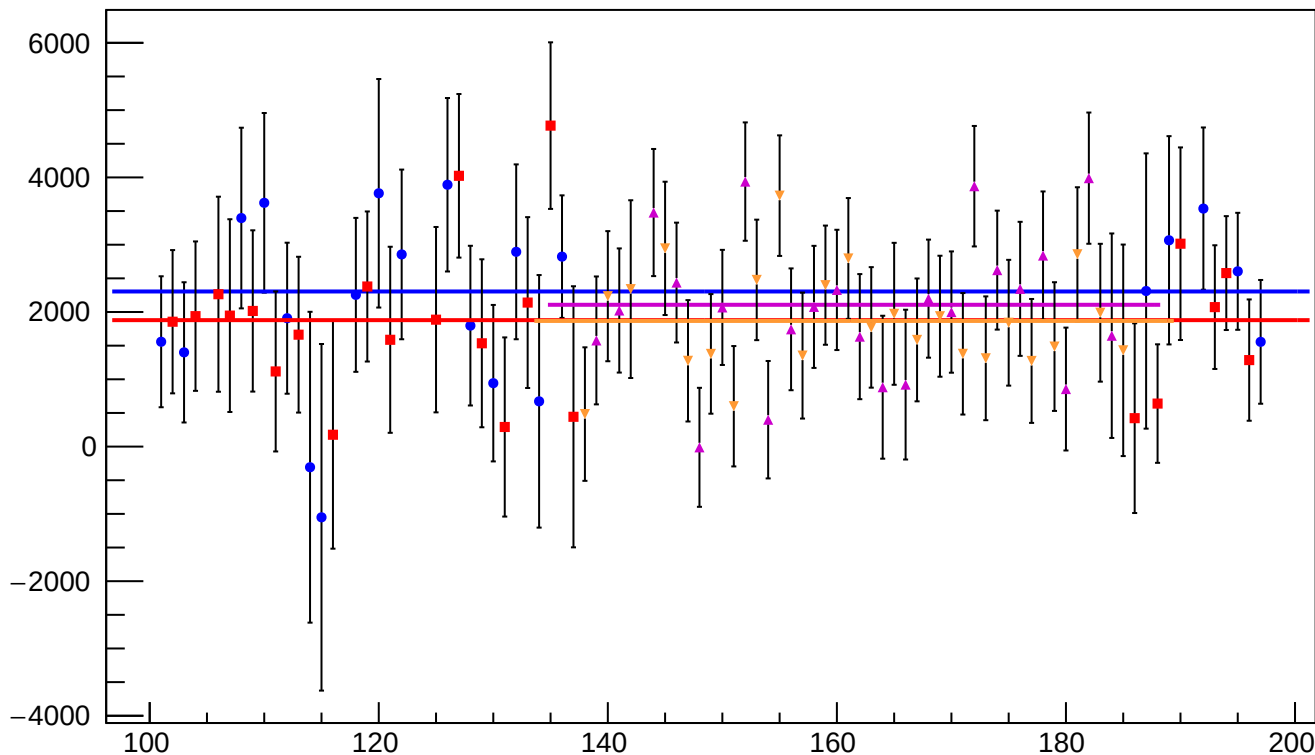


# dit\_asym\_us\_avg\_mean vs Slug, Sign Corrected



Right In: 2305.085 $\pm$ 267.719

Left Out: 1867.512 $\pm$ 194.801

Right Out: 1879.017 $\pm$ 245.994

Left In: 2107.246 $\pm$ 194.959

$\chi^2$ /NDF: 13.4/20

$\chi^2$ /NDF:15.1/23

$\chi^2$ /NDF: 17.3/22

$\chi^2$ /NDF:30.0/22

Left: 1987.282 $\pm$ 137.801

Right: 2074.065 $\pm$ 181.138

In: 2175.805 $\pm$ 157.599

Out: 1871.946 $\pm$ 152.716

All: 2019.095 $\pm$ 109.672

$\chi^2$ /NDF: 45.9/46

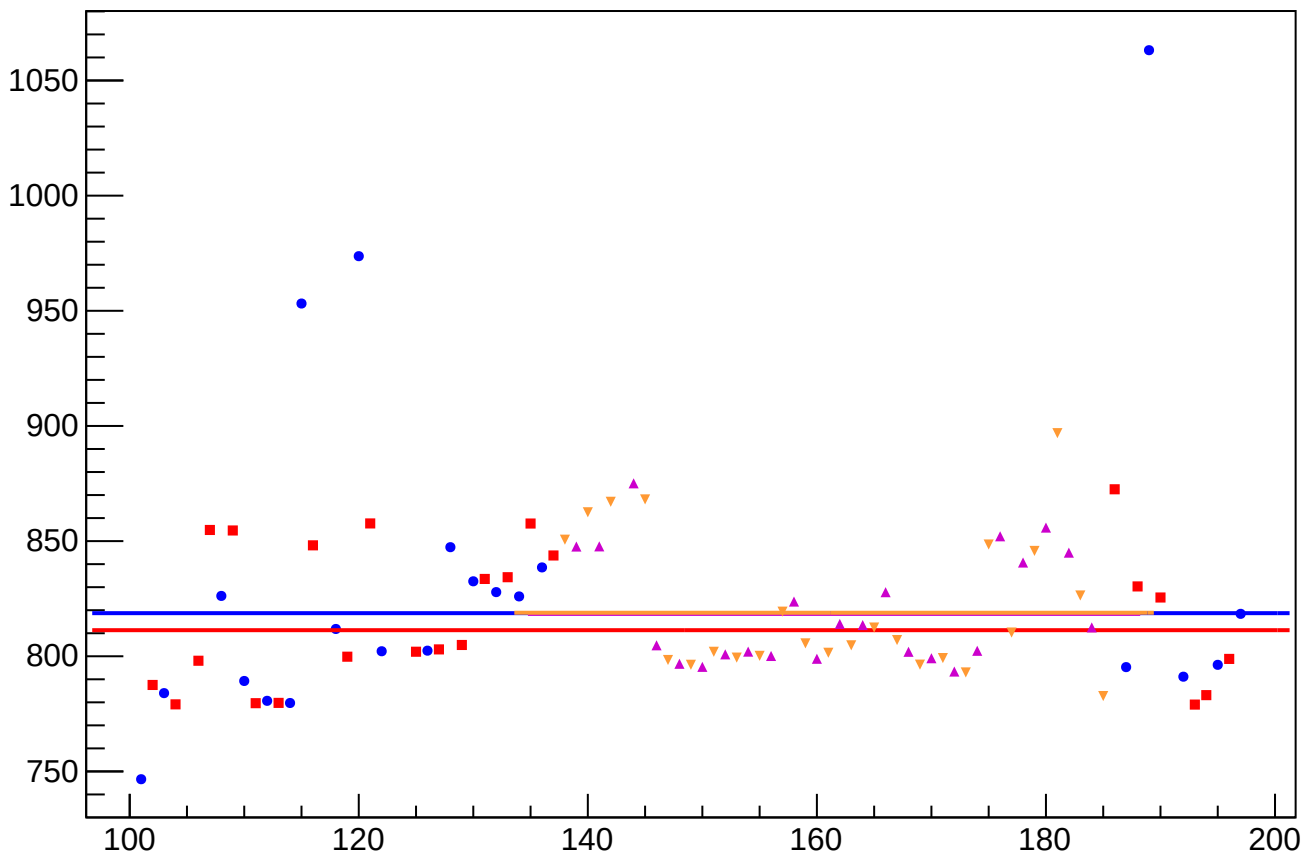
$\chi^2$ /NDF: 32.1/43

$\chi^2$ /NDF:43.8/43

$\chi^2$ /NDF:32.4/46

$\chi^2$ /NDF: 78.1/90

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



Right In: 818.717 $\pm$ 0.189  $\chi^2/\text{NDF}$ : 95023.4/20

Left Out: 818.900 $\pm$ 0.138  $\chi^2/\text{NDF}$ : 41670.9/23

Right Out: 811.326 $\pm$ 0.174  $\chi^2/\text{NDF}$ : 28406.1/22

Left In: 818.403 $\pm$ 0.138  $\chi^2/\text{NDF}$ : 29907.0/22

Left: 818.652 $\pm$ 0.097  $\chi^2/\text{NDF}$ : 71584.4/46

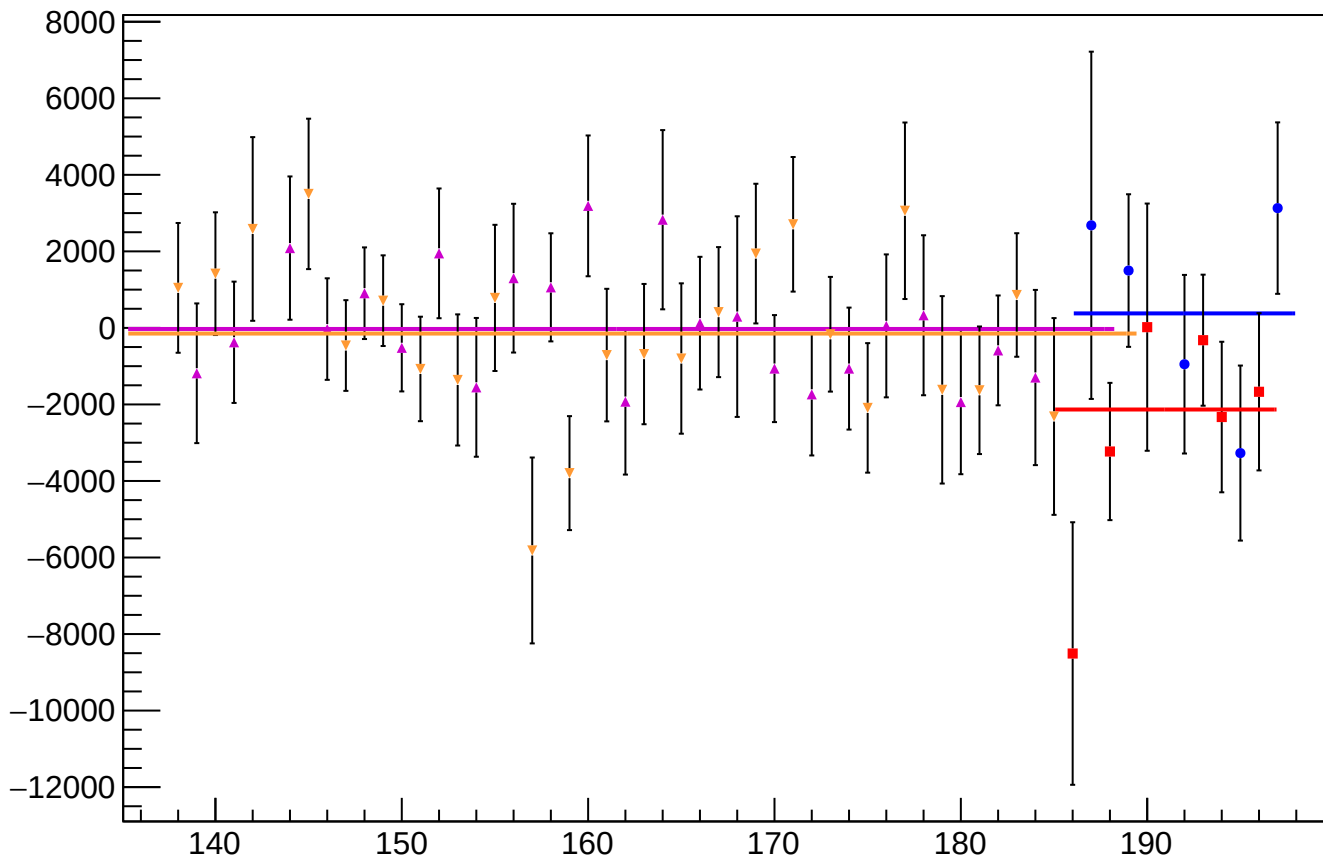
Right: 814.710 $\pm$ 0.128  $\chi^2/\text{NDF}$ : 124256.0/43

In: 818.512 $\pm$ 0.111  $\chi^2/\text{NDF}$ : 124932.2/43

Out: 815.981 $\pm$ 0.108  $\chi^2/\text{NDF}$ : 71242.2/46

All: 817.207 $\pm$ 0.078  $\chi^2/\text{NDF}$ : 196440.4/90

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



Right In:  $379.020 \pm 1069.537$   $\chi^2/\text{NDF}: 5.0/4$

Left Out:  $-147.864 \pm 347.750$   $\chi^2/\text{NDF}: 29.3/23$

Right Out:  $-2132.417 \pm 867.670$   $\chi^2/\text{NDF}: 5.5/5$

Left In:  $-27.722 \pm 344.229$   $\chi^2/\text{NDF}: 14.8/22$

Left:  $-87.182 \pm 244.642$   $\chi^2/\text{NDF}: 44.2/46$

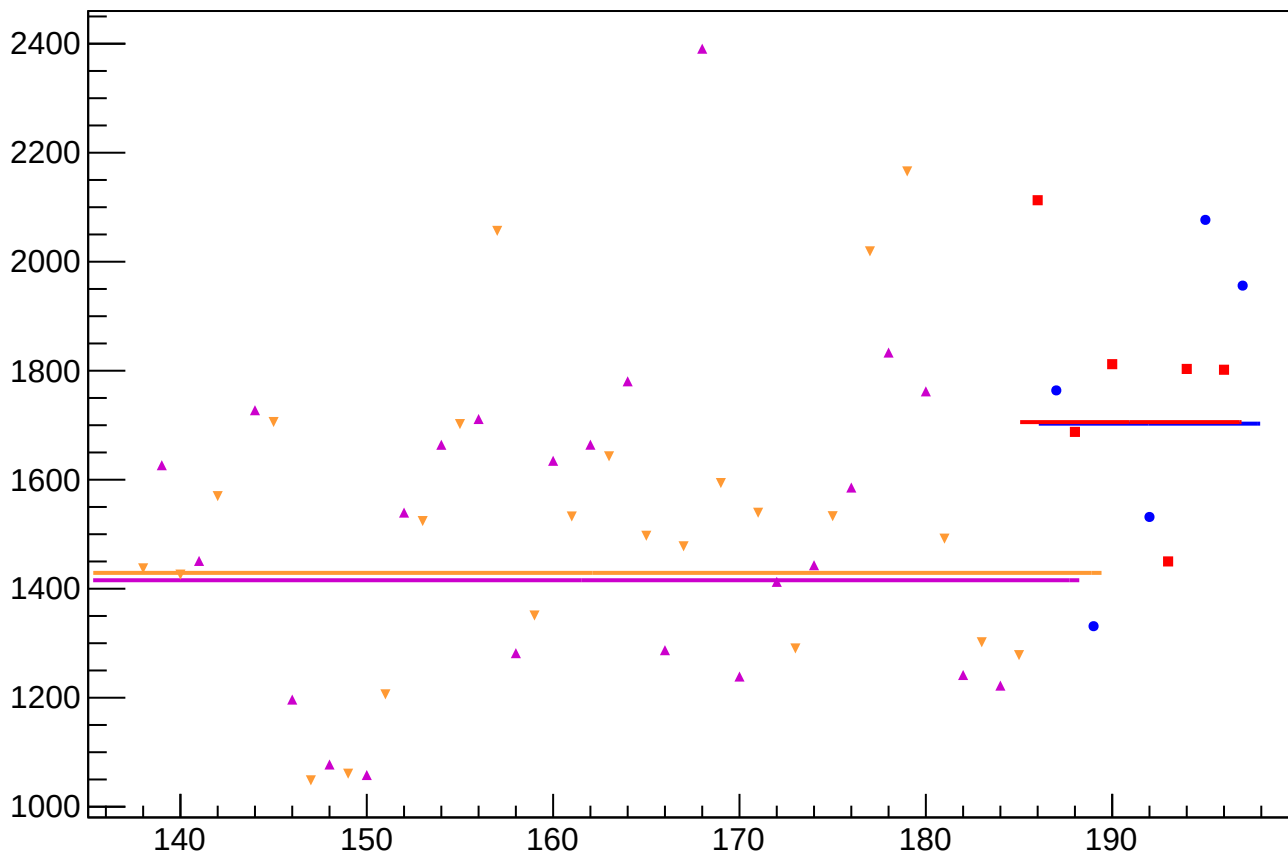
Right:  $-1135.593 \pm 673.820$   $\chi^2/\text{NDF}: 13.7/10$

In:  $10.456 \pm 327.676$   $\chi^2/\text{NDF}: 19.9/27$

Out:  $-422.524 \pm 322.790$   $\chi^2/\text{NDF}: 39.2/29$

All:  $-209.286 \pm 229.955$   $\chi^2/\text{NDF}: 60.1/57$

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



Right In: 1702.877 $\pm$ 0.756  $\chi^2/\text{NDF}$ : 159618.3/4

Left Out: 1429.065 $\pm$ 0.246  $\chi^2/\text{NDF}$ : 1106949.6/23

Right Out: 1705.700 $\pm$ 0.614  $\chi^2/\text{NDF}$ : 84418.4/5

Left In: 1415.555 $\pm$ 0.243  $\chi^2/\text{NDF}$ : 1245603.5/22

Left: 1422.241 $\pm$ 0.173  $\chi^2/\text{NDF}$ : 2354077.8/46

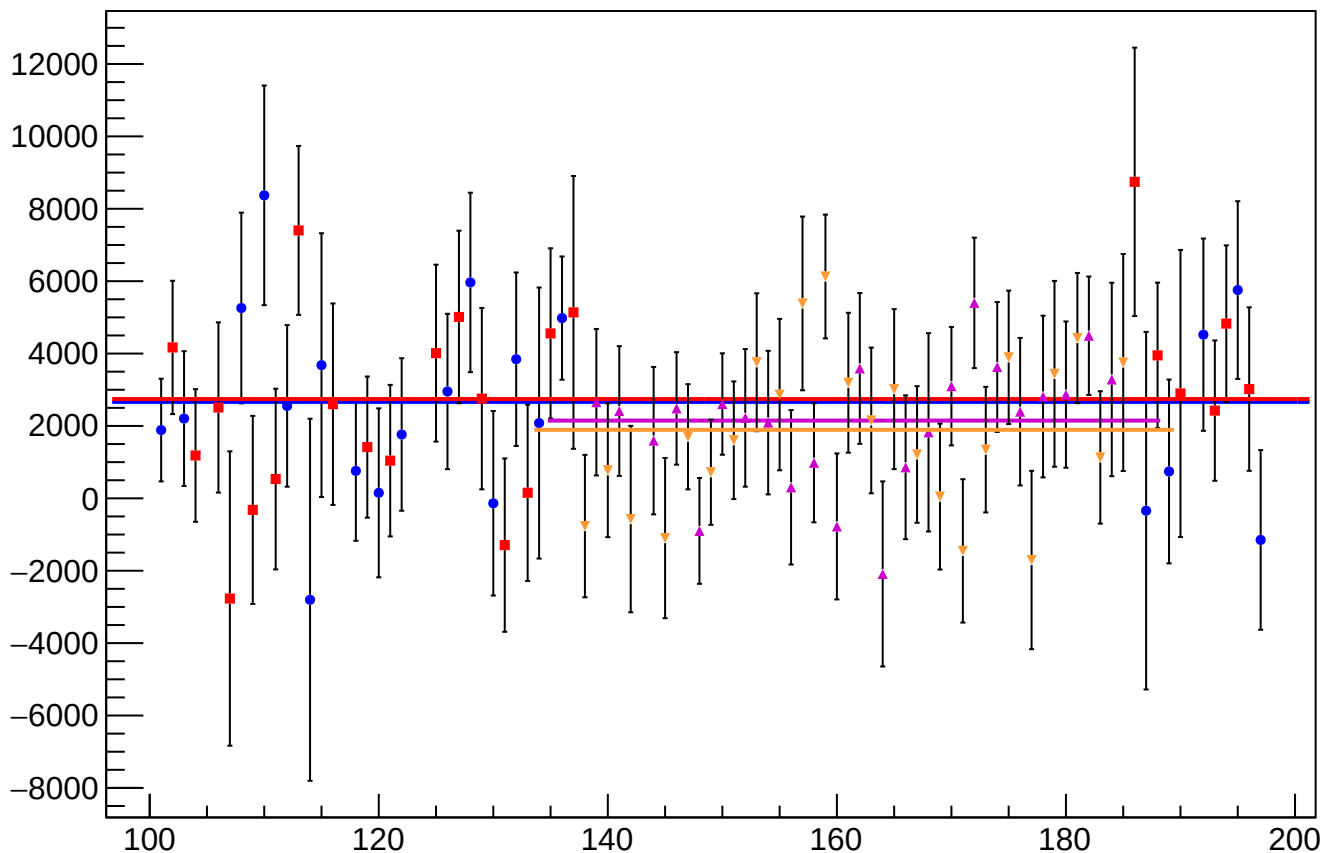
Right: 1704.579 $\pm$ 0.476  $\chi^2/\text{NDF}$ : 244045.1/10

In: 1442.524 $\pm$ 0.232  $\chi^2/\text{NDF}$ : 1536010.0/27

Out: 1467.351 $\pm$ 0.228  $\chi^2/\text{NDF}$ : 1366531.1/29

All: 1455.124 $\pm$ 0.163  $\chi^2/\text{NDF}$ : 2908367.8/57

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



Right In: 2664.872 $\pm$ 511.532  $\chi^2$ /NDF: 19.0/20

Left Out: 1892.511 $\pm$ 394.798  $\chi^2$ /NDF: 25.9/23

Right Out: 2743.892 $\pm$ 493.623  $\chi^2$ /NDF: 20.6/22

Left In: 2148.867 $\pm$ 391.716  $\chi^2$ /NDF: 18.4/22

Left: 2021.694 $\pm$ 278.068  $\chi^2$ /NDF: 44.6/46

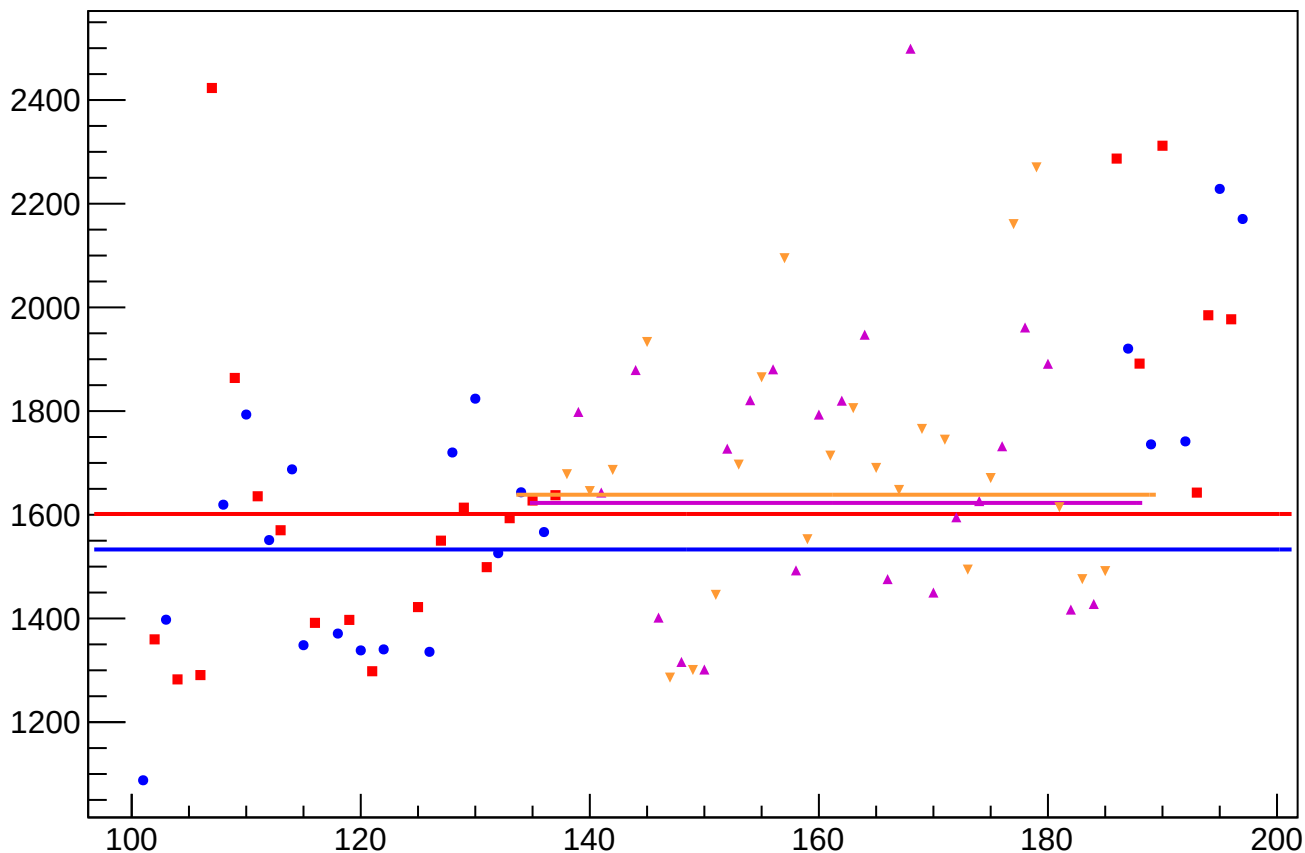
Right: 2705.790 $\pm$ 355.207  $\chi^2$ /NDF: 39.5/43

In: 2339.604 $\pm$ 311.003  $\chi^2$ /NDF: 38.0/43

Out: 2224.654 $\pm$ 308.316  $\chi^2$ /NDF: 48.3/46

All: 2281.631 $\pm$ 218.956  $\chi^2$ /NDF: 86.4/90

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



Right In: 1533.074 $\pm$ 0.362  $\chi^2/\text{NDF}$ : 663208.0/20

Left Out: 1638.679 $\pm$ 0.279  $\chi^2/\text{NDF}$ : 671983.1/23

Right Out: 1601.537 $\pm$ 0.349  $\chi^2/\text{NDF}$ : 617444.8/22

Left In: 1622.876 $\pm$ 0.277  $\chi^2/\text{NDF}$ : 780522.2/22

Left: 1630.716 $\pm$ 0.197  $\chi^2/\text{NDF}$ : 1454120.1/46

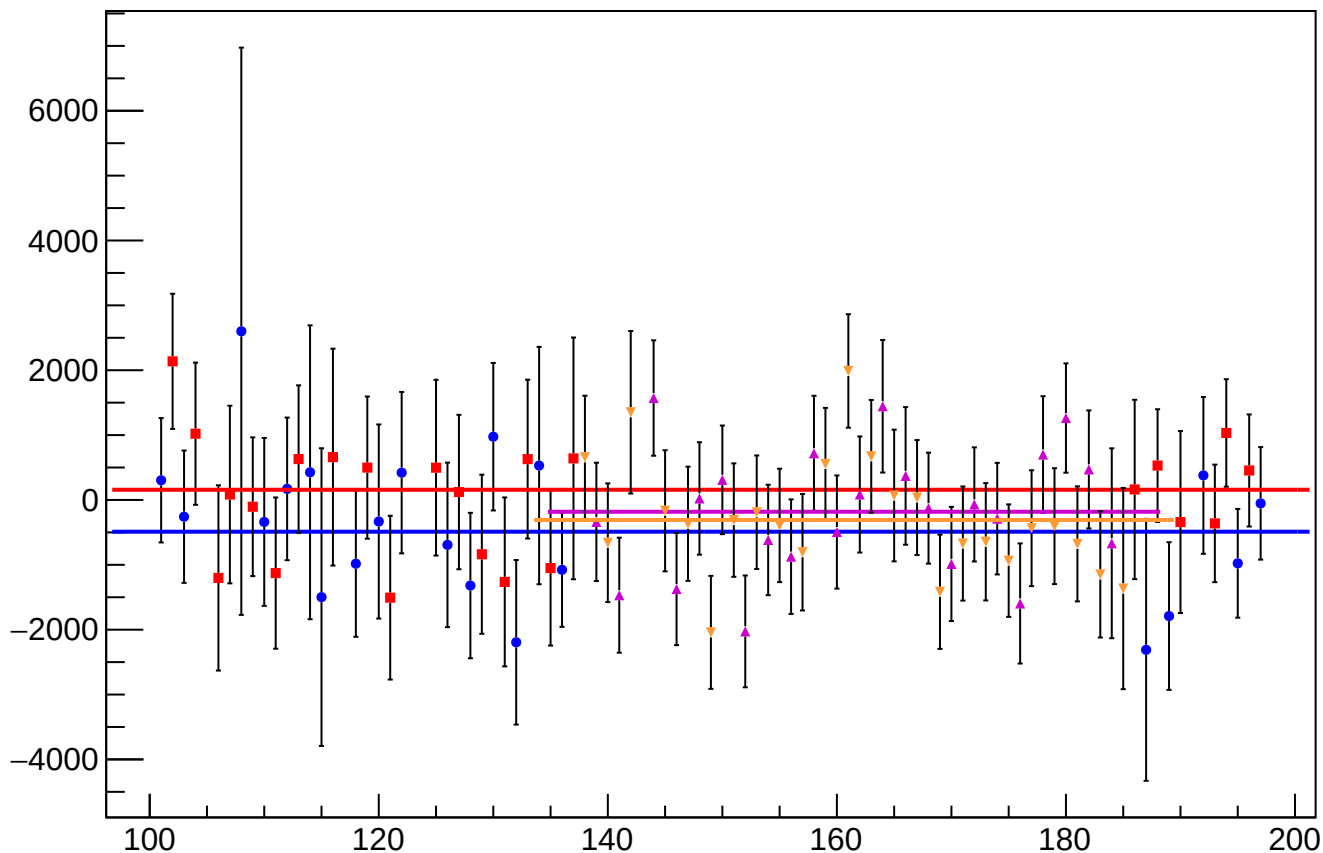
Right: 1568.525 $\pm$ 0.251  $\chi^2/\text{NDF}$ : 1299203.9/43

In: 1589.681 $\pm$ 0.220  $\chi^2/\text{NDF}$ : 1482585.1/43

Out: 1624.189 $\pm$ 0.218  $\chi^2/\text{NDF}$ : 1296333.9/46

All: 1607.085 $\pm$ 0.155  $\chi^2/\text{NDF}$ : 2791337.1/90

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



Right In:  $-489.404 \pm 261.270$   $\chi^2/\text{NDF}: 10.7/20$

Left Out:  $-308.819 \pm 187.448$   $\chi^2/\text{NDF}: 20.6/23$

Right Out:  $157.437 \pm 238.966$   $\chi^2/\text{NDF}: 13.5/22$

Left In:  $-181.983 \pm 187.935$   $\chi^2/\text{NDF}: 25.6/22$

Left:  $-245.566 \pm 132.717$   $\chi^2/\text{NDF}: 46.4/46$

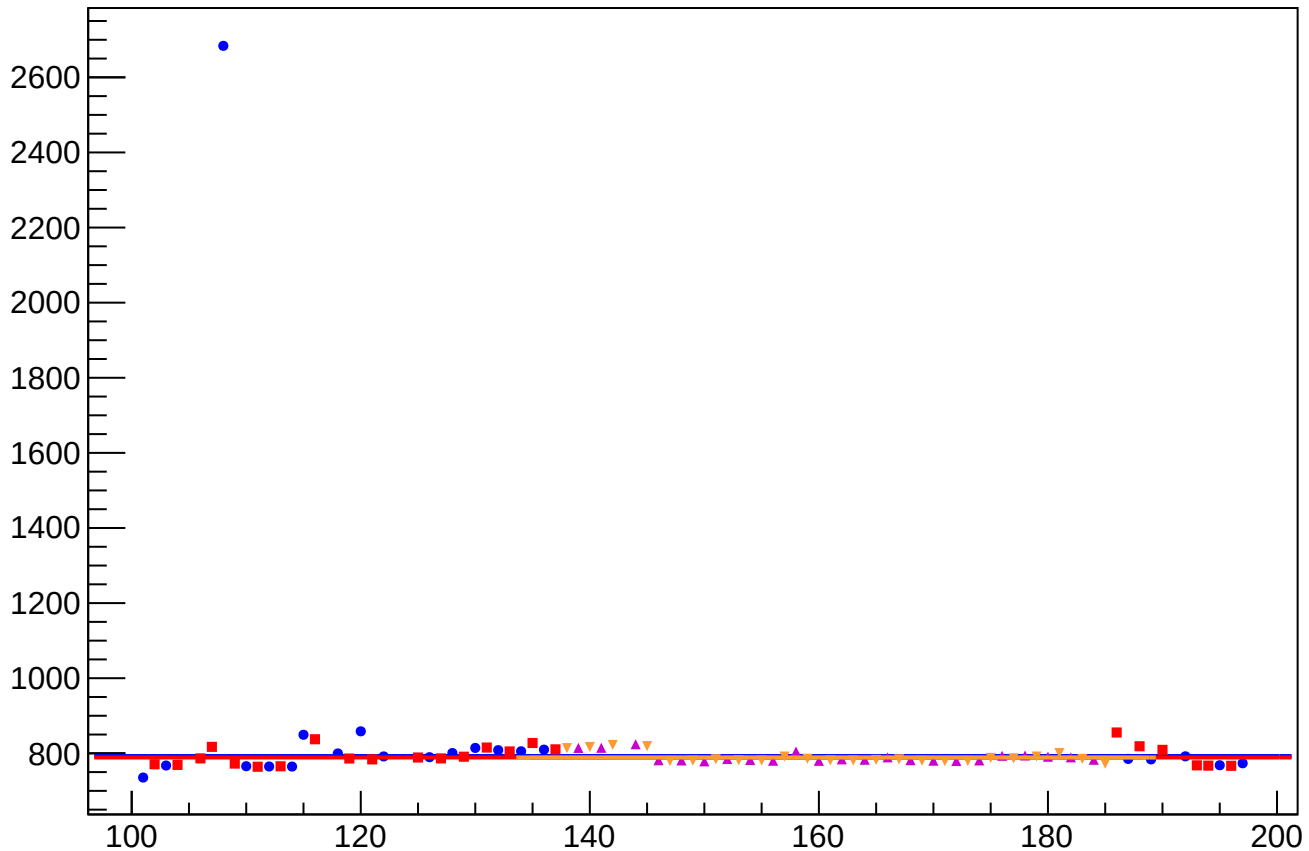
Right:  $-137.199 \pm 176.333$   $\chi^2/\text{NDF}: 27.6/43$

In:  $-286.808 \pm 152.565$   $\chi^2/\text{NDF}: 37.2/43$

Out:  $-131.212 \pm 147.487$   $\chi^2/\text{NDF}: 36.4/46$

All:  $-206.377 \pm 106.039$   $\chi^2/\text{NDF}: 74.2/90$

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



Right In: 792.718 $\pm$ 0.185  $\chi^2$ /NDF: 394969.3/20

Left Out: 788.886 $\pm$ 0.133  $\chi^2$ /NDF: 9342.2/23

Right Out: 788.876 $\pm$ 0.169  $\chi^2$ /NDF: 20786.6/22

Left In: 789.406 $\pm$ 0.133  $\chi^2$ /NDF: 9219.1/22

Left: 789.145 $\pm$ 0.094  $\chi^2$ /NDF: 18569.0/46

Right: 790.626 $\pm$ 0.125  $\chi^2$ /NDF: 415991.4/43

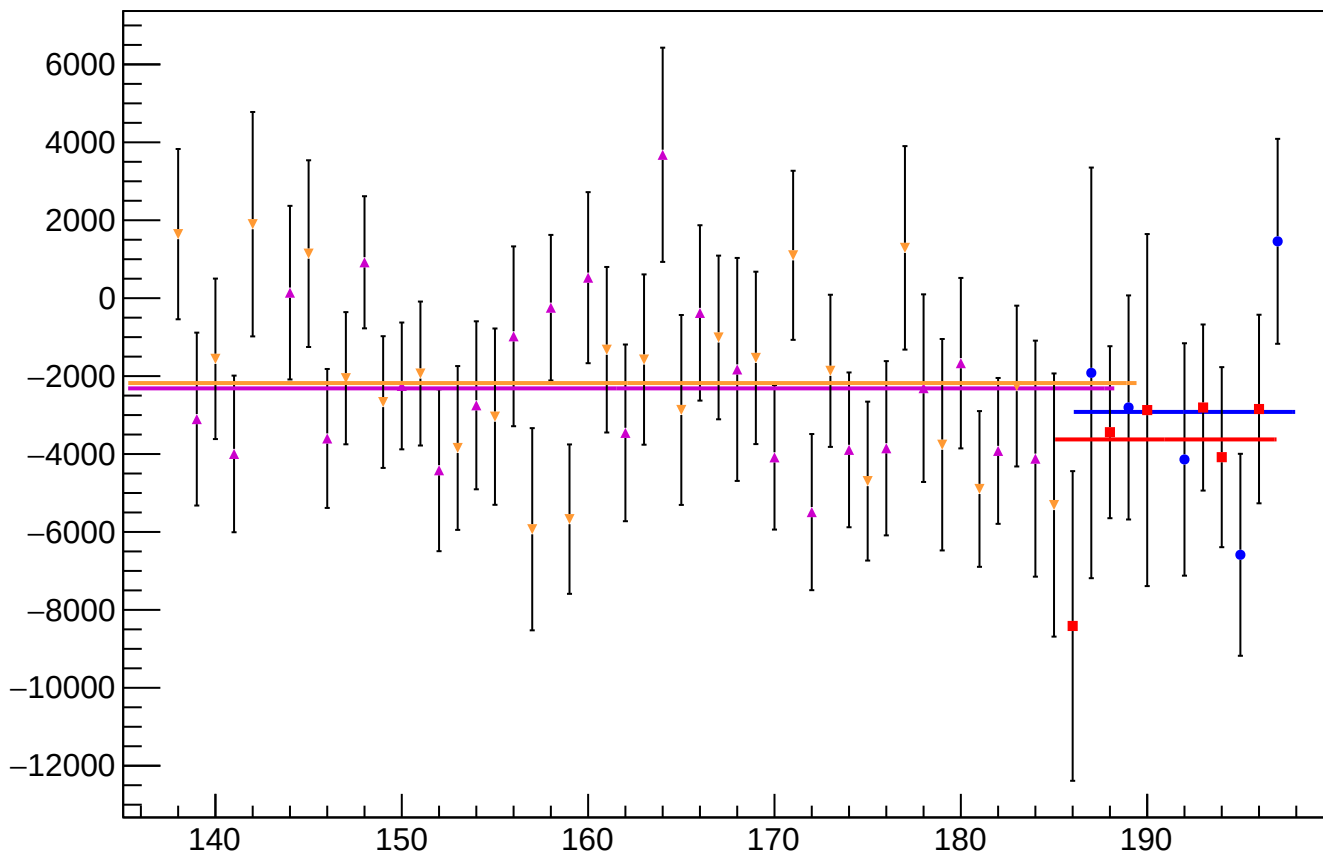
In: 790.536 $\pm$ 0.108  $\chi^2$ /NDF: 404400.2/43

Out: 788.882 $\pm$ 0.104  $\chi^2$ /NDF: 30128.8/46

All: 789.681 $\pm$ 0.075  $\chi^2$ /NDF: 434650.5/90



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



Right In: -2919.331 $\pm$ 1333.009  $\chi^2$ /NDF: 5.0/4

Left Out: -2178.467 $\pm$ 439.661  $\chi^2$ /NDF: 22.7/23

Right Out: -3625.330 $\pm$ 1056.588  $\chi^2$ /NDF: 1.8/5

Left In: -2315.169 $\pm$ 437.003  $\chi^2$ /NDF: 22.0/22

Left: -2247.233 $\pm$ 309.943  $\chi^2$ /NDF: 44.8/46

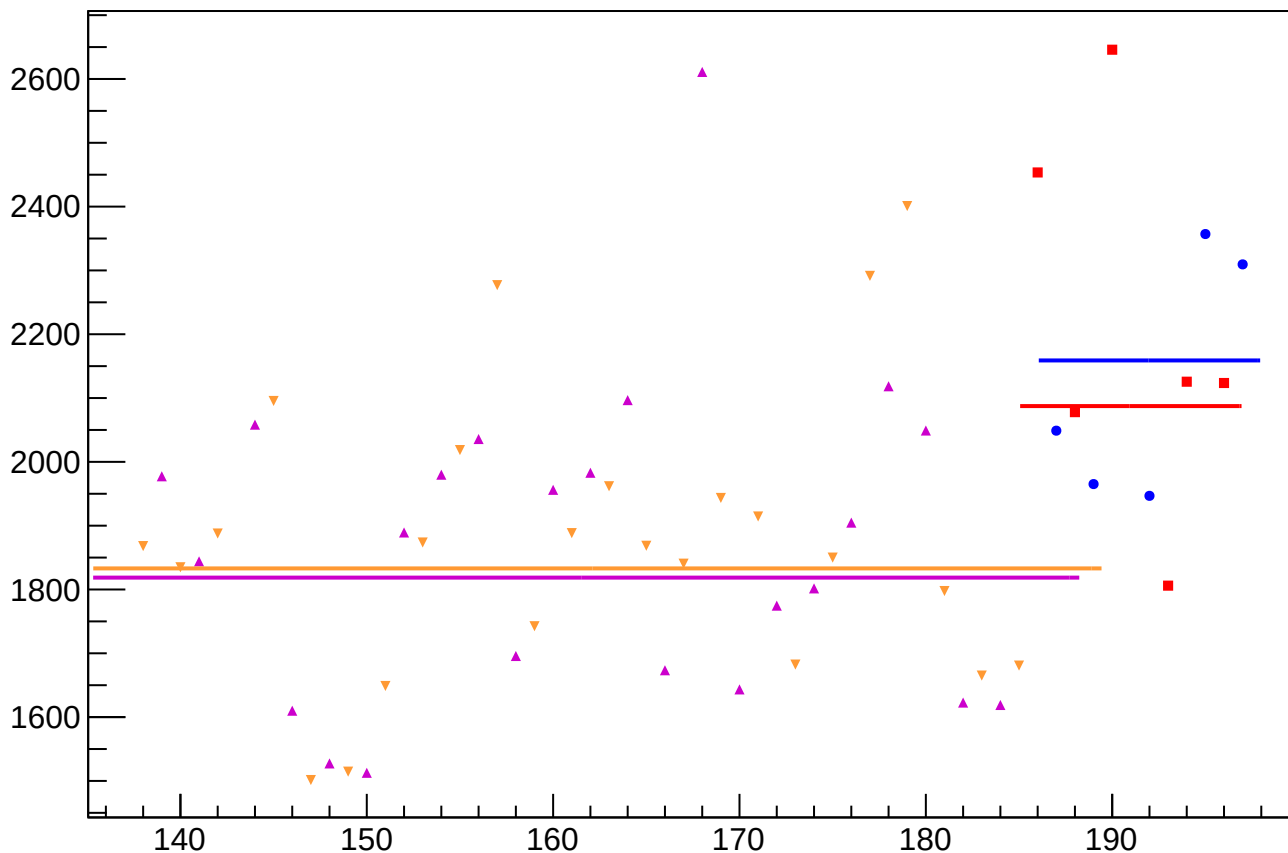
Right: -3352.920 $\pm$ 828.023  $\chi^2$ /NDF: 6.9/10

In: -2373.800 $\pm$ 415.258  $\chi^2$ /NDF: 27.2/27

Out: -2392.016 $\pm$ 405.920  $\chi^2$ /NDF: 26.1/29

All: -2383.115 $\pm$ 290.274  $\chi^2$ /NDF: 53.3/57

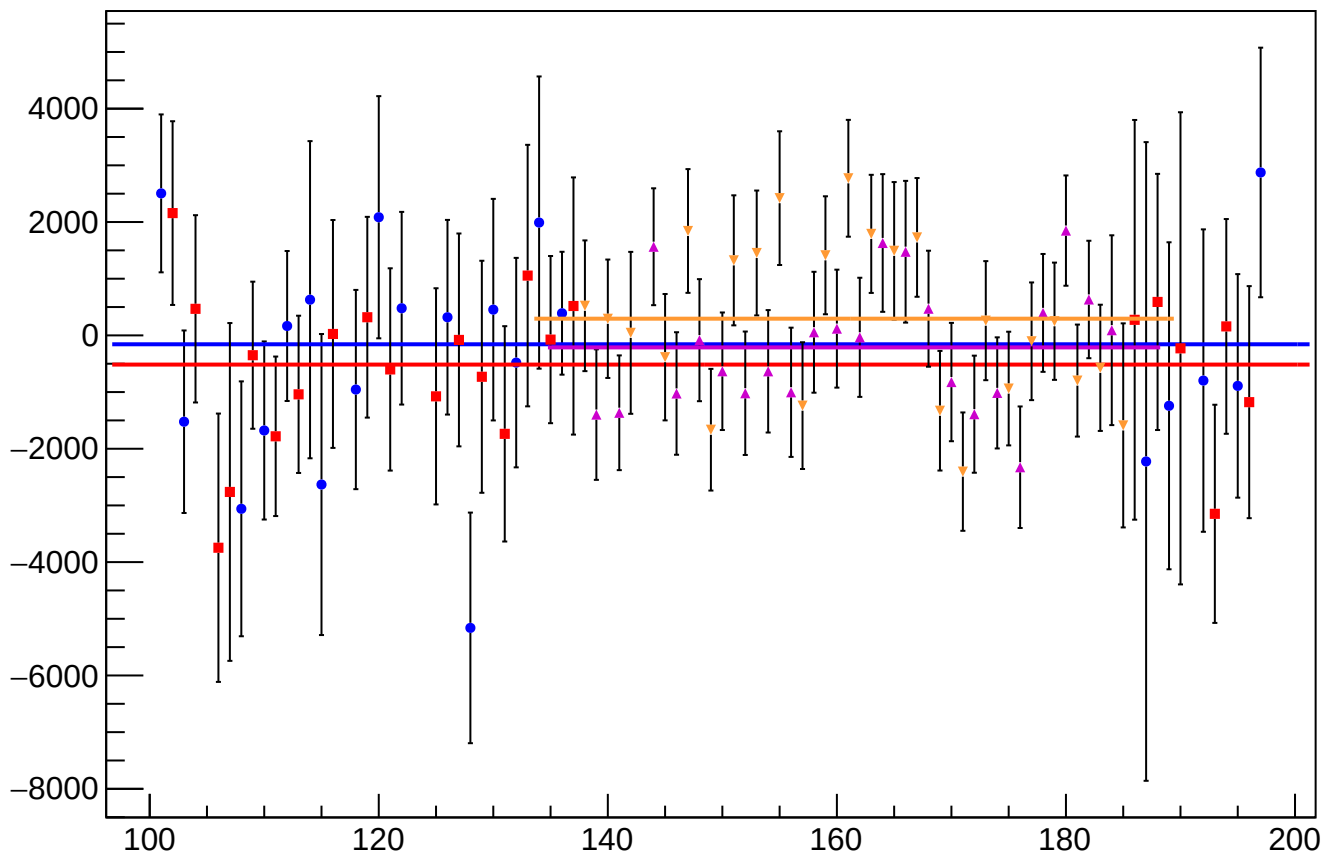
# asym\_us\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 2158.932 $\pm$ 0.943  $\chi^2/\text{NDF}$ : 38307.7/4  
 Left Out: 1833.028 $\pm$ 0.311  $\chi^2/\text{NDF}$ : 465466.9/23  
 Right Out: 2087.402 $\pm$ 0.747  $\chi^2/\text{NDF}$ : 83429.5/5  
 Left In: 1818.594 $\pm$ 0.309  $\chi^2/\text{NDF}$ : 536826.7/22

Left: 1825.767 $\pm$ 0.219  $\chi^2/\text{NDF}$ : 1003377.8/46  
 Right: 2115.002 $\pm$ 0.586  $\chi^2/\text{NDF}$ : 125273.9/10  
 In: 1851.622 $\pm$ 0.294  $\chi^2/\text{NDF}$ : 692854.1/27  
 Out: 1870.572 $\pm$ 0.287  $\chi^2/\text{NDF}$ : 647709.1/29  
 All: 1861.313 $\pm$ 0.205  $\chi^2/\text{NDF}$ : 1342693.1/57

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



Right In:  $-156.934 \pm 404.010$   $\chi^2/\text{NDF}: 19.0/20$

Left Out:  $294.652 \pm 224.344$   $\chi^2/\text{NDF}: 38.3/23$

Right Out:  $-515.041 \pm 389.997$   $\chi^2/\text{NDF}: 10.5/22$

Left In:  $-212.080 \pm 224.701$   $\chi^2/\text{NDF}: 23.7/22$

Left:  $41.688 \pm 158.761$   $\chi^2/\text{NDF}: 64.6/46$

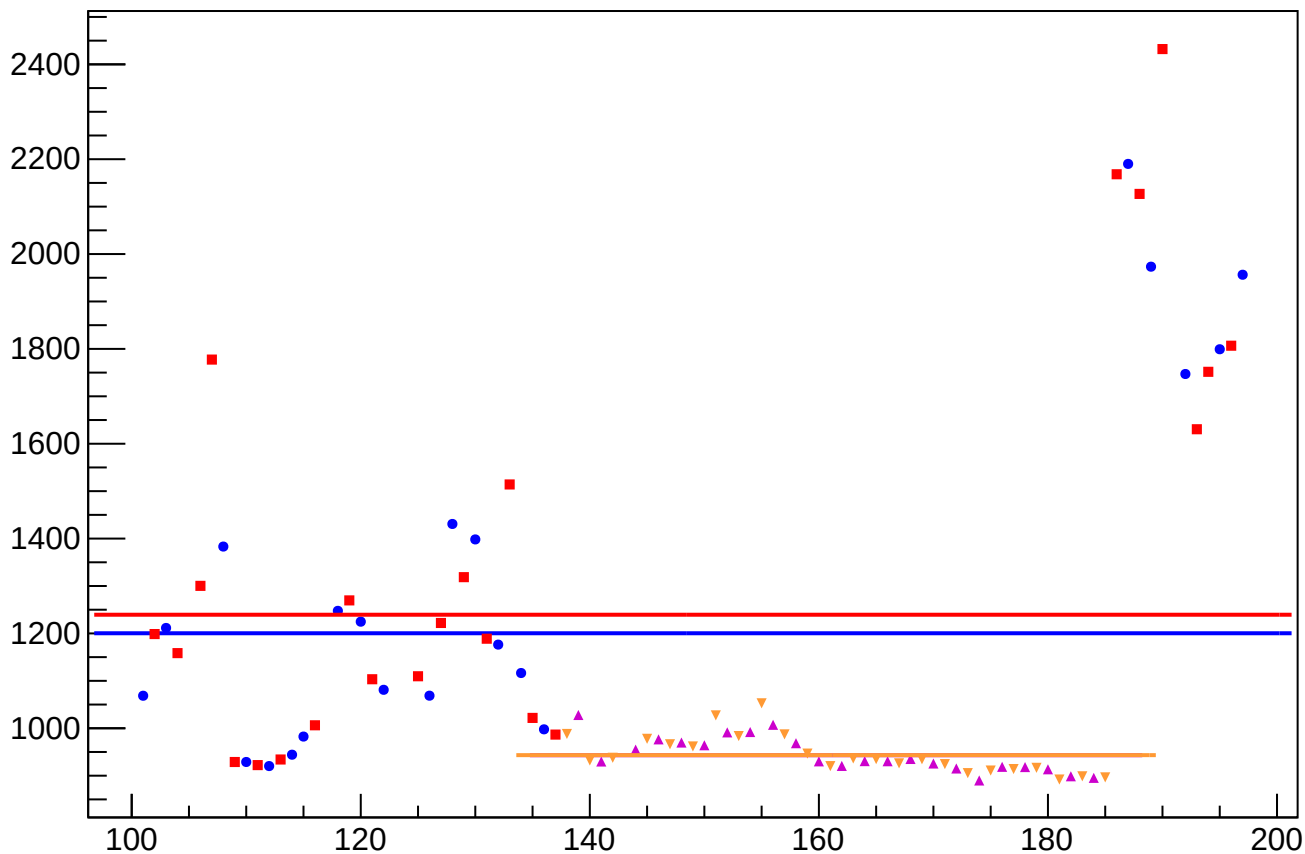
Right:  $-342.305 \pm 280.593$   $\chi^2/\text{NDF}: 29.9/43$

In:  $-199.052 \pm 196.372$   $\chi^2/\text{NDF}: 42.8/43$

Out:  $93.335 \pm 194.465$   $\chi^2/\text{NDF}: 52.0/46$

All:  $-51.432 \pm 138.177$   $\chi^2/\text{NDF}: 95.9/90$

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



Right In: 1200.352 $\pm$ 0.286  $\chi^2$ /NDF: 1062178.3/20

Left Out: 943.327 $\pm$ 0.159  $\chi^2$ /NDF: 60410.5/23

Right Out: 1239.415 $\pm$ 0.276  $\chi^2$ /NDF: 1528977.3/22

Left In: 943.137 $\pm$ 0.159  $\chi^2$ /NDF: 49948.2/22

Left: 943.232 $\pm$ 0.112  $\chi^2$ /NDF: 110359.4/46

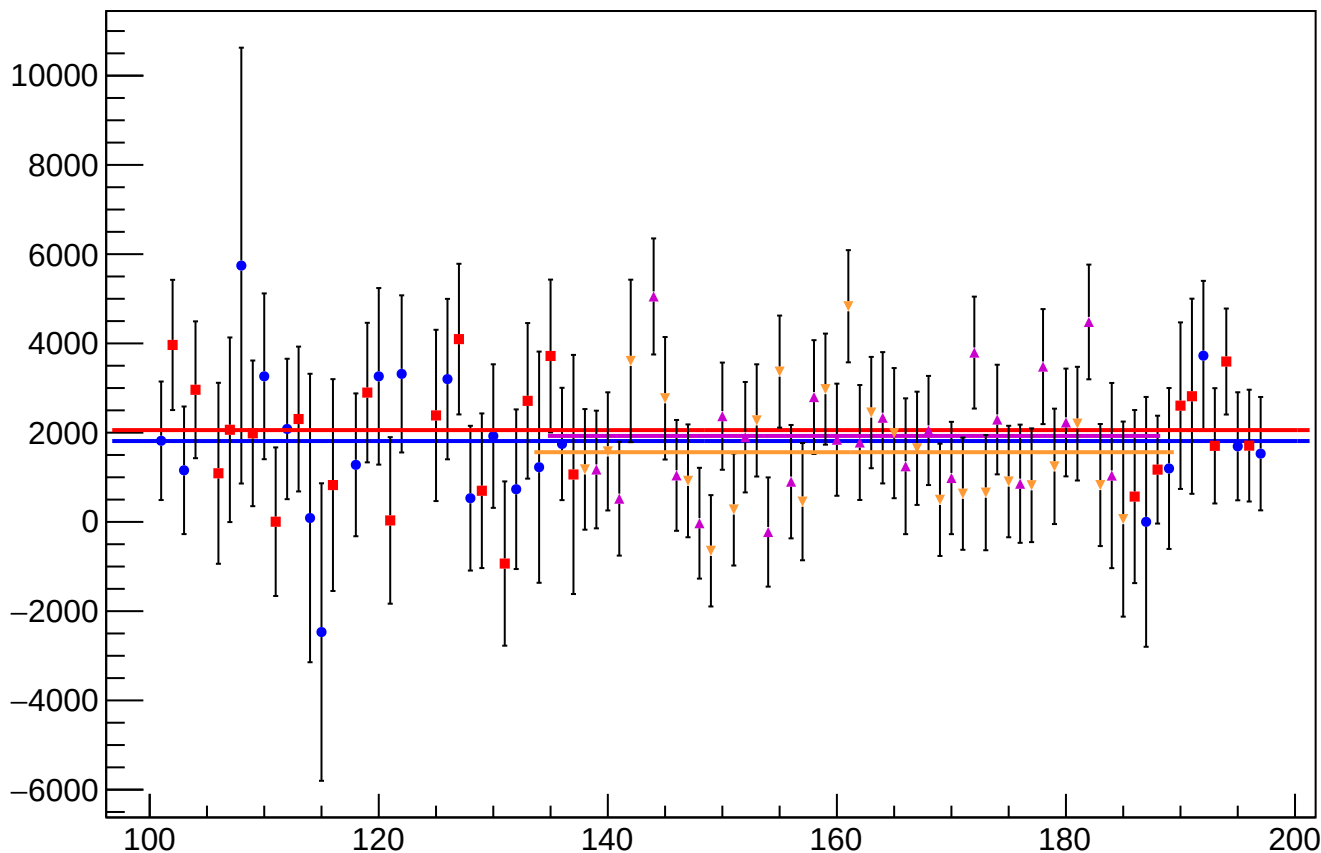
Right: 1220.573 $\pm$ 0.198  $\chi^2$ /NDF: 2600834.1/43

In: 1003.904 $\pm$ 0.139  $\chi^2$ /NDF: 1731270.2/43

Out: 1016.945 $\pm$ 0.138  $\chi^2$ /NDF: 2455553.5/46

All: 1010.488 $\pm$ 0.098  $\chi^2$ /NDF: 4191276.5/90

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



Right In: 1812.076 $\pm$ 372.465  $\chi^2/\text{NDF}$ : 8.3/20

Left Out: 1562.090 $\pm$ 269.272  $\chi^2/\text{NDF}$ : 21.8/23

Right Out: 2057.482 $\pm$ 336.821  $\chi^2/\text{NDF}$ : 14.7/23

Left In: 1926.929 $\pm$ 269.667  $\chi^2/\text{NDF}$ : 24.1/22

Left: 1744.243 $\pm$ 190.544  $\chi^2/\text{NDF}$ : 46.8/46

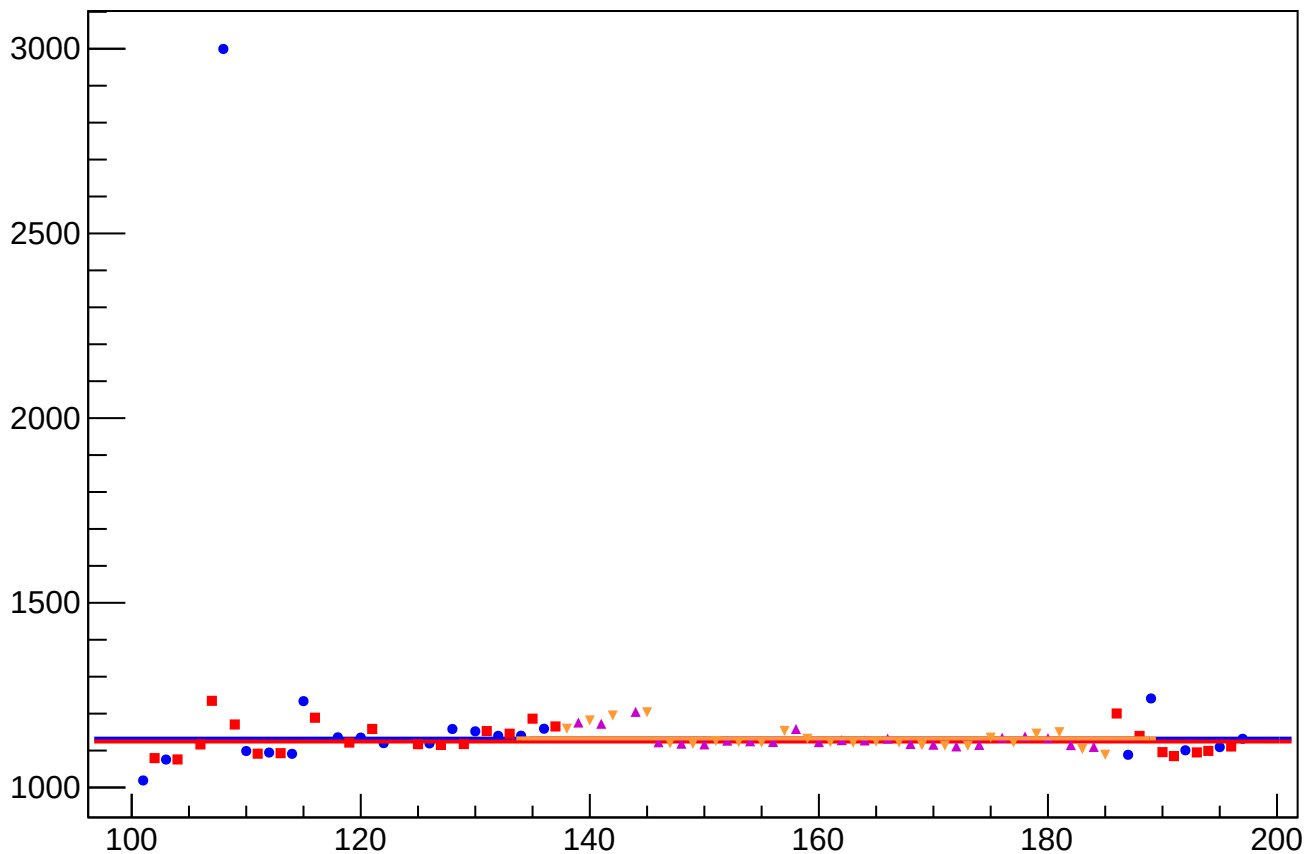
Right: 1947.080 $\pm$ 249.822  $\chi^2/\text{NDF}$ : 23.3/44

In: 1887.430 $\pm$ 218.429  $\chi^2/\text{NDF}$ : 32.5/43

Out: 1755.252 $\pm$ 210.323  $\chi^2/\text{NDF}$ : 37.8/47

All: 1818.843 $\pm$ 151.505  $\chi^2/\text{NDF}$ : 70.5/91

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



Right In: 1132.236 $\pm$ 0.263  $\chi^2$ /NDF: 325224.8/20

Left Out: 1132.882 $\pm$ 0.190  $\chi^2$ /NDF:16786.8/23

Right Out: 1124.481 $\pm$ 0.238  $\chi^2$ /NDF: 25528.7/23

Left In: 1132.570 $\pm$ 0.191  $\chi^2$ /NDF:14524.8/22

Left: 1132.727 $\pm$ 0.135  $\chi^2$ /NDF: 31312.9/46

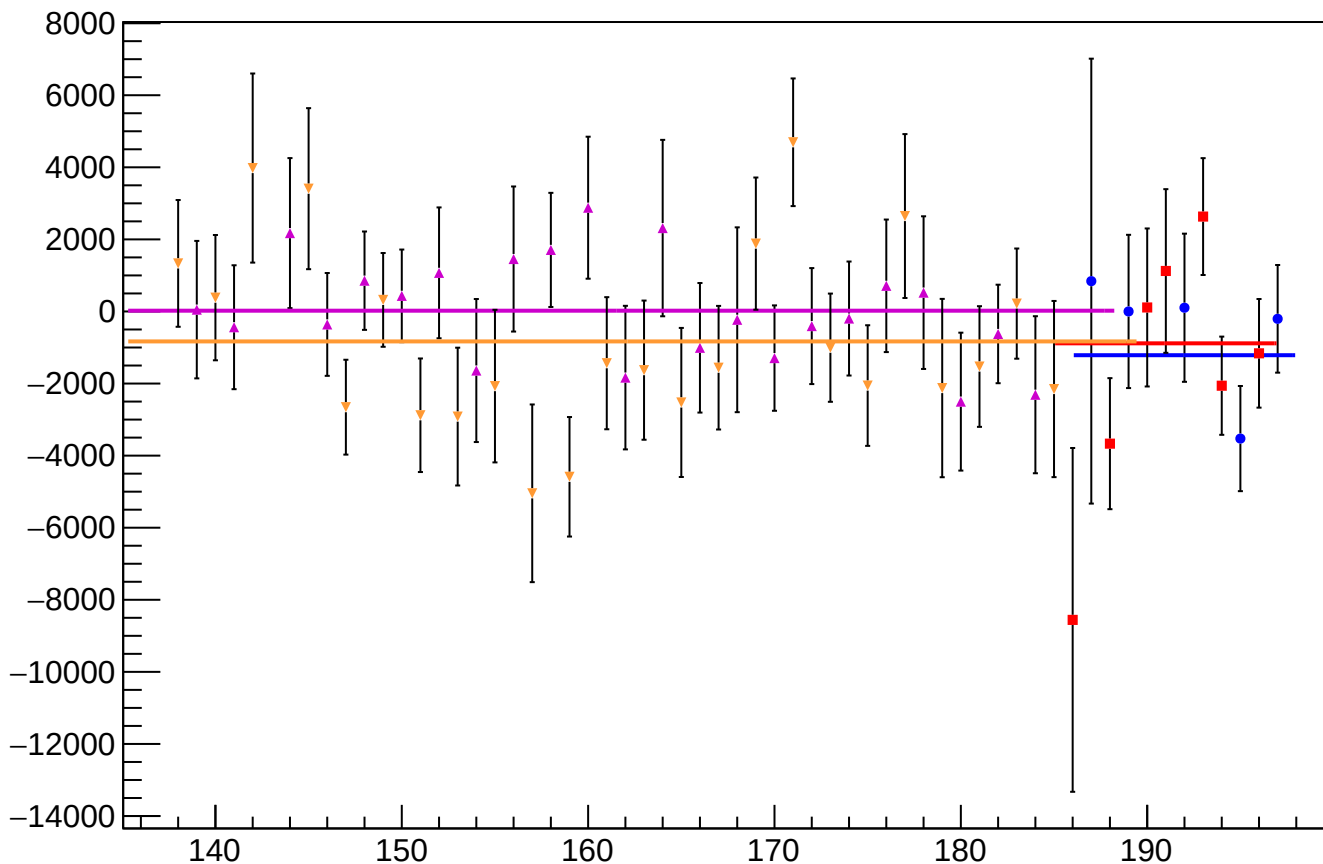
Right: 1127.970 $\pm$ 0.177  $\chi^2$ /NDF: 351230.5/44

In: 1132.455 $\pm$ 0.154  $\chi^2$ /NDF:339750.7/43

Out: 1129.606 $\pm$ 0.149  $\chi^2$ /NDF:43074.7/47

All: 1130.977 $\pm$ 0.107  $\chi^2$ /NDF: 383001.9/91

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



Right In: -1213.610 $\pm$ 844.506  $\chi^2/\text{NDF}$ : 3.8/4

Left Out: -830.927 $\pm$ 366.086  $\chi^2/\text{NDF}$ :40.1/23

Right Out: -884.146 $\pm$ 688.756  $\chi^2/\text{NDF}$ : 11.4/6

Left In: 21.419 $\pm$ 362.476  $\chi^2/\text{NDF}$ :12.8/22

Left: -400.530 $\pm$ 257.576  $\chi^2/\text{NDF}$ : 55.6/46

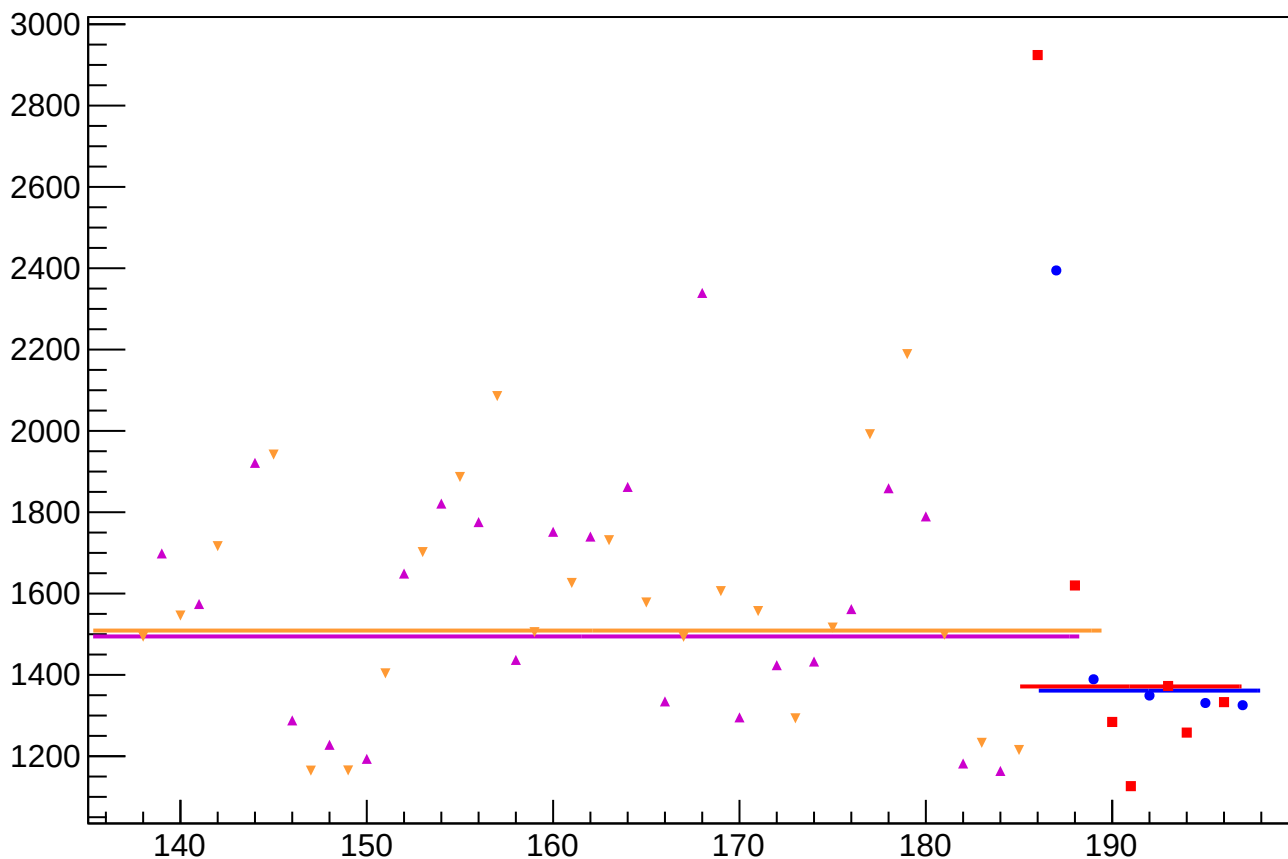
Right: -1015.752 $\pm$ 533.749  $\chi^2/\text{NDF}$ : 15.3/11

In: -170.711 $\pm$ 333.090  $\chi^2/\text{NDF}$ :18.4/27

Out: -842.650 $\pm$ 323.260  $\chi^2/\text{NDF}$ :51.5/30

All: -516.741 $\pm$ 231.977  $\chi^2/\text{NDF}$ : 72.0/58

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

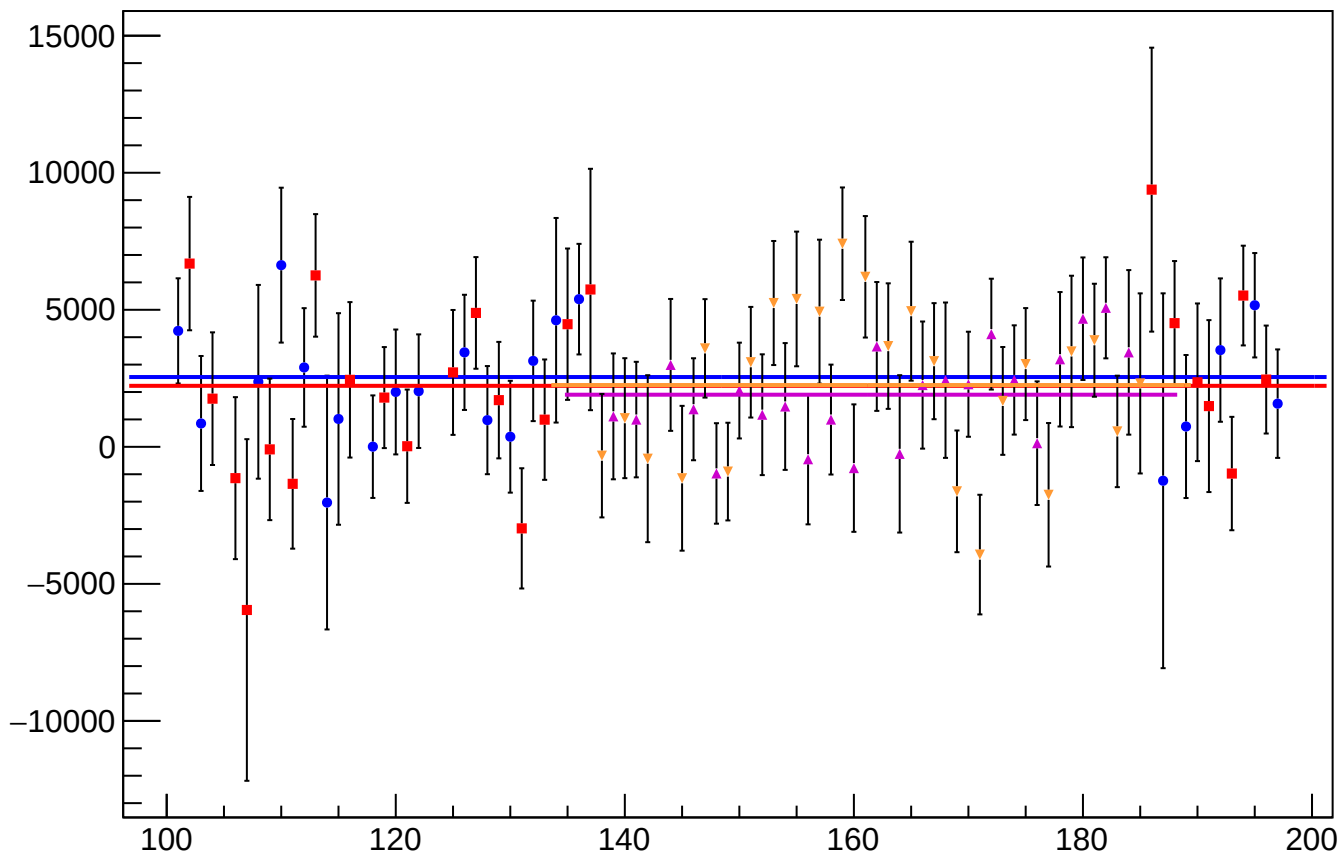


Right In: 1361.367 $\pm$ 0.597  $\chi^2$ /NDF: 58480.3/4  
 Left Out: 1508.993 $\pm$ 0.259  $\chi^2$ /NDF:988673.2/23  
 Right Out: 1371.535 $\pm$ 0.487  $\chi^2$ /NDF: 290946.1/6  
 Left In: 1494.507 $\pm$ 0.256  $\chi^2$ /NDF:1096280.5/22

Left: 1501.678 $\pm$ 0.182  $\chi^2$ /NDF: 2086534.9/46  
 Right: 1367.473 $\pm$ 0.377  $\chi^2$ /NDF: 349600.6/11  
 In: 1473.795 $\pm$ 0.236  $\chi^2$ /NDF:1196737.6/27  
 Out: 1478.713 $\pm$ 0.229  $\chi^2$ /NDF:1341731.0/30  
 All: 1476.328 $\pm$ 0.164  $\chi^2$ /NDF: 2538693.2/58



# asym\_usl\_mean vs Slug, Sign Corrected



Right In: 2546.524+/-514.719  $\chi^2/\text{NDF}$ : 13.8/20

Left Out: 2253.979+/-456.390  $\chi^2/\text{NDF}$ : 38.7/23

Right Out: 2225.711+/-490.124  $\chi^2/\text{NDF}$ : 31.7/23

Left In: 1901.797+/-453.879  $\chi^2/\text{NDF}$ : 13.9/22

Left: 2076.917+/-321.825  $\chi^2/\text{NDF}$ : 52.8/46

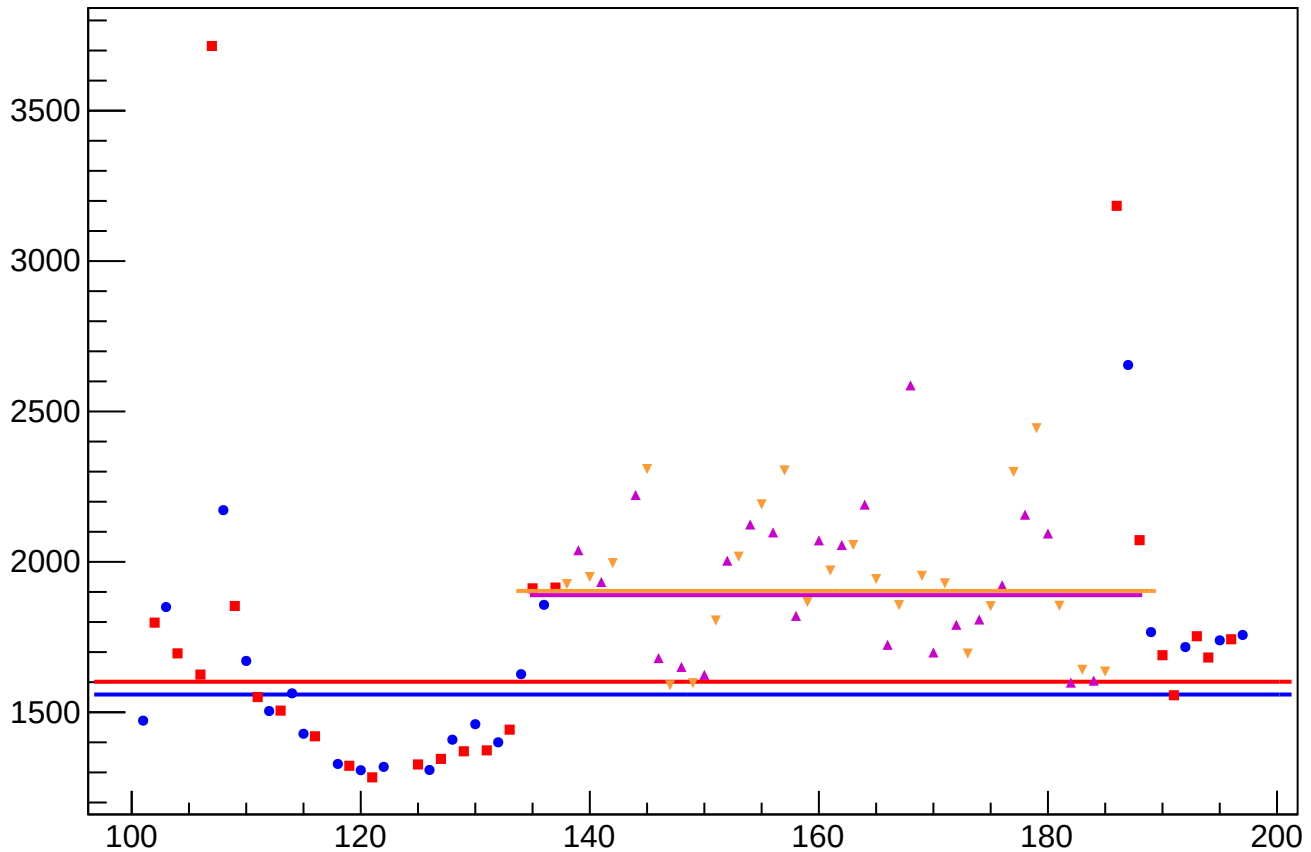
Right: 2378.270+/-354.947  $\chi^2/\text{NDF}$ : 45.7/44

In: 2183.822+/-340.429  $\chi^2/\text{NDF}$ : 28.6/43

Out: 2240.851+/-334.006  $\chi^2/\text{NDF}$ : 70.3/47

All: 2212.880+/-238.416  $\chi^2/\text{NDF}$ : 98.9/91

# asym\_usl\_rms vs Slug, Sign Corrected



Right In: 1558.987 $\pm$ 0.364  $\chi^2/\text{NDF}$ : 389435.7/20

Left Out: 1903.456 $\pm$ 0.323  $\chi^2/\text{NDF}$ : 461899.8/23

Right Out: 1601.489 $\pm$ 0.347  $\chi^2/\text{NDF}$ : 823546.6/23

Left In: 1889.326 $\pm$ 0.321  $\chi^2/\text{NDF}$ : 508648.5/22

Left: 1896.352 $\pm$ 0.228  $\chi^2/\text{NDF}$ : 971512.1/46

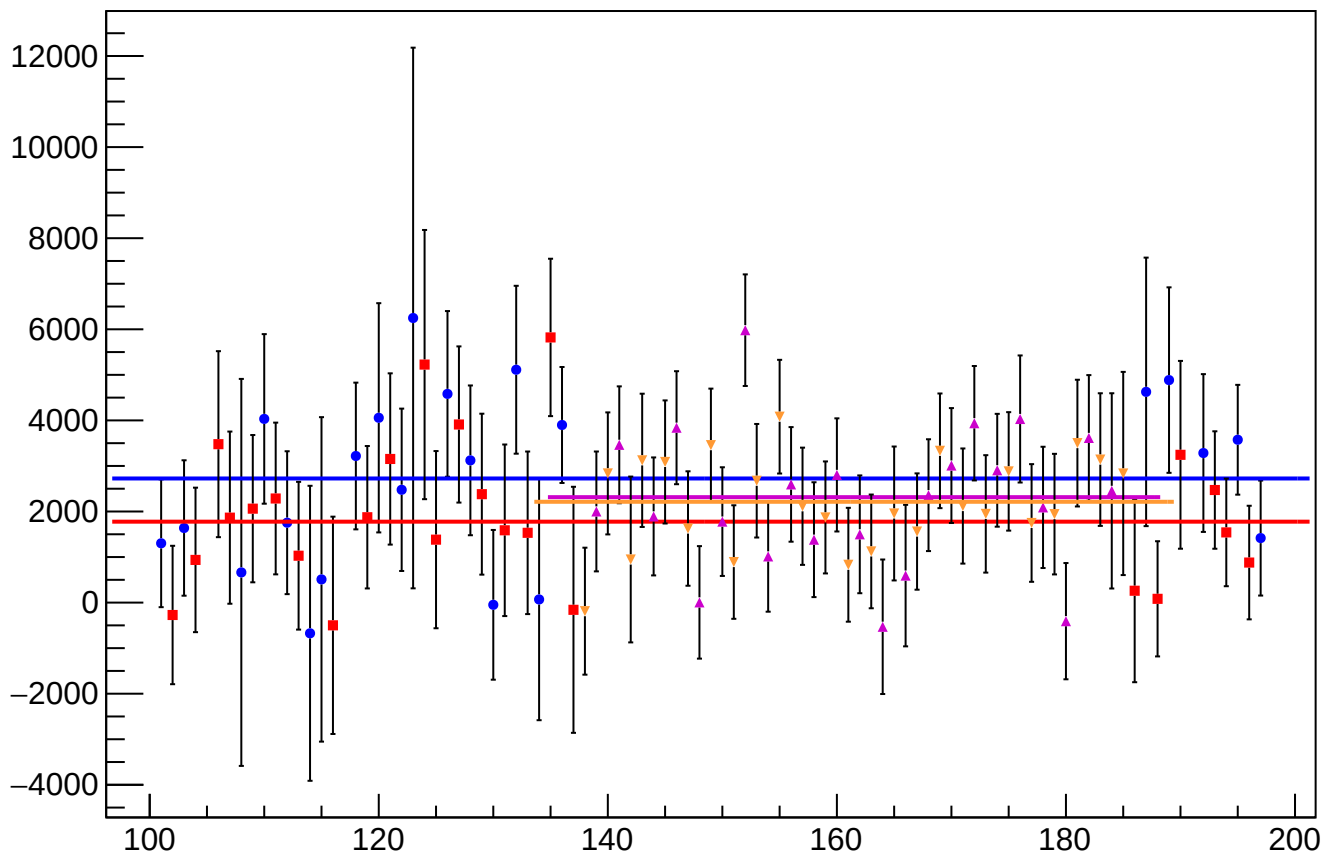
Right: 1581.278 $\pm$ 0.251  $\chi^2/\text{NDF}$ : 1220134.1/44

In: 1744.825 $\pm$ 0.241  $\chi^2/\text{NDF}$ : 1361513.4/43

Out: 1763.221 $\pm$ 0.236  $\chi^2/\text{NDF}$ : 1692054.1/47

All: 1754.198 $\pm$ 0.169  $\chi^2/\text{NDF}$ : 3056543.2/91

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



Right In: 2724.858 $\pm$ 381.403  $\chi^2/\text{NDF}$ : 15.6/21

Left Out: 2213.308 $\pm$ 266.921  $\chi^2/\text{NDF}$ : 14.2/24

Right Out: 1776.785 $\pm$ 342.615  $\chi^2/\text{NDF}$ : 17.4/23

Left In: 2314.778 $\pm$ 271.873  $\chi^2/\text{NDF}$ : 31.6/22

Left: 2263.111 $\pm$ 190.469  $\chi^2/\text{NDF}$ : 45.8/47

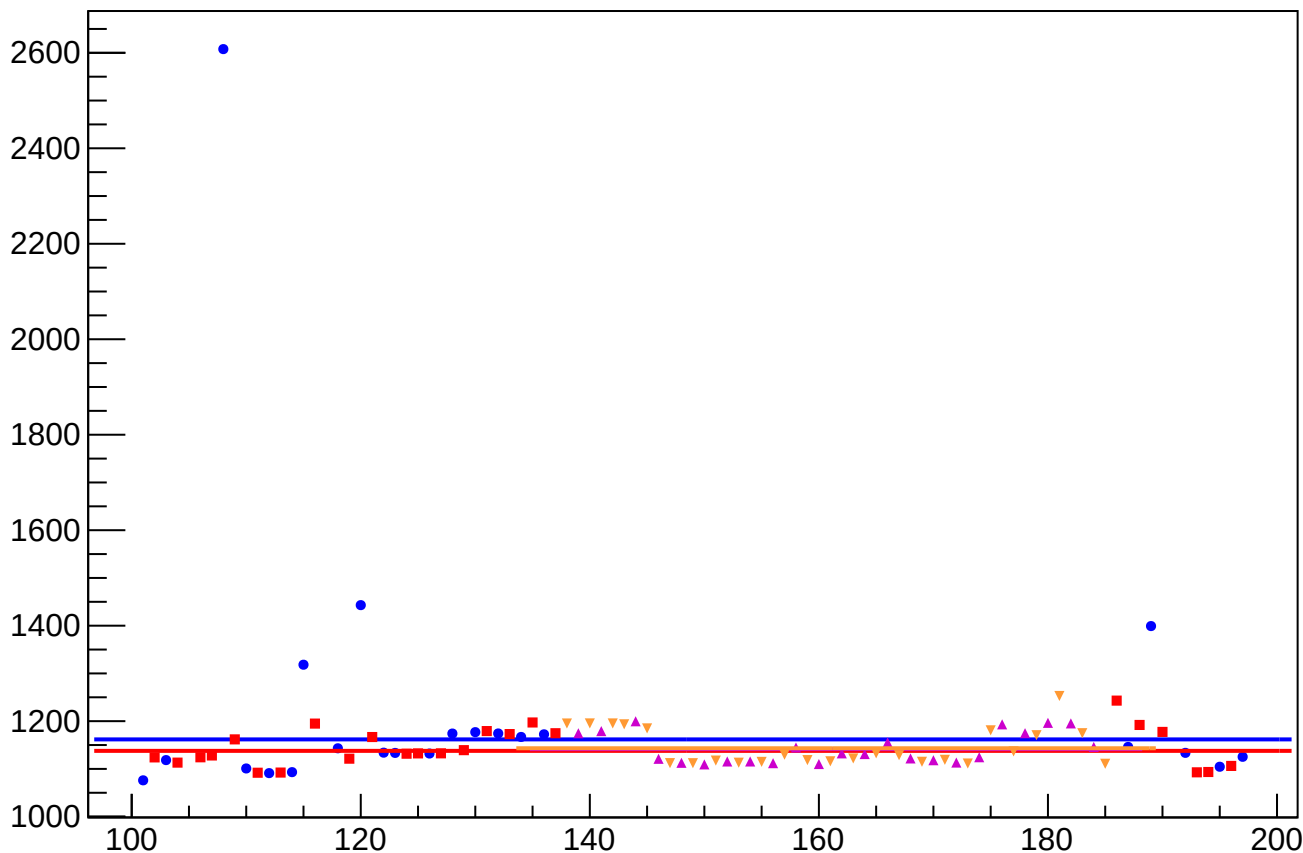
Right: 2200.175 $\pm$ 254.879  $\chi^2/\text{NDF}$ : 36.4/45

In: 2452.943 $\pm$ 221.385  $\chi^2/\text{NDF}$ : 47.9/44

Out: 2048.432 $\pm$ 210.563  $\chi^2/\text{NDF}$ : 32.6/48

All: 2240.559 $\pm$ 152.573  $\chi^2/\text{NDF}$ : 82.3/93

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



Right In: 1161.808 $\pm$ 0.270  $\chi^2$ /NDF: 312634.9/21

Left Out: 1143.249 $\pm$ 0.189  $\chi^2$ /NDF: 39493.3/24

Right Out: 1137.776 $\pm$ 0.242  $\chi^2$ /NDF: 27126.0/23

Left In: 1141.363 $\pm$ 0.192  $\chi^2$ /NDF: 28014.9/22

Left: 1142.324 $\pm$ 0.135  $\chi^2$ /NDF: 67557.2/47

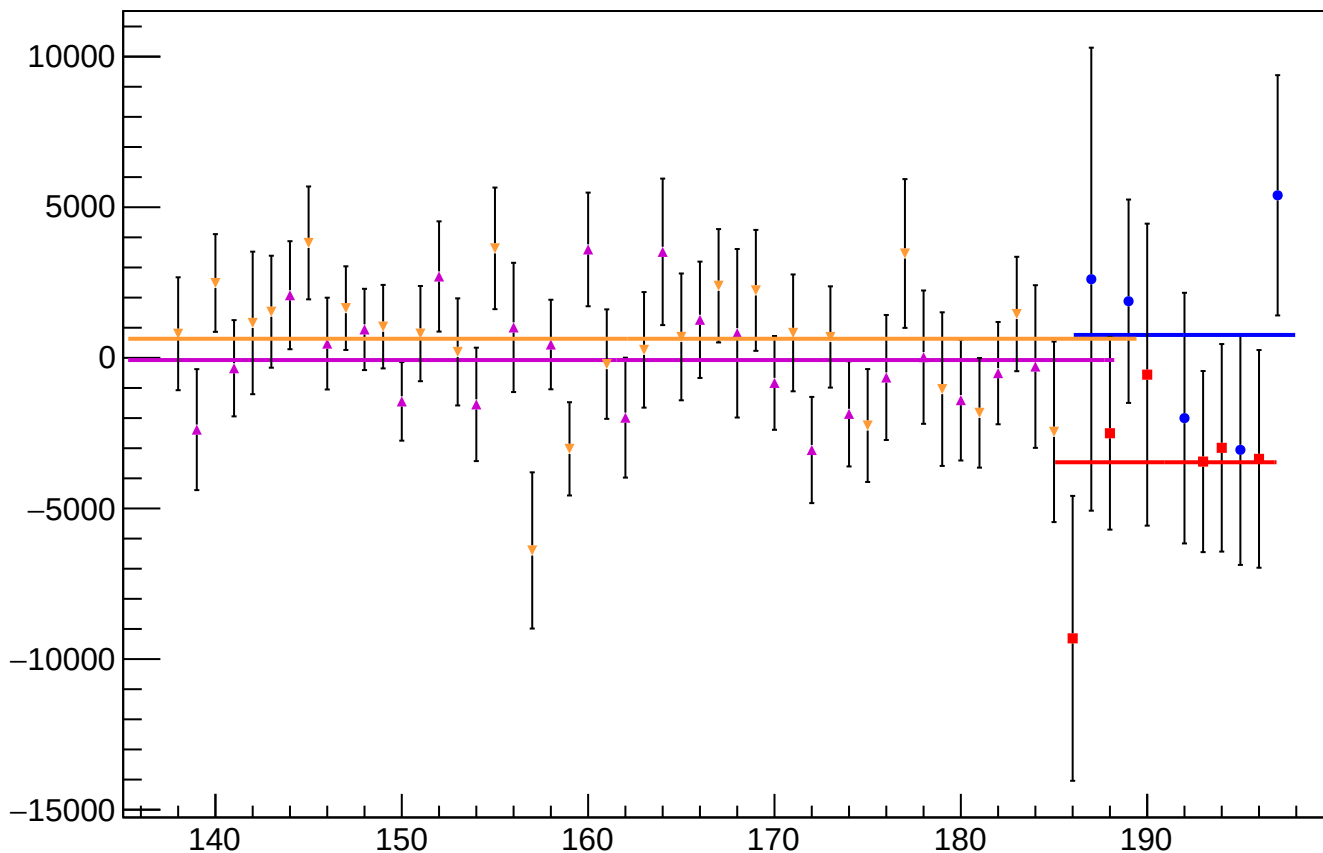
Right: 1148.508 $\pm$ 0.180  $\chi^2$ /NDF: 344155.0/45

In: 1148.251 $\pm$ 0.157  $\chi^2$ /NDF: 344460.3/44

Out: 1141.182 $\pm$ 0.149  $\chi^2$ /NDF: 66936.9/48

All: 1144.540 $\pm$ 0.108  $\chi^2$ /NDF: 412467.9/93

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



Right In: 760.700 $\pm$ 1844.702  $\chi^2/\text{NDF}$ : 3.0/4

Left Out: 633.748 $\pm$ 371.934  $\chi^2/\text{NDF}$ : 29.3/24

Right Out: -3466.055 $\pm$ 1484.668  $\chi^2/\text{NDF}$ : 2.0/5

Left In: -72.962 $\pm$ 375.277  $\chi^2/\text{NDF}$ : 20.1/22

Left: 283.555 $\pm$ 264.171  $\chi^2/\text{NDF}$ : 51.2/47

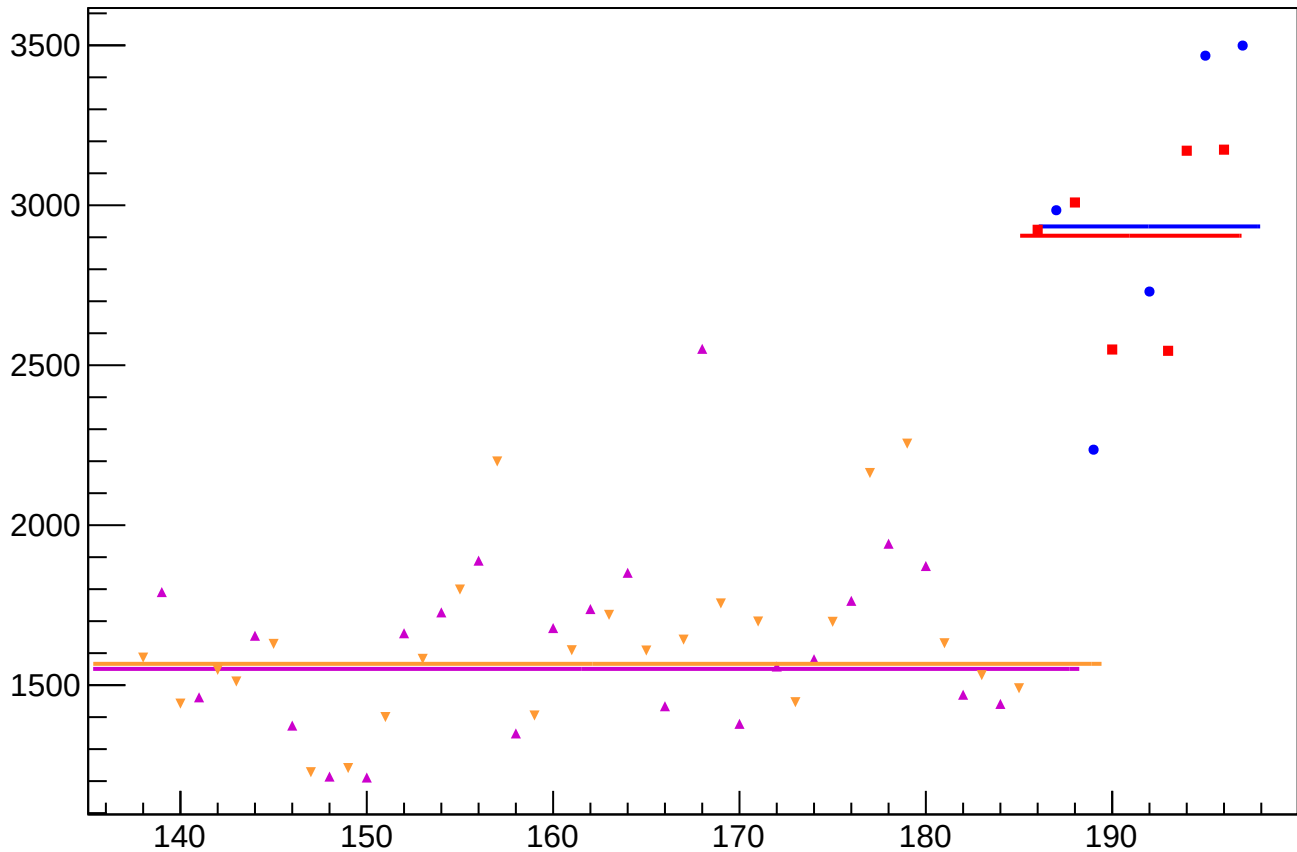
Right: -1804.470 $\pm$ 1156.602  $\chi^2/\text{NDF}$ : 8.1/10

In: -39.831 $\pm$ 367.745  $\chi^2/\text{NDF}$ : 23.3/27

Out: 391.645 $\pm$ 360.785  $\chi^2/\text{NDF}$ : 38.4/30

All: 180.029 $\pm$ 257.539  $\chi^2/\text{NDF}$ : 62.4/58

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



Right In: 2933.856 $\pm$ 1.304  $\chi^2$ /NDF: 169593.9/4

Left Out: 1566.626 $\pm$ 0.263  $\chi^2$ /NDF: 766955.2/24

Right Out: 2904.845 $\pm$ 1.050  $\chi^2$ /NDF: 63838.3/5

Left In: 1550.750 $\pm$ 0.265  $\chi^2$ /NDF: 928652.8/22

Left: 1558.759 $\pm$ 0.187  $\chi^2$ /NDF: 1697413.8/47

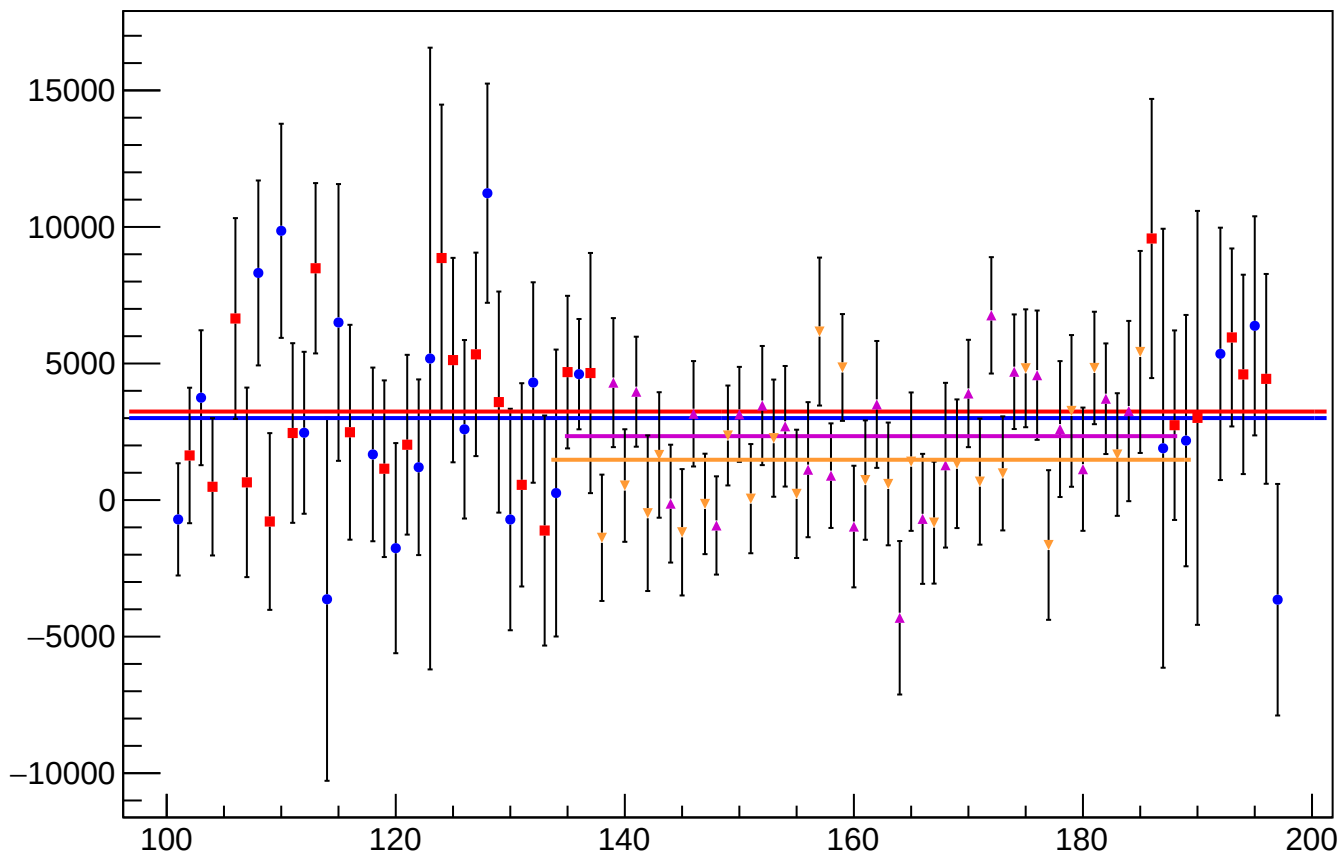
Right: 2916.250 $\pm$ 0.818  $\chi^2$ /NDF: 233732.4/10

In: 1605.716 $\pm$ 0.260  $\chi^2$ /NDF: 2177882.3/27

Out: 1645.651 $\pm$ 0.255  $\chi^2$ /NDF: 2359734.2/30

All: 1626.065 $\pm$ 0.182  $\chi^2$ /NDF: 4549634.6/58

# asym\_usr\_mean vs Slug, Sign Corrected



Right In: 3001.927 $\pm$ 745.624  $\chi^2$ /NDF: 22.0/21

Left Out: 1475.648 $\pm$ 451.347  $\chi^2$ /NDF:20.9/24

Right Out: 3241.039 $\pm$ 717.703  $\chi^2$ /NDF: 14.1/23

Left In: 2339.905 $\pm$ 457.448  $\chi^2$ /NDF:25.2/22

Left: 1901.975 $\pm$ 321.286  $\chi^2$ /NDF: 47.9/47

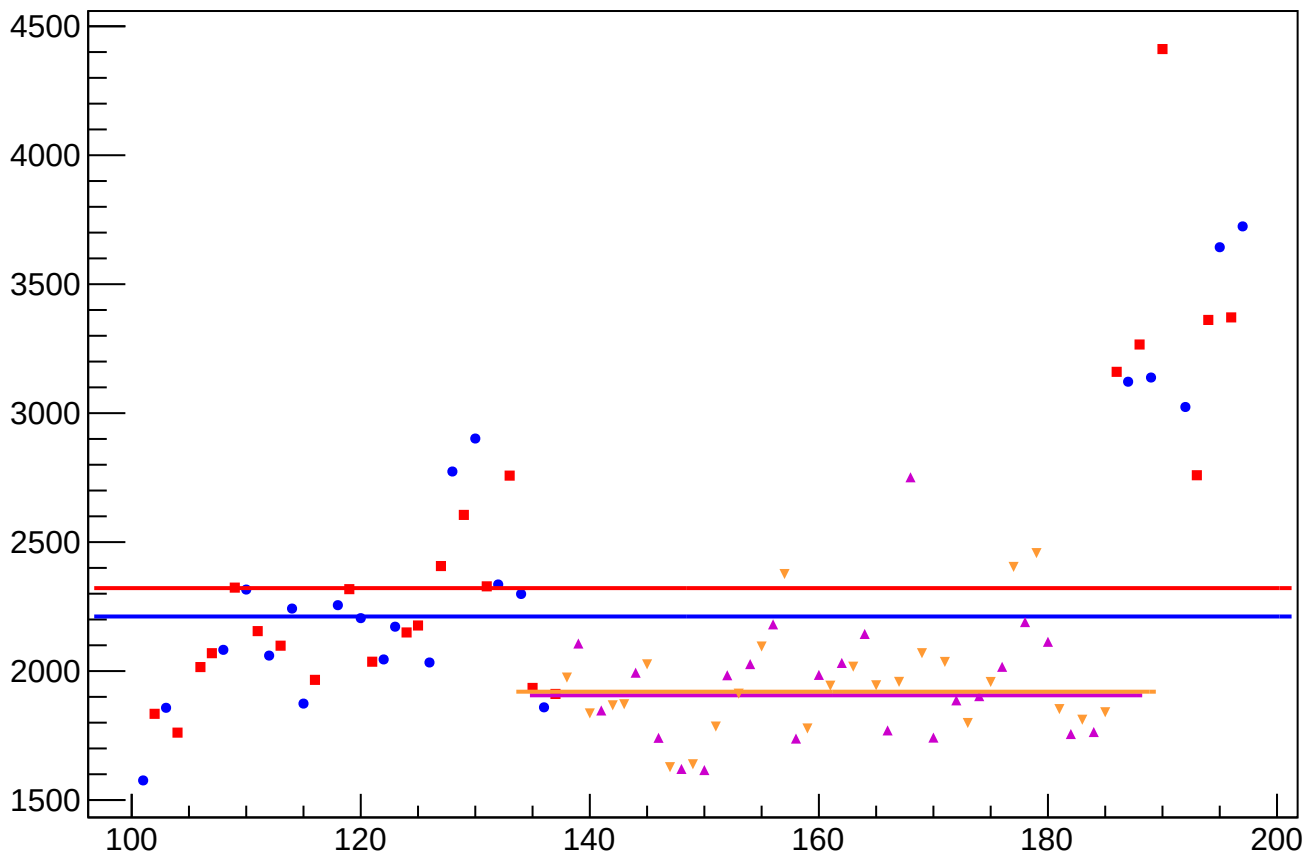
Right: 3126.044 $\pm$ 517.082  $\chi^2$ /NDF: 36.2/45

In: 2520.945 $\pm$ 389.915  $\chi^2$ /NDF:47.8/44

Out: 1975.968 $\pm$ 382.074  $\chi^2$ /NDF:39.3/48

All: 2242.922 $\pm$ 272.897  $\chi^2$ /NDF: 88.1/93

# asym\_usr\_rms vs Slug, Sign Corrected



Right In:  $2211.642 \pm 0.527$   $\chi^2/NDF: 1101354.4/21$

Left Out:  $1920.082 \pm 0.319$   $\chi^2/NDF: 365919.7/24$

Right Out:  $2321.653 \pm 0.507$   $\chi^2/NDF: 1042566.7/23$

Left In:  $1906.043 \pm 0.323$   $\chi^2/NDF: 451054.7/22$

Left:  $1913.157 \pm 0.227$   $\chi^2/NDF: 817929.0/47$

Right:  $2268.746 \pm 0.366$   $\chi^2/NDF: 2166520.2/45$

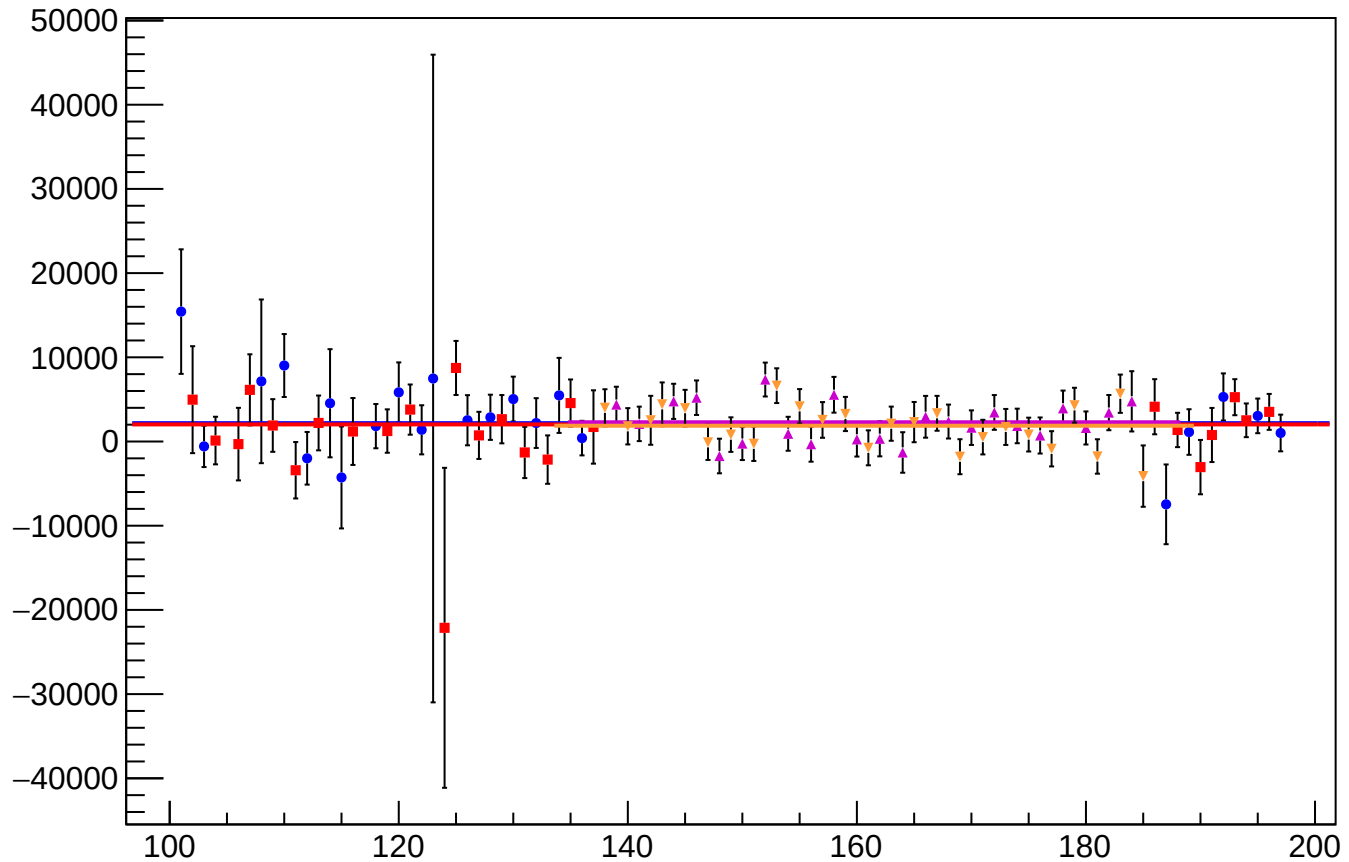
In:  $1989.613 \pm 0.276$   $\chi^2/NDF: 1796499.8/44$

Out:  $2033.889 \pm 0.270$   $\chi^2/NDF: 1857169.4/48$

All:  $2012.201 \pm 0.193$   $\chi^2/NDF: 3666825.4/93$



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



Right In: 2178.940+/-657.619  $\chi^2/\text{NDF}$ : 20.8/21

Left Out: 1875.290+/-433.245  $\chi^2/\text{NDF}$ :30.0/24

Right Out: 2029.768+/-592.915  $\chi^2/\text{NDF}$ : 21.4/24

Left In: 2286.268+/-441.005  $\chi^2/\text{NDF}$ :27.3/22

Left: 2077.132+/-309.058  $\chi^2/\text{NDF}$ : 57.8/47

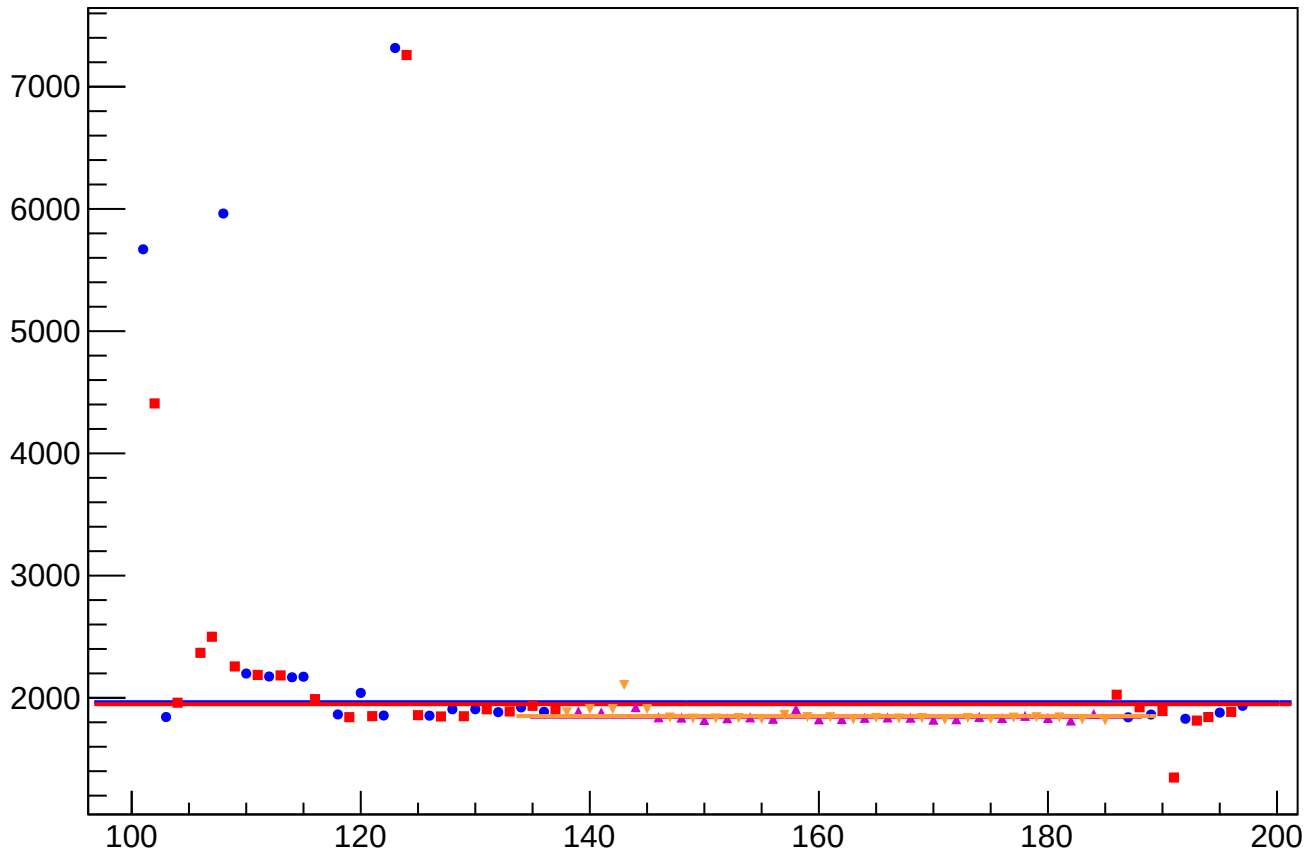
Right: 2096.657+/-440.358  $\chi^2/\text{NDF}$ : 42.2/46

In: 2252.974+/-366.271  $\chi^2/\text{NDF}$ :48.2/44

Out: 1929.061+/-349.809  $\chi^2/\text{NDF}$ :51.4/49

All: 2083.575+/-252.972  $\chi^2/\text{NDF}$ : 100.0/94

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



Right In: 1964.221+/-0.465  $\chi^2/\text{NDF}$ : 933655.8/21

Left Out: 1851.066+/-0.306  $\chi^2/\text{NDF}$ : 26251.6/24

Right Out: 1948.208+/-0.419  $\chi^2/\text{NDF}$ : 650621.0/24

Left In: 1845.411+/-0.312  $\chi^2/\text{NDF}$ : 8318.8/22

Left: 1848.289+/-0.219  $\chi^2/\text{NDF}$ : 34737.7/47

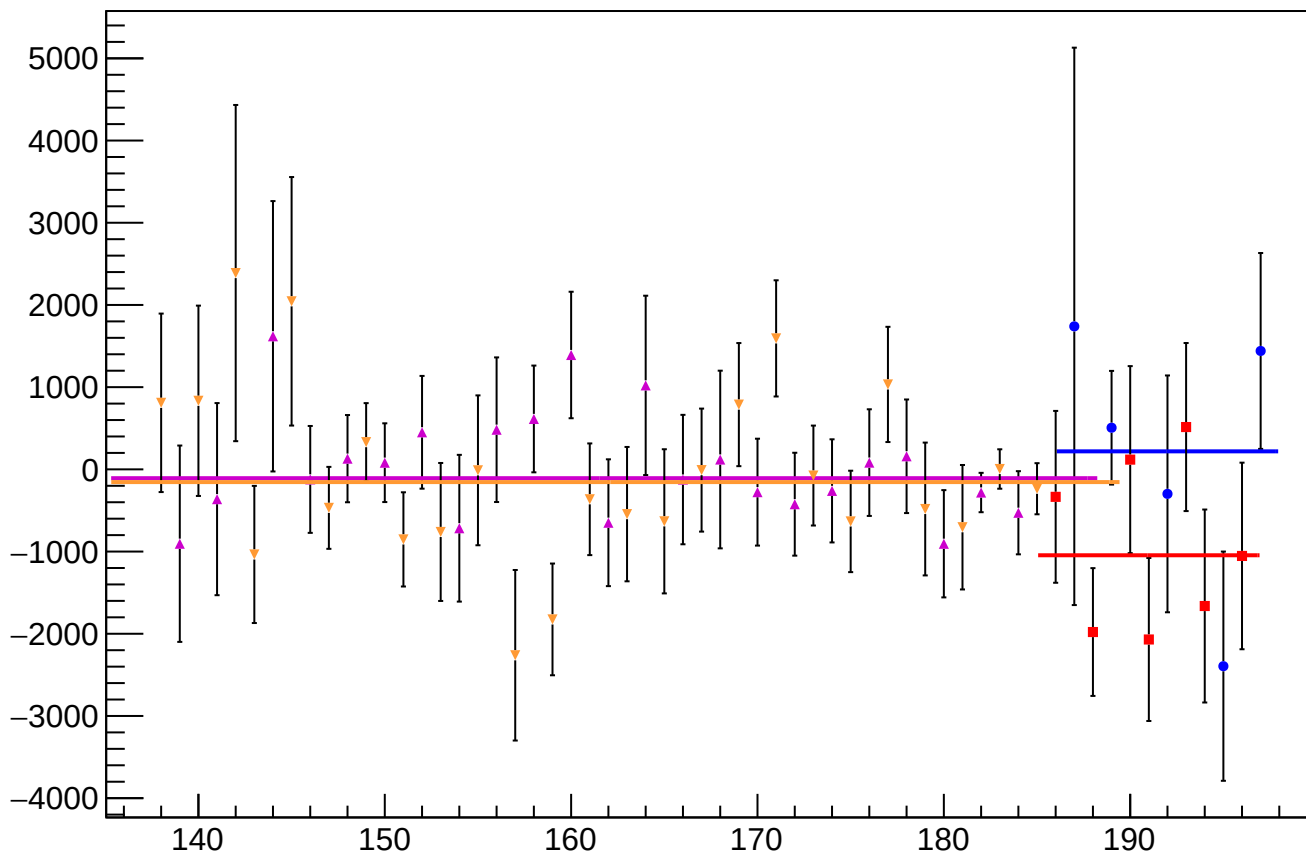
Right: 1955.388+/-0.311  $\chi^2/\text{NDF}$ : 1584930.9/46

In: 1882.267+/-0.259  $\chi^2/\text{NDF}$ : 987004.7/44

Out: 1884.879+/-0.247  $\chi^2/\text{NDF}$ : 711871.4/49

All: 1883.633+/-0.179  $\chi^2/\text{NDF}$ : 1698929.2/94

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



Right In:  $219.066 \pm 507.703$   $\chi^2/\text{NDF}$ : 5.1/4

Left Out:  $-154.845 \pm 119.654$   $\chi^2/\text{NDF}$ : 33.0/24

Right Out:  $-1045.138 \pm 382.927$   $\chi^2/\text{NDF}$ : 6.6/6

Left In:  $-107.387 \pm 127.580$   $\chi^2/\text{NDF}$ : 13.5/22

Left:  $-132.636 \pm 87.276$   $\chi^2/\text{NDF}$ : 46.6/47

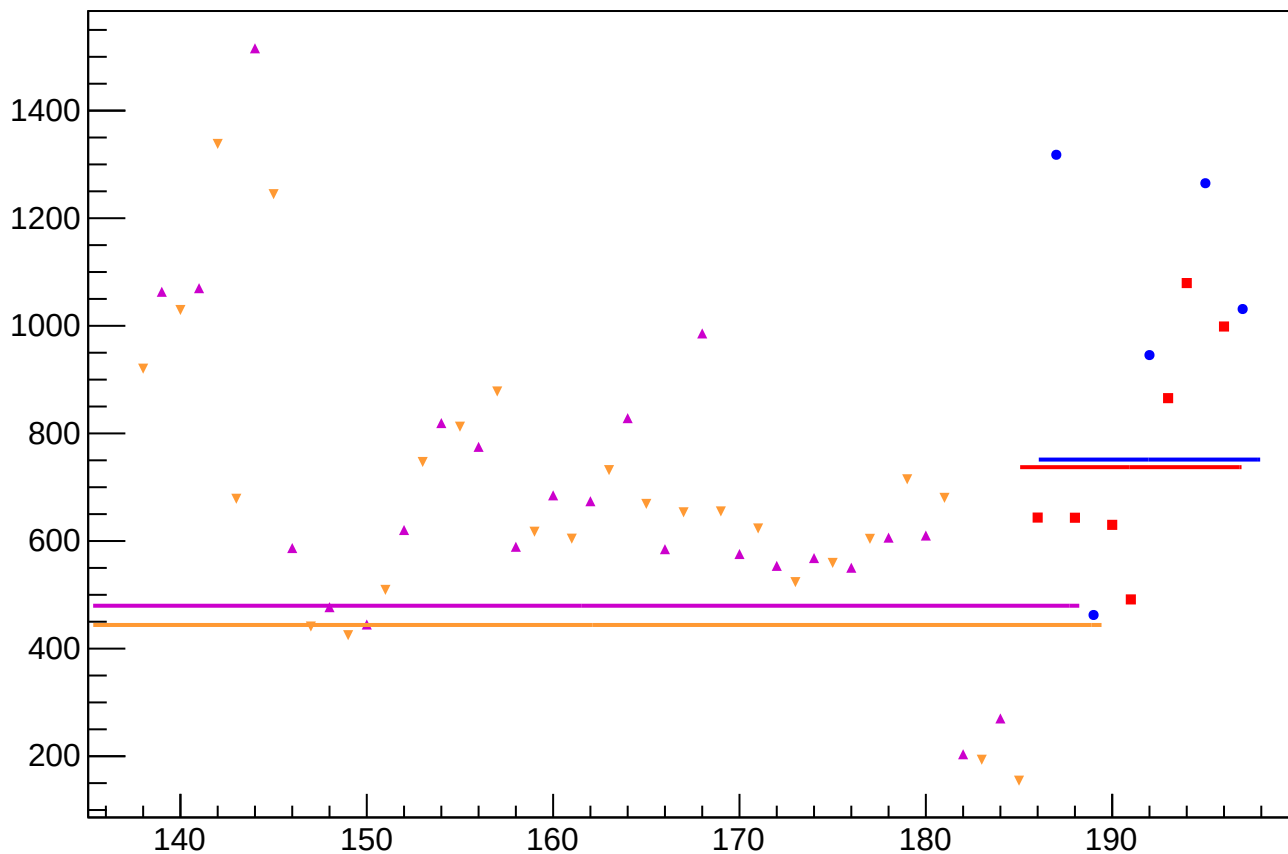
Right:  $-586.740 \pm 305.719$   $\chi^2/\text{NDF}$ : 15.6/11

In:  $-87.998 \pm 123.733$   $\chi^2/\text{NDF}$ : 19.0/27

Out:  $-234.040 \pm 114.208$   $\chi^2/\text{NDF}$ : 44.5/31

All:  $-166.856 \pm 83.923$   $\chi^2/\text{NDF}$ : 64.2/59

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



Left: 460.697 $\pm$ 0.062  $\chi^2/\text{NDF}$ : 15391334.0/47

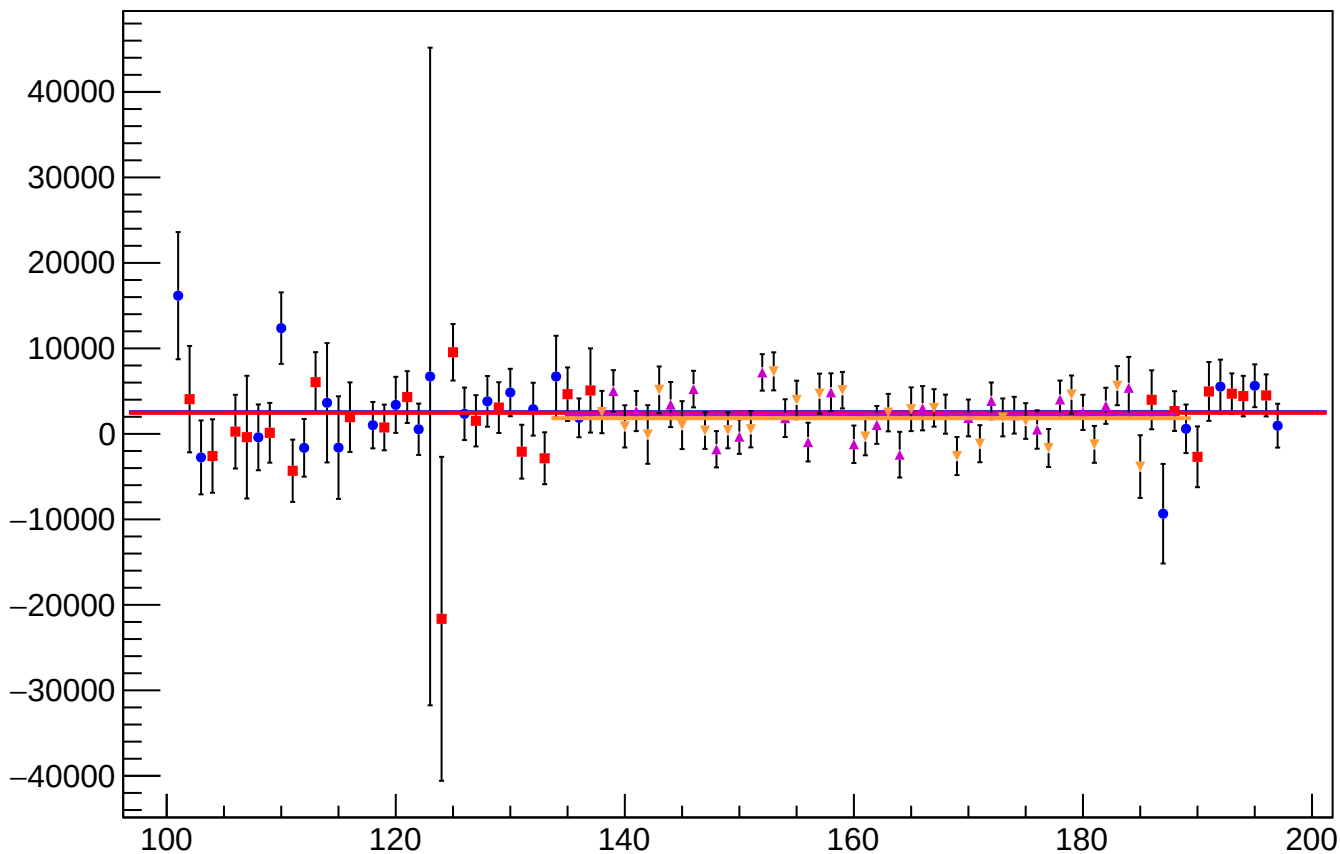
Right: 742.388 $\pm$ 0.216  $\chi^2/\text{NDF}$ : 1317744.7/11

In: 495.859 $\pm$ 0.087  $\chi^2/\text{NDF}$ : 8096307.3/27

Out: 470.052 $\pm$ 0.081  $\chi^2/\text{NDF}$ : 10135815.3/31

All: 481.924 $\pm$ 0.059  $\chi^2/\text{NDF}$ : 18279099.9/59

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



Right In: 2537.851 $\pm$ 719.869  $\chi^2$ /NDF: 23.0/21

Left Out: 1834.720 $\pm$ 463.777  $\chi^2$ /NDF:32.8/24

Right Out: 2466.819 $\pm$ 655.807  $\chi^2$ /NDF: 25.0/24

Left In: 2260.178 $\pm$ 472.324  $\chi^2$ /NDF:26.3/22

Left: 2043.565 $\pm$ 330.920  $\chi^2$ /NDF: 59.5/47

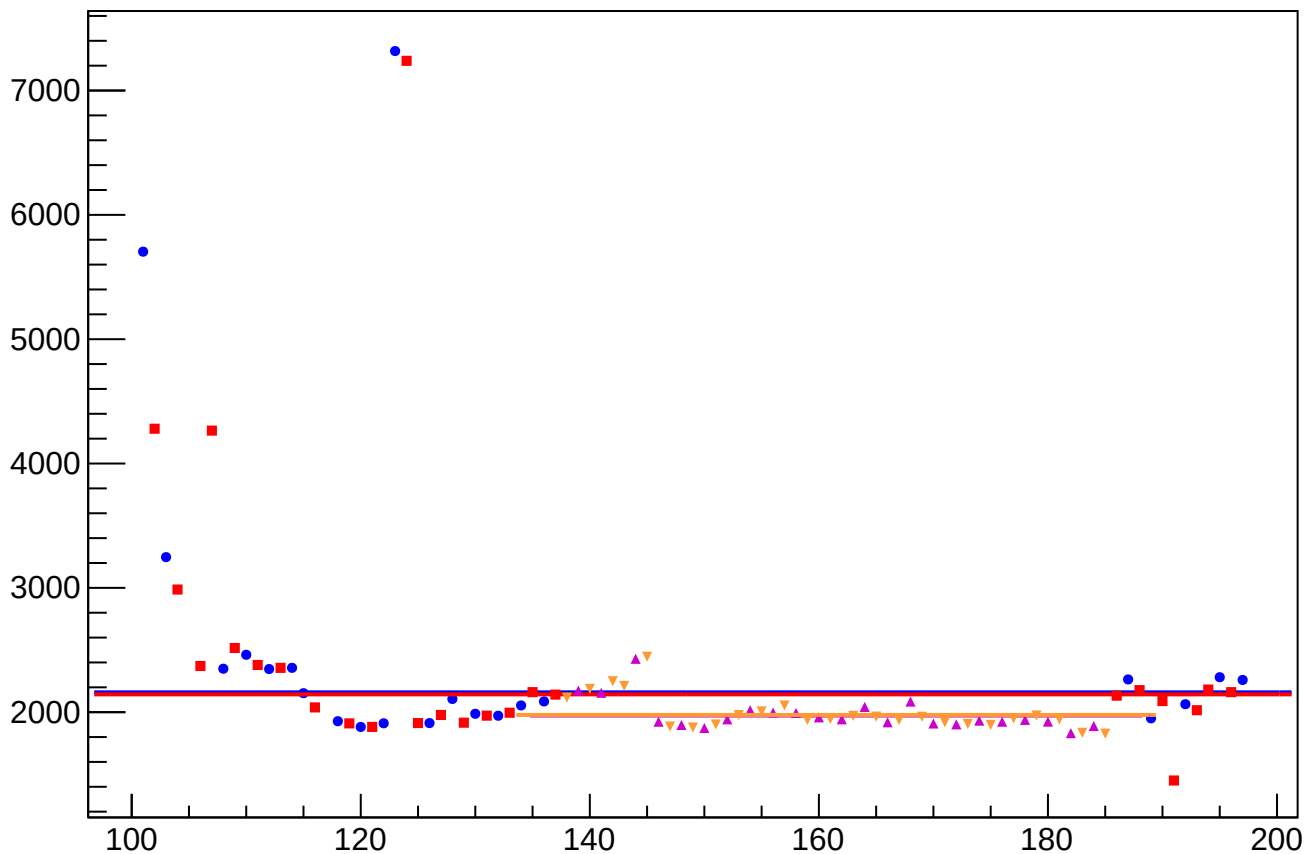
Right: 2499.034 $\pm$ 484.795  $\chi^2$ /NDF: 48.0/46

In: 2343.742 $\pm$ 394.908  $\chi^2$ /NDF:49.4/44

Out: 2045.451 $\pm$ 378.658  $\chi^2$ /NDF:58.4/49

All: 2188.333 $\pm$ 273.316  $\chi^2$ /NDF: 108.1/94

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



Right In: 2159.661+/-0.509  $\chi^2/\text{NDF}$ : 734911.9/21

Left Out: 1978.045+/-0.328  $\chi^2/\text{NDF}$ : 137699.3/24

Right Out: 2143.264+/-0.464  $\chi^2/\text{NDF}$ : 834766.5/24

Left In: 1973.216+/-0.334  $\chi^2/\text{NDF}$ : 120479.3/22

Left: 1975.675+/-0.234  $\chi^2/\text{NDF}$ : 258285.0/47

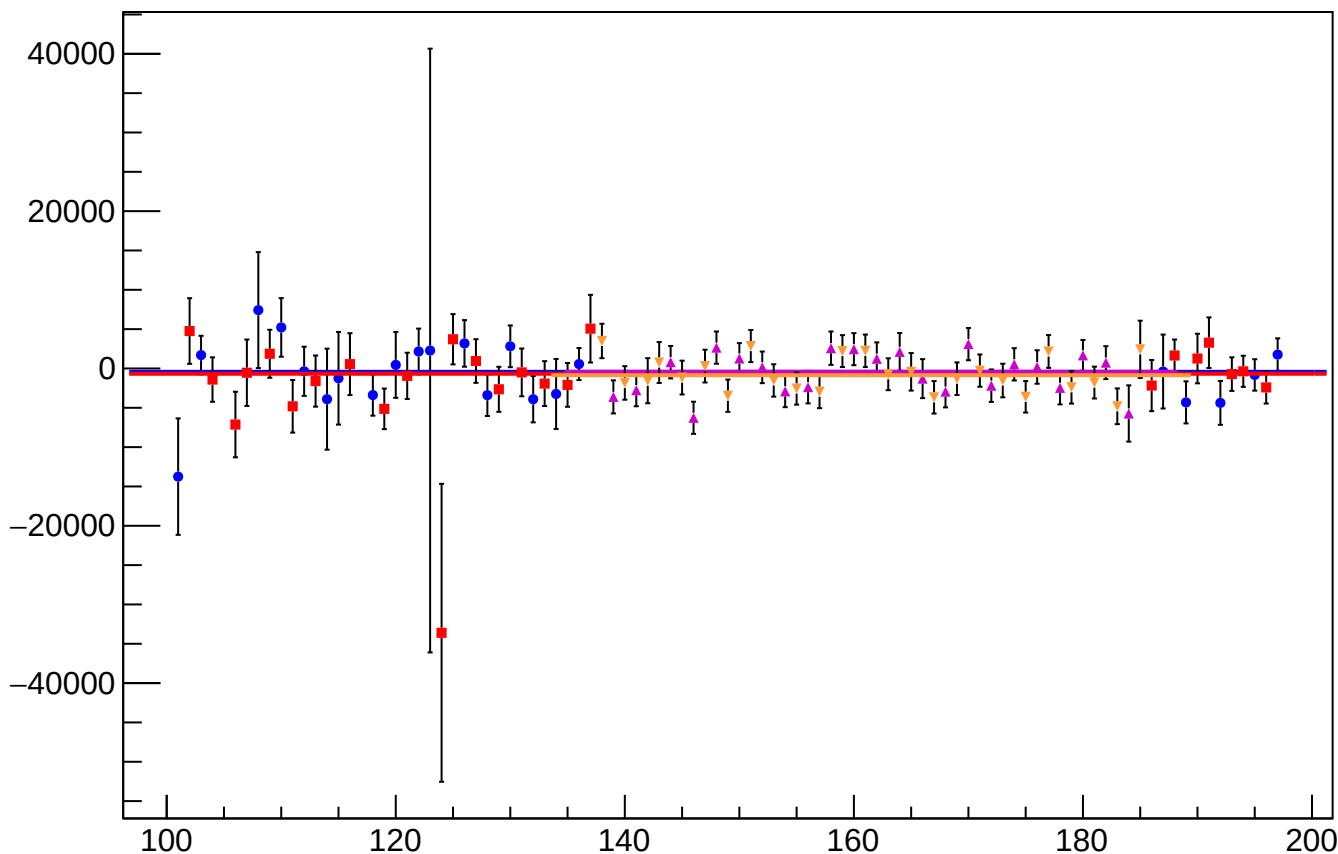
Right: 2150.701+/-0.343  $\chi^2/\text{NDF}$ : 1570245.4/46

In: 2029.326+/-0.279  $\chi^2/\text{NDF}$ : 949176.9/44

Out: 2033.126+/-0.268  $\chi^2/\text{NDF}$ : 1057086.5/49

All: 2031.306+/-0.193  $\chi^2/\text{NDF}$ : 2006359.9/94

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



Right In: -425.961 $\pm$ 651.527  $\chi^2$ /NDF: 21.4/21

Left Out: -858.637 $\pm$ 431.465  $\chi^2$ /NDF:26.9/24

Right Out: -671.790 $\pm$ 583.801  $\chi^2$ /NDF: 21.7/24

Left In: -427.682 $\pm$ 439.561  $\chi^2$ /NDF:33.7/22

Left: -647.165 $\pm$ 307.914  $\chi^2$ /NDF: 61.1/47

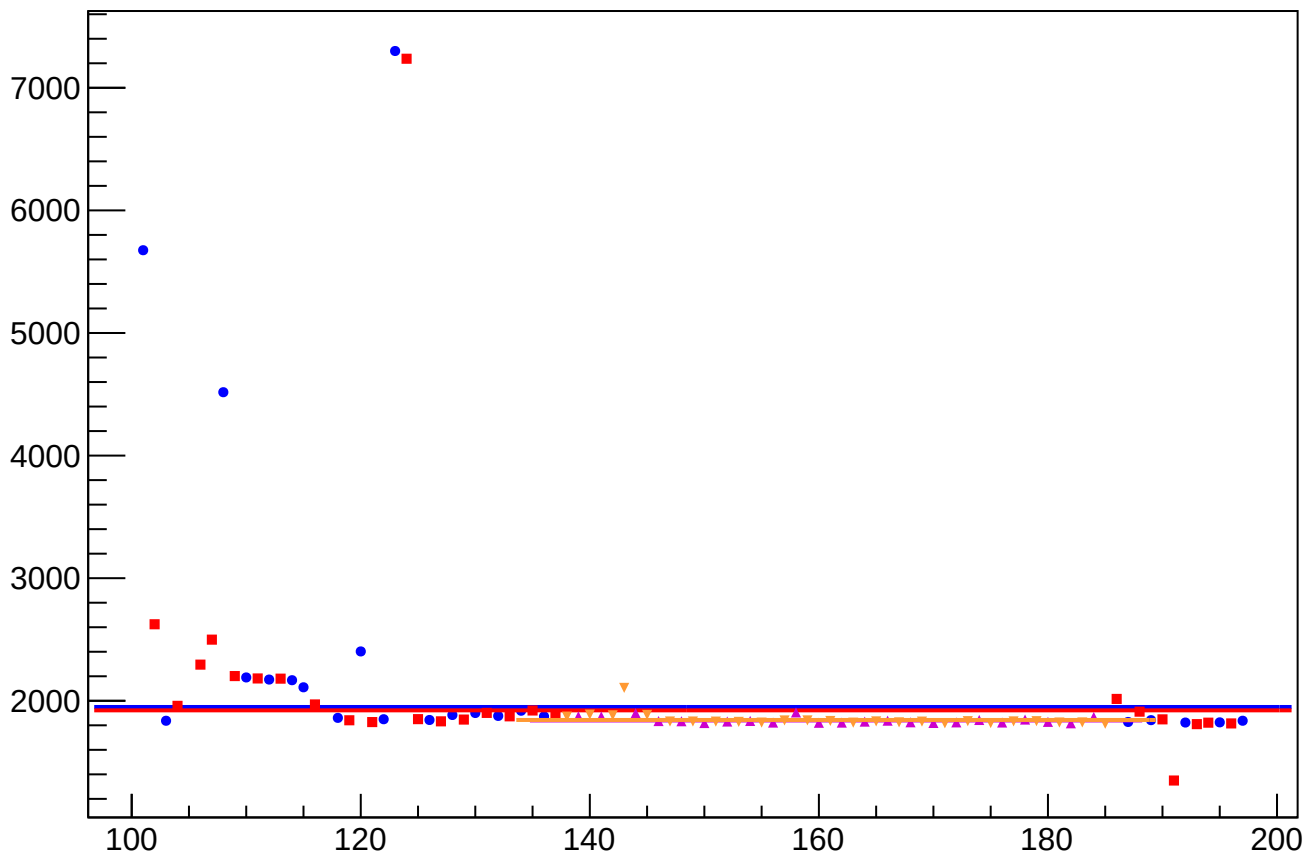
Right: -562.312 $\pm$ 434.788  $\chi^2$ /NDF: 43.1/46

In: -427.144 $\pm$ 364.387  $\chi^2$ /NDF:55.1/44

Out: -792.632 $\pm$ 346.985  $\chi^2$ /NDF:48.6/49

All: -618.823 $\pm$ 251.282  $\chi^2$ /NDF: 104.2/94

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



Right In: 1949.514 $\pm$ 0.461  $\chi^2$ /NDF: 873747.0/21

Left Out: 1843.534 $\pm$ 0.305  $\chi^2$ /NDF: 24974.2/24

Right Out: 1922.087 $\pm$ 0.413  $\chi^2$ /NDF: 401382.7/24

Left In: 1839.431 $\pm$ 0.311  $\chi^2$ /NDF: 6418.5/22

Left: 1841.521 $\pm$ 0.218  $\chi^2$ /NDF: 31481.4/47

Right: 1934.301 $\pm$ 0.307  $\chi^2$ /NDF: 1277095.7/46

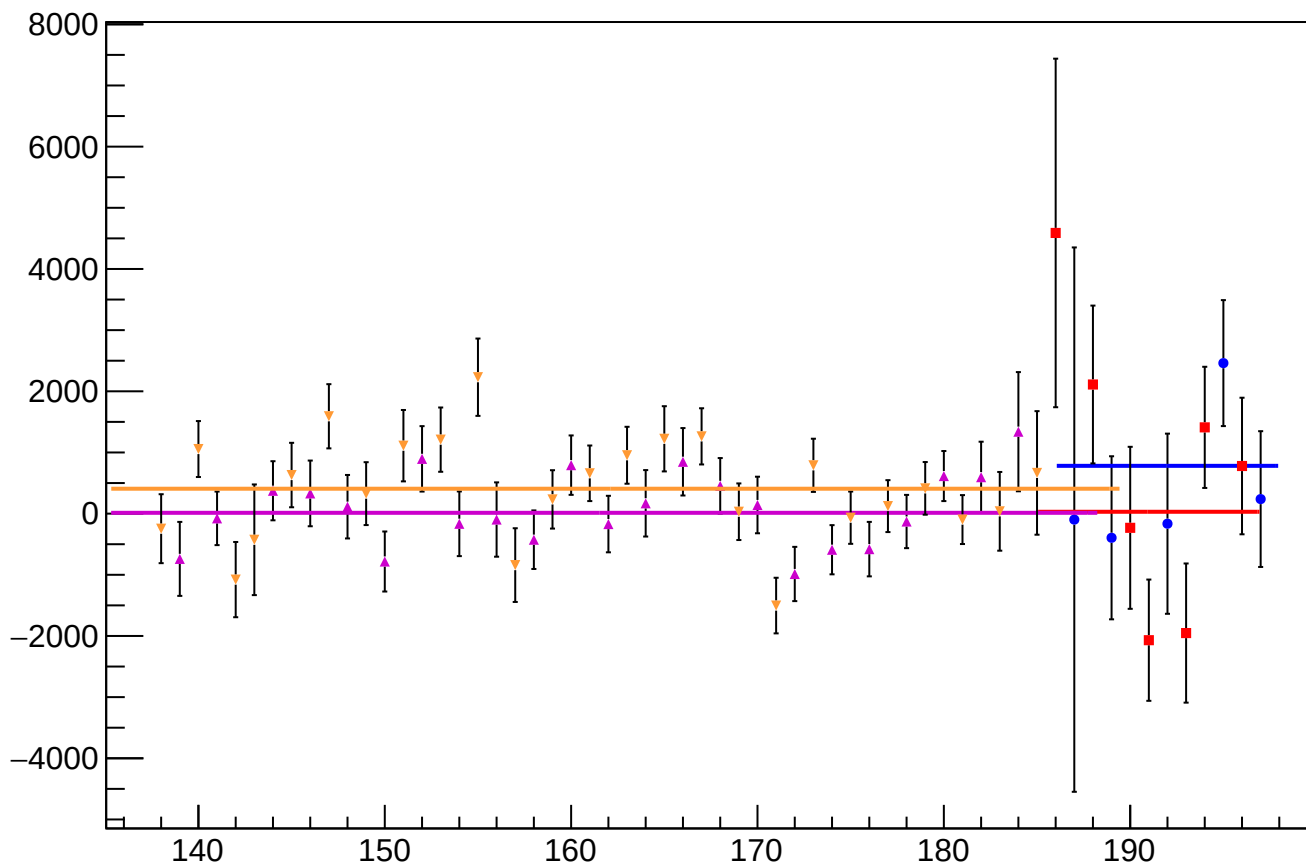
In: 1873.865 $\pm$ 0.258  $\chi^2$ /NDF: 919402.4/44

Out: 1871.283 $\pm$ 0.245  $\chi^2$ /NDF: 449775.1/49

All: 1872.511 $\pm$ 0.178  $\chi^2$ /NDF: 1369230.1/94



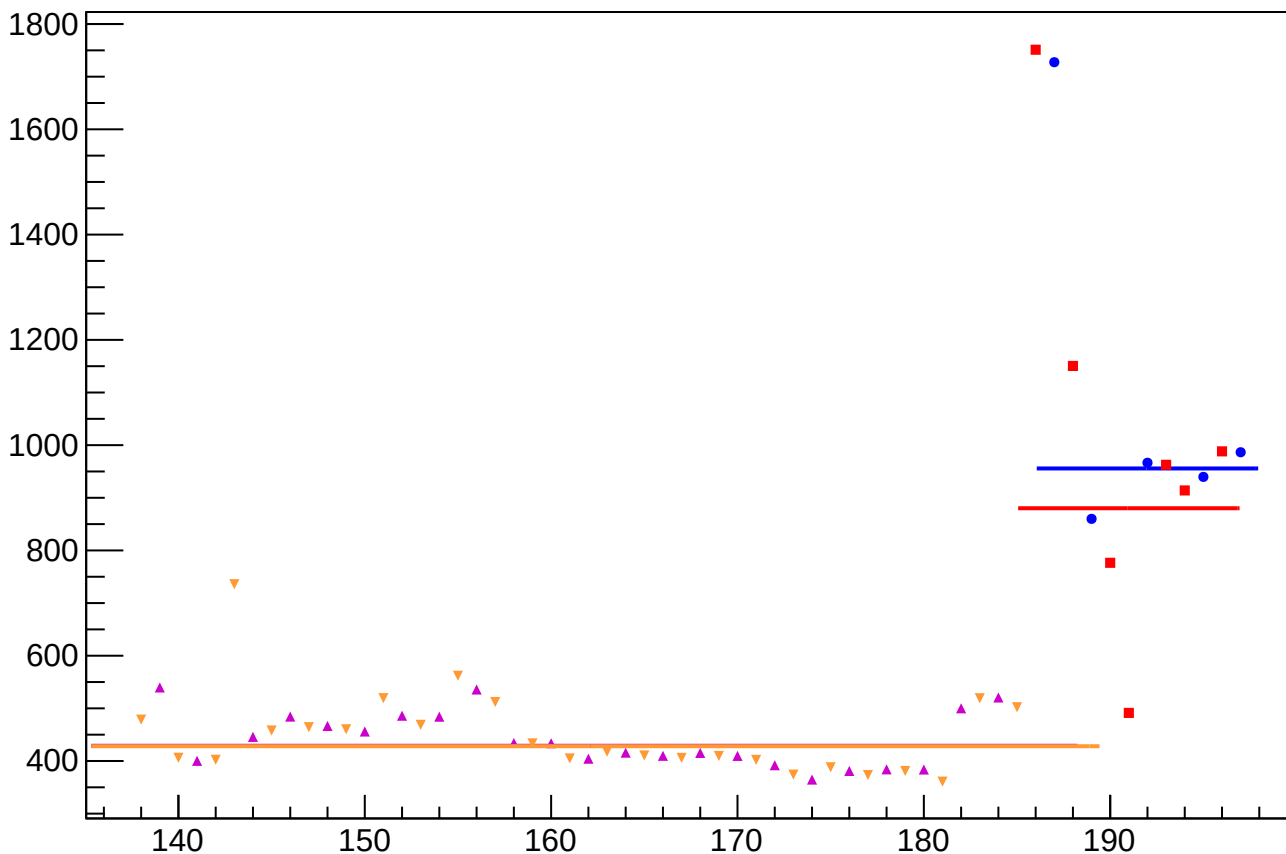
asym\_at1\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 781.474+/-594.531  $\chi^2/\text{NDF}$ : 4.1/4  
 Left Out: 407.320+/-101.221  $\chi^2/\text{NDF}$ : 62.1/24  
 Right Out: 30.441+/-451.456  $\chi^2/\text{NDF}$ : 15.1/6  
 Left In: 13.395+/-102.912  $\chi^2/\text{NDF}$ : 29.2/22

Left: 213.621+/-72.165  $\chi^2/\text{NDF}$ : 98.8/47  
 Right: 305.114+/-359.545  $\chi^2/\text{NDF}$ : 20.3/11  
 In: 35.739+/-101.404  $\chi^2/\text{NDF}$ : 35.0/27  
 Out: 389.281+/-98.769  $\chi^2/\text{NDF}$ : 77.9/31  
 All: 217.164+/-70.754  $\chi^2/\text{NDF}$ : 119.1/59

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



Right In: 955.729 $\pm$ 0.420  $\chi^2$ /NDF: 72608.4/4

Left Out: 428.052 $\pm$ 0.072  $\chi^2$ /NDF: 704731.3/24

Right Out: 880.130 $\pm$ 0.319  $\chi^2$ /NDF: 626294.0/6

Left In: 428.926 $\pm$ 0.073  $\chi^2$ /NDF: 418755.3/22

Left: 428.482 $\pm$ 0.051  $\chi^2$ /NDF: 1123560.0/47

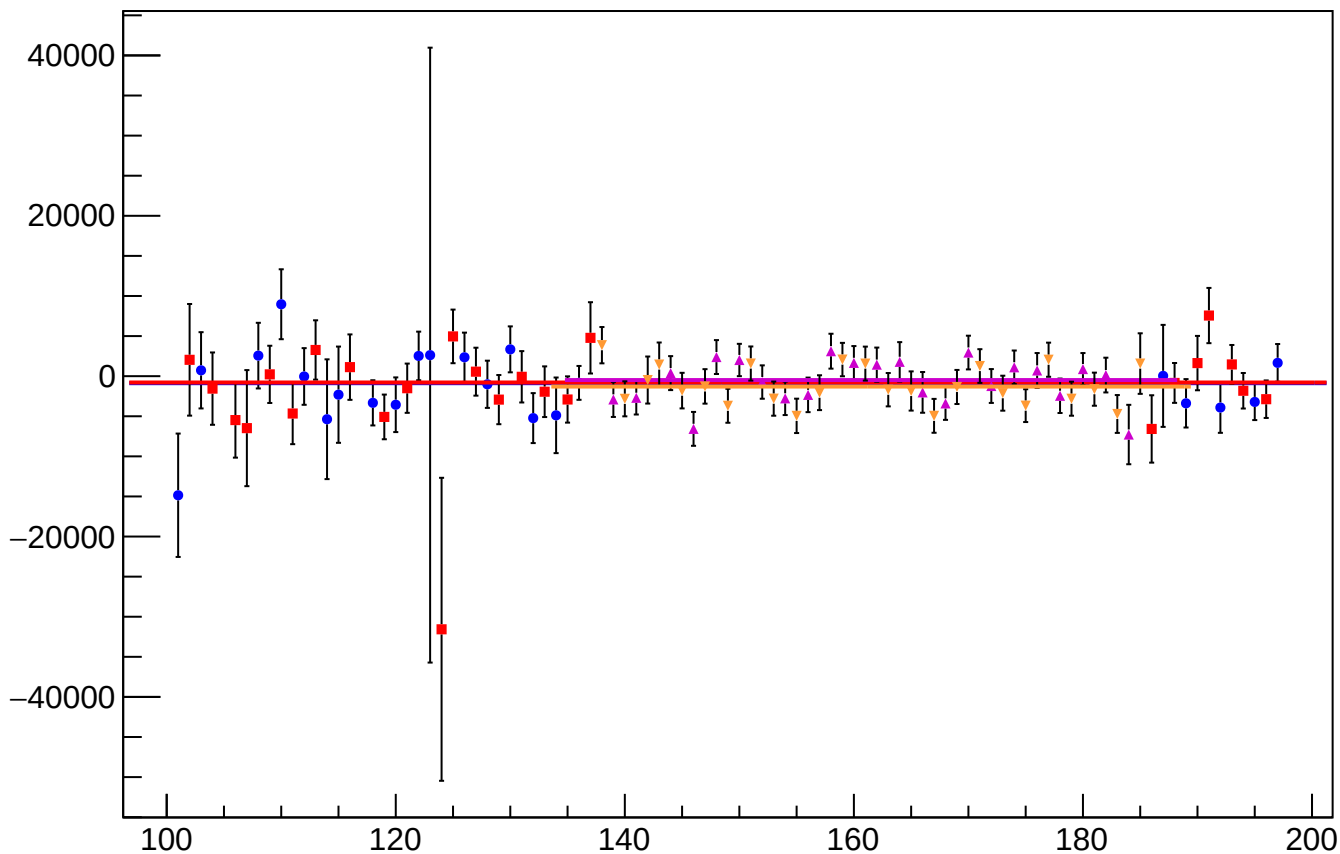
Right: 907.779 $\pm$ 0.254  $\chi^2$ /NDF: 719413.6/11

In: 444.252 $\pm$ 0.072  $\chi^2$ /NDF: 2015961.3/27

Out: 449.690 $\pm$ 0.070  $\chi^2$ /NDF: 3240550.5/31

All: 447.043 $\pm$ 0.050  $\chi^2$ /NDF: 5259464.0/59

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



Right In:  $-874.931 \pm 716.492$   $\chi^2/\text{NDF}$ : 22.2/21

Left Out:  $-1294.152 \pm 444.151$   $\chi^2/\text{NDF}$ : 29.6/24

Right Out:  $-789.008 \pm 663.062$   $\chi^2/\text{NDF}$ : 25.5/24

Left In:  $-485.827 \pm 452.020$   $\chi^2/\text{NDF}$ : 32.4/22

Left:  $-897.086 \pm 316.808$   $\chi^2/\text{NDF}$ : 63.7/47

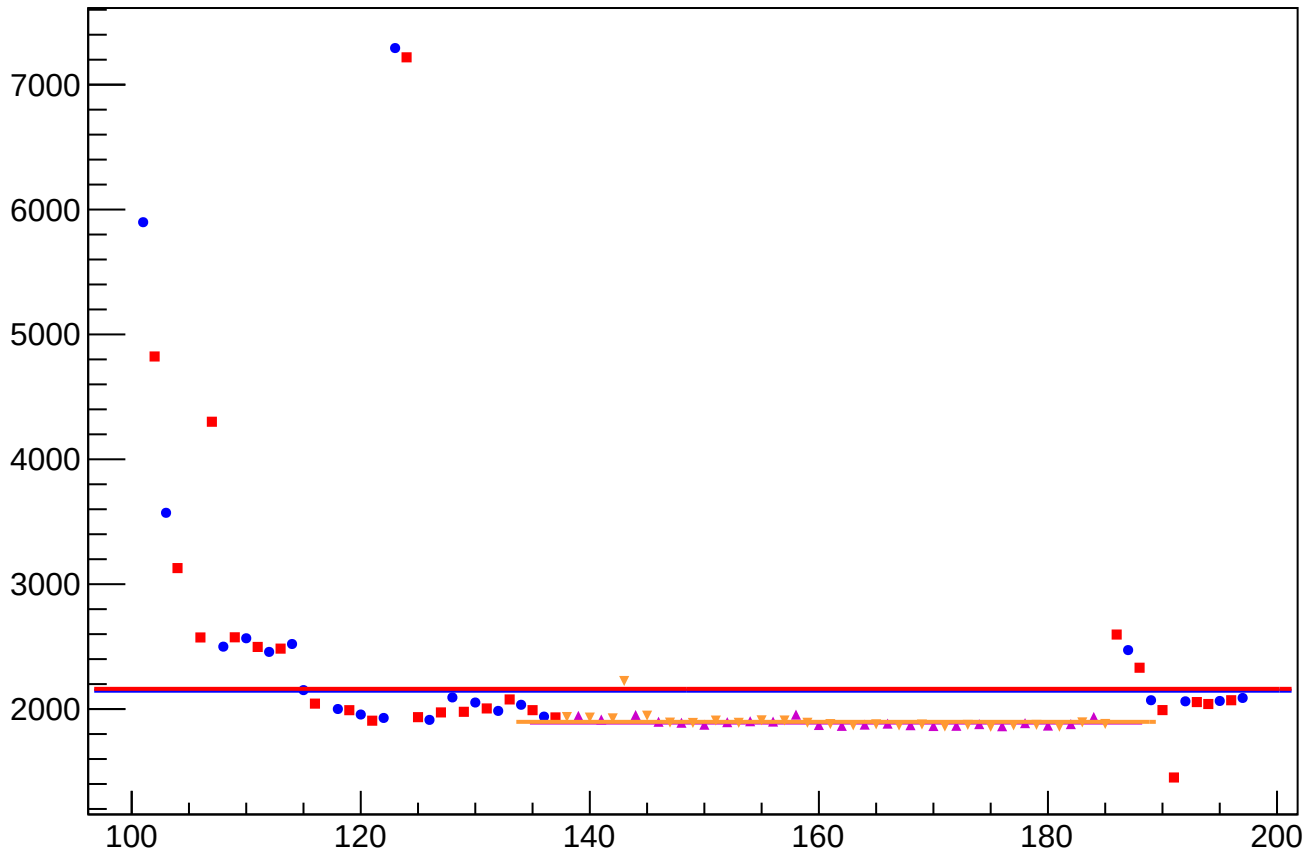
Right:  $-828.647 \pm 486.649$   $\chi^2/\text{NDF}$ : 47.7/46

In:  $-596.604 \pm 382.299$   $\chi^2/\text{NDF}$ : 54.8/44

Out:  $-1137.696 \pm 369.013$   $\chi^2/\text{NDF}$ : 55.6/49

All:  $-876.715 \pm 265.504$   $\chi^2/\text{NDF}$ : 111.4/94

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



Right In: 2146.993 $\pm$ 0.507  $\chi^2$ /NDF: 819060.2/21

Left Out: 1897.670 $\pm$ 0.314  $\chi^2$ /NDF: 35089.1/24

Right Out: 2161.949 $\pm$ 0.469  $\chi^2$ /NDF: 974516.0/24

Left In: 1891.722 $\pm$ 0.320  $\chi^2$ /NDF: 7584.2/22

Left: 1894.748 $\pm$ 0.224  $\chi^2$ /NDF: 42849.4/47

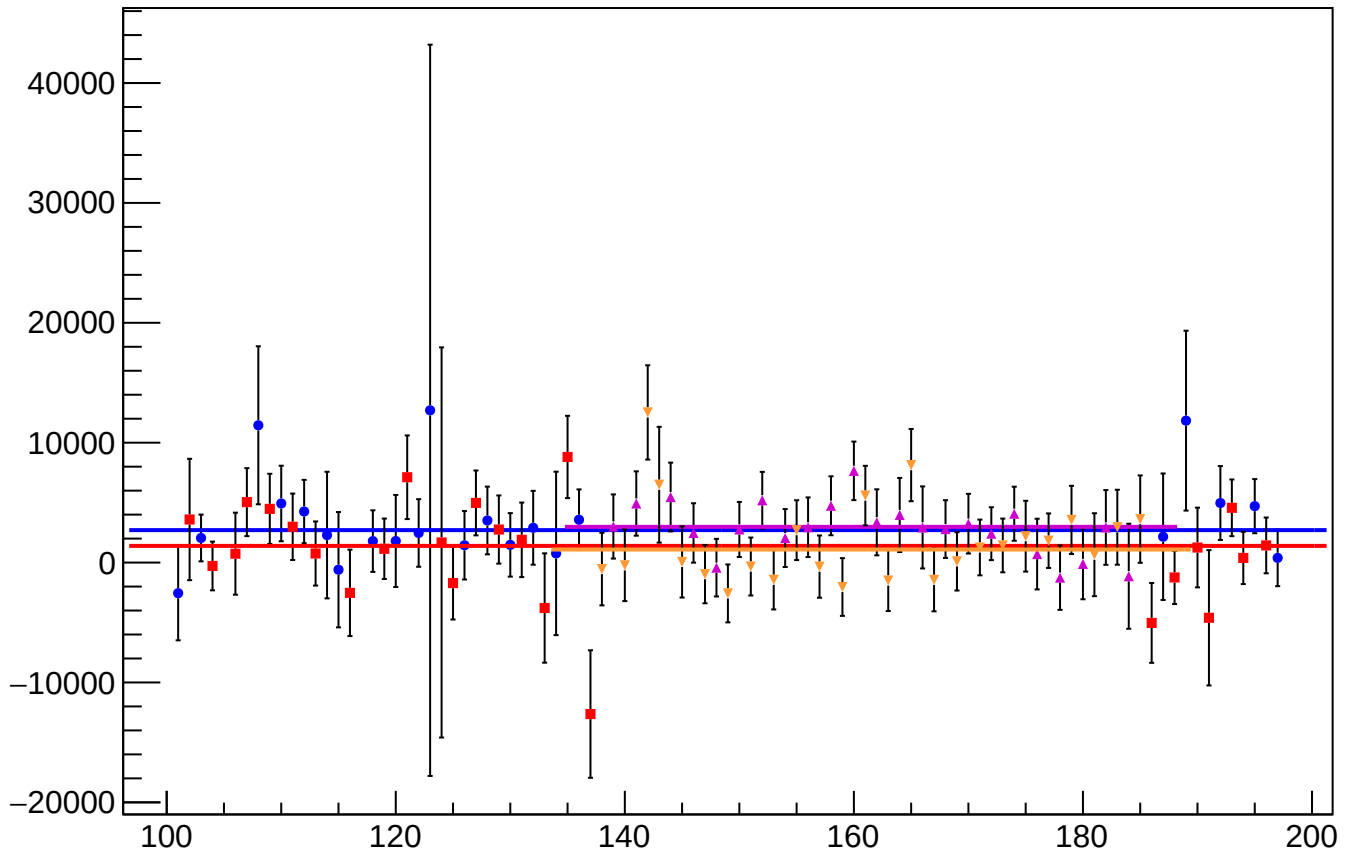
Right: 2155.049 $\pm$ 0.344  $\chi^2$ /NDF: 1794045.6/46

In: 1964.397 $\pm$ 0.270  $\chi^2$ /NDF: 1008237.8/44

Out: 1979.524 $\pm$ 0.261  $\chi^2$ /NDF: 1228920.9/49

All: 1972.228 $\pm$ 0.188  $\chi^2$ /NDF: 2238779.6/94

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



Right In: 2707.093 $\pm$ 669.851  $\chi^2$ /NDF: 9.8/21

Left Out: 1087.902 $\pm$ 540.984  $\chi^2$ /NDF:29.9/24

Right Out: 1391.995 $\pm$ 594.705  $\chi^2$ /NDF: 32.2/24

Left In: 2981.160 $\pm$ 546.107  $\chi^2$ /NDF:14.0/22

Left: 2025.608 $\pm$ 384.332  $\chi^2$ /NDF: 50.0/47

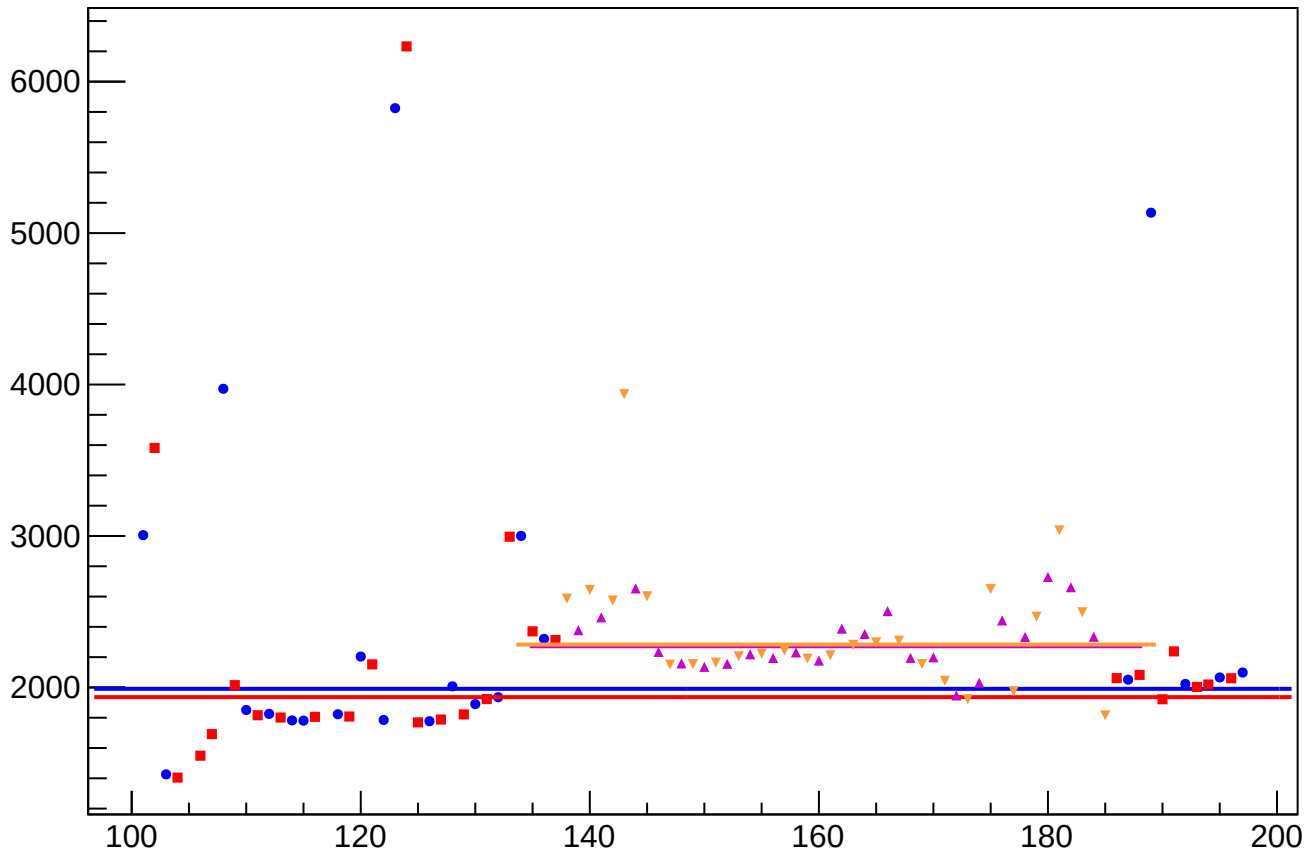
Right: 1971.669 $\pm$ 444.725  $\chi^2$ /NDF: 44.1/46

In: 2871.731 $\pm$ 423.268  $\chi^2$ /NDF:23.9/44

Out: 1225.596 $\pm$ 400.181  $\chi^2$ /NDF:62.2/49

All: 2002.547 $\pm$ 290.790  $\chi^2$ /NDF: 94.1/94

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



Right In: 1990.766 $\pm$ 0.474  $\chi^2/\text{NDF}$ : 1007917.2/21

Left Out: 2283.204 $\pm$ 0.383  $\chi^2/\text{NDF}$ : 634430.6/24

Right Out: 1935.992 $\pm$ 0.420  $\chi^2/\text{NDF}$ : 746558.9/24

Left In: 2271.946 $\pm$ 0.386  $\chi^2/\text{NDF}$ : 243546.3/22

Left: 2277.628 $\pm$ 0.272  $\chi^2/\text{NDF}$ : 878405.9/47

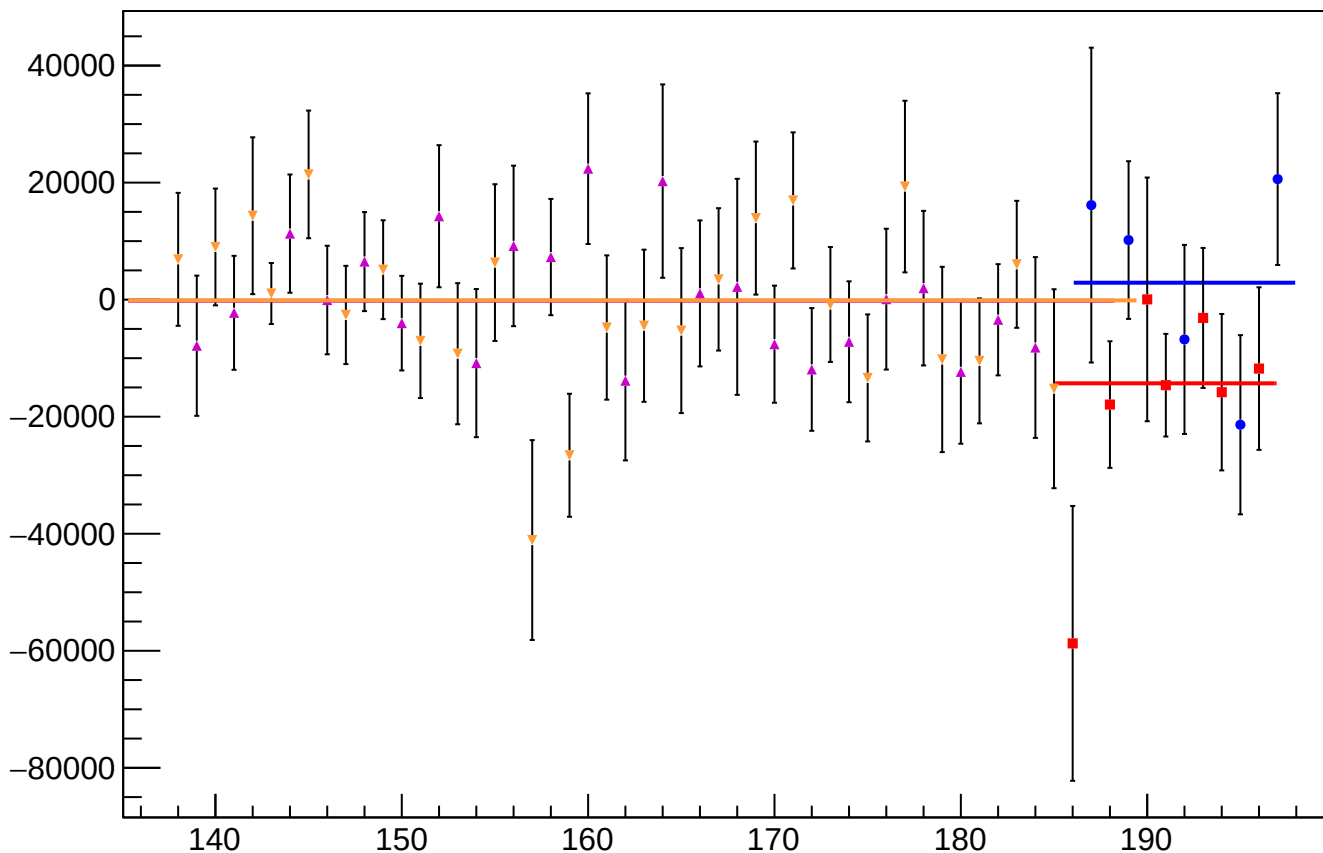
Right: 1960.132 $\pm$ 0.314  $\chi^2/\text{NDF}$ : 1761955.4/46

In: 2159.677 $\pm$ 0.299  $\chi^2/\text{NDF}$ : 1463161.4/44

Out: 2125.965 $\pm$ 0.283  $\chi^2/\text{NDF}$ : 1754084.5/49

All: 2141.876 $\pm$ 0.206  $\chi^2/\text{NDF}$ : 3223945.4/94

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



Right In: 2894.669 $\pm$ 7137.327  $\chi^2$ /NDF: 4.9/4

Left Out: -124.370 $\pm$ 2141.976  $\chi^2$ /NDF:29.7/24

Right Out: -14297.219 $\pm$ 4798.100  $\chi^2$ /NDF: 5.1/6

Left In: -185.013 $\pm$ 2330.398  $\chi^2$ /NDF:15.0/22

Left: -152.141 $\pm$ 1577.017  $\chi^2$ /NDF: 44.7/47

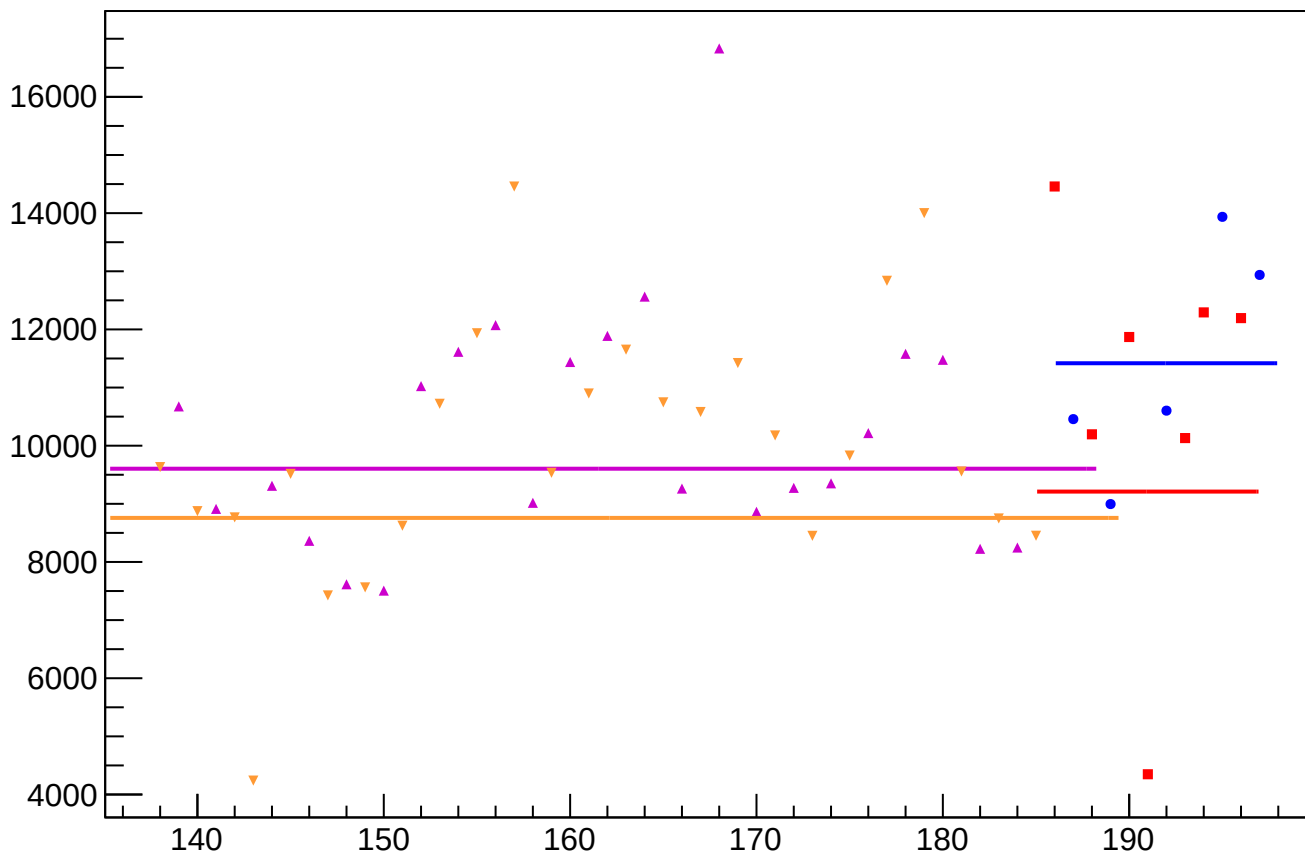
Right: -8946.077 $\pm$ 3981.962  $\chi^2$ /NDF: 13.9/11

In: 111.676 $\pm$ 2215.303  $\chi^2$ /NDF:20.1/27

Out: -2479.543 $\pm$ 1955.925  $\chi^2$ /NDF:42.1/31

All: -1344.442 $\pm$ 1466.217  $\chi^2$ /NDF: 62.9/59

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



Right In: 11418.112 $\pm$ 5.047  $\chi^2$ /NDF: 147821.4/4

Left Out: 8757.819 $\pm$ 1.515  $\chi^2$ /NDF:2779104.9/24

Right Out: 9210.564 $\pm$ 3.393  $\chi^2$ /NDF: 974363.3/6

Left In: 9604.027 $\pm$ 1.648  $\chi^2$ /NDF:1095805.7/22

Left: 9145.335 $\pm$ 1.115  $\chi^2$ /NDF: 4017855.5/47

Right: 9897.685 $\pm$ 2.816  $\chi^2$ /NDF: 1253960.2/11

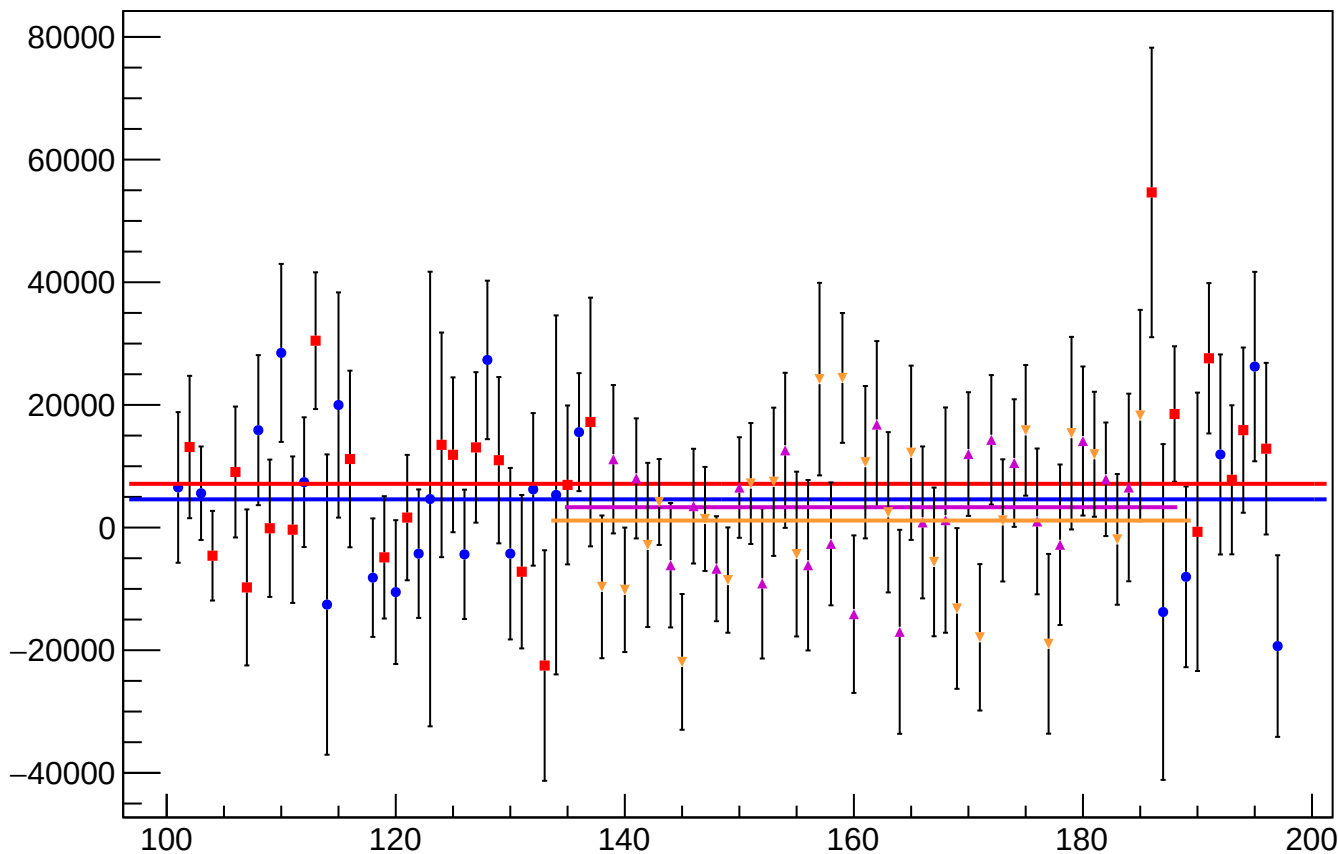
In: 9778.792 $\pm$ 1.566  $\chi^2$ /NDF:1360383.3/27

Out: 8833.054 $\pm$ 1.383  $\chi^2$ /NDF:3768316.5/31

All: 9247.340 $\pm$ 1.037  $\chi^2$ /NDF: 5333531.8/59



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



Right In: 4600.047+/-2735.240  $\chi^2/\text{NDF}$ : 20.5/21

Left Out: 1145.185+/-2232.341  $\chi^2/\text{NDF}$ : 27.9/24

Right Out: 7131.758+/-2473.075  $\chi^2/\text{NDF}$ : 24.9/24

Left In: 3316.960+/-2336.196  $\chi^2/\text{NDF}$ : 13.4/22

Left: 2181.728+/-1613.970  $\chi^2/\text{NDF}$ : 41.7/47

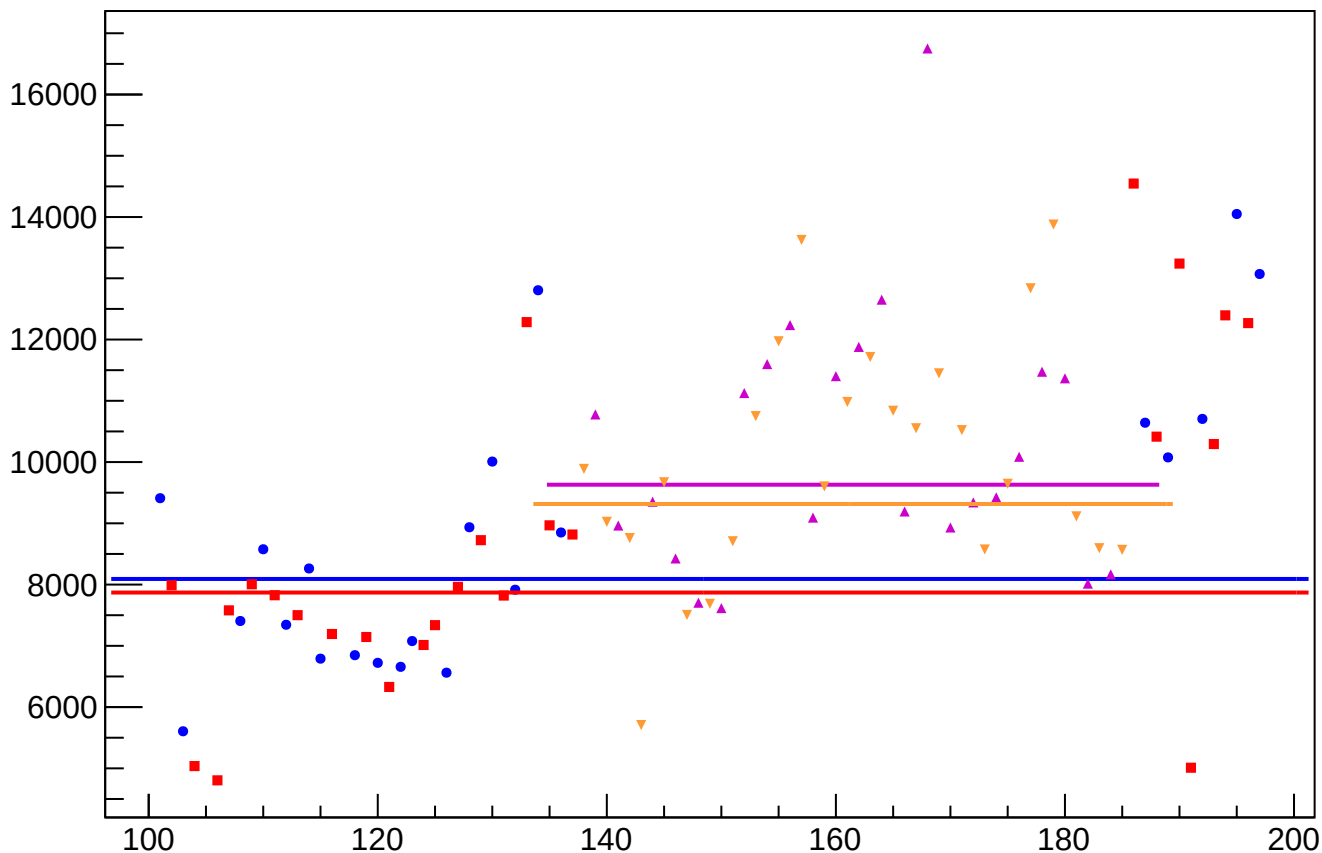
Right: 5993.017+/-1834.429  $\chi^2/\text{NDF}$ : 45.8/46

In: 3858.165+/-1776.432  $\chi^2/\text{NDF}$ : 34.0/44

Out: 3832.993+/-1657.094  $\chi^2/\text{NDF}$ : 56.0/49

All: 3844.705+/-1211.737  $\chi^2/\text{NDF}$ : 90.0/94

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



Right In: 8091.719 $\pm$ 1.934  $\chi^2/\text{NDF}$ : 1145537.5/21

Left Out: 9315.396 $\pm$ 1.579  $\chi^2/\text{NDF}$ : 1503512.6/24

Right Out: 7869.999 $\pm$ 1.749  $\chi^2/\text{NDF}$ : 1665159.6/24

Left In: 9630.345 $\pm$ 1.652  $\chi^2/\text{NDF}$ : 1074643.5/22

Left: 9465.715 $\pm$ 1.141  $\chi^2/\text{NDF}$ : 2597156.4/47

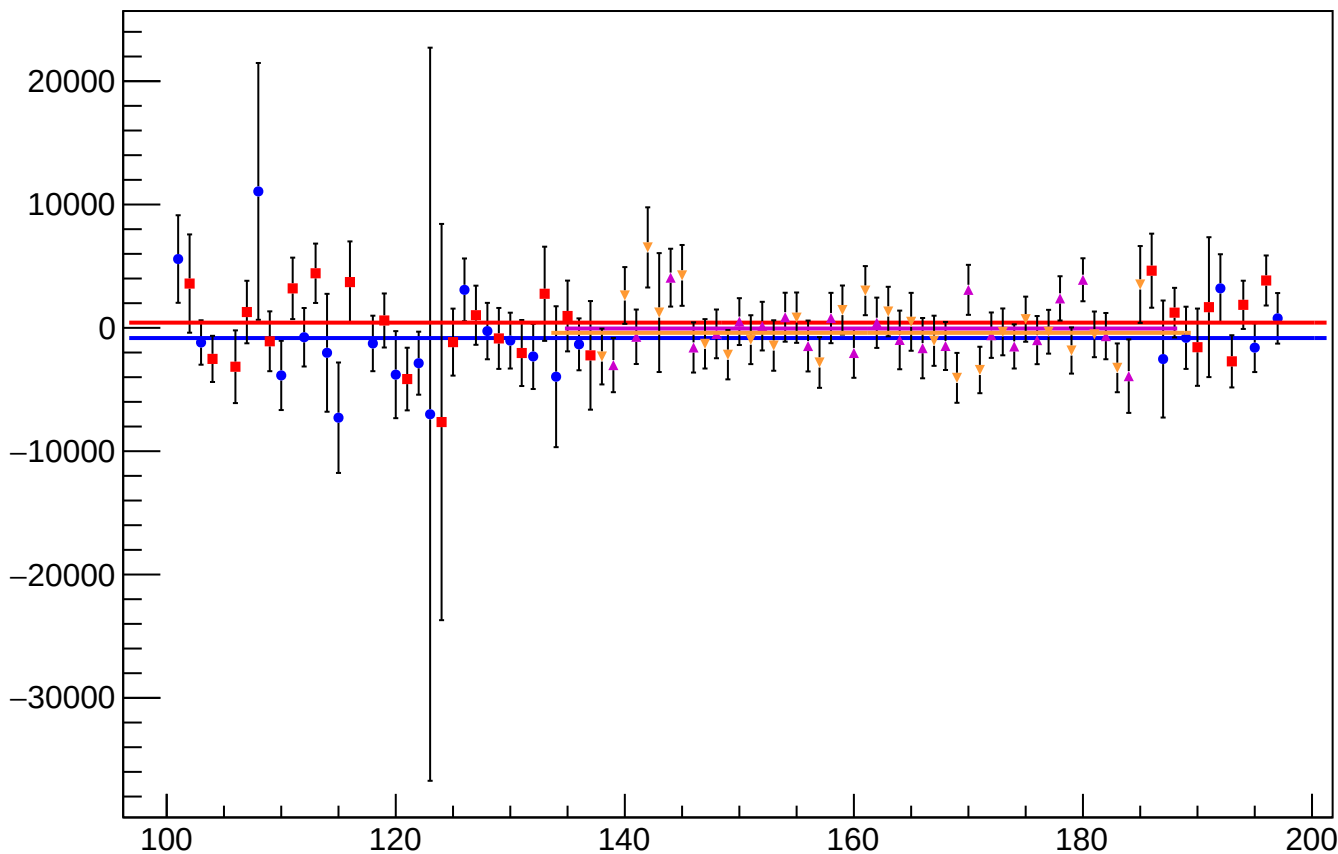
Right: 7969.717 $\pm$ 1.297  $\chi^2/\text{NDF}$ : 2817928.6/46

In: 8981.337 $\pm$ 1.256  $\chi^2/\text{NDF}$ : 2586108.2/44

Out: 8666.379 $\pm$ 1.172  $\chi^2/\text{NDF}$ : 3545161.5/49

All: 8812.918 $\pm$ 0.857  $\chi^2/\text{NDF}$ : 6164888.6/94

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



Right In: -826.673+/-577.940  $\chi^2/\text{NDF}$ : 15.5/21

Left Out: -403.389+/-419.243  $\chi^2/\text{NDF}$ : 28.9/24

Right Out: 423.226+/-523.040  $\chi^2/\text{NDF}$ : 24.0/24

Left In: -53.539+/-422.570  $\chi^2/\text{NDF}$ : 20.9/22

Left: -229.847+/-297.619  $\chi^2/\text{NDF}$ : 50.1/47

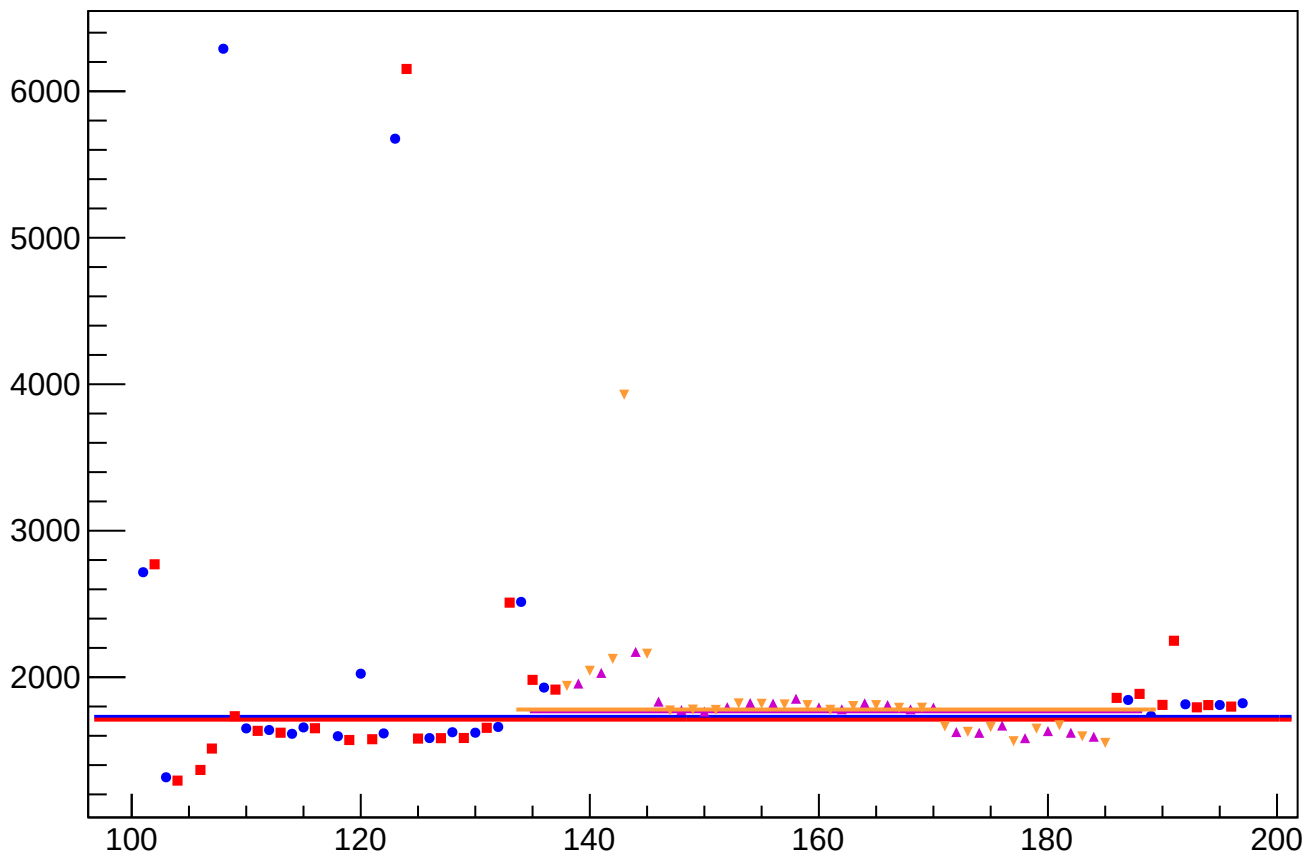
Right: -139.554+/-387.806  $\chi^2/\text{NDF}$ : 42.1/46

In: -322.873+/-341.115  $\chi^2/\text{NDF}$ : 37.5/44

Out: -80.046+/-327.126  $\chi^2/\text{NDF}$ : 54.5/49

All: -196.379+/-236.104  $\chi^2/\text{NDF}$ : 92.2/94

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



Right In: 1729.130+/-0.409  $\chi^2/\text{NDF}$ : 792732.4/21

Left Out: 1779.434+/-0.296  $\chi^2/\text{NDF}$ : 610925.0/24

Right Out: 1710.326+/-0.370  $\chi^2/\text{NDF}$ : 630182.8/24

Left In: 1767.314+/-0.299  $\chi^2/\text{NDF}$ : 196583.8/22

Left: 1773.422+/-0.210  $\chi^2/\text{NDF}$ : 808337.9/47

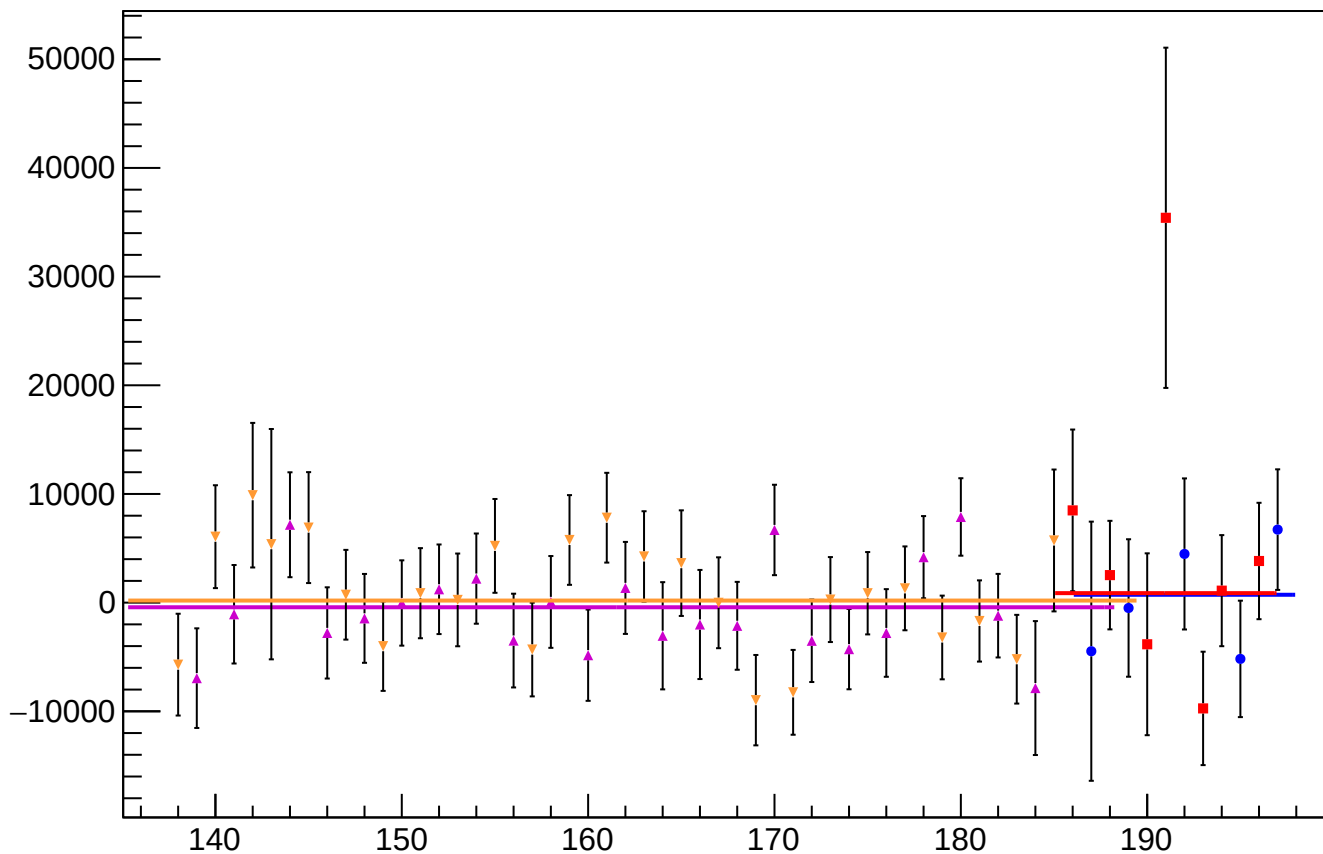
Right: 1718.792+/-0.274  $\chi^2/\text{NDF}$ : 1424079.2/46

In: 1754.012+/-0.241  $\chi^2/\text{NDF}$ : 995005.2/44

Out: 1752.401+/-0.231  $\chi^2/\text{NDF}$ : 1262365.7/49

All: 1753.173+/-0.167  $\chi^2/\text{NDF}$ : 2257394.1/94

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



Right In: 724.020 $\pm$ 2886.074  $\chi^2$ /NDF: 2.9/4

Left Out: 191.104 $\pm$ 869.912  $\chi^2$ /NDF:30.6/24

Right Out: 874.350 $\pm$ 2316.147  $\chi^2$ /NDF: 10.8/6

Left In: -426.004 $\pm$ 874.870  $\chi^2$ /NDF:21.3/22

Left: -115.696 $\pm$ 616.866  $\chi^2$ /NDF: 52.1/47

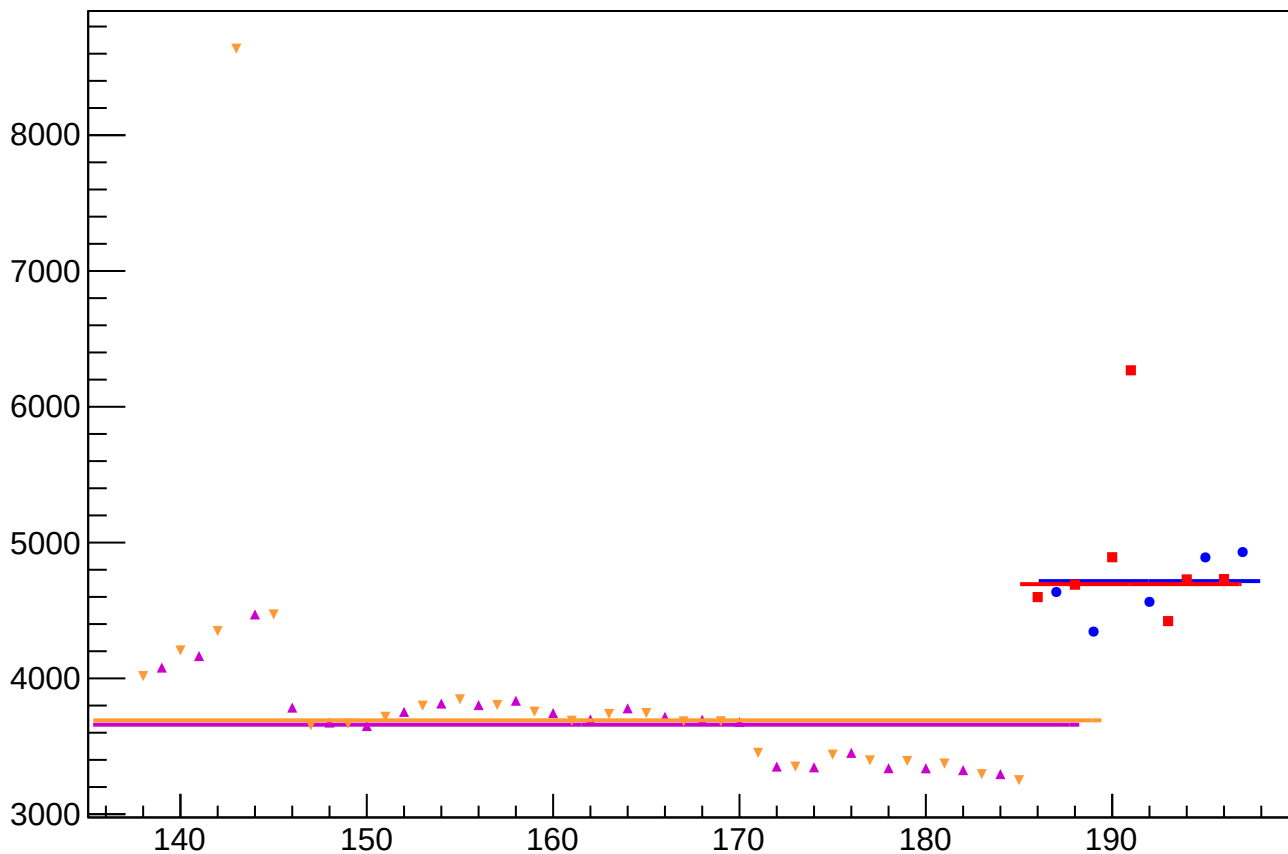
Right: 815.459 $\pm$ 1806.380  $\chi^2$ /NDF: 13.7/11

In: -329.221 $\pm$ 837.248  $\chi^2$ /NDF:24.3/27

Out: 275.571 $\pm$ 814.367  $\chi^2$ /NDF:41.5/31

All: -18.448 $\pm$ 583.766  $\chi^2$ /NDF: 66.0/59

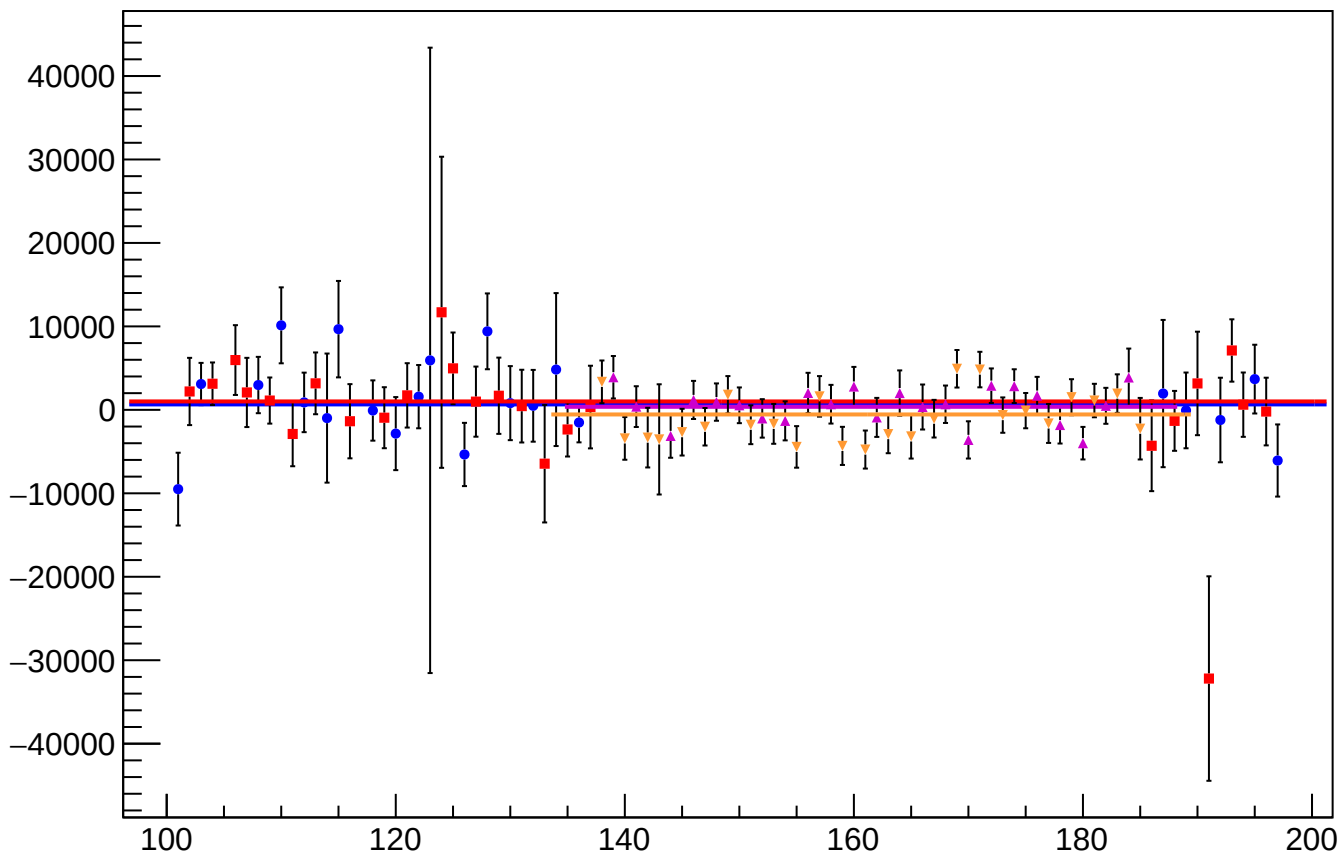
asym\_at2\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 4716.443 $\pm$ 2.041  $\chi^2$ /NDF: 13056.2/4  
 Left Out: 3691.174 $\pm$ 0.615  $\chi^2$ /NDF: 639471.7/24  
 Right Out: 4694.066 $\pm$ 1.638  $\chi^2$ /NDF: 27332.7/6  
 Left In: 3659.086 $\pm$ 0.619  $\chi^2$ /NDF: 198077.1/22

Left: 3675.221 $\pm$ 0.436  $\chi^2$ /NDF: 838901.7/47  
 Right: 4702.832 $\pm$ 1.277  $\chi^2$ /NDF: 40462.0/11  
 In: 3748.071 $\pm$ 0.592  $\chi^2$ /NDF: 456988.2/27  
 Out: 3815.158 $\pm$ 0.576  $\chi^2$ /NDF: 995429.5/31  
 All: 3782.544 $\pm$ 0.413  $\chi^2$ /NDF: 1459016.3/59

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



Right In:  $651.607 \pm 879.230$   $\chi^2/\text{NDF}$ : 24.8/21

Left Out:  $-551.411 \pm 481.630$   $\chi^2/\text{NDF}$ : 34.0/24

Right Out:  $1009.509 \pm 814.107$   $\chi^2/\text{NDF}$ : 19.3/24

Left In:  $366.243 \pm 483.092$   $\chi^2/\text{NDF}$ : 20.5/22

Left:  $-93.975 \pm 341.080$   $\chi^2/\text{NDF}$ : 56.4/47

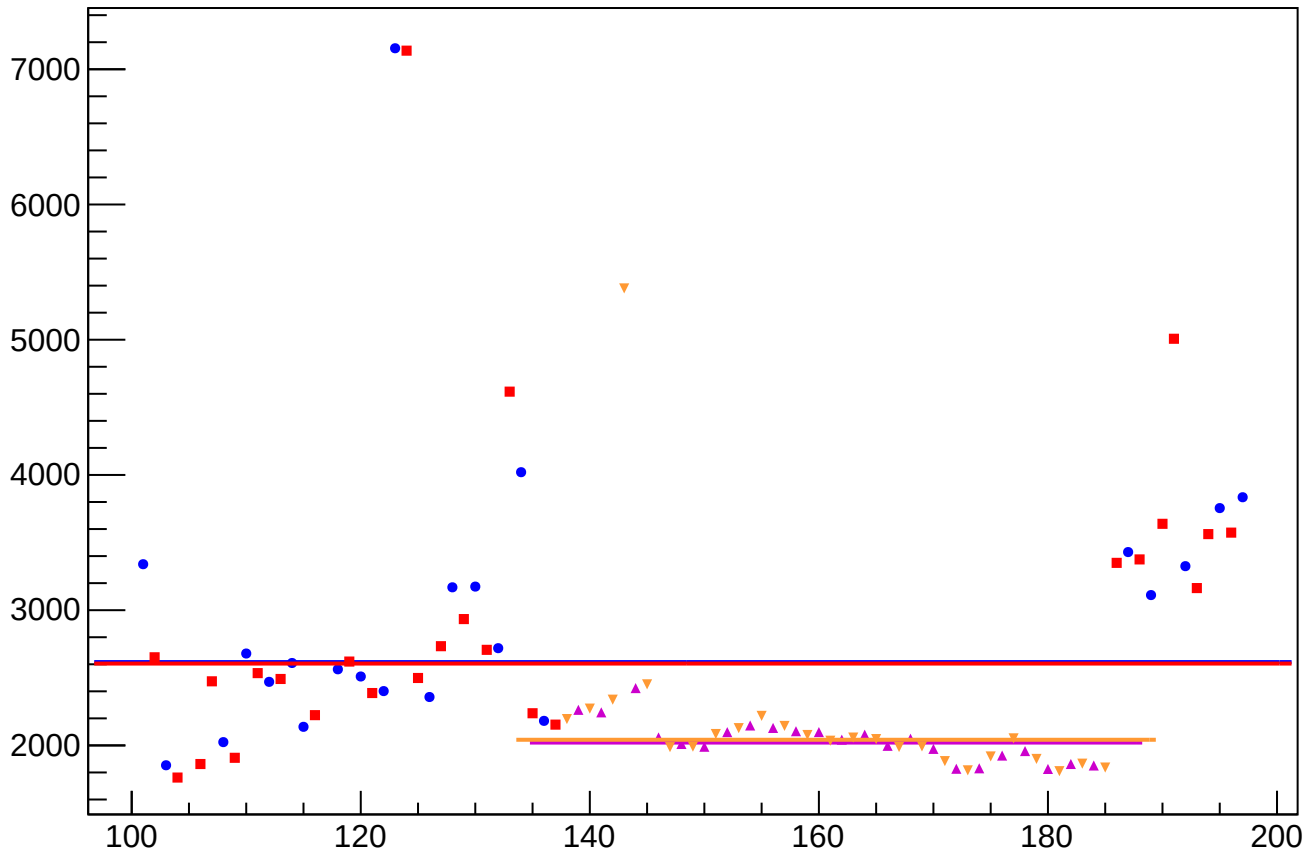
Right:  $844.302 \pm 597.358$   $\chi^2/\text{NDF}$ : 44.2/46

In:  $432.416 \pm 423.392$   $\chi^2/\text{NDF}$ : 45.4/44

Out:  $-146.731 \pm 414.521$   $\chi^2/\text{NDF}$ : 56.0/49

All:  $136.712 \pm 296.197$   $\chi^2/\text{NDF}$ : 102.4/94

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



Right In: 2616.233+/-0.622  $\chi^2/\text{NDF}$ : 930531.0/21

Left Out: 2041.781+/-0.341  $\chi^2/\text{NDF}$ : 706854.2/24

Right Out: 2605.258+/-0.576  $\chi^2/\text{NDF}$ : 1317257.5/24

Left In: 2021.065+/-0.342  $\chi^2/\text{NDF}$ : 178726.2/22

Left: 2031.455+/-0.241  $\chi^2/\text{NDF}$ : 887424.8/47

Right: 2610.324+/-0.422  $\chi^2/\text{NDF}$ : 2247956.3/46

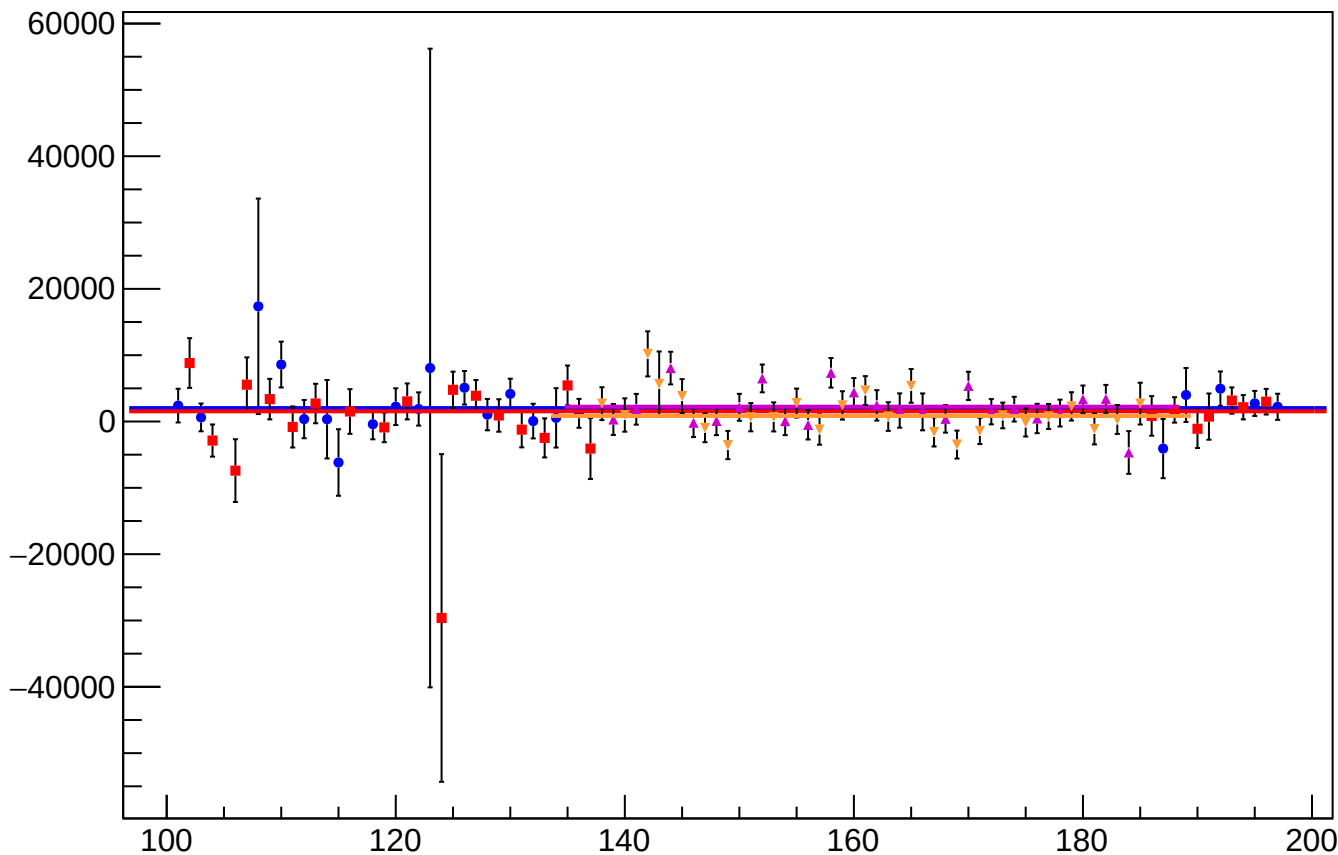
In: 2159.078+/-0.299  $\chi^2/\text{NDF}$ : 1813186.4/44

Out: 2187.867+/-0.293  $\chi^2/\text{NDF}$ : 2733833.5/49

All: 2173.778+/-0.209  $\chi^2/\text{NDF}$ : 4551741.3/94



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



Right In: 2022.844+/-590.122  $\chi^2/\text{NDF}$ : 16.1/21

Left Out: 837.426+/-454.502  $\chi^2/\text{NDF}$ : 32.3/24

Right Out: 1538.291+/-542.983  $\chi^2/\text{NDF}$ : 26.6/24

Left In: 2235.652+/-457.720  $\chi^2/\text{NDF}$ : 31.0/22

Left: 1531.607+/-322.513  $\chi^2/\text{NDF}$ : 68.0/47

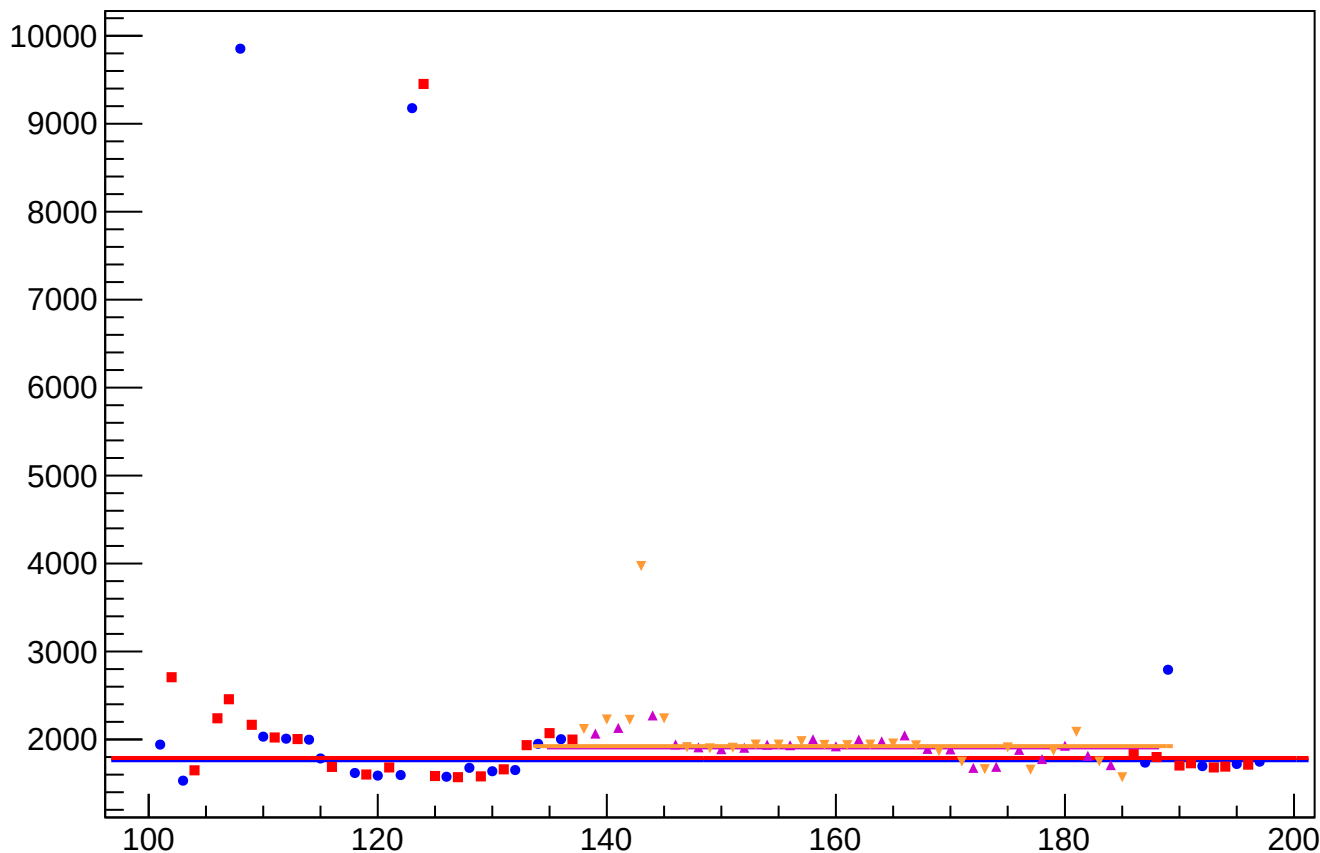
Right: 1760.445+/-399.574  $\chi^2/\text{NDF}$ : 43.0/46

In: 2155.715+/-361.677  $\chi^2/\text{NDF}$ : 47.1/44

Out: 1126.174+/-348.521  $\chi^2/\text{NDF}$ : 59.9/49

All: 1621.880+/-250.964  $\chi^2/\text{NDF}$ : 111.2/94

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



Right In: 1763.620+/-0.417  $\chi^2/\text{NDF}$ : 814053.9/21

Left Out: 1924.077+/-0.321  $\chi^2/\text{NDF}$ : 583939.2/24

Right Out: 1789.390+/-0.384  $\chi^2/\text{NDF}$ : 555252.6/24

Left In: 1909.656+/-0.324  $\chi^2/\text{NDF}$ : 164475.5/22

Left: 1916.918+/-0.228  $\chi^2/\text{NDF}$ : 749414.3/47

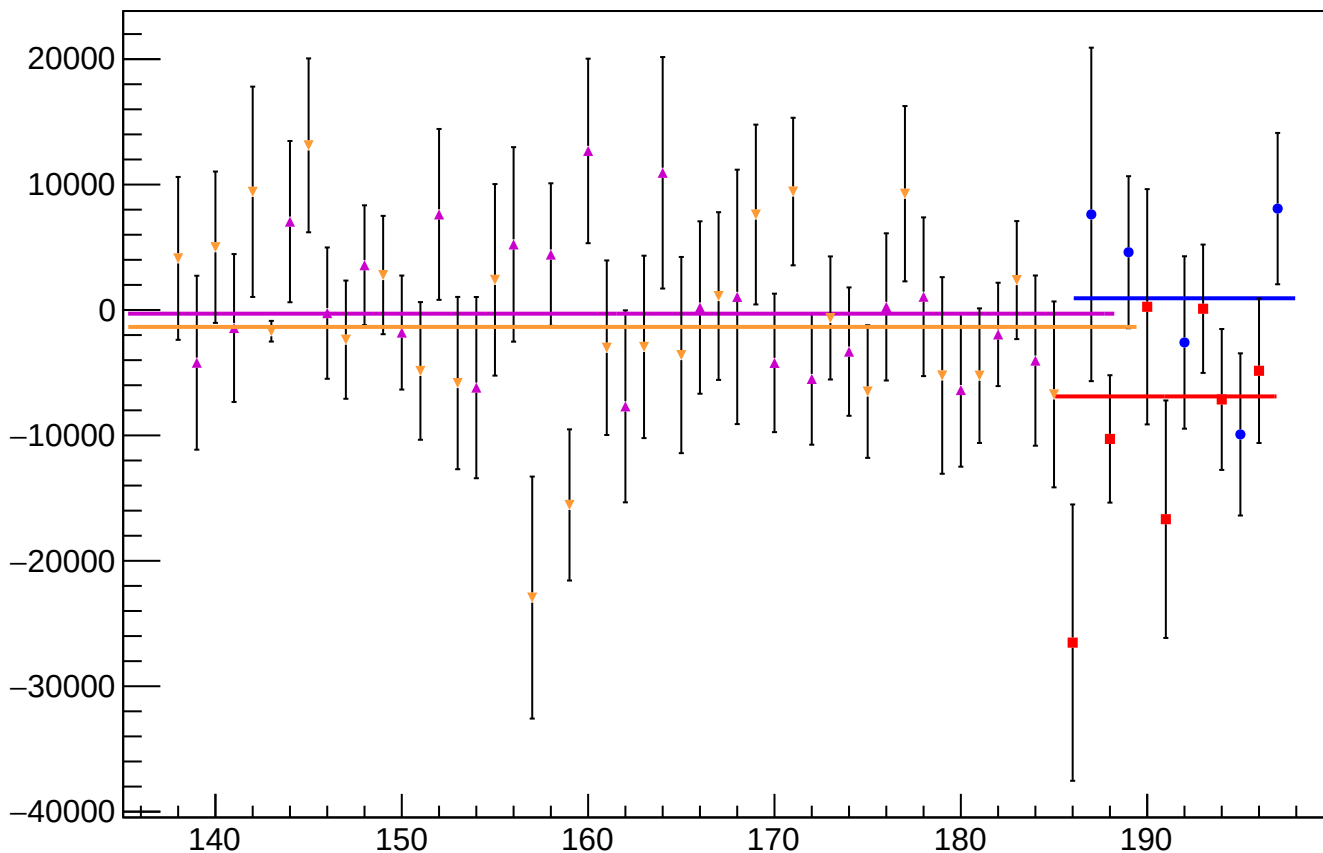
Right: 1777.584+/-0.282  $\chi^2/\text{NDF}$ : 1371373.2/46

In: 1854.801+/-0.256  $\chi^2/\text{NDF}$ : 1055003.3/44

Out: 1868.542+/-0.246  $\chi^2/\text{NDF}$ : 1211611.3/49

All: 1861.928+/-0.177  $\chi^2/\text{NDF}$ : 2268111.9/94

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



Right In: 933.696 $\pm$ 3079.753  $\chi^2$ /NDF: 5.1/4

Left Out: -1349.584 $\pm$ 690.658  $\chi^2$ /NDF:30.9/24

Right Out: -6891.889 $\pm$ 2428.459  $\chi^2$ /NDF: 7.3/6

Left In: -294.047 $\pm$ 1252.274  $\chi^2$ /NDF:14.5/22

Left: -1103.398 $\pm$ 604.776  $\chi^2$ /NDF: 46.0/47

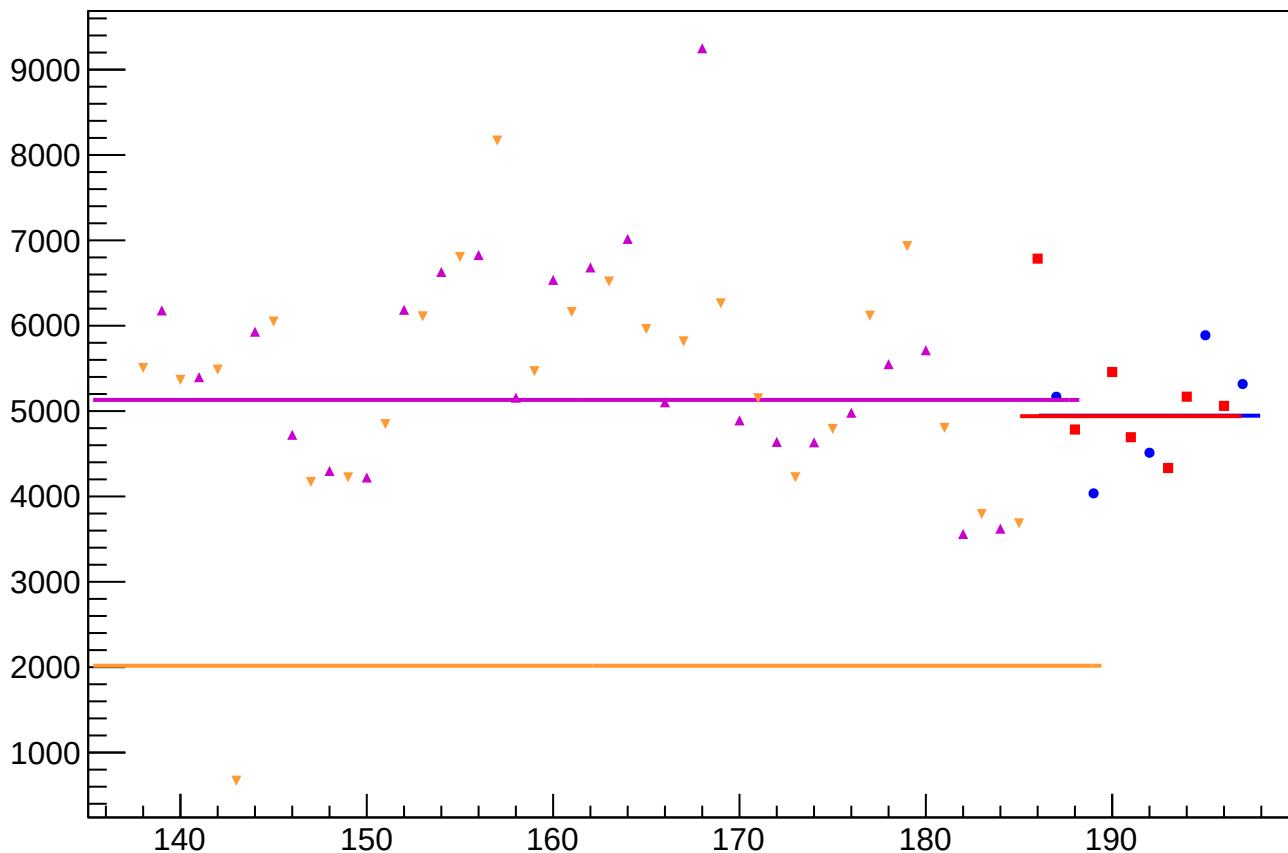
Right: -3891.639 $\pm$ 1906.936  $\chi^2$ /NDF: 16.4/11

In: -119.857 $\pm$ 1160.042  $\chi^2$ /NDF:19.8/27

Out: -1764.324 $\pm$ 664.314  $\chi^2$ /NDF:43.0/31

All: -1358.213 $\pm$ 576.479  $\chi^2$ /NDF: 64.3/59

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



Right In: 4946.338 $\pm$ 2.178  $\chi^2$ /NDF: 103637.0/4

Left Out: 2017.245 $\pm$ 0.488  $\chi^2$ /NDF:19159743.3/24

Right Out: 4940.232 $\pm$ 1.717  $\chi^2$ /NDF: 97797.6/6

Left In: 5130.756 $\pm$ 0.885  $\chi^2$ /NDF:1489813.1/22

Left: 2743.420 $\pm$ 0.428  $\chi^2$ /NDF: 30129278.1/47

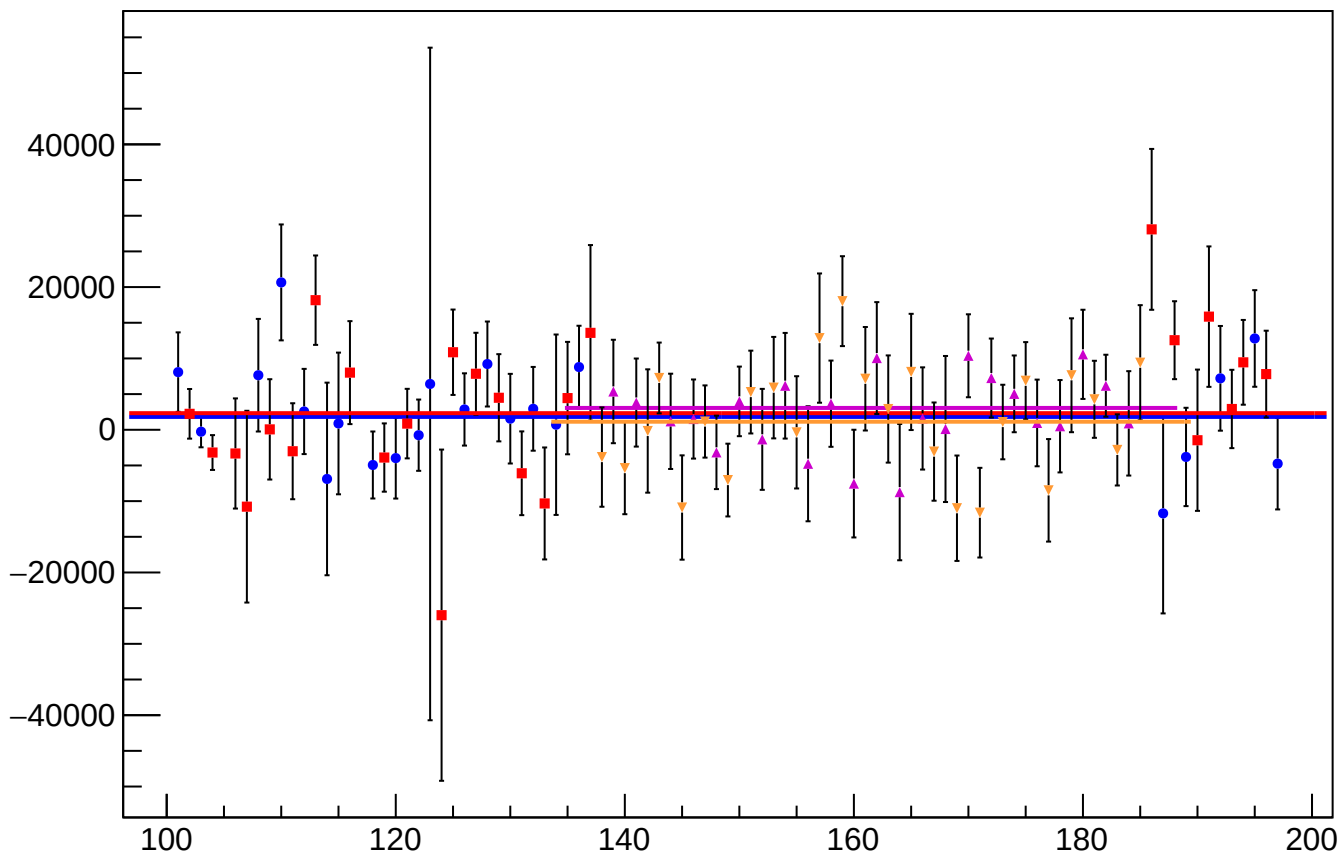
Right: 4942.573 $\pm$ 1.348  $\chi^2$ /NDF: 201439.4/11

In: 5104.591 $\pm$ 0.820  $\chi^2$ /NDF:1599604.1/27

Out: 2235.977 $\pm$ 0.470  $\chi^2$ /NDF:21938208.5/31

All: 2944.399 $\pm$ 0.408  $\chi^2$ /NDF: 32747548.7/5

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



Right In: 1804.625+/-1211.483  $\chi^2/\text{NDF}$ : 20.8/21

Left Out: 1132.501+/-1280.211  $\chi^2/\text{NDF}$ :32.5/24

Right Out: 2328.393+/-1153.928  $\chi^2/\text{NDF}$ : 39.3/24

Left In: 3061.439+/-1313.197  $\chi^2/\text{NDF}$ :12.3/22

Left: 2072.439+/-916.686  $\chi^2/\text{NDF}$ : 45.9/47

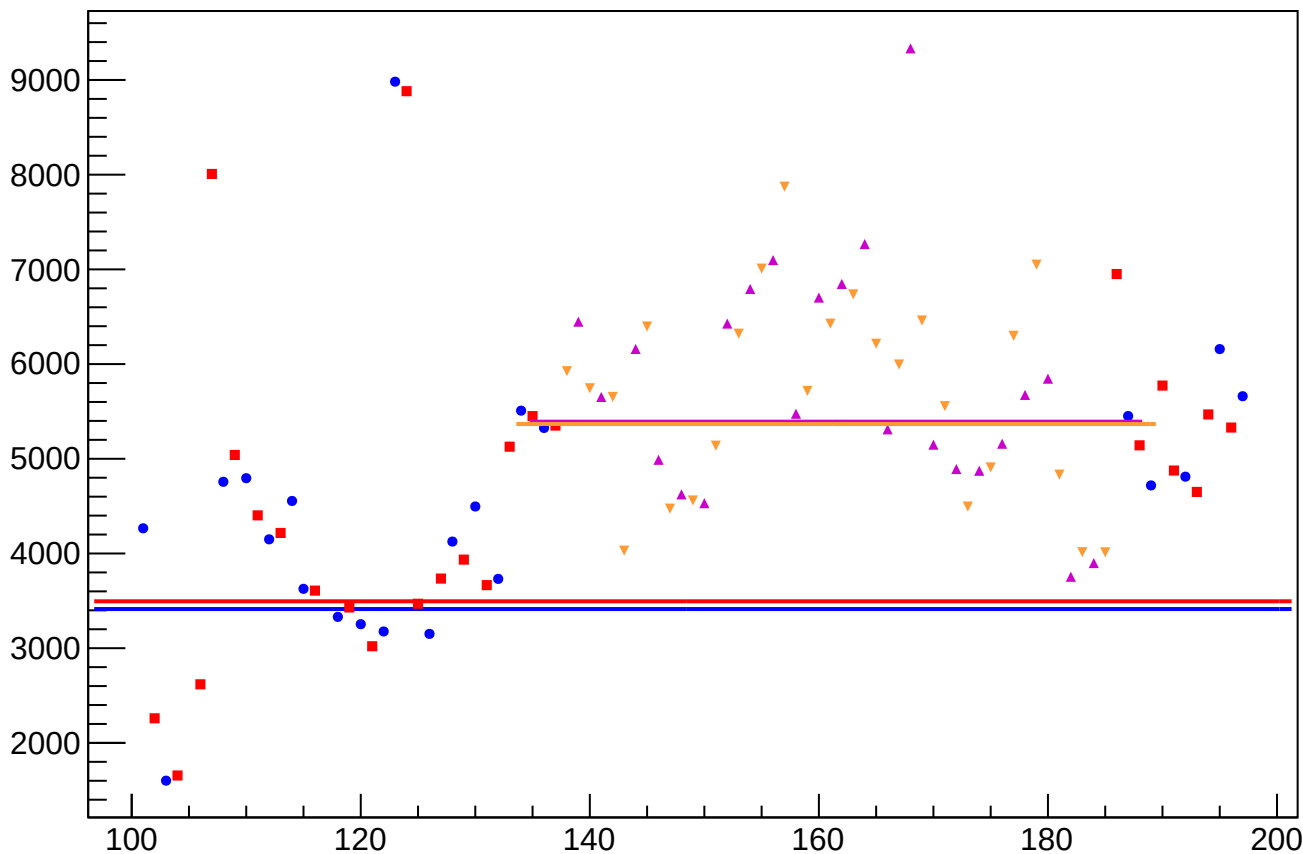
Right: 2079.246+/-835.557  $\chi^2/\text{NDF}$ : 60.2/46

In: 2382.480+/-890.438  $\chi^2/\text{NDF}$ :33.6/44

Out: 1792.323+/-857.129  $\chi^2/\text{NDF}$ :72.2/49

All: 2076.157+/-617.522  $\chi^2/\text{NDF}$ : 106.1/94

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



Right In: 3413.444+/-0.857  $\chi^2/\text{NDF}$ : 2747244.6/21

Left Out: 5366.944+/-0.905  $\chi^2/\text{NDF}$ : 1213541.3/24

Right Out: 3495.272+/-0.806  $\chi^2/\text{NDF}$ : 3231452.6/24

Left In: 5391.987+/-0.929  $\chi^2/\text{NDF}$ : 1320415.5/22

Left: 5379.147+/-0.648  $\chi^2/\text{NDF}$ : 2534329.7/47

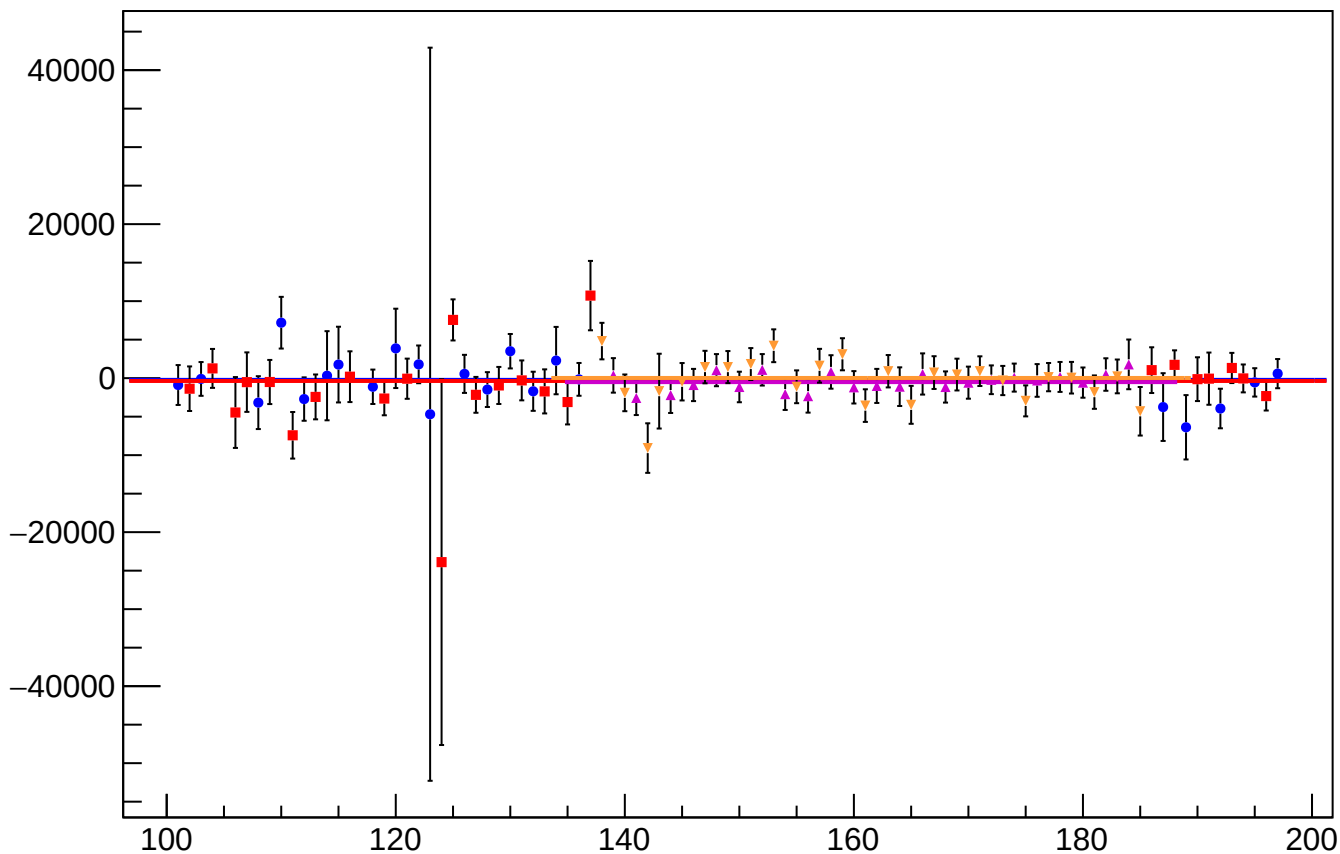
Right: 3456.828+/-0.587  $\chi^2/\text{NDF}$ : 5983534.8/46

In: 4323.129+/-0.630  $\chi^2/\text{NDF}$ : 6520310.4/44

Out: 4323.383+/-0.602  $\chi^2/\text{NDF}$ : 6828489.9/49

All: 4323.262+/-0.435  $\chi^2/\text{NDF}$ : 13348800.4/99

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



Right In:  $-224.665 \pm 581.845$   $\chi^2/\text{NDF}$ : 17.1/21

Left Out:  $23.375 \pm 440.724$   $\chi^2/\text{NDF}$ : 31.7/24

Right Out:  $-365.857 \pm 528.365$   $\chi^2/\text{NDF}$ : 29.4/24

Left In:  $-514.693 \pm 444.402$   $\chi^2/\text{NDF}$ : 5.9/22

Left:  $-243.423 \pm 312.931$   $\chi^2/\text{NDF}$ : 38.4/47

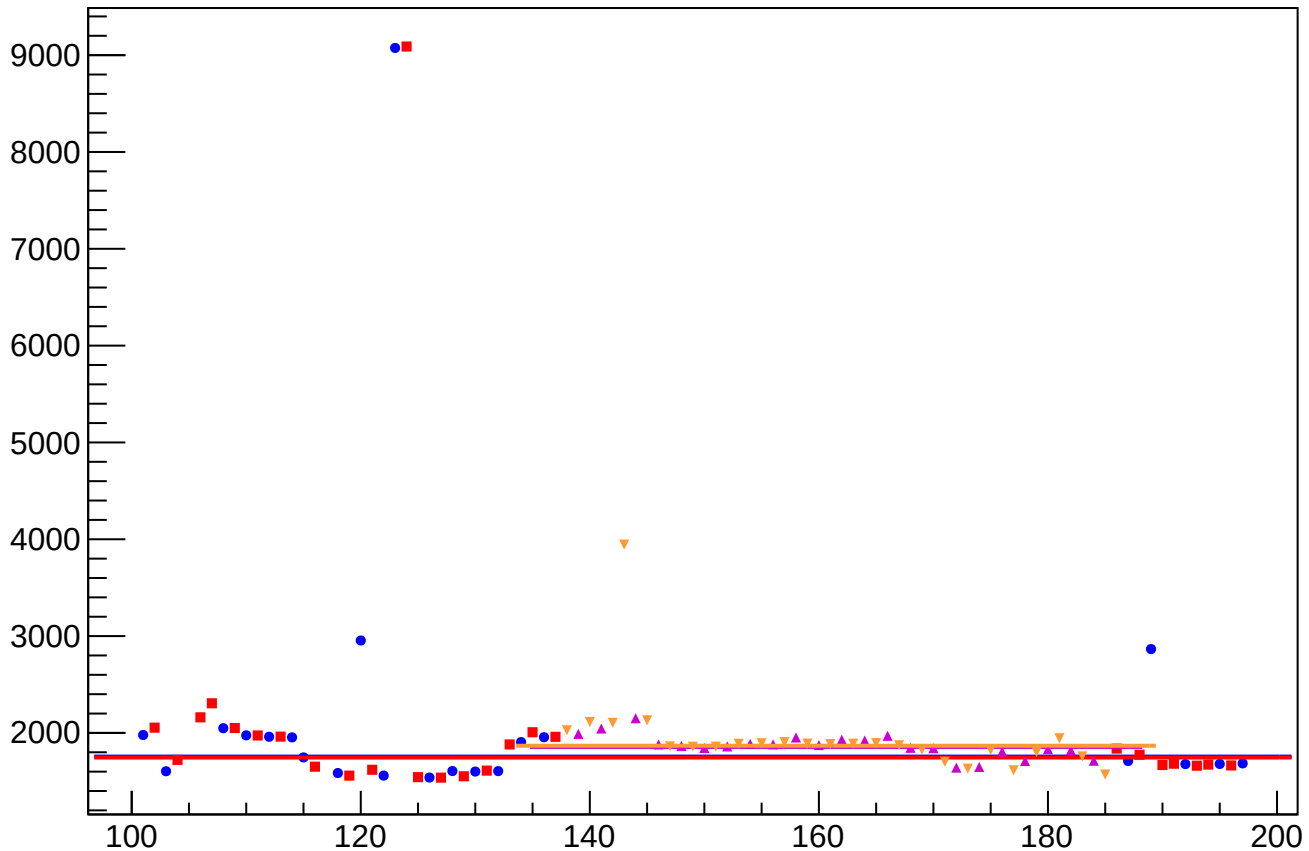
Right:  $-302.047 \pm 391.154$   $\chi^2/\text{NDF}$ : 46.5/46

In:  $-407.837 \pm 353.172$   $\chi^2/\text{NDF}$ : 23.2/44

Out:  $-136.326 \pm 338.441$   $\chi^2/\text{NDF}$ : 61.4/49

All:  $-266.301 \pm 244.356$   $\chi^2/\text{NDF}$ : 84.9/94

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



Right In: 1755.413 $\pm$ 0.411  $\chi^2$ /NDF: 450414.3/21

Left Out: 1867.539 $\pm$ 0.312  $\chi^2$ /NDF: 545343.0/24

Right Out: 1745.804 $\pm$ 0.373  $\chi^2$ /NDF: 427282.6/24

Left In: 1855.480 $\pm$ 0.314  $\chi^2$ /NDF: 136219.4/22

Left: 1861.559 $\pm$ 0.221  $\chi^2$ /NDF: 682305.0/47

Right: 1750.142 $\pm$ 0.276  $\chi^2$ /NDF: 877996.1/46

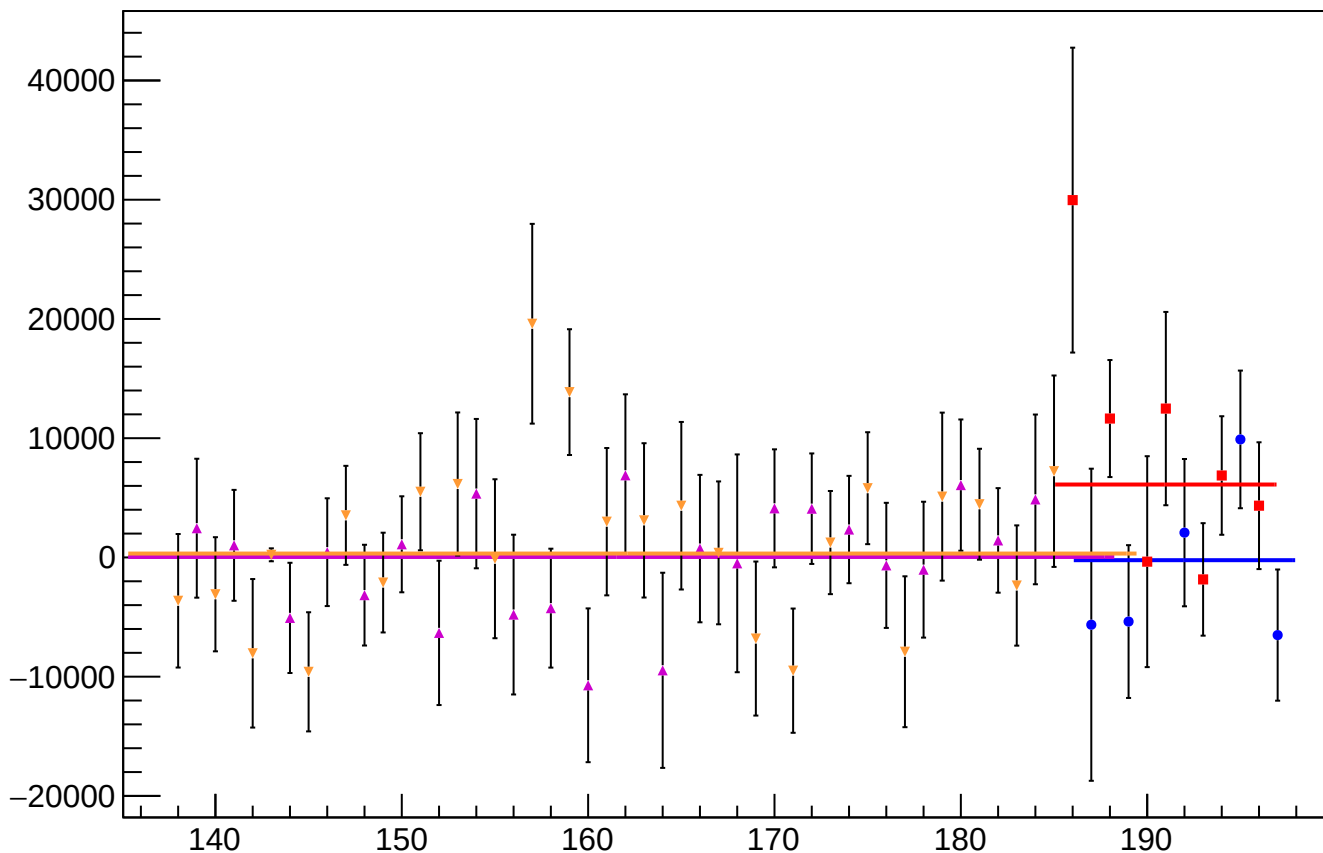
In: 1818.612 $\pm$ 0.250  $\chi^2$ /NDF: 623994.6/44

Out: 1817.536 $\pm$ 0.239  $\chi^2$ /NDF: 1035303.4/49

All: 1818.050 $\pm$ 0.173  $\chi^2$ /NDF: 1659307.7/94



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



Right In: -230.653+/-2893.187  $\chi^2/\text{NDF}$ : 5.3/4

Left Out: 325.135+/-488.239  $\chi^2/\text{NDF}$ : 32.5/24

Right Out: 6115.118+/-2256.349  $\chi^2/\text{NDF}$ : 8.9/6

Left In: 40.142+/-1109.747  $\chi^2/\text{NDF}$ : 13.9/22

Left: 278.917+/-446.900  $\chi^2/\text{NDF}$ : 46.4/47

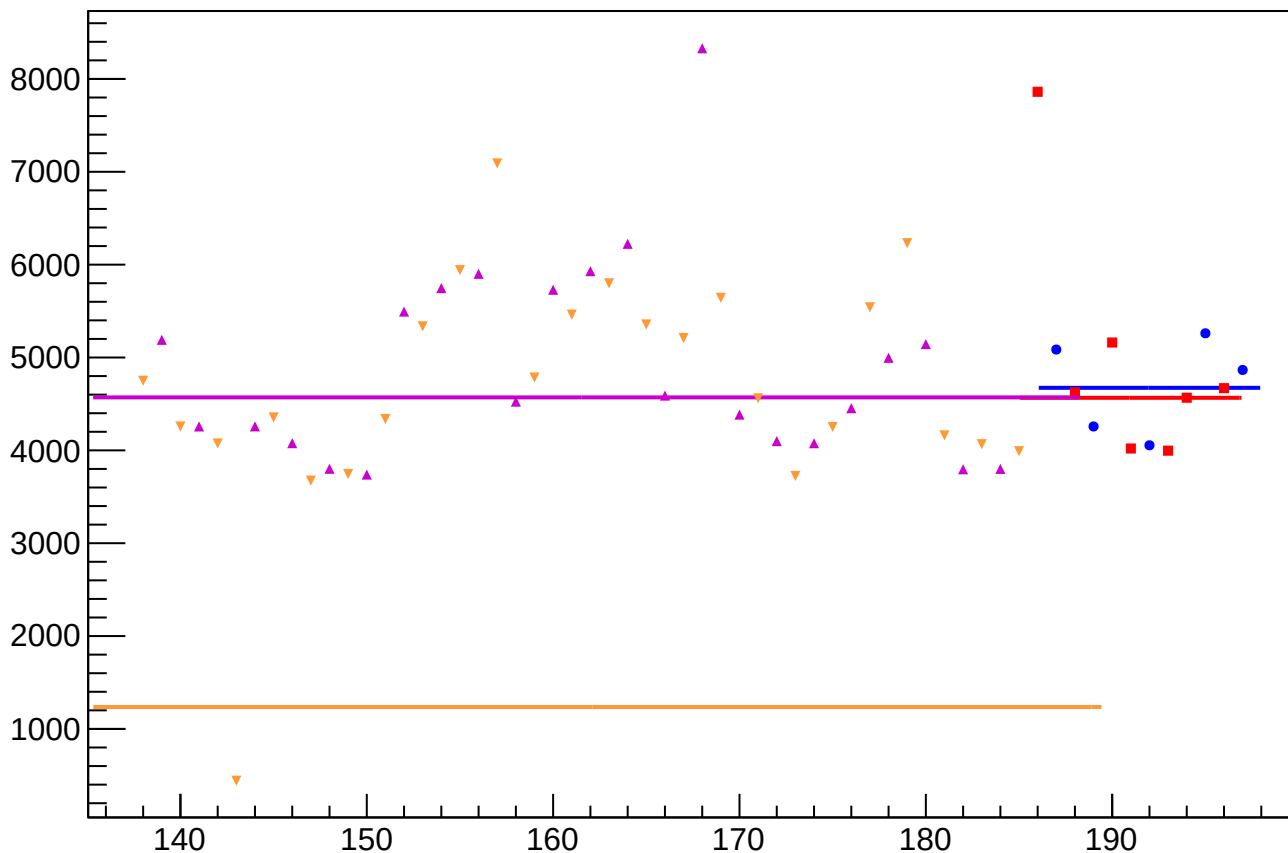
Right: 3715.186+/-1779.237  $\chi^2/\text{NDF}$ : 17.2/11

In: 5.410+/-1036.139  $\chi^2/\text{NDF}$ : 19.2/27

Out: 584.109+/-477.195  $\chi^2/\text{NDF}$ : 47.7/31

All: 482.842+/-433.436  $\chi^2/\text{NDF}$ : 67.2/59

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



Right In: 4673.646+/-2.046  $\chi^2/\text{NDF}$ : 53641.1/4

Left Out: 1236.170+/-0.345  $\chi^2/\text{NDF}$ : 23395886.7/24

Right Out: 4565.962+/-1.595  $\chi^2/\text{NDF}$ : 181223.7/6

Left In: 4570.398+/-0.785  $\chi^2/\text{NDF}$ : 1145211.6/22

Left: 1776.884+/-0.316  $\chi^2/\text{NDF}$ : 39667244.3/47

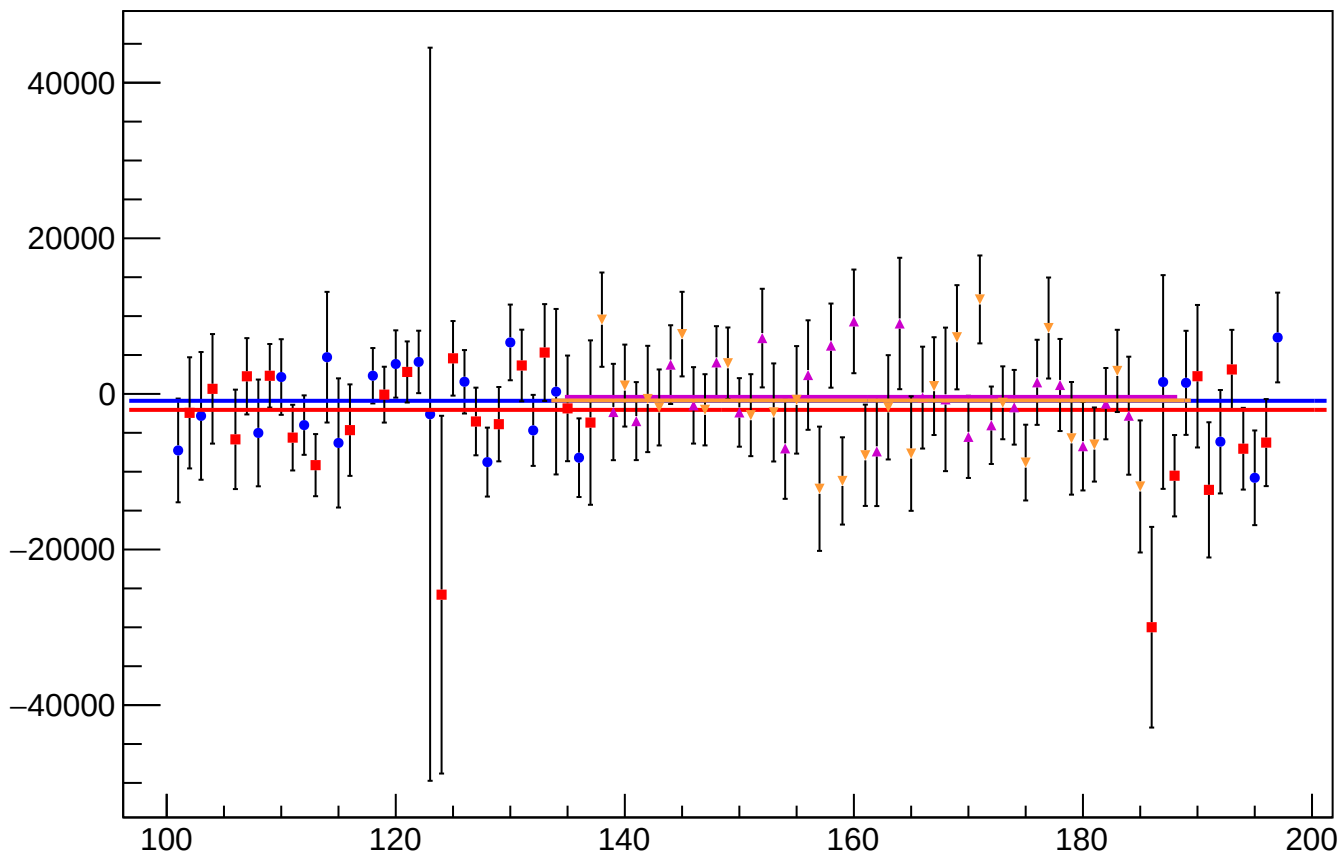
Right: 4606.687+/-1.258  $\chi^2/\text{NDF}$ : 236587.6/11

In: 4583.640+/-0.733  $\chi^2/\text{NDF}$ : 1201073.1/27

Out: 1385.105+/-0.337  $\chi^2/\text{NDF}$ : 27737929.1/31

All: 1944.818+/-0.306  $\chi^2/\text{NDF}$ : 44662719.9/5

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



Right In: -885.512 $\pm$ 1154.910  $\chi^2$ /NDF: 20.9/21

Left Out: -845.427 $\pm$ 1152.677  $\chi^2$ /NDF:30.0/24

Right Out: -2052.026 $\pm$ 1068.230  $\chi^2$ /NDF: 26.0/24

Left In: -385.098 $\pm$ 1181.458  $\chi^2$ /NDF:13.9/22

Left: -620.938 $\pm$ 825.053  $\chi^2$ /NDF: 44.0/47

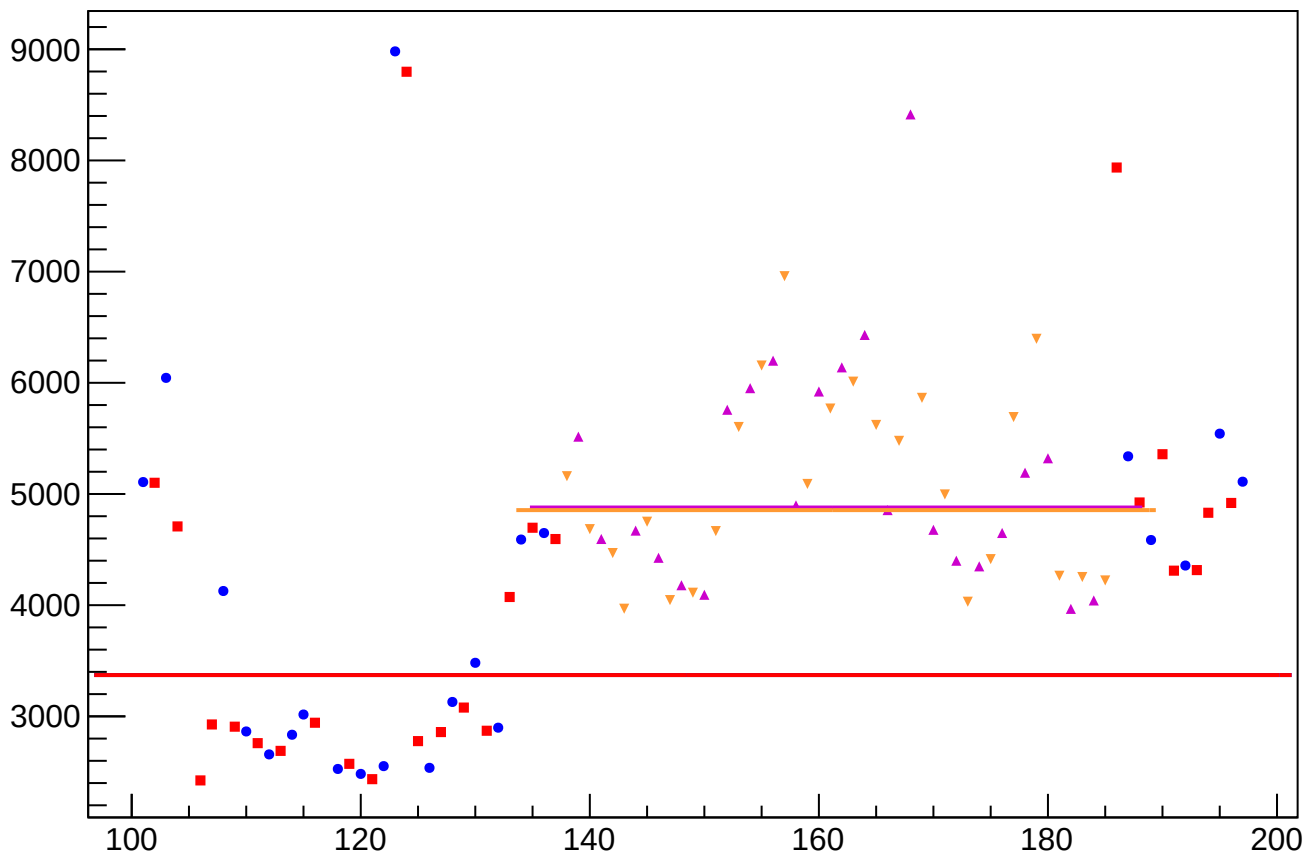
Right: -1514.182 $\pm$ 784.208  $\chi^2$ /NDF: 47.5/46

In: -640.991 $\pm$ 825.871  $\chi^2$ /NDF:35.0/44

Out: -1494.539 $\pm$ 783.508  $\chi^2$ /NDF:56.6/49

All: -1090.217 $\pm$ 568.410  $\chi^2$ /NDF: 92.1/94

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



Right In: 3371.716+/-0.817  $\chi^2/\text{NDF}$ : 1637899.3/21

Left Out: 4854.932+/-0.815  $\chi^2/\text{NDF}$ : 895557.4/24

Right Out: 3371.217+/-0.748  $\chi^2/\text{NDF}$ : 1881631.1/24

Left In: 4878.261+/-0.835  $\chi^2/\text{NDF}$ : 965222.2/22

Left: 4866.309+/-0.583  $\chi^2/\text{NDF}$ : 1861179.2/47

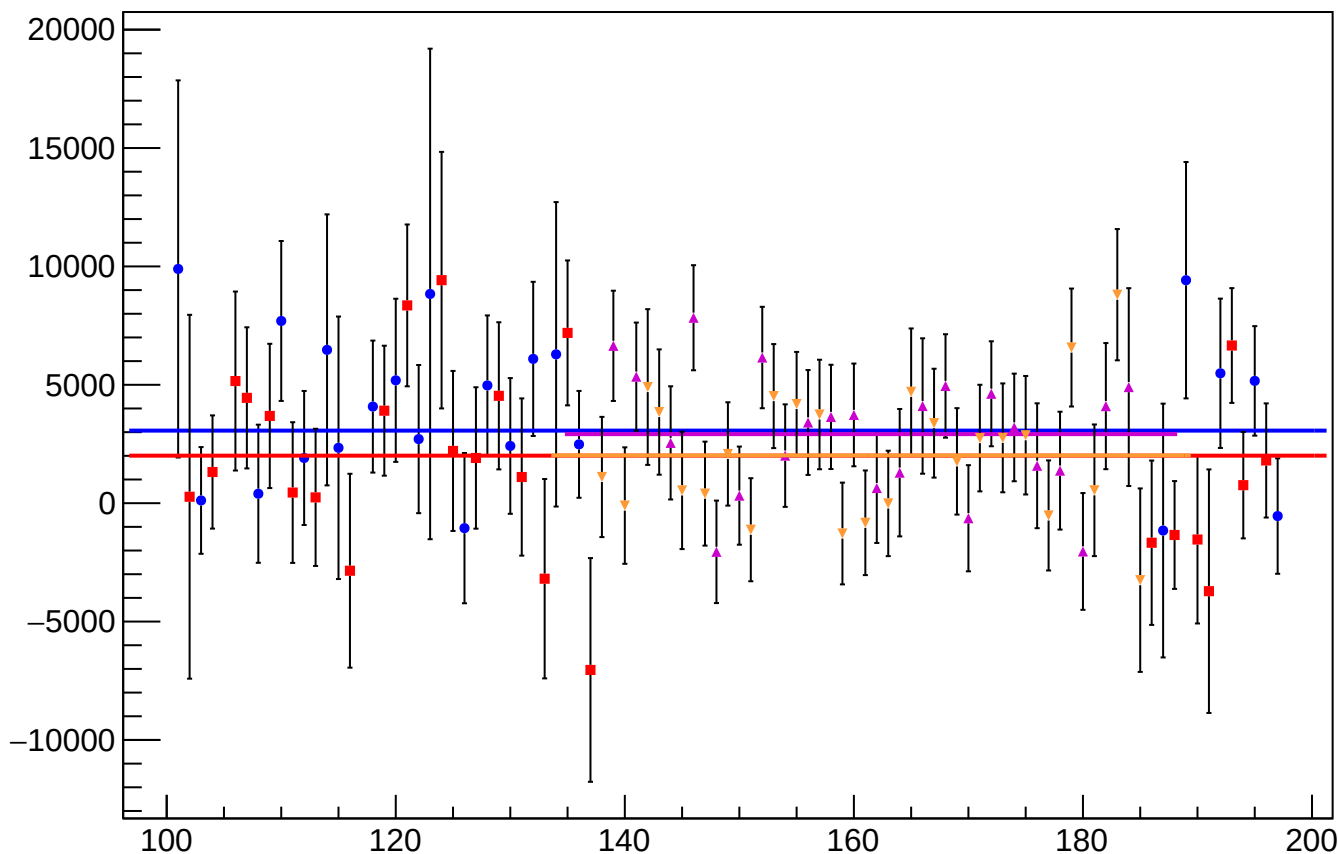
Right: 3371.445+/-0.551  $\chi^2/\text{NDF}$ : 3519530.5/46

In: 4107.869+/-0.584  $\chi^2/\text{NDF}$ : 4266102.4/44

Out: 4049.293+/-0.551  $\chi^2/\text{NDF}$ : 4576497.3/49

All: 4076.881+/-0.401  $\chi^2/\text{NDF}$ : 8847922.3/94

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



Right In: 3065.094+/-688.207  $\chi^2/\text{NDF}$ : 15.7/21

Left Out: 2019.326+/-481.340  $\chi^2/\text{NDF}$ : 27.1/24

Right Out: 2007.003+/-624.732  $\chi^2/\text{NDF}$ : 28.0/24

Left In: 2916.079+/-489.445  $\chi^2/\text{NDF}$ : 28.8/22

Left: 2460.216+/-343.188  $\chi^2/\text{NDF}$ : 57.7/47

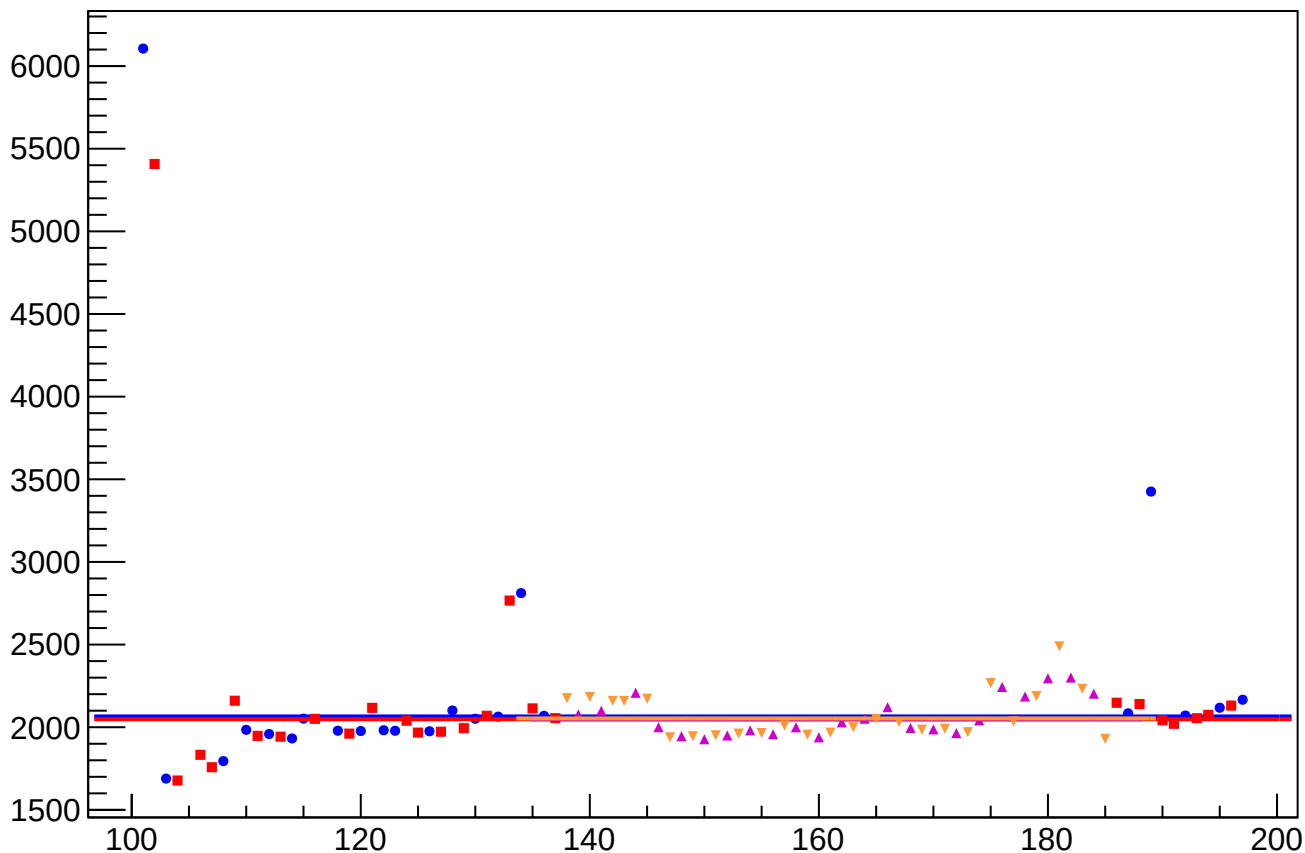
Right: 2485.014+/-462.569  $\chi^2/\text{NDF}$ : 45.0/46

In: 2966.133+/-398.861  $\chi^2/\text{NDF}$ : 44.6/44

Out: 2014.736+/-381.292  $\chi^2/\text{NDF}$ : 55.1/49

All: 2469.020+/-275.616  $\chi^2/\text{NDF}$ : 102.7/94

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



Right In: 2065.236+/-0.487  $\chi^2/\text{NDF}$ : 779388.8/21

Left Out: 2053.296+/-0.340  $\chi^2/\text{NDF}$ : 136888.1/24

Right Out: 2048.282+/-0.442  $\chi^2/\text{NDF}$ : 536357.9/24

Left In: 2047.277+/-0.346  $\chi^2/\text{NDF}$ : 103001.2/22

Left: 2050.337+/-0.243  $\chi^2/\text{NDF}$ : 240043.0/47

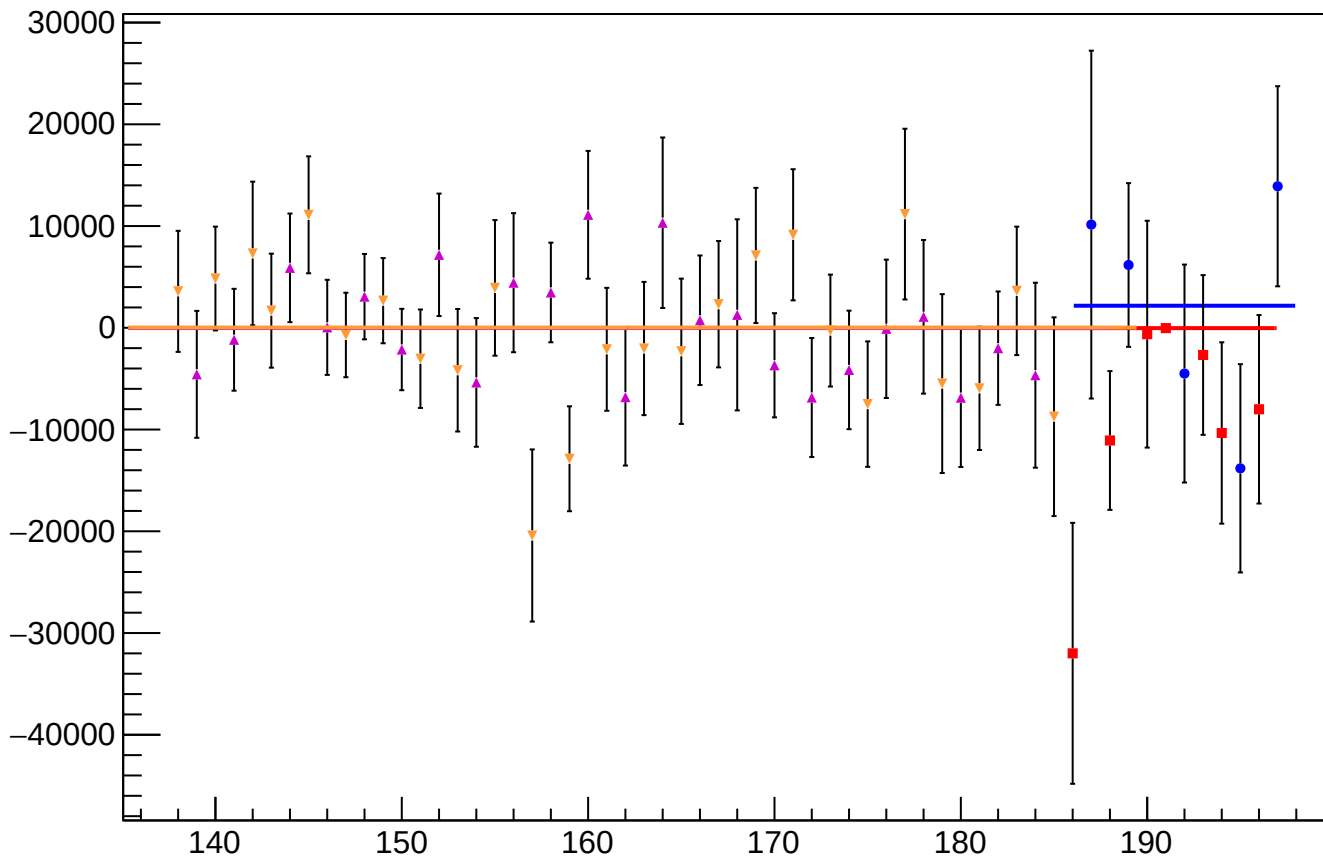
Right: 2055.939+/-0.327  $\chi^2/\text{NDF}$ : 1316412.3/46

In: 2053.310+/-0.282  $\chi^2/\text{NDF}$ : 883294.4/44

Out: 2051.428+/-0.270  $\chi^2/\text{NDF}$ : 673326.9/49

All: 2052.326+/-0.195  $\chi^2/\text{NDF}$ : 1556644.6/94

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



Right In: 2168.191 $\pm$ 4589.655  $\chi^2$ /NDF: 4.7/4

Left Out: 25.977 $\pm$ 1194.625  $\chi^2$ /NDF:29.2/24

Right Out: -31.754 $\pm$ 15.145  $\chi^2$ /NDF: 11.0/6

Left In: -23.765 $\pm$ 1211.652  $\chi^2$ /NDF:15.2/22

Left: 1.458 $\pm$ 850.684  $\chi^2$ /NDF: 44.4/47

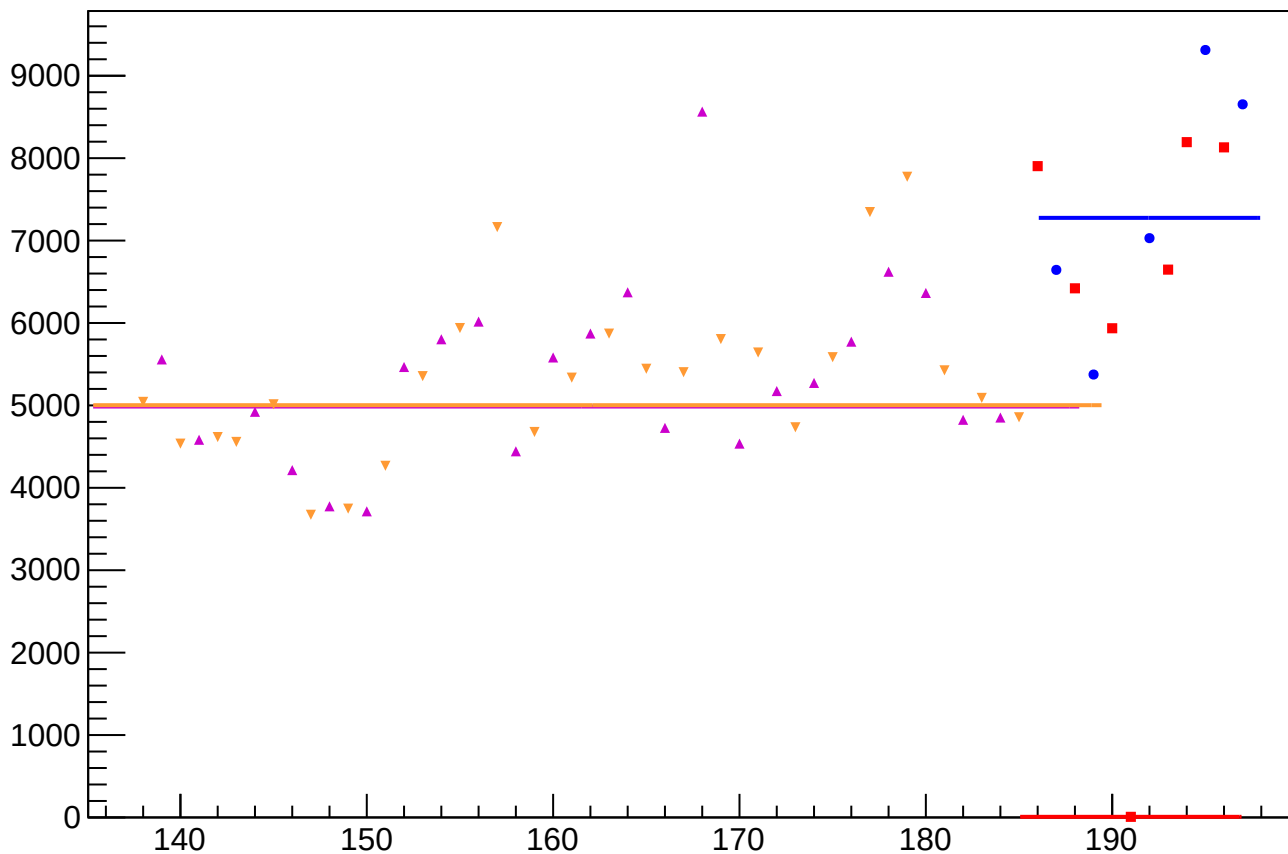
Right: -31.730 $\pm$ 15.145  $\chi^2$ /NDF: 16.0/11

In: 119.048 $\pm$ 1171.516  $\chi^2$ /NDF:20.1/27

Out: -31.744 $\pm$ 15.144  $\chi^2$ /NDF:40.3/31

All: -31.719 $\pm$ 15.142  $\chi^2$ /NDF: 60.4/59

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



Right In: 7275.725+/-3.245  $\chi^2/\text{NDF}$ : 233907.8/4

Left Out: 5002.559+/-0.845  $\chi^2/\text{NDF}$ :1145597.1/24

Right Out: 7.630+/-0.011  $\chi^2/\text{NDF}$ : 7749842.6/6

Left In: 4986.169+/-0.857  $\chi^2/\text{NDF}$ :1197602.7/22

Left: 4994.480+/-0.602  $\chi^2/\text{NDF}$ : 2343385.4/47

Right: 7.709+/-0.011  $\chi^2/\text{NDF}$ : 12999159.9/11

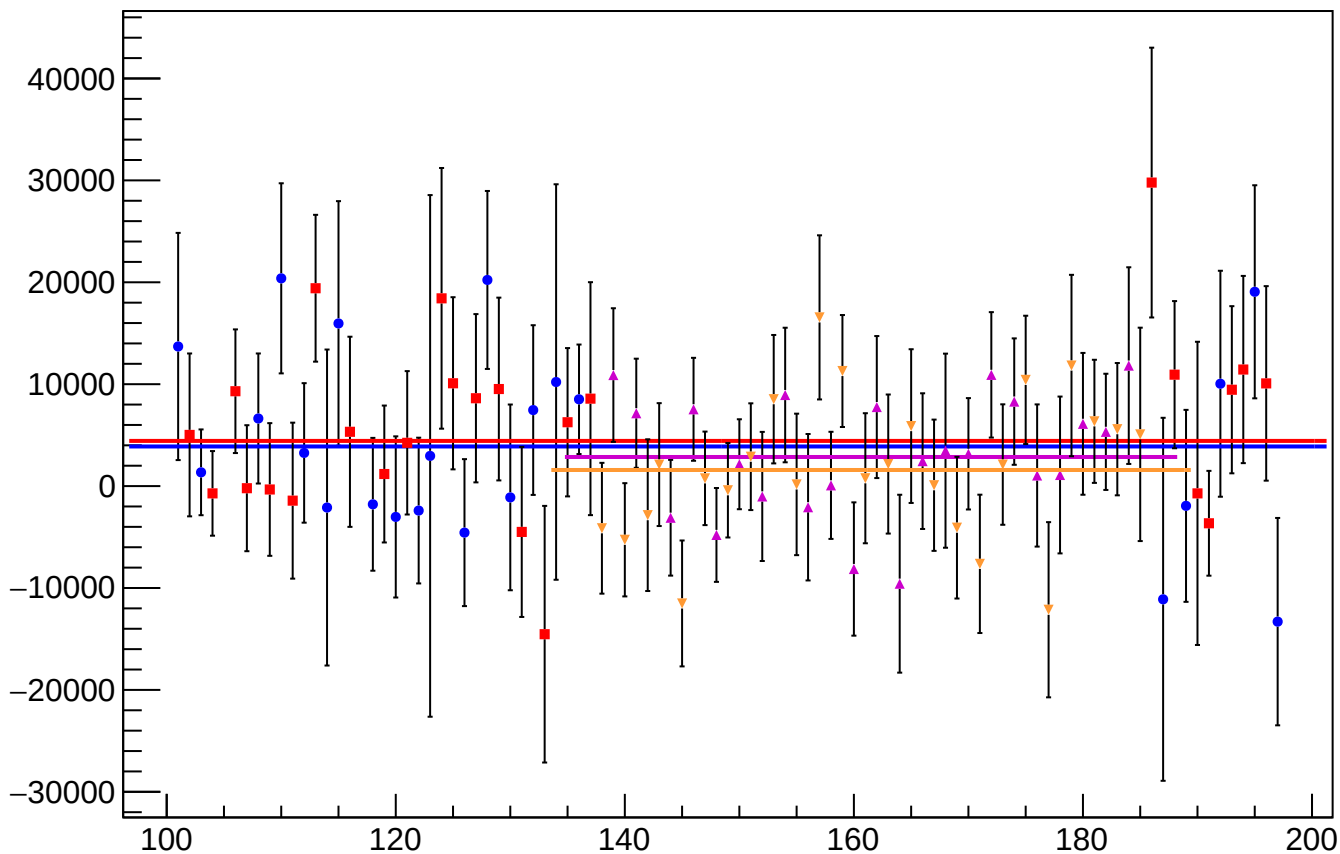
In: 5135.341+/-0.828  $\chi^2/\text{NDF}$ :1896788.9/27

Out: 8.433+/-0.011  $\chi^2/\text{NDF}$ :43854154.3/31

All: 9.290+/-0.011  $\chi^2/\text{NDF}$ : 84048610.3/59



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



Right In: 3888.000+/-1737.875  $\chi^2/\text{NDF}$ : 20.5/21

Left Out: 1580.515+/-1266.098  $\chi^2/\text{NDF}$ : 25.2/24

Right Out: 4434.486+/-1507.346  $\chi^2/\text{NDF}$ : 22.7/24

Left In: 2856.480+/-1284.131  $\chi^2/\text{NDF}$ : 18.1/22

Left: 2209.475+/-901.574  $\chi^2/\text{NDF}$ : 43.8/47

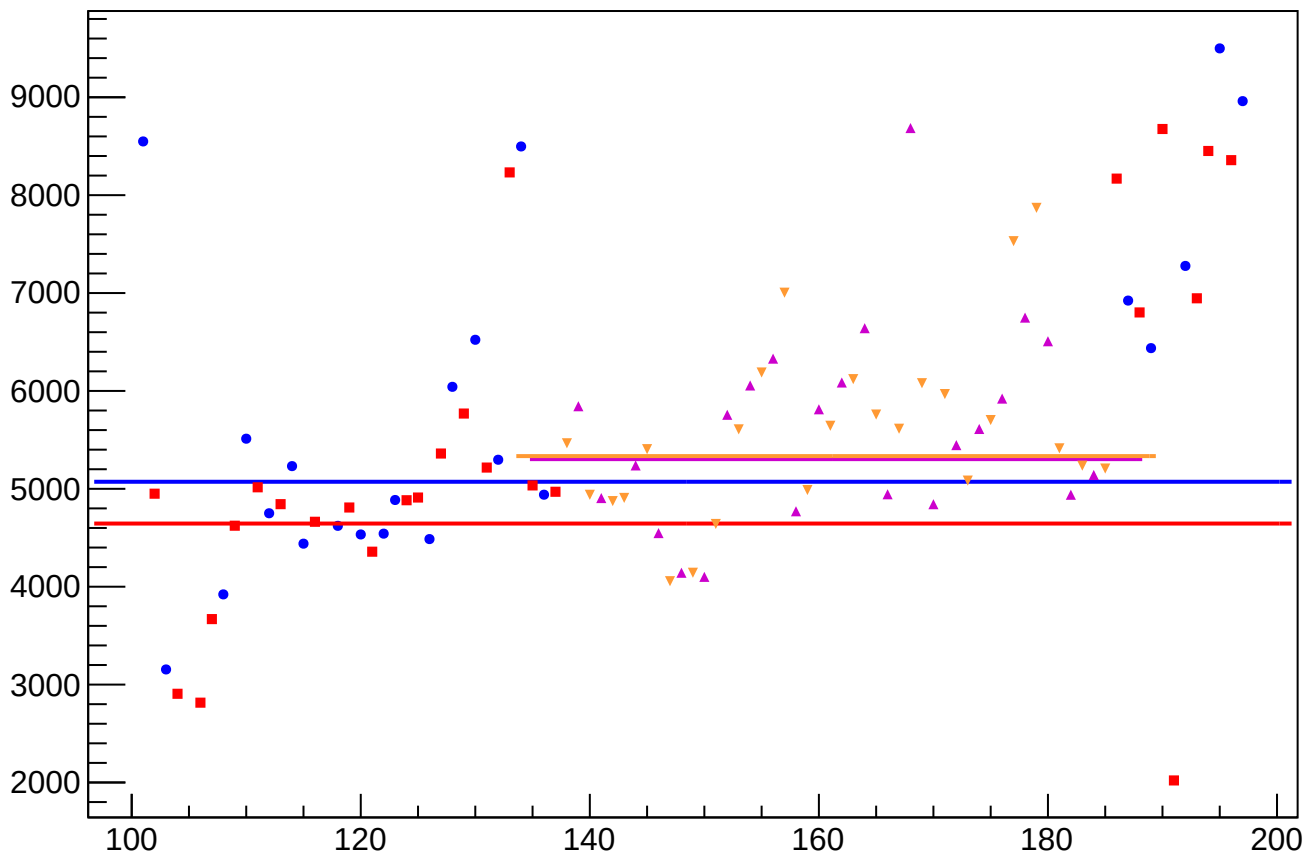
Right: 4199.869+/-1138.700  $\chi^2/\text{NDF}$ : 43.2/46

In: 3220.775+/-1032.777  $\chi^2/\text{NDF}$ : 38.8/44

Out: 2761.111+/-969.480  $\chi^2/\text{NDF}$ : 49.9/49

All: 2976.427+/-706.844  $\chi^2/\text{NDF}$ : 88.8/94

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



Right In: 5072.071+/-1.229  $\chi^2$ /NDF: 1666192.4/21

Left Out: 5334.221+/-0.895  $\chi^2$ /NDF:865414.3/24

Right Out: 4645.194+/-1.061  $\chi^2$ /NDF: 2641746.6/24

Left In: 5303.321+/-0.908  $\chi^2$ /NDF:960356.0/22

Left: 5318.989+/-0.638  $\chi^2$ /NDF: 1826357.5/47

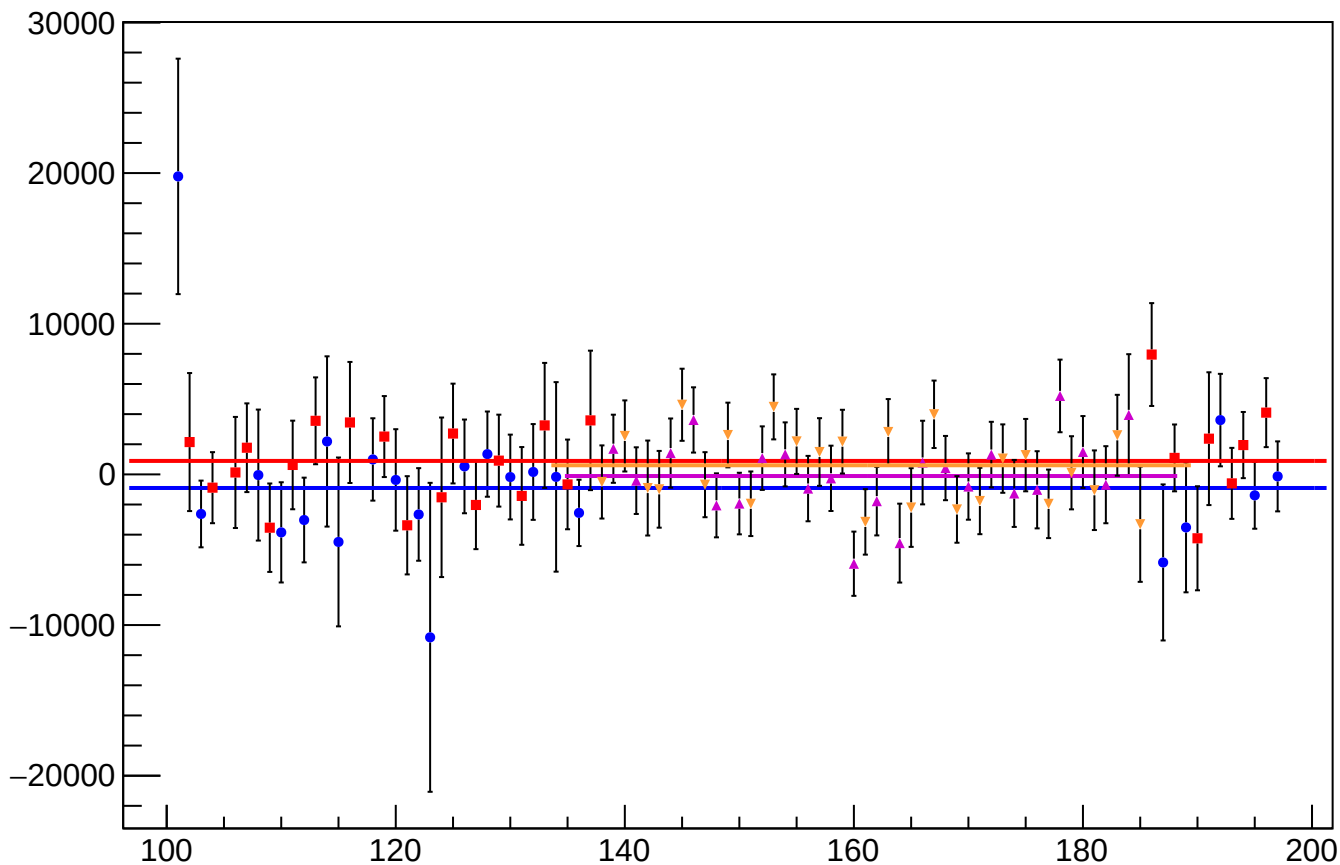
Right: 4827.536+/-0.803  $\chi^2$ /NDF: 4377064.3/46

In: 5221.652+/-0.730  $\chi^2$ /NDF:2649454.3/44

Out: 5047.712+/-0.684  $\chi^2$ /NDF:3753464.2/49

All: 5129.029+/-0.499  $\chi^2$ /NDF: 6433127.3/94

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



Right In:  $-902.332 \pm 680.074$   $\chi^2/\text{NDF}$ : 16.7/21

Left Out:  $605.796 \pm 469.397$   $\chi^2/\text{NDF}$ : 25.2/24

Right Out:  $893.890 \pm 605.379$   $\chi^2/\text{NDF}$ : 18.6/24

Left In:  $-108.365 \pm 477.899$   $\chi^2/\text{NDF}$ : 25.0/22

Left:  $255.125 \pm 334.879$   $\chi^2/\text{NDF}$ : 51.4/47

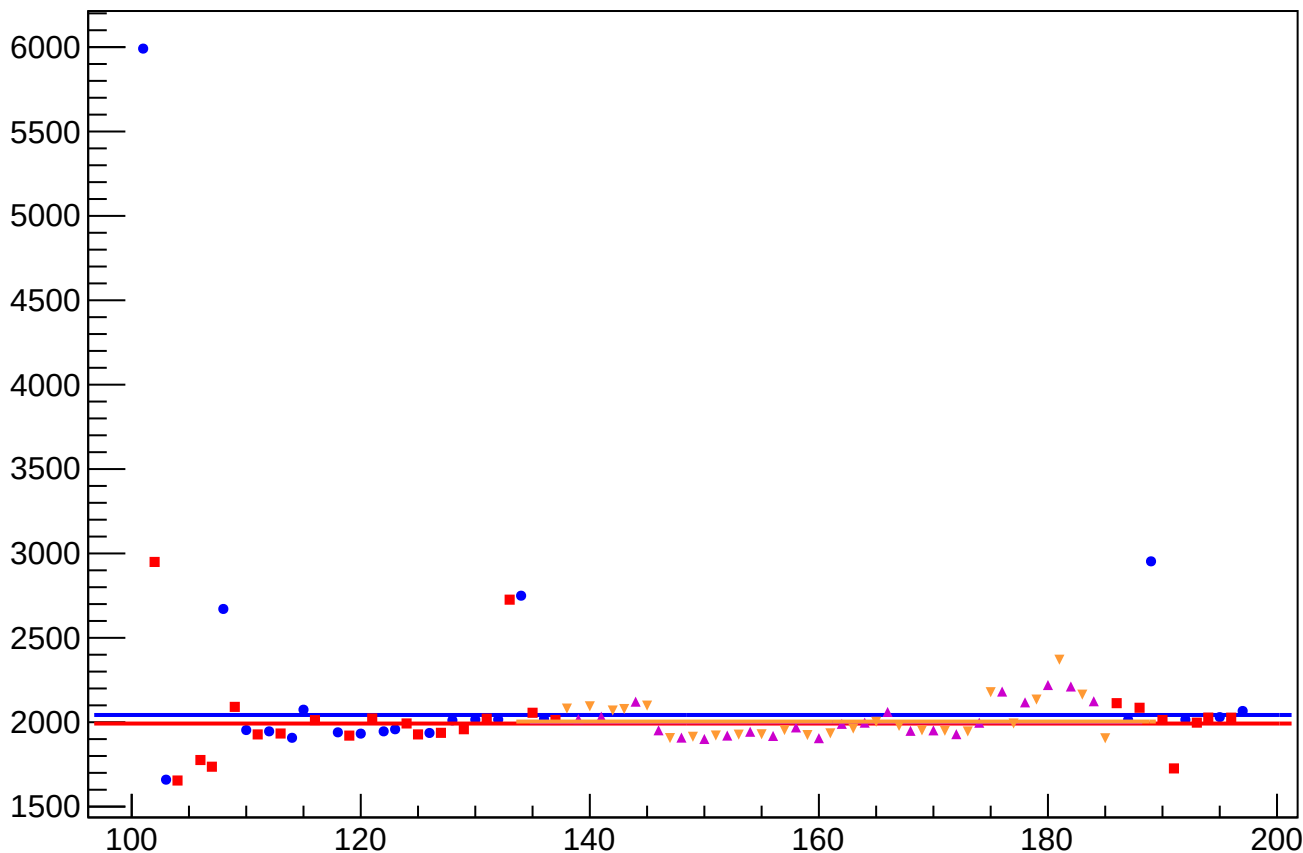
Right:  $99.802 \pm 452.179$   $\chi^2/\text{NDF}$ : 39.1/46

In:  $-370.827 \pm 391.010$   $\chi^2/\text{NDF}$ : 42.6/44

Out:  $713.968 \pm 370.951$   $\chi^2/\text{NDF}$ : 43.9/49

All:  $200.109 \pm 269.114$   $\chi^2/\text{NDF}$ : 90.5/94

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



Right In: 2042.960 $\pm$ 0.481  $\chi^2$ /NDF: 742617.7/21

Left Out: 2003.987 $\pm$ 0.332  $\chi^2$ /NDF: 99981.7/24

Right Out: 1992.177 $\pm$ 0.428  $\chi^2$ /NDF: 236220.4/24

Left In: 2000.119 $\pm$ 0.338  $\chi^2$ /NDF: 79688.8/22

Left: 2002.088 $\pm$ 0.237  $\chi^2$ /NDF: 179737.2/47

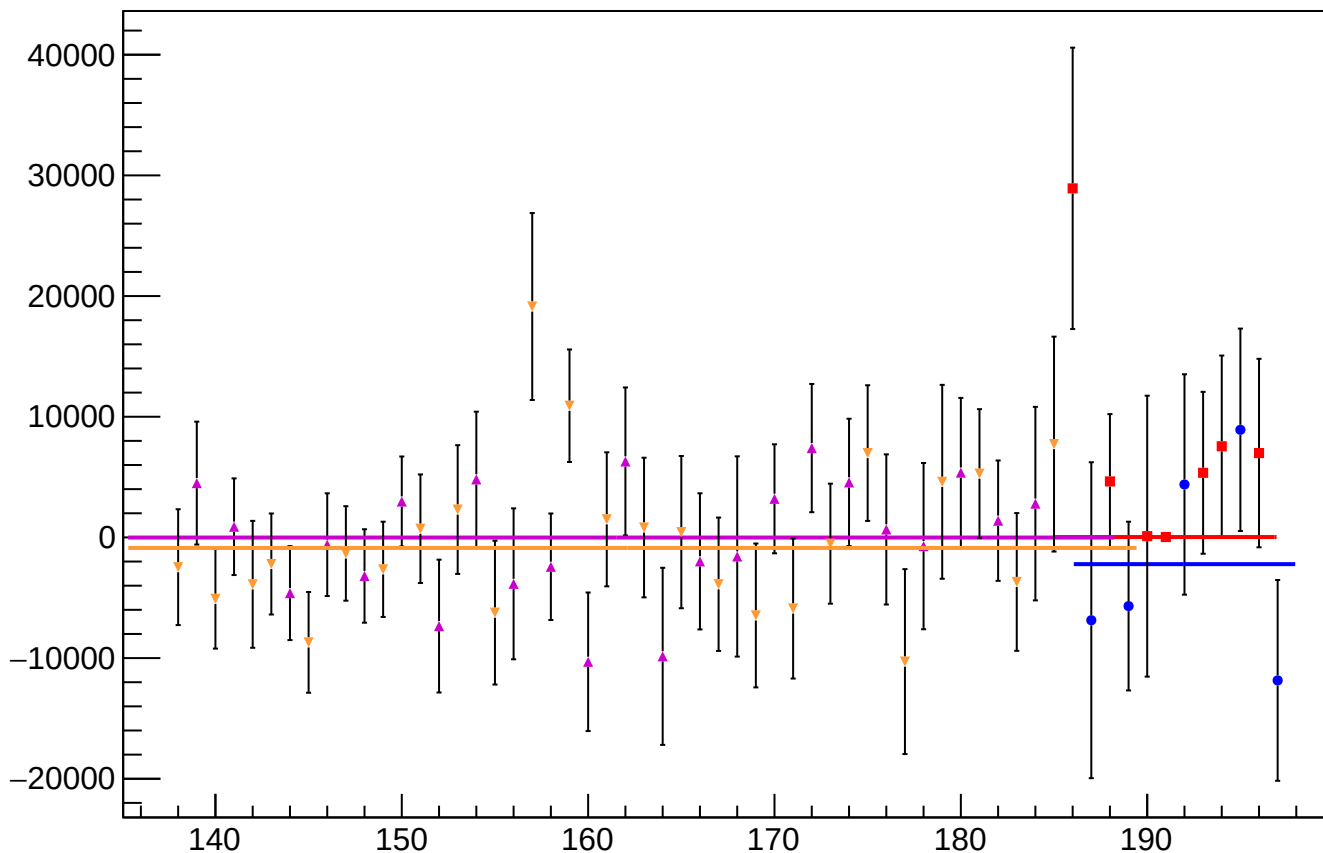
Right: 2014.611 $\pm$ 0.320  $\chi^2$ /NDF: 985063.8/46

In: 2014.281 $\pm$ 0.276  $\chi^2$ /NDF: 827619.6/44

Out: 1999.549 $\pm$ 0.262  $\chi^2$ /NDF: 336678.0/49

All: 2006.526 $\pm$ 0.190  $\chi^2$ /NDF: 1165792.1/94

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



Right In: -2215.151 $\pm$ 3864.755  $\chi^2$ /NDF: 4.0/4

Left Out: -871.296 $\pm$ 1043.390  $\chi^2$ /NDF:28.3/24

Right Out: 31.202 $\pm$ 14.261  $\chi^2$ /NDF: 9.2/6

Left In: -10.945 $\pm$ 1070.258  $\chi^2$ /NDF:17.2/22

Left: -452.055 $\pm$ 747.106  $\chi^2$ /NDF: 45.8/47

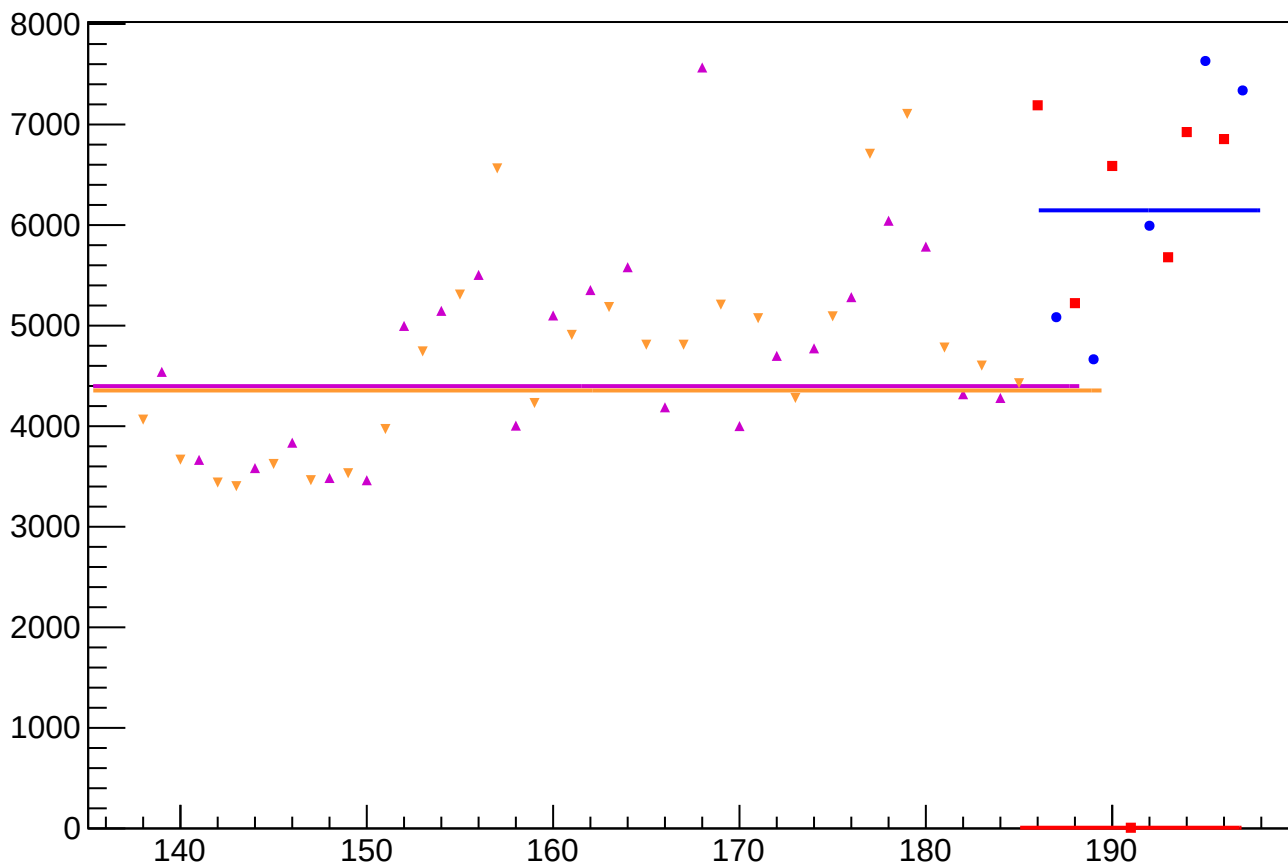
Right: 31.171 $\pm$ 14.261  $\chi^2$ /NDF: 13.6/11

In: -167.943 $\pm$ 1031.439  $\chi^2$ /NDF:21.5/27

Out: 31.033 $\pm$ 14.259  $\chi^2$ /NDF:38.3/31

All: 30.995 $\pm$ 14.258  $\chi^2$ /NDF: 59.8/59

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



Right In: 6146.425+/-2.733  $\chi^2/\text{NDF}$ : 207306.7/4

Left Out: 4355.202+/-0.738  $\chi^2/\text{NDF}$ :1350492.3/24

Right Out: 7.197+/-0.010  $\chi^2/\text{NDF}$ : 7809842.1/6

Left In: 4398.421+/-0.757  $\chi^2/\text{NDF}$ :1278784.1/22

Left: 4376.262+/-0.528  $\chi^2/\text{NDF}$ : 2630948.5/47

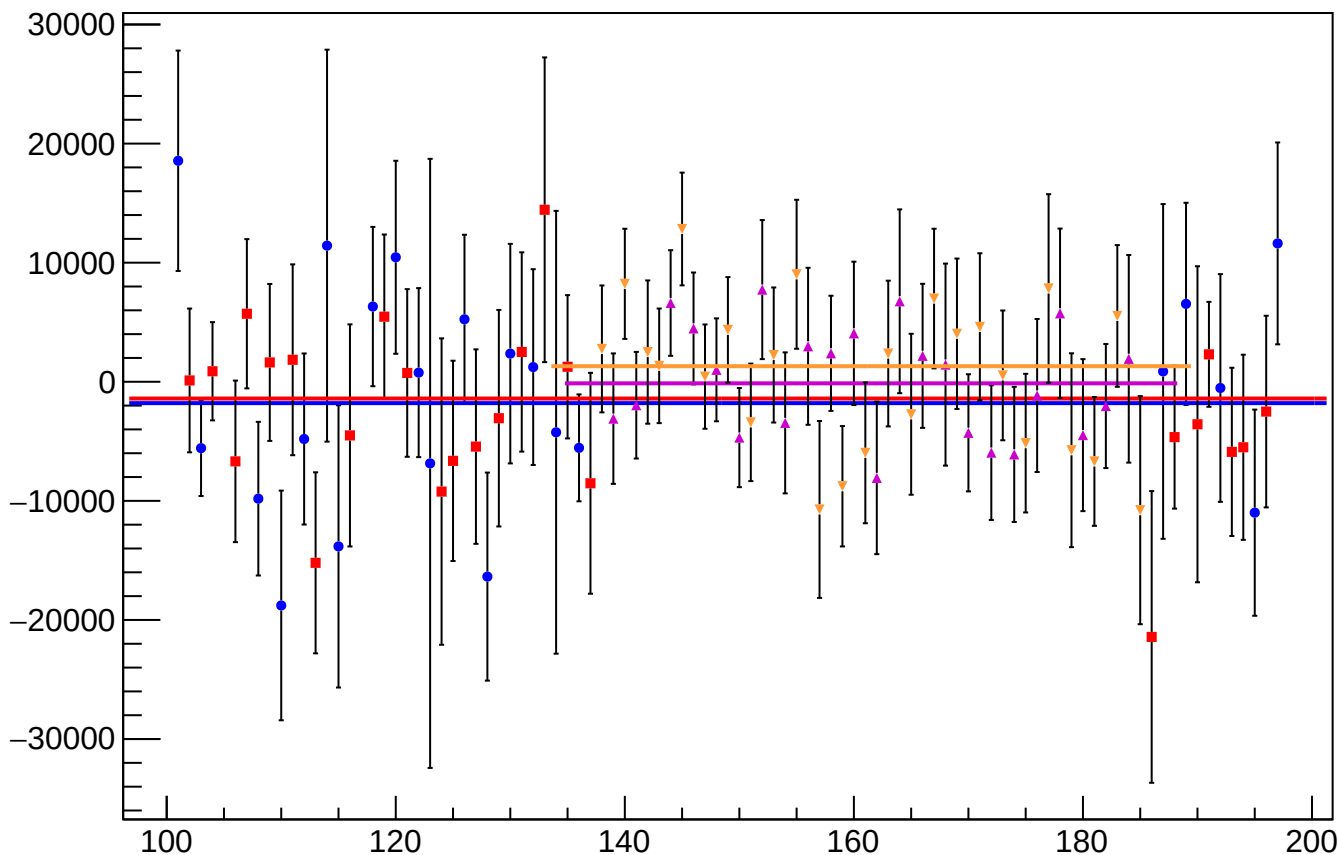
Right: 7.281+/-0.010  $\chi^2/\text{NDF}$ : 13063850.5/11

In: 4522.925+/-0.729  $\chi^2/\text{NDF}$ :1866088.2/27

Out: 8.009+/-0.010  $\chi^2/\text{NDF}$ :43884798.0/31

All: 8.872+/-0.010  $\chi^2/\text{NDF}$ : 84065063.8/59

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



Right In: -1793.622 $\pm$ 1651.321  $\chi^2$ /NDF: 25.6/21

Left Out: 1306.805 $\pm$ 1131.617  $\chi^2$ /NDF:28.1/24

Right Out: -1408.214 $\pm$ 1424.774  $\chi^2$ /NDF: 15.1/24

Left In: -131.428 $\pm$ 1157.282  $\chi^2$ /NDF:14.9/22

Left: 603.813 $\pm$ 809.096  $\chi^2$ /NDF: 43.8/47

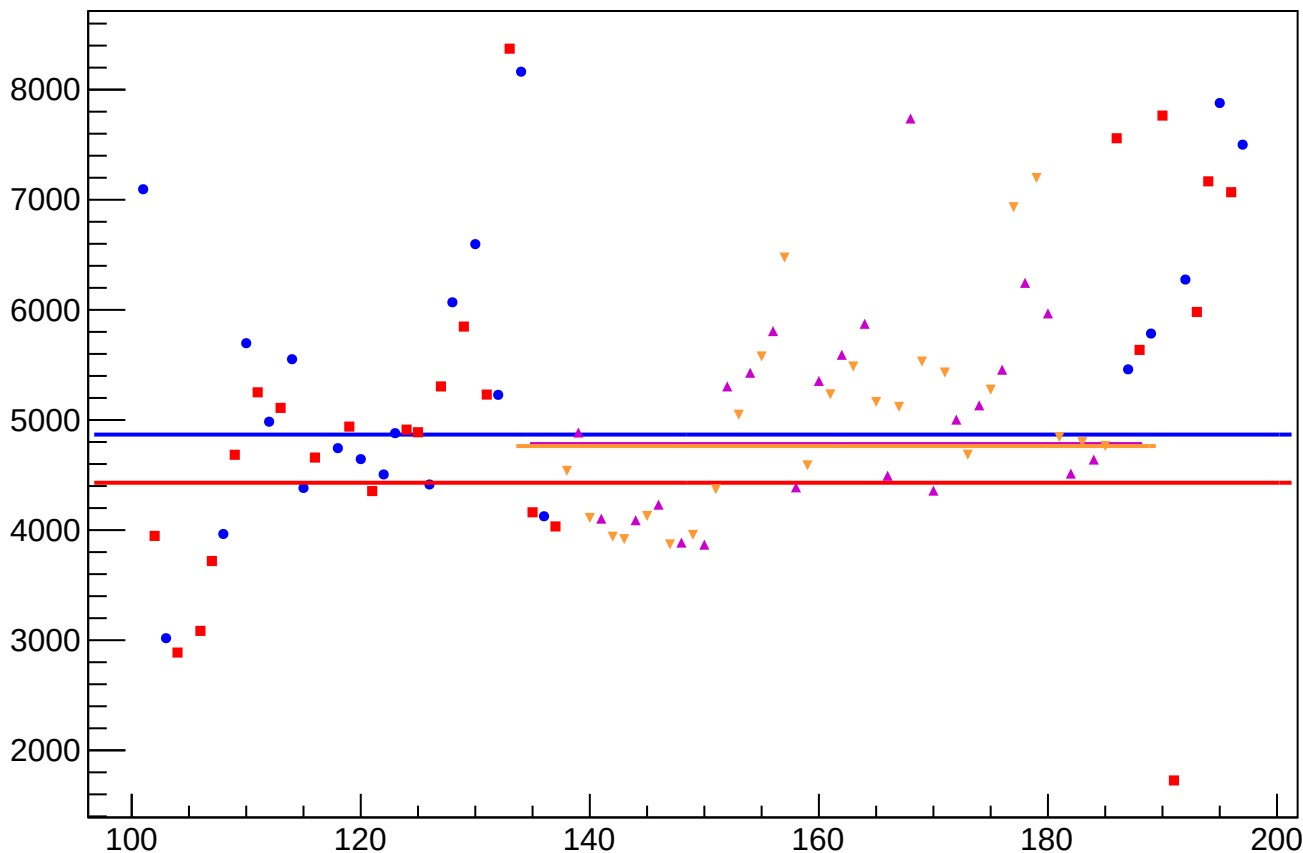
Right: -1572.687 $\pm$ 1078.743  $\chi^2$ /NDF: 40.8/46

In: -678.917 $\pm$ 947.716  $\chi^2$ /NDF:41.2/44

Out: 256.601 $\pm$ 886.128  $\chi^2$ /NDF:45.5/49

All: -179.775 $\pm$ 647.265  $\chi^2$ /NDF: 87.2/94

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



Right In: 4867.469 $\pm$ 1.168  $\chi^2/\text{NDF}$ : 1350859.0/21

Left Out: 4763.190 $\pm$ 0.800  $\chi^2/\text{NDF}$ :941856.9/24

Right Out: 4430.070 $\pm$ 1.003  $\chi^2/\text{NDF}$ : 2409638.9/24

Left In: 4781.172 $\pm$ 0.818  $\chi^2/\text{NDF}$ :951542.2/22

Left: 4771.979 $\pm$ 0.572  $\chi^2/\text{NDF}$ : 1893645.9/47

Right: 4615.883 $\pm$ 0.761  $\chi^2/\text{NDF}$ : 3841208.5/46

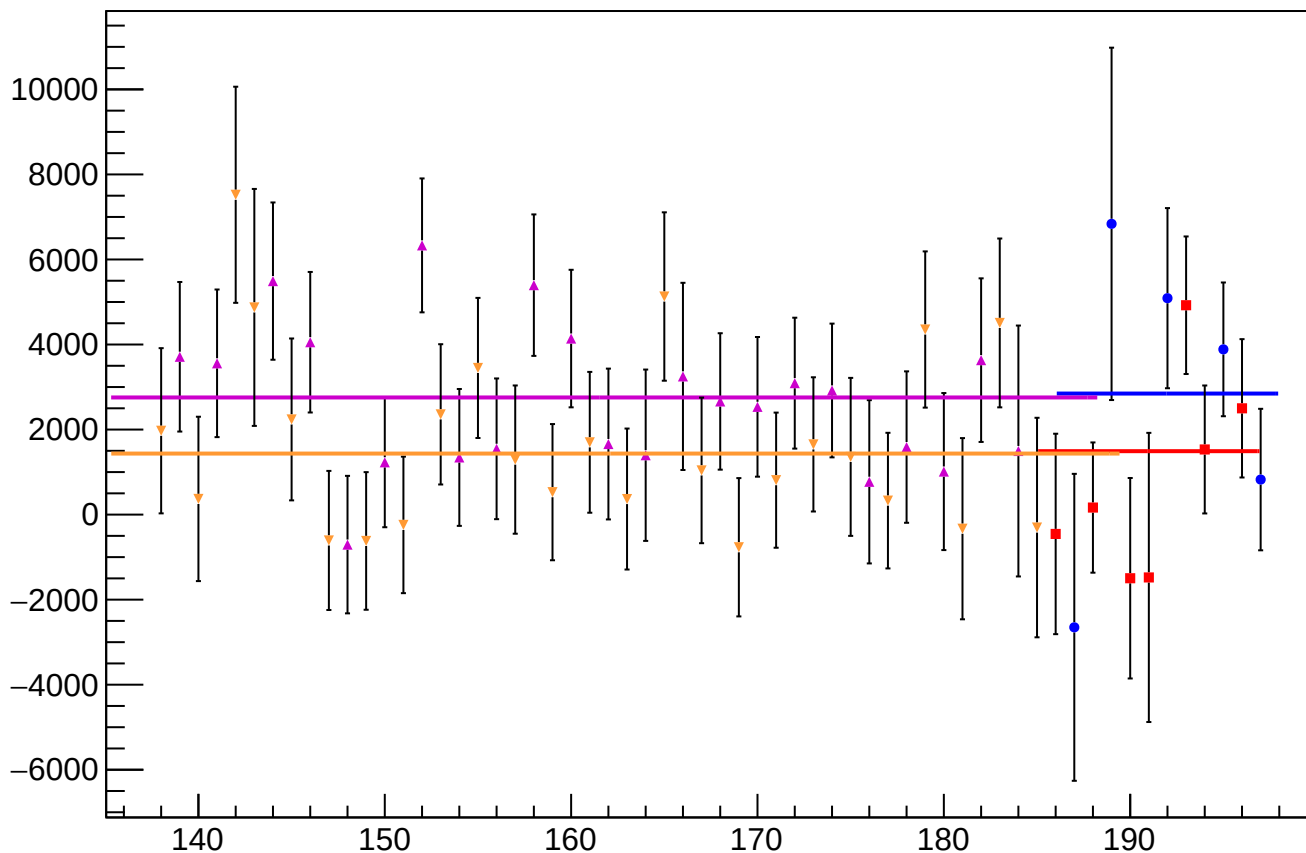
In: 4809.596 $\pm$ 0.670  $\chi^2/\text{NDF}$ :2306064.2/44

Out: 4633.709 $\pm$ 0.626  $\chi^2/\text{NDF}$ :3418861.2/49

All: 4715.618 $\pm$ 0.457  $\chi^2/\text{NDF}$ : 5761733.0/94



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



Right In: 2846.742 $\pm$ 943.498  $\chi^2$ /NDF: 6.3/4

Left Out: 1435.504 $\pm$ 358.178  $\chi^2$ /NDF:26.7/24

Right Out: 1491.767 $\pm$ 694.252  $\chi^2$ /NDF: 8.7/6

Left In: 2754.889 $\pm$ 361.672  $\chi^2$ /NDF:22.4/22

Left: 2088.793 $\pm$ 254.496  $\chi^2$ /NDF: 55.8/47

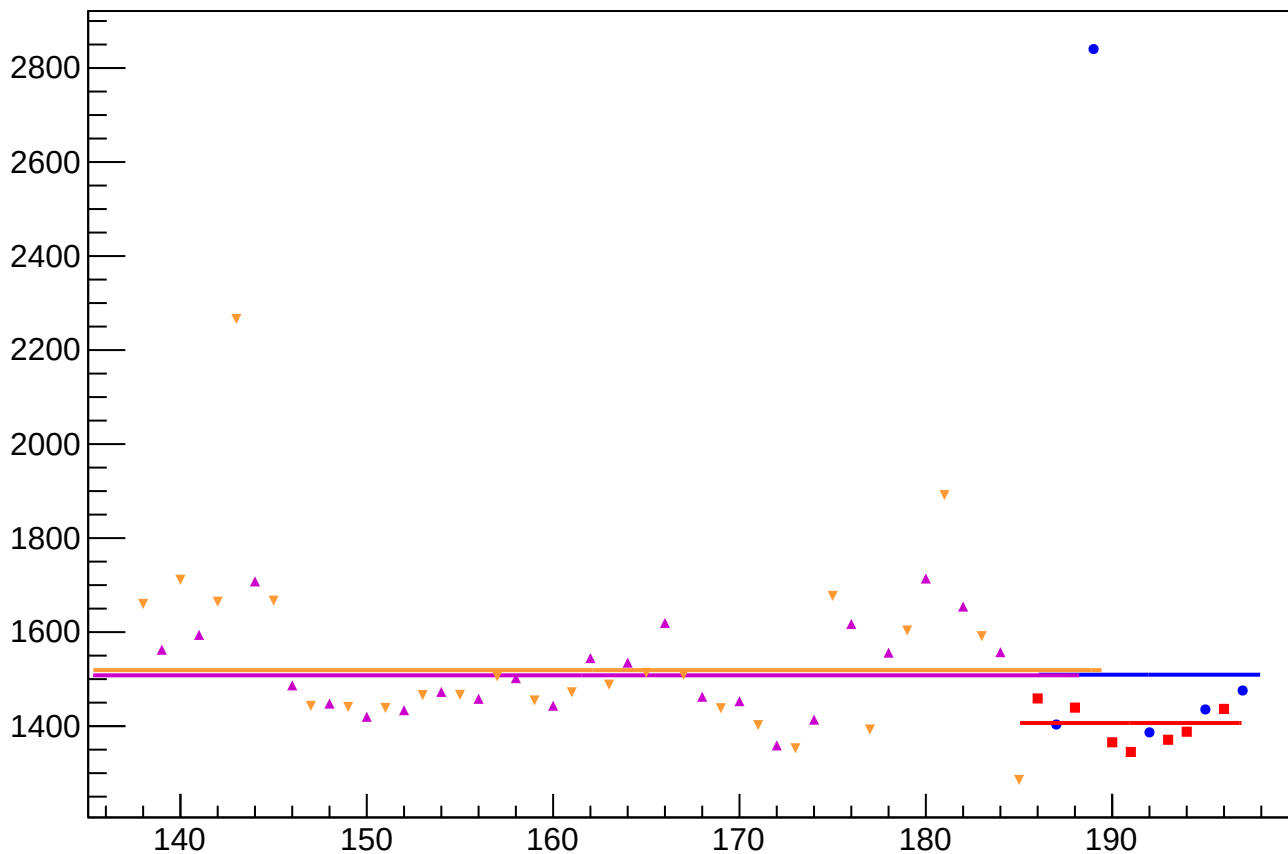
Right: 1967.711 $\pm$ 559.182  $\chi^2$ /NDF: 16.3/11

In: 2766.657 $\pm$ 337.710  $\chi^2$ /NDF:28.6/27

Out: 1447.331 $\pm$ 318.311  $\chi^2$ /NDF:35.4/31

All: 2068.016 $\pm$ 231.635  $\chi^2$ /NDF: 72.2/59

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



Right In: 1509.426 $\pm$ 0.667  $\chi^2/\text{NDF}$ : 220038.5/4

Left Out: 1519.092 $\pm$ 0.253  $\chi^2/\text{NDF}$ : 365839.2/24

Right Out: 1406.752 $\pm$ 0.491  $\chi^2/\text{NDF}$ : 5113.6/6

Left In: 1508.111 $\pm$ 0.256  $\chi^2/\text{NDF}$ : 131488.7/22

Left: 1513.655 $\pm$ 0.180  $\chi^2/\text{NDF}$ : 498258.6/47

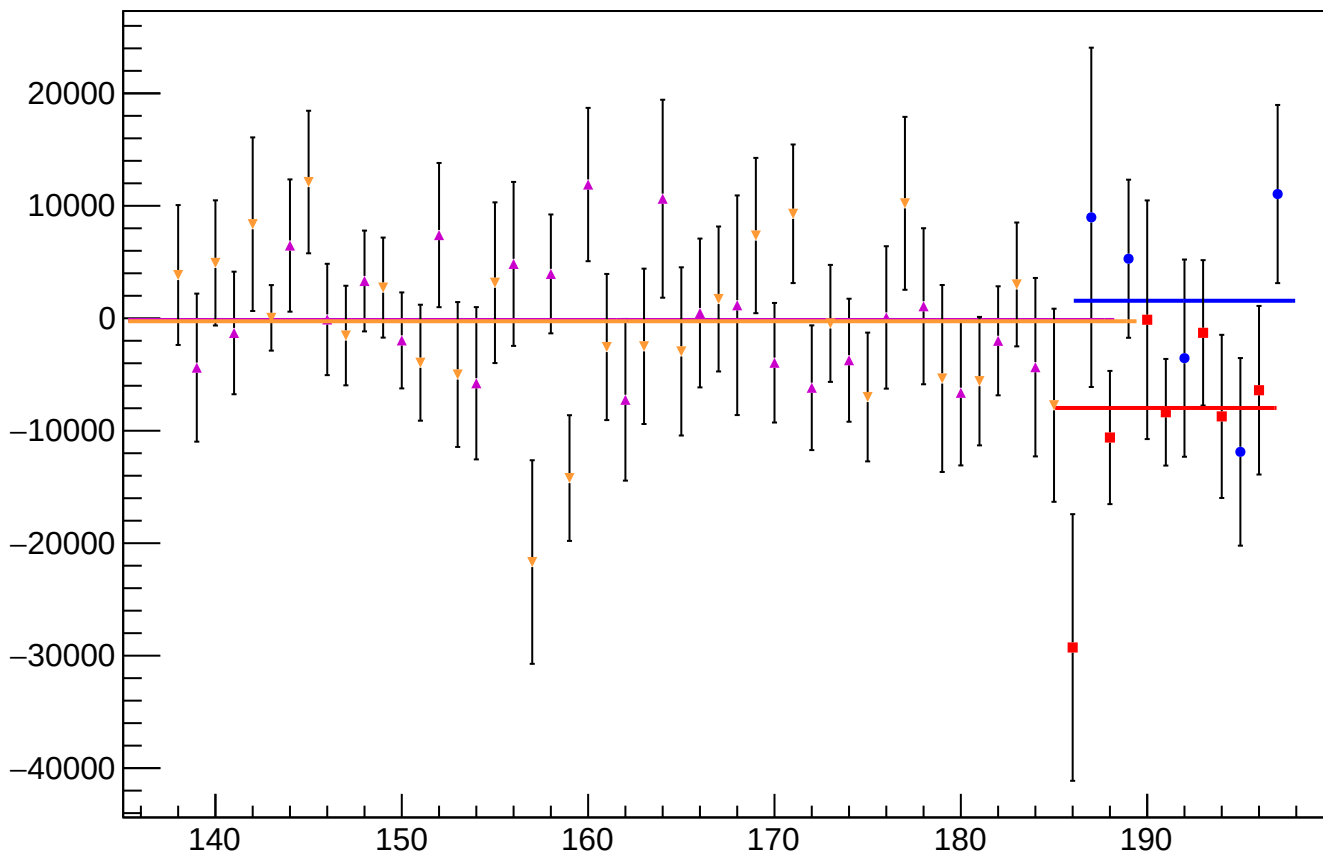
Right: 1442.817 $\pm$ 0.395  $\chi^2/\text{NDF}$ : 240517.3/11

In: 1508.280 $\pm$ 0.239  $\chi^2/\text{NDF}$ : 351530.5/27

Out: 1495.476 $\pm$ 0.225  $\chi^2/\text{NDF}$ : 412311.7/31

All: 1501.500 $\pm$ 0.164  $\chi^2/\text{NDF}$ : 765364.6/59

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



Right In: 1557.543 $\pm$ 3836.337  $\chi^2$ /NDF: 4.9/4

Left Out: -264.324 $\pm$ 1151.119  $\chi^2$ /NDF:29.7/24

Right Out: -7975.126 $\pm$ 2584.094  $\chi^2$ /NDF: 5.1/6

Left In: -151.239 $\pm$ 1241.800  $\chi^2$ /NDF:14.9/22

Left: -212.060 $\pm$ 844.204  $\chi^2$ /NDF: 44.6/47

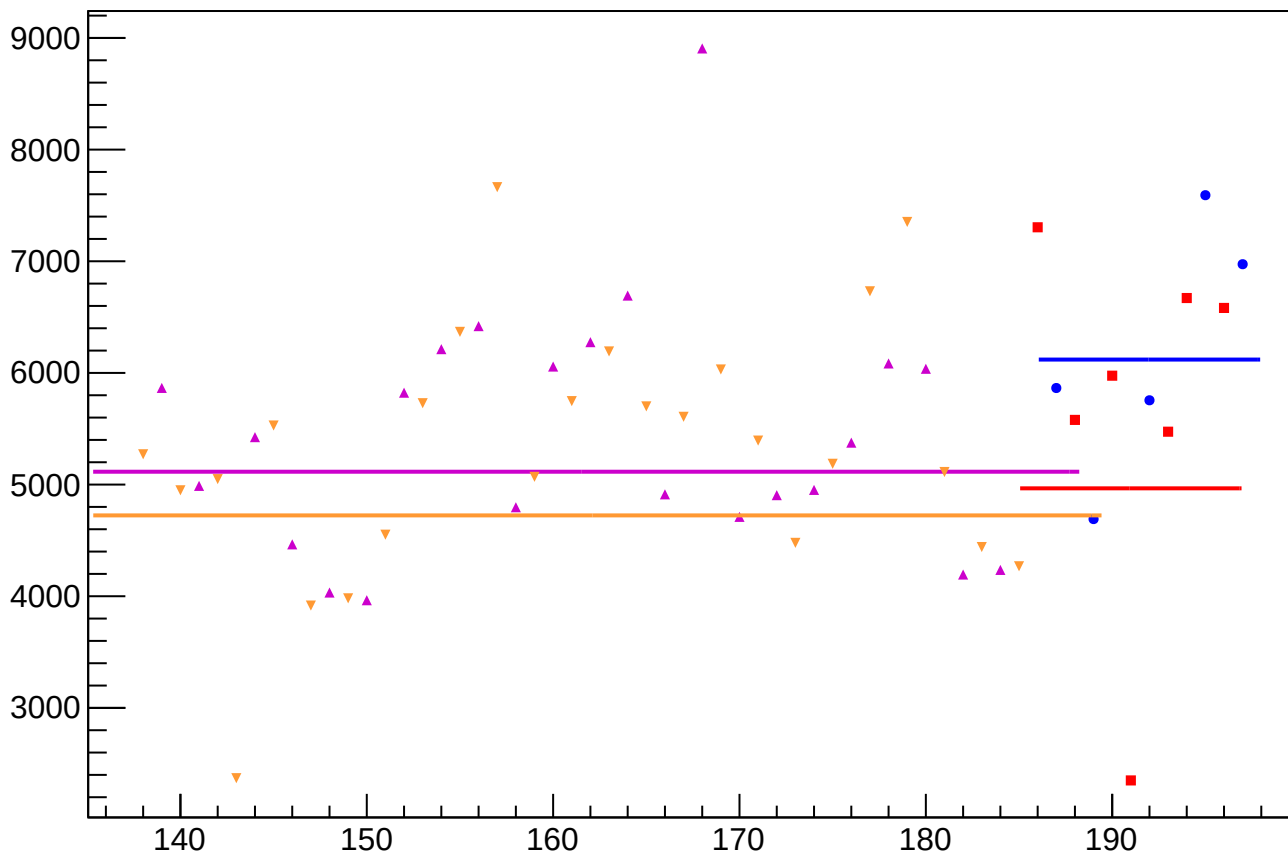
Right: -4999.910 $\pm$ 2143.230  $\chi^2$ /NDF: 14.2/11

In: 10.823 $\pm$ 1181.447  $\chi^2$ /NDF:19.9/27

Out: -1541.080 $\pm$ 1051.508  $\chi^2$ /NDF:42.2/31

All: -855.131 $\pm$ 785.467  $\chi^2$ /NDF: 63.1/59

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



Right In: 6119.586 $\pm$ 2.713  $\chi^2$ /NDF: 172160.5/4

Left Out: 4724.027 $\pm$ 0.814  $\chi^2$ /NDF: 2537532.1/24

Right Out: 4966.328 $\pm$ 1.827  $\chi^2$ /NDF: 941901.4/6

Left In: 5115.139 $\pm$ 0.878  $\chi^2$ /NDF: 1131347.2/22

Left: 4904.783 $\pm$ 0.597  $\chi^2$ /NDF: 3775584.1/47

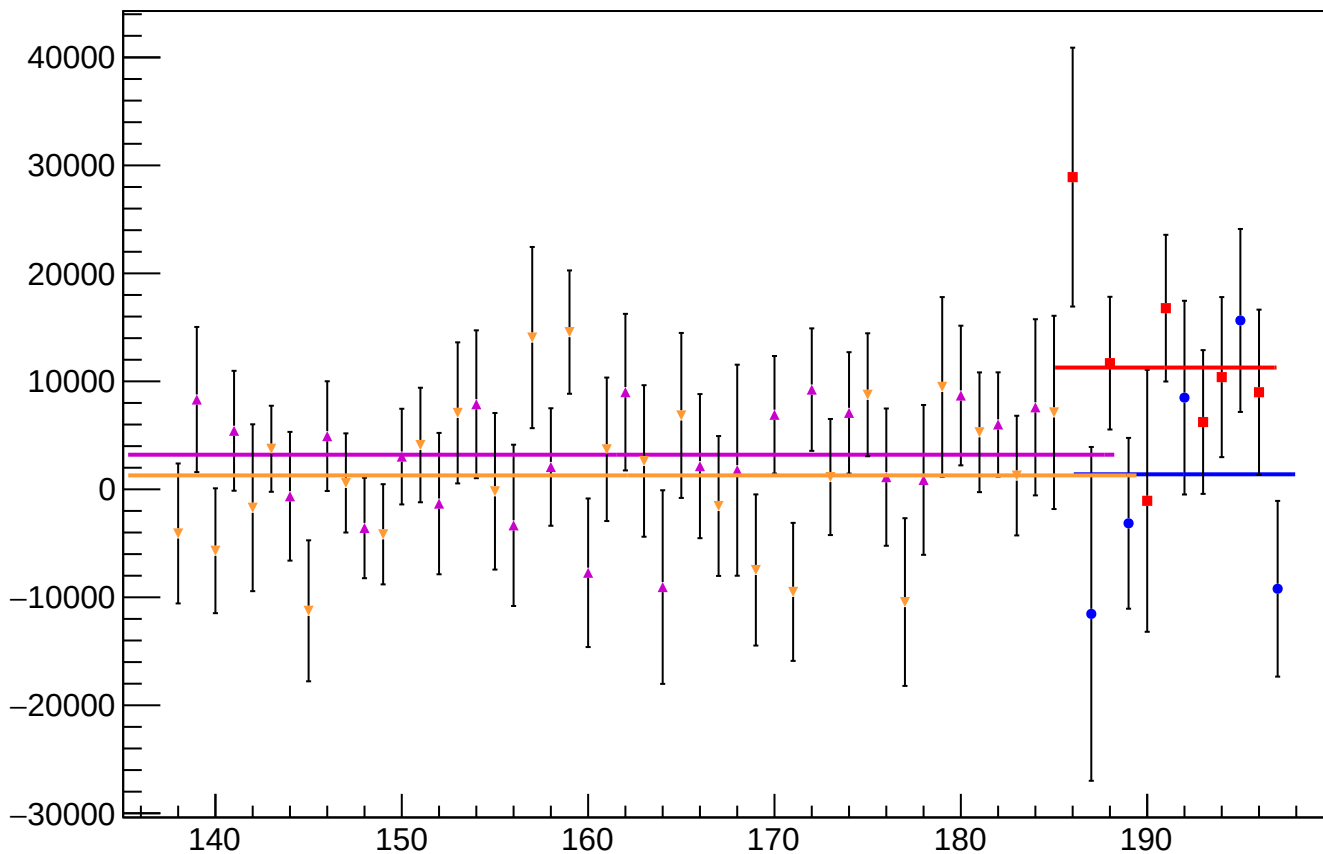
Right: 5326.268 $\pm$ 1.515  $\chi^2$ /NDF: 1238390.1/11

In: 5210.402 $\pm$ 0.835  $\chi^2$ /NDF: 1427608.5/27

Out: 4764.147 $\pm$ 0.744  $\chi^2$ /NDF: 3494106.2/31

All: 4961.394 $\pm$ 0.555  $\chi^2$ /NDF: 5080934.6/59

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



Right In: 1390.790+/-4028.331  $\chi^2/\text{NDF}$ : 6.2/4

Left Out: 1292.246+/-1215.761  $\chi^2/\text{NDF}$ : 27.8/24

Right Out: 11276.398+/-2889.507  $\chi^2/\text{NDF}$ : 4.5/6

Left In: 3205.363+/-1265.586  $\chi^2/\text{NDF}$ : 13.9/22

Left: 2210.405+/-876.758  $\chi^2/\text{NDF}$ : 42.9/47

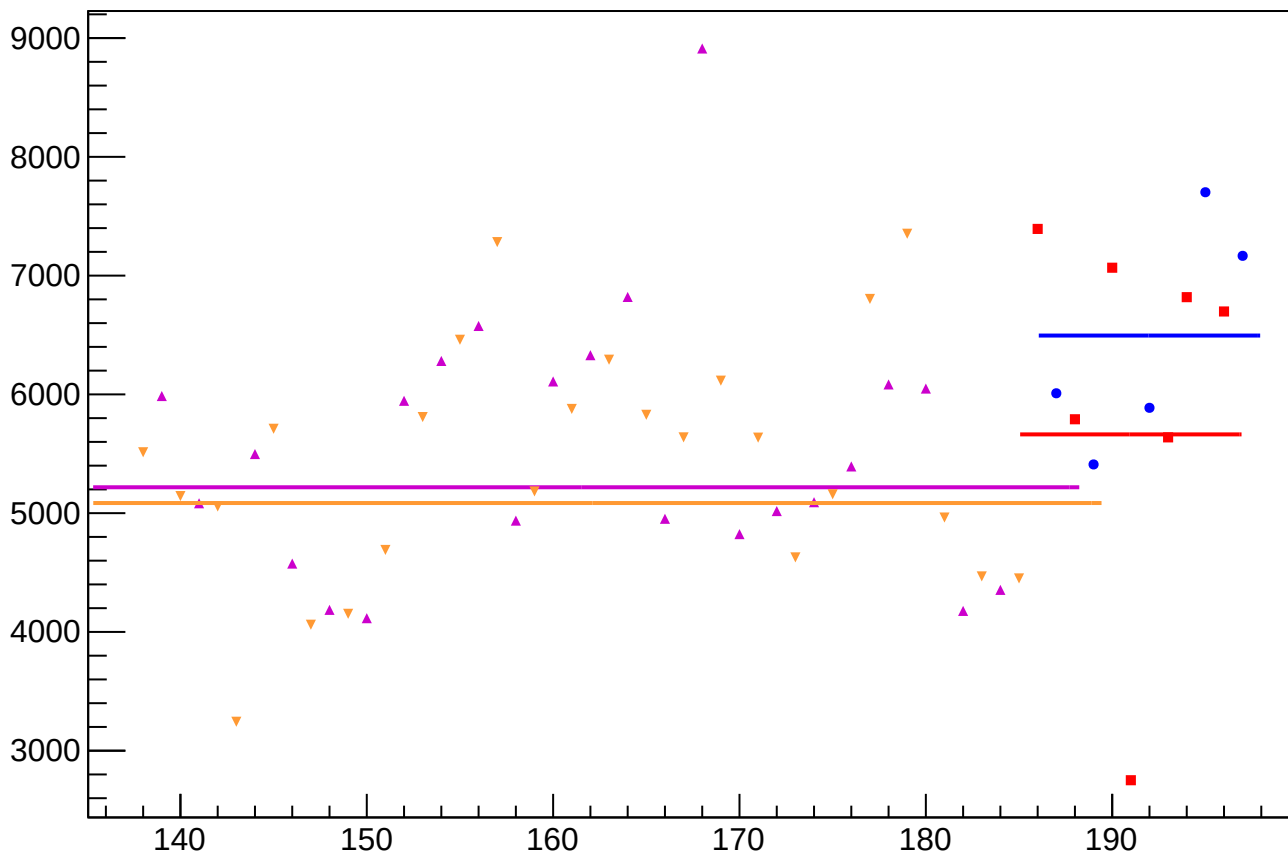
Right: 7918.037+/-2347.941  $\chi^2/\text{NDF}$ : 14.7/11

In: 3042.348+/-1207.401  $\chi^2/\text{NDF}$ : 20.2/27

Out: 2793.908+/-1120.610  $\chi^2/\text{NDF}$ : 42.5/31

All: 2908.879+/-821.361  $\chi^2/\text{NDF}$ : 62.7/59

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



Right In: 6495.421+/-2.848  $\chi^2/\text{NDF}$ : 102982.2/4

Left Out: 5085.307+/-0.860  $\chi^2/\text{NDF}$ :1356698.4/24

Right Out: 5663.212+/-2.043  $\chi^2/\text{NDF}$ : 521978.4/6

Left In: 5217.971+/-0.895  $\chi^2/\text{NDF}$ :1058996.1/22

Left: 5148.976+/-0.620  $\chi^2/\text{NDF}$ : 2427123.8/47

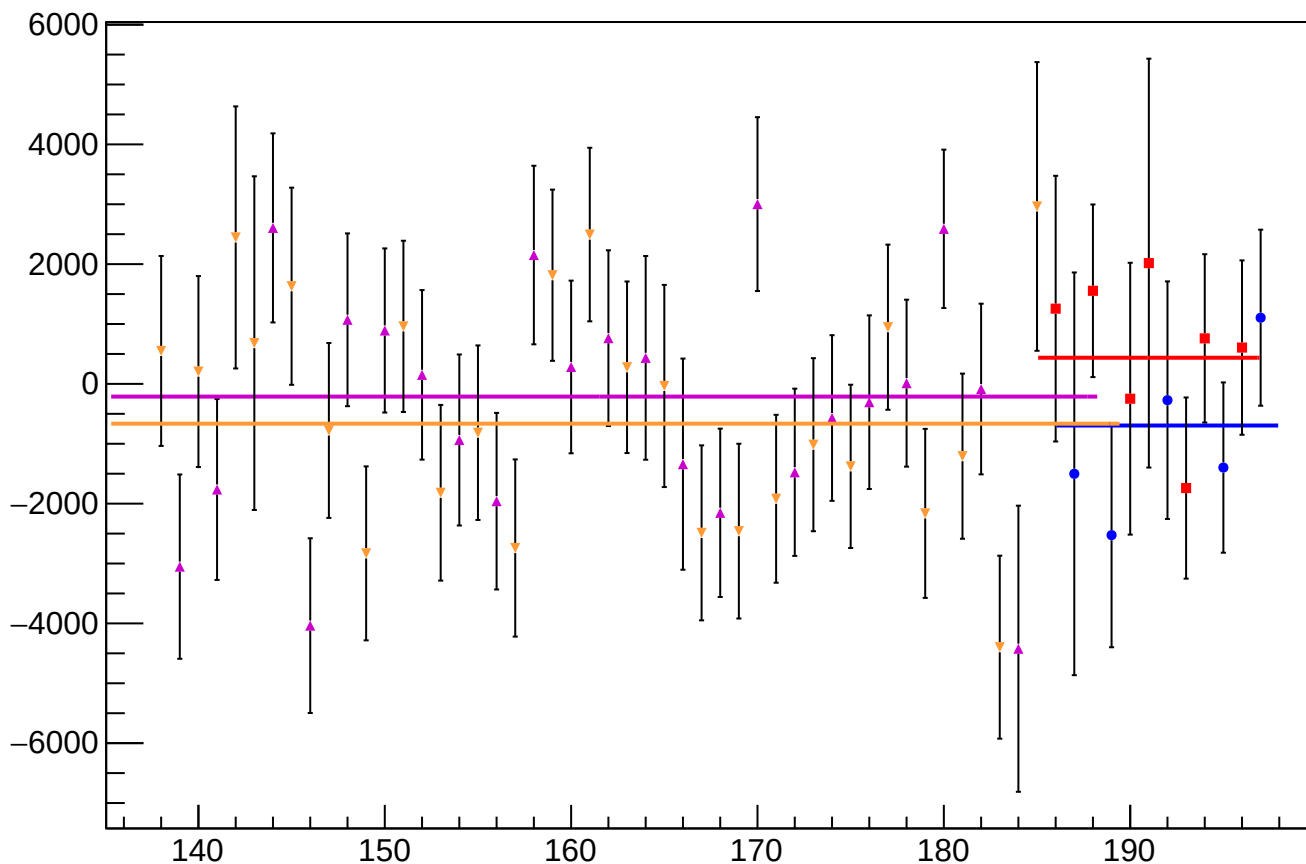
Right: 5945.931+/-1.660  $\chi^2/\text{NDF}$ : 681320.6/11

In: 5332.733+/-0.854  $\chi^2/\text{NDF}$ :1345035.5/27

Out: 5172.227+/-0.792  $\chi^2/\text{NDF}$ :1946645.6/31

All: 5246.504+/-0.581  $\chi^2/\text{NDF}$ : 3310668.7/59

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



Right In: -695.216+/-794.334  $\chi^2/\text{NDF}$ : 2.8/4

Left Out: -664.362+/-305.119  $\chi^2/\text{NDF}$ :34.6/24

Right Out: 436.845+/-648.354  $\chi^2/\text{NDF}$ : 3.2/6

Left In: -212.071+/-308.597  $\chi^2/\text{NDF}$ :36.6/22

Left: -440.780+/-216.971  $\chi^2/\text{NDF}$ : 72.3/47

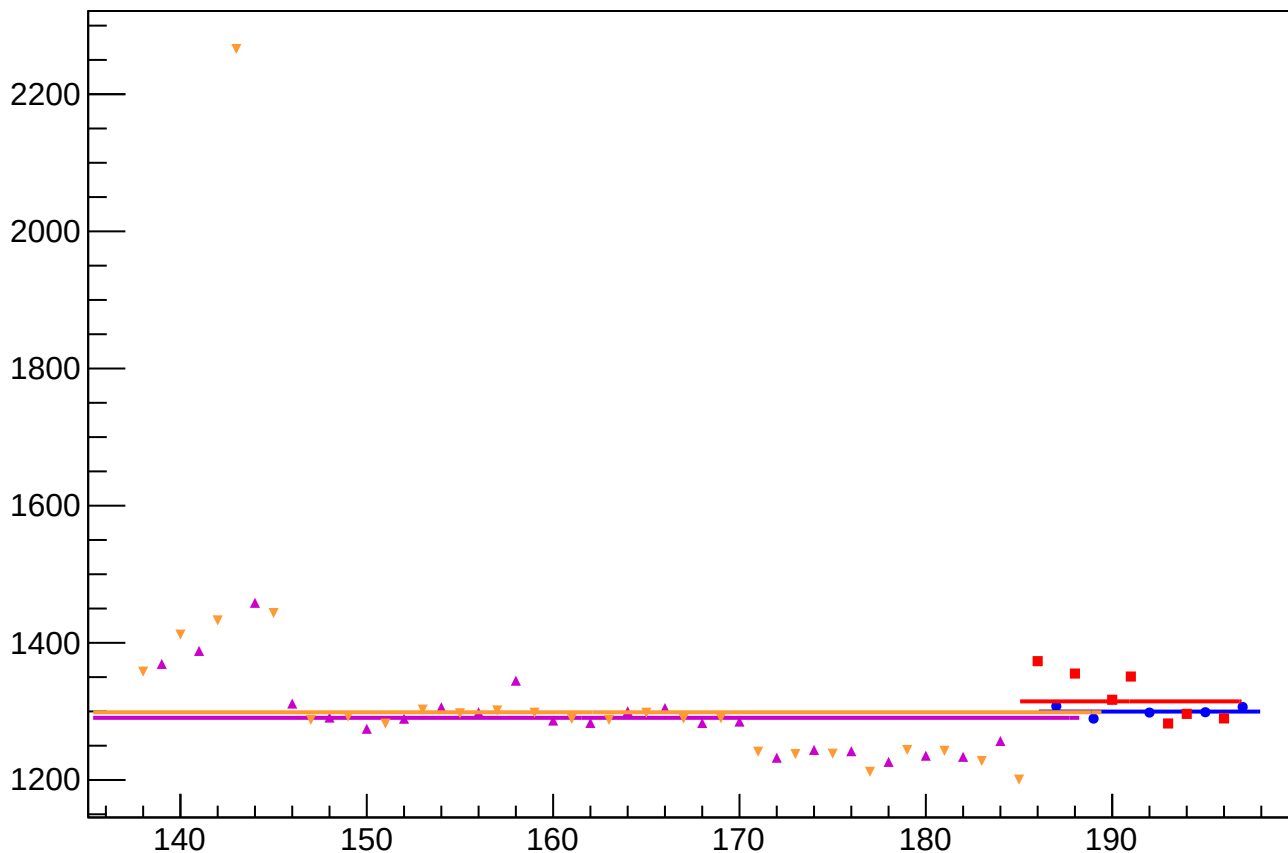
Right: -15.797+/-502.280  $\chi^2/\text{NDF}$ : 7.2/11

In: -275.430+/-287.652  $\chi^2/\text{NDF}$ :39.8/27

Out: -464.698+/-276.075  $\chi^2/\text{NDF}$ :40.2/31

All: -373.949+/-199.182  $\chi^2/\text{NDF}$ : 80.1/59

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



Right In:  $1299.768 \pm 0.562$   $\chi^2/\text{NDF}: 113.7/4$

Left Out:  $1298.743 \pm 0.216$   $\chi^2/\text{NDF}: 310344.8/24$

Right Out:  $1314.618 \pm 0.458$   $\chi^2/\text{NDF}: 5035.0/6$

Left In:  $1290.644 \pm 0.218$   $\chi^2/\text{NDF}: 59427.8/22$

Left:  $1294.740 \pm 0.153$   $\chi^2/\text{NDF}: 370469.1/47$

Right:  $1308.681 \pm 0.355$   $\chi^2/\text{NDF}: 5568.2/11$

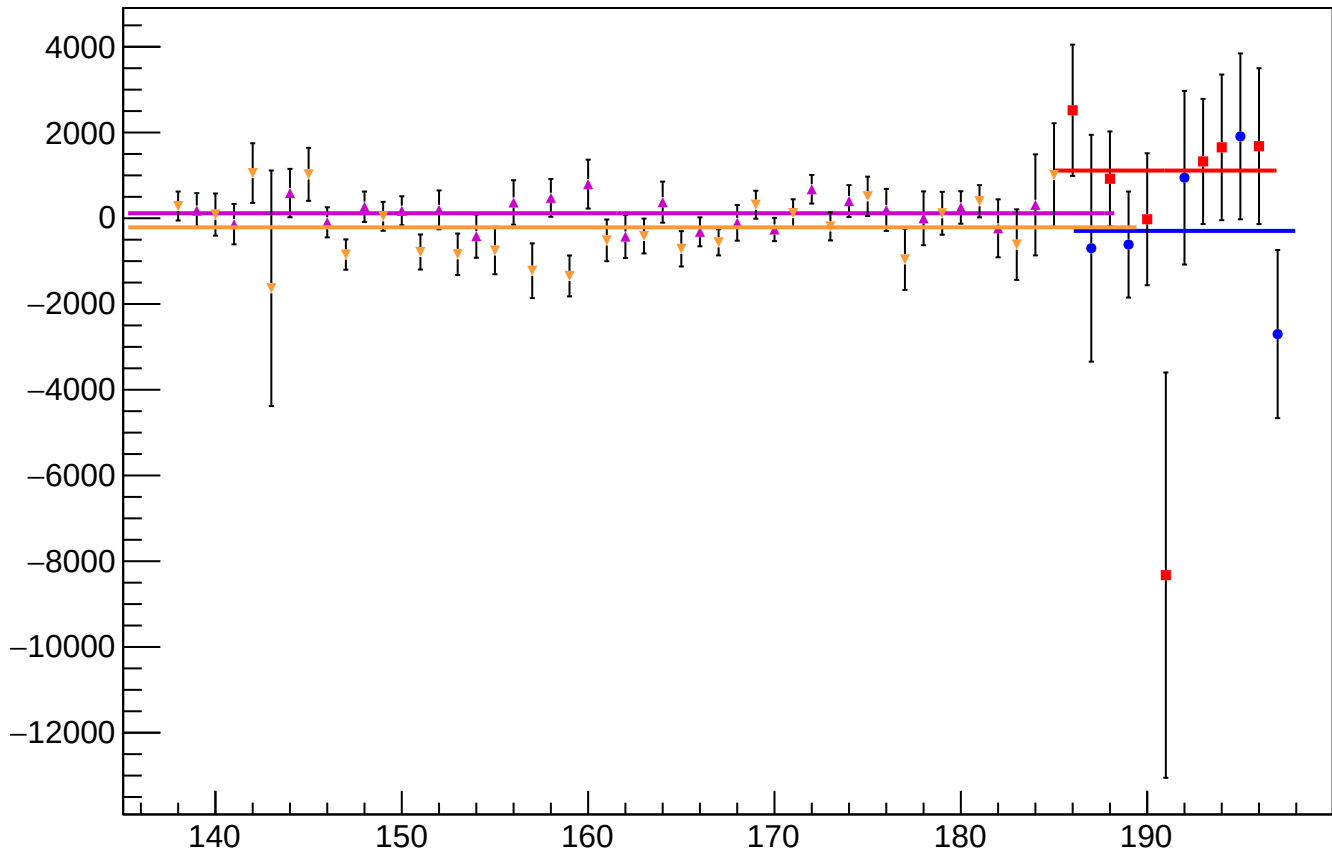
In:  $1291.841 \pm 0.203$   $\chi^2/\text{NDF}: 59770.7/27$

Out:  $1301.622 \pm 0.195$   $\chi^2/\text{NDF}: 316361.4/31$

All:  $1296.932 \pm 0.141$   $\chi^2/\text{NDF}: 377335.8/59$



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



Right In:  $-294.591 \pm 798.784$   $\chi^2/\text{NDF}$ : 3.3/4

Left Out:  $-211.646 \pm 87.670$   $\chi^2/\text{NDF}$ : 41.7/24

Right Out:  $1112.924 \pm 594.231$   $\chi^2/\text{NDF}$ : 5.6/6

Left In:  $117.113 \pm 88.214$   $\chi^2/\text{NDF}$ : 14.3/22

Left:  $-48.284 \pm 62.183$   $\chi^2/\text{NDF}$ : 63.0/47

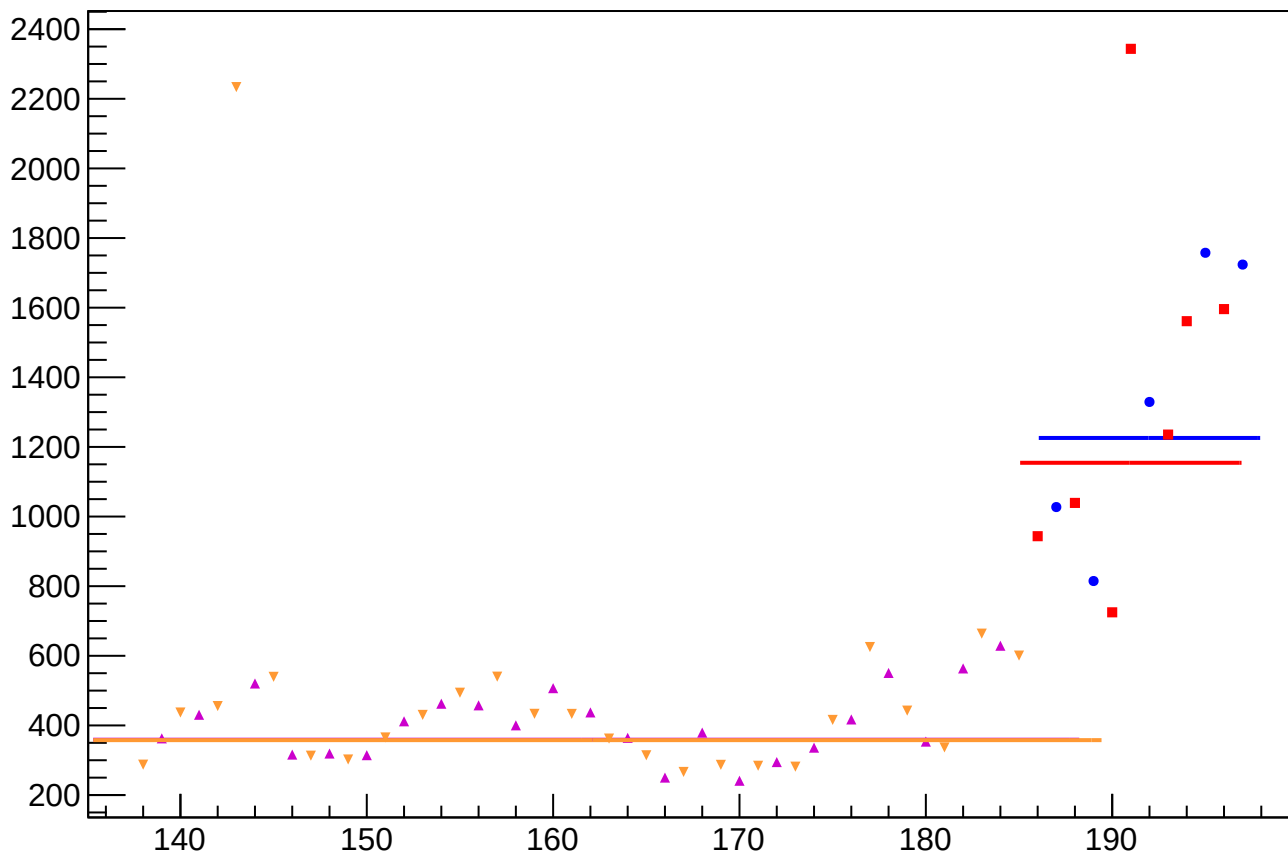
Right:  $611.486 \pm 476.773$   $\chi^2/\text{NDF}$ : 10.9/11

In:  $112.153 \pm 87.681$   $\chi^2/\text{NDF}$ : 17.8/27

Out:  $-183.429 \pm 86.731$   $\chi^2/\text{NDF}$ : 52.2/31

All:  $-37.248 \pm 61.661$   $\chi^2/\text{NDF}$ : 75.7/59

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



Right In: 1225.772+/-0.565  $\chi^2/\text{NDF}$ : 517360.0/4

Left Out: 357.749+/-0.062  $\chi^2/\text{NDF}$ : 3042055.7/24

Right Out: 1154.432+/-0.420  $\chi^2/\text{NDF}$ : 580846.2/6

Left In: 359.000+/-0.062  $\chi^2/\text{NDF}$ : 1858849.9/22

Left: 358.371+/-0.044  $\chi^2/\text{NDF}$ : 4901108.0/47

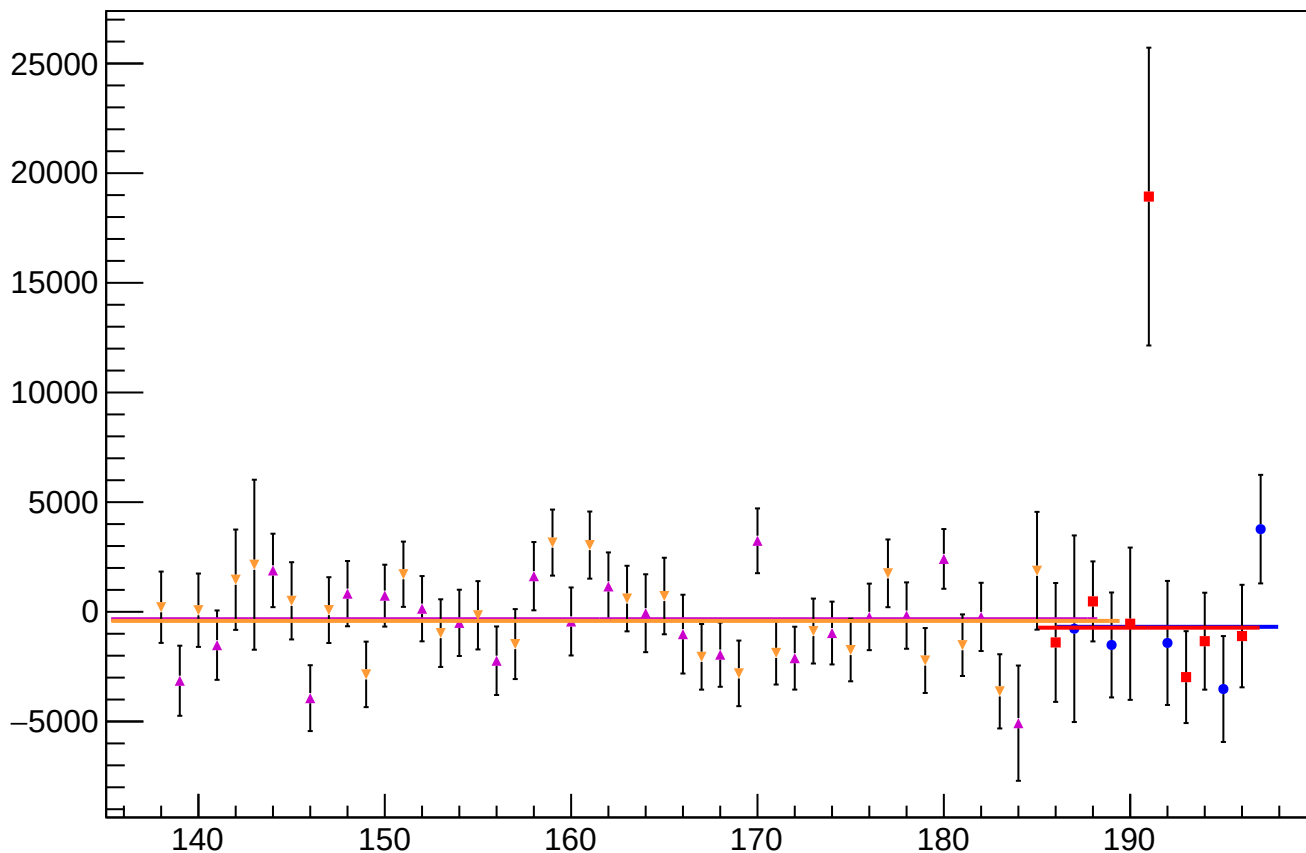
Right: 1179.847+/-0.337  $\chi^2/\text{NDF}$ : 1108475.9/11

In: 369.444+/-0.062  $\chi^2/\text{NDF}$ : 4702779.1/27

Out: 374.721+/-0.061  $\chi^2/\text{NDF}$ : 7141248.2/31

All: 372.111+/-0.044  $\chi^2/\text{NDF}$ : 11847688.6/59

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



Right In: -684.305+/-1204.063  $\chi^2/\text{NDF}$ : 4.8/4

Left Out: -413.407+/-320.677  $\chi^2/\text{NDF}$ : 32.8/24

Right Out: -723.073+/-929.713  $\chi^2/\text{NDF}$ : 10.1/6

Left In: -337.193+/-323.023  $\chi^2/\text{NDF}$ : 32.8/22

Left: -375.578+/-227.578  $\chi^2/\text{NDF}$ : 65.6/47

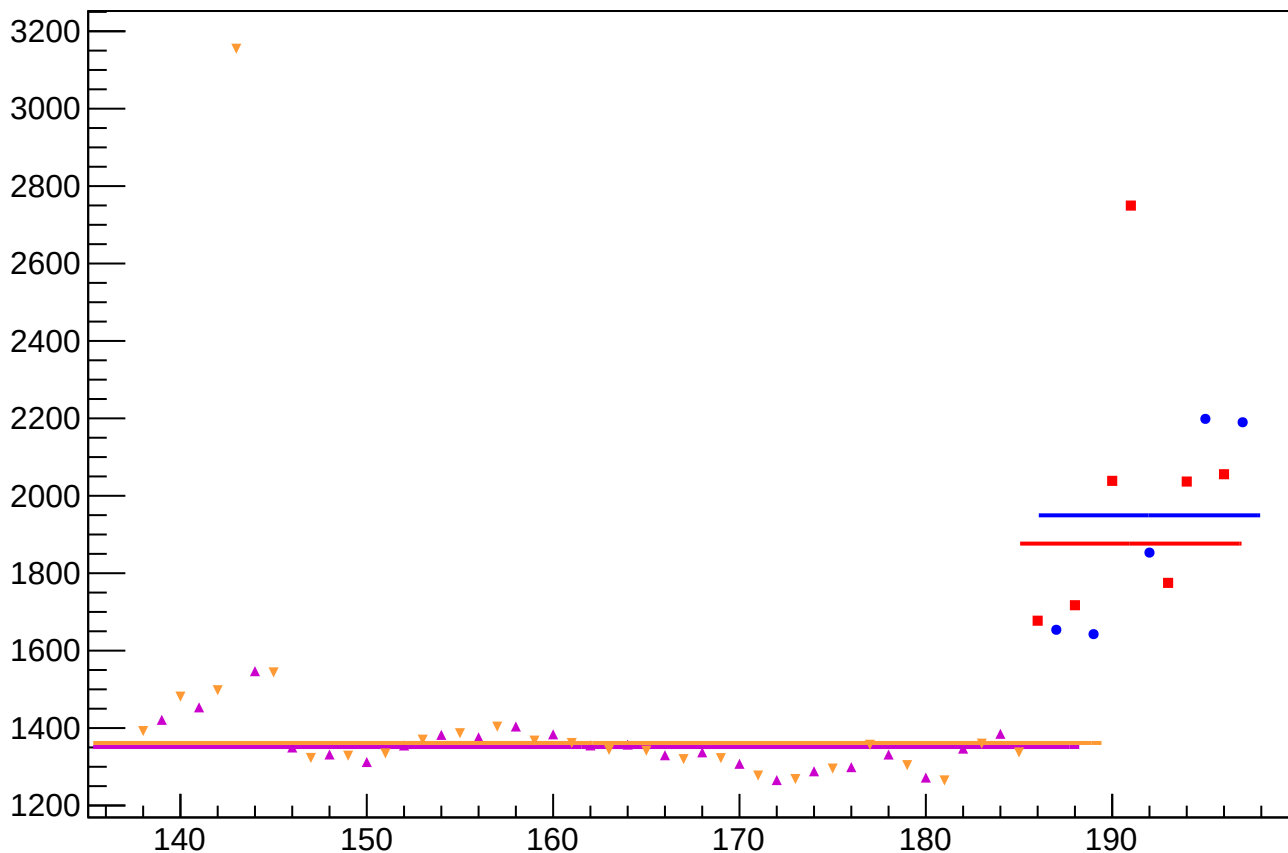
Right: -708.593+/-735.875  $\chi^2/\text{NDF}$ : 14.9/11

In: -360.498+/-311.991  $\chi^2/\text{NDF}$ : 37.7/27

Out: -446.331+/-303.150  $\chi^2/\text{NDF}$ : 43.0/31

All: -404.648+/-217.418  $\chi^2/\text{NDF}$ : 80.7/59

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



Right In: 1949.527+/-0.851  $\chi^2/\text{NDF}$ : 85061.2/4

Left Out: 1361.511+/-0.227  $\chi^2/\text{NDF}$ : 507869.8/24

Right Out: 1876.483+/-0.657  $\chi^2/\text{NDF}$ : 90436.4/6

Left In: 1351.012+/-0.228  $\chi^2/\text{NDF}$ : 68978.1/22

Left: 1356.300+/-0.161  $\chi^2/\text{NDF}$ : 577911.7/47

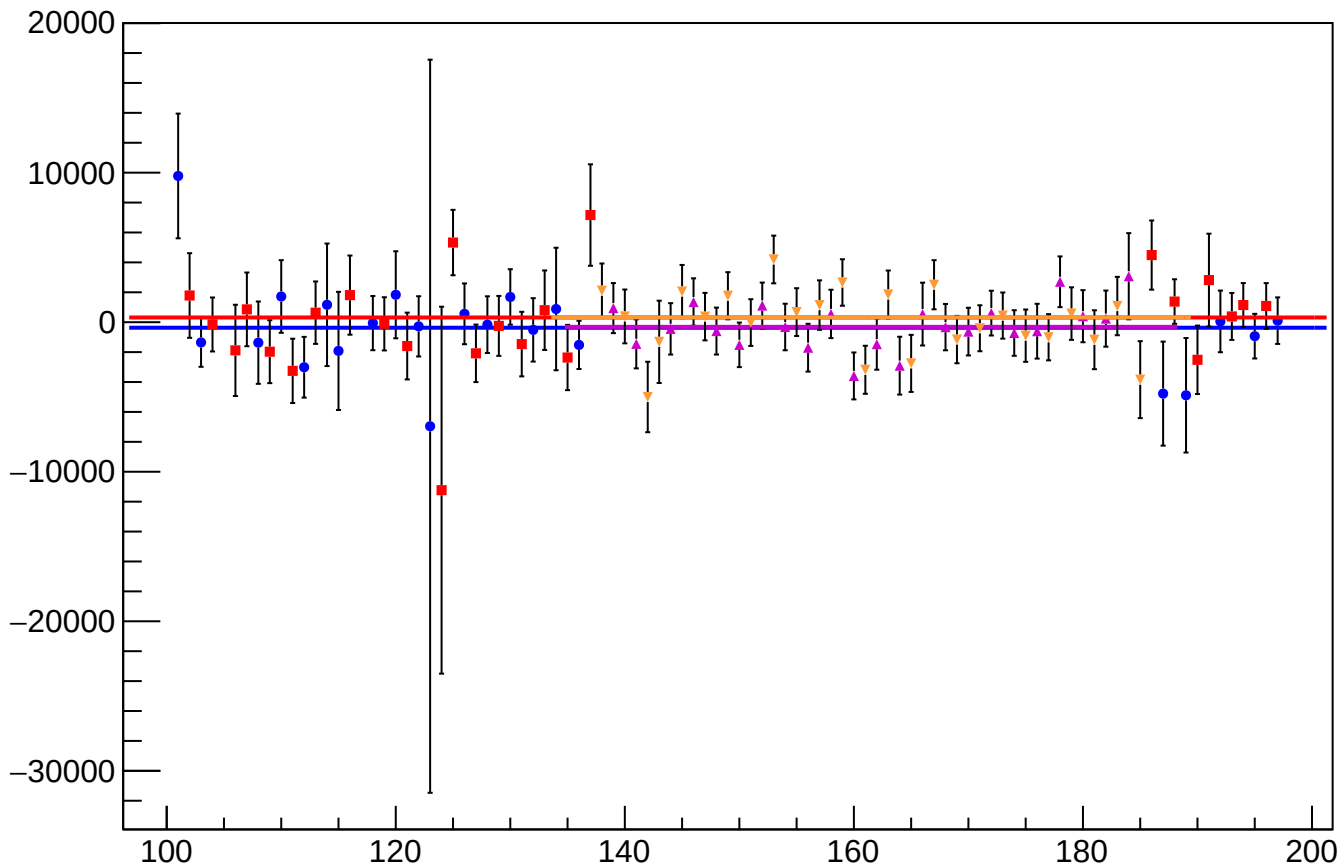
Right: 1903.766+/-0.520  $\chi^2/\text{NDF}$ : 180108.7/11

In: 1391.197+/-0.221  $\chi^2/\text{NDF}$ : 615034.8/27

Out: 1416.263+/-0.214  $\chi^2/\text{NDF}$ : 1146687.1/31

All: 1404.090+/-0.154  $\chi^2/\text{NDF}$ : 1768362.2/59

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



Right In: -368.955+/-471.479  $\chi^2/\text{NDF}$ : 15.2/21

Left Out: 320.058+/-344.642  $\chi^2/\text{NDF}$ : 32.4/24

Right Out: 315.632+/-420.581  $\chi^2/\text{NDF}$ : 26.6/24

Left In: -310.833+/-348.292  $\chi^2/\text{NDF}$ : 16.8/22

Left: 7.936+/-244.979  $\chi^2/\text{NDF}$ : 50.9/47

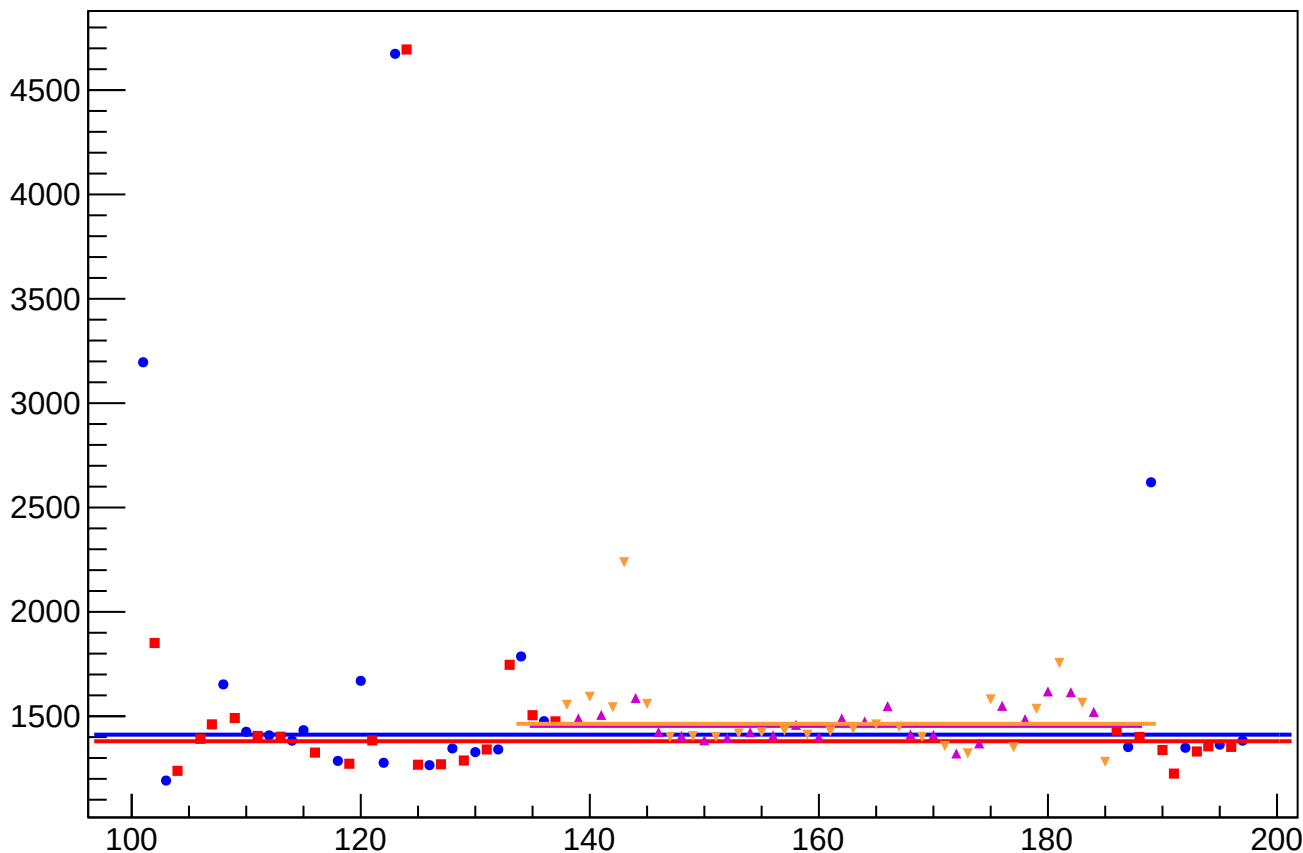
Right: 12.272+/-313.854  $\chi^2/\text{NDF}$ : 42.9/46

In: -331.353+/-280.143  $\chi^2/\text{NDF}$ : 32.0/44

Out: 318.280+/-266.573  $\chi^2/\text{NDF}$ : 59.0/49

All: 9.578+/-193.115  $\chi^2/\text{NDF}$ : 93.8/94

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



Right In: 1411.748 $\pm$ 0.333  $\chi^2$ /NDF: 731559.1/21

Left Out: 1463.714 $\pm$ 0.244  $\chi^2$ /NDF: 310491.4/24

Right Out: 1380.171 $\pm$ 0.297  $\chi^2$ /NDF: 303128.1/24

Left In: 1453.763 $\pm$ 0.246  $\chi^2$ /NDF: 99224.2/22

Left: 1458.791 $\pm$ 0.173  $\chi^2$ /NDF: 410540.5/47

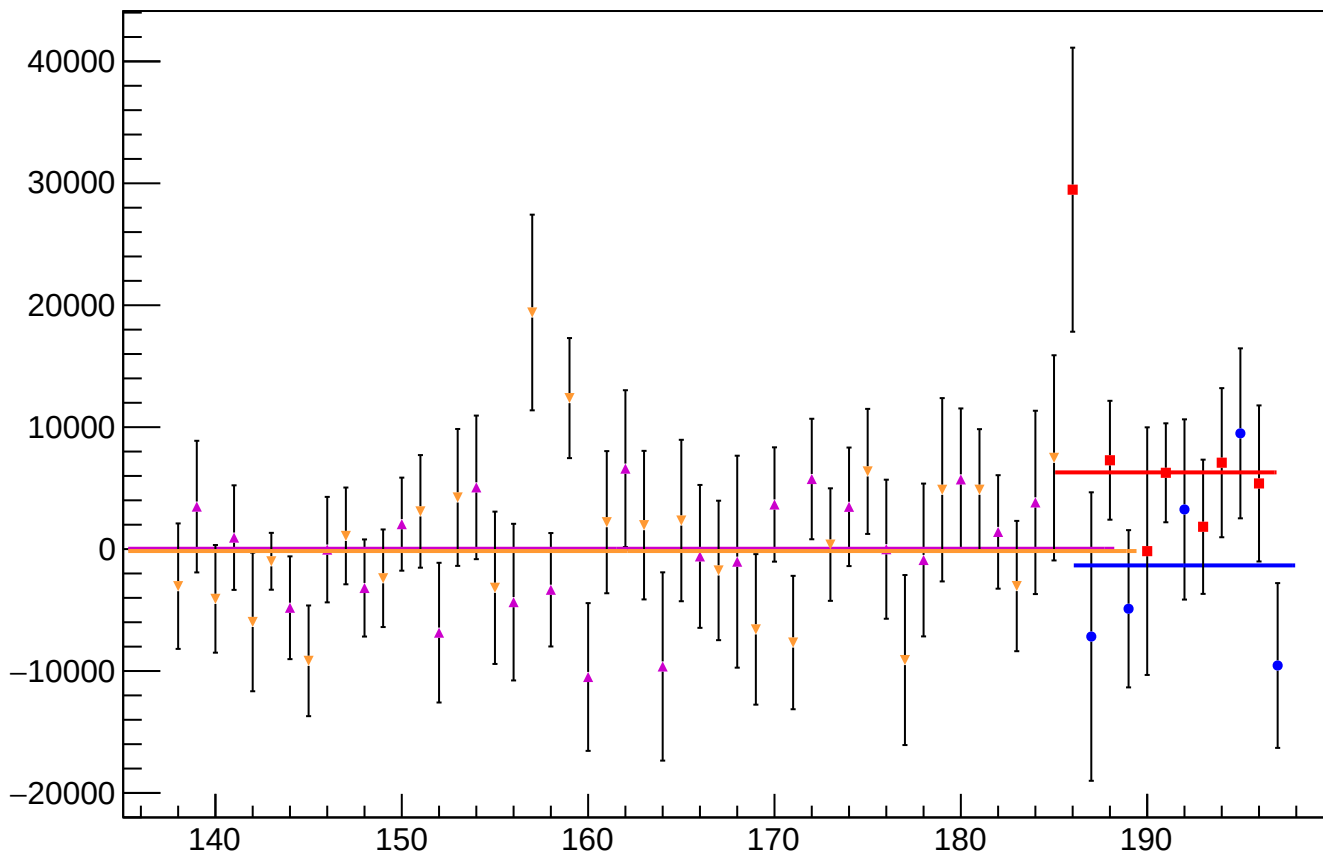
Right: 1394.159 $\pm$ 0.222  $\chi^2$ /NDF: 1039684.5/46

In: 1438.930 $\pm$ 0.198  $\chi^2$ /NDF: 841058.4/44

Out: 1430.138 $\pm$ 0.188  $\chi^2$ /NDF: 660849.9/49

All: 1434.315 $\pm$ 0.137  $\chi^2$ /NDF: 1502942.1/94

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



Right In: -1338.315+/-3297.452  $\chi^2/\text{NDF}$ : 4.8/4

Left Out: -160.118+/-989.347  $\chi^2/\text{NDF}$ : 29.7/24

Right Out: 6290.919+/-2213.878  $\chi^2/\text{NDF}$ : 5.1/6

Left In: 26.926+/-1085.415  $\chi^2/\text{NDF}$ : 15.3/22

Left: -75.238+/-731.183  $\chi^2/\text{NDF}$ : 45.0/47

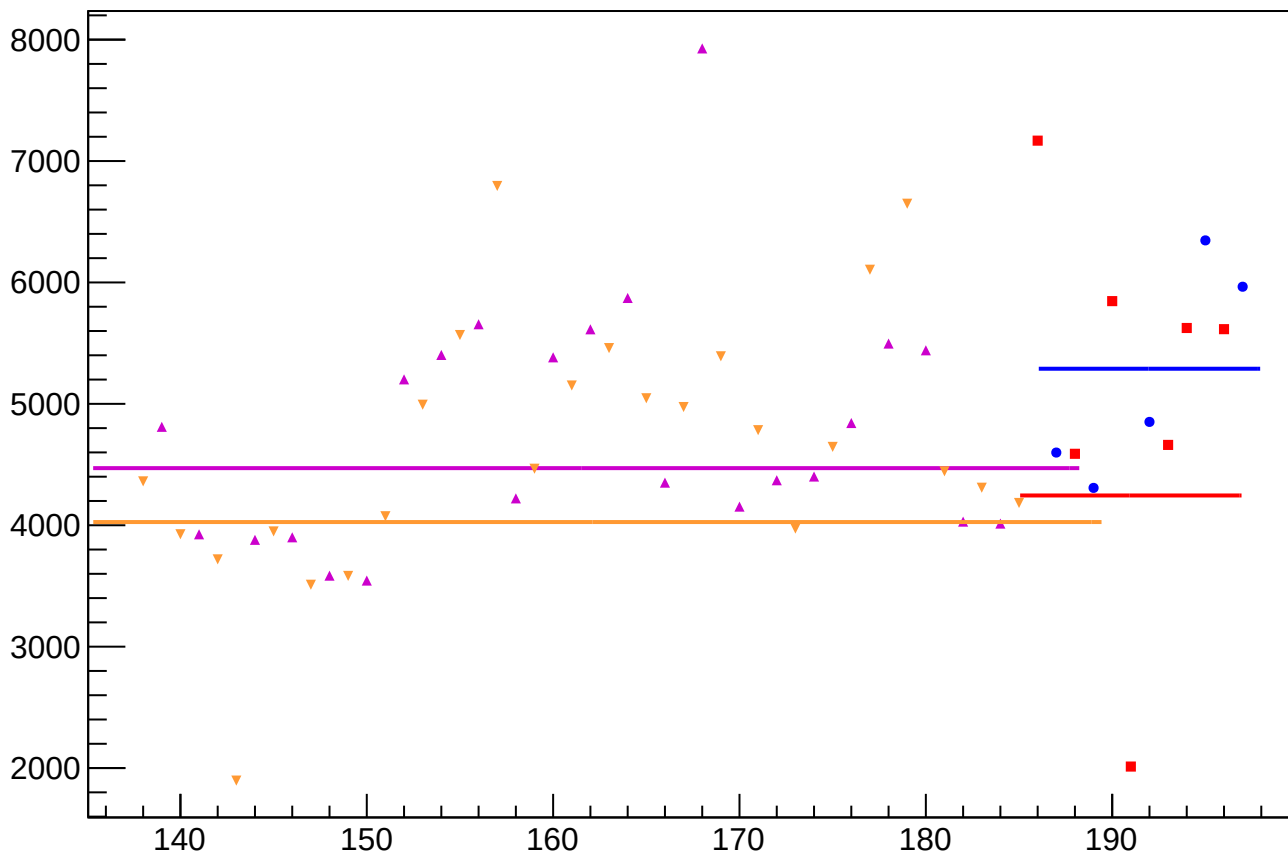
Right: 3920.451+/-1838.041  $\chi^2/\text{NDF}$ : 13.6/11

In: -106.539+/-1030.996  $\chi^2/\text{NDF}$ : 20.3/27

Out: 913.736+/-903.257  $\chi^2/\text{NDF}$ : 41.9/31

All: 470.685+/-679.399  $\chi^2/\text{NDF}$ : 62.7/59

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



Right In: 5289.237 $\pm$ 2.332  $\chi^2$ /NDF: 126142.0/4

Left Out: 4026.447 $\pm$ 0.700  $\chi^2$ /NDF: 3071265.0/24

Right Out: 4245.321 $\pm$ 1.565  $\chi^2$ /NDF: 995901.0/6

Left In: 4470.490 $\pm$ 0.768  $\chi^2$ /NDF: 1132495.2/22

Left: 4227.952 $\pm$ 0.517  $\chi^2$ /NDF: 4386588.9/47

Right: 4569.675 $\pm$ 1.300  $\chi^2$ /NDF: 1260210.9/11

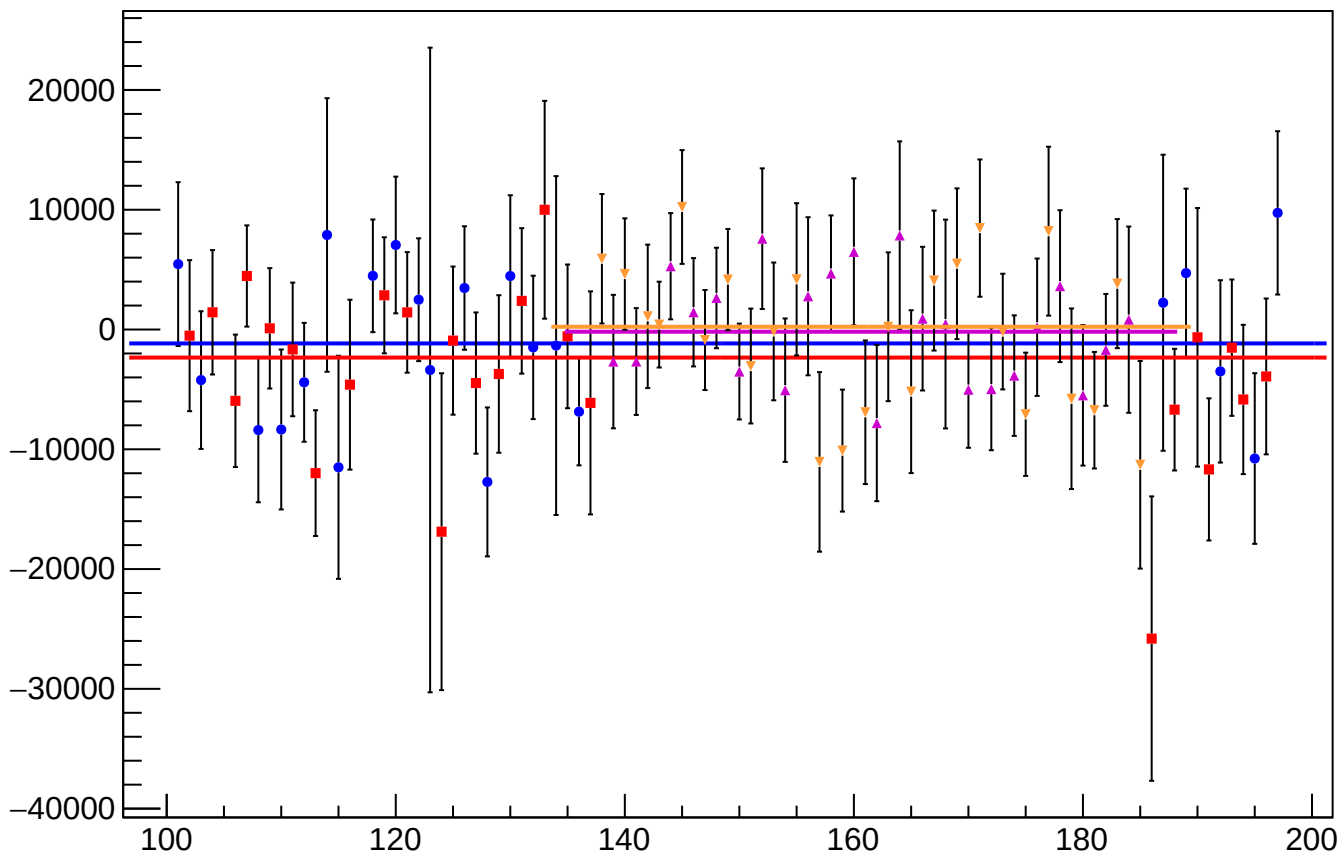
In: 4550.530 $\pm$ 0.729  $\chi^2$ /NDF: 1369885.9/27

Out: 4062.881 $\pm$ 0.639  $\chi^2$ /NDF: 4083460.4/31

All: 4274.641 $\pm$ 0.480  $\chi^2$ /NDF: 5706484.7/59



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



Right In:  $-1161.154 \pm 1373.471$   $\chi^2/\text{NDF}: 22.0/21$

Left Out:  $229.897 \pm 1073.528$   $\chi^2/\text{NDF}: 28.1/24$

Right Out:  $-2342.558 \pm 1207.096$   $\chi^2/\text{NDF}: 20.8/24$

Left In:  $-185.280 \pm 1119.296$   $\chi^2/\text{NDF}: 14.3/22$

Left:  $30.970 \pm 774.774$   $\chi^2/\text{NDF}: 42.5/47$

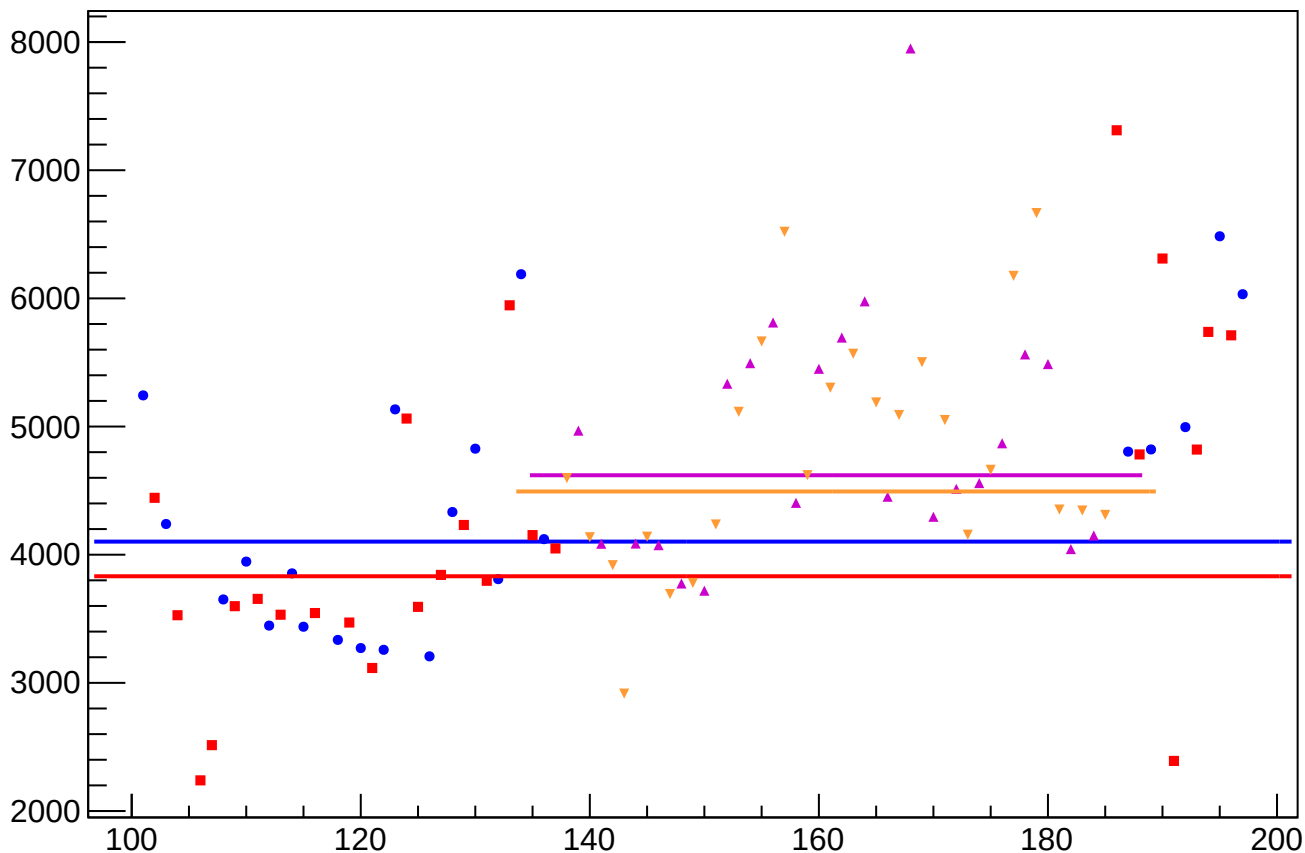
Right:  $-1827.708 \pm 906.693$   $\chi^2/\text{NDF}: 43.1/46$

