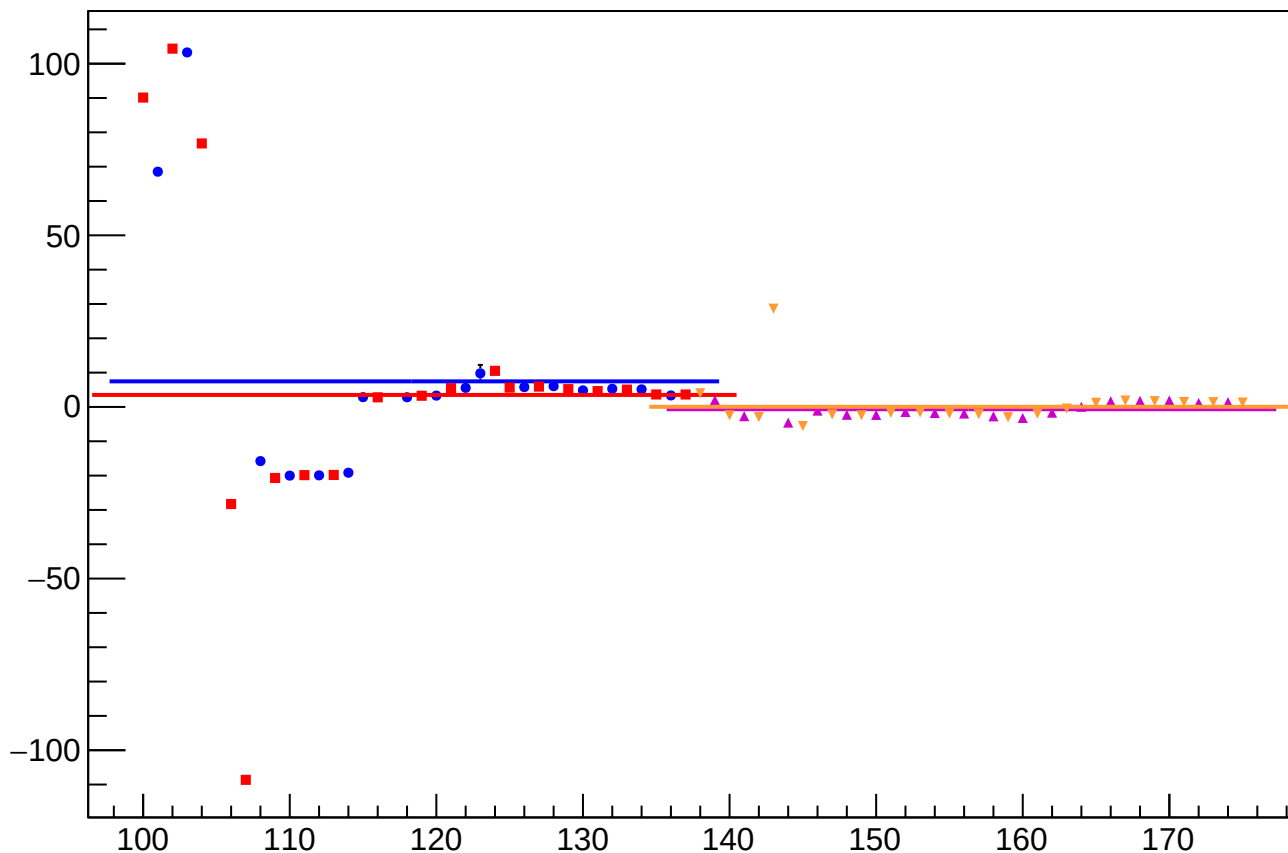
Right:  $0.132 \pm 0.528$   $\chi^2/\text{NDF}$ : 131.8/35

In:  $1.718 \pm 0.346$   $\chi^2/\text{NDF}$ : 125.9/34

Out:  $2.345 \pm 0.333$   $\chi^2/\text{NDF}$ : 114.1/38

All:  $2.043 \pm 0.240$   $\chi^2/\text{NDF}$ : 241.7/73

reg\_asym\_at1\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 7.454+/-0.044  $\chi^2/\text{NDF}$ : 356053.3/16

Left Out: 0.049+/-0.017  $\chi^2/\text{NDF}$ : 77229.0/19

Right Out: 3.502+/-0.046  $\chi^2/\text{NDF}$ : 510579.7/18

Left In: -0.667+/-0.018  $\chi^2/\text{NDF}$ : 12630.4/17

Left: -0.301+/-0.012  $\chi^2/\text{NDF}$ : 90703.9/37

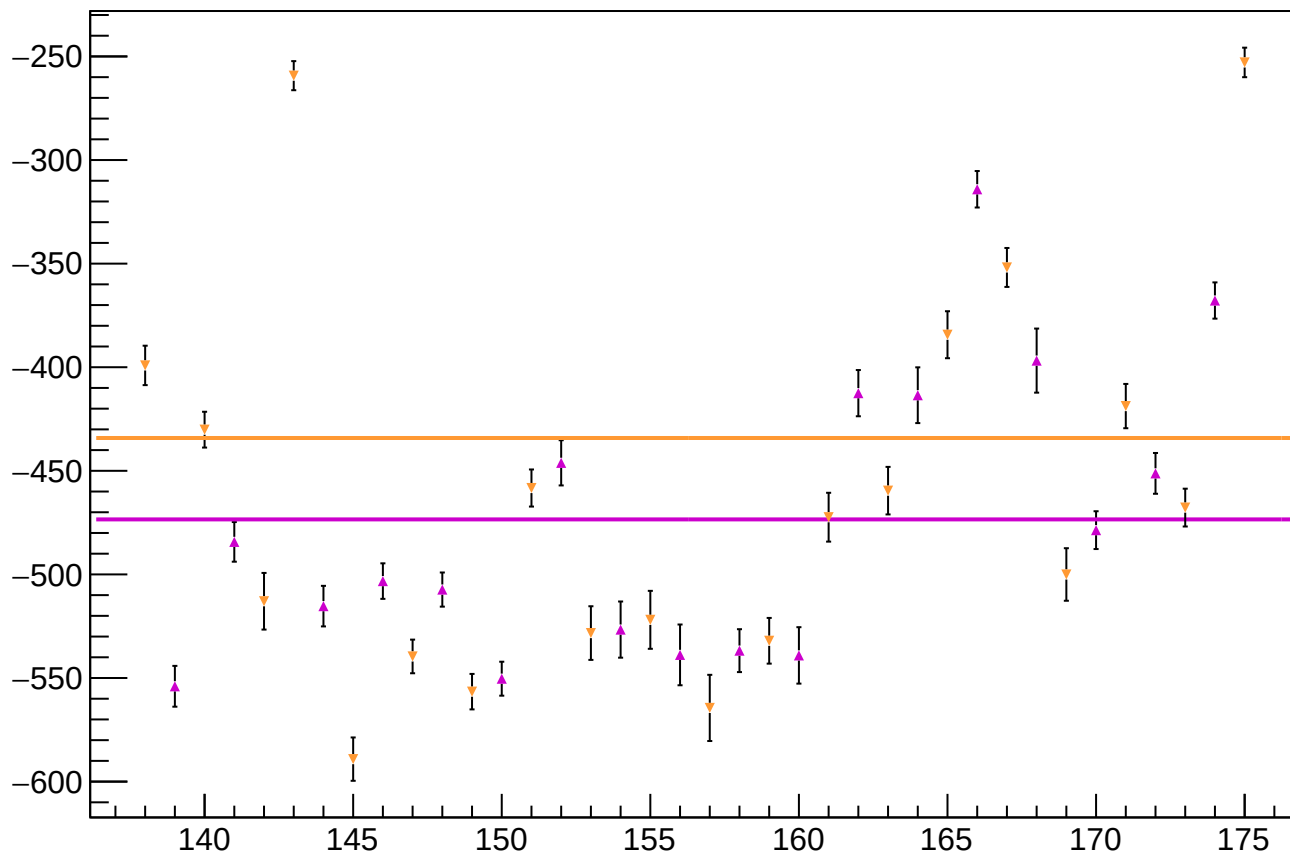
Right: 5.528+/-0.032  $\chi^2/\text{NDF}$ : 870492.1/35

In: 0.436+/-0.016  $\chi^2/\text{NDF}$ : 397569.0/34

Out: 0.482+/-0.016  $\chi^2/\text{NDF}$ : 592835.1/38

All: 0.459+/-0.011  $\chi^2/\text{NDF}$ : 990408.2/73

reg\_asym\_at2\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -434.157+/-2.212  $\chi^2/\text{NDF}$ :2306.9/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -473.449+/-2.396  $\chi^2/\text{NDF}$ :858.6/17

Left: -452.237+/-1.626  $\chi^2/\text{NDF}$ : 3310.7/37

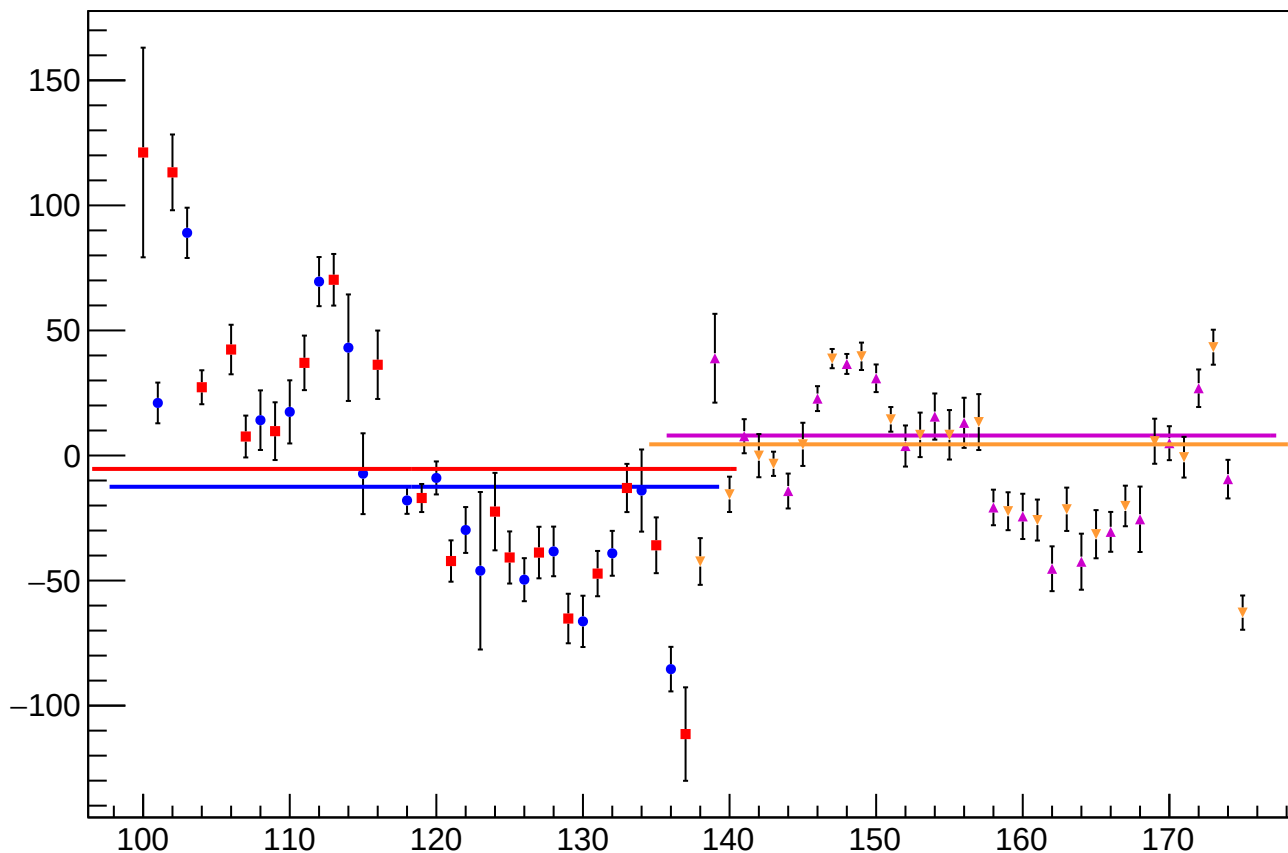
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -473.449+/-2.396  $\chi^2/\text{NDF}$ :858.6/17

Out: -434.157+/-2.212  $\chi^2/\text{NDF}$ :2306.9/19

All: -452.237+/-1.626  $\chi^2/\text{NDF}$ : 3310.7/37

reg\_asym\_at2\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-12.500 \pm 2.311$   $\chi^2/\text{NDF}$ : 341.1/16

Left Out:  $4.472 \pm 1.553$   $\chi^2/\text{NDF}$ : 347.8/19

Right Out:  $-5.363 \pm 2.264$   $\chi^2/\text{NDF}$ : 344.6/18

Left In:  $7.992 \pm 1.695$   $\chi^2/\text{NDF}$ : 218.0/17

Left:  $6.078 \pm 1.145$   $\chi^2/\text{NDF}$ : 568.2/37

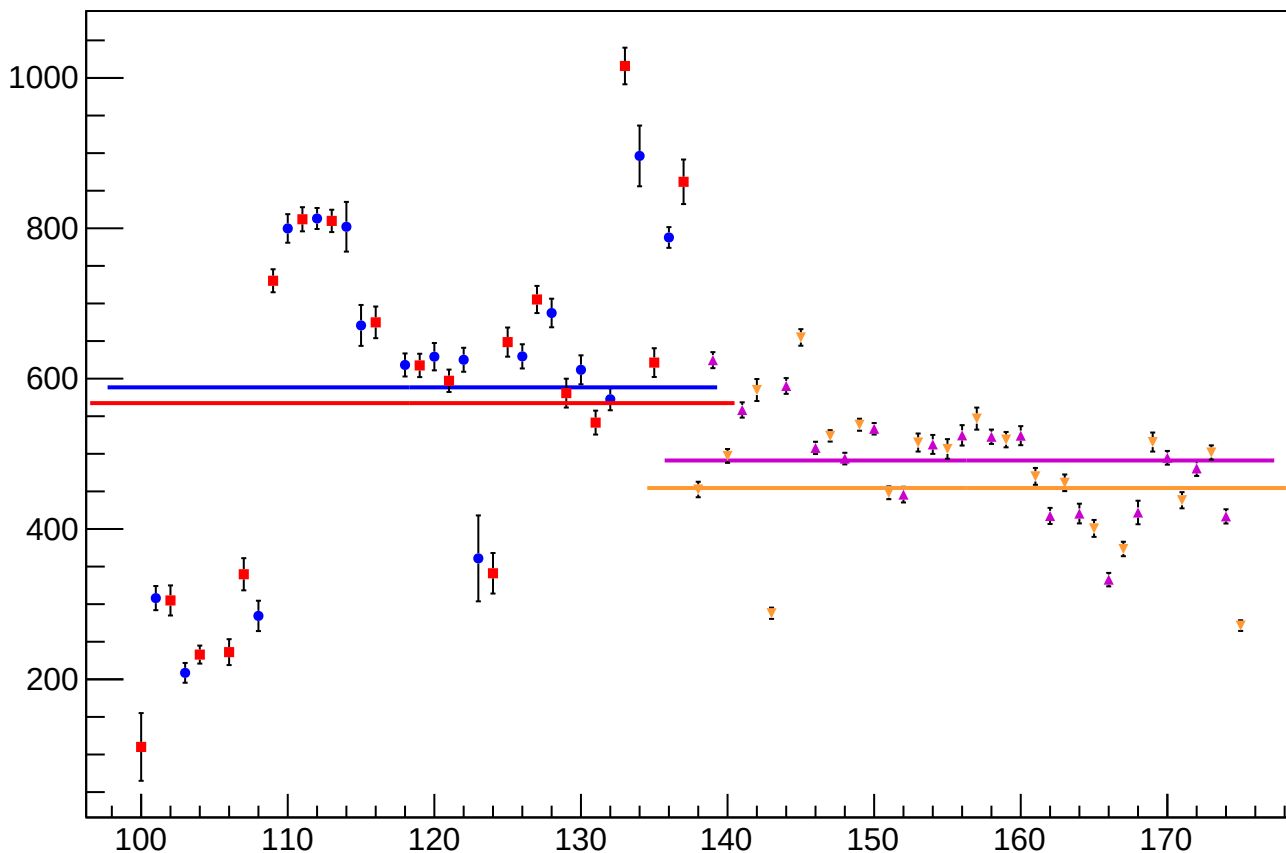
Right:  $-8.858 \pm 1.617$   $\chi^2/\text{NDF}$ : 690.5/35

In:  $0.823 \pm 1.367$   $\chi^2/\text{NDF}$ : 610.2/34

Out:  $1.327 \pm 1.280$   $\chi^2/\text{NDF}$ : 705.2/38

All:  $1.091 \pm 0.934$   $\chi^2/\text{NDF}$ : 1315.5/73

reg\_asym\_at2\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 588.421 $\pm$ 4.320  $\chi^2$ /NDF: 2130.2/16

Left Out: 454.504 $\pm$ 2.202  $\chi^2$ /NDF:2049.7/19

Right Out: 567.451 $\pm$ 4.137  $\chi^2$ /NDF: 2784.8/18

Left In: 491.122 $\pm$ 2.368  $\chi^2$ /NDF:840.6/17

Left: 471.485 $\pm$ 1.613  $\chi^2$ /NDF: 3018.6/37

Right: 577.481 $\pm$ 2.988  $\chi^2$ /NDF: 4927.3/35

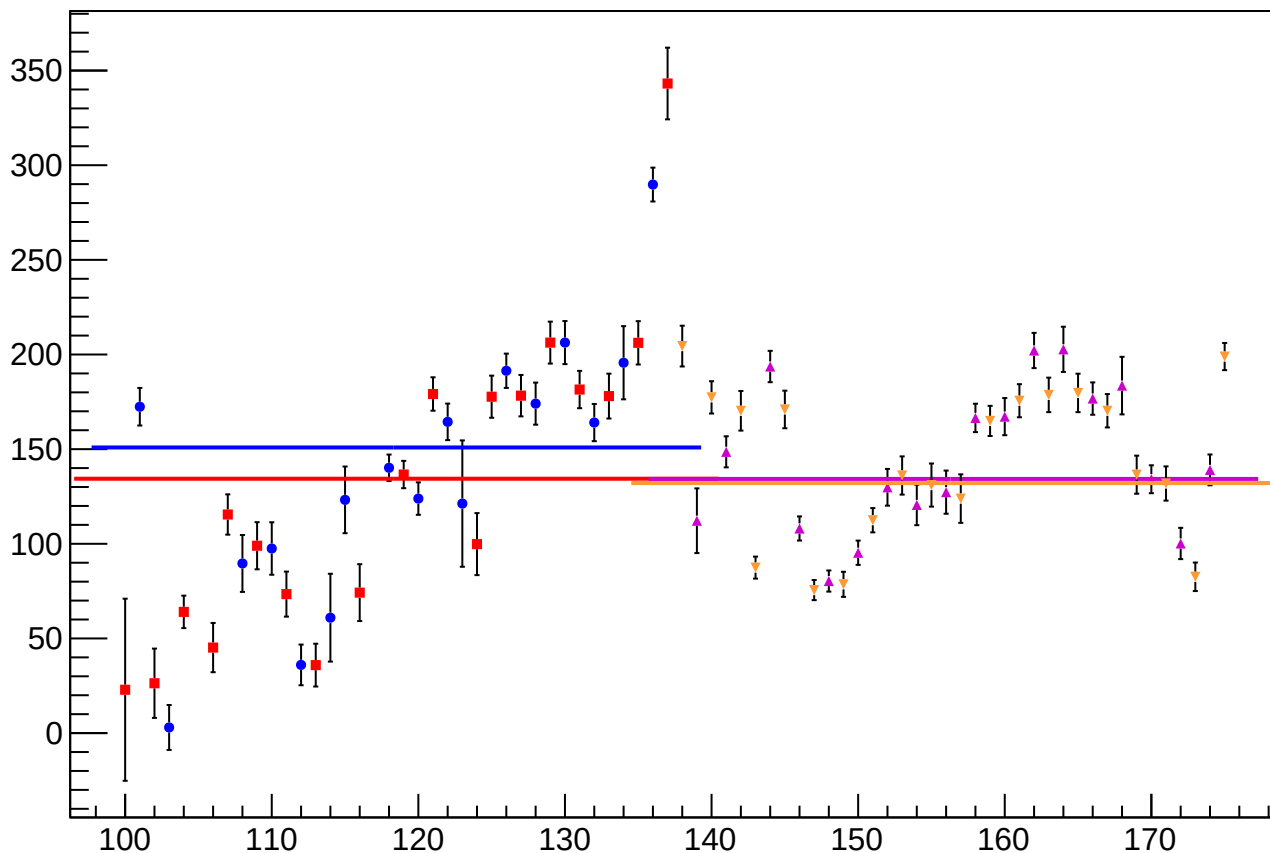
In: 513.603 $\pm$ 2.077  $\chi^2$ /NDF:3360.8/34

Out: 479.446 $\pm$ 1.944  $\chi^2$ /NDF:5415.4/38

All: 495.398 $\pm$ 1.419  $\chi^2$ /NDF: 8920.4/73



reg\_asym\_at2\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 150.891 $\pm$ 2.674  $\chi^2$ /NDF: 634.8/16

Left Out: 132.092 $\pm$ 1.825  $\chi^2$ /NDF: 588.4/19

Right Out: 134.381 $\pm$ 2.620  $\chi^2$ /NDF: 584.9/18

Left In: 134.280 $\pm$ 1.985  $\chi^2$ /NDF: 374.0/17

Left: 133.095 $\pm$ 1.344  $\chi^2$ /NDF: 963.0/37

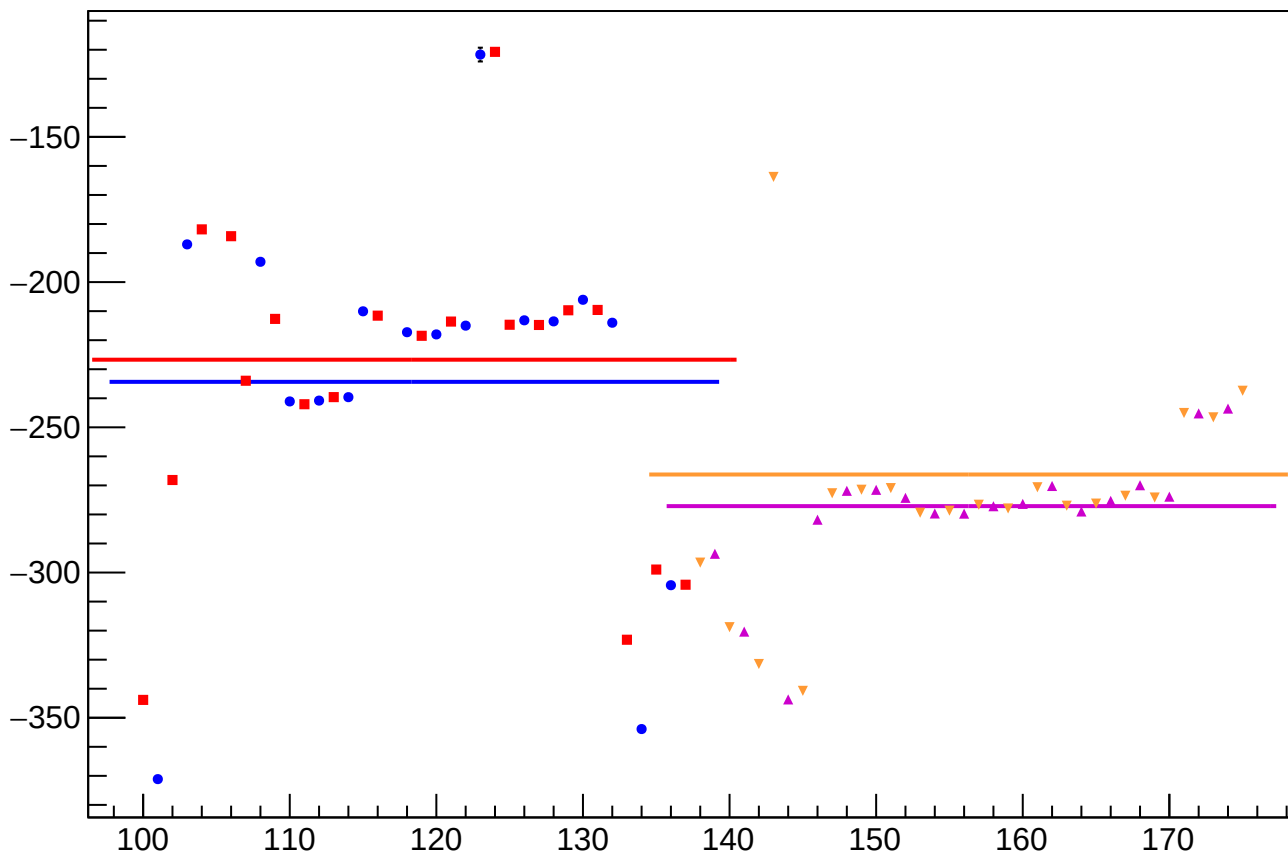
Right: 142.467 $\pm$ 1.871  $\chi^2$ /NDF: 1239.2/35

In: 140.181 $\pm$ 1.594  $\chi^2$ /NDF: 1033.7/34

Out: 132.840 $\pm$ 1.498  $\chi^2$ /NDF: 1173.8/38

All: 136.283 $\pm$ 1.091  $\chi^2$ /NDF: 2218.7/73

reg\_asym\_at2\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -234.341+/-0.148  $\chi^2/\text{NDF}$ : 145165.1/16

Left Out: -266.243+/-0.089  $\chi^2/\text{NDF}$ :199267.0/19

Right Out: -226.716+/-0.141  $\chi^2/\text{NDF}$ : 99440.4/18

Left In: -277.132+/-0.093  $\chi^2/\text{NDF}$ :52766.6/17

Left: -271.429+/-0.064  $\chi^2/\text{NDF}$ : 259187.9/37

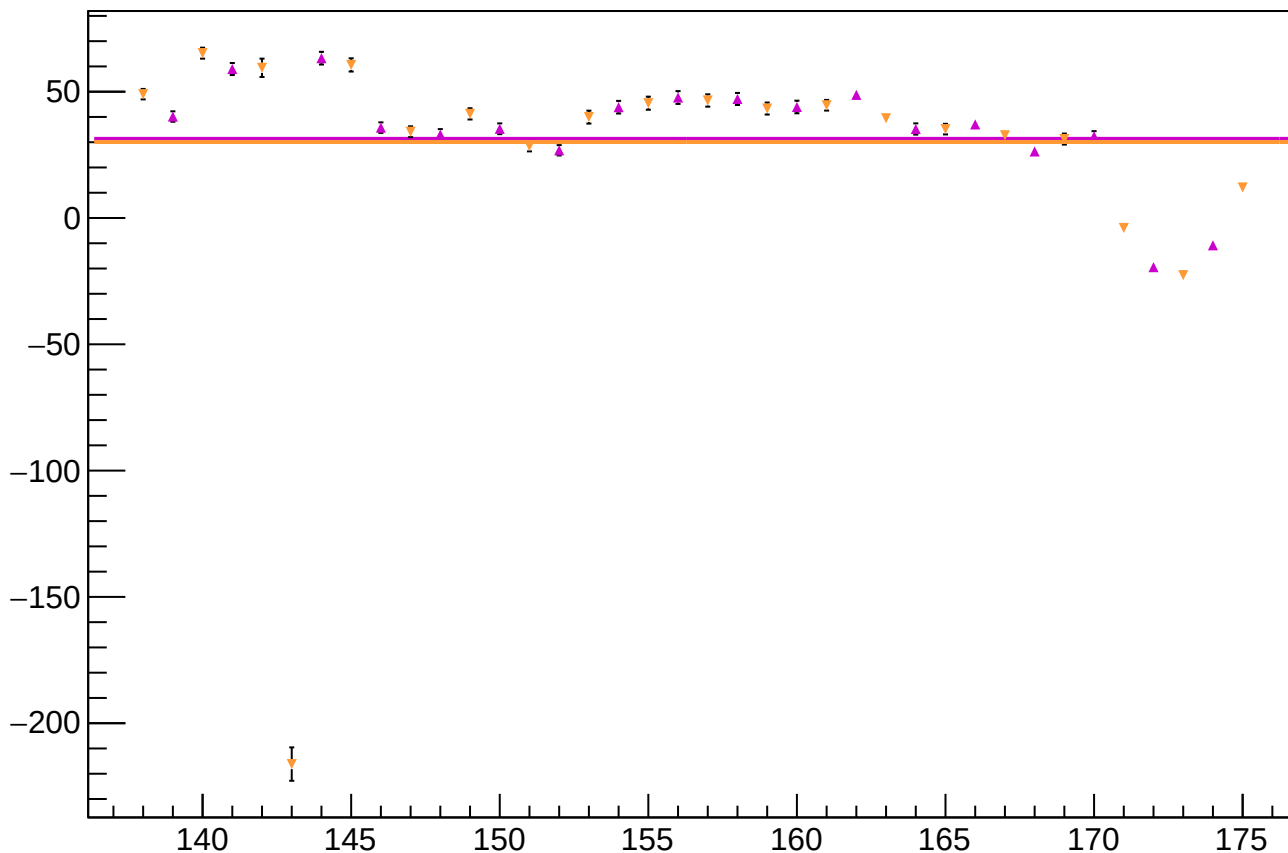
Right: -230.345+/-0.102  $\chi^2/\text{NDF}$ : 245990.9/35

In: -265.023+/-0.079  $\chi^2/\text{NDF}$ :257624.5/34

Out: -255.047+/-0.075  $\chi^2/\text{NDF}$ :354775.1/38

All: -259.797+/-0.054  $\chi^2/\text{NDF}$ : 620776.7/73

reg\_asym\_at2\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 30.097+/-0.484     $\chi^2/\text{NDF}$ :3389.4/19

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 31.327+/-0.499     $\chi^2/\text{NDF}$ :1883.9/17

Left: 30.693+/-0.348     $\chi^2/\text{NDF}$ : 5276.4/37

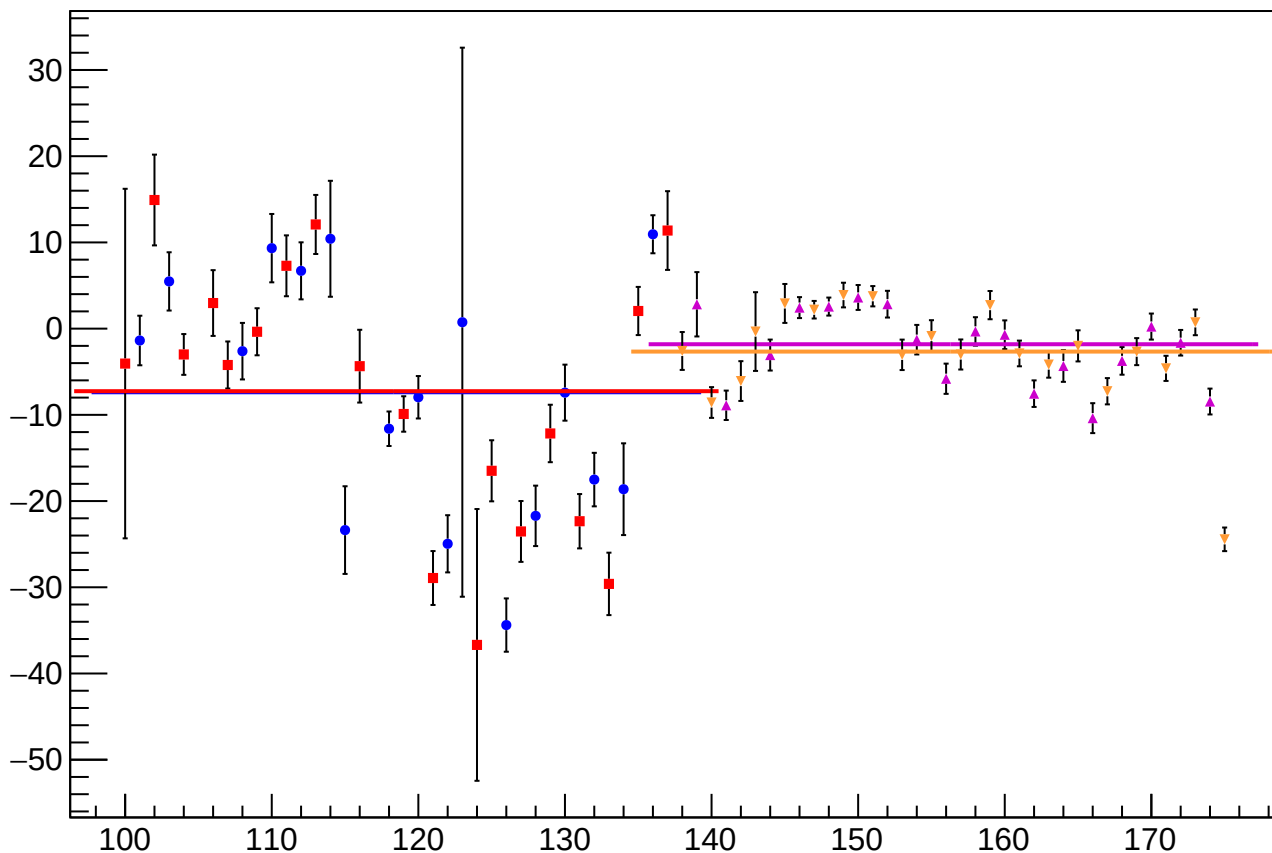
Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 31.327+/-0.499     $\chi^2/\text{NDF}$ :1883.9/17

Out: 30.097+/-0.484     $\chi^2/\text{NDF}$ :3389.4/19

All: 30.693+/-0.348     $\chi^2/\text{NDF}$ : 5276.4/37

reg\_asym\_at2\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-7.381 \pm 0.779$   $\chi^2/\text{NDF}$ : 283.6/16

Left Out:  $-2.661 \pm 0.355$   $\chi^2/\text{NDF}$ : 375.1/19

Right Out:  $-7.256 \pm 0.762$   $\chi^2/\text{NDF}$ : 257.3/18

Left In:  $-1.810 \pm 0.368$   $\chi^2/\text{NDF}$ : 141.6/17

Left:  $-2.251 \pm 0.256$   $\chi^2/\text{NDF}$ : 519.5/37

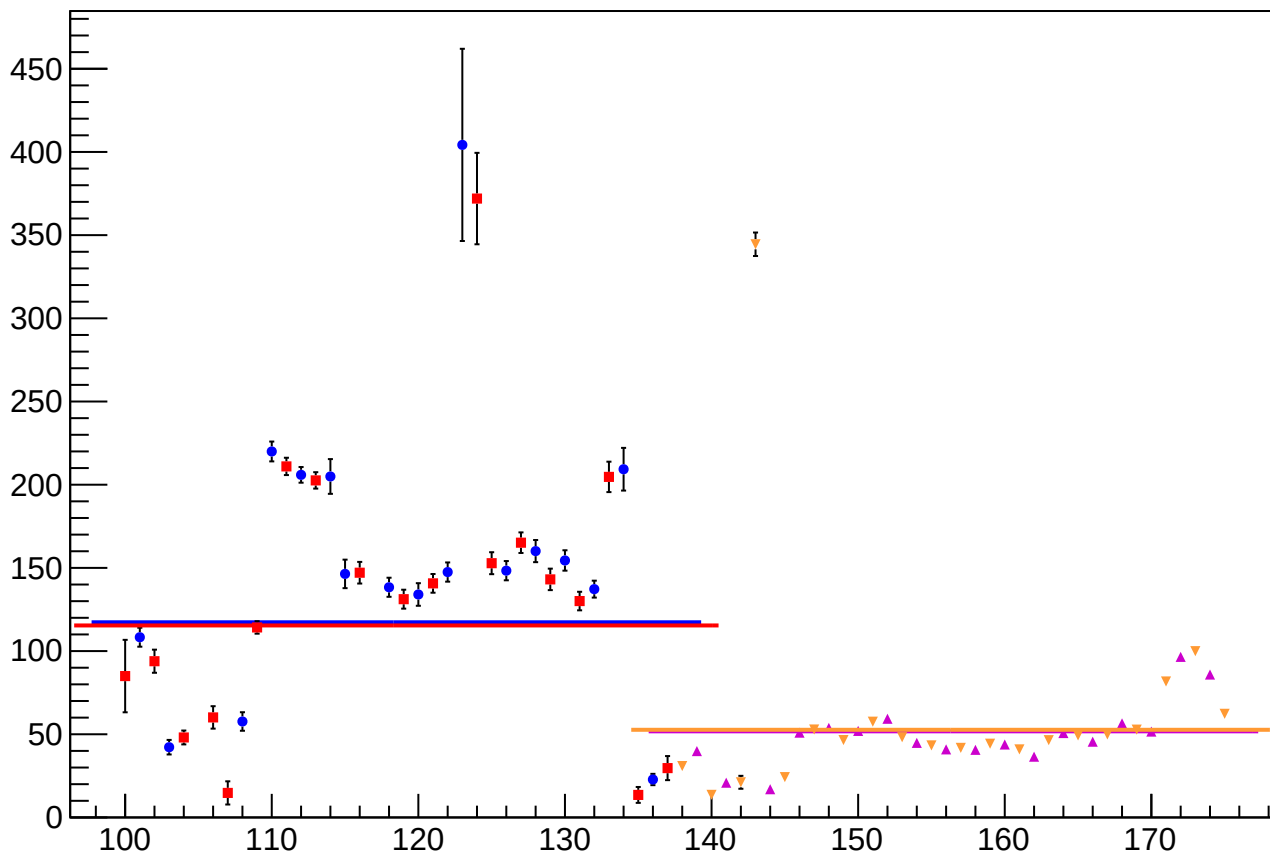
Right:  $-7.317 \pm 0.545$   $\chi^2/\text{NDF}$ : 540.9/35

In:  $-2.828 \pm 0.333$   $\chi^2/\text{NDF}$ : 467.1/34

Out:  $-3.482 \pm 0.322$   $\chi^2/\text{NDF}$ : 662.2/38

All:  $-3.165 \pm 0.231$   $\chi^2/\text{NDF}$ : 1131.3/73

reg\_asym\_at2\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 117.302 $\pm$ 1.409  $\chi^2$ /NDF: 2161.3/16

Left Out: 52.690 $\pm$ 0.478  $\chi^2$ /NDF:3209.2/19

Right Out: 115.405 $\pm$ 1.361  $\chi^2$ /NDF: 2150.5/18

Left In: 51.766 $\pm$ 0.494  $\chi^2$ /NDF:1376.3/17

Left: 52.243 $\pm$ 0.344  $\chi^2$ /NDF: 4587.4/37

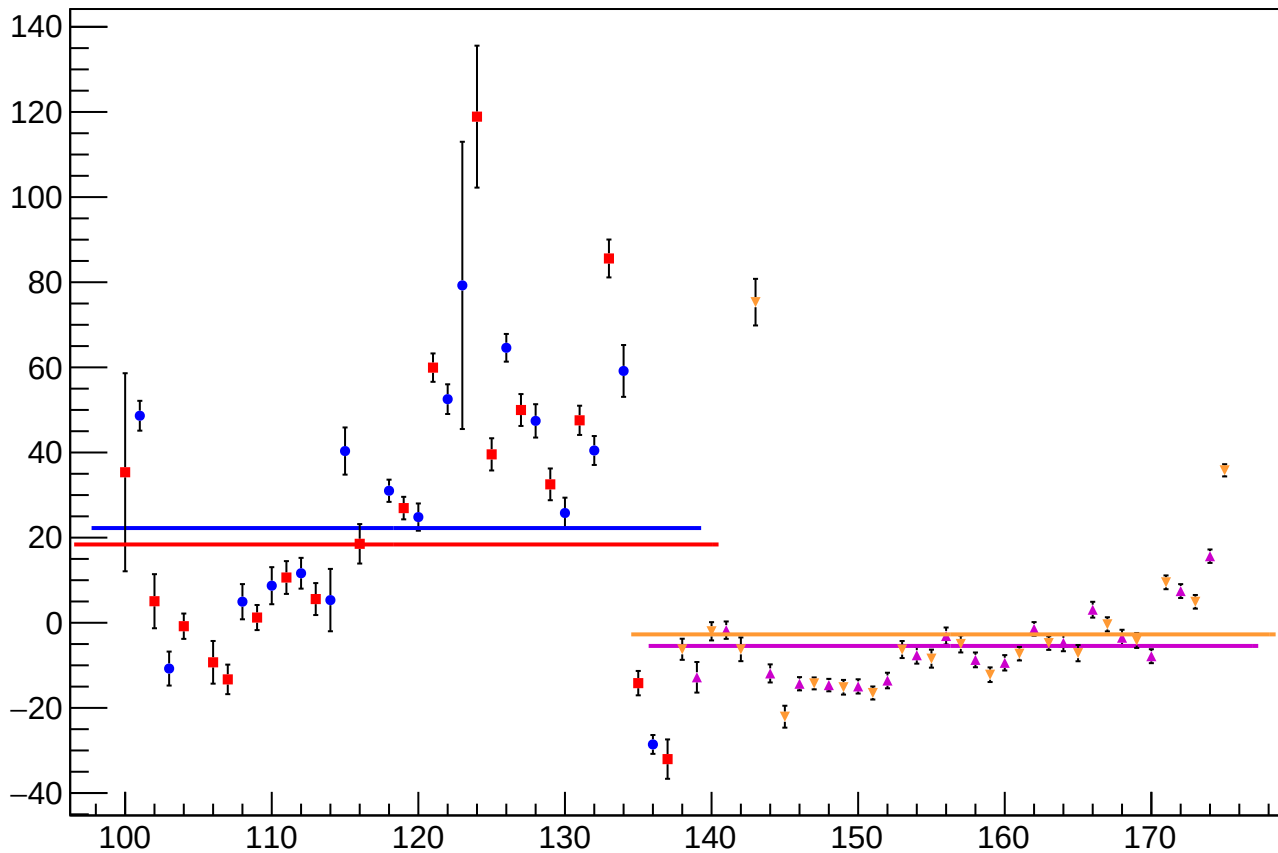
Right: 116.321 $\pm$ 0.979  $\chi^2$ /NDF: 4312.7/35