In:  $-574.736 \pm 867.664$   $\chi^2/\text{NDF}: 36.5/44$

Out:  $-906.186 \pm 802.182$   $\chi^2/\text{NDF}: 51.4/49$

All:  $-753.439 \pm 589.019$   $\chi^2/\text{NDF}: 88.0/94$

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



Right In: 4102.159+/-0.971  $\chi^2/\text{NDF}$ : 841223.0/21

Left Out: 4493.314+/-0.759  $\chi^2/\text{NDF}$ : 1309134.5/24

Right Out: 3831.793+/-0.848  $\chi^2/\text{NDF}$ : 1525561.8/24

Left In: 4619.952+/-0.791  $\chi^2/\text{NDF}$ : 1001966.3/22

Left: 4553.991+/-0.548  $\chi^2/\text{NDF}$ : 2324435.7/47

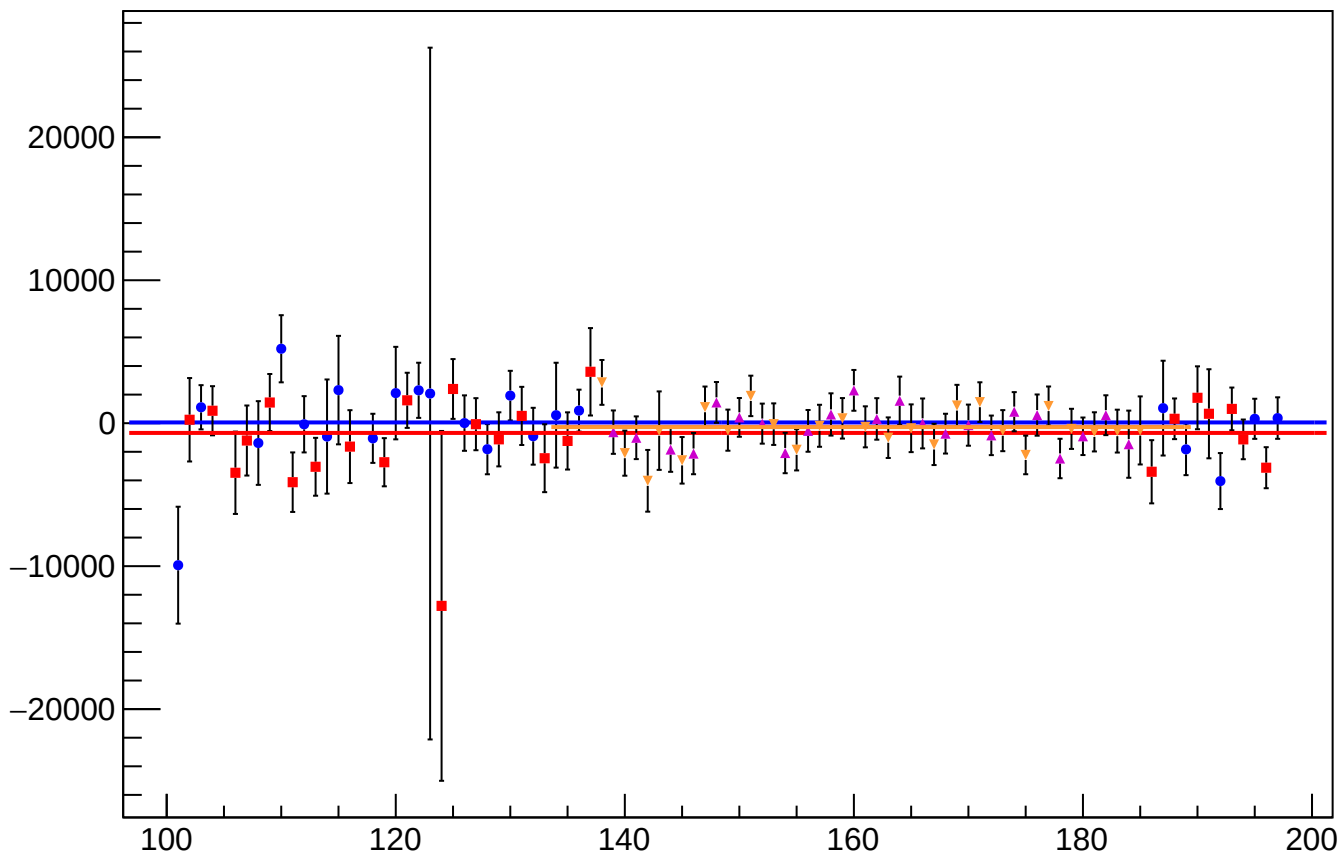
Right: 3948.689+/-0.639  $\chi^2/\text{NDF}$ : 2410778.1/46

In: 4413.304+/-0.614  $\chi^2/\text{NDF}$ : 2014005.2/44

Out: 4198.874+/-0.565  $\chi^2/\text{NDF}$ : 3172716.5/49

All: 4297.363+/-0.416  $\chi^2/\text{NDF}$ : 5252769.0/94

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



Right In:  $53.893 \pm 437.311$   $\chi^2/\text{NDF}: 22.6/21$

Left Out:  $-270.523 \pm 302.030$   $\chi^2/\text{NDF}: 22.2/24$

Right Out:  $-679.751 \pm 398.499$   $\chi^2/\text{NDF}: 24.1/24$

Left In:  $-258.285 \pm 305.289$   $\chi^2/\text{NDF}: 16.0/22$

Left:  $-264.470 \pm 214.711$   $\chi^2/\text{NDF}: 38.2/47$

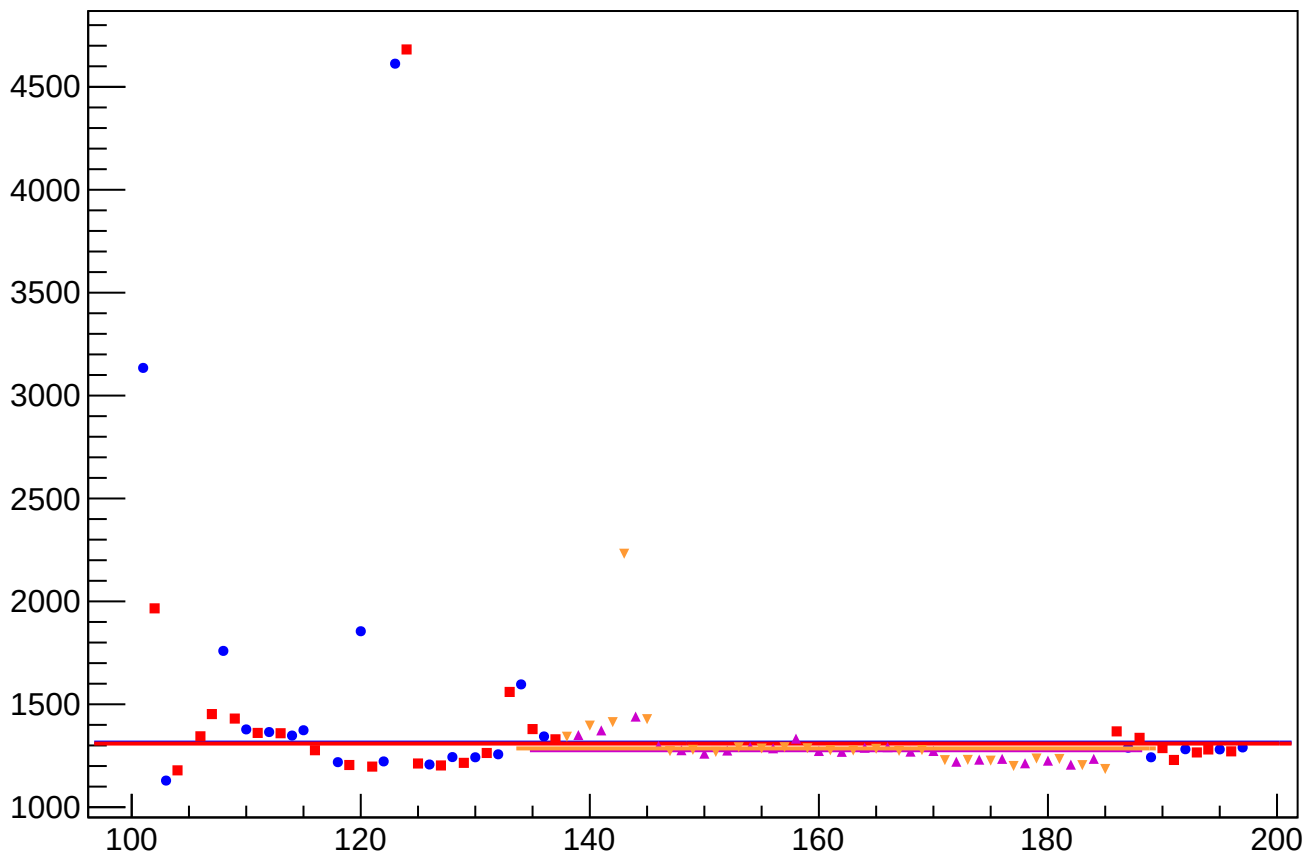
Right:  $-346.923 \pm 294.549$   $\chi^2/\text{NDF}: 48.2/46$

In:  $-155.996 \pm 250.325$   $\chi^2/\text{NDF}: 39.0/44$

Out:  $-419.831 \pm 240.706$   $\chi^2/\text{NDF}: 46.9/49$

All:  $-293.080 \pm 173.506$   $\chi^2/\text{NDF}: 86.5/94$

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



Right In: 1313.959 $\pm$ 0.309  $\chi^2$ /NDF: 610975.8/21

Left Out: 1285.574 $\pm$ 0.214  $\chi^2$ /NDF: 306057.6/24

Right Out: 1309.185 $\pm$ 0.282  $\chi^2$ /NDF: 346085.0/24

Left In: 1276.755 $\pm$ 0.216  $\chi^2$ /NDF: 59434.2/22

Left: 1281.212 $\pm$ 0.152  $\chi^2$ /NDF: 366335.3/47

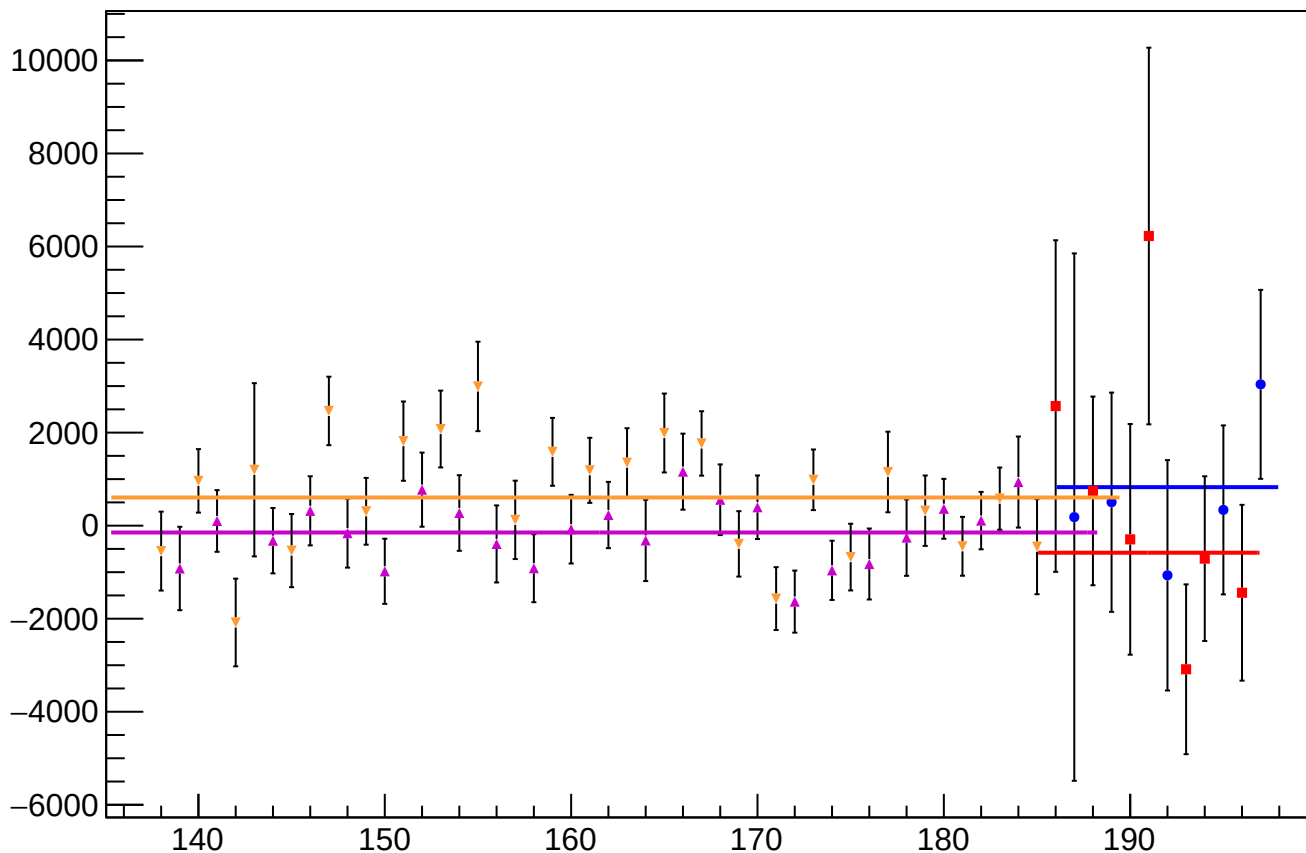
Right: 1311.351 $\pm$ 0.208  $\chi^2$ /NDF: 957191.0/46

In: 1288.945 $\pm$ 0.177  $\chi^2$ /NDF: 680142.1/44

Out: 1294.189 $\pm$ 0.170  $\chi^2$ /NDF: 656601.8/49

All: 1291.670 $\pm$ 0.123  $\chi^2$ /NDF: 1337199.9/94

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



Right In: 827.554 $\pm$ 1042.728  $\chi^2$ /NDF: 1.9/4

Left Out: 605.167 $\pm$ 153.922  $\chi^2$ /NDF:60.0/24

Right Out: -581.913 $\pm$ 831.833  $\chi^2$ /NDF: 6.2/6

Left In: -147.044 $\pm$ 154.051  $\chi^2$ /NDF:19.4/22

Left: 229.377 $\pm$ 108.885  $\chi^2$ /NDF: 91.3/47

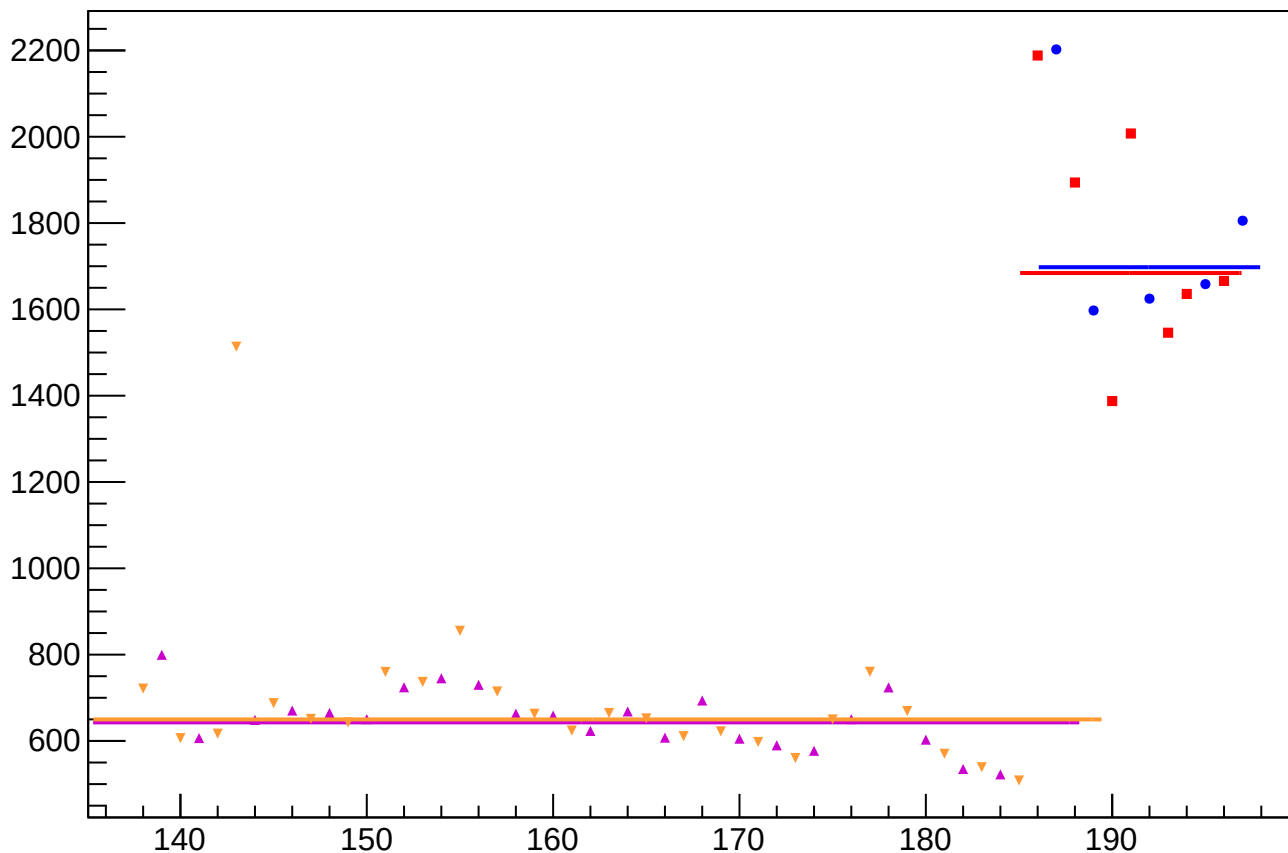
Right: -33.768 $\pm$ 650.267  $\chi^2$ /NDF: 9.1/11

In: -126.226 $\pm$ 152.397  $\chi^2$ /NDF:22.1/27

Out: 565.867 $\pm$ 151.353  $\chi^2$ /NDF:68.1/31

All: 222.200 $\pm$ 107.390  $\chi^2$ /NDF: 100.6/59

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



Right In: 1697.709+/-0.737  $\chi^2/\text{NDF}$ : 27773.3/4

Left Out: 649.866+/-0.109  $\chi^2/\text{NDF}$ : 840823.5/24

Right Out: 1684.245+/-0.588  $\chi^2/\text{NDF}$ : 115961.8/6

Left In: 643.008+/-0.109  $\chi^2/\text{NDF}$ : 323844.6/22

Left: 646.440+/-0.077  $\chi^2/\text{NDF}$ : 1166651.7/47

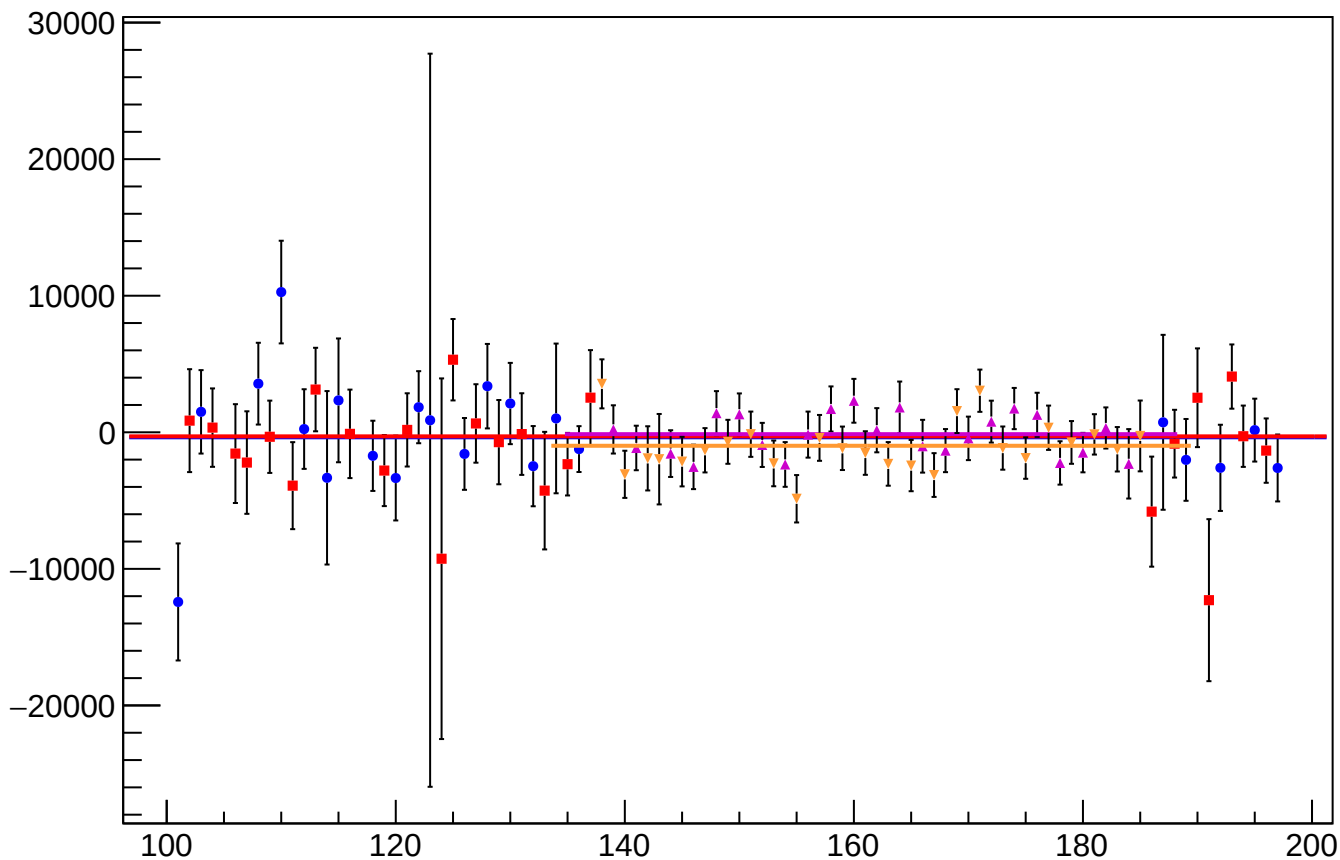
Right: 1689.481+/-0.460  $\chi^2/\text{NDF}$ : 143938.9/11

In: 665.537+/-0.108  $\chi^2/\text{NDF}$ : 2354104.3/27

Out: 684.111+/-0.107  $\chi^2/\text{NDF}$ : 3946947.6/31

All: 674.888+/-0.076  $\chi^2/\text{NDF}$ : 6316007.7/59

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



Right In:  $-366.906 \pm 646.454$   $\chi^2/\text{NDF}$ : 25.5/21

Left Out:  $-987.247 \pm 339.757$   $\chi^2/\text{NDF}$ : 28.5/24

Right Out:  $-297.809 \pm 603.986$   $\chi^2/\text{NDF}$ : 20.7/24

Left In:  $-137.780 \pm 342.262$   $\chi^2/\text{NDF}$ : 18.8/22

Left:  $-565.633 \pm 241.125$   $\chi^2/\text{NDF}$ : 50.4/47

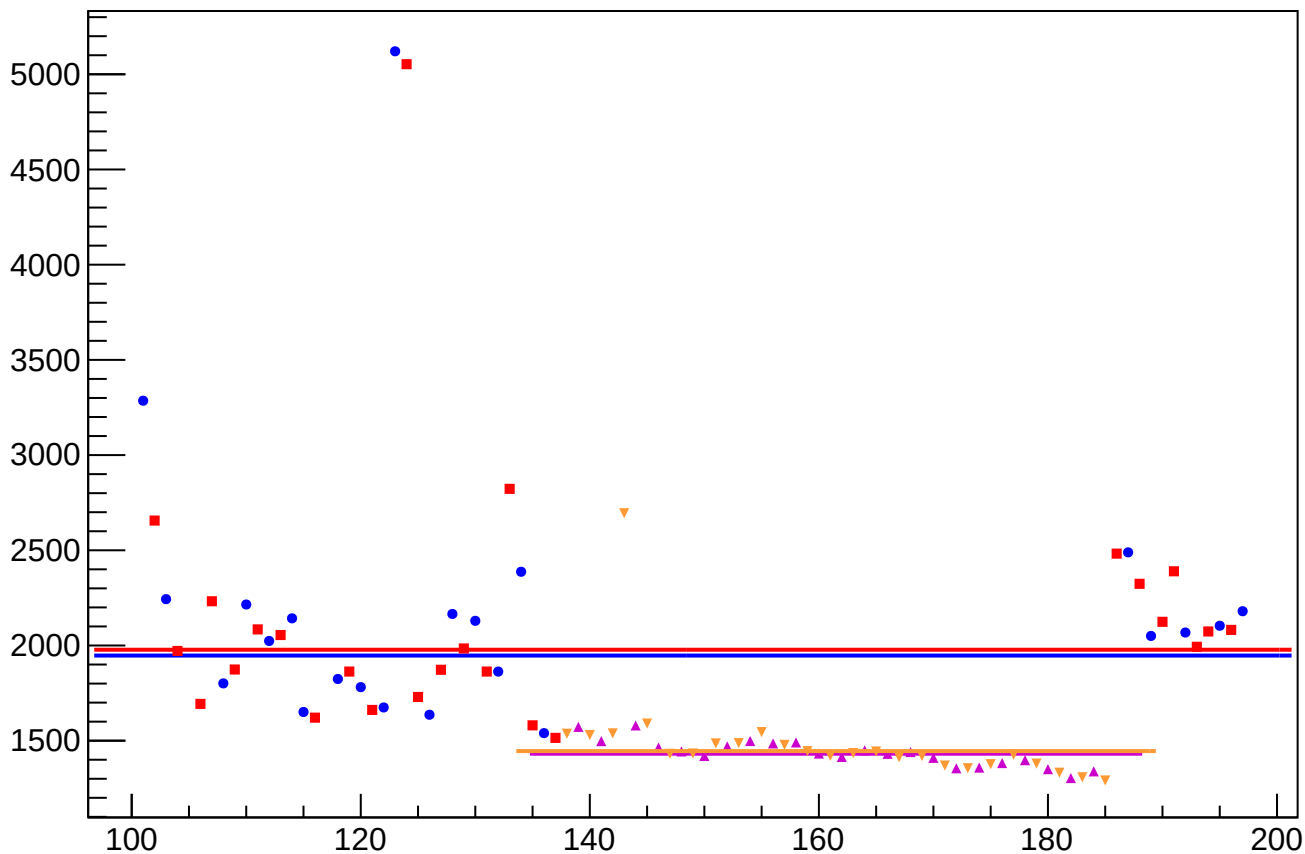
Right:  $-330.014 \pm 441.333$   $\chi^2/\text{NDF}$ : 46.2/46

In:  $-187.945 \pm 302.483$   $\chi^2/\text{NDF}$ : 44.4/44

Out:  $-821.525 \pm 296.121$   $\chi^2/\text{NDF}$ : 50.2/49

All:  $-511.468 \pm 211.602$   $\chi^2/\text{NDF}$ : 96.9/94

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



Right In: 1947.170+/-0.457  $\chi^2/\text{NDF}$ : 525032.6/21

Left Out: 1445.418+/-0.240  $\chi^2/\text{NDF}$ : 374859.2/24

Right Out: 1977.713+/-0.427  $\chi^2/\text{NDF}$ : 540455.9/24

Left In: 1431.663+/-0.242  $\chi^2/\text{NDF}$ : 77792.5/22

Left: 1438.591+/-0.171  $\chi^2/\text{NDF}$ : 454278.6/47

Right: 1963.478+/-0.312  $\chi^2/\text{NDF}$ : 1067872.3/46

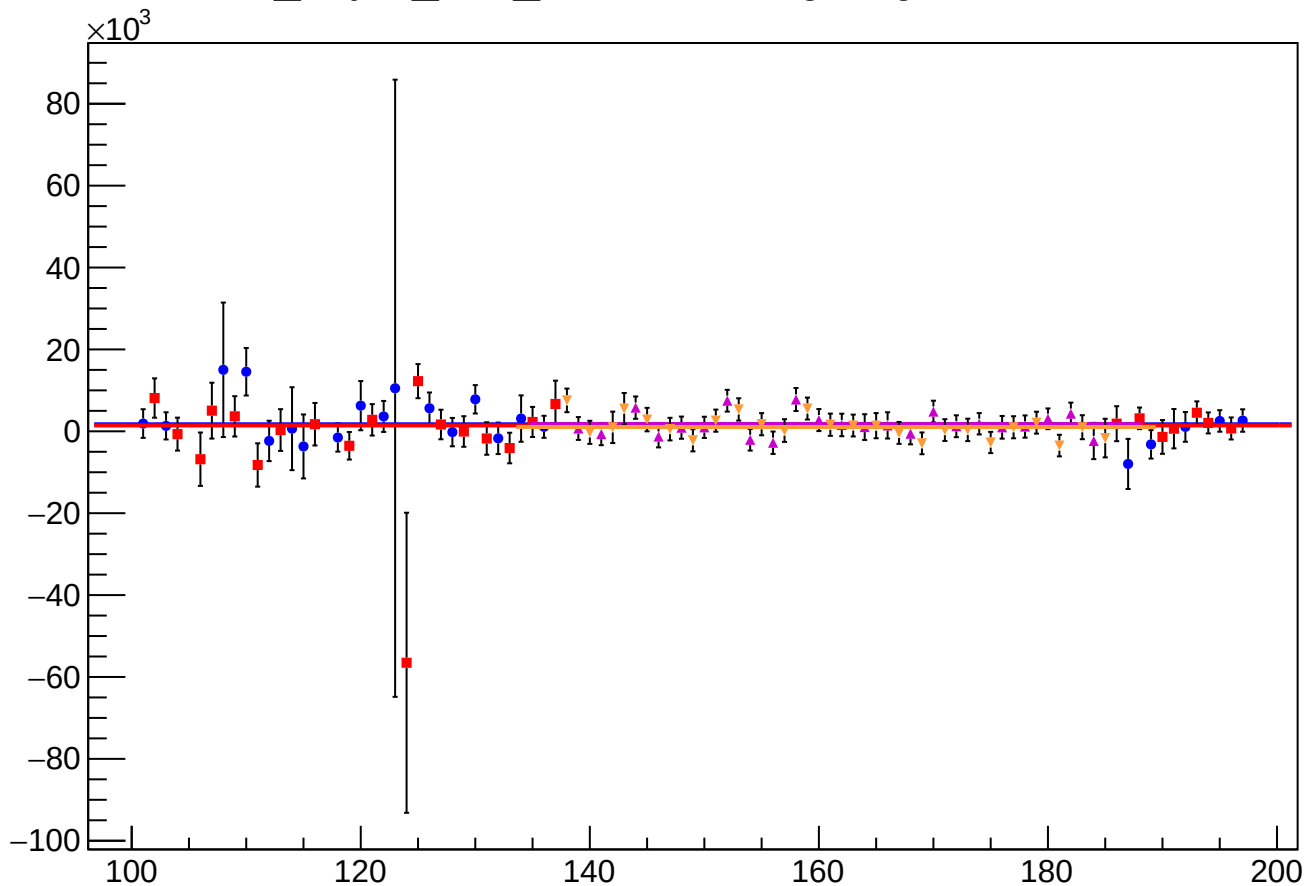
In: 1544.529+/-0.214  $\chi^2/\text{NDF}$ : 1596195.1/44

Out: 1573.369+/-0.209  $\chi^2/\text{NDF}$ : 2095337.9/49

All: 1559.255+/-0.150  $\chi^2/\text{NDF}$ : 3700816.6/94



# dit\_asym\_atl1\_mean vs Slug, Sign Corrected



Right In: 1715.727 $\pm$ 848.405  $\chi^2$ /NDF: 18.5/21

Left Out: 1057.276 $\pm$ 566.243  $\chi^2$ /NDF: 22.7/24

Right Out: 1429.855 $\pm$ 784.377  $\chi^2$ /NDF: 25.4/24

Left In: 1762.122 $\pm$ 574.660  $\chi^2$ /NDF: 23.2/22

Left: 1404.499 $\pm$ 403.337  $\chi^2$ /NDF: 46.7/47

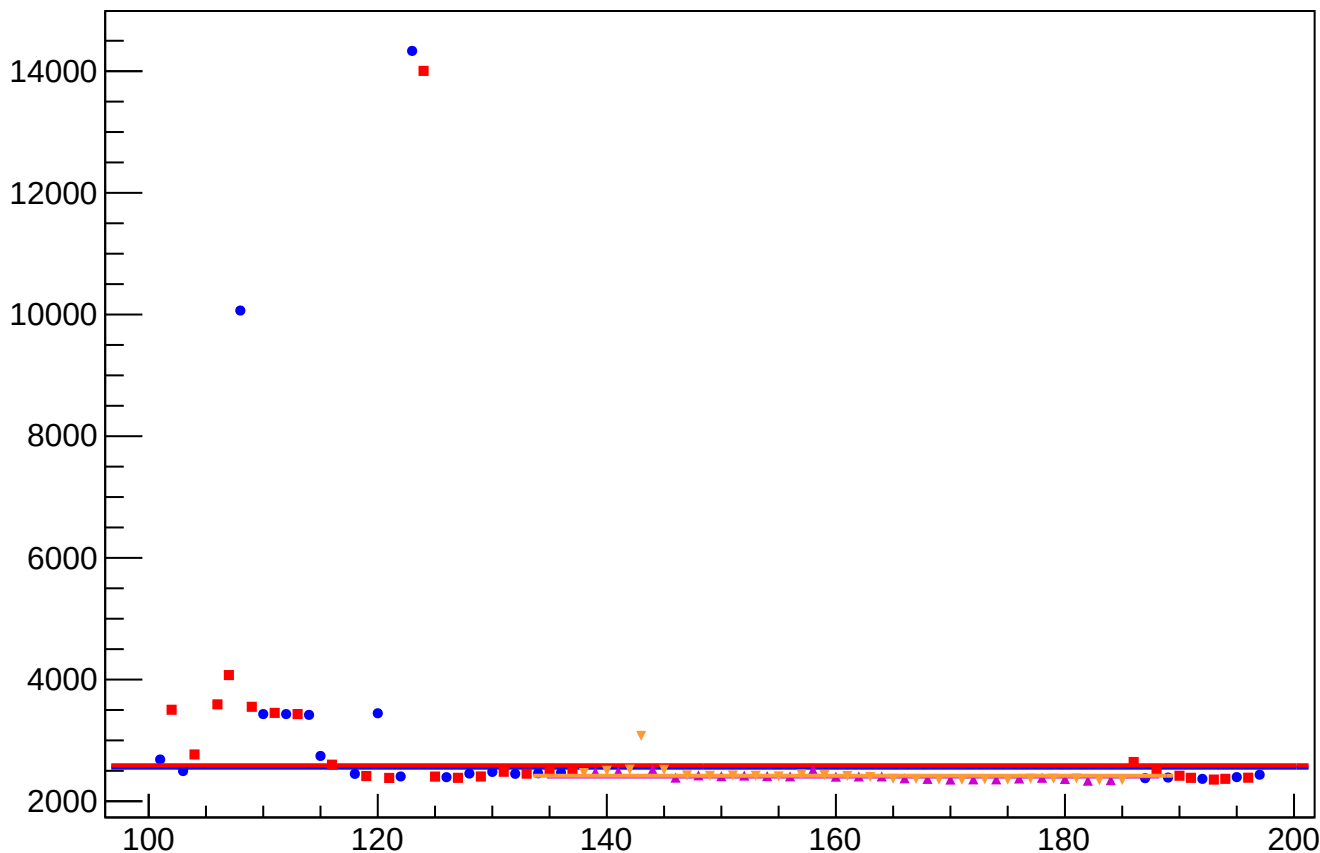
Right: 1561.598 $\pm$ 575.945  $\chi^2$ /NDF: 44.0/46

In: 1747.531 $\pm$ 475.789  $\chi^2$ /NDF: 41.8/44

Out: 1184.921 $\pm$ 459.111  $\chi^2$ /NDF: 48.3/49

All: 1456.193 $\pm$ 330.379  $\chi^2$ /NDF: 90.8/94

# dit\_asym\_atl1\_rms vs Slug, Sign Corrected



Right In: 2551.937+/-0.600  $\chi^2/\text{NDF}$ : 676687.0/21

Left Out: 2418.972+/-0.400  $\chi^2/\text{NDF}$ : 74779.7/24

Right Out: 2591.648+/-0.555  $\chi^2/\text{NDF}$ : 678712.8/24

Left In: 2406.443+/-0.406  $\chi^2/\text{NDF}$ : 15245.2/22

Left: 2412.800+/-0.285  $\chi^2/\text{NDF}$ : 90507.2/47

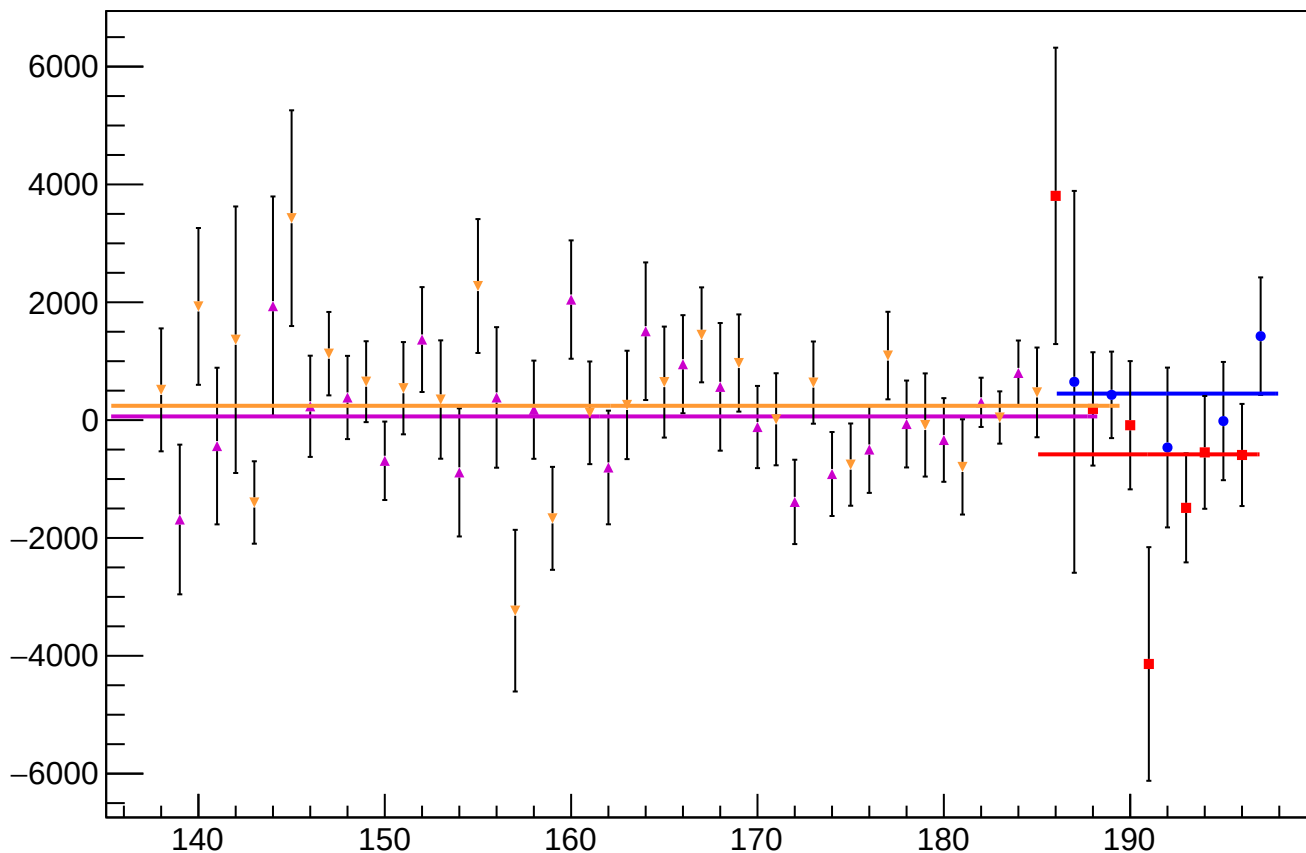
Right: 2573.348+/-0.407  $\chi^2/\text{NDF}$ : 1357762.3/46

In: 2452.201+/-0.336  $\chi^2/\text{NDF}$ : 732252.4/44

Out: 2478.131+/-0.325  $\chi^2/\text{NDF}$ : 817212.5/49

All: 2465.629+/-0.234  $\chi^2/\text{NDF}$ : 1552540.8/94

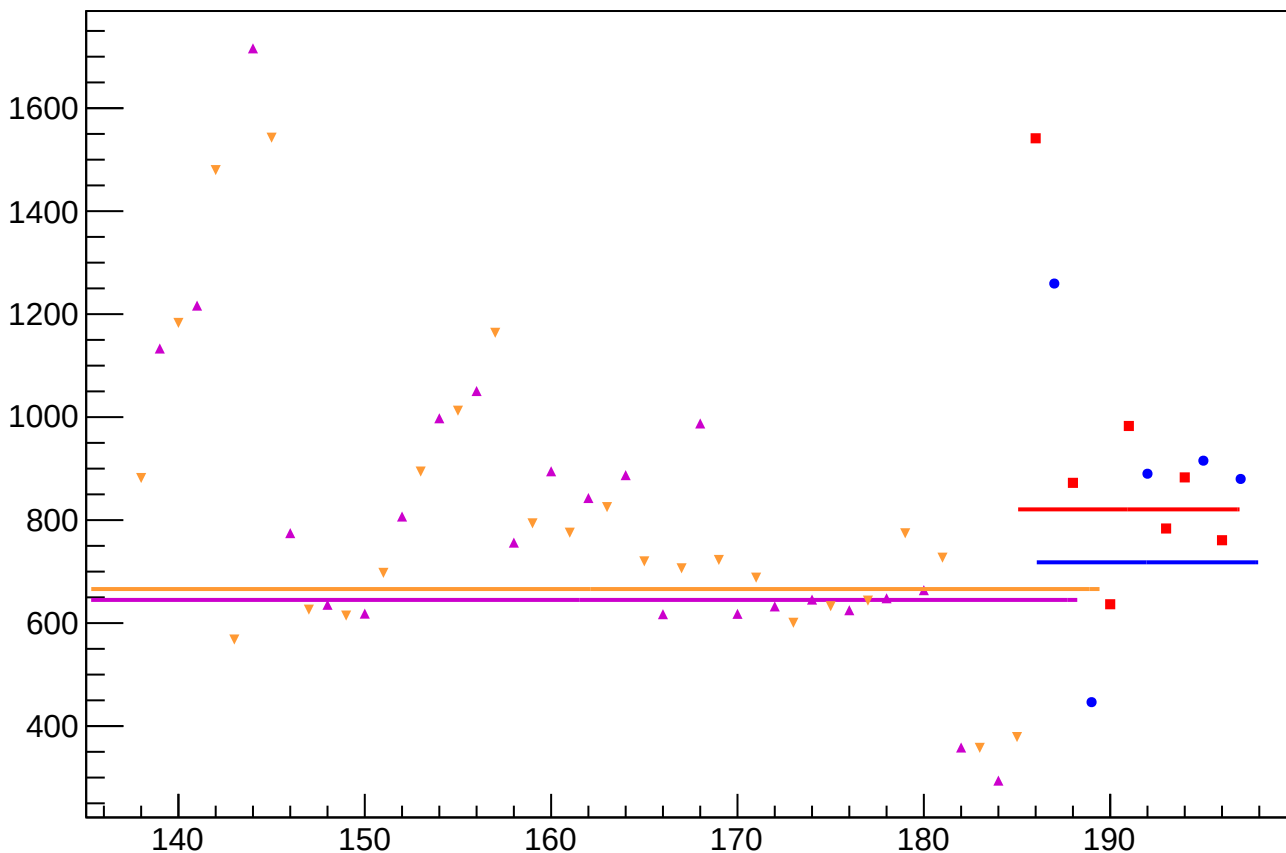
# asym\_atl1\_correction\_mean vs Slug, Sign Corrected



Right In: 449.977+/-471.752  $\chi^2/\text{NDF}$ : 1.6/4  
 Left Out: 243.135+/-163.940  $\chi^2/\text{NDF}$ :36.0/24  
 Right Out: -581.050+/-410.684  $\chi^2/\text{NDF}$ : 8.1/6  
 Left In: 62.569+/-164.169  $\chi^2/\text{NDF}$ :24.3/22

Left: 152.978+/-116.004  $\chi^2/\text{NDF}$ : 60.9/47  
 Right: -136.547+/-309.753  $\chi^2/\text{NDF}$ : 12.4/11  
 In: 104.418+/-155.049  $\chi^2/\text{NDF}$ :26.5/27  
 Out: 129.852+/-152.257  $\chi^2/\text{NDF}$ :47.5/31  
 All: 117.366+/-108.636  $\chi^2/\text{NDF}$ : 74.1/59

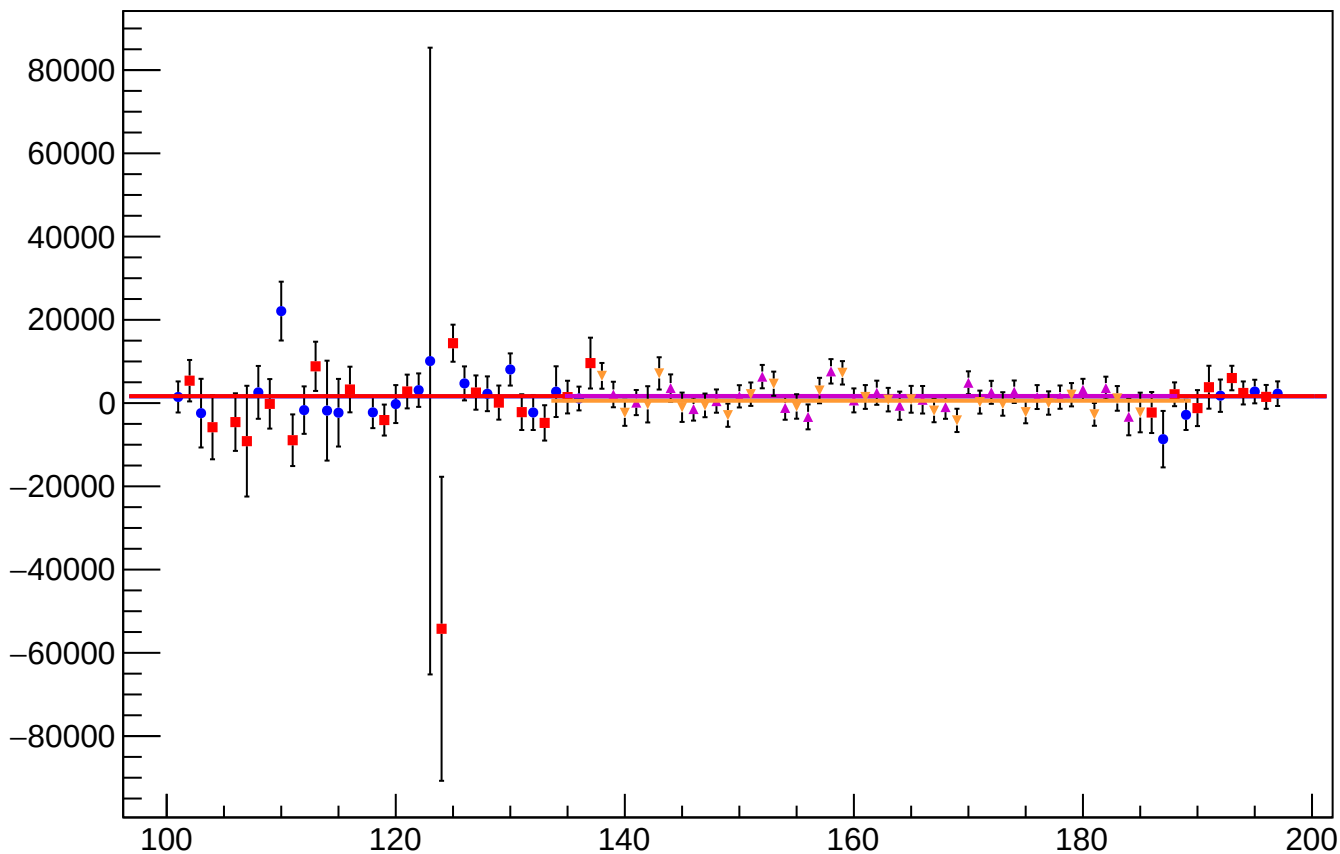
asym\_atl1\_correction\_rms vs Slug, Sign Corrected



Right In: 718.029 $\pm$ 0.334  $\chi^2$ /NDF: 491844.0/4  
 Left Out: 666.133 $\pm$ 0.116  $\chi^2$ /NDF:3190574.7/24  
 Right Out: 820.830 $\pm$ 0.290  $\chi^2$ /NDF: 261791.9/6  
 Left In: 645.011 $\pm$ 0.116  $\chi^2$ /NDF:4176295.6/22

Left: 655.587 $\pm$ 0.082  $\chi^2$ /NDF: 7383446.0/47  
 Right: 776.510 $\pm$ 0.219  $\chi^2$ /NDF: 807663.9/11  
 In: 652.899 $\pm$ 0.110  $\chi^2$ /NDF:4710877.2/27  
 Out: 687.396 $\pm$ 0.108  $\chi^2$ /NDF:3697140.9/31  
 All: 670.461 $\pm$ 0.077  $\chi^2$ /NDF: 8458419.8/59

# asym\_atl1\_mean vs Slug, Sign Corrected



Right In: 1603.431+/-929.737  $\chi^2/\text{NDF}$ : 19.0/21

Left Out: 566.778+/-598.308  $\chi^2/\text{NDF}$ : 25.2/24

Right Out: 1673.544+/-868.251  $\chi^2/\text{NDF}$ : 29.0/24

Left In: 1713.317+/-607.775  $\chi^2/\text{NDF}$ : 18.1/22

Left: 1131.048+/-426.375  $\chi^2/\text{NDF}$ : 45.0/47

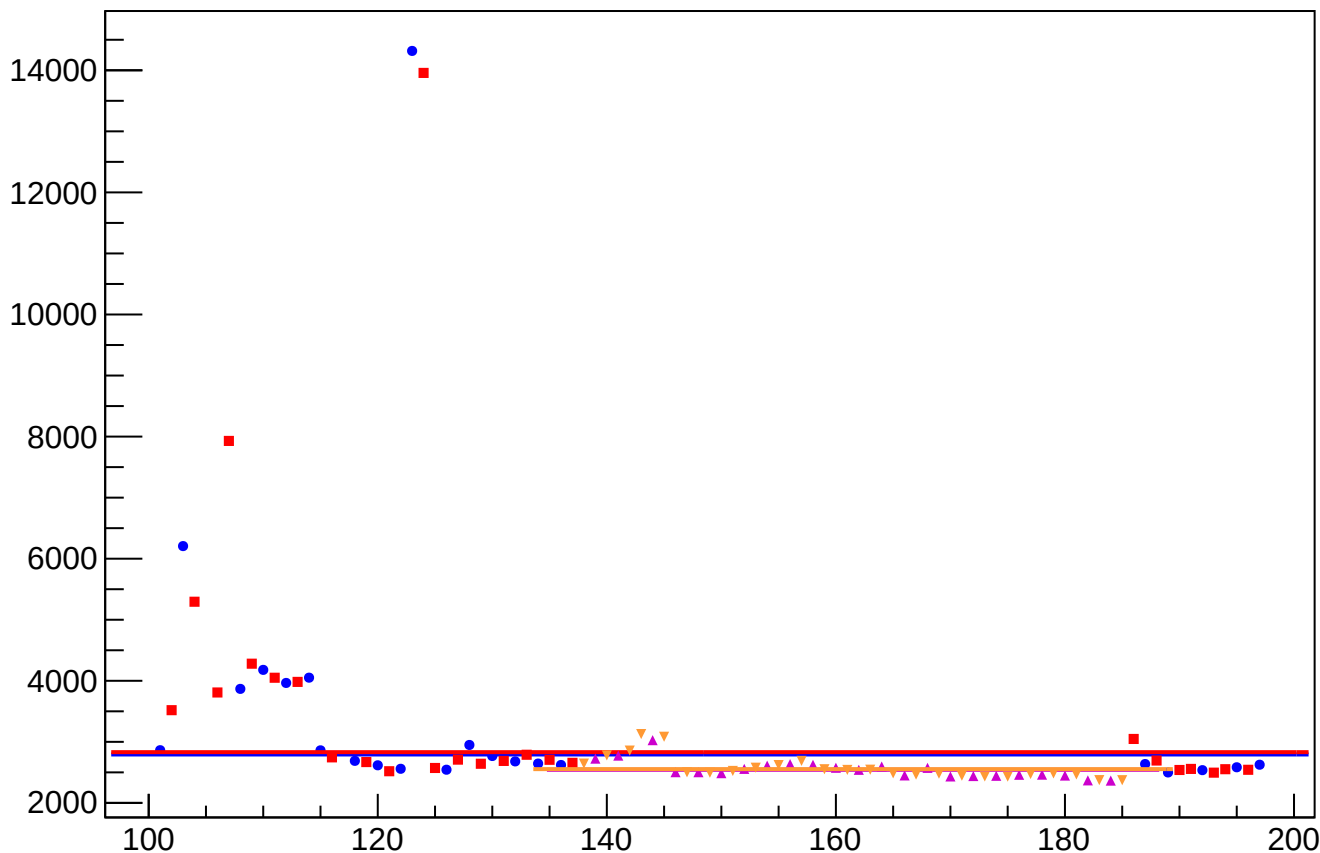
Right: 1640.883+/-634.570  $\chi^2/\text{NDF}$ : 48.0/46

In: 1680.418+/-508.722  $\chi^2/\text{NDF}$ : 37.0/44

Out: 923.120+/-492.663  $\chi^2/\text{NDF}$ : 55.3/49

All: 1289.628+/-353.907  $\chi^2/\text{NDF}$ : 93.5/94

# asym\_atl1\_rms vs Slug, Sign Corrected



Right In: 2793.070+/-0.657  $\chi^2/\text{NDF}$ : 702742.1/21

Left Out: 2553.097+/-0.423  $\chi^2/\text{NDF}$ : 148430.5/24

Right Out: 2831.103+/-0.614  $\chi^2/\text{NDF}$ : 1158465.2/24

Left In: 2541.950+/-0.430  $\chi^2/\text{NDF}$ : 97238.4/22

Left: 2547.611+/-0.301  $\chi^2/\text{NDF}$ : 246010.6/47

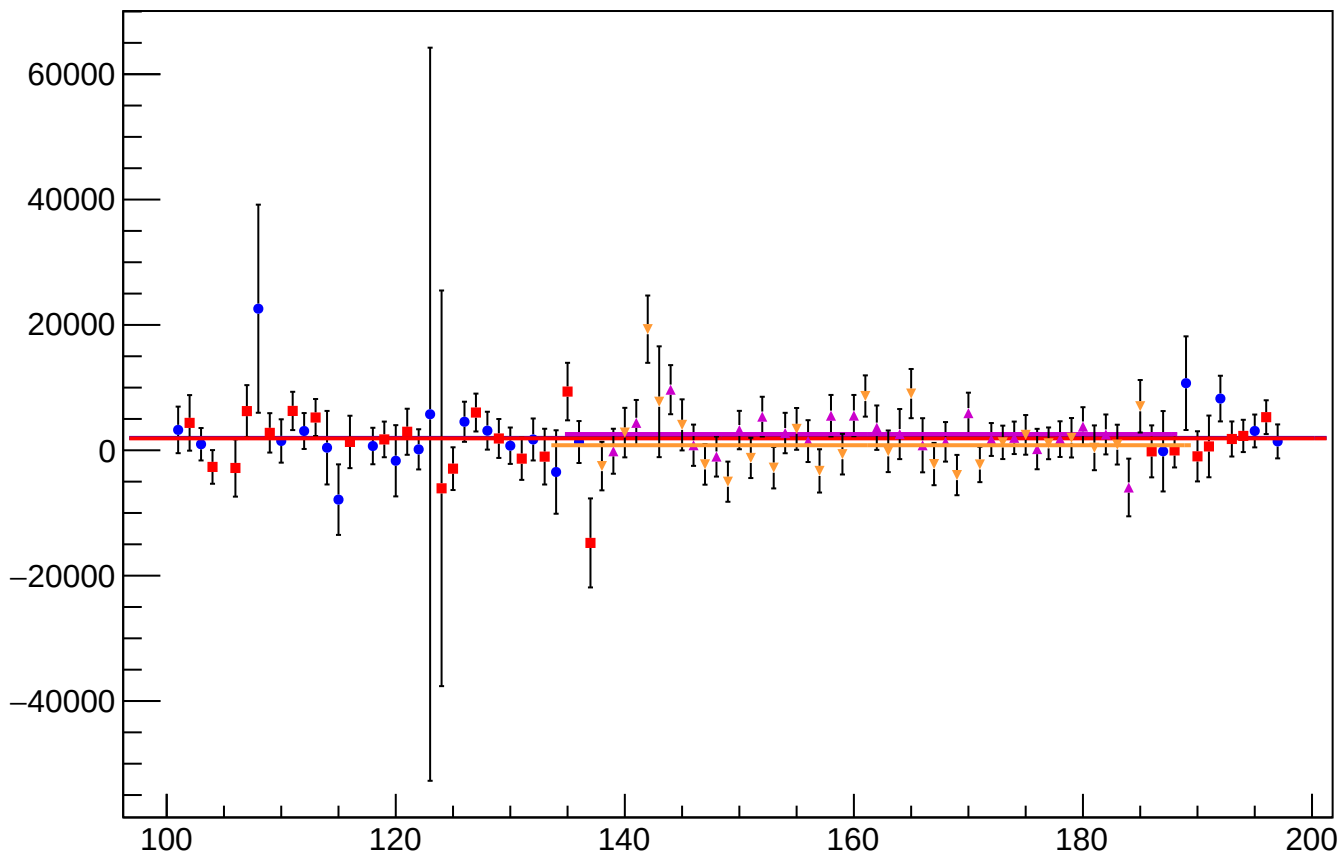
Right: 2813.386+/-0.449  $\chi^2/\text{NDF}$ : 1862995.1/46

In: 2617.133+/-0.360  $\chi^2/\text{NDF}$ : 902203.2/44

Out: 2642.605+/-0.348  $\chi^2/\text{NDF}$ : 1445923.4/49

All: 2630.278+/-0.250  $\chi^2/\text{NDF}$ : 2350714.1/94

# dit\_asym\_atl2\_mean vs Slug, Sign Corrected



Right In: 1976.055+/-775.028  $\chi^2/\text{NDF}$ : 12.4/21

Left Out: 807.297+/-677.513  $\chi^2/\text{NDF}$ : 39.1/24

Right Out: 1904.684+/-691.229  $\chi^2/\text{NDF}$ : 25.2/24

Left In: 2595.551+/-683.824  $\chi^2/\text{NDF}$ : 14.0/22

Left: 1693.134+/-481.290  $\chi^2/\text{NDF}$ : 56.6/47

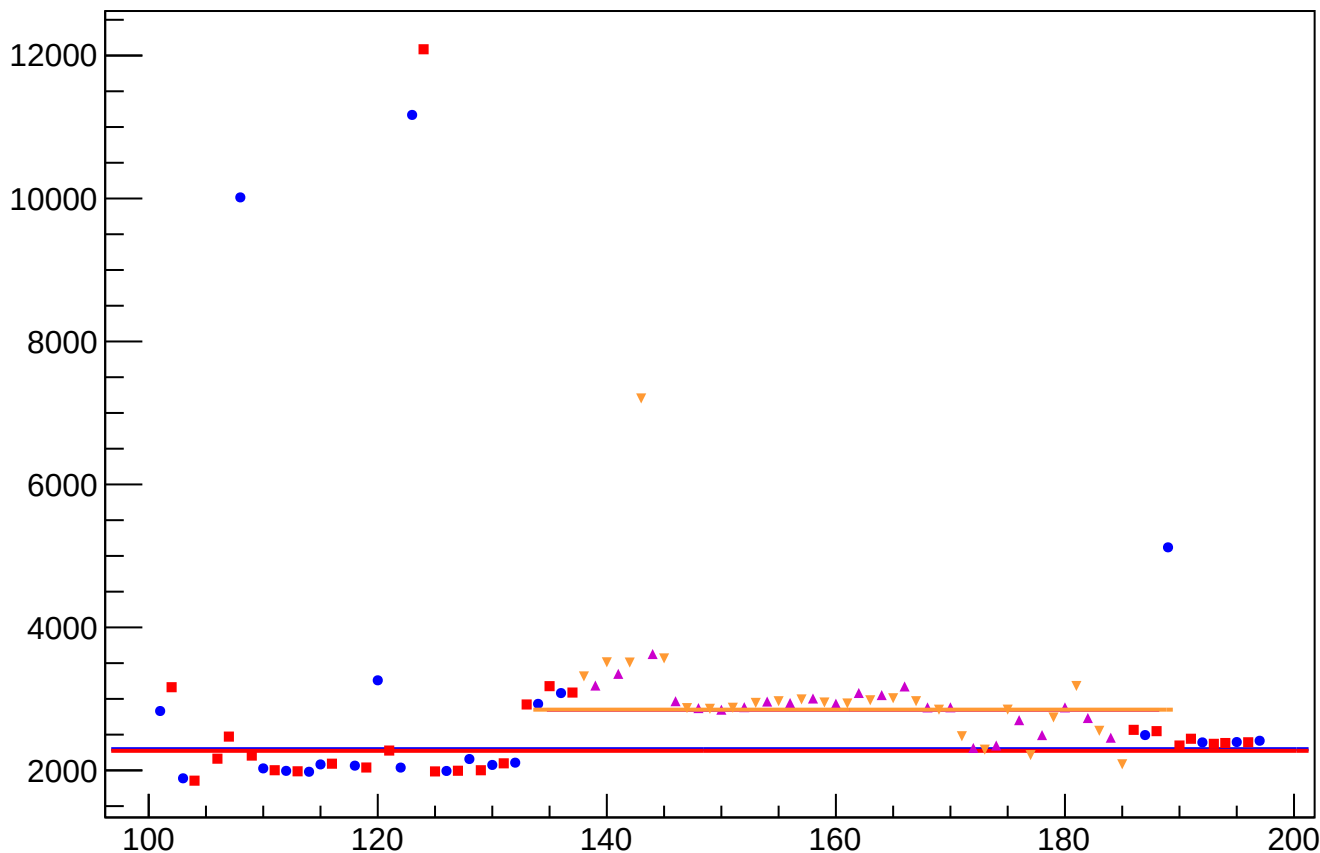
Right: 1936.303+/-515.865  $\chi^2/\text{NDF}$ : 37.6/46

In: 2324.382+/-512.765  $\chi^2/\text{NDF}$ : 26.8/44

Out: 1344.995+/-483.851  $\chi^2/\text{NDF}$ : 65.7/49

All: 1806.297+/-351.912  $\chi^2/\text{NDF}$ : 94.3/94

# dit\_asym\_atl2\_rms vs Slug, Sign Corrected



Right In: 2296.677+/-0.548  $\chi^2/\text{NDF}$ : 1159467.1/21

Left Out: 2849.256+/-0.479  $\chi^2/\text{NDF}$ : 1034478.3/24

Right Out: 2273.581+/-0.489  $\chi^2/\text{NDF}$ : 622990.0/24

Left In: 2844.779+/-0.484  $\chi^2/\text{NDF}$ : 383776.8/22

Left: 2847.038+/-0.340  $\chi^2/\text{NDF}$ : 1418298.4/47

Right: 2283.808+/-0.365  $\chi^2/\text{NDF}$ : 1783446.7/46

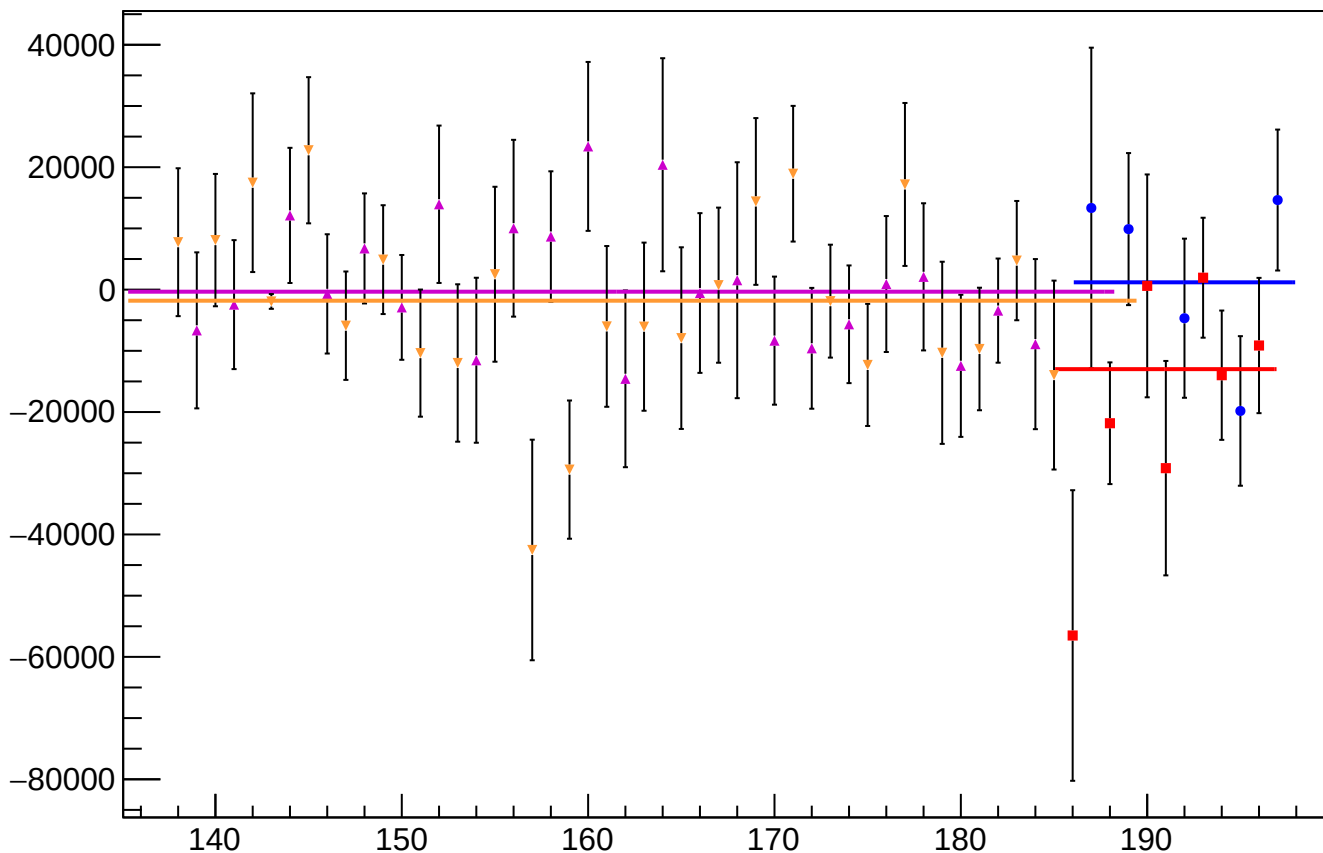
In: 2604.860+/-0.363  $\chi^2/\text{NDF}$ : 2105670.5/44

Out: 2567.049+/-0.342  $\chi^2/\text{NDF}$ : 2365315.1/49

All: 2584.854+/-0.249  $\chi^2/\text{NDF}$ : 4476739.7/94



asym\_atl2\_correction\_mean vs Slug, Sign Corrected



Right In: 1193.482 $\pm$ 5965.320  $\chi^2/\text{NDF}$ : 5.2/4

Left Out: -1810.593 $\pm$ 1078.173  $\chi^2/\text{NDF}$ :31.2/24

Right Out: -12992.236 $\pm$ 4675.964  $\chi^2/\text{NDF}$ : 8.0/6

Left In: -339.260 $\pm$ 2365.986  $\chi^2/\text{NDF}$ :14.2/22

Left: -1557.594 $\pm$ 981.106  $\chi^2/\text{NDF}$ : 45.7/47

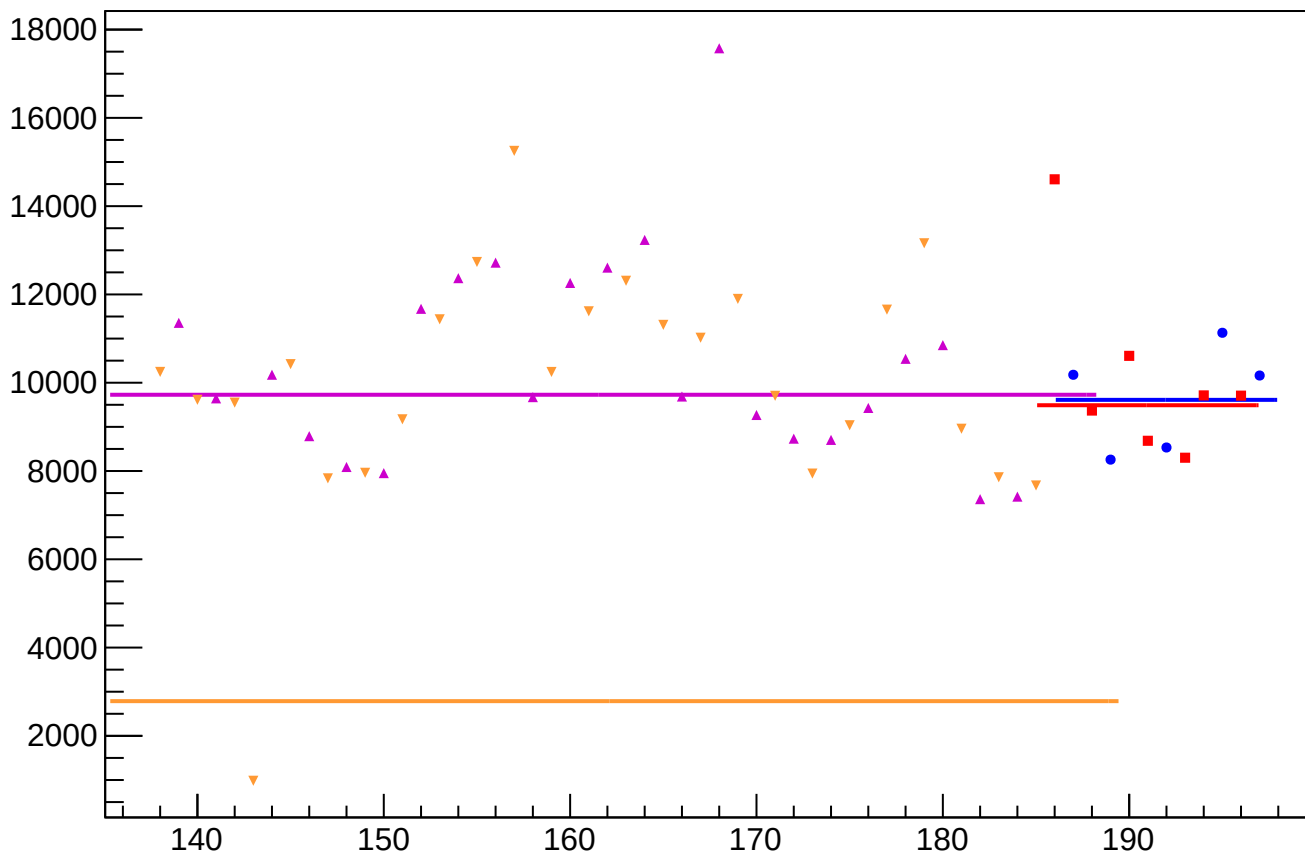
Right: -7593.327 $\pm$ 3680.113  $\chi^2/\text{NDF}$ : 16.7/11

In: -130.918 $\pm$ 2199.314  $\chi^2/\text{NDF}$ :19.5/27

Out: -2375.066 $\pm$ 1050.606  $\chi^2/\text{NDF}$ :44.7/31

All: -1958.111 $\pm$ 947.996  $\chi^2/\text{NDF}$ : 65.0/59

asym\_atl2\_correction\_rms vs Slug, Sign Corrected



Right In: 9611.864+/-4.218  $\chi^2/\text{NDF}$ : 74018.9/4

Left Out: 2786.461+/-0.762  $\chi^2/\text{NDF}$ : 22863045.3/24

Right Out: 9490.027+/-3.306  $\chi^2/\text{NDF}$ : 136170.0/6

Left In: 9727.255+/-1.673  $\chi^2/\text{NDF}$ : 1261406.7/22

Left: 3979.946+/-0.694  $\chi^2/\text{NDF}$ : 38376569.5/47

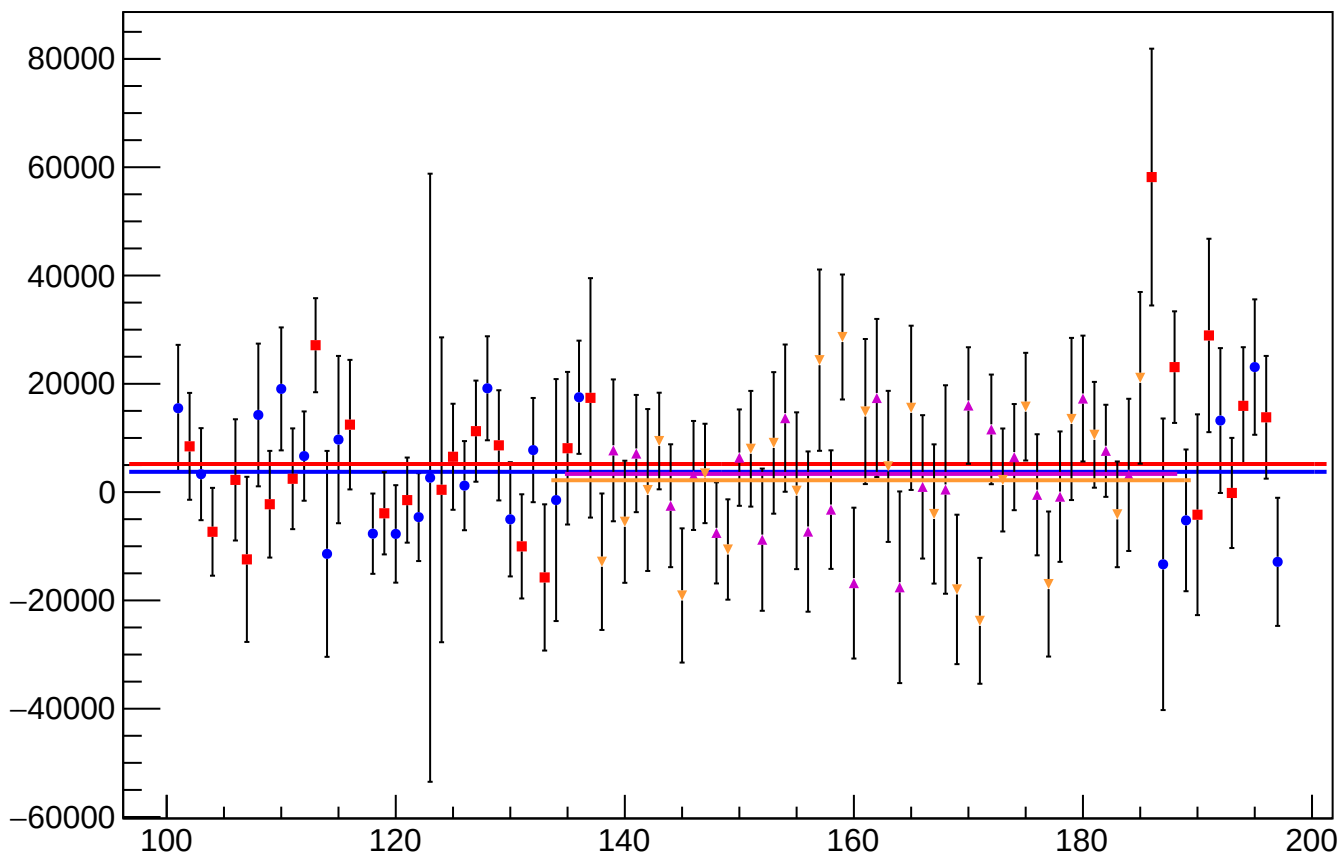
Right: 9536.397+/-2.602  $\chi^2/\text{NDF}$ : 210705.6/11

In: 9711.570+/-1.555  $\chi^2/\text{NDF}$ : 1336072.2/27

Out: 3124.871+/-0.743  $\chi^2/\text{NDF}$ : 26902251.6/31

All: 4348.659+/-0.670  $\chi^2/\text{NDF}$ : 42844075.0/5

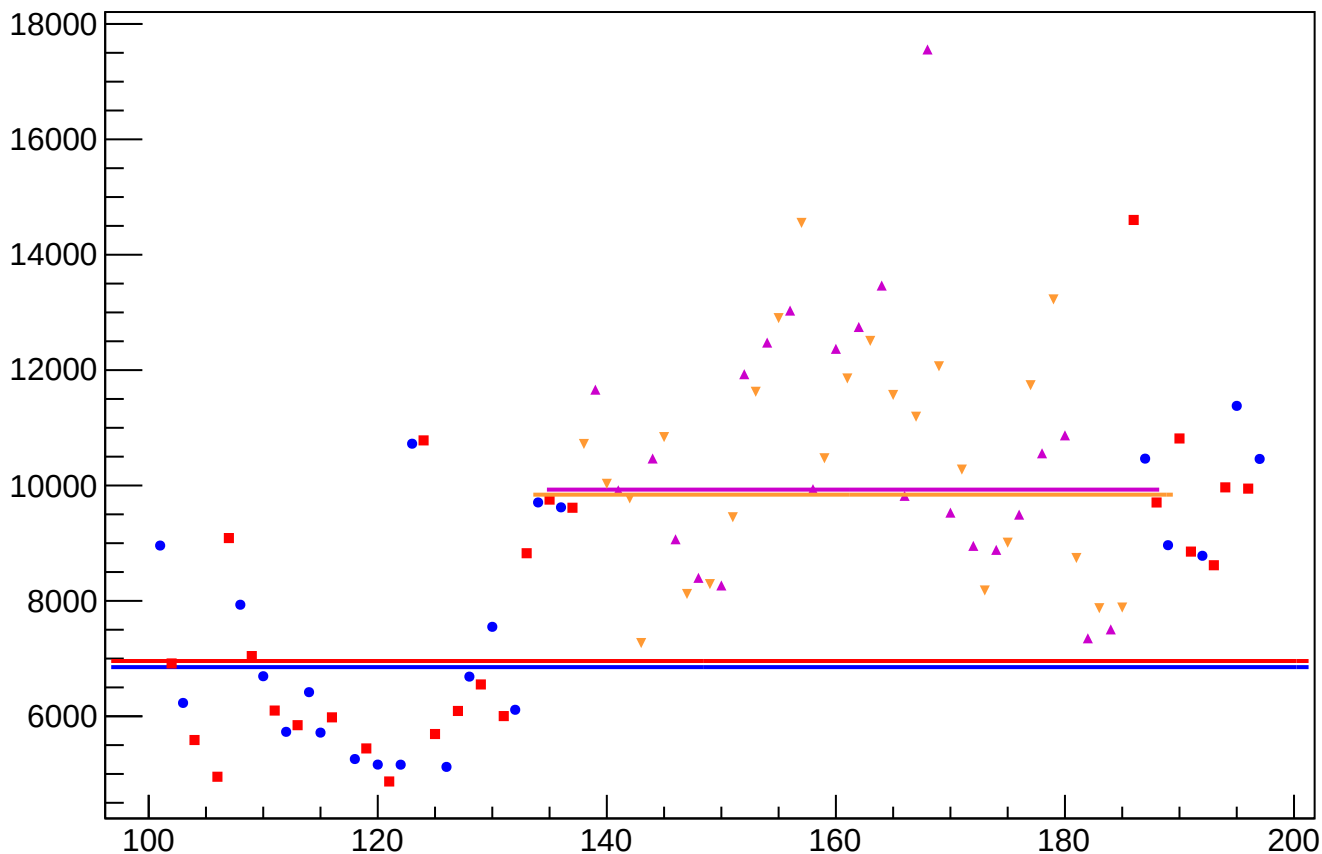
# asym\_atl2\_mean vs Slug, Sign Corrected



Right In: 3746.488 $\pm$ 2323.539  $\chi^2$ /NDF: 20.5/21  
Left Out: 2192.629 $\pm$ 2346.604  $\chi^2$ /NDF:31.2/24  
Right Out: 5190.832 $\pm$ 2167.952  $\chi^2$ /NDF: 31.2/24  
Left In: 3362.489 $\pm$ 2413.842  $\chi^2$ /NDF:12.8/22

Left: 2761.039 $\pm$ 1682.568  $\chi^2$ /NDF: 44.1/47  
Right: 4518.633 $\pm$ 1585.125  $\chi^2$ /NDF: 51.9/46  
In: 3561.805 $\pm$ 1674.004  $\chi^2$ /NDF:33.3/44  
Out: 3810.192 $\pm$ 1592.391  $\chi^2$ /NDF:63.2/49  
All: 3692.201 $\pm$ 1153.764  $\chi^2$ /NDF: 96.6/94

# asym\_atl2\_rms vs Slug, Sign Corrected



Right In: 6851.718 $\pm$ 1.643

$\chi^2/\text{NDF}$ : 1257935.5/21

Left: 9883.710 $\pm$ 1.190  $\chi^2/\text{NDF}$ : 2406921.7/47

Right: 6908.510 $\pm$ 1.121  $\chi^2/\text{NDF}$ : 2766916.1/46

Left Out: 9841.227 $\pm$ 1.659

$\chi^2/\text{NDF}$ : 1184767.7/24

In: 8331.553 $\pm$ 1.184  $\chi^2/\text{NDF}$ : 4165552.0/44

Right Out: 6957.947 $\pm$ 1.533

$\chi^2/\text{NDF}$ : 1506745.7/24

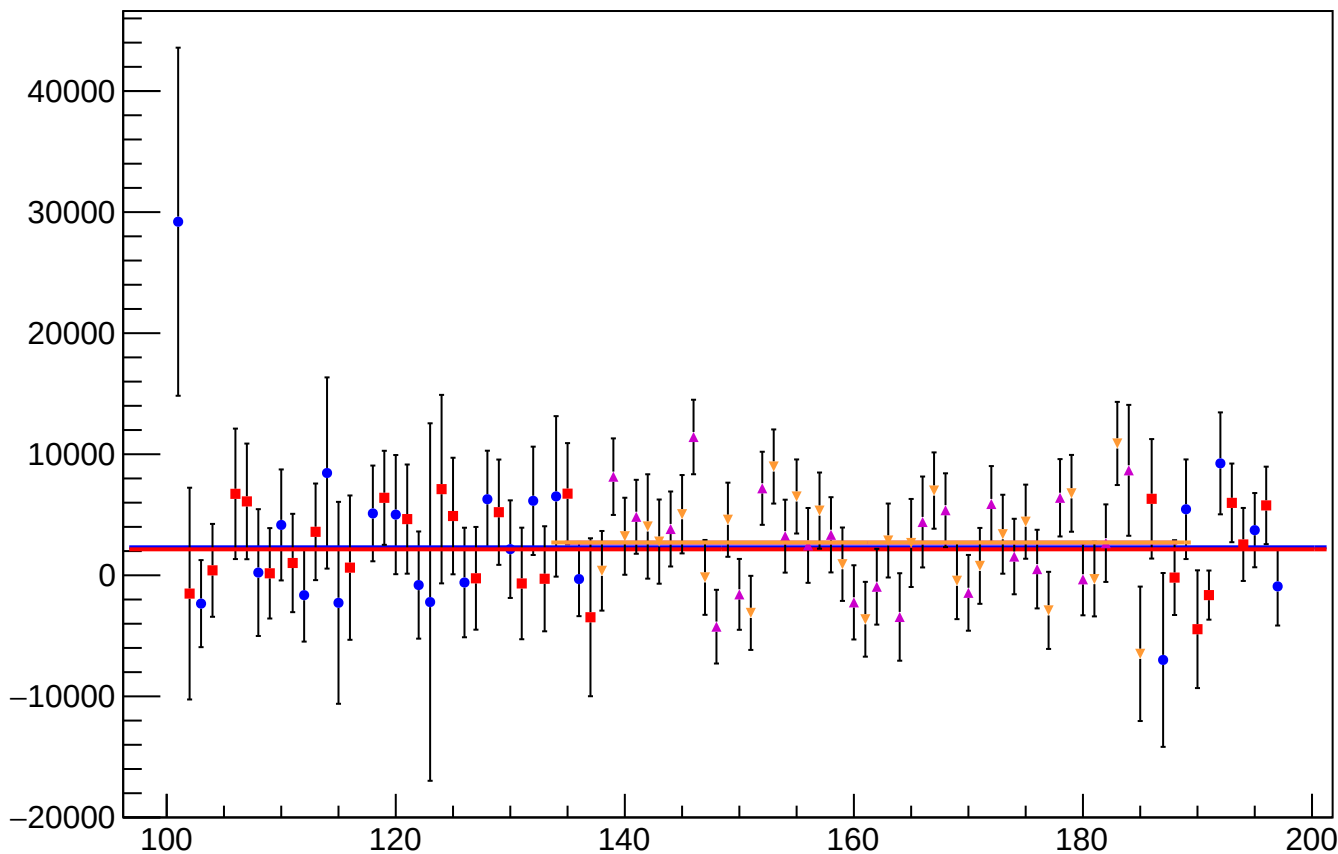
Out: 8285.614 $\pm$ 1.126  $\chi^2/\text{NDF}$ : 4320579.0/49

Left In: 9928.662 $\pm$ 1.707

$\chi^2/\text{NDF}$ : 1220804.9/22

All: 8307.436 $\pm$ 0.816  $\chi^2/\text{NDF}$ : 8486921.7/94

# dit\_asym\_atr1\_mean vs Slug, Sign Corrected



Right In: 2312.184 $\pm$ 947.363  $\chi^2$ /NDF: 18.3/21

Left Out: 2712.564 $\pm$ 648.832  $\chi^2$ /NDF:34.7/24

Right Out: 2145.557 $\pm$ 795.388  $\chi^2$ /NDF: 17.3/24

Left In: 2697.794 $\pm$ 662.544  $\chi^2$ /NDF:36.1/22

Left: 2705.333 $\pm$ 463.565  $\chi^2$ /NDF: 70.8/47

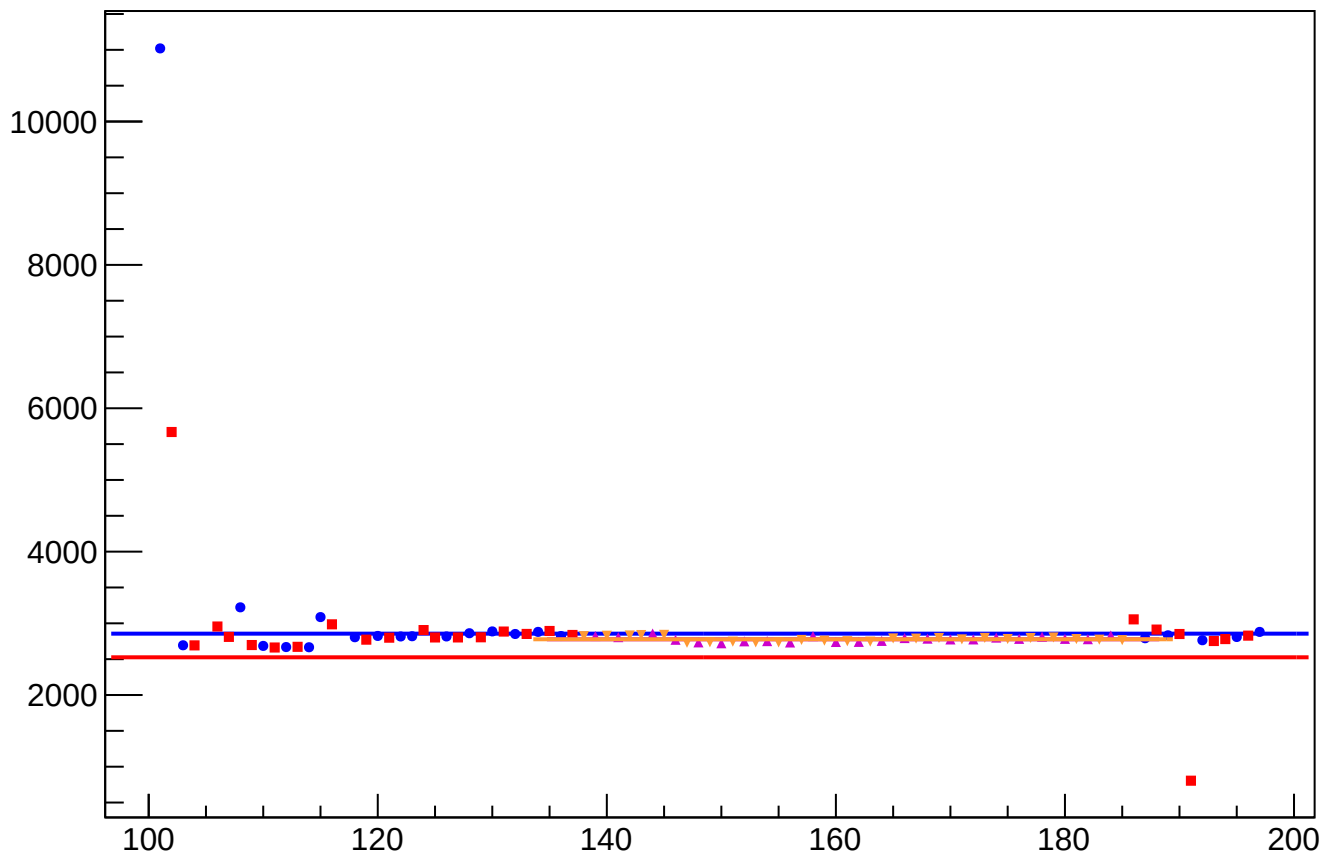
Right: 2214.450 $\pm$ 609.158  $\chi^2$ /NDF: 35.7/46

In: 2571.139 $\pm$ 542.941  $\chi^2$ /NDF:54.5/44

Out: 2486.013 $\pm$ 502.769  $\chi^2$ /NDF:52.4/49

All: 2525.310 $\pm$ 368.897  $\chi^2$ /NDF: 106.9/94

# dit\_asym\_atr1\_rms vs Slug, Sign Corrected



Right In: 2855.848+/-0.670  $\chi^2/\text{NDF}$ : 671919.0/21

Left Out: 2777.450+/-0.459  $\chi^2/\text{NDF}$ : 5253.1/24

Right Out: 2526.013+/-0.562  $\chi^2/\text{NDF}$ : 1934537.5/24

Left In: 2777.355+/-0.468  $\chi^2/\text{NDF}$ : 5488.7/22

Left: 2777.404+/-0.328  $\chi^2/\text{NDF}$ : 10741.8/47

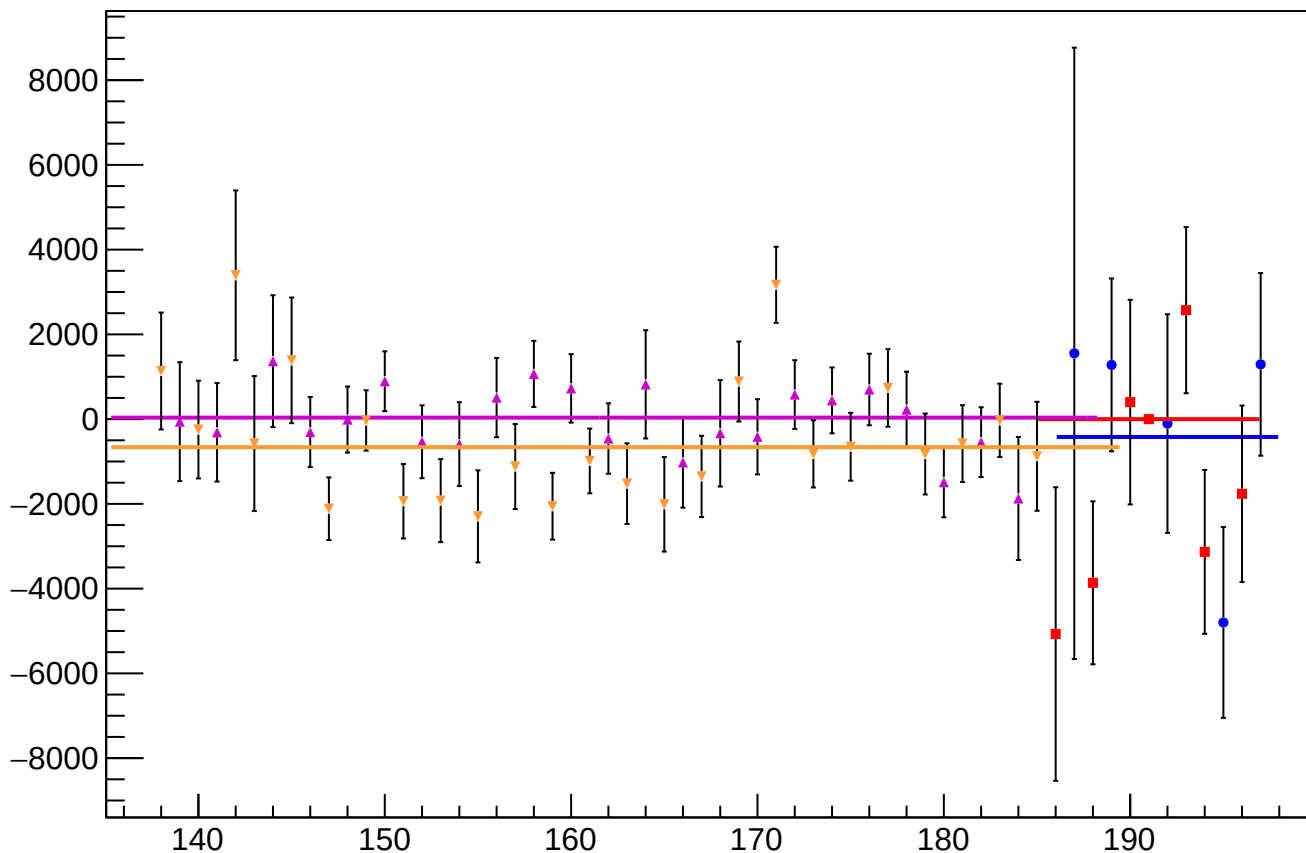
Right: 2662.385+/-0.431  $\chi^2/\text{NDF}$ : 2748653.8/46

In: 2803.136+/-0.384  $\chi^2/\text{NDF}$ : 686627.8/44

Out: 2676.987+/-0.356  $\chi^2/\text{NDF}$ : 2059796.6/49

All: 2735.222+/-0.261  $\chi^2/\text{NDF}$ : 2804549.8/94

# asym\_atr1\_correction\_mean vs Slug, Sign Corrected



Right In:  $-421.398 \pm 1102.632$   $\chi^2/\text{NDF}: 5.2/4$

Left Out:  $-661.759 \pm 190.222$   $\chi^2/\text{NDF}: 48.7/24$

Right Out:  $-0.277 \pm 4.105$   $\chi^2/\text{NDF}: 11.3/6$

Left In:  $35.366 \pm 190.553$   $\chi^2/\text{NDF}: 15.1/22$

Left:  $-313.803 \pm 134.624$   $\chi^2/\text{NDF}: 70.5/47$

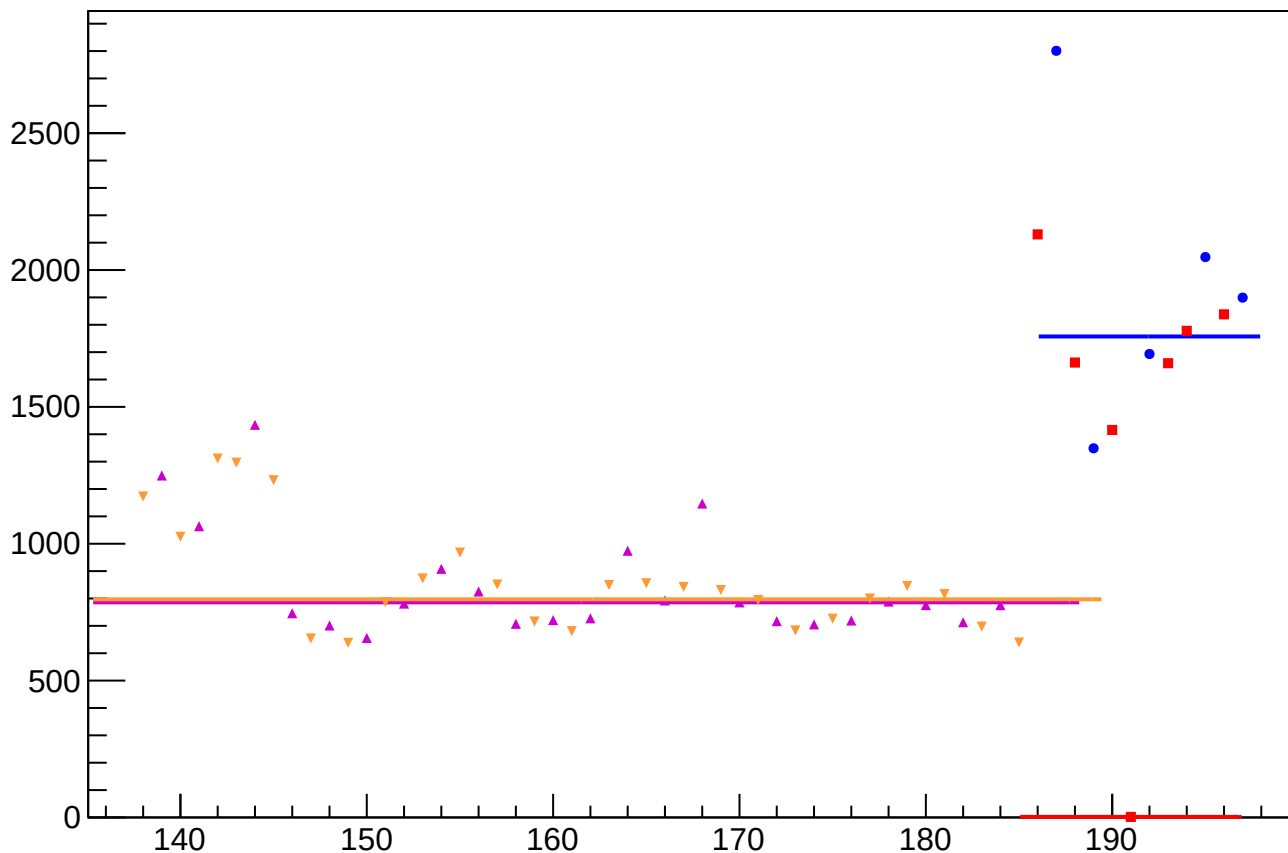
Right:  $-0.283 \pm 4.105$   $\chi^2/\text{NDF}: 16.6/11$

In:  $22.120 \pm 187.770$   $\chi^2/\text{NDF}: 20.5/27$

Out:  $-0.585 \pm 4.104$   $\chi^2/\text{NDF}: 72.0/31$

All:  $-0.575 \pm 4.103$   $\chi^2/\text{NDF}: 92.5/59$

# asym\_atr1\_correction\_rms vs Slug, Sign Corrected



Right In: 1757.265+/-0.780  $\chi^2/\text{NDF}$ : 165263.0/4

Left Out: 796.994+/-0.135  $\chi^2/\text{NDF}$ :1174879.0/24

Right Out: 2.074+/-0.003  $\chi^2/\text{NDF}$ : 7602887.0/6

Left In: 785.928+/-0.135  $\chi^2/\text{NDF}$ :1126027.7/22

Left: 791.470+/-0.095  $\chi^2/\text{NDF}$ : 2304284.9/47

Right: 2.098+/-0.003  $\chi^2/\text{NDF}$ : 12835857.1/11

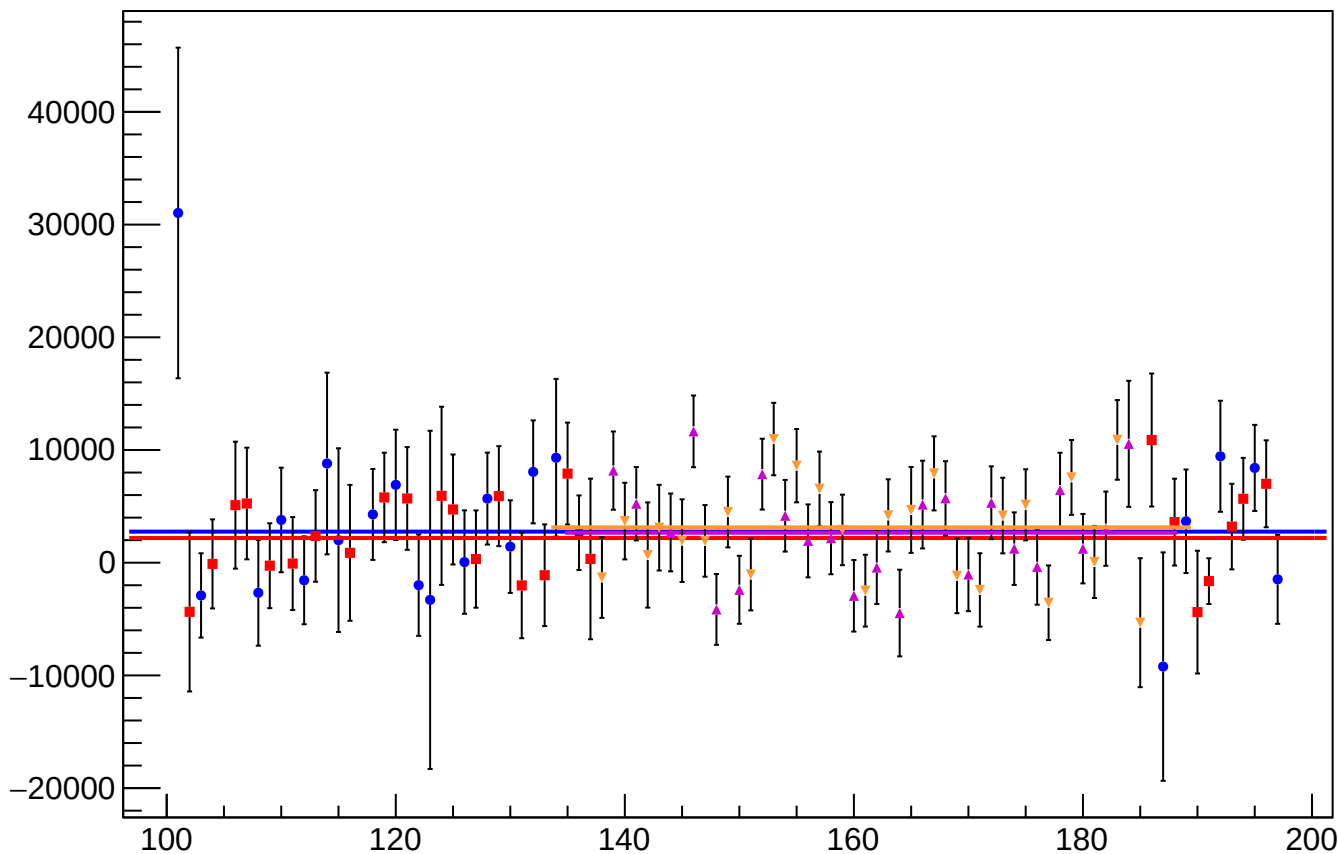
In: 814.096+/-0.133  $\chi^2/\text{NDF}$ :2798342.6/27

Out: 2.444+/-0.003  $\chi^2/\text{NDF}$ :43687944.4/31

All: 2.832+/-0.003  $\chi^2/\text{NDF}$ : 83837961.8/59



# asym\_atr1\_mean vs Slug, Sign Corrected



Right In: 2756.769 $\pm$ 1010.895  $\chi^2$ /NDF: 21.1/21

Left Out: 3139.358 $\pm$ 680.222  $\chi^2$ /NDF:38.3/24

Right Out: 2189.991 $\pm$ 846.286  $\chi^2$ /NDF: 18.3/24

Left In: 2659.828 $\pm$ 693.121  $\chi^2$ /NDF:36.9/22

Left: 2904.096 $\pm$ 485.486  $\chi^2$ /NDF: 75.4/47

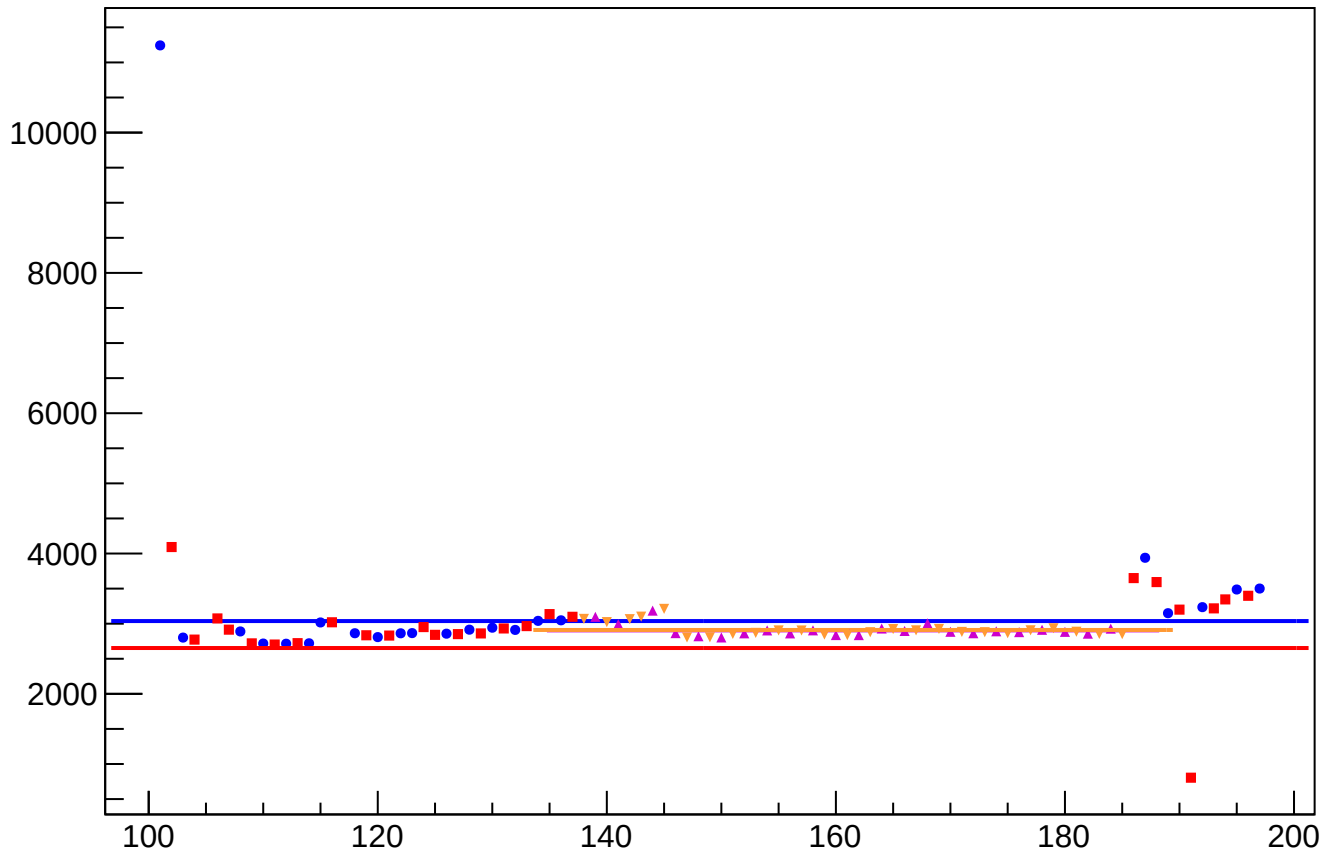
Right: 2423.536 $\pm$ 648.910  $\chi^2$ /NDF: 39.6/46

In: 2690.828 $\pm$ 571.654  $\chi^2$ /NDF:58.1/44

Out: 2766.745 $\pm$ 530.187  $\chi^2$ /NDF:57.3/49

All: 2731.639 $\pm$ 388.733  $\chi^2$ /NDF: 115.4/94

# asym\_atr1\_rms vs Slug, Sign Corrected



Right In: 3037.380+/-0.715  $\chi^2/\text{NDF}$ : 756694.0/21

Left Out: 2910.362+/-0.481  $\chi^2/\text{NDF}$ :36080.5/24

Right Out: 2653.110+/-0.598  $\chi^2/\text{NDF}$ : 2227410.1/24

Left In: 2904.499+/-0.490  $\chi^2/\text{NDF}$ :30423.1/22

Left: 2907.485+/-0.343  $\chi^2/\text{NDF}$ : 66576.4/47

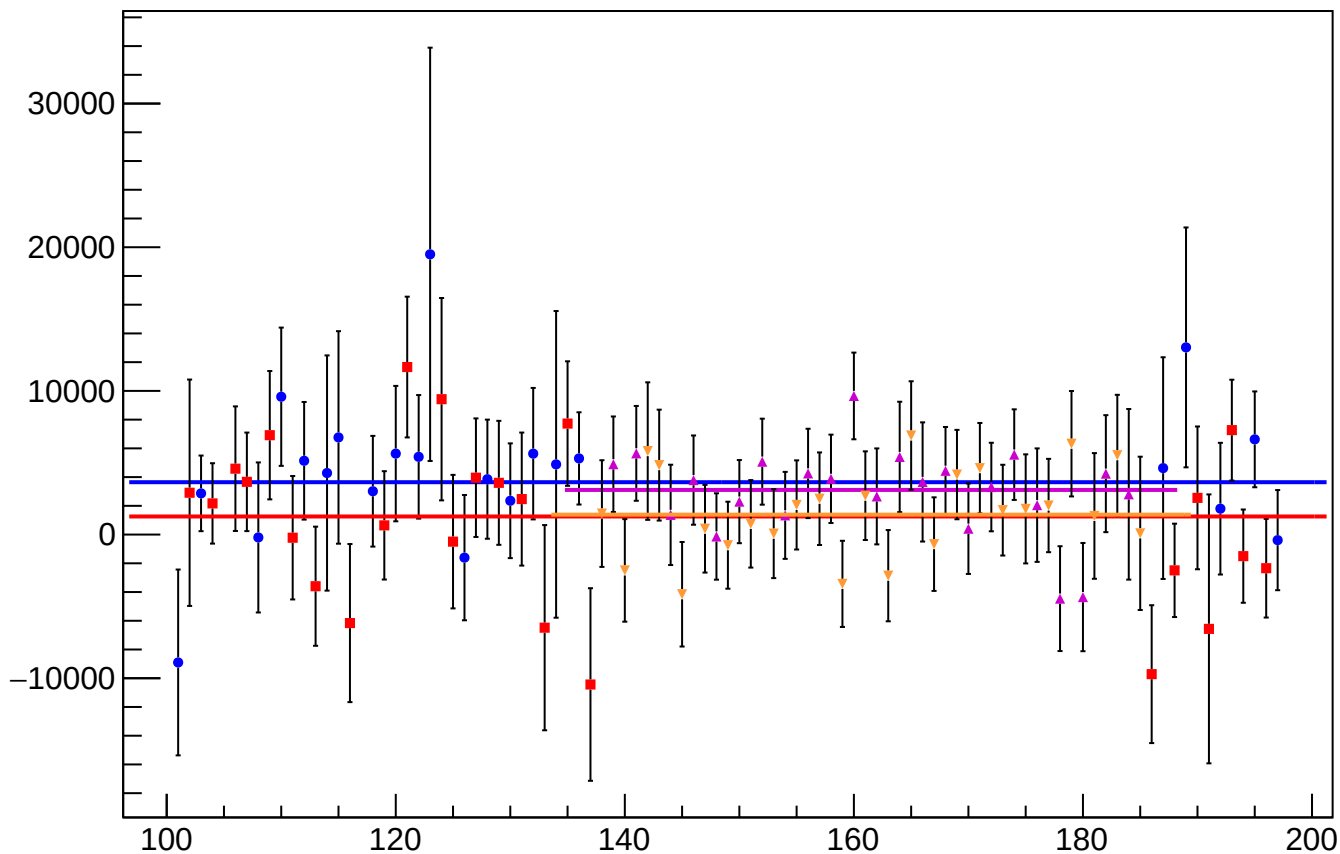
Right: 2811.451+/-0.459  $\chi^2/\text{NDF}$ : 3154016.8/46

In: 2946.992+/-0.404  $\chi^2/\text{NDF}$ :810623.8/44

Out: 2809.394+/-0.375  $\chi^2/\text{NDF}$ :2375761.6/49

All: 2873.022+/-0.275  $\chi^2/\text{NDF}$ : 3248677.2/94

# dit\_asym\_atr2\_mean vs Slug, Sign Corrected



Right In: 3644.862 $\pm$ 957.682  $\chi^2$ /NDF: 13.4/21

Left Out: 1386.275 $\pm$ 684.647  $\chi^2$ /NDF:18.0/24

Right Out: 1259.079 $\pm$ 857.078  $\chi^2$ /NDF: 31.5/24

Left In: 3106.878 $\pm$ 695.685  $\chi^2$ /NDF:18.4/22

Left: 2232.819 $\pm$ 487.974  $\chi^2$ /NDF: 39.5/47

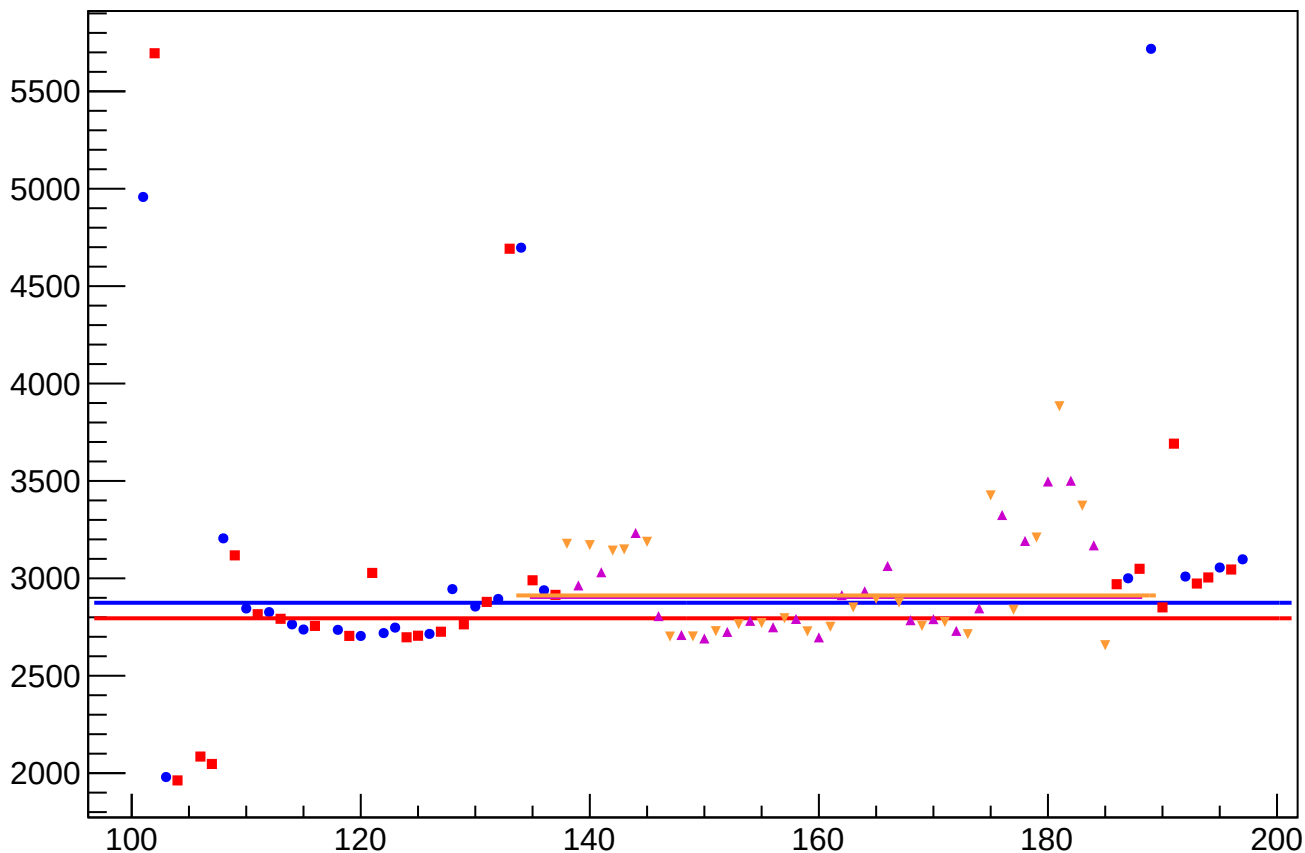
Right: 2320.116 $\pm$ 638.662  $\chi^2$ /NDF: 48.4/46

In: 3292.708 $\pm$ 562.852  $\chi^2$ /NDF:32.0/44

Out: 1336.727 $\pm$ 534.929  $\chi^2$ /NDF:49.5/49

All: 2264.996 $\pm$ 387.748  $\chi^2$ /NDF: 87.9/94

# dit\_asym\_atr2\_rms vs Slug, Sign Corrected



Right In: 2874.615 $\pm$ 0.677  $\chi^2$ /NDF: 766836.6/21

Left Out: 2912.211 $\pm$ 0.484  $\chi^2$ /NDF: 290908.5/24

Right Out: 2794.913 $\pm$ 0.606  $\chi^2$ /NDF: 819589.1/24

Left In: 2904.472 $\pm$ 0.492  $\chi^2$ /NDF: 217578.9/22

Left: 2908.403 $\pm$ 0.345  $\chi^2$ /NDF: 508613.1/47

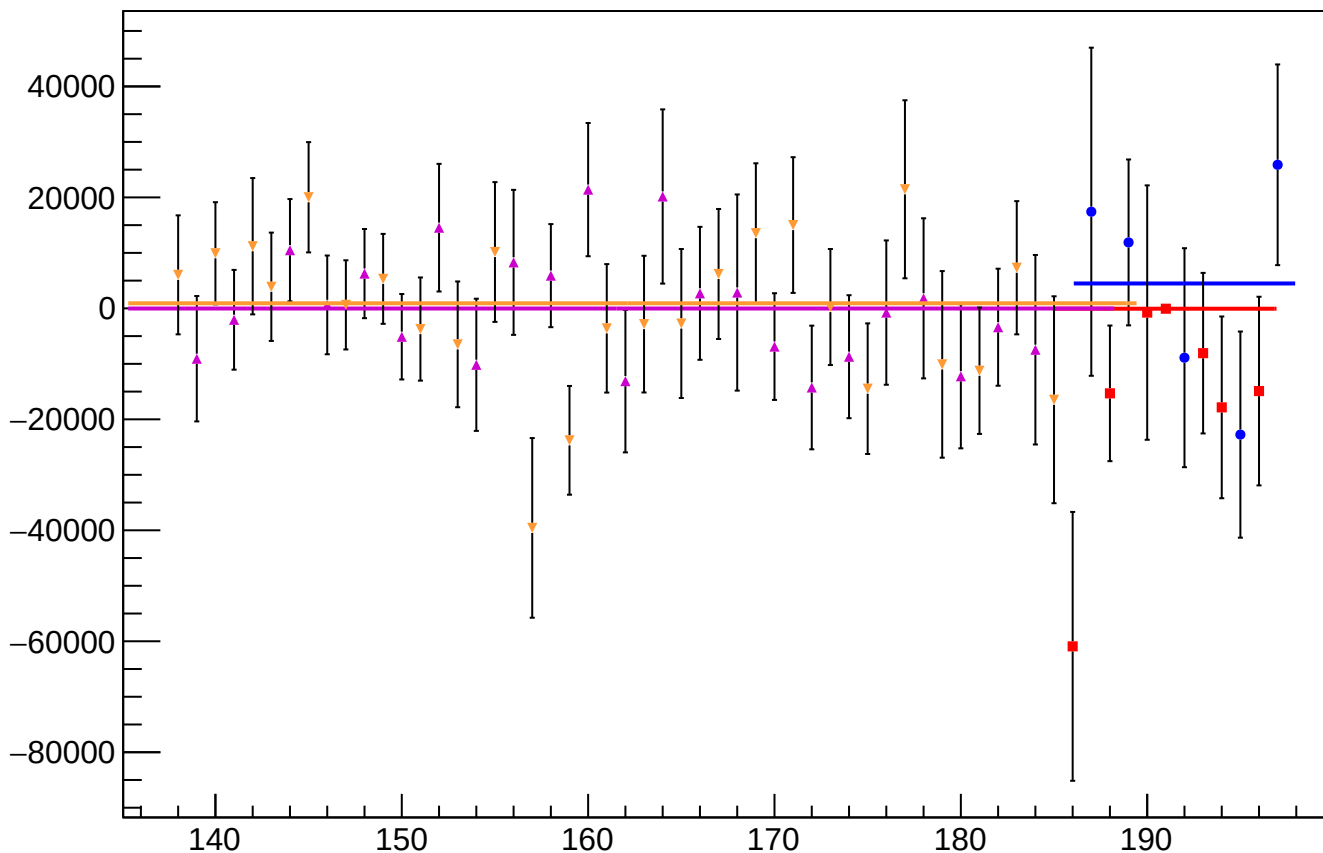
Right: 2830.350 $\pm$ 0.452  $\chi^2$ /NDF: 1594118.9/46

In: 2894.159 $\pm$ 0.398  $\chi^2$ /NDF: 985687.9/44

Out: 2866.506 $\pm$ 0.378  $\chi^2$ /NDF: 1133371.6/49

All: 2879.628 $\pm$ 0.274  $\chi^2$ /NDF: 2121596.1/94

# asym\_atr2\_correction\_mean vs Slug, Sign Corrected



Right In: 4486.970 $\pm$ 8409.484  $\chi^2$ /NDF: 4.4/4

Left Out: 916.096 $\pm$ 2238.762  $\chi^2$ /NDF: 28.7/24

Right Out: -62.983 $\pm$ 29.129  $\chi^2$ /NDF: 10.1/6

Left In: -25.729 $\pm$ 2280.428  $\chi^2$ /NDF: 16.1/22

Left: 453.866 $\pm$ 1597.571  $\chi^2$ /NDF: 44.9/47

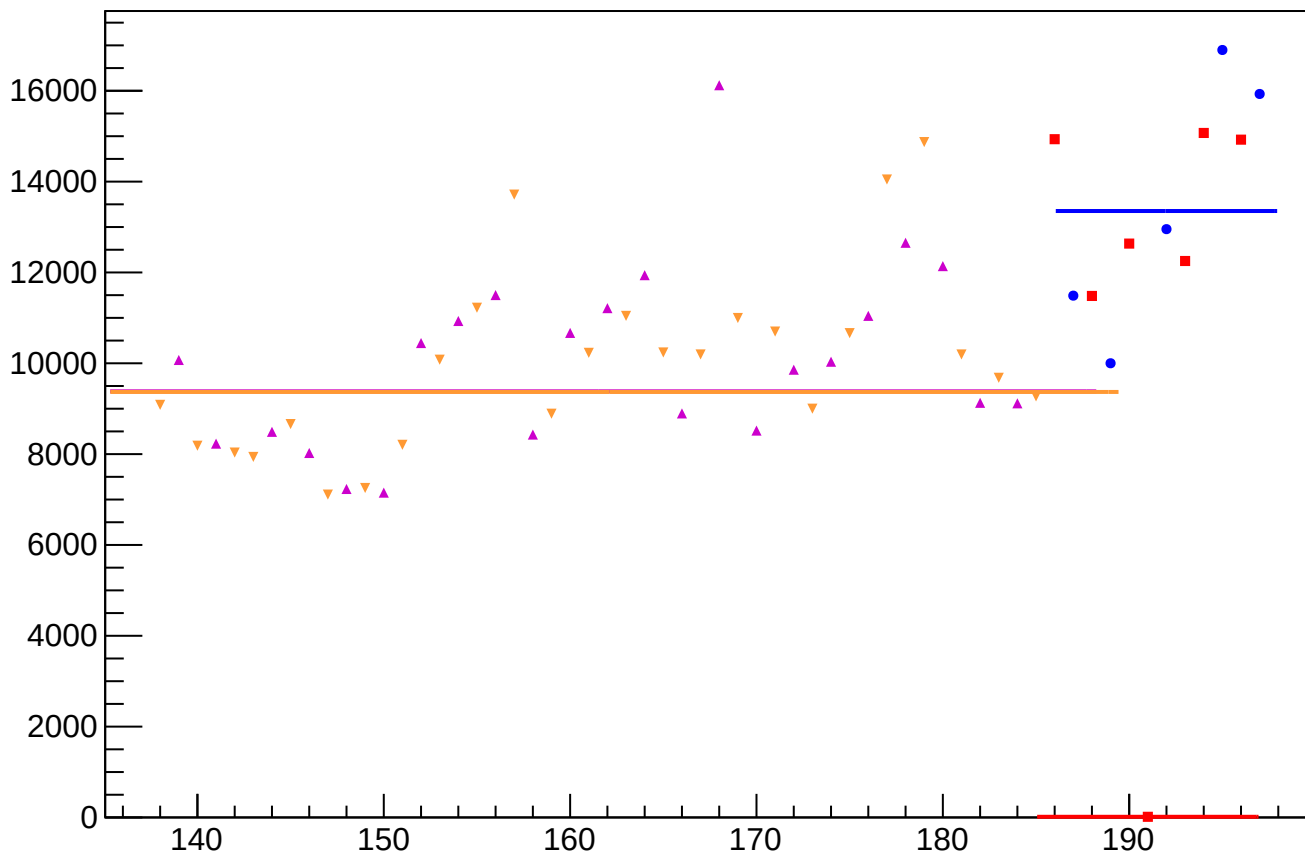
Right: -62.929 $\pm$ 29.129  $\chi^2$ /NDF: 14.9/11

In: 283.382 $\pm$ 2200.940  $\chi^2$ /NDF: 20.8/27

Out: -62.817 $\pm$ 29.127  $\chi^2$ /NDF: 39.0/31

All: -62.757 $\pm$ 29.124  $\chi^2$ /NDF: 59.9/59

# asym\_atr2\_correction\_rms vs Slug, Sign Corrected



Right In: 13352.798+/-5.946  $\chi^2/\text{NDF}$ : 222806.5/4

Left Out: 9369.034+/-1.583  $\chi^2/\text{NDF}$ :1183012.4/24

Right Out: 14.686+/-0.021  $\chi^2/\text{NDF}$ : 7784702.0/6

Left In: 9382.727+/-1.613  $\chi^2/\text{NDF}$ :1205648.8/22

Left: 9375.755+/-1.130  $\chi^2/\text{NDF}$ : 2388697.9/47

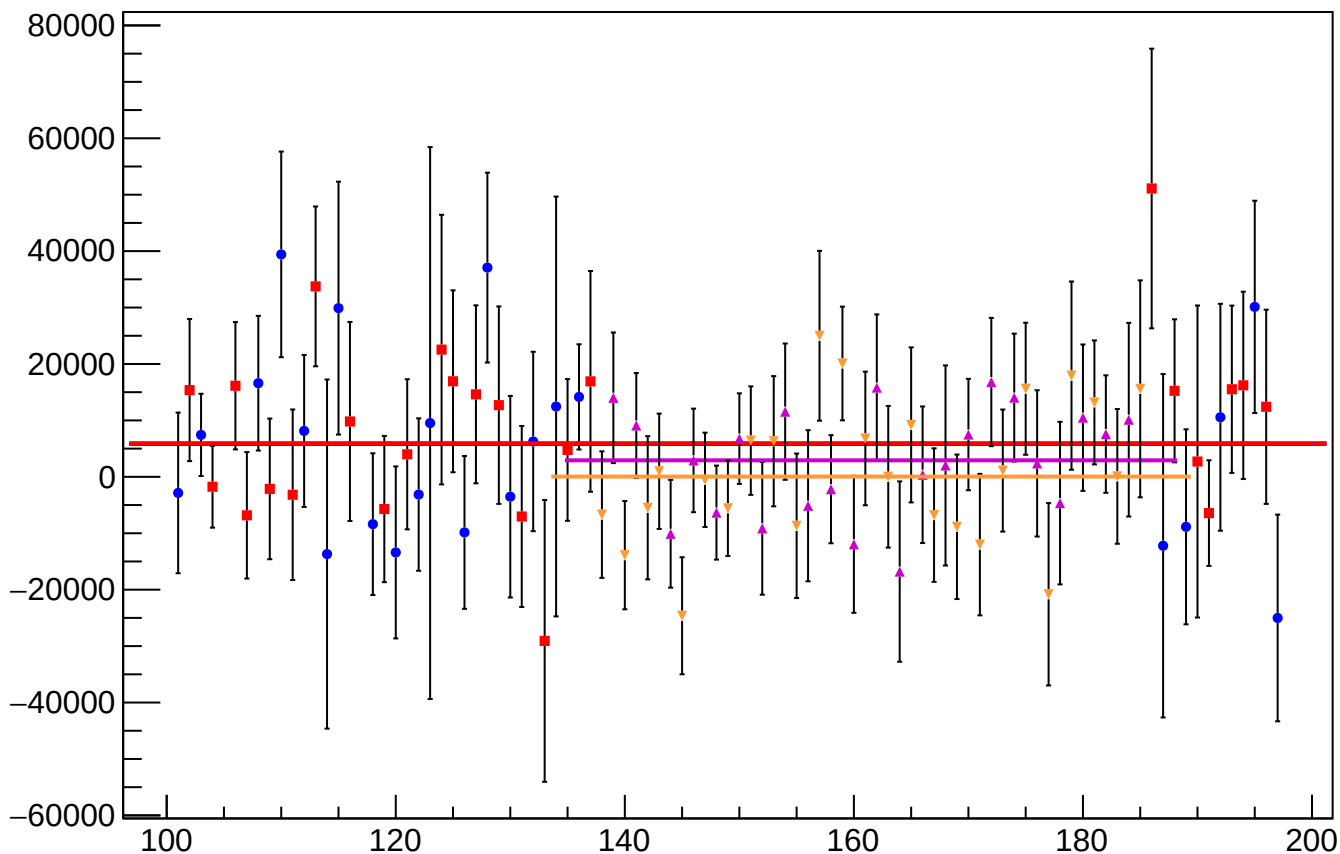
Right: 14.846+/-0.021  $\chi^2/\text{NDF}$ : 13038746.0/11

In: 9654.669+/-1.556  $\chi^2/\text{NDF}$ :1843668.9/27

Out: 16.270+/-0.021  $\chi^2/\text{NDF}$ :43879137.9/31

All: 17.957+/-0.021  $\chi^2/\text{NDF}$ : 84071219.2/59

# asym\_atr2\_mean vs Slug, Sign Corrected



Right In: 5844.526+/-3164.324  $\chi^2/\text{NDF}$ : 21.1/21

Left Out: 43.265+/-2290.867  $\chi^2/\text{NDF}$ : 25.9/24

Right Out: 5960.335+/-2760.476  $\chi^2/\text{NDF}$ : 20.2/24

Left In: 2925.533+/-2330.587  $\chi^2/\text{NDF}$ : 14.6/22

Left: 1459.628+/-1633.750  $\chi^2/\text{NDF}$ : 41.2/47

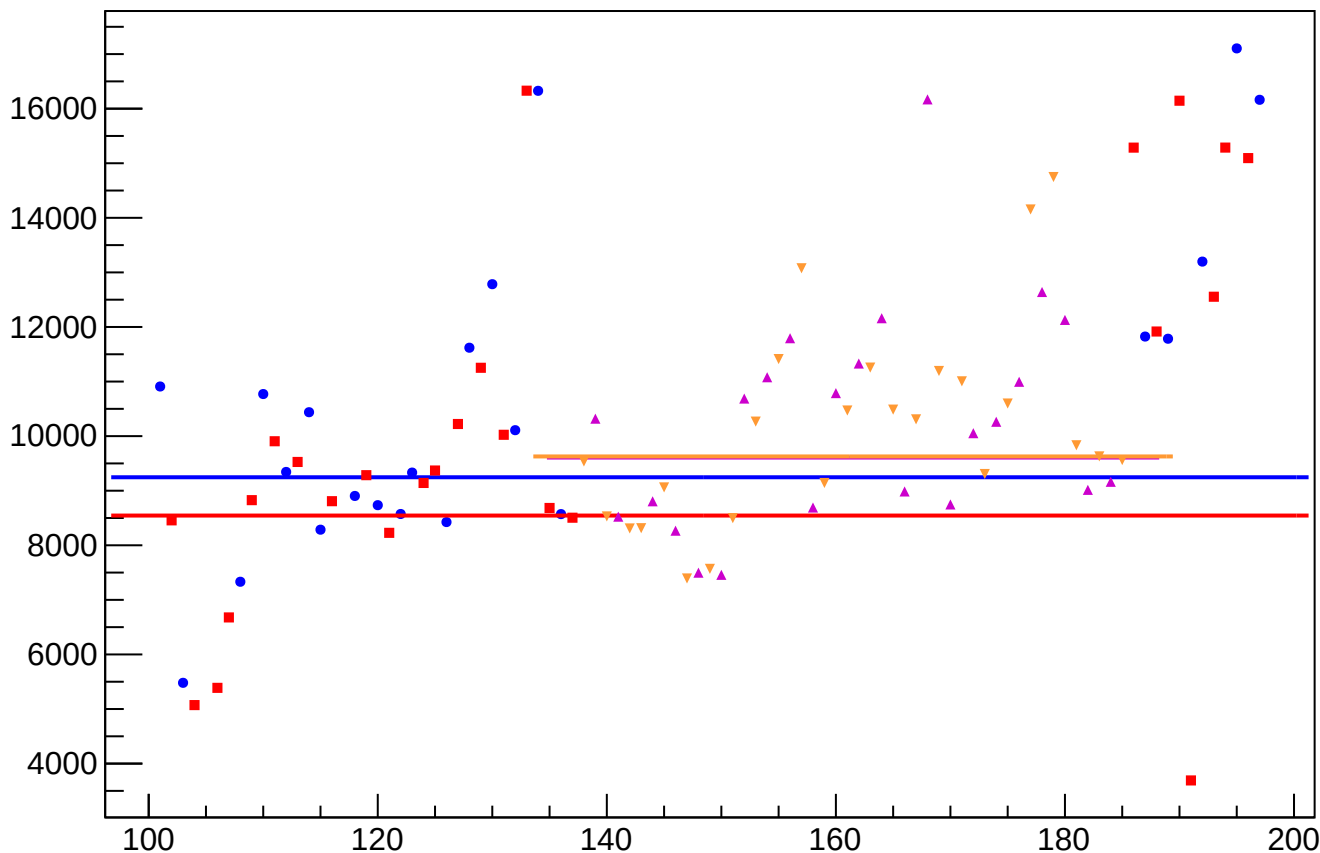
Right: 5910.288+/-2080.174  $\chi^2/\text{NDF}$ : 41.3/46

In: 3952.100+/-1876.541  $\chi^2/\text{NDF}$ : 36.2/44

Out: 2456.420+/-1762.882  $\chi^2/\text{NDF}$ : 48.8/49

All: 3157.595+/-1284.849  $\chi^2/\text{NDF}$ : 85.4/94

# asym\_atr2\_rms vs Slug, Sign Corrected



Right In: 9246.411+/-2.238  $\chi^2$ /NDF: 1624946.9/21

Left Out: 9627.824+/-1.620  $\chi^2$ /NDF:1004641.7/24

Right Out: 8544.772+/-1.952  $\chi^2$ /NDF: 2738991.3/24

Left In: 9607.553+/-1.648  $\chi^2$ /NDF:1085465.7/22

Left: 9617.863+/-1.155  $\chi^2$ /NDF: 2090184.3/47

Right: 8847.975+/-1.471  $\chi^2$ /NDF: 4419777.6/46

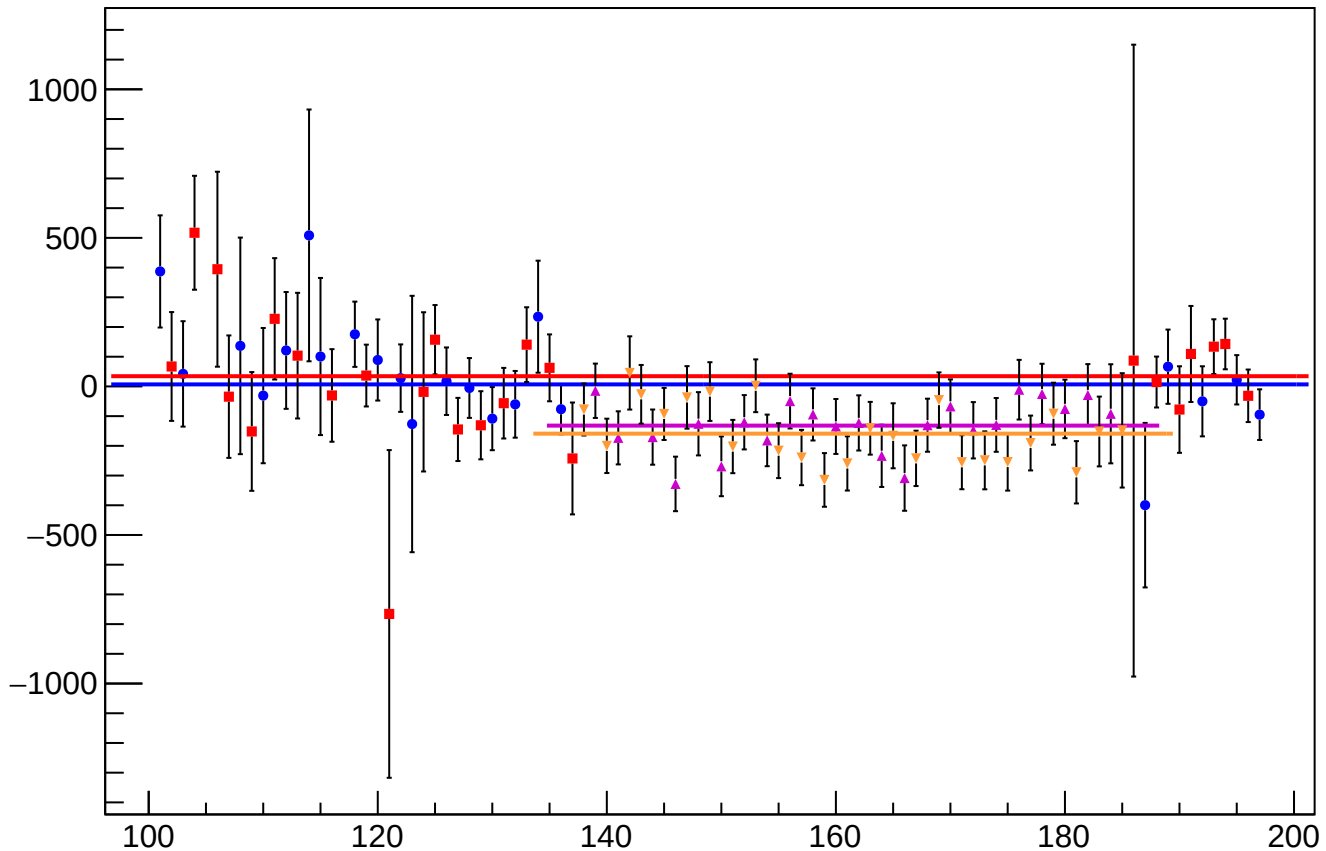
In: 9480.545+/-1.327  $\chi^2$ /NDF:2727301.8/44

Out: 9186.105+/-1.247  $\chi^2$ /NDF:3925949.8/49

All: 9324.136+/-0.909  $\chi^2$ /NDF: 6679407.6/94



# dit\_asym\_sam1\_mean vs Slug, Sign Corrected



Right In:  $6.841 \pm 27.785$   $\chi^2/\text{NDF}: 17.0/21$

Left Out:  $-158.948 \pm 19.453$   $\chi^2/\text{NDF}: 25.8/24$

Right Out:  $34.403 \pm 26.749$   $\chi^2/\text{NDF}: 25.6/24$

Left In:  $-131.879 \pm 20.076$   $\chi^2/\text{NDF}: 17.8/22$

Left:  $-145.840 \pm 13.970$   $\chi^2/\text{NDF}: 44.5/47$

Right:  $21.145 \pm 19.270$   $\chi^2/\text{NDF}: 43.2/46$

In:  $-84.297 \pm 16.273$   $\chi^2/\text{NDF}: 51.2/44$

Out:  $-92.061 \pm 15.733$   $\chi^2/\text{NDF}: 85.6/49$

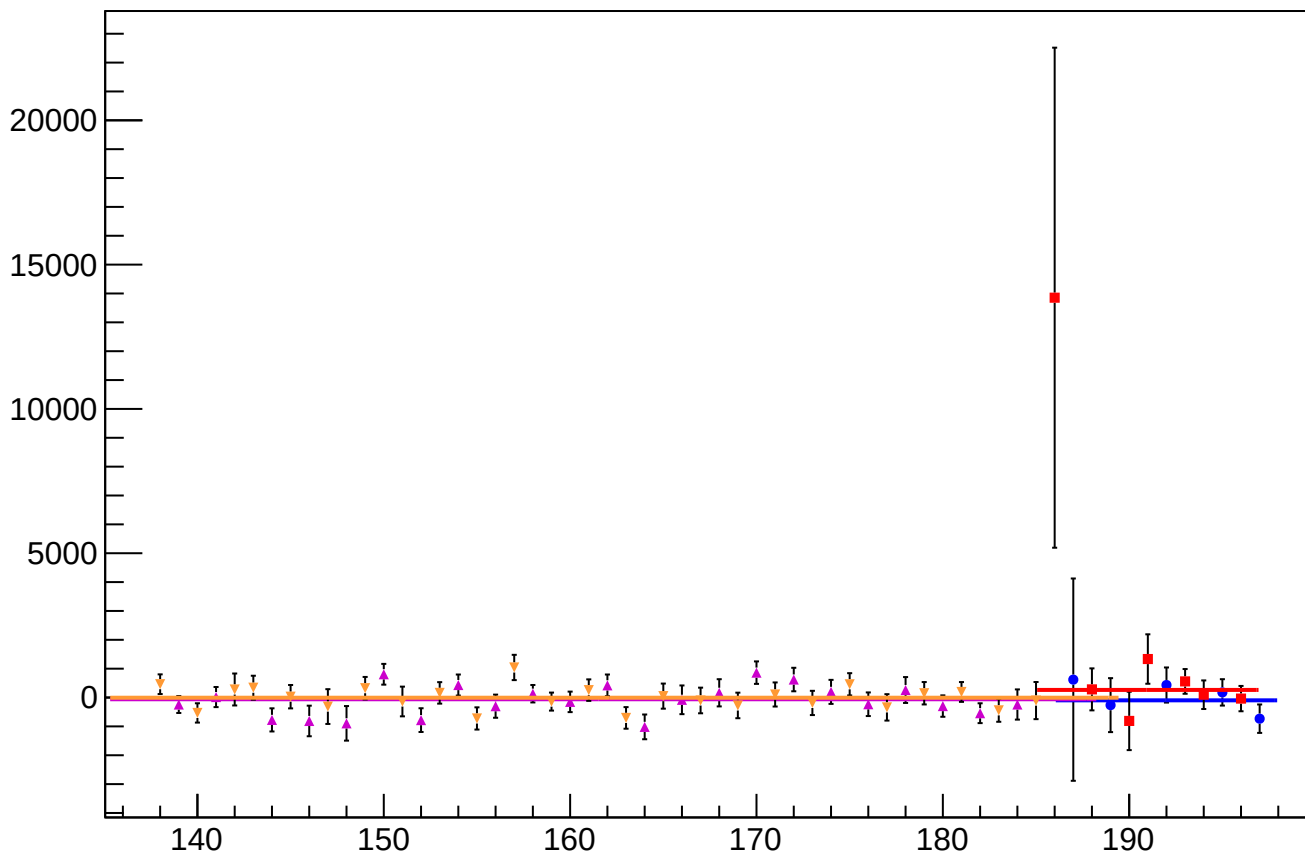
All:  $-88.310 \pm 11.311$   $\chi^2/\text{NDF}: 136.9/94$

Left In: 84.108+/-0.014     $\chi^2/\text{NDF}$ :96934.3/22

Out: 83.867+/-0.011     $\chi^2/\text{NDF}$ :2232552.5/49

All: 83.743+/-0.008     $\chi^2/\text{NDF}$ : 3451799.2/94

# asym\_sam1\_correction\_mean vs Slug, Sign Corrected



Right In: -97.036+/-279.048     $\chi^2/\text{NDF}$ : 2.9/4

Left Out: -6.627+/-81.138     $\chi^2/\text{NDF}$ :24.4/24

Right Out: 263.503+/-229.566     $\chi^2/\text{NDF}$ : 6.2/6

Left In: -59.971+/-82.046     $\chi^2/\text{NDF}$ :38.0/22

Left: -33.002+/-57.692     $\chi^2/\text{NDF}$ : 62.6/47

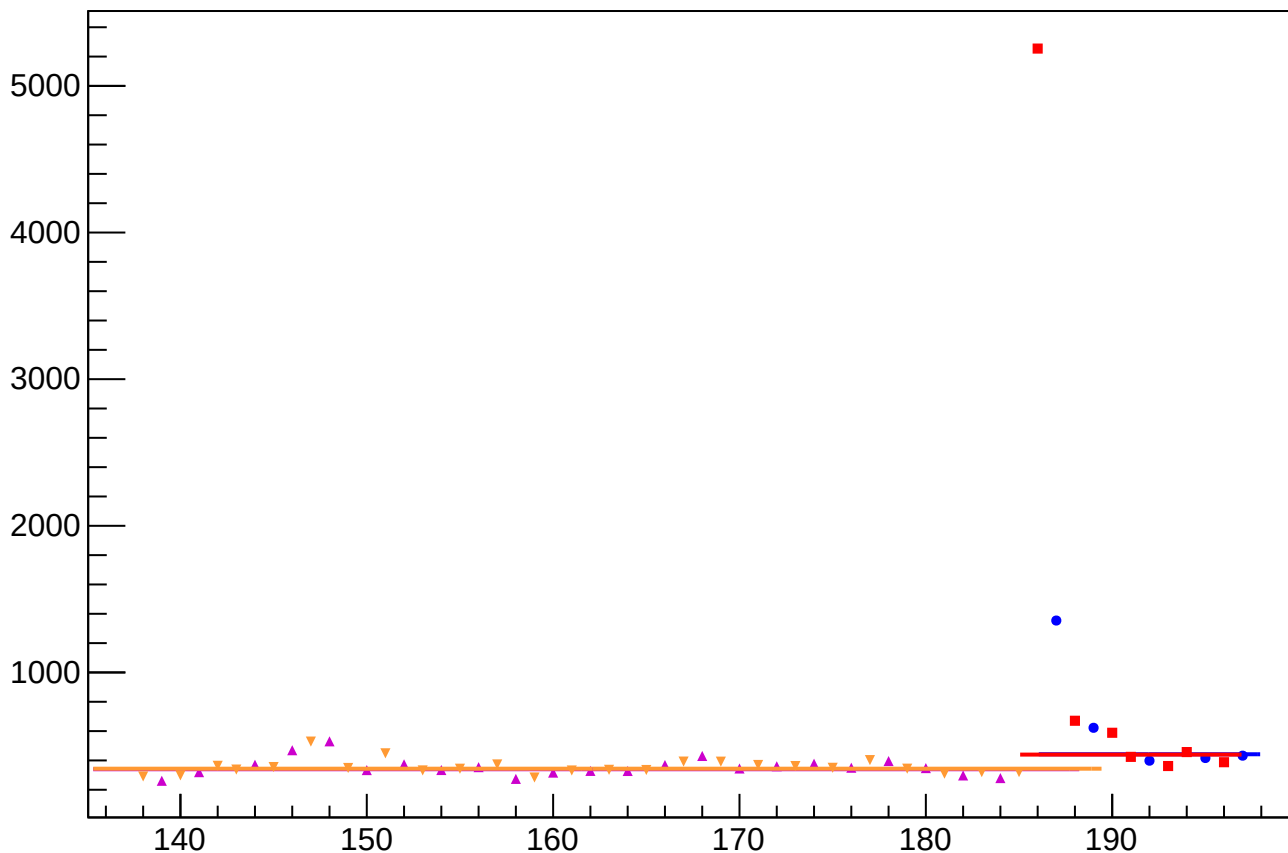
Right: 117.981+/-177.283     $\chi^2/\text{NDF}$ : 10.1/11

In: -62.921+/-78.714     $\chi^2/\text{NDF}$ :40.9/27

Out: 23.370+/-76.500     $\chi^2/\text{NDF}$ :31.8/31

All: -18.545+/-54.860     $\chi^2/\text{NDF}$ : 73.3/59

asym\_sam1\_correction\_rms vs Slug, Sign Corrected



Right In: 442.085 $\pm$ 0.197  $\chi^2/\text{NDF}$ : 227299.0/4

Left Out: 343.620 $\pm$ 0.057  $\chi^2/\text{NDF}$ : 571090.7/24

Right Out: 439.782 $\pm$ 0.162  $\chi^2/\text{NDF}$ : 959816.3/6

Left In: 339.804 $\pm$ 0.058  $\chi^2/\text{NDF}$ : 799750.5/22

Left: 341.733 $\pm$ 0.041  $\chi^2/\text{NDF}$ : 1373028.9/47

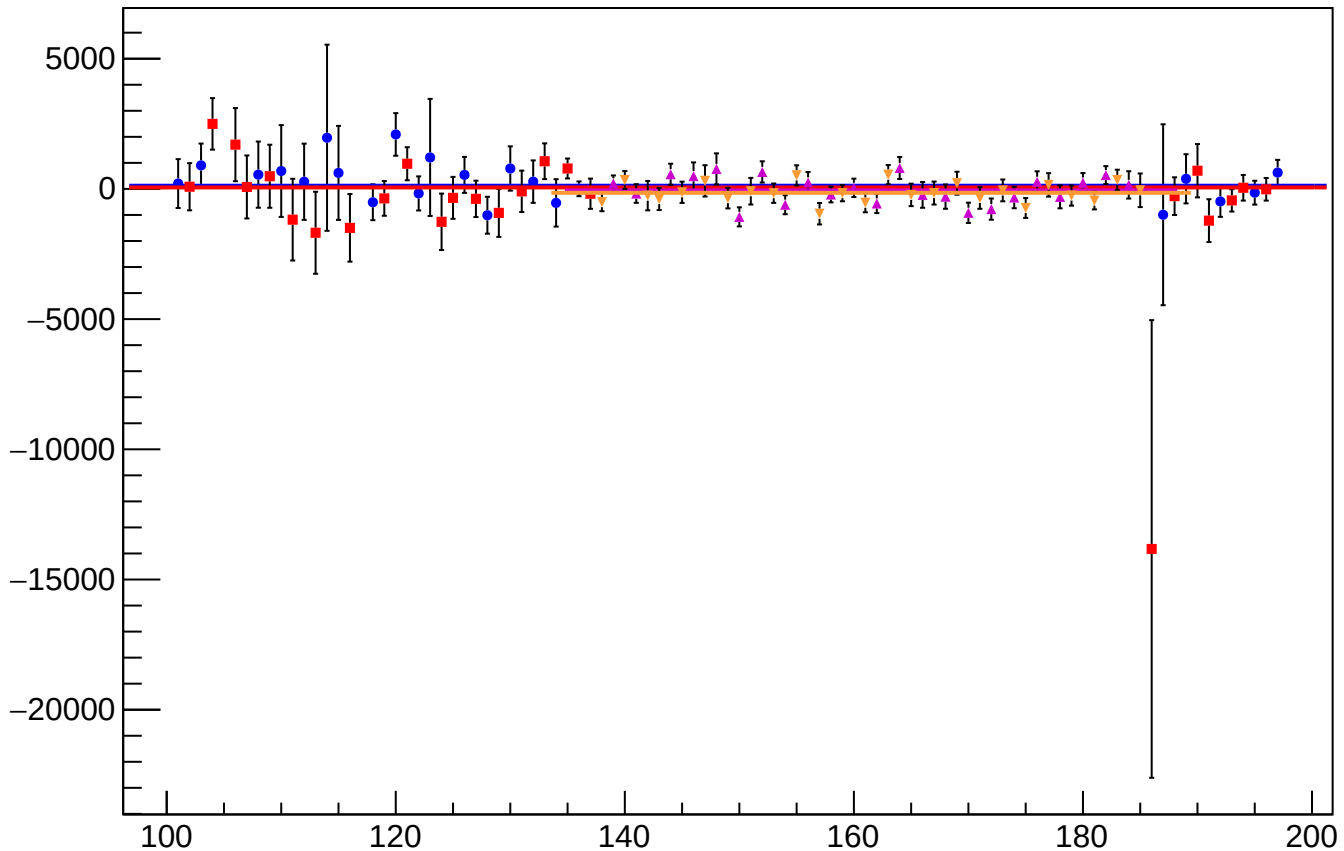
Right: 440.712 $\pm$ 0.125  $\chi^2/\text{NDF}$ : 1187196.6/11

In: 347.942 $\pm$ 0.056  $\chi^2/\text{NDF}$ : 1274368.2/27

Out: 354.299 $\pm$ 0.054  $\chi^2/\text{NDF}$ : 1842867.3/31

All: 351.211 $\pm$ 0.039  $\chi^2/\text{NDF}$ : 3123942.3/59

# asym\_sam1\_mean vs Slug, Sign Corrected



Right In: 122.114 $\pm$ 150.491  $\chi^2$ /NDF: 15.4/21

Left Out: -148.809 $\pm$ 81.017  $\chi^2$ /NDF:22.0/24

Right Out: 56.047 $\pm$ 143.433  $\chi^2$ /NDF: 29.4/24

Left In: -56.402 $\pm$ 82.155  $\chi^2$ /NDF:39.7/22

Left: -103.250 $\pm$ 57.686  $\chi^2$ /NDF: 62.3/47

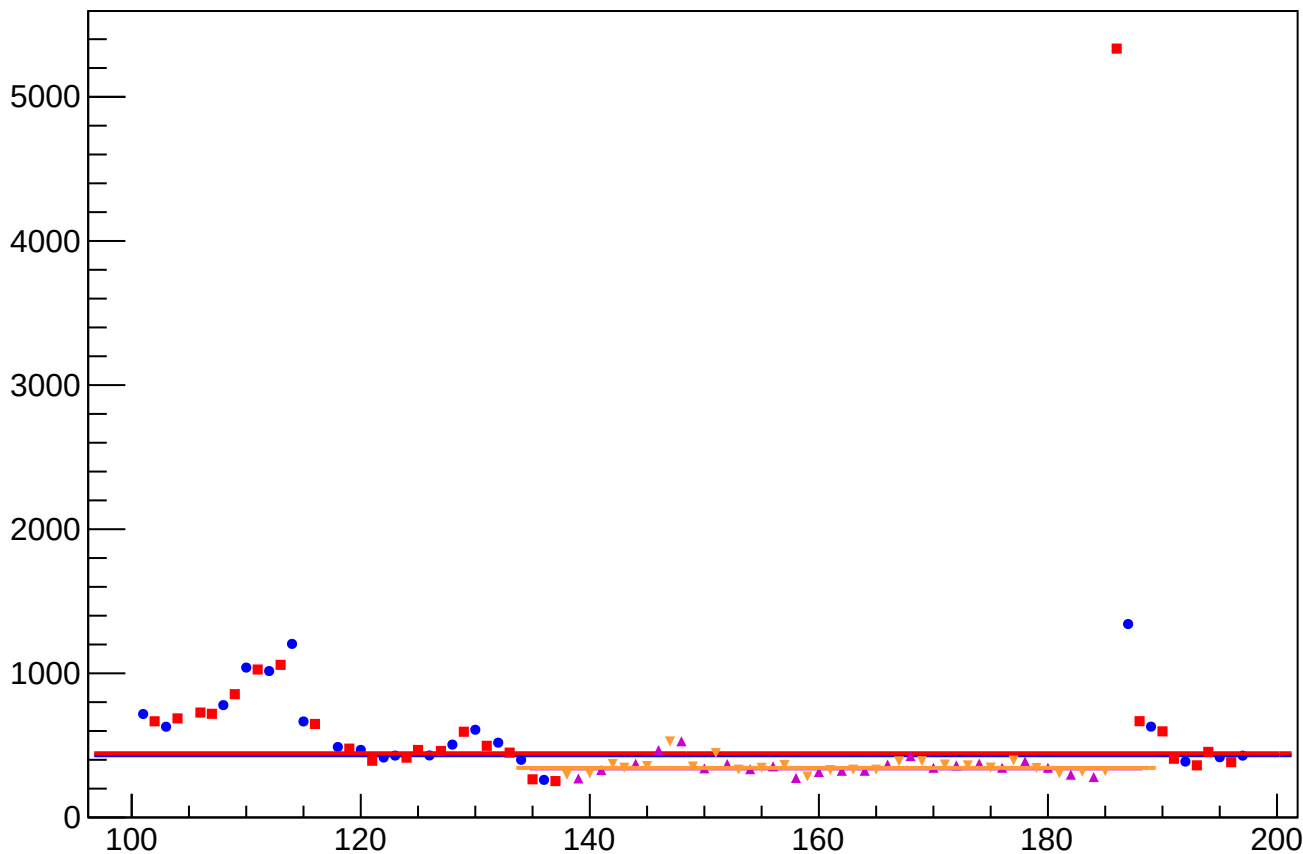
Right: 87.495 $\pm$ 103.828  $\chi^2$ /NDF: 44.9/46

In: -15.416 $\pm$ 72.110  $\chi^2$ /NDF:56.2/44

Out: -99.259 $\pm$ 70.542  $\chi^2$ /NDF:53.0/49

All: -58.259 $\pm$ 50.426  $\chi^2$ /NDF: 109.9/94

# asym\_sam1\_rms vs Slug, Sign Corrected



Right In: 431.832 $\pm$ 0.106  $\chi^2$ /NDF: 2251456.1/21

Left Out: 343.762 $\pm$ 0.057  $\chi^2$ /NDF: 539246.3/24

Right Out: 445.545 $\pm$ 0.101  $\chi^2$ /NDF: 3004530.5/24

Left In: 340.519 $\pm$ 0.058  $\chi^2$ /NDF: 737049.6/22

Left: 342.163 $\pm$ 0.041  $\chi^2$ /NDF: 1277875.5/47

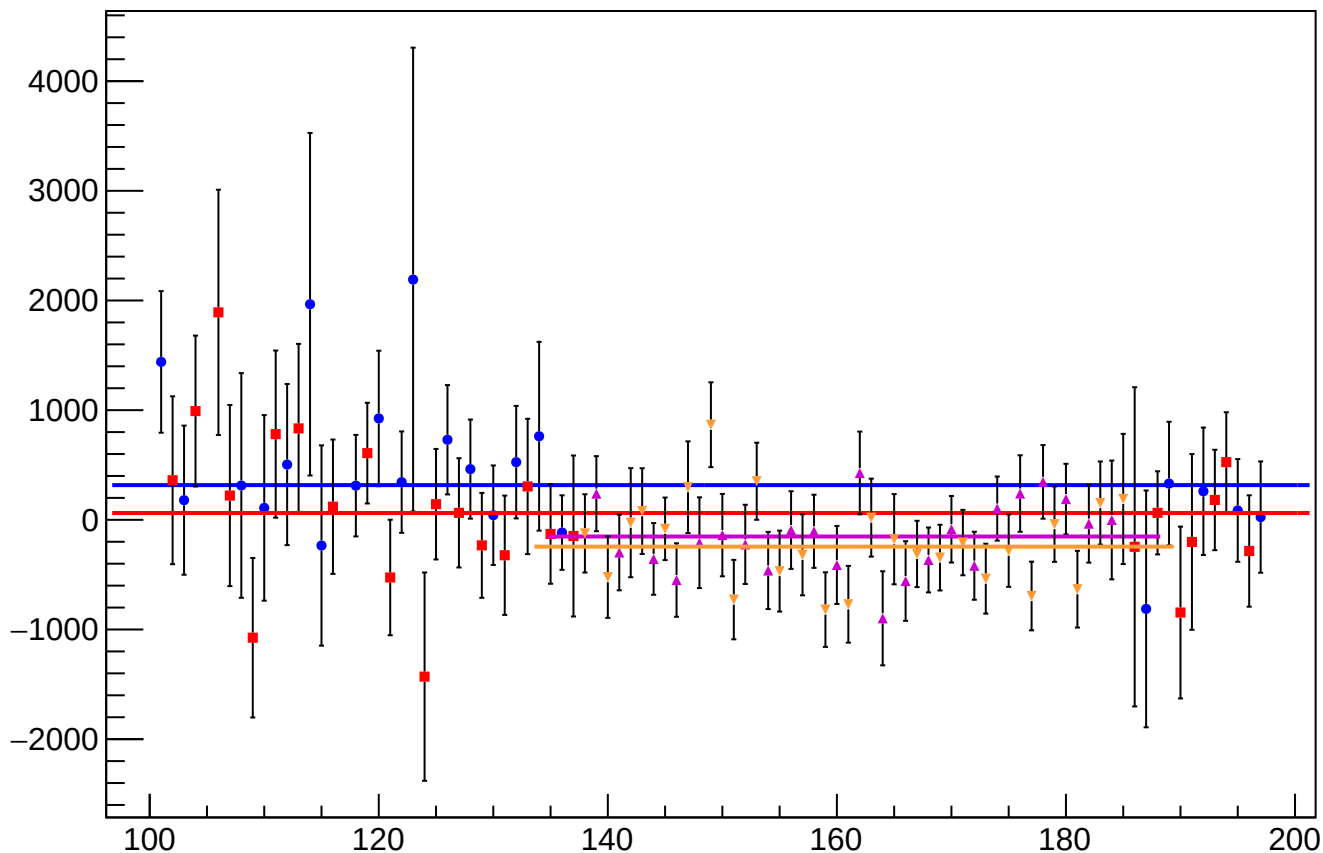
Right: 439.017 $\pm$ 0.073  $\chi^2$ /NDF: 5264687.9/46

In: 361.484 $\pm$ 0.051  $\chi^2$ /NDF: 3555770.9/44

Out: 368.381 $\pm$ 0.050  $\chi^2$ /NDF: 4307290.3/49

All: 365.008 $\pm$ 0.036  $\chi^2$ /NDF: 7872408.6/94

# dit\_asym\_sam2\_mean vs Slug, Sign Corrected



Right In: 316.580 $\pm$ 123.494  $\chi^2/\text{NDF}$ : 11.3/21

Left Out: -244.459 $\pm$ 70.636  $\chi^2/\text{NDF}$ :28.9/24

Right Out: 62.442 $\pm$ 117.312  $\chi^2/\text{NDF}$ : 18.6/24

Left In: -152.030 $\pm$ 72.312  $\chi^2/\text{NDF}$ :18.2/22

Left: -199.328 $\pm$ 50.529  $\chi^2/\text{NDF}$ : 47.9/47

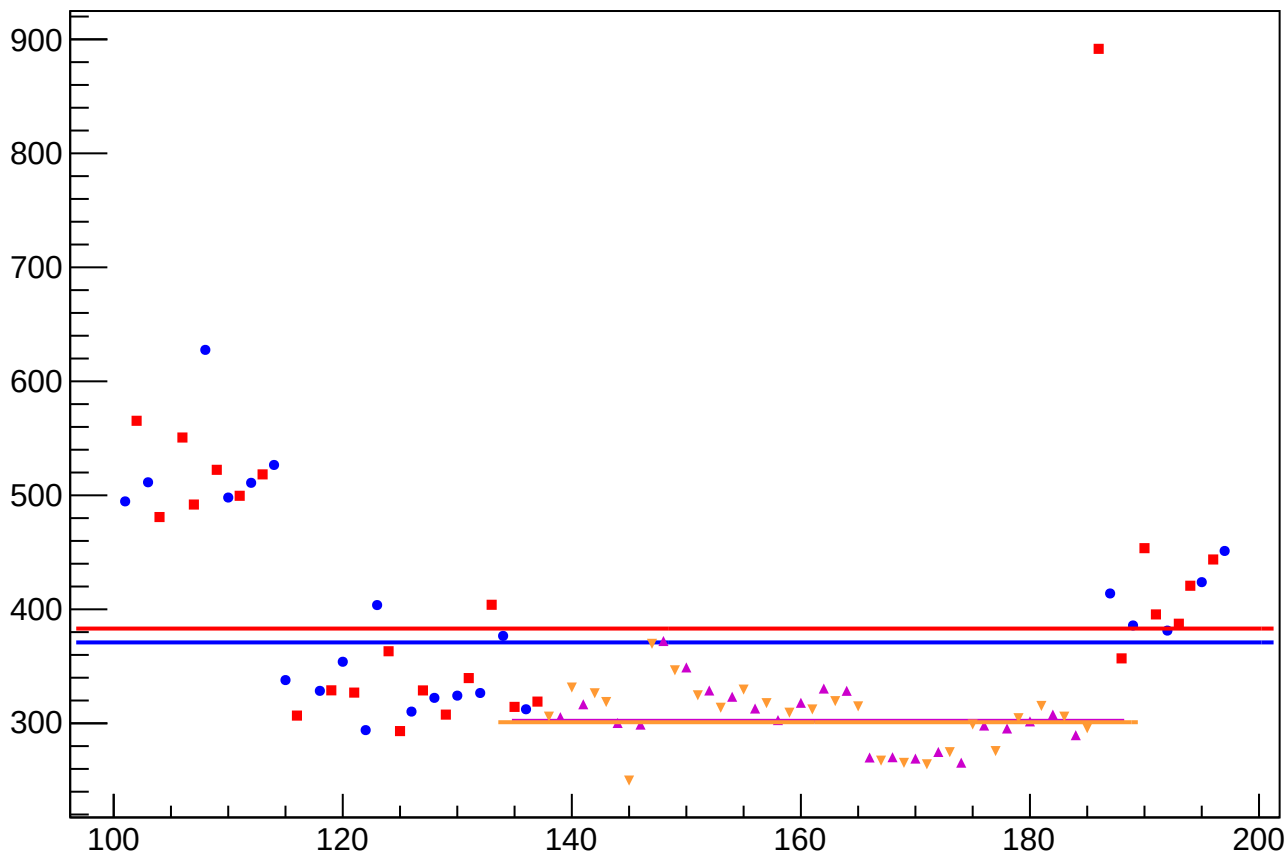
Right: 182.992 $\pm$ 85.054  $\chi^2/\text{NDF}$ : 32.1/46

In: -32.382 $\pm$ 62.401  $\chi^2/\text{NDF}$ :40.2/44

Out: -162.798 $\pm$ 60.513  $\chi^2/\text{NDF}$ :52.5/49

All: -99.593 $\pm$ 43.441  $\chi^2/\text{NDF}$ : 94.9/94

# dit\_asym\_sam2\_rms vs Slug, Sign Corrected



Right In: 370.962 $\pm$ 0.087  $\chi^2$ /NDF: 728107.3/21

Left Out: 300.961 $\pm$ 0.050  $\chi^2$ /NDF:322200.5/24

Right Out: 383.118 $\pm$ 0.083  $\chi^2$ /NDF: 1023812.2/24

Left In: 302.180 $\pm$ 0.051  $\chi^2$ /NDF:247468.9/22

Left: 301.556 $\pm$ 0.036  $\chi^2$ /NDF: 569960.3/47

Right: 377.352 $\pm$ 0.060  $\chi^2$ /NDF: 1762105.1/46

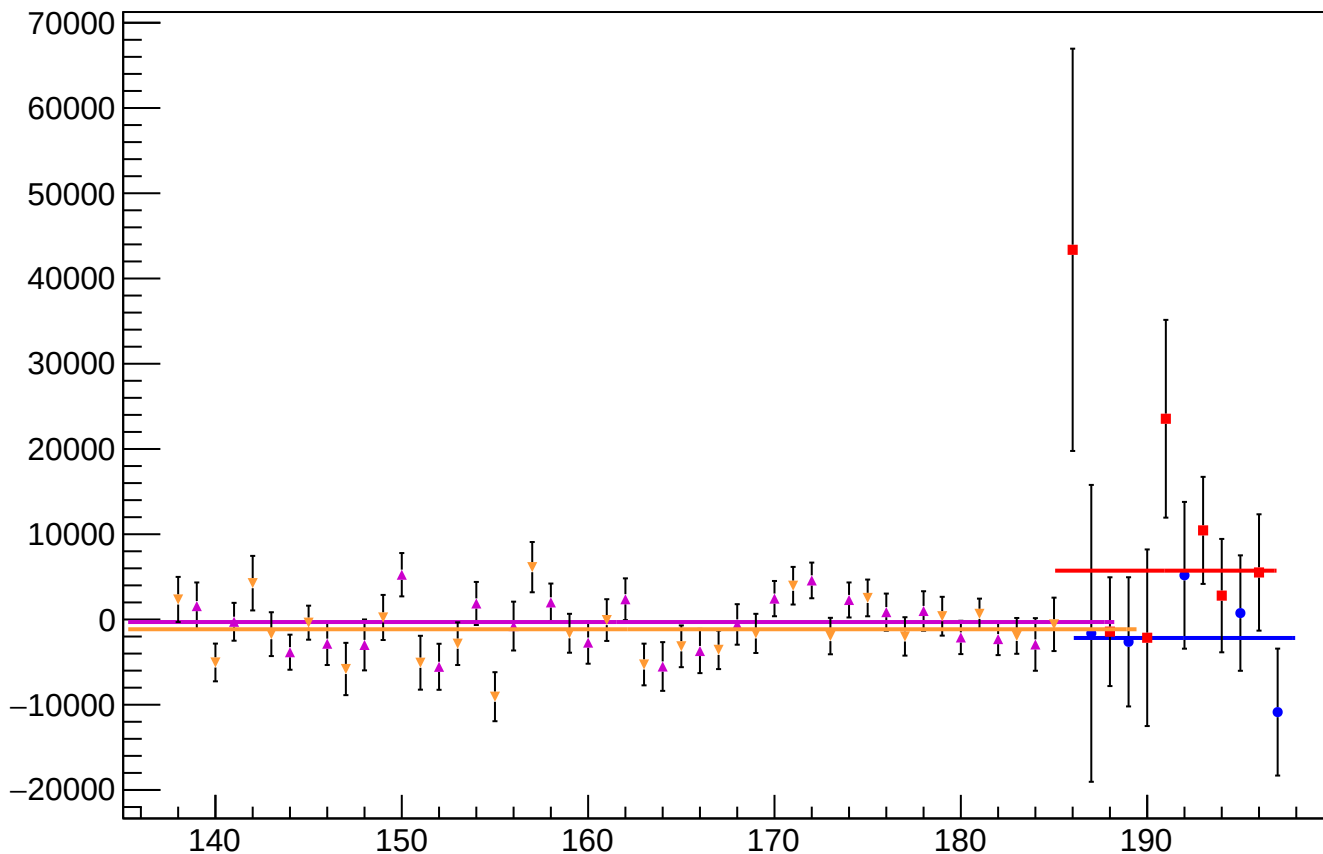
In: 319.742 $\pm$ 0.044  $\chi^2$ /NDF:1437594.9/44

Out: 322.821 $\pm$ 0.043  $\chi^2$ /NDF:2065925.5/49

All: 321.329 $\pm$ 0.031  $\chi^2$ /NDF: 3506030.6/94



asym\_sam2\_correction\_mean vs Slug, Sign Corrected



Right In: -2169.541 $\pm$ 3674.882  $\chi^2$ /NDF: 2.3/4

Left Out: -1146.466 $\pm$ 479.950  $\chi^2$ /NDF:41.3/24

Right Out: 5726.928 $\pm$ 2980.680  $\chi^2$ /NDF: 7.5/6

Left In: -298.915 $\pm$ 491.476  $\chi^2$ /NDF:35.0/22

Left: -732.745 $\pm$ 343.379  $\chi^2$ /NDF: 77.8/47

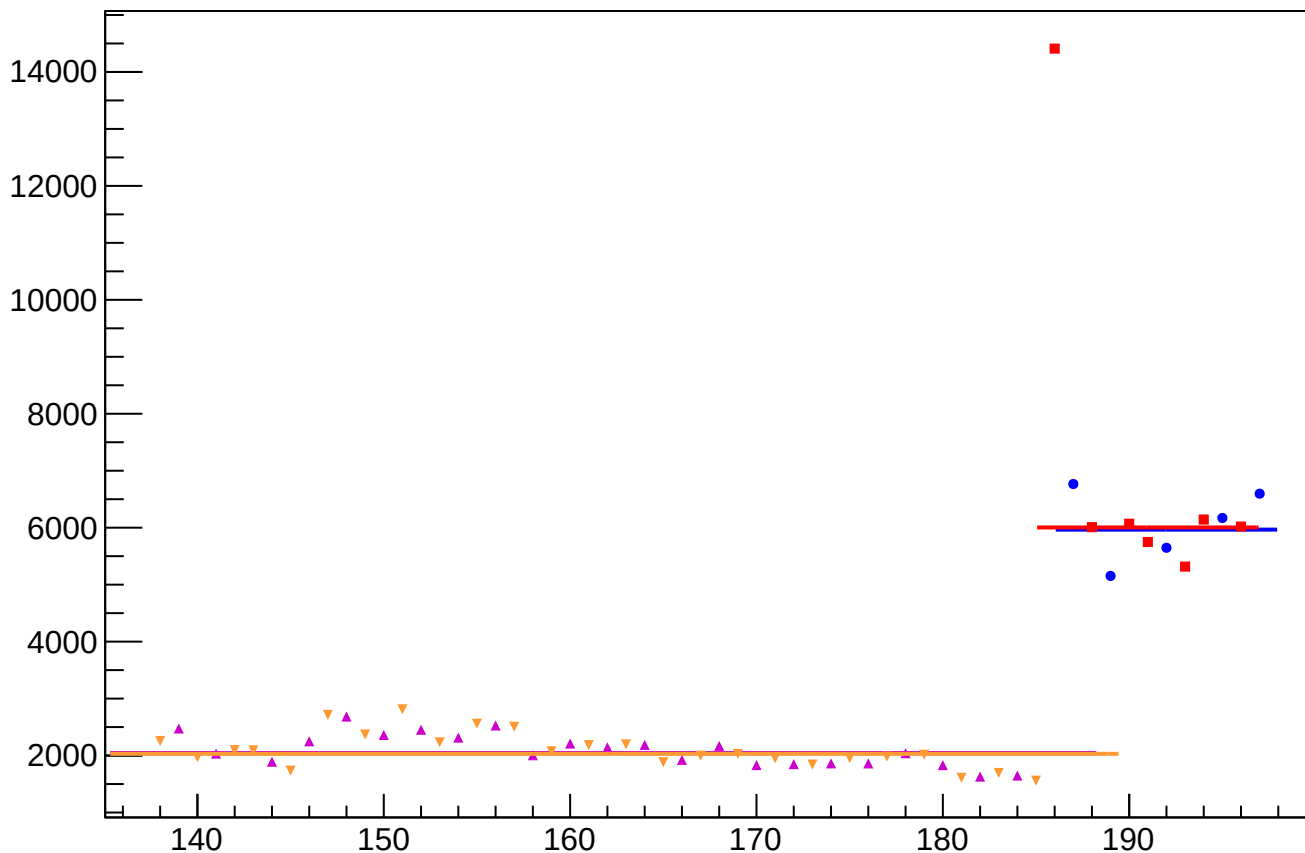
Right: 2593.463 $\pm$ 2314.938  $\chi^2$ /NDF: 12.6/11

In: -331.786 $\pm$ 487.139  $\chi^2$ /NDF:37.5/27

Out: -972.760 $\pm$ 473.847  $\chi^2$ /NDF:54.0/31

All: -661.137 $\pm$ 339.662  $\chi^2$ /NDF: 92.4/59

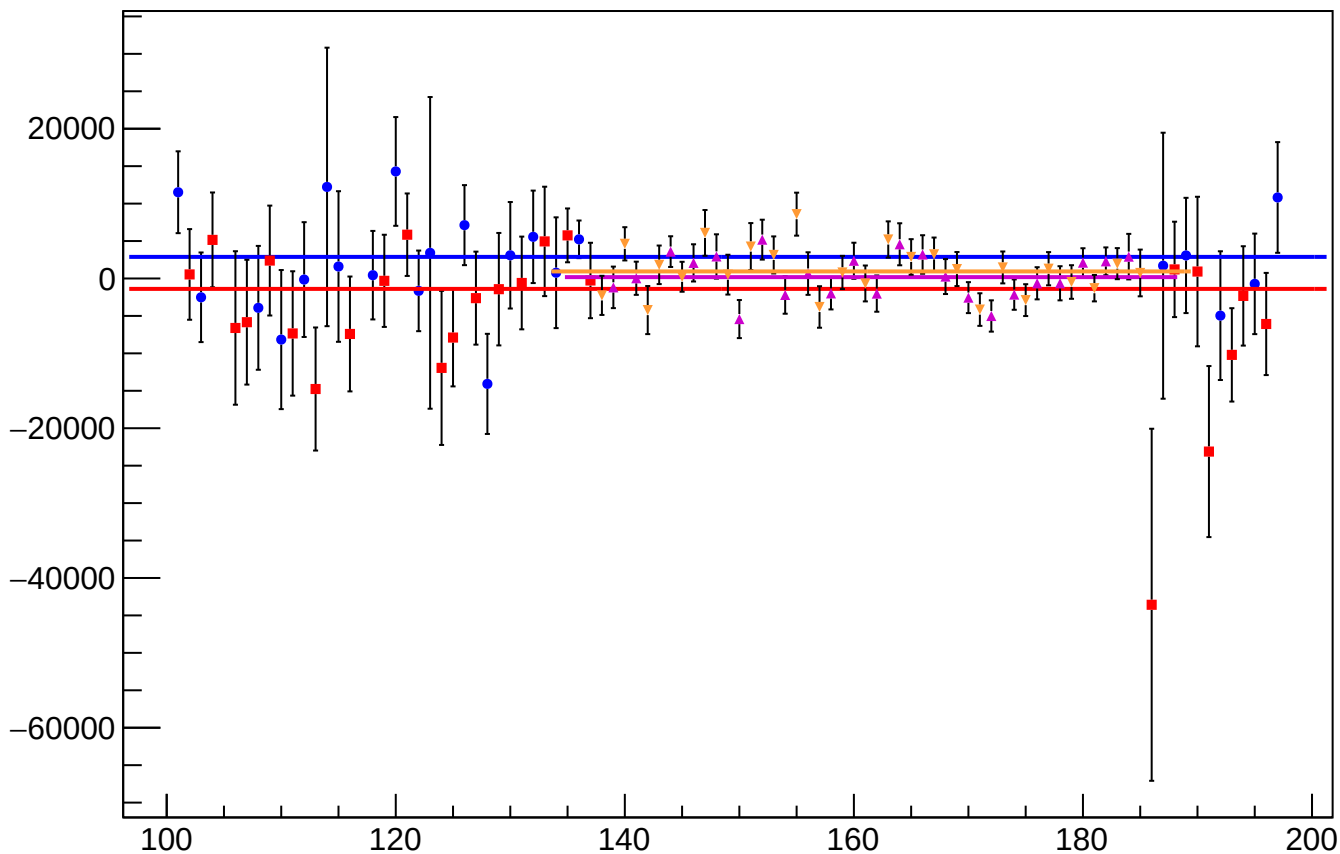
# asym\_sam2\_correction\_rms vs Slug, Sign Corrected



Right In: 5966.370+/-2.599  $\chi^2/\text{NDF}$ : 46147.1/4  
 Left Out: 2030.179+/-0.339  $\chi^2/\text{NDF}$ : 702523.9/24  
 Right Out: 6004.113+/-2.108  $\chi^2/\text{NDF}$ : 279678.3/6  
 Left In: 2044.056+/-0.348  $\chi^2/\text{NDF}$ : 570535.5/22

Left: 2036.953+/-0.243  $\chi^2/\text{NDF}$ : 1273875.5/47  
 Right: 5989.136+/-1.637  $\chi^2/\text{NDF}$ : 325952.7/11  
 In: 2112.978+/-0.344  $\chi^2/\text{NDF}$ : 2855036.3/27  
 Out: 2130.610+/-0.335  $\chi^2/\text{NDF}$ : 4447365.5/31  
 All: 2122.038+/-0.240  $\chi^2/\text{NDF}$ : 7303748.1/59

# asym\_sam2\_mean vs Slug, Sign Corrected



Right In: 2883.330+/-1341.101  $\chi^2/\text{NDF}$ : 19.7/21

Left Out: 942.775+/-474.439  $\chi^2/\text{NDF}$ : 38.3/24

Right Out: -1390.773+/-1345.187  $\chi^2/\text{NDF}$ : 23.9/24

Left In: 180.087+/-486.112  $\chi^2/\text{NDF}$ : 32.9/22

Left: 570.698+/-339.531  $\chi^2/\text{NDF}$ : 72.5/47

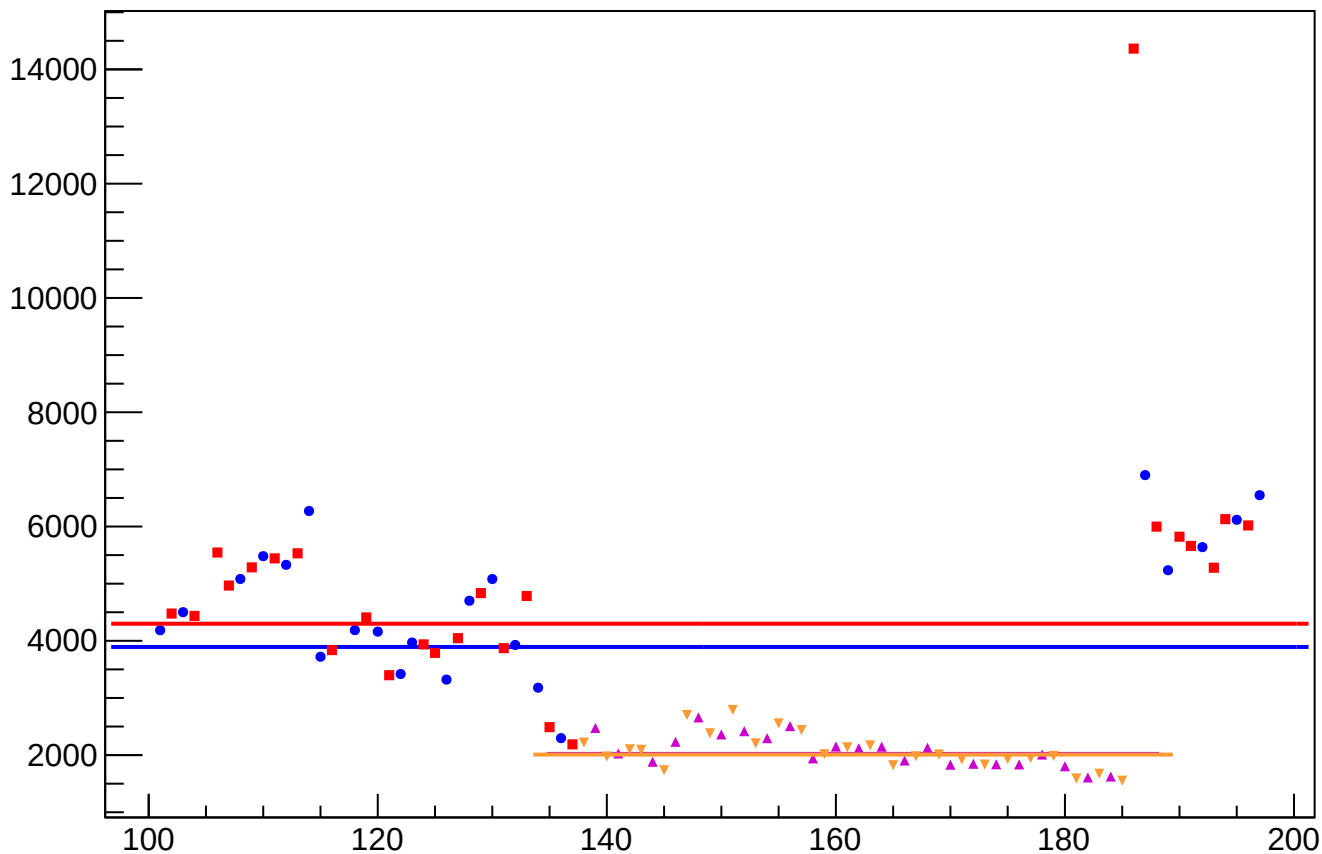
Right: 752.780+/-949.743  $\chi^2/\text{NDF}$ : 48.6/46

In: 494.010+/-457.015  $\chi^2/\text{NDF}$ : 56.2/44

Out: 684.612+/-447.426  $\chi^2/\text{NDF}$ : 64.9/49

All: 591.332+/-319.714  $\chi^2/\text{NDF}$ : 121.1/94

# asym\_sam2\_rms vs Slug, Sign Corrected



Right In: 3892.655+/-0.948  $\chi^2/\text{NDF}$ : 1865665.7/21

Left Out: 2008.897+/-0.335  $\chi^2/\text{NDF}$ : 709254.4/24

Right Out: 4299.157+/-0.951  $\chi^2/\text{NDF}$ : 2042687.9/24

Left In: 2020.887+/-0.344  $\chi^2/\text{NDF}$ : 576363.5/22

Left: 2014.747+/-0.240  $\chi^2/\text{NDF}$ : 1286241.1/47

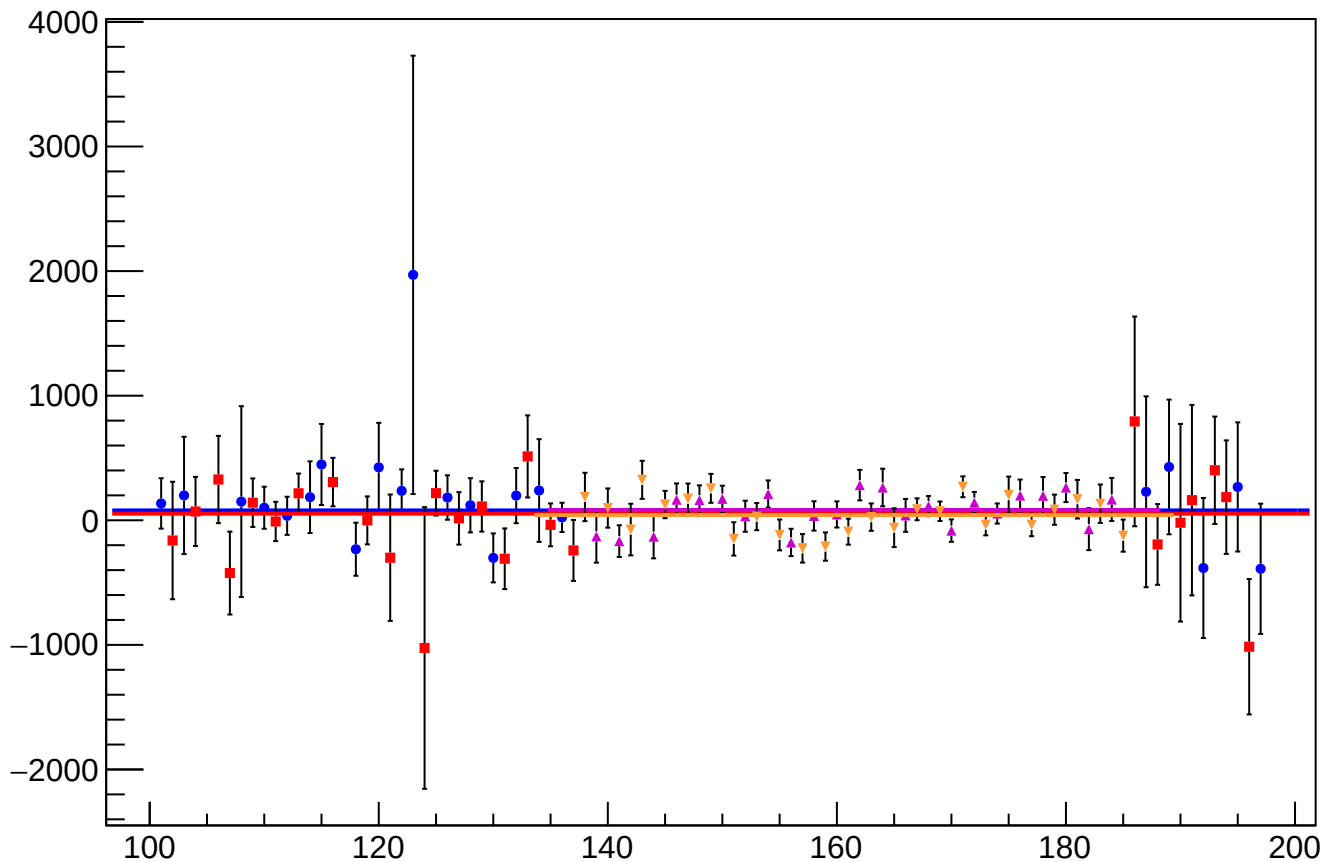
Right: 4095.288+/-0.672  $\chi^2/\text{NDF}$ : 3999950.3/46

In: 2238.253+/-0.323  $\chi^2/\text{NDF}$ : 5885528.1/44

Out: 2262.271+/-0.316  $\chi^2/\text{NDF}$ : 7907980.7/49

All: 2250.517+/-0.226  $\chi^2/\text{NDF}$ : 13796329.5/99

# dit\_asym\_sam3\_mean vs Slug, Sign Corrected



Right In: 79.090 $\pm$ 50.845  $\chi^2$ /NDF: 13.6/21

Left Out: 41.847 $\pm$ 23.035  $\chi^2$ /NDF: 39.1/24

Right Out: 53.180 $\pm$ 51.192  $\chi^2$ /NDF: 20.3/24

Left In: 82.630 $\pm$ 24.154  $\chi^2$ /NDF: 28.6/22

Left: 61.273 $\pm$ 16.670  $\chi^2$ /NDF: 69.2/47

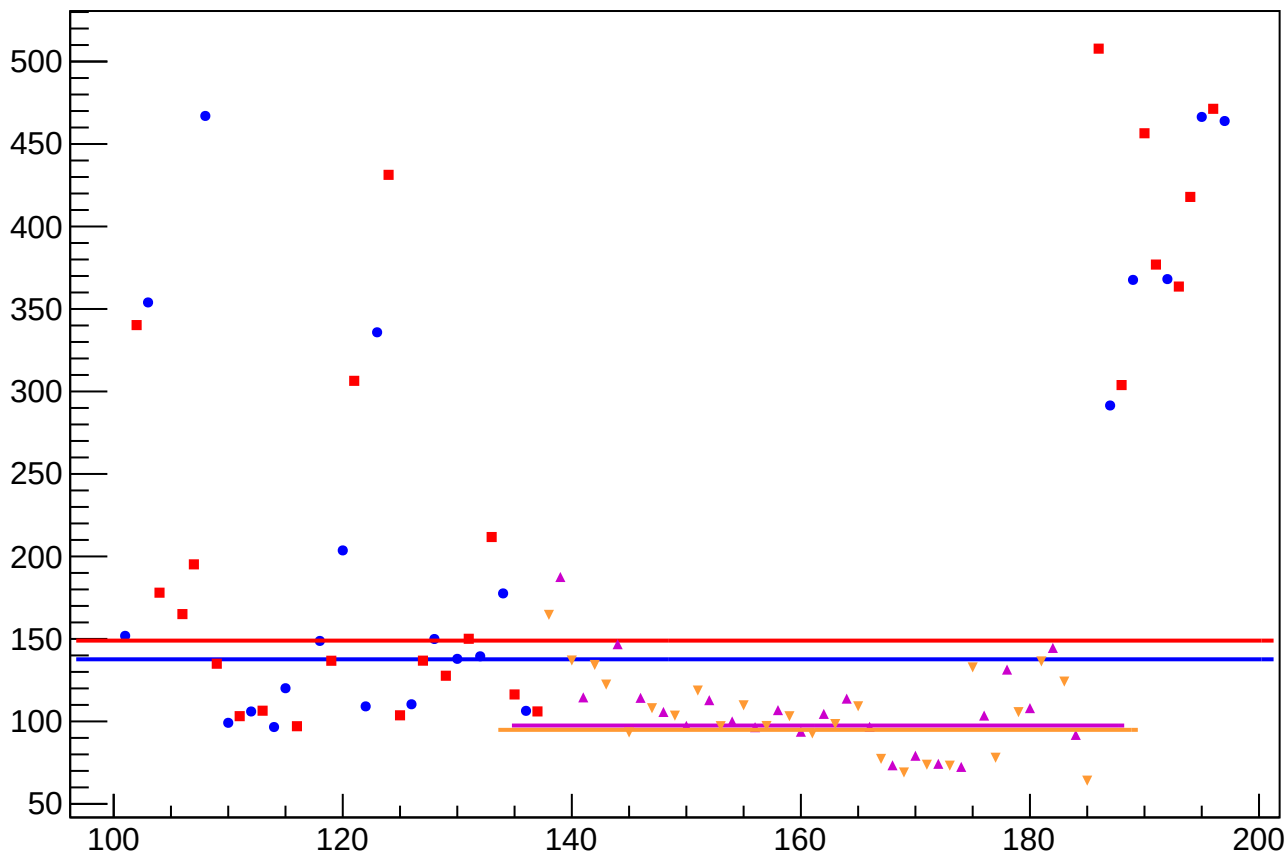
Right: 66.223 $\pm$ 36.075  $\chi^2$ /NDF: 34.0/46

In: 81.978 $\pm$ 21.817  $\chi^2$ /NDF: 42.2/44

Out: 43.756 $\pm$ 21.007  $\chi^2$ /NDF: 59.5/49

All: 62.144 $\pm$ 15.132  $\chi^2$ /NDF: 103.2/94

# dit\_asym\_sam3\_rms vs Slug, Sign Corrected



Right In: 137.645 $\pm$ 0.036  $\chi^2/\text{NDF}$ : 3767924.2/21

Left Out: 94.886 $\pm$ 0.016  $\chi^2/\text{NDF}$ :1796861.0/24

Right Out: 148.982 $\pm$ 0.036  $\chi^2/\text{NDF}$ : 4742799.6/24

Left In: 97.499 $\pm$ 0.017  $\chi^2/\text{NDF}$ :1561333.1/22

Left: 96.131 $\pm$ 0.012  $\chi^2/\text{NDF}$ : 3370445.2/47

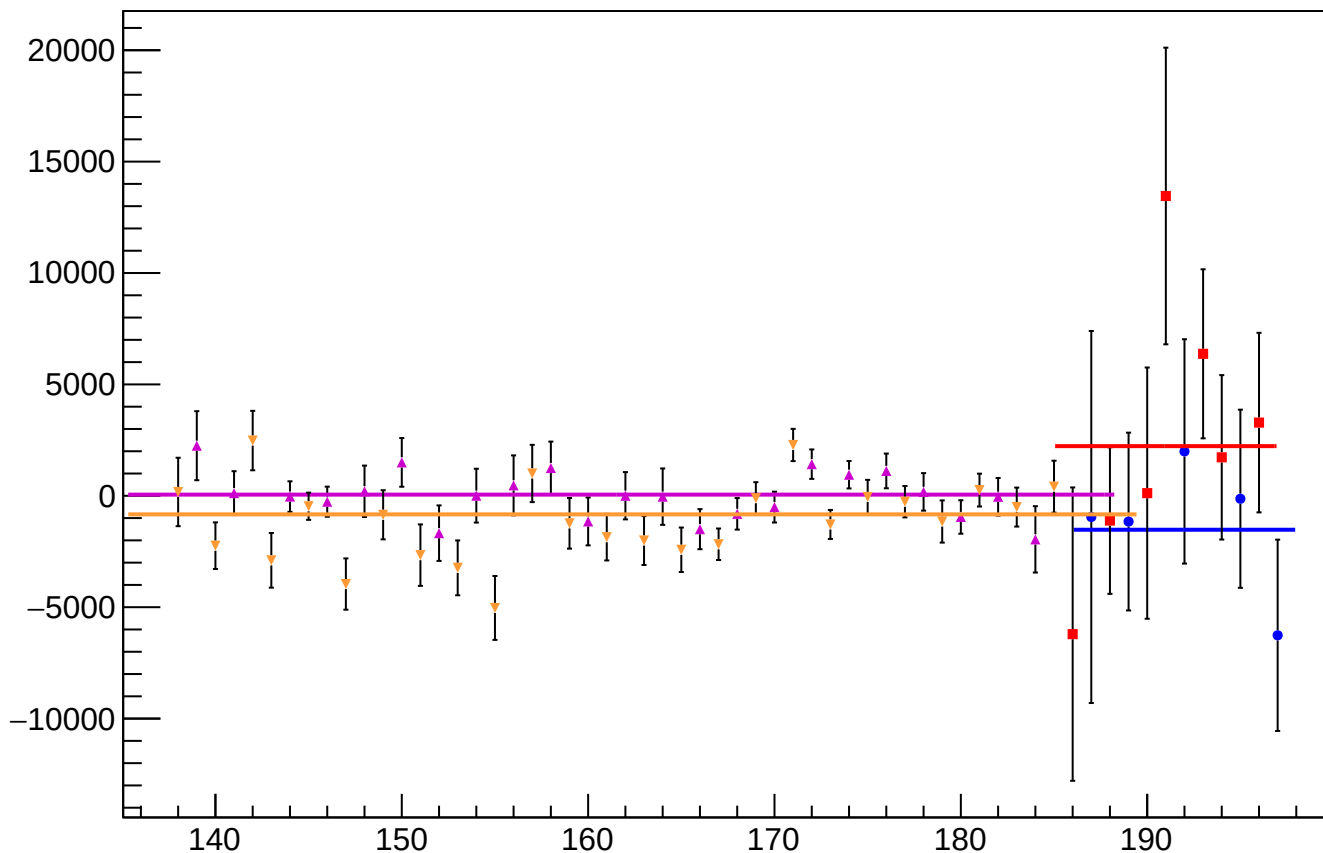
Right: 143.275 $\pm$ 0.026  $\chi^2/\text{NDF}$ : 8560105.1/46

In: 104.890 $\pm$ 0.015  $\chi^2/\text{NDF}$ :6346555.9/44

Out: 103.995 $\pm$ 0.015  $\chi^2/\text{NDF}$ :8396897.4/49

All: 104.426 $\pm$ 0.011  $\chi^2/\text{NDF}$ : 14745199.8/94

asym\_sam3\_correction\_mean vs Slug, Sign Corrected



Right In: -1523.190 $\pm$ 2069.837  $\chi^2$ /NDF: 1.8/4

Left Out: -832.580 $\pm$ 183.960  $\chi^2$ /NDF:68.8/24

Right Out: 2229.043 $\pm$ 1635.266  $\chi^2$ /NDF: 6.9/6

Left In: 53.006 $\pm$ 184.870  $\chi^2$ /NDF:25.3/22

Left: -391.972 $\pm$ 130.400  $\chi^2$ /NDF: 105.7/47

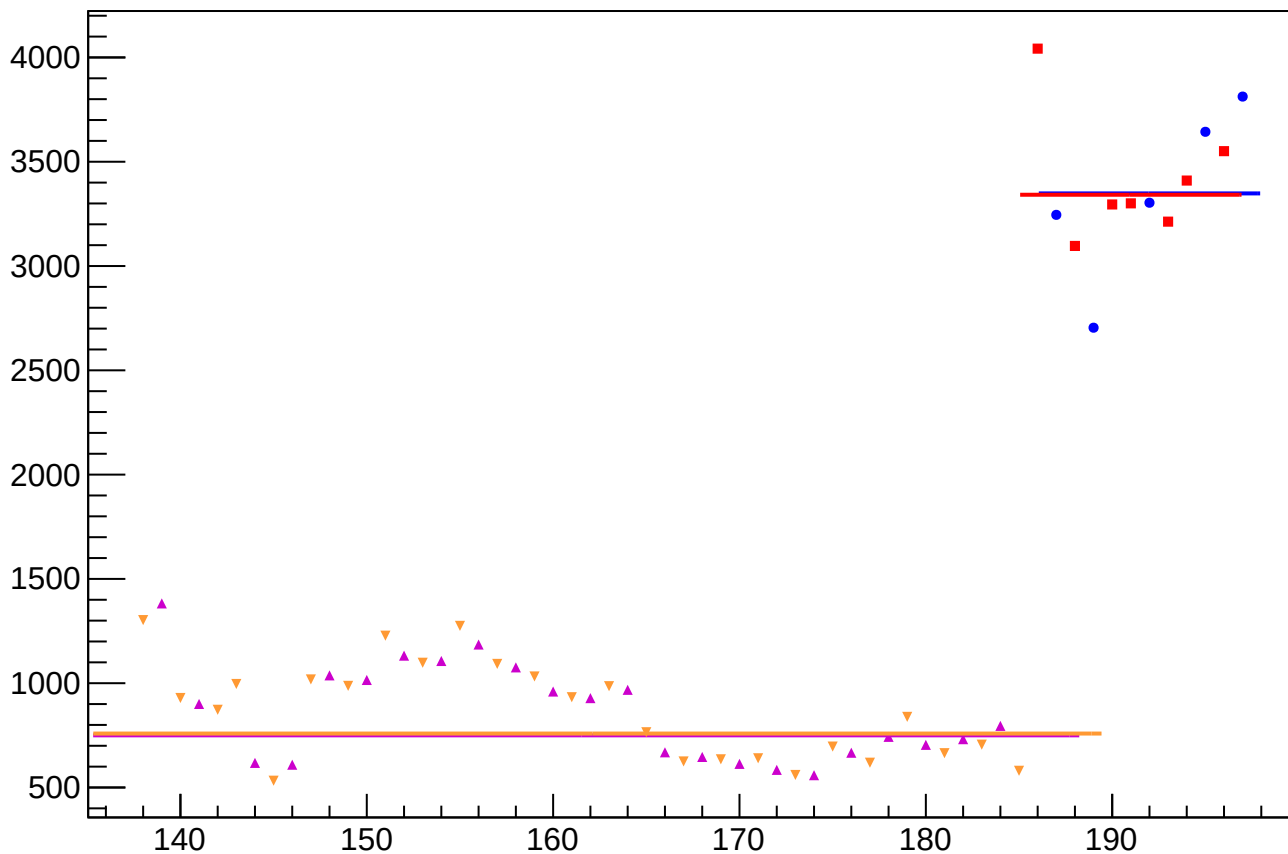
Right: 787.053 $\pm$ 1283.135  $\chi^2$ /NDF: 10.8/11

In: 40.531 $\pm$ 184.137  $\chi^2$ /NDF:27.7/27

Out: -794.318 $\pm$ 182.807  $\chi^2$ /NDF:79.2/31

All: -379.919 $\pm$ 129.732  $\chi^2$ /NDF: 117.3/59

# asym\_sam3\_correction\_rms vs Slug, Sign Corrected

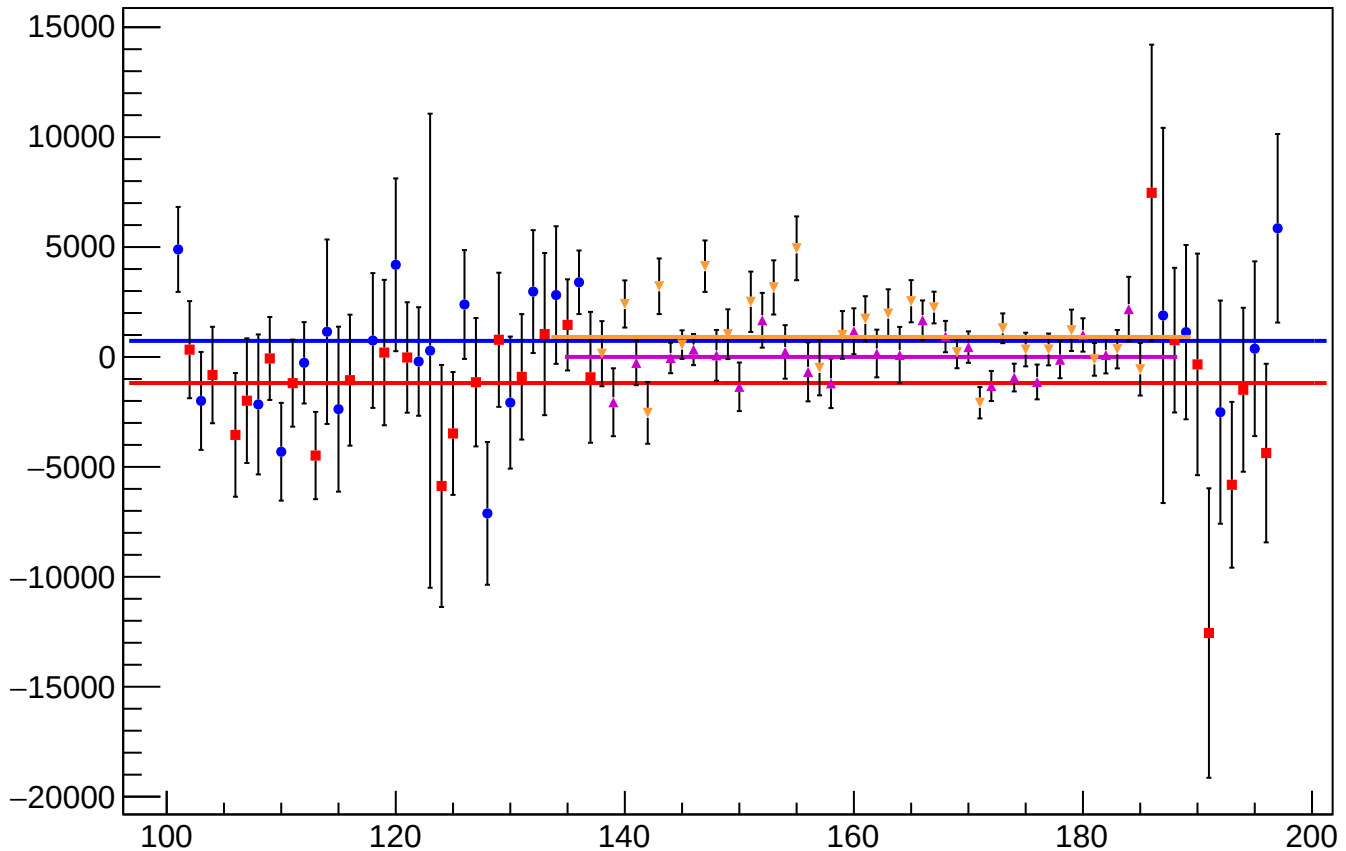


Right In: 3348.167+/-1.464  $\chi^2/\text{NDF}$ : 86821.2/4  
 Left Out: 758.608+/-0.130  $\chi^2/\text{NDF}$ : 2453711.9/24  
 Right Out: 3341.768+/-1.156  $\chi^2/\text{NDF}$ : 42350.5/6  
 Left In: 749.995+/-0.131  $\chi^2/\text{NDF}$ : 2186634.5/22

Left: 754.323+/-0.092  $\chi^2/\text{NDF}$ : 4642527.3/47  
 Right: 3344.227+/-0.907  $\chi^2/\text{NDF}$ : 129183.5/11  
 In: 770.558+/-0.130  $\chi^2/\text{NDF}$ : 5399841.7/27  
 Out: 790.890+/-0.129  $\chi^2/\text{NDF}$ : 7424330.3/31  
 All: 780.797+/-0.092  $\chi^2/\text{NDF}$ : 12836452.1/59



# asym\_sam3\_mean vs Slug, Sign Corrected



Right In: 732.088 $\pm$ 592.864  $\chi^2$ /NDF: 27.5/21

Left Out: 911.919 $\pm$ 186.104  $\chi^2$ /NDF: 64.9/24

Right Out: -1184.335 $\pm$ 565.799  $\chi^2$ /NDF: 15.8/24

Left In: 2.470 $\pm$ 187.271  $\chi^2$ /NDF: 25.6/22

Left: 460.036 $\pm$ 132.006  $\chi^2$ /NDF: 102.4/47

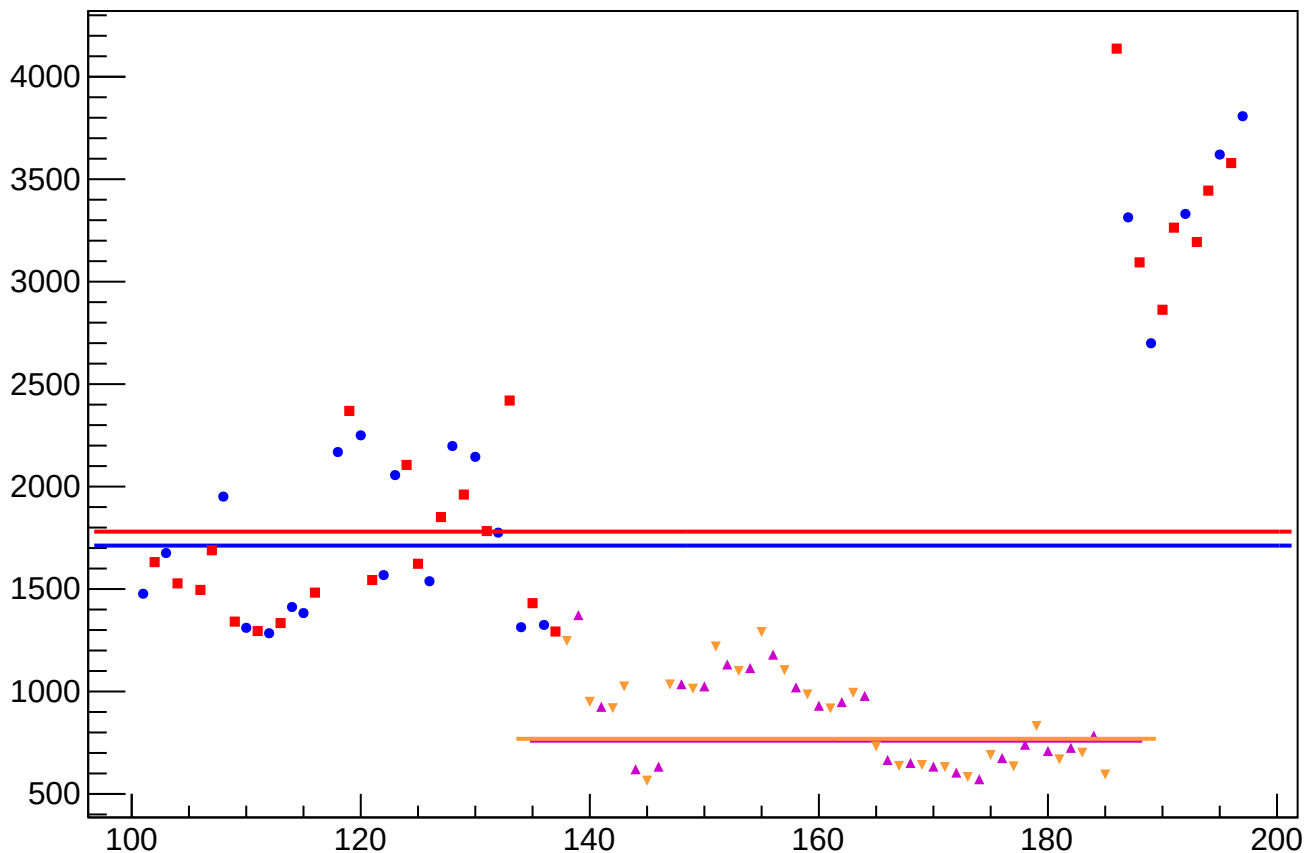
Right: -270.864 $\pm$ 409.314  $\chi^2$ /NDF: 48.8/46

In: 68.664 $\pm$ 178.574  $\chi^2$ /NDF: 54.5/44

Out: 707.266 $\pm$ 176.787  $\chi^2$ /NDF: 93.0/49

All: 391.177 $\pm$ 125.634  $\chi^2$ /NDF: 154.0/94

# asym\_sam3\_rms vs Slug, Sign Corrected



Right In: 1712.038 $\pm$ 0.419  $\chi^2$ /NDF: 1938918.2/21

Left Out: 769.207 $\pm$ 0.132  $\chi^2$ /NDF: 2275390.6/24

Right Out: 1780.150 $\pm$ 0.400  $\chi^2$ /NDF: 2509950.9/24

Left In: 759.935 $\pm$ 0.132  $\chi^2$ /NDF: 2014703.5/22

Left: 764.600 $\pm$ 0.093  $\chi^2$ /NDF: 4292560.8/47

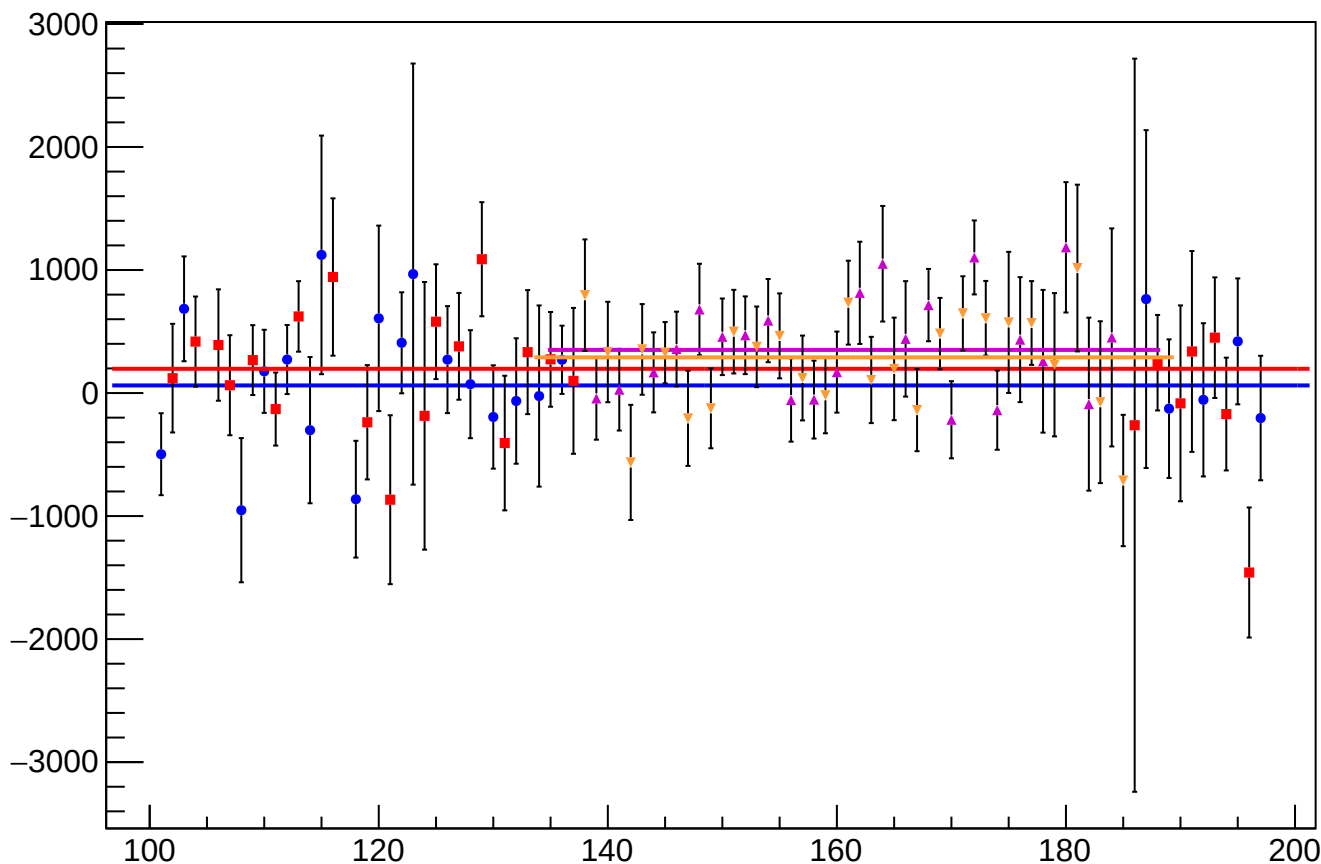
Right: 1747.684 $\pm$ 0.289  $\chi^2$ /NDF: 4462684.0/46

In: 846.315 $\pm$ 0.126  $\chi^2$ /NDF: 8643739.6/44

Out: 867.903 $\pm$ 0.125  $\chi^2$ /NDF: 10546945.7/49

All: 857.218 $\pm$ 0.089  $\chi^2$ /NDF: 19205448.0/94

# dit\_asym\_sam4\_mean vs Slug, Sign Corrected



Right In: 61.932+/-98.007  $\chi^2/\text{NDF}$ : 17.9/21

Left Out: 290.293+/-72.910  $\chi^2/\text{NDF}$ :22.3/24

Right Out: 197.210+/-90.085  $\chi^2/\text{NDF}$ : 25.7/24

Left In: 350.522+/-75.911  $\chi^2/\text{NDF}$ :27.4/22

Left: 319.194+/-52.584  $\chi^2/\text{NDF}$ : 50.1/47

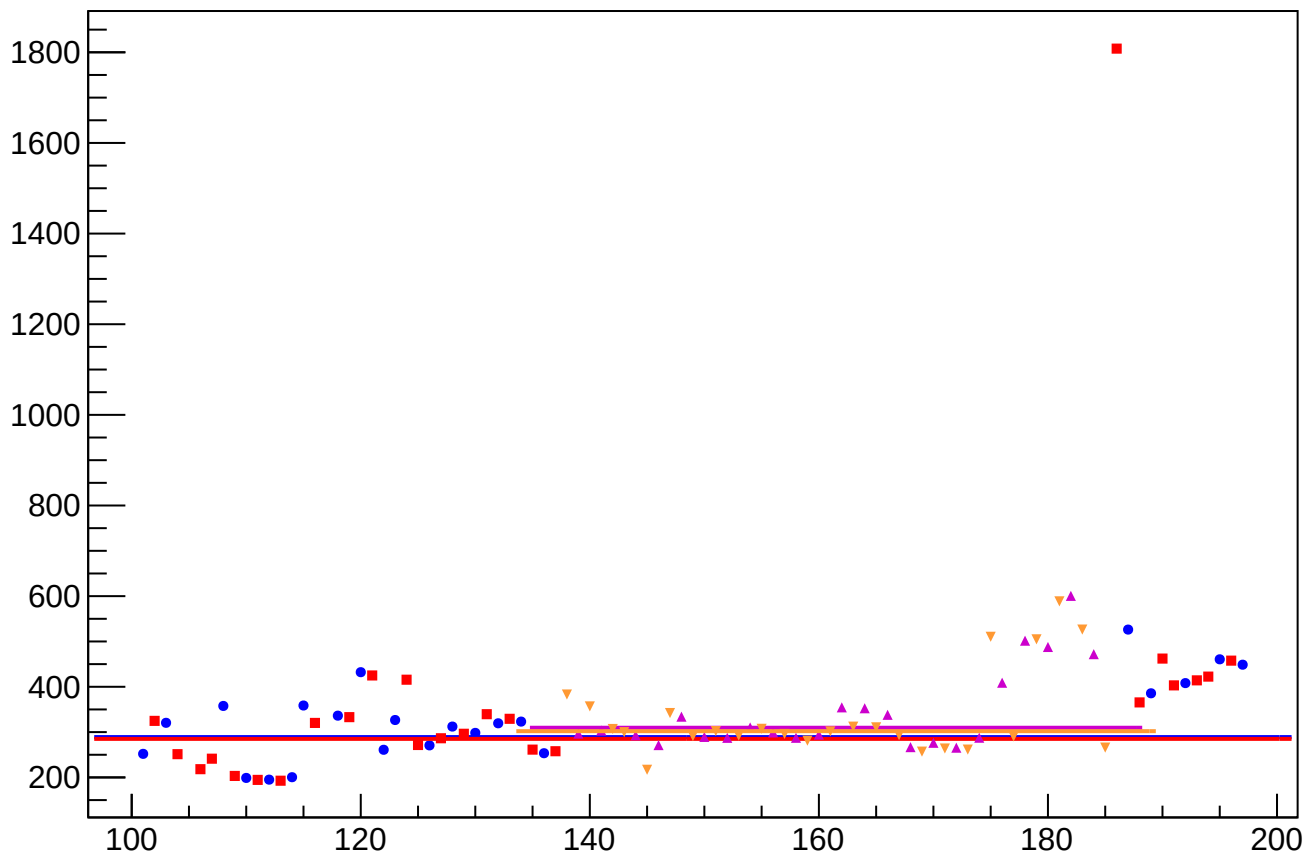
Right: 135.258+/-66.324  $\chi^2/\text{NDF}$ : 44.7/46

In: 242.310+/-60.014  $\chi^2/\text{NDF}$ :50.7/44

Out: 253.452+/-56.674  $\chi^2/\text{NDF}$ :48.7/49

All: 248.200+/-41.205  $\chi^2/\text{NDF}$ : 99.5/94

# dit\_asym\_sam4\_rms vs Slug, Sign Corrected



Right In: 289.000 $\pm$ 0.069  $\chi^2$ /NDF: 1256920.0/21

Left Out: 302.040 $\pm$ 0.052  $\chi^2$ /NDF:1597233.8/24

Right Out: 285.076 $\pm$ 0.064  $\chi^2$ /NDF: 2129554.8/24

Left In: 309.609 $\pm$ 0.054  $\chi^2$ /NDF:1180280.8/22

Left: 305.672 $\pm$ 0.037  $\chi^2$ /NDF: 2787857.1/47

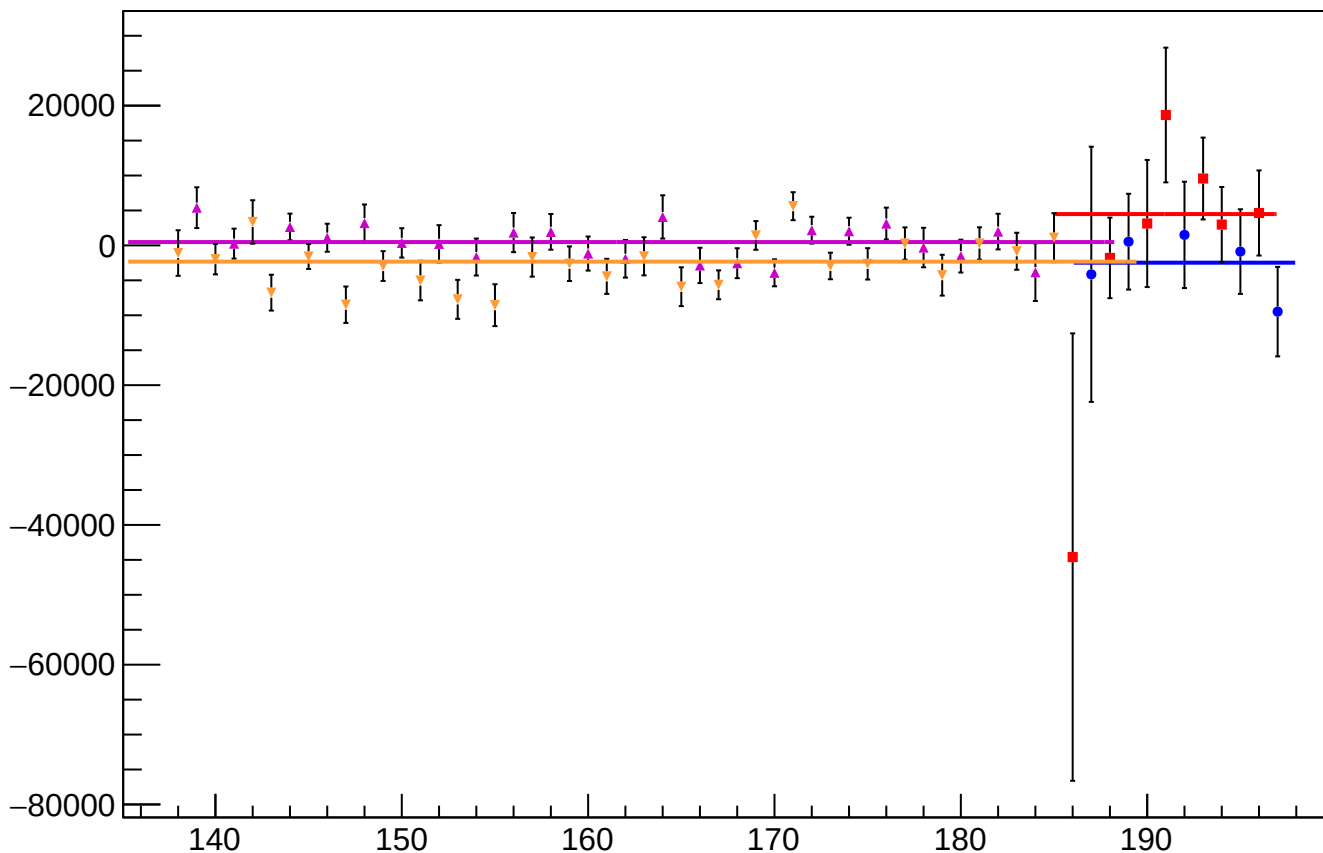
Right: 286.873 $\pm$ 0.047  $\chi^2$ /NDF: 3388212.5/46

In: 301.881 $\pm$ 0.042  $\chi^2$ /NDF:2492477.5/44

Out: 295.326 $\pm$ 0.040  $\chi^2$ /NDF:3769641.5/49

All: 298.416 $\pm$ 0.029  $\chi^2$ /NDF: 6274732.4/94

asym\_sam4\_correction\_mean vs Slug, Sign Corrected



Right In:  $-2472.791 \pm 3275.543$   $\chi^2/\text{NDF}$ : 1.7/4

Left Out:  $-2325.488 \pm 486.043$   $\chi^2/\text{NDF}$ : 49.8/24

Right Out:  $4483.734 \pm 2629.302$   $\chi^2/\text{NDF}$ : 6.6/6

Left In:  $477.779 \pm 494.228$   $\chi^2/\text{NDF}$ : 23.1/22

Left:  $-947.260 \pm 346.542$   $\chi^2/\text{NDF}$ : 89.2/47

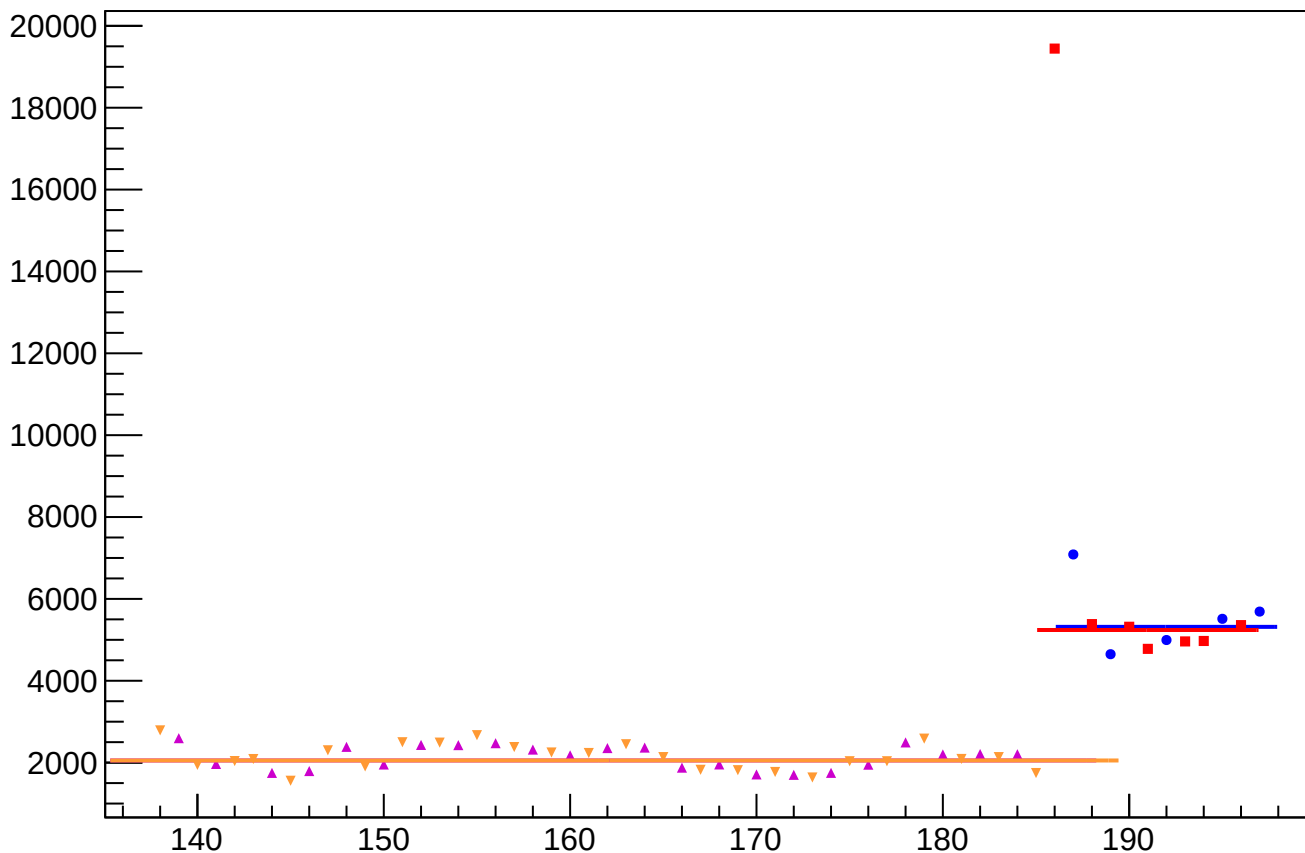
Right:  $1757.801 \pm 2050.429$   $\chi^2/\text{NDF}$ : 11.0/11

In:  $412.101 \pm 488.697$   $\chi^2/\text{NDF}$ : 25.6/27

Out:  $-2100.492 \pm 477.946$   $\chi^2/\text{NDF}$ : 62.9/31

All:  $-872.138 \pm 341.696$   $\chi^2/\text{NDF}$ : 102.0/59

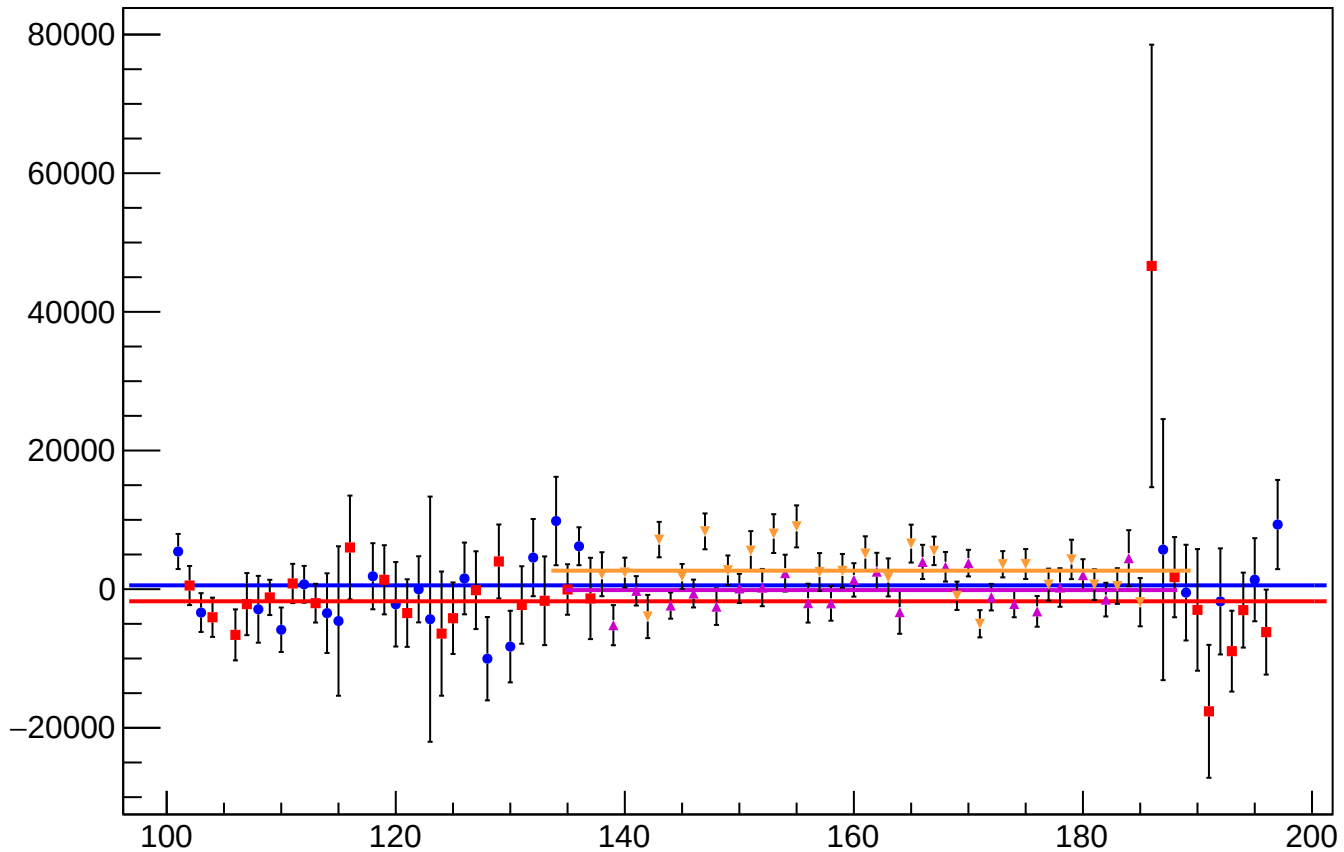
# asym\_sam4\_correction\_rms vs Slug, Sign Corrected



Right In: 5316.824+/-2.316  $\chi^2$ /NDF: 50228.4/4  
 Left Out: 2052.401+/-0.344  $\chi^2$ /NDF:838023.2/24  
 Right Out: 5240.181+/-1.859  $\chi^2$ /NDF: 409996.5/6  
 Left In: 2052.384+/-0.349  $\chi^2$ /NDF:653872.2/22

Left: 2052.392+/-0.245  $\chi^2$ /NDF: 1491895.3/47  
 Right: 5270.214+/-1.450  $\chi^2$ /NDF: 460890.8/11  
 In: 2125.048+/-0.346  $\chi^2$ /NDF:2646346.7/27  
 Out: 2157.734+/-0.338  $\chi^2$ /NDF:4090735.2/31  
 All: 2141.754+/-0.242  $\chi^2$ /NDF: 6741654.7/59

# asym\_sam4\_mean vs Slug, Sign Corrected



Right In: 551.196+/-949.970  $\chi^2/\text{NDF}$ : 26.3/21

Left Out: 2667.050+/-480.963  $\chi^2/\text{NDF}$ :50.0/24

Right Out: -1747.654+/-875.438  $\chi^2/\text{NDF}$ : 15.0/24

Left In: -132.307+/-489.752  $\chi^2/\text{NDF}$ :24.7/22

Left: 1292.715+/-343.157  $\chi^2/\text{NDF}$ : 91.3/47

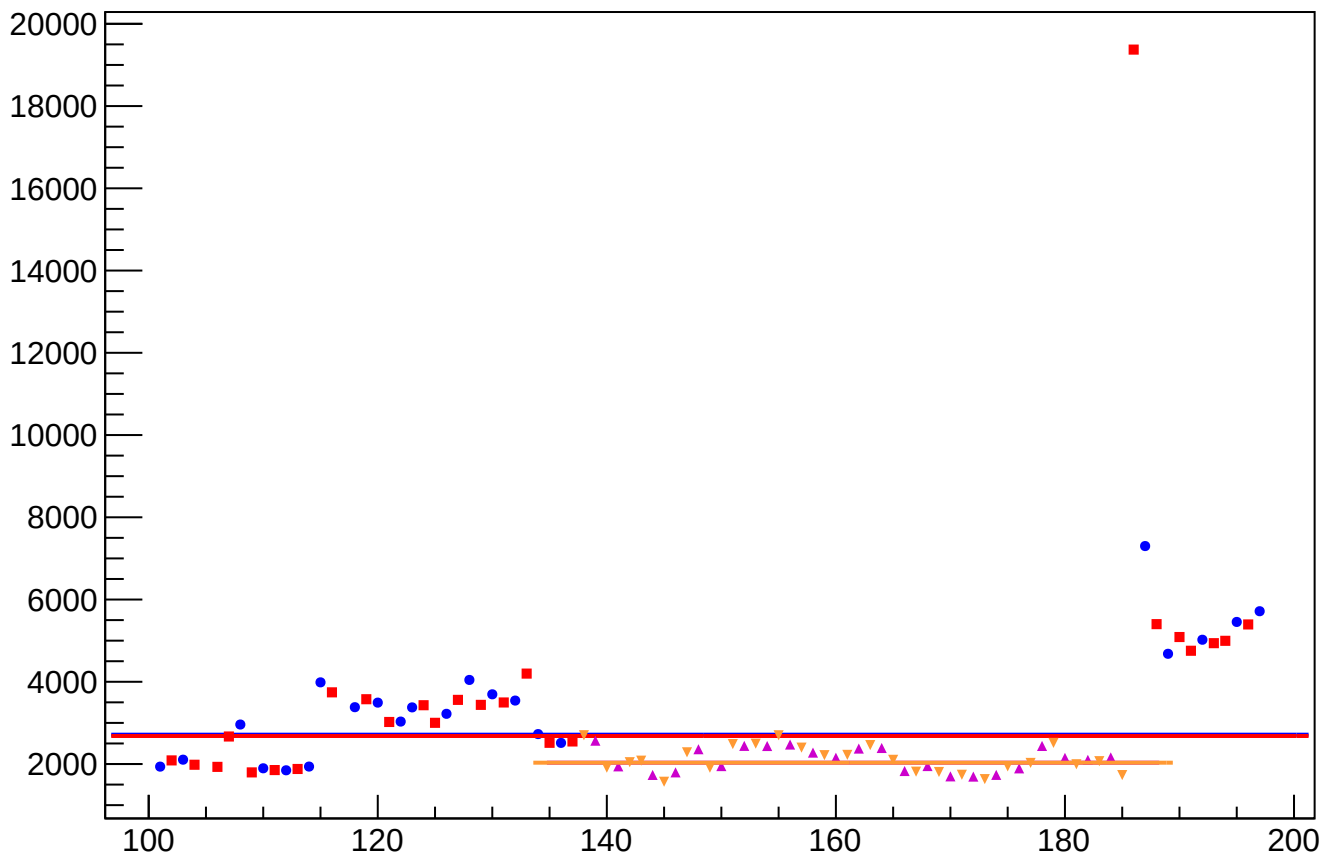
Right: -691.936+/-643.767  $\chi^2/\text{NDF}$ : 44.5/46

In: 11.213+/-435.307  $\chi^2/\text{NDF}$ :51.4/44

Out: 1643.480+/-421.535  $\chi^2/\text{NDF}$ :84.5/49

All: 853.576+/-302.822  $\chi^2/\text{NDF}$ : 143.2/94

# asym\_sam4\_rms vs Slug, Sign Corrected



Right In: 2713.319+/-0.672  $\chi^2/\text{NDF}$ : 2339862.4/21

Left Out: 2032.502+/-0.340  $\chi^2/\text{NDF}$ : 824418.6/24

Right Out: 2681.827+/-0.619  $\chi^2/\text{NDF}$ : 3549764.6/24

Left In: 2031.692+/-0.346  $\chi^2/\text{NDF}$ : 653382.0/22

Left: 2032.104+/-0.243  $\chi^2/\text{NDF}$ : 1477803.4/47

Right: 2696.289+/-0.455  $\chi^2/\text{NDF}$ : 5890815.5/46

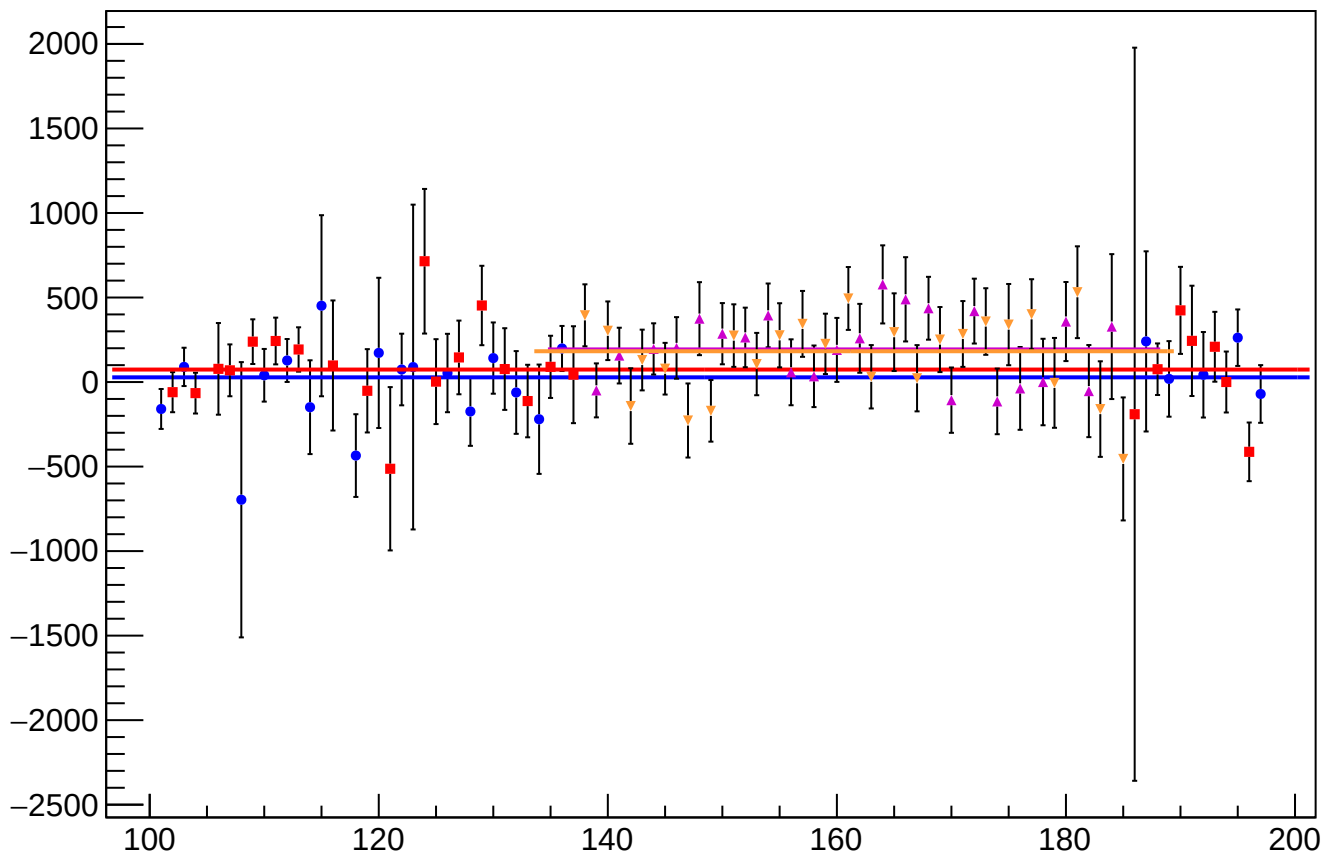
In: 2174.818+/-0.308  $\chi^2/\text{NDF}$ : 3806718.2/44

Out: 2183.051+/-0.298  $\chi^2/\text{NDF}$ : 5219359.1/49

All: 2179.067+/-0.214  $\chi^2/\text{NDF}$ : 9026446.4/94



# dit\_asym\_sam5\_mean vs Slug, Sign Corrected



Right In: 27.854+/-41.778     $\chi^2/\text{NDF}$ : 15.1/21

Left Out: 182.238+/-40.102     $\chi^2/\text{NDF}$ :26.9/24

Right Out: 73.888+/-38.143     $\chi^2/\text{NDF}$ : 24.6/24

Left In: 193.004+/-41.384     $\chi^2/\text{NDF}$ :21.1/22

Left: 187.451+/-28.799     $\chi^2/\text{NDF}$ : 48.0/47

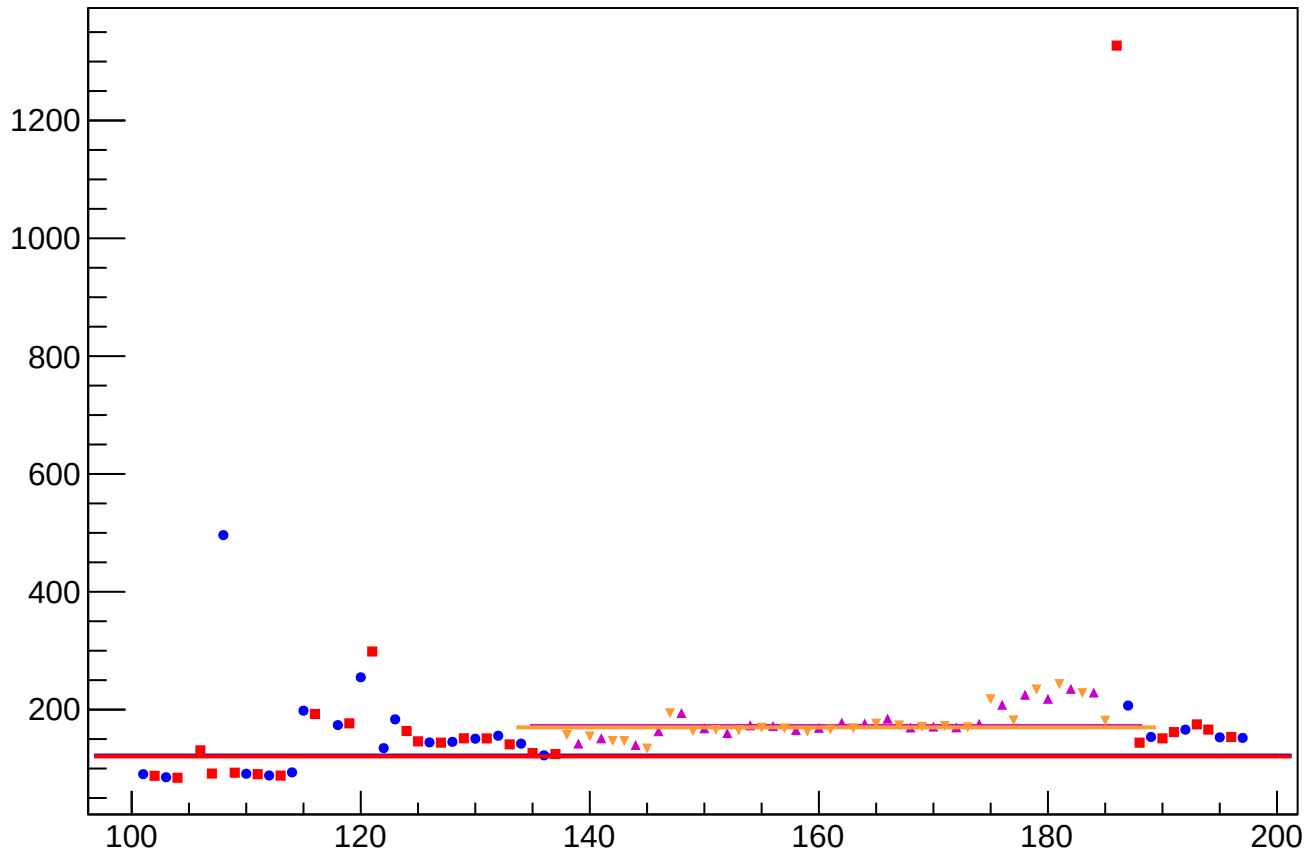
Right: 52.961+/-28.169     $\chi^2/\text{NDF}$ : 40.4/46

In: 111.211+/-29.401     $\chi^2/\text{NDF}$ :44.1/44

Out: 125.351+/-27.638     $\chi^2/\text{NDF}$ :55.4/49

All: 118.718+/-20.137     $\chi^2/\text{NDF}$ : 99.6/94

# dit\_asym\_sam5\_rms vs Slug, Sign Corrected



Right In: 122.029 $\pm$ 0.030  $\chi^2$ /NDF: 1749765.4/21

Left Out: 169.906 $\pm$ 0.028  $\chi^2$ /NDF: 663159.2/24

Right Out: 120.508 $\pm$ 0.027  $\chi^2$ /NDF: 2376244.0/24

Left In: 172.065 $\pm$ 0.029  $\chi^2$ /NDF: 589733.9/22

Left: 170.952 $\pm$ 0.020  $\chi^2$ /NDF: 1255701.2/47

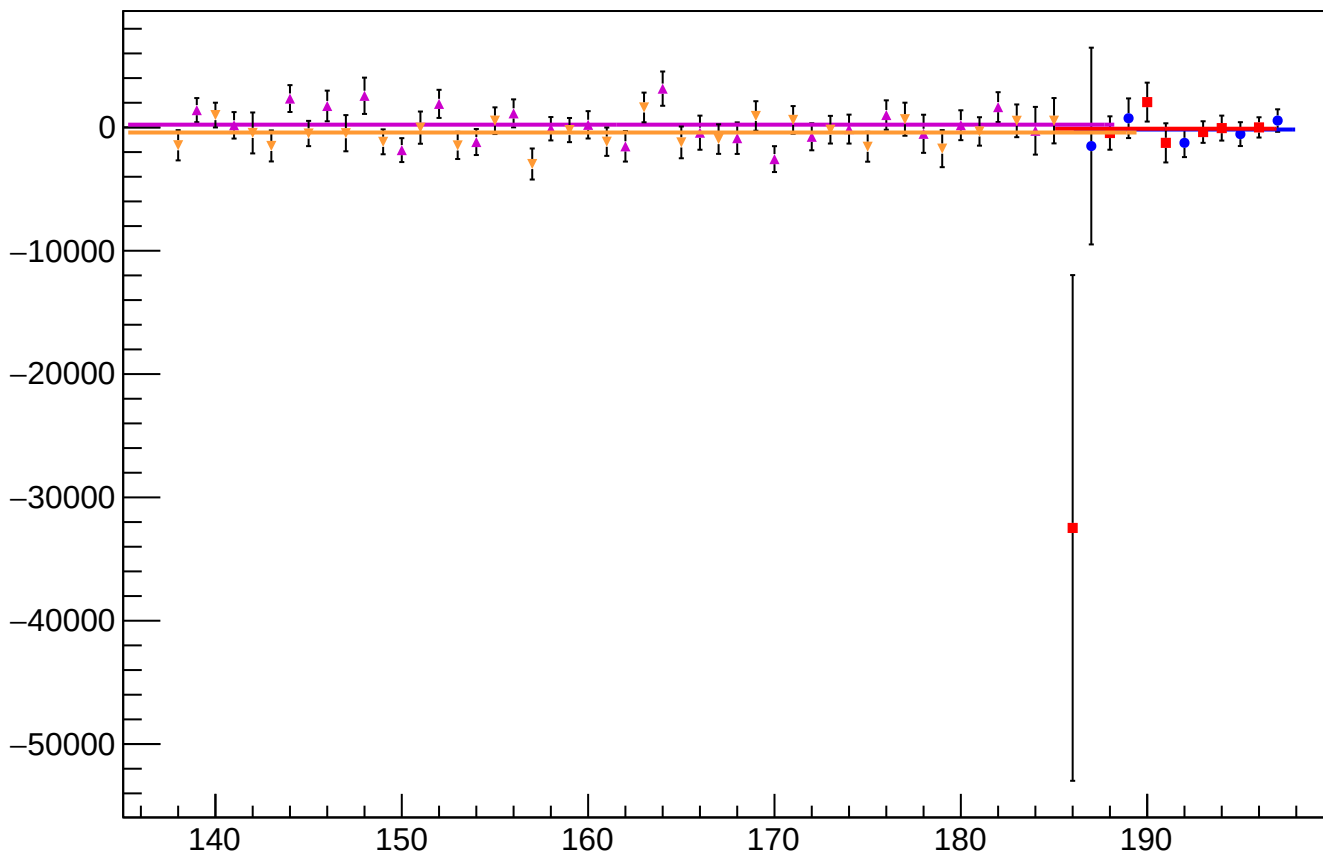
Right: 121.199 $\pm$ 0.020  $\chi^2$ /NDF: 4127454.6/46

In: 147.284 $\pm$ 0.021  $\chi^2$ /NDF: 3787511.3/44

Out: 143.971 $\pm$ 0.020  $\chi^2$ /NDF: 4632715.5/49

All: 145.525 $\pm$ 0.014  $\chi^2$ /NDF: 8433709.0/94

# asym\_sam5\_correction\_mean vs Slug, Sign Corrected



Right In:  $-170.187 \pm 540.709$   $\chi^2/\text{NDF}: 2.0/4$

Left Out:  $-412.804 \pm 240.278$   $\chi^2/\text{NDF}: 19.0/24$

Right Out:  $-105.414 \pm 442.406$   $\chi^2/\text{NDF}: 5.1/6$

Left In:  $223.332 \pm 243.771$   $\chi^2/\text{NDF}: 36.0/22$

Left:  $-99.327 \pm 171.124$   $\chi^2/\text{NDF}: 58.5/47$

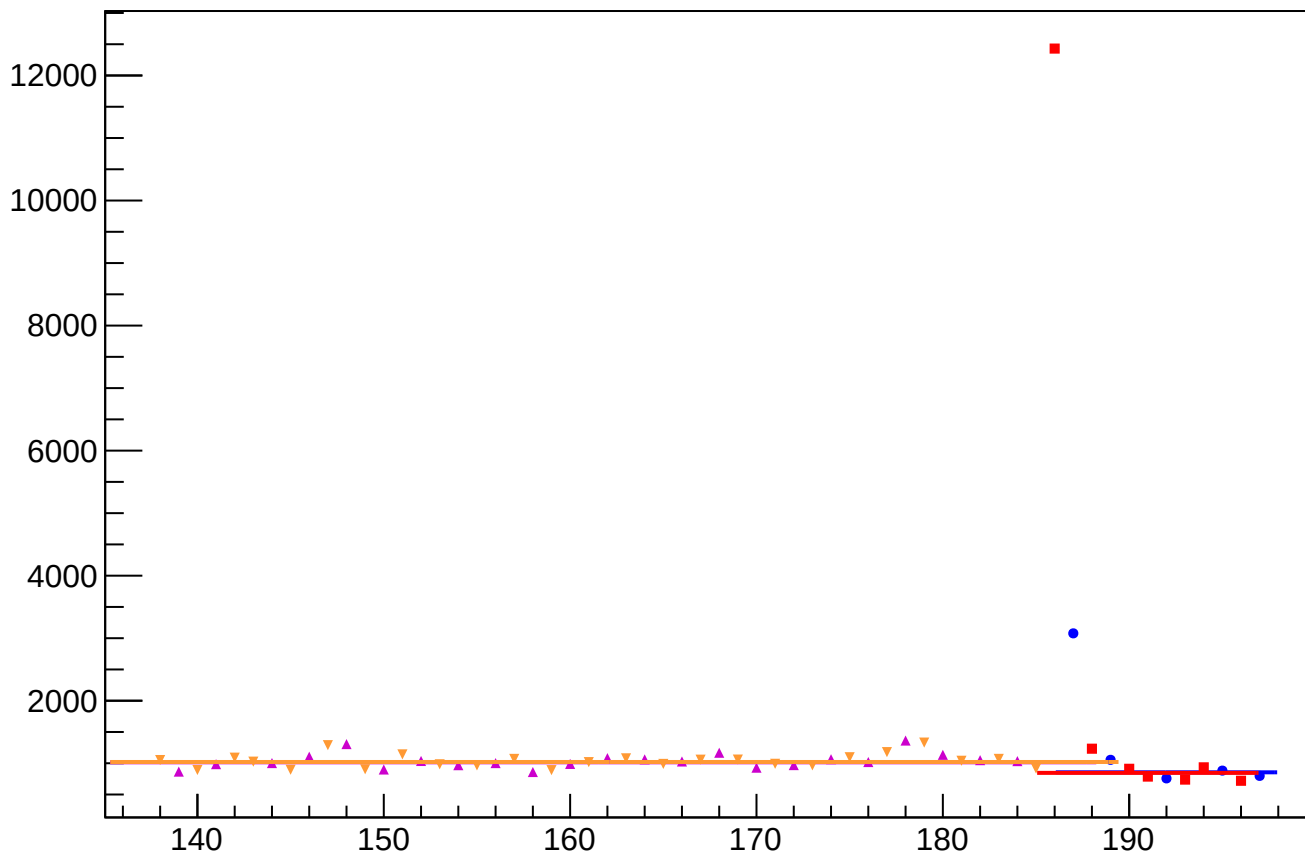
Right:  $-131.388 \pm 342.401$   $\chi^2/\text{NDF}: 7.1/11$

In:  $156.859 \pm 222.231$   $\chi^2/\text{NDF}: 38.5/27$

Out:  $-342.786 \pm 211.146$   $\chi^2/\text{NDF}: 24.5/31$

All:  $-105.734 \pm 153.072$   $\chi^2/\text{NDF}: 65.6/59$

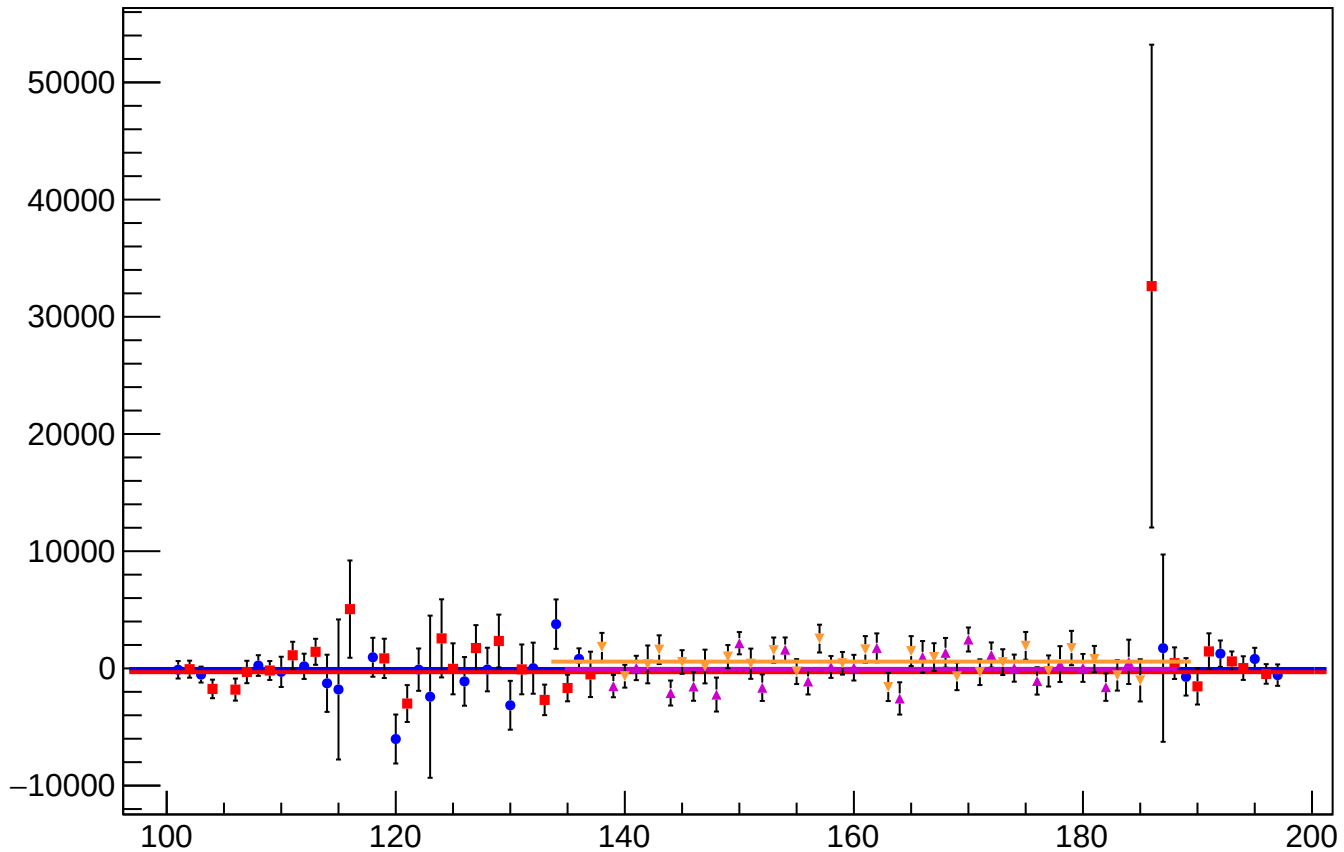
# asym\_sam5\_correction\_rms vs Slug, Sign Corrected



Right In: 854.955 $\pm$ 0.382  $\chi^2$ /NDF: 209669.0/4  
 Left Out: 1020.149 $\pm$ 0.170  $\chi^2$ /NDF: 369866.7/24  
 Right Out: 846.066 $\pm$ 0.313  $\chi^2$ /NDF: 900468.5/6  
 Left In: 1015.000 $\pm$ 0.172  $\chi^2$ /NDF: 404865.5/22

Left: 1017.611 $\pm$ 0.121  $\chi^2$ /NDF: 775184.8/47  
 Right: 849.630 $\pm$ 0.242  $\chi^2$ /NDF: 1110461.3/11  
 In: 987.965 $\pm$ 0.157  $\chi^2$ /NDF: 760157.4/27  
 Out: 980.495 $\pm$ 0.149  $\chi^2$ /NDF: 1509468.2/31  
 All: 984.039 $\pm$ 0.108  $\chi^2$ /NDF: 2270813.1/59

# asym\_sam5\_mean vs Slug, Sign Corrected



Right In:  $-48.876 \pm 269.846$   $\chi^2/\text{NDF}$ : 19.1/21

Left Out:  $580.226 \pm 235.583$   $\chi^2/\text{NDF}$ : 18.4/24

Right Out:  $-322.148 \pm 239.568$   $\chi^2/\text{NDF}$ : 29.1/24

Left In:  $-42.397 \pm 239.278$   $\chi^2/\text{NDF}$ : 37.9/22

Left:  $273.759 \pm 167.873$   $\chi^2/\text{NDF}$ : 59.7/47

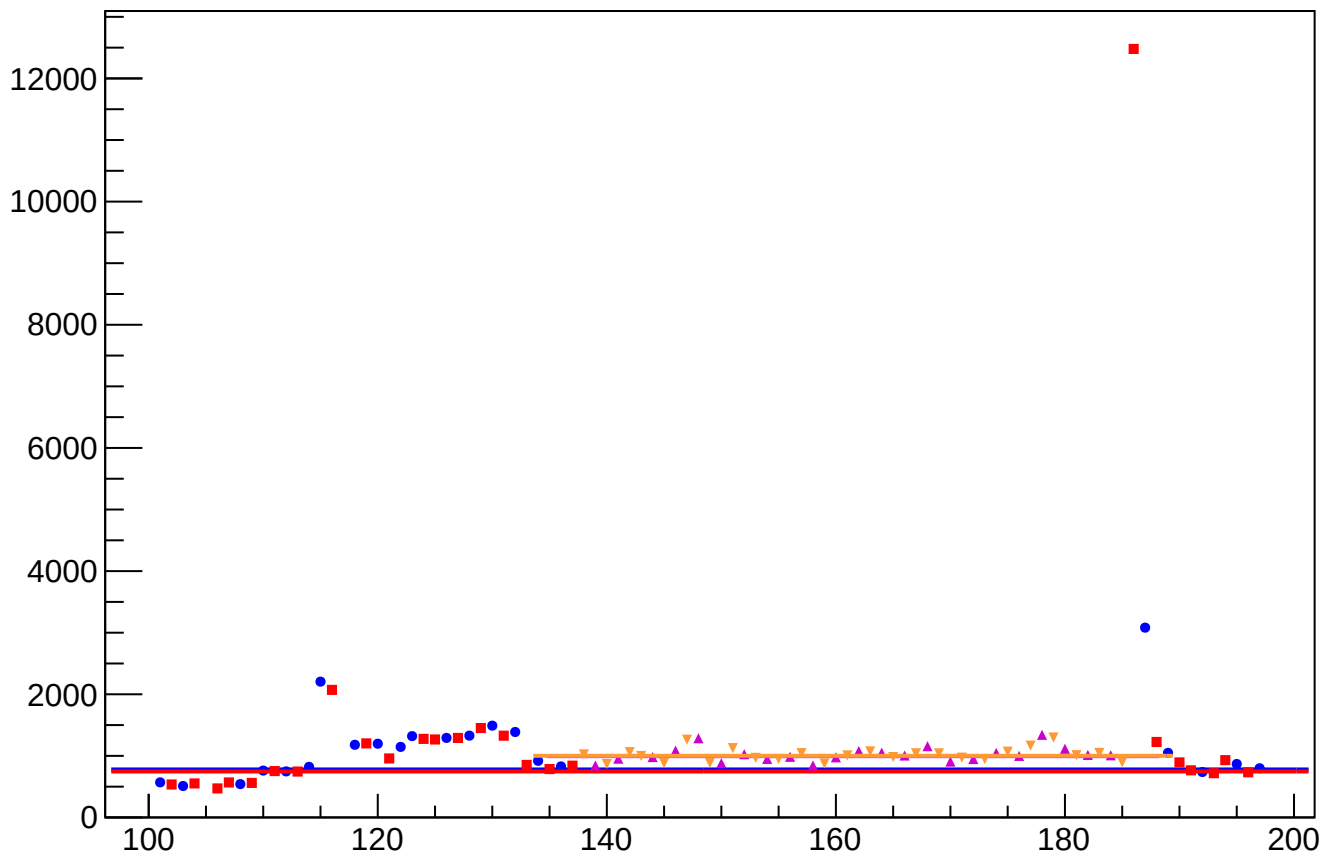
Right:  $-201.697 \pm 179.152$   $\chi^2/\text{NDF}$ : 48.7/46

In:  $-45.249 \pm 179.031$   $\chi^2/\text{NDF}$ : 56.9/44

Out:  $136.606 \pm 167.973$   $\chi^2/\text{NDF}$ : 54.7/49

All:  $51.468 \pm 122.498$   $\chi^2/\text{NDF}$ : 112.2/94

# asym\_sam5\_rms vs Slug, Sign Corrected



Right In: 779.409+/-0.191  $\chi^2/\text{NDF}$ : 1965376.7/21

Left Out: 1001.233+/-0.167  $\chi^2/\text{NDF}$ : 370278.3/24

Right Out: 746.373+/-0.169  $\chi^2/\text{NDF}$ : 2698193.8/24

Left In: 995.590+/-0.169  $\chi^2/\text{NDF}$ : 424434.6/22

Left: 998.455+/-0.119  $\chi^2/\text{NDF}$ : 795277.7/47

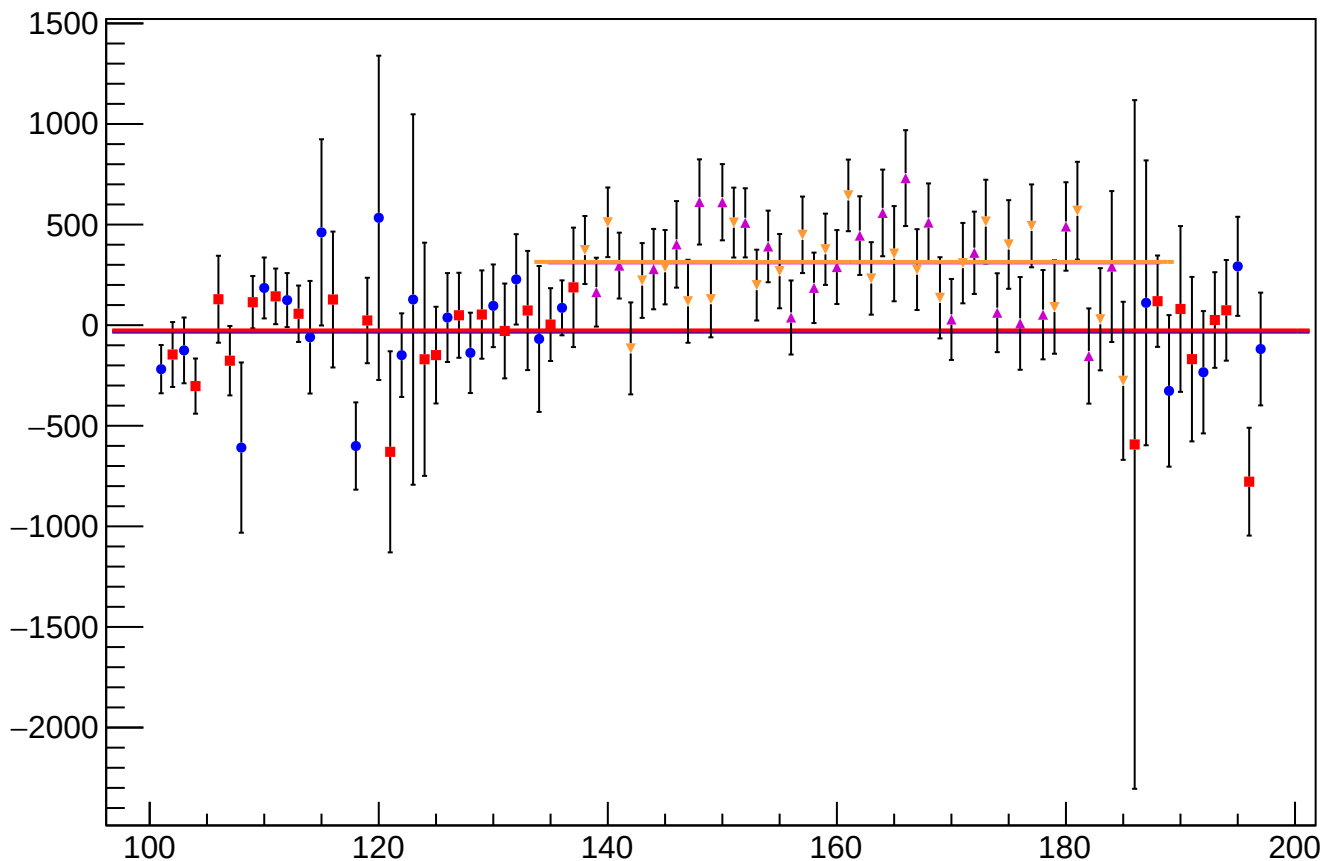
Right: 760.934+/-0.127  $\chi^2/\text{NDF}$ : 4680333.9/46

In: 900.432+/-0.127  $\chi^2/\text{NDF}$ : 3108409.1/44

Out: 875.940+/-0.119  $\chi^2/\text{NDF}$ : 4219192.5/49

All: 887.406+/-0.087  $\chi^2/\text{NDF}$ : 7347508.5/94

# dit\_asym\_sam6\_mean vs Slug, Sign Corrected



Right In:  $-32.048 \pm 45.863$   $\chi^2/\text{NDF}: 22.7/21$

Left Out:  $314.517 \pm 39.818$   $\chi^2/\text{NDF}: 21.4/24$

Right Out:  $-26.169 \pm 42.337$   $\chi^2/\text{NDF}: 20.6/24$

Left In:  $312.097 \pm 41.646$   $\chi^2/\text{NDF}: 26.9/22$

Left:  $313.361 \pm 28.780$   $\chi^2/\text{NDF}: 48.3/47$

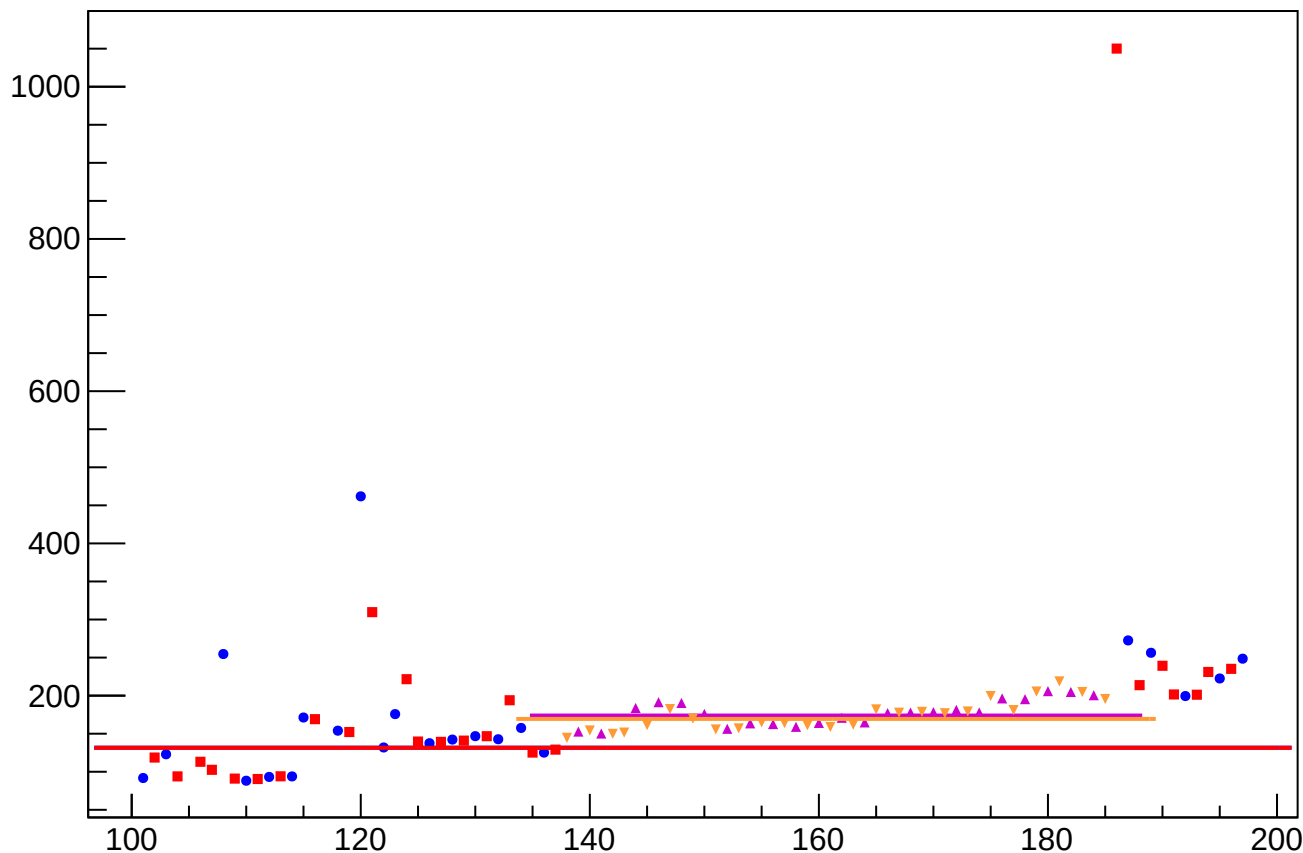
Right:  $-28.874 \pm 31.109$   $\chi^2/\text{NDF}: 43.3/46$

In:  $156.572 \pm 30.831$   $\chi^2/\text{NDF}: 80.4/44$

Out:  $154.613 \pm 29.005$   $\chi^2/\text{NDF}: 76.4/49$

All:  $155.532 \pm 21.126$   $\chi^2/\text{NDF}: 156.8/94$

# dit\_asym\_sam6\_rms vs Slug, Sign Corrected



Right In: 131.655 $\pm$ 0.032  $\chi^2/\text{NDF}$ : 2192297.8/21

Left Out: 169.432 $\pm$ 0.028  $\chi^2/\text{NDF}$ : 386461.5/24

Right Out: 131.449 $\pm$ 0.030  $\chi^2/\text{NDF}$ : 3024037.6/24

Left In: 173.847 $\pm$ 0.029  $\chi^2/\text{NDF}$ : 291729.8/22

Left: 171.540 $\pm$ 0.020  $\chi^2/\text{NDF}$ : 689934.9/47

Right: 131.544 $\pm$ 0.022  $\chi^2/\text{NDF}$ : 5216357.1/46

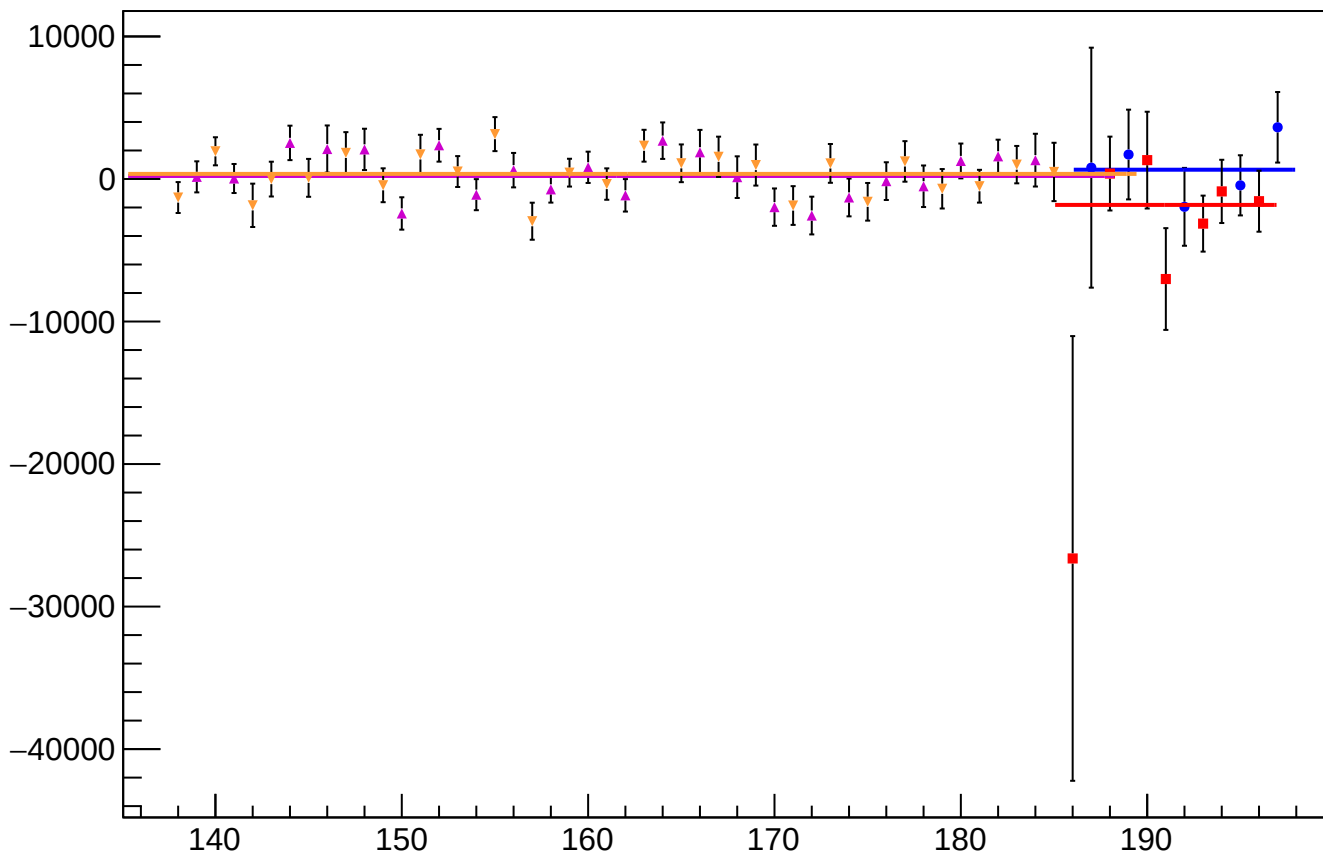
In: 154.779 $\pm$ 0.022  $\chi^2/\text{NDF}$ : 3411739.9/44

Out: 151.604 $\pm$ 0.021  $\chi^2/\text{NDF}$ : 4264692.7/49

All: 153.095 $\pm$ 0.015  $\chi^2/\text{NDF}$ : 7687686.6/94



asym\_sam6\_correction\_mean vs Slug, Sign Corrected



Right In: 650.912+/-1253.193  $\chi^2/\text{NDF}$ : 2.7/4

Left Out: 356.612+/-250.934  $\chi^2/\text{NDF}$ : 33.4/24

Right Out: -1818.865+/-1000.661  $\chi^2/\text{NDF}$ : 6.9/6

Left In: 212.007+/-257.383  $\chi^2/\text{NDF}$ : 36.0/22

Left: 286.144+/-179.674  $\chi^2/\text{NDF}$ : 69.6/47

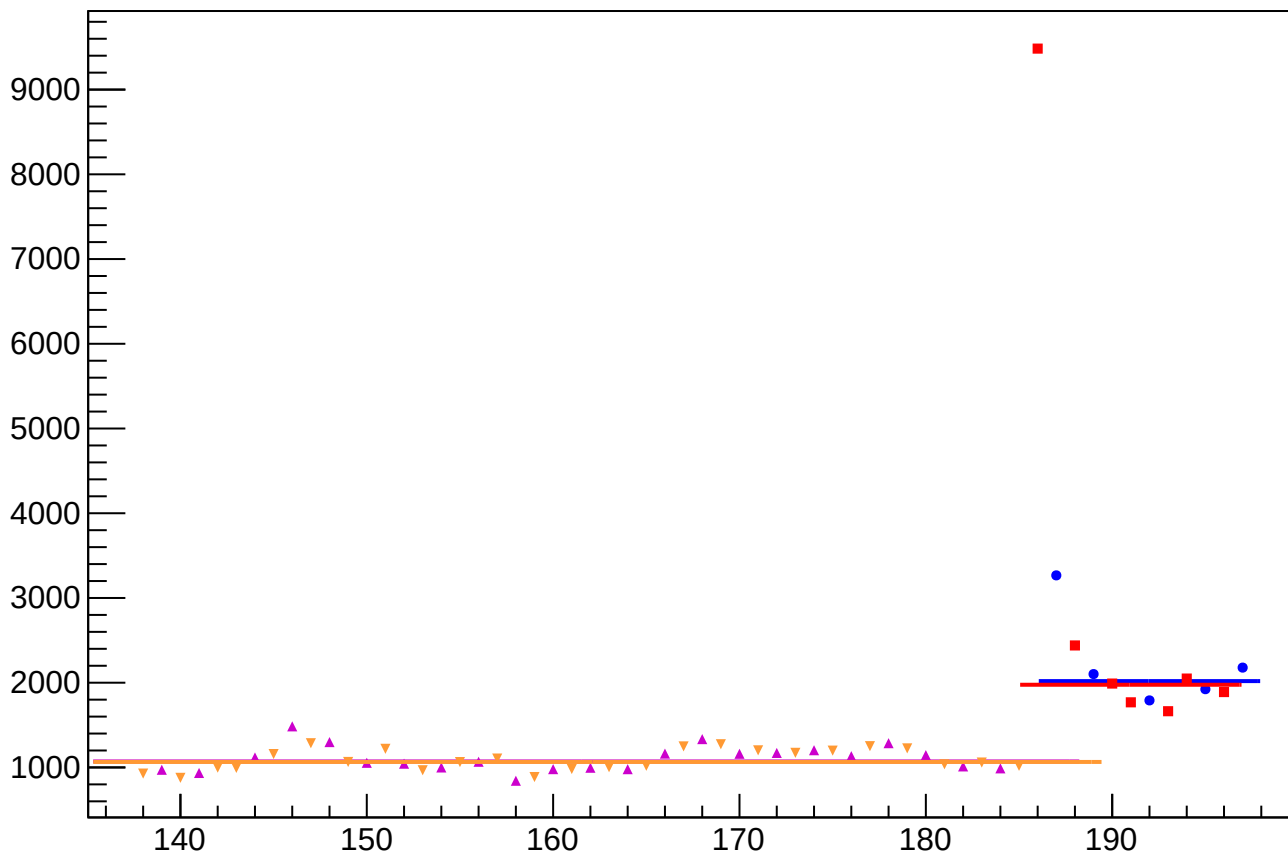
Right: -857.270+/-781.961  $\chi^2/\text{NDF}$ : 12.0/11

In: 229.771+/-252.121  $\chi^2/\text{NDF}$ : 38.9/27

Out: 227.901+/-243.398  $\chi^2/\text{NDF}$ : 44.7/31

All: 228.803+/-175.111  $\chi^2/\text{NDF}$ : 83.6/59

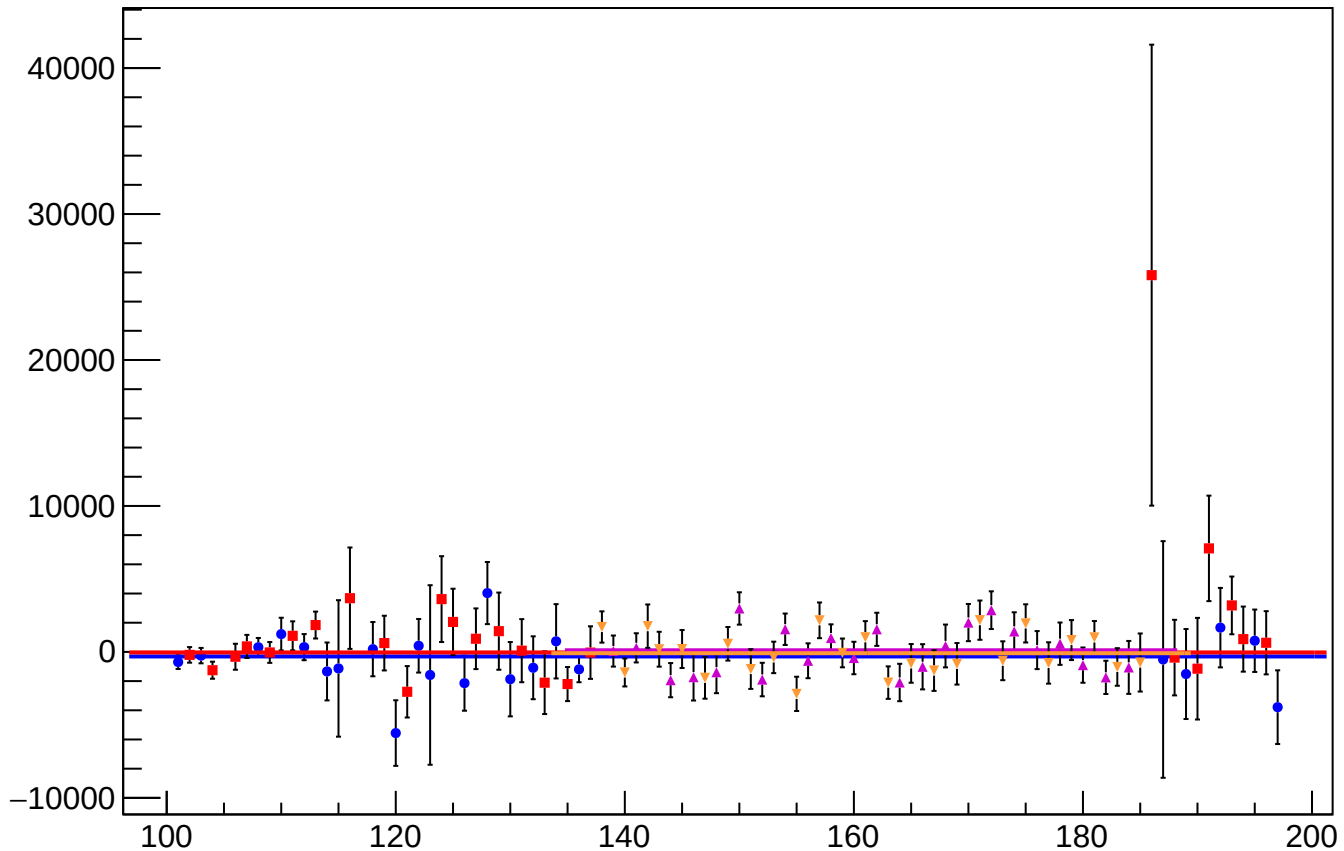
# asym\_sam6\_correction\_rms vs Slug, Sign Corrected



Right In: 2018.967+/-0.886  $\chi^2/\text{NDF}$ : 71584.3/4  
 Left Out: 1064.868+/-0.177  $\chi^2/\text{NDF}$ : 493614.2/24  
 Right Out: 1975.893+/-0.708  $\chi^2/\text{NDF}$ : 590090.3/6  
 Left In: 1070.694+/-0.182  $\chi^2/\text{NDF}$ : 570407.8/22

Left: 1067.707+/-0.127  $\chi^2/\text{NDF}$ : 1064547.2/47  
 Right: 1992.664+/-0.553  $\chi^2/\text{NDF}$ : 663117.5/11  
 In: 1109.074+/-0.178  $\chi^2/\text{NDF}$ : 1740790.7/27  
 Out: 1118.769+/-0.172  $\chi^2/\text{NDF}$ : 2643365.6/31  
 All: 1114.092+/-0.124  $\chi^2/\text{NDF}$ : 4385686.8/59

# asym\_sam6\_mean vs Slug, Sign Corrected



Right In:  $-311.812 \pm 245.252$   $\chi^2/\text{NDF}$ : 19.7/21

Left Out:  $-89.632 \pm 247.271$   $\chi^2/\text{NDF}$ : 31.0/24

Right Out:  $-35.603 \pm 240.568$   $\chi^2/\text{NDF}$ : 30.8/24

Left In:  $110.879 \pm 254.337$   $\chi^2/\text{NDF}$ : 35.2/22

Left:  $7.800 \pm 177.292$   $\chi^2/\text{NDF}$ : 66.4/47

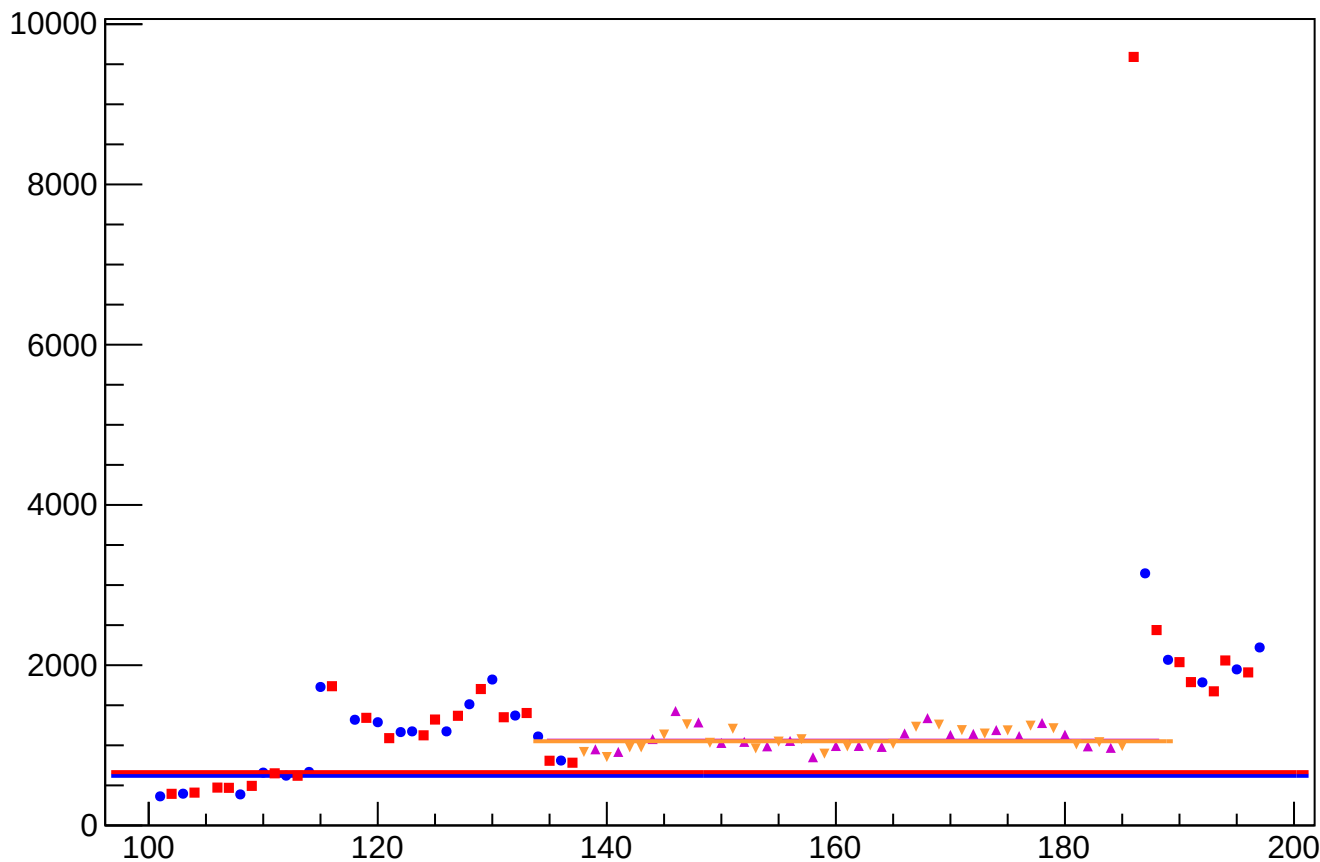
Right:  $-171.044 \pm 171.739$   $\chi^2/\text{NDF}$ : 51.1/46

In:  $-108.151 \pm 176.544$   $\chi^2/\text{NDF}$ : 56.3/44

Out:  $-61.875 \pm 172.428$   $\chi^2/\text{NDF}$ : 61.8/49

All:  $-84.467 \pm 123.354$   $\chi^2/\text{NDF}$ : 118.1/94

# asym\_sam6\_rms vs Slug, Sign Corrected



Right In: 619.633+/-0.173  $\chi^2/\text{NDF}$ : 5938871.5/21

Left Out: 1050.918+/-0.175  $\chi^2/\text{NDF}$ : 483477.5/24

Right Out: 665.492+/-0.170  $\chi^2/\text{NDF}$ : 7072008.3/24

Left In: 1058.154+/-0.180  $\chi^2/\text{NDF}$ : 532260.0/22

Left: 1054.434+/-0.125  $\chi^2/\text{NDF}$ : 1016569.7/47

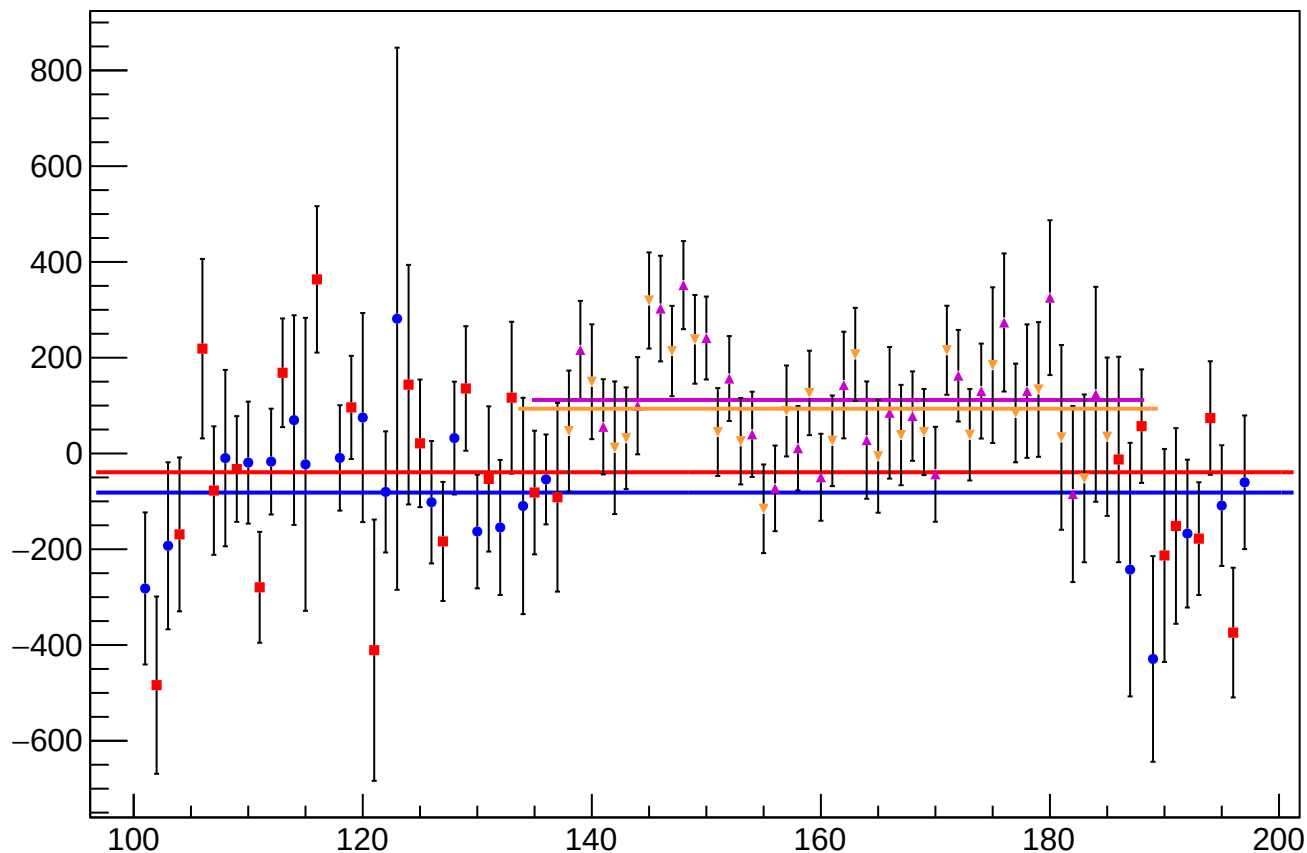
Right: 643.005+/-0.121  $\chi^2/\text{NDF}$ : 13046517.8/46

In: 830.921+/-0.125  $\chi^2/\text{NDF}$ : 9551976.3/44

Out: 852.910+/-0.122  $\chi^2/\text{NDF}$ : 10051853.1/49

All: 842.175+/-0.087  $\chi^2/\text{NDF}$ : 19619708.3/94

# dit\_asym\_sam7\_mean vs Slug, Sign Corrected



Right In: -81.625 $\pm$ 31.218  $\chi^2/\text{NDF}$ : 9.8/21

Left Out: 93.496 $\pm$ 21.284  $\chi^2/\text{NDF}$ :22.8/24

Right Out: -39.206 $\pm$ 28.529  $\chi^2/\text{NDF}$ : 41.5/24

Left In: 111.732 $\pm$ 21.971  $\chi^2/\text{NDF}$ :30.7/22

Left: 102.325 $\pm$ 15.287  $\chi^2/\text{NDF}$ : 53.8/47

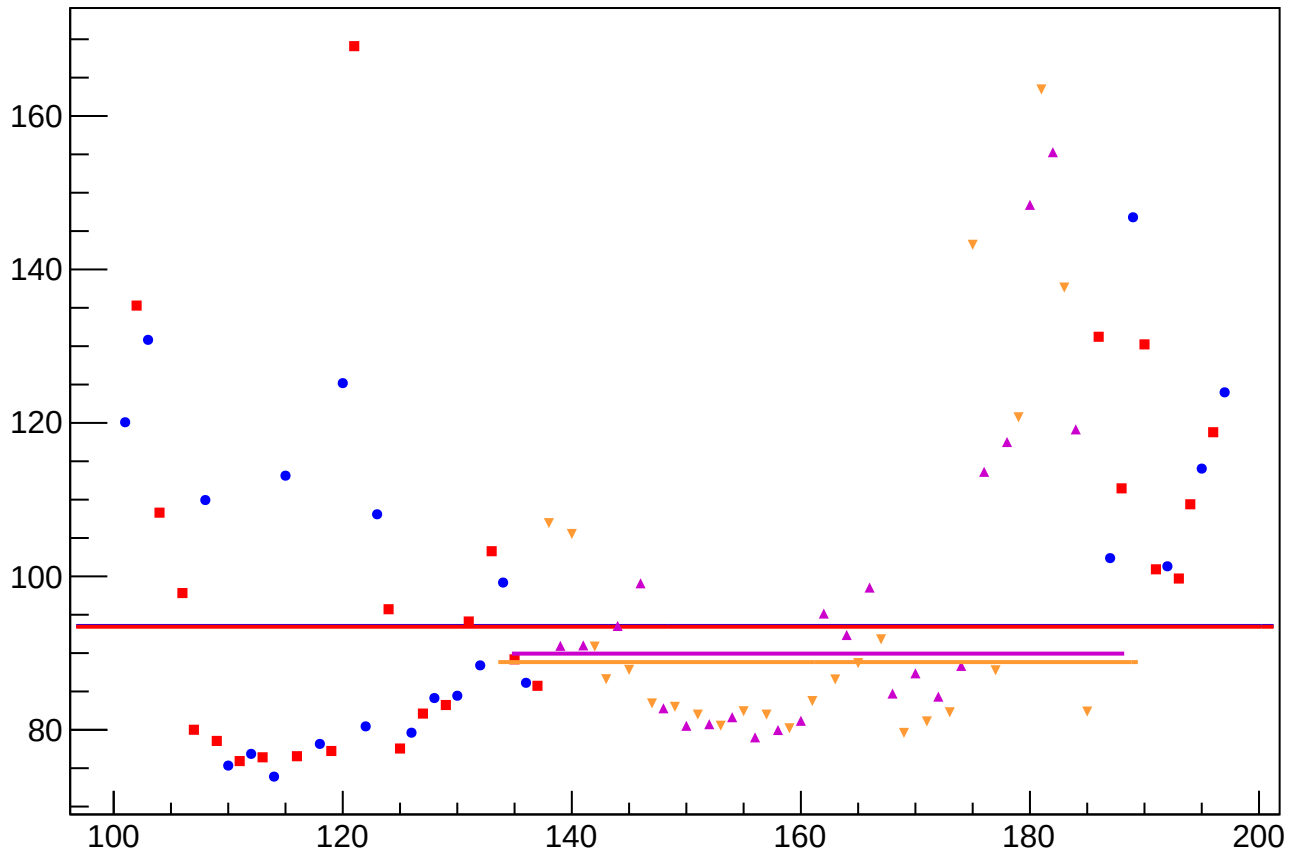
Right: -58.510 $\pm$ 21.060  $\chi^2/\text{NDF}$ : 52.3/46

In: 47.683 $\pm$ 17.967  $\chi^2/\text{NDF}$ :66.1/44

Out: 46.045 $\pm$ 17.060  $\chi^2/\text{NDF}$ :78.2/49

All: 46.822 $\pm$ 12.371  $\chi^2/\text{NDF}$ : 144.3/94

# dit\_asym\_sam7\_rms vs Slug, Sign Corrected



Right In: 93.537 $\pm$ 0.022  $\chi^2$ /NDF: 720677.7/21

Left Out: 88.830 $\pm$ 0.015  $\chi^2$ /NDF: 1000651.2/24

Right Out: 93.438 $\pm$ 0.020  $\chi^2$ /NDF: 839285.5/24

Left In: 89.934 $\pm$ 0.016  $\chi^2$ /NDF: 874129.5/22

Left: 89.364 $\pm$ 0.011  $\chi^2$ /NDF: 1877387.2/47

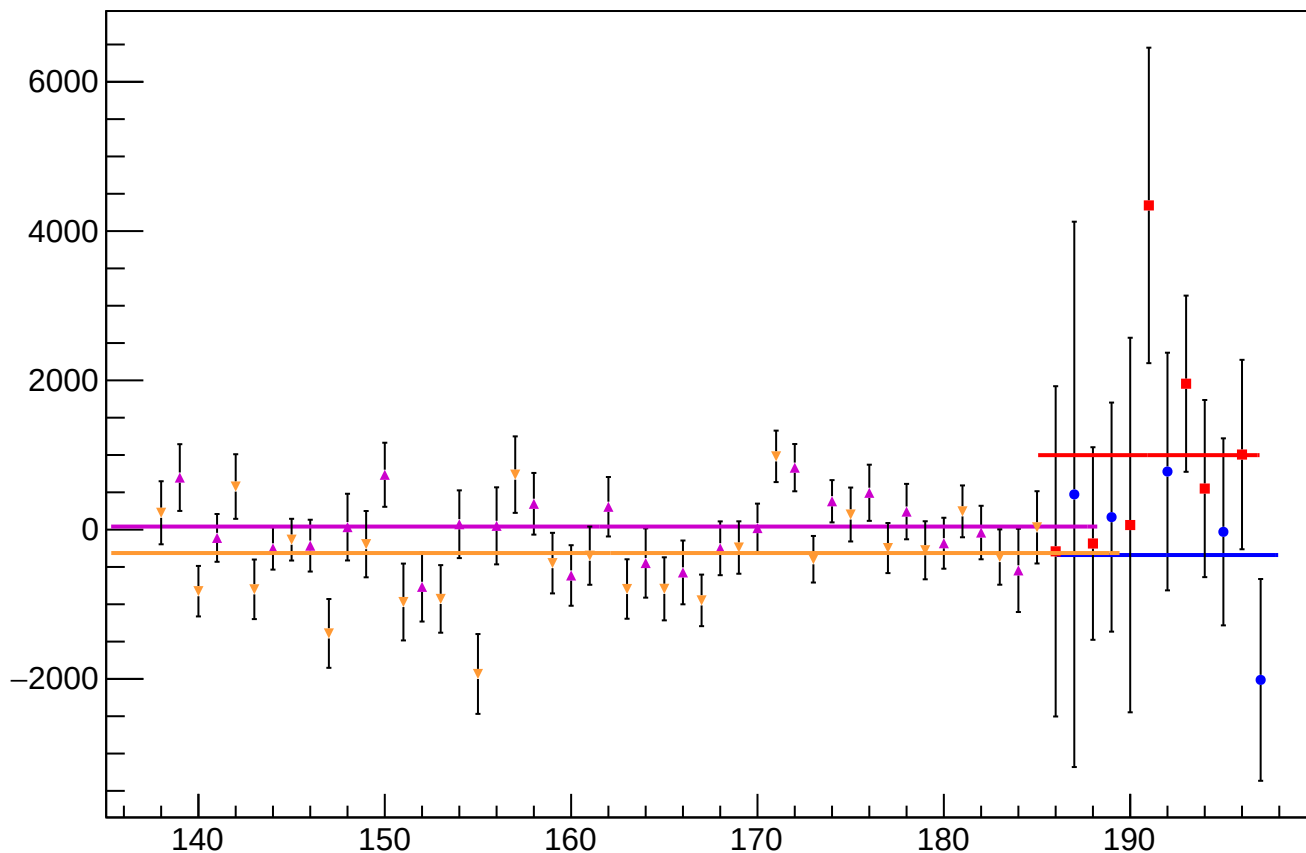
Right: 93.483 $\pm$ 0.015  $\chi^2$ /NDF: 1559974.0/46

In: 91.127 $\pm$ 0.013  $\chi^2$ /NDF: 1612621.3/44

Out: 90.478 $\pm$ 0.012  $\chi^2$ /NDF: 1873464.8/49

All: 90.786 $\pm$ 0.009  $\chi^2$ /NDF: 3487461.8/94

asym\_sam7\_correction\_mean vs Slug, Sign Corrected



Right In:  $-340.152 \pm 693.674$   $\chi^2/\text{NDF}: 2.2/4$

Left Out:  $-313.446 \pm 77.334$   $\chi^2/\text{NDF}: 58.1/24$

Right Out:  $998.010 \pm 555.829$   $\chi^2/\text{NDF}: 4.6/6$

Left In:  $41.244 \pm 78.858$   $\chi^2/\text{NDF}: 28.0/22$

Left:  $-139.560 \pm 55.214$   $\chi^2/\text{NDF}: 96.4/47$

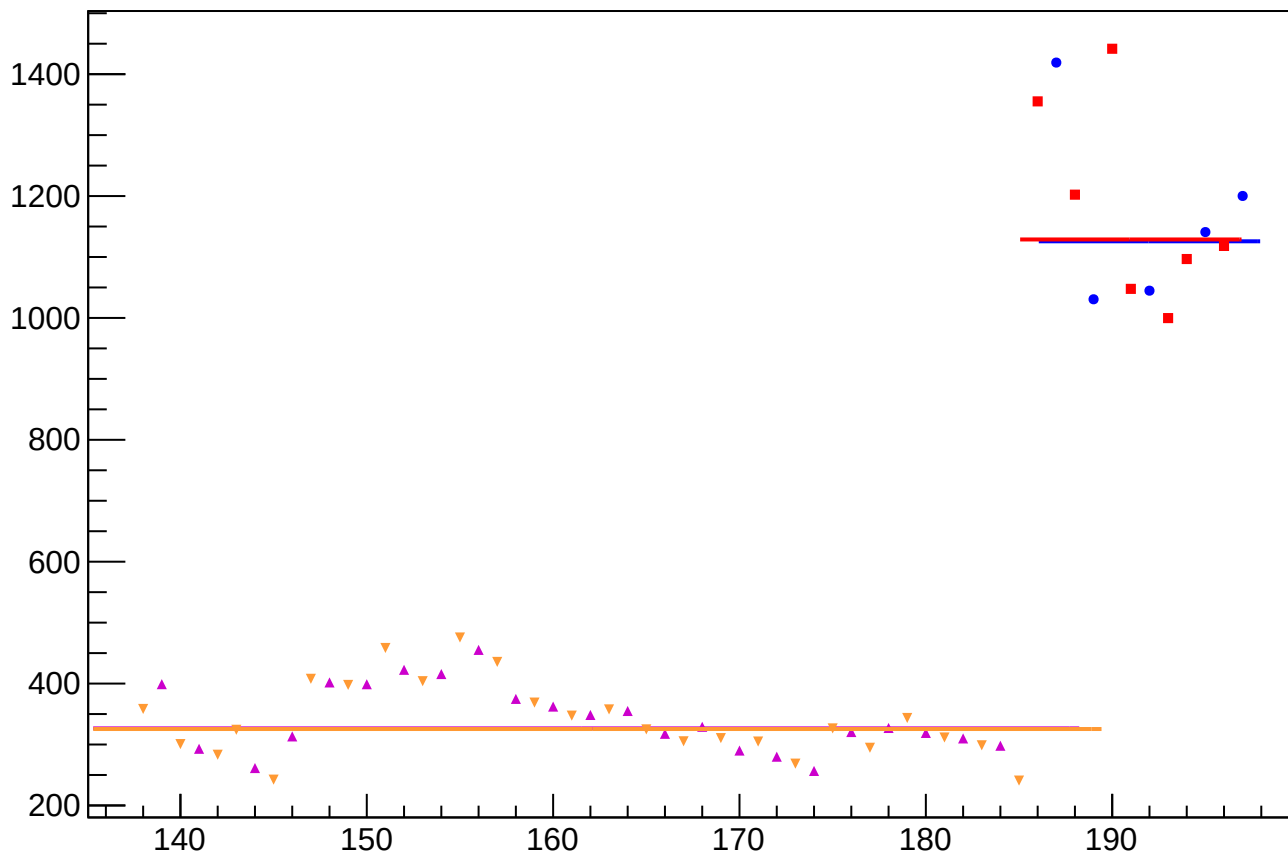
Right:  $474.780 \pm 433.758$   $\chi^2/\text{NDF}: 9.1/11$

In:  $36.378 \pm 78.353$   $\chi^2/\text{NDF}: 30.6/27$

Out:  $-288.541 \pm 76.597$   $\chi^2/\text{NDF}: 68.2/31$

All:  $-129.764 \pm 54.772$   $\chi^2/\text{NDF}: 107.5/59$

asym\_sam7\_correction\_rms vs Slug, Sign Corrected



Right In: 1125.751+/-0.491  $\chi^2/\text{NDF}$ : 32108.5/4

Left Out: 325.432+/-0.055  $\chi^2/\text{NDF}$ : 1000974.7/24

Right Out: 1128.775+/-0.393  $\chi^2/\text{NDF}$ : 87026.1/6

Left In: 326.516+/-0.056  $\chi^2/\text{NDF}$ : 841153.2/22

Left: 325.964+/-0.039  $\chi^2/\text{NDF}$ : 1842320.6/47

Right: 1127.592+/-0.307  $\chi^2/\text{NDF}$ : 119157.7/11

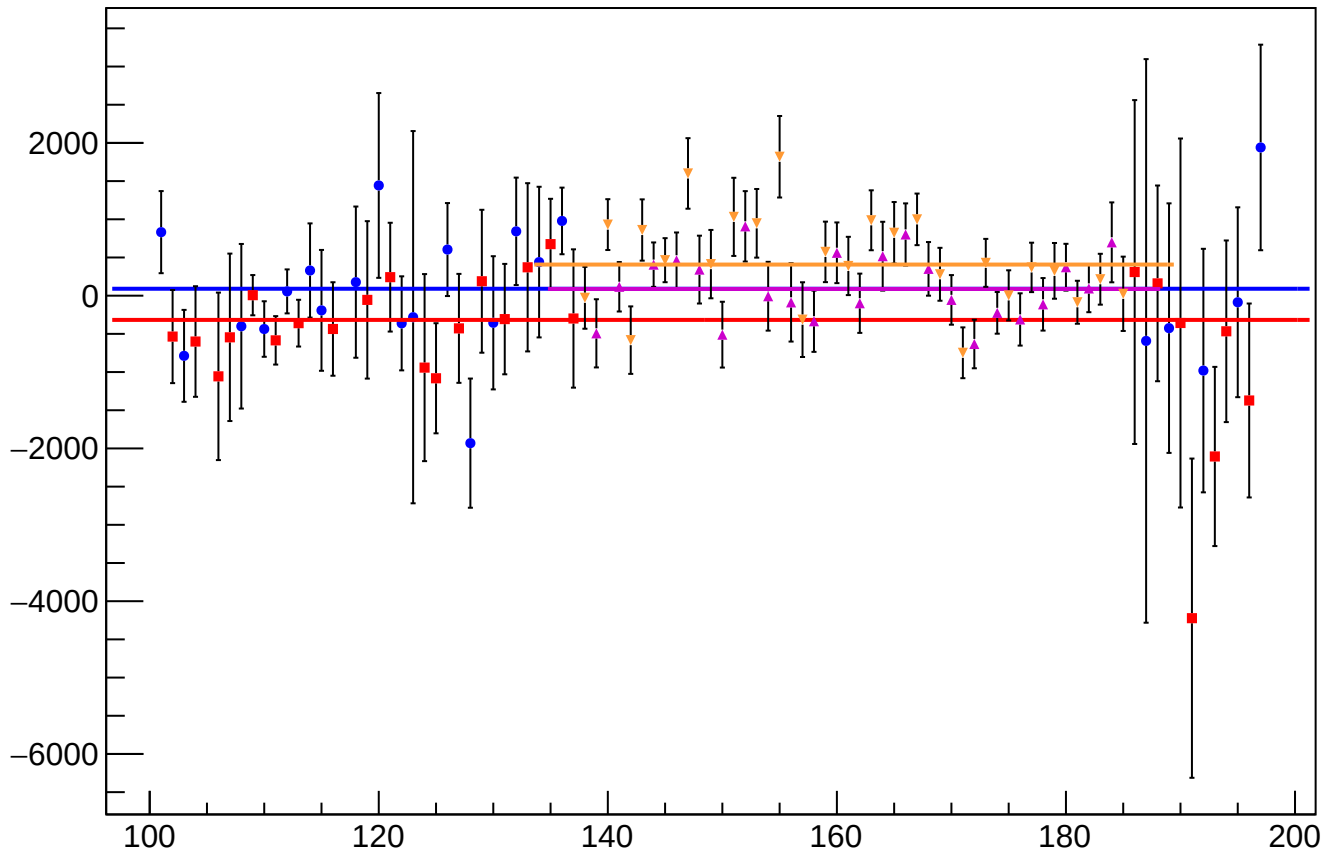
In: 336.713+/-0.055  $\chi^2/\text{NDF}$ : 3494402.6/27

Out: 340.688+/-0.054  $\chi^2/\text{NDF}$ : 5186472.0/31

All: 338.746+/-0.039  $\chi^2/\text{NDF}$ : 8683505.9/59



# asym\_sam7\_mean vs Slug, Sign Corrected



Right In: 90.735+/-139.730  $\chi^2/\text{NDF}$ : 23.1/21

Left Out: 407.375+/-74.730  $\chi^2/\text{NDF}$ : 53.0/24

Right Out: -317.181+/-126.365  $\chi^2/\text{NDF}$ : 15.4/24

Left In: 87.657+/-76.572  $\chi^2/\text{NDF}$ : 27.4/22

Left: 251.406+/-53.481  $\chi^2/\text{NDF}$ : 89.4/47

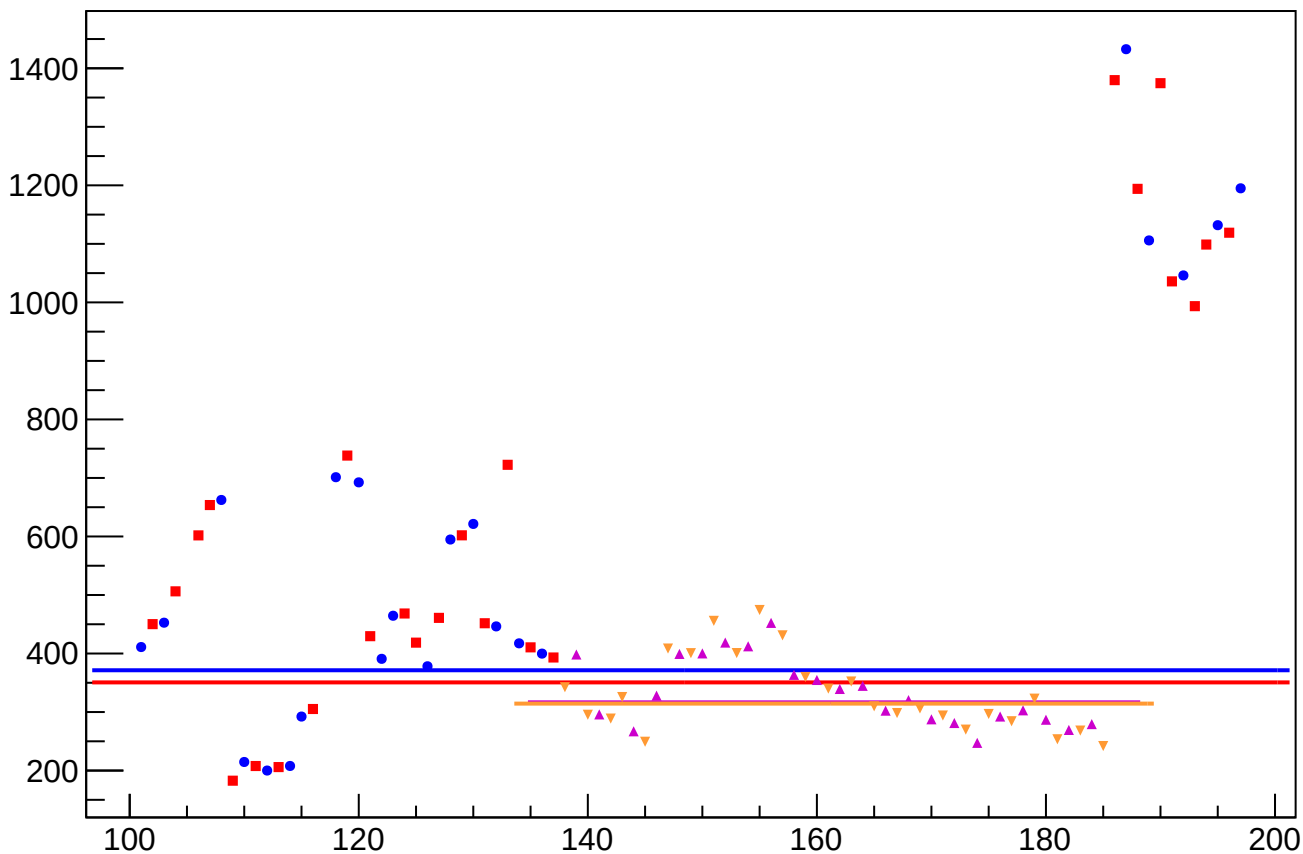
Right: -133.660+/-93.724  $\chi^2/\text{NDF}$ : 43.1/46

In: 88.368+/-67.150  $\chi^2/\text{NDF}$ : 50.5/44

Out: 219.632+/-64.324  $\chi^2/\text{NDF}$ : 92.8/49

All: 156.820+/-46.451  $\chi^2/\text{NDF}$ : 145.2/94

# asym\_sam7\_rms vs Slug, Sign Corrected



Right In: 371.391+/-0.099  $\chi^2/\text{NDF}$ : 4567741.9/21

Left Out: 314.405+/-0.053  $\chi^2/\text{NDF}$ : 1112244.9/24

Right Out: 350.638+/-0.089  $\chi^2/\text{NDF}$ : 6891938.8/24

Left In: 316.616+/-0.054  $\chi^2/\text{NDF}$ : 929652.0/22

Left: 315.484+/-0.038  $\chi^2/\text{NDF}$ : 2042751.4/47

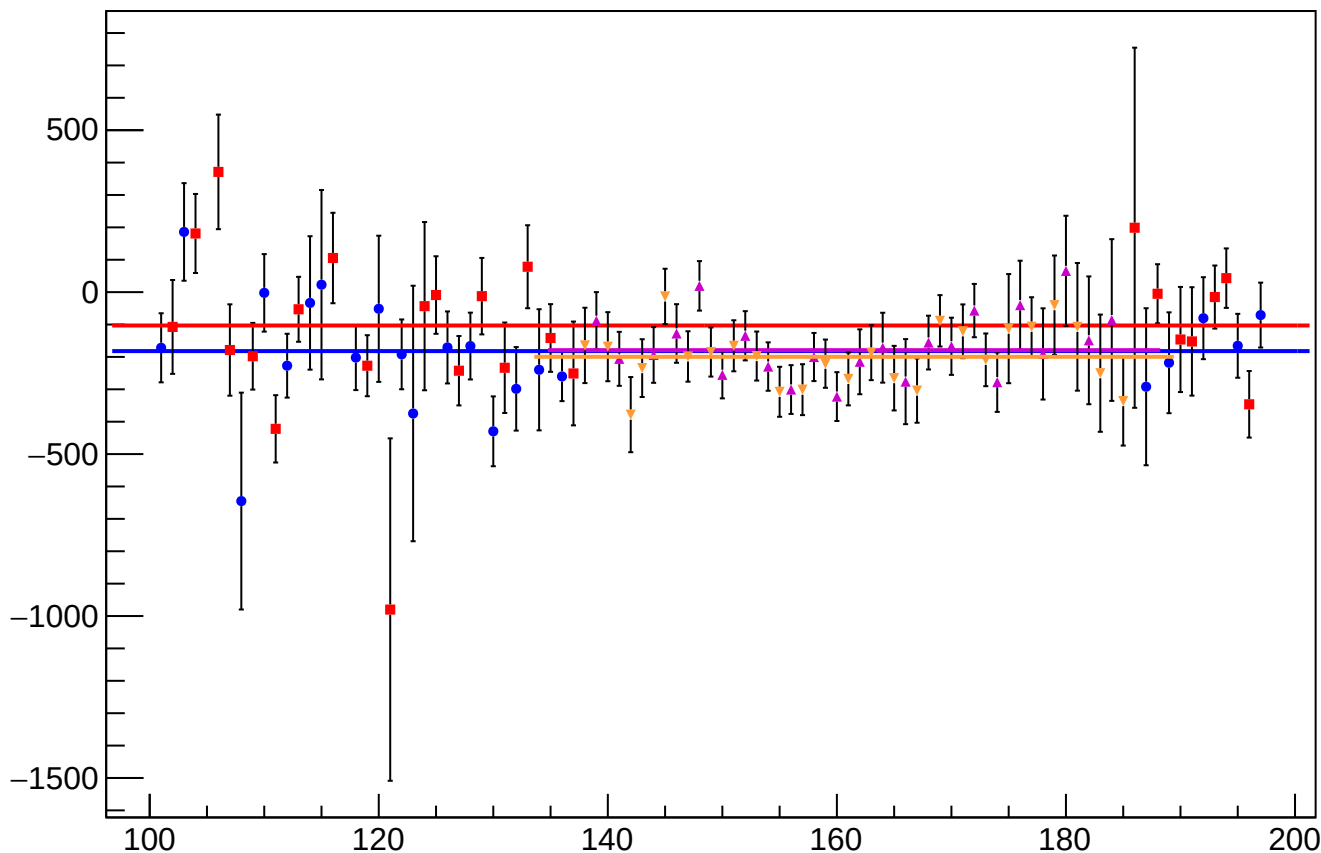
Right: 359.975+/-0.066  $\chi^2/\text{NDF}$ : 11483949.8/46

In: 329.266+/-0.047  $\chi^2/\text{NDF}$ : 5733749.1/44

Out: 323.793+/-0.045  $\chi^2/\text{NDF}$ : 8126009.3/49

All: 326.412+/-0.033  $\chi^2/\text{NDF}$ : 13866686.9/94

# dit\_asym\_sam8\_mean vs Slug, Sign Corrected



Right In:  $-182.045 \pm 26.677$   $\chi^2/\text{NDF}: 21.4/21$

Left Out:  $-199.640 \pm 18.452$   $\chi^2/\text{NDF}: 20.2/24$

Right Out:  $-102.964 \pm 24.595$   $\chi^2/\text{NDF}: 47.5/24$

Left In:  $-179.154 \pm 19.112$   $\chi^2/\text{NDF}: 23.9/22$

Left:  $-189.757 \pm 13.275$   $\chi^2/\text{NDF}: 44.6/47$

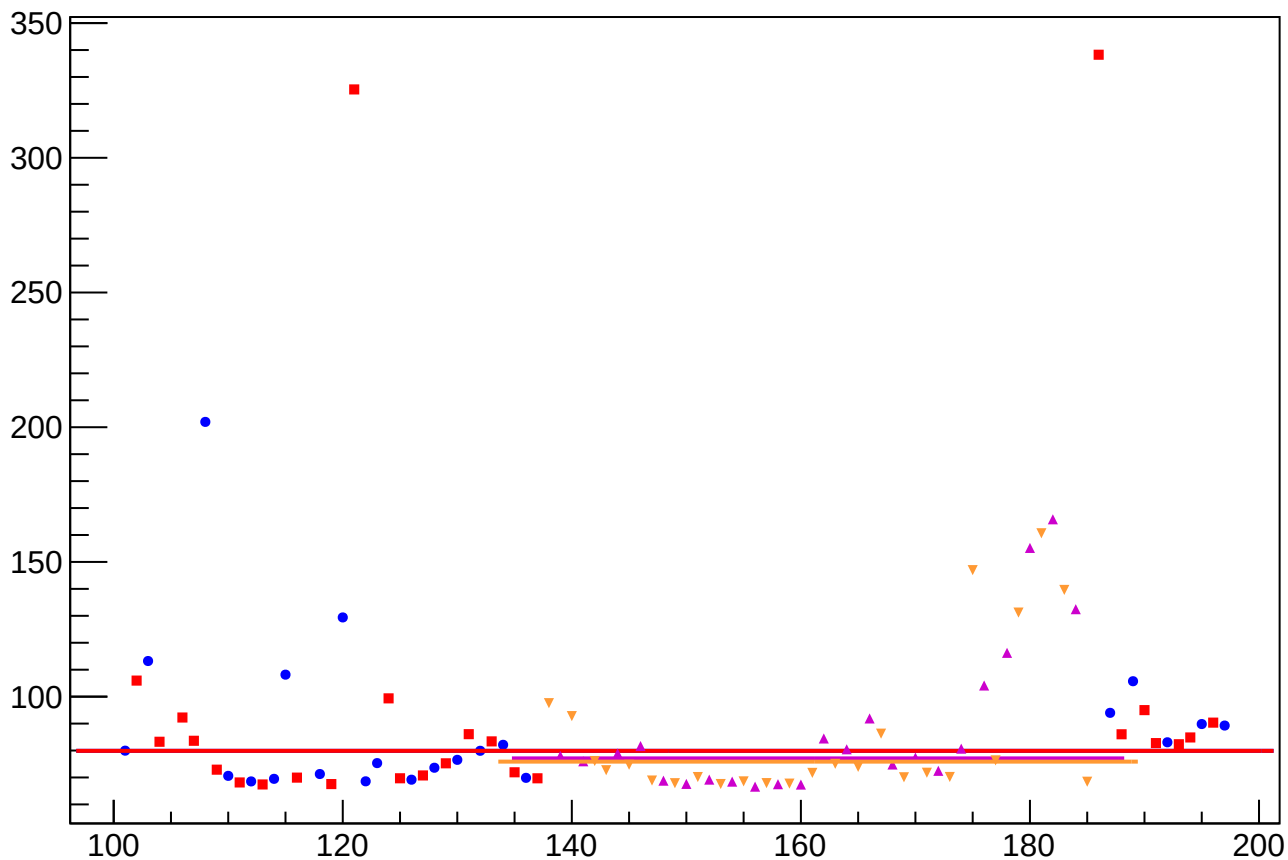
Right:  $-139.300 \pm 18.083$   $\chi^2/\text{NDF}: 73.7/46$

In:  $-180.135 \pm 15.536$   $\chi^2/\text{NDF}: 45.3/44$

Out:  $-164.824 \pm 14.760$   $\chi^2/\text{NDF}: 77.6/49$

All:  $-172.087 \pm 10.701$   $\chi^2/\text{NDF}: 123.4/94$

# dit\_asym\_sam8\_rms vs Slug, Sign Corrected



Right In: 79.889 $\pm$ 0.019  $\chi^2$ /NDF: 723390.9/21

Left Out: 75.883 $\pm$ 0.013  $\chi^2$ /NDF:1552500.3/24

Right Out: 79.878 $\pm$ 0.017  $\chi^2$ /NDF: 1174255.7/24

Left In: 77.080 $\pm$ 0.014  $\chi^2$ /NDF:1422981.1/22

Left: 76.460 $\pm$ 0.009  $\chi^2$ /NDF: 2979537.9/47

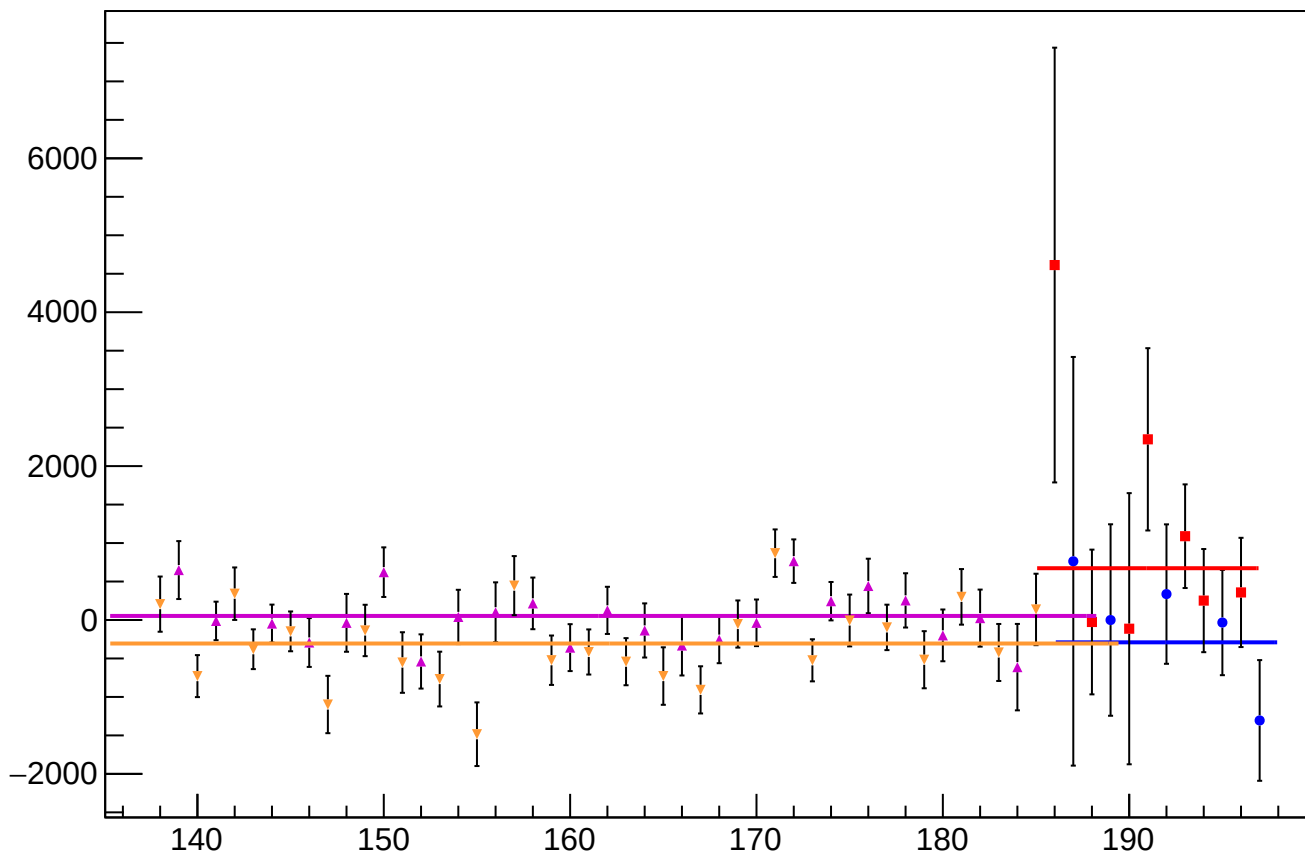
Right: 79.883 $\pm$ 0.013  $\chi^2$ /NDF: 1897646.8/46

In: 78.032 $\pm$ 0.011  $\chi^2$ /NDF:2161030.2/44

Out: 77.322 $\pm$ 0.010  $\chi^2$ /NDF:2760518.0/49

All: 77.659 $\pm$ 0.008  $\chi^2$ /NDF: 4923747.4/94

asym\_sam8\_correction\_mean vs Slug, Sign Corrected



Right In:  $-290.407 \pm 416.389$   $\chi^2/\text{NDF}: 2.5/4$

Left Out:  $-305.659 \pm 65.327$   $\chi^2/\text{NDF}: 54.9/24$

Right Out:  $672.911 \pm 338.955$   $\chi^2/\text{NDF}: 5.7/6$

Left In:  $52.759 \pm 67.539$   $\chi^2/\text{NDF}: 24.9/22$

Left:  $-132.416 \pm 46.956$   $\chi^2/\text{NDF}: 94.3/47$

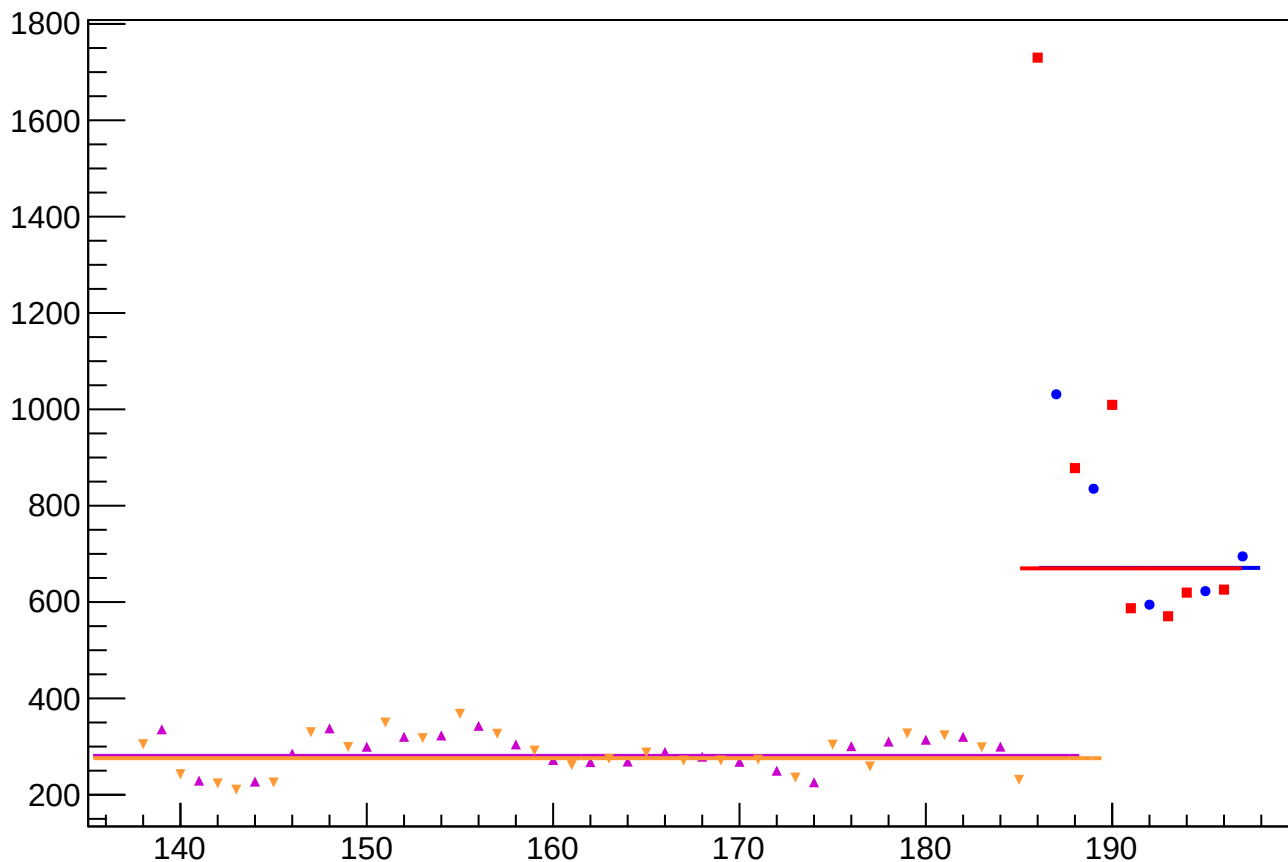
Right:  $288.979 \pm 262.870$   $\chi^2/\text{NDF}: 11.4/11$

In:  $43.962 \pm 66.668$   $\chi^2/\text{NDF}: 28.0/27$

Out:  $-270.612 \pm 64.146$   $\chi^2/\text{NDF}: 68.6/31$

All:  $-119.386 \pm 46.224$   $\chi^2/\text{NDF}: 108.2/59$

asym\_sam8\_correction\_rms vs Slug, Sign Corrected



Left: 278.186 +/- 0.033  $\chi^2/\text{NDF}$ : 1345588.4/47

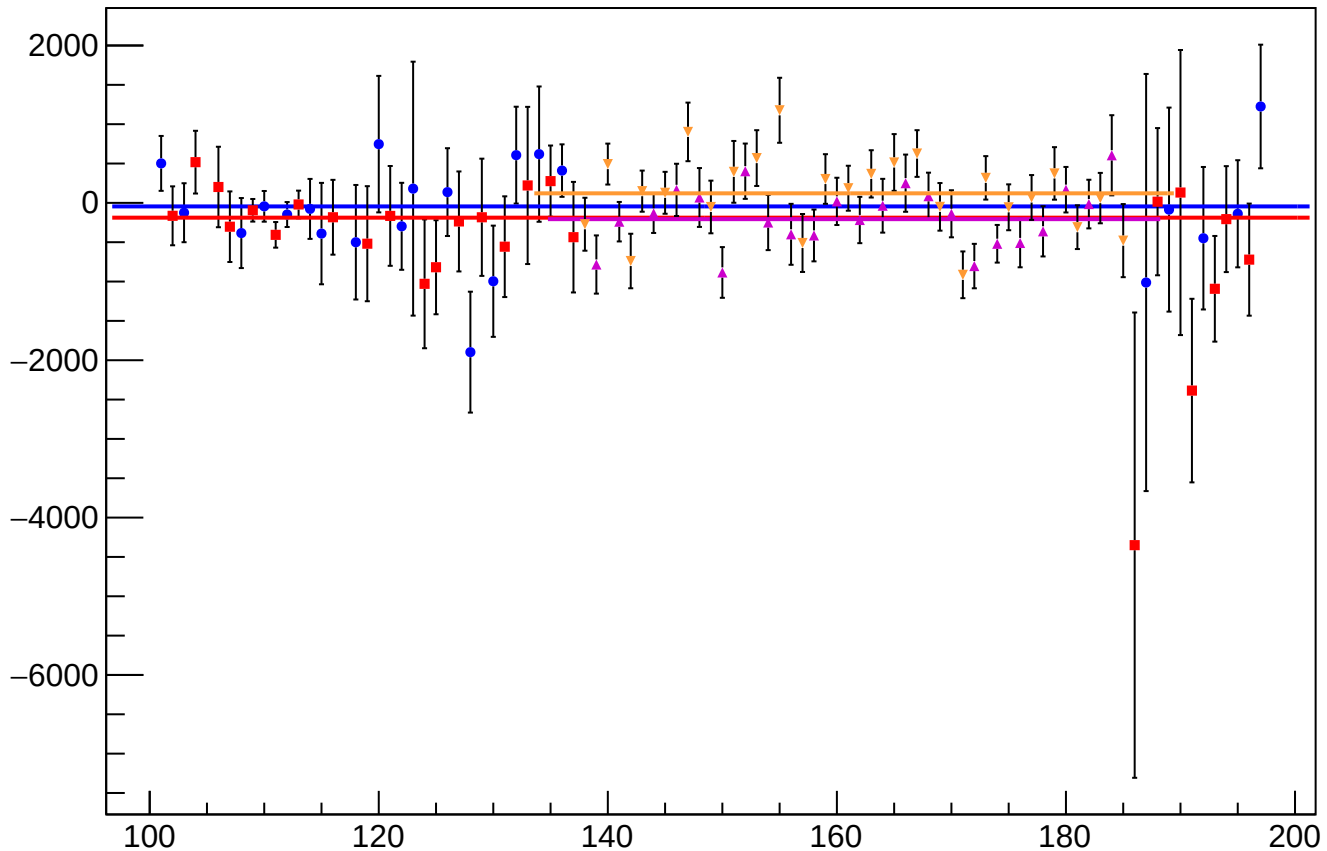
Right: 670.306 +/- 0.186  $\chi^2/\text{NDF}$ : 623701.8/11

In: 290.633 +/- 0.047  $\chi^2/\text{NDF}$ : 2396990.0/27

Out: 290.012 +/- 0.045  $\chi^2/\text{NDF}$ : 3884872.8/31

All: 290.311 +/- 0.033  $\chi^2/\text{NDF}$ : 6281952.9/59

# asym\_sam8\_mean vs Slug, Sign Corrected



Right In:  $-45.127 \pm 88.312$   $\chi^2/\text{NDF}: 19.5/21$

Left Out:  $121.185 \pm 62.911$   $\chi^2/\text{NDF}: 49.0/24$

Right Out:  $-188.099 \pm 75.135$   $\chi^2/\text{NDF}: 19.0/24$

Left In:  $-207.047 \pm 65.246$   $\chi^2/\text{NDF}: 27.8/22$

Left:  $-36.951 \pm 45.288$   $\chi^2/\text{NDF}: 89.9/47$

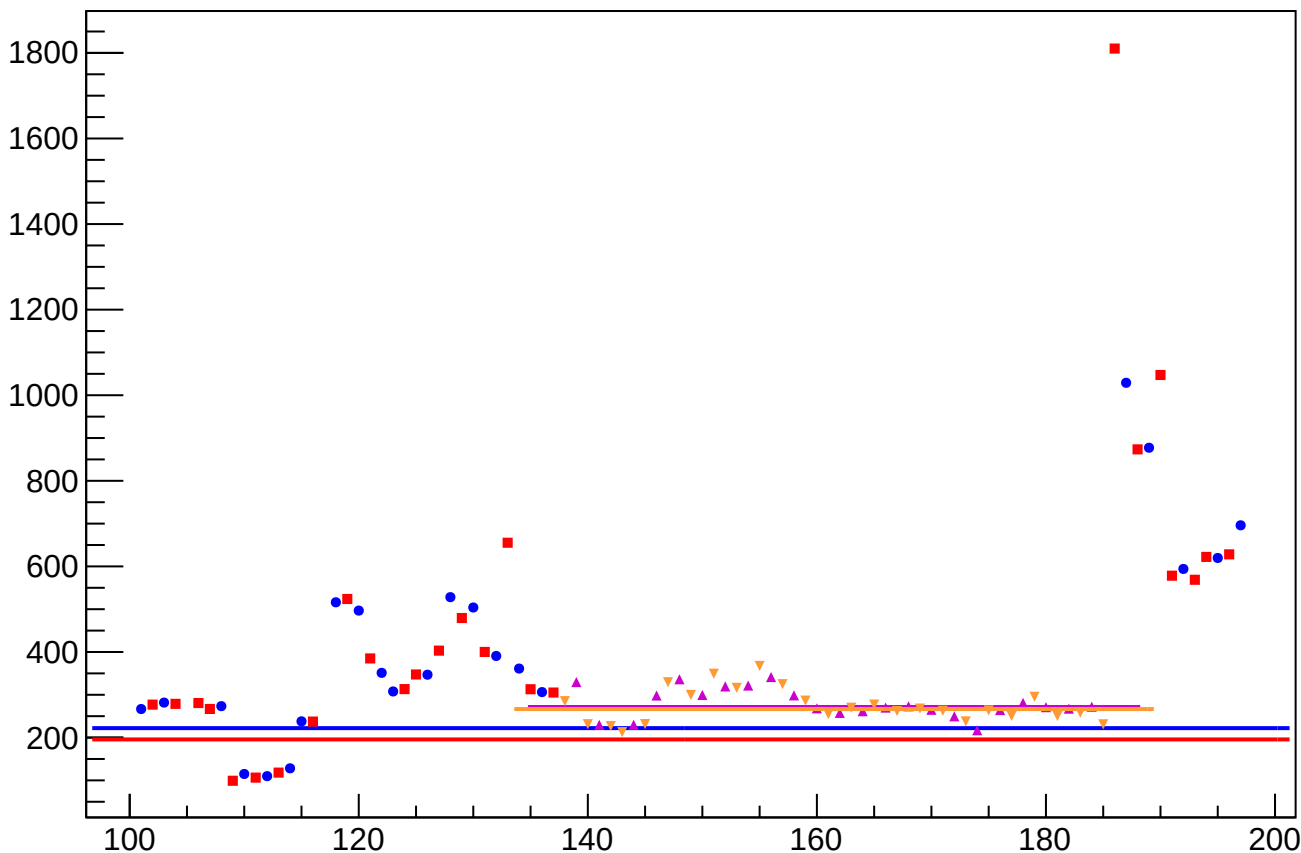
Right:  $-128.065 \pm 57.226$   $\chi^2/\text{NDF}: 40.0/46$

In:  $-149.872 \pm 52.477$   $\chi^2/\text{NDF}: 49.5/44$

Out:  $-6.282 \pm 48.235$   $\chi^2/\text{NDF}: 77.9/49$

All:  $-72.039 \pm 35.513$   $\chi^2/\text{NDF}: 131.5/94$

# asym\_sam8\_rms vs Slug, Sign Corrected



Right In: 222.068+/-0.062  $\chi^2/\text{NDF}$ : 5989193.6/21

Left Out: 266.618+/-0.044  $\chi^2/\text{NDF}$ : 639230.8/24

Right Out: 195.652+/-0.053  $\chi^2/\text{NDF}$ : 8722888.3/24

Left In: 271.451+/-0.046  $\chi^2/\text{NDF}$ : 530897.8/22

Left: 268.946+/-0.032  $\chi^2/\text{NDF}$ : 1175815.9/47

Right: 206.744+/-0.040  $\chi^2/\text{NDF}$ : 14815890.1/46

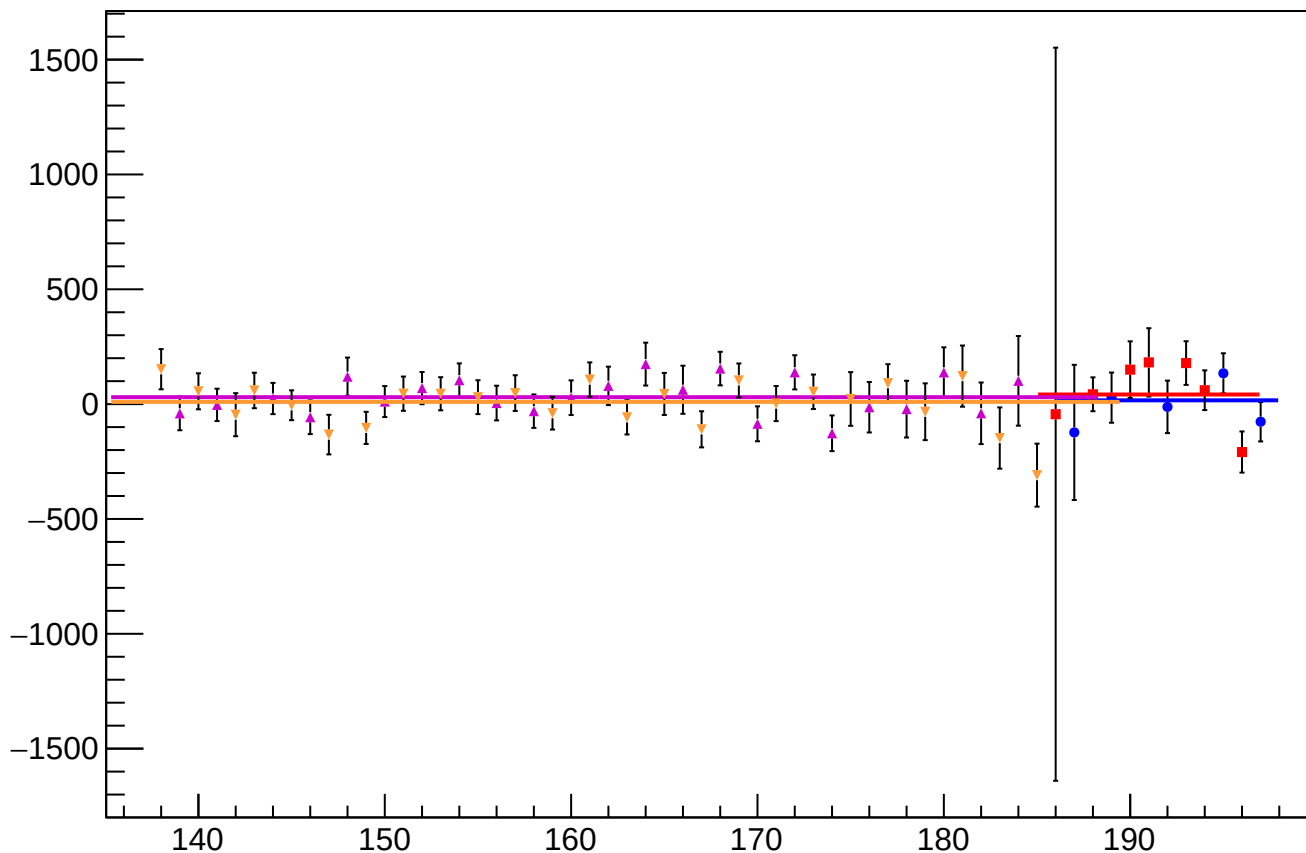
In: 254.013+/-0.037  $\chi^2/\text{NDF}$ : 6924645.0/44

Out: 237.370+/-0.034  $\chi^2/\text{NDF}$ : 10410975.2/49

All: 244.992+/-0.025  $\chi^2/\text{NDF}$ : 17444663.8/94



dit\_asym\_sam\_15\_avg\_mean vs Slug, Sign Corrected



Right In: 16.528 $\pm$ 47.701  $\chi^2$ /NDF: 3.3/4

Left Out: 9.762 $\pm$ 16.463  $\chi^2$ /NDF:25.9/24

Right Out: 41.891 $\pm$ 38.791  $\chi^2$ /NDF: 11.6/6

Left In: 30.236 $\pm$ 17.031  $\chi^2$ /NDF:21.9/22

Left: 19.652 $\pm$ 11.837  $\chi^2$ /NDF: 48.6/47

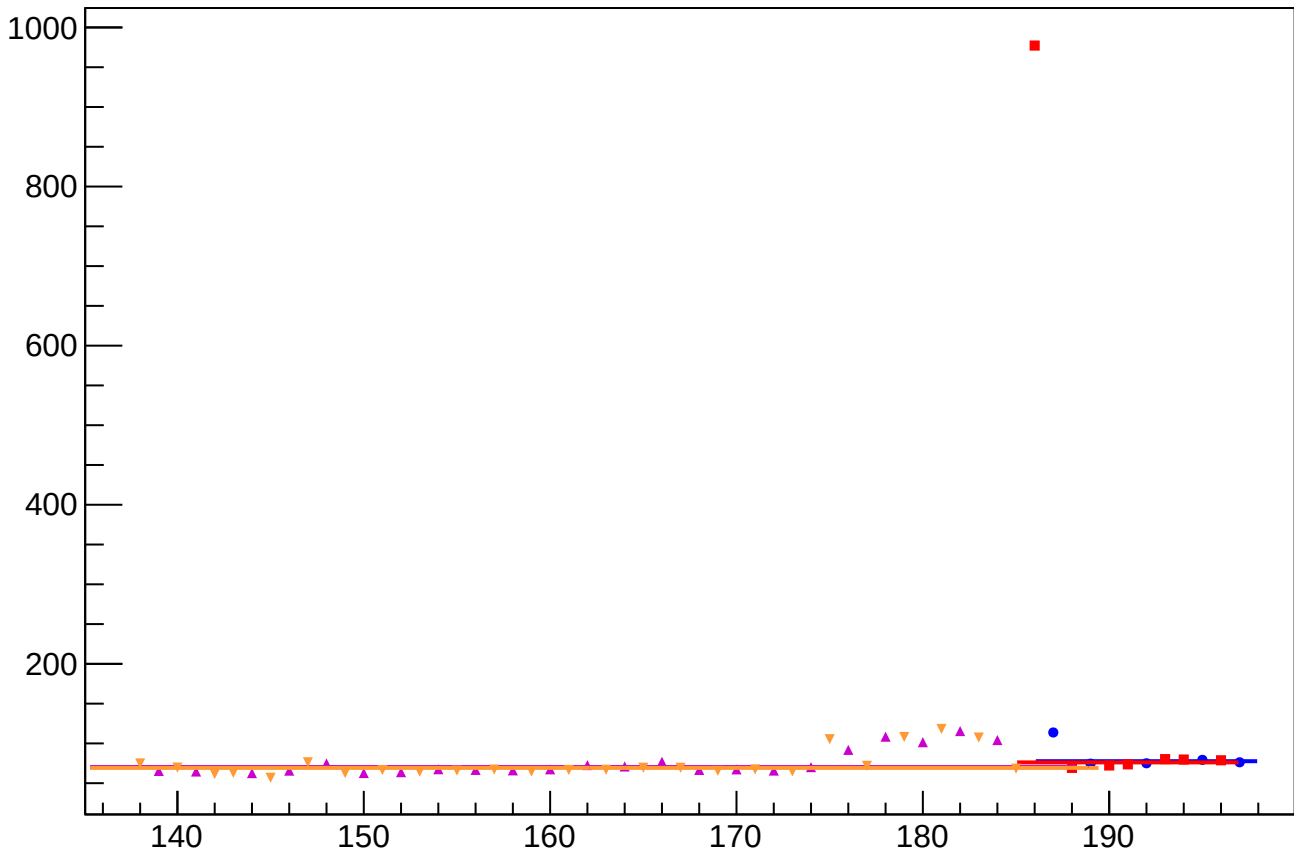
Right: 31.795 $\pm$ 30.096  $\chi^2$ /NDF: 15.1/11

In: 28.686 $\pm$ 16.039  $\chi^2$ /NDF:25.3/27

Out: 14.666 $\pm$ 15.155  $\chi^2$ /NDF:38.1/31

All: 21.279 $\pm$ 11.015  $\chi^2$ /NDF: 63.8/59

dit\_asym\_sam\_15\_avg\_rms vs Slug, Sign Corrected



Right In: 77.637 $\pm$ 0.034  $\chi^2$ /NDF: 34037.1/4

Left Out: 69.234 $\pm$ 0.012  $\chi^2$ /NDF:1005922.1/24

Right Out: 76.126 $\pm$ 0.027  $\chi^2$ /NDF: 666620.2/6

Left In: 70.322 $\pm$ 0.012  $\chi^2$ /NDF:862105.7/22

Left: 69.760 $\pm$ 0.008  $\chi^2$ /NDF: 1872251.2/47

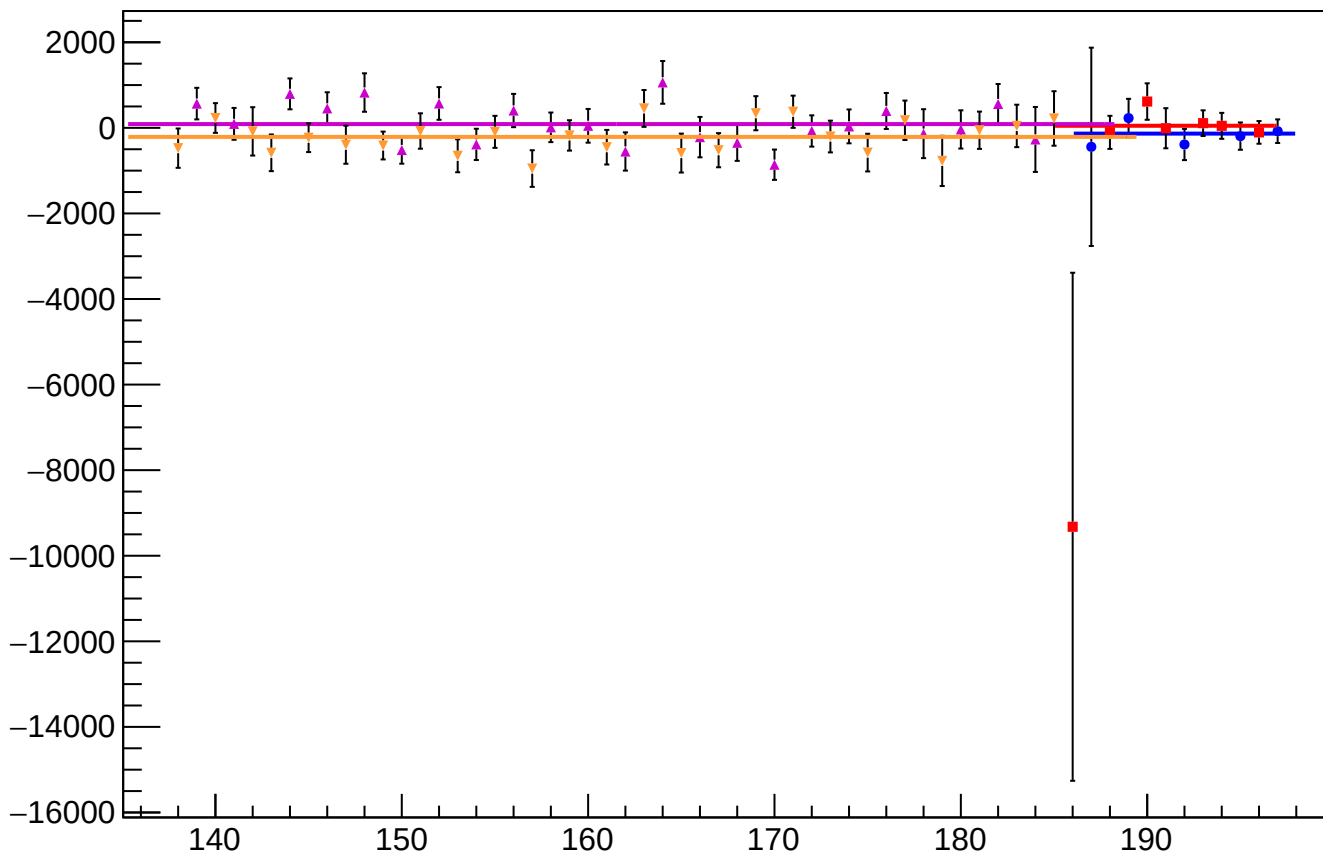
Right: 76.728 $\pm$ 0.021  $\chi^2$ /NDF: 701866.2/11

In: 71.149 $\pm$ 0.011  $\chi^2$ /NDF:937858.3/27

Out: 70.286 $\pm$ 0.011  $\chi^2$ /NDF:1726037.8/31

All: 70.693 $\pm$ 0.008  $\chi^2$ /NDF: 2666959.6/59

asym\_sam\_15\_avg\_correction\_mean vs Slug, Sign Corrected



Right In:  $-134.606 \pm 167.566$   $\chi^2/\text{NDF}$ : 1.2/4

Left Out:  $-211.526 \pm 82.780$   $\chi^2/\text{NDF}$ : 19.4/24

Right Out:  $48.967 \pm 137.312$   $\chi^2/\text{NDF}$ : 4.8/6

Left In:  $88.062 \pm 84.309$   $\chi^2/\text{NDF}$ : 33.5/22

Left:  $-64.474 \pm 59.067$   $\chi^2/\text{NDF}$ : 59.3/47

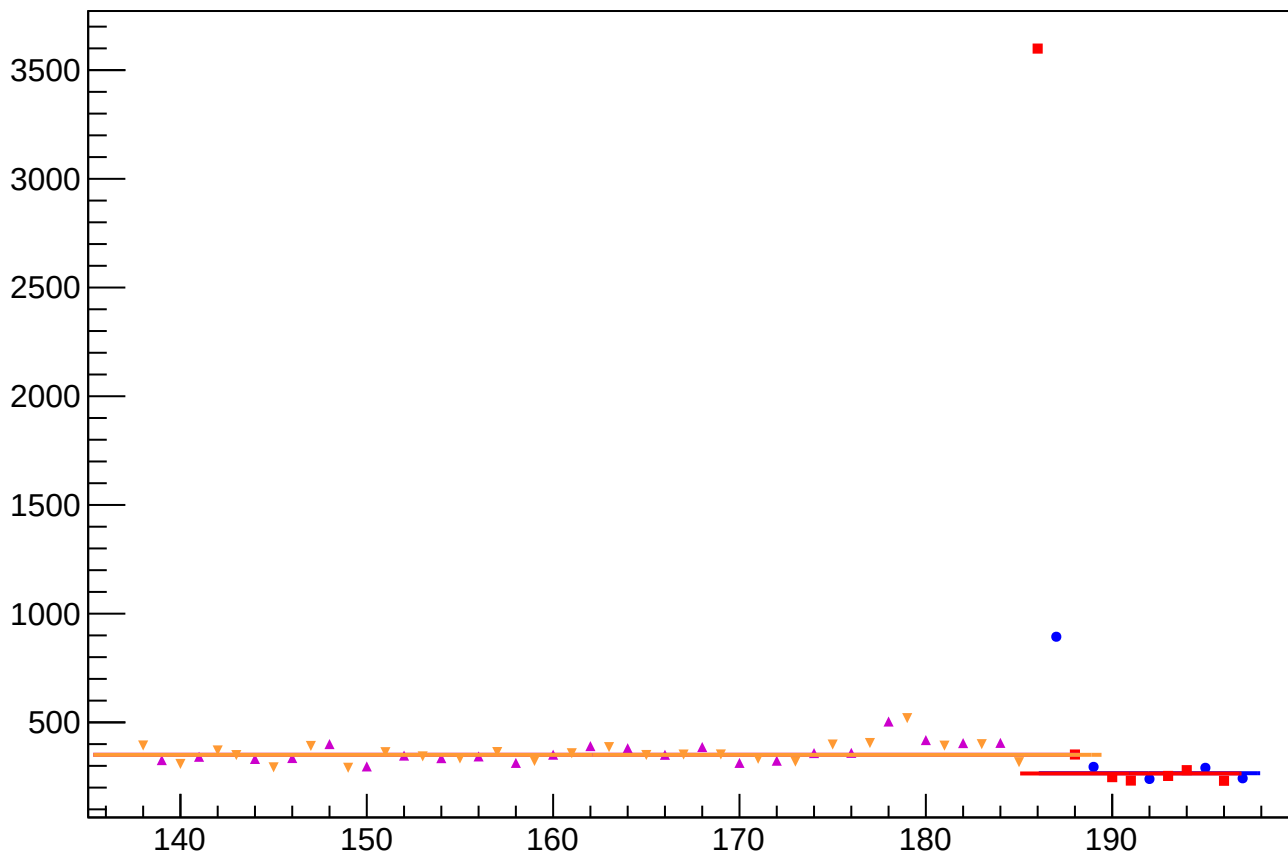
Right:  $-24.781 \pm 106.208$   $\chi^2/\text{NDF}$ : 6.8/11

In:  $43.080 \pm 75.314$   $\chi^2/\text{NDF}$ : 36.1/27

Out:  $-142.089 \pm 70.894$   $\chi^2/\text{NDF}$ : 26.9/31

All:  $-55.097 \pm 51.621$   $\chi^2/\text{NDF}$ : 66.2/59

asym\_sam\_15\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 266.150 $\pm$ 0.118  $\chi^2$ /NDF: 192340.1/4

Left Out: 350.780 $\pm$ 0.059  $\chi^2$ /NDF: 506274.4/24

Right Out: 264.958 $\pm$ 0.097  $\chi^2$ /NDF: 785343.9/6

Left In: 350.944 $\pm$ 0.060  $\chi^2$ /NDF: 424876.4/22

Left: 350.861 $\pm$ 0.042  $\chi^2$ /NDF: 931154.7/47

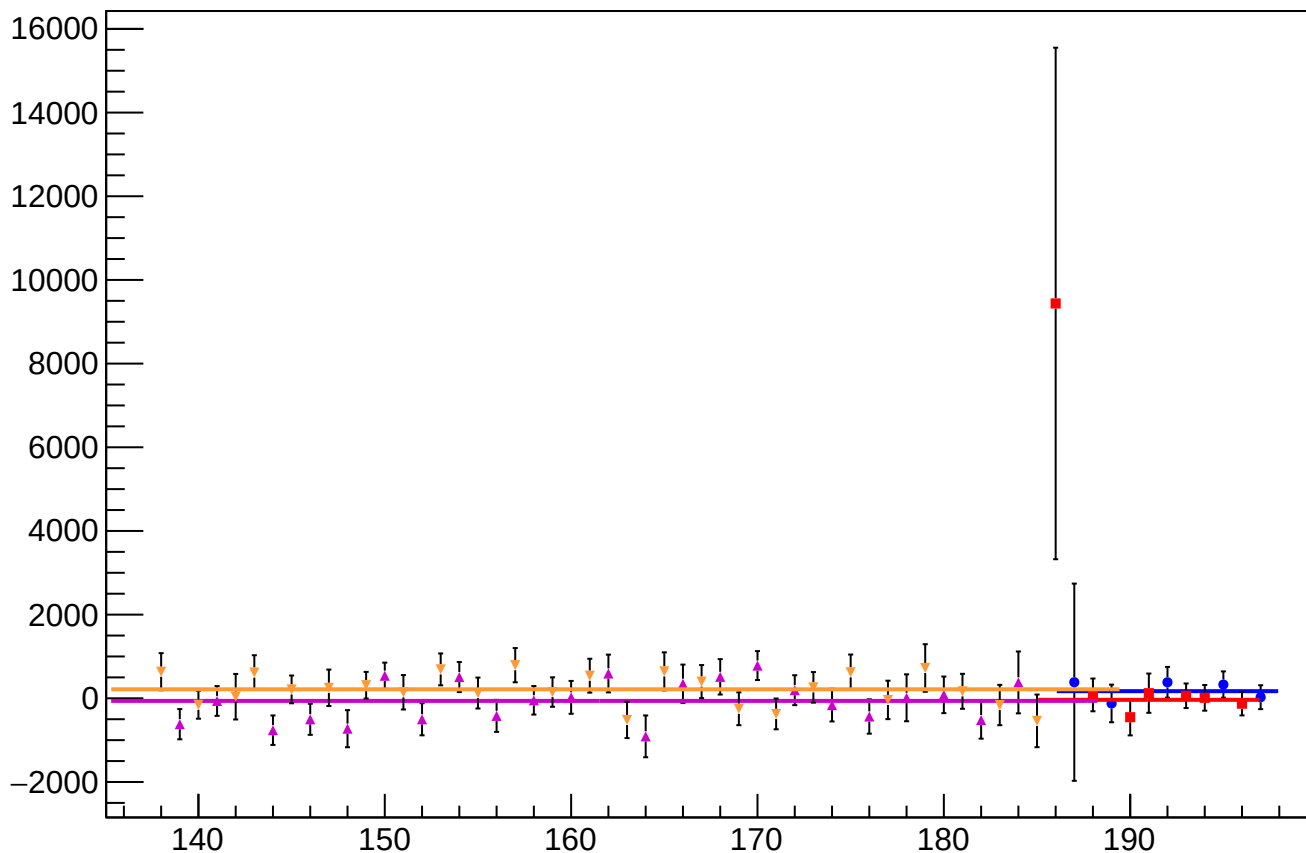
Right: 265.437 $\pm$ 0.075  $\chi^2$ /NDF: 977744.7/11

In: 333.815 $\pm$ 0.053  $\chi^2$ /NDF: 1025901.7/27

Out: 327.903 $\pm$ 0.050  $\chi^2$ /NDF: 1864655.0/31

All: 330.681 $\pm$ 0.037  $\chi^2$ /NDF: 2897090.0/59

# asym\_sam\_15\_avg\_mean vs Slug, Sign Corrected



Right In: 170.539+/-169.256  $\chi^2/\text{NDF}$ : 1.3/4

Left Out: 215.214+/-81.235  $\chi^2/\text{NDF}$ :19.6/24

Right Out: -36.364+/-139.626  $\chi^2/\text{NDF}$ : 3.8/6

Left In: -61.730+/-82.841  $\chi^2/\text{NDF}$ :34.9/22

Left: 79.453+/-58.001  $\chi^2/\text{NDF}$ : 60.2/47

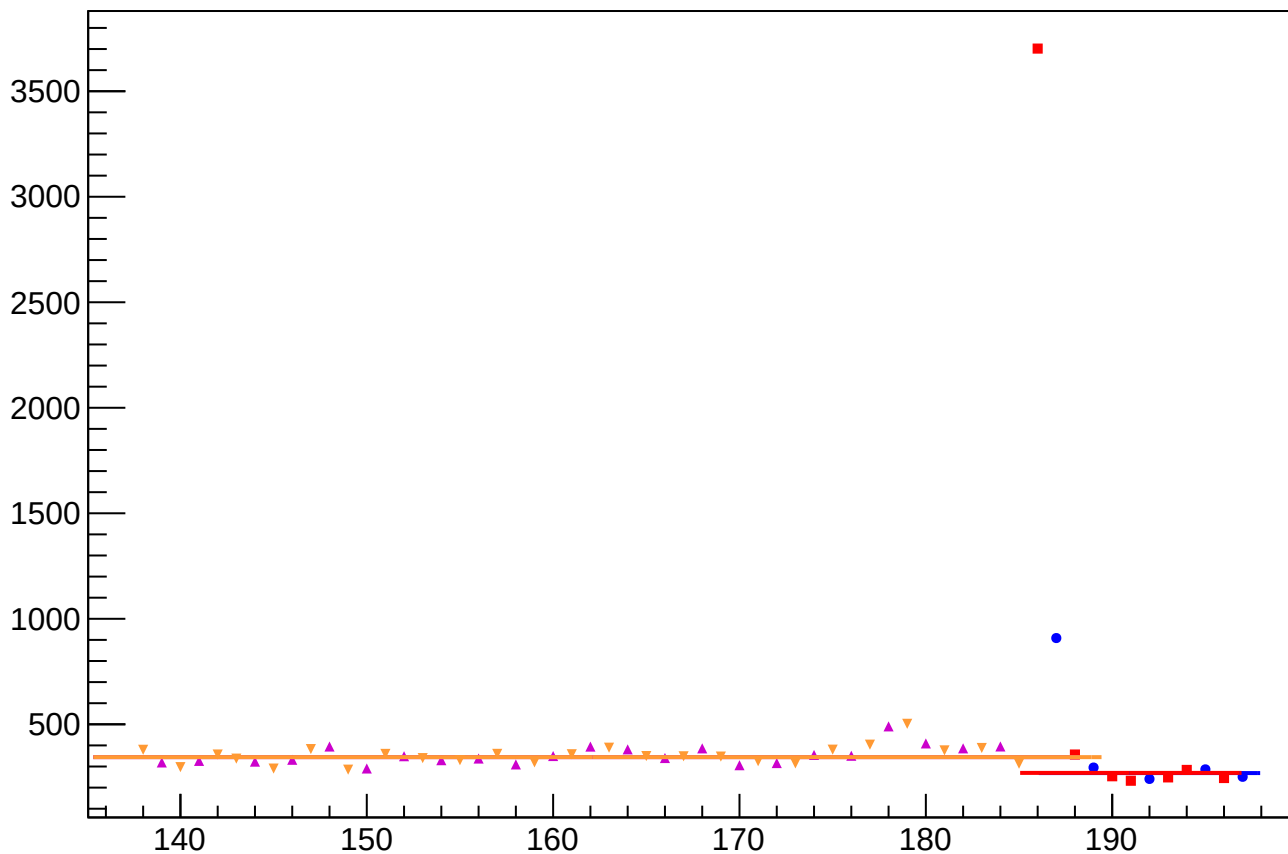
Right: 47.421+/-107.707  $\chi^2/\text{NDF}$ : 5.9/11

In: -16.842+/-74.407  $\chi^2/\text{NDF}$ :37.7/27

Out: 151.592+/-70.216  $\chi^2/\text{NDF}$ :25.8/31

All: 72.252+/-51.067  $\chi^2/\text{NDF}$ : 66.2/59

# asym\_sam\_15\_avg\_rms vs Slug, Sign Corrected



Right In: 268.941 $\pm$ 0.120  $\chi^2$ /NDF: 179651.6/4

Left Out: 344.439 $\pm$ 0.057  $\chi^2$ /NDF: 488381.9/24

Right Out: 269.731 $\pm$ 0.099  $\chi^2$ /NDF: 774275.0/6

Left In: 344.475 $\pm$ 0.059  $\chi^2$ /NDF: 433401.7/22

Left: 344.457 $\pm$ 0.041  $\chi^2$ /NDF: 921783.8/47

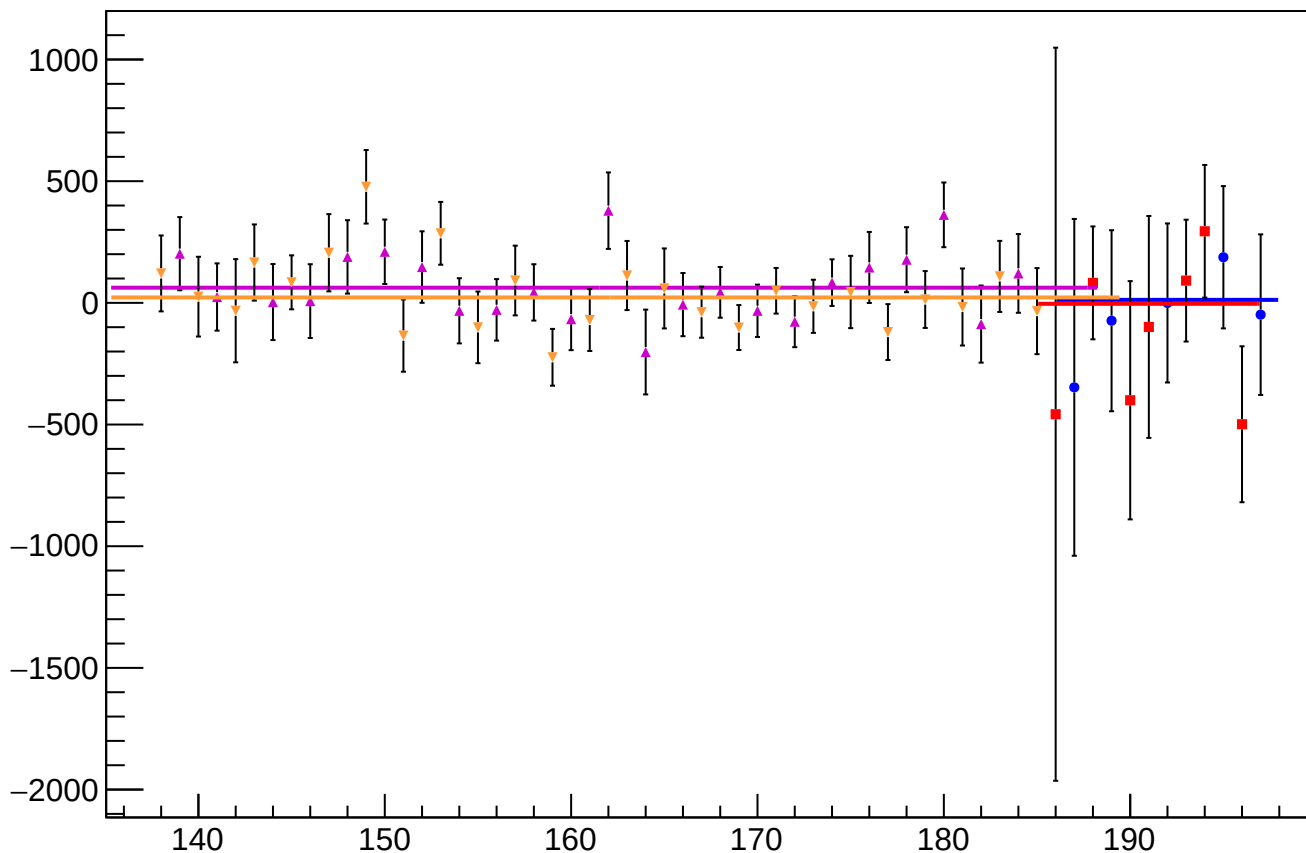
Right: 269.411 $\pm$ 0.076  $\chi^2$ /NDF: 953952.5/11

In: 329.877 $\pm$ 0.053  $\chi^2$ /NDF: 934392.6/27

Out: 325.546 $\pm$ 0.050  $\chi^2$ /NDF: 1690438.3/31

All: 327.586 $\pm$ 0.036  $\chi^2$ /NDF: 2628416.0/59

dit\_asym\_sam\_26\_avg\_mean vs Slug, Sign Corrected



Right In: 12.305+/-158.987  $\chi^2/\text{NDF}$ : 0.7/4

Left Out: 22.164+/-26.284  $\chi^2/\text{NDF}$ : 28.1/24

Right Out: -3.881+/-122.014  $\chi^2/\text{NDF}$ : 4.7/6

Left In: 62.310+/-27.398  $\chi^2/\text{NDF}$ : 22.0/22

Left: 41.404+/-18.967  $\chi^2/\text{NDF}$ : 51.2/47

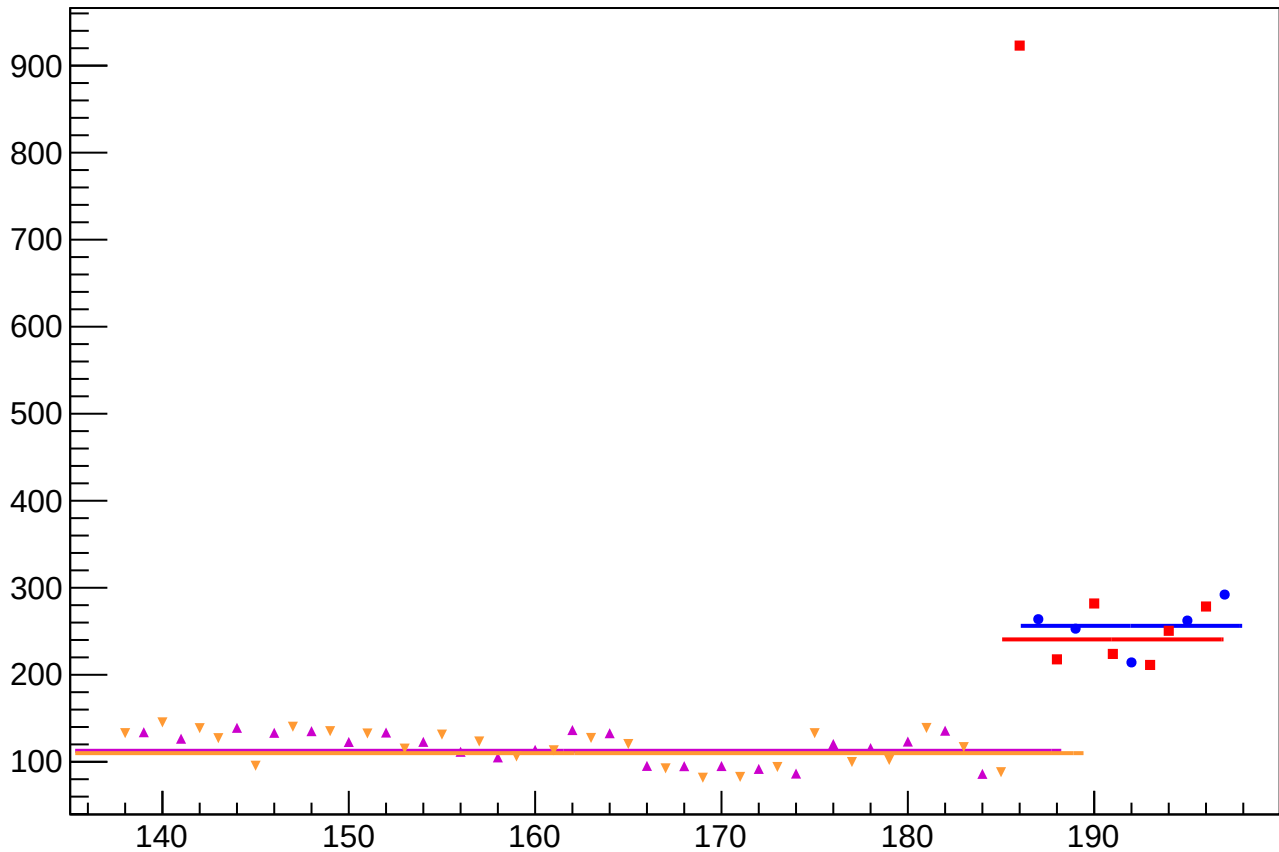
Right: 2.119+/-96.794  $\chi^2/\text{NDF}$ : 5.4/11

In: 60.868+/-27.000  $\chi^2/\text{NDF}$ : 22.8/27

Out: 21.009+/-25.695  $\chi^2/\text{NDF}$ : 32.8/31

All: 39.951+/-18.613  $\chi^2/\text{NDF}$ : 56.7/59

dit\_asym\_sam\_26\_avg\_rms vs Slug, Sign Corrected

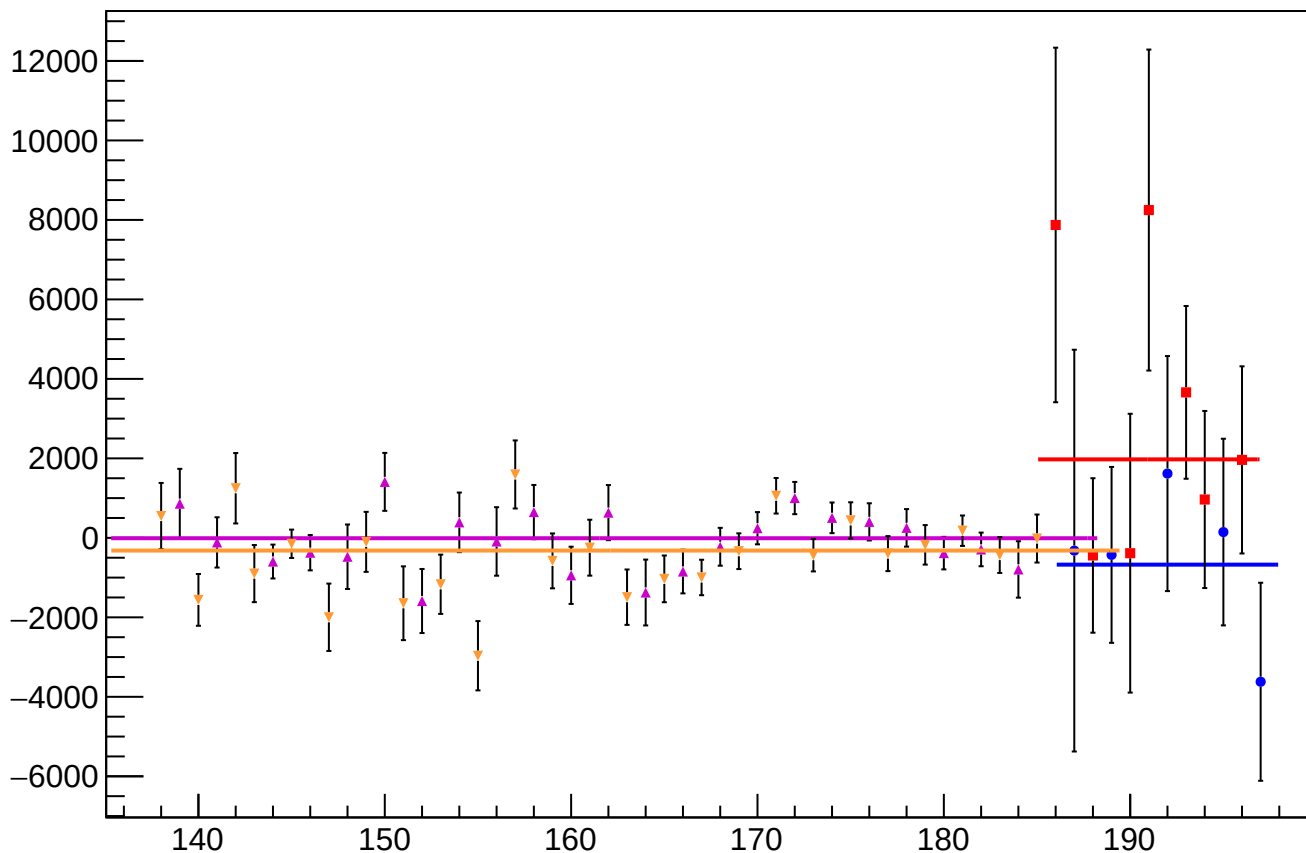


Right In: 256.251 $\pm$ 0.112  $\chi^2/\text{NDF}$ : 58071.1/4  
 Left Out: 109.953 $\pm$ 0.019  $\chi^2/\text{NDF}$ : 1140626.9/24  
 Right Out: 240.661 $\pm$ 0.086  $\chi^2/\text{NDF}$ : 504802.9/6  
 Left In: 112.657 $\pm$ 0.019  $\chi^2/\text{NDF}$ : 835831.1/22

Left: 111.249 $\pm$ 0.013  $\chi^2/\text{NDF}$ : 1986605.7/47  
 Right: 246.440 $\pm$ 0.068  $\chi^2/\text{NDF}$ : 574976.5/11  
 In: 116.798 $\pm$ 0.019  $\chi^2/\text{NDF}$ : 2478328.8/27  
 Out: 115.749 $\pm$ 0.018  $\chi^2/\text{NDF}$ : 3838851.4/31  
 All: 116.248 $\pm$ 0.013  $\chi^2/\text{NDF}$ : 6318765.3/59



asym\_sam\_26\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -674.150+/-1195.219  $\chi^2/\text{NDF}$ : 2.1/4

Left Out: -319.391+/-110.306  $\chi^2/\text{NDF}$ : 51.5/24

Right Out: 1974.903+/-975.423  $\chi^2/\text{NDF}$ : 7.0/6

Left In: -9.462+/-112.340  $\chi^2/\text{NDF}$ : 32.5/22

Left: -167.259+/-78.707  $\chi^2/\text{NDF}$ : 87.9/47

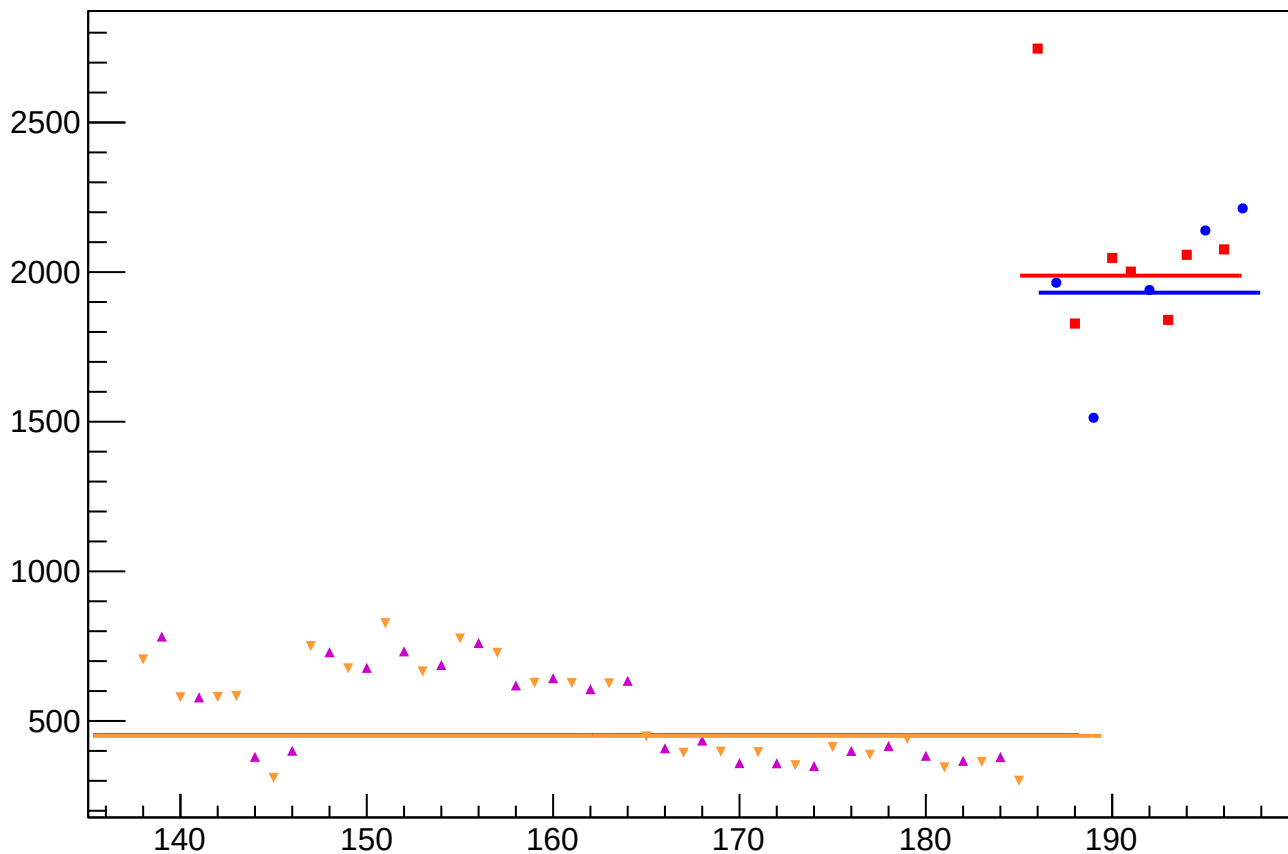
Right: 915.894+/-755.705  $\chi^2/\text{NDF}$ : 12.1/11

In: -15.283+/-111.847  $\chi^2/\text{NDF}$ : 34.9/27

Out: -290.422+/-109.607  $\chi^2/\text{NDF}$ : 64.0/31

All: -155.635+/-78.284  $\chi^2/\text{NDF}$ : 102.0/59

asym\_sam\_26\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 1931.273+/-0.845  $\chi^2/\text{NDF}$ : 112669.0/4

Left Out: 450.363+/-0.078  $\chi^2/\text{NDF}$ : 3096435.8/24

Right Out: 1988.113+/-0.690  $\chi^2/\text{NDF}$ : 86005.7/6

Left In: 452.694+/-0.079  $\chi^2/\text{NDF}$ : 2586032.2/22

Left: 451.507+/-0.056  $\chi^2/\text{NDF}$ : 5682906.4/47

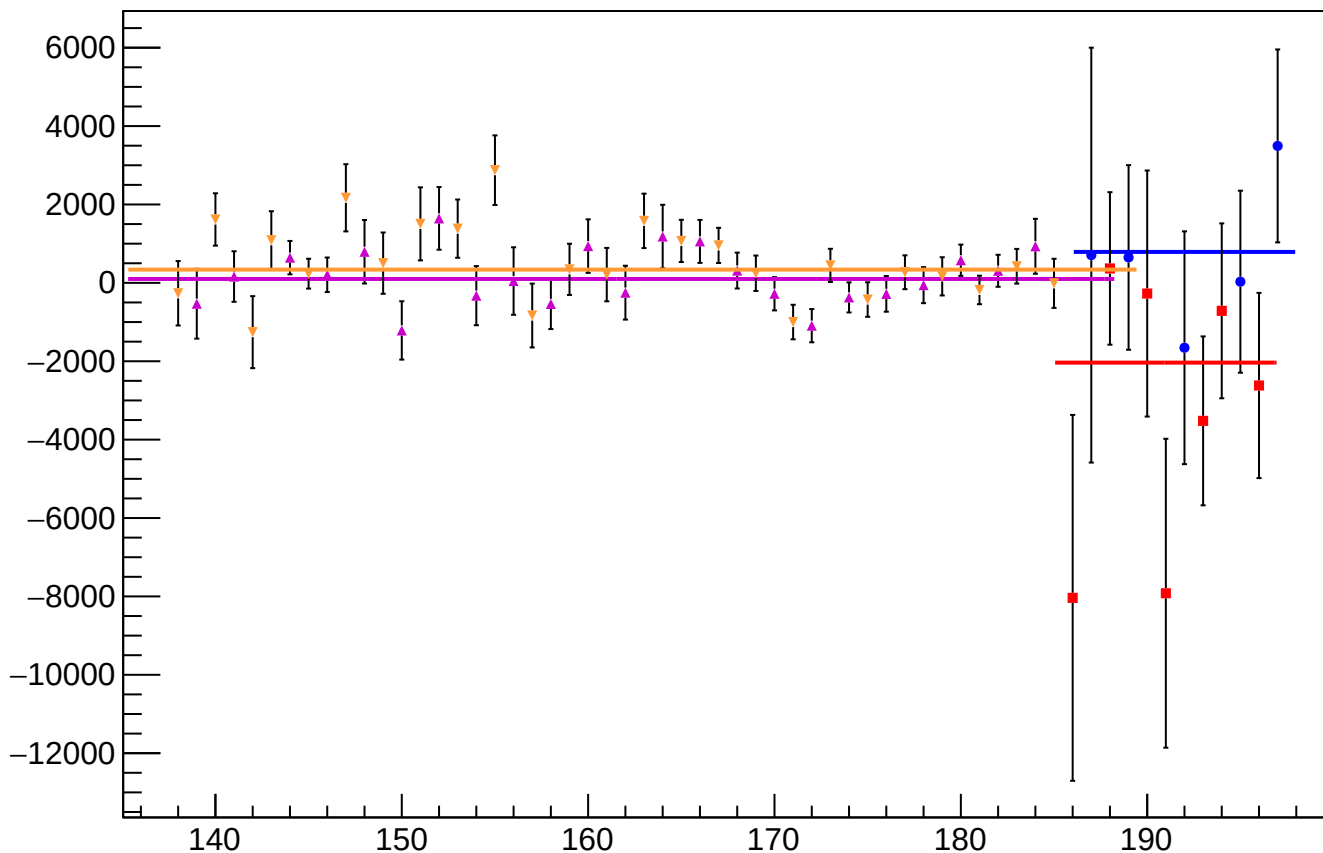
Right: 1965.390+/-0.534  $\chi^2/\text{NDF}$ : 201389.6/11

In: 465.642+/-0.079  $\chi^2/\text{NDF}$ : 5732618.0/27

Out: 469.780+/-0.078  $\chi^2/\text{NDF}$ : 8090355.5/31

All: 467.753+/-0.055  $\chi^2/\text{NDF}$ : 13824369.7/59

# asym\_sam\_26\_avg\_mean vs Slug, Sign Corrected



Right In: 789.606 $\pm$ 1212.723  $\chi^2$ /NDF: 2.0/4

Left Out: 337.948 $\pm$ 109.831  $\chi^2$ /NDF:48.6/24

Right Out: -2034.812 $\pm$ 966.124  $\chi^2$ /NDF: 6.6/6

Left In: 99.475 $\pm$ 111.475  $\chi^2$ /NDF:32.1/22

Left: 220.483 $\pm$ 78.237  $\chi^2$ /NDF: 83.0/47

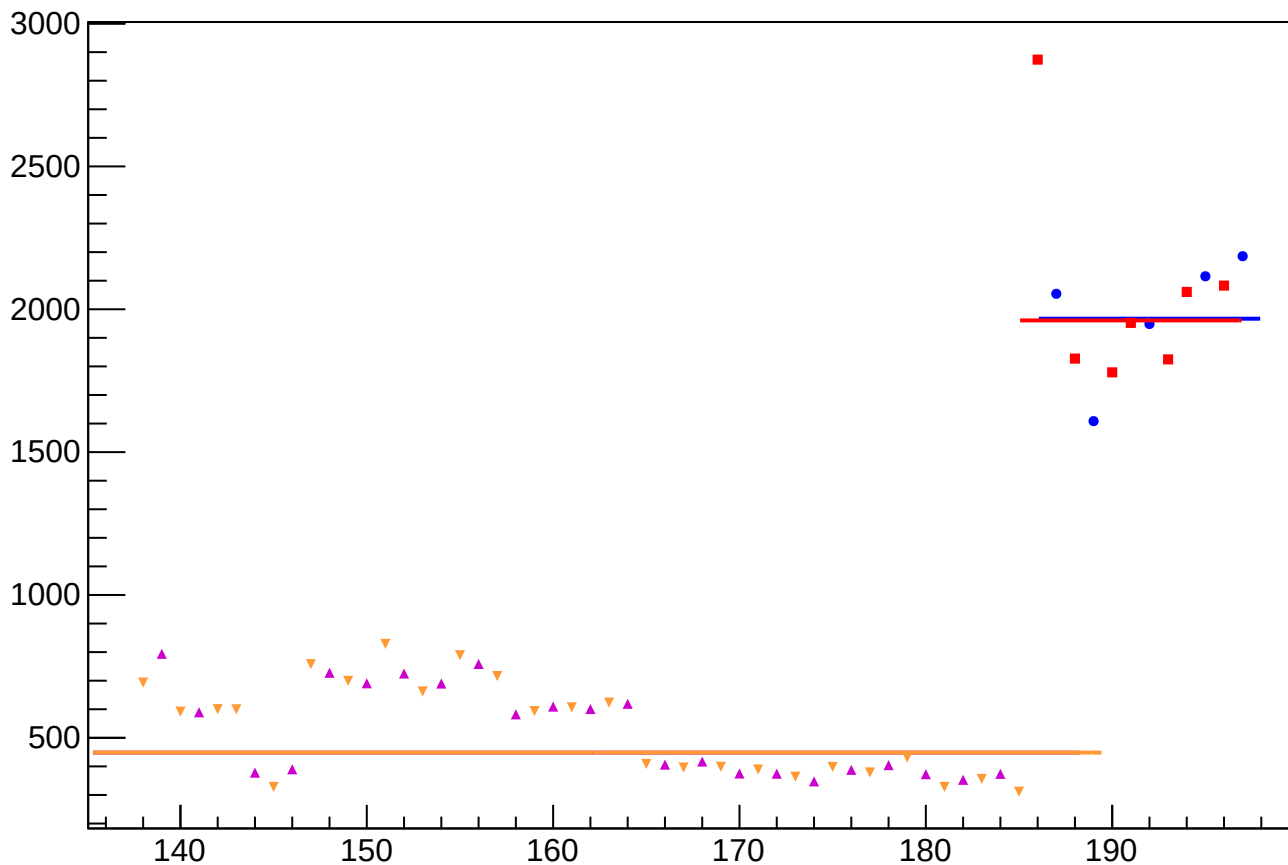
Right: -938.224 $\pm$ 755.647  $\chi^2$ /NDF: 11.9/11