In: 58.938 $\pm$ 0.466  $\chi^2$ /NDF:5465.4/34

Out: 59.591 $\pm$ 0.451  $\chi^2$ /NDF:7250.5/38

All: 59.275 $\pm$ 0.324  $\chi^2$ /NDF: 12716.9/73

reg\_asym\_at2\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 22.250 $\pm$ 0.889  $\chi^2$ /NDF: 1071.4/16

Left Out: -2.730 $\pm$ 0.407  $\chi^2$ /NDF:1325.5/19

Right Out: 18.395 $\pm$ 0.872  $\chi^2$ /NDF: 1077.1/18

Left In: -5.443 $\pm$ 0.423  $\chi^2$ /NDF:422.8/17

Left: -4.035 $\pm$ 0.293  $\chi^2$ /NDF: 1769.6/37

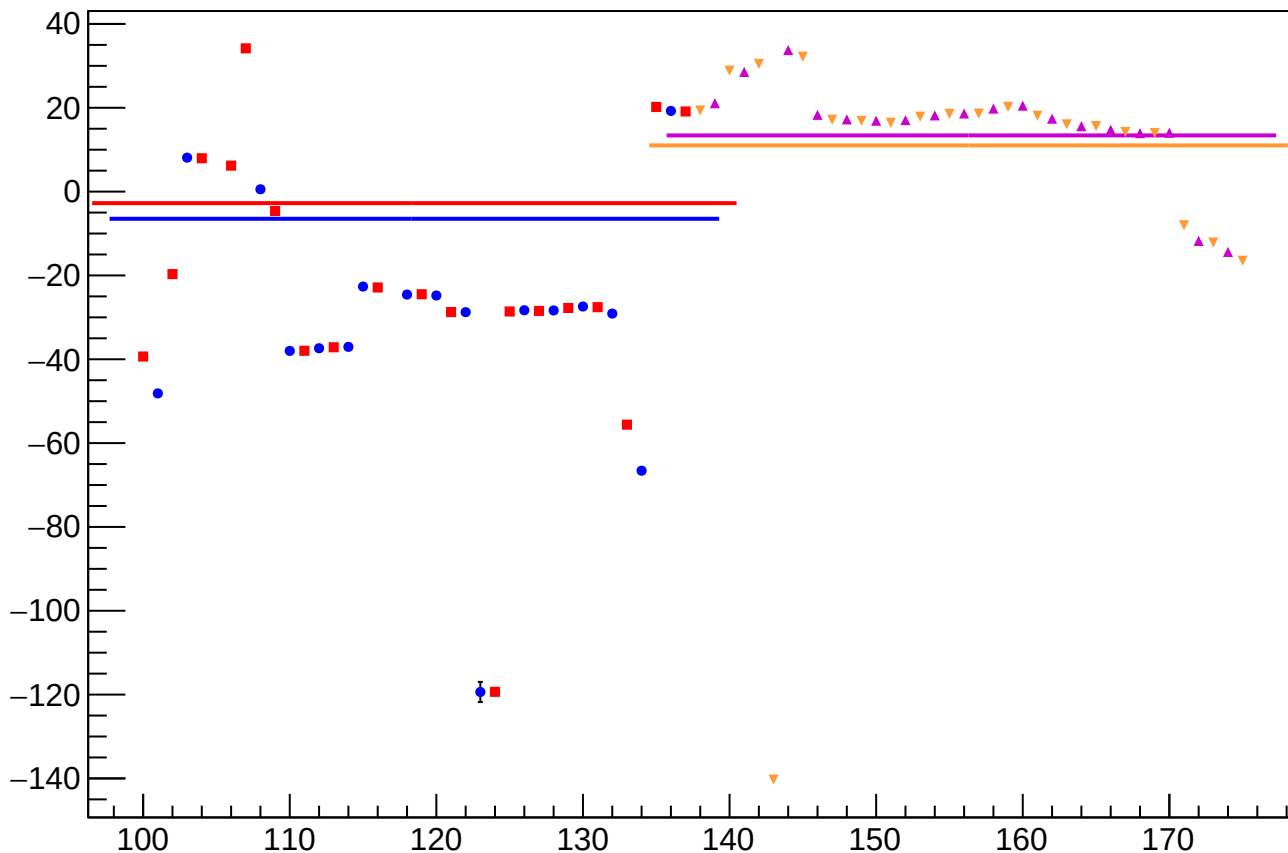
Right: 20.284 $\pm$ 0.622  $\chi^2$ /NDF: 2158.2/35

In: -0.335 $\pm$ 0.382  $\chi^2$ /NDF:2285.3/34

Out: 1.054 $\pm$ 0.369  $\chi^2$ /NDF:2884.6/38

All: 0.383 $\pm$ 0.265  $\chi^2$ /NDF: 5176.7/73

reg\_asym\_at2\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-6.482 \pm 0.046$   $\chi^2/\text{NDF}: 265804.1/16$

Left Out:  $11.024 \pm 0.019$   $\chi^2/\text{NDF}: 790970.8/19$

Right Out:  $-2.751 \pm 0.046$   $\chi^2/\text{NDF}: 266291.4/18$

Left In:  $13.406 \pm 0.019$   $\chi^2/\text{NDF}: 397836.7/17$

Left:  $12.203 \pm 0.013$   $\chi^2/\text{NDF}: 1196663.5/37$

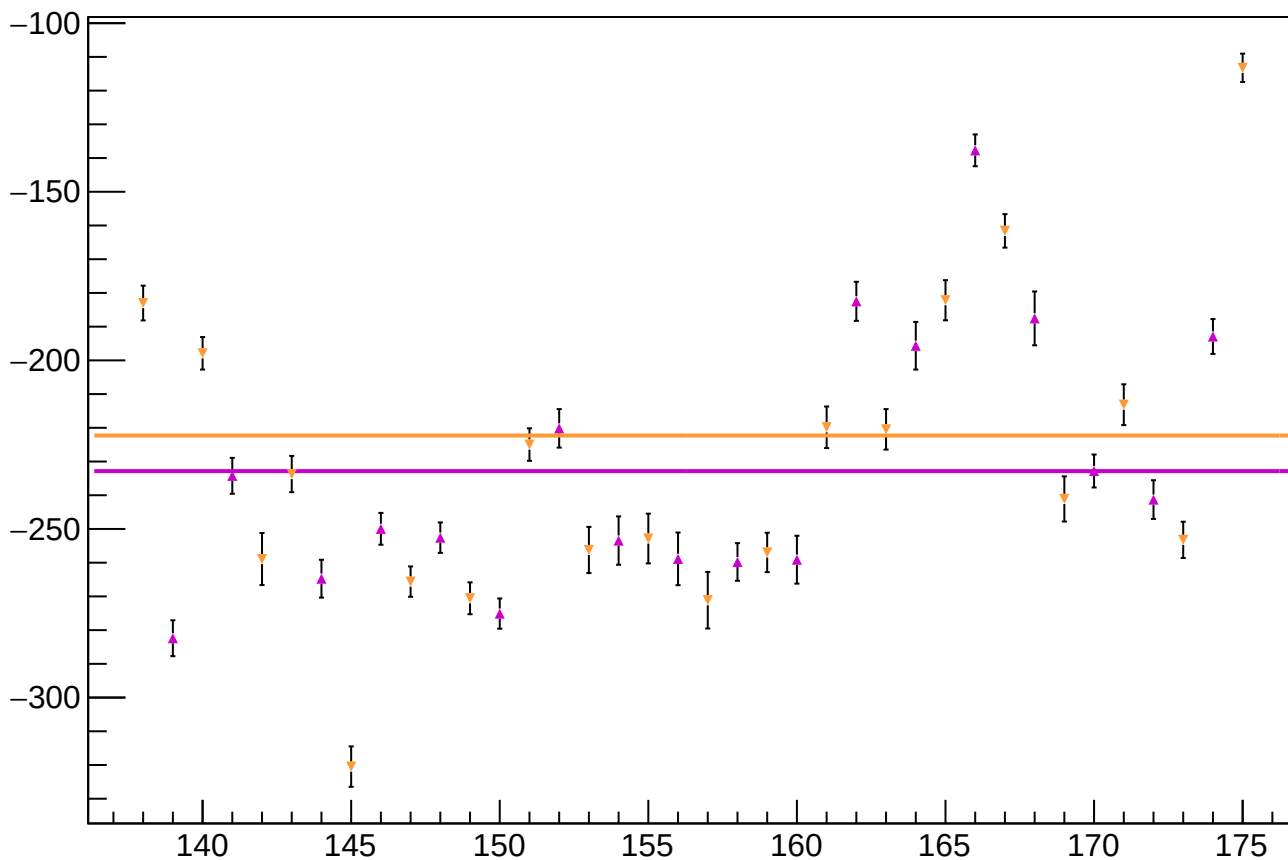
Right:  $-4.597 \pm 0.032$   $\chi^2/\text{NDF}: 535394.7/35$

In:  $10.499 \pm 0.018$   $\chi^2/\text{NDF}: 822124.7/34$

Out:  $9.010 \pm 0.017$   $\chi^2/\text{NDF}: 1134905.8/38$

All:  $9.747 \pm 0.012$   $\chi^2/\text{NDF}: 1960629.6/73$

reg\_asym\_atl1r2\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-222.285 \pm 1.246$   $\chi^2/\text{NDF}: 1598.2/19$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-232.845 \pm 1.308$   $\chi^2/\text{NDF}: 906.3/17$

Left:  $-227.311 \pm 0.902$   $\chi^2/\text{NDF}: 2538.7/37$

Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

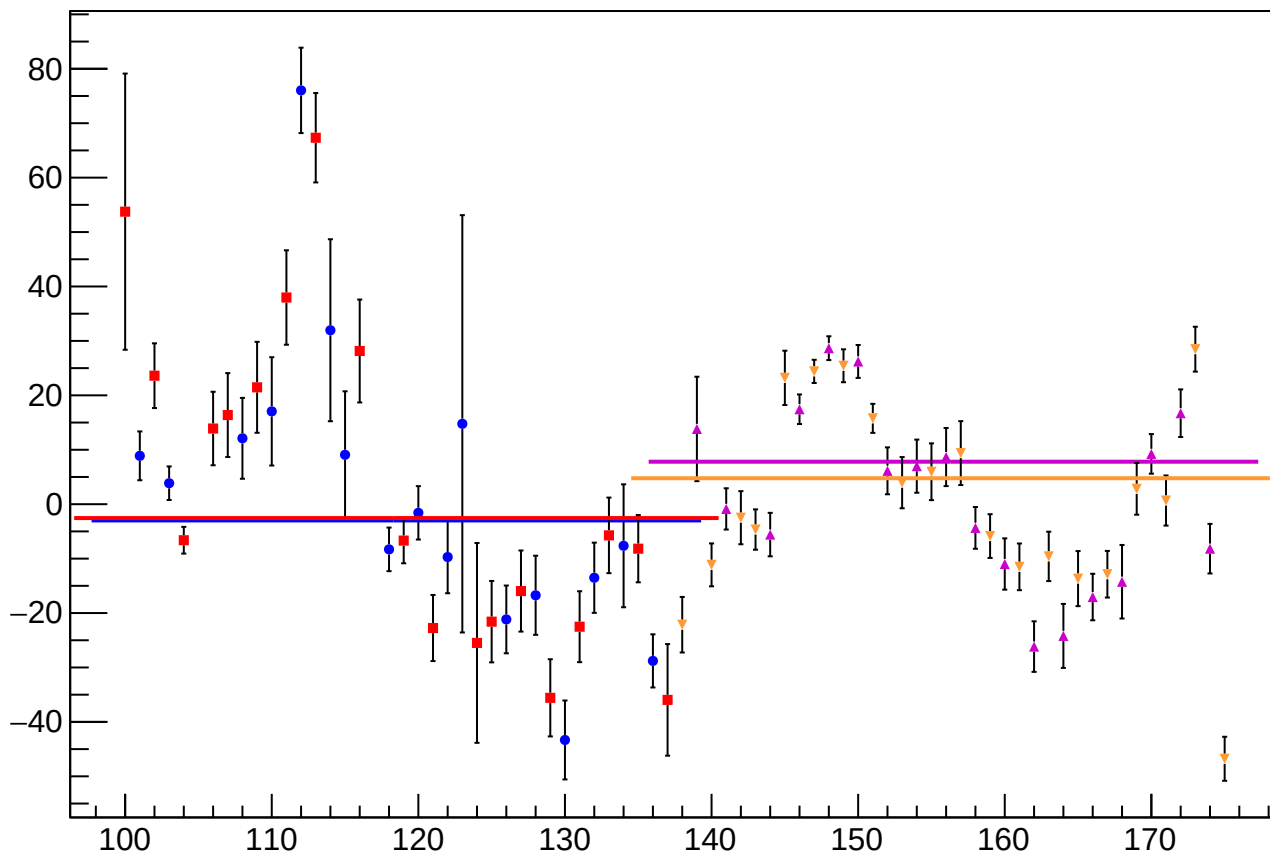
In:  $-232.845 \pm 1.308$   $\chi^2/\text{NDF}: 906.3/17$

Out:  $-222.285 \pm 1.246$   $\chi^2/\text{NDF}: 1598.2/19$

All:  $-227.311 \pm 0.902$   $\chi^2/\text{NDF}: 2538.7/37$



reg\_asym\_atl1r2\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-2.981 \pm 1.450$   $\chi^2/\text{NDF}$ : 203.9/16

Left Out:  $4.772 \pm 0.874$   $\chi^2/\text{NDF}$ : 473.9/19

Right Out:  $-2.548 \pm 1.399$   $\chi^2/\text{NDF}$ : 218.1/18

Left In:  $7.806 \pm 0.925$   $\chi^2/\text{NDF}$ : 328.0/17

Left:  $6.204 \pm 0.635$   $\chi^2/\text{NDF}$ : 807.6/37

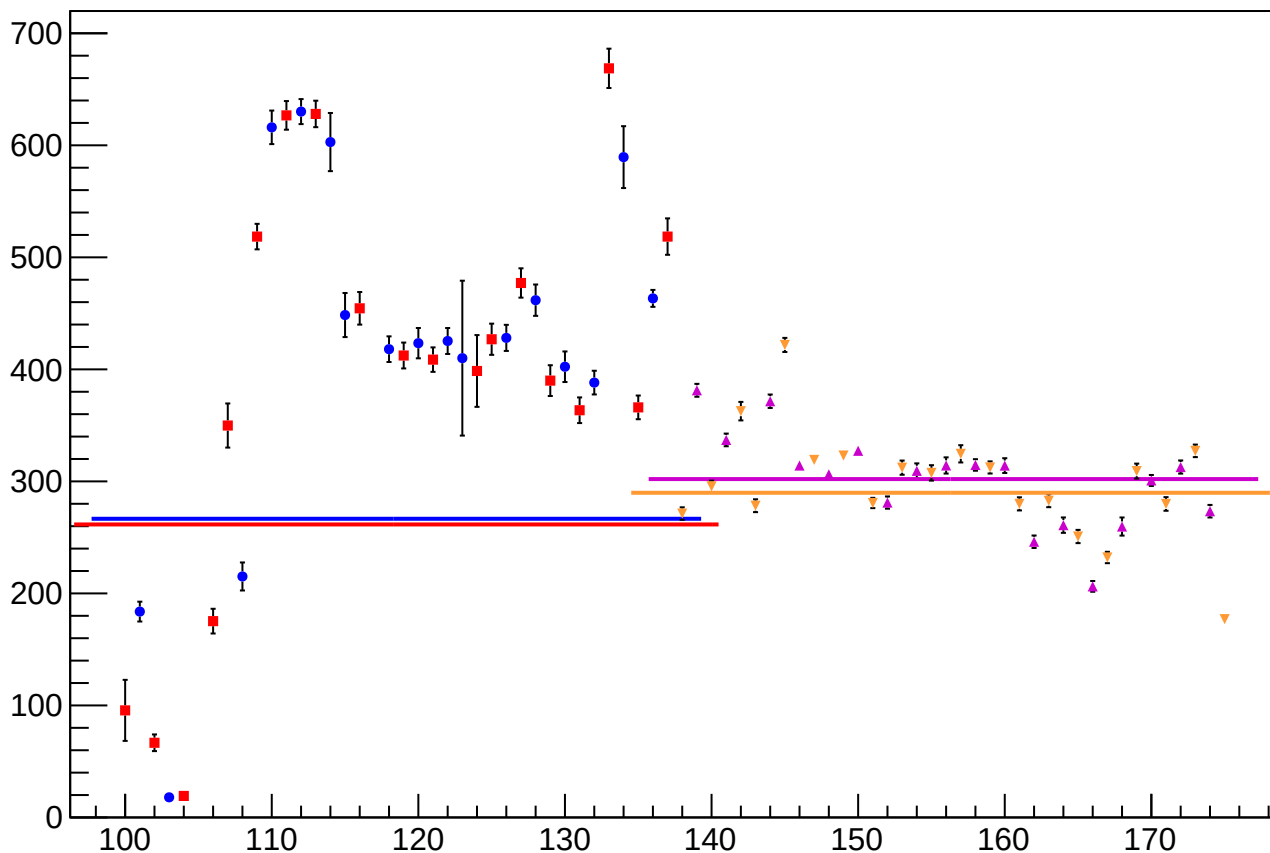
Right:  $-2.757 \pm 1.007$   $\chi^2/\text{NDF}$ : 422.1/35

In:  $4.688 \pm 0.780$   $\chi^2/\text{NDF}$ : 571.2/34

Out:  $2.716 \pm 0.741$   $\chi^2/\text{NDF}$ : 711.7/38

All:  $3.652 \pm 0.537$   $\chi^2/\text{NDF}$ : 1286.3/73

reg\_asym\_atl1r2\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 266.624 $\pm$ 2.477  $\chi^2$ /NDF: 7662.7/16

Left Out: 289.837 $\pm$ 1.234  $\chi^2$ /NDF:1655.3/19

Right Out: 261.551 $\pm$ 2.458  $\chi^2$ /NDF: 8208.2/18

Left In: 302.057 $\pm$ 1.289  $\chi^2$ /NDF:1025.6/17

Left: 295.680 $\pm$ 0.892  $\chi^2$ /NDF: 2727.8/37

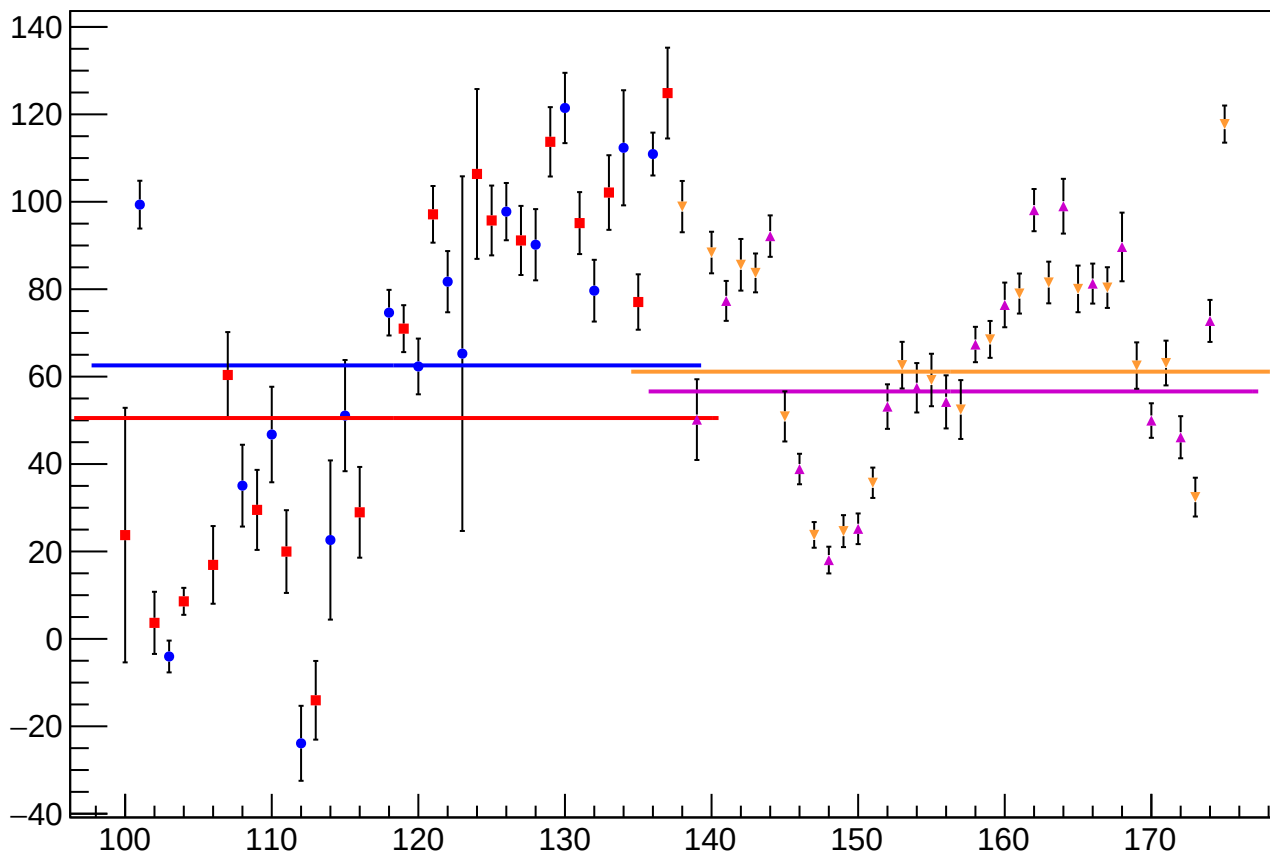
Right: 264.068 $\pm$ 1.745  $\chi^2$ /NDF: 15873.0/35

In: 294.503 $\pm$ 1.144  $\chi^2$ /NDF:8849.3/34

Out: 284.140 $\pm$ 1.103  $\chi^2$ /NDF:9969.3/38

All: 289.134 $\pm$ 0.794  $\chi^2$ /NDF: 18861.1/73

reg\_asym\_atl1r2\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 62.566 $\pm$ 1.678  $\chi^2$ /NDF: 722.4/16

Left Out: 61.138 $\pm$ 1.026  $\chi^2$ /NDF: 723.1/19

Right Out: 50.526 $\pm$ 1.643  $\chi^2$ /NDF: 657.0/18

Left In: 56.610 $\pm$ 1.082  $\chi^2$ /NDF: 550.3/17

Left: 58.995 $\pm$ 0.745  $\chi^2$ /NDF: 1282.7/37

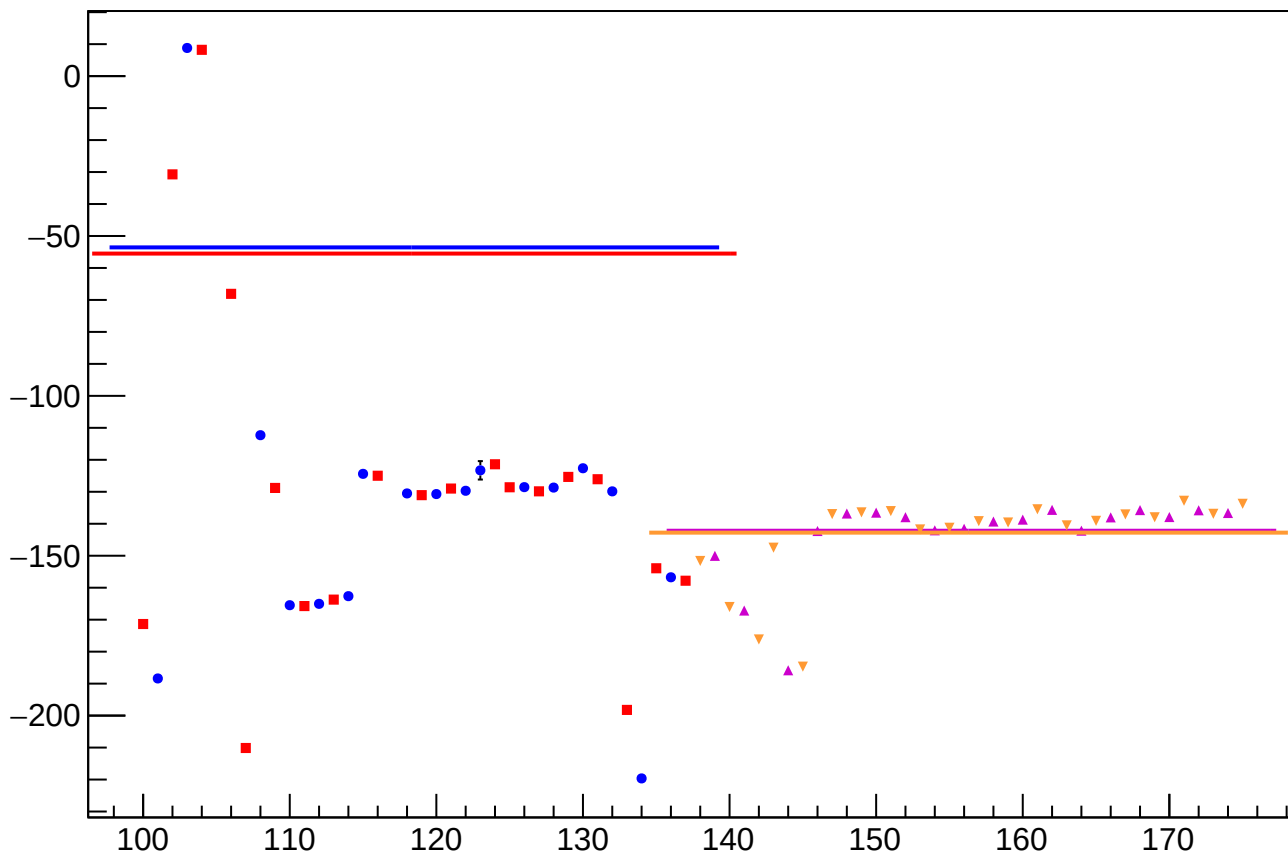
Right: 56.420 $\pm$ 1.174  $\chi^2$ /NDF: 1405.7/35

In: 58.360 $\pm$ 0.910  $\chi^2$ /NDF: 1281.6/34

Out: 58.163 $\pm$ 0.870  $\chi^2$ /NDF: 1410.1/38

All: 58.257 $\pm$ 0.629  $\chi^2$ /NDF: 2691.8/73

reg\_asym\_atl1r2\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -53.567 $\pm$ 0.070  $\chi^2$ /NDF: 1230233.3/16

Left Out: -142.779 $\pm$ 0.050  $\chi^2$ /NDF: 62430.7/19

Right Out: -55.502 $\pm$ 0.072  $\chi^2$ /NDF: 969632.0/18

Left In: -142.185 $\pm$ 0.051  $\chi^2$ /NDF: 47622.4/17

Left: -142.488 $\pm$ 0.035  $\chi^2$ /NDF: 110123.1/37

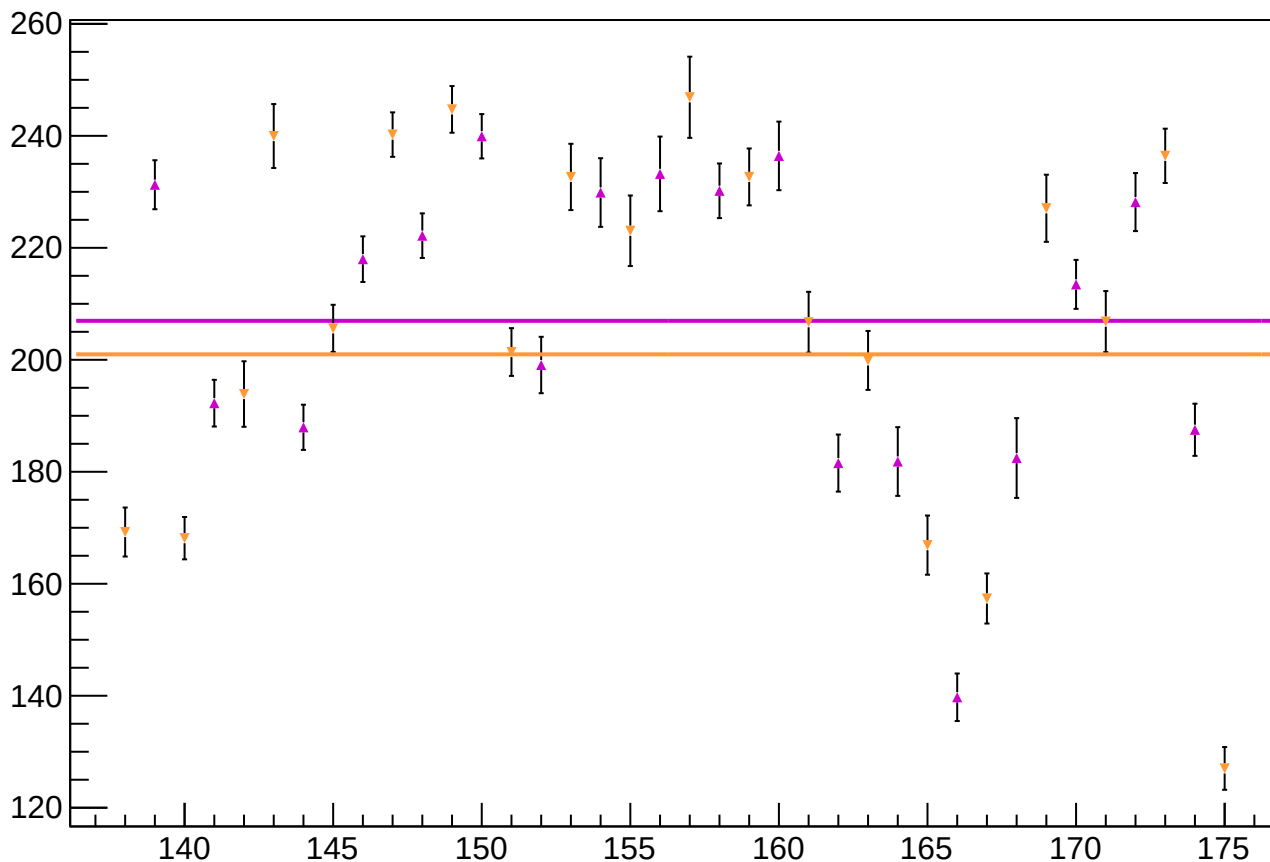
Right: -54.512 $\pm$ 0.050  $\chi^2$ /NDF: 2200235.7/35

In: -111.845 $\pm$ 0.041  $\chi^2$ /NDF: 2323642.8/34

Out: -114.615 $\pm$ 0.041  $\chi^2$ /NDF: 2029861.3/38

All: -113.239 $\pm$ 0.029  $\chi^2$ /NDF: 4355787.6/73

reg\_asym\_atl1r2\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 200.975 $\pm$ 1.082  $\chi^2/\text{NDF}$ :1091.1/19

Right Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 206.962 $\pm$ 1.124  $\chi^2/\text{NDF}$ :575.4/17

Left: 203.854 $\pm$ 0.780  $\chi^2/\text{NDF}$ : 1681.2/37

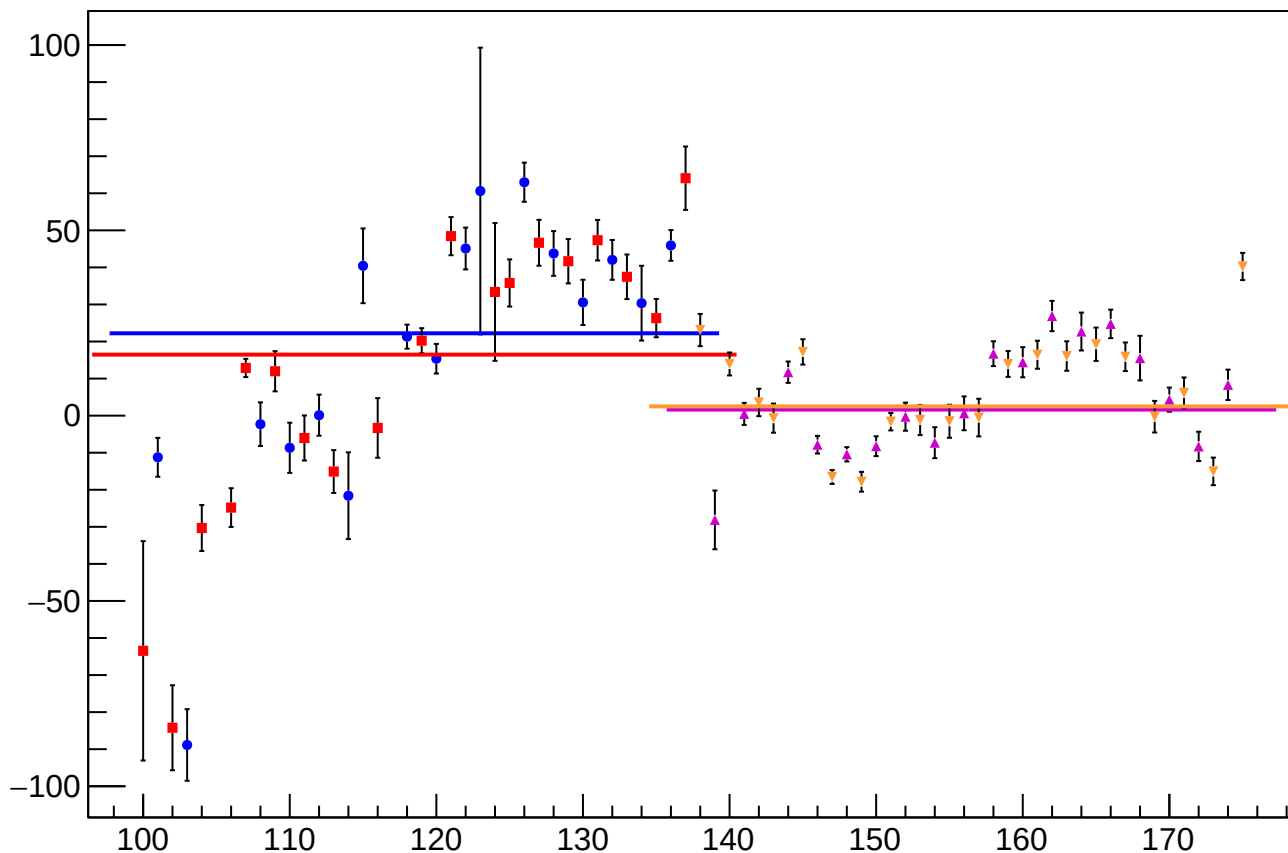
Right: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 206.962 $\pm$ 1.124  $\chi^2/\text{NDF}$ :575.4/17

Out: 200.975 $\pm$ 1.082  $\chi^2/\text{NDF}$ :1091.1/19

All: 203.854 $\pm$ 0.780  $\chi^2/\text{NDF}$ : 1681.2/37

# reg\_asym\_atl1r2\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 22.221+/-1.374  $\chi^2/\text{NDF}$ : 385.6/16

Left Out: 2.492+/-0.762  $\chi^2/\text{NDF}$ : 411.4/19

Right Out: 16.466+/-1.230  $\chi^2/\text{NDF}$ : 425.9/18

Left In: 1.641+/-0.798  $\chi^2/\text{NDF}$ : 236.3/17

Left: 2.086+/-0.551  $\chi^2/\text{NDF}$ : 648.2/37

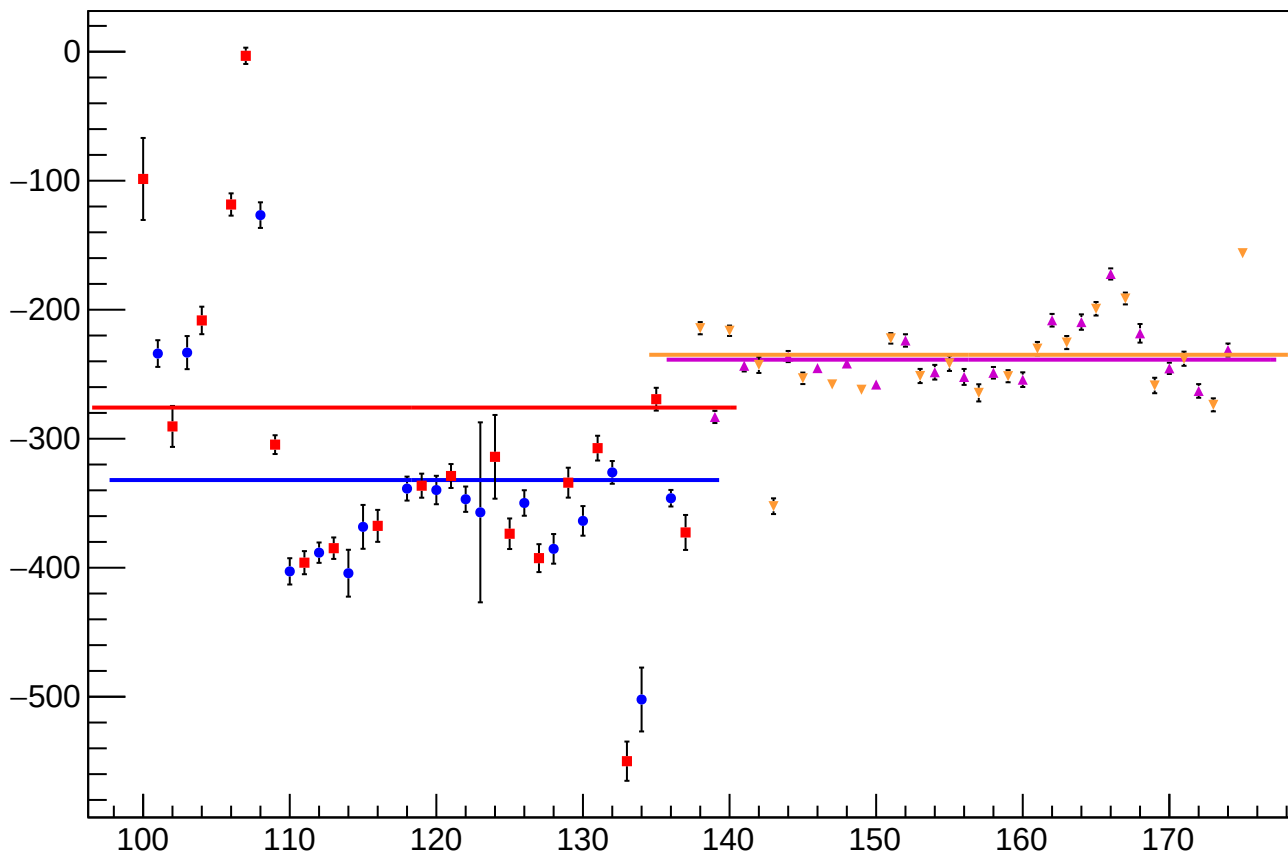
Right: 19.025+/-0.916  $\chi^2/\text{NDF}$ : 821.2/35

In: 6.835+/-0.690  $\chi^2/\text{NDF}$ : 789.6/34

Out: 6.369+/-0.648  $\chi^2/\text{NDF}$ : 930.6/38

All: 6.587+/-0.472  $\chi^2/\text{NDF}$ : 1720.5/73

reg\_asym\_atl1r2\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-332.037 \pm 2.562$   $\chi^2/\text{NDF}: 784.9/16$