In: 105.258 $\pm$ 111.007  $\chi^2$ /NDF:34.4/27

Out: 307.674 $\pm$ 109.128  $\chi^2$ /NDF:61.1/31

All: 208.194 $\pm$ 77.821  $\chi^2$ /NDF: 97.2/59

# asym\_sam\_26\_avg\_rms vs Slug, Sign Corrected



Right In: 1967.044 $\pm$ 0.858  $\chi^2$ /NDF: 70960.0/4

Left Out: 448.397 $\pm$ 0.078  $\chi^2$ /NDF: 3077183.0/24

Right Out: 1961.066 $\pm$ 0.683  $\chi^2$ /NDF: 109965.9/6

Left In: 448.238 $\pm$ 0.079  $\chi^2$ /NDF: 2563455.5/22

Left: 448.319 $\pm$ 0.055  $\chi^2$ /NDF: 5640640.6/47

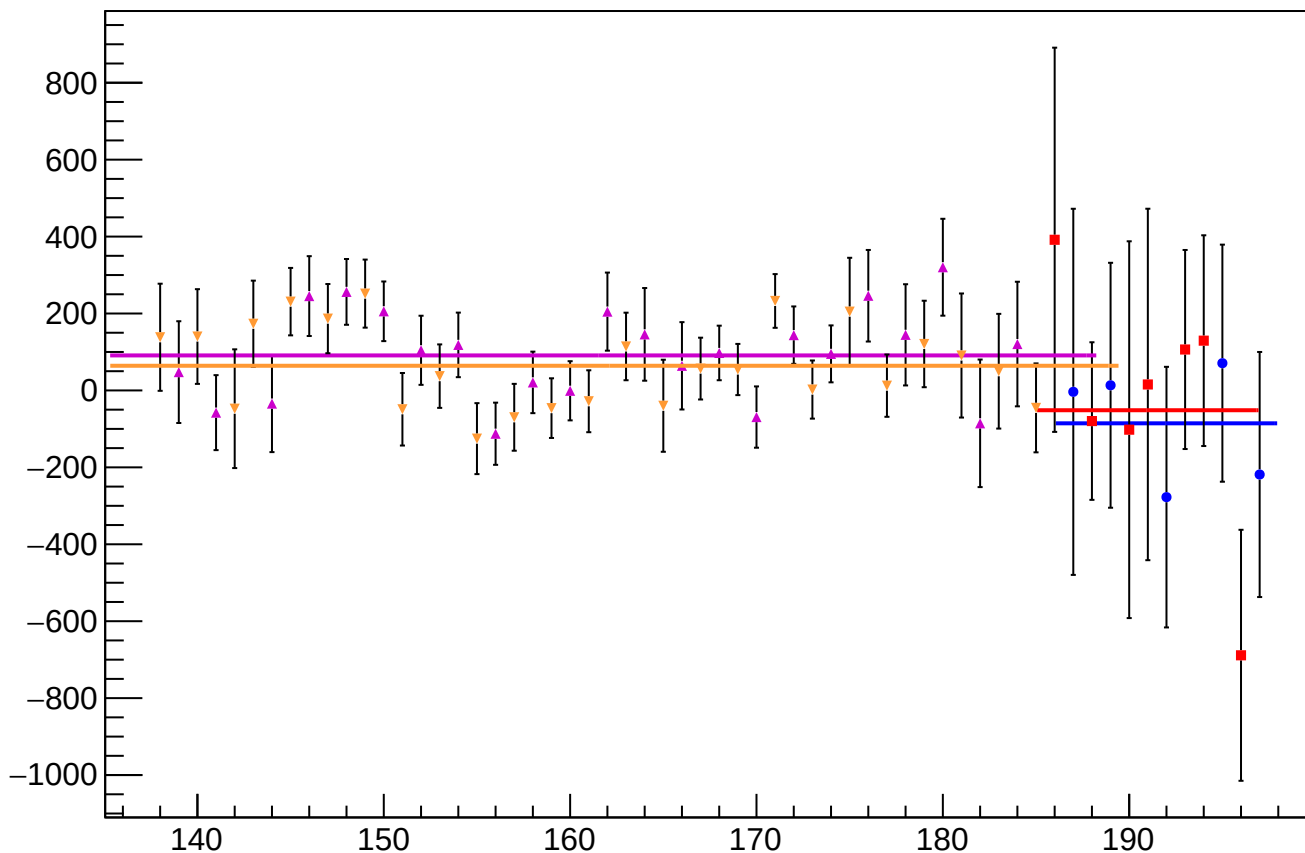
Right: 1963.387 $\pm$ 0.534  $\chi^2$ /NDF: 180955.6/11

In: 460.964 $\pm$ 0.078  $\chi^2$ /NDF: 5745106.0/27

Out: 467.696 $\pm$ 0.077  $\chi^2$ /NDF: 8027484.6/31

All: 464.388 $\pm$ 0.055  $\chi^2$ /NDF: 13776331.4/59

dit\_asym\_sam\_37\_avg\_mean vs Slug, Sign Corrected



Right In:  $-85.509 \pm 151.849$   $\chi^2/\text{NDF}$ : 0.9/4

Left Out:  $64.142 \pm 18.728$   $\chi^2/\text{NDF}$ : 33.8/24

Right Out:  $-51.493 \pm 115.898$   $\chi^2/\text{NDF}$ : 5.5/6

Left In:  $91.028 \pm 19.637$   $\chi^2/\text{NDF}$ : 32.6/22

Left:  $76.948 \pm 13.553$   $\chi^2/\text{NDF}$ : 67.4/47

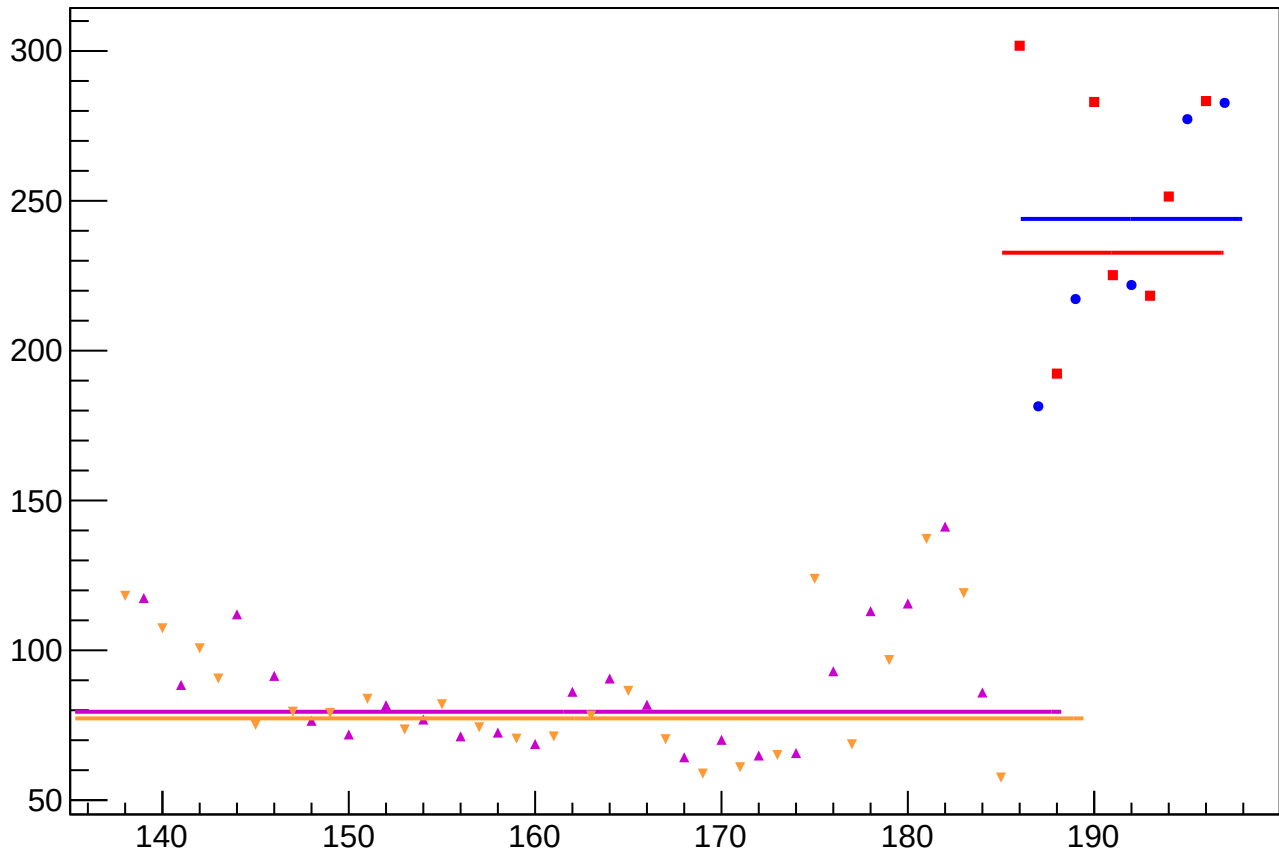
Right:  $-64.014 \pm 92.129$   $\chi^2/\text{NDF}$ : 6.4/11

In:  $88.125 \pm 19.475$   $\chi^2/\text{NDF}$ : 34.9/27

Out:  $61.199 \pm 18.488$   $\chi^2/\text{NDF}$ : 40.2/31

All:  $73.962 \pm 13.408$   $\chi^2/\text{NDF}$ : 76.1/59

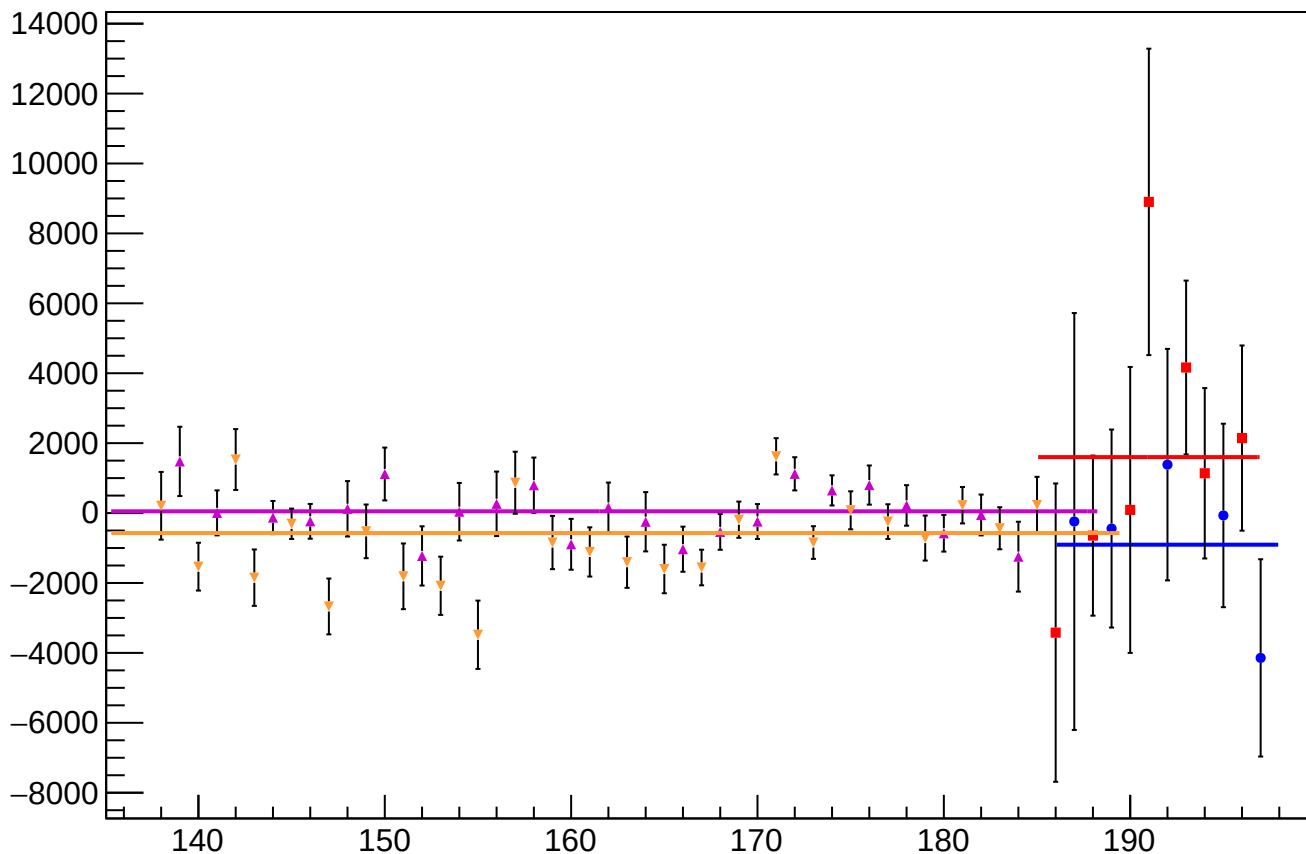
dit\_asym\_sam\_37\_avg\_rms vs Slug, Sign Corrected



Right In: 243.966 $\pm$ 0.107  $\chi^2$ /NDF: 109998.0/4  
 Left Out: 77.280 $\pm$ 0.013  $\chi^2$ /NDF:1553410.1/24  
 Right Out: 232.683 $\pm$ 0.082  $\chi^2$ /NDF: 201121.2/6  
 Left In: 79.491 $\pm$ 0.014  $\chi^2$ /NDF:1333774.9/22

Left: 78.333 $\pm$ 0.010  $\chi^2$ /NDF: 2900472.8/47  
 Right: 236.836 $\pm$ 0.065  $\chi^2$ /NDF: 318095.7/11  
 In: 82.197 $\pm$ 0.014  $\chi^2$ /NDF:3751578.8/27  
 Out: 81.234 $\pm$ 0.013  $\chi^2$ /NDF:5258862.5/31  
 All: 81.690 $\pm$ 0.009  $\chi^2$ /NDF: 9013012.9/59

asym\_sam\_37\_avg\_correction\_mean vs Slug, Sign Corrected



Right In:  $-904.966 \pm 1393.870$   $\chi^2/\text{NDF}: 1.9/4$

Left Out:  $-571.669 \pm 128.158$   $\chi^2/\text{NDF}: 66.8/24$

Right Out:  $1600.958 \pm 1097.500$   $\chi^2/\text{NDF}: 6.4/6$

Left In:  $50.077 \pm 129.187$   $\chi^2/\text{NDF}: 26.1/22$

Left:  $-263.282 \pm 90.983$   $\chi^2/\text{NDF}: 104.6/47$

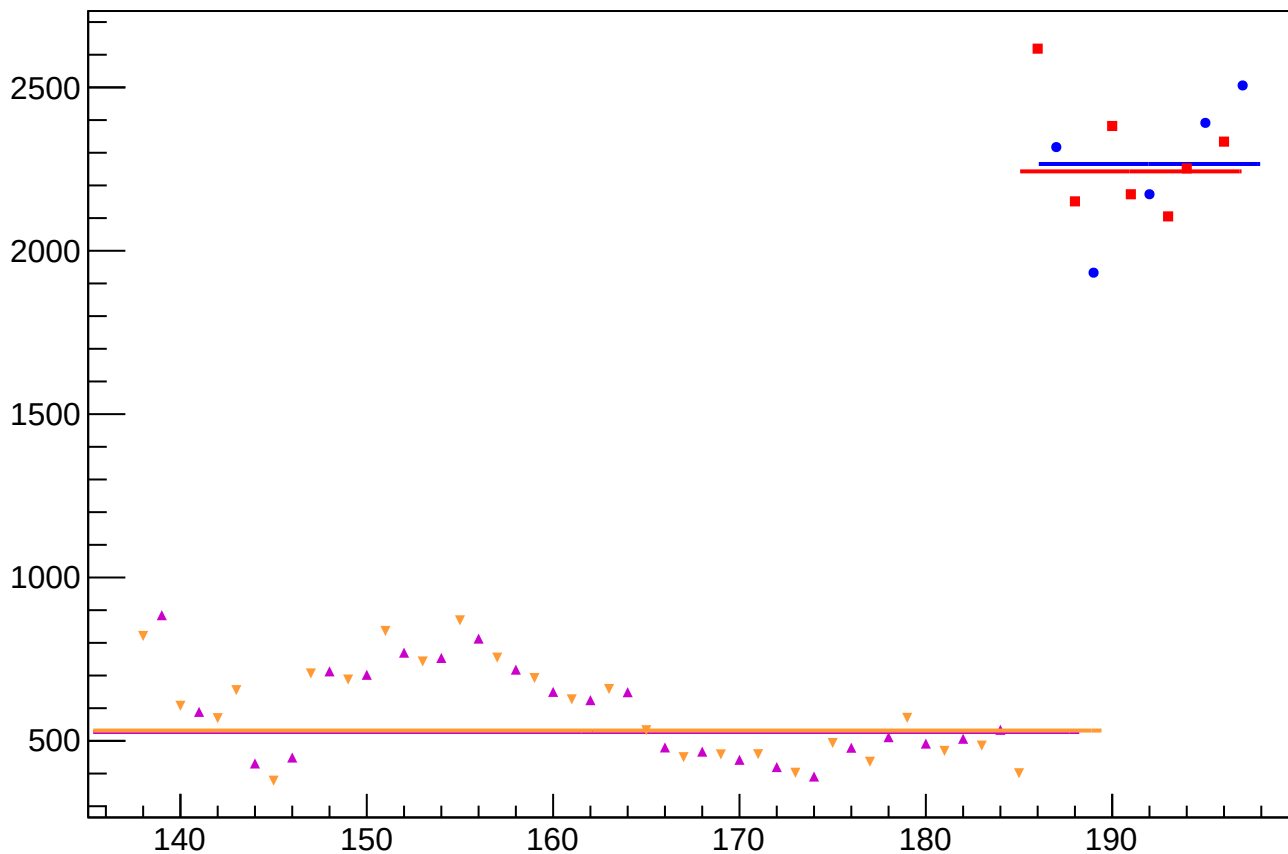
Right:  $641.938 \pm 862.288$   $\chi^2/\text{NDF}: 10.3/11$

In:  $41.943 \pm 128.635$   $\chi^2/\text{NDF}: 28.6/27$

Out:  $-542.442 \pm 127.293$   $\chi^2/\text{NDF}: 77.0/31$

All:  $-253.315 \pm 90.481$   $\chi^2/\text{NDF}: 116.0/59$

asym\_sam\_37\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 2265.635 $\pm$ 0.986  $\chi^2$ /NDF: 48411.4/4

Left Out: 531.643 $\pm$ 0.091  $\chi^2$ /NDF: 2038304.3/24

Right Out: 2243.003 $\pm$ 0.776  $\chi^2$ /NDF: 30065.4/6

Left In: 527.182 $\pm$ 0.091  $\chi^2$ /NDF: 1813383.7/22

Left: 529.430 $\pm$ 0.064  $\chi^2$ /NDF: 3852889.7/47

Right: 2251.664 $\pm$ 0.610  $\chi^2$ /NDF: 78802.3/11

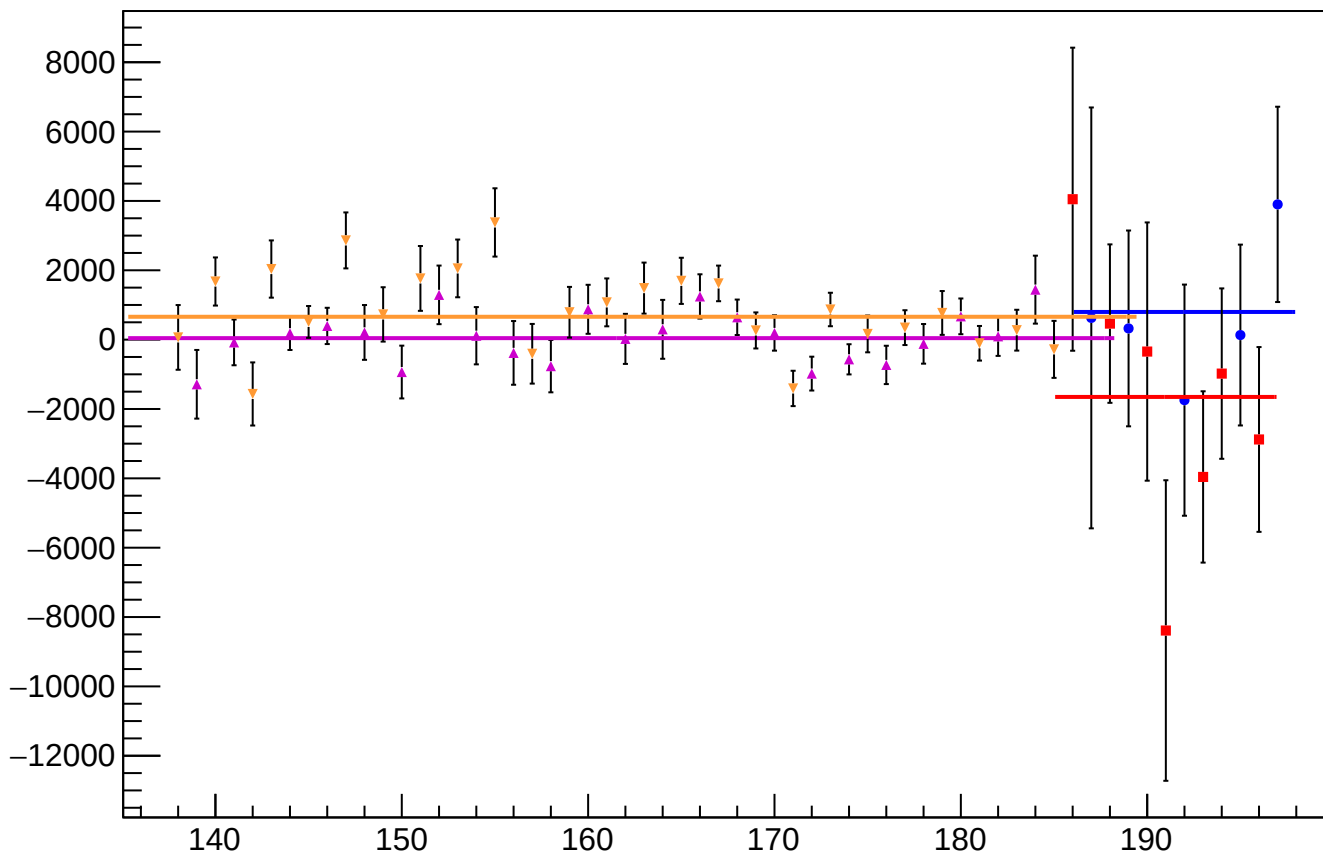
In: 541.988 $\pm$ 0.091  $\chi^2$ /NDF: 4946377.6/27

Out: 554.665 $\pm$ 0.090  $\chi^2$ /NDF: 6865951.0/31

All: 548.393 $\pm$ 0.064  $\chi^2$ /NDF: 11822141.3/59



# asym\_sam\_37\_avg\_mean vs Slug, Sign Corrected



Right In: 798.379 $\pm$ 1392.460  $\chi^2$ /NDF: 1.9/4

Left Out: 659.523 $\pm$ 128.164  $\chi^2$ /NDF:62.4/24

Right Out: -1652.294 $\pm$ 1091.304  $\chi^2$ /NDF: 6.3/6

Left In: 43.183 $\pm$ 129.538  $\chi^2$ /NDF:26.0/22

Left: 354.638 $\pm$ 91.108  $\chi^2$ /NDF: 99.9/47

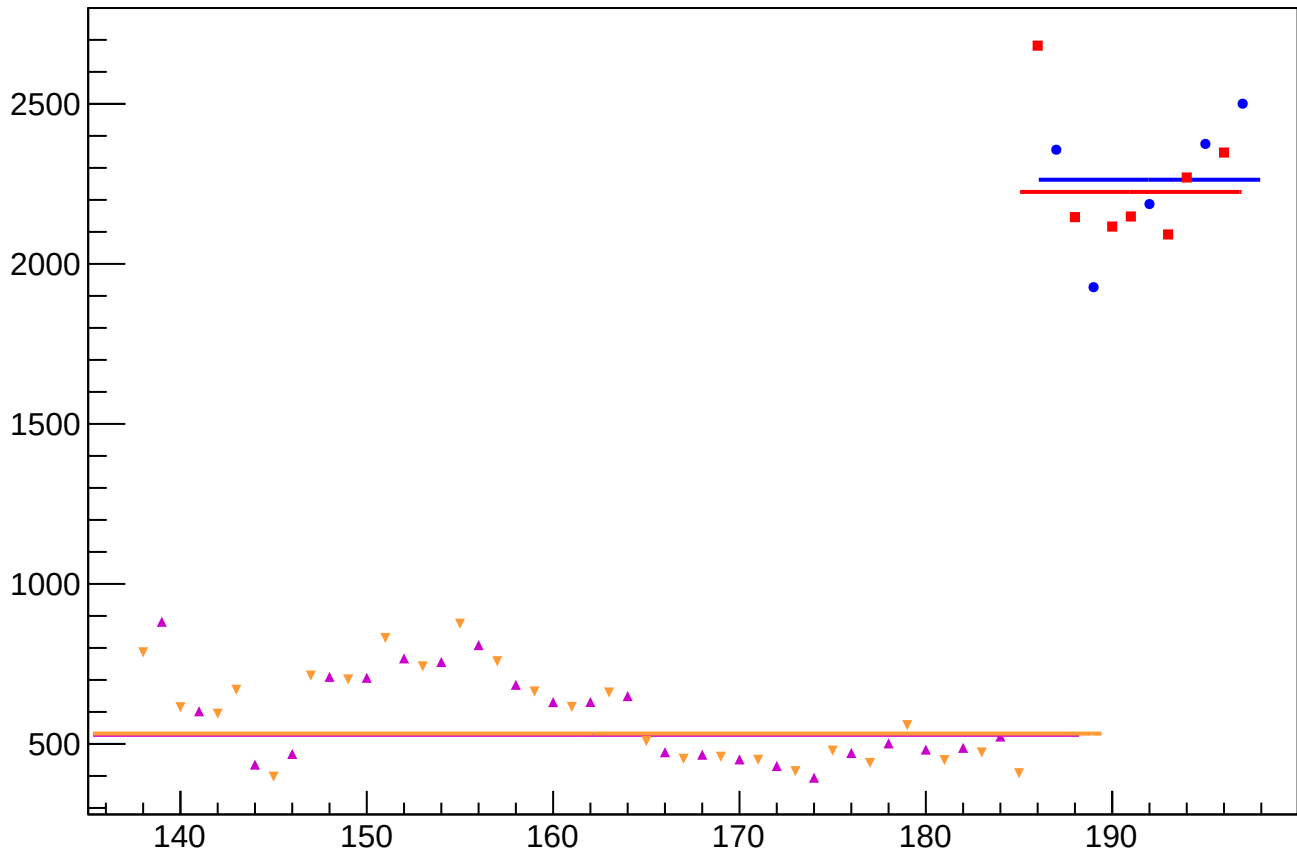
Right: -719.796 $\pm$ 858.942  $\chi^2$ /NDF: 10.1/11

In: 49.662 $\pm$ 128.981  $\chi^2$ /NDF:28.2/27

Out: 628.071 $\pm$ 127.289  $\chi^2$ /NDF:73.1/31

All: 342.684 $\pm$ 90.599  $\chi^2$ /NDF: 111.5/59

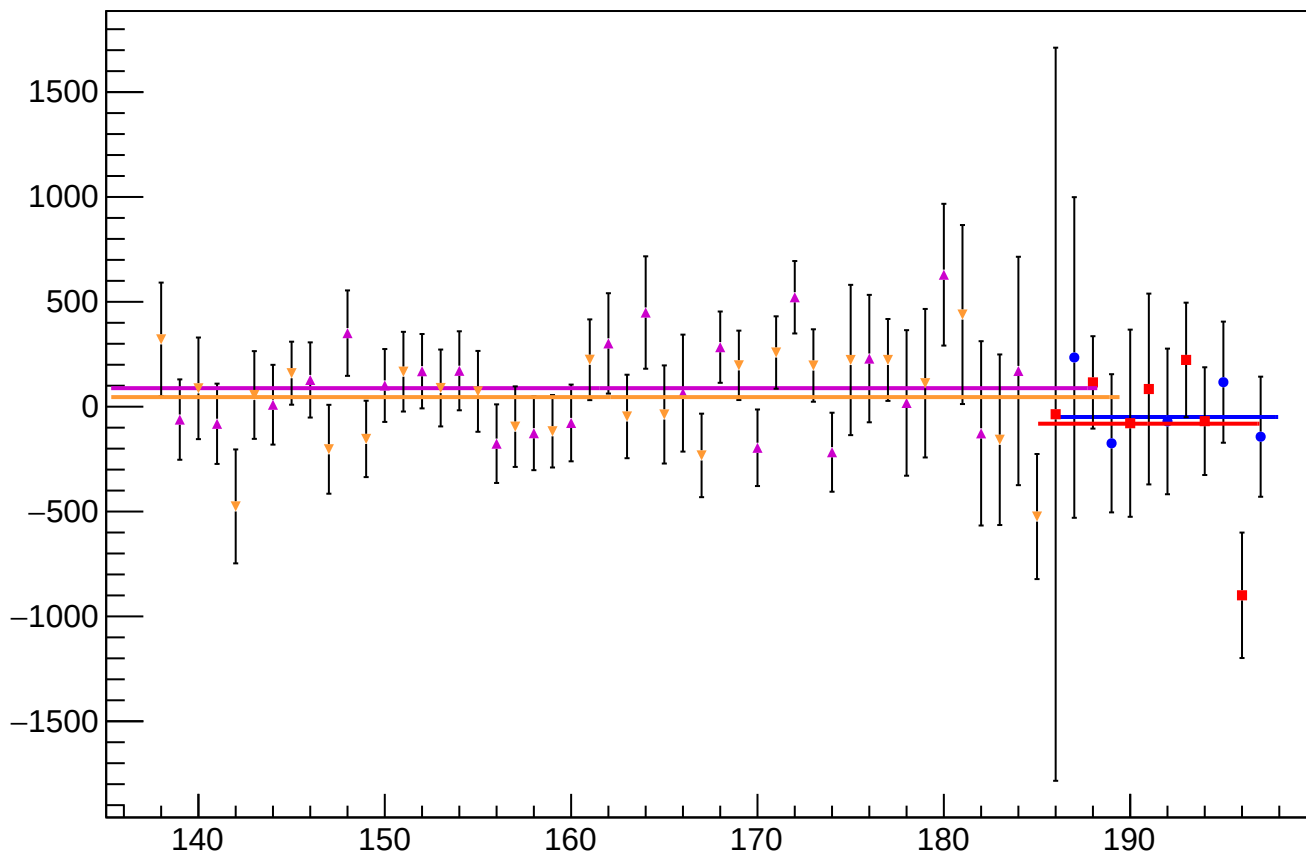
# asym\_sam\_37\_avg\_rms vs Slug, Sign Corrected



Right In: 2263.020+/-0.985  $\chi^2/\text{NDF}$ : 47719.8/4  
 Left Out: 532.393+/-0.091  $\chi^2/\text{NDF}$ : 1943066.8/24  
 Right Out: 2224.893+/-0.772  $\chi^2/\text{NDF}$ : 37290.2/6  
 Left In: 528.464+/-0.092  $\chi^2/\text{NDF}$ : 1712049.5/22

Left: 530.449+/-0.064  $\chi^2/\text{NDF}$ : 3656045.7/47  
 Right: 2239.401+/-0.607  $\chi^2/\text{NDF}$ : 85938.9/11  
 In: 543.347+/-0.091  $\chi^2/\text{NDF}$ : 4836564.8/27  
 Out: 555.419+/-0.090  $\chi^2/\text{NDF}$ : 6725474.9/31  
 All: 549.462+/-0.064  $\chi^2/\text{NDF}$ : 11570915.2/59

dit\_asym\_sam\_48\_avg\_mean vs Slug, Sign Corrected



Right In:  $-49.184 \pm 151.783$   $\chi^2/\text{NDF}$ : 0.7/4

Left Out:  $45.675 \pm 41.779$   $\chi^2/\text{NDF}$ : 21.9/24

Right Out:  $-81.129 \pm 119.071$   $\chi^2/\text{NDF}$ : 9.7/6

Left In:  $88.356 \pm 43.518$   $\chi^2/\text{NDF}$ : 26.4/22

Left:  $66.145 \pm 30.138$   $\chi^2/\text{NDF}$ : 48.8/47

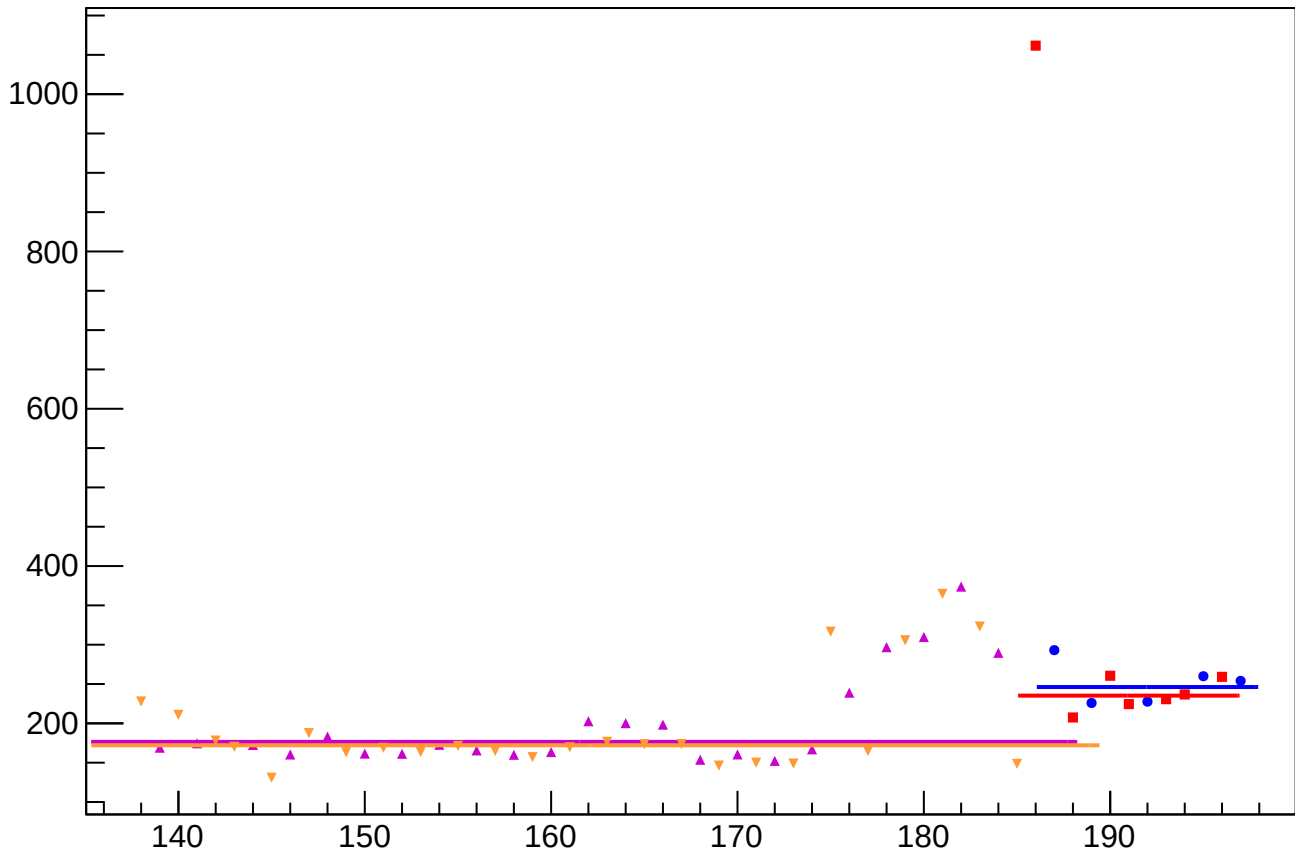
Right:  $-68.959 \pm 93.684$   $\chi^2/\text{NDF}$ : 10.4/11

In:  $77.908 \pm 41.833$   $\chi^2/\text{NDF}$ : 27.8/27

Out:  $31.775 \pm 39.423$   $\chi^2/\text{NDF}$ : 32.6/31

All:  $53.475 \pm 28.690$   $\chi^2/\text{NDF}$ : 61.1/59

dit\_asym\_sam\_48\_avg\_rms vs Slug, Sign Corrected



Right In: 246.181 $\pm$ 0.107  $\chi^2$ /NDF: 26871.4/4

Left Out: 172.097 $\pm$ 0.030  $\chi^2$ /NDF:1752497.1/24

Right Out: 235.275 $\pm$ 0.084  $\chi^2$ /NDF: 499804.5/6

Left In: 176.425 $\pm$ 0.031  $\chi^2$ /NDF:1360607.7/22

Left: 174.173 $\pm$ 0.021  $\chi^2$ /NDF: 3123399.2/47

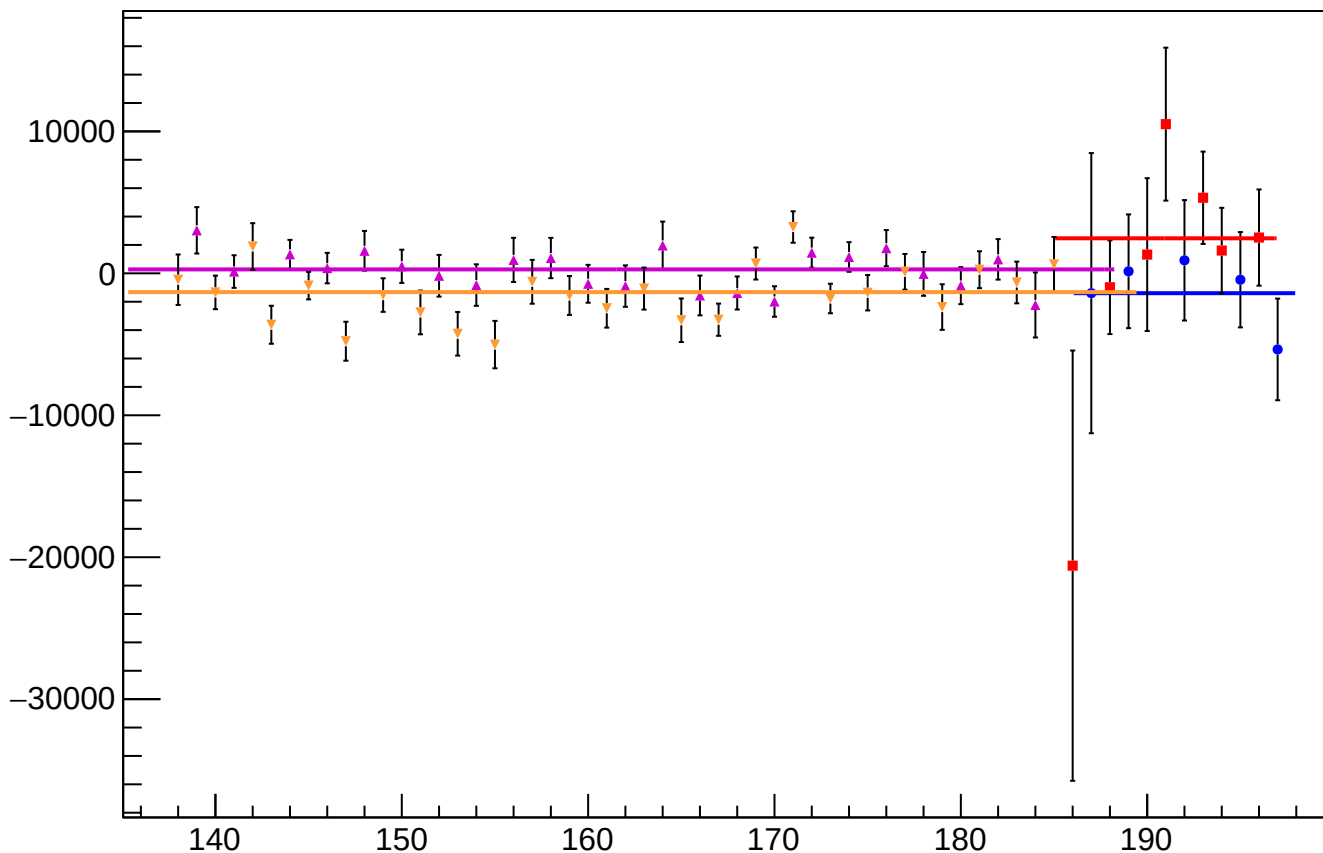
Right: 239.430 $\pm$ 0.066  $\chi^2$ /NDF: 533067.3/11

In: 181.724 $\pm$ 0.030  $\chi^2$ /NDF:1777815.1/27

Out: 179.022 $\pm$ 0.028  $\chi^2$ /NDF:2753641.9/31

All: 180.293 $\pm$ 0.020  $\chi^2$ /NDF: 4535874.2/59

asym\_sam\_48\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -1398.577 $\pm$ 1841.647  $\chi^2$ /NDF: 1.8/4

Left Out: -1324.367 $\pm$ 265.950  $\chi^2$ /NDF:53.6/24

Right Out: 2467.387 $\pm$ 1478.966  $\chi^2$ /NDF: 6.5/6

Left In: 276.678 $\pm$ 270.547  $\chi^2$ /NDF:22.0/22

Left: -537.562 $\pm$ 189.659  $\chi^2$ /NDF: 93.5/47

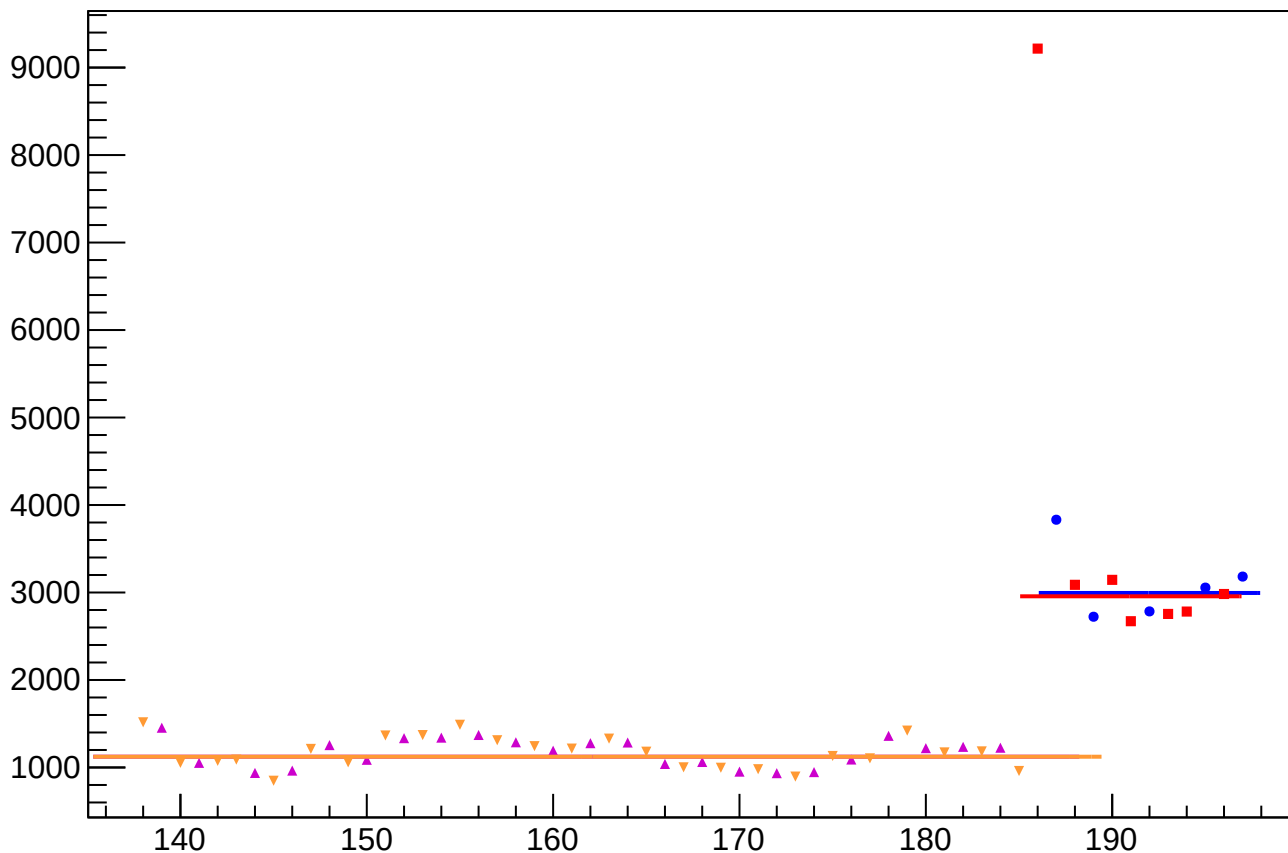
Right: 951.672 $\pm$ 1153.151  $\chi^2$ /NDF: 11.0/11

In: 241.288 $\pm$ 267.674  $\chi^2$ /NDF:24.6/27

Out: -1205.598 $\pm$ 261.752  $\chi^2$ /NDF:66.5/31

All: -498.338 $\pm$ 187.145  $\chi^2$ /NDF: 106.0/59

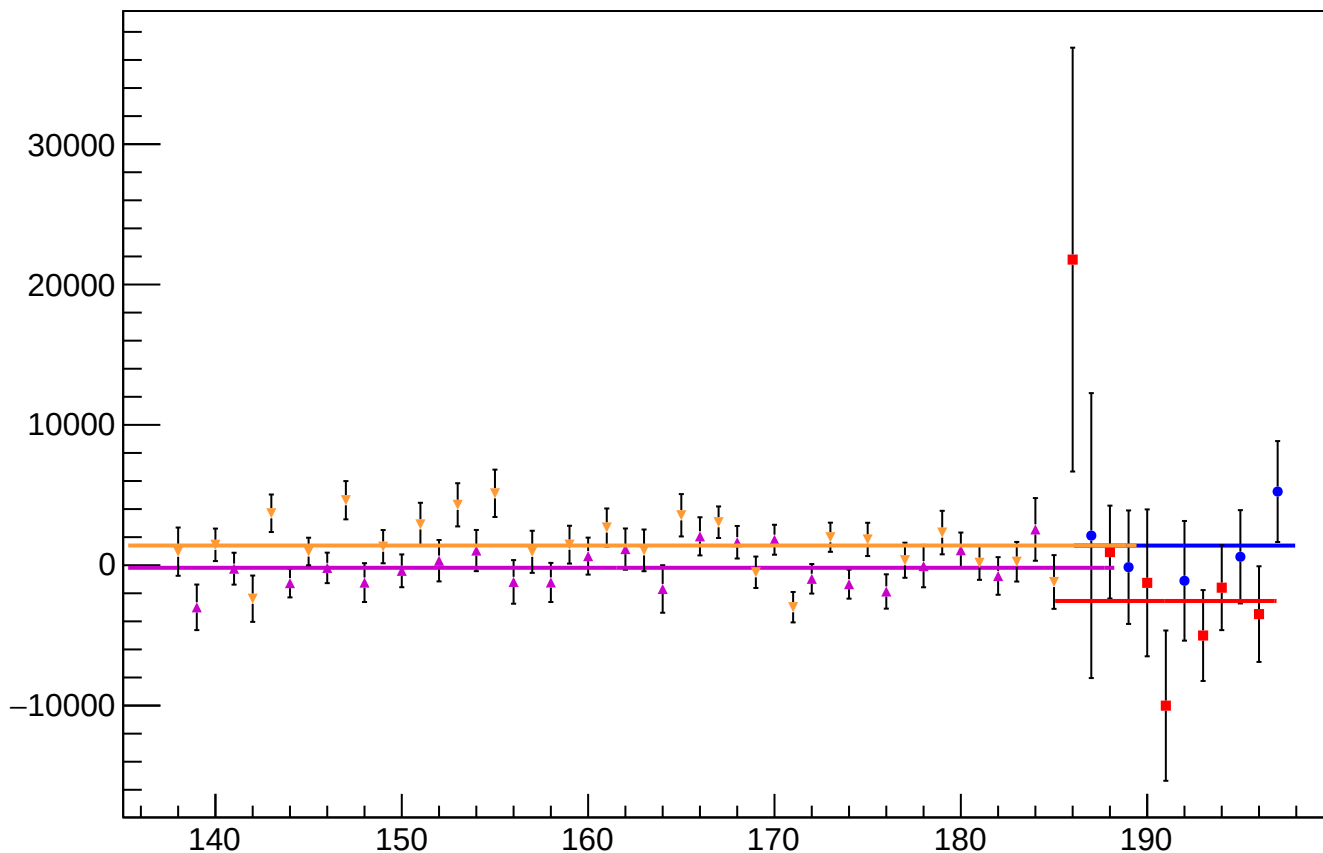
asym\_sam\_48\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 2994.712 $\pm$ 1.302  $\chi^2$ /NDF: 34658.4/4  
 Left Out: 1123.022 $\pm$ 0.188  $\chi^2$ /NDF: 842393.5/24  
 Right Out: 2956.493 $\pm$ 1.046  $\chi^2$ /NDF: 366925.6/6  
 Left In: 1123.148 $\pm$ 0.191  $\chi^2$ /NDF: 689778.4/22

Left: 1123.084 $\pm$ 0.134  $\chi^2$ /NDF: 1532172.1/47  
 Right: 2971.478 $\pm$ 0.815  $\chi^2$ /NDF: 402107.6/11  
 In: 1162.685 $\pm$ 0.189  $\chi^2$ /NDF: 2746309.1/27  
 Out: 1180.452 $\pm$ 0.185  $\chi^2$ /NDF: 4186745.1/31  
 All: 1171.767 $\pm$ 0.132  $\chi^2$ /NDF: 6937558.4/59

# asym\_sam\_48\_avg\_mean vs Slug, Sign Corrected



Right In: 1399.345 $\pm$ 1845.001  $\chi^2$ /NDF: 1.7/4

Left Out: 1404.763 $\pm$ 262.517  $\chi^2$ /NDF: 53.1/24

Right Out: -2546.864 $\pm$ 1477.715  $\chi^2$ /NDF: 6.5/6

Left In: -183.249 $\pm$ 267.620  $\chi^2$ /NDF: 23.7/22

Left: 626.041 $\pm$ 187.406  $\chi^2$ /NDF: 94.8/47

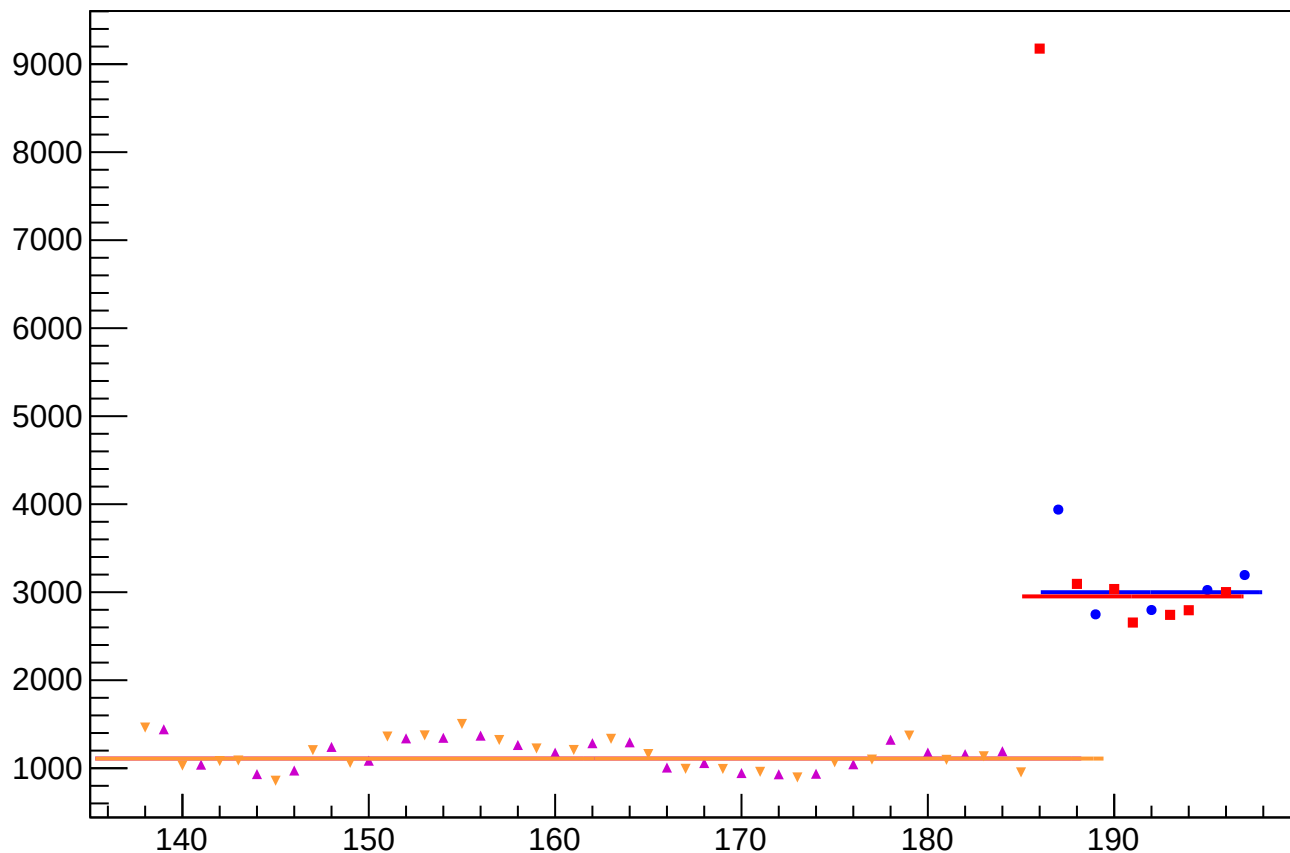
Right: -1004.700 $\pm$ 1153.379  $\chi^2$ /NDF: 10.9/11

In: -150.637 $\pm$ 264.848  $\chi^2$ /NDF: 26.1/27

Out: 1283.866 $\pm$ 258.470  $\chi^2$ /NDF: 66.5/31

All: 584.095 $\pm$ 184.980  $\chi^2$ /NDF: 107.7/59

# asym\_sam\_48\_avg\_rms vs Slug, Sign Corrected



Right In: 2999.654 $\pm$ 1.305  $\chi^2/\text{NDF}$ : 35349.8/4

Left Out: 1109.574 $\pm$ 0.186  $\chi^2/\text{NDF}$ : 812957.8/24

Right Out: 2952.265 $\pm$ 1.045  $\chi^2/\text{NDF}$ : 364405.2/6

Left In: 1110.162 $\pm$ 0.189  $\chi^2/\text{NDF}$ : 673229.2/22

Left: 1109.863 $\pm$ 0.133  $\chi^2/\text{NDF}$ : 1486192.0/47

Right: 2970.784 $\pm$ 0.816  $\chi^2/\text{NDF}$ : 400558.8/11

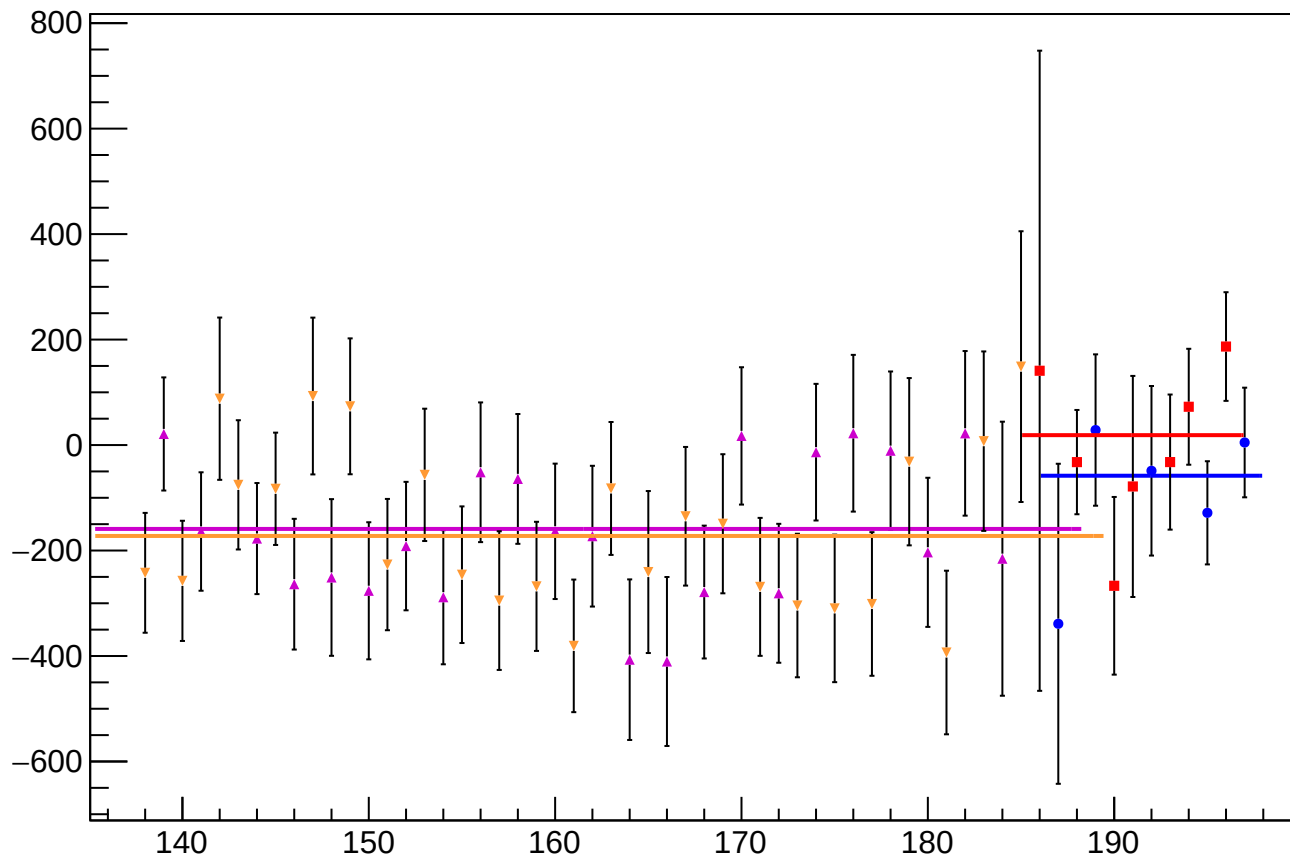
In: 1149.098 $\pm$ 0.187  $\chi^2/\text{NDF}$ : 2762973.7/27

Out: 1165.950 $\pm$ 0.183  $\chi^2/\text{NDF}$ : 4192166.8/31

All: 1157.729 $\pm$ 0.131  $\chi^2/\text{NDF}$ : 6959288.0/59



# dit\_asym\_sam\_15\_dd\_mean vs Slug, Sign Corrected



Right In:  $-58.154 \pm 58.205$   $\chi^2/\text{NDF}: 2.1/4$

Left Out:  $-172.357 \pm 26.709$   $\chi^2/\text{NDF}: 27.2/24$

Right Out:  $18.781 \pm 49.938$   $\chi^2/\text{NDF}: 6.5/6$

Left In:  $-159.044 \pm 27.608$   $\chi^2/\text{NDF}: 21.1/22$

Left:  $-165.921 \pm 19.196$   $\chi^2/\text{NDF}: 48.4/47$

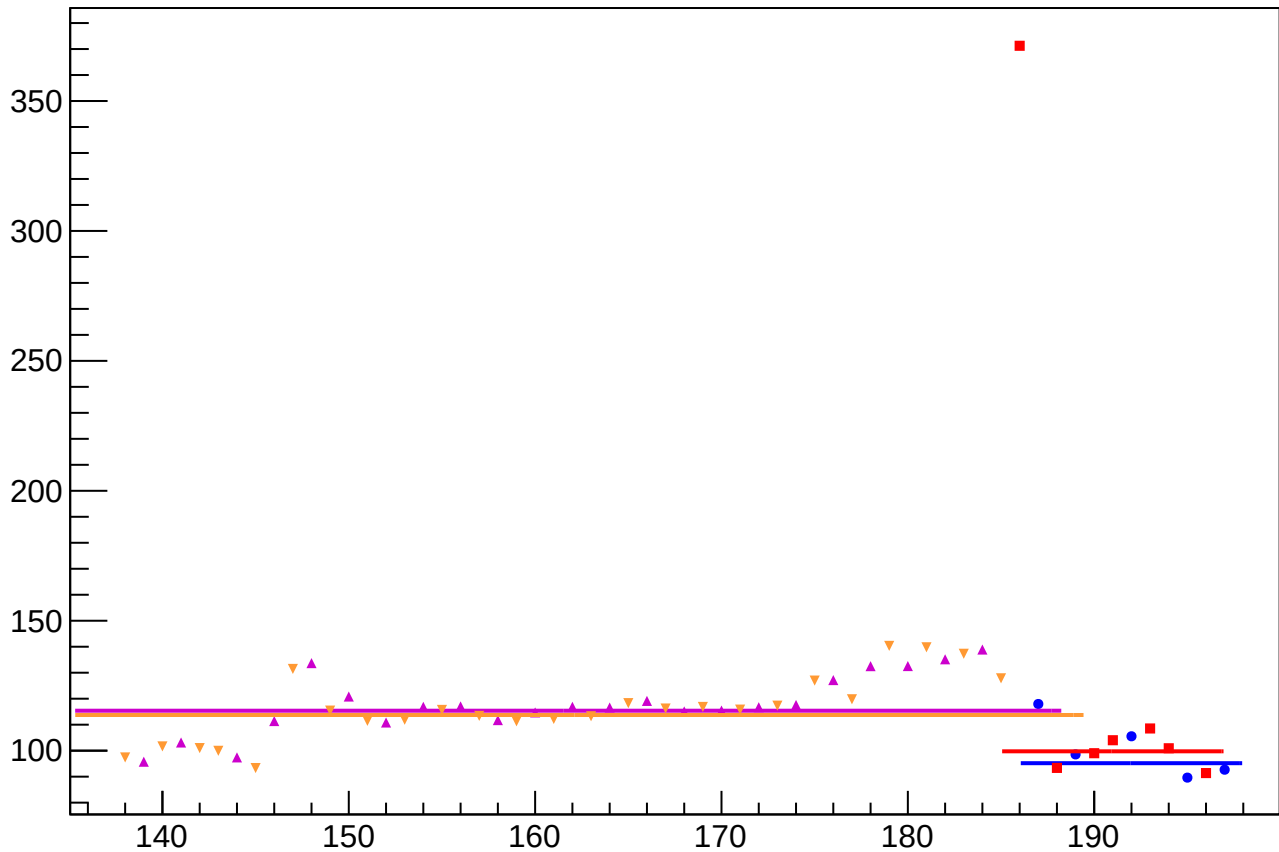
Right:  $-13.839 \pm 37.901$   $\chi^2/\text{NDF}: 9.6/11$

In:  $-140.514 \pm 24.944$   $\chi^2/\text{NDF}: 25.6/27$

Out:  $-129.842 \pm 23.552$   $\chi^2/\text{NDF}: 45.1/31$

All:  $-134.872 \pm 17.125$   $\chi^2/\text{NDF}: 70.8/59$

dit\_asym\_sam\_15\_dd\_rms vs Slug, Sign Corrected



Right In: 95.182 $\pm$ 0.041  $\chi^2$ /NDF: 28283.8/4

Left Out: 113.727 $\pm$ 0.019  $\chi^2$ /NDF: 392153.8/24

Right Out: 99.751 $\pm$ 0.035  $\chi^2$ /NDF: 432262.6/6

Left In: 115.377 $\pm$ 0.020  $\chi^2$ /NDF: 309034.7/22

Left: 114.525 $\pm$ 0.014  $\chi^2$ /NDF: 704876.2/47

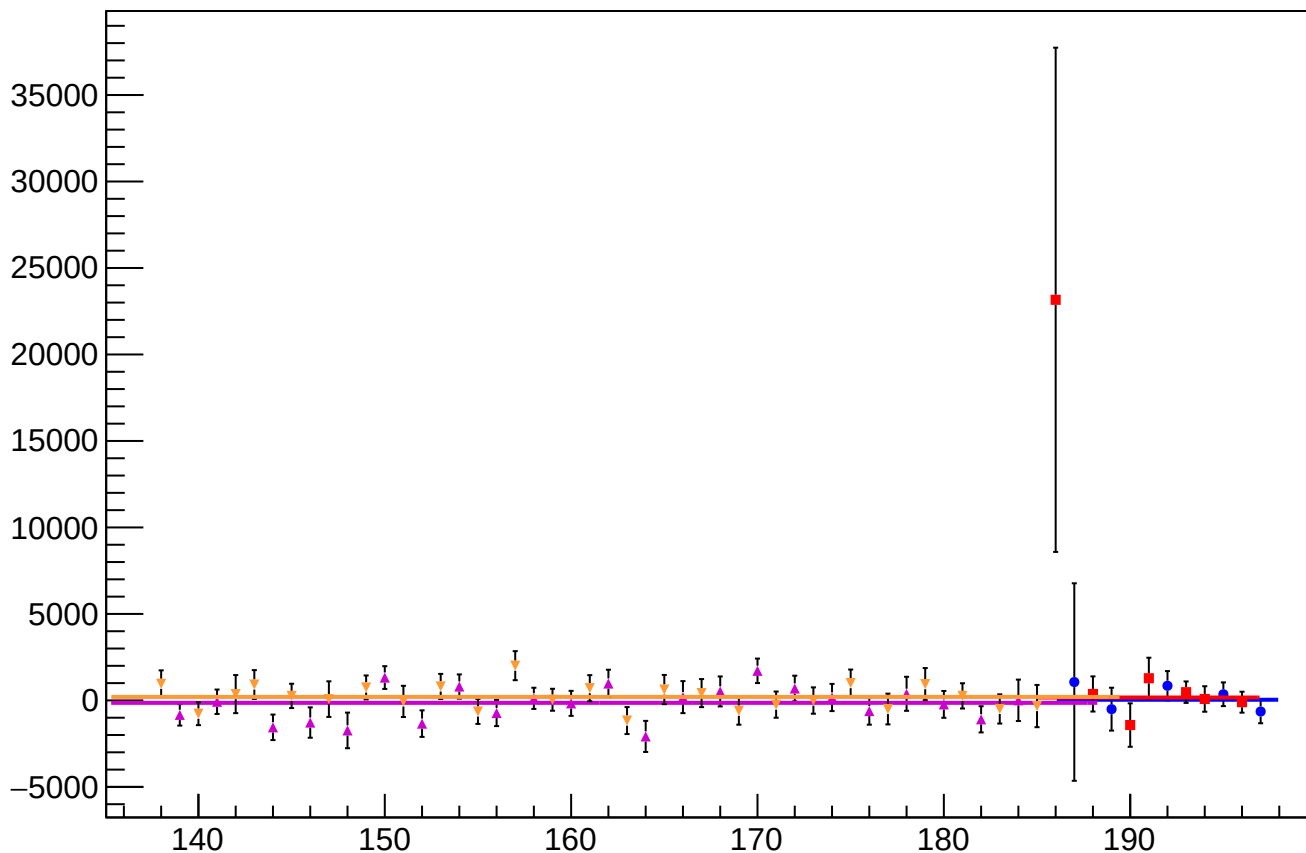
Right: 97.814 $\pm$ 0.027  $\chi^2$ /NDF: 467647.7/11

In: 111.668 $\pm$ 0.018  $\chi^2$ /NDF: 533863.4/27

Out: 110.619 $\pm$ 0.017  $\chi^2$ /NDF: 946216.3/31

All: 111.113 $\pm$ 0.012  $\chi^2$ /NDF: 1481950.0/59

asym\_sam\_15\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 38.753+/-396.288  $\chi^2/\text{NDF}$ : 2.4/4

Left Out: 202.466+/-159.030  $\chi^2/\text{NDF}$ :19.8/24

Right Out: 167.733+/-324.638  $\chi^2/\text{NDF}$ : 5.5/6

Left In: -140.039+/-161.024  $\chi^2/\text{NDF}$ :36.9/22

Left: 33.348+/-113.149  $\chi^2/\text{NDF}$ : 58.9/47

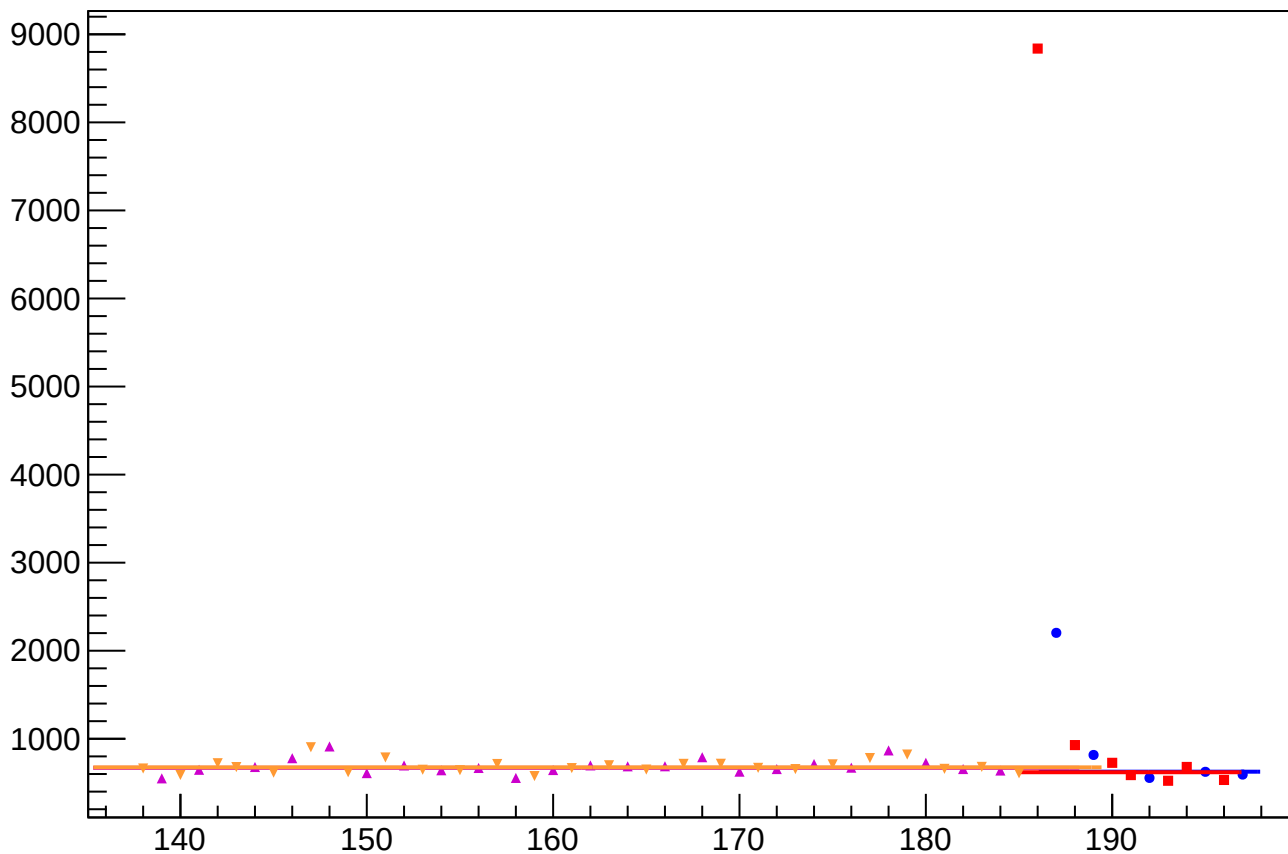
Right: 115.937+/-251.131  $\chi^2/\text{NDF}$ : 7.9/11

In: -114.703+/-149.179  $\chi^2/\text{NDF}$ :39.4/27

Out: 195.744+/-142.815  $\chi^2/\text{NDF}$ :25.3/31

All: 47.284+/-103.162  $\chi^2/\text{NDF}$ : 66.9/59

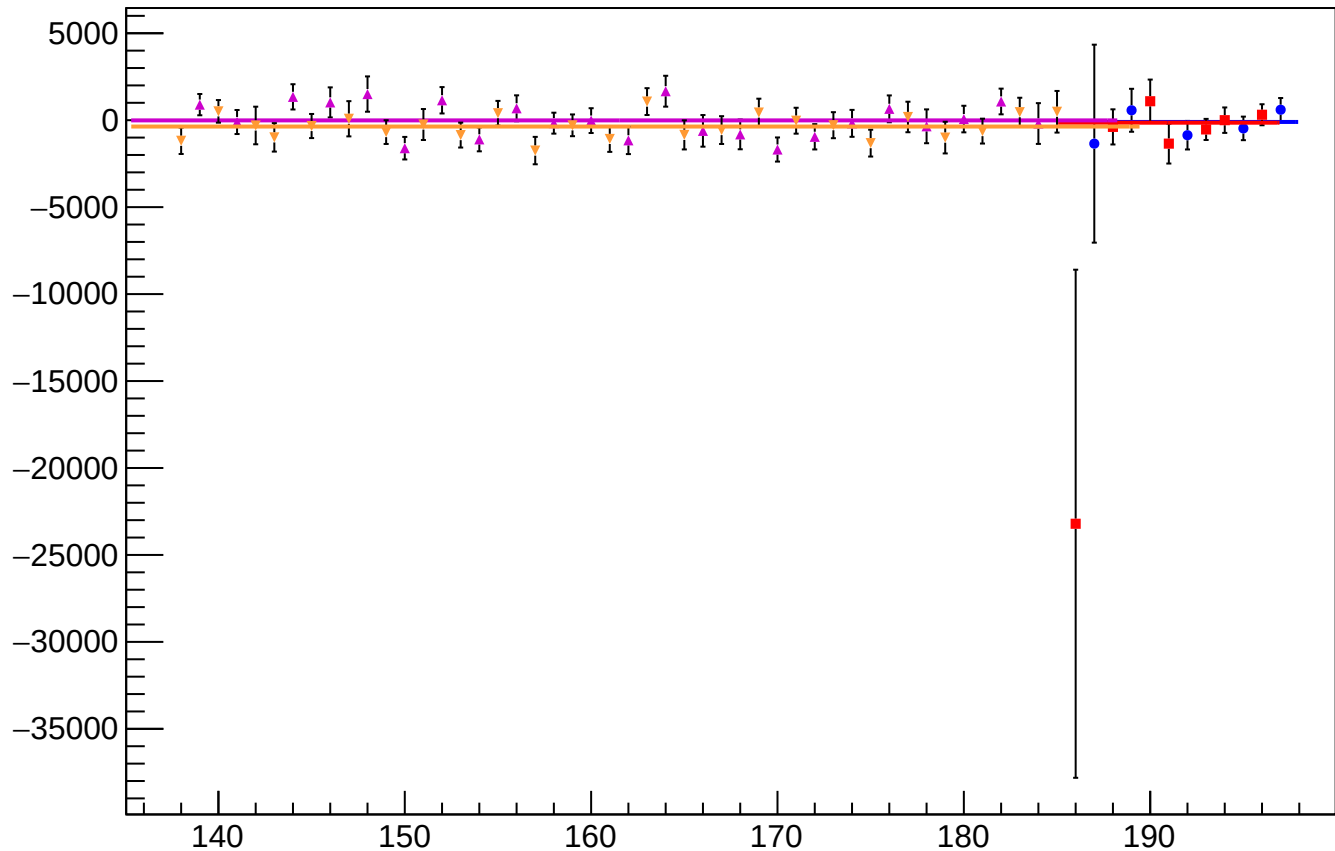
asym\_sam\_15\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 626.354+/-0.280  $\chi^2/\text{NDF}$ : 218153.4/4  
 Left Out: 675.335+/-0.112  $\chi^2/\text{NDF}$ : 358713.6/24  
 Right Out: 620.235+/-0.230  $\chi^2/\text{NDF}$ : 939652.1/6  
 Left In: 669.938+/-0.114  $\chi^2/\text{NDF}$ : 464085.7/22

Left: 672.670+/-0.080  $\chi^2/\text{NDF}$ : 823936.7/47  
 Right: 622.692+/-0.178  $\chi^2/\text{NDF}$ : 1158090.7/11  
 In: 663.761+/-0.105  $\chi^2/\text{NDF}$ : 703002.3/27  
 Out: 664.671+/-0.101  $\chi^2/\text{NDF}$ : 1344830.0/31  
 All: 664.236+/-0.073  $\chi^2/\text{NDF}$ : 2047871.1/59

# asym\_sam\_15\_dd\_mean vs Slug, Sign Corrected



Right In:  $-101.220 \pm 390.938$   $\chi^2/\text{NDF}$ : 2.6/4

Left Out:  $-365.394 \pm 156.301$   $\chi^2/\text{NDF}$ : 18.7/24

Right Out:  $-144.001 \pm 320.803$   $\chi^2/\text{NDF}$ : 5.7/6

Left In:  $-11.243 \pm 158.497$   $\chi^2/\text{NDF}$ : 38.8/22

Left:  $-190.789 \pm 111.290$   $\chi^2/\text{NDF}$ : 60.1/47

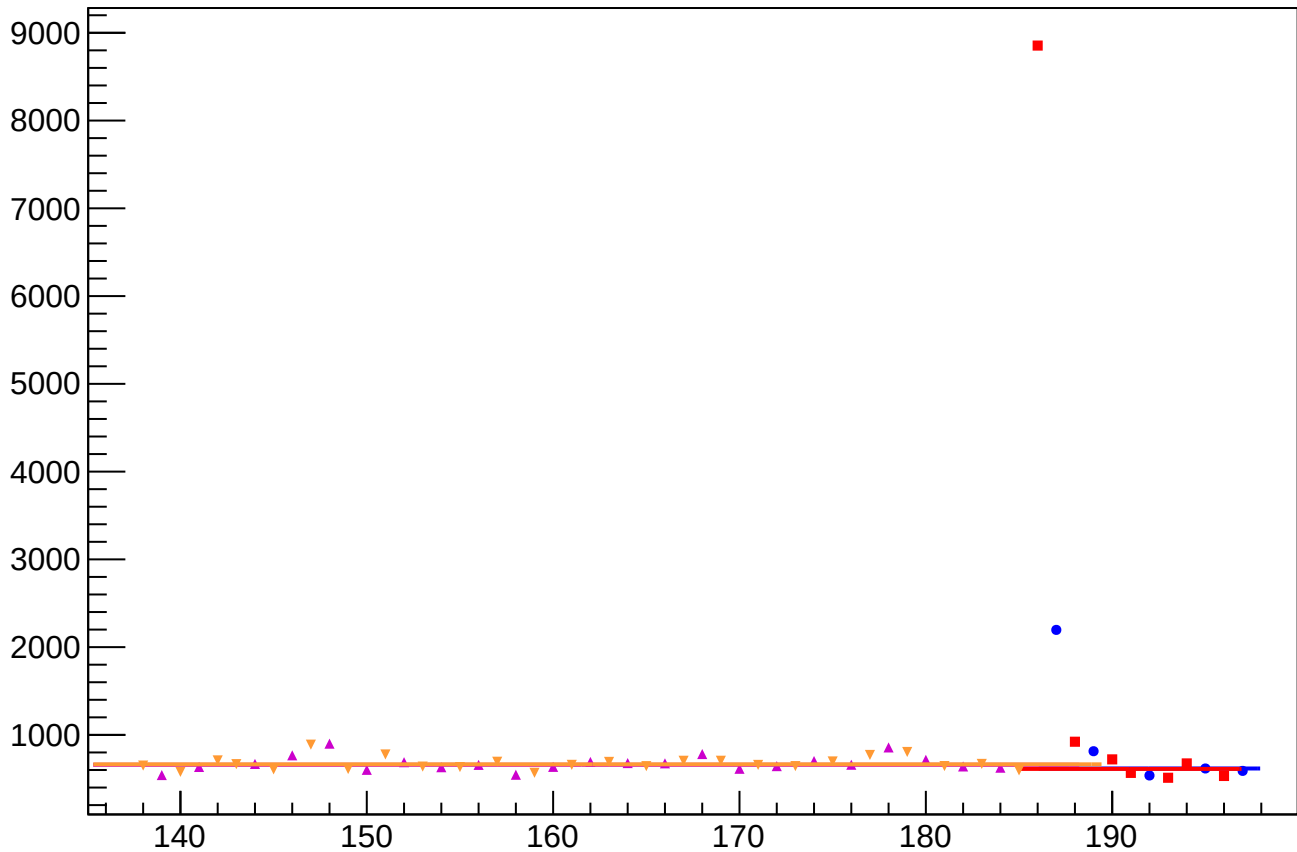
Right:  $-126.786 \pm 247.994$   $\chi^2/\text{NDF}$ : 8.2/11

In:  $-23.945 \pm 146.884$   $\chi^2/\text{NDF}$ : 41.4/27

Out:  $-322.922 \pm 140.511$   $\chi^2/\text{NDF}$ : 24.8/31

All:  $-180.060 \pm 101.535$   $\chi^2/\text{NDF}$ : 68.4/59

# asym\_sam\_15\_dd\_rms vs Slug, Sign Corrected



Right In:  $617.217 \pm 0.276$   $\chi^2/\text{NDF}$ : 226867.4/4

Left Out:  $664.618 \pm 0.111$   $\chi^2/\text{NDF}$ : 356964.3/24

Right Out:  $612.450 \pm 0.227$   $\chi^2/\text{NDF}$ : 948295.2/6

Left In:  $659.230 \pm 0.112$   $\chi^2/\text{NDF}$ : 472744.9/22

Left:  $661.962 \pm 0.079$   $\chi^2/\text{NDF}$ : 830881.0/47

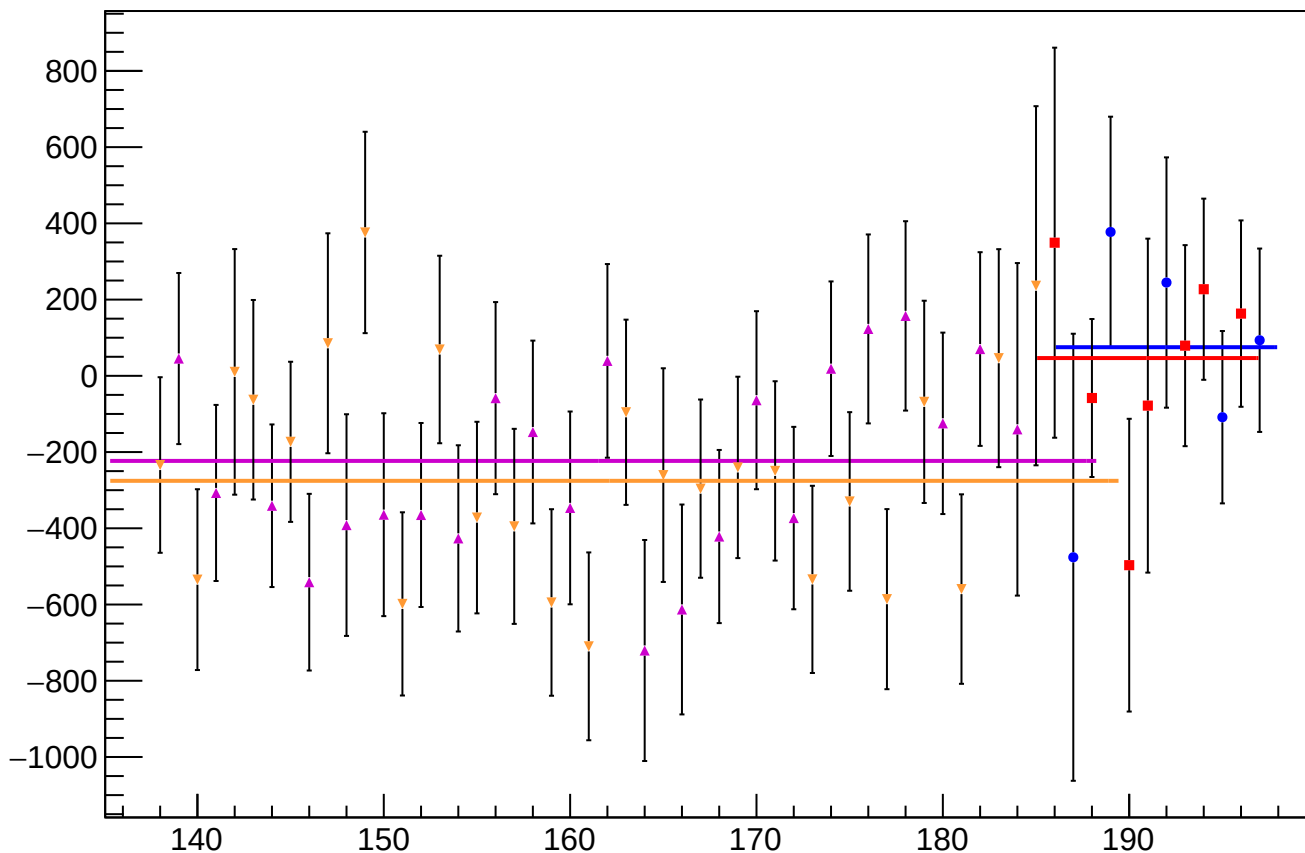
Right:  $614.368 \pm 0.175$   $\chi^2/\text{NDF}$ : 1175340.3/11

In:  $653.299 \pm 0.104$   $\chi^2/\text{NDF}$ : 719450.3/27

Out:  $654.610 \pm 0.099$   $\chi^2/\text{NDF}$ : 1348001.5/31

All:  $653.984 \pm 0.072$   $\chi^2/\text{NDF}$ : 2067535.0/59

# dit\_asym\_sam\_26\_dd\_mean vs Slug, Sign Corrected



Right In: 75.105 $\pm$ 129.148  $\chi^2/\text{NDF}$ : 2.8/4

Left Out: -275.447 $\pm$ 50.539  $\chi^2/\text{NDF}$ : 27.3/24

Right Out: 46.611 $\pm$ 106.657  $\chi^2/\text{NDF}$ : 3.5/6

Left In: -223.195 $\pm$ 51.742  $\chi^2/\text{NDF}$ : 20.8/22

Left: -249.935 $\pm$ 36.154  $\chi^2/\text{NDF}$ : 48.6/47

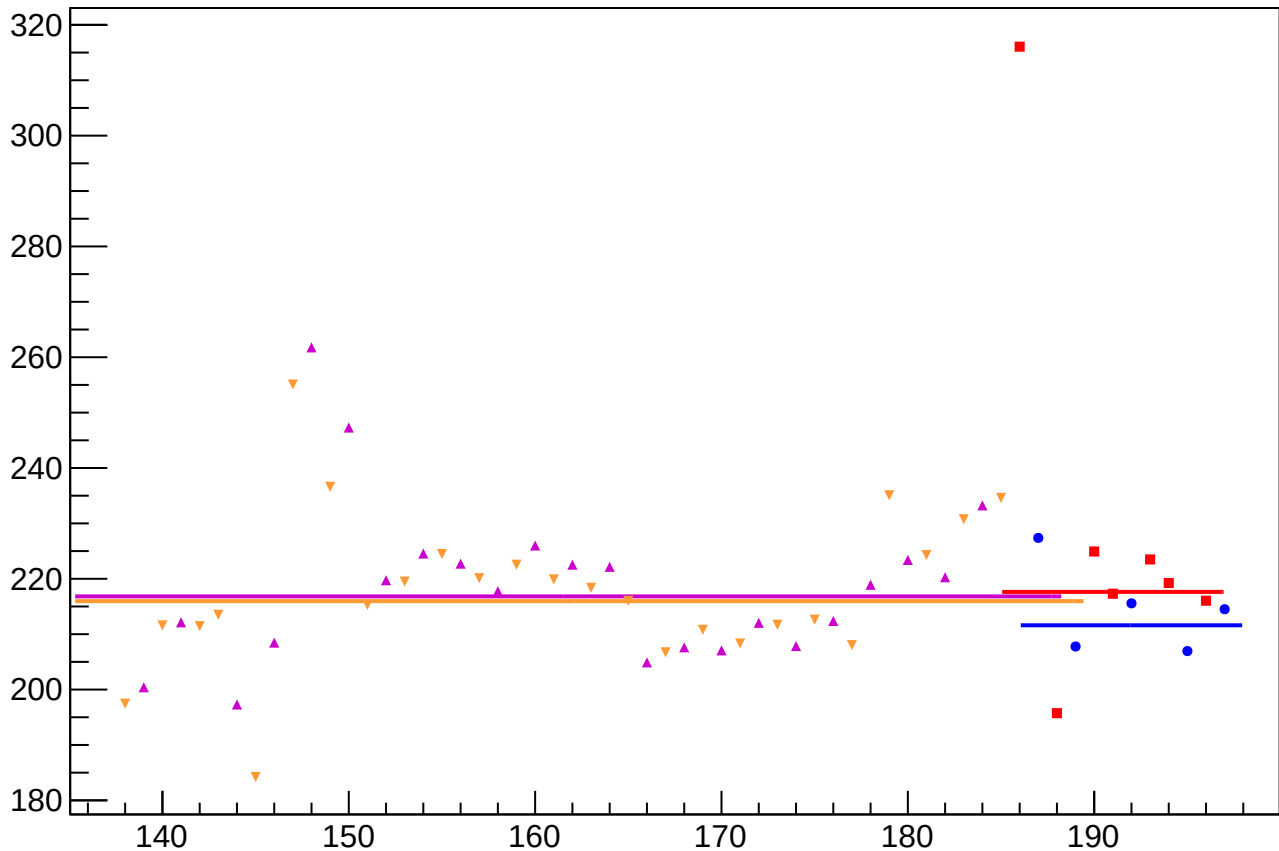
Right: 58.165 $\pm$ 82.238  $\chi^2/\text{NDF}$ : 6.4/11

In: -181.937 $\pm$ 48.030  $\chi^2/\text{NDF}$ : 28.2/27

Out: -216.393 $\pm$ 45.671  $\chi^2/\text{NDF}$ : 38.3/31

All: -200.032 $\pm$ 33.097  $\chi^2/\text{NDF}$ : 66.7/59

dit\_asym\_sam\_26\_dd\_rms vs Slug, Sign Corrected

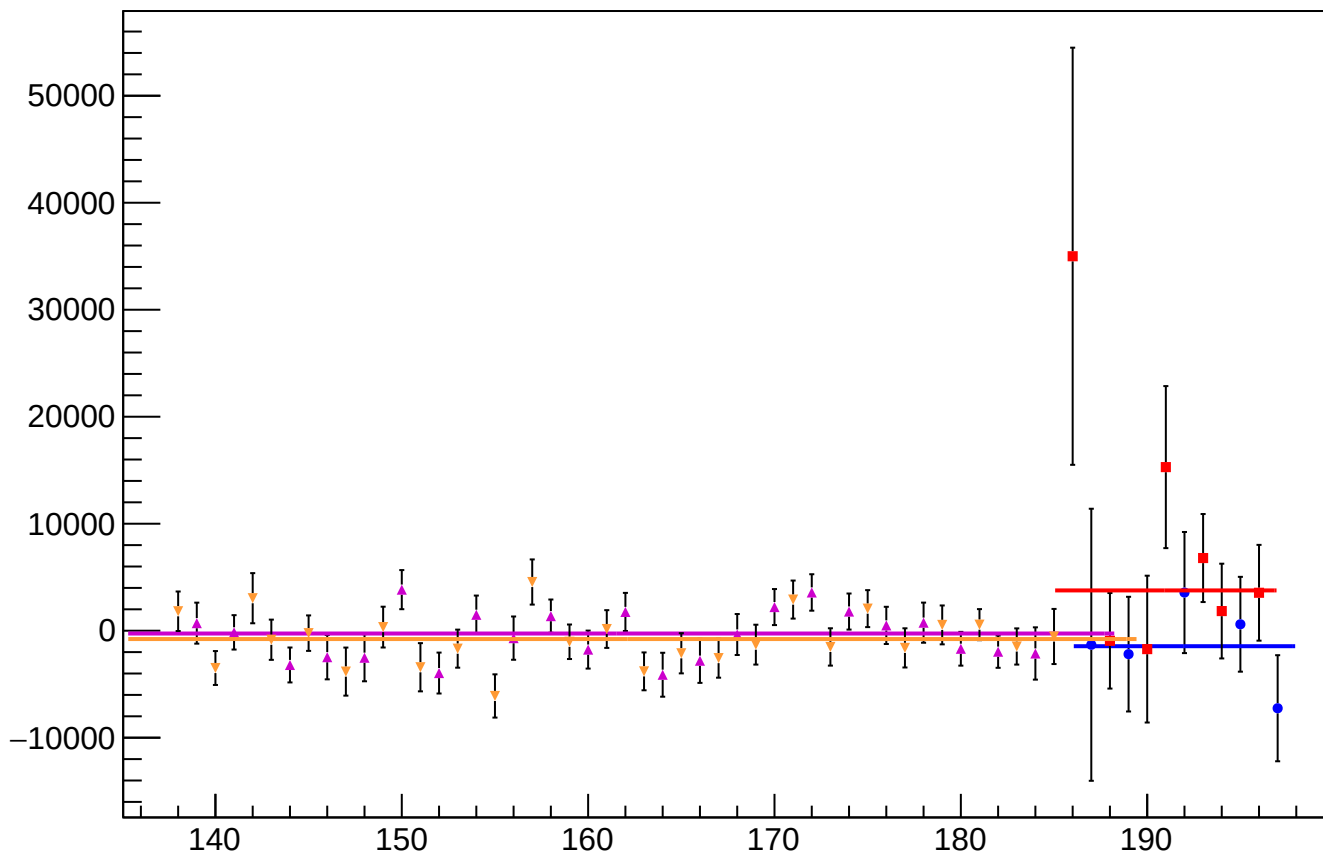


Right In: 211.602 $\pm$ 0.091  $\chi^2$ /NDF: 3198.7/4  
 Left Out: 215.963 $\pm$ 0.036  $\chi^2$ /NDF:144735.1/24  
 Right Out: 217.634 $\pm$ 0.075  $\chi^2$ /NDF: 98214.0/6  
 Left In: 216.821 $\pm$ 0.037  $\chi^2$ /NDF:132518.8/22

Left: 216.382 $\pm$ 0.026  $\chi^2$ /NDF: 277535.4/47  
 Right: 215.188 $\pm$ 0.058  $\chi^2$ /NDF: 104006.0/11  
 In: 216.099 $\pm$ 0.034  $\chi^2$ /NDF:138531.6/27  
 Out: 216.270 $\pm$ 0.032  $\chi^2$ /NDF:243349.8/31  
 All: 216.189 $\pm$ 0.023  $\chi^2$ /NDF: 381894.6/59



asym\_sam\_26\_dd\_correction\_mean vs Slug, Sign Corrected



Right In:  $-1447.882 \pm 2470.745$   $\chi^2/\text{NDF}: 2.4/4$

Left Out:  $-779.146 \pm 366.965$   $\chi^2/\text{NDF}: 38.5/24$

Right Out:  $3765.546 \pm 1994.084$   $\chi^2/\text{NDF}: 7.4/6$

Left In:  $-261.815 \pm 376.203$   $\chi^2/\text{NDF}: 35.4/22$

Left:  $-526.910 \pm 262.688$   $\chi^2/\text{NDF}: 74.9/47$

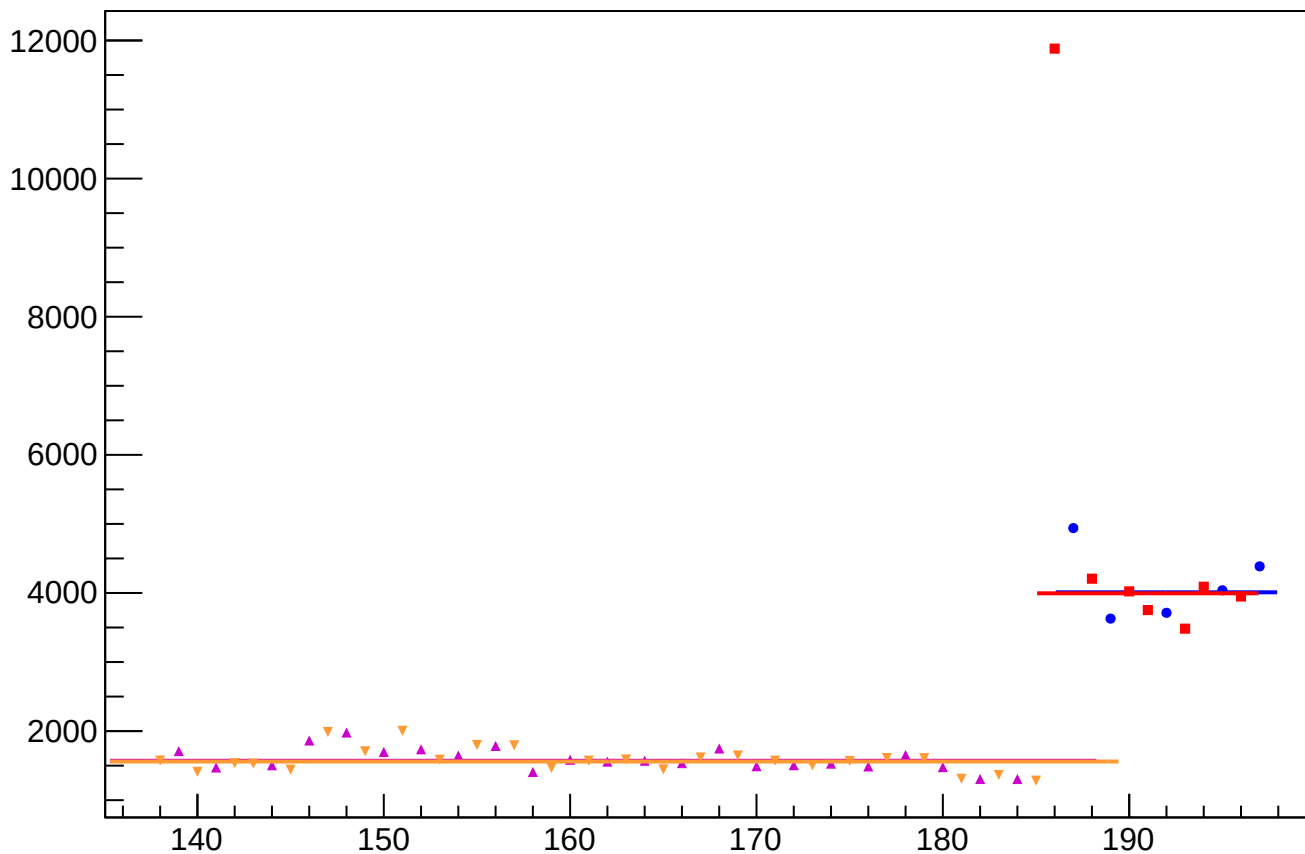
Right:  $1709.141 \pm 1551.746$   $\chi^2/\text{NDF}: 12.5/11$

In:  $-288.689 \pm 371.916$   $\chi^2/\text{NDF}: 38.1/27$

Out:  $-630.277 \pm 360.905$   $\chi^2/\text{NDF}: 50.9/31$

All:  $-464.615 \pm 259.003$   $\chi^2/\text{NDF}: 89.4/59$

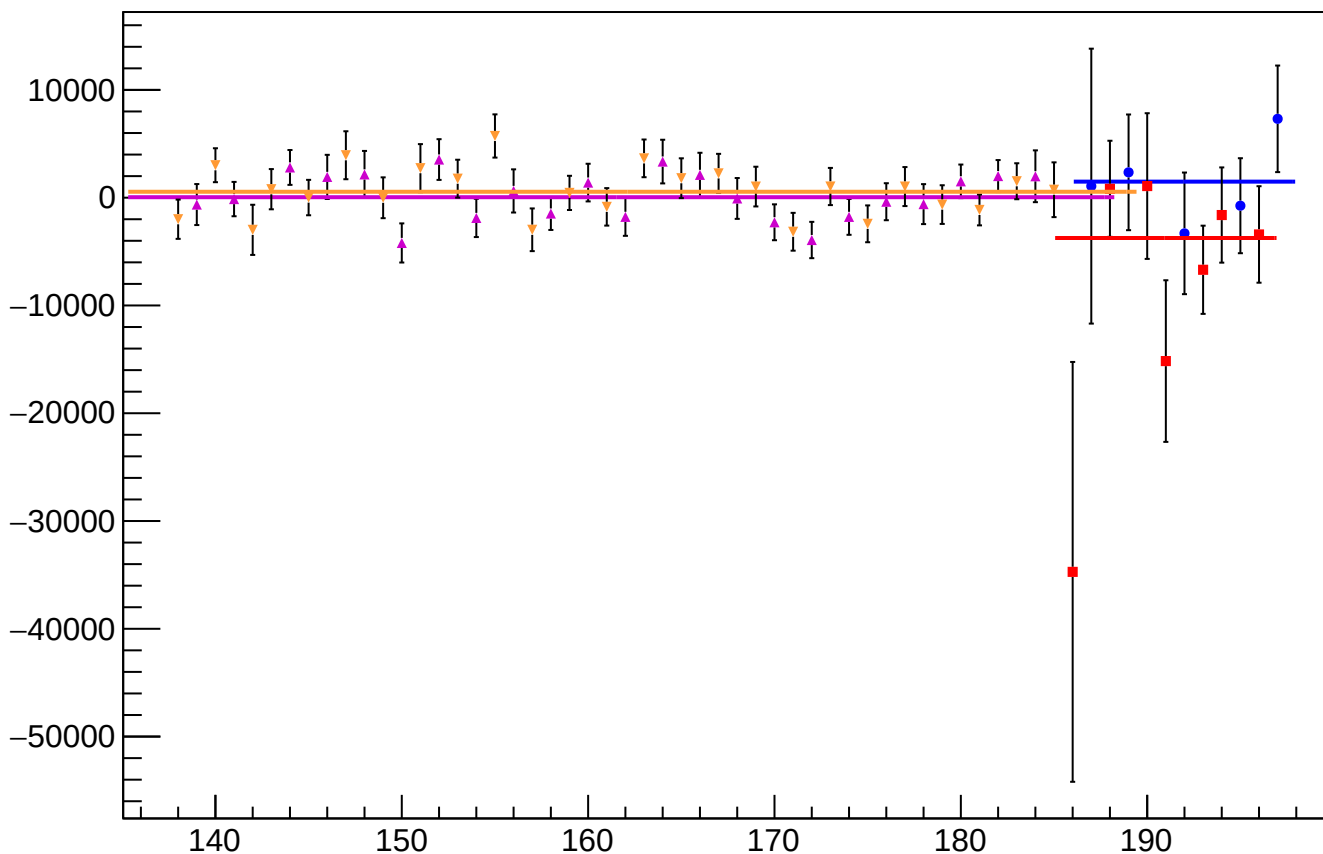
asym\_sam\_26\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 4009.690 $\pm$ 1.747  $\chi^2$ /NDF: 37878.2/4  
 Left Out: 1559.504 $\pm$ 0.259  $\chi^2$ /NDF: 379160.1/24  
 Right Out: 3995.285 $\pm$ 1.410  $\chi^2$ /NDF: 366062.2/6  
 Left In: 1570.331 $\pm$ 0.266  $\chi^2$ /NDF: 329434.5/22

Left: 1564.783 $\pm$ 0.186  $\chi^2$ /NDF: 709443.3/47  
 Right: 4000.967 $\pm$ 1.097  $\chi^2$ /NDF: 403981.5/11  
 In: 1625.603 $\pm$ 0.263  $\chi^2$ /NDF: 2272649.9/27  
 Out: 1639.292 $\pm$ 0.255  $\chi^2$ /NDF: 3631615.2/31  
 All: 1632.653 $\pm$ 0.183  $\chi^2$ /NDF: 5905660.6/59

# asym\_sam\_26\_dd\_mean vs Slug, Sign Corrected



Right In: 1489.128+/-2464.400  $\chi^2/\text{NDF}$ : 2.4/4

Left Out: 550.093+/-362.172  $\chi^2/\text{NDF}$ : 35.6/24

Right Out: -3740.444+/-1986.113  $\chi^2/\text{NDF}$ : 7.2/6

Left In: 43.949+/-371.765  $\chi^2/\text{NDF}$ : 33.5/22

Left: 303.636+/-259.420  $\chi^2/\text{NDF}$ : 70.0/47

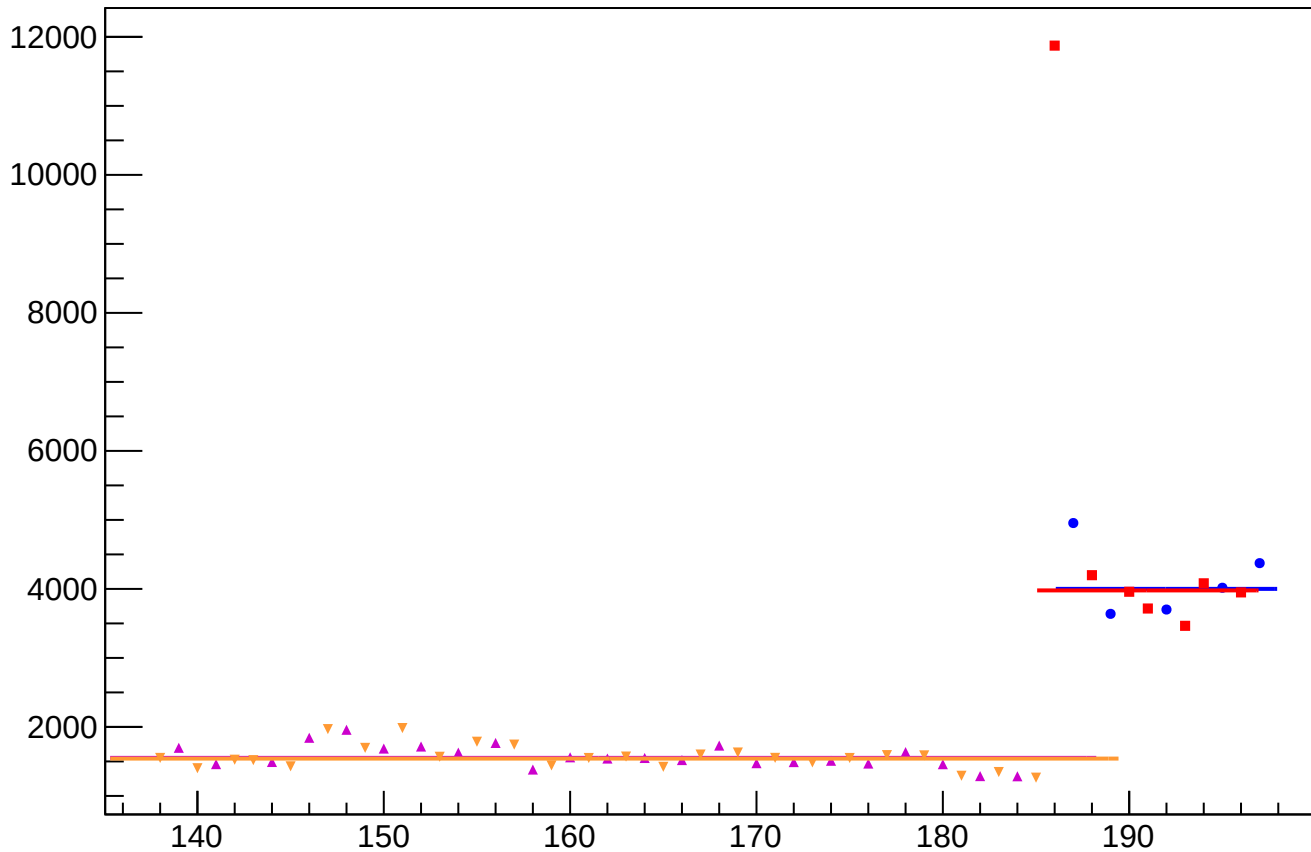
Right: -1681.252+/-1546.417  $\chi^2/\text{NDF}$ : 12.3/11

In: 76.105+/-367.606  $\chi^2/\text{NDF}$ : 36.3/27

Out: 412.014+/-356.297  $\chi^2/\text{NDF}$ : 47.2/31

All: 249.306+/-255.845  $\chi^2/\text{NDF}$ : 83.9/59

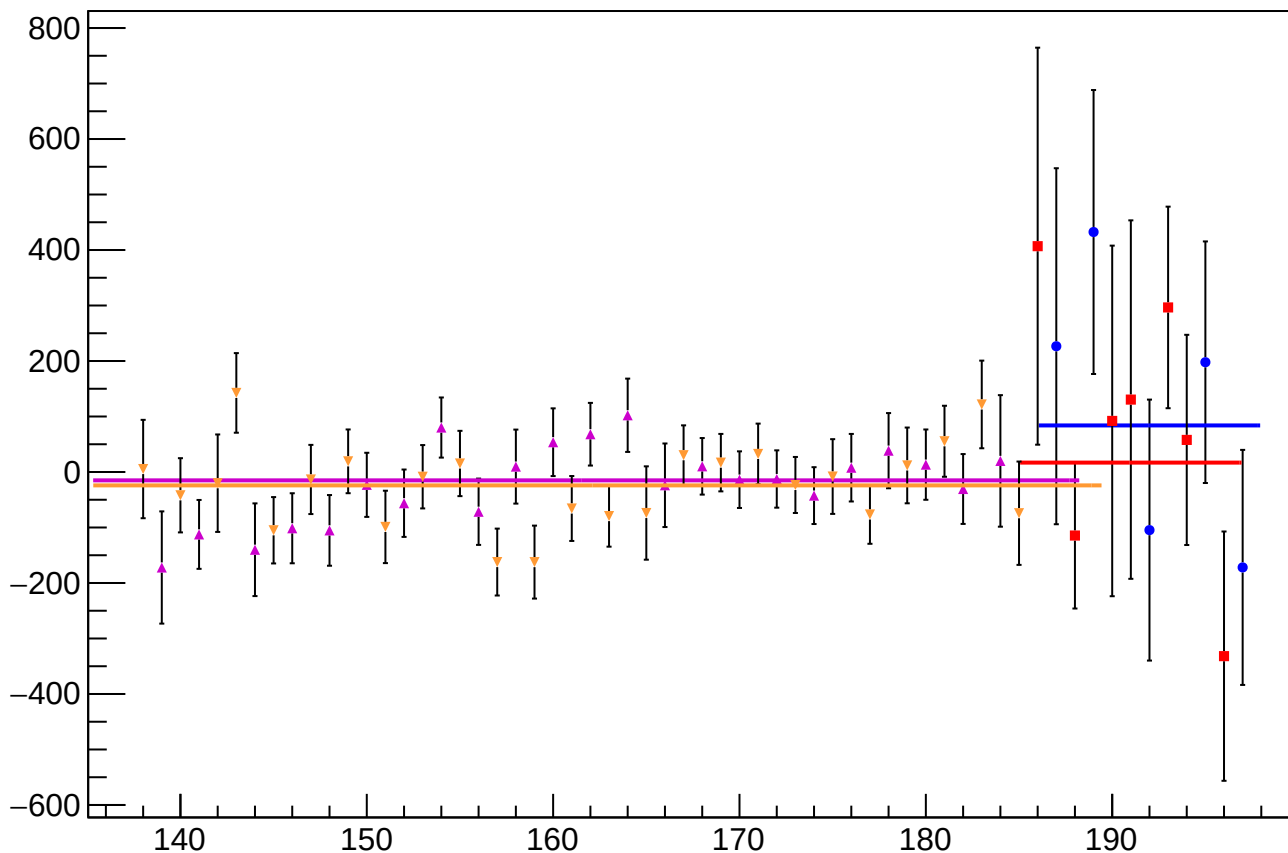
# asym\_sam\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 4000.541 $\pm$ 1.743  $\chi^2$ /NDF: 37332.7/4  
 Left Out: 1541.149 $\pm$ 0.256  $\chi^2$ /NDF: 382077.8/24  
 Right Out: 3978.355 $\pm$ 1.404  $\chi^2$ /NDF: 368568.5/6  
 Left In: 1551.481 $\pm$ 0.263  $\chi^2$ /NDF: 339002.9/22

Left: 1546.180 $\pm$ 0.183  $\chi^2$ /NDF: 721873.3/47  
 Right: 3987.091 $\pm$ 1.093  $\chi^2$ /NDF: 405999.5/11  
 In: 1605.974 $\pm$ 0.260  $\chi^2$ /NDF: 2307566.3/27  
 Out: 1619.583 $\pm$ 0.252  $\chi^2$ /NDF: 3665390.3/31  
 All: 1612.991 $\pm$ 0.181  $\chi^2$ /NDF: 5974369.9/59

# dit\_asym\_sam\_37\_dd\_mean vs Slug, Sign Corrected



Right In: 83.904 $\pm$ 107.523  $\chi^2$ /NDF: 4.4/4

Left Out: -24.126 $\pm$ 12.525  $\chi^2$ /NDF:30.7/24

Right Out: 16.930 $\pm$ 78.265  $\chi^2$ /NDF: 7.2/6

Left In: -15.058 $\pm$ 12.921  $\chi^2$ /NDF:23.8/22

Left: -19.733 $\pm$ 8.993  $\chi^2$ /NDF: 54.8/47

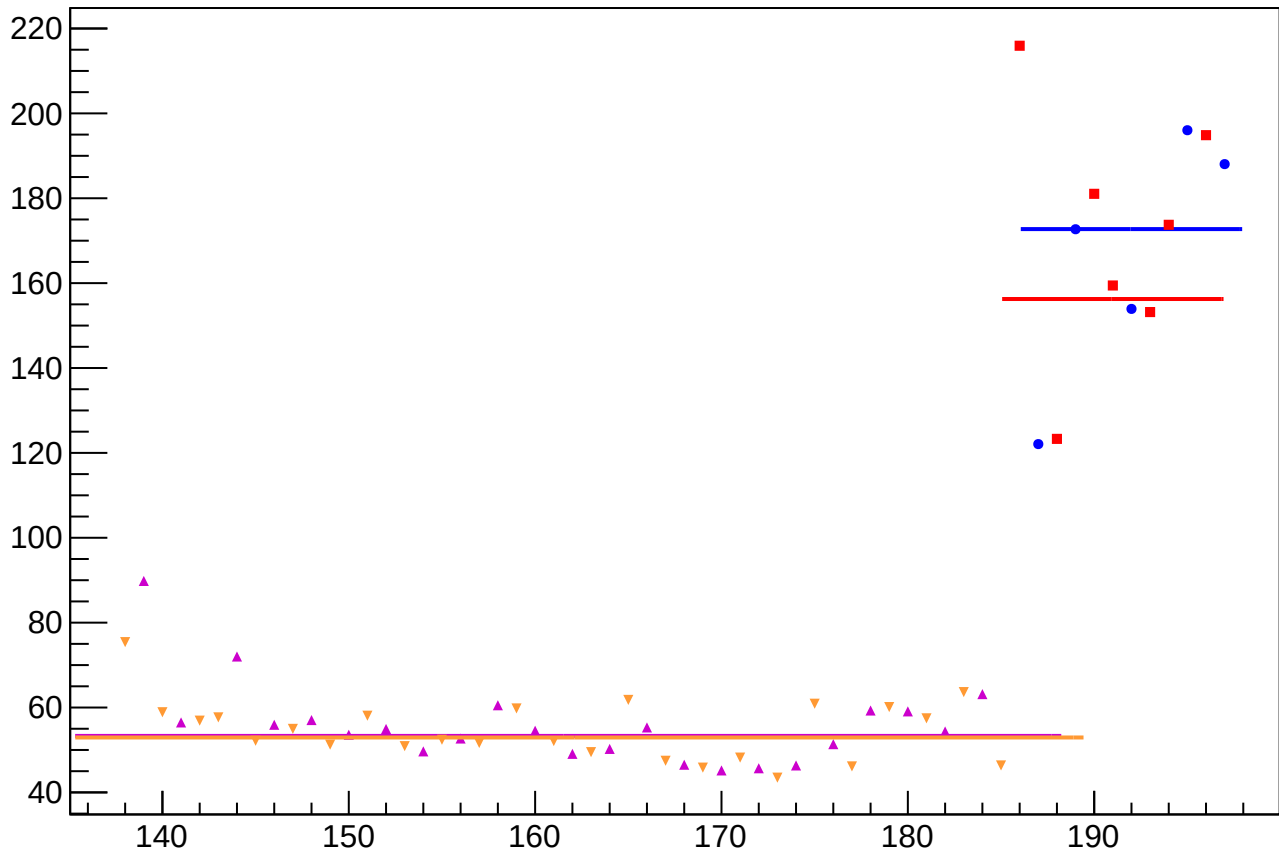
Right: 40.125 $\pm$ 63.277  $\chi^2$ /NDF: 11.9/11

In: -13.649 $\pm$ 12.829  $\chi^2$ /NDF:29.1/27

Out: -23.101 $\pm$ 12.367  $\chi^2$ /NDF:38.1/31

All: -18.548 $\pm$ 8.904  $\chi^2$ /NDF: 67.5/59

# dit\_asym\_sam\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 172.734 $\pm$ 0.076  $\chi^2$ /NDF: 96058.8/4

Left Out: 52.942 $\pm$ 0.009  $\chi^2$ /NDF:513146.0/24

Right Out: 156.260 $\pm$ 0.055  $\chi^2$ /NDF: 270450.1/6

Left In: 53.312 $\pm$ 0.009  $\chi^2$ /NDF:644220.1/22

Left: 53.121 $\pm$ 0.006  $\chi^2$ /NDF: 1158211.4/47

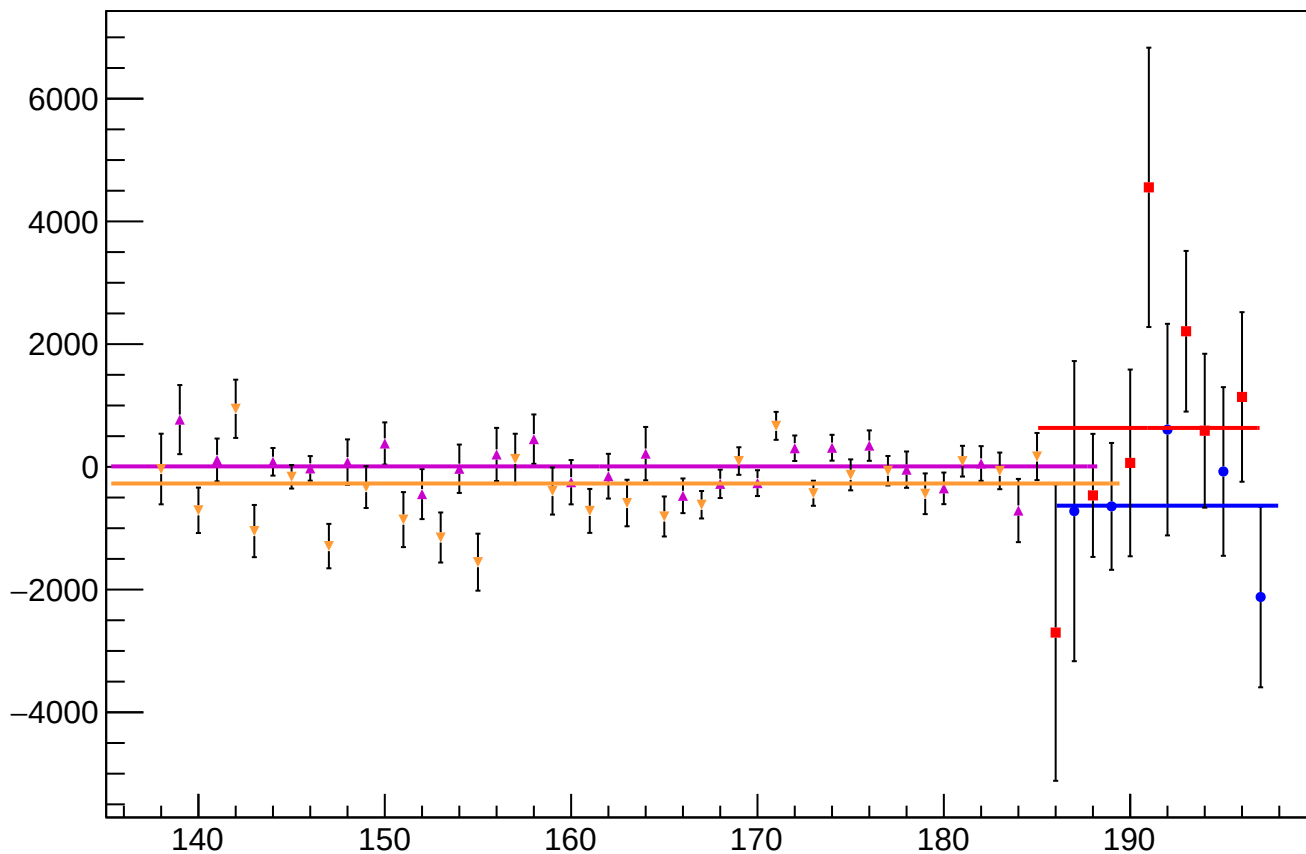
Right: 161.965 $\pm$ 0.045  $\chi^2$ /NDF: 397199.6/11

In: 55.012 $\pm$ 0.009  $\chi^2$ /NDF:3172300.7/27

Out: 55.522 $\pm$ 0.009  $\chi^2$ /NDF:4181939.9/31

All: 55.276 $\pm$ 0.006  $\chi^2$ /NDF: 7355878.3/59

asym\_sam\_37\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: -632.687+/-641.484  $\chi^2/\text{NDF}$ : 1.7/4

Left Out: -271.240+/-60.285  $\chi^2/\text{NDF}$ : 67.7/24

Right Out: 634.412+/-531.947  $\chi^2/\text{NDF}$ : 7.8/6

Left In: 7.535+/-60.328  $\chi^2/\text{NDF}$ : 22.9/22

Left: -131.952+/-42.643  $\chi^2/\text{NDF}$ : 101.2/47

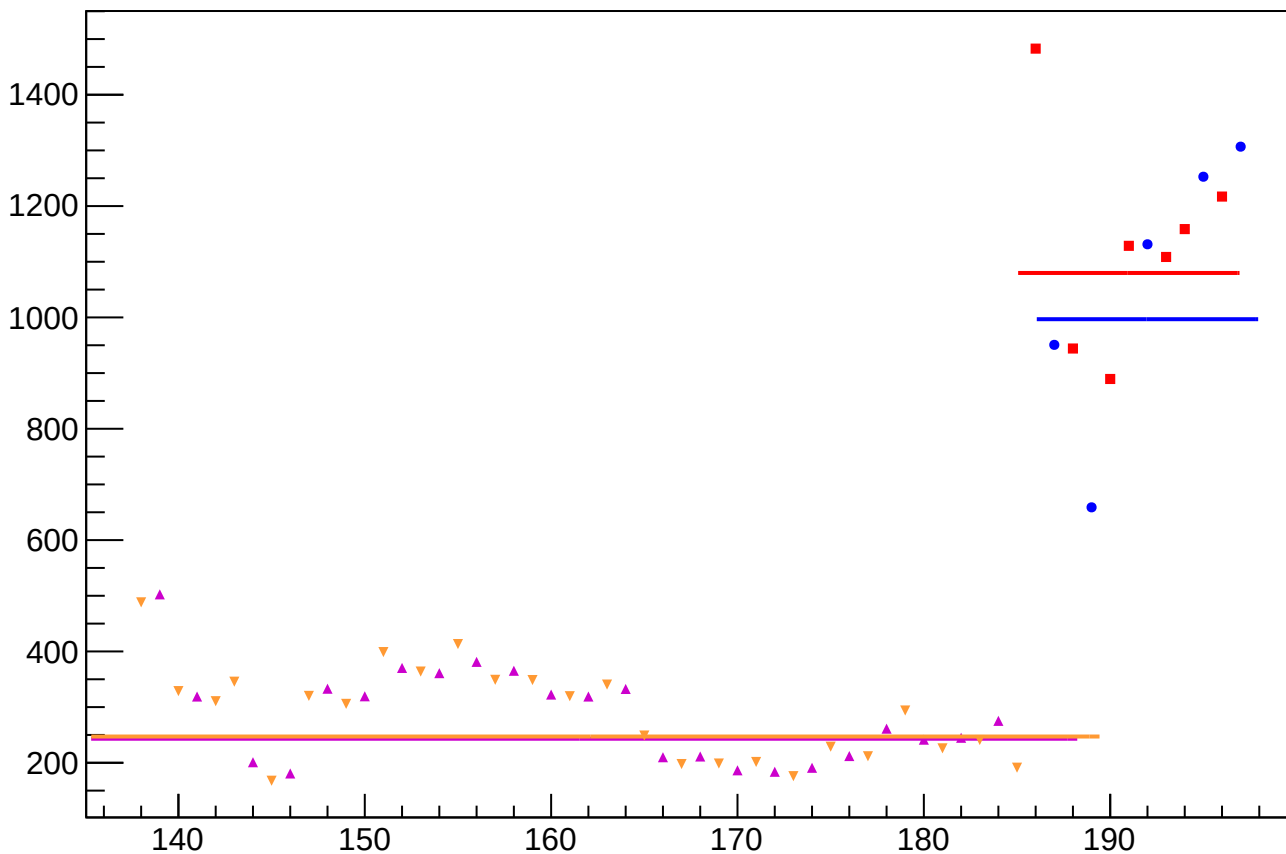
Right: 118.121+/-409.475  $\chi^2/\text{NDF}$ : 11.8/11

In: 1.922+/-60.063  $\chi^2/\text{NDF}$ : 25.5/27

Out: -259.756+/-59.901  $\chi^2/\text{NDF}$ : 78.3/31

All: -129.269+/-42.414  $\chi^2/\text{NDF}$ : 113.4/59

asym\_sam\_37\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 996.798+/-0.454  $\chi^2/\text{NDF}$ : 384610.0/4

Left Out: 247.166+/-0.043  $\chi^2/\text{NDF}$ : 2853302.0/24

Right Out: 1079.852+/-0.376  $\chi^2/\text{NDF}$ : 153123.2/6

Left In: 243.189+/-0.043  $\chi^2/\text{NDF}$ : 2571190.8/22

Left: 245.179+/-0.030  $\chi^2/\text{NDF}$ : 5428841.5/47

Right: 1046.011+/-0.290  $\chi^2/\text{NDF}$ : 557598.7/11

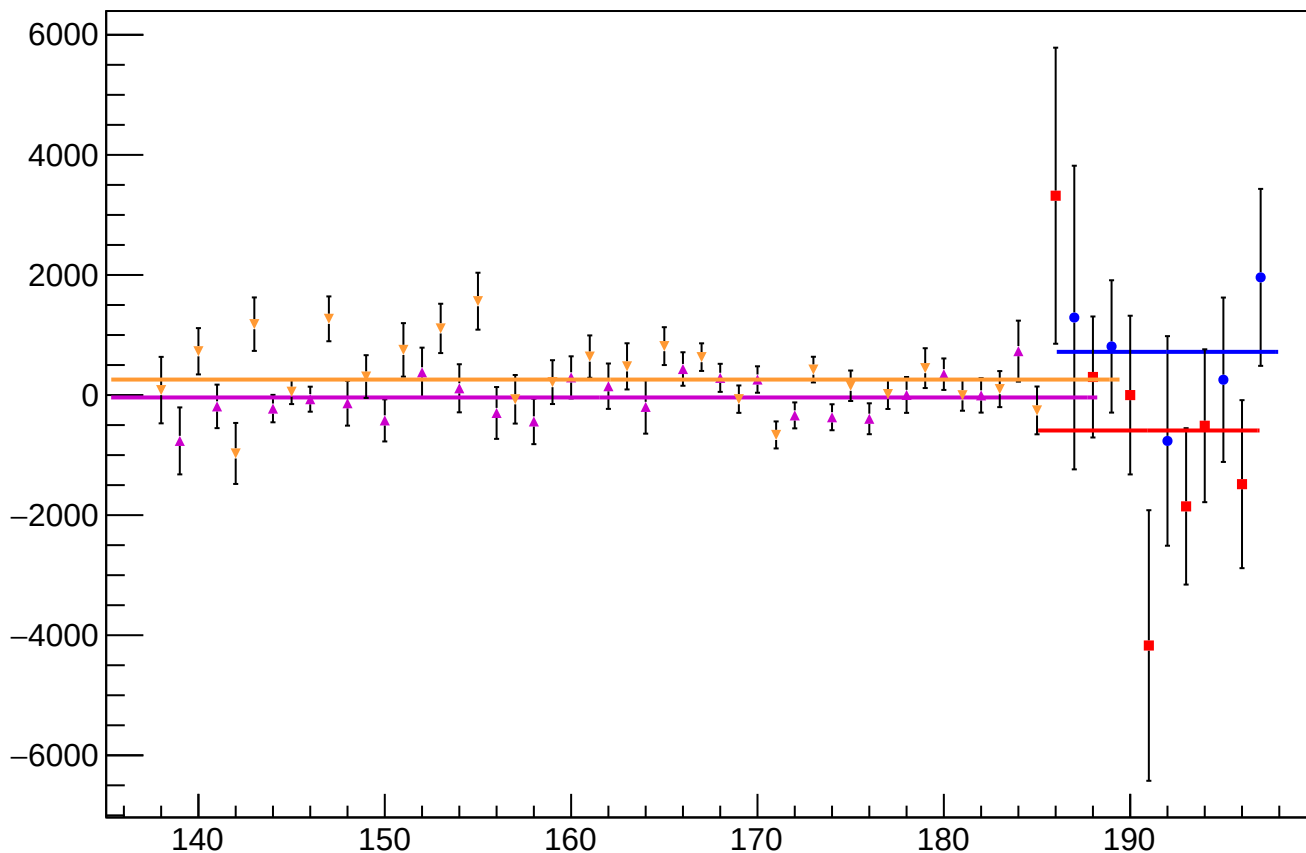
In: 249.795+/-0.042  $\chi^2/\text{NDF}$ : 5691871.5/27

Out: 257.724+/-0.042  $\chi^2/\text{NDF}$ : 7844955.6/31

All: 253.771+/-0.030  $\chi^2/\text{NDF}$ : 13554301.4/59



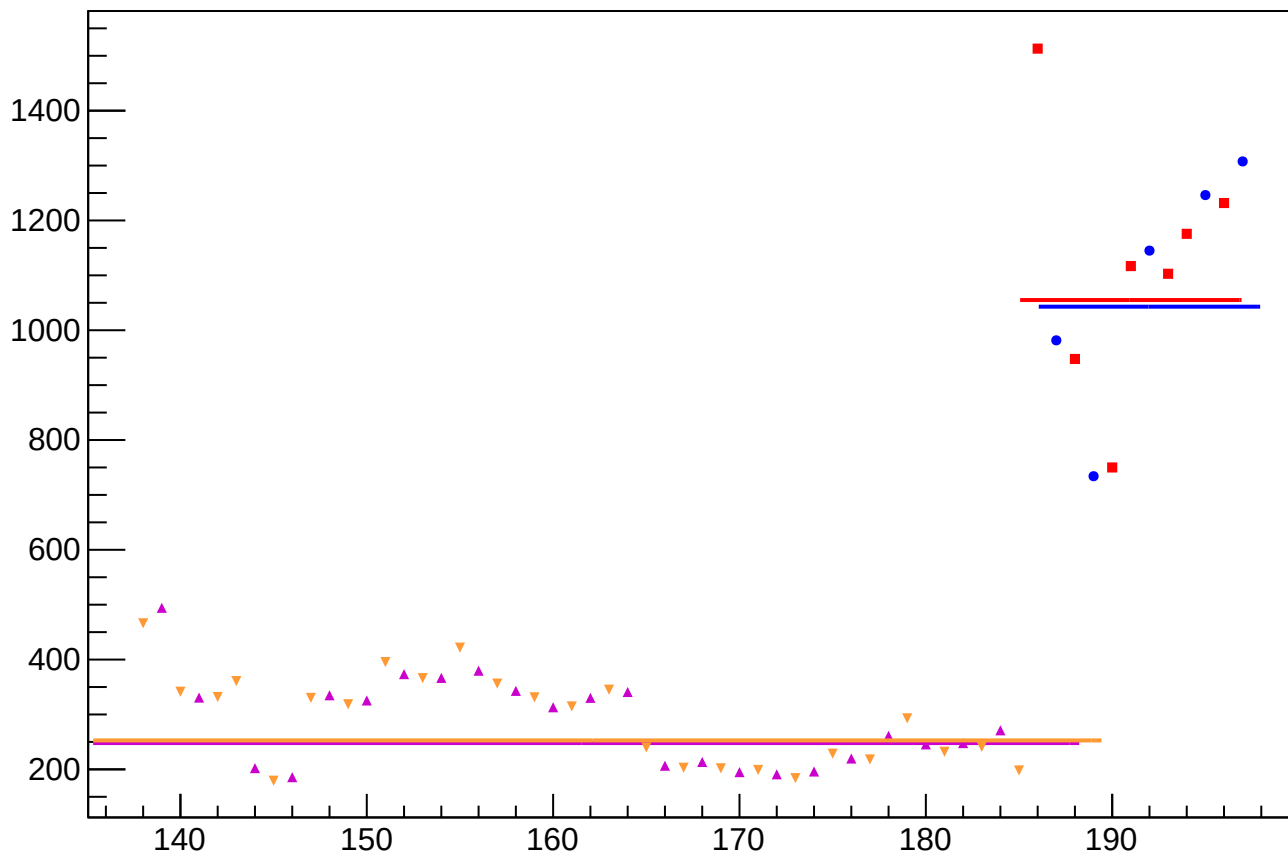
# asym\_sam\_37\_dd\_mean vs Slug, Sign Corrected



Right In:  $719.479 \pm 659.070$   $\chi^2/\text{NDF}: 1.6/4$   
 Left Out:  $258.044 \pm 61.488$   $\chi^2/\text{NDF}: 65.0/24$   
 Right Out:  $-590.103 \pm 524.407$   $\chi^2/\text{NDF}: 7.4/6$   
 Left In:  $-40.015 \pm 61.495$   $\chi^2/\text{NDF}: 25.0/22$

Left:  $109.033 \pm 43.481$   $\chi^2/\text{NDF}: 101.8/47$   
 Right:  $-82.420 \pm 410.357$   $\chi^2/\text{NDF}: 11.4/11$   
 In:  $-33.460 \pm 61.229$   $\chi^2/\text{NDF}: 28.0/27$   
 Out:  $246.542 \pm 61.069$   $\chi^2/\text{NDF}: 74.9/31$   
 All:  $106.907 \pm 43.239$   $\chi^2/\text{NDF}: 113.4/59$

# asym\_sam\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 1042.916+/-0.466  $\chi^2/\text{NDF}$ : 273708.1/4

Left Out: 252.721+/-0.043  $\chi^2/\text{NDF}$ : 2648800.3/24

Right Out: 1055.047+/-0.371  $\chi^2/\text{NDF}$ : 252374.2/6

Left In: 247.919+/-0.043  $\chi^2/\text{NDF}$ : 2374698.8/22

Left: 250.320+/-0.031  $\chi^2/\text{NDF}$ : 5029597.8/47

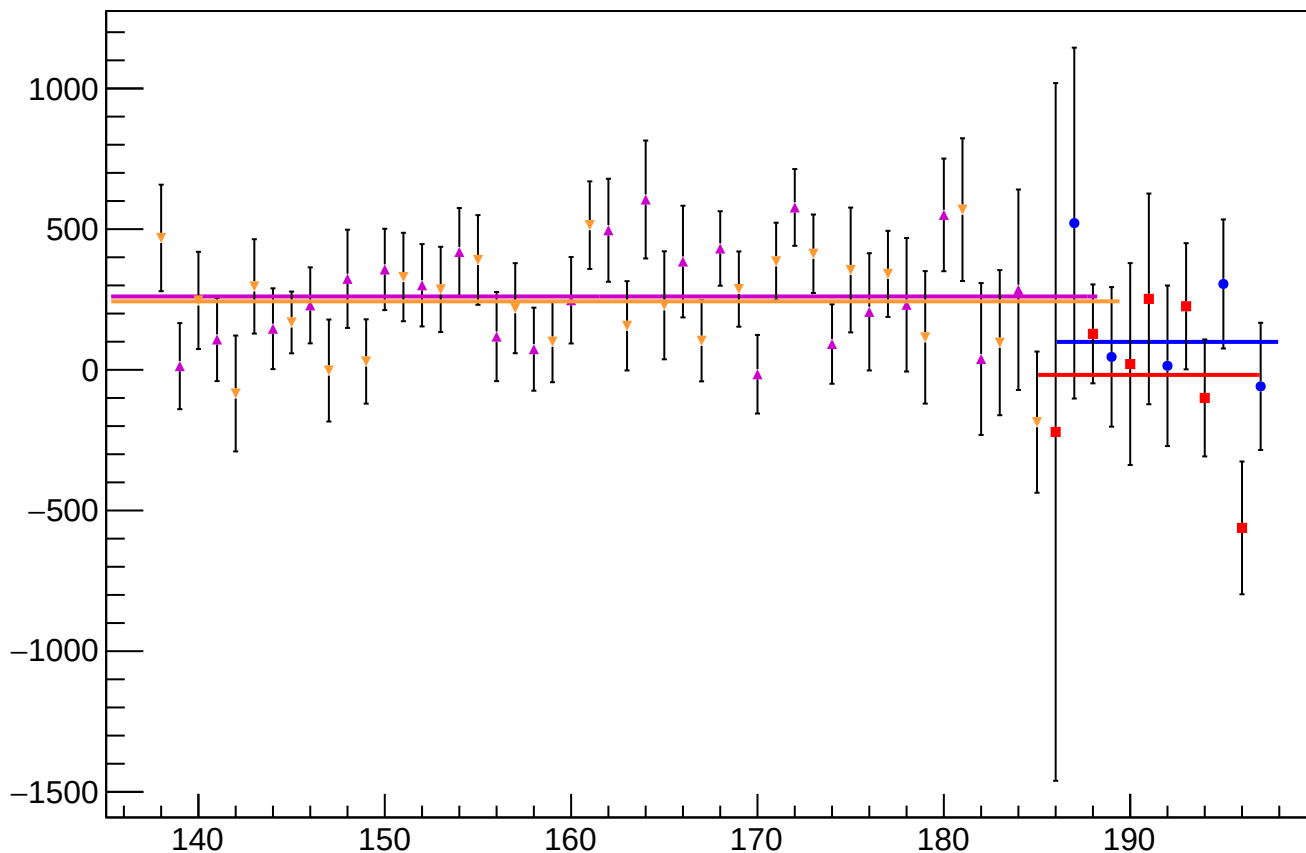
Right: 1050.344+/-0.290  $\chi^2/\text{NDF}$ : 526497.2/11

In: 254.780+/-0.043  $\chi^2/\text{NDF}$ : 5533326.4/27

Out: 263.601+/-0.043  $\chi^2/\text{NDF}$ : 7519292.6/31

All: 259.202+/-0.031  $\chi^2/\text{NDF}$ : 13073429.8/59

dit\_asym\_sam\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 99.261 $\pm$ 119.768  $\chi^2$ /NDF: 1.9/4

Left Out: 243.442 $\pm$ 32.738  $\chi^2$ /NDF:23.4/24

Right Out: -17.977 $\pm$ 95.828  $\chi^2$ /NDF: 7.9/6

Left In: 260.749 $\pm$ 33.988  $\chi^2$ /NDF:28.5/22

Left: 251.772 $\pm$ 23.579  $\chi^2$ /NDF: 52.0/47

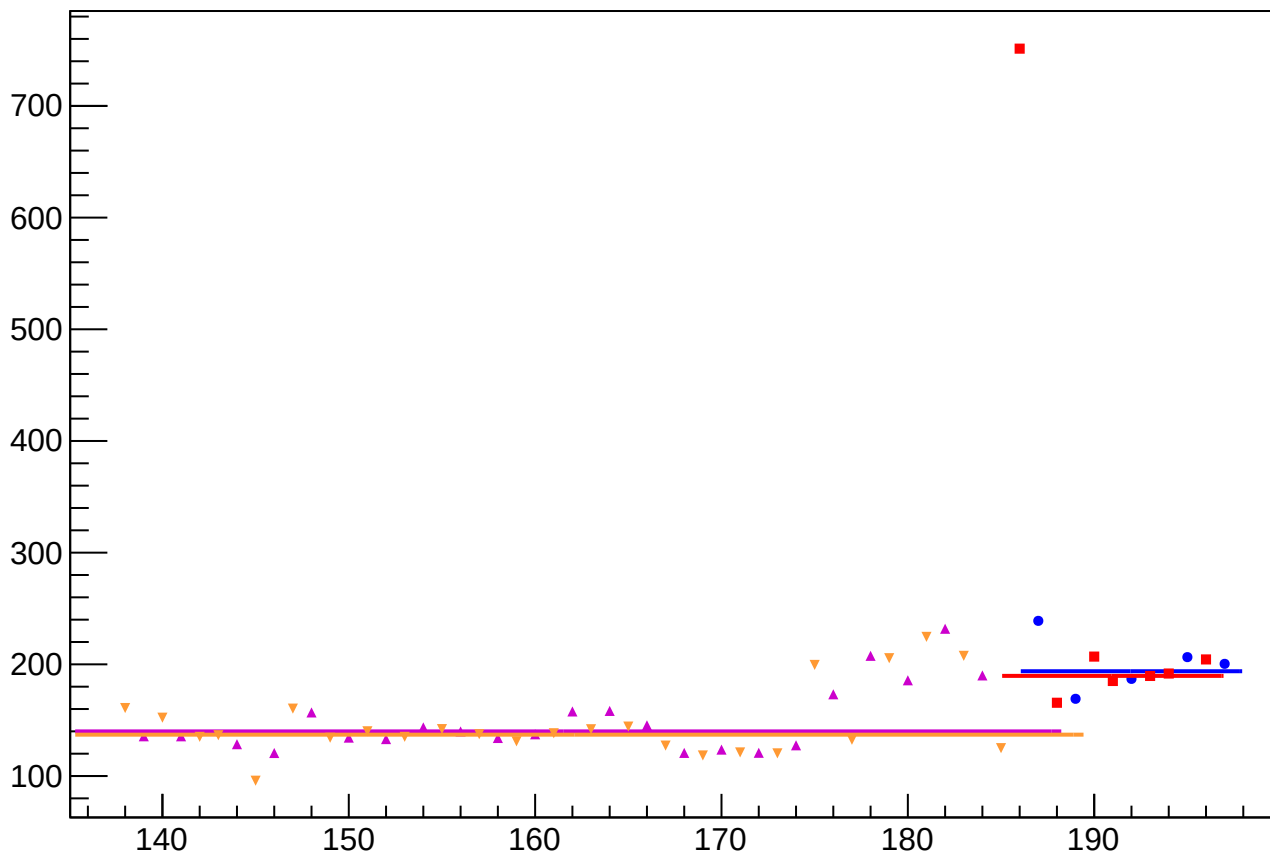
Right: 27.782 $\pm$ 74.825  $\chi^2$ /NDF: 10.4/11

In: 248.714 $\pm$ 32.697  $\chi^2$ /NDF:32.0/27

Out: 216.120 $\pm$ 30.980  $\chi^2$ /NDF:38.0/31

All: 231.539 $\pm$ 22.489  $\chi^2$ /NDF: 70.5/59

dit\_asym\_sam\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 193.830 $\pm$ 0.085  $\chi^2$ /NDF: 39221.8/4

Left Out: 137.036 $\pm$ 0.023  $\chi^2$ /NDF:1200381.2/24

Right Out: 189.671 $\pm$ 0.068  $\chi^2$ /NDF: 460682.1/6

Left In: 139.966 $\pm$ 0.024  $\chi^2$ /NDF:838127.9/22

Left: 138.446 $\pm$ 0.017  $\chi^2$ /NDF: 2046220.3/47

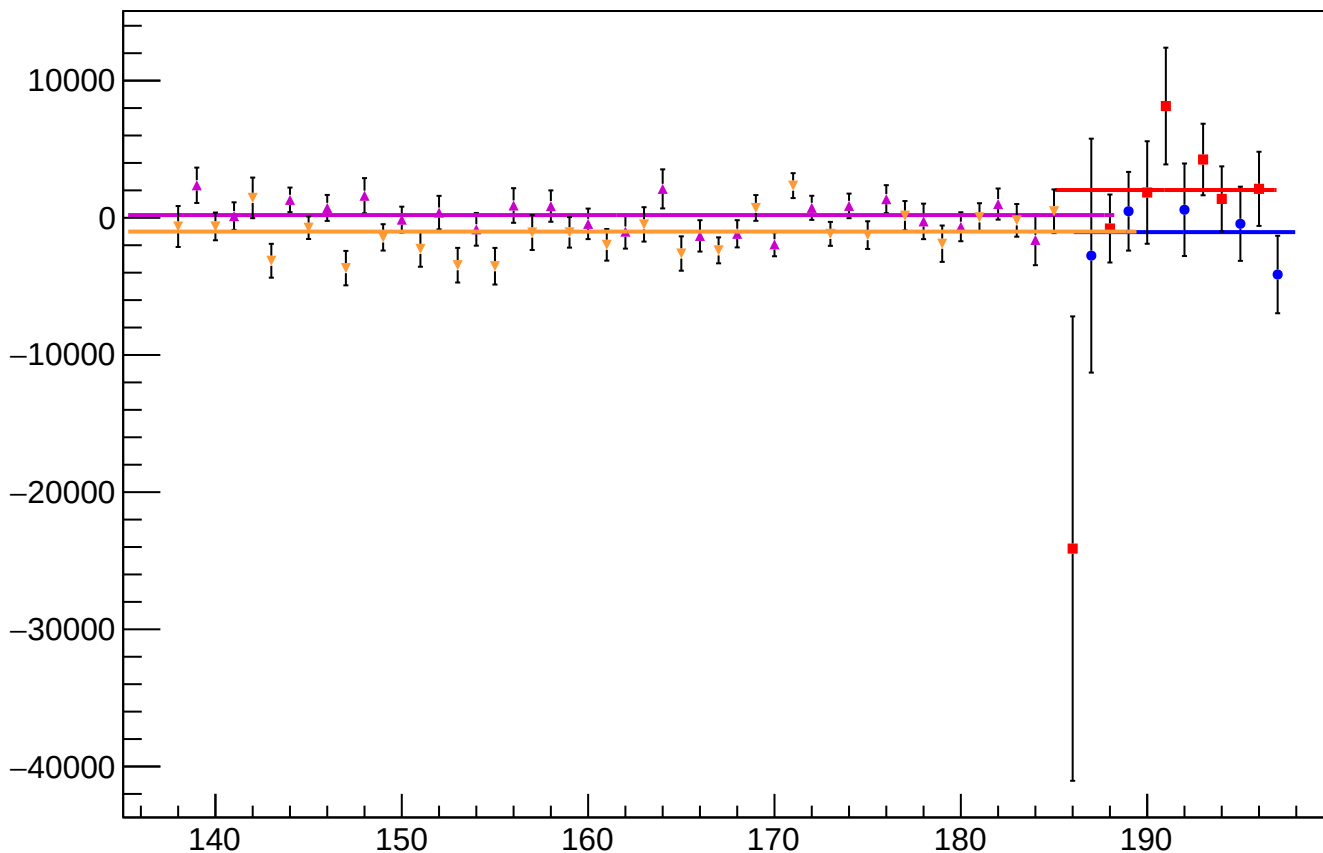
Right: 191.294 $\pm$ 0.053  $\chi^2$ /NDF: 501374.8/11

In: 143.980 $\pm$ 0.023  $\chi^2$ /NDF:1251732.9/27

Out: 142.537 $\pm$ 0.022  $\chi^2$ /NDF:2201382.5/31

All: 143.220 $\pm$ 0.016  $\chi^2$ /NDF: 3455169.6/59

asym\_sam\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: -1043.174+/-1435.496  $\chi^2/\text{NDF}$ : 1.8/4

Left Out: -1004.364+/-222.387  $\chi^2/\text{NDF}$ : 44.7/24

Right Out: 2025.657+/-1151.025  $\chi^2/\text{NDF}$ : 6.5/6

Left In: 198.654+/-225.997  $\chi^2/\text{NDF}$ : 24.6/22

Left: -412.541+/-158.512  $\chi^2/\text{NDF}$ : 83.7/47

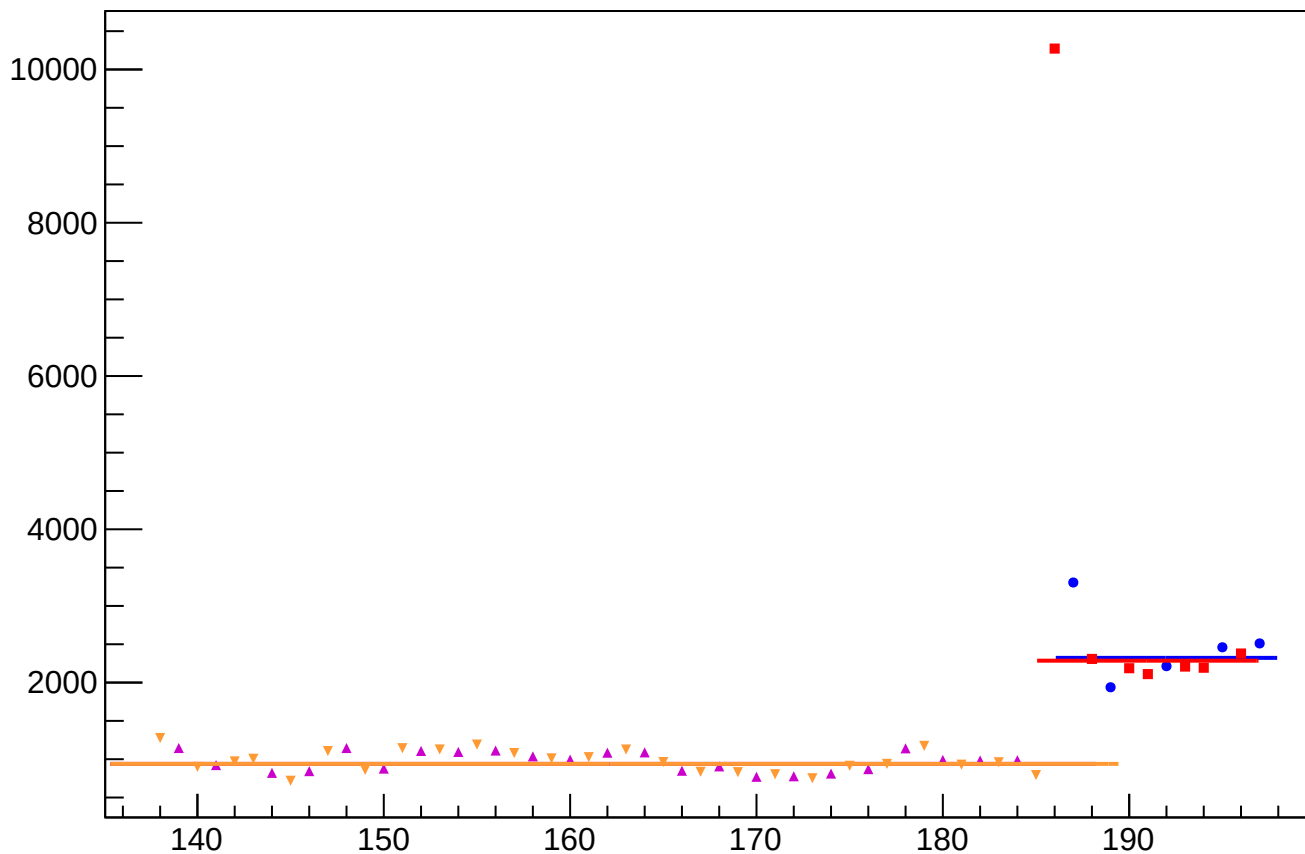
Right: 824.724+/-897.997  $\chi^2/\text{NDF}$ : 11.1/11

In: 168.619+/-223.248  $\chi^2/\text{NDF}$ : 27.2/27

Out: -895.326+/-218.349  $\chi^2/\text{NDF}$ : 57.9/31

All: -375.154+/-156.099  $\chi^2/\text{NDF}$ : 96.7/59

asym\_sam\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 2322.259+/-1.015  $\chi^2/\text{NDF}$ : 78548.1/4

Left Out: 938.988+/-0.157  $\chi^2/\text{NDF}$ : 828400.0/24

Right Out: 2285.740+/-0.814  $\chi^2/\text{NDF}$ : 457302.4/6

Left In: 938.755+/-0.160  $\chi^2/\text{NDF}$ : 611419.0/22

Left: 938.874+/-0.112  $\chi^2/\text{NDF}$ : 1439820.2/47

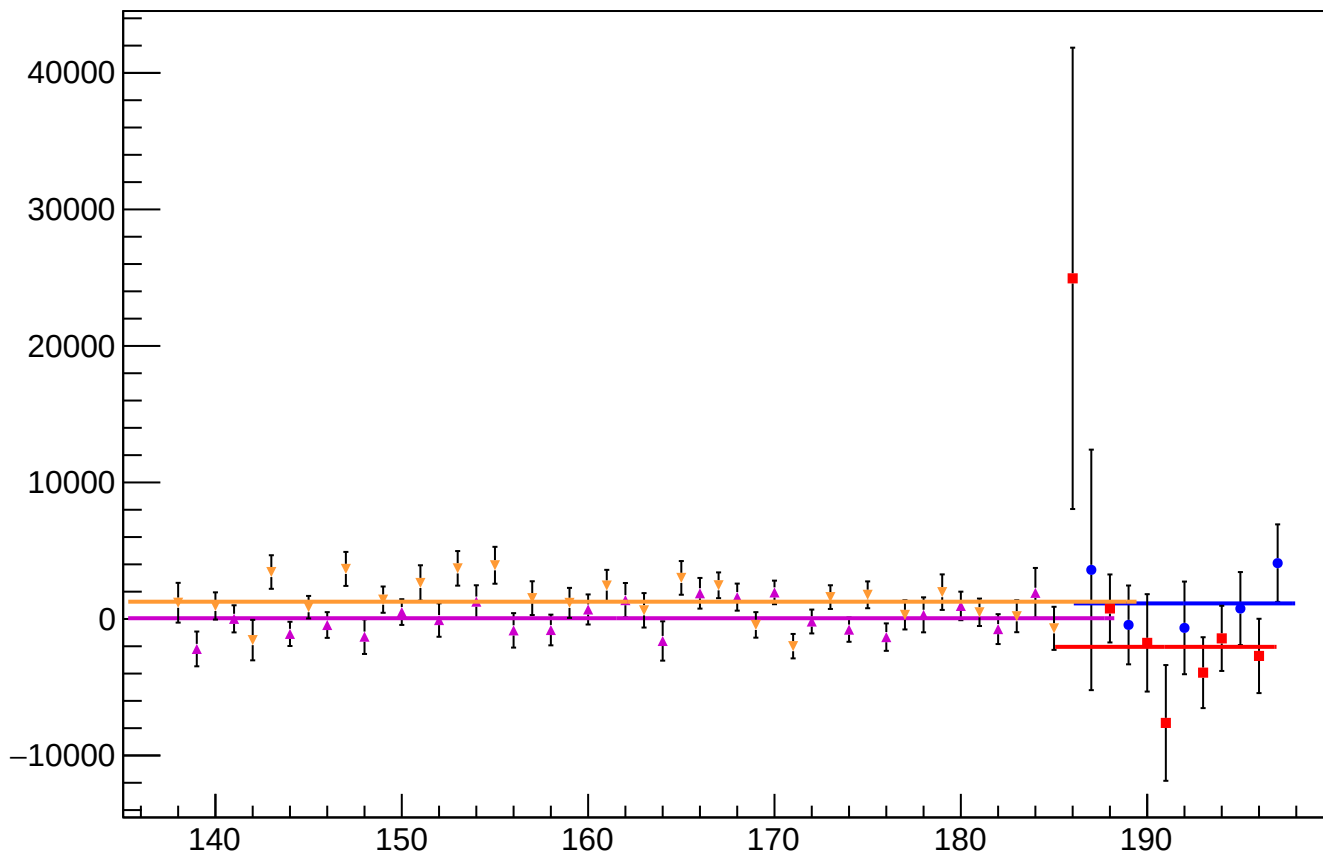
Right: 2300.031+/-0.635  $\chi^2/\text{NDF}$ : 536638.3/11

In: 972.217+/-0.158  $\chi^2/\text{NDF}$ : 2502783.3/27

Out: 987.453+/-0.154  $\chi^2/\text{NDF}$ : 3925187.2/31

All: 980.004+/-0.110  $\chi^2/\text{NDF}$ : 6432731.2/59

# asym\_sam\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 1139.455+/-1438.120  $\chi^2/\text{NDF}$ : 1.8/4

Left Out: 1264.940+/-220.626  $\chi^2/\text{NDF}$ : 45.5/24

Right Out: -2043.146+/-1148.620  $\chi^2/\text{NDF}$ : 6.2/6

Left In: 53.940+/-224.371  $\chi^2/\text{NDF}$ : 26.4/22

Left: 669.631+/-157.313  $\chi^2/\text{NDF}$ : 86.8/47

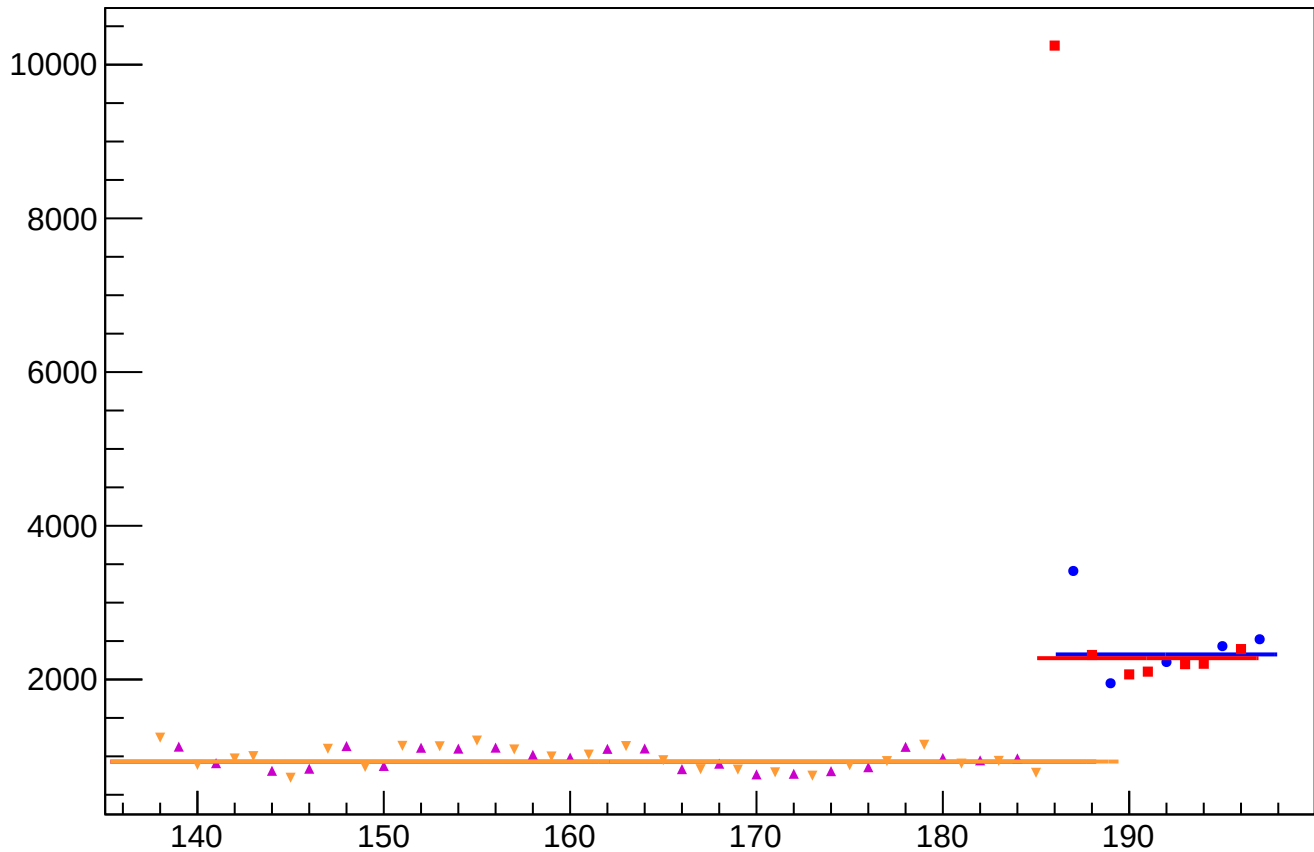
Right: -803.626+/-897.493  $\chi^2/\text{NDF}$ : 11.0/11

In: 79.734+/-221.689  $\chi^2/\text{NDF}$ : 28.7/27

Out: 1147.233+/-216.665  $\chi^2/\text{NDF}$ : 59.8/31

All: 625.716+/-154.951  $\chi^2/\text{NDF}$ : 100.3/59

# asym\_sam\_48\_dd\_rms vs Slug, Sign Corrected

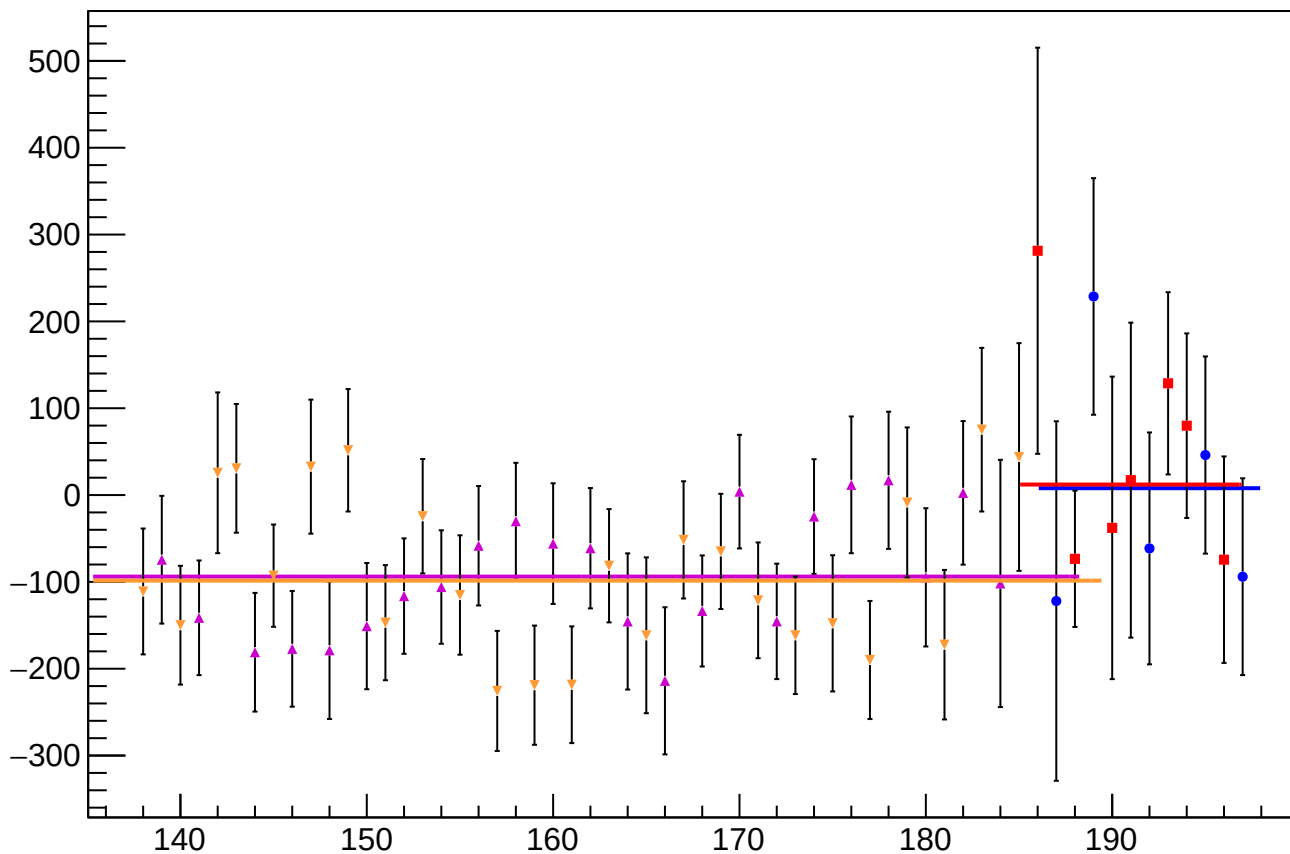


Right In: 2326.189+/-1.017  $\chi^2/\text{NDF}$ : 78804.1/4  
Left Out: 932.170+/-0.156  $\chi^2/\text{NDF}$ : 828733.8/24  
Right Out: 2277.362+/-0.812  $\chi^2/\text{NDF}$ : 463411.6/6  
Left In: 930.854+/-0.159  $\chi^2/\text{NDF}$ : 621985.5/22

Left: 931.523+/-0.111  $\chi^2/\text{NDF}$ : 1450754.2/47  
Right: 2296.379+/-0.635  $\chi^2/\text{NDF}$ : 543623.3/11  
In: 964.011+/-0.157  $\chi^2/\text{NDF}$ : 2538817.6/27  
Out: 980.034+/-0.153  $\chi^2/\text{NDF}$ : 3937666.4/31  
All: 972.206+/-0.110  $\chi^2/\text{NDF}$ : 6481827.7/59



dit\_asym\_sam\_13\_57\_dd\_mean vs Slug, Sign Corrected



Right In:  $7.910 \pm 58.851$   $\chi^2/\text{NDF}$ : 4.2/4

Left Out:  $-98.557 \pm 14.525$   $\chi^2/\text{NDF}$ : 35.2/24

Right Out:  $12.130 \pm 44.993$   $\chi^2/\text{NDF}$ : 4.8/6

Left In:  $-93.899 \pm 15.039$   $\chi^2/\text{NDF}$ : 19.3/22

Left:  $-96.309 \pm 10.448$   $\chi^2/\text{NDF}$ : 54.6/47

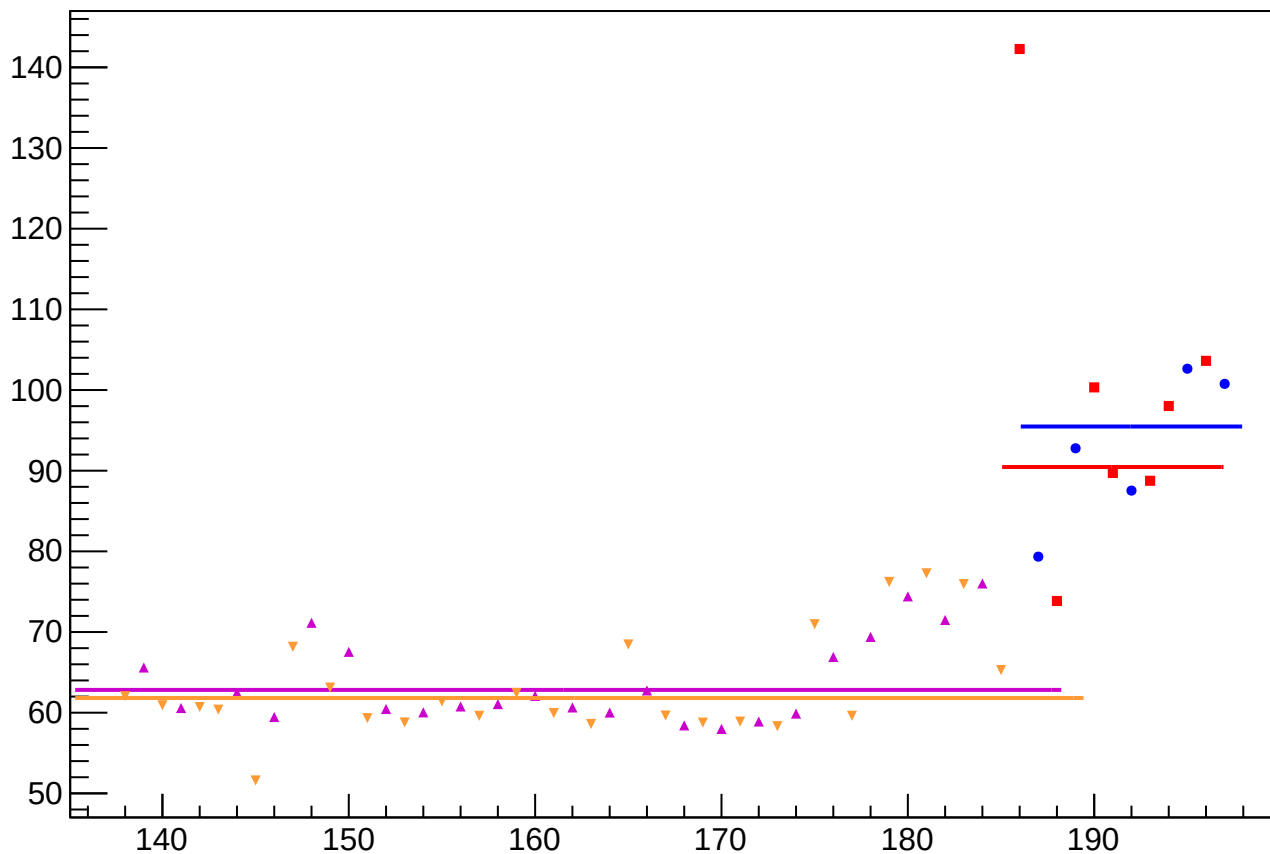
Right:  $10.573 \pm 35.744$   $\chi^2/\text{NDF}$ : 9.0/11

In:  $-87.658 \pm 14.571$   $\chi^2/\text{NDF}$ : 26.3/27

Out:  $-88.111 \pm 13.823$   $\chi^2/\text{NDF}$ : 45.5/31

All:  $-87.896 \pm 10.028$   $\chi^2/\text{NDF}$ : 71.8/59

dit\_asym\_sam\_13\_57\_dd\_rms vs Slug, Sign Corrected



Right In: 95.476+/-0.042     $\chi^2/\text{NDF}$ : 32329.6/4

Left Out: 61.827+/-0.010     $\chi^2/\text{NDF}$ :313572.8/24

Right Out:  $90.457 \pm 0.032$      $\chi^2/\text{NDF}$ : 229305.8/6

Left In: 62.827+/-0.011     $\chi^2/\text{NDF}$ :187007.2/22

Left:  $62.310 \pm 0.007$      $\chi^2/\text{NDF}: 505157.6/47$

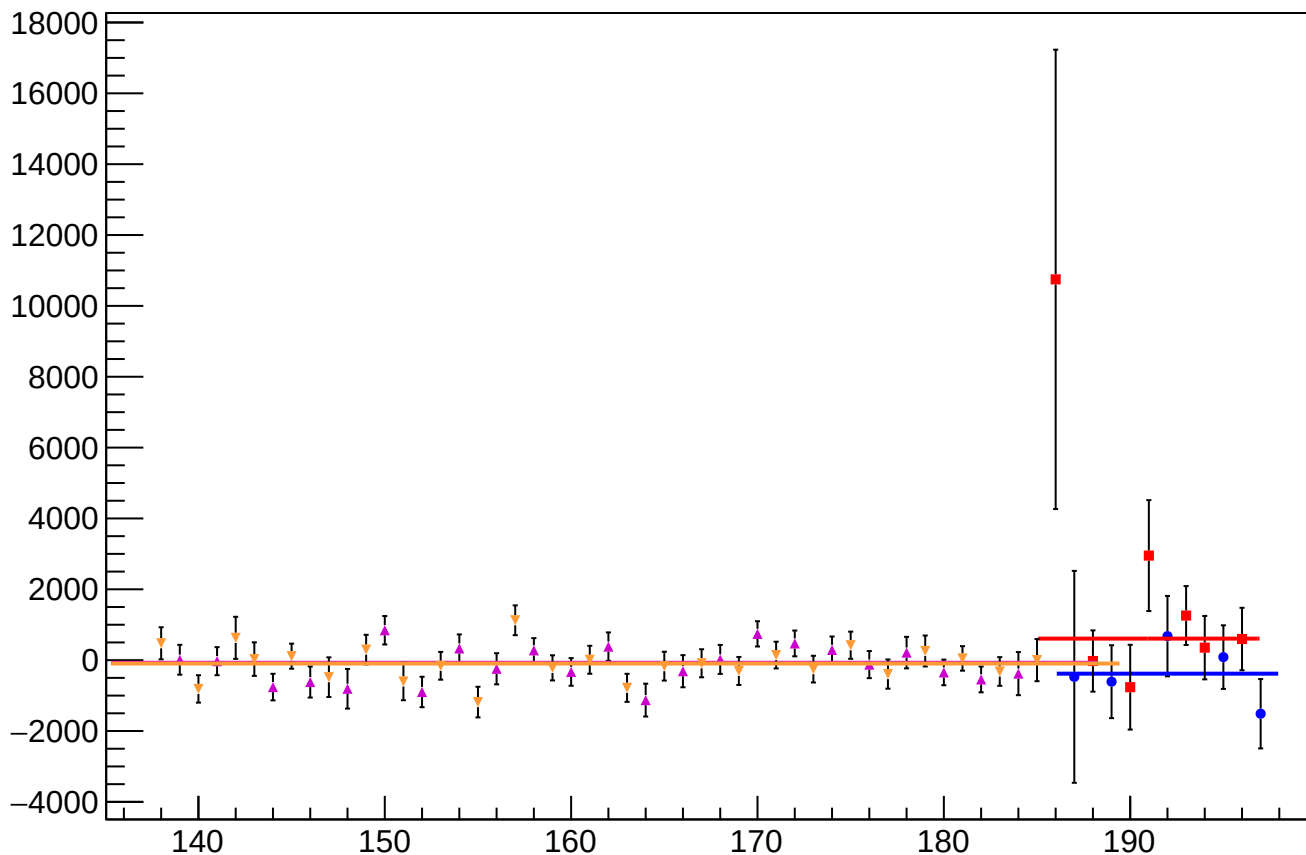
Right: 92.308+/-0.025     $\chi^2/\text{NDF}$ : 270816.4/11

ln: 64.829+/-0.010     $\chi^2$ /NDF:797152.2/27

Out: 64.529+/-0.010     $\chi^2/\text{NDF}$ :1276240.5/31

All: 64.671+/-0.007     $\chi^2/\text{NDF}$ : 2073837.6/59

asym\_sam\_13\_57\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: -381.403+/-492.821  $\chi^2/\text{NDF}$ : 2.5/4

Left Out: -94.907+/-82.850  $\chi^2/\text{NDF}$ :31.6/24

Right Out: 608.592+/-393.817  $\chi^2/\text{NDF}$ : 7.2/6

Left In: -73.914+/-84.652  $\chi^2/\text{NDF}$ :36.4/22

Left: -84.636+/-59.211  $\chi^2/\text{NDF}$ : 68.0/47

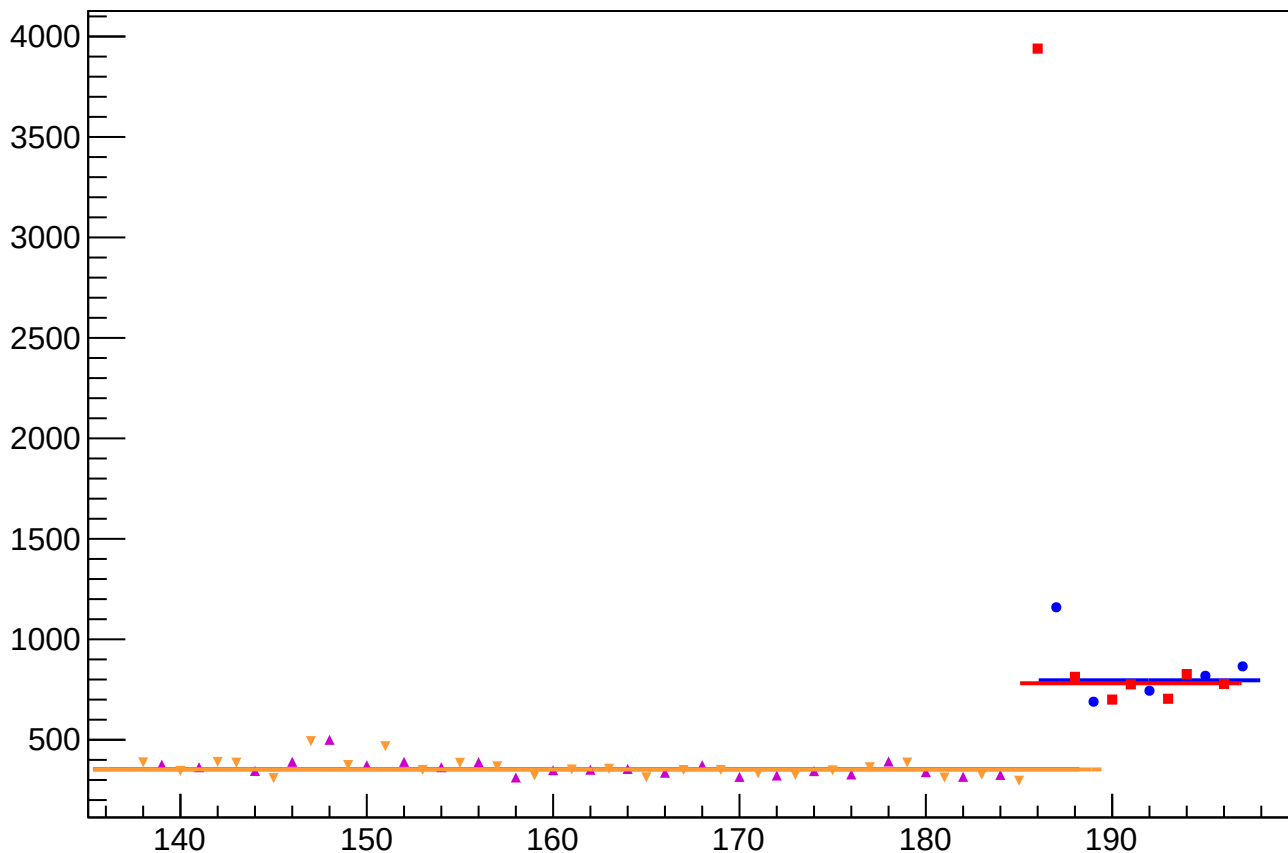
Right: 222.778+/-307.653  $\chi^2/\text{NDF}$ : 12.2/11

In: -82.727+/-83.430  $\chi^2/\text{NDF}$ :39.3/27

Out: -65.091+/-81.075  $\chi^2/\text{NDF}$ :41.9/31

All: -73.656+/-58.143  $\chi^2/\text{NDF}$ : 81.1/59

asym\_sam\_13\_57\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 796.032 $\pm$ 0.348  $\chi^2$ /NDF: 66454.8/4

Left Out: 352.403 $\pm$ 0.059  $\chi^2$ /NDF: 418506.2/24

Right Out: 781.351 $\pm$ 0.278  $\chi^2$ /NDF: 509120.8/6

Left In: 353.197 $\pm$ 0.060  $\chi^2$ /NDF: 321761.0/22

Left: 352.791 $\pm$ 0.042  $\chi^2$ /NDF: 740357.2/47

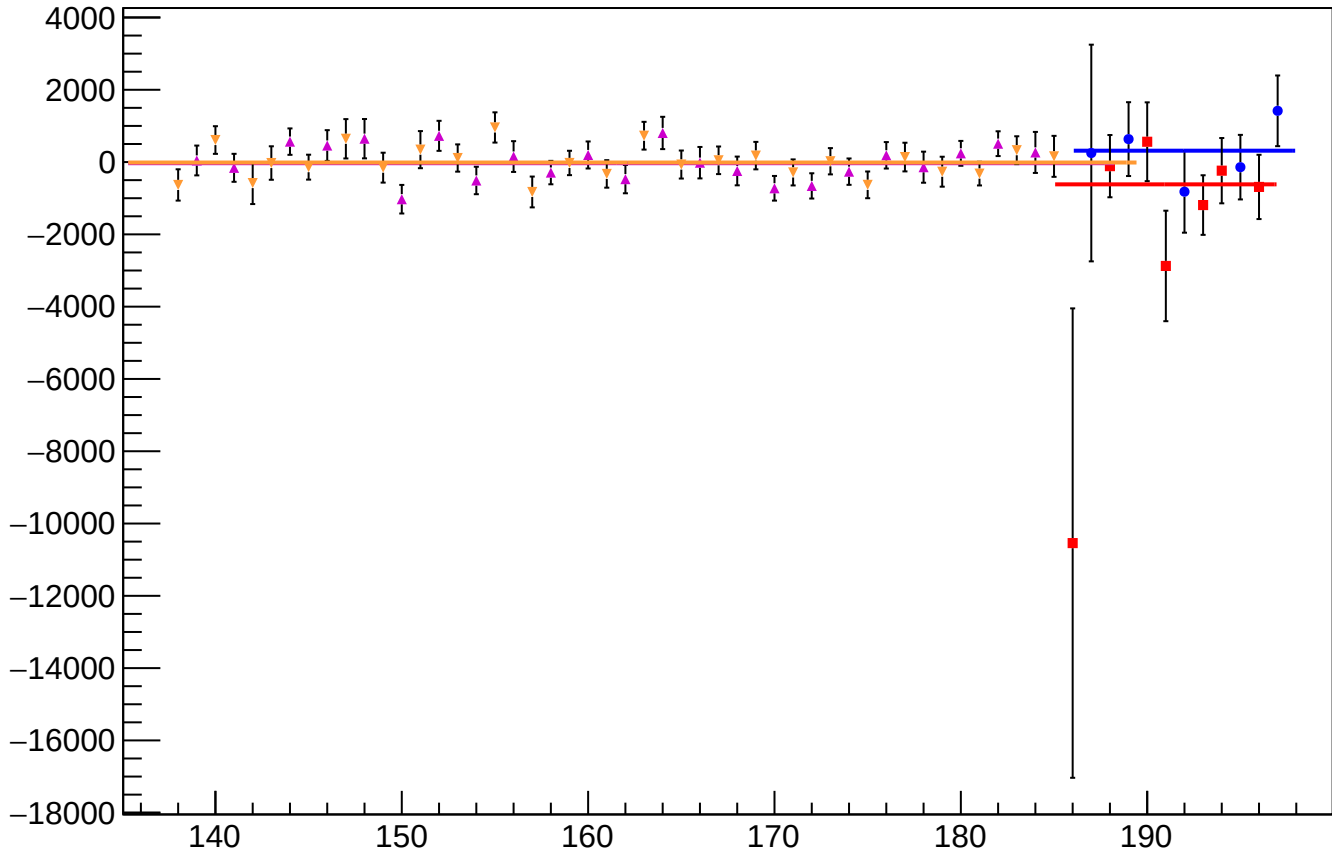
Right: 787.073 $\pm$ 0.218  $\chi^2$ /NDF: 576658.7/11

In: 365.888 $\pm$ 0.059  $\chi^2$ /NDF: 1956800.6/27

Out: 370.582 $\pm$ 0.057  $\chi^2$ /NDF: 3199810.4/31

All: 368.303 $\pm$ 0.041  $\chi^2$ /NDF: 5159867.0/59

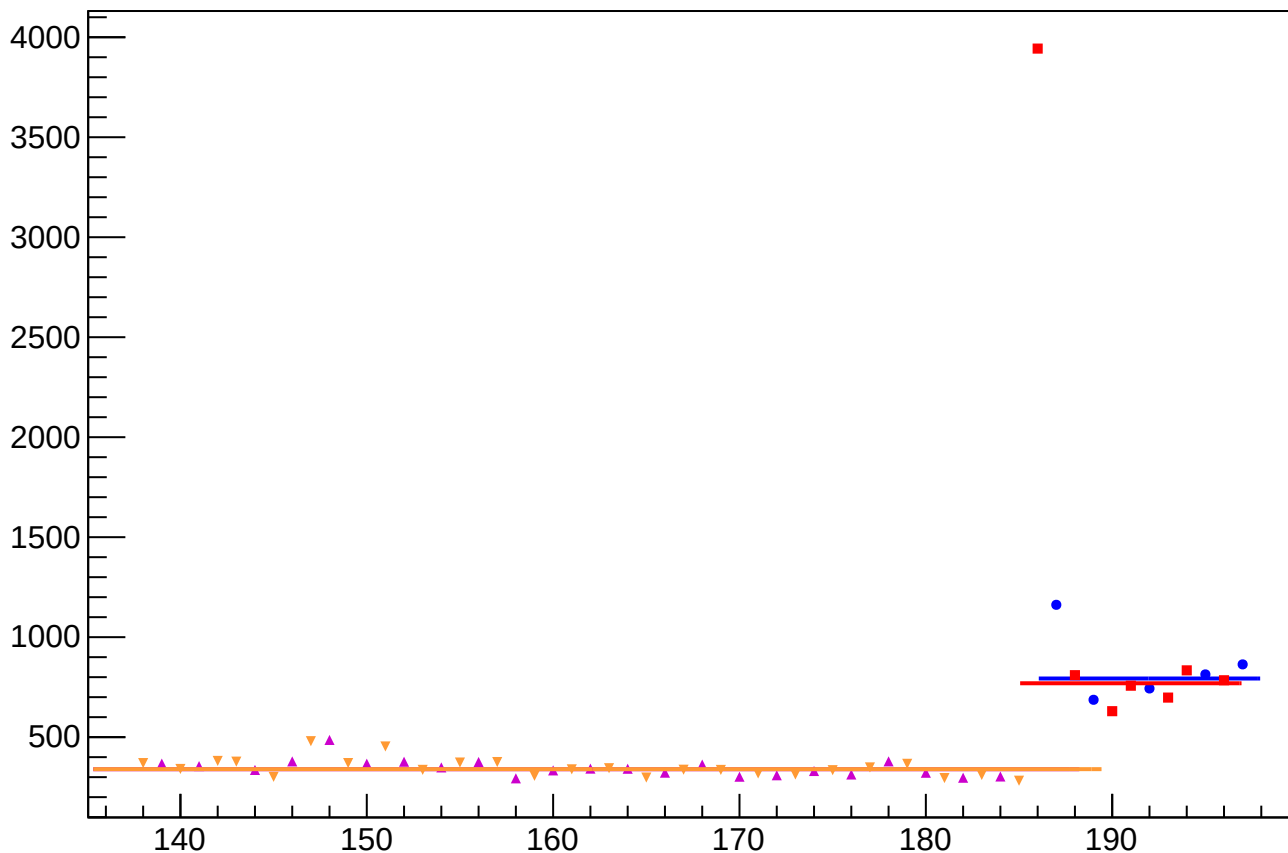
# asym\_sam\_13\_57\_dd\_mean vs Slug, Sign Corrected



Right In: 314.717 $\pm$ 491.026  $\chi^2$ /NDF: 2.6/4  
 Left Out: -12.545 $\pm$ 79.984  $\chi^2$ /NDF:27.3/24  
 Right Out: -616.435 $\pm$ 389.139  $\chi^2$ /NDF: 6.7/6  
 Left In: -31.531 $\pm$ 81.476  $\chi^2$ /NDF:34.8/22

Left: -21.863 $\pm$ 57.077  $\chi^2$ /NDF: 62.2/47  
 Right: -257.222 $\pm$ 304.979  $\chi^2$ /NDF: 11.5/11  
 In: -22.253 $\pm$ 80.377  $\chi^2$ /NDF:37.9/27  
 Out: -37.023 $\pm$ 78.346  $\chi^2$ /NDF:36.4/31  
 All: -29.827 $\pm$ 56.103  $\chi^2$ /NDF: 74.3/59

asym\_sam\_13\_57\_dd\_rms vs Slug, Sign Corrected



Right In: 793.270 $\pm$ 0.347  $\chi^2$ /NDF: 67302.8/4

Left Out: 340.018 $\pm$ 0.057  $\chi^2$ /NDF: 465345.1/24

Right Out: 769.501 $\pm$ 0.275  $\chi^2$ /NDF: 541058.9/6

Left In: 339.571 $\pm$ 0.058  $\chi^2$ /NDF: 377816.0/22

Left: 339.799 $\pm$ 0.040  $\chi^2$ /NDF: 843191.8/47

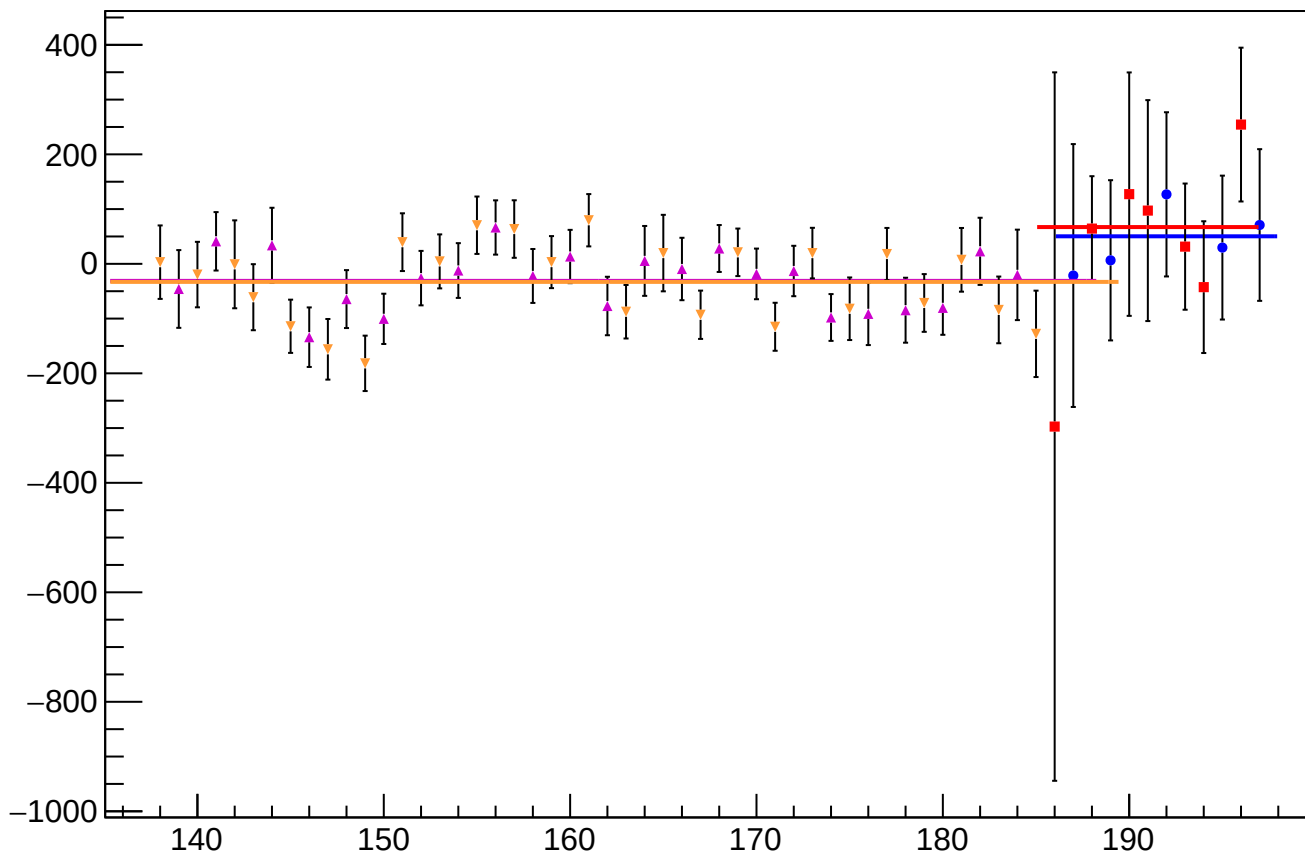
Right: 778.671 $\pm$ 0.216  $\chi^2$ /NDF: 611240.1/11

In: 351.728 $\pm$ 0.057  $\chi^2$ /NDF: 2106853.0/27

Out: 357.427 $\pm$ 0.055  $\chi^2$ /NDF: 3343846.4/31

All: 354.650 $\pm$ 0.040  $\chi^2$ /NDF: 5455856.2/59

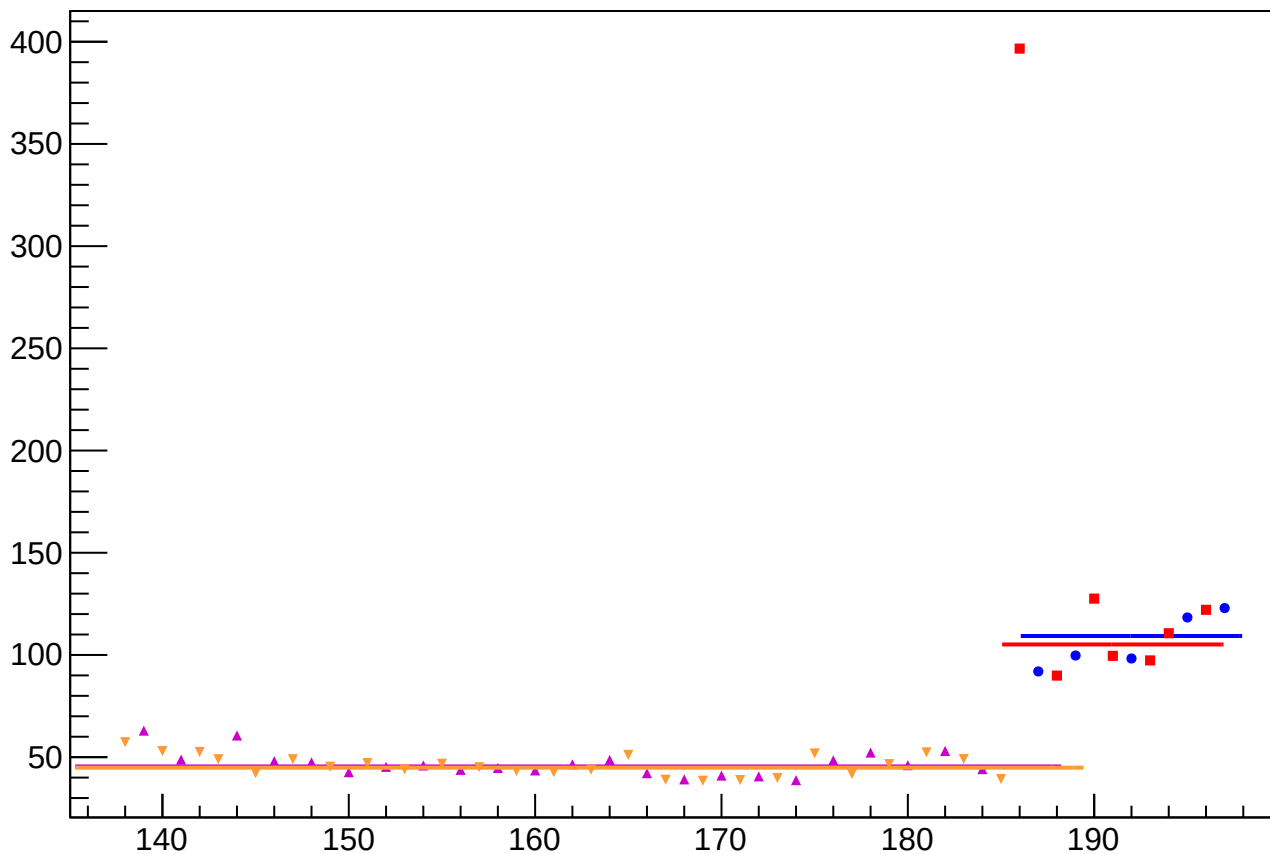
dit\_asym\_sam\_15\_37\_dd\_mean vs Slug, Sign Corrected



Right In: 50.291 $\pm$ 67.651  $\chi^2$ /NDF: 0.5/4  
 Left Out: -32.964 $\pm$ 10.578  $\chi^2$ /NDF:48.0/24  
 Right Out: 67.168 $\pm$ 53.352  $\chi^2$ /NDF: 3.1/6  
 Left In: -31.144 $\pm$ 10.958  $\chi^2$ /NDF:23.4/22

Left: -32.086 $\pm$ 7.610  $\chi^2$ /NDF: 71.5/47  
 Right: 60.696 $\pm$ 41.892  $\chi^2$ /NDF: 3.6/11  
 In: -29.062 $\pm$ 10.817  $\chi^2$ /NDF:25.3/27  
 Out: -29.177 $\pm$ 10.376  $\chi^2$ /NDF:54.5/31  
 All: -29.122 $\pm$ 7.488  $\chi^2$ /NDF: 79.9/59

dit\_asym\_sam\_15\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 109.279 $\pm$ 0.048  $\chi^2$ /NDF: 58669.5/4

Left Out: 44.862 $\pm$ 0.007  $\chi^2$ /NDF: 415524.3/24

Right Out: 105.139 $\pm$ 0.038  $\chi^2$ /NDF: 520878.0/6

Left In: 45.465 $\pm$ 0.008  $\chi^2$ /NDF: 457021.7/22

Left: 45.153 $\pm$ 0.005  $\chi^2$ /NDF: 875681.9/47

Right: 106.727 $\pm$ 0.030  $\chi^2$ /NDF: 584164.7/11

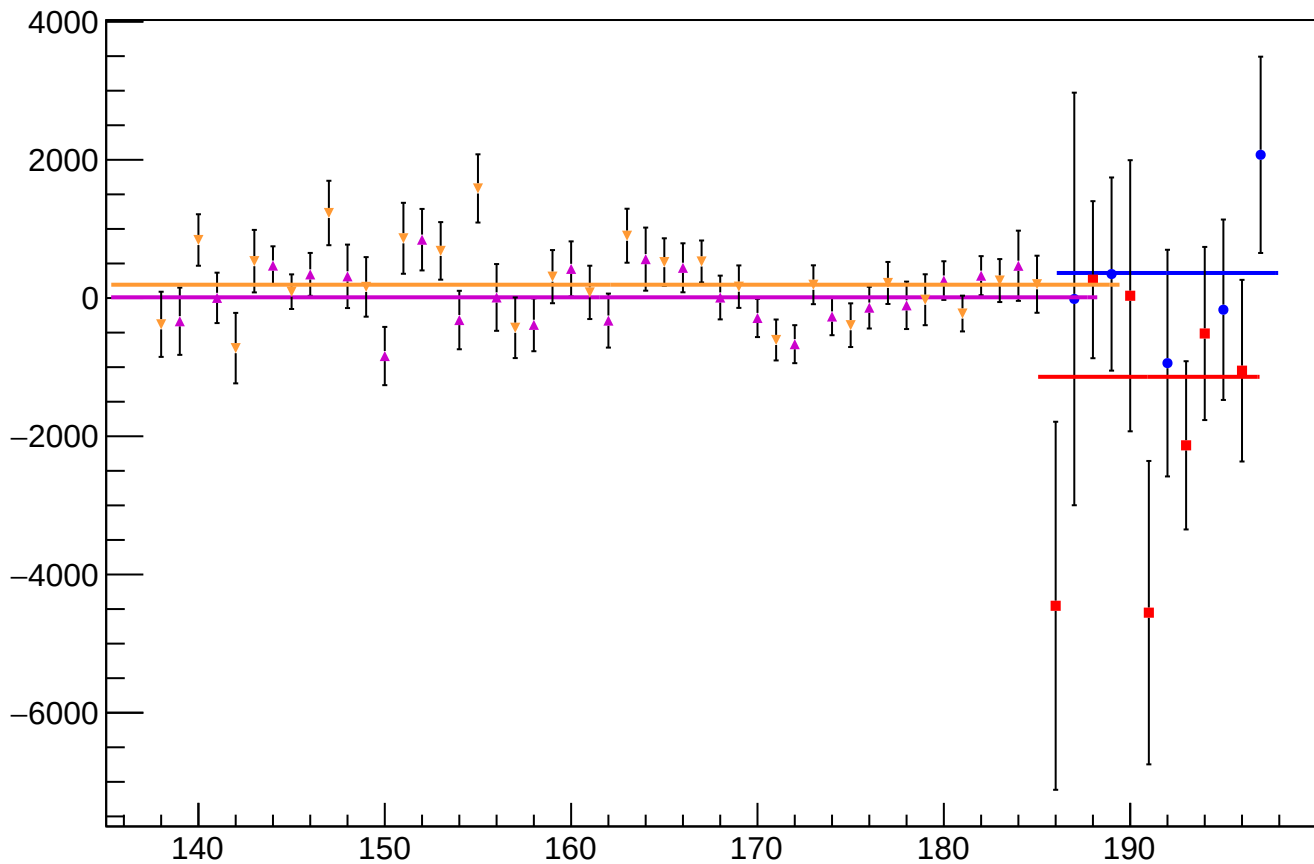
In: 47.096 $\pm$ 0.008  $\chi^2$ /NDF: 2249762.4/27

Out: 47.142 $\pm$ 0.007  $\chi^2$ /NDF: 3392802.6/31

All: 47.120 $\pm$ 0.005  $\chi^2$ /NDF: 5642583.3/59



asym\_sam\_15\_37\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 362.803 $\pm$ 693.519  $\chi^2$ /NDF: 2.3/4

Left Out: 192.946 $\pm$ 70.968  $\chi^2$ /NDF:45.8/24

Right Out: -1139.761 $\pm$ 552.582  $\chi^2$ /NDF: 6.8/6

Left In: 10.801 $\pm$ 72.300  $\chi^2$ /NDF:30.2/22

Left: 103.567 $\pm$ 50.646  $\chi^2$ /NDF: 79.3/47

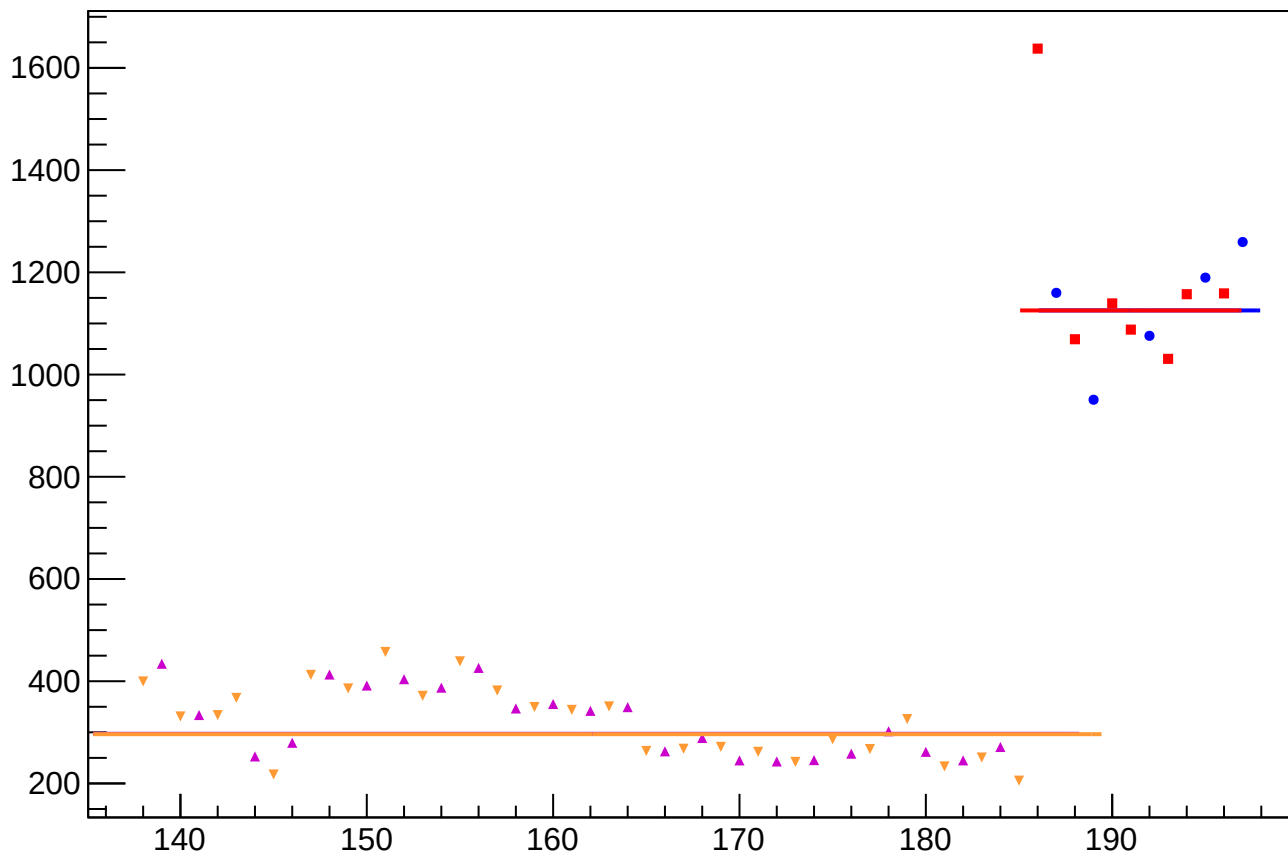
Right: -556.276 $\pm$ 432.172  $\chi^2$ /NDF: 11.9/11

In: 14.585 $\pm$ 71.910  $\chi^2$ /NDF:32.8/27

Out: 171.321 $\pm$ 70.390  $\chi^2$ /NDF:58.3/31

All: 94.628 $\pm$ 50.302  $\chi^2$ /NDF: 93.5/59

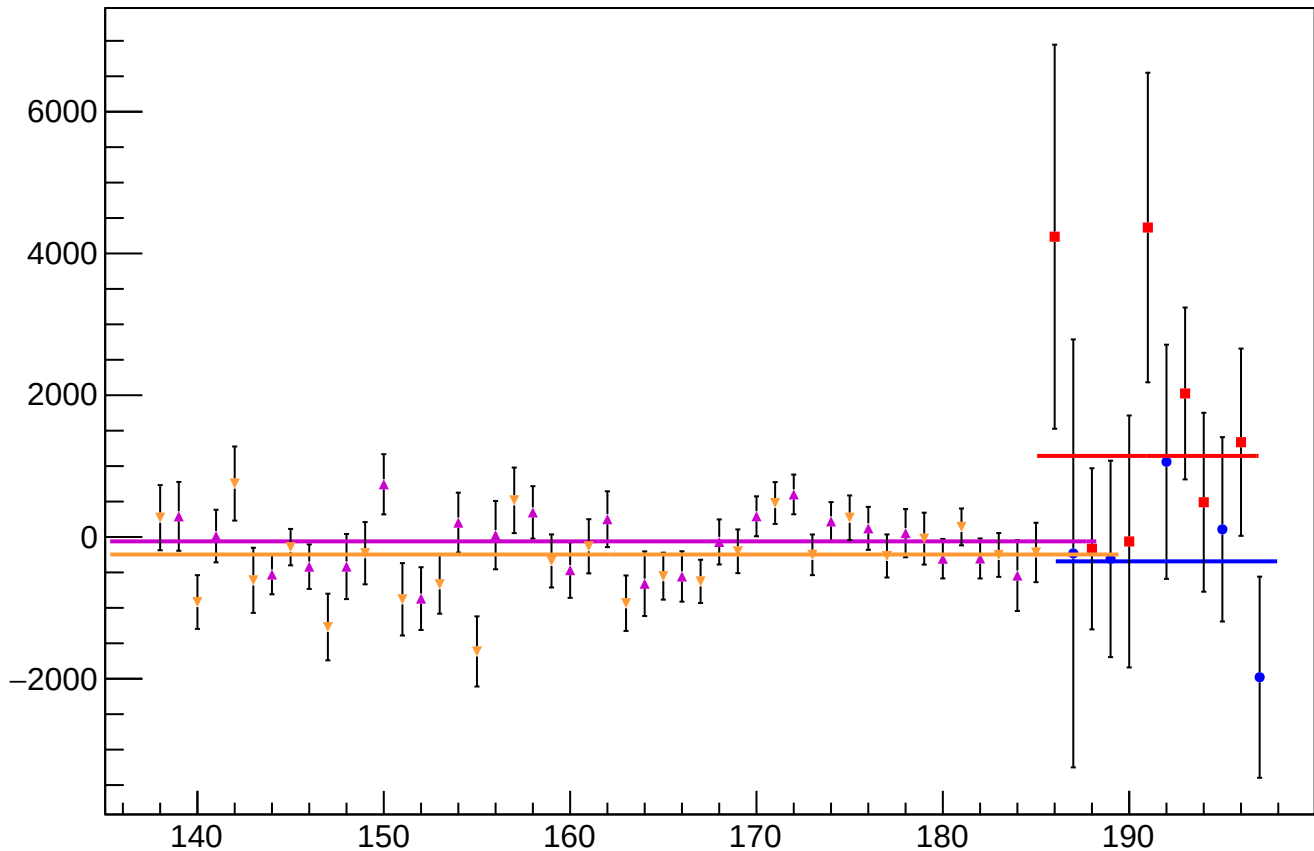
asym\_sam\_15\_37\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 1125.460 $\pm$ 0.490  $\chi^2$ /NDF: 55977.1/4  
 Left Out: 296.383 $\pm$ 0.050  $\chi^2$ /NDF:1635498.4/24  
 Right Out: 1125.473 $\pm$ 0.391  $\chi^2$ /NDF: 94310.2/6  
 Left In: 297.137 $\pm$ 0.051  $\chi^2$ /NDF:1320750.3/22

Left: 296.753 $\pm$ 0.036  $\chi^2$ /NDF: 2956359.4/47  
 Right: 1125.468 $\pm$ 0.306  $\chi^2$ /NDF: 150287.4/11  
 In: 306.043 $\pm$ 0.051  $\chi^2$ /NDF:4199122.7/27  
 Out: 309.837 $\pm$ 0.050  $\chi^2$ /NDF:6159092.4/31  
 All: 307.980 $\pm$ 0.036  $\chi^2$ /NDF: 10361058.0/59

asym\_sam\_15\_37\_dd\_mean vs Slug, Sign Corrected



Right In: -343.638 $\pm$ 692.607  $\chi^2/\text{NDF}$ : 2.2/4

Left Out: -247.108 $\pm$ 71.218  $\chi^2/\text{NDF}$ : 43.6/24

Right Out: 1143.908 $\pm$ 549.027  $\chi^2/\text{NDF}$ : 6.1/6

Left In: -61.707 $\pm$ 72.478  $\chi^2/\text{NDF}$ : 30.3/22

Left: -156.032 $\pm$ 50.798  $\chi^2/\text{NDF}$ : 77.2/47

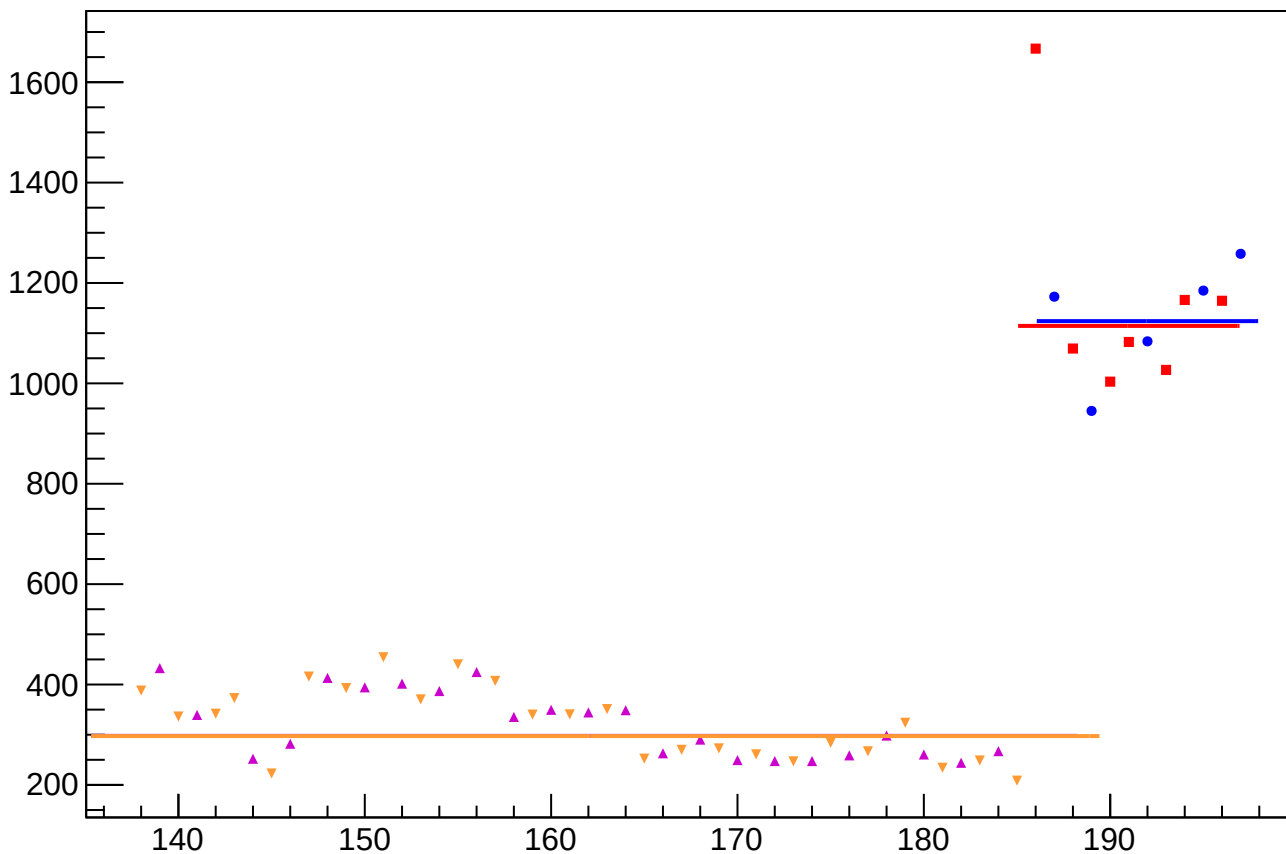
Right: 569.882 $\pm$ 430.247  $\chi^2/\text{NDF}$ : 11.1/11

In: -64.761 $\pm$ 72.084  $\chi^2/\text{NDF}$ : 32.7/27

Out: -224.089 $\pm$ 70.626  $\chi^2/\text{NDF}$ : 56.0/31

All: -146.052 $\pm$ 50.448  $\chi^2/\text{NDF}$ : 91.1/59

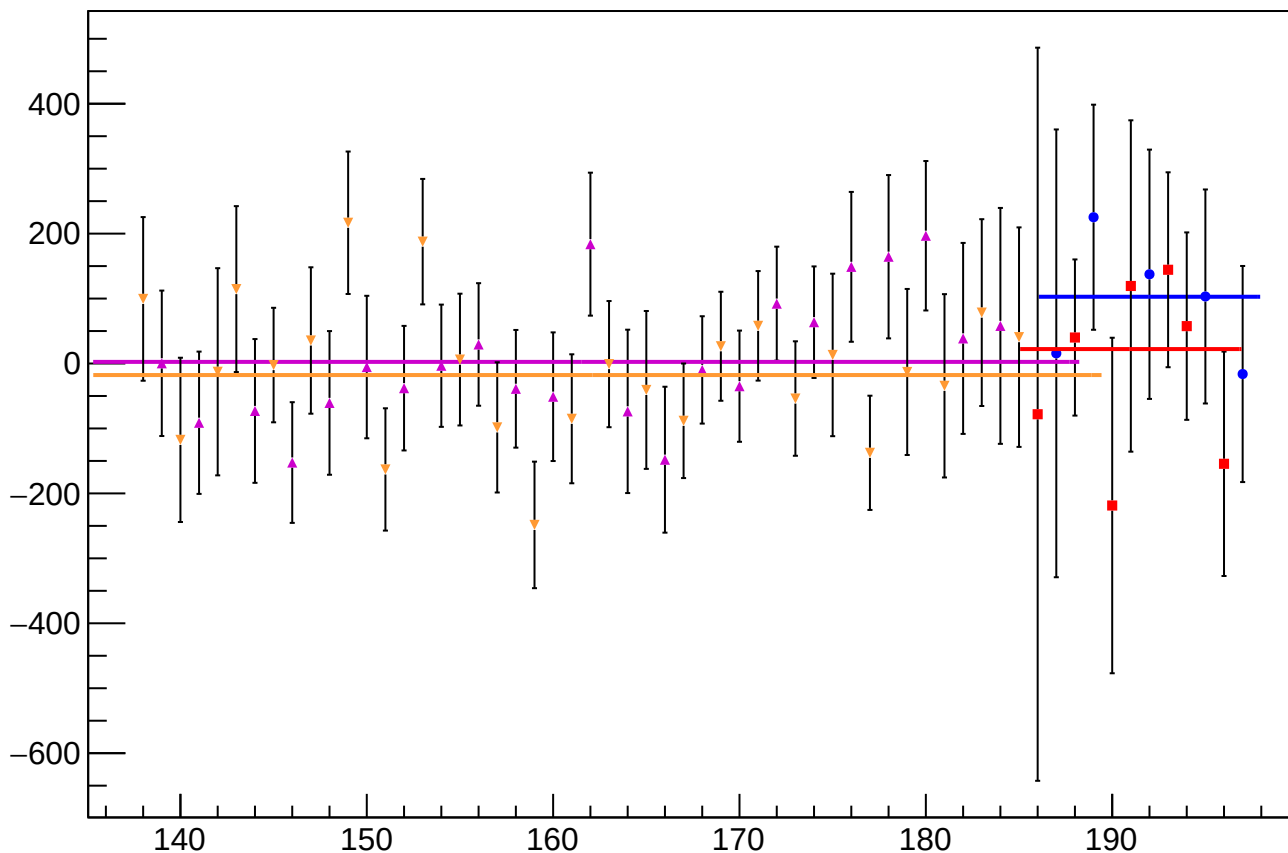
asym\_sam\_15\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 1123.994 $\pm$ 0.490  $\chi^2$ /NDF: 57264.4/4  
 Left Out: 297.273 $\pm$ 0.050  $\chi^2$ /NDF: 1627904.5/24  
 Right Out: 1114.476 $\pm$ 0.388  $\chi^2$ /NDF: 111210.1/6  
 Left In: 297.696 $\pm$ 0.051  $\chi^2$ /NDF: 1274607.7/22

Left: 297.481 $\pm$ 0.036  $\chi^2$ /NDF: 2902547.0/47  
 Right: 1118.149 $\pm$ 0.304  $\chi^2$ /NDF: 168706.5/11  
 In: 306.647 $\pm$ 0.051  $\chi^2$ /NDF: 4147657.7/27  
 Out: 310.796 $\pm$ 0.050  $\chi^2$ /NDF: 6096797.3/31  
 All: 308.764 $\pm$ 0.036  $\chi^2$ /NDF: 10247836.1/59

dit\_asym\_sam\_24\_68\_dd\_mean vs Slug, Sign Corrected



Right In: 102.801 $\pm$ 83.971  $\chi^2$ /NDF: 1.1/4

Left Out: -17.764 $\pm$ 21.121  $\chi^2$ /NDF:25.5/24

Right Out: 22.233 $\pm$ 66.136  $\chi^2$ /NDF: 2.8/6

Left In: 2.505 $\pm$ 21.582  $\chi^2$ /NDF:18.0/22

Left: -7.848 $\pm$ 15.095  $\chi^2$ /NDF: 44.0/47

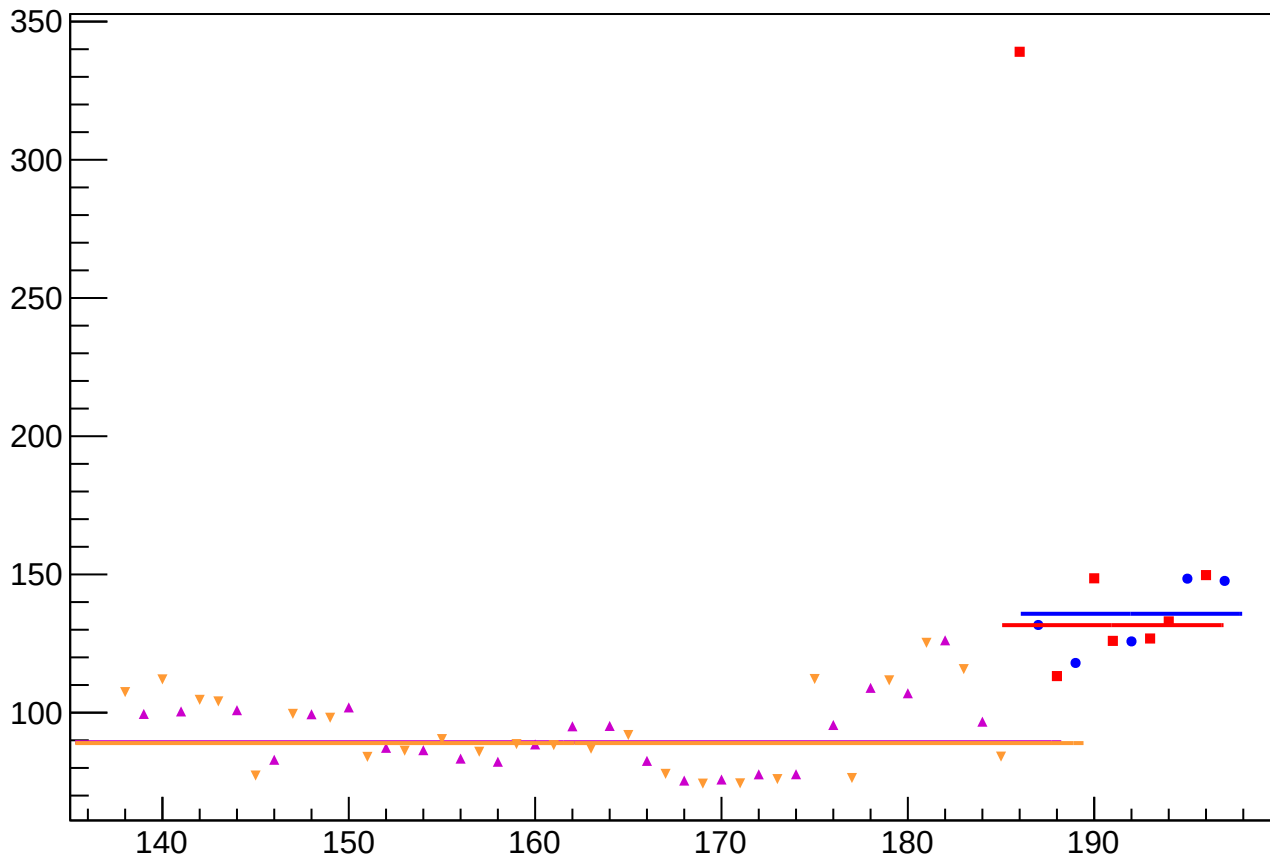
Right: 53.077 $\pm$ 51.956  $\chi^2$ /NDF: 4.5/11

In: 8.720 $\pm$ 20.903  $\chi^2$ /NDF:20.4/27

Out: -14.062 $\pm$ 20.120  $\chi^2$ /NDF:28.7/31

All: -3.106 $\pm$ 14.496  $\chi^2$ /NDF: 49.7/59

dit\_asym\_sam\_24\_68\_dd\_rms vs Slug, Sign Corrected



Right In: 135.770 $\pm$ 0.059  $\chi^2$ /NDF: 48876.4/4

Left Out: 88.991 $\pm$ 0.015  $\chi^2$ /NDF:807471.2/24

Right Out: 131.657 $\pm$ 0.047  $\chi^2$ /NDF: 350899.4/6

Left In: 89.321 $\pm$ 0.015  $\chi^2$ /NDF:560433.9/22

Left: 89.152 $\pm$ 0.011  $\chi^2$ /NDF: 1368144.9/47

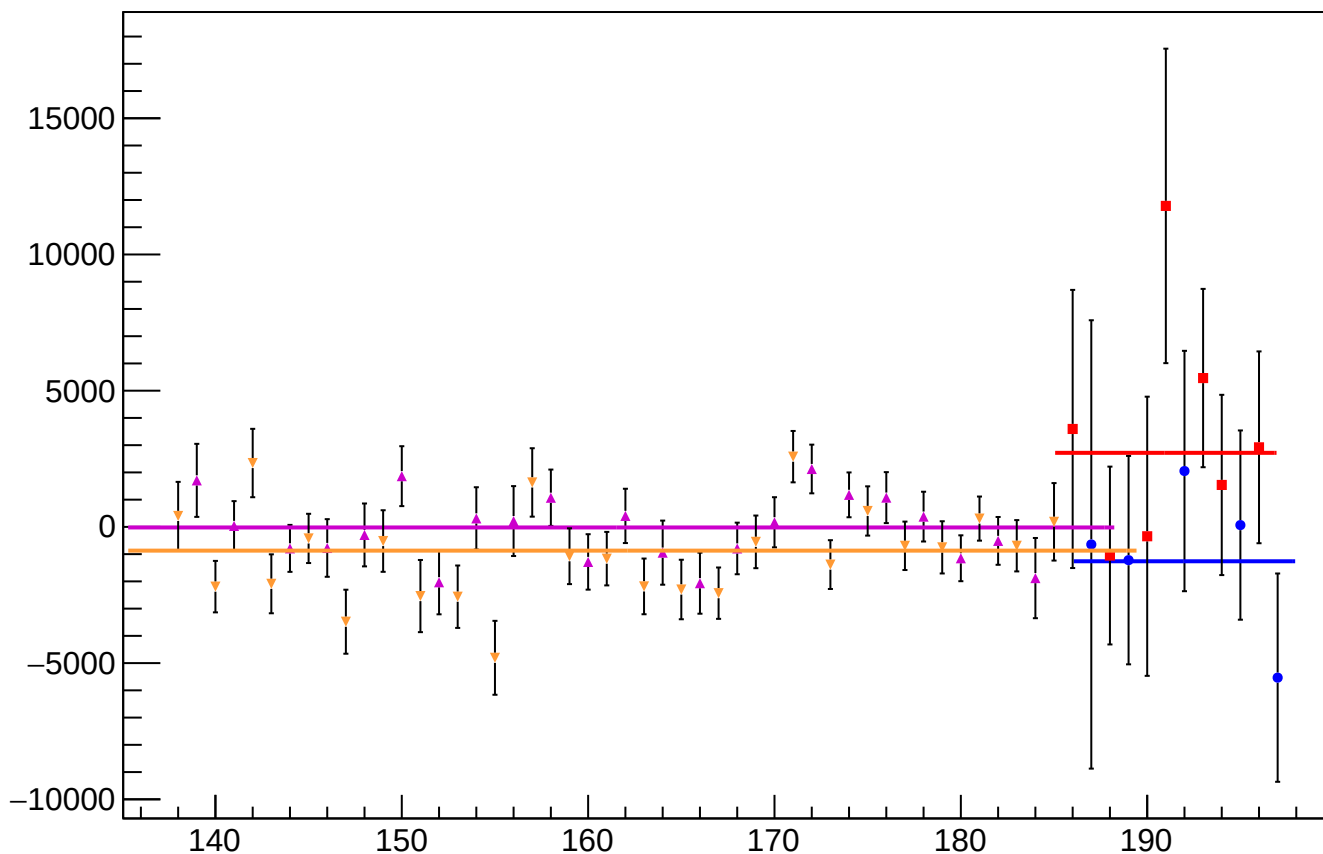
Right: 133.232 $\pm$ 0.037  $\chi^2$ /NDF: 402737.2/11

In: 92.200 $\pm$ 0.015  $\chi^2$ /NDF:1183343.5/27

Out: 92.939 $\pm$ 0.014  $\chi^2$ /NDF:1913731.7/31

All: 92.584 $\pm$ 0.010  $\chi^2$ /NDF: 3098375.9/59

asym\_sam\_24\_68\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: -1261.759+/-1870.614  $\chi^2/\text{NDF}$ : 2.0/4

Left Out: -871.061+/-205.986  $\chi^2/\text{NDF}$ : 57.6/24

Right Out: 2718.568+/-1465.342  $\chi^2/\text{NDF}$ : 5.0/6

Left In: -20.573+/-210.177  $\chi^2/\text{NDF}$ : 29.7/22

Left: -454.381+/-147.113  $\chi^2/\text{NDF}$ : 95.6/47

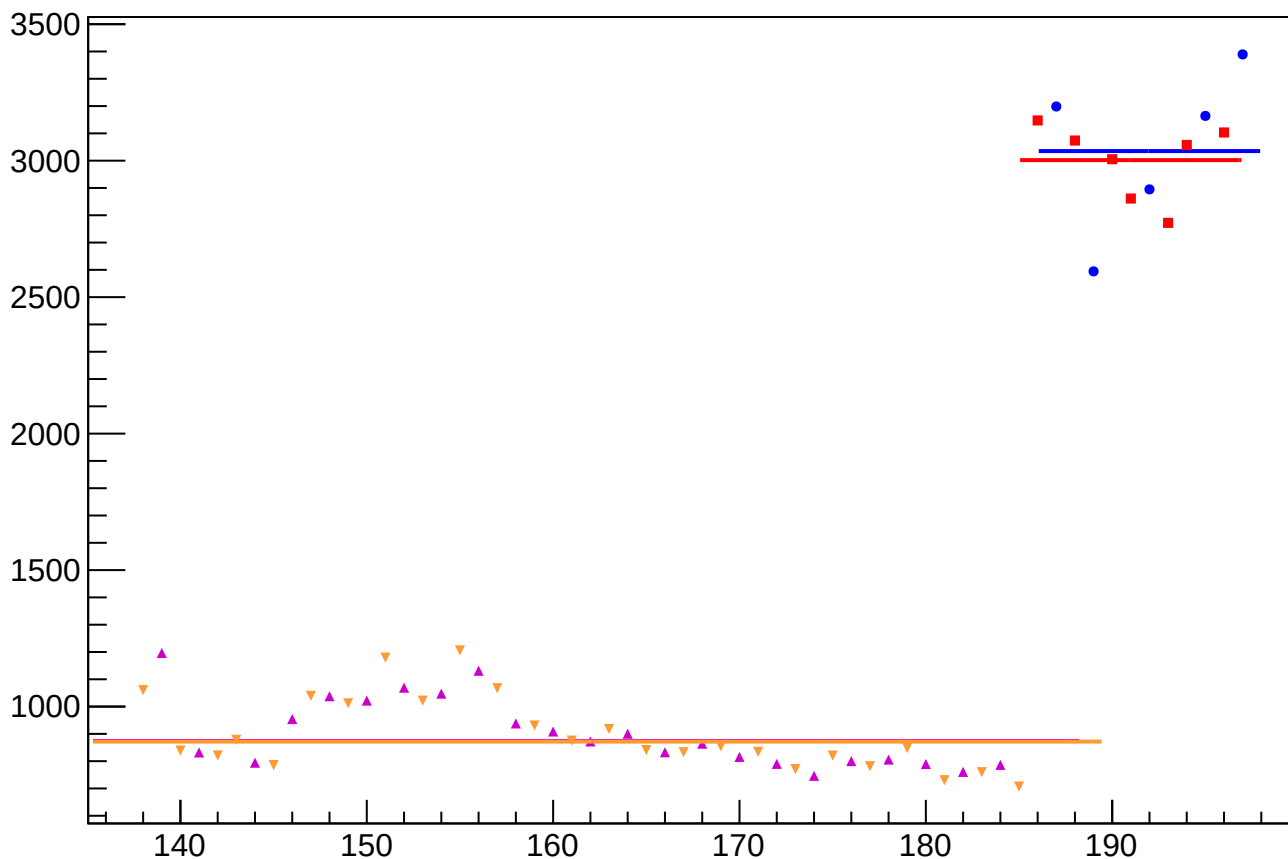
Right: 1204.925+/-1153.550  $\chi^2/\text{NDF}$ : 9.8/11

In: -36.047+/-208.862  $\chi^2/\text{NDF}$ : 32.1/27

Out: -801.503+/-203.980  $\chi^2/\text{NDF}$ : 68.5/31

All: -427.826+/-145.931  $\chi^2/\text{NDF}$ : 107.5/59

asym\_sam\_24\_68\_dd\_correction\_rms vs Slug, Sign Corrected

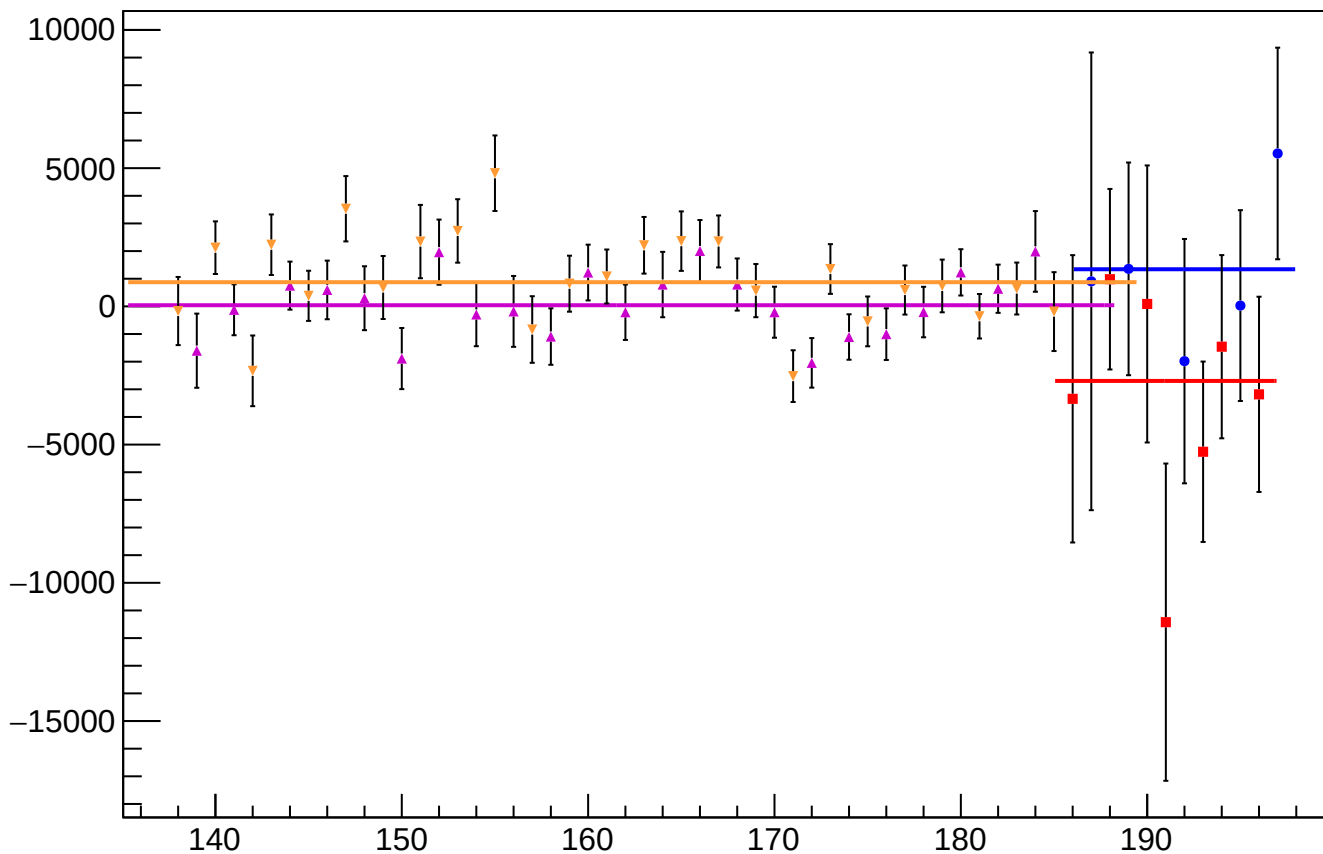


Right In: 3035.134 $\pm$ 1.323  $\chi^2/\text{NDF}$ : 49271.0/4  
 Left Out: 871.690 $\pm$ 0.146  $\chi^2/\text{NDF}$ : 642403.4/24  
 Right Out: 3002.002 $\pm$ 1.036  $\chi^2/\text{NDF}$ : 15854.9/6  
 Left In: 874.055 $\pm$ 0.149  $\chi^2/\text{NDF}$ : 578510.6/22

Left: 872.849 $\pm$ 0.104  $\chi^2/\text{NDF}$ : 1221043.2/47  
 Right: 3014.602 $\pm$ 0.816  $\chi^2/\text{NDF}$ : 65514.8/11  
 In: 900.997 $\pm$ 0.148  $\chi^2/\text{NDF}$ : 3263836.1/27  
 Out: 912.970 $\pm$ 0.144  $\chi^2/\text{NDF}$ : 4803406.5/31  
 All: 907.125 $\pm$ 0.103  $\chi^2/\text{NDF}$ : 8070606.7/59



asym\_sam\_24\_68\_dd\_mean vs Slug, Sign Corrected



Right In: 1342.947 $\pm$ 1871.402  $\chi^2$ /NDF: 1.9/4

Left Out: 875.084 $\pm$ 205.572  $\chi^2$ /NDF:55.1/24

Right Out: -2696.720 $\pm$ 1464.548  $\chi^2$ /NDF: 4.7/6

Left In: 41.523 $\pm$ 210.209  $\chi^2$ /NDF:28.1/22

Left: 467.597 $\pm$ 146.973  $\chi^2$ /NDF: 91.2/47

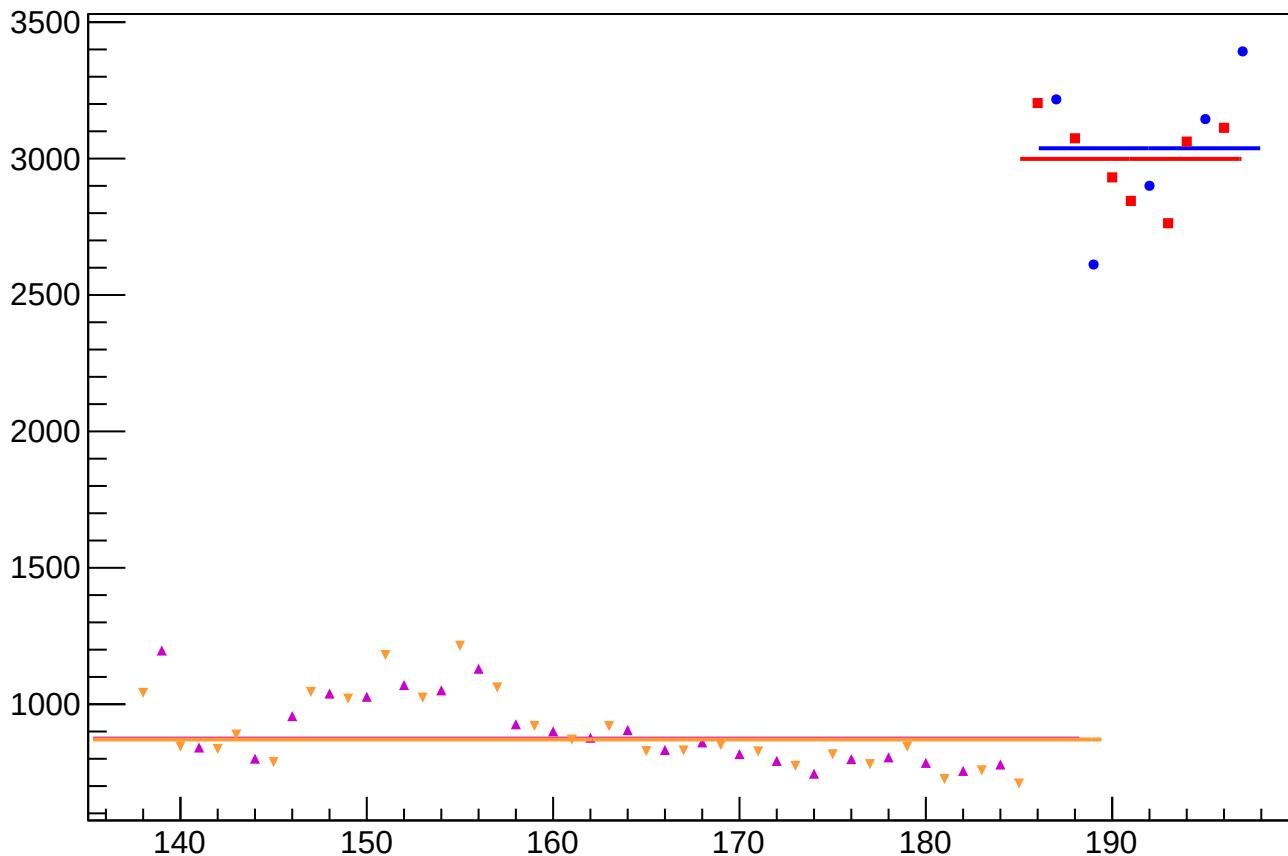
Right: -1162.345 $\pm$ 1153.347  $\chi^2$ /NDF: 9.5/11

In: 57.739 $\pm$ 208.895  $\chi^2$ /NDF:30.5/27

Out: 806.070 $\pm$ 203.576  $\chi^2$ /NDF:65.6/31

All: 441.552 $\pm$ 145.794  $\chi^2$ /NDF: 102.7/59

# asym\_sam\_24\_68\_dd\_rms vs Slug, Sign Corrected



Right In: 3037.770 $\pm$ 1.323  $\chi^2$ /NDF: 46544.6/4

Left Out: 870.853 $\pm$ 0.145  $\chi^2$ /NDF:651805.6/24

Right Out: 2998.896 $\pm$ 1.036  $\chi^2$ /NDF: 19234.5/6

Left In: 873.902 $\pm$ 0.149  $\chi^2$ /NDF:583344.5/22

Left: 872.344 $\pm$ 0.104  $\chi^2$ /NDF: 1235365.2/47

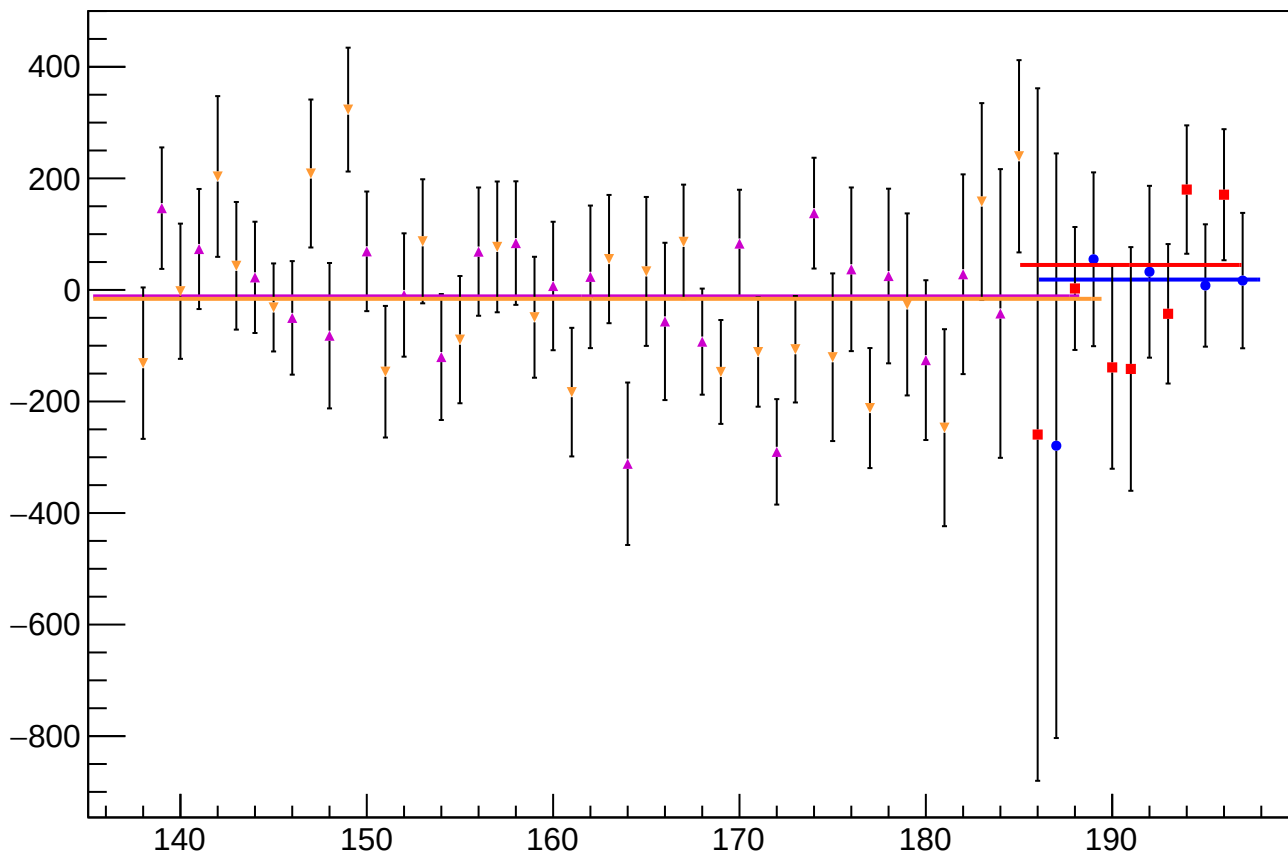
Right: 3013.661 $\pm$ 0.816  $\chi^2$ /NDF: 66314.4/11

In: 900.864 $\pm$ 0.148  $\chi^2$ /NDF:3270545.5/27

Out: 911.970 $\pm$ 0.144  $\chi^2$ /NDF:4812084.9/31

All: 906.560 $\pm$ 0.103  $\chi^2$ /NDF: 8085530.0/59

dit\_asym\_sam\_26\_48\_dd\_mean vs Slug, Sign Corrected



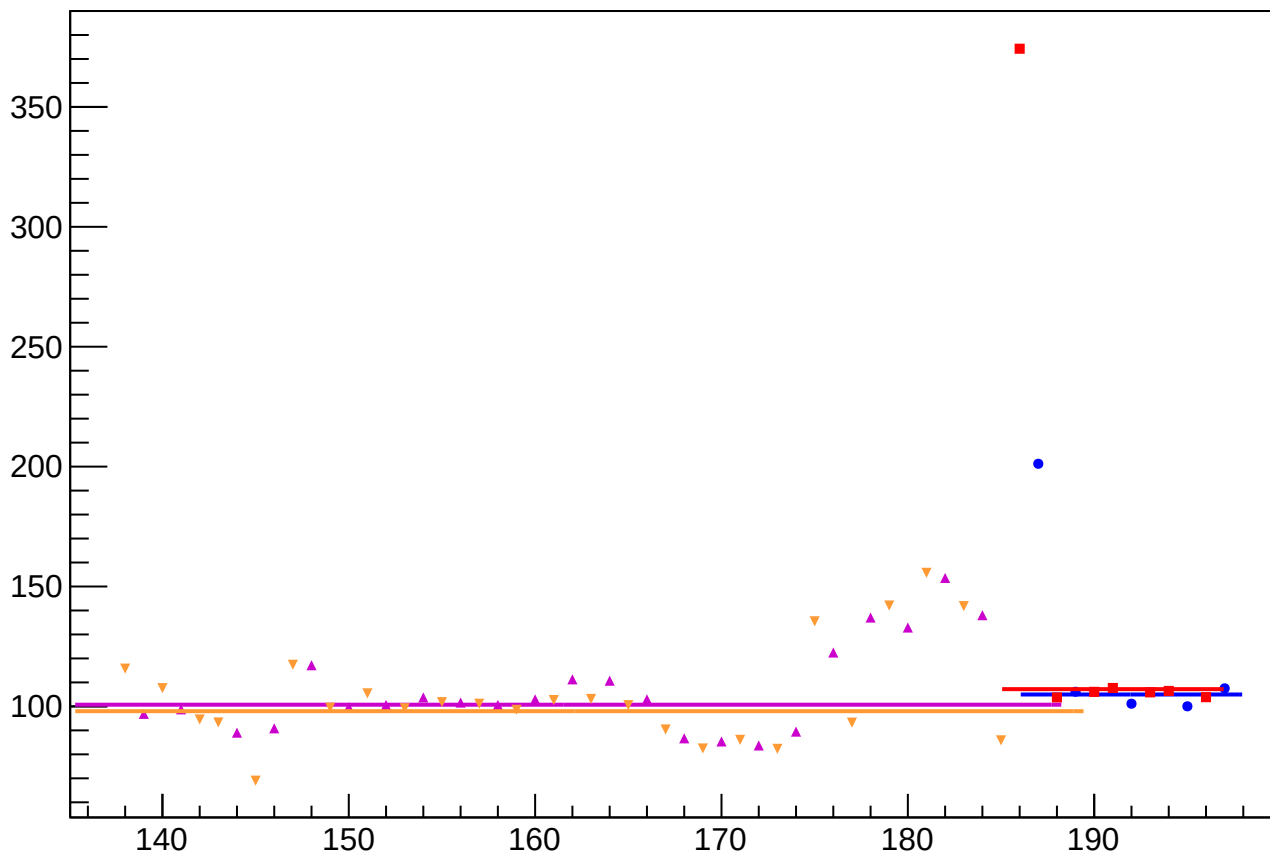
Right In:  $18.572 \pm 64.827$   $\chi^2/\text{NDF}: 0.4/4$   
 Left Out:  $-15.956 \pm 23.377$   $\chi^2/\text{NDF}: 34.9/24$   
 Right Out:  $44.772 \pm 53.604$   $\chi^2/\text{NDF}: 5.2/6$   
 Left In:  $-11.570 \pm 24.412$   $\chi^2/\text{NDF}: 24.0/22$

Left:  $-13.858 \pm 16.884$   $\chi^2/\text{NDF}: 58.9/47$   
 Right:  $34.133 \pm 41.310$   $\chi^2/\text{NDF}: 5.6/11$

In:  $-7.826 \pm 22.846$   $\chi^2/\text{NDF}: 24.5/27$   
 Out:  $-6.251 \pm 21.428$   $\chi^2/\text{NDF}: 41.1/31$

All:  $-6.988 \pm 15.629$   $\chi^2/\text{NDF}: 65.7/59$

dit\_asym\_sam\_26\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 104.963 $\pm$ 0.046  $\chi^2/\text{NDF}$ : 73687.3/4

Left Out: 98.001 $\pm$ 0.017  $\chi^2/\text{NDF}$ : 1155021.9/24

Right Out: 107.194 $\pm$ 0.038  $\chi^2/\text{NDF}$ : 374145.9/6

Left In: 100.704 $\pm$ 0.017  $\chi^2/\text{NDF}$ : 759922.8/22

Left: 99.294 $\pm$ 0.012  $\chi^2/\text{NDF}$ : 1927728.9/47

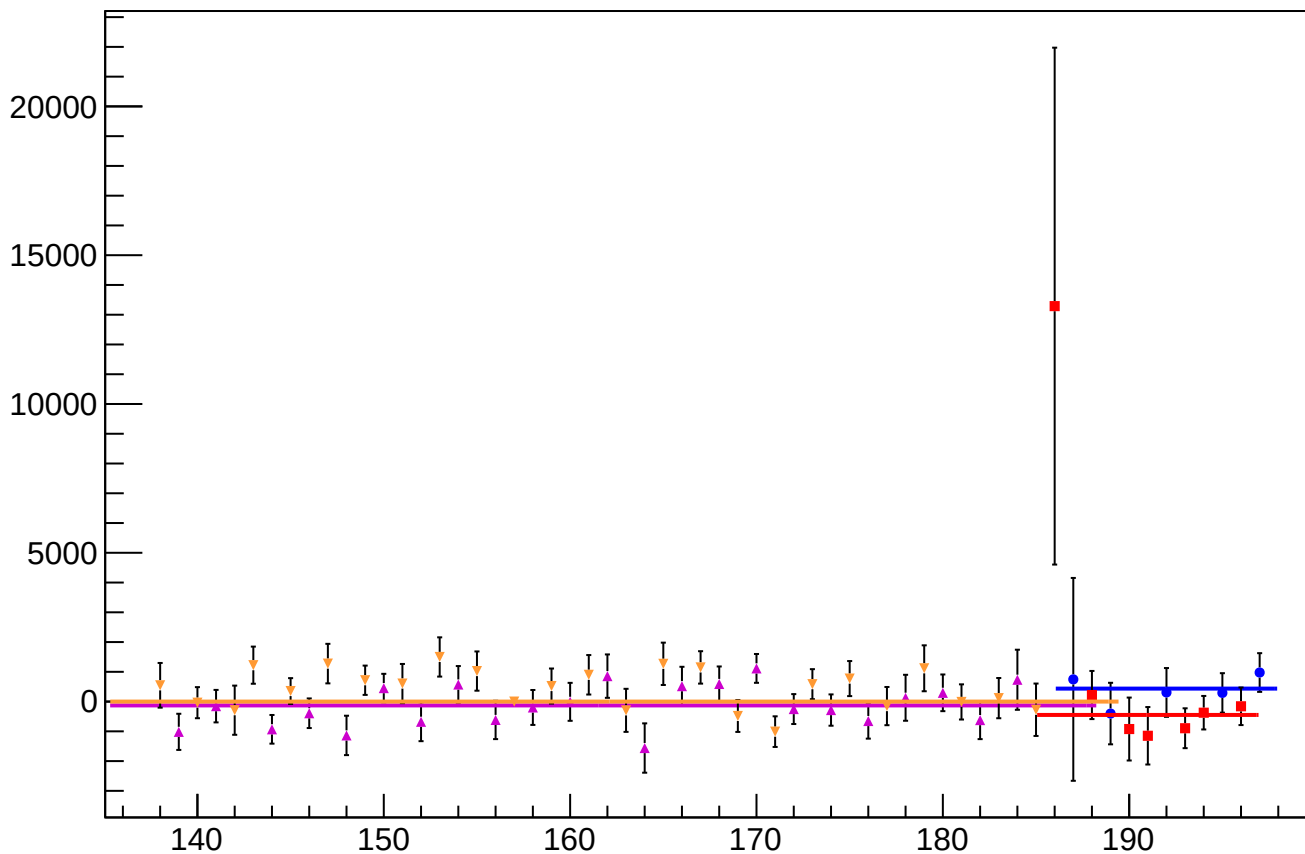
Right: 106.288 $\pm$ 0.029  $\chi^2/\text{NDF}$ : 449240.0/11

In: 101.233 $\pm$ 0.016  $\chi^2/\text{NDF}$ : 841170.8/27

Out: 99.470 $\pm$ 0.015  $\chi^2/\text{NDF}$ : 1578585.7/31

All: 100.295 $\pm$ 0.011  $\chi^2/\text{NDF}$ : 2426087.8/59

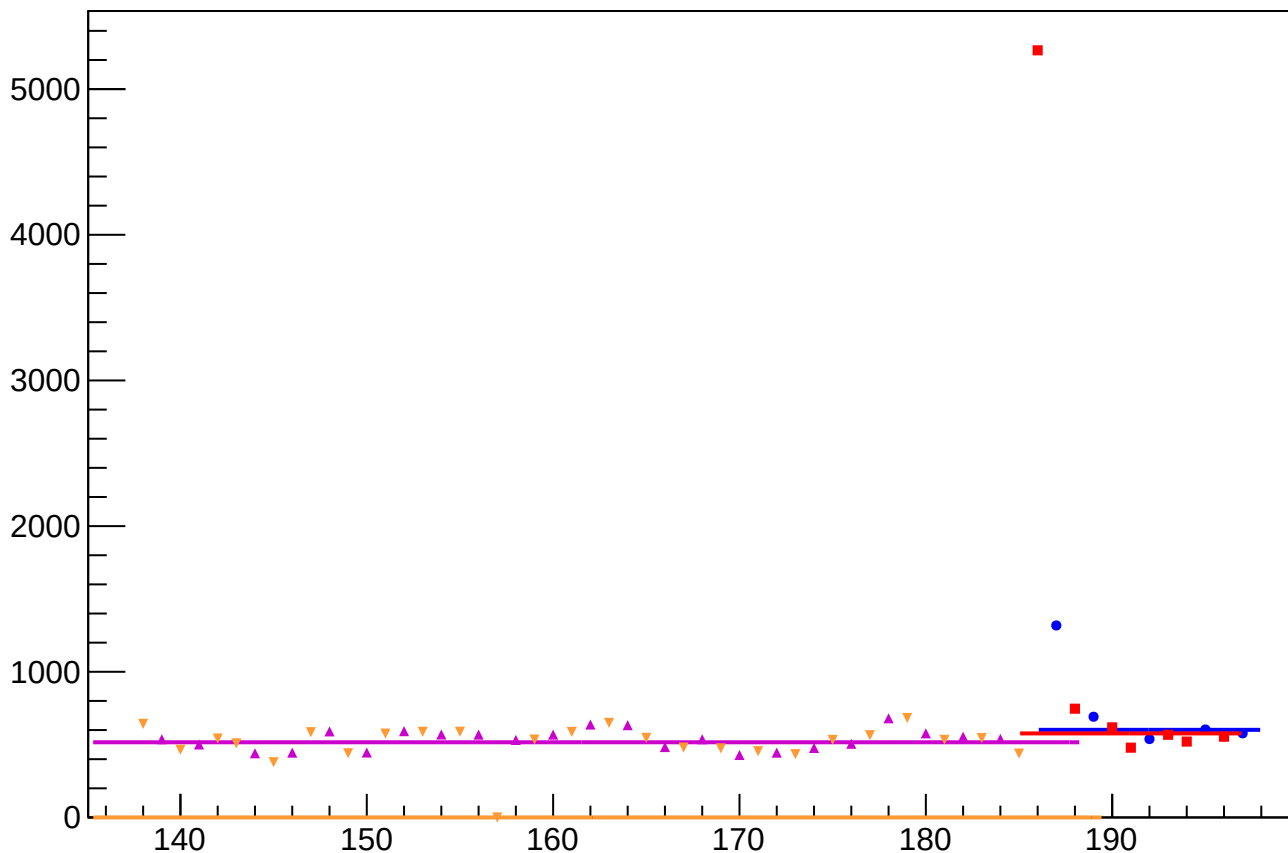
asym\_sam\_26\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 435.886+/-374.017  $\chi^2/\text{NDF}$ : 1.4/4  
 Left Out: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 39.9/24  
 Right Out: -448.804+/-296.161  $\chi^2/\text{NDF}$ : 4.6/6  
 Left In: -129.094+/-124.247  $\chi^2/\text{NDF}$ : 28.3/22

Left: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 69.3/47  
 Right: -107.867+/-232.184  $\chi^2/\text{NDF}$ : 9.5/11  
 In: -72.943+/-117.911  $\chi^2/\text{NDF}$ : 31.8/27  
 Out: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 46.7/31  
 All: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 78.9/59

asym\_sam\_26\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 601.533+/-0.264  $\chi^2/\text{NDF}$ : 118252.4/4

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 34974091.9/24

Right Out: 576.878+/-0.209  $\chi^2/\text{NDF}$ : 717492.7/6

Left In: 516.120+/-0.088  $\chi^2/\text{NDF}$ : 571744.7/22

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 70057167.0/47

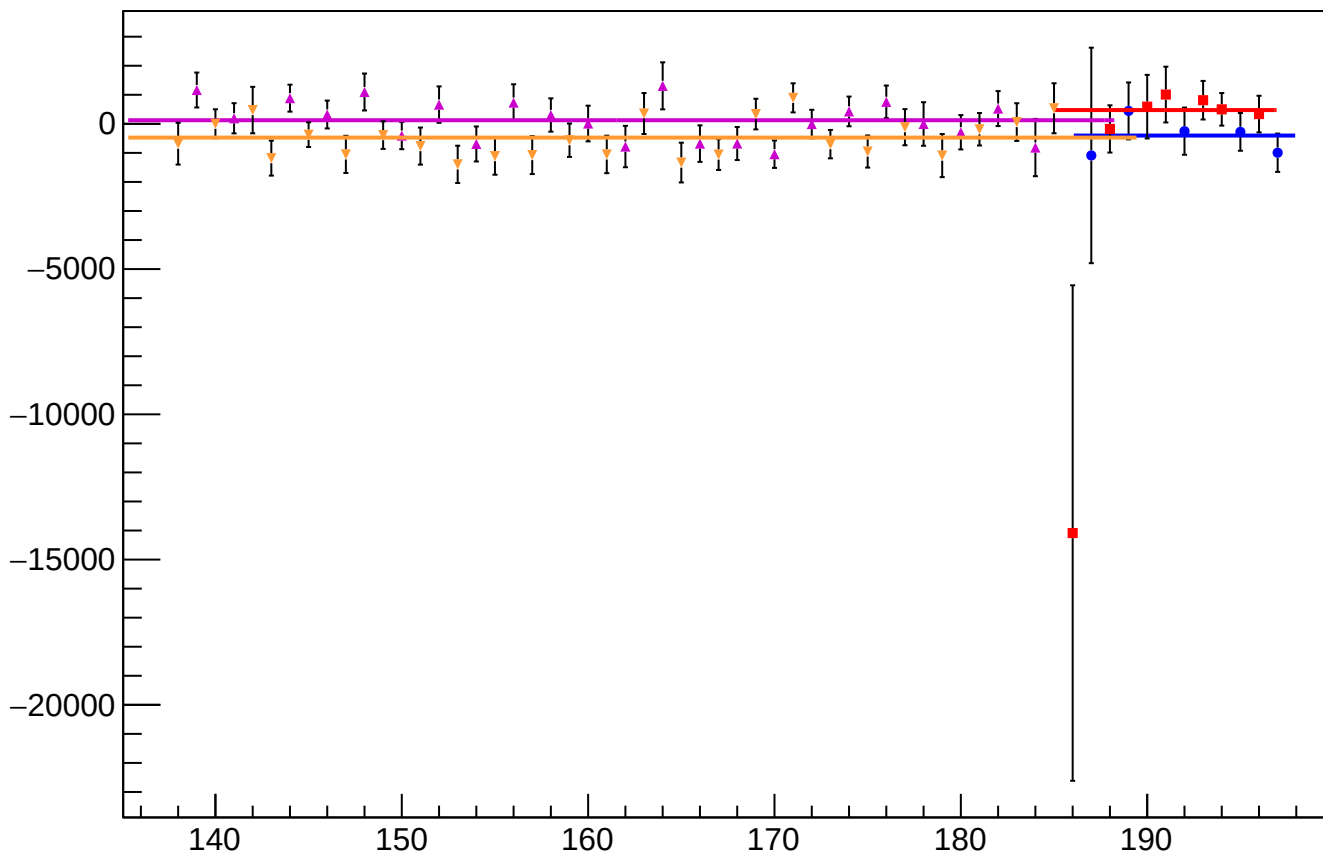
Right: 586.379+/-0.164  $\chi^2/\text{NDF}$ : 841086.5/11

In: 524.609+/-0.083  $\chi^2/\text{NDF}$ : 783932.7/27

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 43279865.1/31

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 83654477.0/59

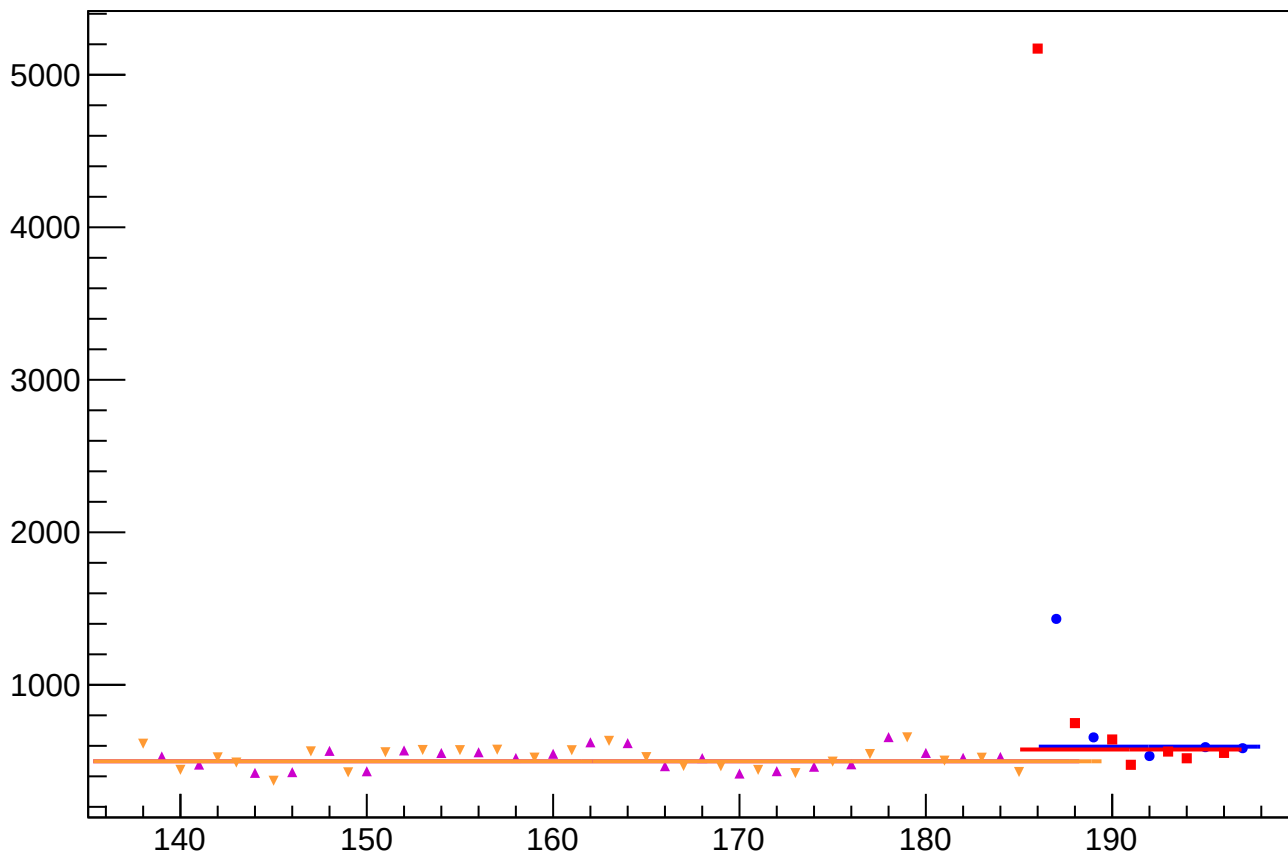
asym\_sam\_26\_48\_dd\_mean vs Slug, Sign Corrected



Right In:  $-403.304 \pm 370.185$   $\chi^2/\text{NDF}: 1.7/4$   
 Left Out:  $-473.870 \pm 117.977$   $\chi^2/\text{NDF}: 27.9/24$   
 Right Out:  $473.854 \pm 295.986$   $\chi^2/\text{NDF}: 4.2/6$   
 Left In:  $124.022 \pm 120.216$   $\chi^2/\text{NDF}: 30.2/22$

Left:  $-180.543 \pm 84.203$   $\chi^2/\text{NDF}: 70.7/47$   
 Right:  $131.777 \pm 231.175$   $\chi^2/\text{NDF}: 9.3/11$   
 In:  $73.716 \pm 114.338$   $\chi^2/\text{NDF}: 33.7/27$   
 Out:  $-343.943 \pm 109.592$   $\chi^2/\text{NDF}: 41.0/31$   
 All:  $-143.961 \pm 79.118$   $\chi^2/\text{NDF}: 81.6/59$

asym\_sam\_26\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 594.628 $\pm$ 0.262  $\chi^2$ /NDF: 121691.4/4

Left Out: 498.662 $\pm$ 0.083  $\chi^2$ /NDF: 734652.4/24

Right Out: 576.079 $\pm$ 0.209  $\chi^2$ /NDF: 724740.0/6

Left In: 498.835 $\pm$ 0.085  $\chi^2$ /NDF: 572334.3/22

Left: 498.747 $\pm$ 0.060  $\chi^2$ /NDF: 1306988.8/47

Right: 583.313 $\pm$ 0.163  $\chi^2$ /NDF: 849494.7/11

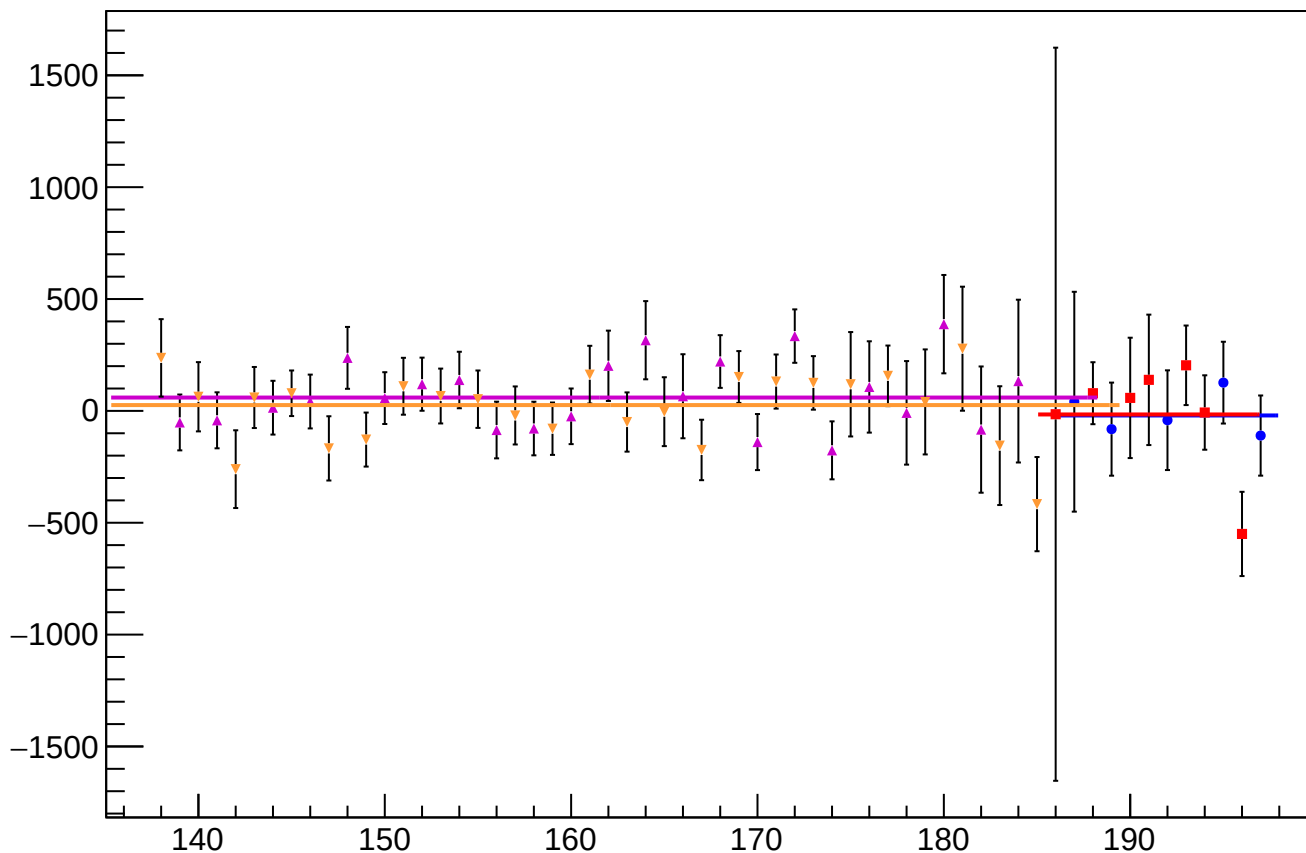
In: 507.974 $\pm$ 0.081  $\chi^2$ /NDF: 815175.0/27

Out: 509.276 $\pm$ 0.077  $\chi^2$ /NDF: 1577456.9/31

All: 508.652 $\pm$ 0.056  $\chi^2$ /NDF: 2392767.1/59



dit\_asym\_sam\_1548\_avg\_mean vs Slug, Sign Corrected



Right In:  $-20.403 \pm 96.024$   $\chi^2/\text{NDF}: 1.0/4$

Left Out:  $25.940 \pm 28.120$   $\chi^2/\text{NDF}: 22.7/24$

Right Out:  $-15.965 \pm 75.794$   $\chi^2/\text{NDF}: 10.4/6$

Left In:  $59.603 \pm 29.184$   $\chi^2/\text{NDF}: 25.6/22$

Left:  $42.147 \pm 20.250$   $\chi^2/\text{NDF}: 49.0/47$

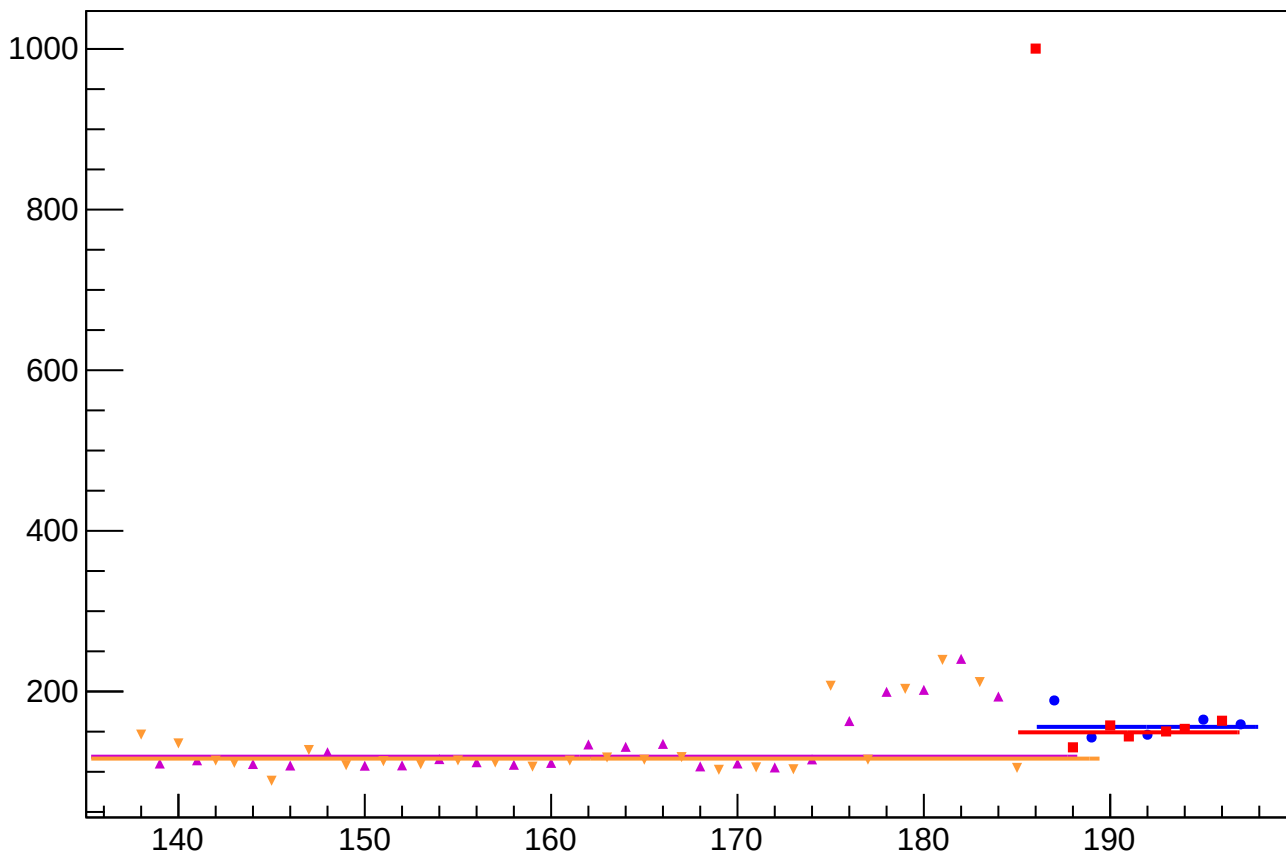
Right:  $-17.668 \pm 59.494$   $\chi^2/\text{NDF}: 11.4/11$

In:  $52.838 \pm 27.923$   $\chi^2/\text{NDF}: 27.3/27$

Out:  $20.870 \pm 26.364$   $\chi^2/\text{NDF}: 33.3/31$

All:  $35.937 \pm 19.170$   $\chi^2/\text{NDF}: 61.3/59$

dit\_asym\_sam\_1548\_avg\_rms vs Slug, Sign Corrected



Right In: 155.947 $\pm$ 0.068  $\chi^2$ /NDF: 26395.4/4

Left Out: 116.427 $\pm$ 0.020  $\chi^2$ /NDF:1589669.4/24

Right Out: 149.143 $\pm$ 0.054  $\chi^2$ /NDF: 592106.2/6

Left In: 118.822 $\pm$ 0.021  $\chi^2$ /NDF:1289178.7/22

Left: 117.580 $\pm$ 0.014  $\chi^2$ /NDF: 2885830.3/47

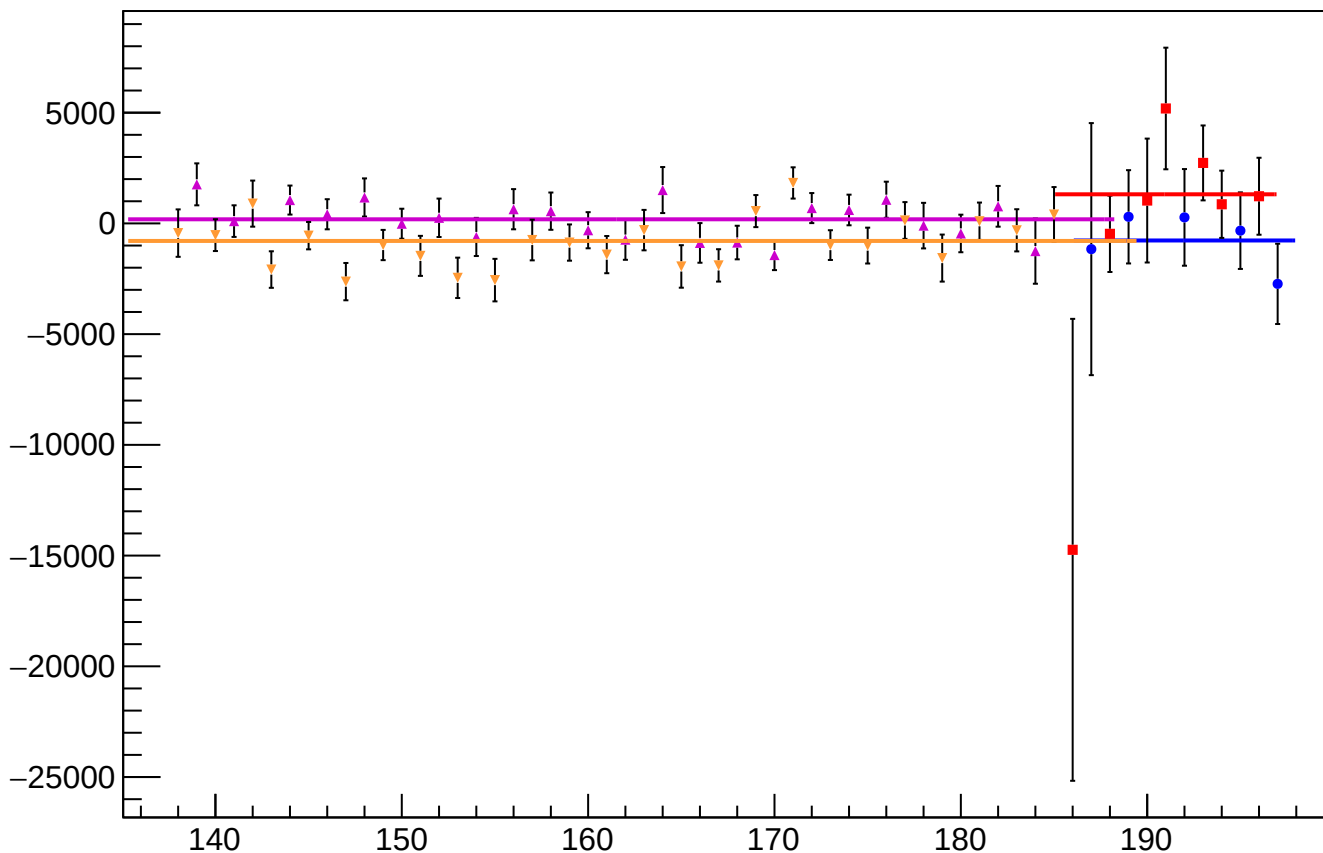
Right: 151.755 $\pm$ 0.042  $\chi^2$ /NDF: 624688.5/11

In: 121.961 $\pm$ 0.020  $\chi^2$ /NDF:1589248.5/27

Out: 120.386 $\pm$ 0.019  $\chi^2$ /NDF:2509311.1/31

All: 121.128 $\pm$ 0.014  $\chi^2$ /NDF: 4101925.2/59

asym\_sam\_1548\_avg\_correction\_mean vs Slug, Sign Corrected



Right In:  $-770.798 \pm 951.300$   $\chi^2/\text{NDF}$ : 1.7/4

Left Out:  $-791.963 \pm 165.971$   $\chi^2/\text{NDF}$ : 43.6/24

Right Out:  $1314.283 \pm 762.282$   $\chi^2/\text{NDF}$ : 6.2/6

Left In:  $185.191 \pm 169.174$   $\chi^2/\text{NDF}$ : 23.4/22

Left:  $-312.725 \pm 118.475$   $\chi^2/\text{NDF}$ : 84.0/47

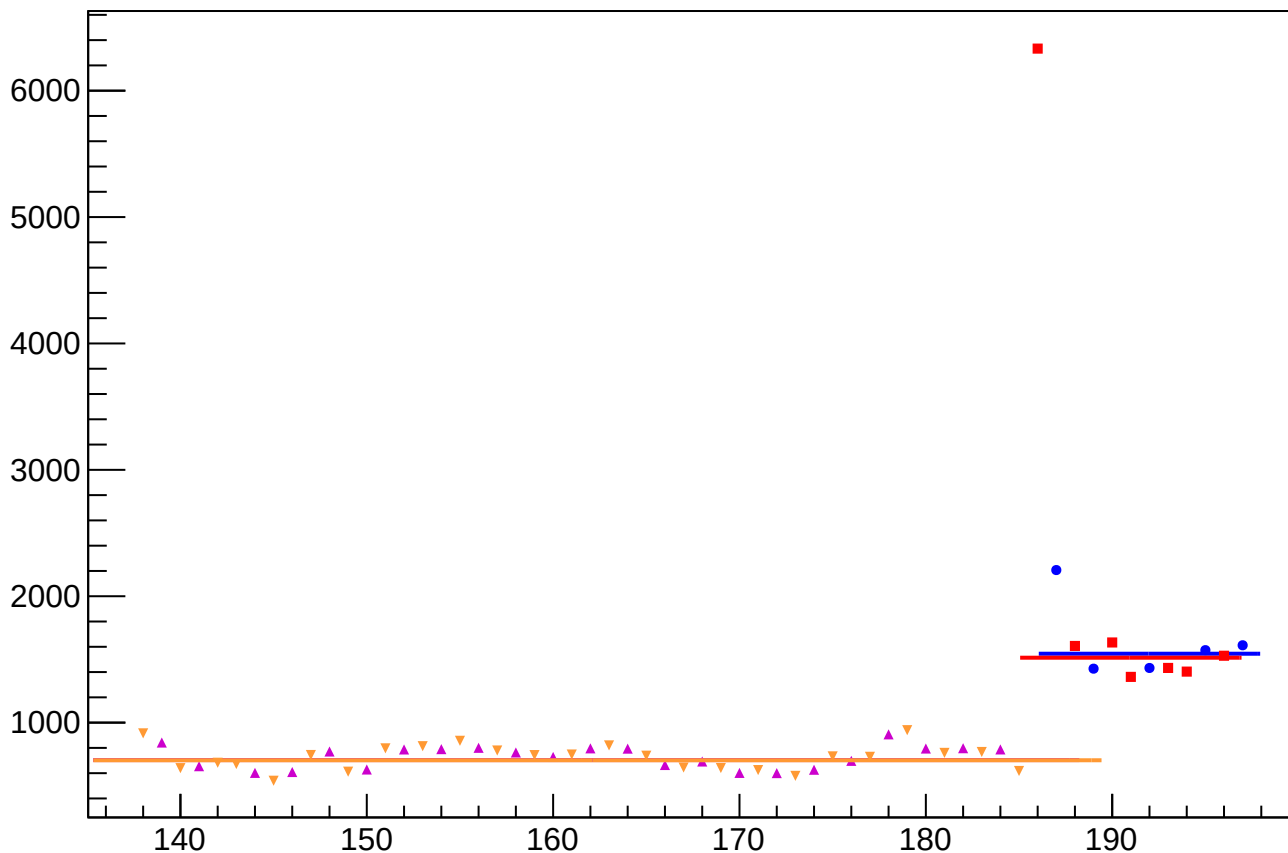
Right:  $498.973 \pm 594.863$   $\chi^2/\text{NDF}$ : 10.9/11

In:  $155.884 \pm 166.561$   $\chi^2/\text{NDF}$ : 26.1/27

Out:  $-696.634 \pm 162.171$   $\chi^2/\text{NDF}$ : 57.1/31

All:  $-281.757 \pm 116.193$   $\chi^2/\text{NDF}$ : 96.7/59

asym\_sam\_1548\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 1545.117 $\pm$ 0.673  $\chi^2$ /NDF: 41957.6/4

Left Out: 702.152 $\pm$ 0.117  $\chi^2$ /NDF: 691552.2/24

Right Out: 1513.625 $\pm$ 0.539  $\chi^2$ /NDF: 457913.8/6

Left In: 703.710 $\pm$ 0.120  $\chi^2$ /NDF: 533573.3/22

Left: 702.916 $\pm$ 0.084  $\chi^2$ /NDF: 1225211.9/47

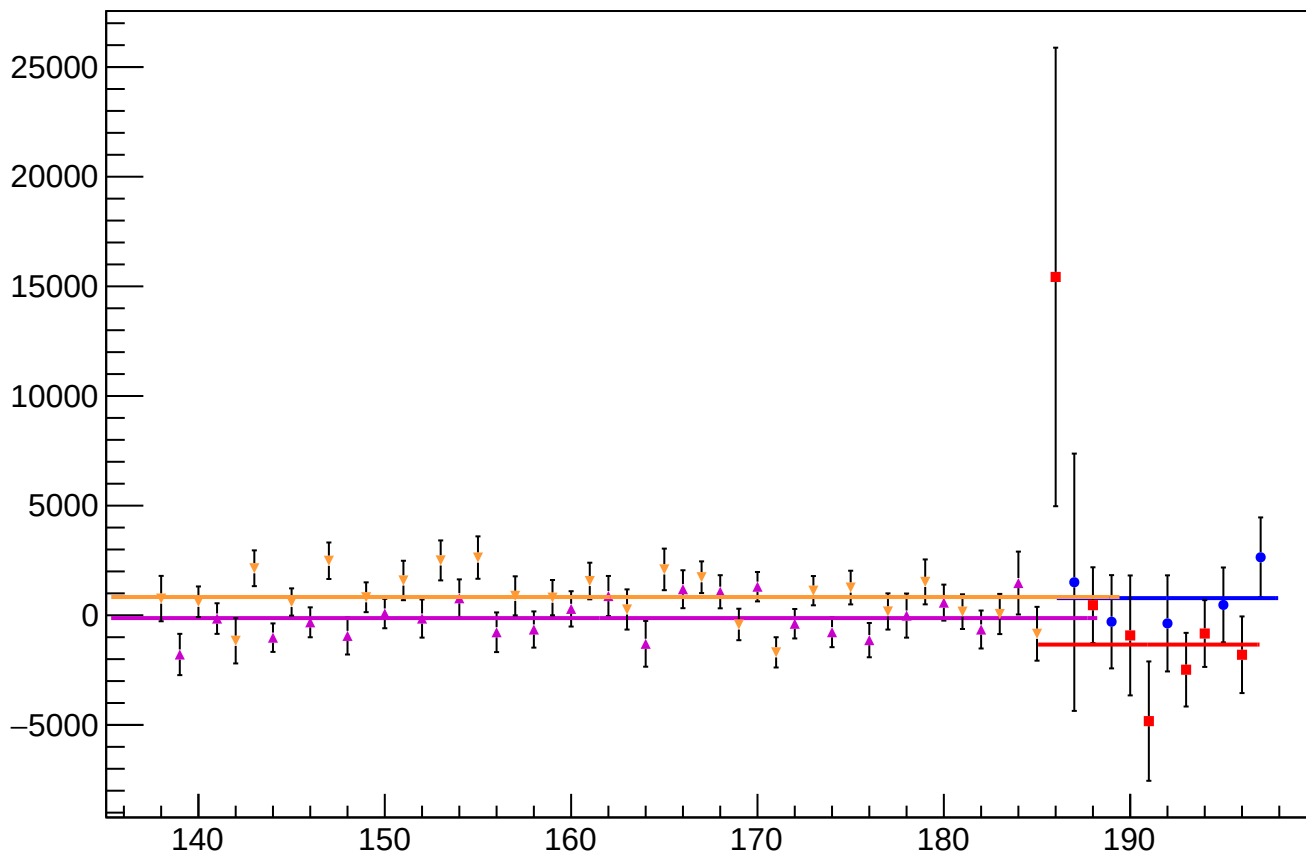
Right: 1525.939 $\pm$ 0.421  $\chi^2$ /NDF: 501206.1/11

In: 729.504 $\pm$ 0.118  $\chi^2$ /NDF: 2092181.1/27

Out: 738.879 $\pm$ 0.115  $\chi^2$ /NDF: 3313334.9/31

All: 734.317 $\pm$ 0.082  $\chi^2$ /NDF: 5408769.1/59

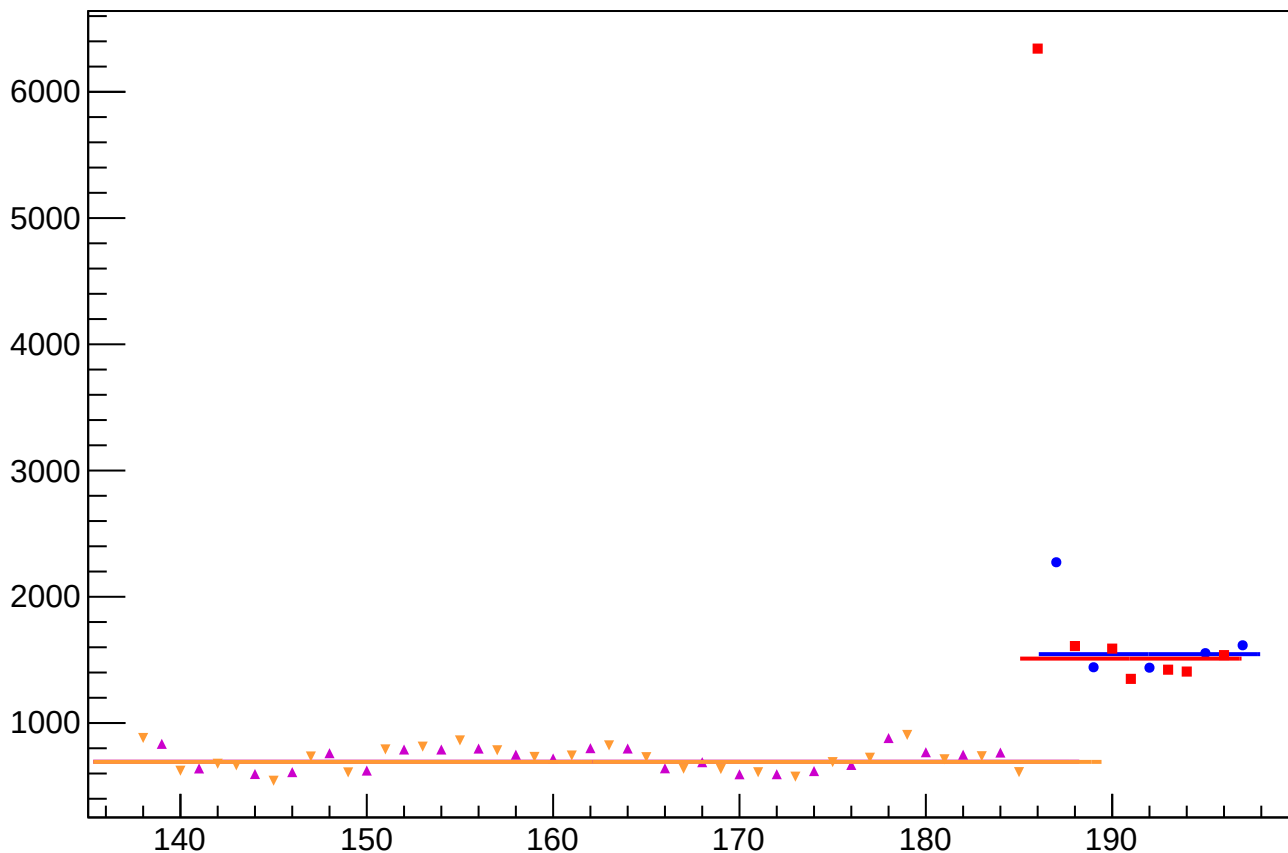
asym\_sam\_1548\_avg\_mean vs Slug, Sign Corrected



Right In:  $782.582 \pm 951.678$   $\chi^2/\text{NDF}: 1.6/4$   
 Left Out:  $832.553 \pm 163.428$   $\chi^2/\text{NDF}: 43.8/24$   
 Right Out:  $-1336.290 \pm 761.130$   $\chi^2/\text{NDF}: 6.0/6$   
 Left In:  $-128.120 \pm 166.866$   $\chi^2/\text{NDF}: 25.3/22$

Left:  $362.214 \pm 116.758$   $\chi^2/\text{NDF}: 86.0/47$   
 Right:  $-509.694 \pm 594.407$   $\chi^2/\text{NDF}: 10.6/11$   
 In:  $-100.957 \pm 164.358$   $\chi^2/\text{NDF}: 27.8/27$   
 Out:  $736.968 \pm 159.786$   $\chi^2/\text{NDF}: 57.5/31$   
 All:  $329.823 \pm 114.568$   $\chi^2/\text{NDF}: 98.7/59$

# asym\_sam\_1548\_avg\_rms vs Slug, Sign Corrected



Right In: 1545.453+/-0.673  $\chi^2/\text{NDF}$ : 43397.5/4

Left Out: 692.071+/-0.116  $\chi^2/\text{NDF}$ : 657636.6/24

Right Out: 1510.322+/-0.538  $\chi^2/\text{NDF}$ : 457494.8/6

Left In: 693.615+/-0.118  $\chi^2/\text{NDF}$ : 520692.6/22

Left: 692.827+/-0.083  $\chi^2/\text{NDF}$ : 1178416.7/47

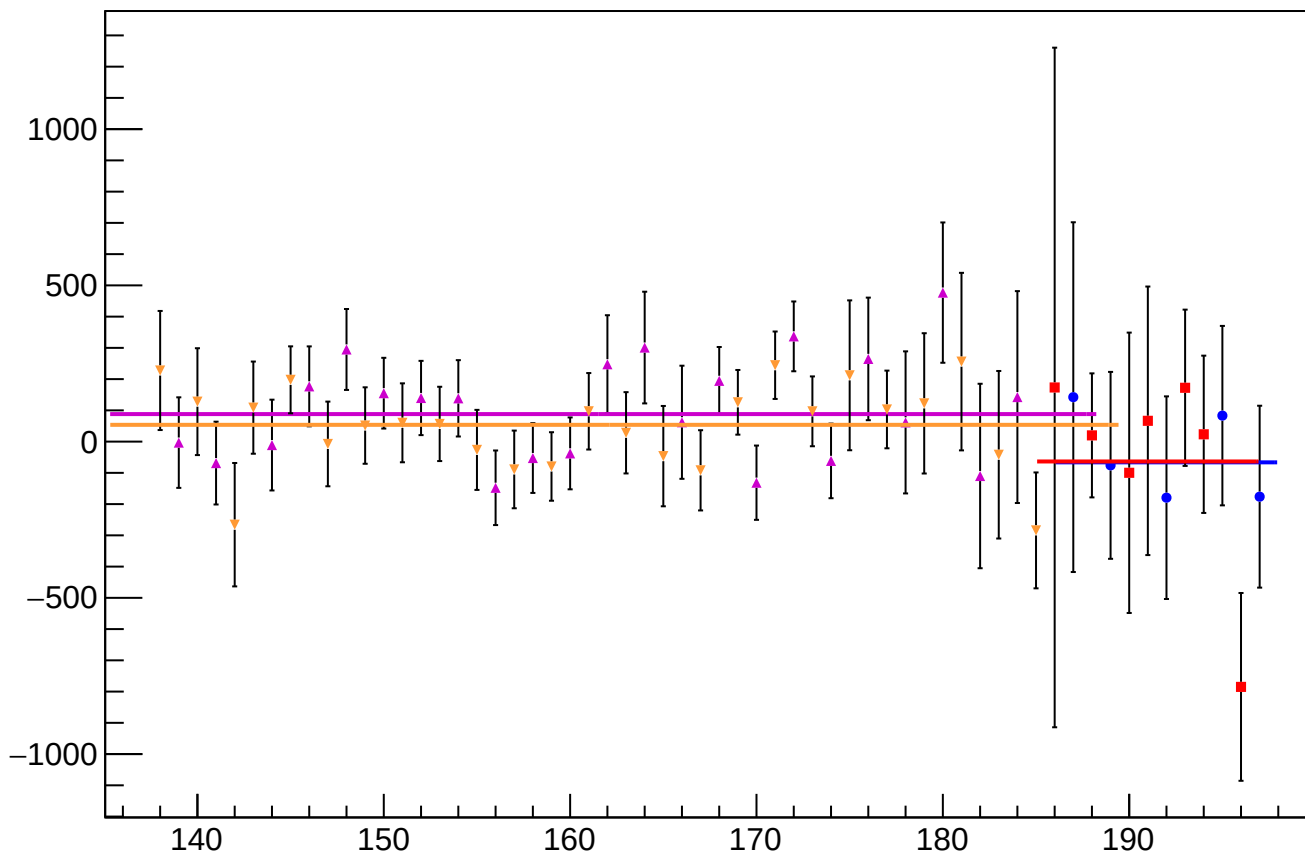
Right: 1524.027+/-0.420  $\chi^2/\text{NDF}$ : 502554.5/11

In: 719.023+/-0.116  $\chi^2/\text{NDF}$ : 2118670.4/27

Out: 728.132+/-0.113  $\chi^2/\text{NDF}$ : 3324718.0/31

All: 723.706+/-0.081  $\chi^2/\text{NDF}$ : 5446547.0/59

dit\_asym\_sam\_3748\_avg\_mean vs Slug, Sign Corrected



Right In:  $-66.383 \pm 144.619$   $\chi^2/\text{NDF}$ : 0.7/4

Left Out:  $53.701 \pm 27.462$   $\chi^2/\text{NDF}$ : 19.2/24

Right Out:  $-63.553 \pm 112.179$   $\chi^2/\text{NDF}$ : 7.1/6

Left In:  $88.085 \pm 28.764$   $\chi^2/\text{NDF}$ : 30.4/22

Left:  $70.097 \pm 19.863$   $\chi^2/\text{NDF}$ : 50.3/47

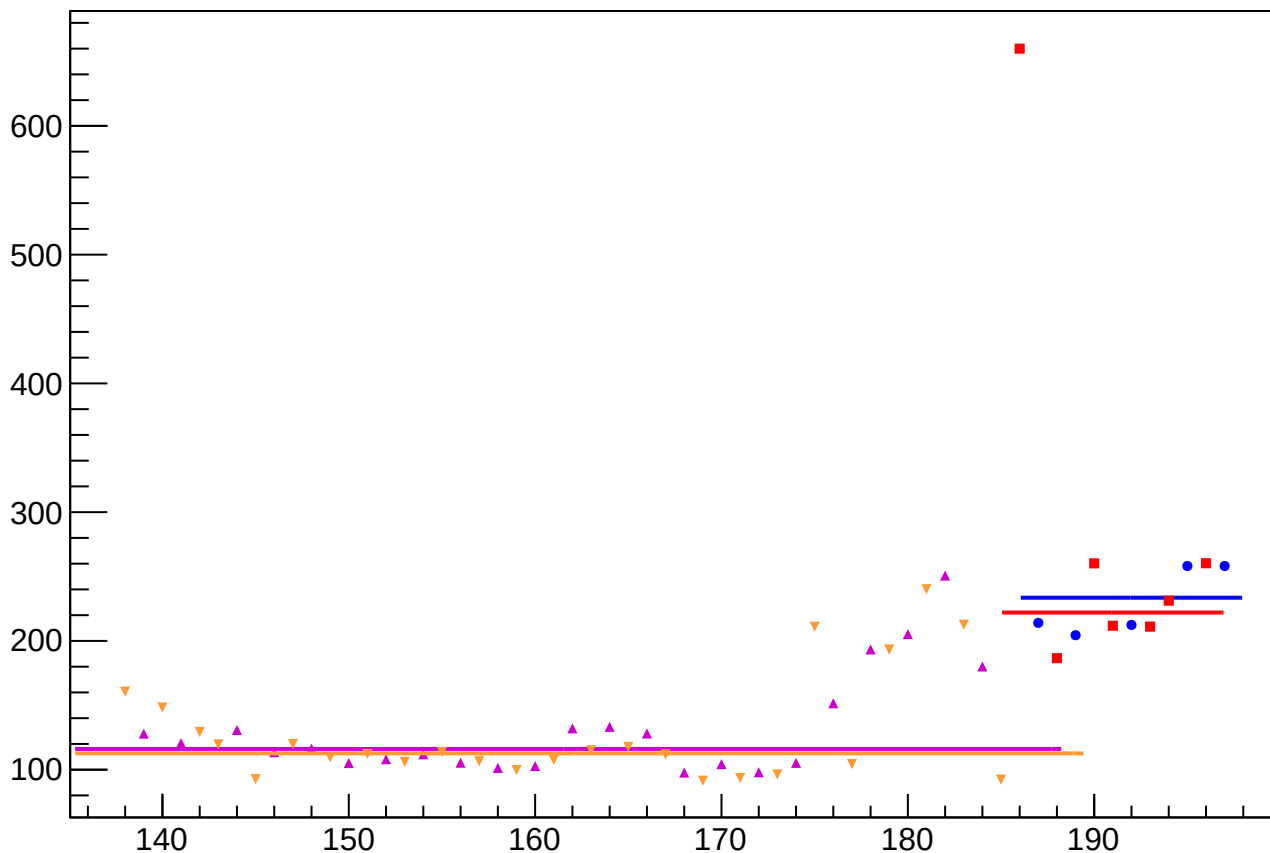
Right:  $-64.616 \pm 88.638$   $\chi^2/\text{NDF}$ : 7.8/11

In:  $82.207 \pm 28.211$   $\chi^2/\text{NDF}$ : 32.1/27

Out:  $47.071 \pm 26.674$   $\chi^2/\text{NDF}$ : 27.3/31

All:  $63.656 \pm 19.382$   $\chi^2/\text{NDF}$ : 60.3/59

dit\_asym\_sam\_3748\_avg\_rms vs Slug, Sign Corrected



Right In: 233.569 $\pm$ 0.102  $\chi^2$ /NDF: 58936.7/4

Left Out: 112.668 $\pm$ 0.019  $\chi^2$ /NDF:1851455.7/24

Right Out: 222.043 $\pm$ 0.079  $\chi^2$ /NDF: 442665.7/6

Left In: 116.108 $\pm$ 0.020  $\chi^2$ /NDF:1438879.3/22

Left: 114.308 $\pm$ 0.014  $\chi^2$ /NDF: 3305297.3/47

Right: 226.373 $\pm$ 0.063  $\chi^2$ /NDF: 509534.7/11

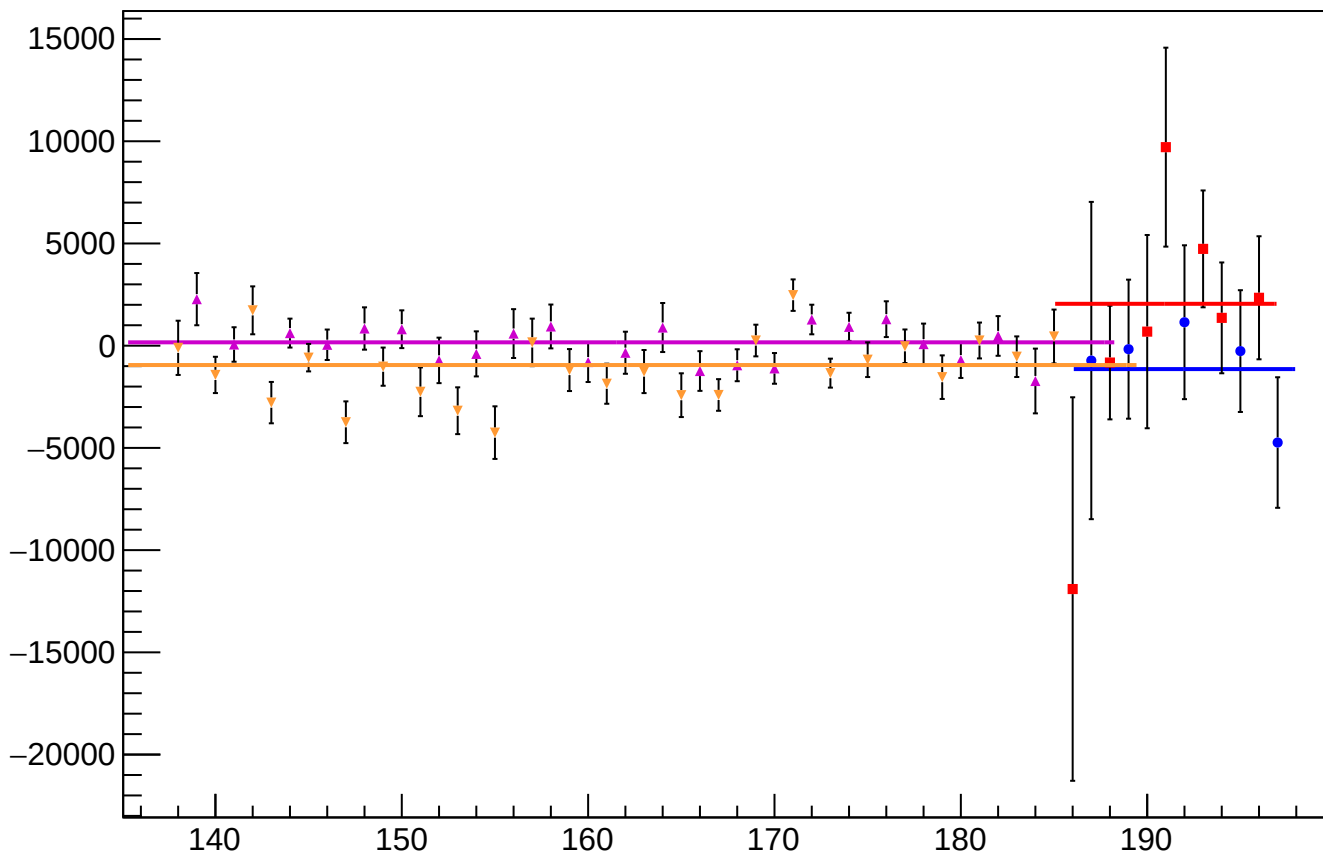
In: 120.577 $\pm$ 0.020  $\chi^2$ /NDF:2767001.3/27

Out: 118.852 $\pm$ 0.019  $\chi^2$ /NDF:4087901.9/31

All: 119.667 $\pm$ 0.014  $\chi^2$ /NDF: 6858852.4/59



asym\_sam\_3748\_avg\_correction\_mean vs Slug, Sign Corrected



Right In:  $-1144.666 \pm 1612.704$   $\chi^2/\text{NDF}$ : 1.8/4

Left Out:  $-946.412 \pm 188.668$   $\chi^2/\text{NDF}$ : 63.3/24

Right Out:  $2048.754 \pm 1294.502$   $\chi^2/\text{NDF}$ : 6.8/6

Left In:  $164.202 \pm 191.131$   $\chi^2/\text{NDF}$ : 22.0/22

Left:  $-398.306 \pm 134.271$   $\chi^2/\text{NDF}$ : 102.4/47

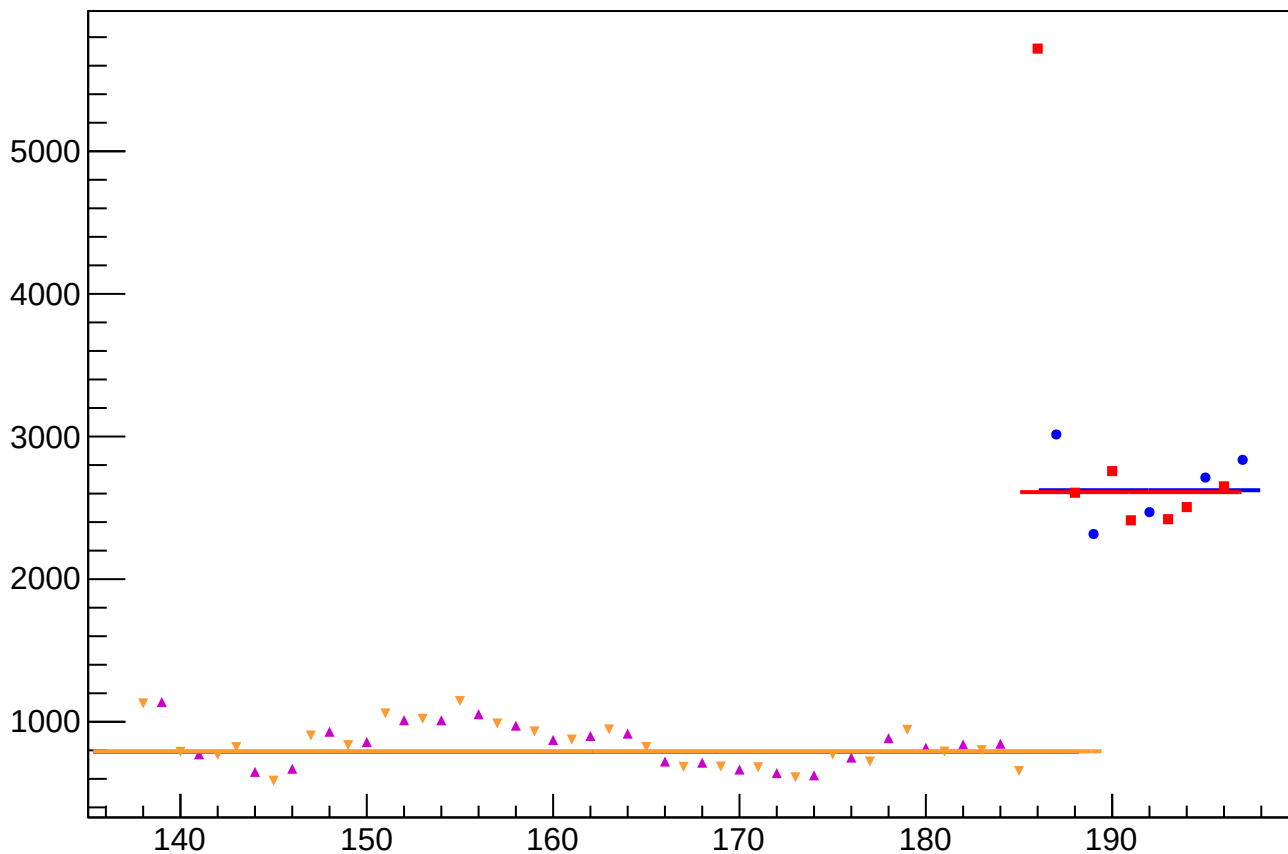
Right:  $797.435 \pm 1009.510$   $\chi^2/\text{NDF}$ : 11.0/11

In:  $146.072 \pm 189.803$   $\chi^2/\text{NDF}$ : 24.5/27

Out:  $-884.113 \pm 186.696$   $\chi^2/\text{NDF}$ : 75.3/31

All:  $-377.520 \pm 133.099$   $\chi^2/\text{NDF}$ : 114.8/59

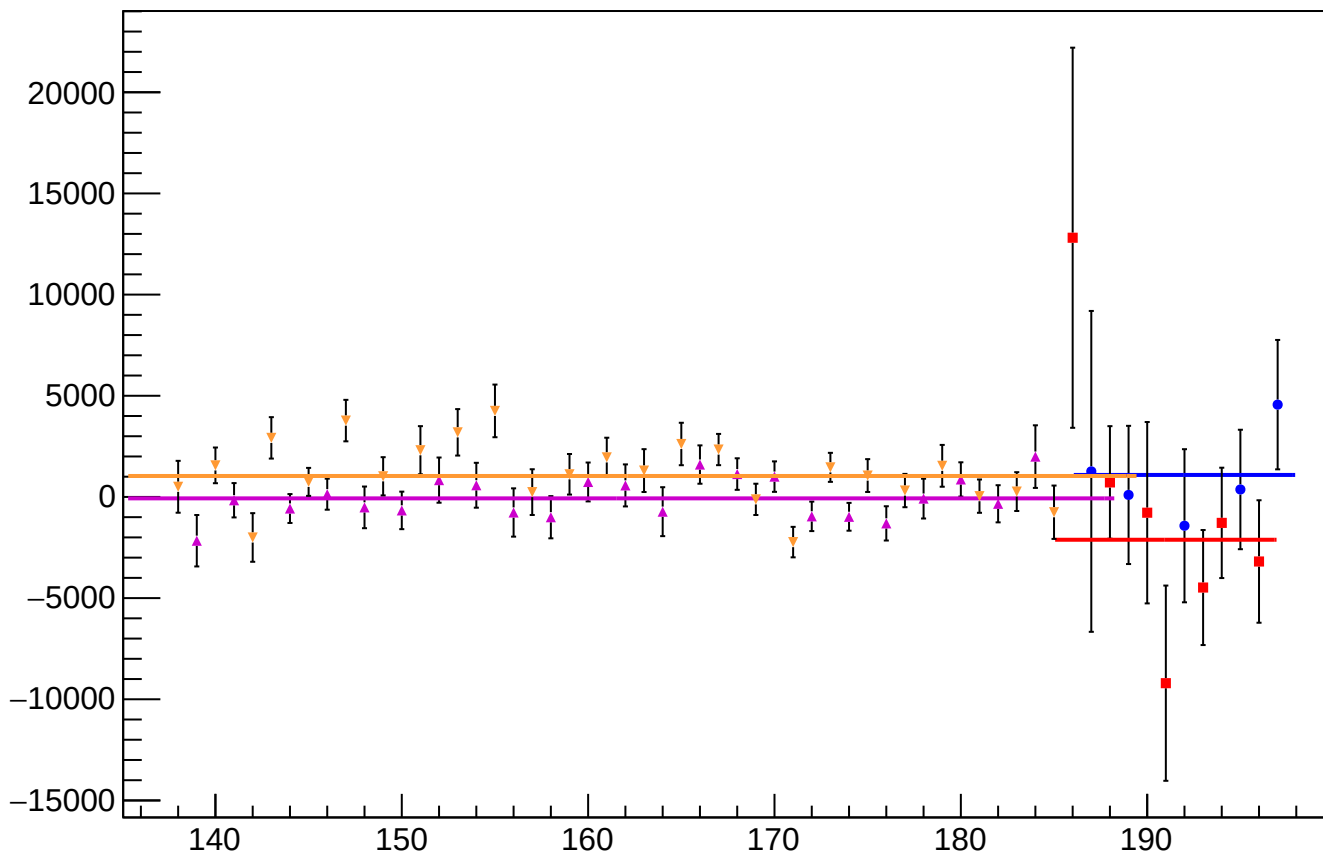
asym\_sam\_3748\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 2623.558 $\pm$ 1.140  $\chi^2$ /NDF: 35372.6/4  
 Left Out: 793.154 $\pm$ 0.133  $\chi^2$ /NDF:1158856.1/24  
 Right Out: 2610.260 $\pm$ 0.915  $\chi^2$ /NDF: 237183.6/6  
 Left In: 789.699 $\pm$ 0.135  $\chi^2$ /NDF:1019959.0/22

Left: 791.449 $\pm$ 0.095  $\chi^2$ /NDF: 2179146.2/47  
 Right: 2615.471 $\pm$ 0.714  $\chi^2$ /NDF: 272638.9/11  
 In: 815.101 $\pm$ 0.134  $\chi^2$ /NDF:3605653.9/27  
 Out: 830.950 $\pm$ 0.132  $\chi^2$ /NDF:5254873.7/31  
 All: 823.156 $\pm$ 0.094  $\chi^2$ /NDF: 8867616.0/59

asym\_sam\_3748\_avg\_mean vs Slug, Sign Corrected



Right In: 1087.075+/-1613.642  $\chi^2/\text{NDF}$ : 1.8/4

Left Out: 1035.605+/-187.244  $\chi^2/\text{NDF}$ : 61.4/24

Right Out: -2116.038+/-1290.142  $\chi^2/\text{NDF}$ : 6.7/6

Left In: -70.852+/-190.155  $\chi^2/\text{NDF}$ : 23.4/22

Left: 490.913+/-133.419  $\chi^2/\text{NDF}$ : 101.9/47

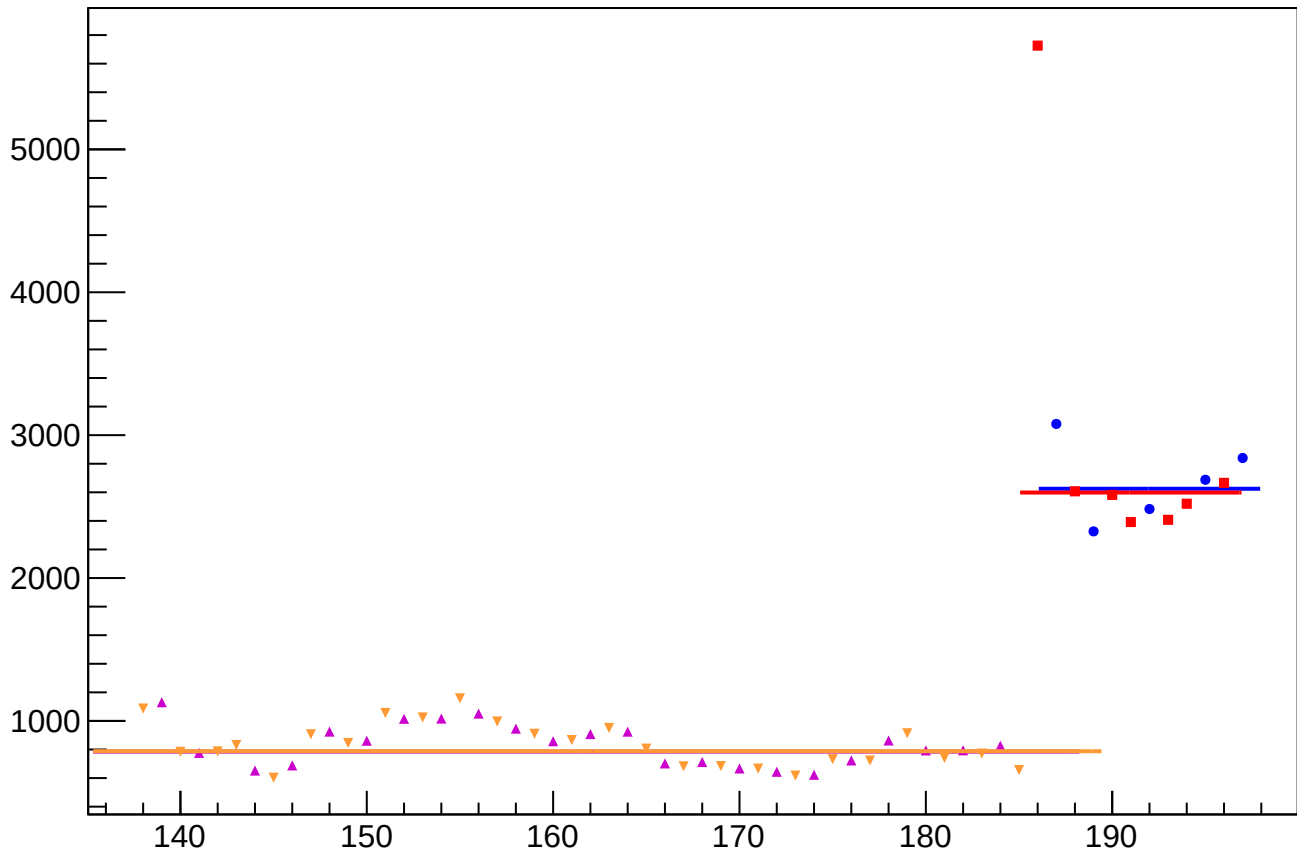
Right: -866.953+/-1007.667  $\chi^2/\text{NDF}$ : 10.9/11

In: -54.992+/-188.849  $\chi^2/\text{NDF}$ : 25.7/27

Out: 970.588+/-185.302  $\chi^2/\text{NDF}$ : 73.9/31

All: 467.519+/-132.264  $\chi^2/\text{NDF}$ : 114.6/59

asym\_sam\_3748\_avg\_rms vs Slug, Sign Corrected



Right In: 2624.865+/-1.141  $\chi^2$ /NDF: 34585.5/4

Left Out: 787.981+/-0.132  $\chi^2$ /NDF:1113986.0/24

Right Out: 2598.474+/-0.912  $\chi^2$ /NDF: 237120.6/6

Left In: 785.179+/-0.134  $\chi^2$ /NDF:976942.0/22

Left: 786.602+/-0.094  $\chi^2$ /NDF: 2091148.6/47

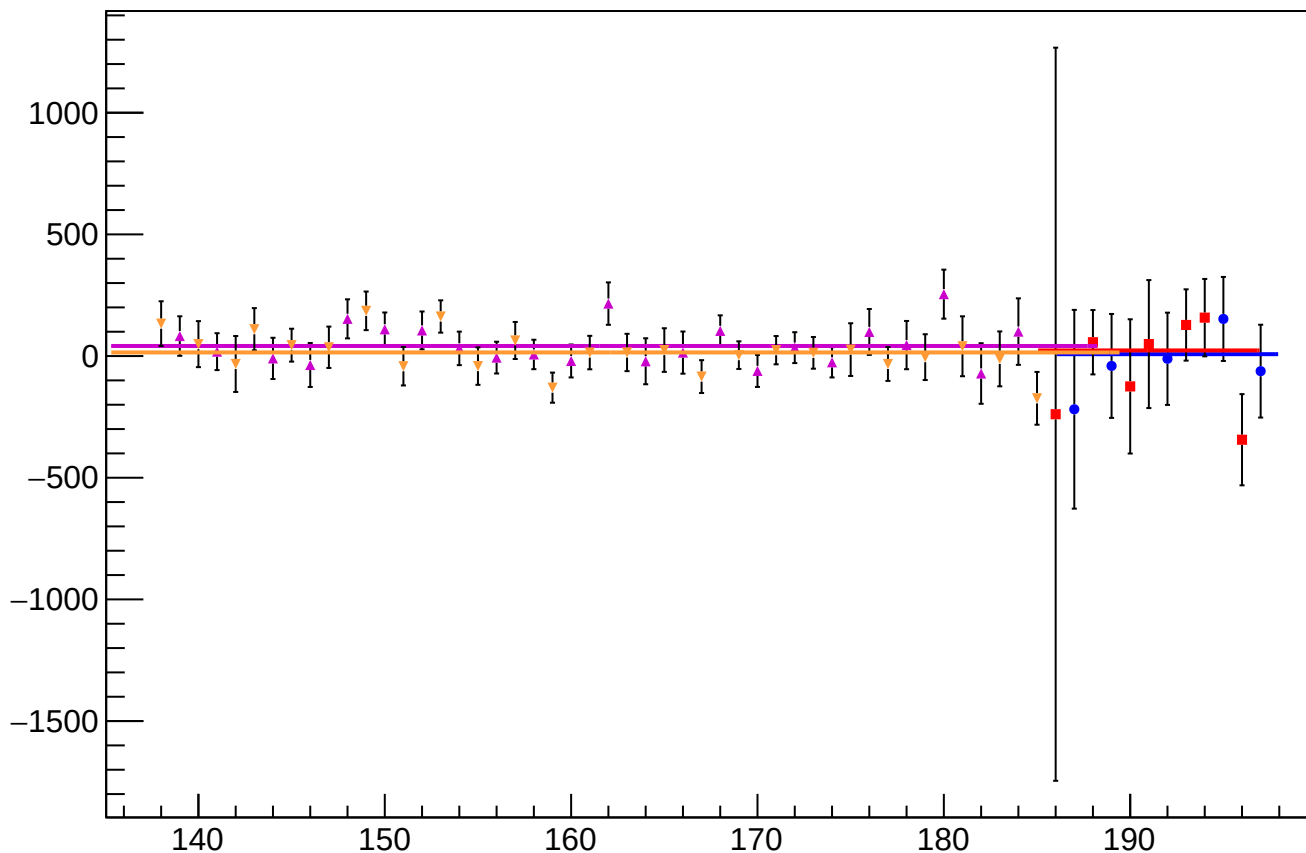
Right: 2608.766+/-0.713  $\chi^2$ /NDF: 272032.4/11

In: 810.376+/-0.134  $\chi^2$ /NDF:3575503.3/27

Out: 825.330+/-0.131  $\chi^2$ /NDF:5208515.0/31

All: 817.995+/-0.094  $\chi^2$ /NDF: 8790407.4/59

dit\_asym\_sam\_1526\_avg\_mean vs Slug, Sign Corrected



Right In:  $7.749 \pm 92.531$   $\chi^2/\text{NDF}$ : 1.2/4

Left Out:  $14.879 \pm 15.529$   $\chi^2/\text{NDF}$ : 25.8/24

Right Out:  $23.142 \pm 70.736$   $\chi^2/\text{NDF}$ : 5.5/6

Left In:  $41.428 \pm 16.130$   $\chi^2/\text{NDF}$ : 21.7/22

Left:  $27.650 \pm 11.187$   $\chi^2/\text{NDF}$ : 48.9/47

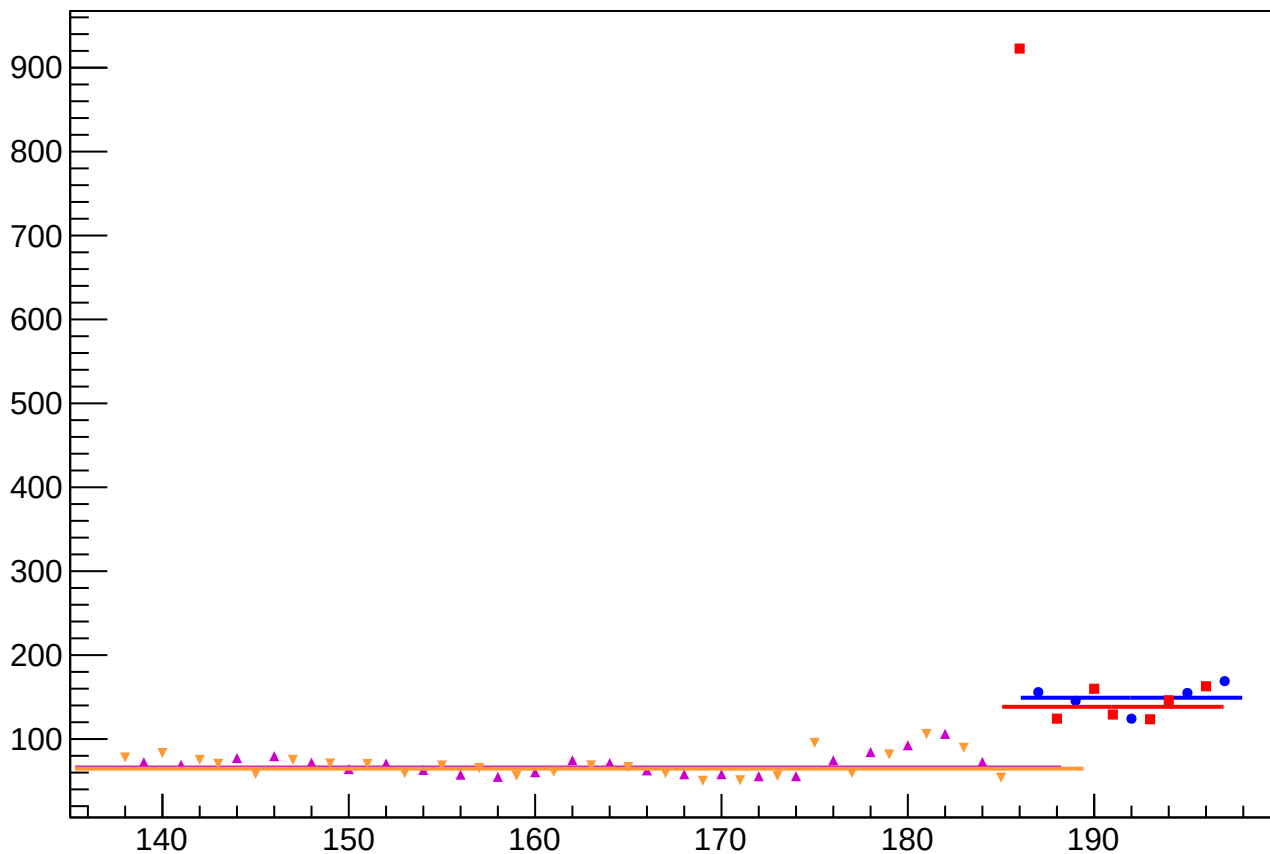
Right:  $17.465 \pm 56.196$   $\chi^2/\text{NDF}$ : 6.7/11

In:  $40.435 \pm 15.891$   $\chi^2/\text{NDF}$ : 23.0/27

Out:  $15.259 \pm 15.168$   $\chi^2/\text{NDF}$ : 31.3/31

All:  $27.261 \pm 10.972$   $\chi^2/\text{NDF}$ : 55.6/59

dit\_asym\_sam\_1526\_avg\_rms vs Slug, Sign Corrected



Right In: 149.197 $\pm$ 0.065  $\chi^2$ /NDF: 59600.2/4

Left Out: 64.680 $\pm$ 0.011  $\chi^2$ /NDF:1150386.4/24

Right Out: 138.381 $\pm$ 0.050  $\chi^2$ /NDF: 639118.3/6

Left In: 66.016 $\pm$ 0.011  $\chi^2$ /NDF:868433.2/22

Left: 65.322 $\pm$ 0.008  $\chi^2$ /NDF: 2025941.7/47

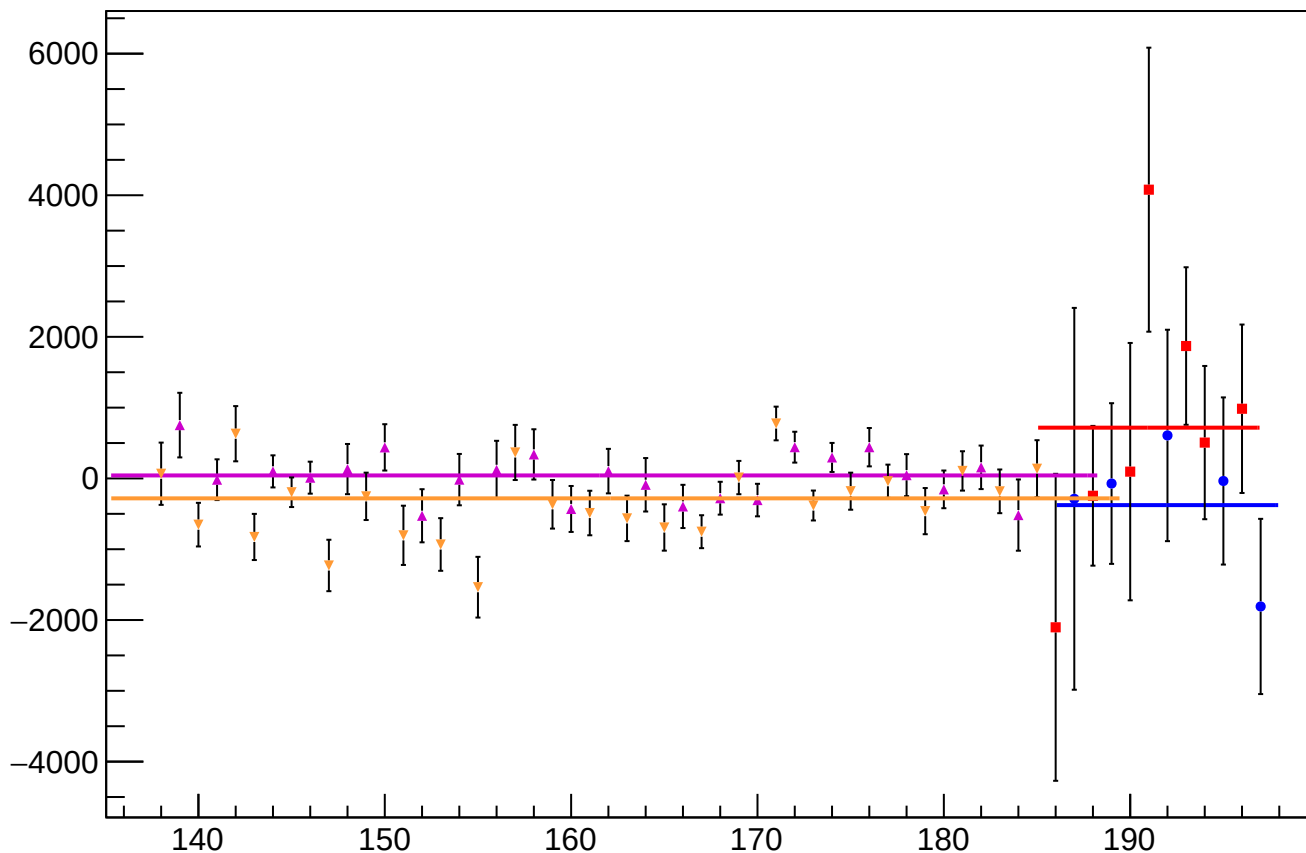
Right: 142.371 $\pm$ 0.040  $\chi^2$ /NDF: 715964.5/11

In: 68.469 $\pm$ 0.011  $\chi^2$ /NDF:2496604.5/27

Out: 68.069 $\pm$ 0.011  $\chi^2$ /NDF:3860894.2/31

All: 68.260 $\pm$ 0.008  $\chi^2$ /NDF: 6358163.3/59

asym\_sam\_1526\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -376.893+/-604.906  $\chi^2/\text{NDF}$ : 1.9/4

Left Out: -281.407+/-59.534  $\chi^2/\text{NDF}$ : 66.5/24

Right Out: 717.154+/-490.368  $\chi^2/\text{NDF}$ : 6.7/6

Left In: 42.368+/-60.284  $\chi^2/\text{NDF}$ : 24.7/22

Left: -121.547+/-42.360  $\chi^2/\text{NDF}$ : 105.8/47

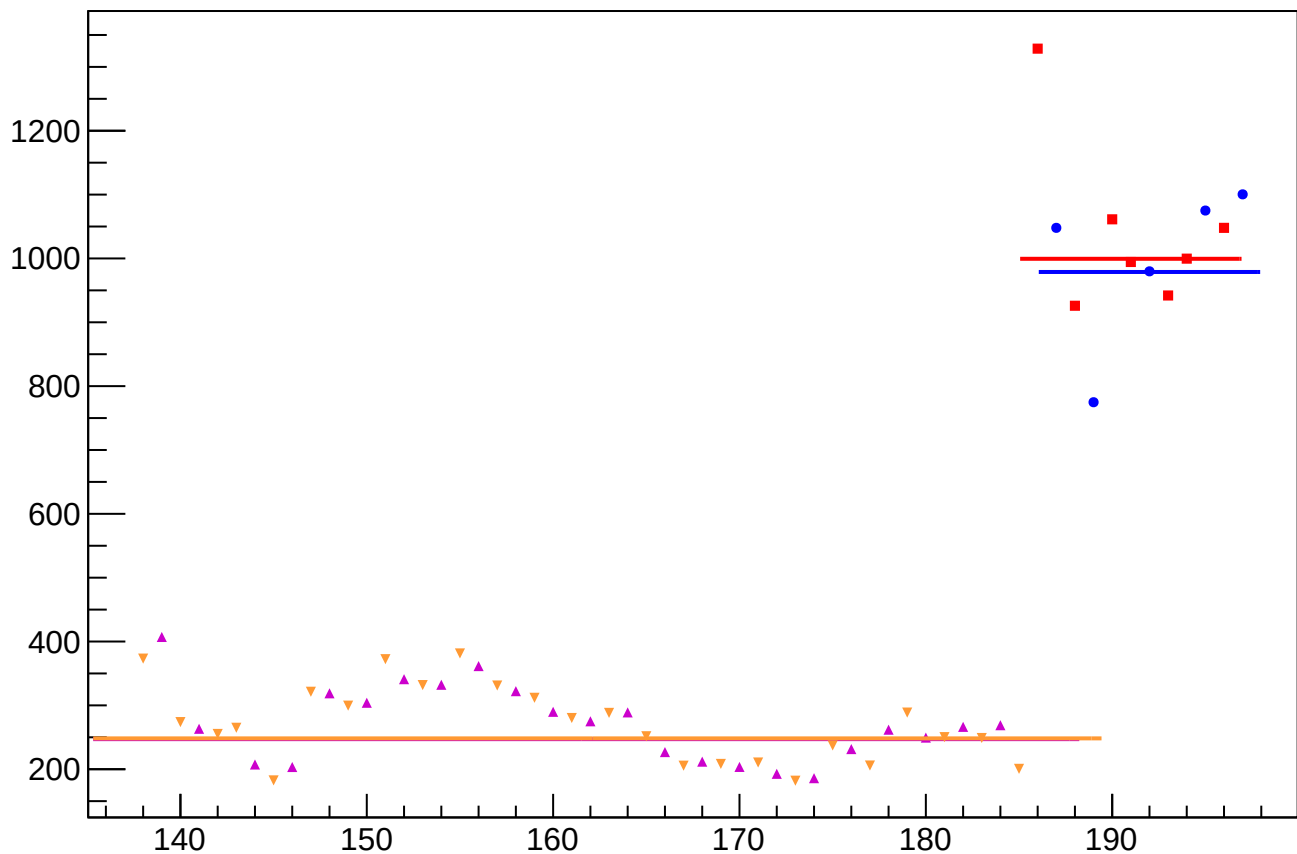
Right: 283.303+/-380.926  $\chi^2/\text{NDF}$ : 10.6/11

In: 38.245+/-59.987  $\chi^2/\text{NDF}$ : 27.1/27

Out: -266.902+/-59.100  $\chi^2/\text{NDF}$ : 77.3/31

All: -116.602+/-42.100  $\chi^2/\text{NDF}$ : 117.5/59

asym\_sam\_1526\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 978.802 $\pm$ 0.428  $\chi^2$ /NDF: 98531.6/4

Left Out: 248.297 $\pm$ 0.042  $\chi^2$ /NDF: 1687698.9/24

Right Out: 999.450 $\pm$ 0.347  $\chi^2$ /NDF: 68186.5/6

Left In: 247.105 $\pm$ 0.043  $\chi^2$ /NDF: 1539330.1/22

Left: 247.709 $\pm$ 0.030  $\chi^2$ /NDF: 3227424.3/47

Right: 991.262 $\pm$ 0.269  $\chi^2$ /NDF: 168124.2/11

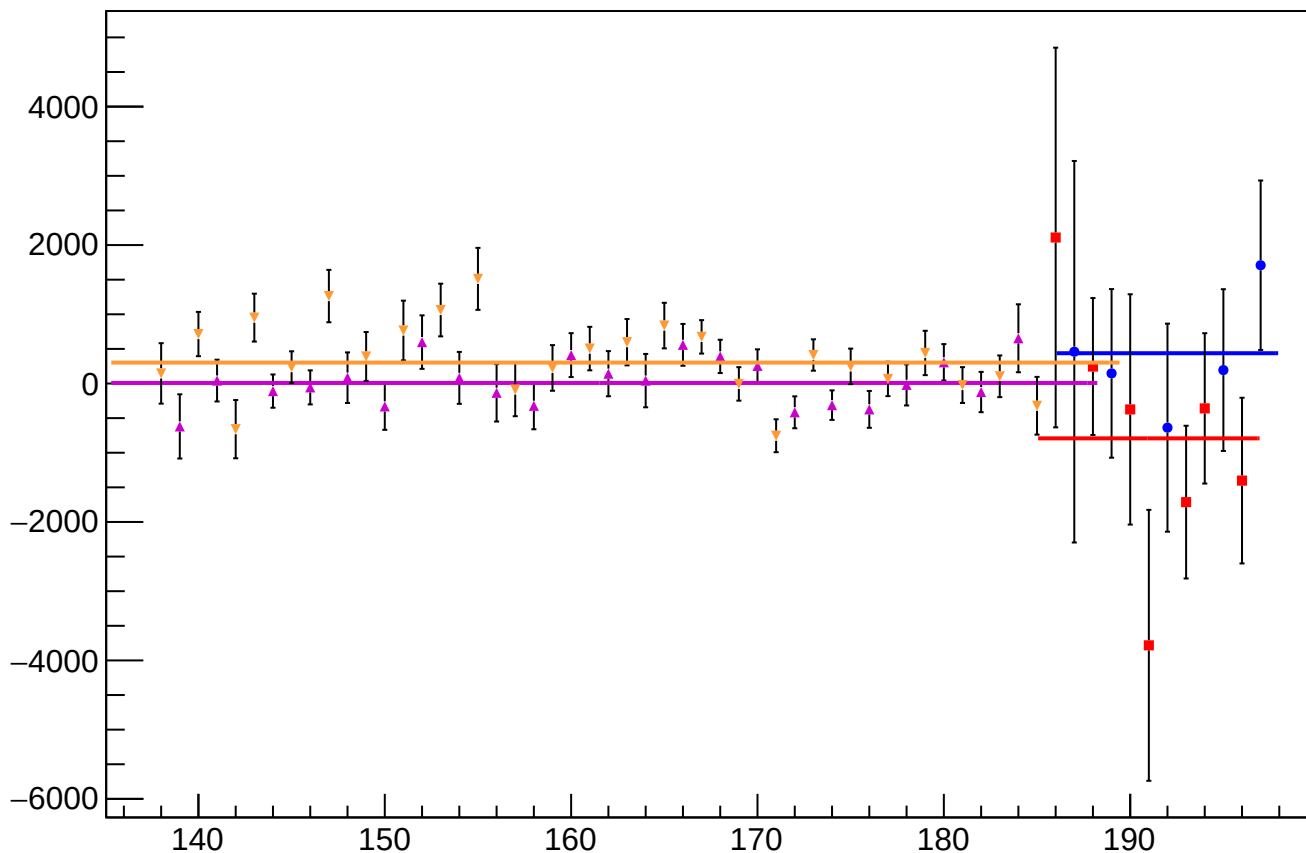
In: 254.301 $\pm$ 0.042  $\chi^2$ /NDF: 4535367.5/27

Out: 259.208 $\pm$ 0.042  $\chi^2$ /NDF: 6380631.8/31

All: 256.791 $\pm$ 0.030  $\chi^2$ /NDF: 10922788.9/59



asym\_sam\_1526\_avg\_mean vs Slug, Sign Corrected



Right In: 437.689+/-614.400  $\chi^2/\text{NDF}$ : 1.7/4

Left Out: 302.420+/-60.991  $\chi^2/\text{NDF}$ :63.8/24

Right Out: -792.271+/-491.134  $\chi^2/\text{NDF}$ : 5.7/6

Left In: 7.915+/-61.726  $\chi^2/\text{NDF}$ :26.3/22

Left: 156.931+/-43.384  $\chi^2/\text{NDF}$ : 101.6/47

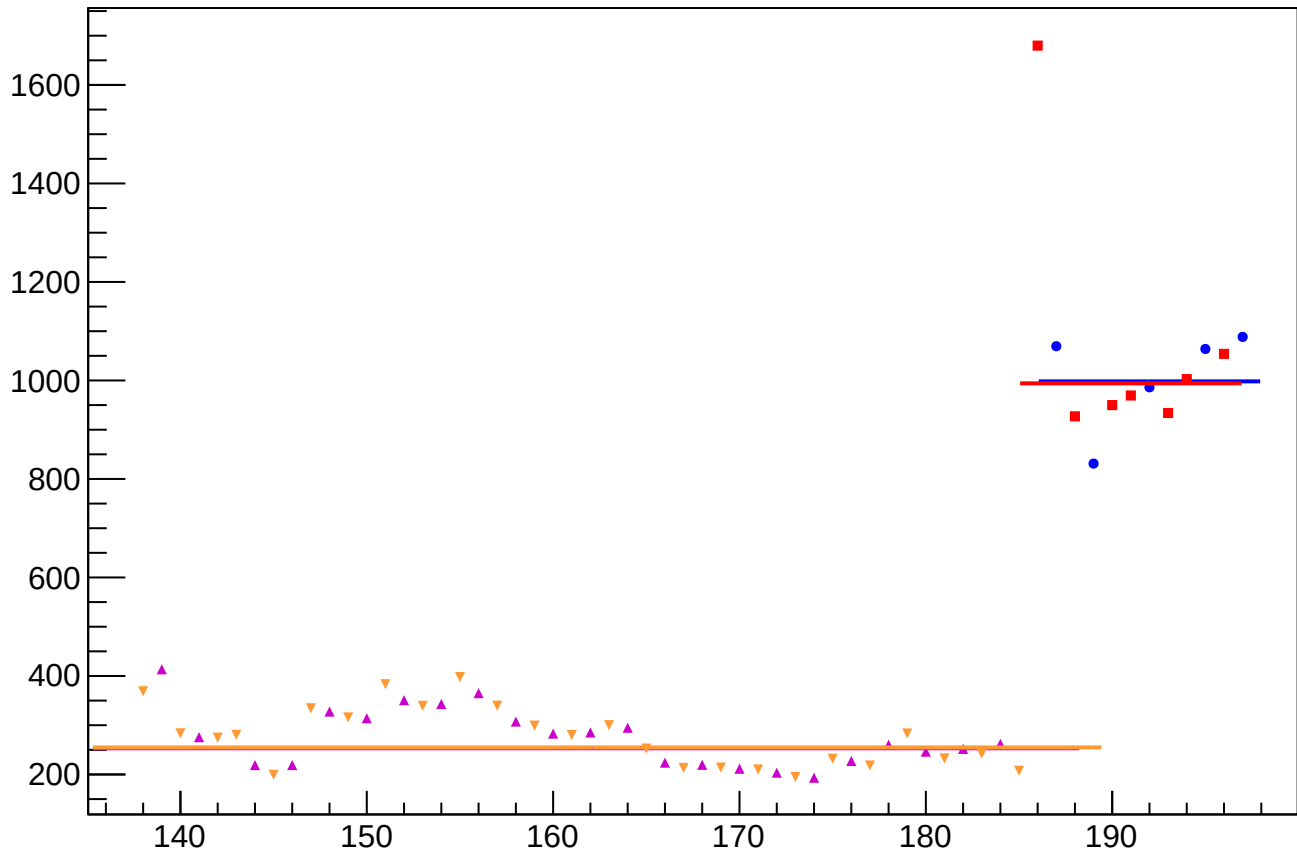
Right: -312.747+/-383.629  $\chi^2/\text{NDF}$ : 9.9/11

In: 12.209+/-61.416  $\chi^2/\text{NDF}$ :28.5/27

Out: 285.795+/-60.526  $\chi^2/\text{NDF}$ :74.5/31

All: 151.000+/-43.110  $\chi^2/\text{NDF}$ : 113.0/59

asym\_sam\_1526\_avg\_rms vs Slug, Sign Corrected



Right In: 998.144 $\pm$ 0.434  $\chi^2$ /NDF: 56262.4/4

Left Out: 254.937 $\pm$ 0.043  $\chi^2$ /NDF:1541708.7/24

Right Out: 994.113 $\pm$ 0.347  $\chi^2$ /NDF: 147036.5/6

Left In: 253.170 $\pm$ 0.044  $\chi^2$ /NDF:1366527.6/22

Left: 254.064 $\pm$ 0.031  $\chi^2$ /NDF: 2909065.8/47

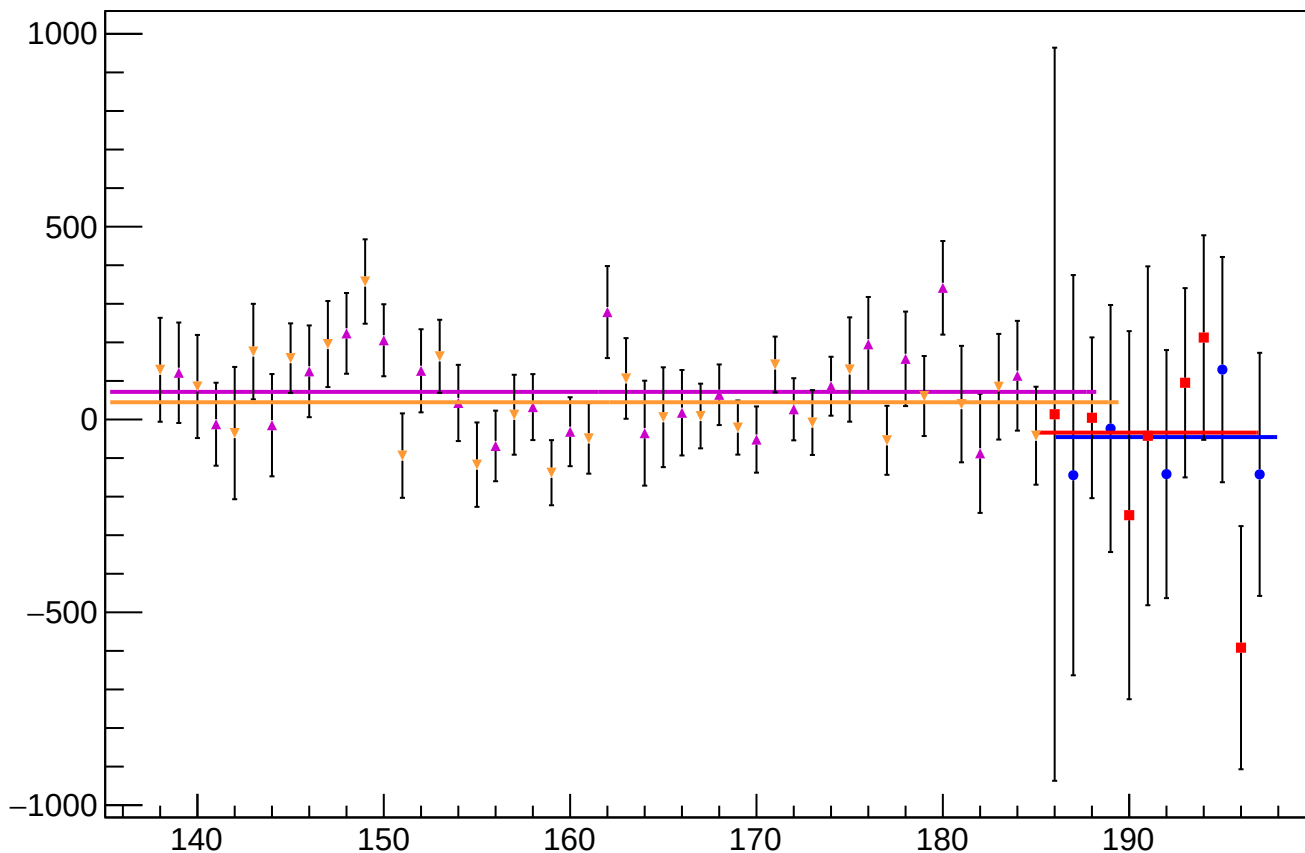
Right: 995.685 $\pm$ 0.271  $\chi^2$ /NDF: 203351.5/11

In: 260.614 $\pm$ 0.043  $\chi^2$ /NDF:4333826.4/27

Out: 266.163 $\pm$ 0.043  $\chi^2$ /NDF:6150236.3/31

All: 263.429 $\pm$ 0.030  $\chi^2$ /NDF: 10492346.2/59

dit\_asym\_sam\_3726\_avg\_mean vs Slug, Sign Corrected



Right In:  $-45.605 \pm 149.217$   $\chi^2/\text{NDF}$ : 0.6/4

Left Out:  $44.746 \pm 20.460$   $\chi^2/\text{NDF}$ : 30.5/24

Right Out:  $-34.052 \pm 115.795$   $\chi^2/\text{NDF}$ : 4.5/6

Left In:  $71.620 \pm 21.469$   $\chi^2/\text{NDF}$ : 23.7/22

Left:  $57.537 \pm 14.811$   $\chi^2/\text{NDF}$ : 55.0/47

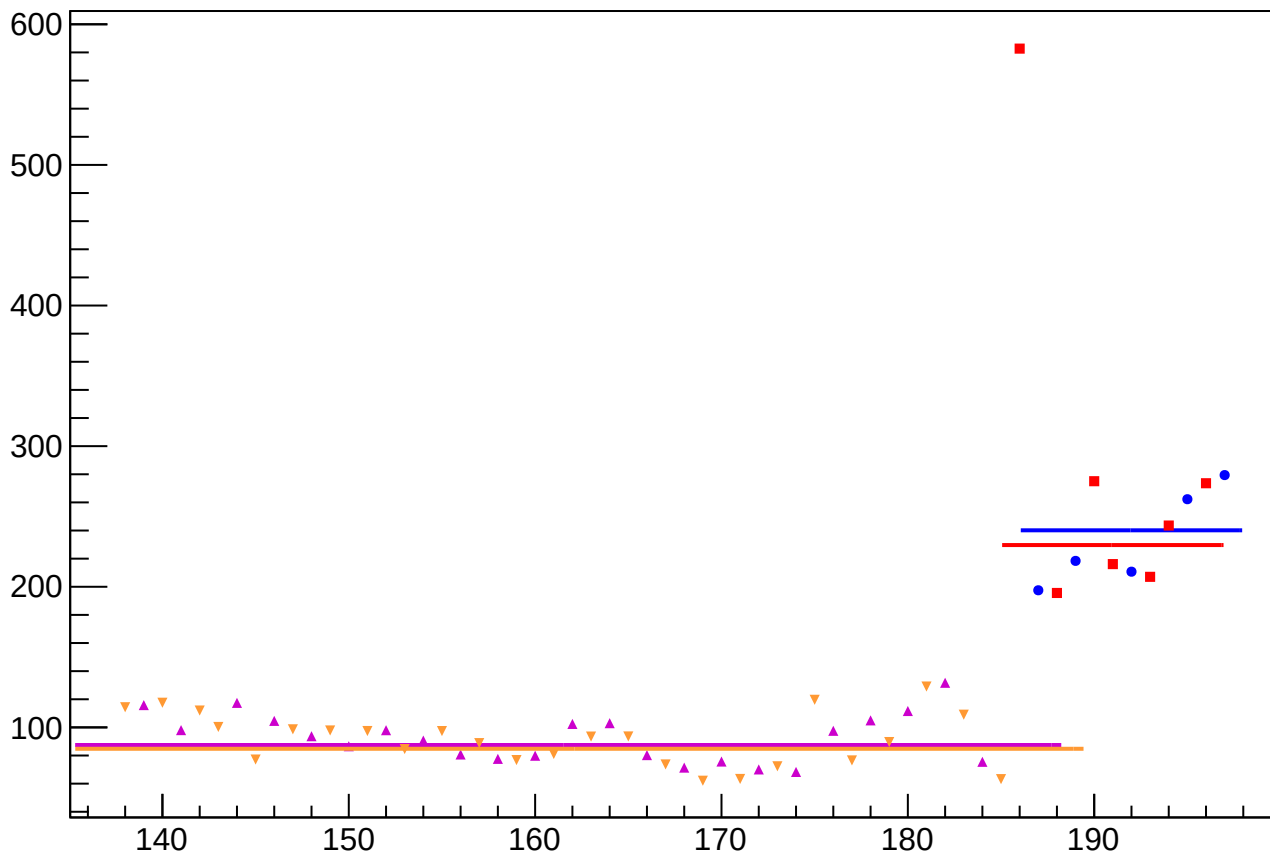
Right:  $-38.395 \pm 91.481$   $\chi^2/\text{NDF}$ : 5.1/11

In:  $69.243 \pm 21.250$   $\chi^2/\text{NDF}$ : 24.8/27

Out:  $42.360 \pm 20.147$   $\chi^2/\text{NDF}$ : 35.5/31

All:  $55.086 \pm 14.621$   $\chi^2/\text{NDF}$ : 61.2/59

dit\_asym\_sam\_3726\_avg\_rms vs Slug, Sign Corrected



Right In: 240.151 $\pm$ 0.106  $\chi^2$ /NDF: 81975.7/4

Left Out: 84.793 $\pm$ 0.014  $\chi^2$ /NDF:1382881.3/24

Right Out: 229.666 $\pm$ 0.082  $\chi^2$ /NDF: 410668.8/6

Left In: 87.477 $\pm$ 0.015  $\chi^2$ /NDF:1056450.2/22

Left: 86.070 $\pm$ 0.010  $\chi^2$ /NDF: 2455720.1/47

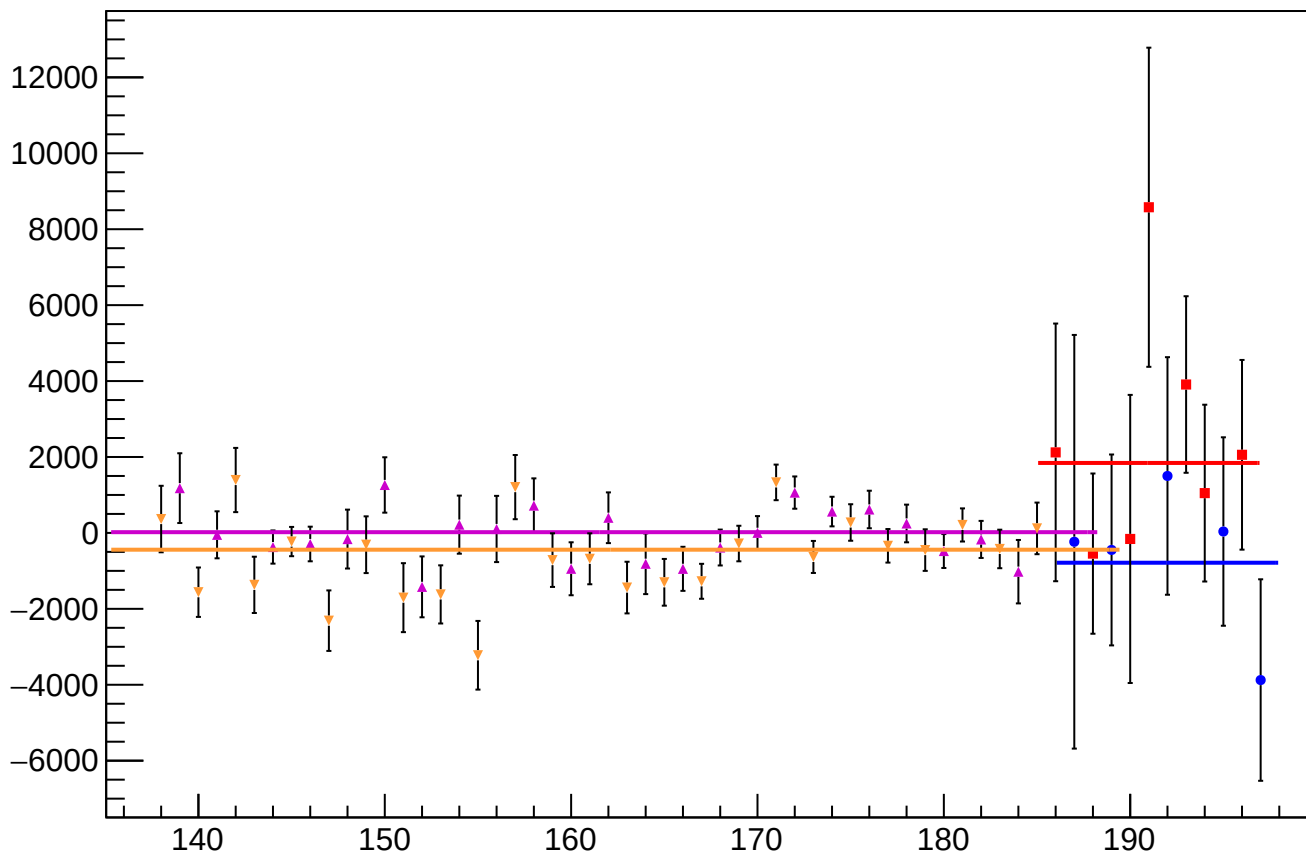
Right: 233.607 $\pm$ 0.065  $\chi^2$ /NDF: 498807.4/11

In: 90.574 $\pm$ 0.015  $\chi^2$ /NDF:3189702.1/27

Out: 89.179 $\pm$ 0.014  $\chi^2$ /NDF:4829398.3/31

All: 89.839 $\pm$ 0.010  $\chi^2$ /NDF: 8023639.4/59

asym\_sam\_3726\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -785.497 $\pm$ 1292.828  $\chi^2$ /NDF: 2.0/4

Left Out: -442.284 $\pm$ 115.425  $\chi^2$ /NDF:60.9/24

Right Out: 1843.021 $\pm$ 1016.965  $\chi^2$ /NDF: 5.0/6

Left In: 19.322 $\pm$ 116.820  $\chi^2$ /NDF:29.5/22

Left: -214.255 $\pm$ 82.107  $\chi^2$ /NDF: 98.3/47

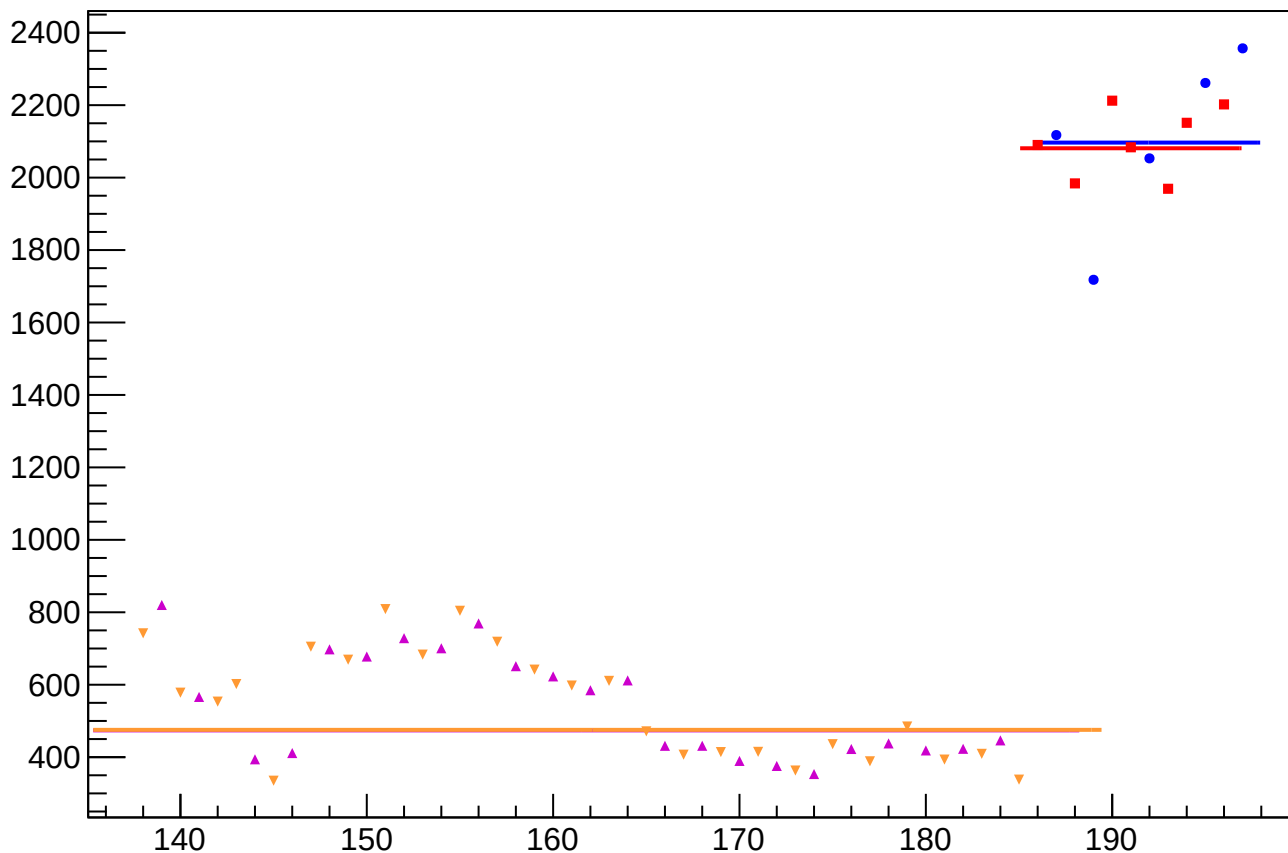
Right: 838.276 $\pm$ 799.306  $\chi^2$ /NDF: 9.6/11

In: 12.803 $\pm$ 116.346  $\chi^2$ /NDF:31.9/27

Out: -413.219 $\pm$ 114.689  $\chi^2$ /NDF:71.0/31

All: -203.265 $\pm$ 81.677  $\chi^2$ /NDF: 109.7/59

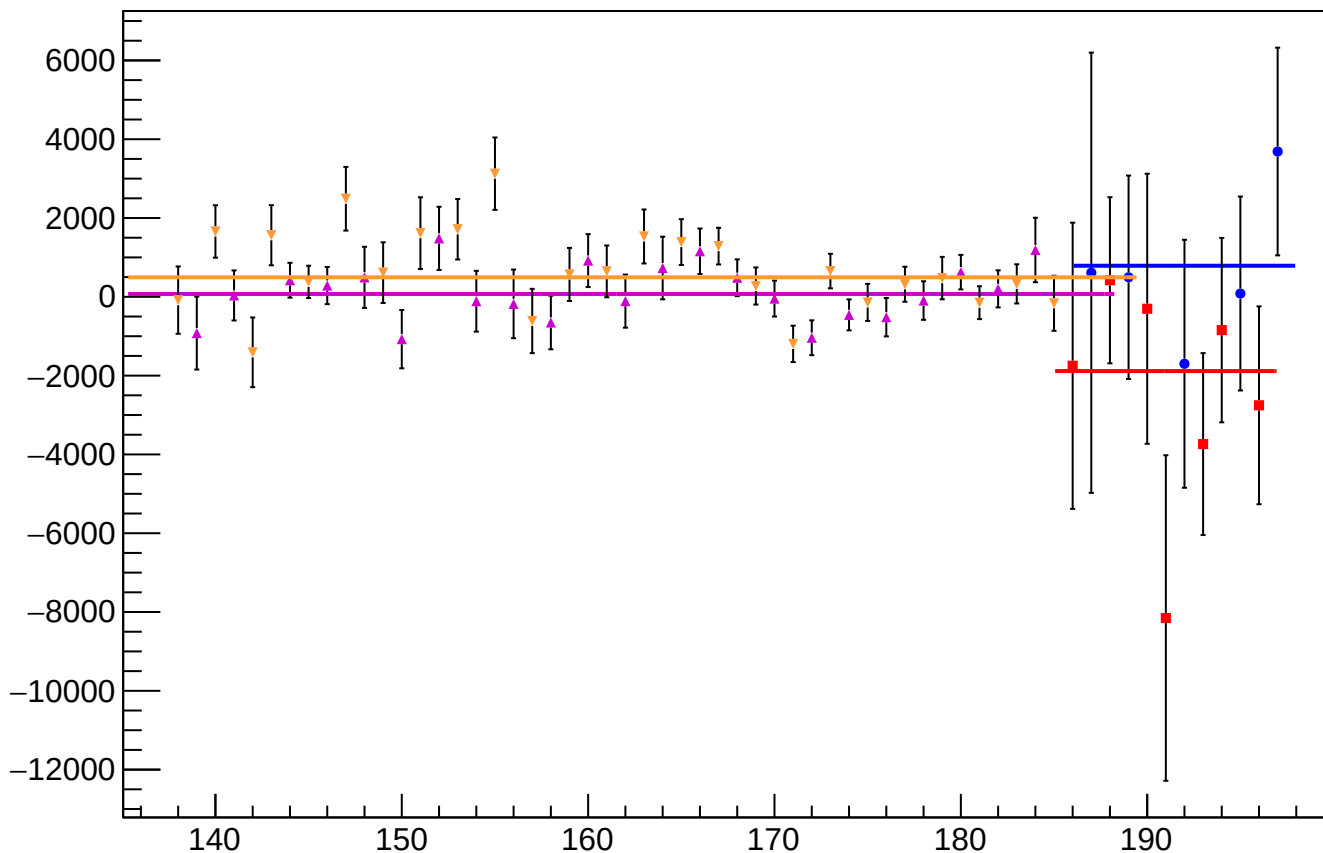
asym\_sam\_3726\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 2096.670 +/- 0.914  $\chi^2/\text{NDF}$ : 73824.1/4  
 Left Out: 475.415 +/- 0.082  $\chi^2/\text{NDF}$ : 2509706.1/24  
 Right Out: 2086.984 +/- 0.719  $\chi^2/\text{NDF}$ : 17783.5/6  
 Left In: 473.947 +/- 0.083  $\chi^2/\text{NDF}$ : 2174476.6/22

Left: 474.690 +/- 0.058  $\chi^2/\text{NDF}$ : 4684342.6/47  
 Right: 2086.980 +/- 0.565  $\chi^2/\text{NDF}$ : 91789.5/11  
 In: 487.089 +/- 0.082  $\chi^2/\text{NDF}$ : 5373704.5/27  
 Out: 495.835 +/- 0.081  $\chi^2/\text{NDF}$ : 7449211.9/31  
 All: 491.525 +/- 0.058  $\chi^2/\text{NDF}$ : 12828648.9/55

# asym\_sam\_3726\_avg\_mean vs Slug, Sign Corrected



Right In: 788.593 $\pm$ 1299.469  $\chi^2$ /NDF: 1.9/4

Left Out: 495.259 $\pm$ 115.521  $\chi^2$ /NDF: 57.2/24

Right Out: -1884.080 $\pm$ 1013.533  $\chi^2$ /NDF: 4.7/6

Left In: 72.627 $\pm$ 116.927  $\chi^2$ /NDF: 29.1/22

Left: 286.499 $\pm$ 82.178  $\chi^2$ /NDF: 92.8/47

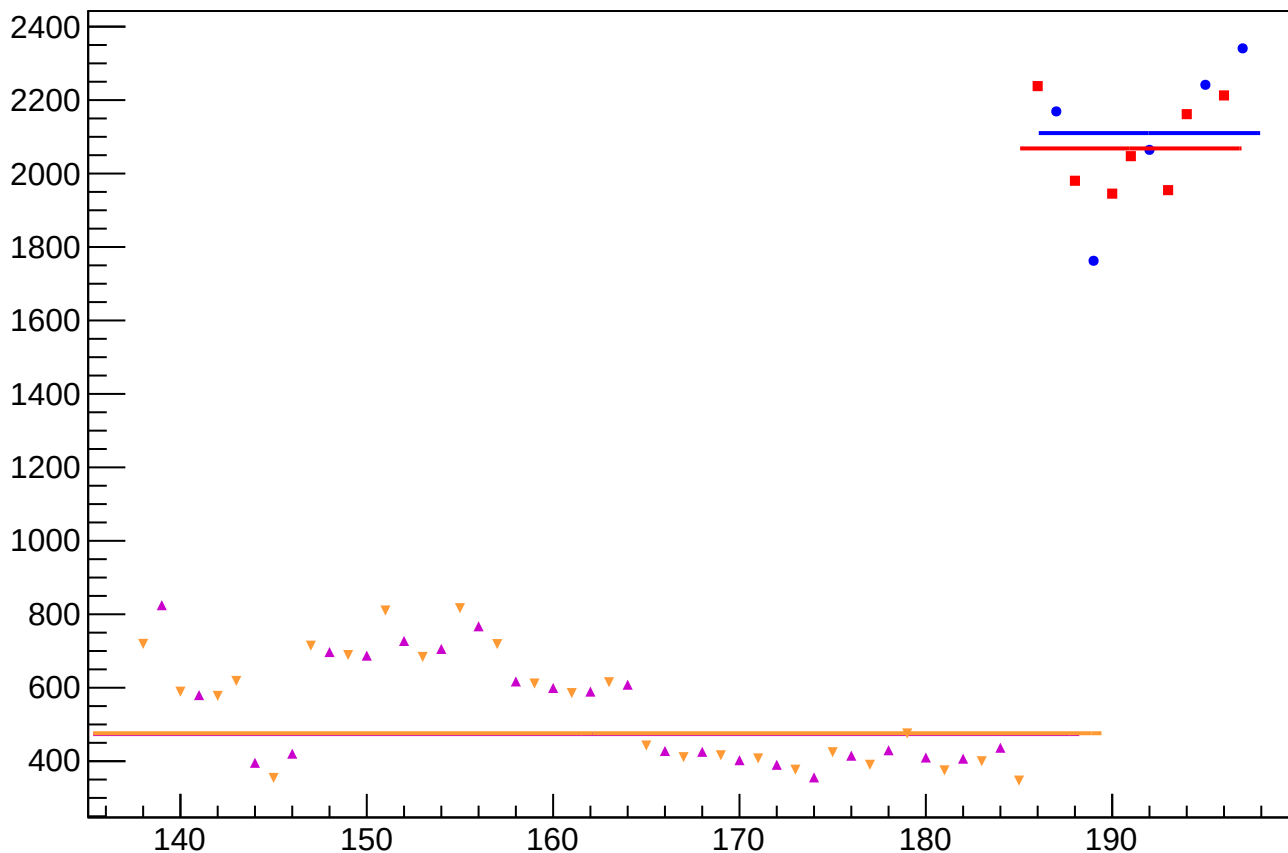
Right: -873.169 $\pm$ 799.189  $\chi^2$ /NDF: 9.2/11

In: 78.378 $\pm$ 116.457  $\chi^2$ /NDF: 31.3/27

Out: 464.745 $\pm$ 114.778  $\chi^2$ /NDF: 67.3/31

All: 274.366 $\pm$ 81.747  $\chi^2$ /NDF: 104.2/59

asym\_sam\_3726\_avg\_rms vs Slug, Sign Corrected

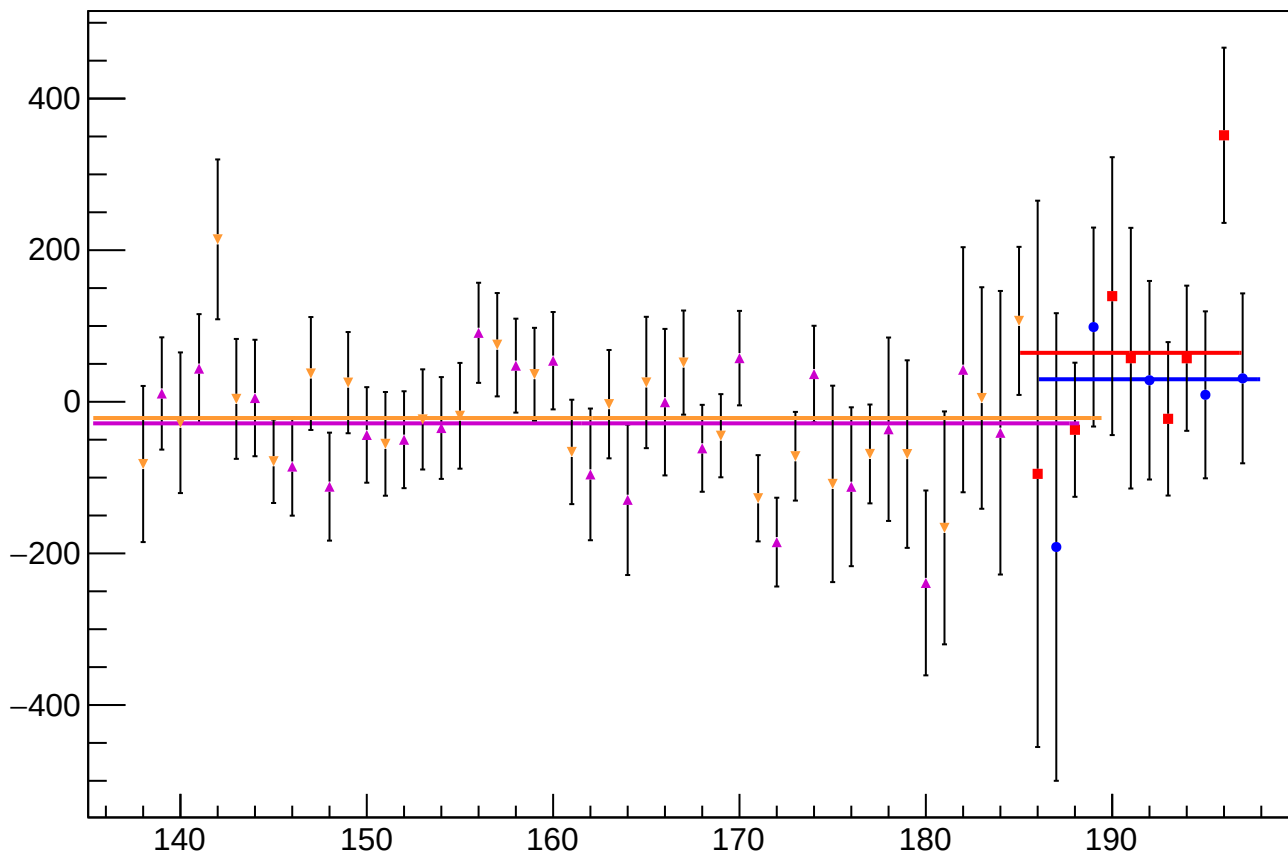


Right In: 2110.175 $\pm$ 0.919  $\chi^2$ /NDF: 57964.9/4  
 Left Out: 476.057 $\pm$ 0.082  $\chi^2$ /NDF: 2461838.6/24  
 Right Out: 2068.386 $\pm$ 0.717  $\chi^2$ /NDF: 25116.3/6  
 Left In: 473.824 $\pm$ 0.083  $\chi^2$ /NDF: 2113753.1/22

Left: 474.954 $\pm$ 0.058  $\chi^2$ /NDF: 4575960.9/47  
 Right: 2084.192 $\pm$ 0.565  $\chi^2$ /NDF: 84367.2/11  
 In: 486.966 $\pm$ 0.082  $\chi^2$ /NDF: 5317647.1/27  
 Out: 496.478 $\pm$ 0.081  $\chi^2$ /NDF: 7360158.3/31  
 All: 491.791 $\pm$ 0.058  $\chi^2$ /NDF: 12684573.2/59



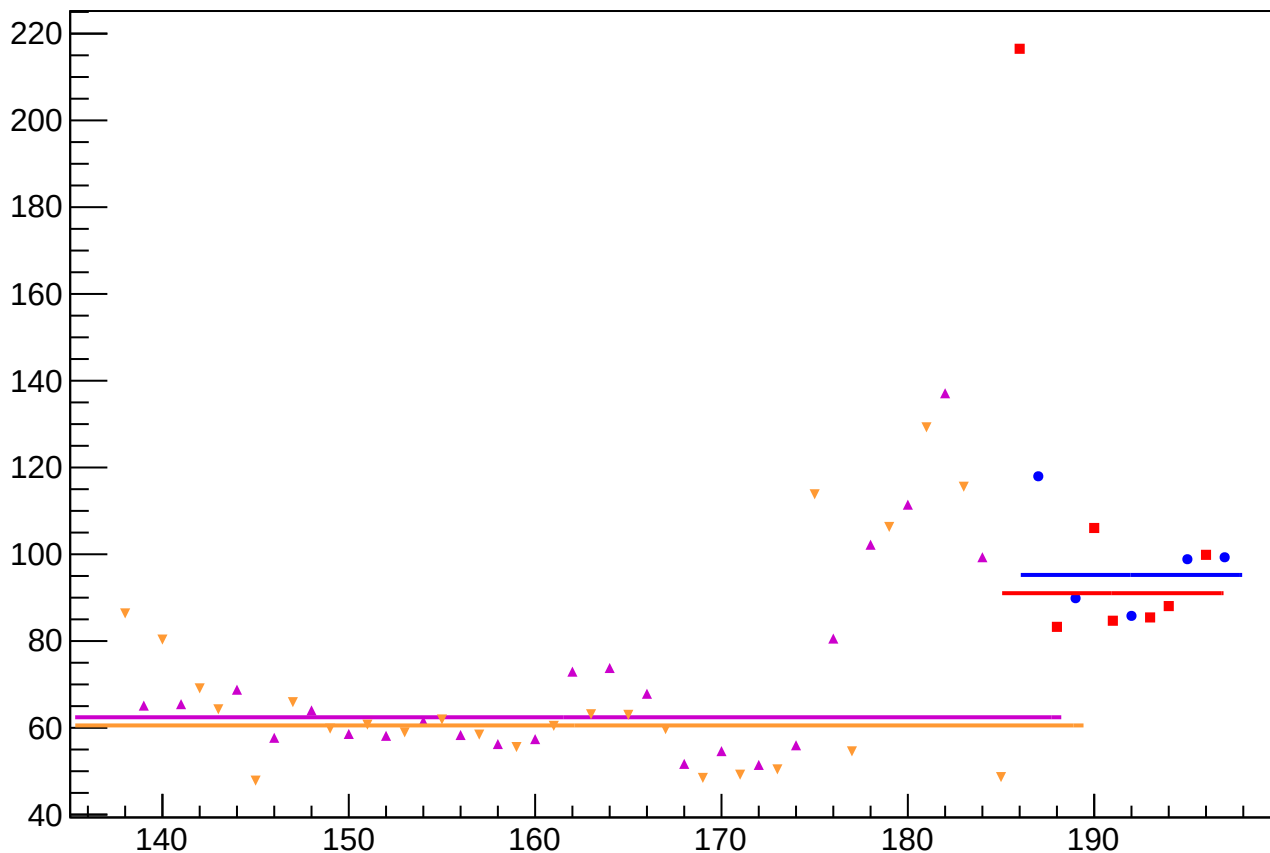
dit\_asym\_sam\_15\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 29.731 $\pm$ 58.833  $\chi^2$ /NDF: 0.8/4  
 Left Out: -21.397 $\pm$ 14.800  $\chi^2$ /NDF:20.9/24  
 Right Out: 64.592 $\pm$ 45.615  $\chi^2$ /NDF: 8.6/6  
 Left In: -28.435 $\pm$ 15.494  $\chi^2$ /NDF:26.2/22

Left: -24.755 $\pm$ 10.702  $\chi^2$ /NDF: 47.2/47  
 Right: 51.503 $\pm$ 36.049  $\chi^2$ /NDF: 9.6/11  
 In: -24.662 $\pm$ 14.983  $\chi^2$ /NDF:28.0/27  
 Out: -13.208 $\pm$ 14.077  $\chi^2$ /NDF:32.7/31  
 All: -18.578 $\pm$ 10.259  $\chi^2$ /NDF: 60.9/59

dit\_asym\_sam\_15\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 95.239 $\pm$ 0.042  $\chi^2$ /NDF: 29394.4/4

Left Out: 60.551 $\pm$ 0.010  $\chi^2$ /NDF:1951663.1/24

Right Out: 91.031 $\pm$ 0.032  $\chi^2$ /NDF: 293762.9/6

Left In: 62.435 $\pm$ 0.011  $\chi^2$ /NDF:1445748.2/22

Left: 61.450 $\pm$ 0.008  $\chi^2$ /NDF: 3412871.1/47

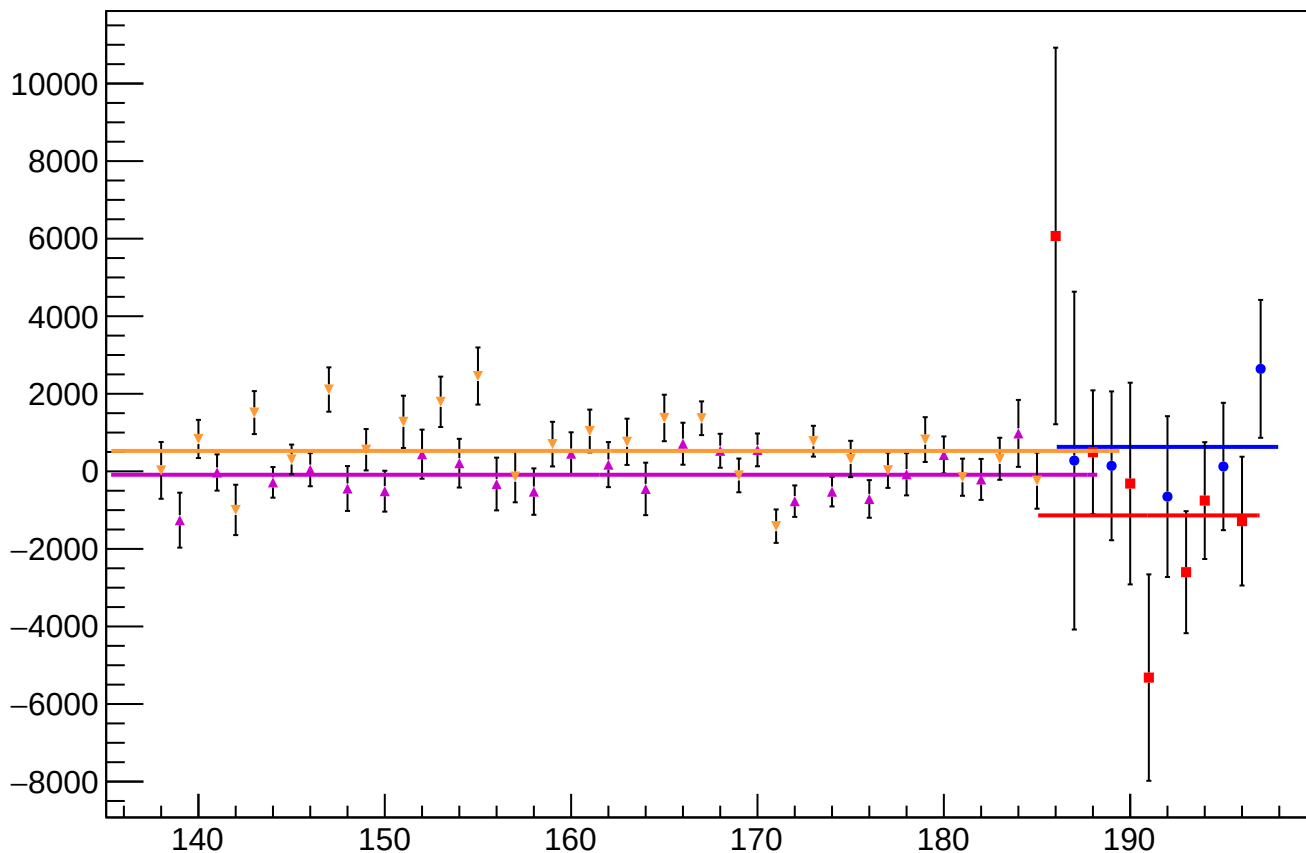
Right: 92.611 $\pm$ 0.025  $\chi^2$ /NDF: 329548.5/11

In: 64.562 $\pm$ 0.011  $\chi^2$ /NDF:2056634.7/27

Out: 63.454 $\pm$ 0.010  $\chi^2$ /NDF:3053370.2/31

All: 63.973 $\pm$ 0.007  $\chi^2$ /NDF: 5115818.8/59

asym\_sam\_15\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 630.429+/-896.608  $\chi^2/\text{NDF}$ : 1.8/4

Left Out: 526.705+/-105.414  $\chi^2/\text{NDF}$ : 65.0/24

Right Out: -1135.906+/-719.428  $\chi^2/\text{NDF}$ : 6.8/6

Left In: -87.989+/-106.843  $\chi^2/\text{NDF}$ : 22.1/22

Left: 223.494+/-75.039  $\chi^2/\text{NDF}$ : 103.9/47

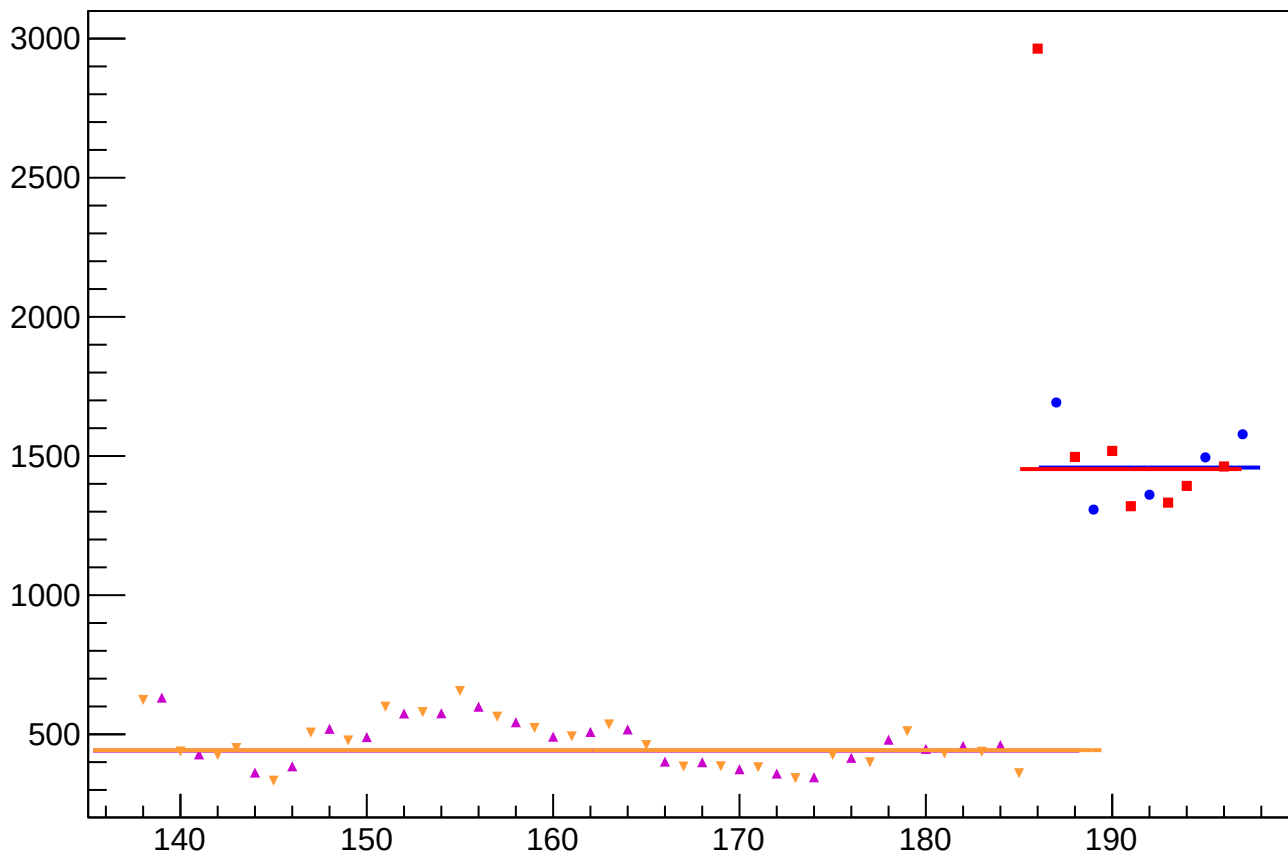
Right: -444.097+/-561.125  $\chi^2/\text{NDF}$ : 10.9/11

In: -77.930+/-106.092  $\chi^2/\text{NDF}$ : 24.6/27

Out: 491.760+/-104.301  $\chi^2/\text{NDF}$ : 77.0/31

All: 211.765+/-74.377  $\chi^2/\text{NDF}$ : 116.2/59

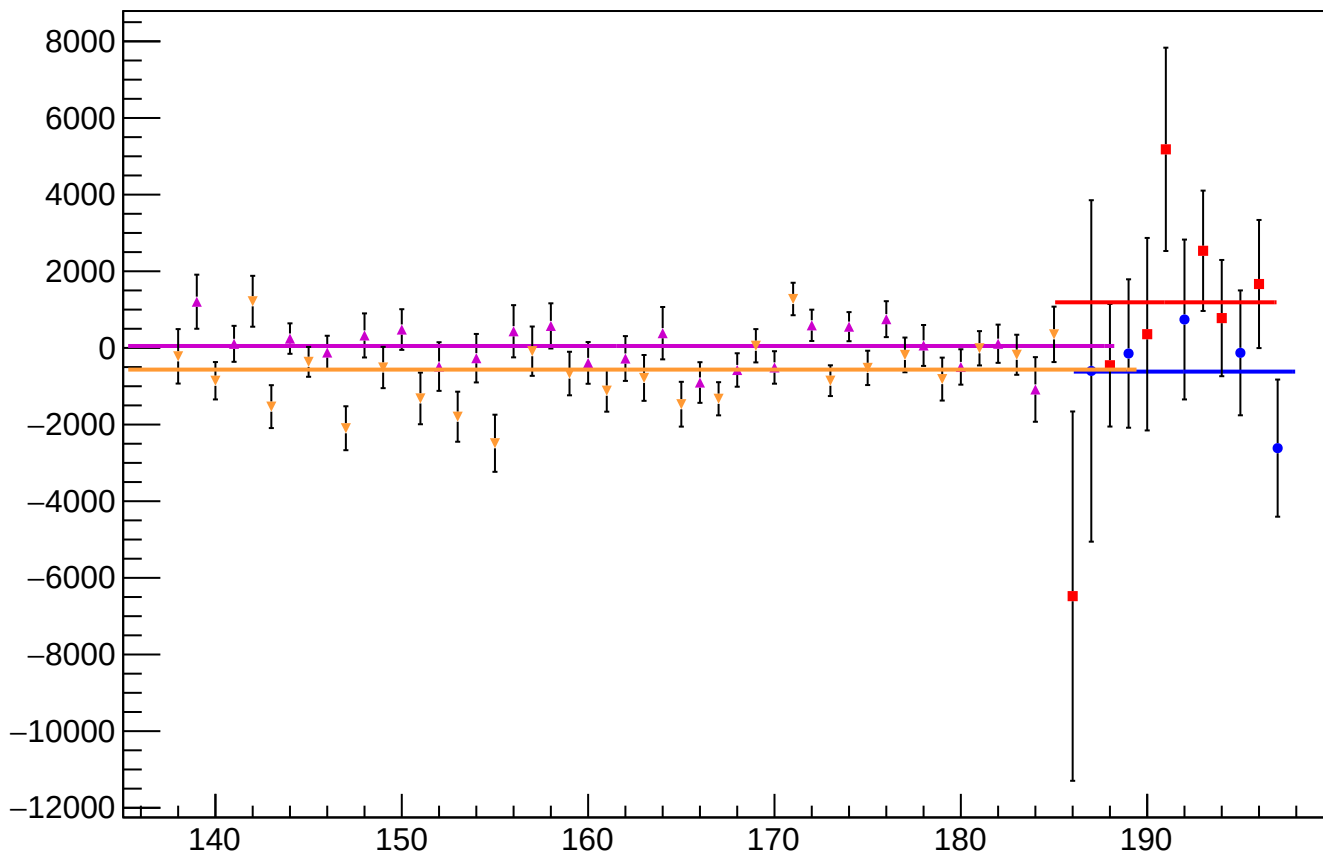
asym\_sam\_15\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 1458.554+/-0.634  $\chi^2/\text{NDF}$ : 32623.8/4  
 Left Out: 443.031+/-0.075  $\chi^2/\text{NDF}$ :1171662.6/24  
 Right Out: 1453.089+/-0.509  $\chi^2/\text{NDF}$ : 216495.6/6  
 Left In: 441.359+/-0.076  $\chi^2/\text{NDF}$ :1035839.5/22

Left: 442.206+/-0.053  $\chi^2/\text{NDF}$ : 2207750.3/47  
 Right: 1455.230+/-0.397  $\chi^2/\text{NDF}$ : 249164.6/11  
 In: 455.601+/-0.075  $\chi^2/\text{NDF}$ :3606569.7/27  
 Out: 464.261+/-0.074  $\chi^2/\text{NDF}$ :5247580.5/31  
 All: 460.005+/-0.053  $\chi^2/\text{NDF}$ : 8860927.2/59