Left Out:  $-234.930 \pm 1.074$   $\chi^2/\text{NDF}: 1210.8/19$

Right Out:  $-275.853 \pm 2.324$   $\chi^2/\text{NDF}: 3362.8/18$

Left In:  $-238.731 \pm 1.112$   $\chi^2/\text{NDF}: 482.0/17$

Left:  $-236.765 \pm 0.773$   $\chi^2/\text{NDF}: 1698.9/37$

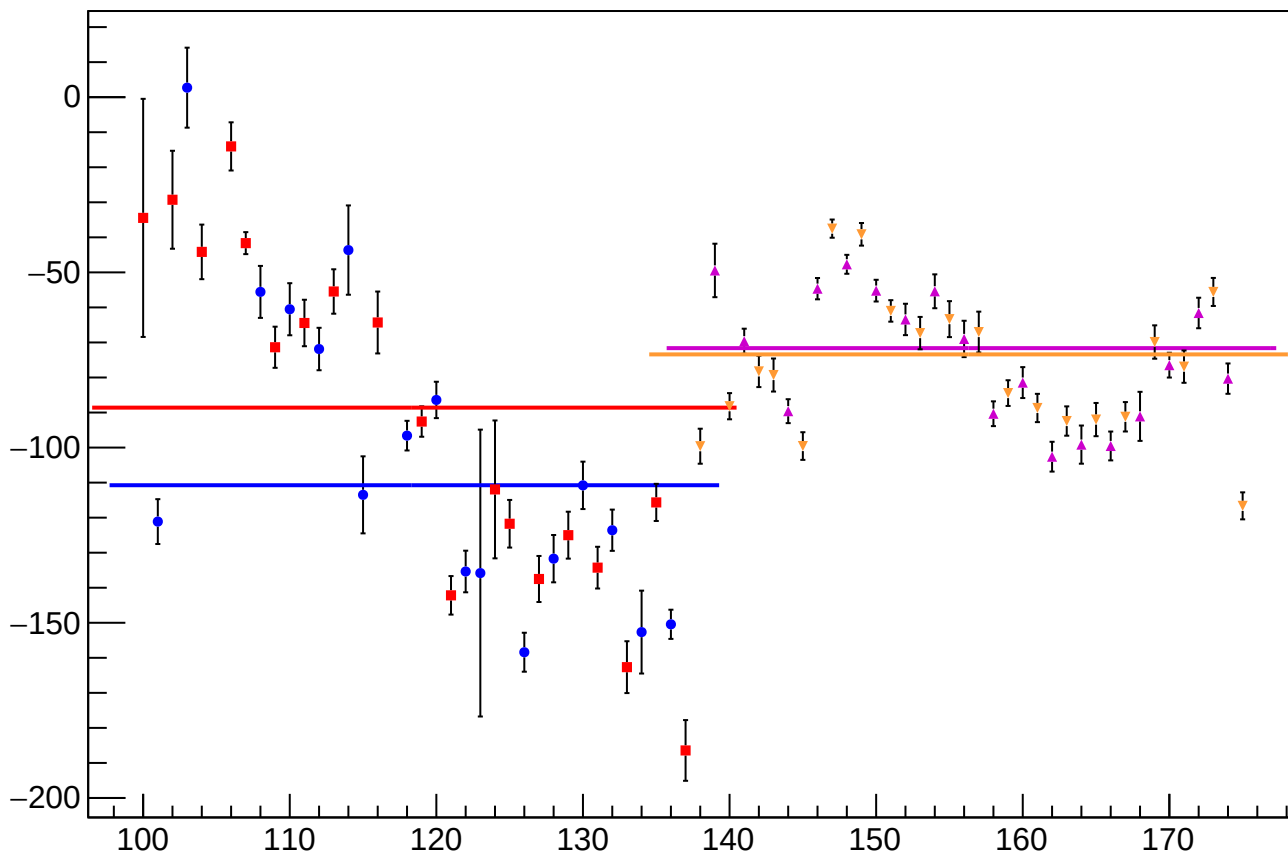
Right:  $-301.220 \pm 1.721$   $\chi^2/\text{NDF}: 4411.6/35$

In:  $-253.518 \pm 1.020$   $\chi^2/\text{NDF}: 2383.1/34$

Out:  $-242.133 \pm 0.975$   $\chi^2/\text{NDF}: 4829.1/38$

All:  $-247.570 \pm 0.705$   $\chi^2/\text{NDF}: 7277.3/73$

reg\_asym\_atl1r2\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-110.745 \pm 1.578$   $\chi^2/\text{NDF}$ : 513.4/16

Left Out:  $-73.407 \pm 0.894$   $\chi^2/\text{NDF}$ : 640.7/19

Right Out:  $-88.600 \pm 1.435$   $\chi^2/\text{NDF}$ : 969.7/18

Left In:  $-71.621 \pm 0.934$   $\chi^2/\text{NDF}$ : 365.5/17

Left:  $-72.553 \pm 0.646$   $\chi^2/\text{NDF}$ : 1008.1/37

Right:  $-98.623 \pm 1.061$   $\chi^2/\text{NDF}$ : 1591.0/35

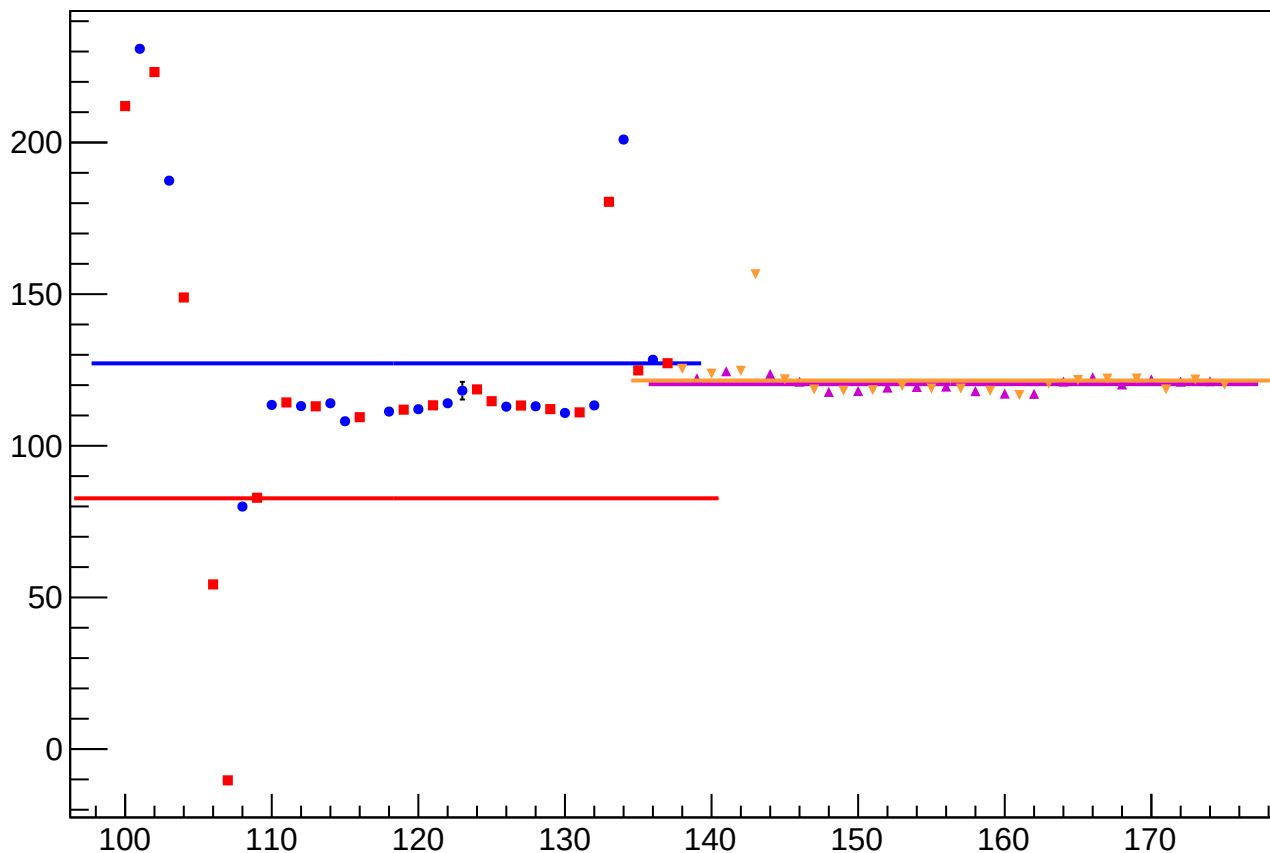
In:  $-81.779 \pm 0.804$   $\chi^2/\text{NDF}$ : 1334.3/34

Out:  $-77.659 \pm 0.759$   $\chi^2/\text{NDF}$ : 1691.2/38

All:  $-79.601 \pm 0.552$   $\chi^2/\text{NDF}$ : 3039.4/73



reg\_asym\_atl1r2\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 127.179+/-0.089  $\chi^2/\text{NDF}$ : 188050.9/16

Left Out: 121.521+/-0.043  $\chi^2/\text{NDF}$ : 23993.8/19

Right Out: 82.684+/-0.075  $\chi^2/\text{NDF}$ : 765716.0/18

Left In: 120.327+/-0.044  $\chi^2/\text{NDF}$ : 2558.8/17

Left: 120.933+/-0.031  $\chi^2/\text{NDF}$ : 26930.0/37

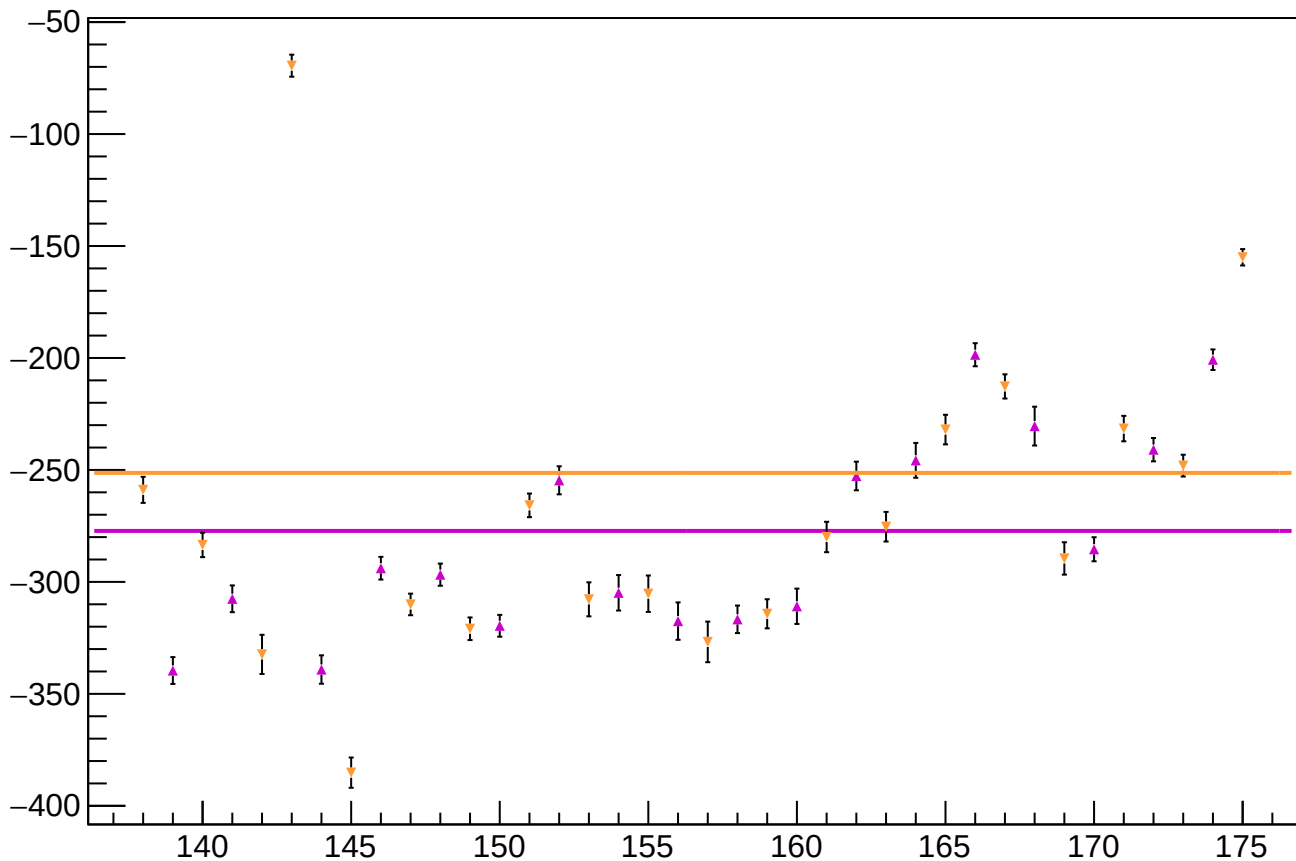
Right: 101.242+/-0.057  $\chi^2/\text{NDF}$ : 1099401.9/35

In: 121.661+/-0.039  $\chi^2/\text{NDF}$ : 195380.6/34

Out: 111.920+/-0.037  $\chi^2/\text{NDF}$ : 989965.0/38

All: 116.557+/-0.027  $\chi^2/\text{NDF}$ : 1217565.4/73

reg\_asym\_atr1l2\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -251.306+/-1.297  $\chi^2/\text{NDF}$ :3308.7/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -277.234+/-1.398  $\chi^2/\text{NDF}$ :1059.7/17

Left: -263.300+/-0.951  $\chi^2/\text{NDF}$ : 4553.3/37

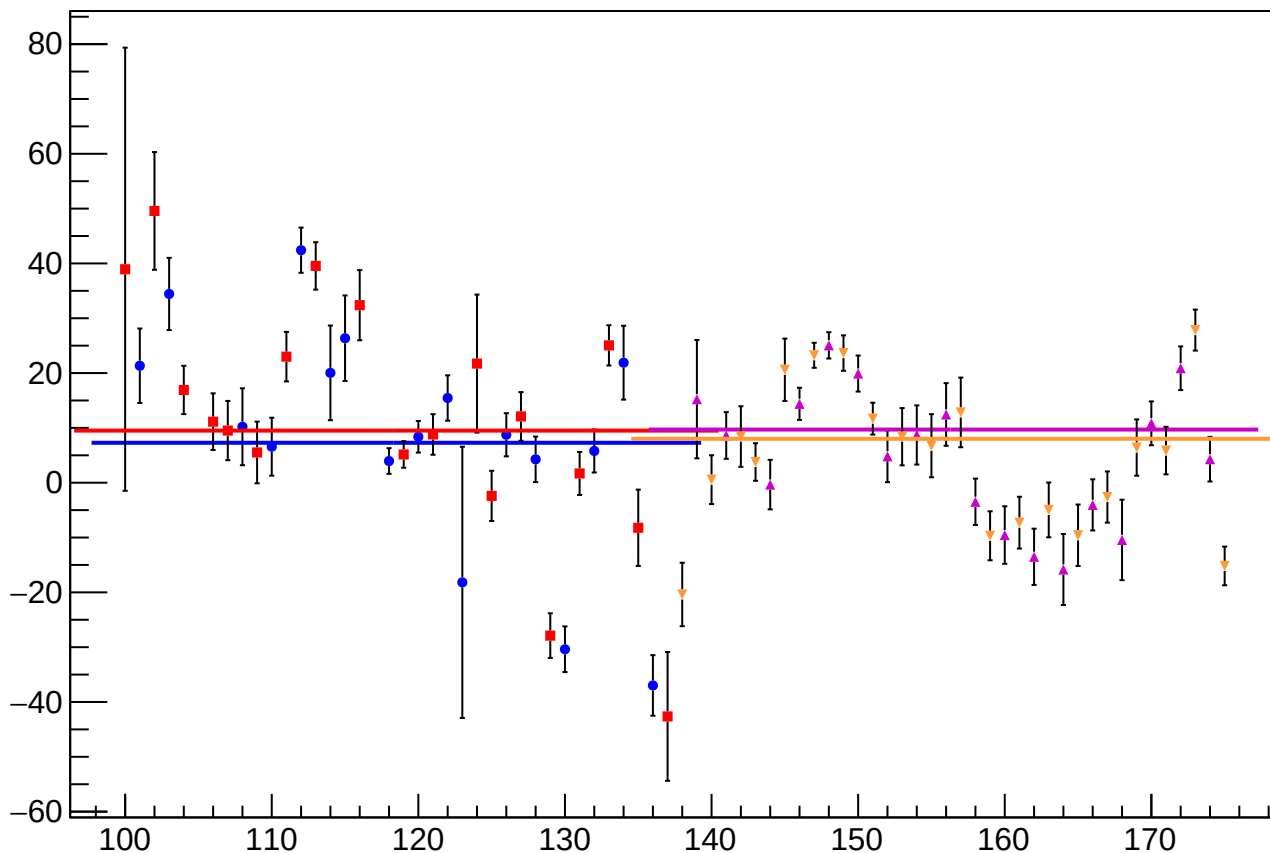
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -277.234+/-1.398  $\chi^2/\text{NDF}$ :1059.7/17

Out: -251.306+/-1.297  $\chi^2/\text{NDF}$ :3308.7/19

All: -263.300+/-0.951  $\chi^2/\text{NDF}$ : 4553.3/37

reg\_asym\_atr1l2\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $7.284 \pm 1.084$   $\chi^2/\text{NDF}$ : 261.0/16

Left Out:  $8.010 \pm 0.920$   $\chi^2/\text{NDF}$ : 223.2/19

Right Out:  $9.505 \pm 1.074$   $\chi^2/\text{NDF}$ : 231.5/18

Left In:  $9.694 \pm 0.995$   $\chi^2/\text{NDF}$ : 144.9/17

Left:  $8.785 \pm 0.675$   $\chi^2/\text{NDF}$ : 369.6/37

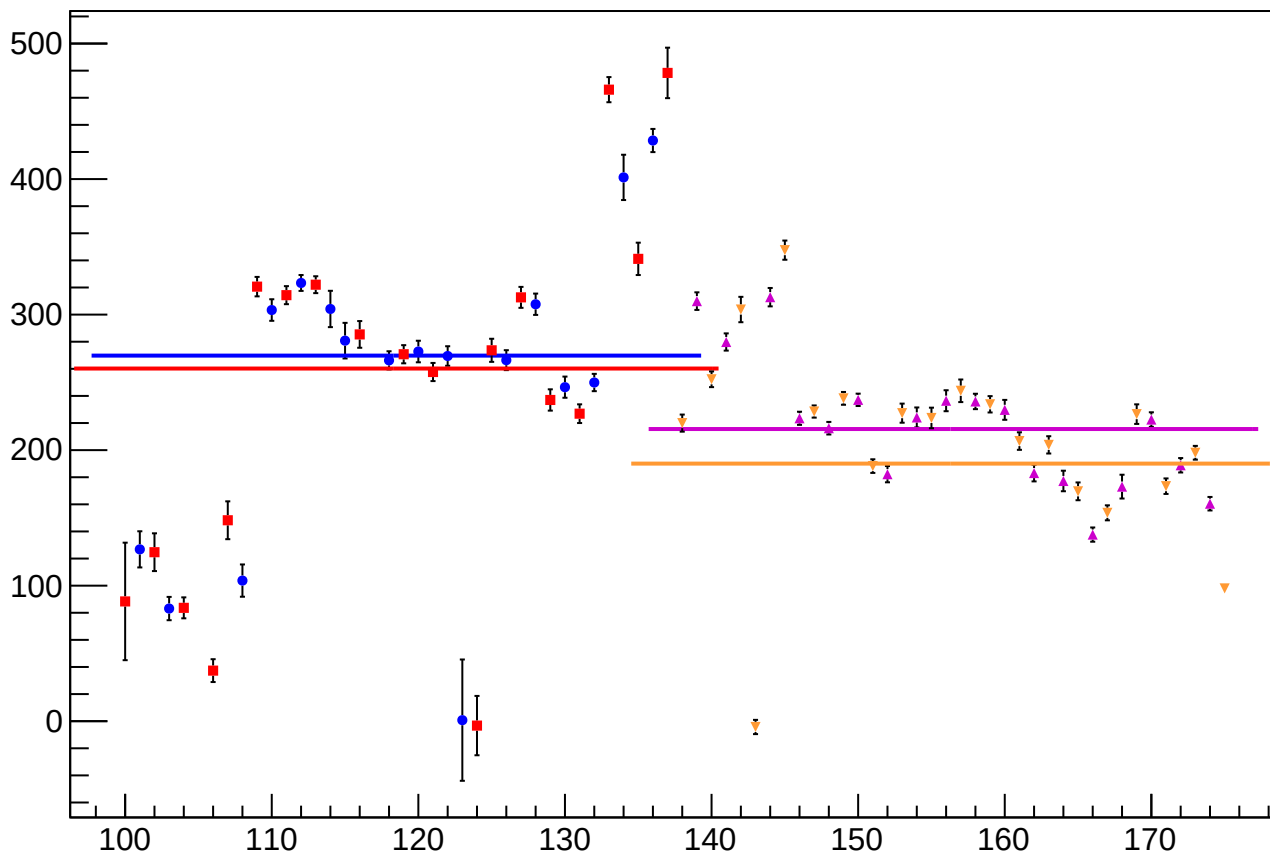
Right:  $8.404 \pm 0.763$   $\chi^2/\text{NDF}$ : 494.7/35

In:  $8.591 \pm 0.733$   $\chi^2/\text{NDF}$ : 408.6/34

Out:  $8.642 \pm 0.699$   $\chi^2/\text{NDF}$ : 455.8/38

All:  $8.618 \pm 0.506$   $\chi^2/\text{NDF}$ : 864.4/73

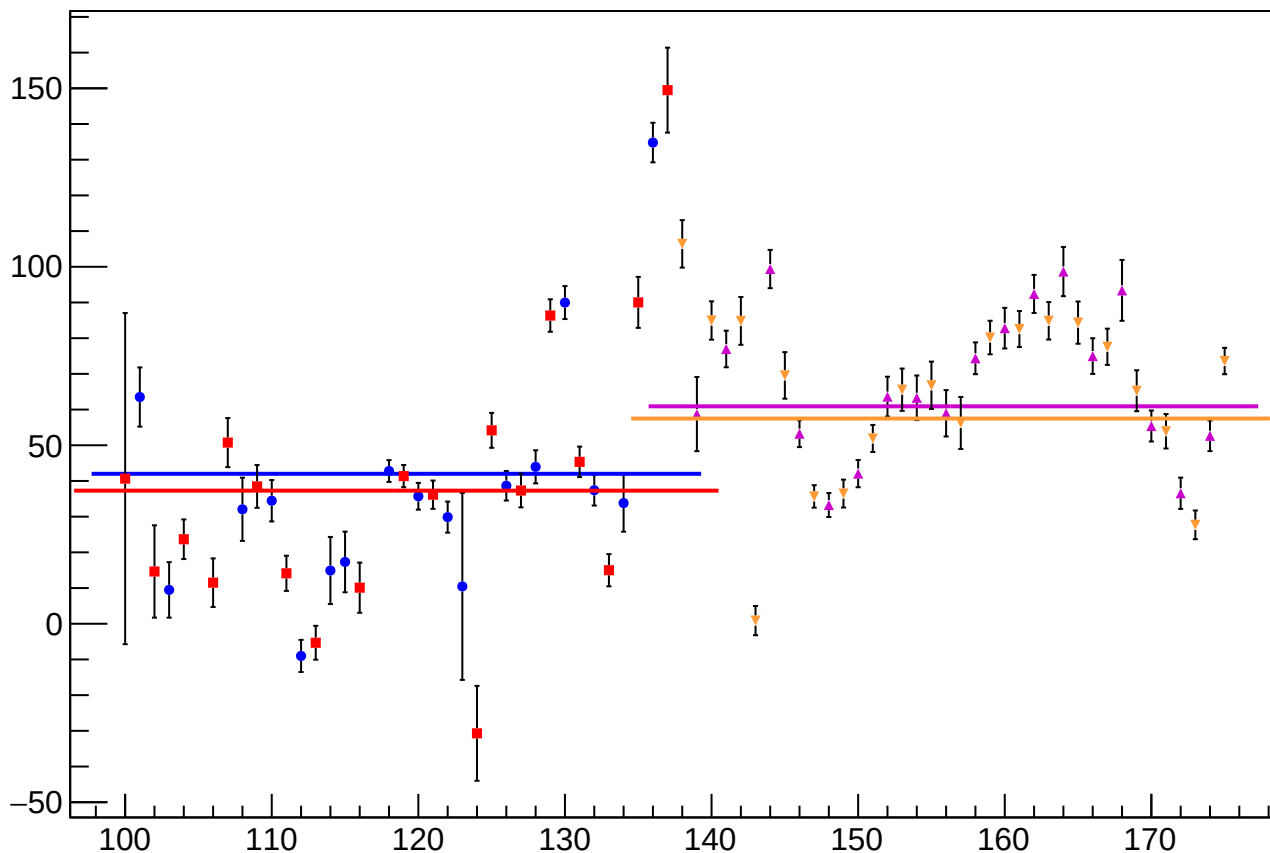
reg\_asym\_atr1l2\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 269.748 +/- 2.071  $\chi^2/\text{NDF}$ : 1374.1/16  
 Left Out: 190.059 +/- 1.288  $\chi^2/\text{NDF}$ : 3200.5/19  
 Right Out: 260.206 +/- 1.978  $\chi^2/\text{NDF}$ : 2541.6/18  
 Left In: 215.574 +/- 1.383  $\chi^2/\text{NDF}$ : 1046.4/17

Left: 201.910 +/- 0.942  $\chi^2/\text{NDF}$ : 4429.3/37  
 Right: 264.757 +/- 1.430  $\chi^2/\text{NDF}$ : 3926.7/35  
 In: 232.270 +/- 1.150  $\chi^2/\text{NDF}$ : 2893.7/34  
 Out: 210.938 +/- 1.079  $\chi^2/\text{NDF}$ : 6625.6/38  
 All: 220.926 +/- 0.787  $\chi^2/\text{NDF}$ : 9702.2/73

reg\_asym\_atr1l2\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 42.006 $\pm$ 1.255  $\chi^2$ /NDF: 575.6/16

Left Out: 57.490 $\pm$ 1.075  $\chi^2$ /NDF: 562.7/19

Right Out: 37.284 $\pm$ 1.237  $\chi^2$ /NDF: 472.6/18

Left In: 60.910 $\pm$ 1.161  $\chi^2$ /NDF: 305.7/17

Left: 59.069 $\pm$ 0.789  $\chi^2$ /NDF: 873.1/37

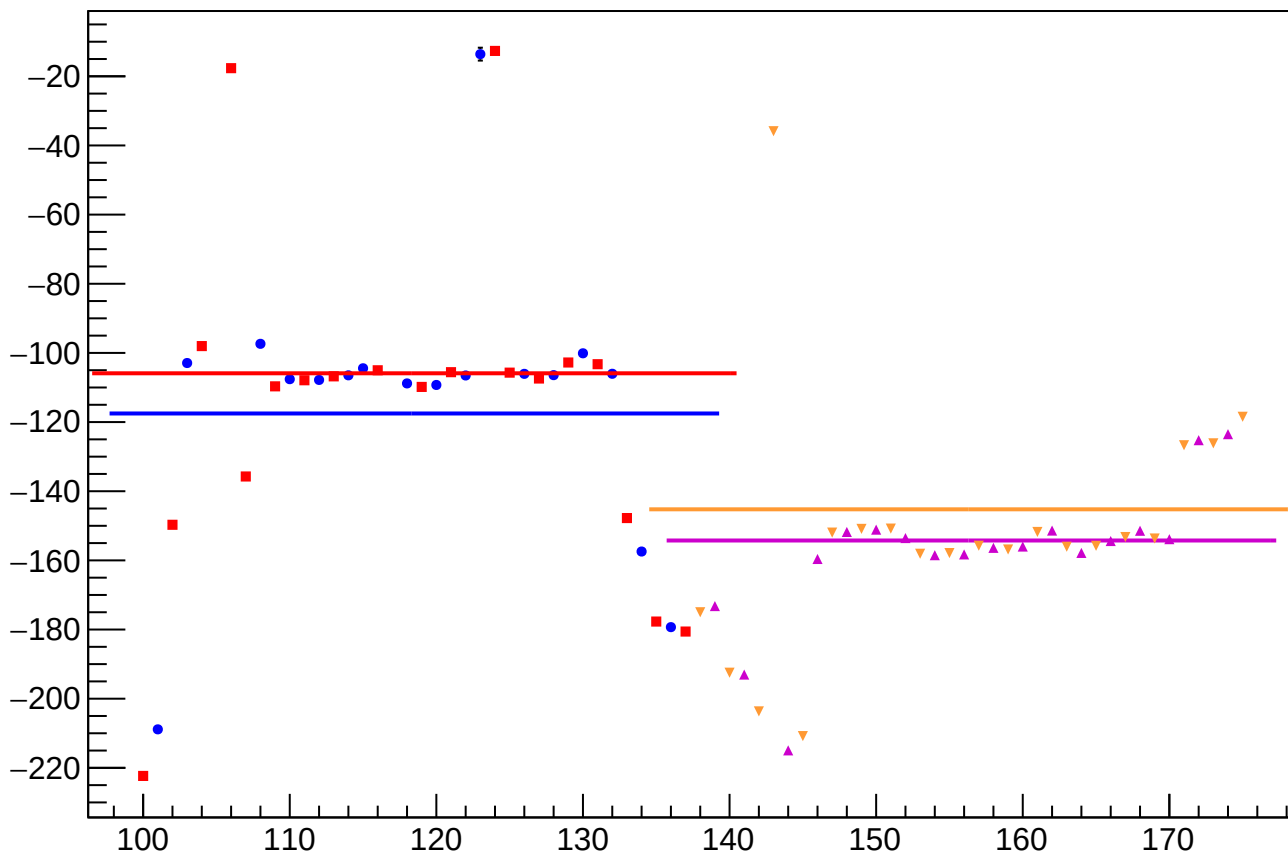
Right: 39.611 $\pm$ 0.881  $\chi^2$ /NDF: 1055.4/35

In: 52.198 $\pm$ 0.852  $\chi^2$ /NDF: 1003.5/34

Out: 48.798 $\pm$ 0.811  $\chi^2$ /NDF: 1187.4/38

All: 50.415 $\pm$ 0.588  $\chi^2$ /NDF: 2199.2/73

reg\_asym\_atr1l2\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -117.516+/-0.078  $\chi^2/\text{NDF}$ : 142016.6/16

Left Out: -145.231+/-0.052  $\chi^2/\text{NDF}$ : 457757.6/19

Right Out: -105.892+/-0.073  $\chi^2/\text{NDF}$ : 324304.4/18

Left In: -154.249+/-0.054  $\chi^2/\text{NDF}$ : 125404.4/17

Left: -149.552+/-0.037  $\chi^2/\text{NDF}$ : 597600.4/37

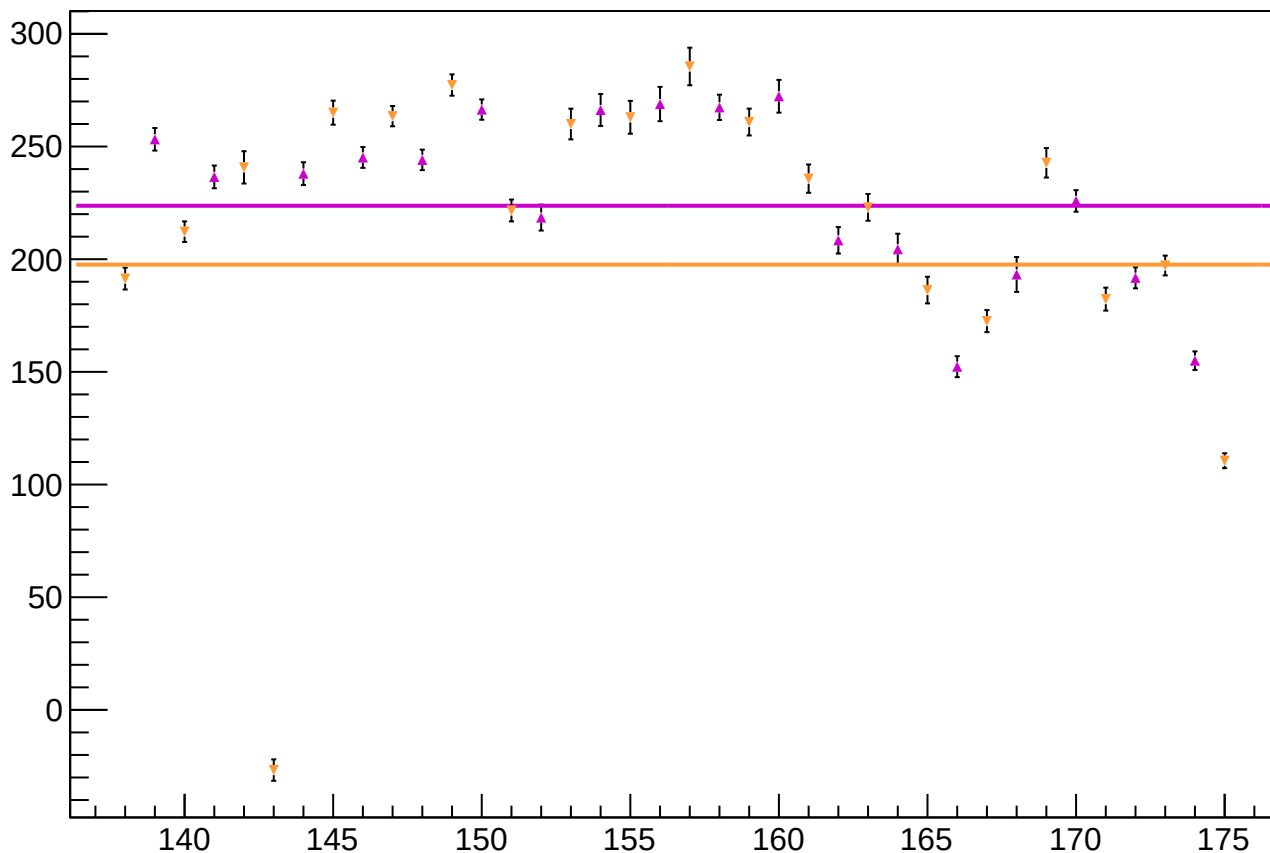
Right: -111.303+/-0.053  $\chi^2/\text{NDF}$ : 478188.8/35

In: -142.299+/-0.044  $\chi^2/\text{NDF}$ : 417049.4/34

Out: -131.959+/-0.042  $\chi^2/\text{NDF}$ : 975548.5/38

All: -136.867+/-0.031  $\chi^2/\text{NDF}$ : 1420981.3/73

reg\_asym\_atr1l2\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 197.605+/-1.164  $\chi^2/\text{NDF}$ :4177.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 223.720+/-1.249  $\chi^2/\text{NDF}$ :949.2/17

Left: 209.751+/-0.852  $\chi^2/\text{NDF}$ : 5360.6/37

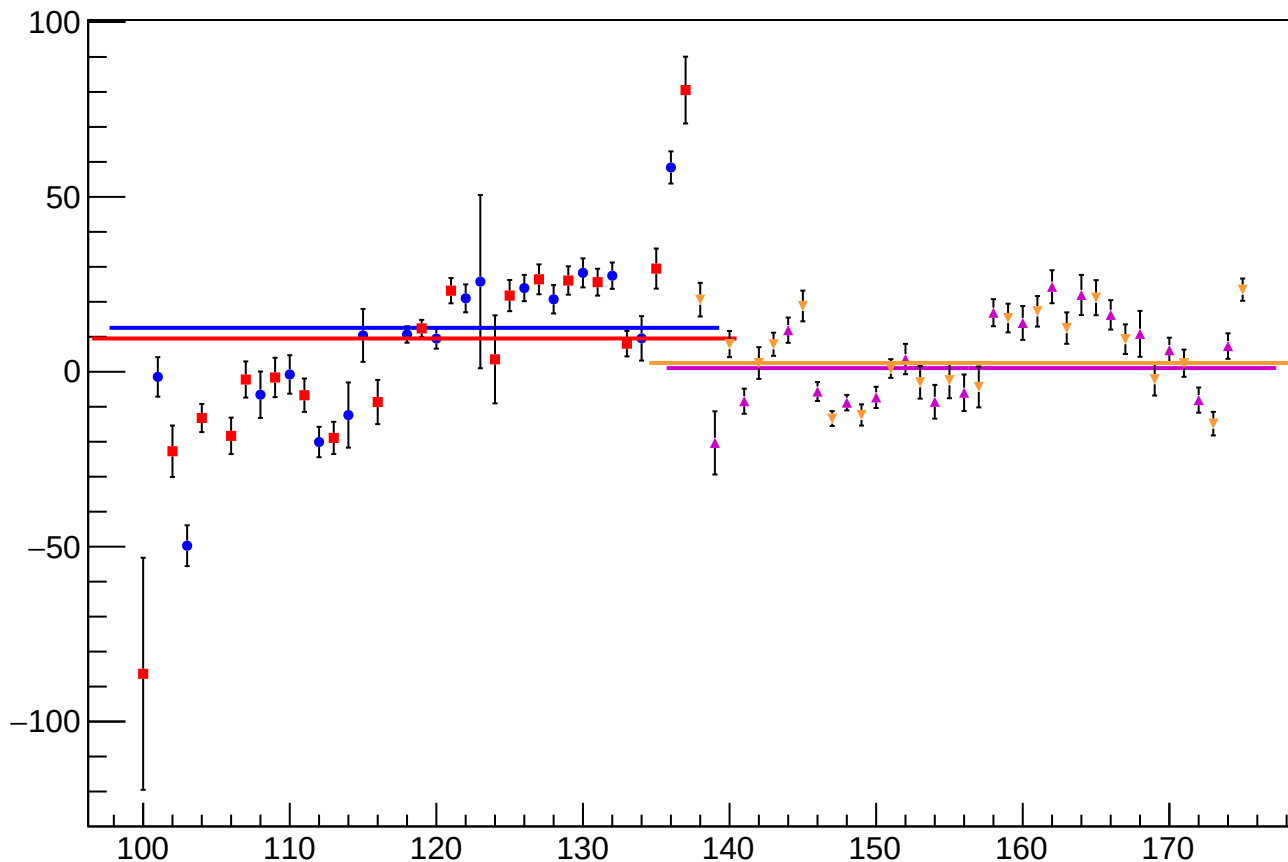
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 223.720+/-1.249  $\chi^2/\text{NDF}$ :949.2/17

Out: 197.605+/-1.164  $\chi^2/\text{NDF}$ :4177.4/19

All: 209.751+/-0.852  $\chi^2/\text{NDF}$ : 5360.6/37

reg\_asym\_atr1l2\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 12.561 $\pm$ 1.056  $\chi^2$ /NDF: 347.7/16

Left Out: 2.517 $\pm$ 0.832  $\chi^2$ /NDF: 229.7/19

Right Out: 9.519 $\pm$ 1.051  $\chi^2$ /NDF: 296.2/18

Left In: 1.051 $\pm$ 0.896  $\chi^2$ /NDF: 149.8/17

Left: 1.838 $\pm$ 0.610  $\chi^2$ /NDF: 381.0/37

Right: 11.033 $\pm$ 0.745  $\chi^2$ /NDF: 648.2/35

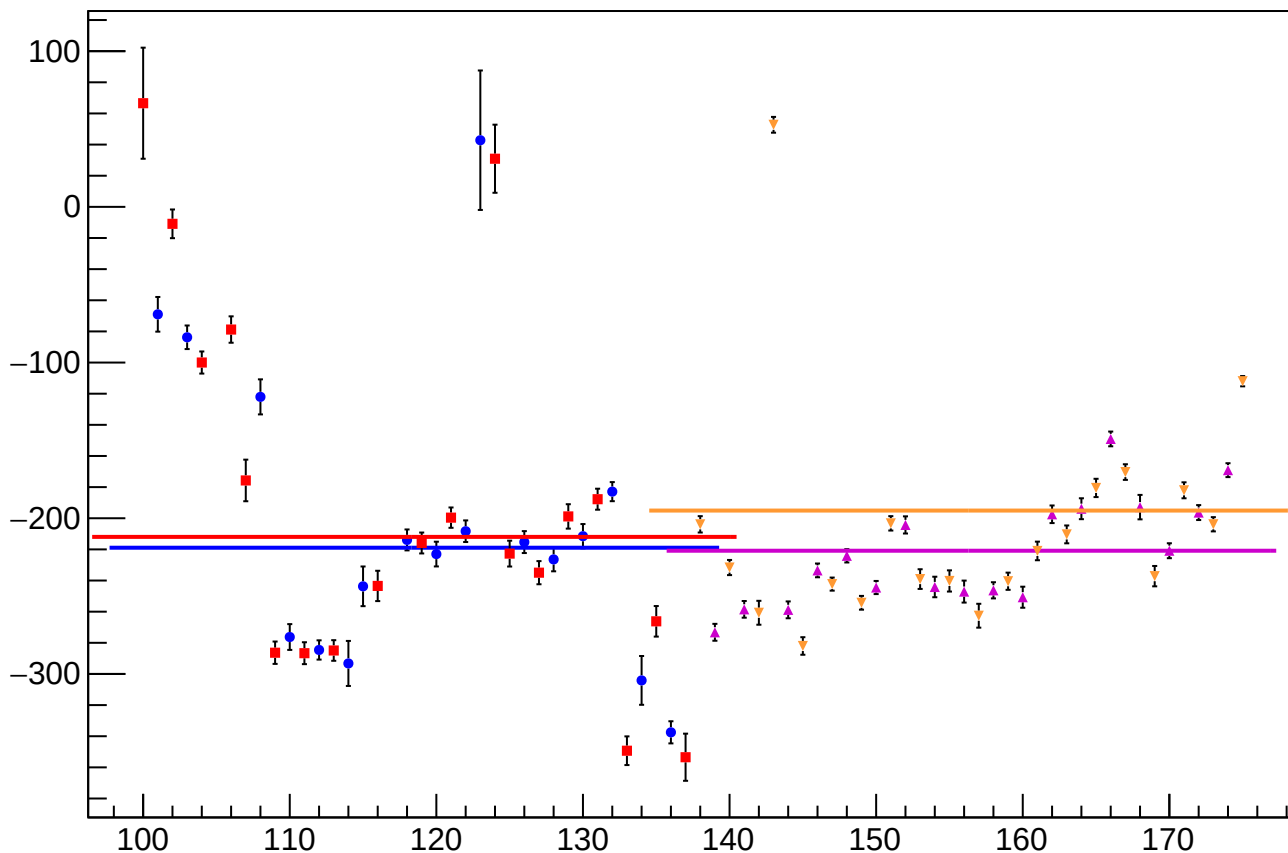
In: 5.869 $\pm$ 0.683  $\chi^2$ /NDF: 566.7/34