# asym\_sam\_15\_48\_dd\_mean vs Slug, Sign Corrected



Right In: -618.144+/-899.482  $\chi^2/\text{NDF}$ : 1.8/4

Left Out: -565.545+/-104.460  $\chi^2/\text{NDF}$ : 62.9/24

Right Out: 1190.246+/-719.267  $\chi^2/\text{NDF}$ : 6.8/6

Left In: 50.387+/-106.218  $\chi^2/\text{NDF}$ : 23.3/22

Left: -262.717+/-74.478  $\chi^2/\text{NDF}$ : 103.3/47

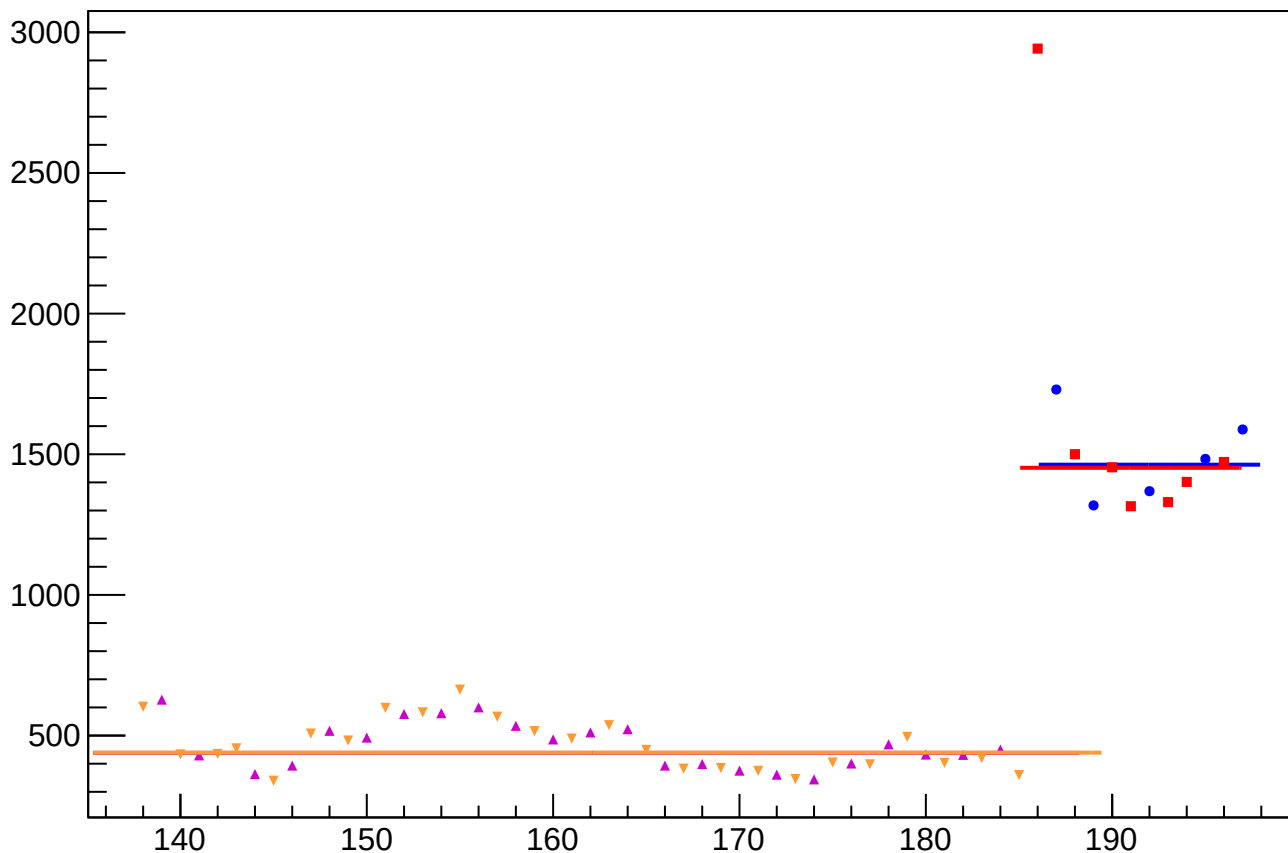
Right: 484.915+/-561.750  $\chi^2/\text{NDF}$ : 11.1/11

In: 41.193+/-105.485  $\chi^2/\text{NDF}$ : 25.6/27

Out: -529.276+/-103.376  $\chi^2/\text{NDF}$ : 75.6/31

All: -249.802+/-73.832  $\chi^2/\text{NDF}$ : 116.2/59

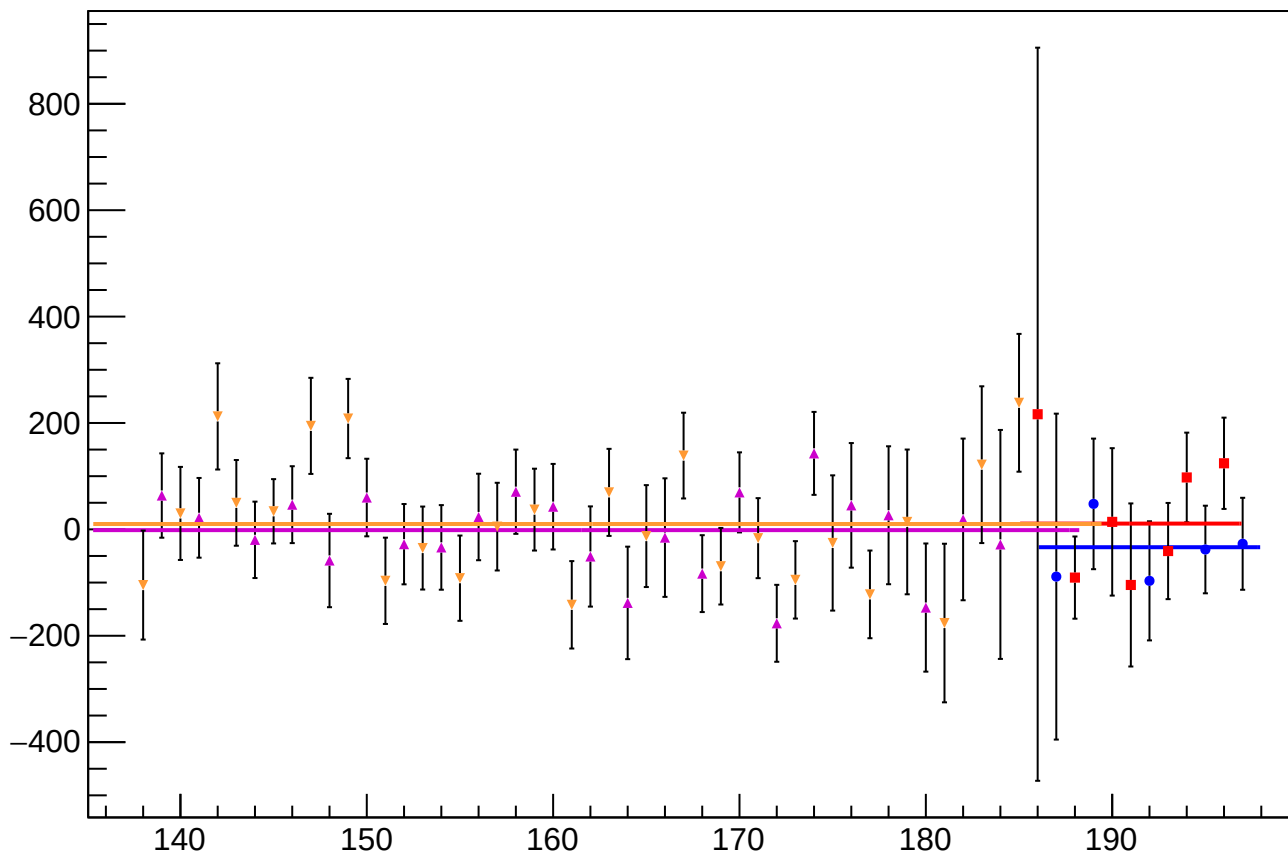
# asym\_sam\_15\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 1462.966 $\pm$ 0.636  $\chi^2/\text{NDF}$ : 32541.6/4  
 Left Out: 439.314 $\pm$ 0.074  $\chi^2/\text{NDF}$ :1164031.3/24  
 Right Out: 1451.930 $\pm$ 0.509  $\chi^2/\text{NDF}$ : 212971.0/6  
 Left In: 438.365 $\pm$ 0.075  $\chi^2/\text{NDF}$ :1024661.1/22

Left: 438.847 $\pm$ 0.053  $\chi^2/\text{NDF}$ : 2188773.6/47  
 Right: 1456.234 $\pm$ 0.397  $\chi^2/\text{NDF}$ : 245696.2/11  
 In: 452.456 $\pm$ 0.075  $\chi^2/\text{NDF}$ :3616614.7/27  
 Out: 460.231 $\pm$ 0.073  $\chi^2/\text{NDF}$ :5259169.6/31  
 All: 456.422 $\pm$ 0.052  $\chi^2/\text{NDF}$ : 8881327.0/59

dit\_asym\_sam\_37\_48\_dd\_mean vs Slug, Sign Corrected



Right In:  $-33.546 \pm 47.778$   $\chi^2/\text{NDF}: 0.8/4$

Left Out:  $10.078 \pm 17.207$   $\chi^2/\text{NDF}: 38.7/24$

Right Out:  $10.861 \pm 38.829$   $\chi^2/\text{NDF}: 5.5/6$

Left In:  $-1.434 \pm 17.926$   $\chi^2/\text{NDF}: 19.0/22$

Left:  $4.557 \pm 12.414$   $\chi^2/\text{NDF}: 58.0/47$

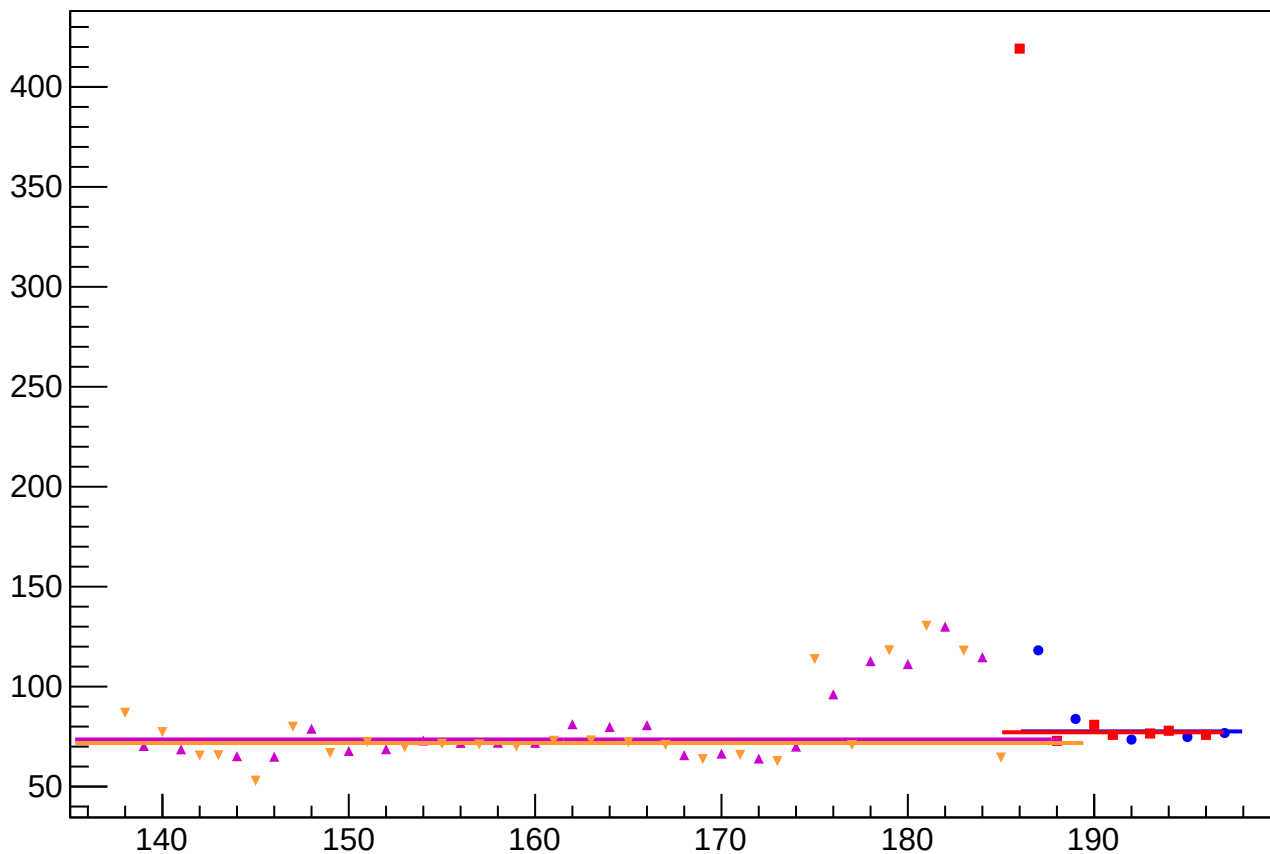
Right:  $-6.802 \pm 30.133$   $\chi^2/\text{NDF}: 6.8/11$

In:  $-5.397 \pm 16.784$   $\chi^2/\text{NDF}: 20.2/27$

Out:  $10.206 \pm 15.732$   $\chi^2/\text{NDF}: 44.2/31$

All:  $2.909 \pm 11.478$   $\chi^2/\text{NDF}: 64.9/59$

dit\_asym\_sam\_37\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 77.587 $\pm$ 0.034  $\chi^2$ /NDF: 45406.7/4

Left Out: 71.785 $\pm$ 0.012  $\chi^2$ /NDF: 1325726.8/24

Right Out: 77.154 $\pm$ 0.027  $\chi^2$ /NDF: 501134.1/6

Left In: 73.558 $\pm$ 0.013  $\chi^2$ /NDF: 1009353.9/22

Left: 72.635 $\pm$ 0.009  $\chi^2$ /NDF: 2345268.8/47

Right: 77.326 $\pm$ 0.021  $\chi^2$ /NDF: 546639.9/11

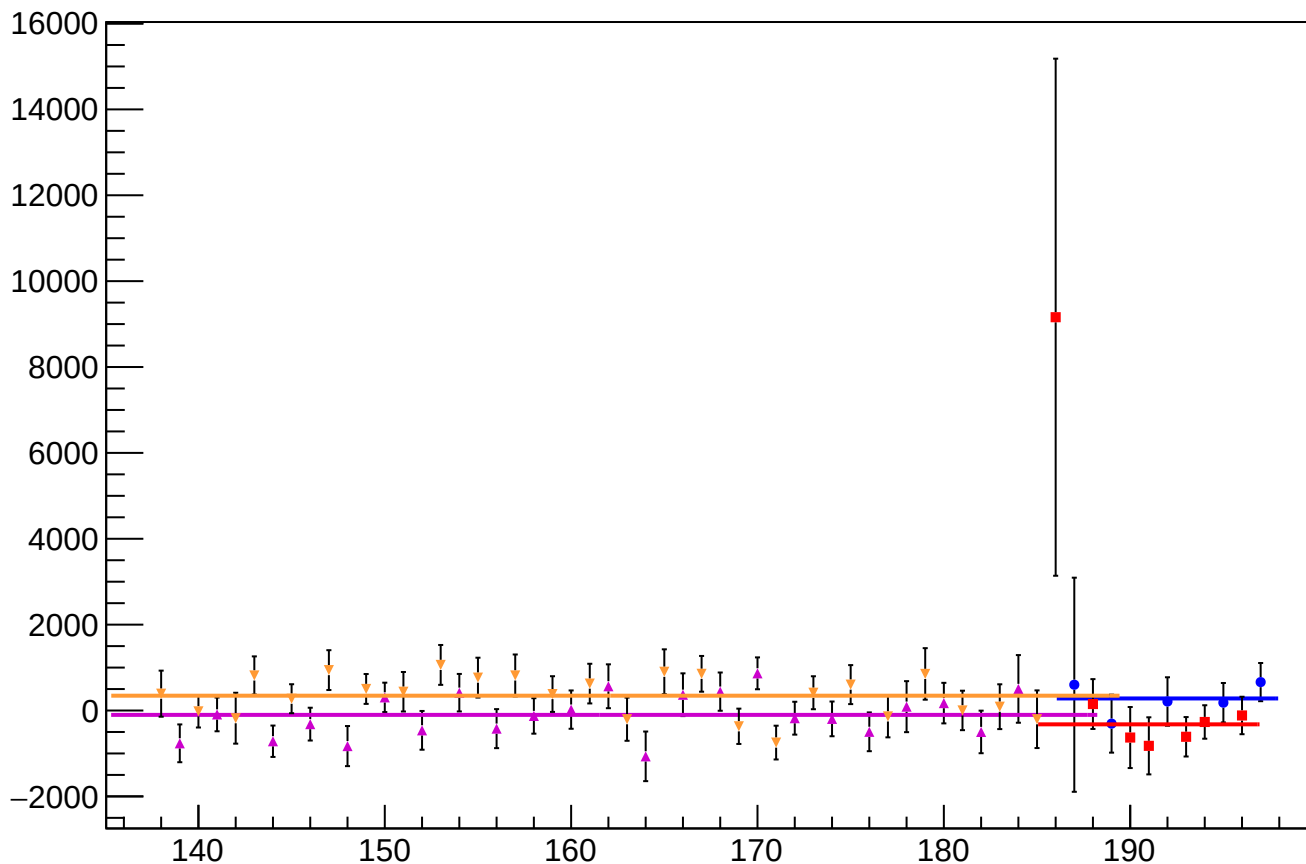
In: 74.055 $\pm$ 0.012  $\chi^2$ /NDF: 1067228.8/27

Out: 72.666 $\pm$ 0.011  $\chi^2$ /NDF: 1858824.0/31

All: 73.316 $\pm$ 0.008  $\chi^2$ /NDF: 2933348.2/59



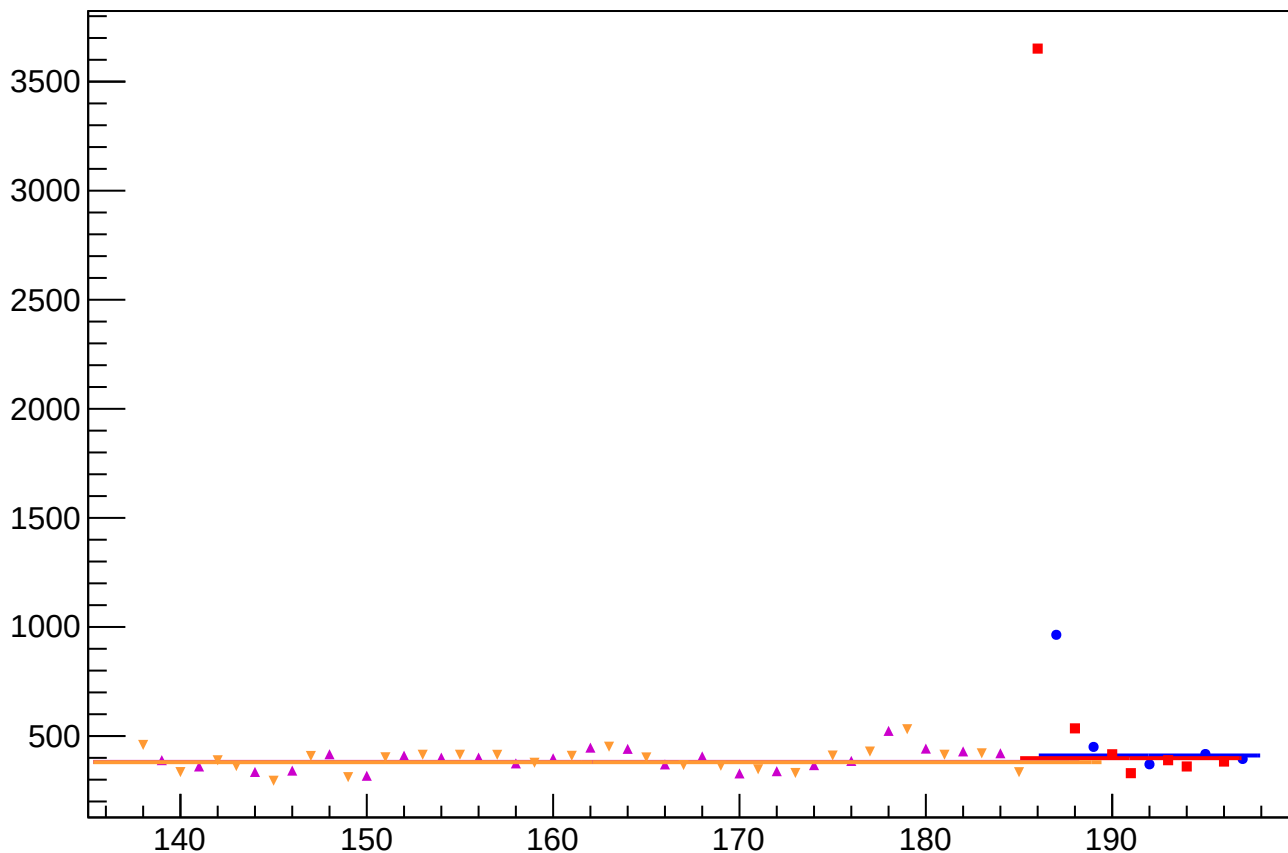
asym\_sam\_37\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 280.931 $\pm$ 255.698  $\chi^2$ /NDF: 1.6/4  
 Left Out: 345.360 $\pm$ 89.857  $\chi^2$ /NDF:27.4/24  
 Right Out: -322.012 $\pm$ 204.887  $\chi^2$ /NDF: 4.5/6  
 Left In: -101.648 $\pm$ 91.670  $\chi^2$ /NDF:28.1/22

Left: 126.320 $\pm$ 64.170  $\chi^2$ /NDF: 67.5/47  
 Right: -86.257 $\pm$ 159.890  $\chi^2$ /NDF: 9.5/11  
 In: -58.076 $\pm$ 86.292  $\chi^2$ /NDF:31.6/27  
 Out: 237.703 $\pm$ 82.291  $\chi^2$ /NDF:40.8/31  
 All: 96.830 $\pm$ 59.553  $\chi^2$ /NDF: 78.6/59

asym\_sam\_37\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 410.833+/-0.181  $\chi^2/\text{NDF}$ : 118592.1/4

Left Out: 380.206+/-0.064  $\chi^2/\text{NDF}$ : 616620.6/24

Right Out: 398.524+/-0.145  $\chi^2/\text{NDF}$ : 739614.3/6

Left In: 381.474+/-0.065  $\chi^2/\text{NDF}$ : 461021.8/22

Left: 380.828+/-0.045  $\chi^2/\text{NDF}$ : 1077837.5/47

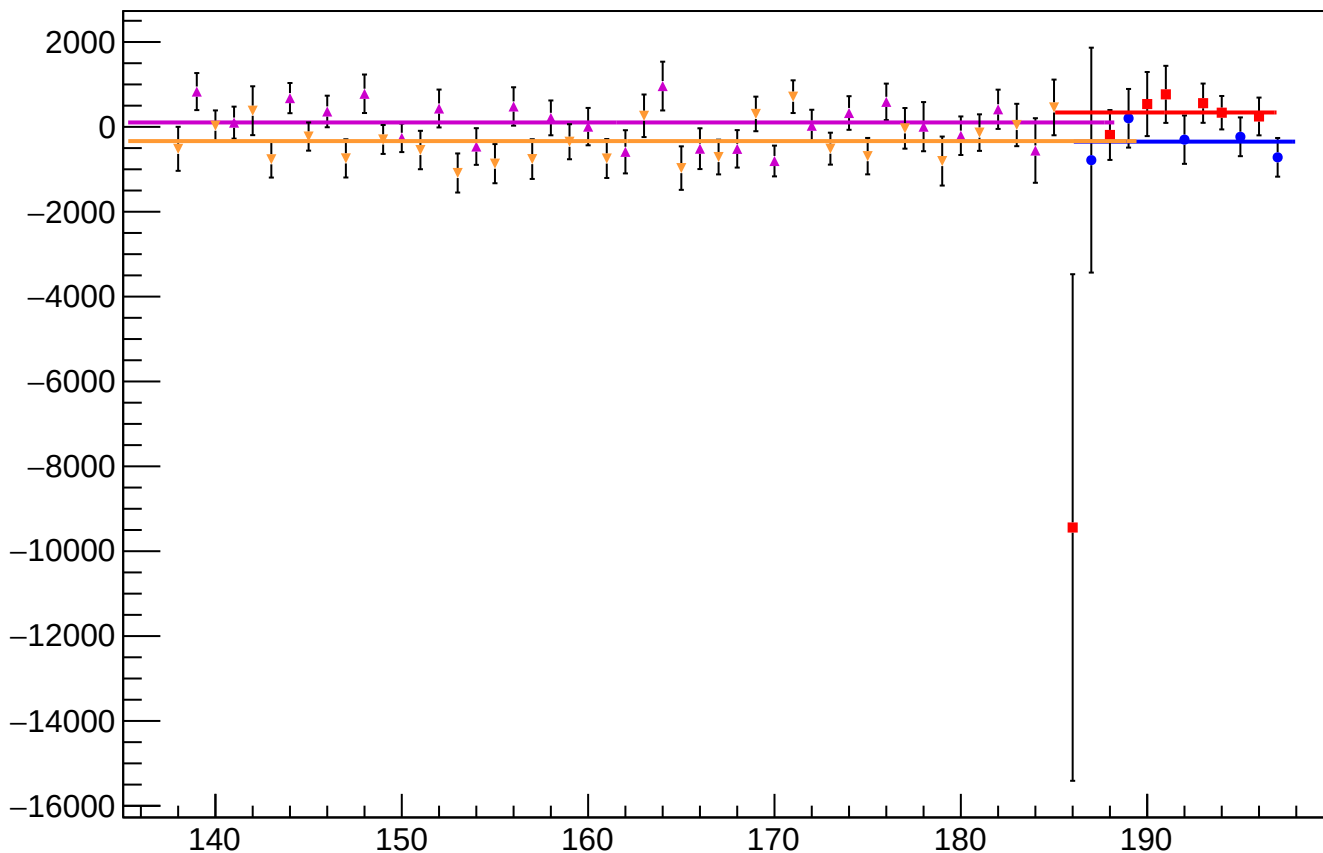
Right: 403.337+/-0.113  $\chi^2/\text{NDF}$ : 861028.9/11

In: 384.818+/-0.061  $\chi^2/\text{NDF}$ : 602978.0/27

Out: 383.161+/-0.058  $\chi^2/\text{NDF}$ : 1369642.7/31

All: 383.950+/-0.042  $\chi^2/\text{NDF}$ : 1973006.7/59

# asym\_sam\_37\_48\_dd\_mean vs Slug, Sign Corrected



Right In:  $-347.796 \pm 258.938$   $\chi^2/\text{NDF}: 1.4/4$

Left Out:  $-335.242 \pm 87.706$   $\chi^2/\text{NDF}: 28.3/24$

Right Out:  $339.159 \pm 208.274$   $\chi^2/\text{NDF}: 4.2/6$

Left In:  $104.117 \pm 89.613$   $\chi^2/\text{NDF}: 29.7/22$

Left:  $-120.287 \pm 62.681$   $\chi^2/\text{NDF}: 70.2/47$

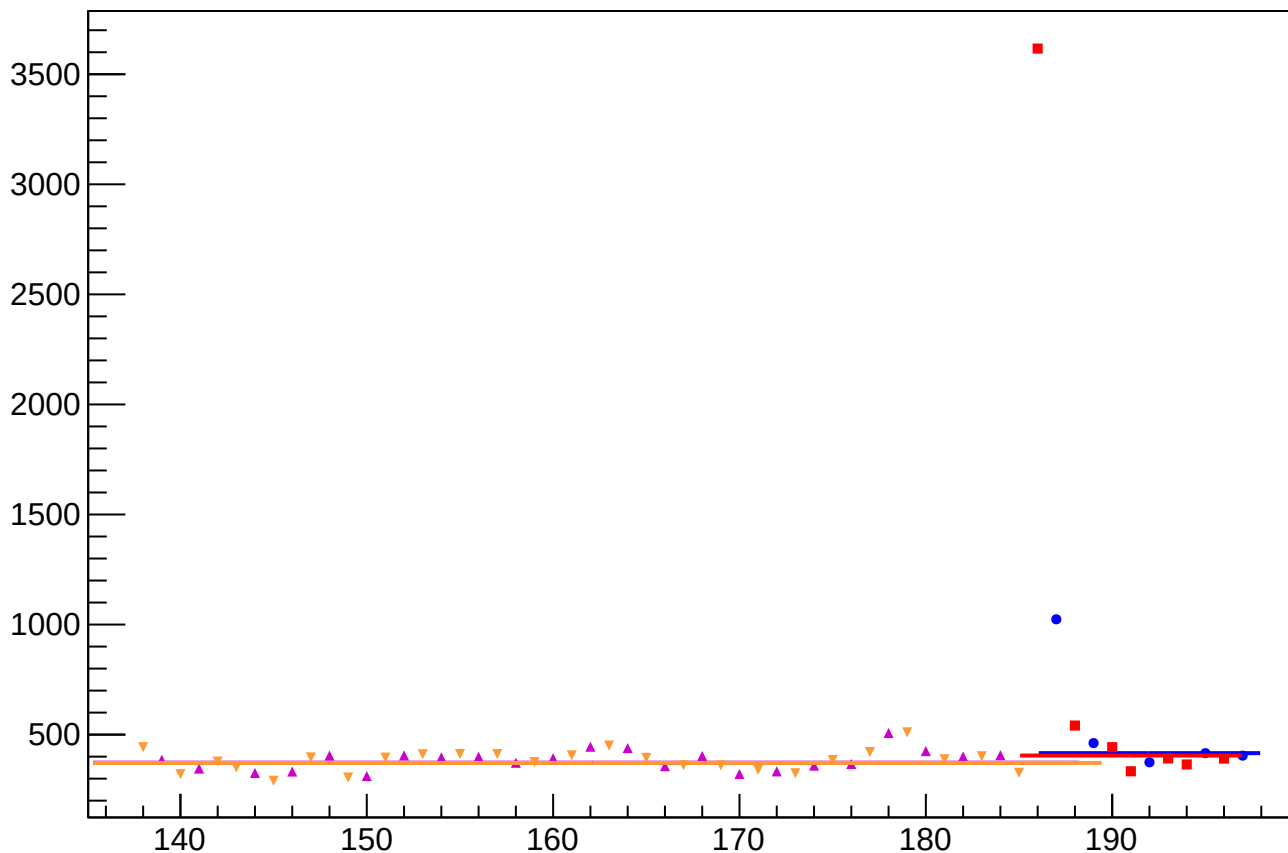
Right:  $69.309 \pm 162.291$   $\chi^2/\text{NDF}: 9.9/11$

In:  $55.780 \pm 84.685$   $\chi^2/\text{NDF}: 33.8/27$

Out:  $-233.662 \pm 80.831$   $\chi^2/\text{NDF}: 41.5/31$

All:  $-95.676 \pm 58.471$   $\chi^2/\text{NDF}: 81.3/59$

# asym\_sam\_37\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 415.838 $\pm$ 0.183  $\chi^2$ /NDF: 125893.6/4

Left Out: 371.375 $\pm$ 0.062  $\chi^2$ /NDF: 604123.3/24

Right Out: 404.953 $\pm$ 0.147  $\chi^2$ /NDF: 738783.3/6

Left In: 372.574 $\pm$ 0.063  $\chi^2$ /NDF: 464397.2/22

Left: 371.962 $\pm$ 0.044  $\chi^2$ /NDF: 1068703.4/47

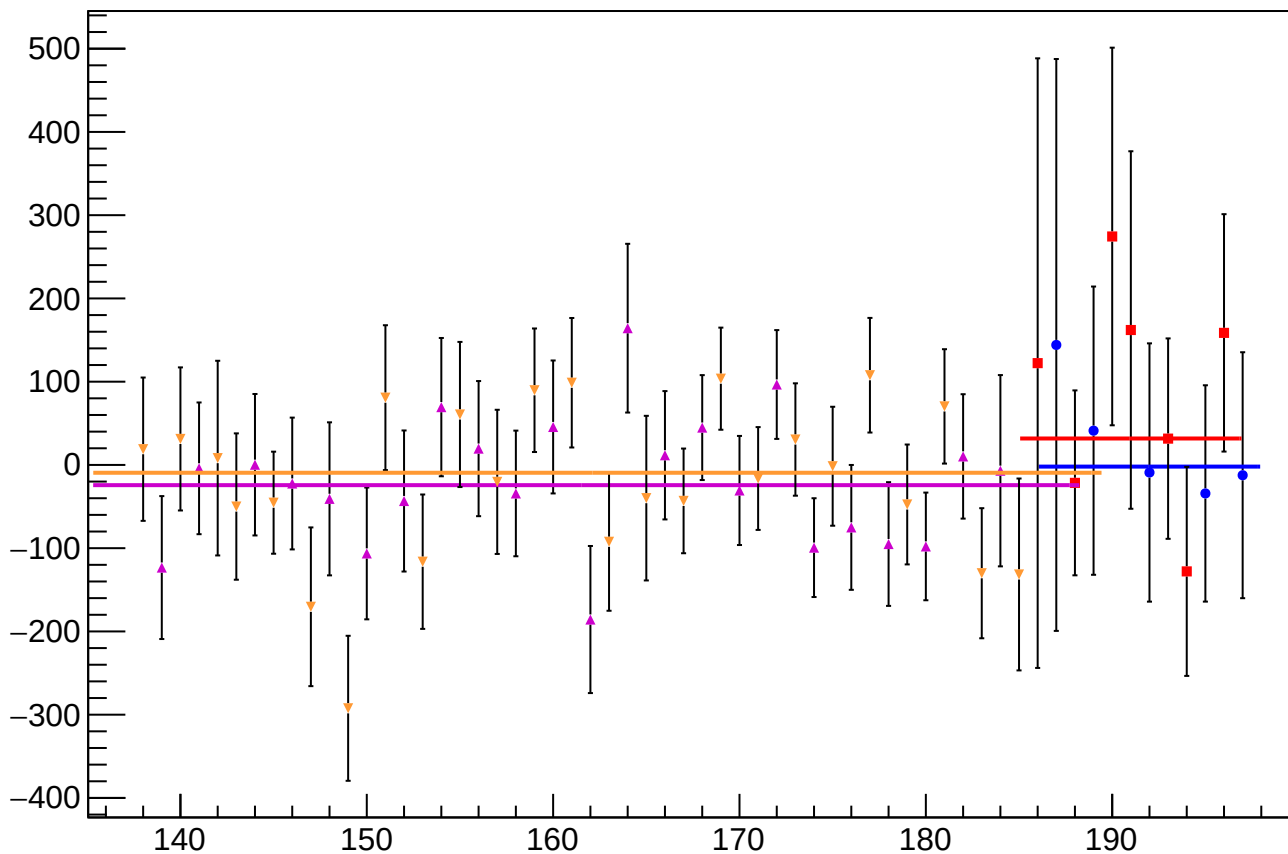
Right: 409.229 $\pm$ 0.115  $\chi^2$ /NDF: 866822.6/11

In: 377.202 $\pm$ 0.060  $\chi^2$ /NDF: 640151.1/27

Out: 376.433 $\pm$ 0.057  $\chi^2$ /NDF: 1387060.3/31

All: 376.799 $\pm$ 0.041  $\chi^2$ /NDF: 2027297.7/59

dit\_asym\_sam\_15\_26\_dd\_mean vs Slug, Sign Corrected



Right In:  $-2.003 \pm 72.844$   $\chi^2/\text{NDF}$ : 0.3/4

Left Out:  $-9.398 \pm 15.471$   $\chi^2/\text{NDF}$ : 34.7/24

Right Out:  $31.761 \pm 56.676$   $\chi^2/\text{NDF}$ : 4.2/6

Left In:  $-24.293 \pm 16.034$   $\chi^2/\text{NDF}$ : 21.1/22

Left:  $-16.580 \pm 11.133$   $\chi^2/\text{NDF}$ : 56.3/47

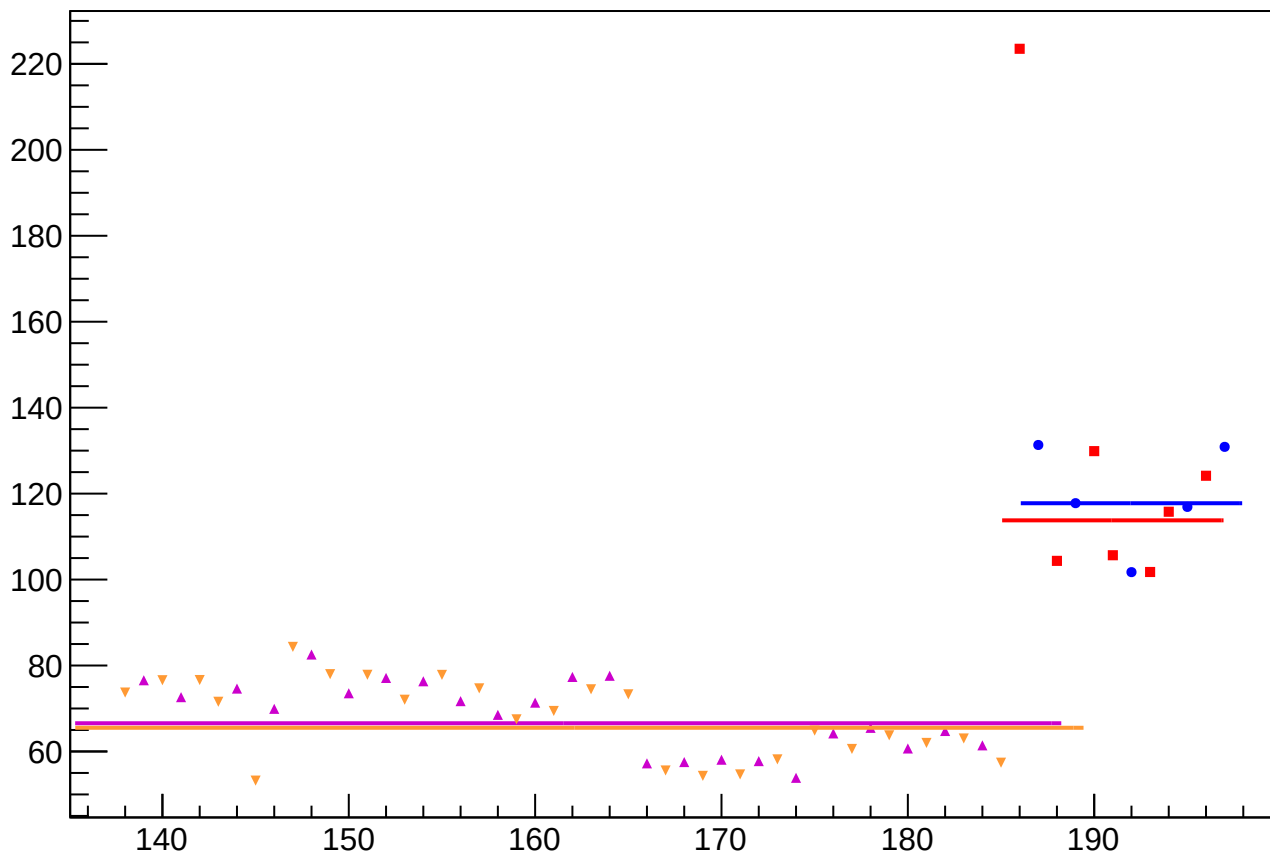
Right:  $19.029 \pm 44.732$   $\chi^2/\text{NDF}$ : 4.7/11

In:  $-23.263 \pm 15.659$   $\chi^2/\text{NDF}$ : 21.5/27

Out:  $-6.543 \pm 14.925$   $\chi^2/\text{NDF}$ : 39.4/31

All:  $-14.502 \pm 10.804$   $\chi^2/\text{NDF}$ : 61.5/59

dit\_asym\_sam\_15\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 117.762 $\pm$ 0.052  $\chi^2$ /NDF: 40341.3/4

Left Out: 65.512 $\pm$ 0.011  $\chi^2$ /NDF: 666993.4/24

Right Out: 113.779 $\pm$ 0.040  $\chi^2$ /NDF: 238035.1/6

Left In: 66.564 $\pm$ 0.011  $\chi^2$ /NDF: 521302.1/22

Left: 66.019 $\pm$ 0.008  $\chi^2$ /NDF: 1192752.0/47

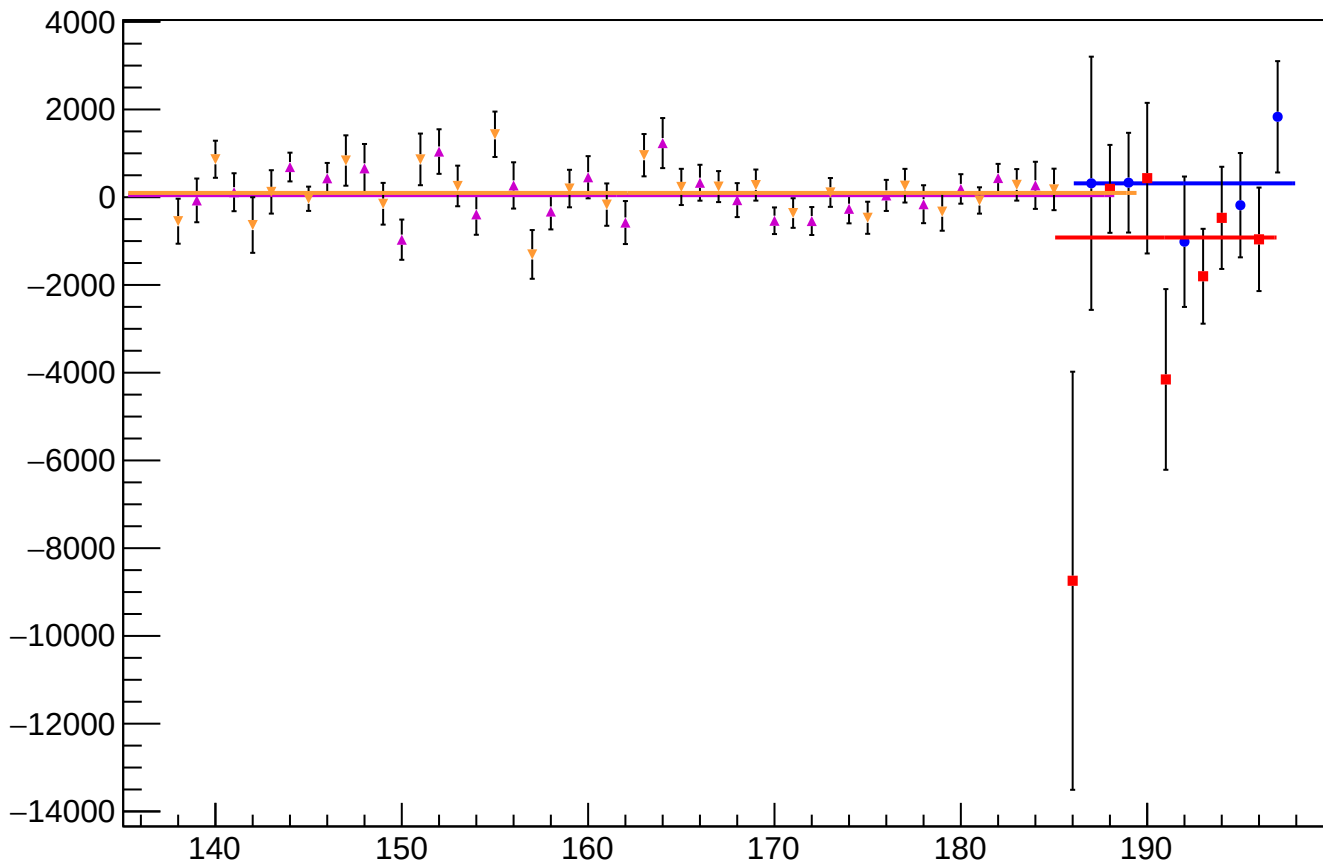
Right: 115.281 $\pm$ 0.032  $\chi^2$ /NDF: 282101.7/11

In: 68.929 $\pm$ 0.011  $\chi^2$ /NDF: 1503976.9/27

Out: 68.859 $\pm$ 0.011  $\chi^2$ /NDF: 2254969.3/31

All: 68.892 $\pm$ 0.008  $\chi^2$ /NDF: 3758967.4/59

asym\_sam\_15\_26\_dd\_correction\_mean vs Slug, Sign Corrected



Right In:  $315.624 \pm 611.342$   $\chi^2/\text{NDF}$ : 2.4/4

Left Out:  $97.420 \pm 82.238$   $\chi^2/\text{NDF}$ : 33.3/24

Right Out:  $-918.456 \pm 504.633$   $\chi^2/\text{NDF}$ : 7.8/6

Left In:  $46.660 \pm 83.857$   $\chi^2/\text{NDF}$ : 34.2/22

Left:  $72.535 \pm 58.715$   $\chi^2/\text{NDF}$ : 67.7/47

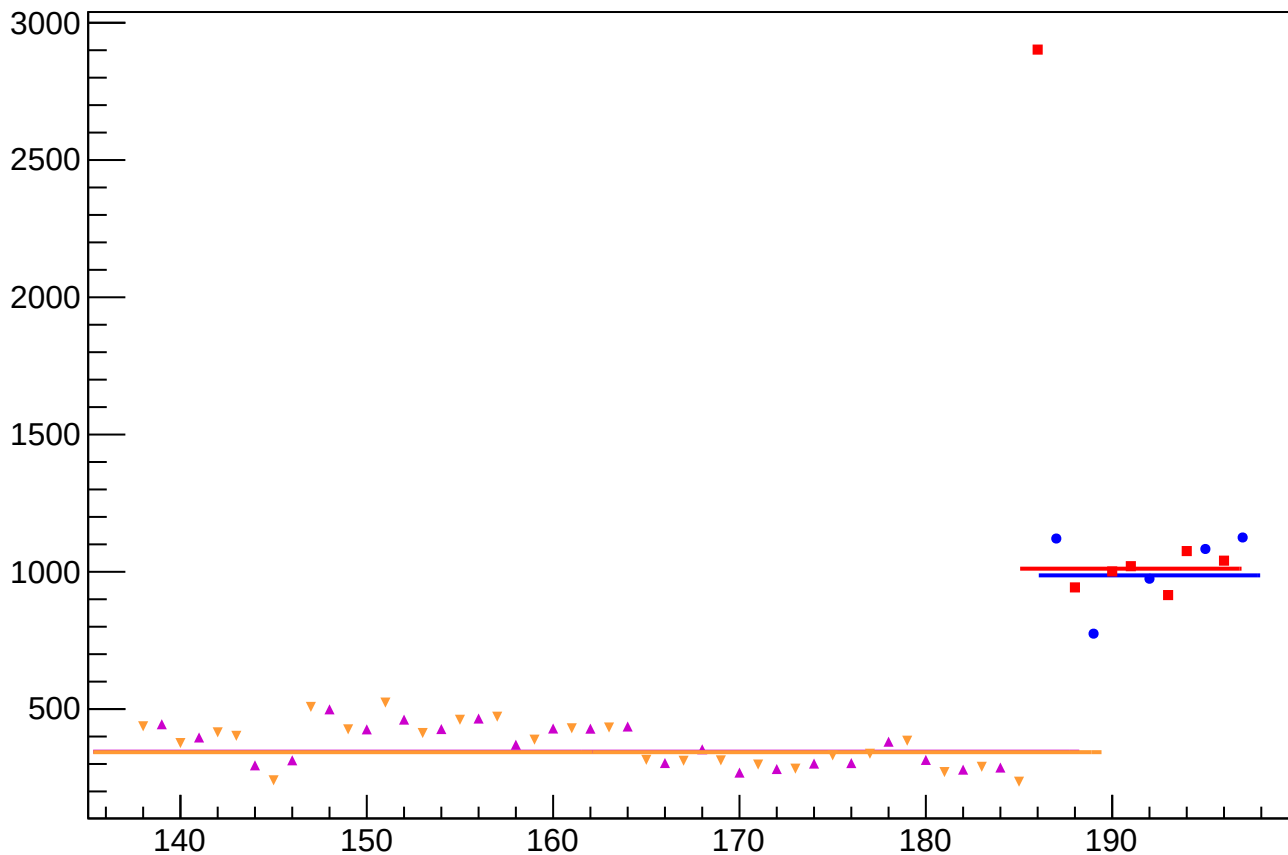
Right:  $-418.349 \pm 389.174$   $\chi^2/\text{NDF}$ : 12.7/11

In:  $51.627 \pm 83.079$   $\chi^2/\text{NDF}$ : 36.8/27

Out:  $71.139 \pm 81.167$   $\chi^2/\text{NDF}$ : 45.1/31

All:  $61.610 \pm 58.058$   $\chi^2/\text{NDF}$ : 81.9/59

asym\_sam\_15\_26\_dd\_correction\_rms vs Slug, Sign Corrected

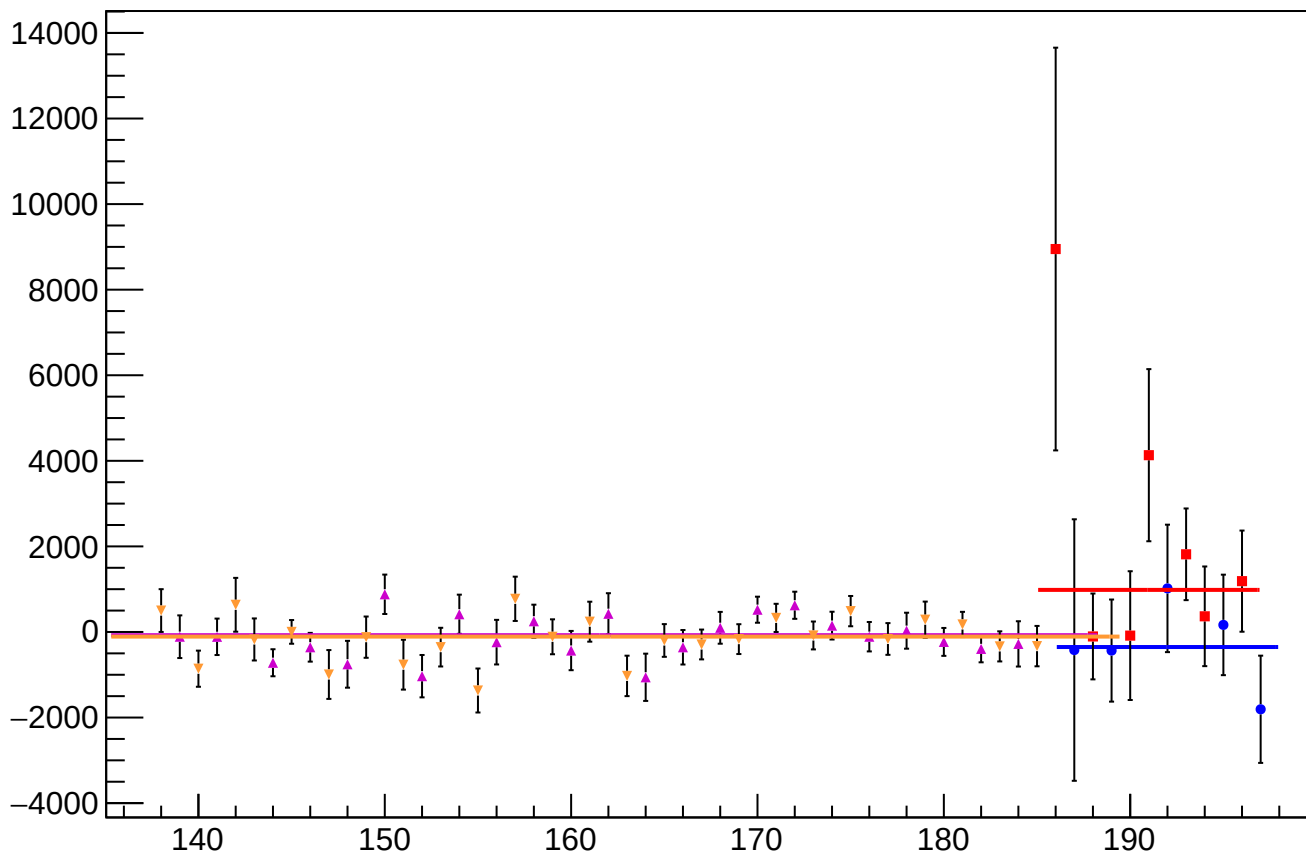


Right In: 987.028 $\pm$ 0.432  $\chi^2$ /NDF: 111000.0/4  
 Left Out: 342.995 $\pm$ 0.058  $\chi^2$ /NDF: 1665121.0/24  
 Right Out: 1011.449 $\pm$ 0.357  $\chi^2$ /NDF: 347439.0/6  
 Left In: 344.818 $\pm$ 0.059  $\chi^2$ /NDF: 1264545.0/22

Left: 343.889 $\pm$ 0.042  $\chi^2$ /NDF: 2930147.7/47  
 Right: 1001.552 $\pm$ 0.275  $\chi^2$ /NDF: 460337.1/11  
 In: 356.678 $\pm$ 0.059  $\chi^2$ /NDF: 3541854.7/27  
 Out: 360.289 $\pm$ 0.057  $\chi^2$ /NDF: 5431078.0/31  
 All: 358.526 $\pm$ 0.041  $\chi^2$ /NDF: 8974865.0/59



asym\_sam\_15\_26\_dd\_mean vs Slug, Sign Corrected



Right In: -351.737 $\pm$ 617.527  $\chi^2$ /NDF: 2.4/4

Left Out: -108.037 $\pm$ 80.579  $\chi^2$ /NDF:30.9/24

Right Out: 983.511 $\pm$ 496.763  $\chi^2$ /NDF: 7.9/6

Left In: -74.986 $\pm$ 81.949  $\chi^2$ /NDF:32.7/22

Left: -91.790 $\pm$ 57.456  $\chi^2$ /NDF: 63.6/47

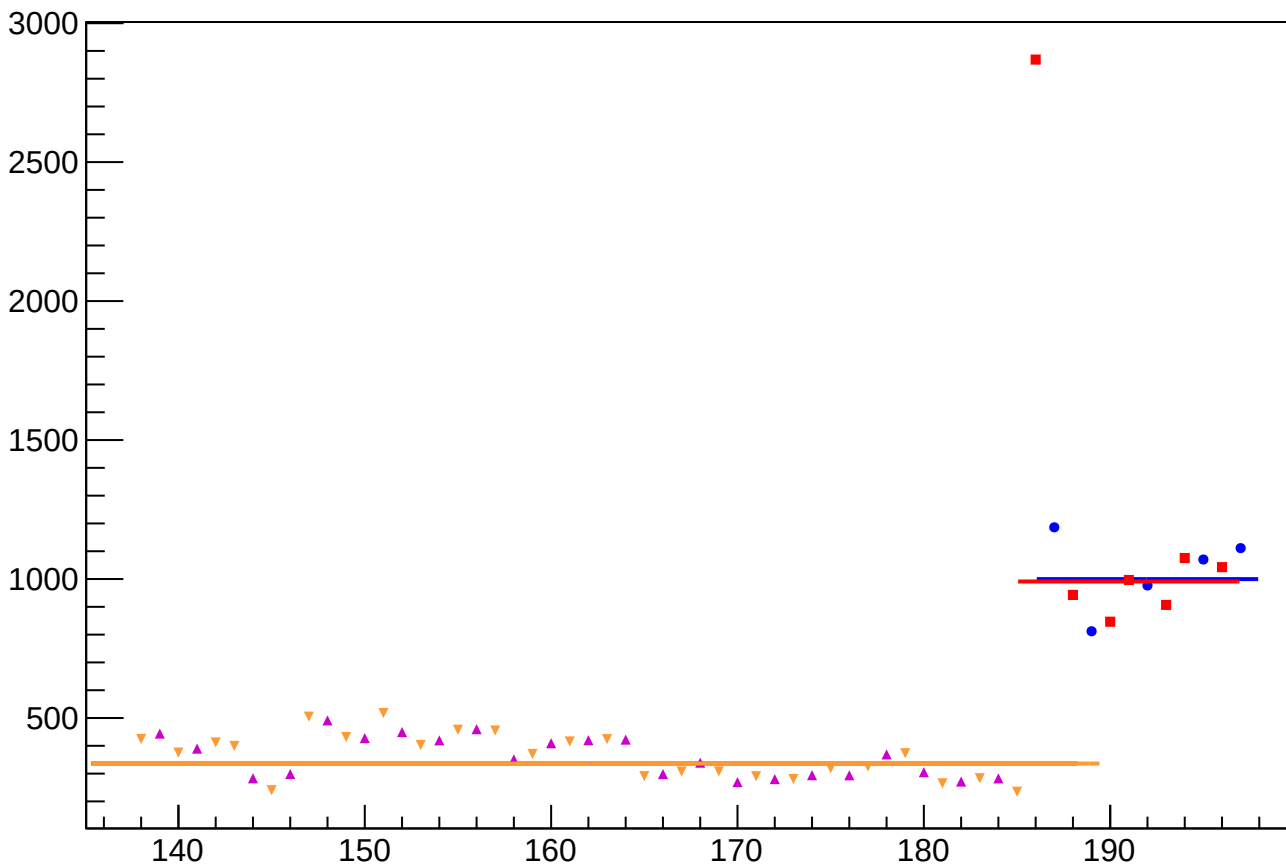
Right: 458.917 $\pm$ 387.067  $\chi^2$ /NDF: 13.1/11

In: -79.775 $\pm$ 81.237  $\chi^2$ /NDF:35.2/27

Out: -80.052 $\pm$ 79.540  $\chi^2$ /NDF:43.5/31

All: -79.917 $\pm$ 56.834  $\chi^2$ /NDF: 78.7/59

asym\_sam\_15\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 999.702 $\pm$ 0.437  $\chi^2$ /NDF: 80388.9/4

Left Out: 336.231 $\pm$ 0.057  $\chi^2$ /NDF: 1659693.0/24

Right Out: 991.164 $\pm$ 0.351  $\chi^2$ /NDF: 368179.8/6

Left In: 336.396 $\pm$ 0.058  $\chi^2$ /NDF: 1269587.6/22

Left: 336.312 $\pm$ 0.041  $\chi^2$ /NDF: 2929284.8/47

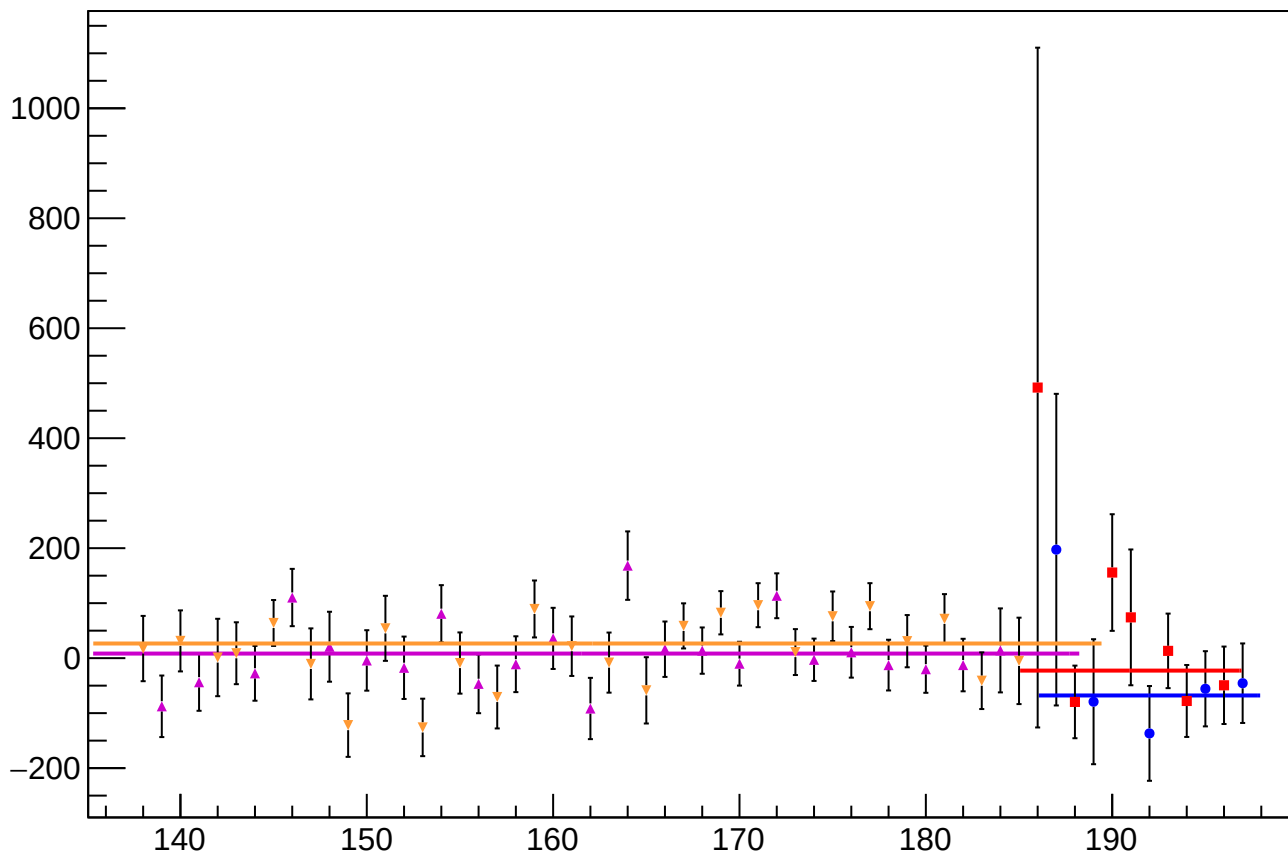
Right: 994.518 $\pm$ 0.274  $\chi^2$ /NDF: 448800.8/11

In: 347.875 $\pm$ 0.057  $\chi^2$ /NDF: 3617563.0/27

Out: 353.022 $\pm$ 0.056  $\chi^2$ /NDF: 5415108.2/31

All: 350.503 $\pm$ 0.040  $\chi^2$ /NDF: 9036769.4/59

dit\_asym\_sam\_37\_26\_dd\_mean vs Slug, Sign Corrected



Right In:  $-67.867 \pm 39.854$   $\chi^2/\text{NDF}$ : 1.7/4

Left Out:  $26.633 \pm 10.090$   $\chi^2/\text{NDF}$ : 36.5/24

Right Out:  $-22.630 \pm 31.019$   $\chi^2/\text{NDF}$ : 6.0/6

Left In:  $8.325 \pm 10.361$   $\chi^2/\text{NDF}$ : 29.6/22

Left:  $17.721 \pm 7.229$   $\chi^2/\text{NDF}$ : 67.7/47

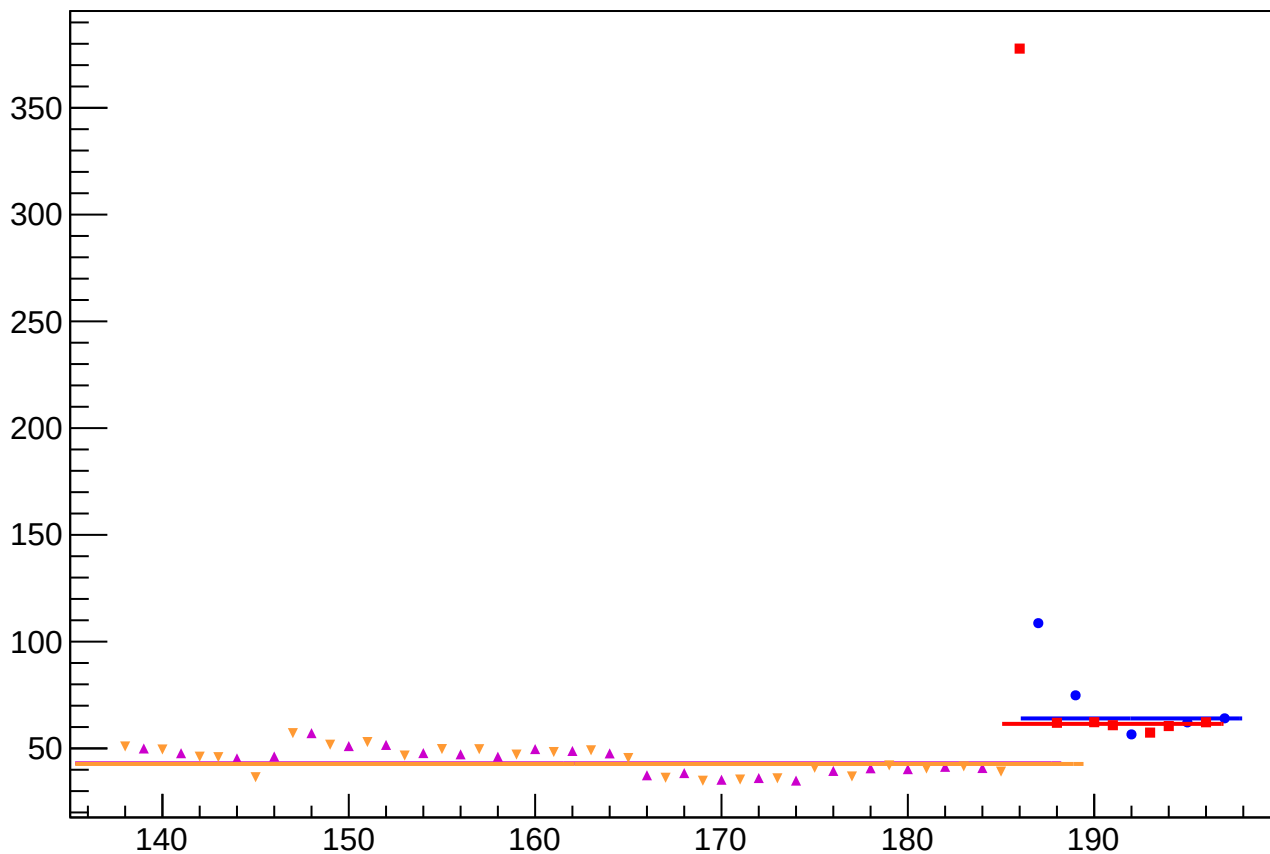
Right:  $-39.696 \pm 24.478$   $\chi^2/\text{NDF}$ : 8.5/11

In:  $3.502 \pm 10.027$   $\chi^2/\text{NDF}$ : 34.7/27

Out:  $21.919 \pm 9.595$   $\chi^2/\text{NDF}$ : 44.7/31

All:  $13.115 \pm 6.933$   $\chi^2/\text{NDF}$ : 81.2/59

dit\_asym\_sam\_37\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 64.030+/-0.028  $\chi^2/\text{NDF}$ : 84274.9/4

Left Out: 42.716+/-0.007  $\chi^2/\text{NDF}$ : 771558.7/24

Right Out: 61.487+/-0.022  $\chi^2/\text{NDF}$ : 531799.5/6

Left In: 43.021+/-0.007  $\chi^2/\text{NDF}$ : 642598.9/22

Left: 42.865+/-0.005  $\chi^2/\text{NDF}$ : 1415050.2/47

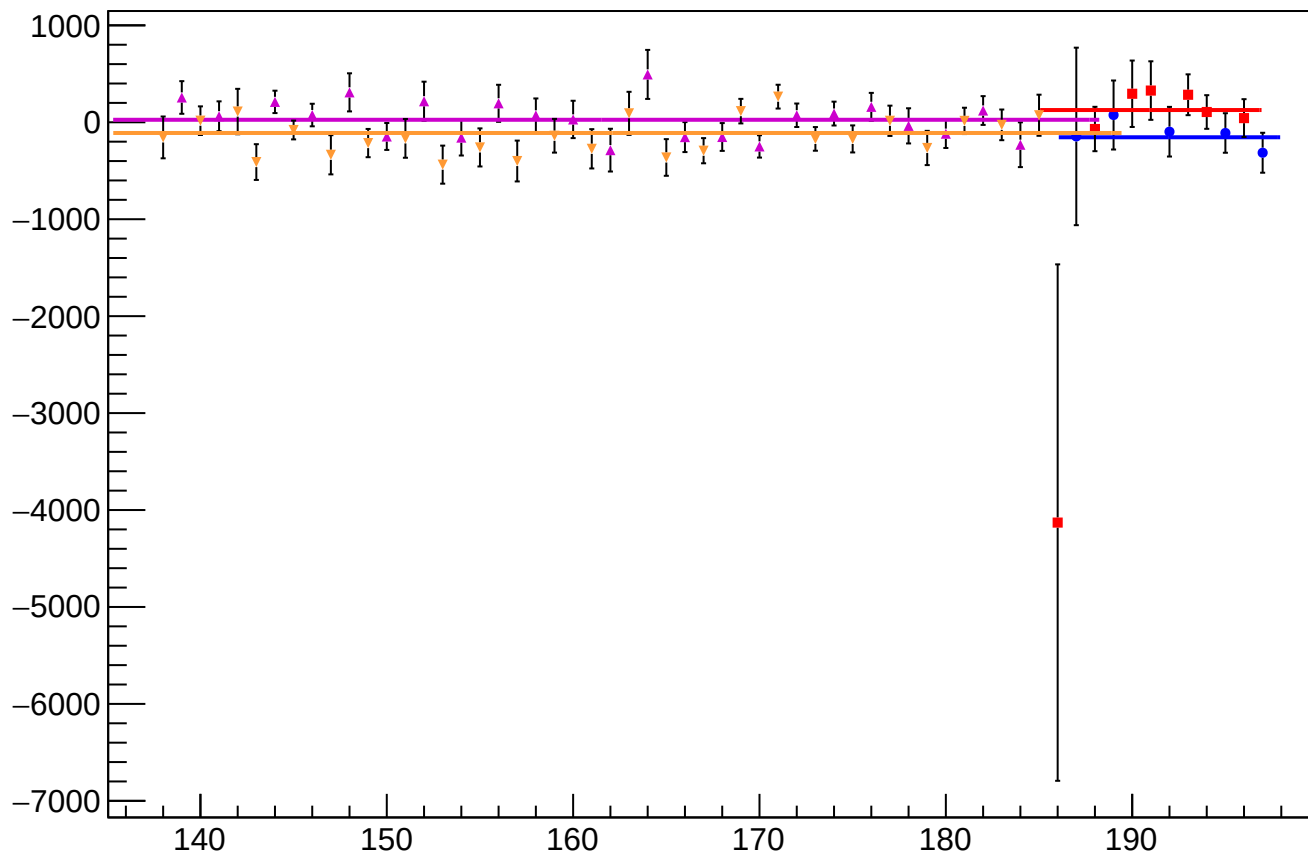
Right: 62.446+/-0.017  $\chi^2/\text{NDF}$ : 621148.4/11

In: 44.351+/-0.007  $\chi^2/\text{NDF}$ : 1247477.7/27

Out: 44.512+/-0.007  $\chi^2/\text{NDF}$ : 1965668.6/31

All: 44.435+/-0.005  $\chi^2/\text{NDF}$ : 3213414.3/59

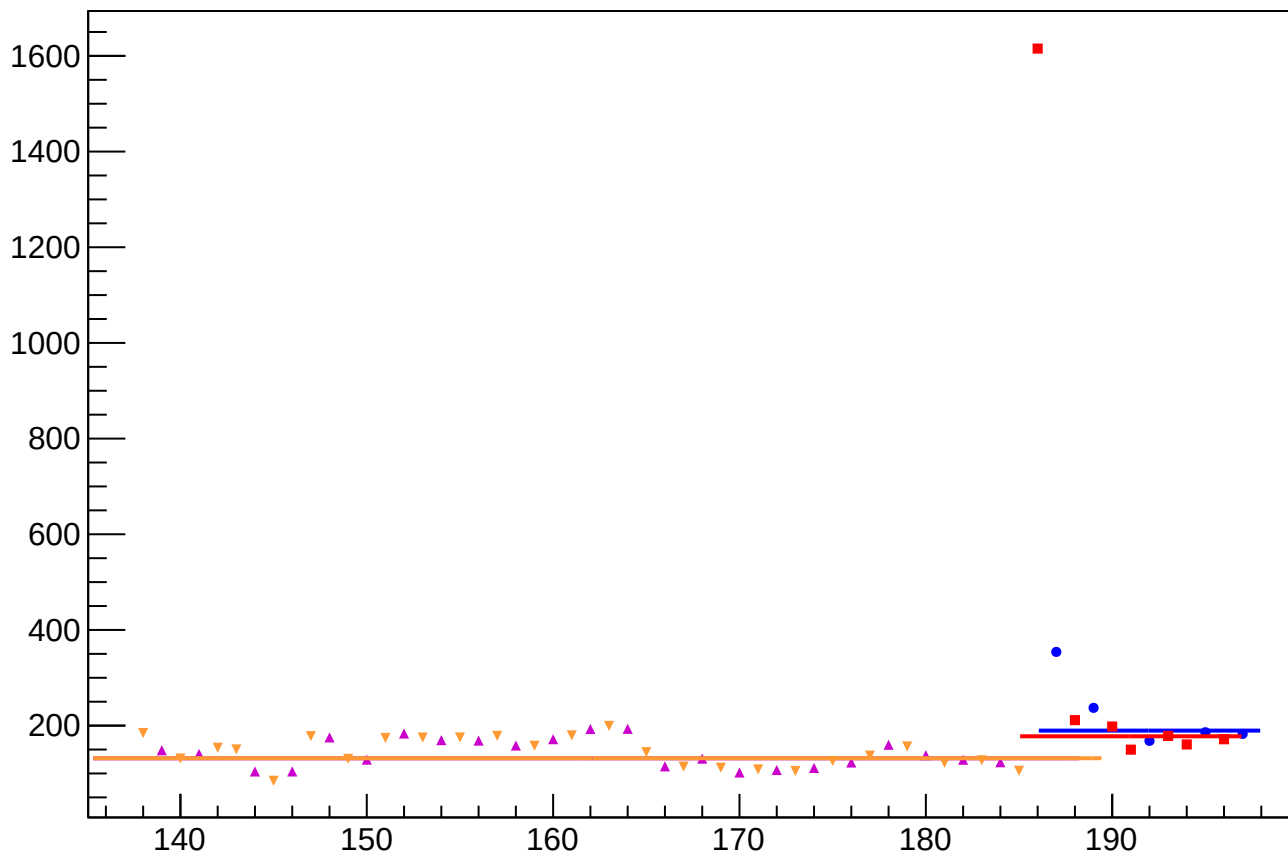
asym\_sam\_37\_26\_dd\_correction\_mean vs Slug, Sign Corrected



Right In:  $-154.616 \pm 117.897$   $\chi^2/\text{NDF}: 1.1/4$   
 Left Out:  $-110.340 \pm 31.717$   $\chi^2/\text{NDF}: 33.0/24$   
 Right Out:  $126.308 \pm 91.034$   $\chi^2/\text{NDF}: 4.7/6$   
 Left In:  $25.828 \pm 32.100$   $\chi^2/\text{NDF}: 29.0/22$

Left:  $-43.073 \pm 22.561$   $\chi^2/\text{NDF}: 71.1/47$   
 Right:  $21.379 \pm 72.054$   $\chi^2/\text{NDF}: 9.4/11$   
 In:  $13.375 \pm 30.972$   $\chi^2/\text{NDF}: 32.3/27$   
 Out:  $-84.723 \pm 29.951$   $\chi^2/\text{NDF}: 43.7/31$   
 All:  $-37.318 \pm 21.531$   $\chi^2/\text{NDF}: 81.2/59$

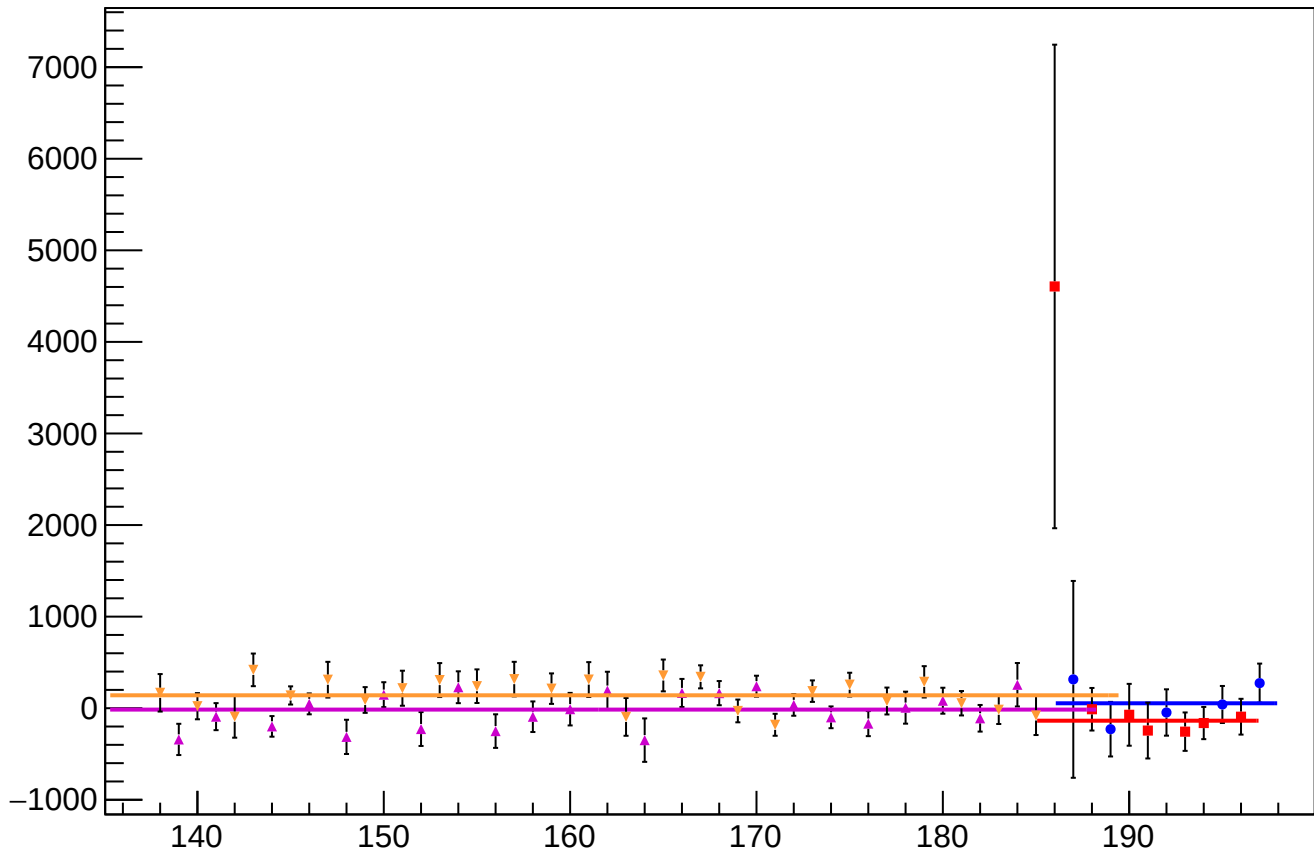
asym\_sam\_37\_26\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 189.597 $\pm$ 0.083  $\chi^2$ /NDF: 117062.4/4  
 Left Out: 131.875 $\pm$ 0.022  $\chi^2$ /NDF:1806379.2/24  
 Right Out: 177.718 $\pm$ 0.064  $\chi^2$ /NDF: 671643.5/6  
 Left In: 131.630 $\pm$ 0.023  $\chi^2$ /NDF:1403692.5/22

Left: 131.754 $\pm$ 0.016  $\chi^2$ /NDF: 3210130.7/47  
 Right: 182.155 $\pm$ 0.051  $\chi^2$ /NDF: 801425.9/11  
 In: 135.630 $\pm$ 0.022  $\chi^2$ /NDF:1970885.6/27  
 Out: 136.837 $\pm$ 0.021  $\chi^2$ /NDF:2930328.1/31  
 All: 136.254 $\pm$ 0.015  $\chi^2$ /NDF: 4902783.3/59

asym\_sam\_37\_26\_dd\_mean vs Slug, Sign Corrected



Right In: 53.776+/-116.049  $\chi^2/\text{NDF}$ : 2.2/4

Left Out: 141.008+/-30.636  $\chi^2/\text{NDF}$ : 27.1/24

Right Out: -136.431+/-91.505  $\chi^2/\text{NDF}$ : 4.1/6

Left In: -15.199+/-31.033  $\chi^2/\text{NDF}$ : 31.4/22

Left: 63.911+/-21.802  $\chi^2/\text{NDF}$ : 71.3/47

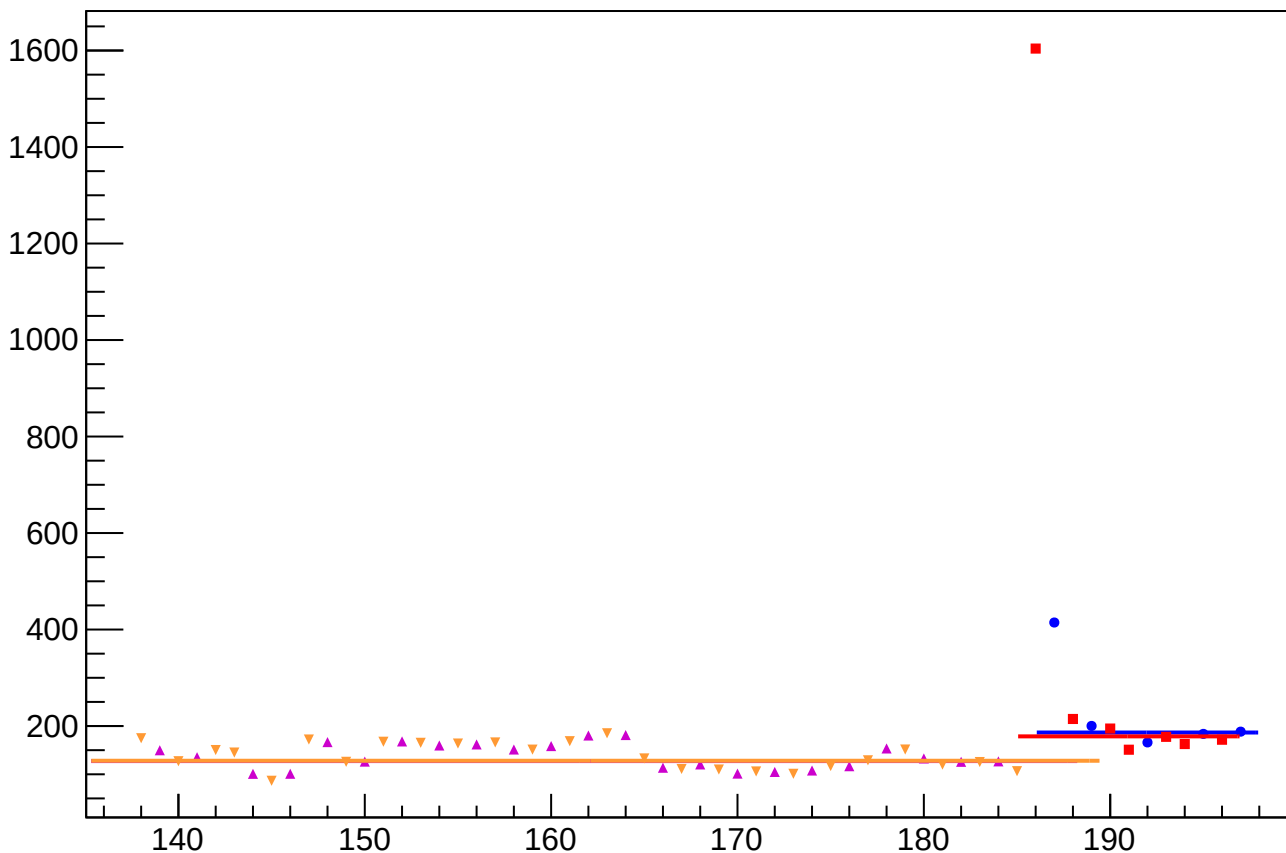
Right: -63.510+/-71.854  $\chi^2/\text{NDF}$ : 7.9/11

In: -10.596+/-29.980  $\chi^2/\text{NDF}$ : 33.9/27

Out: 113.044+/-29.051  $\chi^2/\text{NDF}$ : 39.5/31

All: 53.169+/-20.863  $\chi^2/\text{NDF}$ : 82.1/59

asym\_sam\_37\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 186.585 $\pm$ 0.082  $\chi^2$ /NDF: 107874.4/4

Left Out: 128.060 $\pm$ 0.022  $\chi^2$ /NDF: 1530283.7/24

Right Out: 178.589 $\pm$ 0.065  $\chi^2$ /NDF: 671057.6/6

Left In: 127.380 $\pm$ 0.022  $\chi^2$ /NDF: 1229899.0/22

Left: 127.724 $\pm$ 0.015  $\chi^2$ /NDF: 2760669.0/47

Right: 181.655 $\pm$ 0.051  $\chi^2$ /NDF: 784786.3/11

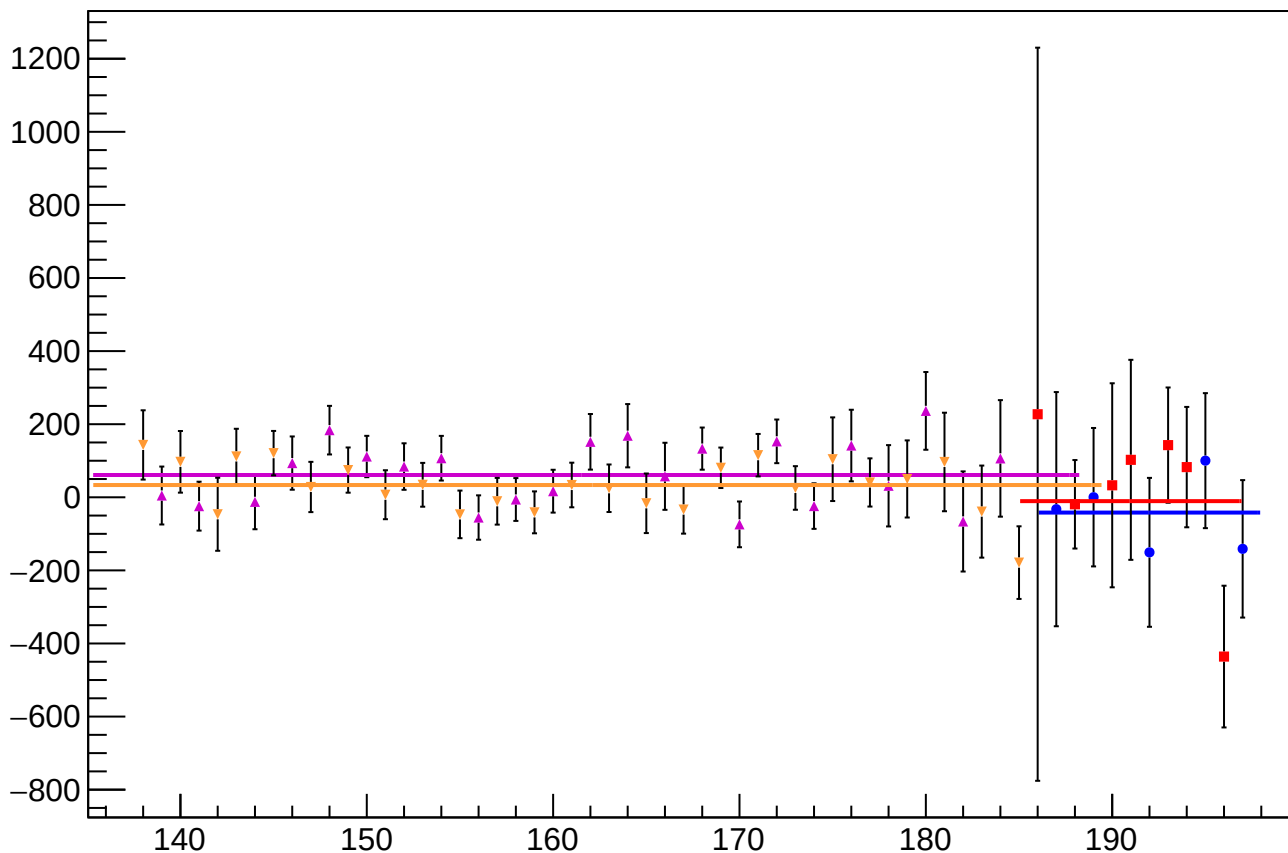
In: 131.331 $\pm$ 0.021  $\chi^2$ /NDF: 1823593.0/27

Out: 133.153 $\pm$ 0.021  $\chi^2$ /NDF: 2749746.0/31

All: 132.270 $\pm$ 0.015  $\chi^2$ /NDF: 4577147.7/59



dit\_asym\_sam\_1357\_avg\_mean vs Slug, Sign Corrected



Right In:  $-41.818 \pm 91.555$   $\chi^2/\text{NDF}$ : 1.2/4

Left Out:  $33.535 \pm 14.197$   $\chi^2/\text{NDF}$ : 19.7/24

Right Out:  $-10.522 \pm 70.871$   $\chi^2/\text{NDF}$ : 6.3/6

Left In:  $60.992 \pm 14.839$   $\chi^2/\text{NDF}$ : 31.6/22

Left:  $46.656 \pm 10.258$   $\chi^2/\text{NDF}$ : 53.0/47

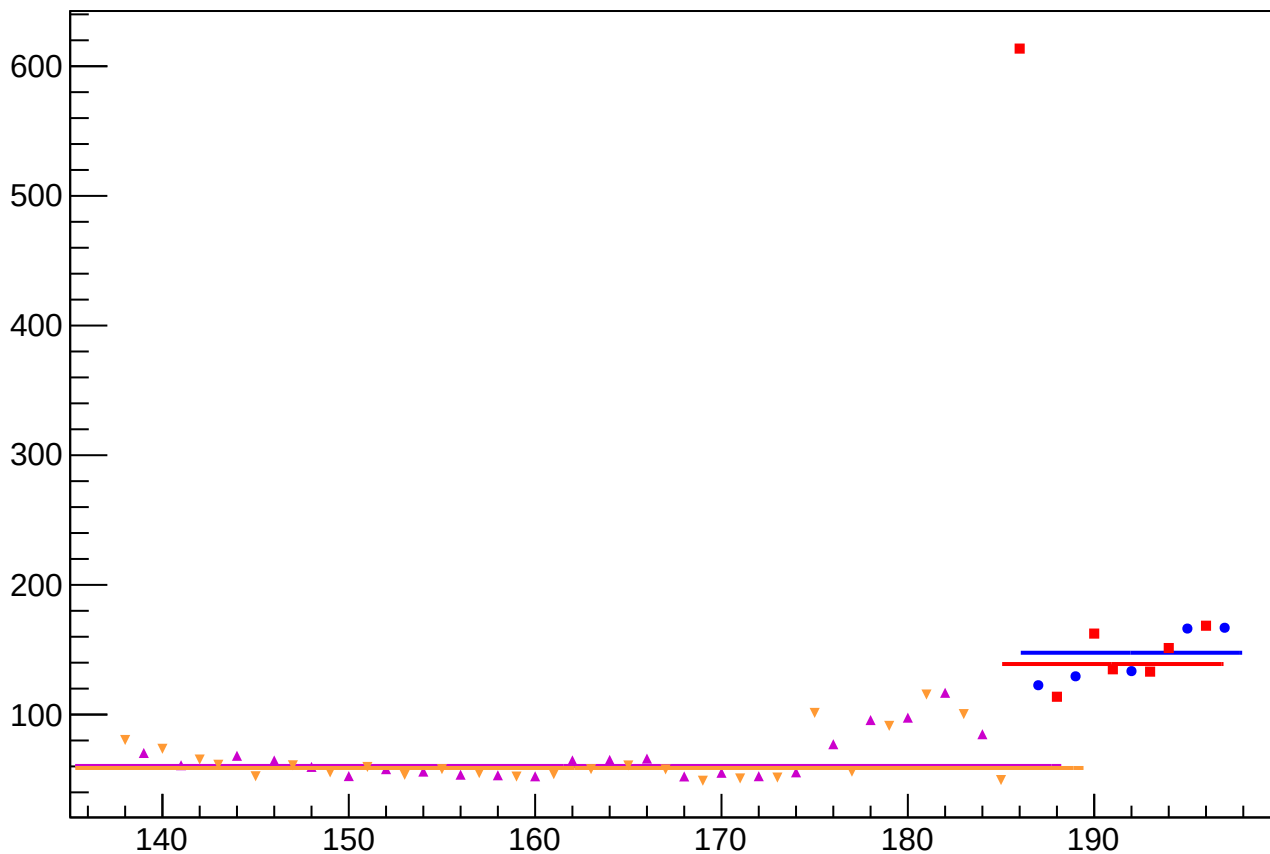
Right:  $-22.249 \pm 56.043$   $\chi^2/\text{NDF}$ : 7.6/11

In:  $58.360 \pm 14.648$   $\chi^2/\text{NDF}$ : 34.0/27

Out:  $31.835 \pm 13.920$   $\chi^2/\text{NDF}$ : 26.4/31

All:  $44.422 \pm 10.090$   $\chi^2/\text{NDF}$ : 62.1/59

dit\_asym\_sam\_1357\_avg\_rms vs Slug, Sign Corrected



Right In: 147.661 $\pm$ 0.065  $\chi^2/\text{NDF}$ : 81729.4/4

Left Out: 58.793 $\pm$ 0.010  $\chi^2/\text{NDF}$ : 1460561.7/24

Right Out: 138.971 $\pm$ 0.050  $\chi^2/\text{NDF}$ : 609721.7/6

Left In: 60.355 $\pm$ 0.010  $\chi^2/\text{NDF}$ : 1217671.4/22

Left: 59.539 $\pm$ 0.007  $\chi^2/\text{NDF}$ : 2689802.0/47

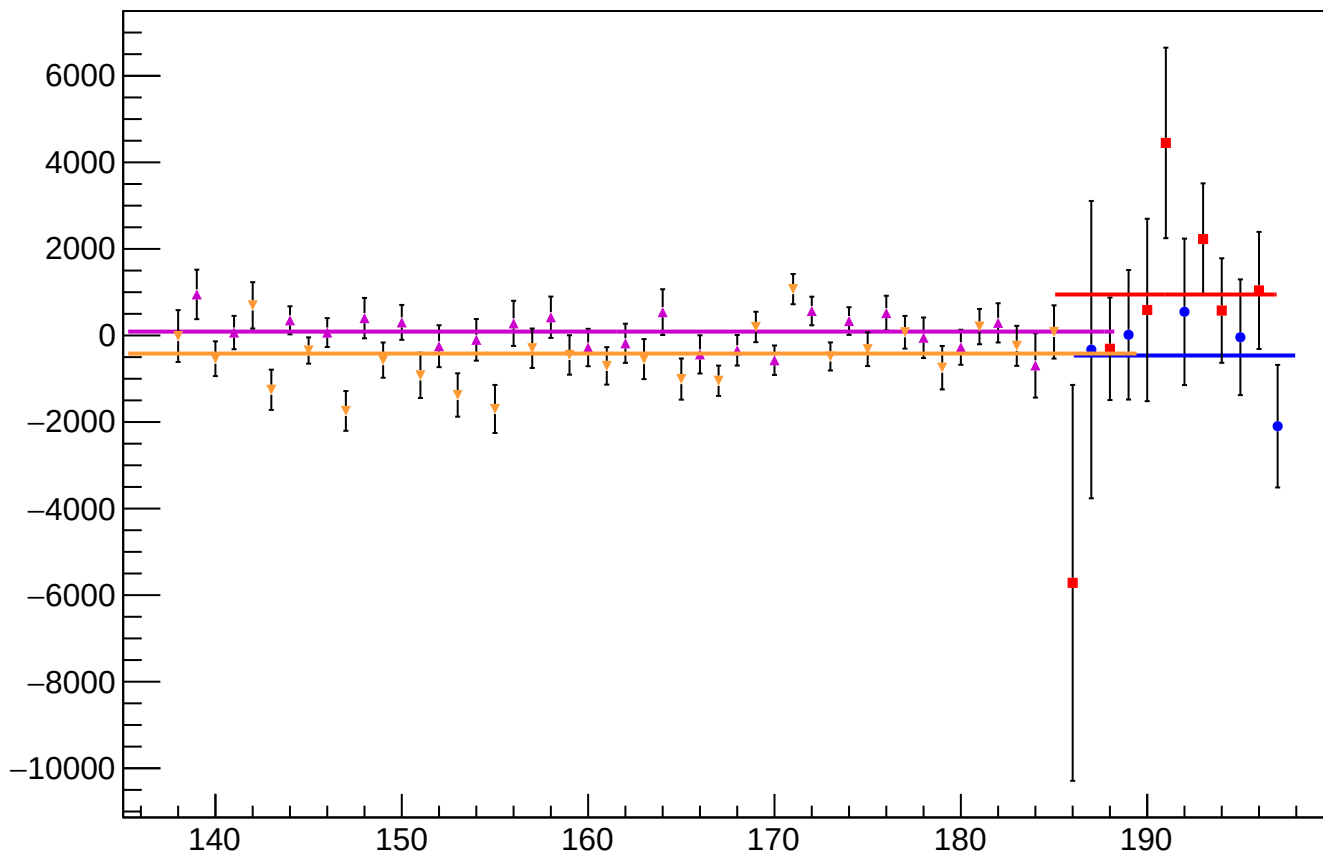
Right: 142.227 $\pm$ 0.040  $\chi^2/\text{NDF}$ : 702718.9/11

In: 62.590 $\pm$ 0.010  $\chi^2/\text{NDF}$ : 3071530.3/27

Out: 61.886 $\pm$ 0.010  $\chi^2/\text{NDF}$ : 4531291.9/31

All: 62.220 $\pm$ 0.007  $\chi^2/\text{NDF}$ : 7605246.6/59

asym\_sam\_1357\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -462.645 $\pm$ 718.252  $\chi^2$ /NDF: 1.9/4

Left Out: -417.817 $\pm$ 84.969  $\chi^2$ /NDF:58.5/24

Right Out: 946.752 $\pm$ 574.646  $\chi^2$ /NDF: 6.9/6

Left In: 89.505 $\pm$ 86.438  $\chi^2$ /NDF:19.4/22

Left: -168.504 $\pm$ 60.595  $\chi^2$ /NDF: 95.4/47

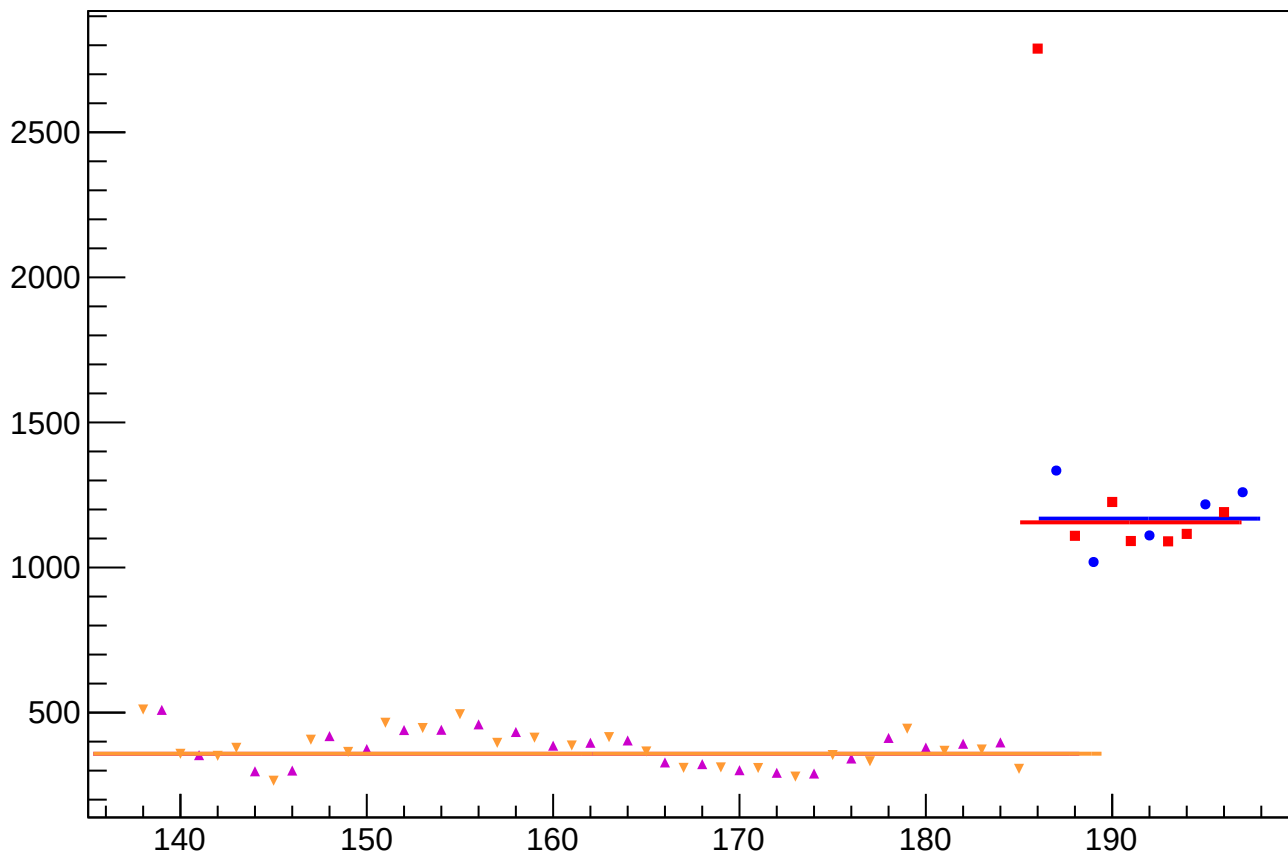
Right: 396.692 $\pm$ 448.709  $\chi^2$ /NDF: 11.1/11

In: 81.622 $\pm$ 85.819  $\chi^2$ /NDF:21.9/27

Out: -388.621 $\pm$ 84.055  $\chi^2$ /NDF:70.9/31

All: -158.381 $\pm$ 60.050  $\chi^2$ /NDF: 108.1/59

asym\_sam\_1357\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 1168.474 $\pm$ 0.508  $\chi^2$ /NDF: 37915.4/4

Left Out: 358.349 $\pm$ 0.060  $\chi^2$ /NDF:1011872.8/24

Right Out: 1155.688 $\pm$ 0.406  $\chi^2$ /NDF: 270564.7/6

Left In: 357.802 $\pm$ 0.061  $\chi^2$ /NDF:893330.5/22

Left: 358.080 $\pm$ 0.043  $\chi^2$ /NDF: 1905244.1/47

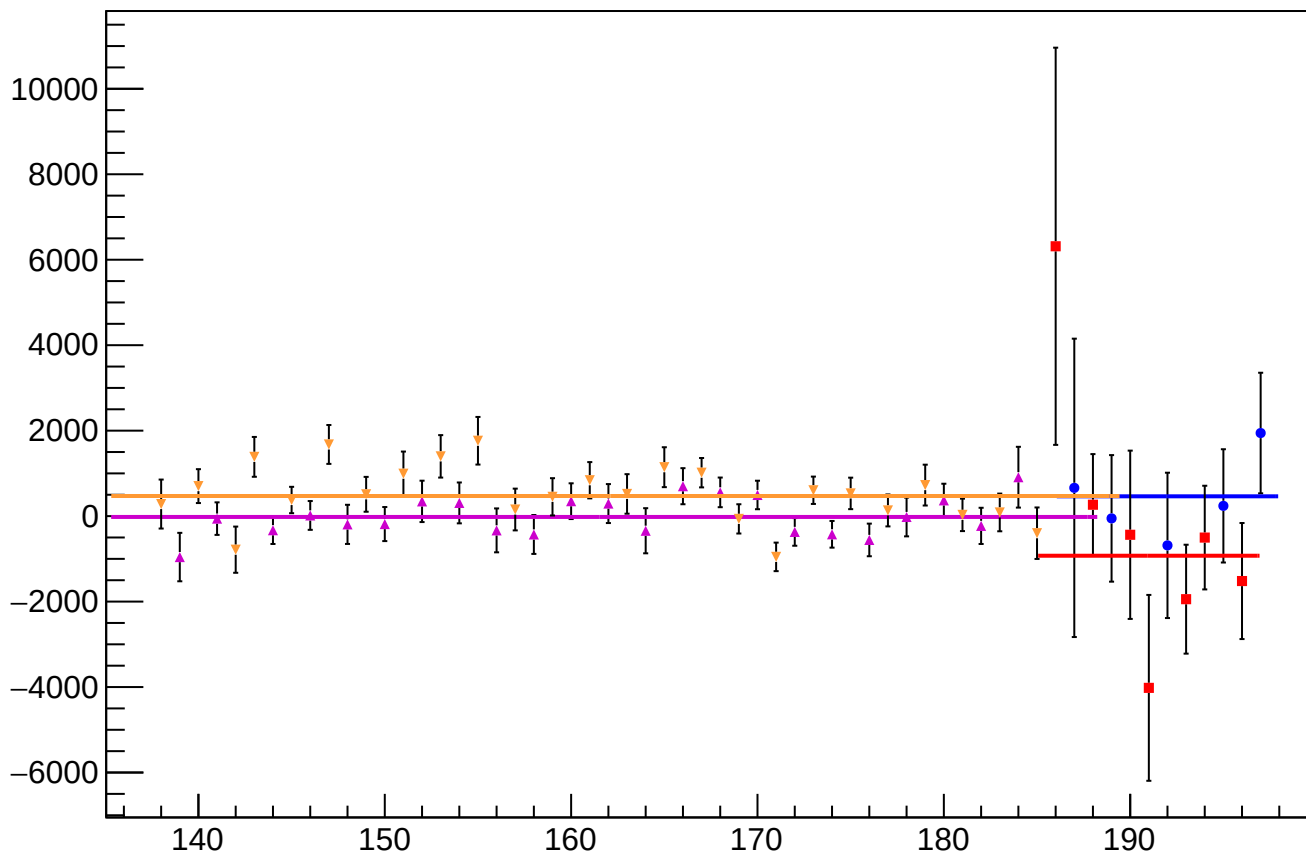
Right: 1160.678 $\pm$ 0.317  $\chi^2$ /NDF: 308866.5/11

In: 369.375 $\pm$ 0.061  $\chi^2$ /NDF:3442679.8/27

Out: 375.409 $\pm$ 0.059  $\chi^2$ /NDF:5050539.3/31

All: 372.454 $\pm$ 0.042  $\chi^2$ /NDF: 8498265.2/59

asym\_sam\_1357\_avg\_mean vs Slug, Sign Corrected



Right In: 463.507 $\pm$ 715.120  $\chi^2$ /NDF: 1.7/4

Left Out: 470.804 $\pm$ 83.480  $\chi^2$ /NDF:58.7/24

Right Out: -926.878 $\pm$ 571.106  $\chi^2$ /NDF: 6.5/6

Left In: -19.328 $\pm$ 84.679  $\chi^2$ /NDF:23.7/22

Left: 229.235 $\pm$ 59.449  $\chi^2$ /NDF: 99.4/47

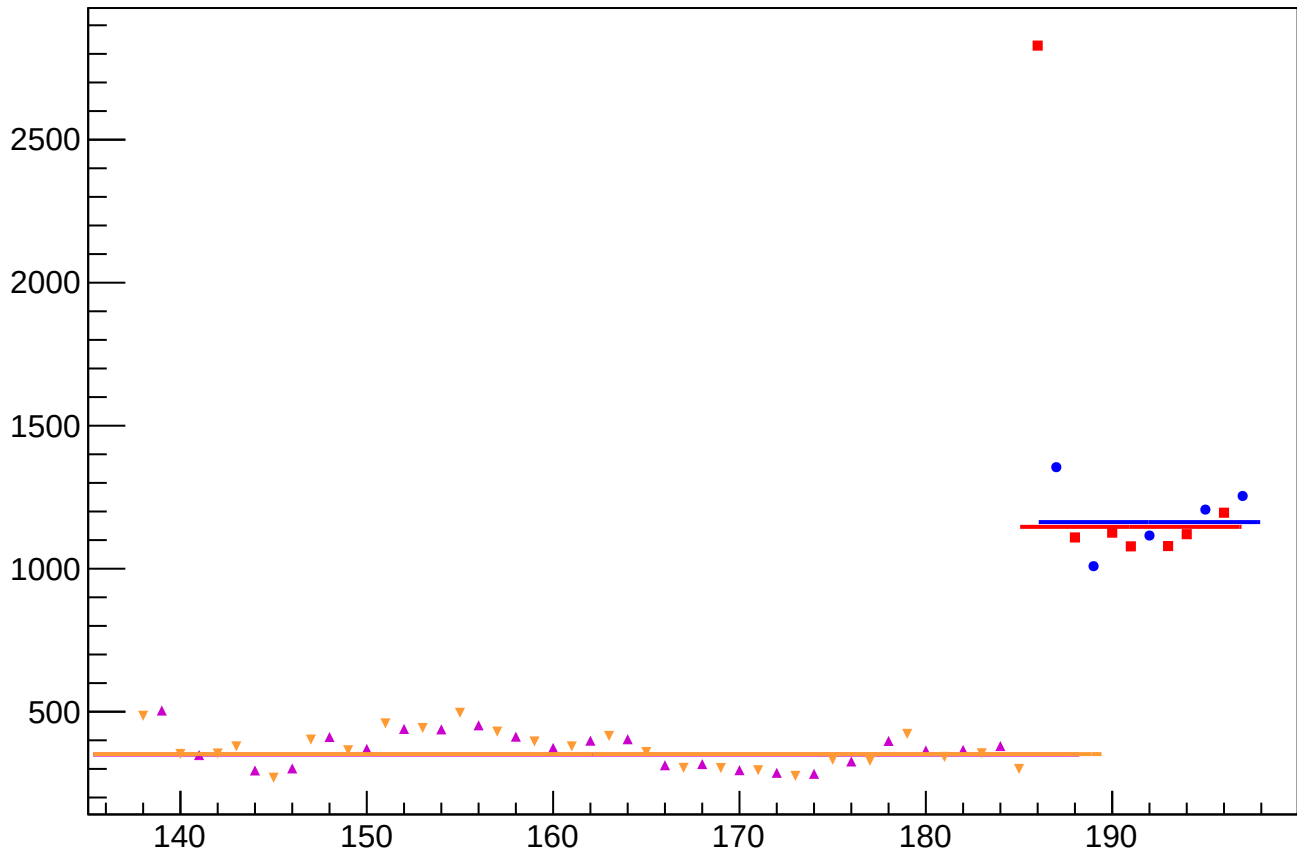
Right: -385.435 $\pm$ 446.260  $\chi^2$ /NDF: 10.5/11

In: -12.651 $\pm$ 84.092  $\chi^2$ /NDF:25.8/27

Out: 441.566 $\pm$ 82.602  $\chi^2$ /NDF:71.0/31

All: 218.517 $\pm$ 58.928  $\chi^2$ /NDF: 111.7/59

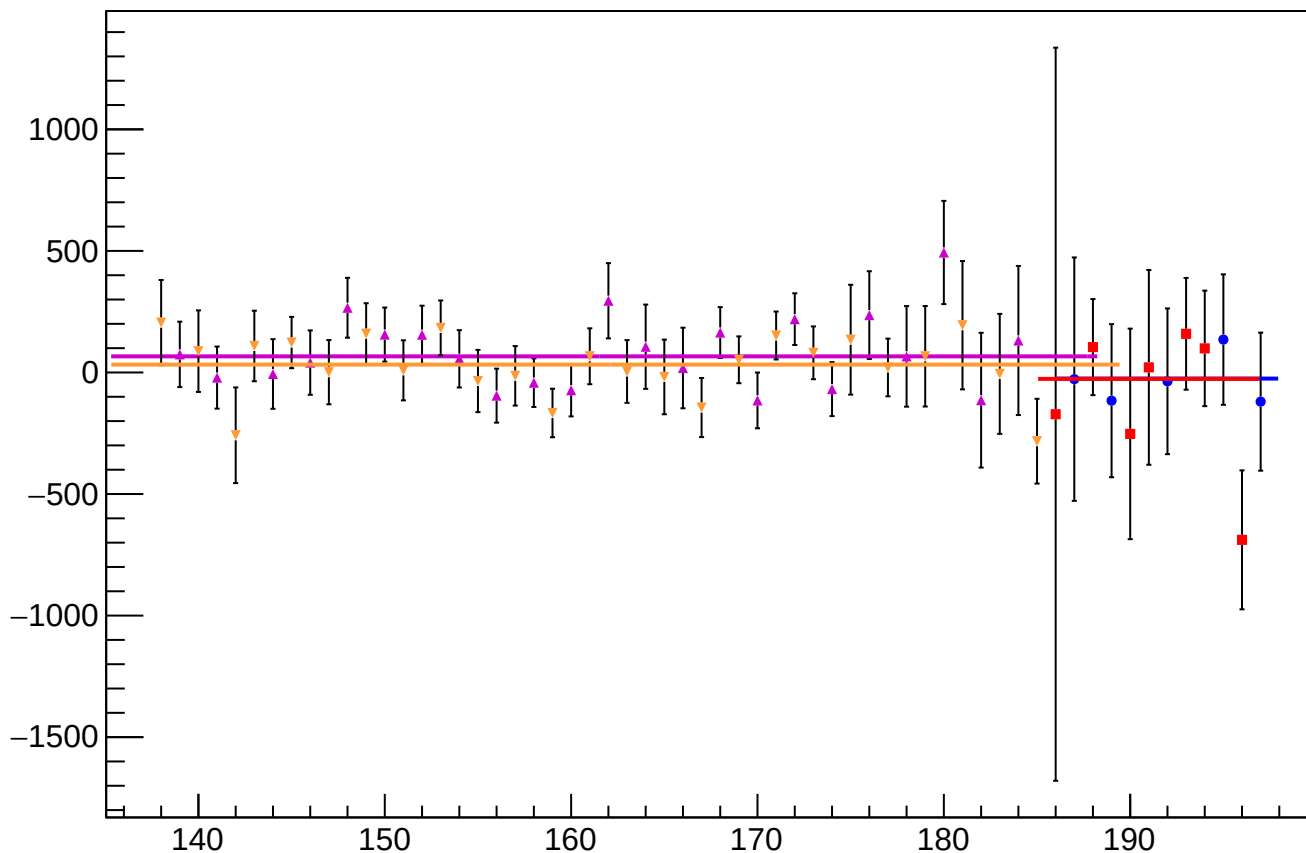
asym\_sam\_1357\_avg\_rms vs Slug, Sign Corrected



Right In: 1162.953 $\pm$ 0.506  $\chi^2$ /NDF: 39786.5/4  
 Left Out: 351.777 $\pm$ 0.059  $\chi^2$ /NDF:1016791.1/24  
 Right Out: 1146.292 $\pm$ 0.404  $\chi^2$ /NDF: 275364.4/6  
 Left In: 350.037 $\pm$ 0.060  $\chi^2$ /NDF:889435.7/22

Left: 350.919 $\pm$ 0.042  $\chi^2$ /NDF: 1906655.0/47  
 Right: 1152.780 $\pm$ 0.316  $\chi^2$ /NDF: 315813.8/11  
 In: 361.278 $\pm$ 0.059  $\chi^2$ /NDF:3477909.8/27  
 Out: 368.398 $\pm$ 0.058  $\chi^2$ /NDF:5081981.7/31  
 All: 364.901 $\pm$ 0.042  $\chi^2$ /NDF: 8567188.4/59

dit\_asym\_sam\_2468\_avg\_mean vs Slug, Sign Corrected



Right In:  $-25.132 \pm 139.340$   $\chi^2/\text{NDF}$ : 0.6/4

Left Out:  $32.332 \pm 26.320$   $\chi^2/\text{NDF}$ : 19.6/24

Right Out:  $-26.408 \pm 107.520$   $\chi^2/\text{NDF}$ : 7.0/6

Left In:  $66.254 \pm 27.450$   $\chi^2/\text{NDF}$ : 24.2/22

Left:  $48.580 \pm 18.998$   $\chi^2/\text{NDF}$ : 44.6/47

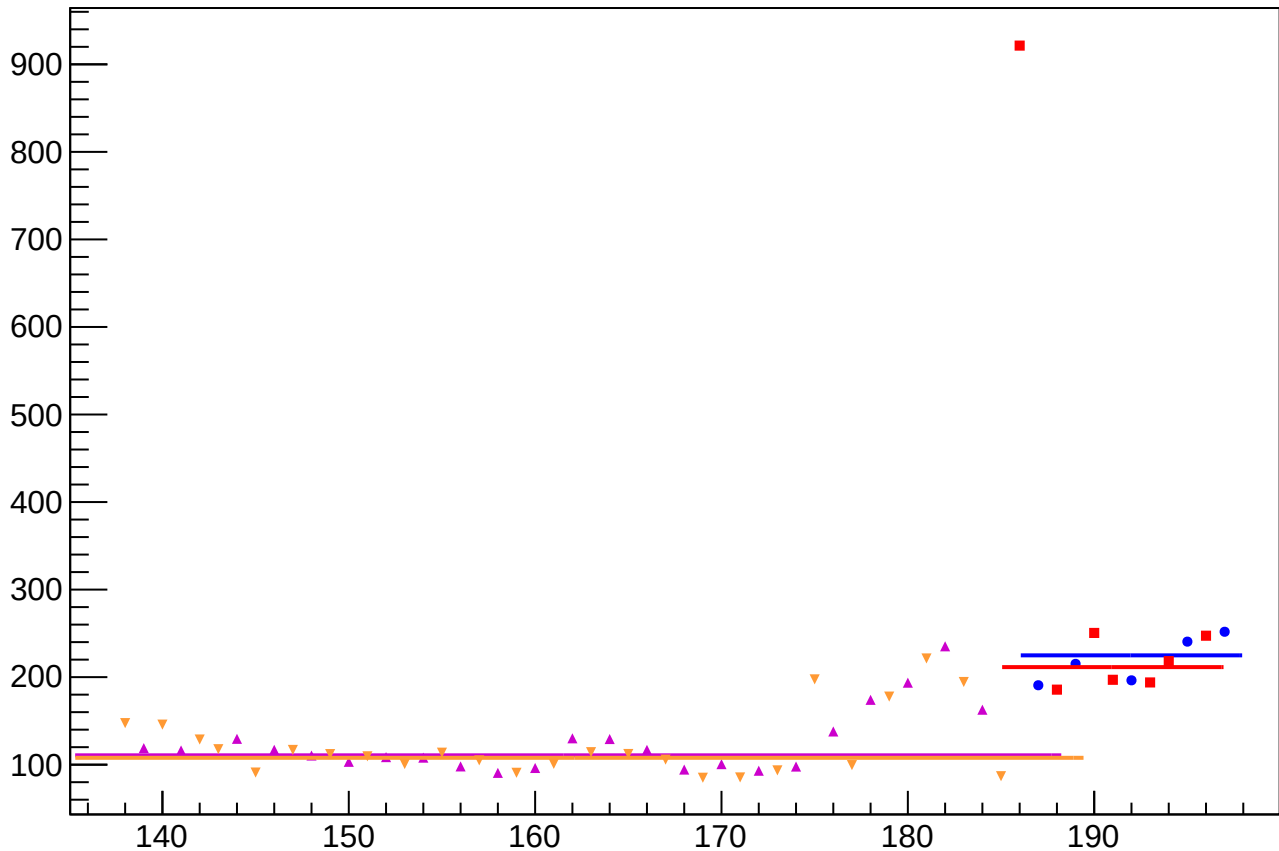
Right:  $-25.932 \pm 85.124$   $\chi^2/\text{NDF}$ : 7.6/11

In:  $62.840 \pm 26.933$   $\chi^2/\text{NDF}$ : 25.2/27

Out:  $29.011 \pm 25.565$   $\chi^2/\text{NDF}$ : 26.9/31

All:  $45.045 \pm 18.542$   $\chi^2/\text{NDF}$ : 52.9/59

dit\_asym\_sam\_2468\_avg\_rms vs Slug, Sign Corrected

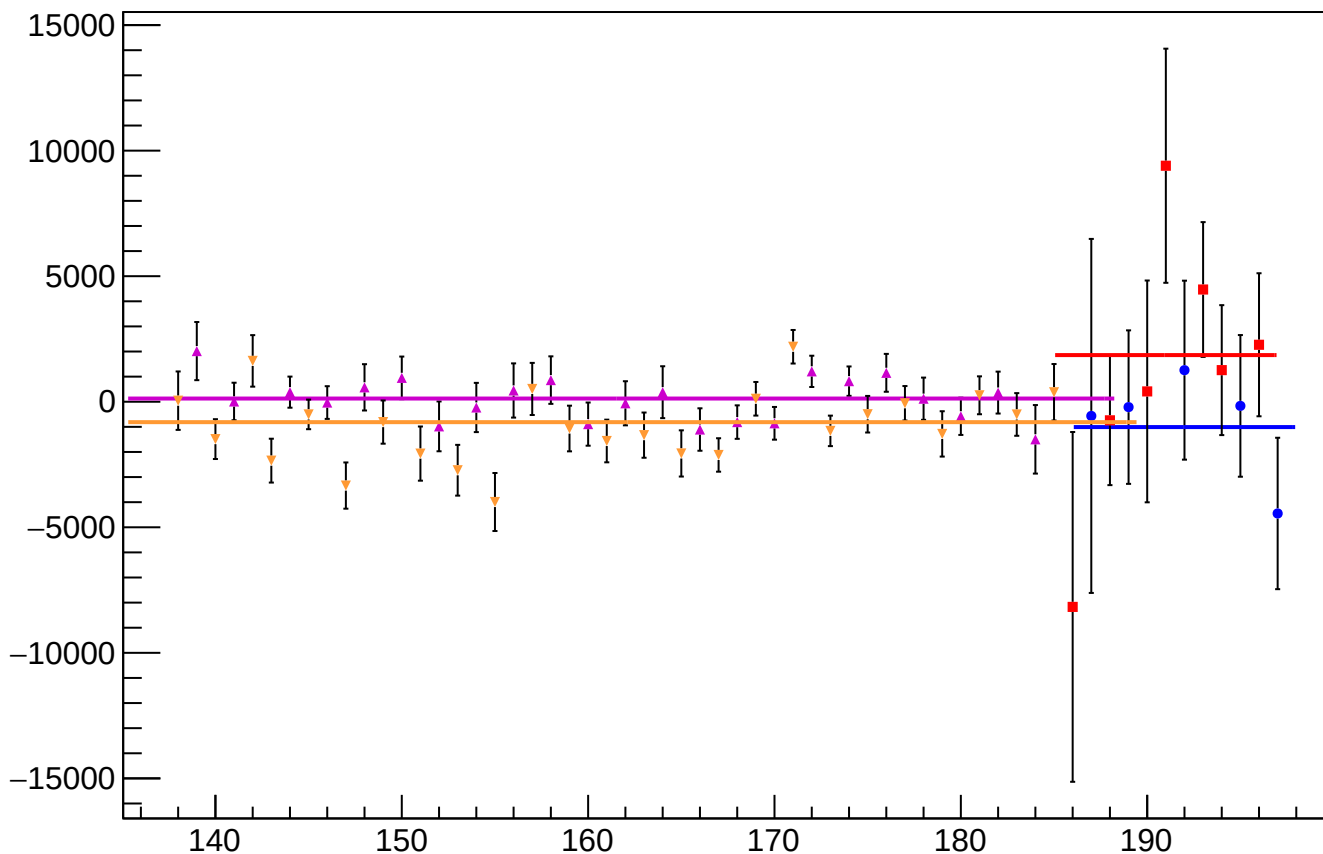


Right In: 224.888 $\pm$ 0.099  $\chi^2$ /NDF: 54165.7/4  
 Left Out: 107.852 $\pm$ 0.019  $\chi^2$ /NDF:1833747.9/24  
 Right Out: 211.453 $\pm$ 0.076  $\chi^2$ /NDF: 541002.4/6  
 Left In: 110.691 $\pm$ 0.019  $\chi^2$ /NDF:1406587.3/22

Left: 109.212 $\pm$ 0.013  $\chi^2$ /NDF: 3251479.0/47  
 Right: 216.467 $\pm$ 0.060  $\chi^2$ /NDF: 606822.7/11  
 In: 114.957 $\pm$ 0.019  $\chi^2$ /NDF:2753920.4/27  
 Out: 113.709 $\pm$ 0.018  $\chi^2$ /NDF:4126624.3/31  
 All: 114.301 $\pm$ 0.013  $\chi^2$ /NDF: 6882803.7/59



asym\_sam\_2468\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -1008.918+/-1504.909  $\chi^2/\text{NDF}$ : 1.9/4

Left Out: -813.029+/-164.102  $\chi^2/\text{NDF}$ : 66.2/24

Right Out: 1857.894+/-1213.173  $\chi^2/\text{NDF}$ : 6.8/6

Left In: 127.427+/-166.308  $\chi^2/\text{NDF}$ : 22.8/22

Left: -349.081+/-116.810  $\chi^2/\text{NDF}$ : 105.2/47

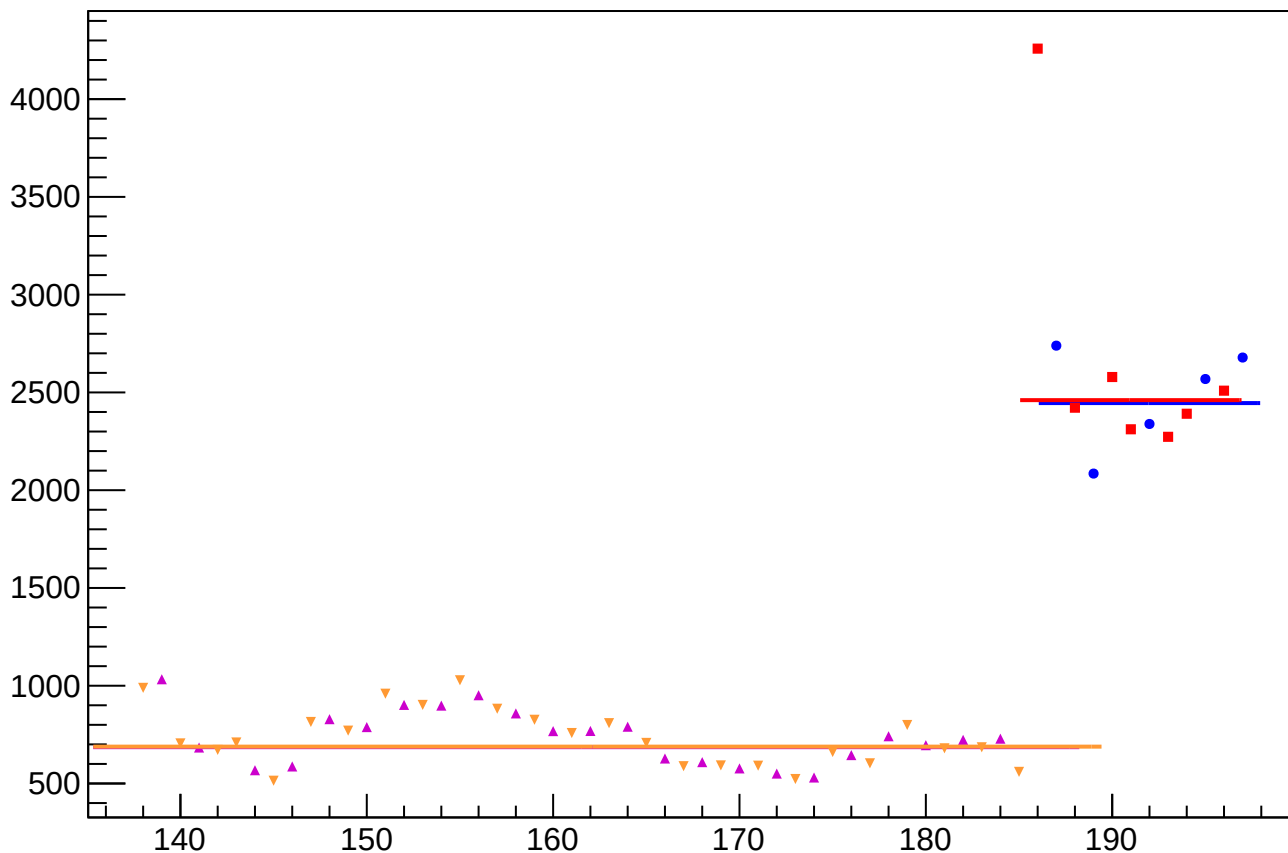
Right: 728.683+/-944.492  $\chi^2/\text{NDF}$ : 10.9/11

In: 113.717+/-165.302  $\chi^2/\text{NDF}$ : 25.2/27

Out: -765.037+/-162.621  $\chi^2/\text{NDF}$ : 77.8/31

All: -332.844+/-115.927  $\chi^2/\text{NDF}$ : 117.3/59

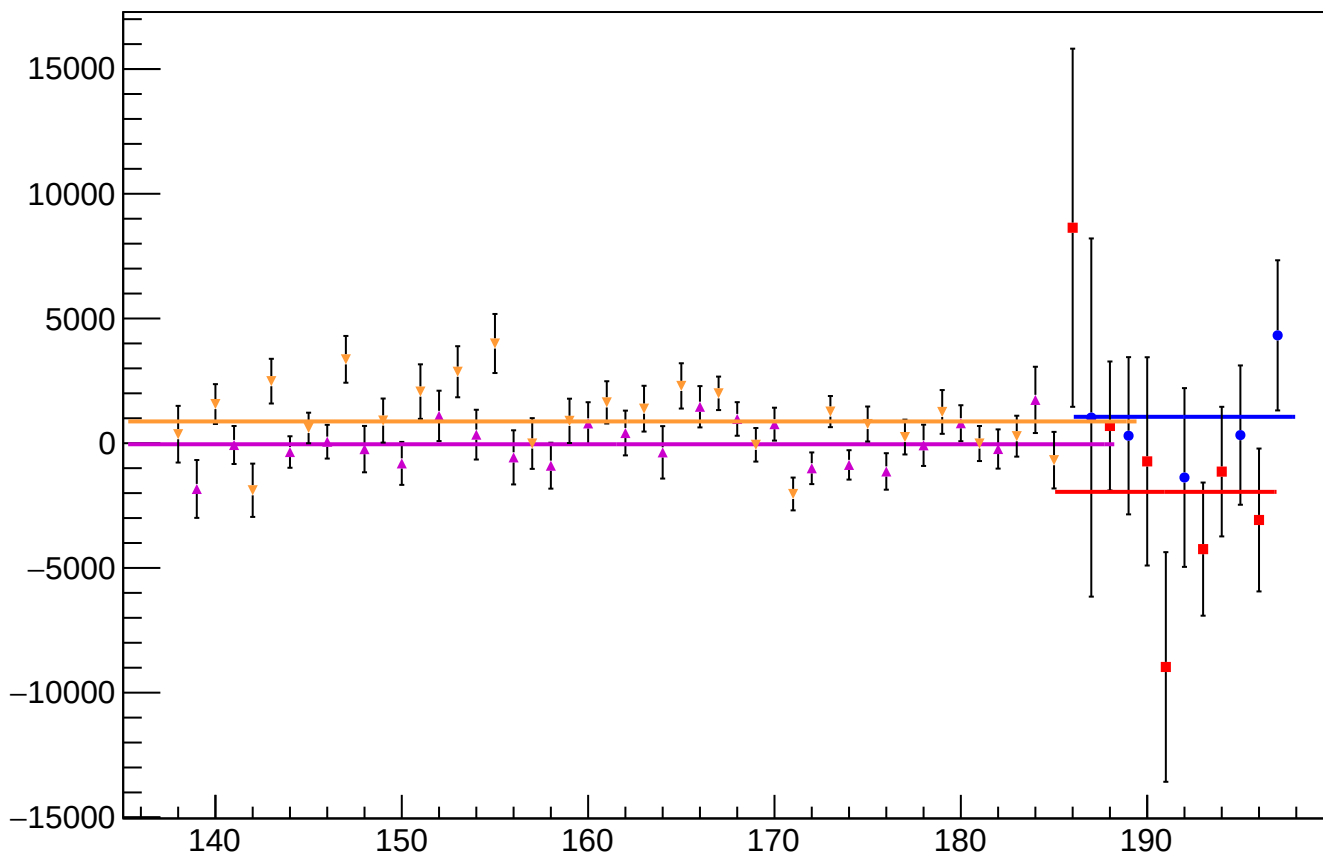
asym\_sam\_2468\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 2445.532 $\pm$ 1.064  $\chi^2$ /NDF: 48832.2/4  
 Left Out: 688.513 $\pm$ 0.116  $\chi^2$ /NDF:1287701.8/24  
 Right Out: 2460.560 $\pm$ 0.858  $\chi^2$ /NDF: 148940.1/6  
 Left In: 685.733 $\pm$ 0.118  $\chi^2$ /NDF:1156263.7/22

Left: 687.142 $\pm$ 0.083  $\chi^2$ /NDF: 2444248.5/47  
 Right: 2454.641 $\pm$ 0.668  $\chi^2$ /NDF: 197893.1/11  
 In: 706.966 $\pm$ 0.117  $\chi^2$ /NDF:3906961.4/27  
 Out: 720.353 $\pm$ 0.115  $\chi^2$ /NDF:5627087.9/31  
 All: 713.769 $\pm$ 0.082  $\chi^2$ /NDF: 9540715.7/59

asym\_sam\_2468\_avg\_mean vs Slug, Sign Corrected



Right In: 1058.516 $\pm$ 1513.428  $\chi^2$ /NDF: 1.8/4

Left Out: 873.446 $\pm$ 164.269  $\chi^2$ /NDF:64.1/24

Right Out: -1949.997 $\pm$ 1209.038  $\chi^2$ /NDF: 6.6/6

Left In: -41.522 $\pm$ 166.728  $\chi^2$ /NDF:24.1/22

Left: 422.759 $\pm$ 117.015  $\chi^2$ /NDF: 103.5/47

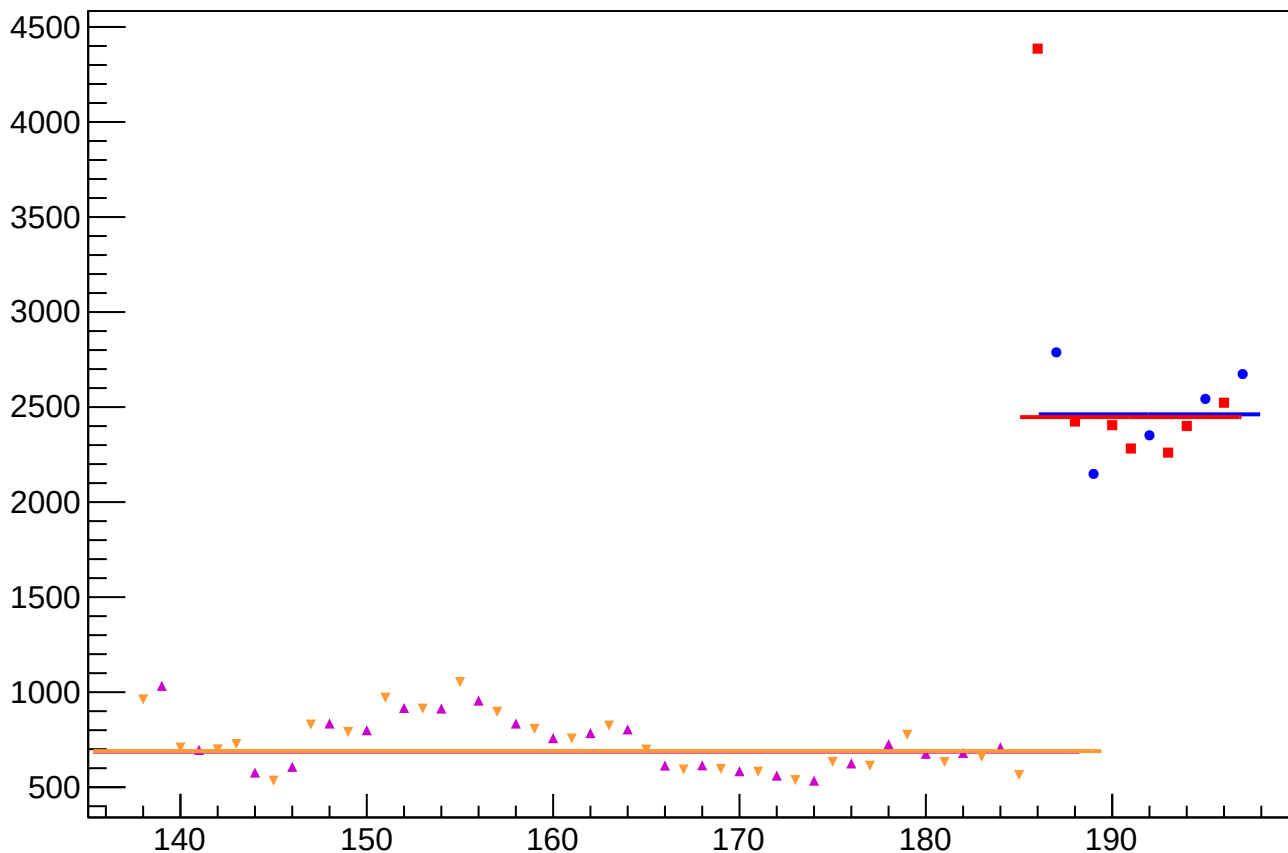
Right: -777.959 $\pm$ 944.619  $\chi^2$ /NDF: 10.8/11

In: -28.332 $\pm$ 165.725  $\chi^2$ /NDF:26.4/27

Out: 822.270 $\pm$ 162.773  $\chi^2$ /NDF:76.1/31

All: 404.612 $\pm$ 116.127  $\chi^2$ /NDF: 115.9/59

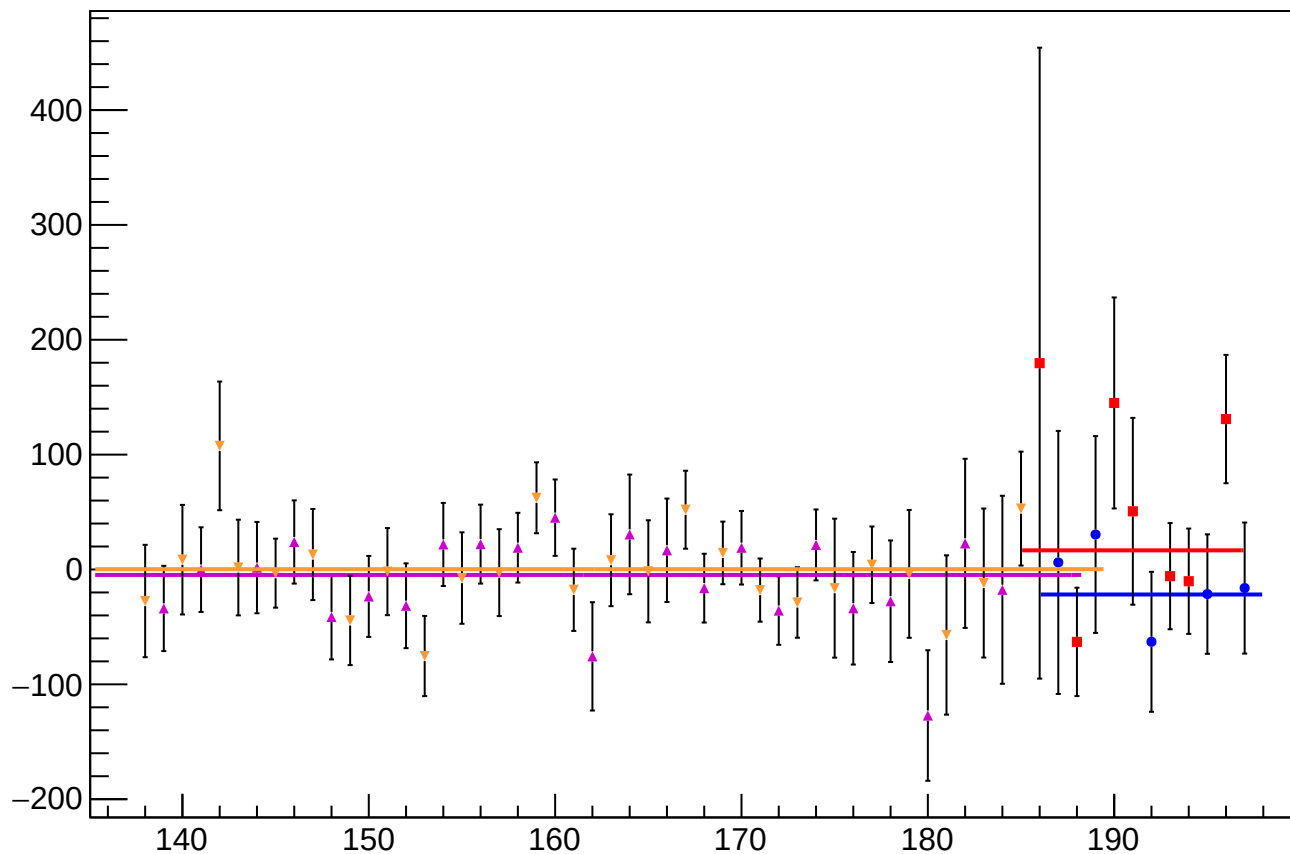
# asym\_sam\_2468\_avg\_rms vs Slug, Sign Corrected



Right In: 2461.801+/-1.070  $\chi^2/\text{NDF}$ : 37425.6/4  
 Left Out: 689.767+/-0.116  $\chi^2/\text{NDF}$ : 1258608.7/24  
 Right Out: 2447.225+/-0.855  $\chi^2/\text{NDF}$ : 160684.5/6  
 Left In: 686.944+/-0.118  $\chi^2/\text{NDF}$ : 1116042.4/22

Left: 688.376+/-0.083  $\chi^2/\text{NDF}$ : 2374942.1/47  
 Right: 2452.903+/-0.668  $\chi^2/\text{NDF}$ : 198223.4/11  
 In: 708.226+/-0.117  $\chi^2/\text{NDF}$ : 3871121.7/27  
 Out: 721.621+/-0.115  $\chi^2/\text{NDF}$ : 5568602.8/31  
 All: 715.044+/-0.082  $\chi^2/\text{NDF}$ : 9446374.9/59

dit\_asym\_sam\_1357\_2468\_dd\_mean vs Slug, Sign Corrected



Right In:  $-21.772 \pm 29.376$   $\chi^2/\text{NDF}$ : 0.9/4

Left Out:  $0.254 \pm 7.690$   $\chi^2/\text{NDF}$ : 20.4/24

Right Out:  $16.674 \pm 22.383$   $\chi^2/\text{NDF}$ : 10.1/6

Left In:  $-4.745 \pm 7.976$   $\chi^2/\text{NDF}$ : 17.9/22

Left:  $-2.154 \pm 5.536$   $\chi^2/\text{NDF}$ : 38.5/47

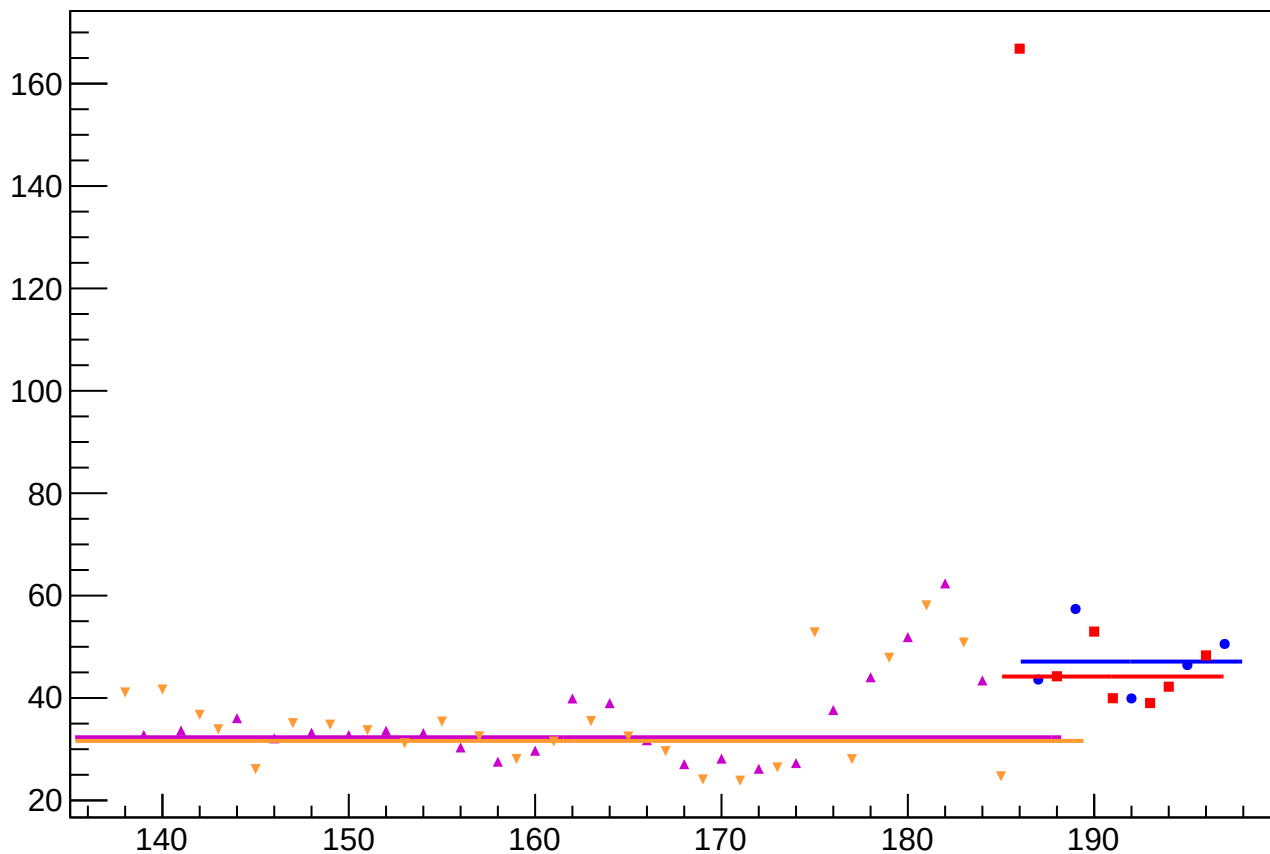
Right:  $2.552 \pm 17.804$   $\chi^2/\text{NDF}$ : 12.1/11

In:  $-5.914 \pm 7.697$   $\chi^2/\text{NDF}$ : 19.1/27

Out:  $1.988 \pm 7.273$   $\chi^2/\text{NDF}$ : 31.0/31

All:  $-1.739 \pm 5.286$   $\chi^2/\text{NDF}$ : 50.6/59

dit\_asym\_sam\_1357\_2468\_dd\_rms vs Slug, Sign Corrected

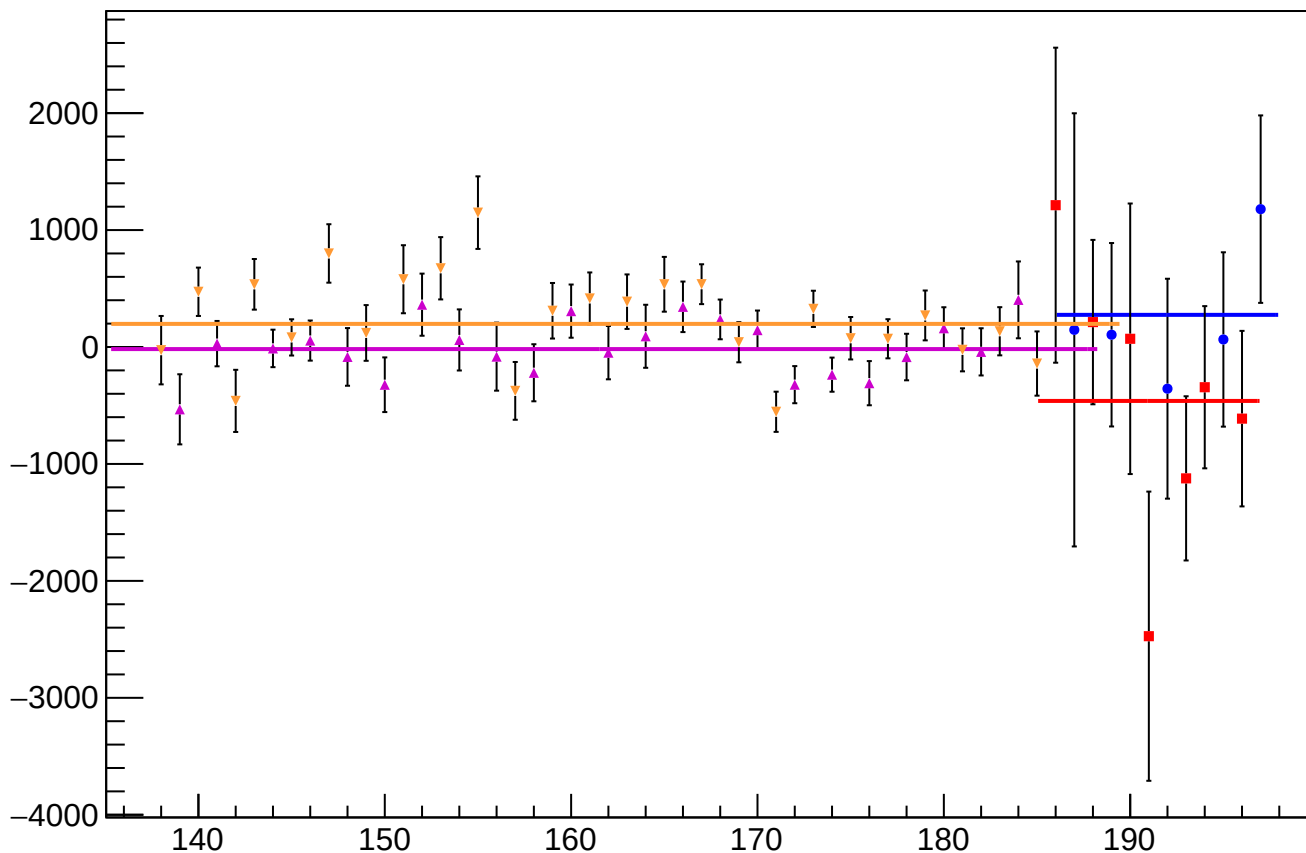


Right In: 47.115 $\pm$ 0.021  $\chi^2/\text{NDF}$ : 66177.2/4  
 Left Out: 31.624 $\pm$ 0.005  $\chi^2/\text{NDF}$ : 1673431.1/24  
 Right Out: 44.197 $\pm$ 0.016  $\chi^2/\text{NDF}$ : 462122.8/6  
 Left In: 32.331 $\pm$ 0.006  $\chi^2/\text{NDF}$ : 1141501.0/22

Left: 31.965 $\pm$ 0.004  $\chi^2/\text{NDF}$ : 2823070.9/47  
 Right: 45.269 $\pm$ 0.013  $\chi^2/\text{NDF}$ : 540786.2/11  
 In: 33.346 $\pm$ 0.005  $\chi^2/\text{NDF}$ : 1679435.6/27  
 Out: 32.952 $\pm$ 0.005  $\chi^2/\text{NDF}$ : 2699910.7/31

All: 33.138 $\pm$ 0.004  $\chi^2/\text{NDF}$ : 4382120.8/59

asym\_sam\_1357\_2468\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 274.976 $\pm$ 395.164  $\chi^2$ /NDF: 1.9/4

Left Out: 197.682 $\pm$ 41.831  $\chi^2$ /NDF:69.9/24

Right Out: -461.147 $\pm$ 318.475  $\chi^2$ /NDF: 6.3/6

Left In: -17.742 $\pm$ 42.576  $\chi^2$ /NDF:27.1/22

Left: 91.870 $\pm$ 29.839  $\chi^2$ /NDF: 110.0/47

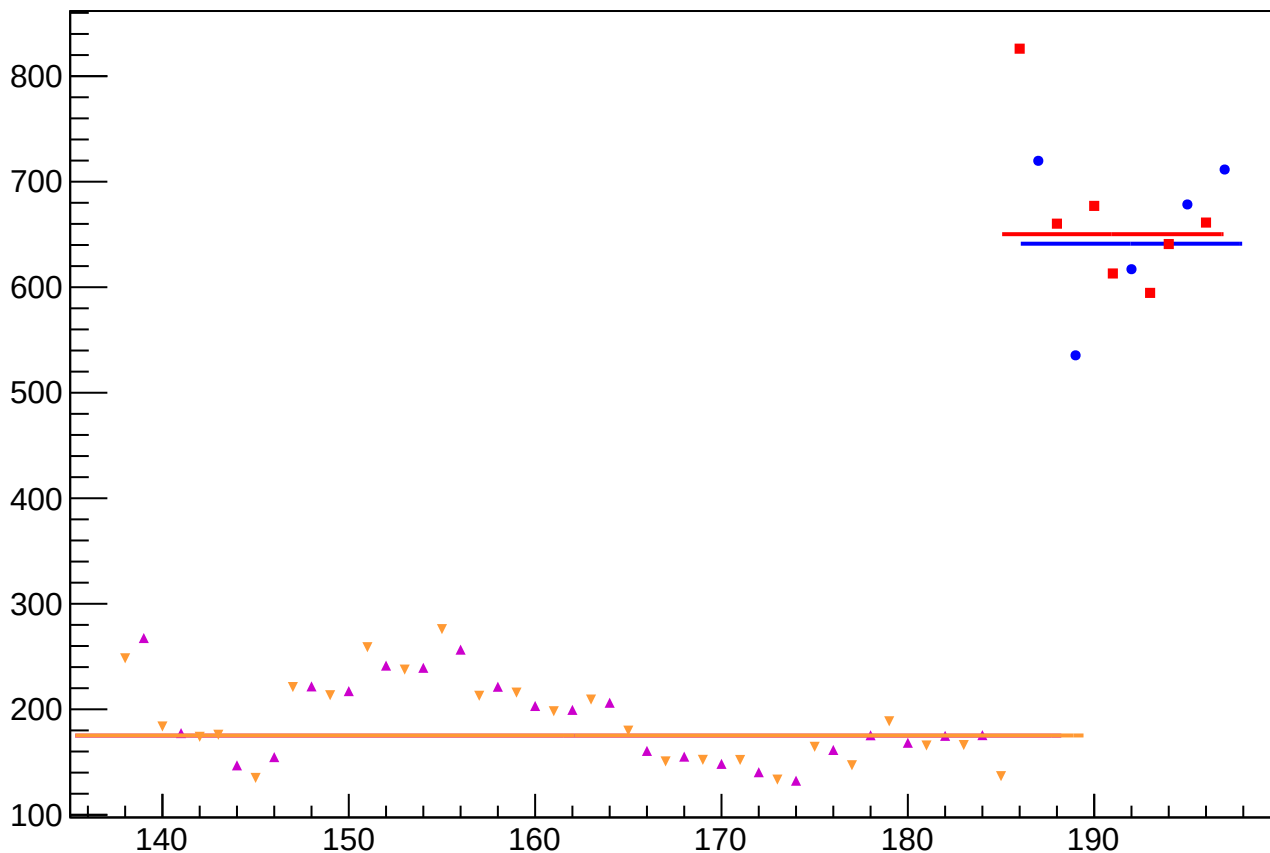
Right: -171.287 $\pm$ 247.968  $\chi^2$ /NDF: 10.2/11

In: -14.383 $\pm$ 42.331  $\chi^2$ /NDF:29.5/27

Out: 186.509 $\pm$ 41.475  $\chi^2$ /NDF:80.4/31

All: 88.114 $\pm$ 29.625  $\chi^2$ /NDF: 121.3/59

asym\_sam\_1357\_2468\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 641.227+/-0.279  $\chi^2/\text{NDF}$ : 61661.0/4

Left Out: 175.207+/-0.030  $\chi^2/\text{NDF}$ : 1418225.0/24

Right Out: 650.256+/-0.225  $\chi^2/\text{NDF}$ : 50704.1/6

Left In: 175.051+/-0.030  $\chi^2/\text{NDF}$ : 1339755.1/22

Left: 175.130+/-0.021  $\chi^2/\text{NDF}$ : 2757993.8/47

Right: 646.701+/-0.175  $\chi^2/\text{NDF}$ : 112998.1/11

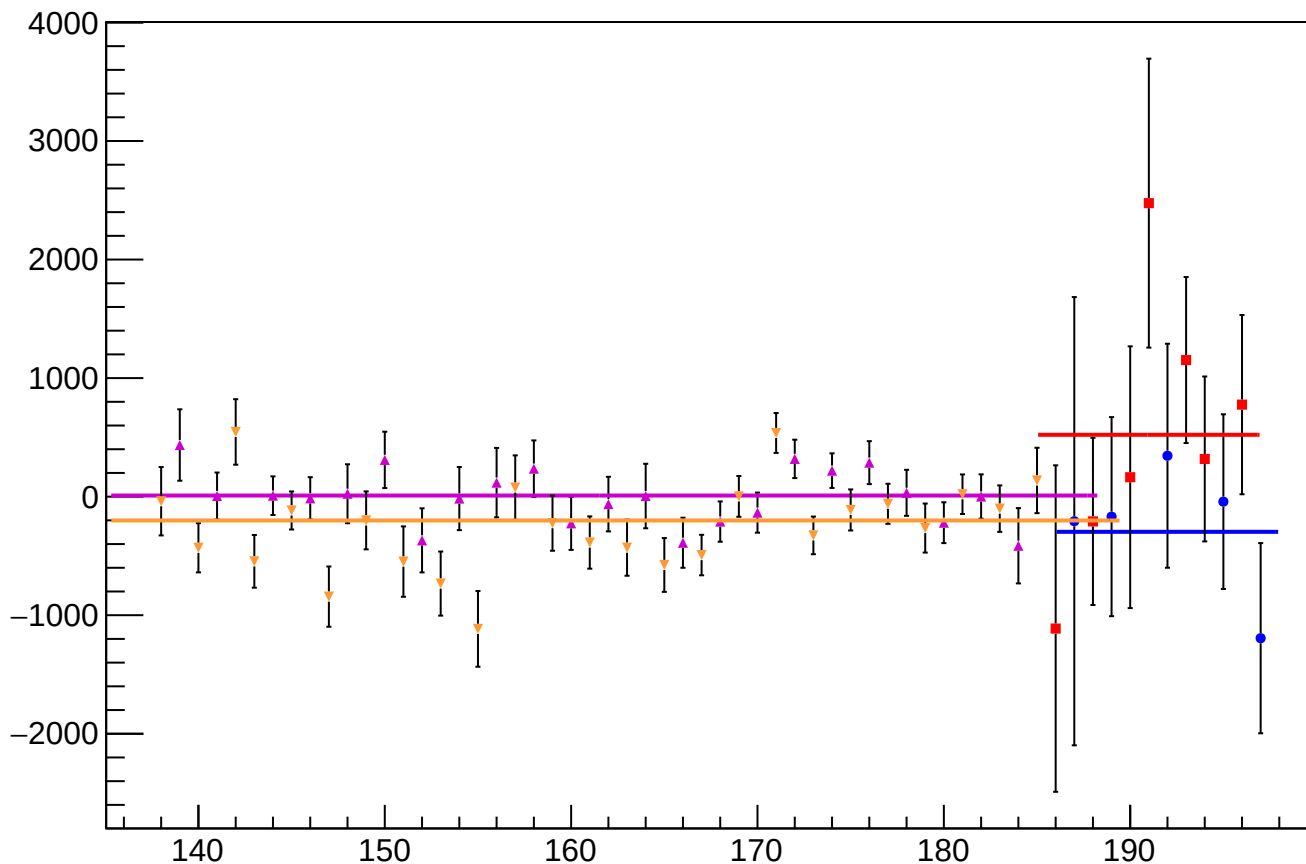
In: 180.400+/-0.030  $\chi^2/\text{NDF}$ : 4152868.5/27

Out: 183.264+/-0.029  $\chi^2/\text{NDF}$ : 5843410.4/31

All: 181.861+/-0.021  $\chi^2/\text{NDF}$ : 10000948.8/59



asym\_sam\_1357\_2468\_dd\_mean vs Slug, Sign Corrected



Right In: -296.633+/-401.118  $\chi^2/\text{NDF}$ : 1.9/4

Left Out: -200.930+/-41.741  $\chi^2/\text{NDF}$ : 65.5/24

Right Out: 521.707+/-317.969  $\chi^2/\text{NDF}$ : 6.2/6

Left In: 9.384+/-42.437  $\chi^2/\text{NDF}$ : 25.4/22

Left: -97.511+/-29.758  $\chi^2/\text{NDF}$ : 103.4/47

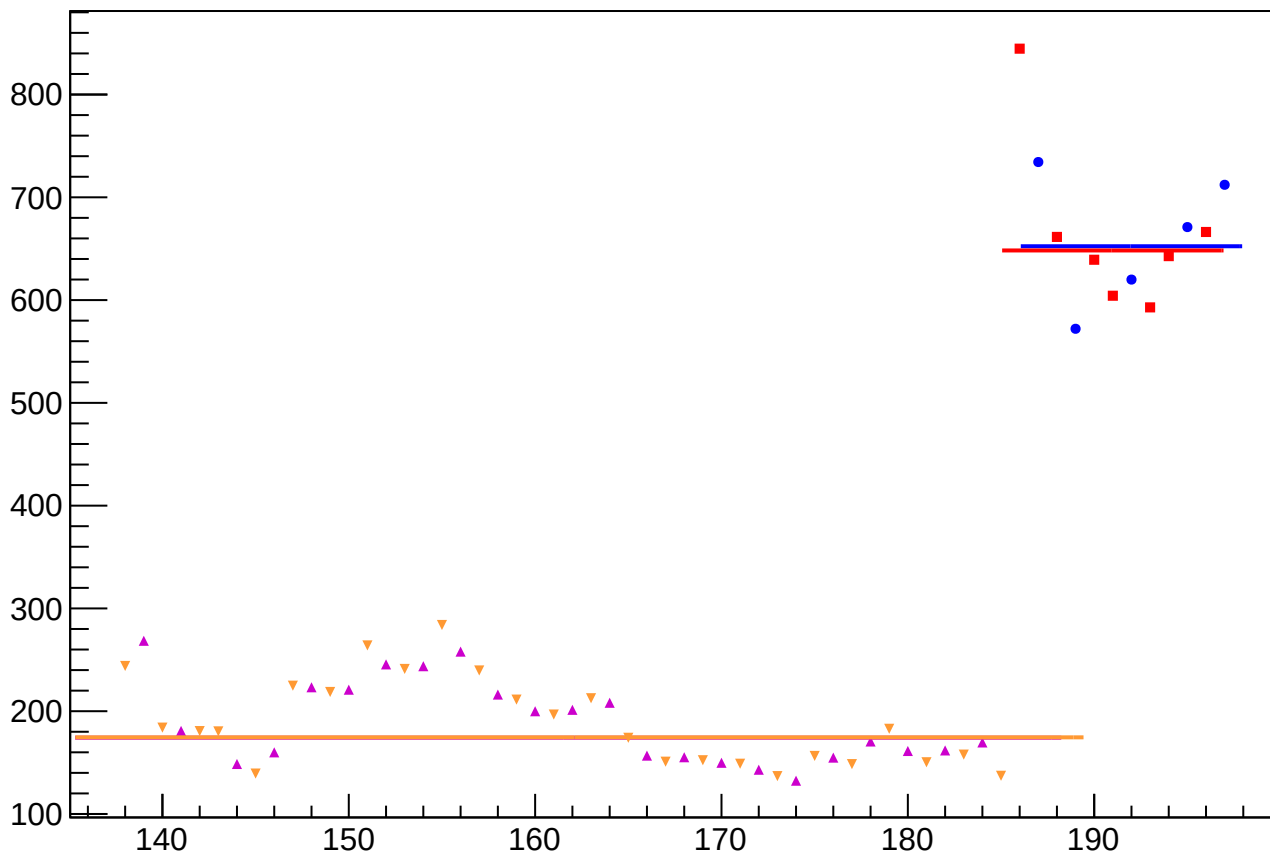
Right: 205.915+/-249.176  $\chi^2/\text{NDF}$ : 10.6/11

In: 5.996+/-42.201  $\chi^2/\text{NDF}$ : 27.8/27

Out: -188.688+/-41.386  $\chi^2/\text{NDF}$ : 76.8/31

All: -93.244+/-29.548  $\chi^2/\text{NDF}$ : 115.4/59

asym\_sam\_1357\_2468\_dd\_rms vs Slug, Sign Corrected



Right In: 652.383+/-0.284  $\chi^2/\text{NDF}$ : 36808.0/4

Left Out: 174.567+/-0.030  $\chi^2/\text{NDF}$ :1532900.3/24

Right Out: 648.294+/-0.225  $\chi^2/\text{NDF}$ : 57881.2/6

Left In: 174.217+/-0.030  $\chi^2/\text{NDF}$ :1364600.9/22

Left: 174.395+/-0.021  $\chi^2/\text{NDF}$ : 2897570.3/47

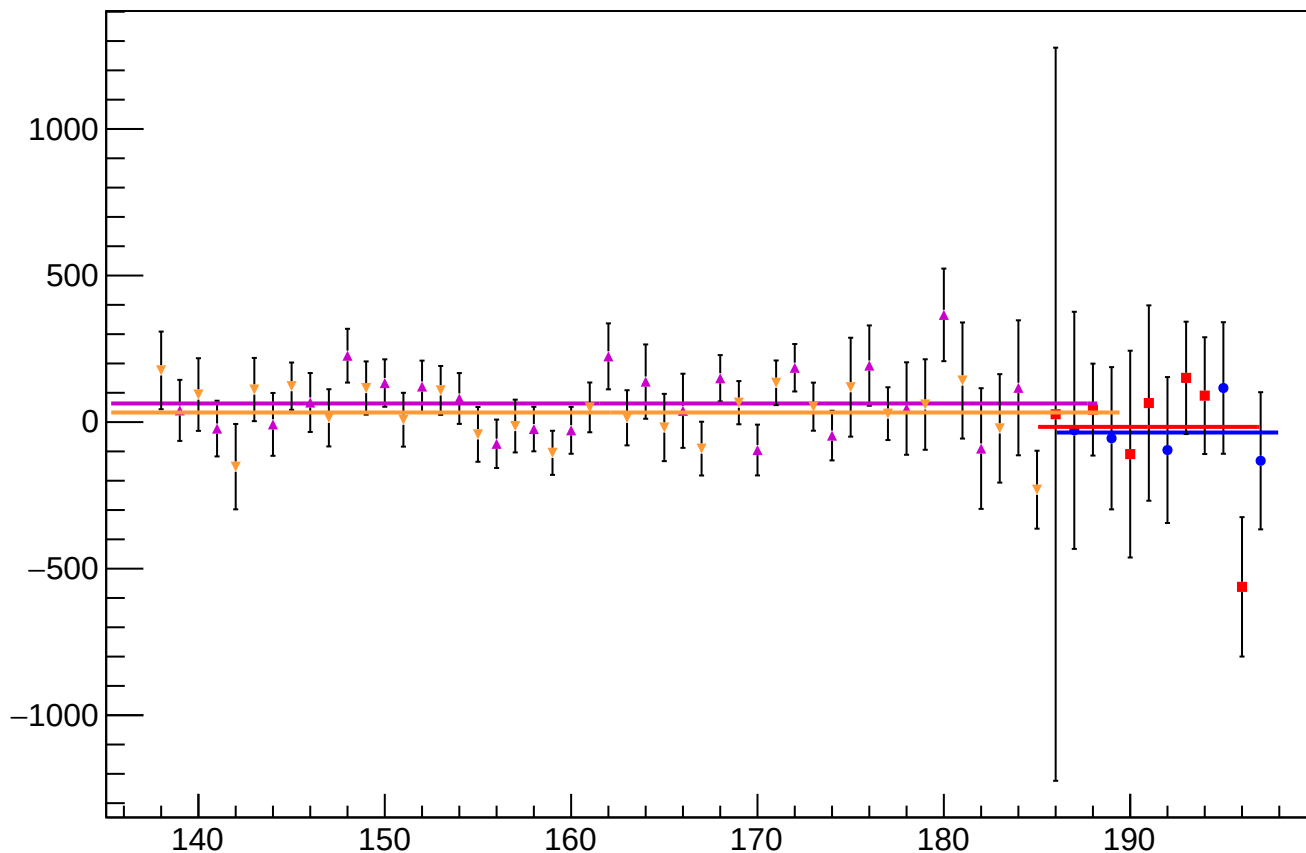
Right: 649.872+/-0.176  $\chi^2/\text{NDF}$ : 94816.8/11

In: 179.510+/-0.030  $\chi^2/\text{NDF}$ :4212071.3/27

Out: 182.592+/-0.029  $\chi^2/\text{NDF}$ :5954916.3/31

All: 181.081+/-0.021  $\chi^2/\text{NDF}$ : 10172426.9/59

dit\_asym\_sam\_12345678\_avg\_mean vs Slug, Sign Corrected



Right In: -35.505 $\pm$ 113.699  $\chi^2$ /NDF: 0.7/4

Left Out: 32.793 $\pm$ 19.705  $\chi^2$ /NDF:19.5/24

Right Out: -16.314 $\pm$ 88.230  $\chi^2$ /NDF: 6.6/6

Left In: 63.566 $\pm$ 20.573  $\chi^2$ /NDF:27.2/22

Left: 47.517 $\pm$ 14.231  $\chi^2$ /NDF: 47.9/47

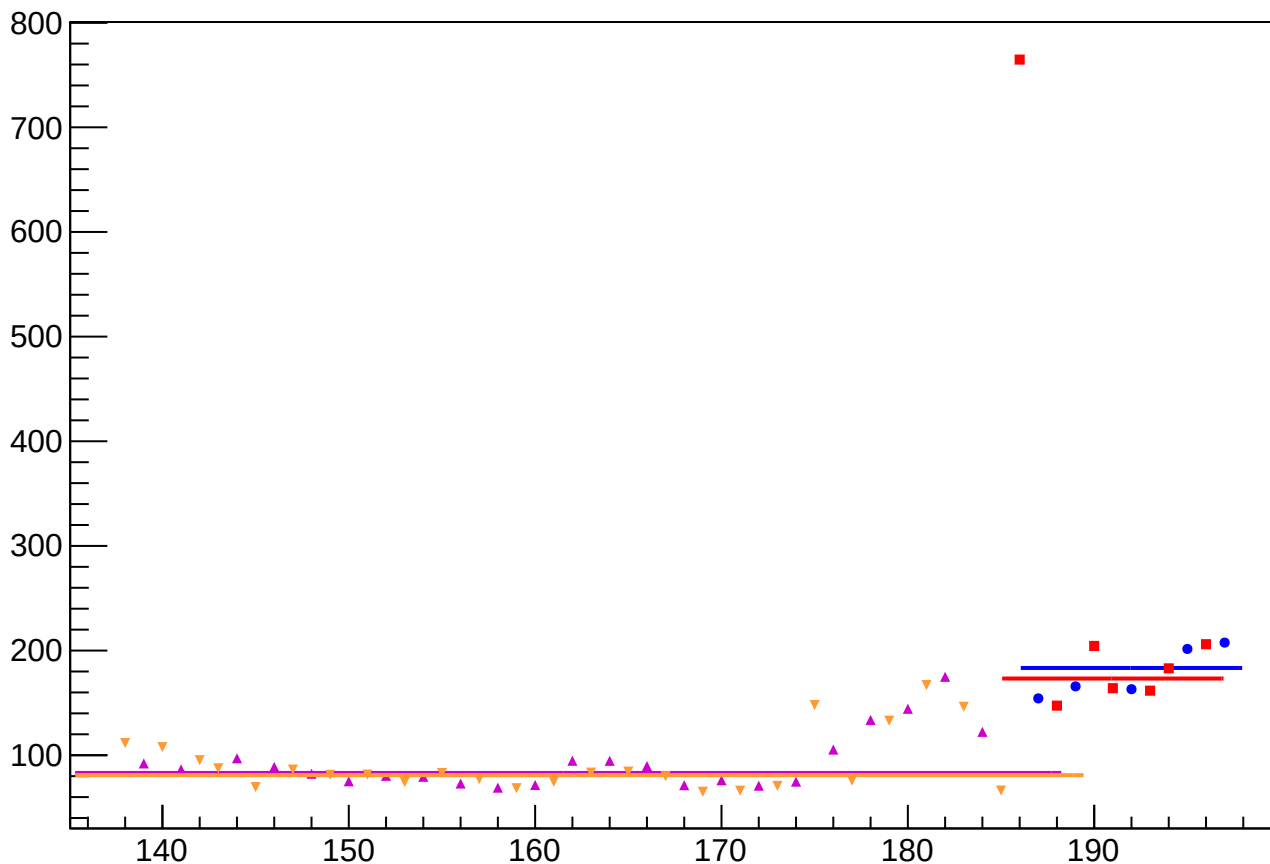
Right: -23.527 $\pm$ 69.705  $\chi^2$ /NDF: 7.3/11

In: 60.425 $\pm$ 20.245  $\chi^2$ /NDF:28.6/27

Out: 30.460 $\pm$ 19.232  $\chi^2$ /NDF:26.4/31

All: 44.674 $\pm$ 13.943  $\chi^2$ /NDF: 56.2/59

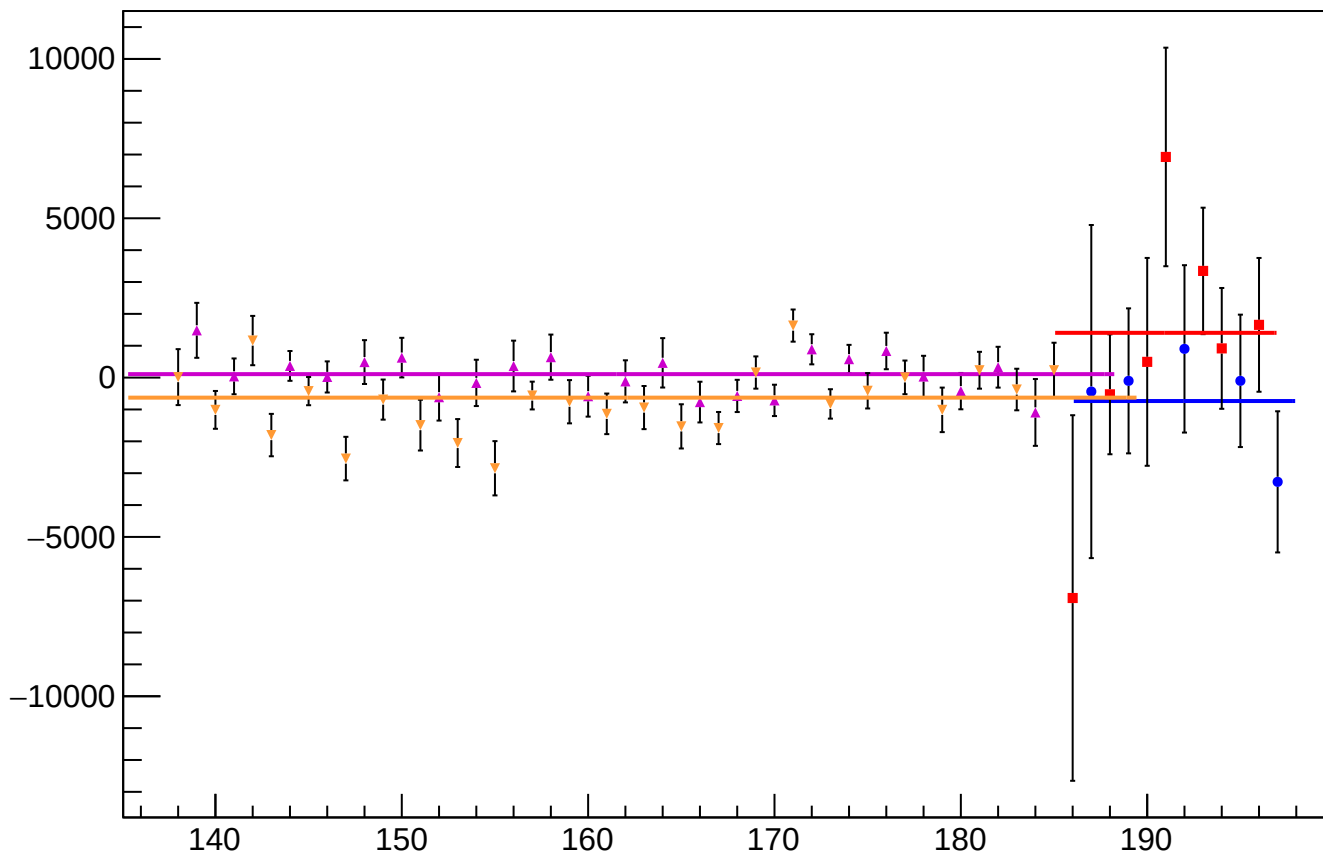
dit\_asym\_sam\_12345678\_avg\_rms vs Slug, Sign Corrected



Right In: 183.378 $\pm$ 0.080  $\chi^2$ /NDF: 68681.7/4  
 Left Out: 80.926 $\pm$ 0.014  $\chi^2$ /NDF:1760910.0/24  
 Right Out: 173.294 $\pm$ 0.062  $\chi^2$ /NDF: 569161.4/6  
 Left In: 83.071 $\pm$ 0.015  $\chi^2$ /NDF:1405124.8/22

Left: 81.952 $\pm$ 0.010  $\chi^2$ /NDF: 3177364.3/47  
 Right: 177.084 $\pm$ 0.049  $\chi^2$ /NDF: 647663.1/11  
 In: 86.251 $\pm$ 0.014  $\chi^2$ /NDF:2981072.9/27  
 Out: 85.315 $\pm$ 0.014  $\chi^2$ /NDF:4417883.9/31  
 All: 85.759 $\pm$ 0.010  $\chi^2$ /NDF: 7401202.9/59

asym\_sam\_12345678\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -735.205+/-1110.950  $\chi^2/\text{NDF}$ : 1.9/4

Left Out: -629.005+/-120.608  $\chi^2/\text{NDF}$ : 63.2/24

Right Out: 1404.949+/-894.056  $\chi^2/\text{NDF}$ : 6.9/6

Left In: 108.821+/-125.527  $\chi^2/\text{NDF}$ : 21.4/22

Left: -274.832+/-86.970  $\chi^2/\text{NDF}$ : 102.6/47

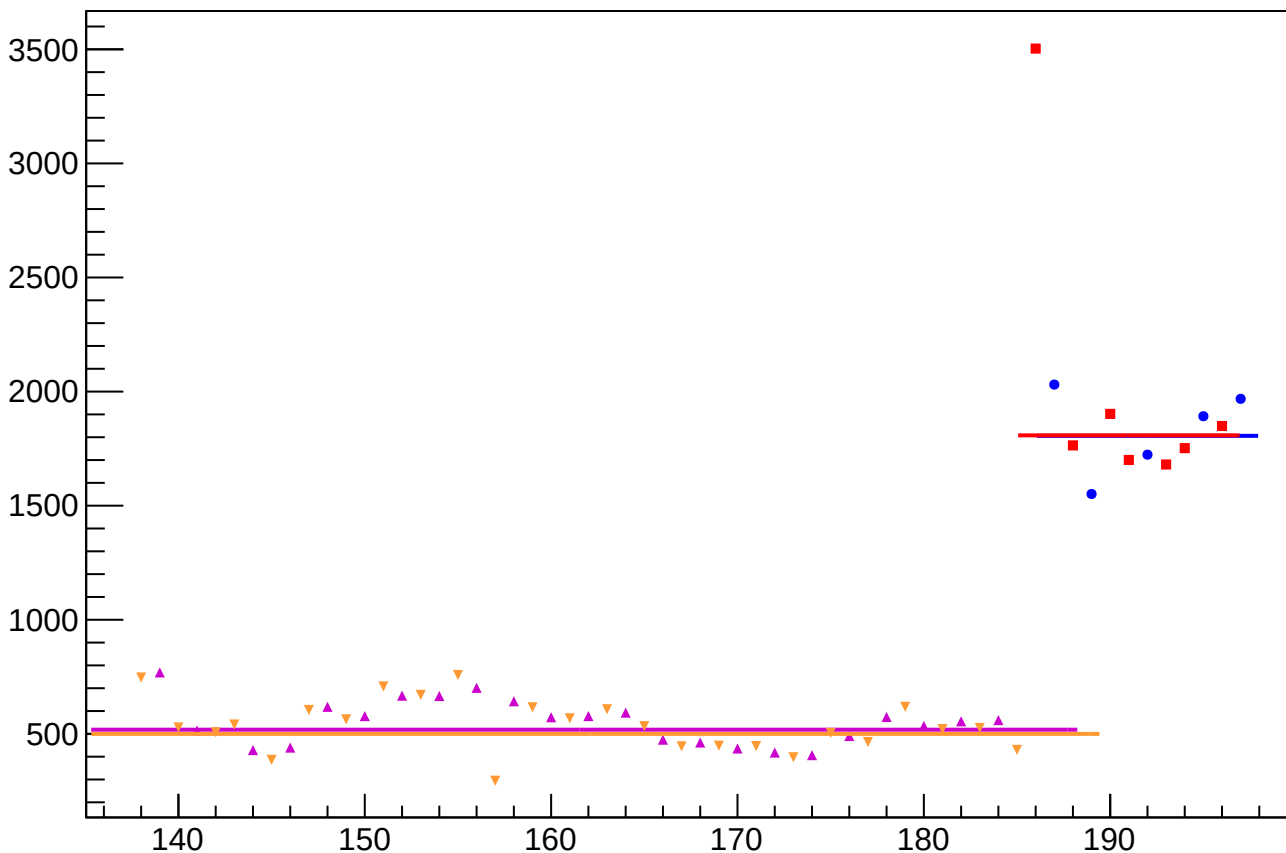
Right: 563.707+/-696.518  $\chi^2/\text{NDF}$ : 11.0/11

In: 98.182+/-124.734  $\chi^2/\text{NDF}$ : 23.9/27

Out: -592.653+/-119.525  $\chi^2/\text{NDF}$ : 75.1/31

All: -261.960+/-86.300  $\chi^2/\text{NDF}$ : 115.0/59

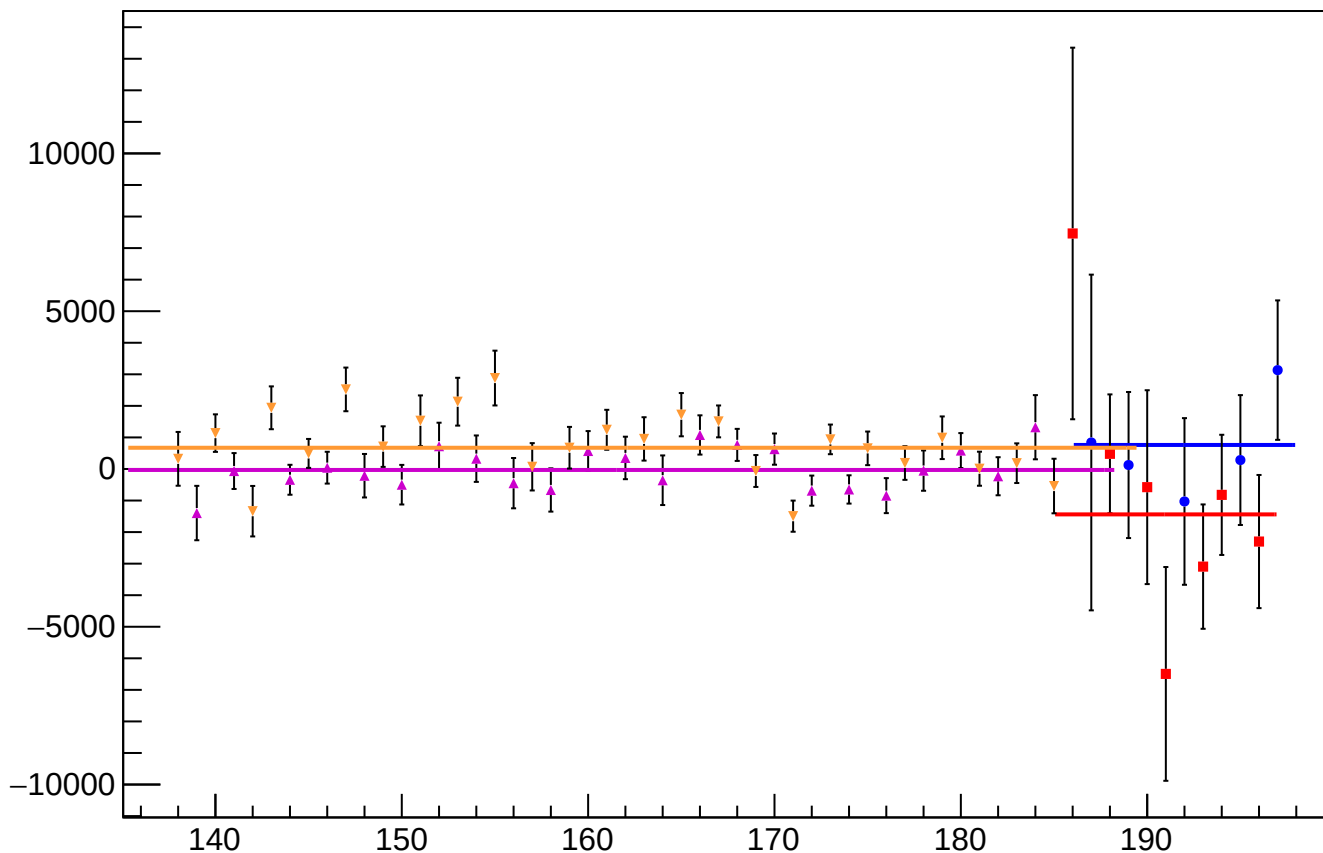
asym\_sam\_12345678\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 1806.080+/-0.786  $\chi^2/\text{NDF}$ : 44916.8/4  
 Left Out: 499.813+/-0.085  $\chi^2/\text{NDF}$ :1626530.8/24  
 Right Out: 1808.219+/-0.632  $\chi^2/\text{NDF}$ : 190138.0/6  
 Left In: 518.244+/-0.089  $\chi^2/\text{NDF}$ :1071993.3/22

Left: 508.660+/-0.061  $\chi^2/\text{NDF}$ : 2720944.9/47  
 Right: 1807.378+/-0.493  $\chi^2/\text{NDF}$ : 235059.3/11  
 In: 534.479+/-0.088  $\chi^2/\text{NDF}$ :3770615.4/27  
 Out: 523.198+/-0.085  $\chi^2/\text{NDF}$ :6023481.0/31  
 All: 528.598+/-0.061  $\chi^2/\text{NDF}$ : 9802624.7/59

asym\_sam\_12345678\_avg\_mean vs Slug, Sign Corrected



Right In: 761.438+/-1113.585  $\chi^2/\text{NDF}$ : 1.7/4

Left Out: 672.498+/-123.428  $\chi^2/\text{NDF}$ : 62.8/24

Right Out: -1438.986+/-890.202  $\chi^2/\text{NDF}$ : 6.6/6

Left In: -31.056+/-125.236  $\chi^2/\text{NDF}$ : 23.8/22

Left: 325.838+/-87.909  $\chi^2/\text{NDF}$ : 102.6/47

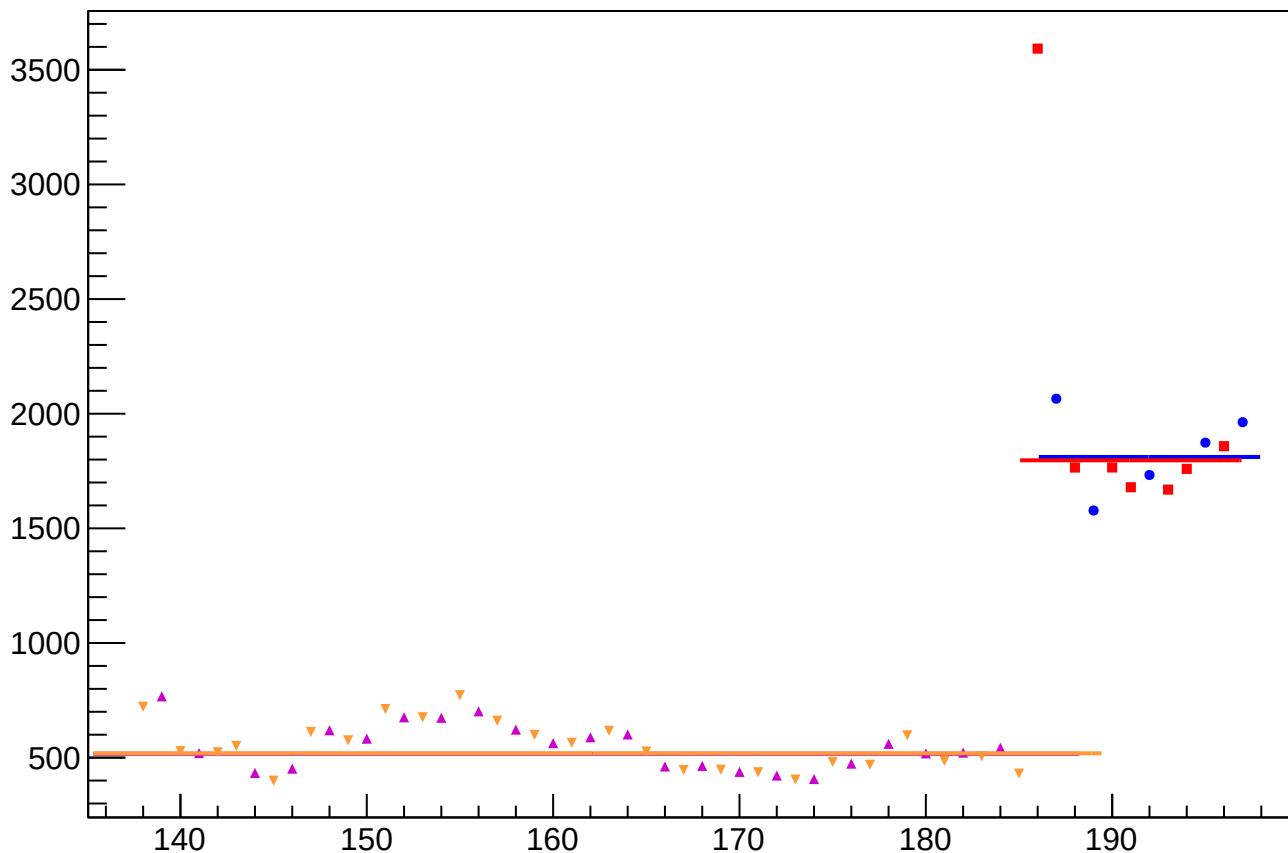
Right: -581.066+/-695.334  $\chi^2/\text{NDF}$ : 10.7/11

In: -21.158+/-124.452  $\chi^2/\text{NDF}$ : 26.1/27

Out: 632.672+/-122.258  $\chi^2/\text{NDF}$ : 74.9/31

All: 311.570+/-87.215  $\chi^2/\text{NDF}$ : 115.0/59

asym\_sam\_12345678\_avg\_rms vs Slug, Sign Corrected



Right In: 1811.345+/-0.787  $\chi^2/\text{NDF}$ : 37976.3/4

Left Out: 518.935+/-0.087  $\chi^2/\text{NDF}$ :1172613.9/24

Right Out: 1796.769+/-0.629  $\chi^2/\text{NDF}$ : 200063.6/6

Left In: 516.594+/-0.089  $\chi^2/\text{NDF}$ :1036092.8/22

Left: 517.782+/-0.062  $\chi^2/\text{NDF}$ : 2209061.2/47

Right: 1802.452+/-0.492  $\chi^2/\text{NDF}$ : 238248.9/11

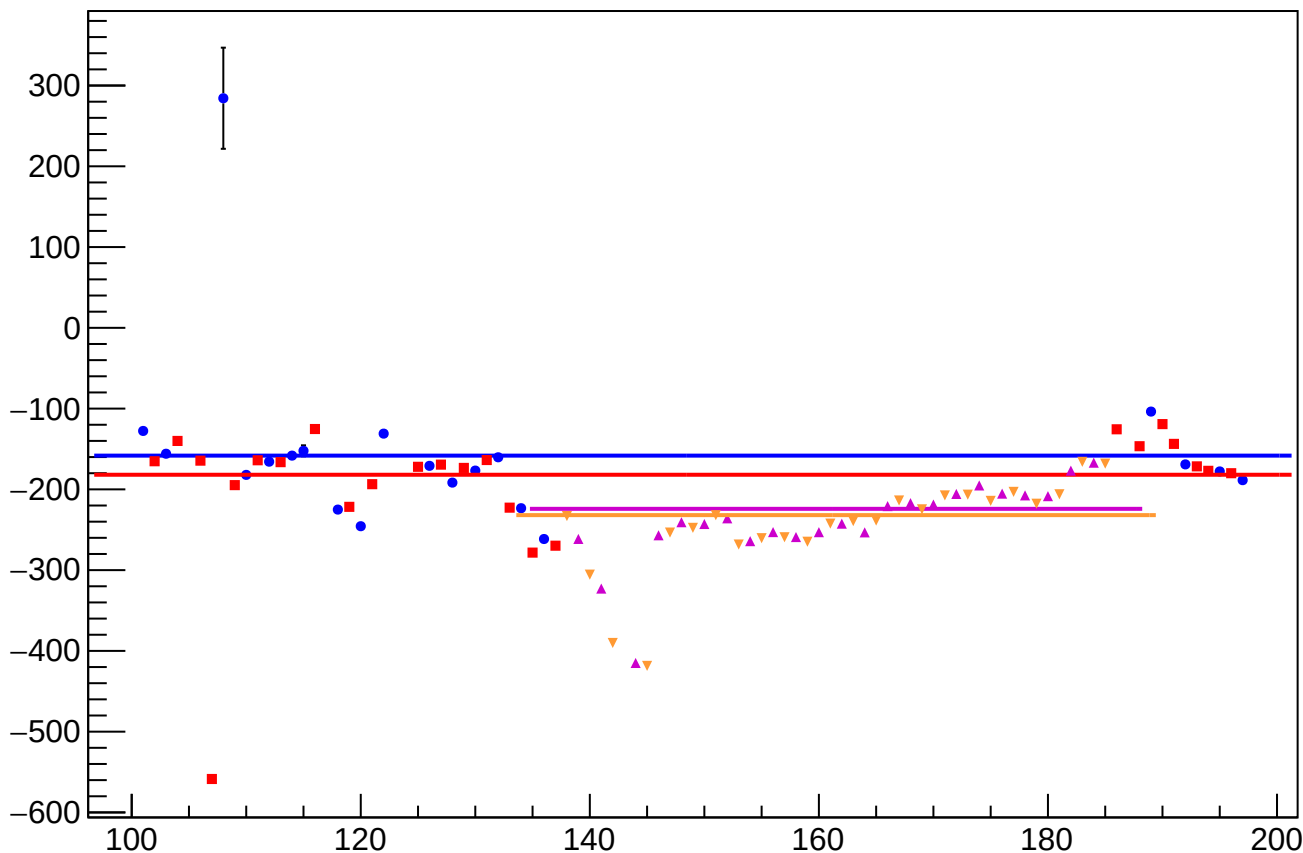
In: 532.765+/-0.088  $\chi^2/\text{NDF}$ :3743982.6/27

Out: 543.037+/-0.086  $\chi^2/\text{NDF}$ :5415937.7/31

All: 537.992+/-0.062  $\chi^2/\text{NDF}$ : 9166853.6/59



# dit\_usl\_4aX\_slope vs Slug, Sign Corrected



Right In: -158.222+/-0.000  $\chi^2/\text{NDF}$ : 122262.3/19

Left Out: -231.902+/-0.108  $\chi^2/\text{NDF}$ : 110473.4/23

Right Out: -181.910+/-0.096  $\chi^2/\text{NDF}$ : 163241.0/23

Left In: -224.103+/-0.098  $\chi^2/\text{NDF}$ : 153347.0/22

Left: -227.631+/-0.073  $\chi^2/\text{NDF}$ : 266668.8/46

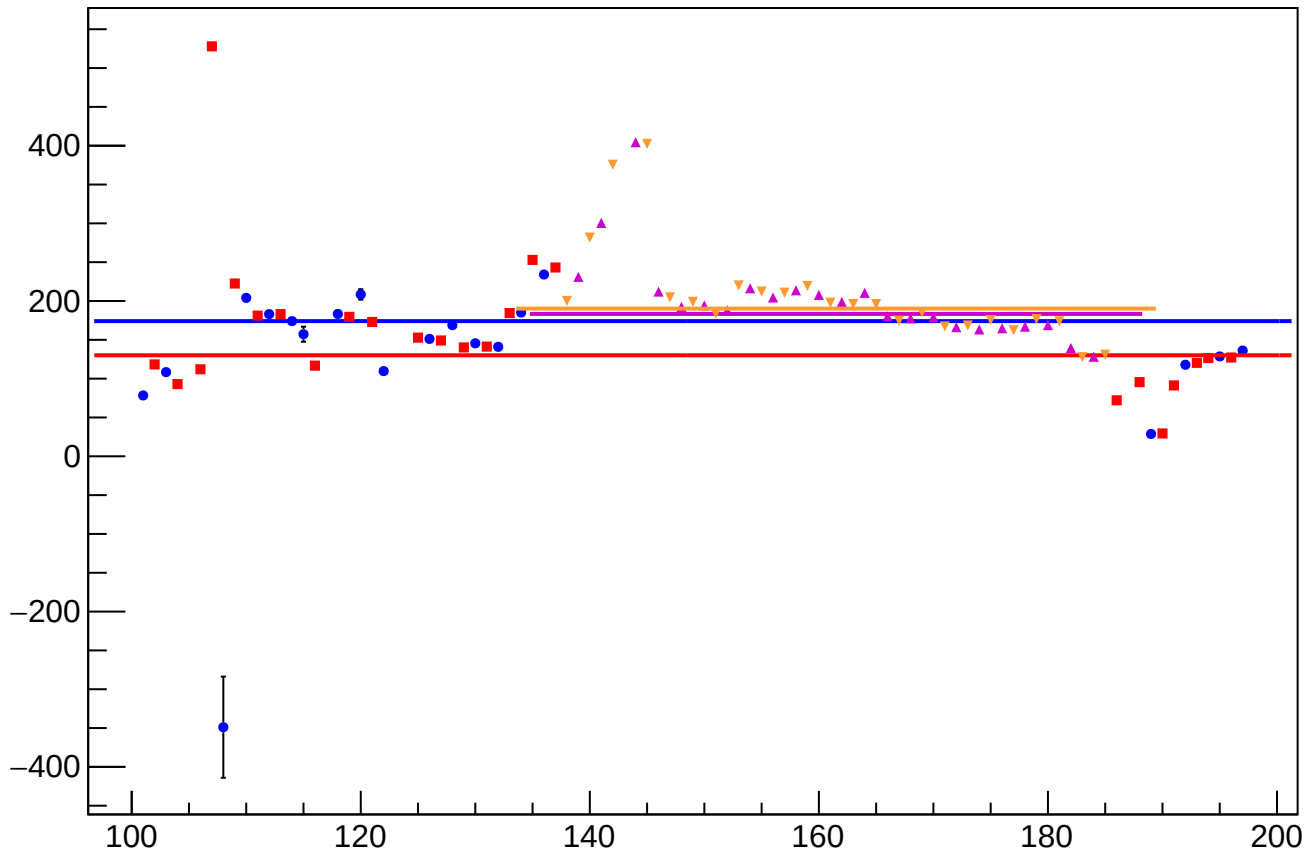
Right: -158.222+/-0.000  $\chi^2/\text{NDF}$ : 346191.8/43

In: -158.222+/-0.000  $\chi^2/\text{NDF}$ : 724933.0/42

Out: -203.982+/-0.072  $\chi^2/\text{NDF}$ : 393055.2/47

All: -158.222+/-0.000  $\chi^2/\text{NDF}$ : 1523499.6/90

# dit\_usl\_4eX\_slope vs Slug, Sign Corrected



Right In: 174.085 $\pm$ 0.000  $\chi^2$ /NDF: 73889.8/19

Left Out: 190.208 $\pm$ 0.109  $\chi^2$ /NDF:99613.5/23

Right Out: 130.091 $\pm$ 0.097  $\chi^2$ /NDF: 158833.1/23

Left In: 183.362 $\pm$ 0.099  $\chi^2$ /NDF:155441.6/22

Left: 186.466 $\pm$ 0.073  $\chi^2$ /NDF: 257224.0/46

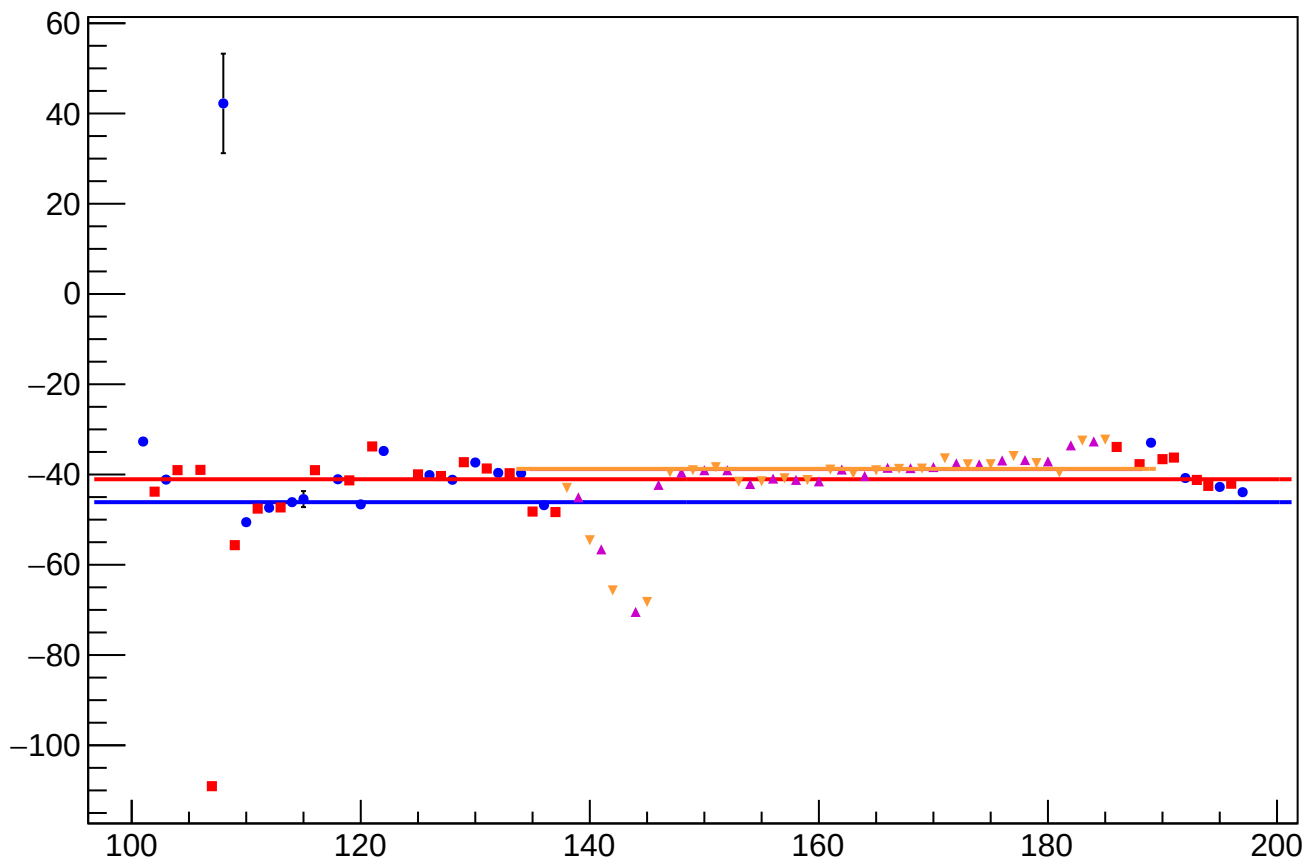
Right: 174.085 $\pm$ 0.000  $\chi^2$ /NDF: 436584.0/43

In: 174.085 $\pm$ 0.000  $\chi^2$ /NDF:238117.4/42

Out: 156.884 $\pm$ 0.073  $\chi^2$ /NDF:428101.8/47

All: 174.085 $\pm$ 0.000  $\chi^2$ /NDF: 722438.8/90

# dit\_usl\_11X12X\_slope vs Slug, Sign Corrected



Right In: -46.126+/-0.000  $\chi^2/\text{NDF}$ : 415181.5/19

Left Out: -38.745+/-0.006  $\chi^2/\text{NDF}$ : 400638.0/23

Right Out: -41.048+/-0.012  $\chi^2/\text{NDF}$ : 303459.5/23

Left In: -38.794+/-0.007  $\chi^2/\text{NDF}$ : 321993.9/22

Left: -38.767+/-0.004  $\chi^2/\text{NDF}$ : 722662.8/46

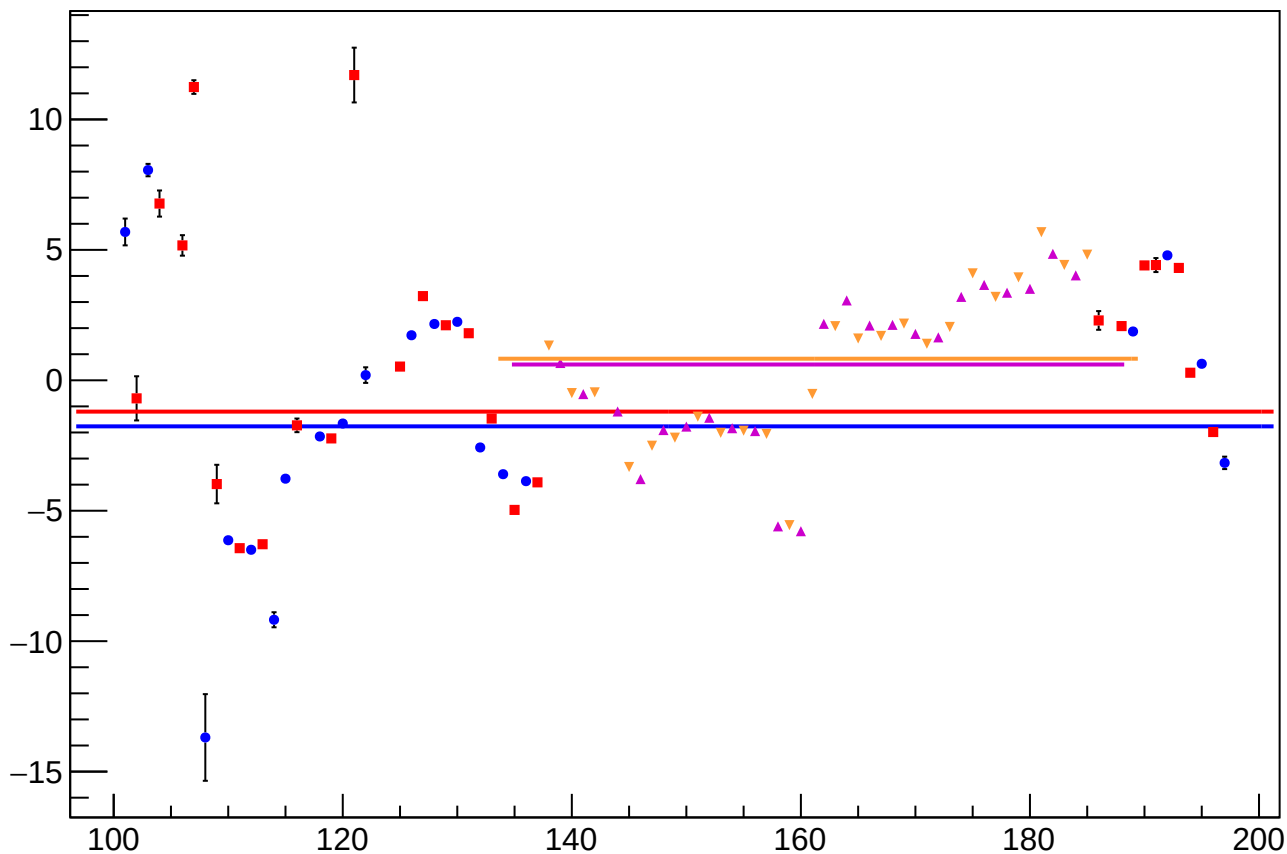
Right: -46.126+/-0.000  $\chi^2/\text{NDF}$ : 884830.9/43

In: -46.126+/-0.000  $\chi^2/\text{NDF}$ : 1992909.6/42

Out: -39.165+/-0.005  $\chi^2/\text{NDF}$ : 732060.1/47

All: -46.126+/-0.000  $\chi^2/\text{NDF}$ : 4440382.2/90

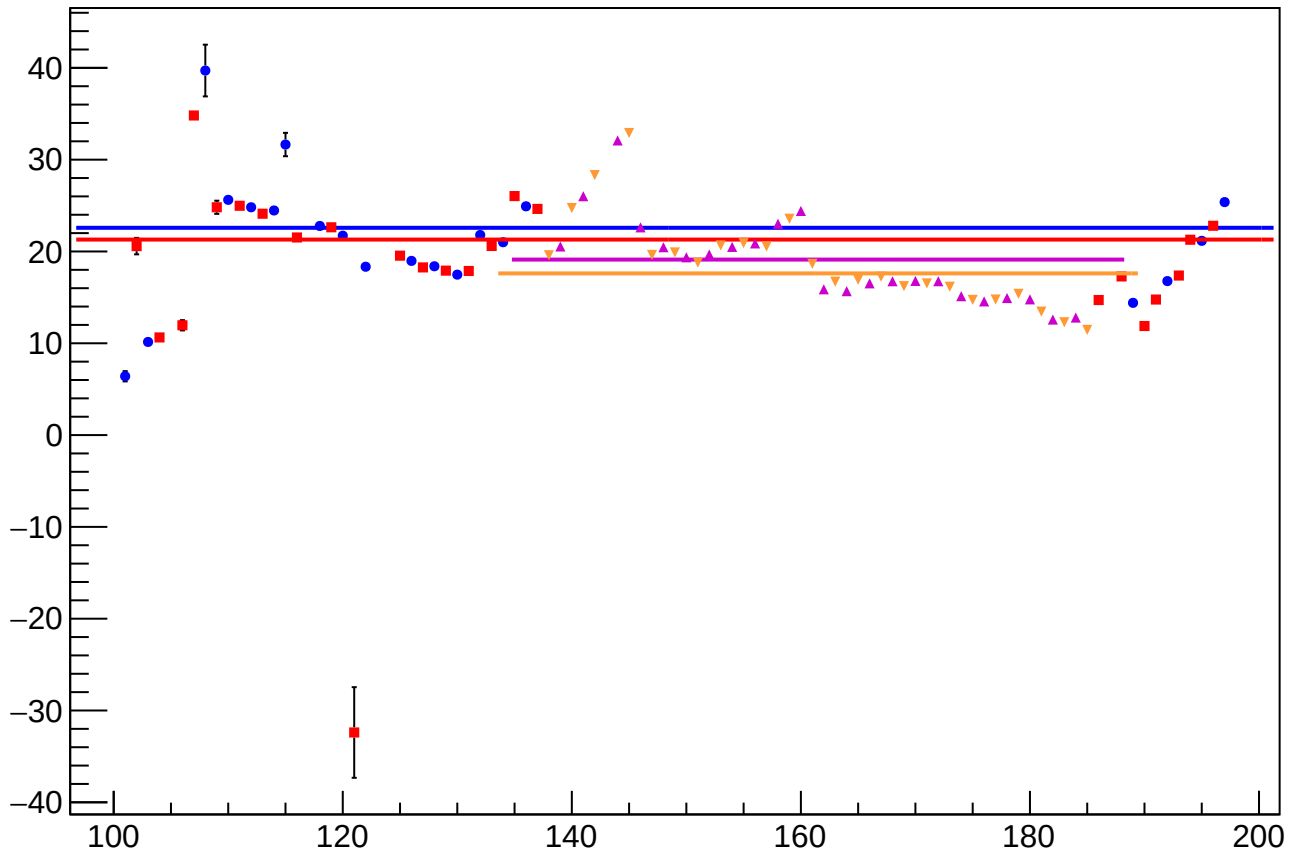
# dit\_usl\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-1.765 \pm 0.017$   $\chi^2/\text{NDF}$ : 31181.1/19  
 Left Out:  $0.828 \pm 0.006$   $\chi^2/\text{NDF}$ : 255303.5/23  
 Right Out:  $-1.200 \pm 0.020$   $\chi^2/\text{NDF}$ : 35390.8/23  
 Left In:  $0.606 \pm 0.005$   $\chi^2/\text{NDF}$ : 331282.7/22

Left:  $0.696 \pm 0.004$   $\chi^2/\text{NDF}$ : 587368.1/46  
 Right:  $-1.524 \pm 0.013$   $\chi^2/\text{NDF}$ : 67030.0/43  
 In:  $0.418 \pm 0.005$   $\chi^2/\text{NDF}$ : 379866.9/42  
 Out:  $0.654 \pm 0.006$   $\chi^2/\text{NDF}$ : 300103.2/47  
 All:  $0.514 \pm 0.004$   $\chi^2/\text{NDF}$ : 680927.1/90

# dit\_usl\_4eY\_slope vs Slug, Sign Corrected



Right In: 22.579 $\pm$ 0.018  $\chi^2$ /NDF: 25486.5/19

Left Out: 17.613 $\pm$ 0.007  $\chi^2$ /NDF:178438.8/23

Right Out: 21.297 $\pm$ 0.020  $\chi^2$ /NDF: 28224.2/23

Left In: 19.117 $\pm$ 0.007  $\chi^2$ /NDF:229353.0/22

Left: 18.369 $\pm$ 0.005  $\chi^2$ /NDF: 430183.3/46

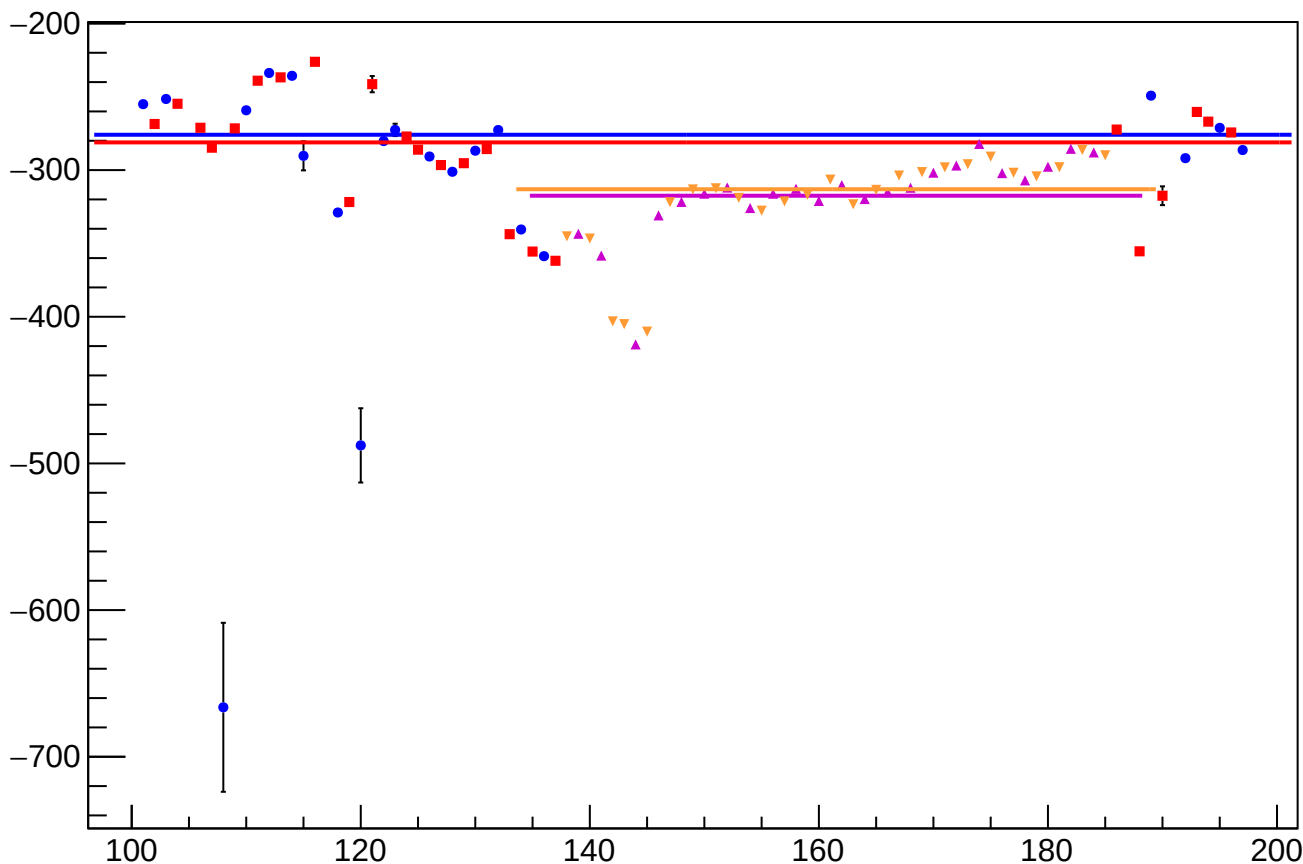
Right: 21.985 $\pm$ 0.013  $\chi^2$ /NDF: 55956.5/43

In: 19.565 $\pm$ 0.007  $\chi^2$ /NDF:285630.2/42

Out: 18.035 $\pm$ 0.007  $\chi^2$ /NDF:237265.3/47

All: 18.810 $\pm$ 0.005  $\chi^2$ /NDF: 549275.8/90

# dit\_usr\_4aX\_slope vs Slug, Sign Corrected



Right In: -275.906+/-0.143  $\chi^2/\text{NDF}$ : 58841.8/20

Left Out: -313.052+/-0.096  $\chi^2/\text{NDF}$ : 54405.8/24

Right Out: -281.113+/-0.112  $\chi^2/\text{NDF}$ : 63535.7/23

Left In: -317.471+/-0.095  $\chi^2/\text{NDF}$ : 63067.6/22

Left: -315.276+/-0.068  $\chi^2/\text{NDF}$ : 118543.8/47

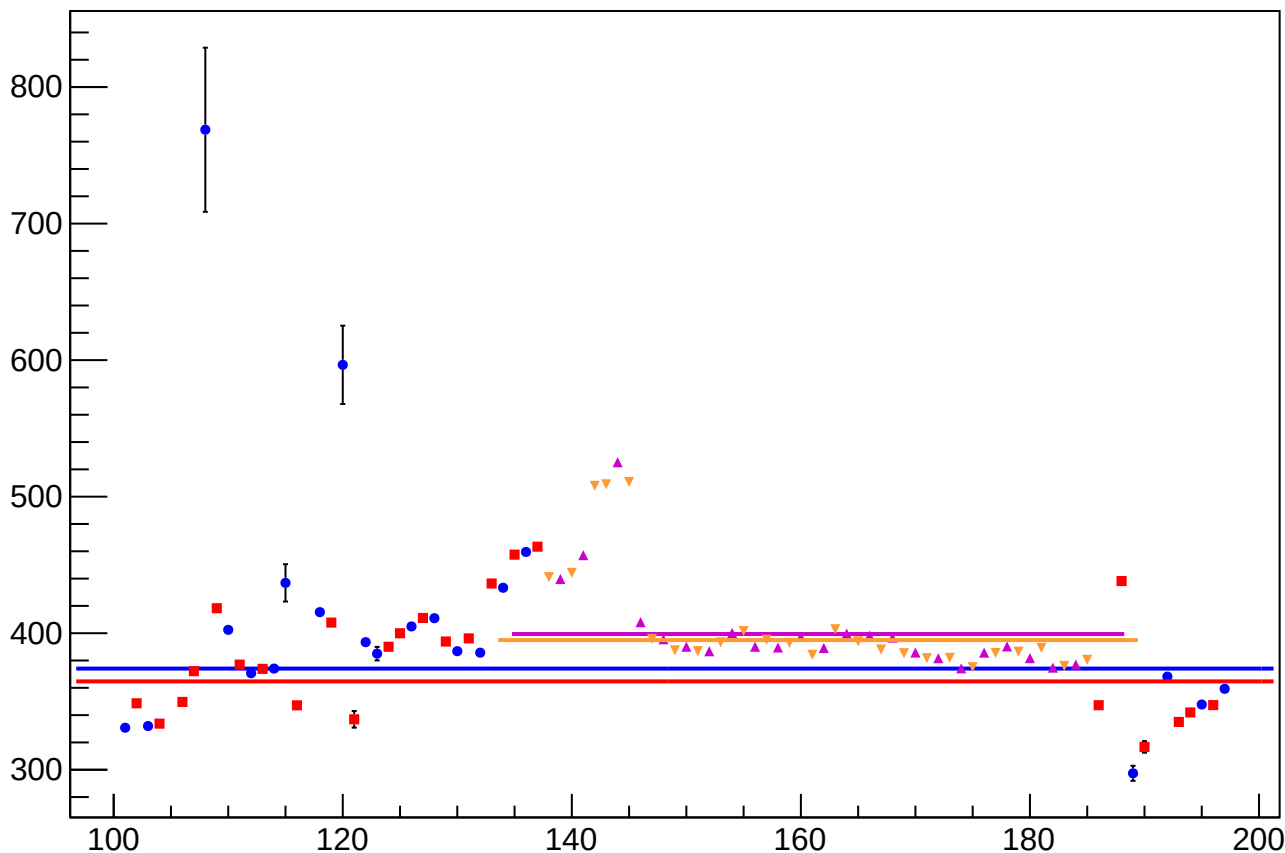
Right: -279.123+/-0.088  $\chi^2/\text{NDF}$ : 123198.7/44

In: -304.680+/-0.079  $\chi^2/\text{NDF}$ : 180555.1/43

Out: -299.599+/-0.073  $\chi^2/\text{NDF}$ : 164728.4/48

All: -301.929+/-0.054  $\chi^2/\text{NDF}$ : 347510.4/92

# dit\_usr\_4eX\_slope vs Slug, Sign Corrected



Right In: 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 43580.6/20

Left Out: 394.968 $\pm$ 0.096  $\chi^2$ /NDF: 68076.2/24

Right Out: 364.703 $\pm$ 0.113  $\chi^2$ /NDF: 89686.5/23

Left In: 399.410 $\pm$ 0.097  $\chi^2$ /NDF: 77209.0/22

Left: 397.169 $\pm$ 0.068  $\chi^2$ /NDF: 146345.7/47

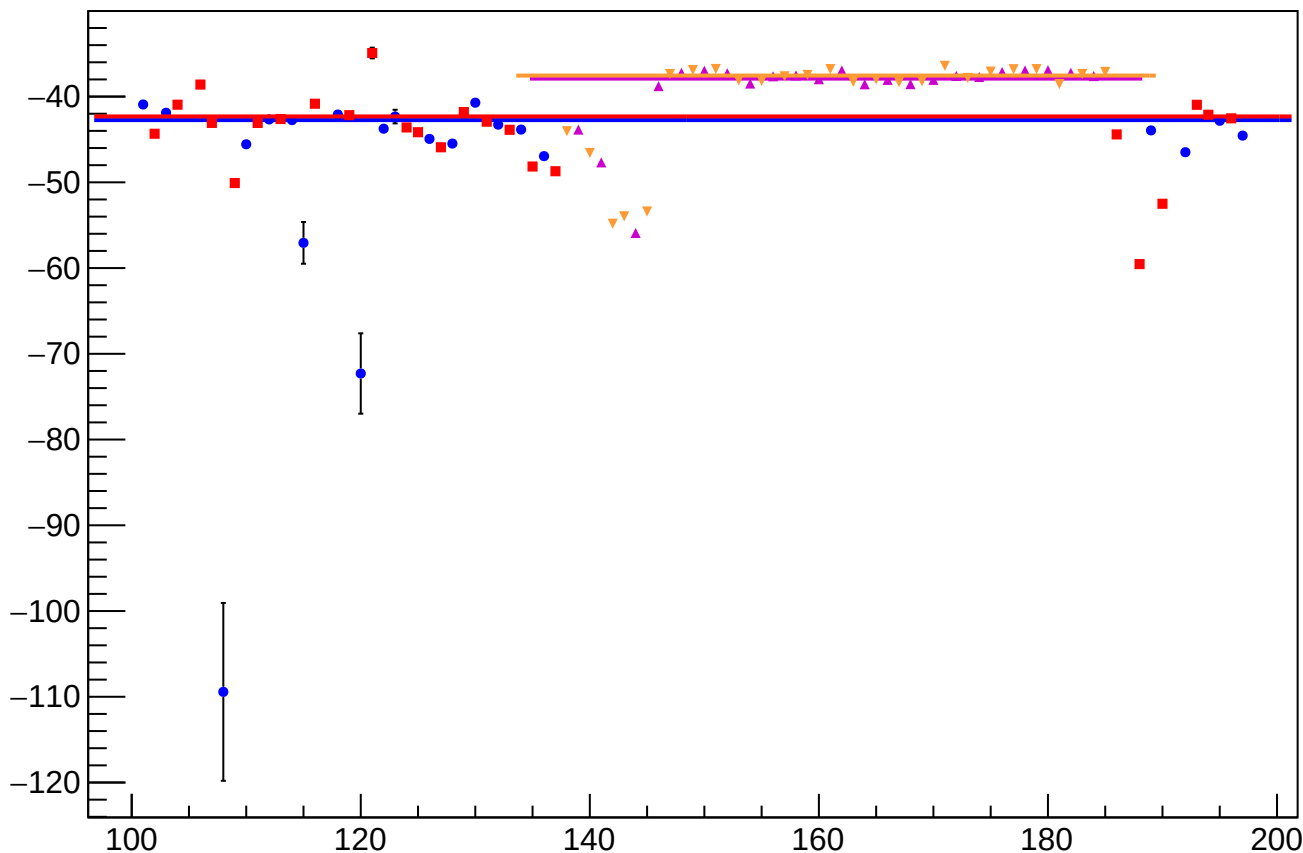
Right: 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 140171.8/44

In: 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 189094.7/43

Out: 382.282 $\pm$ 0.073  $\chi^2$ /NDF: 199416.6/48

All: 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 401032.7/92

# dit\_usr\_11X12X\_slope vs Slug, Sign Corrected



Right In: -42.744+/-0.000  $\chi^2/\text{NDF}$ : 14037.9/20

Left Out: -37.547+/-0.004  $\chi^2/\text{NDF}$ : 267131.7/24

Right Out: -42.314+/-0.014  $\chi^2/\text{NDF}$ : 22674.3/23

Left In: -37.903+/-0.004  $\chi^2/\text{NDF}$ : 156960.8/22

Left: -37.711+/-0.003  $\chi^2/\text{NDF}$ : 428070.7/47

Right: -42.744+/-0.000  $\chi^2/\text{NDF}$ : 37716.5/44

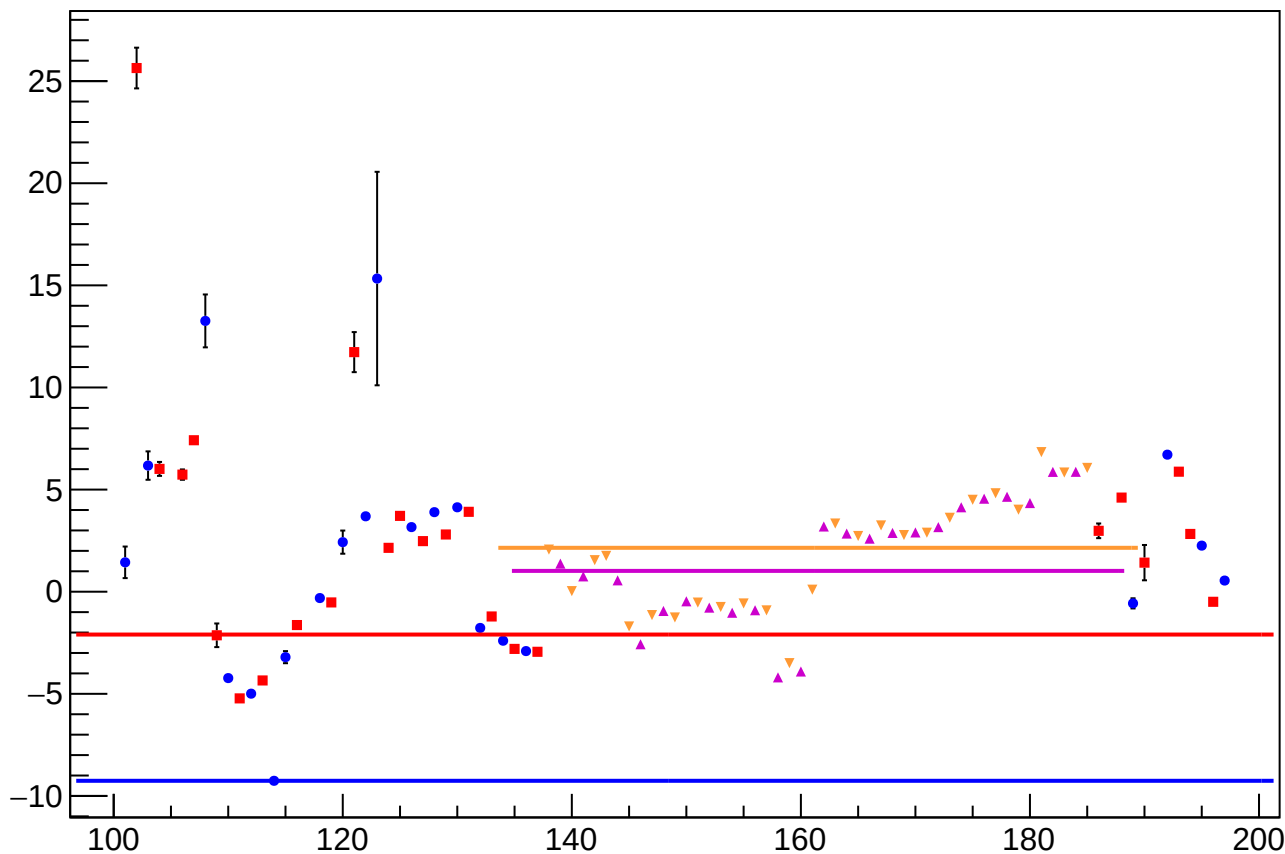
In: -42.744+/-0.000  $\chi^2/\text{NDF}$ : 1532892.2/43

Out: -37.900+/-0.004  $\chi^2/\text{NDF}$ : 404088.6/48

All: -42.744+/-0.000  $\chi^2/\text{NDF}$ : 3659250.4/92



# dit\_usr\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-9.259 \pm 0.000$   $\chi^2/\text{NDF}$ : 437416.7/20

Left Out:  $2.149 \pm 0.005$   $\chi^2/\text{NDF}$ : 290739.3/24

Right Out:  $-2.098 \pm 0.008$   $\chi^2/\text{NDF}$ : 69169.9/23

Left In:  $1.019 \pm 0.006$   $\chi^2/\text{NDF}$ : 250029.0/22

Left:  $1.671 \pm 0.004$   $\chi^2/\text{NDF}$ : 563410.5/47

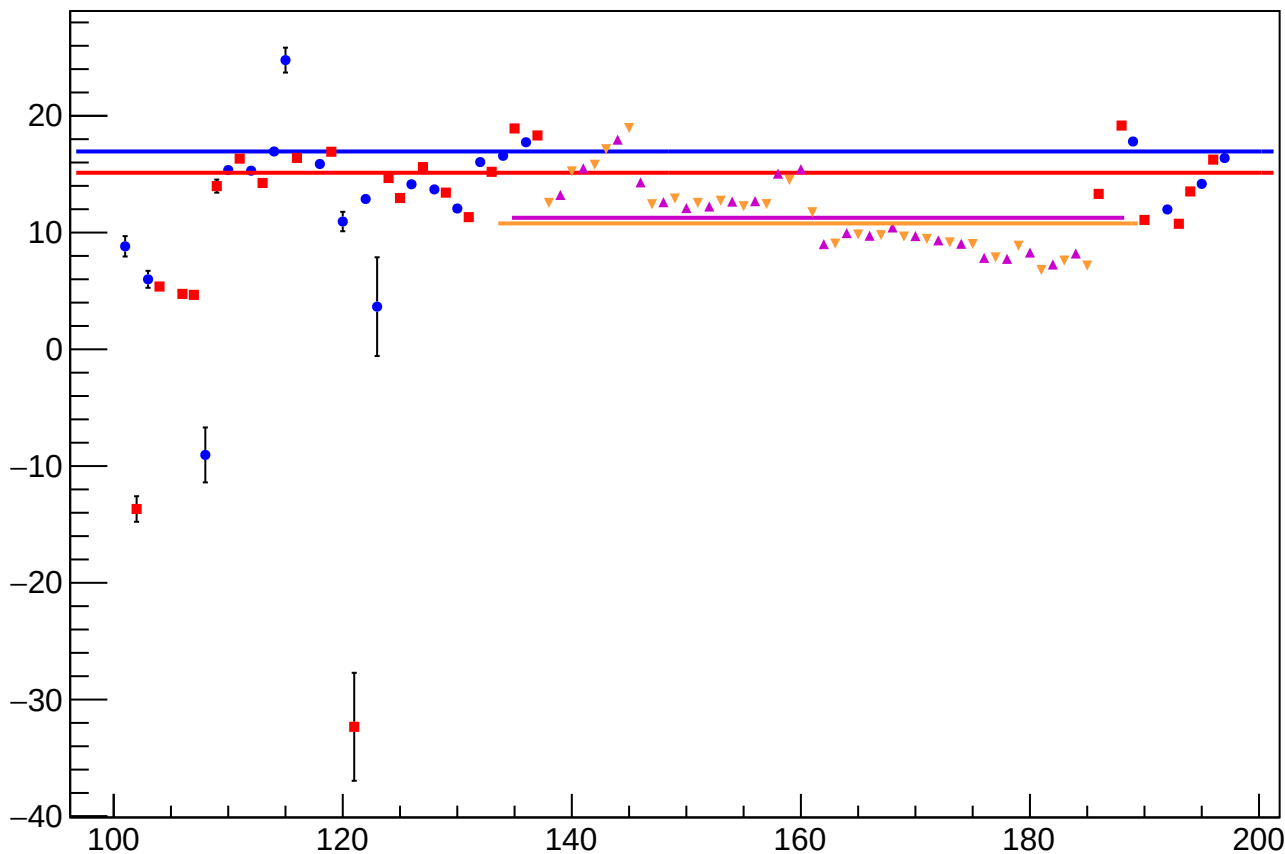
Right:  $-9.259 \pm 0.000$   $\chi^2/\text{NDF}$ : 1397206.5/44

In:  $-9.259 \pm 0.000$   $\chi^2/\text{NDF}$ : 3935486.6/43

Out:  $0.903 \pm 0.004$   $\chi^2/\text{NDF}$ : 581262.8/48

All:  $-9.259 \pm 0.000$   $\chi^2/\text{NDF}$ : 10628873.9/92

# dit\_usr\_4eY\_slope vs Slug, Sign Corrected



Right In: 16.947 $\pm$ 0.000  $\chi^2$ /NDF: 12435.0/20

Left Out: 10.782 $\pm$ 0.007  $\chi^2$ /NDF:129427.5/24

Right Out: 15.123 $\pm$ 0.015  $\chi^2$ /NDF: 31601.1/23

Left In: 11.267 $\pm$ 0.008  $\chi^2$ /NDF:98438.0/22

Left: 10.986 $\pm$ 0.005  $\chi^2$ /NDF: 230089.4/47

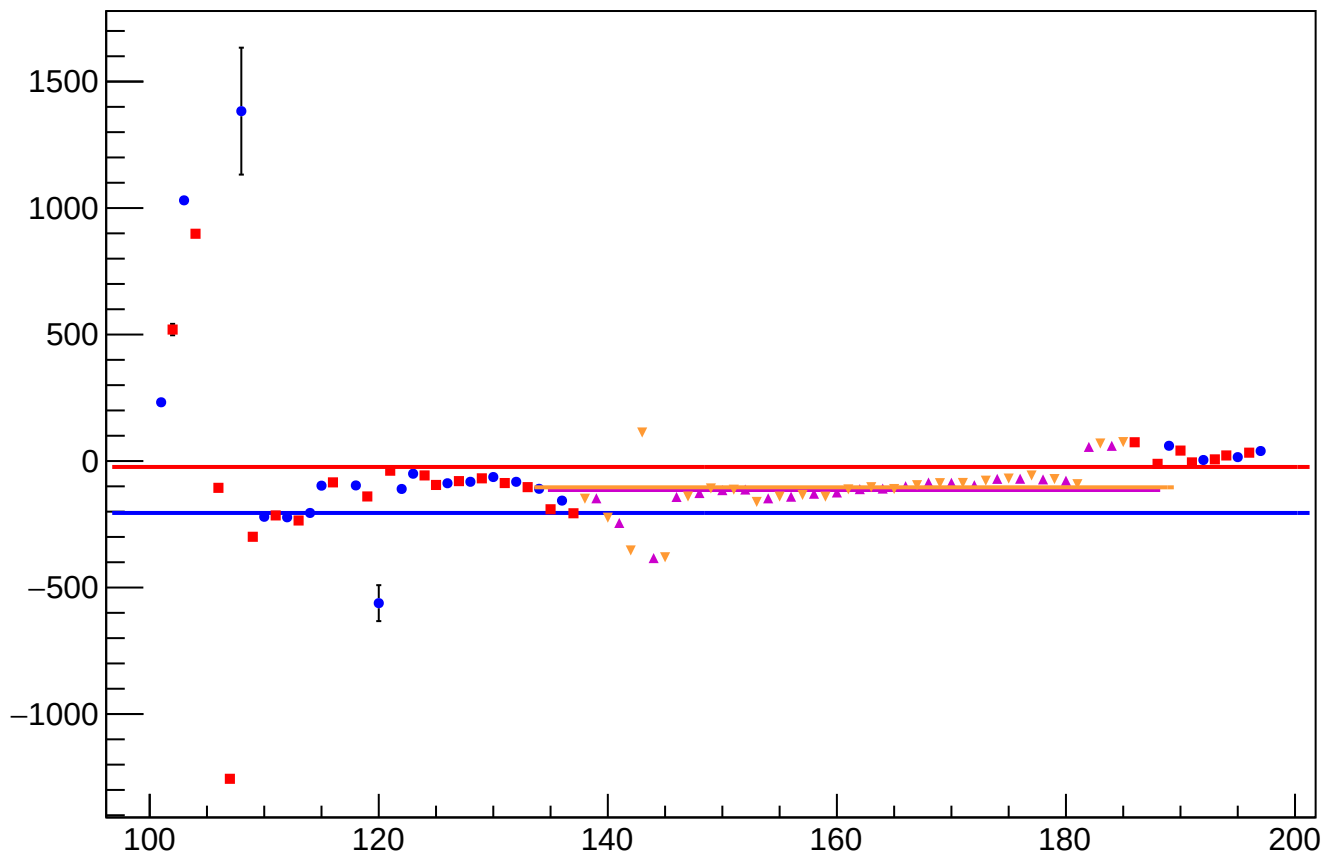
Right: 16.947 $\pm$ 0.000  $\chi^2$ /NDF: 58322.3/44

In: 16.947 $\pm$ 0.000  $\chi^2$ /NDF:635536.3/43

Out: 11.478 $\pm$ 0.006  $\chi^2$ /NDF:229043.0/48

All: 16.947 $\pm$ 0.000  $\chi^2$ /NDF: 1665779.8/92

# dit\_atl1\_4aX\_slope vs Slug, Sign Corrected



Right In: -205.160+/-0.000  $\chi^2/\text{NDF}$ : 1492974.7/20

Left Out: -103.842+/-0.192  $\chi^2/\text{NDF}$ : 94751.7/24

Right Out: -23.361+/-0.236  $\chi^2/\text{NDF}$ : 165722.0/24

Left In: -114.444+/-0.225  $\chi^2/\text{NDF}$ : 76837.7/22

Left: -108.306+/-0.146  $\chi^2/\text{NDF}$ : 172877.4/47

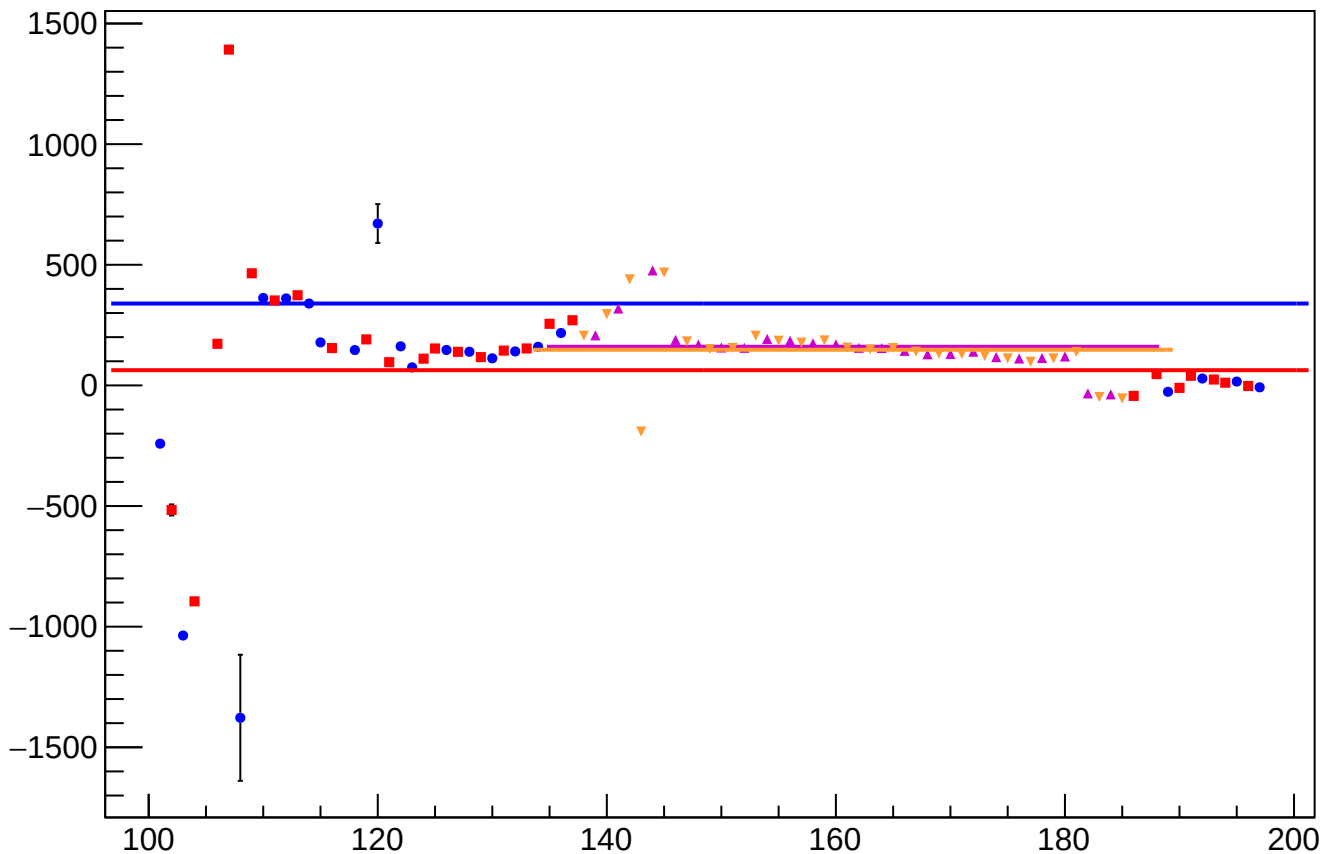
Right: -205.160+/-0.000  $\chi^2/\text{NDF}$ : 2254189.6/45

In: -205.160+/-0.000  $\chi^2/\text{NDF}$ : 1732693.9/43

Out: -71.784+/-0.149  $\chi^2/\text{NDF}$ : 330690.2/49

All: -205.160+/-0.000  $\chi^2/\text{NDF}$ : 2868030.7/93

# dit\_atl1\_4eX\_slope vs Slug, Sign Corrected



Right In: 339.325 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 1530067.4/20

Left Out: 147.771 $\pm$ 0.196  $\chi^2/\text{NDF}$ : 134281.2/24

Right Out: 63.013 $\pm$ 0.230  $\chi^2/\text{NDF}$ : 252238.4/24

Left In: 160.049 $\pm$ 0.230  $\chi^2/\text{NDF}$ : 83579.0/22

Left: 152.950 $\pm$ 0.149  $\chi^2/\text{NDF}$ : 219512.9/47

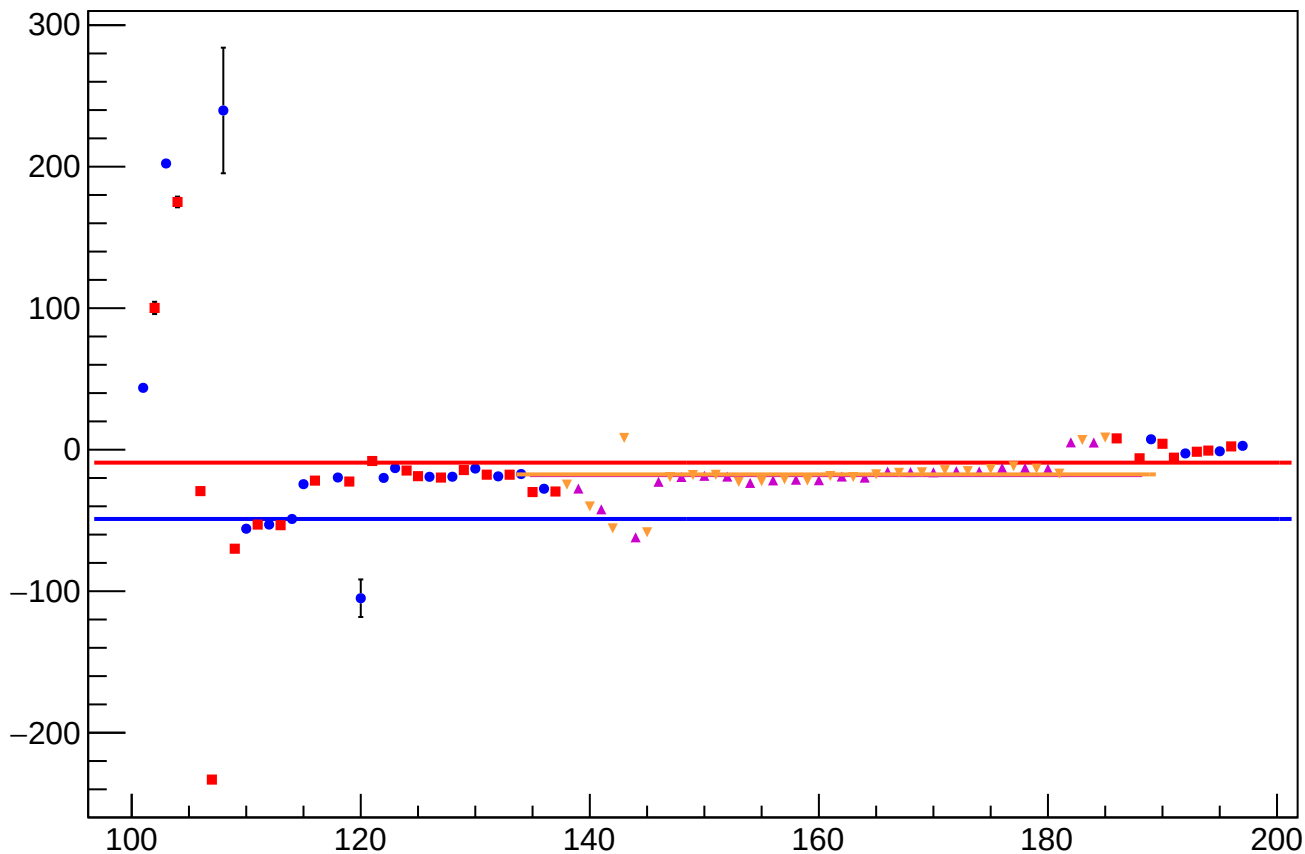
Right: 339.325 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 3221372.8/45

In: 339.325 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 2222985.4/43

Out: 112.141 $\pm$ 0.149  $\chi^2/\text{NDF}$ : 465005.8/49

All: 339.325 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 5002197.2/93

# dit\_atl1\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $-48.945 \pm 0.000$   $\chi^2/\text{NDF}$ : 6641825.2/20

Left Out:  $-17.446 \pm 0.010$   $\chi^2/\text{NDF}$ : 714044.4/24

Right Out:  $-9.144 \pm 0.030$   $\chi^2/\text{NDF}$ : 361354.9/24

Left In:  $-17.951 \pm 0.012$   $\chi^2/\text{NDF}$ : 252123.1/22

Left:  $-17.648 \pm 0.008$   $\chi^2/\text{NDF}$ : 967185.6/47

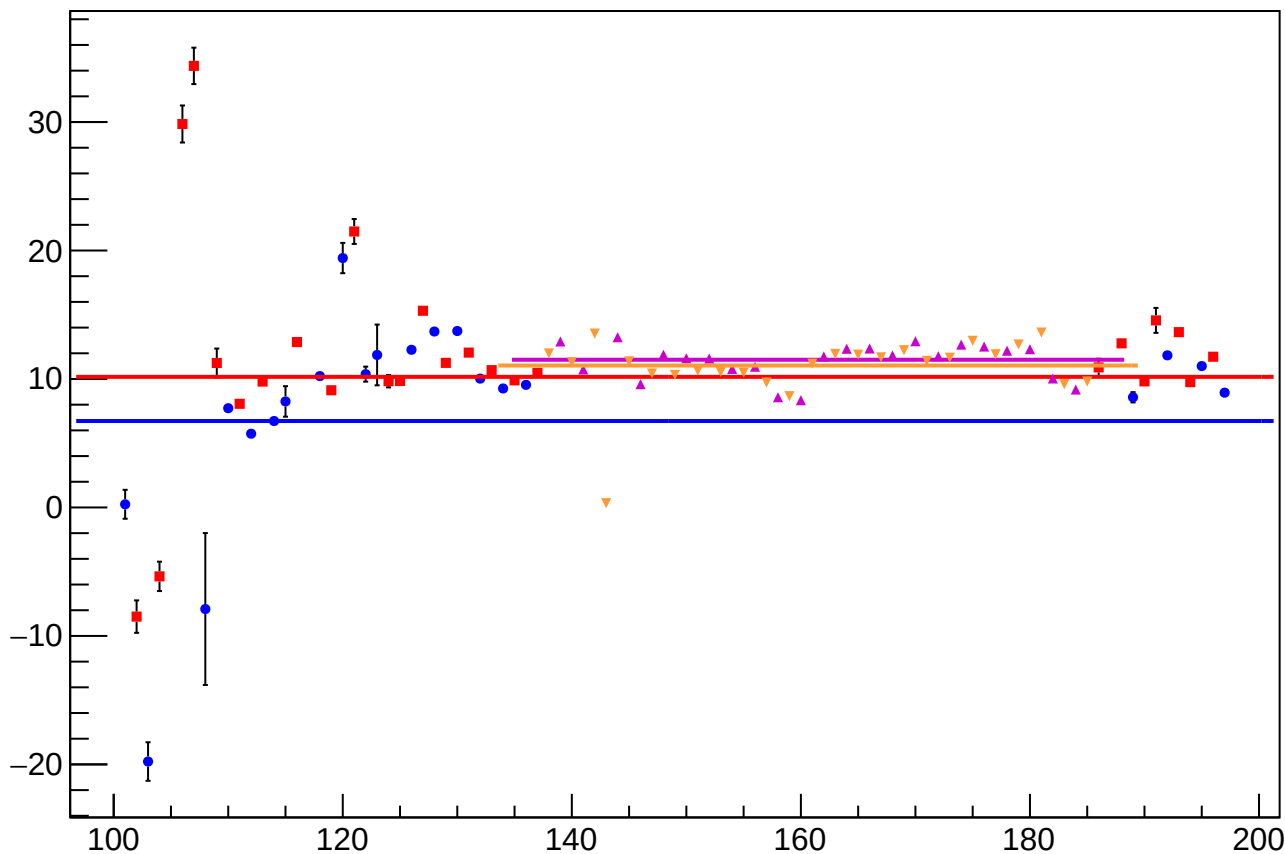
Right:  $-48.945 \pm 0.000$   $\chi^2/\text{NDF}$ : 8731529.9/45

In:  $-48.945 \pm 0.000$   $\chi^2/\text{NDF}$ : 13280559.3/43

Out:  $-16.628 \pm 0.010$   $\chi^2/\text{NDF}$ : 1143178.8/49

All:  $-48.945 \pm 0.000$   $\chi^2/\text{NDF}$ : 25987747.3/93

# dit\_atl1\_4aY\_slope vs Slug, Sign Corrected



Right In: 6.728 $\pm$ 0.000  $\chi^2$ /NDF: 14972.5/20

Left Out: 11.049 $\pm$ 0.012  $\chi^2$ /NDF:31618.4/24

Right Out: 10.167 $\pm$ 0.034  $\chi^2$ /NDF: 6111.8/24

Left In: 11.498 $\pm$ 0.010  $\chi^2$ /NDF:15848.8/22

Left: 11.309 $\pm$ 0.008  $\chi^2$ /NDF: 48246.1/47

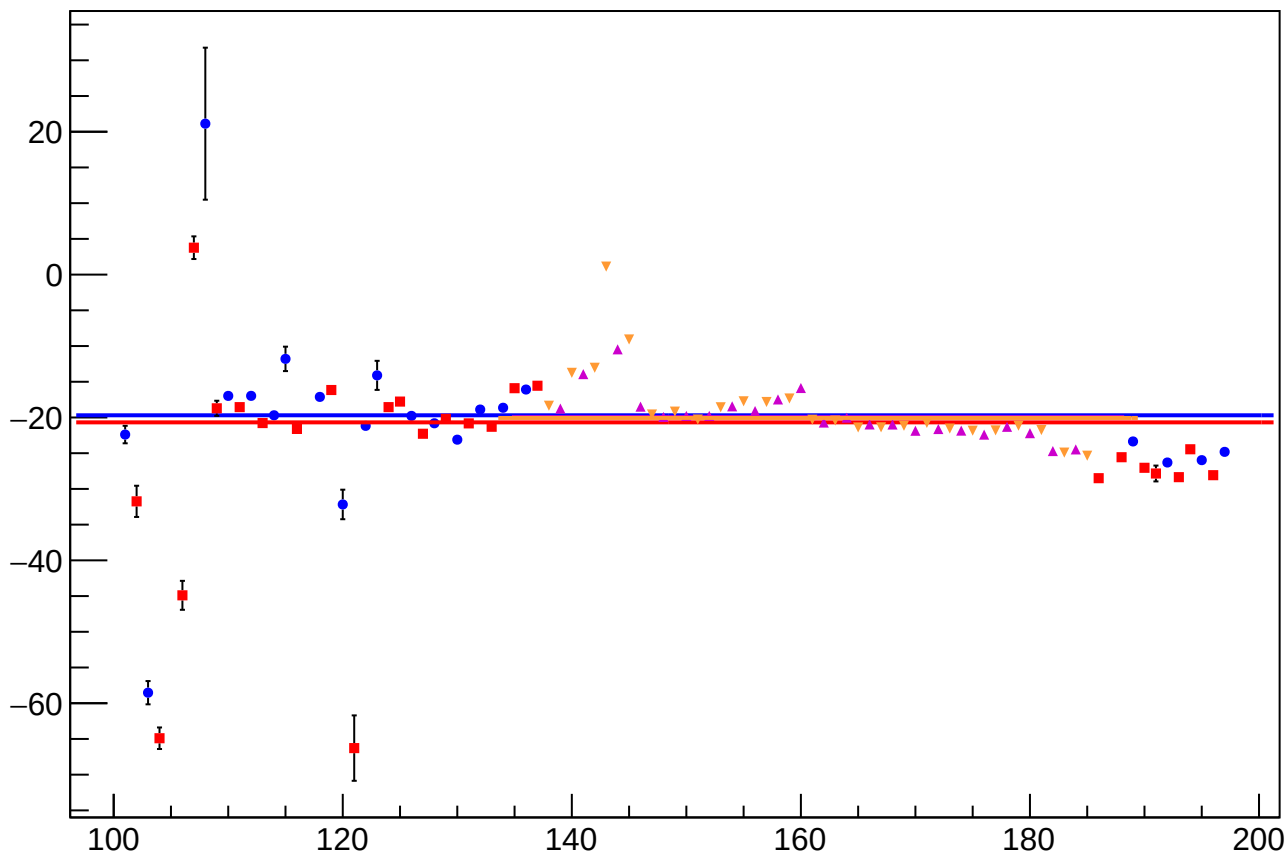
Right: 6.728 $\pm$ 0.000  $\chi^2$ /NDF: 31433.5/45

In: 6.728 $\pm$ 0.000  $\chi^2$ /NDF:240028.0/43

Out: 10.947 $\pm$ 0.012  $\chi^2$ /NDF:38332.5/49

All: 6.728 $\pm$ 0.000  $\chi^2$ /NDF: 412562.2/93

# dit\_atl1\_4eY\_slope vs Slug, Sign Corrected



Right In:  $-19.693 \pm 0.000$   $\chi^2/\text{NDF}: 9998.8/20$

Left Out:  $-20.065 \pm 0.014$   $\chi^2/\text{NDF}: 71466.1/24$

Right Out:  $-20.684 \pm 0.045$   $\chi^2/\text{NDF}: 6616.8/24$

Left In:  $-19.955 \pm 0.015$   $\chi^2/\text{NDF}: 22657.6/22$

Left:  $-20.015 \pm 0.010$   $\chi^2/\text{NDF}: 94152.2/47$

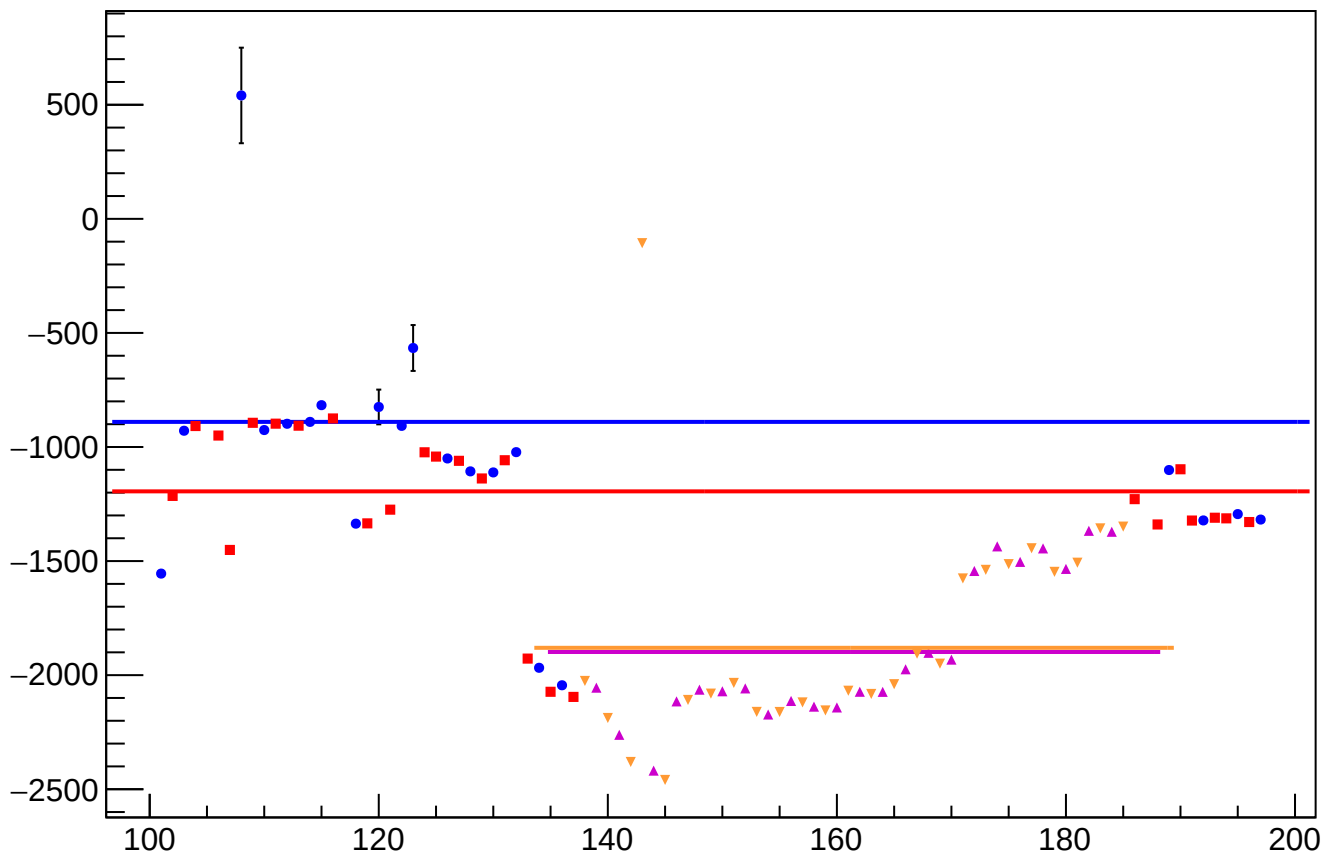
Right:  $-19.693 \pm 0.000$   $\chi^2/\text{NDF}: 17105.1/45$

In:  $-19.693 \pm 0.000$   $\chi^2/\text{NDF}: 32957.3/43$

Out:  $-20.119 \pm 0.013$   $\chi^2/\text{NDF}: 78257.3/49$

All:  $-19.693 \pm 0.000$   $\chi^2/\text{NDF}: 112251.5/93$

# dit\_atl2\_4aX\_slope vs Slug, Sign Corrected



Right In: -889.928+/-0.000  $\chi^2/\text{NDF}$ : 1278113.6/20

Left Out: -1880.162+/-0.353  $\chi^2/\text{NDF}$ : 873293.0/24

Right Out: -1194.447+/-0.237  $\chi^2/\text{NDF}$ : 925533.6/24

Left In: -1898.497+/-0.364  $\chi^2/\text{NDF}$ : 698003.8/22

Left: -1889.053+/-0.253  $\chi^2/\text{NDF}$ : 1572605.5/47

Right: -889.928+/-0.000  $\chi^2/\text{NDF}$ : 3855025.1/45

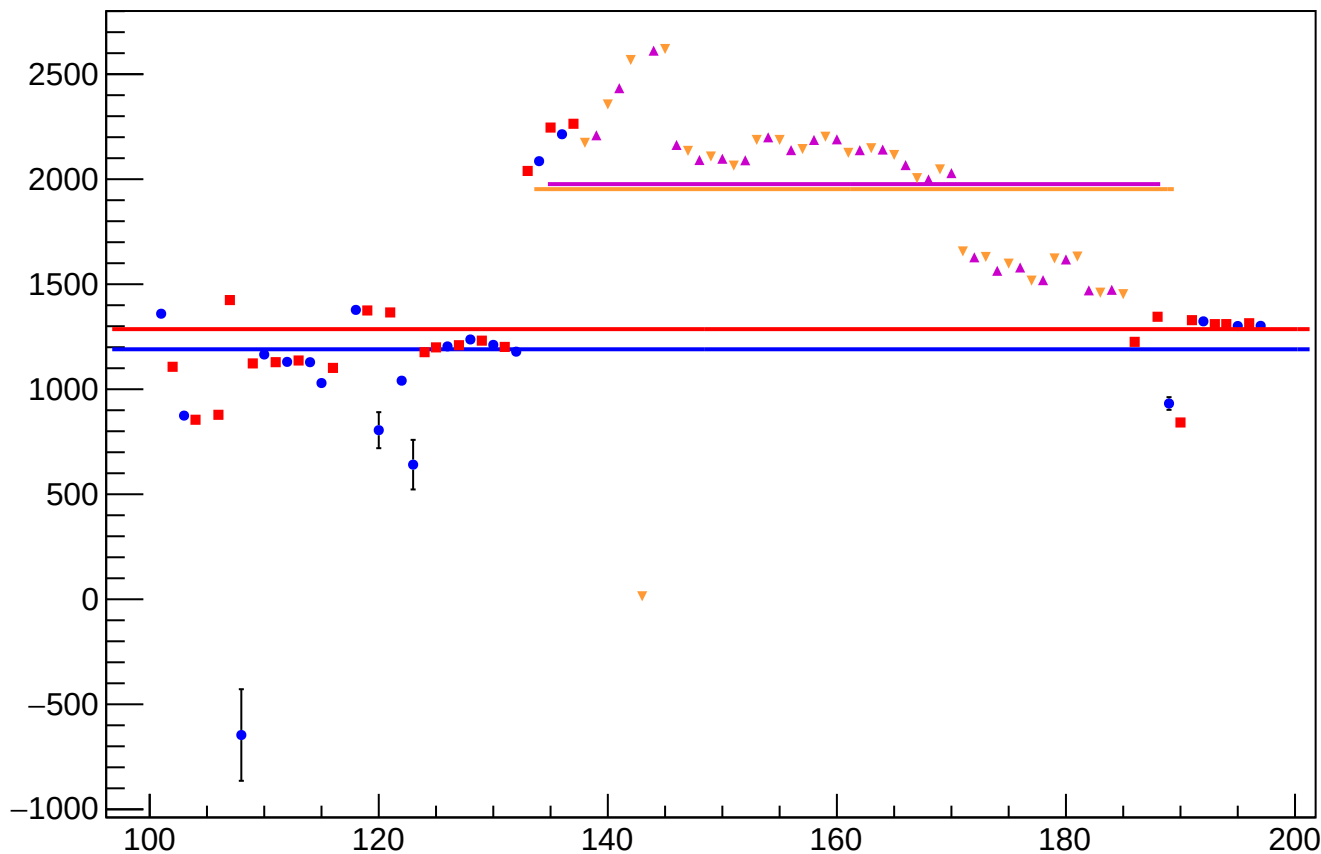
In: -889.928+/-0.000  $\chi^2/\text{NDF}$ : 9664916.1/43

Out: -1407.513+/-0.197  $\chi^2/\text{NDF}$ : 4400639.9/49

All: -889.928+/-0.000  $\chi^2/\text{NDF}$ : 20986842.2/9



# dit\_atl2\_4eX\_slope vs Slug, Sign Corrected



Right In:  $1190.235 \pm 0.227$   $\chi^2/\text{NDF}: 552115.0/20$

Left Out:  $1952.706 \pm 0.354$   $\chi^2/\text{NDF}: 820225.3/24$

Right Out:  $1286.133 \pm 0.242$   $\chi^2/\text{NDF}: 533318.7/24$

Left In:  $1976.603 \pm 0.367$   $\chi^2/\text{NDF}: 625684.0/22$

Left:  $1964.216 \pm 0.255$   $\chi^2/\text{NDF}: 1448104.1/47$

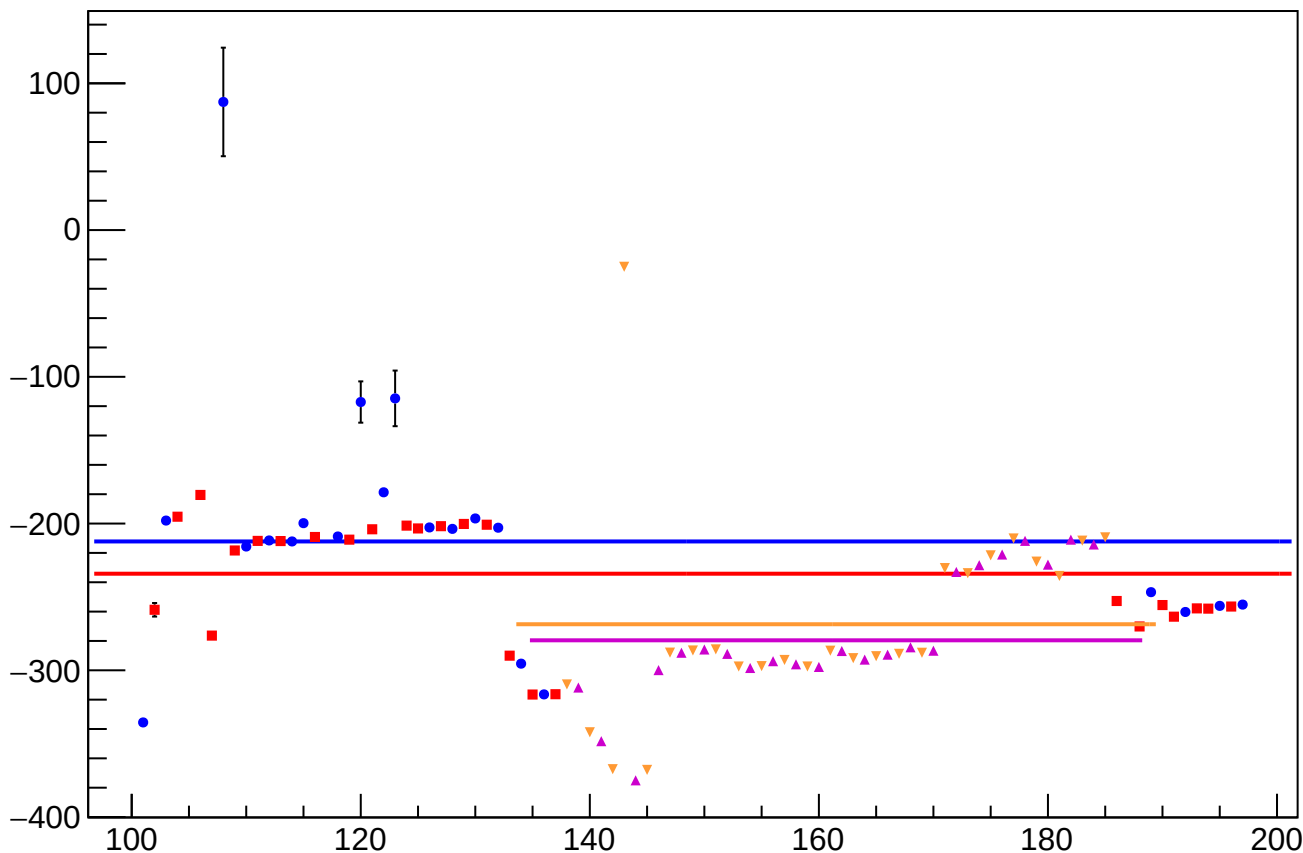
Right:  $1235.218 \pm 0.166$   $\chi^2/\text{NDF}: 1168839.6/45$

In:  $1408.206 \pm 0.193$   $\chi^2/\text{NDF}: 4491895.5/43$

Out:  $1498.376 \pm 0.200$   $\chi^2/\text{NDF}: 3770213.3/49$

All:  $1451.822 \pm 0.139$   $\chi^2/\text{NDF}: 8367309.6/93$

# dit\_atl2\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $-212.190 \pm 0.000$   $\chi^2/\text{NDF}: 1472132.4/20$

Left Out:  $-268.611 \pm 0.022$   $\chi^2/\text{NDF}: 7041710.3/24$

Right Out:  $-234.179 \pm 0.031$   $\chi^2/\text{NDF}: 846153.1/24$

Left In:  $-279.563 \pm 0.022$   $\chi^2/\text{NDF}: 2298119.7/22$

Left:  $-274.180 \pm 0.015$   $\chi^2/\text{NDF}: 9465442.7/47$

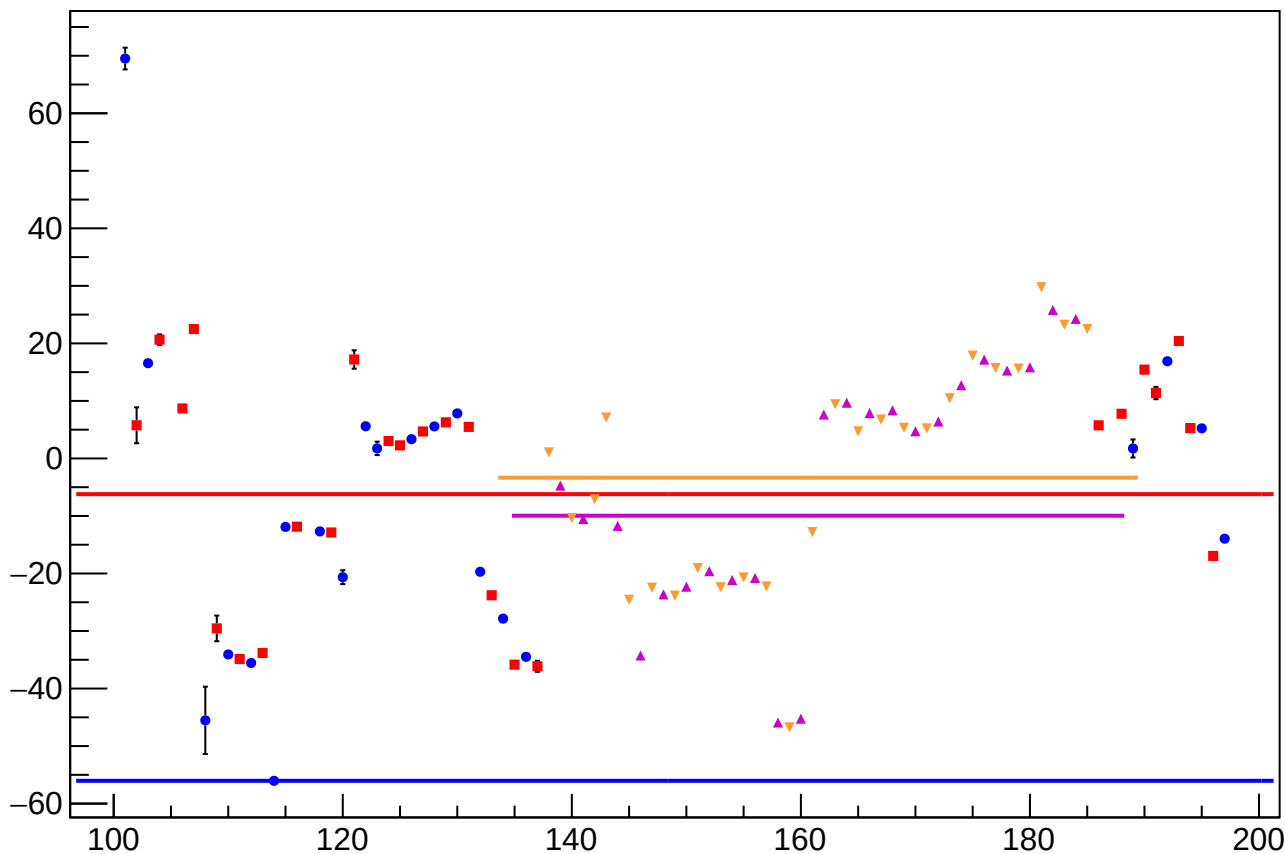
Right:  $-212.190 \pm 0.000$   $\chi^2/\text{NDF}: 2831438.4/45$

In:  $-212.190 \pm 0.000$   $\chi^2/\text{NDF}: 13441960.3/43$

Out:  $-256.902 \pm 0.018$   $\chi^2/\text{NDF}: 8718262.2/49$

All:  $-212.190 \pm 0.000$   $\chi^2/\text{NDF}: 28399293.4/9$

# dit\_atl2\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-56.037 \pm 0.000$   $\chi^2/\text{NDF}: 1705017.6/20$

Left Out:  $-3.341 \pm 0.018$   $\chi^2/\text{NDF}: 1399746.6/24$

Right Out:  $-6.207 \pm 0.040$   $\chi^2/\text{NDF}: 188474.8/24$

Left In:  $-9.956 \pm 0.018$   $\chi^2/\text{NDF}: 1689839.0/22$

Left:  $-6.485 \pm 0.013$   $\chi^2/\text{NDF}: 3156876.8/47$

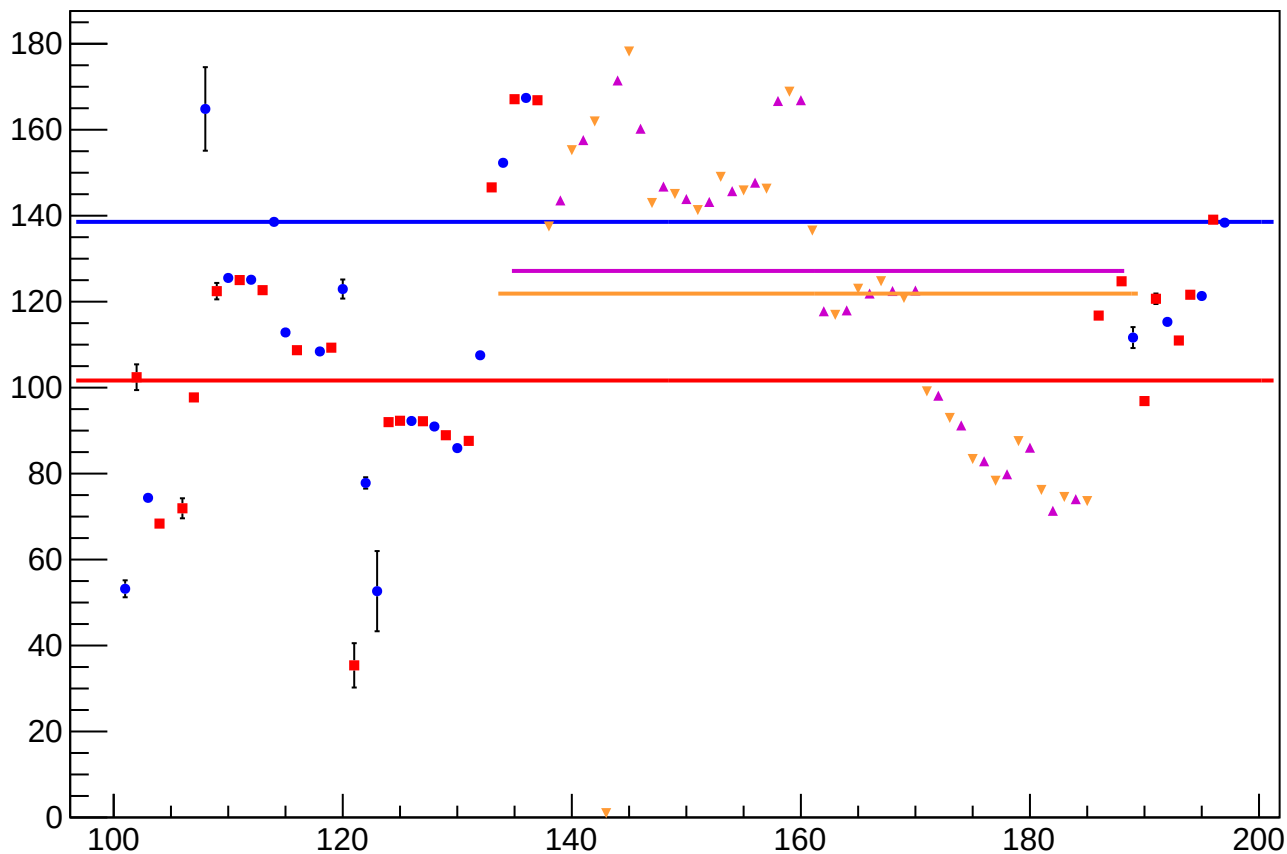
Right:  $-56.037 \pm 0.000$   $\chi^2/\text{NDF}: 3420511.2/45$

In:  $-56.037 \pm 0.000$   $\chi^2/\text{NDF}: 9619214.8/43$

Out:  $-3.799 \pm 0.016$   $\chi^2/\text{NDF}: 1592463.6/49$

All:  $-56.037 \pm 0.000$   $\chi^2/\text{NDF}: 21722274.4/93$

# dit\_atl2\_4eY\_slope vs Slug, Sign Corrected



Right In: 138.565 $\pm$ 0.000  $\chi^2$ /NDF: 911446.7/20

Left Out: 121.875 $\pm$ 0.024  $\chi^2$ /NDF:1617383.6/24

Right Out: 101.658 $\pm$ 0.032  $\chi^2$ /NDF: 323401.7/24

Left In: 127.150 $\pm$ 0.026  $\chi^2$ /NDF:1340248.6/22

Left: 124.317 $\pm$ 0.018  $\chi^2$ /NDF: 2979450.2/47

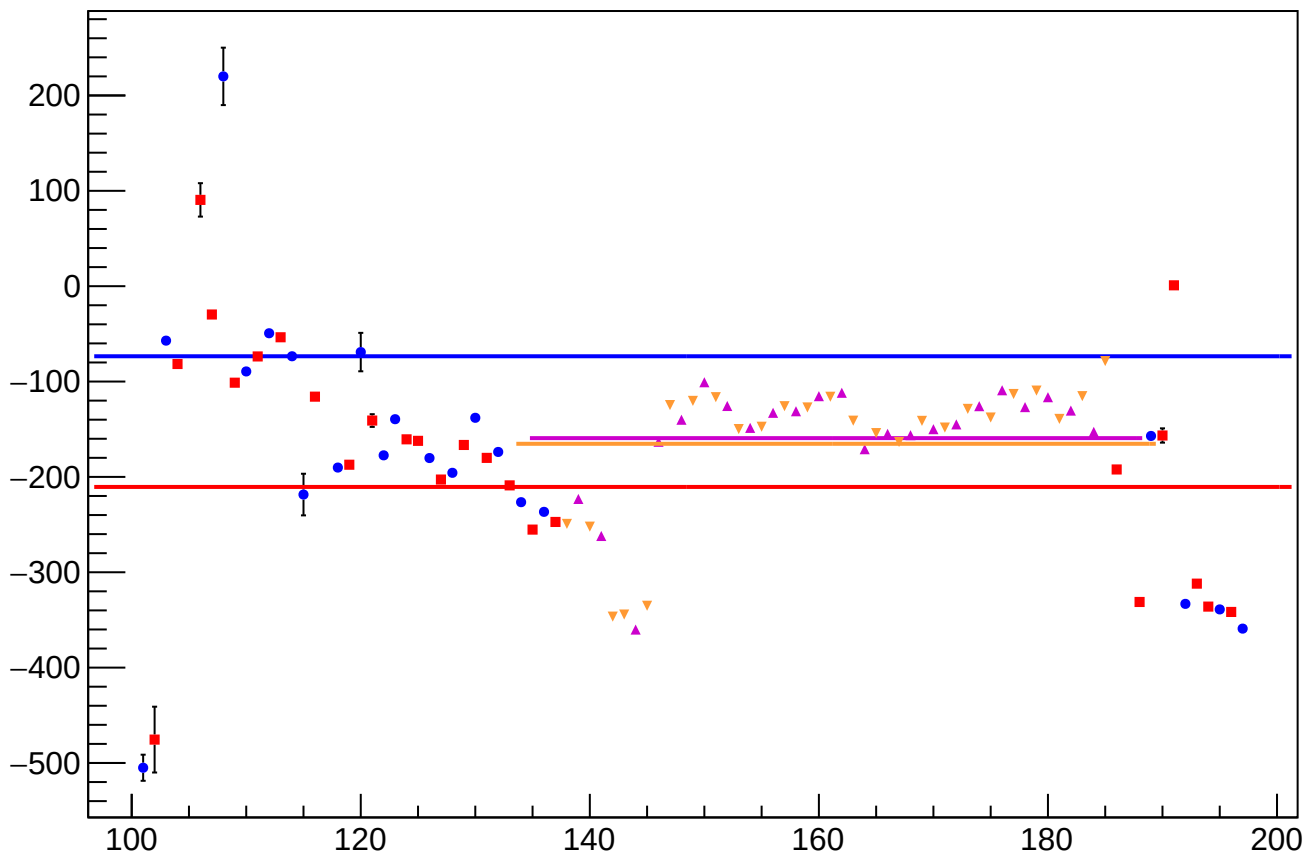
Right: 138.565 $\pm$ 0.000  $\chi^2$ /NDF: 2533870.3/45

In: 138.565 $\pm$ 0.000  $\chi^2$ /NDF:2441895.9/43

Out: 114.591 $\pm$ 0.019  $\chi^2$ /NDF:2190130.1/49

All: 138.565 $\pm$ 0.000  $\chi^2$ /NDF: 6153440.8/93

# dit\_atr1\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-73.485 \pm 0.000$   $\chi^2/\text{NDF}: 209656.7/20$

Left Out:  $-165.282 \pm 0.232$   $\chi^2/\text{NDF}: 84301.0/24$

Right Out:  $-210.522 \pm 0.272$   $\chi^2/\text{NDF}: 160580.0/24$

Left In:  $-159.346 \pm 0.239$   $\chi^2/\text{NDF}: 73885.5/22$

Left:  $-162.407 \pm 0.166$   $\chi^2/\text{NDF}: 158504.2/47$

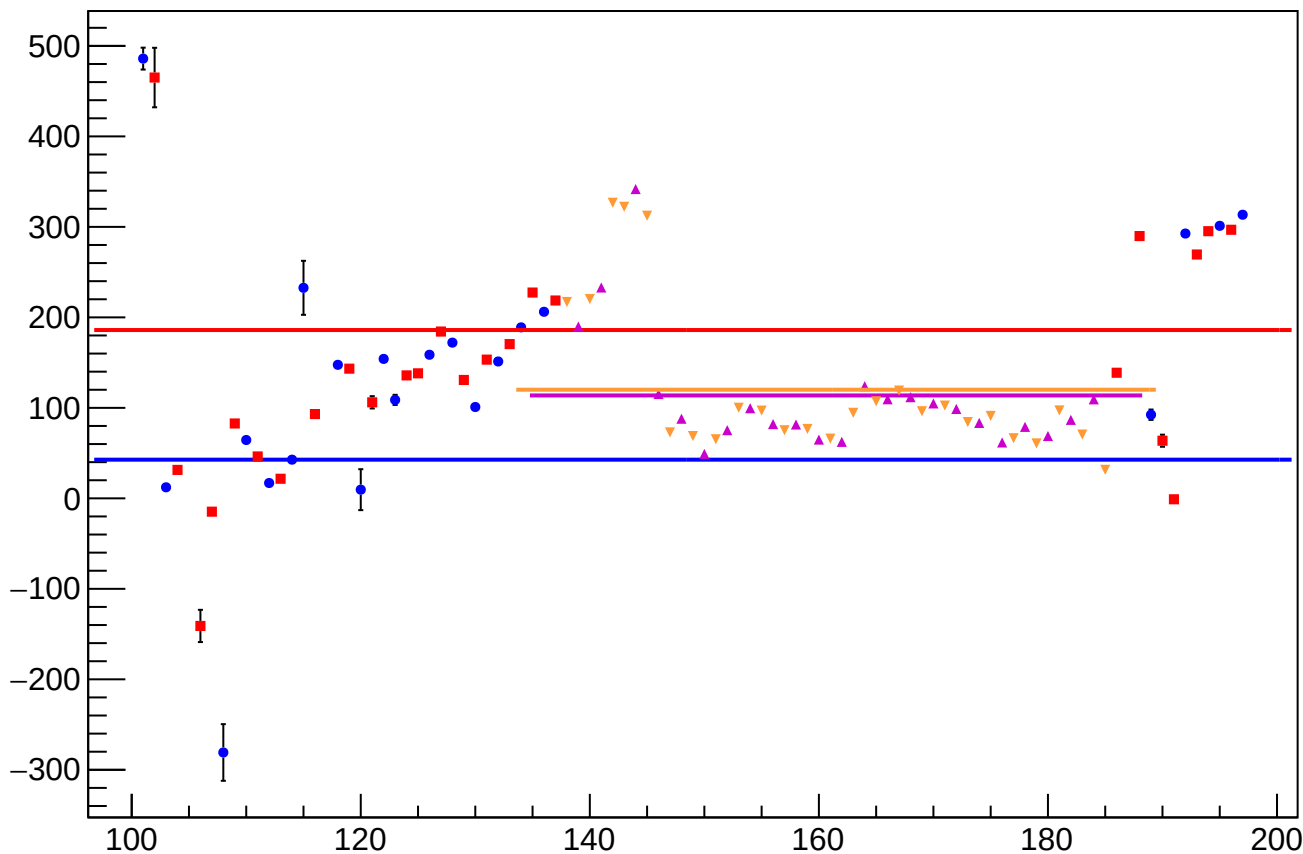
Right:  $-73.485 \pm 0.000$   $\chi^2/\text{NDF}: 623901.2/45$

In:  $-73.485 \pm 0.000$   $\chi^2/\text{NDF}: 412448.0/43$

Out:  $-184.302 \pm 0.176$   $\chi^2/\text{NDF}: 260904.4/49$

All:  $-73.485 \pm 0.000$   $\chi^2/\text{NDF}: 1067908.7/93$

# dit\_atr1\_4eX\_slope vs Slug, Sign Corrected



Right In: 42.743+/-0.000  $\chi^2/\text{NDF}$ : 188141.6/20

Left Out: 120.053+/-0.237  $\chi^2/\text{NDF}$ : 97926.9/24

Right Out: 186.008+/-0.287  $\chi^2/\text{NDF}$ : 133546.9/24

Left In: 113.733+/-0.246  $\chi^2/\text{NDF}$ : 81886.4/22

Left: 117.016+/-0.171  $\chi^2/\text{NDF}$ : 180155.1/47

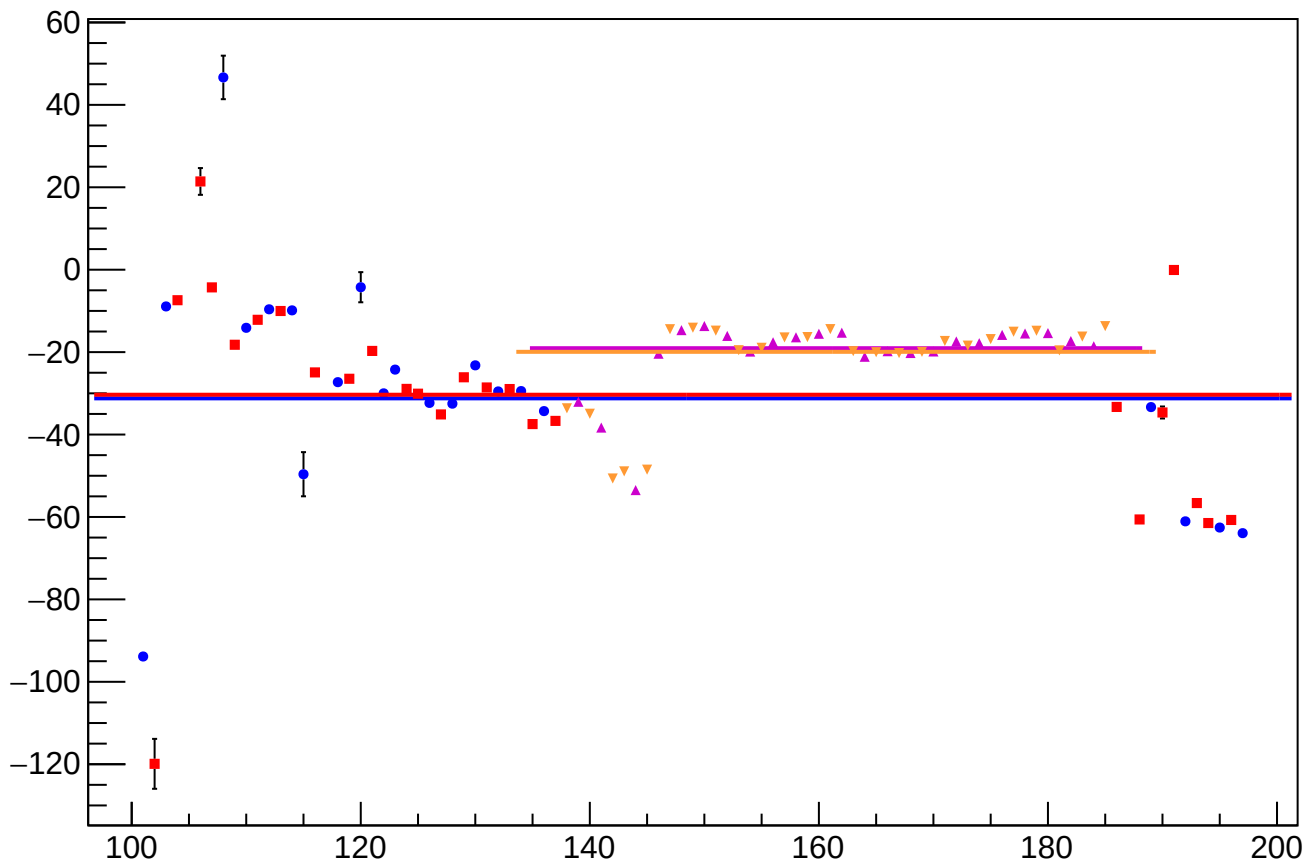
Right: 42.743+/-0.000  $\chi^2/\text{NDF}$ : 570476.3/45

In: 42.743+/-0.000  $\chi^2/\text{NDF}$ : 353091.0/43

Out: 146.766+/-0.183  $\chi^2/\text{NDF}$ : 262846.0/49

All: 42.743+/-0.000  $\chi^2/\text{NDF}$ : 939783.8/93

# dit\_atr1\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $-31.219 \pm 0.033$   $\chi^2/\text{NDF}: 114784.7/20$

Left Out:  $-19.926 \pm 0.012$   $\chi^2/\text{NDF}: 374900.2/24$

Right Out:  $-30.337 \pm 0.031$   $\chi^2/\text{NDF}: 456226.7/24$

Left In:  $-19.047 \pm 0.014$   $\chi^2/\text{NDF}: 214747.8/22$

Left:  $-19.543 \pm 0.009$   $\chi^2/\text{NDF}: 591888.6/47$

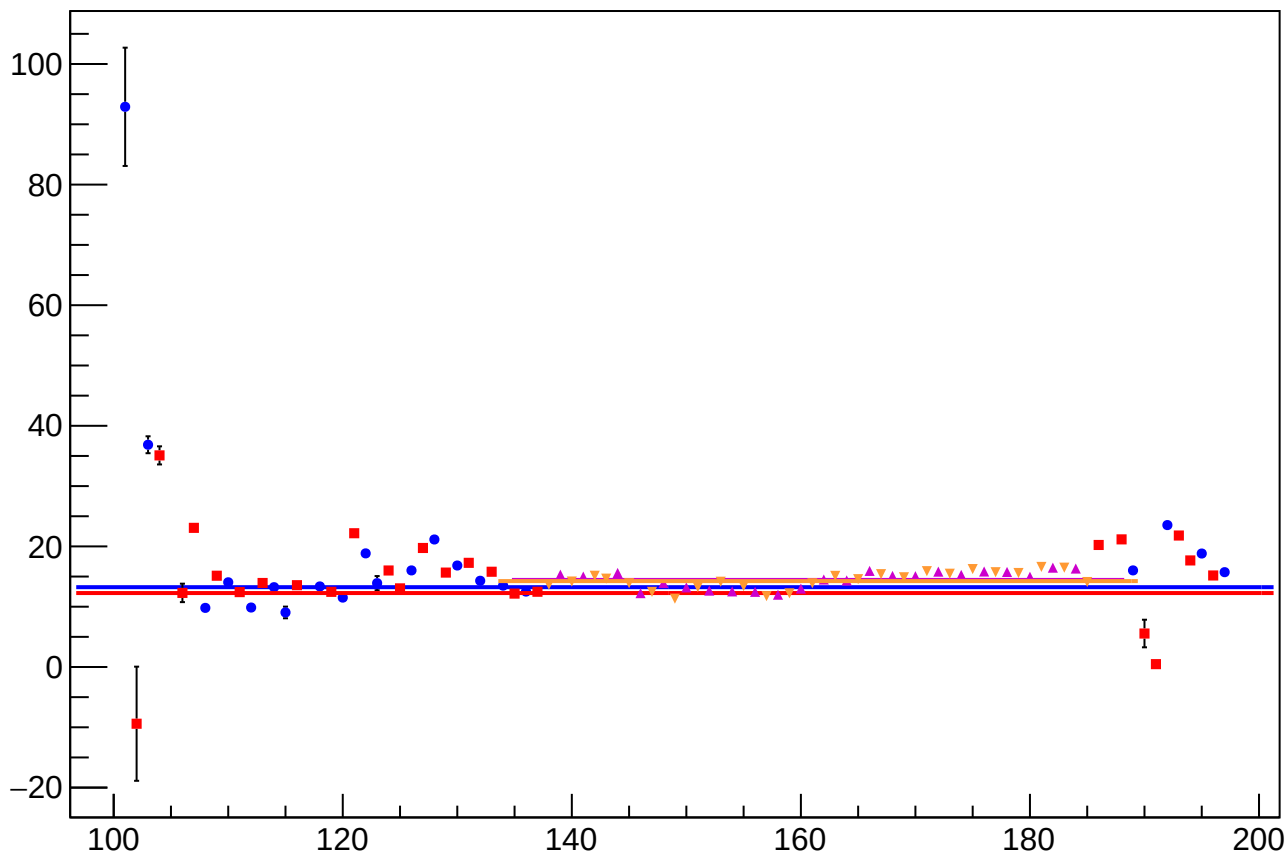
Right:  $-30.741 \pm 0.023$   $\chi^2/\text{NDF}: 571391.2/45$

In:  $-20.862 \pm 0.013$   $\chi^2/\text{NDF}: 443086.9/43$

Out:  $-21.364 \pm 0.011$   $\chi^2/\text{NDF}: 930752.3/49$

All:  $-21.144 \pm 0.009$   $\chi^2/\text{NDF}: 1374694.5/93$

# dit\_atr1\_4aY\_slope vs Slug, Sign Corrected



Right In: 13.238 $\pm$ 0.000  $\chi^2$ /NDF: 7958.8/20

Left Out: 14.245 $\pm$ 0.012  $\chi^2$ /NDF:12367.6/24

Right Out: 12.264 $\pm$ 0.040  $\chi^2$ /NDF: 24637.0/24

Left In: 14.441 $\pm$ 0.012  $\chi^2$ /NDF:12955.9/22

Left: 14.346 $\pm$ 0.008  $\chi^2$ /NDF: 25459.7/47

Right: 13.238 $\pm$ 0.000  $\chi^2$ /NDF: 33202.5/45

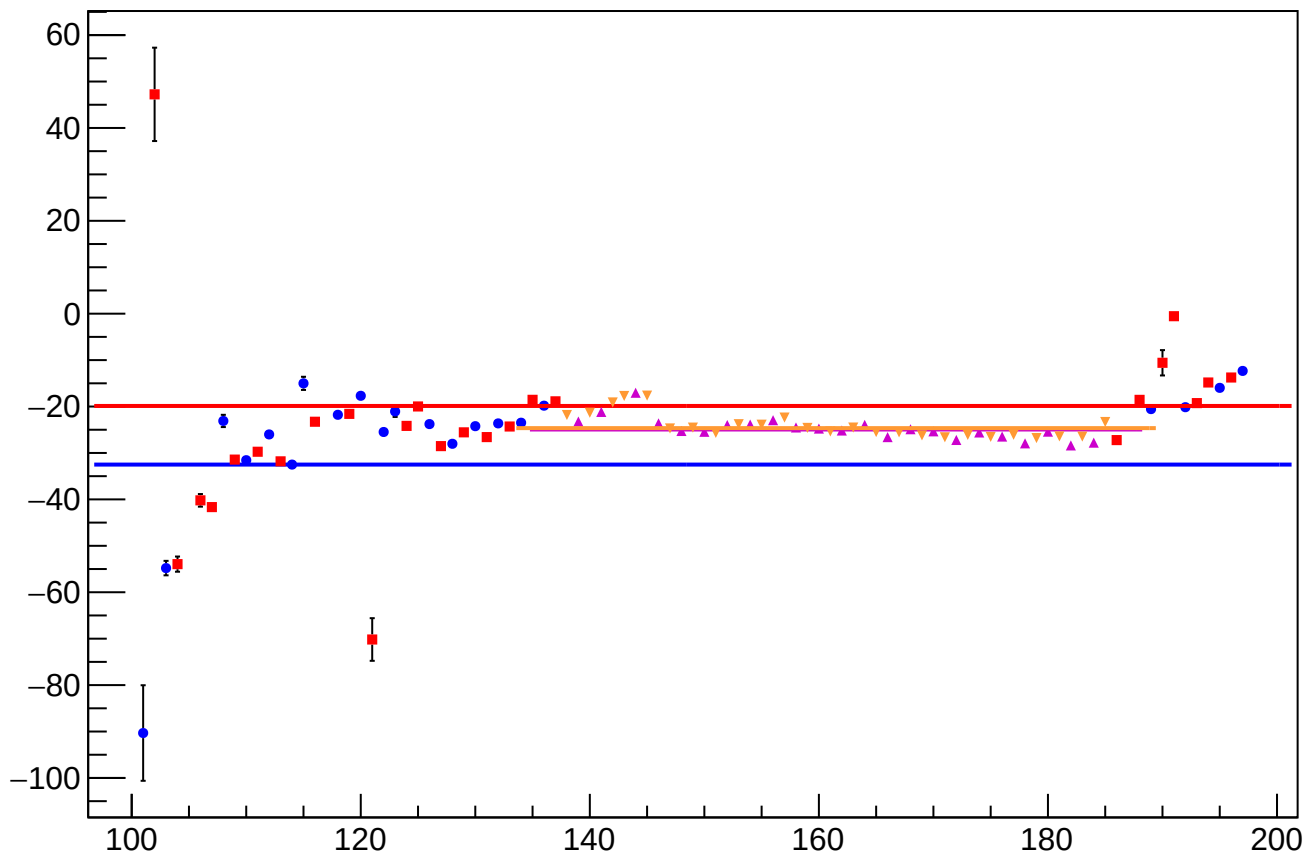
In: 13.238 $\pm$ 0.000  $\chi^2$ /NDF:31580.5/43

Out: 14.079 $\pm$ 0.011  $\chi^2$ /NDF:39306.1/49

All: 13.238 $\pm$ 0.000  $\chi^2$ /NDF: 76261.5/93



# dit\_atr1\_4eY\_slope vs Slug, Sign Corrected



Right In:  $-32.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 86133.9/20

Left Out:  $-24.652 \pm 0.015$   $\chi^2/\text{NDF}$ : 23058.0/24

Right Out:  $-19.877 \pm 0.041$   $\chi^2/\text{NDF}$ : 60403.6/24

Left In:  $-24.948 \pm 0.015$   $\chi^2/\text{NDF}$ : 14049.6/22

Left:  $-24.798 \pm 0.011$   $\chi^2/\text{NDF}$ : 37300.4/47

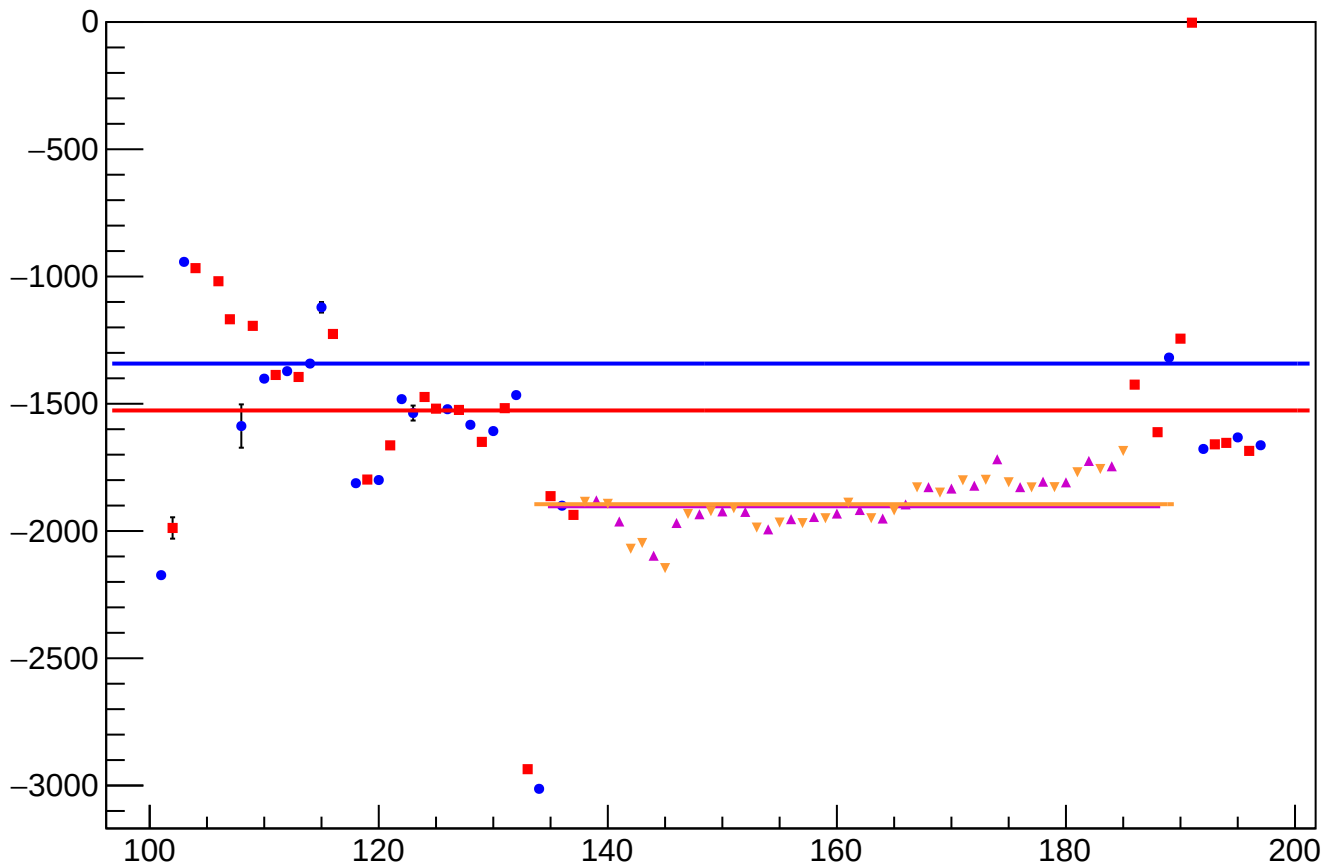
Right:  $-32.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 242772.4/45

In:  $-32.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 348084.8/43

Out:  $-24.083 \pm 0.014$   $\chi^2/\text{NDF}$ : 95584.4/49

All:  $-32.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 803111.2/93

# dit\_atr2\_4aX\_slope vs Slug, Sign Corrected



Right In: -1342.107+/-0.000  $\chi^2/\text{NDF}$ : 613963.6/20

Left Out: -1894.646+/-0.318  $\chi^2/\text{NDF}$ : 67387.8/24

Right Out: -1526.310+/-0.270  $\chi^2/\text{NDF}$ : 1923845.2/24

Left In: -1902.803+/-0.289  $\chi^2/\text{NDF}$ : 69208.9/22

Left: -1899.114+/-0.214  $\chi^2/\text{NDF}$ : 136957.6/47

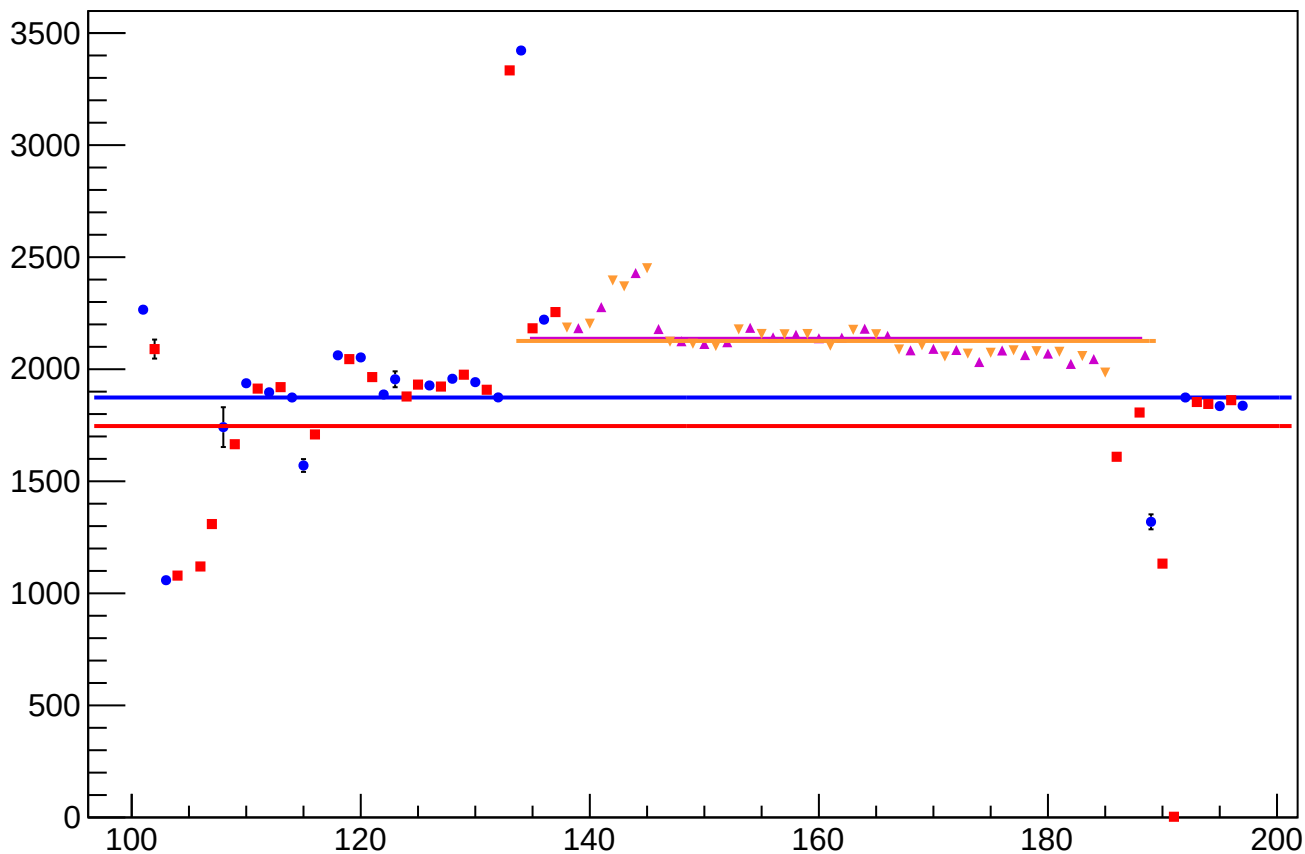
Right: -1342.107+/-0.000  $\chi^2/\text{NDF}$ : 3004139.8/45

In: -1342.107+/-0.000  $\chi^2/\text{NDF}$ : 4453258.9/43

Out: -1680.564+/-0.206  $\chi^2/\text{NDF}$ : 2772104.9/49

All: -1342.107+/-0.000  $\chi^2/\text{NDF}$ : 9934119.2/9

# dit\_atr2\_4eX\_slope vs Slug, Sign Corrected



Right In: 1873.852+/-0.000  $\chi^2/\text{NDF}$ : 202999.8/20

Left Out: 2126.160+/-0.317  $\chi^2/\text{NDF}$ : 48244.0/24

Right Out: 1746.454+/-0.271  $\chi^2/\text{NDF}$ : 3316071.8/24

Left In: 2135.770+/-0.290  $\chi^2/\text{NDF}$ : 58031.3/22

Left: 2131.403+/-0.214  $\chi^2/\text{NDF}$ : 106775.9/47

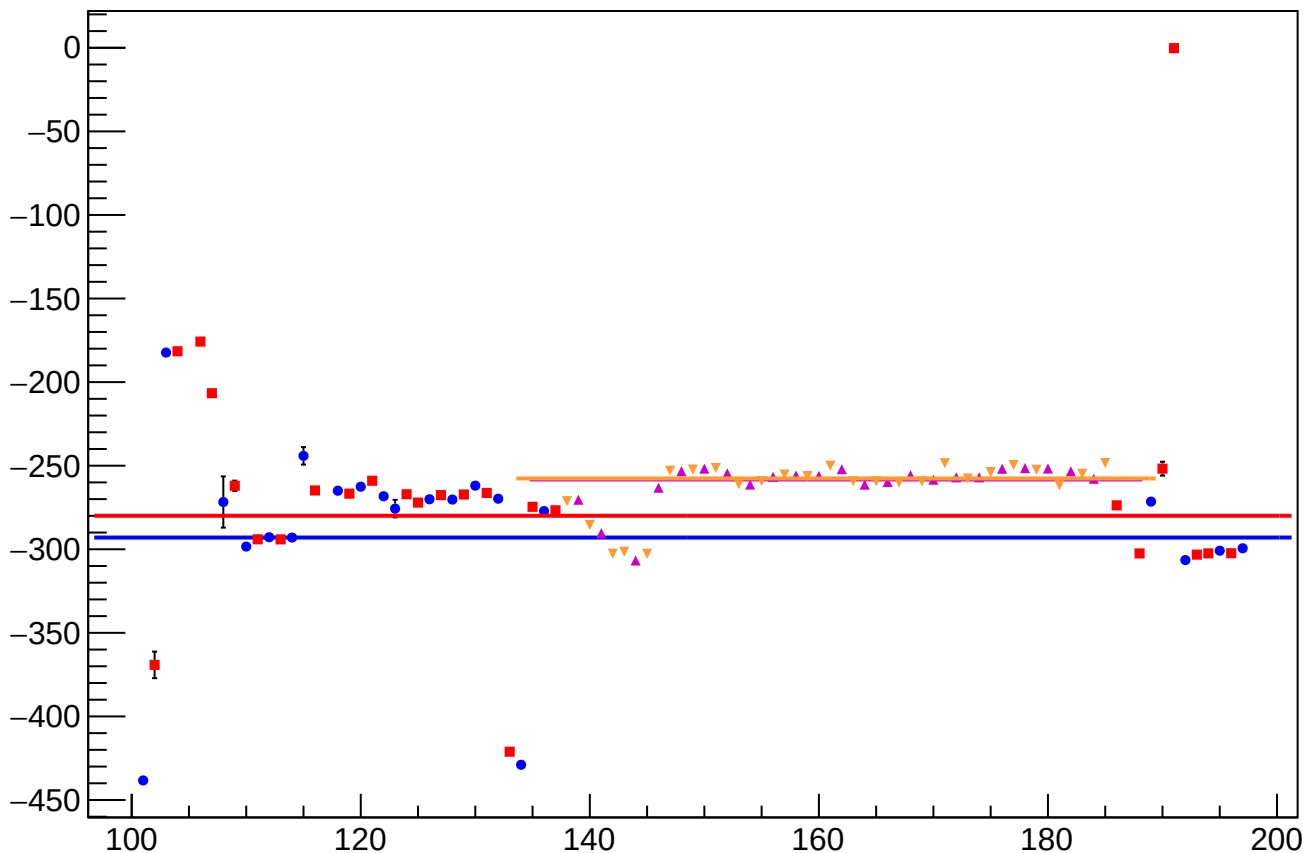
Right: 1873.852+/-0.000  $\chi^2/\text{NDF}$ : 3740028.9/45

In: 1873.852+/-0.000  $\chi^2/\text{NDF}$ : 1079477.6/43

Out: 1906.634+/-0.206  $\chi^2/\text{NDF}$ : 4192334.6/49

All: 1873.852+/-0.000  $\chi^2/\text{NDF}$ : 5297118.3/93

# dit\_atr2\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $-292.986 \pm 0.000$   $\chi^2/\text{NDF}: 1054065.5/20$

Left Out:  $-257.631 \pm 0.020$   $\chi^2/\text{NDF}: 226942.0/24$

Right Out:  $-279.957 \pm 0.035$   $\chi^2/\text{NDF}: 1929188.1/24$

Left In:  $-258.240 \pm 0.017$   $\chi^2/\text{NDF}: 268186.3/22$

Left:  $-257.974 \pm 0.013$   $\chi^2/\text{NDF}: 495658.2/47$

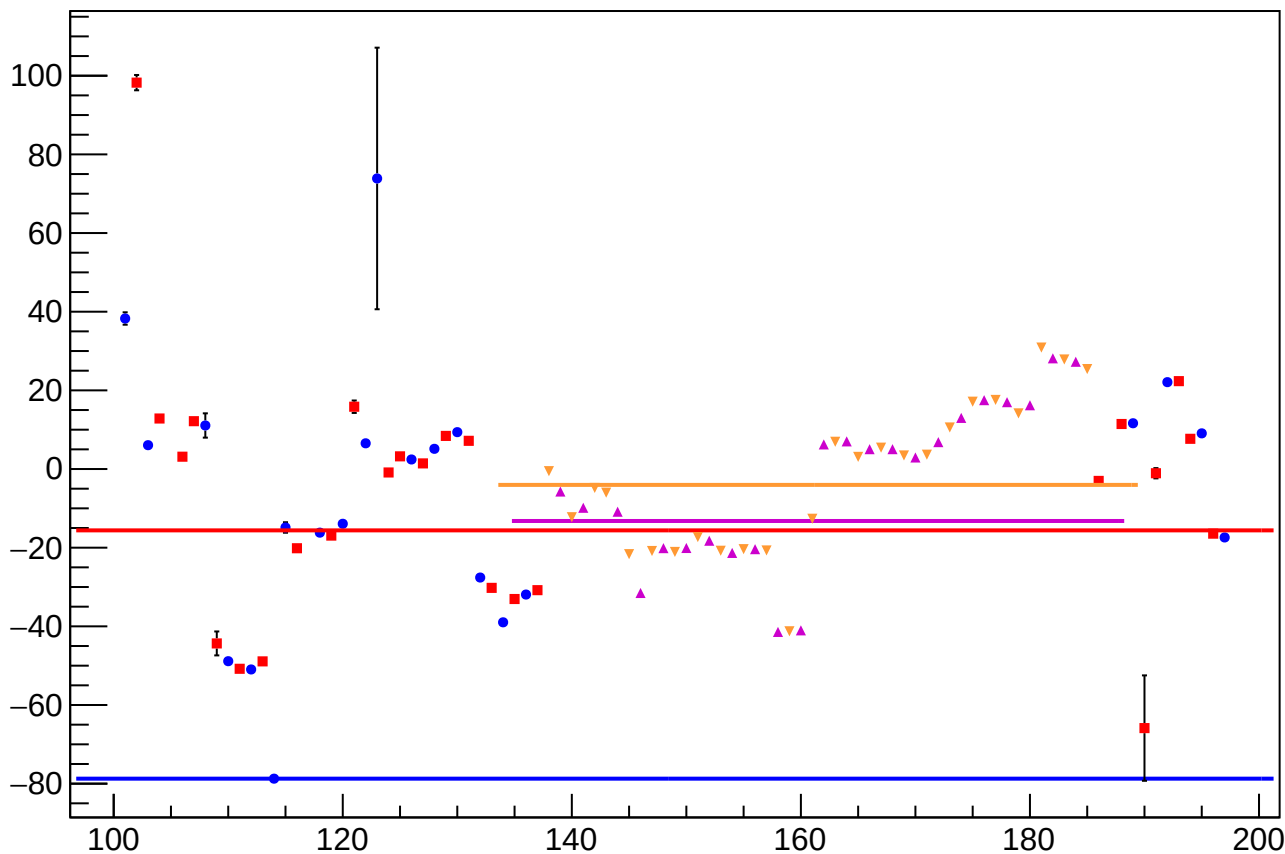
Right:  $-292.986 \pm 0.000$   $\chi^2/\text{NDF}: 3119087.6/45$

In:  $-292.986 \pm 0.000$   $\chi^2/\text{NDF}: 5268900.4/43$

Out:  $-262.986 \pm 0.017$   $\chi^2/\text{NDF}: 2459278.0/49$

All:  $-292.986 \pm 0.000$   $\chi^2/\text{NDF}: 10730850.3/9$

# dit\_atr2\_4aY\_slope vs Slug, Sign Corrected



Right In: -78.728 +/- 0.000  $\chi^2/\text{NDF}$ : 1608960.9/20

Left Out: -4.036 +/- 0.017  $\chi^2/\text{NDF}$ : 1369619.3/24

Right Out: -15.598 +/- 0.066  $\chi^2/\text{NDF}$ : 99117.3/24

Left In: -13.213 +/- 0.017  $\chi^2/\text{NDF}$ : 1356033.4/22

Left: -8.666 +/- 0.012  $\chi^2/\text{NDF}$ : 2871427.0/47

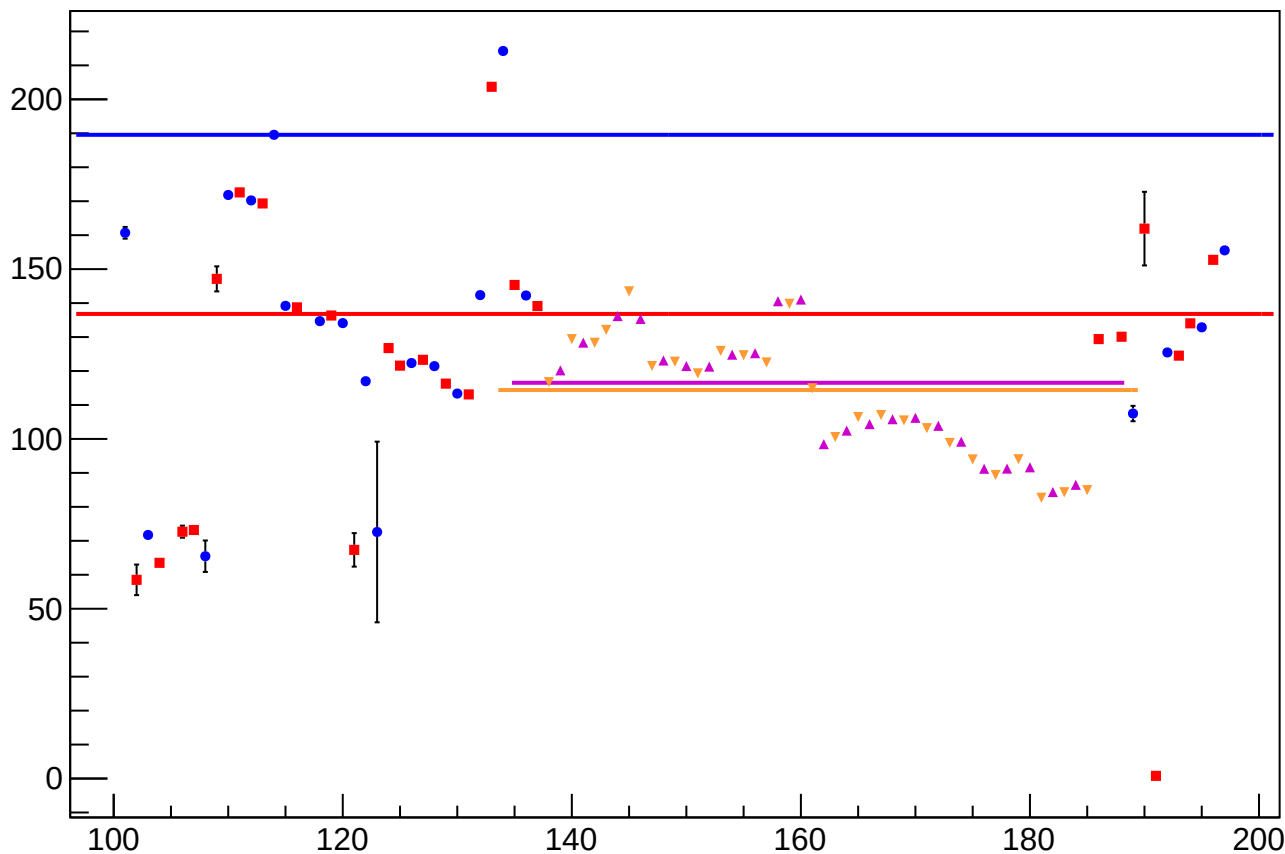
Right: -78.728 +/- 0.000  $\chi^2/\text{NDF}$ : 2635835.0/45

In: -78.728 +/- 0.000  $\chi^2/\text{NDF}$ : 17961769.3/43

Out: -4.770 +/- 0.017  $\chi^2/\text{NDF}$ : 1497881.5/49

All: -78.728 +/- 0.000  $\chi^2/\text{NDF}$ : 39498956.2/93

# dit\_atr2\_4eY\_slope vs Slug, Sign Corrected



Right In: 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 1018276.3/20

Left Out: 114.395 $\pm$ 0.023  $\chi^2$ /NDF:434871.2/24

Right Out: 136.808 $\pm$ 0.056  $\chi^2$ /NDF: 128401.1/24

Left In: 116.538 $\pm$ 0.024  $\chi^2$ /NDF:458128.6/22

Left: 115.418 $\pm$ 0.016  $\chi^2$ /NDF: 897301.5/47

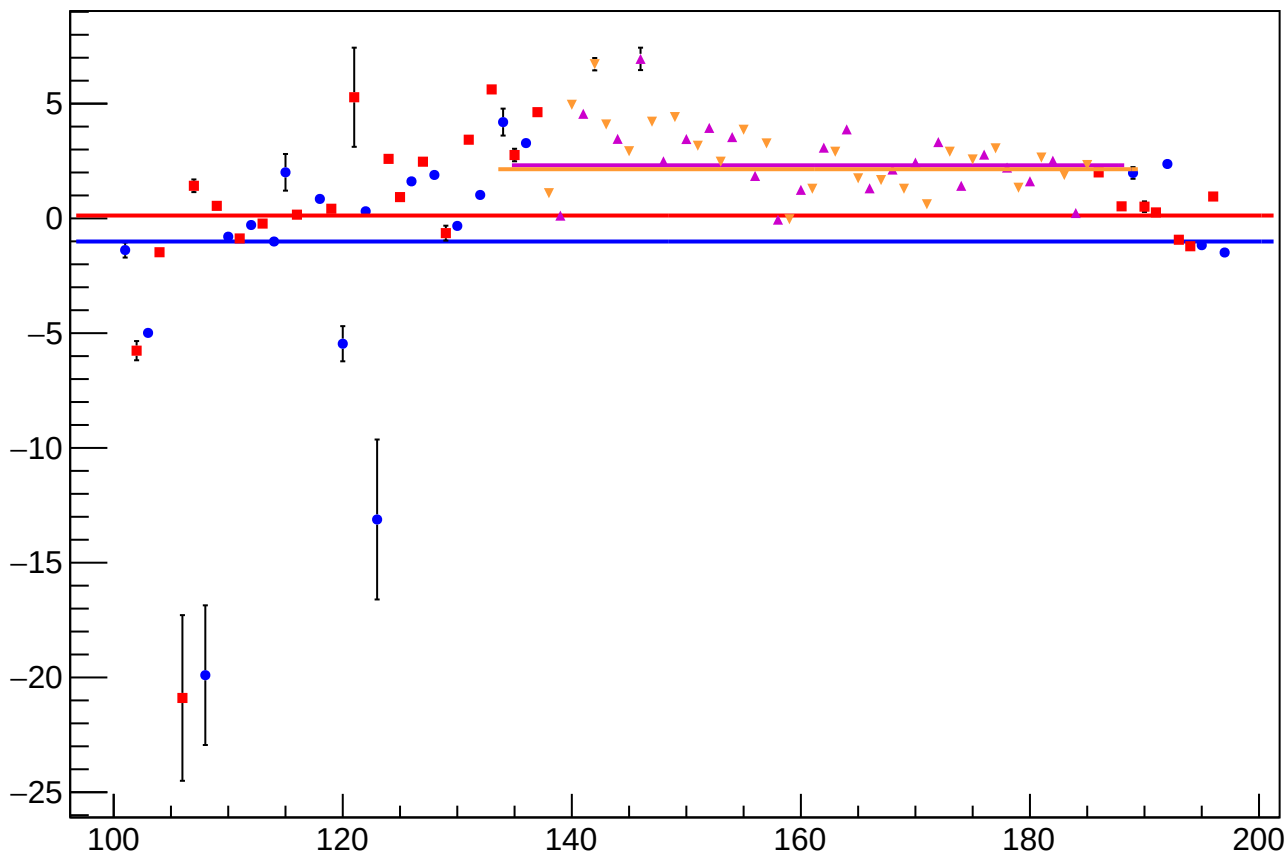
Right: 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 2026247.0/45

In: 189.551 $\pm$ 0.000  $\chi^2$ /NDF:11038217.5/43

Out: 117.505 $\pm$ 0.021  $\chi^2$ /NDF:700067.9/49

All: 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 23567315.3/93

# dit\_sam1\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-1.007 \pm 0.000$   $\chi^2/\text{NDF}$ : 7923.3/20

Left Out:  $2.143 \pm 0.015$   $\chi^2/\text{NDF}$ : 6585.0/24

Right Out:  $0.125 \pm 0.014$   $\chi^2/\text{NDF}$ : 5582.1/24

Left In:  $2.313 \pm 0.014$   $\chi^2/\text{NDF}$ : 7446.3/22

Left:  $2.231 \pm 0.010$   $\chi^2/\text{NDF}$ : 14101.5/47

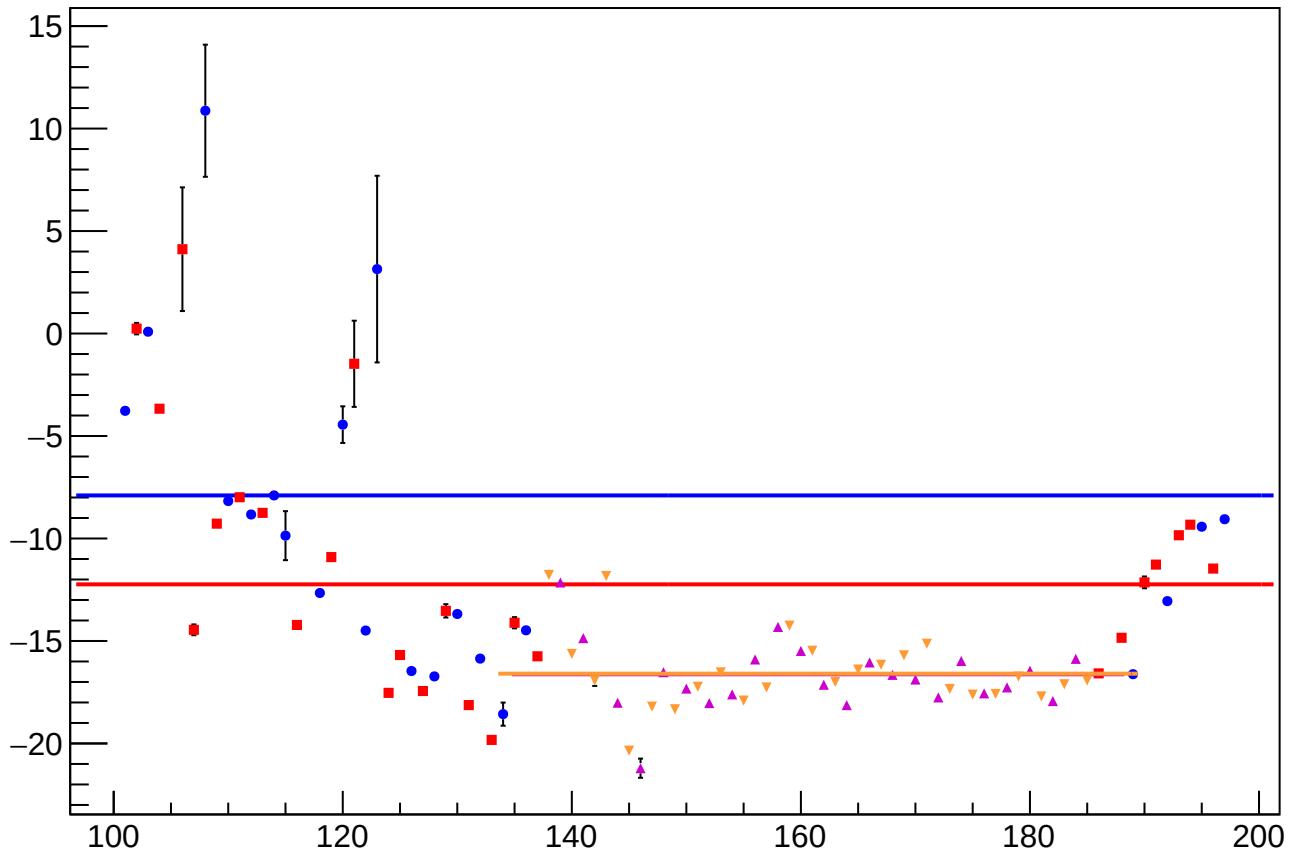
Right:  $-1.007 \pm 0.000$   $\chi^2/\text{NDF}$ : 19824.1/45

In:  $-1.007 \pm 0.000$   $\chi^2/\text{NDF}$ : 71093.6/43

Out:  $1.105 \pm 0.010$   $\chi^2/\text{NDF}$ : 21922.4/49

All:  $-1.007 \pm 0.000$   $\chi^2/\text{NDF}$ : 135800.7/93

# dit\_sam1\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-7.899 \pm 0.000$   $\chi^2/\text{NDF}: 46201.8/20$

Left Out:  $-16.595 \pm 0.014$   $\chi^2/\text{NDF}: 8432.7/24$

Right Out:  $-12.237 \pm 0.017$   $\chi^2/\text{NDF}: 34281.9/24$

Left In:  $-16.625 \pm 0.015$   $\chi^2/\text{NDF}: 6289.5/22$

Left:  $-16.610 \pm 0.010$   $\chi^2/\text{NDF}: 14724.4/47$

Right:  $-7.899 \pm 0.000$   $\chi^2/\text{NDF}: 146620.8/45$

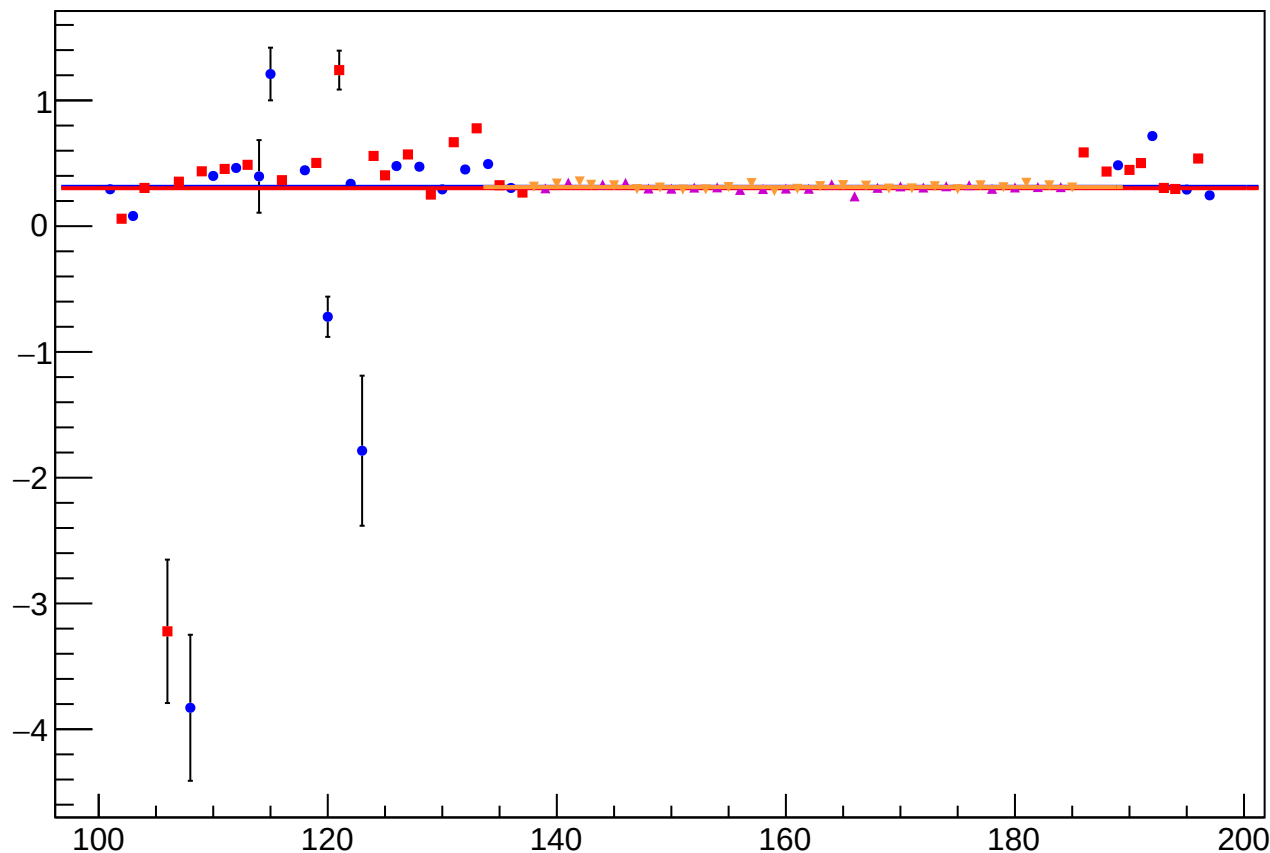
In:  $-7.899 \pm 0.000$   $\chi^2/\text{NDF}: 405299.1/43$

Out:  $-14.761 \pm 0.011$   $\chi^2/\text{NDF}: 81372.3/49$

All:  $-7.899 \pm 0.000$   $\chi^2/\text{NDF}: 879996.2/93$



# dit\_sam1\_11X12X\_slope vs Slug, Sign Corrected



Right In: 0.313 $\pm$ 0.001  $\chi^2$ /NDF: 3329.3/20

Left Out: 0.311 $\pm$ 0.000  $\chi^2$ /NDF:4975.7/24

Right Out: 0.302 $\pm$ 0.001  $\chi^2$ /NDF: 7230.6/24

Left In: 0.310 $\pm$ 0.000  $\chi^2$ /NDF:3074.6/22

Left: 0.310 $\pm$ 0.000  $\chi^2$ /NDF: 8056.7/47

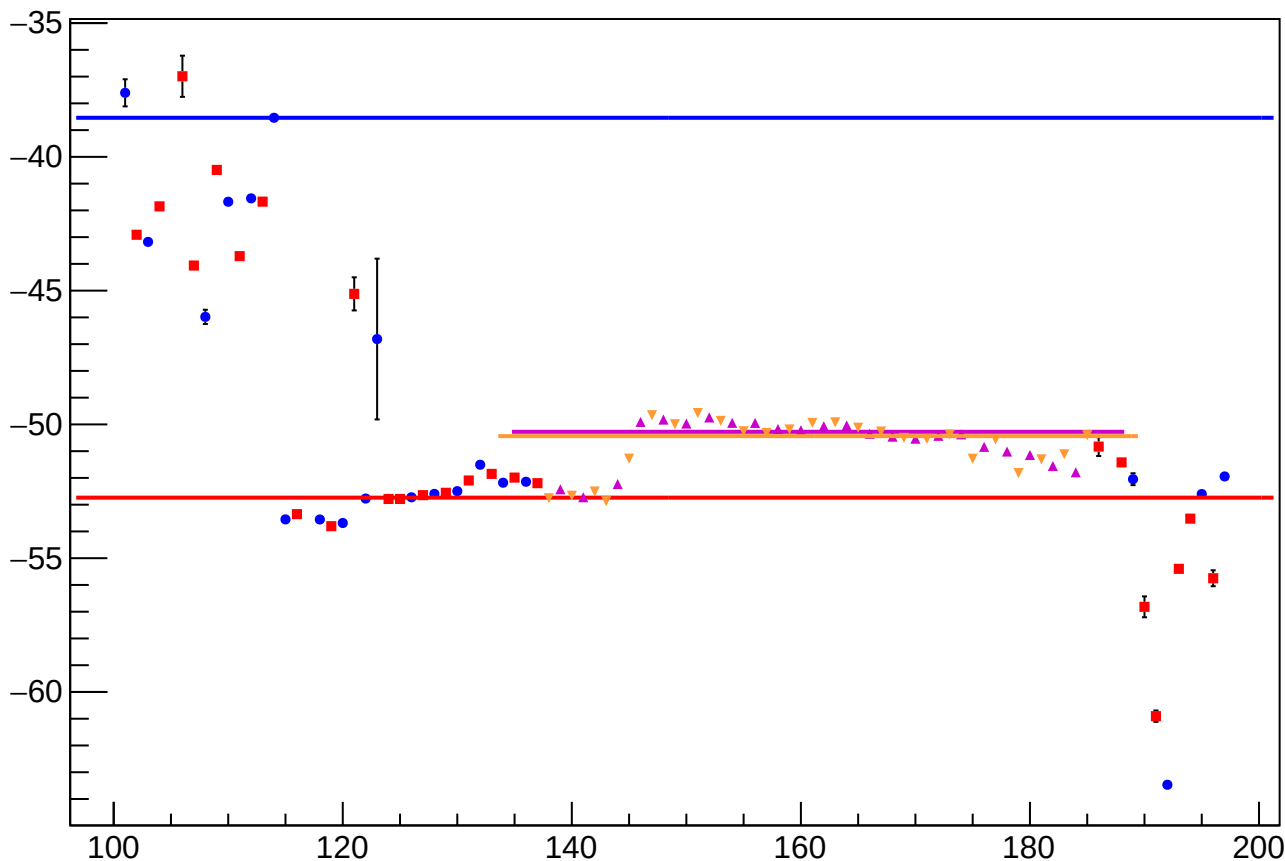
Right: 0.307 $\pm$ 0.001  $\chi^2$ /NDF: 10640.4/45

In: 0.310 $\pm$ 0.000  $\chi^2$ /NDF:6414.1/43

Out: 0.310 $\pm$ 0.000  $\chi^2$ /NDF:12314.3/49

All: 0.310 $\pm$ 0.000  $\chi^2$ /NDF: 18728.4/93

# dit\_sam1\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}: 15049415.5/20$

Left Out:  $-50.438 \pm 0.001$   $\chi^2/\text{NDF}: 299897.3/24$

Right Out:  $-52.737 \pm 0.002$   $\chi^2/\text{NDF}: 84032.4/24$

Left In:  $-50.276 \pm 0.001$   $\chi^2/\text{NDF}: 190236.3/22$

Left:  $-50.350 \pm 0.001$   $\chi^2/\text{NDF}: 497837.6/47$

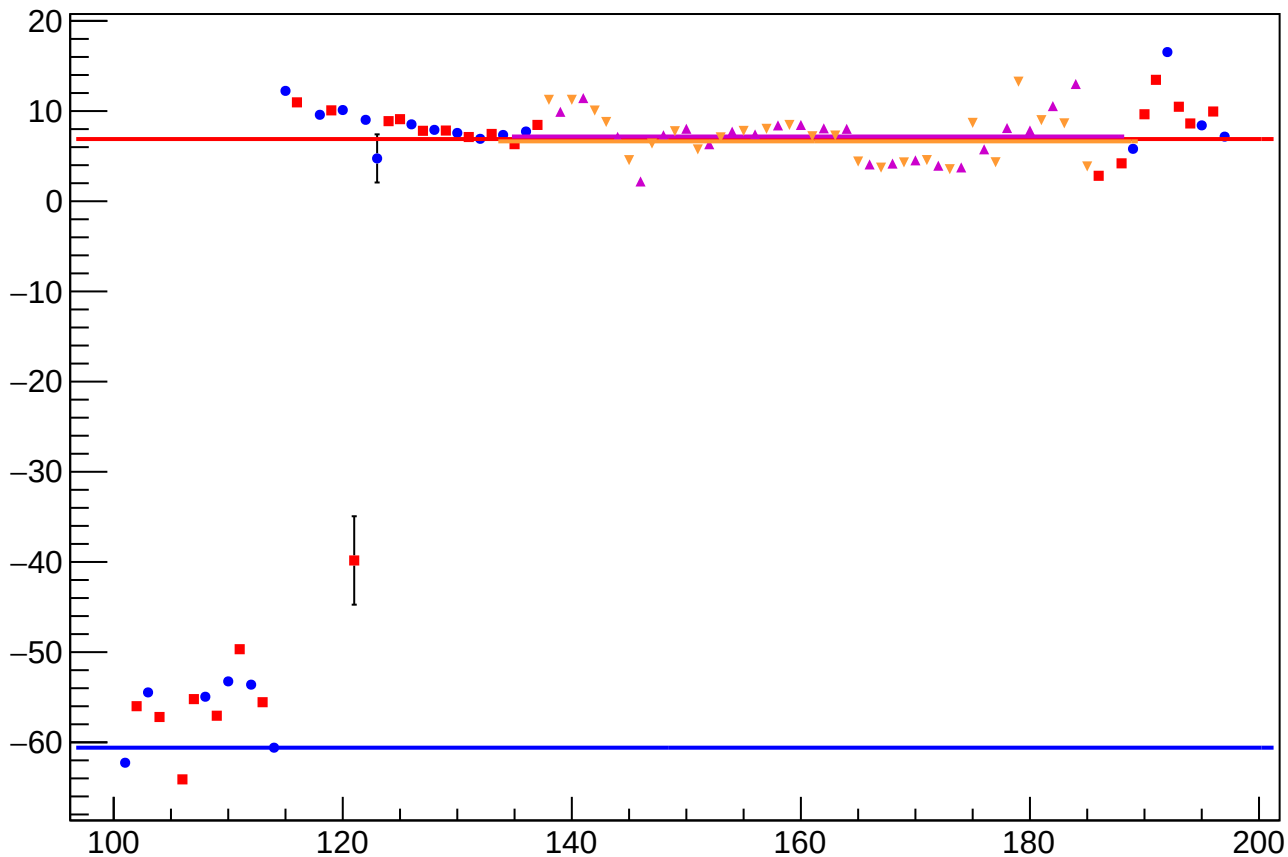
Right:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}: 72327809.9/45$

In:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}: 103208476.6/43$

Out:  $-51.236 \pm 0.001$   $\chi^2/\text{NDF}: 1362758.5/49$

All:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}: 236366097.5/9$

# dit\_sam1\_4eY\_slope vs Slug, Sign Corrected



Right In:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 28538219.1/20$

Left Out:  $6.641 \pm 0.004$   $\chi^2/\text{NDF}: 340462.4/24$

Right Out:  $6.897 \pm 0.011$   $\chi^2/\text{NDF}: 1163338.9/24$

Left In:  $7.179 \pm 0.003$   $\chi^2/\text{NDF}: 214127.6/22$

Left:  $6.926 \pm 0.003$   $\chi^2/\text{NDF}: 565961.5/47$

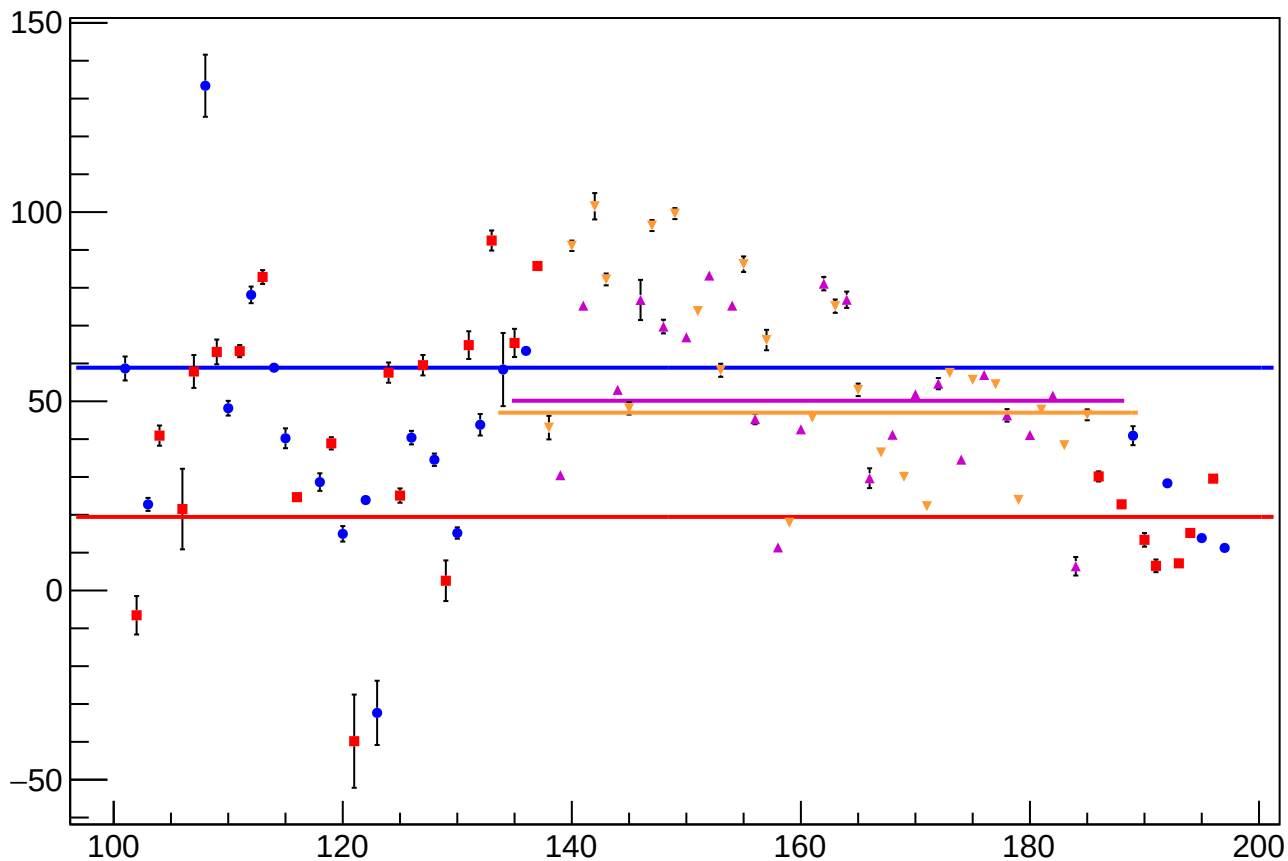
Right:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 70263903.1/45$

In:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 412609081.1/43$

Out:  $6.668 \pm 0.003$   $\chi^2/\text{NDF}: 1504322.9/49$

All:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 788740355.5/9$

# dit\_sam2\_4aX\_slope vs Slug, Sign Corrected



Right In: 58.880 $\pm$ 0.000  $\chi^2$ /NDF: 23272.8/20

Left Out: 46.995 $\pm$ 0.215  $\chi^2$ /NDF:9203.7/24

Right Out: 19.451 $\pm$ 0.167  $\chi^2$ /NDF: 10691.3/24

Left In: 50.144 $\pm$ 0.212  $\chi^2$ /NDF:6667.7/22

Left: 48.595 $\pm$ 0.151  $\chi^2$ /NDF: 15980.5/47

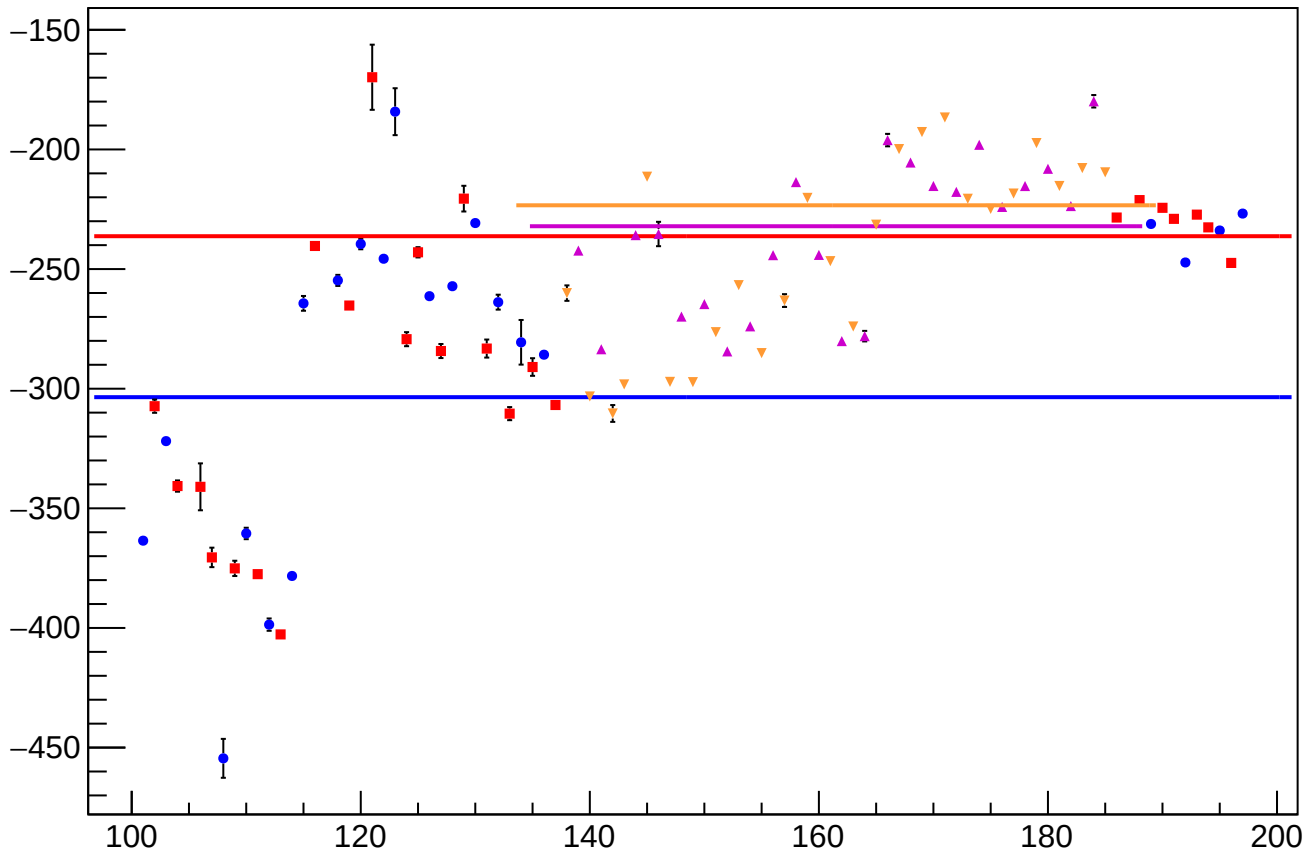
Right: 58.880 $\pm$ 0.000  $\chi^2$ /NDF: 89925.8/45

In: 58.880 $\pm$ 0.000  $\chi^2$ /NDF:31646.4/43

Out: 29.792 $\pm$ 0.132  $\chi^2$ /NDF:30148.4/49

All: 58.880 $\pm$ 0.000  $\chi^2$ /NDF: 110559.7/93

# dit\_sam2\_4eX\_slope vs Slug, Sign Corrected



Right In: -303.540 $\pm$ 0.189  $\chi^2$ /NDF: 134444.1/20

Left Out: -223.342 $\pm$ 0.215  $\chi^2$ /NDF:22293.9/24

Right Out: -236.263 $\pm$ 0.150  $\chi^2$ /NDF: 28343.9/24

Left In: -232.094 $\pm$ 0.217  $\chi^2$ /NDF:17468.1/22

Left: -227.678 $\pm$ 0.153  $\chi^2$ /NDF: 40579.8/47

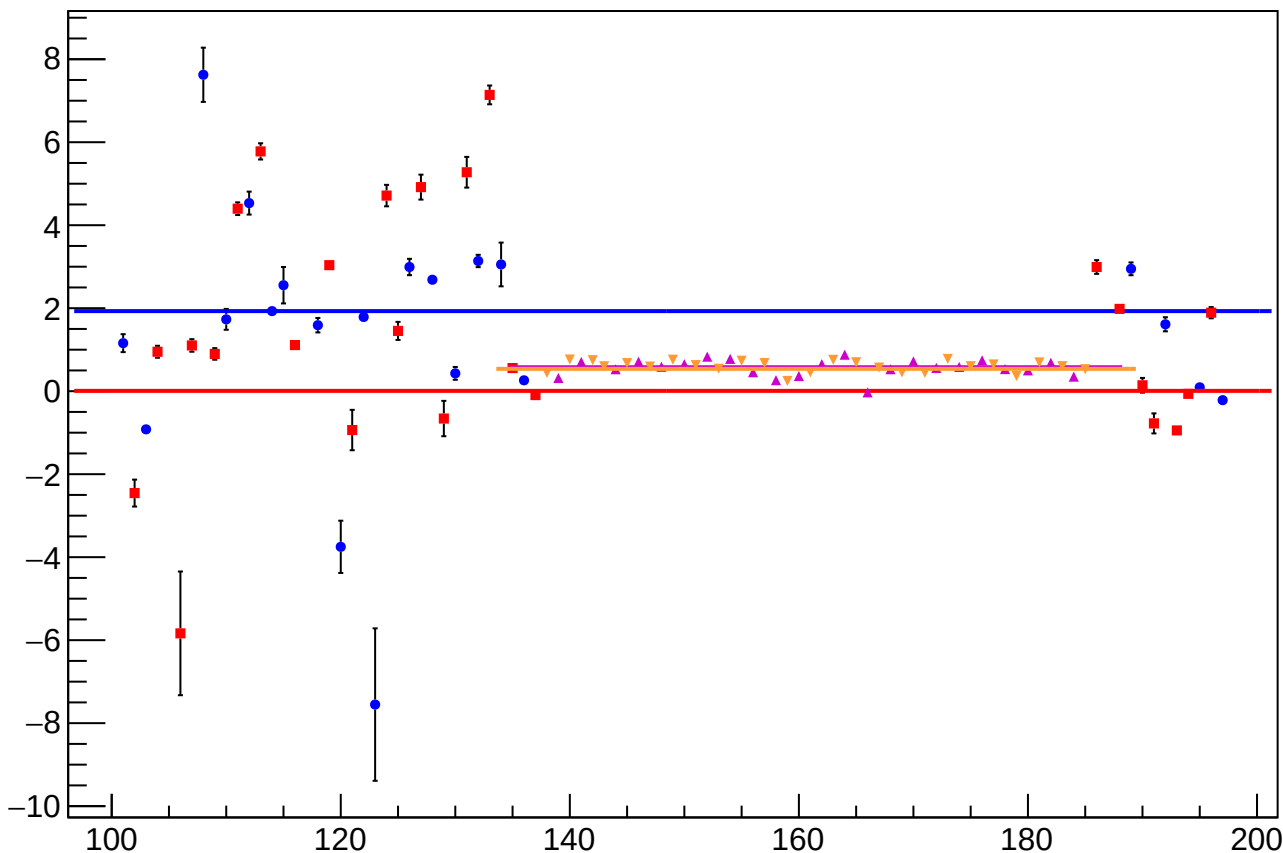
Right: -262.290 $\pm$ 0.118  $\chi^2$ /NDF: 240455.4/45

In: -272.782 $\pm$ 0.143  $\chi^2$ /NDF:213412.5/43

Out: -232.038 $\pm$ 0.123  $\chi^2$ /NDF:53058.9/49

All: -249.442 $\pm$ 0.093  $\chi^2$ /NDF: 313204.4/93

# dit\_sam2\_11X12X\_slope vs Slug, Sign Corrected



Right In: 1.930 $\pm$ 0.000  $\chi^2$ /NDF: 63866.8/20

Left Out: 0.539 $\pm$ 0.002  $\chi^2$ /NDF:10792.6/24

Right Out: 0.008 $\pm$ 0.004  $\chi^2$ /NDF: 10776.2/24

Left In: 0.577 $\pm$ 0.001  $\chi^2$ /NDF:15533.6/22

Left: 0.561 $\pm$ 0.001  $\chi^2$ /NDF: 26629.0/47

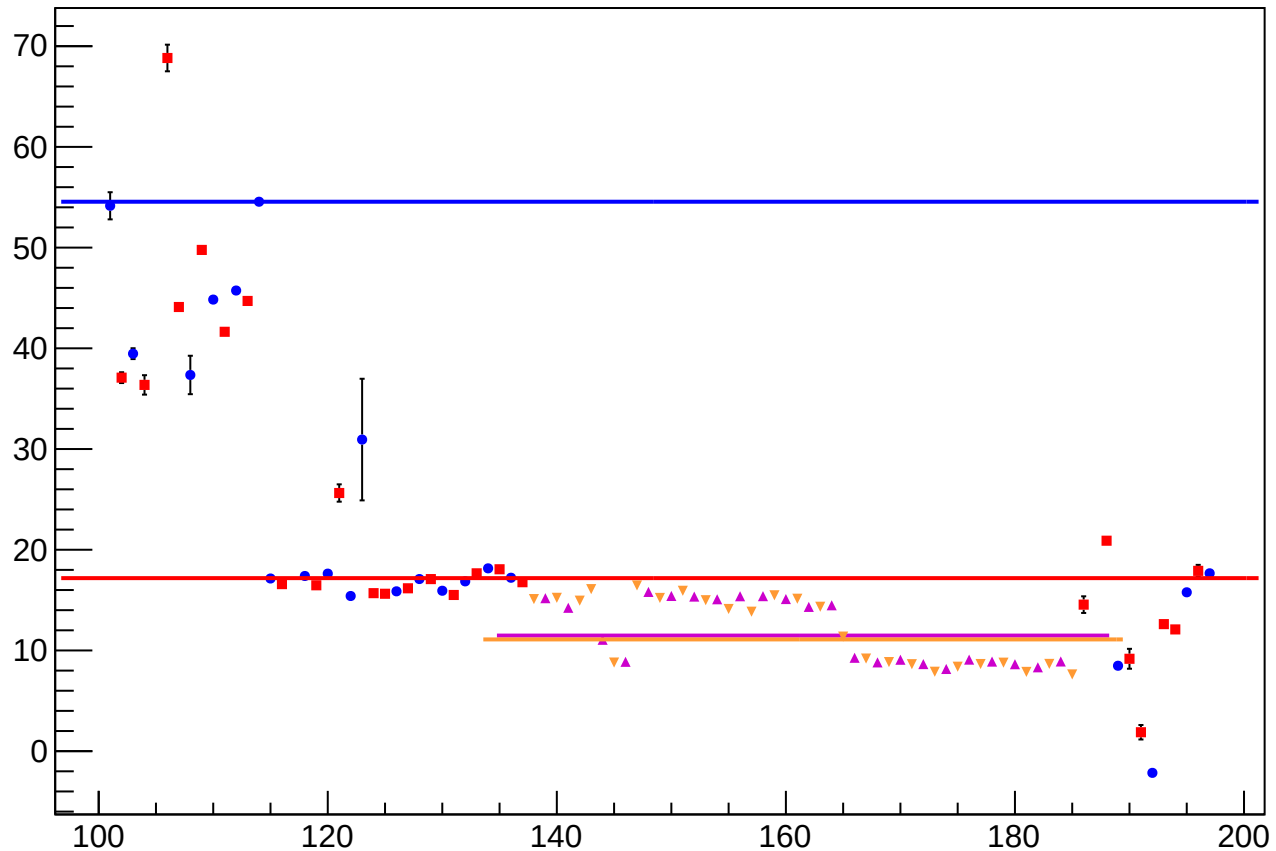
Right: 1.930 $\pm$ 0.000  $\chi^2$ /NDF: 273102.8/45

In: 1.930 $\pm$ 0.000  $\chi^2$ /NDF:948597.6/43

Out: 0.469 $\pm$ 0.002  $\chi^2$ /NDF:34727.2/49

All: 1.930 $\pm$ 0.000  $\chi^2$ /NDF: 1859910.2/93

# dit\_sam2\_4aY\_slope vs Slug, Sign Corrected



Right In: 54.556 $\pm$ 0.000  $\chi^2$ /NDF: 9946152.2/20

Left Out: 11.095 $\pm$ 0.005  $\chi^2$ /NDF: 381518.3/24

Right Out: 17.182 $\pm$ 0.018  $\chi^2$ /NDF: 62474.6/24

Left In: 11.477 $\pm$ 0.005  $\chi^2$ /NDF: 381285.2/22

Left: 11.291 $\pm$ 0.004  $\chi^2$ /NDF: 765409.6/47

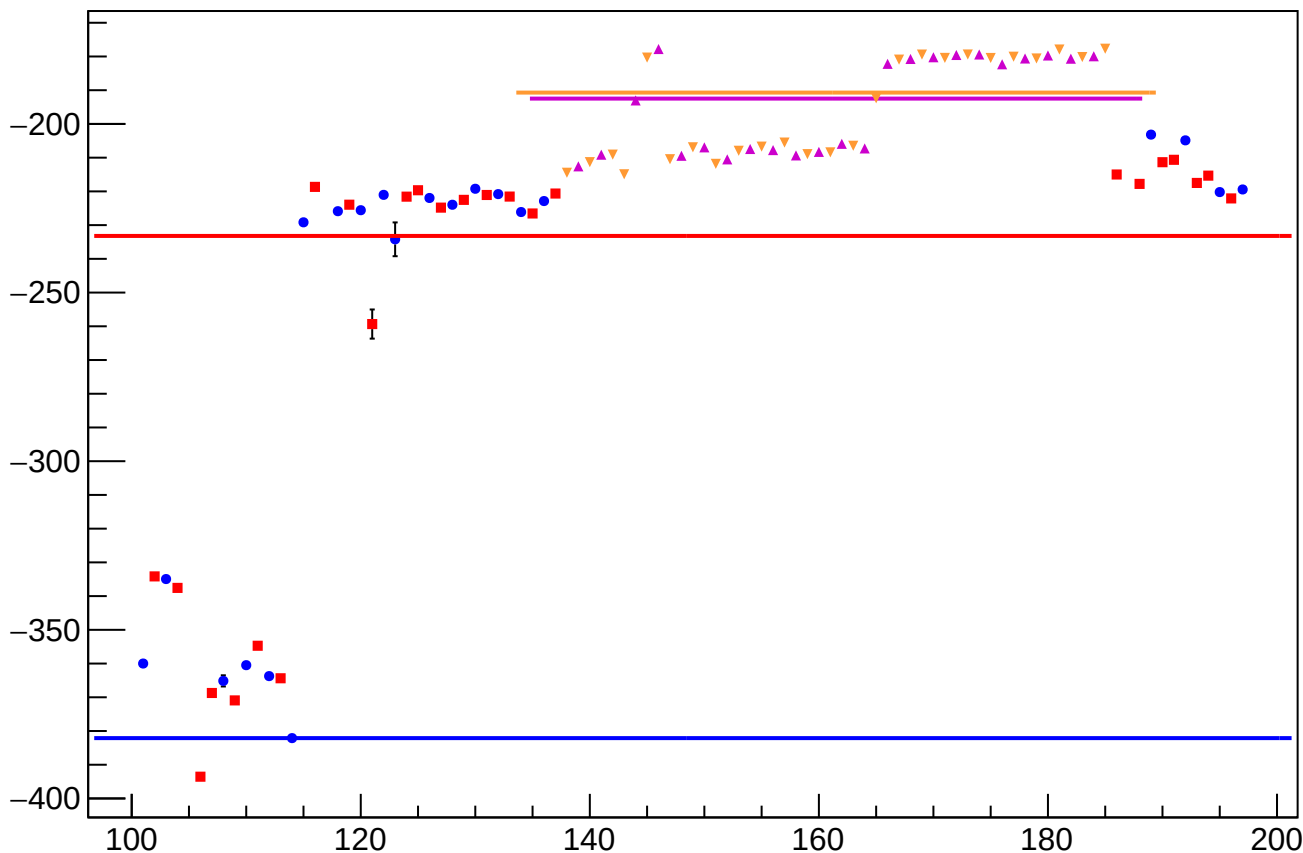
Right: 54.556 $\pm$ 0.000  $\chi^2$ /NDF: 14283096.3/45

In: 54.556 $\pm$ 0.000  $\chi^2$ /NDF: 78272888.1/43

Out: 11.587 $\pm$ 0.005  $\chi^2$ /NDF: 548195.2/49

All: 54.556 $\pm$ 0.000  $\chi^2$ /NDF: 148816630.9/93

# dit\_sam2\_4eY\_slope vs Slug, Sign Corrected



Right In:  $-382.108 \pm 0.000$   $\chi^2/\text{NDF}: 19497846.9/20$

Left Out:  $-190.703 \pm 0.011$   $\chi^2/\text{NDF}: 1602184.8/24$

Right Out:  $-233.207 \pm 0.047$   $\chi^2/\text{NDF}: 655252.4/24$

Left In:  $-192.488 \pm 0.011$   $\chi^2/\text{NDF}: 1500910.9/22$

Left:  $-191.577 \pm 0.008$   $\chi^2/\text{NDF}: 3115630.8/47$

Right:  $-382.108 \pm 0.000$   $\chi^2/\text{NDF}: 30233191.9/45$

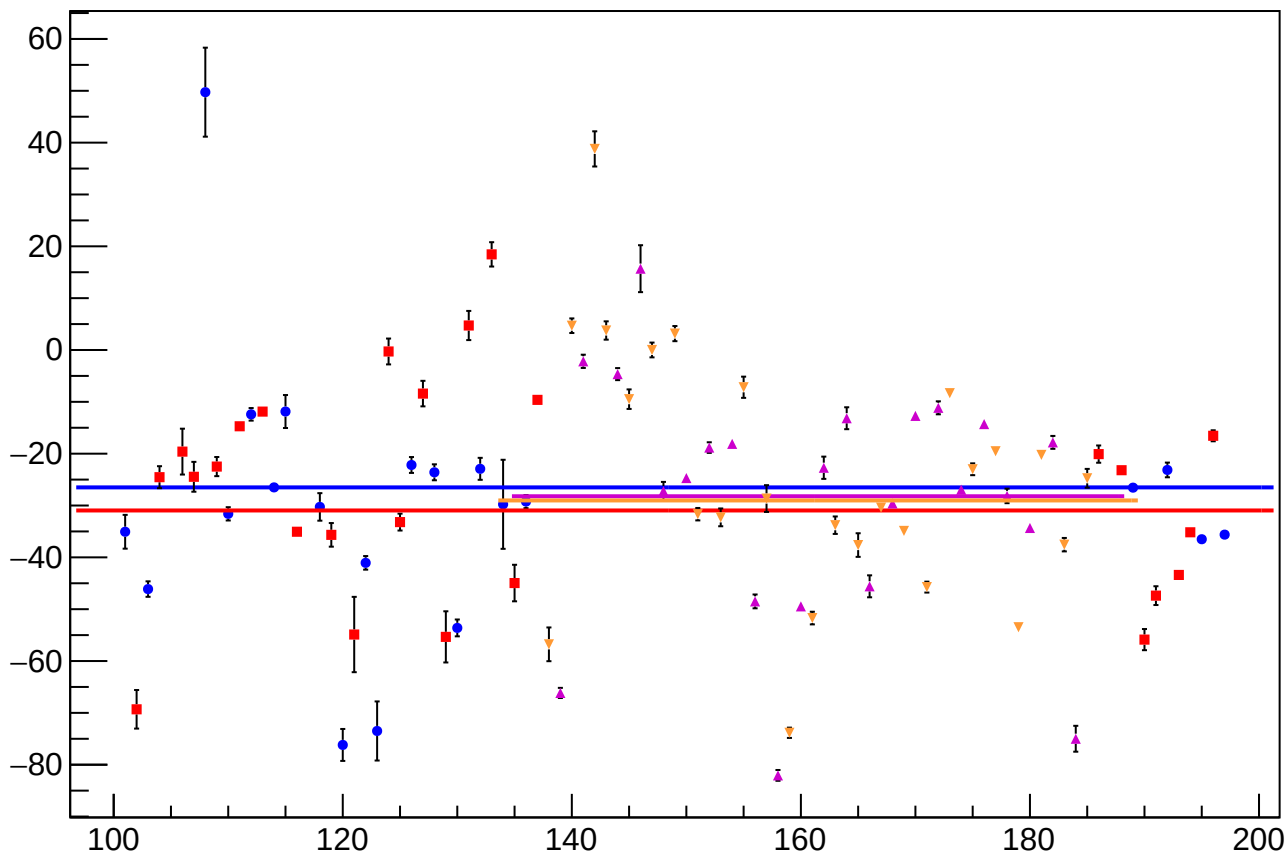
In:  $-382.108 \pm 0.000$   $\chi^2/\text{NDF}: 298112003.1/43$

Out:  $-192.979 \pm 0.011$   $\chi^2/\text{NDF}: 3034838.3/49$

All:  $-382.108 \pm 0.000$   $\chi^2/\text{NDF}: 604786178.6/100$



# dit\_sam3\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-26.504 \pm 0.000$   $\chi^2/\text{NDF}: 1731.9/20$   
 Left Out:  $-29.022 \pm 0.235$   $\chi^2/\text{NDF}: 7110.5/24$   
 Right Out:  $-30.956 \pm 0.173$   $\chi^2/\text{NDF}: 4523.2/24$   
 Left In:  $-28.215 \pm 0.215$   $\chi^2/\text{NDF}: 7786.5/22$

Left:  $-28.582 \pm 0.158$   $\chi^2/\text{NDF}: 14903.4/47$

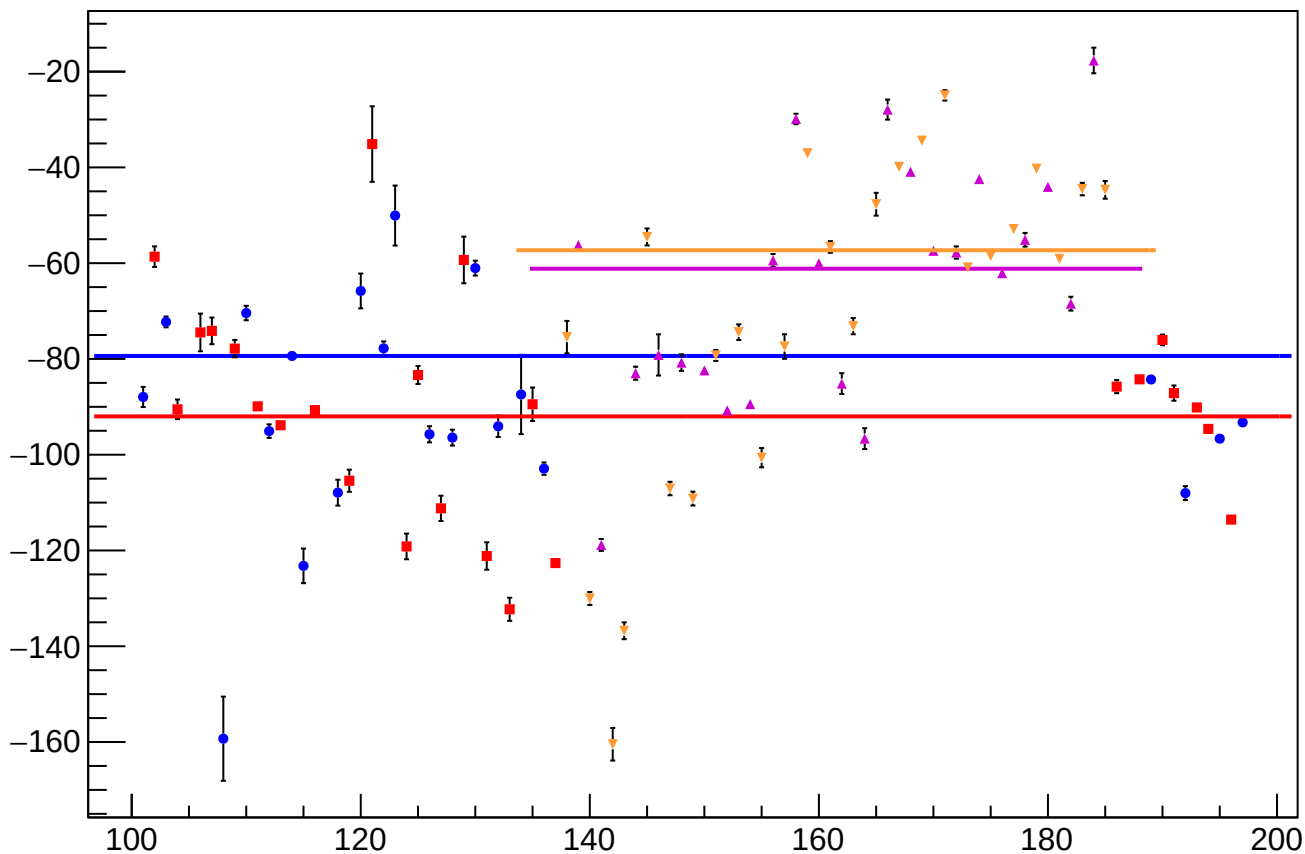
Right:  $-26.504 \pm 0.000$   $\chi^2/\text{NDF}: 6919.4/45$

In:  $-26.504 \pm 0.000$   $\chi^2/\text{NDF}: 9582.0/43$

Out:  $-30.277 \pm 0.139$   $\chi^2/\text{NDF}: 11677.7/49$

All:  $-26.504 \pm 0.000$   $\chi^2/\text{NDF}: 21995.1/93$

# dit\_sam3\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}$ : 3485.5/20

Left Out:  $-57.300 \pm 0.229$   $\chi^2/\text{NDF}$ : 13067.7/24

Right Out:  $-91.998 \pm 0.147$   $\chi^2/\text{NDF}$ : 3204.0/24

Left In:  $-61.164 \pm 0.218$   $\chi^2/\text{NDF}$ : 8941.7/22

Left:  $-59.332 \pm 0.158$   $\chi^2/\text{NDF}$ : 22158.9/47

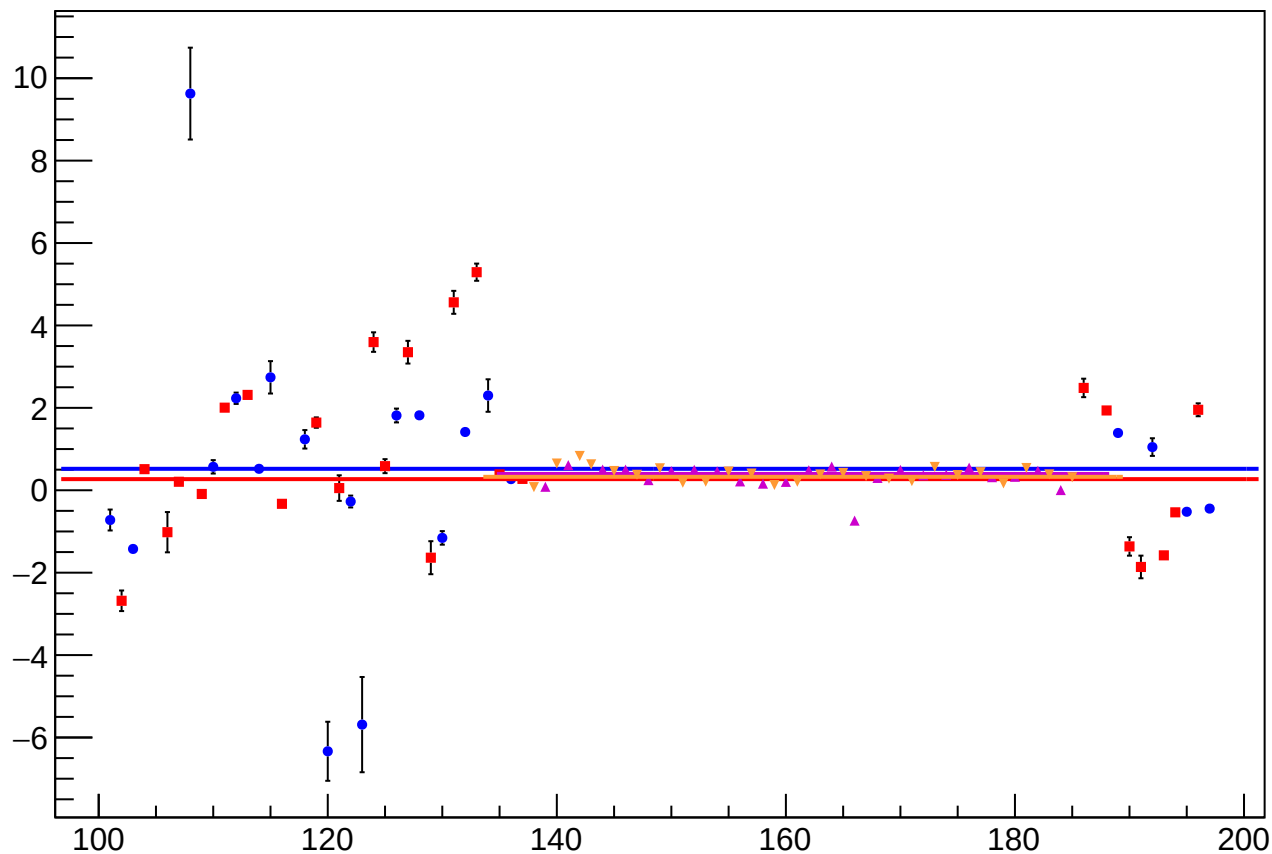
Right:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}$ : 14085.9/45

In:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}$ : 19433.1/43

Out:  $-81.908 \pm 0.124$   $\chi^2/\text{NDF}$ : 32526.1/49

All:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}$ : 52378.8/93

# dit\_sam3\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $0.521 \pm 0.000$   $\chi^2/\text{NDF}: 3954.5/20$

Left Out:  $0.326 \pm 0.002$   $\chi^2/\text{NDF}: 10419.3/24$

Right Out:  $0.270 \pm 0.010$   $\chi^2/\text{NDF}: 5924.9/24$

Left In:  $0.396 \pm 0.001$   $\chi^2/\text{NDF}: 11392.0/22$

Left:  $0.365 \pm 0.001$   $\chi^2/\text{NDF}: 22859.4/47$

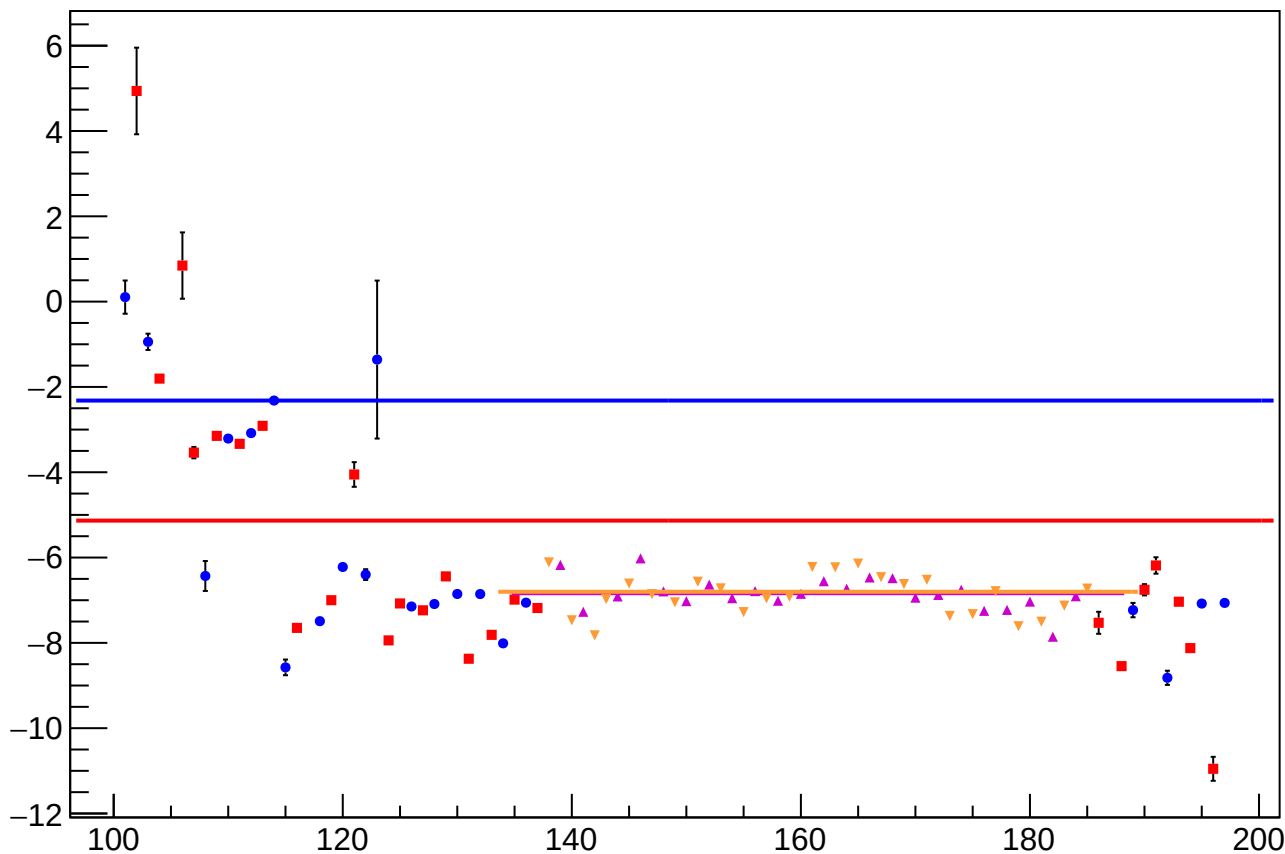
Right:  $0.521 \pm 0.000$   $\chi^2/\text{NDF}: 10483.1/45$

In:  $0.521 \pm 0.000$   $\chi^2/\text{NDF}: 22863.3/43$

Out:  $0.325 \pm 0.002$   $\chi^2/\text{NDF}: 16373.8/49$

All:  $0.521 \pm 0.000$   $\chi^2/\text{NDF}: 54564.3/93$

# dit\_sam3\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}: 281969.3/20$

Left Out:  $-6.802 \pm 0.002$   $\chi^2/\text{NDF}: 14918.8/24$

Right Out:  $-5.134 \pm 0.010$   $\chi^2/\text{NDF}: 53039.8/24$

Left In:  $-6.836 \pm 0.002$   $\chi^2/\text{NDF}: 9245.1/22$

Left:  $-6.819 \pm 0.002$   $\chi^2/\text{NDF}: 24259.8/47$

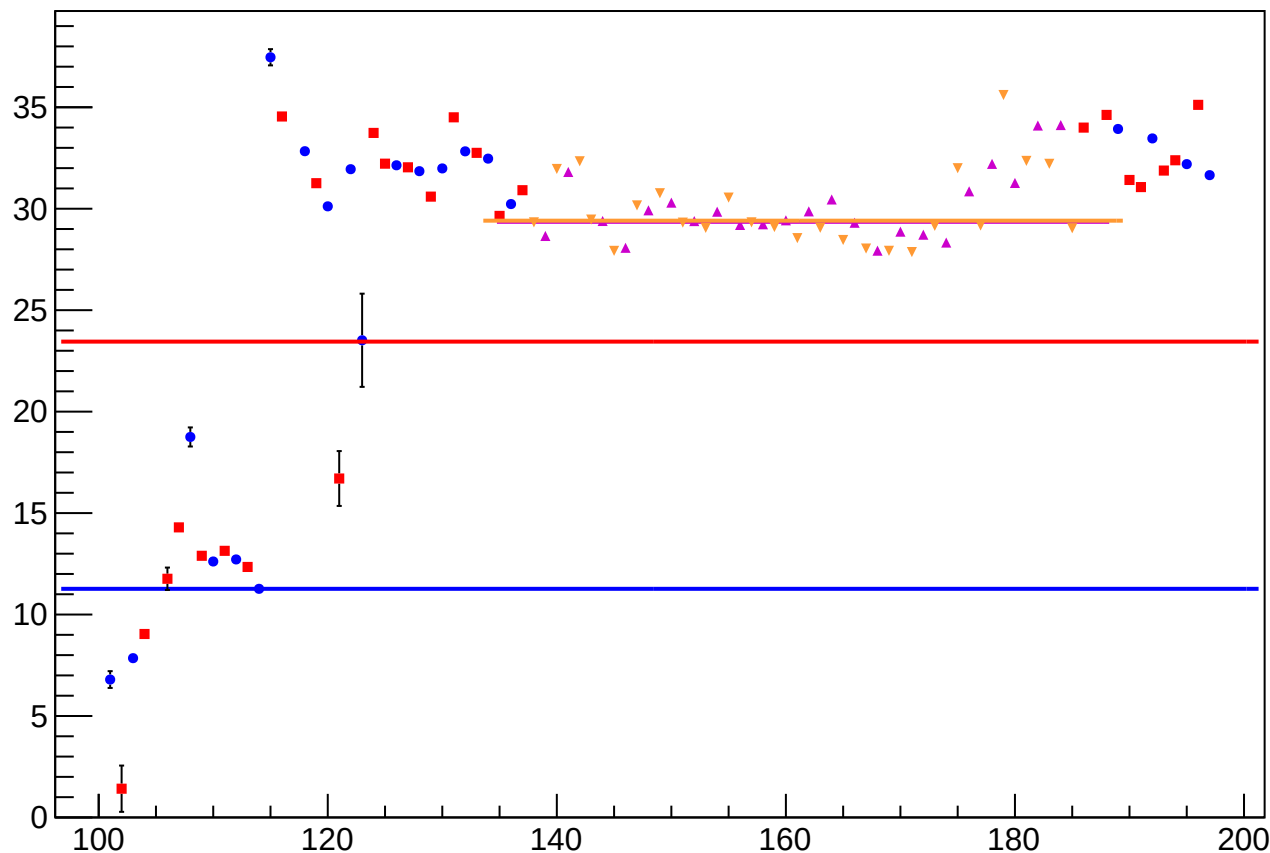
Right:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}: 417840.4/45$

In:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}: 3803294.4/43$

Out:  $-6.701 \pm 0.002$   $\chi^2/\text{NDF}: 95275.8/49$

All:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}: 7201991.4/93$

# dit\_sam3\_4eY\_slope vs Slug, Sign Corrected



Right In: 11.268+/-0.000  $\chi^2/\text{NDF}$ : 1171049.2/20

Left Out: 29.411+/-0.008  $\chi^2/\text{NDF}$ : 44374.5/24

Right Out: 23.451+/-0.016  $\chi^2/\text{NDF}$ : 402173.3/24

Left In: 29.354+/-0.008  $\chi^2/\text{NDF}$ : 14741.7/22

Left: 29.381+/-0.006  $\chi^2/\text{NDF}$ : 59141.7/47

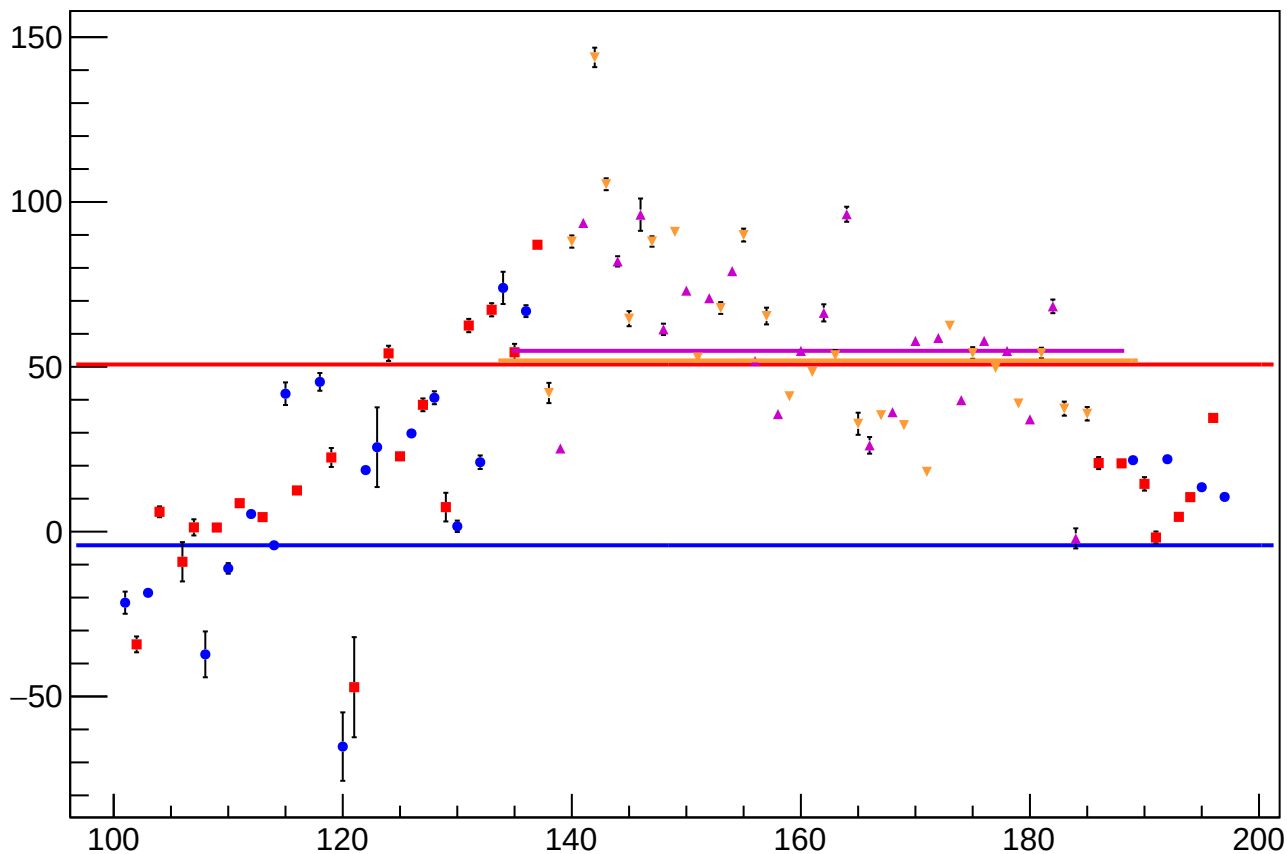
Right: 11.268+/-0.000  $\chi^2/\text{NDF}$ : 2157969.5/45

In: 11.268+/-0.000  $\chi^2/\text{NDF}$ : 6449983.1/43

Out: 28.167+/-0.007  $\chi^2/\text{NDF}$ : 557281.3/49

All: 11.268+/-0.000  $\chi^2/\text{NDF}$ : 12396528.3/93

# dit\_sam4\_4aX\_slope vs Slug, Sign Corrected



Right In:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}$ : 6466.0/20

Left Out:  $51.931 \pm 0.276$   $\chi^2/\text{NDF}$ : 6225.4/24

Right Out:  $50.706 \pm 0.159$   $\chi^2/\text{NDF}$ : 57185.5/24

Left In:  $54.849 \pm 0.247$   $\chi^2/\text{NDF}$ : 6325.8/22

Left:  $53.548 \pm 0.184$   $\chi^2/\text{NDF}$ : 12613.3/47

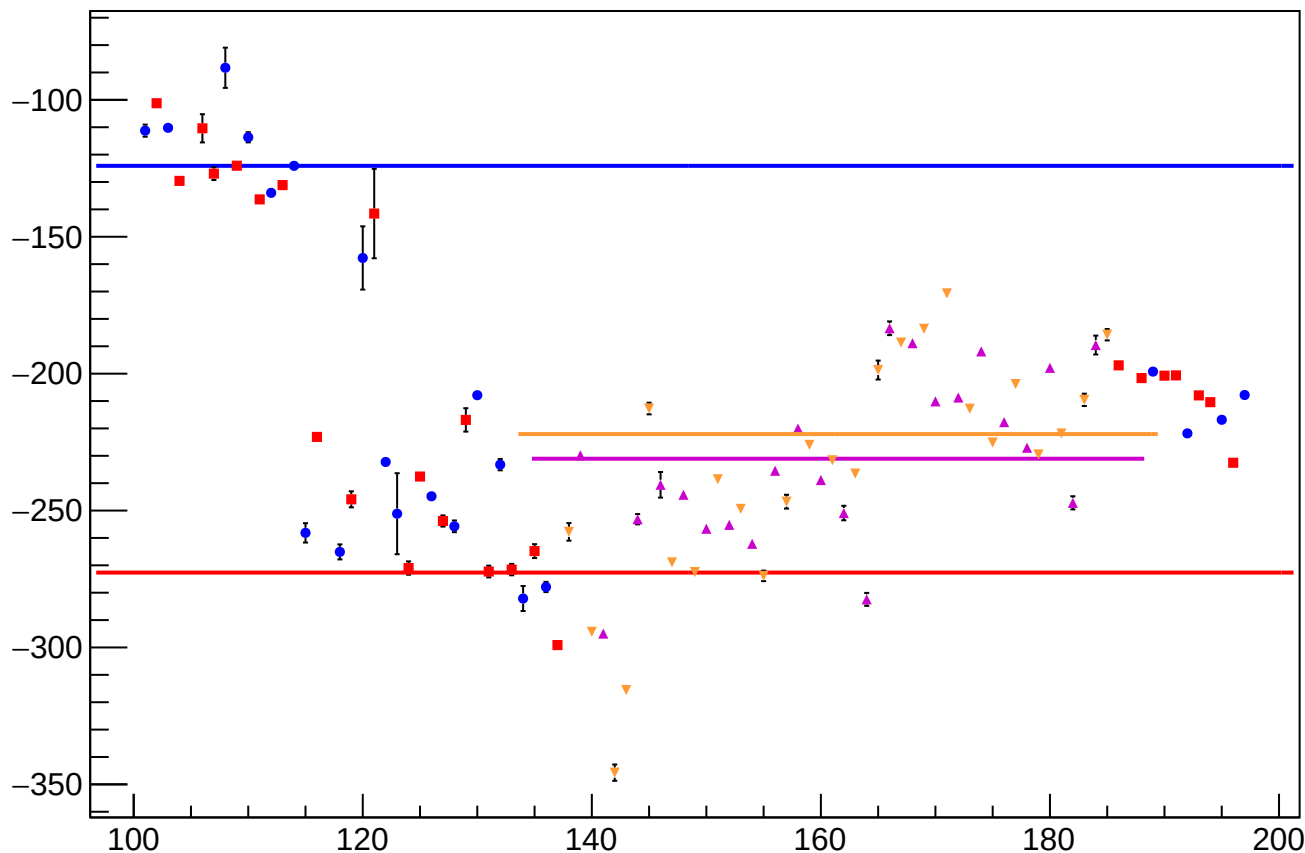
Right:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}$ : 182540.8/45

In:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}$ : 69746.4/43

Out:  $51.012 \pm 0.138$   $\chi^2/\text{NDF}$ : 63425.8/49

All:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}$ : 293452.7/93

# dit\_sam4\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-124.095 \pm 0.000$   $\chi^2/\text{NDF}$ : 86863.6/20

Left Out:  $-222.063 \pm 0.272$   $\chi^2/\text{NDF}$ : 15812.2/24

Right Out:  $-272.646 \pm 0.106$   $\chi^2/\text{NDF}$ : 200031.5/24

Left In:  $-231.069 \pm 0.249$   $\chi^2/\text{NDF}$ : 12005.6/22

Left:  $-226.957 \pm 0.184$   $\chi^2/\text{NDF}$ : 28412.7/47

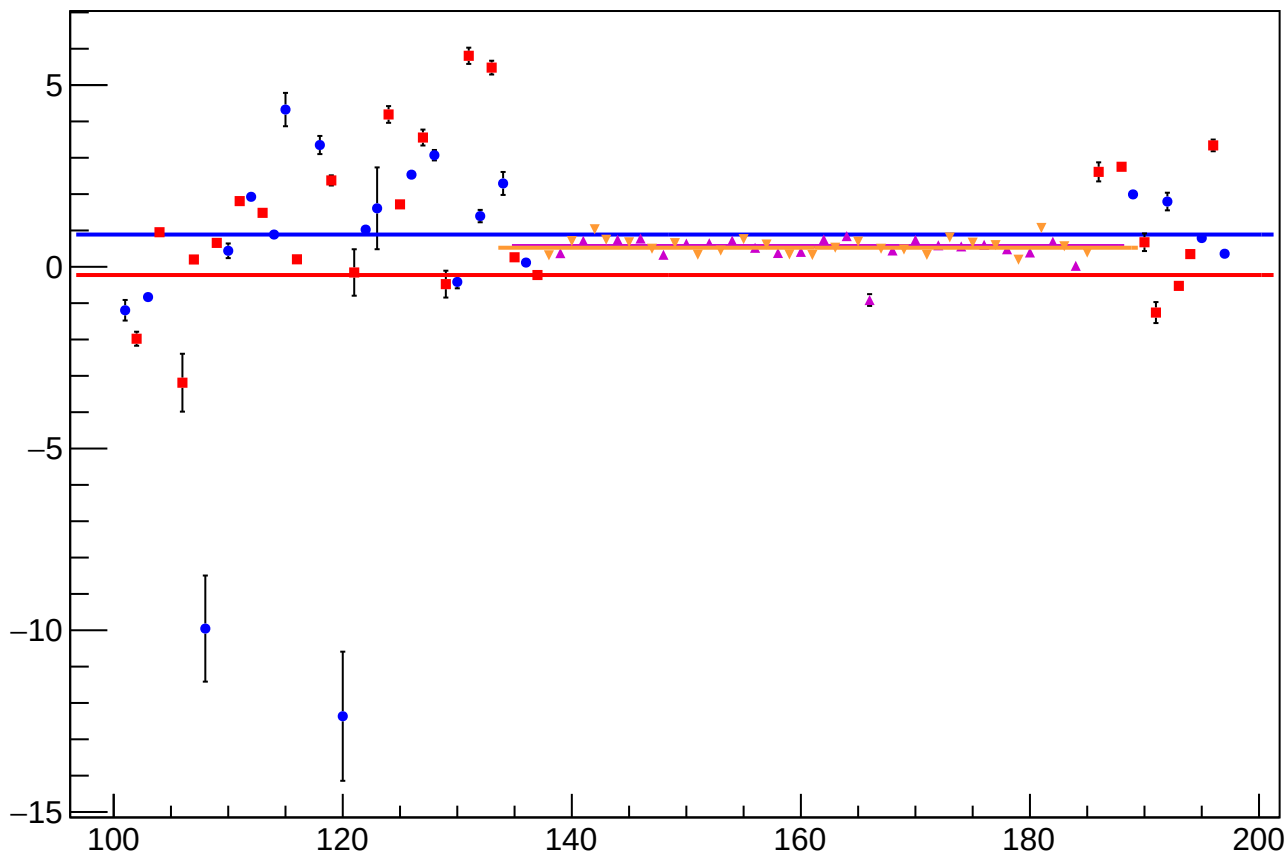
Right:  $-124.095 \pm 0.000$   $\chi^2/\text{NDF}$ : 2235154.1/45

In:  $-124.095 \pm 0.000$   $\chi^2/\text{NDF}$ : 282742.5/43

Out:  $-265.938 \pm 0.099$   $\chi^2/\text{NDF}$ : 245799.5/49

All:  $-124.095 \pm 0.000$   $\chi^2/\text{NDF}$ : 2576399.5/93

# dit\_sam4\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $0.888 \pm 0.000$   $\chi^2/\text{NDF}: 8813.4/20$

Left Out:  $0.525 \pm 0.002$   $\chi^2/\text{NDF}: 9207.9/24$

Right Out:  $-0.226 \pm 0.000$   $\chi^2/\text{NDF}: 6674.0/24$

Left In:  $0.572 \pm 0.002$   $\chi^2/\text{NDF}: 5600.2/22$

Left:  $0.549 \pm 0.001$   $\chi^2/\text{NDF}: 15080.9/47$

Right:  $0.888 \pm 0.000$   $\chi^2/\text{NDF}: 422222080.9/45$

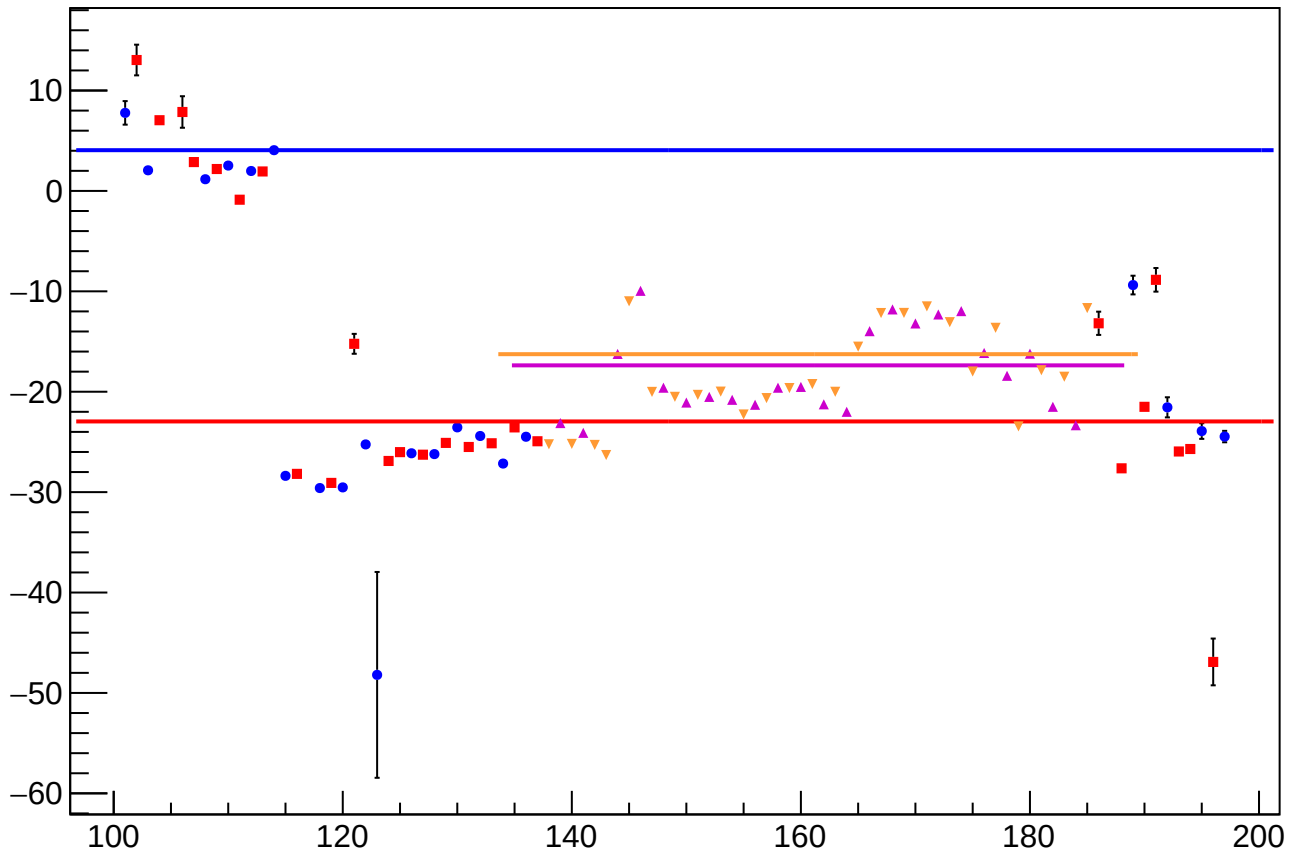
In:  $0.888 \pm 0.000$   $\chi^2/\text{NDF}: 39842.9/43$

Out:  $-0.225 \pm 0.000$   $\chi^2/\text{NDF}: 154403.9/49$

All:  $0.888 \pm 0.000$   $\chi^2/\text{NDF}: 422294657.6/93$



# dit\_sam4\_4aY\_slope vs Slug, Sign Corrected



Right In:  $4.057 \pm 0.000$   $\chi^2/\text{NDF}$ : 1252552.2/20

Left Out:  $-16.260 \pm 0.010$   $\chi^2/\text{NDF}$ : 188515.0/24

Right Out:  $-22.959 \pm 0.026$   $\chi^2/\text{NDF}$ : 116741.8/24

Left In:  $-17.374 \pm 0.009$   $\chi^2/\text{NDF}$ : 169487.5/22

Left:  $-16.854 \pm 0.007$   $\chi^2/\text{NDF}$ : 364596.8/47

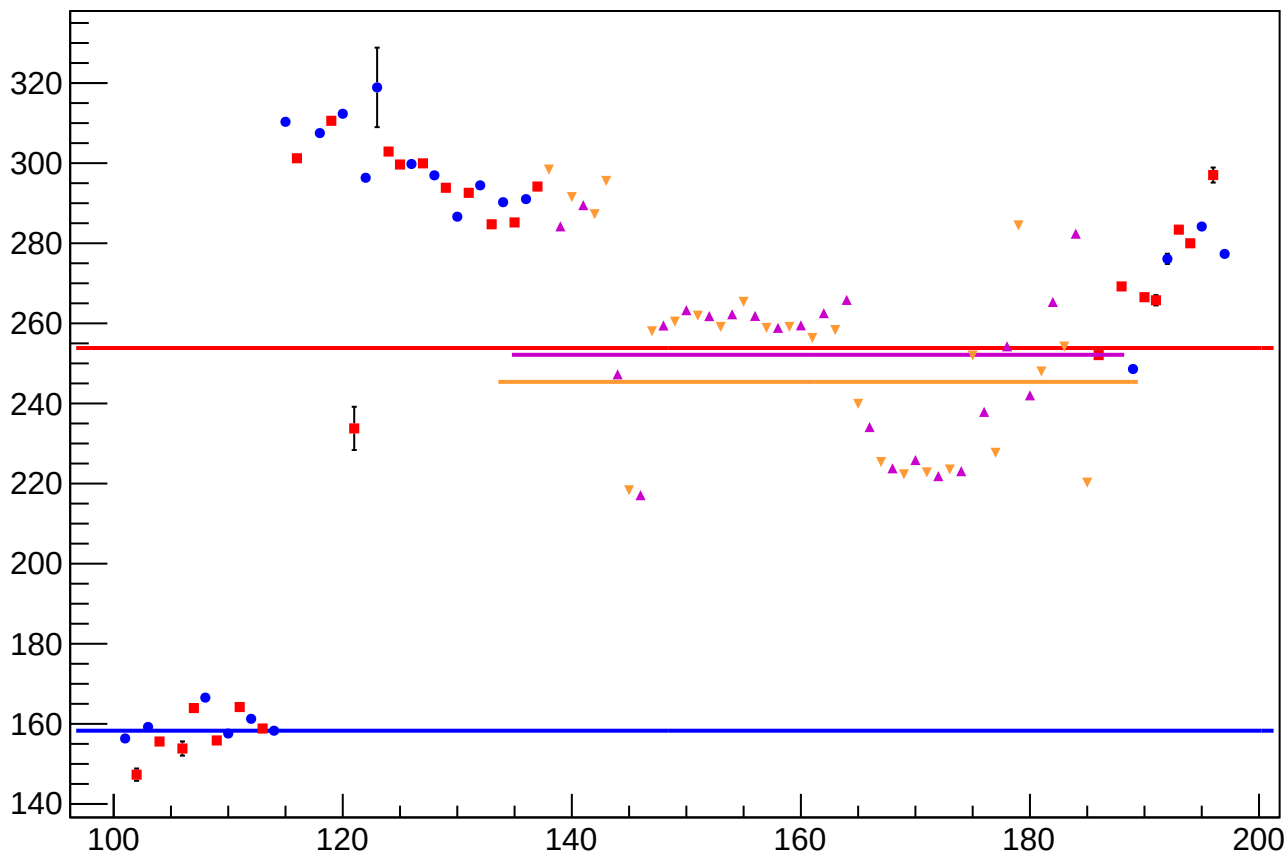
Right:  $4.057 \pm 0.000$   $\chi^2/\text{NDF}$ : 2440270.3/45

In:  $4.057 \pm 0.000$   $\chi^2/\text{NDF}$ : 6652305.4/43

Out:  $-17.119 \pm 0.009$   $\chi^2/\text{NDF}$ : 362657.8/49

All:  $4.057 \pm 0.000$   $\chi^2/\text{NDF}$ : 12144433.5/93

# dit\_sam4\_4eY\_slope vs Slug, Sign Corrected



Right In: 158.293+/-0.000  $\chi^2/\text{NDF}$ : 2522308.4/20

Left Out: 245.391+/-0.027  $\chi^2/\text{NDF}$ : 723564.6/24

Right Out: 253.844+/-0.064  $\chi^2/\text{NDF}$ : 947707.1/24

Left In: 252.148+/-0.028  $\chi^2/\text{NDF}$ : 359416.7/22

Left: 248.650+/-0.020  $\chi^2/\text{NDF}$ : 1112396.8/47

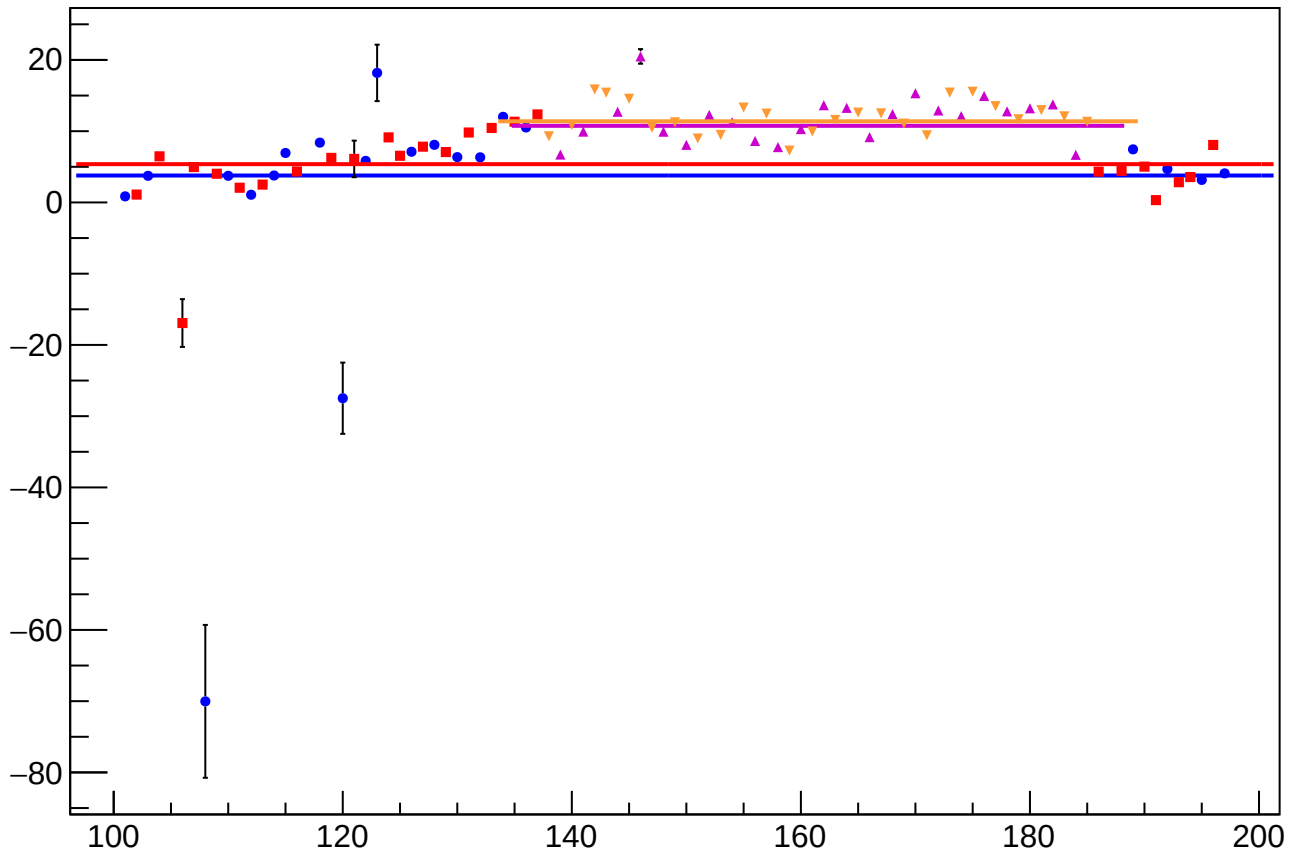
Right: 158.293+/-0.000  $\chi^2/\text{NDF}$ : 5710821.0/45

In: 158.293+/-0.000  $\chi^2/\text{NDF}$ : 13845360.9/43

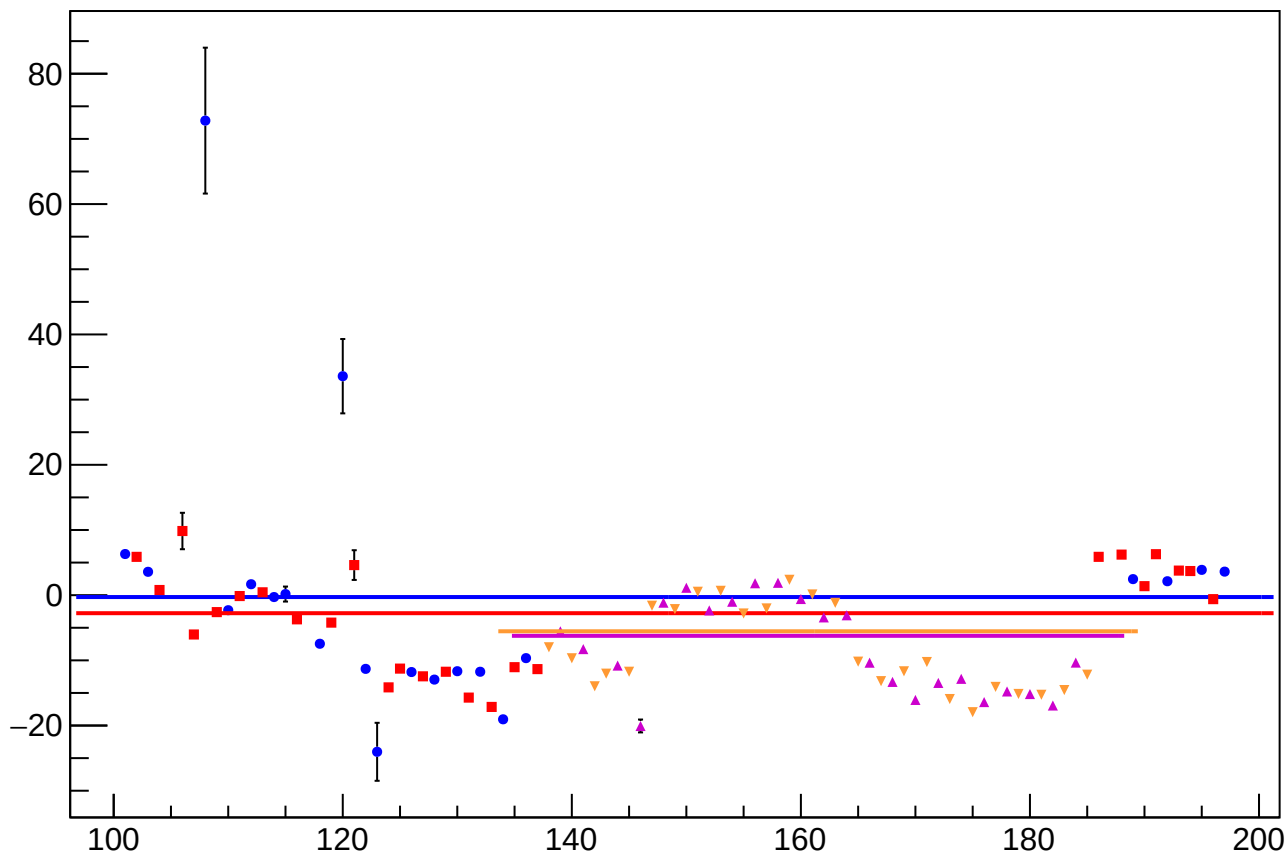
Out: 246.703+/-0.025  $\chi^2/\text{NDF}$ : 1686087.8/49

All: 158.293+/-0.000  $\chi^2/\text{NDF}$ : 27888038.3/93

# dit\_sam5\_4aX\_slope vs Slug, Sign Corrected



# dit\_sam5\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-0.287 \pm 0.000$   $\chi^2/\text{NDF}$ : 47110.8/20

Left Out:  $-5.539 \pm 0.030$   $\chi^2/\text{NDF}$ : 43439.8/24

Right Out:  $-2.764 \pm 0.023$   $\chi^2/\text{NDF}$ : 105203.1/24

Left In:  $-6.234 \pm 0.028$   $\chi^2/\text{NDF}$ : 57358.9/22

Left:  $-5.909 \pm 0.021$   $\chi^2/\text{NDF}$ : 101082.7/47

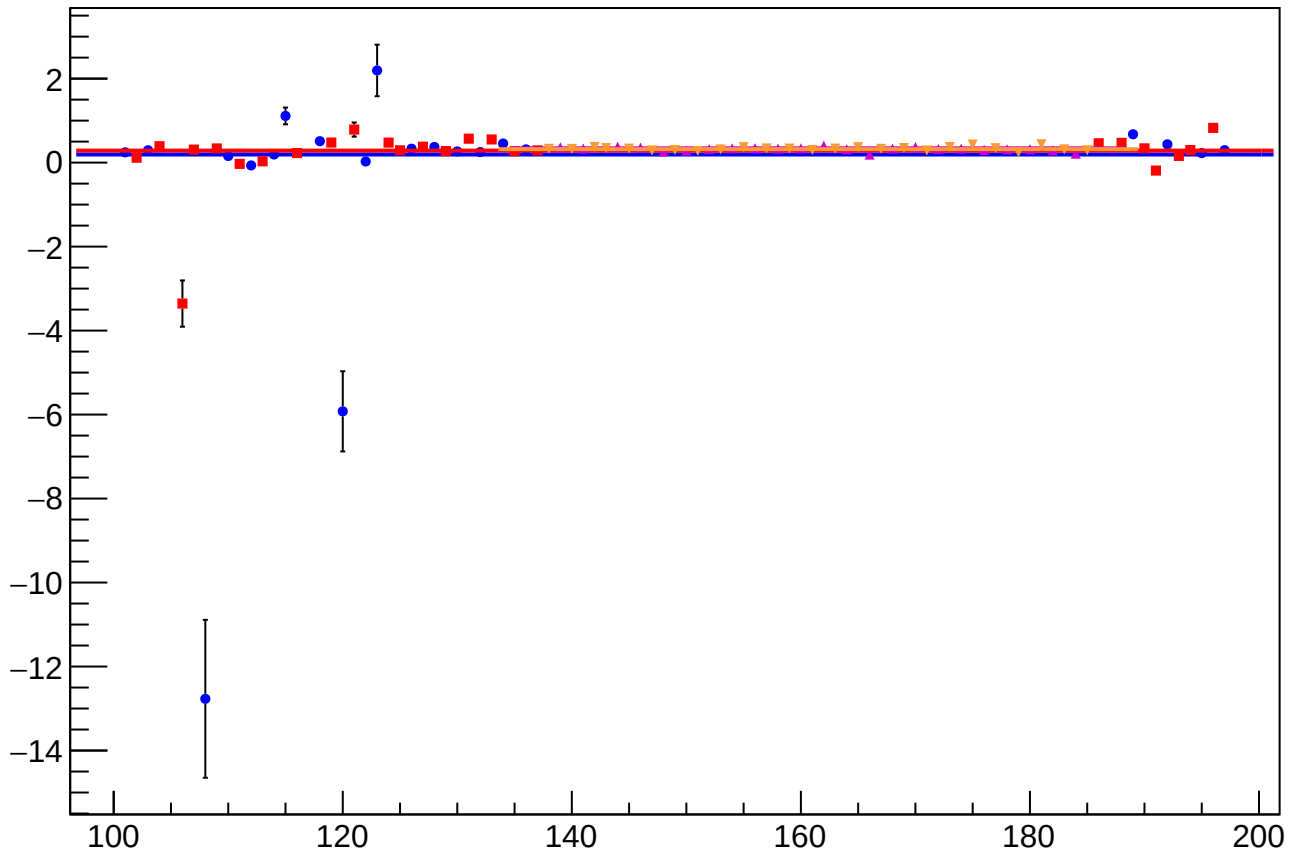
Right:  $-0.287 \pm 0.000$   $\chi^2/\text{NDF}$ : 164216.2/45

In:  $-0.287 \pm 0.000$   $\chi^2/\text{NDF}$ : 148828.6/43

Out:  $-3.771 \pm 0.018$   $\chi^2/\text{NDF}$ : 154057.7/49

All:  $-0.287 \pm 0.000$   $\chi^2/\text{NDF}$ : 339816.2/93

# dit\_sam5\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $0.193 \pm 0.000$   $\chi^2/\text{NDF}$ : 10688.5/20

Left Out:  $0.320 \pm 0.001$   $\chi^2/\text{NDF}$ : 3374.4/24

Right Out:  $0.286 \pm 0.001$   $\chi^2/\text{NDF}$ : 7298.7/24

Left In:  $0.340 \pm 0.001$   $\chi^2/\text{NDF}$ : 4171.9/22

Left:  $0.330 \pm 0.000$   $\chi^2/\text{NDF}$ : 8287.4/47

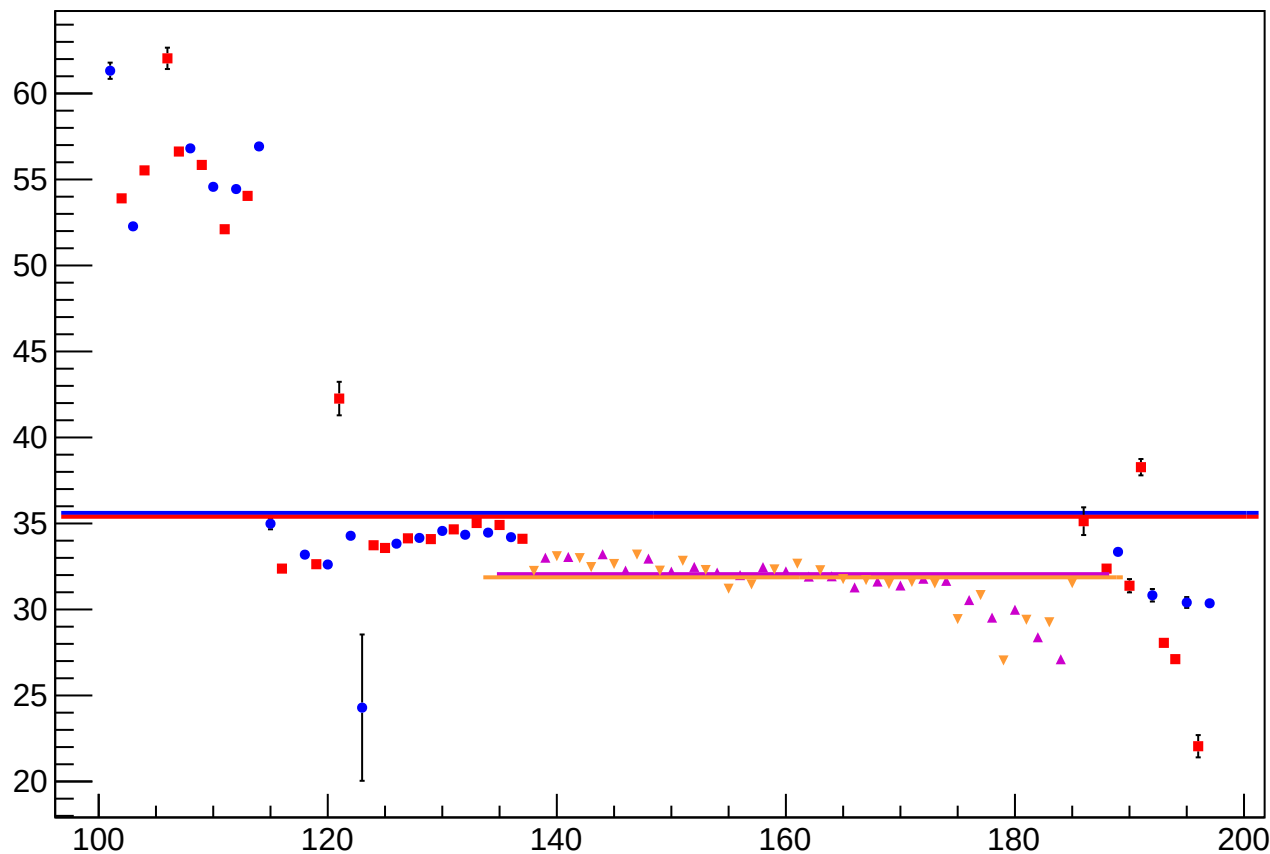
Right:  $0.193 \pm 0.000$   $\chi^2/\text{NDF}$ : 22221.0/45

In:  $0.193 \pm 0.000$   $\chi^2/\text{NDF}$ : 91457.6/43

Out:  $0.316 \pm 0.000$   $\chi^2/\text{NDF}$ : 11186.9/49

All:  $0.193 \pm 0.000$   $\chi^2/\text{NDF}$ : 169581.2/93

# dit\_sam5\_4aY\_slope vs Slug, Sign Corrected



Right In: 35.614 $\pm$ 0.011  $\chi^2$ /NDF: 220453.1/20

Left Out: 31.869 $\pm$ 0.003  $\chi^2$ /NDF: 61955.3/24

Right Out: 35.391 $\pm$ 0.011  $\chi^2$ /NDF: 271924.7/24

Left In: 32.053 $\pm$ 0.003  $\chi^2$ /NDF: 32470.5/22

Left: 31.953 $\pm$ 0.002  $\chi^2$ /NDF: 96020.3/47

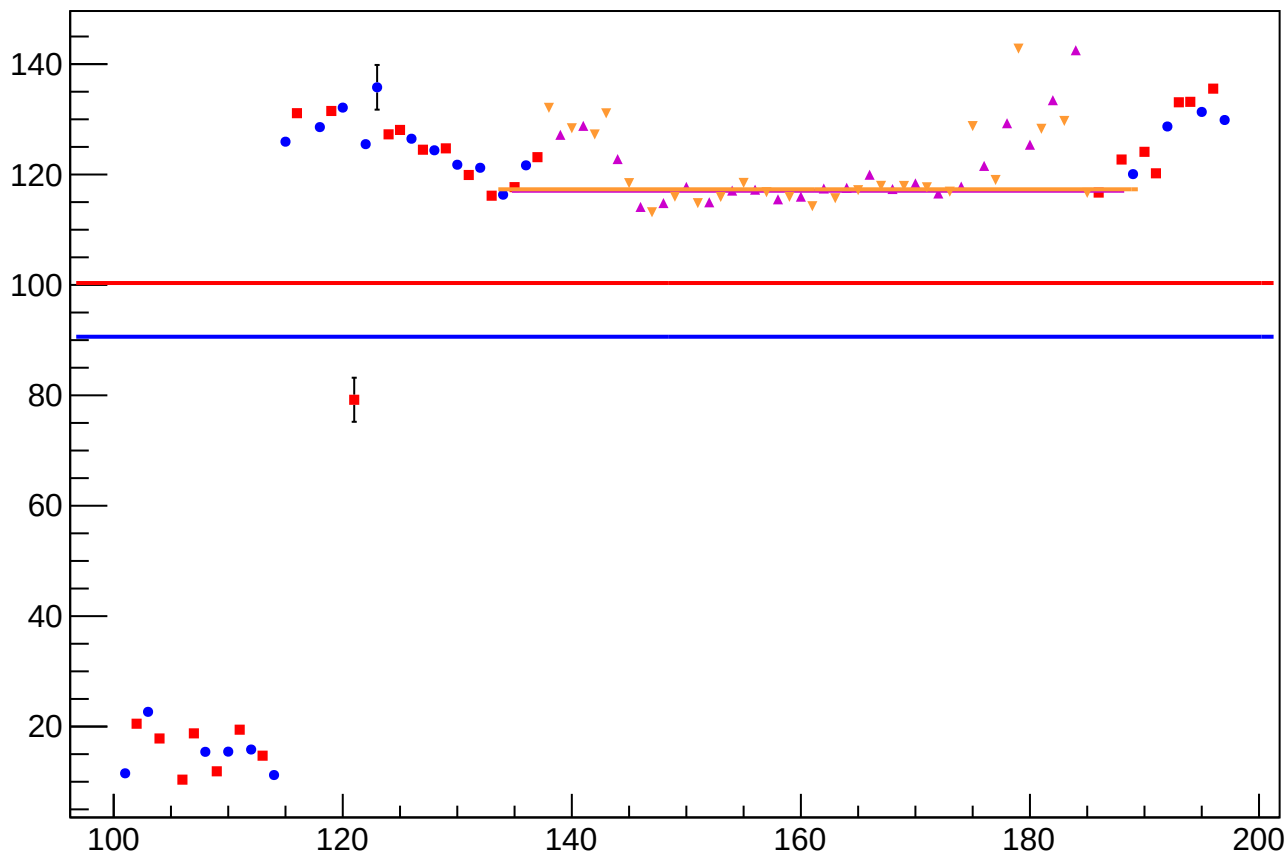
Right: 35.496 $\pm$ 0.008  $\chi^2$ /NDF: 492583.9/45

In: 32.352 $\pm$ 0.003  $\chi^2$ /NDF: 343940.2/43

Out: 32.147 $\pm$ 0.003  $\chi^2$ /NDF: 434715.6/49

All: 32.240 $\pm$ 0.002  $\chi^2$ /NDF: 780792.5/93

# dit\_sam5\_4eY\_slope vs Slug, Sign Corrected



Right In: 90.615+/-0.030  $\chi^2/\text{NDF}$ : 2571315.2/20

Left Out: 117.323+/-0.008  $\chi^2/\text{NDF}$ : 172684.3/24

Right Out: 100.345+/-0.027  $\chi^2/\text{NDF}$ : 3221501.4/24

Left In: 117.061+/-0.009  $\chi^2/\text{NDF}$ : 62905.3/22

Left: 117.207+/-0.006  $\chi^2/\text{NDF}$ : 236083.4/47

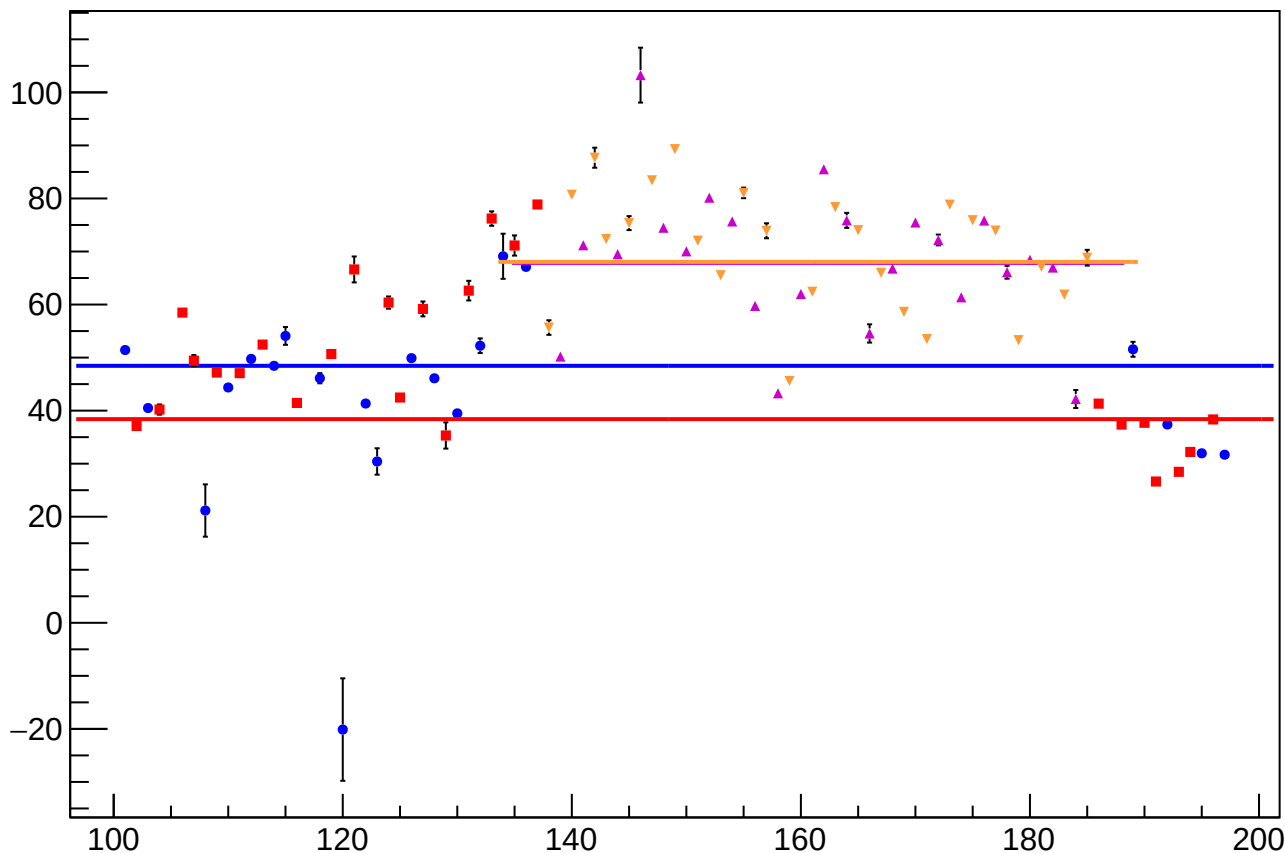
Right: 96.111+/-0.020  $\chi^2/\text{NDF}$ : 5851032.4/45

In: 115.000+/-0.008  $\chi^2/\text{NDF}$ : 3336248.4/43

Out: 115.965+/-0.008  $\chi^2/\text{NDF}$ : 3768944.6/49

All: 115.539+/-0.006  $\chi^2/\text{NDF}$ : 7112450.7/93

# dit\_sam6\_4aX\_slope vs Slug, Sign Corrected



Right In: 48.450+/-0.000  $\chi^2/\text{NDF}$ : 9564.4/20

Left Out: 68.044+/-0.132  $\chi^2/\text{NDF}$ : 6670.6/24

Right Out: 38.399+/-0.090  $\chi^2/\text{NDF}$ : 13591.1/24

Left In: 67.852+/-0.126  $\chi^2/\text{NDF}$ : 5519.9/22

Left: 67.943+/-0.091  $\chi^2/\text{NDF}$ : 12191.7/47

Right: 48.450+/-0.000  $\chi^2/\text{NDF}$ : 35680.8/45

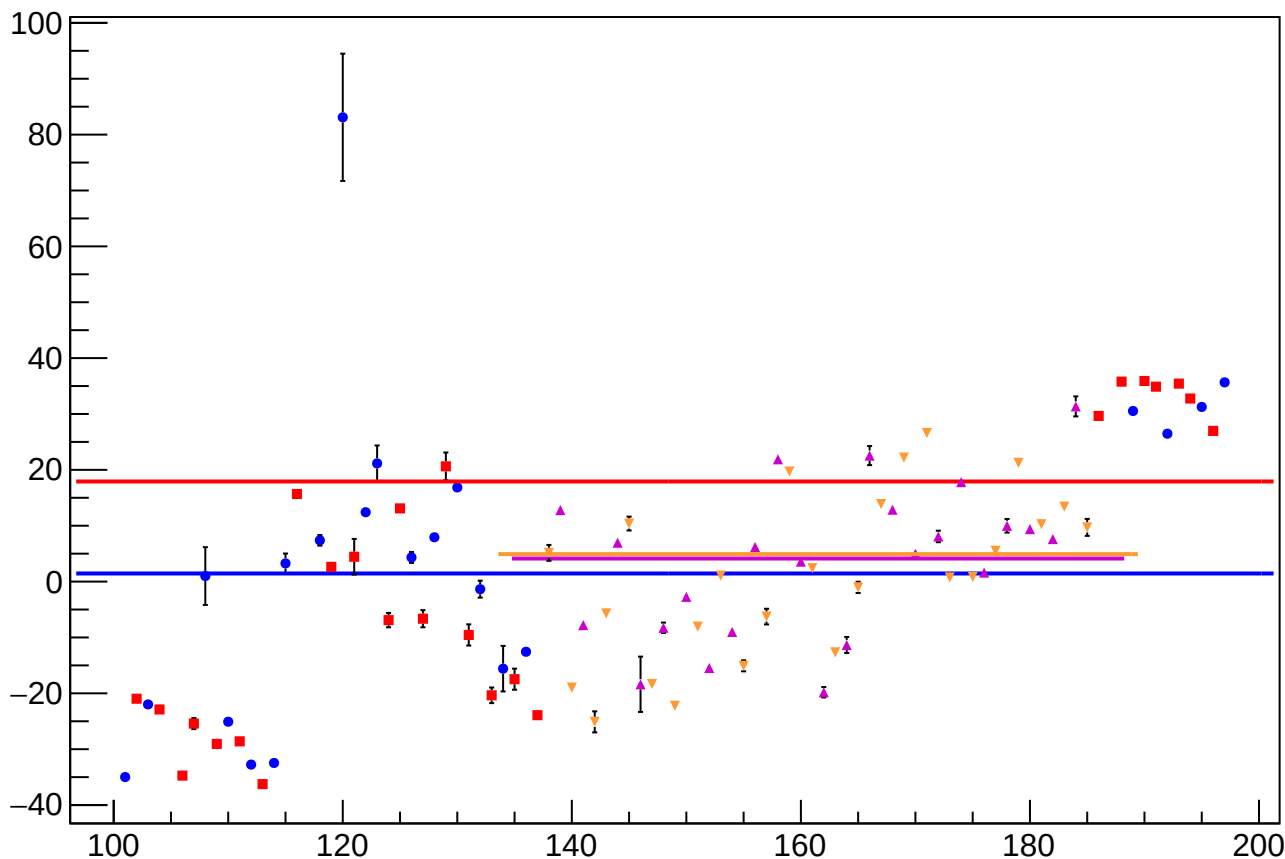
In: 48.450+/-0.000  $\chi^2/\text{NDF}$ : 38939.9/43

Out: 47.754+/-0.074  $\chi^2/\text{NDF}$ : 54650.7/49

All: 48.450+/-0.000  $\chi^2/\text{NDF}$ : 93678.1/93



# dit\_sam6\_4eX\_slope vs Slug, Sign Corrected



Right In:  $1.452 \pm 0.115$   $\chi^2/\text{NDF}: 58480.7/20$

Left Out:  $4.920 \pm 0.132$   $\chi^2/\text{NDF}: 10378.5/24$

Right Out:  $17.919 \pm 0.080$   $\chi^2/\text{NDF}: 98071.2/24$

Left In:  $4.129 \pm 0.127$   $\chi^2/\text{NDF}: 6161.4/22$

Left:  $4.508 \pm 0.092$   $\chi^2/\text{NDF}: 16558.6/47$

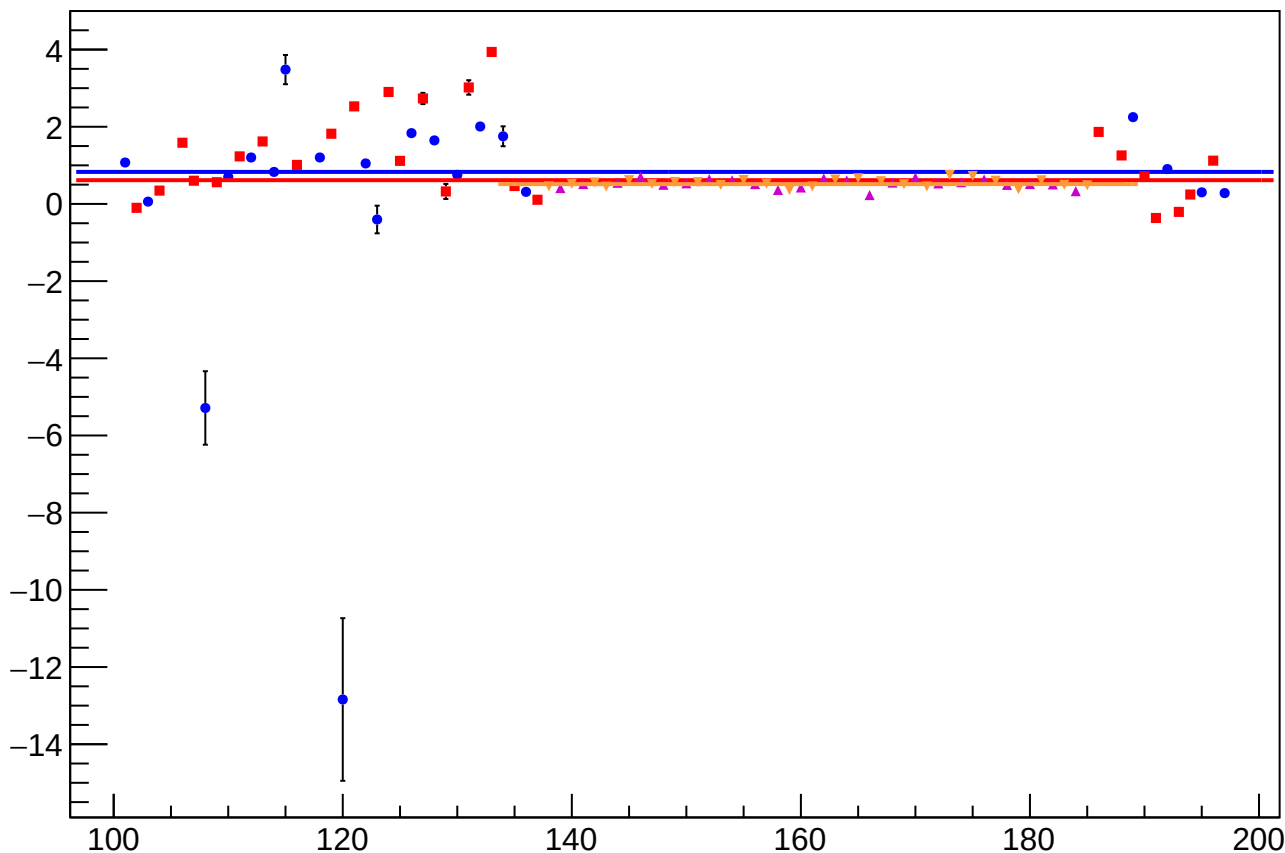
Right:  $12.531 \pm 0.066$   $\chi^2/\text{NDF}: 170353.6/45$

In:  $2.658 \pm 0.085$   $\chi^2/\text{NDF}: 64886.5/43$

Out:  $14.424 \pm 0.069$   $\chi^2/\text{NDF}: 115517.3/49$

All:  $9.800 \pm 0.053$   $\chi^2/\text{NDF}: 191976.8/93$

# dit\_sam6\_11X12X\_slope vs Slug, Sign Corrected



Right In:  $0.830 \pm 0.000$   $\chi^2/\text{NDF}$ : 15851.7/20

Left Out:  $0.513 \pm 0.001$   $\chi^2/\text{NDF}$ : 15206.1/24

Right Out:  $0.616 \pm 0.006$   $\chi^2/\text{NDF}$ : 9152.9/24

Left In:  $0.536 \pm 0.001$   $\chi^2/\text{NDF}$ : 11764.8/22

Left:  $0.526 \pm 0.001$   $\chi^2/\text{NDF}$ : 27282.9/47

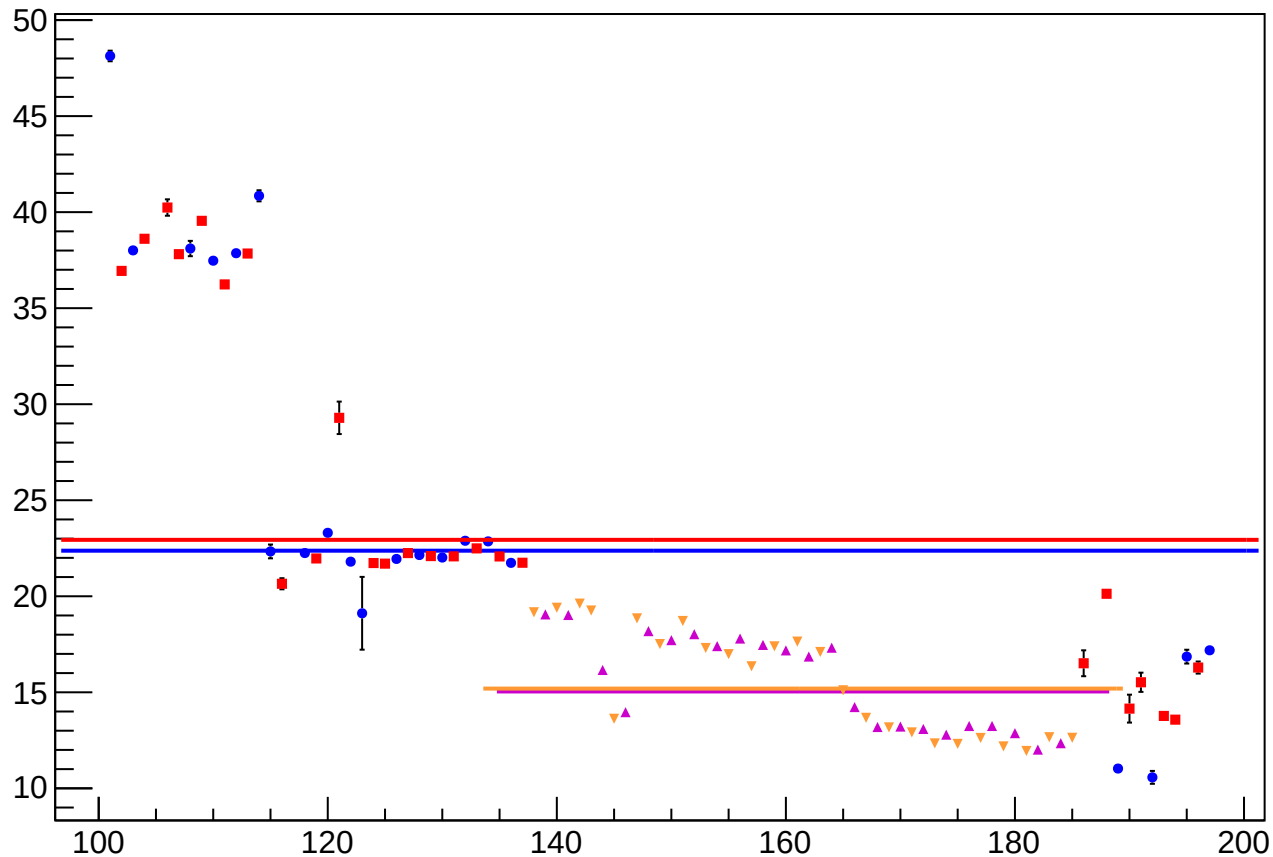
Right:  $0.830 \pm 0.000$   $\chi^2/\text{NDF}$ : 26387.7/45

In:  $0.830 \pm 0.000$   $\chi^2/\text{NDF}$ : 142856.1/43

Out:  $0.516 \pm 0.001$   $\chi^2/\text{NDF}$ : 24666.2/49

All:  $0.830 \pm 0.000$   $\chi^2/\text{NDF}$ : 276804.0/93

# dit\_sam6\_4aY\_slope vs Slug, Sign Corrected



Right In: 22.373 $\pm$ 0.009     $\chi^2/\text{NDF}$ : 127382.7/20

Left Out: 15.194 $\pm$ 0.004     $\chi^2/\text{NDF}$ : 417095.1/24

Right Out: 22.938 $\pm$ 0.009     $\chi^2/\text{NDF}$ : 170513.3/24

Left In: 15.044 $\pm$ 0.005     $\chi^2/\text{NDF}$ : 285851.6/22

Left: 15.125 $\pm$ 0.003     $\chi^2/\text{NDF}$ : 703514.0/47

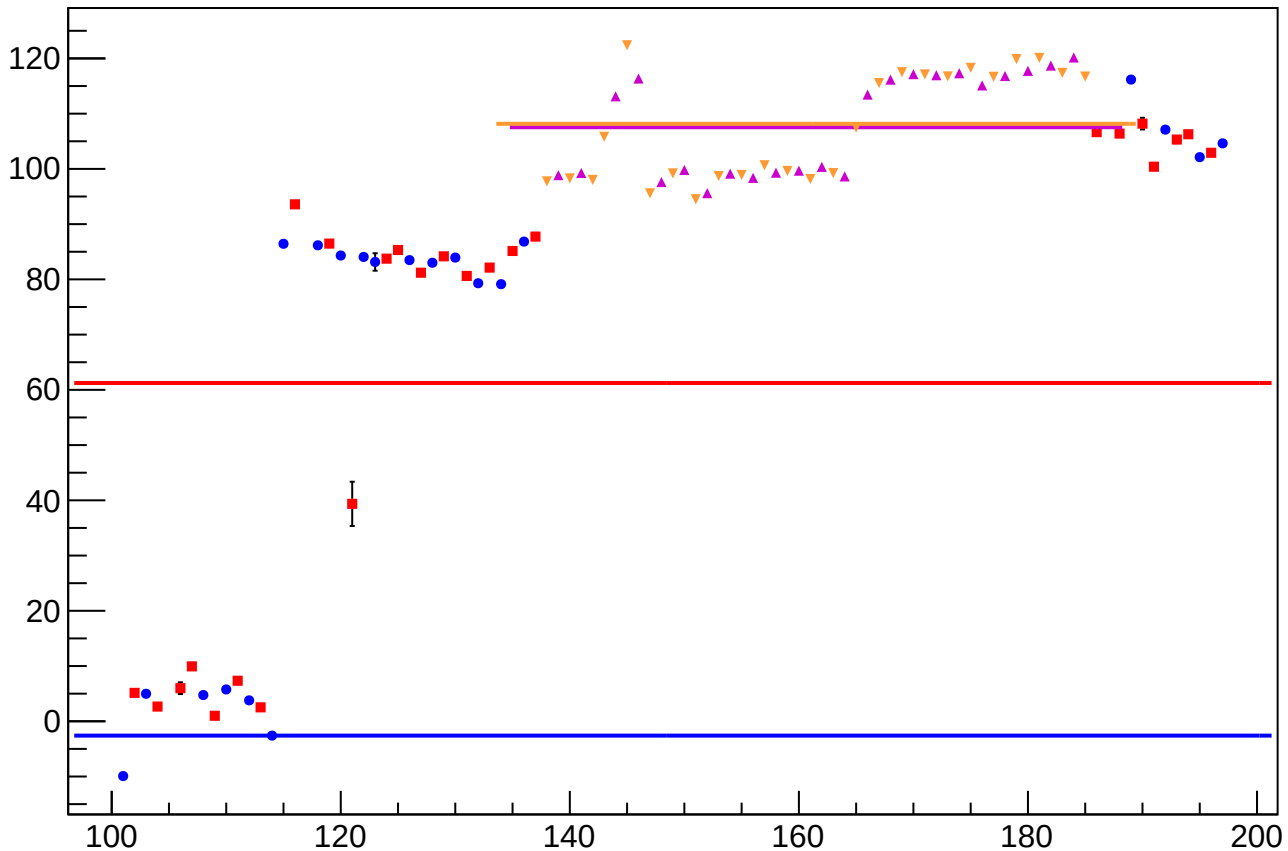
Right: 22.663 $\pm$ 0.006     $\chi^2/\text{NDF}$ : 299813.4/45

In: 16.510 $\pm$ 0.004     $\chi^2/\text{NDF}$ : 916845.1/43

Out: 16.614 $\pm$ 0.004     $\chi^2/\text{NDF}$ : 1191199.3/49

All: 16.566 $\pm$ 0.003     $\chi^2/\text{NDF}$ : 2108378.4/93

# dit\_sam6\_4eY\_slope vs Slug, Sign Corrected



Right In: -2.596+/-0.000  $\chi^2/\text{NDF}$ : 8192546.2/20

Left Out: 108.162+/-0.009  $\chi^2/\text{NDF}$ :1076822.4/24

Right Out: 61.244+/-0.031  $\chi^2/\text{NDF}$ : 1643682.9/24

Left In: 107.543+/-0.009  $\chi^2/\text{NDF}$ :988940.0/22

Left: 107.853+/-0.007  $\chi^2/\text{NDF}$ : 2067974.4/47

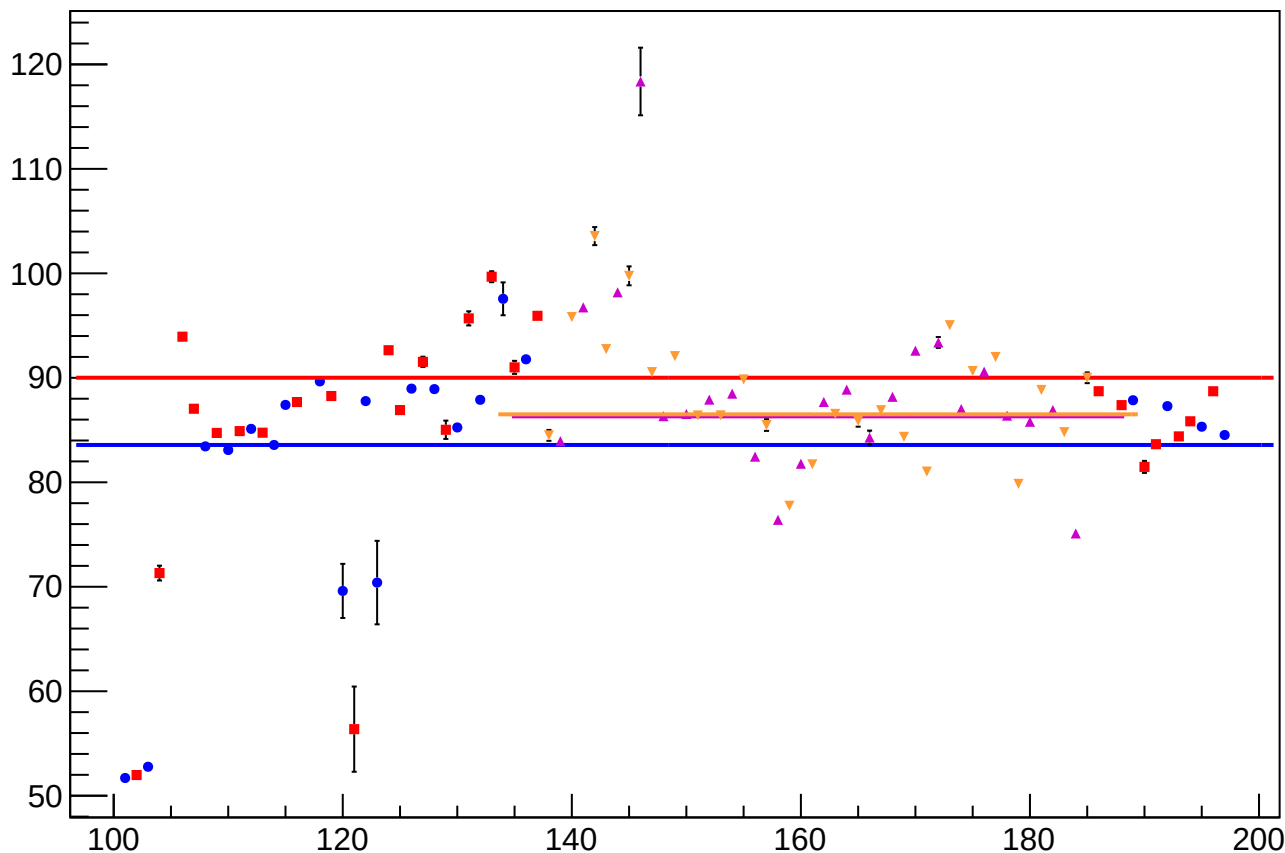
Right: -2.596+/-0.000  $\chi^2/\text{NDF}$ : 14126715.5/45

In: -2.596+/-0.000  $\chi^2/\text{NDF}$ :148748542.3/43

Out: 104.244+/-0.009  $\chi^2/\text{NDF}$ :4844428.1/49

All: -2.596+/-0.000  $\chi^2/\text{NDF}$ : 297470693.8/93

# dit\_sam7\_4aX\_slope vs Slug, Sign Corrected



Right In: 83.573+/-0.000  $\chi^2/\text{NDF}$ : 50575.0/20

Left Out: 86.505+/-0.060  $\chi^2/\text{NDF}$ :8553.0/24

Right Out: 90.008+/-0.021  $\chi^2/\text{NDF}$ : 76584.6/24

Left In: 86.310+/-0.051  $\chi^2/\text{NDF}$ :8666.5/22

Left: 86.393+/-0.039  $\chi^2/\text{NDF}$ : 17225.5/47

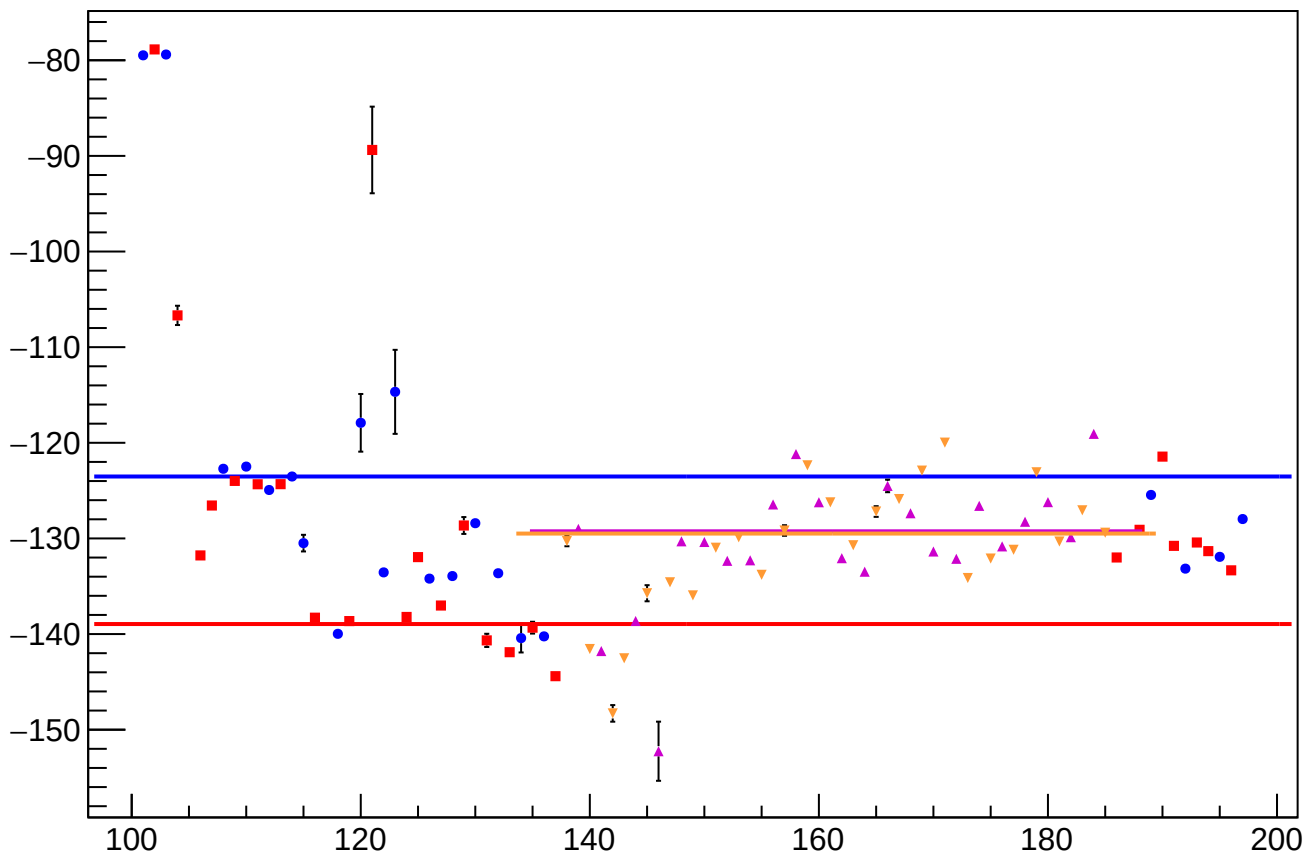
Right: 83.573+/-0.000  $\chi^2/\text{NDF}$ : 222985.7/45

In: 83.573+/-0.000  $\chi^2/\text{NDF}$ :62073.6/43

Out: 89.632+/-0.020  $\chi^2/\text{NDF}$ :88188.1/49

All: 83.573+/-0.000  $\chi^2/\text{NDF}$ : 245431.5/93

# dit\_sam7\_4eX\_slope vs Slug, Sign Corrected



Right In: -123.524+/-0.000  $\chi^2/\text{NDF}$ : 176566.6/20

Left Out: -129.492+/-0.059  $\chi^2/\text{NDF}$ :10775.3/24

Right Out: -138.952+/-0.017  $\chi^2/\text{NDF}$ : 290178.0/24

Left In: -129.256+/-0.052  $\chi^2/\text{NDF}$ :6558.2/22

Left: -129.358+/-0.039  $\chi^2/\text{NDF}$ : 17342.6/47

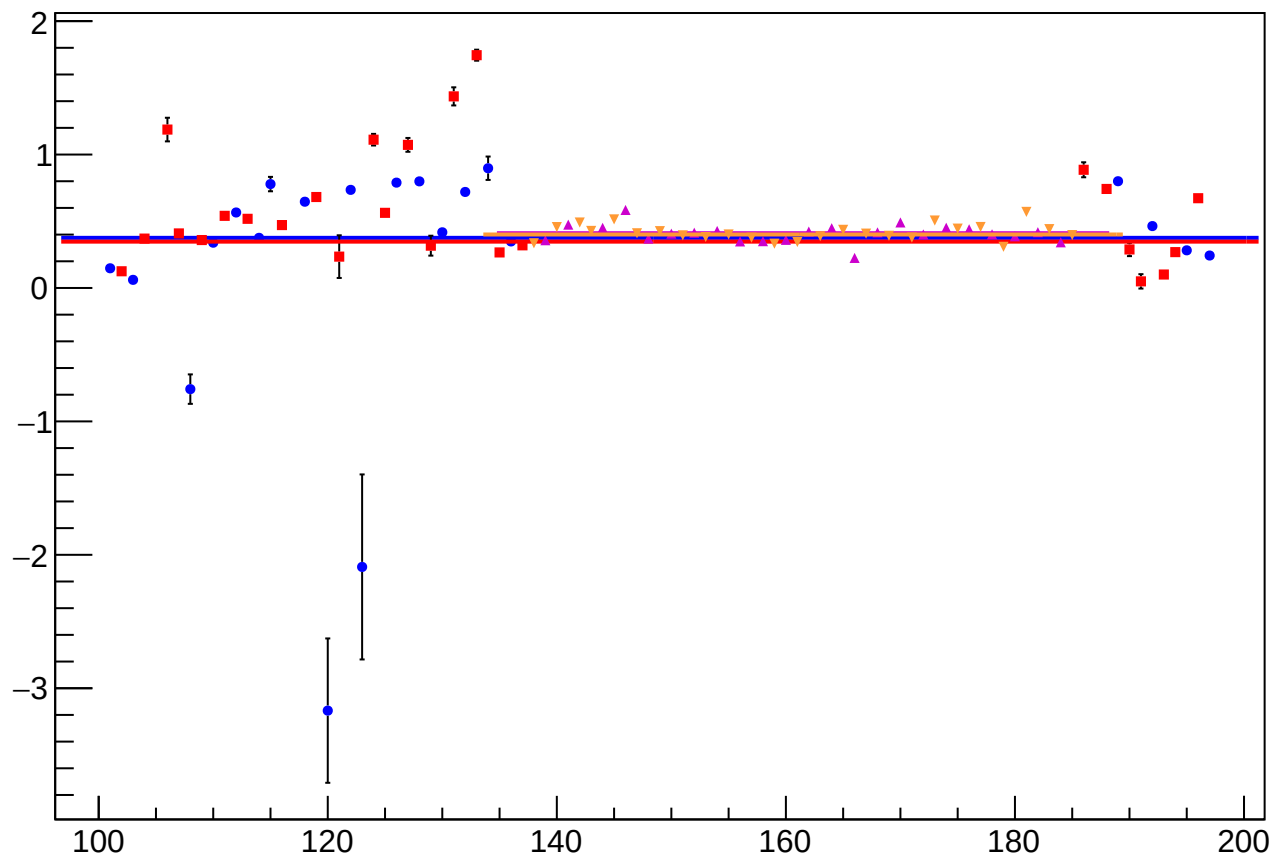
Right: -123.524+/-0.000  $\chi^2/\text{NDF}$ : 1327343.6/45

In: -123.524+/-0.000  $\chi^2/\text{NDF}$ :195487.7/43

Out: -138.260+/-0.016  $\chi^2/\text{NDF}$ :324613.8/49

All: -123.524+/-0.000  $\chi^2/\text{NDF}$ : 1367199.7/93

# dit\_sam7\_11X12X\_slope vs Slug, Sign Corrected



Right In: 0.376 $\pm$ 0.000  $\chi^2$ /NDF: 4316.4/20

Left Out: 0.401 $\pm$ 0.000  $\chi^2$ /NDF:9030.9/24

Right Out: 0.347 $\pm$ 0.001  $\chi^2$ /NDF: 6322.3/24

Left In: 0.410 $\pm$ 0.000  $\chi^2$ /NDF:8478.2/22

Left: 0.406 $\pm$ 0.000  $\chi^2$ /NDF: 17715.3/47

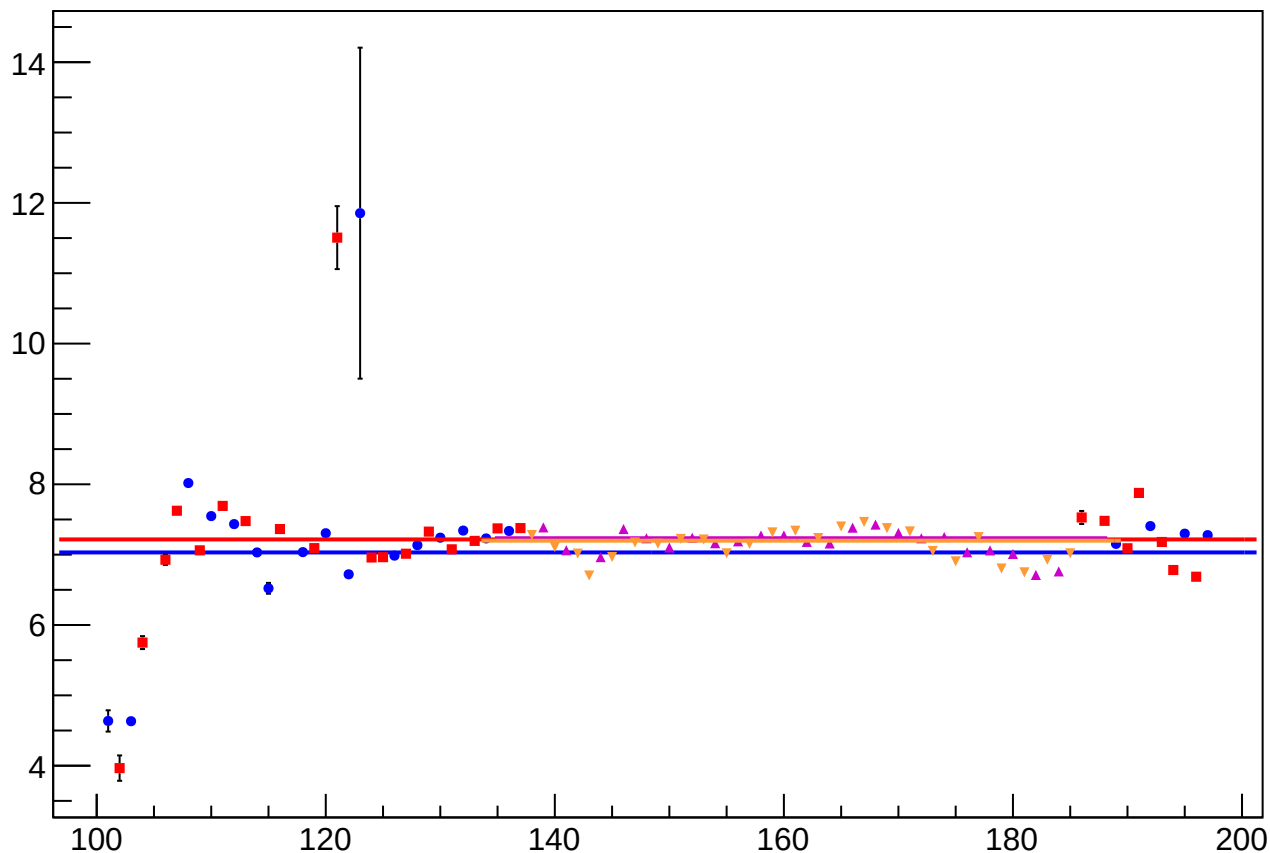
Right: 0.376 $\pm$ 0.000  $\chi^2$ /NDF: 11018.2/45

In: 0.376 $\pm$ 0.000  $\chi^2$ /NDF:18687.5/43

Out: 0.395 $\pm$ 0.000  $\chi^2$ /NDF:16553.0/49

All: 0.376 $\pm$ 0.000  $\chi^2$ /NDF: 36929.6/93

# dit\_sam7\_4aY\_slope vs Slug, Sign Corrected



Right In:  $7.032 \pm 0.000$   $\chi^2/\text{NDF}$ : 20637.6/20

Left Out:  $7.199 \pm 0.001$   $\chi^2/\text{NDF}$ : 37453.7/24

Right Out:  $7.216 \pm 0.002$   $\chi^2/\text{NDF}$ : 10638.8/24

Left In:  $7.233 \pm 0.001$   $\chi^2/\text{NDF}$ : 23085.0/22

Left:  $7.217 \pm 0.001$   $\chi^2/\text{NDF}$ : 61326.3/47

Right:  $7.032 \pm 0.000$   $\chi^2/\text{NDF}$ : 37792.0/45

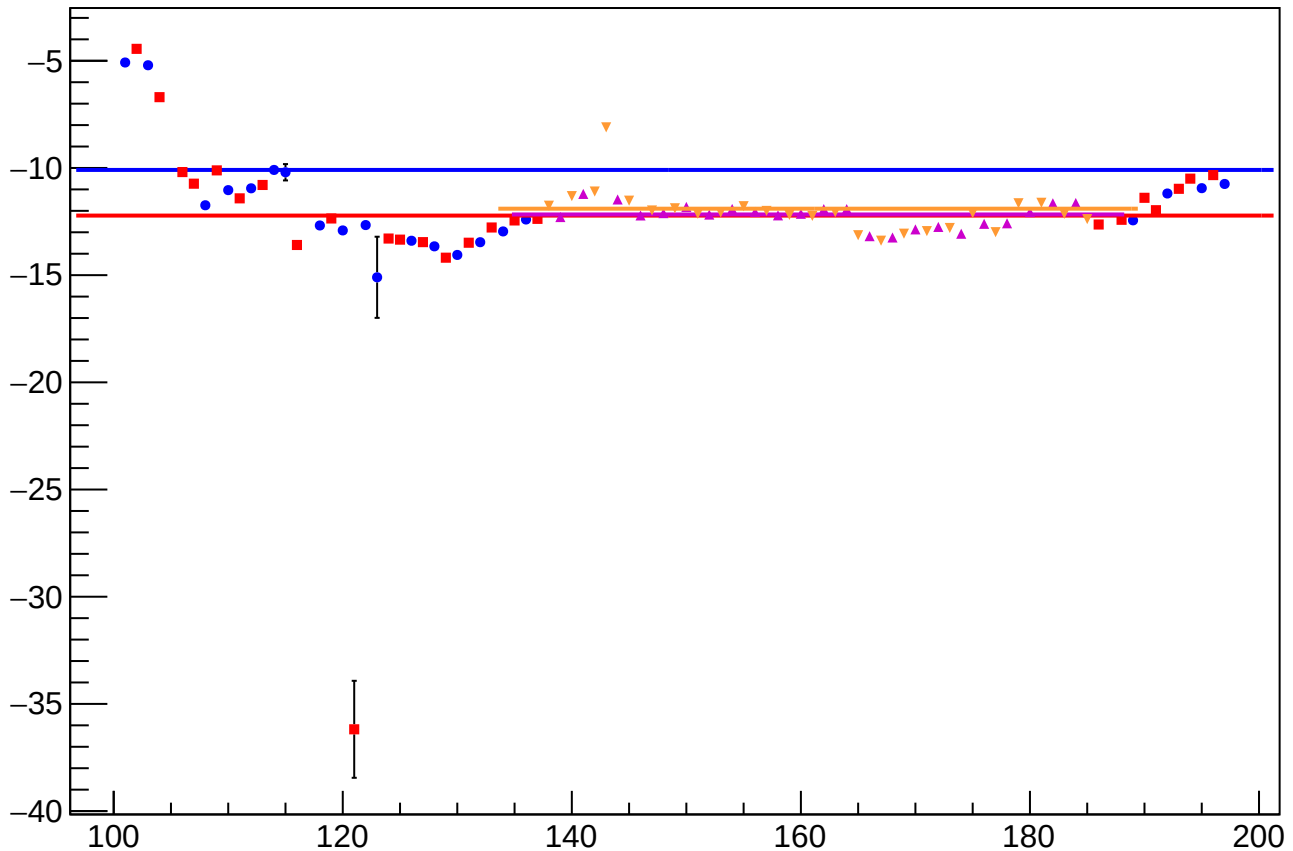
In:  $7.032 \pm 0.000$   $\chi^2/\text{NDF}$ : 102483.8/43

Out:  $7.201 \pm 0.001$   $\chi^2/\text{NDF}$ : 48144.5/49

All:  $7.032 \pm 0.000$   $\chi^2/\text{NDF}$ : 191443.0/93



# dit\_sam7\_4eY\_slope vs Slug, Sign Corrected



Right In:  $-10.092 \pm 0.000$   $\chi^2/\text{NDF}$ : 552883.8/20

Left Out:  $-11.899 \pm 0.002$   $\chi^2/\text{NDF}$ : 498866.6/24

Right Out:  $-12.221 \pm 0.003$   $\chi^2/\text{NDF}$ : 142480.6/24

Left In:  $-12.169 \pm 0.002$   $\chi^2/\text{NDF}$ : 49568.3/22

Left:  $-12.033 \pm 0.001$   $\chi^2/\text{NDF}$ : 561016.9/47

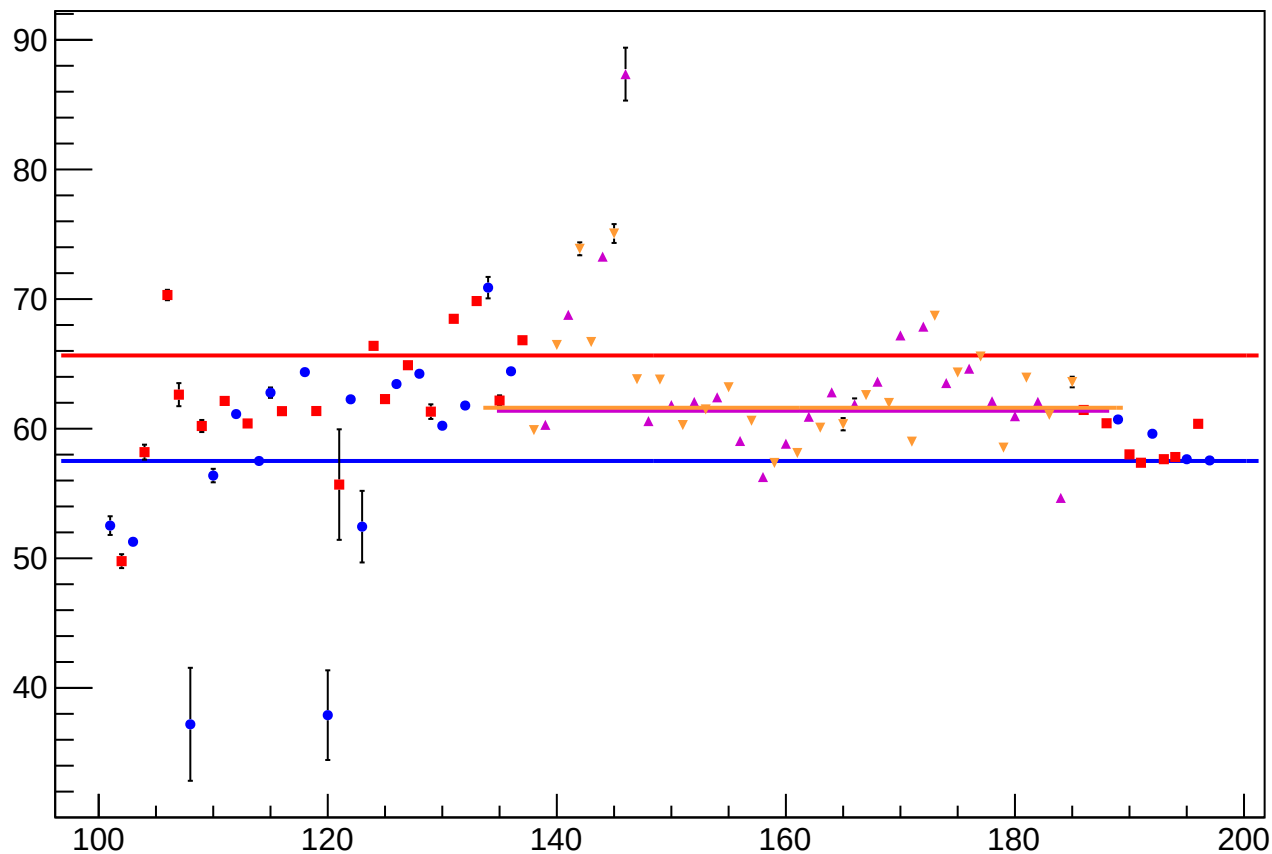
Right:  $-10.092 \pm 0.000$   $\chi^2/\text{NDF}$ : 1093645.1/45

In:  $-10.092 \pm 0.000$   $\chi^2/\text{NDF}$ : 2085299.5/43

Out:  $-11.964 \pm 0.002$   $\chi^2/\text{NDF}$ : 648598.7/49

All:  $-10.092 \pm 0.000$   $\chi^2/\text{NDF}$ : 4268024.4/93

# dit\_sam8\_4aX\_slope vs Slug, Sign Corrected



Right In:  $57.510 \pm 0.000$   $\chi^2/\text{NDF}: 9263.1/20$

Left Out:  $61.615 \pm 0.039$   $\chi^2/\text{NDF}: 7756.9/24$

Right Out:  $65.649 \pm 0.012$   $\chi^2/\text{NDF}: 56137.7/24$

Left In:  $61.383 \pm 0.033$   $\chi^2/\text{NDF}: 8900.0/22$

Left:  $61.479 \pm 0.025$   $\chi^2/\text{NDF}: 16677.8/47$

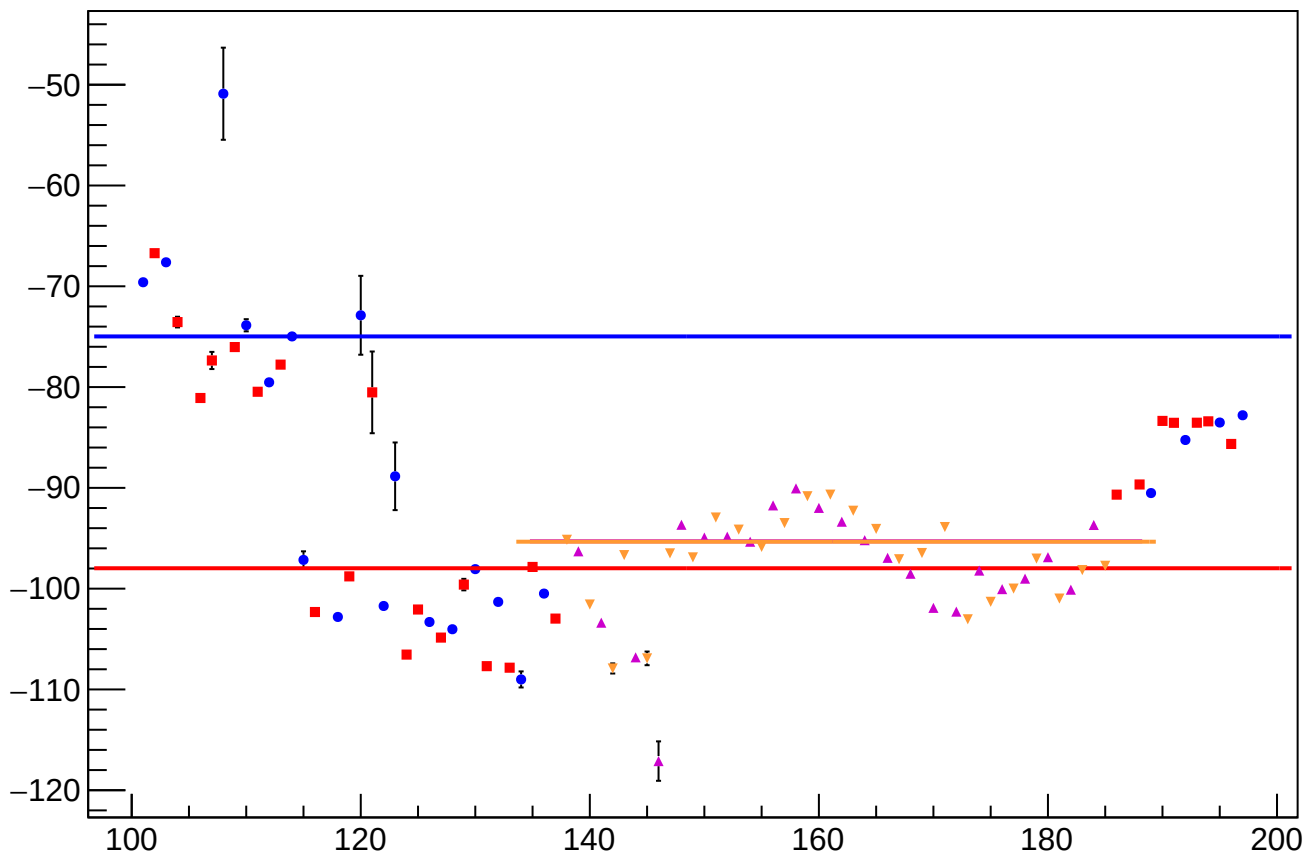
Right:  $57.510 \pm 0.000$   $\chi^2/\text{NDF}: 507025.5/45$

In:  $57.510 \pm 0.000$   $\chi^2/\text{NDF}: 32315.7/43$

Out:  $65.285 \pm 0.012$   $\chi^2/\text{NDF}: 73684.8/49$

All:  $57.510 \pm 0.000$   $\chi^2/\text{NDF}: 548976.0/93$

# dit\_sam8\_4eX\_slope vs Slug, Sign Corrected



Right In:  $-74.974 \pm 0.000$   $\chi^2/\text{NDF}: 182526.4/20$

Left Out:  $-95.342 \pm 0.039$   $\chi^2/\text{NDF}: 9387.4/24$

Right Out:  $-97.976 \pm 0.015$   $\chi^2/\text{NDF}: 300306.7/24$

Left In:  $-95.301 \pm 0.033$   $\chi^2/\text{NDF}: 11271.5/22$

Left:  $-95.319 \pm 0.025$   $\chi^2/\text{NDF}: 20659.5/47$

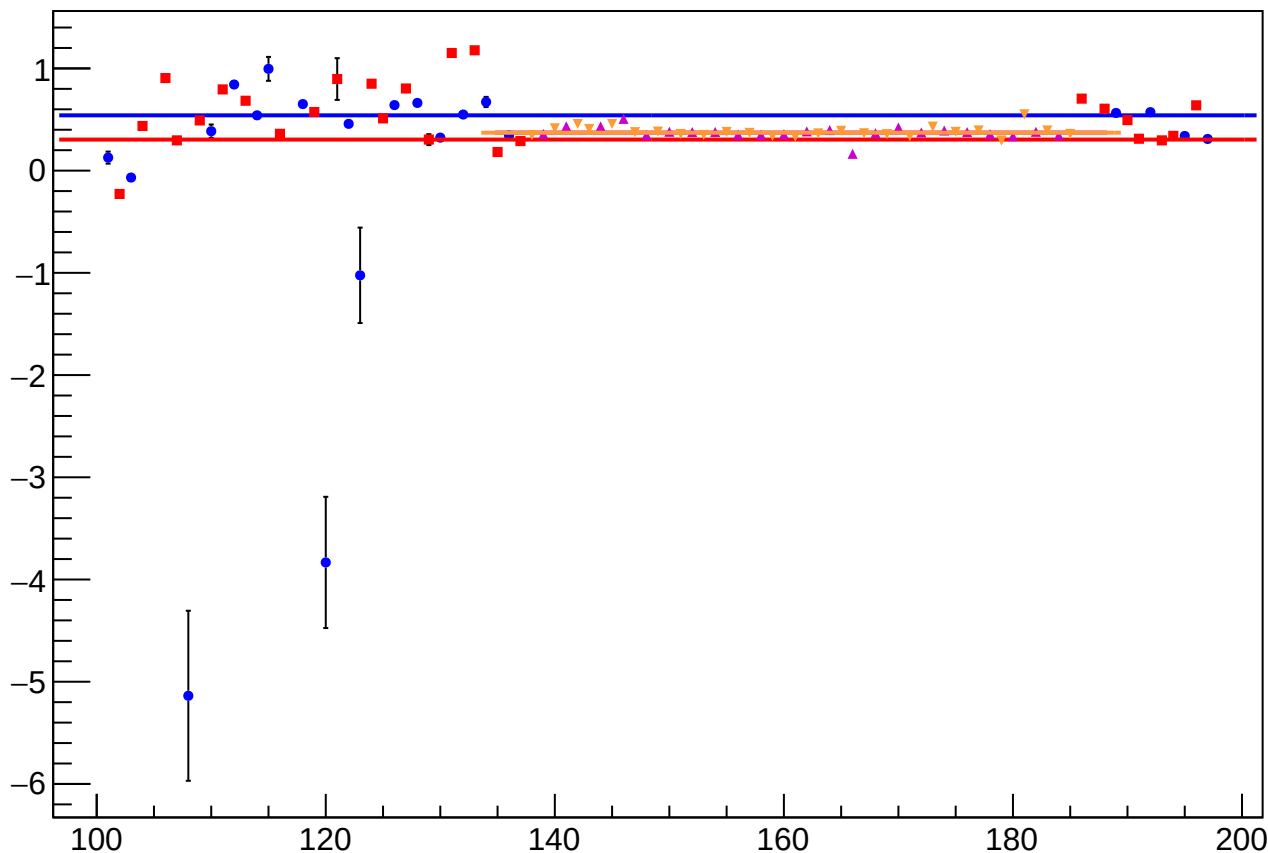
Right:  $-74.974 \pm 0.000$   $\chi^2/\text{NDF}: 2719377.2/45$

In:  $-74.974 \pm 0.000$   $\chi^2/\text{NDF}: 568750.0/43$

Out:  $-97.617 \pm 0.014$   $\chi^2/\text{NDF}: 313692.9/49$

All:  $-74.974 \pm 0.000$   $\chi^2/\text{NDF}: 3391949.5/93$

# dit\_sam8\_11X12X\_slope vs Slug, Sign Corrected



Right In: 0.541 $\pm$ 0.000  $\chi^2$ /NDF: 30613.5/20

Left Out: 0.371 $\pm$ 0.000  $\chi^2$ /NDF: 6797.7/24

Right Out: 0.304 $\pm$ 0.001  $\chi^2$ /NDF: 11235.7/24

Left In: 0.372 $\pm$ 0.000  $\chi^2$ /NDF: 6020.6/22

Left: 0.372 $\pm$ 0.000  $\chi^2$ /NDF: 12824.6/47

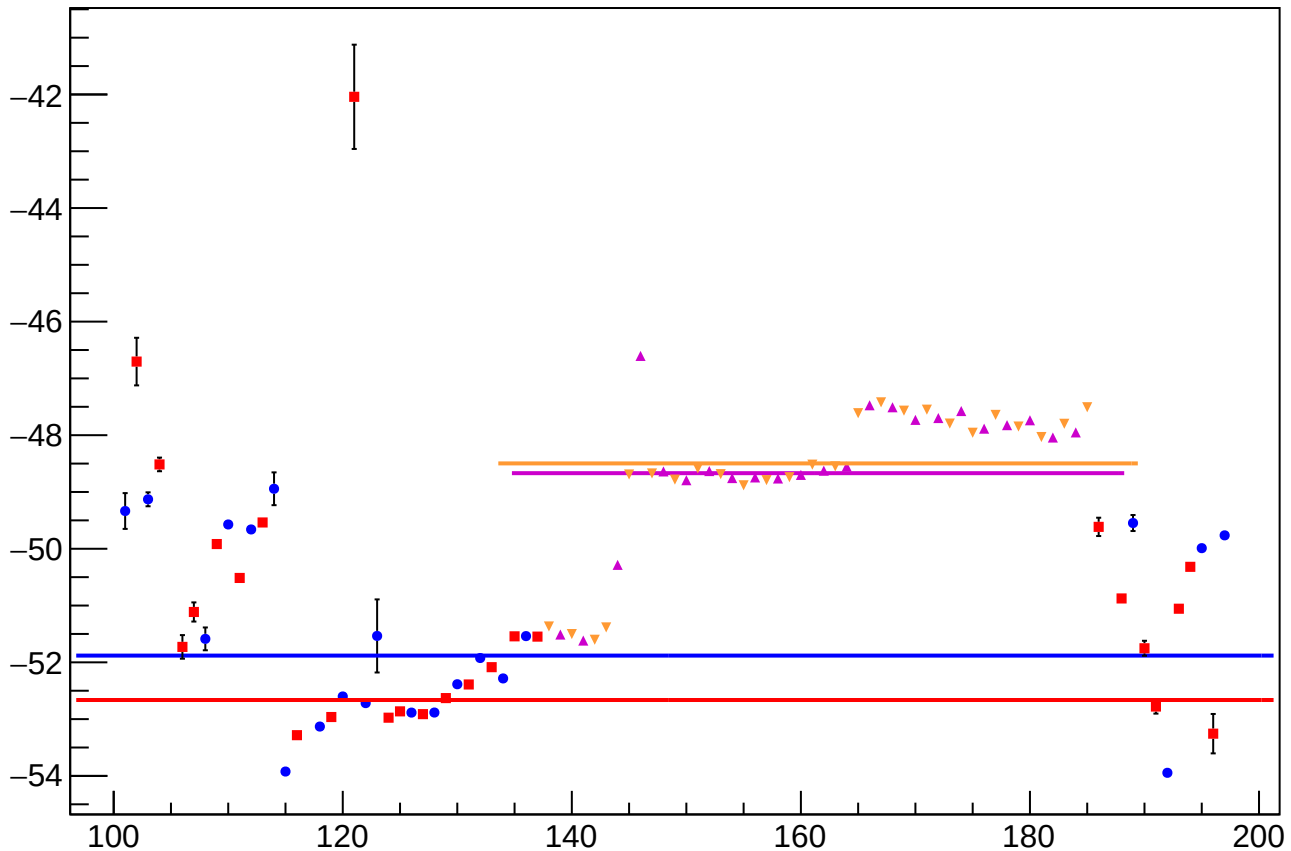
Right: 0.541 $\pm$ 0.000  $\chi^2$ /NDF: 129959.5/45

In: 0.541 $\pm$ 0.000  $\chi^2$ /NDF: 335750.0/43

Out: 0.359 $\pm$ 0.000  $\chi^2$ /NDF: 23877.0/49

All: 0.541 $\pm$ 0.000  $\chi^2$ /NDF: 653207.2/93

# dit\_sam8\_4aY\_slope vs Slug, Sign Corrected



Right In:  $-51.881 \pm 0.002$   $\chi^2/\text{NDF}$ : 81511.6/20

Left Out:  $-48.497 \pm 0.001$   $\chi^2/\text{NDF}$ : 699790.4/24

Right Out:  $-52.663 \pm 0.003$   $\chi^2/\text{NDF}$ : 62690.8/24

Left In:  $-48.669 \pm 0.001$   $\chi^2/\text{NDF}$ : 809321.2/22

Left:  $-48.594 \pm 0.001$   $\chi^2/\text{NDF}$ : 1523797.8/47

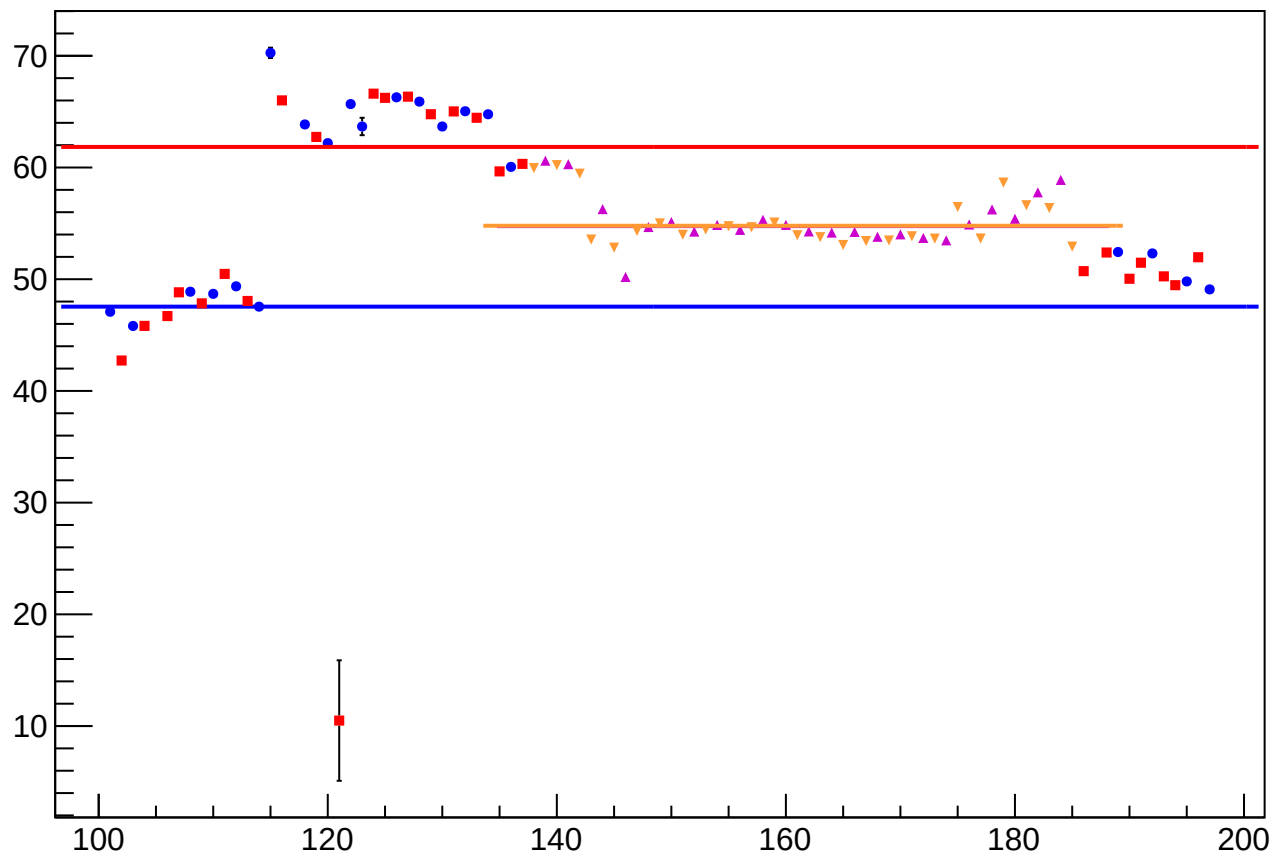
Right:  $-52.219 \pm 0.002$   $\chi^2/\text{NDF}$ : 197731.4/45

In:  $-49.153 \pm 0.001$   $\chi^2/\text{NDF}$ : 2664544.9/43

Out:  $-49.118 \pm 0.001$   $\chi^2/\text{NDF}$ : 3040439.1/49

All:  $-49.137 \pm 0.001$   $\chi^2/\text{NDF}$ : 5705698.3/93

# dit\_sam8\_4eY\_slope vs Slug, Sign Corrected



Right In: 47.545+/-0.000  $\chi^2/\text{NDF}$ : 3609879.2/20

Left Out: 54.787+/-0.003  $\chi^2/\text{NDF}$ :301226.3/24

Right Out: 61.843+/-0.007  $\chi^2/\text{NDF}$ : 625114.6/24

Left In: 54.755+/-0.003  $\chi^2/\text{NDF}$ :100763.3/22

Left: 54.769+/-0.002  $\chi^2/\text{NDF}$ : 402054.6/47

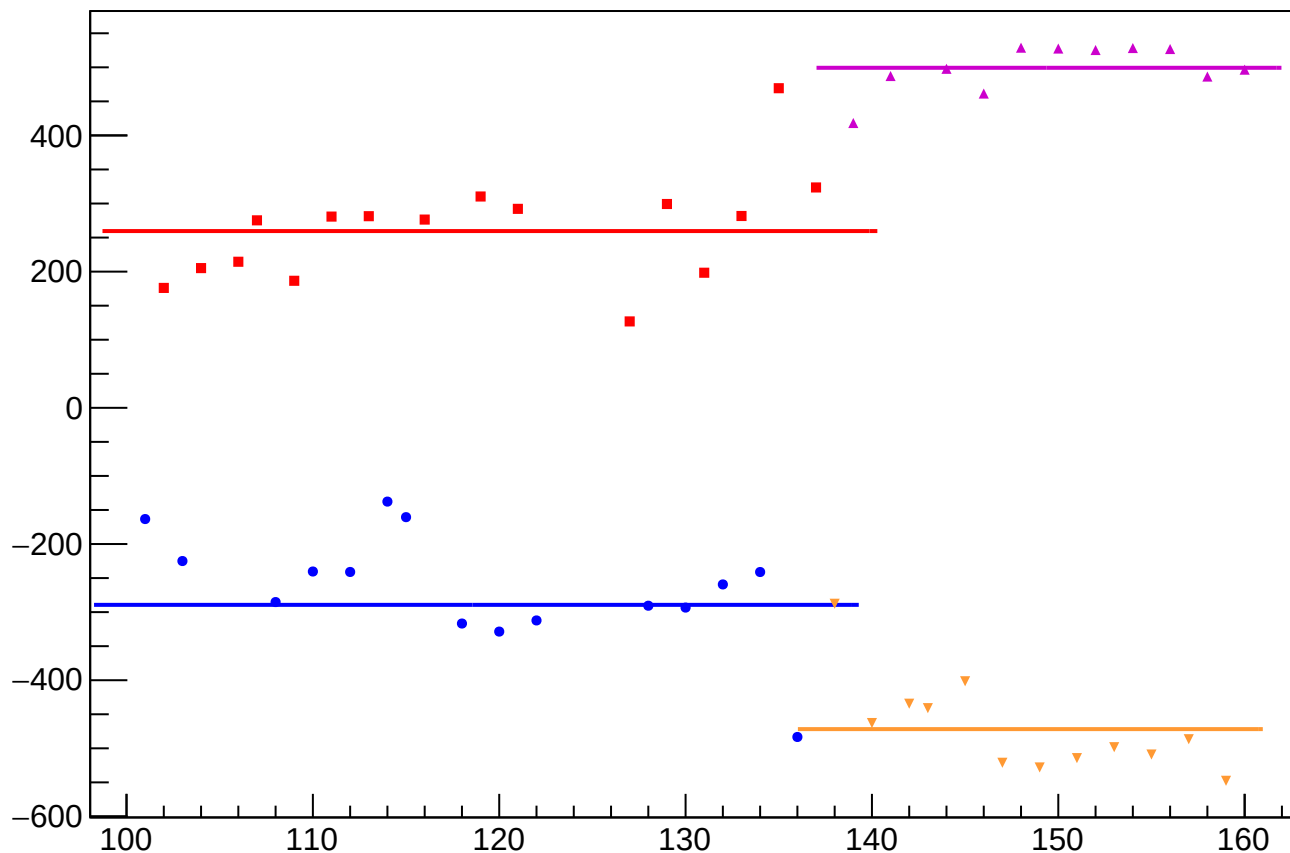
Right: 47.545+/-0.000  $\chi^2/\text{NDF}$ : 8289160.8/45

In: 47.545+/-0.000  $\chi^2/\text{NDF}$ :11365438.7/43

Out: 55.822+/-0.003  $\chi^2/\text{NDF}$ :1768779.0/49

All: 47.545+/-0.000  $\chi^2/\text{NDF}$ : 22393571.1/93

# 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

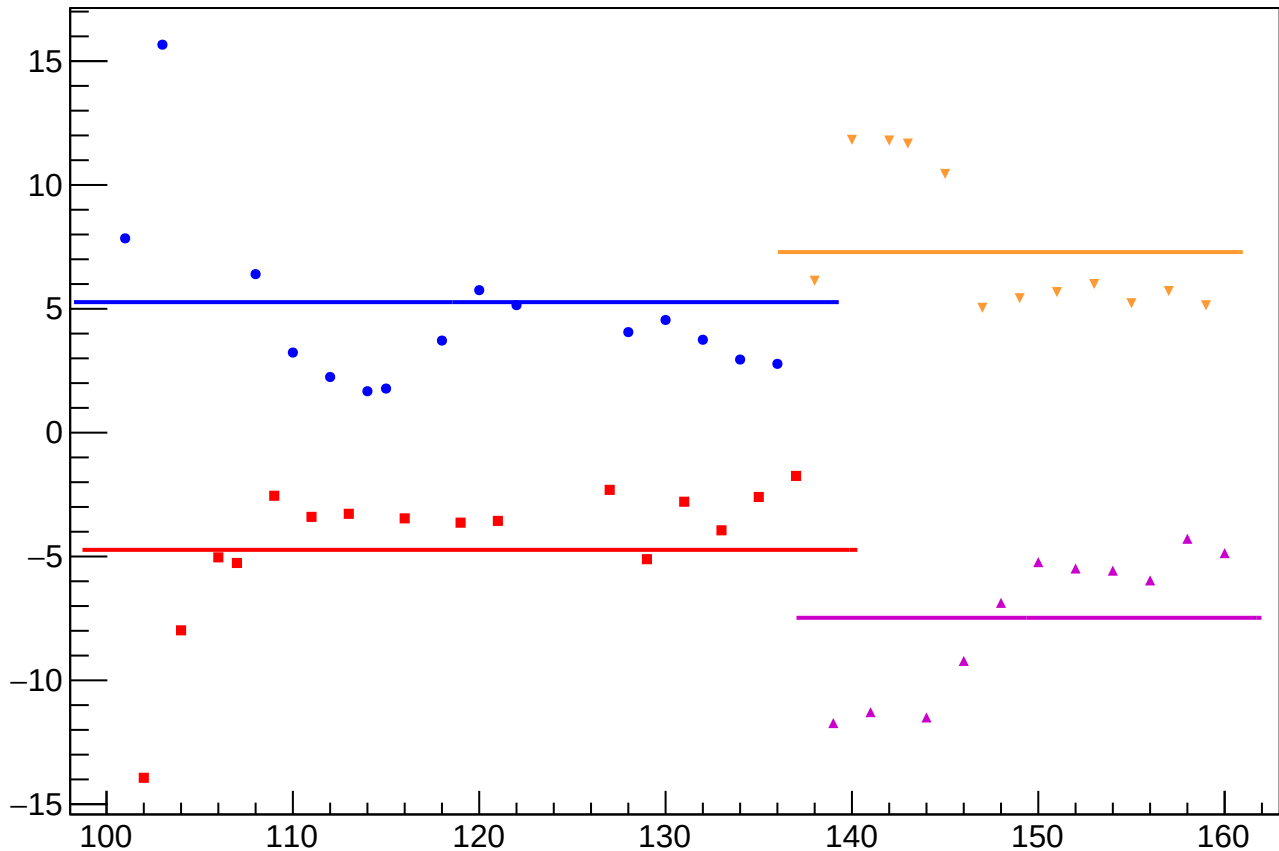
Right: -11.129+/-0.000  $\chi^2/\text{NDF}$ : 108768514077982

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+/-0.000

$\chi^2/\text{NDF}$ : 8709683292123798330550906790084608.0/14

Left Out: 7.291+/-0.000

$\chi^2/\text{NDF}$ : 6718053515172863885836432351166464.0/11

Right Out: -4.732+/-0.000

$\chi^2/\text{NDF}$ : 6856893072575211562802281426452480.0/15

Left In: -7.475+/-0.000

$\chi^2/\text{NDF}$ : 7057812139399579538870244550377472.0/10

Left: -0.132+/-0.000

$\chi^2/\text{NDF}$ : 11395661588137733

Right: 0.201+/-0.000

$\chi^2/\text{NDF}$ : 48467955168543439

In: -2.217+/-0.000

$\chi^2/\text{NDF}$ : 776859230117979508

Out: 2.219+/-0.000

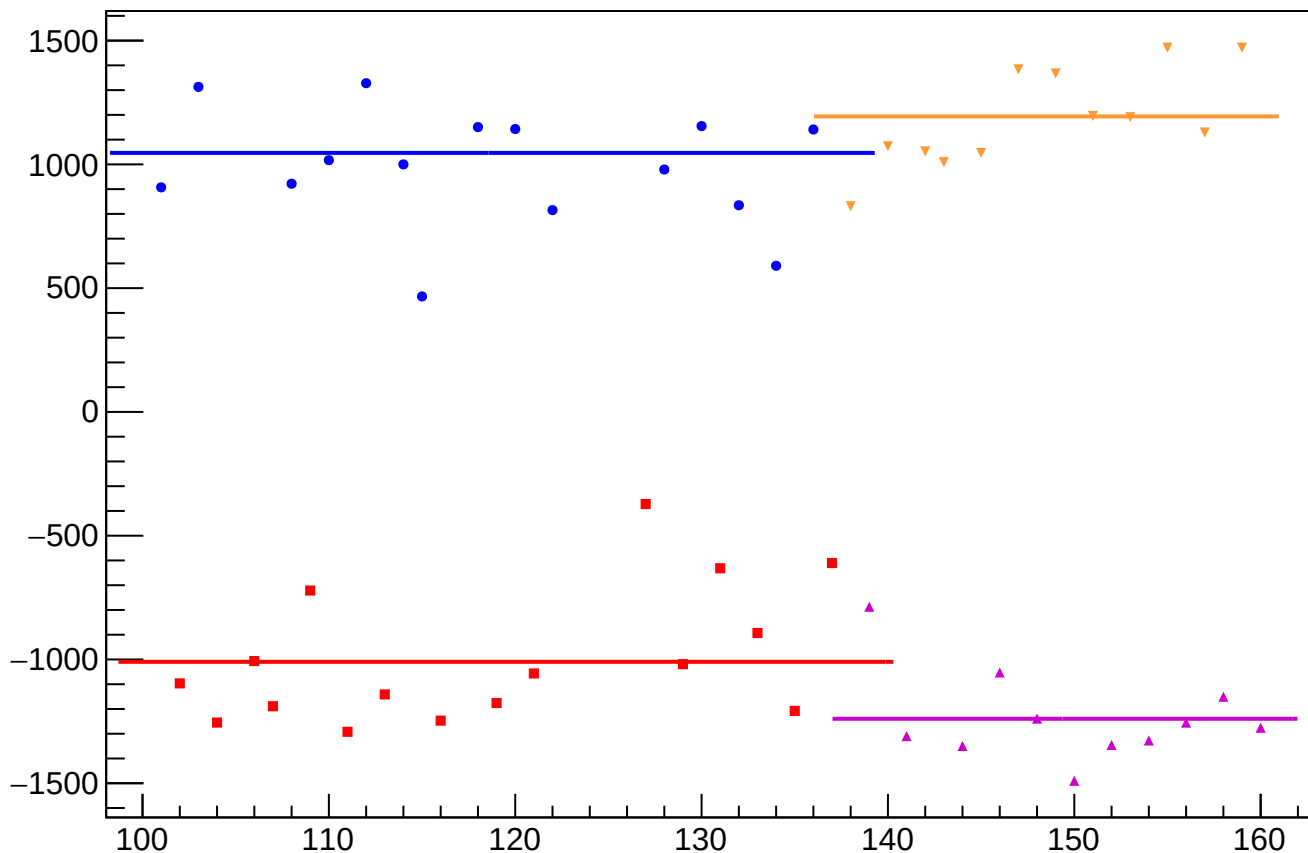
$\chi^2/\text{NDF}$ : 693111439111449338

All: 0.007+/-0.000

$\chi^2/\text{NDF}$ : 16250941727402

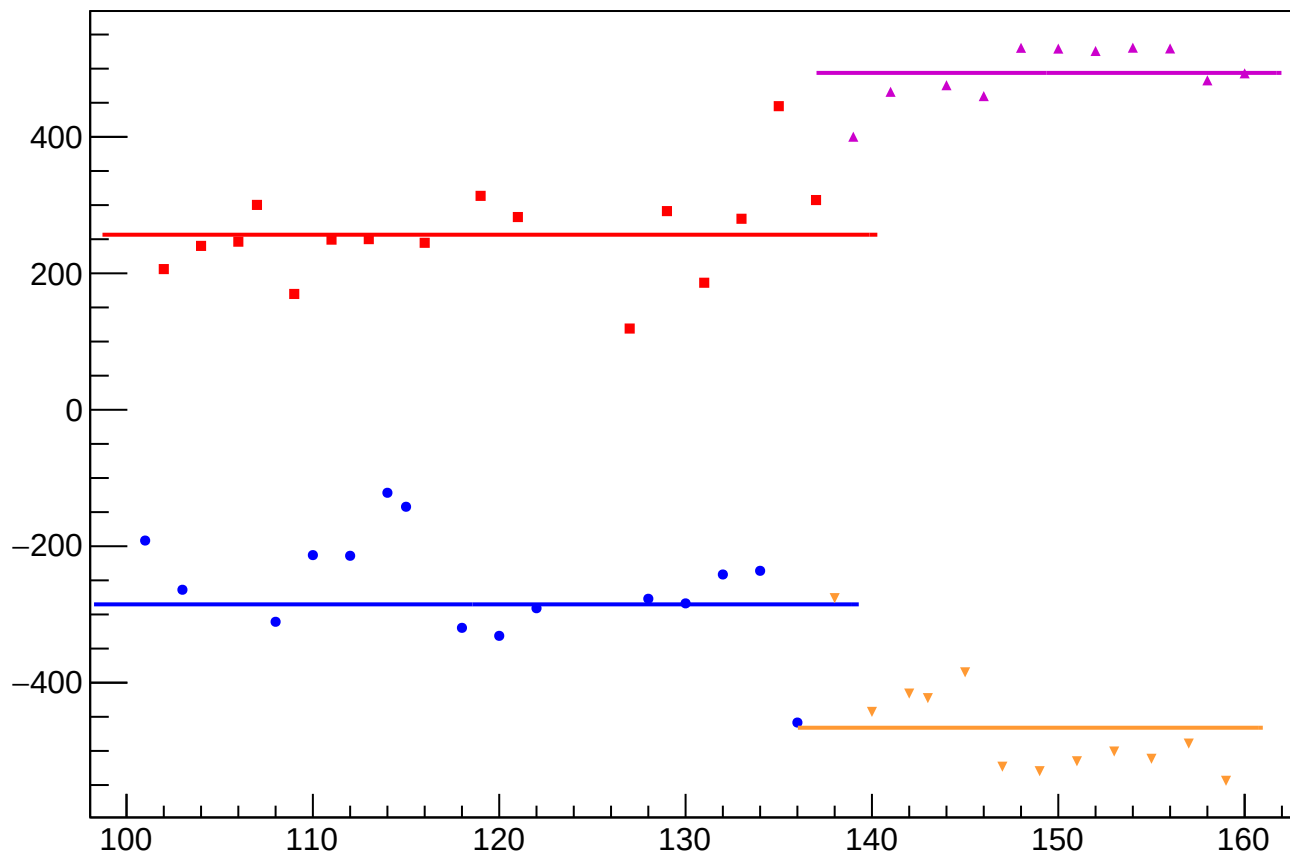


dit\_4aX\_coil1\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                       |                                         |
|------------------------------|-------------------------------------------------------------------|-----------------------|-----------------------------------------|
| 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\_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

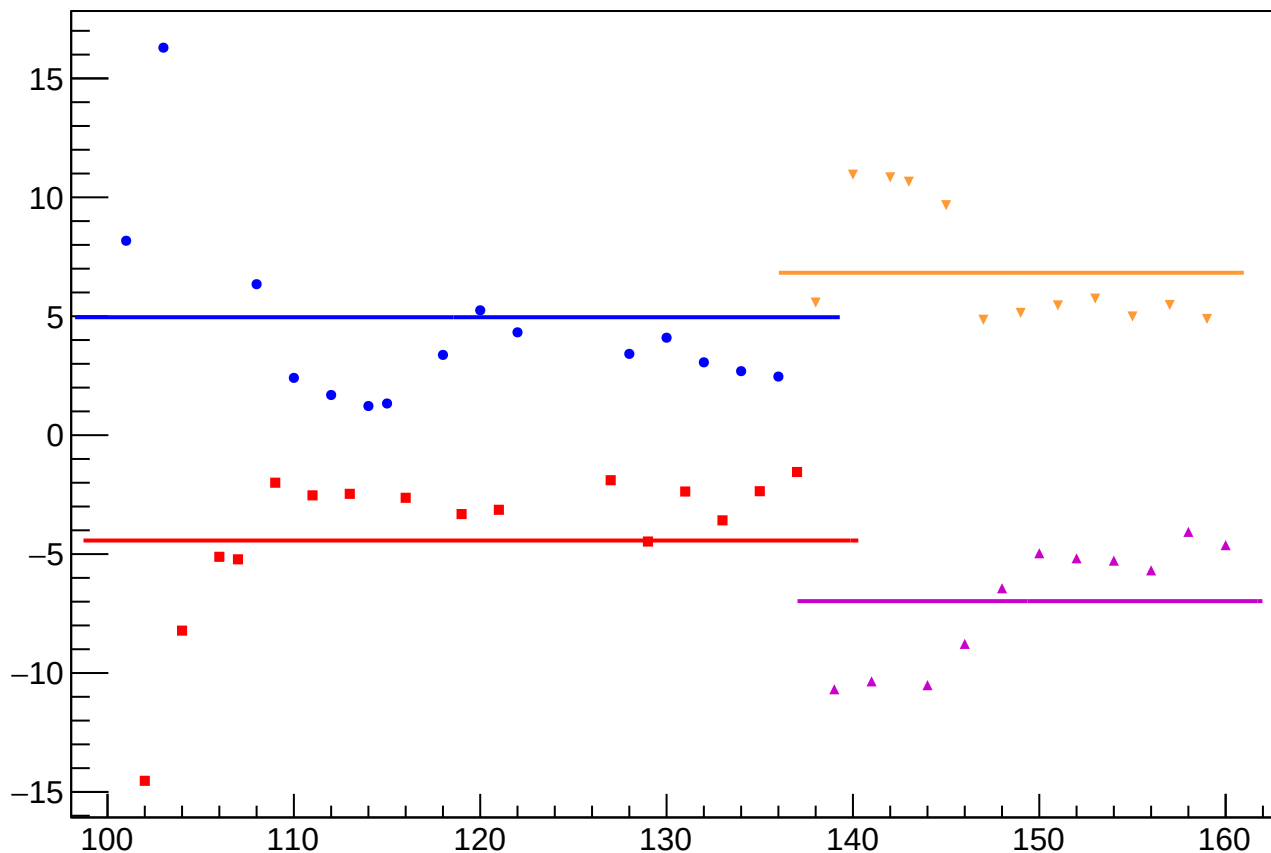
Right: -10.589+/-0.000  $\chi^2/\text{NDF}$ : 104681795299957

In: 172.388+/-0.000  $\chi^2/\text{NDF}$ : 23725794461997010

Out: -161.153+/-0.000  $\chi^2/\text{NDF}$ : 210188051150550

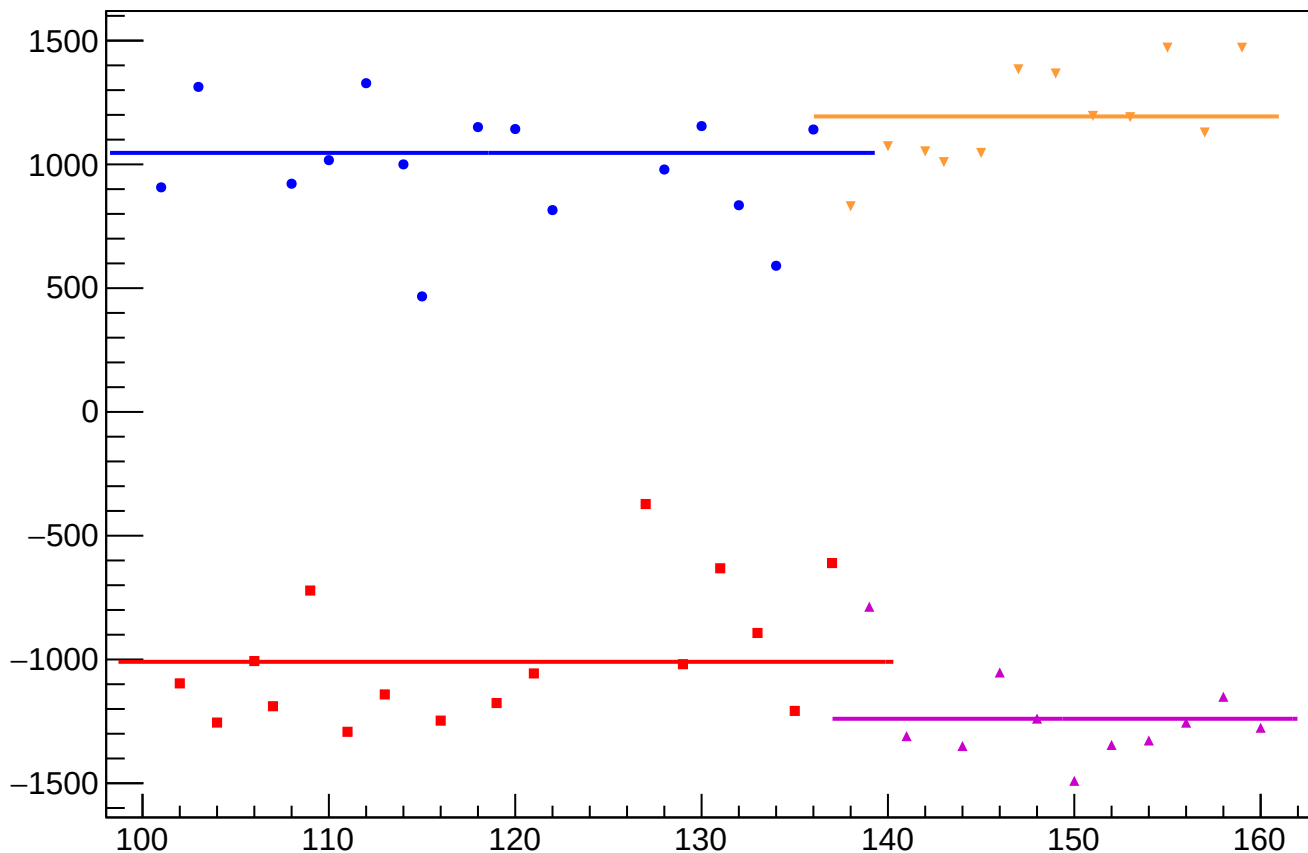
All: 5.194+/-0.000  $\chi^2/\text{NDF}$ : 53516578605527

# dit\_4eX\_coil1\_err\_mean vs Slug, Sign Corrected



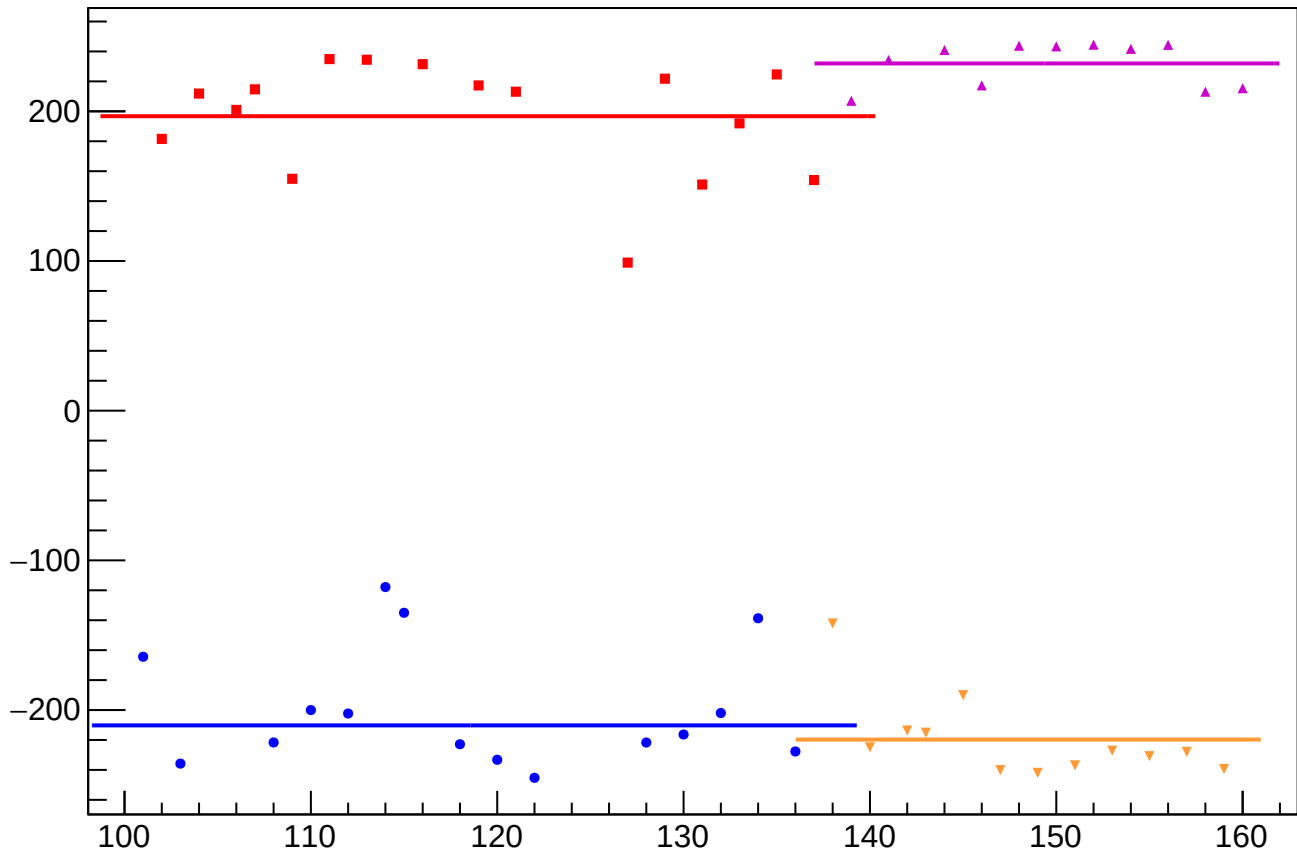
Right In:  $4.959 \pm 0.000$   $\chi^2/\text{NDF}$ : 10465467057143371817371681641463808.0/14  
 Left Out:  $6.828 \pm 0.000$   $\chi^2/\text{NDF}$ : 5374095498583312473439971131260928.0/11  
 Right Out:  $-4.429 \pm 0.000$   $\chi^2/\text{NDF}$ : 8371440400334524571131796772618240.0/15  
 Left In:  $-6.978 \pm 0.000$   $\chi^2/\text{NDF}$ : 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

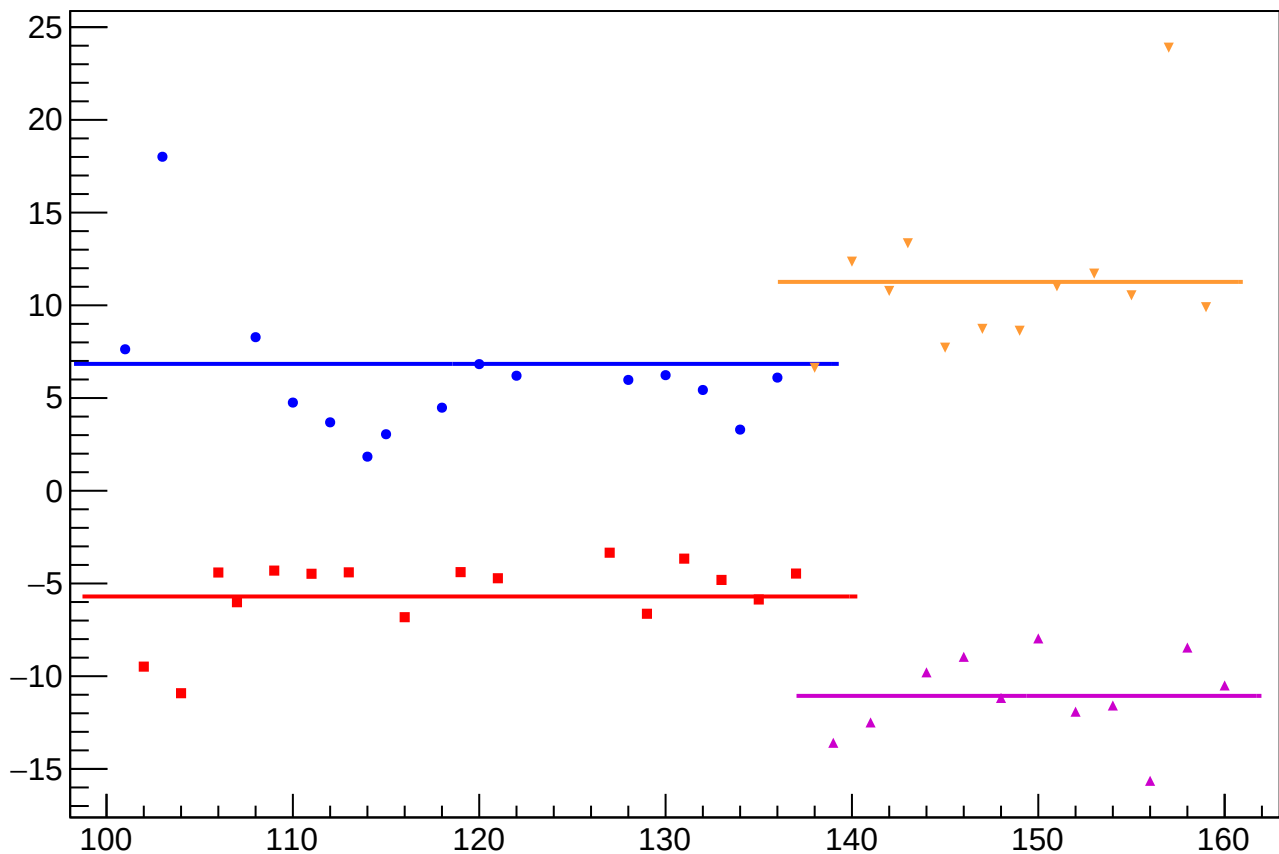
Right: -3.979+/-0.000  $\chi^2/\text{NDF}$ : 5596508618889263

In: 49.520+/-0.000  $\chi^2/\text{NDF}$ : 753125513421150554

Out: -44.029+/-0.000  $\chi^2/\text{NDF}$ : 6848097439733710

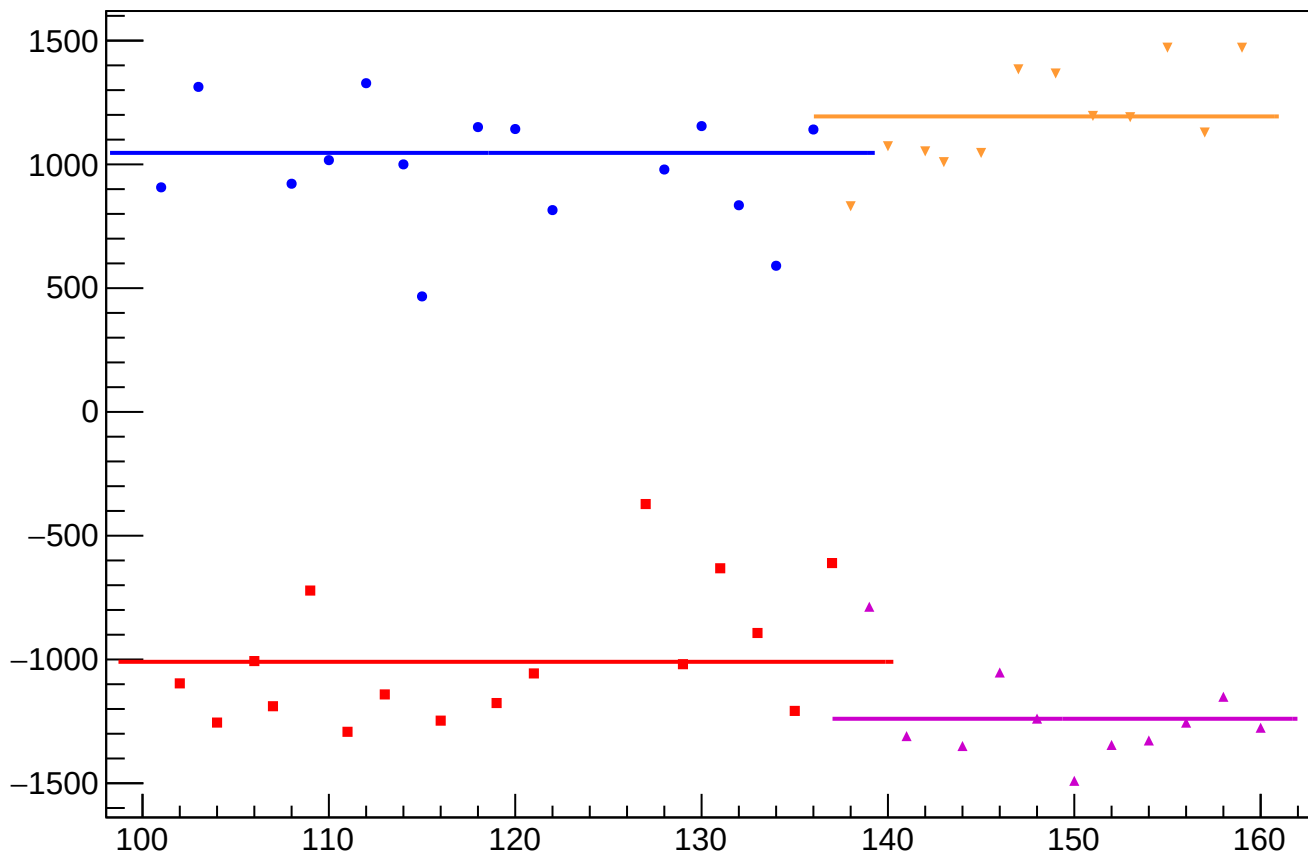
All: 2.627+/-0.000  $\chi^2/\text{NDF}$ : 15069384503153

dit\_11X12X\_coil1\_err\_mean vs Slug, Sign Corrected



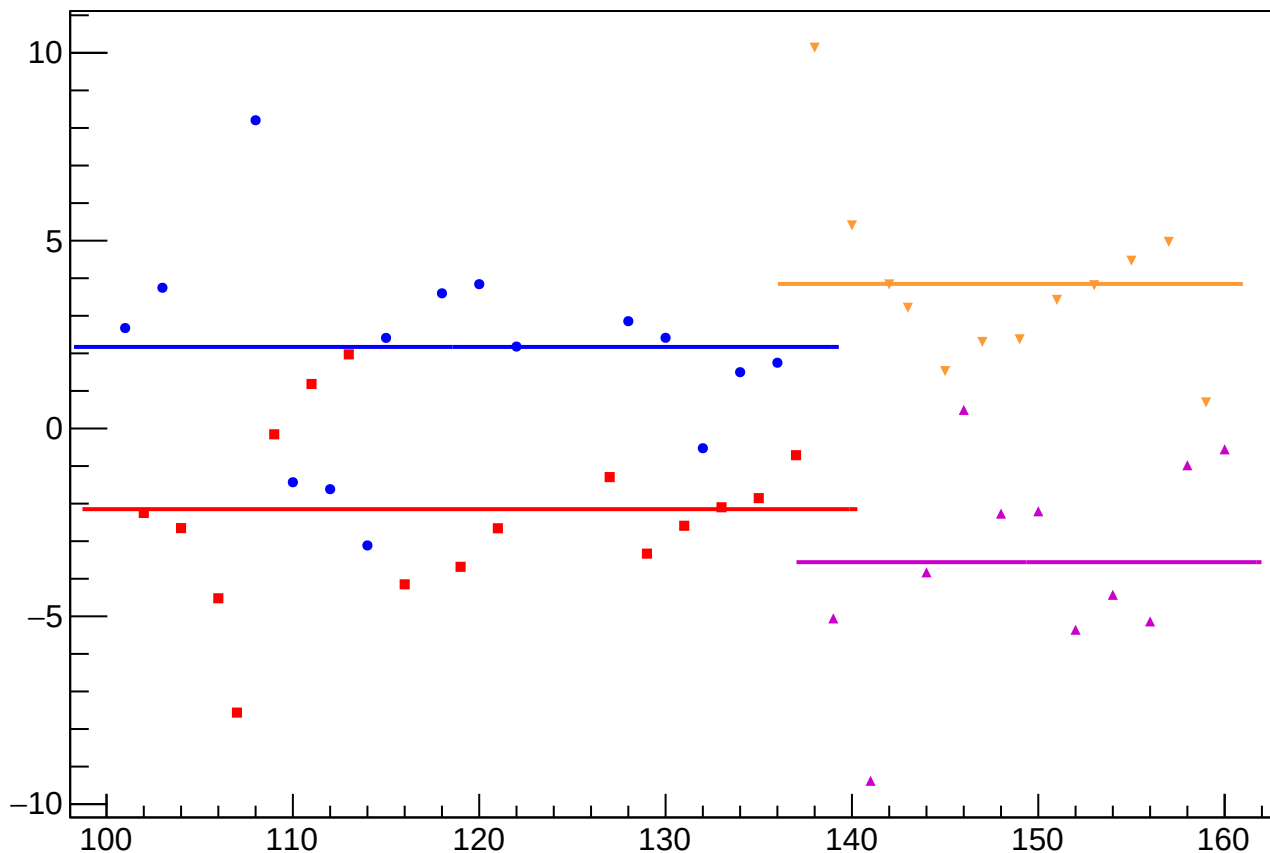
Right In: 6.842 +/- 0.000  $\chi^2/\text{NDF}$ : 9355934166823324467316647620771840.0/14  
 Left Out: 11.263 +/- 0.000  $\chi^2/\text{NDF}$ : 16950484304495826735526537389408256.0/11  
 Right Out: -5.701 +/- 0.000  $\chi^2/\text{NDF}$ : 3174693398300953393137731791486976.0/15  
 Left In: -11.061 +/- 0.000  $\chi^2/\text{NDF}$ : 4417559387784954400311933713514496.0/10  
 All: 0.226 +/- 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

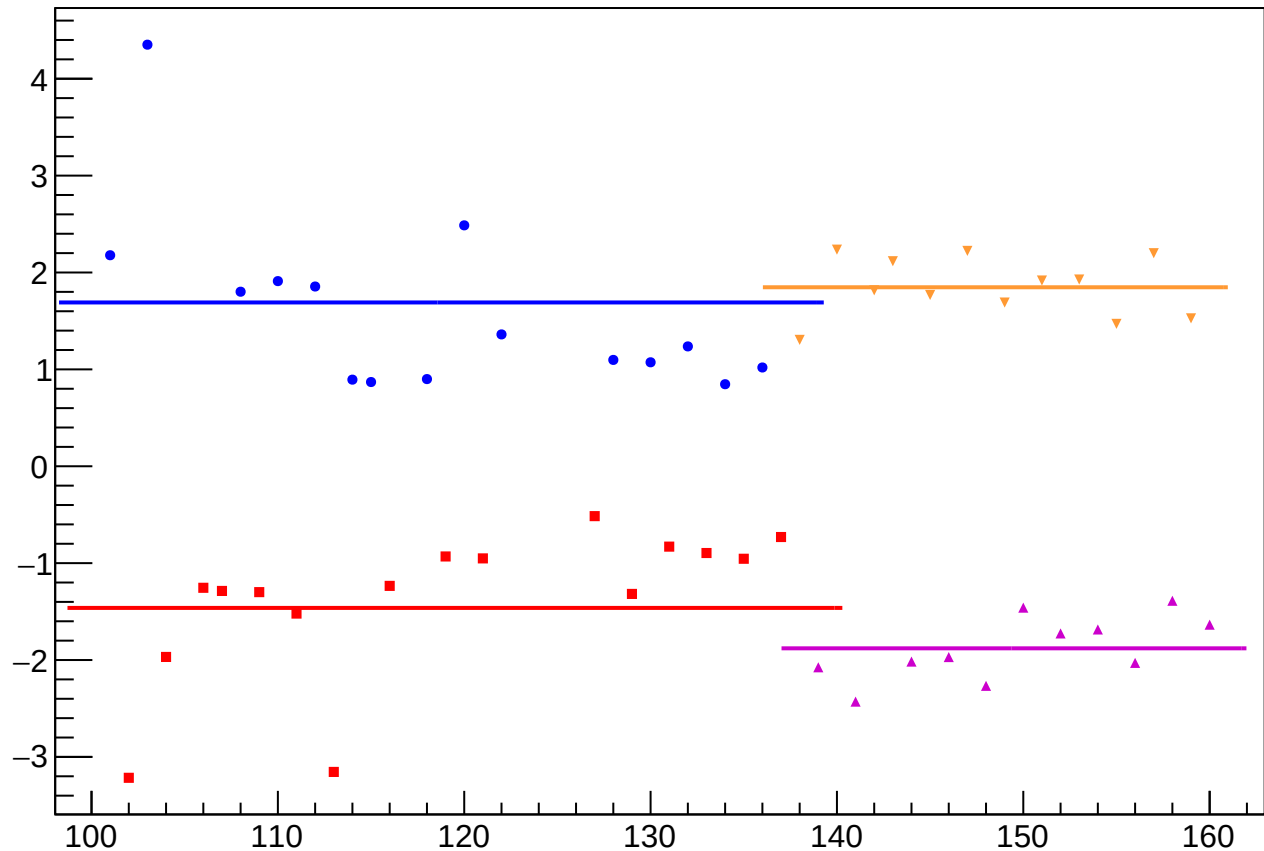
# dit\_4aY\_coil1\_mean vs Slug, Sign Corrected



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:  $0.065 \pm 0.000$   $\chi^2/\text{NDF}: 49586913800618$

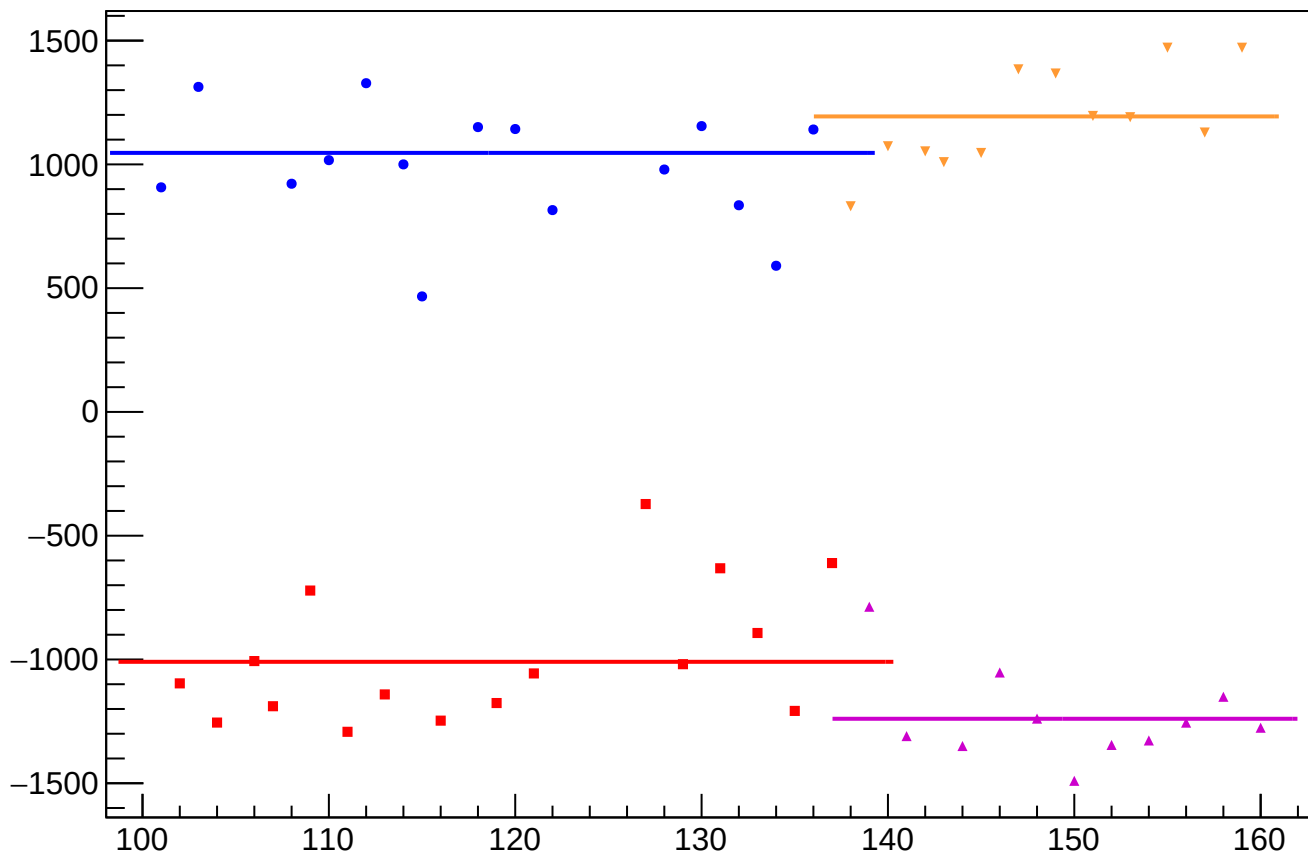


dit\_4aY\_coil1\_err\_mean vs Slug, Sign Corrected



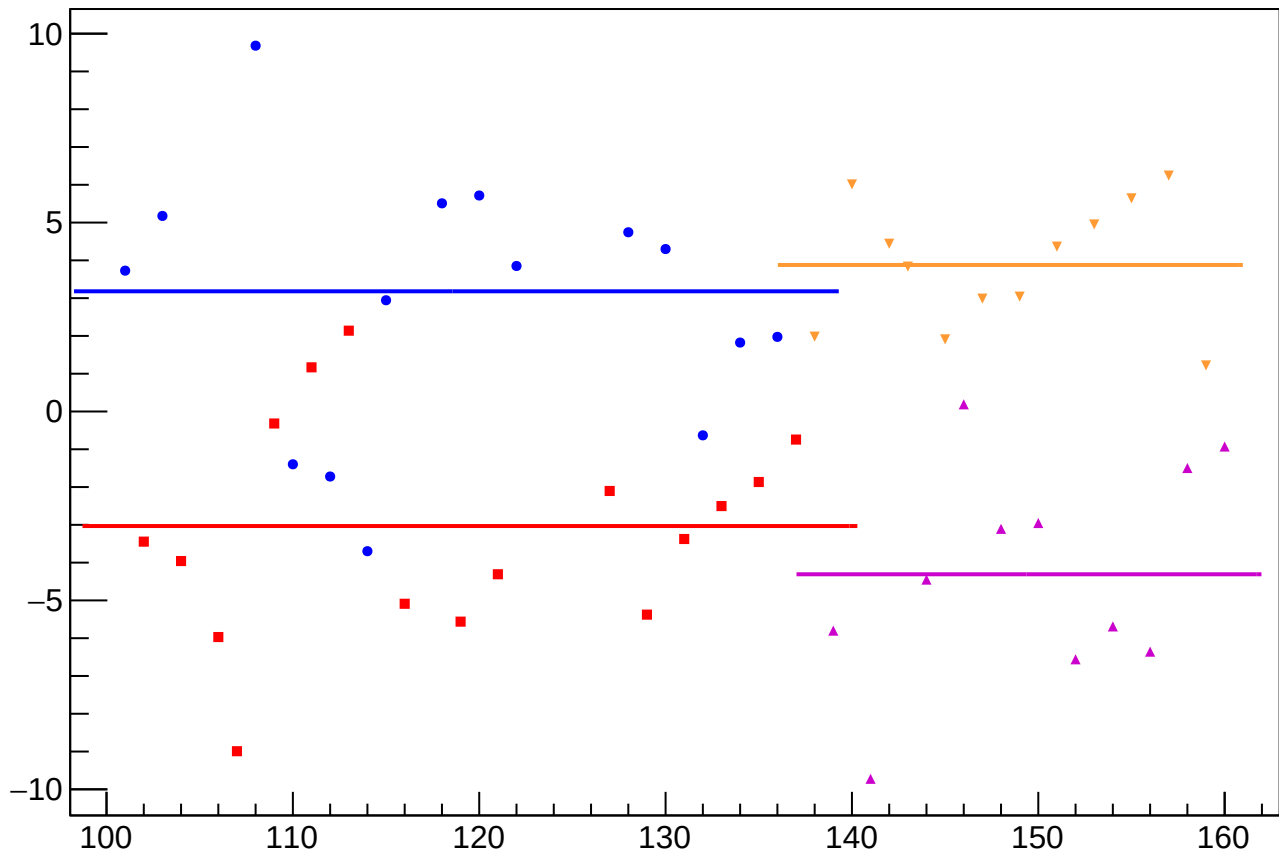
Right In:  $1.691 \pm 0.000$   $\chi^2/\text{NDF}: 612163393317609859674079412355072.0/14$   
 Left Out:  $1.847 \pm 0.000$   $\chi^2/\text{NDF}: 84162850183102511254837045231616.0/11$   
 Right Out:  $-1.462 \pm 0.000$   $\chi^2/\text{NDF}: 444384511662519040022371754835968.0/15$   
 Left In:  $-1.879 \pm 0.000$   $\chi^2/\text{NDF}: 90968052268112309617342982127616.0/10$   
 All:  $0.024 \pm 0.000$   $\chi^2/\text{NDF}: 10893960400462$

dit\_4aY\_coil1\_Ndata\_mean vs Slug, Sign Corrected



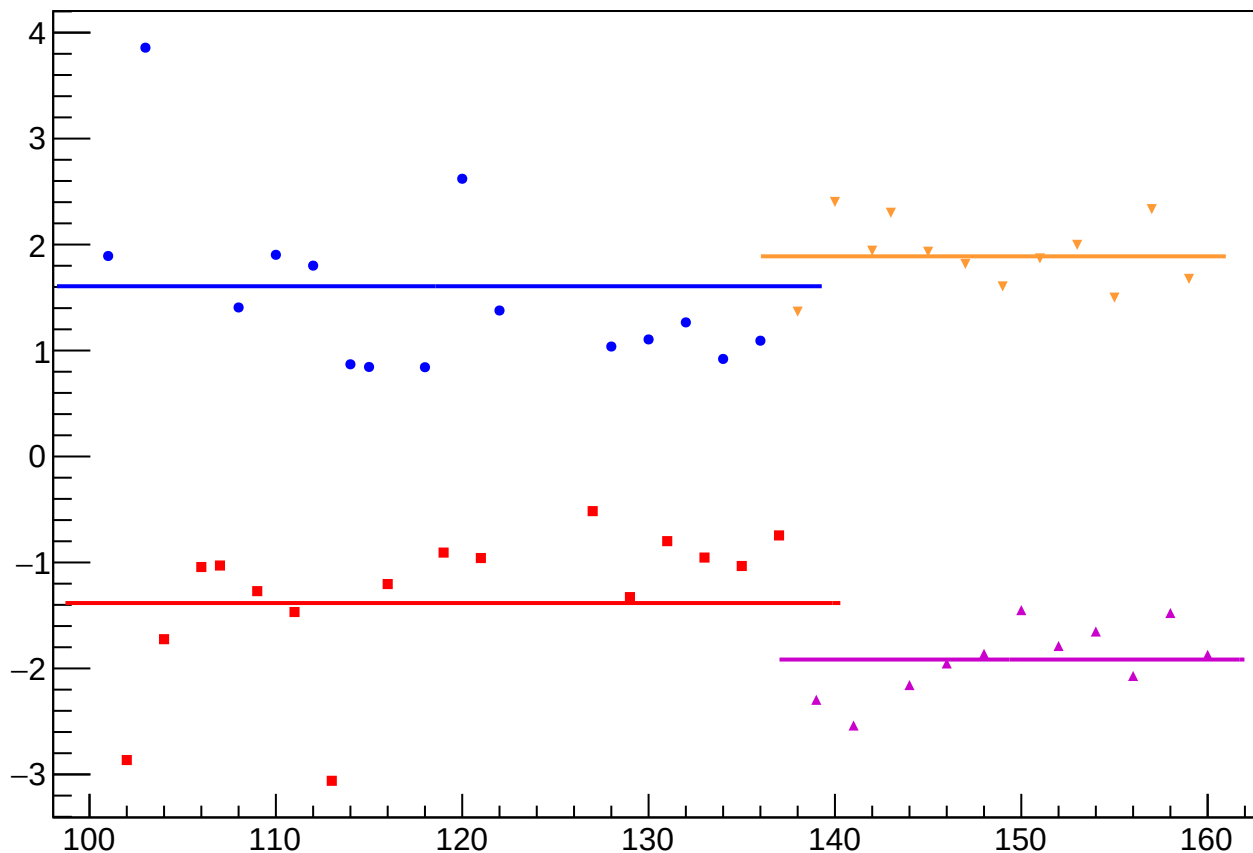
|                              |                                                                   |                       |                                         |
|------------------------------|-------------------------------------------------------------------|-----------------------|-----------------------------------------|
| 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



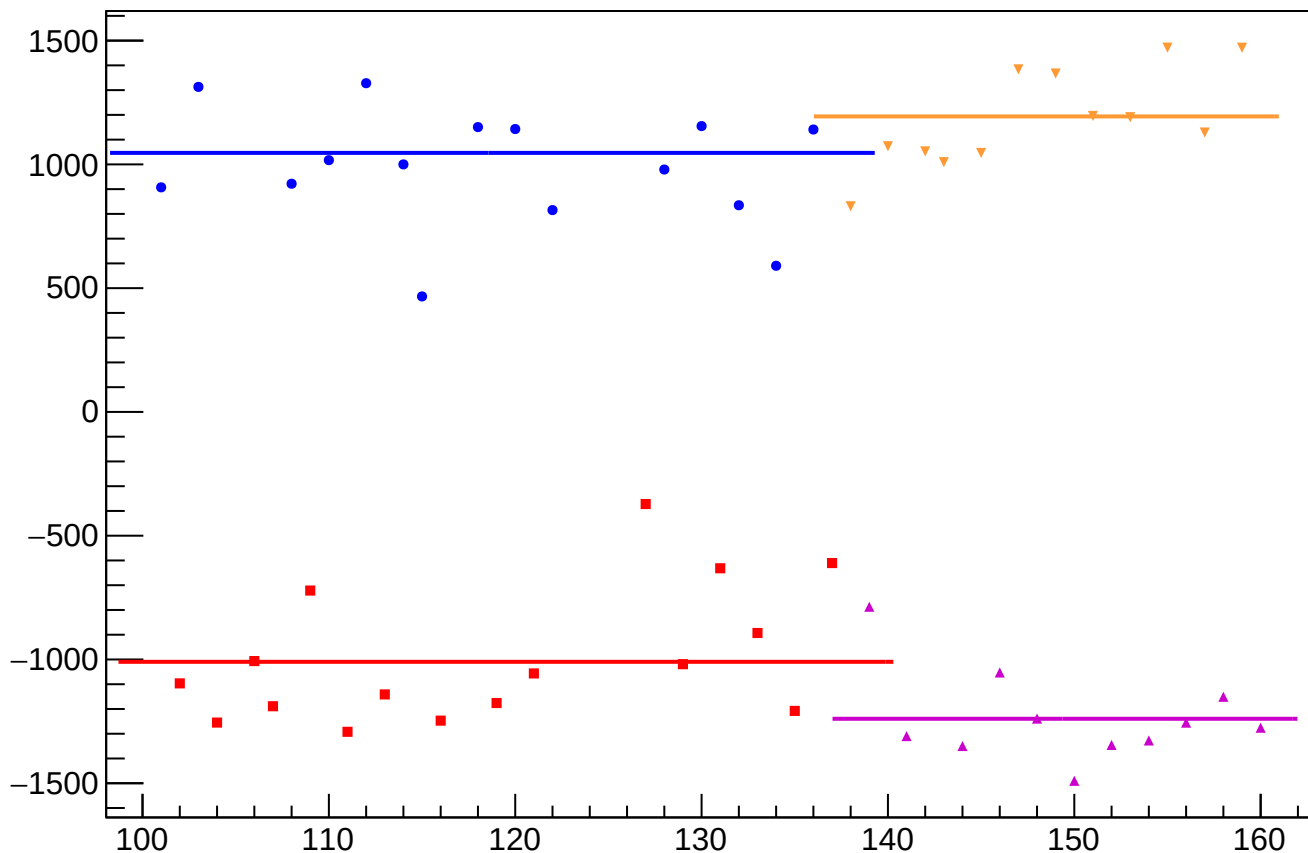
Left:  $-0.237 \pm 0.000$   $\chi^2/\text{NDF}: 40330727078704471$   
 Right In:  $3.181 \pm 0.000$   $\chi^2/\text{NDF}: 5833303227868252617704566394191872.0/14$   
 Left Out:  $3.878 \pm 0.000$   $\chi^2/\text{NDF}: 2463584640289158504459219897417728.0/11$   
 Right Out:  $-3.032 \pm 0.000$   $\chi^2/\text{NDF}: 4937209831371793945496546833334272.0/15$   
 Left In:  $-4.308 \pm 0.000$   $\chi^2/\text{NDF}: 7073495667694280351803168107003904.0/10$   
 All:  $-0.125 \pm 0.000$   $\chi^2/\text{NDF}: 6385427084403$

dit\_4eY\_coil1\_err\_mean vs Slug, Sign Corrected



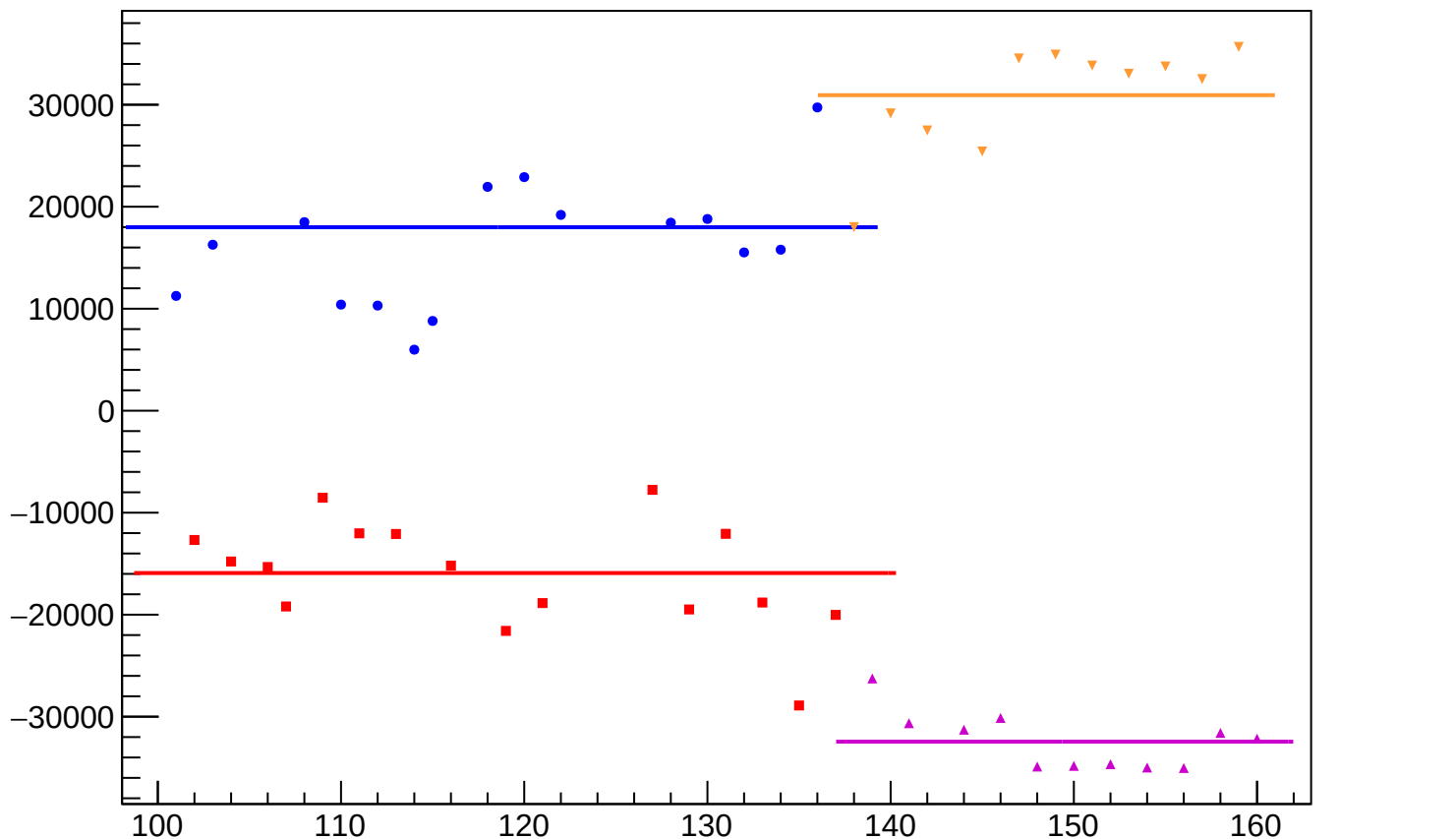
Right In:  $1.607 \pm 0.000$   $\chi^2/\text{NDF}: 460949628640148184181205735833600.0/14$   
 Left Out:  $1.889 \pm 0.000$   $\chi^2/\text{NDF}: 94097326064066188177587241484288.0/11$   
 Right Out:  $-1.383 \pm 0.000$   $\chi^2/\text{NDF}: 358348897016286200957650337792000.0/15$   
 Left In:  $-1.916 \pm 0.000$   $\chi^2/\text{NDF}: 95276515809016209875699691945984.0/10$   
 All:  $0.024 \pm 0.000$   $\chi^2/\text{NDF}: 10610919143090$

dit\_4eY\_coil1\_Ndata\_mean vs Slug, Sign Corrected



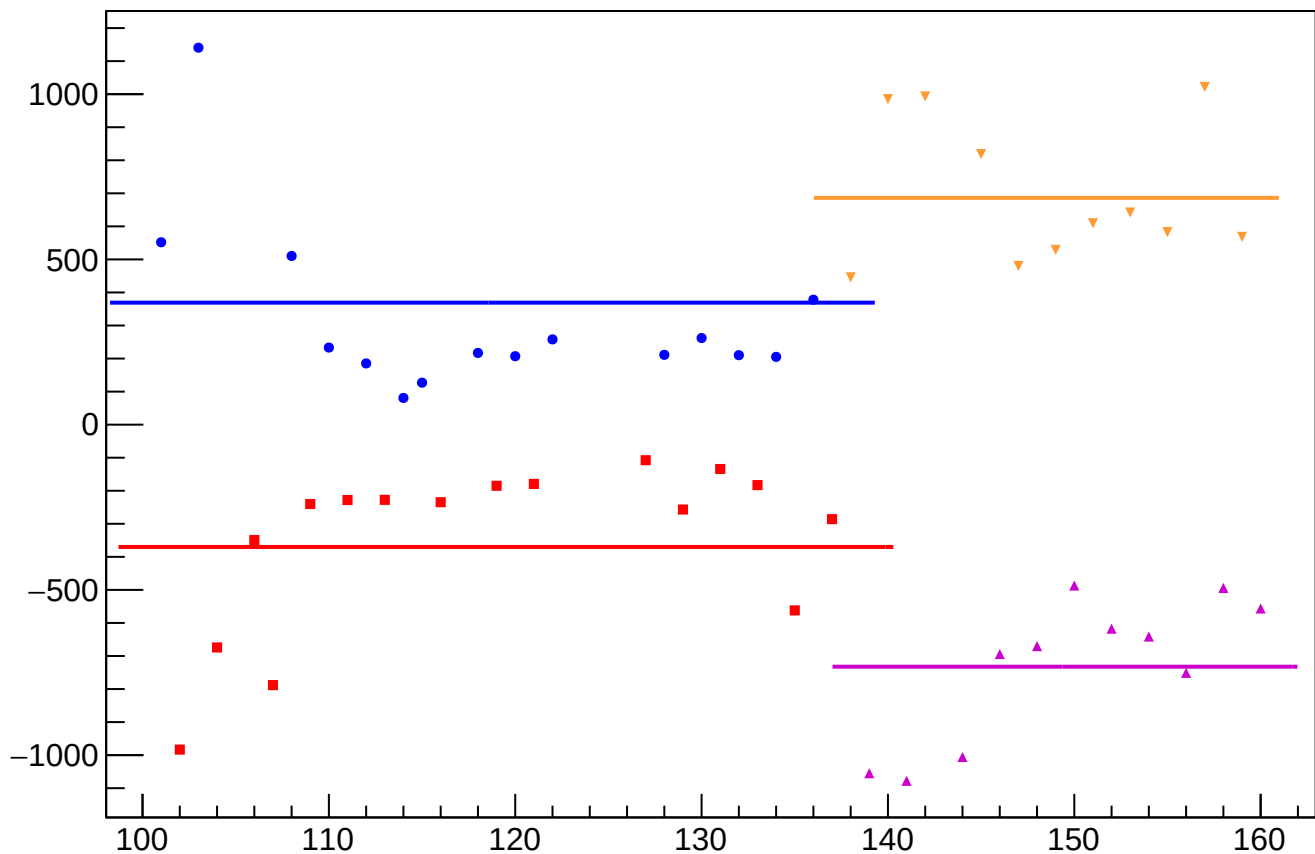
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10  
 All: -15.348+/-0.000  $\chi^2/\text{NDF}$ : 424479012287

dit\_usl\_coil1\_mean vs Slug, Sign Corrected



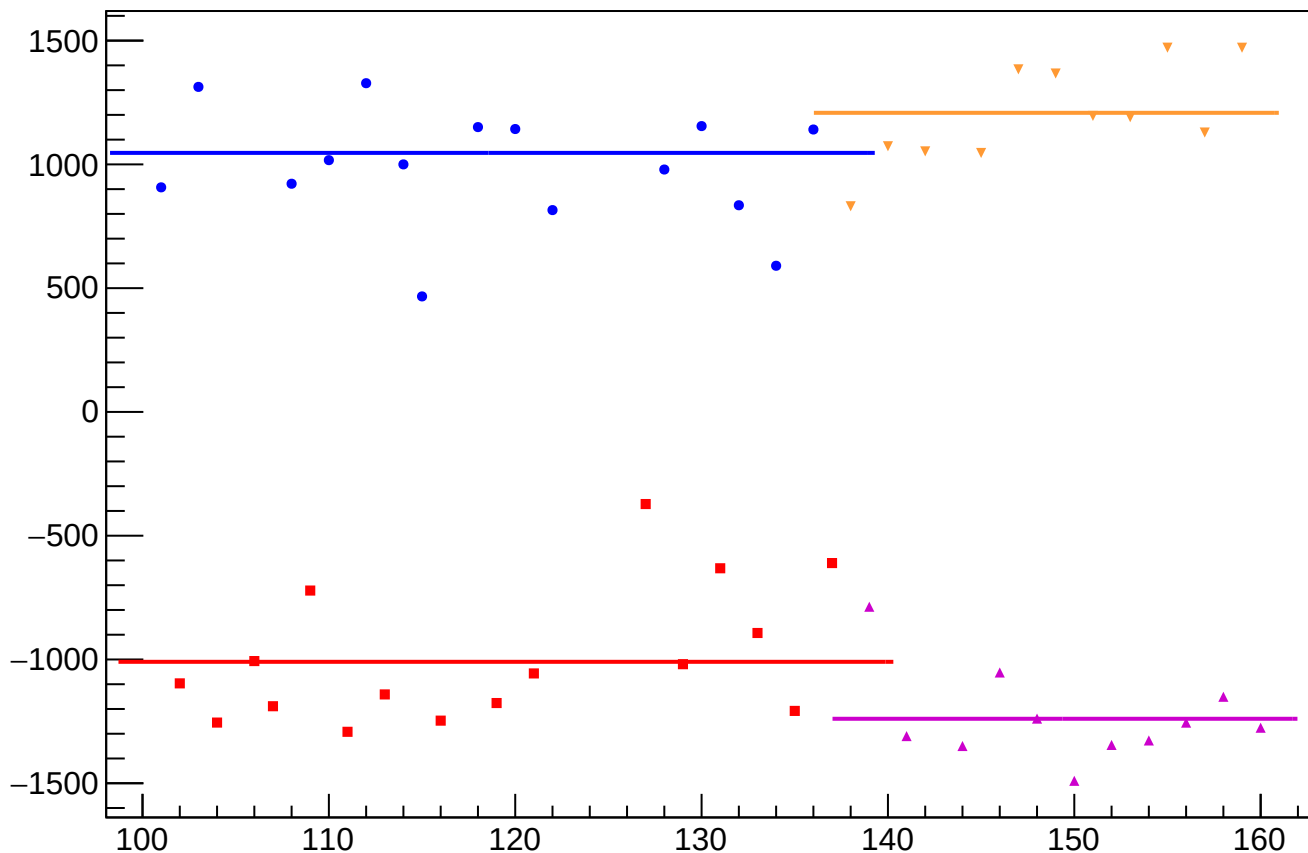
Right In: 17988.185+/-0.000  $\chi^2/\text{NDF}$ : 24815111809984217103544001237552952508416.0/14  
 Left Out: 30938.190+/-0.000  $\chi^2/\text{NDF}$ : 22231201695257869773275369100022395174912.0/10  
 Right Out: -15915.227+/-0.000  $\chi^2/\text{NDF}$ : 19954189674705952707042287416087223992320.0/15  
 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



Right In: 369.169+/-0.000  $\chi^2/\text{NDF}$ : 48053036789565485994195833341370957824.0/14  
 Left Out: 686.240+/-0.000  $\chi^2/\text{NDF}$ : 34417236167842983766159212562513657856.0/10  
 Right Out: -370.091+/-0.000  $\chi^2/\text{NDF}$ : 48214462907052107543037037125316902912.0/15  
 Left In: -732.414+/-0.000  $\chi^2/\text{NDF}$ : 39942105840529115736569596950263889920.0/10  
 All: -33.290+/-0.000  $\chi^2/\text{NDF}$ : 124154771081

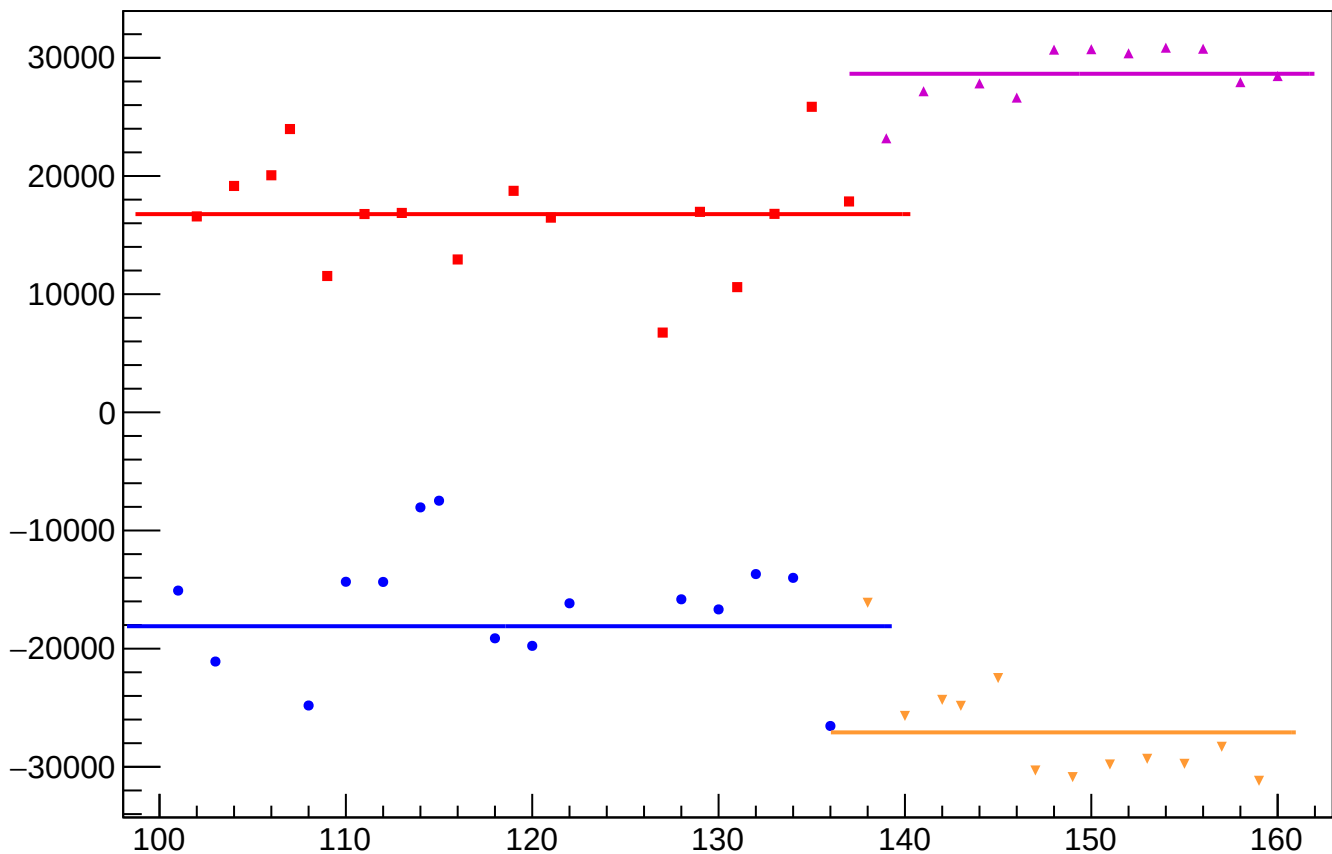
dit\_usl\_coil1\_Ndata\_mean vs Slug, Sign Corrected



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

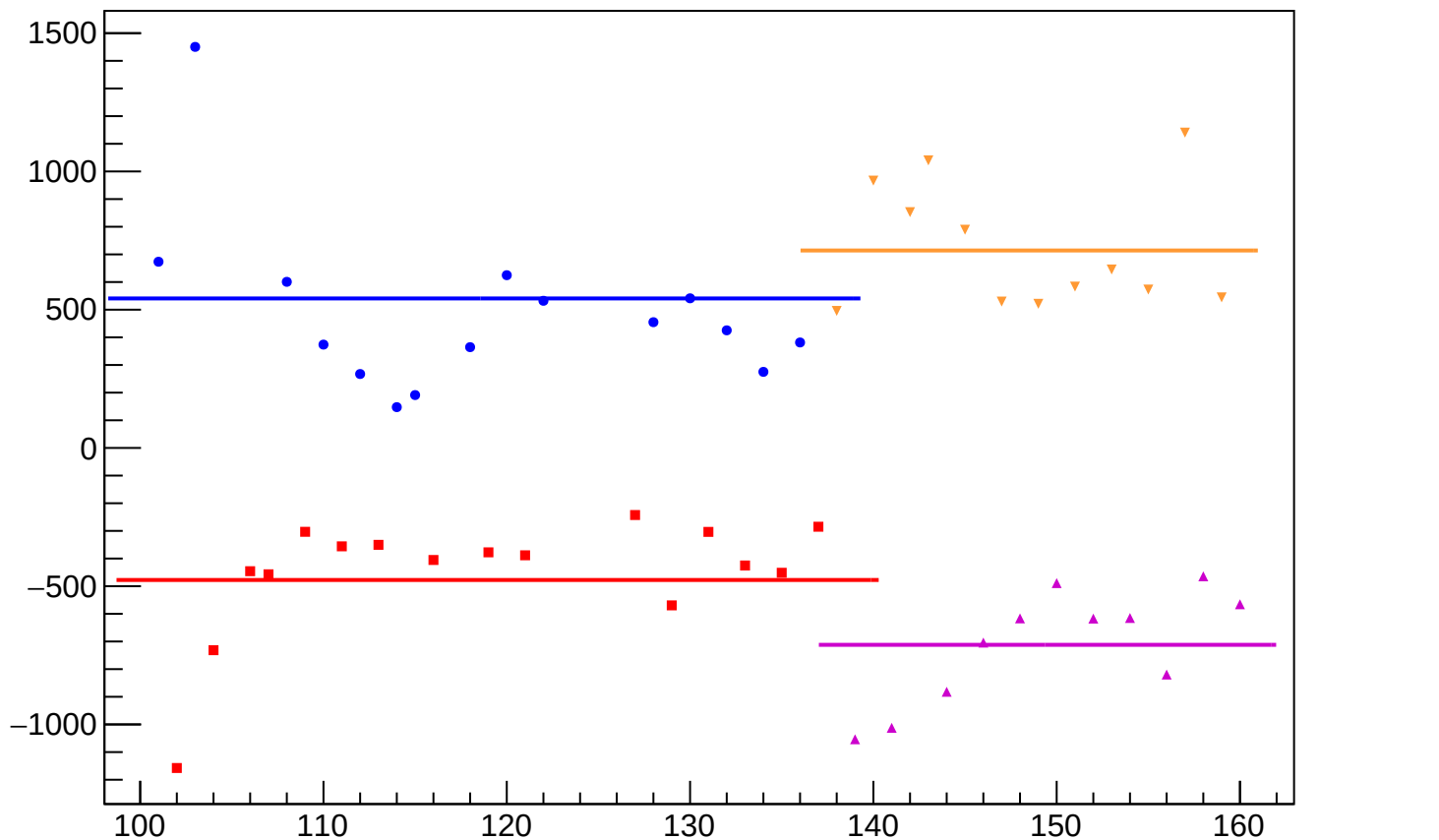
Right: -425.015+/-0.000  $\chi^2/\text{NDF}$ : 42892863582613

In: 9361.516+/-0.000  $\chi^2/\text{NDF}$ : 8527147862381255

Out: -8581.907+/-0.000  $\chi^2/\text{NDF}$ : 77289596182504

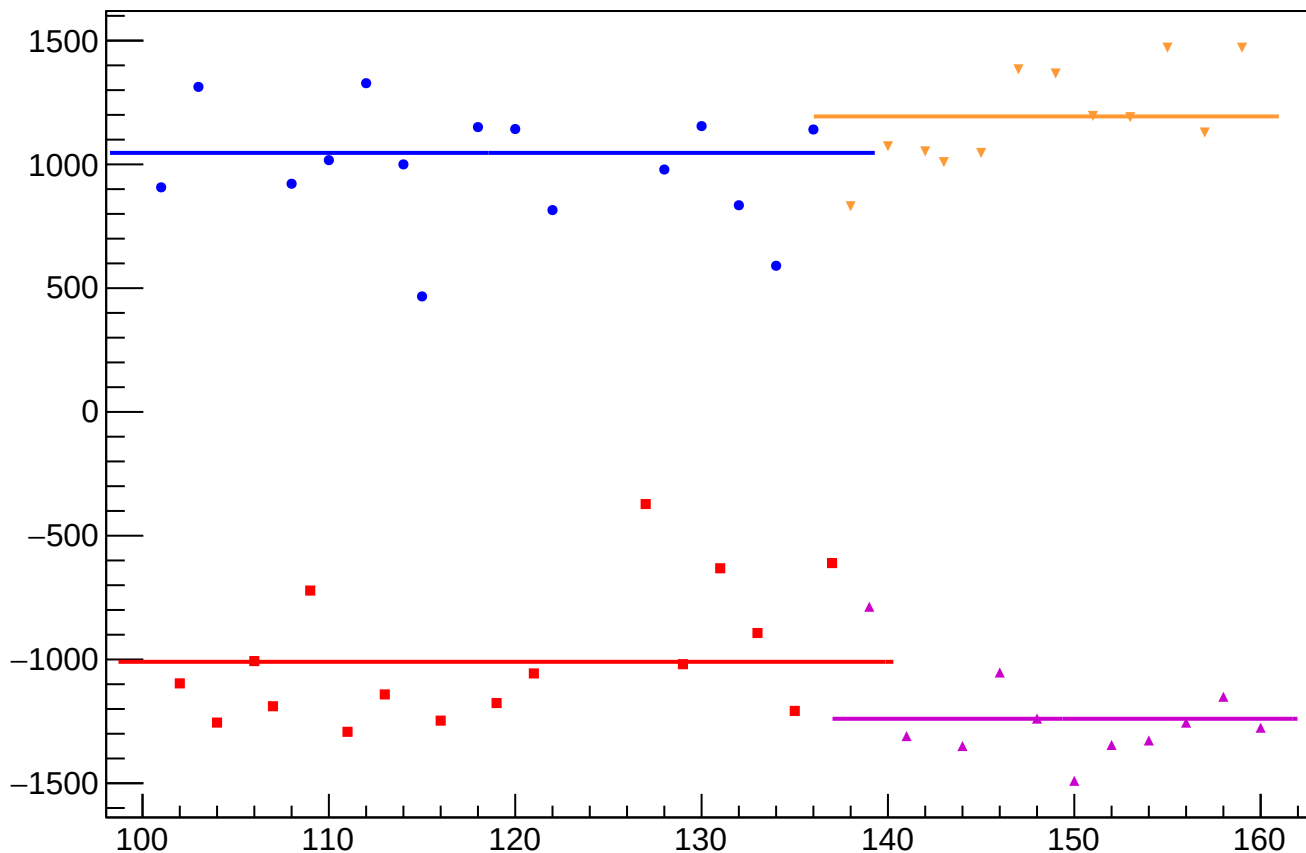
All: 367.048+/-0.000  $\chi^2/\text{NDF}$ : 18794796419

dit\_usr\_coil1\_err\_mean vs Slug, Sign Corrected



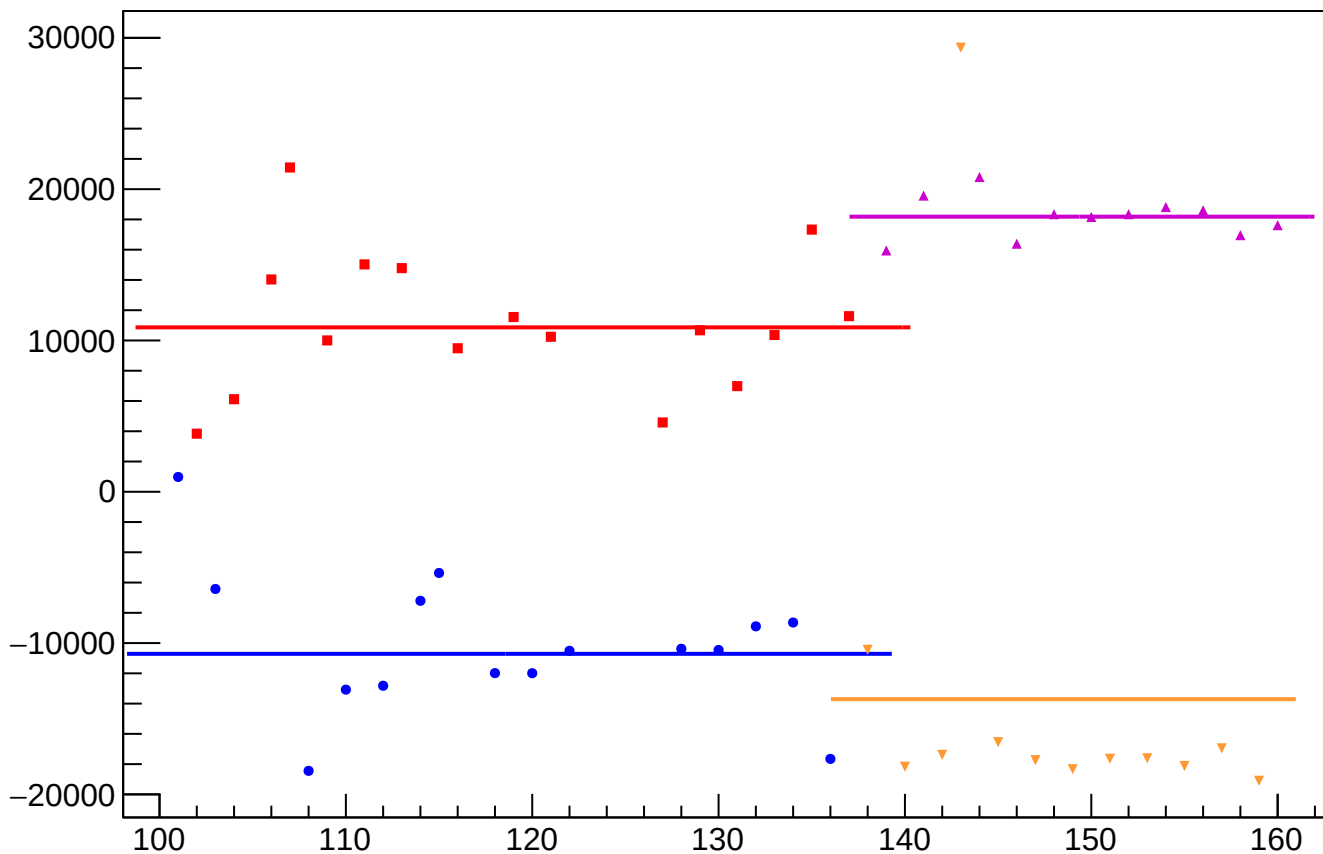
Left:  $-2.853 \pm 0.000$   $\chi^2/\text{NDF}: 10119212919667896$   
 Right In:  $540.663 \pm 0.000$   $\chi^2/\text{NDF}: 64546819695986774721678785082975846400.0/14$   
 Left Out:  $714.147 \pm 0.000$   $\chi^2/\text{NDF}: 43160975478631460248575745928156151808.0/11$   
 Right Out:  $-477.546 \pm 0.000$   $\chi^2/\text{NDF}: 38798306504296954461537116809760604160.0/15$   
 Left In:  $-712.092 \pm 0.000$   $\chi^2/\text{NDF}: 34092045920503284936427855101460217856.0/10$   
 All:  $8.600 \pm 0.000$   $\chi^2/\text{NDF}: 14568707976042$

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

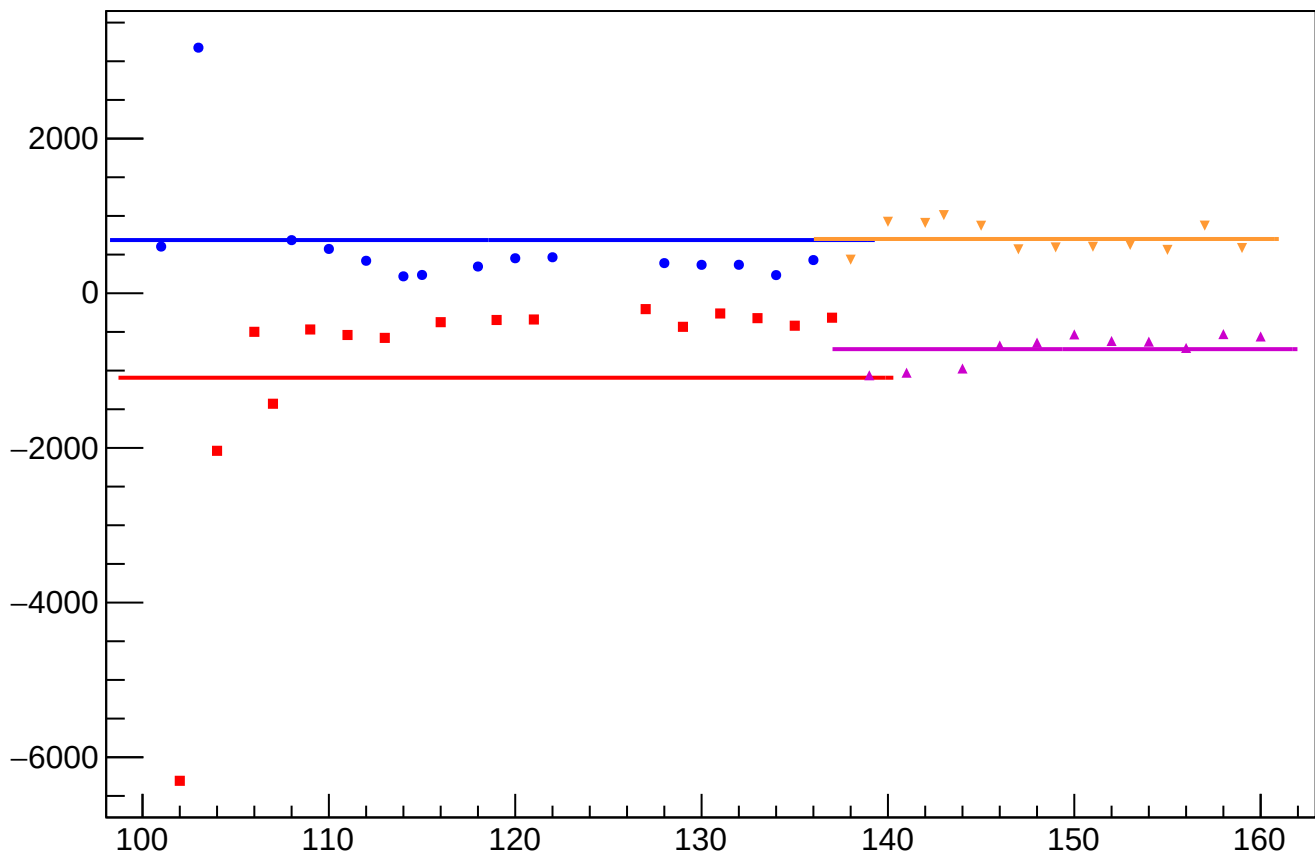
$\chi^2/\text{NDF}$ : 14234762838858382484525901644131626647552.0/15

Left In: 18181.504 +/- 0.000

$\chi^2/\text{NDF}$ : 1643617183572647868818914289162838343680.0/10

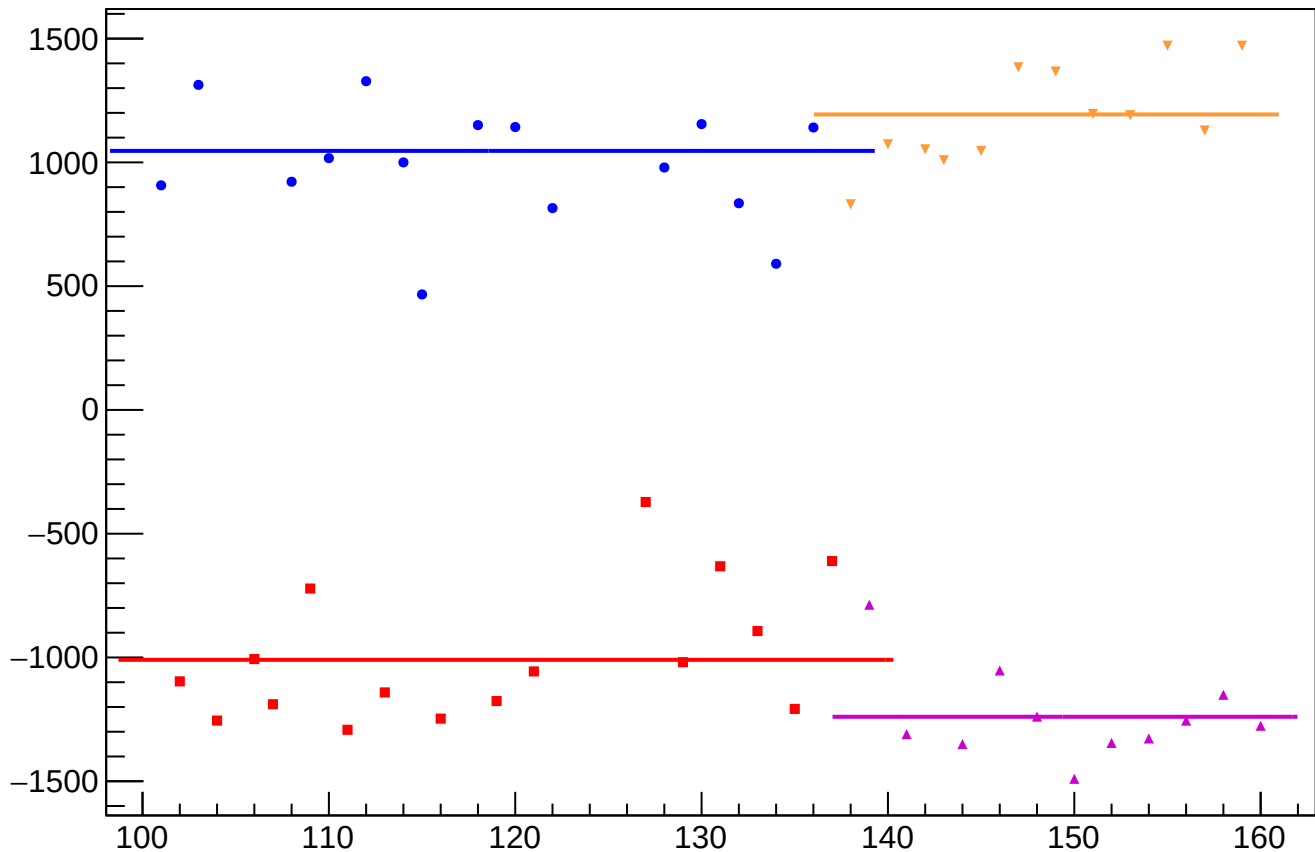
All: 1448.863 +/- 0.000  $\chi^2/\text{NDF}$ : 79476286142

dit\_atl1\_coil1\_err\_mean vs Slug, Sign Corrected



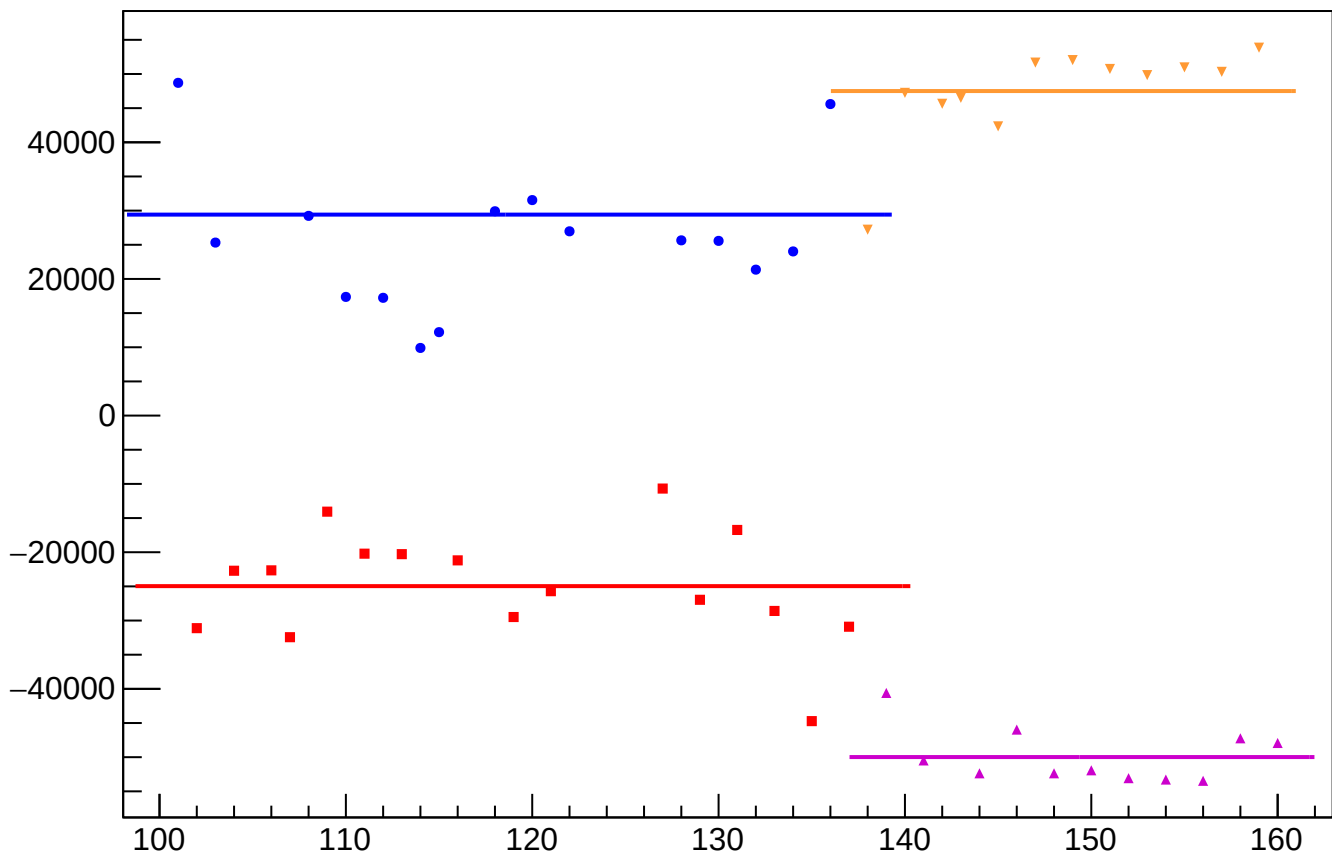
Right In:  $687.939 \pm 0.000$   $\chi^2/\text{NDF}: 409297141104301509817753390759024787456.0/14$   
 Left Out:  $701.825 \pm 0.000$   $\chi^2/\text{NDF}: 29011752452264624264282448573098885120.0/11$   
 Right Out:  $-1092.265 \pm 0.000$   $\chi^2/\text{NDF}: 1883198142929605813456233812946948456448.0/15$   
 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

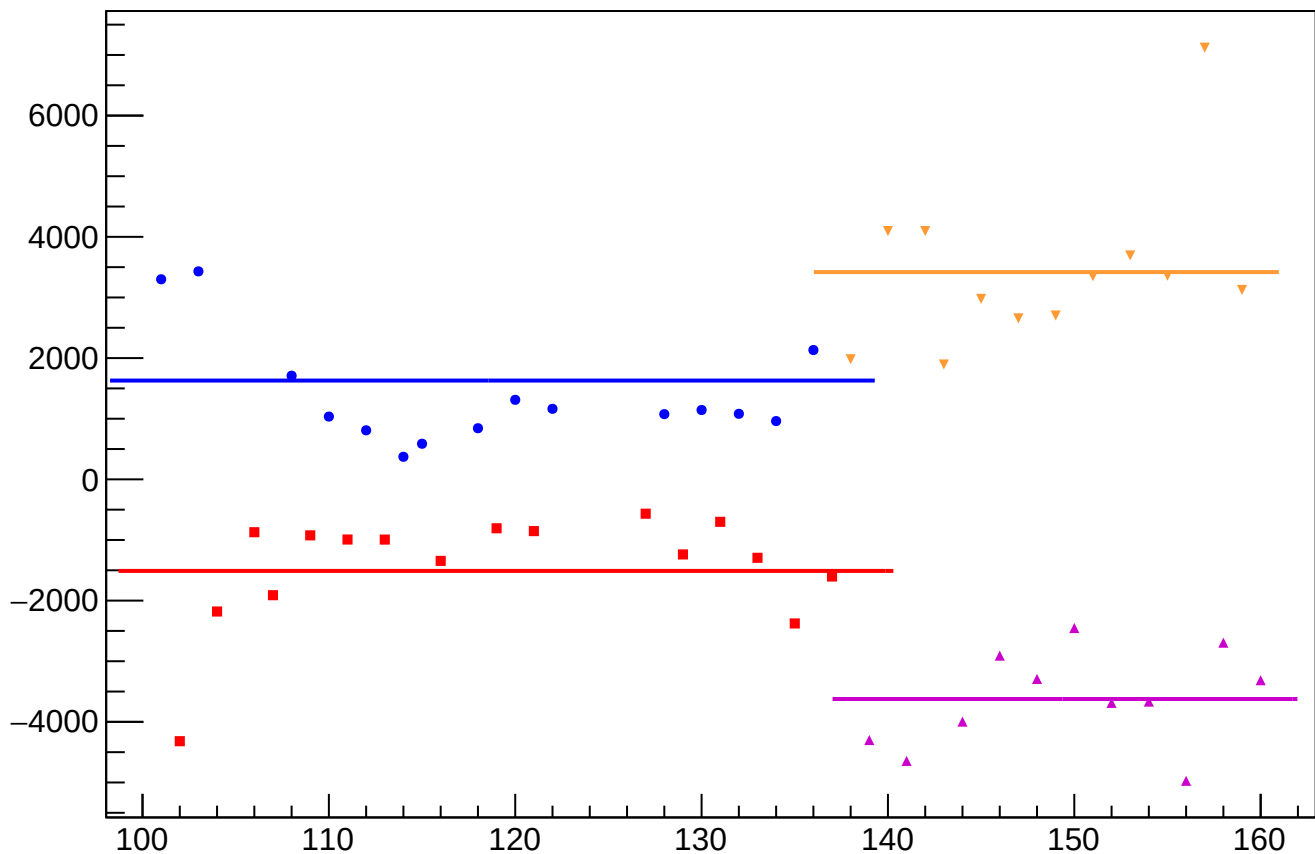
$\chi^2/\text{NDF}$ : 45631572920122171972835961685494315614208.0/15

Left In: -49982.063+/-0.000

$\chi^2/\text{NDF}$ : 13505821019305603846121121344717970210816.0/10

All: -103.402+/-0.000  $\chi^2/\text{NDF}$ : 55223983268

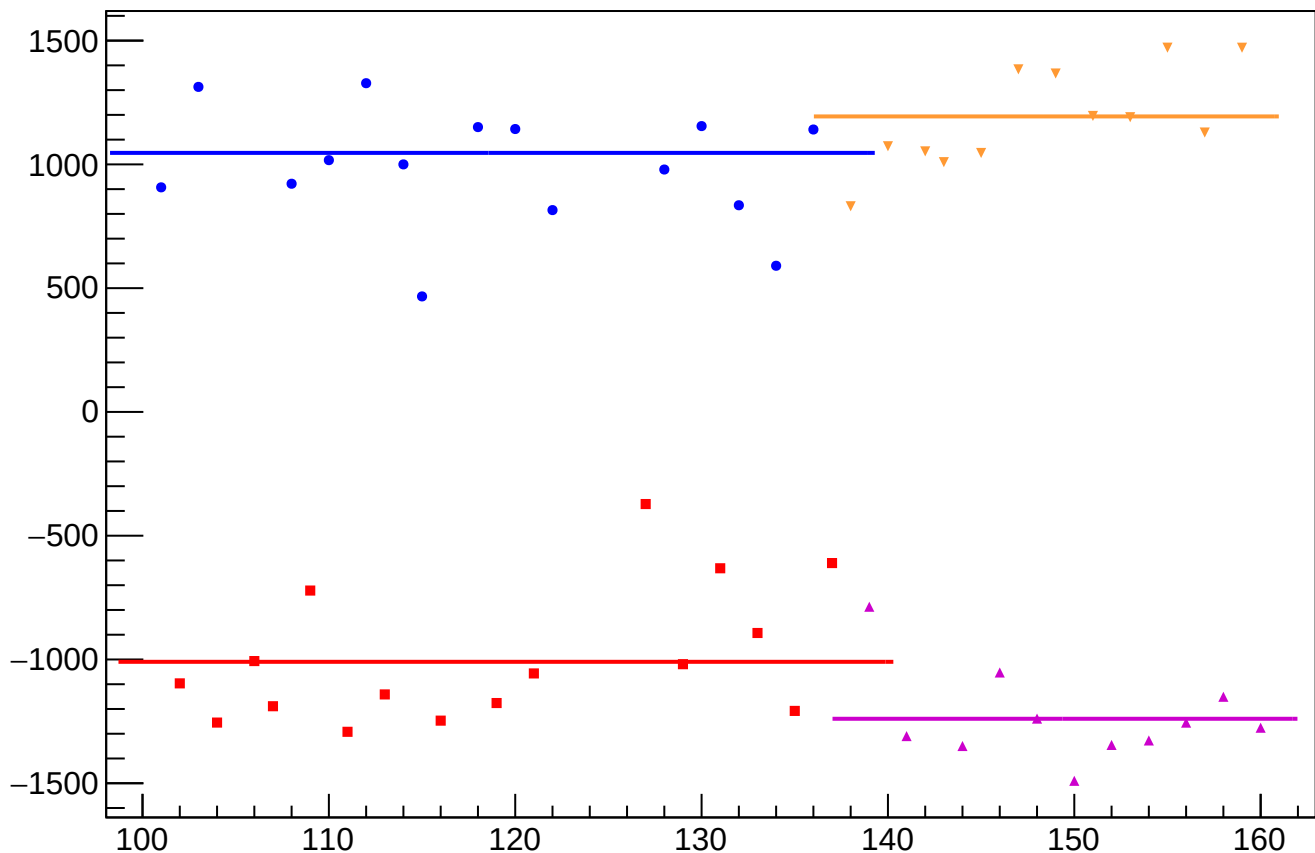
dit\_atl2\_coil1\_err\_mean vs Slug, Sign Corrected



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

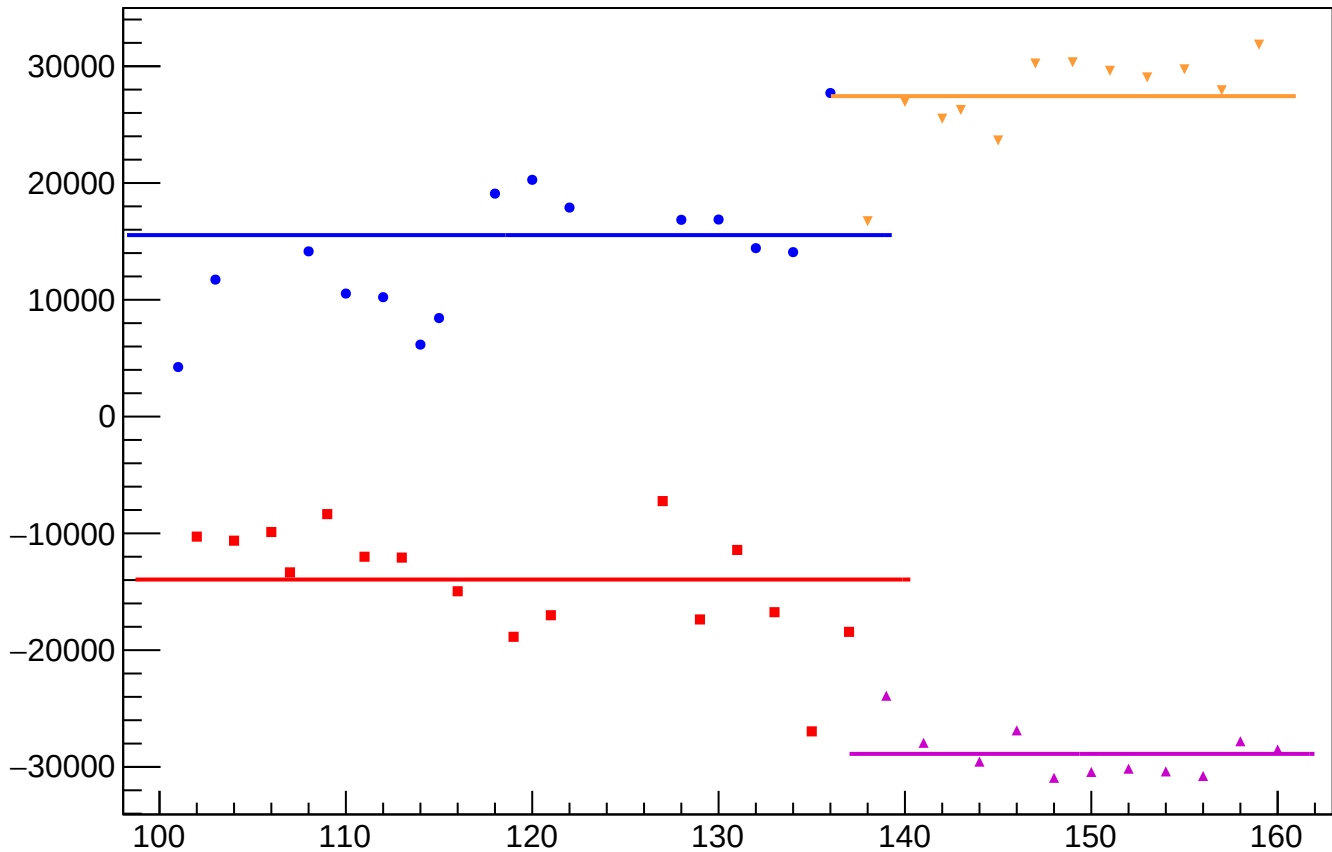


dit\_atl2\_coil1\_Ndata\_mean vs Slug, Sign Corrected



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

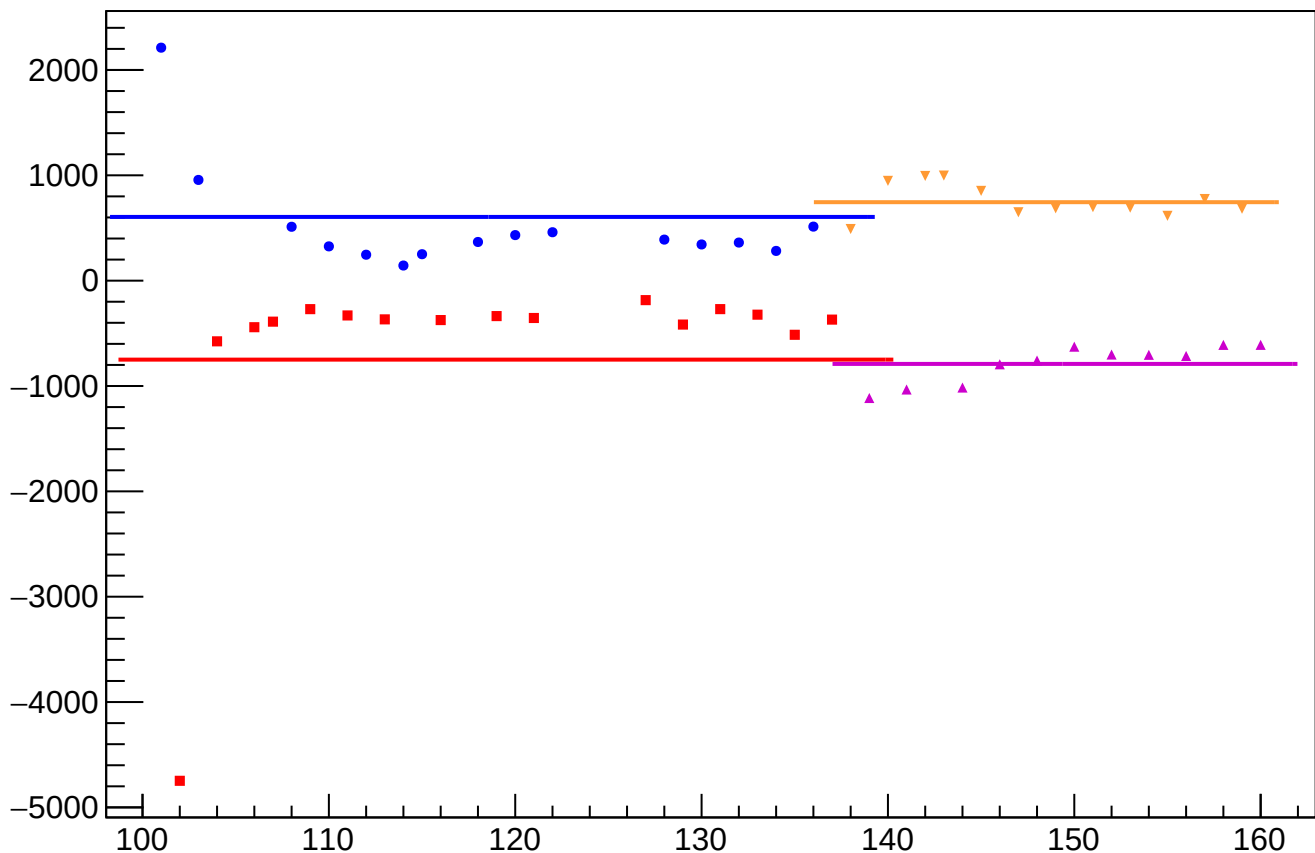
$\chi^2/\text{NDF}$ : 16954071035739584664612813430748100952064.0/15

Left In: -28881.771+/-0.000

$\chi^2/\text{NDF}$ : 3761764043421234560623243625754374701056.0/10

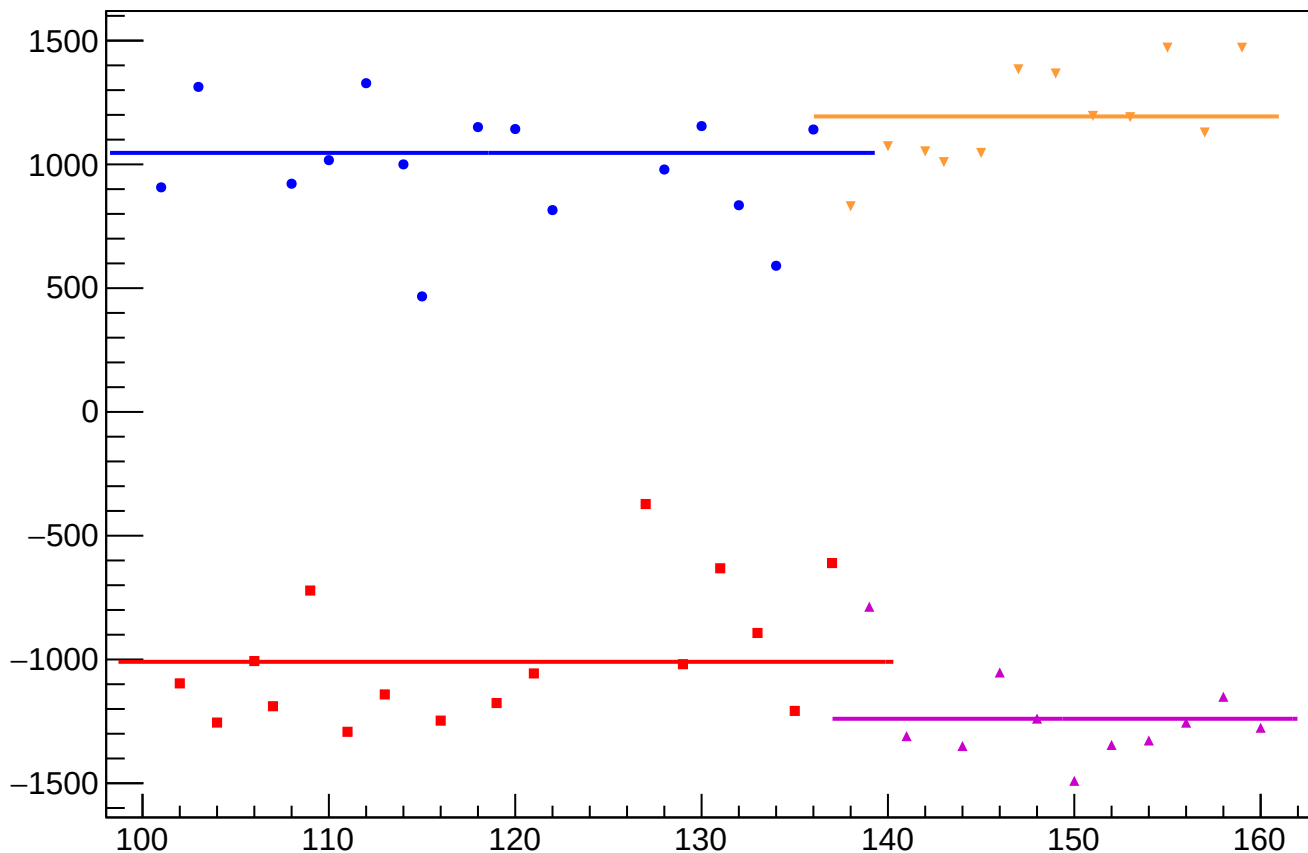
All: -262.152+/-0.000  $\chi^2/\text{NDF}$ : 18076481618

dit\_atr1\_coil1\_err\_mean vs Slug, Sign Corrected



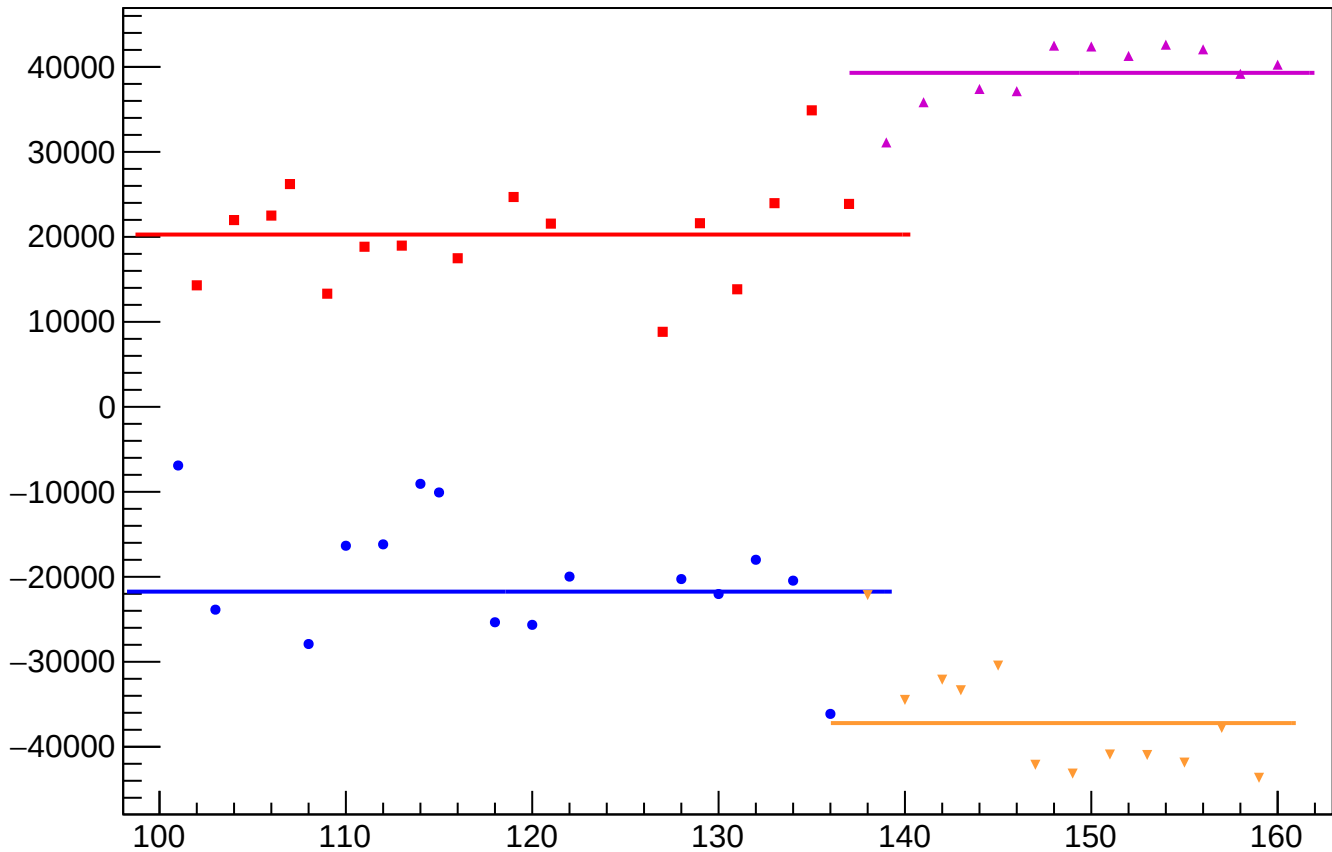
Right In: 605.034+/-0.000  $\chi^2/\text{NDF}$ : 189401522791607614448600157723362852864.0/14  
 Left Out: 744.985+/-0.000  $\chi^2/\text{NDF}$ : 19571453984278961719936247870544412672.0/11  
 Right Out: -749.582+/-0.000  $\chi^2/\text{NDF}$ : 1021358768377495935693748779804344188928.0/15  
 Left In: -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

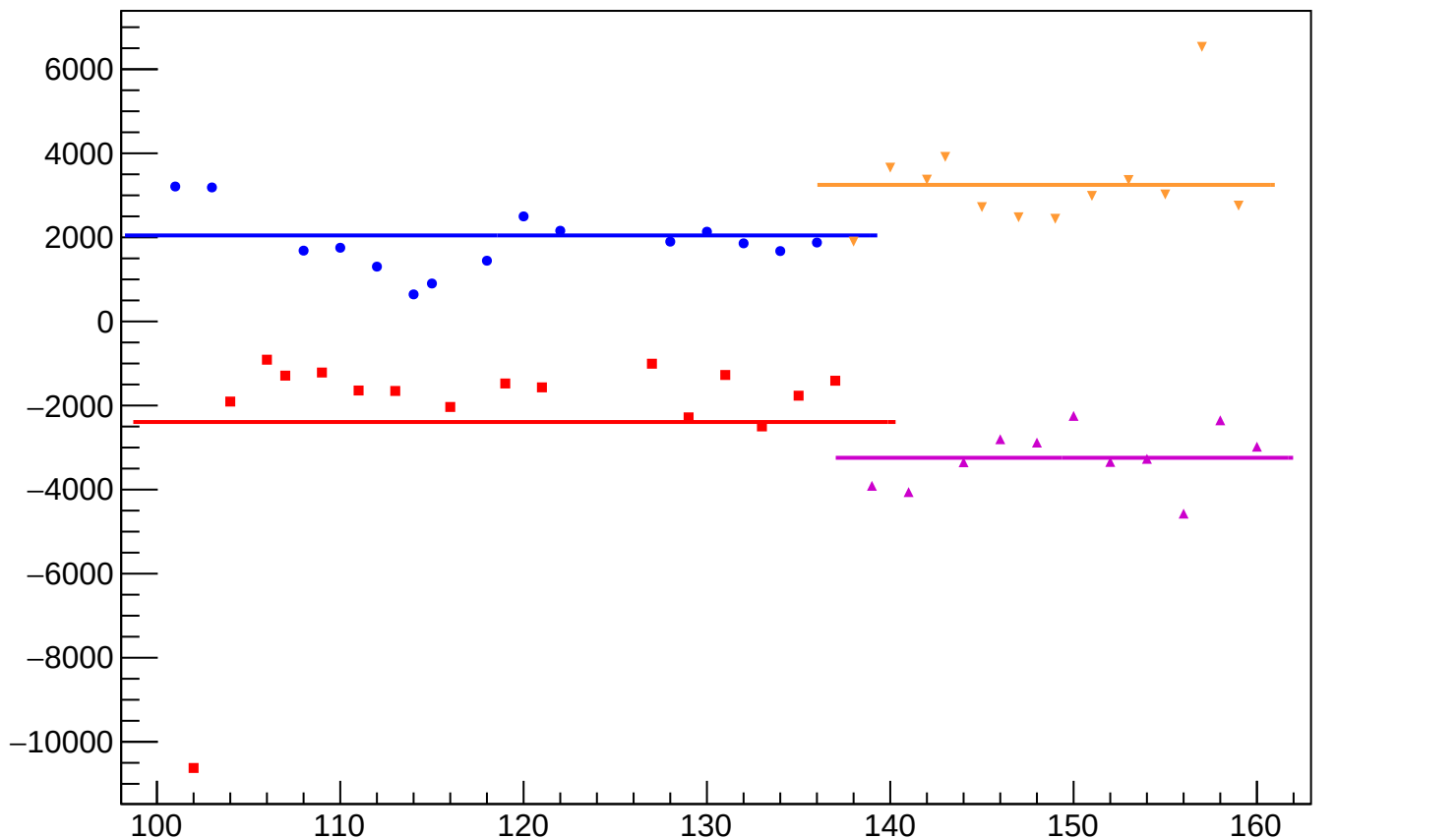
Right: -446.610+/-0.000  $\chi^2/\text{NDF}$ : 64780902874572

In: 14114.985+/-0.000  $\chi^2/\text{NDF}$ : 147263048816292

Out: -12958.212+/-0.000  $\chi^2/\text{NDF}$ : 1336456927560

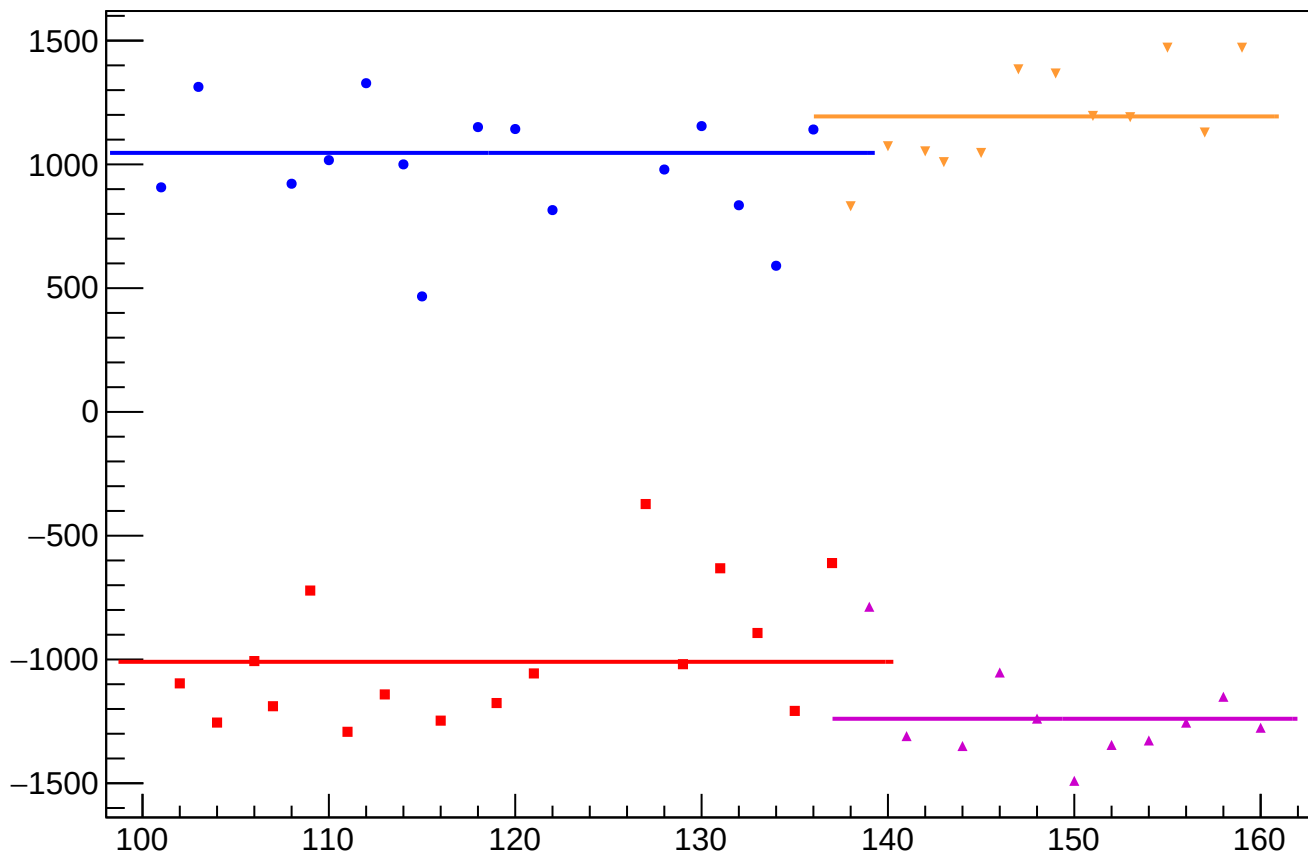
All: 544.051+/-0.000  $\chi^2/\text{NDF}$ : 338702108163

dit\_atr2\_coil1\_err\_mean vs Slug, Sign Corrected



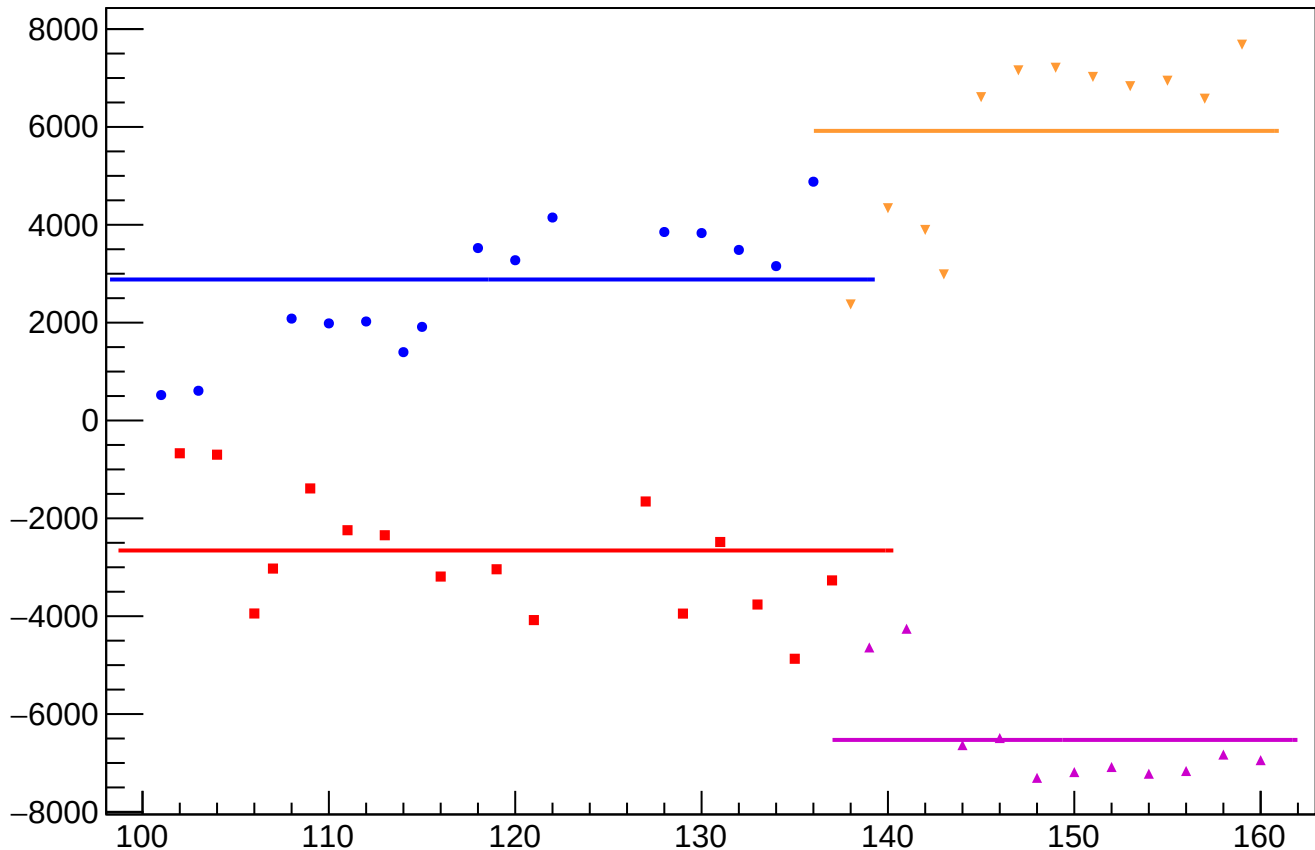
Right In: 2046.354+/-0.000  $\chi^2/\text{NDF}$ : 266555515927348892036833058355226345472.0/14  
 Left Out: 3249.314+/-0.000  $\chi^2/\text{NDF}$ : 1190726211956001849078073092083852247040.0/11  
 Right Out: -2391.939+/-0.000  $\chi^2/\text{NDF}$ : 4415294964789778815259357544579499819008.0/15  
 Left 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: -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      |

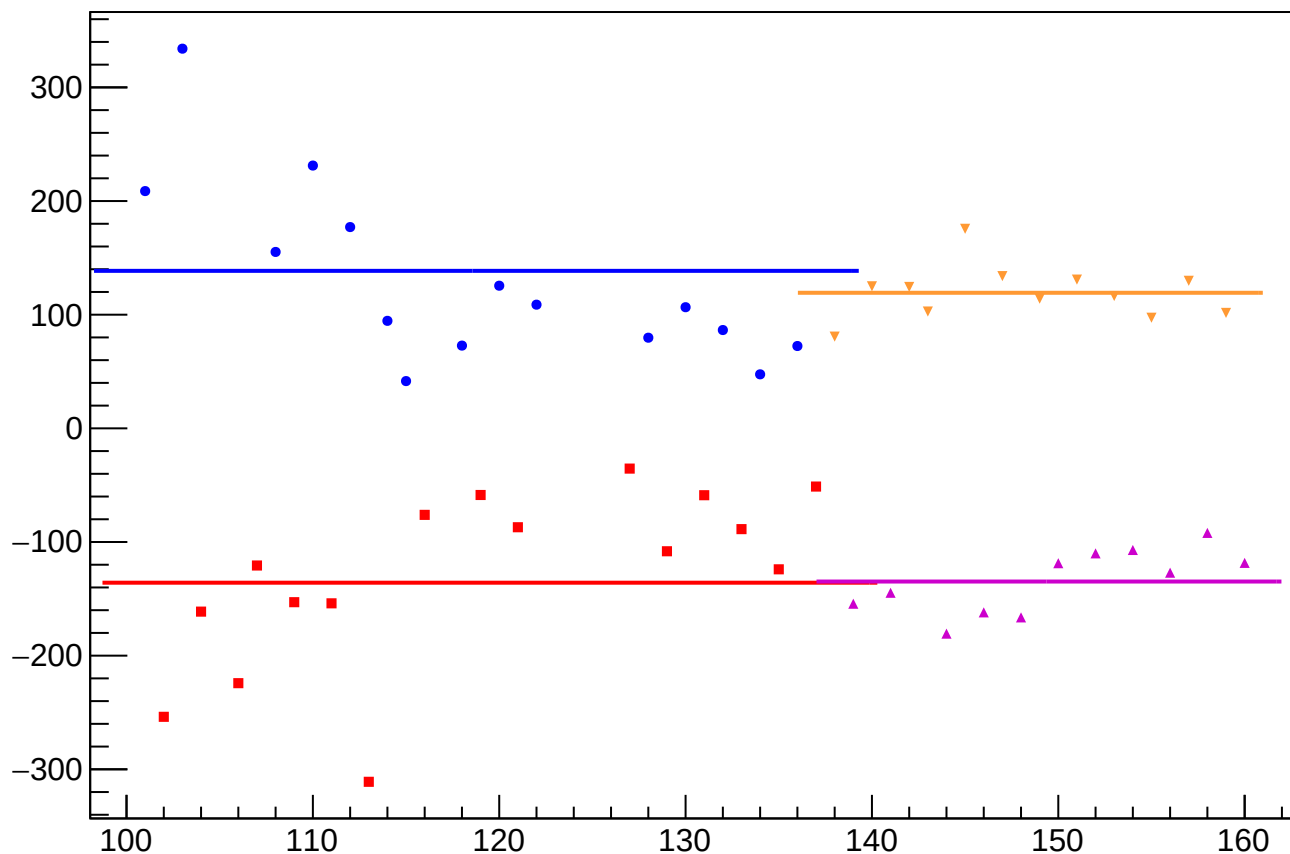
# dit\_sam1\_coil1\_mean vs Slug, Sign Corrected



Right In: 2881.935+/-0.000  $\chi^2/\text{NDF}$ : 1320319391496525533692082365878834823168.0/14  
 Left Out: 5919.511+/-0.000  $\chi^2/\text{NDF}$ : 2779072700024845827027981240176985767936.0/11  
 Right Out: -2656.918+/-0.000  $\chi^2/\text{NDF}$ : 1077696846216053561130716877125509447680.0/15  
 Left In: -6528.681+/-0.000  $\chi^2/\text{NDF}$ : 940619832290547661204641528694924378112.0/10  
 All: -166.093+/-0.000  $\chi^2/\text{NDF}$ : 87540894065

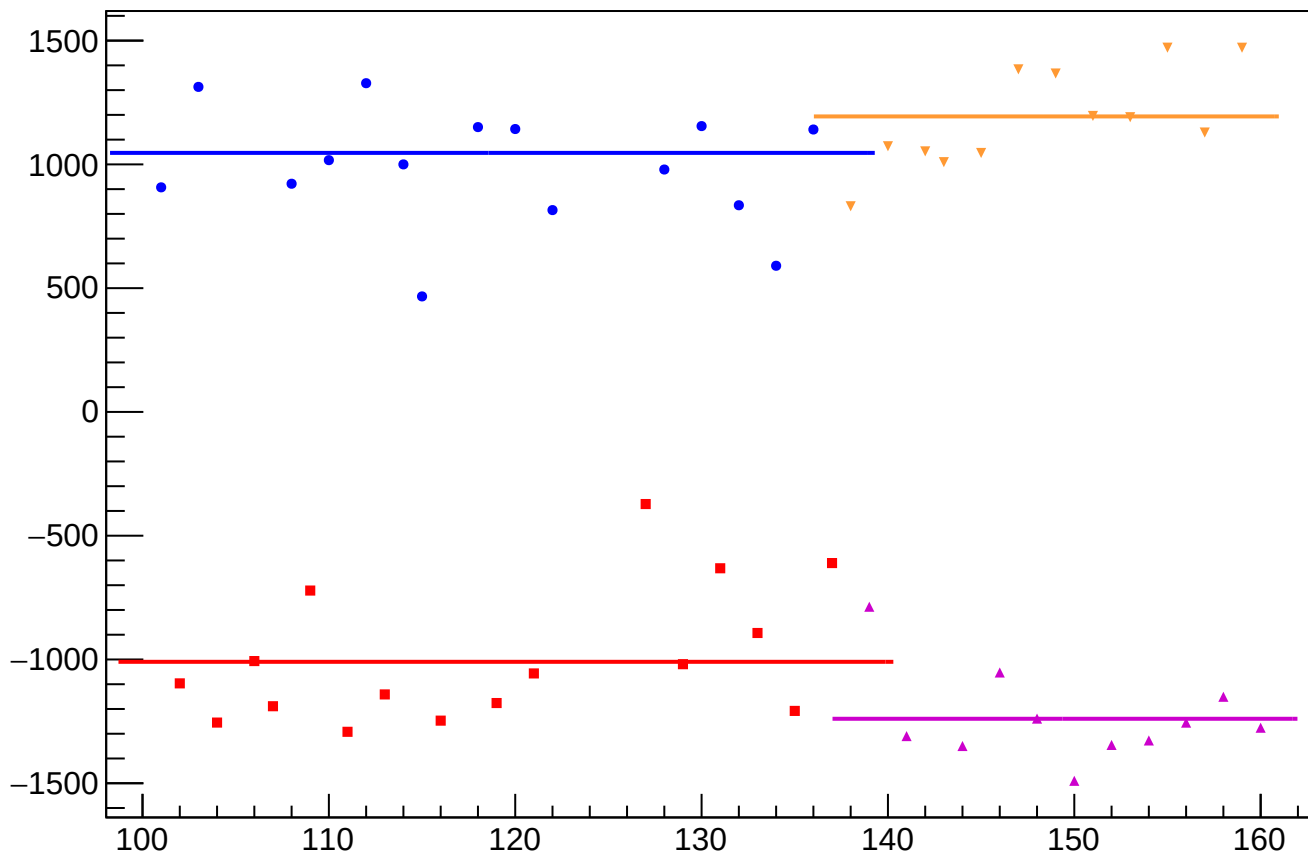


dit\_sam1\_coil1\_err\_mean vs Slug, Sign Corrected



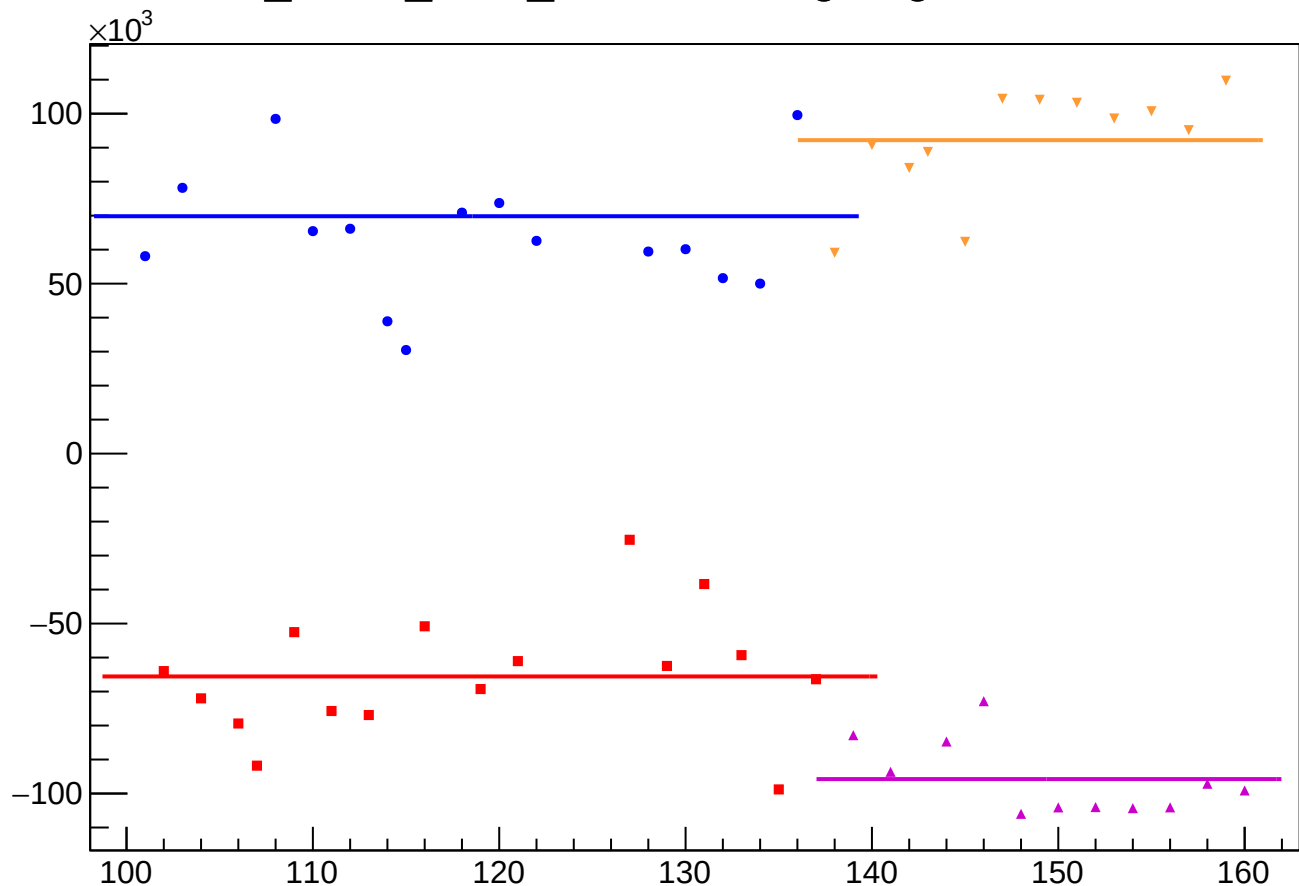
Right In: 138.577+/-0.000  $\chi^2/\text{NDF}$ : 4242369889979811373883774021335515136.0/14  
 Left Out: 119.282+/-0.000  $\chi^2/\text{NDF}$ : 487845779395217879153815293985292288.0/11  
 Right Out: -135.809+/-0.000  $\chi^2/\text{NDF}$ : 3956401741862524263243160868173643776.0/15  
 Left In: -134.785+/-0.000  $\chi^2/\text{NDF}$ : 689808602632315539029860685392642048.0/10  
 All: -5.125+/-0.000  $\chi^2/\text{NDF}$ : 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+/-0.000

$\chi^2/\text{NDF}$ : 187803282116493131197684060541288926150656.0/14

Left Out: 92210.698+/-0.000

$\chi^2/\text{NDF}$ : 226577476657807585202083767685360289579008.0/11

Right Out: -65555.147+/-0.000

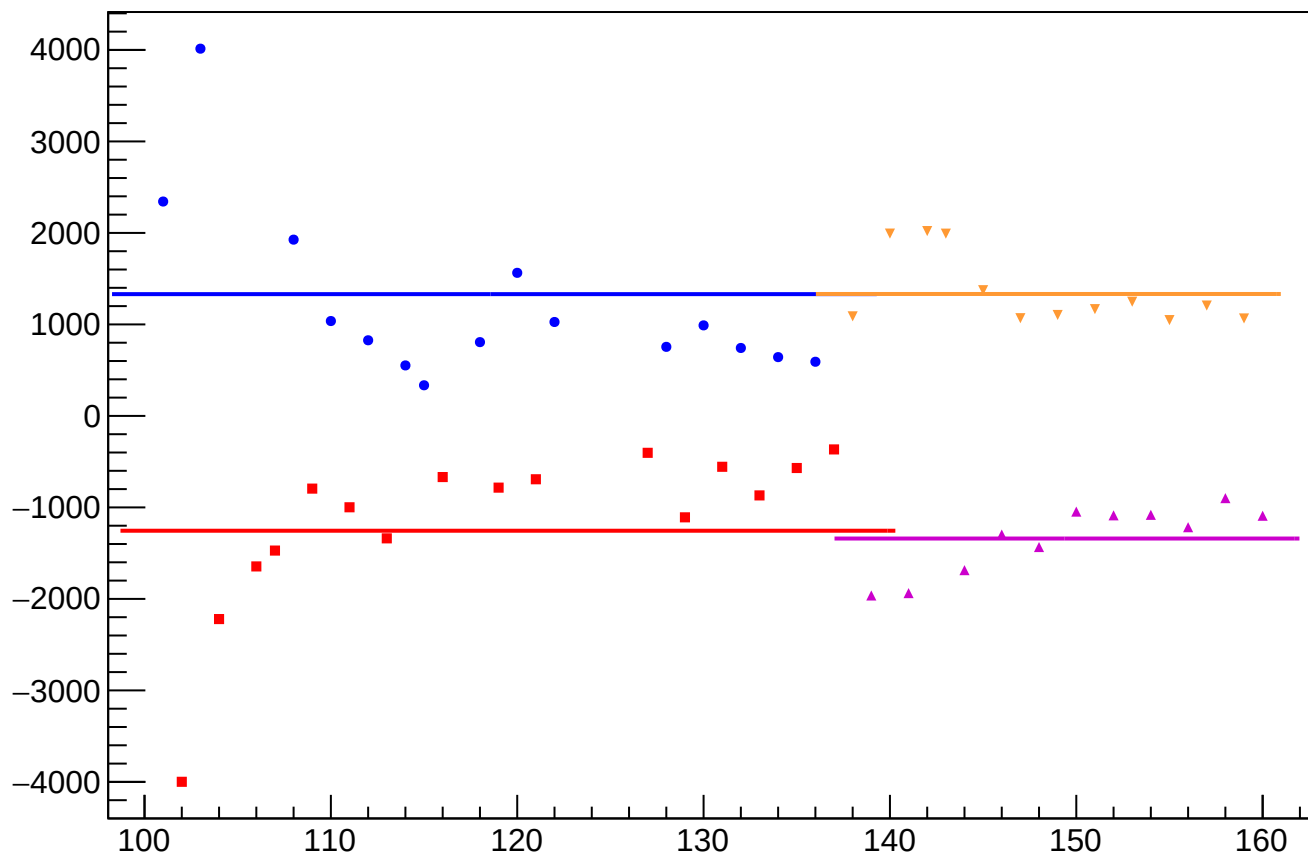
$\chi^2/\text{NDF}$ : 212001467811386750910625783195999741673472.0/15

Left In: -95749.411+/-0.000

$\chi^2/\text{NDF}$ : 102376761881530271427340284738693826084864.0/10

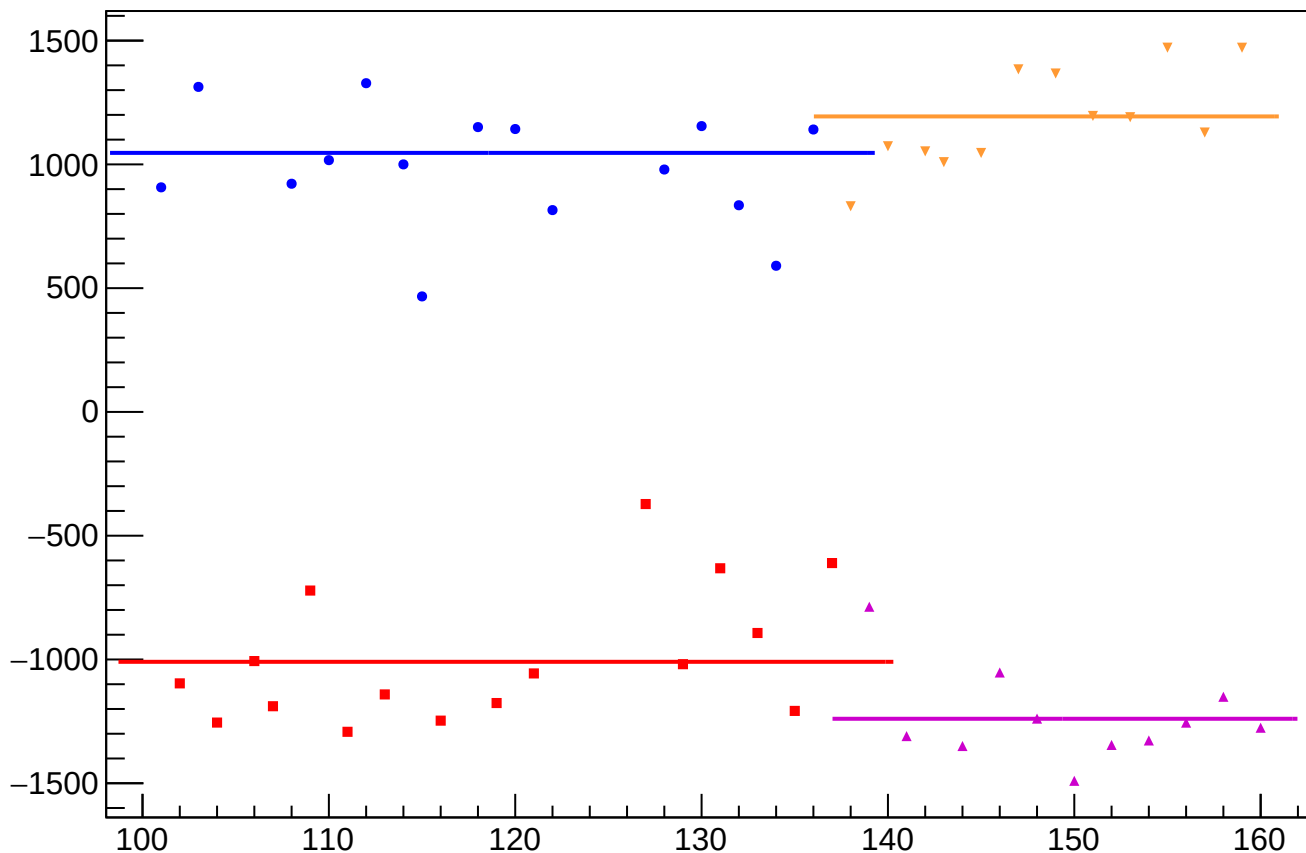
All: -824.008+/-0.000  $\chi^2/\text{NDF}$ : 23000264296

# dit\_sam2\_coil1\_err\_mean vs Slug, Sign Corrected



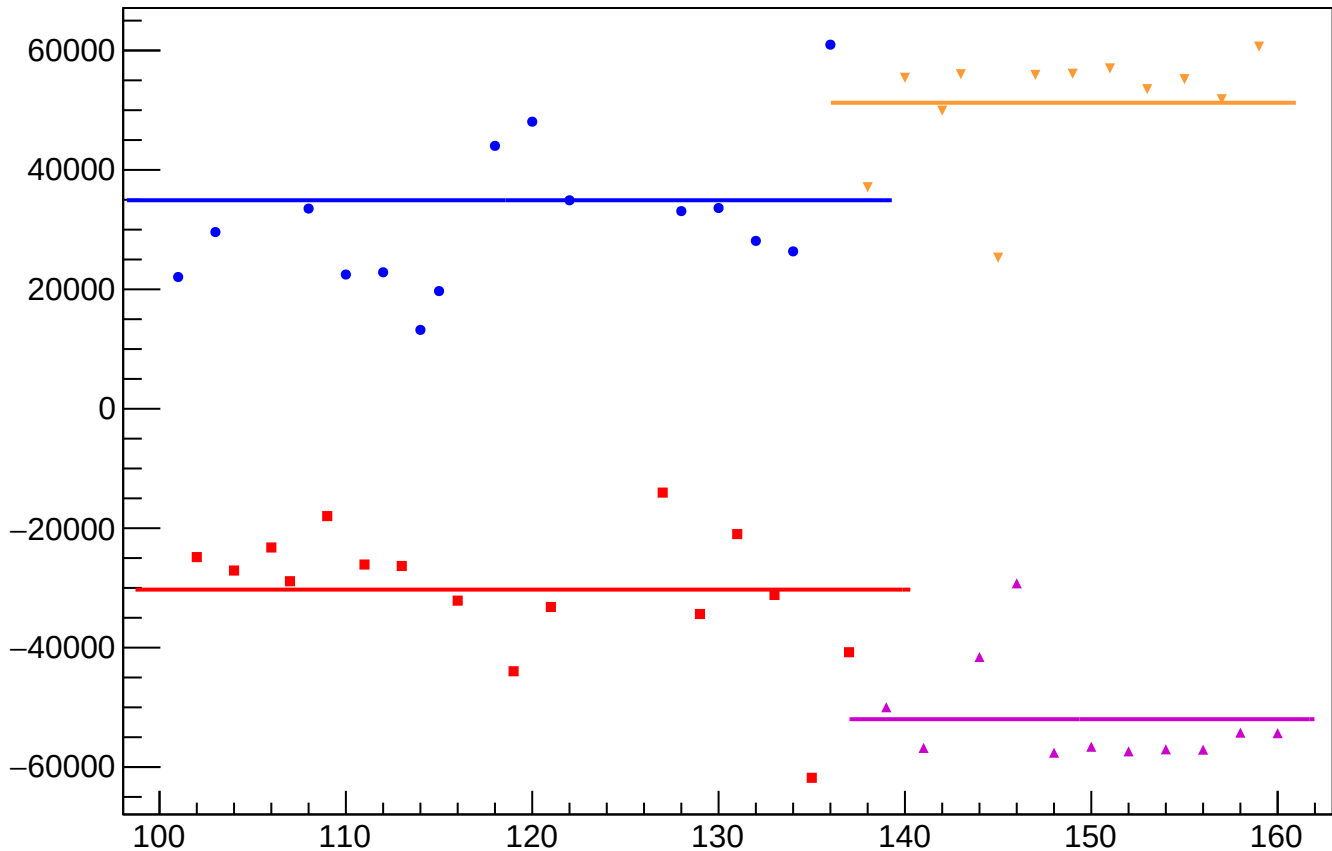
Right In: 1330.956+/-0.000  $\chi^2/\text{NDF}$ : 649481263842681659449409147059572834304.0/14  
 Left Out: 1332.669+/-0.000  $\chi^2/\text{NDF}$ : 117488793251165999850417206895273050112.0/11  
 Right Out: -1254.871+/-0.000  $\chi^2/\text{NDF}$ : 632140068983304062809817716800861765632.0/15  
 Left 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



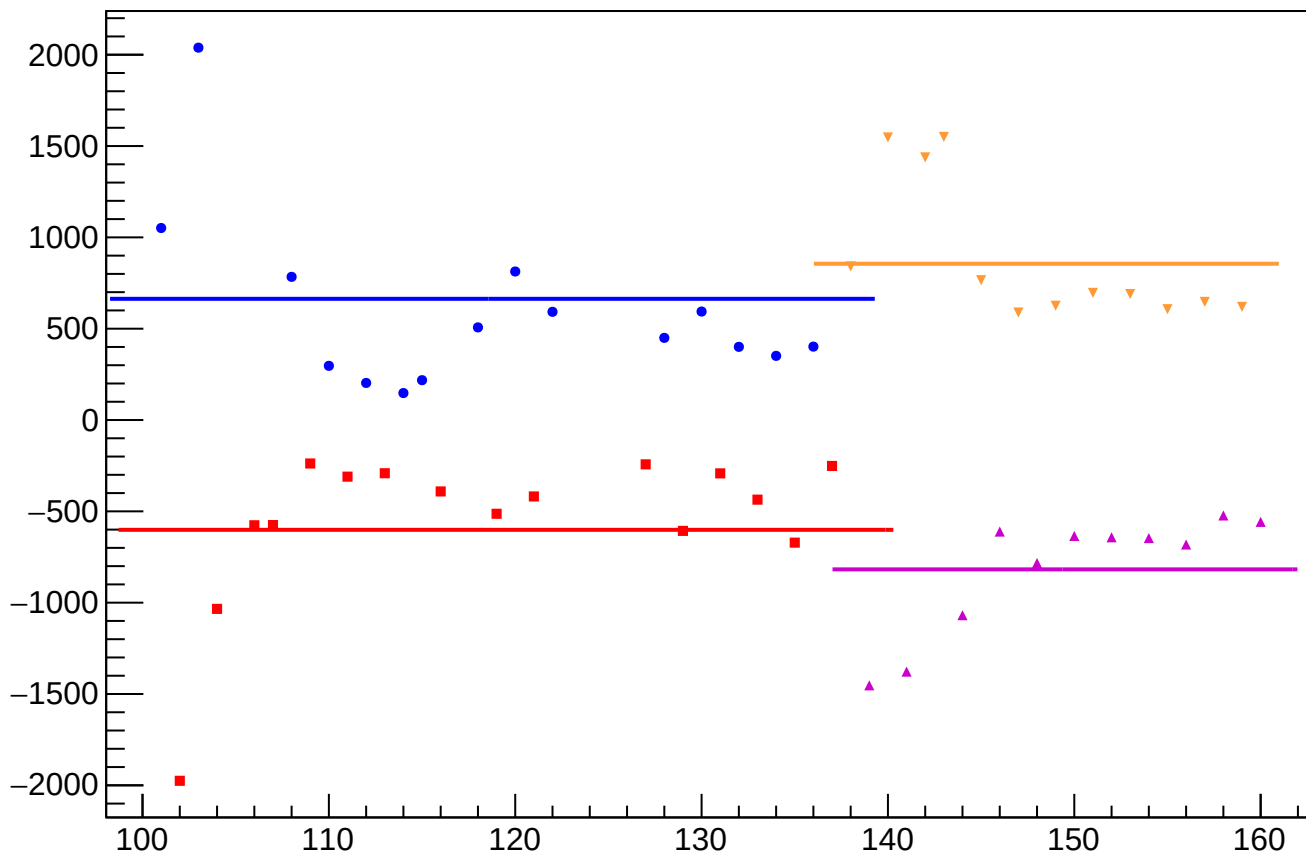
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -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



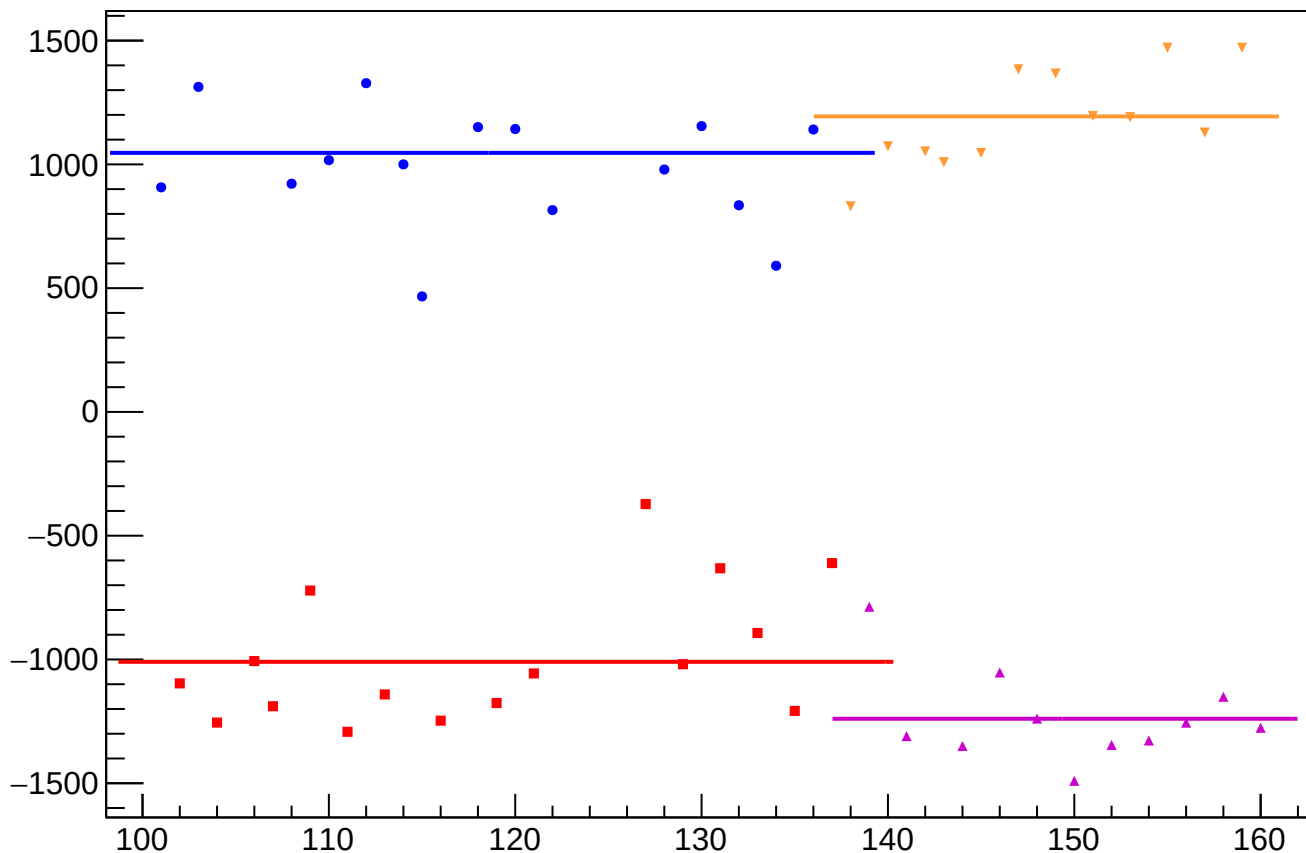
Right In: 34919.716+/-0.000  $\chi^2/\text{NDF}$ : 106387385440718622155122541848729997017088.0/14  
 Left Out: 51246.568+/-0.000  $\chi^2/\text{NDF}$ : 86168540614102445062046954668602534395904.0/11  
 Right Out: -30282.373+/-0.000  $\chi^2/\text{NDF}$ : 88346165266593126627598951693506073067520.0/15  
 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



Left:  $14.433 \pm 0.000$   $\chi^2/\text{NDF}: 14918307802218483$   
 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:  $17.811 \pm 0.000$   $\chi^2/\text{NDF}: 2325491183866$

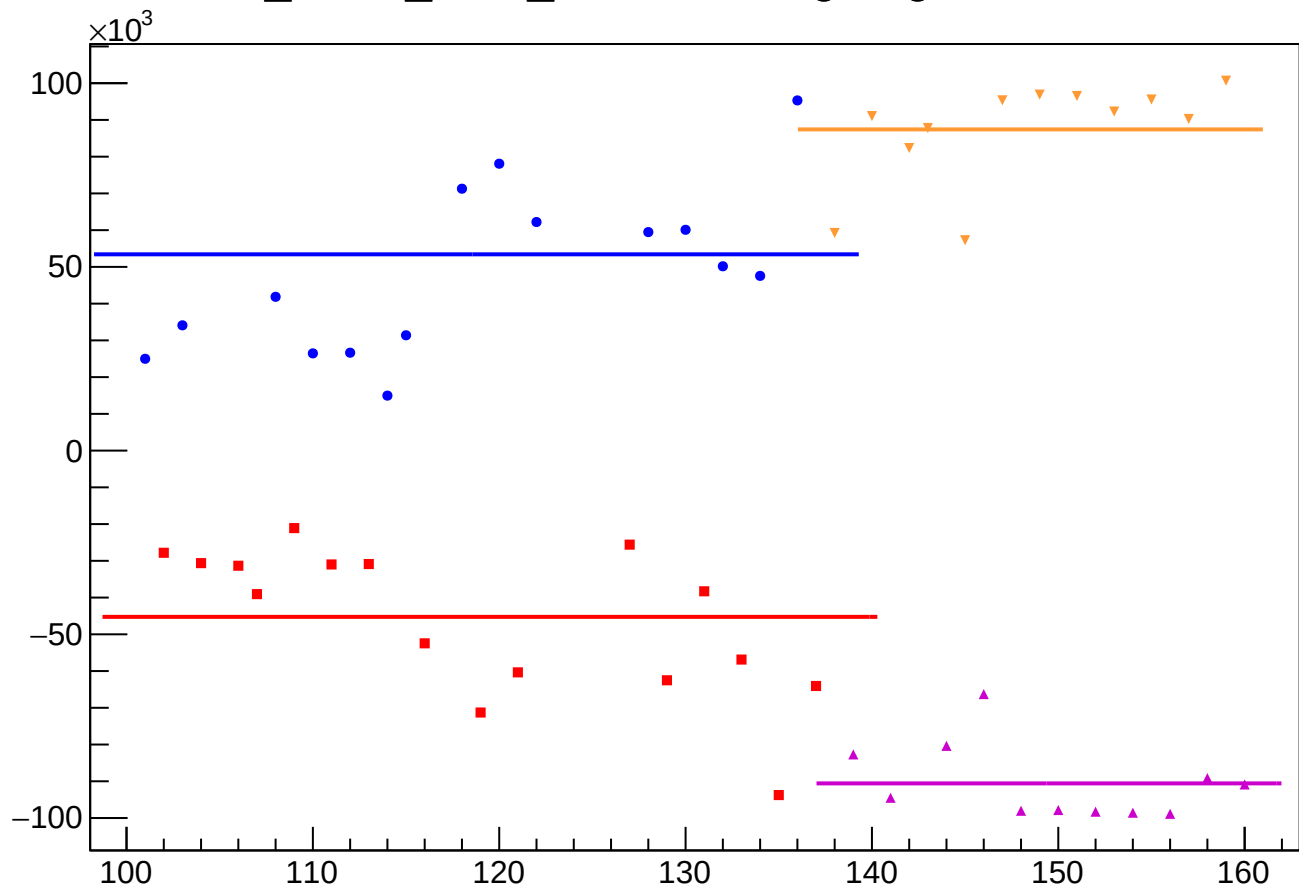
dit\_sam3\_coil1\_Ndata\_mean vs Slug, Sign Corrected



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

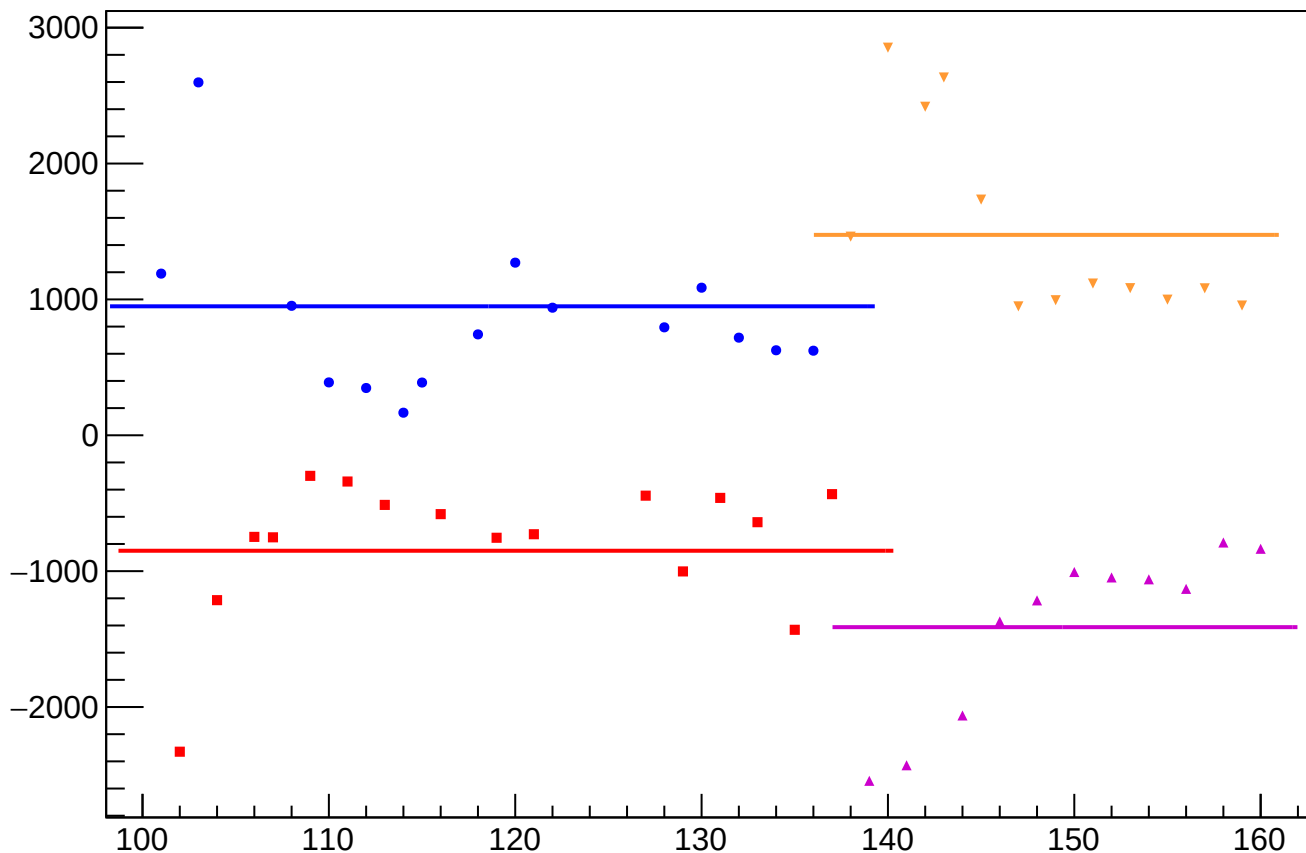


dit\_sam4\_coil1\_mean vs Slug, Sign Corrected



|                               |                                                                       |                         |                                      |
|-------------------------------|-----------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 53422.452+/-0.000   | $\chi^2/\text{NDF}$ : 360635757315133800133751123167777346551808.0/14 | Left: -2060.108+/-0.000 | $\chi^2/\text{NDF}$ : 14824251298743 |
| Left Out: 87421.965+/-0.000   | $\chi^2/\text{NDF}$ : 176009447933973172298765808269588074332160.0/11 | Right: 3412.622+/-0.000 | $\chi^2/\text{NDF}$ : 38491691465863 |
| Right Out: -45247.617+/-0.000 | $\chi^2/\text{NDF}$ : 286060196488034430215784613374055547928576.0/15 | In: -31162.736+/-0.000  | $\chi^2/\text{NDF}$ : 83559951874998 |
| Left In: -90573.760+/-0.000   | $\chi^2/\text{NDF}$ : 90574081394354221593949262312406685581312.0/10  | Out: 31450.674+/-0.000  | $\chi^2/\text{NDF}$ : 72491482538819 |
|                               | 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  $\chi^2/\text{NDF}$ : 45705013574232361

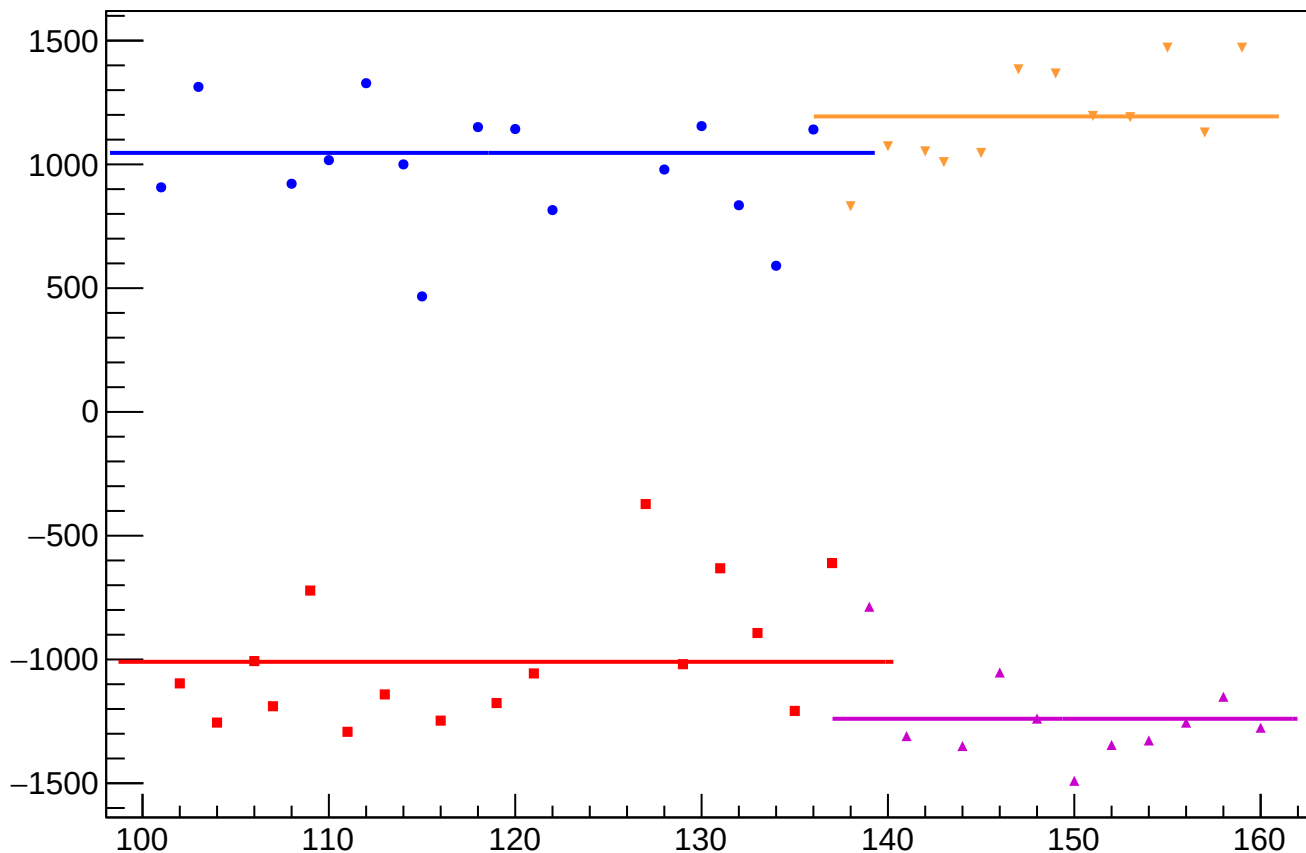
Right: 37.382+/-0.000  $\chi^2/\text{NDF}$ : 1494917928354426

In: -437.909+/-0.000  $\chi^2/\text{NDF}$ : 2684013086565036

Out: 494.188+/-0.000  $\chi^2/\text{NDF}$ : 2696503915470133

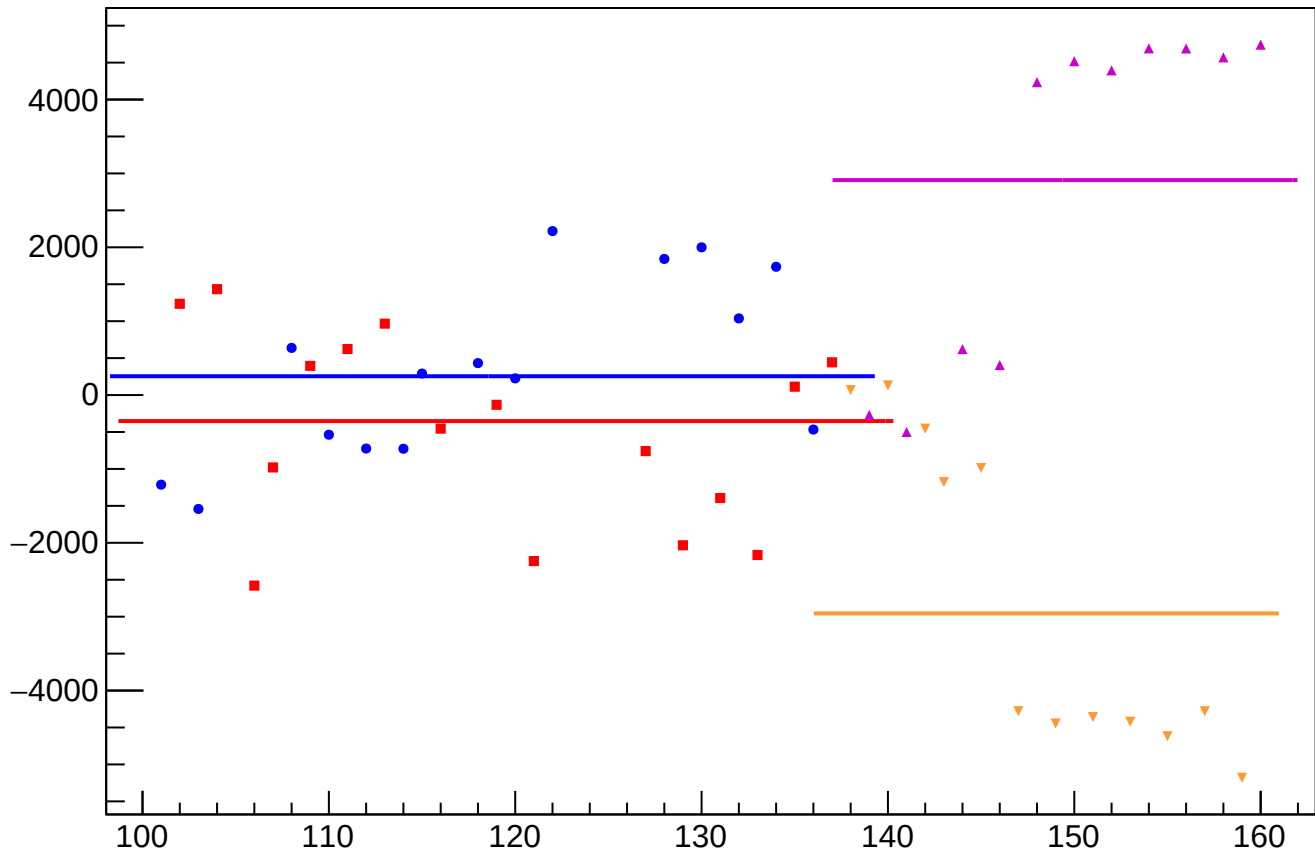
All: 29.322+/-0.000  $\chi^2/\text{NDF}$ : 6065565997163

dit\_sam4\_coil1\_Ndata\_mean vs Slug, Sign Corrected



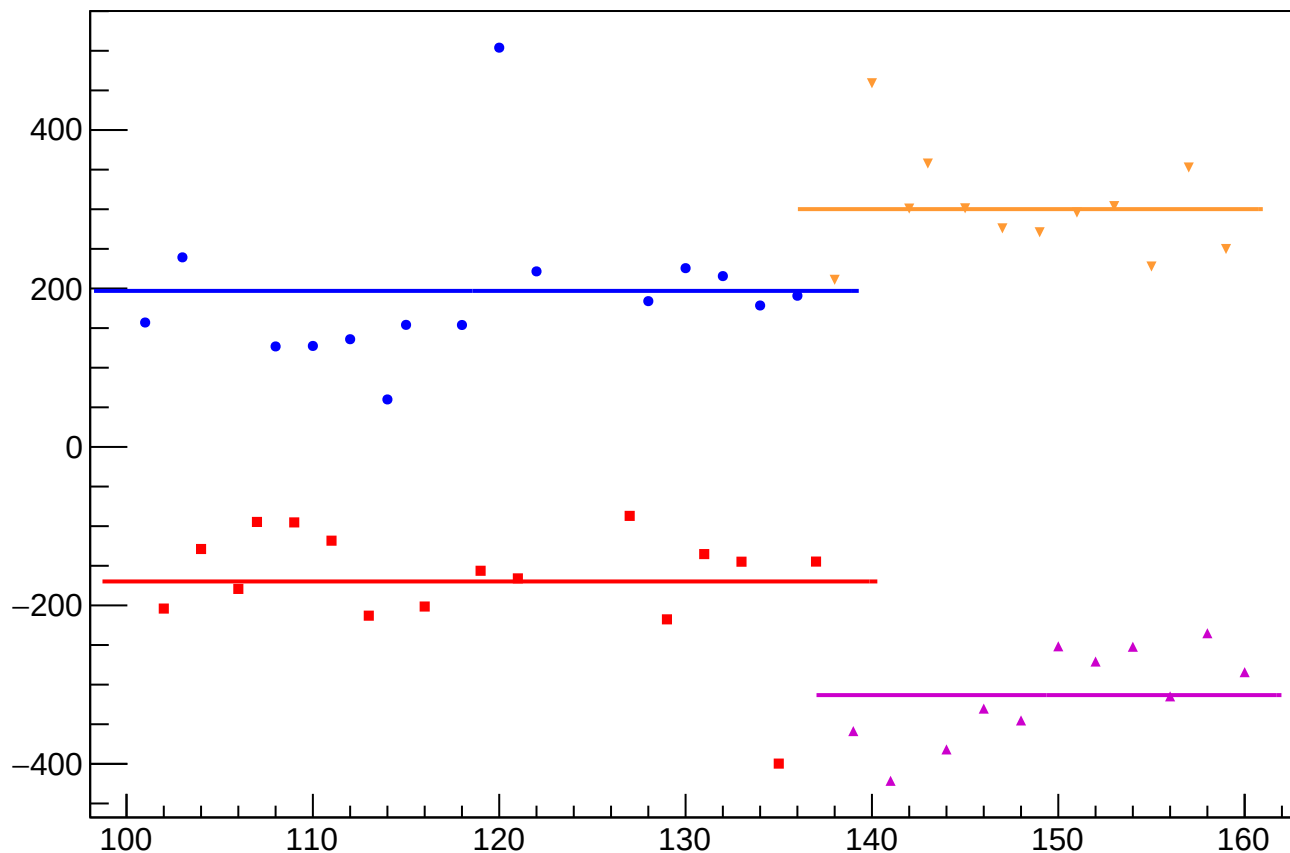
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -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



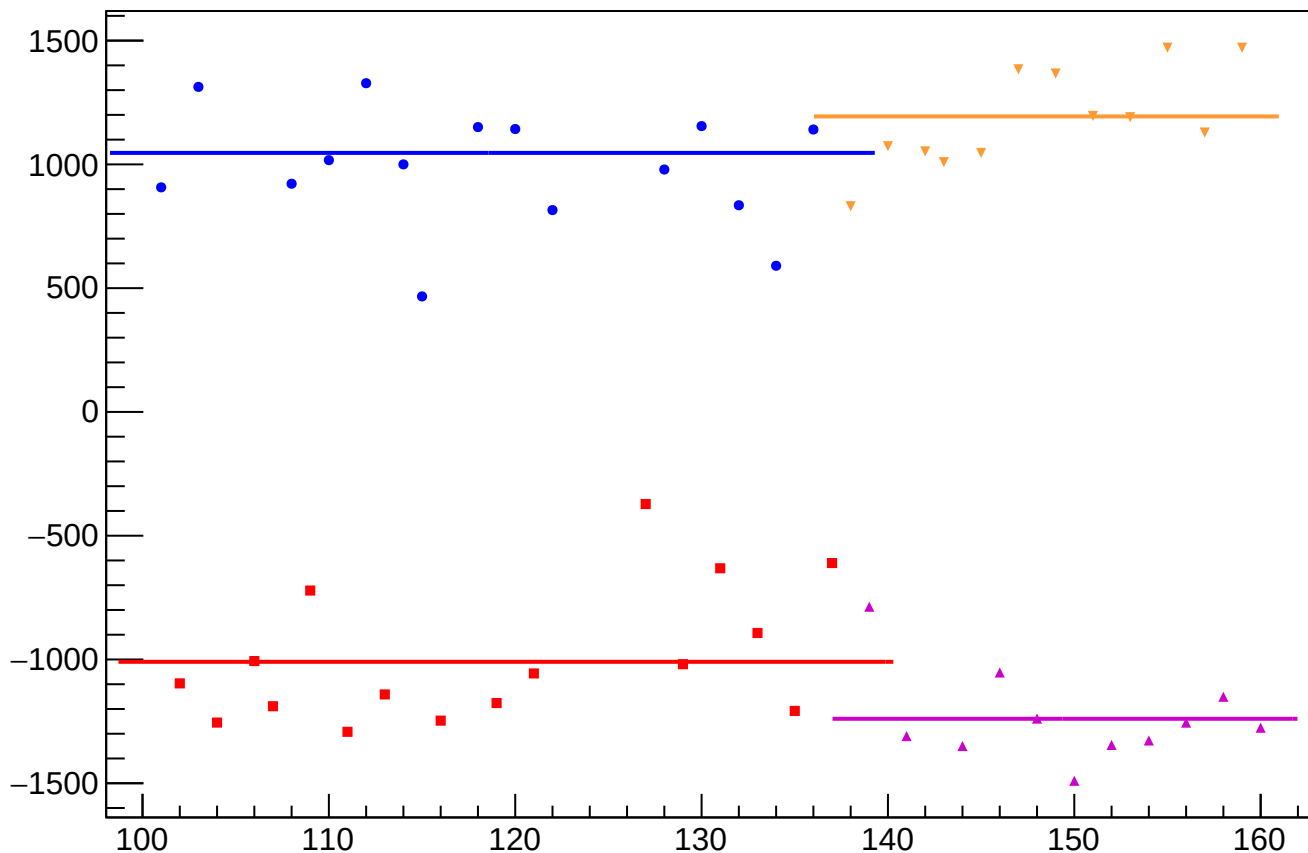
Left: -7.270 +/- 0.000  $\chi^2/\text{NDF}$ : 23893577266149002  
 Right In: 254.578 +/- 0.000  $\chi^2/\text{NDF}$ : 978402113531006640741569223967249530880.0/14  
 Right: -53.015 +/- 0.000  $\chi^2/\text{NDF}$ : 220036732540735  
 Left Out: -2955.997 +/- 0.000  $\chi^2/\text{NDF}$ : 3707818280907677847342876591435129290752.0/11  
 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



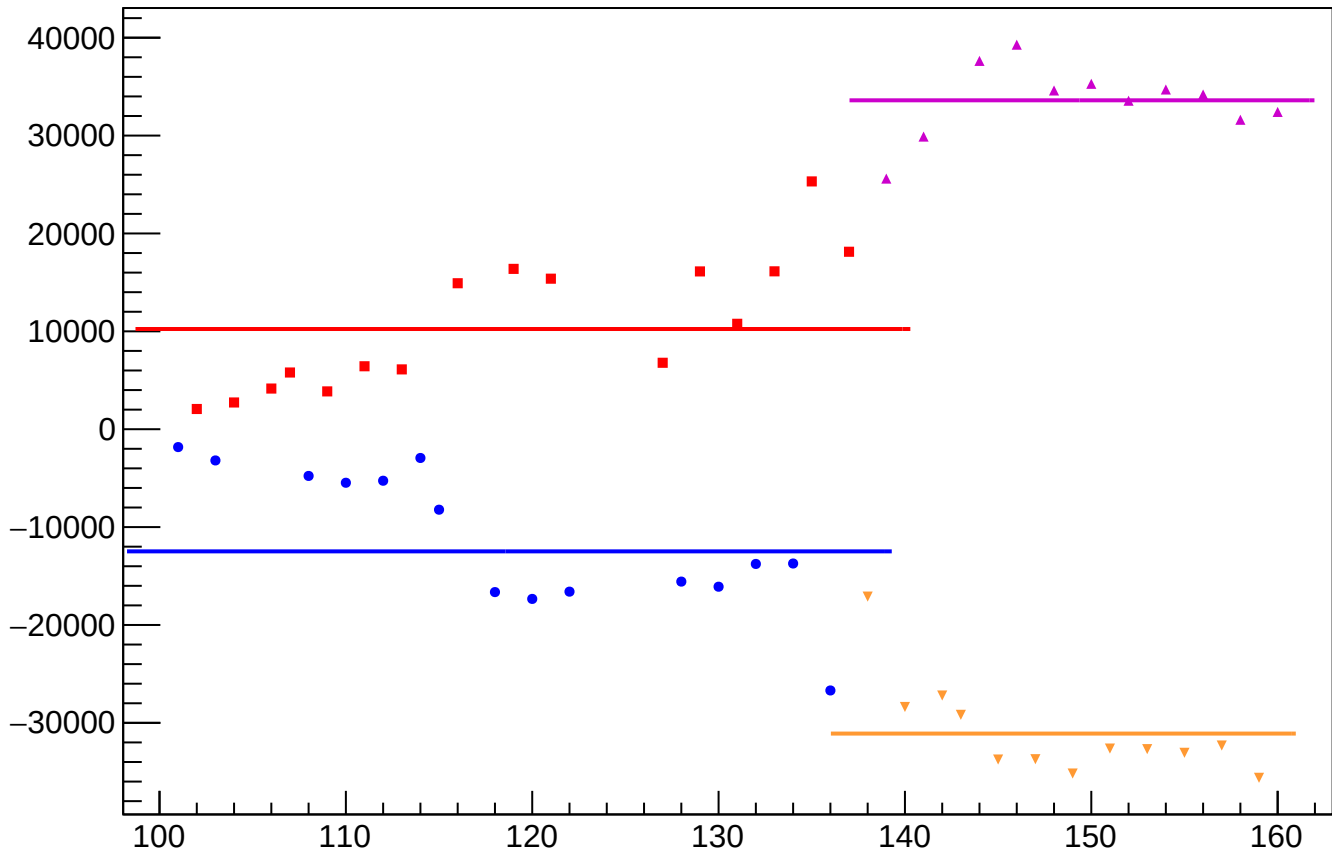
Right In:  $196.955 \pm 0.000$   $\chi^2/\text{NDF}: 4485245160329657914621372425838788608.0/14$   
 Left Out:  $300.154 \pm 0.000$   $\chi^2/\text{NDF}: 3873021428685352941137053448690204672.0/11$   
 Right Out:  $-169.778 \pm 0.000$   $\chi^2/\text{NDF}: 3892609445494845784493558646385410048.0/15$   
 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



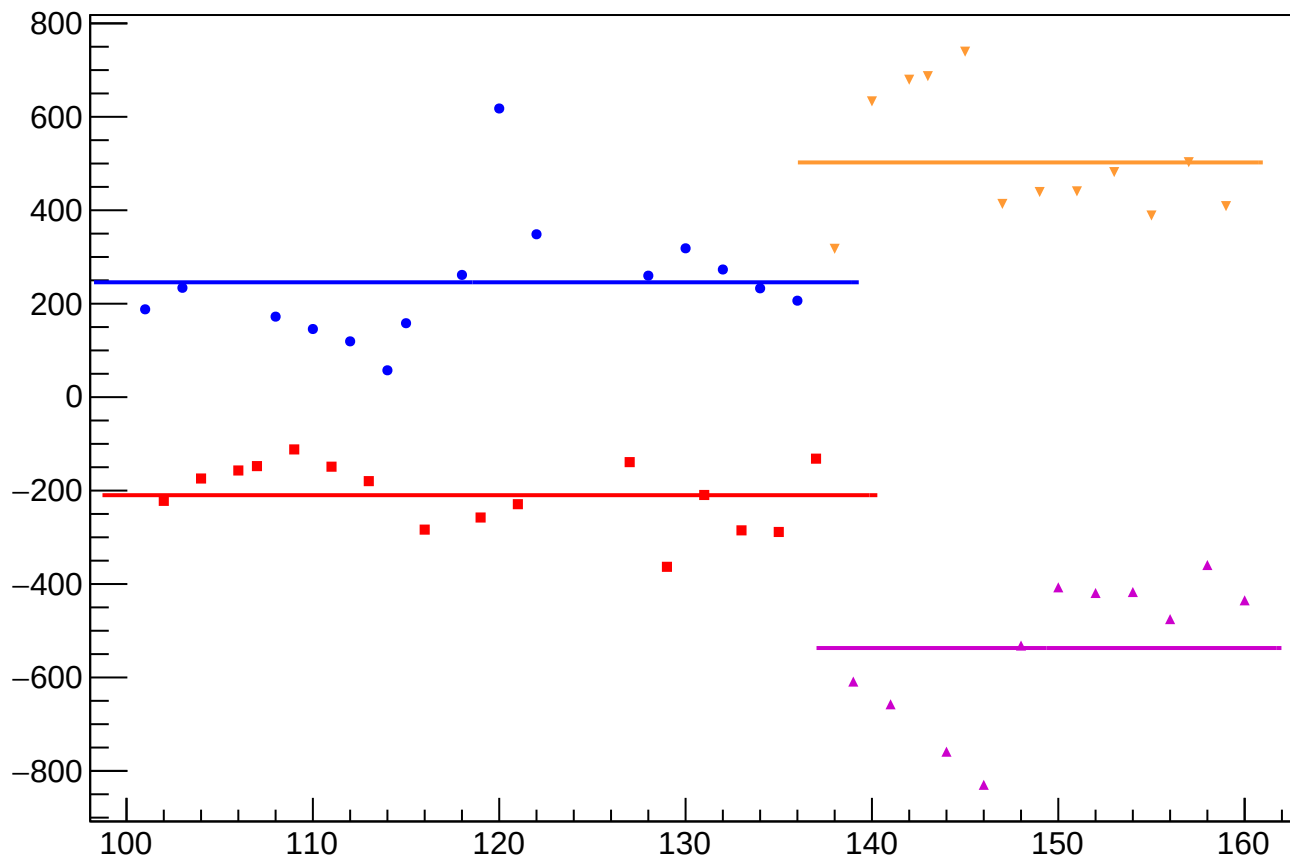
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: -1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: -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  $\chi^2/\text{NDF}$ : 41178633231253805317353333973475271901184.0/14  
 Left Out: -31096.364+/-0.000  $\chi^2/\text{NDF}$ : 21759430970673179273891990313759368282112.0/11  
 Right Out: 10238.098+/-0.000  $\chi^2/\text{NDF}$ : 31227861126159534031961501923223718068224.0/15  
 Left In: 33603.125+/-0.000  $\chi^2/\text{NDF}$ : 11377877741280377988076632069746943066112.0/10  
 All: 430.161+/-0.000  $\chi^2/\text{NDF}$ : 220312696497

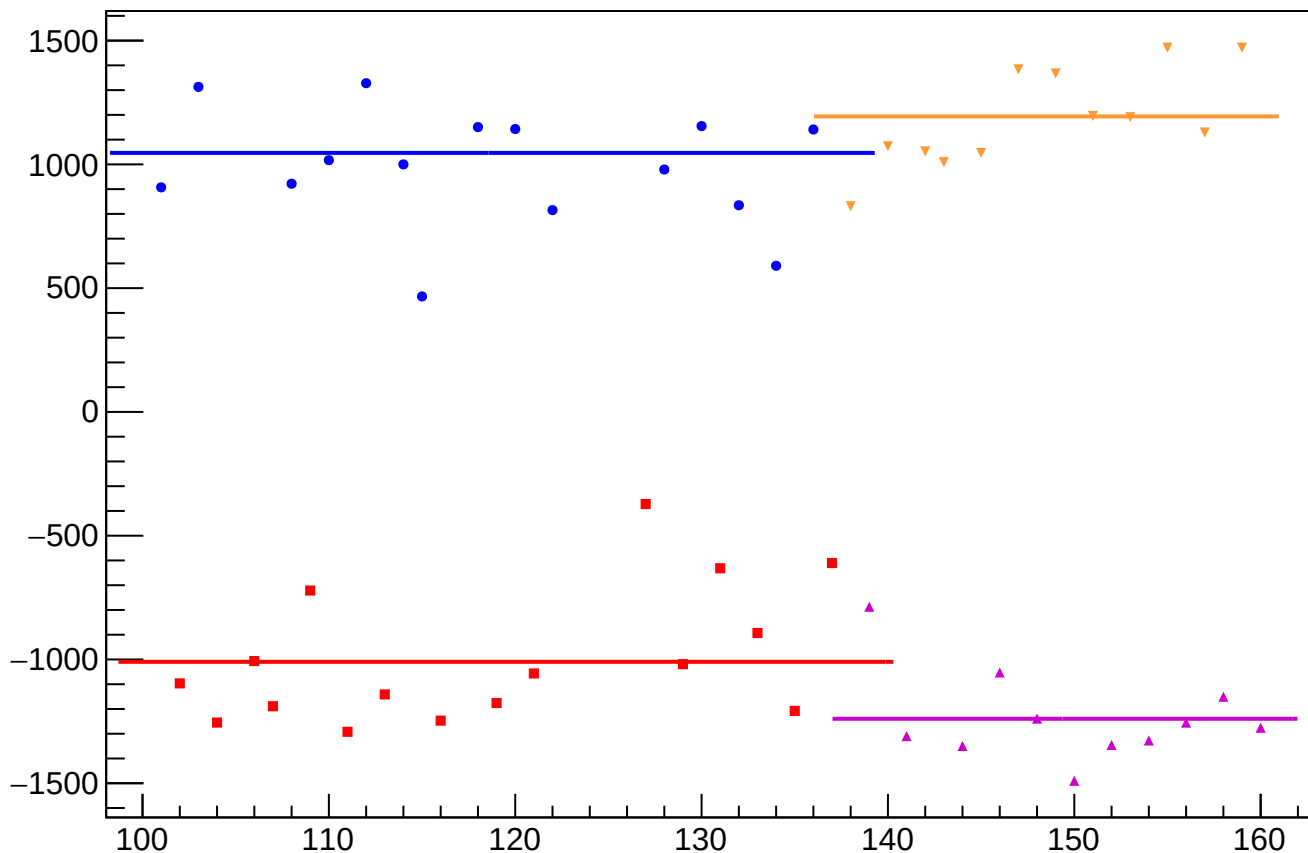
dit\_sam6\_coil1\_err\_mean vs Slug, Sign Corrected



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

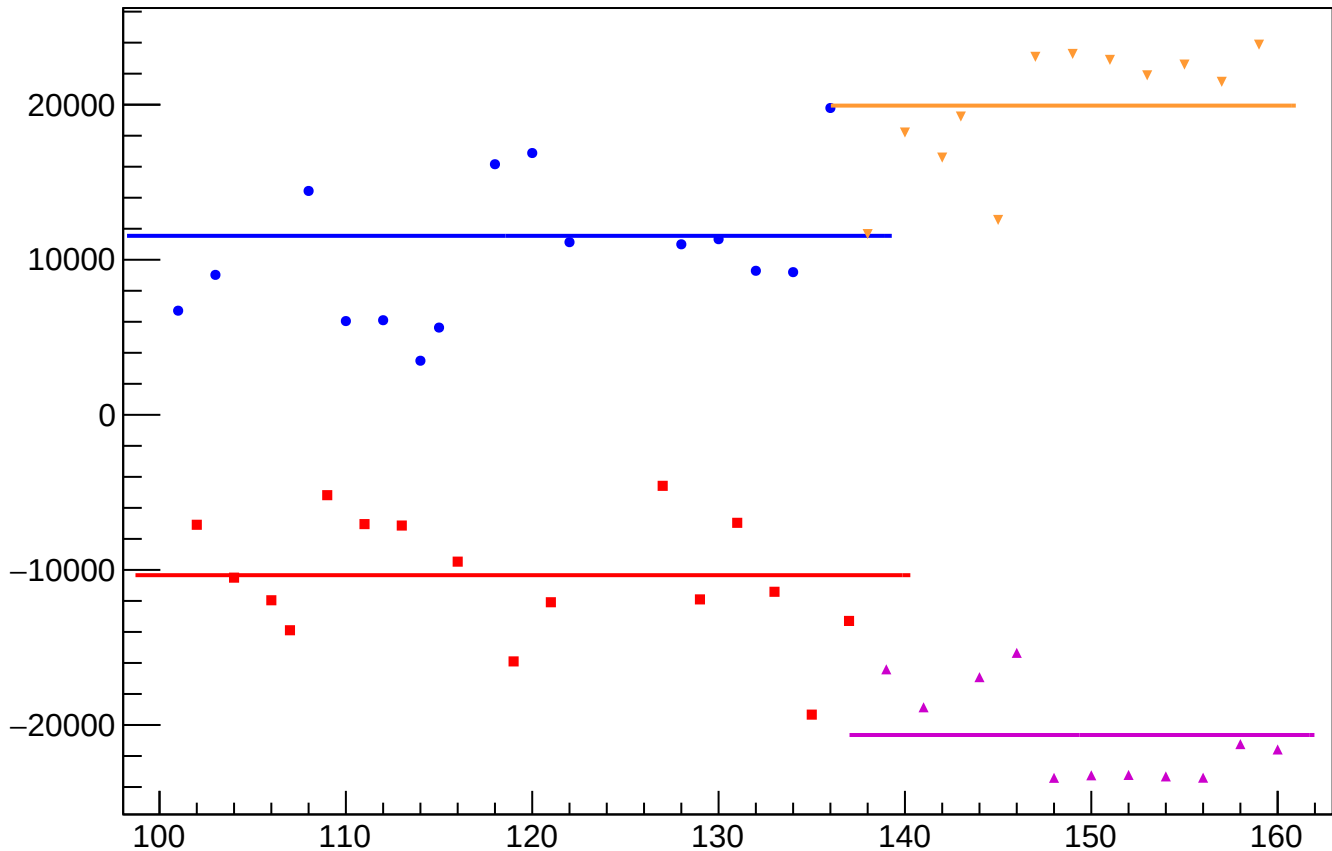


dit\_sam6\_coil1\_Ndata\_mean vs Slug, Sign Corrected



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

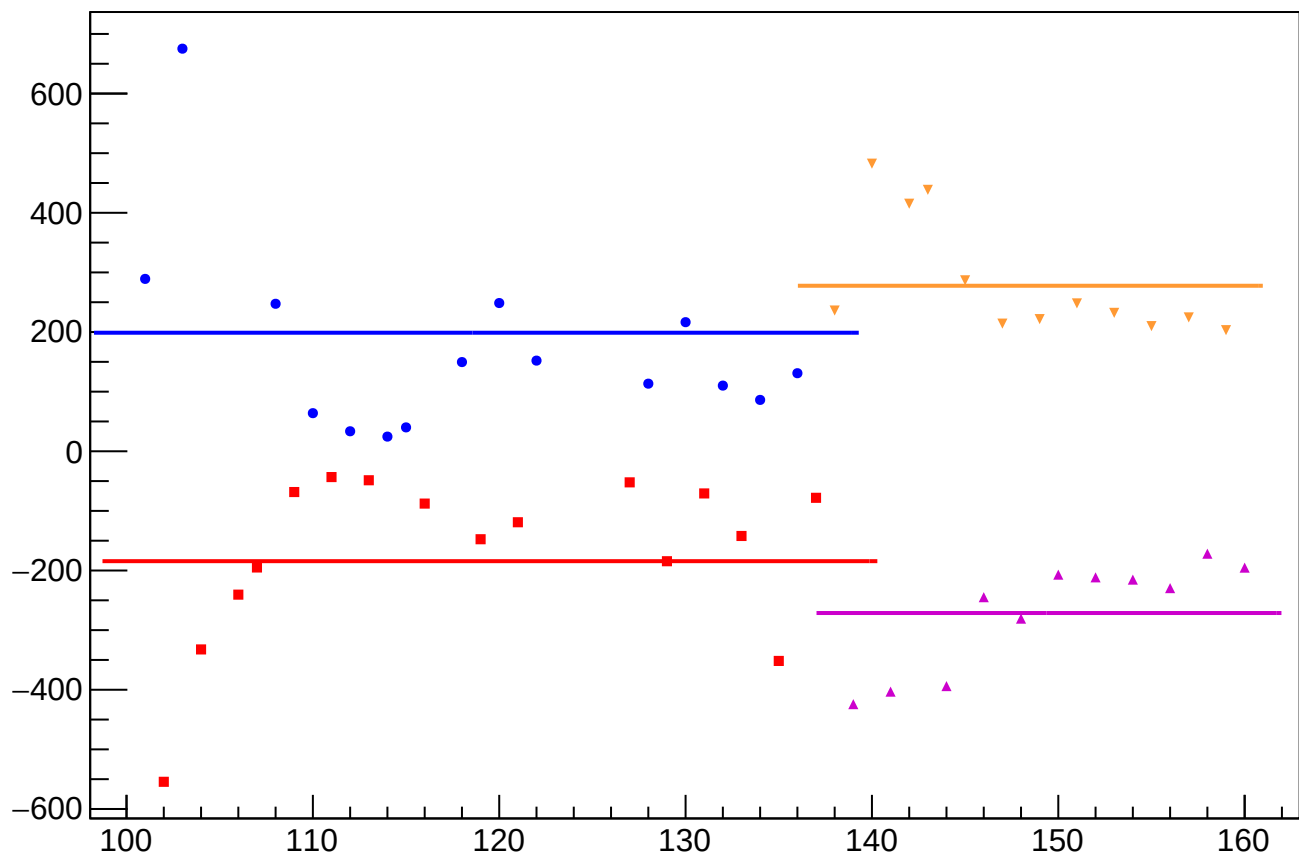
$\chi^2/\text{NDF}$ : 11260833863406751645923420062982418202624.0/15

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 $\pm$ 0.000  $\chi^2$ /NDF: 18333995109503438037075916944440295424.0/14

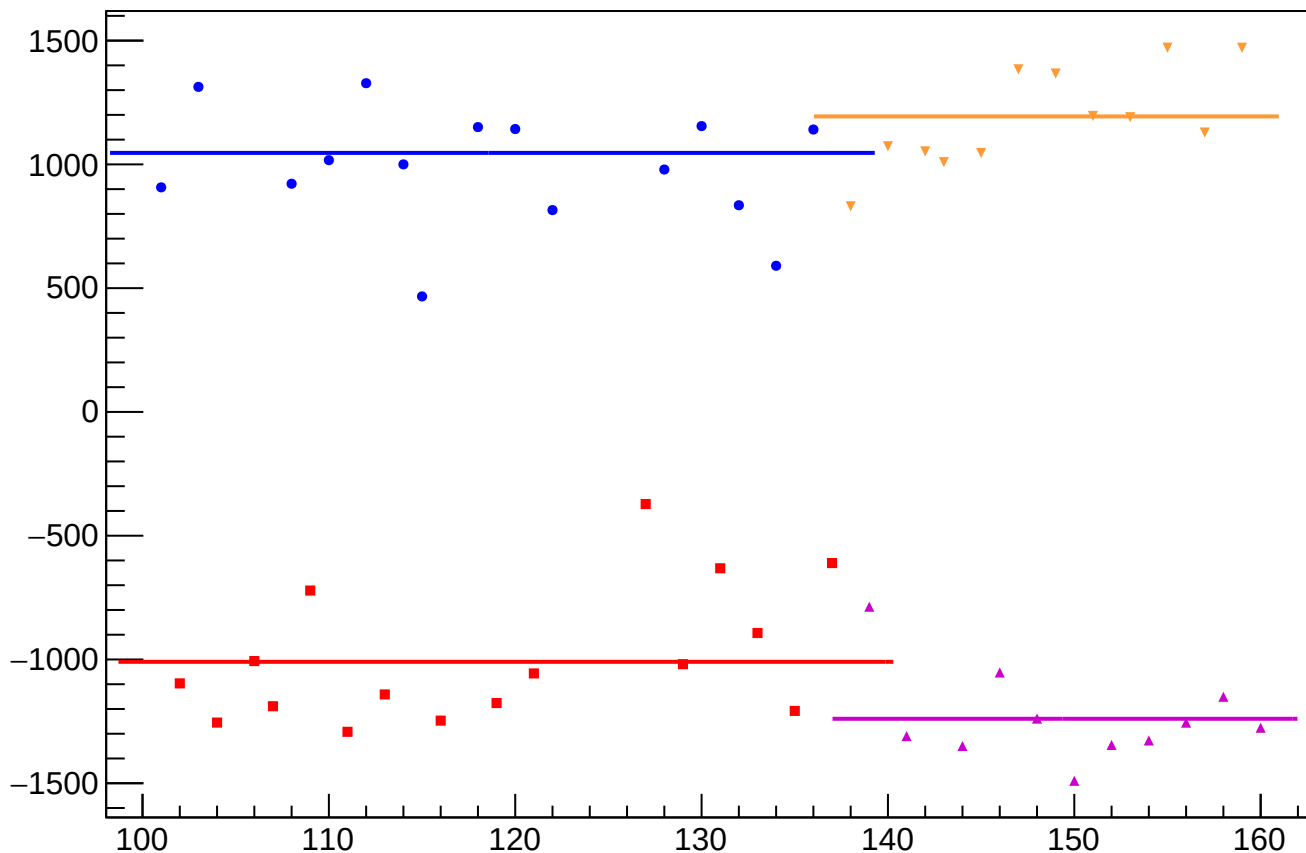
Left Out: 277.638 $\pm$ 0.000  $\chi^2$ /NDF: 8038613705890486227984688847014330368.0/11

Right Out: -184.328 $\pm$ 0.000  $\chi^2$ /NDF: 14927434931395588601024961538372403200.0/15

Left In: -271.291 $\pm$ 0.000  $\chi^2$ /NDF: 7112445981030520145066814103974051840.0/10

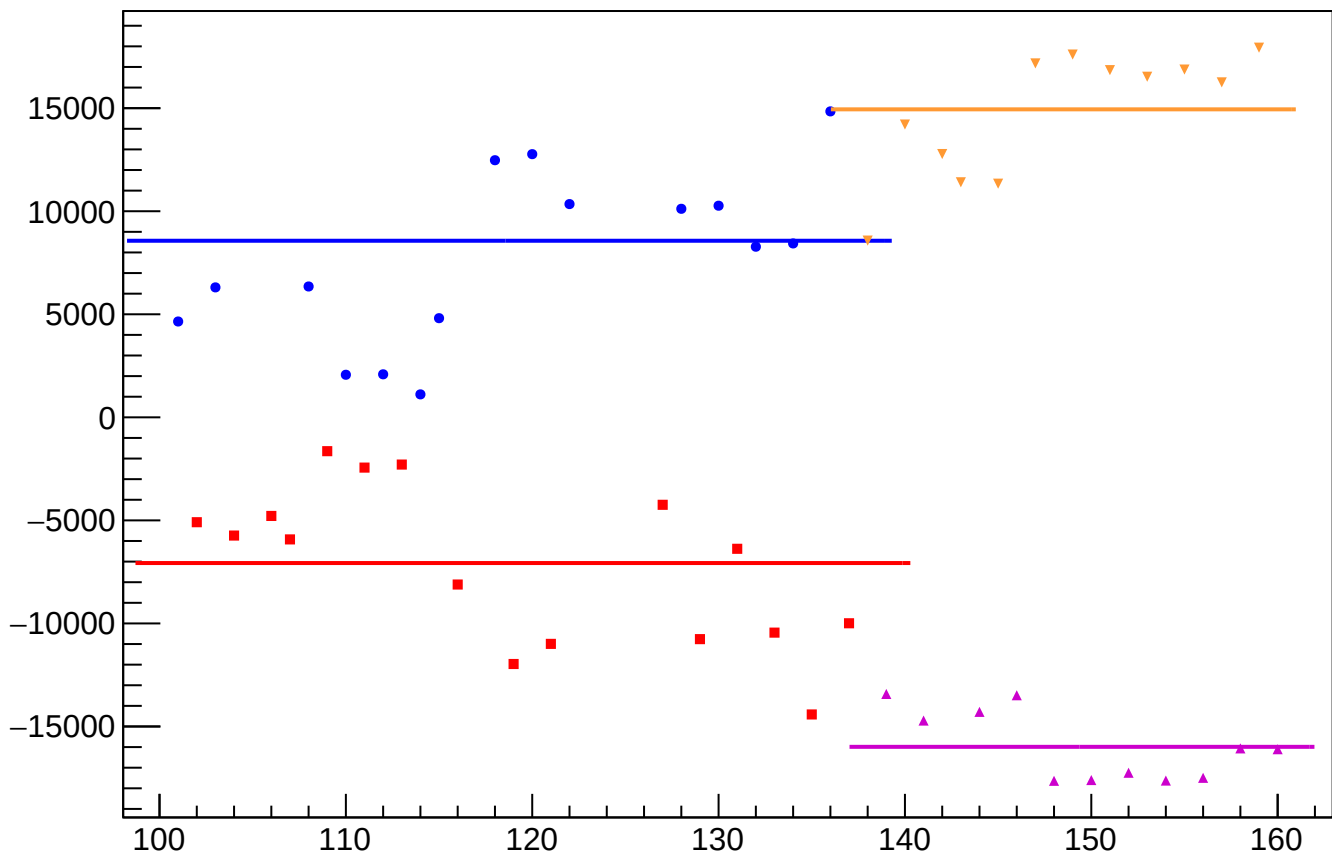
All: 2.915 $\pm$ 0.000  $\chi^2$ /NDF: 2351696492796

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 +/- 0.000

$\chi^2/NDF$ : 11106048878972501366429055679645708451840.0/14

Left Out: 14943.560 +/- 0.000

$\chi^2/NDF$ : 7900539606524387386359998406585036570624.0/11

Right Out: -7069.884 +/- 0.000

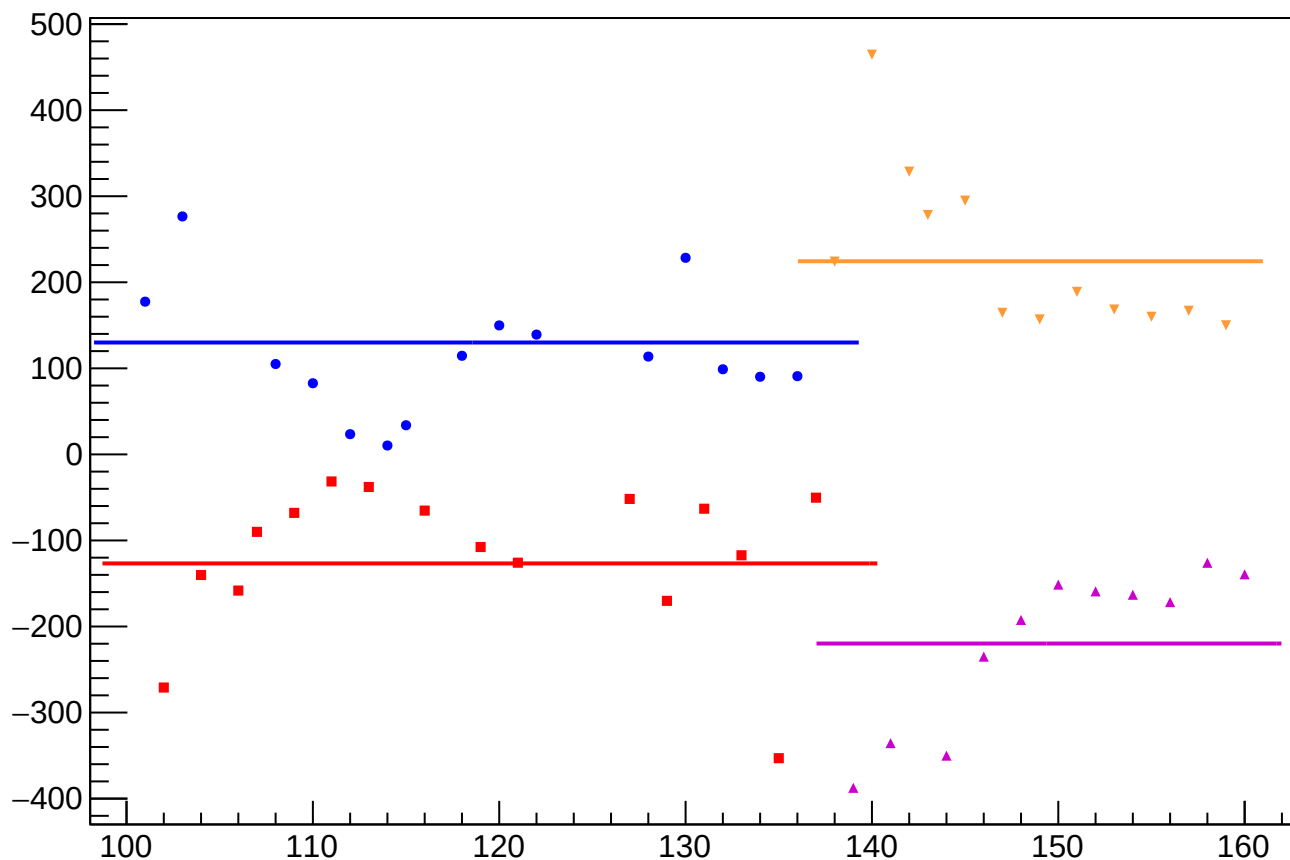
$\chi^2/NDF$ : 10076862363502652111378210539664387866624.0/15

Left In: -15987.436 +/- 0.000

$\chi^2/NDF$ : 2470393428254815728629083332629999124480.0/10

All: -85.320 +/- 0.000  $\chi^2/NDF$ : 552788797574

dit\_sam8\_coil1\_err\_mean vs Slug, Sign Corrected



Right In: 130.021 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 3115259987552341725946418665378283520.0/14

Left Out: 224.458 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 7870394140048491055430374232164401152.0/11

Right Out: -126.709 $\pm$ 0.000

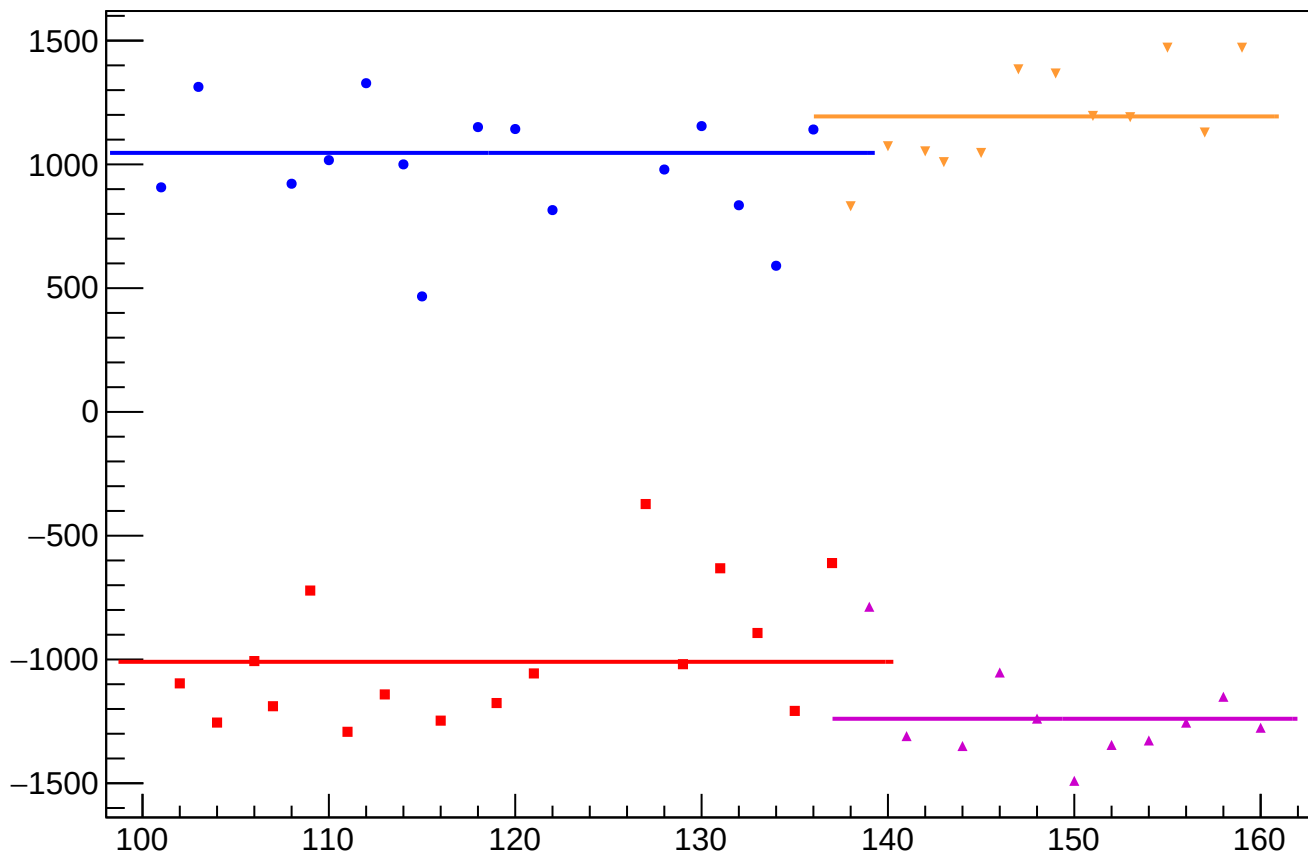
$\chi^2/\text{NDF}$ : 5397122581297664561308621600668516352.0/15

Left In: -219.787 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 7418609629454172879787970620999860224.0/10

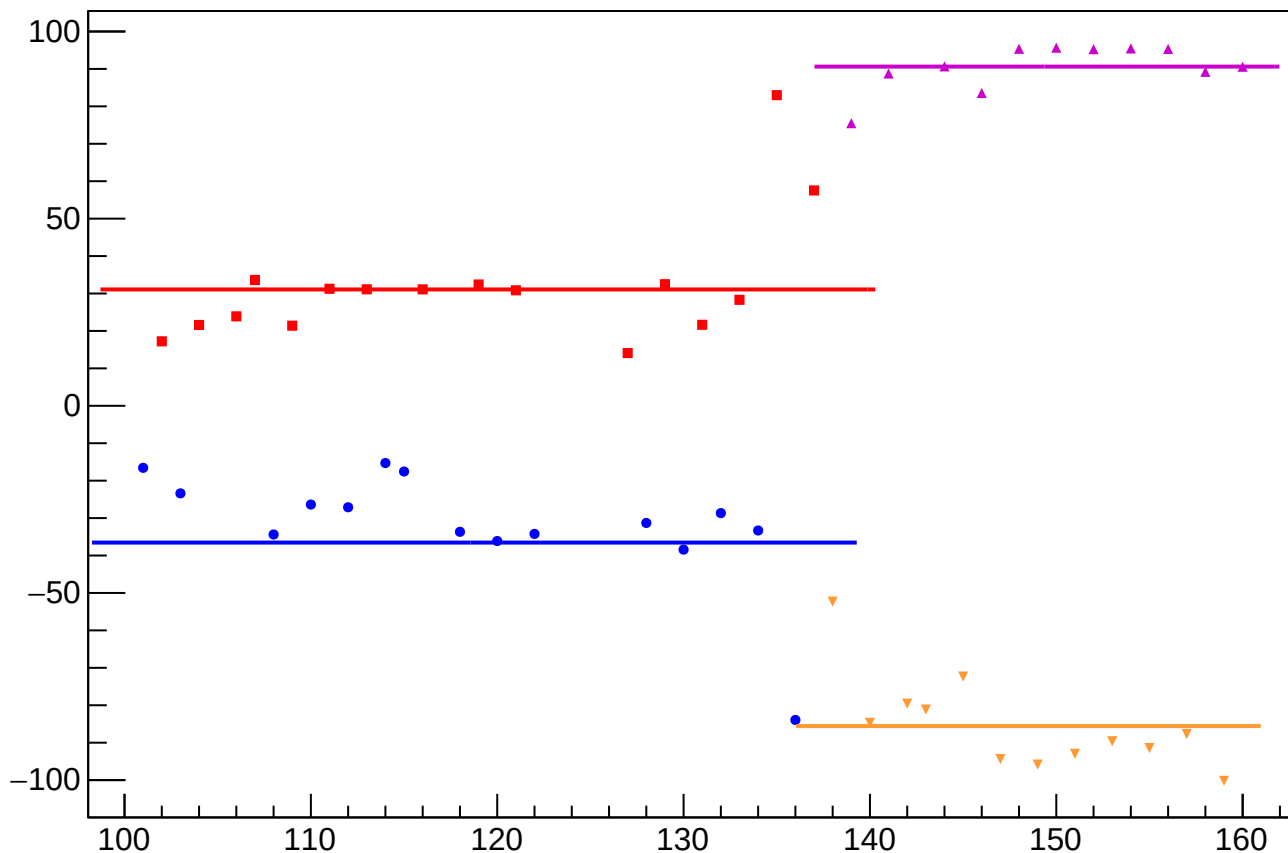
All: 0.615 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 1361639505758

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

$\chi^2/\text{NDF}$ : 254351867861444609202637633864335360.0/14

$\chi^2/\text{NDF}$ : 143557776257547990865591640732467200.0/11

$\chi^2/\text{NDF}$ : 181291079119381636178408498876383232.0/15

$\chi^2/\text{NDF}$ : 33089833083626408117297955498622976.0/10

Left: 3.003 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 144401853367529279

Right: -2.265 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 1939933040270060

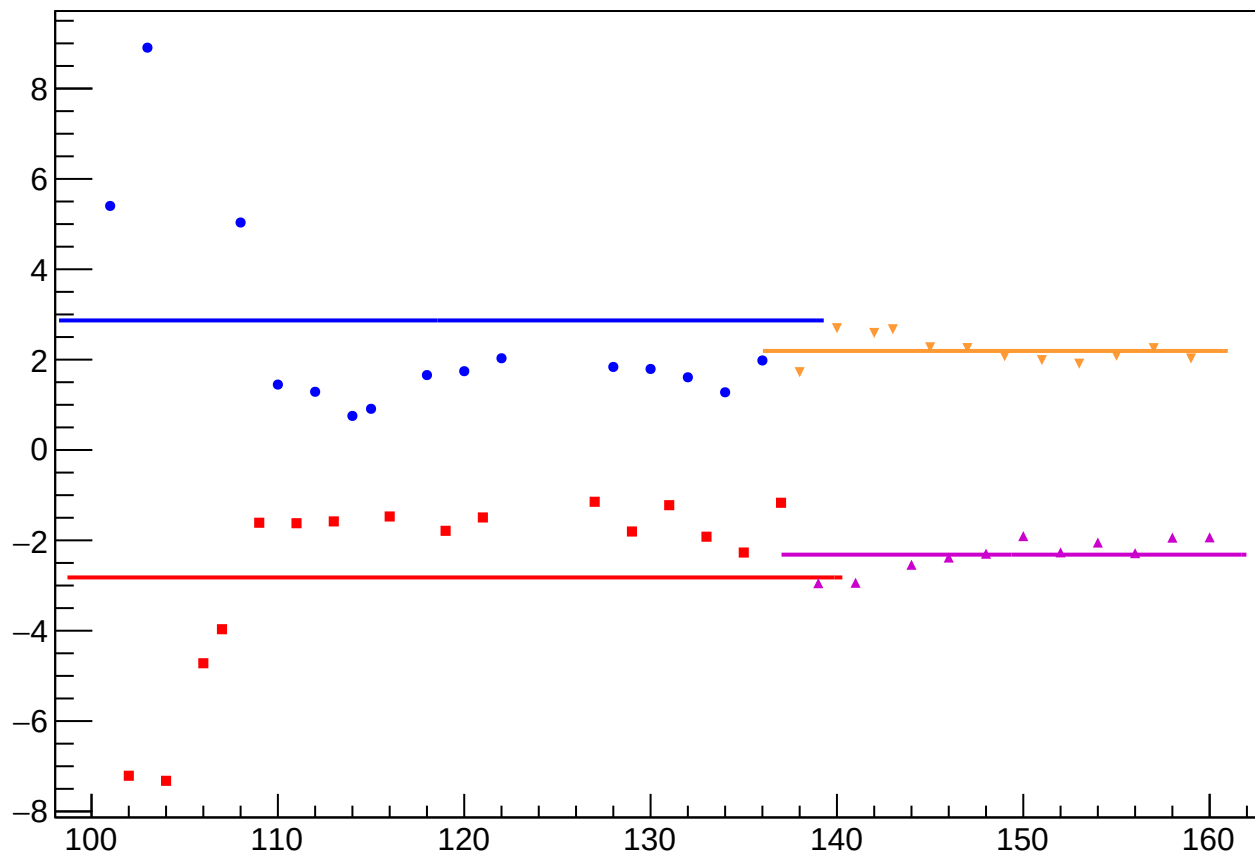
In: 38.154 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 645160855456739365

Out: -36.355 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 5572346140178000

All: 0.805 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 16401400360245

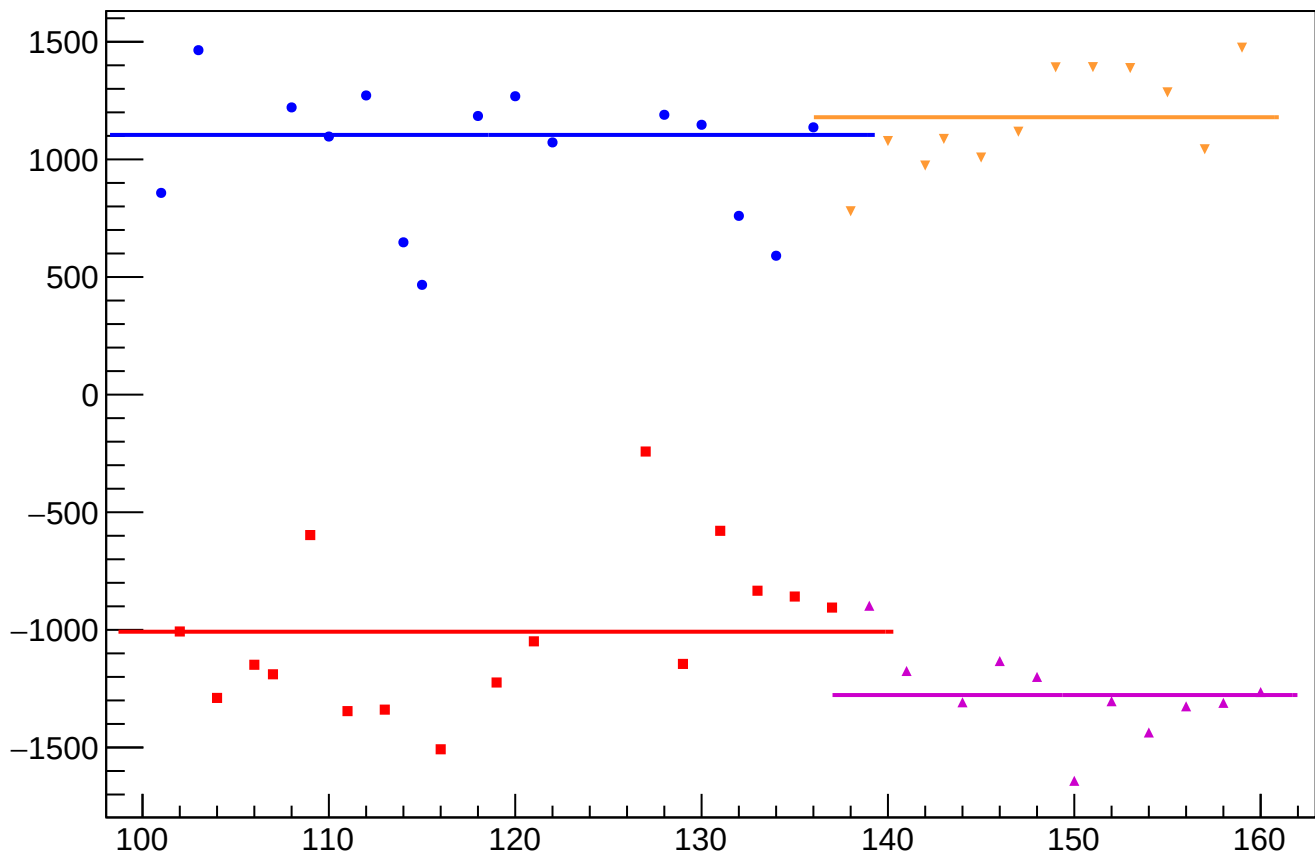


dit\_4aX\_coil3\_err\_mean vs Slug, Sign Corrected



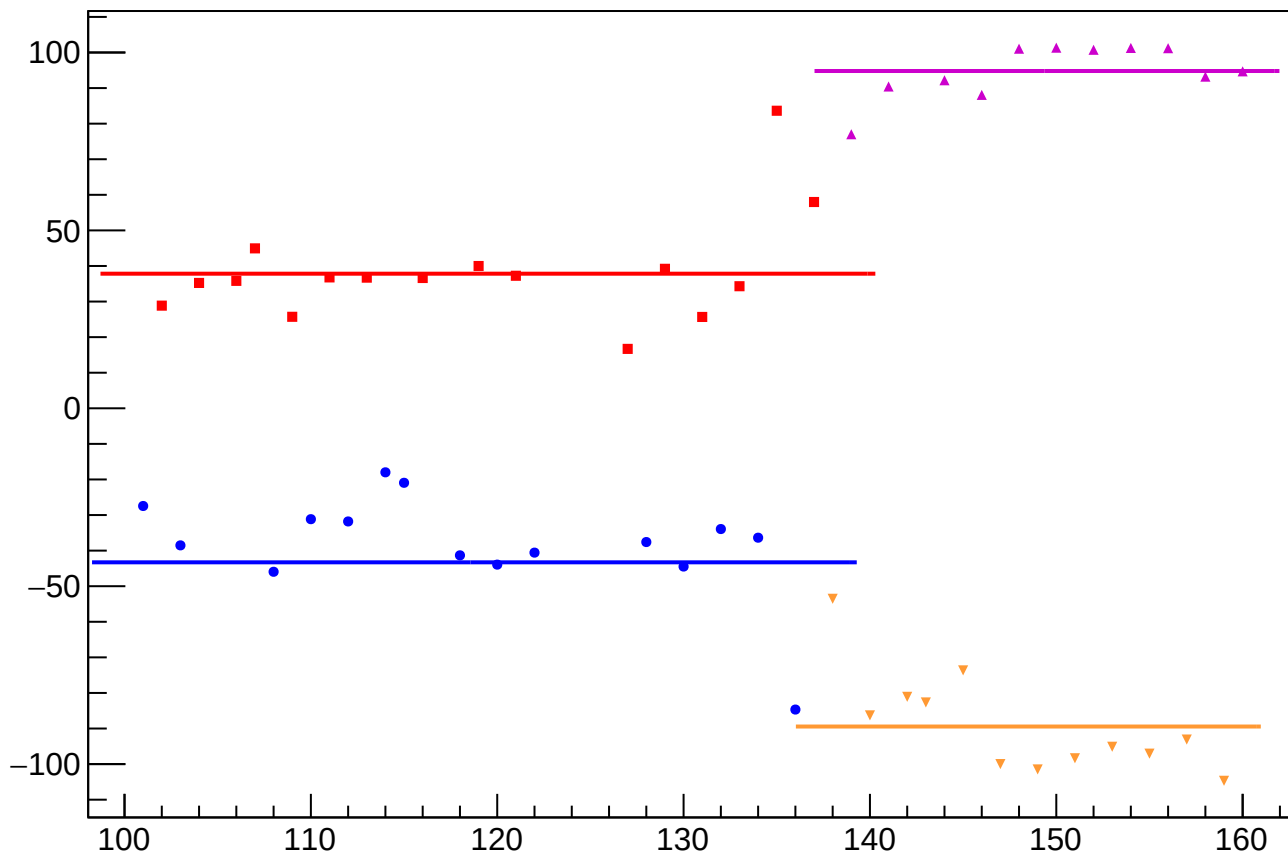
Right In:  $2.867 \pm 0.000$   $\chi^2/\text{NDF}$ : 3455499087584693564208174061322240.0/14  
 Left Out:  $2.192 \pm 0.000$   $\chi^2/\text{NDF}$ : 76043906789141561084580015898624.0/11  
 Right Out:  $-2.821 \pm 0.000$   $\chi^2/\text{NDF}$ : 3052948718107902490497172912472064.0/15  
 Left In:  $-2.317 \pm 0.000$   $\chi^2/\text{NDF}$ : 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 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 199342736778845281087197523996573696.0/14

Left Out: -89.439 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 181119962985690841138788427972476928.0/11

Right Out: 37.832 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 148683933977204936634636843897323520.0/15

Left In: 94.799 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 49077050032611006982156968074936320.0/10

Left: 3.181 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 158268282831051271

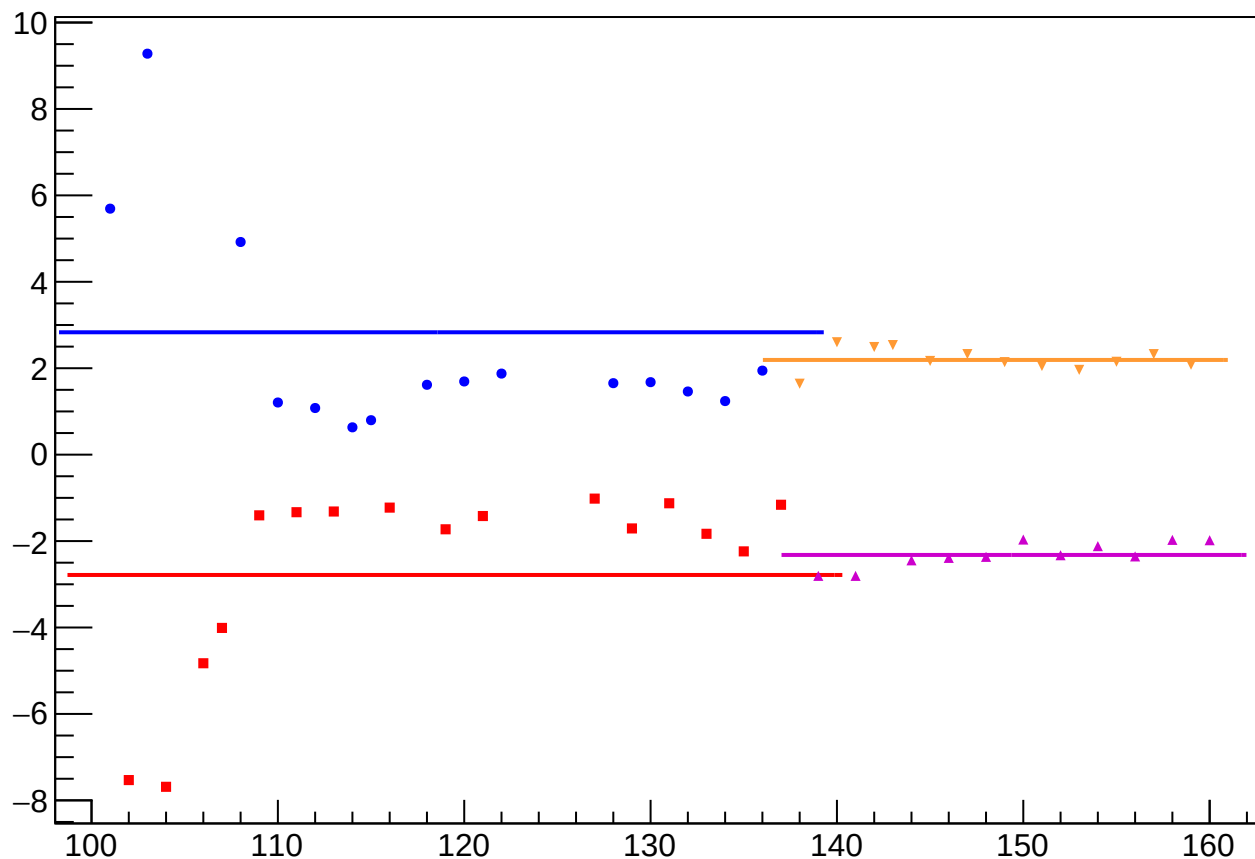
Right: -2.174 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 2512687101518028

In: 37.826 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 751790372998047563

Out: -35.745 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 6575776048743356

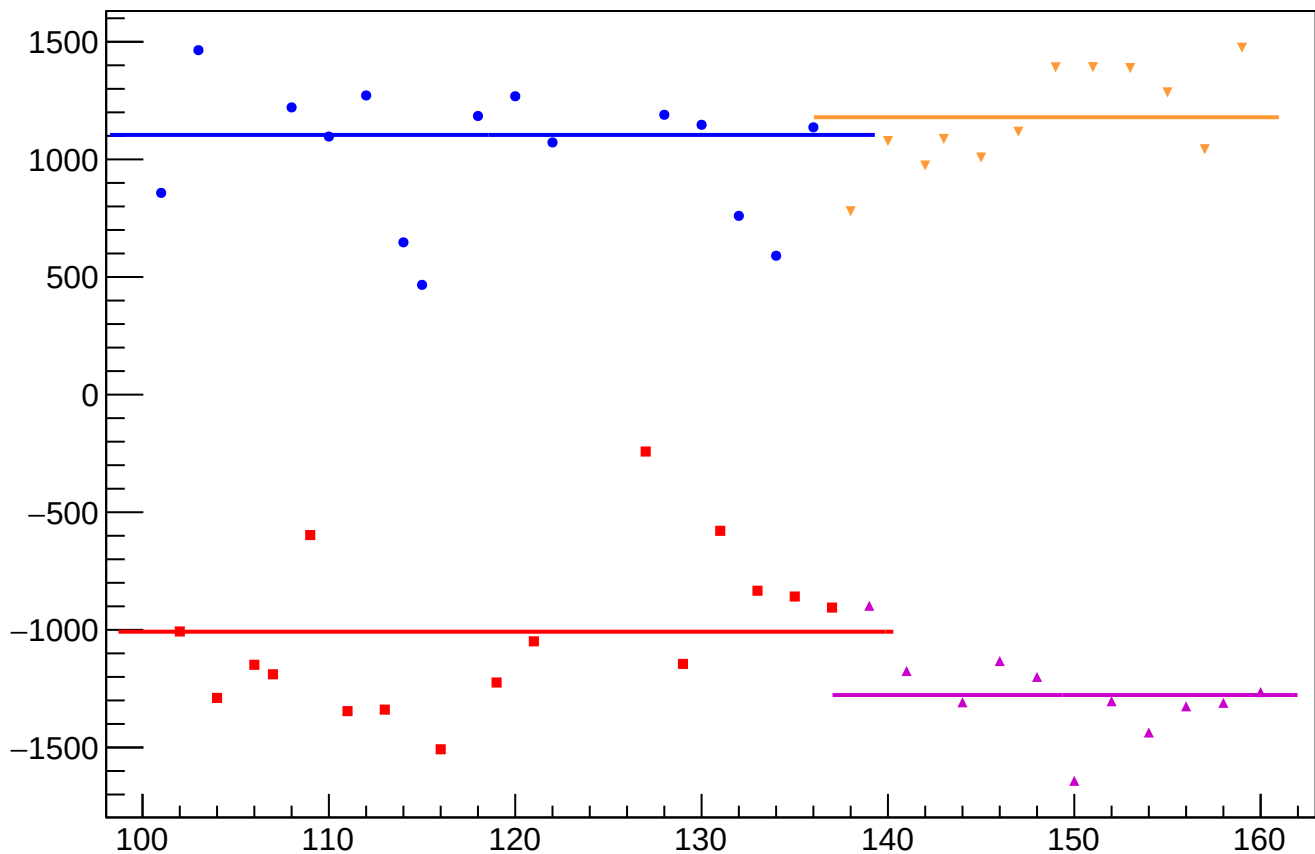
All: 0.947 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 1836150818238

dit\_4eX\_coil3\_err\_mean vs Slug, Sign Corrected



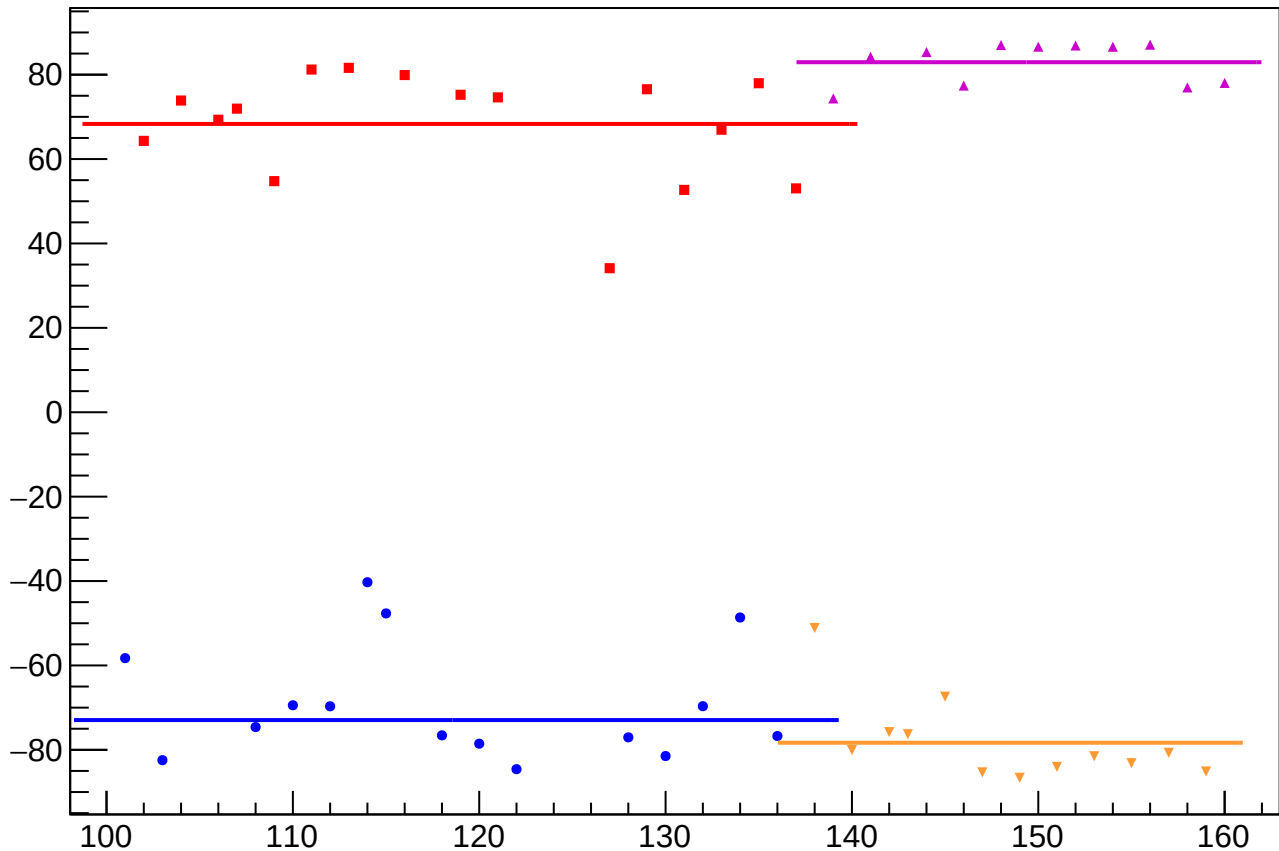
Right In: 2.832 +/- 0.000  $\chi^2/NDF$ : 3957672531929017328512564323155968.0/14  
 Left Out: 2.192 +/- 0.000  $\chi^2/NDF$ : 59601559247415008947816525463552.0/11  
 Right Out: -2.784 +/- 0.000  $\chi^2/NDF$ : 3589544956108116898091236897849344.0/15  
 Left In: -2.321 +/- 0.000  $\chi^2/NDF$ : 74619123224616324544404505231360.0/10  
 All: -0.051 +/- 0.000  $\chi^2/NDF$ : 2741558316748

dit\_4eX\_coil3\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                       |                                        |
|------------------------------|-------------------------------------------------------------------|-----------------------|----------------------------------------|
| Right In: 1104.111+/-0.000   | $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14 | Left: -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\_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

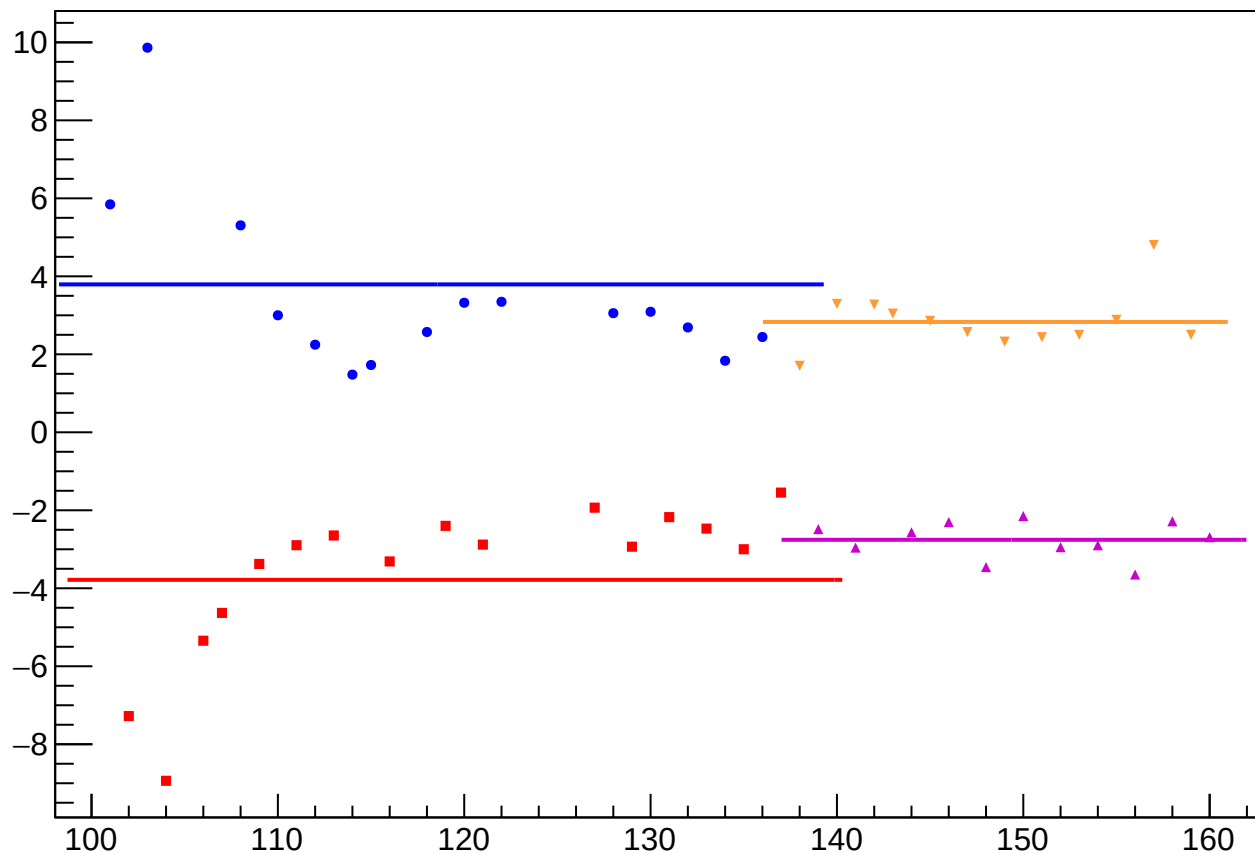
Right: -1.347+/-0.000  $\chi^2/\text{NDF}$ : 6737392391922205

In: 18.630+/-0.000  $\chi^2/\text{NDF}$ : 935227547229560147

Out: -16.451+/-0.000  $\chi^2/\text{NDF}$ : 8485315004637869

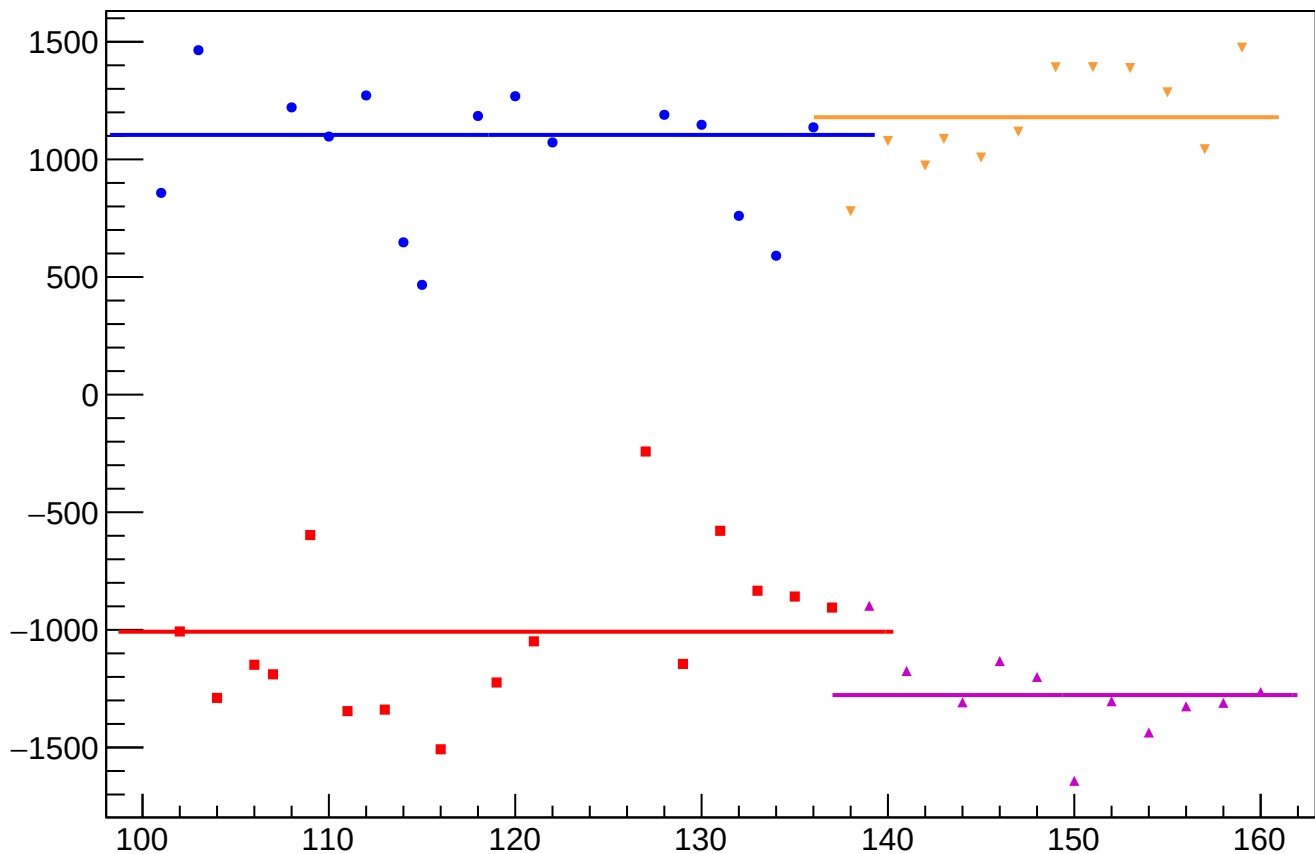
All: 1.045+/-0.000  $\chi^2/\text{NDF}$ : 18808011568652

dit\_11X12X\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 3.793 +/- 0.000  $\chi^2/\text{NDF}$ : 3205389242726129619796290810413056.0/14  
 Left Out: 2.830 +/- 0.000  $\chi^2/\text{NDF}$ : 492749026028838907947829621161984.0/11  
 Right Out: -3.783 +/- 0.000  $\chi^2/\text{NDF}$ : 2878586622192676654452338755371008.0/15  
 Left In: -2.757 +/- 0.000  $\chi^2/\text{NDF}$ : 191720746547732306226054042746880.0/10  
 All: -0.007 +/- 0.000  $\chi^2/\text{NDF}$ : 3999287355304

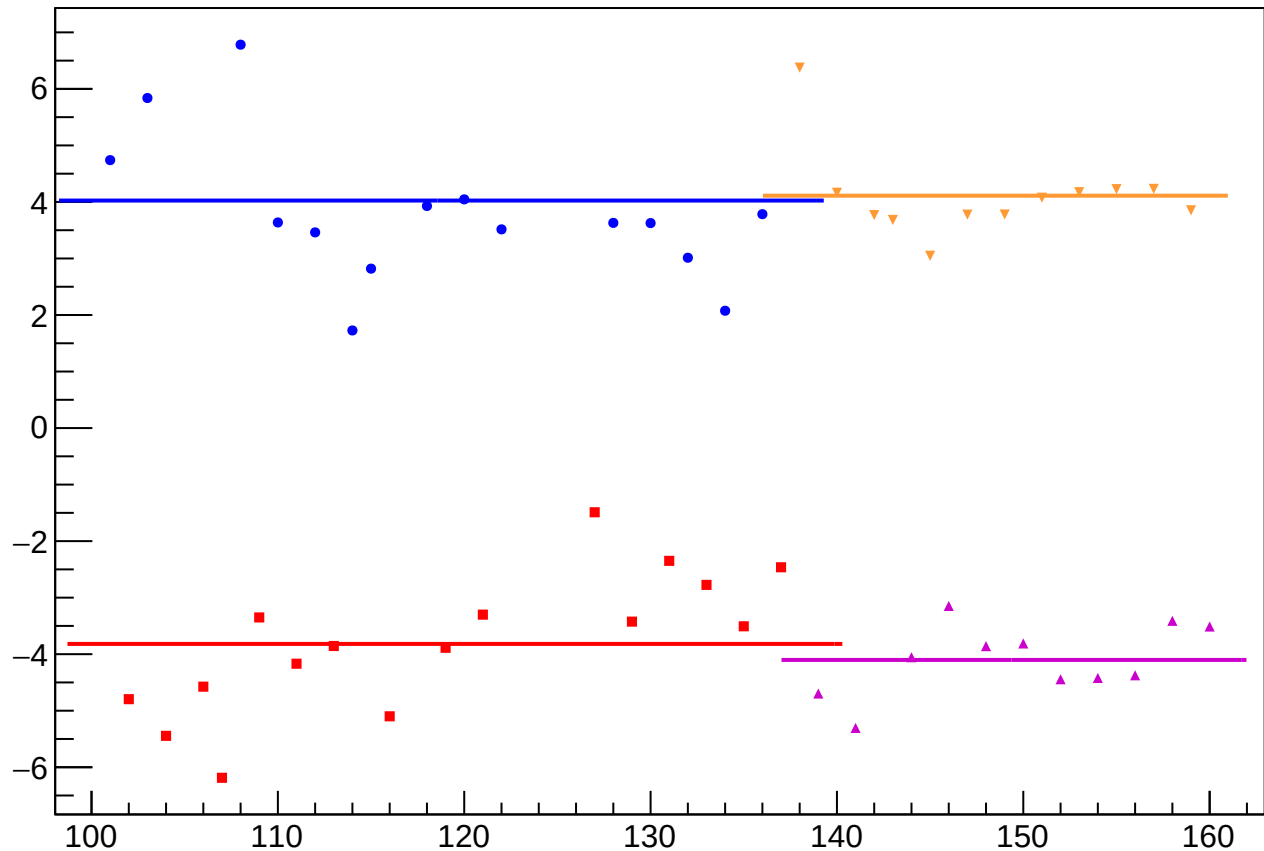
dit\_11X12X\_coil3\_Ndata\_mean vs Slug, Sign Corrected



|                              |                                                                   |                       |                                        |
|------------------------------|-------------------------------------------------------------------|-----------------------|----------------------------------------|
| 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     |

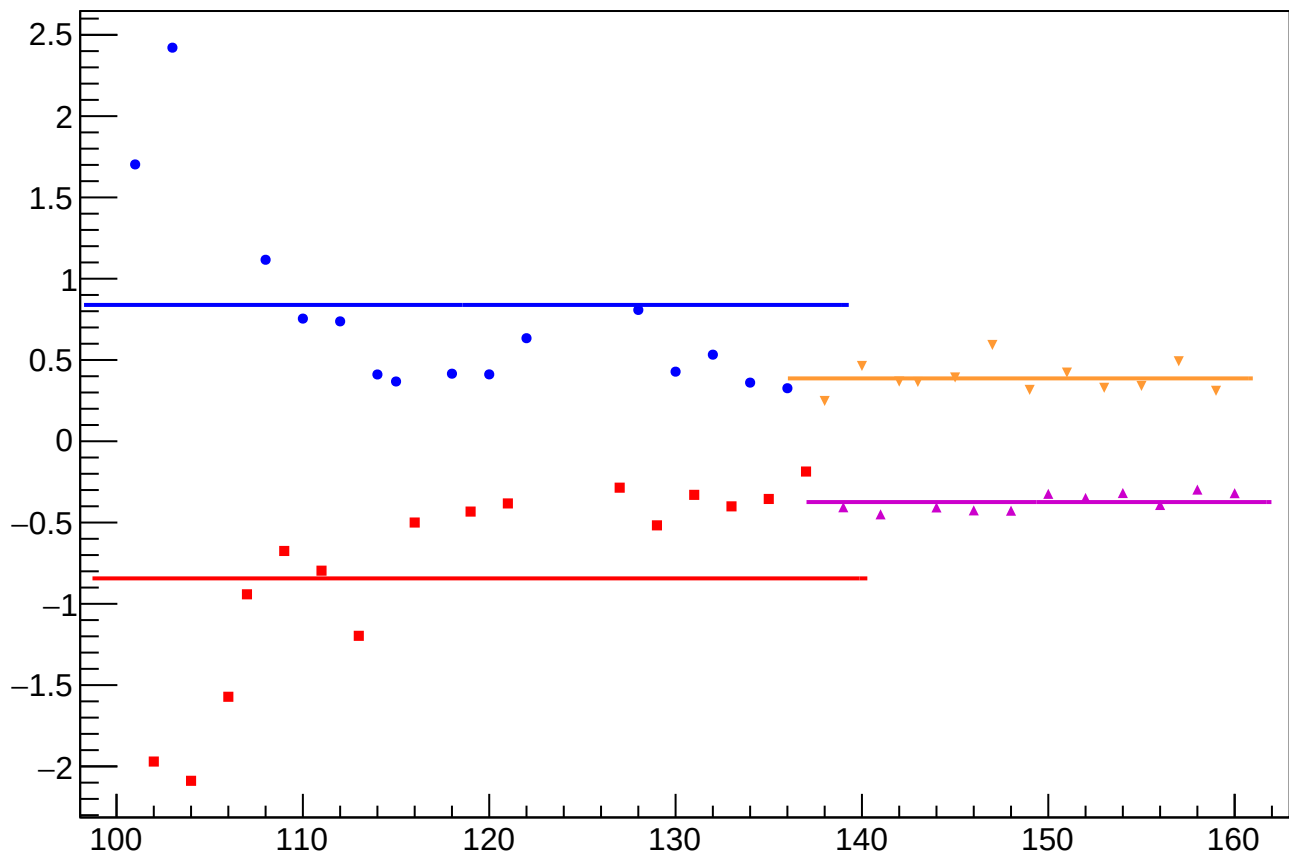


# dit\_4aY\_coil3\_mean vs Slug, Sign Corrected



Left: -0.018 +/- 0.000  $\chi^2/\text{NDF}$ : 31853611122068431  
 Right: 0.050 +/- 0.000  $\chi^2/\text{NDF}$ : 21892754887879739  
 In: -0.749 +/- 0.000  $\chi^2/\text{NDF}$ : 262752943933562033  
 Out: 0.766 +/- 0.000  $\chi^2/\text{NDF}$ : 256661576644538779  
 All: 0.010 +/- 0.000  $\chi^2/\text{NDF}$ : 53749829914354

dit\_4aY\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 0.839+/-0.000

$\chi^2/\text{NDF}$ : 258416025334615661521163083841536.0/14

Left Out: 0.387+/-0.000

$\chi^2/\text{NDF}$ : 7656532010606705303389852401664.0/11

Right Out: -0.844+/-0.000

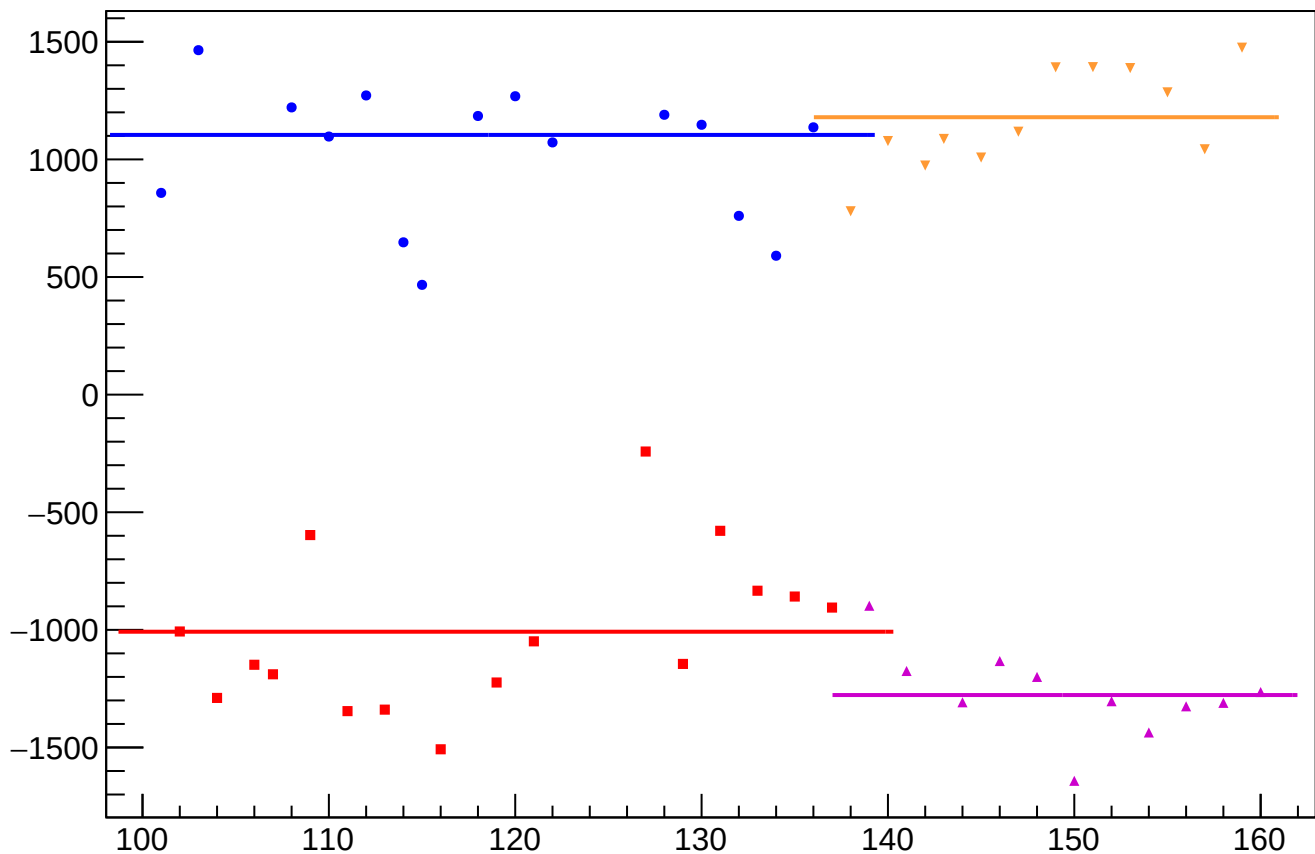
$\chi^2/\text{NDF}$ : 252917509393432760240648918925312.0/15

Left In: -0.374+/-0.000

$\chi^2/\text{NDF}$ : 2408191855928929204652403064832.0/10

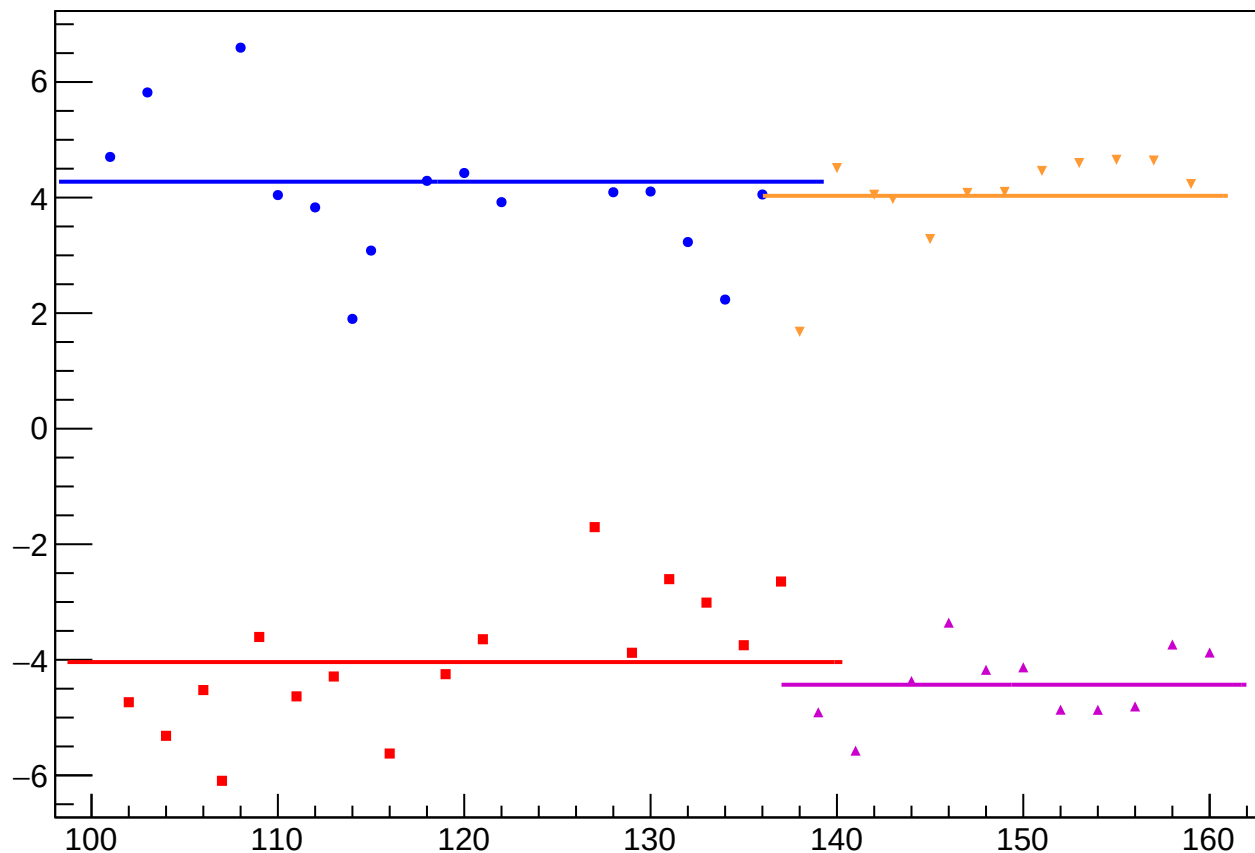
All: -0.003+/-0.000  $\chi^2/\text{NDF}$ : 1718408465884

dit\_4aY\_coil3\_Ndata\_mean vs Slug, Sign Corrected



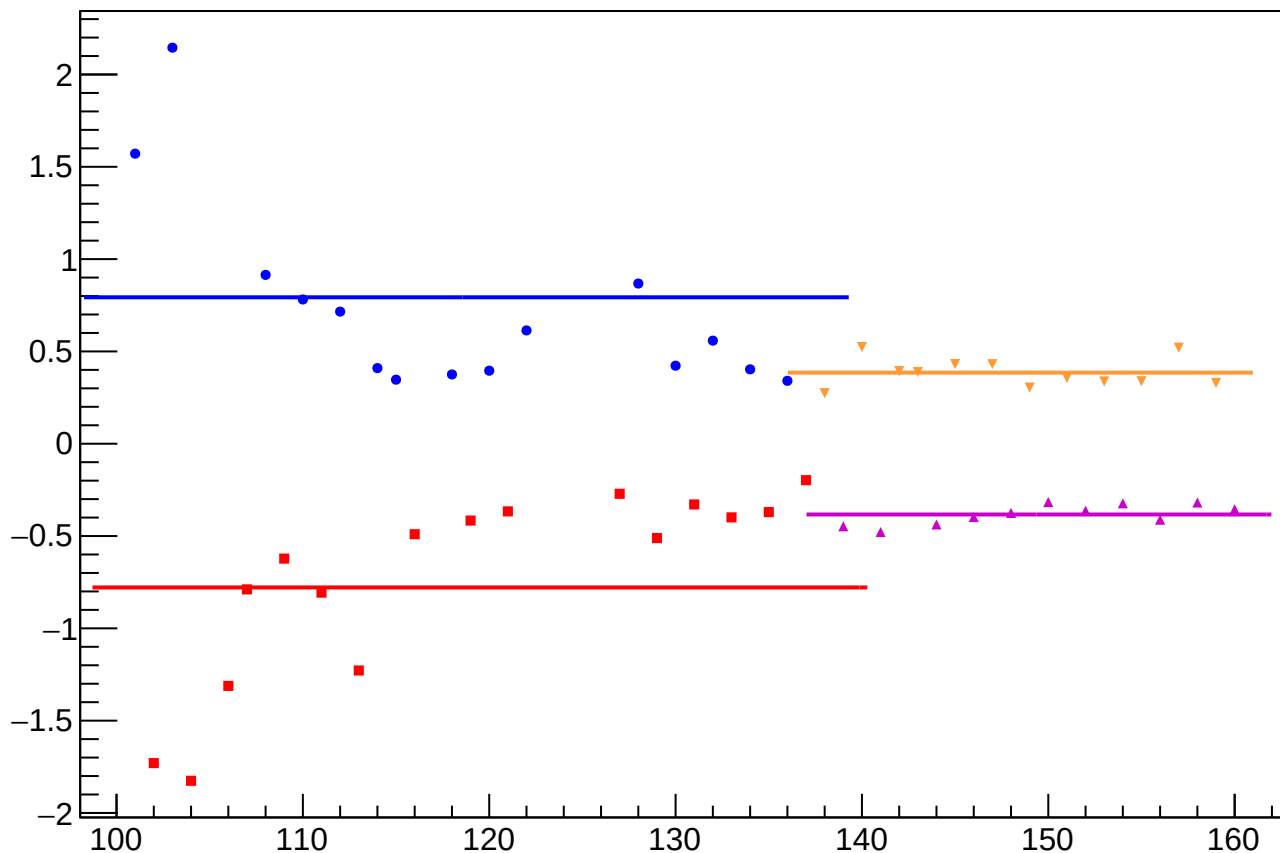
Right In:  $1104.111 \pm 0.000$   $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out:  $1179.336 \pm 0.000$   $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 Right Out:  $-1007.906 \pm 0.000$   $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Left In:  $-1277.097 \pm 0.000$   $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All:  $-18.335 \pm 0.000$   $\chi^2/\text{NDF}$ : 441608022845

dit\_4eY\_coil3\_mean vs Slug, Sign Corrected



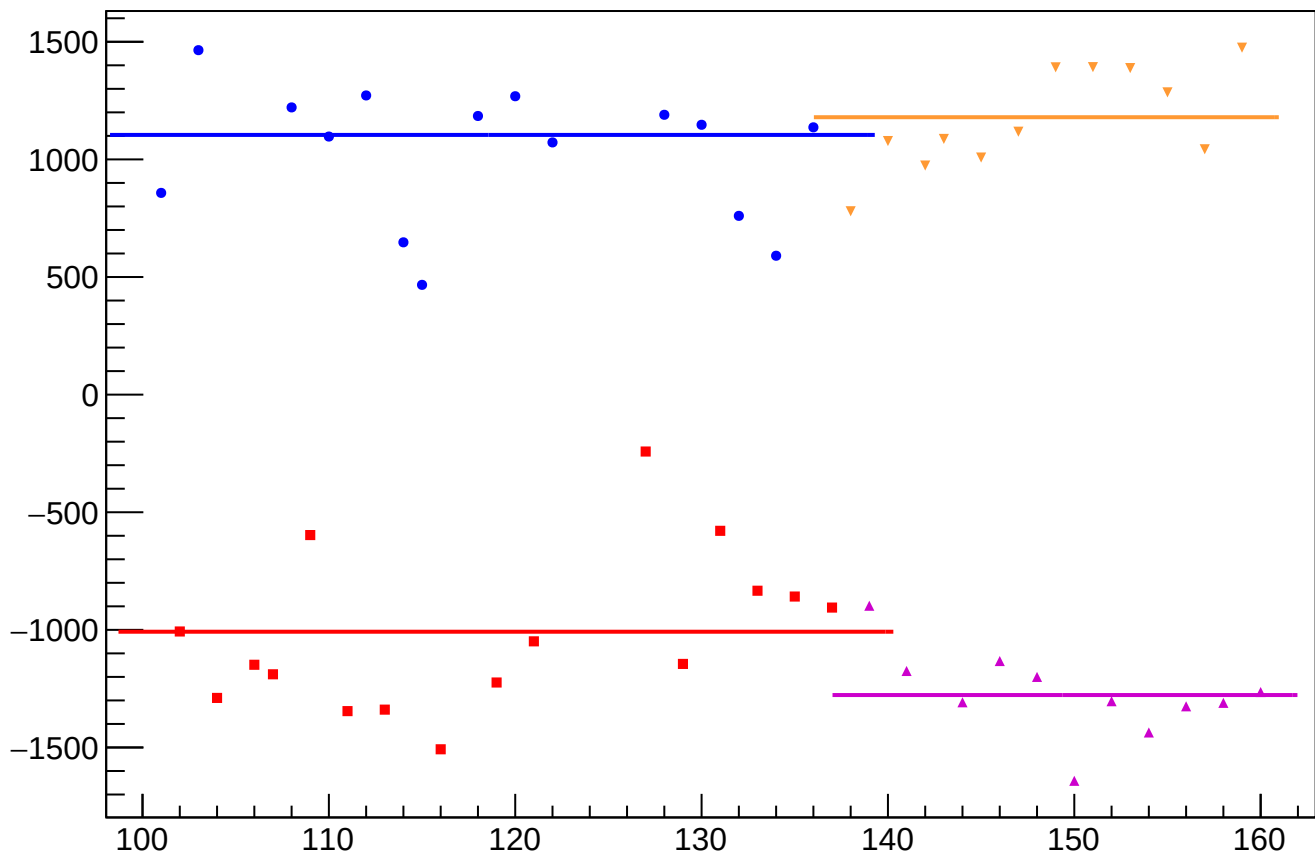
|                           |                                                              |                      |                                          |
|---------------------------|--------------------------------------------------------------|----------------------|------------------------------------------|
| Right In: 4.275+/-0.000   | $\chi^2/\text{NDF}$ : 597188707898198851792415435522048.0/14 | Left: -0.224+/-0.000 | $\chi^2/\text{NDF}$ : 33846784910567174  |
| Left Out: 4.030+/-0.000   | $\chi^2/\text{NDF}$ : 600797720921367466879695481470976.0/11 | Right: 0.061+/-0.000 | $\chi^2/\text{NDF}$ : 24108117163015416  |
| Right Out: -4.039+/-0.000 | $\chi^2/\text{NDF}$ : 772368848194464324973108765130752.0/15 | In: -0.839+/-0.000   | $\chi^2/\text{NDF}$ : 298405306819524431 |
| Left In: -4.432+/-0.000   | $\chi^2/\text{NDF}$ : 345602703191245770554210363899904.0/10 | Out: 0.626+/-0.000   | $\chi^2/\text{NDF}$ : 264837106487294890 |
|                           |                                                              | All: -0.105+/-0.000  | $\chi^2/\text{NDF}$ : 5801697378090      |

dit\_4eY\_coil3\_err\_mean vs Slug, Sign Corrected



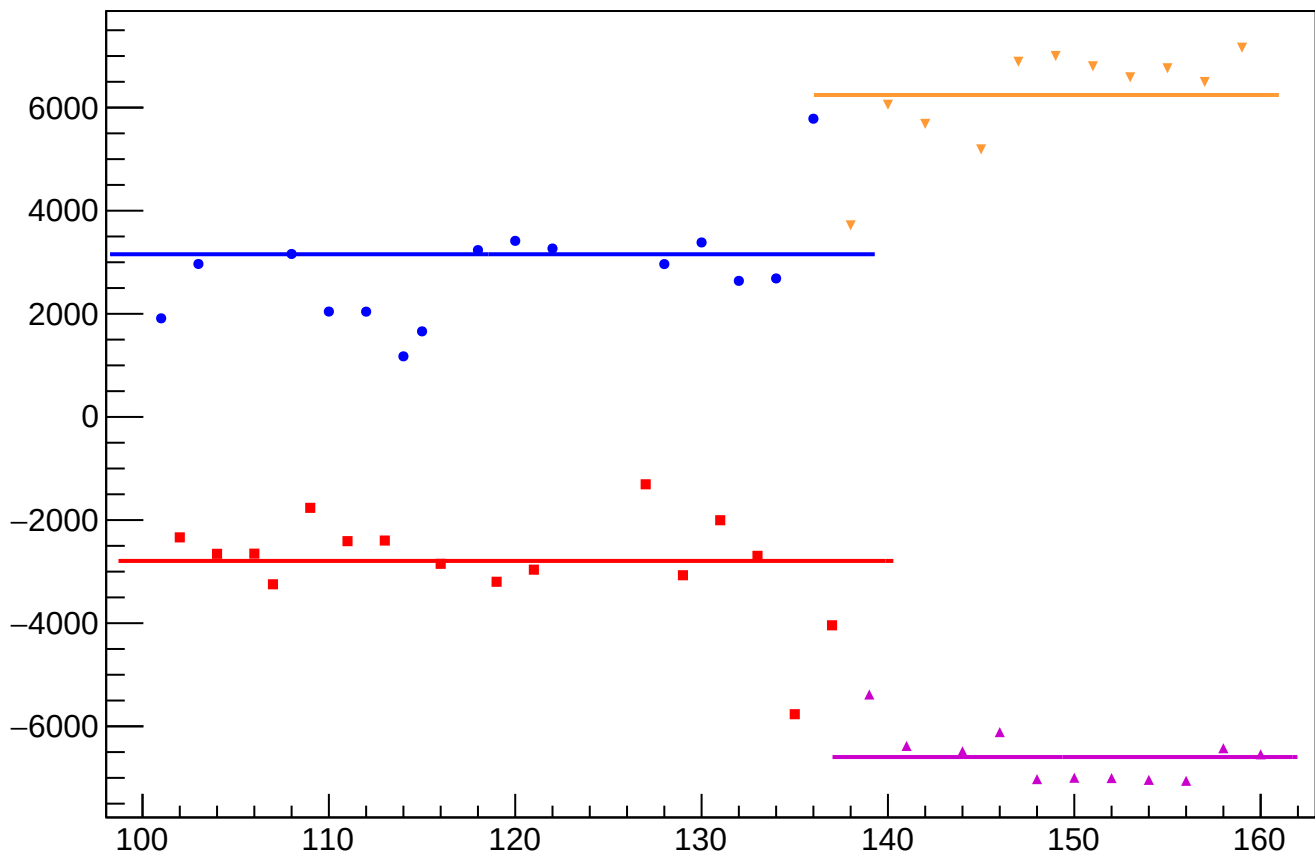
Right In:  $0.793 \pm 0.000$   $\chi^2/\text{NDF}: 195508777173589483440314700005376.0/14$   
 Left Out:  $0.385 \pm 0.000$   $\chi^2/\text{NDF}: 5547784180240414411423653822464.0/11$   
 Right Out:  $-0.778 \pm 0.000$   $\chi^2/\text{NDF}: 185814635772183306063903690063872.0/15$   
 Left In:  $-0.383 \pm 0.000$   $\chi^2/\text{NDF}: 2618375268437967875049691021312.0/10$   
 All:  $-0.002 \pm 0.000$   $\chi^2/\text{NDF}: 1473239916142$

dit\_4eY\_coil3\_Ndata\_mean vs Slug, Sign Corrected



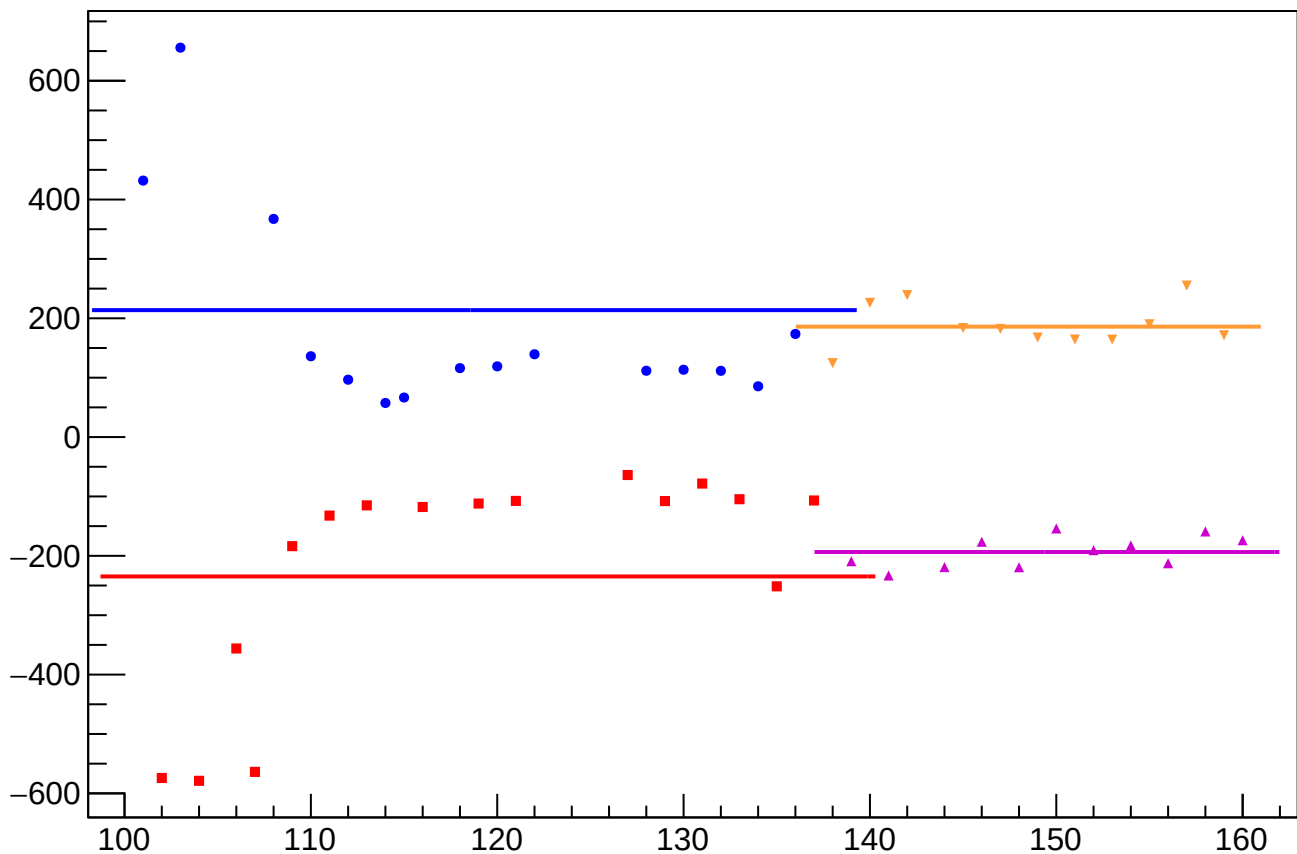
Left: -55.563 +/- 0.000  $\chi^2/\text{NDF}$ : 2840892210996509  
 Right In: 1104.111 +/- 0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Right: 33.659 +/- 0.000  $\chi^2/\text{NDF}$ : 1569083056347410  
 Left Out: 1179.336 +/- 0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 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\_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

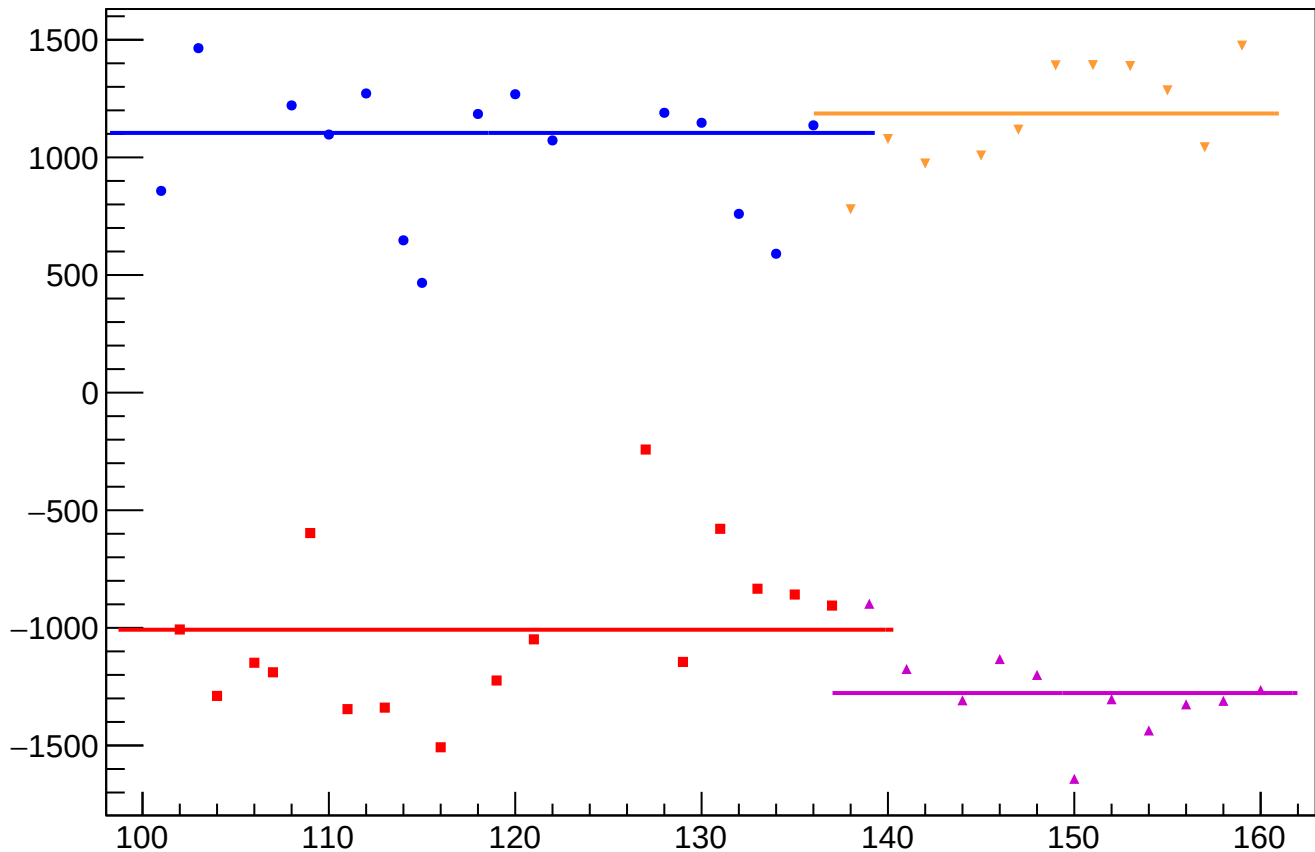
dit\_usl\_coil3\_err\_mean vs Slug, Sign Corrected



Left: -12.048 +/- 0.000  $\chi^2/\text{NDF}$ : 6529786806410777  
 Right: -13.554 +/- 0.000  $\chi^2/\text{NDF}$ : 109883652295878  
 In: -25.504 +/- 0.000  $\chi^2/\text{NDF}$ : 83555095892474159  
 Out: 0.624 +/- 0.000  $\chi^2/\text{NDF}$ : 911015055676819525  
 All: -12.690 +/- 0.000  $\chi^2/\text{NDF}$ : 175183232937

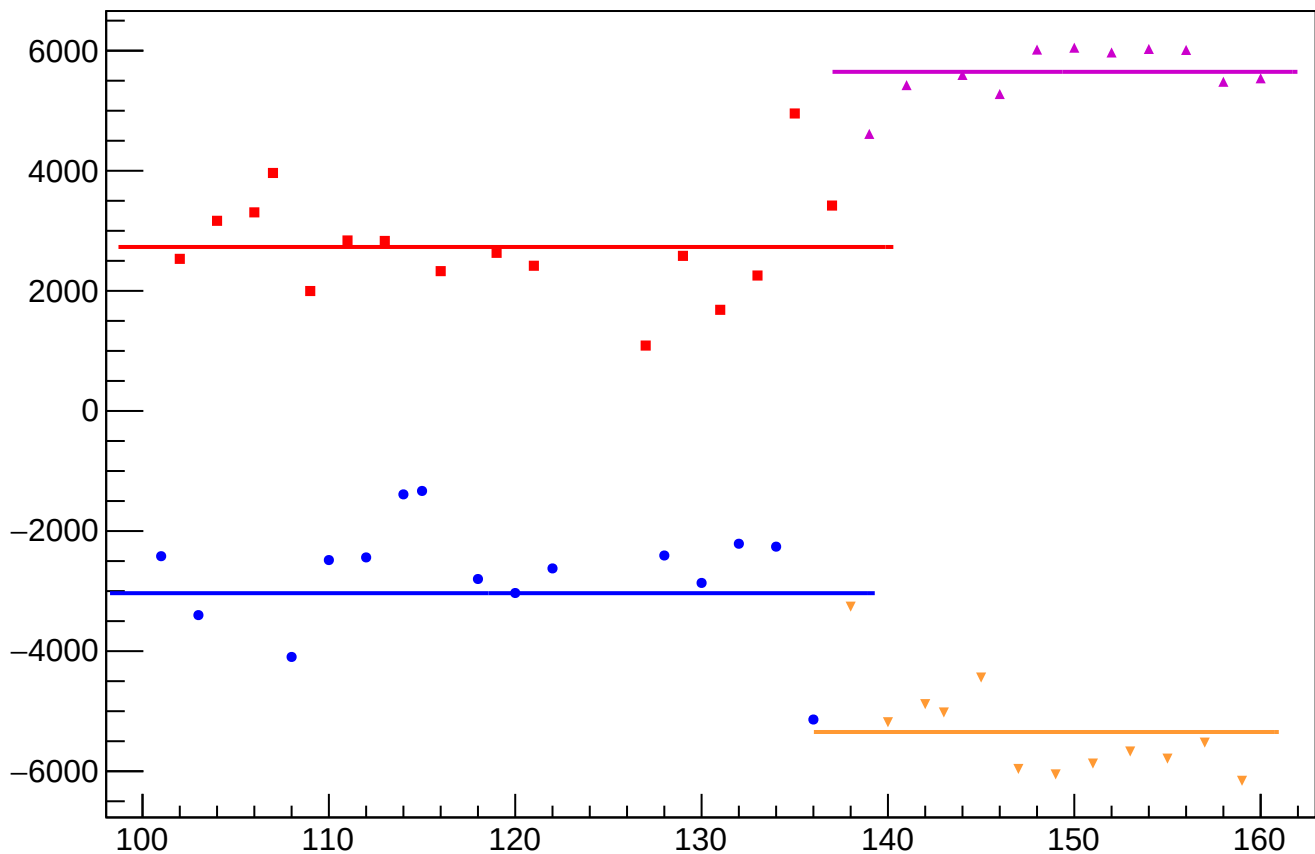


dit\_usl\_coil3\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out: 1186.635+/-0.000  $\chi^2/\text{NDF}$ : 38127290182419373090636614603236179968.0/10  
 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: -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

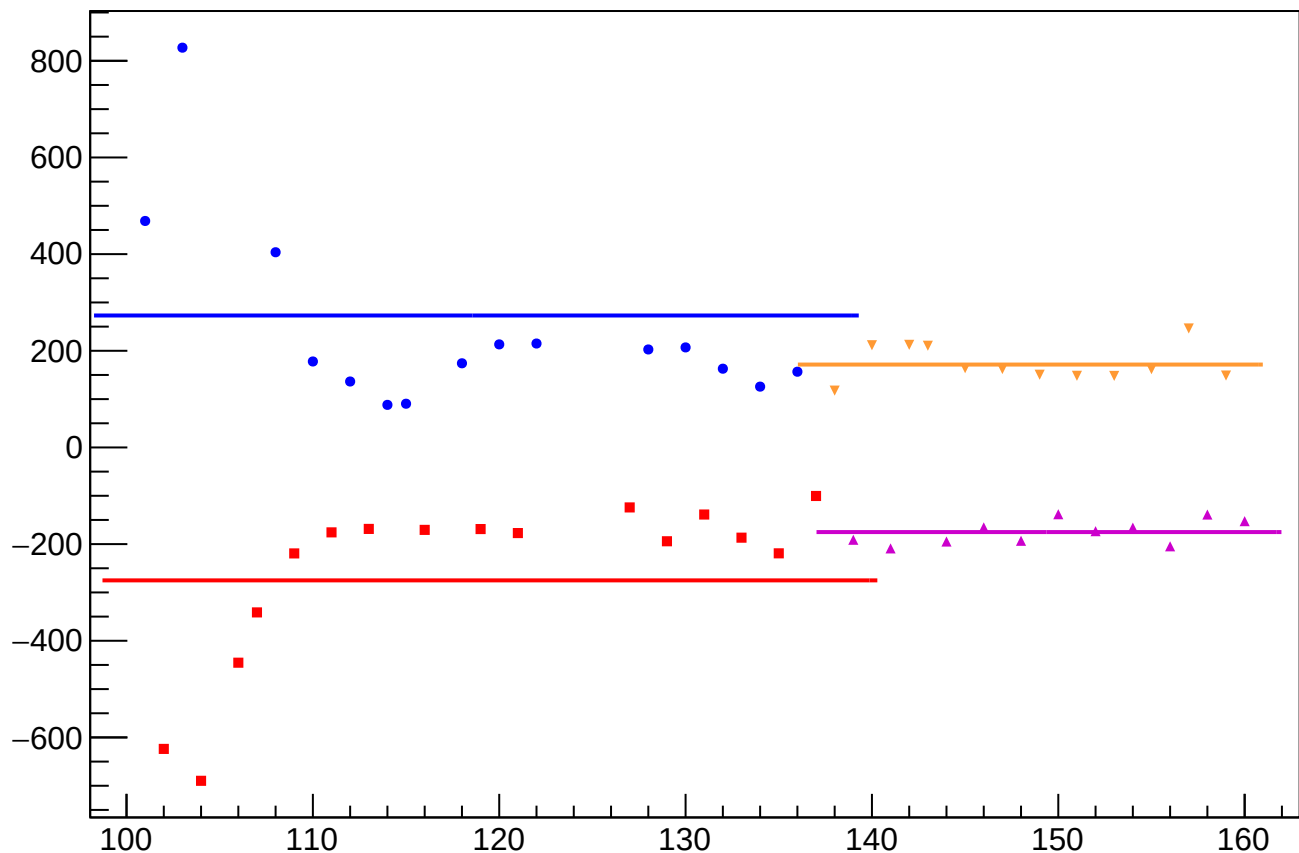
Right: -112.316+/-0.000  $\chi^2/\text{NDF}$ : 12093460154256