Out: 5.217 $\pm$ 0.652  $\chi^2$ /NDF: 553.3/38

All: 5.528 $\pm$ 0.472  $\chi^2$ /NDF: 1120.5/73



reg\_asym\_atr1l2\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-218.925 \pm 2.006$   $\chi^2/\text{NDF}$ : 1146.6/16

Left Out:  $-195.059 \pm 1.159$   $\chi^2/\text{NDF}$ : 4039.9/19

Right Out:  $-211.968 \pm 1.924$   $\chi^2/\text{NDF}$ : 1886.2/18

Left In:  $-220.860 \pm 1.239$   $\chi^2/\text{NDF}$ : 747.5/17

Left:  $-207.103 \pm 0.846$   $\chi^2/\text{NDF}$ : 5018.7/37

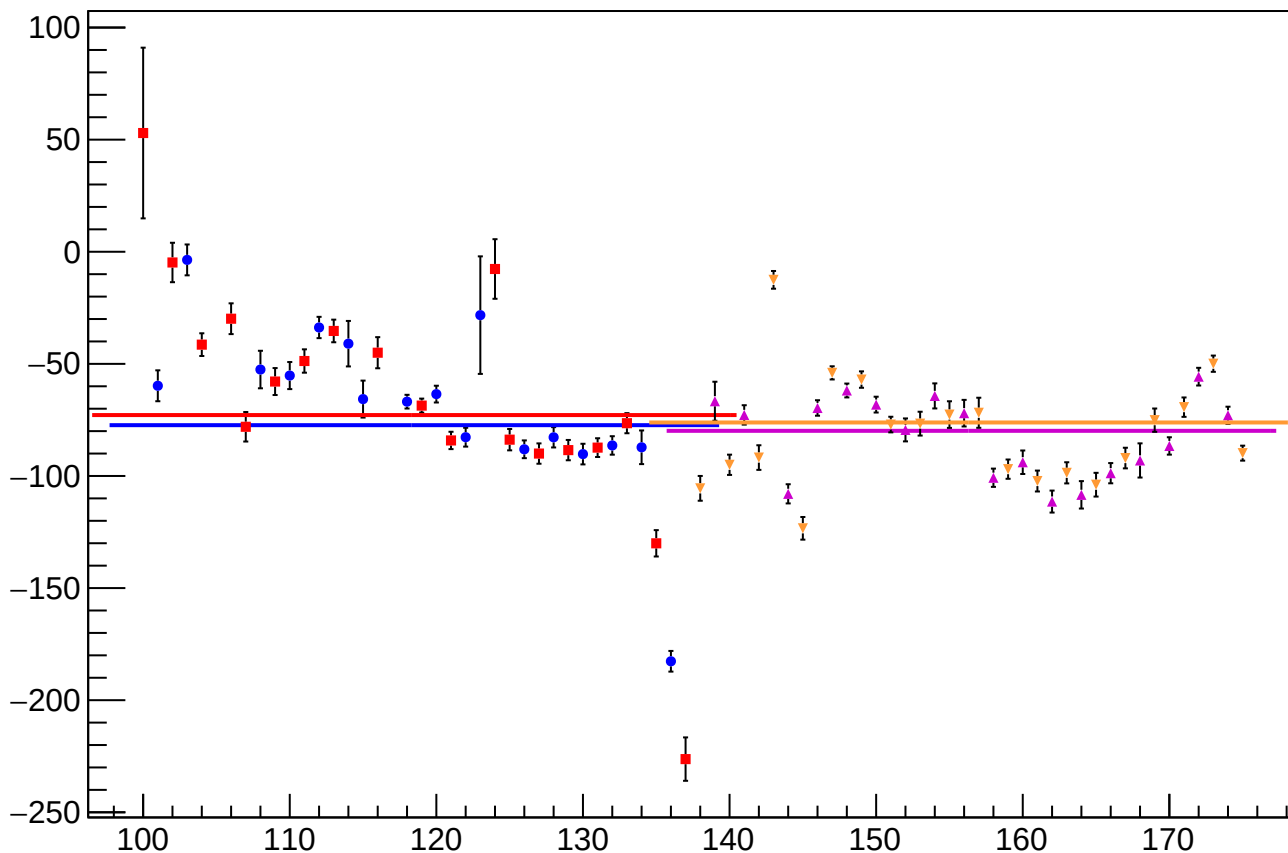
Right:  $-215.302 \pm 1.389$   $\chi^2/\text{NDF}$ : 3039.1/35

In:  $-220.326 \pm 1.054$   $\chi^2/\text{NDF}$ : 1894.8/34

Out:  $-199.559 \pm 0.993$   $\chi^2/\text{NDF}$ : 5982.7/38

All:  $-209.323 \pm 0.723$   $\chi^2/\text{NDF}$ : 8083.2/73

reg\_asym\_atr1l2\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-77.342 \pm 1.219$   $\chi^2/\text{NDF}$ : 817.2/16

Left Out:  $-76.141 \pm 0.971$   $\chi^2/\text{NDF}$ : 673.6/19

Right Out:  $-72.836 \pm 1.209$   $\chi^2/\text{NDF}$ : 672.9/18

Left In:  $-79.865 \pm 1.043$   $\chi^2/\text{NDF}$ : 272.4/17

Left:  $-77.869 \pm 0.711$   $\chi^2/\text{NDF}$ : 952.8/37

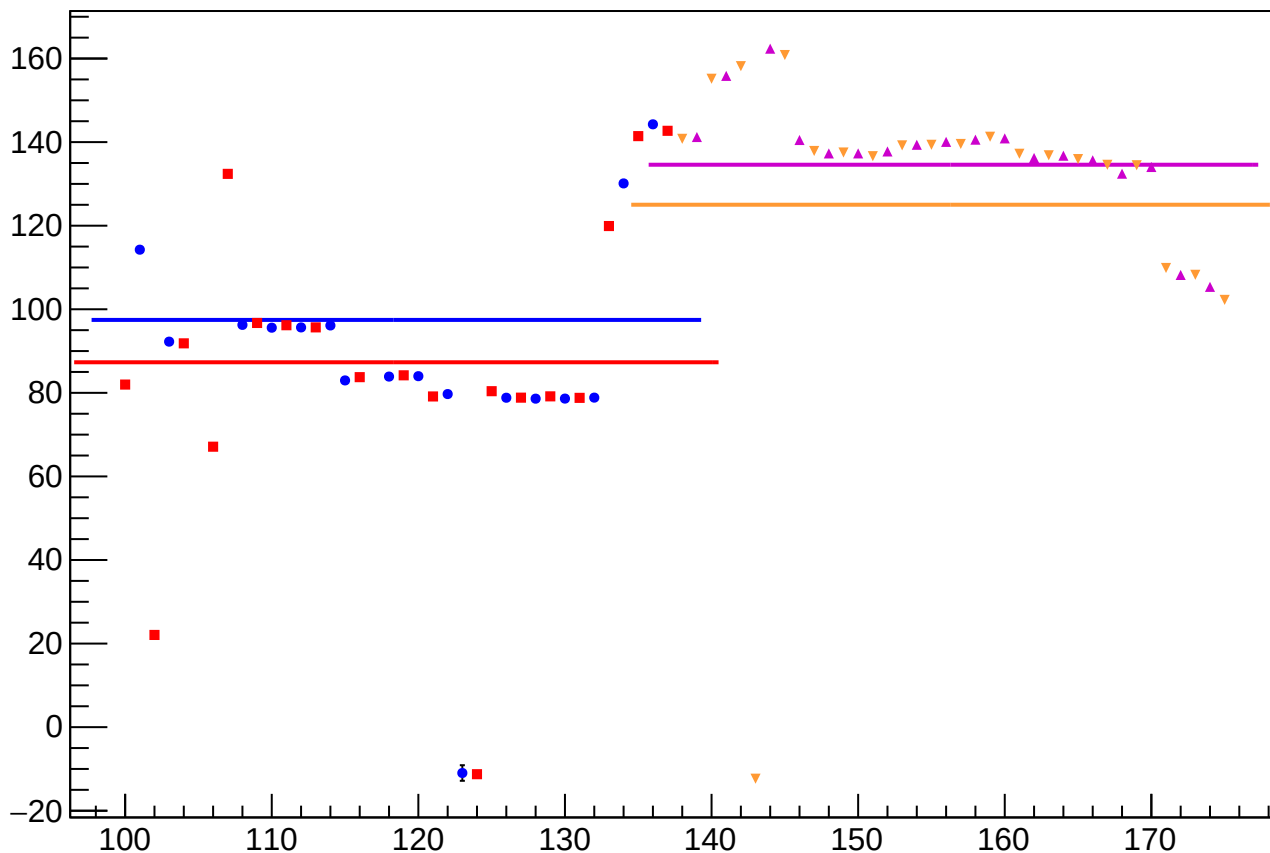
Right:  $-75.069 \pm 0.858$   $\chi^2/\text{NDF}$ : 1497.0/35

In:  $-78.799 \pm 0.793$   $\chi^2/\text{NDF}$ : 1092.1/34

Out:  $-74.844 \pm 0.757$   $\chi^2/\text{NDF}$ : 1351.0/38

All:  $-76.730 \pm 0.547$   $\chi^2/\text{NDF}$ : 2456.1/73

reg\_asym\_atr1l2\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 97.452+/-0.073  $\chi^2/\text{NDF}$ : 94476.4/16

Left Out: 125.017+/-0.047  $\chi^2/\text{NDF}$ : 598781.1/19

Right Out: 87.315+/-0.068  $\chi^2/\text{NDF}$ : 221837.7/18

Left In: 134.587+/-0.049  $\chi^2/\text{NDF}$ : 85127.4/17

Left: 129.621+/-0.034  $\chi^2/\text{NDF}$ : 704105.1/37

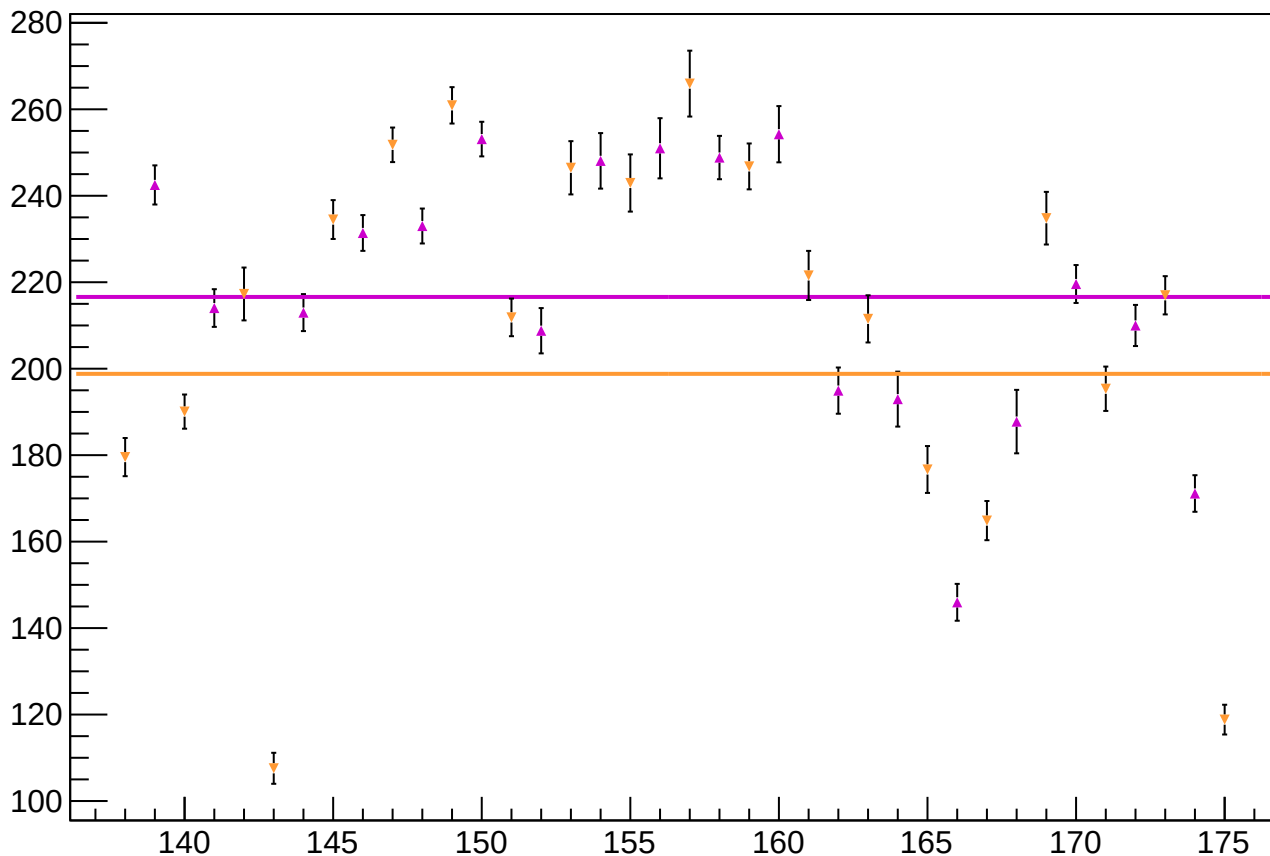
Right: 92.024+/-0.050  $\chi^2/\text{NDF}$ : 326563.7/35

In: 123.269+/-0.040  $\chi^2/\text{NDF}$ : 358214.9/34

Out: 112.988+/-0.039  $\chi^2/\text{NDF}$ : 1028466.5/38

All: 117.881+/-0.028  $\chi^2/\text{NDF}$ : 1420546.7/73

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 198.807+/-1.060  $\chi^2/\text{NDF}$ :2096.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 216.597+/-1.141  $\chi^2/\text{NDF}$ :710.0/17

Left: 207.046+/-0.776  $\chi^2/\text{NDF}$ : 2936.7/37

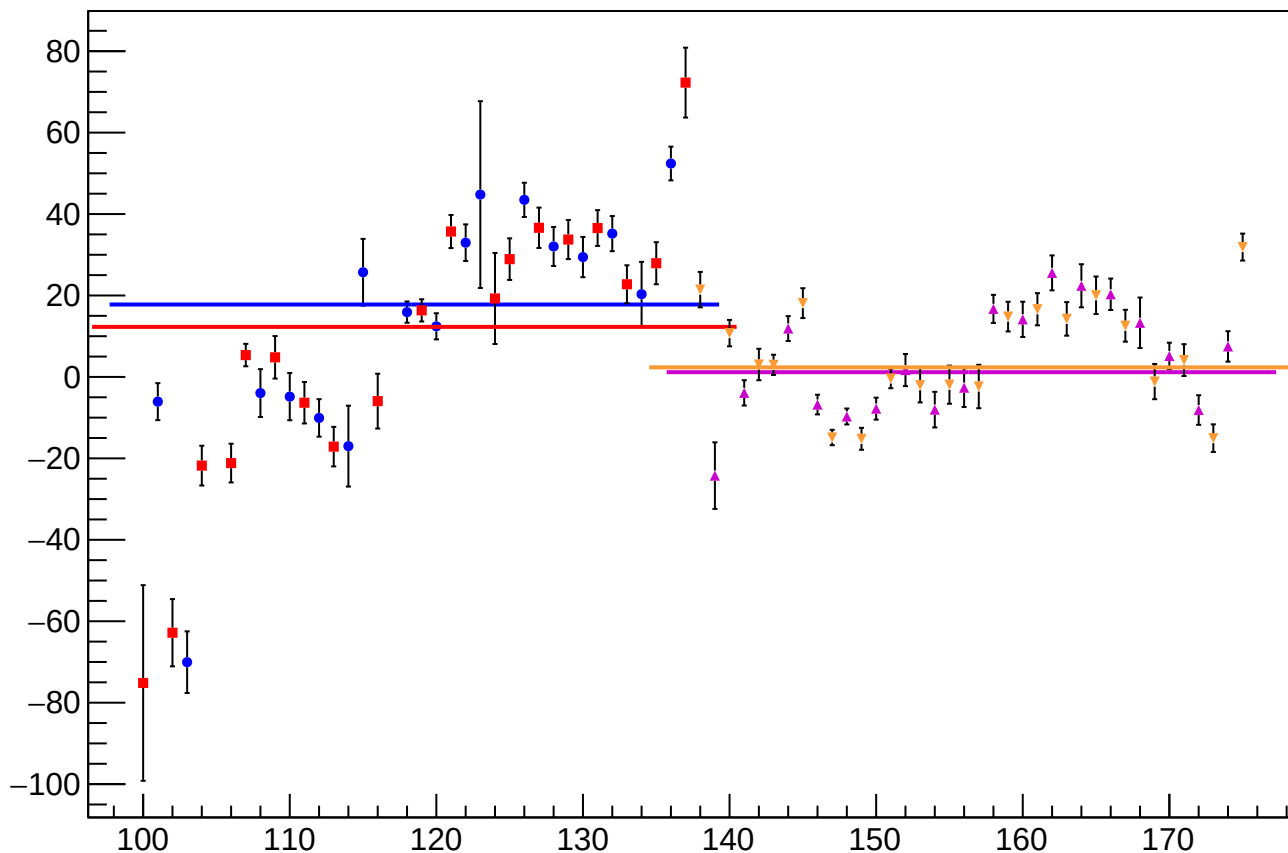
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 216.597+/-1.141  $\chi^2/\text{NDF}$ :710.0/17

Out: 198.807+/-1.060  $\chi^2/\text{NDF}$ :2096.1/19

All: 207.046+/-0.776  $\chi^2/\text{NDF}$ : 2936.7/37

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $17.786 \pm 1.146$   $\chi^2/\text{NDF}$ : 395.1/16

Left Out:  $2.350 \pm 0.748$   $\chi^2/\text{NDF}$ : 335.0/19

Right Out:  $12.294 \pm 1.086$   $\chi^2/\text{NDF}$ : 443.7/18

Left In:  $1.164 \pm 0.811$   $\chi^2/\text{NDF}$ : 199.5/17

Left:  $1.805 \pm 0.550$   $\chi^2/\text{NDF}$ : 535.7/37

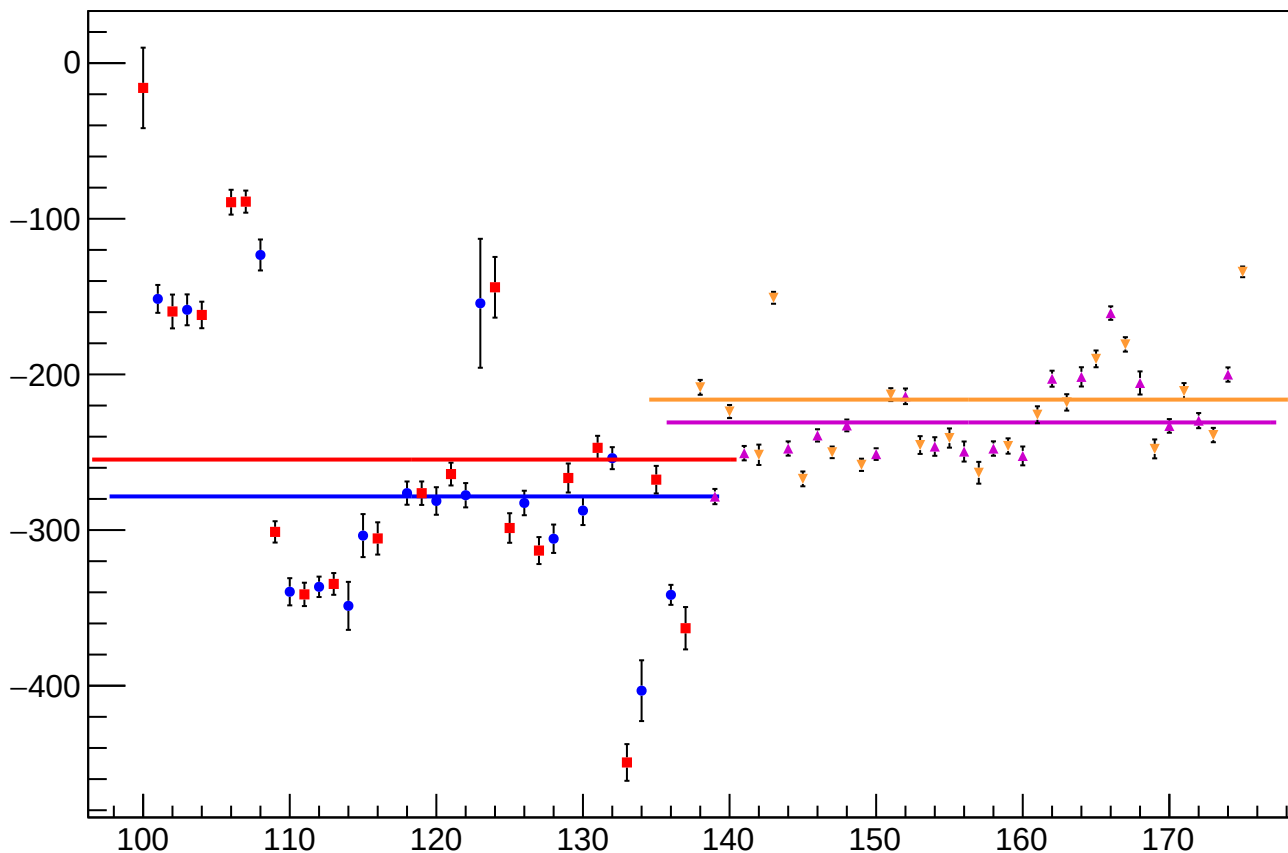
Right:  $14.891 \pm 0.788$   $\chi^2/\text{NDF}$ : 850.9/35

In:  $6.712 \pm 0.662$   $\chi^2/\text{NDF}$ : 734.7/34

Out:  $5.550 \pm 0.616$   $\chi^2/\text{NDF}$ : 835.6/38

All:  $6.089 \pm 0.451$   $\chi^2/\text{NDF}$ : 1572.0/73

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-278.393 \pm 2.168$   $\chi^2/\text{NDF}: 910.5/16$

Left Out:  $-216.185 \pm 1.056$   $\chi^2/\text{NDF}: 1470.4/19$

Right Out:  $-254.703 \pm 2.020$   $\chi^2/\text{NDF}: 2038.5/18$

Left In:  $-230.853 \pm 1.130$   $\chi^2/\text{NDF}: 583.3/17$

Left:  $-223.027 \pm 0.772$   $\chi^2/\text{NDF}: 2143.7/37$

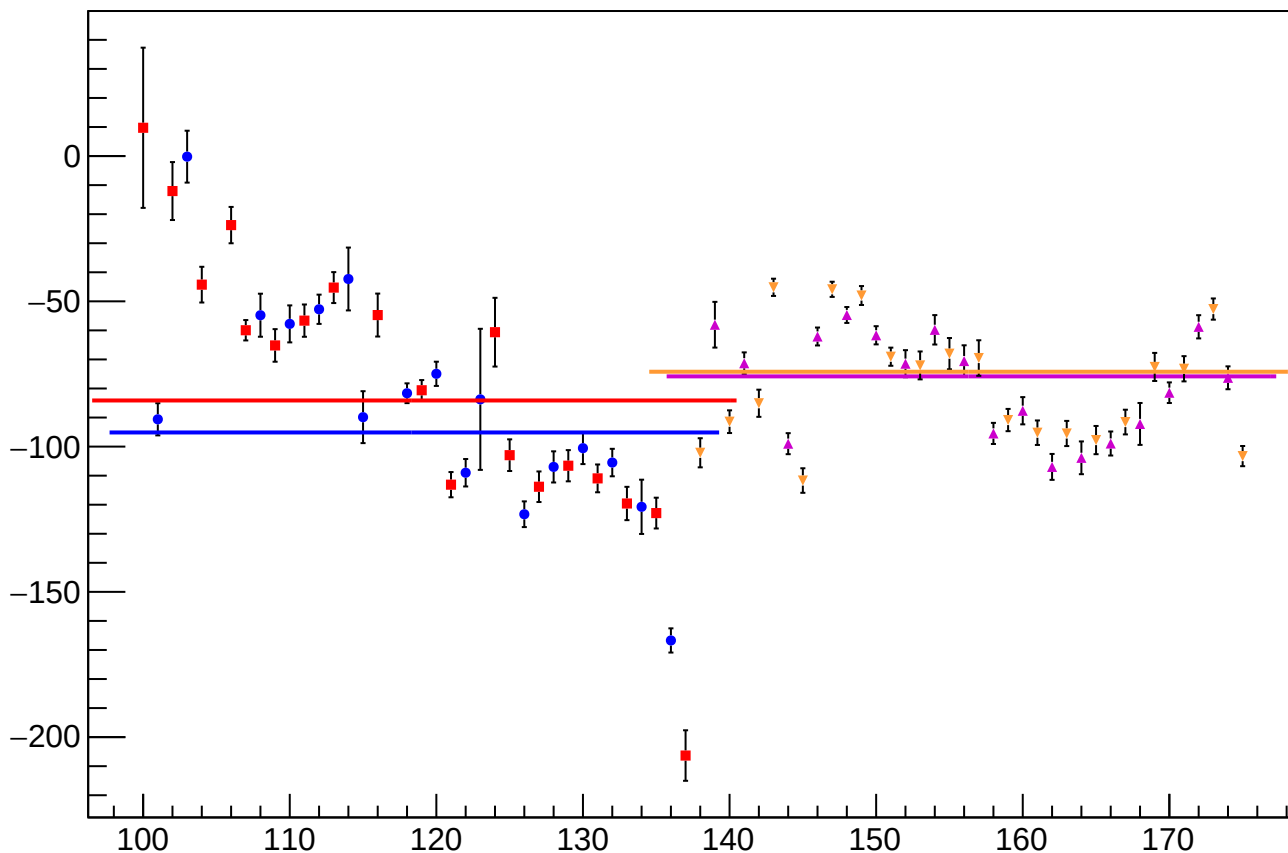
Right:  $-265.715 \pm 1.478$   $\chi^2/\text{NDF}: 3013.0/35$

In:  $-241.008 \pm 1.002$   $\chi^2/\text{NDF}: 1872.1/34$

Out:  $-224.455 \pm 0.936$   $\chi^2/\text{NDF}: 3794.4/38$

All:  $-232.170 \pm 0.684$   $\chi^2/\text{NDF}: 5812.3/73$

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-95.135 \pm 1.322$   $\chi^2/\text{NDF}$ : 674.9/16

Left Out:  $-74.230 \pm 0.878$   $\chi^2/\text{NDF}$ : 630.6/19

Right Out:  $-84.124 \pm 1.259$   $\chi^2/\text{NDF}$ : 782.9/18

Left In:  $-75.829 \pm 0.949$   $\chi^2/\text{NDF}$ : 325.3/17

Left:  $-74.968 \pm 0.644$   $\chi^2/\text{NDF}$ : 957.4/37

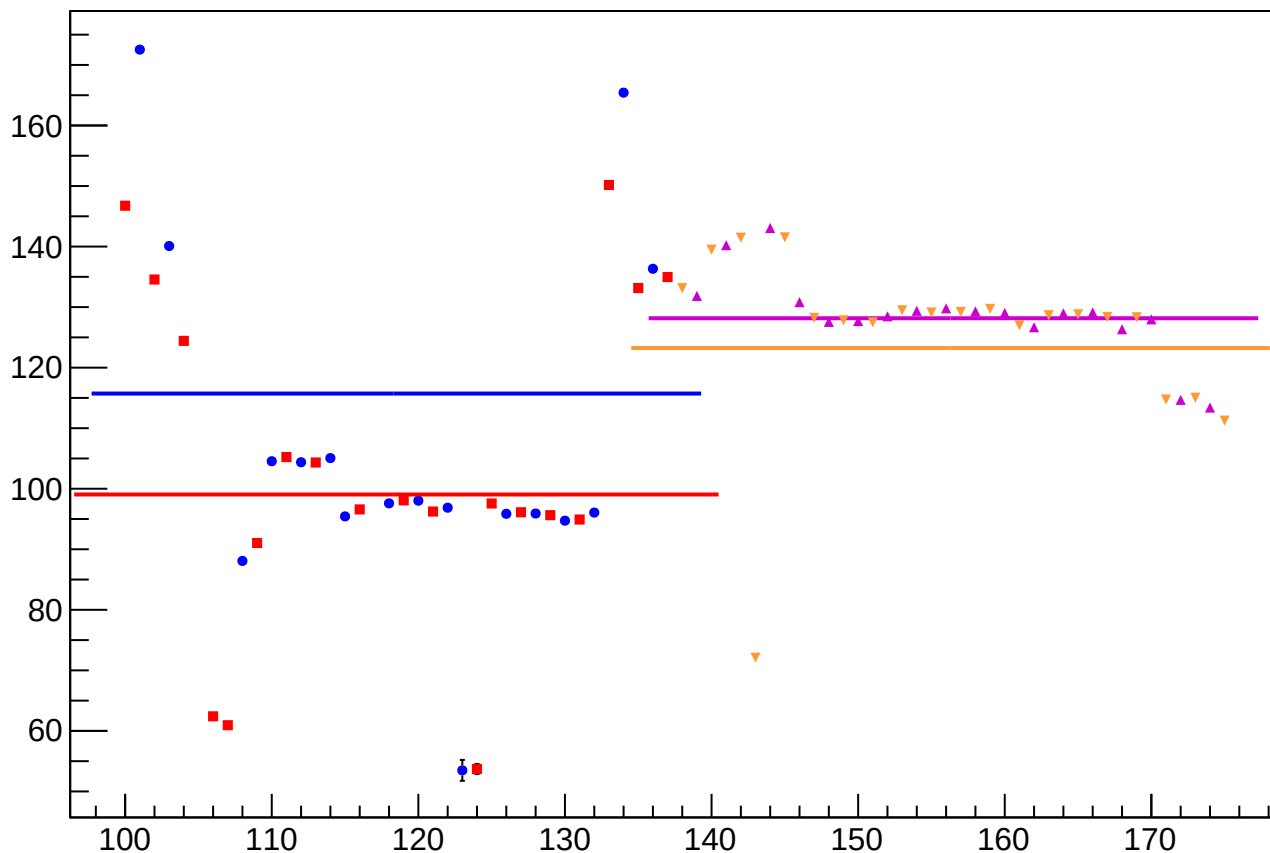
Right:  $-89.357 \pm 0.912$   $\chi^2/\text{NDF}$ : 1494.2/35

In:  $-82.390 \pm 0.771$   $\chi^2/\text{NDF}$ : 1140.9/34

Out:  $-77.468 \pm 0.720$   $\chi^2/\text{NDF}$ : 1455.0/38

All:  $-79.761 \pm 0.526$   $\chi^2/\text{NDF}$ : 2617.7/73

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 115.724 $\pm$ 0.078  $\chi^2$ /NDF: 106388.1/16

Left Out: 123.238 $\pm$ 0.043  $\chi^2$ /NDF:154305.8/19

Right Out: 99.049 $\pm$ 0.069  $\chi^2$ /NDF: 173463.3/18

Left In: 128.162 $\pm$ 0.044  $\chi^2$ /NDF:24560.2/17

Left: 125.593 $\pm$ 0.031  $\chi^2$ /NDF: 185272.5/37

Right: 106.312 $\pm$ 0.051  $\chi^2$ /NDF: 305658.4/35

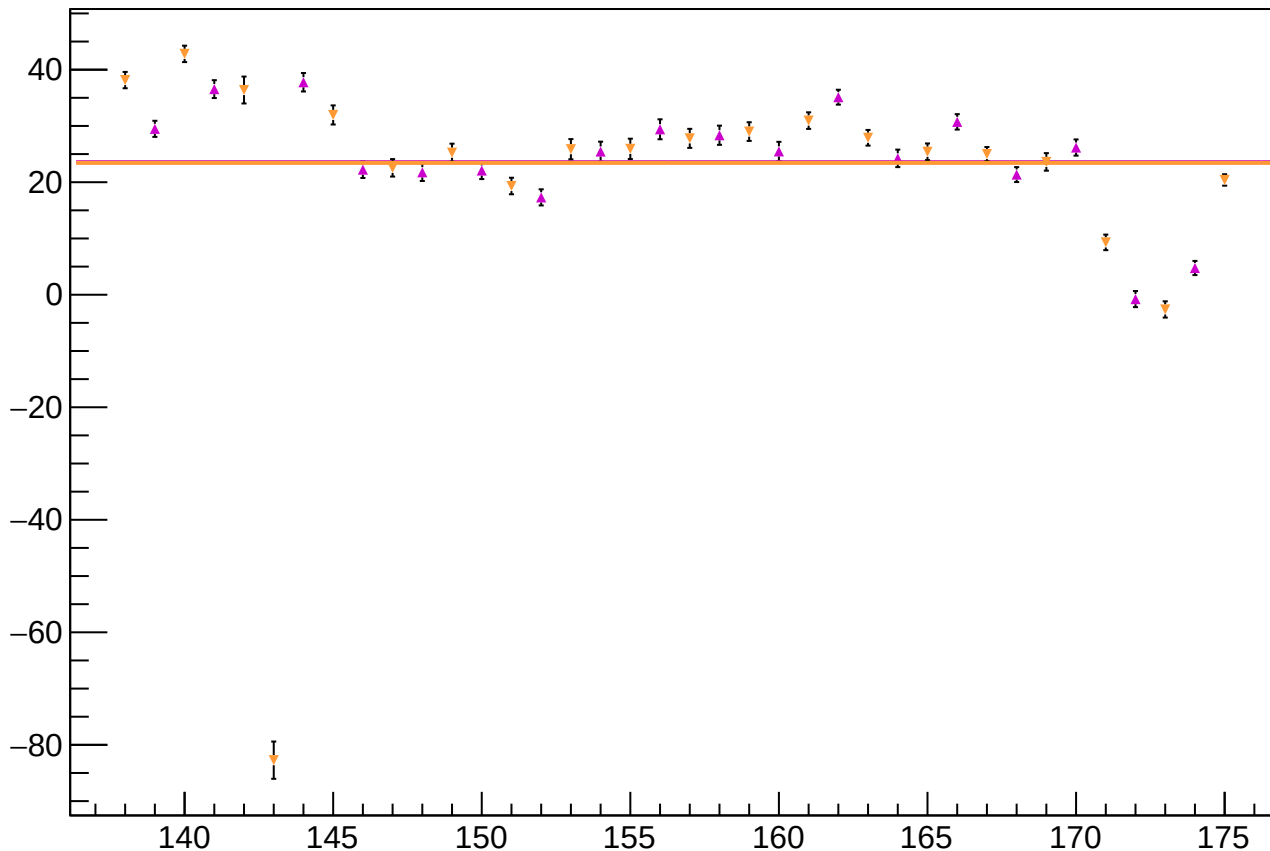
In: 125.113 $\pm$ 0.039  $\chi^2$ /NDF:150154.2/34

Out: 116.504 $\pm$ 0.036  $\chi^2$ /NDF:417741.3/38

All: 120.526 $\pm$ 0.026  $\chi^2$ /NDF: 594396.3/73



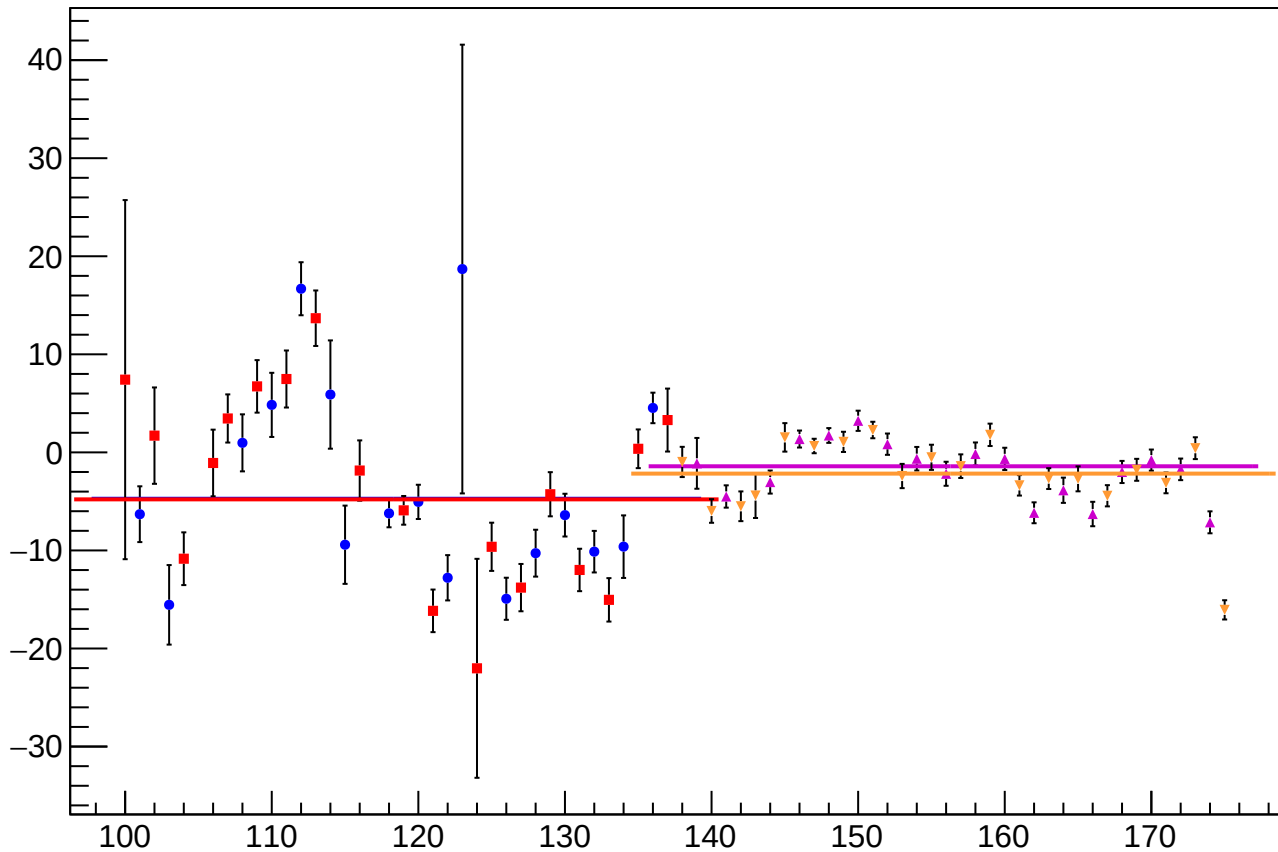
reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left Out: 23.442 $\pm$ 0.341  $\chi^2$ /NDF:1870.3/19  
 Right Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Left In: 23.558 $\pm$ 0.352  $\chi^2$ /NDF:824.4/17

Left: 23.498 $\pm$ 0.245  $\chi^2$ /NDF: 2694.8/37  
 Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 In: 23.558 $\pm$ 0.352  $\chi^2$ /NDF:824.4/17  
 Out: 23.442 $\pm$ 0.341  $\chi^2$ /NDF:1870.3/19  
 All: 23.498 $\pm$ 0.245  $\chi^2$ /NDF: 2694.8/37

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-4.730 \pm 0.580$   $\chi^2/\text{NDF}$ : 174.8/16

Left Out:  $-2.166 \pm 0.250$   $\chi^2/\text{NDF}$ : 302.3/19

Right Out:  $-4.793 \pm 0.586$   $\chi^2/\text{NDF}$ : 193.5/18

Left In:  $-1.418 \pm 0.260$   $\chi^2/\text{NDF}$ : 129.2/17

Left:  $-1.806 \pm 0.180$   $\chi^2/\text{NDF}$ : 435.8/37

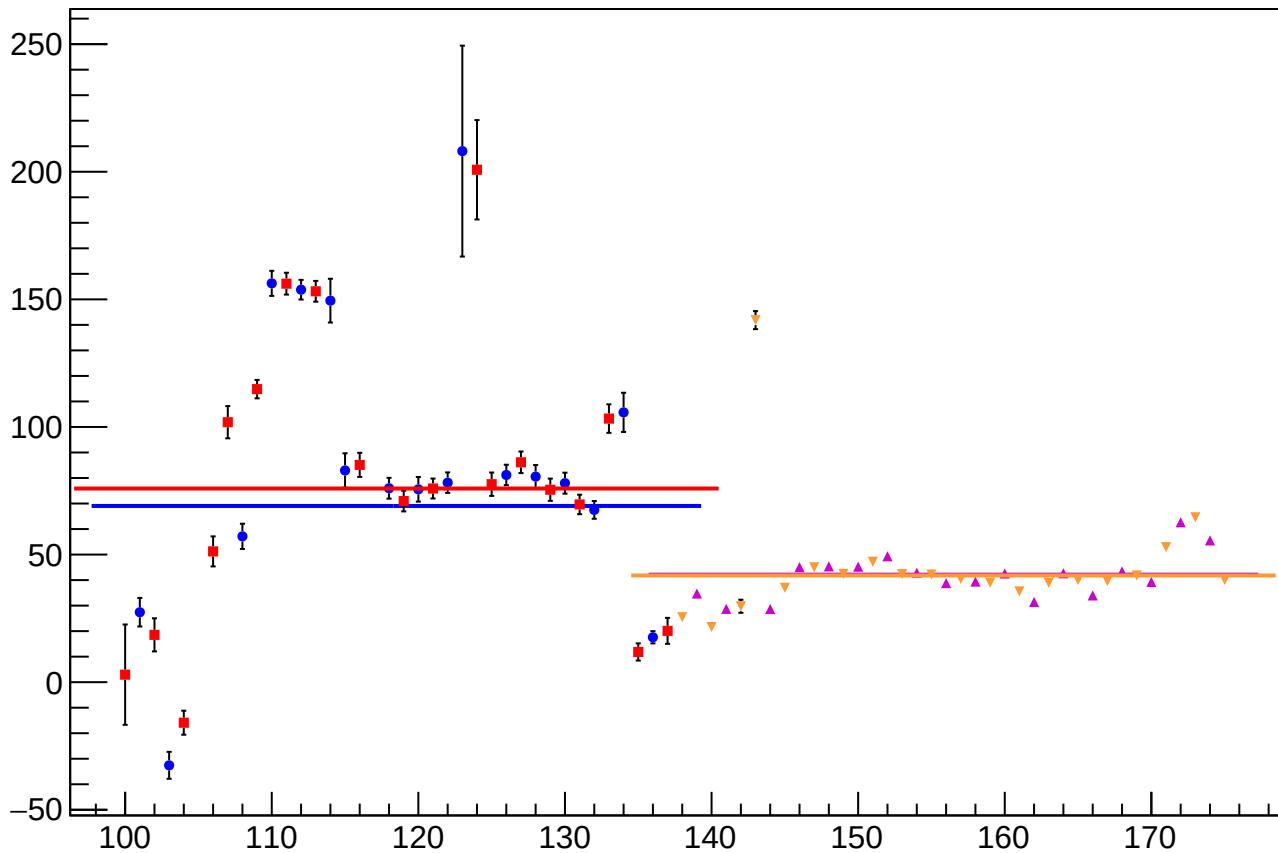
Right:  $-4.761 \pm 0.412$   $\chi^2/\text{NDF}$ : 368.3/35

In:  $-1.973 \pm 0.237$   $\chi^2/\text{NDF}$ : 331.3/34

Out:  $-2.572 \pm 0.230$   $\chi^2/\text{NDF}$ : 512.7/38

All:  $-2.282 \pm 0.165$   $\chi^2/\text{NDF}$ : 847.3/73

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 69.048 $\pm$ 1.077  $\chi^2$ /NDF: 1847.9/16

Left Out: 41.805 $\pm$ 0.337  $\chi^2$ /NDF:1455.6/19

Right Out: 75.878 $\pm$ 1.069  $\chi^2$ /NDF: 1895.0/18

Left In: 42.127 $\pm$ 0.349  $\chi^2$ /NDF:596.4/17

Left: 41.961 $\pm$ 0.242  $\chi^2$ /NDF: 2052.4/37

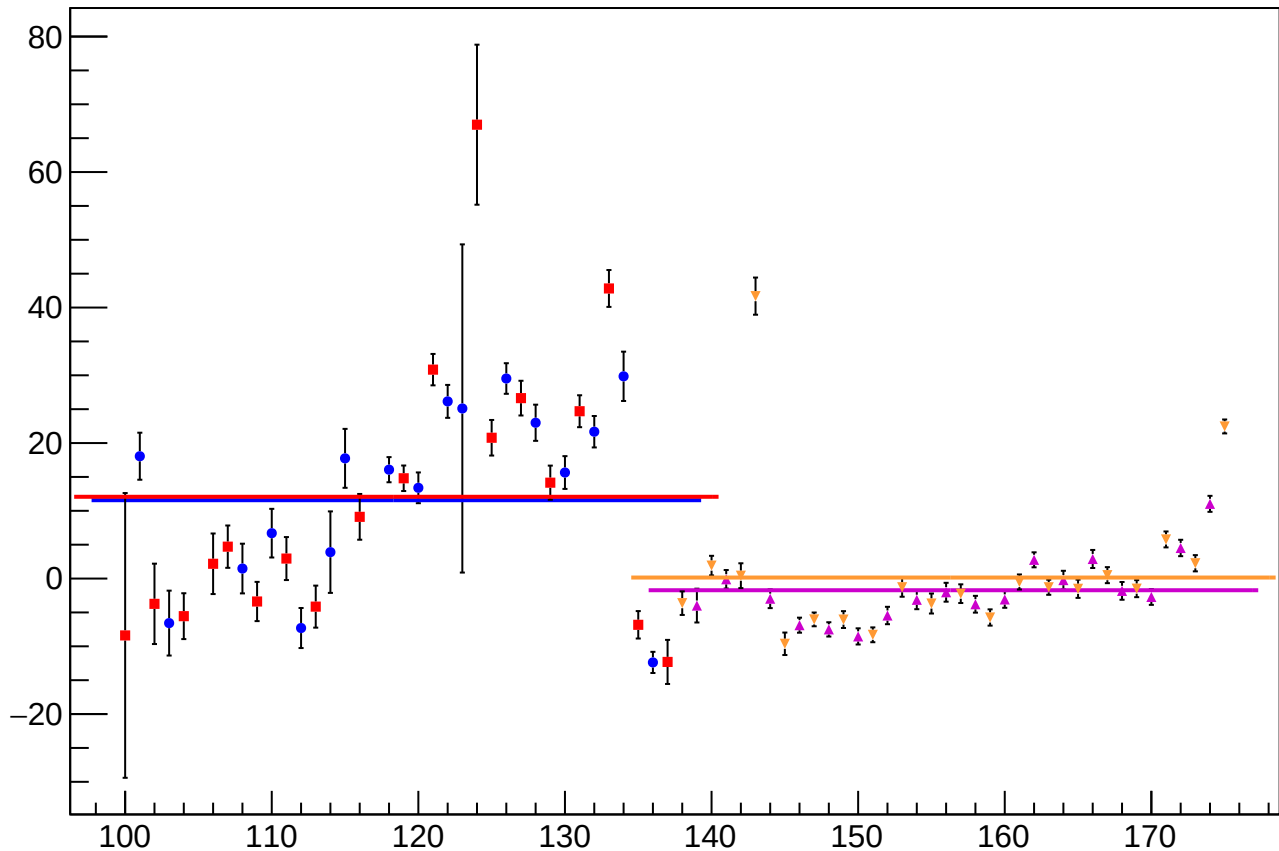
Right: 72.486 $\pm$ 0.759  $\chi^2$ /NDF: 3763.1/35

In: 44.682 $\pm$ 0.332  $\chi^2$ /NDF:3010.2/34

Out: 44.883 $\pm$ 0.321  $\chi^2$ /NDF:4273.9/38

All: 44.786 $\pm$ 0.231  $\chi^2$ /NDF: 7284.2/73

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 11.565 $\pm$ 0.658  $\chi^2$ /NDF: 478.2/16

Left Out: 0.152 $\pm$ 0.287  $\chi^2$ /NDF:929.4/19

Right Out: 12.071 $\pm$ 0.665  $\chi^2$ /NDF: 543.3/18

Left In: -1.722 $\pm$ 0.299  $\chi^2$ /NDF:274.4/17

Left: -0.748 $\pm$ 0.207  $\chi^2$ /NDF: 1224.3/37

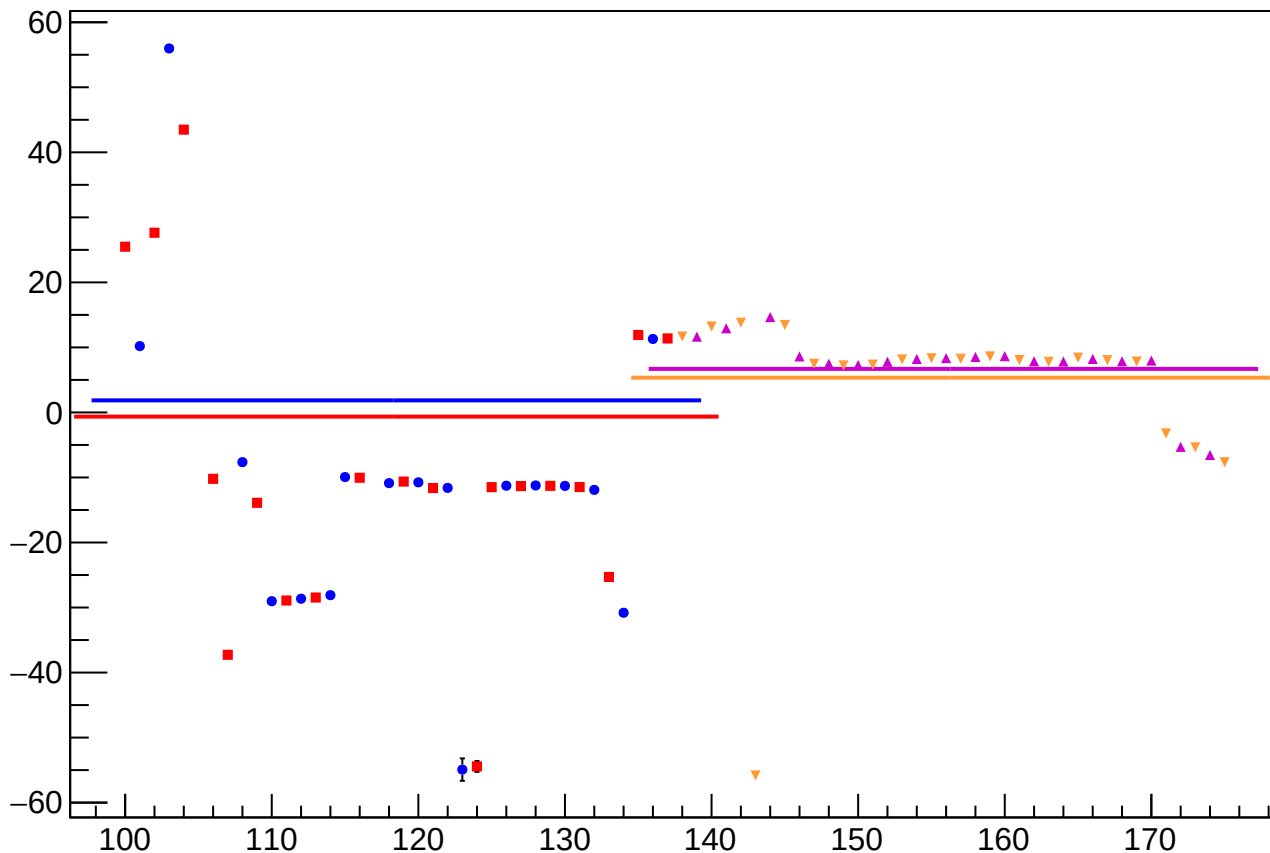
Right: 11.816 $\pm$ 0.468  $\chi^2$ /NDF: 1021.8/35

In: 0.547 $\pm$ 0.272  $\chi^2$ /NDF:1090.5/34

Out: 2.027 $\pm$ 0.264  $\chi^2$ /NDF:1743.8/38

All: 1.310 $\pm$ 0.189  $\chi^2$ /NDF: 2849.6/73

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $1.855 \pm 0.037$   $\chi^2/\text{NDF}: 359414.1/16$

Left Out:  $5.342 \pm 0.013$   $\chi^2/\text{NDF}: 396059.0/19$

Right Out:  $-0.644 \pm 0.037$   $\chi^2/\text{NDF}: 361625.7/18$

Left In:  $6.697 \pm 0.013$   $\chi^2/\text{NDF}: 159132.1/17$

Left:  $6.010 \pm 0.009$   $\chi^2/\text{NDF}: 560296.6/37$

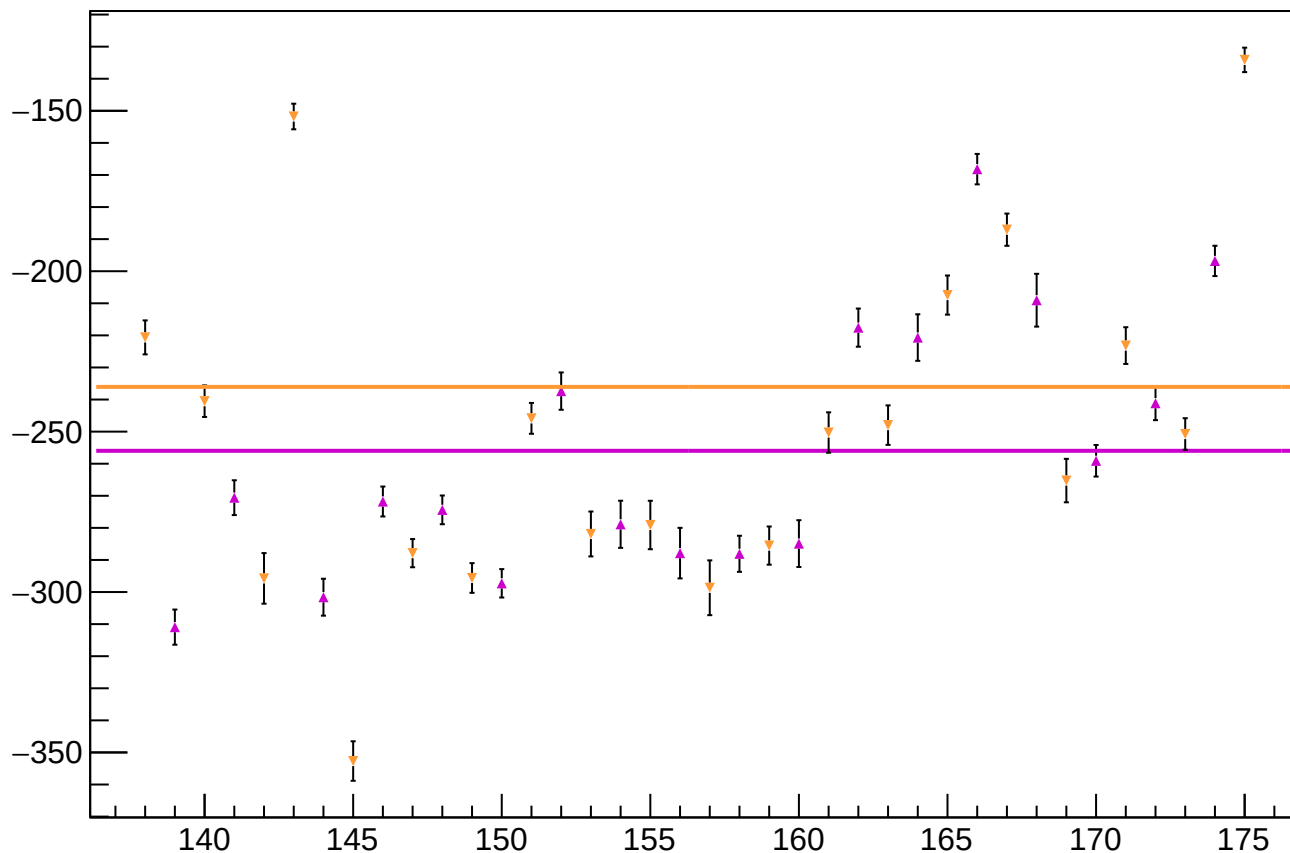
Right:  $0.608 \pm 0.026$   $\chi^2/\text{NDF}: 723318.4/35$

In:  $6.128 \pm 0.013$   $\chi^2/\text{NDF}: 533659.9/34$

Out:  $4.658 \pm 0.013$   $\chi^2/\text{NDF}: 780804.9/38$

All:  $5.385 \pm 0.009$   $\chi^2/\text{NDF}: 1321272.5/73$

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-236.058 \pm 1.209$   $\chi^2/\text{NDF}: 2253.7/19$

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-255.979 \pm 1.305$   $\chi^2/\text{NDF}: 976.4/17$

Left:  $-245.255 \pm 0.887$   $\chi^2/\text{NDF}: 3355.5/37$

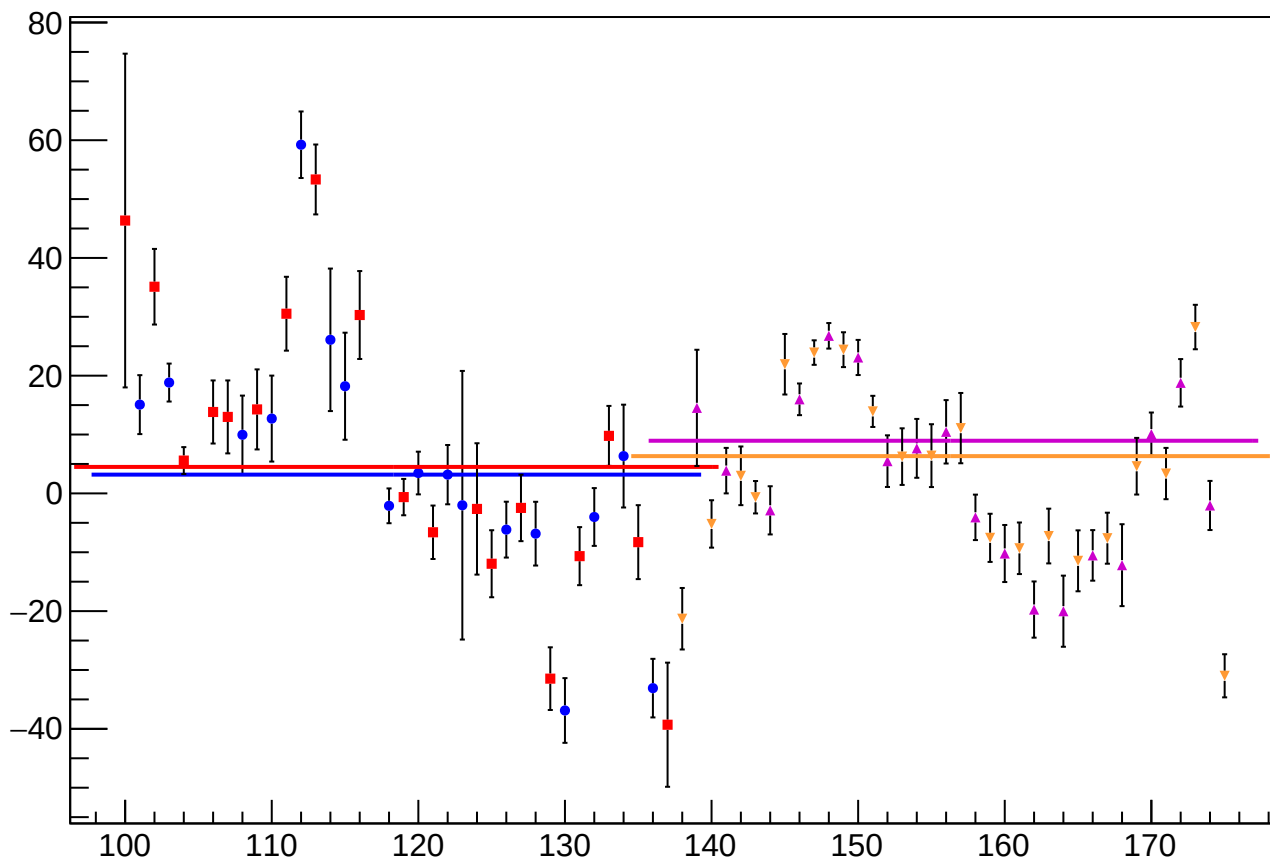
Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

In:  $-255.979 \pm 1.305$   $\chi^2/\text{NDF}: 976.4/17$

Out:  $-236.058 \pm 1.209$   $\chi^2/\text{NDF}: 2253.7/19$

All:  $-245.255 \pm 0.887$   $\chi^2/\text{NDF}: 3355.5/37$

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $3.188 \pm 1.225$   $\chi^2/\text{NDF}$ : 255.6/16

Left Out:  $6.331 \pm 0.848$   $\chi^2/\text{NDF}$ : 362.9/19

Right Out:  $4.497 \pm 1.160$   $\chi^2/\text{NDF}$ : 225.4/18

Left In:  $8.944 \pm 0.923$   $\chi^2/\text{NDF}$ : 236.7/17

Left:  $7.527 \pm 0.624$   $\chi^2/\text{NDF}$ : 604.0/37

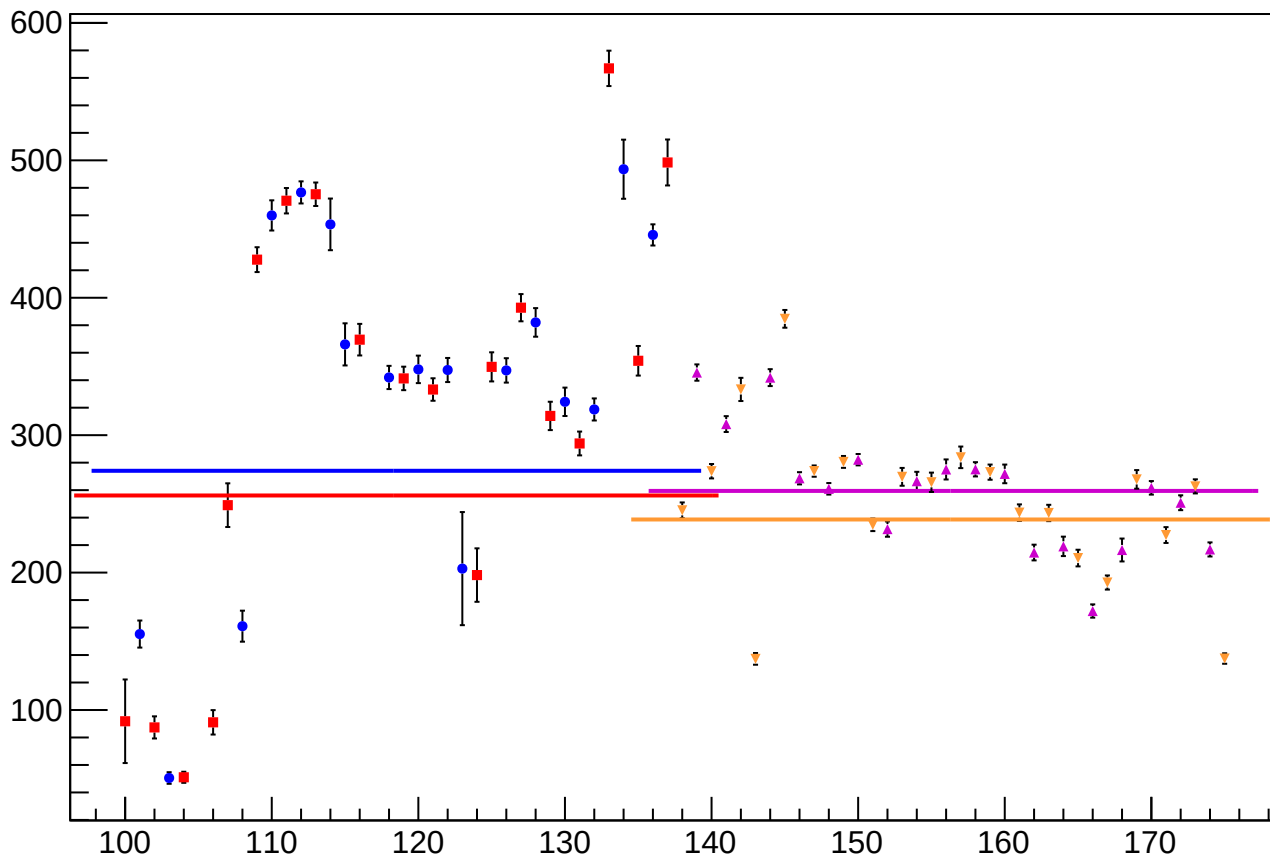
Right:  $3.879 \pm 0.842$   $\chi^2/\text{NDF}$ : 481.7/35

In:  $6.862 \pm 0.737$   $\chi^2/\text{NDF}$ : 506.5/34

Out:  $5.692 \pm 0.684$   $\chi^2/\text{NDF}$ : 590.0/38

All:  $6.234 \pm 0.501$   $\chi^2/\text{NDF}$ : 1097.8/73

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 274.079+/-2.191  $\chi^2/\text{NDF}$ : 5112.0/16

Left Out: 238.640+/-1.201  $\chi^2/\text{NDF}$ : 2383.9/19

Right Out: 256.109+/-2.080  $\chi^2/\text{NDF}$ : 6444.1/18

Left In: 259.434+/-1.288  $\chi^2/\text{NDF}$ : 1058.4/17

Left: 248.308+/-0.878  $\chi^2/\text{NDF}$ : 3581.7/37

Right: 264.628+/-1.509  $\chi^2/\text{NDF}$ : 11591.4/35

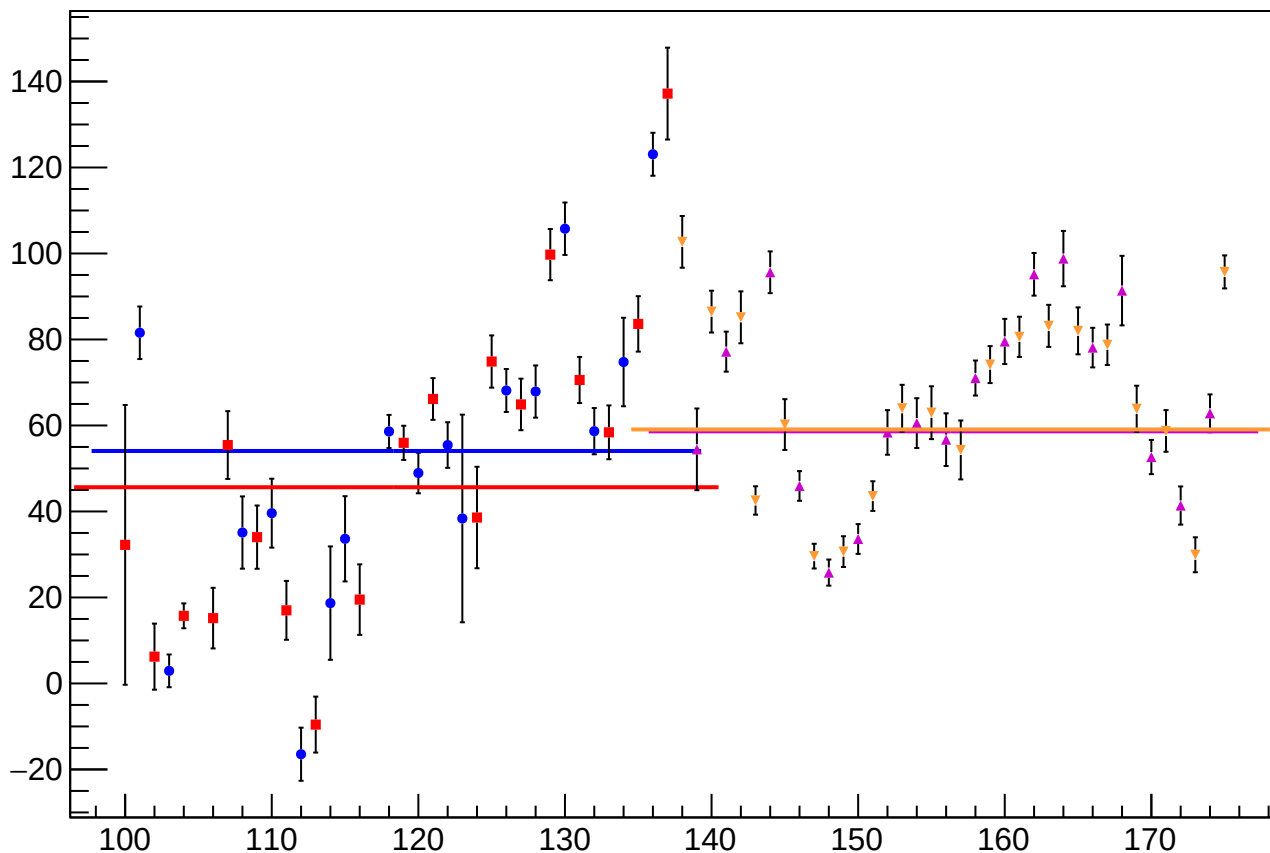
In: 263.196+/-1.110  $\chi^2/\text{NDF}$ : 6203.6/34

Out: 243.006+/-1.040  $\chi^2/\text{NDF}$ : 8880.8/38

All: 252.439+/-0.759  $\chi^2/\text{NDF}$ : 15260.6/73



reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 54.065 $\pm$ 1.421  $\chi^2$ /NDF: 634.4/16

Left Out: 59.074 $\pm$ 0.996  $\chi^2$ /NDF:554.3/19

Right Out: 45.637 $\pm$ 1.359  $\chi^2$ /NDF: 530.8/18

Left In: 58.632 $\pm$ 1.079  $\chi^2$ /NDF:427.9/17

Left: 58.871 $\pm$ 0.732  $\chi^2$ /NDF: 982.3/37

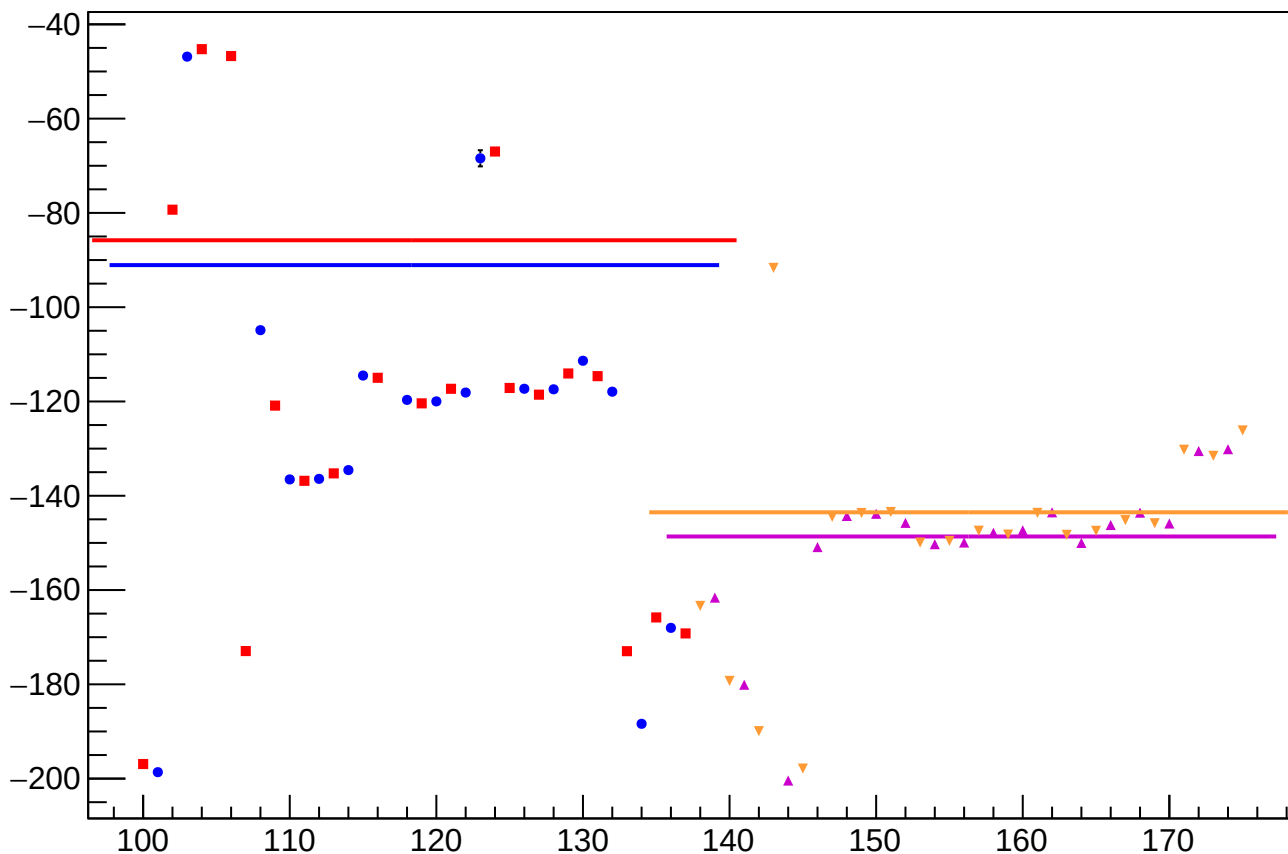
Right: 49.665 $\pm$ 0.982  $\chi^2$ /NDF: 1183.6/35

In: 56.960 $\pm$ 0.859  $\chi^2$ /NDF:1068.8/34

Out: 54.380 $\pm$ 0.803  $\chi^2$ /NDF:1148.7/38

All: 55.583 $\pm$ 0.587  $\chi^2$ /NDF: 2222.3/73

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -91.074 $\pm$ 0.068  $\chi^2$ /NDF: 534647.5/16

Left Out: -143.509 $\pm$ 0.048  $\chi^2$ /NDF: 208319.2/19

Right Out: -85.803 $\pm$ 0.065  $\chi^2$ /NDF: 495895.1/18

Left In: -148.638 $\pm$ 0.051  $\chi^2$ /NDF: 80498.3/17

Left: -145.959 $\pm$ 0.035  $\chi^2$ /NDF: 294177.6/37

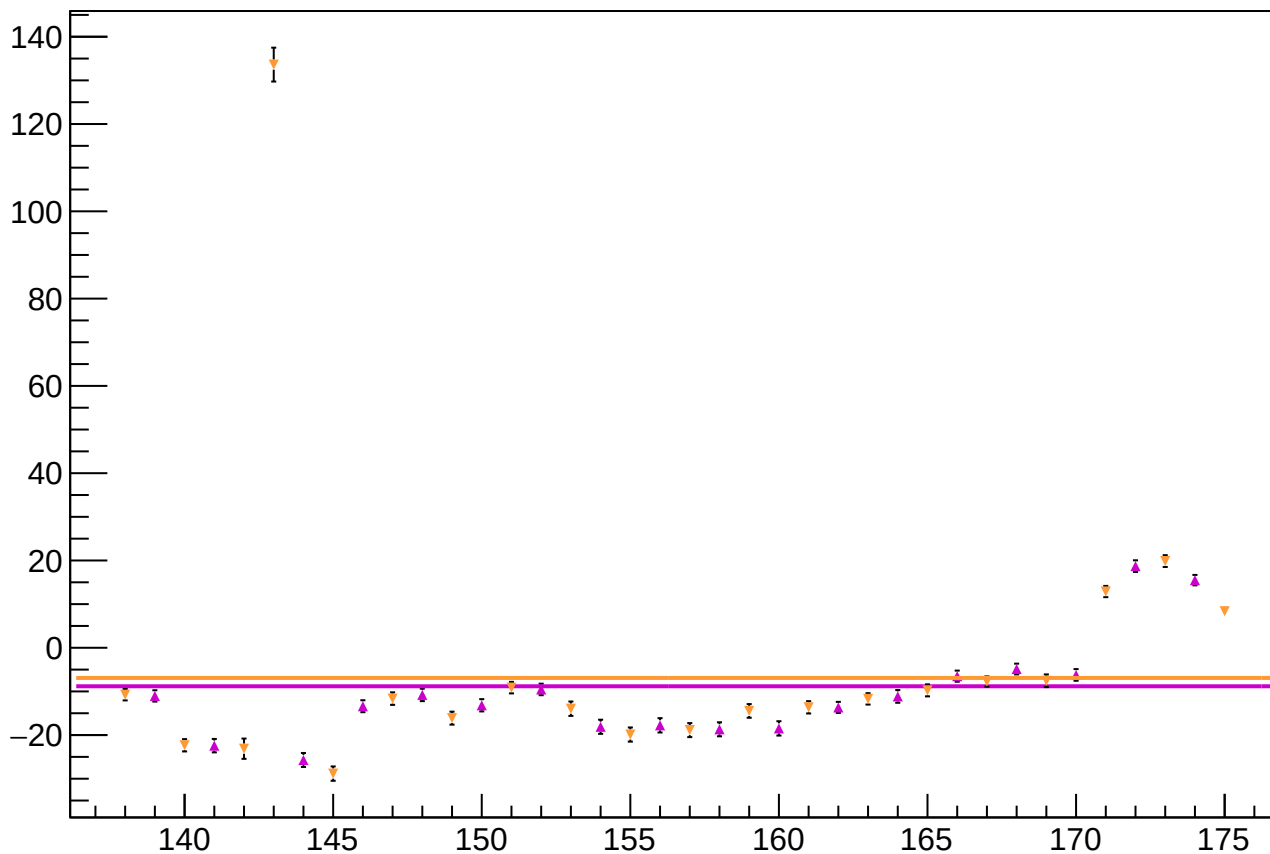
Right: -88.339 $\pm$ 0.047  $\chi^2$ /NDF: 1033703.0/35

In: -127.928 $\pm$ 0.041  $\chi^2$ /NDF: 1080352.5/34

Out: -122.934 $\pm$ 0.039  $\chi^2$ /NDF: 1210722.4/38

All: -125.326 $\pm$ 0.028  $\chi^2$ /NDF: 2298993.3/73

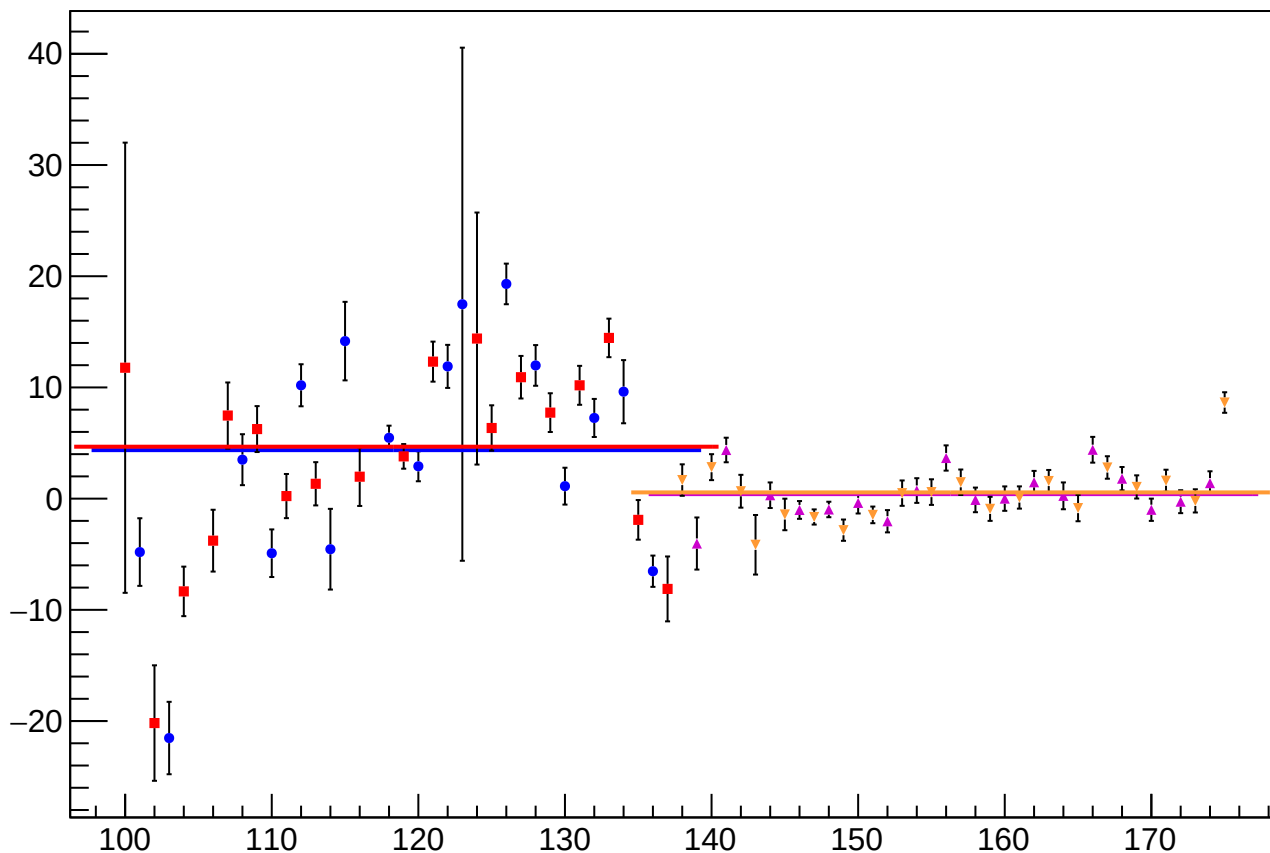
reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out: -6.910+/-0.319  $\chi^2/\text{NDF}$ : 2801.1/19  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Left In: -8.822+/-0.330  $\chi^2/\text{NDF}$ : 1222.4/17