In: 2065.482+/-0.000  $\chi^2/\text{NDF}$ : 2953204271382502

Out: -1938.587+/-0.000  $\chi^2/\text{NDF}$ : 26282051967126

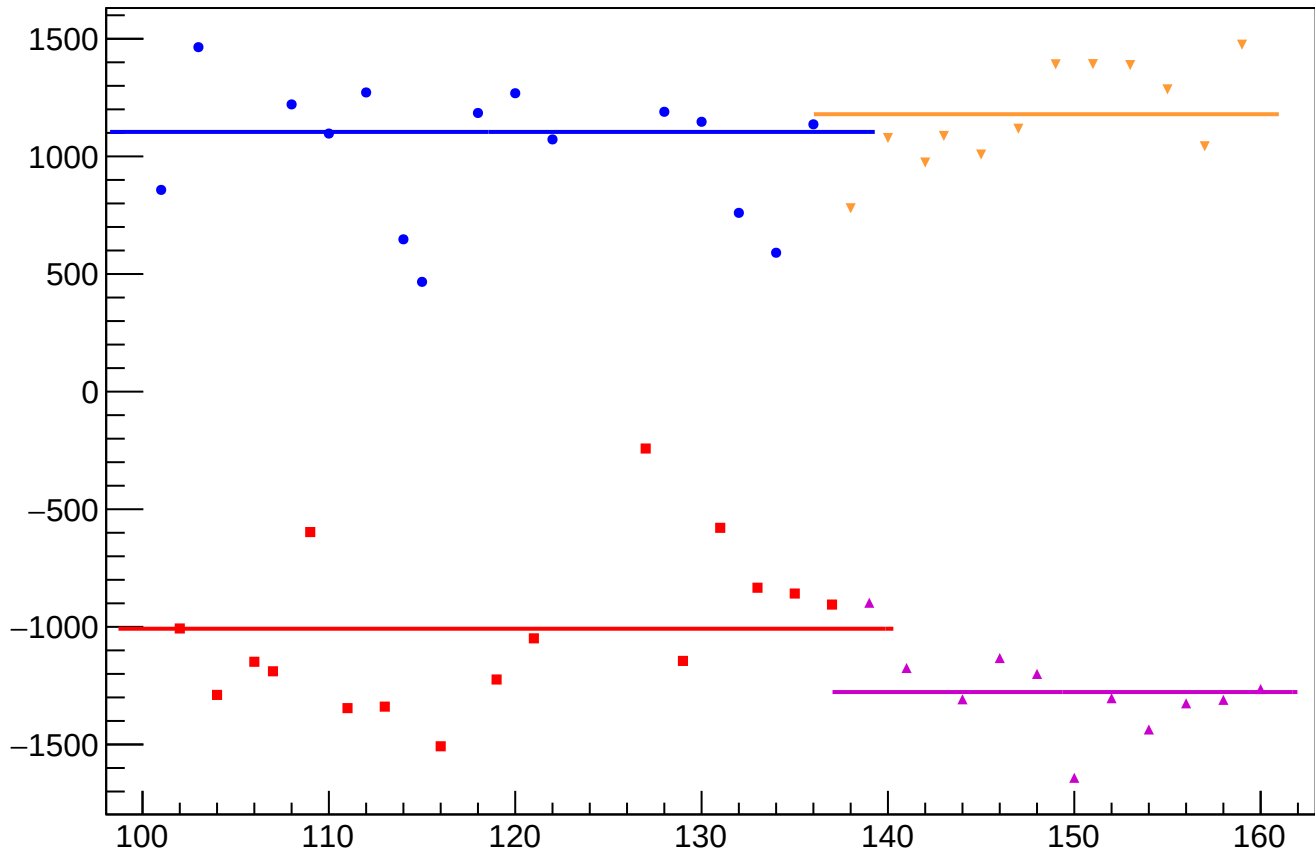
All: 58.370+/-0.000  $\chi^2/\text{NDF}$ : 6845569684778

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

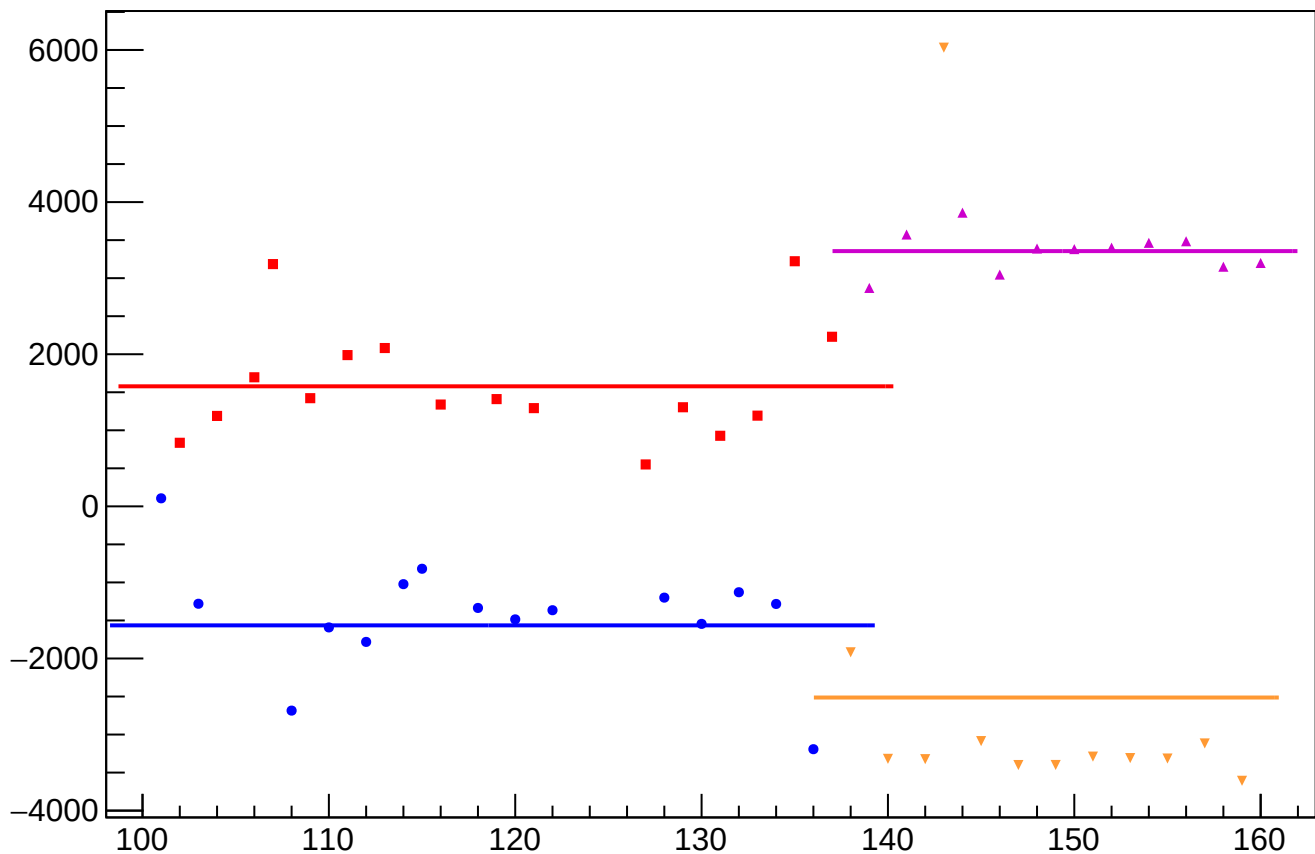
$\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15

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

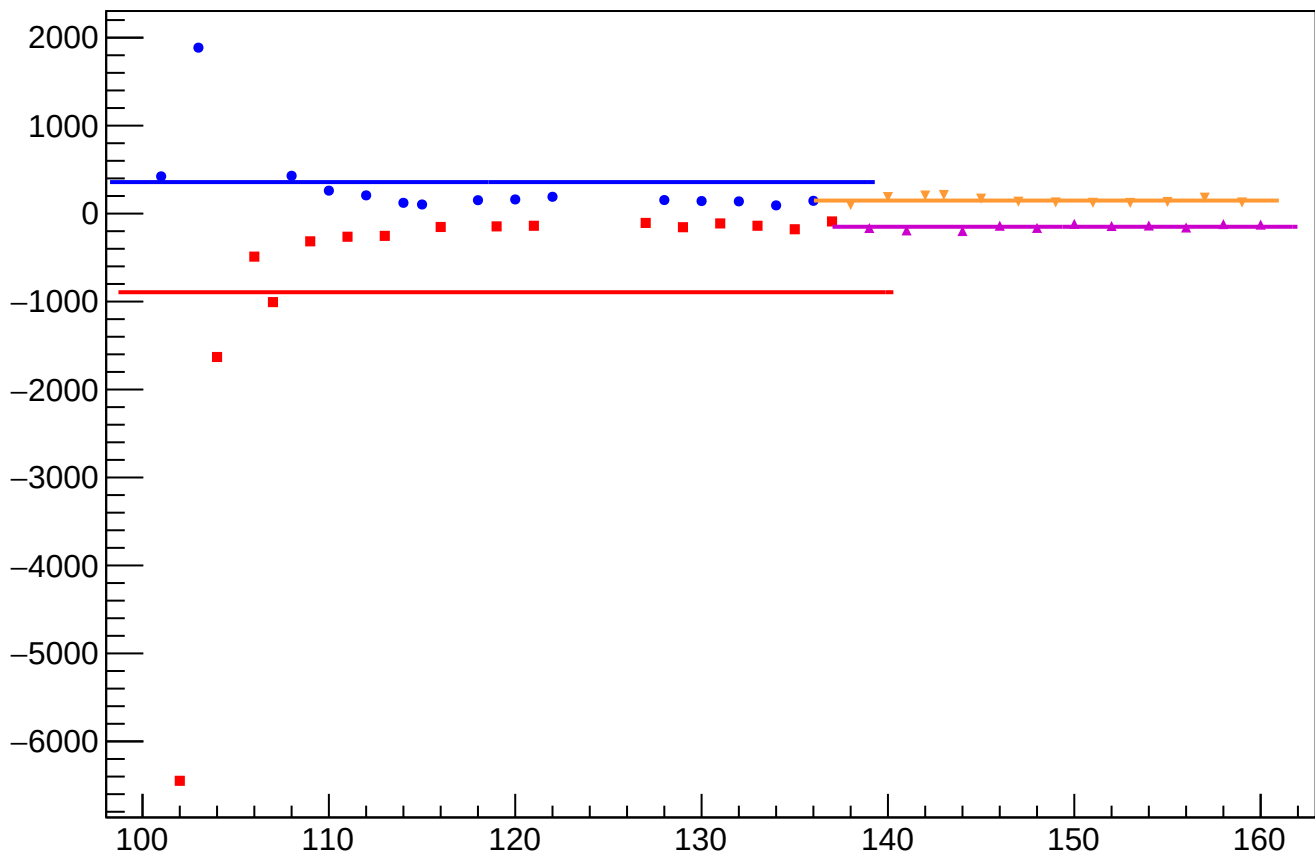
Right: 28.285+/-0.000  $\chi^2/\text{NDF}$ : 4101258280925694

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+/-0.000

$\chi^2/\text{NDF}$ : 157922789145697858165644452090202816512.0/14

Left Out: 148.359+/-0.000

$\chi^2/\text{NDF}$ : 1090286331733366082581256970807803904.0/11

Right Out: -893.897+/-0.000

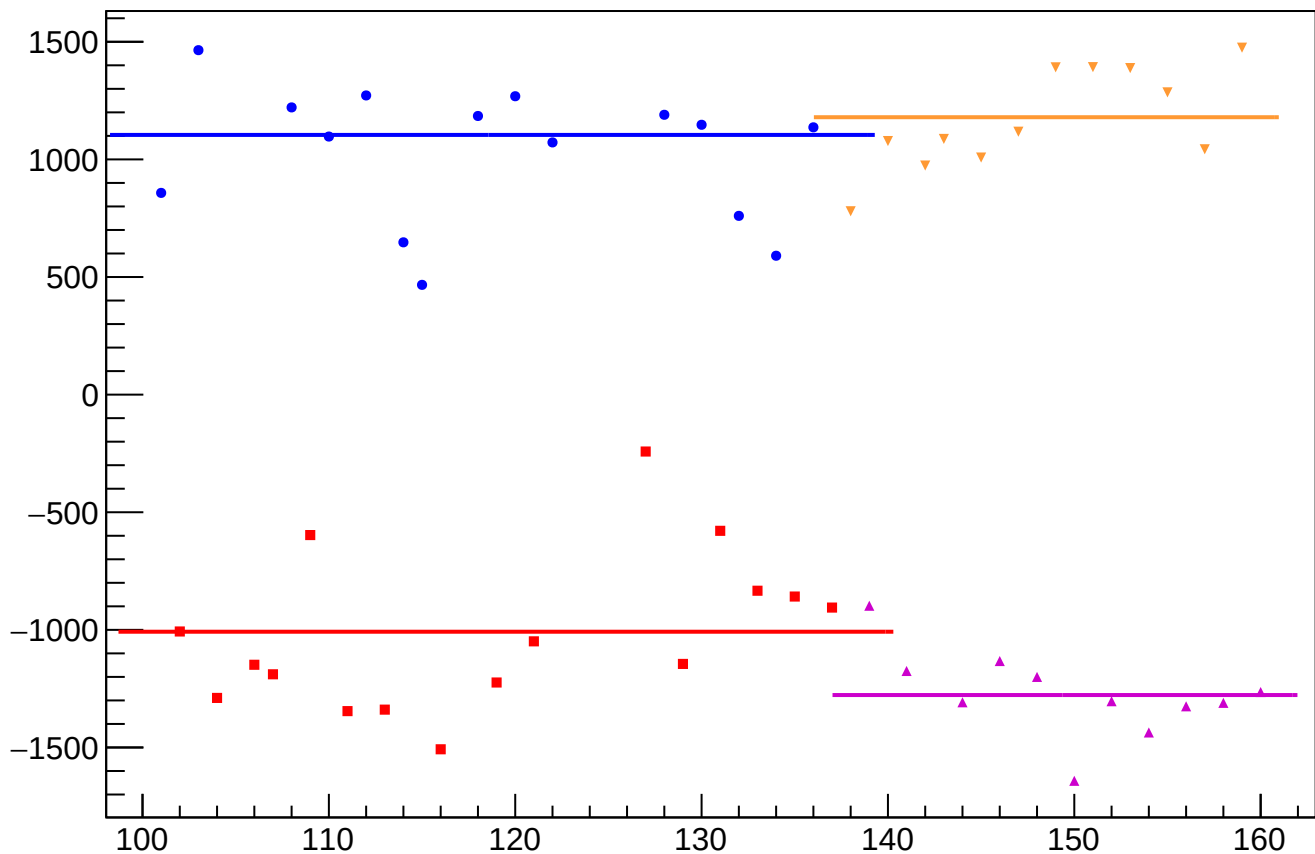
$\chi^2/\text{NDF}$ : 2075920155774201043572695656797803905024.0/15

Left In: -149.829+/-0.000

$\chi^2/\text{NDF}$ : 645756718172892804384604635004928000.0/10

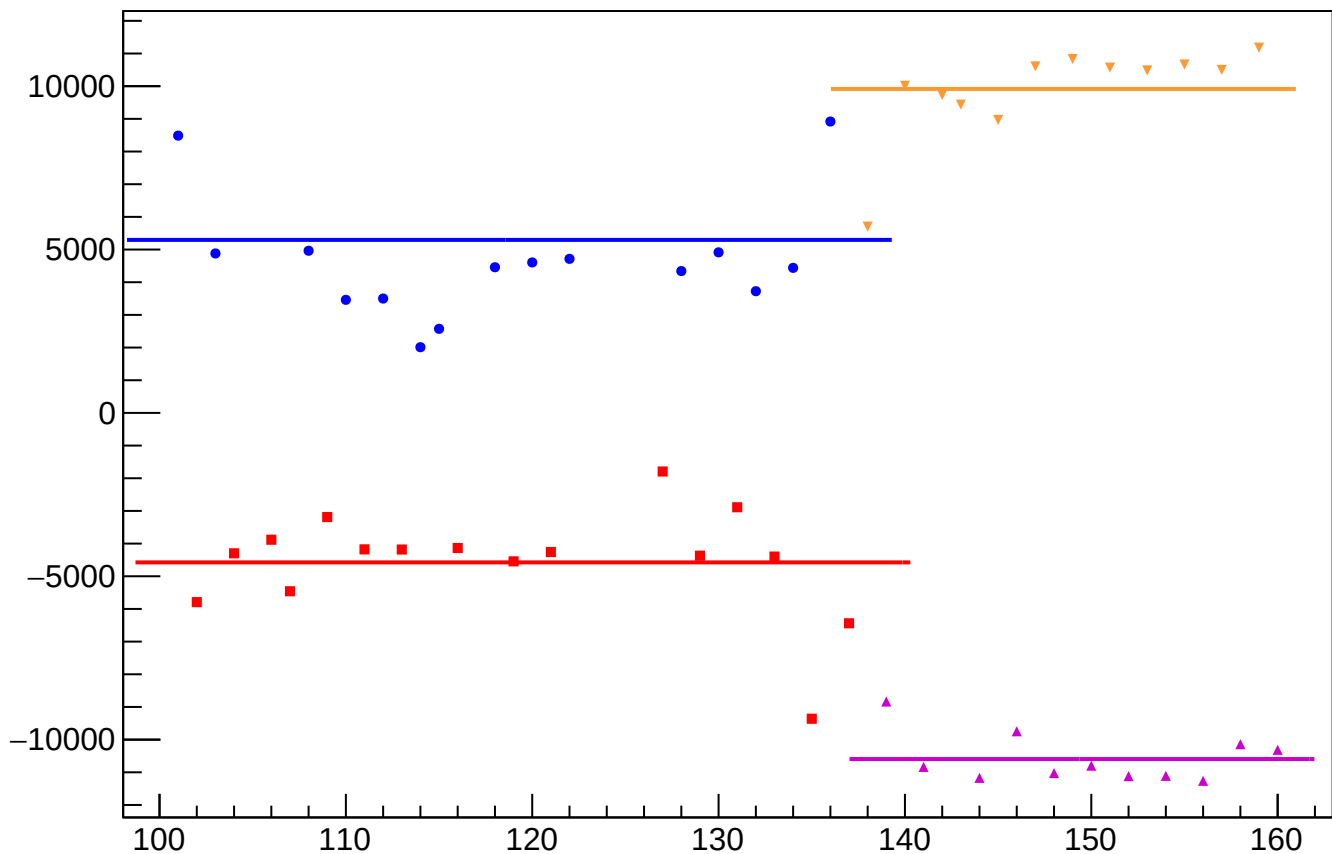
All: -116.258+/-0.000  $\chi^2/\text{NDF}$ : 28499930865

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

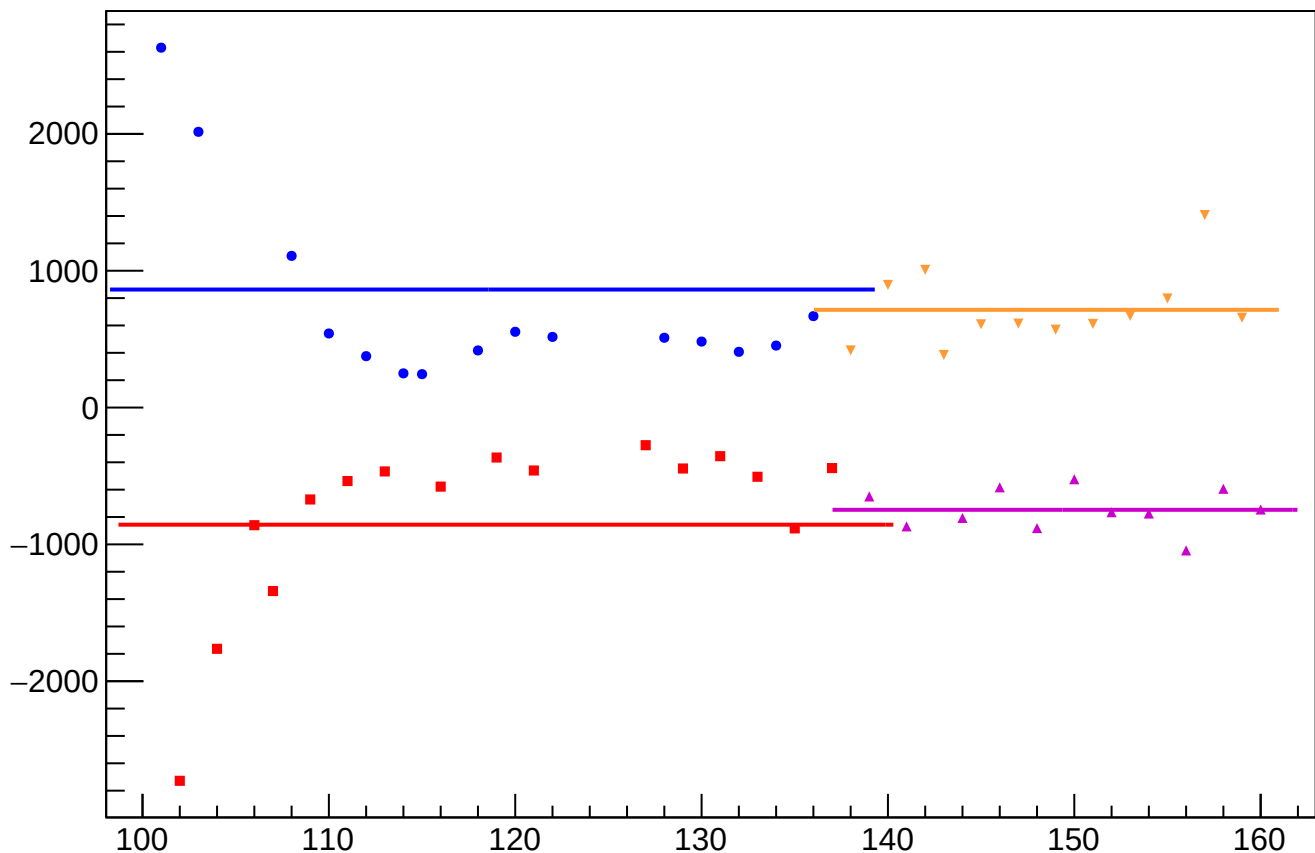
# dit\_atl2\_coil3\_mean vs Slug, Sign Corrected



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

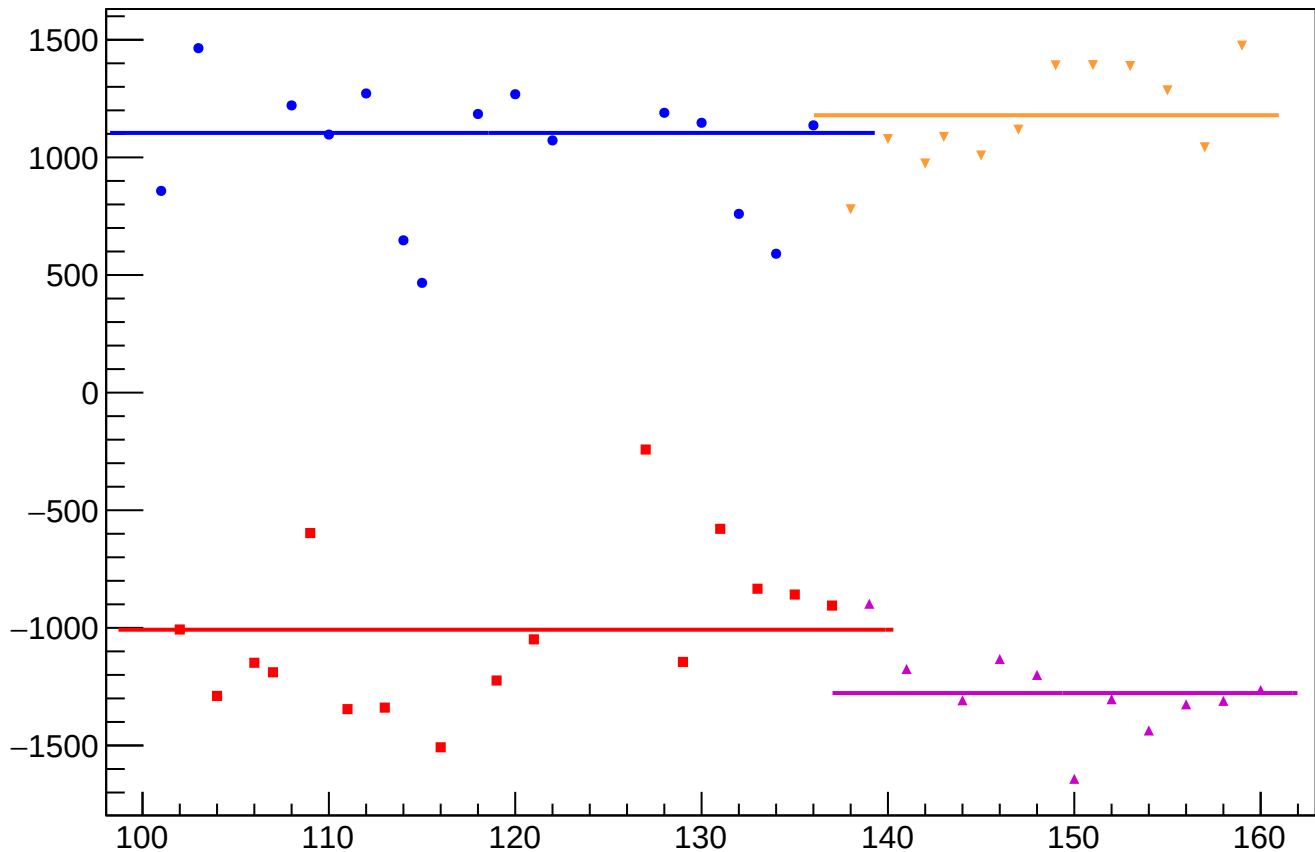
Right: -8.442+/-0.000  $\chi^2/\text{NDF}$ : 1636587396882894

In: -83.027+/-0.000  $\chi^2/\text{NDF}$ : 13454995318402178

Out: 51.744+/-0.000  $\chi^2/\text{NDF}$ : 13419429235658595

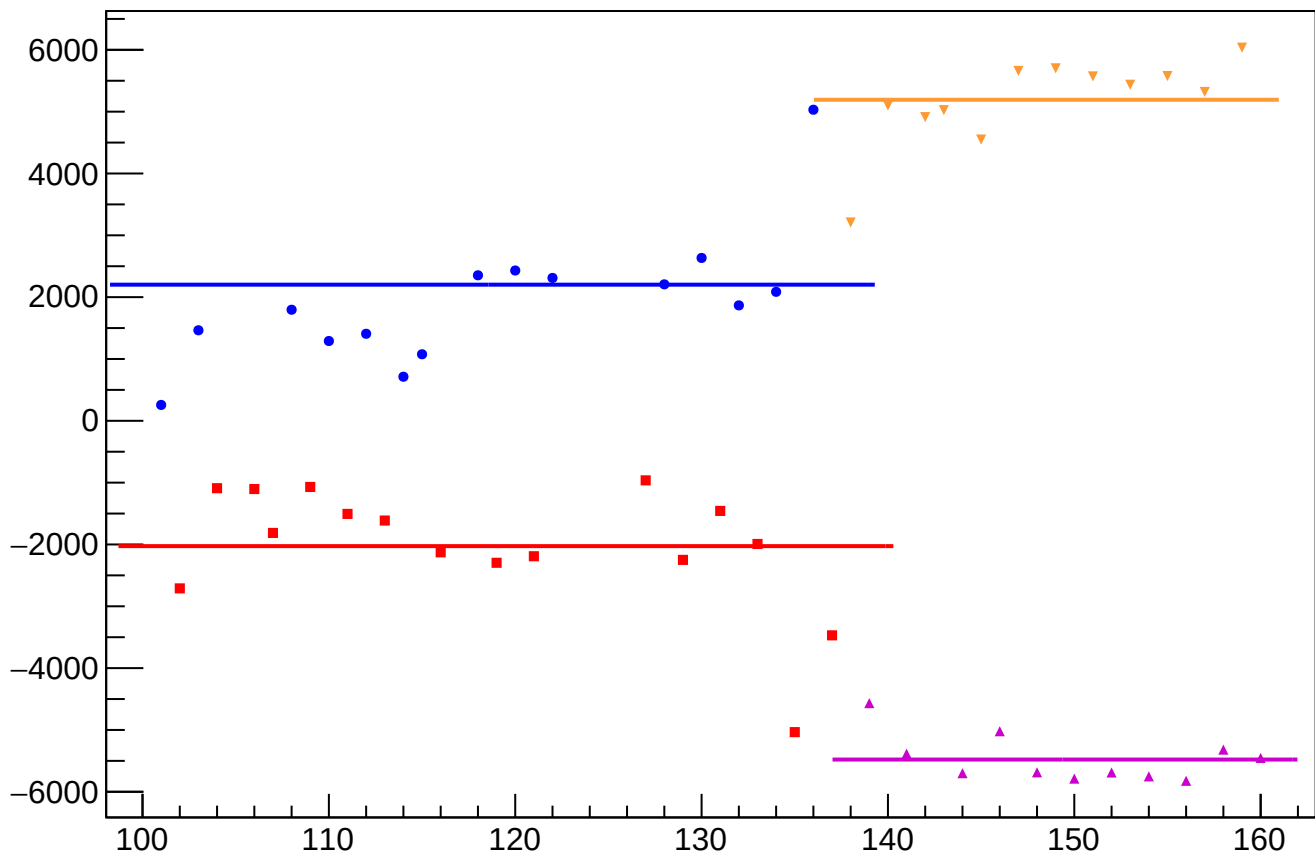
All: -15.471+/-0.000  $\chi^2/\text{NDF}$ : 270176391125

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  
 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

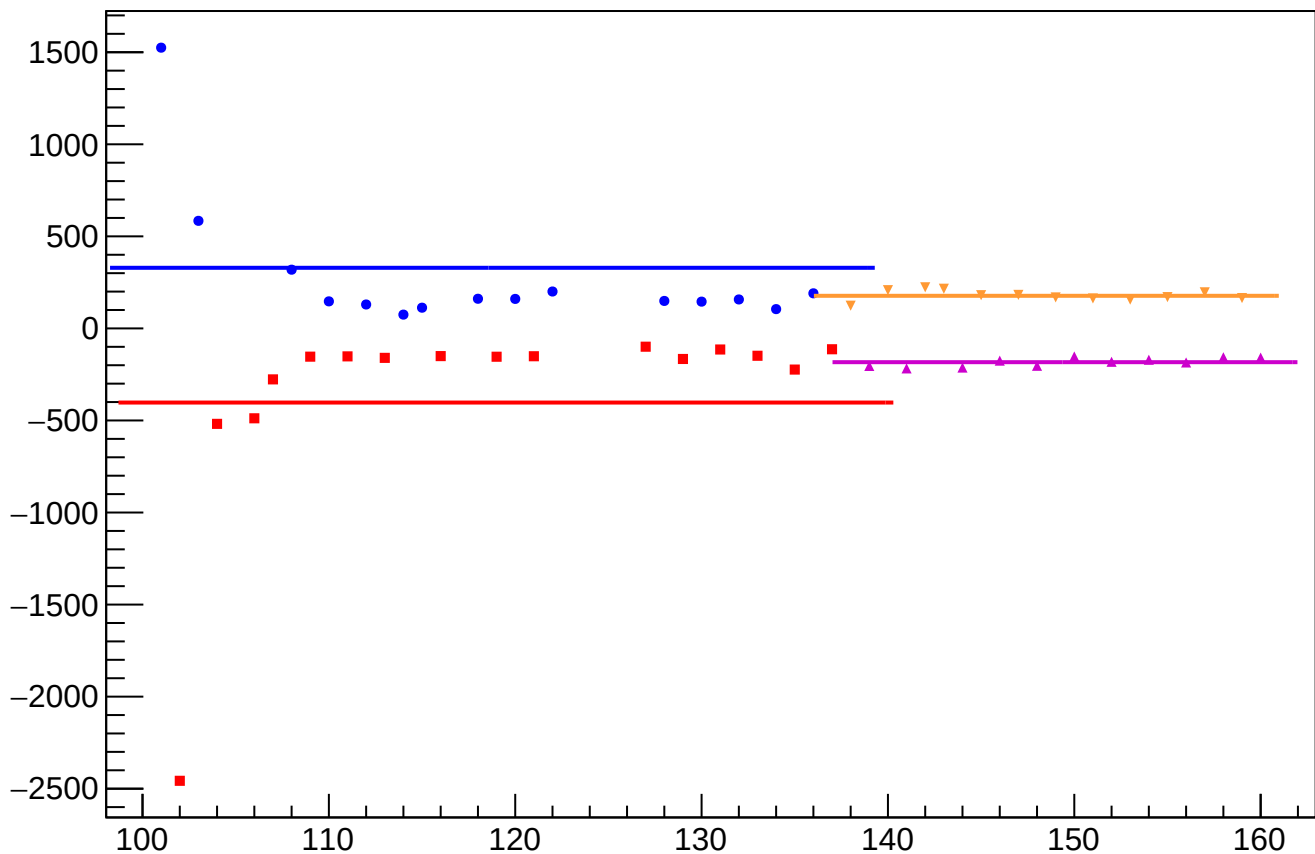
$\chi^2/\text{NDF}$ : 708626456603410705124518299956645199872.0/15

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

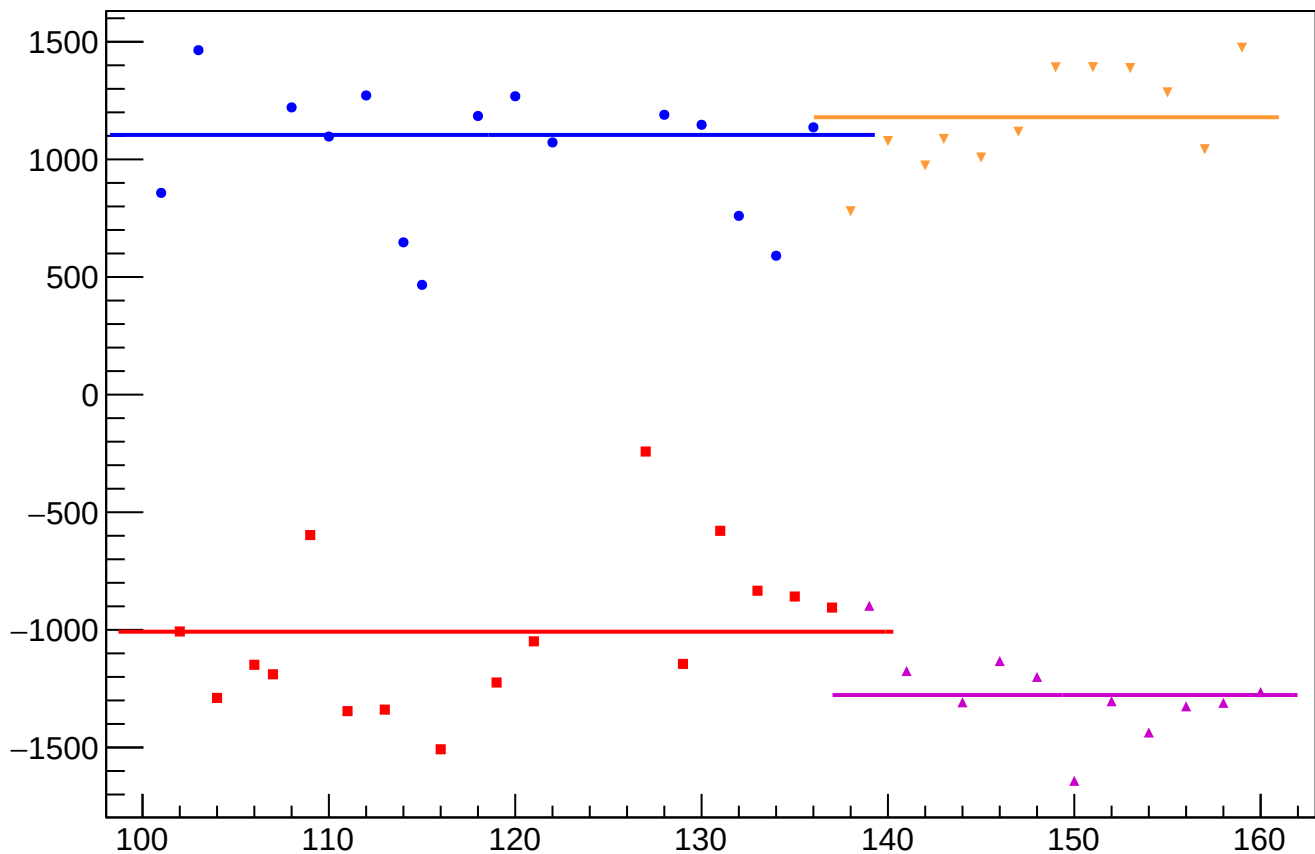
$\chi^2/\text{NDF}$ : 277636056793293374242116053515003494400.0/15

Left In: -183.411+/-0.000

$\chi^2/\text{NDF}$ : 452789814018275751637875535657304064.0/10

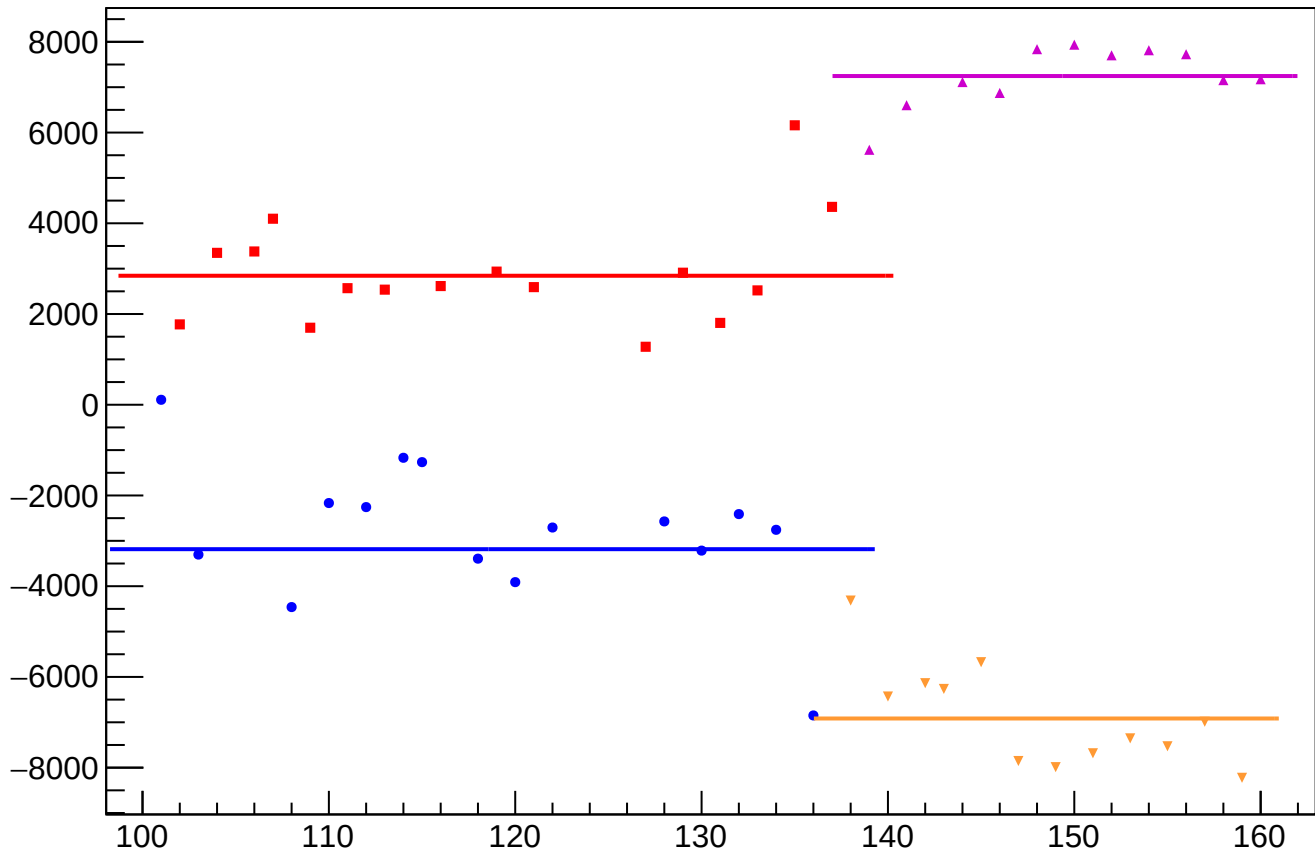
All: -19.824+/-0.000  $\chi^2/\text{NDF}$ : 618995356861

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

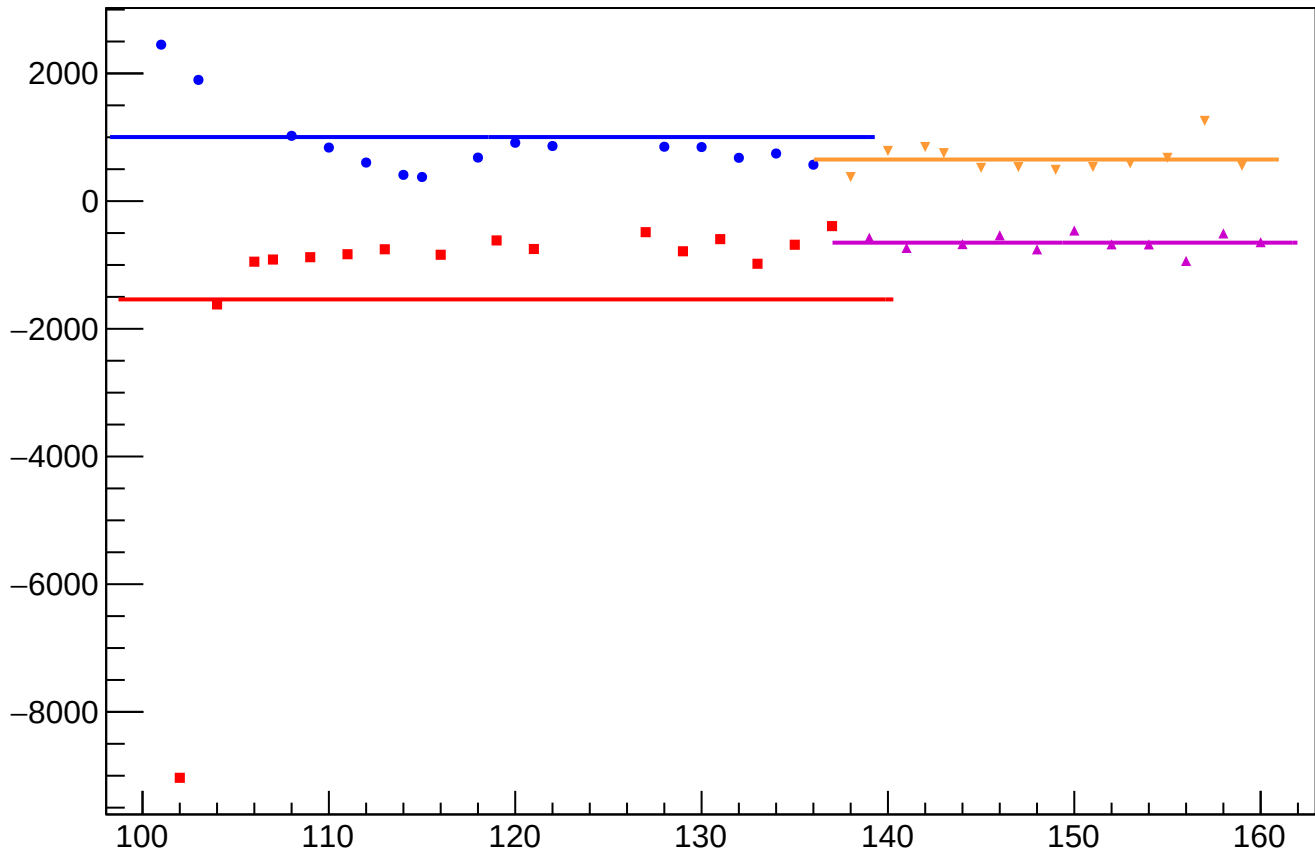
Right: -128.944+/-0.000  $\chi^2/\text{NDF}$ : 15032681342441

In: 2942.696+/-0.000  $\chi^2/\text{NDF}$ : 440076230139336

Out: -2798.729+/-0.000  $\chi^2/\text{NDF}$ : 38794467171221

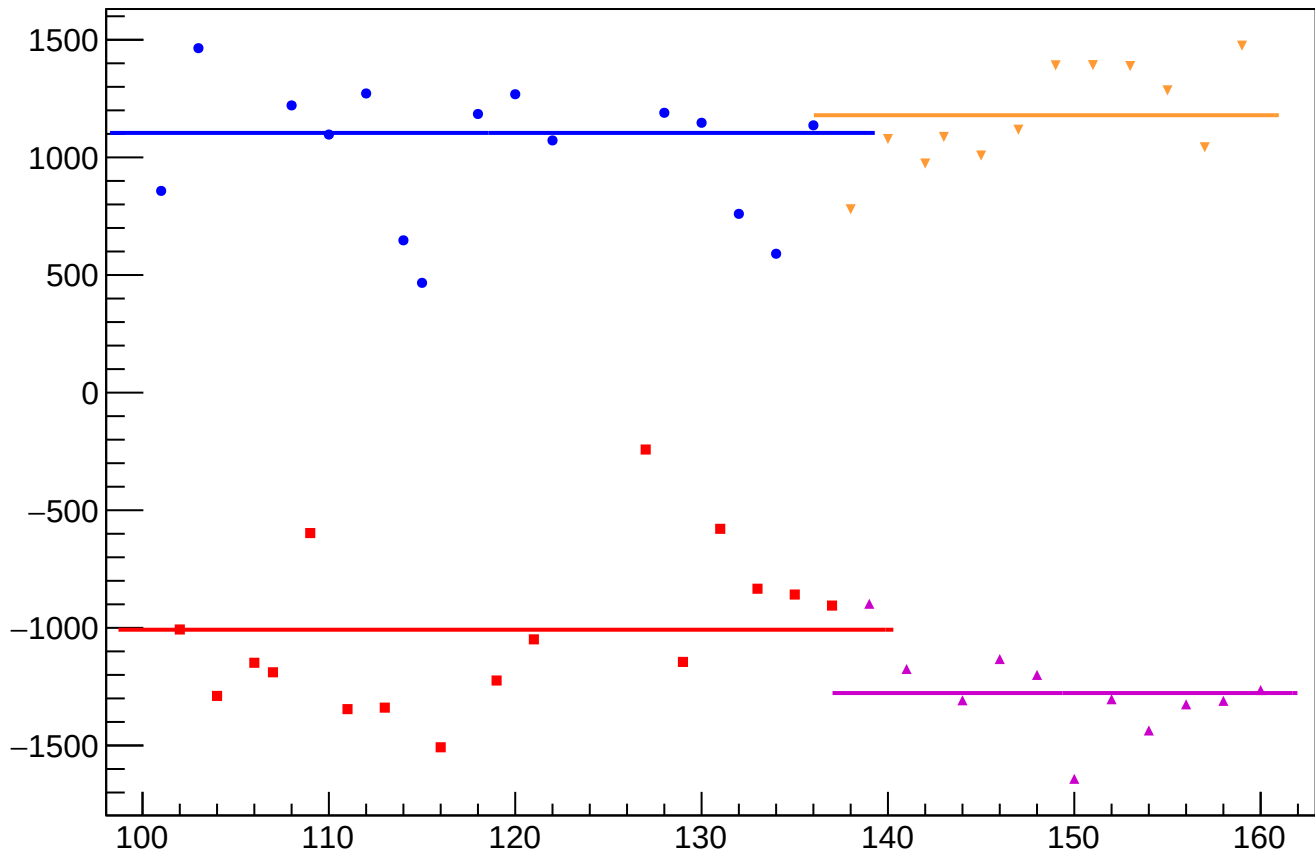
All: 64.702+/-0.000  $\chi^2/\text{NDF}$ : 1087940046919

# 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:  $-120.940 \pm 0.000$   $\chi^2/\text{NDF}: 68625749232$

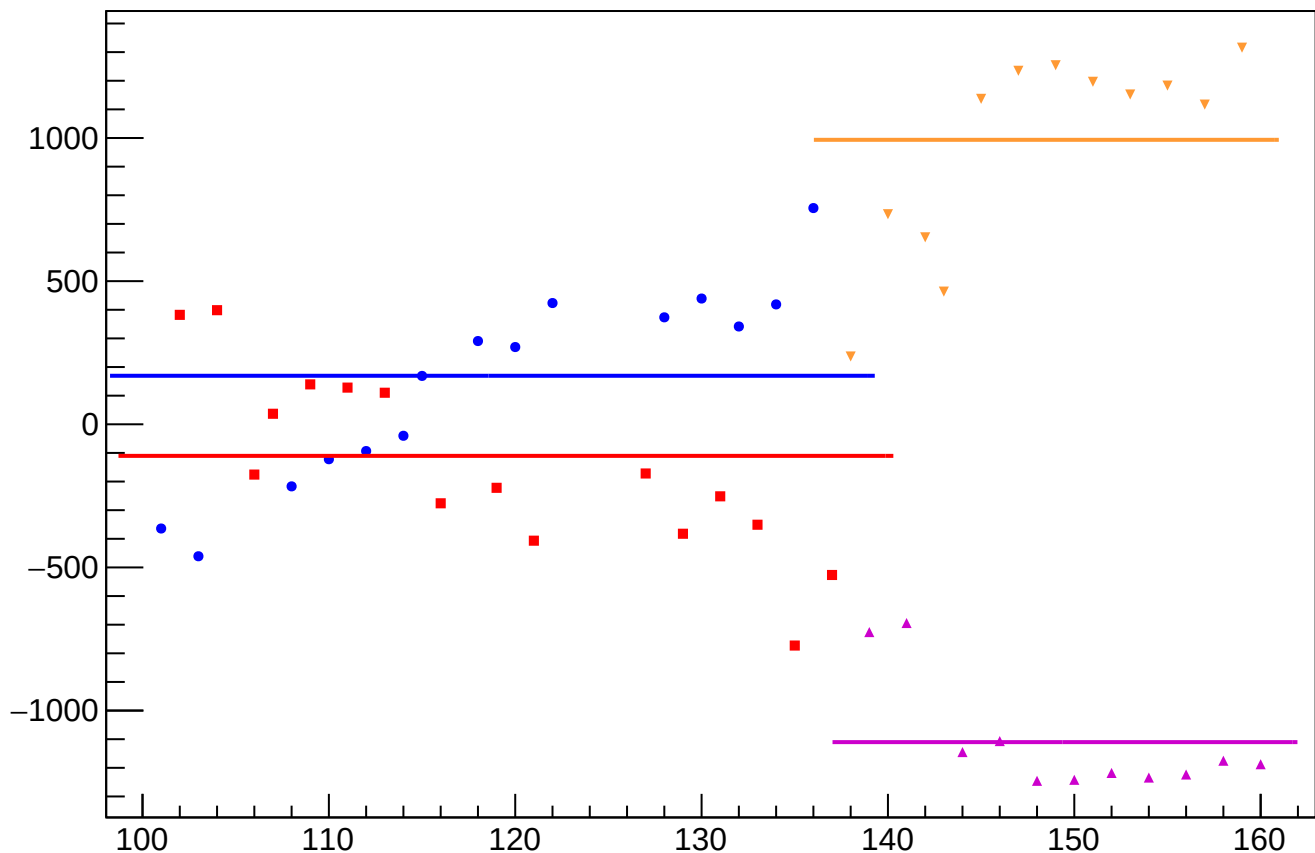
dit\_atr2\_coil3\_Ndata\_mean vs Slug, Sign Corrected



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

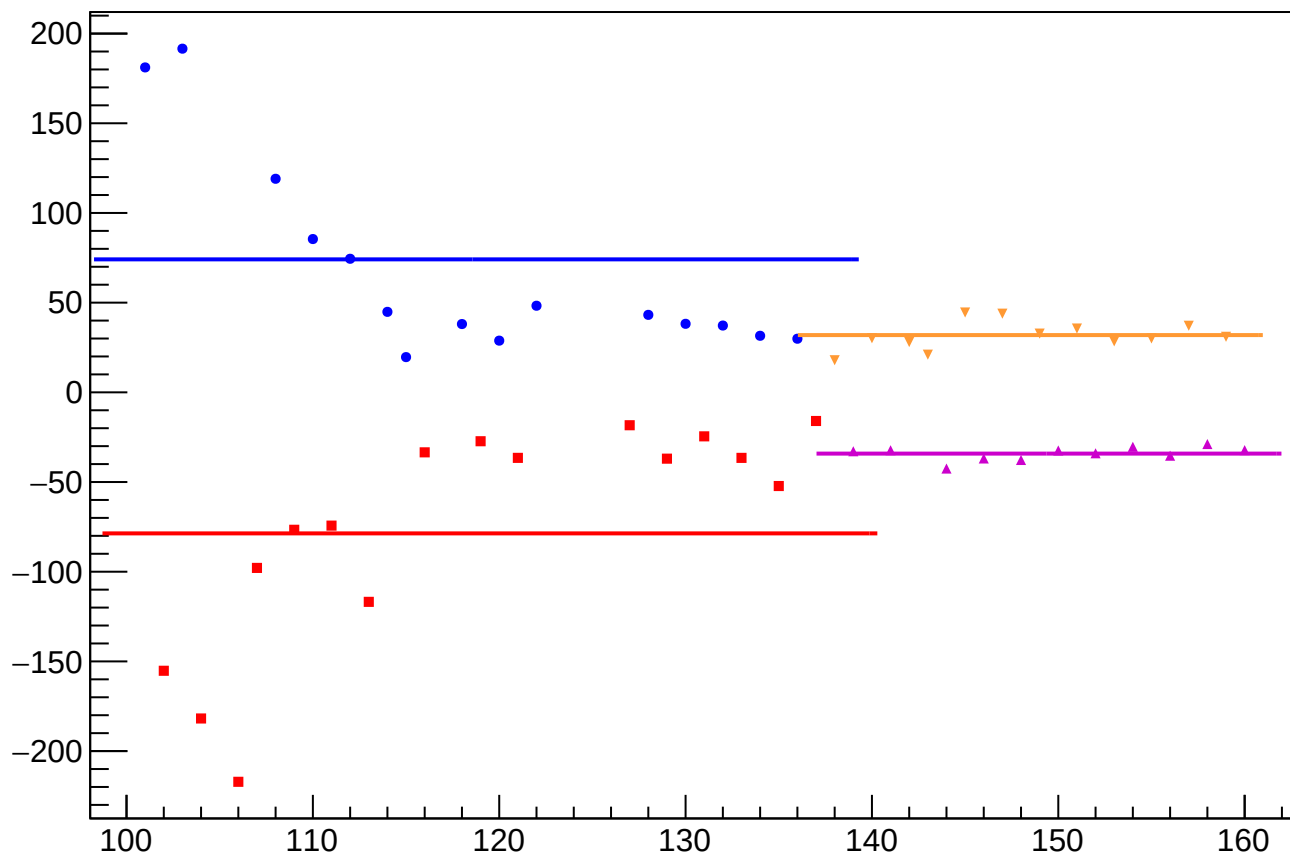
$\chi^2/\text{NDF}$ : 71770784102052938523592716508479881216.0/15

Left In: -1110.204 +/- 0.000

$\chi^2/\text{NDF}$ : 34078671675207101758695575343264169984.0/10

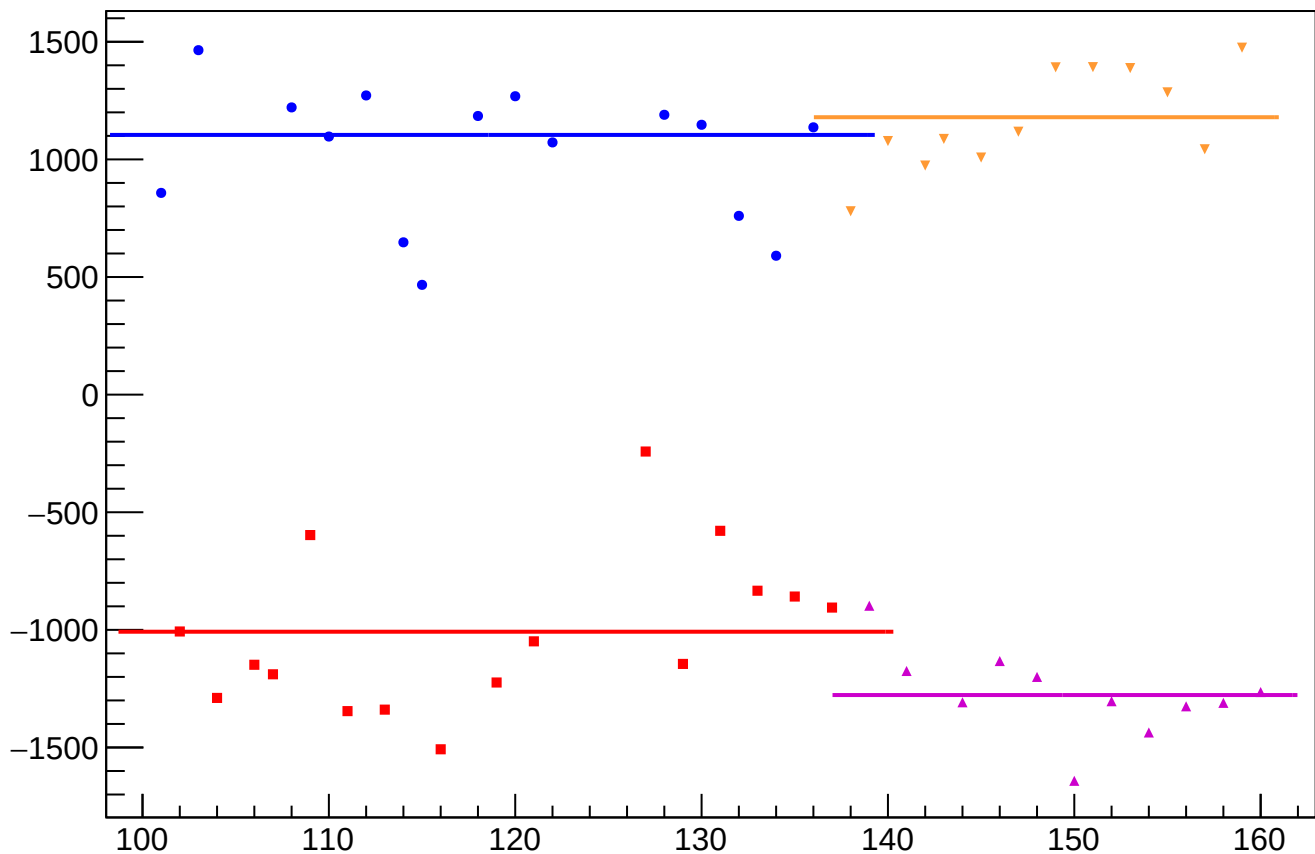
All: -25.735 +/- 0.000  $\chi^2/\text{NDF}$ : 237118807737

dit\_sam1\_coil3\_err\_mean vs Slug, Sign Corrected



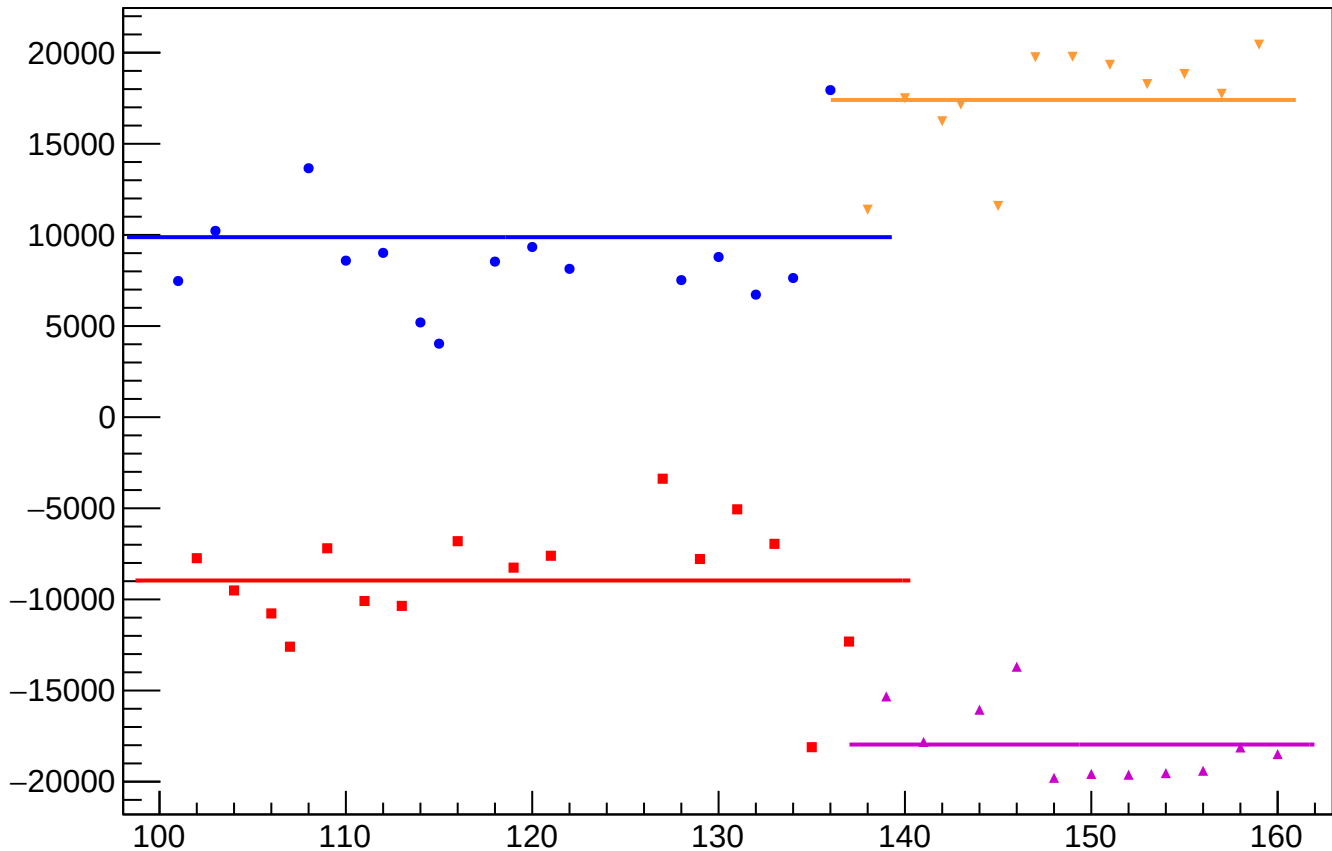
Right In: 74.129+/-0.000  $\chi^2/\text{NDF}$ : 2168375717401207322620658258081218560.0/14  
 Left Out: 31.916+/-0.000  $\chi^2/\text{NDF}$ : 52391134971476446801164737802403840.0/11  
 Right Out: -78.633+/-0.000  $\chi^2/\text{NDF}$ : 2343230336879830638767678903539466240.0/15  
 Left In: -34.158+/-0.000  $\chi^2/\text{NDF}$ : 12535781757096828038064244290224128.0/10  
 All: -2.134+/-0.000  $\chi^2/\text{NDF}$ : 1426173775487

dit\_sam1\_coil3\_Ndata\_mean vs Slug, Sign Corrected



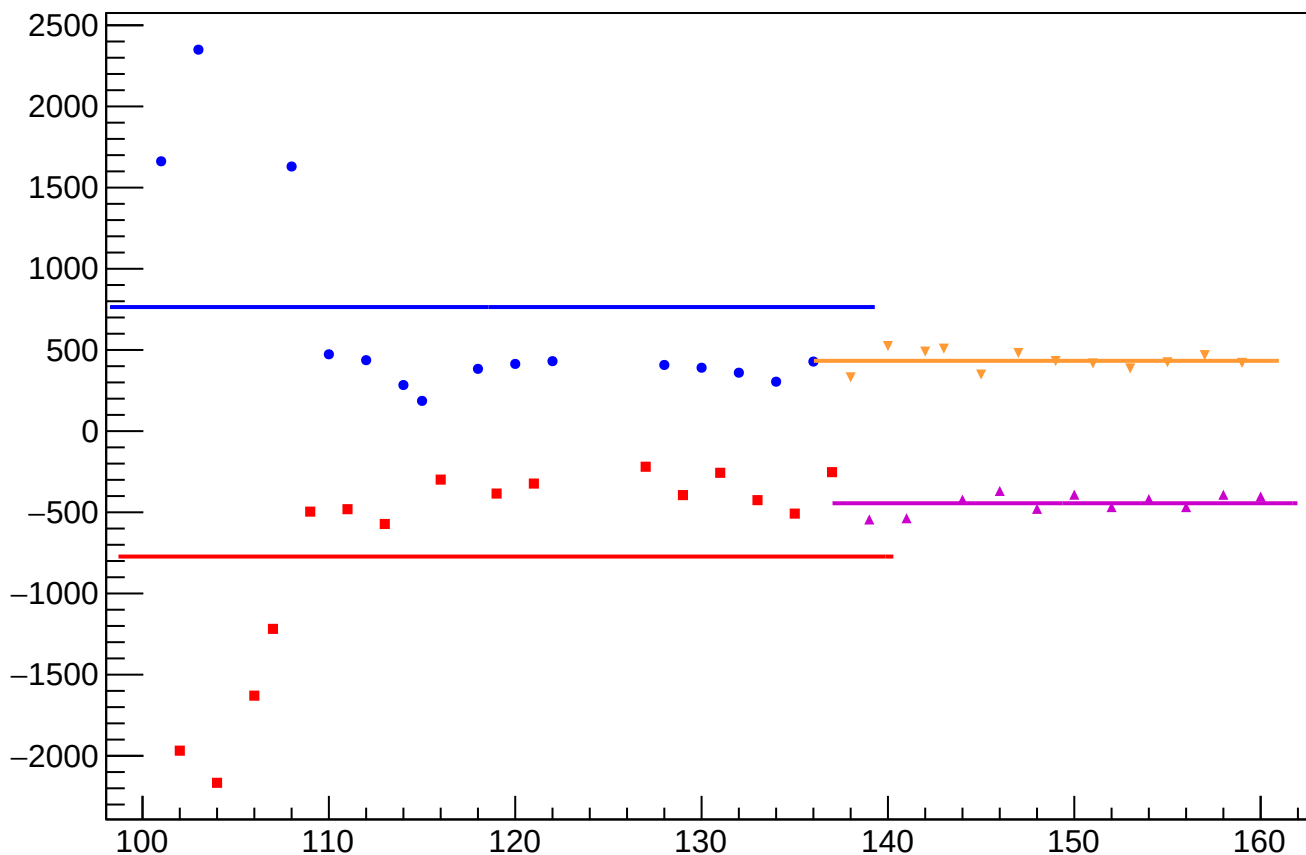
Right In: 1104.111 $\pm$ 0.000  $\chi^2$ /NDF: 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336 $\pm$ 0.000  $\chi^2$ /NDF: 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906 $\pm$ 0.000  $\chi^2$ /NDF: 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097 $\pm$ 0.000  $\chi^2$ /NDF: 29578729901602647998073818936097374208.0/10  
 All: -18.335 $\pm$ 0.000  $\chi^2$ /NDF: 441608022845

dit\_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

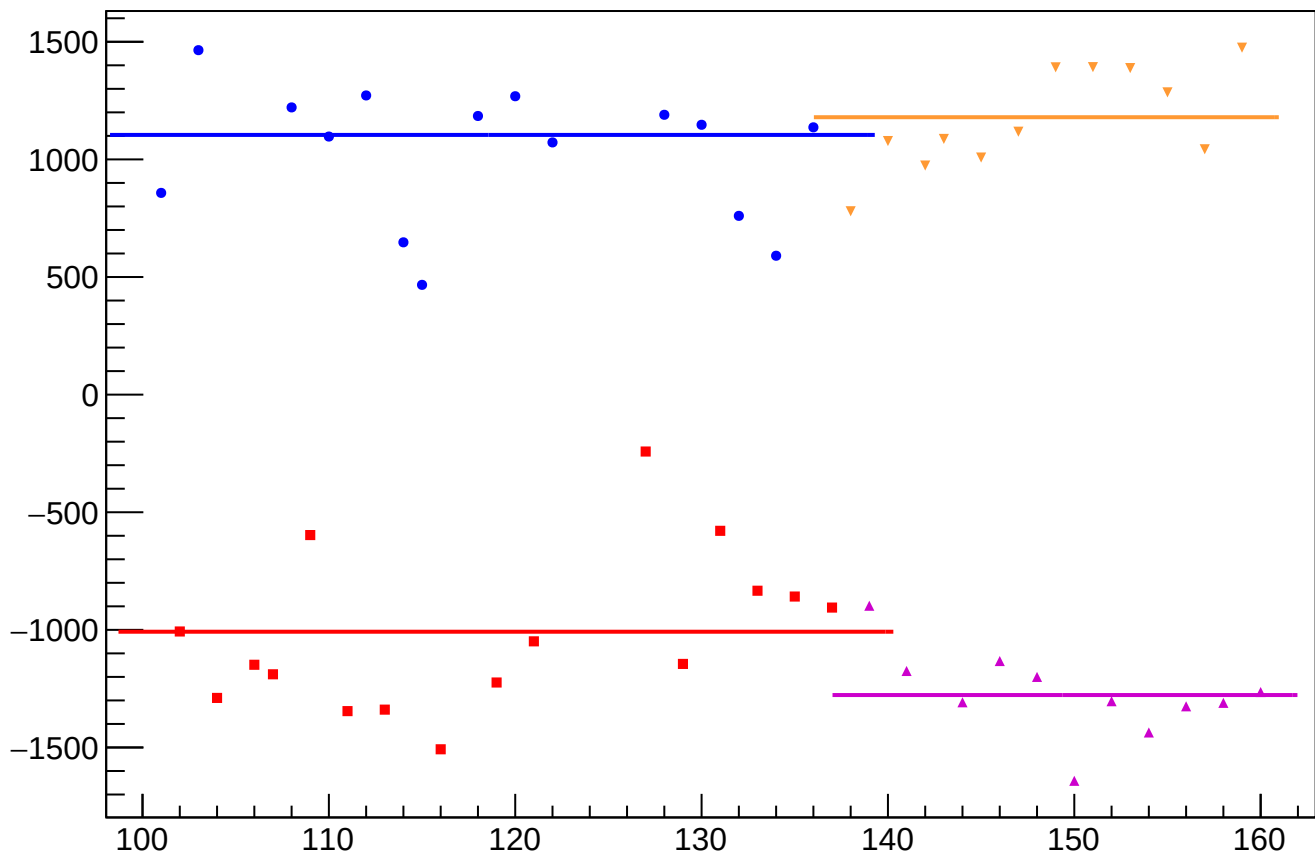
Left Out: 433.079+/-0.000  $\chi^2/\text{NDF}$ : 3070370524438239159273190119476035584.0/11

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

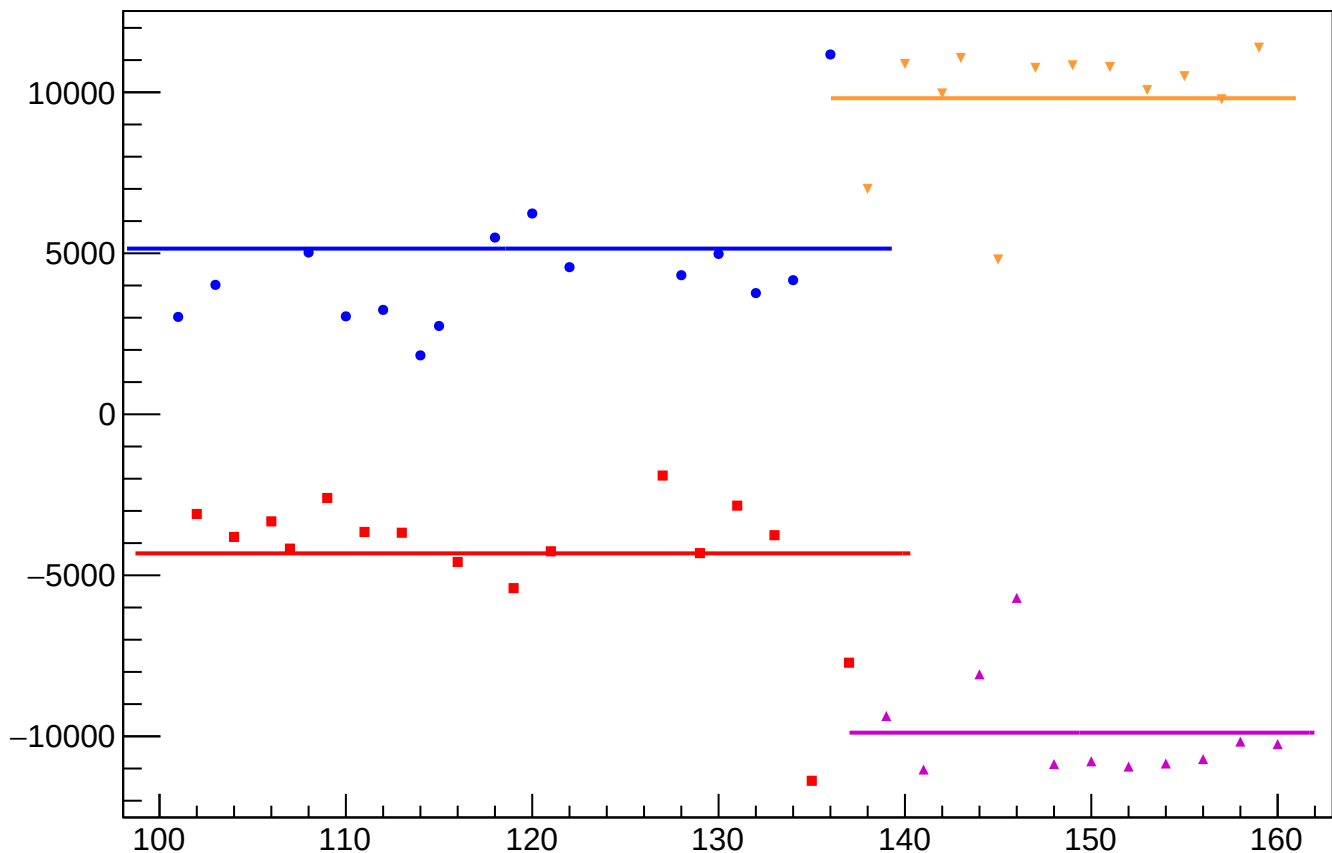
All: -10.754+/-0.000  $\chi^2/\text{NDF}$ : 171344684046

dit\_sam2\_coil3\_Ndata\_mean vs Slug, Sign Corrected



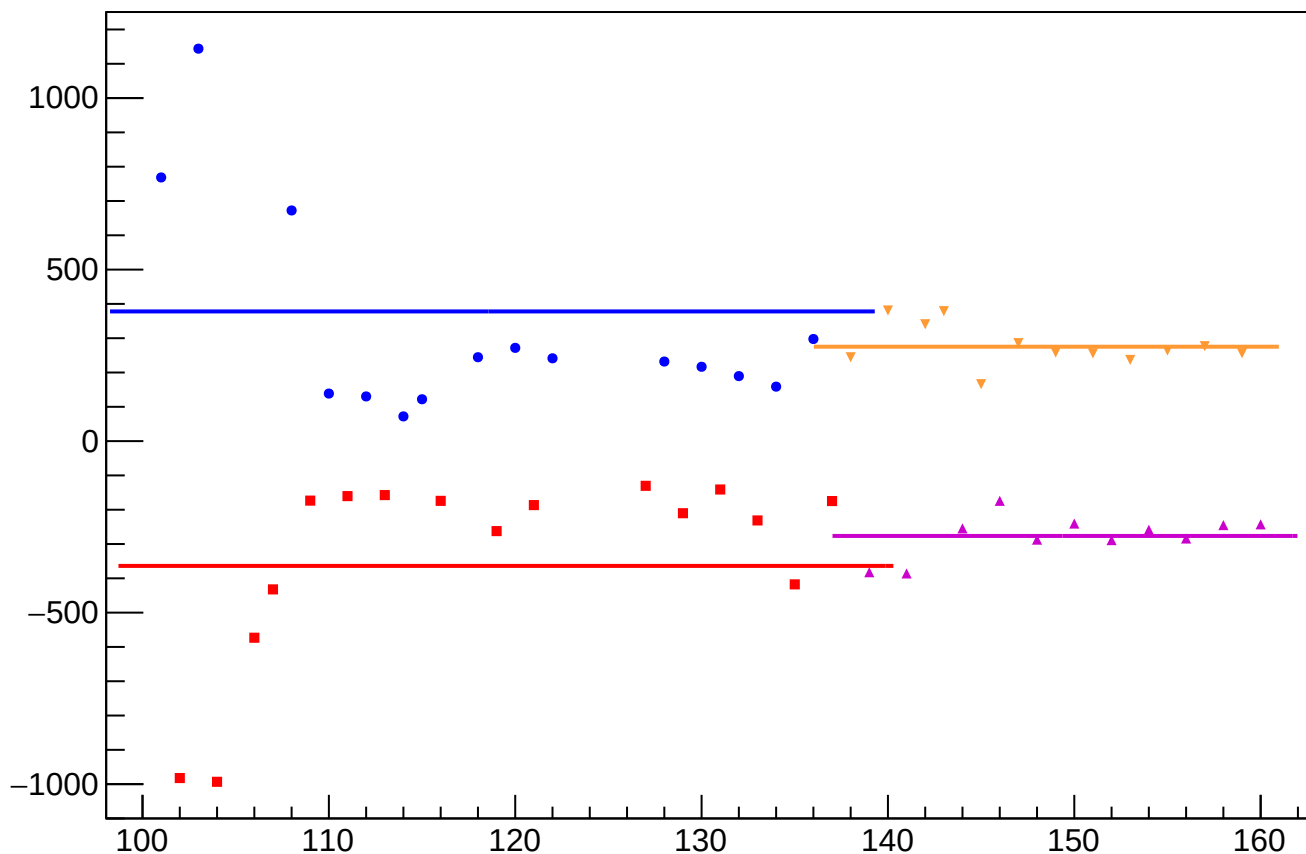
Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906+/-0.000  $\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10  
 All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

dit\_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

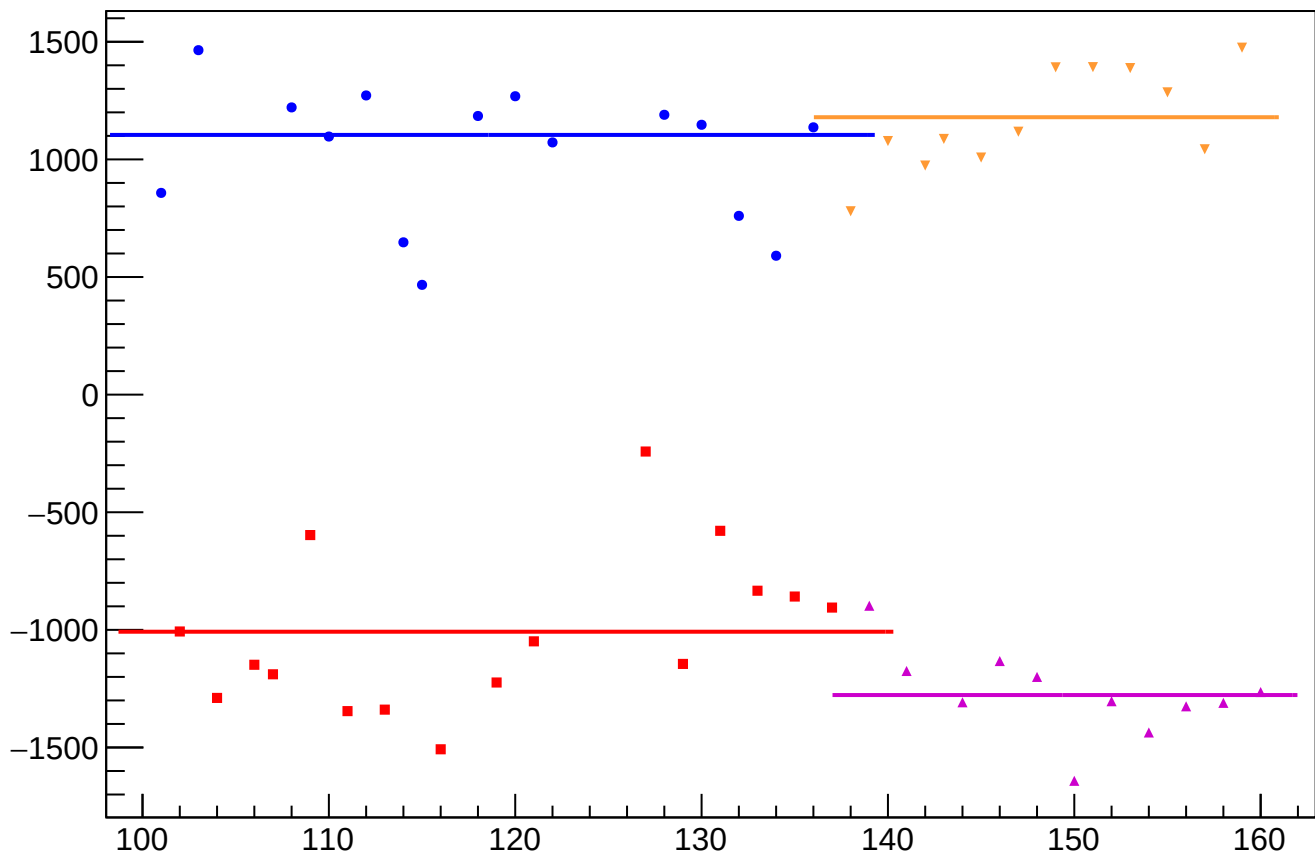
dit\_sam3\_coil3\_err\_mean vs Slug, Sign Corrected



Right In: 378.052+/-0.000  $\chi^2/\text{NDF}$ : 61516590022593053040860760861331947520.0/14  
 Left Out: 275.181+/-0.000  $\chi^2/\text{NDF}$ : 3063973924838483752648023856495198208.0/11  
 Right Out: -363.772+/-0.000  $\chi^2/\text{NDF}$ : 59031337484709801804181439342706688000.0/15  
 Left In: -276.429+/-0.000  $\chi^2/\text{NDF}$ : 3176476969276554988209041450490396672.0/10  
 All: -0.376+/-0.000  $\chi^2/\text{NDF}$ : 4476277184699

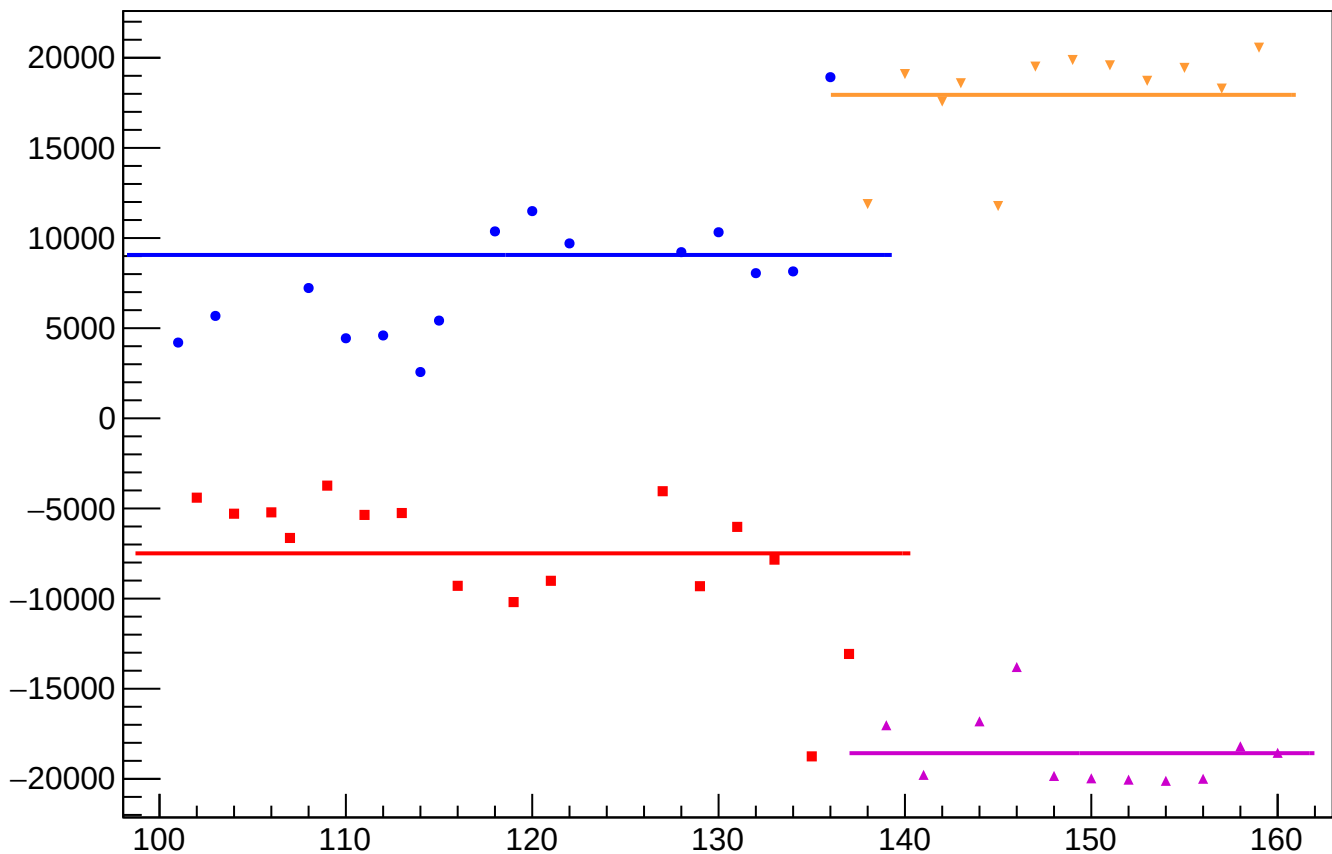


dit\_sam3\_coil3\_Ndata\_mean vs Slug, Sign Corrected



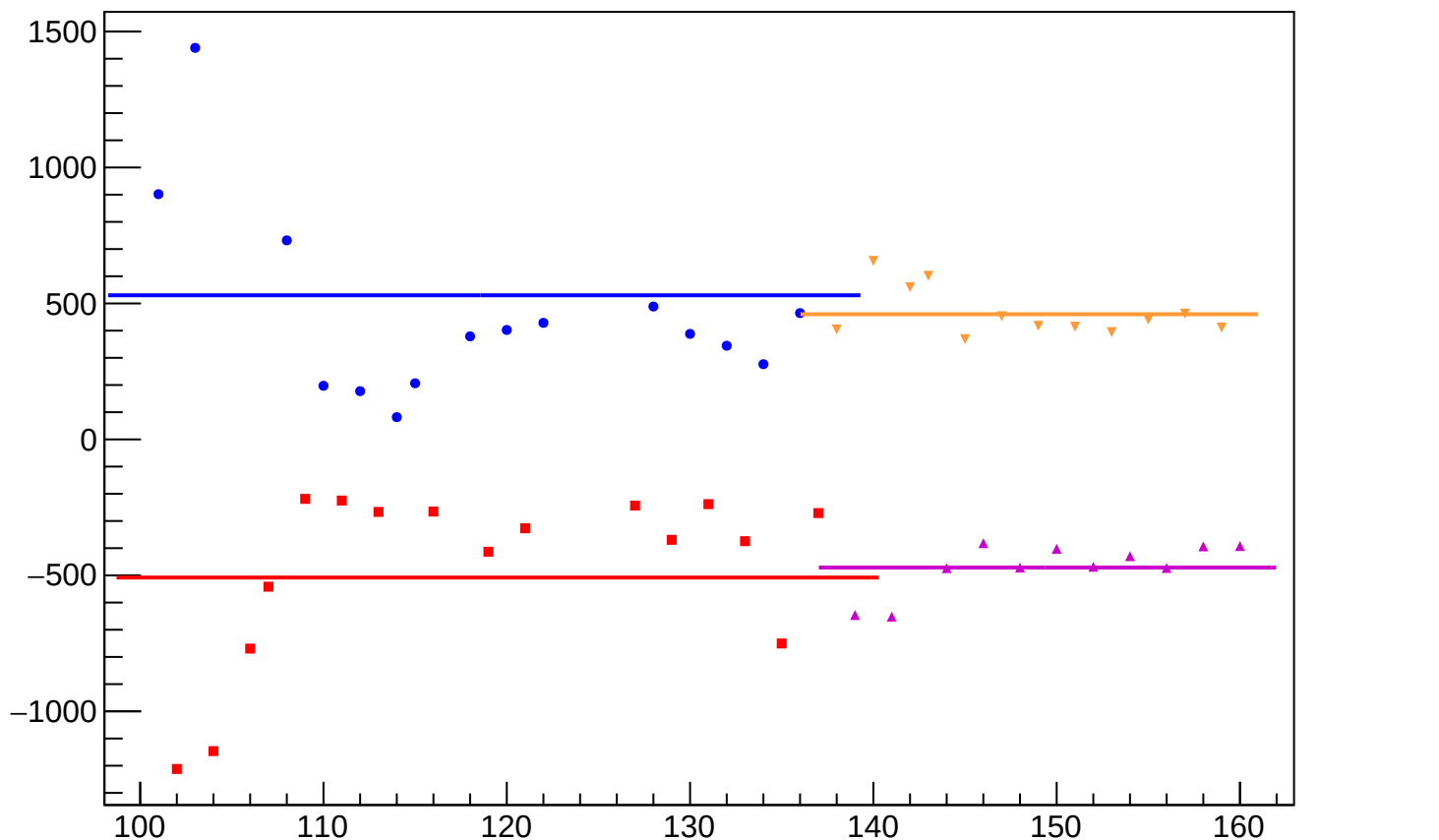
Right In: 1104.111 $\pm$ 0.000  $\chi^2$ /NDF: 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336 $\pm$ 0.000  $\chi^2$ /NDF: 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906 $\pm$ 0.000  $\chi^2$ /NDF: 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097 $\pm$ 0.000  $\chi^2$ /NDF: 29578729901602647998073818936097374208.0/10  
 All: -18.335 $\pm$ 0.000  $\chi^2$ /NDF: 441608022845

# dit\_sam4\_coil3\_mean vs Slug, Sign Corrected



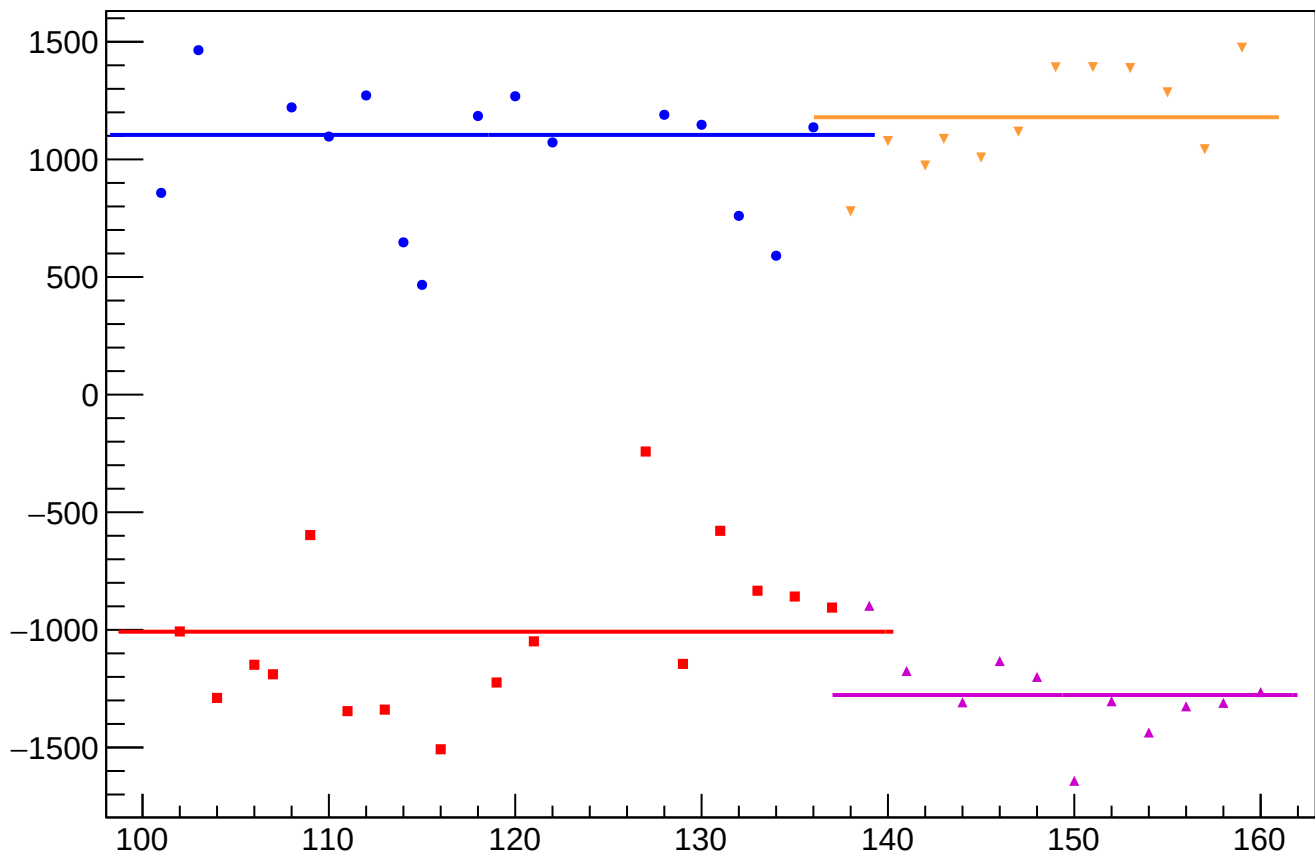
Right In: 9062.710 $\pm$ 0.000  $\chi^2$ /NDF: 13621066943114354594159252409175431446528.0/14  
 Left Out: 17943.531 $\pm$ 0.000  $\chi^2$ /NDF: 7473617733274816603280469921274378846208.0/11  
 Right Out: -7490.147 $\pm$ 0.000  $\chi^2$ /NDF: 10108202124204139932285006457388239159296.0/15  
 Left In: -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



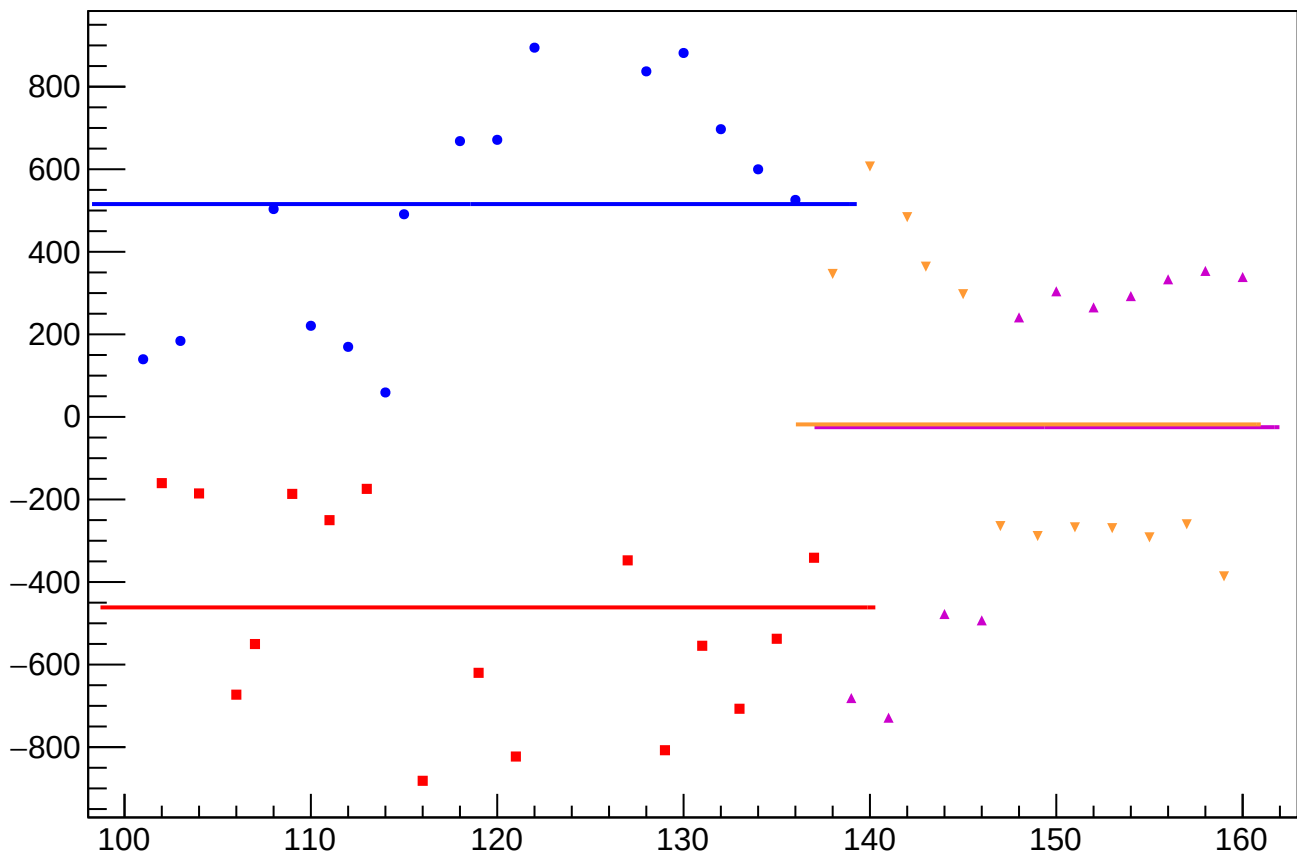
Right In:  $530.057 \pm 0.000$   $\chi^2/\text{NDF}: 78754676063063255524046471751880671232.0/14$   
 Left Out:  $460.312 \pm 0.000$   $\chi^2/\text{NDF}: 6754606428371283053517529701630869504.0/11$   
 Right Out:  $-507.987 \pm 0.000$   $\chi^2/\text{NDF}: 76689734698308464337881841969555046400.0/15$   
 Left In:  $-471.219 \pm 0.000$   $\chi^2/\text{NDF}: 7445973219160336257467772011051745280.0/10$   
 All:  $-3.012 \pm 0.000$   $\chi^2/\text{NDF}: 9229168077860$

dit\_sam4\_coil3\_Ndata\_mean vs Slug, Sign Corrected



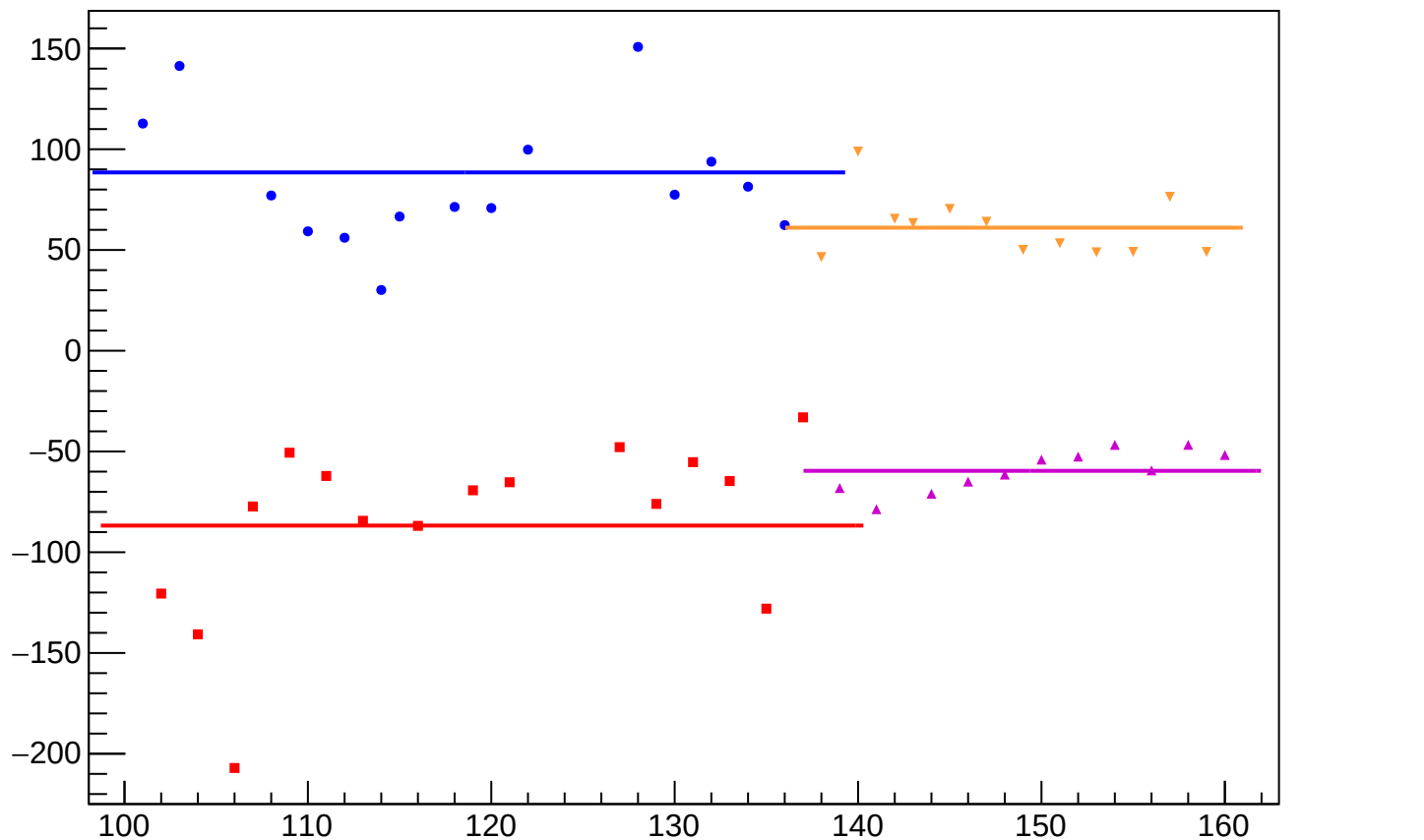
Right In: 1104.111 $\pm$ 0.000  $\chi^2$ /NDF: 32737841591587454251521906421545304064.0/14  
 Left Out: 1179.336 $\pm$ 0.000  $\chi^2$ /NDF: 38742916032610862911819544133355175936.0/11  
 Right Out: -1007.906 $\pm$ 0.000  $\chi^2$ /NDF: 69077878009873965622695939627477368832.0/15  
 Left In: -1277.097 $\pm$ 0.000  $\chi^2$ /NDF: 29578729901602647998073818936097374208.0/10  
 All: -18.335 $\pm$ 0.000  $\chi^2$ /NDF: 441608022845

# dit\_sam5\_coil3\_mean vs Slug, Sign Corrected



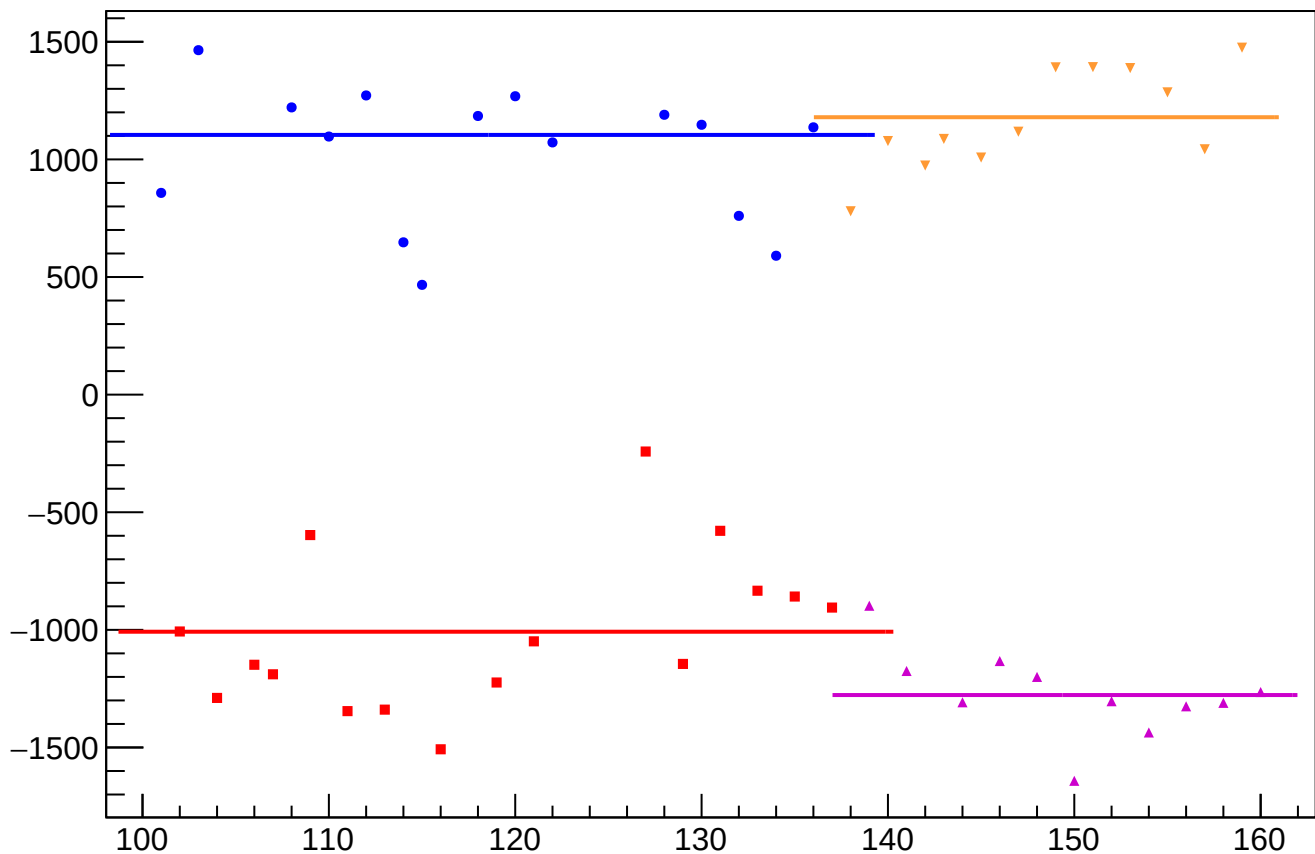
Left:  $-21.540 \pm 0.000$   $\chi^2/\text{NDF}: 2912056569899347$   
 Right In:  $515.635 \pm 0.000$   $\chi^2/\text{NDF}: 48465403420573957292673062371162324992.0/14$   
 Right:  $20.387 \pm 0.000$   $\chi^2/\text{NDF}: 4030056130167457$   
 Left Out:  $-18.146 \pm 0.000$   $\chi^2/\text{NDF}: 114014627327363890146179797072763420672.0/11$   
 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:  $-59.604 \pm 0.000$   $\chi^2/\text{NDF}: 90862625181985664375323463168032768.0/10$   
 All:  $0.094 \pm 0.000$   $\chi^2/\text{NDF}: 18800505371841$

dit\_sam5\_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

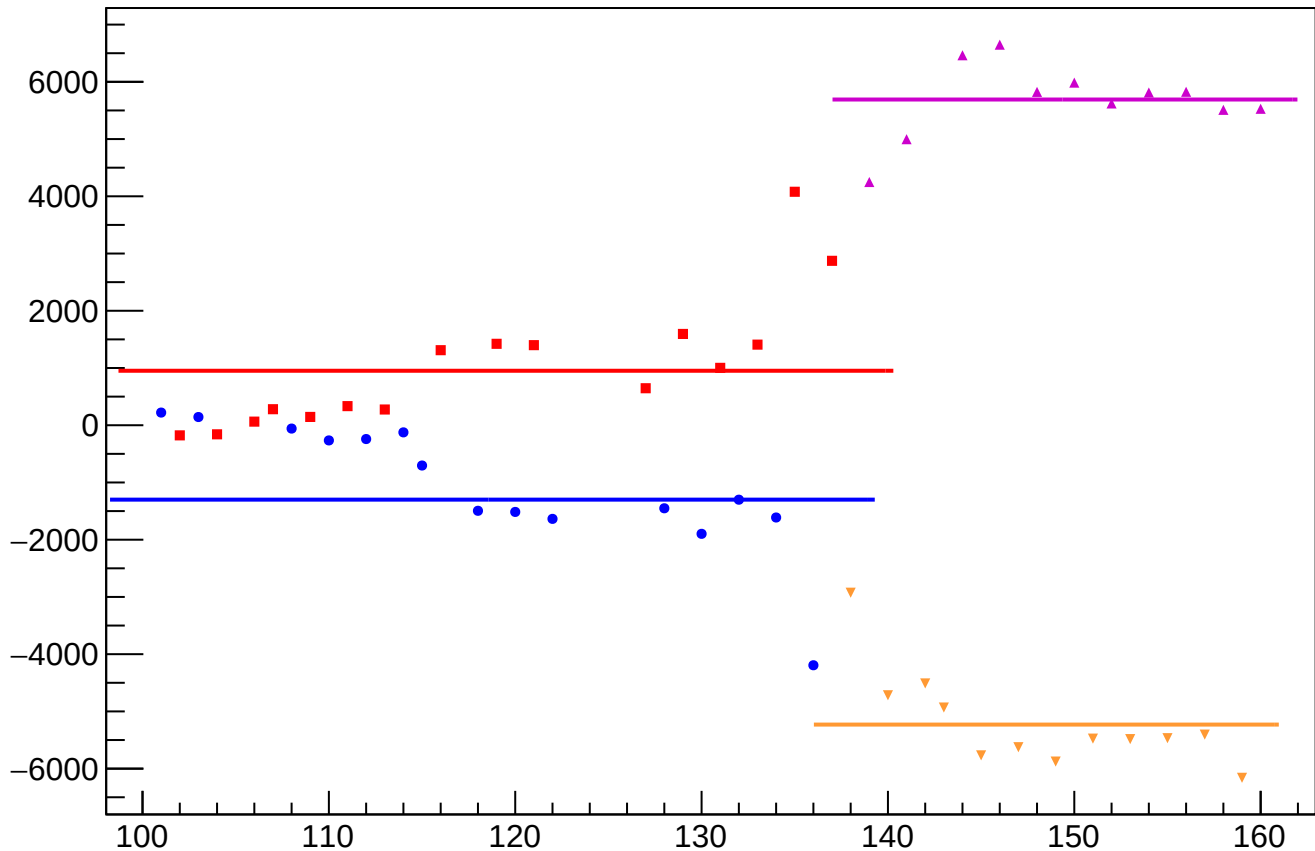
$\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15

Left In: -1277.097+/-0.000

$\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_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

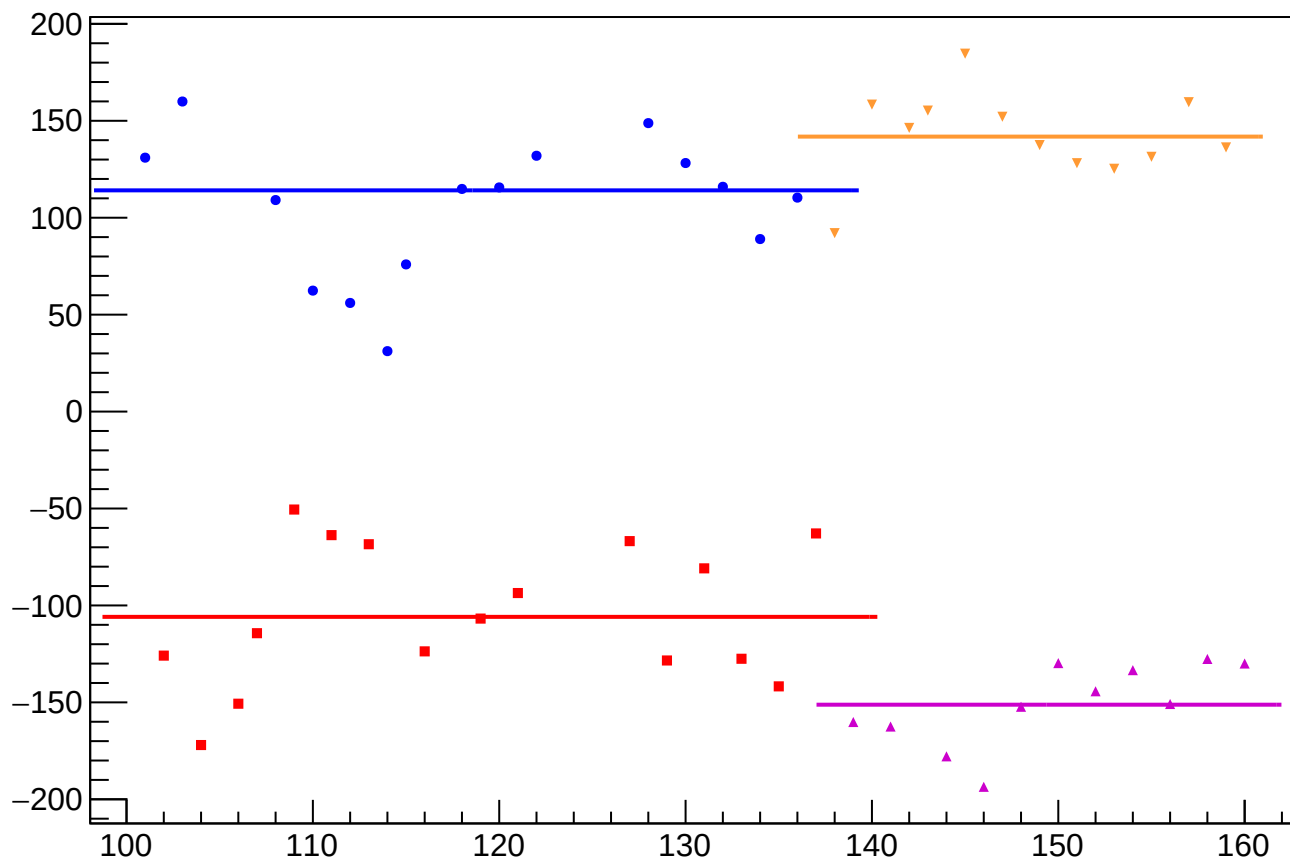
In: 2806.606+/-0.000  $\chi^2/\text{NDF}$ : 2018689735914814

Out: -2622.043+/-0.000  $\chi^2/\text{NDF}$ : 16199599941303

All: 85.397+/-0.000  $\chi^2/\text{NDF}$ : 5962362698239

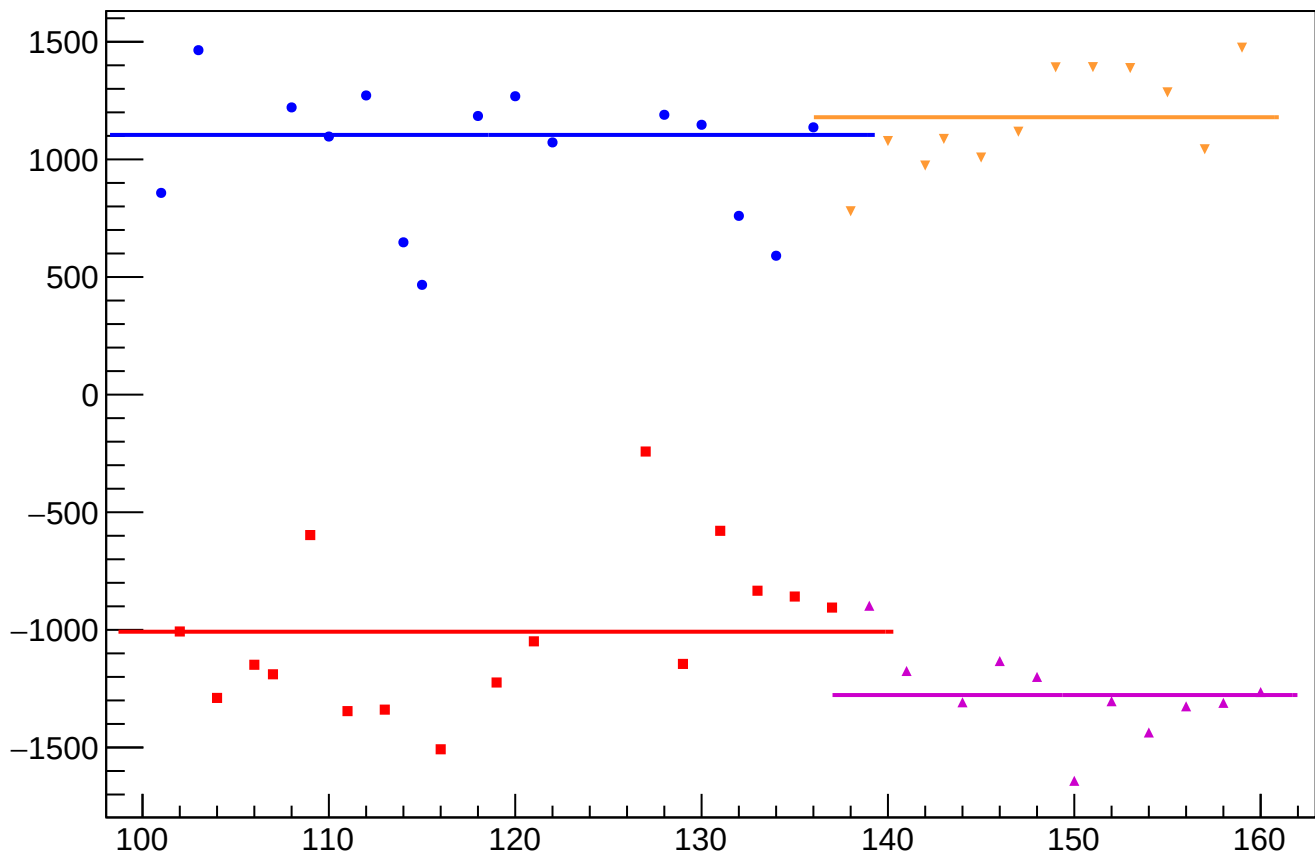


dit\_sam6\_coil3\_err\_mean vs Slug, Sign Corrected



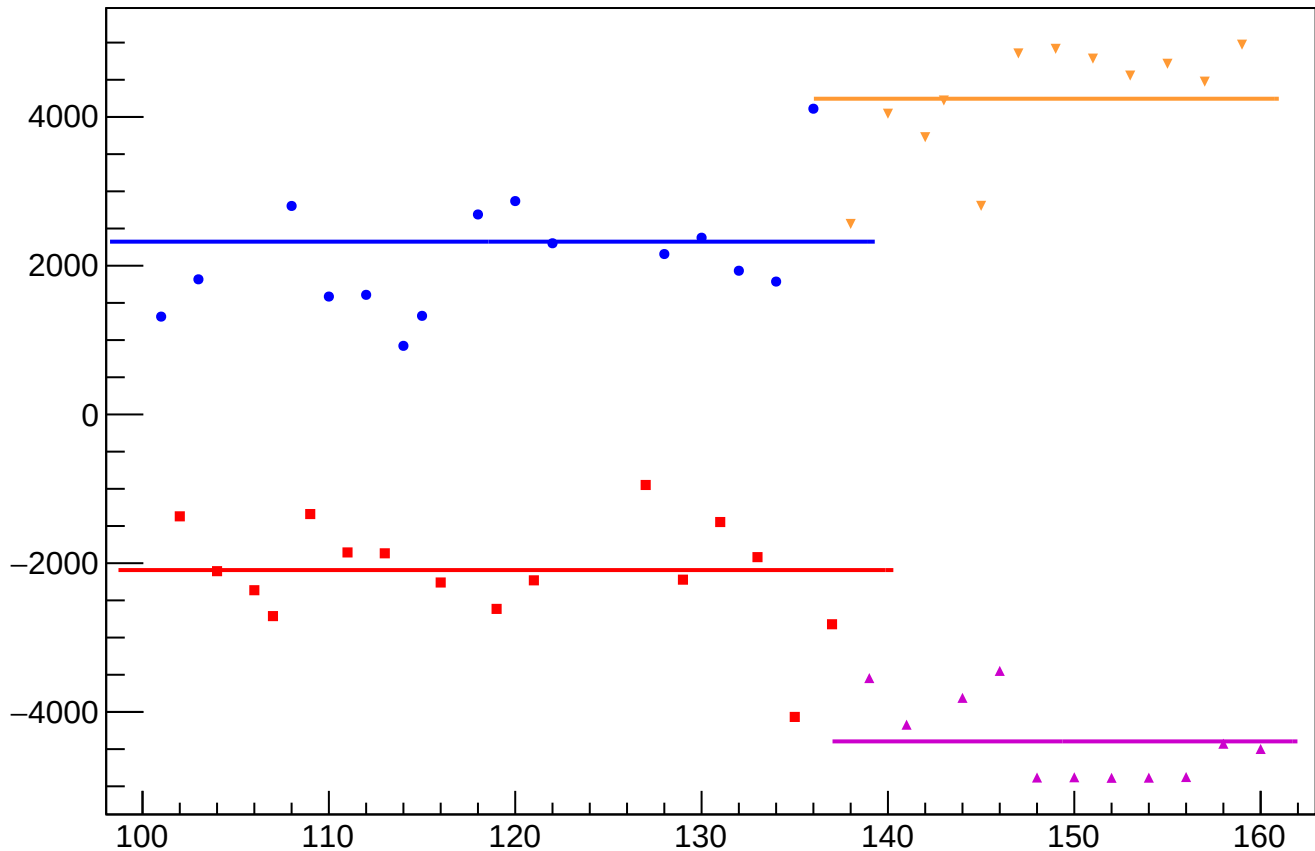
Right In: 114.118 $\pm$ 0.000  $\chi^2$ /NDF: 607226770891525118881736460452495360.0/14  
 Left Out: 141.844 $\pm$ 0.000  $\chi^2$ /NDF: 455273254245846333149237795723673600.0/11  
 Right Out: -105.890 $\pm$ 0.000  $\chi^2$ /NDF: 851861355270591521058611007535972352.0/15  
 Left In: -151.203 $\pm$ 0.000  $\chi^2$ /NDF: 382227652604999337577431549784096768.0/10  
 All: -2.103 $\pm$ 0.000  $\chi^2$ /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

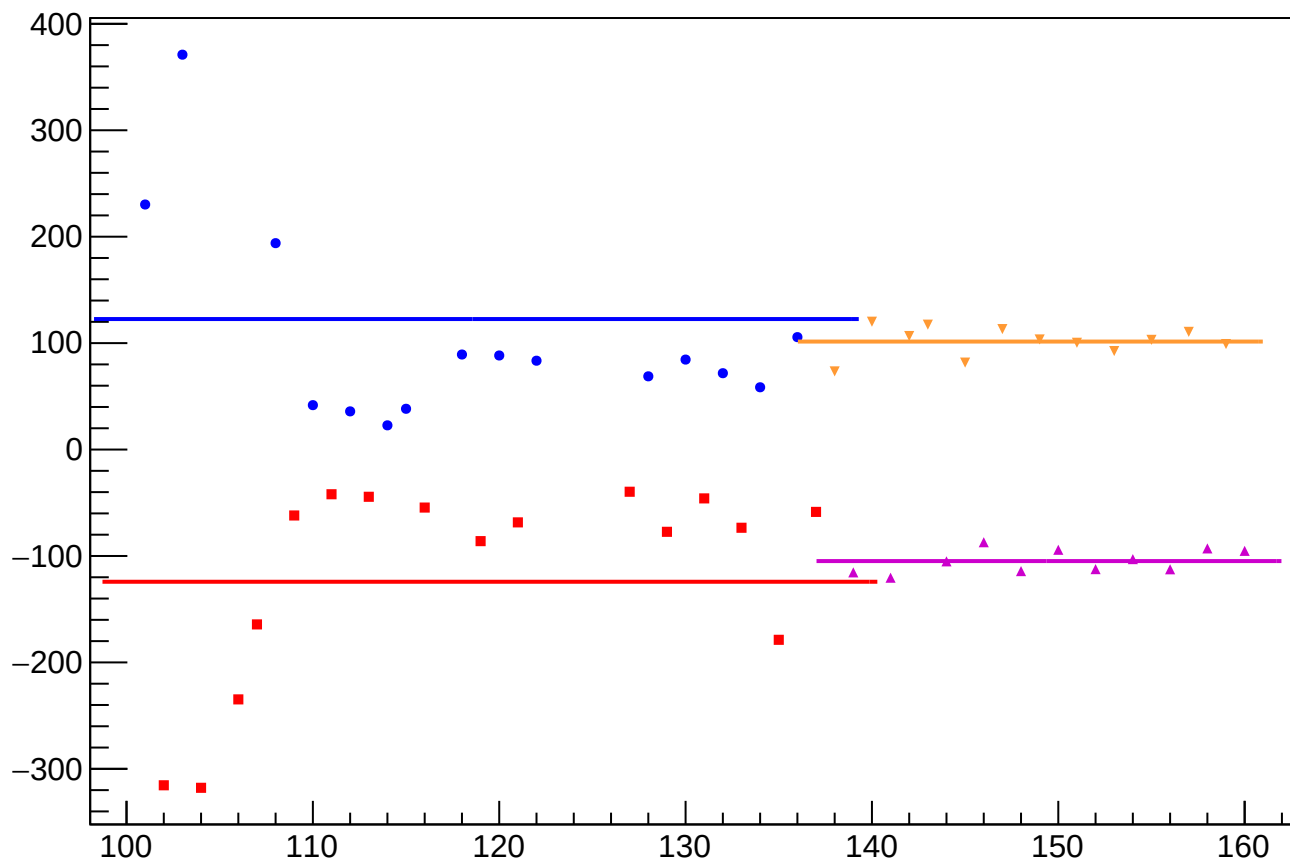
$\chi^2/\text{NDF}$ : 367126080872166122663684022473339174912.0/15

Left In: -4396.069+/-0.000

$\chi^2/\text{NDF}$ : 270326441631367265143713722564756897792.0/10

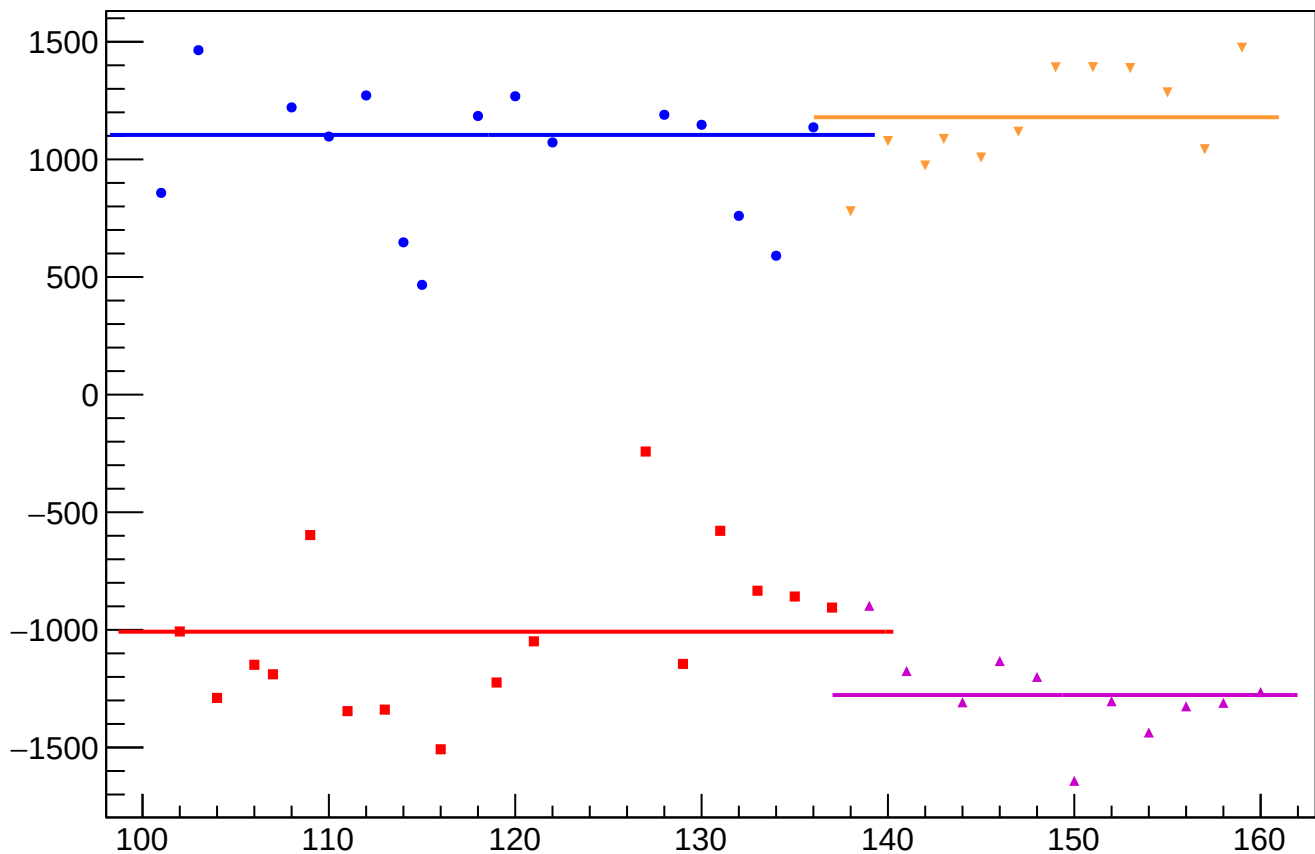
All: -22.065+/-0.000  $\chi^2/\text{NDF}$ : 424251896737

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+/-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

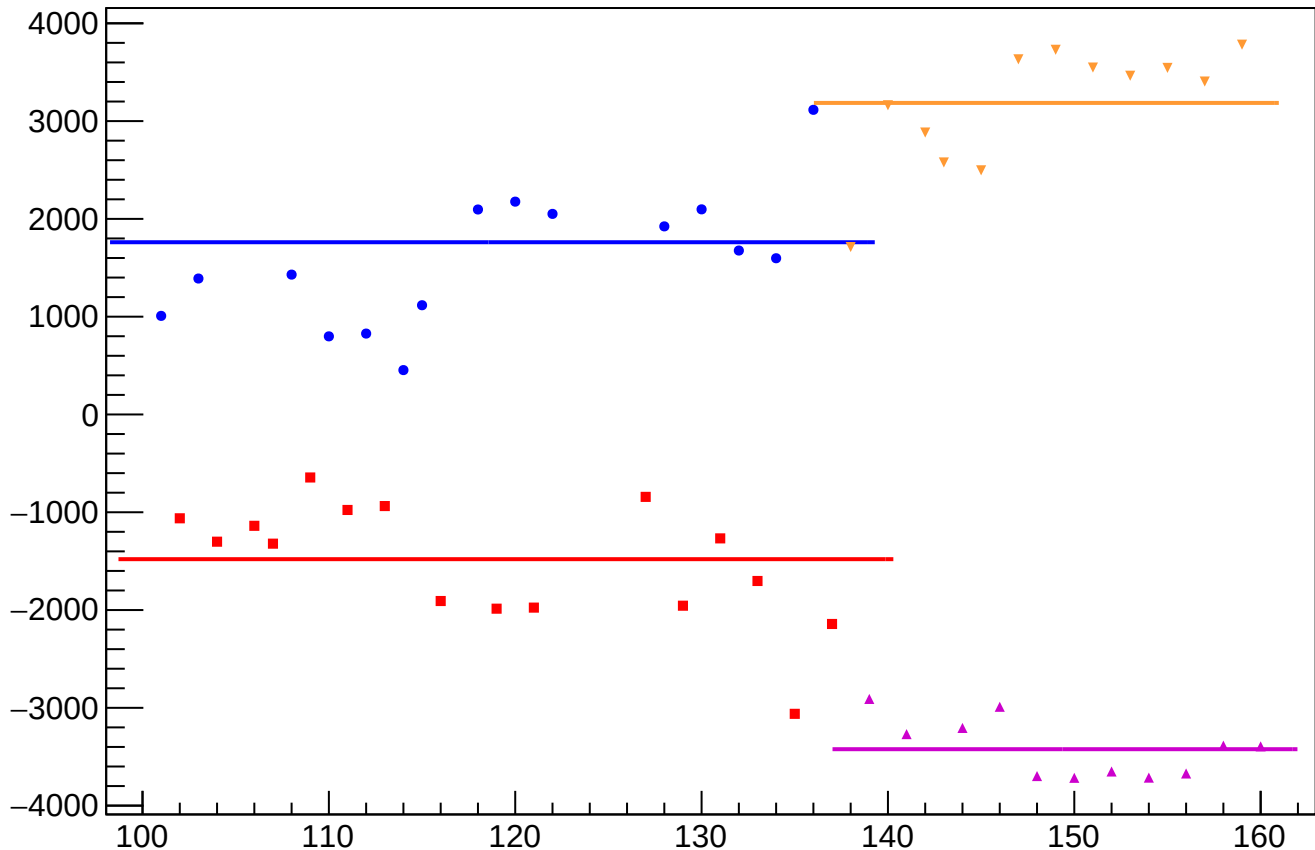
$\chi^2/\text{NDF}$ : 69077878009873965622695939627477368832.0/15

Left In: -1277.097+/-0.000

$\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

All: -18.335+/-0.000  $\chi^2/\text{NDF}$ : 441608022845

# dit\_sam8\_coil3\_mean vs Slug, Sign Corrected



Right In: 1761.245+/-0.000

$\chi^2/\text{NDF}$ : 332206925976055306953064744993096204288.0/14

Left Out: 3185.925+/-0.000

$\chi^2/\text{NDF}$ : 334945906452981161805339150604505710592.0/11

Right Out: -1479.801+/-0.000

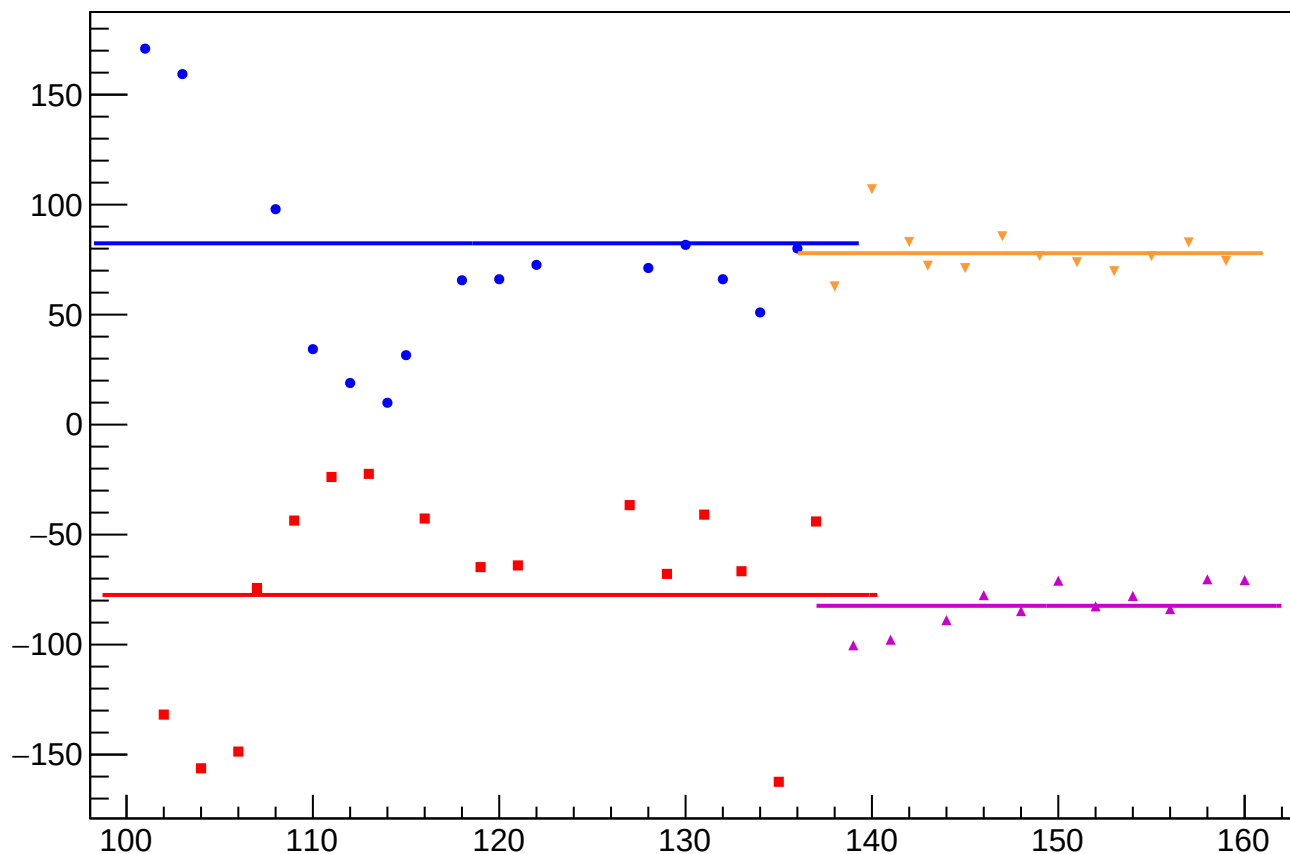
$\chi^2/\text{NDF}$ : 263467768134780968832551238609236131840.0/15

Left In: -3423.018+/-0.000

$\chi^2/\text{NDF}$ : 7453703884208882463869581727568494592.0/10

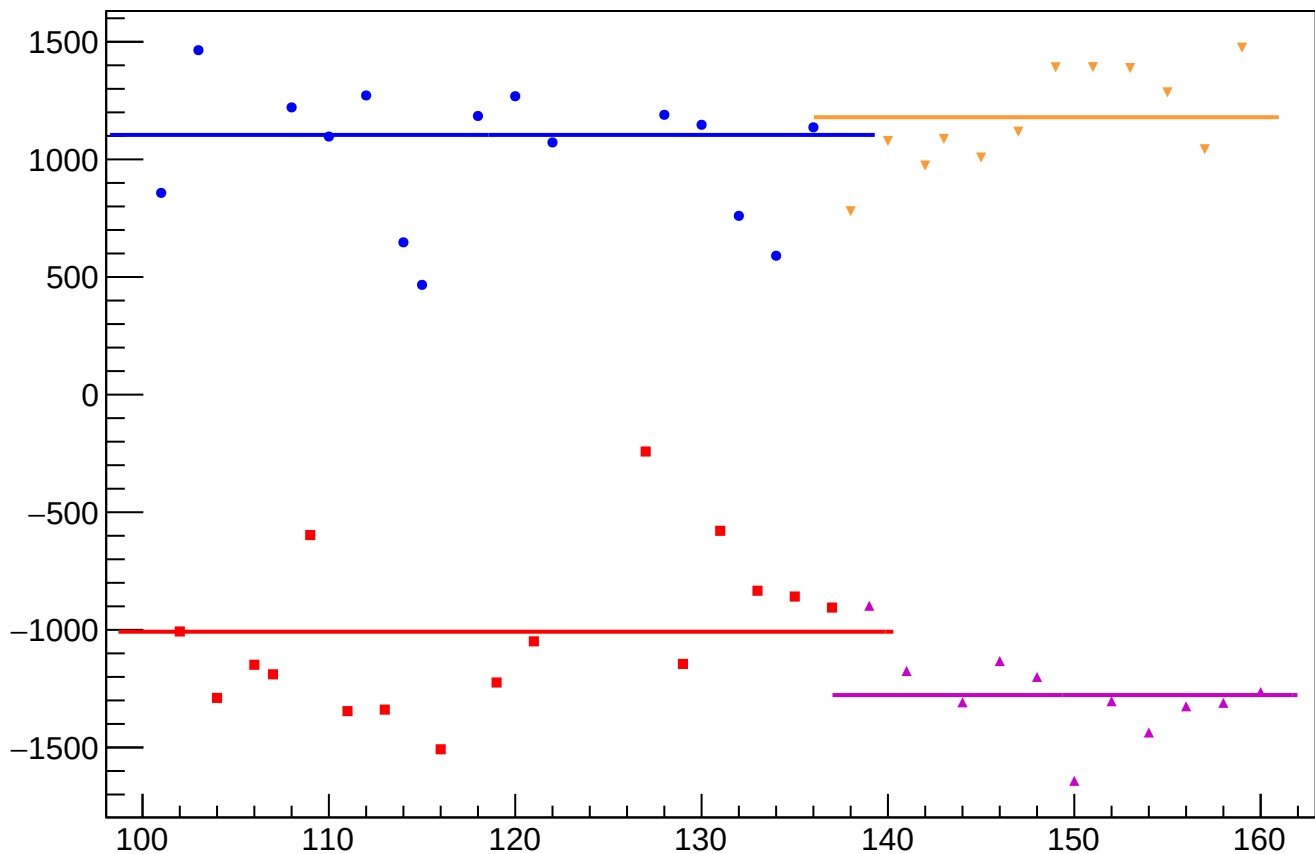
All: -30.093+/-0.000  $\chi^2/\text{NDF}$ : 245798533014

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

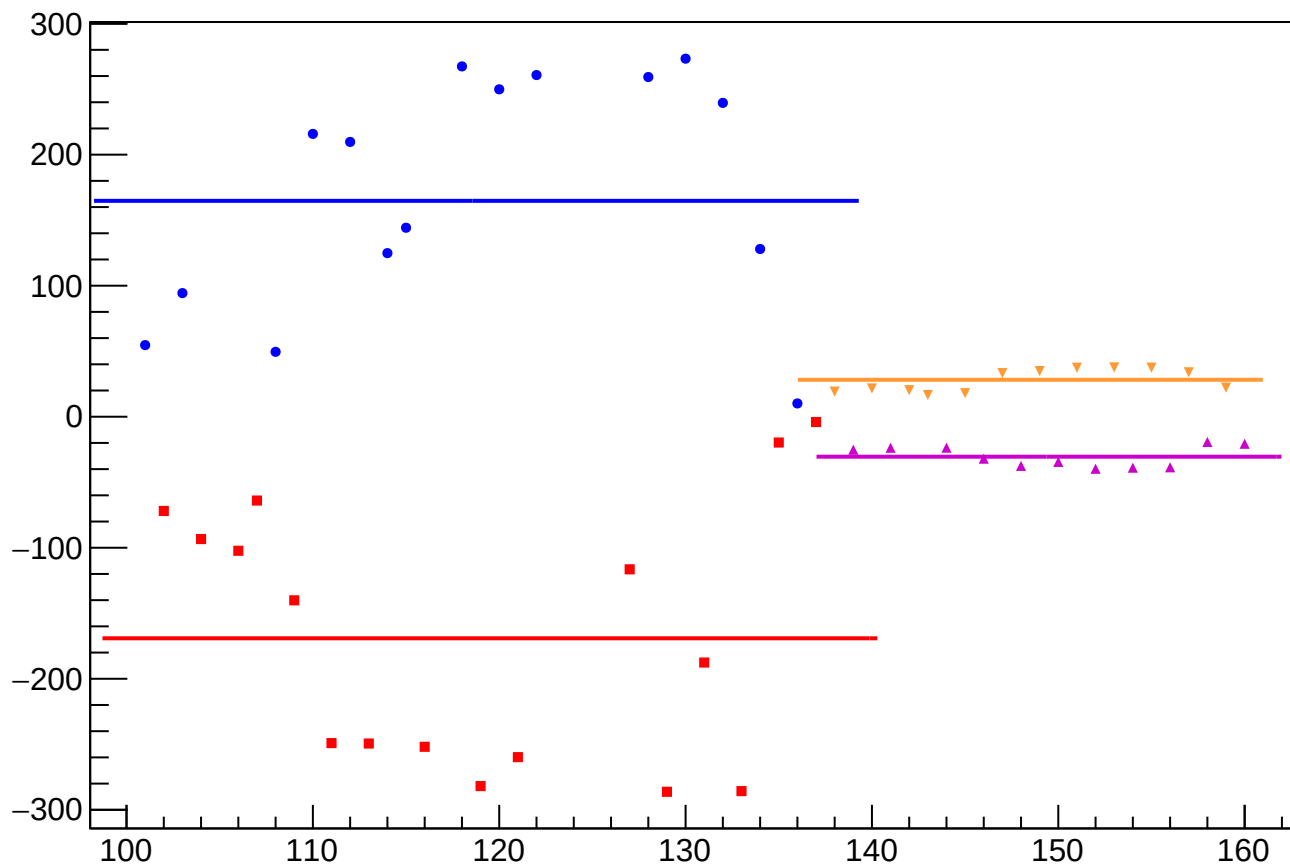
dit\_sam8\_coil3\_Ndata\_mean vs Slug, Sign Corrected



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

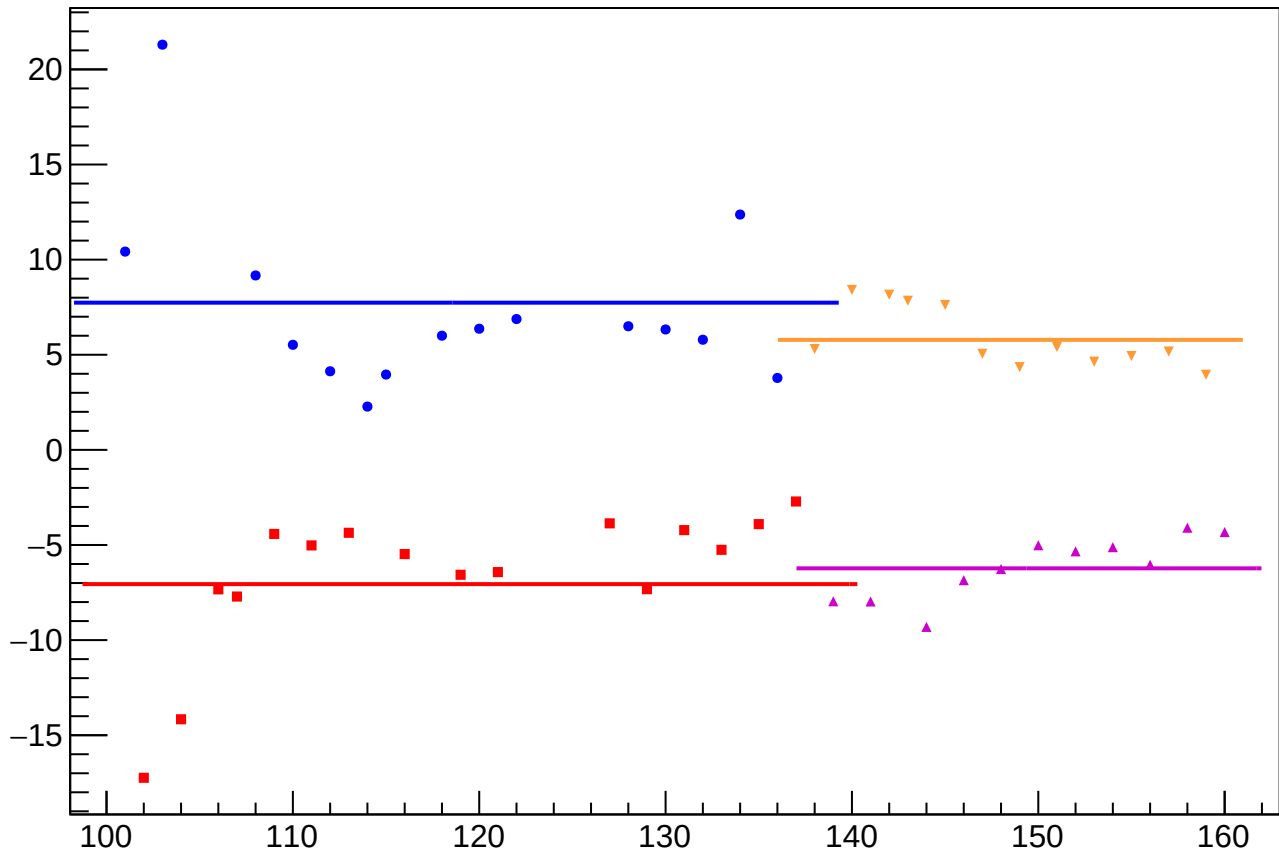


# dit\_4aX\_coil7\_mean vs Slug, Sign Corrected



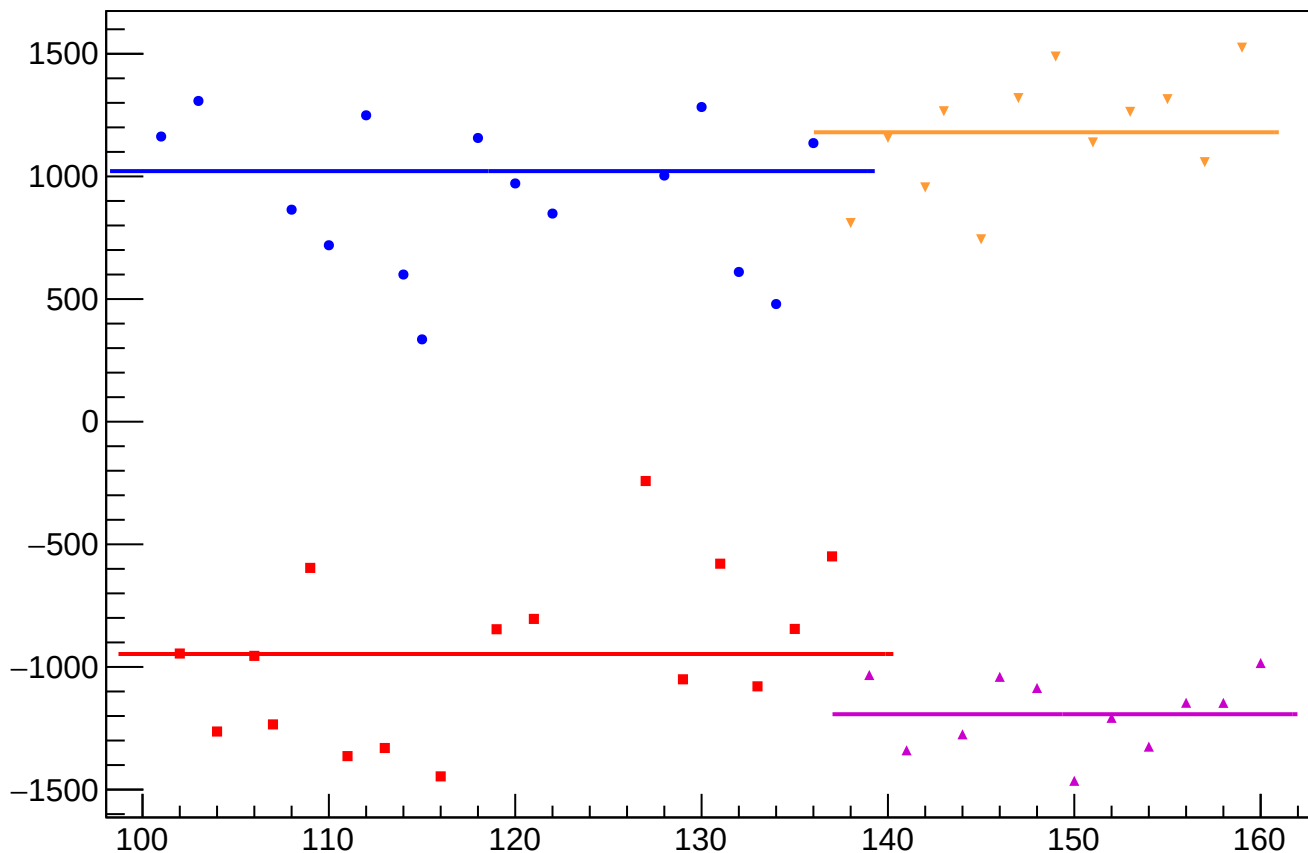
Left:  $-1.317 \pm 0.000$   $\chi^2/\text{NDF}: 16978934081589781$   
 Right In:  $164.752 \pm 0.000$   $\chi^2/\text{NDF}: 6369828943181833917425699916554960896.0/14$   
 Left Out:  $28.192 \pm 0.000$   $\chi^2/\text{NDF}: 62073928949862768083975059378536448.0/11$   
 Right Out:  $-169.108 \pm 0.000$   $\chi^2/\text{NDF}: 6040721802042936822766910687819071488.0/15$   
 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



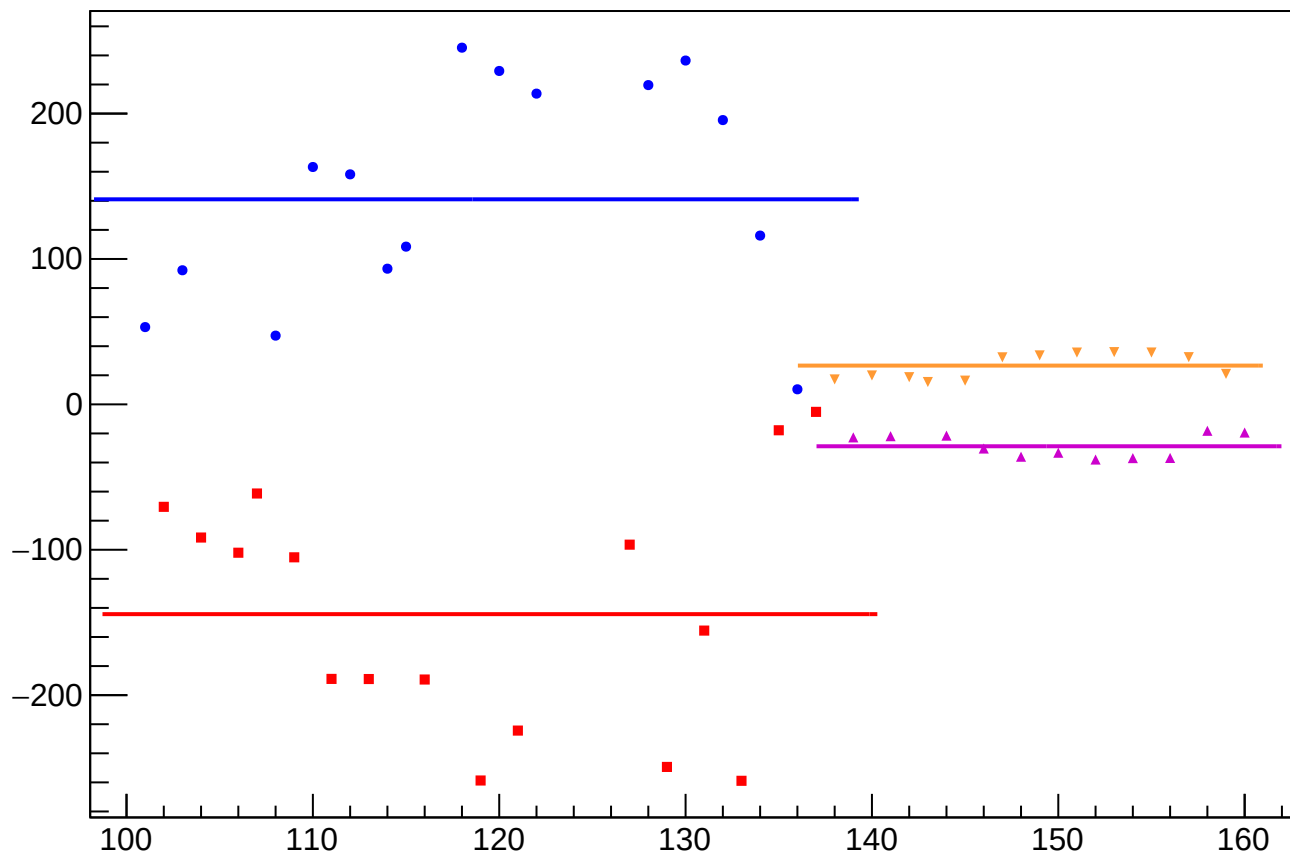
Right In: 7.738 $\pm$ 0.000  $\chi^2$ /NDF: 15127215479234506007469492768079872.0/14  
 Left Out: 5.783 $\pm$ 0.000  $\chi^2$ /NDF: 2082103650411209995862519006101504.0/11  
 Right Out: -7.057 $\pm$ 0.000  $\chi^2$ /NDF: 11292441204139394792341242753581056.0/15  
 Left In: -6.228 $\pm$ 0.000  $\chi^2$ /NDF: 2331911751655733809355489024147456.0/10  
 All: -0.049 $\pm$ 0.000  $\chi^2$ /NDF: 1693113496789

dit\_4aX\_coil7\_Ndata\_mean vs Slug, Sign Corrected



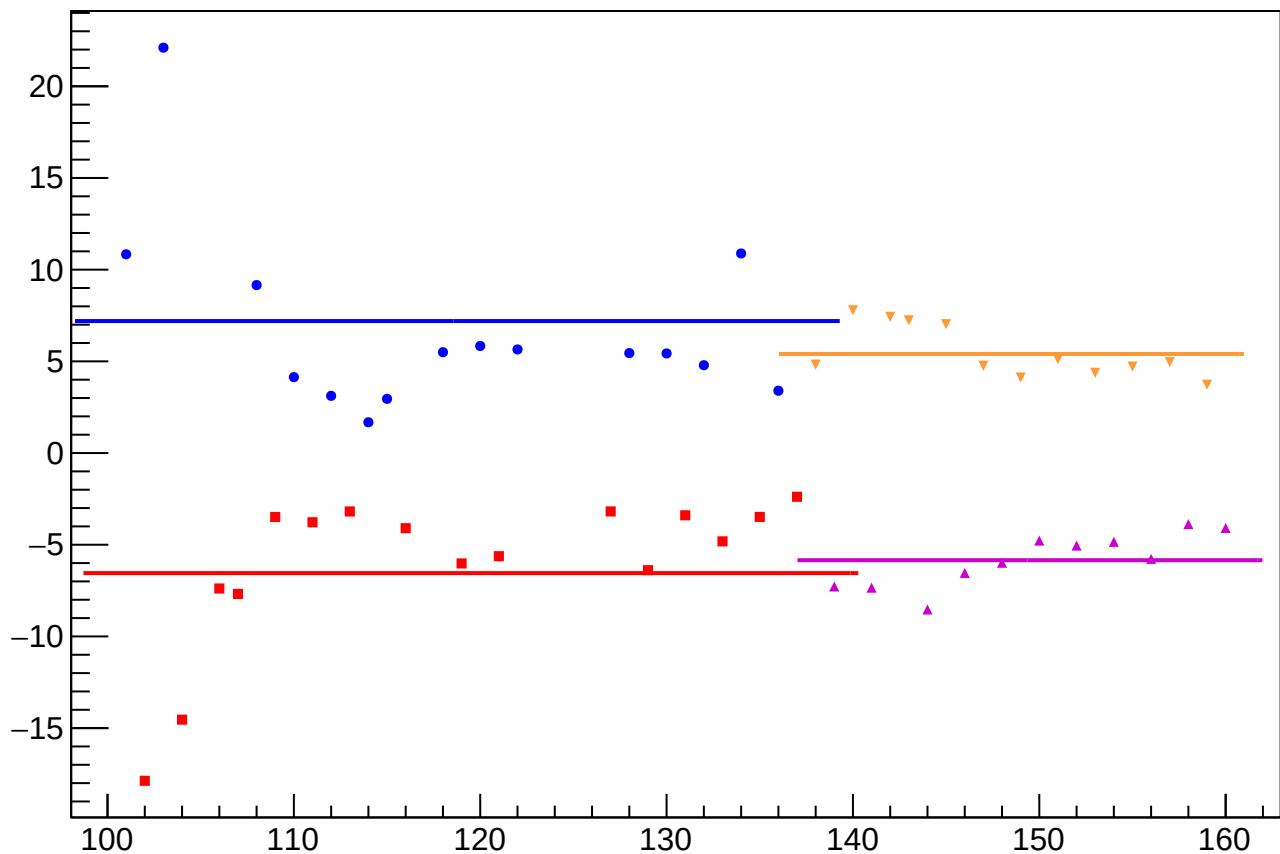
Right In: 1021.684 $\pm$ 0.000  $\chi^2$ /NDF: 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103 $\pm$ 0.000  $\chi^2$ /NDF: 50788606804690292724539730503787347968.0/11  
 Right Out: -947.145 $\pm$ 0.000  $\chi^2$ /NDF: 67784656011936521511169668028018196480.0/15  
 Left In: -1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10  
 All: 2.504 $\pm$ 0.000  $\chi^2$ /NDF: 40413764320356

# dit\_4eX\_coil7\_mean vs Slug, Sign Corrected



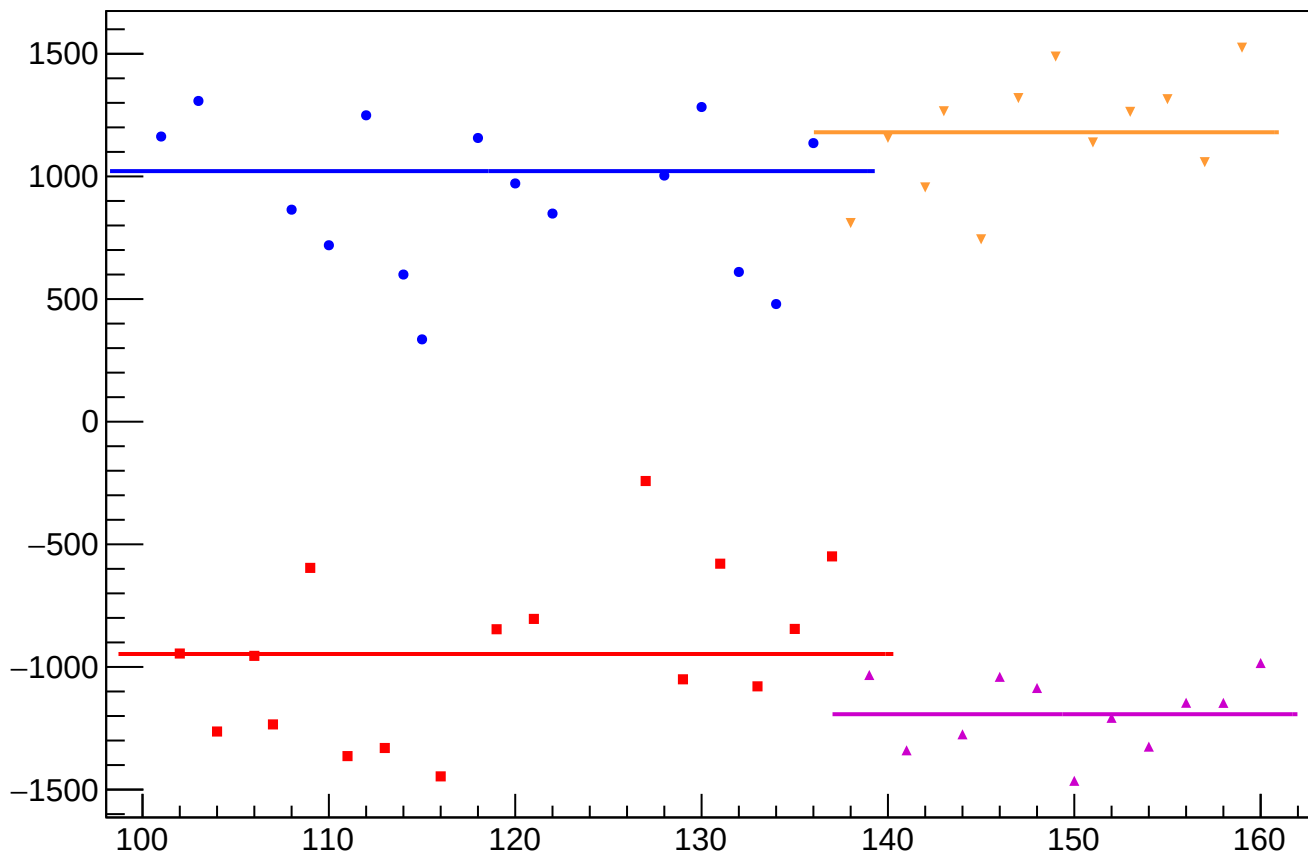
Left:  $-1.225 \pm 0.000$   $\chi^2/\text{NDF}: 15294237123103654$   
 Right In:  $141.032 \pm 0.000$   $\chi^2/\text{NDF}: 4507992585512923332587415612245934080.0/14$   
 Left Out:  $26.669 \pm 0.000$   $\chi^2/\text{NDF}: 62522343114115856238629096966324224.0/11$   
 Right Out:  $-144.283 \pm 0.000$   $\chi^2/\text{NDF}: 4268333571517740886065361663928827904.0/15$   
 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



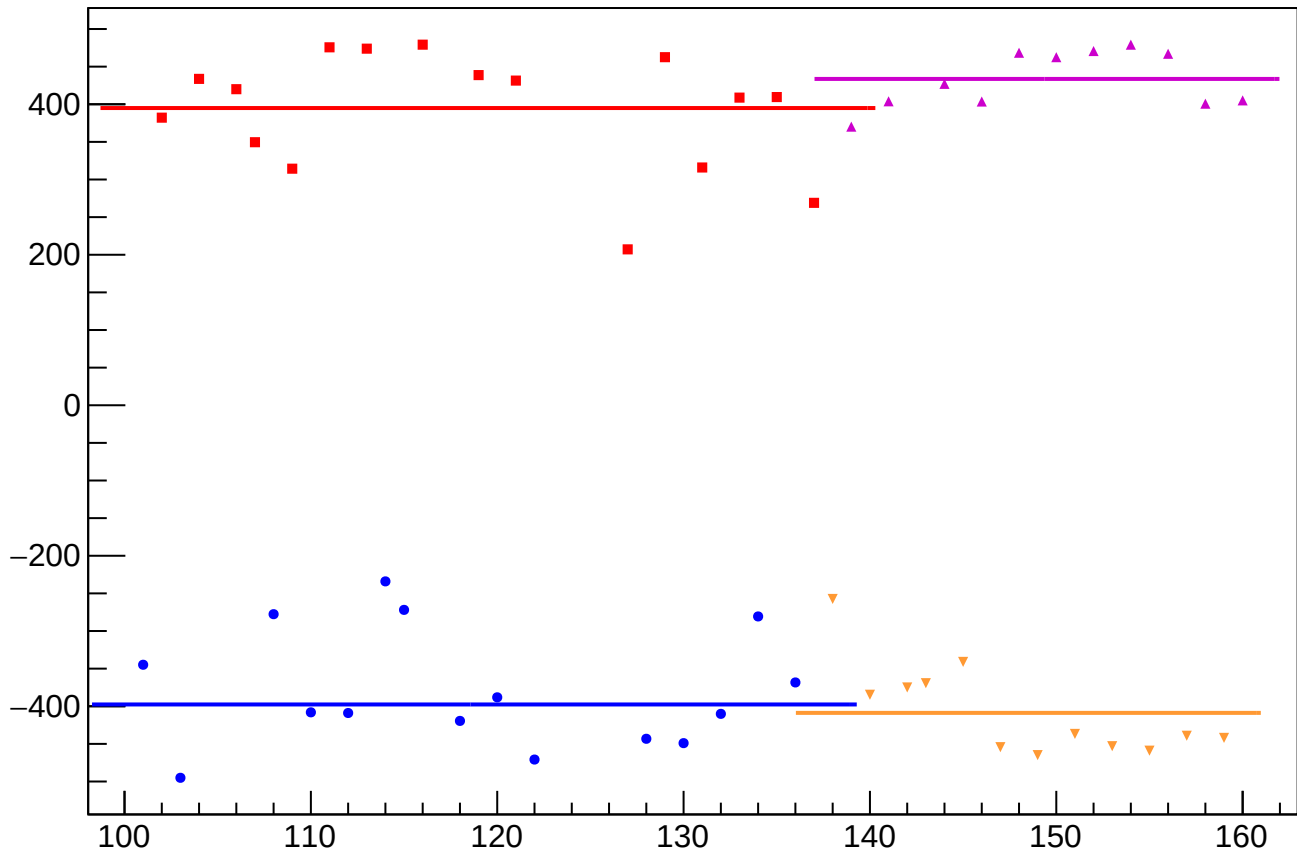
Left:  $-0.250 \pm 0.000$   $\chi^2/\text{NDF}$ : 61618141302730381  
 Right In:  $7.198 \pm 0.000$   $\chi^2/\text{NDF}$ : 18212640728502785337831966963138560.0/14  
 Right:  $0.232 \pm 0.000$   $\chi^2/\text{NDF}$ : 94430884745367791  
 Left Out:  $5.404 \pm 0.000$   $\chi^2/\text{NDF}$ : 1657476673222734549536062415306752.0/11  
 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  | $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14 | Left: -12.747+/-0.000                | $\chi^2/\text{NDF}$ : 2657013306605046 |
| Left Out: 1180.103+/-0.000  | $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11 | Right: 23.805+/-0.000                | $\chi^2/\text{NDF}$ : 1383338523153511 |
| Right Out: -947.145+/-0.000 | $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15 | In: -279.065+/-0.000                 | $\chi^2/\text{NDF}$ : 1929090788254319 |
| Left In: -1192.687+/-0.000  | $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10 | 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

$\chi^2/\text{NDF}$ : 2661280785384633207096106229474263040.0/14

Left Out: -408.794+/-0.000

$\chi^2/\text{NDF}$ : 3366573213961692909439105040404971520.0/11

Right Out: 394.973+/-0.000

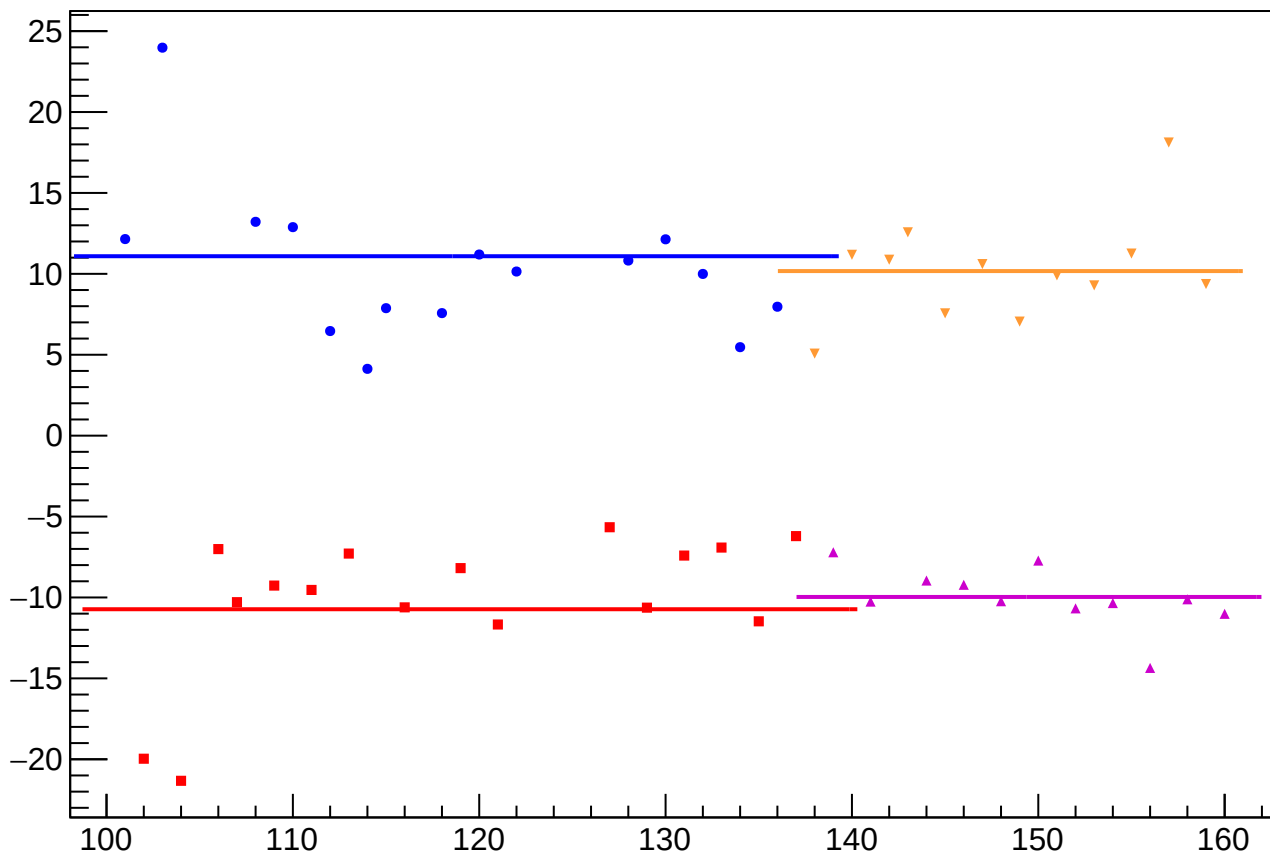
$\chi^2/\text{NDF}$ : 3685595513427183501596165280874102784.0/15

Left In: 433.664+/-0.000

$\chi^2/\text{NDF}$ : 1198237421385461104687495484599697408.0/10

Left: 14.727+/-0.000  $\chi^2/\text{NDF}$ : 33067887701439855  
 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

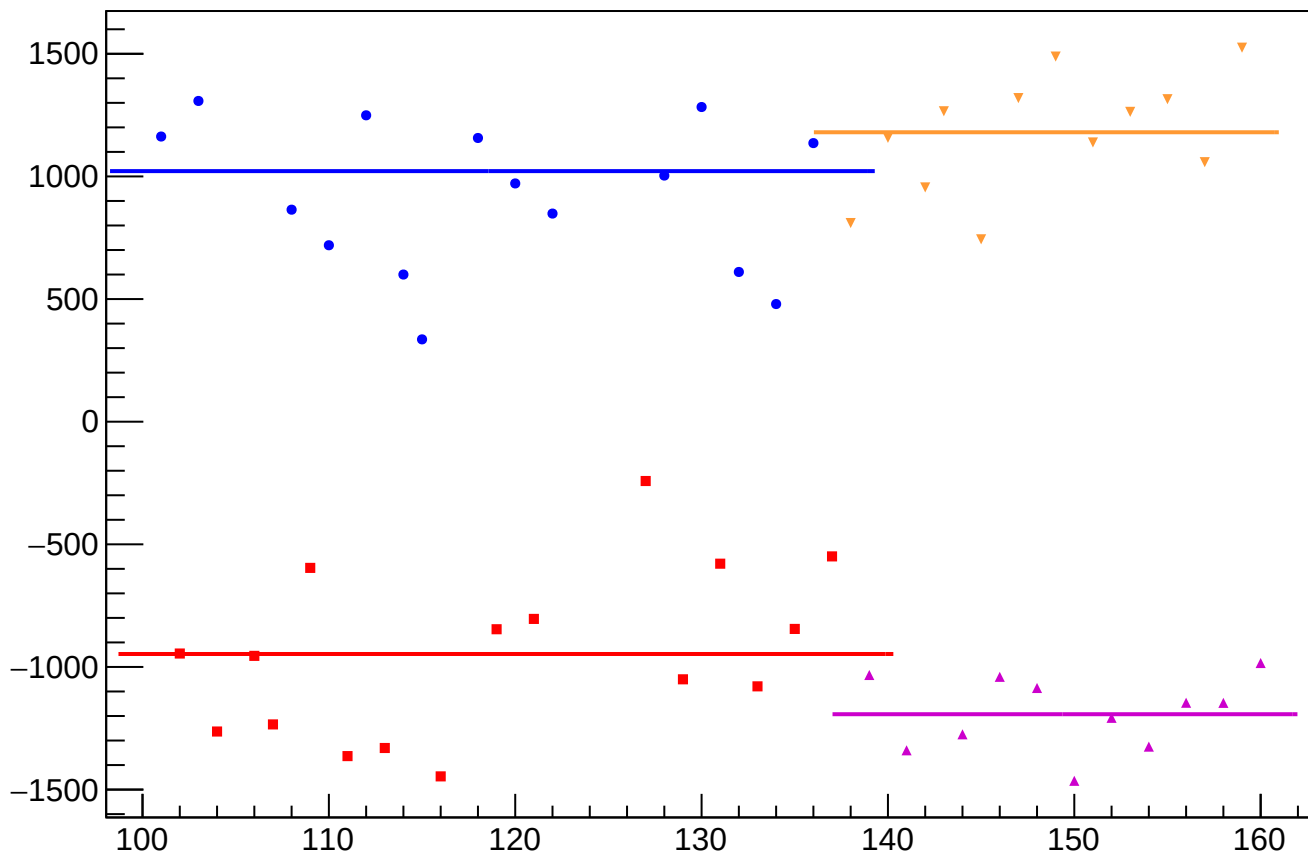
dit\_11X12X\_coil7\_err\_mean vs Slug, Sign Corrected



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

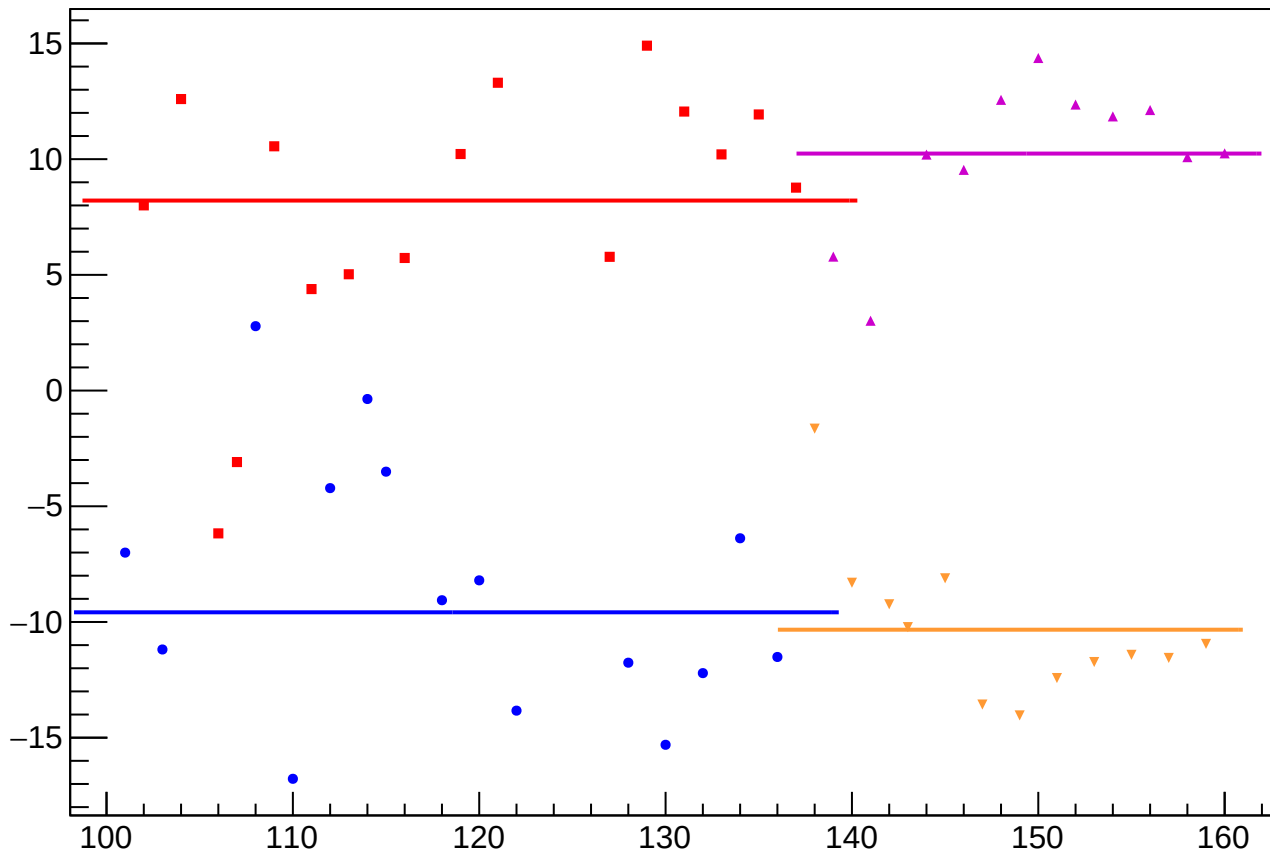
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

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+/-0.000

$\chi^2/\text{NDF}$ : 14702679983940002820806471963377664.0/14

Left Out: -10.333+/-0.000

$\chi^2/\text{NDF}$ : 9377692425026365375047041474887680.0/11

Right Out: 8.211+/-0.000

$\chi^2/\text{NDF}$ : 18304237293835961465605754204454912.0/15

Left In: 10.241+/-0.000

$\chi^2/\text{NDF}$ : 8992829088408430483485977772818432.0/10

Left: 0.010+/-0.000  $\chi^2/\text{NDF}$ : 212884271856614194

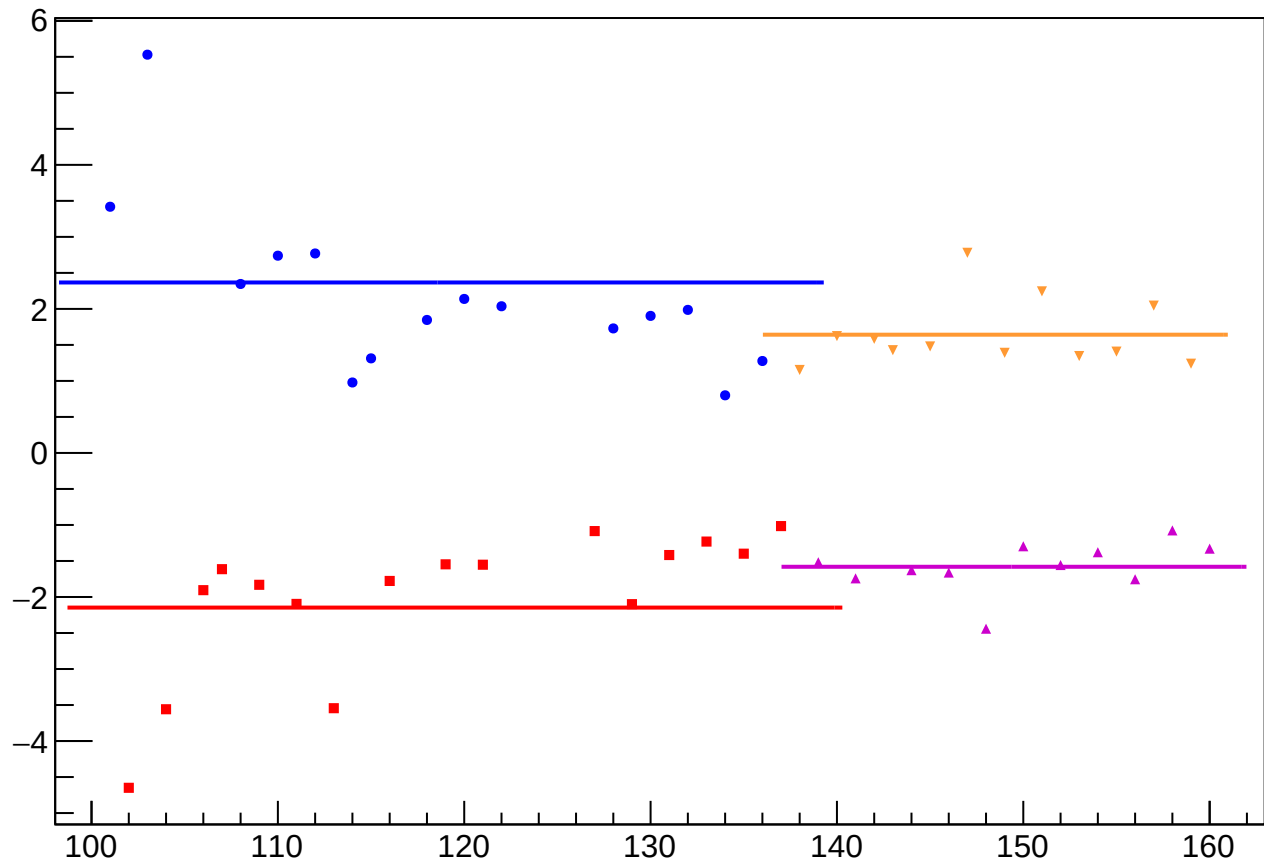
Right: -0.564+/-0.000  $\chi^2/\text{NDF}$ : 1371493250181668

In: 2.062+/-0.000  $\chi^2/\text{NDF}$ : 1735093437250268156

Out: -2.510+/-0.000  $\chi^2/\text{NDF}$ : 16029265277756400

All: -0.229+/-0.000  $\chi^2/\text{NDF}$ : 3502860386482

dit\_4aY\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 2.367+/-0.000

$\chi^2/\text{NDF}$ : 920633294546152876922066767446016.0/14

Left Out: 1.642+/-0.000

$\chi^2/\text{NDF}$ : 195842148226043527039909915262976.0/11

Right Out: -2.147+/-0.000

$\chi^2/\text{NDF}$ : 764171992480224478656127555338240.0/15

Left In: -1.580+/-0.000

$\chi^2/\text{NDF}$ : 104159820106689813353171792166912.0/10

Left: 0.022+/-0.000  $\chi^2/\text{NDF}$ : 507128763199602995

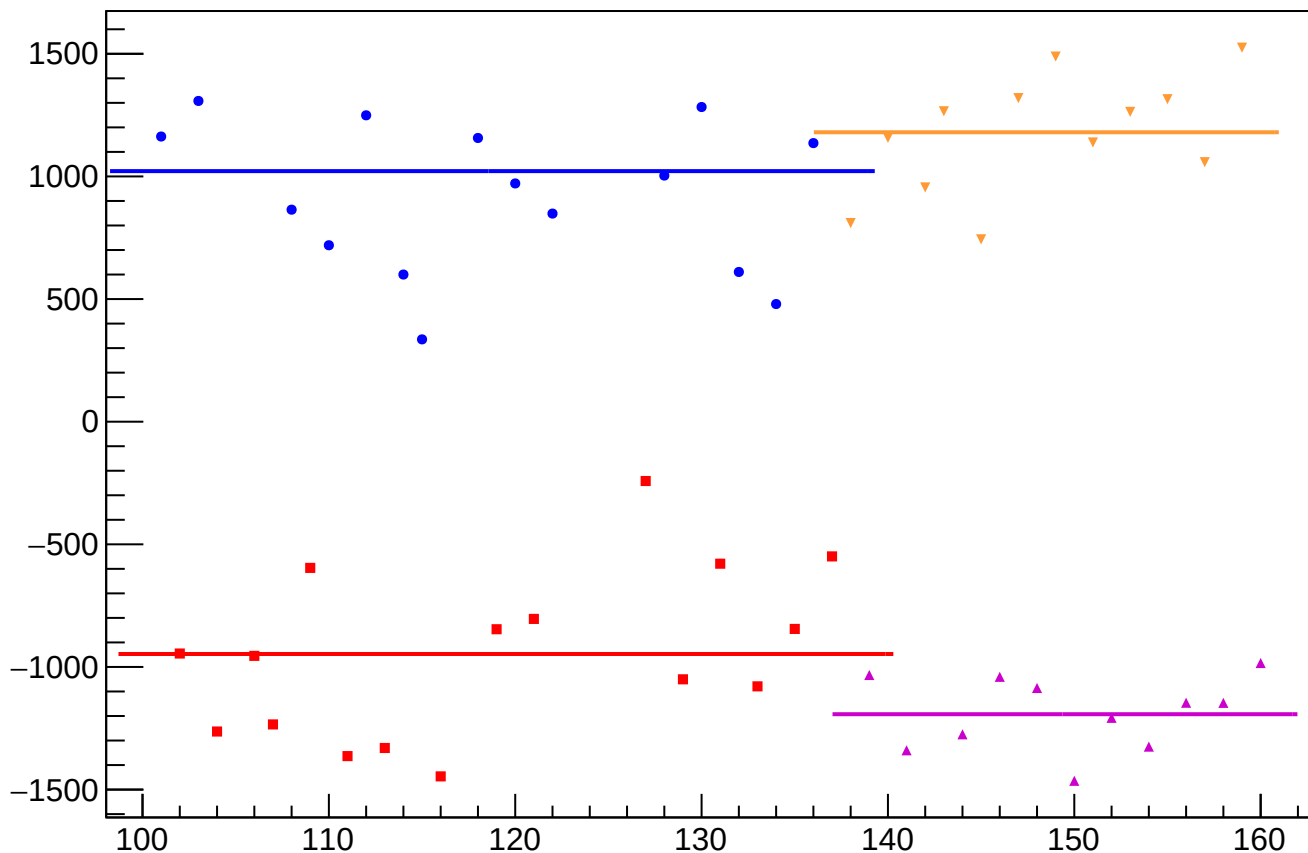
Right: 0.079+/-0.000  $\chi^2/\text{NDF}$ : 83877353838823588

In: 0.048+/-0.000  $\chi^2/\text{NDF}$ : 6965293012919252949

Out: 0.043+/-0.000  $\chi^2/\text{NDF}$ : 649620992957813524

All: 0.046+/-0.000  $\chi^2/\text{NDF}$ : 13461521258222

dit\_4aY\_coil7\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1021.684 $\pm$ 0.000

Left Out: 1180.103 $\pm$ 0.000

Right Out: -947.145 $\pm$ 0.000

Left In: -1192.687 $\pm$ 0.000

$\chi^2$ /NDF: 40493101470870278397836276403592495104.0/14

$\chi^2$ /NDF: 50788606804690292724539730503787347968.0/11

$\chi^2$ /NDF: 67784656011936521511169668028018196480.0/15

$\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10

Left: -12.747 $\pm$ 0.000  $\chi^2$ /NDF: 2657013306605046

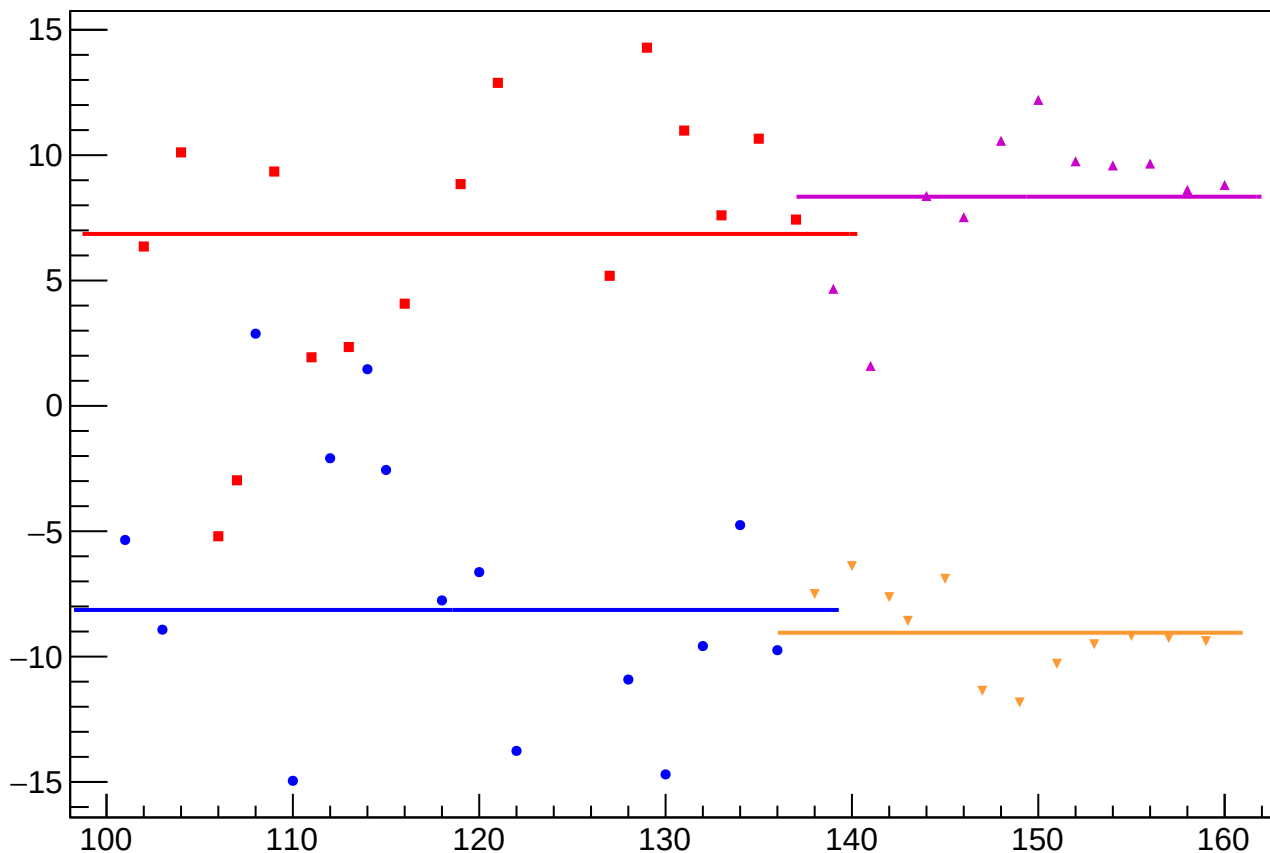
Right: 23.805 $\pm$ 0.000  $\chi^2$ /NDF: 1383338523153511

In: -279.065 $\pm$ 0.000  $\chi^2$ /NDF: 1929090788254319

Out: 282.649 $\pm$ 0.000  $\chi^2$ /NDF: 1863497273761245

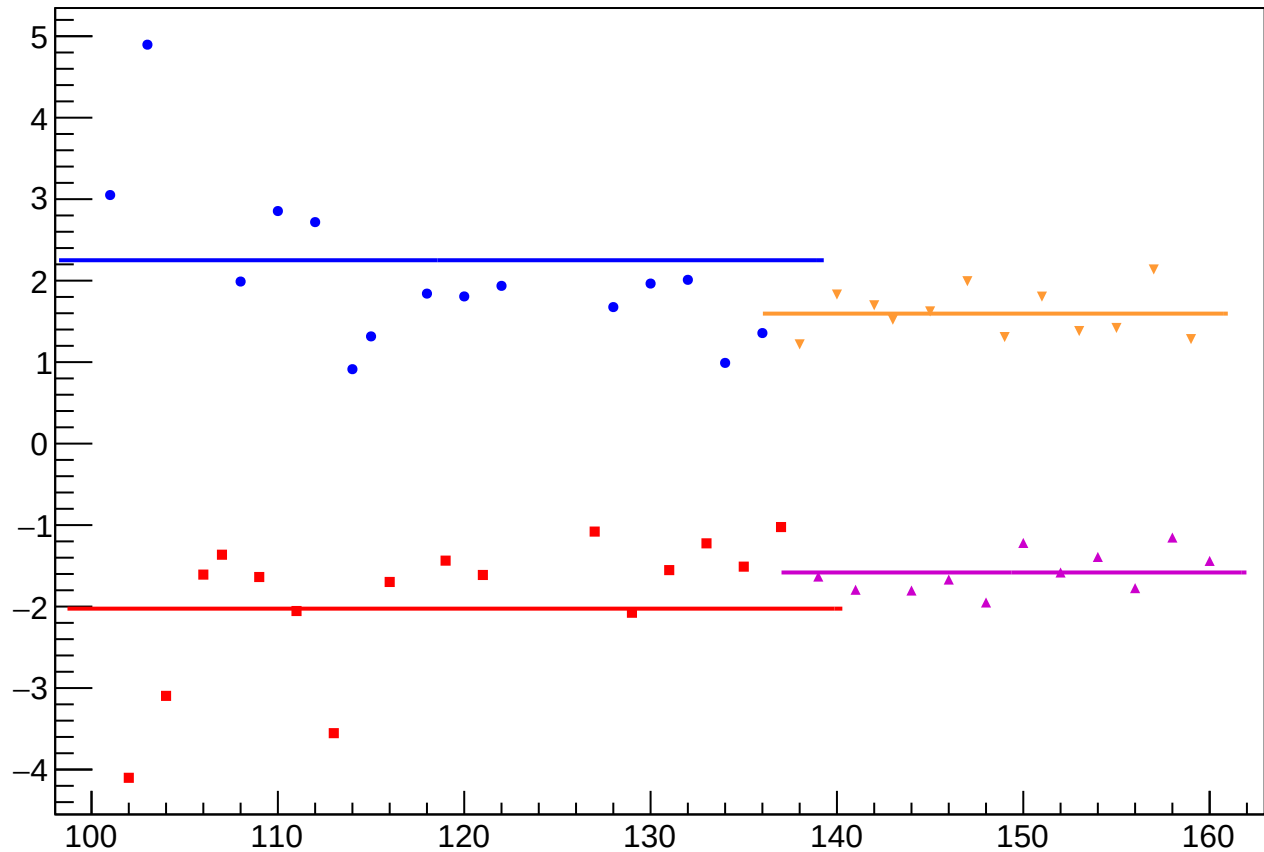
All: 2.504 $\pm$ 0.000  $\chi^2$ /NDF: 40413764320356

# dit\_4eY\_coil7\_mean vs Slug, Sign Corrected



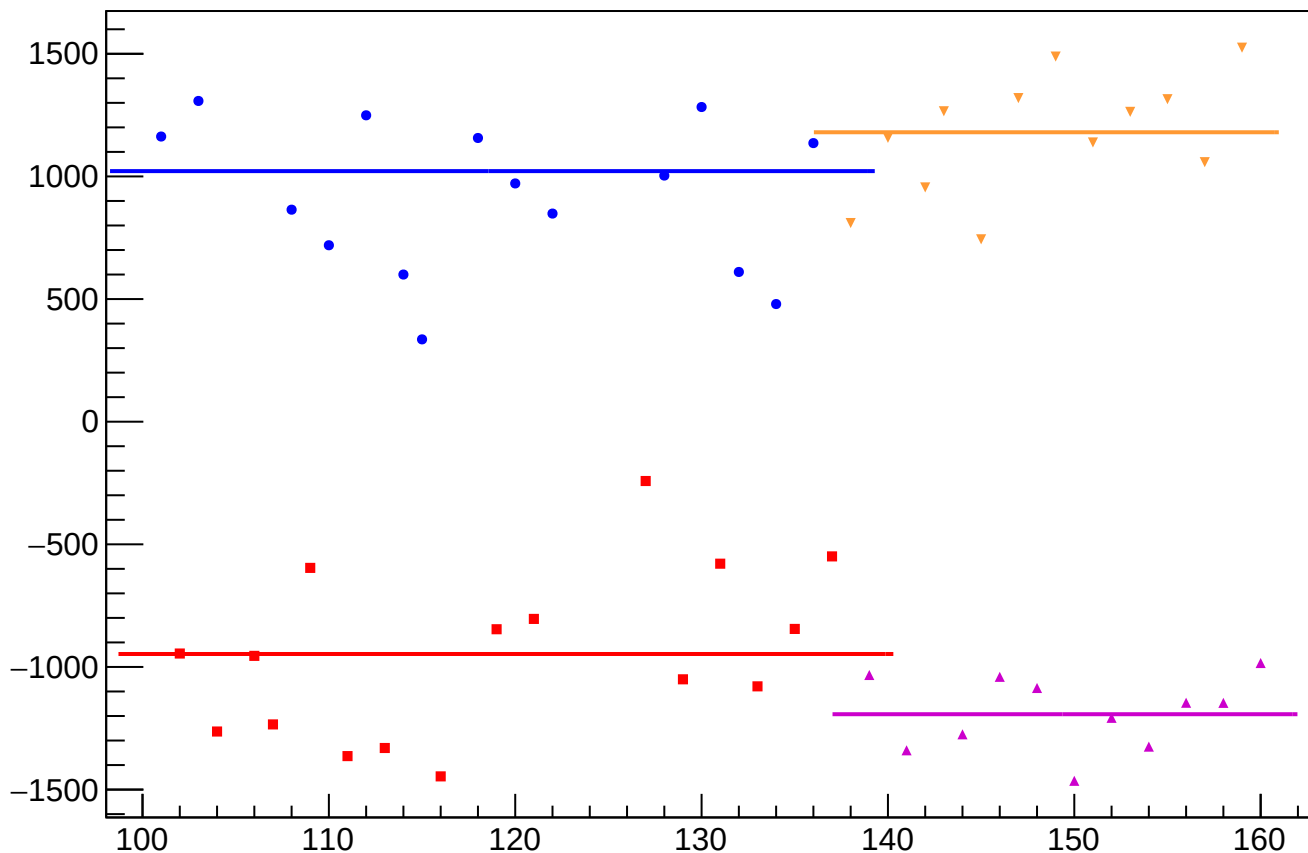
Right In:  $-8.139 \pm 0.000$   $\chi^2/\text{NDF}: 14676442649222120372533779893321728.0/14$   
 Left Out:  $-9.049 \pm 0.000$   $\chi^2/\text{NDF}: 2449058506184839792133889501167616.0/11$   
 Right Out:  $6.859 \pm 0.000$   $\chi^2/\text{NDF}: 16483631561591790731352632153079808.0/15$   
 Left In:  $8.343 \pm 0.000$   $\chi^2/\text{NDF}: 7268690948063694771204756789526528.0/10$   
 All:  $-0.402 \pm 0.000$   $\chi^2/\text{NDF}: 2538807042517$

dit\_4eY\_coil7\_err\_mean vs Slug, Sign Corrected



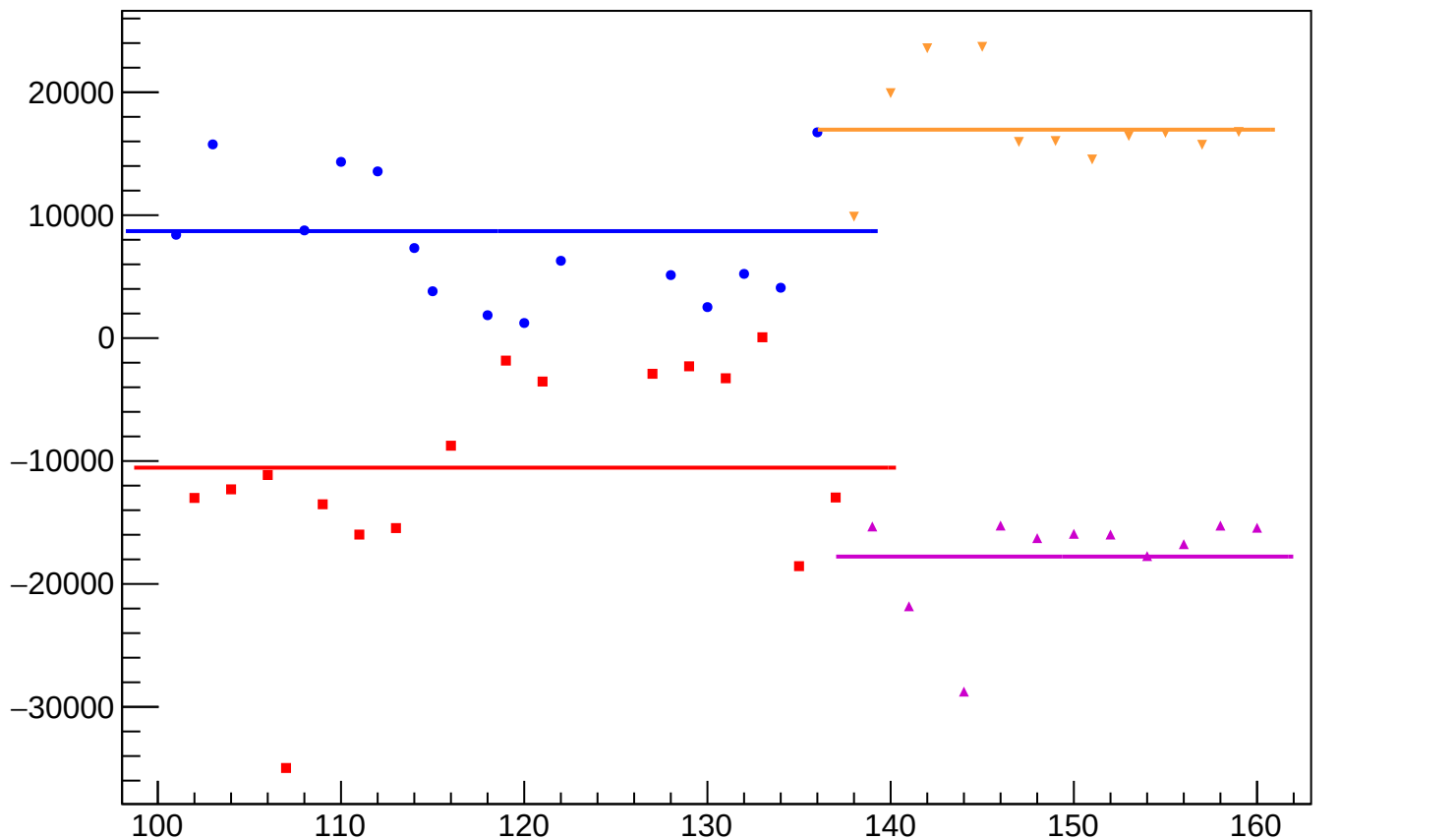
Right In: 2.250 $\pm$ 0.000  $\chi^2$ /NDF: 656774588136274816295442701090816.0/14  
 Left Out: 1.595 $\pm$ 0.000  $\chi^2$ /NDF: 76549213292208781148545230045184.0/11  
 Right Out: -2.025 $\pm$ 0.000  $\chi^2$ /NDF: 578717441762956454616505599918080.0/15  
 Left In: -1.582 $\pm$ 0.000  $\chi^2$ /NDF: 54930988145763434904897999339520.0/10  
 All: 0.034 $\pm$ 0.000  $\chi^2$ /NDF: 12024014402929

dit\_4eY\_coil7\_Ndata\_mean vs Slug, Sign Corrected



|                             |                                                                   |                                      |                                        |
|-----------------------------|-------------------------------------------------------------------|--------------------------------------|----------------------------------------|
| Right In: 1021.684+/-0.000  | $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14 | Left: -12.747+/-0.000                | $\chi^2/\text{NDF}$ : 2657013306605046 |
| Left Out: 1180.103+/-0.000  | $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11 | Right: 23.805+/-0.000                | $\chi^2/\text{NDF}$ : 1383338523153511 |
| Right Out: -947.145+/-0.000 | $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15 | In: -279.065+/-0.000                 | $\chi^2/\text{NDF}$ : 1929090788254319 |
| Left In: -1192.687+/-0.000  | $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10 | Out: 282.649+/-0.000                 | $\chi^2/\text{NDF}$ : 1863497273761245 |
|                             | All: 2.504+/-0.000                                                | $\chi^2/\text{NDF}$ : 40413764320356 |                                        |

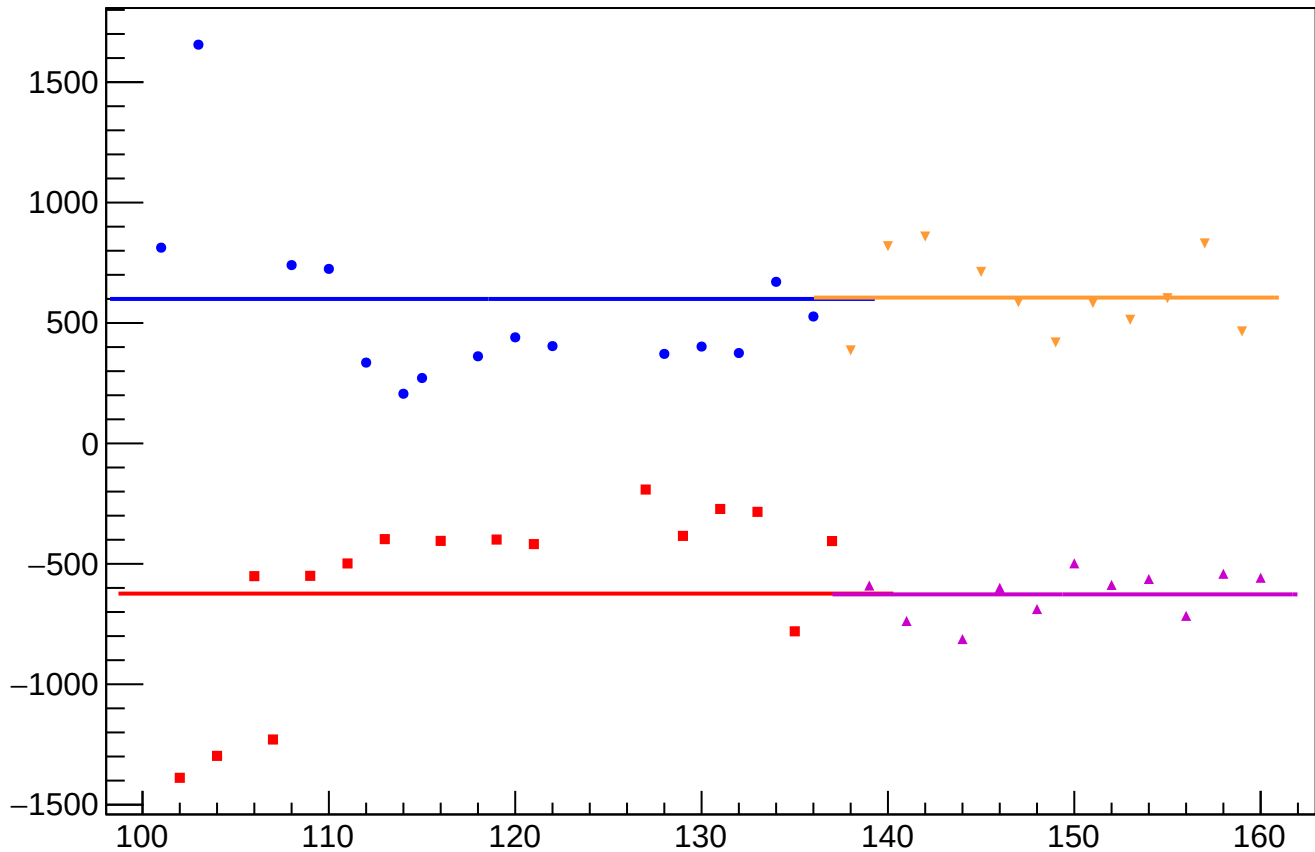
# dit\_usl\_coil7\_mean vs Slug, Sign Corrected



Left:  $-1162.779 \pm 0.000$   $\chi^2/\text{NDF}: 55890843498990$   
 Right In:  $8703.332 \pm 0.000$   $\chi^2/\text{NDF}: 19501133067308426859536304500819191922688.0/14$   
 Left Out:  $16957.575 \pm 0.000$   $\chi^2/\text{NDF}: 10938008625550561770285254297697243889664.0/10$   
 Right Out:  $-10539.327 \pm 0.000$   $\chi^2/\text{NDF}: 46226684227836109273394062569753758662656.0/15$   
 Left In:  $-17773.103 \pm 0.000$   $\chi^2/\text{NDF}: 14926066991142889452676587552618632445952.0/10$   
 All:  $-1114.529 \pm 0.000$   $\chi^2/\text{NDF}: 7464452329$

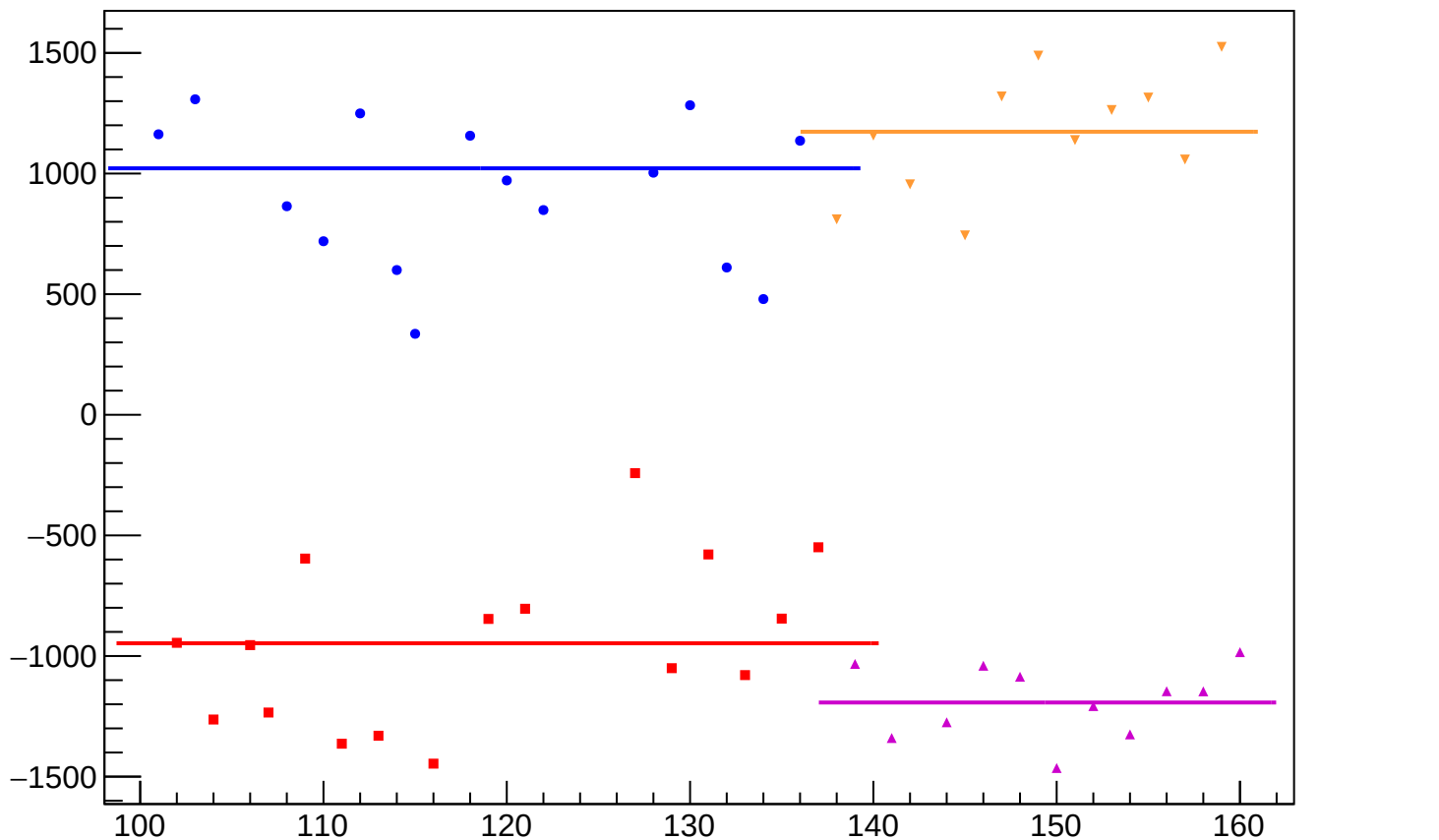


dit\_usl\_coil7\_err\_mean vs Slug, Sign Corrected



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

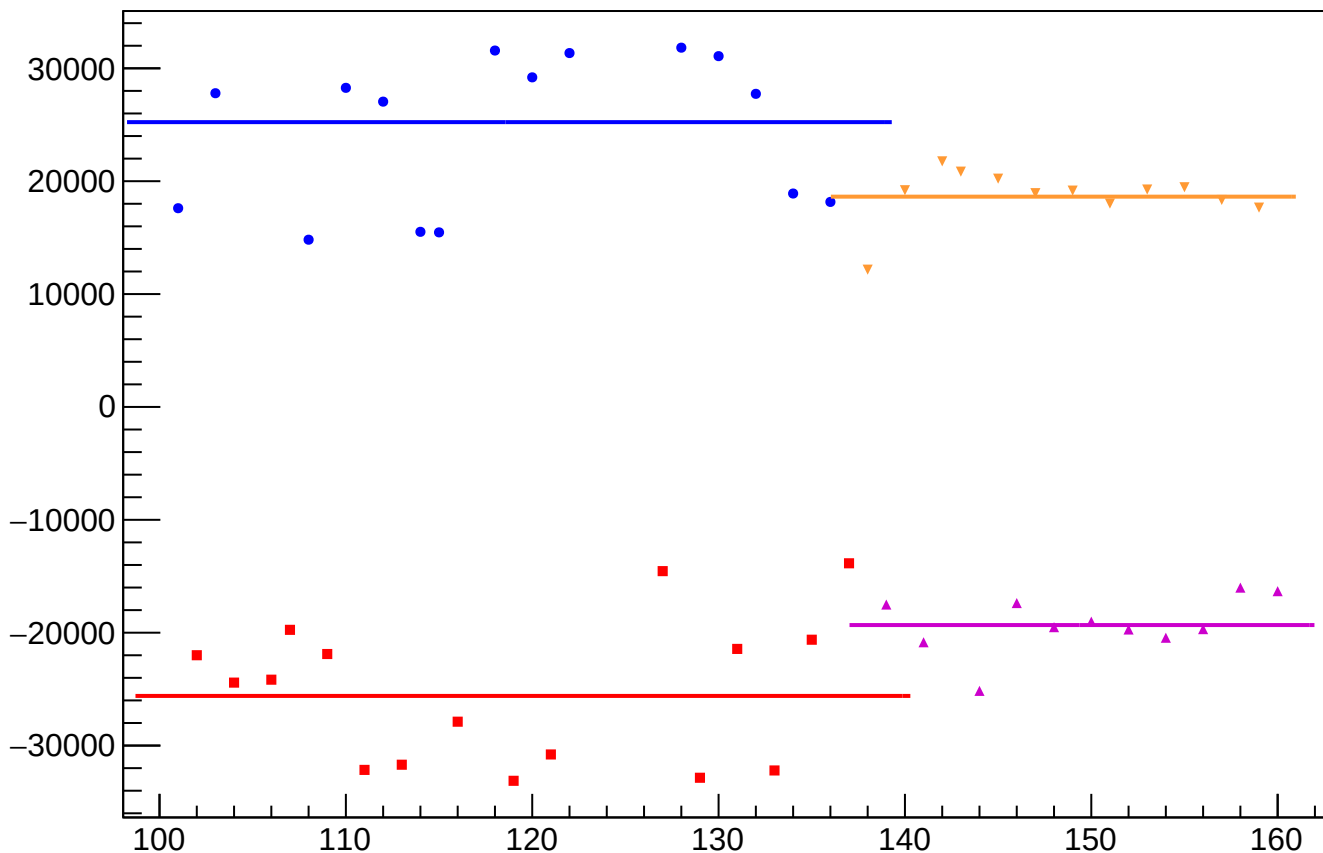
Left In: -1192.687 +/- 0.000

$\chi^2/\text{NDF}$ : 1925528738372820562654022867381911552.0/10

All: -24.912 +/- 0.000

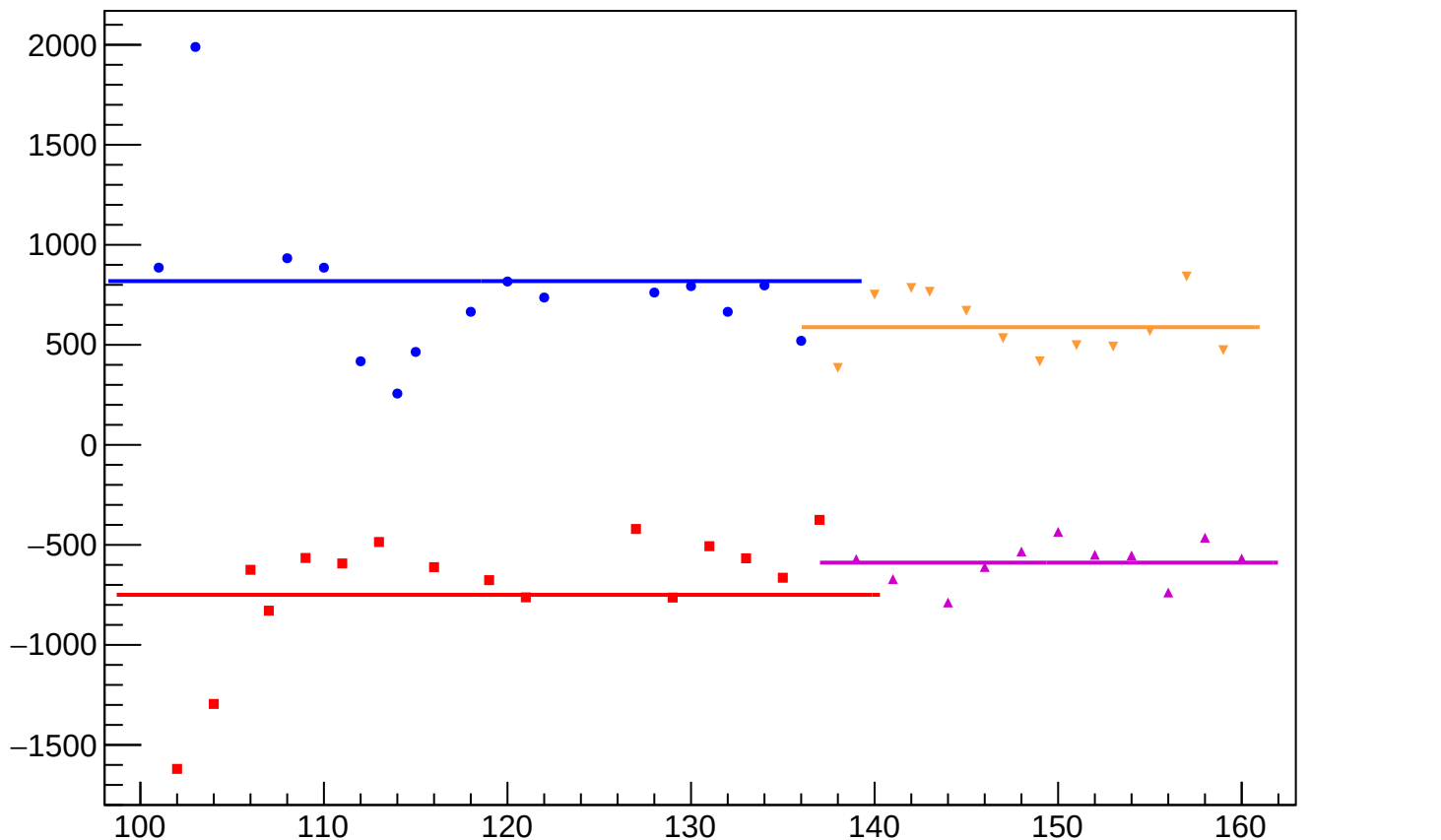
$\chi^2/\text{NDF}$ : 393215150522

# dit\_usr\_coil7\_mean vs Slug, Sign Corrected



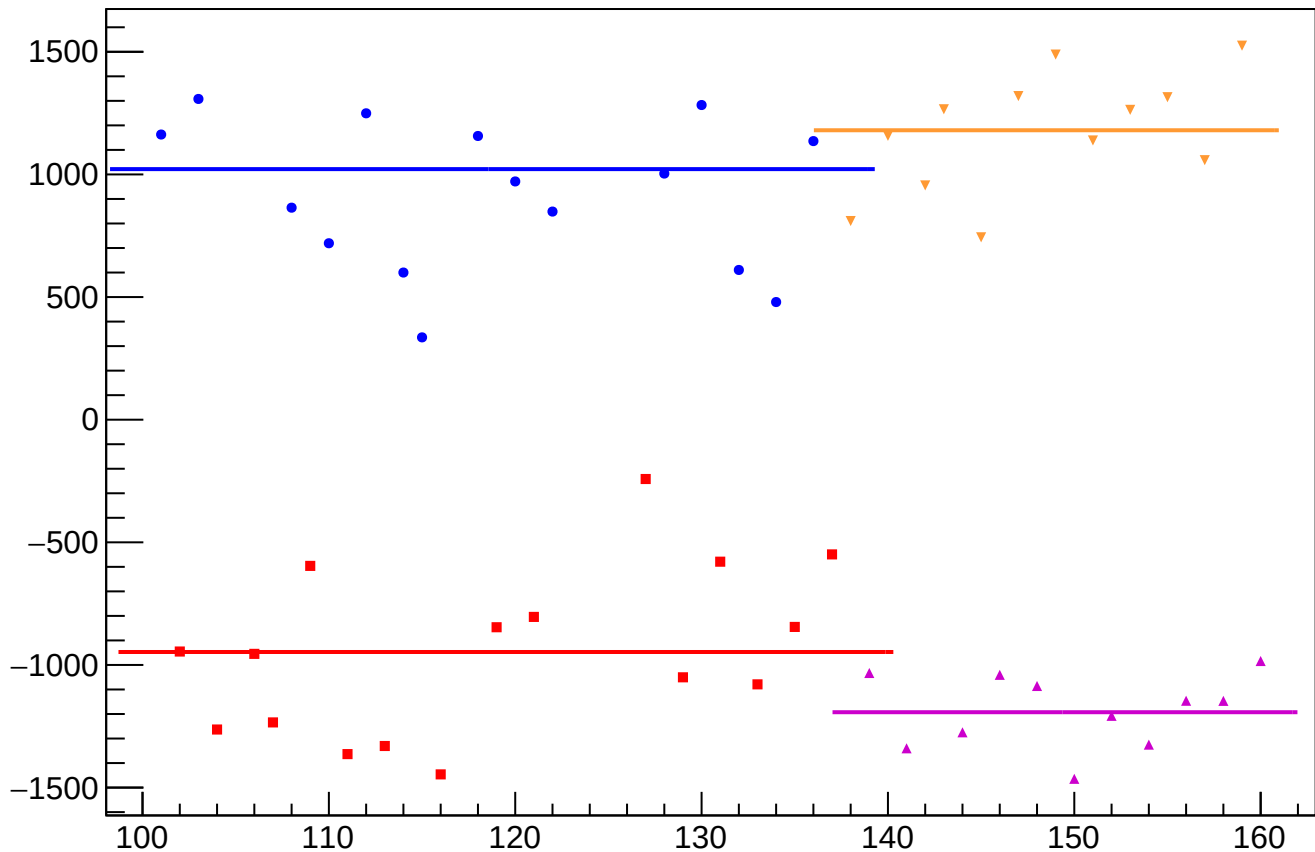
Right In: 25232.229+/-0.000  $\chi^2/\text{NDF}$ : 24534581974772031016304633863538632294400.0/14  
 Left Out: 18630.609+/-0.000  $\chi^2/\text{NDF}$ : 4499157177792733453337123782201790431232.0/11  
 Right Out: -25601.388+/-0.000  $\chi^2/\text{NDF}$ : 24359757587964510827650819847270483099648.0/15  
 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

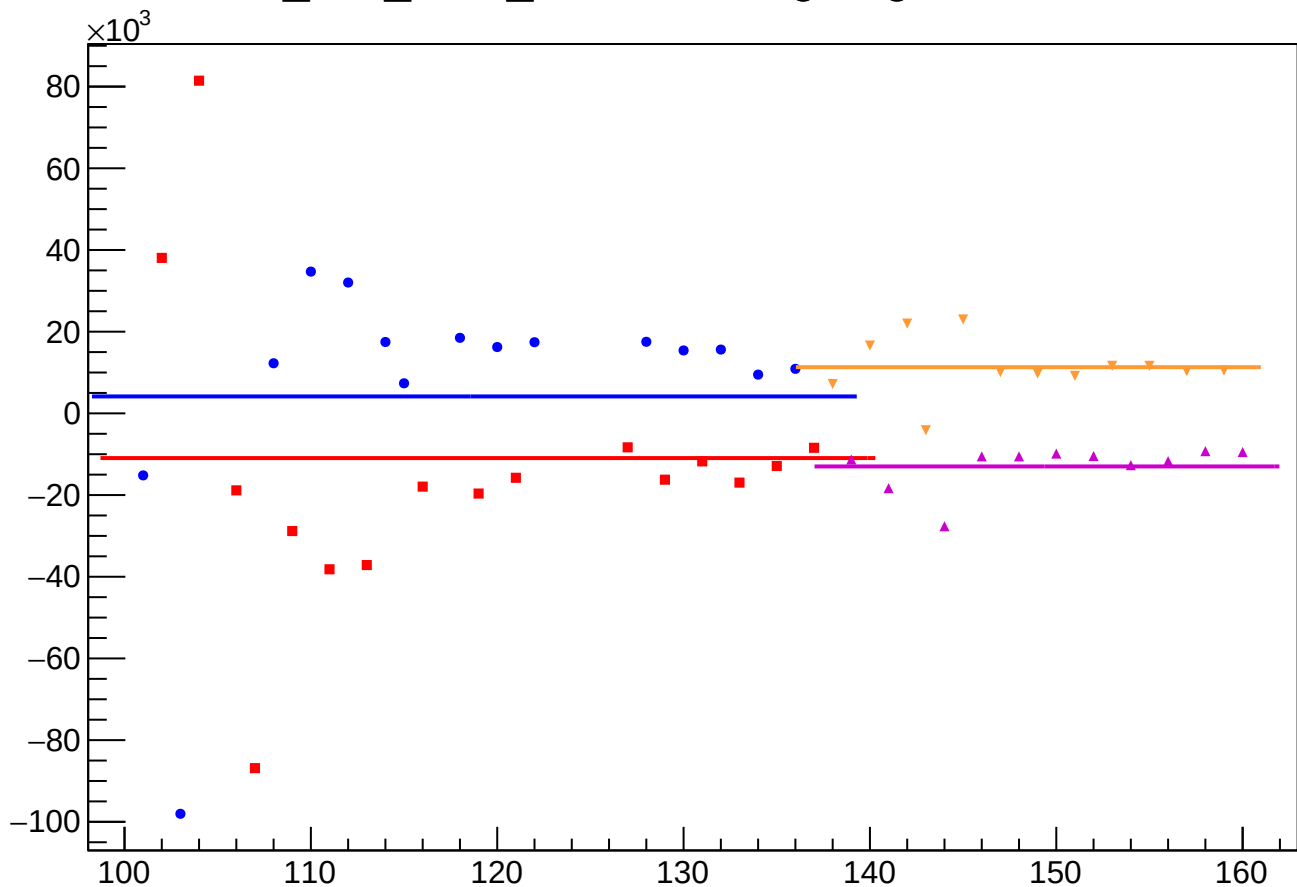
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

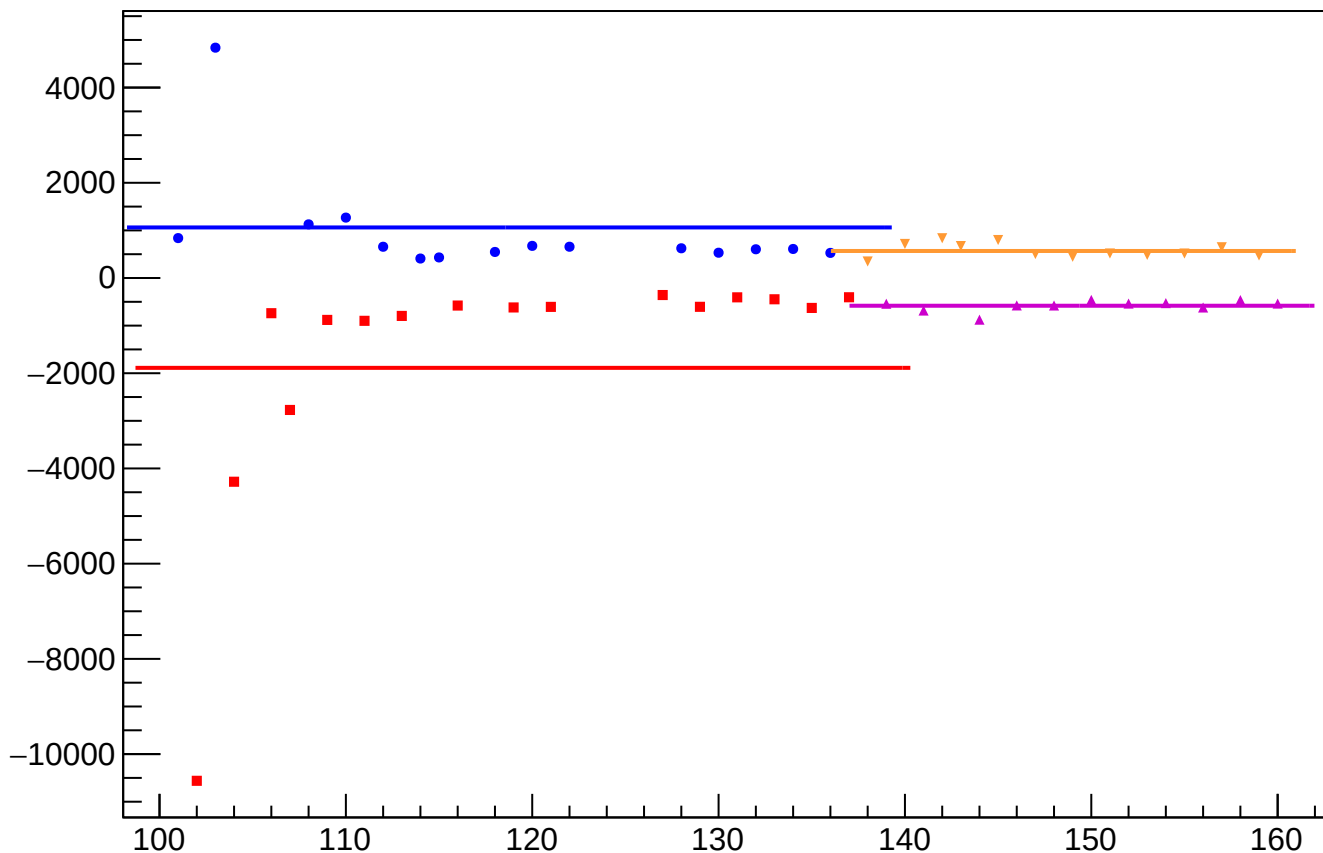
All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_atl1\_coil7\_mean vs Slug, Sign Corrected



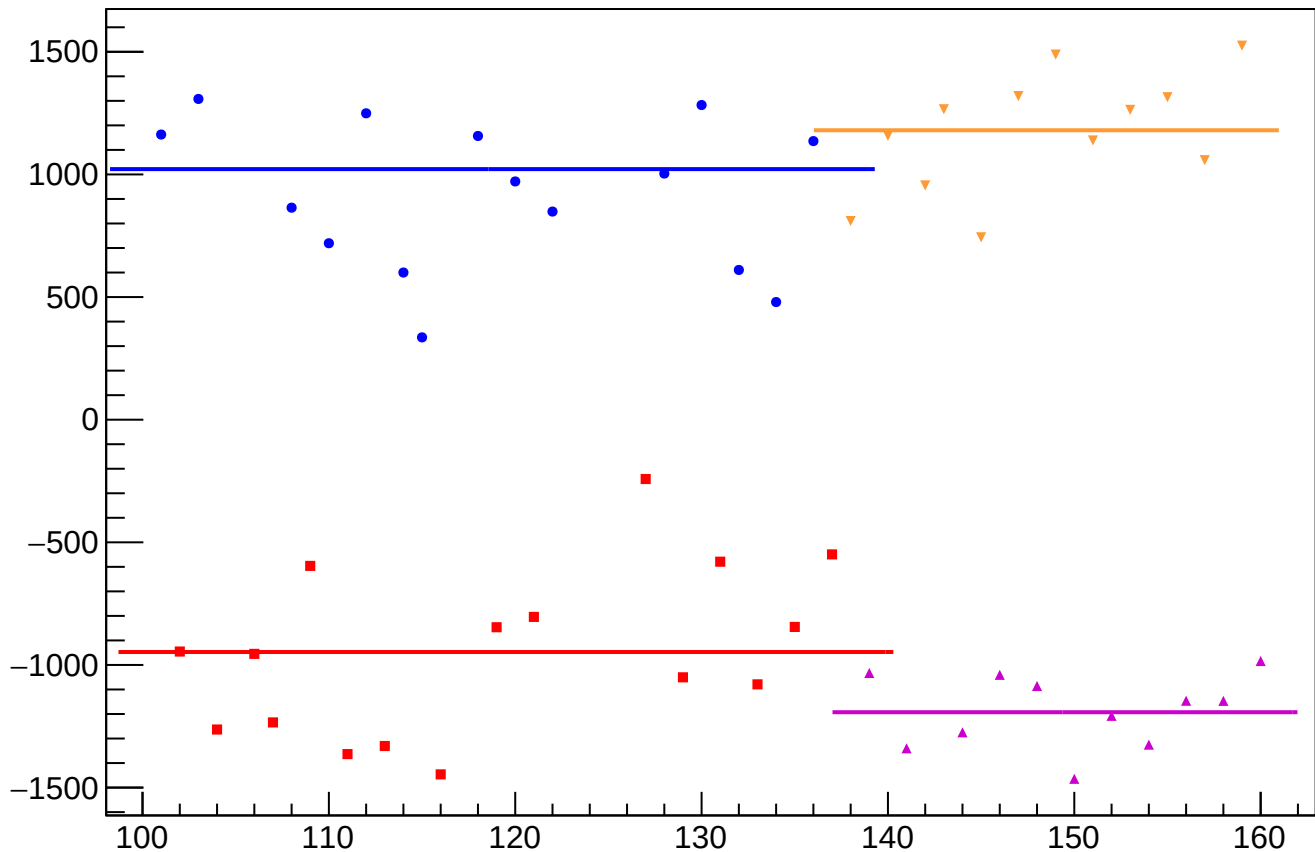
Left:  $-909.343 \pm 0.000$   $\chi^2/\text{NDF}: 334047502497759$   
 Right In:  $4145.268 \pm 0.000$   $\chi^2/\text{NDF}: 763693998395064689637972381933507648159744.0/14$   
 Right:  $-3504.625 \pm 0.000$   $\chi^2/\text{NDF}: 1712578788282$   
 Left Out:  $11307.773 \pm 0.000$   $\chi^2/\text{NDF}: 36281065862244259787300982388178548686848.0/11$   
 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



Right In: 1062.141+/-0.000  $\chi^2/\text{NDF}$ : 952806231926530012715872184655778152448.0/14  
 Left Out: 567.733+/-0.000  $\chi^2/\text{NDF}$ : 17522884747687495168010192179255312384.0/11  
 Right Out: -1887.077+/-0.000  $\chi^2/\text{NDF}$ : 5525872718363845620366029387569058283520.0/15  
 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

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

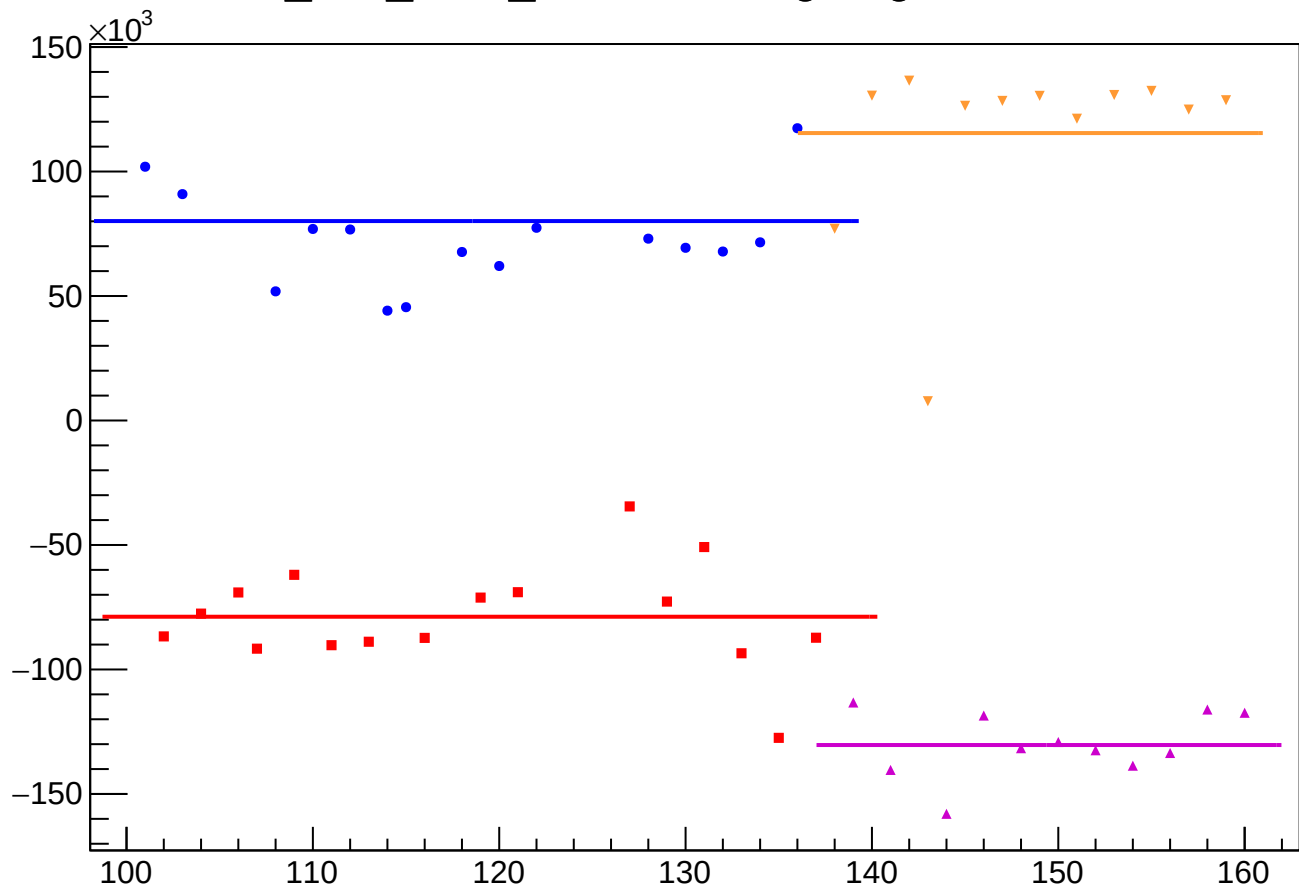
Left In: -1192.687+/-0.000

$\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356



dit\_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

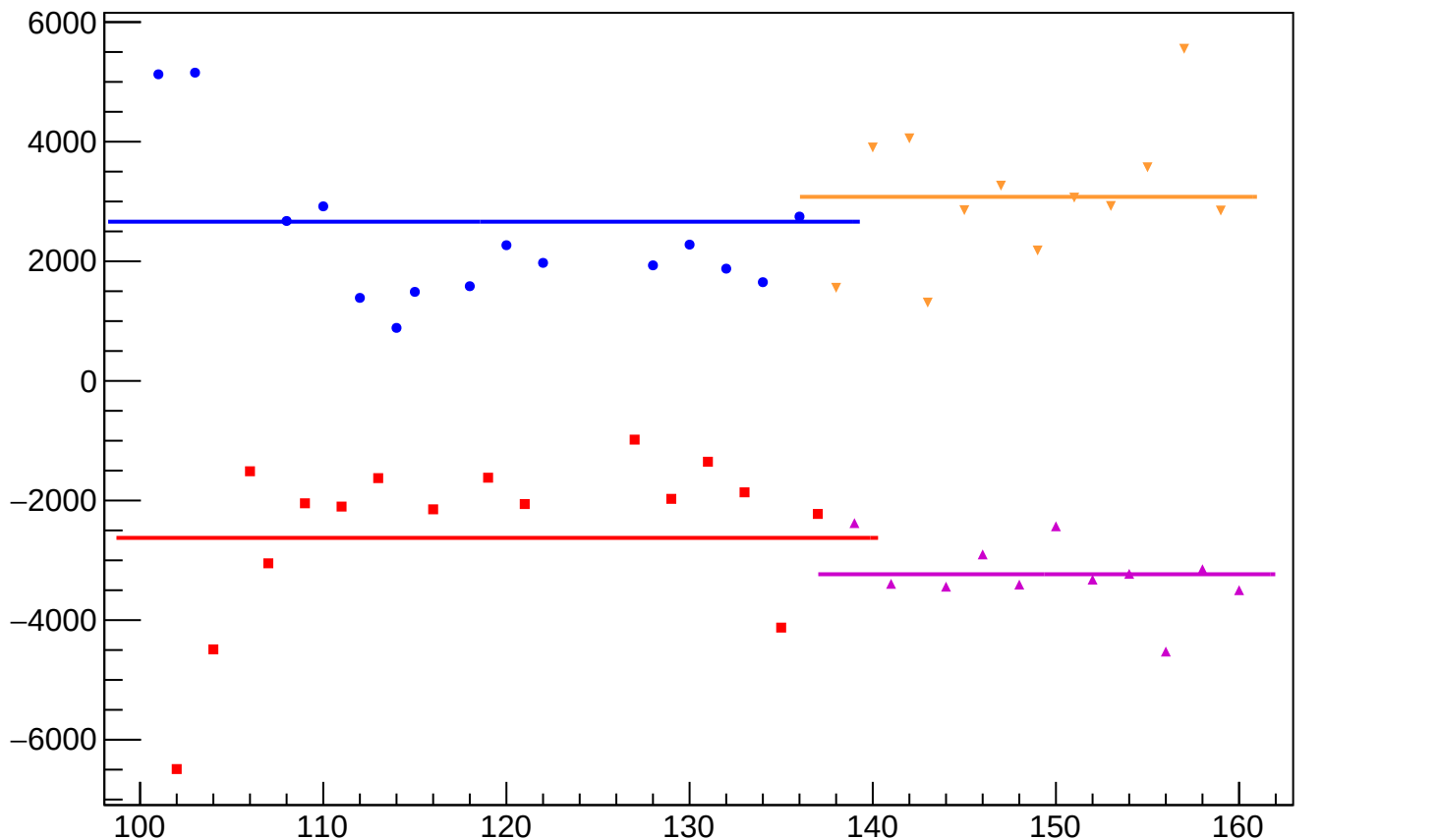
$\chi^2/\text{NDF}$ : 286076919217811099434470442231998185472000.0/15

Left In: -130346.244+/-0.000

$\chi^2/\text{NDF}$ : 148174871015439819820100459279999278514176.0/10

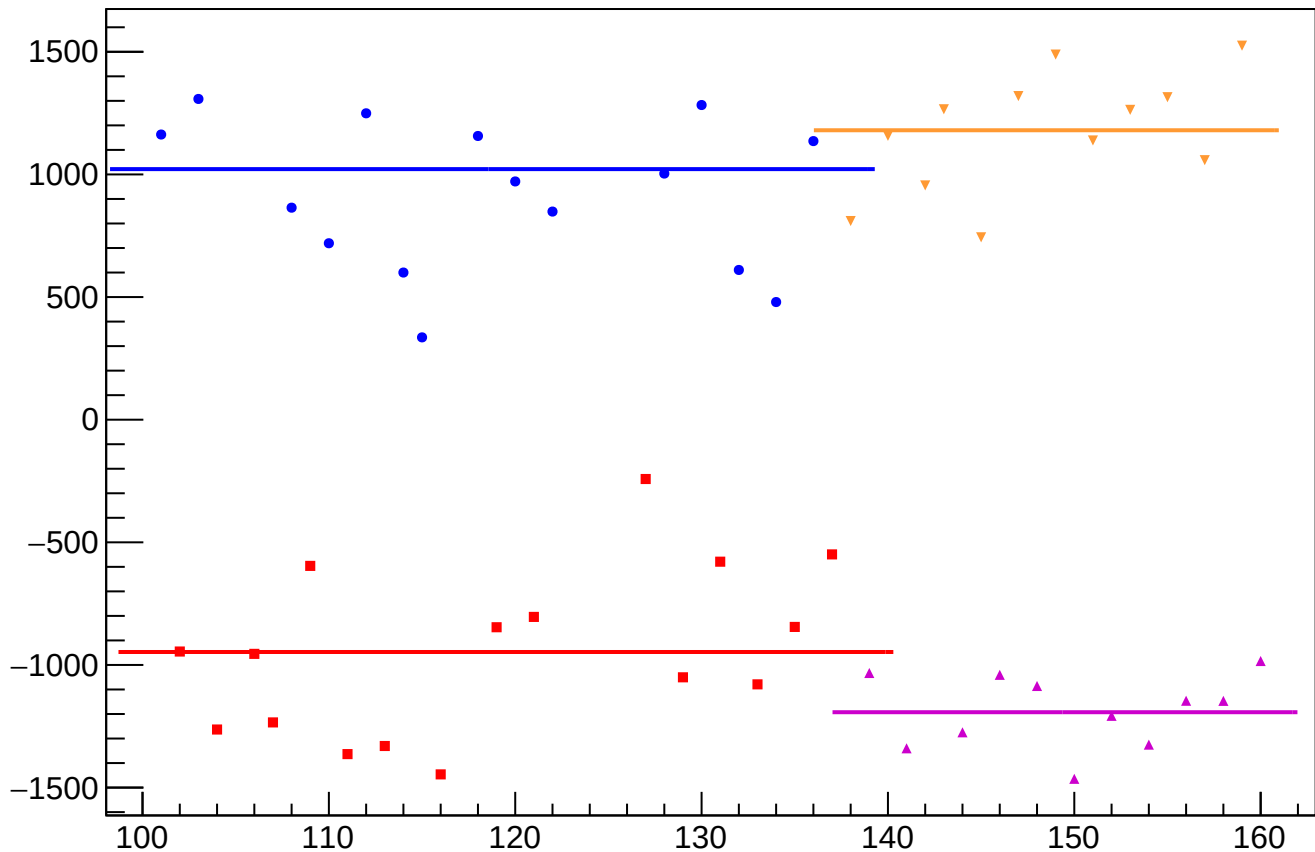
All: -4915.433+/-0.000  $\chi^2/\text{NDF}$ : 3784007443

dit\_atl2\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 2662.183+/-0.000  $\chi^2/\text{NDF}$ : 1031389230165640157864439705583367487488.0/14  
 Left Out: 3077.945+/-0.000  $\chi^2/\text{NDF}$ : 1073709891492389198093936322660595138560.0/11  
 Right Out: -2624.696+/-0.000  $\chi^2/\text{NDF}$ : 1566705216866534713590934835660406652928.0/15  
 Left In: -3232.879+/-0.000  $\chi^2/\text{NDF}$ : 275721007613891276741007240283331493888.0/10  
 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

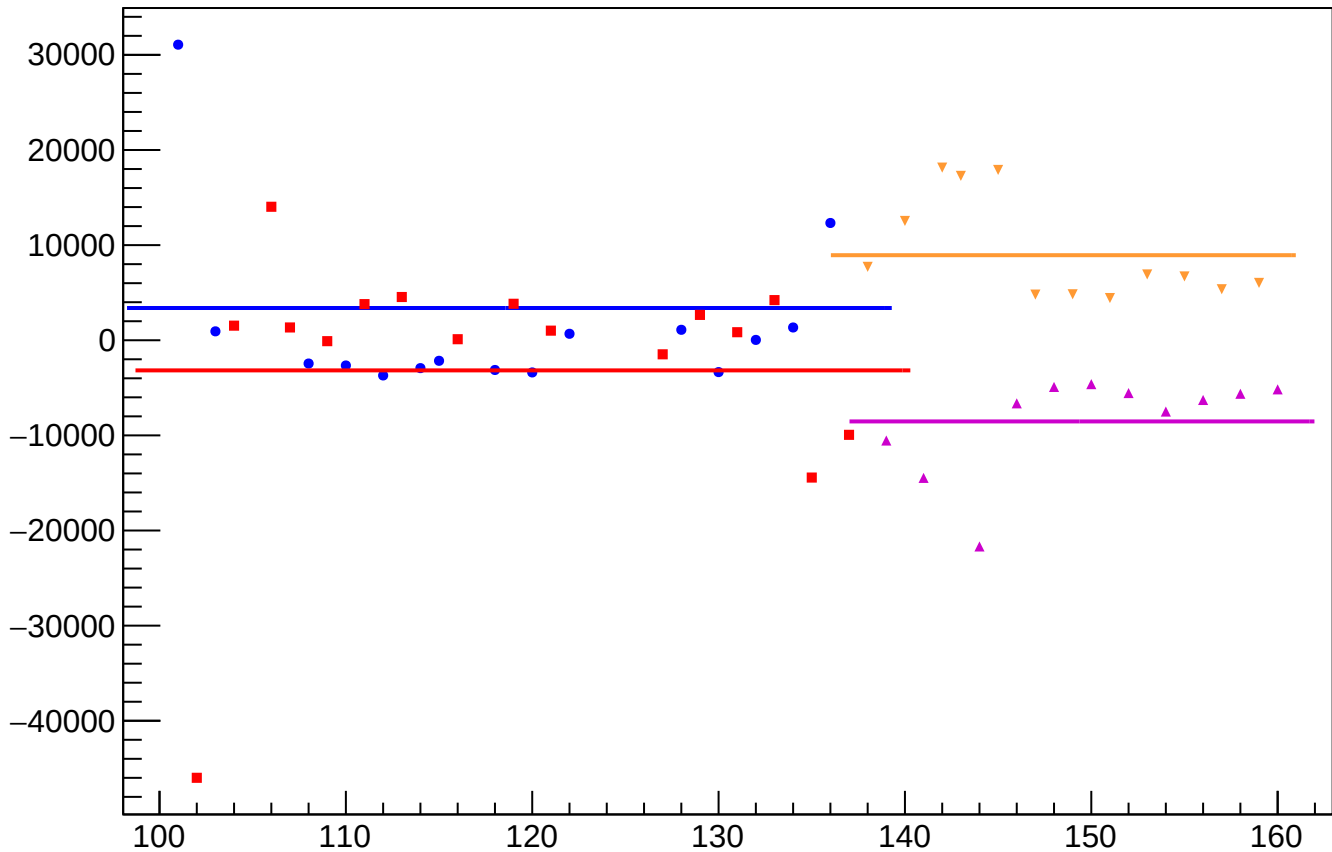
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

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

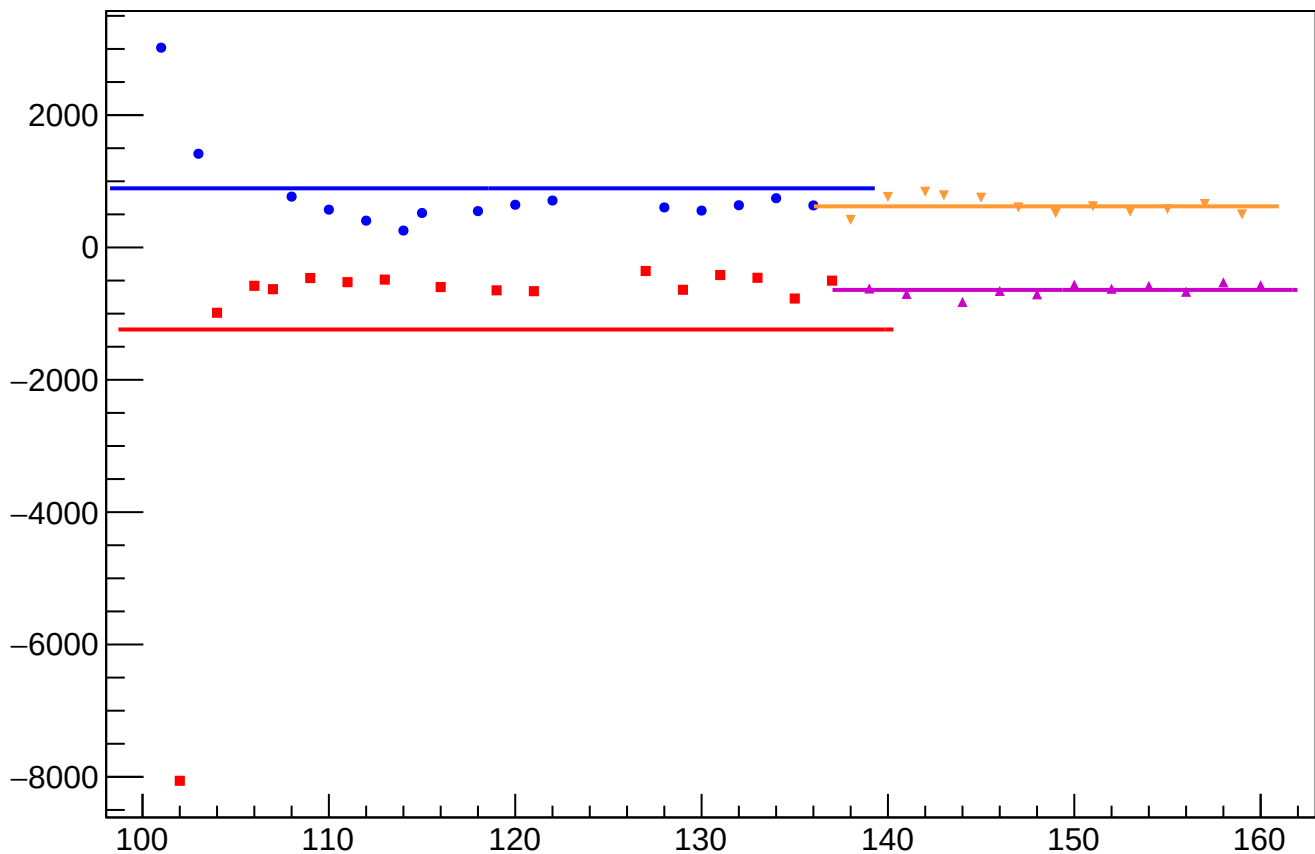
$\chi^2/\text{NDF}$ : 137753886677241144460462531881687568089088.0/15

Left In: -8532.821+/-0.000

$\chi^2/\text{NDF}$ : 24299515949380224586324737558095226470400.0/10

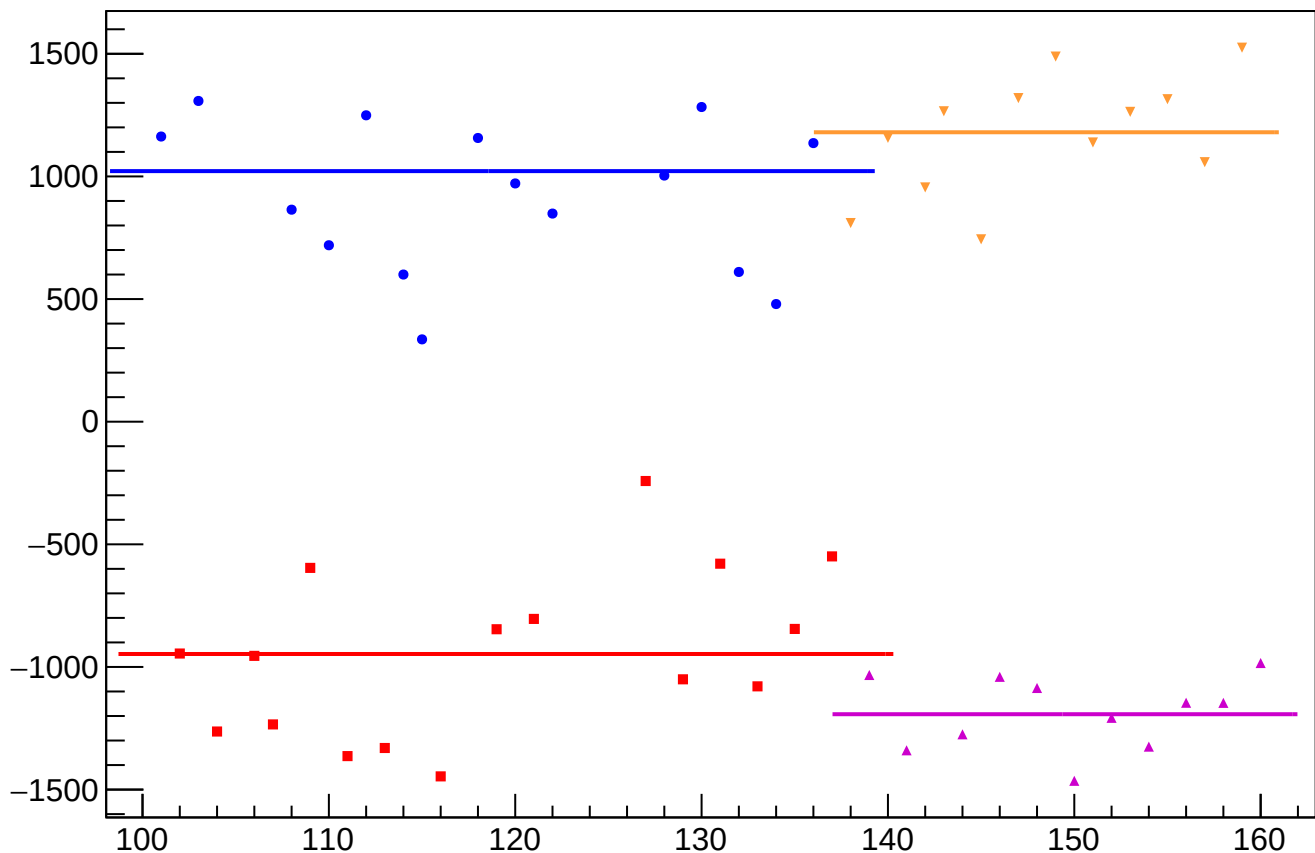
All: 119.281+/-0.000  $\chi^2/\text{NDF}$ : 405144112898

dit\_atr1\_coil7\_err\_mean vs Slug, Sign Corrected



Right In: 893.683+/-0.000  $\chi^2/\text{NDF}$ : 334583619078631008932404228227359309824.0/14  
 Left Out: 621.395+/-0.000  $\chi^2/\text{NDF}$ : 13220761349033595391183034930255888384.0/11  
 Right Out: -1239.298+/-0.000  $\chi^2/\text{NDF}$ : 2970990859486483990408108918937565003776.0/15  
 Left In: -641.490+/-0.000  $\chi^2/\text{NDF}$ : 6047241871046466320943152926715543552.0/10  
 All: -86.047+/-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

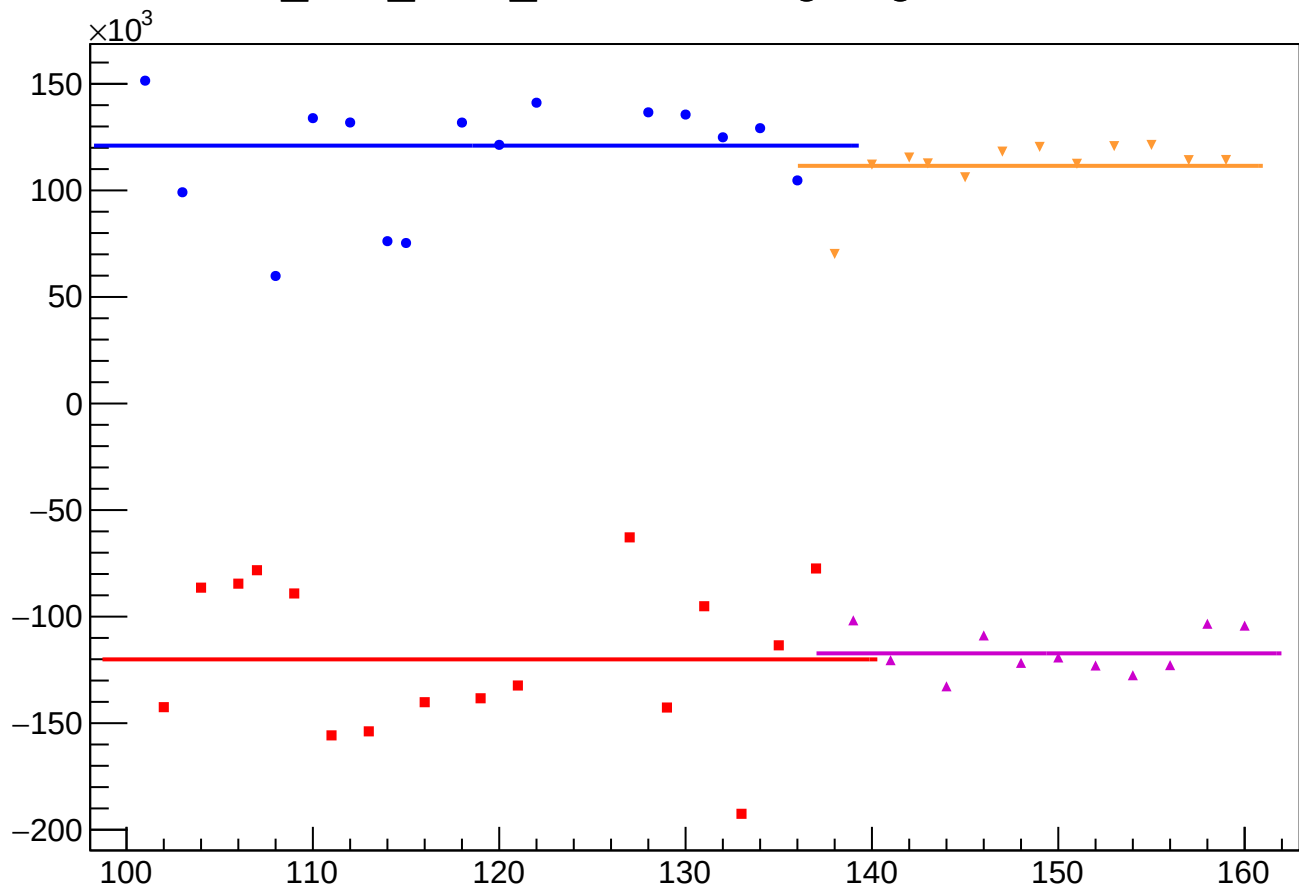
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

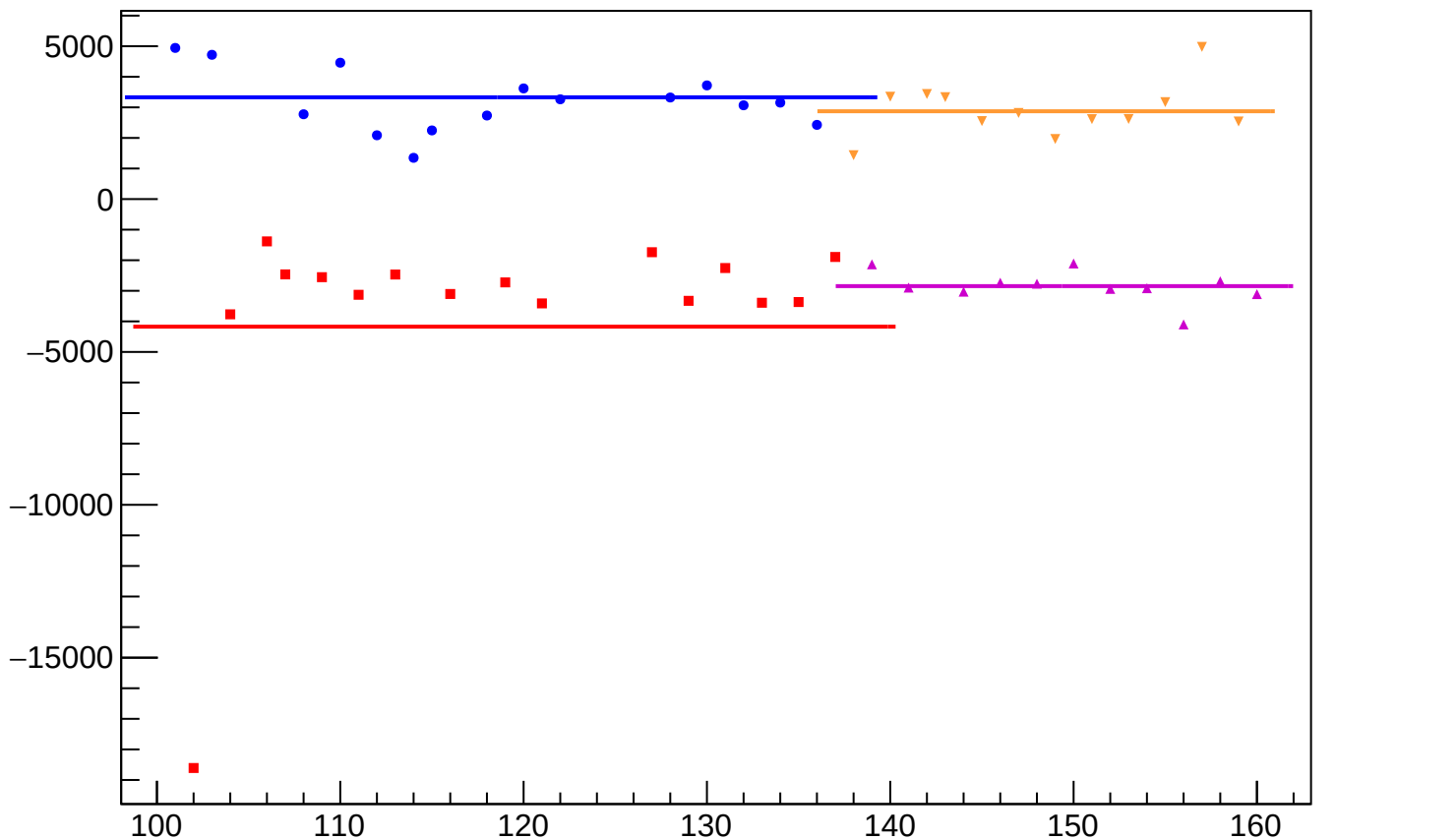
All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_atr2\_coil7\_mean vs Slug, Sign Corrected



Right In: 121016.482 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 358713856404303554987784975983609668173824.0/14  
 Left Out: 111531.681 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 162724299829921950370834246417372913074176.0/11  
 Right Out: -120060.693 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 828419782346707601448620310014135952736256.0/15  
 Left In: -117237.465 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 92299527706158063096544434206678792011776.0/10  
 All: -2513.712 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 4461091057

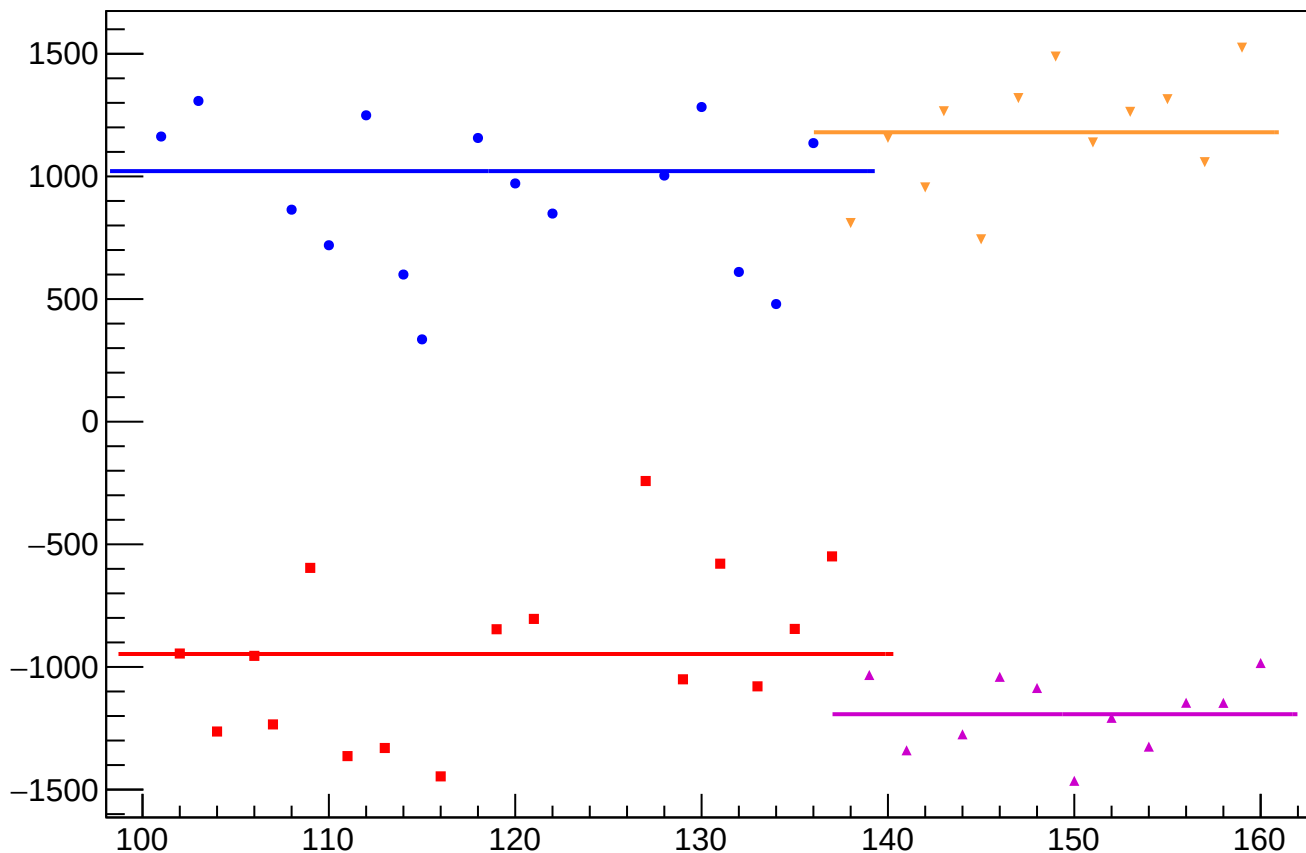
dit\_atr2\_coil7\_err\_mean vs Slug, Sign Corrected



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

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

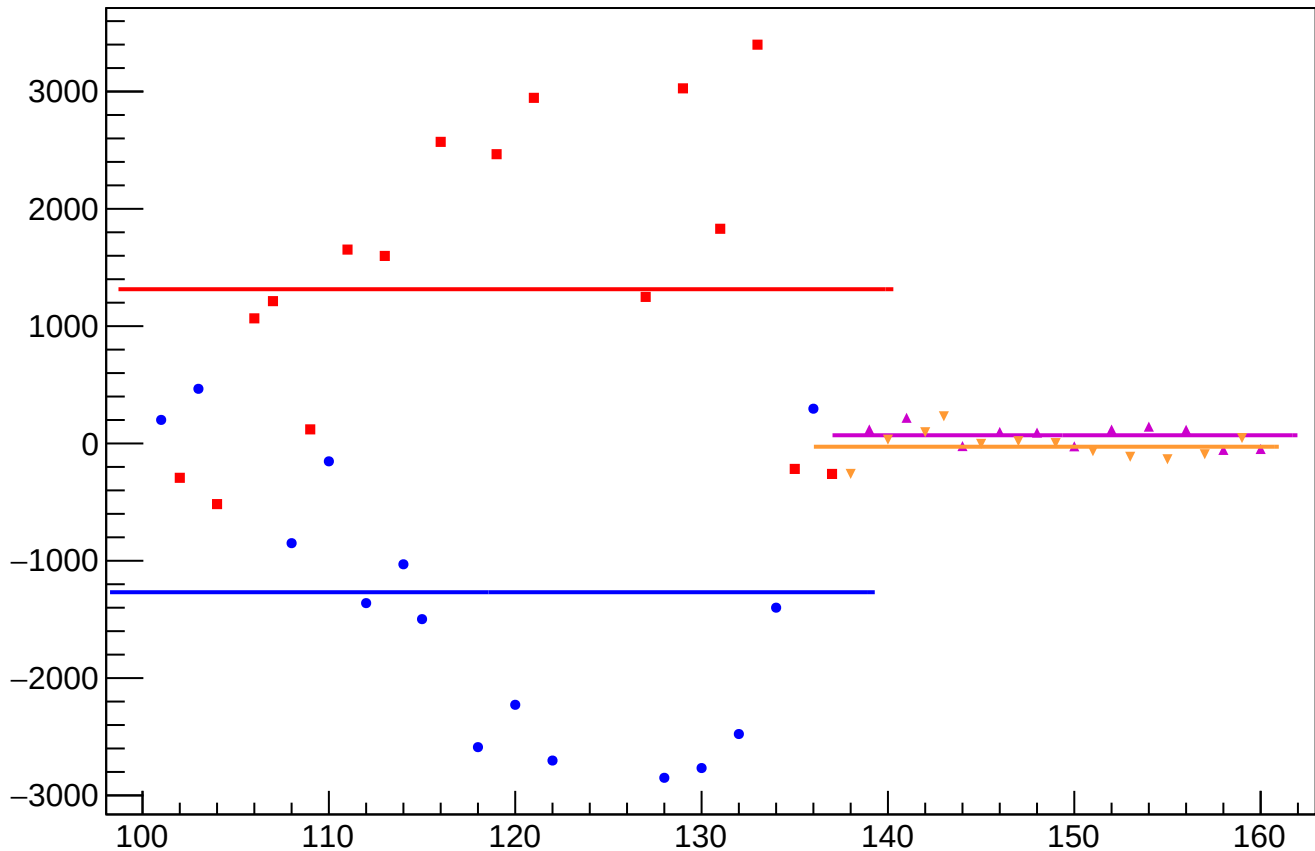
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

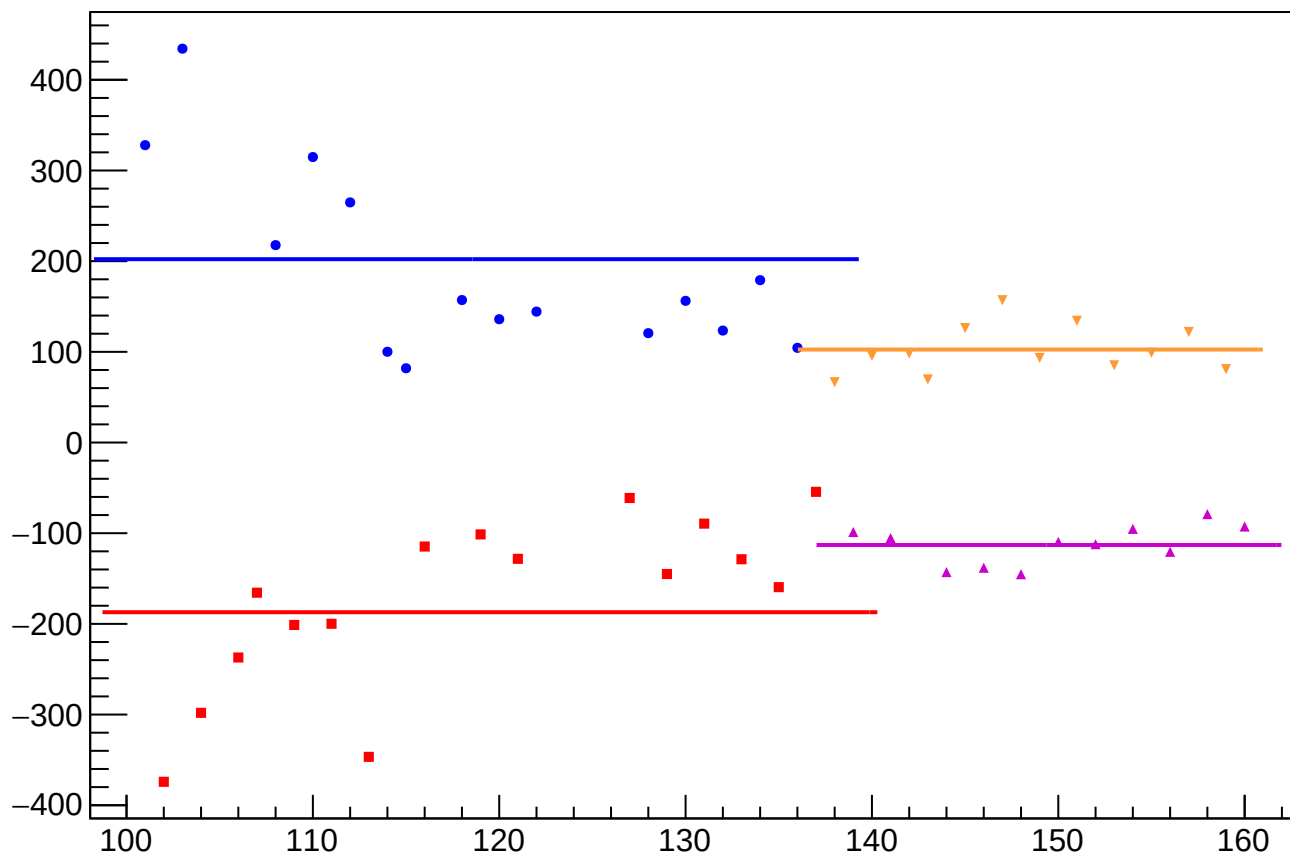
All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

dit\_sam1\_coil7\_mean vs Slug, Sign Corrected



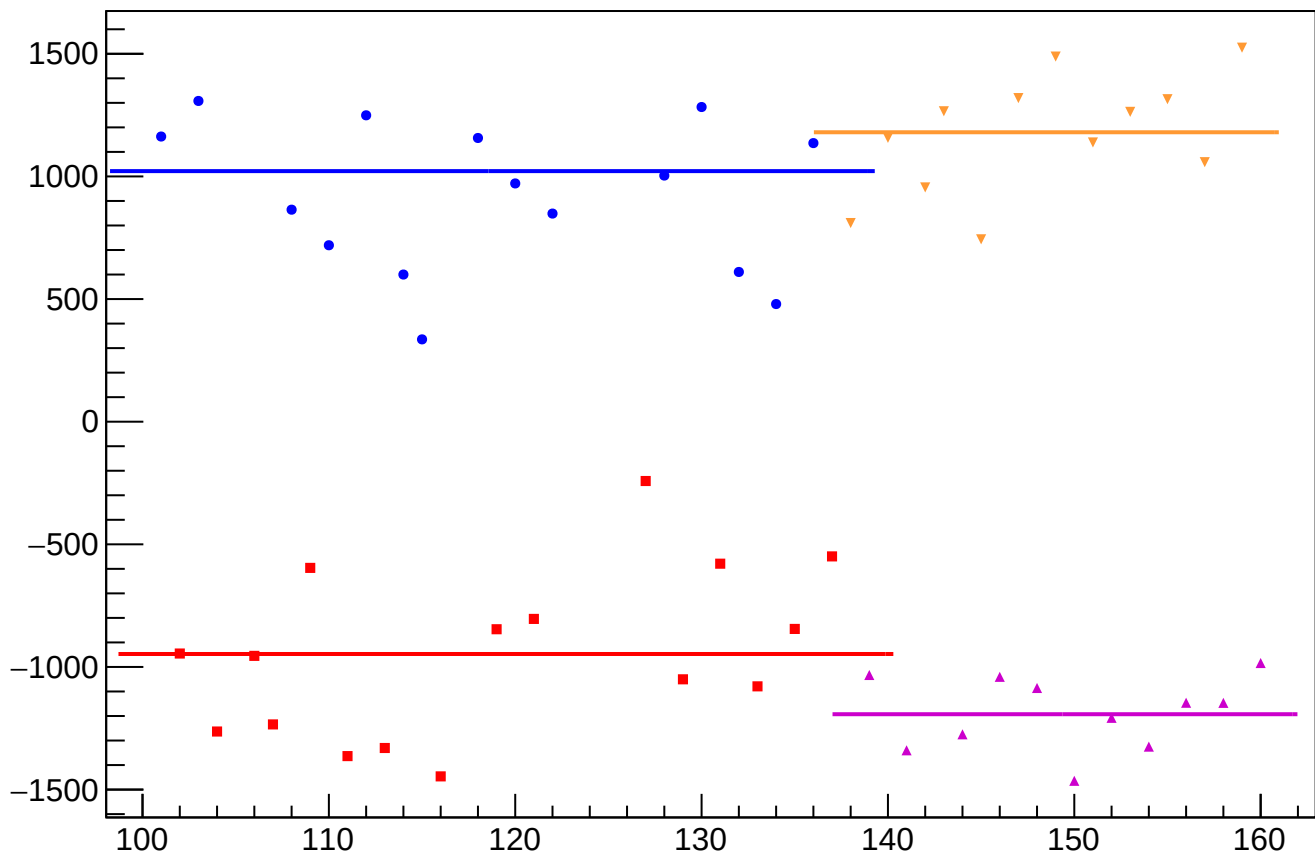
Left: 21.337+/-0.000  $\chi^2/\text{NDF}$ : 23678457867018899  
 Right In: -1268.061+/-0.000  $\chi^2/\text{NDF}$ : 1092280760288833856070470490800647045120.0/14  
 Right: 41.017+/-0.000  $\chi^2/\text{NDF}$ : 4385100658196815  
 Left Out: -27.745+/-0.000  $\chi^2/\text{NDF}$ : 12401866293776389782406733193877127168.0/11  
 In: -482.133+/-0.000  $\chi^2/\text{NDF}$ : 1781620225198016  
 Right Out: 1314.767+/-0.000  $\chi^2/\text{NDF}$ : 1098471313864079013714609379653260935168.0/15  
 Out: 538.641+/-0.000  $\chi^2/\text{NDF}$ : 1805860646471756  
 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

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

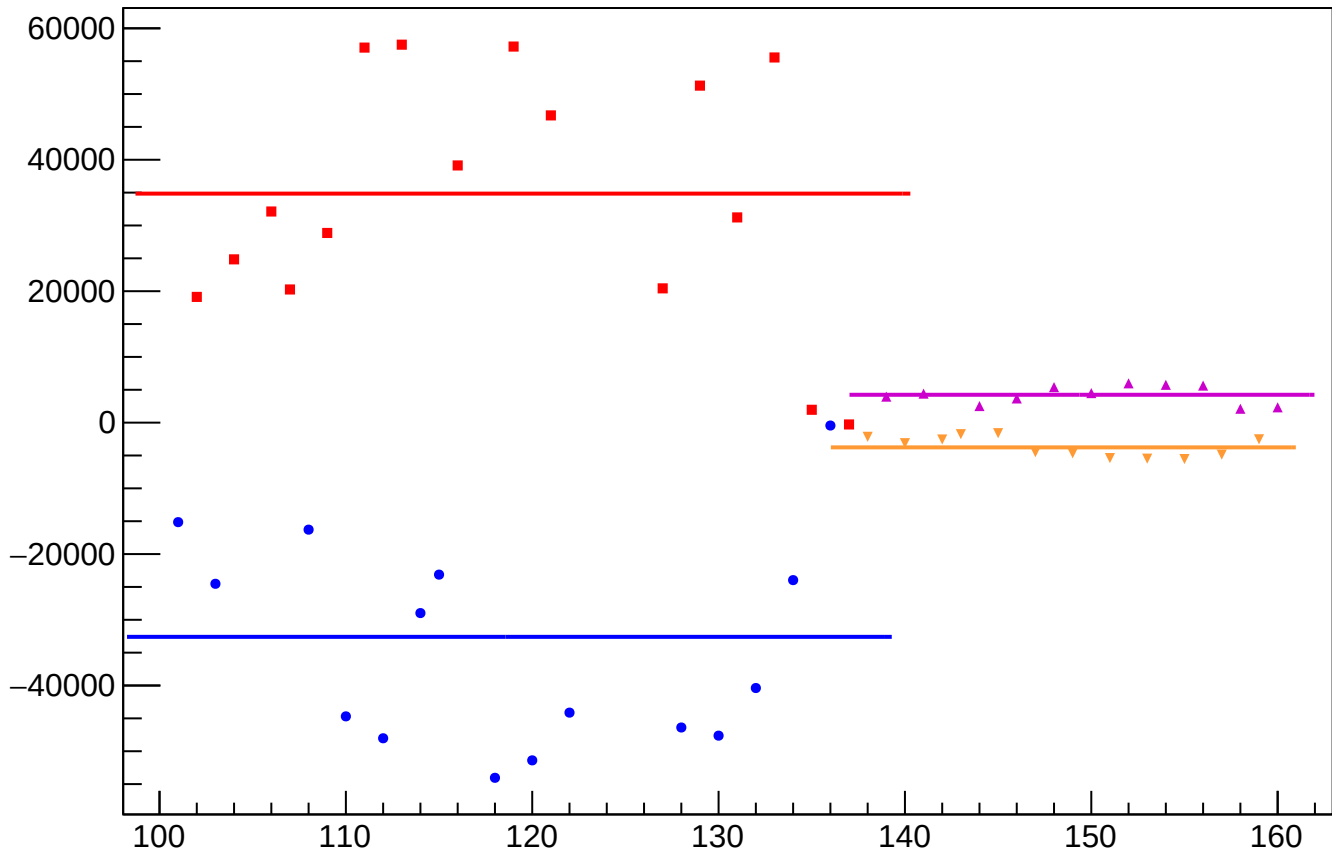
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

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\_sam2\_coil7\_mean vs Slug, Sign Corrected



Right In: -32594.962 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 209150369207000564489724529020922520141824.0/14

Left Out: -3764.764 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 1969097651481267133720686593450373545984.0/11

Right Out: 34848.046 $\pm$ 0.000

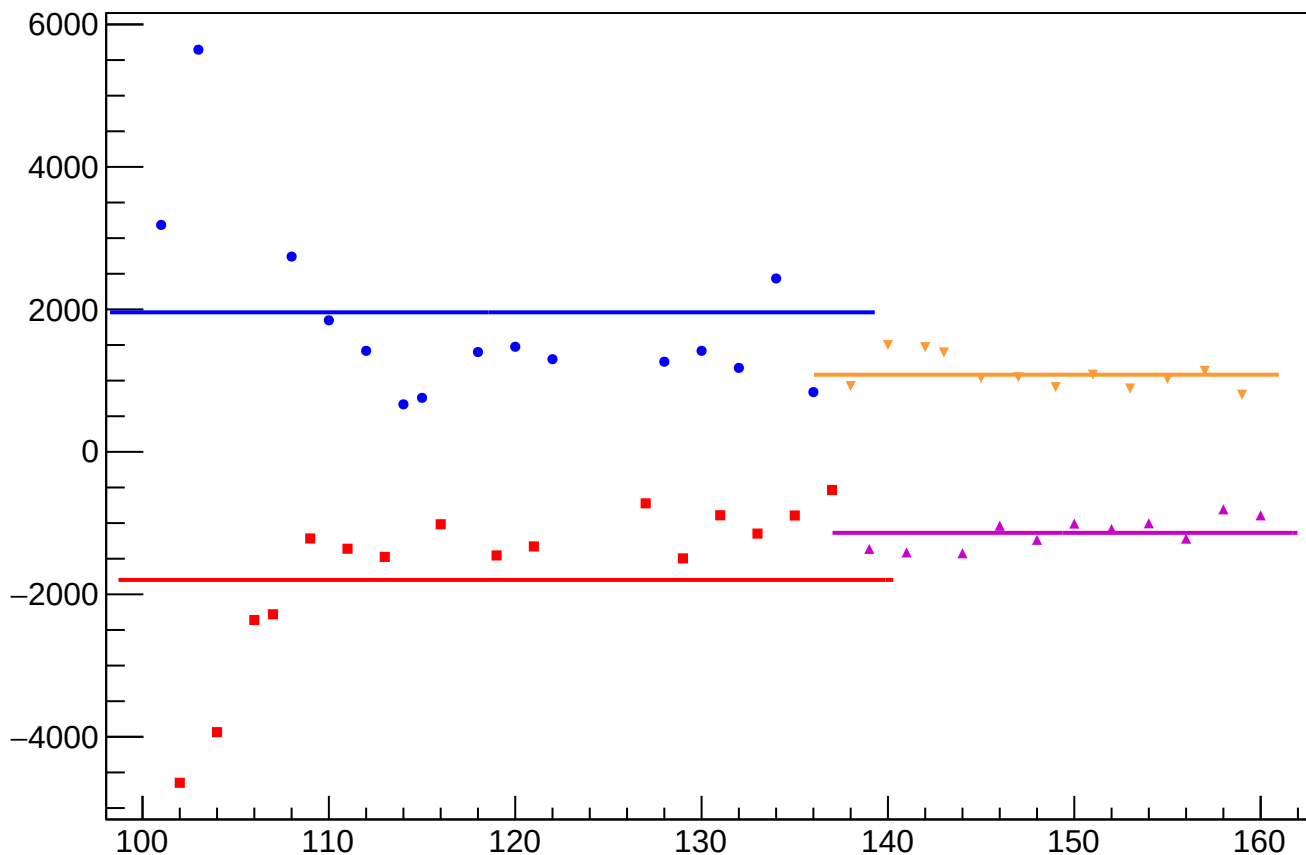
$\chi^2/\text{NDF}$ : 221127702024811719232559434097324967591936.0/15

Left In: 4238.758 $\pm$ 0.000

$\chi^2/\text{NDF}$ : 1676258877466067471746283067125033598976.0/10

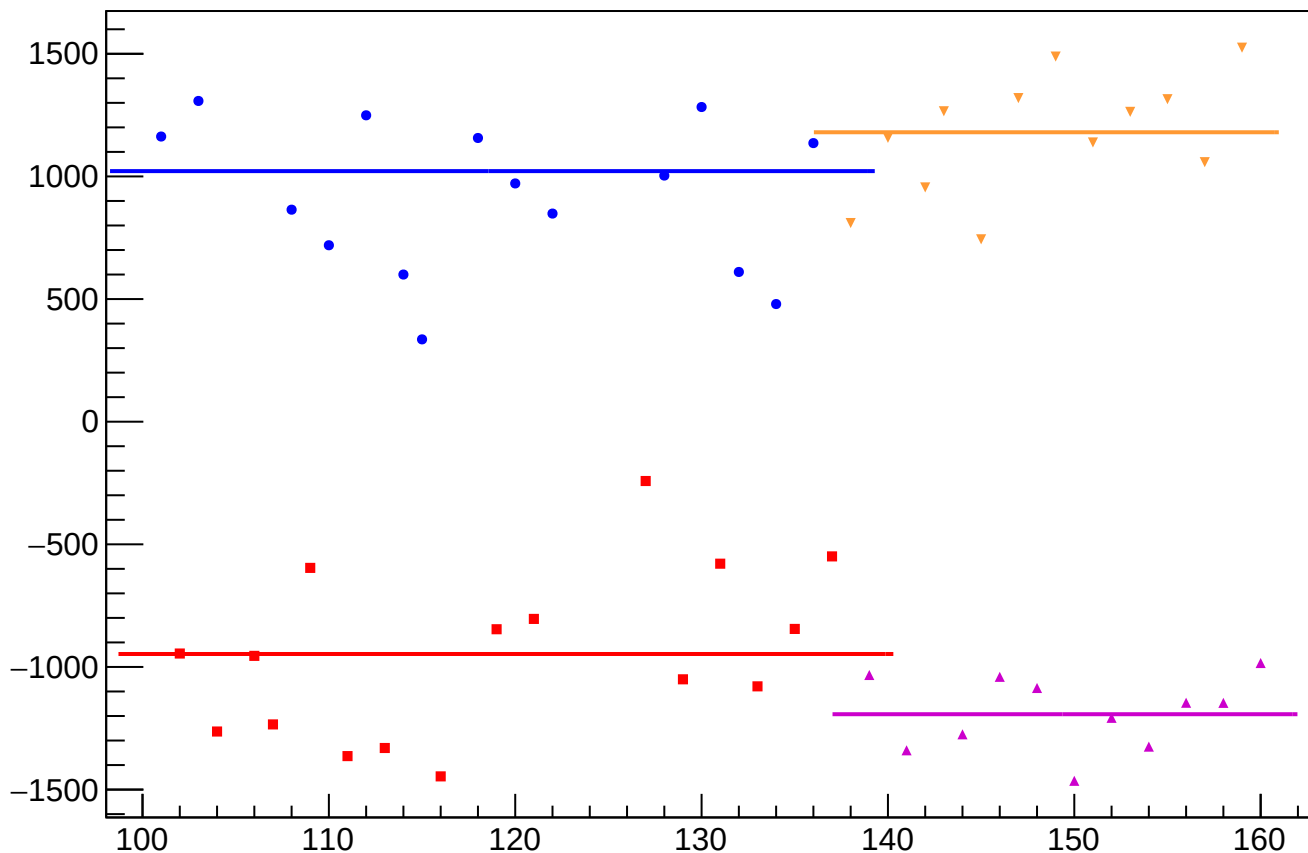
All: 813.296 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 196090705413

# dit\_sam2\_coil7\_err\_mean vs Slug, Sign Corrected



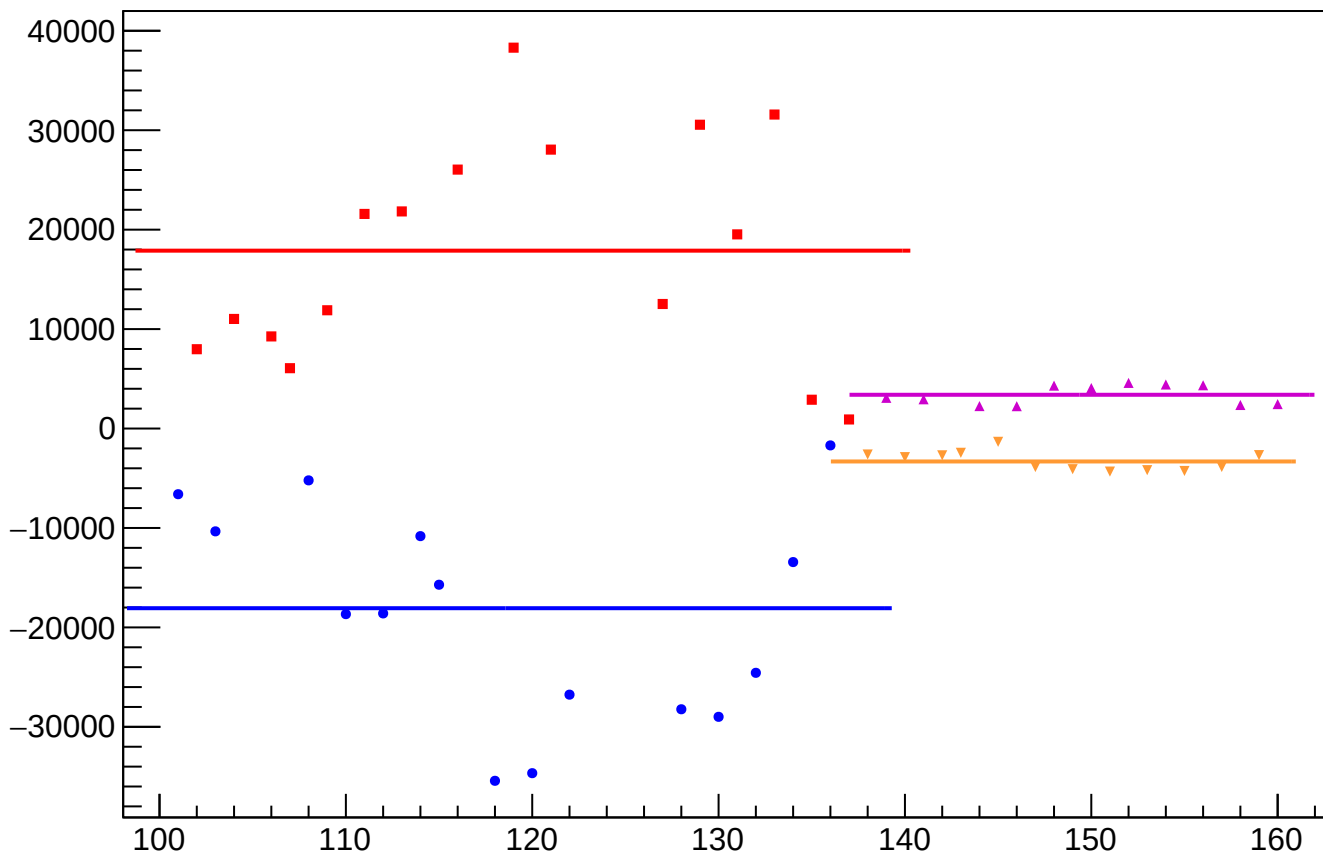
Right In: 1958.835 $\pm$ 0.000  $\chi^2$ /NDF: 1189322999631358431600643692981190131712.0/14  
 Left Out: 1082.769 $\pm$ 0.000  $\chi^2$ /NDF: 42435467592938018504955570075058831360.0/11  
 Right Out: -1797.392 $\pm$ 0.000  $\chi^2$ /NDF: 955096623879958195657195074614240215040.0/15  
 Left In: -1136.738 $\pm$ 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

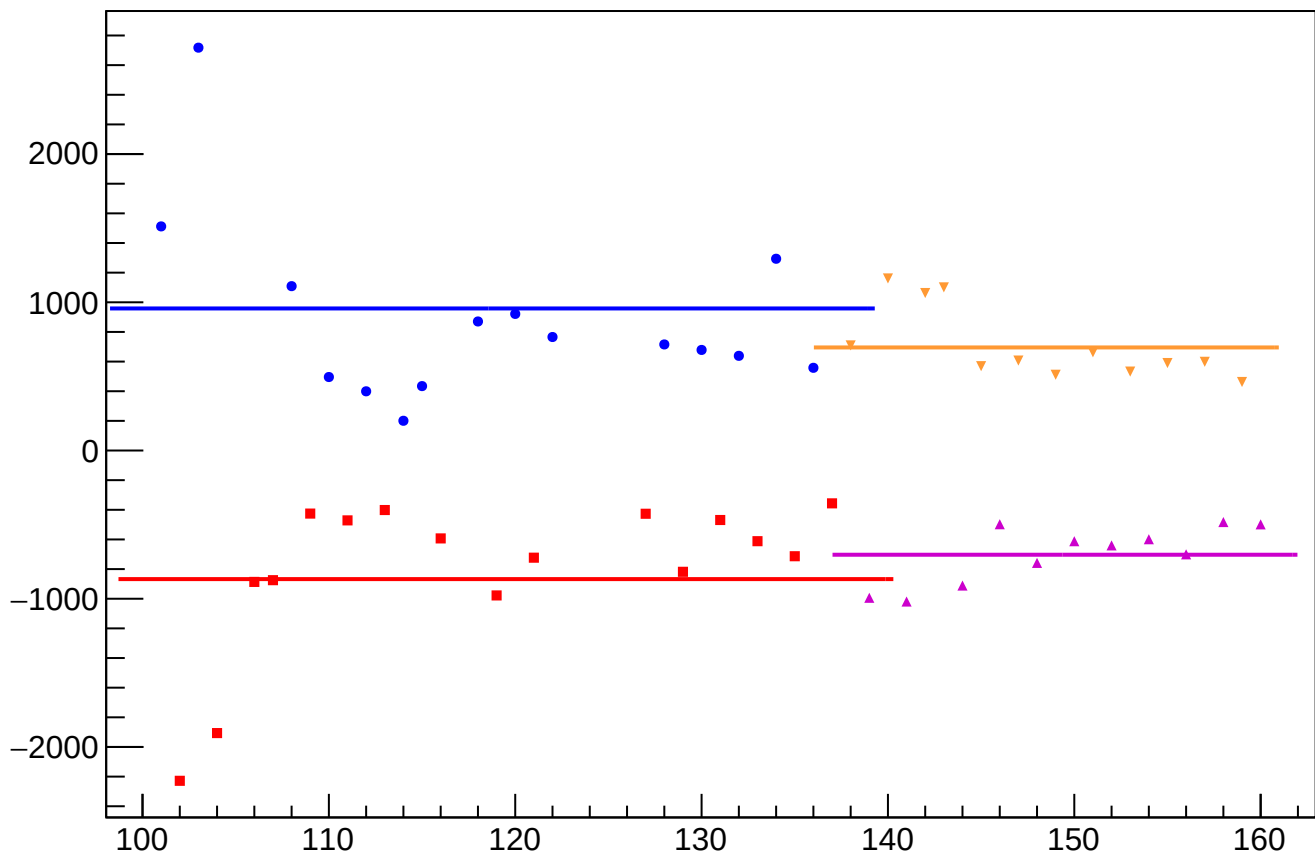
# dit\_sam3\_coil7\_mean vs Slug, Sign Corrected



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

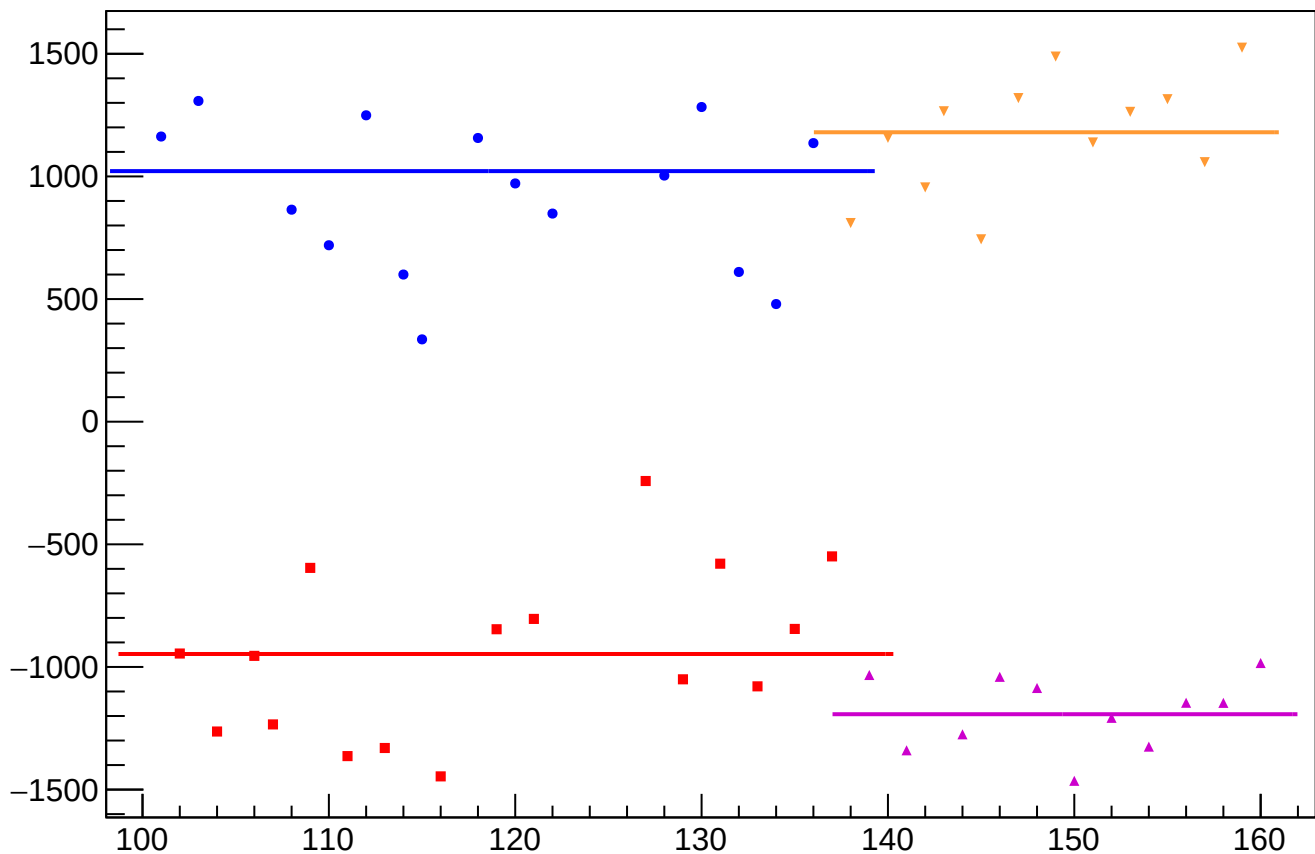


dit\_sam3\_coil7\_err\_mean vs Slug, Sign Corrected



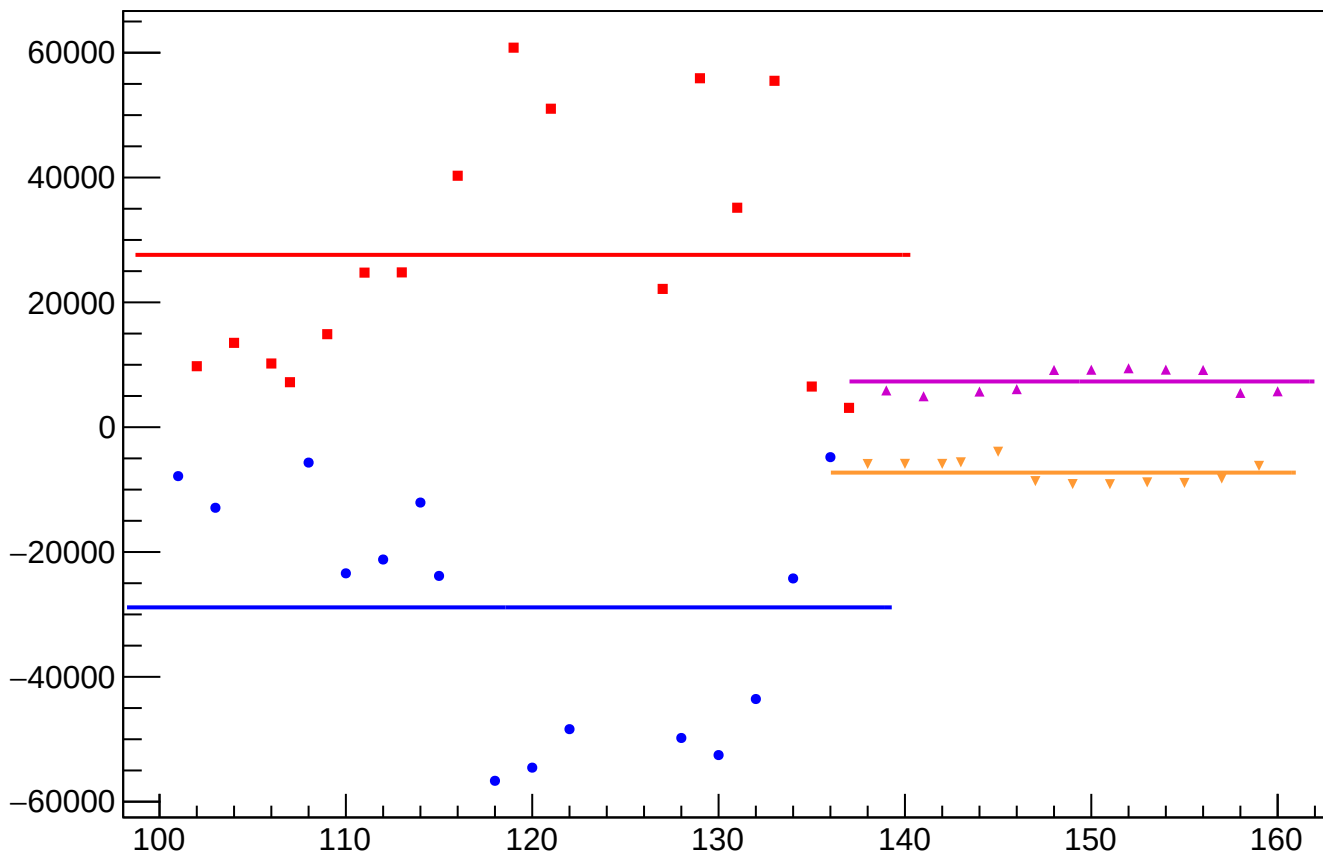
Right In: 958.411+/-0.000  $\chi^2/\text{NDF}$ : 264733105058522822278137197070739570688.0/14  
 Left Out: 695.356+/-0.000  $\chi^2/\text{NDF}$ : 48004139750379541003610269806183317504.0/11  
 Right Out: -867.538+/-0.000  $\chi^2/\text{NDF}$ : 216129851545166714122252317604488151040.0/15  
 Left In: -703.169+/-0.000  $\chi^2/\text{NDF}$ : 32040531861451426969939944767733366784.0/10  
 All: 9.254+/-0.000  $\chi^2/\text{NDF}$ : 25575818346098

dit\_sam3\_coil7\_Ndata\_mean vs Slug, Sign Corrected



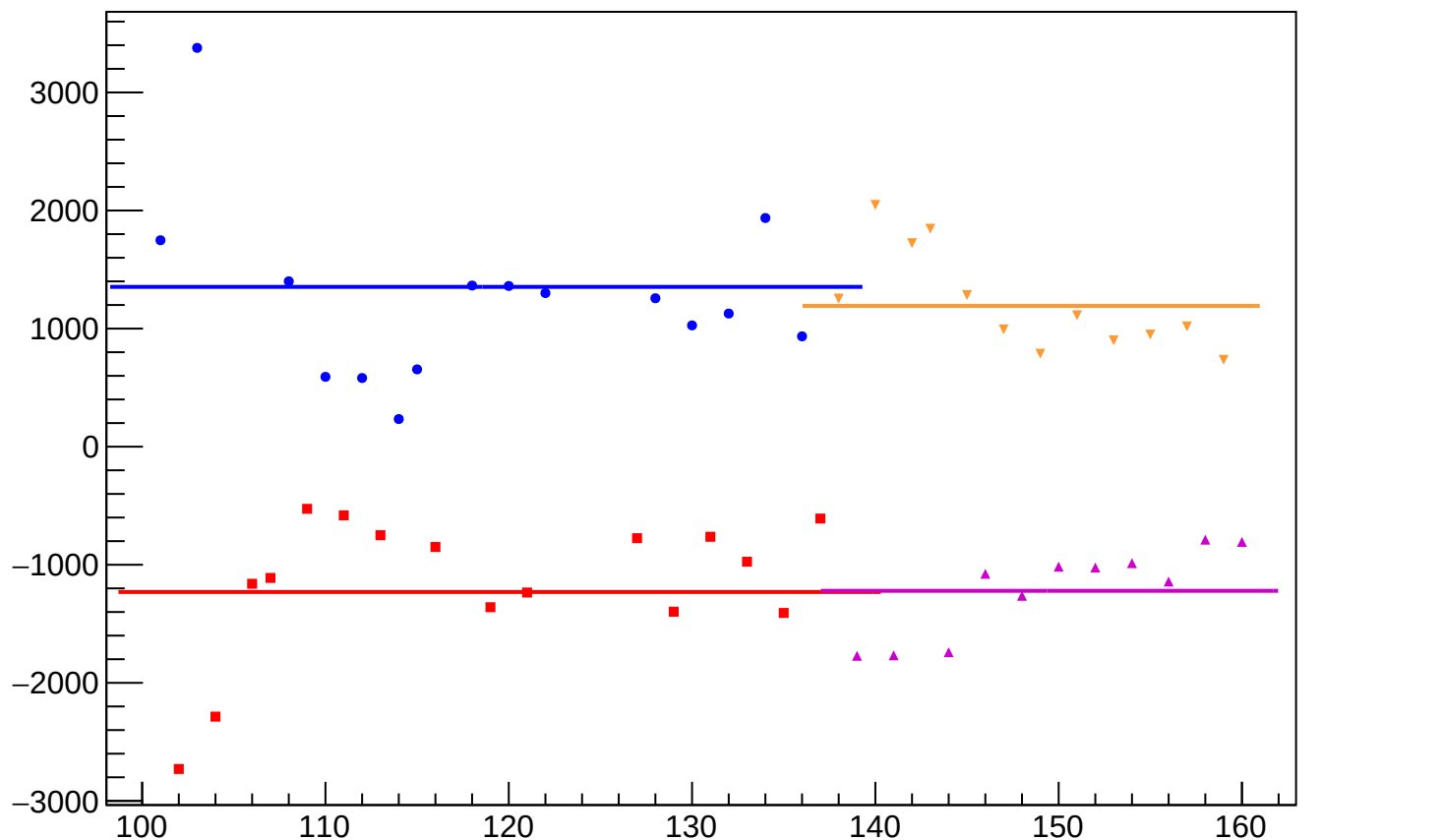
Left: -12.747 +/- 0.000  $\chi^2/\text{NDF}$ : 2657013306605046  
 Right: 23.805 +/- 0.000  $\chi^2/\text{NDF}$ : 1383338523153511  
 In: -279.065 +/- 0.000  $\chi^2/\text{NDF}$ : 1929090788254319  
 Out: 282.649 +/- 0.000  $\chi^2/\text{NDF}$ : 1863497273761245  
 All: 2.504 +/- 0.000  $\chi^2/\text{NDF}$ : 40413764320356

# dit\_sam4\_coil7\_mean vs Slug, Sign Corrected



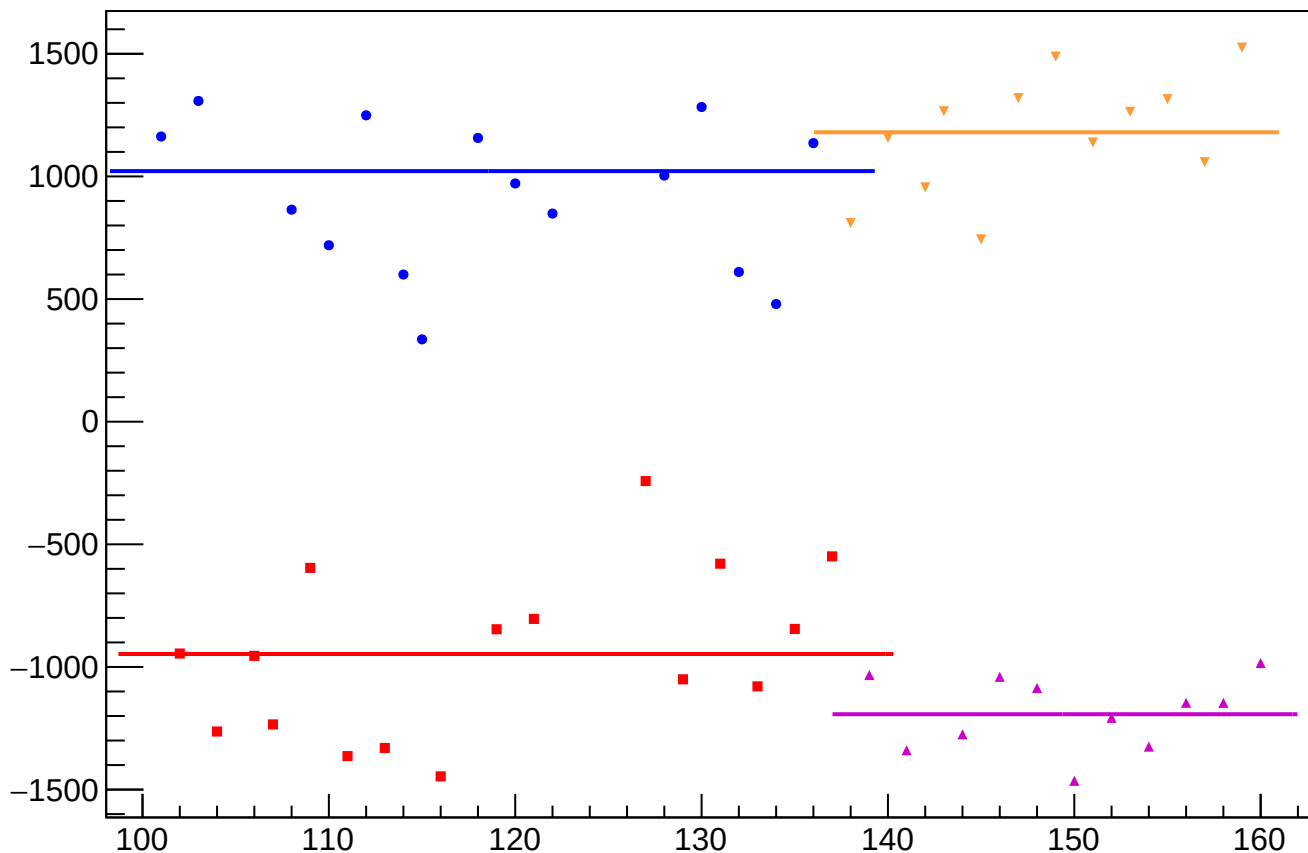
Right In: -28868.624+/-0.000  $\chi^2/\text{NDF}$ : 261450701095727362961367657926584124309504.0/14  
 Left Out: -7277.886+/-0.000  $\chi^2/\text{NDF}$ : 2738867305918098068317388239234104557568.0/11  
 Right Out: 27610.848+/-0.000  $\chi^2/\text{NDF}$ : 248097983477523504935751571384400118546432.0/15  
 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



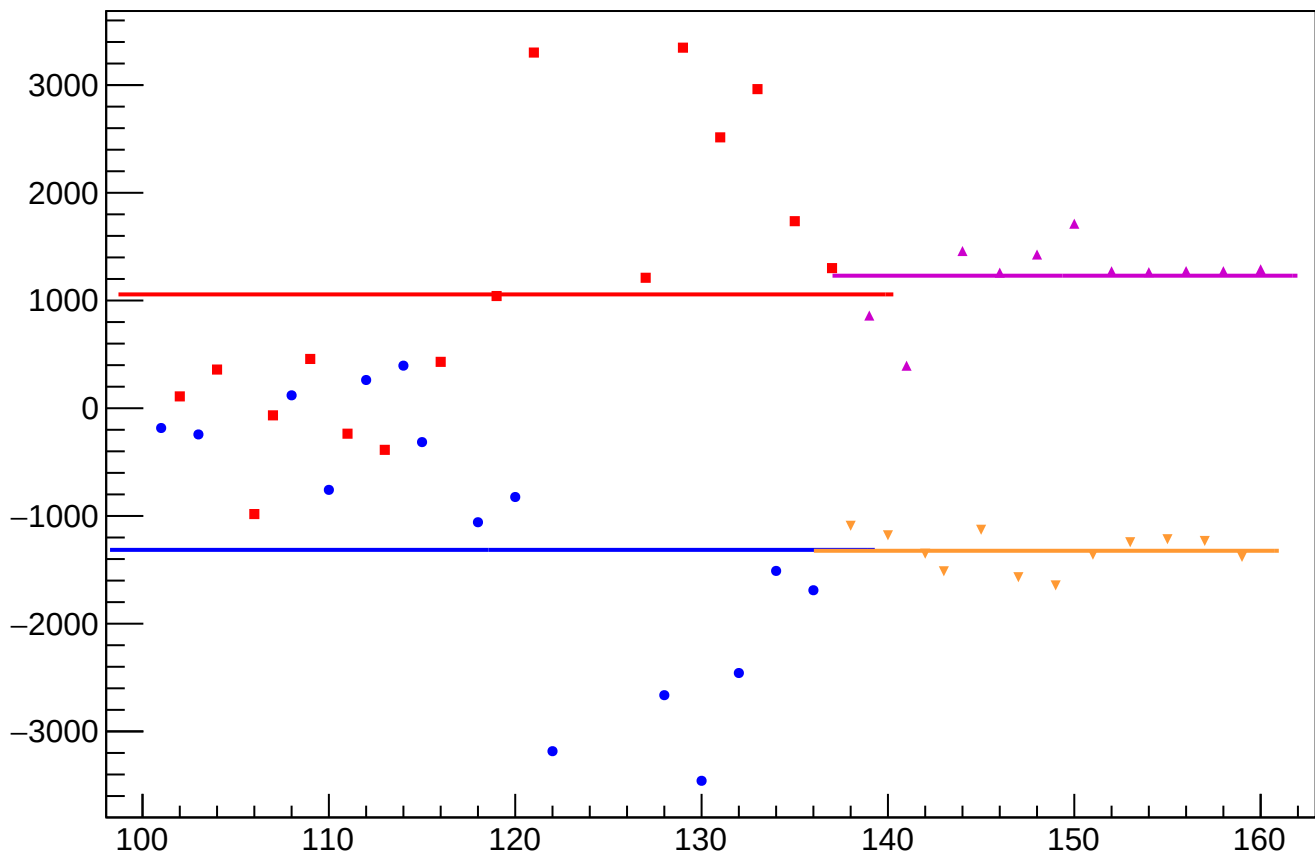
Right In: 1353.413 $\pm$ 0.000  $\chi^2$ /NDF: 352887966702770713373861839880553758720.0/14  
 Left Out: 1192.275 $\pm$ 0.000  $\chi^2$ /NDF: 150893742871936420702627399426239365120.0/11  
 Right Out: -1230.633 $\pm$ 0.000  $\chi^2$ /NDF: 276989454129150005656872744539903754240.0/15  
 Left In: -1220.761 $\pm$ 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

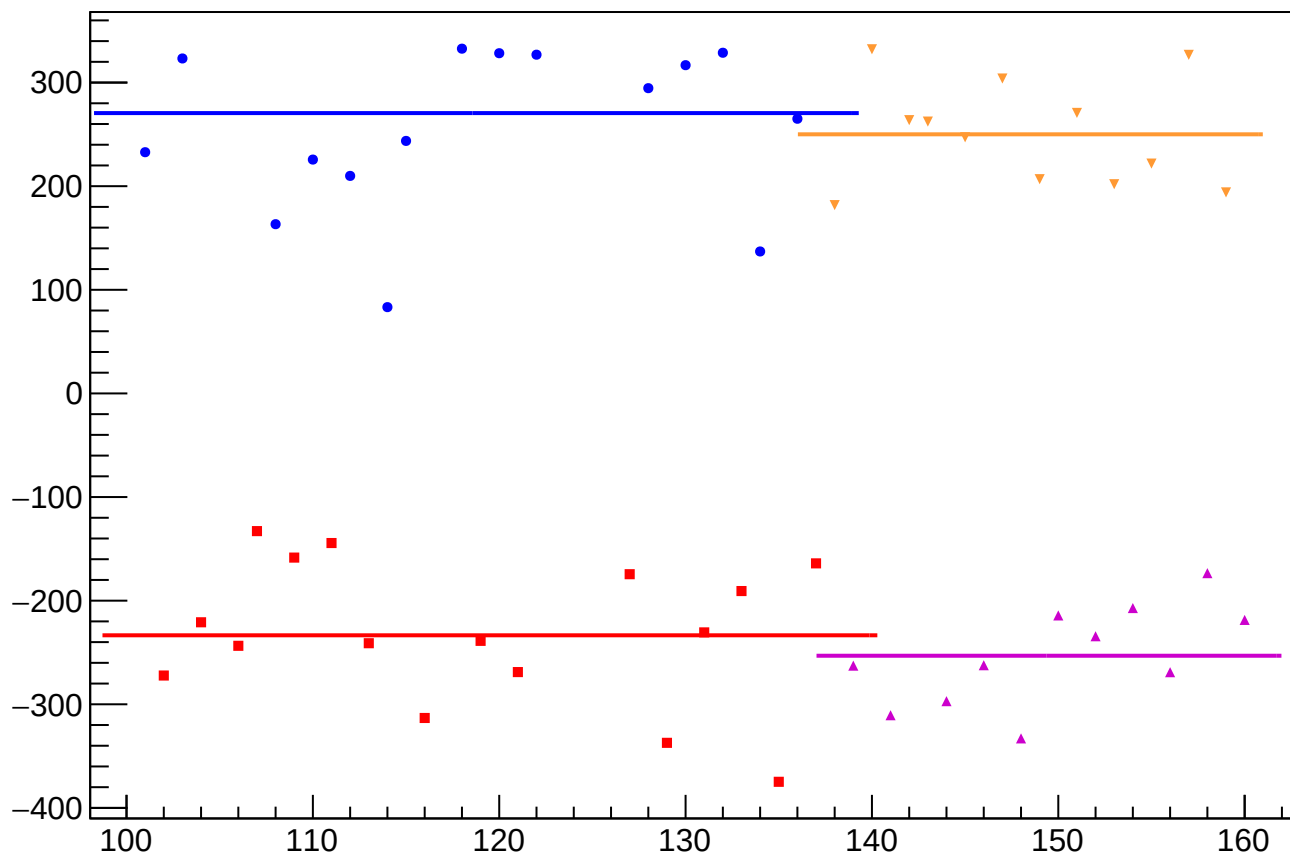
Right: -112.789+/-0.000  $\chi^2/\text{NDF}$ : 39432514405702

In: 180.308+/-0.000  $\chi^2/\text{NDF}$ : 35361660763294785

Out: -319.095+/-0.000  $\chi^2/\text{NDF}$ : 333836126374439

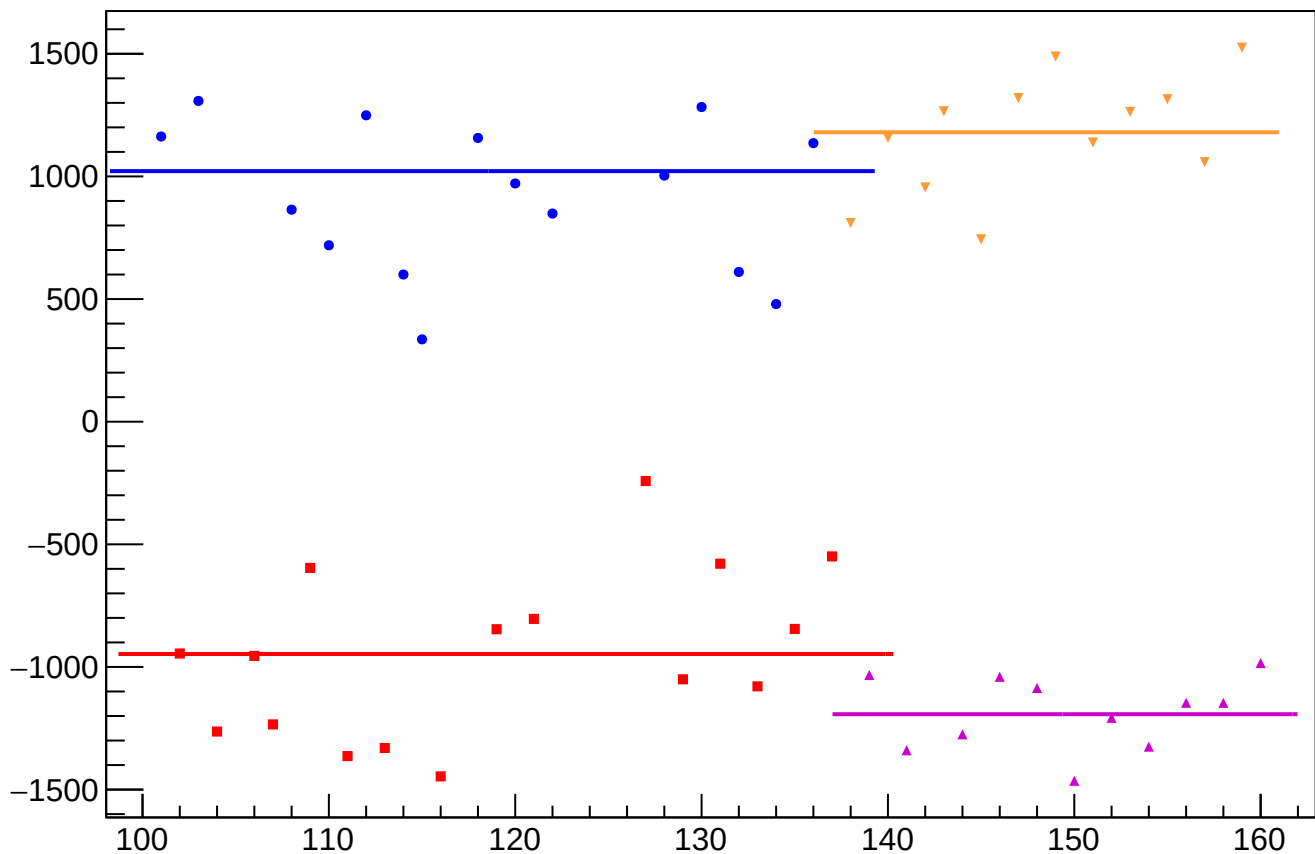
All: -70.027+/-0.000  $\chi^2/\text{NDF}$ : 707118050555

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

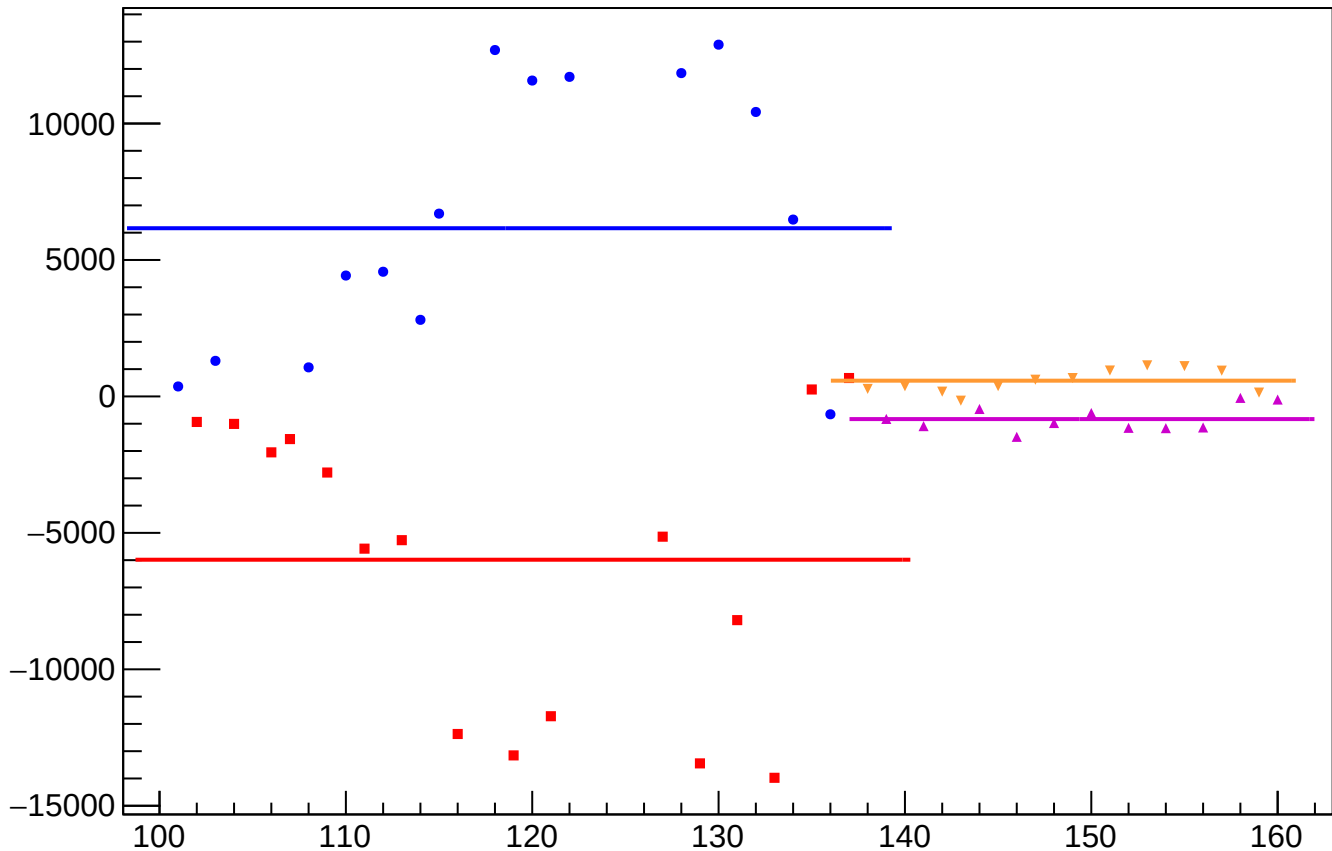
In: -279.065+/-0.000  $\chi^2/\text{NDF}$ : 1929090788254319

Out: 282.649+/-0.000  $\chi^2/\text{NDF}$ : 1863497273761245

All: 2.504+/-0.000  $\chi^2/\text{NDF}$ : 40413764320356

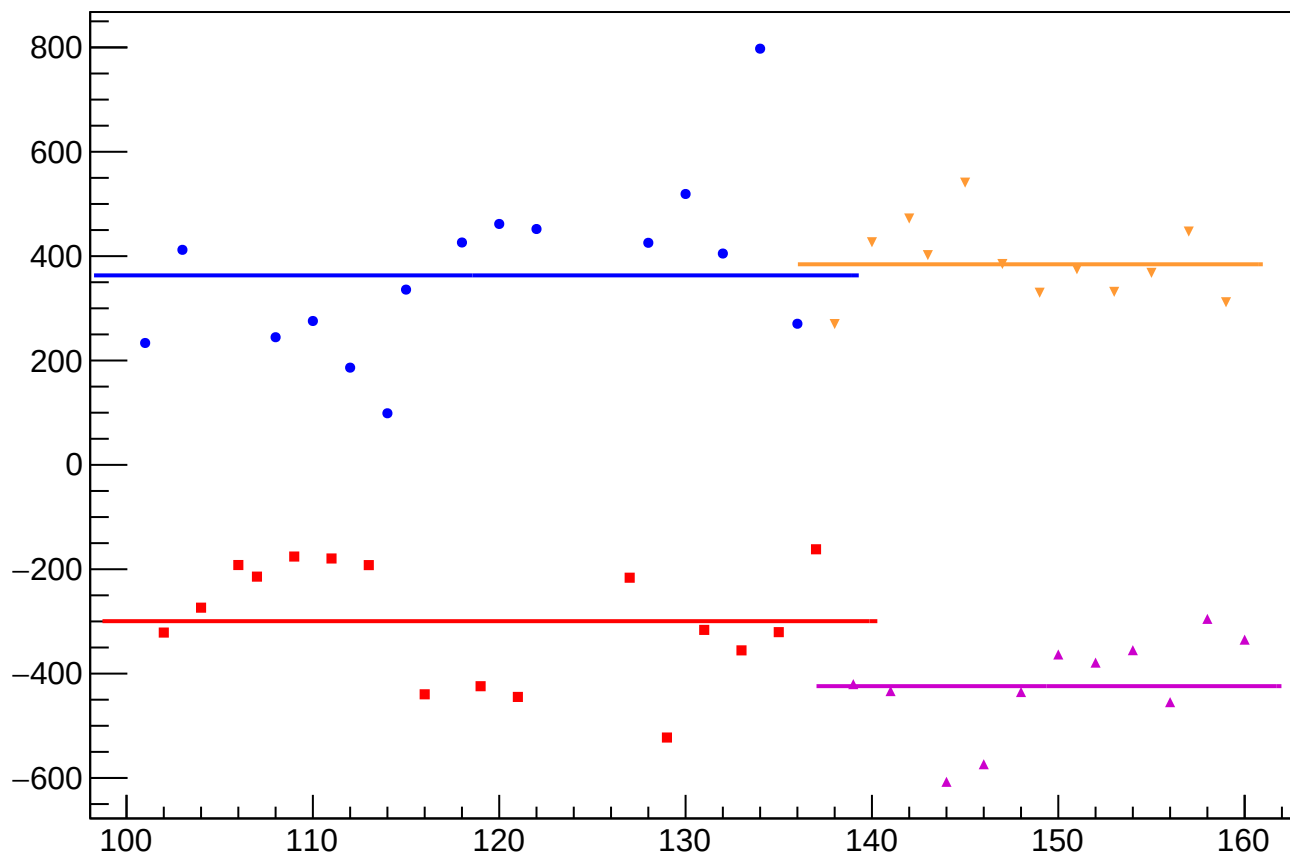


# dit\_sam6\_coil7\_mean vs Slug, Sign Corrected



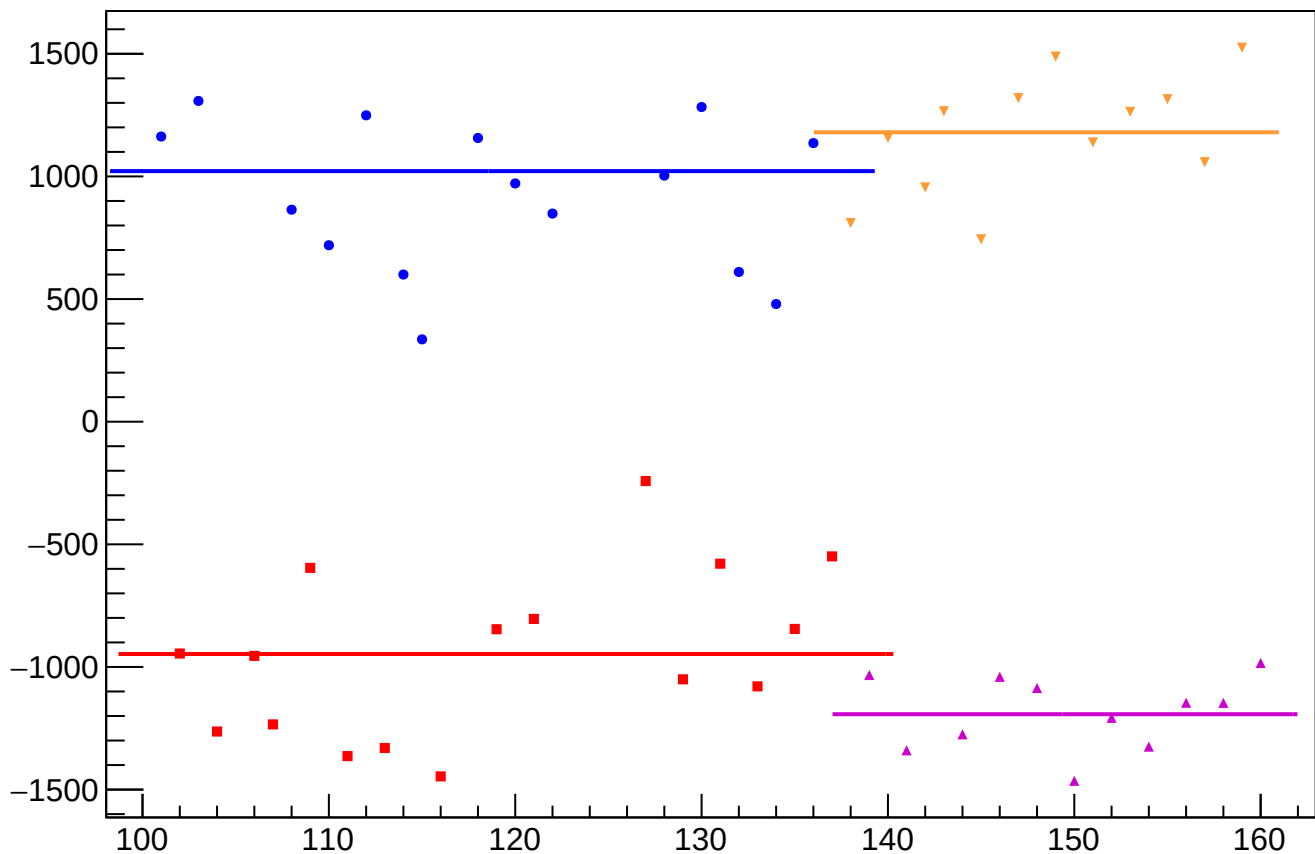
Right In: 6163.445+/-0.000  $\chi^2/\text{NDF}$ : 18200622549026770504746300139009854144512.0/14  
 Left Out: 577.285+/-0.000  $\chi^2/\text{NDF}$ : 143964932817712353720884813497116917760.0/11  
 Right Out: -5983.876+/-0.000  $\chi^2/\text{NDF}$ : 17505201913276273559161088764155841740800.0/15  
 Left 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

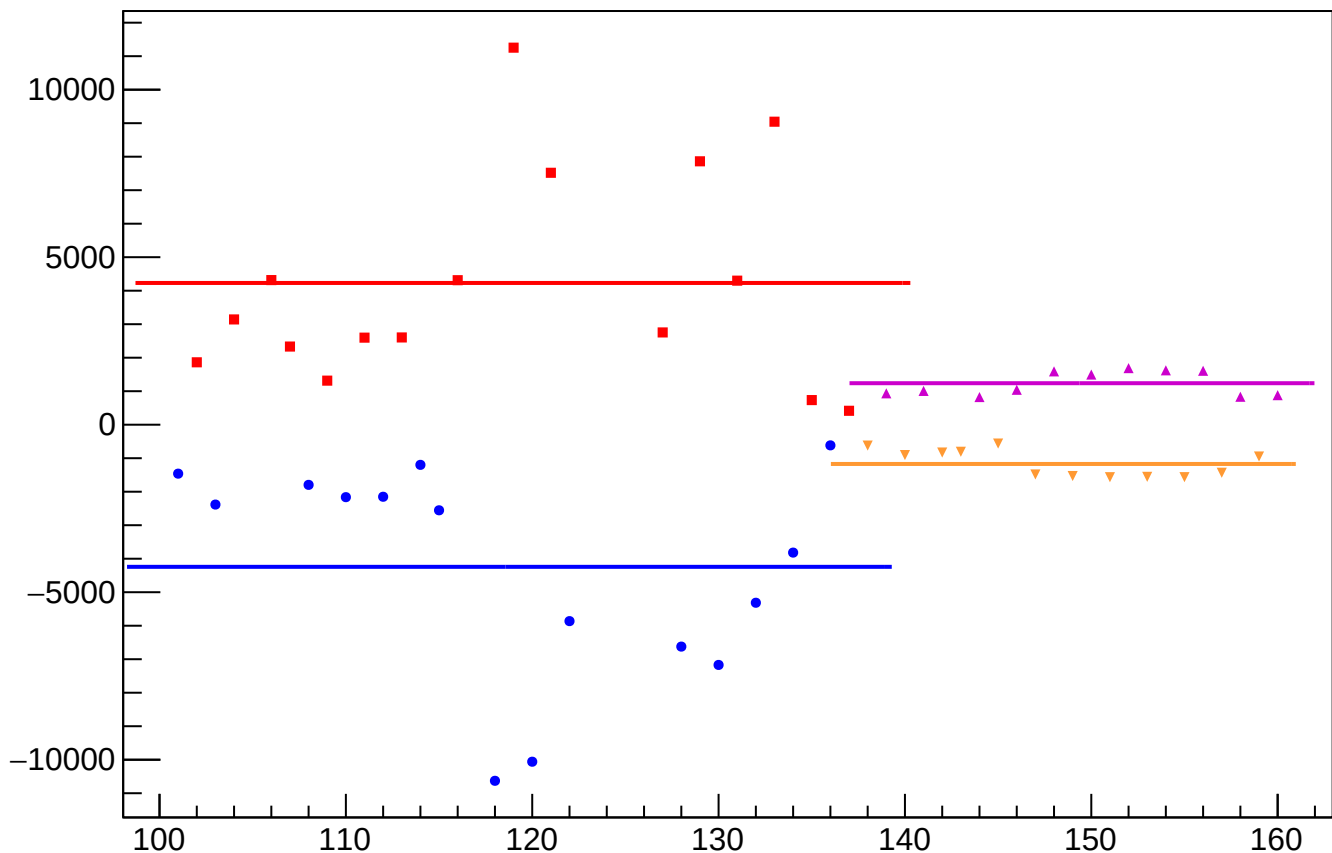
Right: 23.805+/-0.000  $\chi^2/\text{NDF}$ : 1383338523153511

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

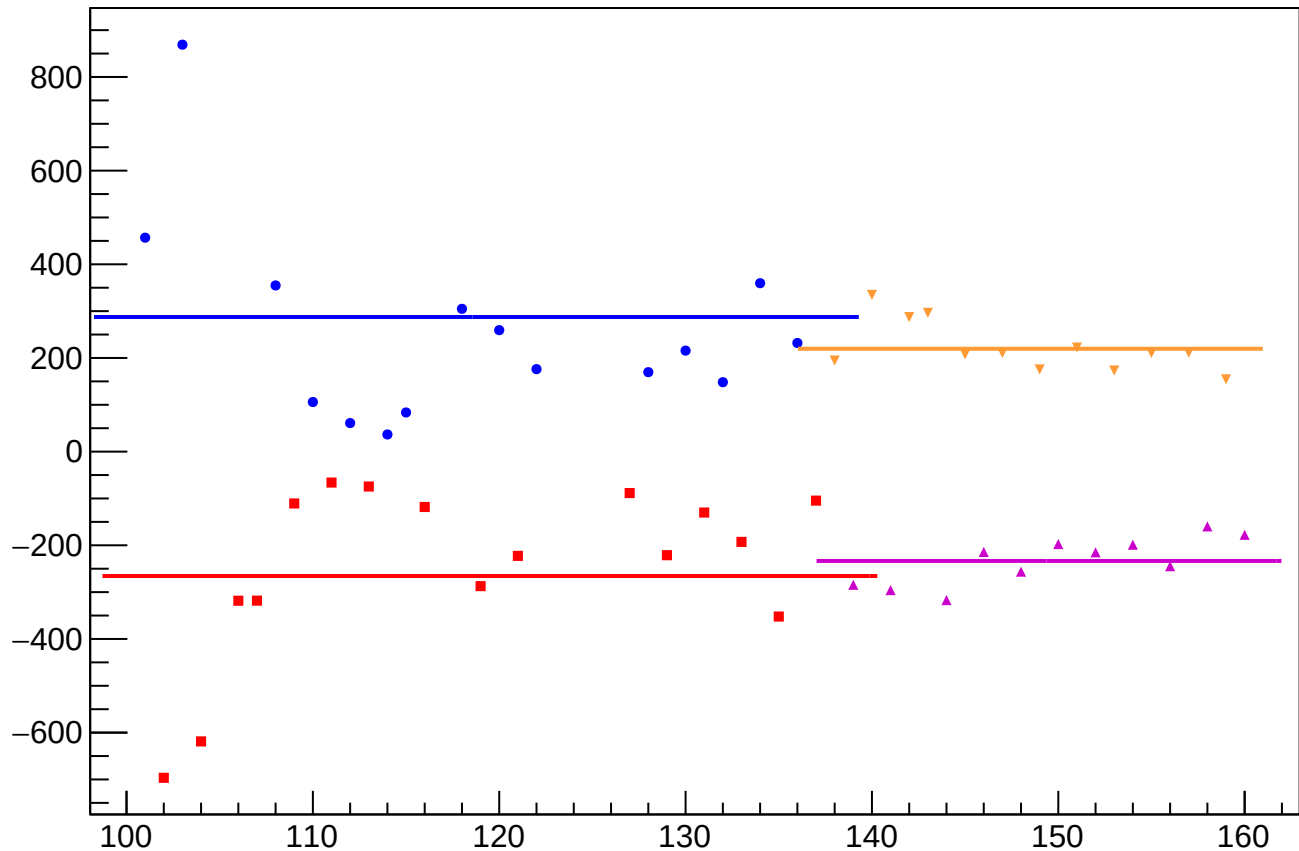
Right: 52.349+/-0.000  $\chi^2/\text{NDF}$ : 3708179263230228

In: -1022.595+/-0.000  $\chi^2/\text{NDF}$ : 183472960455815

Out: 1107.560+/-0.000  $\chi^2/\text{NDF}$ : 180754931945864

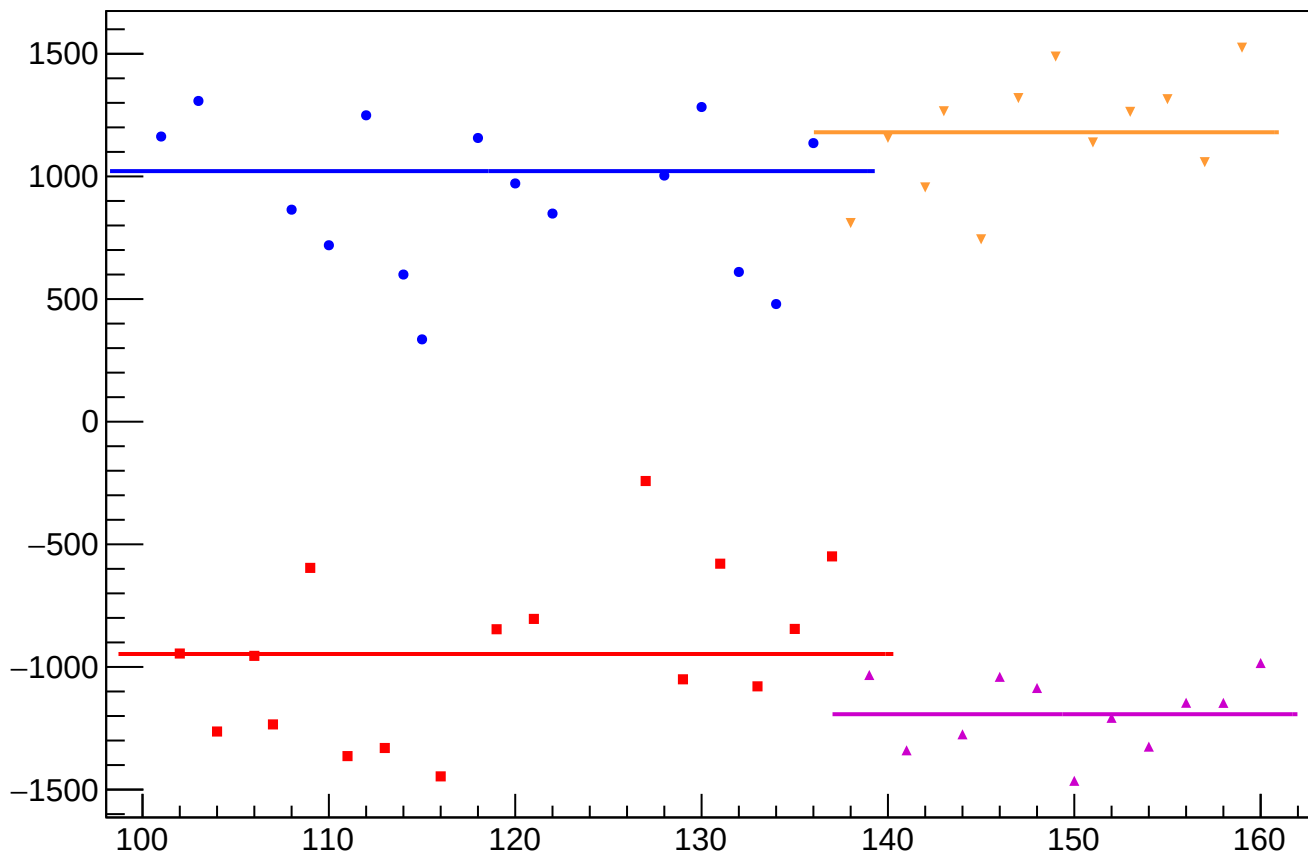
All: 45.184+/-0.000  $\chi^2/\text{NDF}$ : 4000063219777

dit\_sam7\_coil7\_err\_mean vs Slug, Sign Corrected



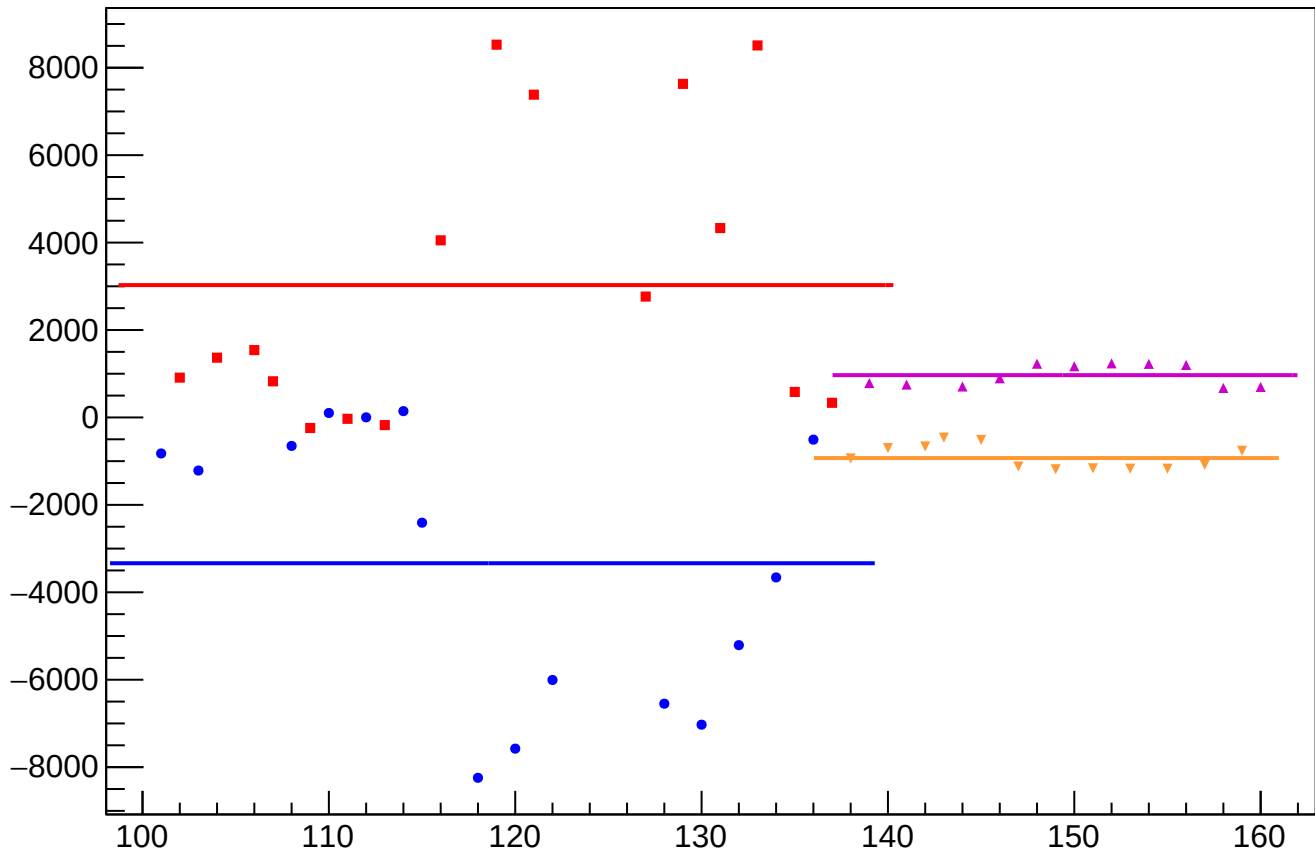
Right In:  $287.460 \pm 0.000$   $\chi^2/\text{NDF}: 29517044144826155936619151581366976512.0/14$   
 Left Out:  $219.672 \pm 0.000$   $\chi^2/\text{NDF}: 2455507522676926762328692419180101632.0/11$   
 Right Out:  $-265.593 \pm 0.000$   $\chi^2/\text{NDF}: 25843263106329059274985499259066908672.0/15$   
 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  $\chi^2/\text{NDF}$ : 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\_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

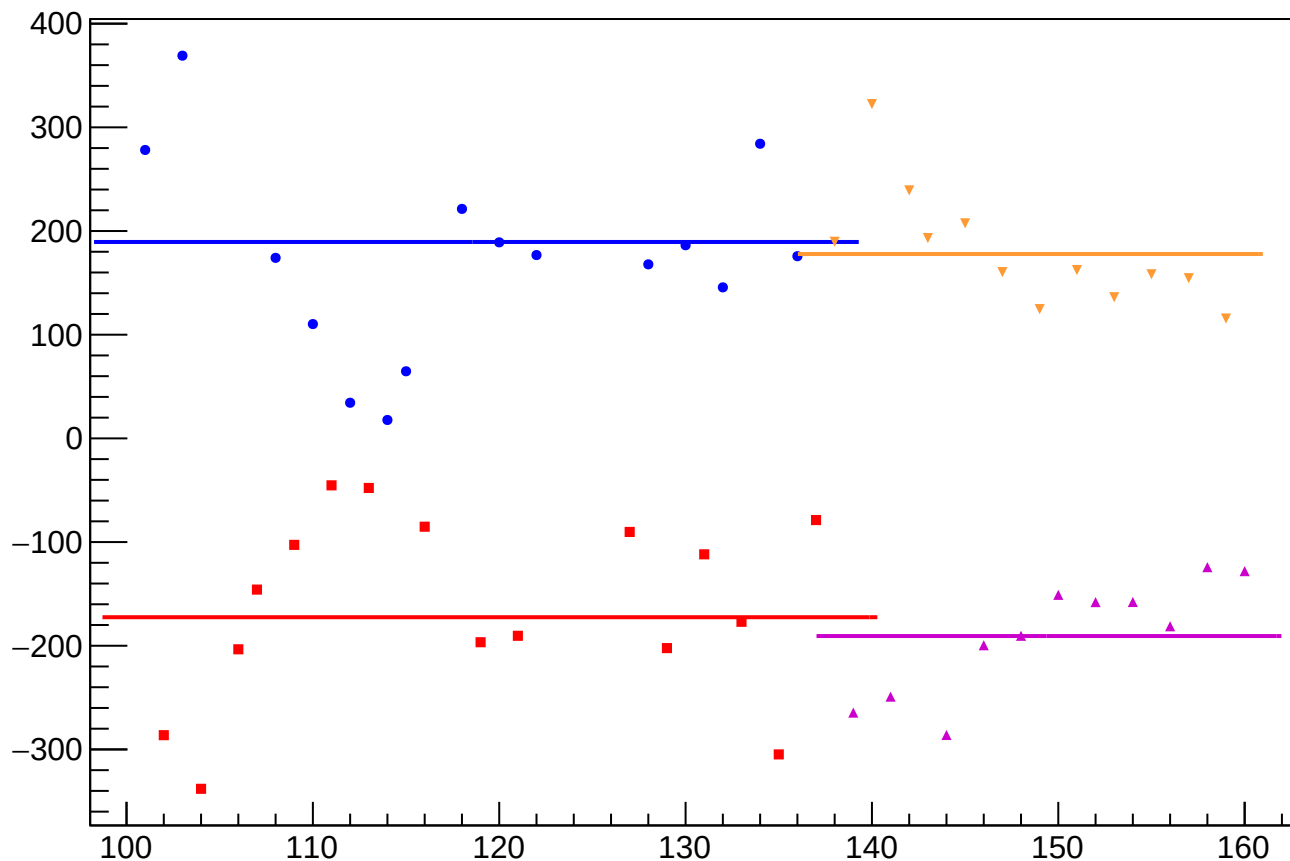
$\chi^2/\text{NDF}$ : 7086157086694396583090903767581326311424.0/15

Left In: 967.568+/-0.000

$\chi^2/\text{NDF}$ : 51461881619401718567497787720865939456.0/10

All: -31.746+/-0.000  $\chi^2/\text{NDF}$ : 285218808380

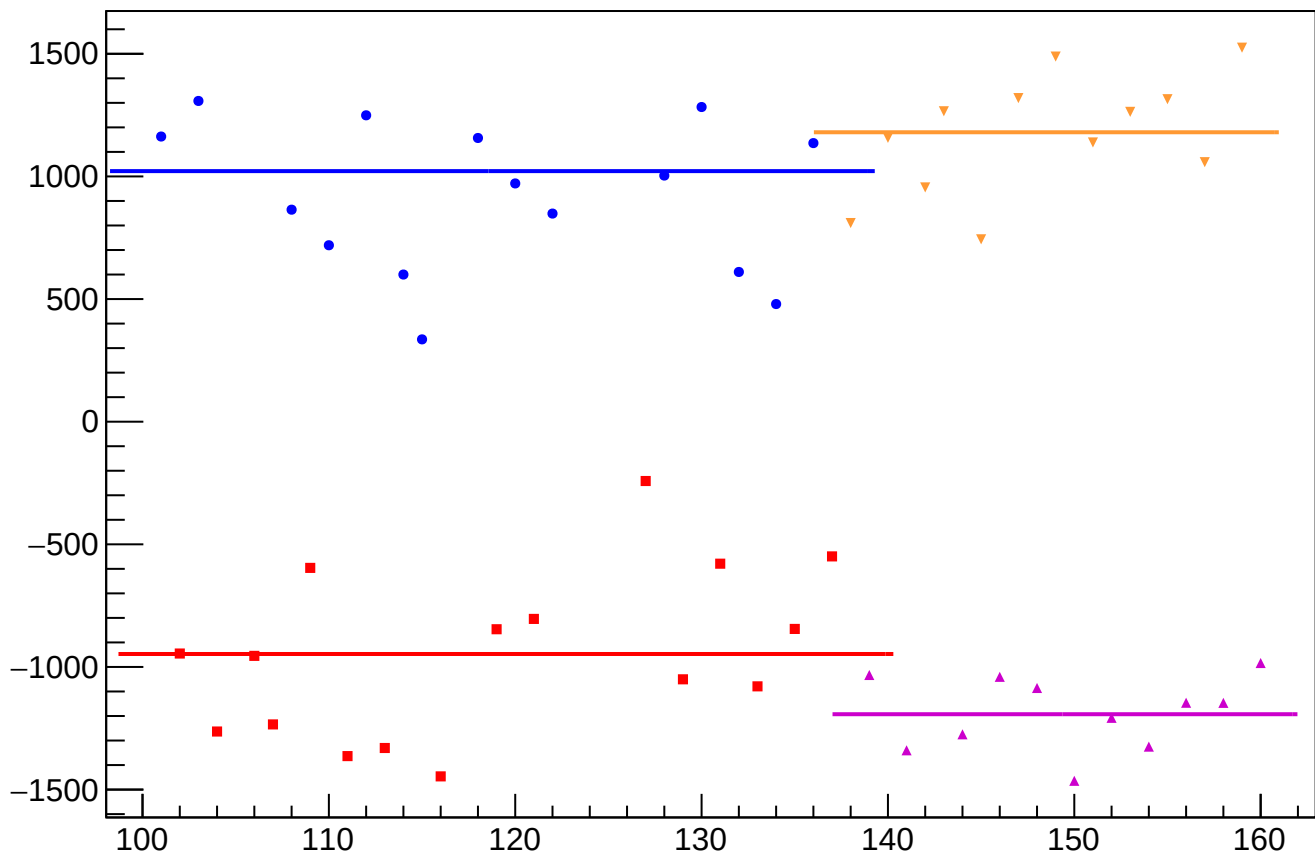
dit\_sam8\_coil7\_err\_mean vs Slug, Sign Corrected



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

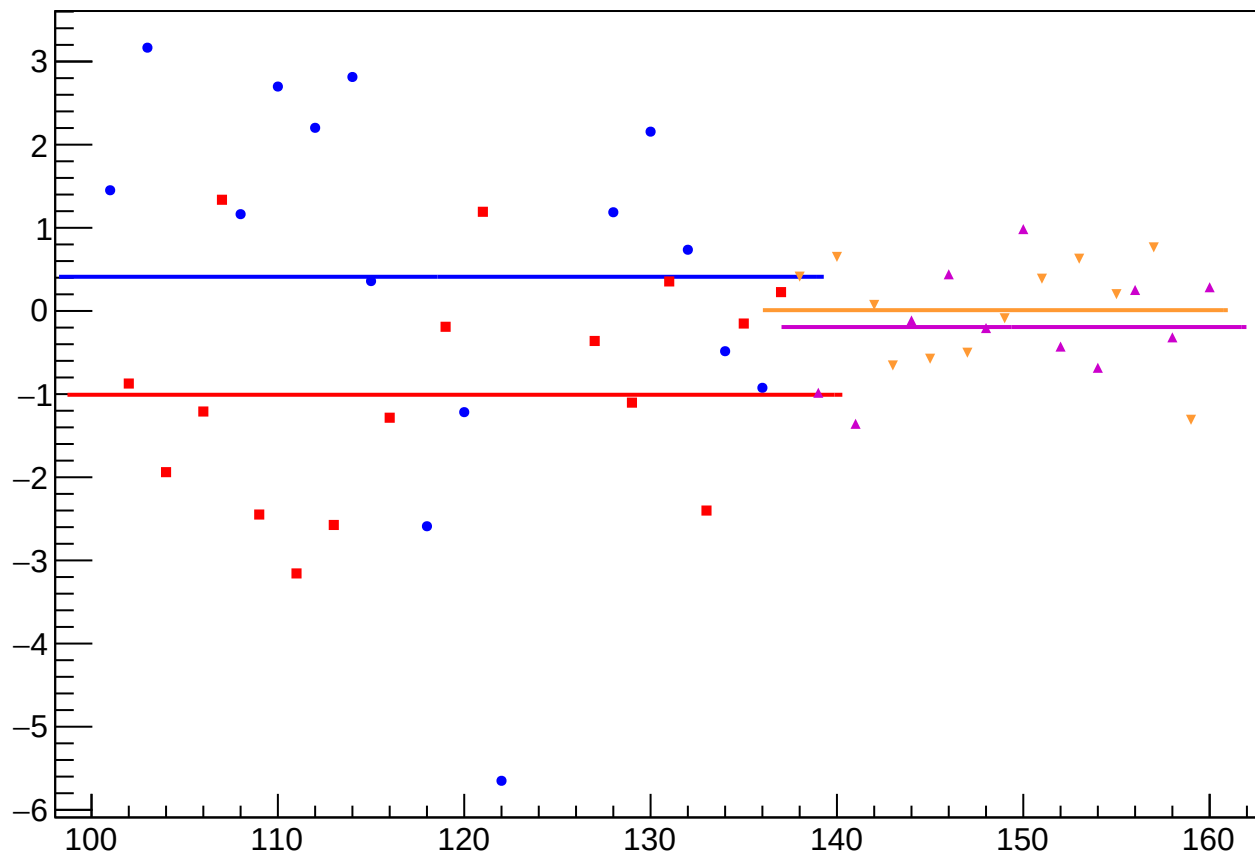


dit\_sam8\_coil7\_Ndata\_mean vs Slug, Sign Corrected



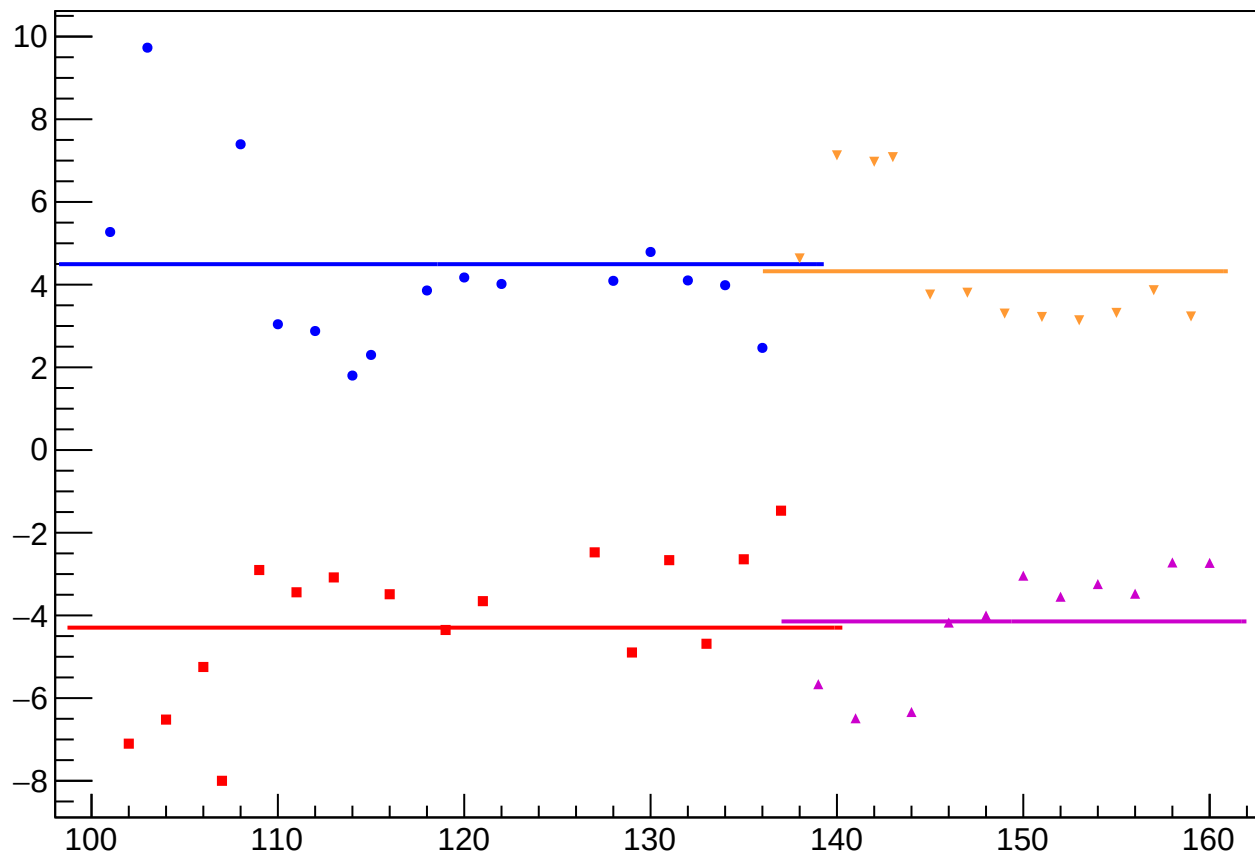
Right In: 1021.684 $\pm$ 0.000  $\chi^2$ /NDF: 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103 $\pm$ 0.000  $\chi^2$ /NDF: 50788606804690292724539730503787347968.0/11  
 Right Out: -947.145 $\pm$ 0.000  $\chi^2$ /NDF: 67784656011936521511169668028018196480.0/15  
 Left In: -1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10  
 All: 2.504 $\pm$ 0.000  $\chi^2$ /NDF: 40413764320356

# dit\_4aX\_coil4\_mean vs Slug, Sign Corrected



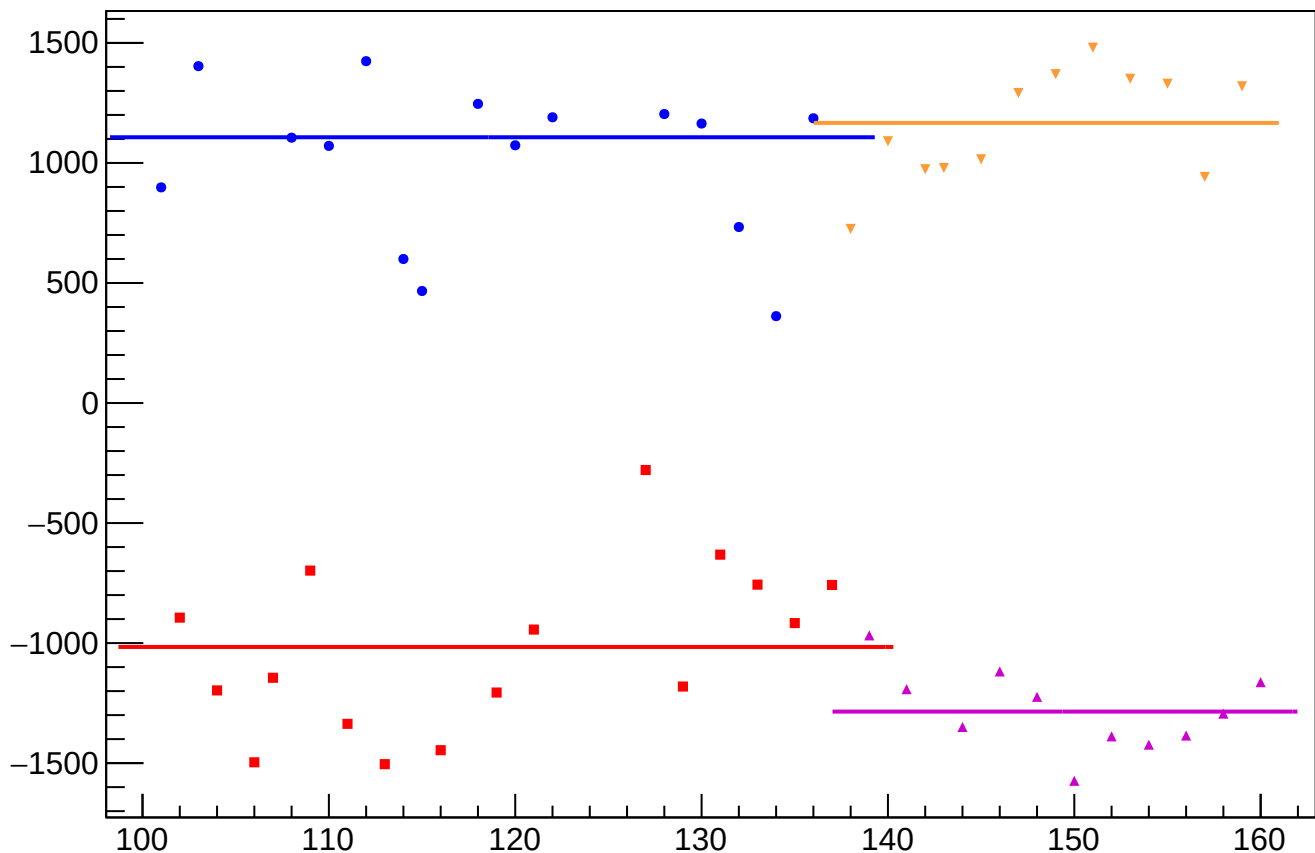
Right In:  $0.411 \pm 0.000$   $\chi^2/\text{NDF}: 3385573506255563170053089820409856.0/14$   
 Left Out:  $0.010 \pm 0.000$   $\chi^2/\text{NDF}: 354573516648160349272665694928896.0/11$   
 Right Out:  $-1.008 \pm 0.000$   $\chi^2/\text{NDF}: 1128402228144096394498047410700288.0/15$   
 Left In:  $-0.193 \pm 0.000$   $\chi^2/\text{NDF}: 386133523330033860307880234713088.0/10$   
 All:  $-0.182 \pm 0.000$   $\chi^2/\text{NDF}: 5971597389441$

dit\_4aX\_coil4\_err\_mean vs Slug, Sign Corrected



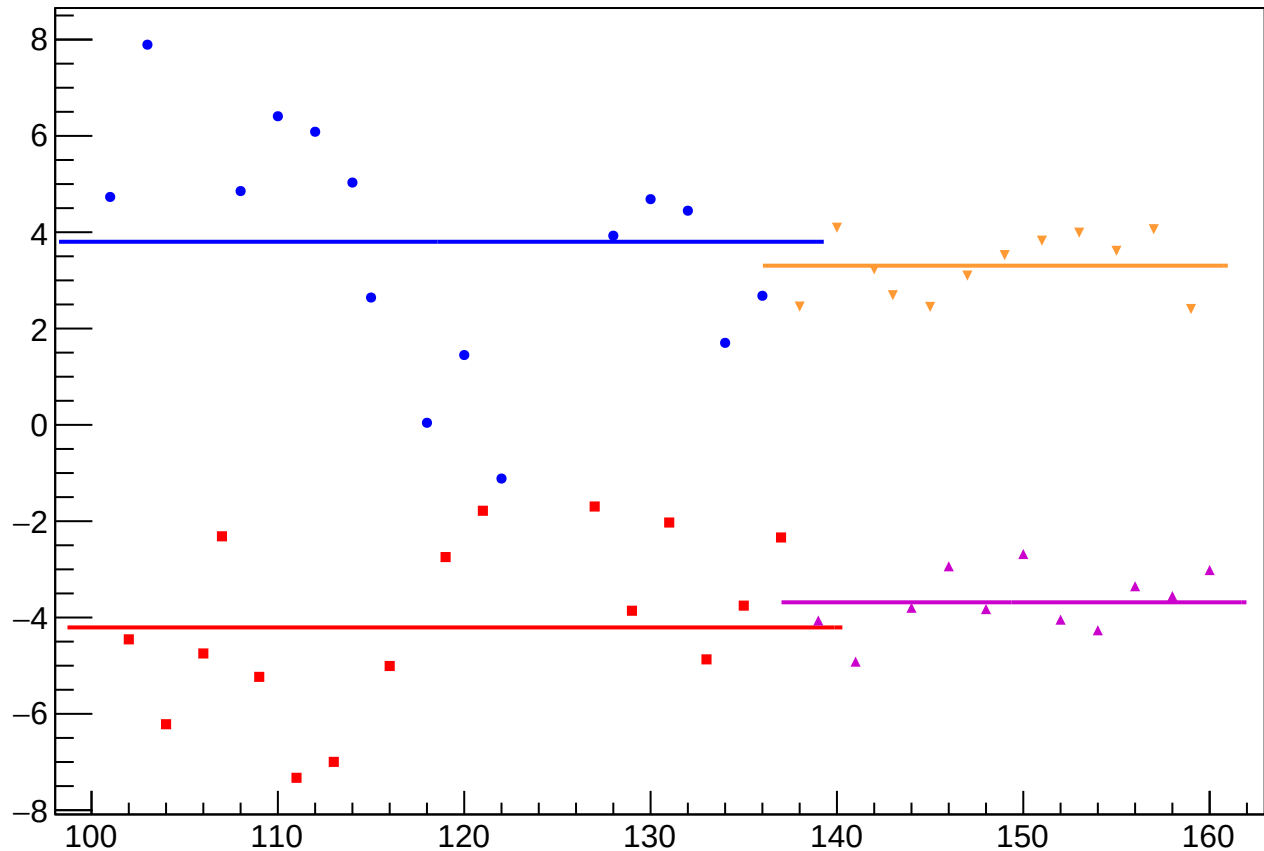
Right In: 4.495 $\pm$ 0.000  $\chi^2$ /NDF: 2742240072441097531500728791597056.0/14  
 Left Out: 4.324 $\pm$ 0.000  $\chi^2$ /NDF: 2025534969388950058407109119180800.0/11  
 Right Out: -4.296 $\pm$ 0.000  $\chi^2$ /NDF: 2011925707062051890381007475441664.0/15  
 Left In: -4.145 $\pm$ 0.000  $\chi^2$ /NDF: 1645942604303349608571849827942400.0/10  
 All: 0.055 $\pm$ 0.000  $\chi^2$ /NDF: 66802270544338

dit\_4aX\_coil4\_Ndata\_mean vs Slug, Sign Corrected



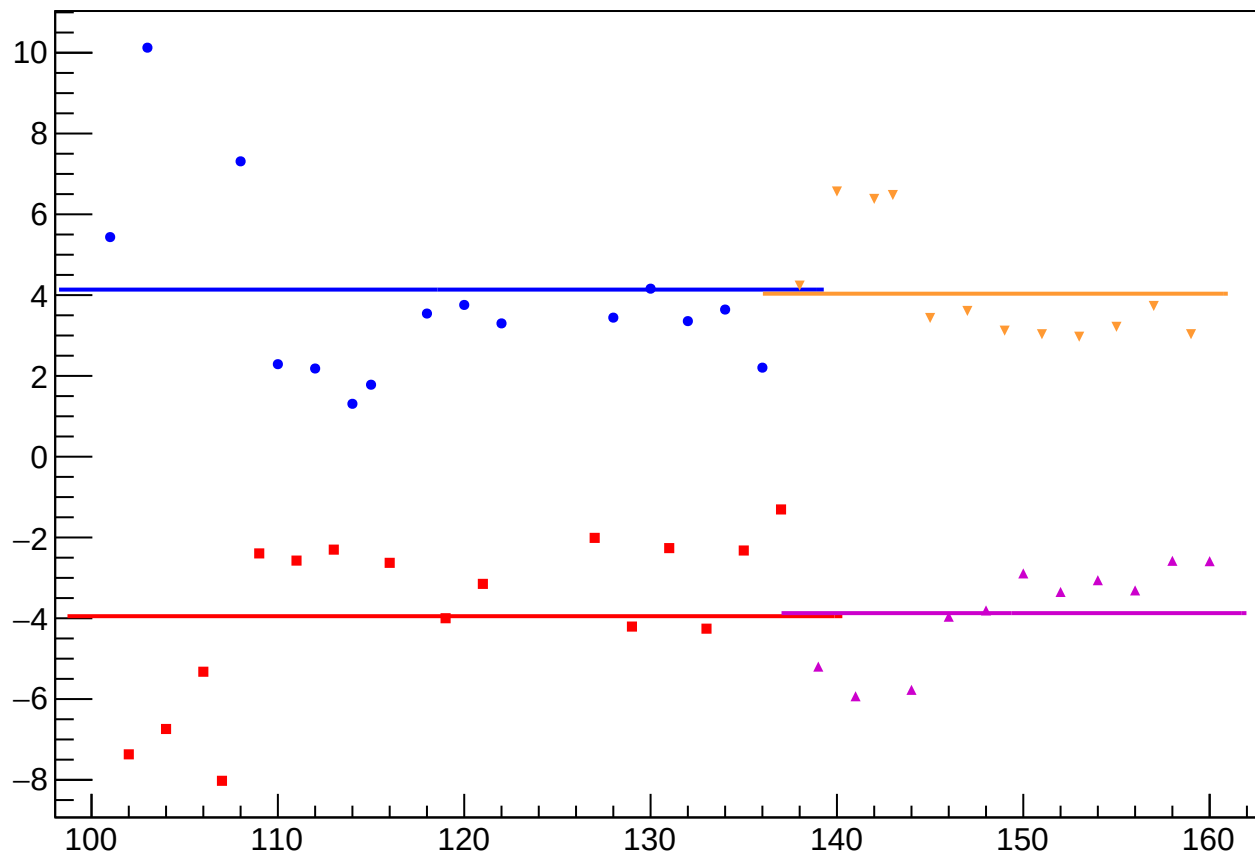
|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| 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



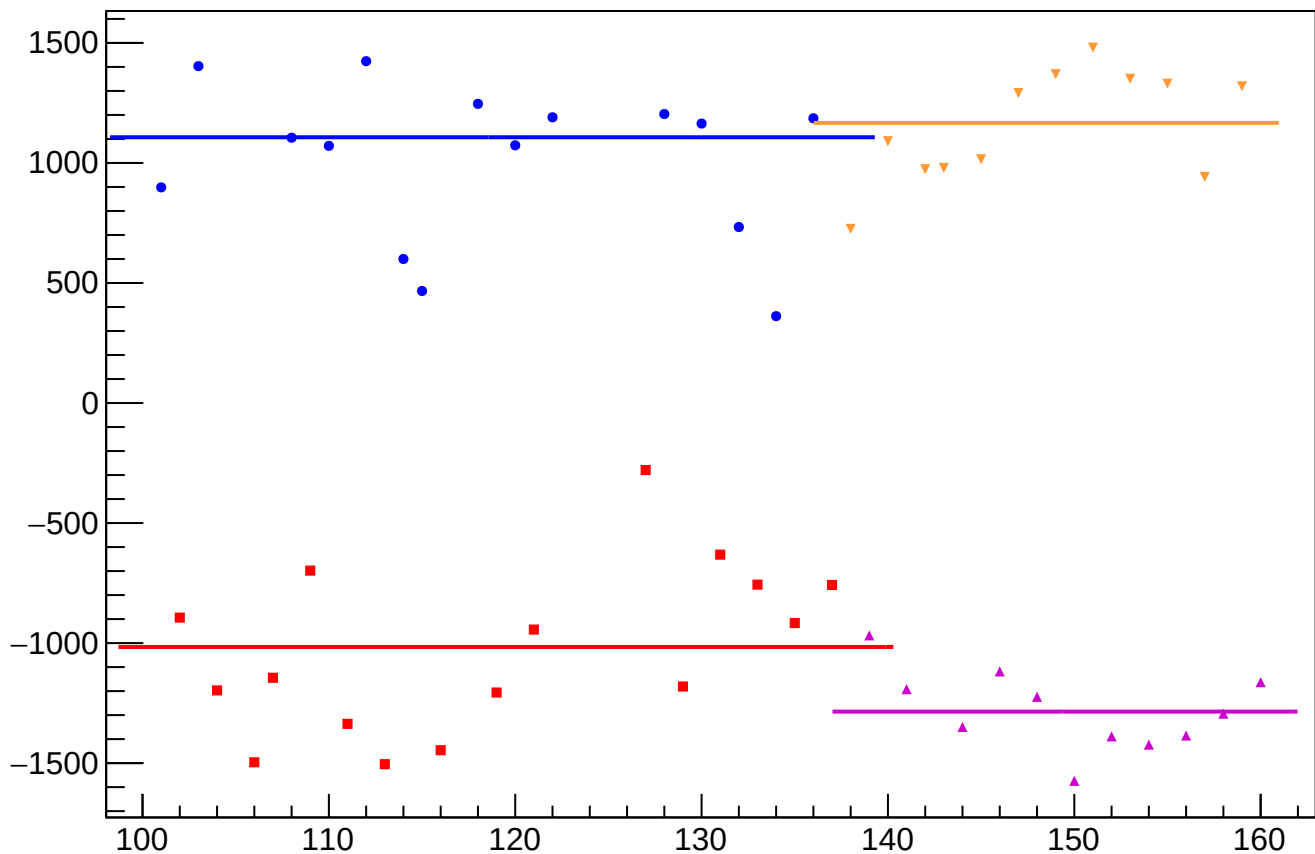
Right In:  $3.802 \pm 0.000$   $\chi^2/\text{NDF}: 3795476074398338930564700657680384.0/14$   
 Left Out:  $3.305 \pm 0.000$   $\chi^2/\text{NDF}: 375514605339805624898679558111232.0/11$   
 Right Out:  $-4.206 \pm 0.000$   $\chi^2/\text{NDF}: 2096427813341454573332265183477760.0/15$   
 Left In:  $-3.684 \pm 0.000$   $\chi^2/\text{NDF}: 366001419656422310601850072596480.0/10$   
 All:  $-0.229 \pm 0.000$   $\chi^2/\text{NDF}: 5017617766780$

dit\_4eX\_coil4\_err\_mean vs Slug, Sign Corrected



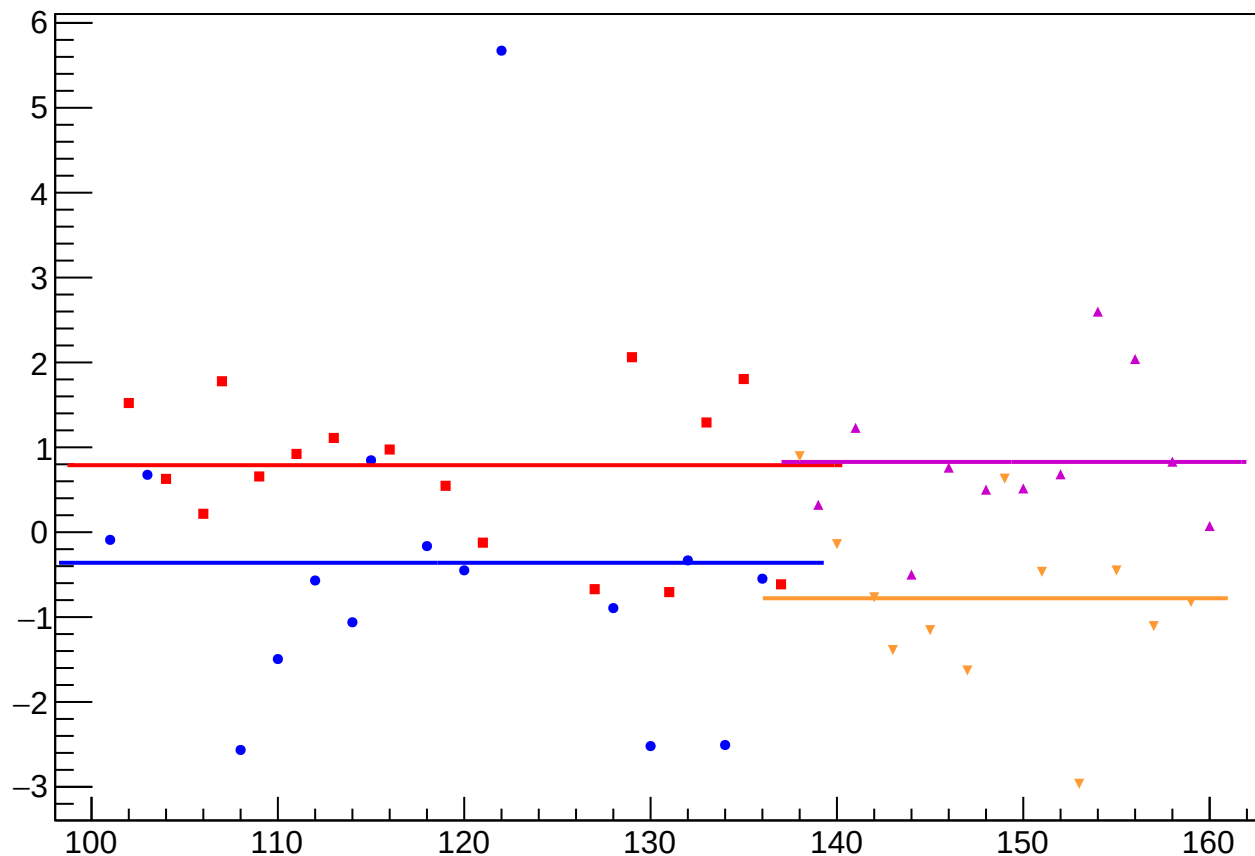
Right In: 4.136 $\pm$ 0.000  $\chi^2$ /NDF: 3507600624388663919898505496231936.0/14  
 Left Out: 4.035 $\pm$ 0.000  $\chi^2$ /NDF: 16092990613525785486150138363904.0/11  
 Right Out: -3.948 $\pm$ 0.000  $\chi^2$ /NDF: 2670176783942302028345551100051456.0/15  
 Left In: -3.873 $\pm$ 0.000  $\chi^2$ /NDF: 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     |

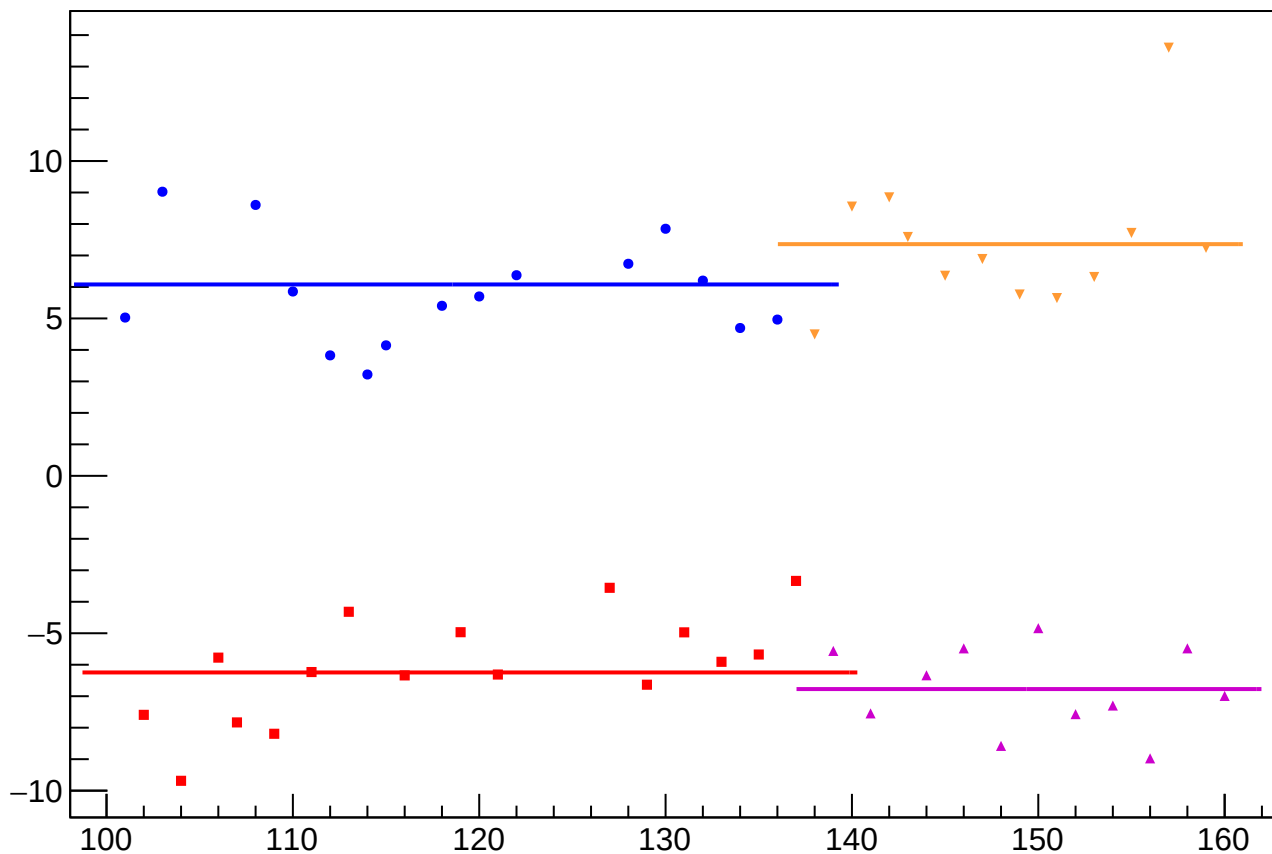
dit\_11X12X\_coil4\_mean vs Slug, Sign Corrected