Left: -7.835+/-0.229  $\chi^2/\text{NDF}$ : 4040.9/37  
 Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 In: -8.822+/-0.330  $\chi^2/\text{NDF}$ : 1222.4/17  
 Out: -6.910+/-0.319  $\chi^2/\text{NDF}$ : 2801.1/19  
 All: -7.835+/-0.229  $\chi^2/\text{NDF}$ : 4040.9/37

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 4.361 $\pm$ 0.464  $\chi^2$ /NDF: 286.5/16

Left Out: 0.561 $\pm$ 0.234  $\chi^2$ /NDF:128.3/19

Right Out: 4.670 $\pm$ 0.474  $\chi^2$ /NDF: 185.4/18

Left In: 0.406 $\pm$ 0.244  $\chi^2$ /NDF:56.8/17

Left: 0.486 $\pm$ 0.169  $\chi^2$ /NDF: 185.4/37

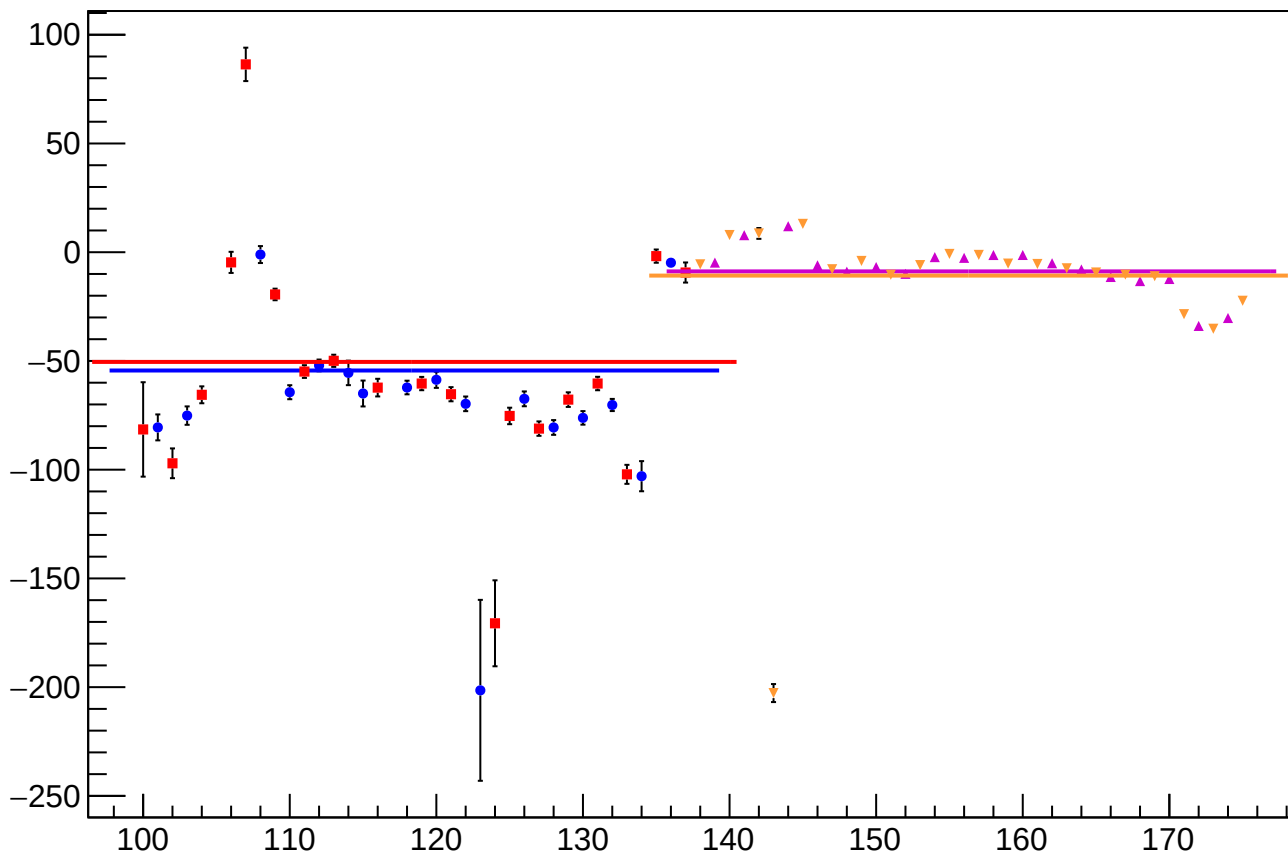
Right: 4.512 $\pm$ 0.332  $\chi^2$ /NDF: 472.1/35

In: 1.260 $\pm$ 0.216  $\chi^2$ /NDF:400.2/34

Out: 1.367 $\pm$ 0.210  $\chi^2$ /NDF:374.1/38

All: 1.315 $\pm$ 0.150  $\chi^2$ /NDF: 774.4/73

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-54.392 \pm 0.863$   $\chi^2/\text{NDF}: 1013.4/16$

Left Out:  $-10.749 \pm 0.315$   $\chi^2/\text{NDF}: 3362.6/19$

Right Out:  $-50.441 \pm 0.857$   $\chi^2/\text{NDF}: 1324.7/18$

Left In:  $-8.819 \pm 0.326$   $\chi^2/\text{NDF}: 995.7/17$

Left:  $-9.816 \pm 0.227$   $\chi^2/\text{NDF}: 4376.5/37$

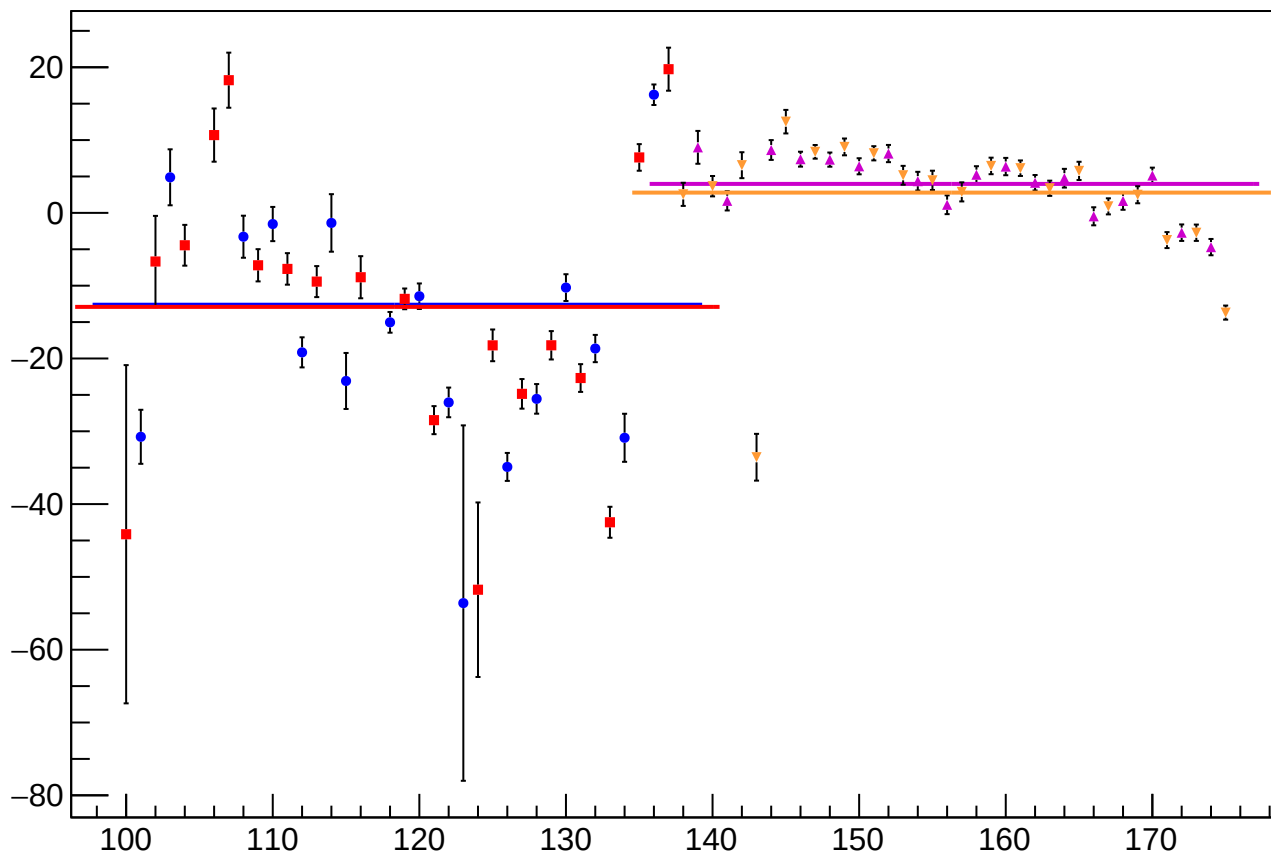
Right:  $-52.405 \pm 0.608$   $\chi^2/\text{NDF}: 2348.7/35$

In:  $-14.520 \pm 0.305$   $\chi^2/\text{NDF}: 4451.6/34$

Out:  $-15.479 \pm 0.296$   $\chi^2/\text{NDF}: 6575.1/38$

All:  $-15.014 \pm 0.212$   $\chi^2/\text{NDF}: 11031.8/73$

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-12.616 \pm 0.530$   $\chi^2/\text{NDF}$ : 788.2/16

Left Out:  $2.784 \pm 0.269$   $\chi^2/\text{NDF}$ : 649.3/19

Right Out:  $-12.912 \pm 0.538$   $\chi^2/\text{NDF}$ : 730.2/18

Left In:  $3.979 \pm 0.280$   $\chi^2/\text{NDF}$ : 183.0/17

Left:  $3.357 \pm 0.194$   $\chi^2/\text{NDF}$ : 841.8/37

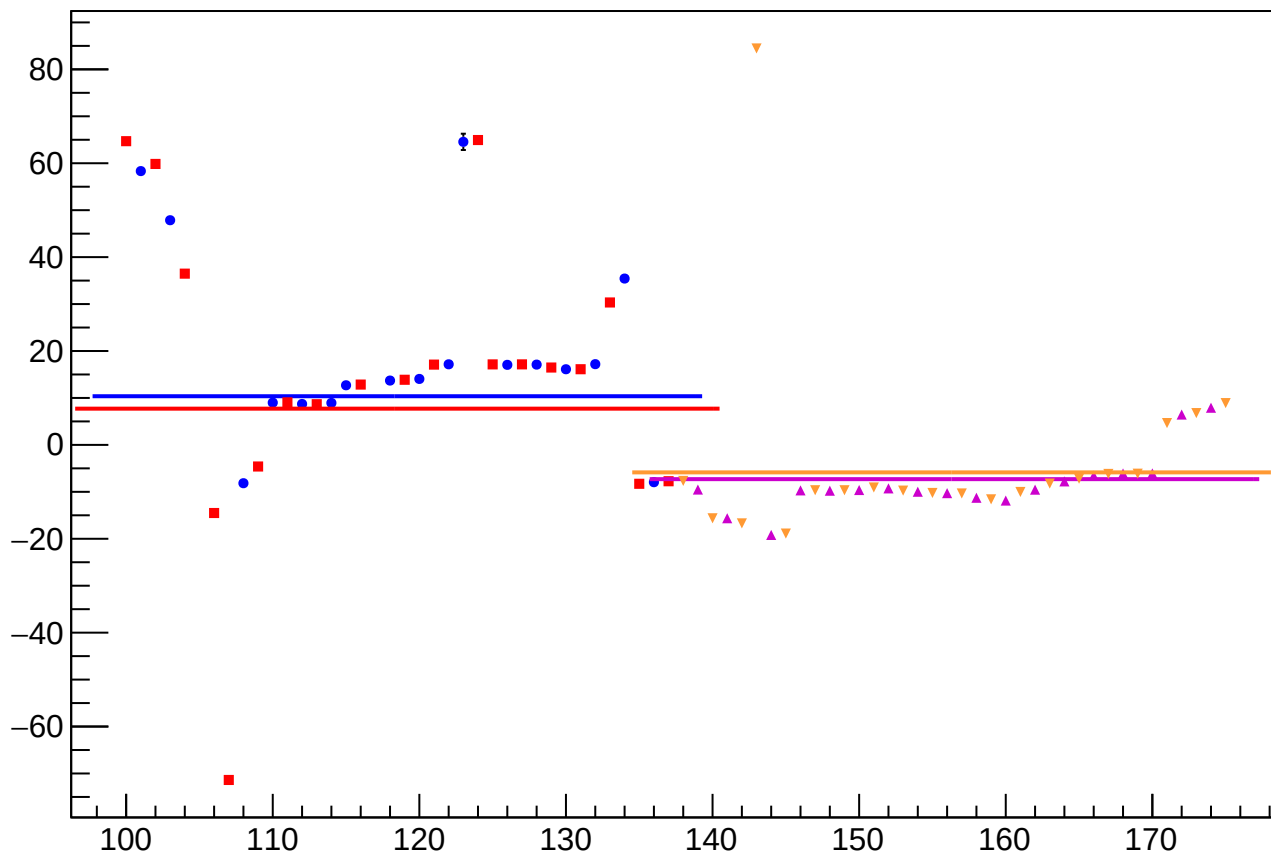
Right:  $-12.762 \pm 0.378$   $\chi^2/\text{NDF}$ : 1518.6/35

In:  $0.357 \pm 0.248$   $\chi^2/\text{NDF}$ : 1737.2/34

Out:  $-0.349 \pm 0.240$   $\chi^2/\text{NDF}$ : 2060.3/38

All:  $-0.006 \pm 0.173$   $\chi^2/\text{NDF}$ : 3801.7/73

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 10.366+/-0.031  $\chi^2/\text{NDF}$ : 381003.5/16

Left Out: -5.856+/-0.012  $\chi^2/\text{NDF}$ : 636446.2/19

Right Out: 7.719+/-0.031  $\chi^2/\text{NDF}$ : 545085.7/18

Left In: -7.297+/-0.013  $\chi^2/\text{NDF}$ : 255595.9/17

Left: -6.567+/-0.009  $\chi^2/\text{NDF}$ : 898659.6/37

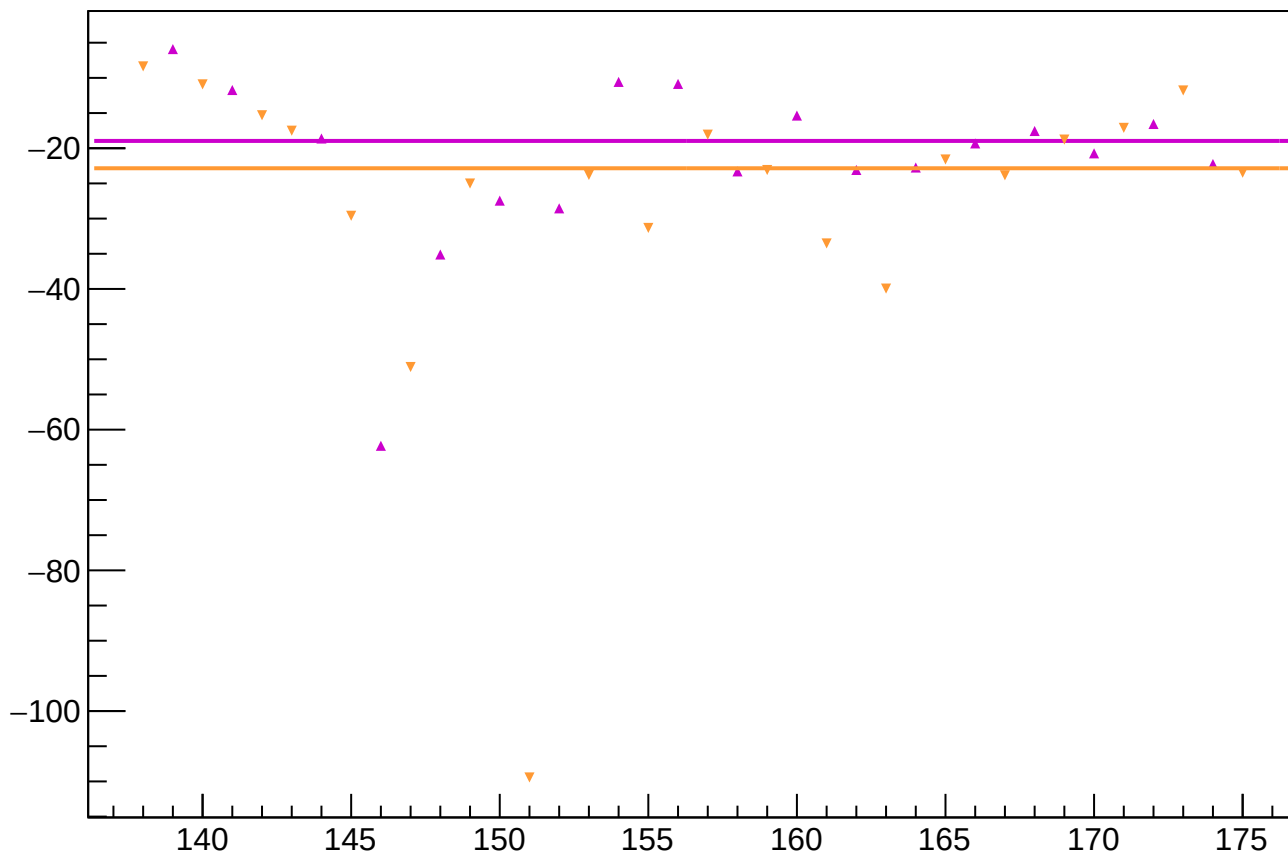
Right: 9.073+/-0.022  $\chi^2/\text{NDF}$ : 929756.2/35

In: -4.722+/-0.012  $\chi^2/\text{NDF}$ : 922393.3/34

Out: -3.997+/-0.012  $\chi^2/\text{NDF}$ : 1344334.9/38

All: -4.356+/-0.008  $\chi^2/\text{NDF}$ : 2268677.4/73

reg\_asym\_bcm\_an\_ds3\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-22.847 \pm 0.051$   $\chi^2/\text{NDF}$ : 62488.3/19

Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left In:  $-18.961 \pm 0.048$   $\chi^2/\text{NDF}$ : 38384.5/17

Left:  $-20.760 \pm 0.035$   $\chi^2/\text{NDF}$ : 103943.9/37

Right:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

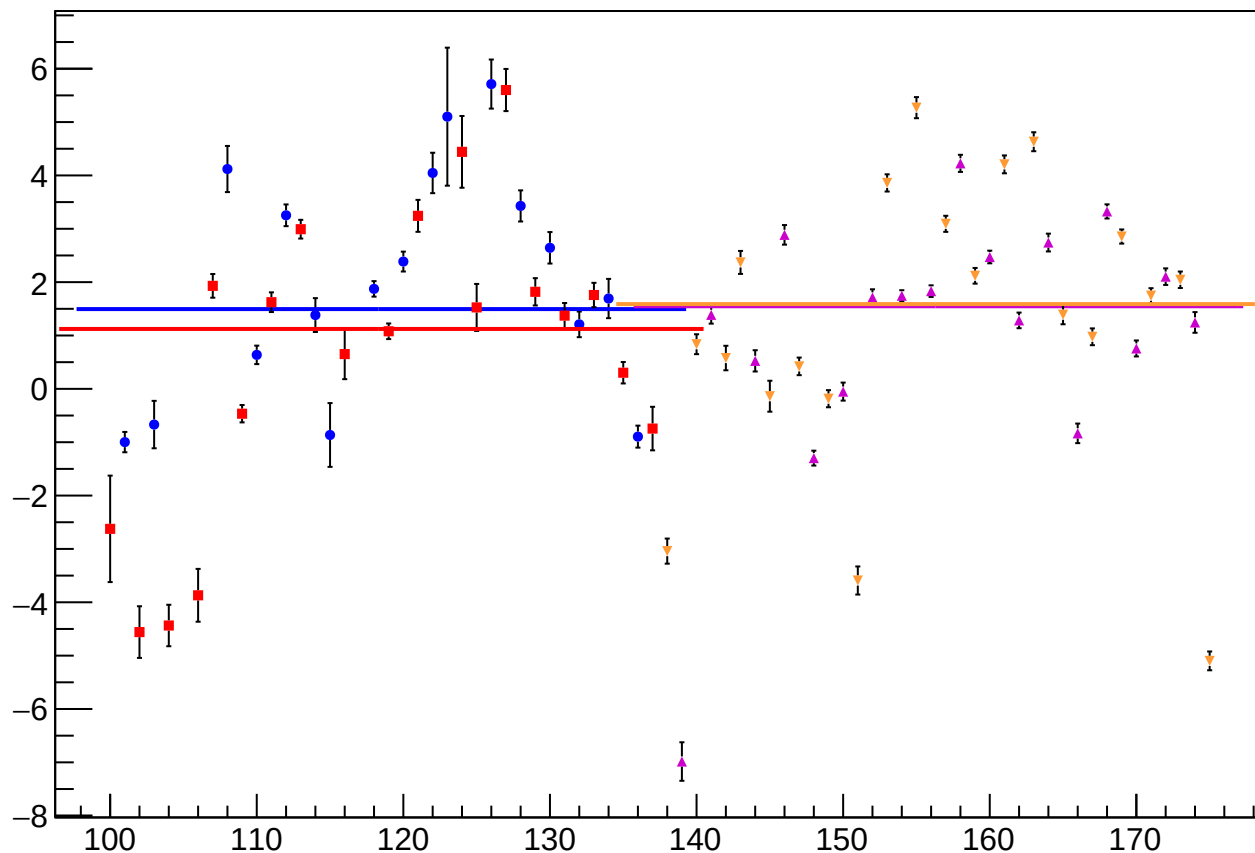
In:  $-18.961 \pm 0.048$   $\chi^2/\text{NDF}$ : 38384.5/17

Out:  $-22.847 \pm 0.051$   $\chi^2/\text{NDF}$ : 62488.3/19

All:  $-20.760 \pm 0.035$   $\chi^2/\text{NDF}$ : 103943.9/37



reg\_asym\_bcm\_an\_ds3\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.495 $\pm$ 0.061  $\chi^2$ /NDF: 708.8/16

Left Out: 1.589 $\pm$ 0.039  $\chi^2$ /NDF:3786.4/19

Right Out: 1.123 $\pm$ 0.058  $\chi^2$ /NDF: 946.5/18

Left In: 1.548 $\pm$ 0.035  $\chi^2$ /NDF:1940.0/17

Left: 1.567 $\pm$ 0.026  $\chi^2$ /NDF: 5727.0/37

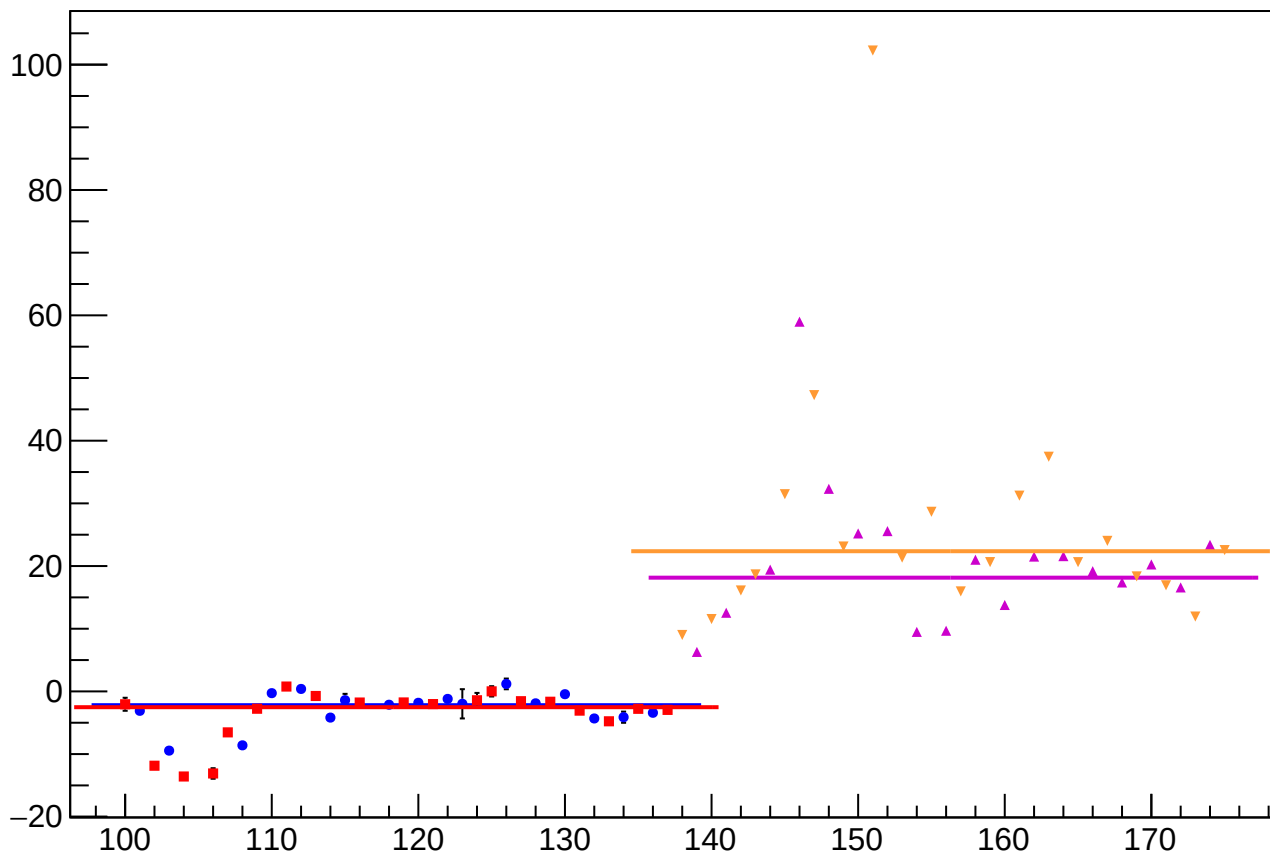
Right: 1.300 $\pm$ 0.042  $\chi^2$ /NDF: 1674.8/35

In: 1.535 $\pm$ 0.031  $\chi^2$ /NDF:2649.4/34

Out: 1.445 $\pm$ 0.032  $\chi^2$ /NDF:4777.3/38

All: 1.492 $\pm$ 0.022  $\chi^2$ /NDF: 7430.7/73

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.200 \pm 0.111$   $\chi^2/\text{NDF}$ : 461.0/16

Left Out:  $22.366 \pm 0.051$   $\chi^2/\text{NDF}$ : 55672.0/19

Right Out:  $-2.520 \pm 0.099$   $\chi^2/\text{NDF}$ : 903.3/18

Left In:  $18.146 \pm 0.047$   $\chi^2/\text{NDF}$ : 36447.7/17

Left:  $20.073 \pm 0.034$   $\chi^2/\text{NDF}$ : 95851.4/37

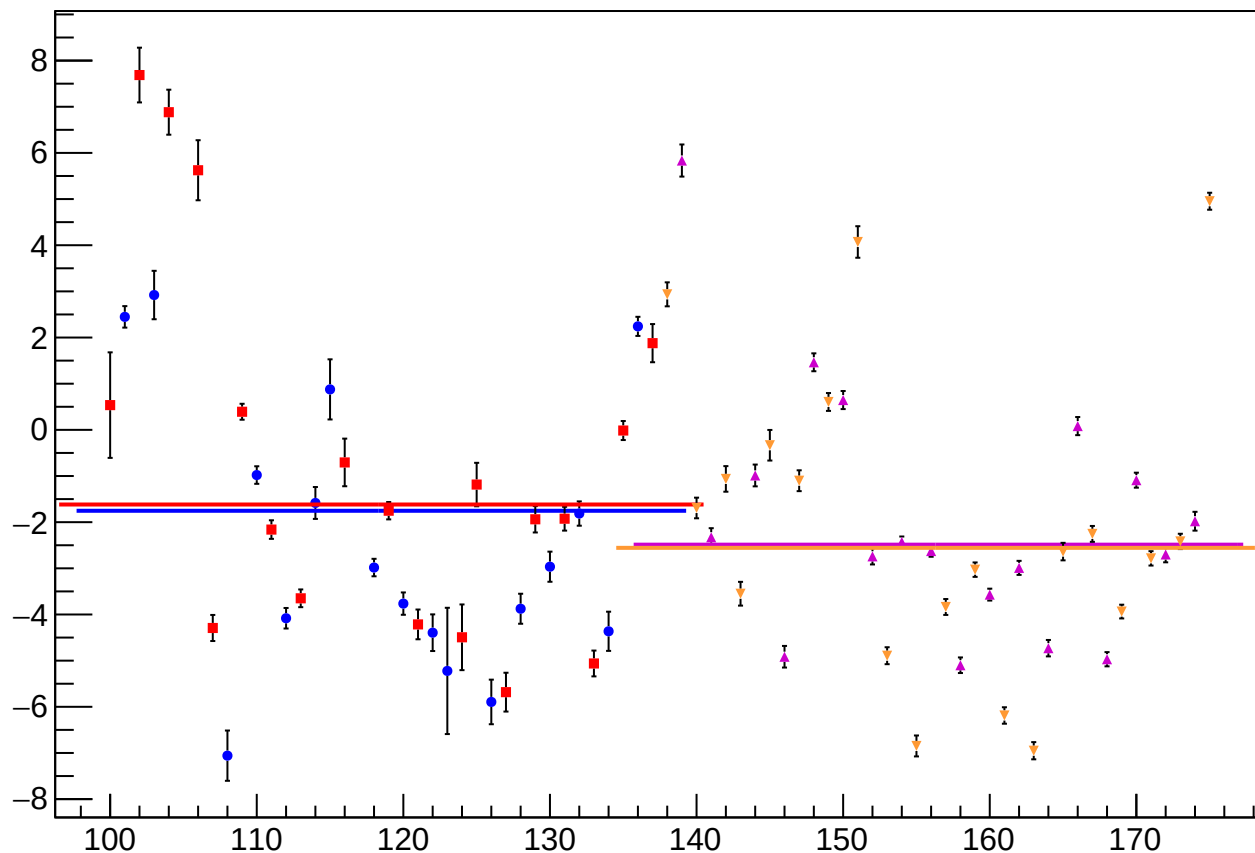
Right:  $-2.378 \pm 0.074$   $\chi^2/\text{NDF}$ : 1368.9/35

In:  $15.068 \pm 0.043$   $\chi^2/\text{NDF}$ : 65638.1/34

Out:  $17.155 \pm 0.045$   $\chi^2/\text{NDF}$ : 106582.3/38

All:  $16.058 \pm 0.031$   $\chi^2/\text{NDF}$ : 173336.9/73

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-1.753 \pm 0.070$   $\chi^2/\text{NDF}$ : 1345.0/16

Left Out:  $-2.556 \pm 0.044$   $\chi^2/\text{NDF}$ : 4550.2/19

Right Out:  $-1.617 \pm 0.066$   $\chi^2/\text{NDF}$ : 1487.5/18

Left In:  $-2.487 \pm 0.040$   $\chi^2/\text{NDF}$ : 2387.5/17

Left:  $-2.519 \pm 0.029$   $\chi^2/\text{NDF}$ : 6939.0/37

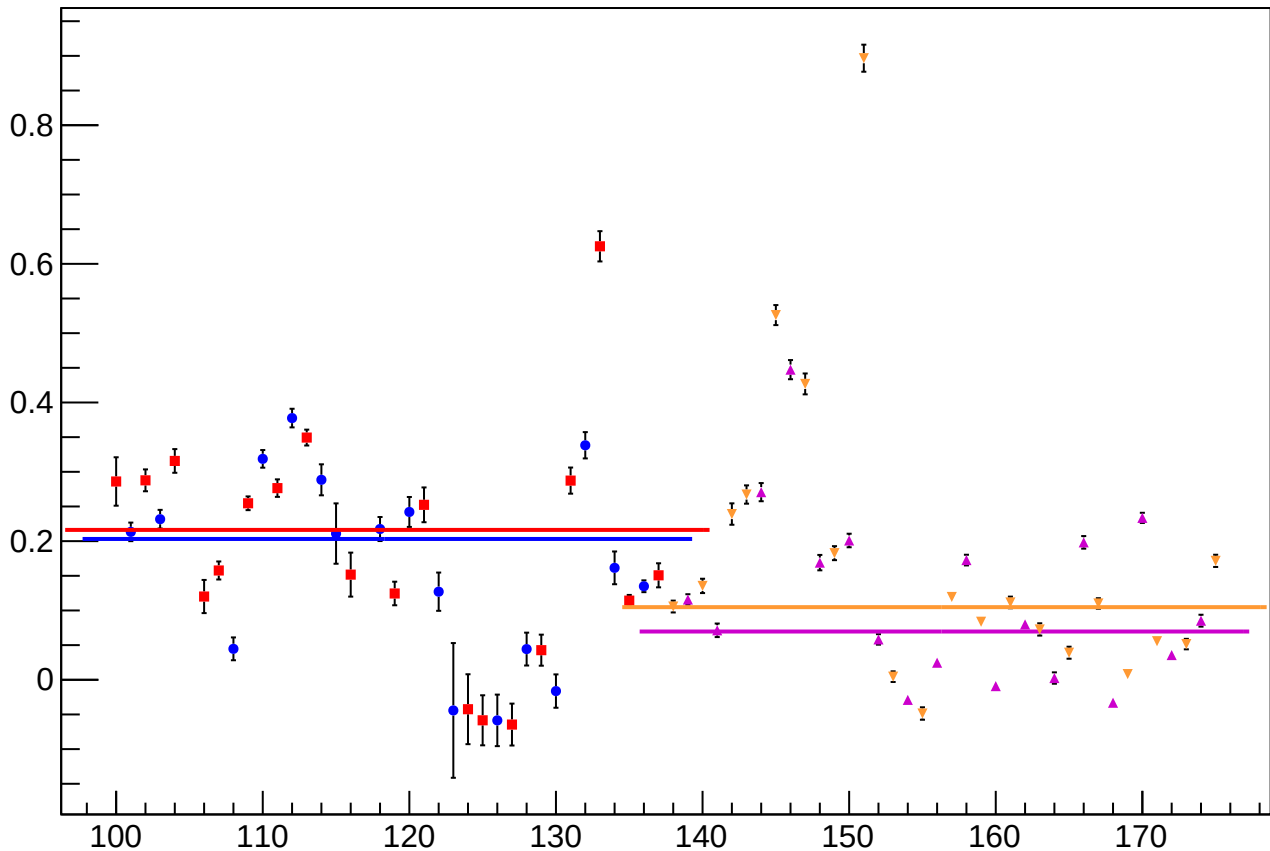
Right:  $-1.681 \pm 0.048$   $\chi^2/\text{NDF}$ : 2834.6/35

In:  $-2.308 \pm 0.035$   $\chi^2/\text{NDF}$ : 3814.9/34

Out:  $-2.269 \pm 0.036$   $\chi^2/\text{NDF}$ : 6179.3/38

All:  $-2.289 \pm 0.025$   $\chi^2/\text{NDF}$ : 9994.8/73

reg\_asym\_bcm\_an\_ds3\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.203 \pm 0.004$   $\chi^2/\text{NDF}$ : 677.2/16

Left Out:  $0.105 \pm 0.002$   $\chi^2/\text{NDF}$ : 4161.3/19

Right Out:  $0.216 \pm 0.004$   $\chi^2/\text{NDF}$ : 1067.3/18

Left In:  $0.070 \pm 0.002$   $\chi^2/\text{NDF}$ : 3211.5/17

Left:  $0.085 \pm 0.001$   $\chi^2/\text{NDF}$ : 7552.6/37

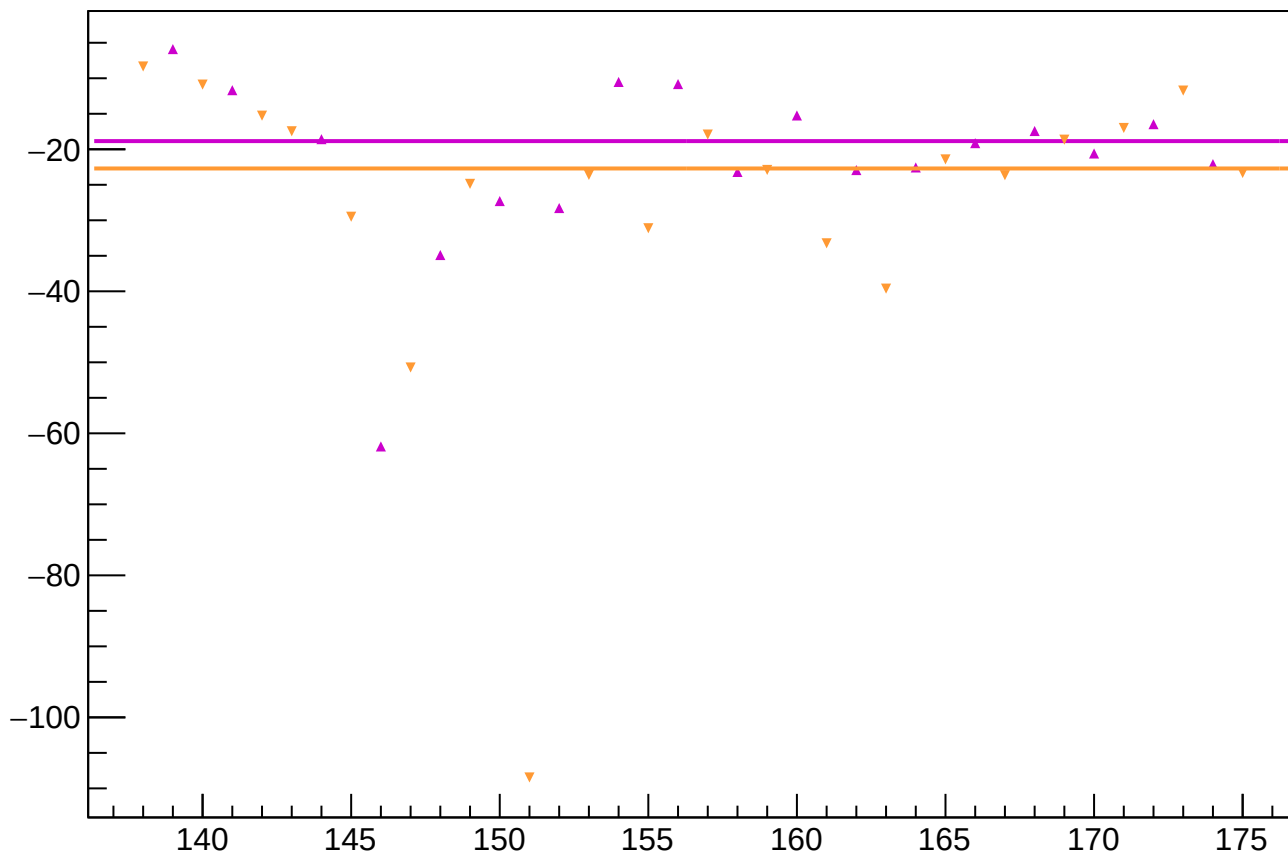
Right:  $0.210 \pm 0.003$   $\chi^2/\text{NDF}$ : 1750.0/35

In:  $0.090 \pm 0.002$   $\chi^2/\text{NDF}$ : 4775.6/34

Out:  $0.129 \pm 0.002$   $\chi^2/\text{NDF}$ : 5938.7/38

All:  $0.108 \pm 0.001$   $\chi^2/\text{NDF}$ : 10996.1/73

reg\_asym\_bcm\_an\_ds\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -22.704+/-0.051  $\chi^2/\text{NDF}$ :62301.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -18.849+/-0.047  $\chi^2/\text{NDF}$ :38294.3/17