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

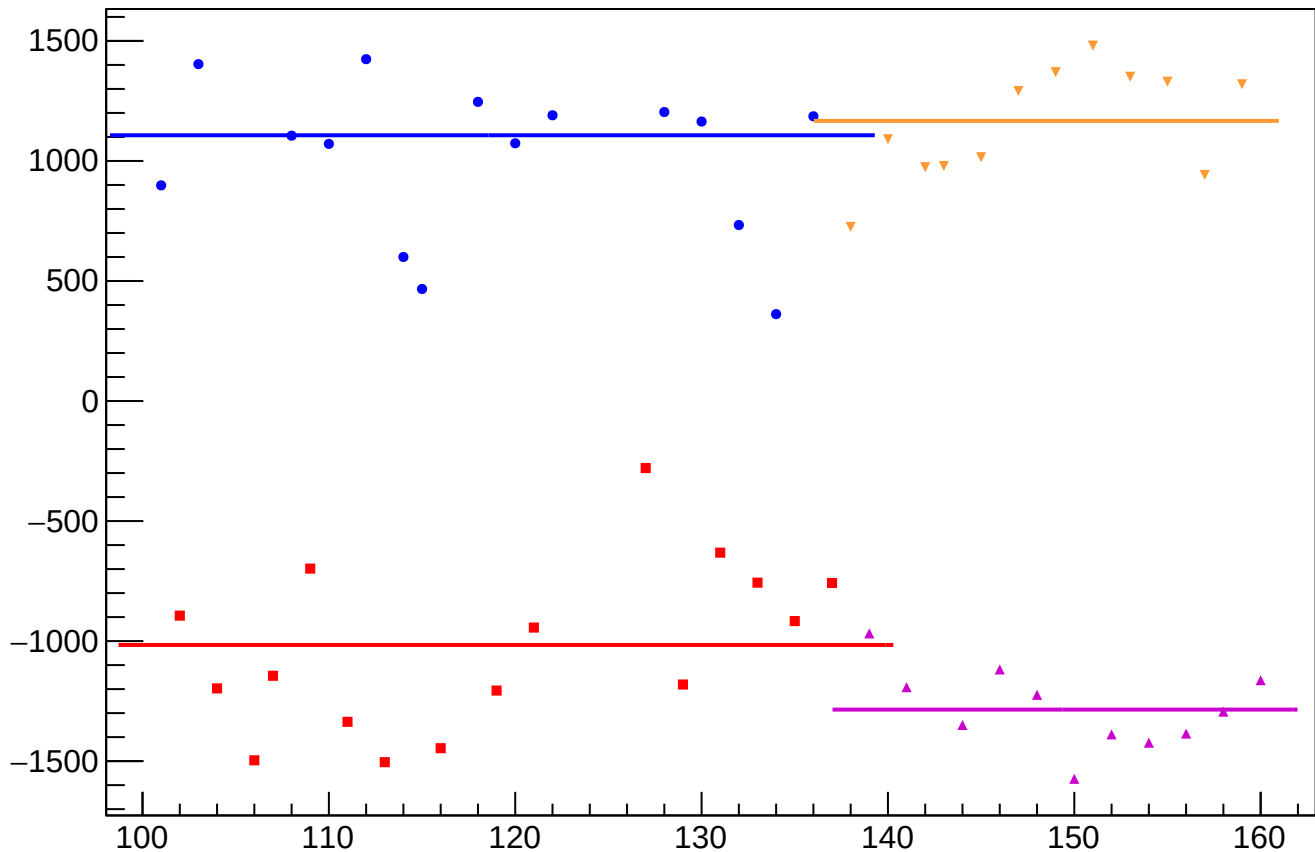


dit\_11X12X\_coil4\_err\_mean vs Slug, Sign Corrected



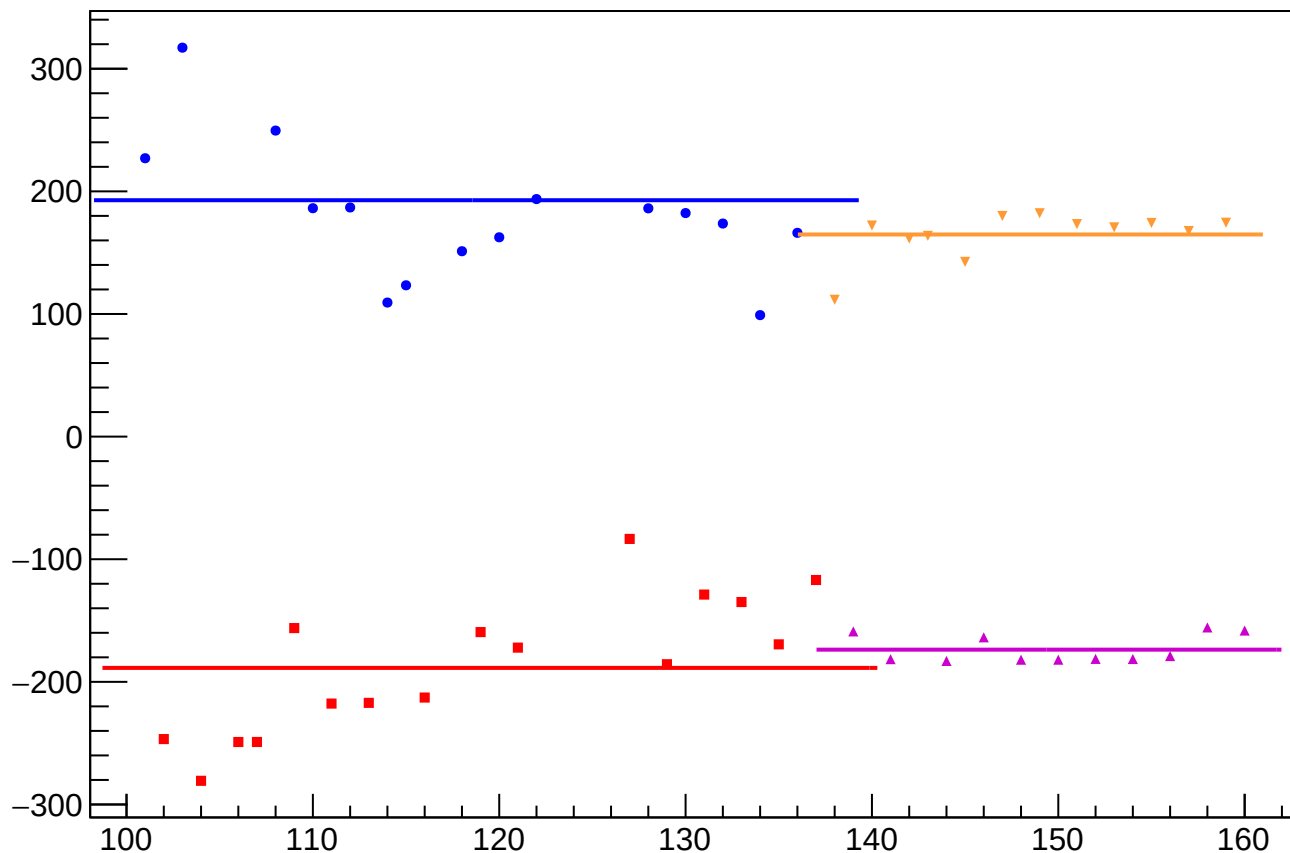
Right In:  $6.079 \pm 0.000$   $\chi^2/\text{NDF}: 1590295171022705157509900448825344.0/14$   
 Left Out:  $7.360 \pm 0.000$   $\chi^2/\text{NDF}: 4580380755239365503585140070154240.0/11$   
 Right Out:  $-6.245 \pm 0.000$   $\chi^2/\text{NDF}: 1816529163105006938510976985595904.0/15$   
 Left In:  $-6.773 \pm 0.000$   $\chi^2/\text{NDF}: 1545880653062872635060205832372224.0/10$   
 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: -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\_4aY\_coil4\_mean vs Slug, Sign Corrected



Right In: 192.771+/-0.000

$\chi^2/\text{NDF}$ : 1640576279746948433391816936236515328.0/14

Left Out: 164.832+/-0.000

$\chi^2/\text{NDF}$ : 331248867631864480349687016910225408.0/11

Right Out: -188.612+/-0.000

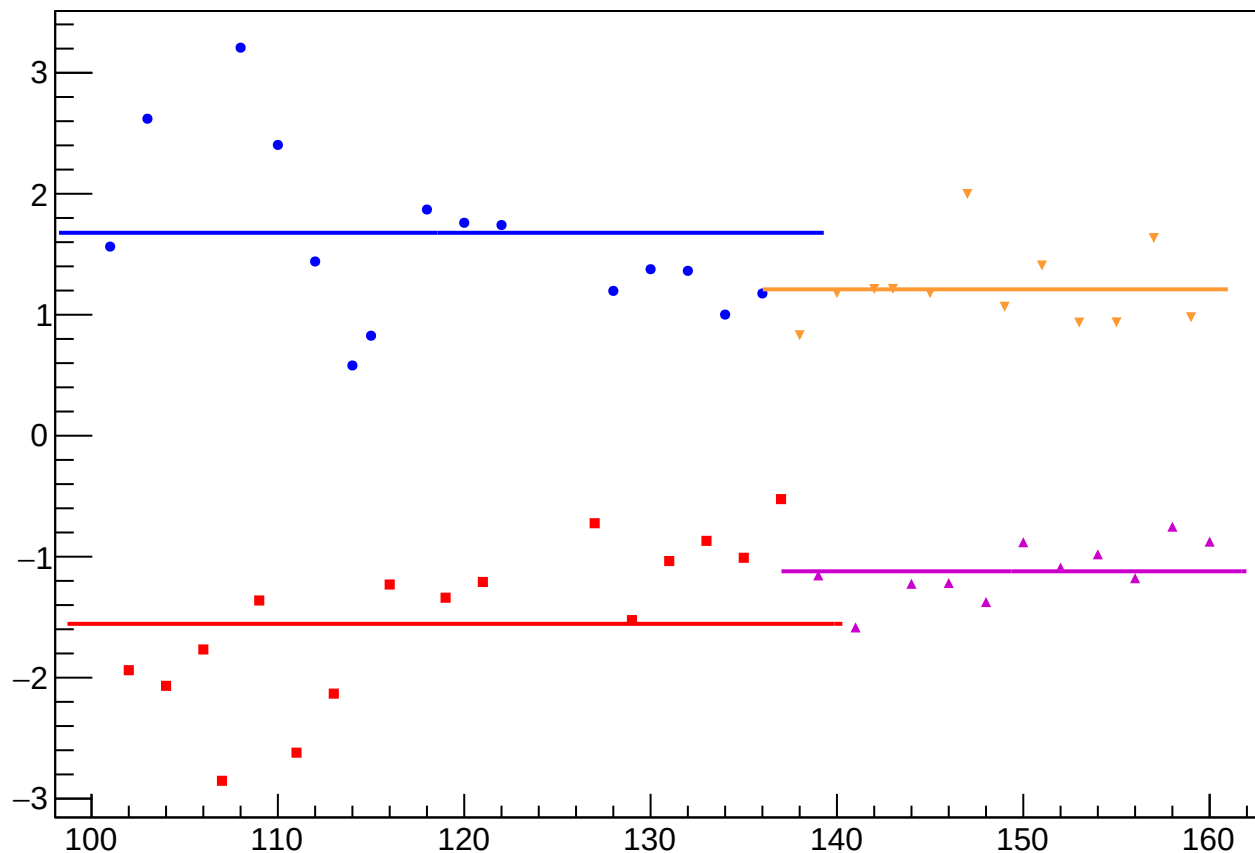
$\chi^2/\text{NDF}$ : 1922342257287674563344204730019610624.0/15

Left In: -173.738+/-0.000

$\chi^2/\text{NDF}$ : 107568156923900649458795541002452992.0/10

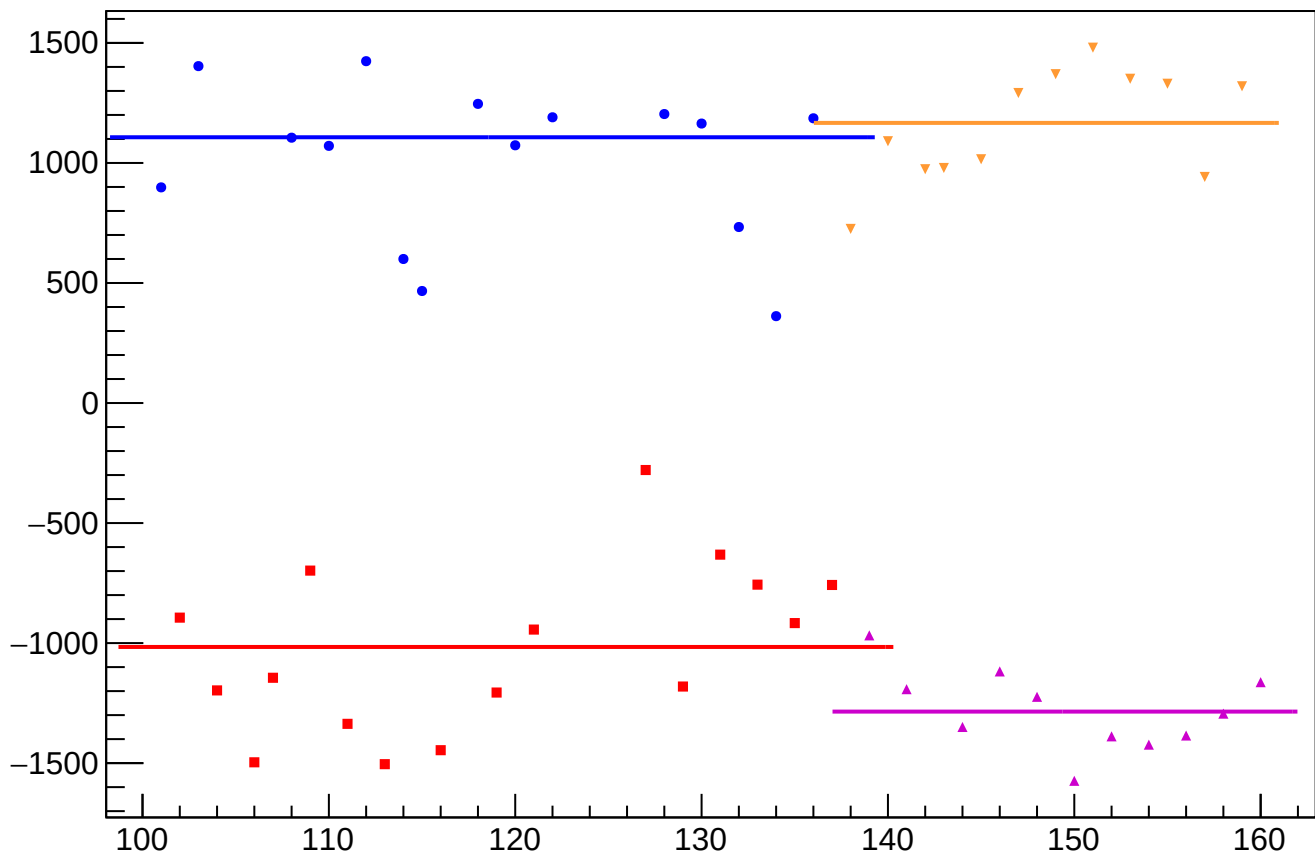
All: -3.352+/-0.000  $\chi^2/\text{NDF}$ : 1045358110774

dit\_4aY\_coil4\_err\_mean vs Slug, Sign Corrected



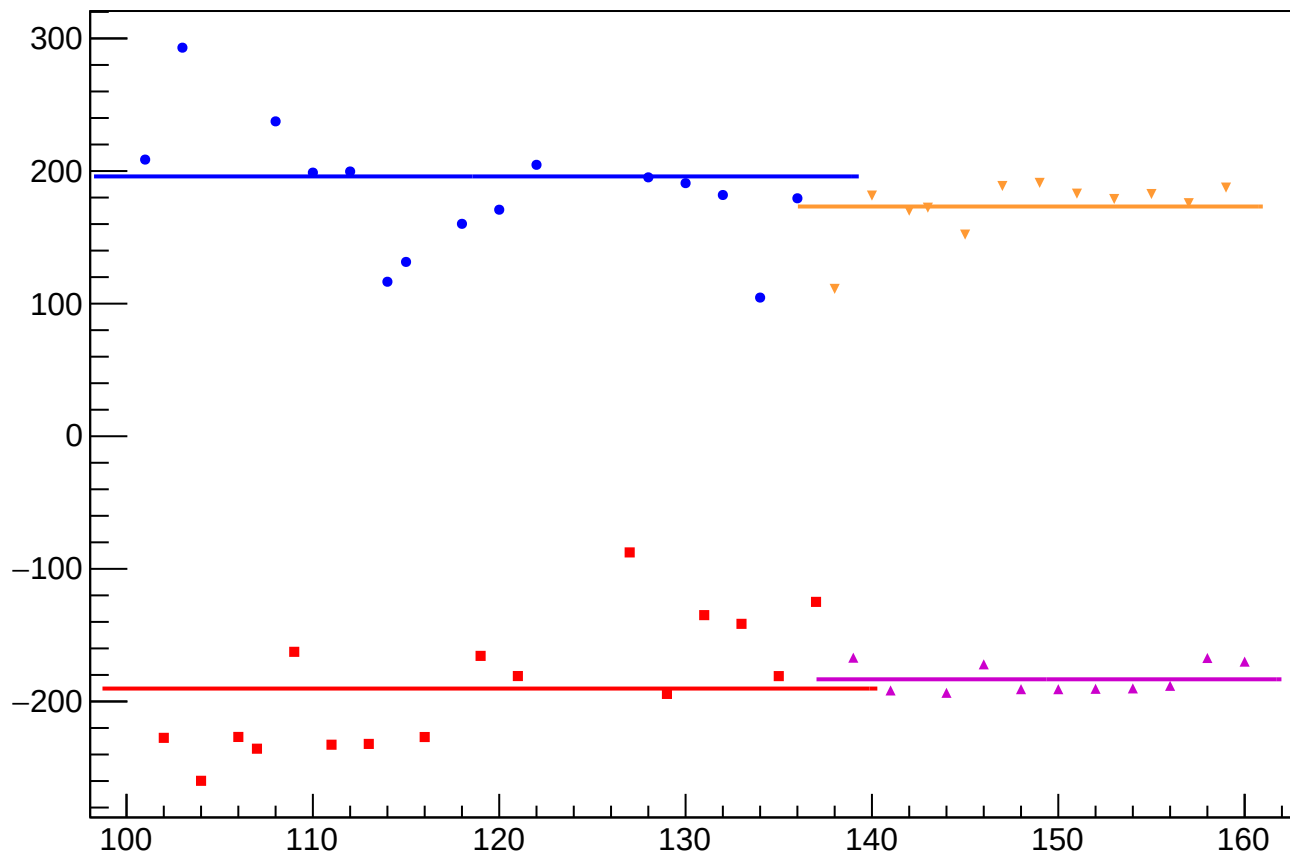
Right In: 1.677 $\pm$ 0.000  $\chi^2$ /NDF: 241879924044788593292791559225344.0/14  
 Left Out: 1.210 $\pm$ 0.000  $\chi^2$ /NDF: 95500502458420026672384705560576.0/11  
 Right Out: -1.555 $\pm$ 0.000  $\chi^2$ /NDF: 255645951433890296827677195108352.0/15  
 Left In: -1.121 $\pm$ 0.000  $\chi^2$ /NDF: 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

$\chi^2$ /NDF: 1057891079869089572370479093183938560.0/14

Left Out: 173.245 $\pm$ 0.000

$\chi^2$ /NDF: 421189743022312956779621222954565632.0/11

Right Out: -190.268 $\pm$ 0.000

$\chi^2$ /NDF: 1468473073667973330267084234323656704.0/15

Left In: -183.290 $\pm$ 0.000

$\chi^2$ /NDF: 101738841511111417821042611832487936.0/10

Left: -5.993 $\pm$ 0.000  $\chi^2$ /NDF: 58931613915214401

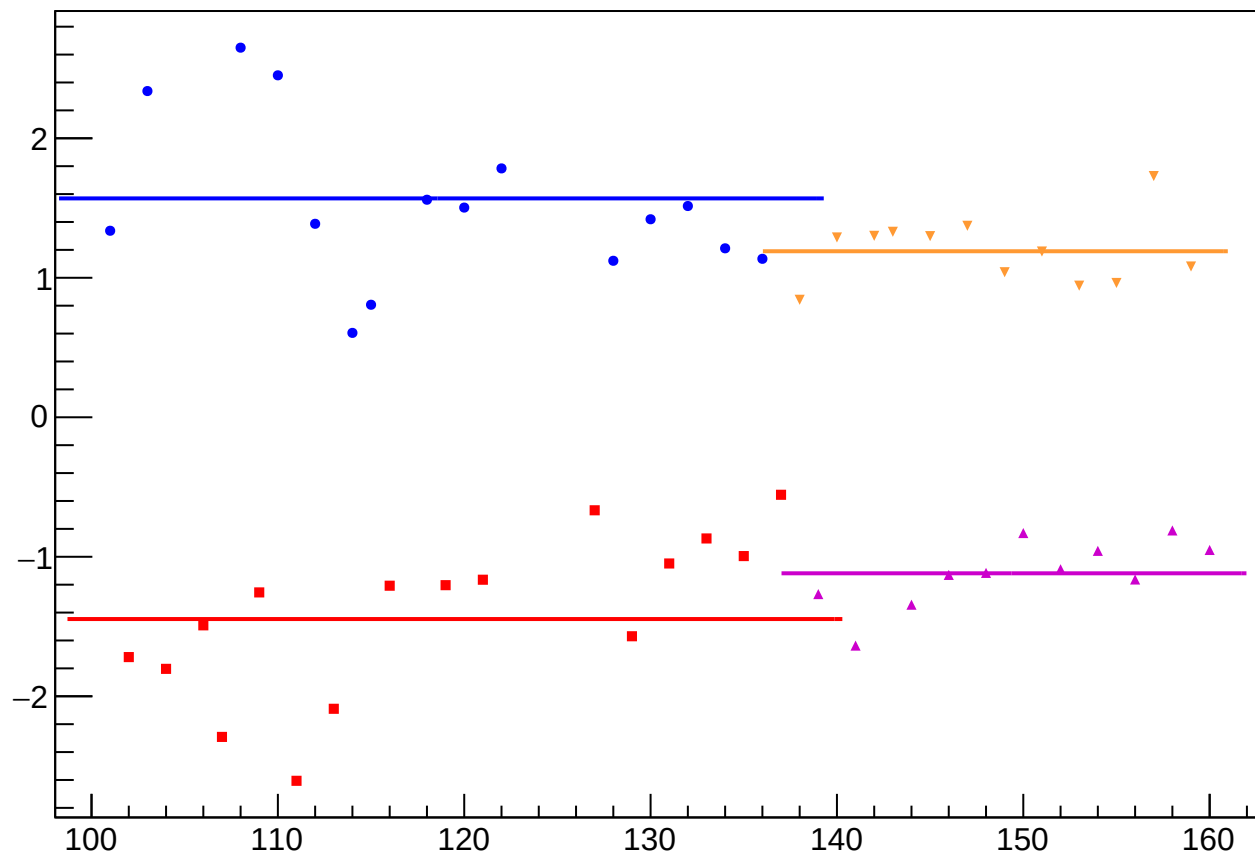
Right: 0.195 $\pm$ 0.000  $\chi^2$ /NDF: 51589726724001798

In: -26.825 $\pm$ 0.000  $\chi^2$ /NDF: 55986720653015776

Out: 19.884 $\pm$ 0.000  $\chi^2$ /NDF: 52843706660567935

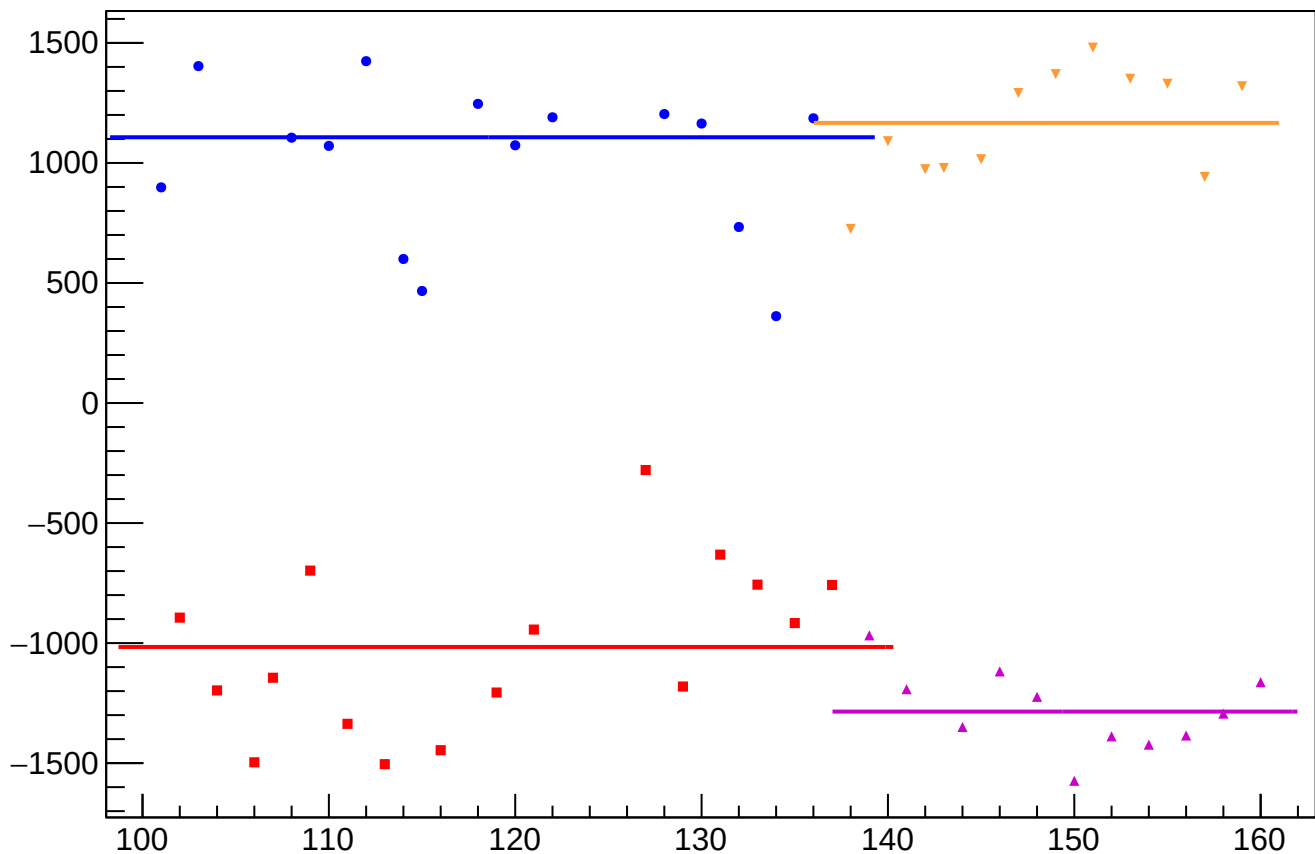
All: -3.411 $\pm$ 0.000  $\chi^2$ /NDF: 1105507050353

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

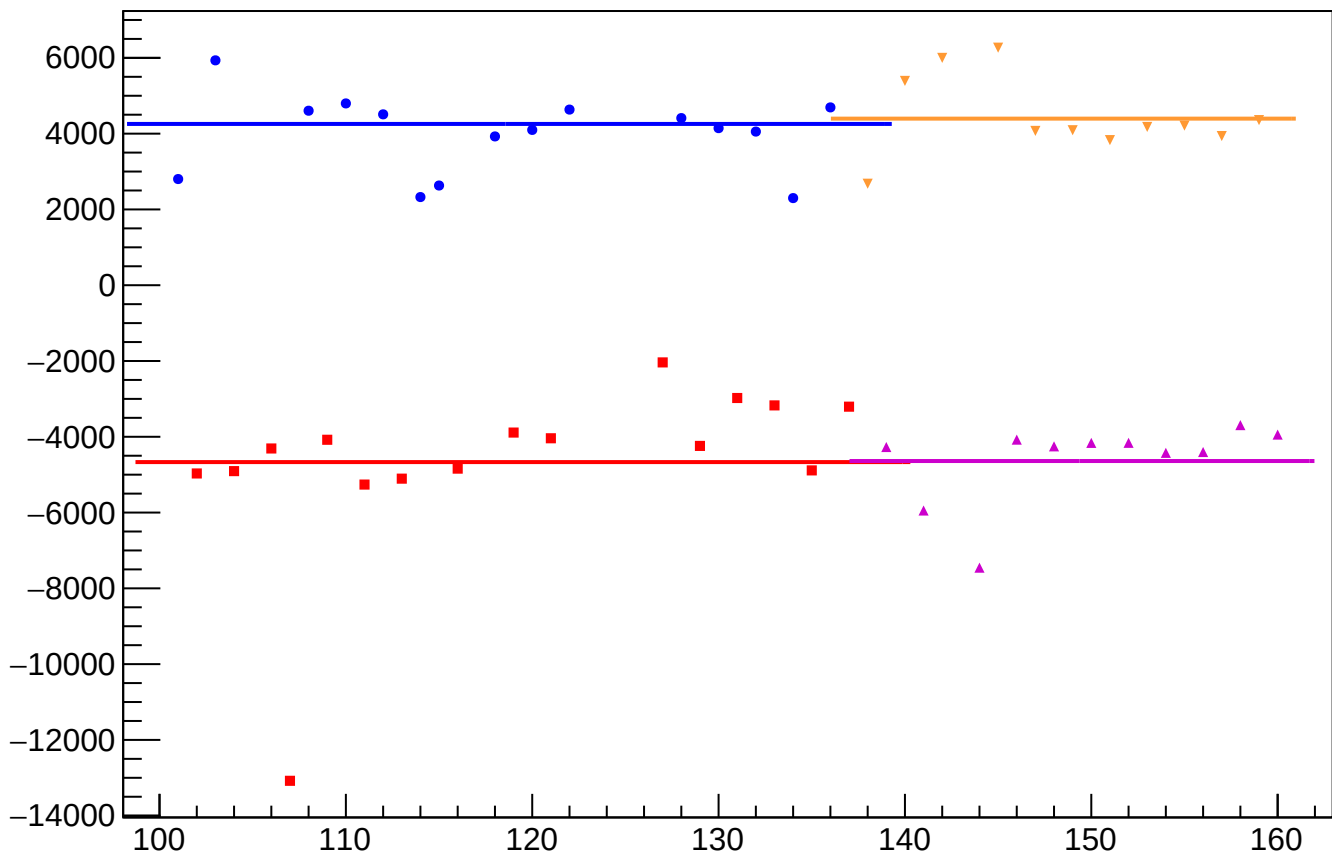
dit\_4eY\_coil4\_Ndata\_mean vs Slug, Sign Corrected



Left: -65.918 +/- 0.000  $\chi^2/\text{NDF}$ : 2831749902088431  
 Right In: 1107.052 +/- 0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Right: 30.953 +/- 0.000  $\chi^2/\text{NDF}$ : 1595991371539270  
 Left Out: 1166.869 +/- 0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 In: -298.283 +/- 0.000  $\chi^2/\text{NDF}$ : 2246669587664541  
 Right Out: -1016.106 +/- 0.000  $\chi^2/\text{NDF}$ : 72567664333509192712184310037150171136.0/15  
 Out: 245.904 +/- 0.000  $\chi^2/\text{NDF}$ : 1954763504813796  
 Left In: -1285.364 +/- 0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10  
 All: -25.499 +/- 0.000  $\chi^2/\text{NDF}$ : 443493791328

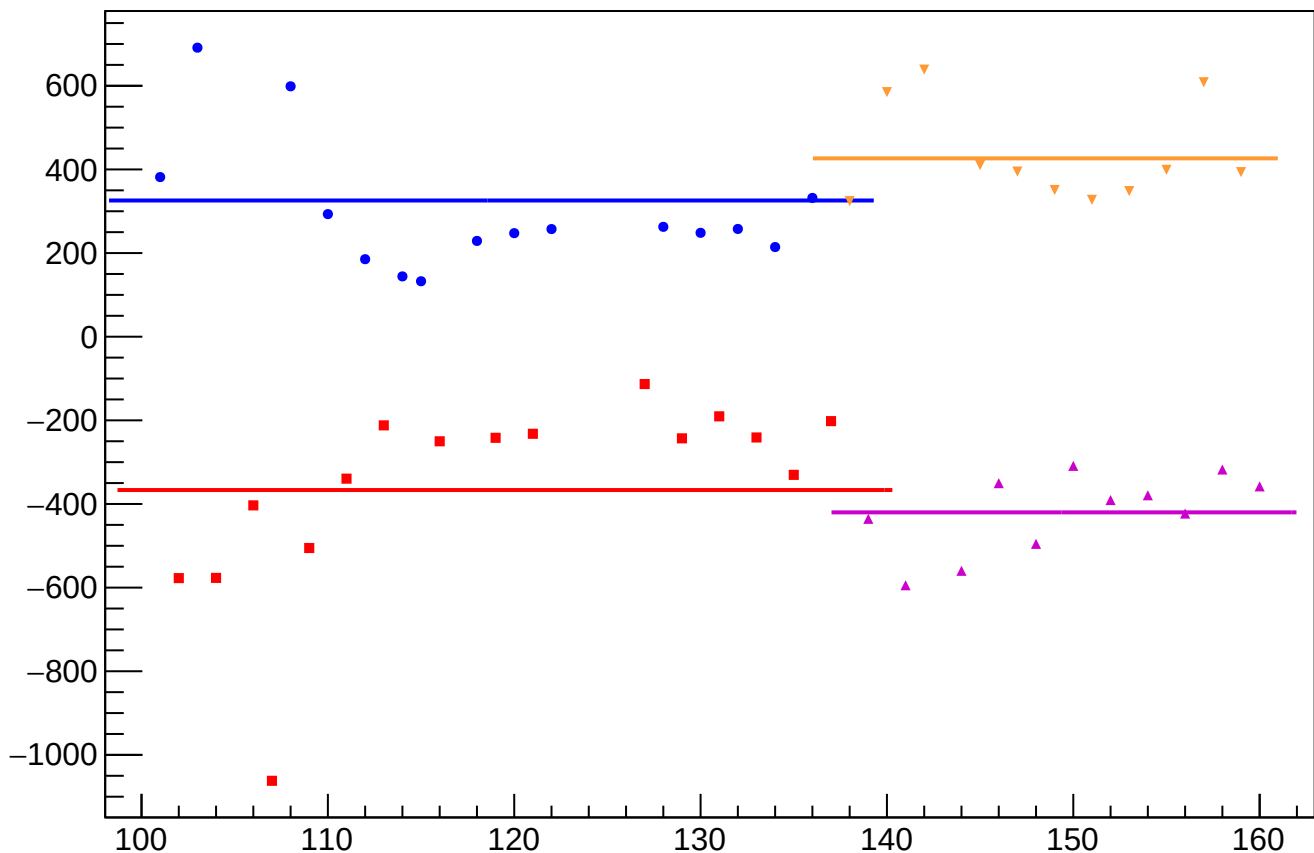


# dit\_usl\_coil4\_mean vs Slug, Sign Corrected



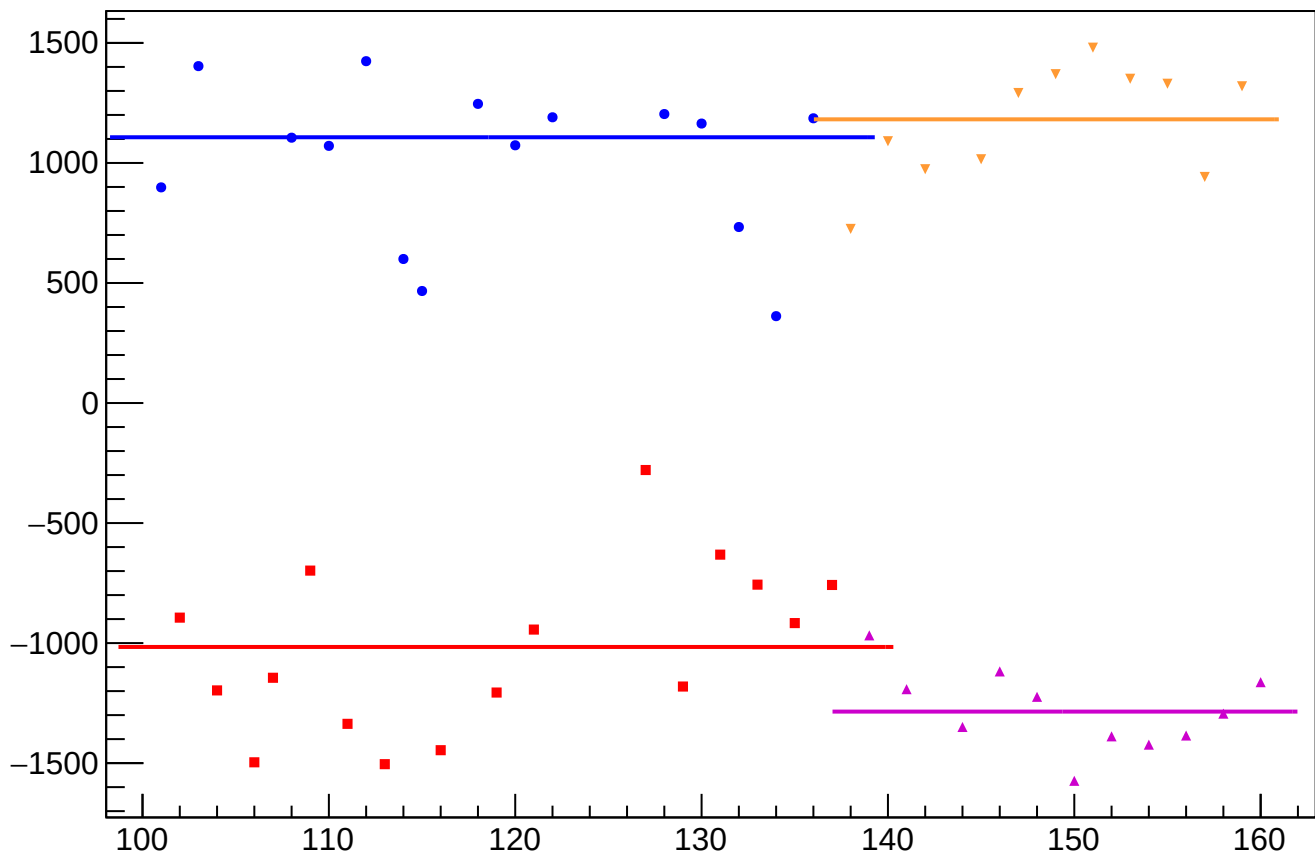
Right In: 4256.386+/-0.000  $\chi^2/\text{NDF}$ : 498605412551624859672454954159576186880.0/14  
 Left Out: 4396.403+/-0.000  $\chi^2/\text{NDF}$ : 767686308157486440179100240552638021632.0/10  
 Right Out: -4667.832+/-0.000  $\chi^2/\text{NDF}$ : 3201925535782807450320951772159309512704.0/15  
 Left 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



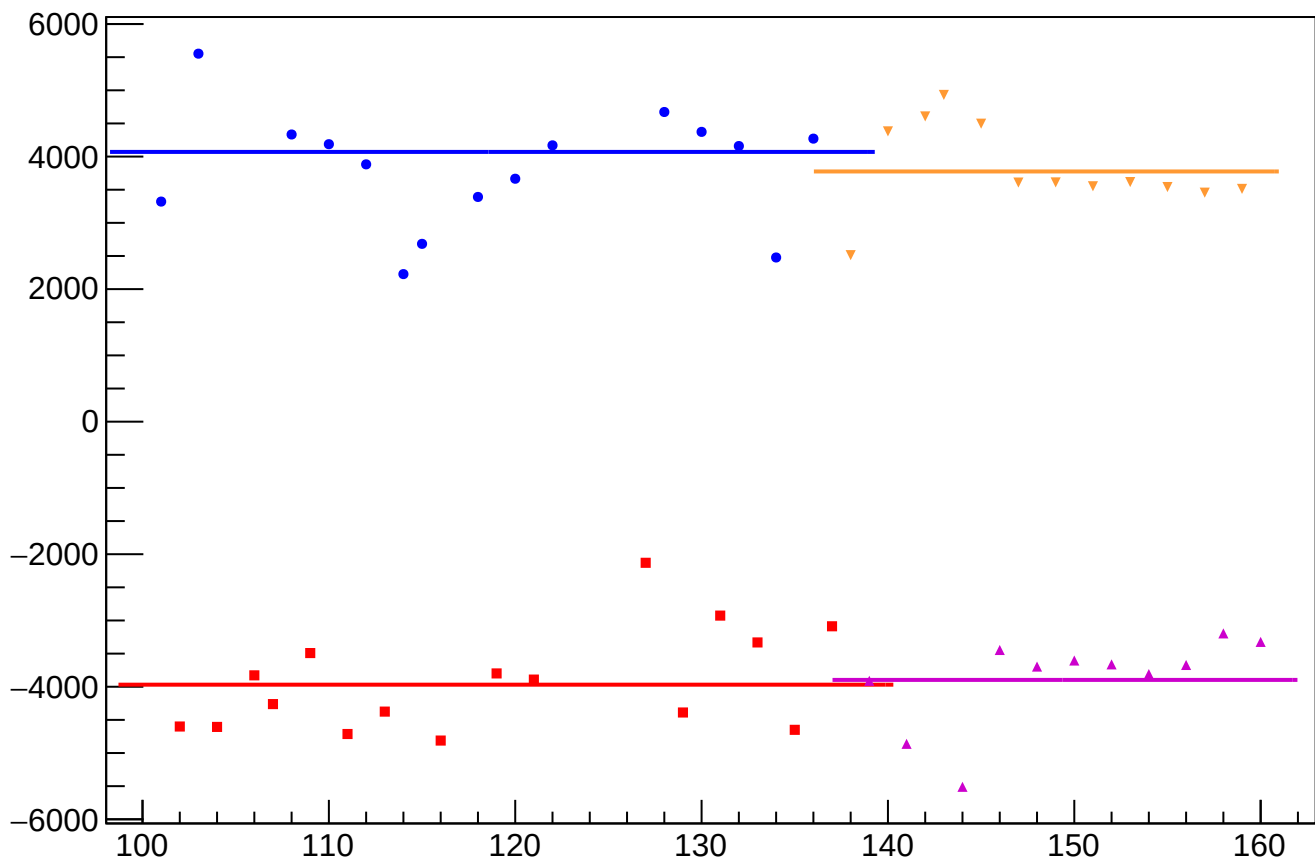
Right In: 325.732 $\pm$ 0.000  $\chi^2$ /NDF: 14633359567940244123897242769854300160.0/14  
 Left Out: 426.446 $\pm$ 0.000  $\chi^2$ /NDF: 9564737566607591468000084323542761472.0/10  
 Right Out: -366.682 $\pm$ 0.000  $\chi^2$ /NDF: 32097250699947956409117440115398934528.0/15  
 Left In: -420.062 $\pm$ 0.000  $\chi^2$ /NDF: 7706514276709269263404419491802644480.0/10  
 All: -19.474 $\pm$ 0.000  $\chi^2$ /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

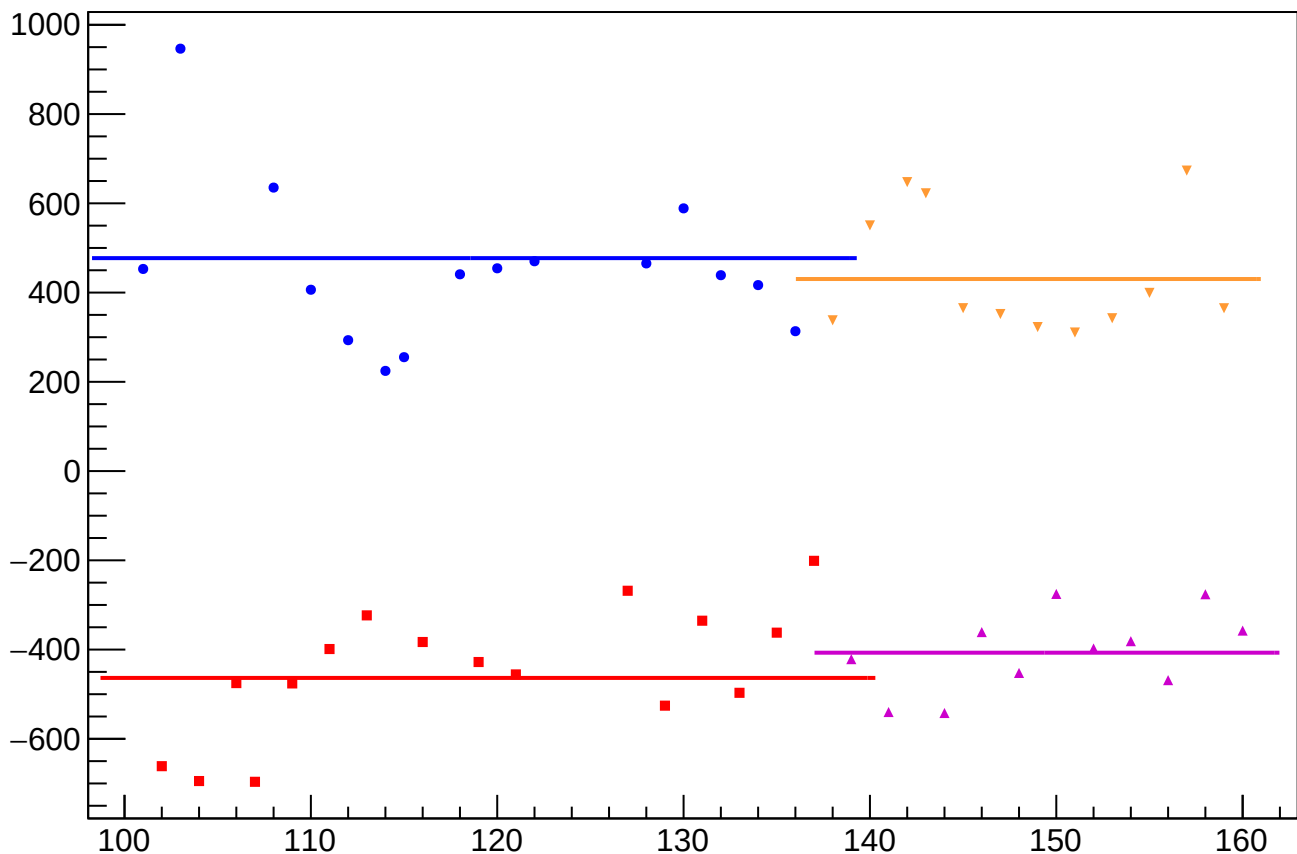
$\chi^2/\text{NDF}$ : 359955880326194784467353369492594884608.0/15

Left In: -3896.757+/-0.000

$\chi^2/\text{NDF}$ : 412530714584693730225130204014353317888.0/10

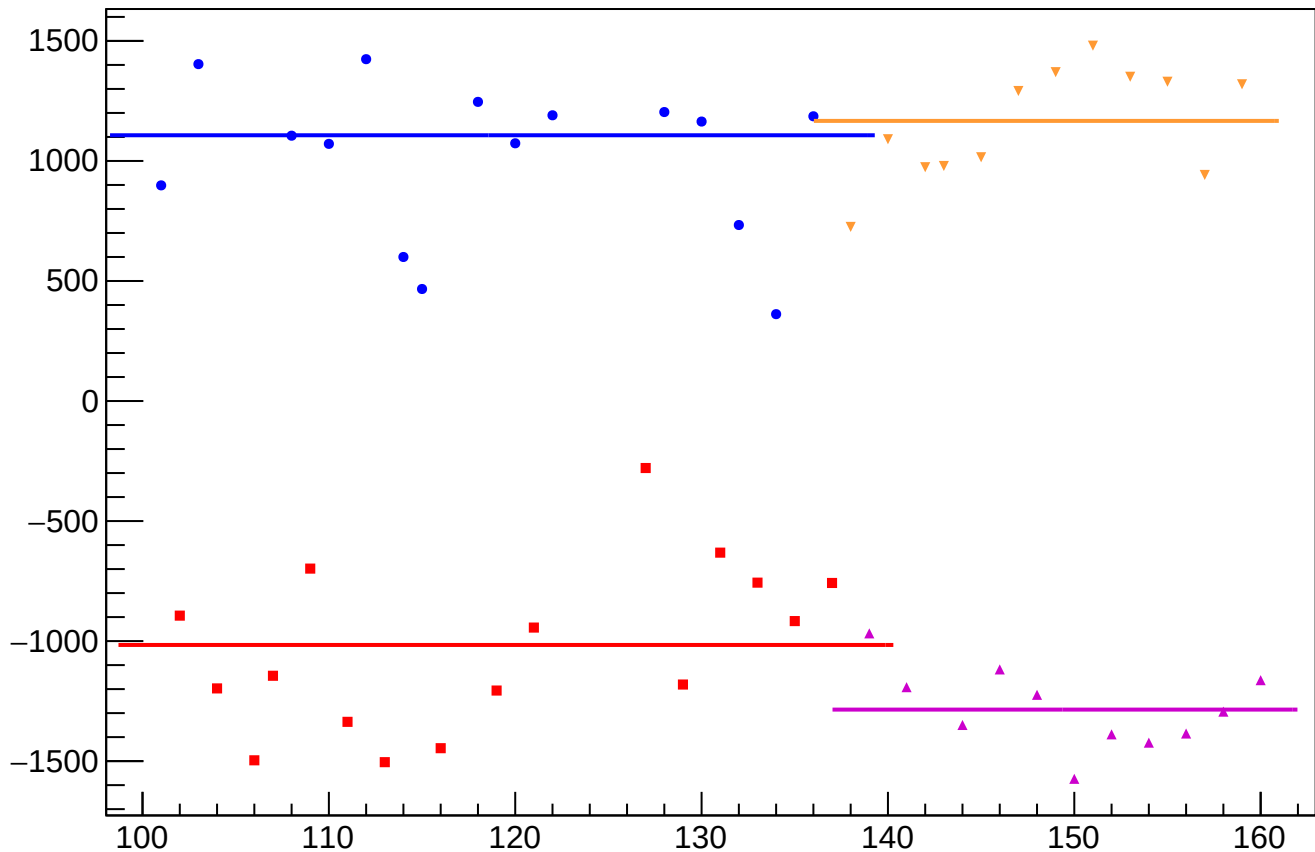
All: -49.222+/-0.000  $\chi^2/\text{NDF}$ : 497704442491

dit\_usr\_coil4\_err\_mean vs Slug, Sign Corrected



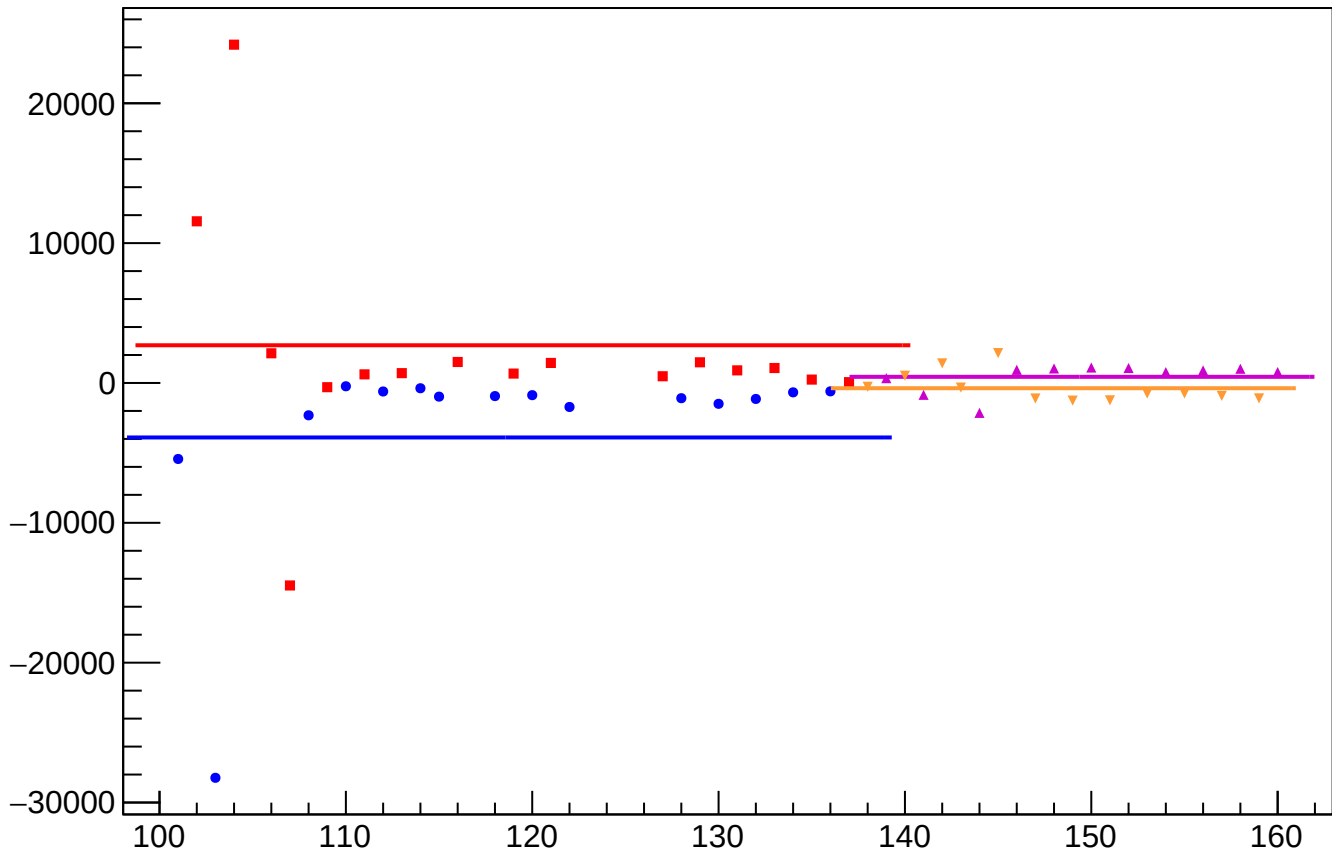
Right In: 477.186 $\pm$ 0.000  $\chi^2$ /NDF: 20455719931758379978892605184974782464.0/14  
 Left Out: 430.385 $\pm$ 0.000  $\chi^2$ /NDF: 15124863187063515916775500602167787520.0/11  
 Right Out: -463.513 $\pm$ 0.000  $\chi^2$ /NDF: 12556777931069903370031832388184571904.0/15  
 Left In: -406.990 $\pm$ 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

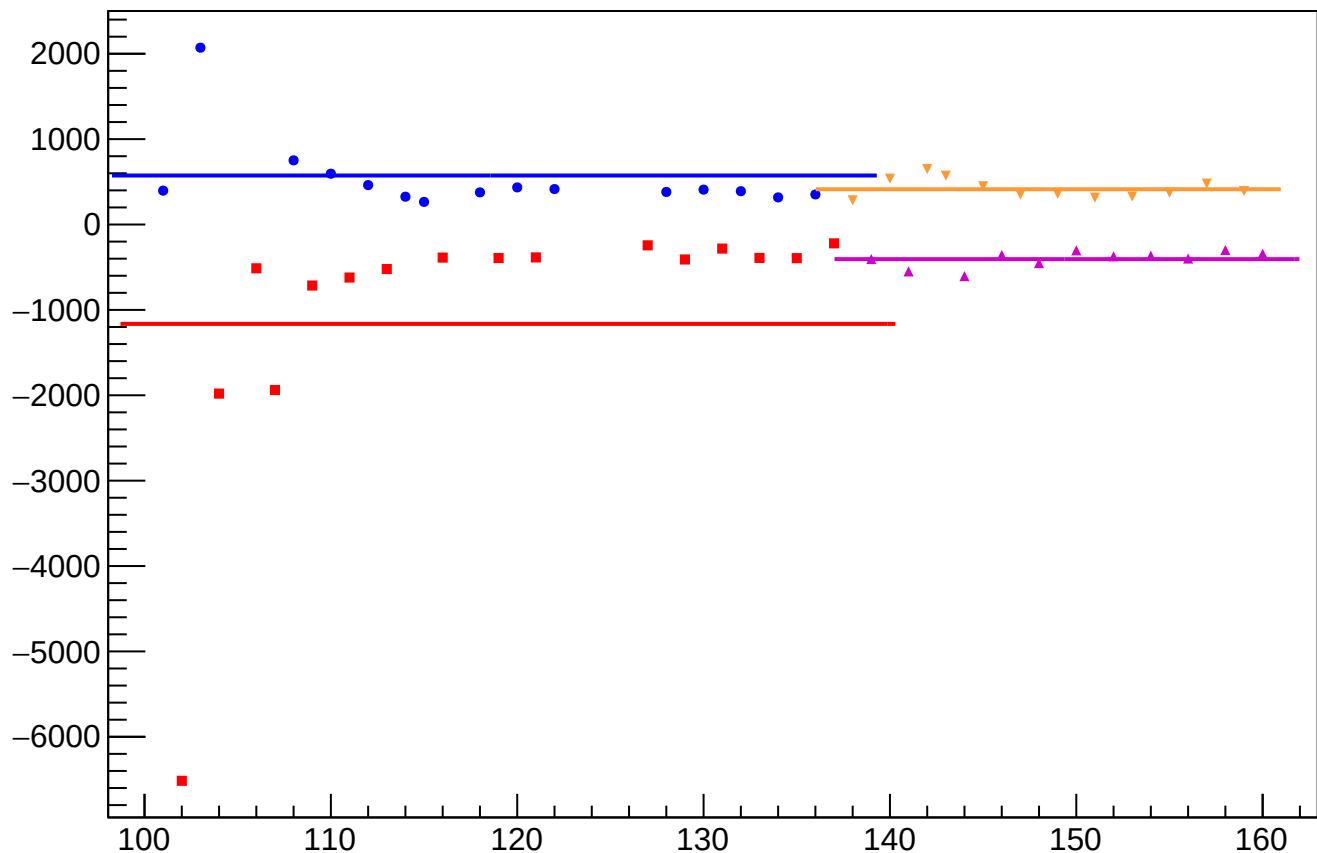


Right In: 1107.052+/-0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869+/-0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: -1016.106+/-0.000  $\chi^2/\text{NDF}$ : 7256766433509192712184310037150171136.0/15  
 Left In: -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



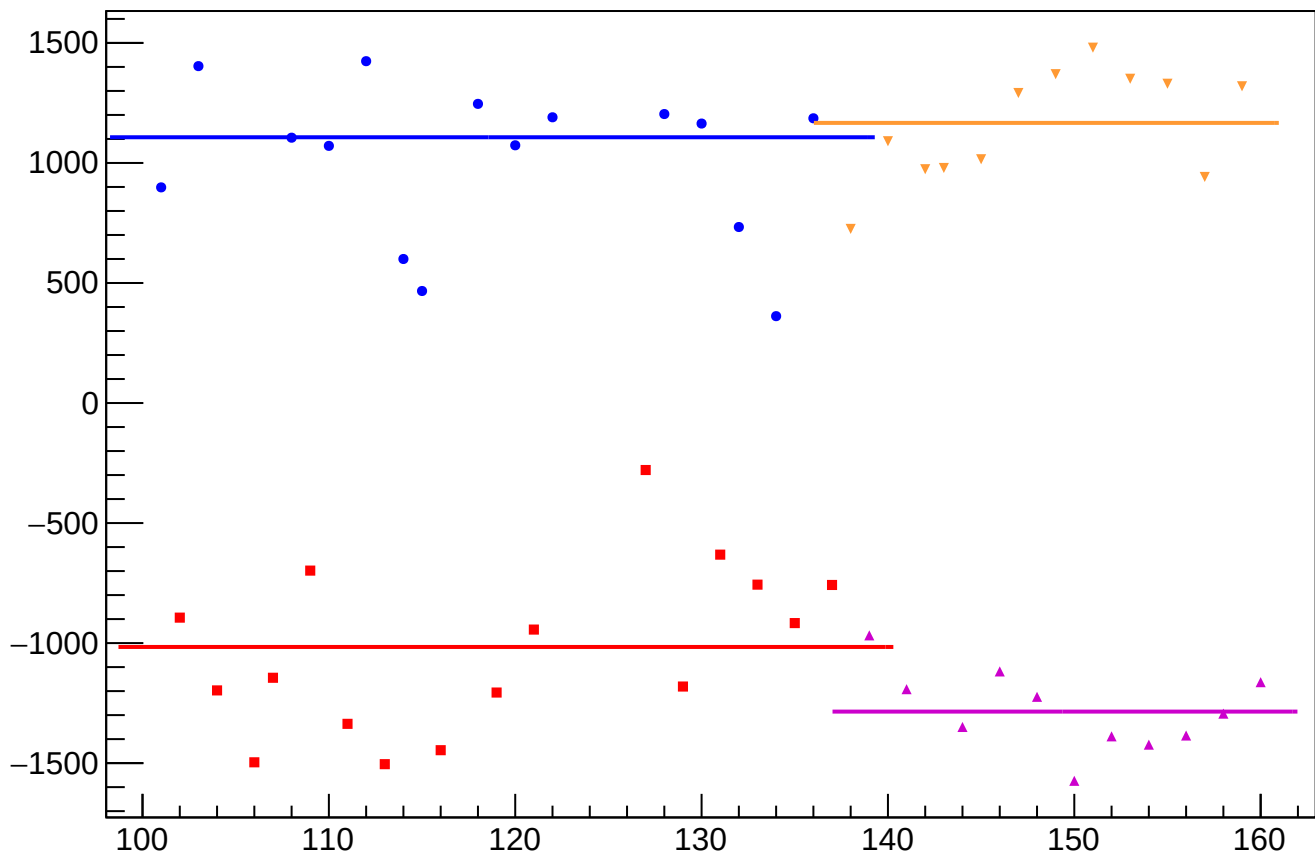
dit\_atl1\_coil4\_err\_mean vs Slug, Sign Corrected



Right In: 574.055+/-0.000  $\chi^2/\text{NDF}$ : 152105229889160423018493709582390525952.0/14  
 Left Out: 413.017+/-0.000  $\chi^2/\text{NDF}$ : 9379796802385704003508317238748774400.0/11  
 Right Out: -1163.697+/-0.000  $\chi^2/\text{NDF}$ : 2003194396475465337190154787515183136768.0/15  
 Left In: -405.371+/-0.000  $\chi^2/\text{NDF}$ : 8096374045117906535343483577494929408.0/10  
 All: -127.041+/-0.000  $\chi^2/\text{NDF}$ : 35467372325

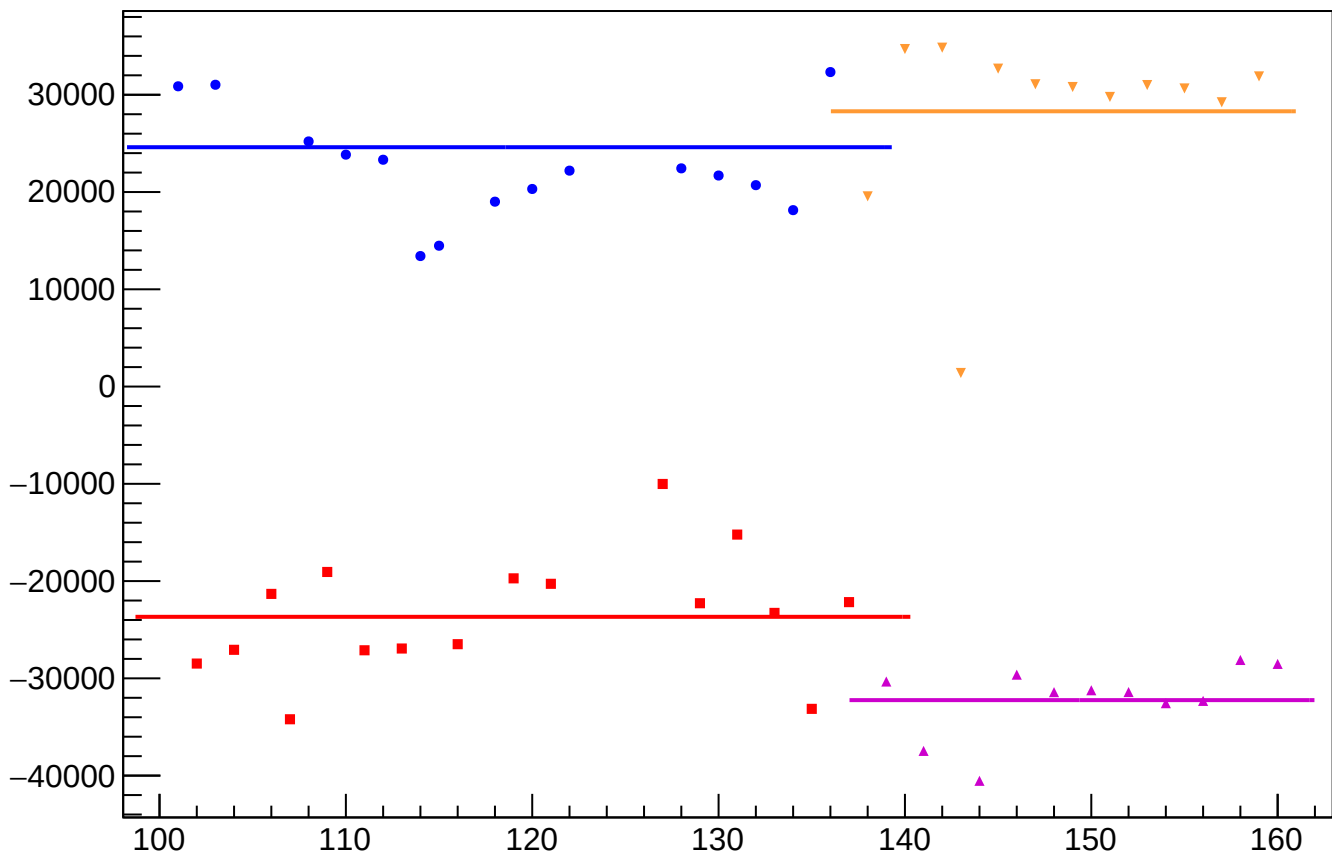


dit\_atl1\_coil4\_Ndata\_mean vs Slug, Sign Corrected



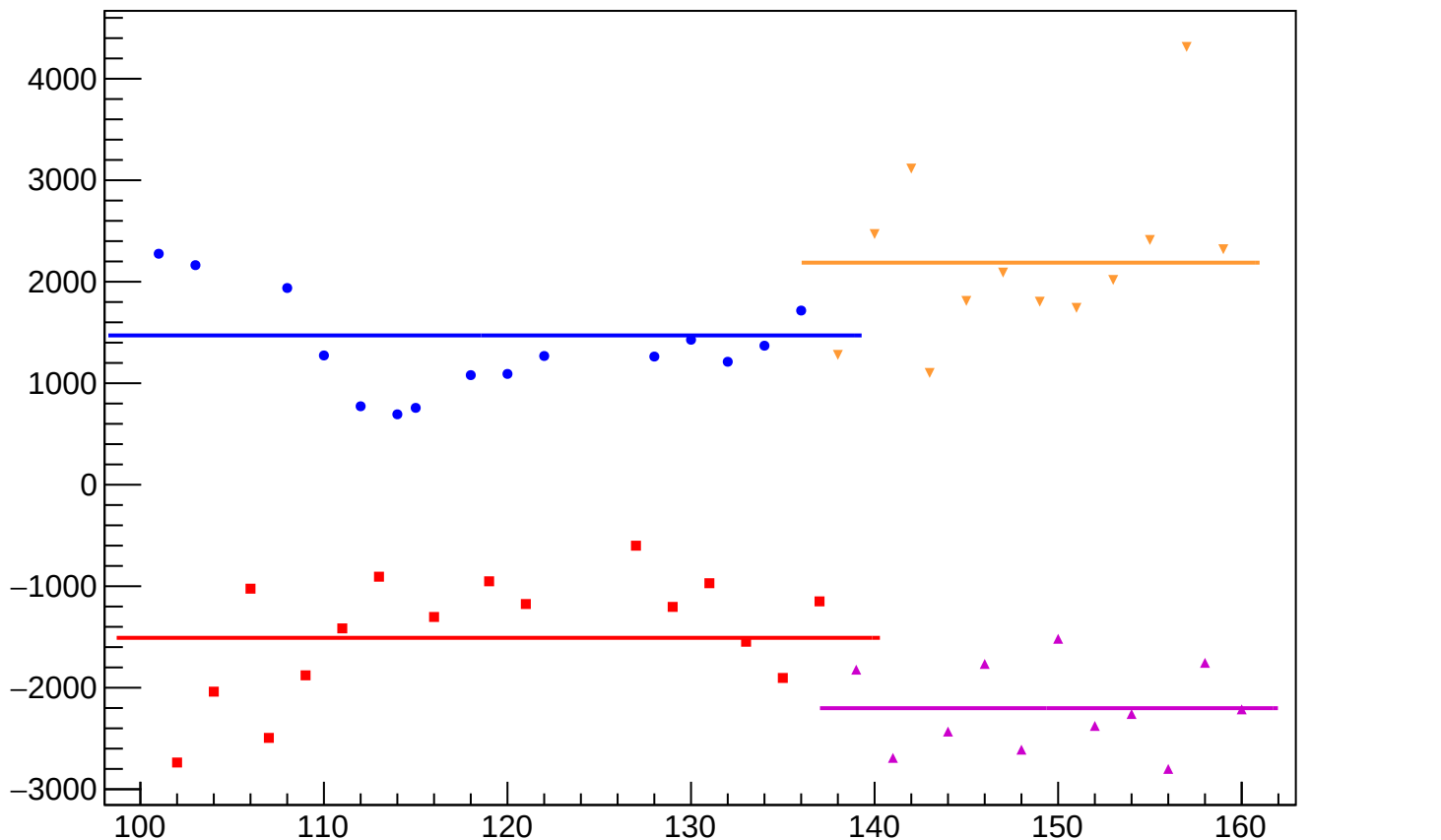
Right In: 1107.052 $\pm$ 0.000  $\chi^2$ /NDF: 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869 $\pm$ 0.000  $\chi^2$ /NDF: 44651845589529754769451964140544327680.0/11  
 Right Out: -1016.106 $\pm$ 0.000  $\chi^2$ /NDF: 7256766433509192712184310037150171136.0/15  
 Left In: -1285.364 $\pm$ 0.000  $\chi^2$ /NDF: 24002572803732345959736048095514853376.0/10  
 All: -25.499 $\pm$ 0.000  $\chi^2$ /NDF: 443493791328

# dit\_atl2\_coil4\_mean vs Slug, Sign Corrected



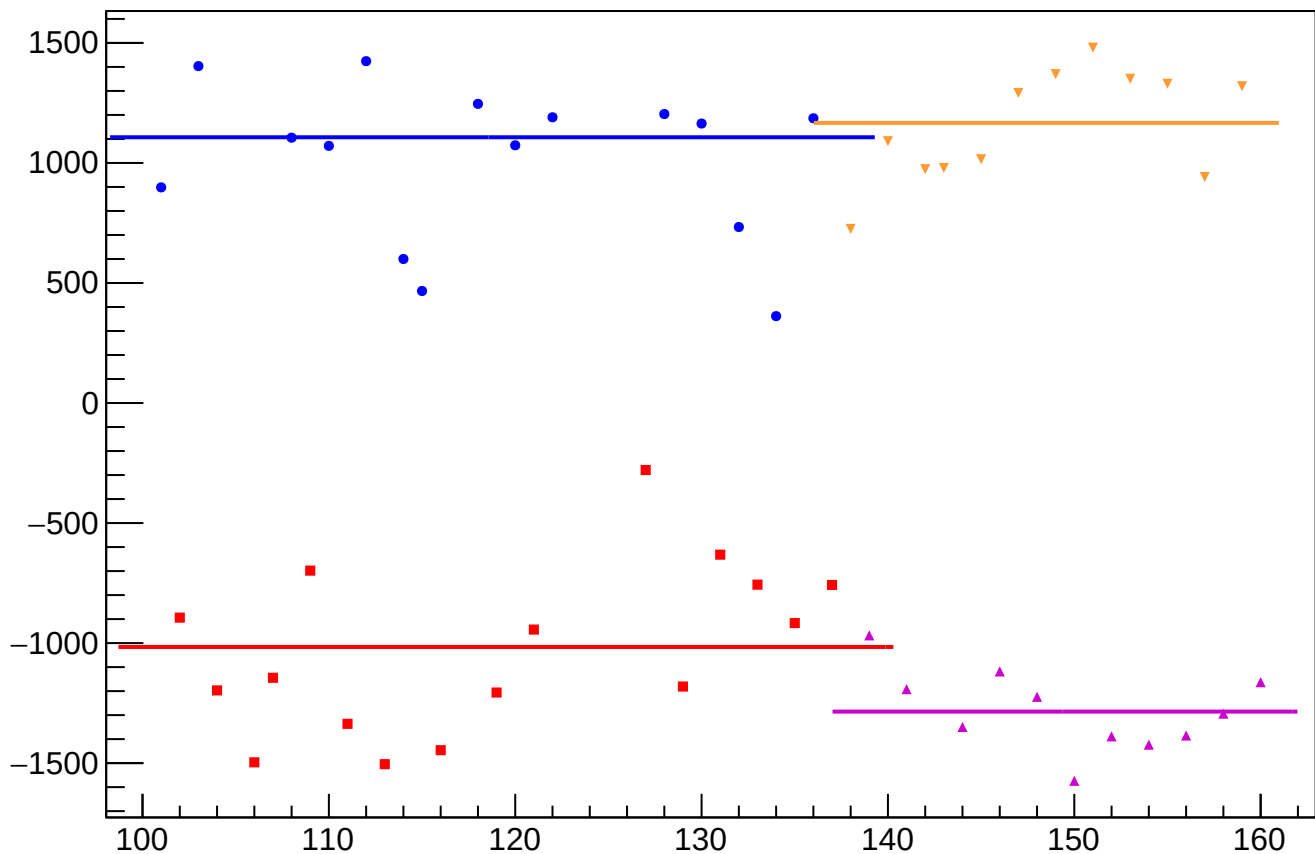
Right In: 24608.761+/-0.000  $\chi^2/\text{NDF}$ : 17555600427140701787636759084167268925440.0/14  
 Left Out: 28302.359+/-0.000  $\chi^2/\text{NDF}$ : 64743960576526073147852789326823934656512.0/11  
 Right Out: -23673.937+/-0.000  $\chi^2/\text{NDF}$ : 24824229344827567313624871677295341862912.0/15  
 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



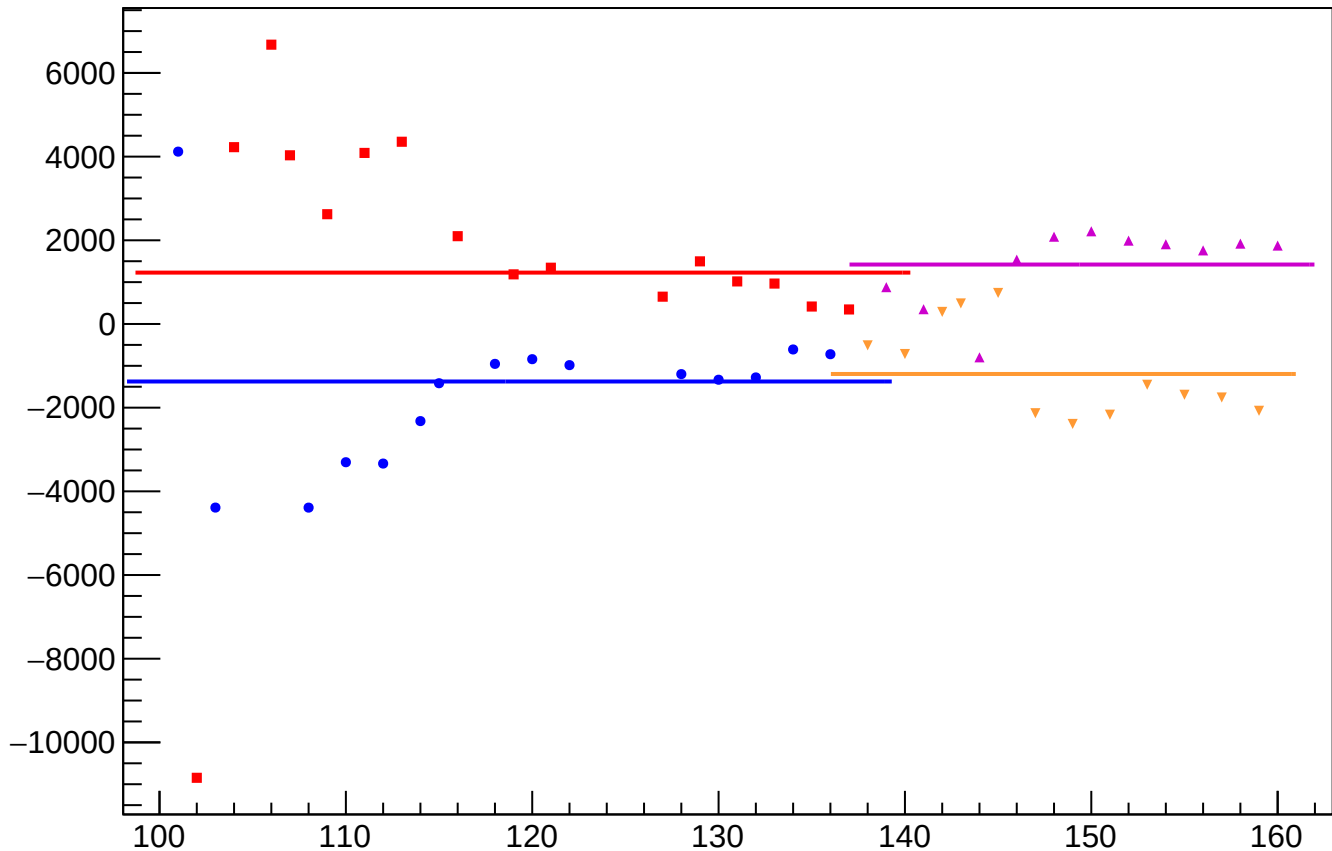
Left: -18.662 +/- 0.000  $\chi^2/\text{NDF}$ : 9604851757835687  
 Right: -39.055 +/- 0.000  $\chi^2/\text{NDF}$ : 330947344548199  
 In: -686.275 +/- 0.000  $\chi^2/\text{NDF}$ : 5438324784011715  
 Out: 628.599 +/- 0.000  $\chi^2/\text{NDF}$ : 6113094829757836  
 All: -27.171 +/- 0.000  $\chi^2/\text{NDF}$ : 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

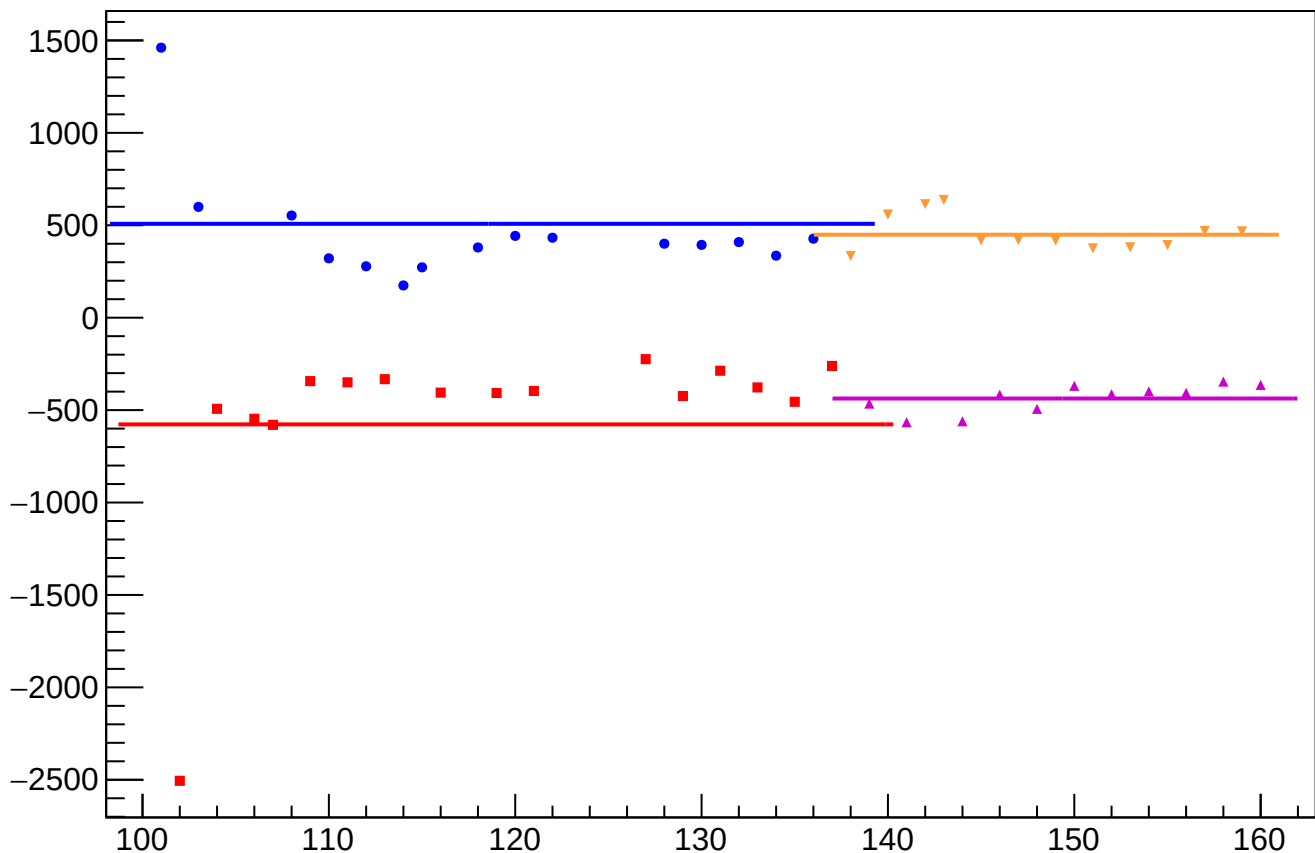
Right: -55.518+/-0.000  $\chi^2/\text{NDF}$ : 164158010761557

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

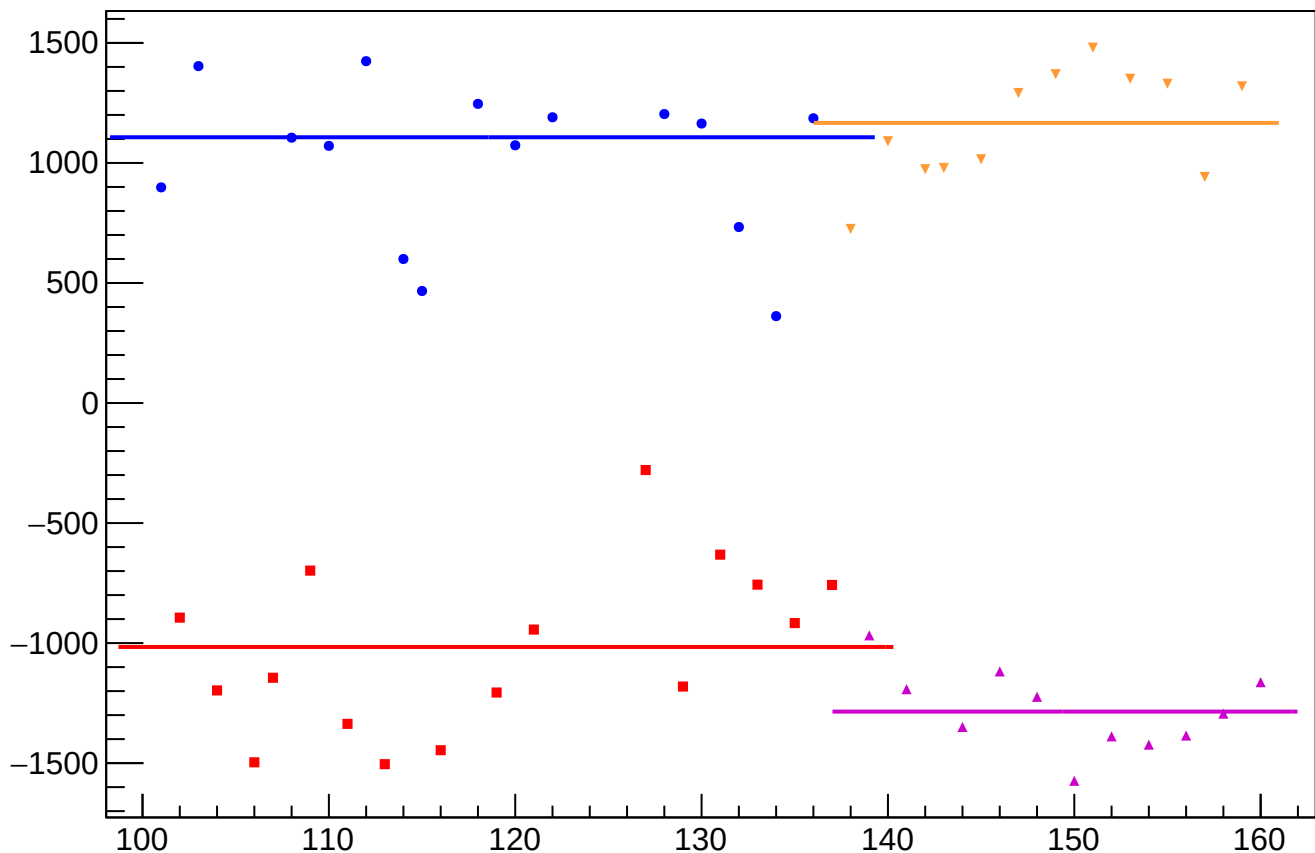
$\chi^2/\text{NDF}$ : 241288780642623391683958641535574081536.0/15

Left In: -437.315+/-0.000

$\chi^2/\text{NDF}$ : 4874677524968742275560761293986070528.0/10

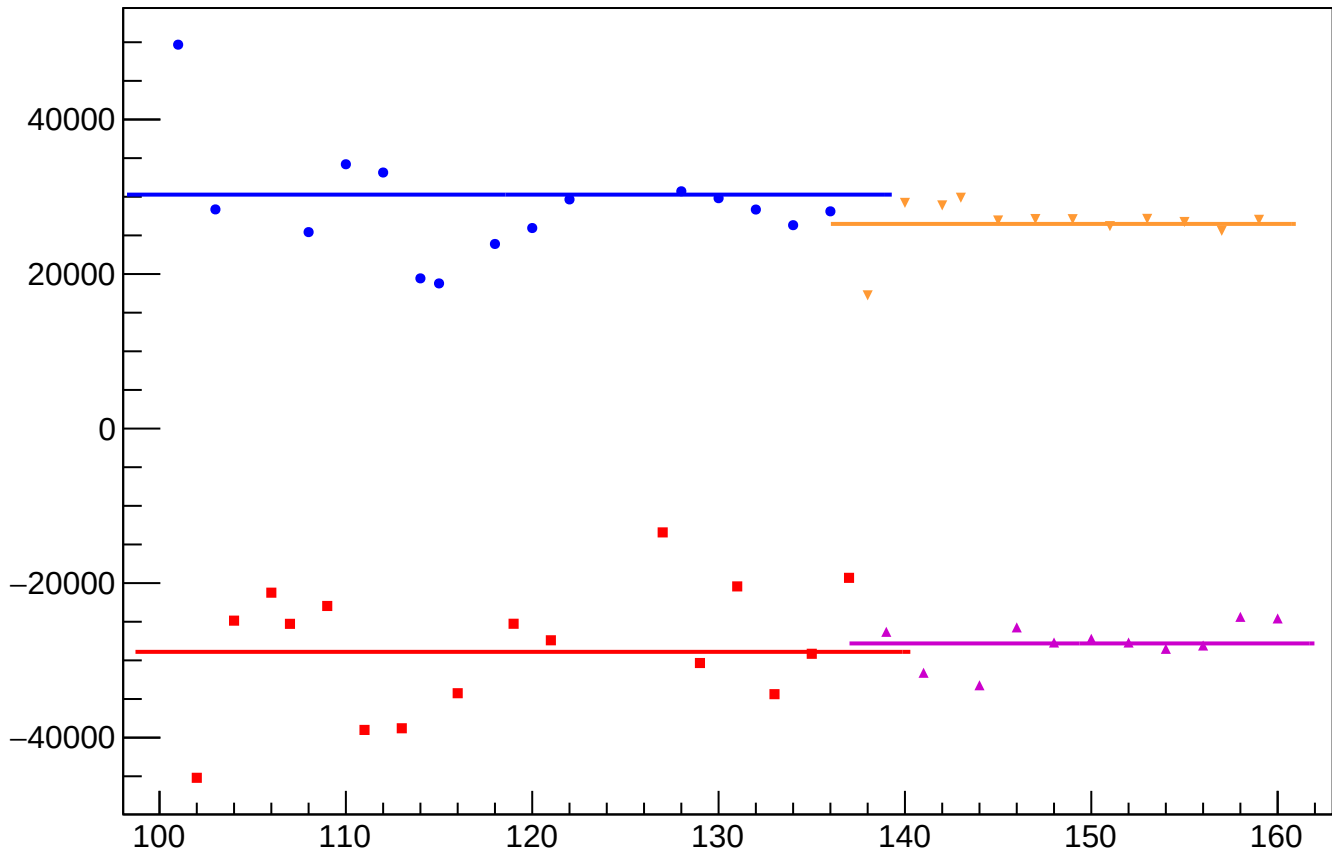
All: -15.611+/-0.000  $\chi^2/\text{NDF}$ : 106701634148

dit\_atr1\_coil4\_Ndata\_mean vs Slug, Sign Corrected



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\_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

Left: -807.954+/-0.000  $\chi^2/\text{NDF}$ : 136920382018106

Right: 285.980+/-0.000  $\chi^2/\text{NDF}$ : 122974265906167

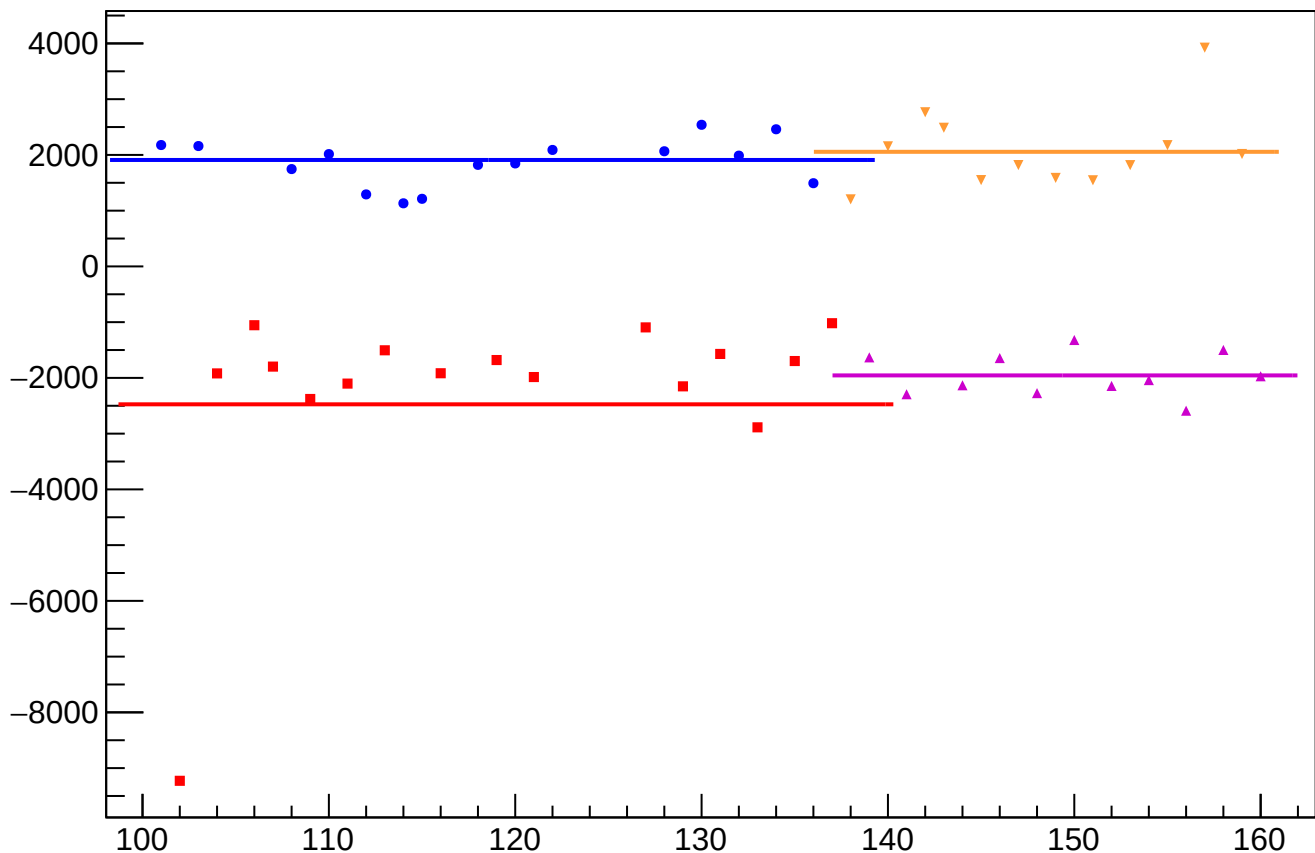
In: -3842.144+/-0.000  $\chi^2/\text{NDF}$ : 132338595511608

Out: 3121.457+/-0.000  $\chi^2/\text{NDF}$ : 123824278408227

All: -351.512+/-0.000  $\chi^2/\text{NDF}$ : 25998642244

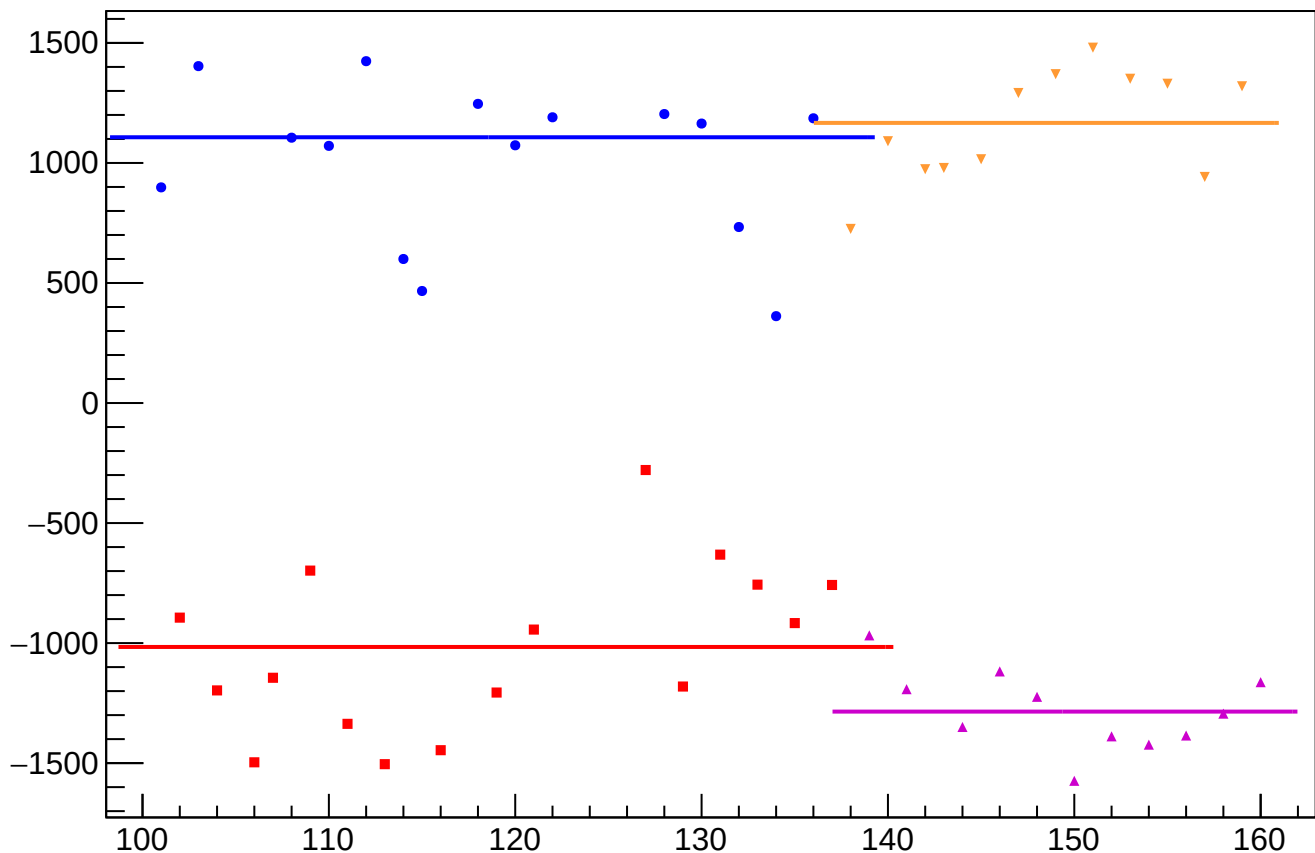


dit\_atr2\_coil4\_err\_mean vs Slug, Sign Corrected



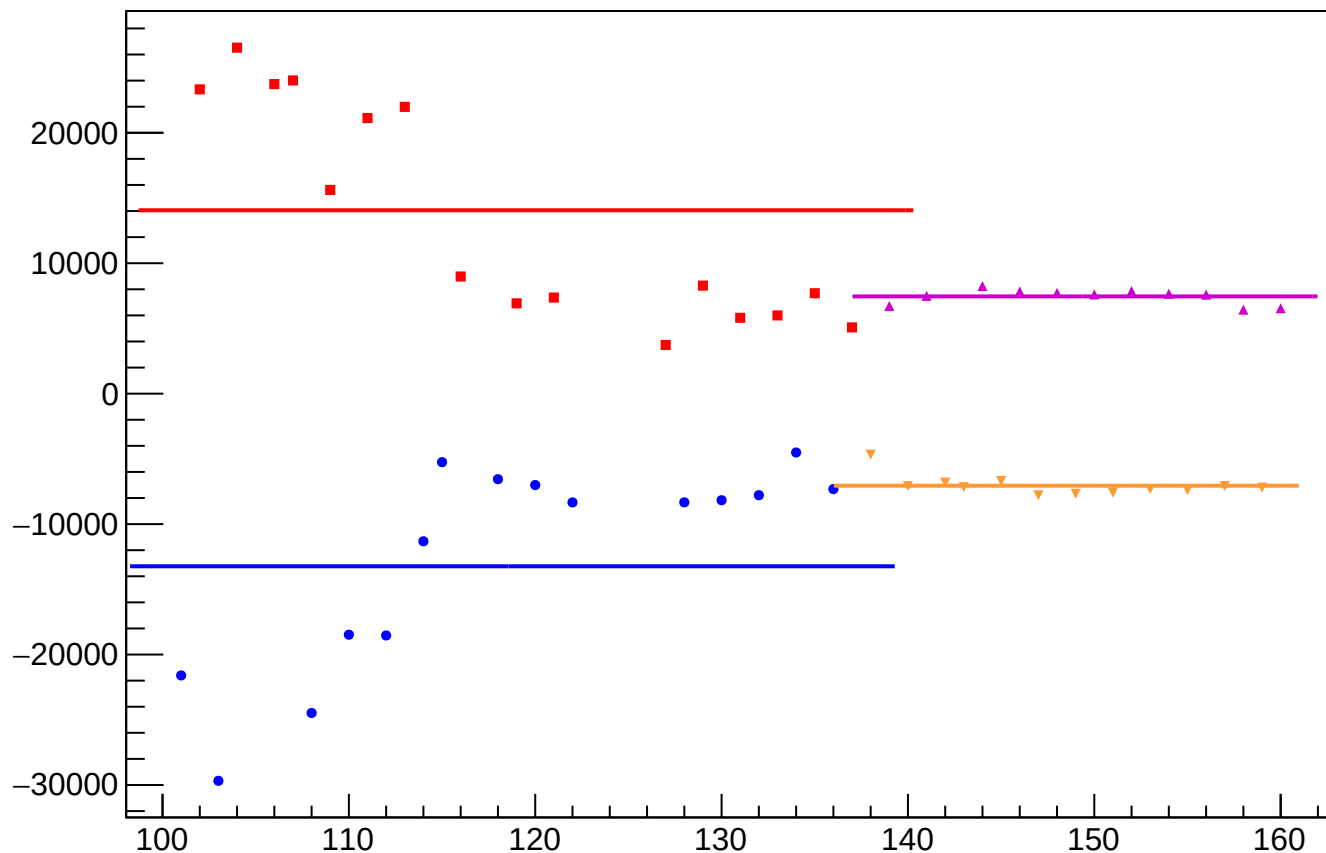
Right In: 1909.434+/-0.000  $\chi^2/\text{NDF}$ : 87636974094211671524177650165869445120.0/14  
 Left Out: 2055.788+/-0.000  $\chi^2/\text{NDF}$ : 438010168588723075505721290768963862528.0/11  
 Right Out: -2473.977+/-0.000  $\chi^2/\text{NDF}$ : 3033908025746418121738753286600386412544.0/15  
 Left 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



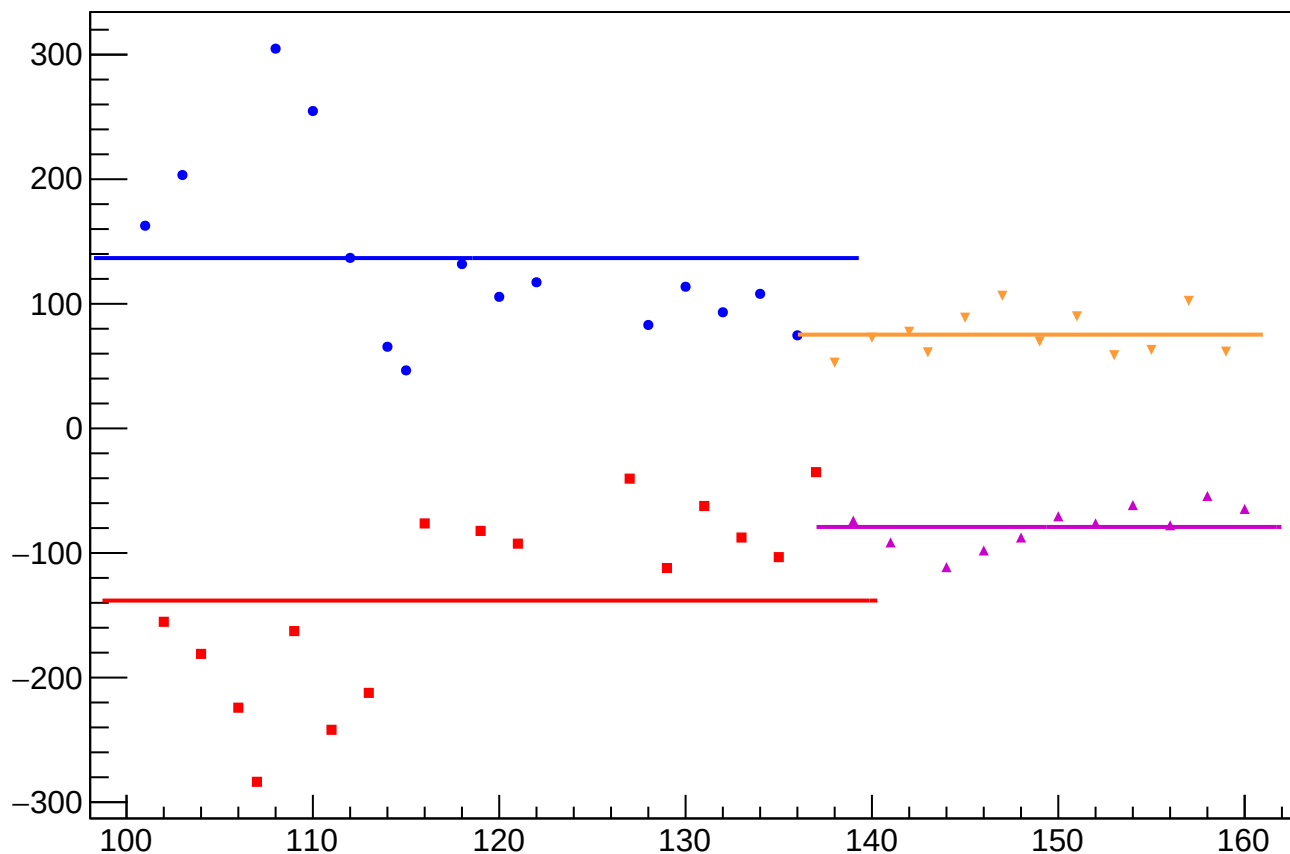
|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Right In: 1107.052+/-0.000   | $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14 | Left: -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\_sam1\_coil4\_mean vs Slug, Sign Corrected



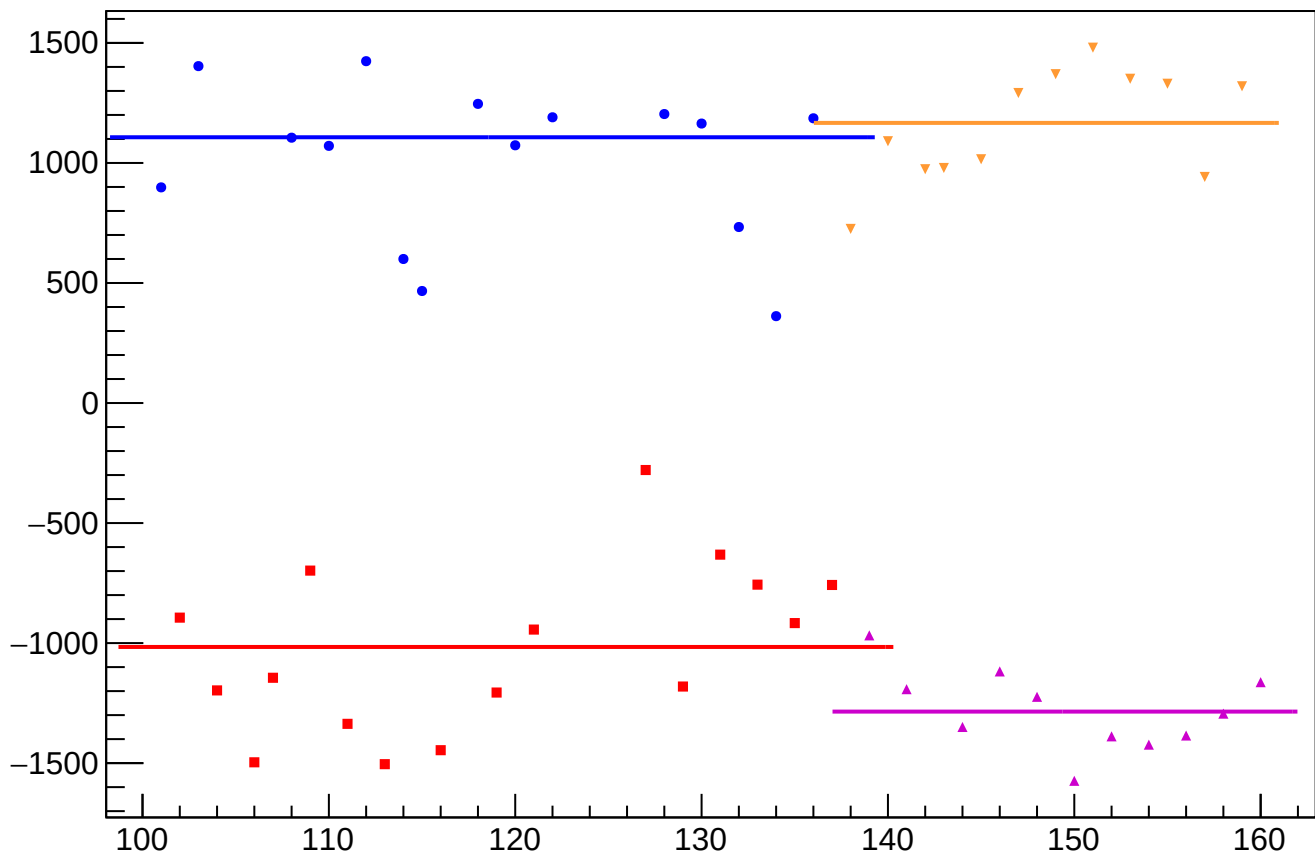
Left: 238.790+/-0.000  $\chi^2/\text{NDF}$ : 9764033800523105  
 Right In: -13233.367+/-0.000  $\chi^2/\text{NDF}$ : 41257043836213043367596866559499640504320.0/14  
 Left Out: -7057.509+/-0.000  $\chi^2/\text{NDF}$ : 567022768290026836186795118569021505536.0/11  
 Right: 600.026+/-0.000  $\chi^2/\text{NDF}$ : 330784909470012  
 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



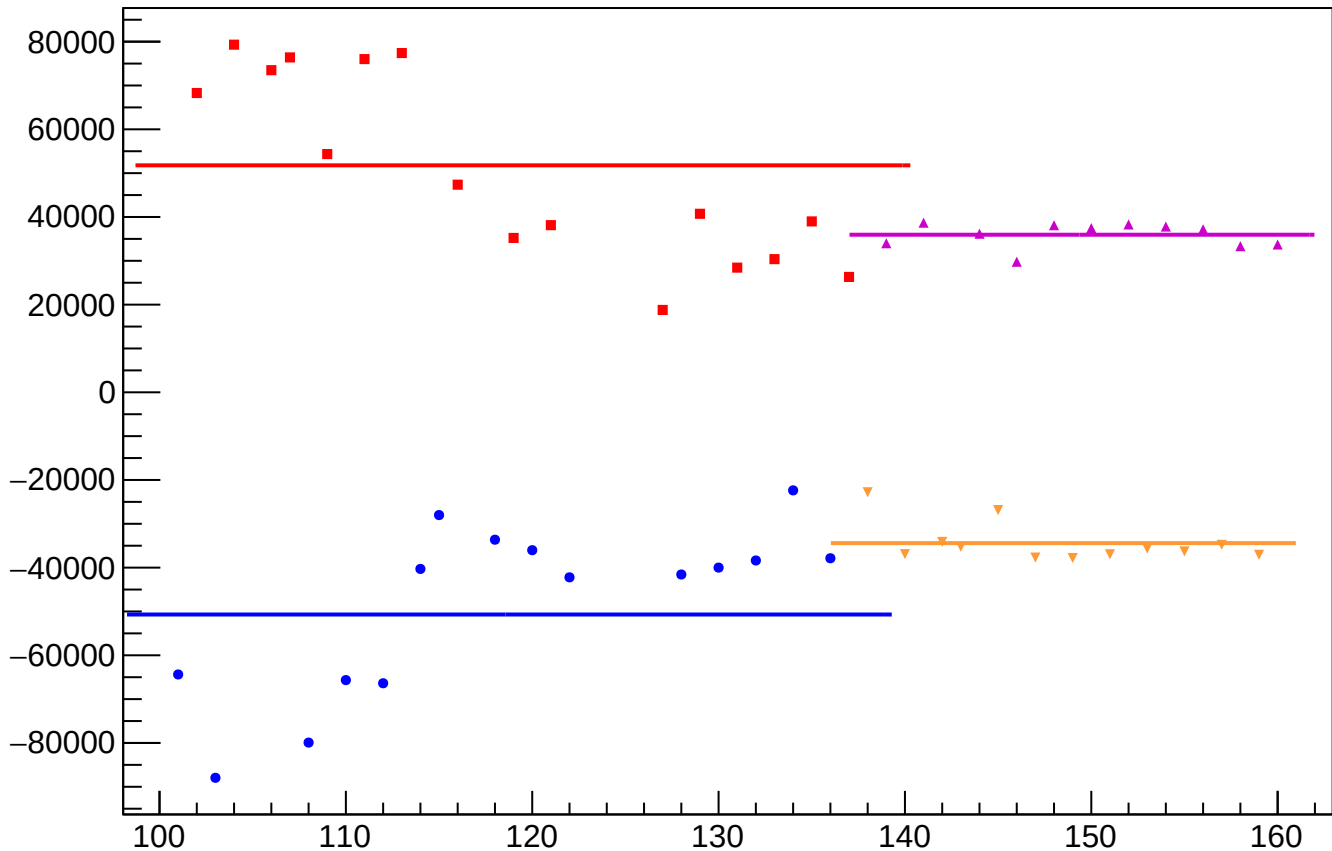
Right In: 136.711+/-0.000  $\chi^2/\text{NDF}$ : 2687065030885227126291764267456659456.0/14  
 Left Out: 75.280+/-0.000  $\chi^2/\text{NDF}$ : 271565230291715258223184233837363200.0/11  
 Right Out: -138.179+/-0.000  $\chi^2/\text{NDF}$ : 3230883352878636334641613561898467328.0/15  
 Left In: -79.096+/-0.000  $\chi^2/\text{NDF}$ : 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 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\_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

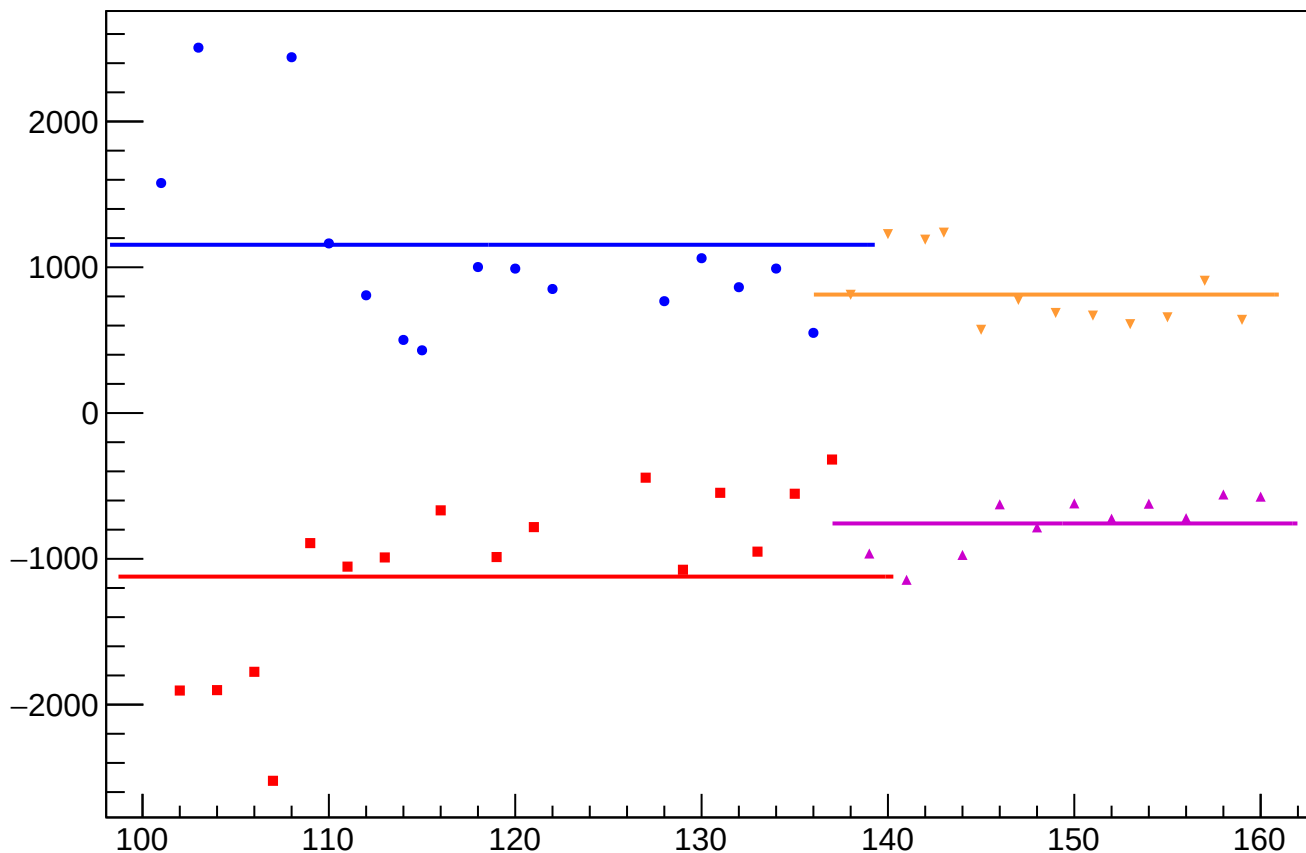
Right: 1245.090+/-0.000  $\chi^2/\text{NDF}$ : 39629195371379

In: 200.989+/-0.000  $\chi^2/\text{NDF}$ : 309519005844449410

Out: 1956.998+/-0.000  $\chi^2/\text{NDF}$ : 316504805338211

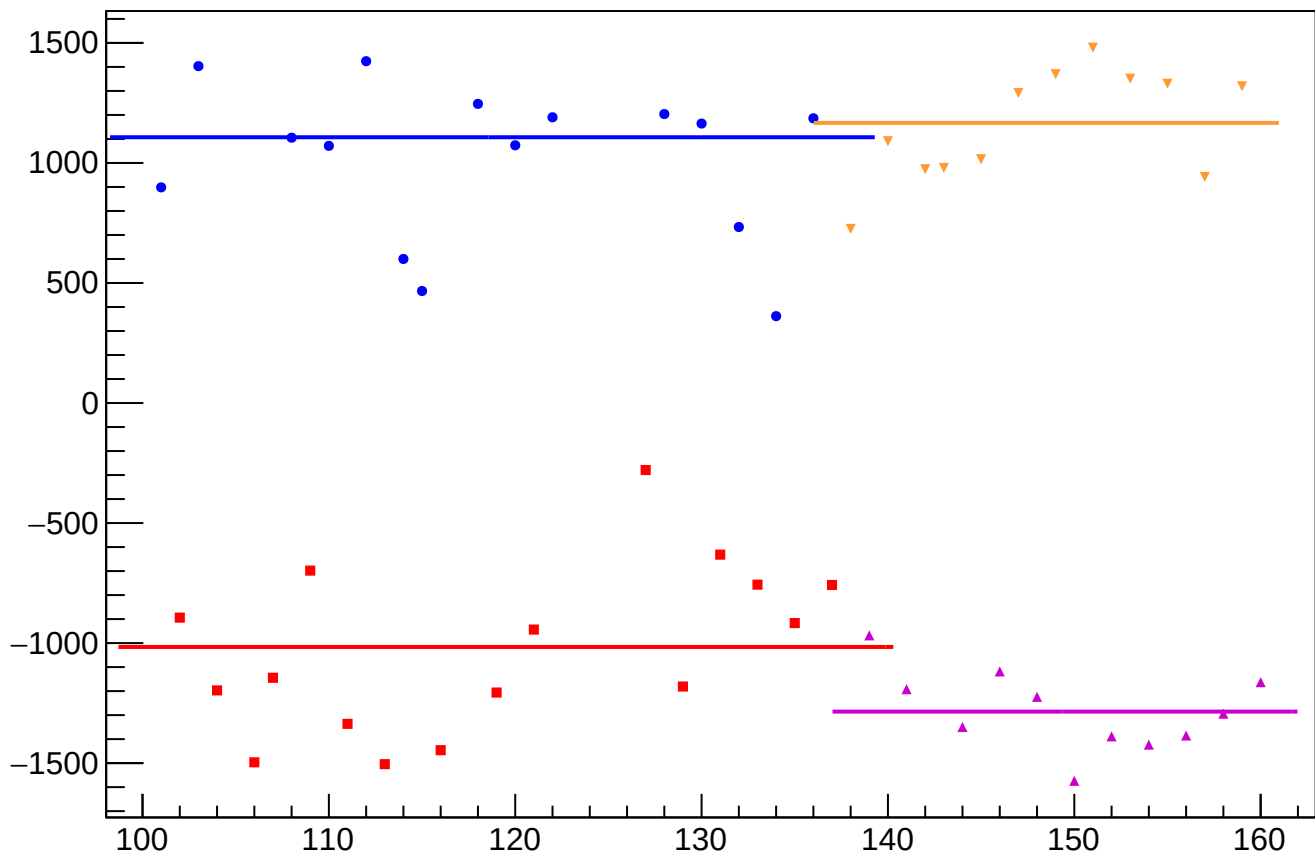
All: 1081.220+/-0.000  $\chi^2/\text{NDF}$ : 6262669489

dit\_sam2\_coil4\_err\_mean vs Slug, Sign Corrected



Right In: 1154.331+/-0.000  $\chi^2/\text{NDF}$ : 249270472563470703232737910394663731200.0/14  
 Left Out: 812.768+/-0.000  $\chi^2/\text{NDF}$ : 48869150953187834312923483015749828608.0/11  
 Right Out: -1121.934+/-0.000  $\chi^2/\text{NDF}$ : 226159335639567338179811644002797617152.0/15  
 Left In: -757.349+/-0.000  $\chi^2/\text{NDF}$ : 31036557490853362173363612241828511744.0/10  
 All: 13.922+/-0.000  $\chi^2/\text{NDF}$ : 3392848168342

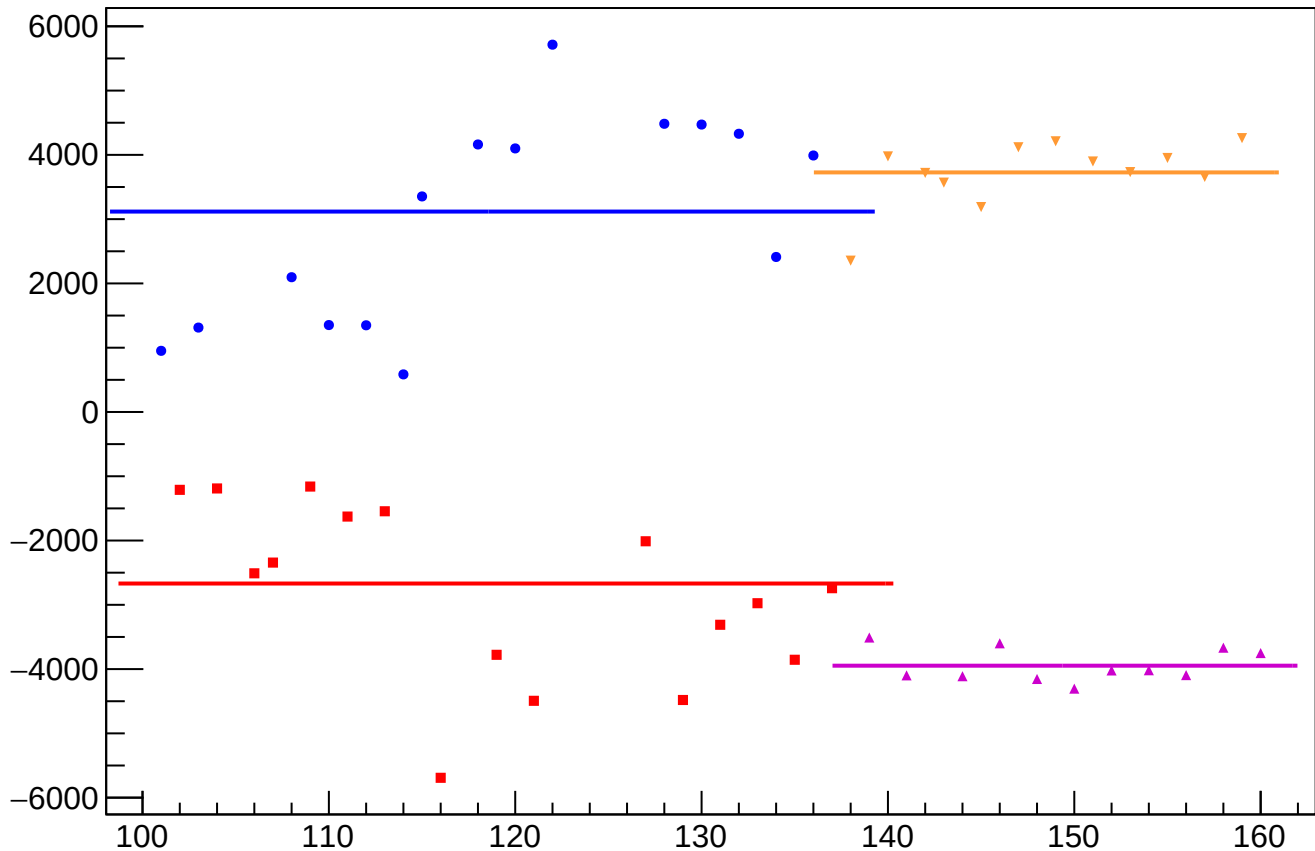
dit\_sam2\_coil4\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1107.052+/-0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left 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\_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

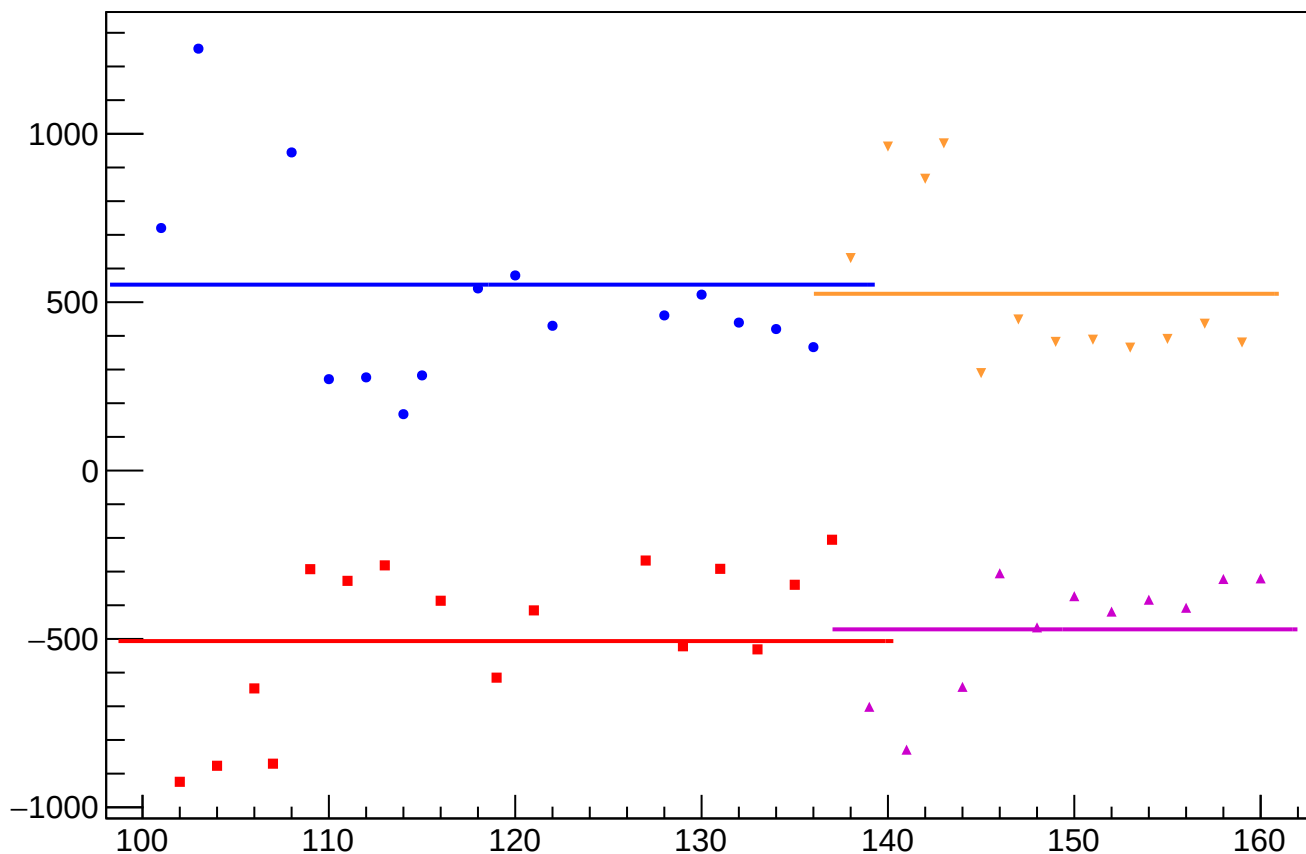
$\chi^2/\text{NDF}$ : 1136406286131098596000054422131257114624.0/15

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

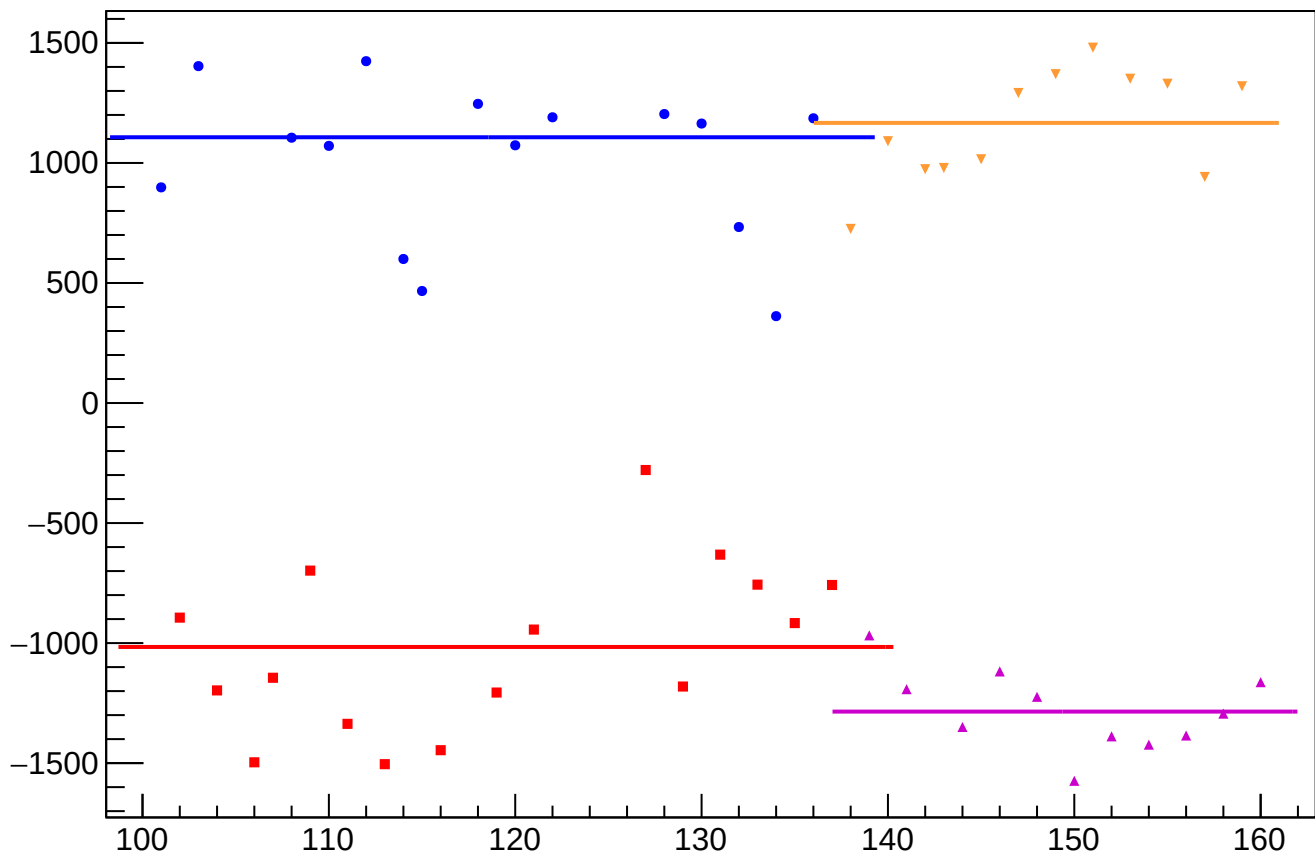
Left Out: 524.984+/-0.000  $\chi^2/\text{NDF}$ : 49120612413638370088062361036096798720.0/11

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

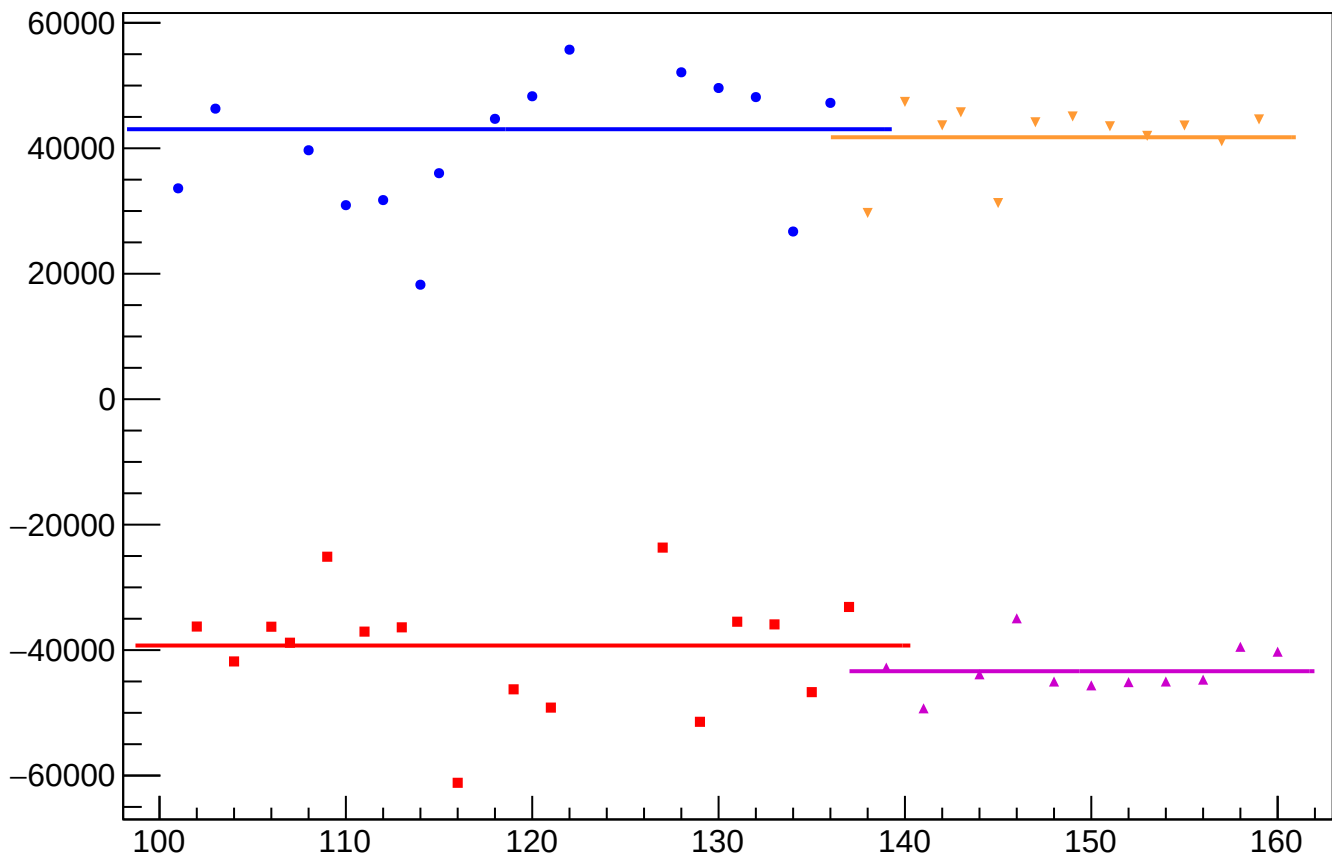
All: 20.520+/-0.000  $\chi^2/\text{NDF}$ : 9875911626514

dit\_sam3\_coil4\_Ndata\_mean vs Slug, Sign Corrected



Right In: 1107.052+/-0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left 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\_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

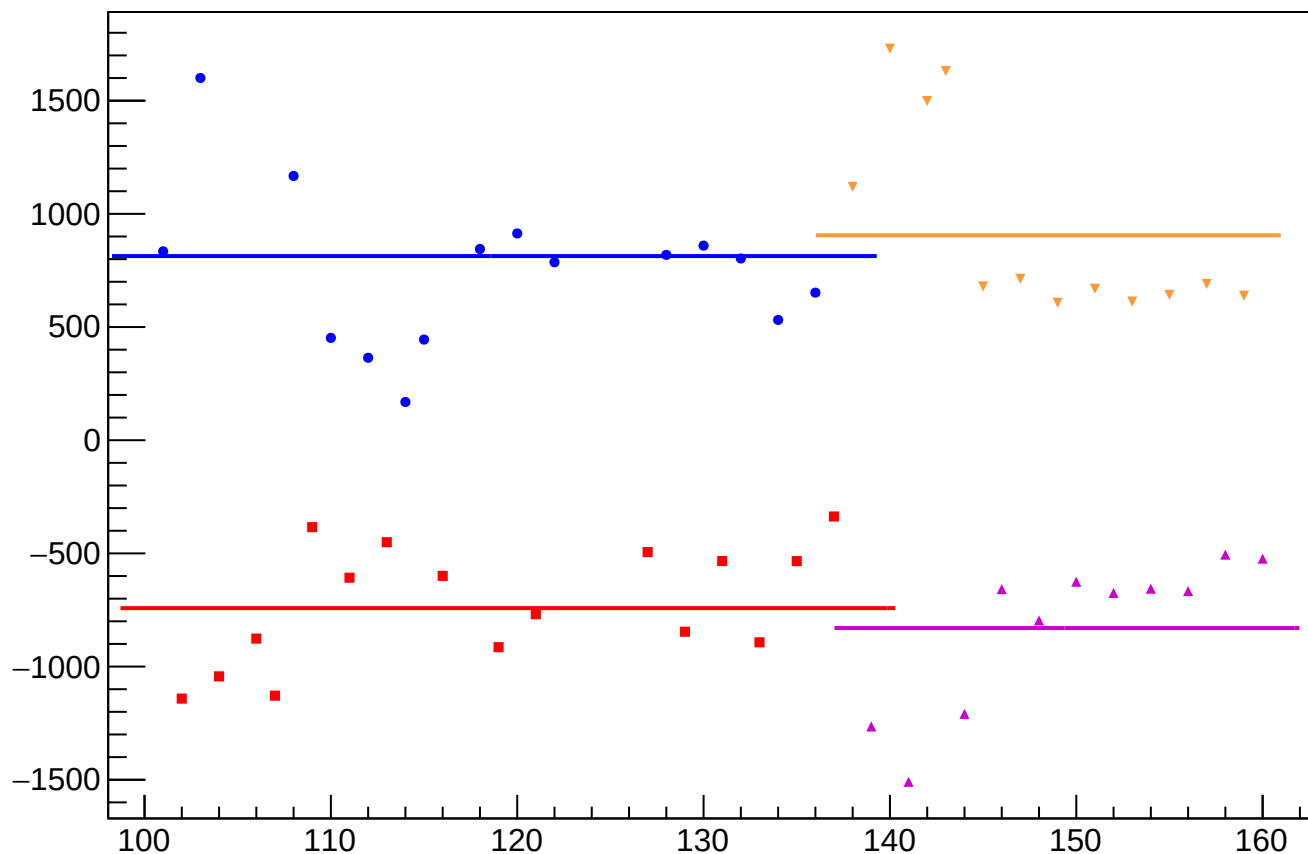
$\chi^2/\text{NDF}$ : 51873036517757666237545716605051585167360.0/15

Left In: -43364.892+/-0.000

$\chi^2/\text{NDF}$ : 12209695723681592241000188414954802511872.0/10

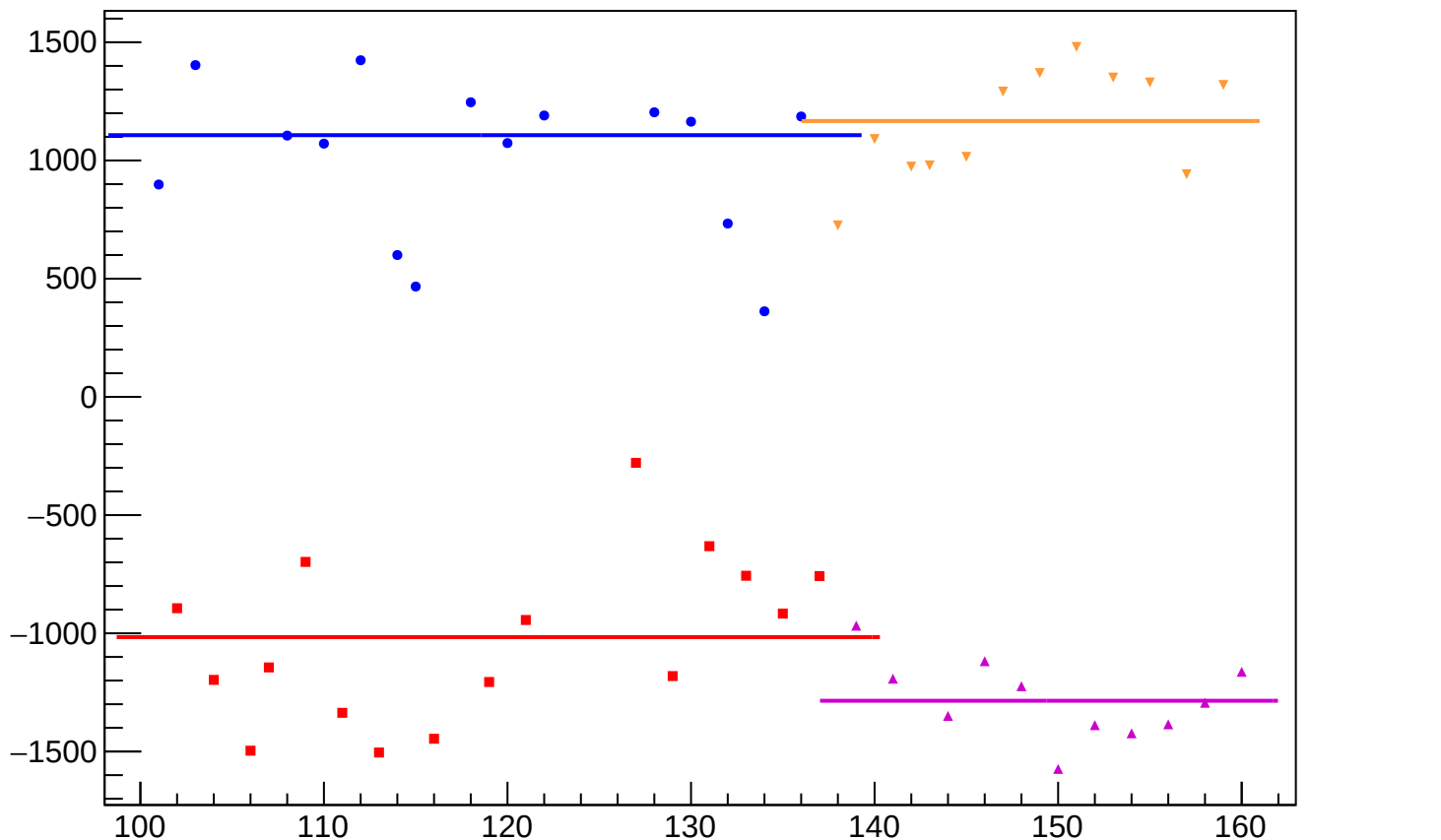
All: -51.092+/-0.000  $\chi^2/\text{NDF}$ : 570108278214

# dit\_sam4\_coil4\_err\_mean vs Slug, Sign Corrected



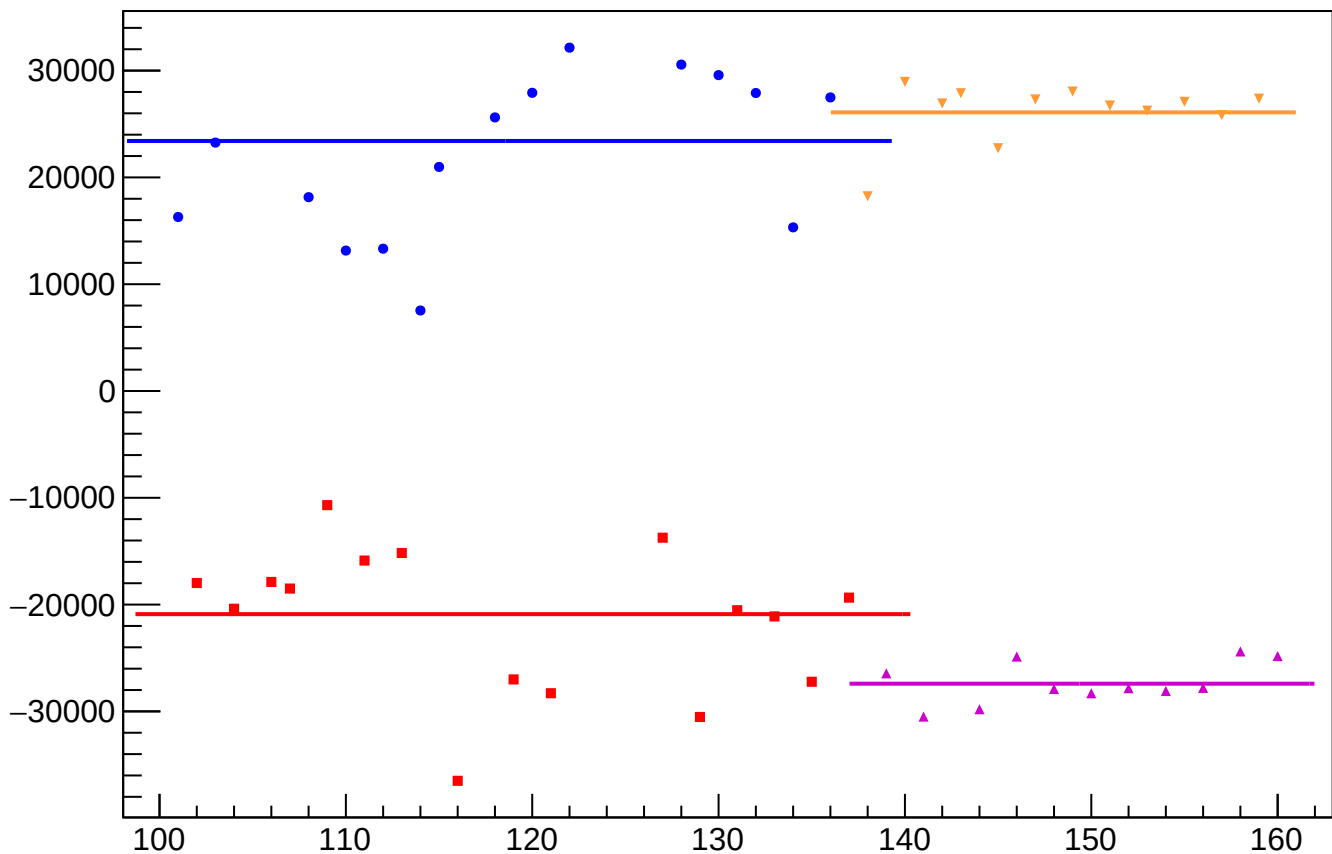
Right In:  $813.500 \pm 0.000$   $\chi^2/\text{NDF}: 67120916816548237638948787518351343616.0/14$   
 Left Out:  $905.383 \pm 0.000$   $\chi^2/\text{NDF}: 151600119297269061553878773288042233856.0/11$   
 Right Out:  $-741.911 \pm 0.000$   $\chi^2/\text{NDF}: 44074134397215409235604746432671645696.0/15$   
 Left In:  $-829.715 \pm 0.000$   $\chi^2/\text{NDF}: 96077836071623048341749512260917657600.0/10$   
 All:  $29.794 \pm 0.000$   $\chi^2/\text{NDF}: 2538038020154$

dit\_sam4\_coil4\_Ndata\_mean vs Slug, Sign Corrected



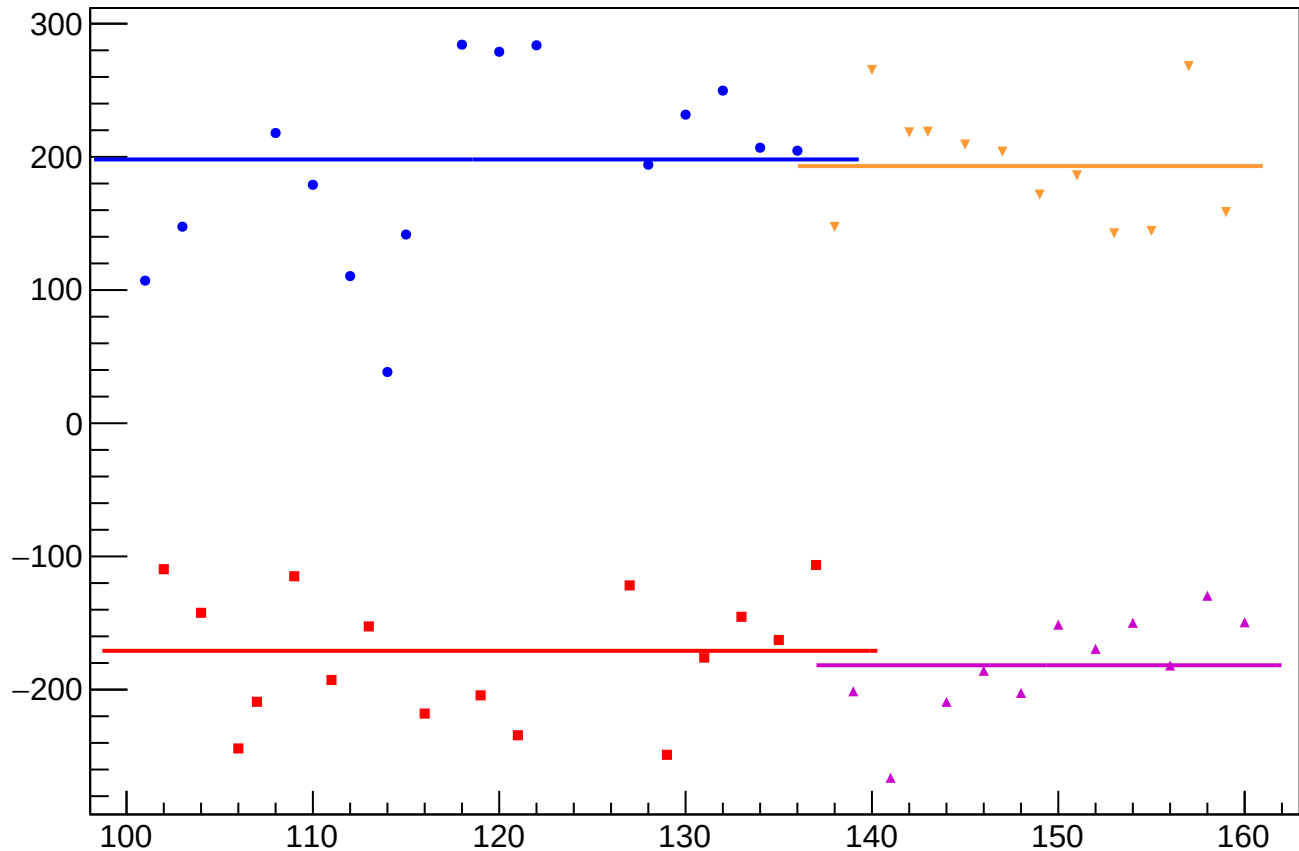
|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| 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

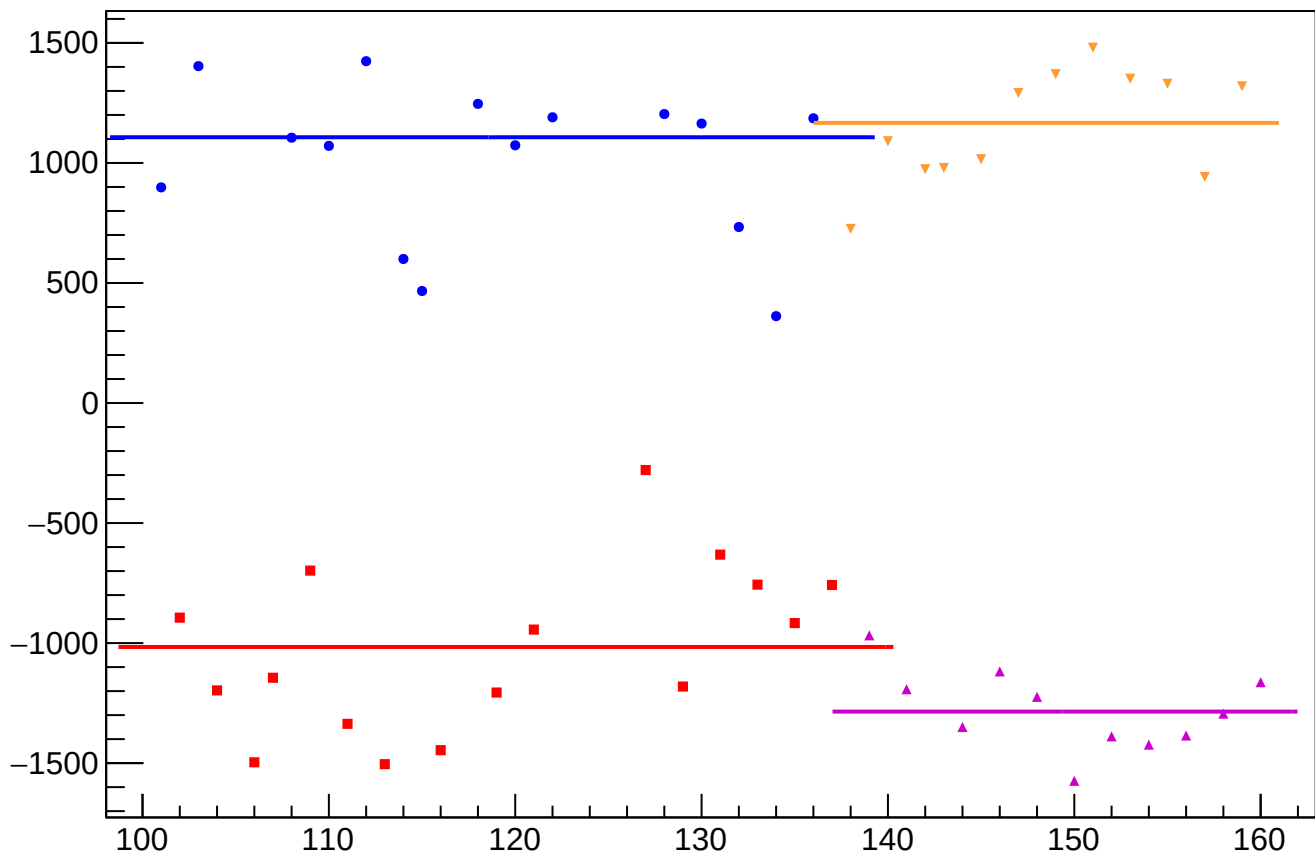
Left In: -181.711+/-0.000

$\chi^2/\text{NDF}$ : 1228549704796737698218369408017891328.0/10

All: 7.342+/-0.000  $\chi^2/\text{NDF}$ : 11615483338933

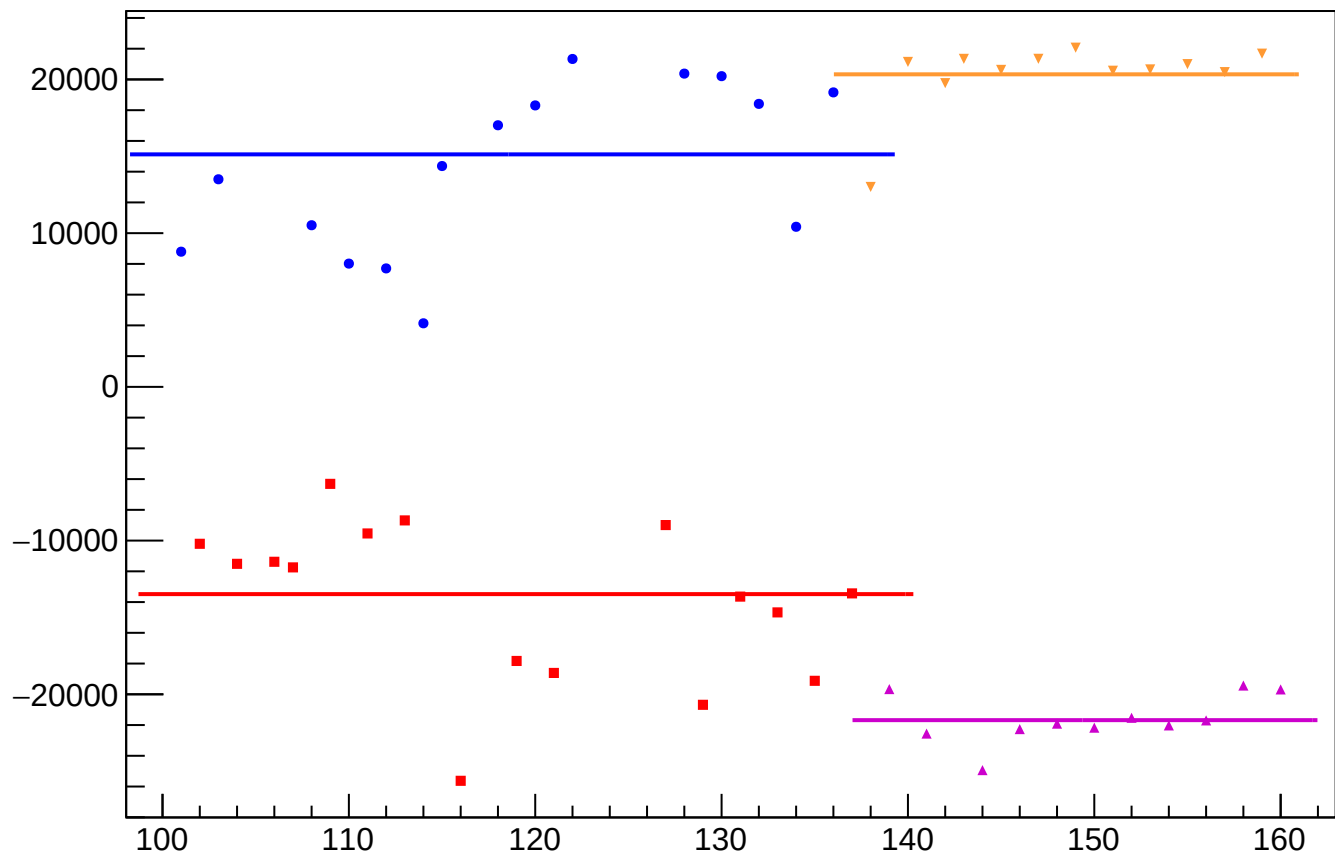


dit\_sam5\_coil4\_Ndata\_mean vs Slug, Sign Corrected



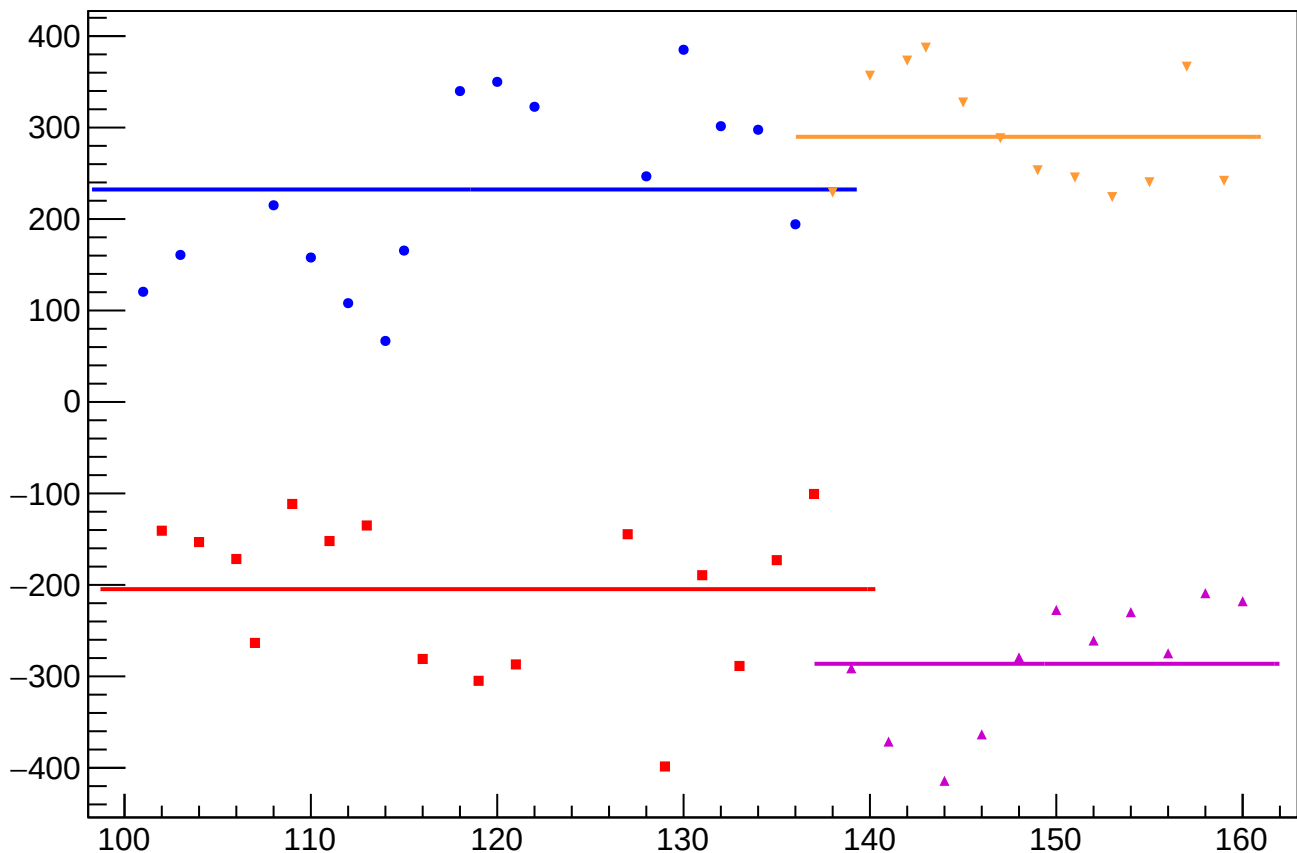
|                              |                                                                   |                                    |                                        |
|------------------------------|-------------------------------------------------------------------|------------------------------------|----------------------------------------|
| 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+/-0.000

$\chi^2/\text{NDF}$ : 5478184144885833956204804001180418048.0/14

Left Out: 289.897+/-0.000

$\chi^2/\text{NDF}$ : 3202390993231935504147250998086205440.0/11

Right Out: -204.637+/-0.000

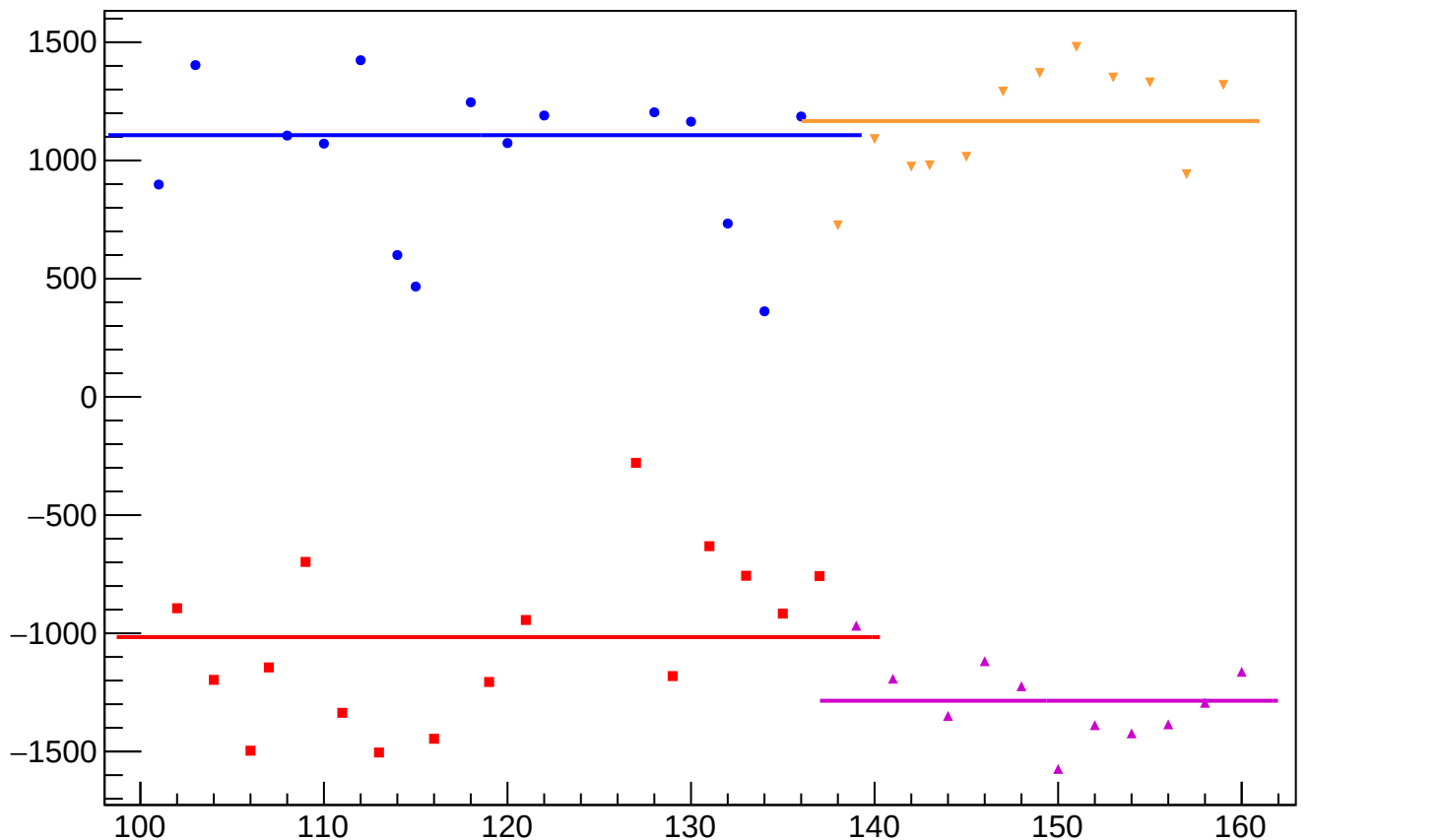
$\chi^2/\text{NDF}$ : 4555067046835230017930882867882098688.0/15

Left In: -286.246+/-0.000

$\chi^2/\text{NDF}$ : 4067110443230234744644750983181631488.0/10

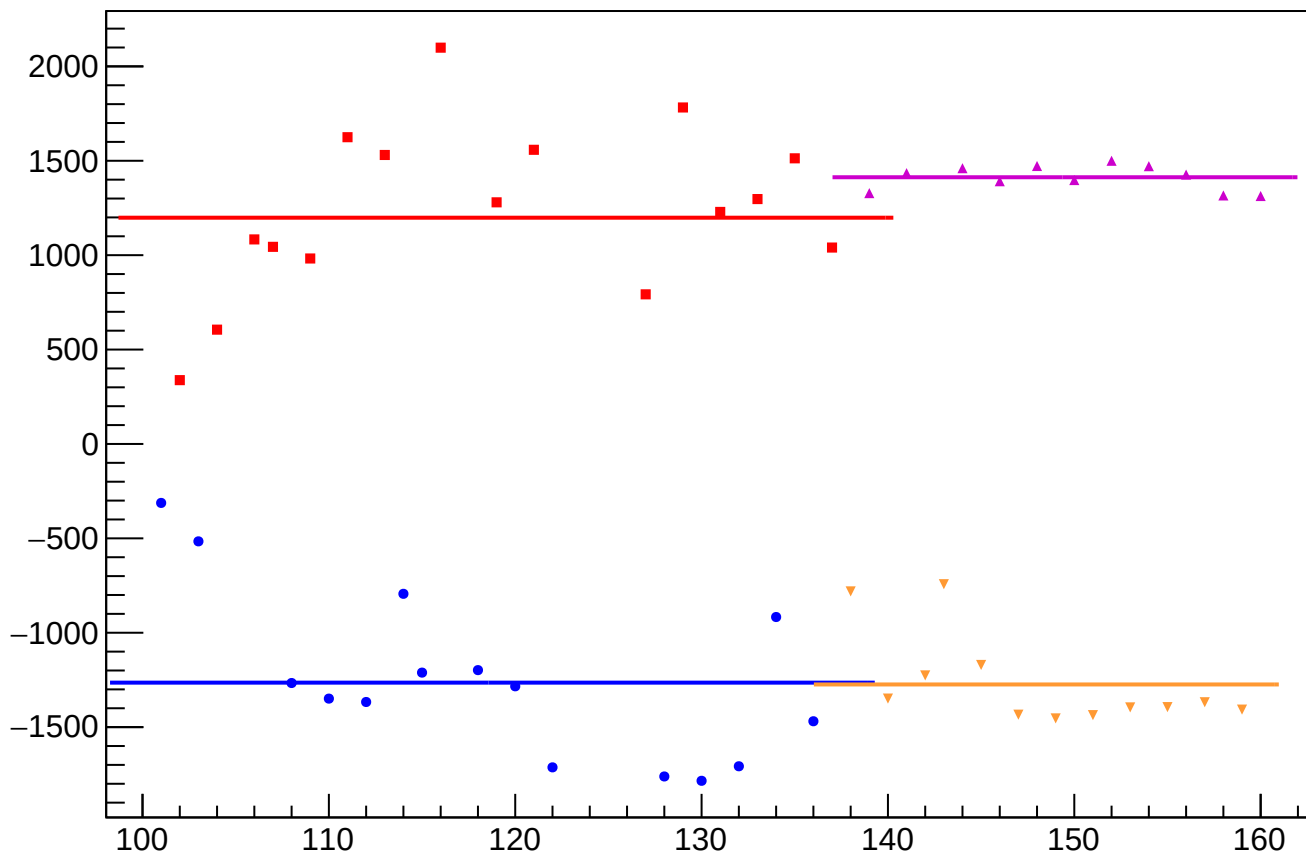
All: 4.677+/-0.000  $\chi^2/\text{NDF}$ : 23271380693899

dit\_sam6\_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\_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

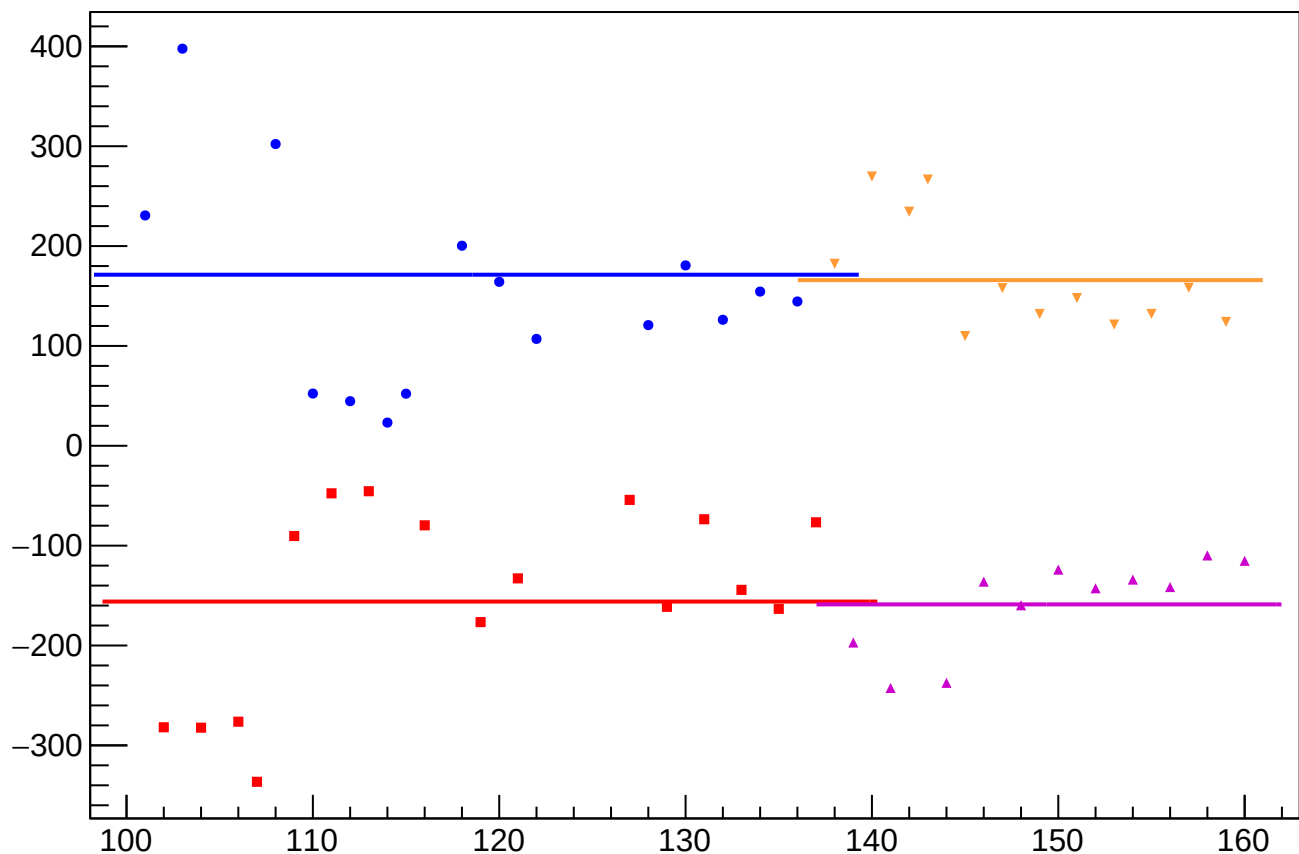
Right: -16.067+/-0.000  $\chi^2/\text{NDF}$ : 226649511001664

In: 308.244+/-0.000  $\chi^2/\text{NDF}$ : 28760344161485338

Out: -230.846+/-0.000  $\chi^2/\text{NDF}$ : 253877034127960

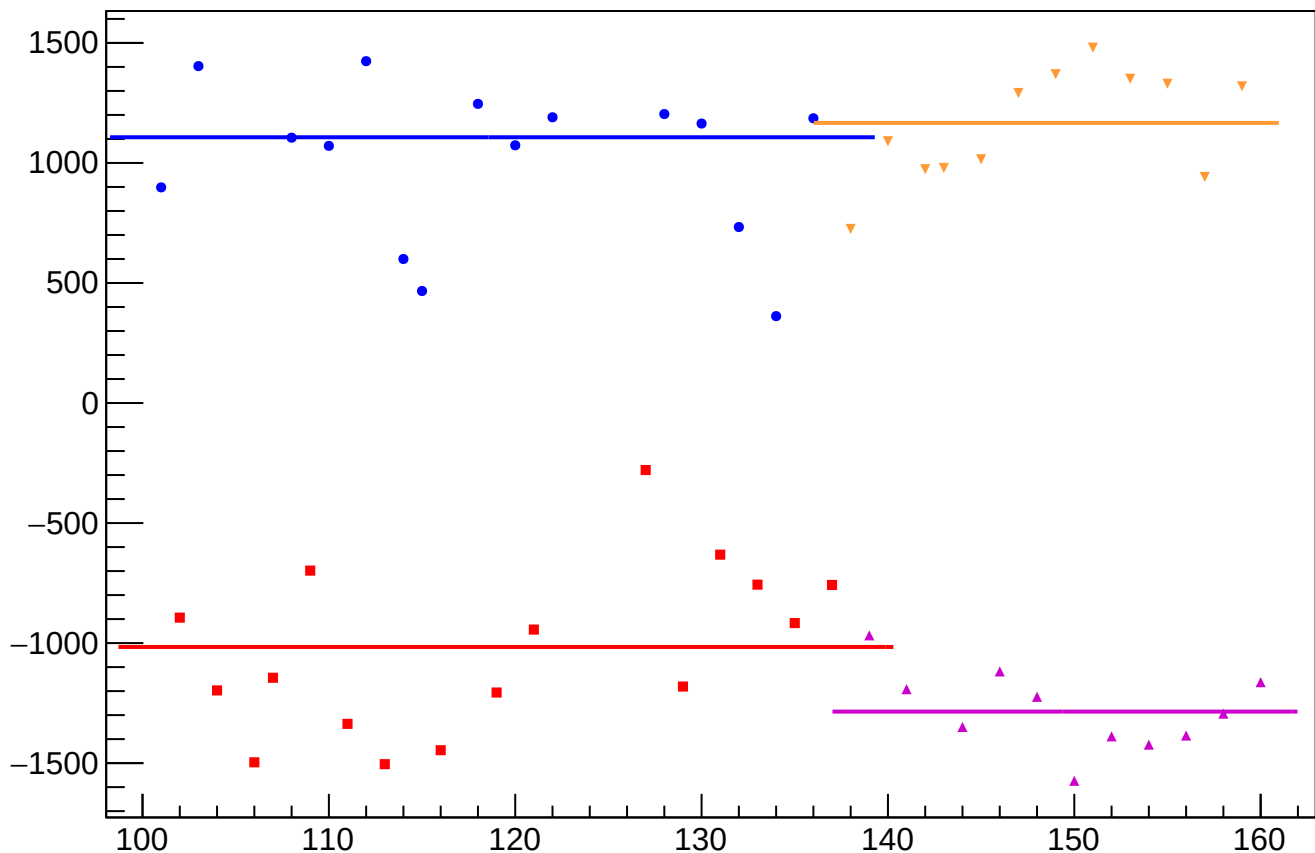
All: 38.016+/-0.000  $\chi^2/\text{NDF}$ : 5643955595721

# dit\_sam7\_coil4\_err\_mean vs Slug, Sign Corrected



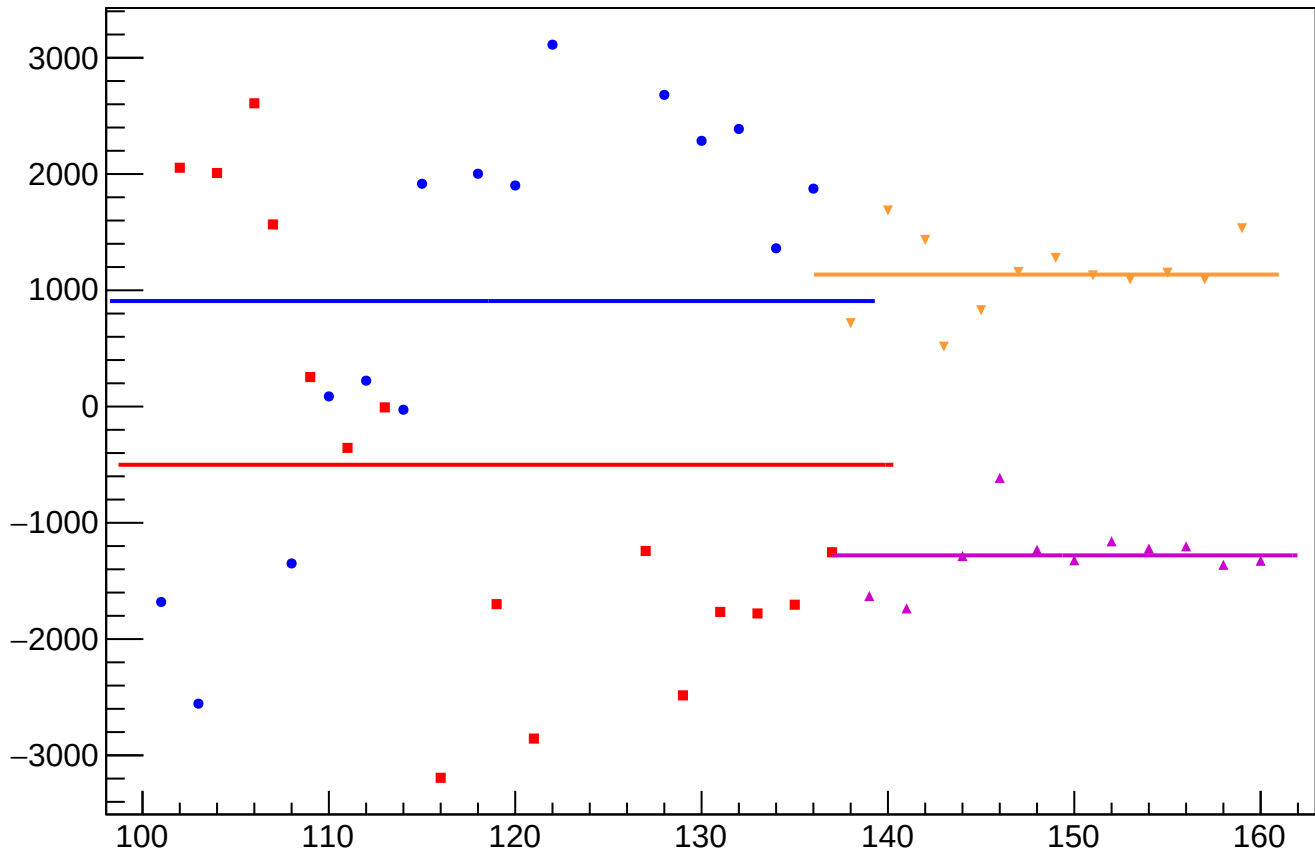
Right In: 171.323+/-0.000  $\chi^2/\text{NDF}$ : 6120975075187305509795143064993398784.0/14  
 Left Out: 165.917+/-0.000  $\chi^2/\text{NDF}$ : 2574923375517186479088669940447707136.0/11  
 Right Out: -155.993+/-0.000  $\chi^2/\text{NDF}$ : 5680659281504595852021524727244783616.0/15  
 Left In: -158.834+/-0.000  $\chi^2/\text{NDF}$ : 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

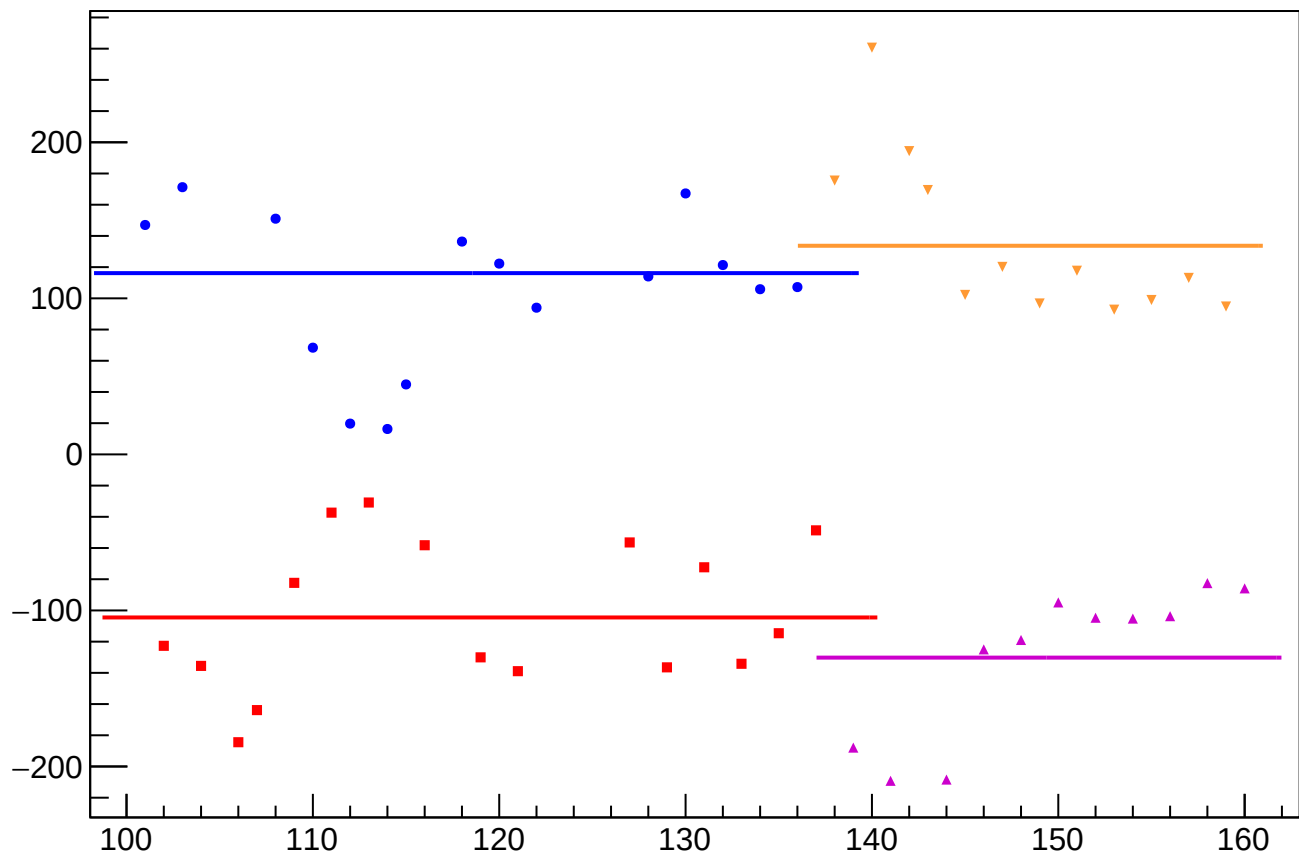
In: -377.486+/-0.000  $\chi^2/\text{NDF}$ : 3998973168088028

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 $\pm$ 0.000

$\chi^2$ /NDF: 1198526427485199785396504127288115200.0/14

Left Out: 133.695 $\pm$ 0.000

$\chi^2$ /NDF: 2332238004384262852879386446827356160.0/11

Right Out: -104.501 $\pm$ 0.000

$\chi^2$ /NDF: 1285986383644058507445602420764180480.0/15

Left In: -130.237 $\pm$ 0.000

$\chi^2$ /NDF: 1968814259217478663576054483231178752.0/10

Left: 1.011 $\pm$ 0.000  $\chi^2$ /NDF: 363089448385334354

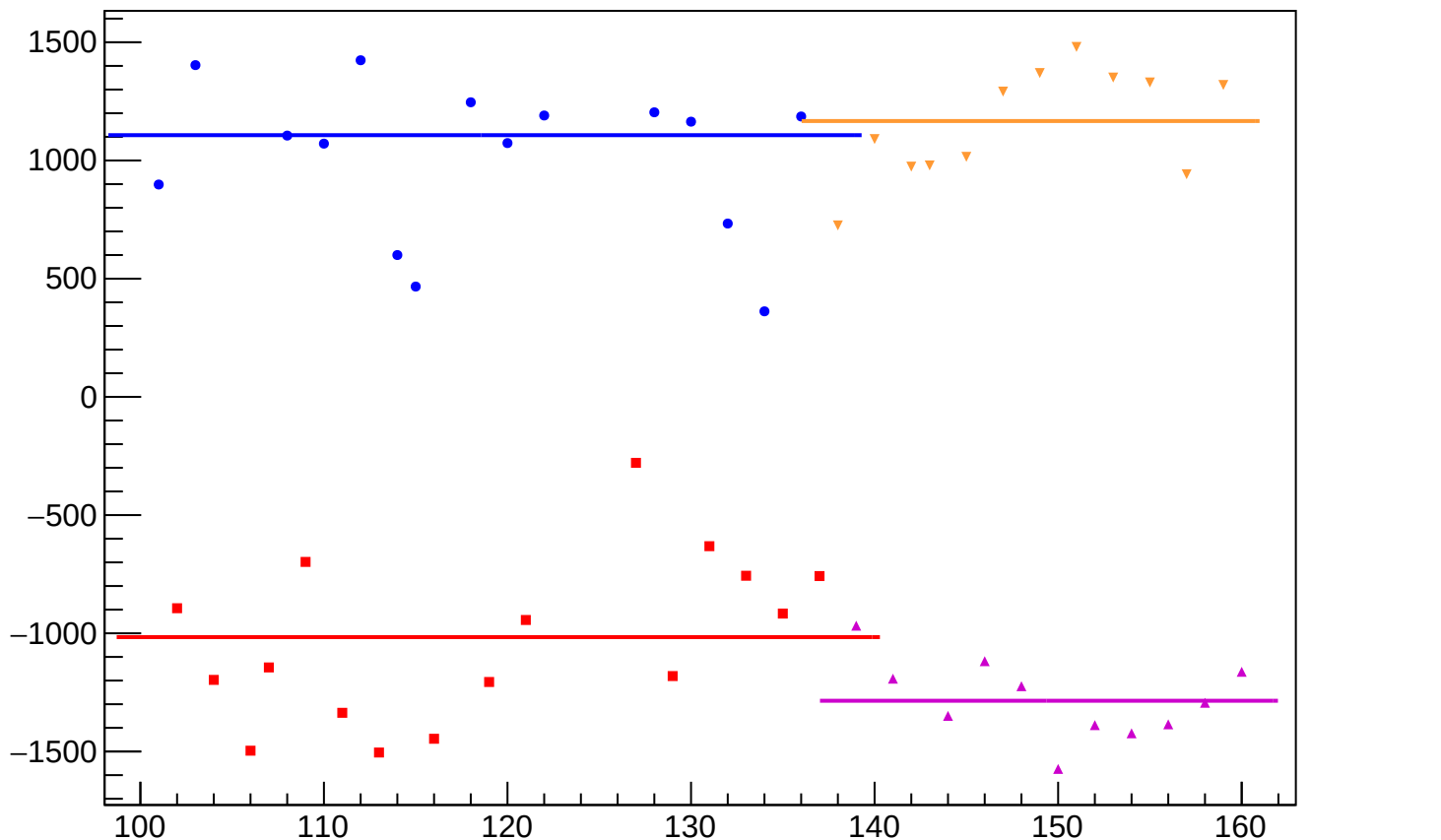
Right: 4.320 $\pm$ 0.000  $\chi^2$ /NDF: 18500756430901072

In: -28.577 $\pm$ 0.000  $\chi^2$ /NDF: 26312198647459661

Out: 33.204 $\pm$ 0.000  $\chi^2$ /NDF: 25496298495933120

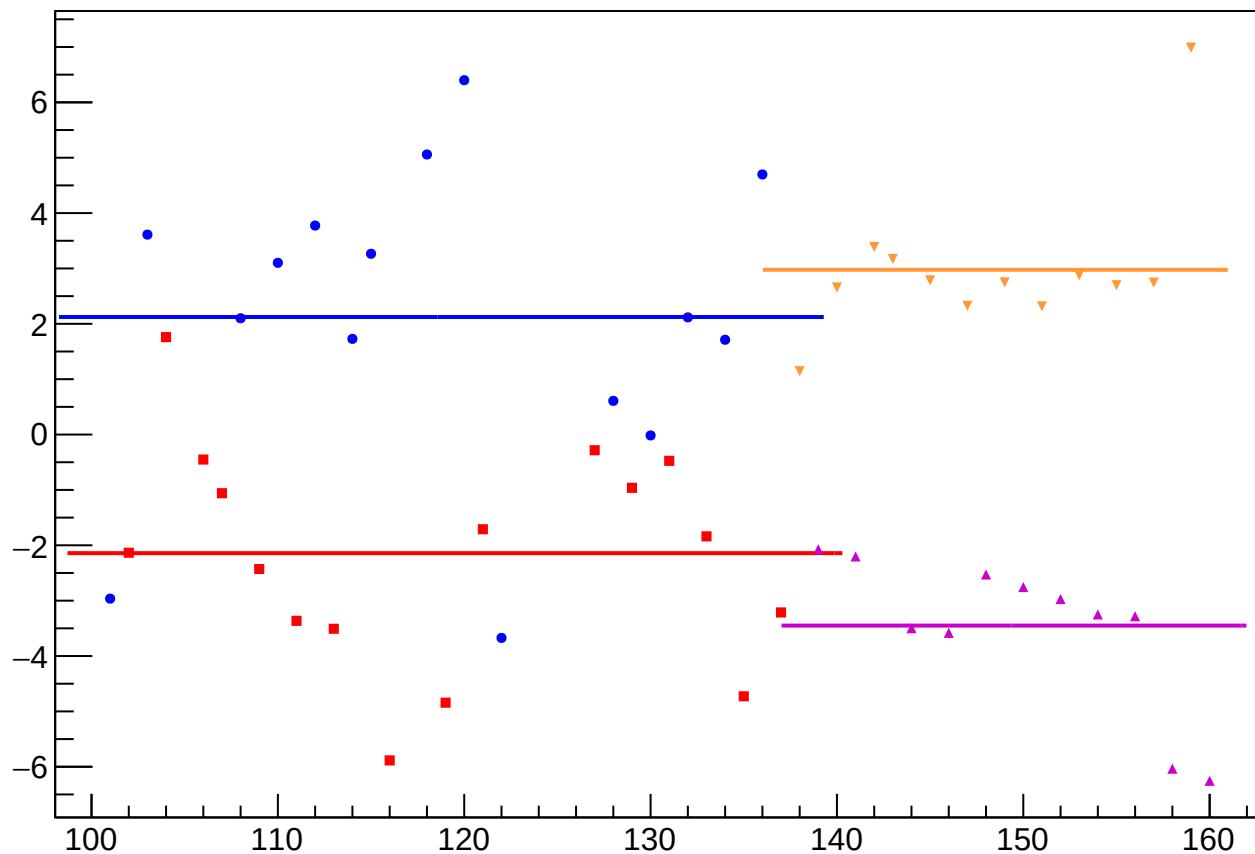
All: 2.392 $\pm$ 0.000  $\chi^2$ /NDF: 54818097492999

dit\_sam8\_coil4\_Ndata\_mean vs Slug, Sign Corrected



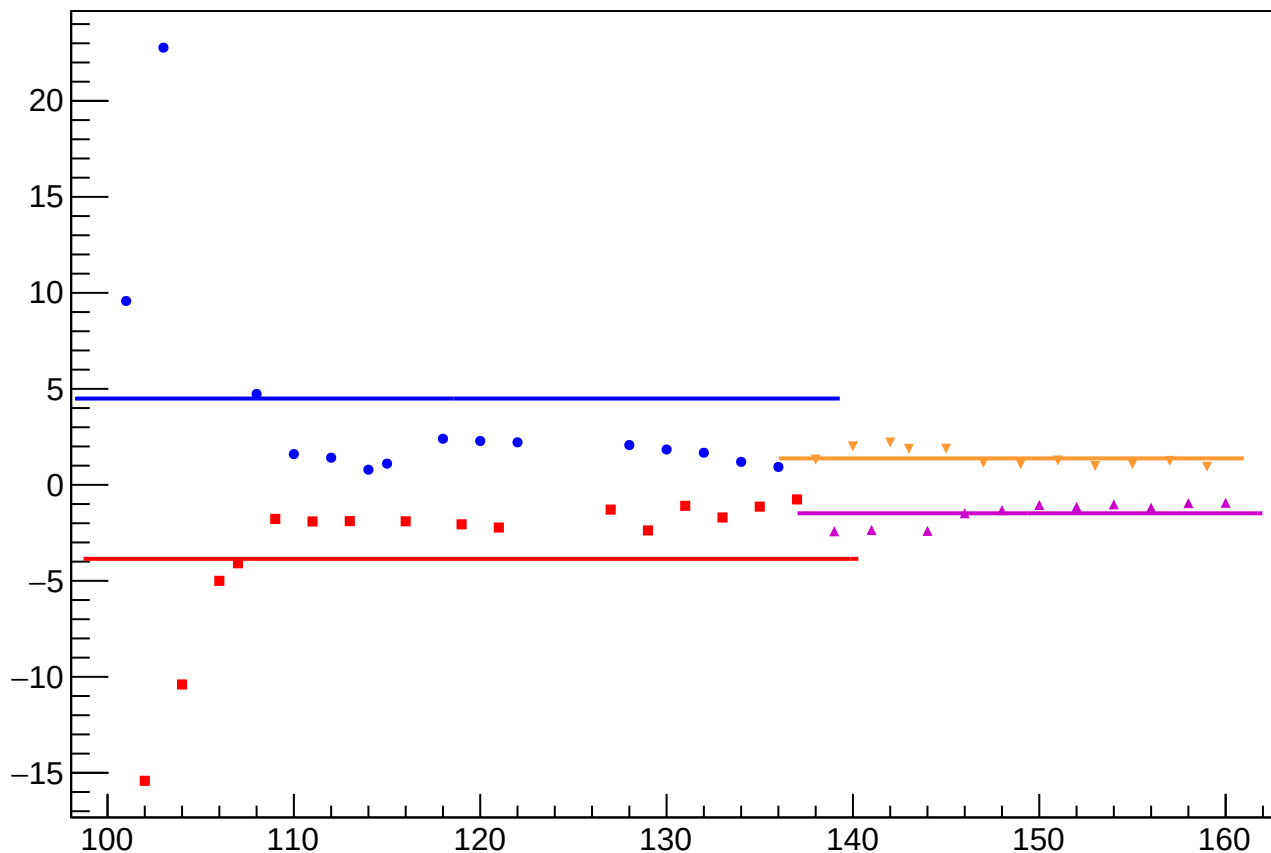
Right In: 1107.052 +/- 0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869 +/- 0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: -1016.106 +/- 0.000  $\chi^2/\text{NDF}$ : 72567664333509192712184310037150171136.0/15  
 Left In: -1285.364 +/- 0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10  
 All: -25.499 +/- 0.000  $\chi^2/\text{NDF}$ : 443493791328

dit\_4aX\_coil6\_mean vs Slug, Sign Corrected



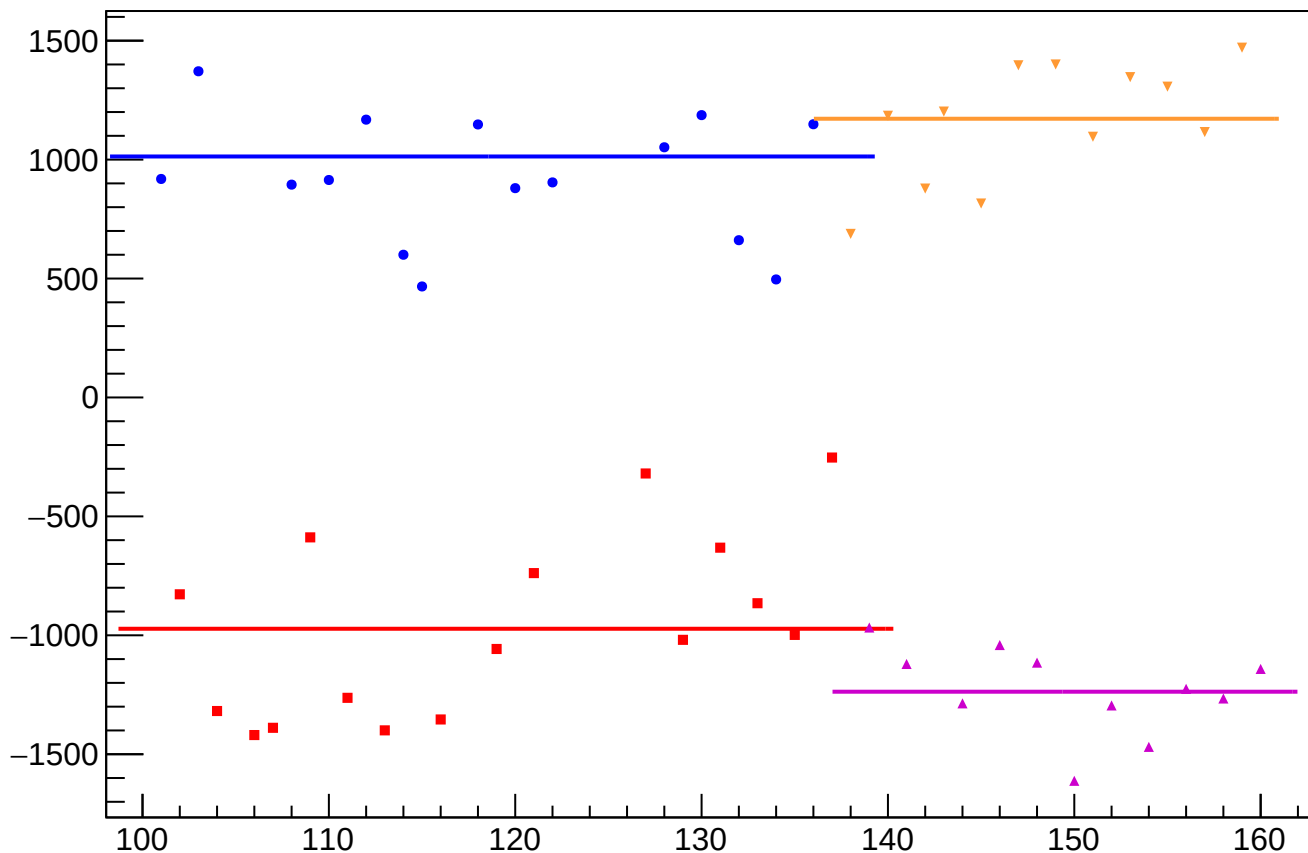
Right In:  $2.123 \pm 0.000$   $\chi^2/\text{NDF}: 5263705922821075971022013849403392.0/14$   
 Left Out:  $2.975 \pm 0.000$   $\chi^2/\text{NDF}: 1653073452461549310648226194391040.0/11$   
 Right Out:  $-2.142 \pm 0.000$   $\chi^2/\text{NDF}: 2472949940993672466161692257026048.0/15$   
 Left In:  $-3.450 \pm 0.000$   $\chi^2/\text{NDF}: 1551935058842125730993767819771904.0/10$   
 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

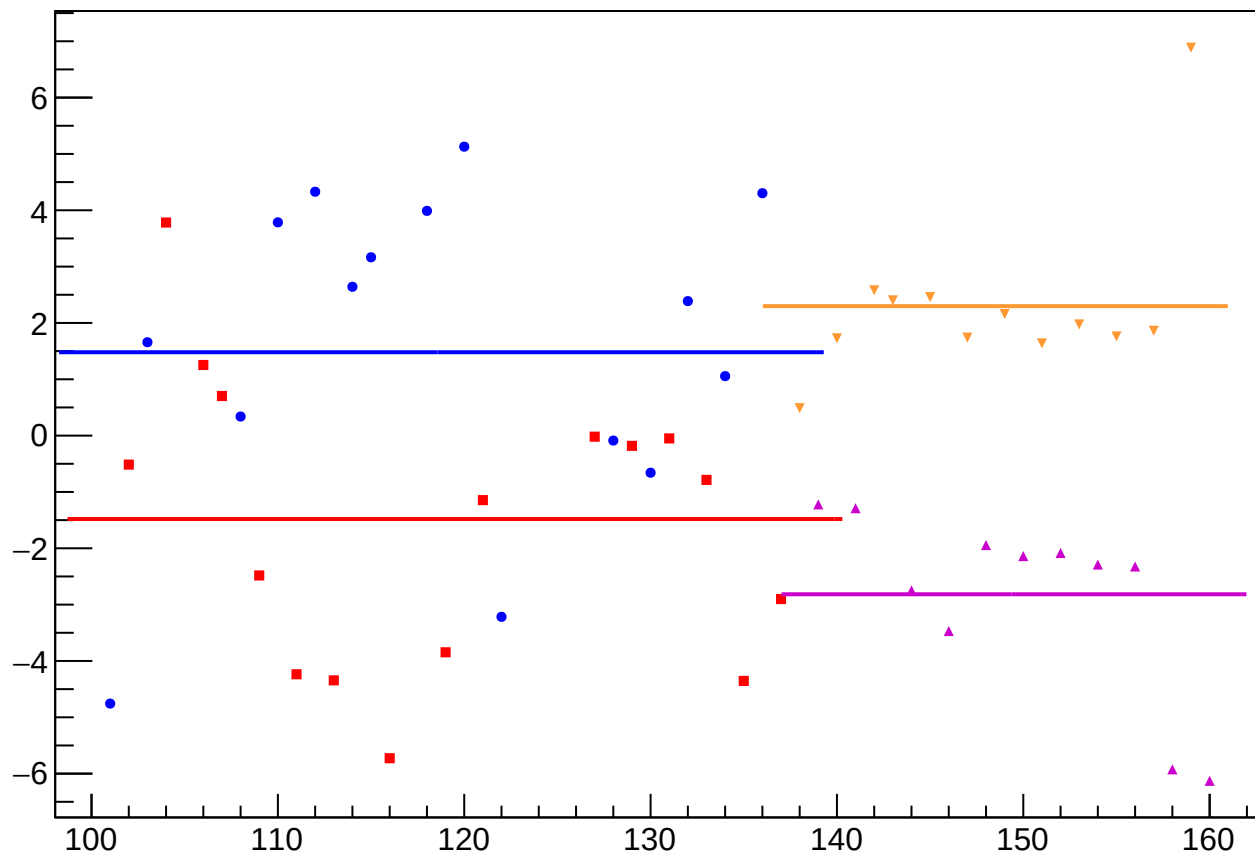
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: -308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

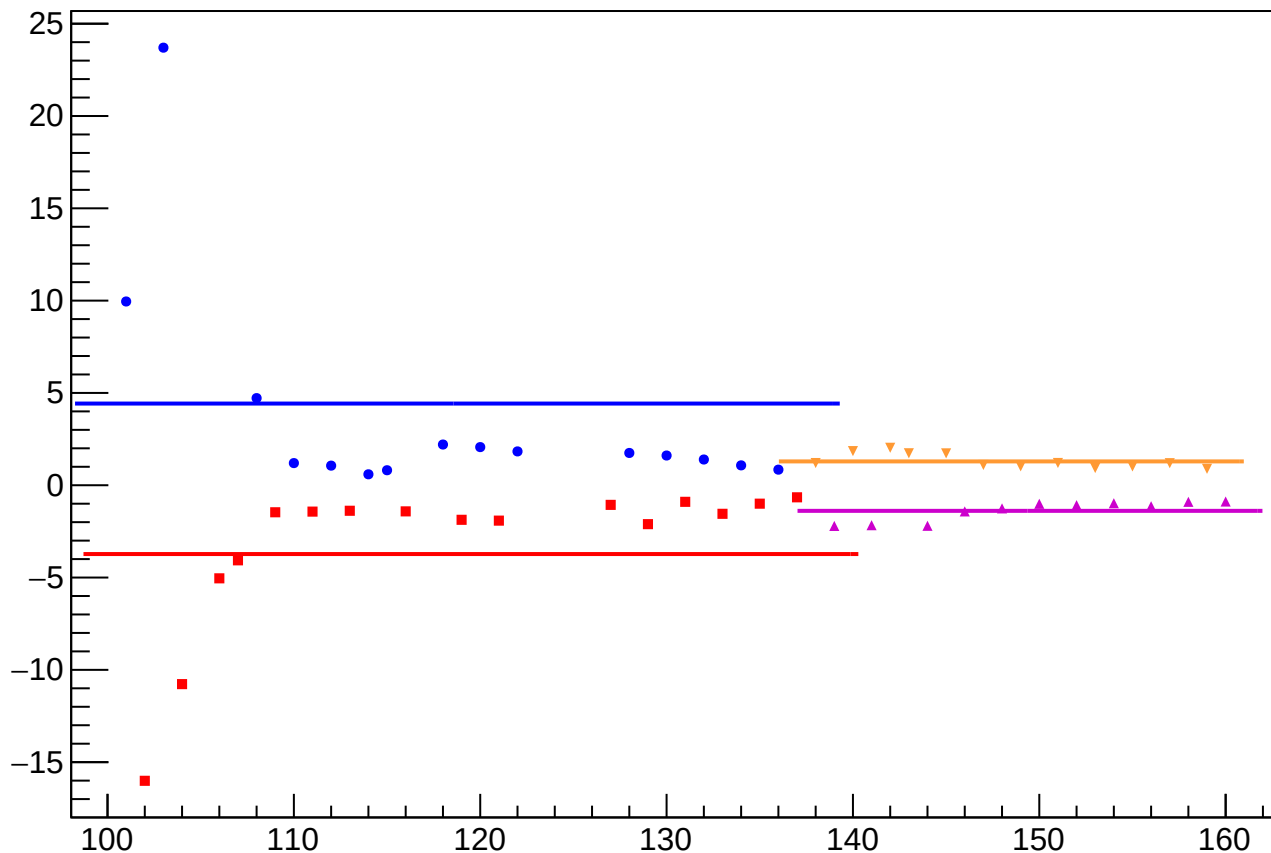
All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

dit\_4eX\_coil6\_mean vs Slug, Sign Corrected



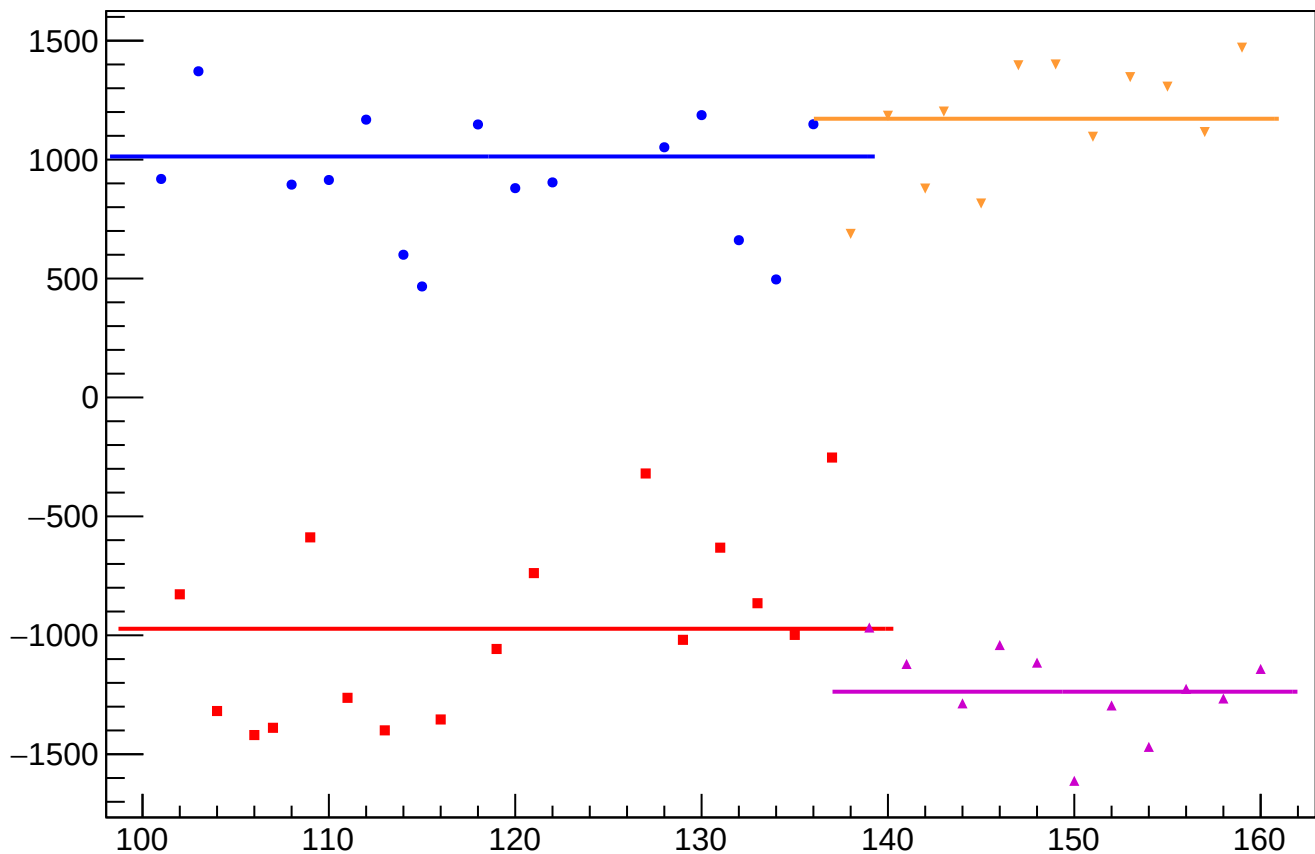
Right In:  $1.480 \pm 0.000$   $\chi^2/\text{NDF}: 5799670695902784459055767987683328.0/14$   
 Left Out:  $2.298 \pm 0.000$   $\chi^2/\text{NDF}: 2079870991739780462593334803693568.0/11$   
 Right Out:  $-1.480 \pm 0.000$   $\chi^2/\text{NDF}: 4092645800613765572662987820367872.0/15$   
 Left In:  $-2.816 \pm 0.000$   $\chi^2/\text{NDF}: 2230790234579581781884760219451392.0/10$   
 All:  $-0.168 \pm 0.000$   $\chi^2/\text{NDF}: 2915247501265$

# dit\_4eX\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 4.424+/-0.000  $\chi^2/\text{NDF}$ : 28257459272876210608839830473277440.0/14  
 Left Out: 1.291+/-0.000  $\chi^2/\text{NDF}$ : 119201725618452190917490324275200.0/11  
 Right Out: -3.727+/-0.000  $\chi^2/\text{NDF}$ : 13991816814749842519794284853460992.0/15  
 Left In: -1.387+/-0.000  $\chi^2/\text{NDF}$ : 245381205913734368947829561360384.0/10  
 All: 0.090+/-0.000  $\chi^2/\text{NDF}$ : 67859501931783

dit\_4eX\_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

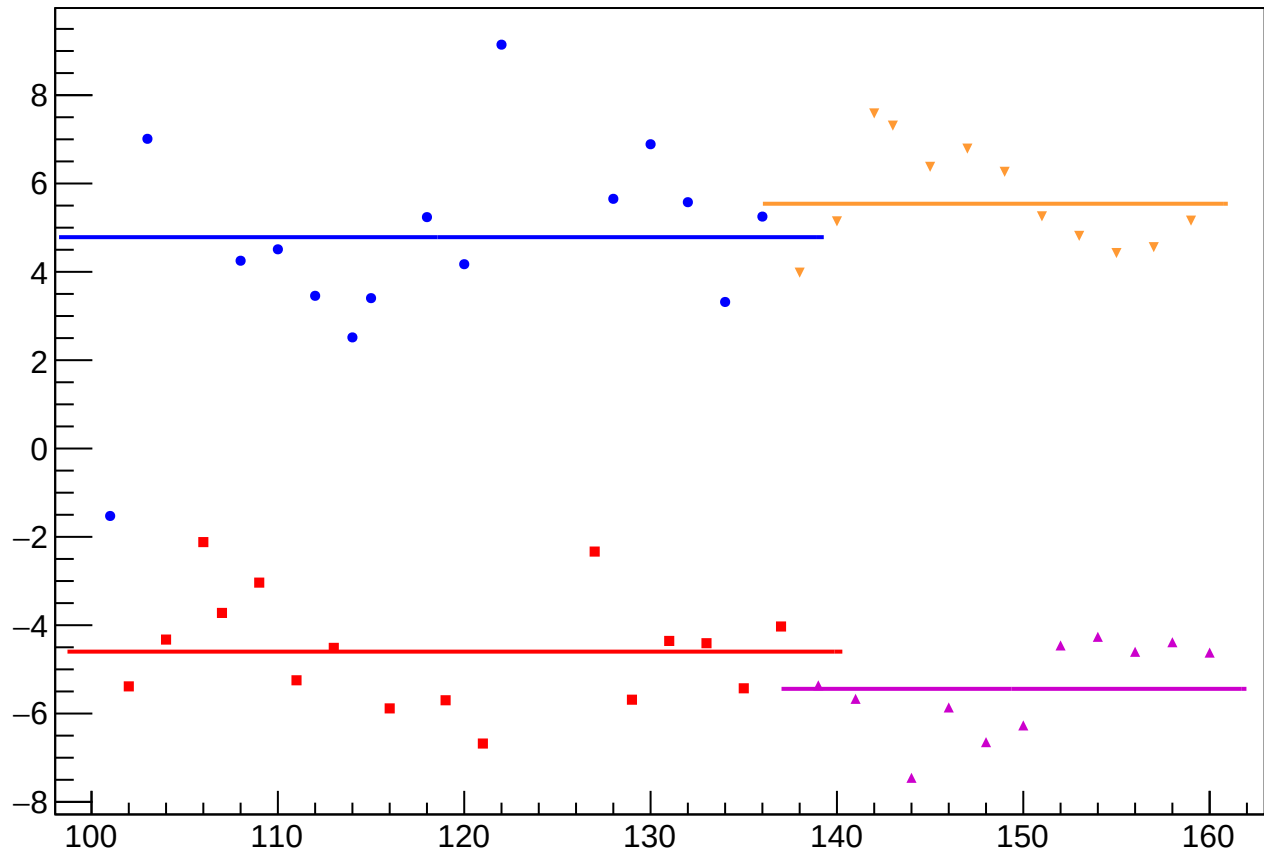
In: 308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668



dit\_11X12X\_coil6\_mean vs Slug, Sign Corrected



Right In: 4.785+/-0.000

$\chi^2/\text{NDF}$ : 3996556073154779711808159470321664.0/14

Left Out: 5.542+/-0.000

$\chi^2/\text{NDF}$ : 1063589592141187742244511087067136.0/11

Right Out: -4.598+/-0.000

$\chi^2/\text{NDF}$ : 989607156792948633247632779640832.0/15

Left In: -5.441+/-0.000

$\chi^2/\text{NDF}$ : 969147874620390855399339032838144.0/10

Left: 0.021+/-0.000  $\chi^2/\text{NDF}$ : 574569475069085613

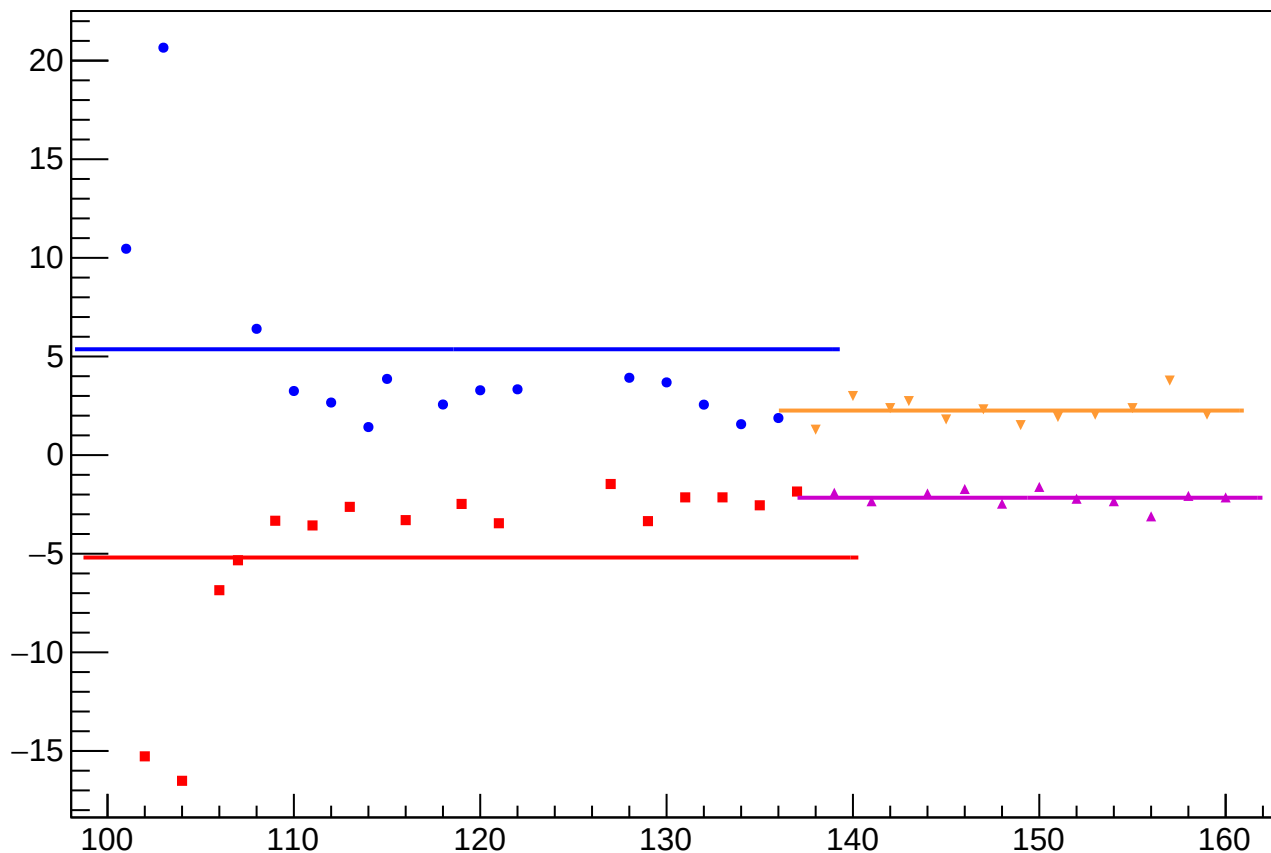
Right: 0.029+/-0.000  $\chi^2/\text{NDF}$ : 33948566568426742

In: -1.222+/-0.000  $\chi^2/\text{NDF}$ : 448312824685683470

Out: 1.264+/-0.000  $\chi^2/\text{NDF}$ : 417024451094656984

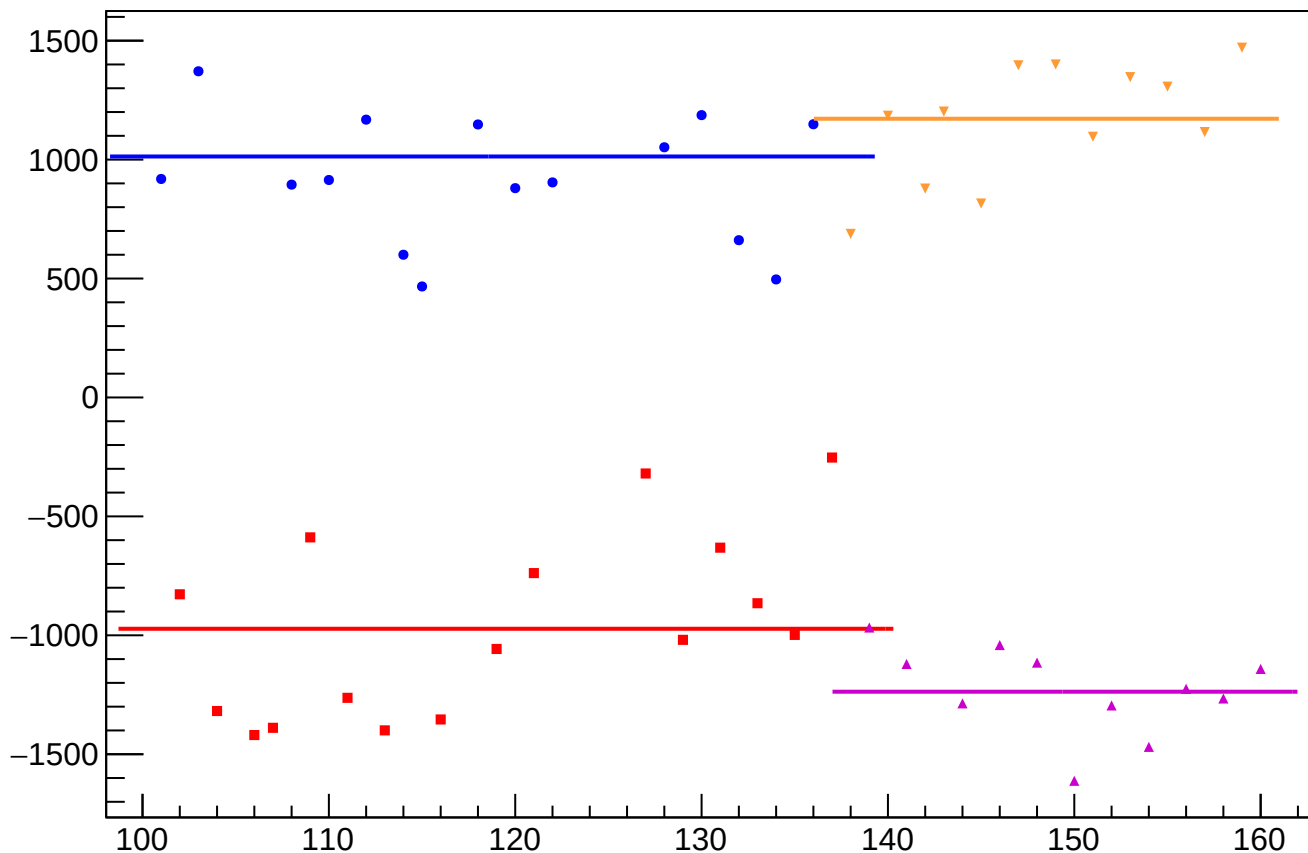
All: 0.024+/-0.000  $\chi^2/\text{NDF}$ : 91405570612349

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

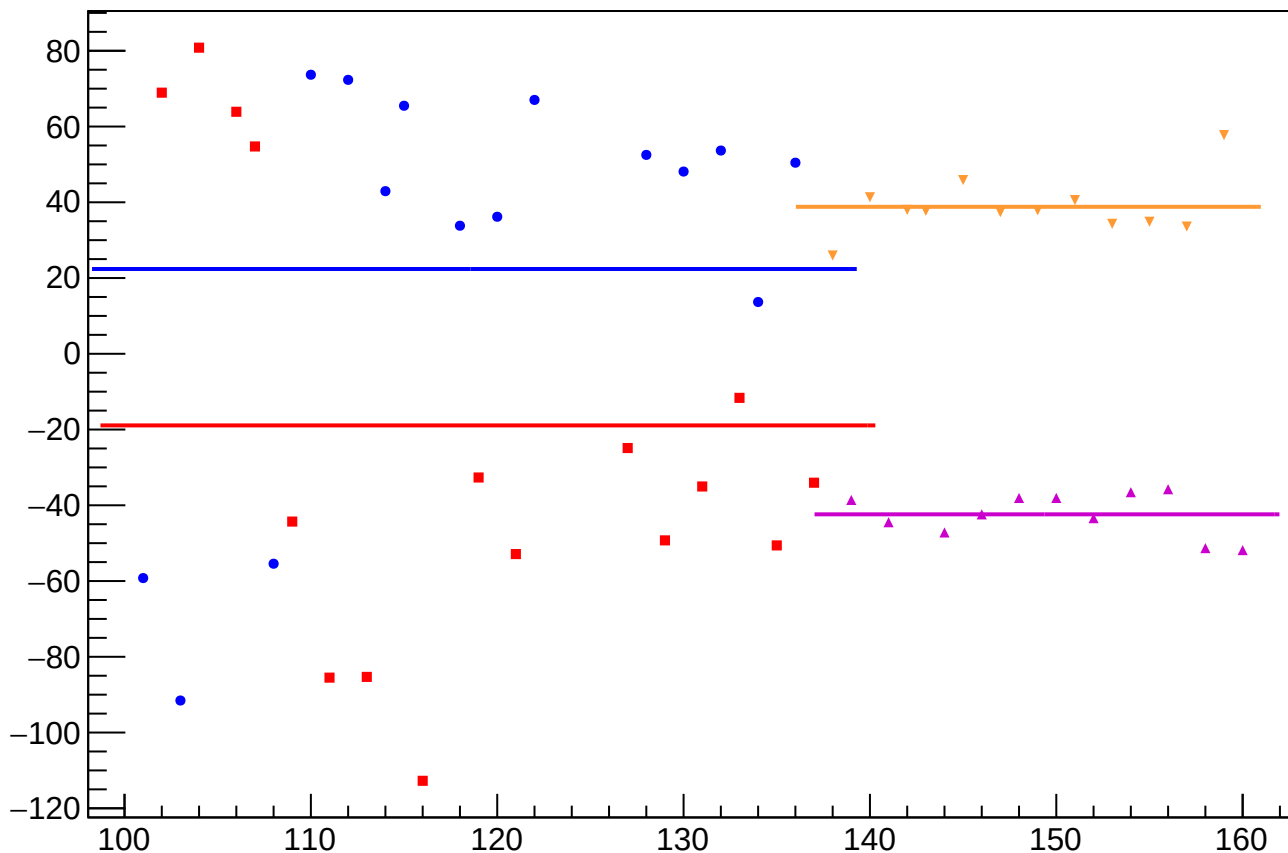
$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

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

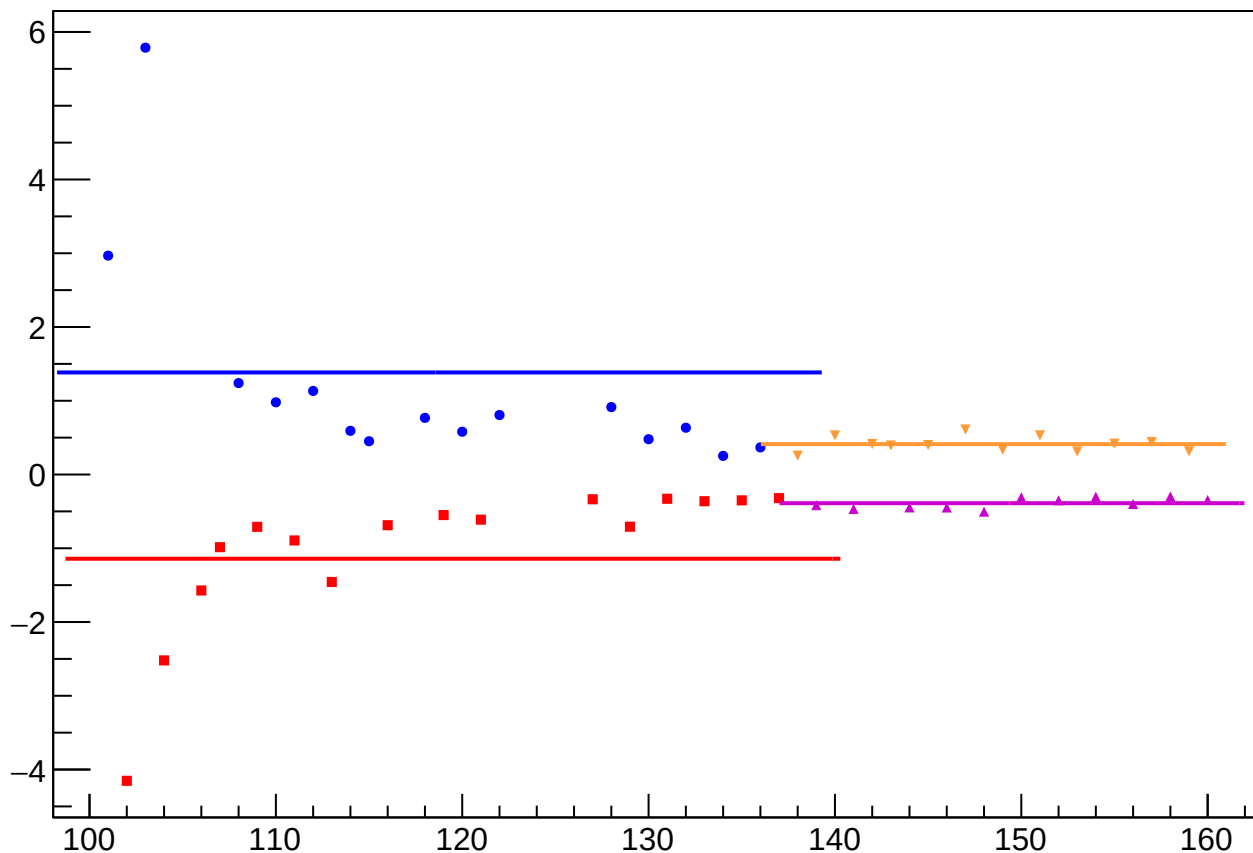
$\chi^2$ /NDF: 2182221808408156293593993992757837824.0/15

Left In: -42.386 $\pm$ 0.000

$\chi^2$ /NDF: 26555660128562986553016927486214144.0/10

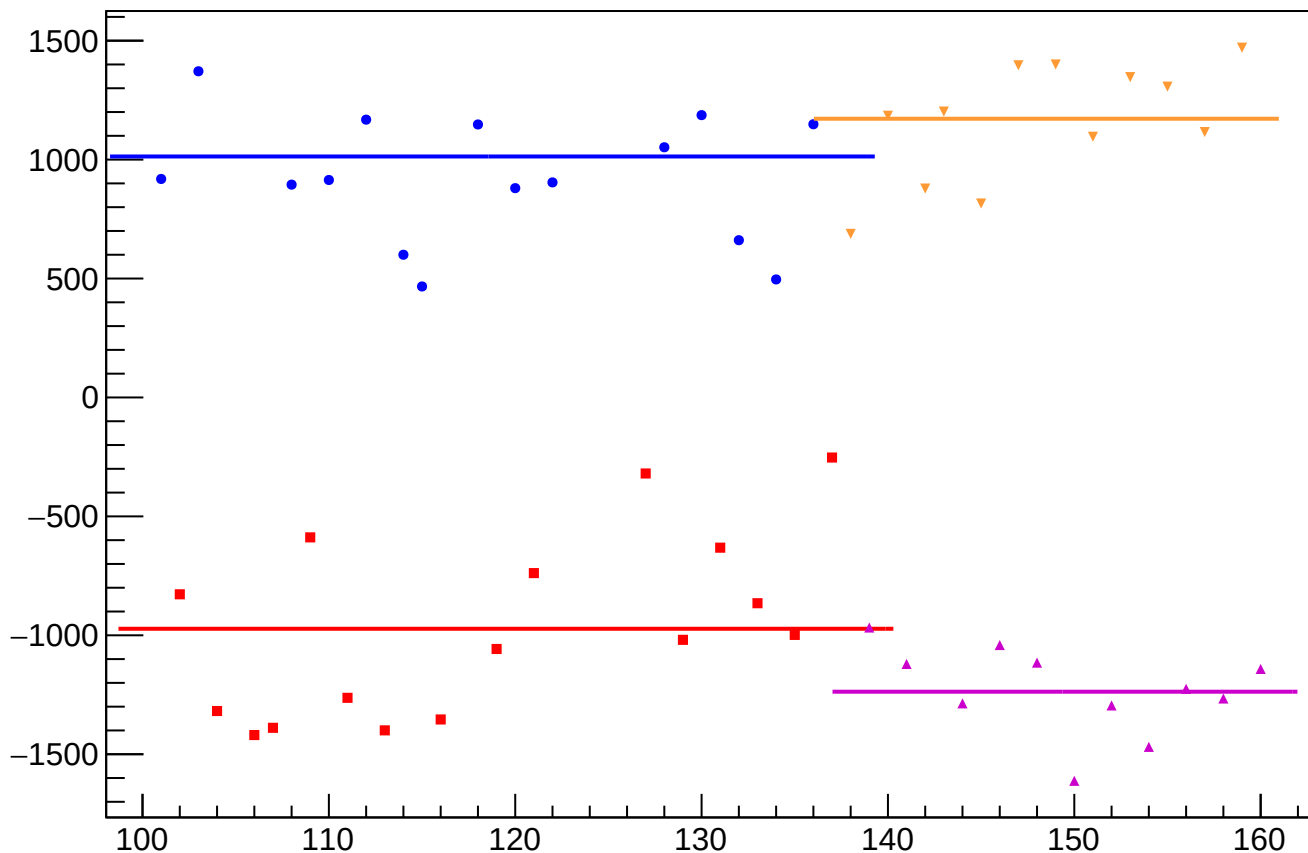
All: -0.564 $\pm$ 0.000  $\chi^2$ /NDF: 7781760585963

dit\_4aY\_coil6\_err\_mean vs Slug, Sign Corrected



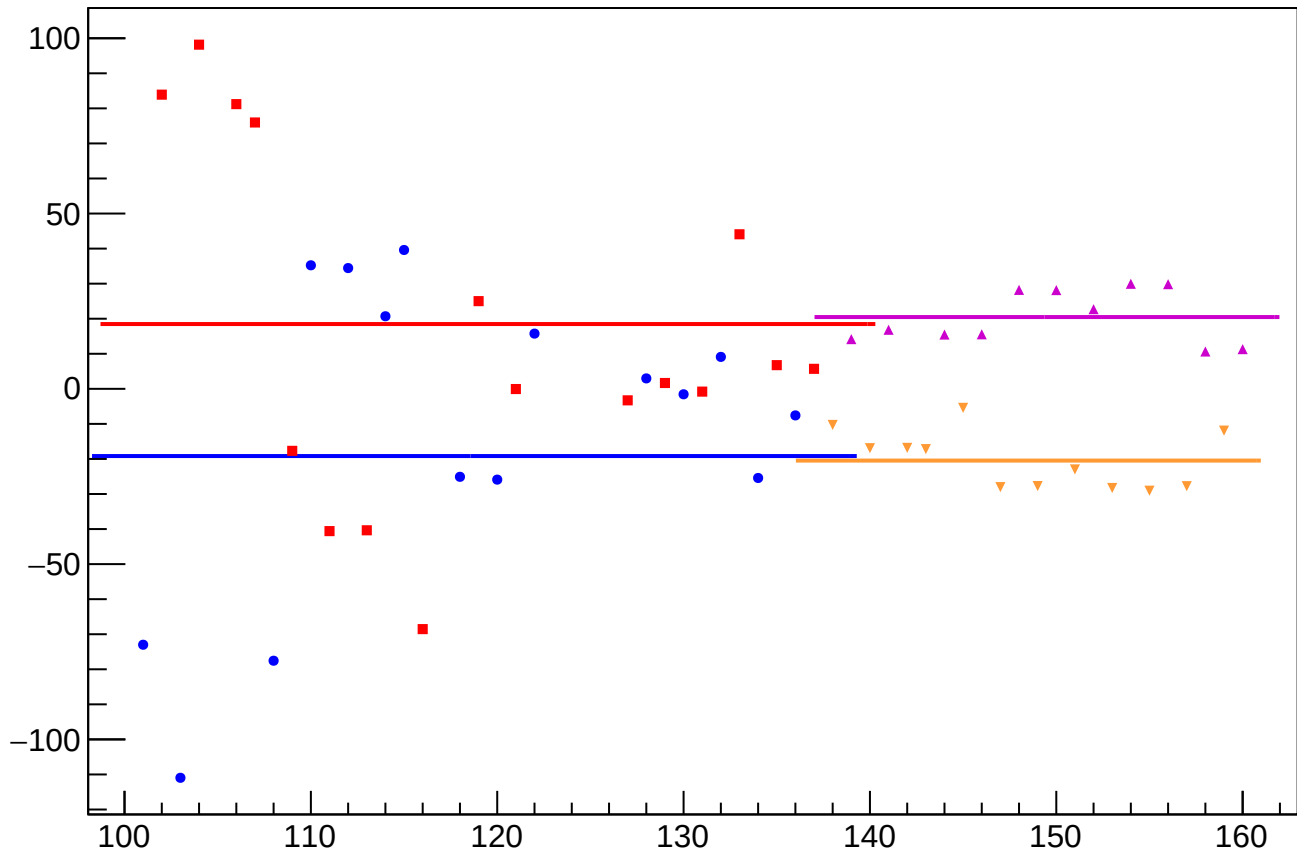
Right In: 1.384+/-0.000  $\chi^2/\text{NDF}$ : 1571159324102064120487940936695808.0/14  
 Left Out: 0.412+/-0.000  $\chi^2/\text{NDF}$ : 9382414275472018674983467220992.0/11  
 Right Out: -1.142+/-0.000  $\chi^2/\text{NDF}$ : 810680738285448955223066212827136.0/15  
 Left In: -0.389+/-0.000  $\chi^2/\text{NDF}$ : 4468112130112640641394154668032.0/10  
 All: 0.049+/-0.000  $\chi^2/\text{NDF}$ : 47956046375431.0/40

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:  $-19.175 \pm 0.000$

Left Out:  $-20.466 \pm 0.000$

Right Out:  $18.479 \pm 0.000$

Left In:  $20.473 \pm 0.000$

$\chi^2/\text{NDF}$ : 1246364705689764961102868160463241216.0/14

$\chi^2/\text{NDF}$ : 58628381923673457294433589512896512.0/11

$\chi^2/\text{NDF}$ : 1489398115046175180640331393369374720.0/15

$\chi^2/\text{NDF}$ : 48484953363349820110348478937300992.0/10

Left:  $0.115 \pm 0.000$   $\chi^2/\text{NDF}$ : 877202582639736103

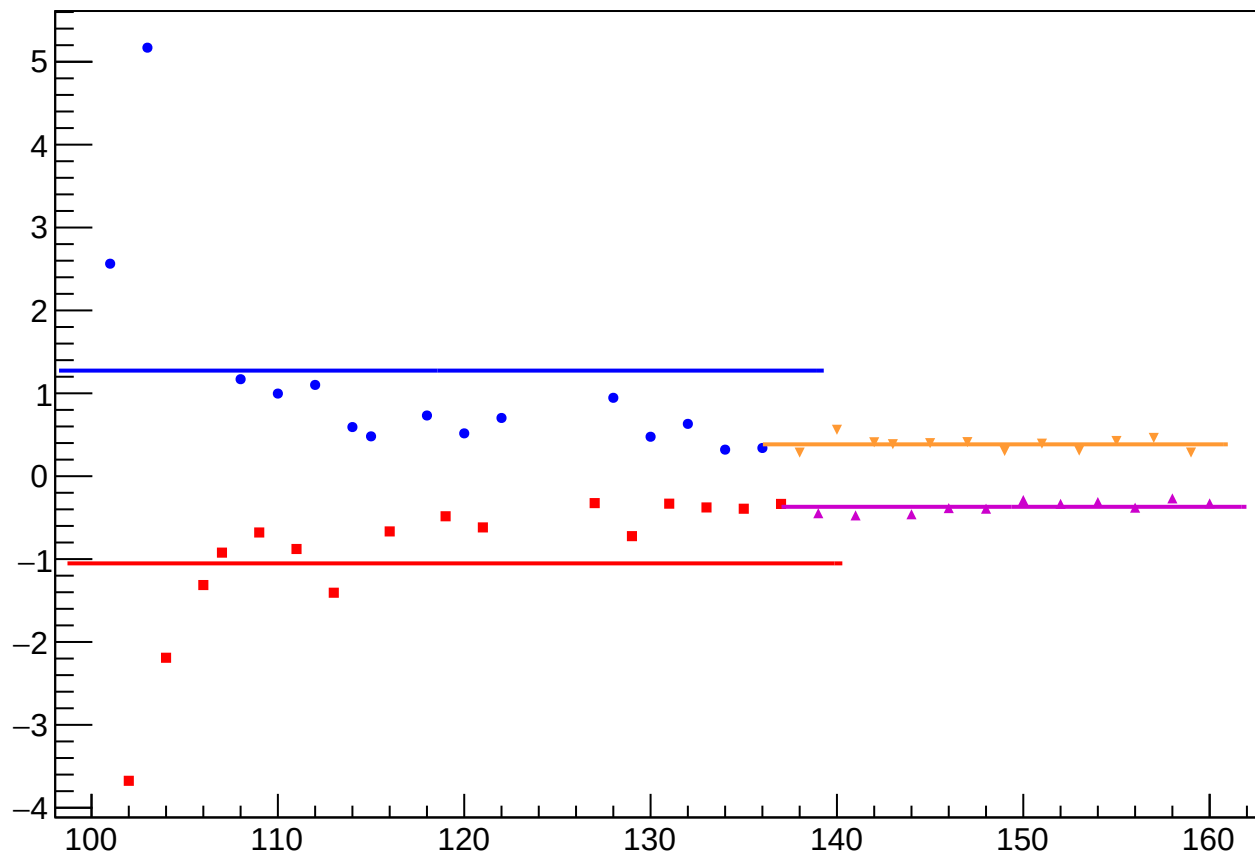
Right:  $-0.091 \pm 0.000$   $\chi^2/\text{NDF}$ : 3202145485356183

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

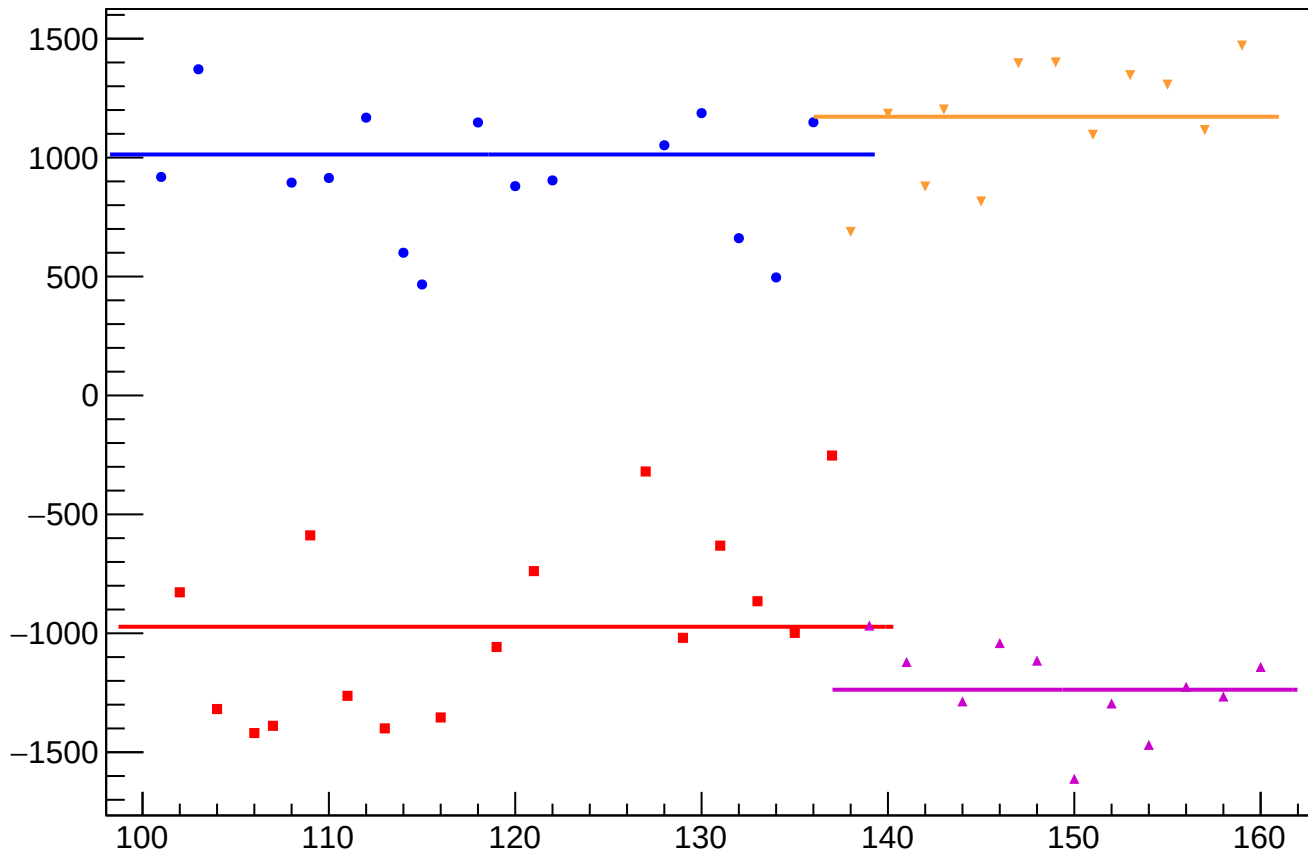
dit\_4eY\_coil6\_err\_mean vs Slug, Sign Corrected



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

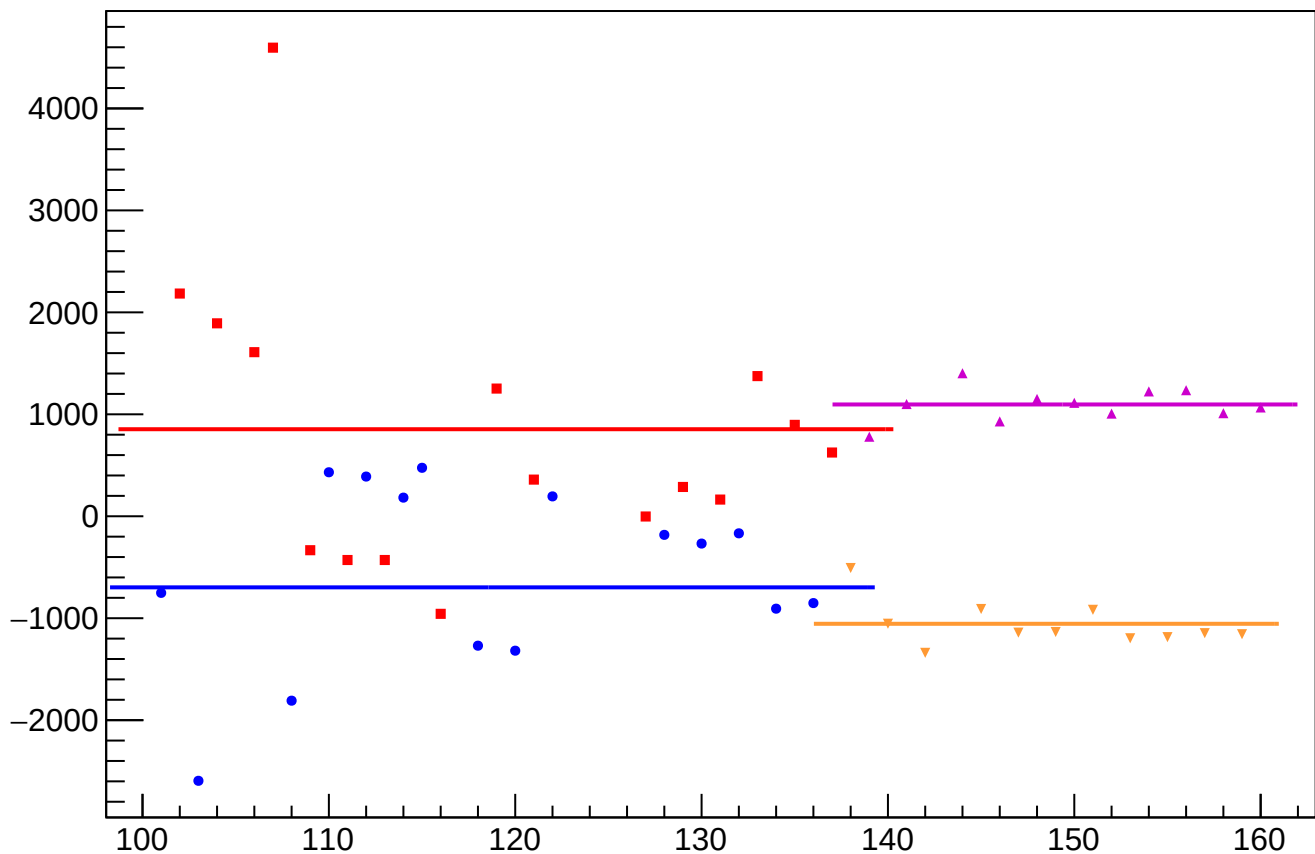
$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

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

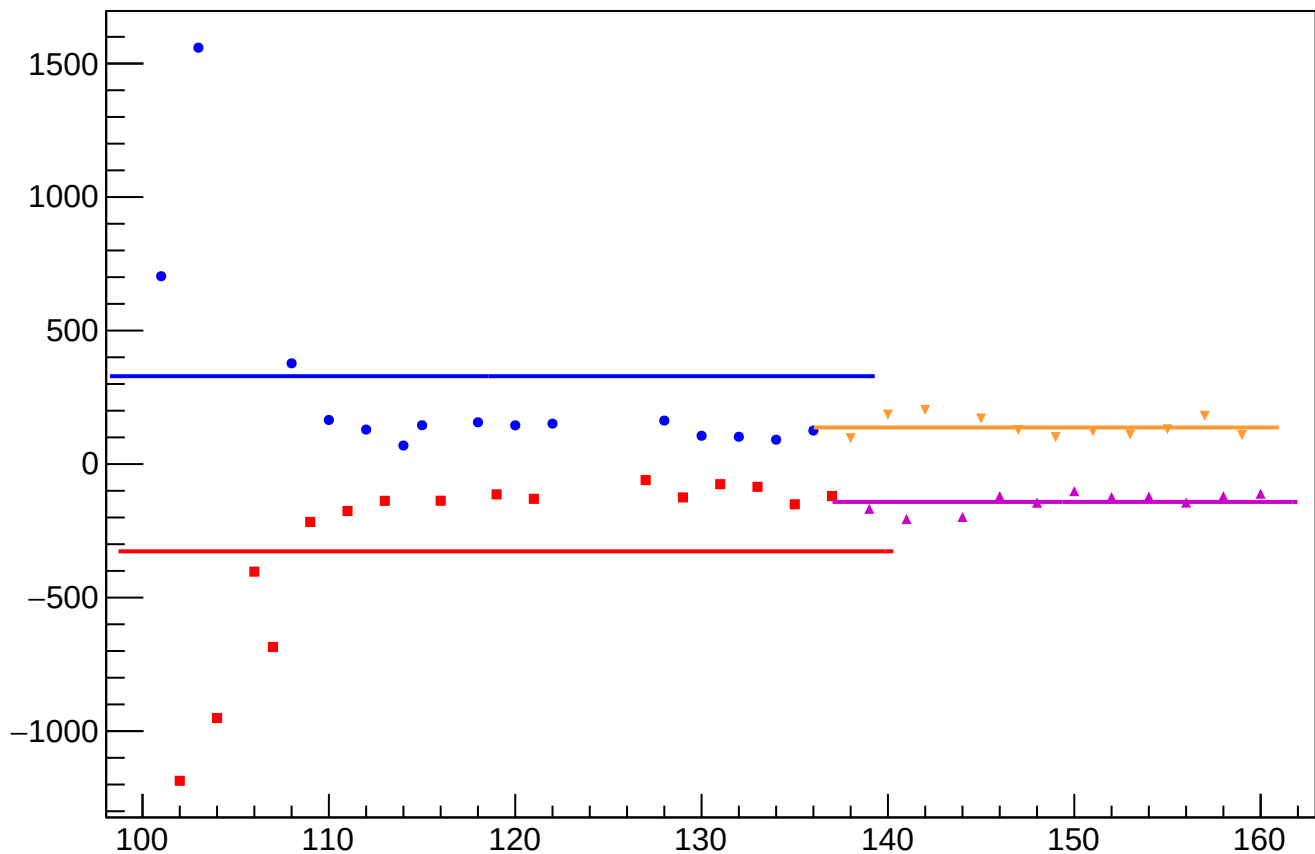
Left In: 1096.508+/-0.000

$\chi^2/\text{NDF}$ : 23397092464085092375008014674557927424.0/10

All: 76.698+/-0.000

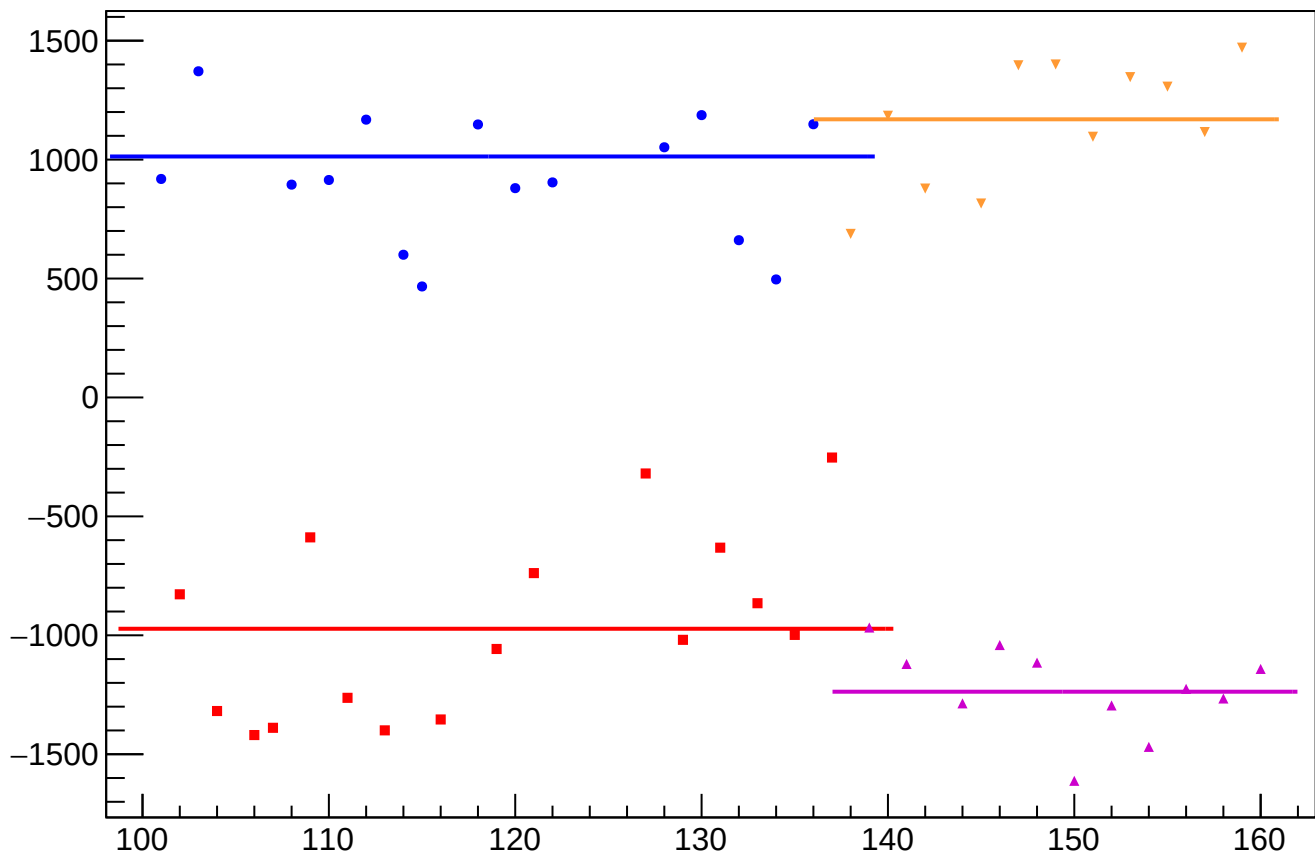
$\chi^2/\text{NDF}$ : 4464746513505

dit\_usl\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 329.108 +/- 0.000  $\chi^2/\text{NDF}$ : 116863820700538623524207945698672377856.0/14  
 Left Out: 137.012 +/- 0.000  $\chi^2/\text{NDF}$ : 1014362817438194132709655172622581760.0/10  
 Right Out: -326.695 +/- 0.000  $\chi^2/\text{NDF}$ : 87569123354318020688611028415151079424.0/15  
 Left In: -141.688 +/- 0.000  $\chi^2/\text{NDF}$ : 1044882408057849194081424130600599552.0/10  
 All: -6.215 +/- 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

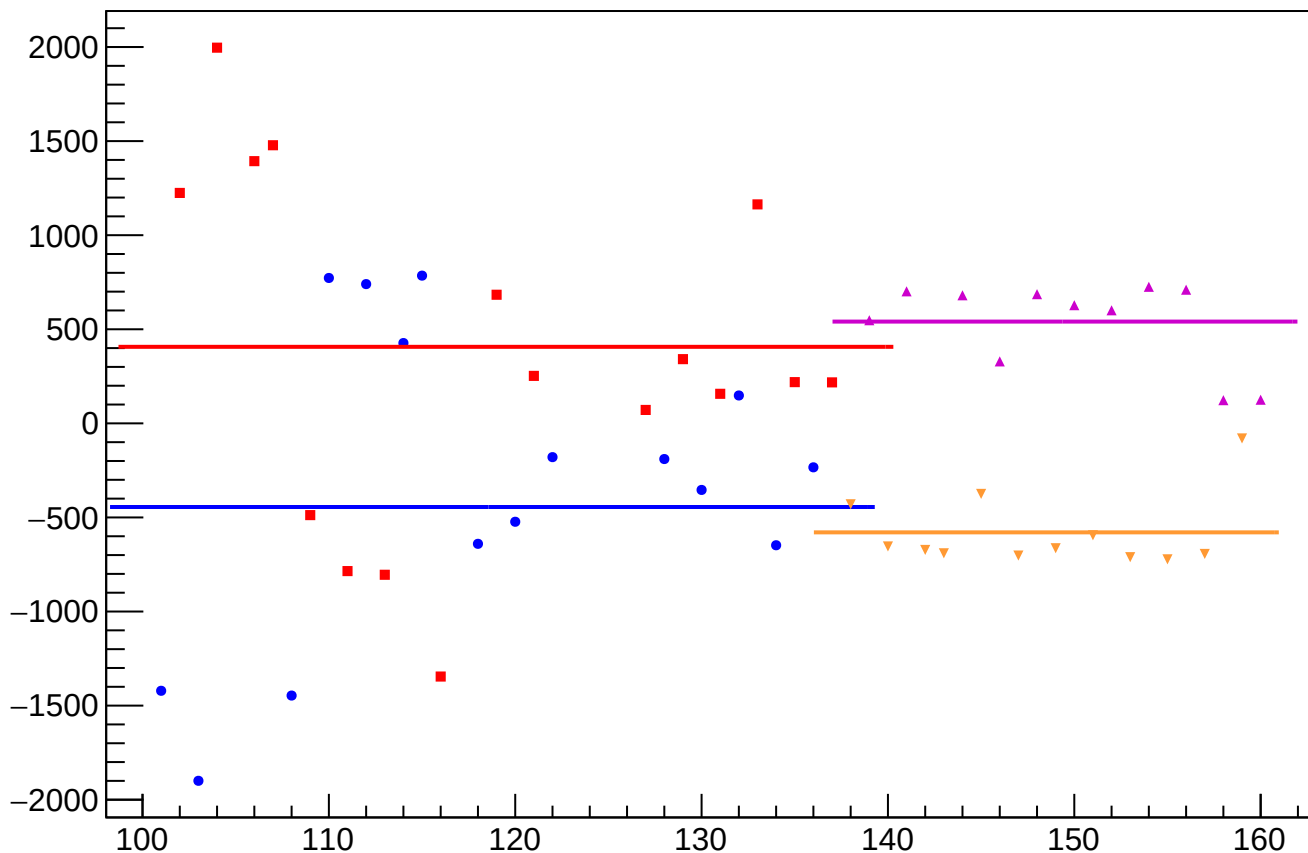
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

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

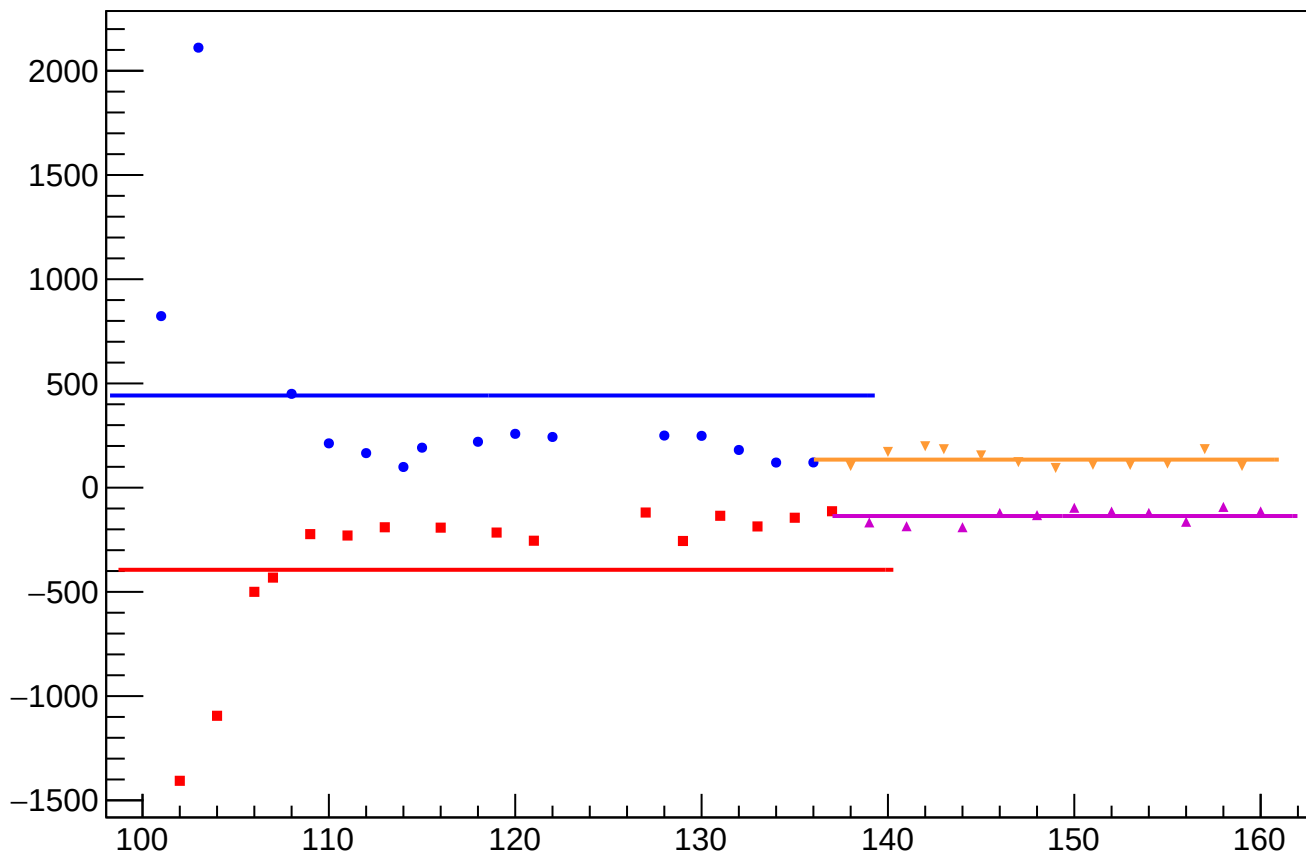
Left In: 540.842+/-0.000

$\chi^2/\text{NDF}$ : 42670193317497817911030367466366697472.0/10

All: -14.875+/-0.000

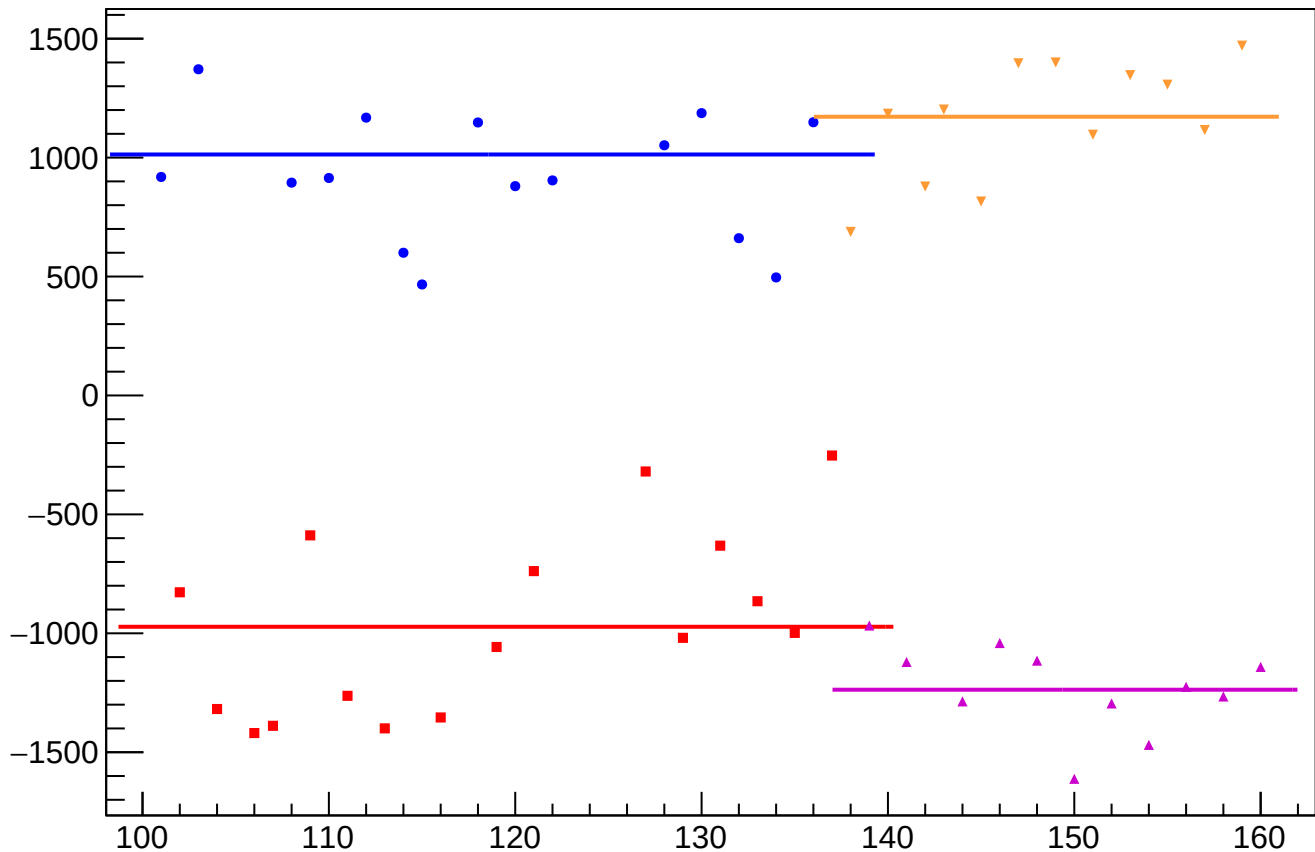
$\chi^2/\text{NDF}$ : 181571626575

dit\_usr\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 442.162+/-0.000  $\chi^2/\text{NDF}$ : 204015999343694089140945697316947361792.0/14  
 Left Out: 134.562+/-0.000  $\chi^2/\text{NDF}$ : 1123122265403287497024317633834516480.0/11  
 Right Out: -394.033+/-0.000  $\chi^2/\text{NDF}$ : 105882611624182009489804426207740035072.0/15  
 Left In: -136.040+/-0.000  $\chi^2/\text{NDF}$ : 1011093061479650527261127450495549440.0/10  
 All: 6.795+/-0.000  $\chi^2/\text{NDF}$ : 57598156309211

dit\_usr\_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

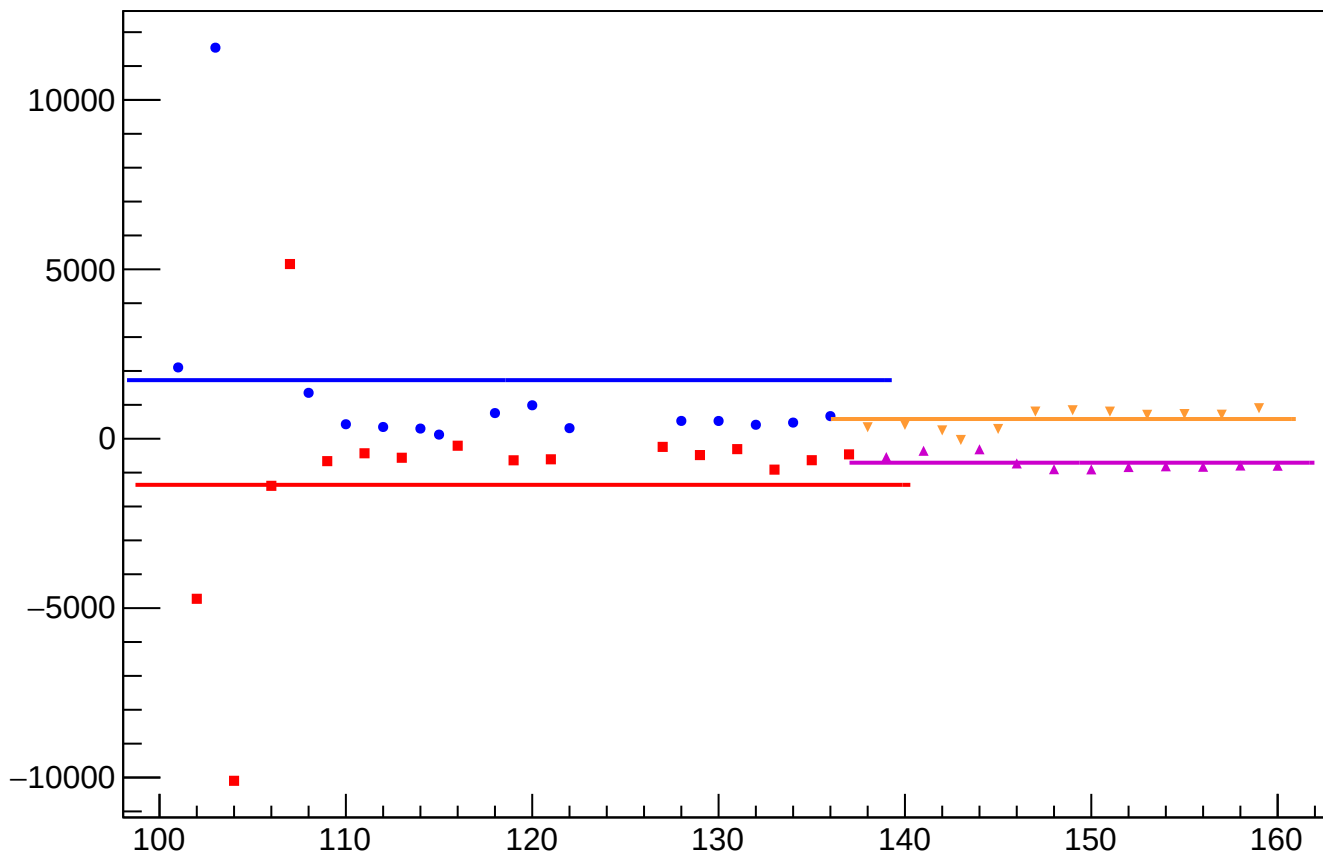
$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

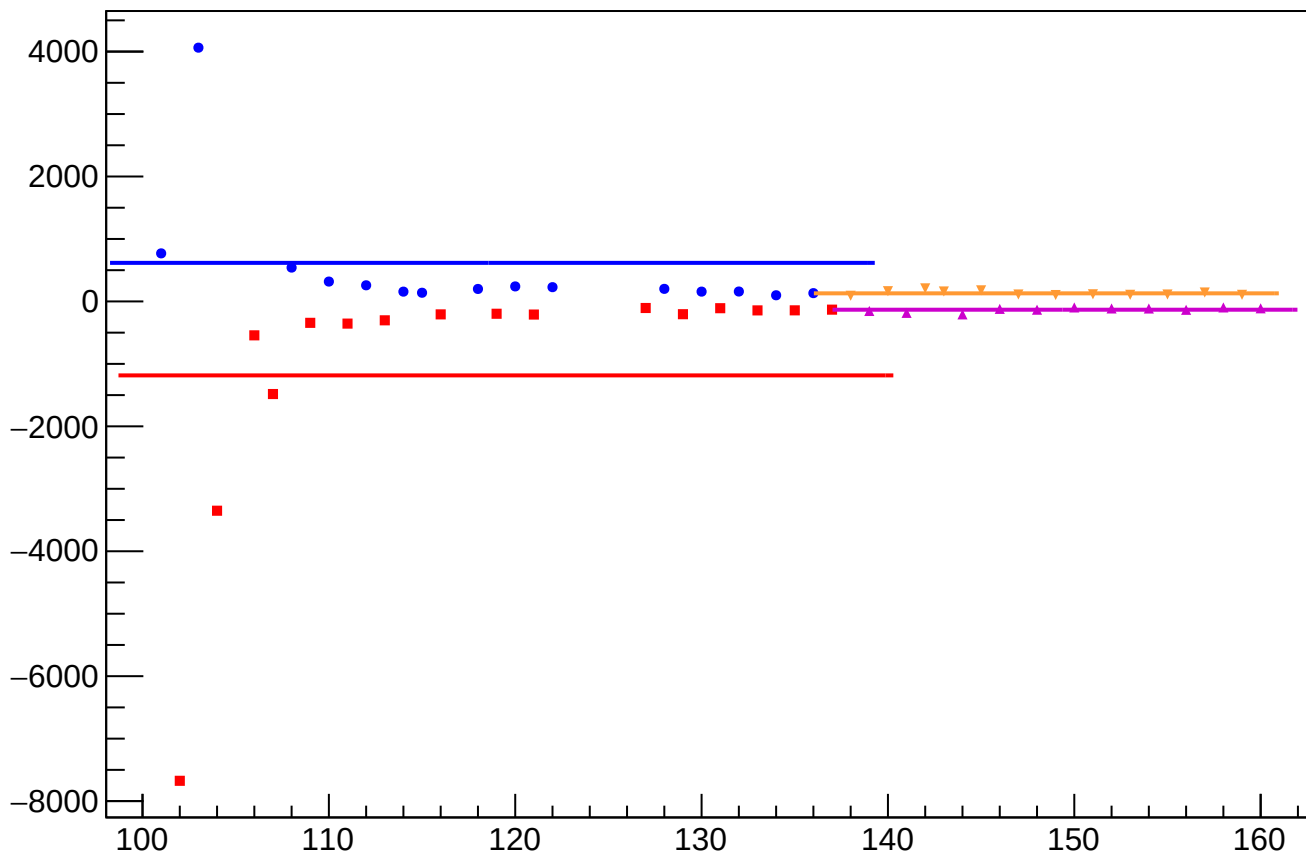
# dit\_atl1\_coil6\_mean vs Slug, Sign Corrected



Right In: 1729.013+/-0.000  $\chi^2/\text{NDF}$ : 6413121297273347408075624116507964866560.0/14  
 Left Out: 582.152+/-0.000  $\chi^2/\text{NDF}$ : 70083772647831486125732989768801714176.0/11  
 Right Out: -1360.914+/-0.000  $\chi^2/\text{NDF}$ : 6431605933148863413038417850186506174464.0/15  
 Left In: -707.889+/-0.000  $\chi^2/\text{NDF}$ : 38116486188817980699032426002432131072.0/10  
 All: 29.296+/-0.000  $\chi^2/\text{NDF}$ : 1689851779226

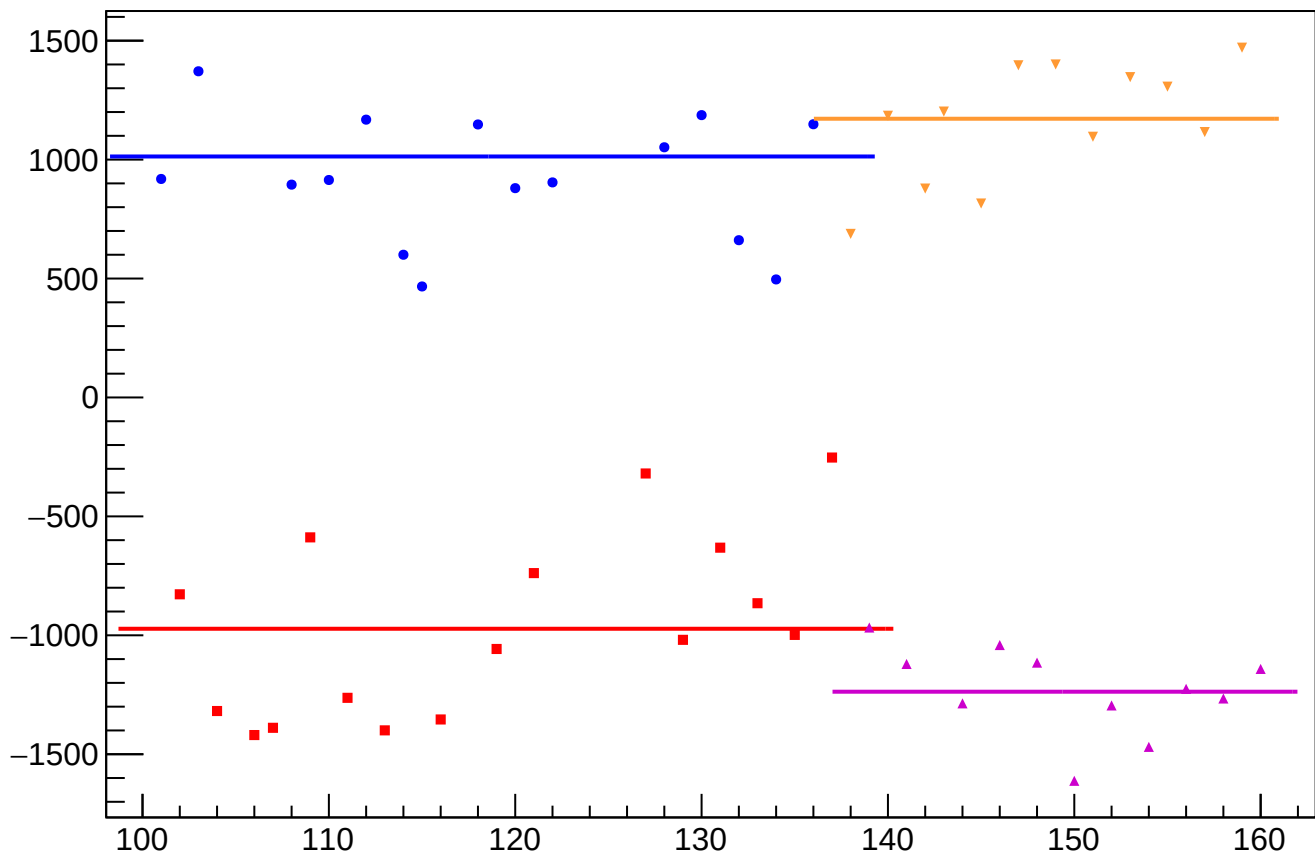


# dit\_atl1\_coil6\_err\_mean vs Slug, Sign Corrected



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

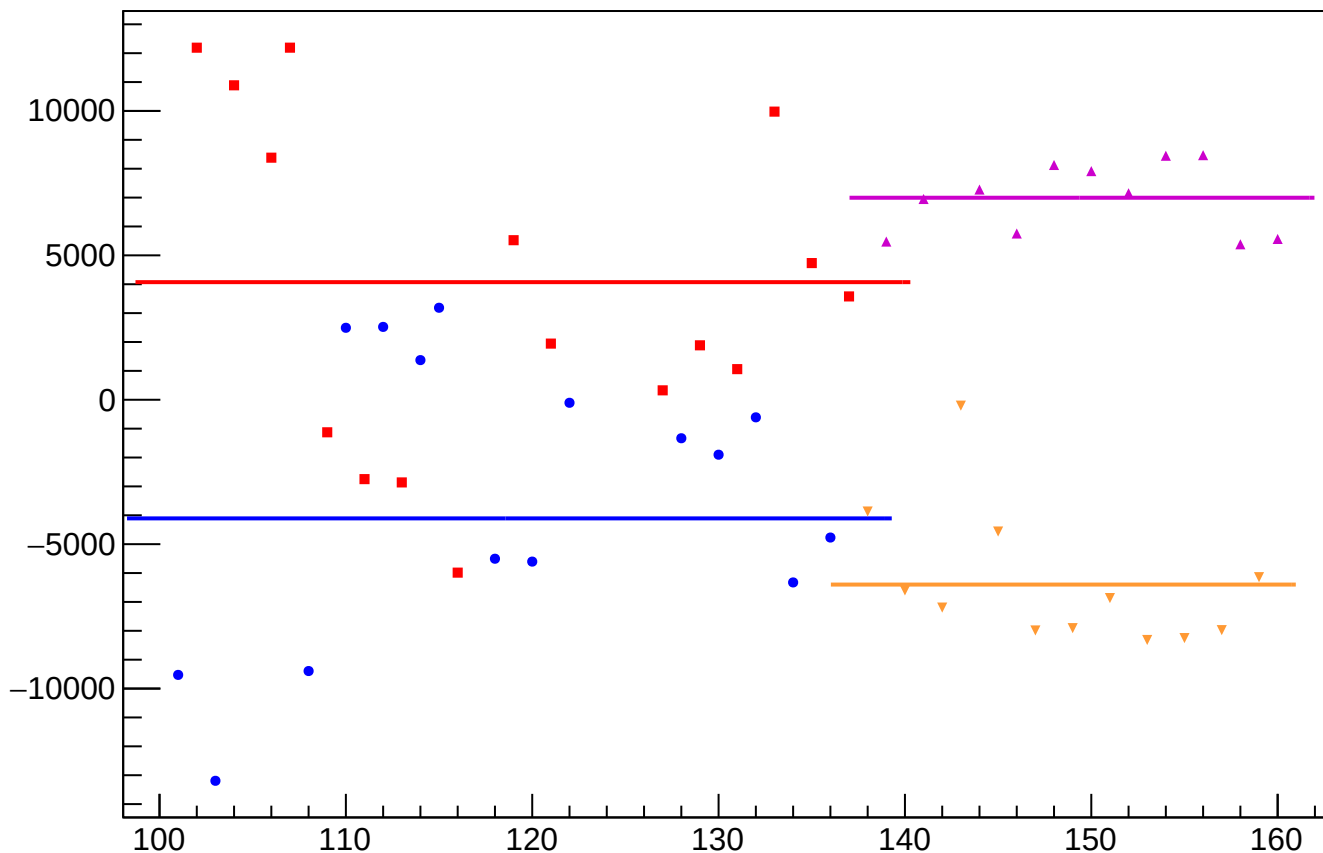
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

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

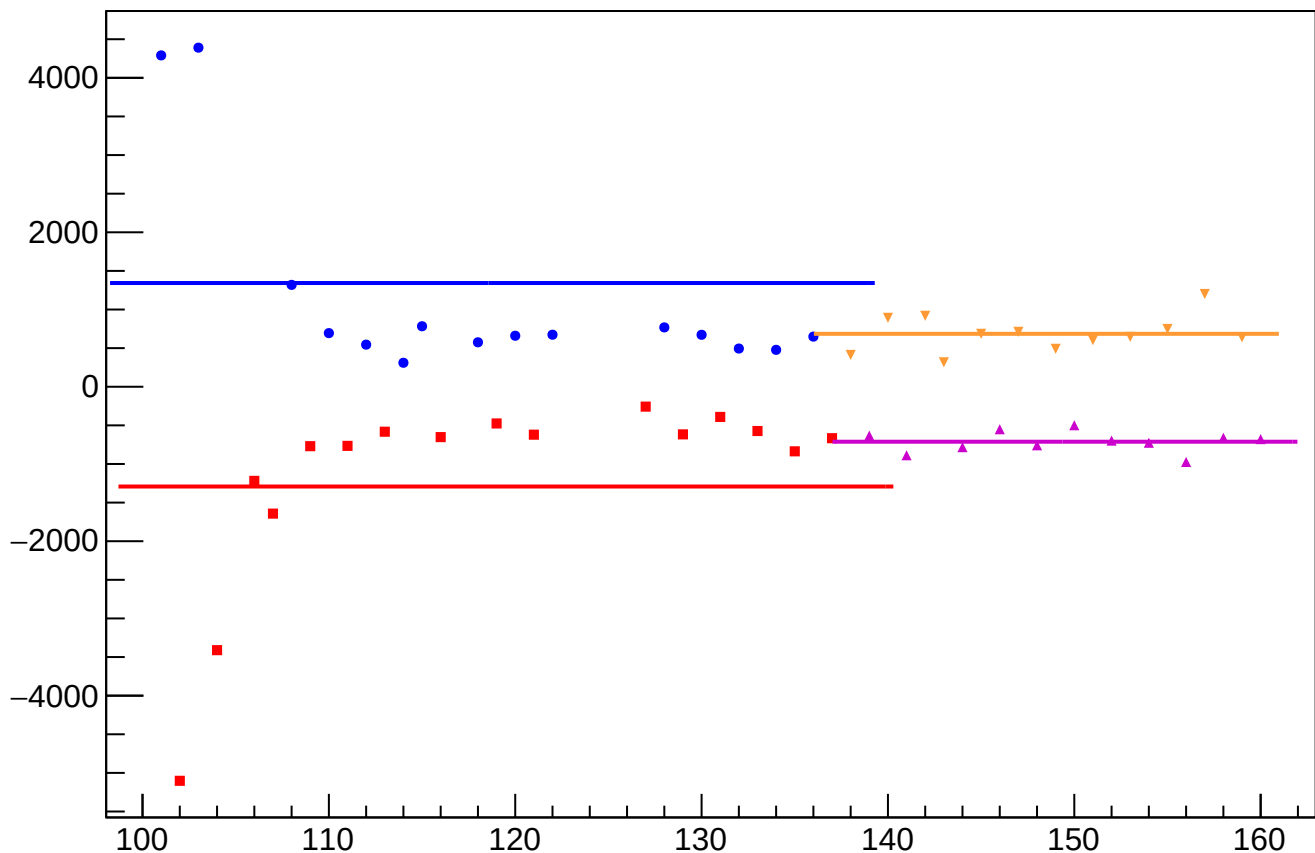
Right: 38.278+/-0.000  $\chi^2/\text{NDF}$ : 5690231407009786

In: 2414.162+/-0.000  $\chi^2/\text{NDF}$ : 6274970680925114

Out: -1981.339+/-0.000  $\chi^2/\text{NDF}$ : 67205872968541

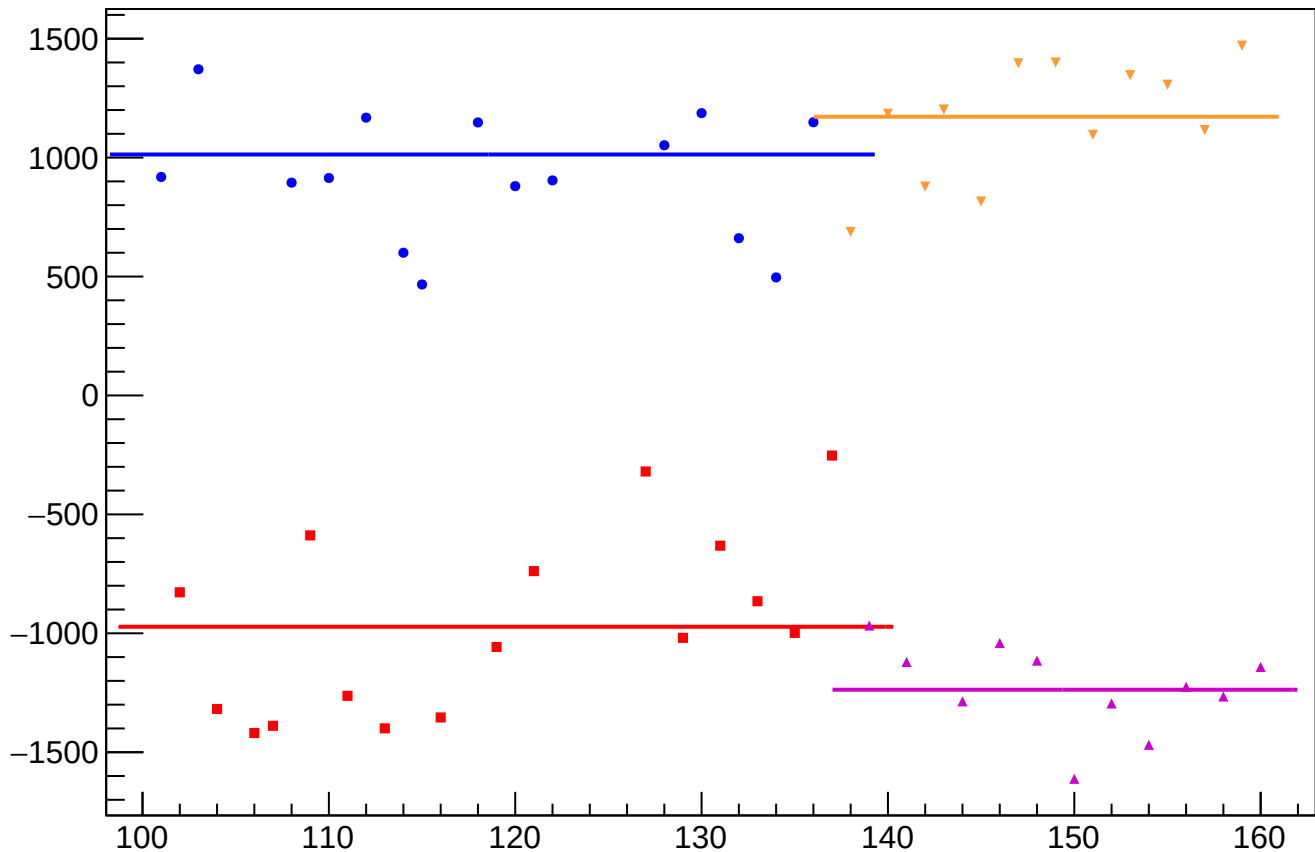
All: 210.837+/-0.000  $\chi^2/\text{NDF}$ : 145189636575

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

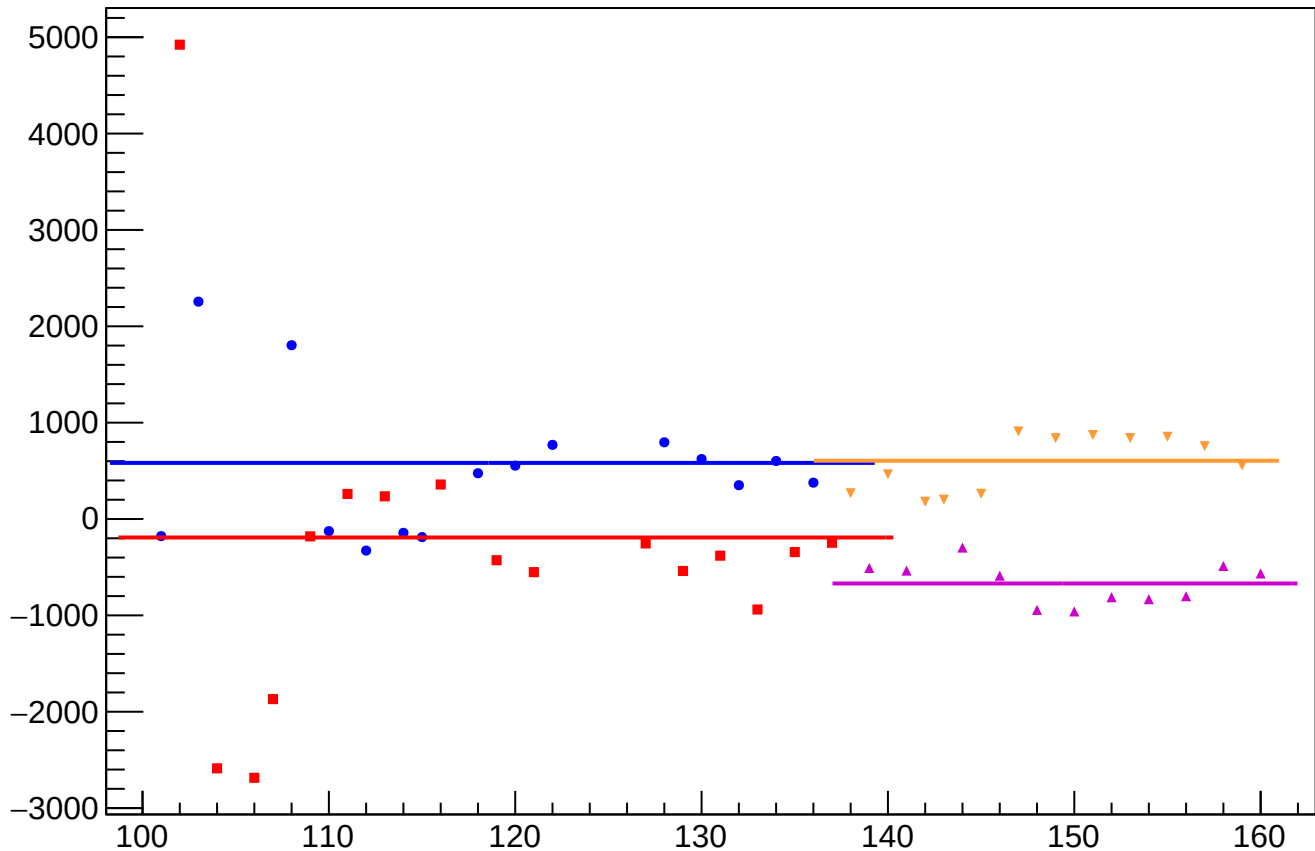
$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

Left In: -1237.150+/-0.000

$\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

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

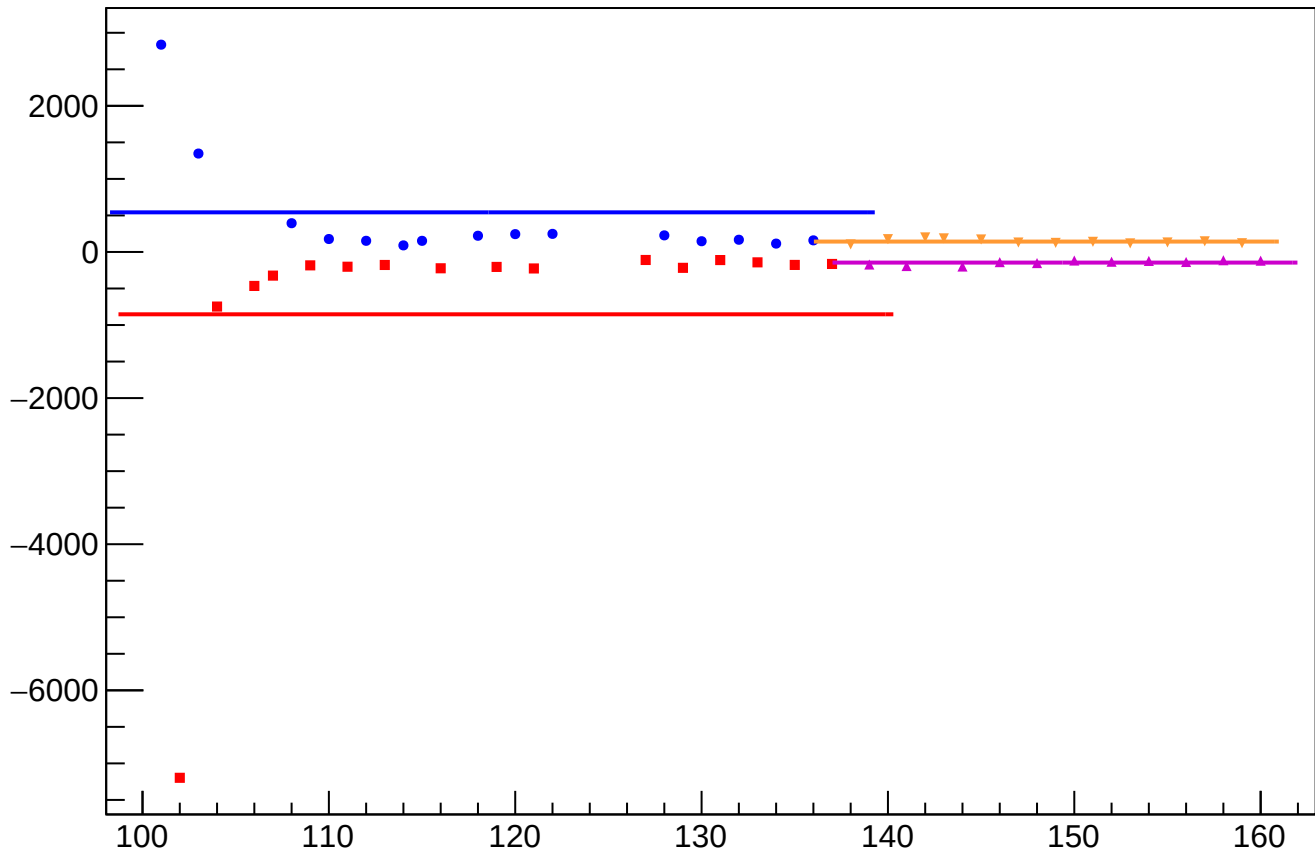
$\chi^2/\text{NDF}$ : 2168762120552346223416743005020716269568.0/15

Left In: -669.155 +/- 0.000

$\chi^2/\text{NDF}$ : 39481195240563617253842230522616479744.0/10

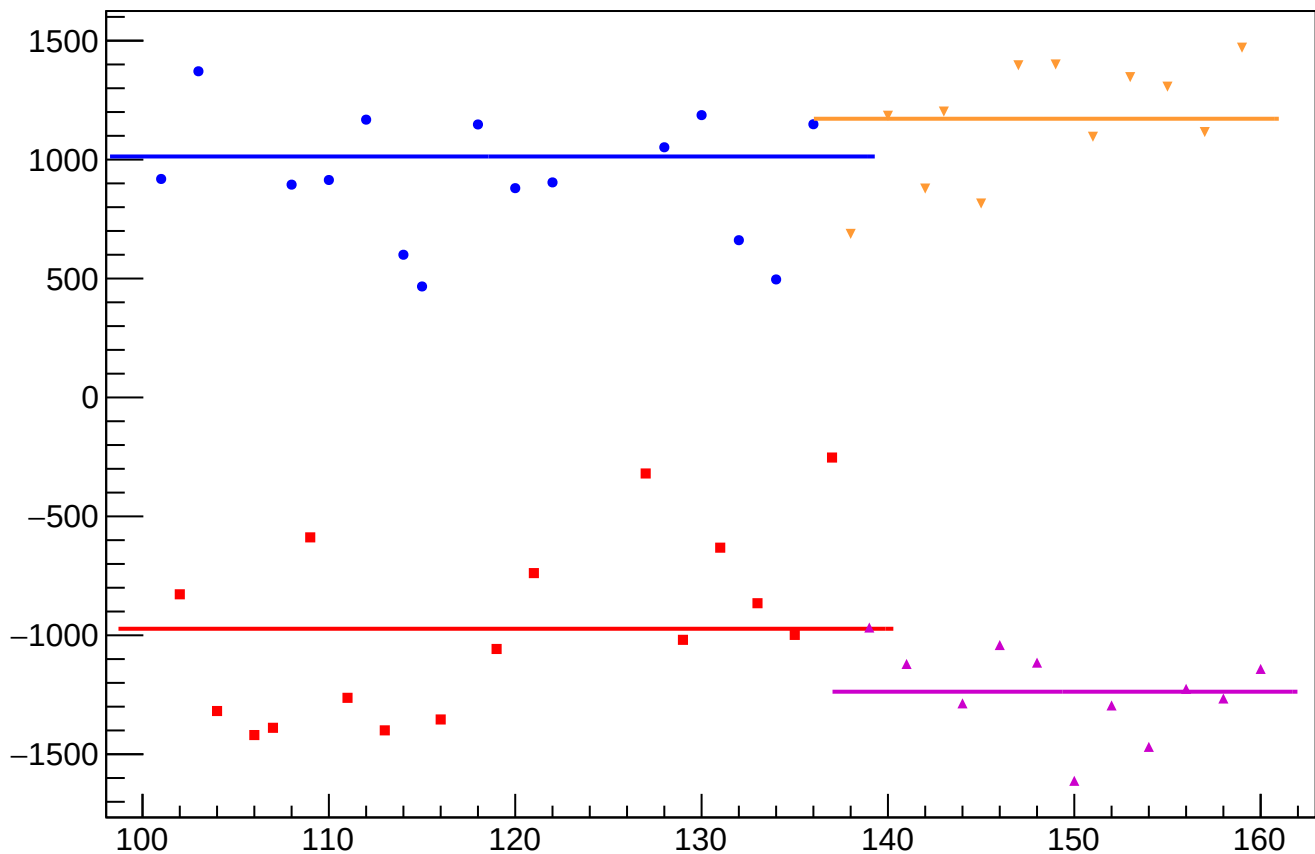
All: 58.630 +/- 0.000  $\chi^2/\text{NDF}$ : 3597086809072

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

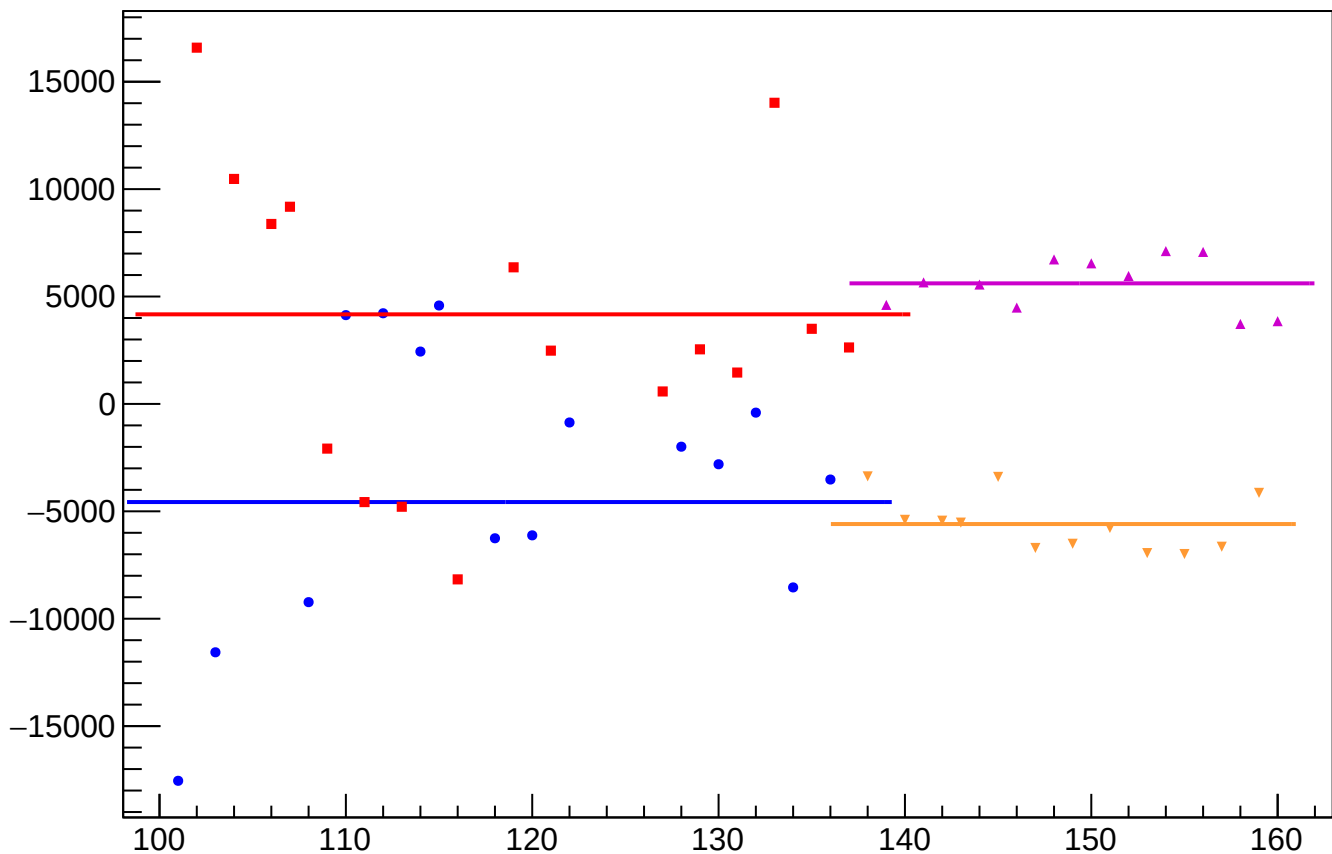
In: 308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

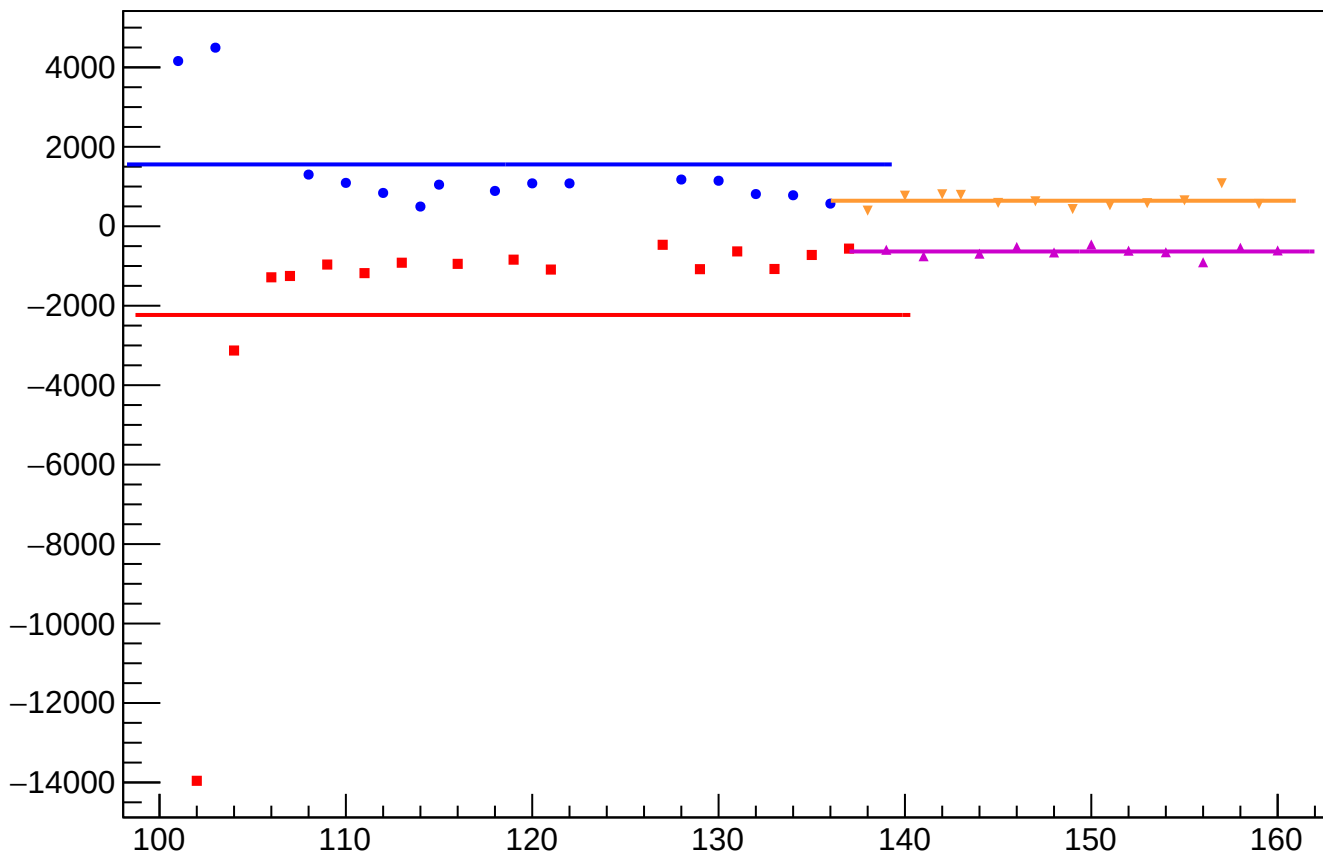


# dit\_atr2\_coil6\_mean vs Slug, Sign Corrected



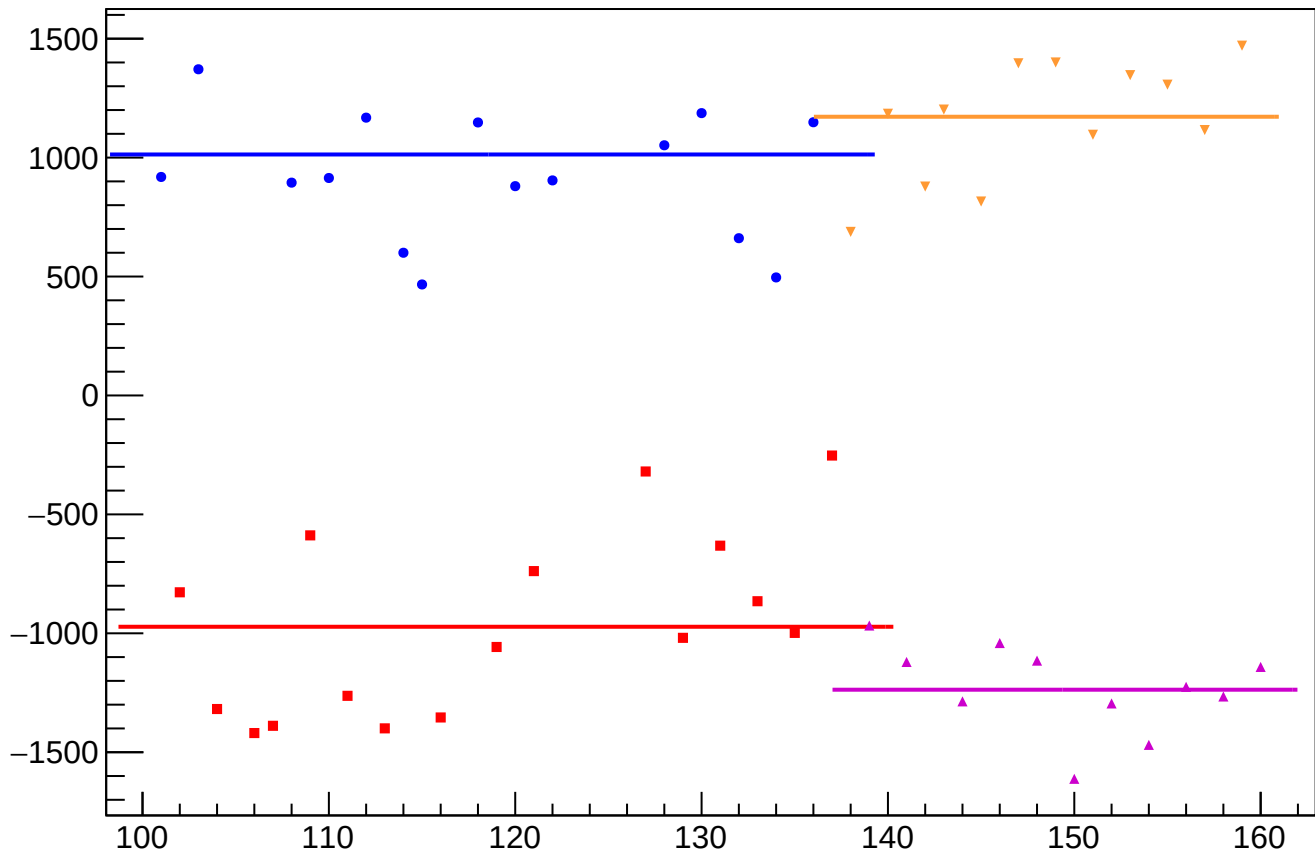
Right In:  $-4568.297 \pm 0.000$   $\chi^2/\text{NDF}: 24195052148165719540713110921977756909568.0/14$   
 Left Out:  $-5592.357 \pm 0.000$   $\chi^2/\text{NDF}: 1502507998590915650067934753088681803776.0/11$   
 Right Out:  $4170.773 \pm 0.000$   $\chi^2/\text{NDF}: 30967248832187912041113909559481103024128.0/15$   
 Left In:  $5613.024 \pm 0.000$   $\chi^2/\text{NDF}: 1272210659936261957248133173503170969600.0/10$   
 All:  $-34.210 \pm 0.000$   $\chi^2/\text{NDF}: 140776657149$

# dit\_atr2\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 1556.763 +/- 0.000  $\chi^2/\text{NDF}$ : 1139364239218600567191855131756930793472.0/14  
 Left Out: 642.639 +/- 0.000  $\chi^2/\text{NDF}$ : 29931346030134316080818937490076336128.0/11  
 Right Out: -2232.520 +/- 0.000  $\chi^2/\text{NDF}$ : 8990395725533930134878595569706942332928.0/15  
 Left In: -634.562 +/- 0.000  $\chi^2/\text{NDF}$ : 12308442809403031190669556314642841600.0/10  
 All: -151.463 +/- 0.000  $\chi^2/\text{NDF}$ : 15746462164

dit\_atr2\_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

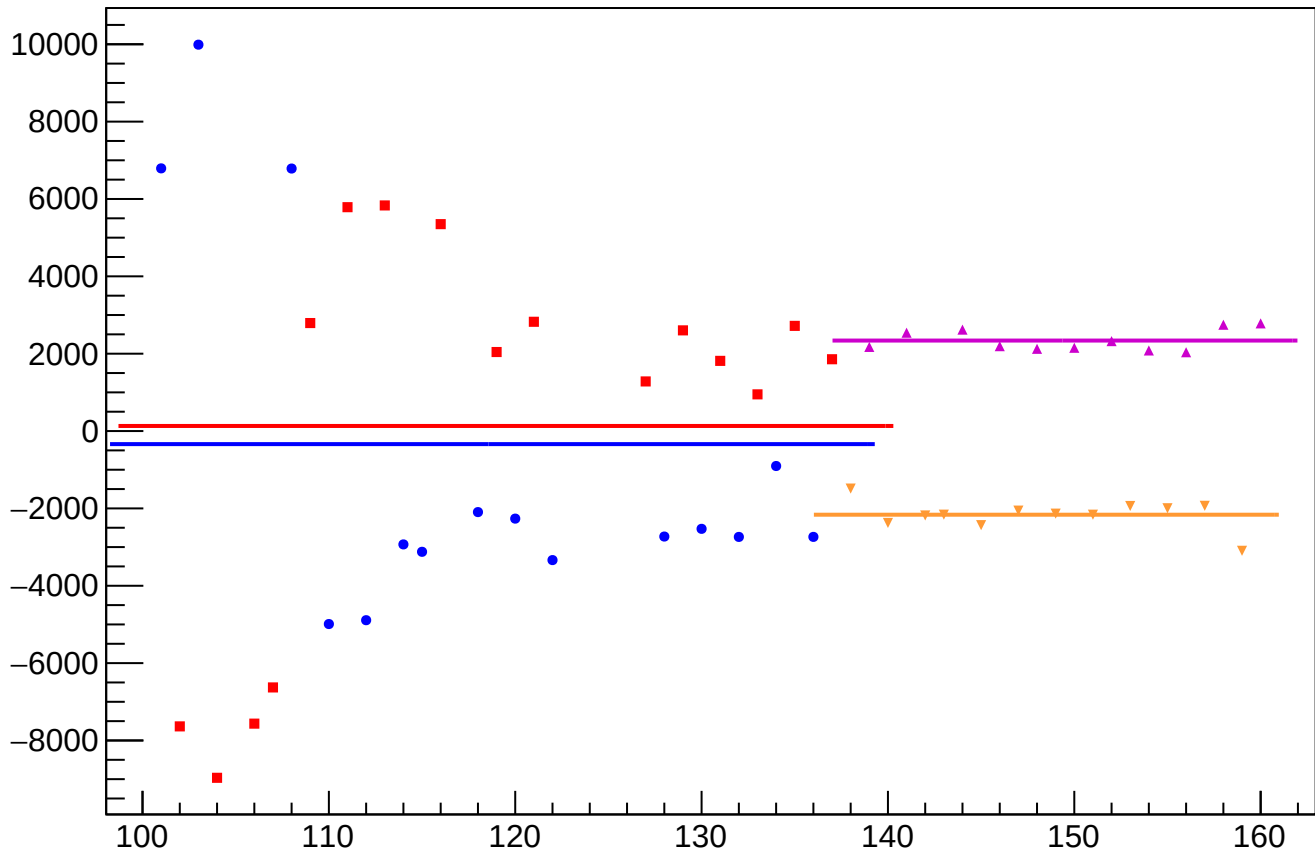
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

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\_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

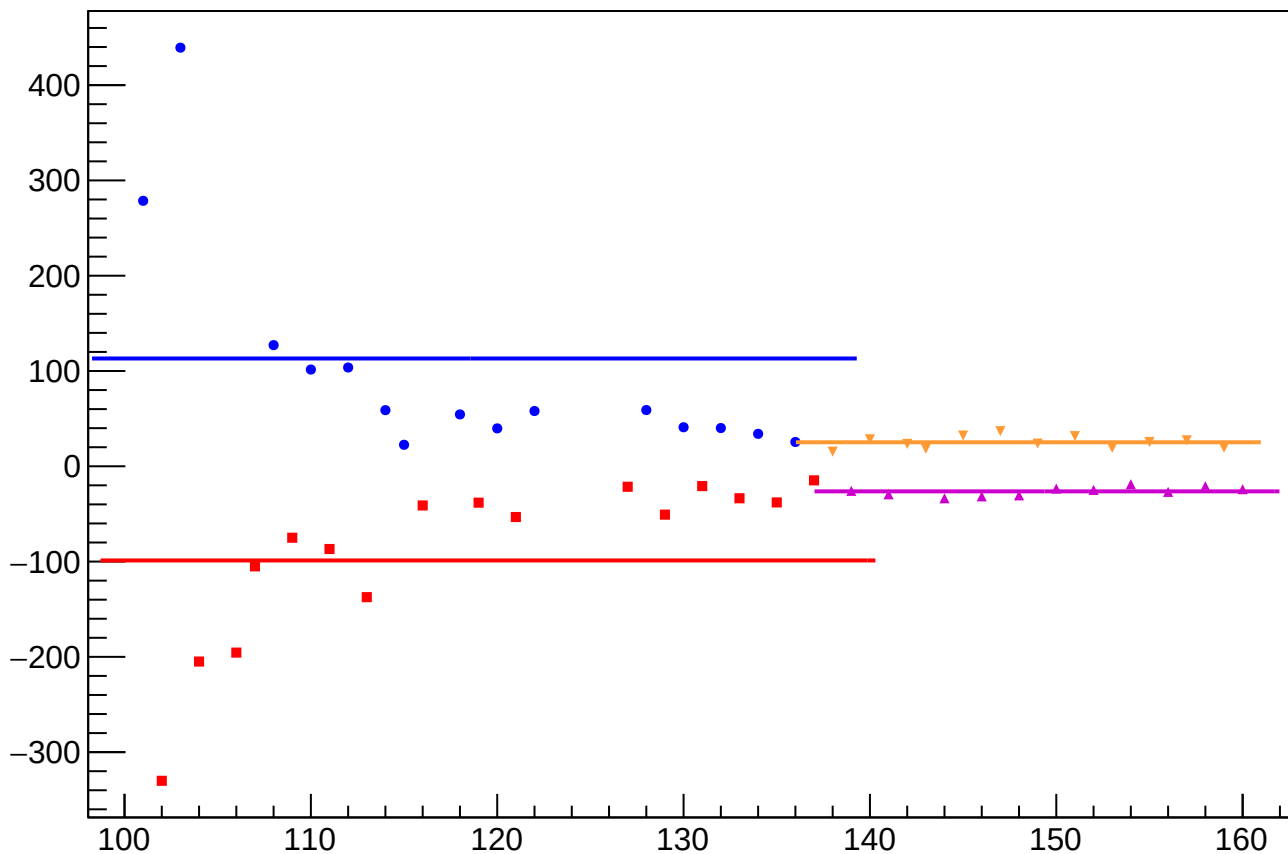
$\chi^2/\text{NDF}$ : 16473217651078877976377424419956902068224.0/15

Left In: 2339.639+/-0.000

$\chi^2/\text{NDF}$ : 62860144247456957543810906284181422080.0/10

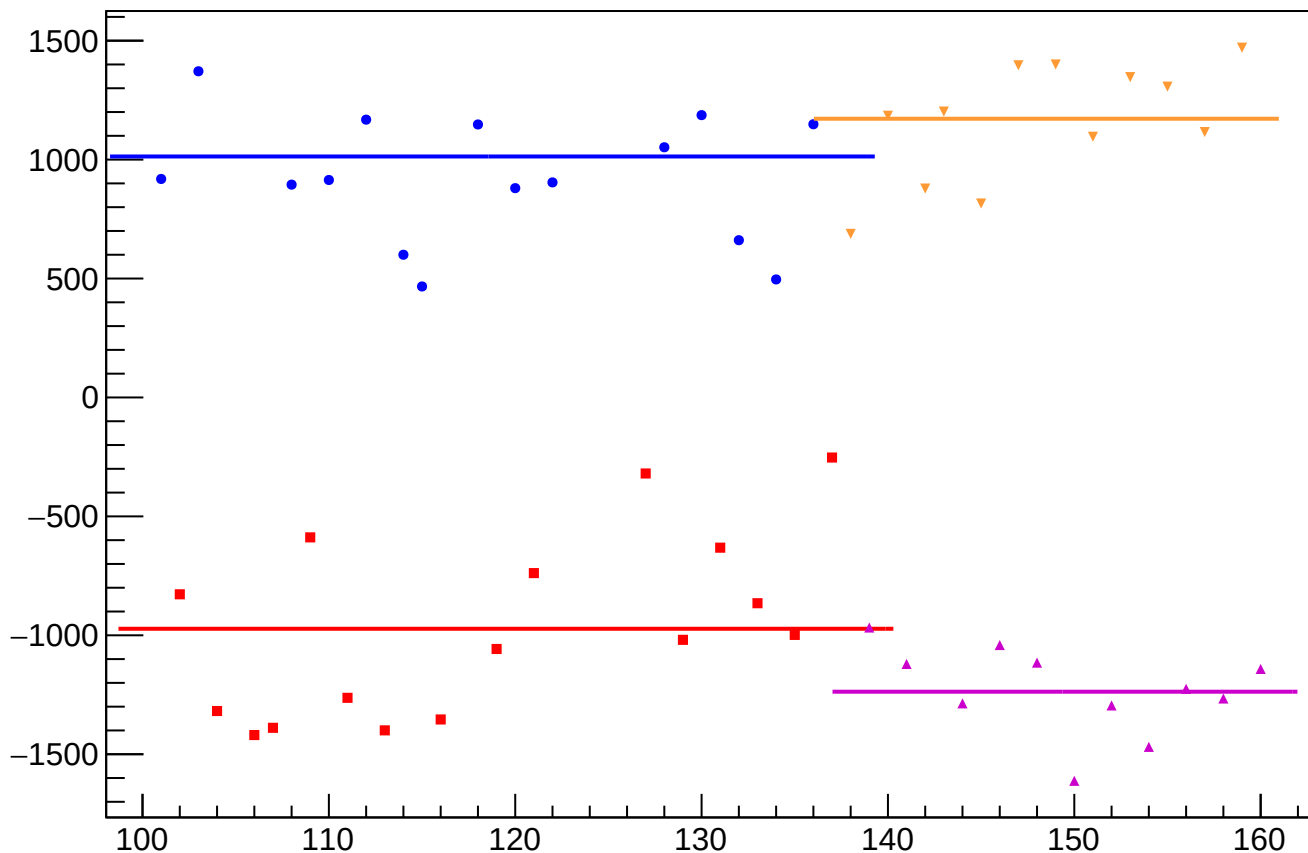
Left: 100.639+/-0.000  $\chi^2/\text{NDF}$ : 9504114139630339  
 Right: -99.949+/-0.000  $\chi^2/\text{NDF}$ : 316982138957514  
 In: 1234.934+/-0.000  $\chi^2/\text{NDF}$ : 1794842889484232  
 Out: -1194.883+/-0.000  $\chi^2/\text{NDF}$ : 18629471707312  
 All: 16.944+/-0.000  $\chi^2/\text{NDF}$ : 4123318495094

dit\_sam1\_coil6\_err\_mean vs Slug, Sign Corrected



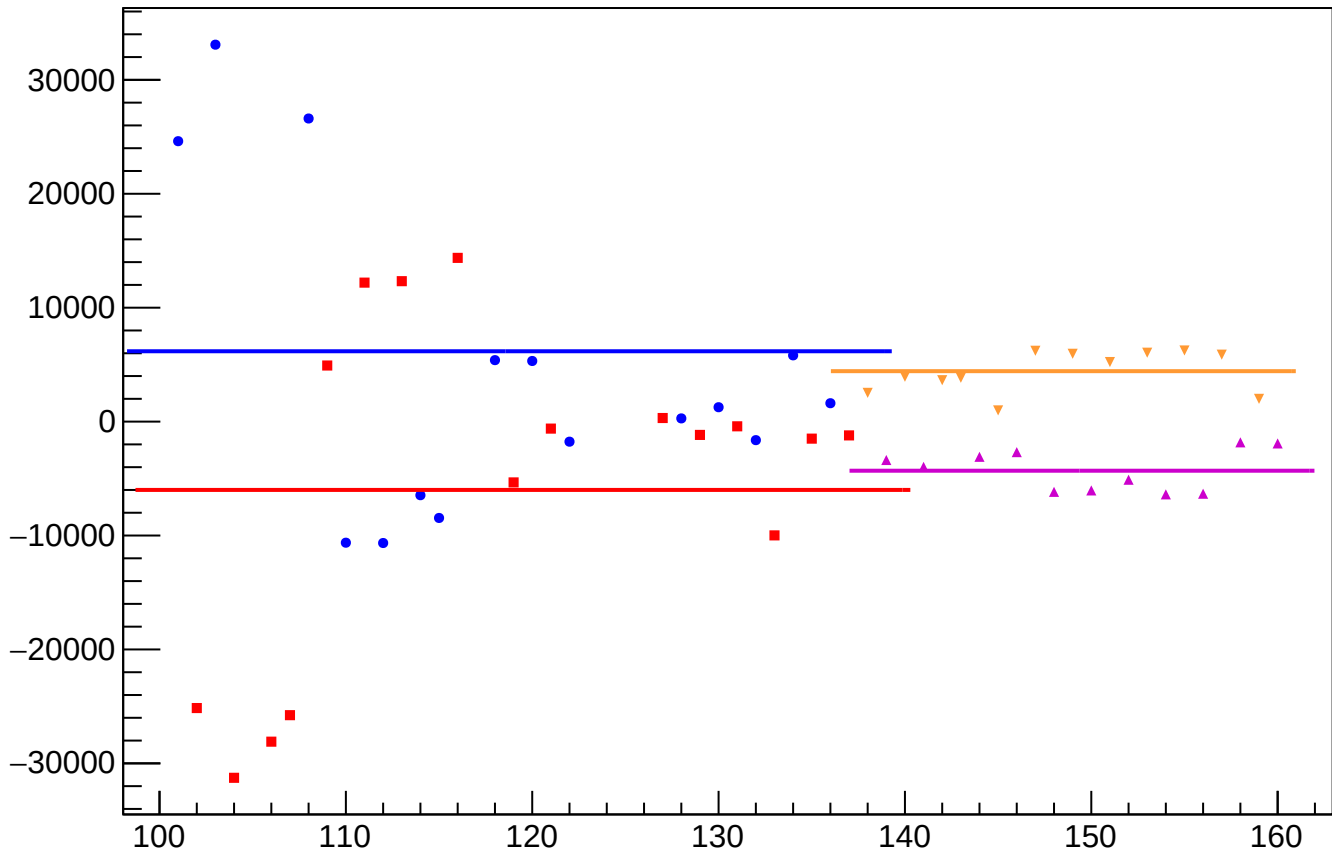
Left: -0.703 +/- 0.000  $\chi^2/\text{NDF}$ : 12737969644467641  
 Right In: 113.134 +/- 0.000  $\chi^2/\text{NDF}$ : 9989638354332004017458192433874468864.0/14  
 Right: 5.701 +/- 0.000  $\chi^2/\text{NDF}$ : 30279176036436111  
 Left Out: 25.204 +/- 0.000  $\chi^2/\text{NDF}$ : 35340998729966912863138320392126464.0/11  
 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



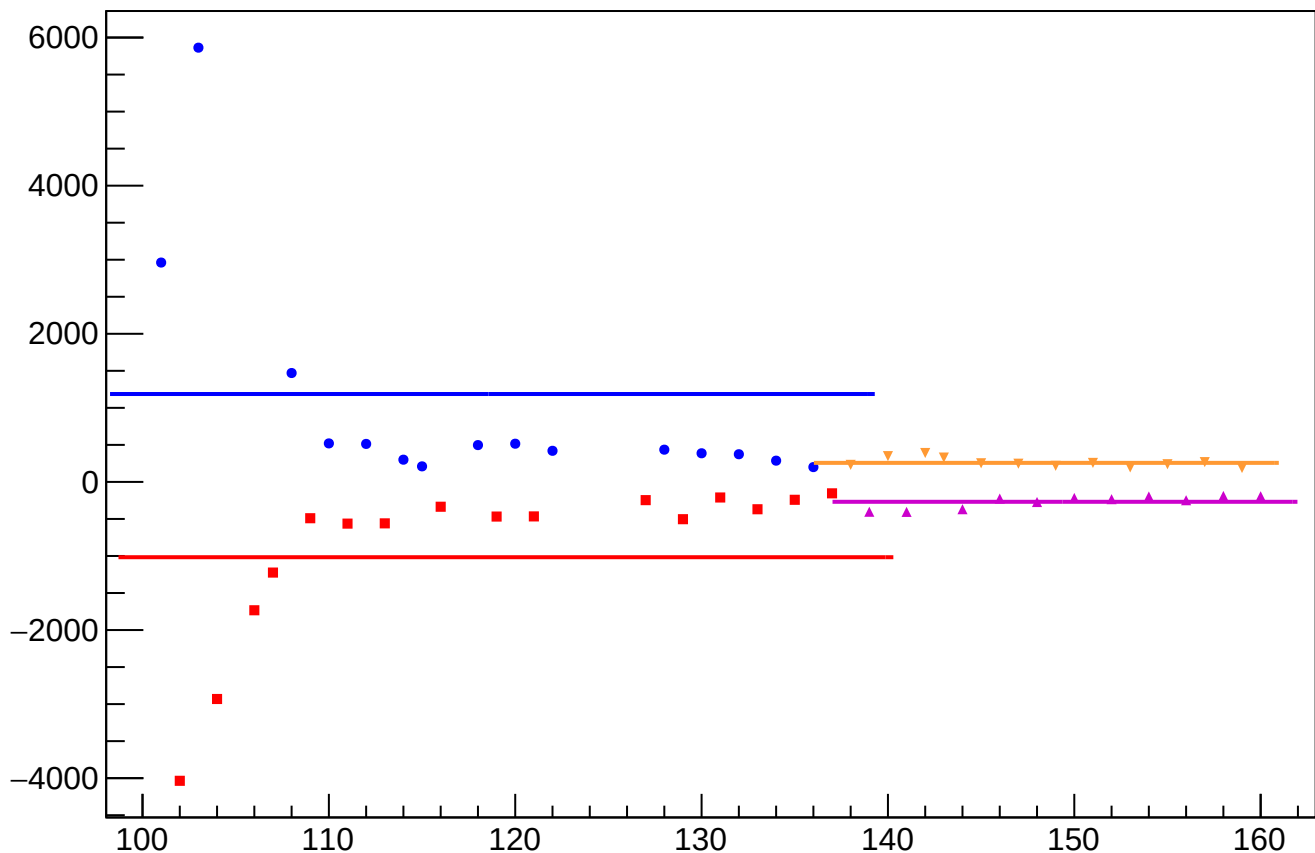
Right In: 1013.146+/-0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807+/-0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: -972.465+/-0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: -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

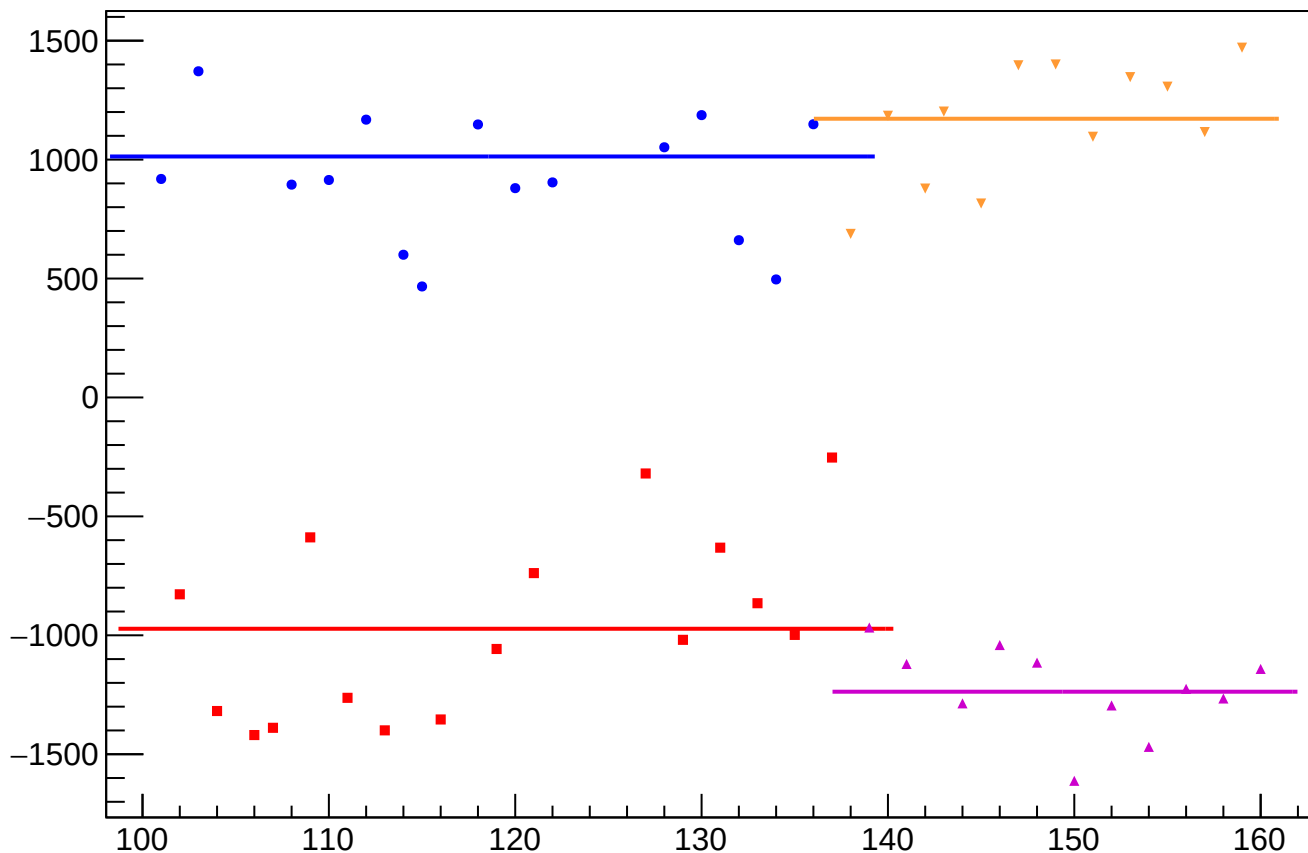
# dit\_sam2\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 1186.846+/-0.000  $\chi^2/\text{NDF}$ : 1796463312802023303623210264680353234944.0/14  
 Left Out: 257.255+/-0.000  $\chi^2/\text{NDF}$ : 2781253601465669157863687249484316672.0/11  
 Right Out: -1016.732+/-0.000  $\chi^2/\text{NDF}$ : 927646003466094249558391691024825057280.0/15  
 Left In: -268.493+/-0.000  $\chi^2/\text{NDF}$ : 5855734975706547823556607966386847744.0/10  
 All: 25.094+/-0.000  $\chi^2/\text{NDF}$ : 4461548431254

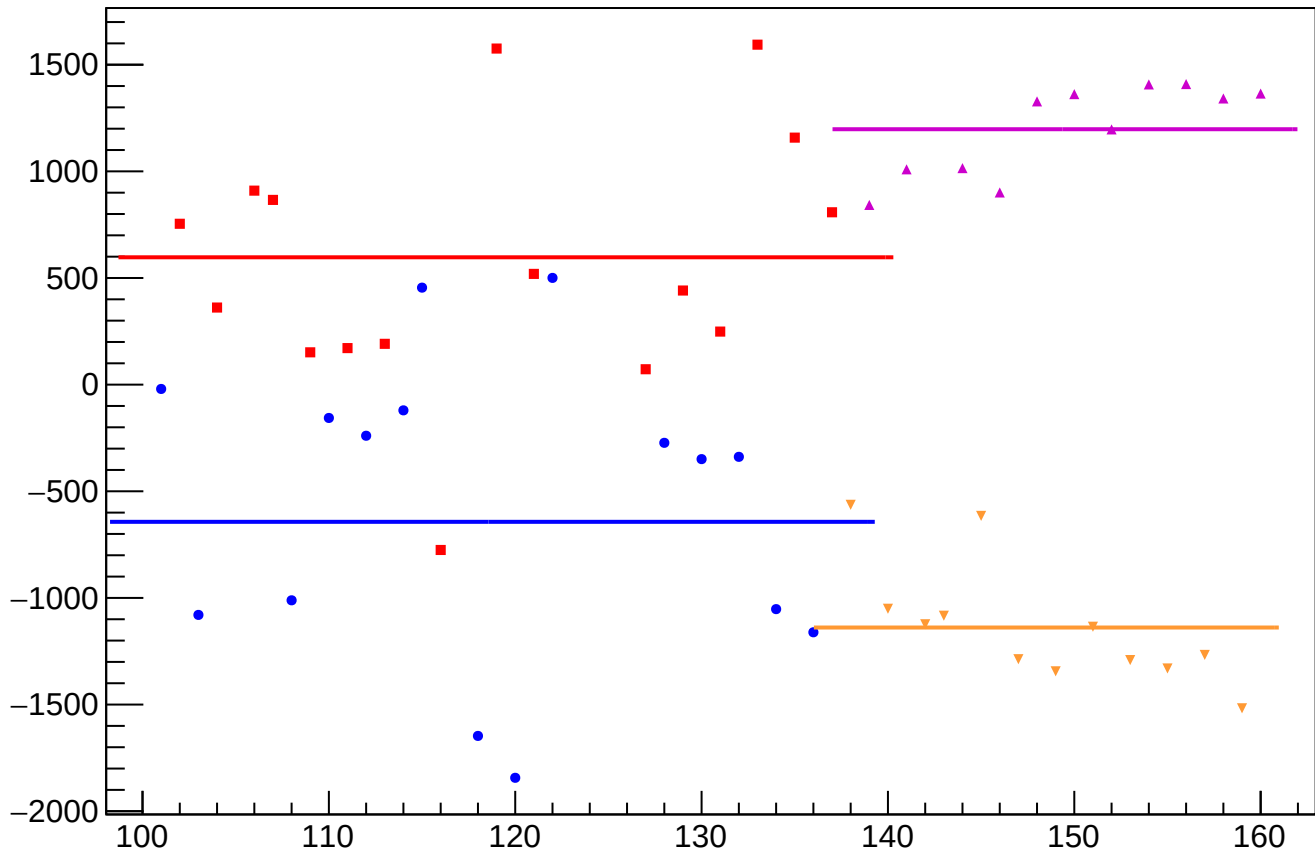


dit\_sam2\_coil6\_Ndata\_mean vs Slug, Sign Corrected



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

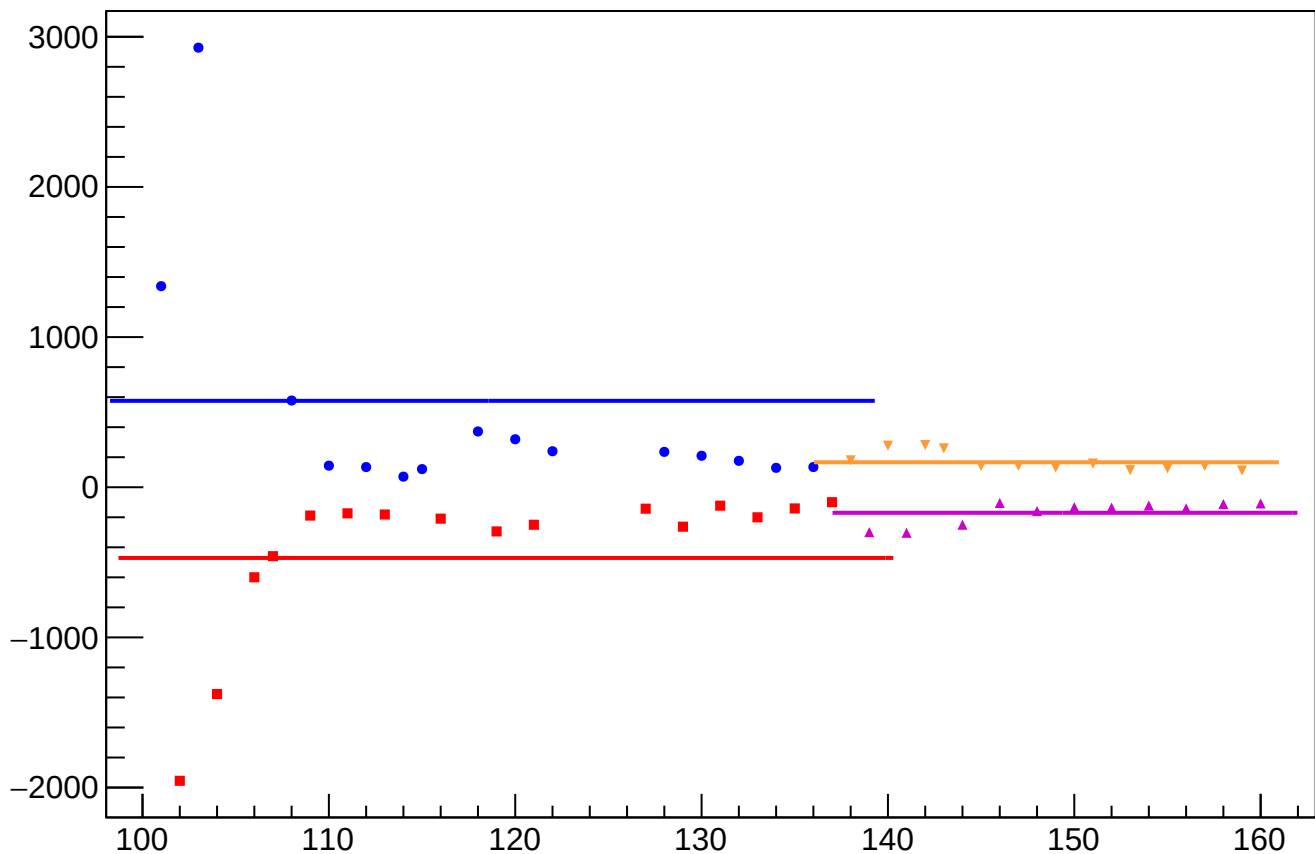
$\chi^2/\text{NDF}$ : 210733370798031449363504004319005376512.0/15

Left In: 1197.503+/-0.000

$\chi^2/\text{NDF}$ : 38624722141560961102710570239066636288.0/10

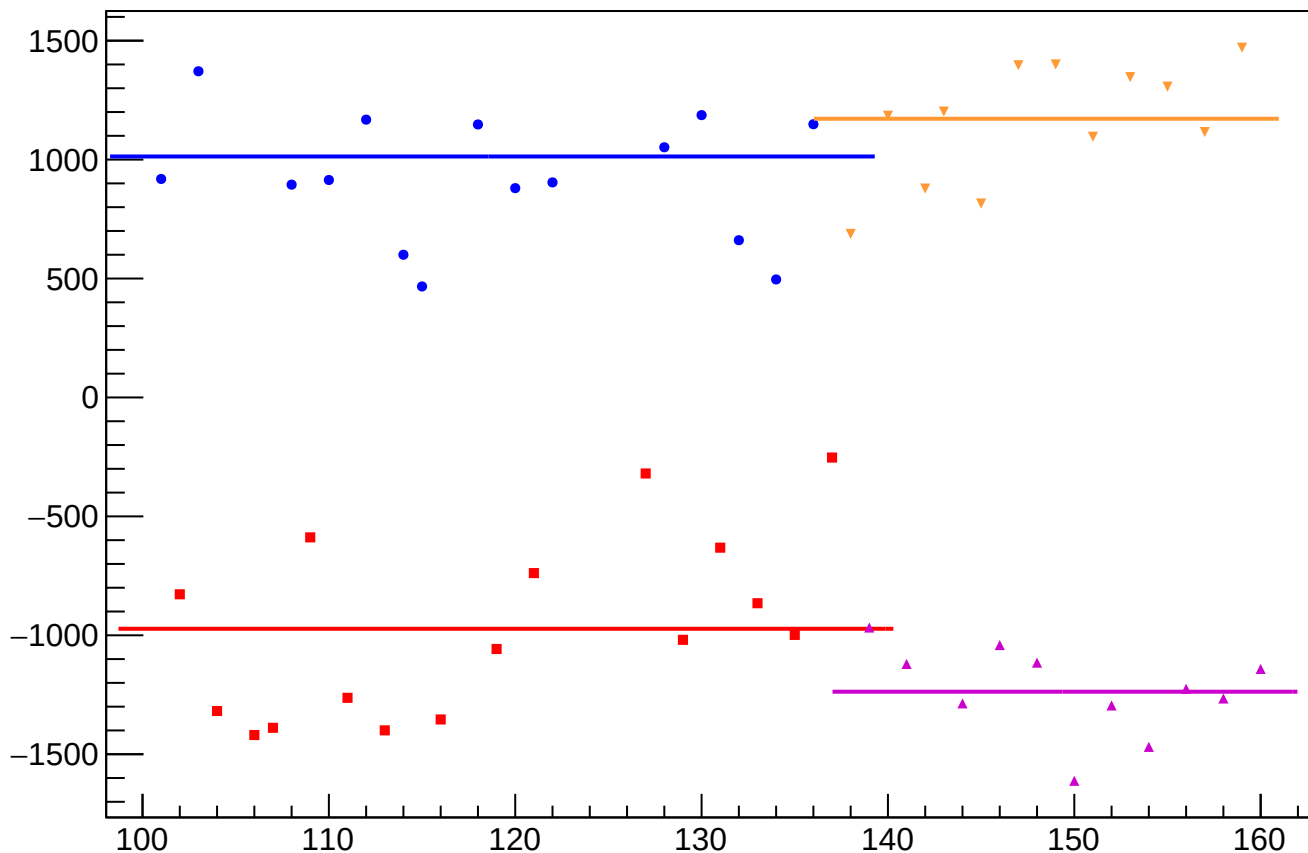
Left: 35.728+/-0.000  $\chi^2/\text{NDF}$ : 26175621969941425  
 Right: -14.605+/-0.000  $\chi^2/\text{NDF}$ : 989448118075246  
 In: 438.045+/-0.000  $\chi^2/\text{NDF}$ : 1603056987163828  
 Out: -406.450+/-0.000  $\chi^2/\text{NDF}$ : 144356337261443  
 All: 14.726+/-0.000  $\chi^2/\text{NDF}$ : 3608953170188

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

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

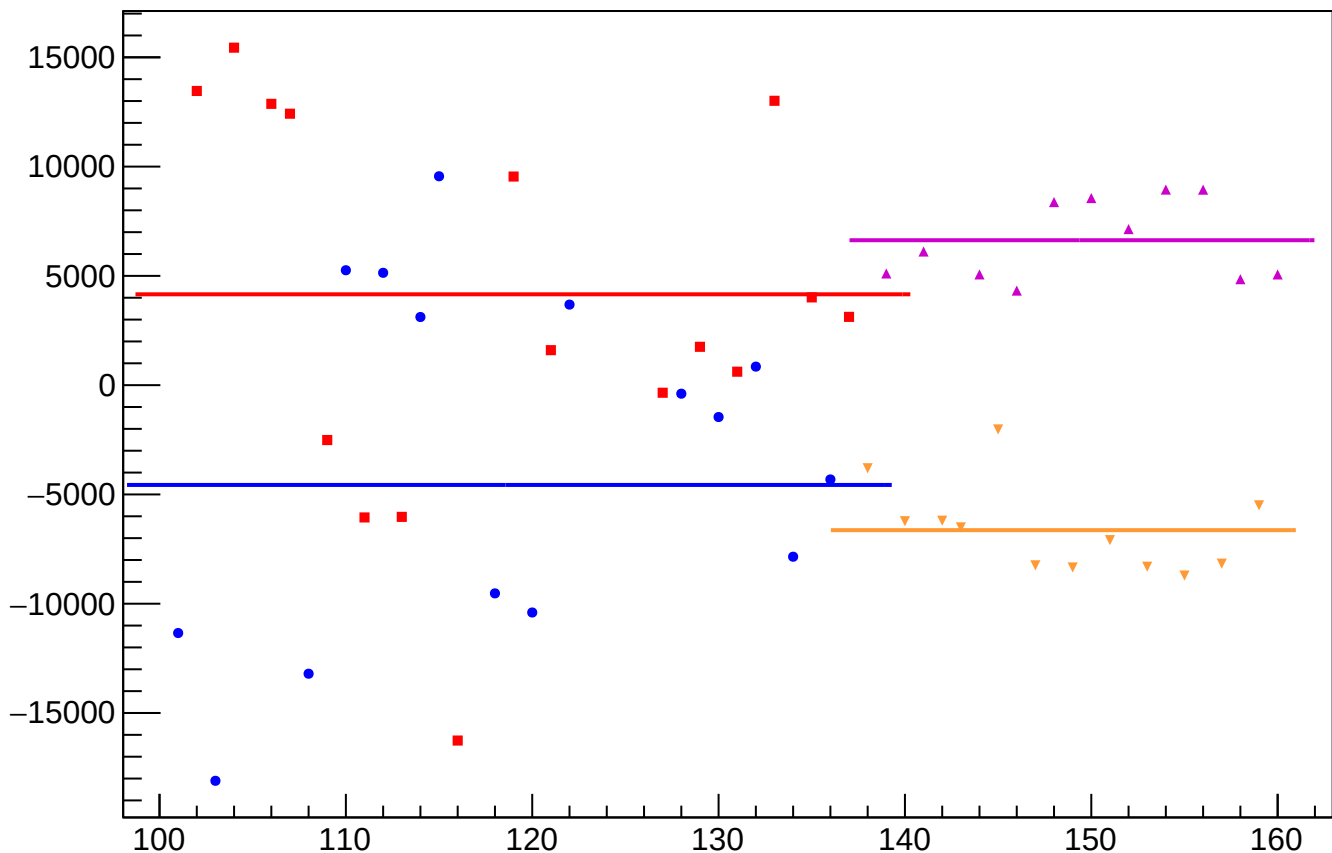
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

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\_sam4\_coil6\_mean vs Slug, Sign Corrected



Right In: -4565.412+/-0.000

Left Out: -6634.457+/-0.000

Right Out: 4156.859+/-0.000

Left In: 6631.377+/-0.000

$\chi^2/\text{NDF}$ : 35667768247432289984899042725155487875072.0/14

$\chi^2/\text{NDF}$ : 3640150880403299784339543756995645407232.0/11

$\chi^2/\text{NDF}$ : 45539455441659927157708443099930682195968.0/15

$\chi^2/\text{NDF}$ : 2831140540306304869921468245145345327104.0/10

Left: 34.548+/-0.000  $\chi^2/\text{NDF}$ : 87332790427800314

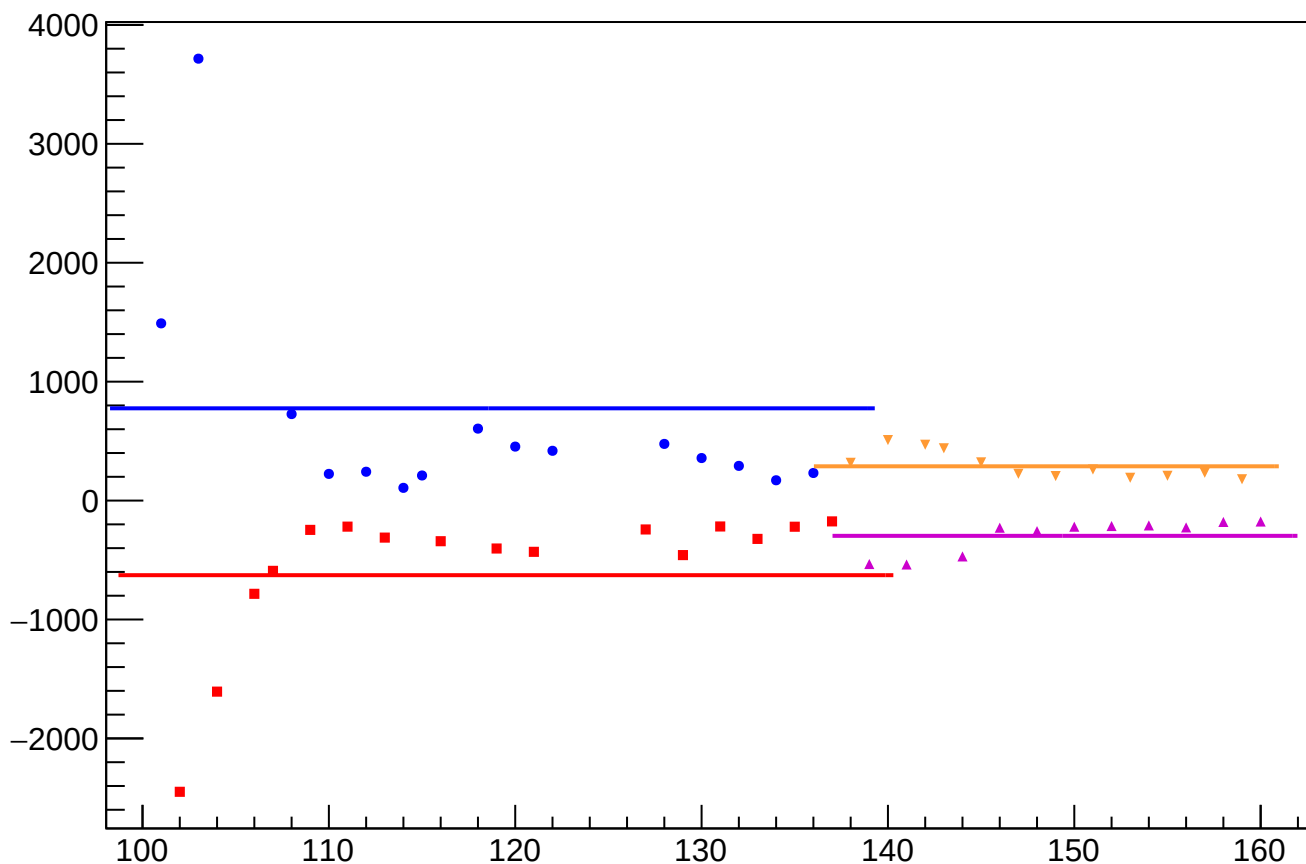
Right: -144.626+/-0.000  $\chi^2/\text{NDF}$ : 10623220696347

In: 2011.723+/-0.000  $\chi^2/\text{NDF}$ : 8629308418563650

Out: -2081.764+/-0.000  $\chi^2/\text{NDF}$ : 94084012188749

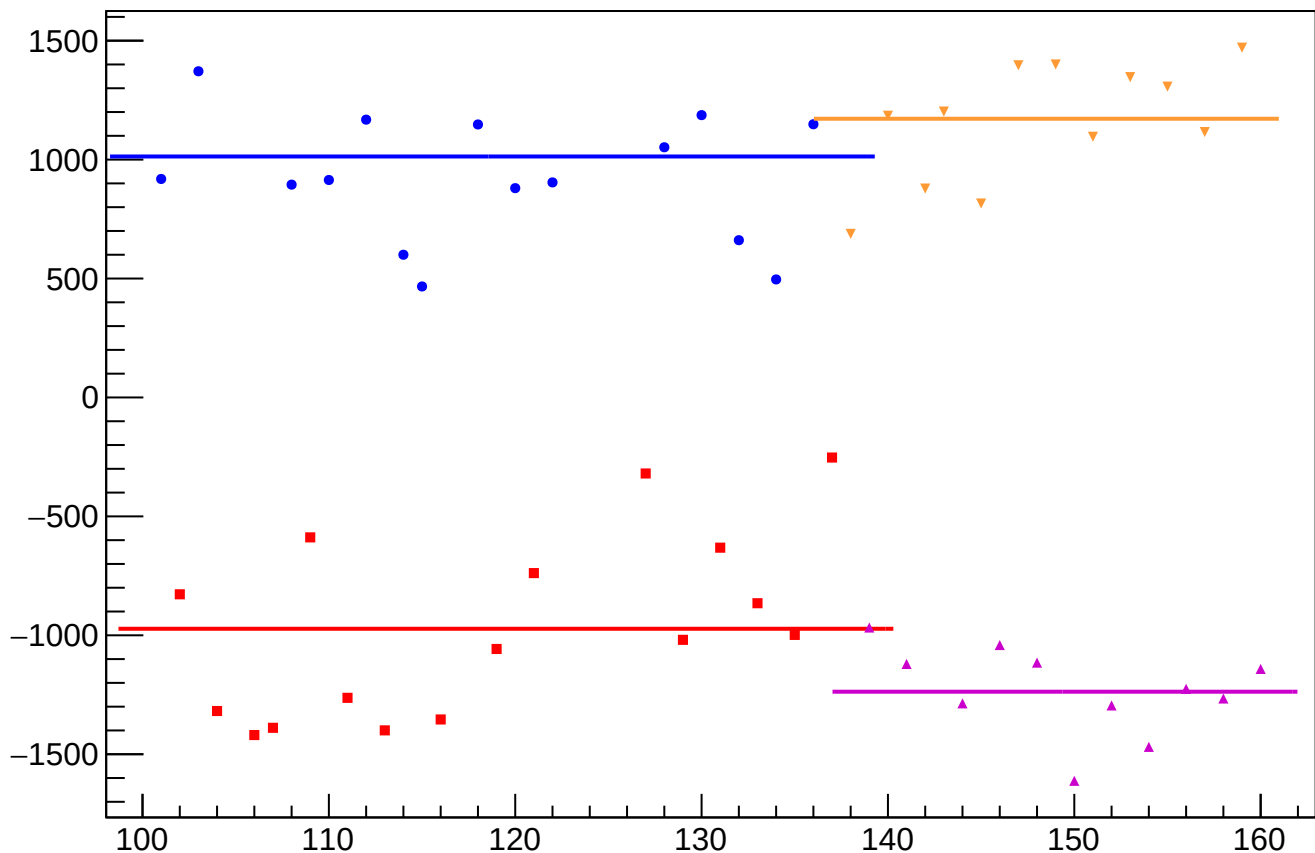
All: -40.212+/-0.000  $\chi^2/\text{NDF}$ : 193589617431

dit\_sam4\_coil6\_err\_mean vs Slug, Sign Corrected



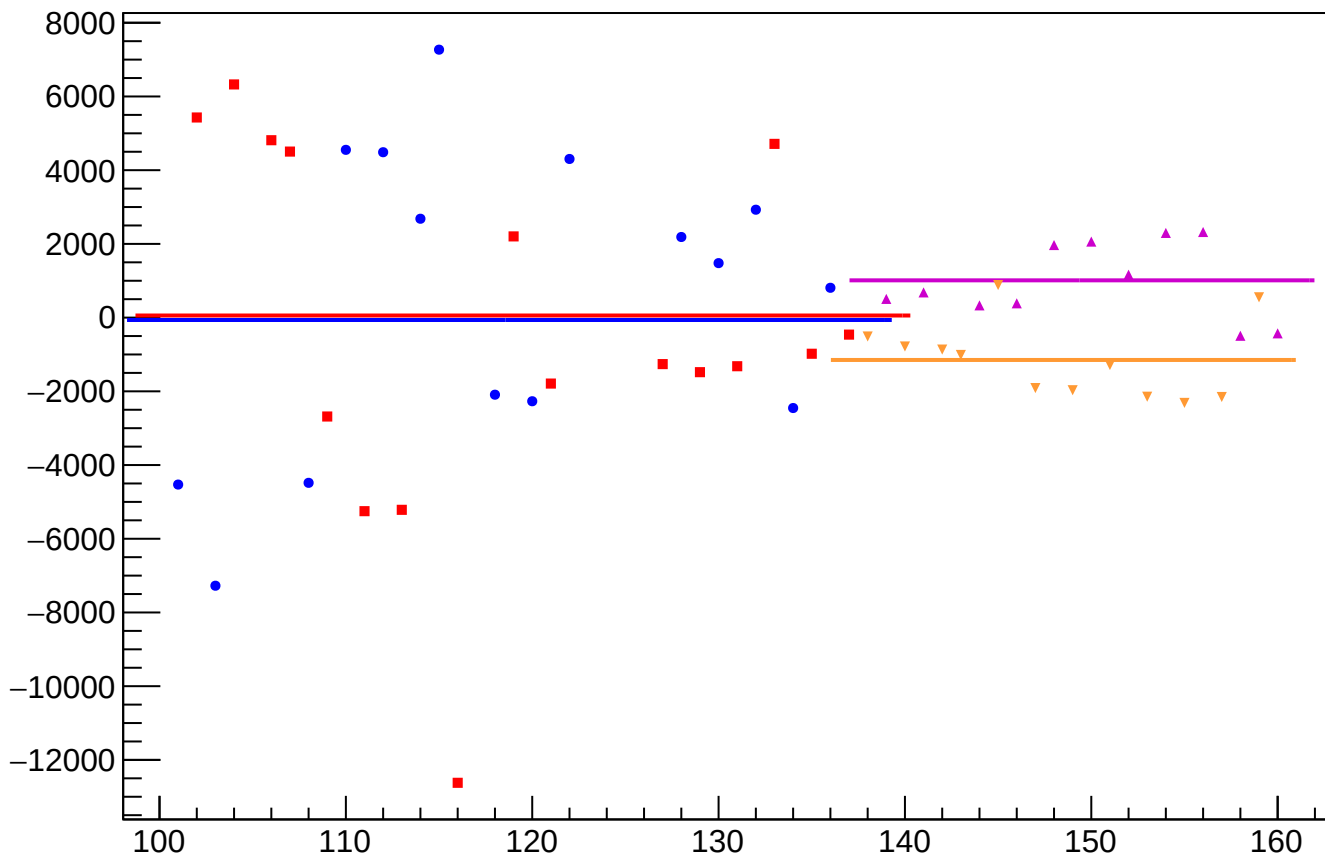
Right In: 775.824+/-0.000  $\chi^2/\text{NDF}$ : 641856726975740612716432458612629045248.0/14  
 Left Out: 288.226+/-0.000  $\chi^2/\text{NDF}$ : 10607349218435095296400376728725225472.0/11  
 Right Out: -627.315+/-0.000  $\chi^2/\text{NDF}$ : 297517676171111924966086193860621369344.0/15  
 Left In: -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  
 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

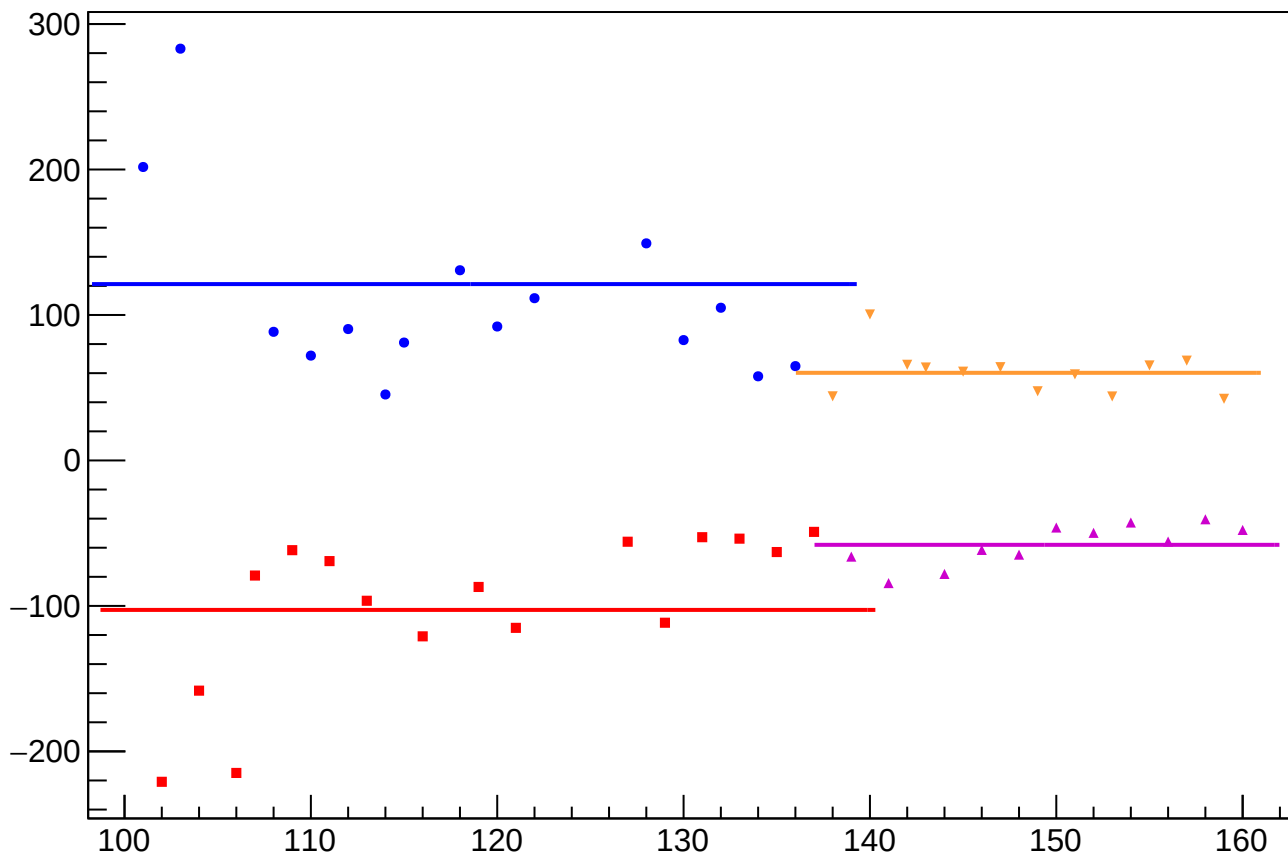
Left In: 1011.284+/-0.000

χ²/NDF: 903909408421874171739001543159795679232.0/10

All: -37.934+/-0.000 χ²/NDF: 274285540726

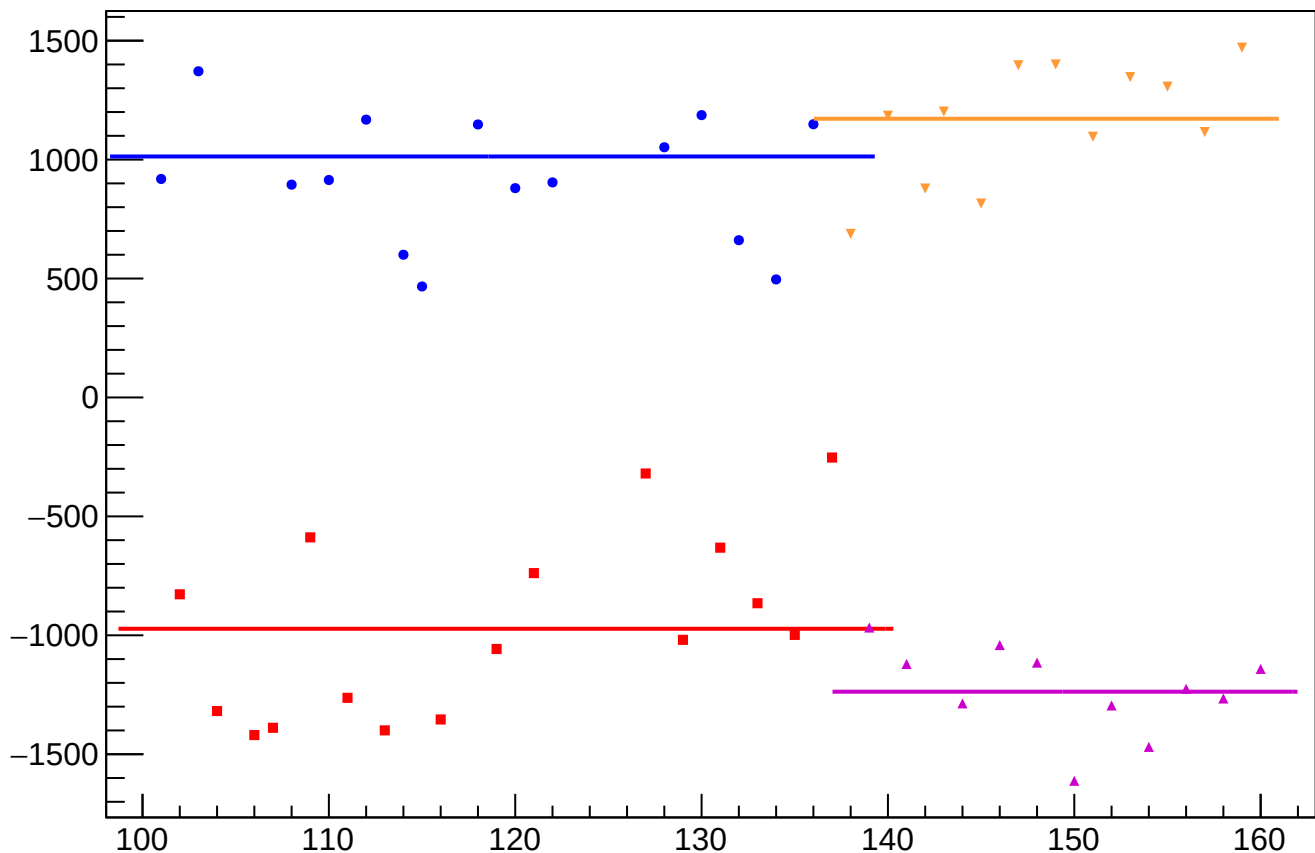


# dit\_sam5\_coil6\_err\_mean vs Slug, Sign Corrected



Right In: 121.228 $\pm$ 0.000  $\chi^2$ /NDF: 2723170857684362574800637594861305856.0/14  
 Left Out: 60.239 $\pm$ 0.000  $\chi^2$ /NDF: 225102554491032869548797845500329984.0/11  
 Right Out: -102.749 $\pm$ 0.000  $\chi^2$ /NDF: 1967668024846010333654427670555918336.0/15  
 Left In: -58.011 $\pm$ 0.000  $\chi^2$ /NDF: 177427701786540438757655027214450688.0/10  
 All: 3.678 $\pm$ 0.000  $\chi^2$ /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

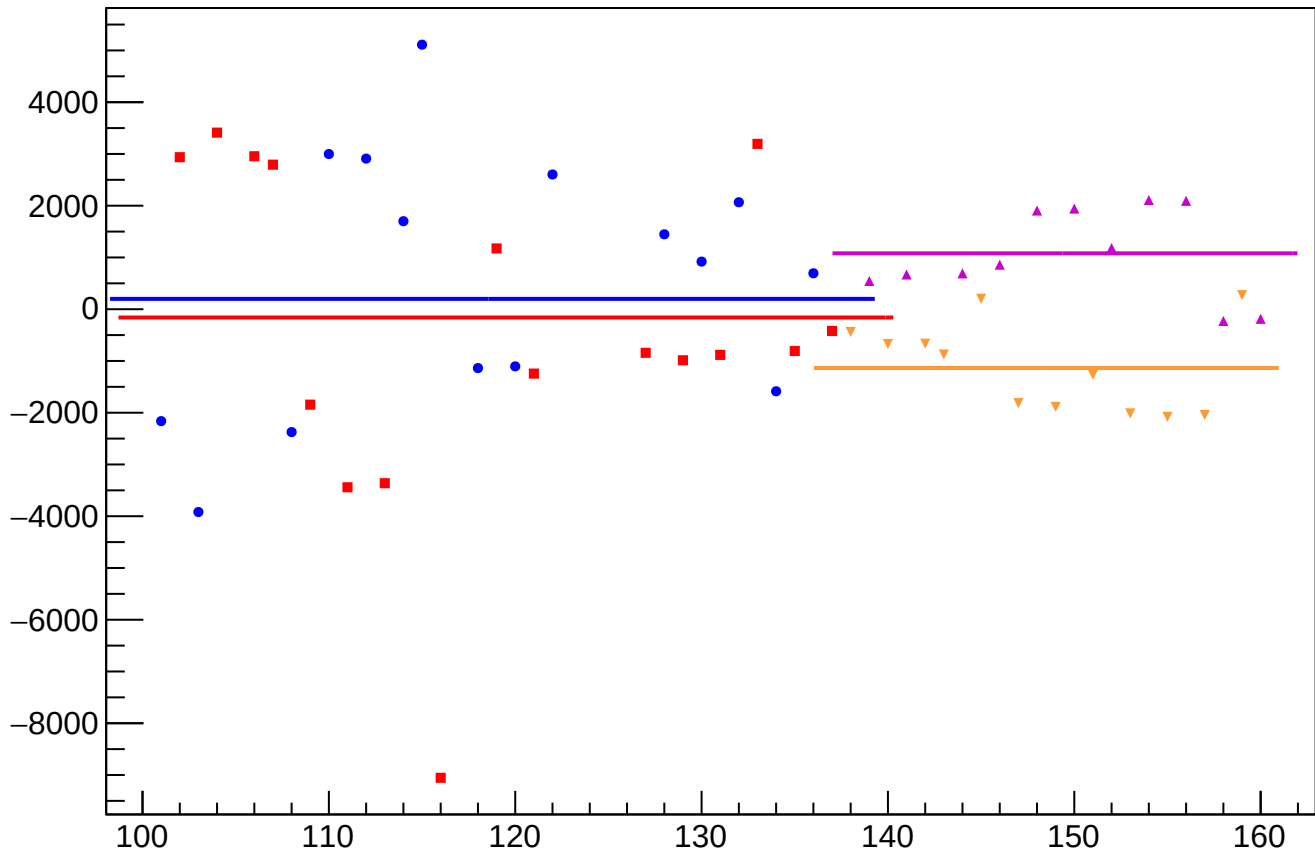
Right: 6.761+/-0.000  $\chi^2/\text{NDF}$ : 14074954421733032

In: -308.706+/-0.000  $\chi^2/\text{NDF}$ : 1992534711877389

Out: 267.171+/-0.000  $\chi^2/\text{NDF}$ : 1904273666999186

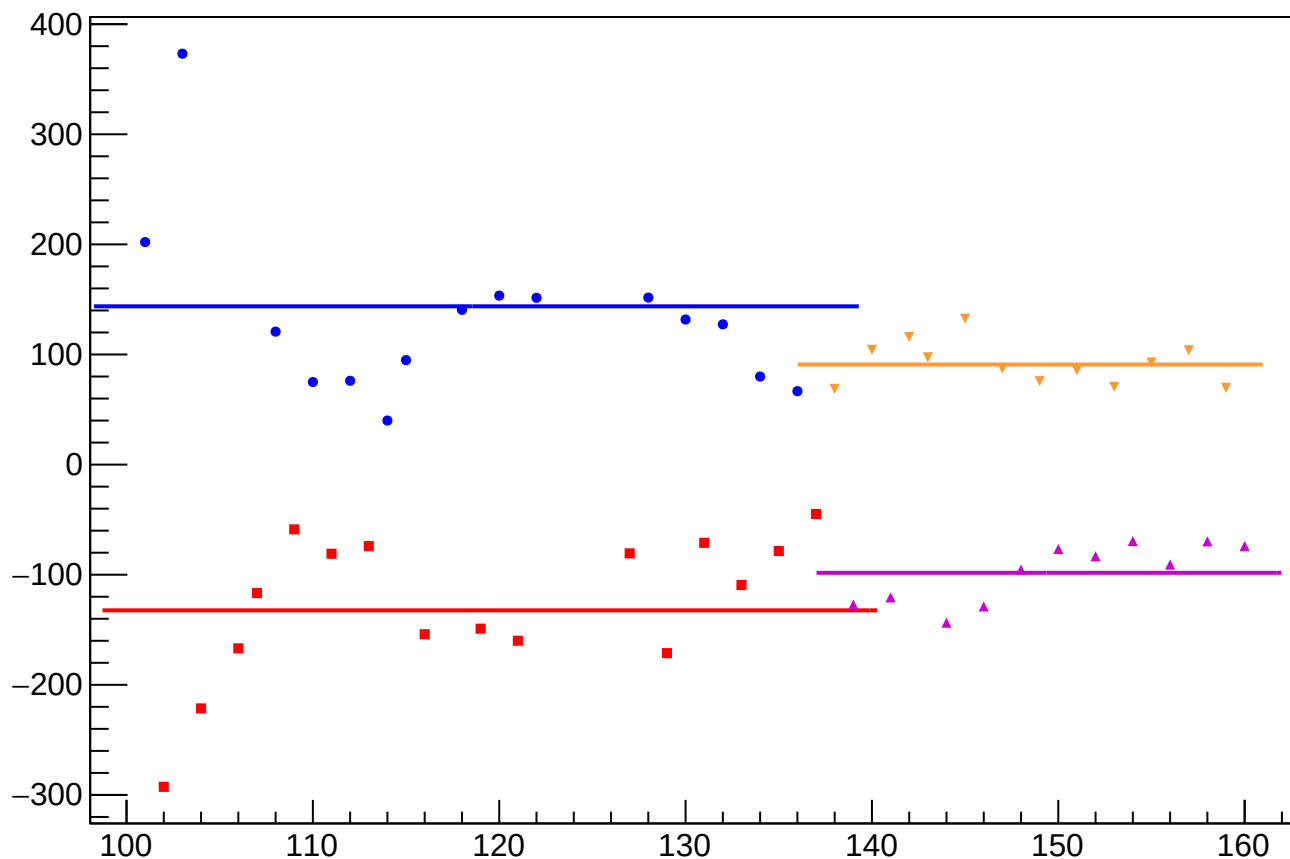
All: -20.037+/-0.000  $\chi^2/\text{NDF}$ : 415830099668

dit\_sam6\_coil6\_mean vs Slug, Sign Corrected



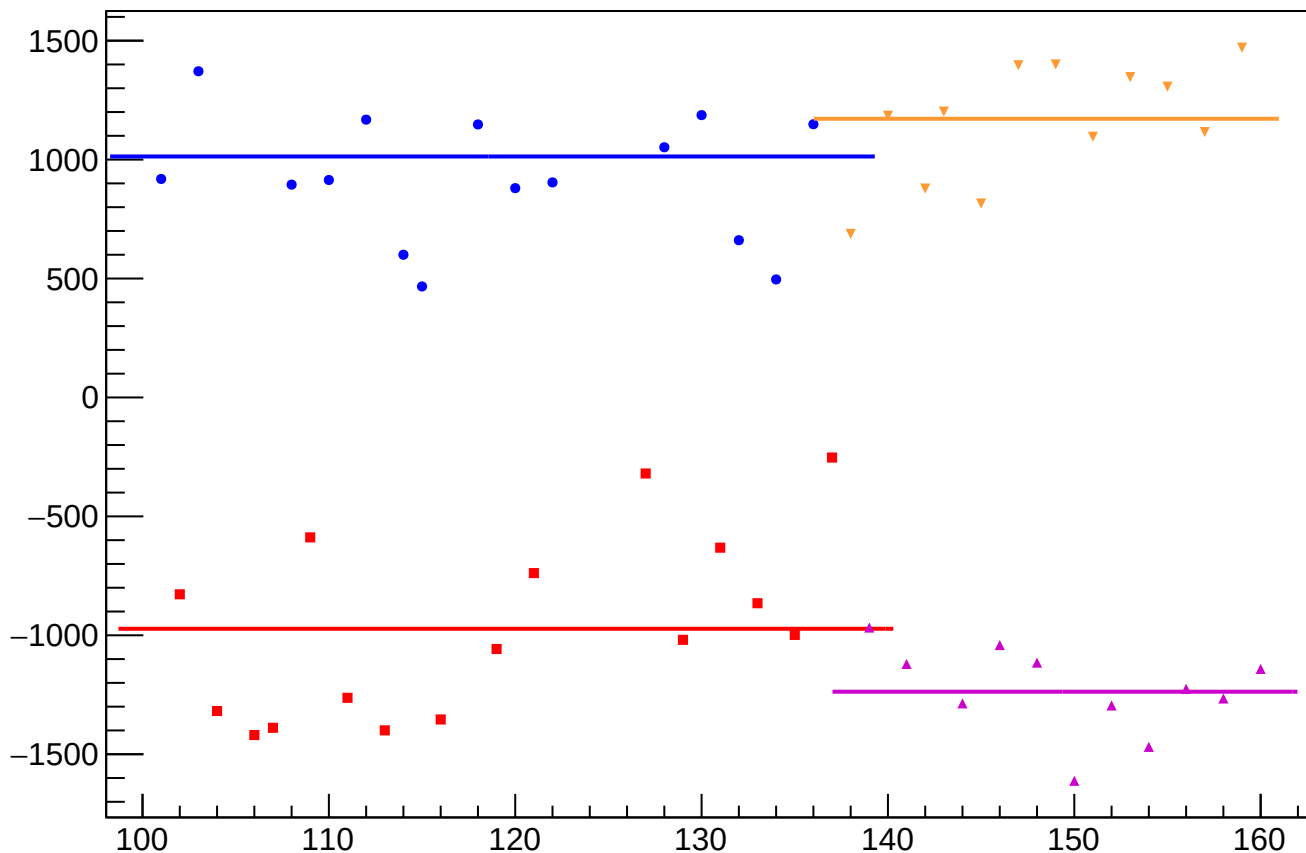
Right In: 199.503+/-0.000  $\chi^2/\text{NDF}$ : 3268159745923533825045181664876849790976.0/14  
 Left Out: -1135.455+/-0.000  $\chi^2/\text{NDF}$ : 654697592596579349133010058178925166592.0/11  
 Right Out: -160.512+/-0.000  $\chi^2/\text{NDF}$ : 5680576709461197901526729703706251493376.0/15  
 Left In: 1079.555+/-0.000  $\chi^2/\text{NDF}$ : 614734398575877452858032752710912049152.0/10  
 All: -5.669+/-0.000  $\chi^2/\text{NDF}$ : 1251632905272

dit\_sam6\_coil6\_err\_mean vs Slug, Sign Corrected



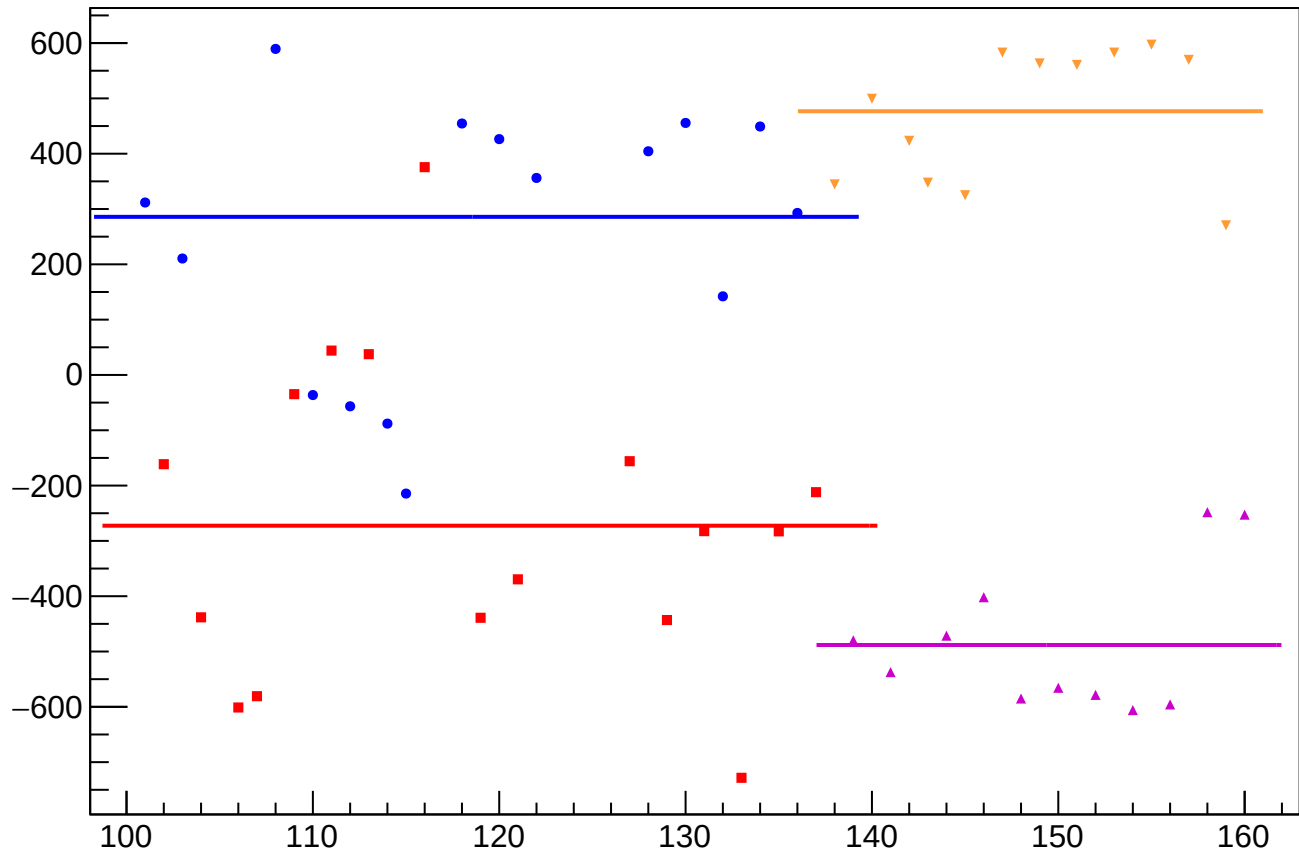
Left: -4.202+/-0.000  $\chi^2/\text{NDF}$ : 17384612750229045  
 Right In: 143.764+/-0.000  $\chi^2/\text{NDF}$ : 4514785869565777849900508591821946880.0/14  
 Right: 3.823+/-0.000  $\chi^2/\text{NDF}$ : 32765016379949297  
 Left Out: 90.882+/-0.000  $\chi^2/\text{NDF}$ : 326242734851411629220497356388040704.0/11  
 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



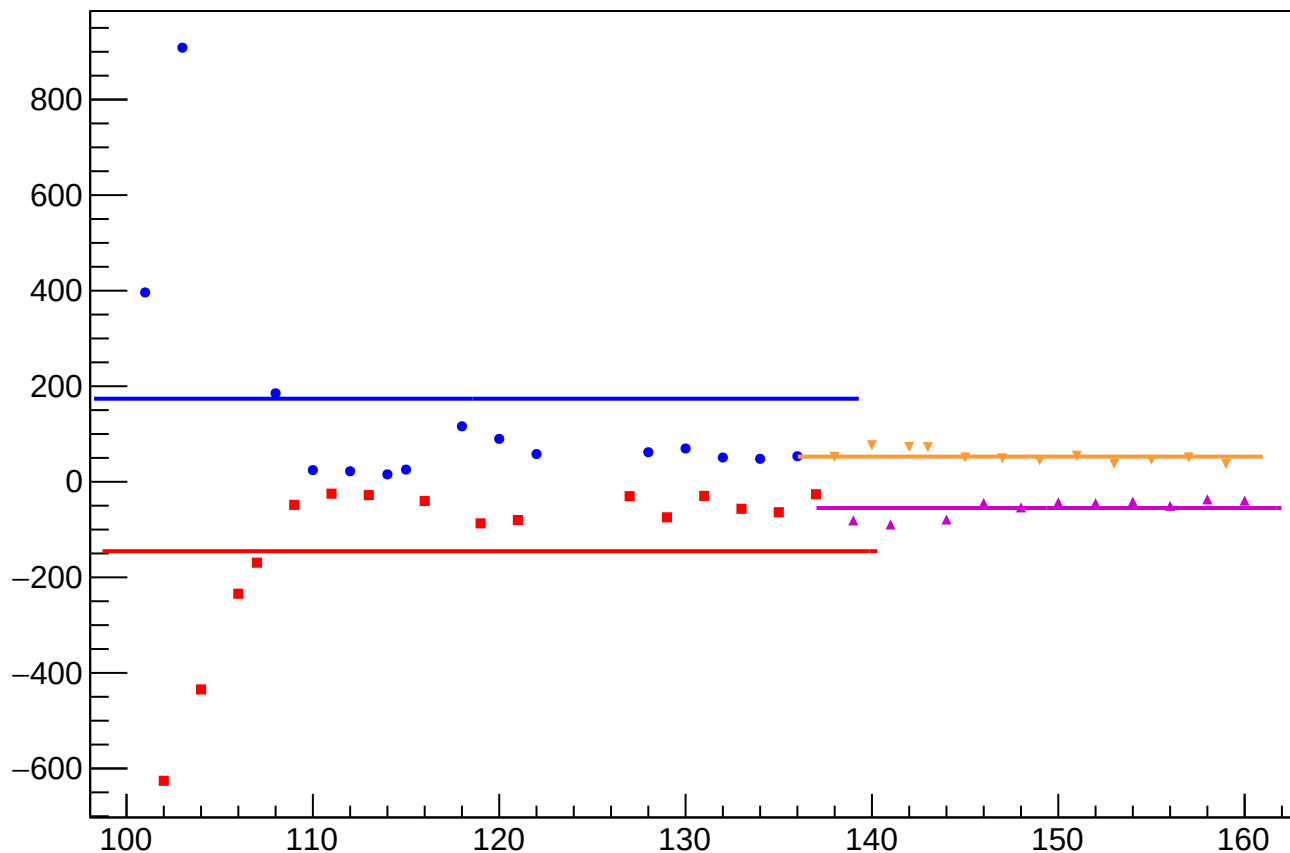
Right In: 1013.146+/-0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807+/-0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: -972.465+/-0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: -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



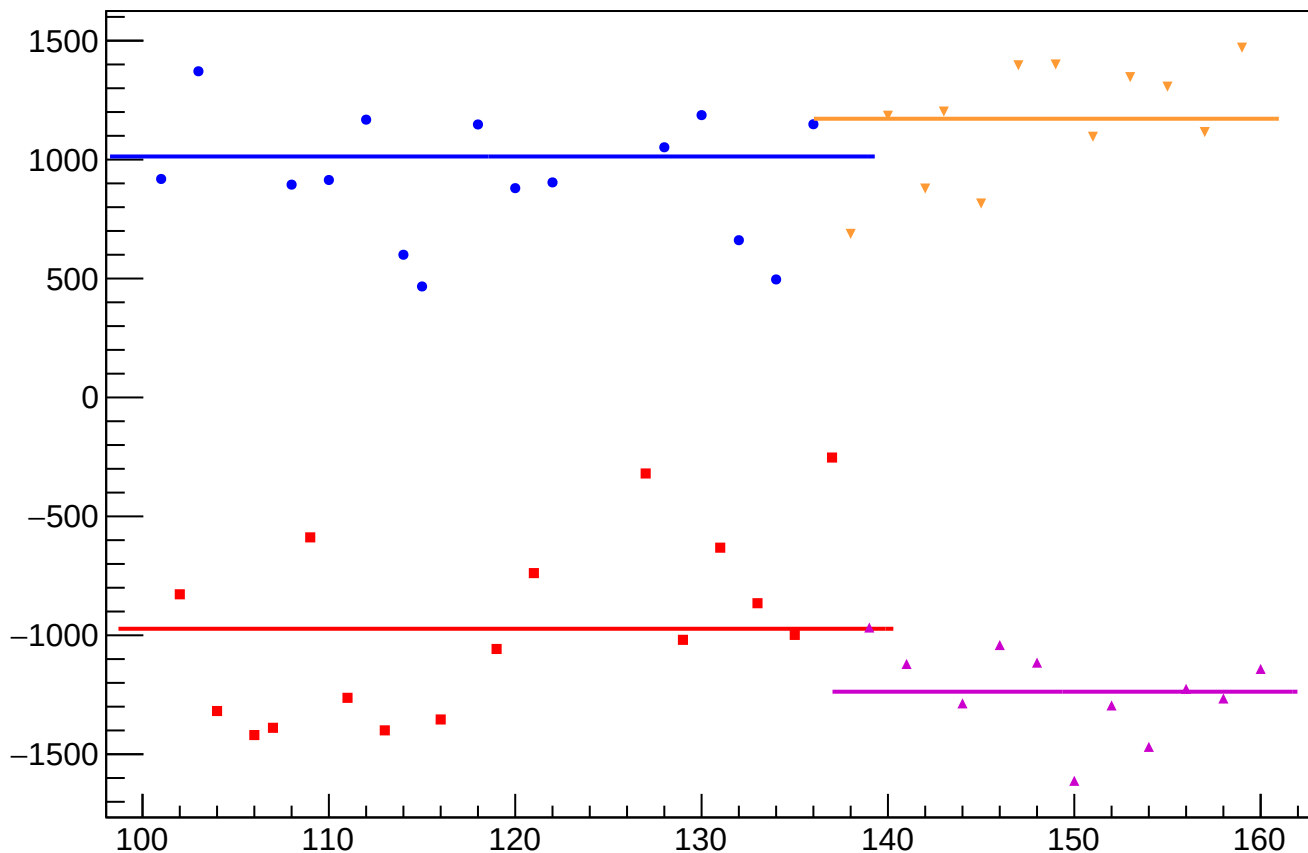
Right In: 285.856+/-0.000  $\chi^2/\text{NDF}$ : 24108244802355530064663311301086281728.0/14  
 Left Out: 476.795+/-0.000  $\chi^2/\text{NDF}$ : 12695994824288000465906190934597435392.0/11  
 Right Out: -272.539+/-0.000  $\chi^2/\text{NDF}$ : 44149952665075593650338713333575712768.0/15  
 Left In: -488.203+/-0.000  $\chi^2/\text{NDF}$ : 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

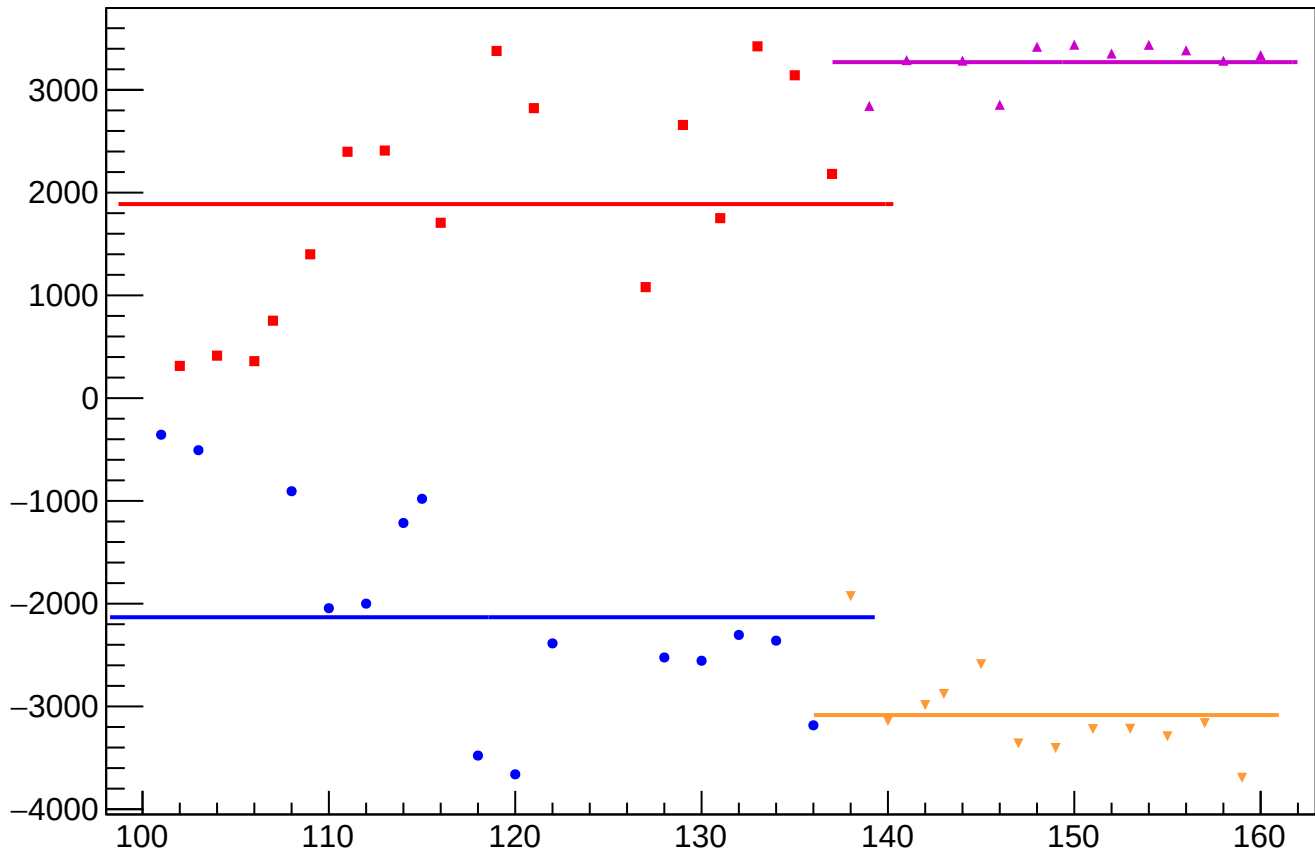
dit\_sam7\_coil6\_Ndata\_mean vs Slug, Sign Corrected