Left: -20.634+/-0.035  $\chi^2/\text{NDF}$ : 103657.1/37

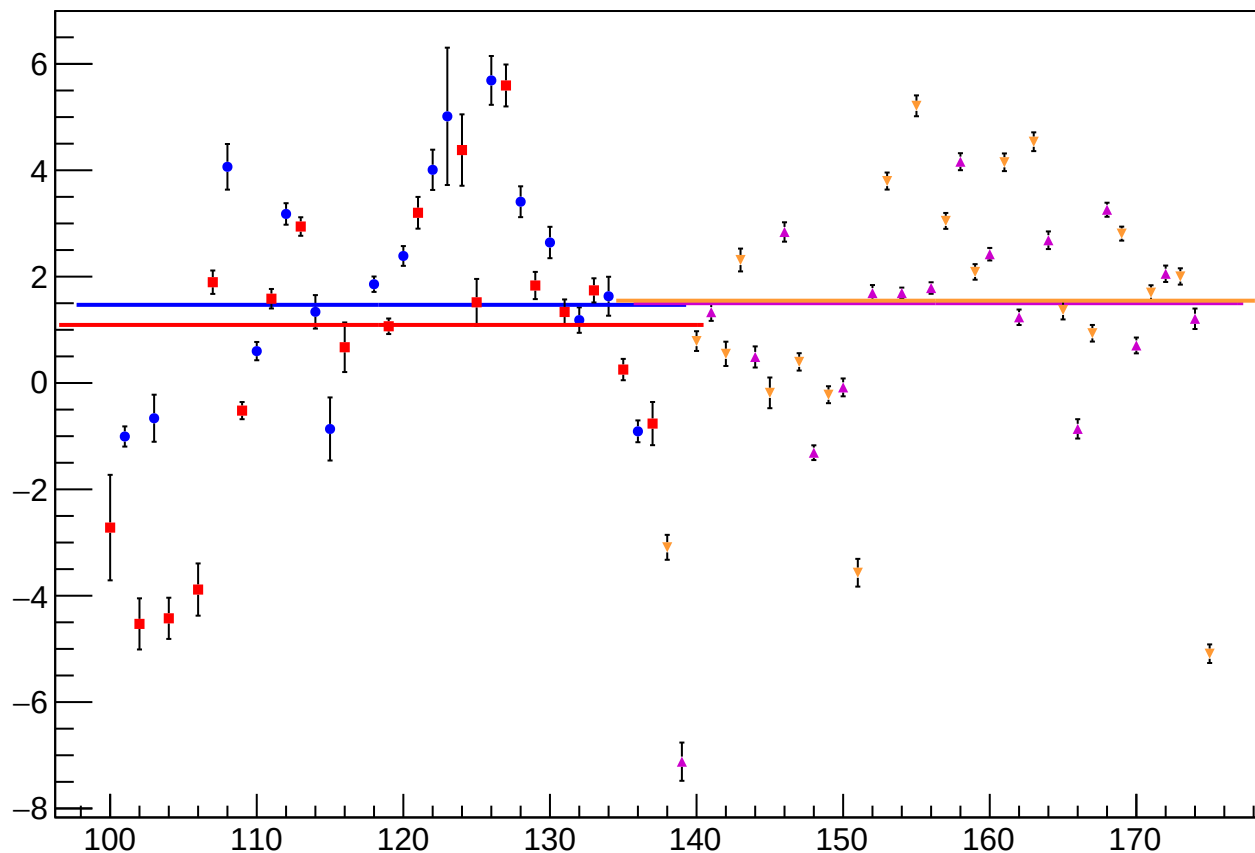
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -18.849+/-0.047  $\chi^2/\text{NDF}$ :38294.3/17

Out: -22.704+/-0.051  $\chi^2/\text{NDF}$ :62301.4/19

All: -20.634+/-0.035  $\chi^2/\text{NDF}$ : 103657.1/37

reg\_asym\_bcm\_an\_ds\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.470 $\pm$ 0.061  $\chi^2$ /NDF: 707.9/16

Left Out: 1.548 $\pm$ 0.039  $\chi^2$ /NDF:3785.3/19

Right Out: 1.092 $\pm$ 0.058  $\chi^2$ /NDF: 952.1/18

Left In: 1.501 $\pm$ 0.035  $\chi^2$ /NDF:1951.1/17

Left: 1.522 $\pm$ 0.026  $\chi^2$ /NDF: 5737.2/37

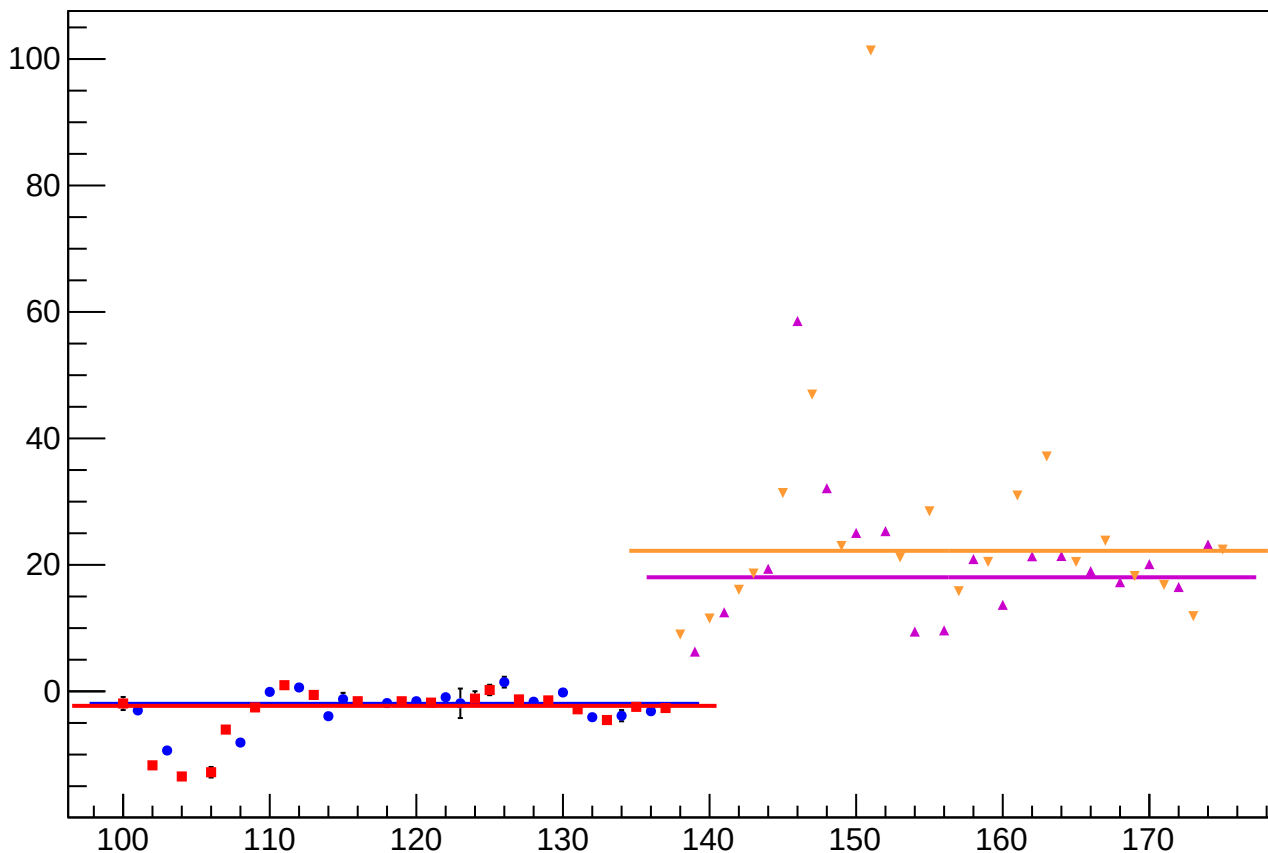
Right: 1.272 $\pm$ 0.042  $\chi^2$ /NDF: 1680.2/35

In: 1.493 $\pm$ 0.030  $\chi^2$ /NDF:2659.1/34

Out: 1.408 $\pm$ 0.032  $\chi^2$ /NDF:4780.3/38

All: 1.453 $\pm$ 0.022  $\chi^2$ /NDF: 7443.1/73

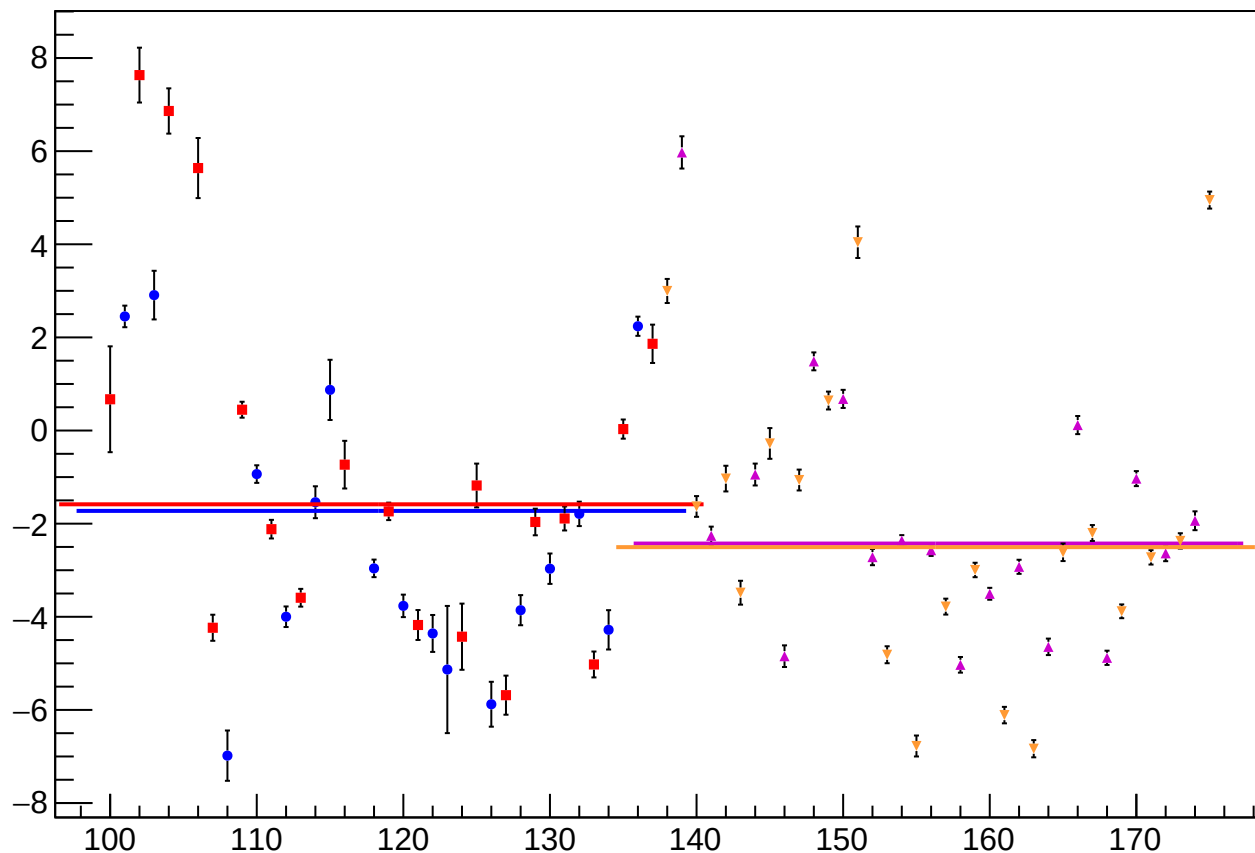
reg\_asym\_bcm\_an\_ds\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-1.977 \pm 0.110$   $\chi^2/\text{NDF}: 463.8/16$   
 Left Out:  $22.224 \pm 0.051$   $\chi^2/\text{NDF}: 55525.1/19$   
 Right Out:  $-2.294 \pm 0.098$   $\chi^2/\text{NDF}: 906.6/18$   
 Left In:  $18.039 \pm 0.046$   $\chi^2/\text{NDF}: 36368.7/17$

Left:  $19.951 \pm 0.034$   $\chi^2/\text{NDF}: 95610.6/37$   
 Right:  $-2.153 \pm 0.073$   $\chi^2/\text{NDF}: 1375.0/35$   
 In:  $15.019 \pm 0.043$   $\chi^2/\text{NDF}: 64925.8/34$   
 Out:  $17.100 \pm 0.045$   $\chi^2/\text{NDF}: 105514.3/38$   
 All:  $16.006 \pm 0.031$   $\chi^2/\text{NDF}: 171565.3/73$

reg\_asym\_bcm\_an\_ds\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-1.726 \pm 0.070$   $\chi^2/\text{NDF}$ : 1341.5/16

Left Out:  $-2.504 \pm 0.043$   $\chi^2/\text{NDF}$ : 4547.4/19

Right Out:  $-1.584 \pm 0.065$   $\chi^2/\text{NDF}$ : 1492.8/18

Left In:  $-2.427 \pm 0.040$   $\chi^2/\text{NDF}$ : 2399.0/17

Left:  $-2.462 \pm 0.029$   $\chi^2/\text{NDF}$ : 6948.1/37

Right:  $-1.650 \pm 0.048$   $\chi^2/\text{NDF}$ : 2836.5/35

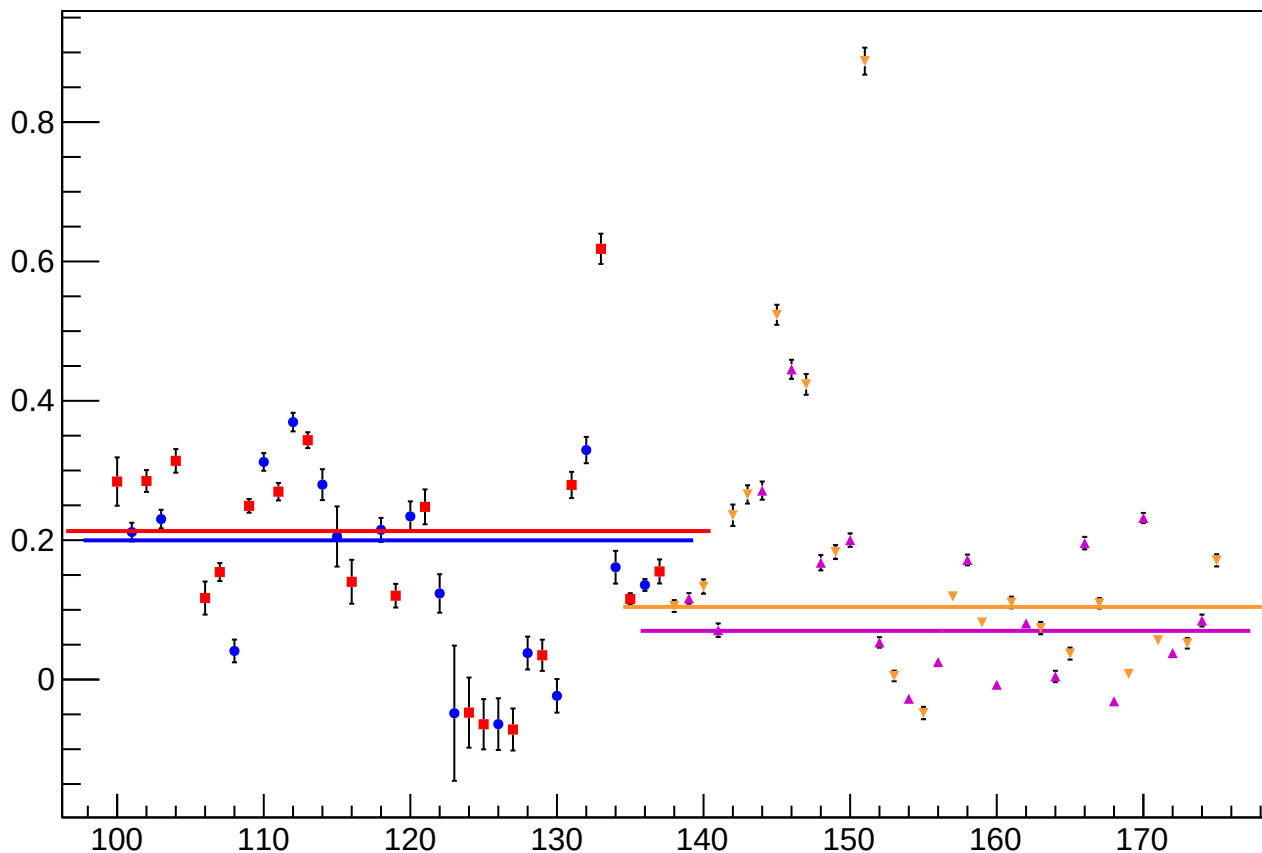
In:  $-2.256 \pm 0.035$   $\chi^2/\text{NDF}$ : 3816.4/34

Out:  $-2.224 \pm 0.036$   $\chi^2/\text{NDF}$ : 6177.6/38

All:  $-2.241 \pm 0.025$   $\chi^2/\text{NDF}$ : 9994.5/73



reg\_asym\_bcm\_an\_ds\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.200 \pm 0.004$   $\chi^2/\text{NDF}$ : 662.5/16

Left Out:  $0.104 \pm 0.002$   $\chi^2/\text{NDF}$ : 4153.2/19

Right Out:  $0.213 \pm 0.004$   $\chi^2/\text{NDF}$ : 1050.9/18

Left In:  $0.070 \pm 0.002$   $\chi^2/\text{NDF}$ : 3184.8/17

Left:  $0.085 \pm 0.001$   $\chi^2/\text{NDF}$ : 7512.4/37

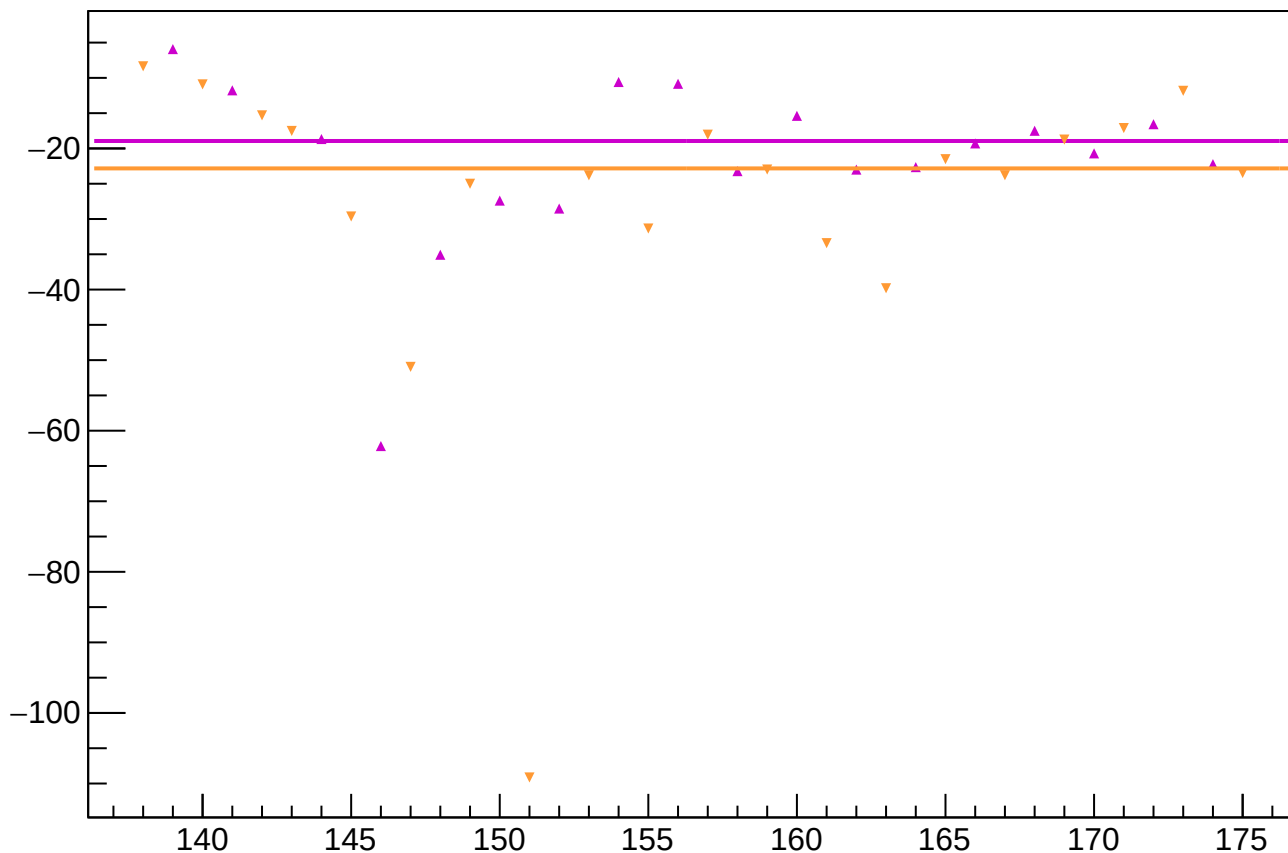
Right:  $0.207 \pm 0.003$   $\chi^2/\text{NDF}$ : 1719.2/35

In:  $0.089 \pm 0.002$   $\chi^2/\text{NDF}$ : 4695.5/34

Out:  $0.128 \pm 0.002$   $\chi^2/\text{NDF}$ : 5888.9/38

All:  $0.107 \pm 0.001$   $\chi^2/\text{NDF}$ : 10858.4/73

reg\_asym\_bcm\_an\_us\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -22.829+/-0.051  $\chi^2/\text{NDF}$ :62415.1/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -18.944+/-0.048  $\chi^2/\text{NDF}$ :38357.0/17

Left: -20.742+/-0.035  $\chi^2/\text{NDF}$ : 103857.5/37

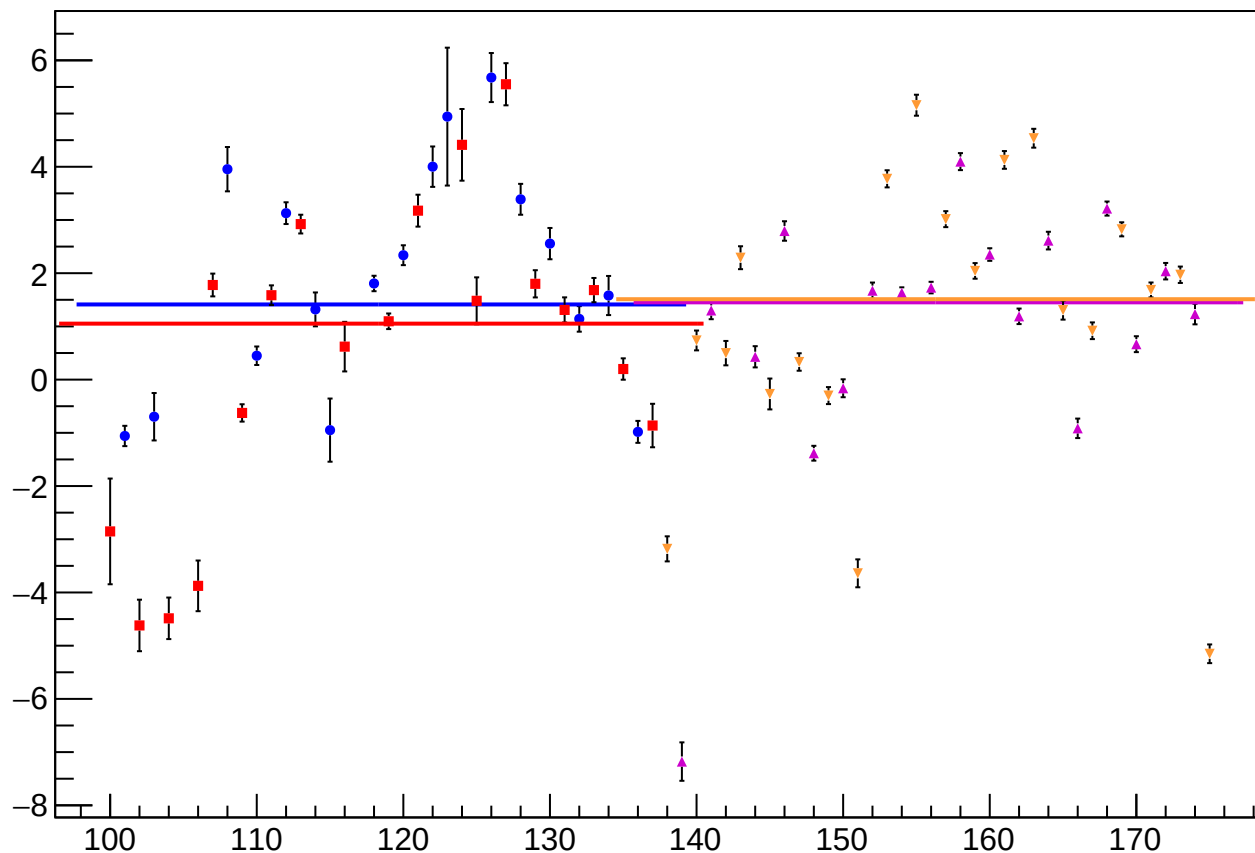
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -18.944+/-0.048  $\chi^2/\text{NDF}$ :38357.0/17

Out: -22.829+/-0.051  $\chi^2/\text{NDF}$ :62415.1/19

All: -20.742+/-0.035  $\chi^2/\text{NDF}$ : 103857.5/37

reg\_asym\_bcm\_an\_us\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.413 $\pm$ 0.061  $\chi^2/\text{NDF}$ : 713.9/16

Left Out: 1.511 $\pm$ 0.039  $\chi^2/\text{NDF}$ :3805.0/19

Right Out: 1.052 $\pm$ 0.058  $\chi^2/\text{NDF}$ : 963.3/18

Left In: 1.452 $\pm$ 0.035  $\chi^2/\text{NDF}$ :1941.0/17

Left: 1.479 $\pm$ 0.026  $\chi^2/\text{NDF}$ : 5747.3/37

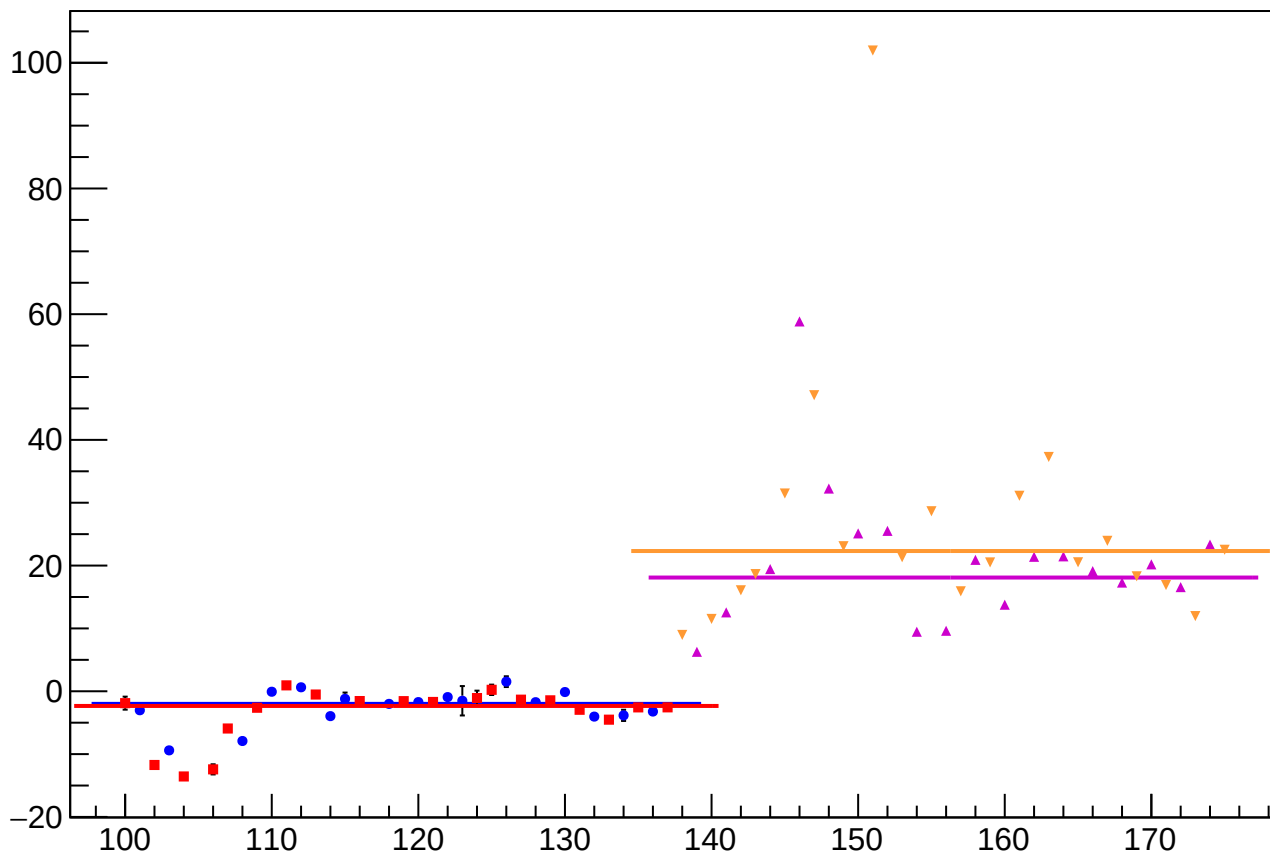
Right: 1.223 $\pm$ 0.042  $\chi^2/\text{NDF}$ : 1695.5/35

In: 1.442 $\pm$ 0.031  $\chi^2/\text{NDF}$ :2655.2/34

Out: 1.370 $\pm$ 0.032  $\chi^2/\text{NDF}$ :4811.6/38

All: 1.408 $\pm$ 0.022  $\chi^2/\text{NDF}$ : 7469.5/73

reg\_asym\_bcm\_an\_us\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.006 \pm 0.111$   $\chi^2/\text{NDF}$ : 463.3/16

Left Out:  $22.314 \pm 0.051$   $\chi^2/\text{NDF}$ : 55622.7/19

Right Out:  $-2.336 \pm 0.099$   $\chi^2/\text{NDF}$ : 901.2/18

Left In:  $18.095 \pm 0.047$   $\chi^2/\text{NDF}$ : 36446.4/17

Left:  $20.021 \pm 0.034$   $\chi^2/\text{NDF}$ : 95818.0/37

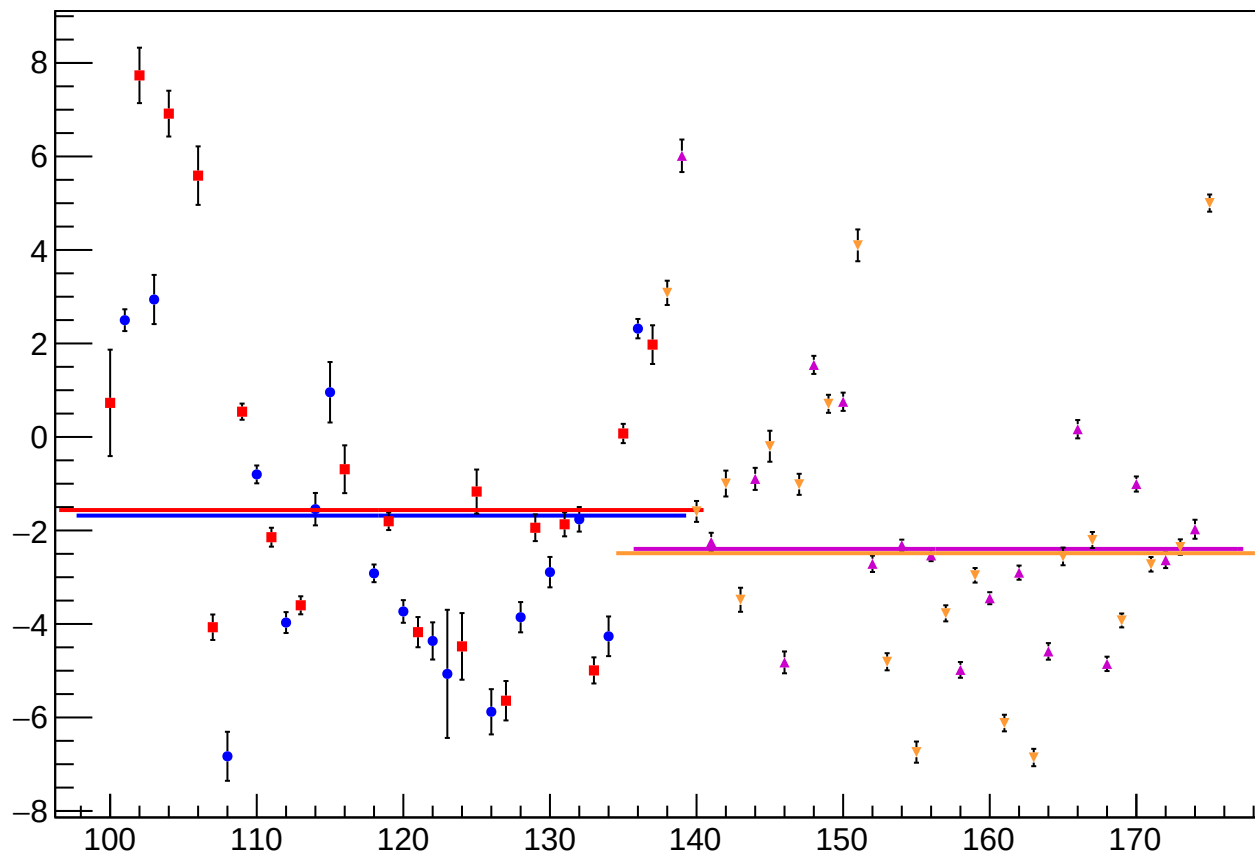
Right:  $-2.190 \pm 0.074$   $\chi^2/\text{NDF}$ : 1369.4/35

In:  $15.069 \pm 0.043$   $\chi^2/\text{NDF}$ : 64957.9/34

Out:  $17.169 \pm 0.045$   $\chi^2/\text{NDF}$ : 105667.9/38

All:  $16.065 \pm 0.031$   $\chi^2/\text{NDF}$ : 171760.5/73

reg\_asym\_bcm\_an\_us\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-1.682 \pm 0.070$   $\chi^2/\text{NDF}$ : 1347.8/16

Left Out:  $-2.487 \pm 0.044$   $\chi^2/\text{NDF}$ : 4576.0/19

Right Out:  $-1.563 \pm 0.066$   $\chi^2/\text{NDF}$ : 1504.7/18

Left In:  $-2.394 \pm 0.040$   $\chi^2/\text{NDF}$ : 2387.2/17

Left:  $-2.436 \pm 0.029$   $\chi^2/\text{NDF}$ : 6965.6/37

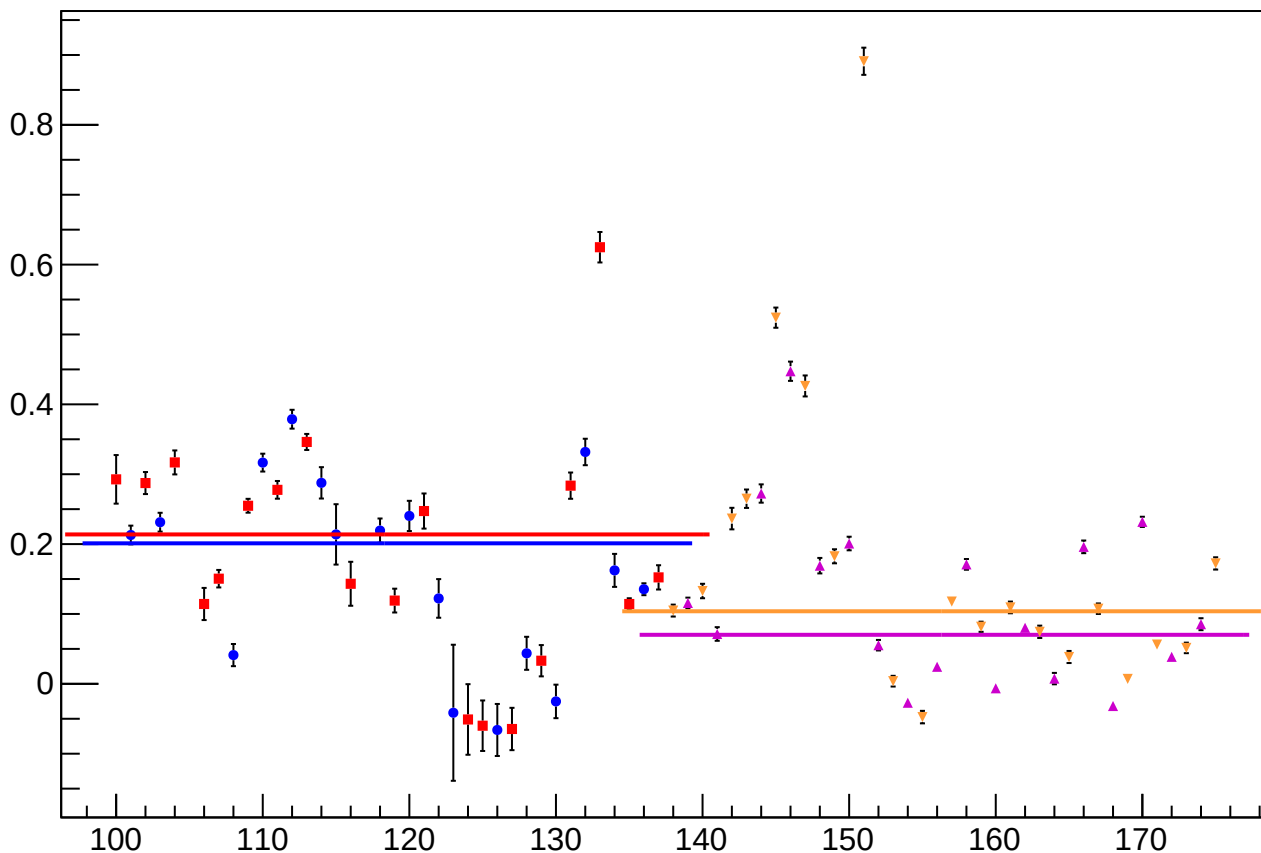
Right:  $-1.619 \pm 0.048$   $\chi^2/\text{NDF}$ : 2854.1/35

In:  $-2.221 \pm 0.035$   $\chi^2/\text{NDF}$ : 3812.7/34

Out:  $-2.204 \pm 0.036$   $\chi^2/\text{NDF}$ : 6218.0/38

All:  $-2.213 \pm 0.025$   $\chi^2/\text{NDF}$ : 10030.8/73

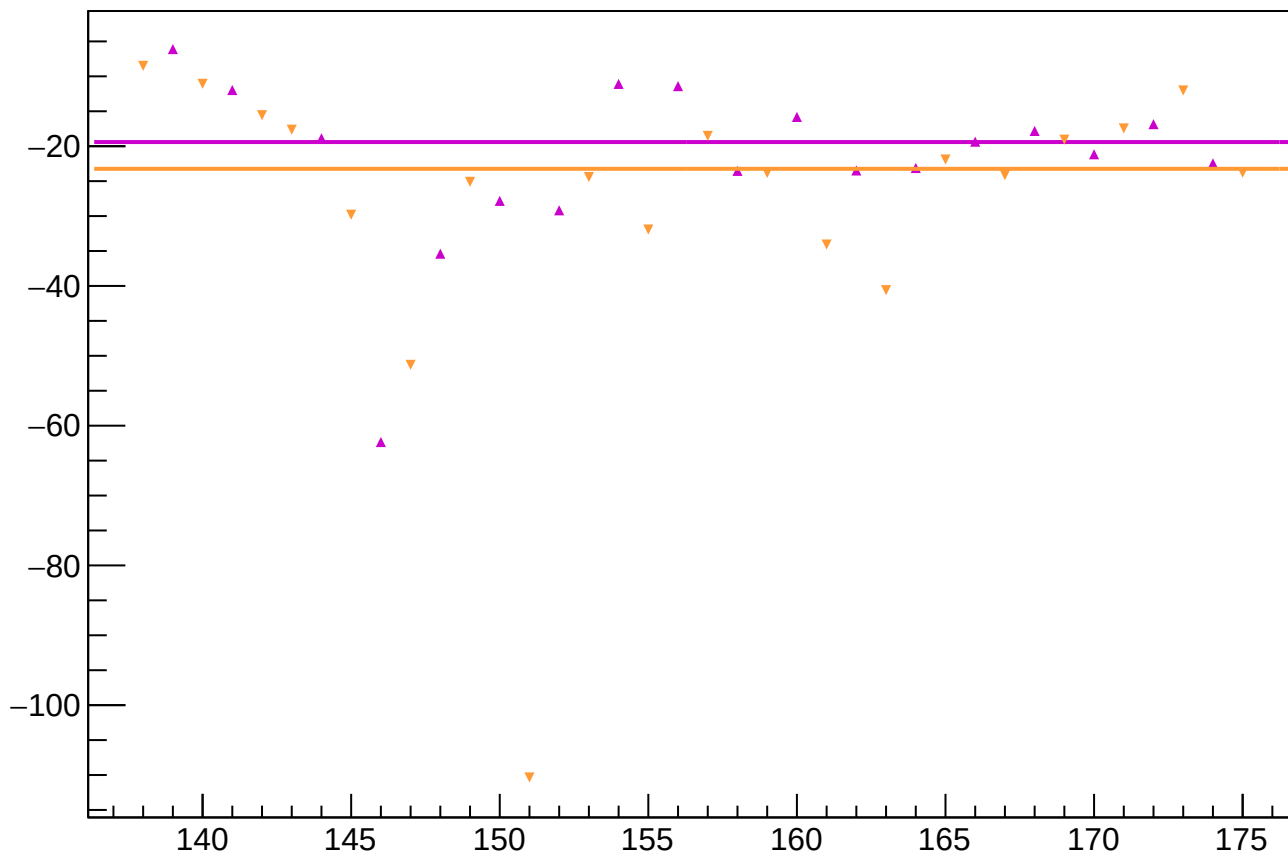
reg\_asym\_bcm\_an\_us\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.201 \pm 0.004$   $\chi^2/\text{NDF}: 691.3/16$   
 Left Out:  $0.104 \pm 0.002$   $\chi^2/\text{NDF}: 4143.3/19$   
 Right Out:  $0.214 \pm 0.004$   $\chi^2/\text{NDF}: 1083.1/18$   
 Left In:  $0.070 \pm 0.002$   $\chi^2/\text{NDF}: 3163.2/17$

Left:  $0.085 \pm 0.001$   $\chi^2/\text{NDF}: 7472.5/37$   
 Right:  $0.208 \pm 0.003$   $\chi^2/\text{NDF}: 1779.7/35$   
 In:  $0.090 \pm 0.002$   $\chi^2/\text{NDF}: 4710.1/34$   
 Out:  $0.128 \pm 0.002$   $\chi^2/\text{NDF}: 5922.2/38$   
 All:  $0.107 \pm 0.001$   $\chi^2/\text{NDF}: 10897.0/73$

reg\_asym\_bcm\_dg\_ds\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -23.235+/-0.052  $\chi^2/\text{NDF}$ :62267.4/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -19.405+/-0.049  $\chi^2/\text{NDF}$ :37219.9/17

Left: -21.185+/-0.036  $\chi^2/\text{NDF}$ : 102359.9/37

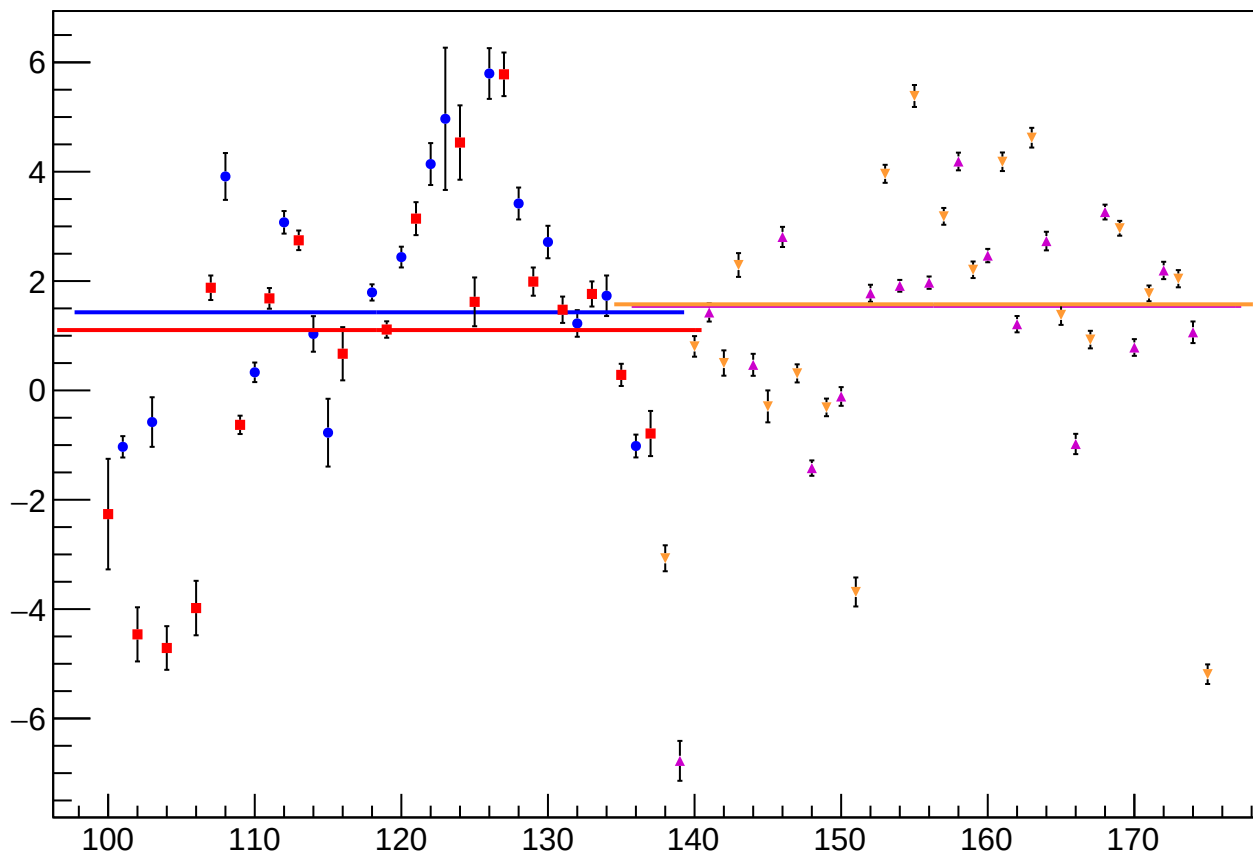
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -19.405+/-0.049  $\chi^2/\text{NDF}$ :37219.9/17

Out: -23.235+/-0.052  $\chi^2/\text{NDF}$ :62267.4/19

All: -21.185+/-0.036  $\chi^2/\text{NDF}$ : 102359.9/37

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.429+/-0.062  $\chi^2/\text{NDF}$ : 711.4/16

Left Out: 1.575+/-0.039  $\chi^2/\text{NDF}$ : 3835.6/19

Right Out: 1.104+/-0.059  $\chi^2/\text{NDF}$ : 936.5/18

Left In: 1.547+/-0.036  $\chi^2/\text{NDF}$ : 1931.3/17

Left: 1.559+/-0.027  $\chi^2/\text{NDF}$ : 5767.2/37

Right: 1.259+/-0.043  $\chi^2/\text{NDF}$ : 1662.3/35

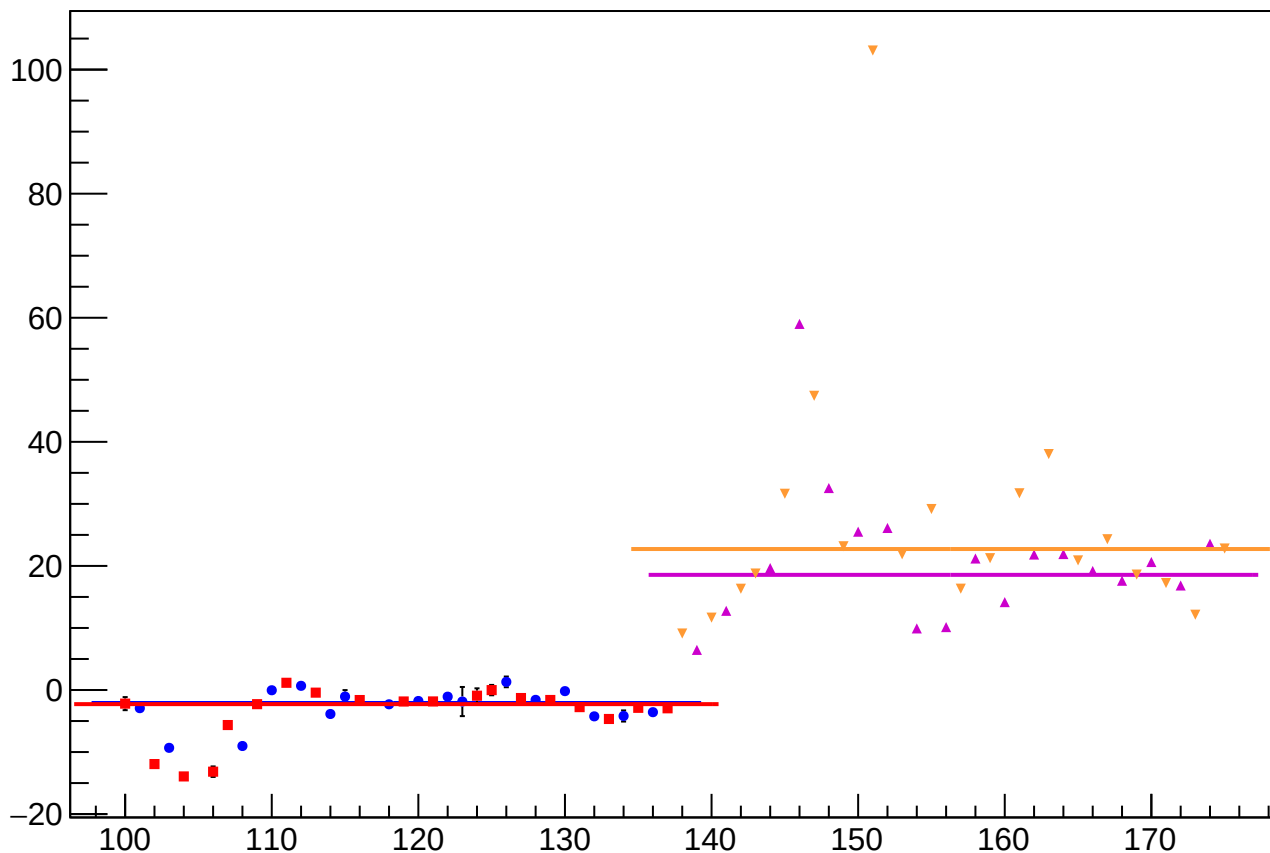
In: 1.517+/-0.031  $\chi^2/\text{NDF}$ : 2645.4/34

Out: 1.430+/-0.033  $\chi^2/\text{NDF}$ : 4815.8/38

All: 1.476+/-0.023  $\chi^2/\text{NDF}$ : 7464.9/73



reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.094 \pm 0.113$   $\chi^2/\text{NDF}$ : 486.5/16

Left Out:  $22.725 \pm 0.052$   $\chi^2/\text{NDF}$ : 55368.2/19

Right Out:  $-2.278 \pm 0.101$   $\chi^2/\text{NDF}$ : 918.6/18

Left In:  $18.560 \pm 0.048$   $\chi^2/\text{NDF}$ : 35151.7/17

Left:  $20.471 \pm 0.035$   $\chi^2/\text{NDF}$ : 94015.6/37

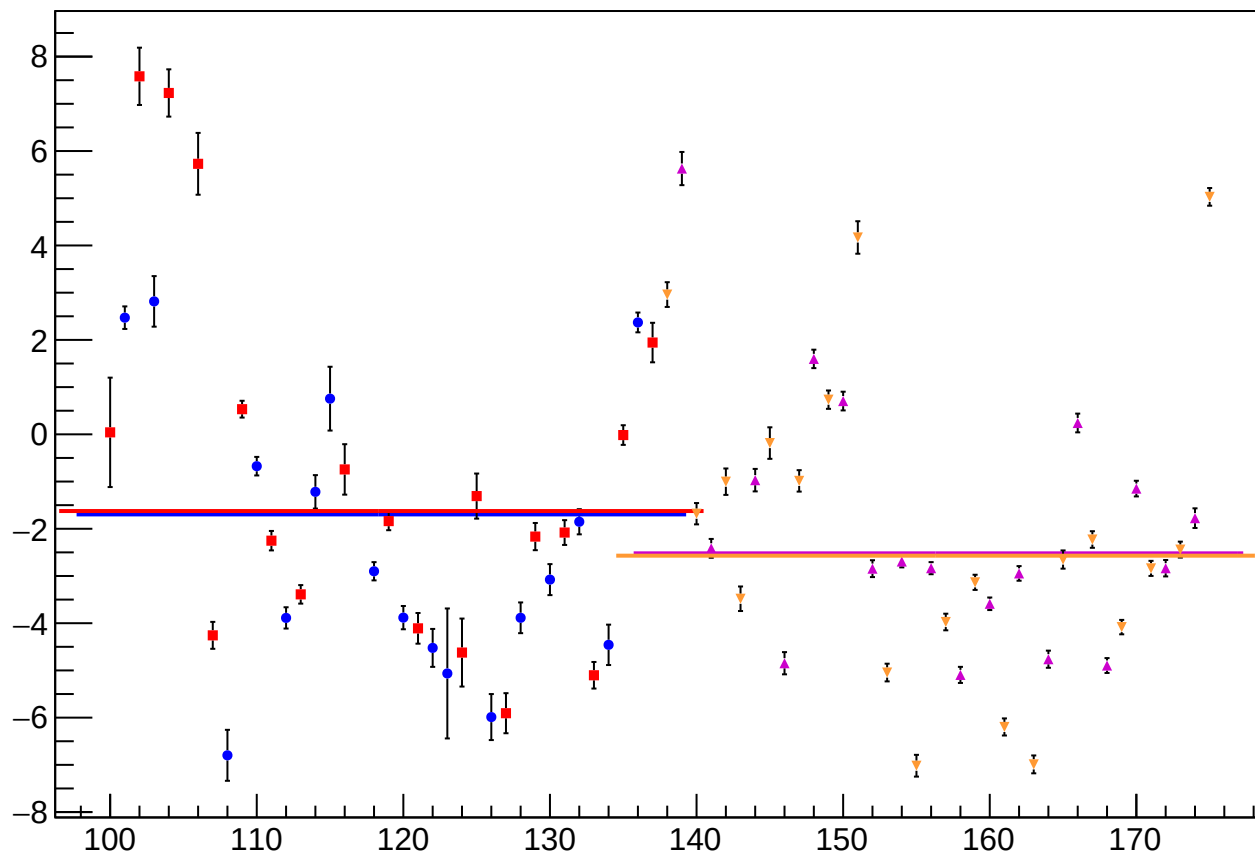
Right:  $-2.196 \pm 0.075$   $\chi^2/\text{NDF}$ : 1406.6/35

In:  $15.417 \pm 0.044$   $\chi^2/\text{NDF}$ : 64168.6/34

Out:  $17.515 \pm 0.046$   $\chi^2/\text{NDF}$ : 104791.4/38

All:  $16.415 \pm 0.032$   $\chi^2/\text{NDF}$ : 170046.1/73

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-1.696 \pm 0.072$   $\chi^2/\text{NDF}$ : 1333.3/16

Left Out:  $-2.570 \pm 0.044$   $\chi^2/\text{NDF}$ : 4599.0/19

Right Out:  $-1.624 \pm 0.067$   $\chi^2/\text{NDF}$ : 1467.3/18

Left In:  $-2.520 \pm 0.041$   $\chi^2/\text{NDF}$ : 2356.4/17

Left:  $-2.543 \pm 0.030$   $\chi^2/\text{NDF}$ : 6956.1/37

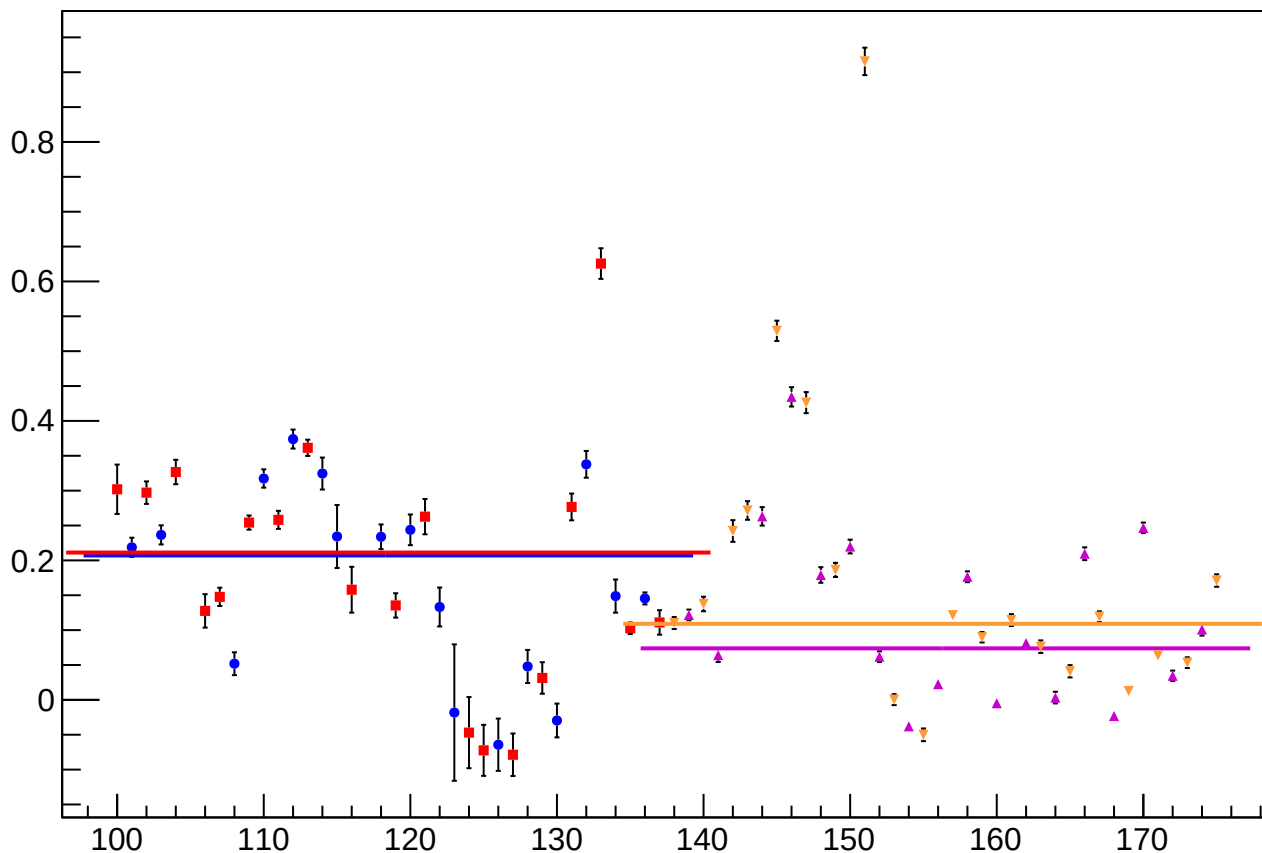
Right:  $-1.658 \pm 0.049$   $\chi^2/\text{NDF}$ : 2801.2/35

In:  $-2.317 \pm 0.035$   $\chi^2/\text{NDF}$ : 3789.8/34

Out:  $-2.281 \pm 0.037$   $\chi^2/\text{NDF}$ : 6204.7/38

All:  $-2.300 \pm 0.026$   $\chi^2/\text{NDF}$ : 9995.1/73

reg\_asym\_bcm\_dg\_ds\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.207 \pm 0.004$   $\chi^2/\text{NDF}$ : 656.3/16

Left Out:  $0.109 \pm 0.002$   $\chi^2/\text{NDF}$ : 4159.8/19

Right Out:  $0.211 \pm 0.004$   $\chi^2/\text{NDF}$ : 1145.7/18

Left In:  $0.074 \pm 0.002$   $\chi^2/\text{NDF}$ : 3259.9/17

Left:  $0.089 \pm 0.001$   $\chi^2/\text{NDF}$ : 7592.9/37

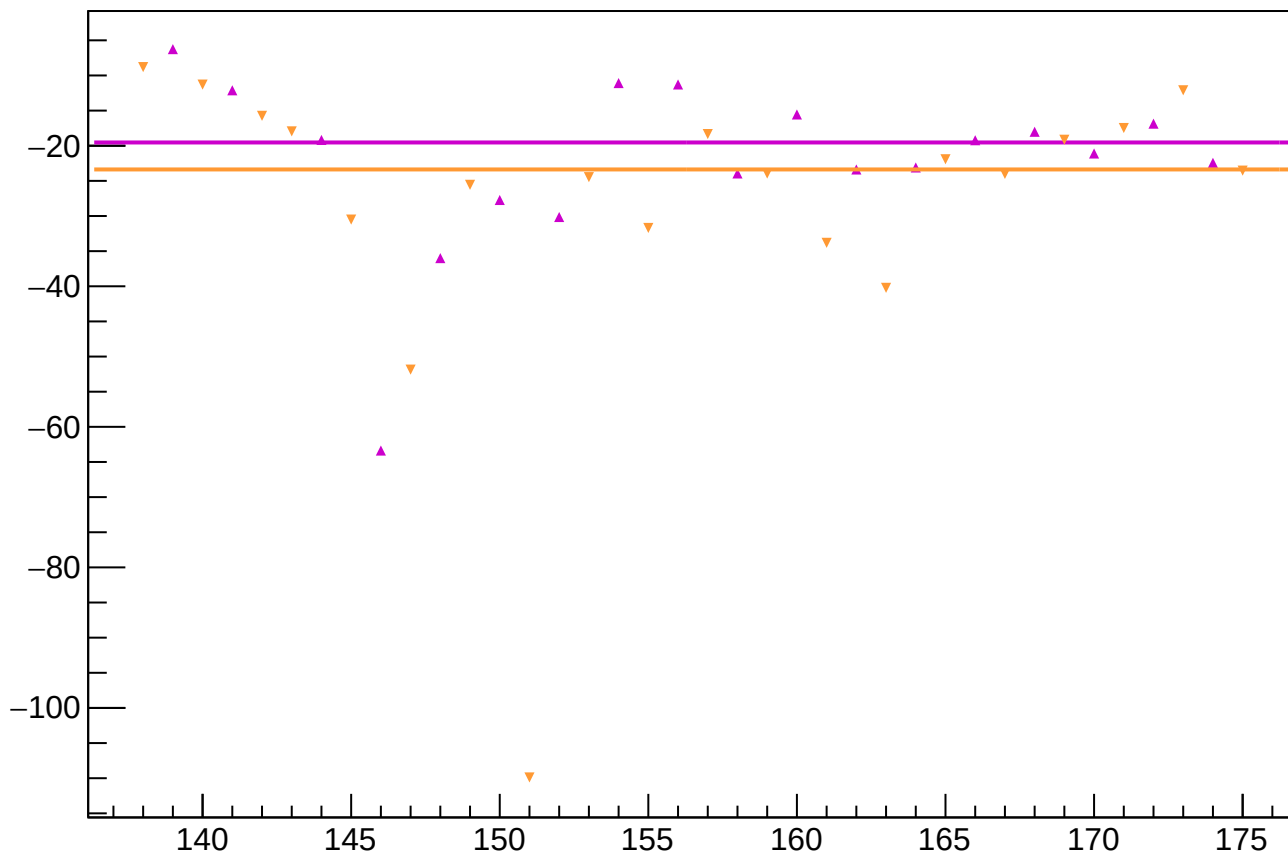
Right:  $0.209 \pm 0.003$   $\chi^2/\text{NDF}$ : 1802.5/35

In:  $0.094 \pm 0.002$   $\chi^2/\text{NDF}$ : 4770.6/34

Out:  $0.132 \pm 0.002$   $\chi^2/\text{NDF}$ : 5882.7/38

All:  $0.111 \pm 0.001$   $\chi^2/\text{NDF}$ : 10895.5/73

reg\_asym\_bcm\_dg\_us\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -23.374+/-0.053  $\chi^2/\text{NDF}$ :61032.3/19

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -19.535+/-0.049  $\chi^2/\text{NDF}$ :37445.9/17

Left: -21.326+/-0.036  $\chi^2/\text{NDF}$ : 101304.3/37

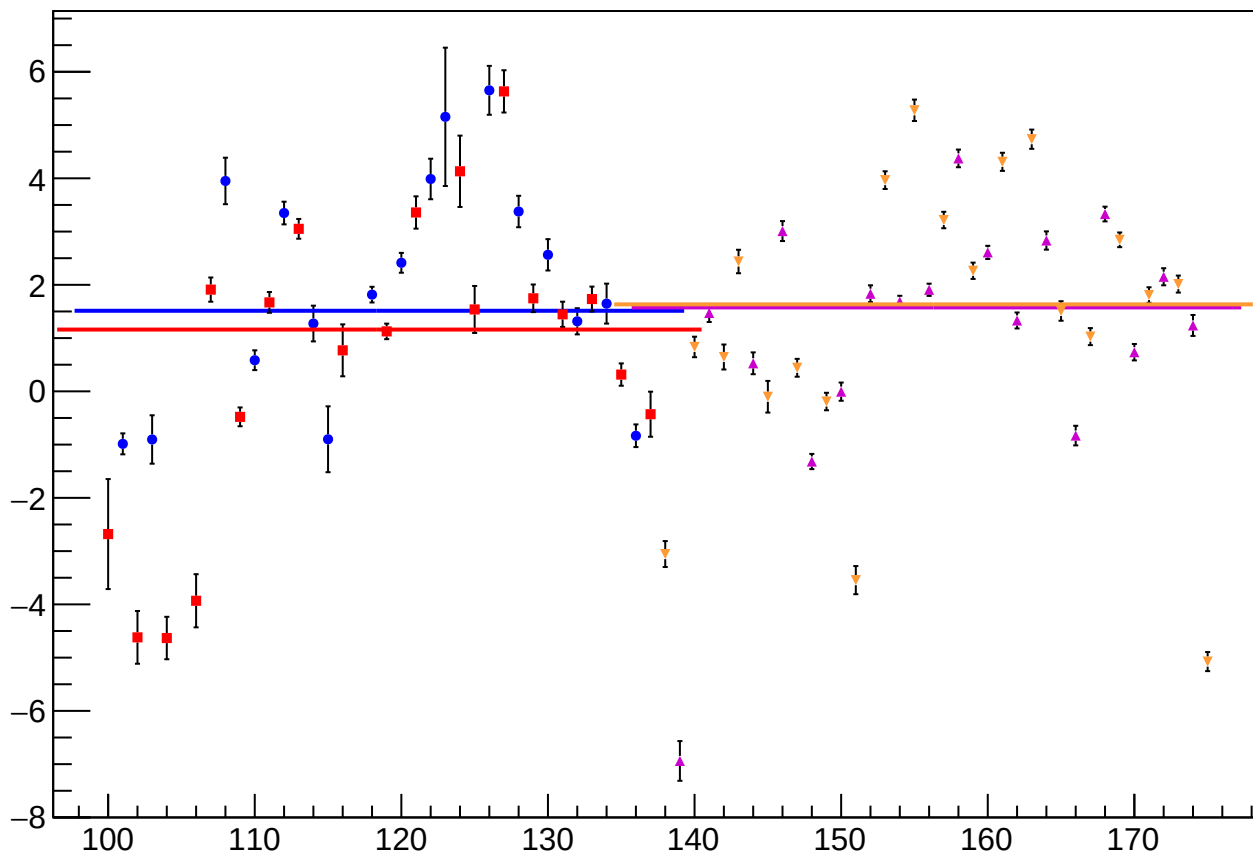
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: -19.535+/-0.049  $\chi^2/\text{NDF}$ :37445.9/17

Out: -23.374+/-0.053  $\chi^2/\text{NDF}$ :61032.3/19

All: -21.326+/-0.036  $\chi^2/\text{NDF}$ : 101304.3/37

reg\_asym\_bcm\_dg\_us\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $1.513 \pm 0.063$   $\chi^2/\text{NDF}$ : 669.7/16

Left Out:  $1.633 \pm 0.040$   $\chi^2/\text{NDF}$ : 3701.5/19

Right Out:  $1.160 \pm 0.060$   $\chi^2/\text{NDF}$ : 917.0/18

Left In:  $1.576 \pm 0.037$   $\chi^2/\text{NDF}$ : 1901.5/17

Left:  $1.602 \pm 0.027$   $\chi^2/\text{NDF}$ : 5604.1/37

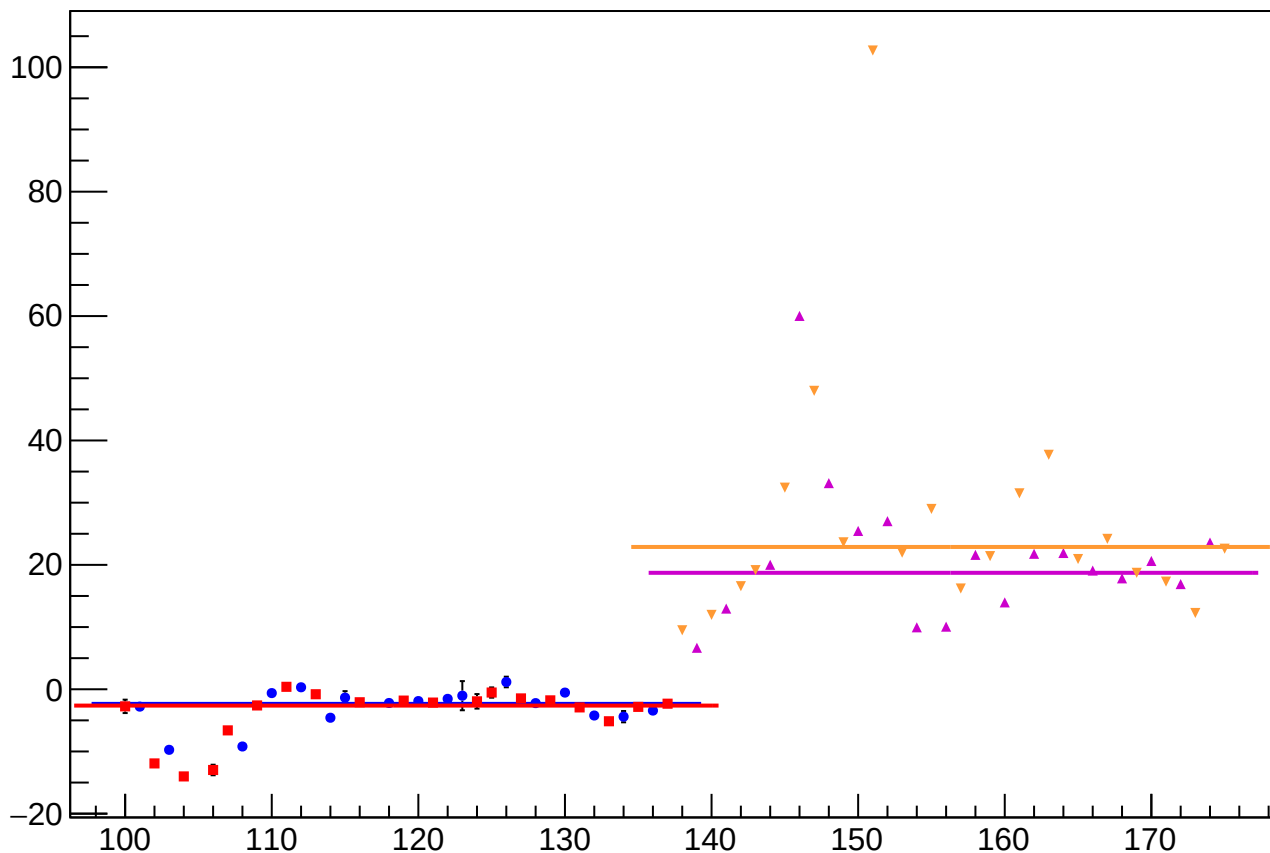
Right:  $1.329 \pm 0.043$   $\chi^2/\text{NDF}$ : 1603.3/35

In:  $1.560 \pm 0.032$   $\chi^2/\text{NDF}$ : 2571.9/34

Out:  $1.489 \pm 0.033$   $\chi^2/\text{NDF}$ : 4661.6/38

All:  $1.526 \pm 0.023$   $\chi^2/\text{NDF}$ : 7235.9/73

reg\_asym\_bcm\_dg\_us\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.350 \pm 0.114$   $\chi^2/\text{NDF}$ : 439.7/16

Left Out:  $22.880 \pm 0.052$   $\chi^2/\text{NDF}$ : 54382.8/19

Right Out:  $-2.624 \pm 0.103$   $\chi^2/\text{NDF}$ : 840.4/18

Left In:  $18.723 \pm 0.048$   $\chi^2/\text{NDF}$ : 35398.4/17

Left:  $20.638 \pm 0.035$   $\chi^2/\text{NDF}$ : 93191.0/37

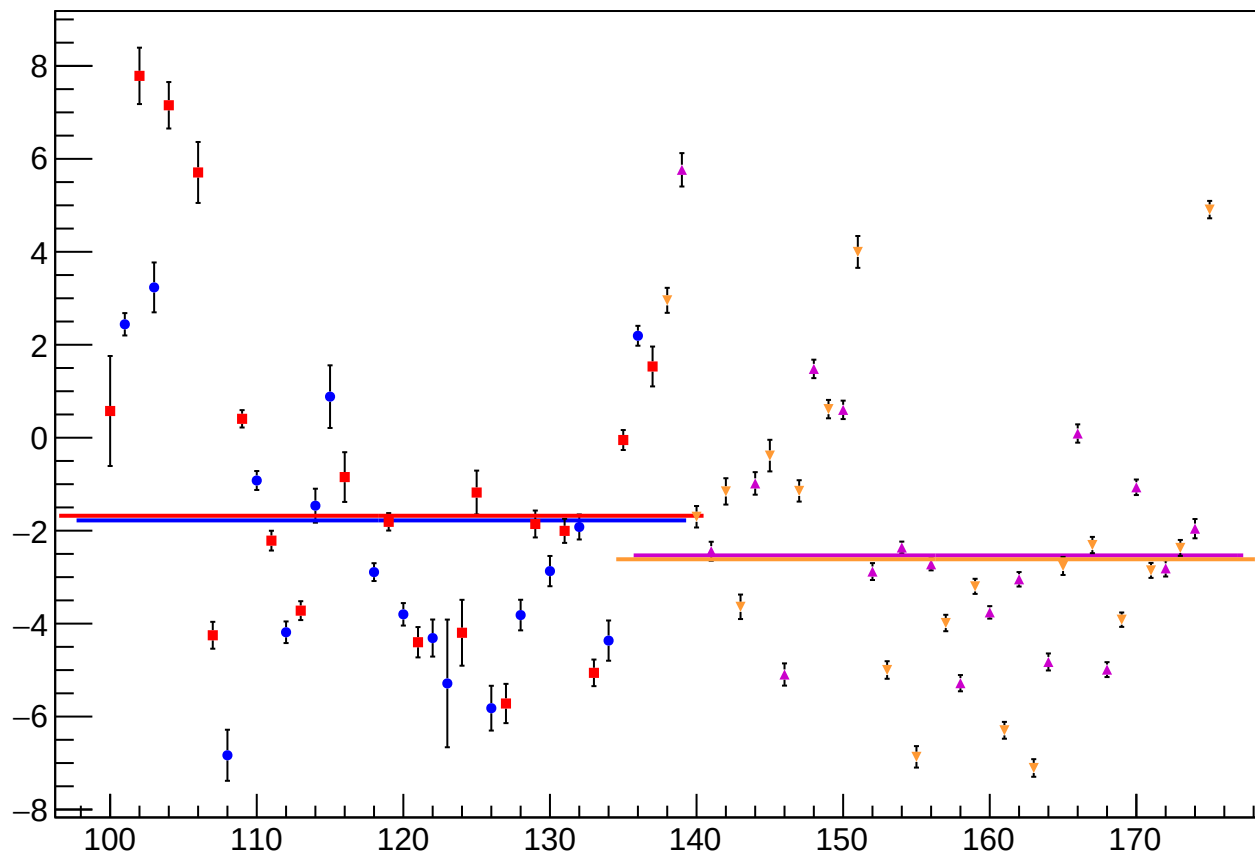
Right:  $-2.501 \pm 0.077$   $\chi^2/\text{NDF}$ : 1283.3/35

In:  $15.529 \pm 0.044$   $\chi^2/\text{NDF}$ : 64677.4/34

Out:  $17.674 \pm 0.047$   $\chi^2/\text{NDF}$ : 103800.5/38

All:  $16.552 \pm 0.032$   $\chi^2/\text{NDF}$ : 169585.4/73

reg\_asym\_bcm\_dg\_us\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-1.779 \pm 0.072$   $\chi^2/\text{NDF}$ : 1272.1/16

Left Out:  $-2.616 \pm 0.045$   $\chi^2/\text{NDF}$ : 4448.4/19

Right Out:  $-1.679 \pm 0.068$   $\chi^2/\text{NDF}$ : 1429.6/18

Left In:  $-2.533 \pm 0.041$   $\chi^2/\text{NDF}$ : 2352.8/17

Left:  $-2.571 \pm 0.030$   $\chi^2/\text{NDF}$ : 6803.0/37

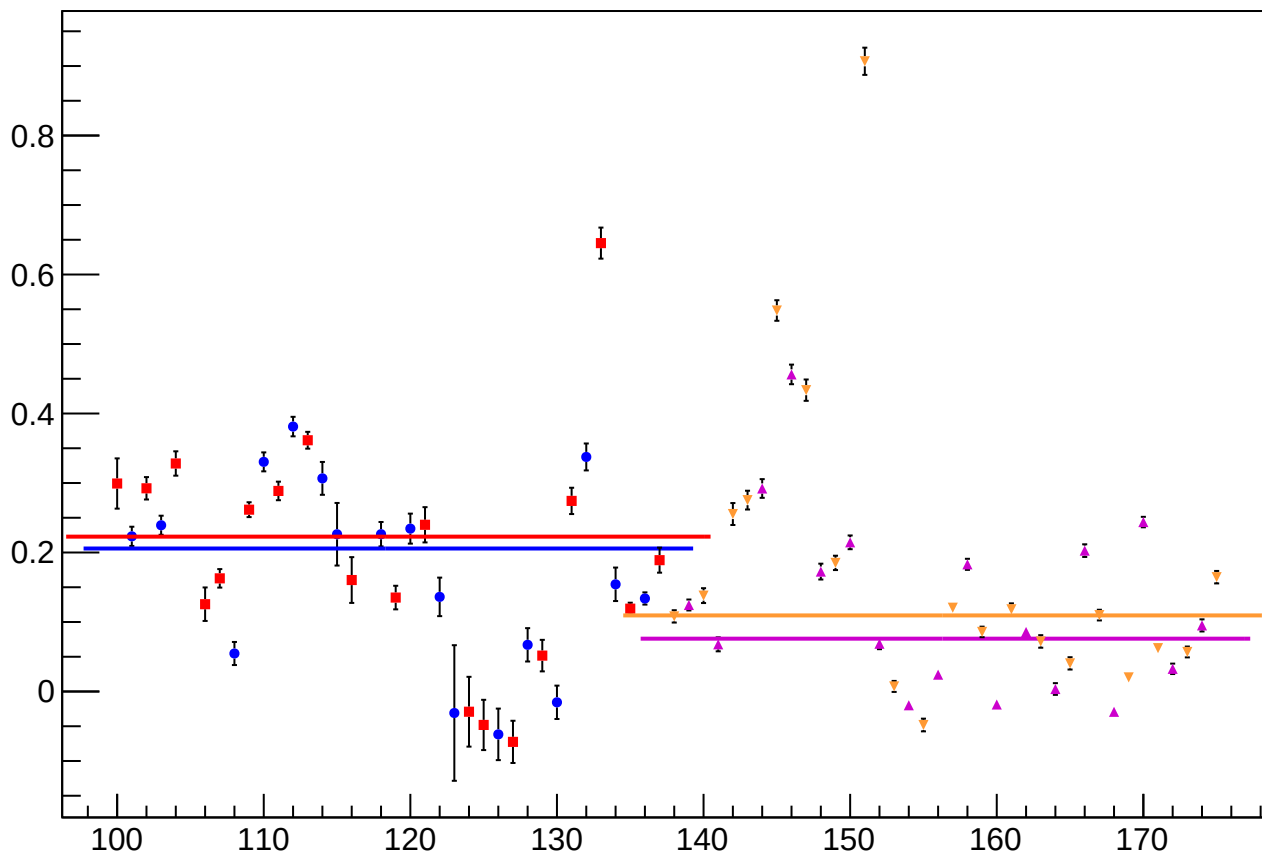
Right:  $-1.726 \pm 0.050$   $\chi^2/\text{NDF}$ : 2702.6/35

In:  $-2.347 \pm 0.036$   $\chi^2/\text{NDF}$ : 3706.8/34

Out:  $-2.332 \pm 0.037$   $\chi^2/\text{NDF}$ : 6010.1/38

All:  $-2.340 \pm 0.026$   $\chi^2/\text{NDF}$ : 9717.0/73

reg\_asym\_bcm\_dg\_us\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.206 $\pm$ 0.004  $\chi^2$ /NDF: 651.8/16

Left Out: 0.109 $\pm$ 0.002  $\chi^2$ /NDF:4127.8/19

Right Out: 0.223 $\pm$ 0.004  $\chi^2$ /NDF: 1042.2/18

Left In: 0.076 $\pm$ 0.002  $\chi^2$ /NDF:3230.6/17

Left: 0.091 $\pm$ 0.001  $\chi^2$ /NDF: 7511.5/37

Right: 0.215 $\pm$ 0.003  $\chi^2$ /NDF: 1702.9/35

In: 0.096 $\pm$ 0.002  $\chi^2$ /NDF:4670.3/34

Out: 0.134 $\pm$ 0.002  $\chi^2$ /NDF:5854.6/38

All: 0.113 $\pm$ 0.001  $\chi^2$ /NDF: 10771.8/73