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

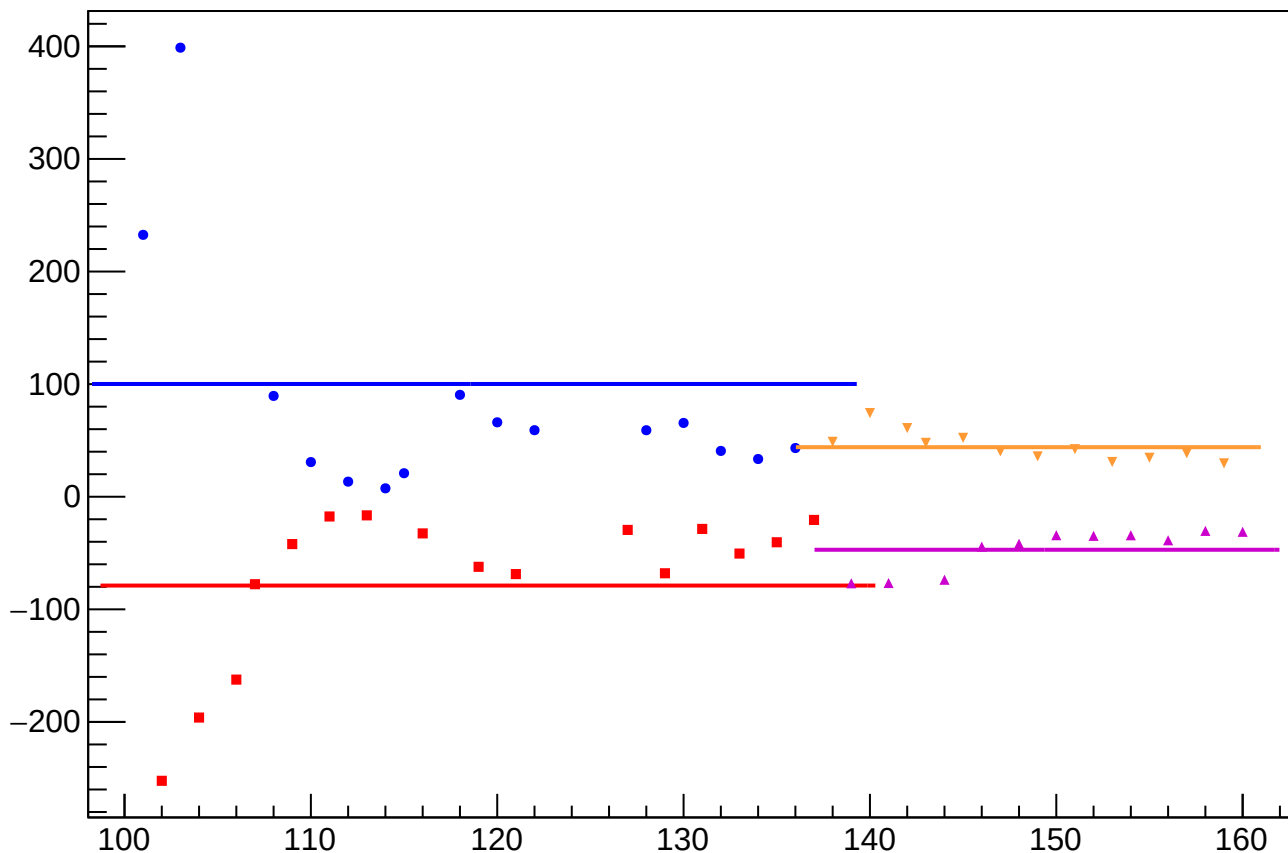
Right: -94.234+/-0.000  $\chi^2/\text{NDF}$ : 683113062504059

In: 1041.098+/-0.000  $\chi^2/\text{NDF}$ : 1188405782367471

Out: -986.042+/-0.000  $\chi^2/\text{NDF}$ : 105033900940683

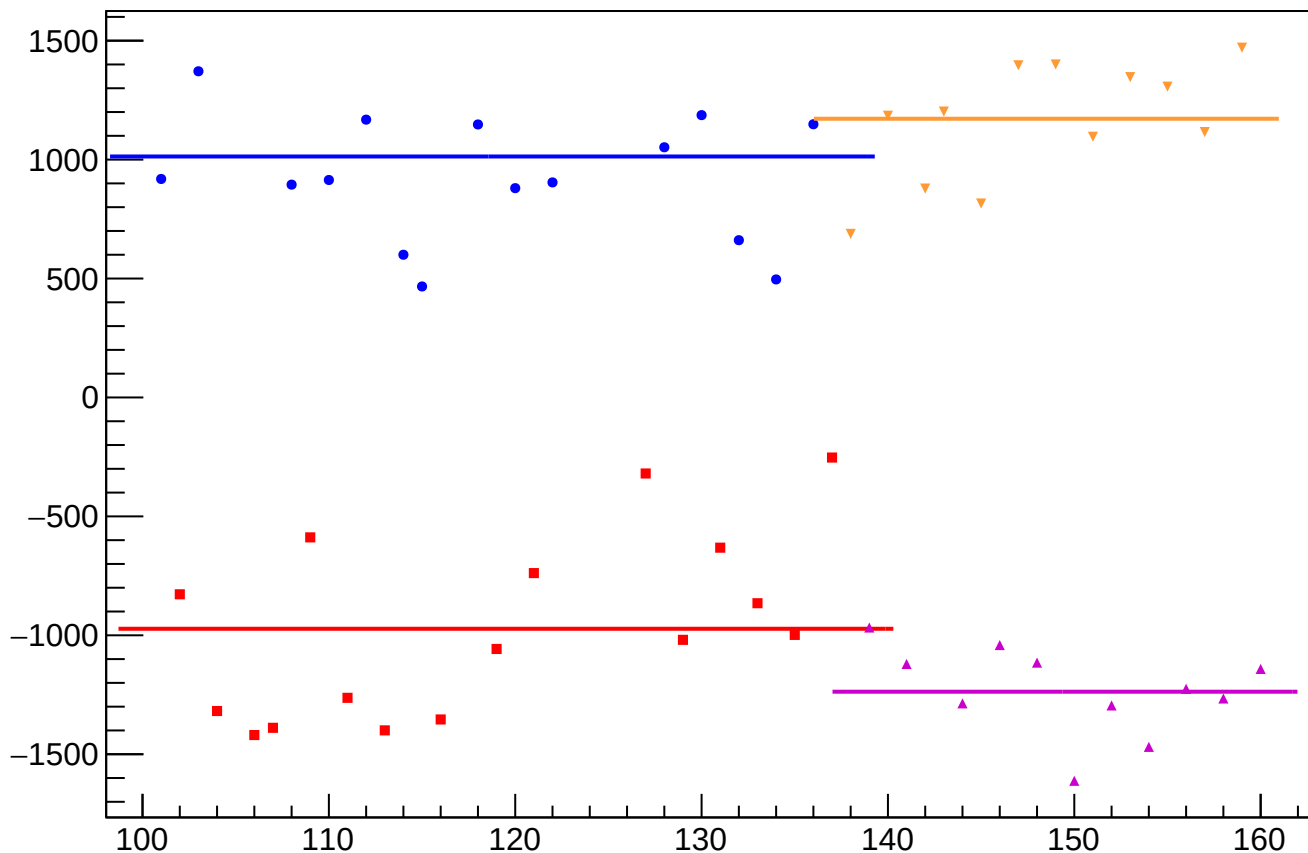
All: 24.957+/-0.000  $\chi^2/\text{NDF}$ : 2562760992420

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

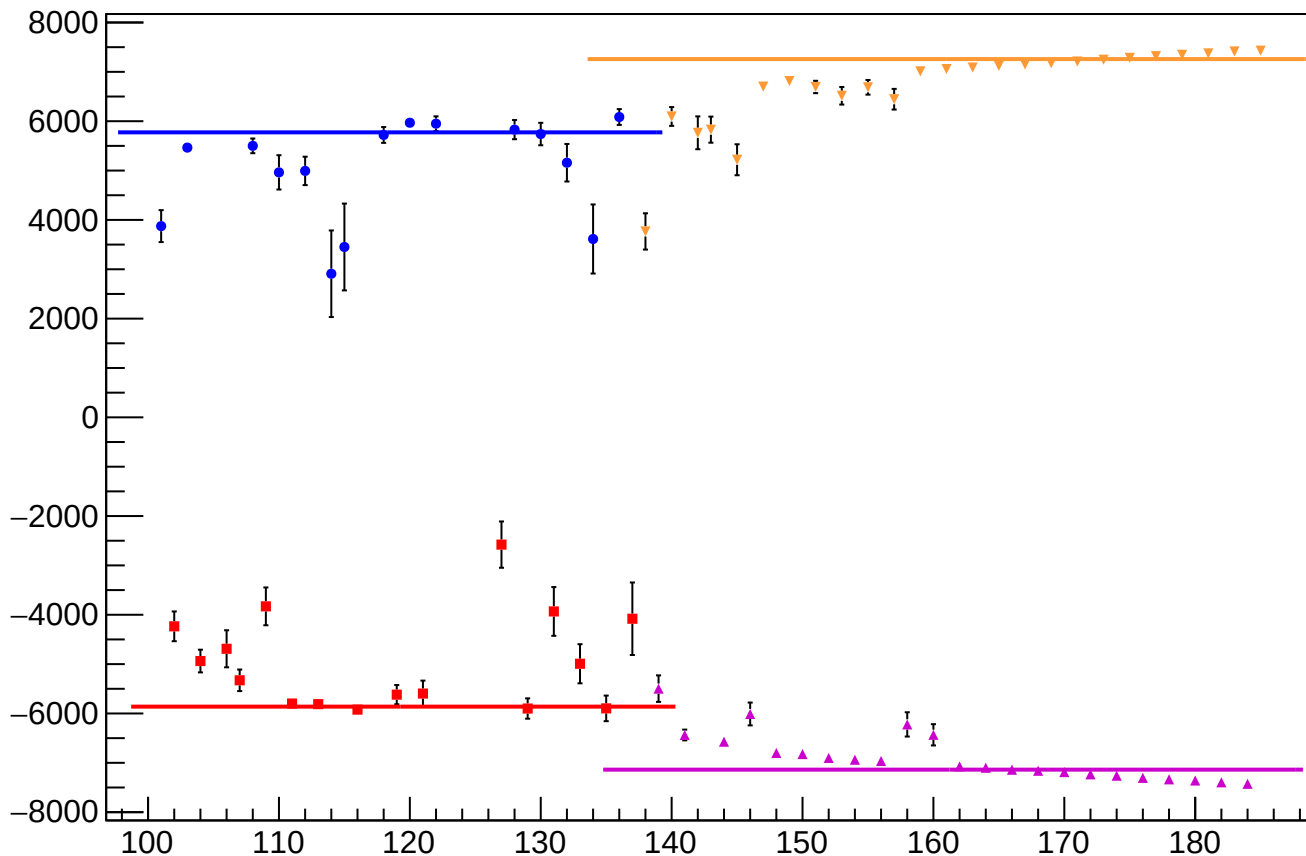
$\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15

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+/-0.181  $\chi^2/\text{NDF}$ : 1828526.5/14

Left Out: 7258.636+/-0.092  $\chi^2/\text{NDF}$ : 4237941.4/24

Right Out: -5861.461+/-0.140  $\chi^2/\text{NDF}$ : 180020.4/15

Left In: -7137.987+/-0.098  $\chi^2/\text{NDF}$ : 4549121.8/22

Left: 544.300+/-0.067  $\chi^2/\text{NDF}$ : 11467691043.9/47

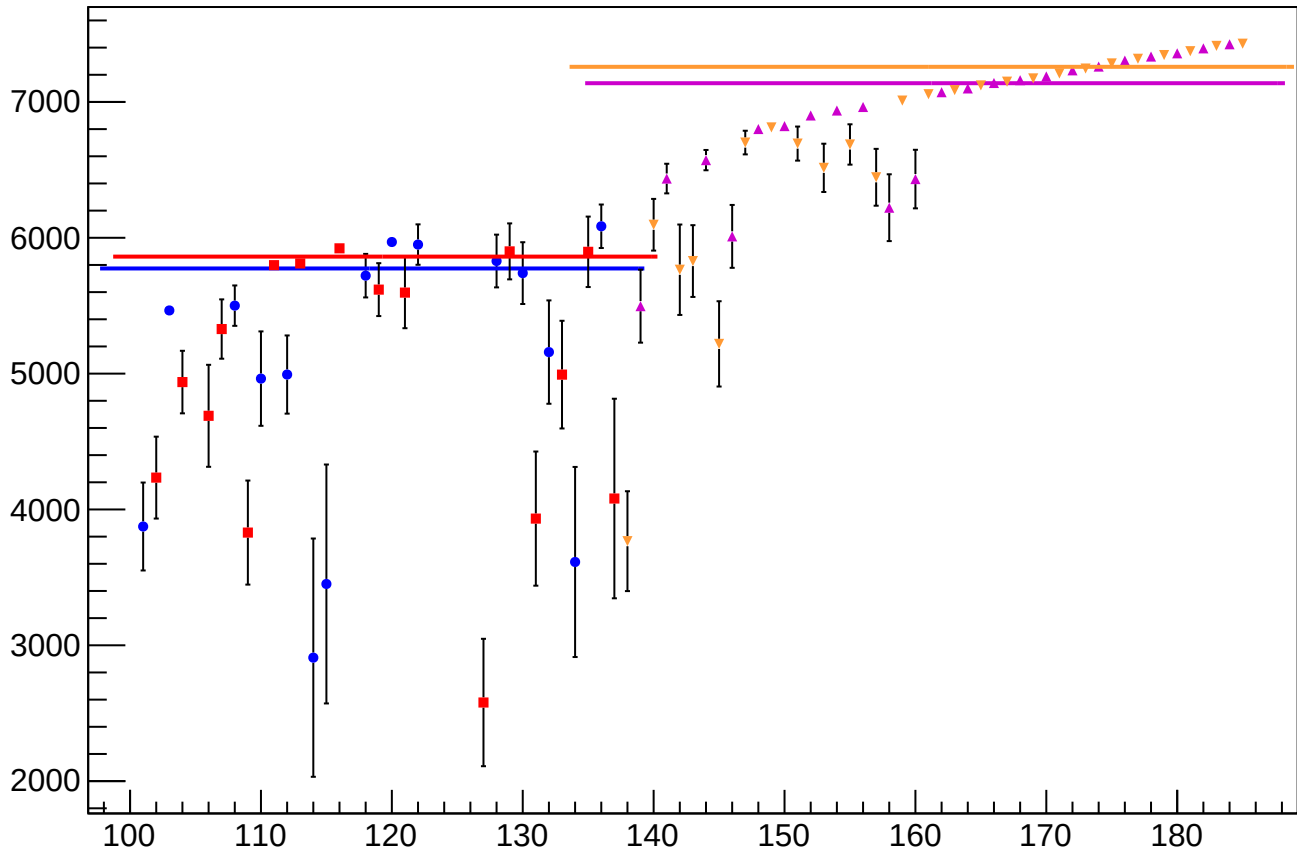
Right: -1536.191+/-0.111  $\chi^2/\text{NDF}$ : 2585354230.9/30

In: -4211.004+/-0.086  $\chi^2/\text{NDF}$ : 3922075931.5/37

Out: 3294.134+/-0.077  $\chi^2/\text{NDF}$ : 6170438889.1/40

All: -15.116+/-0.057  $\chi^2/\text{NDF}$ : 14311598667.5

# dit\_run\_rms vs Slug, Sign Corrected



Right In: 5774.117+/-0.181  $\chi^2/\text{NDF}$ : 1828526.5/14

Left Out: 7258.636+/-0.092  $\chi^2/\text{NDF}$ : 4237941.4/24

Right Out: 5861.461+/-0.140  $\chi^2/\text{NDF}$ : 180020.4/15

Left In: 7137.987+/-0.098  $\chi^2/\text{NDF}$ : 4549121.8/22

Left: 7202.367+/-0.067  $\chi^2/\text{NDF}$ : 9591818.2/47

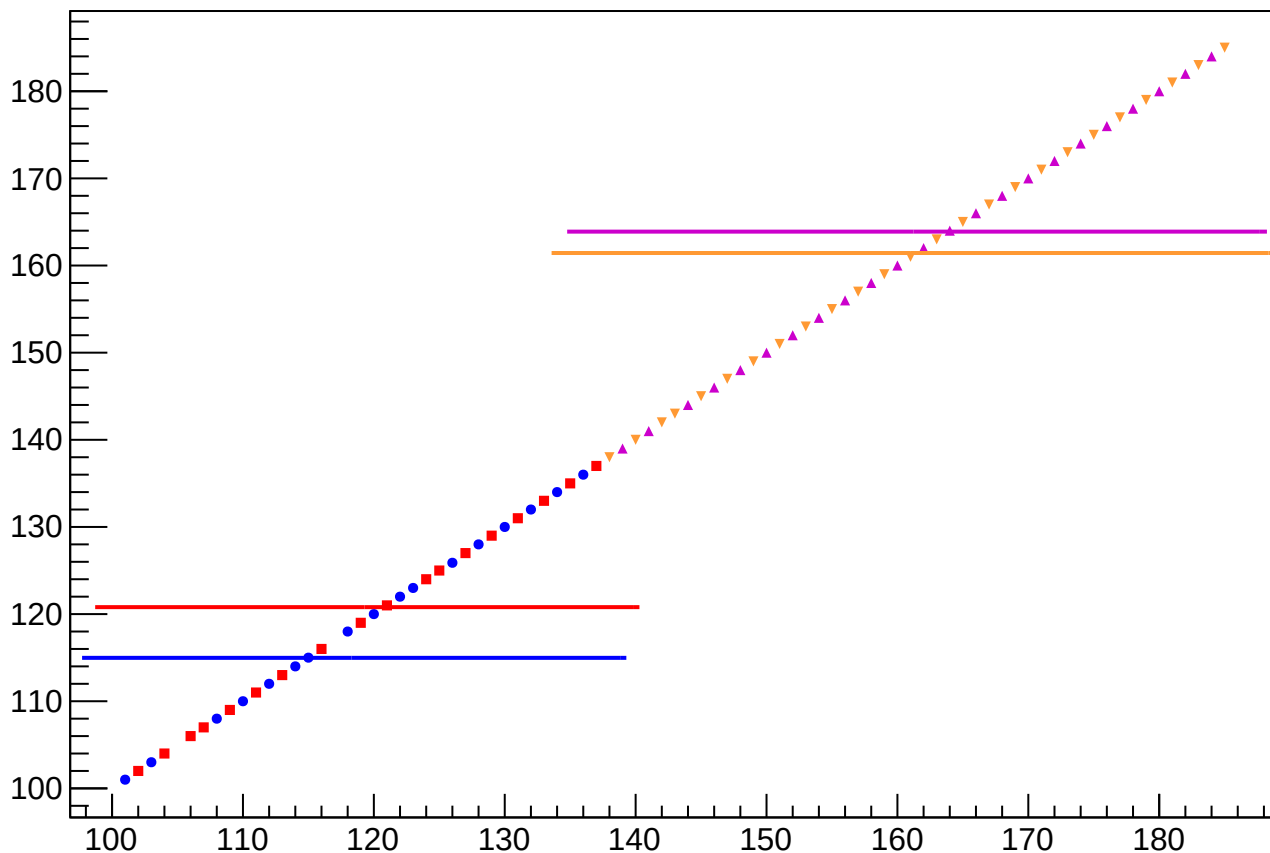
Right: 5828.993+/-0.111  $\chi^2/\text{NDF}$ : 2154118.4/30

In: 6828.818+/-0.086  $\chi^2/\text{NDF}$ : 50065585.8/37

Out: 6836.451+/-0.077  $\chi^2/\text{NDF}$ : 74342923.0/40

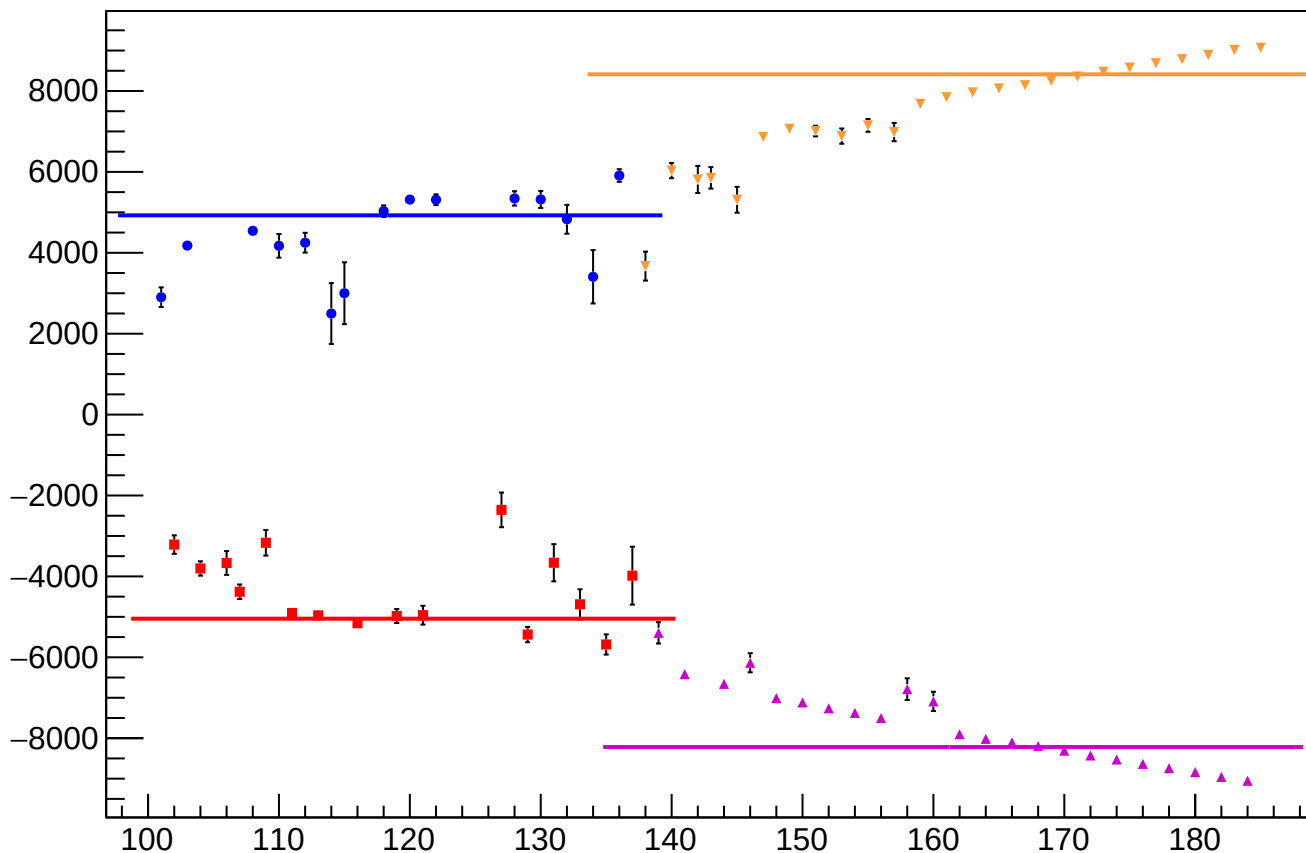
All: 6833.085+/-0.057  $\chi^2/\text{NDF}$ : 124412873.1

# dit\_slug\_slope vs Slug, Sign Corrected



|                            |                                                              |                        |                                         |
|----------------------------|--------------------------------------------------------------|------------------------|-----------------------------------------|
| Right In: 114.980+/-0.000  | $\chi^2/\text{NDF}$ : 112344936246012934714934440230912.0/16 | Left: 162.851+/-0.000  | $\chi^2/\text{NDF}$ : 3540465111321937  |
| Left Out: 161.437+/-0.000  | $\chi^2/\text{NDF}$ : 144351415086772086919986205949952.0/24 | Right: 117.302+/-0.000 | $\chi^2/\text{NDF}$ : 172044633770068   |
| Right Out: 120.798+/-0.000 | $\chi^2/\text{NDF}$ : 39759758039532944522978032353280.0/17  | In: 138.150+/-0.000    | $\chi^2/\text{NDF}$ : 19909207355439177 |
| Left In: 163.890+/-0.000   | $\chi^2/\text{NDF}$ : 206308926090069183709360387260416.0/22 | Out: 141.079+/-0.000   | $\chi^2/\text{NDF}$ : 9922053725241077  |
|                            |                                                              | All: 139.354+/-0.000   | $\chi^2/\text{NDF}$ : 299301426527      |

# dit\_cyclenum\_mean vs Slug, Sign Corrected



Right In:  $4925.305 \pm 0.939$   $\chi^2/\text{NDF}: 330994.6/14$

Left Out:  $8412.753 \pm 0.396$   $\chi^2/\text{NDF}: 2106465.3/24$

Right Out:  $-5045.221 \pm 0.668$   $\chi^2/\text{NDF}: 30179.9/15$

Left In:  $-8217.639 \pm 0.381$   $\chi^2/\text{NDF}: 2974101.4/22$

Left:  $-221.056 \pm 0.274$   $\chi^2/\text{NDF}: 921962342.7/47$

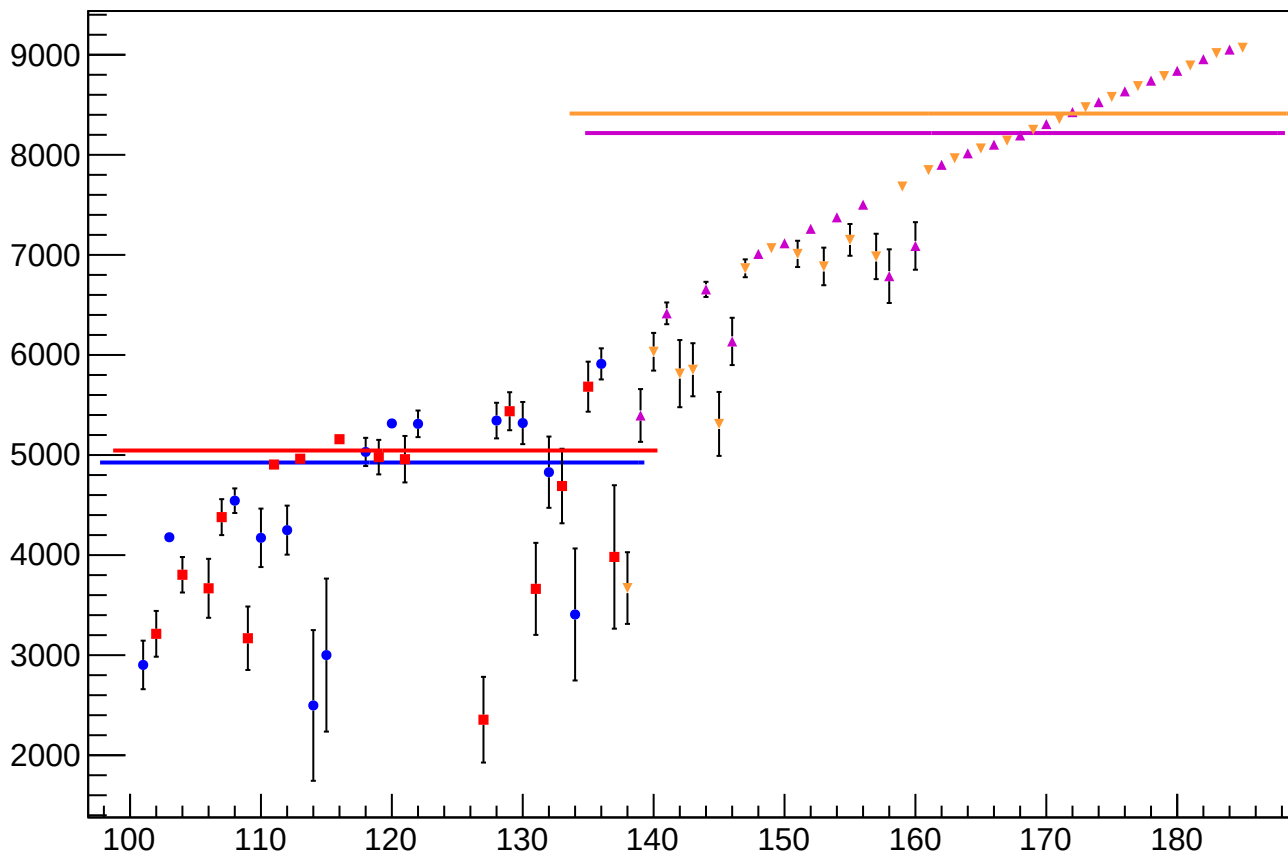
Right:  $-1694.510 \pm 0.544$   $\chi^2/\text{NDF}: 75266282.5/30$

In:  $-6360.026 \pm 0.353$   $\chi^2/\text{NDF}: 171632346.5/37$

Out:  $4915.430 \pm 0.340$   $\chi^2/\text{NDF}: 302691560.4/40$

All:  $-519.775 \pm 0.245$   $\chi^2/\text{NDF}: 1003073907.0/100$

# dit\_cyclenum\_rms vs Slug, Sign Corrected



Right In: 4925.305 $\pm$ 0.939  $\chi^2$ /NDF: 330994.6/14

Left Out: 8412.753 $\pm$ 0.396  $\chi^2$ /NDF: 2106465.3/24

Right Out: 5045.221 $\pm$ 0.668  $\chi^2$ /NDF: 30179.9/15

Left In: 8217.639 $\pm$ 0.381  $\chi^2$ /NDF: 2974101.4/22

Left: 8311.458 $\pm$ 0.274  $\chi^2$ /NDF: 5206774.3/47

Right: 5004.922 $\pm$ 0.544  $\chi^2$ /NDF: 372009.4/30

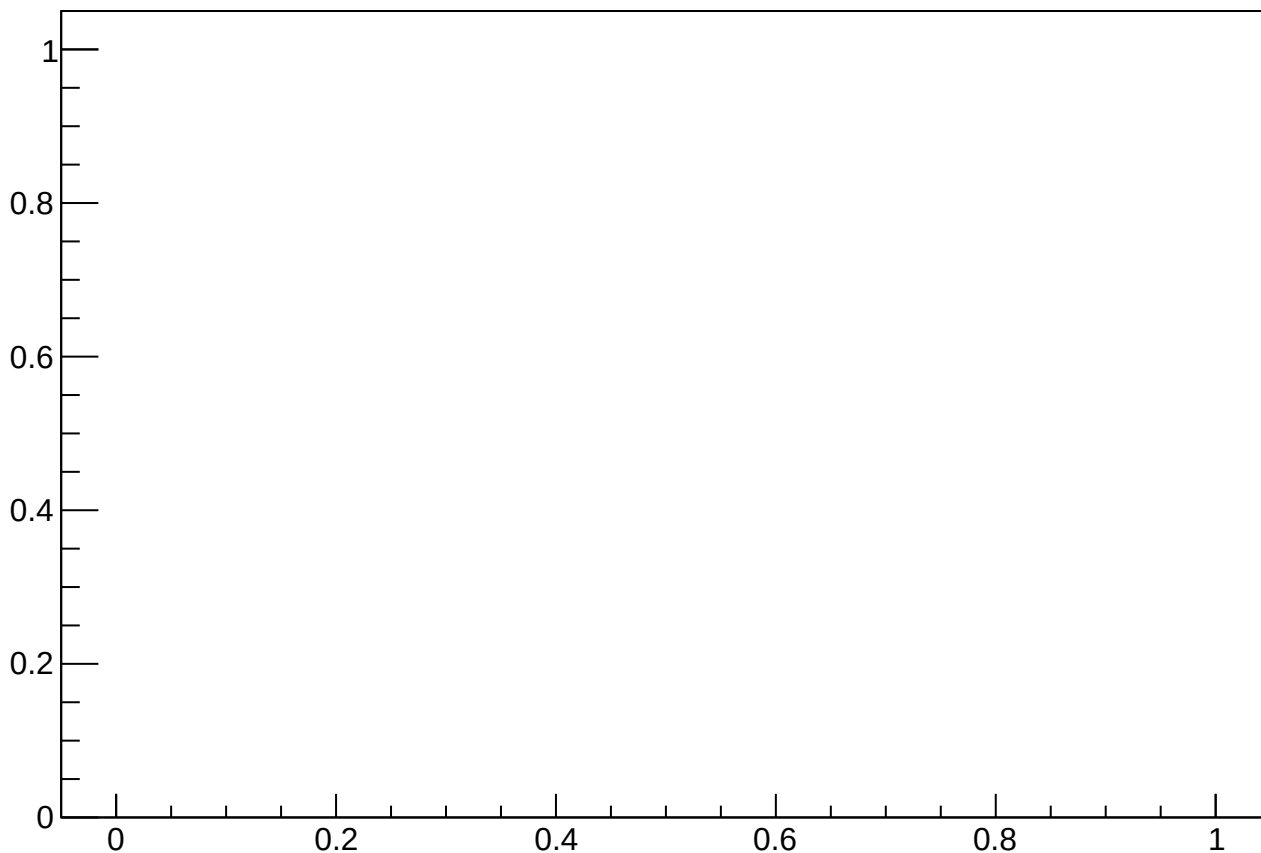
In: 7752.303 $\pm$ 0.353  $\chi^2$ /NDF: 13867841.6/37

Out: 7537.633 $\pm$ 0.340  $\chi^2$ /NDF: 20955273.2/40

All: 7641.112 $\pm$ 0.245  $\chi^2$ /NDF: 35014772.5/71



# 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

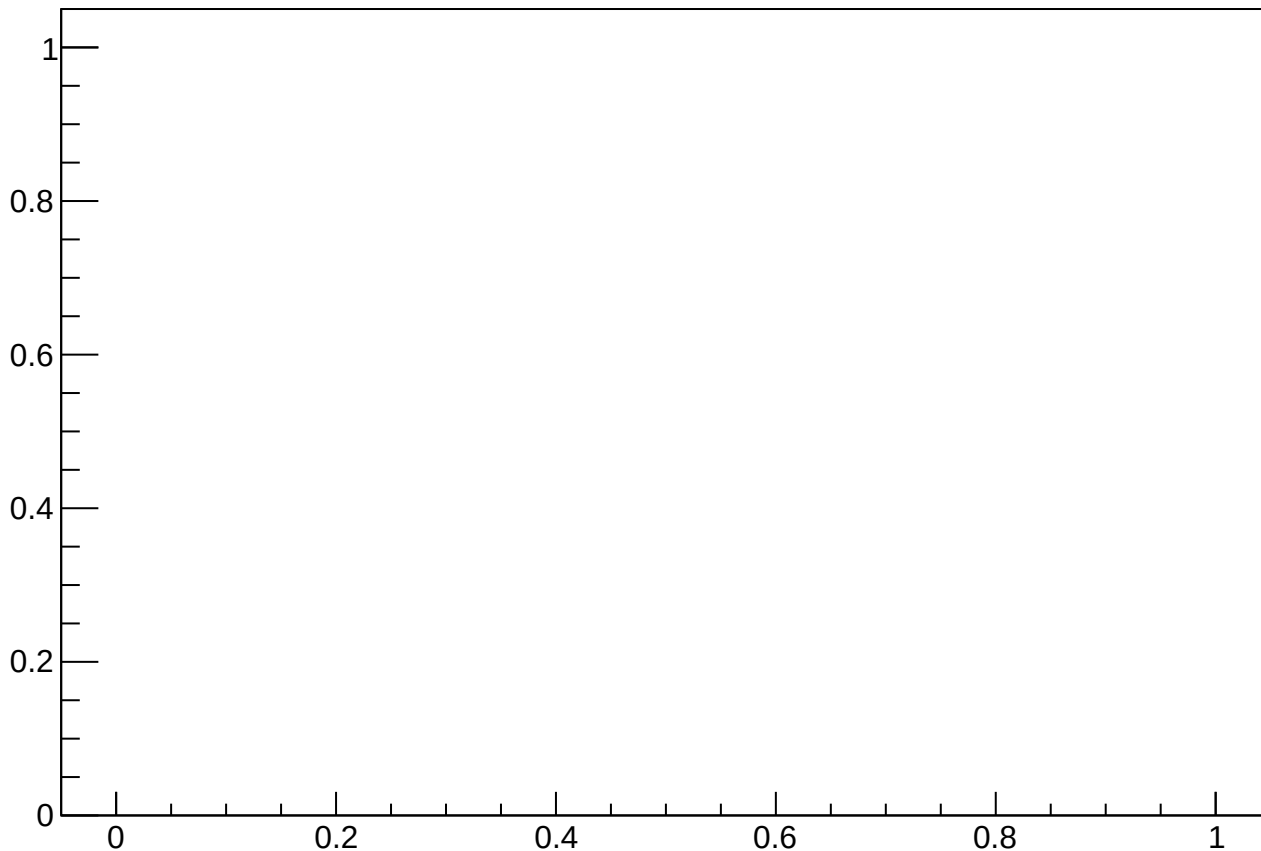
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

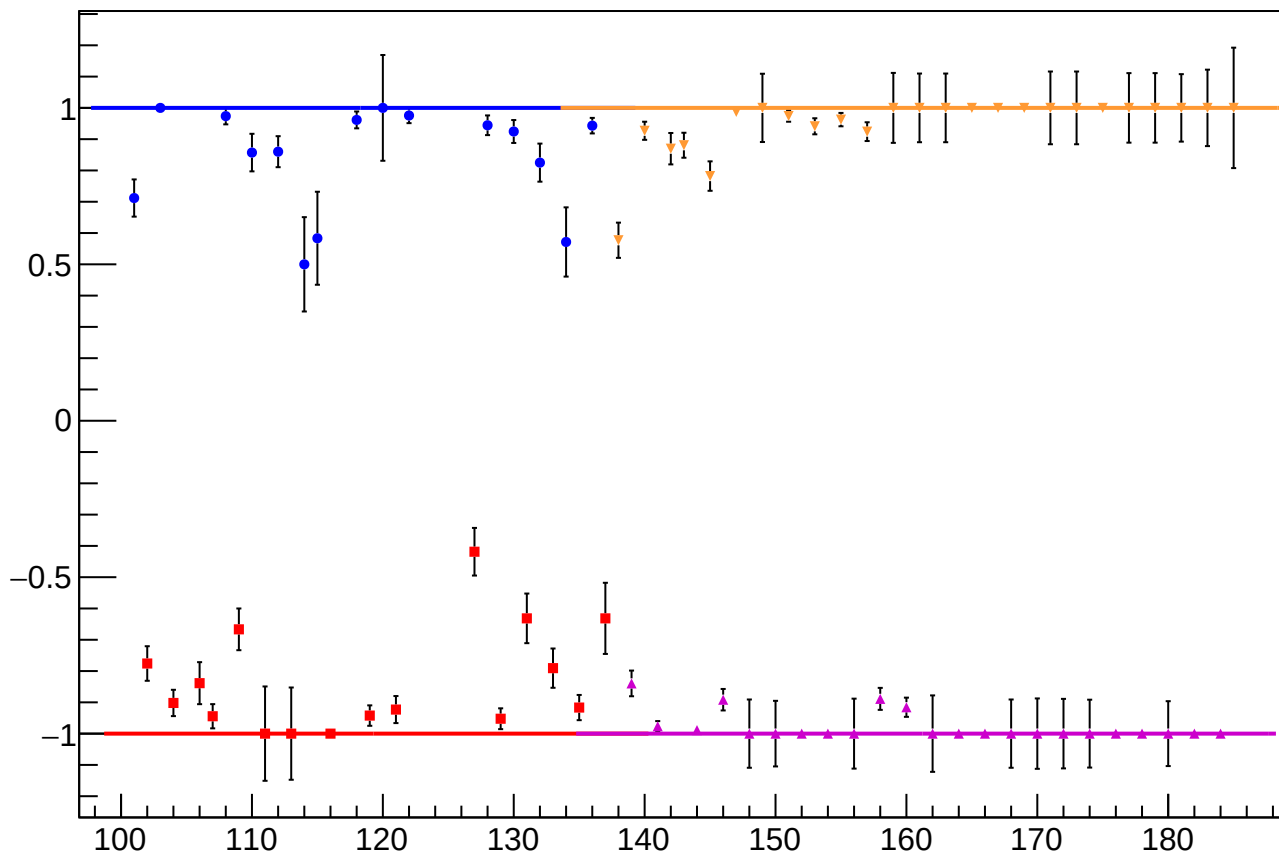
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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:  $1.000 \pm 0.000$   $\chi^2/\text{NDF}: 1596.8/24$

Right Out:  $-1.000 \pm 0.000$   $\chi^2/\text{NDF}: 168.9/15$

Left In:  $-1.000 \pm 0.000$   $\chi^2/\text{NDF}: 385.6/22$

Left:  $-0.308 \pm 0.000$   $\chi^2/\text{NDF}: 25106005466555206$

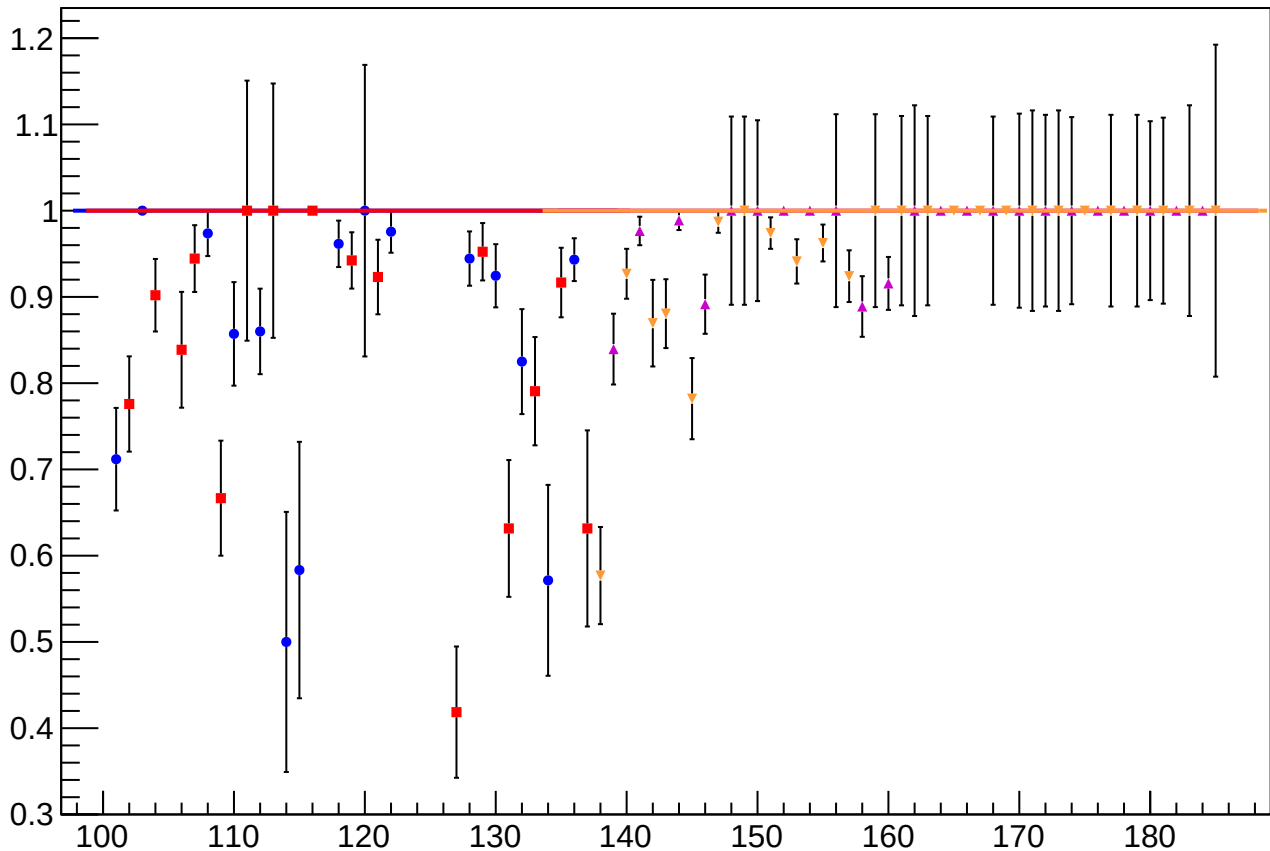
Right:  $0.398 \pm 0.000$   $\chi^2/\text{NDF}: 14173250084479480$

In:  $-0.878 \pm 0.000$   $\chi^2/\text{NDF}: 441913906621430577$

Out:  $0.900 \pm 0.000$   $\chi^2/\text{NDF}: 192642163504562978$

All:  $-0.268 \pm 0.000$   $\chi^2/\text{NDF}: 2731457681481$

# dit\_flag\_rms vs Slug, Sign Corrected



Right In: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 95.9/14

Left Out: 1.000+/-0.000  $\chi^2/\text{NDF}$ :1596.8/24

Right Out: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 168.9/15

Left In: 1.000+/-0.000  $\chi^2/\text{NDF}$ :385.6/22

Left: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 802.6/47

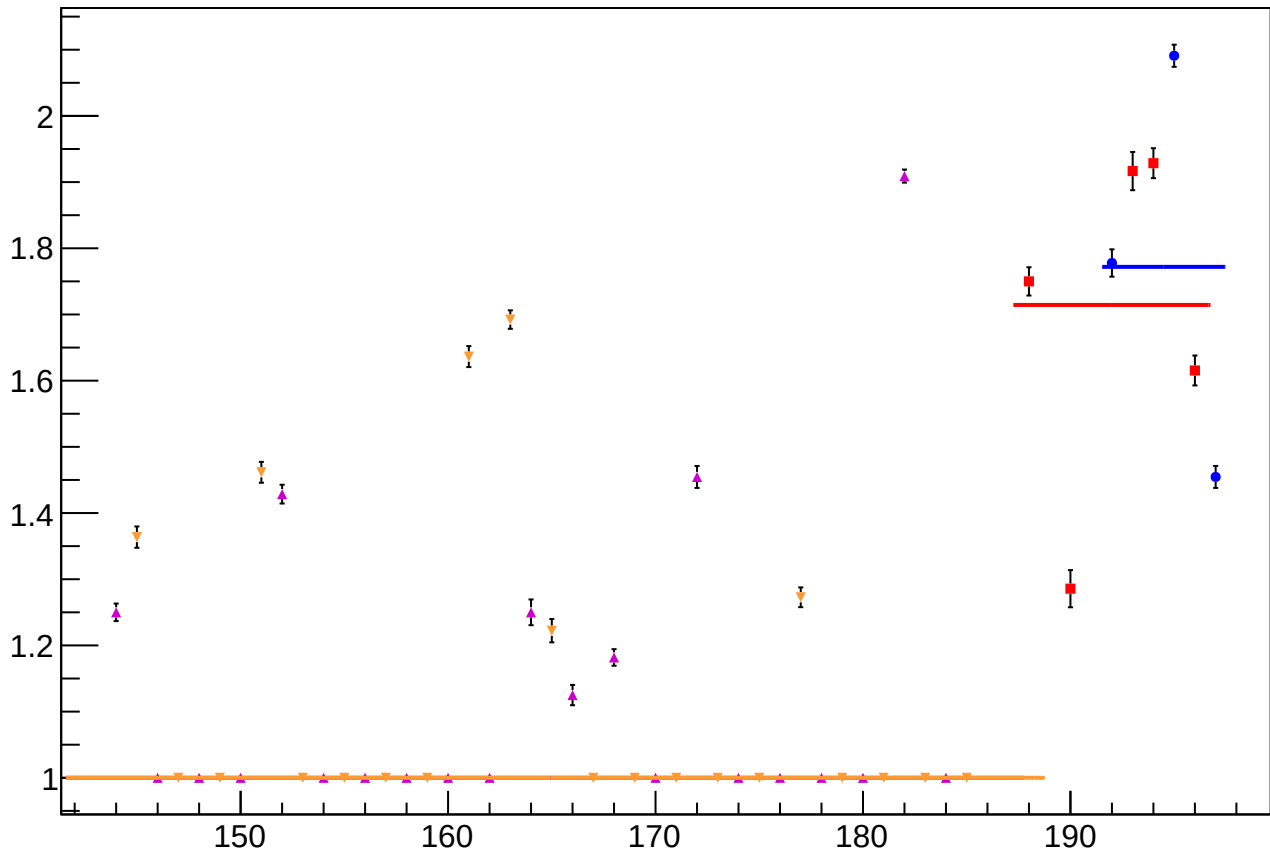
Right: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 347.8/30

In: 1.000+/-0.000  $\chi^2/\text{NDF}$ :746.7/37

Out: 1.000+/-0.000  $\chi^2/\text{NDF}$ :607.7/40

All: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 1354.4/78

# dit\_segment\_slope vs Slug, Sign Corrected



Right In: 1.772 $\pm$ 0.010  $\chi^2$ /NDF: 730.5/2

Left Out: 1.000 $\pm$ 0.000  $\chi^2$ /NDF:18616.2/20

Right Out: 1.714 $\pm$ 0.011  $\chi^2$ /NDF: 393.7/4

Left In: 1.000 $\pm$ 0.000  $\chi^2$ /NDF:12089.0/20

Left: 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 19113.7/41

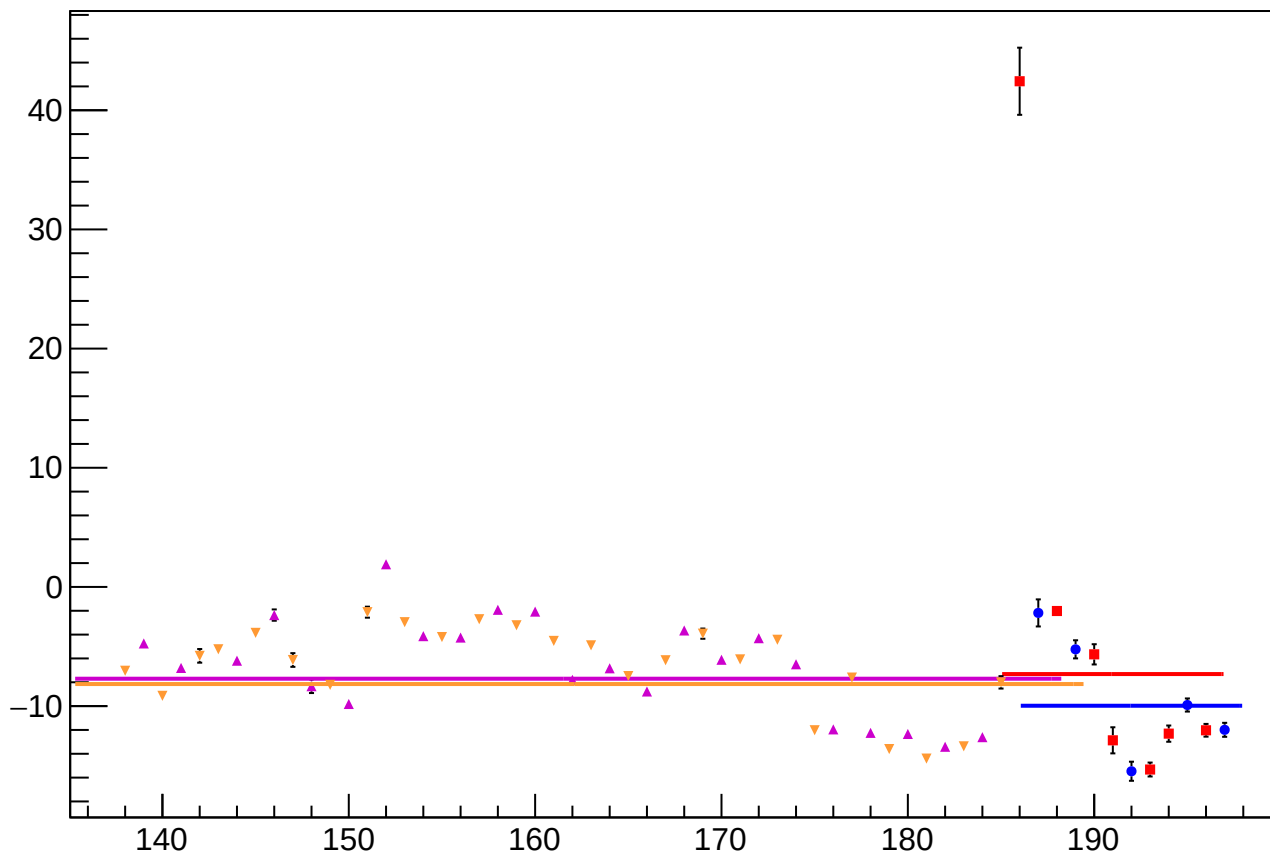
Right: 1.745 $\pm$ 0.007  $\chi^2$ /NDF: 1139.2/7

In: 1.000 $\pm$ 0.000  $\chi^2$ /NDF:18515.2/23

Out: 1.000 $\pm$ 0.000  $\chi^2$ /NDF:23380.7/25

All: 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 30304.4/49

reg\_asym\_sam1\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-9.970 \pm 0.312$   $\chi^2/\text{NDF}$ : 144.7/4

Left Out:  $-8.149 \pm 0.068$   $\chi^2/\text{NDF}$ : 3613.1/24

Right Out:  $-7.311 \pm 0.225$   $\chi^2/\text{NDF}$ : 909.2/6

Left In:  $-7.701 \pm 0.068$   $\chi^2/\text{NDF}$ : 3737.2/22

Left:  $-7.928 \pm 0.048$   $\chi^2/\text{NDF}$ : 7372.0/47

Right:  $-8.219 \pm 0.182$   $\chi^2/\text{NDF}$ : 1101.6/11

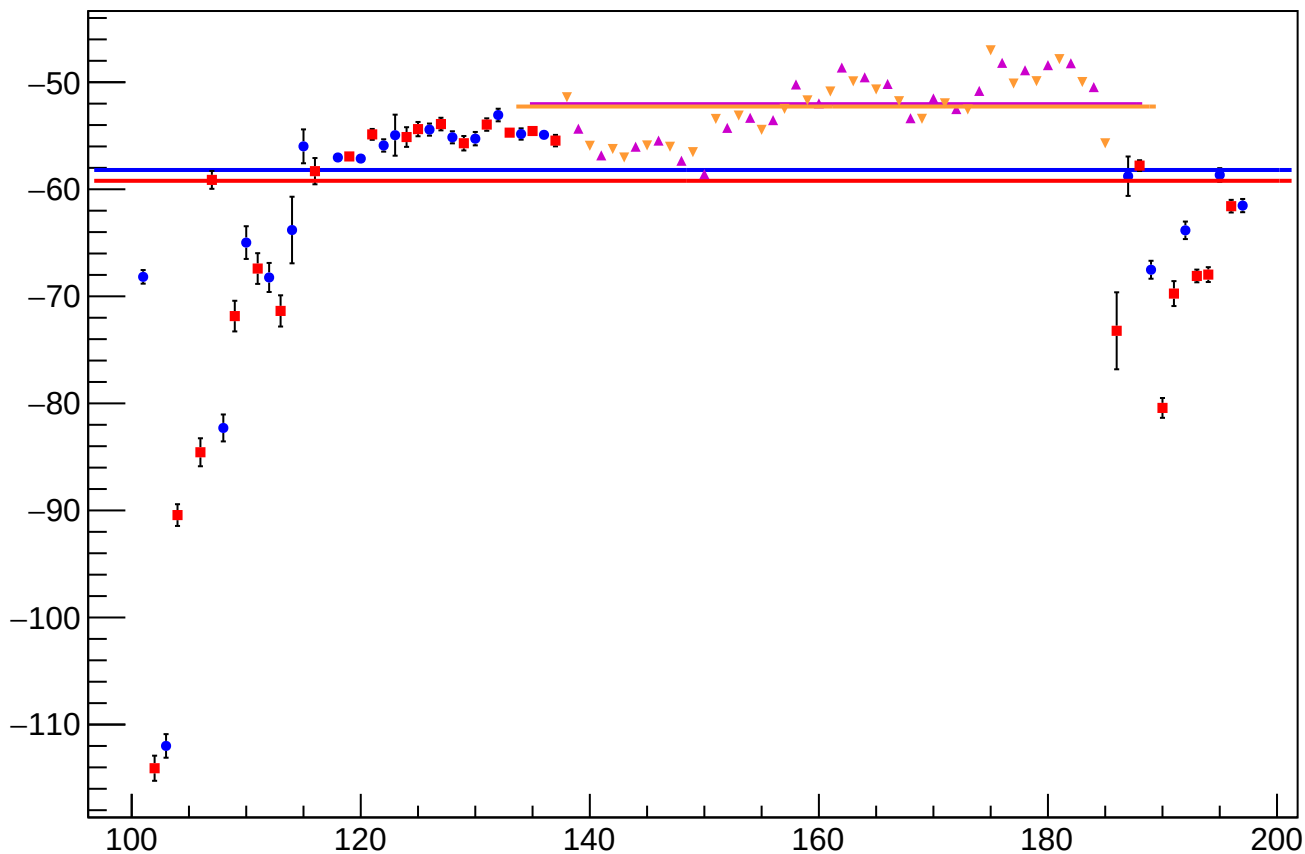
In:  $-7.805 \pm 0.067$   $\chi^2/\text{NDF}$ : 3932.3/27

Out:  $-8.080 \pm 0.065$   $\chi^2/\text{NDF}$ : 4535.0/31

All:  $-7.947 \pm 0.046$   $\chi^2/\text{NDF}$ : 8476.0/59



reg\_asym\_sam1\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -58.198 $\pm$ 0.131  $\chi^2$ /NDF: 3676.8/21

Left Out: -52.271 $\pm$ 0.055  $\chi^2$ /NDF: 2609.6/24

Right Out: -59.209 $\pm$ 0.127  $\chi^2$ /NDF: 5493.4/24

Left In: -52.050 $\pm$ 0.057  $\chi^2$ /NDF: 3197.5/22

Left: -52.164 $\pm$ 0.040  $\chi^2$ /NDF: 5814.9/47

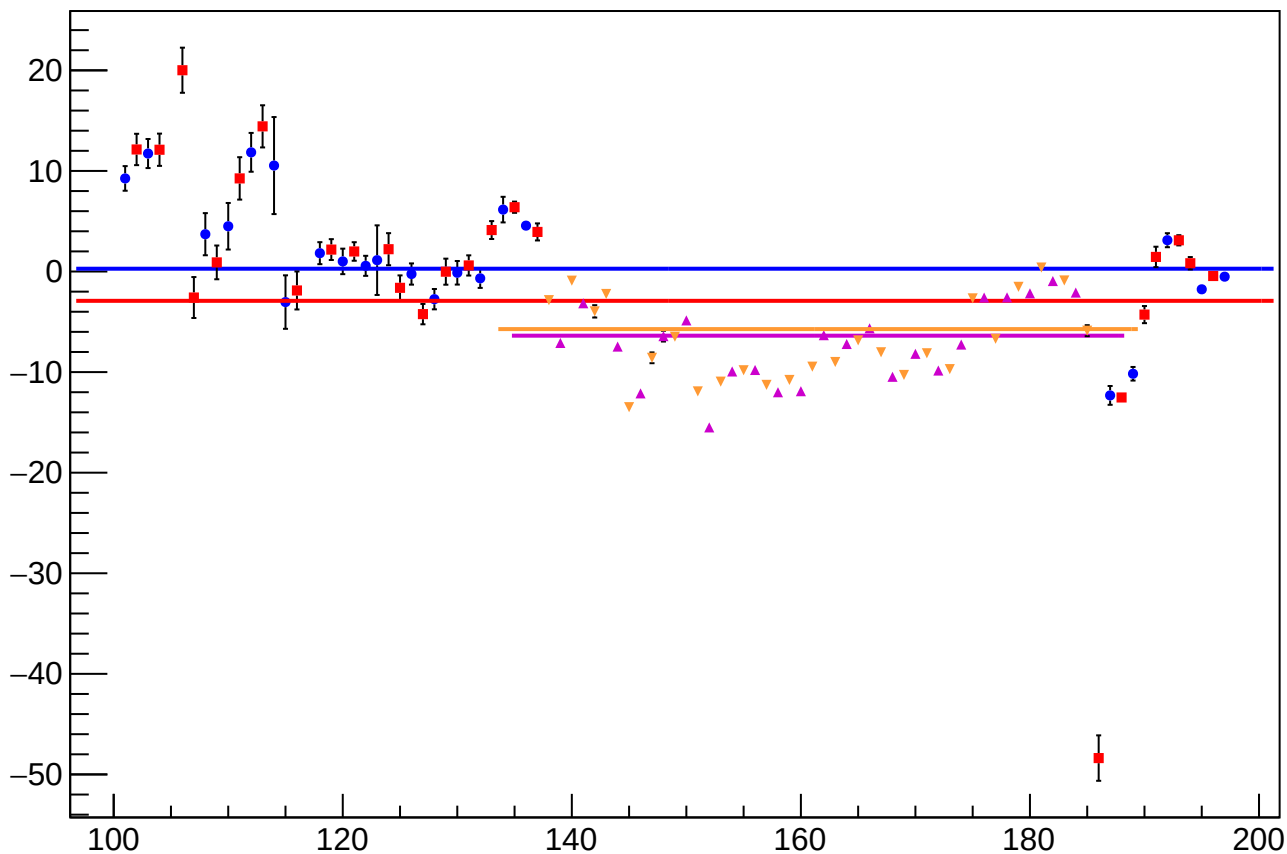
Right: -58.721 $\pm$ 0.091  $\chi^2$ /NDF: 9201.1/46

In: -53.028 $\pm$ 0.052  $\chi^2$ /NDF: 8726.2/44

Out: -53.381 $\pm$ 0.051  $\chi^2$ /NDF: 10629.7/49

All: -53.210 $\pm$ 0.036  $\chi^2$ /NDF: 19379.4/94

reg\_asym\_sam1\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $0.278 \pm 0.186$   $\chi^2/\text{NDF}$ : 768.7/21

Left Out:  $-5.725 \pm 0.068$   $\chi^2/\text{NDF}$ : 3989.1/24

Right Out:  $-2.914 \pm 0.155$   $\chi^2/\text{NDF}$ : 2759.3/24

Left In:  $-6.379 \pm 0.068$   $\chi^2/\text{NDF}$ : 3395.7/22

Left:  $-6.049 \pm 0.048$   $\chi^2/\text{NDF}$ : 7431.1/47

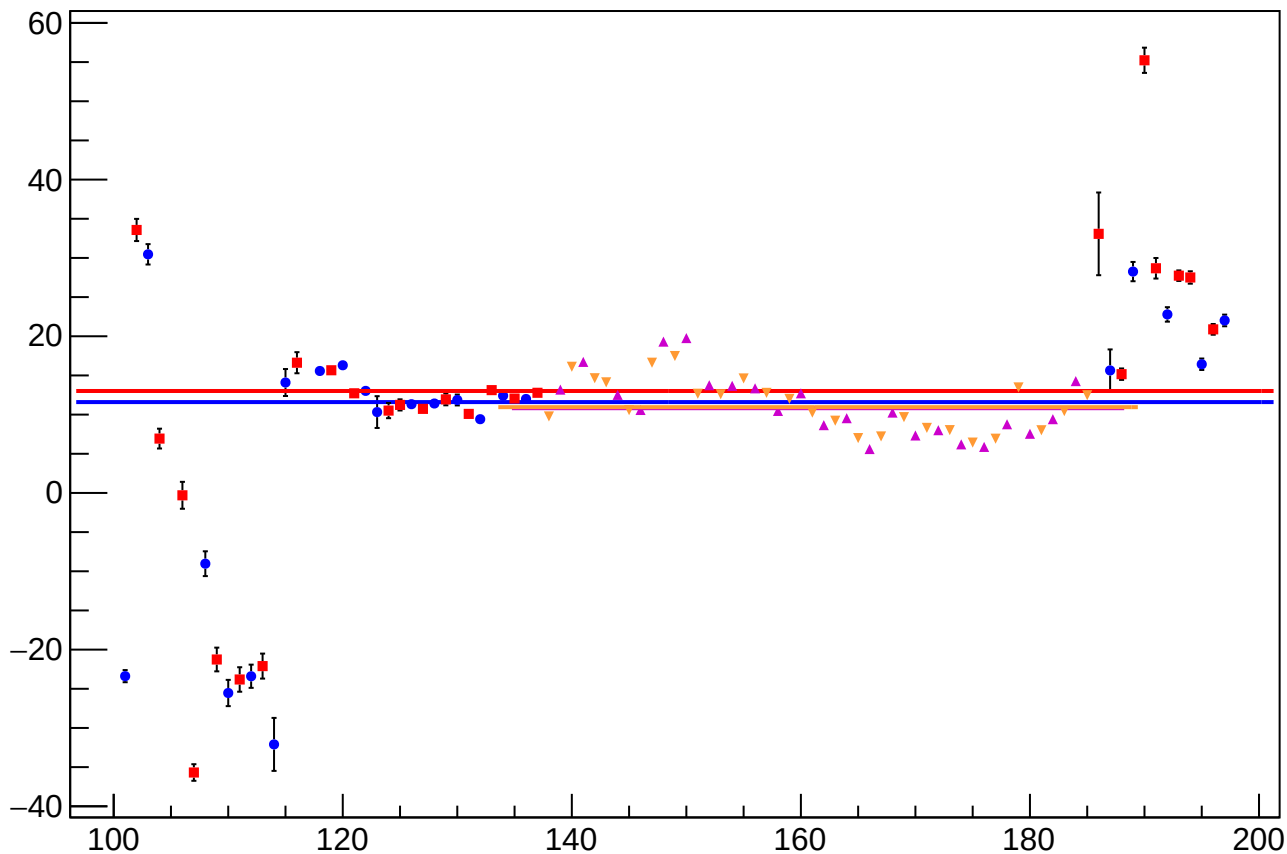
Right:  $-1.598 \pm 0.119$   $\chi^2/\text{NDF}$ : 3701.8/46

In:  $-5.586 \pm 0.064$   $\chi^2/\text{NDF}$ : 5296.7/44

Out:  $-5.277 \pm 0.062$   $\chi^2/\text{NDF}$ : 7023.0/49

All:  $-5.426 \pm 0.045$   $\chi^2/\text{NDF}$ : 12331.7/94

reg\_asym\_sam1\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 11.598 $\pm$ 0.147  $\chi^2$ /NDF: 4352.6/21

Left Out: 10.950 $\pm$ 0.062  $\chi^2$ /NDF: 2620.4/24

Right Out: 13.015 $\pm$ 0.145  $\chi^2$ /NDF: 5856.2/24

Left In: 10.818 $\pm$ 0.063  $\chi^2$ /NDF: 3577.7/22

Left: 10.886 $\pm$ 0.044  $\chi^2$ /NDF: 6200.3/47

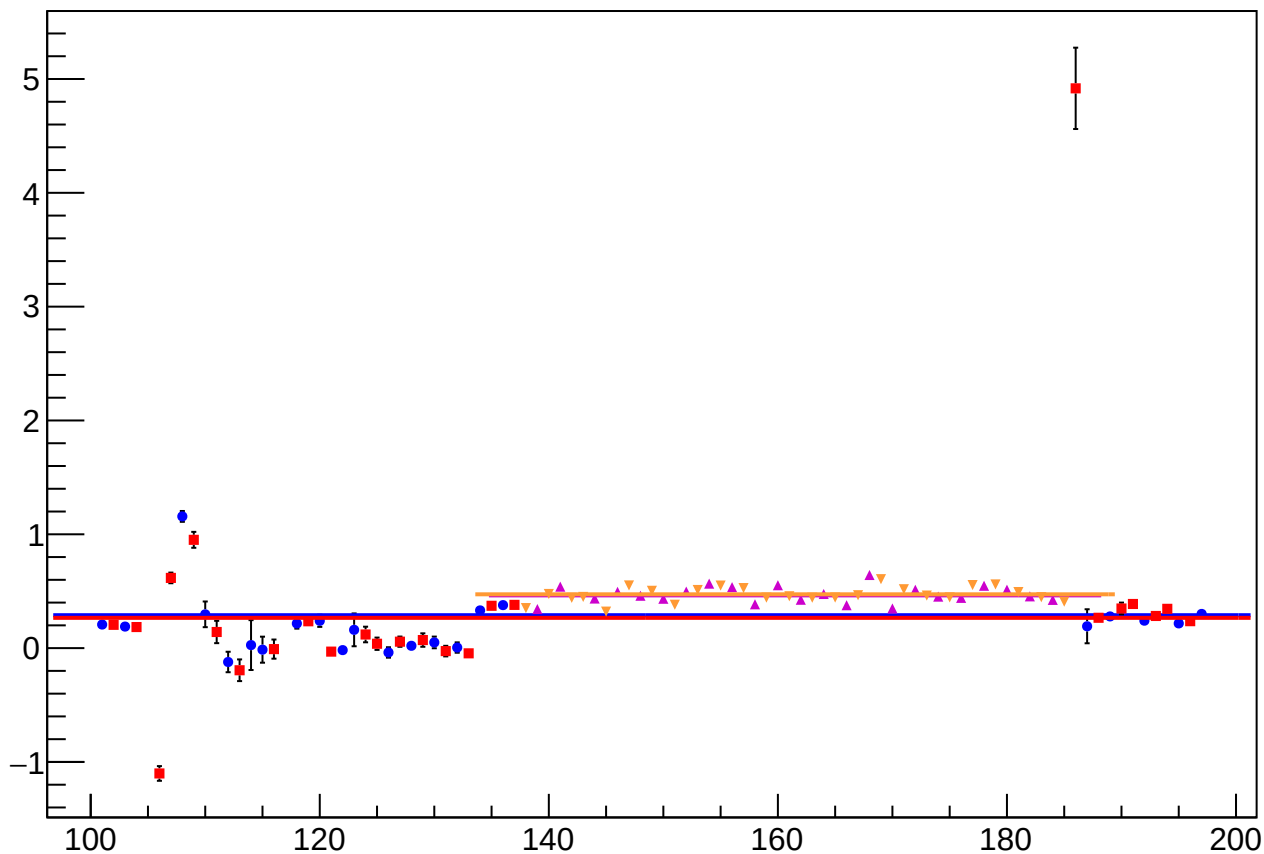
Right: 12.318 $\pm$ 0.103  $\chi^2$ /NDF: 10256.1/46

In: 10.939 $\pm$ 0.058  $\chi^2$ /NDF: 7954.1/44

Out: 11.267 $\pm$ 0.057  $\chi^2$ /NDF: 8649.3/49

All: 11.107 $\pm$ 0.040  $\chi^2$ /NDF: 16619.8/94

reg\_asym\_sam1\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.289 \pm 0.007$   $\chi^2/\text{NDF}: 663.8/21$

Left Out:  $0.473 \pm 0.003$   $\chi^2/\text{NDF}: 515.0/24$

Right Out:  $0.266 \pm 0.007$   $\chi^2/\text{NDF}: 1156.0/24$

Left In:  $0.463 \pm 0.003$   $\chi^2/\text{NDF}: 749.9/22$

Left:  $0.468 \pm 0.002$   $\chi^2/\text{NDF}: 1270.7/47$

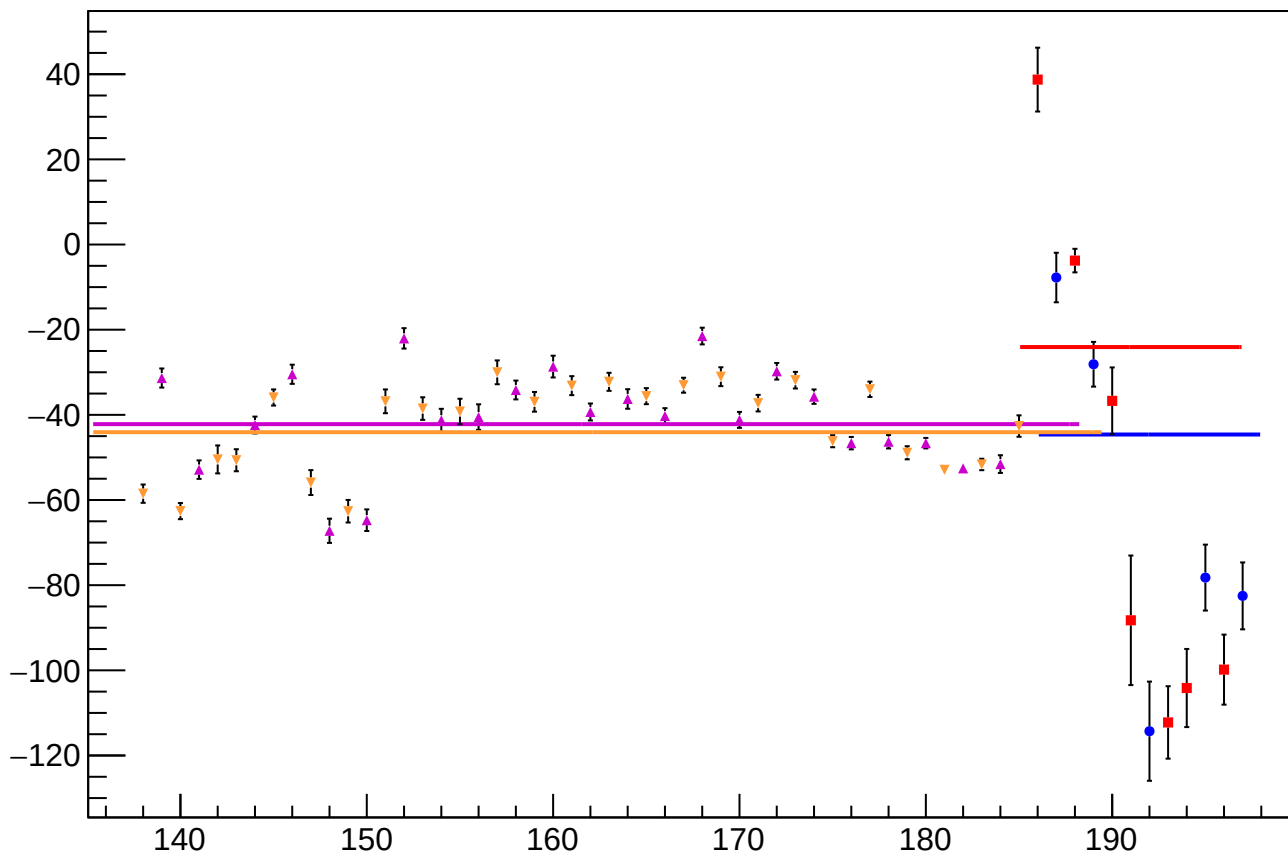
Right:  $0.277 \pm 0.005$   $\chi^2/\text{NDF}: 1825.6/46$

In:  $0.440 \pm 0.003$   $\chi^2/\text{NDF}: 1952.1/44$

Out:  $0.443 \pm 0.003$   $\chi^2/\text{NDF}: 2483.9/49$

All:  $0.441 \pm 0.002$   $\chi^2/\text{NDF}: 4436.6/94$

reg\_asym\_sam2\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-44.618 \pm 3.071$   $\chi^2/\text{NDF}: 127.9/4$

Left Out:  $-44.074 \pm 0.389$   $\chi^2/\text{NDF}: 632.8/24$

Right Out:  $-24.079 \pm 2.184$   $\chi^2/\text{NDF}: 412.9/6$

Left In:  $-42.185 \pm 0.398$   $\chi^2/\text{NDF}: 651.0/22$

Left:  $-43.149 \pm 0.278$   $\chi^2/\text{NDF}: 1295.4/47$

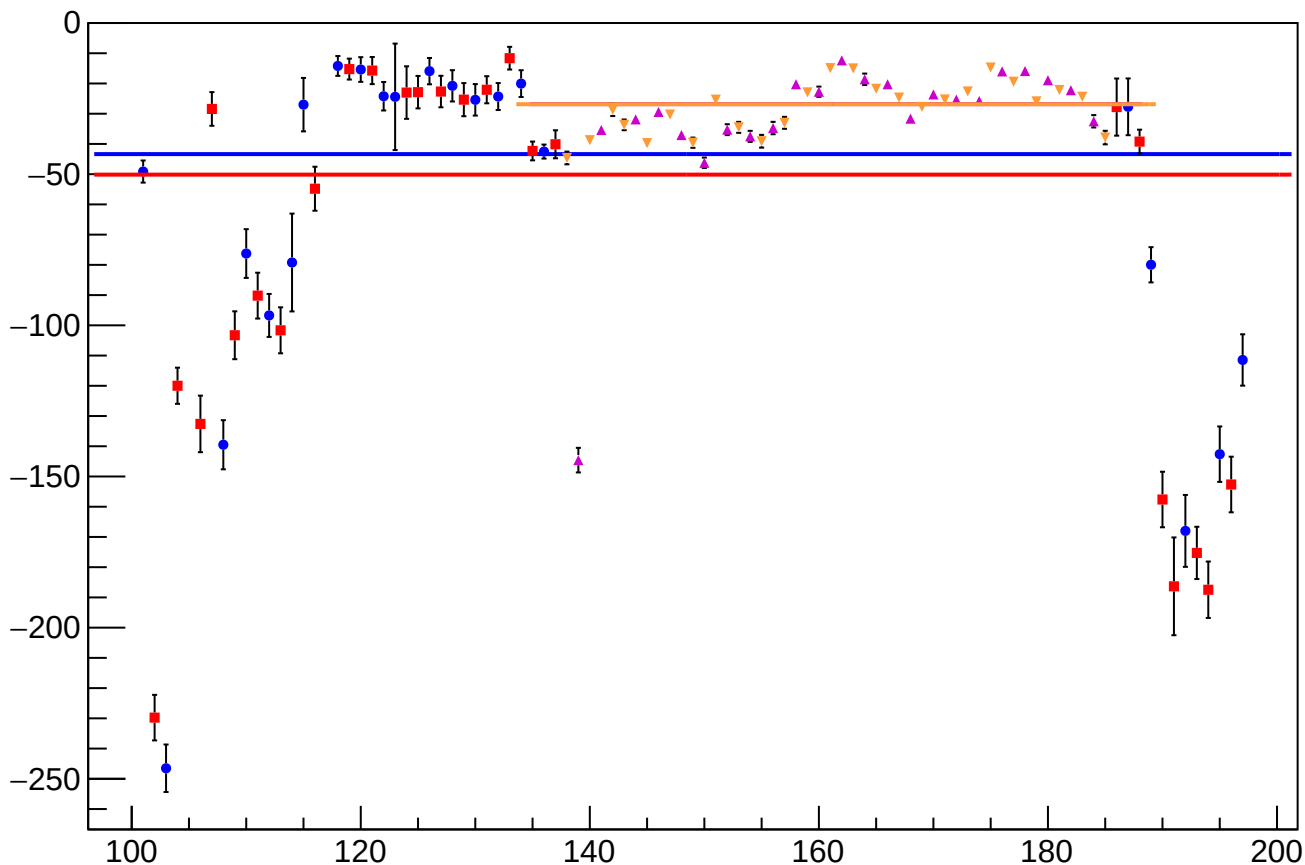
Right:  $-30.980 \pm 1.780$   $\chi^2/\text{NDF}: 570.6/11$

In:  $-42.225 \pm 0.394$   $\chi^2/\text{NDF}: 779.6/27$

Out:  $-43.458 \pm 0.383$   $\chi^2/\text{NDF}: 1127.0/31$

All:  $-42.859 \pm 0.275$   $\chi^2/\text{NDF}: 1911.6/59$

reg\_asym\_sam2\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-43.362 \pm 1.086$   $\chi^2/\text{NDF}$ : 1486.1/21

Left Out:  $-26.867 \pm 0.317$   $\chi^2/\text{NDF}$ : 629.1/24

Right Out:  $-50.149 \pm 1.112$   $\chi^2/\text{NDF}$ : 2088.1/24

Left In:  $-26.825 \pm 0.325$   $\chi^2/\text{NDF}$ : 1481.6/22

Left:  $-26.847 \pm 0.227$   $\chi^2/\text{NDF}$ : 2110.7/47

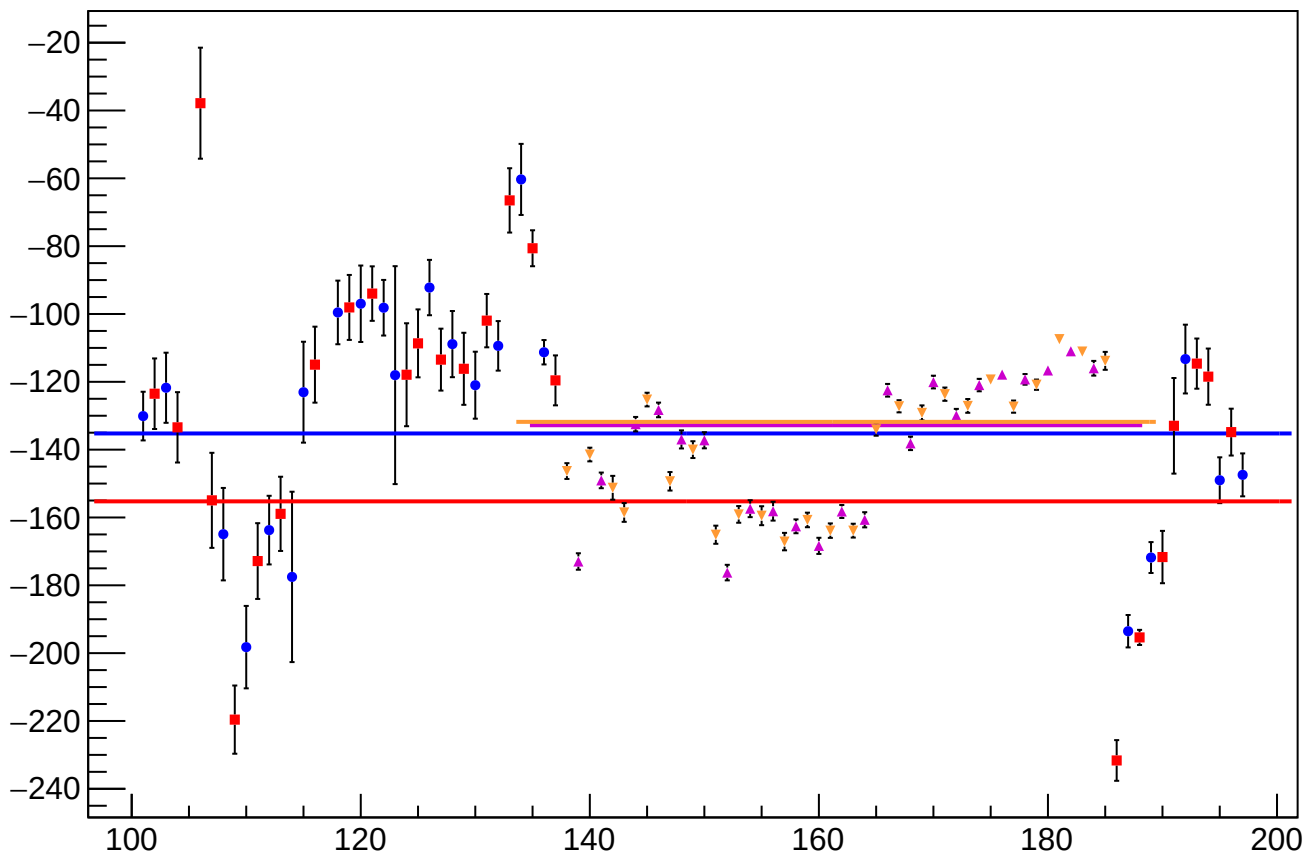
Right:  $-46.677 \pm 0.777$   $\chi^2/\text{NDF}$ : 3593.3/46

In:  $-28.187 \pm 0.312$   $\chi^2/\text{NDF}$ : 3180.3/44

Out:  $-28.618 \pm 0.305$   $\chi^2/\text{NDF}$ : 3122.8/49

All:  $-28.407 \pm 0.218$   $\chi^2/\text{NDF}$ : 6304.1/94

reg\_asym\_sam2\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -135.224 $\pm$ 1.619  $\chi^2$ /NDF: 463.0/21

Left Out: -131.805 $\pm$ 0.392  $\chi^2$ /NDF:2417.0/24

Right Out: -155.247 $\pm$ 1.401  $\chi^2$ /NDF: 1184.5/24

Left In: -132.799 $\pm$ 0.398  $\chi^2$ /NDF:2515.9/22

Left: -132.294 $\pm$ 0.279  $\chi^2$ /NDF: 4936.0/47

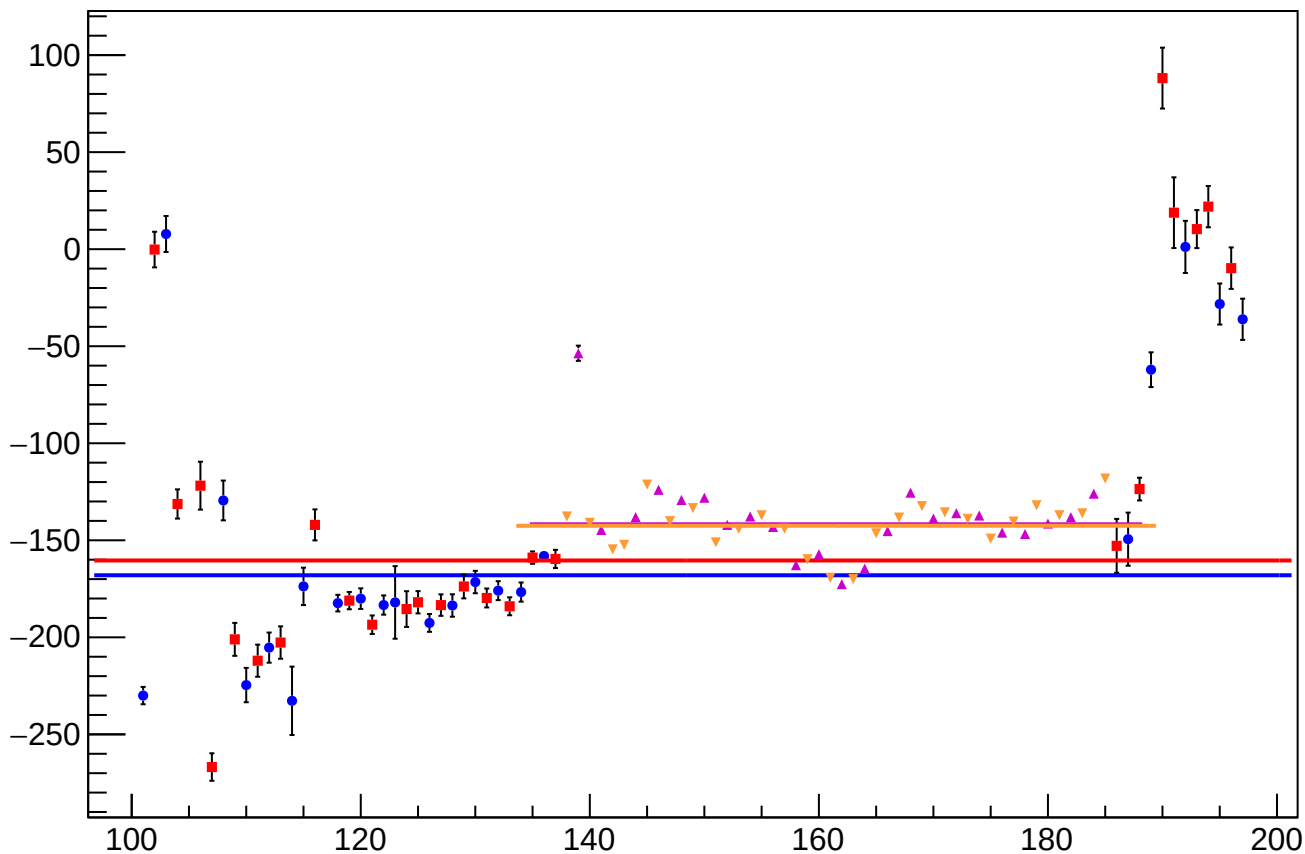
Right: -146.672 $\pm$ 1.060  $\chi^2$ /NDF: 1734.9/46

In: -132.937 $\pm$ 0.386  $\chi^2$ /NDF:2981.0/44

Out: -133.506 $\pm$ 0.378  $\chi^2$ /NDF:3861.0/49

All: -133.228 $\pm$ 0.270  $\chi^2$ /NDF: 6843.1/94

reg\_asym\_sam2\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-168.021 \pm 1.228$   $\chi^2/\text{NDF}: 1359.0/21$

Left Out:  $-142.517 \pm 0.355$   $\chi^2/\text{NDF}: 1144.2/24$

Right Out:  $-160.400 \pm 1.278$   $\chi^2/\text{NDF}: 1987.4/24$

Left In:  $-141.769 \pm 0.363$   $\chi^2/\text{NDF}: 1604.4/22$

Left:  $-142.151 \pm 0.254$   $\chi^2/\text{NDF}: 2750.7/47$

Right:  $-164.362 \pm 0.885$   $\chi^2/\text{NDF}: 3364.9/46$

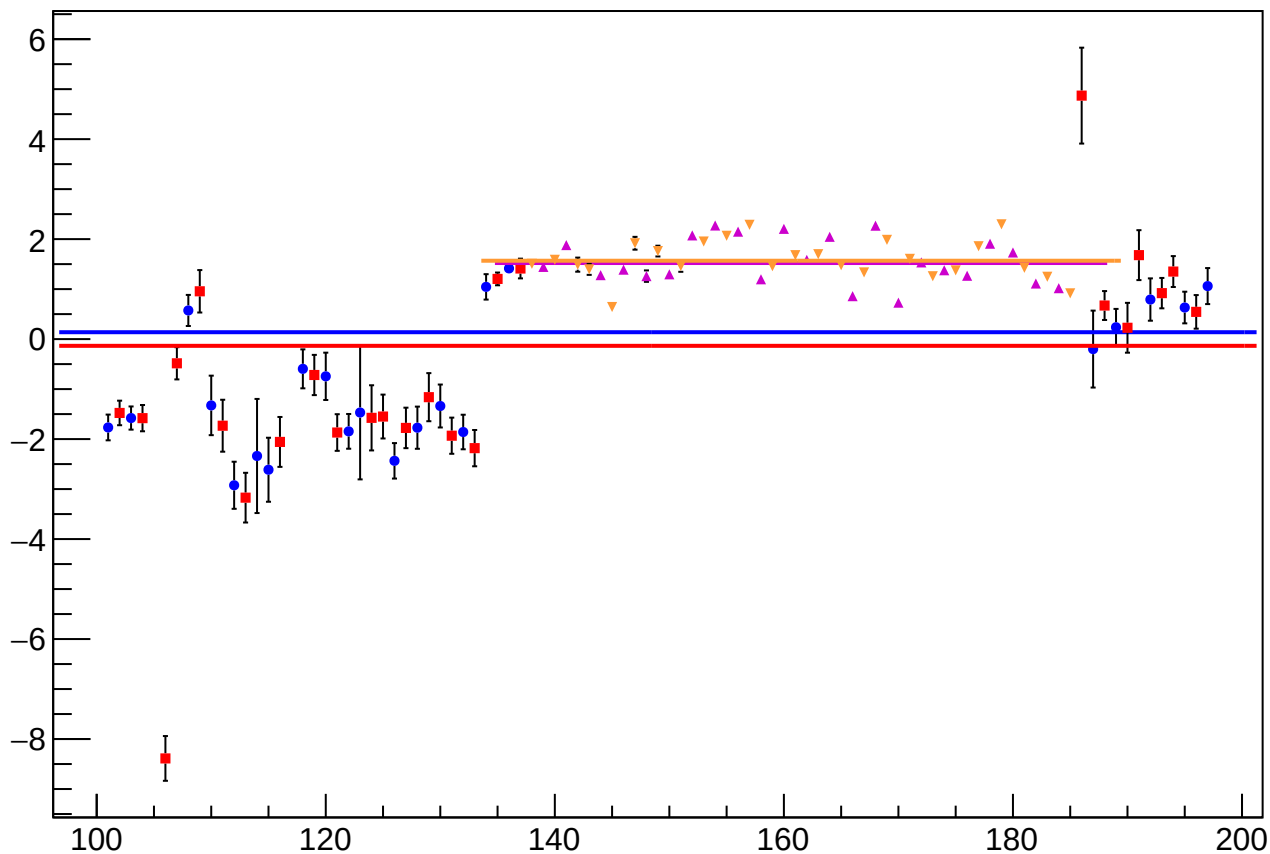
In:  $-143.876 \pm 0.348$   $\chi^2/\text{NDF}: 3383.9/44$

Out:  $-143.797 \pm 0.342$   $\chi^2/\text{NDF}: 3313.5/49$

All:  $-143.836 \pm 0.244$   $\chi^2/\text{NDF}: 6697.5/94$



reg\_asym\_sam2\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.138 \pm 0.063$   $\chi^2/\text{NDF}: 538.9/21$

Left Out:  $1.568 \pm 0.016$   $\chi^2/\text{NDF}: 541.0/24$

Right Out:  $-0.134 \pm 0.063$   $\chi^2/\text{NDF}: 846.2/24$

Left In:  $1.522 \pm 0.016$   $\chi^2/\text{NDF}: 739.1/22$

Left:  $1.545 \pm 0.012$   $\chi^2/\text{NDF}: 1284.1/47$

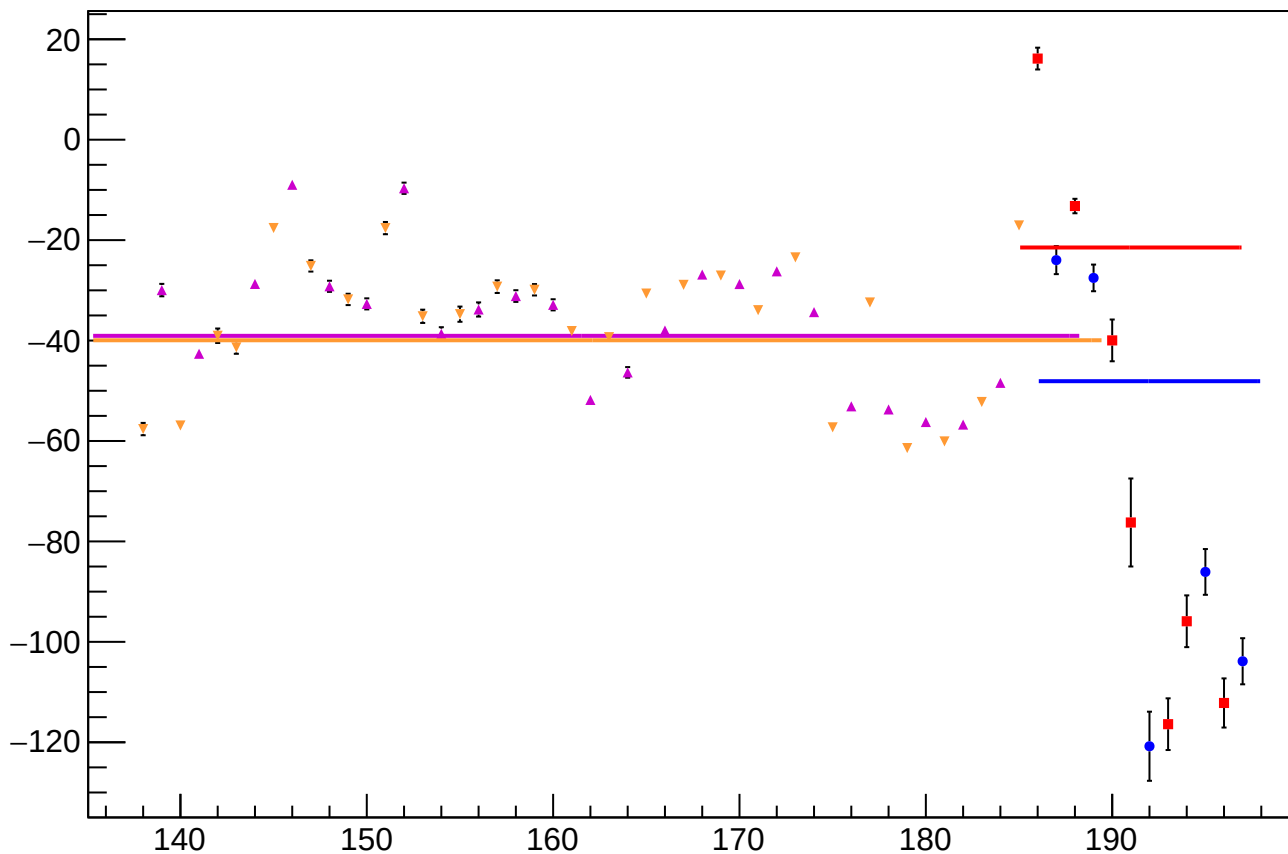
Right:  $0.004 \pm 0.045$   $\chi^2/\text{NDF}: 1394.4/46$

In:  $1.433 \pm 0.016$   $\chi^2/\text{NDF}: 1735.6/44$

Out:  $1.464 \pm 0.016$   $\chi^2/\text{NDF}: 2062.1/49$

All:  $1.448 \pm 0.011$   $\chi^2/\text{NDF}: 3799.7/94$

reg\_asym\_sam3\_diff\_bpm1X\_slope vs Slug, Sign Corrected

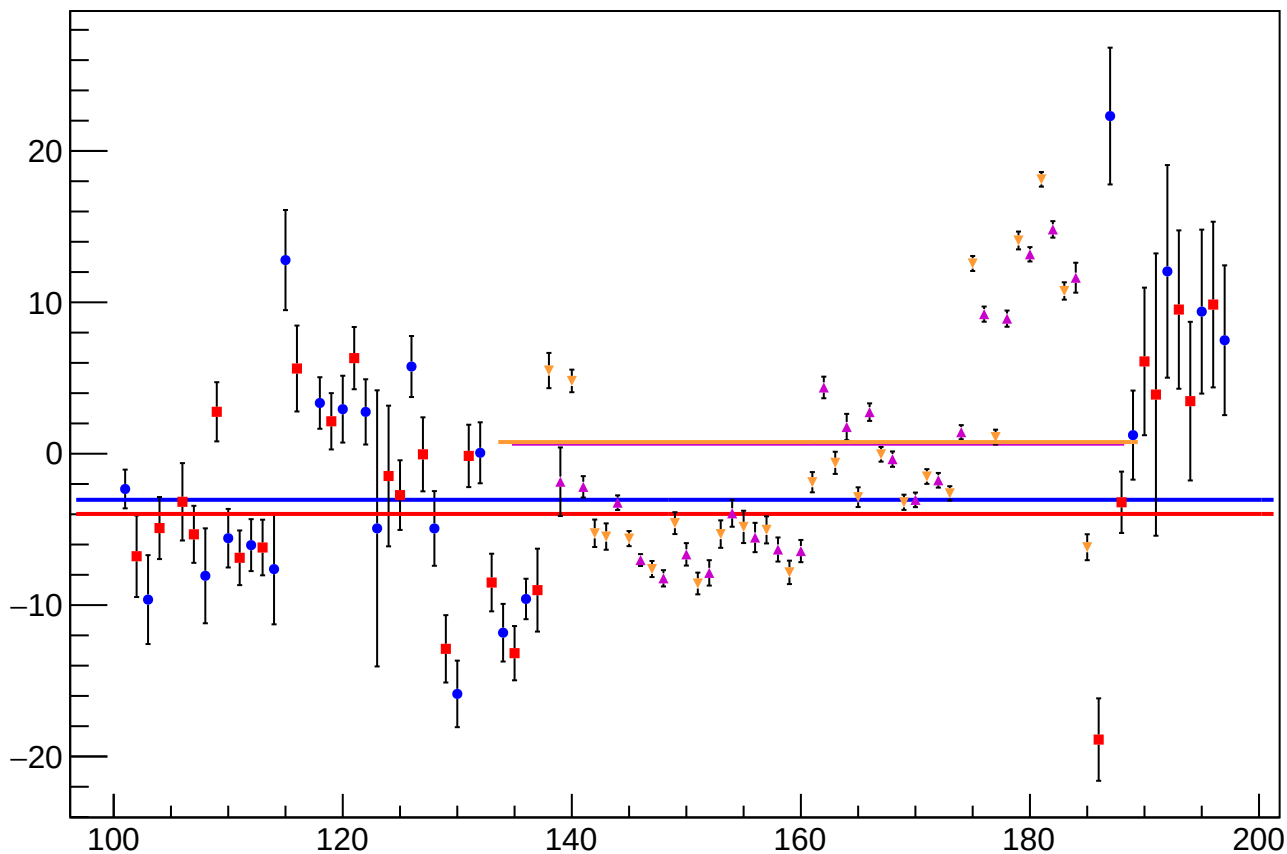


Right In:  $-48.091 \pm 1.608$   $\chi^2/\text{NDF}: 463.2/4$   
 Left Out:  $-39.942 \pm 0.153$   $\chi^2/\text{NDF}: 9806.2/24$   
 Right Out:  $-21.467 \pm 1.065$   $\chi^2/\text{NDF}: 1284.0/6$   
 Left In:  $-39.060 \pm 0.154$   $\chi^2/\text{NDF}: 8577.0/22$

Left:  $-39.503 \pm 0.109$   $\chi^2/\text{NDF}: 18399.6/47$   
 Right:  $-29.582 \pm 0.888$   $\chi^2/\text{NDF}: 1937.8/11$   
 In:  $-39.142 \pm 0.153$   $\chi^2/\text{NDF}: 9071.5/27$   
 Out:  $-39.566 \pm 0.152$   $\chi^2/\text{NDF}: 11385.2/31$

All:  $-39.356 \pm 0.108$   $\chi^2/\text{NDF}: 20460.5/59$

reg\_asym\_sam3\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-3.044 \pm 0.480$   $\chi^2/\text{NDF}: 215.4/21$

Left Out:  $0.770 \pm 0.124$   $\chi^2/\text{NDF}: 3952.9/24$

Right Out:  $-3.978 \pm 0.475$   $\chi^2/\text{NDF}: 173.4/24$

Left In:  $0.662 \pm 0.124$   $\chi^2/\text{NDF}: 3340.9/22$

Left:  $0.716 \pm 0.088$   $\chi^2/\text{NDF}: 7294.2/47$

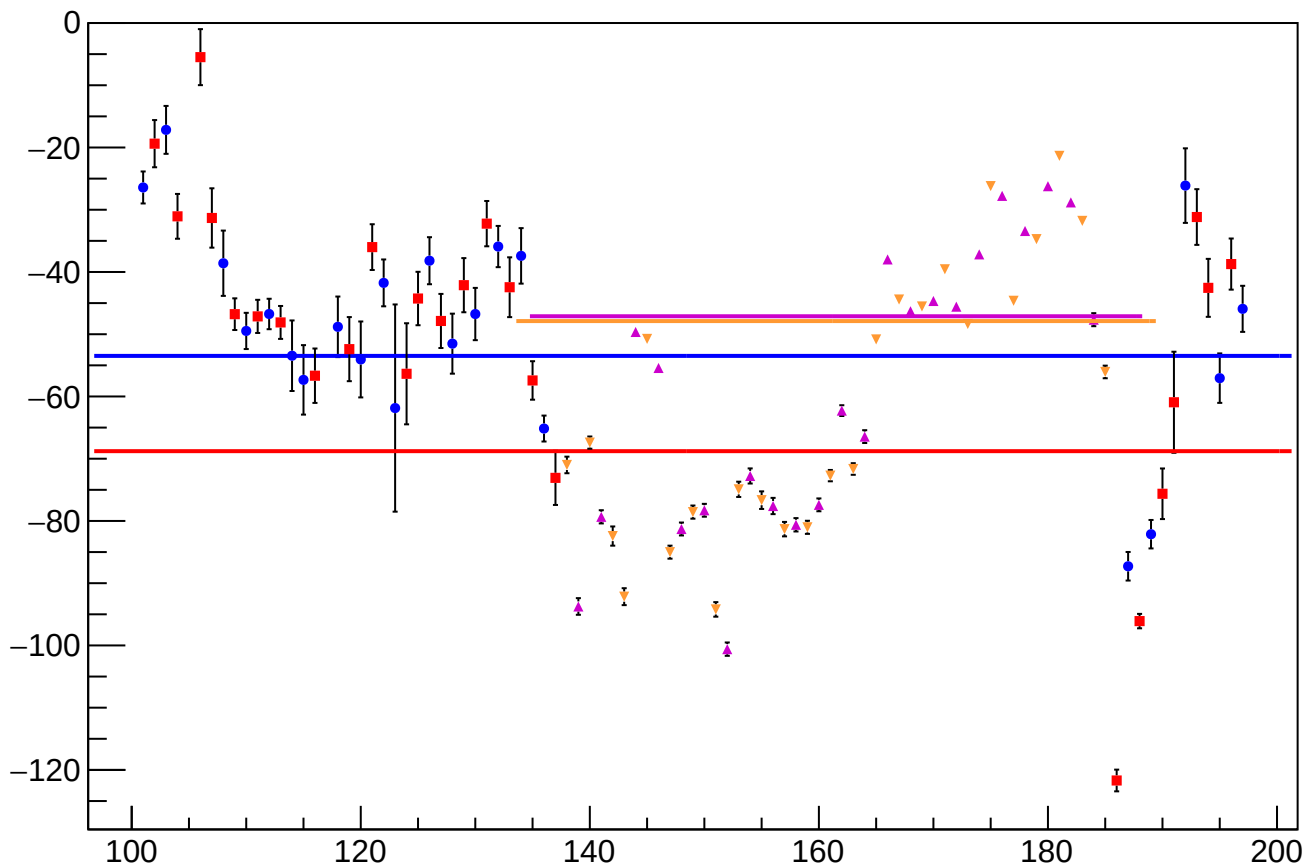
Right:  $-3.516 \pm 0.338$   $\chi^2/\text{NDF}: 390.7/46$

In:  $0.430 \pm 0.120$   $\chi^2/\text{NDF}: 3612.2/44$

Out:  $0.466 \pm 0.120$   $\chi^2/\text{NDF}: 4219.8/49$

All:  $0.448 \pm 0.085$   $\chi^2/\text{NDF}: 7832.0/94$

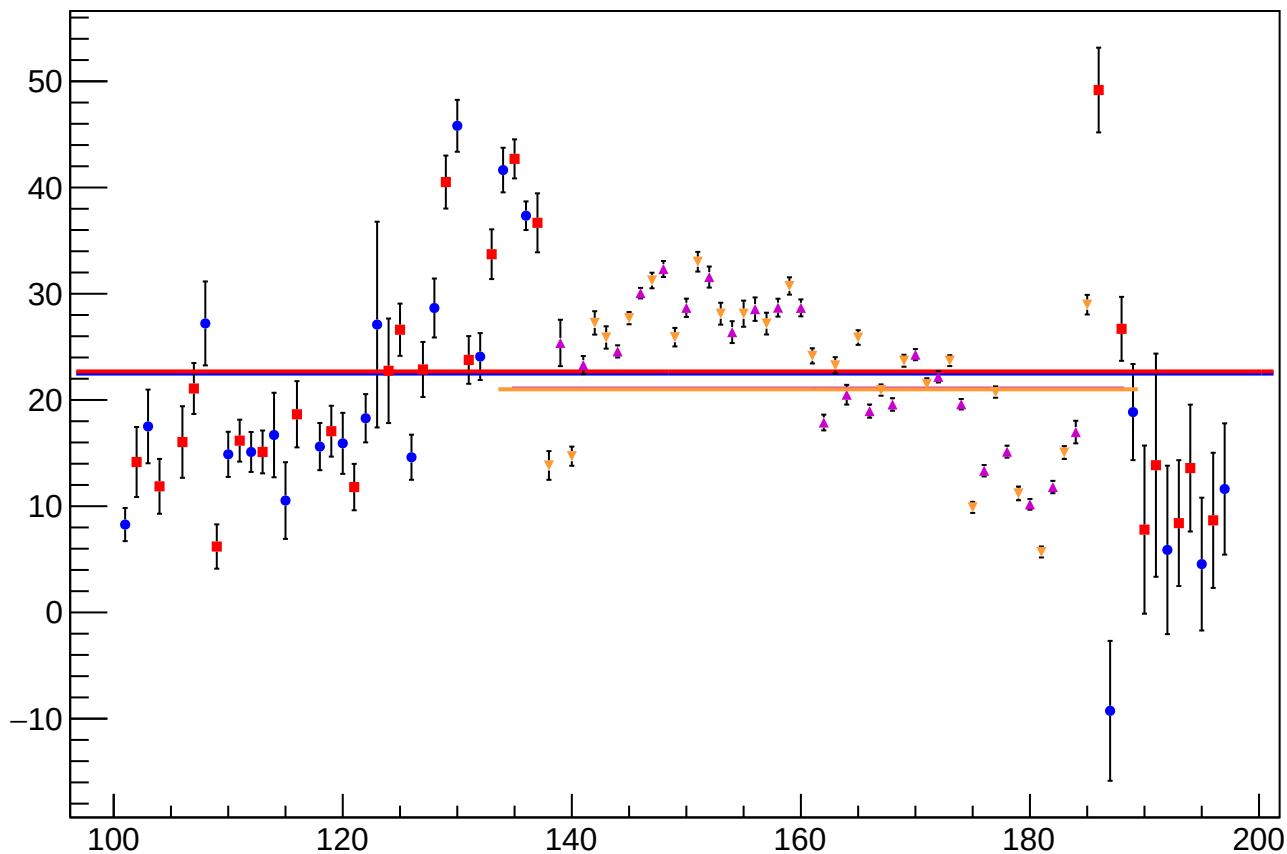
reg\_asym\_sam3\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-53.481 \pm 0.738$   $\chi^2/\text{NDF}$ : 719.8/21  
 Left Out:  $-47.888 \pm 0.155$   $\chi^2/\text{NDF}$ : 16707.2/24  
 Right Out:  $-68.787 \pm 0.621$   $\chi^2/\text{NDF}$ : 2713.4/24  
 Left In:  $-47.112 \pm 0.155$   $\chi^2/\text{NDF}$ : 15654.8/22

Left:  $-47.500 \pm 0.109$   $\chi^2/\text{NDF}$ : 32374.6/47  
 Right:  $-62.452 \pm 0.475$   $\chi^2/\text{NDF}$ : 3685.0/46  
 In:  $-47.380 \pm 0.151$   $\chi^2/\text{NDF}$ : 16445.9/44  
 Out:  $-49.113 \pm 0.150$   $\chi^2/\text{NDF}$ : 20488.5/49  
 All:  $-48.254 \pm 0.107$   $\chi^2/\text{NDF}$ : 37000.3/94

reg\_asym\_sam3\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 22.487 $\pm$ 0.544  $\chi^2$ /NDF: 501.9/21

Left Out: 21.005 $\pm$ 0.139  $\chi^2$ /NDF:2789.5/24

Right Out: 22.688 $\pm$ 0.548  $\chi^2$ /NDF: 431.3/24

Left In: 21.069 $\pm$ 0.139  $\chi^2$ /NDF:2176.7/22

Left: 21.037 $\pm$ 0.098  $\chi^2$ /NDF: 4966.4/47

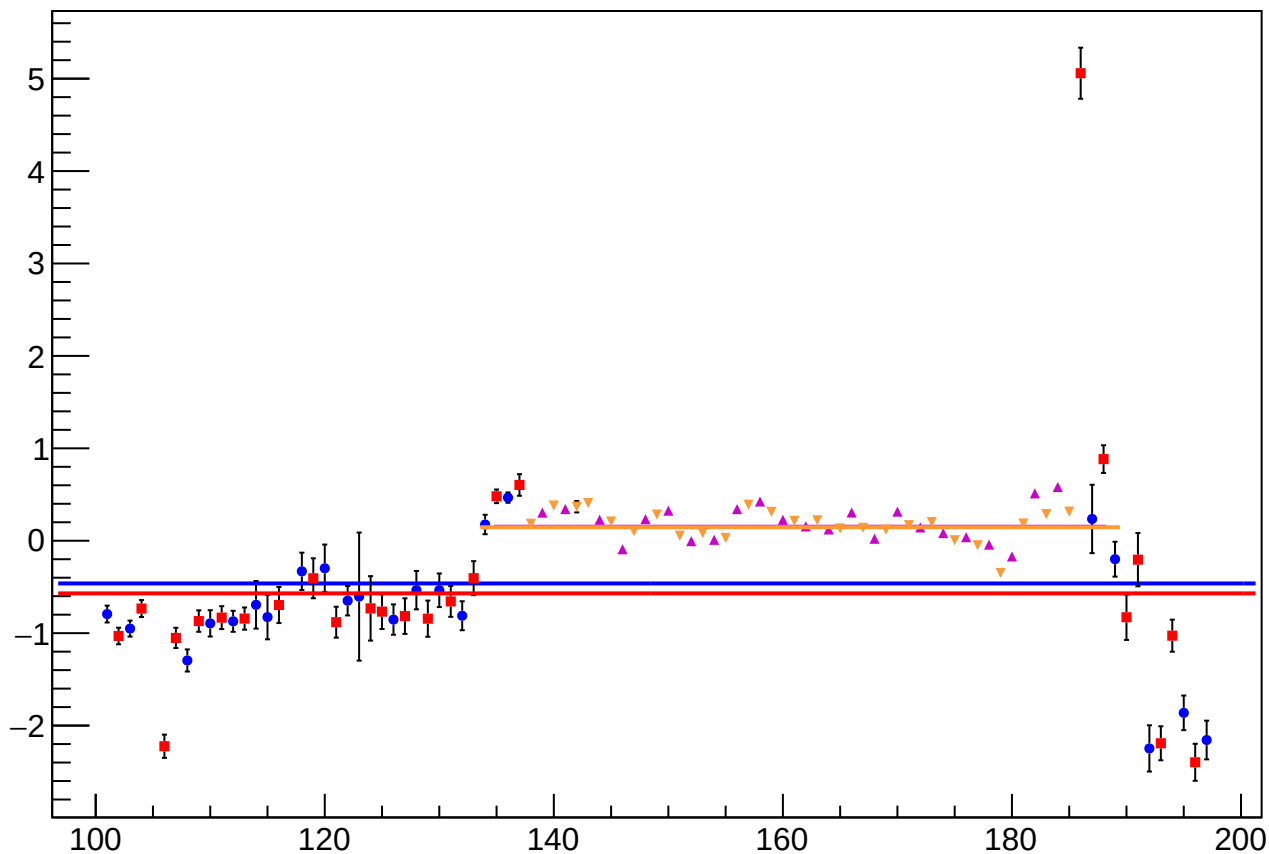
Right: 22.587 $\pm$ 0.386  $\chi^2$ /NDF: 933.2/46

In: 21.156 $\pm$ 0.135  $\chi^2$ /NDF:2685.0/44

Out: 21.106 $\pm$ 0.135  $\chi^2$ /NDF:3229.7/49

All: 21.131 $\pm$ 0.095  $\chi^2$ /NDF: 5914.7/94

reg\_asym\_sam3\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.462 \pm 0.029$   $\chi^2/\text{NDF}: 622.9/21$

Left Out:  $0.146 \pm 0.006$   $\chi^2/\text{NDF}: 609.8/24$

Right Out:  $-0.570 \pm 0.028$   $\chi^2/\text{NDF}: 1232.3/24$

Left In:  $0.151 \pm 0.006$   $\chi^2/\text{NDF}: 873.9/22$

Left:  $0.149 \pm 0.004$   $\chi^2/\text{NDF}: 1484.1/47$

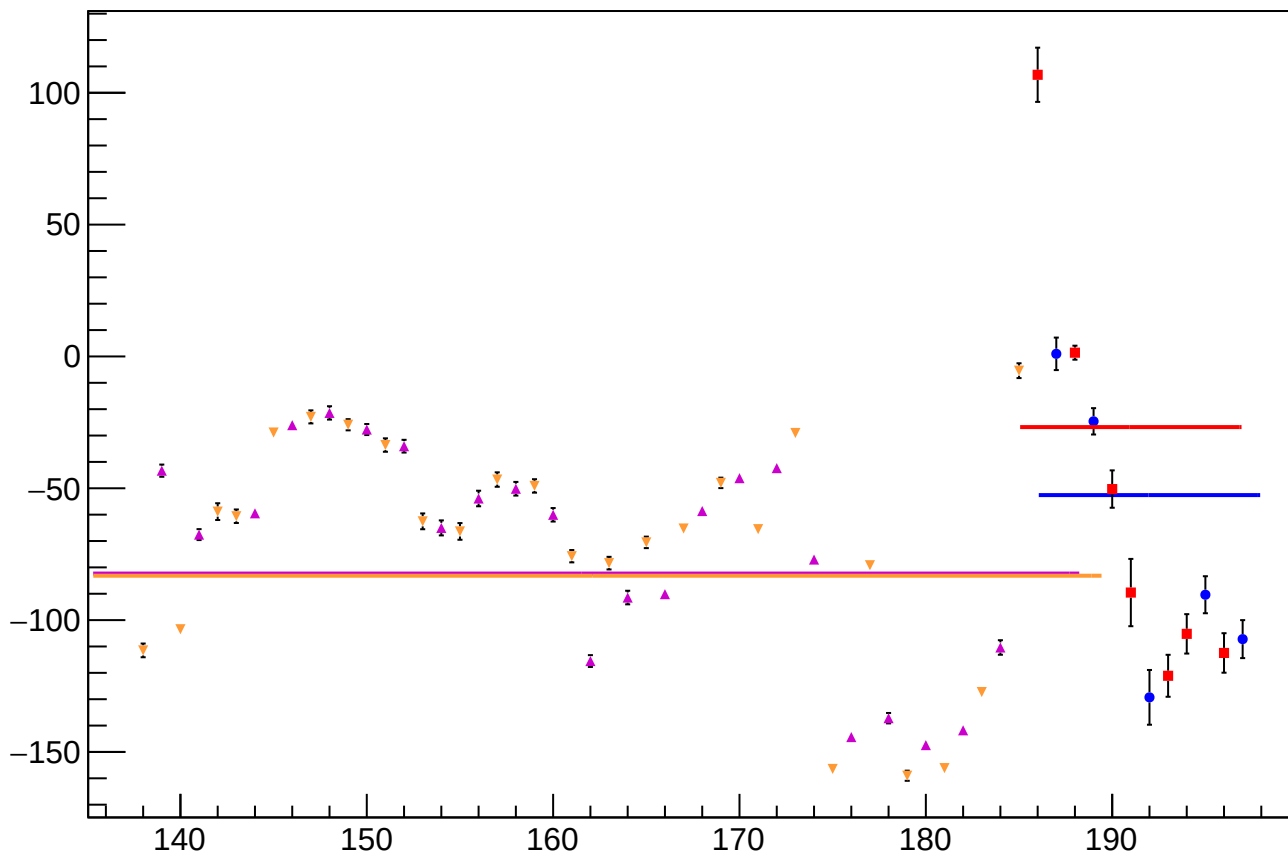
Right:  $-0.517 \pm 0.020$   $\chi^2/\text{NDF}: 1862.4/46$

In:  $0.123 \pm 0.006$   $\chi^2/\text{NDF}: 1930.5/44$

Out:  $0.111 \pm 0.006$   $\chi^2/\text{NDF}: 2459.7/49$

All:  $0.117 \pm 0.004$   $\chi^2/\text{NDF}: 4391.9/94$

reg\_asym\_sam4\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-52.584 \pm 2.946$   $\chi^2/\text{NDF}$ : 248.0/4

Left Out:  $-83.163 \pm 0.407$   $\chi^2/\text{NDF}$ : 13794.3/24

Right Out:  $-26.791 \pm 2.089$   $\chi^2/\text{NDF}$ : 698.6/6

Left In:  $-82.342 \pm 0.413$   $\chi^2/\text{NDF}$ : 10954.9/22

Left:  $-82.758 \pm 0.290$   $\chi^2/\text{NDF}$ : 24751.3/47

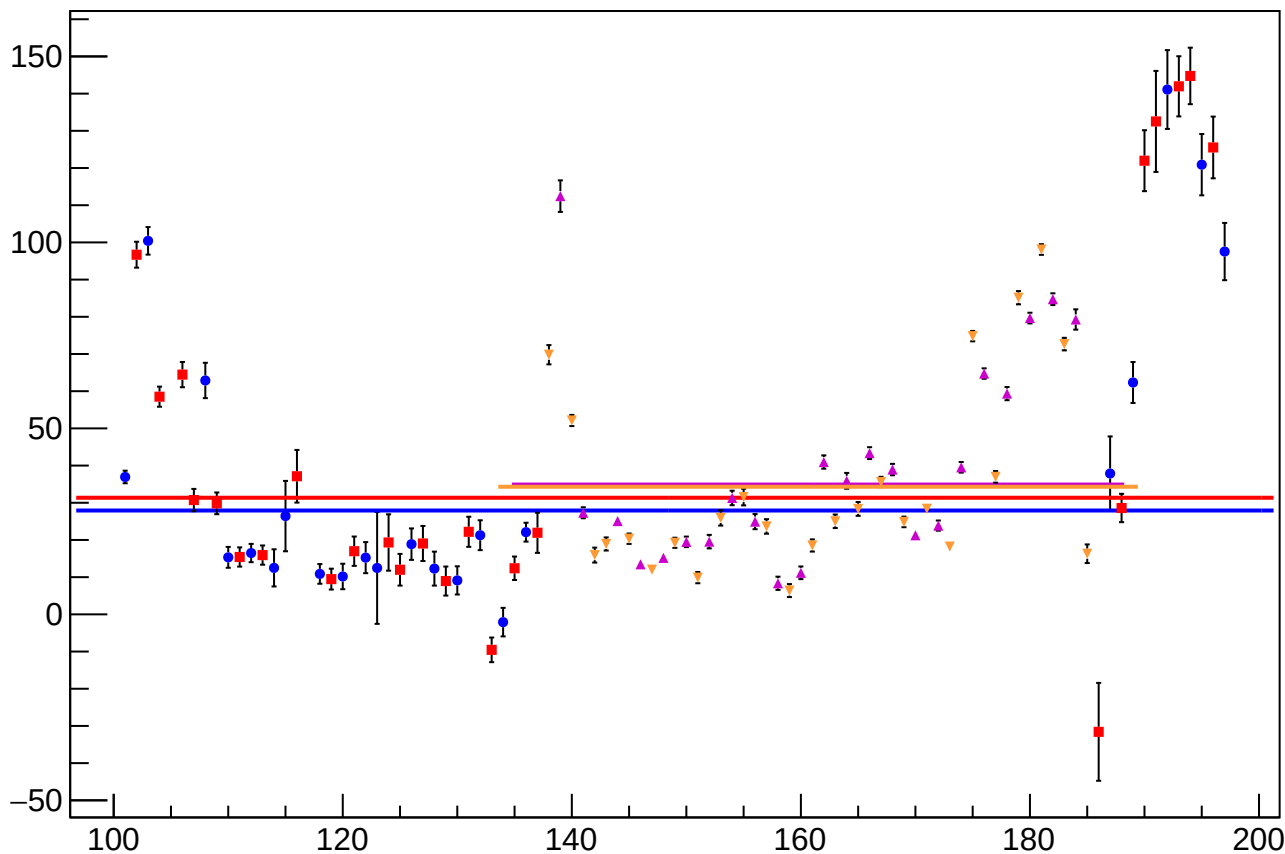
Right:  $-35.422 \pm 1.704$   $\chi^2/\text{NDF}$ : 997.5/11

In:  $-81.769 \pm 0.409$   $\chi^2/\text{NDF}$ : 11303.0/27

Out:  $-81.101 \pm 0.400$   $\chi^2/\text{NDF}$ : 15194.3/31

All:  $-81.427 \pm 0.286$   $\chi^2/\text{NDF}$ : 26498.6/59

reg\_asym\_sam4\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 27.918 $\pm$ 0.780  $\chi^2$ /NDF: 1068.8/21

Left Out: 34.306 $\pm$ 0.321  $\chi^2$ /NDF:6163.7/24

Right Out: 31.351 $\pm$ 0.777  $\chi^2$ /NDF: 1696.1/24

Left In: 34.893 $\pm$ 0.328  $\chi^2$ /NDF:4754.6/22

Left: 34.593 $\pm$ 0.229  $\chi^2$ /NDF: 10919.9/47

Right: 29.642 $\pm$ 0.550  $\chi^2$ /NDF: 2774.6/46

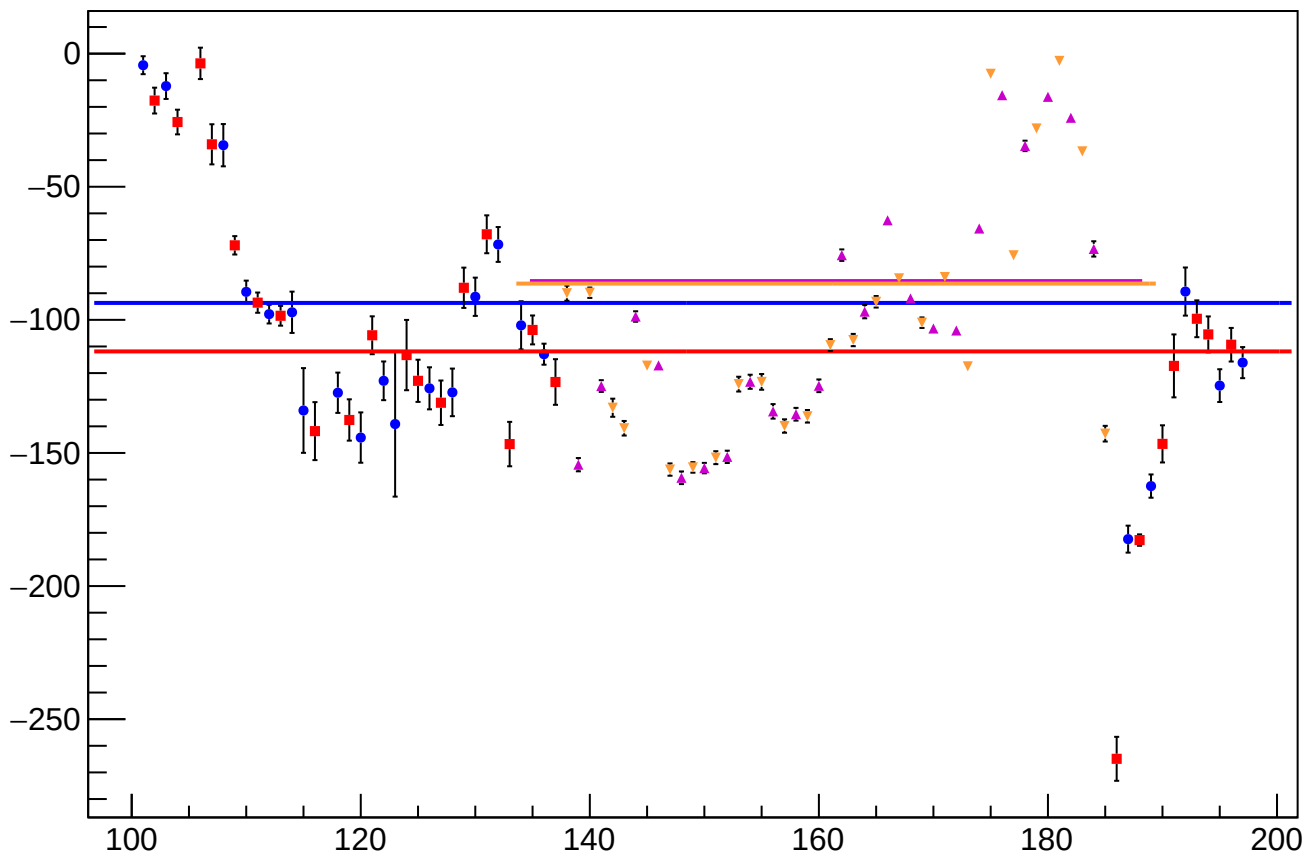
In: 33.844 $\pm$ 0.302  $\chi^2$ /NDF:5891.3/44

Out: 33.875 $\pm$ 0.297  $\chi^2$ /NDF:7872.1/49

All: 33.860 $\pm$ 0.212  $\chi^2$ /NDF: 13763.4/94



reg\_asym\_sam4\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -93.642 $\pm$ 1.230  $\chi^2$ /NDF: 1780.2/21

Left Out: -86.377 $\pm$ 0.409  $\chi^2$ /NDF:14435.1/24

Right Out: -111.858 $\pm$ 1.073  $\chi^2$ /NDF: 2896.1/24

Left In: -85.441 $\pm$ 0.413  $\chi^2$ /NDF:12998.9/22

Left: -85.914 $\pm$ 0.291  $\chi^2$ /NDF: 27436.5/47

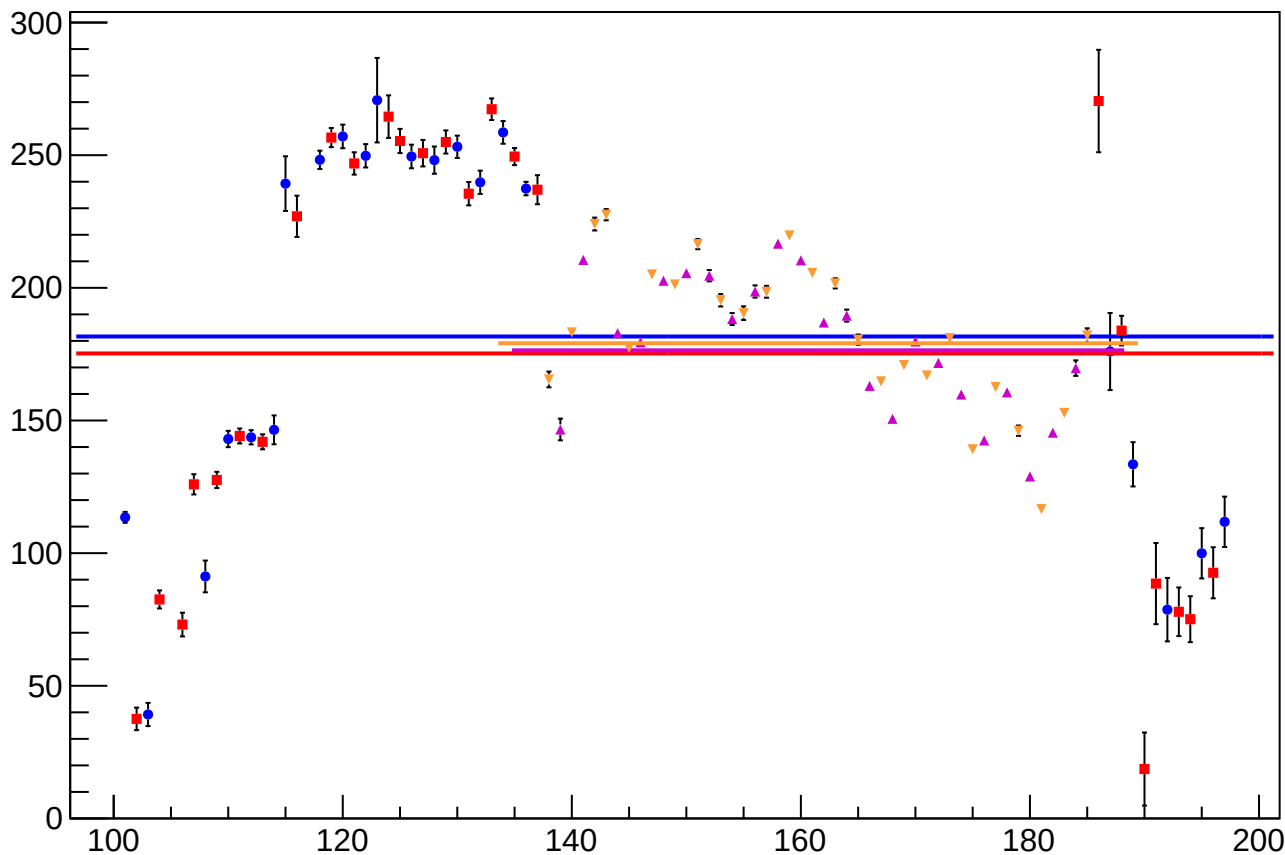
Right: -103.988 $\pm$ 0.809  $\chi^2$ /NDF: 4800.9/46

In: -86.272 $\pm$ 0.392  $\chi^2$ /NDF:14819.0/44

Out: -89.610 $\pm$ 0.382  $\chi^2$ /NDF:17823.5/49

All: -87.981 $\pm$ 0.274  $\chi^2$ /NDF: 32679.7/94

reg\_asym\_sam4\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 181.663 $\pm$ 0.896  $\chi^2$ /NDF: 5645.3/21

Left Out: 179.109 $\pm$ 0.363  $\chi^2$ /NDF: 5877.5/24

Right Out: 175.273 $\pm$ 0.896  $\chi^2$ /NDF: 6686.7/24

Left In: 176.449 $\pm$ 0.370  $\chi^2$ /NDF: 4442.1/22

Left: 177.804 $\pm$ 0.259  $\chi^2$ /NDF: 10345.9/47

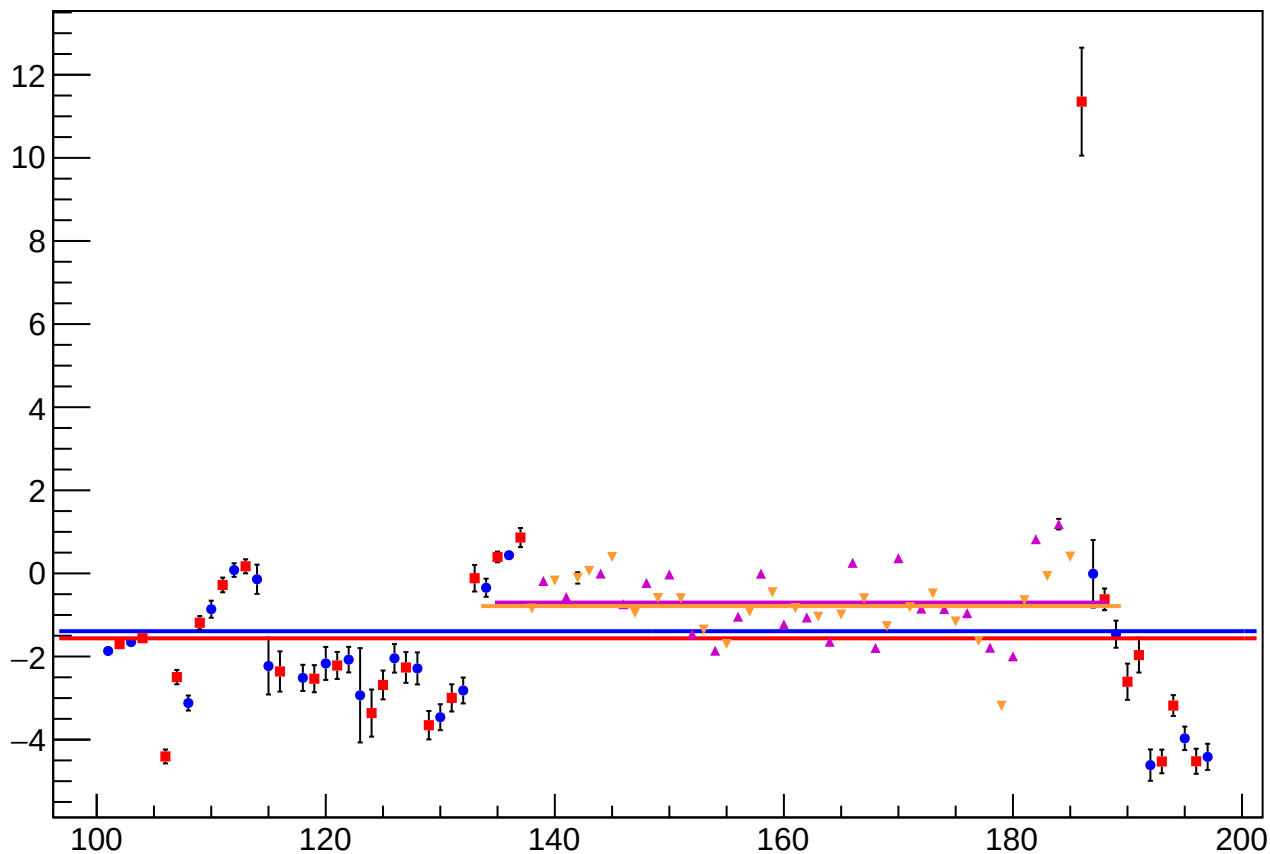
Right: 178.468 $\pm$ 0.633  $\chi^2$ /NDF: 12357.4/46

In: 177.208 $\pm$ 0.342  $\chi^2$ /NDF: 10116.3/44

Out: 178.569 $\pm$ 0.336  $\chi^2$ /NDF: 12579.9/49

All: 177.899 $\pm$ 0.240  $\chi^2$ /NDF: 22704.3/94

reg\_asym\_sam4\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-1.391 \pm 0.046$   $\chi^2/\text{NDF}$ : 890.9/21

Left Out:  $-0.787 \pm 0.017$   $\chi^2/\text{NDF}$ : 1760.7/24

Right Out:  $-1.562 \pm 0.043$   $\chi^2/\text{NDF}$ : 1301.4/24

Left In:  $-0.702 \pm 0.017$   $\chi^2/\text{NDF}$ : 2421.3/22

Left:  $-0.745 \pm 0.012$   $\chi^2/\text{NDF}$ : 4194.8/47

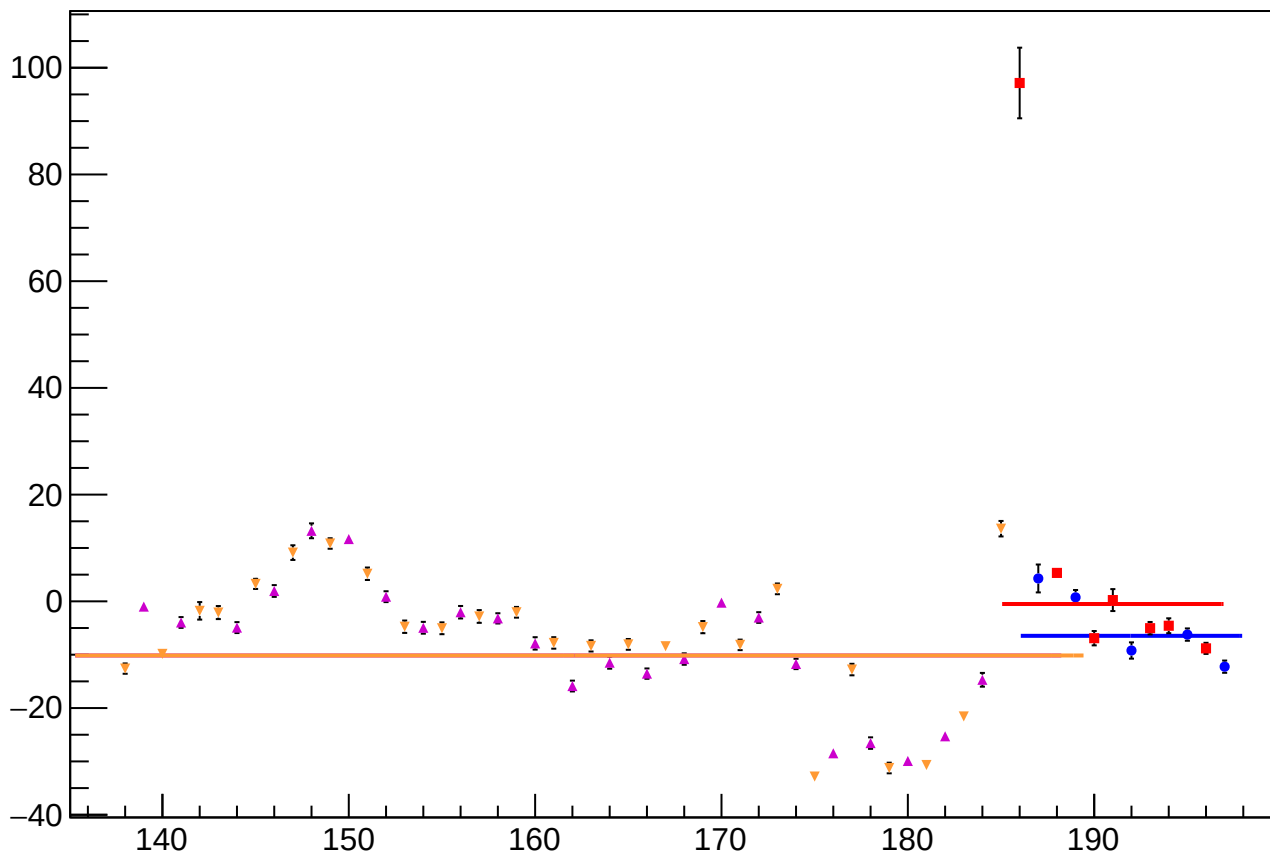
Right:  $-1.482 \pm 0.031$   $\chi^2/\text{NDF}$ : 2199.7/46

In:  $-0.783 \pm 0.016$   $\chi^2/\text{NDF}$ : 3510.0/44

Out:  $-0.887 \pm 0.016$   $\chi^2/\text{NDF}$ : 3343.1/49

All:  $-0.836 \pm 0.011$   $\chi^2/\text{NDF}$ : 6874.9/94

reg\_asym\_sam5\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-6.464 \pm 0.619$   $\chi^2/\text{NDF}$ : 73.2/4

Left Out:  $-10.147 \pm 0.202$   $\chi^2/\text{NDF}$ : 4128.5/24

Right Out:  $-0.500 \pm 0.429$   $\chi^2/\text{NDF}$ : 410.7/6

Left In:  $-10.149 \pm 0.204$   $\chi^2/\text{NDF}$ : 3491.7/22

Left:  $-10.148 \pm 0.143$   $\chi^2/\text{NDF}$ : 7620.2/47

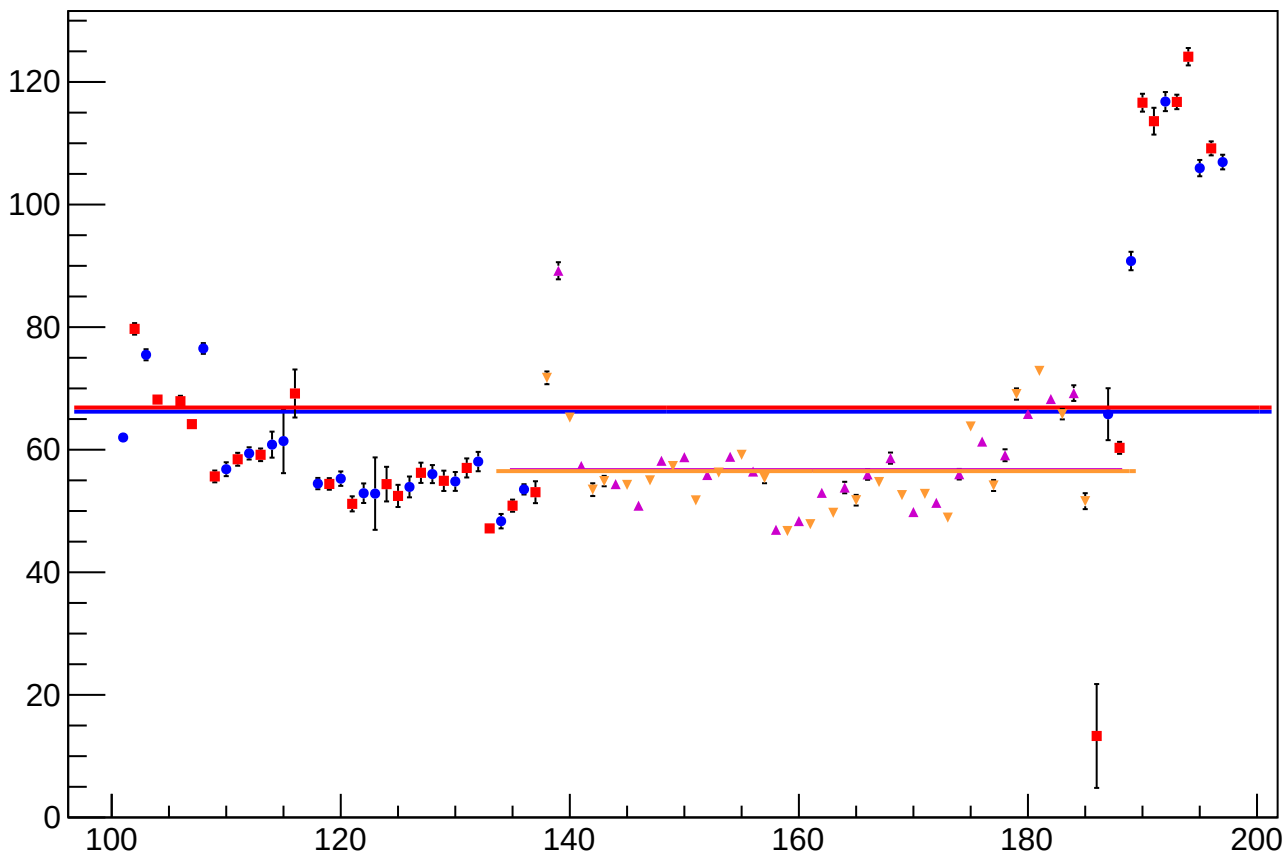
Right:  $-2.438 \pm 0.353$   $\chi^2/\text{NDF}$ : 546.6/11

In:  $-9.788 \pm 0.194$   $\chi^2/\text{NDF}$ : 3596.9/27

Out:  $-8.400 \pm 0.183$   $\chi^2/\text{NDF}$ : 4953.0/31

All:  $-9.054 \pm 0.133$   $\chi^2/\text{NDF}$ : 8577.0/59

reg\_asym\_sam5\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 66.210 $\pm$ 0.244  $\chi^2$ /NDF: 4774.7/21

Left Out: 56.508 $\pm$ 0.159  $\chi^2$ /NDF:1962.3/24

Right Out: 66.885 $\pm$ 0.225  $\chi^2$ /NDF: 8682.2/24

Left In: 56.674 $\pm$ 0.165  $\chi^2$ /NDF:1679.8/22

Left: 56.588 $\pm$ 0.114  $\chi^2$ /NDF: 3642.7/47

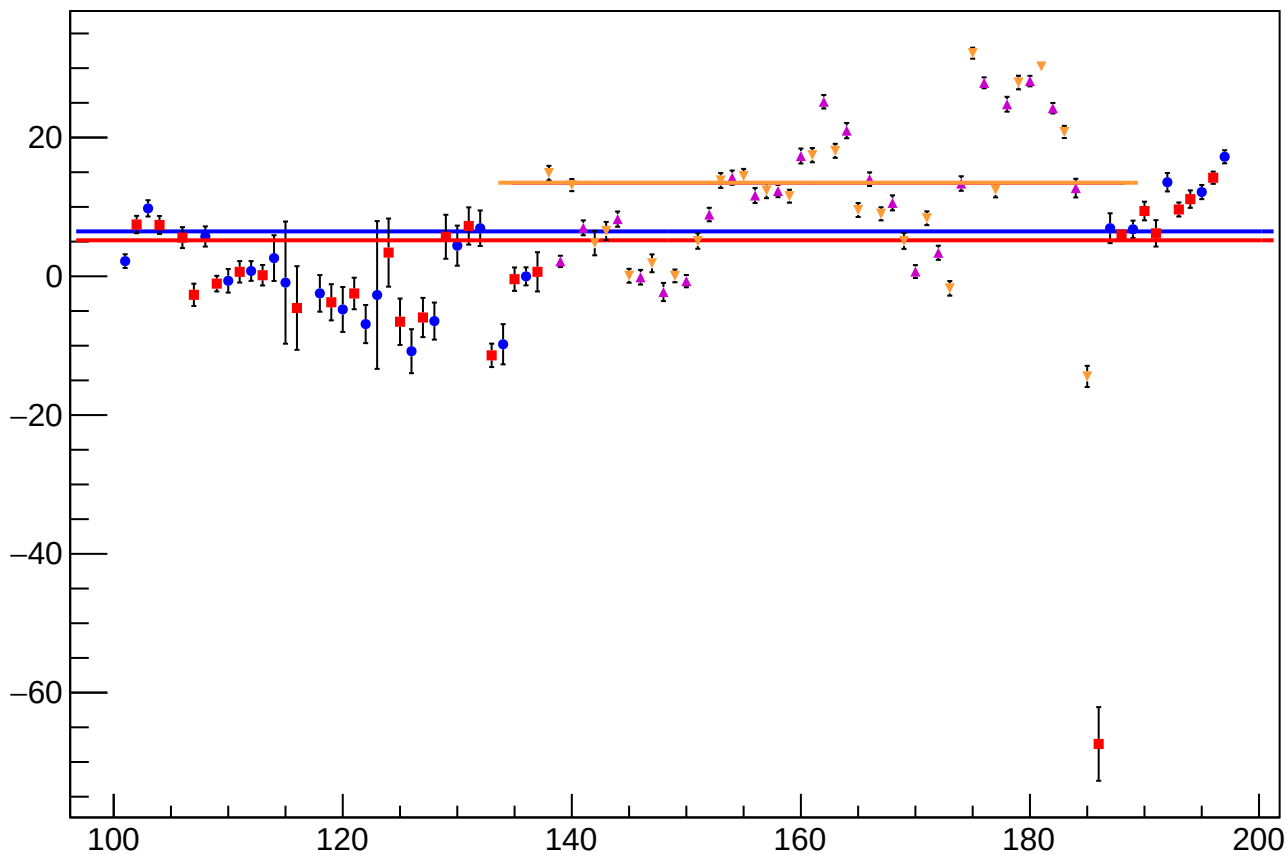
Right: 66.576 $\pm$ 0.165  $\chi^2$ /NDF: 13461.0/46

In: 59.658 $\pm$ 0.136  $\chi^2$ /NDF:7503.8/44

Out: 59.981 $\pm$ 0.130  $\chi^2$ /NDF:12065.3/49

All: 59.827 $\pm$ 0.094  $\chi^2$ /NDF: 19572.1/94

reg\_asym\_sam5\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $6.473 \pm 0.348$   $\chi^2/\text{NDF}$ : 409.4/21

Left Out:  $13.485 \pm 0.202$   $\chi^2/\text{NDF}$ : 2731.0/24

Right Out:  $5.191 \pm 0.279$   $\chi^2/\text{NDF}$ : 590.6/24

Left In:  $13.456 \pm 0.203$   $\chi^2/\text{NDF}$ : 2371.9/22

Left:  $13.471 \pm 0.143$   $\chi^2/\text{NDF}$ : 5102.9/47

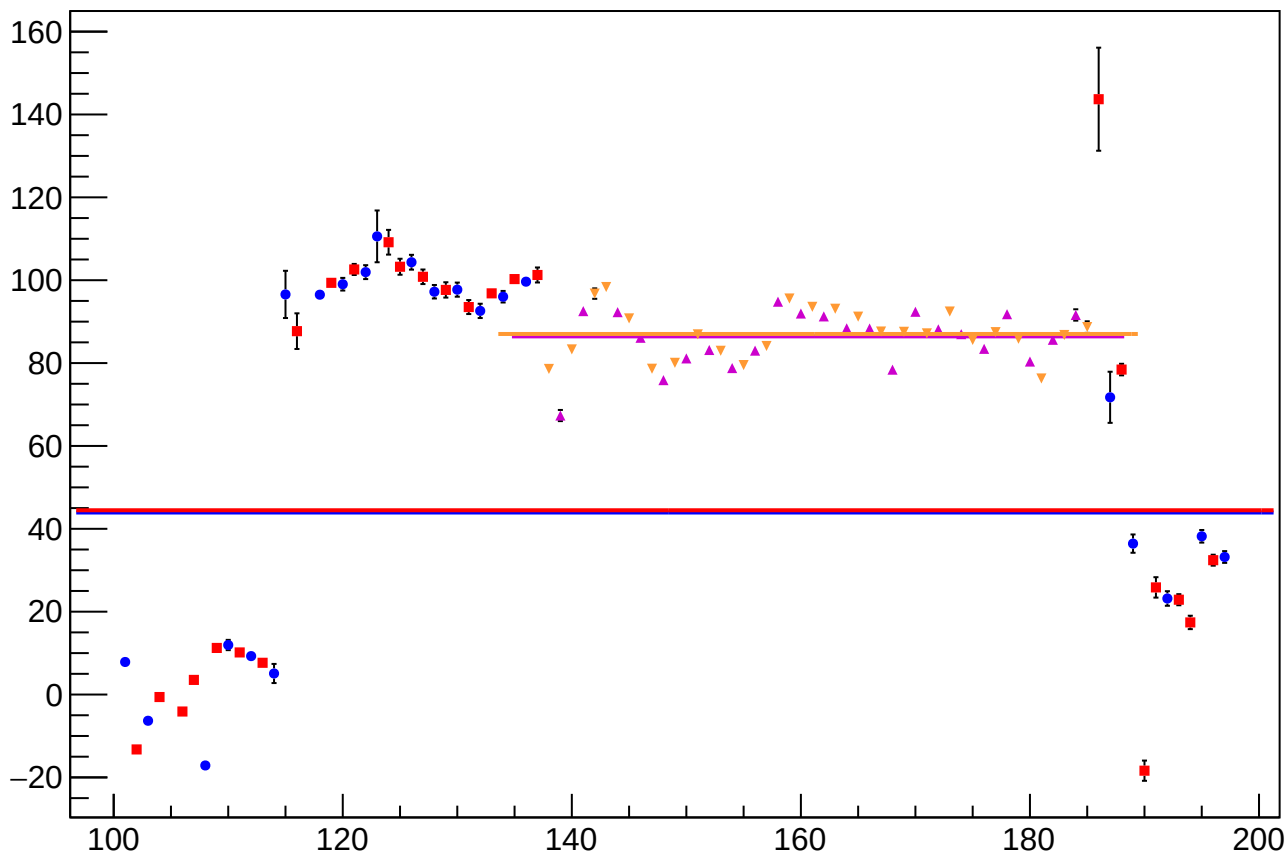
Right:  $5.692 \pm 0.218$   $\chi^2/\text{NDF}$ : 1008.3/46

In:  $11.681 \pm 0.175$   $\chi^2/\text{NDF}$ : 3082.0/44

Out:  $10.632 \pm 0.163$   $\chi^2/\text{NDF}$ : 3902.3/49

All:  $11.120 \pm 0.120$   $\chi^2/\text{NDF}$ : 7003.4/94

reg\_asym\_sam5\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 43.935 $\pm$ 0.284  $\chi^2$ /NDF: 25335.1/21

Left Out: 87.023 $\pm$ 0.179  $\chi^2$ /NDF:1057.2/24

Right Out: 44.476 $\pm$ 0.266  $\chi^2$ /NDF: 29900.3/24

Left In: 86.443 $\pm$ 0.184  $\chi^2$ /NDF:1038.6/22

Left: 86.740 $\pm$ 0.128  $\chi^2$ /NDF: 2100.8/47

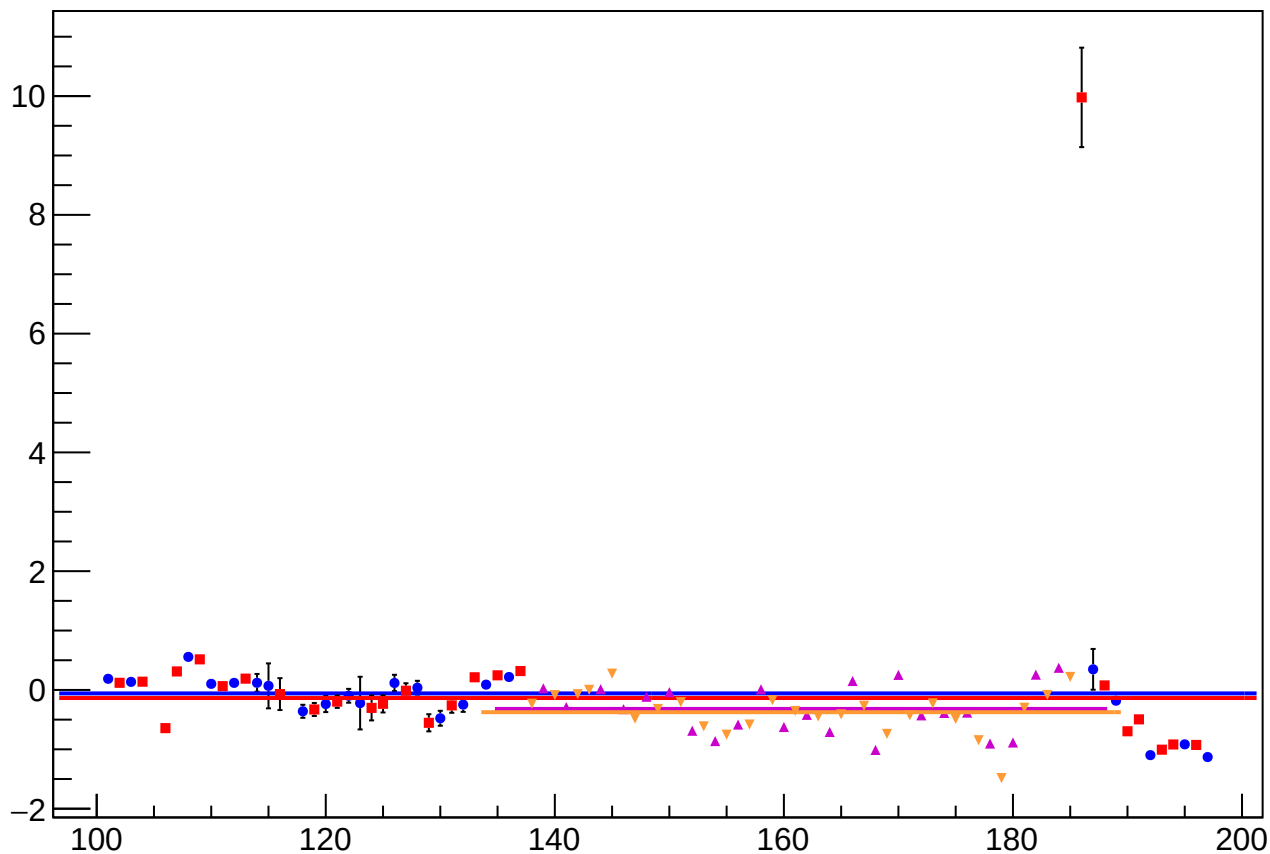
Right: 44.224 $\pm$ 0.194  $\chi^2$ /NDF: 55237.3/46

In: 73.905 $\pm$ 0.154  $\chi^2$ /NDF:42117.5/44

Out: 73.689 $\pm$ 0.149  $\chi^2$ /NDF:48569.6/49

All: 73.793 $\pm$ 0.107  $\chi^2$ /NDF: 90688.2/94

reg\_asym\_sam5\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.059 \pm 0.012$   $\chi^2/\text{NDF}$ : 1854.9/21

Left Out:  $-0.375 \pm 0.008$   $\chi^2/\text{NDF}$ : 1657.5/24

Right Out:  $-0.136 \pm 0.011$   $\chi^2/\text{NDF}$ : 2165.7/24

Left In:  $-0.320 \pm 0.008$   $\chi^2/\text{NDF}$ : 2325.0/22

Left:  $-0.348 \pm 0.006$   $\chi^2/\text{NDF}$ : 4005.2/47

Right:  $-0.101 \pm 0.008$   $\chi^2/\text{NDF}$ : 4042.5/46

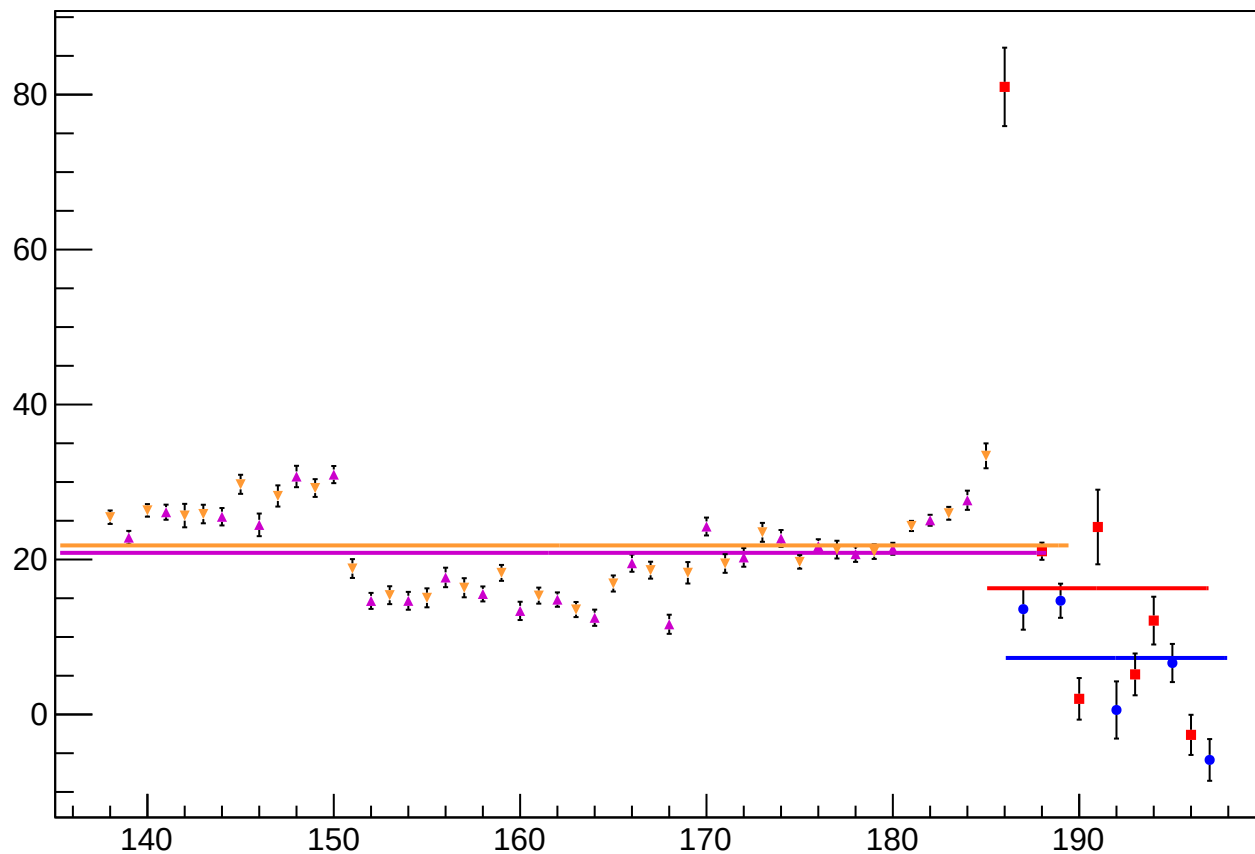
In:  $-0.240 \pm 0.007$   $\chi^2/\text{NDF}$ : 4493.1/44

Out:  $-0.292 \pm 0.007$   $\chi^2/\text{NDF}$ : 4122.1/49

All:  $-0.267 \pm 0.005$   $\chi^2/\text{NDF}$ : 8644.8/94



reg\_asym\_sam6\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $7.295 \pm 1.175$   $\chi^2/\text{NDF}: 44.1/4$

Left Out:  $21.818 \pm 0.210$   $\chi^2/\text{NDF}: 522.7/24$

Right Out:  $16.291 \pm 0.837$   $\chi^2/\text{NDF}: 285.2/6$

Left In:  $20.860 \pm 0.216$   $\chi^2/\text{NDF}: 575.5/22$

Left:  $21.351 \pm 0.151$   $\chi^2/\text{NDF}: 1108.3/47$

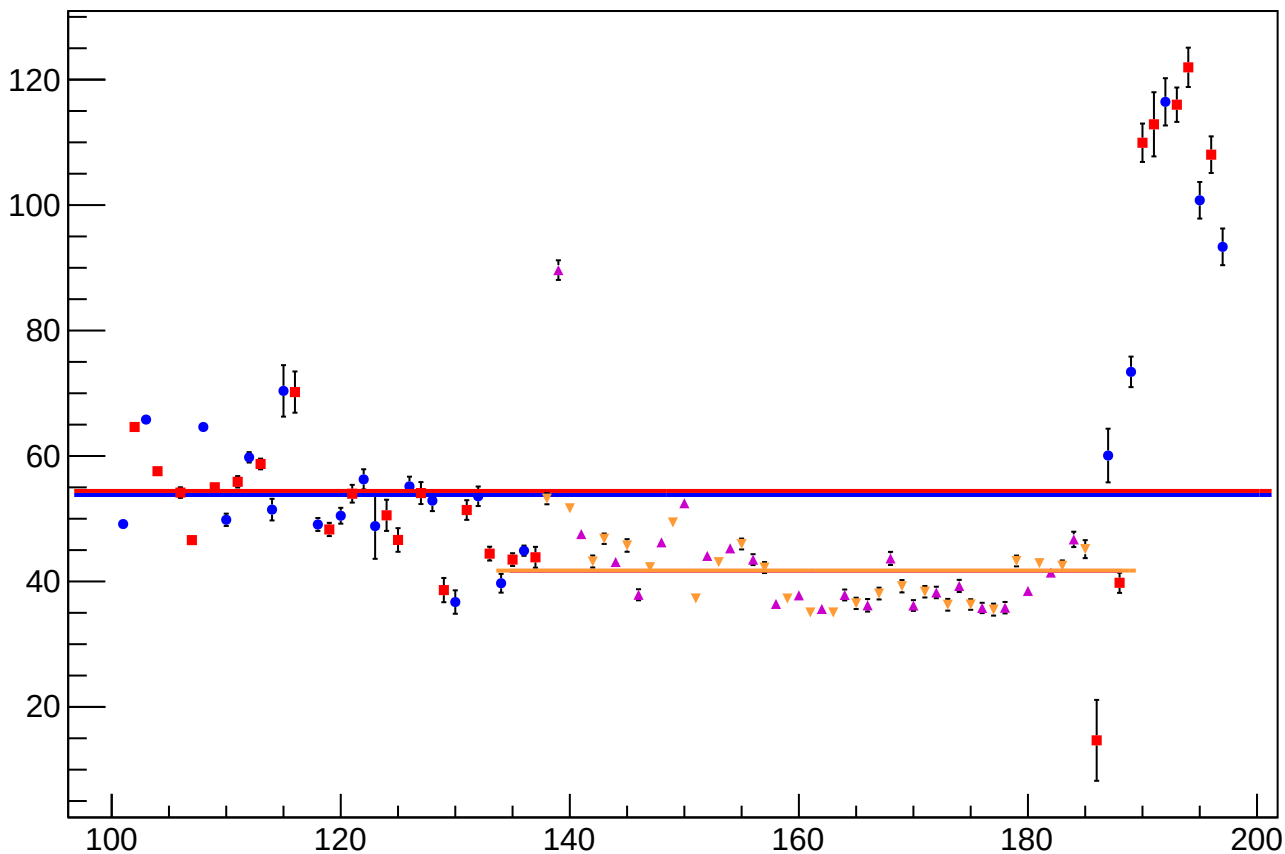
Right:  $13.265 \pm 0.682$   $\chi^2/\text{NDF}: 368.2/11$

In:  $20.419 \pm 0.212$   $\chi^2/\text{NDF}: 748.6/27$

Out:  $21.490 \pm 0.204$   $\chi^2/\text{NDF}: 848.9/31$

All:  $20.975 \pm 0.147$   $\chi^2/\text{NDF}: 1610.8/59$

reg\_asym\_sam6\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 53.786 $\pm$ 0.208  $\chi^2$ /NDF: 1999.0/21

Left Out: 41.732 $\pm$ 0.166  $\chi^2$ /NDF:1014.0/24

Right Out: 54.430 $\pm$ 0.222  $\chi^2$ /NDF: 2768.5/24

Left In: 41.682 $\pm$ 0.173  $\chi^2$ /NDF:1715.9/22

Left: 41.709 $\pm$ 0.120  $\chi^2$ /NDF: 2729.9/47

Right: 54.087 $\pm$ 0.152  $\chi^2$ /NDF: 4772.0/46

In: 46.653 $\pm$ 0.133  $\chi^2$ /NDF:5715.4/44

Out: 46.271 $\pm$ 0.133  $\chi^2$ /NDF:5877.6/49

All: 46.462 $\pm$ 0.094  $\chi^2$ /NDF: 11597.2/94

reg\_asym\_sam6\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $5.092 \pm 0.342$   $\chi^2/\text{NDF}: 4470.2/21$

Left Out:  $52.116 \pm 0.210$   $\chi^2/\text{NDF}: 1445.4/24$

Right Out:  $11.755 \pm 0.334$   $\chi^2/\text{NDF}: 5694.6/24$

Left In:  $53.447 \pm 0.214$   $\chi^2/\text{NDF}: 1167.6/22$

Left:  $52.769 \pm 0.150$   $\chi^2/\text{NDF}: 2632.6/47$

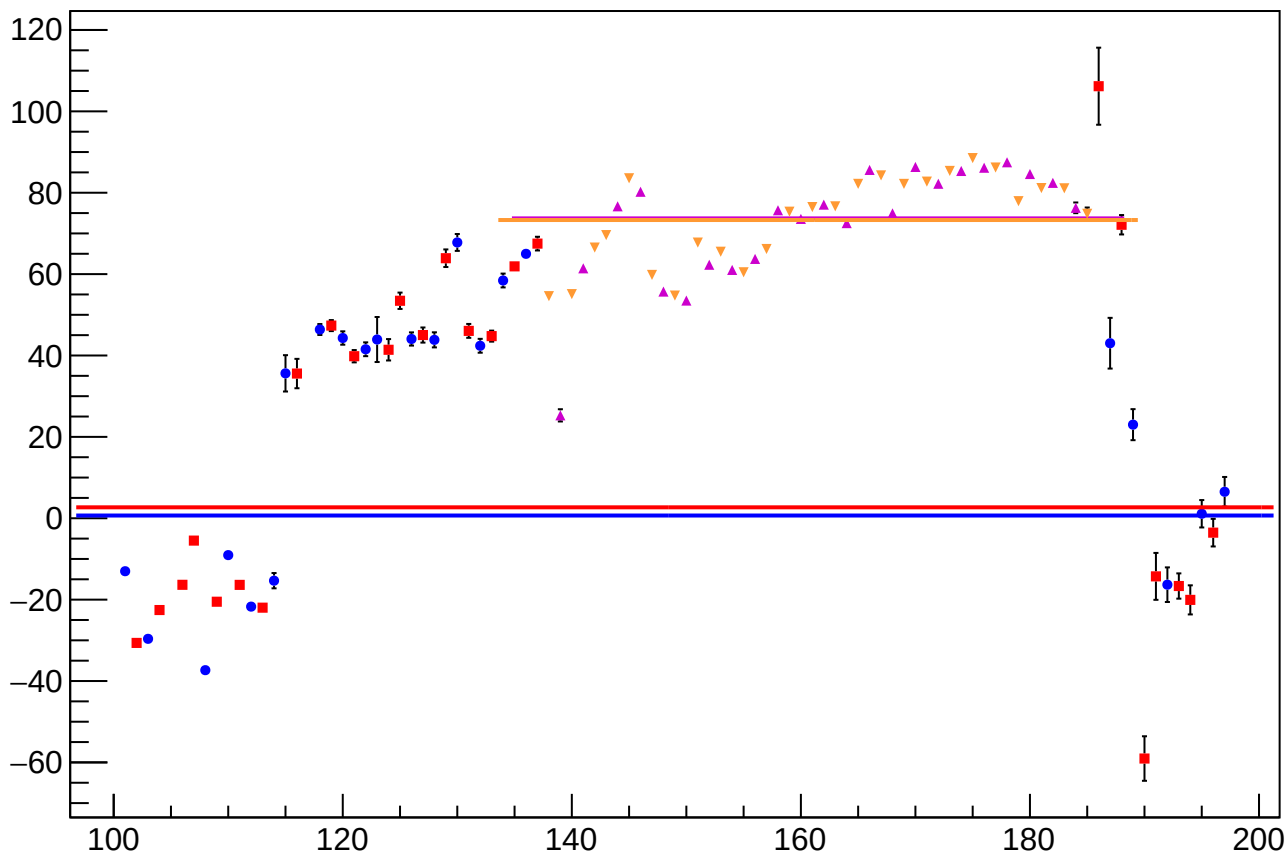
Right:  $8.497 \pm 0.239$   $\chi^2/\text{NDF}: 10358.8/46$

In:  $39.800 \pm 0.182$   $\chi^2/\text{NDF}: 19990.4/44$

Out:  $40.669 \pm 0.178$   $\chi^2/\text{NDF}: 17572.9/49$

All:  $40.243 \pm 0.127$   $\chi^2/\text{NDF}: 37575.0/94$

reg\_asym\_sam6\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.673 $\pm$ 0.244     $\chi^2$ /NDF: 18523.1/21

Left Out: 73.294 $\pm$ 0.187     $\chi^2$ /NDF:3148.2/24

Right Out: 2.688 $\pm$ 0.263     $\chi^2$ /NDF: 16570.8/24

Left In: 73.699 $\pm$ 0.194     $\chi^2$ /NDF:3901.1/22

Left: 73.489 $\pm$ 0.135     $\chi^2$ /NDF: 7051.6/47

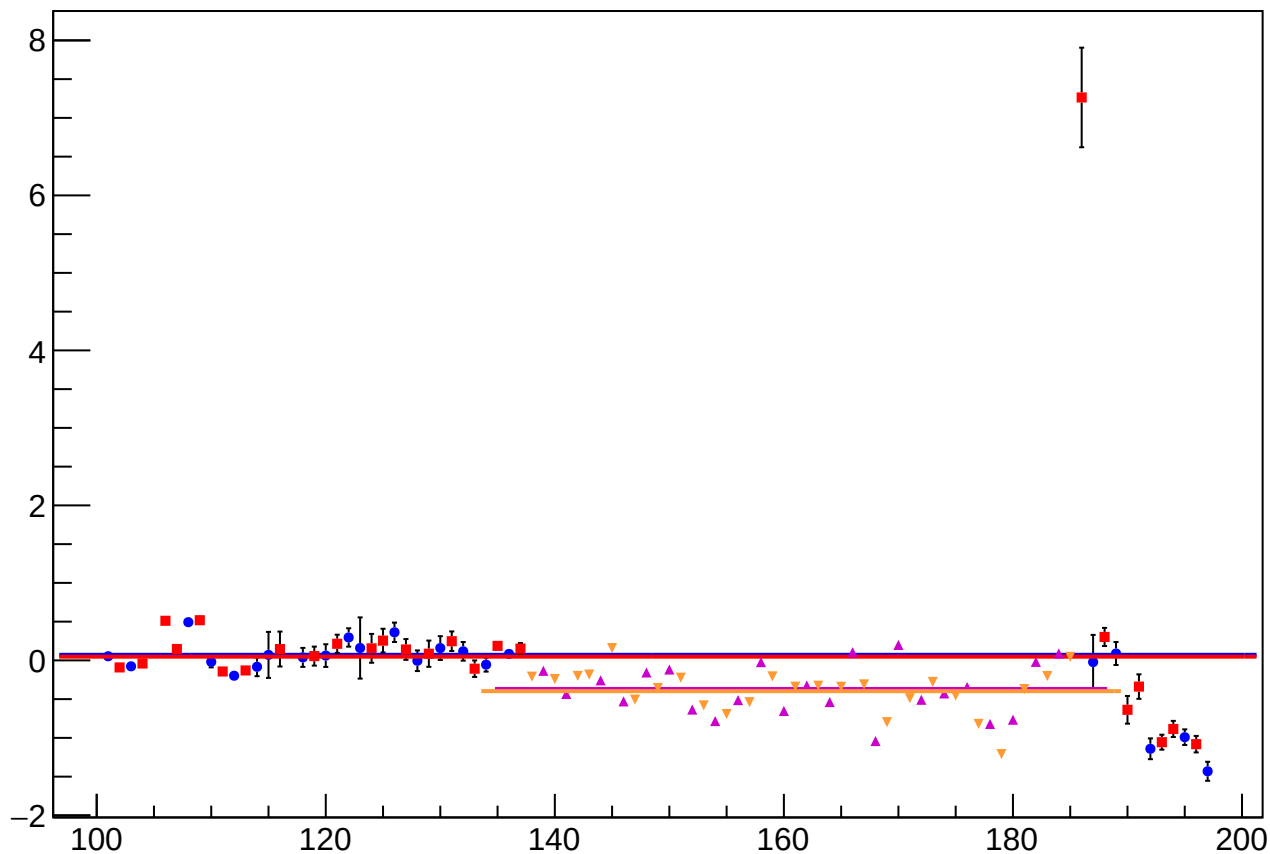
Right: 1.608 $\pm$ 0.179     $\chi^2$ /NDF: 35125.4/46

In: 45.495 $\pm$ 0.152     $\chi^2$ /NDF:77228.9/44

Out: 49.495 $\pm$ 0.153     $\chi^2$ /NDF:67594.8/49

All: 47.486 $\pm$ 0.108     $\chi^2$ /NDF: 145169.1/94

reg\_asym\_sam6\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.072 \pm 0.011$   $\chi^2/\text{NDF}: 752.2/21$

Left Out:  $-0.397 \pm 0.009$   $\chi^2/\text{NDF}: 943.5/24$

Right Out:  $0.048 \pm 0.011$   $\chi^2/\text{NDF}: 875.3/24$

Left In:  $-0.369 \pm 0.009$   $\chi^2/\text{NDF}: 1322.7/22$

Left:  $-0.383 \pm 0.006$   $\chi^2/\text{NDF}: 2271.6/47$

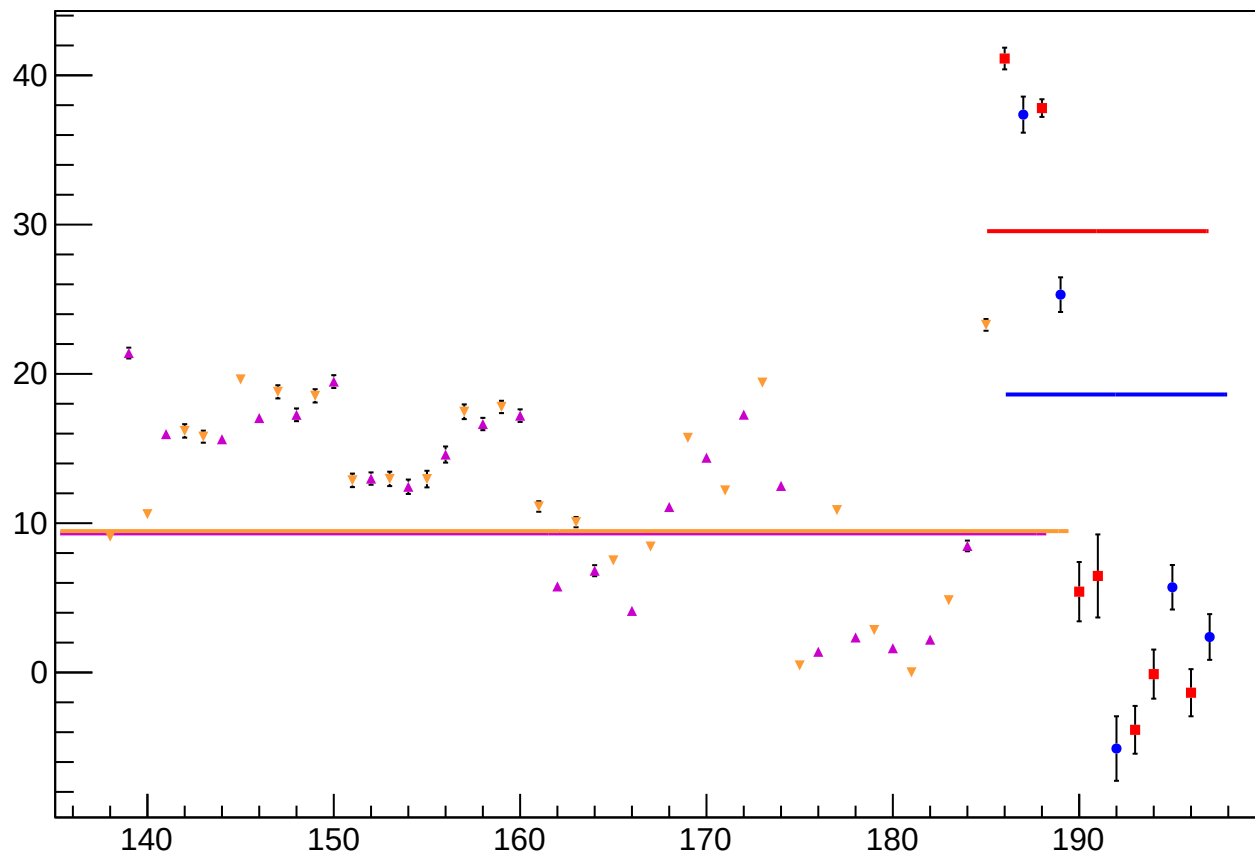
Right:  $0.060 \pm 0.008$   $\chi^2/\text{NDF}: 1629.9/46$

In:  $-0.198 \pm 0.007$   $\chi^2/\text{NDF}: 3082.4/44$

Out:  $-0.225 \pm 0.007$   $\chi^2/\text{NDF}: 2861.8/49$

All:  $-0.212 \pm 0.005$   $\chi^2/\text{NDF}: 5952.8/94$

reg\_asym\_sam7\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 18.621+/-0.630  $\chi^2/\text{NDF}$ : 581.8/4

Left Out: 9.470+/-0.061  $\chi^2/\text{NDF}$ : 12578.0/24

Right Out: 29.562+/-0.398  $\chi^2/\text{NDF}$ : 1808.7/6

Left In: 9.315+/-0.063  $\chi^2/\text{NDF}$ : 11007.3/22

Left: 9.394+/-0.044  $\chi^2/\text{NDF}$ : 23588.5/47

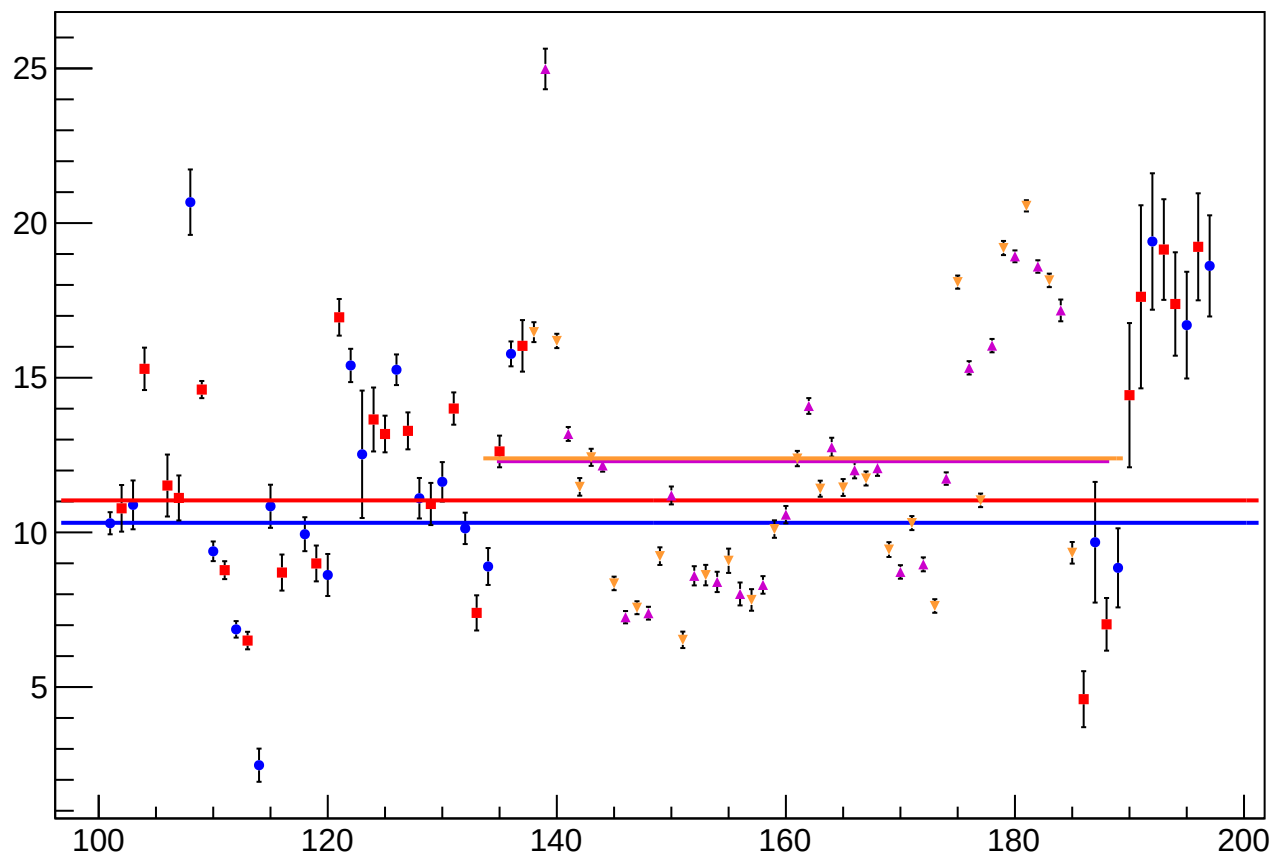
Right: 26.438+/-0.337  $\chi^2/\text{NDF}$ : 2605.9/11

In: 9.406+/-0.062  $\chi^2/\text{NDF}$ : 11805.0/27

Out: 9.935+/-0.061  $\chi^2/\text{NDF}$ : 16871.2/31

All: 9.678+/-0.044  $\chi^2/\text{NDF}$ : 28713.2/59

reg\_asym\_sam7\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $10.310 \pm 0.117$   $\chi^2/\text{NDF}: 936.0/21$

Left Out:  $12.393 \pm 0.050$   $\chi^2/\text{NDF}: 7525.9/24$

Right Out:  $11.034 \pm 0.113$   $\chi^2/\text{NDF}: 944.6/24$

Left In:  $12.302 \pm 0.051$   $\chi^2/\text{NDF}: 5661.3/22$

Left:  $12.349 \pm 0.036$   $\chi^2/\text{NDF}: 13188.8/47$

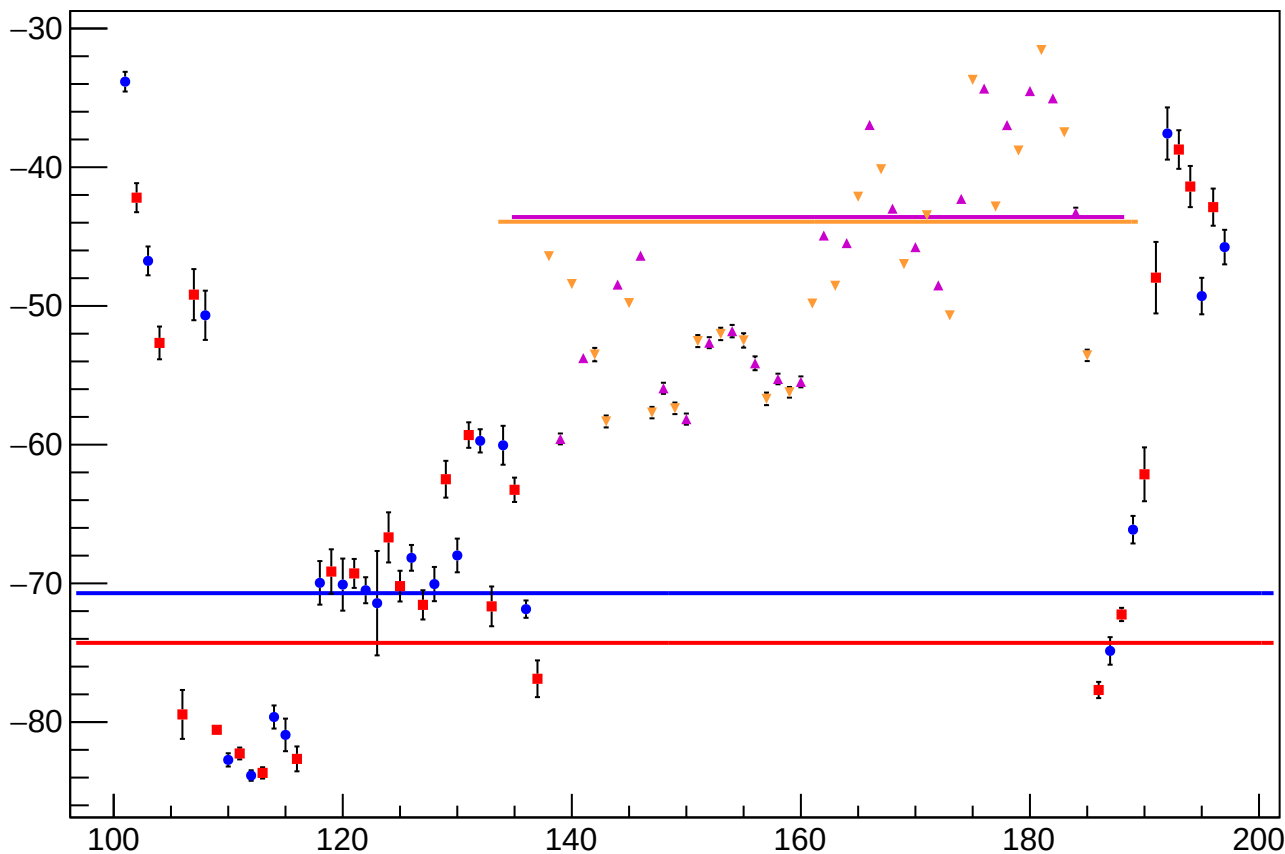
Right:  $10.684 \pm 0.082$   $\chi^2/\text{NDF}: 1900.3/46$

In:  $11.985 \pm 0.047$   $\chi^2/\text{NDF}: 6839.3/44$

Out:  $12.174 \pm 0.046$   $\chi^2/\text{NDF}: 8590.7/49$

All:  $12.082 \pm 0.033$   $\chi^2/\text{NDF}: 15438.3/94$

reg\_asym\_sam7\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-70.706 \pm 0.185$   $\chi^2/\text{NDF}: 6639.9/21$

Left Out:  $-43.930 \pm 0.062$   $\chi^2/\text{NDF}: 17576.0/24$

Right Out:  $-74.289 \pm 0.159$   $\chi^2/\text{NDF}: 5220.0/24$

Left In:  $-43.591 \pm 0.063$   $\chi^2/\text{NDF}: 15574.9/22$

Left:  $-43.763 \pm 0.044$   $\chi^2/\text{NDF}: 33165.5/47$

Right:  $-72.773 \pm 0.121$   $\chi^2/\text{NDF}: 12075.6/46$

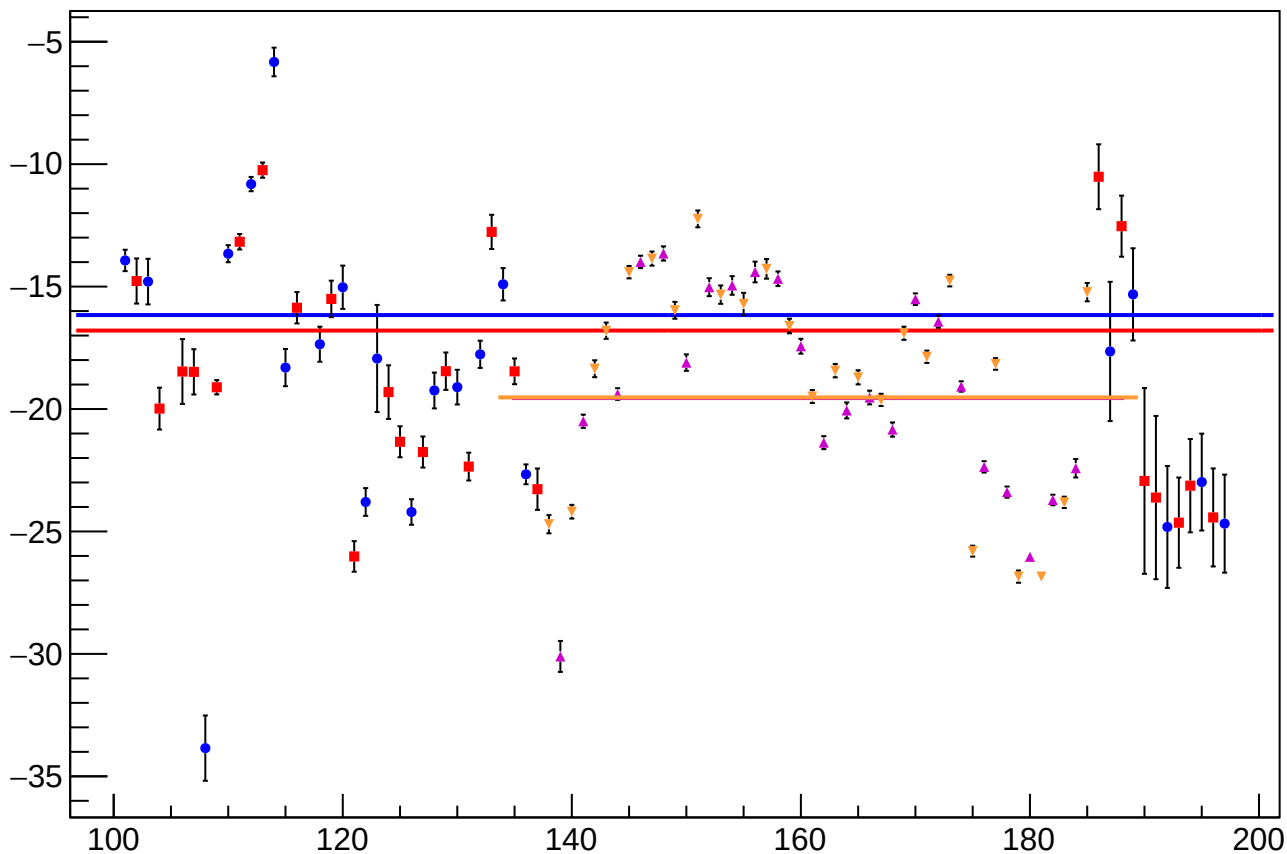
In:  $-46.406 \pm 0.060$   $\chi^2/\text{NDF}: 41401.7/44$

Out:  $-47.953 \pm 0.058$   $\chi^2/\text{NDF}: 54541.5/49$

All:  $-47.205 \pm 0.042$   $\chi^2/\text{NDF}: 96289.6/94$



reg\_asym\_sam7\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Left: -19.539  $\pm$  0.040  $\chi^2/\text{NDF}$ : 10852.2/47

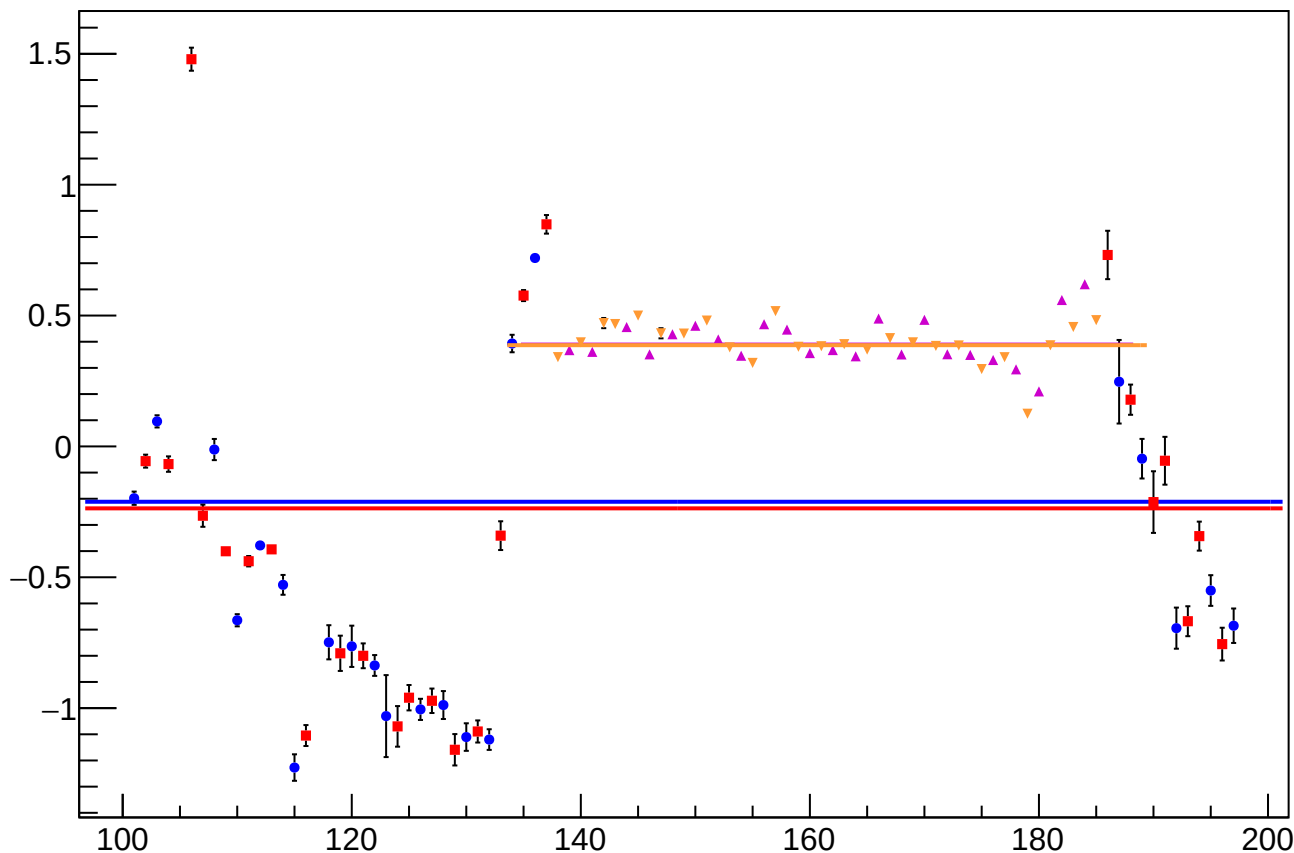
Right: -16.491  $\pm$  0.091  $\chi^2/\text{NDF}$ : 2986.9/46

In: -19.010  $\pm$  0.052  $\chi^2/\text{NDF}$ : 6606.1/44

Out: -19.077  $\pm$  0.051  $\chi^2/\text{NDF}$ : 8176.4/49

All: -19.044  $\pm$  0.037  $\chi^2/\text{NDF}$ : 14783.3/94

reg\_asym\_sam7\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.211 \pm 0.007$   $\chi^2/\text{NDF}$ : 6478.1/21

Left Out:  $0.387 \pm 0.003$   $\chi^2/\text{NDF}$ : 989.2/24

Right Out:  $-0.237 \pm 0.007$   $\chi^2/\text{NDF}$ : 6501.4/24

Left In:  $0.389 \pm 0.003$   $\chi^2/\text{NDF}$ : 1257.1/22

Left:  $0.388 \pm 0.002$   $\chi^2/\text{NDF}$ : 2246.7/47

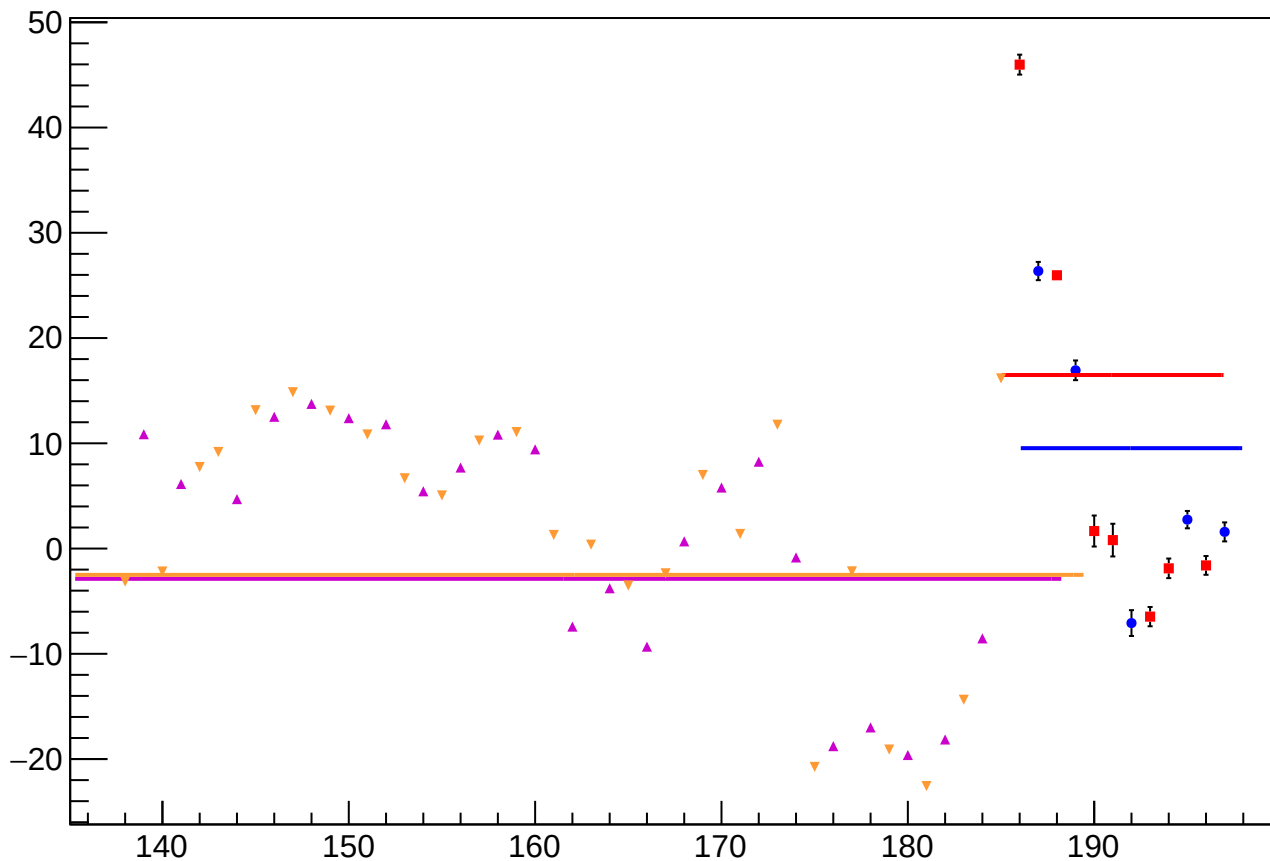
Right:  $-0.225 \pm 0.005$   $\chi^2/\text{NDF}$ : 12985.7/46

In:  $0.322 \pm 0.002$   $\chi^2/\text{NDF}$ : 13663.5/44

Out:  $0.312 \pm 0.002$   $\chi^2/\text{NDF}$ : 14620.1/49

All:  $0.317 \pm 0.002$   $\chi^2/\text{NDF}$ : 28292.6/94

reg\_asym\_sam8\_diff\_bpm1X\_slope vs Slug, Sign Corrected



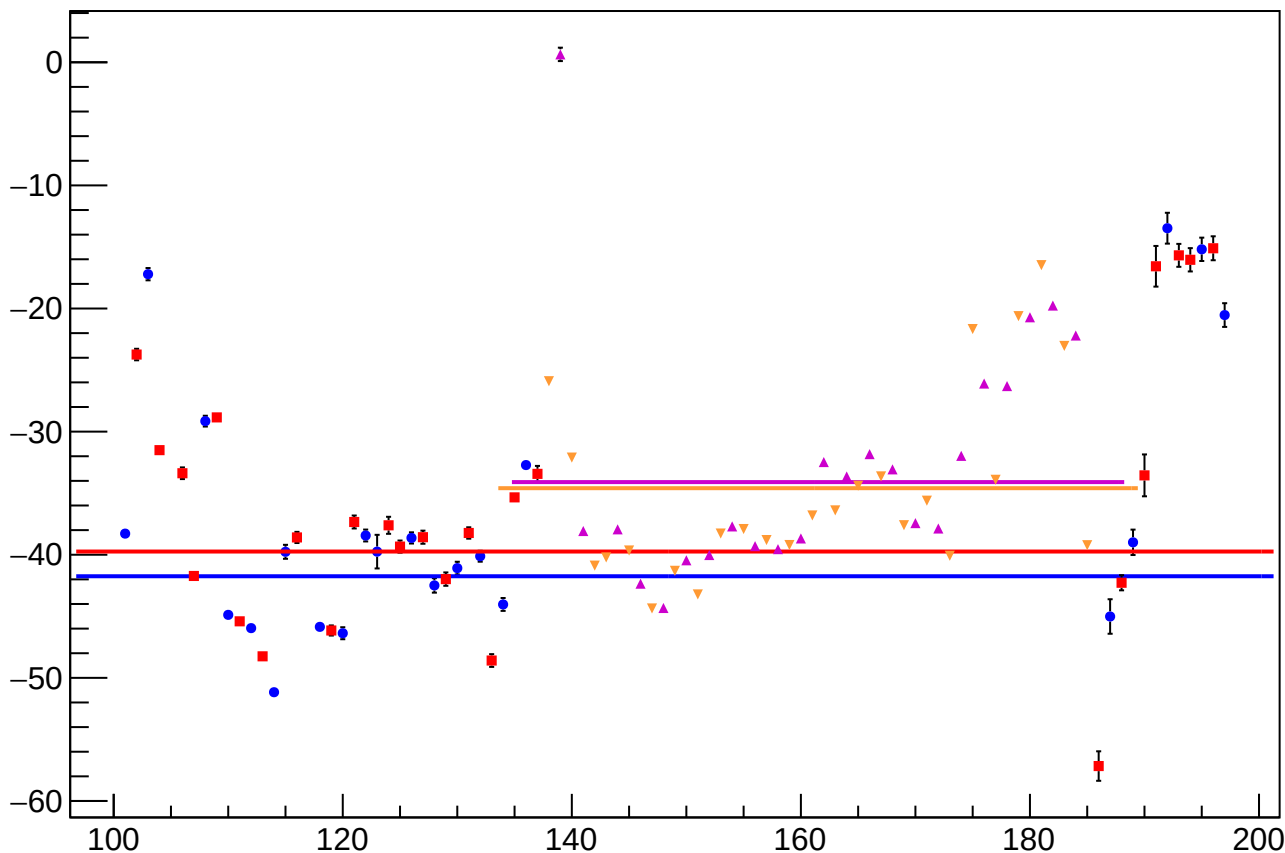
Right In:  $9.537 \pm 0.414$   $\chi^2/\text{NDF}: 767.3/4$   
 Left Out:  $-2.499 \pm 0.053$   $\chi^2/\text{NDF}: 55930.9/24$   
 Right Out:  $16.488 \pm 0.301$   $\chi^2/\text{NDF}: 3091.8/6$   
 Left In:  $-2.876 \pm 0.055$   $\chi^2/\text{NDF}: 46380.9/22$

Left:  $-2.681 \pm 0.038$   $\chi^2/\text{NDF}: 102336.4/47$   
 Right:  $14.088 \pm 0.243$   $\chi^2/\text{NDF}: 4043.6/11$

In:  $-2.664 \pm 0.054$   $\chi^2/\text{NDF}: 48031.6/27$   
 Out:  $-1.928 \pm 0.052$   $\chi^2/\text{NDF}: 62890.1/31$

All:  $-2.282 \pm 0.038$   $\chi^2/\text{NDF}: 111017.4/59$

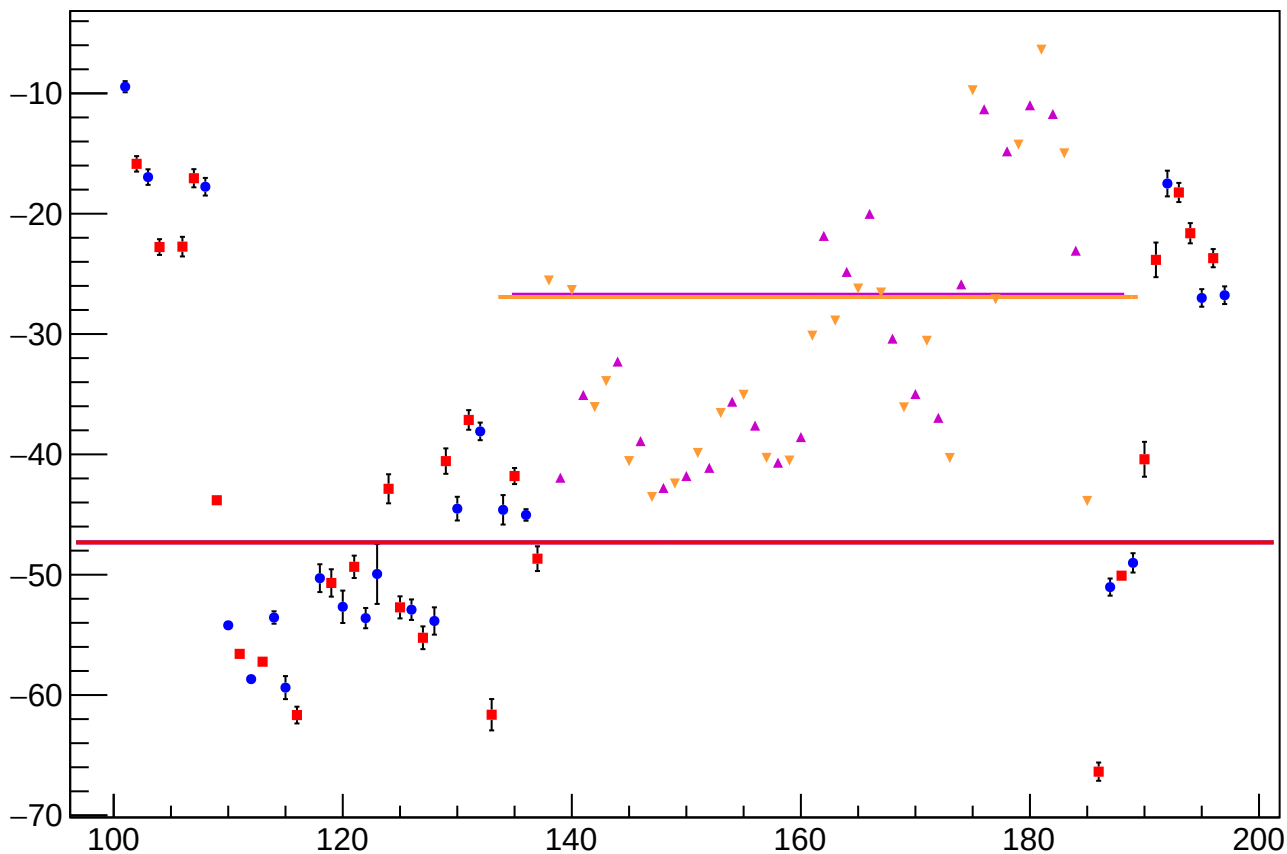
reg\_asym\_sam8\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-41.747 \pm 0.077$   $\chi^2/\text{NDF}: 8396.2/21$   
 Left Out:  $-34.594 \pm 0.042$   $\chi^2/\text{NDF}: 34404.6/24$   
 Right Out:  $-39.739 \pm 0.071$   $\chi^2/\text{NDF}: 13288.2/24$   
 Left In:  $-34.099 \pm 0.044$   $\chi^2/\text{NDF}: 29370.6/22$

Left:  $-34.358 \pm 0.030$   $\chi^2/\text{NDF}: 63841.7/47$   
 Right:  $-40.672 \pm 0.052$   $\chi^2/\text{NDF}: 22050.8/46$   
 In:  $-35.980 \pm 0.038$   $\chi^2/\text{NDF}: 45248.8/44$   
 Out:  $-35.912 \pm 0.036$   $\chi^2/\text{NDF}: 51546.6/49$   
 All:  $-35.944 \pm 0.026$   $\chi^2/\text{NDF}: 96797.0/94$

reg\_asym\_sam8\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-47.312 \pm 0.117$   $\chi^2/\text{NDF}$ : 17158.9/21

Left Out:  $-26.920 \pm 0.053$   $\chi^2/\text{NDF}$ : 49198.9/24

Right Out:  $-47.316 \pm 0.099$   $\chi^2/\text{NDF}$ : 15393.2/24

Left In:  $-26.733 \pm 0.055$   $\chi^2/\text{NDF}$ : 42643.0/22

Left:  $-26.829 \pm 0.038$   $\chi^2/\text{NDF}$ : 91847.9/47

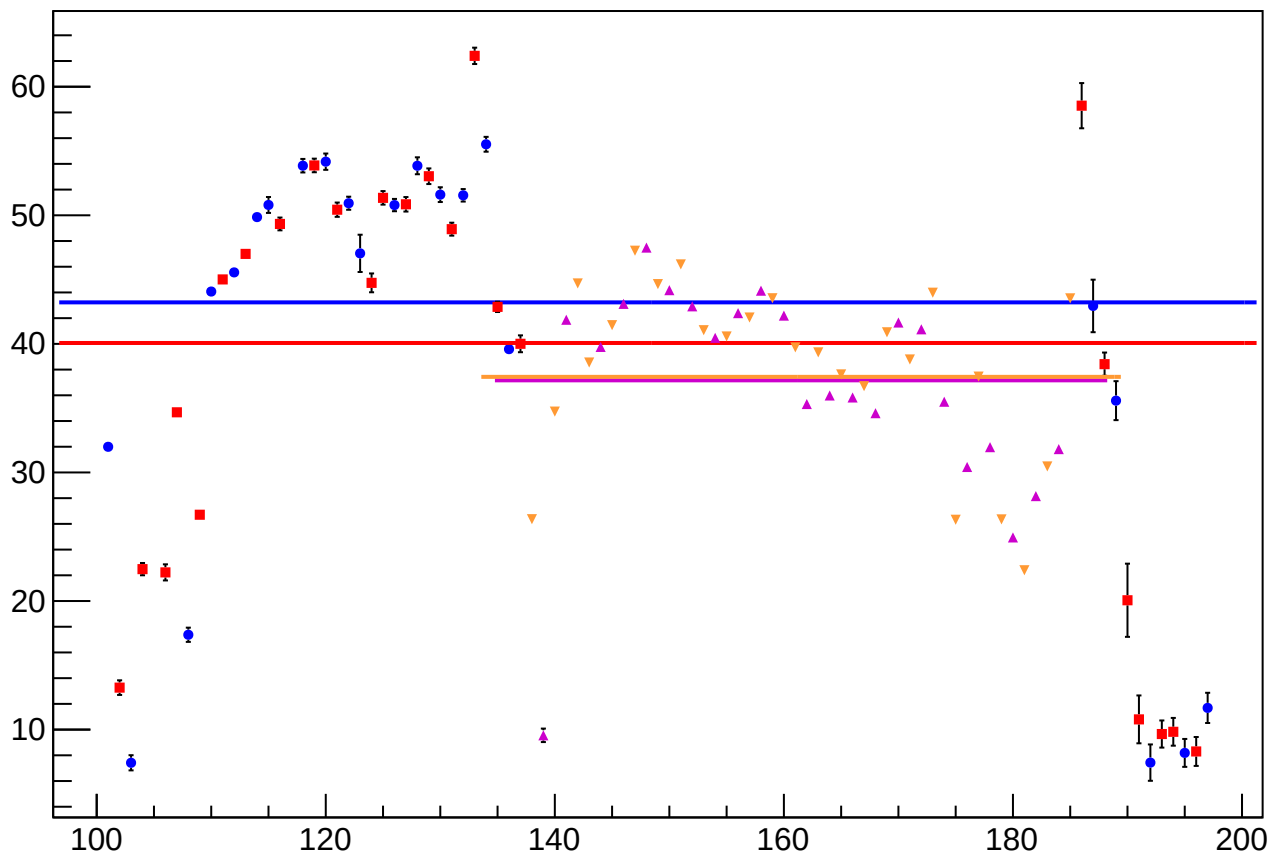
Right:  $-47.315 \pm 0.076$   $\chi^2/\text{NDF}$ : 32552.0/46

In:  $-30.413 \pm 0.050$   $\chi^2/\text{NDF}$ : 85089.6/44

Out:  $-31.522 \pm 0.047$   $\chi^2/\text{NDF}$ : 97592.2/49

All:  $-30.998 \pm 0.034$   $\chi^2/\text{NDF}$ : 182945.7/94

reg\_asym\_sam8\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 43.228 $\pm$ 0.086  $\chi^2$ /NDF: 13108.6/21

Left Out: 37.435 $\pm$ 0.047  $\chi^2$ /NDF:21517.4/24

Right Out: 40.069 $\pm$ 0.079  $\chi^2$ /NDF: 19828.6/24

Left In: 37.164 $\pm$ 0.049  $\chi^2$ /NDF:17427.3/22

Left: 37.305 $\pm$ 0.034  $\chi^2$ /NDF: 38960.5/47

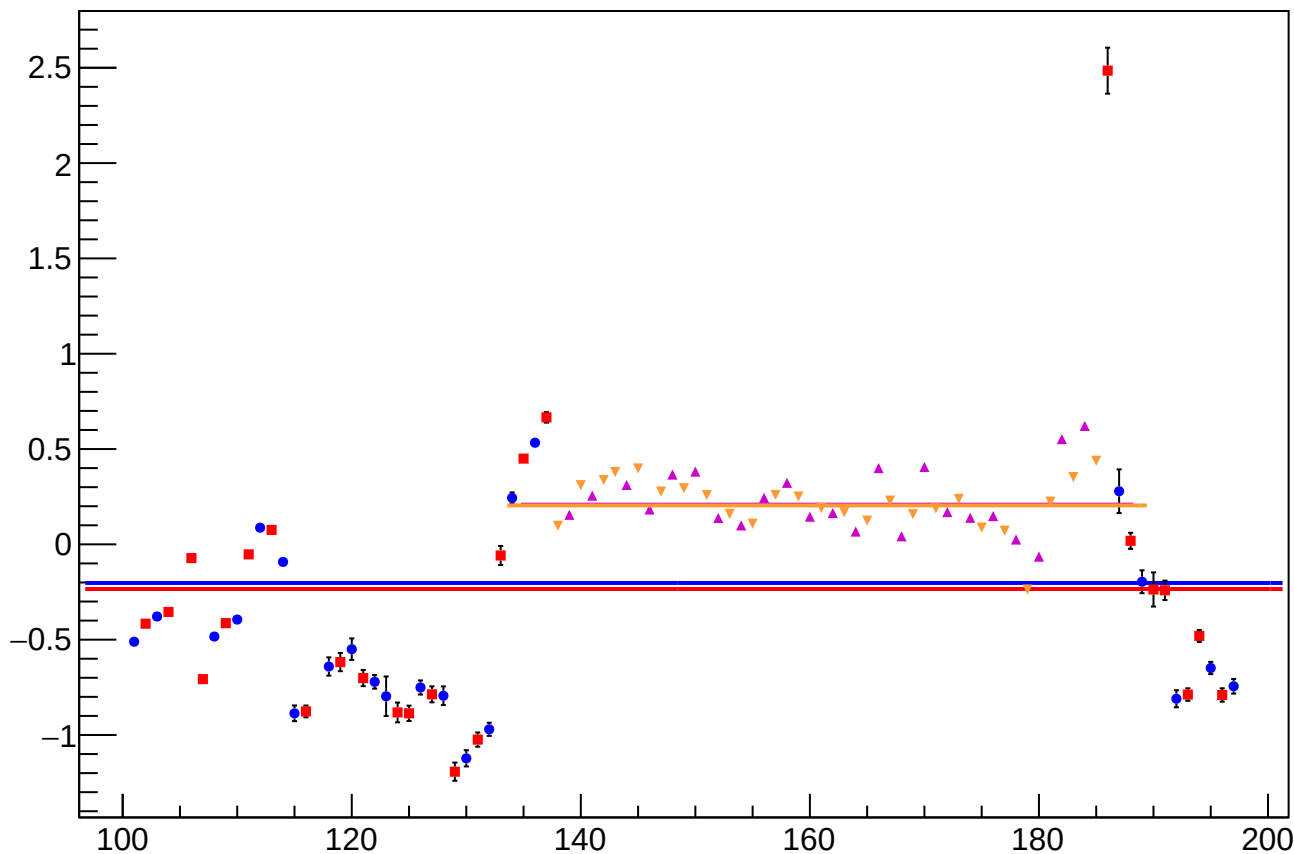
Right: 41.522 $\pm$ 0.058  $\chi^2$ /NDF: 33670.0/46

In: 38.662 $\pm$ 0.043  $\chi^2$ /NDF:34301.1/44

Out: 38.129 $\pm$ 0.041  $\chi^2$ /NDF:42162.4/49

All: 38.383 $\pm$ 0.029  $\chi^2$ /NDF: 76545.5/94

reg\_asym\_sam8\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.202 \pm 0.005$   $\chi^2/\text{NDF}$ : 7997.6/21

Left Out:  $0.204 \pm 0.002$   $\chi^2/\text{NDF}$ : 3801.8/24

Right Out:  $-0.234 \pm 0.004$   $\chi^2/\text{NDF}$ : 8617.6/24

Left In:  $0.208 \pm 0.002$   $\chi^2/\text{NDF}$ : 5095.2/22

Left:  $0.206 \pm 0.002$   $\chi^2/\text{NDF}$ : 8898.7/47

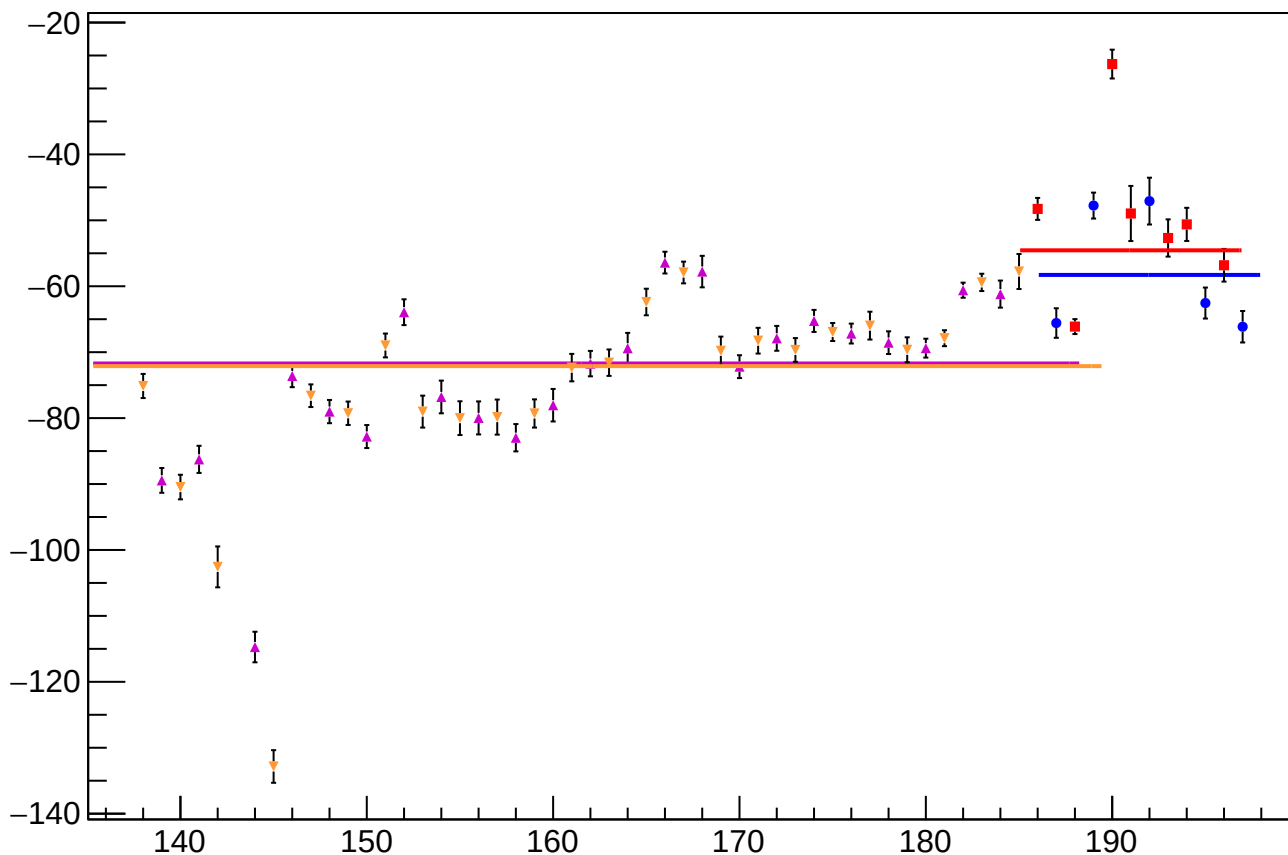
Right:  $-0.220 \pm 0.003$   $\chi^2/\text{NDF}$ : 16640.8/46

In:  $0.132 \pm 0.002$   $\chi^2/\text{NDF}$ : 19321.4/44

Out:  $0.110 \pm 0.002$   $\chi^2/\text{NDF}$ : 21121.3/49

All:  $0.121 \pm 0.001$   $\chi^2/\text{NDF}$ : 40507.5/94

reg\_asym\_usl\_diff\_bpm1X\_slope vs Slug, Sign Corrected

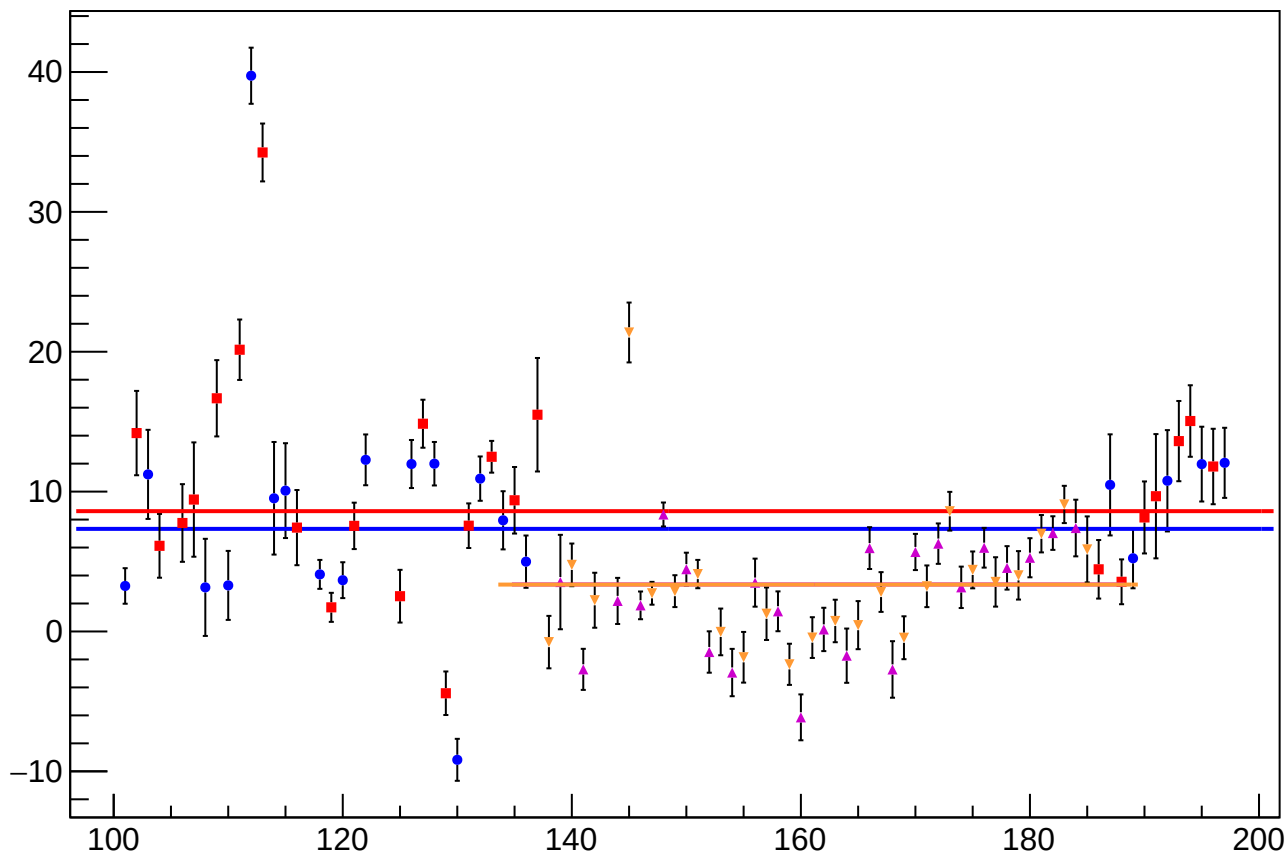


Right In:  $-58.281 \pm 1.058$   $\chi^2/\text{NDF}$ : 63.3/4  
 Left Out:  $-72.115 \pm 0.383$   $\chi^2/\text{NDF}$ : 1125.2/23  
 Right Out:  $-54.550 \pm 0.735$   $\chi^2/\text{NDF}$ : 290.7/6  
 Left In:  $-71.713 \pm 0.380$   $\chi^2/\text{NDF}$ : 884.6/22

Left:  $-71.913 \pm 0.270$   $\chi^2/\text{NDF}$ : 2010.3/46  
 Right:  $-55.766 \pm 0.604$   $\chi^2/\text{NDF}$ : 362.4/11  
 In:  $-70.175 \pm 0.358$   $\chi^2/\text{NDF}$ : 1090.7/27  
 Out:  $-68.370 \pm 0.340$   $\chi^2/\text{NDF}$ : 1864.8/30  
 All:  $-69.225 \pm 0.246$   $\chi^2/\text{NDF}$ : 2969.0/58



reg\_asym\_usl\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 7.335 $\pm$ 0.409  $\chi^2$ /NDF: 456.4/20

Left Out: 3.353 $\pm$ 0.295  $\chi^2$ /NDF:167.8/23

Right Out: 8.602 $\pm$ 0.402  $\chi^2$ /NDF: 373.7/23

Left In: 3.360 $\pm$ 0.298  $\chi^2$ /NDF:164.5/22

Left: 3.356 $\pm$ 0.209  $\chi^2$ /NDF: 332.3/46

Right: 7.978 $\pm$ 0.287  $\chi^2$ /NDF: 835.0/44

In: 4.738 $\pm$ 0.241  $\chi^2$ /NDF:682.8/43

Out: 5.185 $\pm$ 0.238  $\chi^2$ /NDF:652.3/47

All: 4.964 $\pm$ 0.169  $\chi^2$ /NDF: 1336.9/91

reg\_asym\_usl\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 30.083+/-0.612  $\chi^2/\text{NDF}$ : 4189.1/20

Left Out: 13.610+/-0.382  $\chi^2/\text{NDF}$ :1303.3/23

Right Out: 17.904+/-0.499  $\chi^2/\text{NDF}$ : 7022.6/23

Left In: 13.262+/-0.379  $\chi^2/\text{NDF}$ :1077.0/22

Left: 13.434+/-0.269  $\chi^2/\text{NDF}$ : 2380.7/46

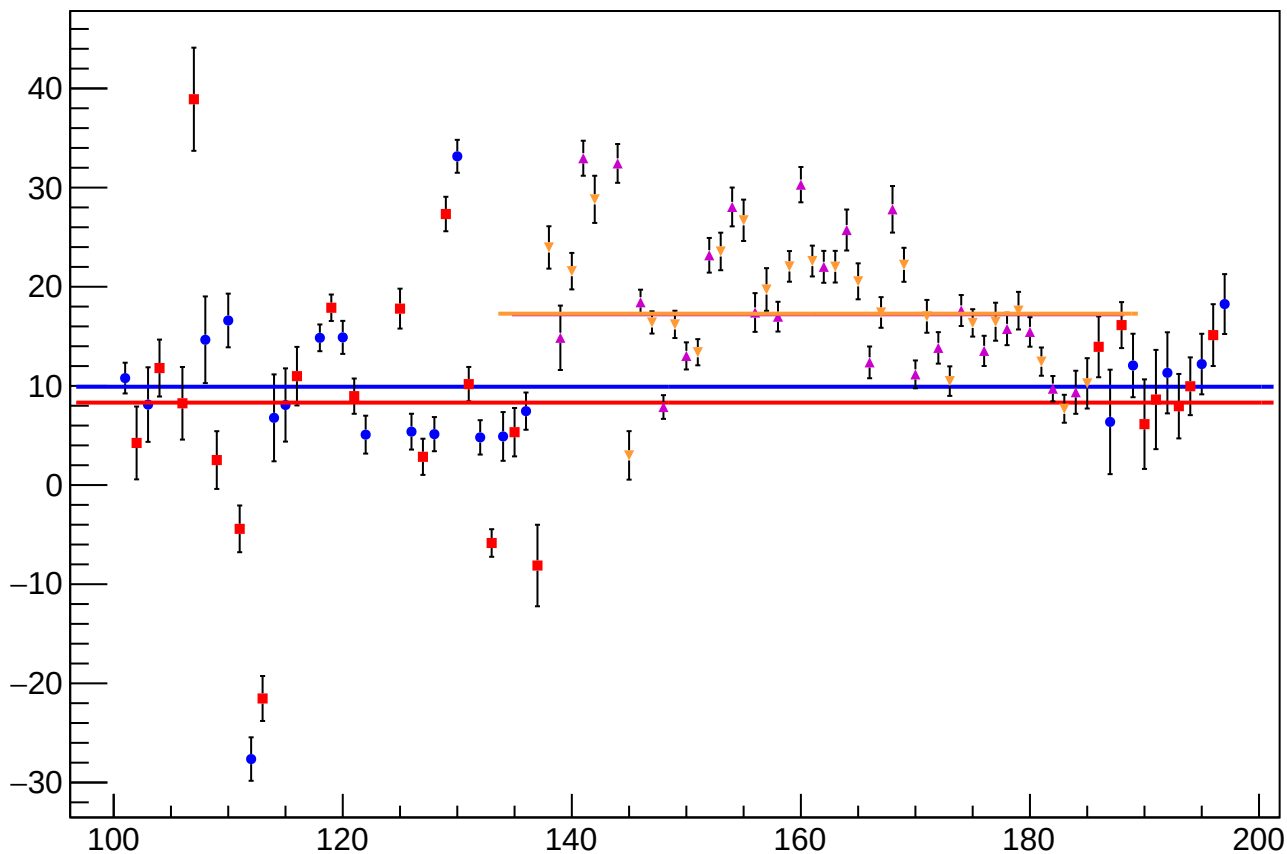
Right: 22.776+/-0.387  $\chi^2/\text{NDF}$ : 11449.6/44

In: 17.921+/-0.322  $\chi^2/\text{NDF}$ :5813.0/43

Out: 15.194+/-0.303  $\chi^2/\text{NDF}$ :8372.6/47

All: 16.476+/-0.221  $\chi^2/\text{NDF}$ : 14223.7/91

reg\_asym\_usl\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 9.915 $\pm$ 0.477  $\chi^2$ /NDF: 564.1/20

Left Out: 17.285 $\pm$ 0.337  $\chi^2$ /NDF:244.0/23

Right Out: 8.315 $\pm$ 0.474  $\chi^2$ /NDF: 589.4/23

Left In: 17.224 $\pm$ 0.339  $\chi^2$ /NDF:442.2/22

Left: 17.255 $\pm$ 0.239  $\chi^2$ /NDF: 686.2/46

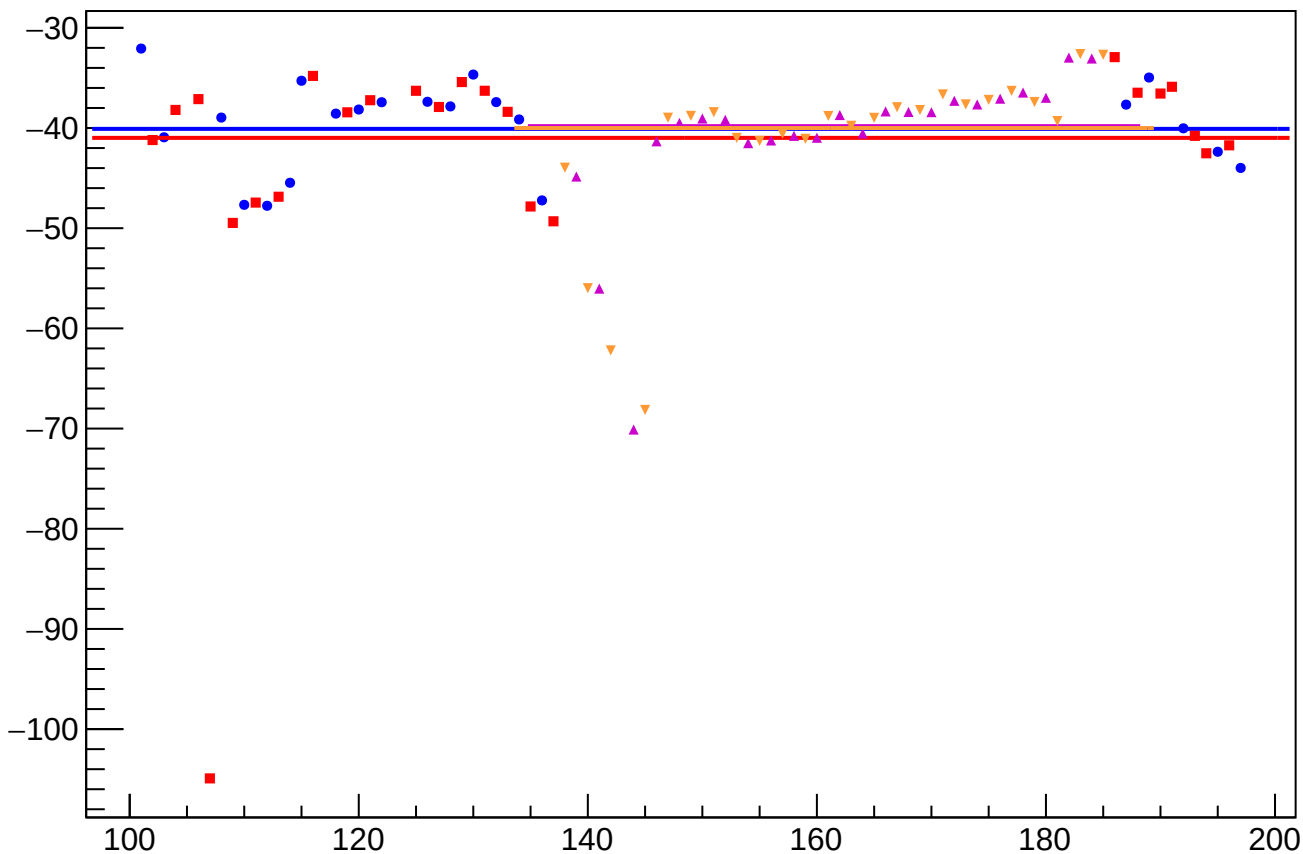
Right: 9.111 $\pm$ 0.336  $\chi^2$ /NDF: 1159.1/44

In: 14.777 $\pm$ 0.276  $\chi^2$ /NDF:1162.4/43

Out: 14.276 $\pm$ 0.275  $\chi^2$ /NDF:1071.0/47

All: 14.526 $\pm$ 0.195  $\chi^2$ /NDF: 2235.0/91

reg\_asym\_usl\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -40.085+/-0.027  $\chi^2/\text{NDF}$ : 30341.1/20

Left Out: -40.002+/-0.016  $\chi^2/\text{NDF}$ : 172150.1/23

Right Out: -40.983+/-0.025  $\chi^2/\text{NDF}$ : 99720.2/23

Left In: -39.813+/-0.016  $\chi^2/\text{NDF}$ : 145790.5/22

Left: -39.906+/-0.011  $\chi^2/\text{NDF}$ : 318013.1/46

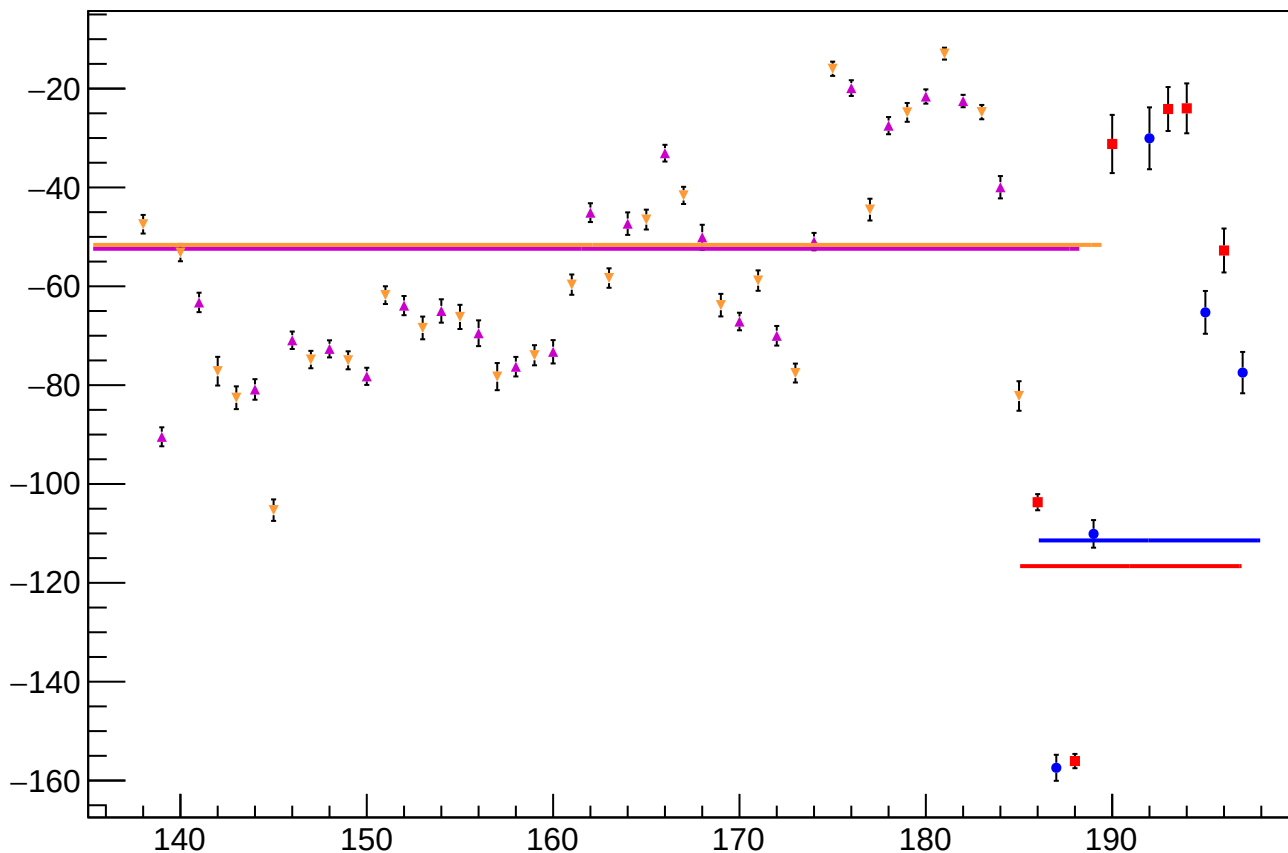
Right: -40.560+/-0.018  $\chi^2/\text{NDF}$ : 130660.6/44

In: -39.882+/-0.013  $\chi^2/\text{NDF}$ : 176209.0/43

Out: -40.278+/-0.013  $\chi^2/\text{NDF}$ : 272962.7/47

All: -40.082+/-0.009  $\chi^2/\text{NDF}$ : 449607.1/91

reg\_asym\_usr\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: -111.419+/-1.564  $\chi^2$ /NDF: 653.9/4

Left Out: -51.622+/-0.383  $\chi^2$ /NDF:4133.0/24

Right Out: -116.618+/-0.988  $\chi^2$ /NDF: 1993.8/5

Left In: -52.409+/-0.387  $\chi^2$ /NDF:3378.7/22

Left: -52.012+/-0.272  $\chi^2$ /NDF: 7513.8/47

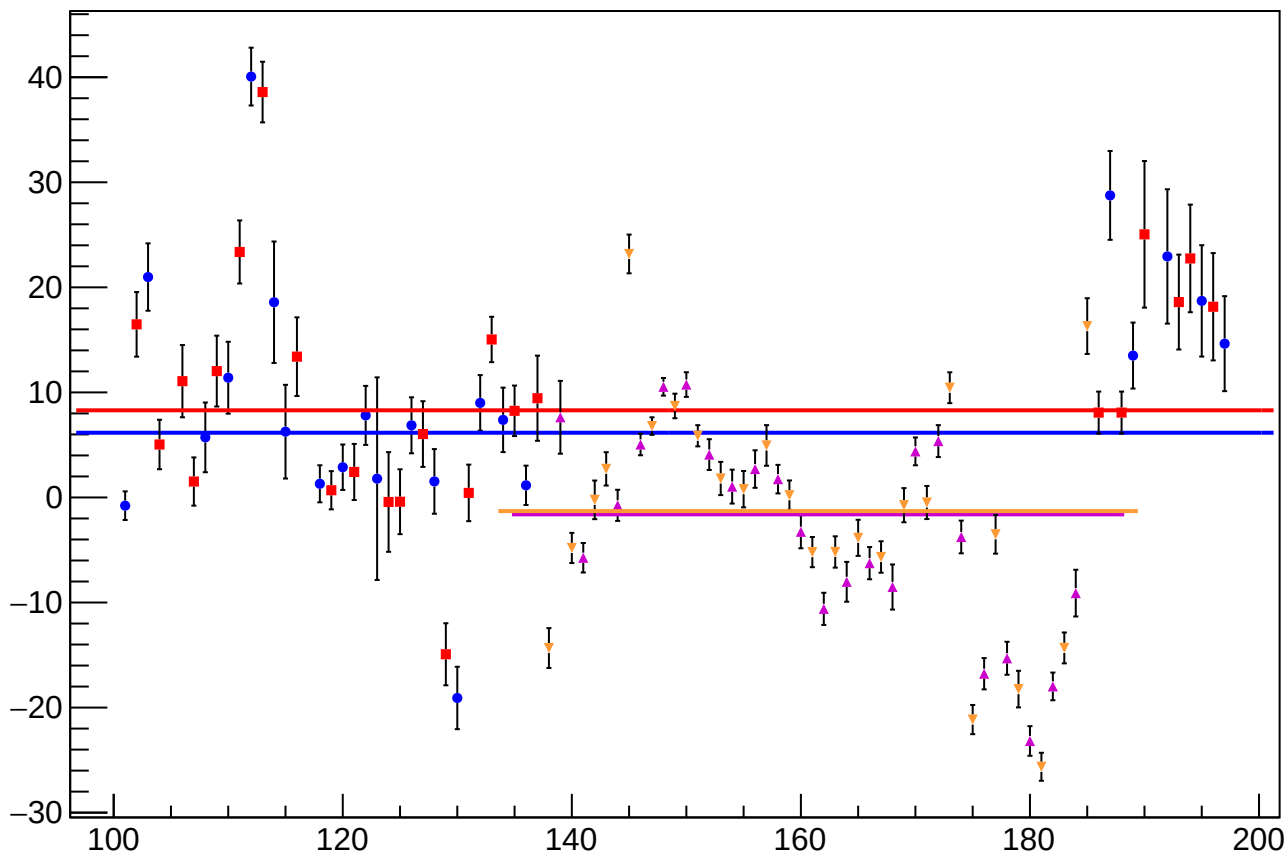
Right: -115.135+/-0.836  $\chi^2$ /NDF: 2655.5/10

In: -55.815+/-0.376  $\chi^2$ /NDF:5373.2/27

Out: -60.125+/-0.358  $\chi^2$ /NDF:9884.9/30

All: -58.077+/-0.259  $\chi^2$ /NDF: 15327.1/58

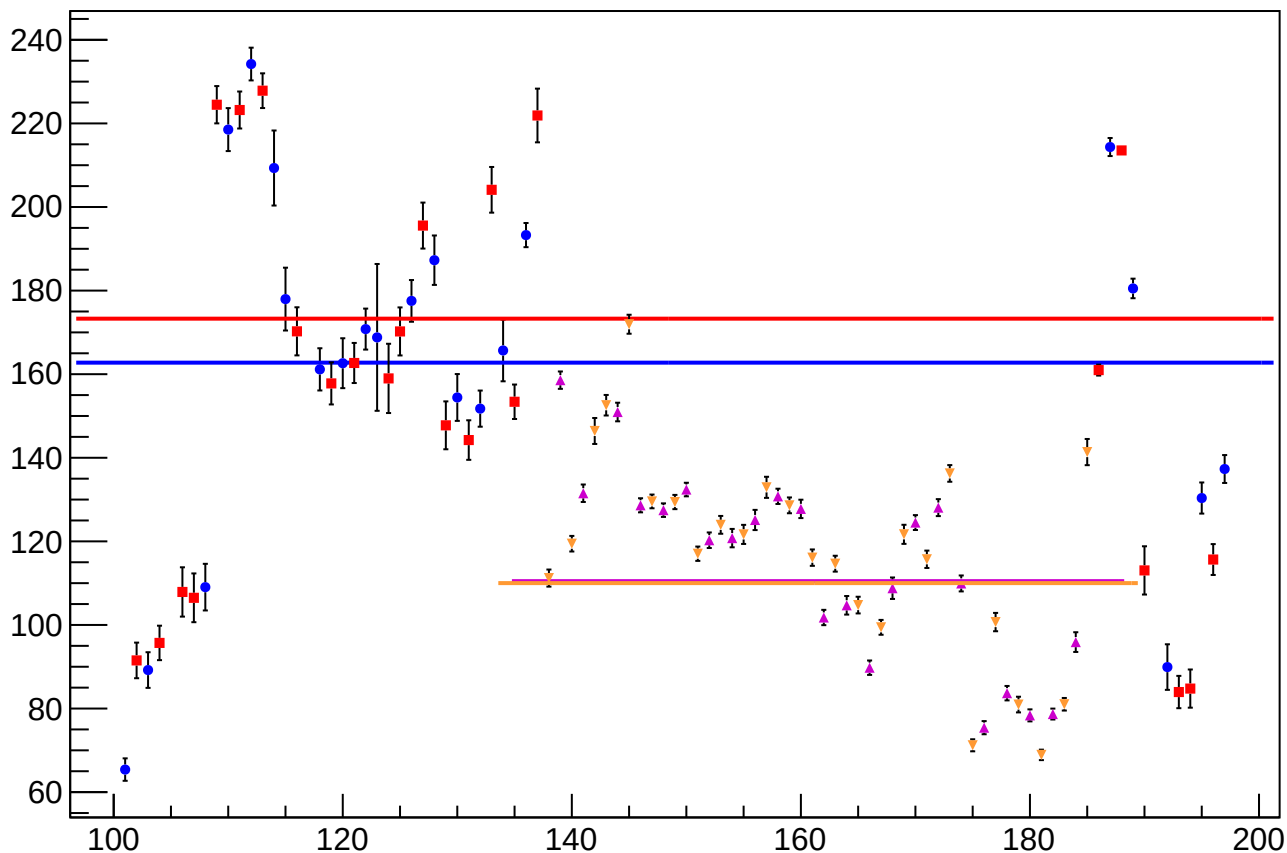
reg\_asym\_usr\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $6.159 \pm 0.592$   $\chi^2/\text{NDF}: 349.6/21$   
 Left Out:  $-1.300 \pm 0.293$   $\chi^2/\text{NDF}: 1315.7/24$   
 Right Out:  $8.296 \pm 0.578$   $\chi^2/\text{NDF}: 293.8/23$   
 Left In:  $-1.608 \pm 0.299$   $\chi^2/\text{NDF}: 1097.4/22$

Left:  $-1.450 \pm 0.209$   $\chi^2/\text{NDF}: 2413.6/47$   
 Right:  $7.252 \pm 0.413$   $\chi^2/\text{NDF}: 650.1/45$   
 In:  $-0.023 \pm 0.267$   $\chi^2/\text{NDF}: 1584.1/44$   
 Out:  $0.656 \pm 0.261$   $\chi^2/\text{NDF}: 1829.0/48$   
 All:  $0.324 \pm 0.187$   $\chi^2/\text{NDF}: 3416.4/93$

# reg\_asym\_usr\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 162.760 $\pm$ 0.859  $\chi^2$ /NDF: 3274.8/21

Left Out: 110.012 $\pm$ 0.383  $\chi^2$ /NDF:4537.0/24

Right Out: 173.285 $\pm$ 0.665  $\chi^2$ /NDF: 4165.3/23

Left In: 110.482 $\pm$ 0.385  $\chi^2$ /NDF:3824.9/22

Left: 110.246 $\pm$ 0.271  $\chi^2$ /NDF: 8362.7/47

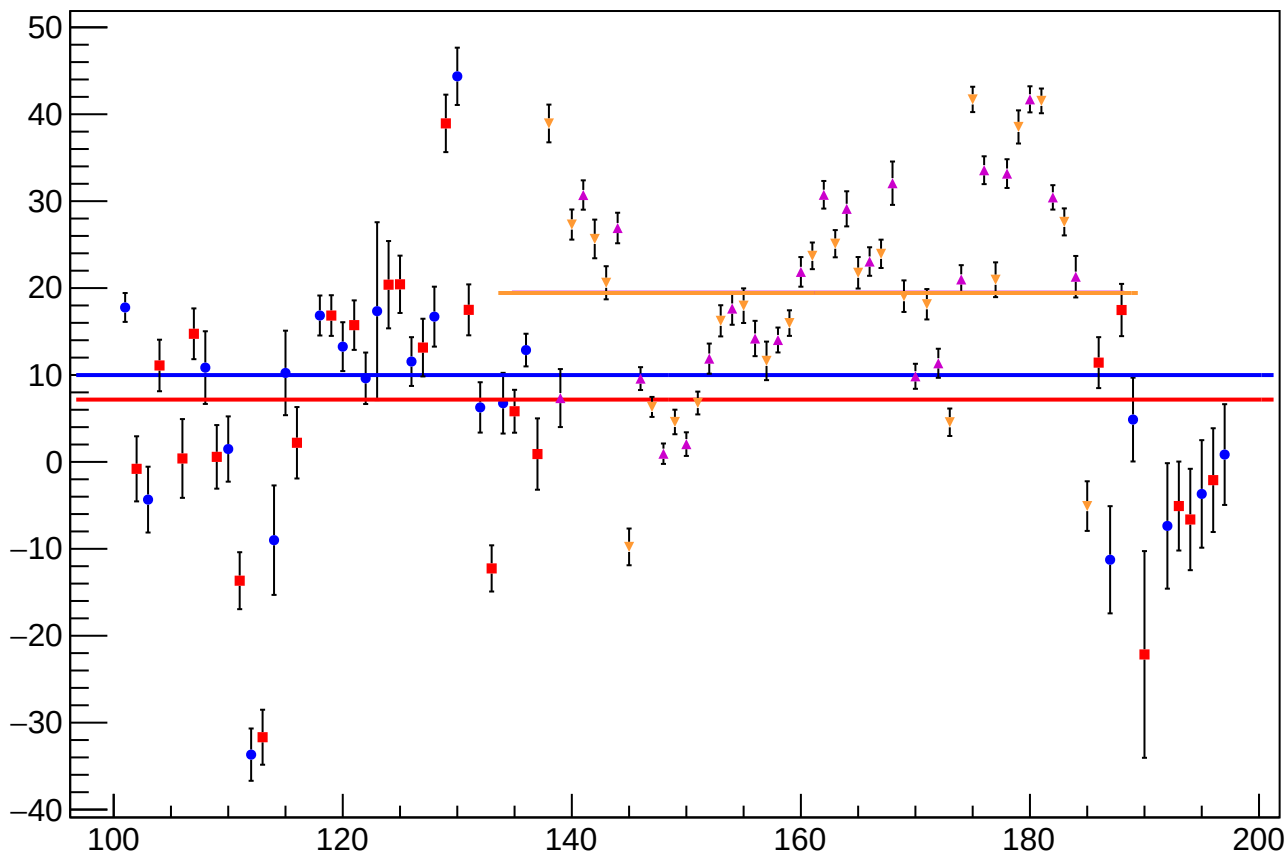
Right: 169.341 $\pm$ 0.526  $\chi^2$ /NDF: 7534.0/45

In: 119.216 $\pm$ 0.351  $\chi^2$ /NDF:10185.1/44

Out: 125.761 $\pm$ 0.332  $\chi^2$ /NDF:15503.7/48

All: 122.674 $\pm$ 0.241  $\chi^2$ /NDF: 25872.5/93

reg\_asym\_usr\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $9.992 \pm 0.689$   $\chi^2/\text{NDF}: 415.8/21$

Left Out:  $19.434 \pm 0.336$   $\chi^2/\text{NDF}: 1452.3/24$

Right Out:  $7.170 \pm 0.689$   $\chi^2/\text{NDF}: 458.2/23$

Left In:  $19.472 \pm 0.342$   $\chi^2/\text{NDF}: 1188.2/22$

Left:  $19.453 \pm 0.239$   $\chi^2/\text{NDF}: 2640.5/47$

Right:  $8.580 \pm 0.487$   $\chi^2/\text{NDF}: 882.4/45$

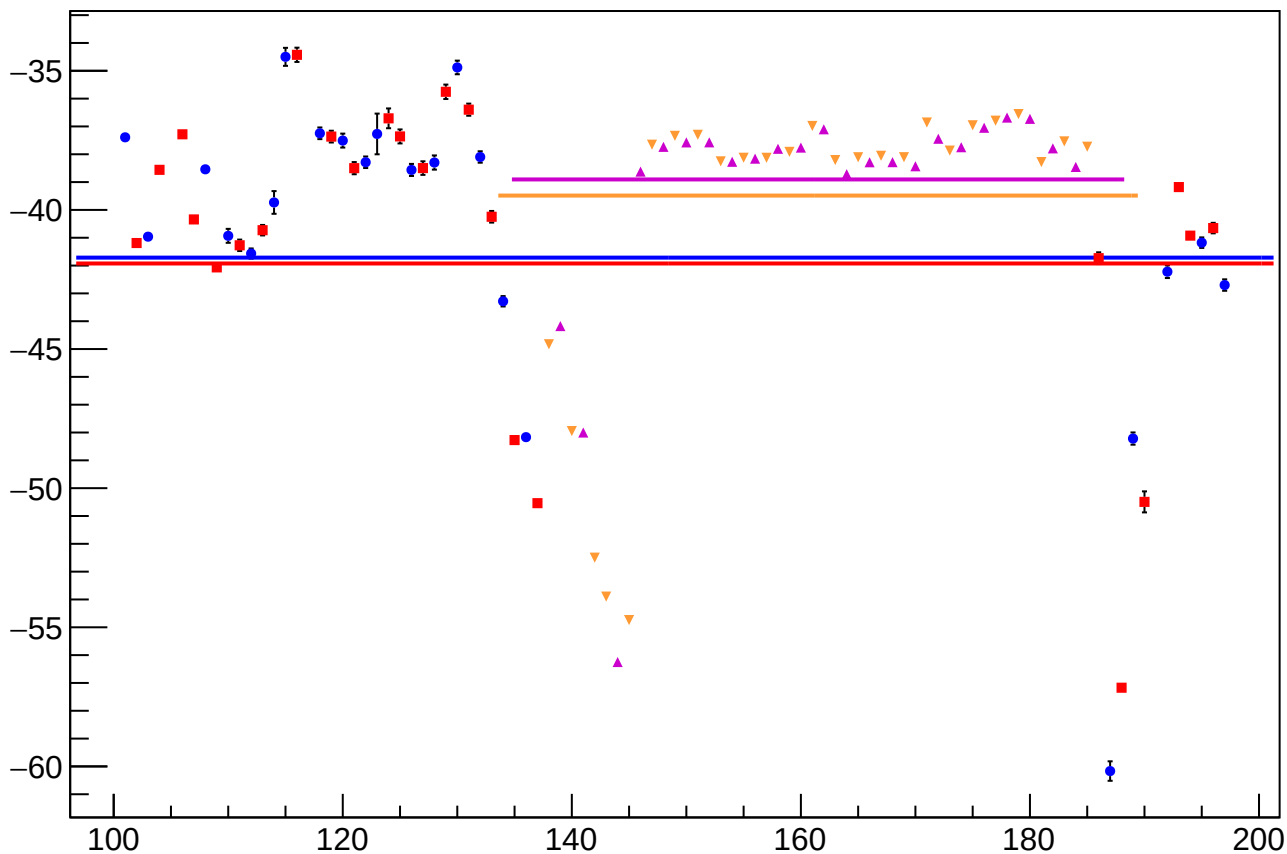
In:  $17.599 \pm 0.306$   $\chi^2/\text{NDF}: 1756.1/44$

Out:  $17.080 \pm 0.302$   $\chi^2/\text{NDF}: 2166.9/48$

All:  $17.336 \pm 0.215$   $\chi^2/\text{NDF}: 3924.5/93$



reg\_asym\_usr\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -41.714 $\pm$ 0.036  $\chi^2$ /NDF: 16393.8/21

Left Out: -39.484 $\pm$ 0.016  $\chi^2$ /NDF: 88877.3/24

Right Out: -41.925 $\pm$ 0.035  $\chi^2$ /NDF: 22343.7/23

Left In: -38.905 $\pm$ 0.016  $\chi^2$ /NDF: 54282.7/22

Left: -39.195 $\pm$ 0.011  $\chi^2$ /NDF: 143834.7/47

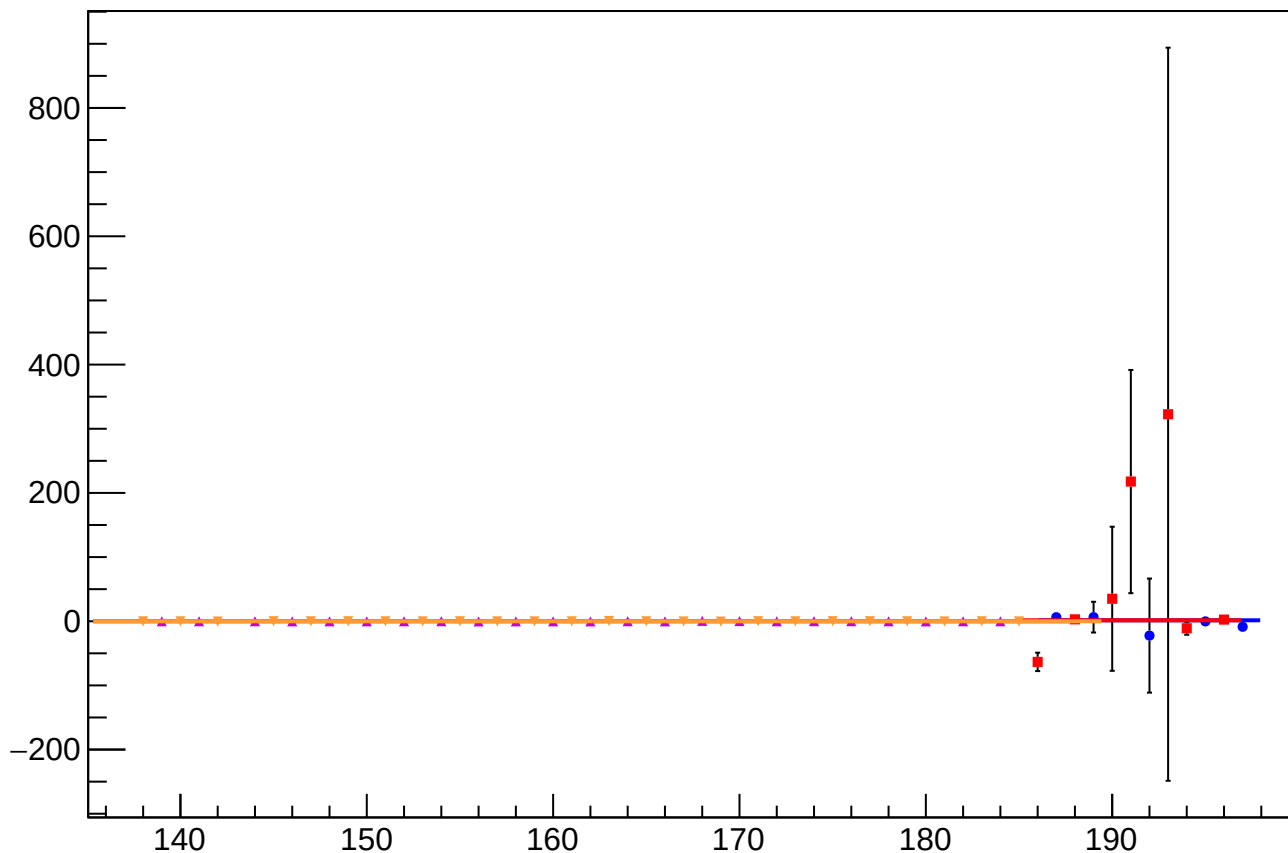
Right: -41.824 $\pm$ 0.025  $\chi^2$ /NDF: 38755.4/45

In: -39.360 $\pm$ 0.014  $\chi^2$ /NDF: 75801.0/44

Out: -39.903 $\pm$ 0.014  $\chi^2$ /NDF: 115335.4/48

All: -39.634 $\pm$ 0.010  $\chi^2$ /NDF: 191847.5/93

reg\_asym\_dsl\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 1.465+/-2.231  $\chi^2/\text{NDF}$ : 7.6/4

Left Out: -0.089+/-0.022  $\chi^2/\text{NDF}$ : 40.0/23

Right Out: 1.499+/-1.790  $\chi^2/\text{NDF}$ : 24.5/6

Left In: -0.026+/-0.022  $\chi^2/\text{NDF}$ : 32.3/22

Left: -0.057+/-0.016  $\chi^2/\text{NDF}$ : 76.4/46

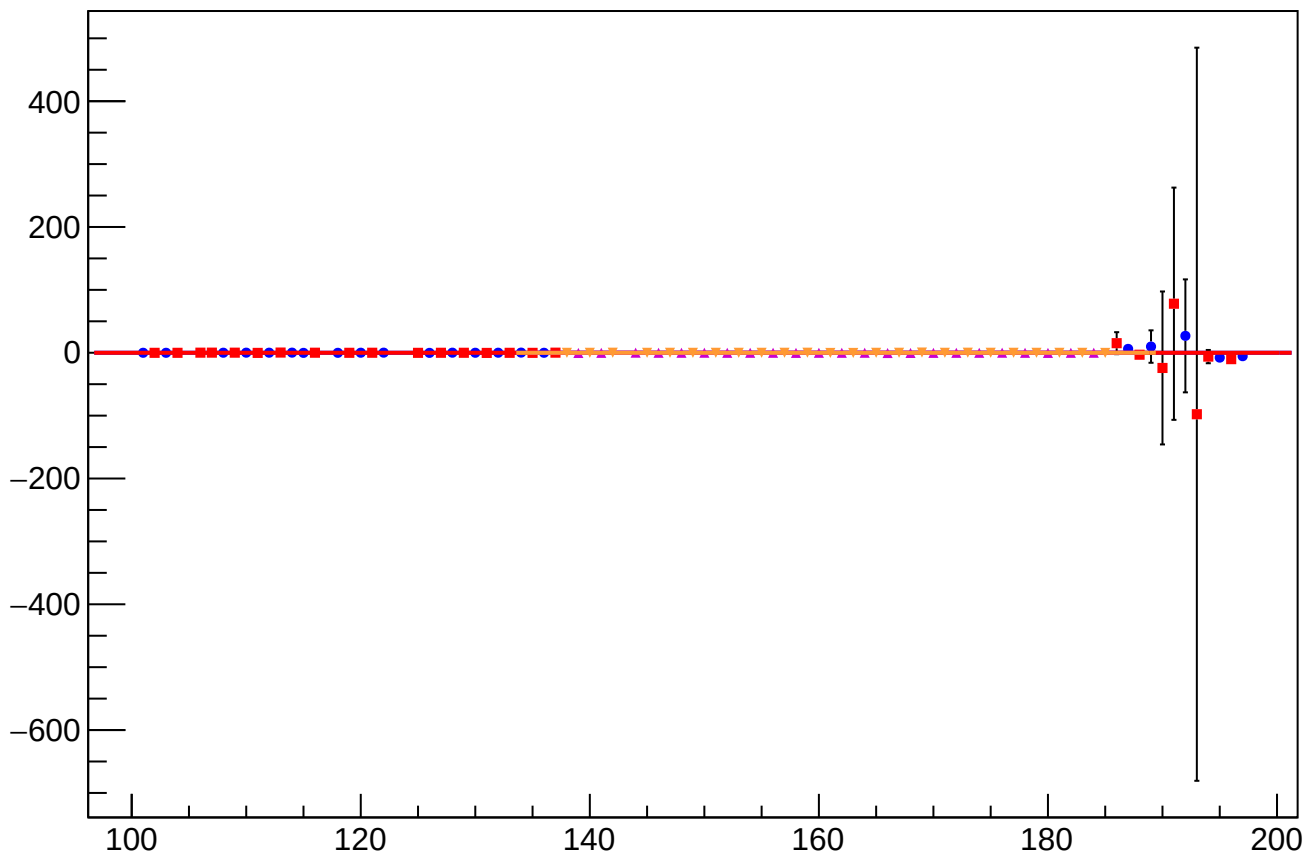
Right: 1.486+/-1.396  $\chi^2/\text{NDF}$ : 32.1/11

In: -0.025+/-0.022  $\chi^2/\text{NDF}$ : 40.3/27

Out: -0.089+/-0.022  $\chi^2/\text{NDF}$ : 65.4/30

All: -0.057+/-0.016  $\chi^2/\text{NDF}$ : 109.7/58

reg\_asym\_dsl\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.001 $\pm$ 0.028  $\chi^2$ /NDF: 17.4/20

Left Out: -0.081 $\pm$ 0.017  $\chi^2$ /NDF: 25.8/23

Right Out: -0.052 $\pm$ 0.029  $\chi^2$ /NDF: 26.5/23

Left In: -0.055 $\pm$ 0.018  $\chi^2$ /NDF: 32.2/22

Left: -0.068 $\pm$ 0.012  $\chi^2$ /NDF: 59.1/46

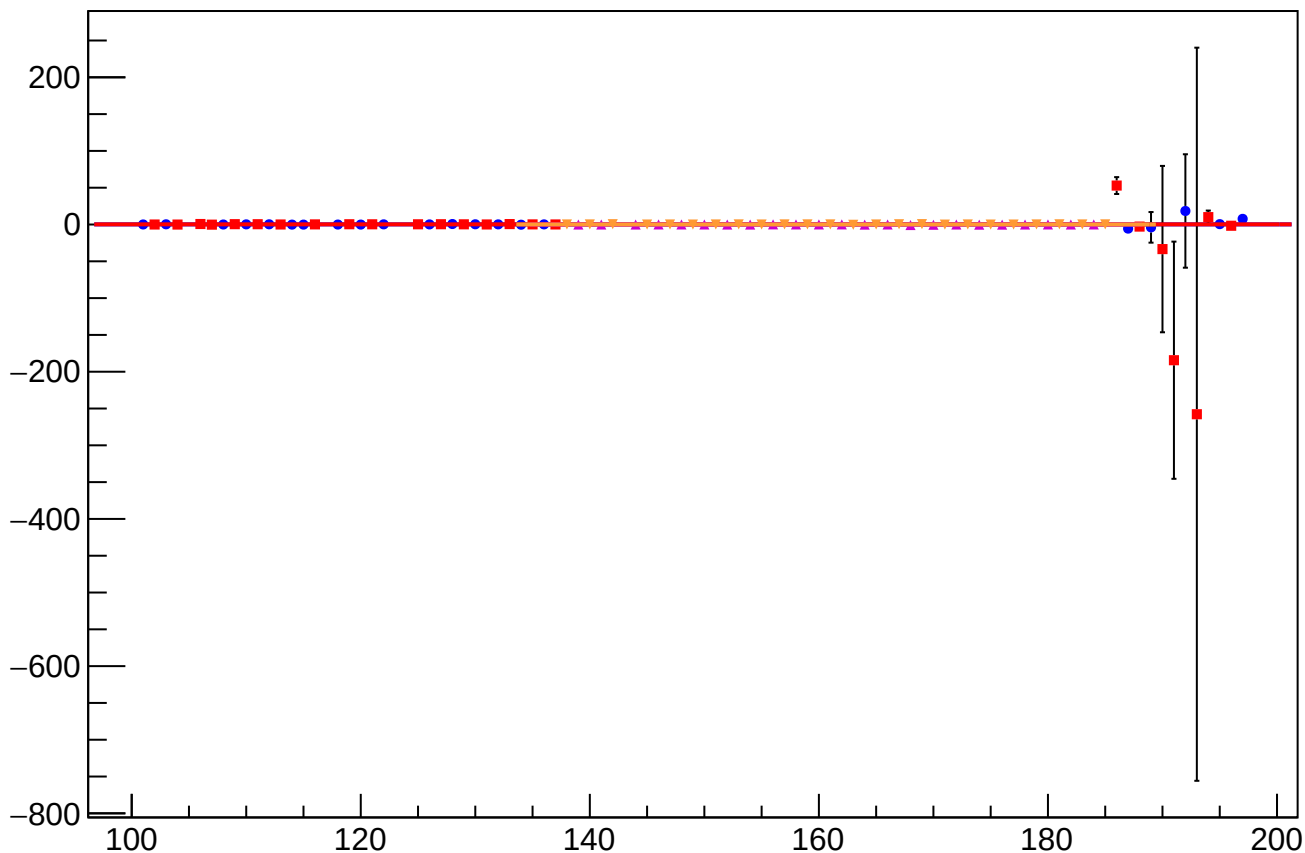
Right: -0.024 $\pm$ 0.020  $\chi^2$ /NDF: 45.5/44

In: -0.039 $\pm$ 0.015  $\chi^2$ /NDF: 52.4/43

Out: -0.073 $\pm$ 0.015  $\chi^2$ /NDF: 53.0/47

All: -0.056 $\pm$ 0.011  $\chi^2$ /NDF: 108.0/91

reg\_asym\_dsl\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.170 $\pm$ 0.052  $\chi^2$ /NDF: 23.2/20

Left Out: 0.082 $\pm$ 0.022  $\chi^2$ /NDF:38.7/23

Right Out: 0.237 $\pm$ 0.054  $\chi^2$ /NDF: 44.9/23

Left In: 0.020 $\pm$ 0.022  $\chi^2$ /NDF:34.5/22

Left: 0.051 $\pm$ 0.016  $\chi^2$ /NDF: 77.1/46

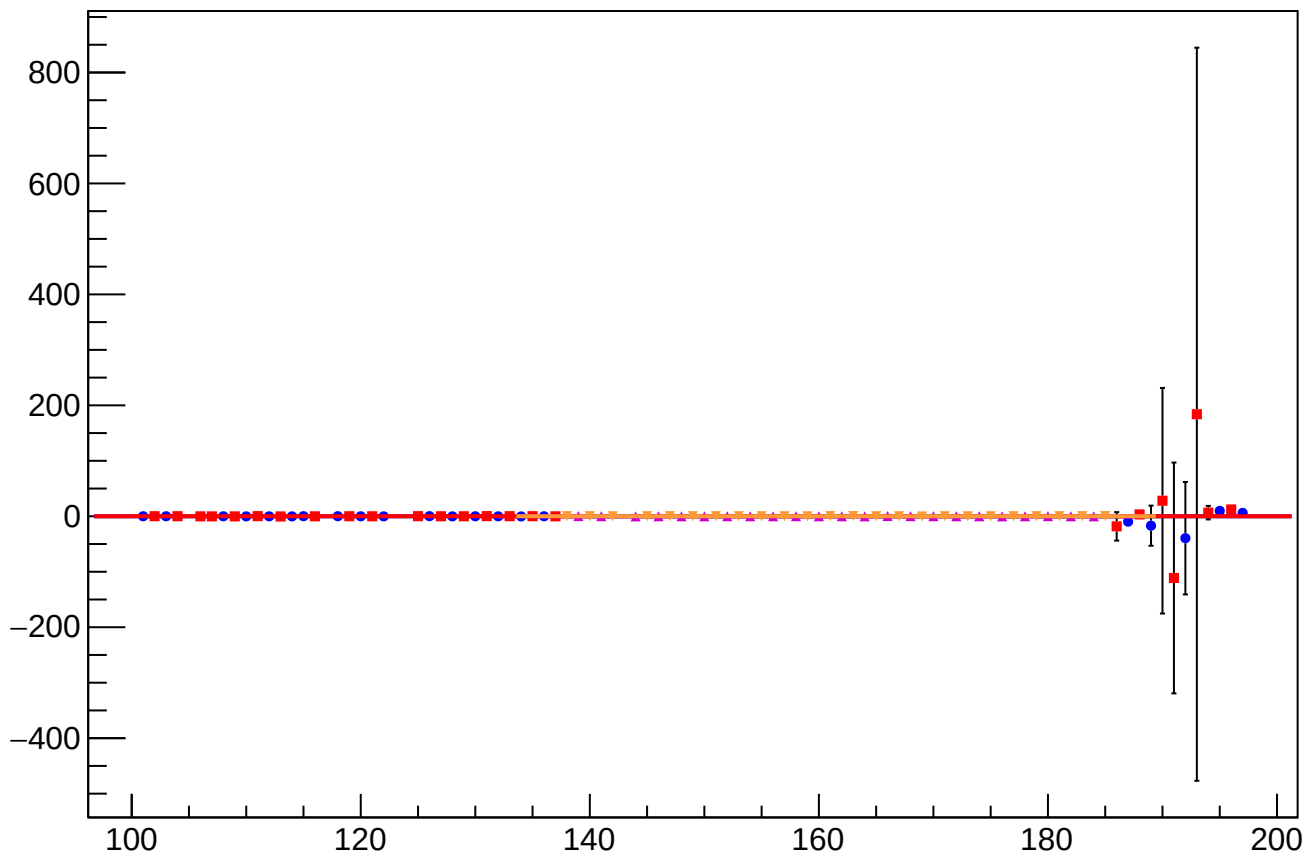
Right: 0.202 $\pm$ 0.038  $\chi^2$ /NDF: 68.9/44

In: 0.043 $\pm$ 0.020  $\chi^2$ /NDF:64.7/43

Out: 0.104 $\pm$ 0.020  $\chi^2$ /NDF:90.7/47

All: 0.073 $\pm$ 0.014  $\chi^2$ /NDF: 159.9/91

reg\_asym\_dsl\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-0.011 \pm 0.033$   $\chi^2/\text{NDF}: 19.0/20$

Left Out:  $0.105 \pm 0.020$   $\chi^2/\text{NDF}: 29.5/23$

Right Out:  $0.059 \pm 0.034$   $\chi^2/\text{NDF}: 25.1/23$

Left In:  $0.072 \pm 0.020$   $\chi^2/\text{NDF}: 31.7/22$

Left:  $0.089 \pm 0.014$   $\chi^2/\text{NDF}: 62.6/46$

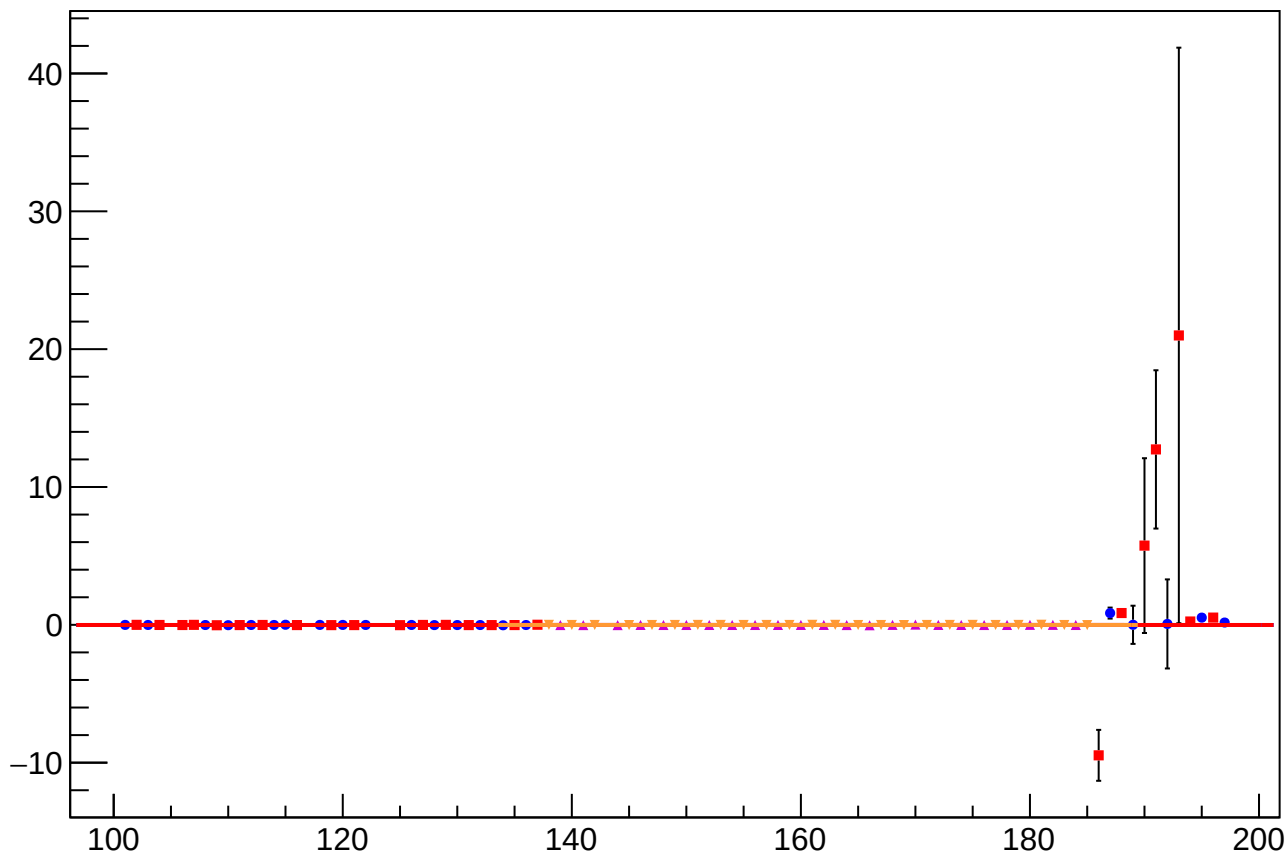
Right:  $0.023 \pm 0.023$   $\chi^2/\text{NDF}: 46.3/44$

In:  $0.050 \pm 0.017$   $\chi^2/\text{NDF}: 55.5/43$

Out:  $0.093 \pm 0.017$   $\chi^2/\text{NDF}: 56.0/47$

All:  $0.072 \pm 0.012$   $\chi^2/\text{NDF}: 114.7/91$

reg\_asym\_dsl\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.012 \pm 0.002$   $\chi^2/\text{NDF}$ : 25.3/20

Left Out:  $-0.008 \pm 0.001$   $\chi^2/\text{NDF}$ : 30.7/23

Right Out:  $-0.011 \pm 0.002$   $\chi^2/\text{NDF}$ : 77.4/23

Left In:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 42.1/22

Left:  $-0.008 \pm 0.001$   $\chi^2/\text{NDF}$ : 73.1/46

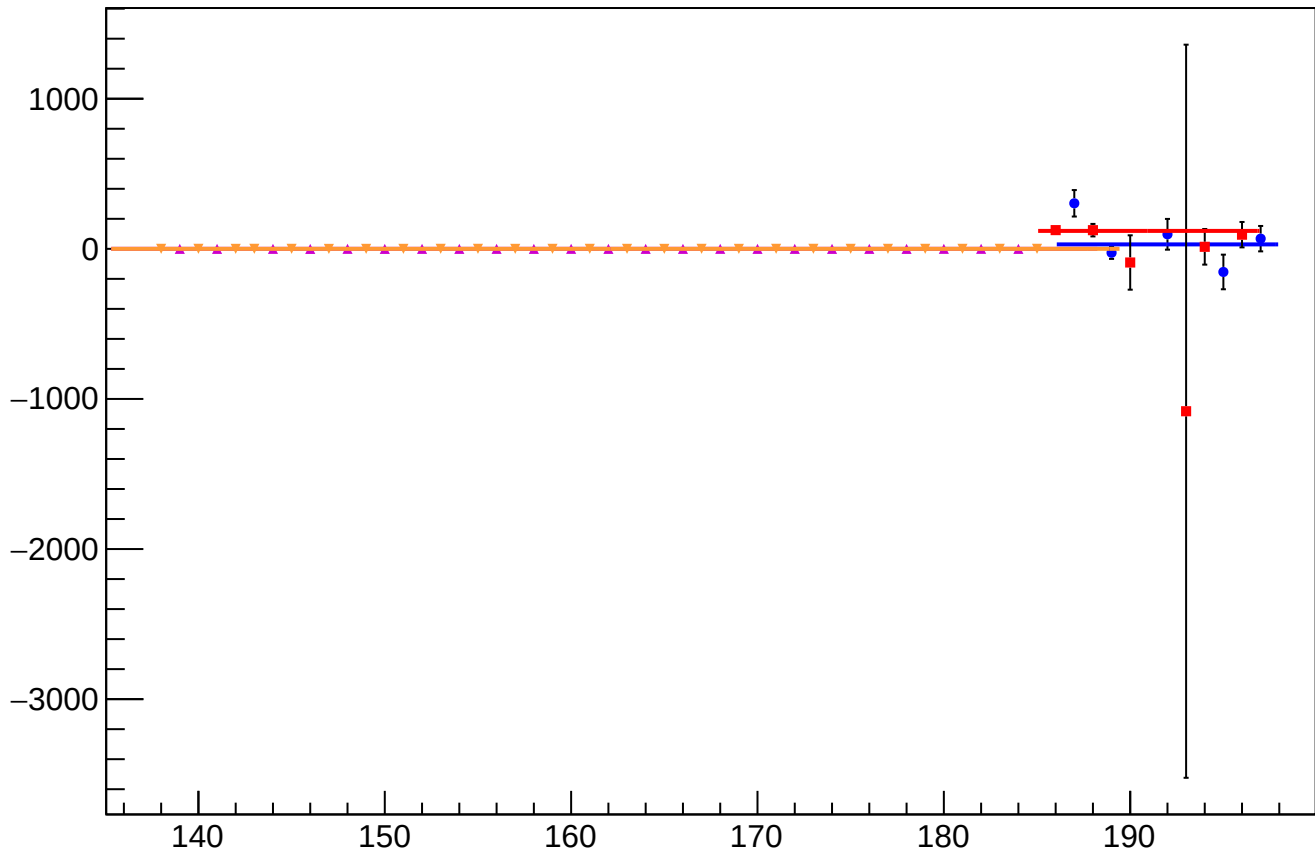
Right:  $-0.011 \pm 0.001$   $\chi^2/\text{NDF}$ : 102.9/44

In:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 69.6/43

Out:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 110.0/47

All:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 180.1/91

reg\_asym\_dsr\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 29.623+/-31.094  $\chi^2/\text{NDF}$ : 14.7/4

Left Out: 0.013+/-0.027  $\chi^2/\text{NDF}$ :29.2/24

Right Out: 119.463+/-16.572  $\chi^2/\text{NDF}$ : 2.6/5

Left In: 0.004+/-0.028  $\chi^2/\text{NDF}$ :28.2/22

Left: 0.009+/-0.019  $\chi^2/\text{NDF}$ : 57.4/47

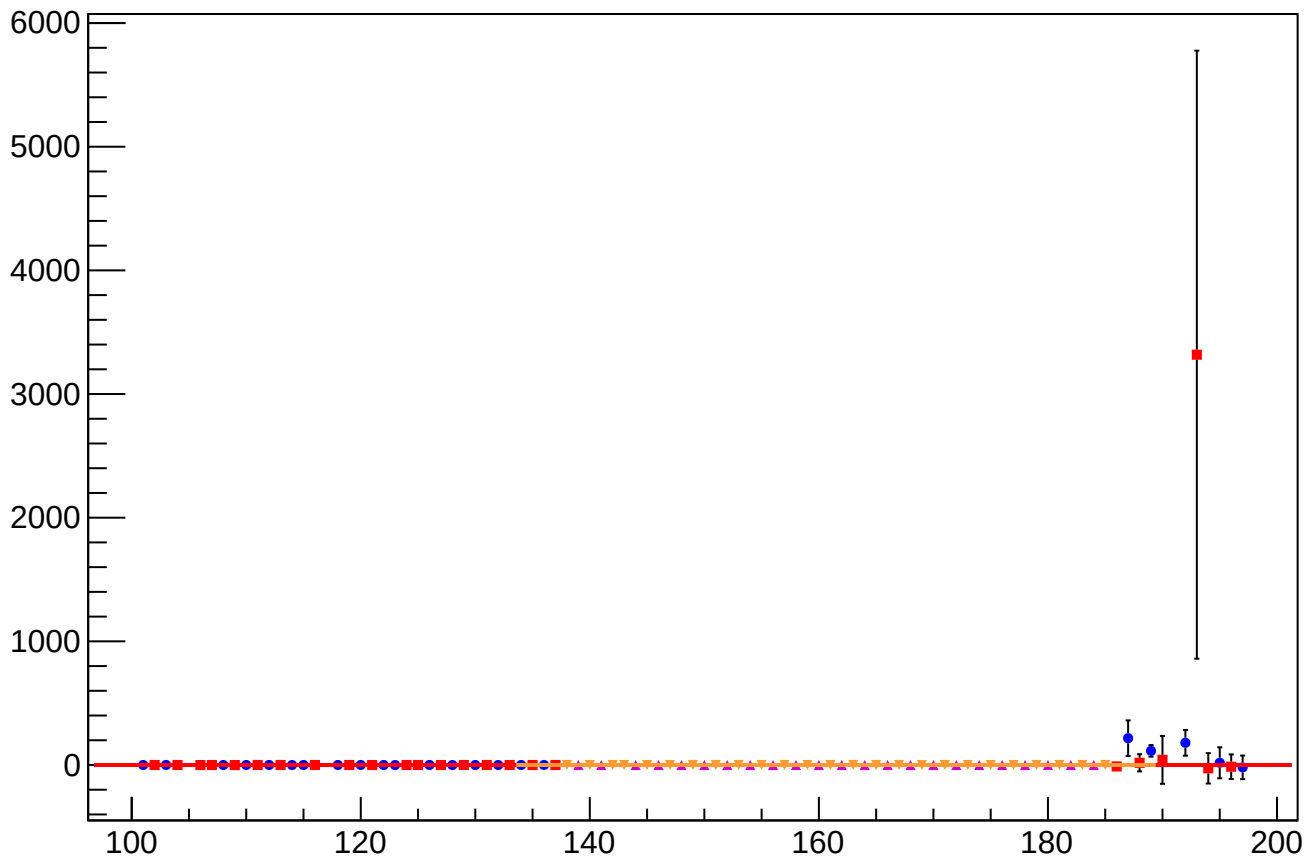
Right: 99.589+/-14.625  $\chi^2/\text{NDF}$ : 23.7/10

In: 0.004+/-0.028  $\chi^2/\text{NDF}$ :43.8/27

Out: 0.014+/-0.027  $\chi^2/\text{NDF}$ :83.7/30

All: 0.009+/-0.019  $\chi^2/\text{NDF}$ : 127.5/58

reg\_asym\_dsr\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-0.024 \pm 0.037$   $\chi^2/\text{NDF}$ : 34.6/21

Left Out:  $-0.058 \pm 0.021$   $\chi^2/\text{NDF}$ : 25.4/24

Right Out:  $-0.128 \pm 0.039$   $\chi^2/\text{NDF}$ : 19.7/23

Left In:  $-0.072 \pm 0.022$   $\chi^2/\text{NDF}$ : 48.7/22

Left:  $-0.064 \pm 0.015$   $\chi^2/\text{NDF}$ : 74.4/47

Right:  $-0.072 \pm 0.027$   $\chi^2/\text{NDF}$ : 58.0/45

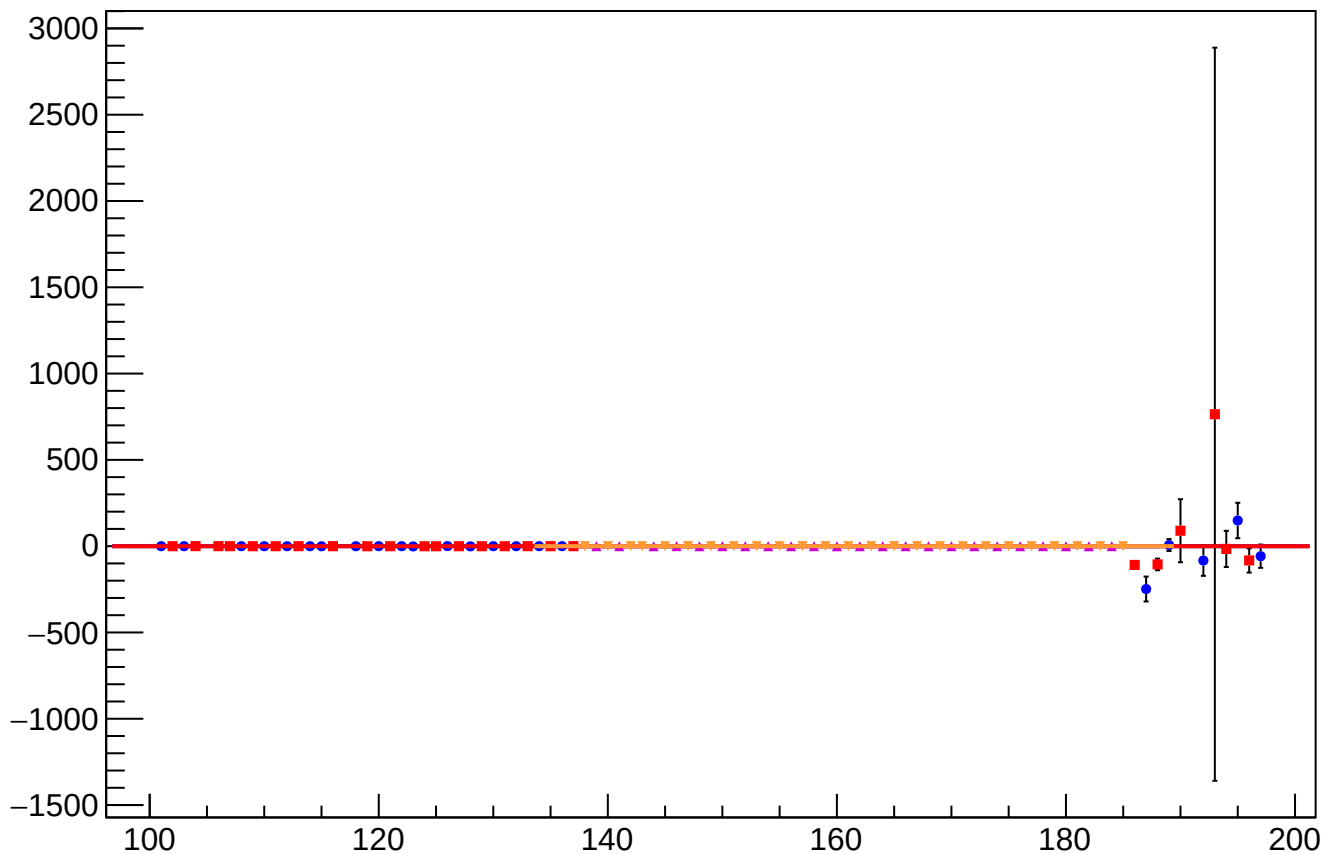
In:  $-0.059 \pm 0.019$   $\chi^2/\text{NDF}$ : 84.6/44

Out:  $-0.074 \pm 0.019$   $\chi^2/\text{NDF}$ : 47.6/48

All:  $-0.066 \pm 0.013$   $\chi^2/\text{NDF}$ : 132.4/93



reg\_asym\_dsr\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-0.130 \pm 0.067$   $\chi^2/\text{NDF}$ : 39.3/21

Left Out:  $-0.015 \pm 0.027$   $\chi^2/\text{NDF}$ : 27.0/24

Right Out:  $-0.176 \pm 0.071$   $\chi^2/\text{NDF}$ : 69.6/23

Left In:  $-0.035 \pm 0.027$   $\chi^2/\text{NDF}$ : 27.7/22

Left:  $-0.025 \pm 0.019$   $\chi^2/\text{NDF}$ : 55.0/47

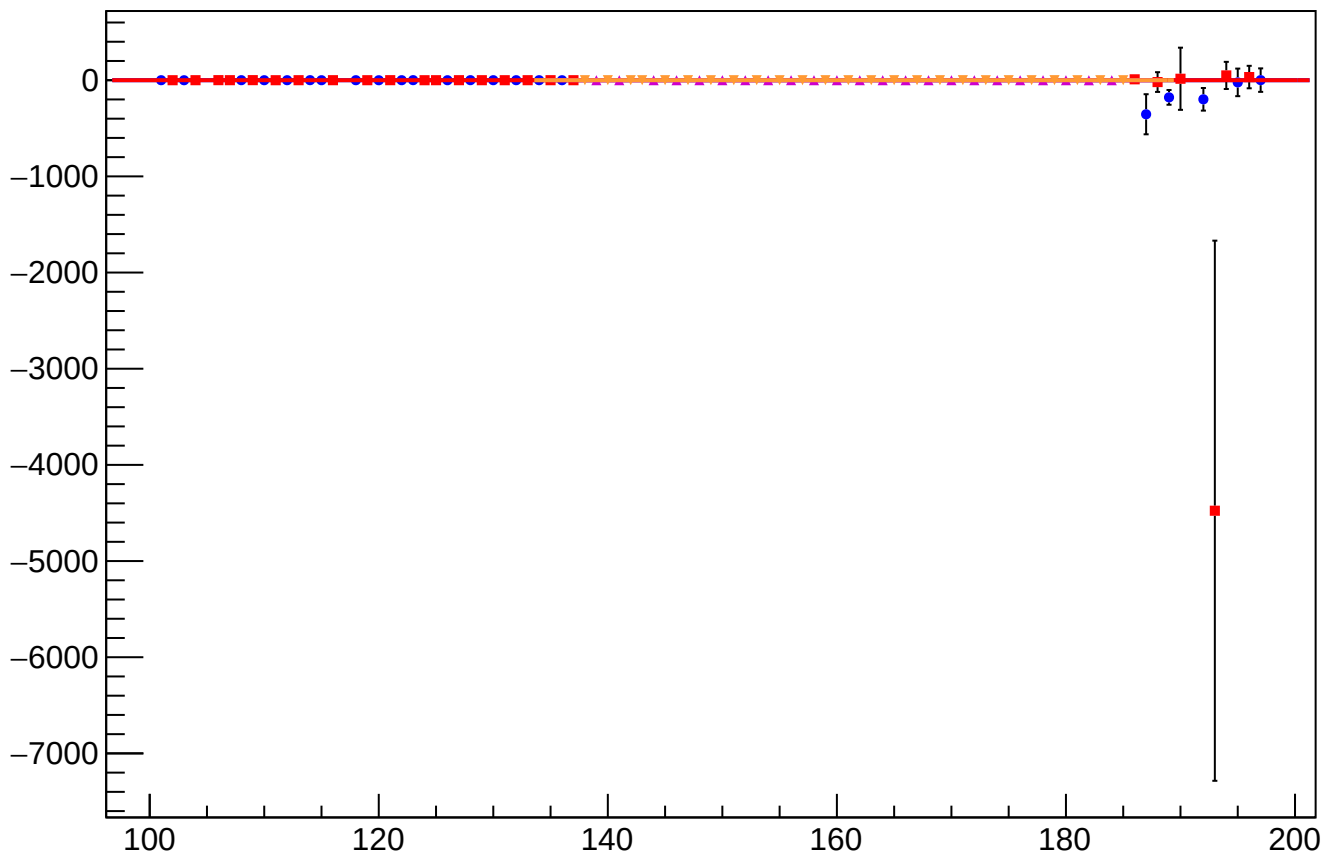
Right:  $-0.151 \pm 0.049$   $\chi^2/\text{NDF}$ : 109.2/45

In:  $-0.048 \pm 0.025$   $\chi^2/\text{NDF}$ : 68.8/44

Out:  $-0.035 \pm 0.025$   $\chi^2/\text{NDF}$ : 101.2/48

All:  $-0.042 \pm 0.018$   $\chi^2/\text{NDF}$ : 170.1/93

reg\_asym\_dsr\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.021+/-0.042  $\chi^2/\text{NDF}$ : 33.7/21

Left Out: 0.062+/-0.024  $\chi^2/\text{NDF}$ : 25.0/24

Right Out: 0.152+/-0.045  $\chi^2/\text{NDF}$ : 18.6/23

Left In: 0.069+/-0.025  $\chi^2/\text{NDF}$ : 51.4/22

Left: 0.065+/-0.017  $\chi^2/\text{NDF}$ : 76.5/47

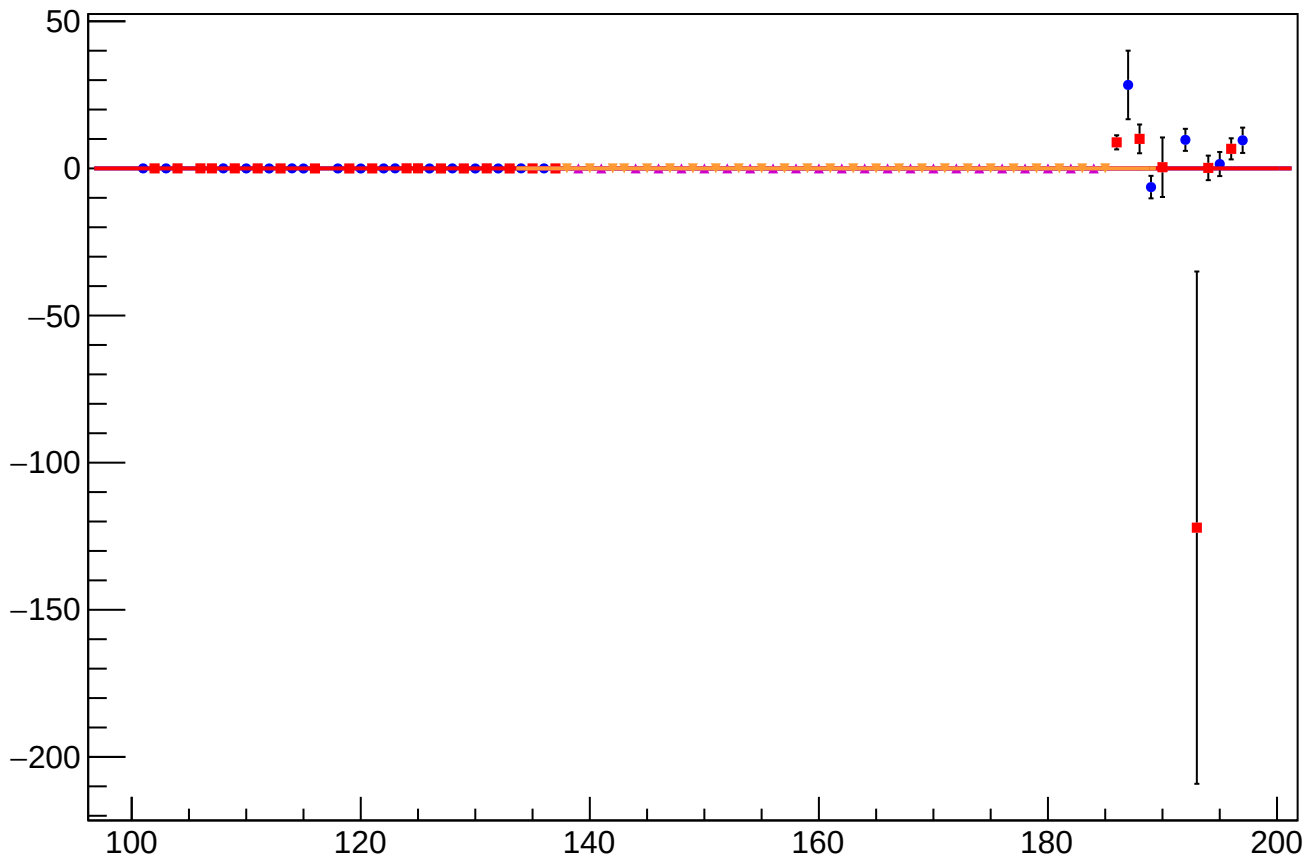
Right: 0.082+/-0.031  $\chi^2/\text{NDF}$ : 56.8/45

In: 0.057+/-0.021  $\chi^2/\text{NDF}$ : 86.1/44

Out: 0.081+/-0.021  $\chi^2/\text{NDF}$ : 46.8/48

All: 0.069+/-0.015  $\chi^2/\text{NDF}$ : 133.5/93

reg\_asym\_dsr\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.001 $\pm$ 0.002  $\chi^2$ /NDF: 52.9/21

Left Out: 0.008 $\pm$ 0.001  $\chi^2$ /NDF: 25.9/24

Right Out: 0.002 $\pm$ 0.002  $\chi^2$ /NDF: 43.8/23

Left In: 0.009 $\pm$ 0.001  $\chi^2$ /NDF: 15.8/22

Left: 0.009 $\pm$ 0.001  $\chi^2$ /NDF: 42.0/47

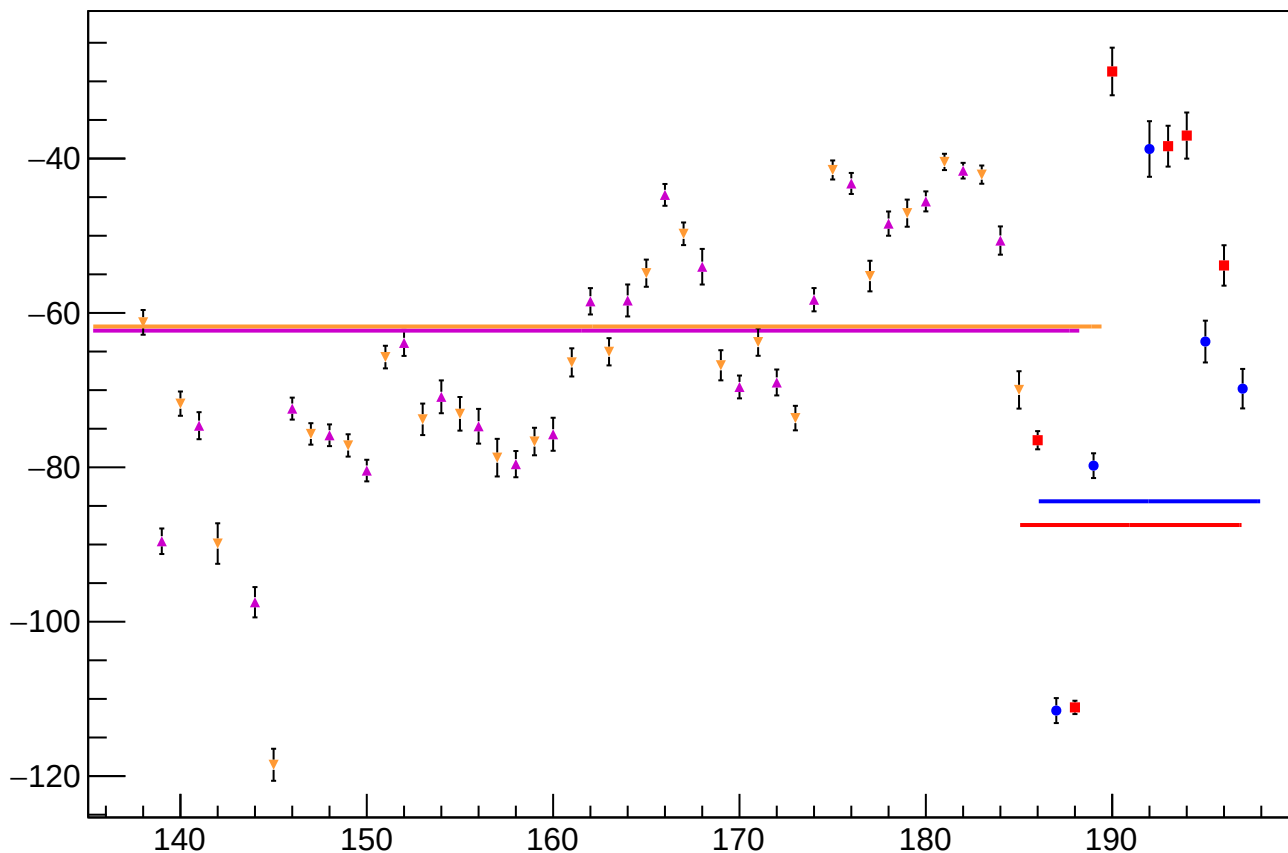
Right: 0.002 $\pm$ 0.002  $\chi^2$ /NDF: 96.8/45

In: 0.008 $\pm$ 0.001  $\chi^2$ /NDF: 78.8/44

Out: 0.007 $\pm$ 0.001  $\chi^2$ /NDF: 75.0/48

All: 0.007 $\pm$ 0.001  $\chi^2$ /NDF: 153.8/93

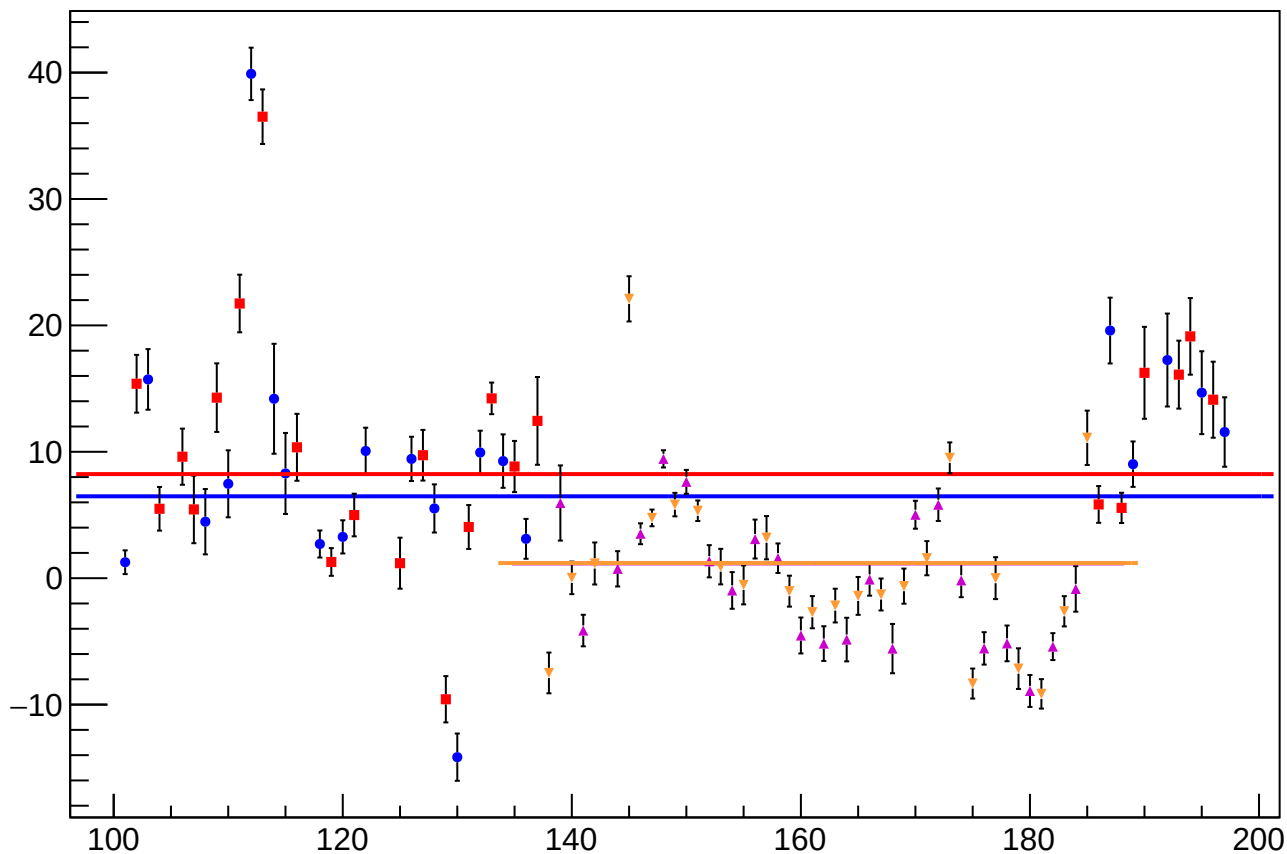
reg\_asym\_us\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-84.401 \pm 0.938$   $\chi^2/\text{NDF}$ : 540.7/4  
 Left Out:  $-61.756 \pm 0.334$   $\chi^2/\text{NDF}$ : 2509.2/23  
 Right Out:  $-87.474 \pm 0.624$   $\chi^2/\text{NDF}$ : 1991.6/5  
 Left In:  $-62.290 \pm 0.331$   $\chi^2/\text{NDF}$ : 2265.0/22

Left:  $-62.025 \pm 0.235$   $\chi^2/\text{NDF}$ : 4775.5/46  
 Right:  $-86.530 \pm 0.520$   $\chi^2/\text{NDF}$ : 2539.7/10  
 In:  $-64.741 \pm 0.312$   $\chi^2/\text{NDF}$ : 3299.9/27  
 Out:  $-67.473 \pm 0.294$   $\chi^2/\text{NDF}$ : 5820.3/29  
 All:  $-66.188 \pm 0.214$   $\chi^2/\text{NDF}$ : 9160.8/57

reg\_asym\_us\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 6.478+/-0.397  $\chi^2/\text{NDF}$ : 512.9/20

Left Out: 1.197+/-0.252  $\chi^2/\text{NDF}$ : 526.1/23

Right Out: 8.236+/-0.394  $\chi^2/\text{NDF}$ : 445.5/22

Left In: 1.171+/-0.255  $\chi^2/\text{NDF}$ : 466.2/22

Left: 1.184+/-0.179  $\chi^2/\text{NDF}$ : 992.3/46

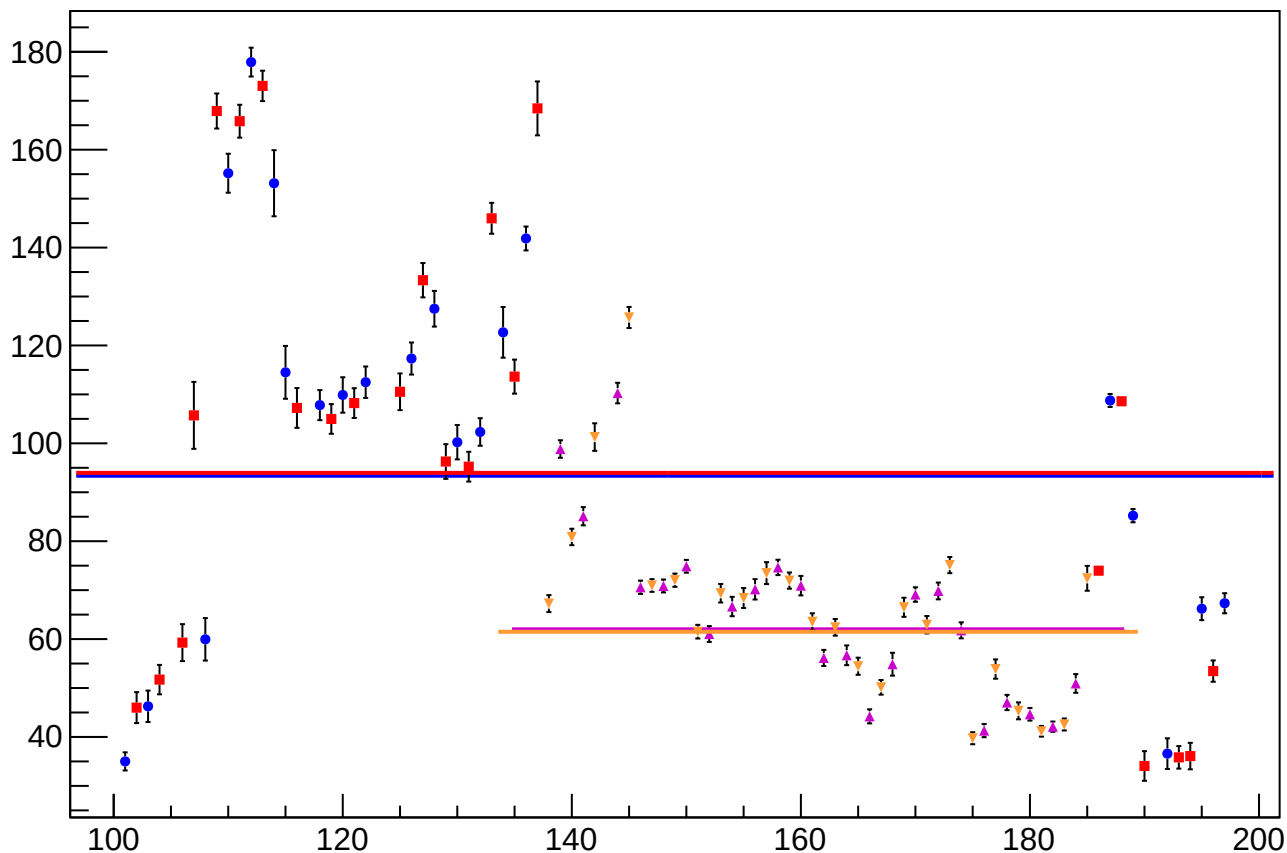
Right: 7.364+/-0.280  $\chi^2/\text{NDF}$ : 968.2/43

In: 2.717+/-0.214  $\chi^2/\text{NDF}$ : 1105.5/43

Out: 3.245+/-0.213  $\chi^2/\text{NDF}$ : 1197.6/46

All: 2.983+/-0.151  $\chi^2/\text{NDF}$ : 2306.2/90

reg\_asym\_us\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 93.379 $\pm$ 0.562  $\chi^2$ /NDF: 3878.0/20

Left Out: 61.496 $\pm$ 0.332  $\chi^2$ /NDF:2610.2/23

Right Out: 93.966 $\pm$ 0.436  $\chi^2$ /NDF: 5451.7/22

Left In: 61.995 $\pm$ 0.329  $\chi^2$ /NDF:2517.6/22

Left: 61.748 $\pm$ 0.234  $\chi^2$ /NDF: 5129.0/46

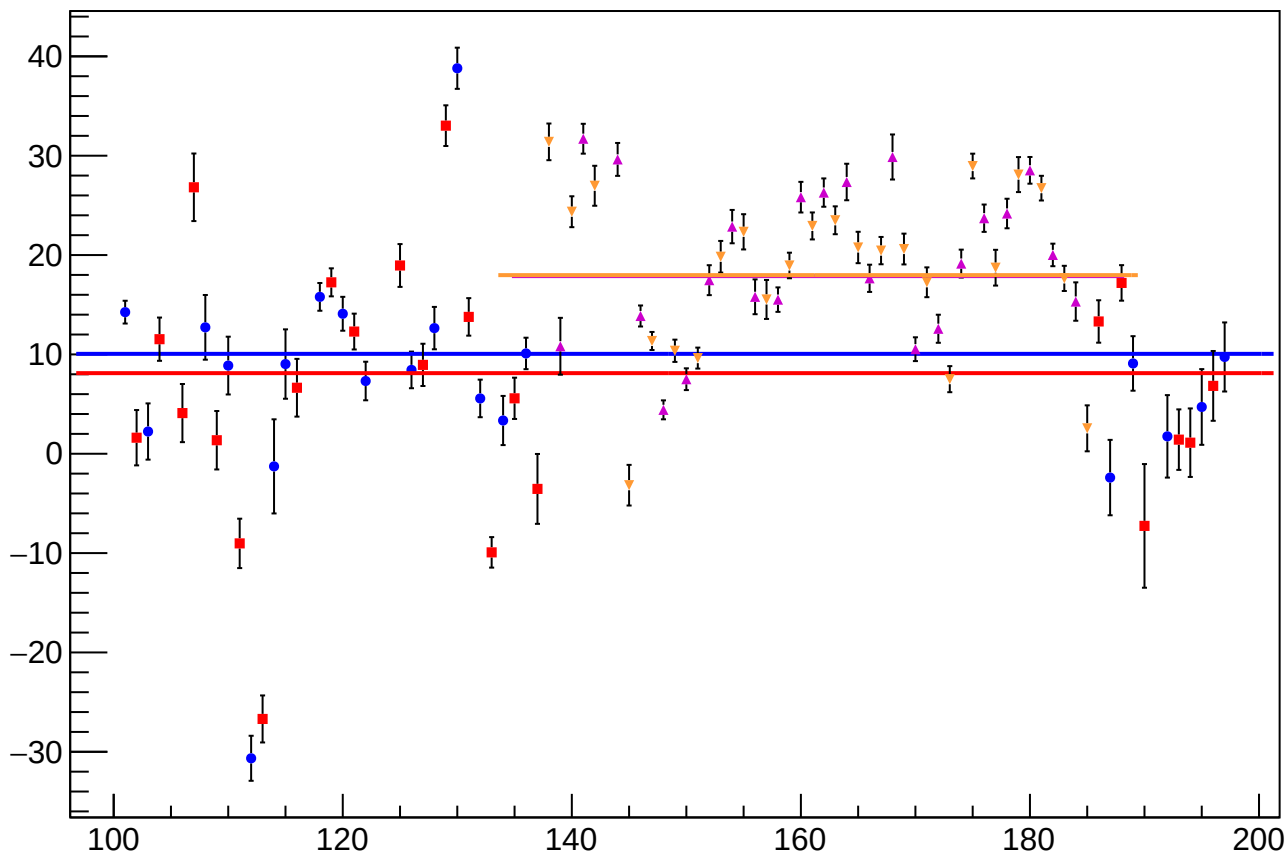
Right: 93.745 $\pm$ 0.345  $\chi^2$ /NDF: 9330.3/43

In: 70.010 $\pm$ 0.284  $\chi^2$ /NDF:8720.3/43

Out: 73.415 $\pm$ 0.264  $\chi^2$ /NDF:11567.2/46

All: 71.833 $\pm$ 0.193  $\chi^2$ /NDF: 20364.6/90

reg\_asym\_us\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 10.055 $\pm$ 0.469  $\chi^2$ /NDF: 599.2/20

Left Out: 17.979 $\pm$ 0.291  $\chi^2$ /NDF: 674.8/23

Right Out: 8.113 $\pm$ 0.474  $\chi^2$ /NDF: 736.7/22

Left In: 17.881 $\pm$ 0.292  $\chi^2$ /NDF: 730.9/22

Left: 17.930 $\pm$ 0.206  $\chi^2$ /NDF: 1405.8/46

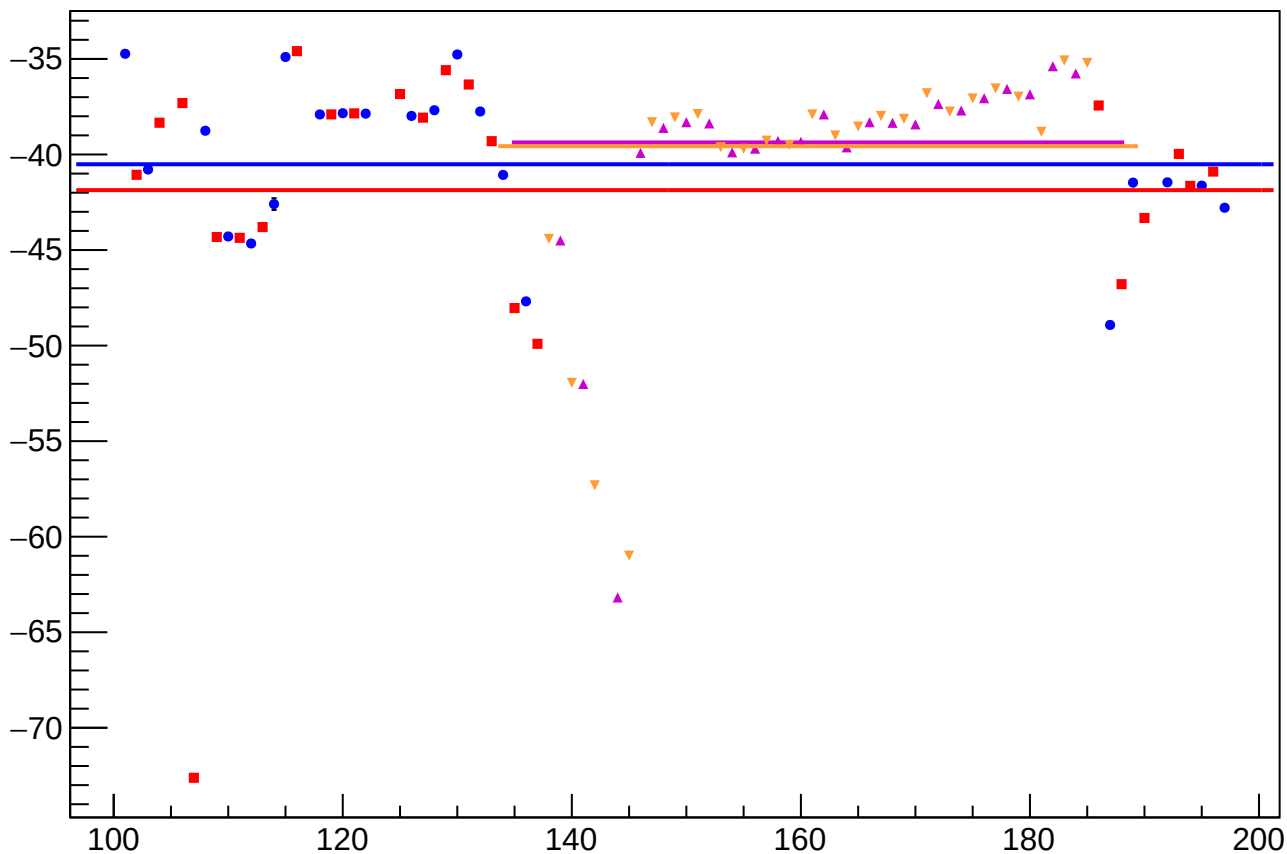
Right: 9.094 $\pm$ 0.333  $\chi^2$ /NDF: 1344.4/43

In: 15.700 $\pm$ 0.248  $\chi^2$ /NDF: 1530.8/43

Out: 15.281 $\pm$ 0.248  $\chi^2$ /NDF: 1726.3/46

All: 15.491 $\pm$ 0.175  $\chi^2$ /NDF: 3258.5/90

reg\_asym\_us\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-40.512 \pm 0.025$   $\chi^2/\text{NDF}: 27457.7/20$

Left Out:  $-39.567 \pm 0.014$   $\chi^2/\text{NDF}: 141152.0/23$

Right Out:  $-41.866 \pm 0.024$   $\chi^2/\text{NDF}: 64431.3/22$

Left In:  $-39.368 \pm 0.014$   $\chi^2/\text{NDF}: 117958.1/22$

Left:  $-39.466 \pm 0.010$   $\chi^2/\text{NDF}: 259216.7/46$

Right:  $-41.216 \pm 0.018$   $\chi^2/\text{NDF}: 93366.9/43$

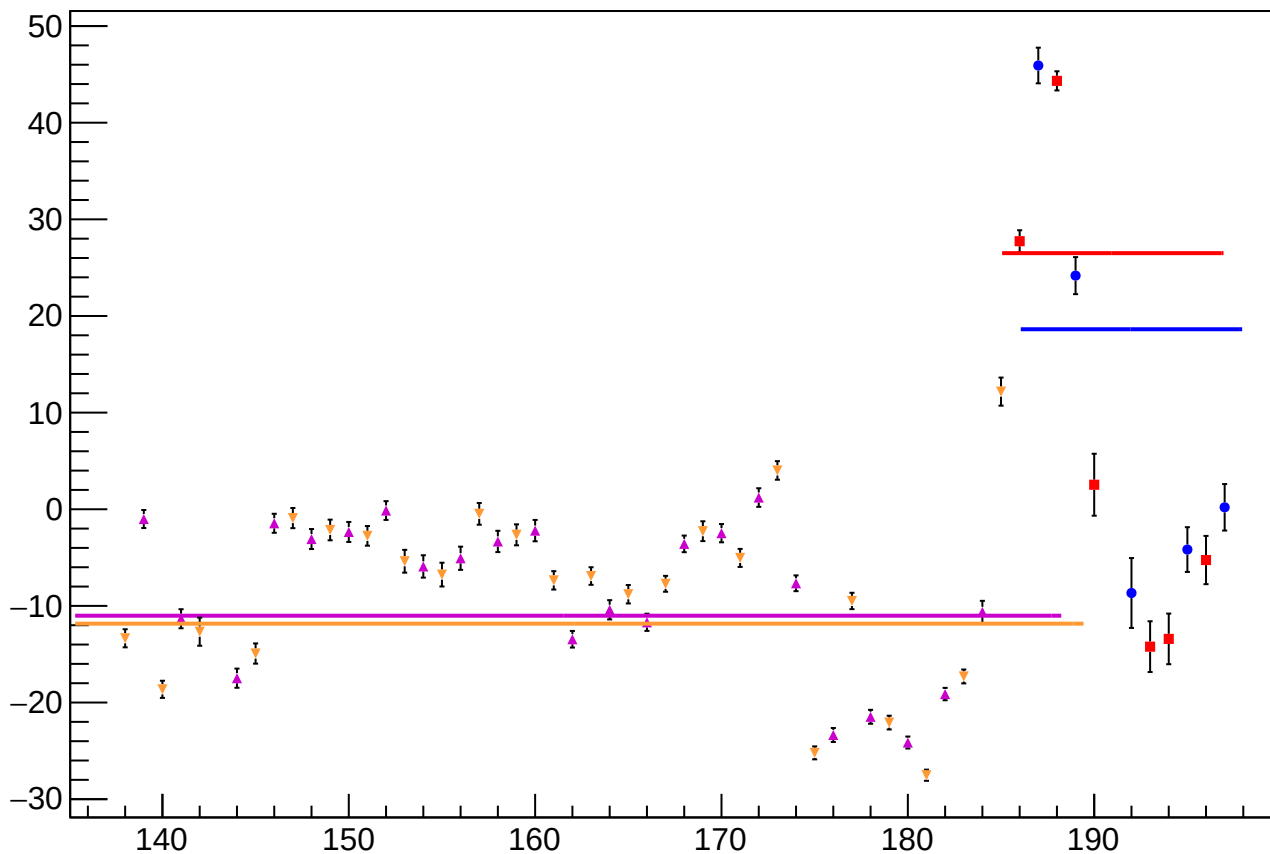
In:  $-39.621 \pm 0.012$   $\chi^2/\text{NDF}: 146995.5/43$

Out:  $-40.120 \pm 0.012$   $\chi^2/\text{NDF}: 212327.1/46$

All:  $-39.870 \pm 0.008$   $\chi^2/\text{NDF}: 360193.5/90$



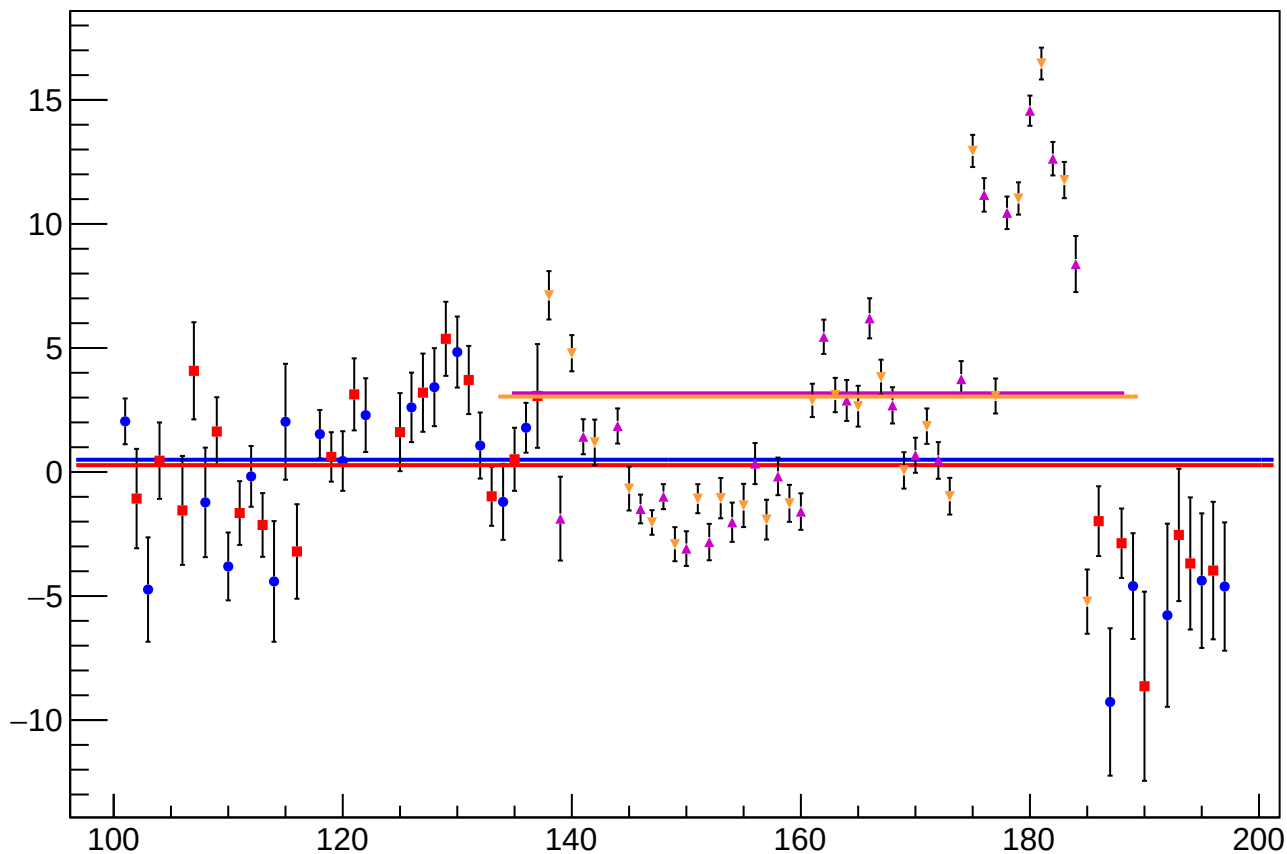
reg\_asym\_us\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $18.626 \pm 0.999$   $\chi^2/\text{NDF}: 439.9/4$   
 Left Out:  $-11.837 \pm 0.187$   $\chi^2/\text{NDF}: 2742.4/23$   
 Right Out:  $26.501 \pm 0.653$   $\chi^2/\text{NDF}: 1015.7/5$   
 Left In:  $-11.014 \pm 0.187$   $\chi^2/\text{NDF}: 2116.6/22$

Left:  $-11.426 \pm 0.132$   $\chi^2/\text{NDF}: 4868.7/46$   
 Right:  $24.144 \pm 0.547$   $\chi^2/\text{NDF}: 1499.1/10$   
 In:  $-10.009 \pm 0.184$   $\chi^2/\text{NDF}: 3406.8/27$   
 Out:  $-8.937 \pm 0.180$   $\chi^2/\text{NDF}: 6944.6/29$   
 All:  $-9.460 \pm 0.129$   $\chi^2/\text{NDF}: 10368.8/57$

reg\_asym\_us\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $0.495 \pm 0.326$   $\chi^2/\text{NDF}: 71.4/20$

Left Out:  $3.042 \pm 0.148$   $\chi^2/\text{NDF}: 1452.6/23$

Right Out:  $0.277 \pm 0.325$   $\chi^2/\text{NDF}: 62.7/22$

Left In:  $3.172 \pm 0.150$   $\chi^2/\text{NDF}: 1297.9/22$

Left:  $3.106 \pm 0.105$   $\chi^2/\text{NDF}: 2750.9/46$

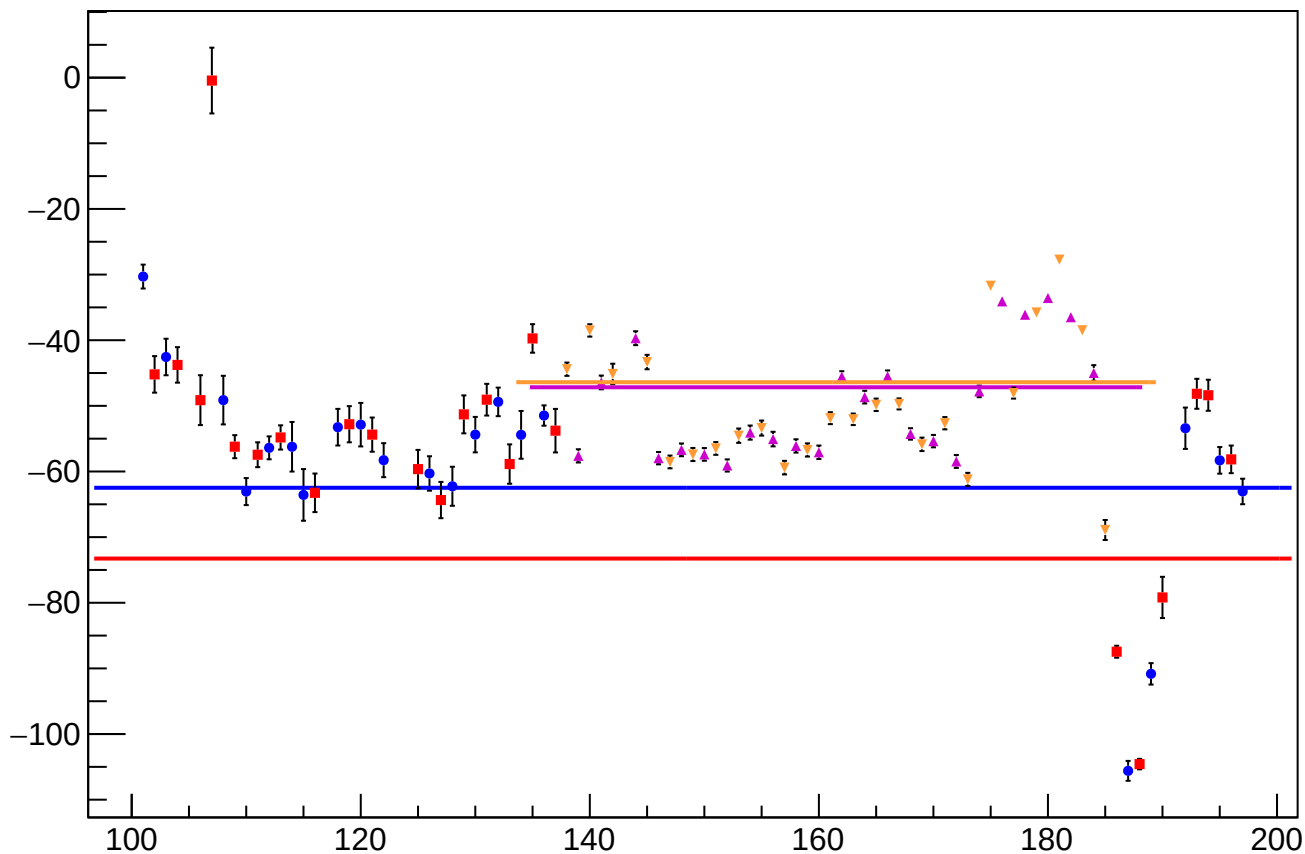
Right:  $0.386 \pm 0.230$   $\chi^2/\text{NDF}: 134.3/43$

In:  $2.705 \pm 0.136$   $\chi^2/\text{NDF}: 1425.2/43$

Out:  $2.568 \pm 0.135$   $\chi^2/\text{NDF}: 1575.3/46$

All:  $2.636 \pm 0.096$   $\chi^2/\text{NDF}: 3000.9/90$

reg\_asym\_us\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-62.481 \pm 0.495$   $\chi^2/\text{NDF}: 1638.1/20$

Left Out:  $-46.398 \pm 0.187$   $\chi^2/\text{NDF}: 3289.4/23$

Right Out:  $-73.266 \pm 0.405$   $\chi^2/\text{NDF}: 3411.4/22$

Left In:  $-47.170 \pm 0.186$   $\chi^2/\text{NDF}: 2526.3/22$

Left:  $-46.784 \pm 0.132$   $\chi^2/\text{NDF}: 5824.3/46$

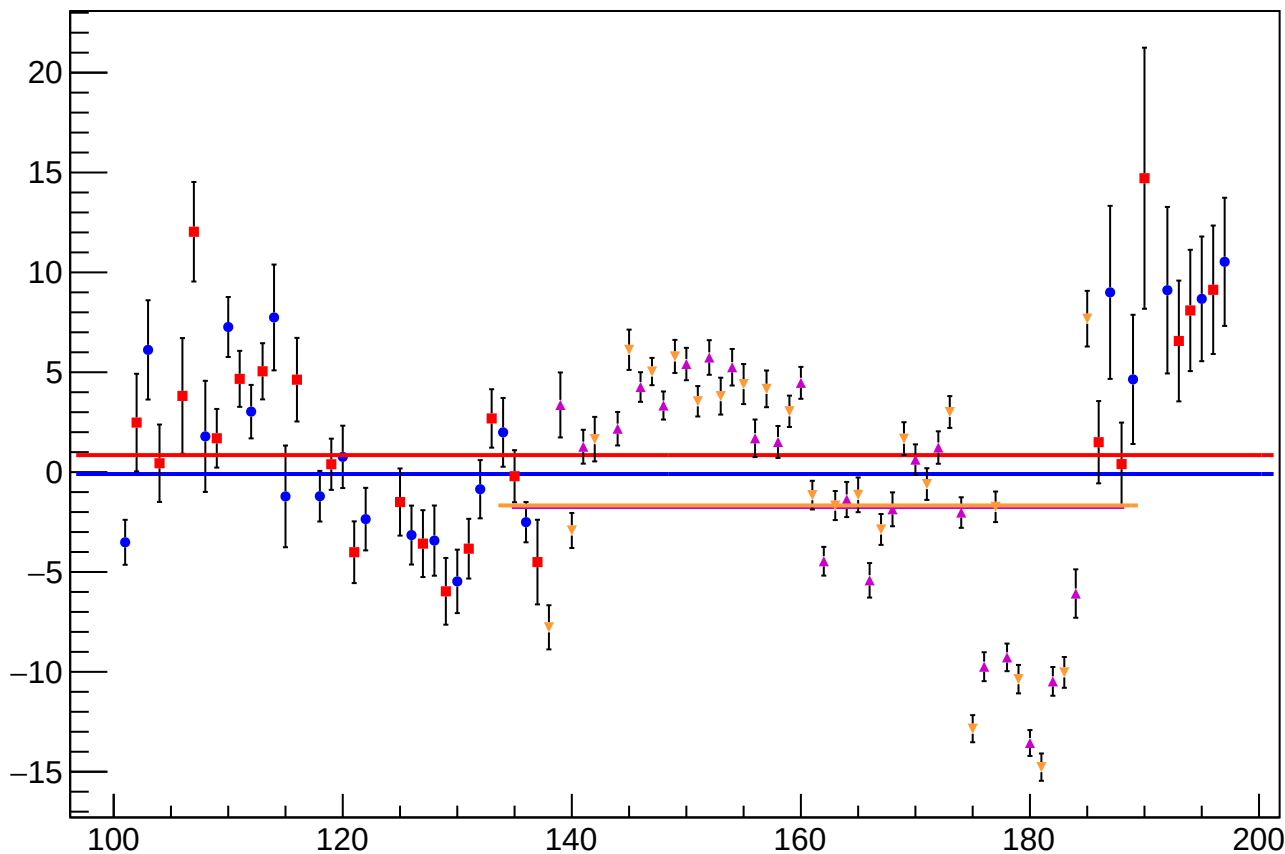
Right:  $-68.935 \pm 0.313$   $\chi^2/\text{NDF}: 5334.1/43$

In:  $-49.076 \pm 0.174$   $\chi^2/\text{NDF}: 5003.5/43$

Out:  $-51.098 \pm 0.169$   $\chi^2/\text{NDF}: 10329.6/46$

All:  $-50.116 \pm 0.122$   $\chi^2/\text{NDF}: 15402.3/90$

reg\_asym\_us\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-0.095 \pm 0.373$   $\chi^2/\text{NDF}: 114.6/20$

Left Out:  $-1.668 \pm 0.167$   $\chi^2/\text{NDF}: 1479.3/23$

Right Out:  $0.852 \pm 0.377$   $\chi^2/\text{NDF}: 116.2/22$

Left In:  $-1.746 \pm 0.168$   $\chi^2/\text{NDF}: 1254.1/22$

Left:  $-1.707 \pm 0.119$   $\chi^2/\text{NDF}: 2733.5/46$

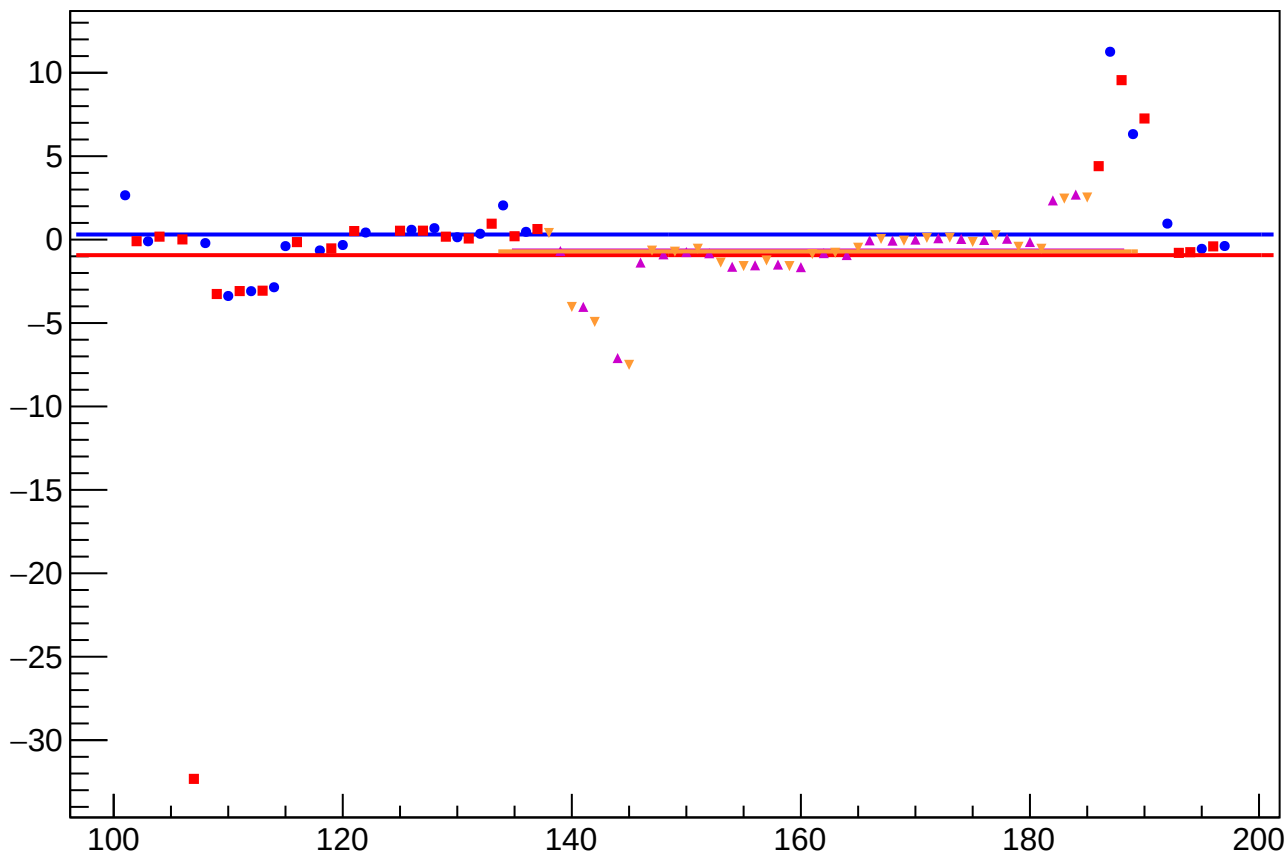
Right:  $0.373 \pm 0.265$   $\chi^2/\text{NDF}: 234.0/43$

In:  $-1.466 \pm 0.154$   $\chi^2/\text{NDF}: 1385.0/43$

Out:  $-1.255 \pm 0.153$   $\chi^2/\text{NDF}: 1632.9/46$

All:  $-1.360 \pm 0.108$   $\chi^2/\text{NDF}: 3018.8/90$

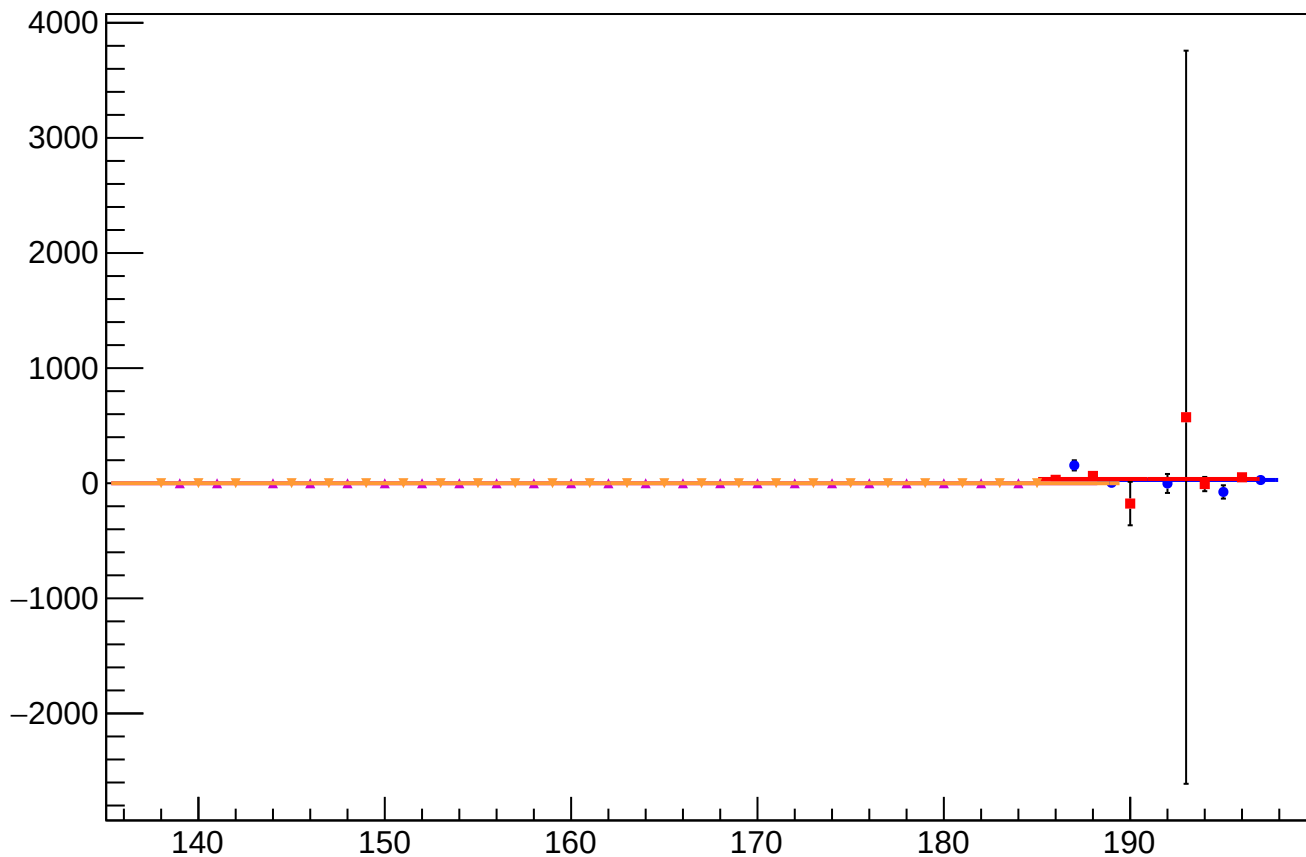
reg\_asym\_us\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.307 \pm 0.020$   $\chi^2/\text{NDF}: 9431.4/20$   
 Left Out:  $-0.703 \pm 0.008$   $\chi^2/\text{NDF}: 53770.3/23$   
 Right Out:  $-0.932 \pm 0.020$   $\chi^2/\text{NDF}: 92102.9/22$   
 Left In:  $-0.651 \pm 0.008$   $\chi^2/\text{NDF}: 44167.1/22$

Left:  $-0.677 \pm 0.005$   $\chi^2/\text{NDF}: 97959.9/46$   
 Right:  $-0.324 \pm 0.014$   $\chi^2/\text{NDF}: 103483.3/43$   
 In:  $-0.530 \pm 0.007$   $\chi^2/\text{NDF}: 55597.6/43$   
 Out:  $-0.733 \pm 0.007$   $\chi^2/\text{NDF}: 145991.2/46$   
 All:  $-0.631 \pm 0.005$   $\chi^2/\text{NDF}: 201994.1/90$

reg\_asym\_ds\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 28.418+/-19.254  $\chi^2/\text{NDF}$ : 12.3/4

Left Out: -0.038+/-0.018  $\chi^2/\text{NDF}$ : 35.6/23

Right Out: 37.018+/-10.011  $\chi^2/\text{NDF}$ : 3.9/5

Left In: -0.009+/-0.018  $\chi^2/\text{NDF}$ : 35.3/22

Left: -0.024+/-0.013  $\chi^2/\text{NDF}$ : 72.1/46

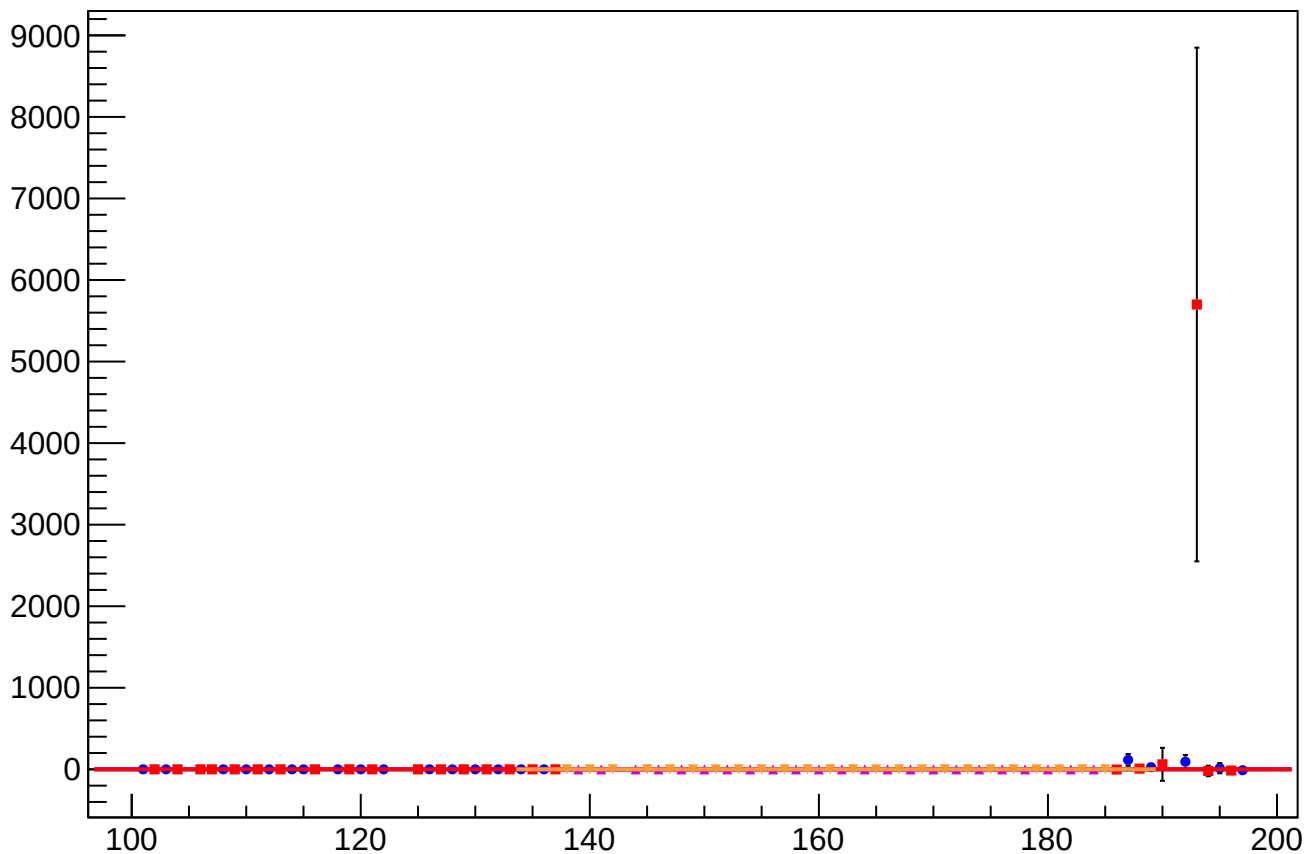
Right: 35.188+/-8.882  $\chi^2/\text{NDF}$ : 16.4/10

In: -0.009+/-0.018  $\chi^2/\text{NDF}$ : 49.8/27

Out: -0.038+/-0.018  $\chi^2/\text{NDF}$ : 53.2/29

All: -0.024+/-0.013  $\chi^2/\text{NDF}$ : 104.2/57

reg\_asym\_ds\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-0.013 \pm 0.023$   $\chi^2/\text{NDF}$ : 16.7/20

Left Out:  $-0.073 \pm 0.014$   $\chi^2/\text{NDF}$ : 27.8/23

Right Out:  $-0.092 \pm 0.025$   $\chi^2/\text{NDF}$ : 12.9/22

Left In:  $-0.065 \pm 0.014$   $\chi^2/\text{NDF}$ : 40.4/22

Left:  $-0.069 \pm 0.010$   $\chi^2/\text{NDF}$ : 68.3/46

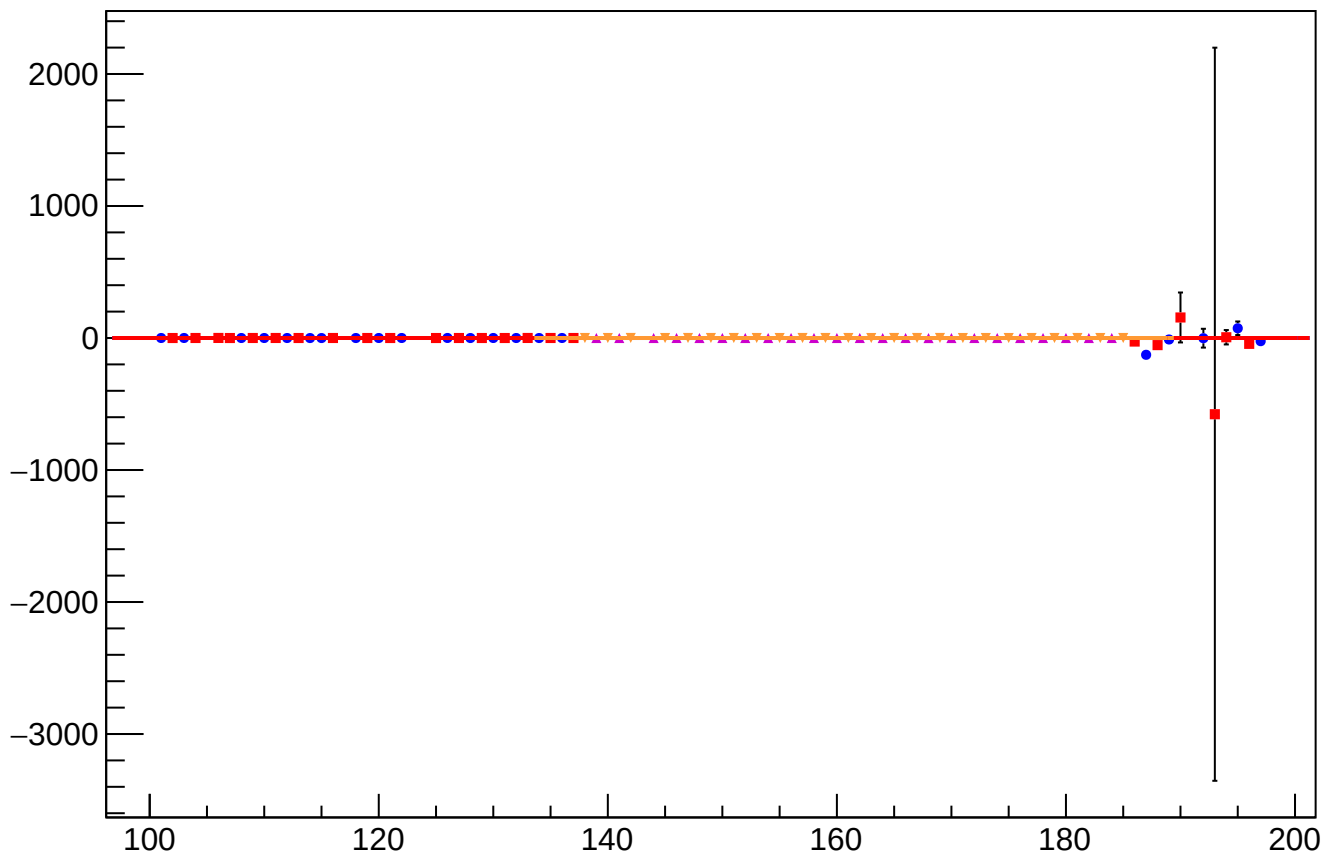
Right:  $-0.050 \pm 0.017$   $\chi^2/\text{NDF}$ : 35.1/43

In:  $-0.051 \pm 0.012$   $\chi^2/\text{NDF}$ : 60.8/43

Out:  $-0.078 \pm 0.012$   $\chi^2/\text{NDF}$ : 41.2/46

All:  $-0.064 \pm 0.009$   $\chi^2/\text{NDF}$ : 104.3/90

reg\_asym\_ds\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.017 $\pm$ 0.043  $\chi^2$ /NDF: 24.8/20

Left Out: 0.036 $\pm$ 0.018  $\chi^2$ /NDF:32.4/23

Right Out: 0.028 $\pm$ 0.045  $\chi^2$ /NDF: 28.3/22

Left In: -0.010 $\pm$ 0.018  $\chi^2$ /NDF:37.1/22

Left: 0.013 $\pm$ 0.013  $\chi^2$ /NDF: 72.8/46

Right: 0.023 $\pm$ 0.031  $\chi^2$ /NDF: 53.1/43

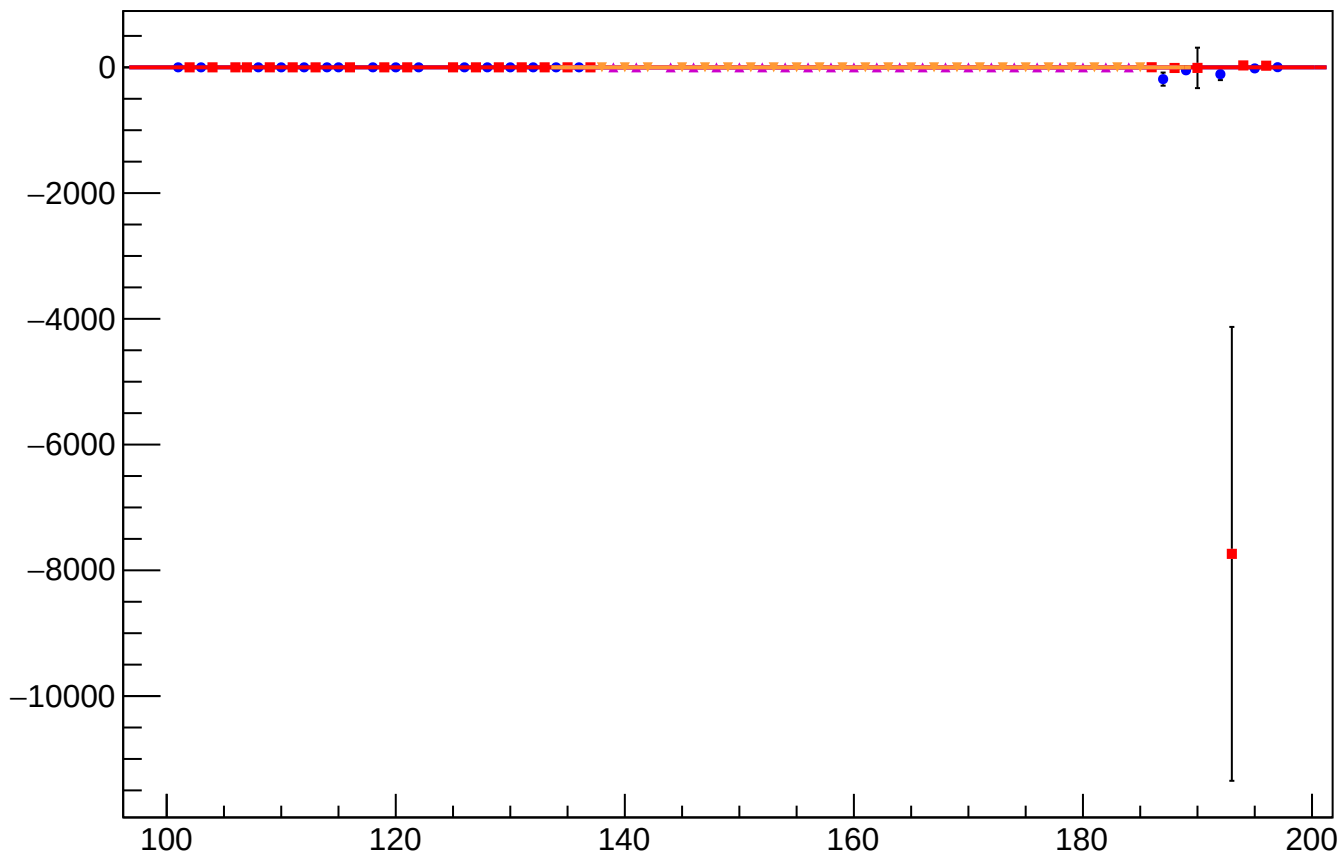
In: -0.006 $\pm$ 0.017  $\chi^2$ /NDF:62.2/43

Out: 0.035 $\pm$ 0.017  $\chi^2$ /NDF:60.7/46

All: 0.014 $\pm$ 0.012  $\chi^2$ /NDF: 126.0/90



reg\_asym\_ds\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.007+/-0.027  $\chi^2/\text{NDF}$ : 17.5/20

Left Out: 0.086+/-0.016  $\chi^2/\text{NDF}$ : 27.8/23

Right Out: 0.110+/-0.029  $\chi^2/\text{NDF}$ : 12.9/22

Left In: 0.071+/-0.016  $\chi^2/\text{NDF}$ : 44.0/22

Left: 0.079+/-0.011  $\chi^2/\text{NDF}$ : 72.1/46

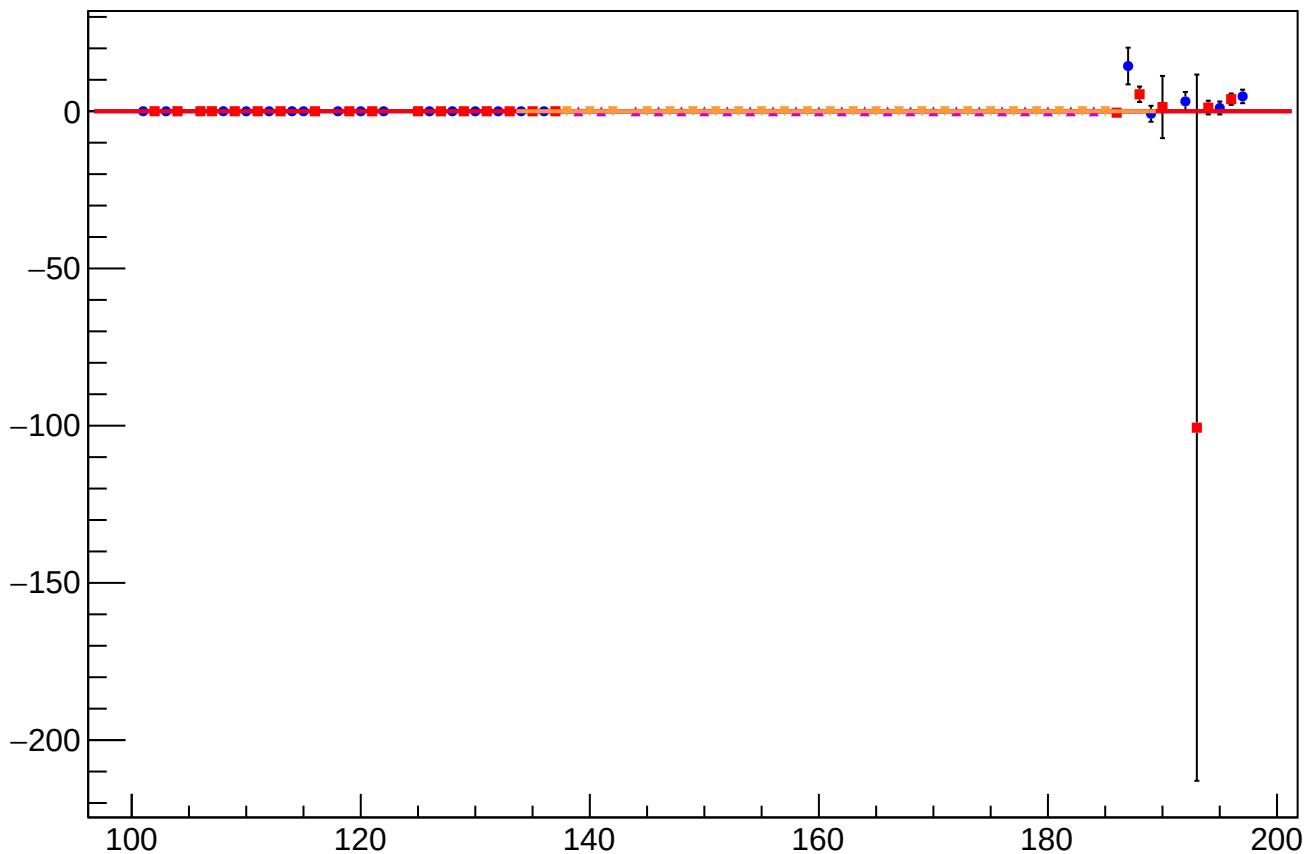
Right: 0.055+/-0.020  $\chi^2/\text{NDF}$ : 37.3/43

In: 0.054+/-0.014  $\chi^2/\text{NDF}$ : 65.7/43

Out: 0.092+/-0.014  $\chi^2/\text{NDF}$ : 41.2/46

All: 0.073+/-0.010  $\chi^2/\text{NDF}$ : 110.5/90

reg\_asym\_ds\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.005 \pm 0.001$   $\chi^2/\text{NDF}$ : 34.9/20

Left Out:  $0.000 \pm 0.001$   $\chi^2/\text{NDF}$ : 23.9/23

Right Out:  $-0.004 \pm 0.001$   $\chi^2/\text{NDF}$ : 34.2/22

Left In:  $0.000 \pm 0.001$   $\chi^2/\text{NDF}$ : 22.4/22

Left:  $0.000 \pm 0.001$   $\chi^2/\text{NDF}$ : 46.3/46

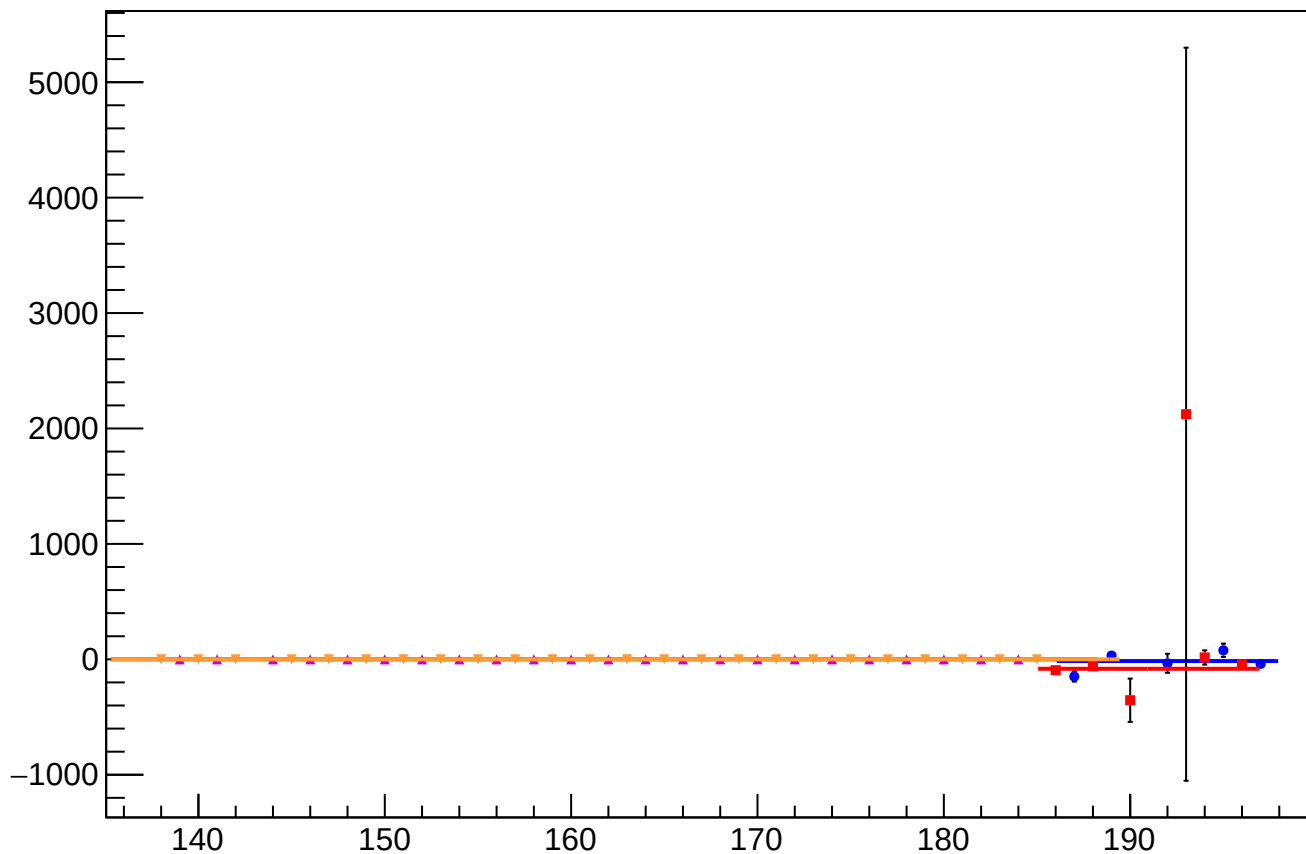
Right:  $-0.005 \pm 0.001$   $\chi^2/\text{NDF}$ : 69.5/43

In:  $-0.001 \pm 0.001$   $\chi^2/\text{NDF}$ : 69.4/43

Out:  $-0.001 \pm 0.001$   $\chi^2/\text{NDF}$ : 66.1/46

All:  $-0.001 \pm 0.000$   $\chi^2/\text{NDF}$ : 135.7/90

reg\_asym\_ds\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-15.063 \pm 19.240$   $\chi^2/\text{NDF}$ : 14.8/4

Left Out:  $-0.052 \pm 0.018$   $\chi^2/\text{NDF}$ : 37.3/23

Right Out:  $-81.765 \pm 10.013$   $\chi^2/\text{NDF}$ : 8.0/5

Left In:  $-0.010 \pm 0.018$   $\chi^2/\text{NDF}$ : 33.3/22

Left:  $-0.031 \pm 0.013$   $\chi^2/\text{NDF}$ : 73.3/46

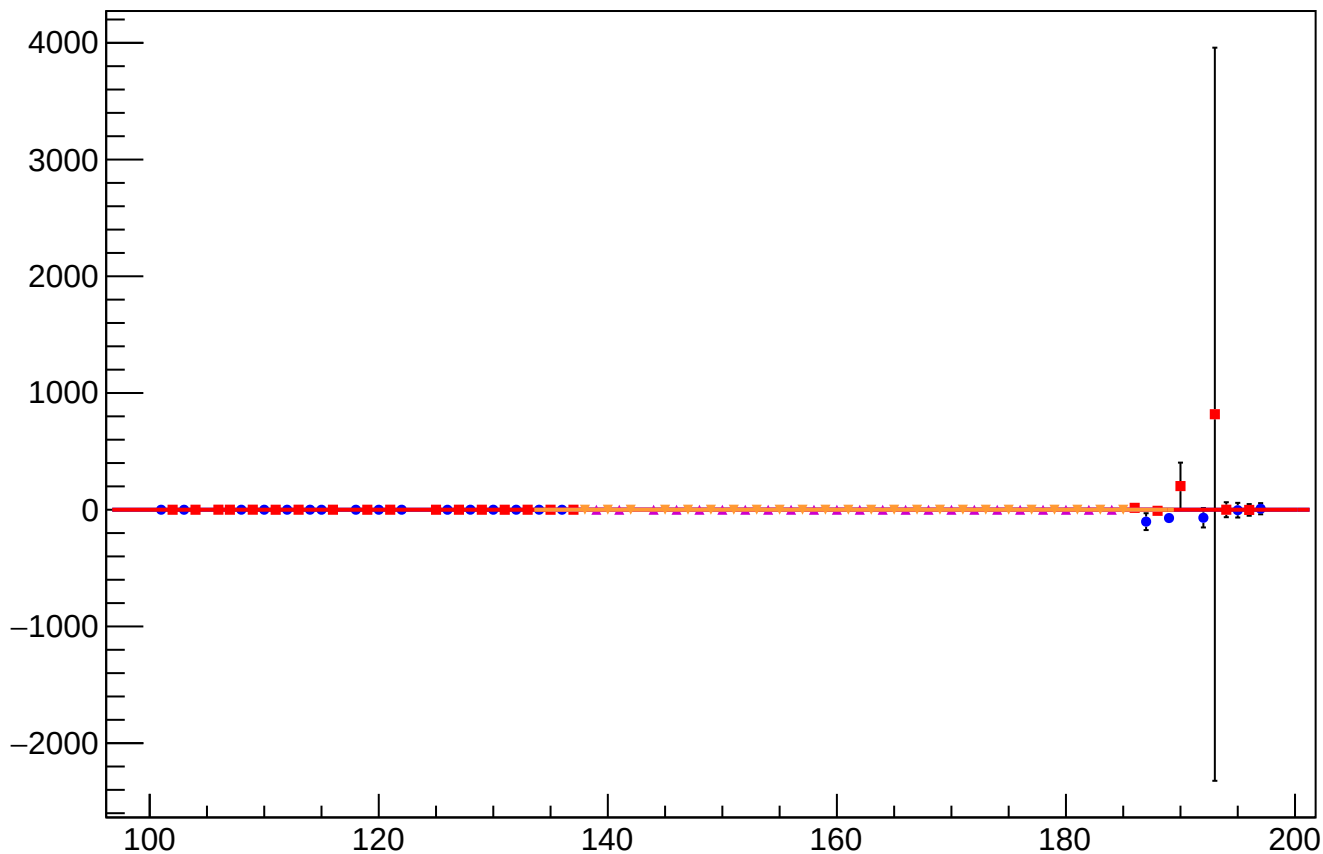
Right:  $-67.549 \pm 8.882$   $\chi^2/\text{NDF}$ : 32.3/10

In:  $-0.010 \pm 0.018$   $\chi^2/\text{NDF}$ : 48.7/27

Out:  $-0.052 \pm 0.018$   $\chi^2/\text{NDF}$ : 111.9/29

All:  $-0.031 \pm 0.013$   $\chi^2/\text{NDF}$ : 163.4/57

reg\_asym\_ds\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.010 $\pm$ 0.023  $\chi^2$ /NDF: 32.8/20

Left Out: -0.010 $\pm$ 0.014  $\chi^2$ /NDF:29.5/23

Right Out: 0.040 $\pm$ 0.025  $\chi^2$ /NDF: 29.4/22

Left In: 0.004 $\pm$ 0.014  $\chi^2$ /NDF:50.3/22

Left: -0.003 $\pm$ 0.010  $\chi^2$ /NDF: 80.2/46

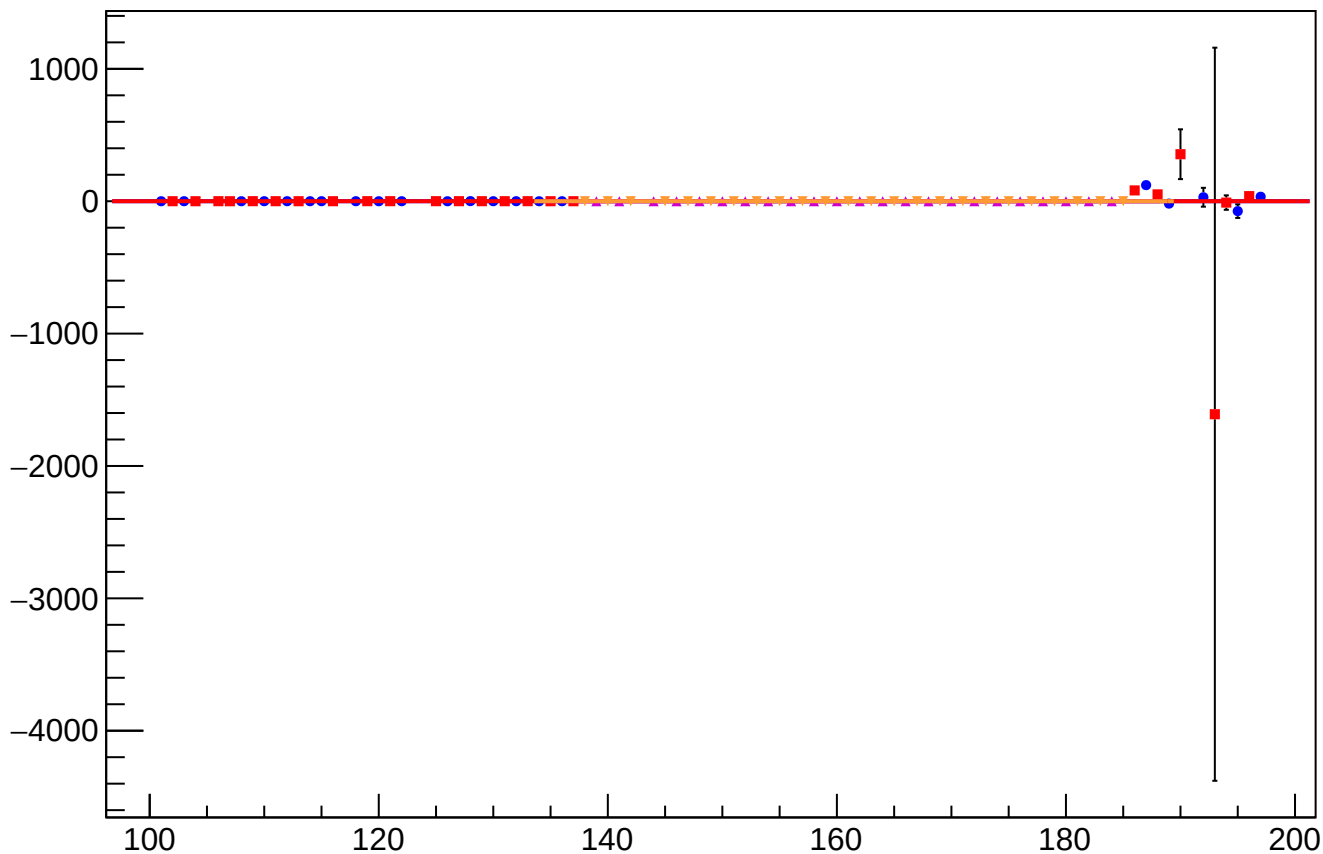
Right: 0.024 $\pm$ 0.017  $\chi^2$ /NDF: 63.0/43

In: 0.006 $\pm$ 0.012  $\chi^2$ /NDF:83.1/43

Out: 0.002 $\pm$ 0.012  $\chi^2$ /NDF:62.0/46

All: 0.004 $\pm$ 0.009  $\chi^2$ /NDF: 145.2/90

reg\_asym\_ds\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.152 $\pm$ 0.043  $\chi^2$ /NDF: 43.8/20

Left Out: 0.048 $\pm$ 0.018  $\chi^2$ /NDF:35.4/23

Right Out: 0.204 $\pm$ 0.045  $\chi^2$ /NDF: 96.5/22

Left In: 0.021 $\pm$ 0.018  $\chi^2$ /NDF:34.0/22

Left: 0.034 $\pm$ 0.013  $\chi^2$ /NDF: 70.5/46

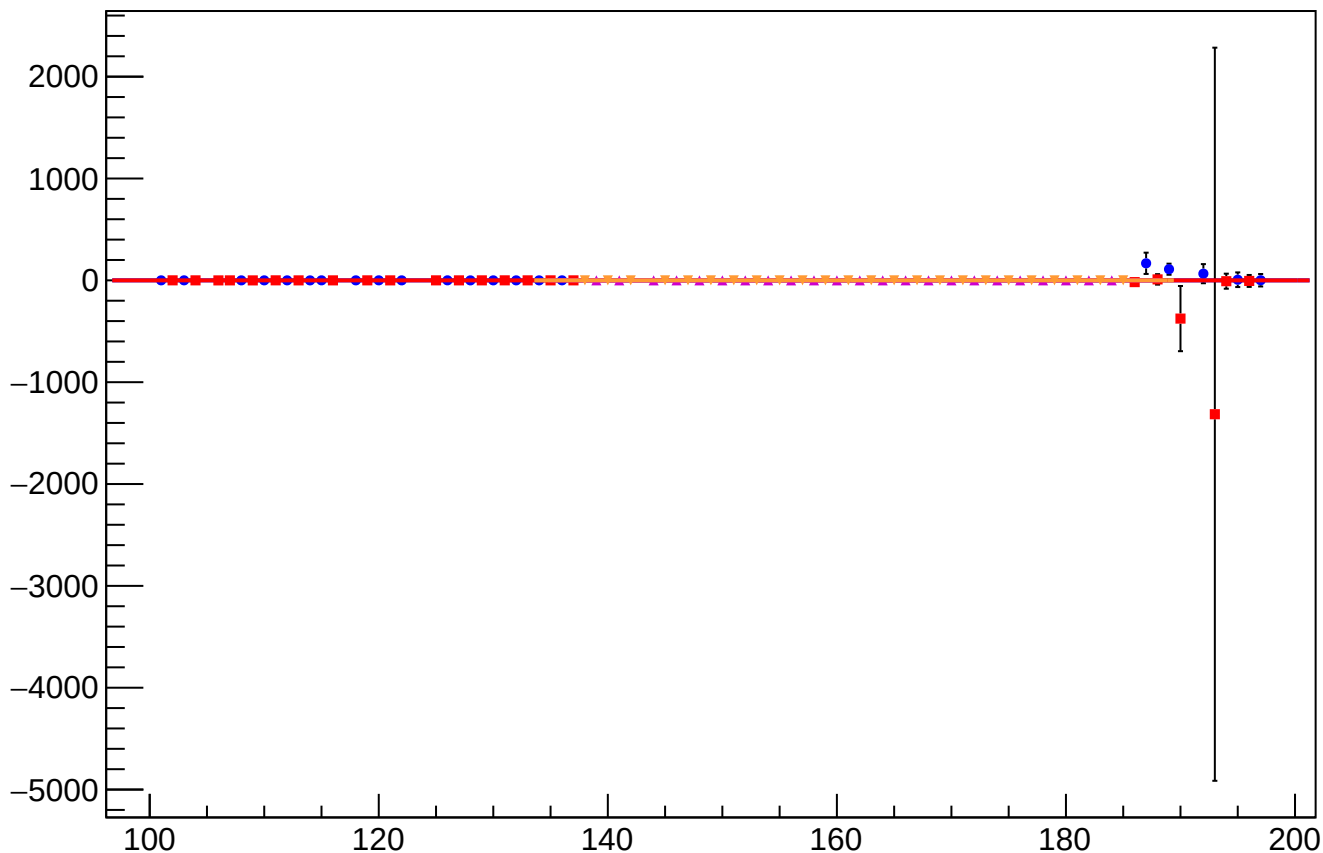
Right: 0.177 $\pm$ 0.031  $\chi^2$ /NDF: 141.0/43

In: 0.041 $\pm$ 0.017  $\chi^2$ /NDF:85.8/43

Out: 0.069 $\pm$ 0.017  $\chi^2$ /NDF:142.2/46

All: 0.055 $\pm$ 0.012  $\chi^2$ /NDF: 229.5/90

reg\_asym\_ds\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -0.014 $\pm$ 0.027  $\chi^2$ /NDF: 32.3/20

Left Out: 0.021 $\pm$ 0.016  $\chi^2$ /NDF:33.2/23

Right Out: -0.050 $\pm$ 0.029  $\chi^2$ /NDF: 27.3/22

Left In: 0.007 $\pm$ 0.016  $\chi^2$ /NDF:50.7/22

Left: 0.014 $\pm$ 0.011  $\chi^2$ /NDF: 84.2/46

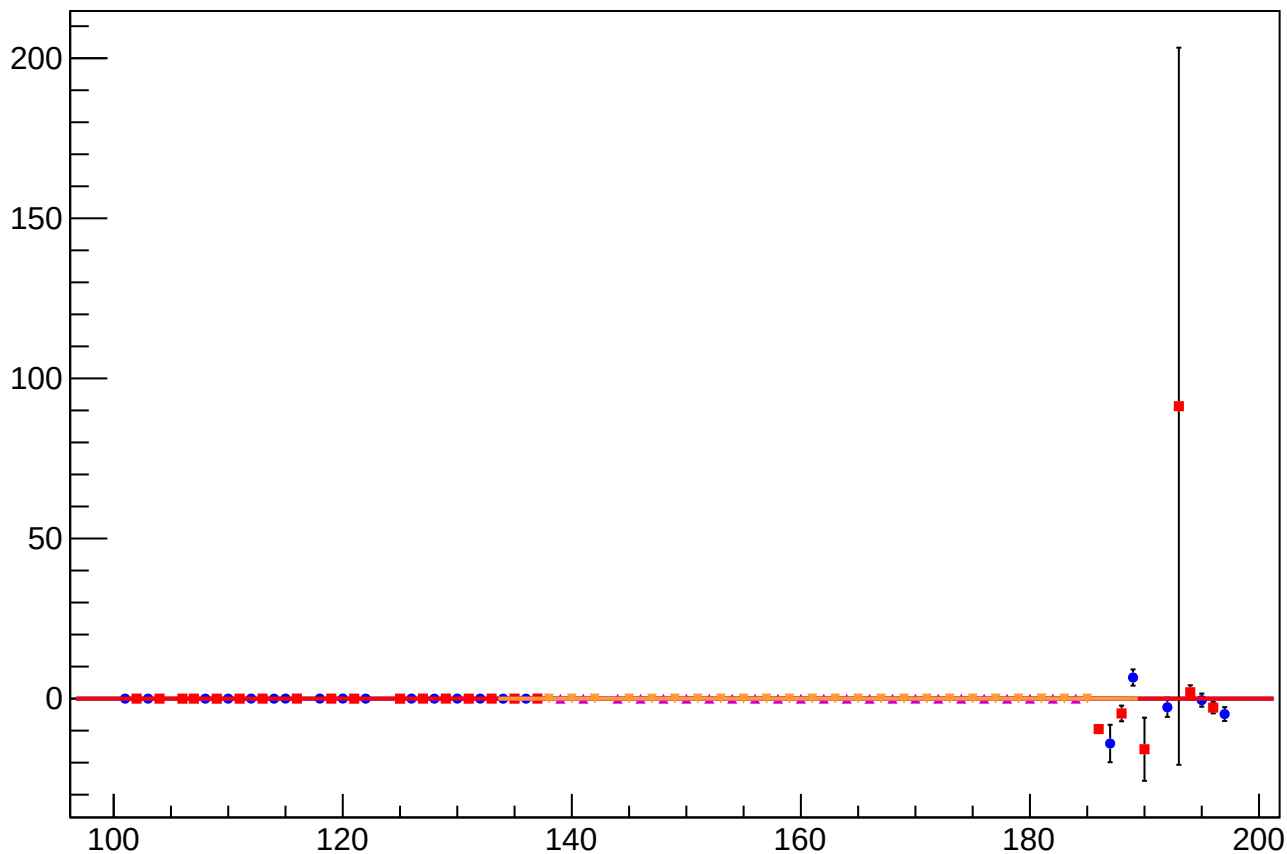
Right: -0.030 $\pm$ 0.020  $\chi^2$ /NDF: 60.4/43

In: 0.002 $\pm$ 0.014  $\chi^2$ /NDF:83.4/43

Out: 0.004 $\pm$ 0.014  $\chi^2$ /NDF:65.1/46

All: 0.003 $\pm$ 0.010  $\chi^2$ /NDF: 148.5/90

reg\_asym\_ds\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.006+/-0.001  $\chi^2/\text{NDF}$ : 47.4/20

Left Out: -0.008+/-0.001  $\chi^2/\text{NDF}$ : 31.9/23

Right Out: -0.006+/-0.001  $\chi^2/\text{NDF}$ : 67.9/22

Left In: -0.009+/-0.001  $\chi^2/\text{NDF}$ : 39.2/22

Left: -0.008+/-0.001  $\chi^2/\text{NDF}$ : 71.4/46

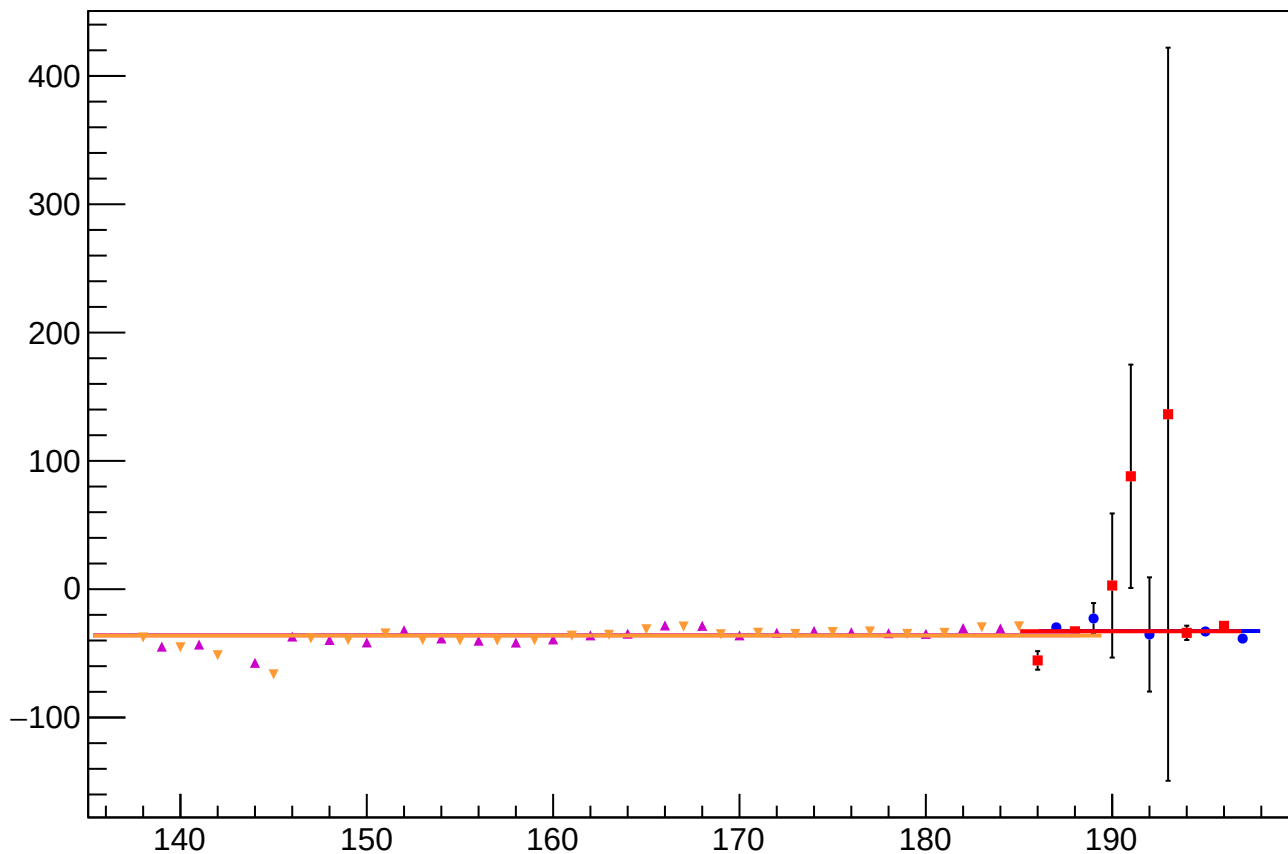
Right: -0.006+/-0.001  $\chi^2/\text{NDF}$ : 115.2/43

In: -0.008+/-0.001  $\chi^2/\text{NDF}$ : 89.4/43

Out: -0.008+/-0.001  $\chi^2/\text{NDF}$ : 101.4/46

All: -0.008+/-0.000  $\chi^2/\text{NDF}$ : 191.1/90

reg\_asym\_left\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: -32.600 $\pm$ 1.328  $\chi^2$ /NDF: 7.9/4

Left Out: -36.110 $\pm$ 0.192  $\chi^2$ /NDF:1118.4/23

Right Out: -32.773 $\pm$ 1.059  $\chi^2$ /NDF: 14.8/6

Left In: -35.869 $\pm$ 0.191  $\chi^2$ /NDF:887.1/22

Left: -35.989 $\pm$ 0.135  $\chi^2$ /NDF: 2006.3/46

Right: -32.706 $\pm$ 0.828  $\chi^2$ /NDF: 22.7/11

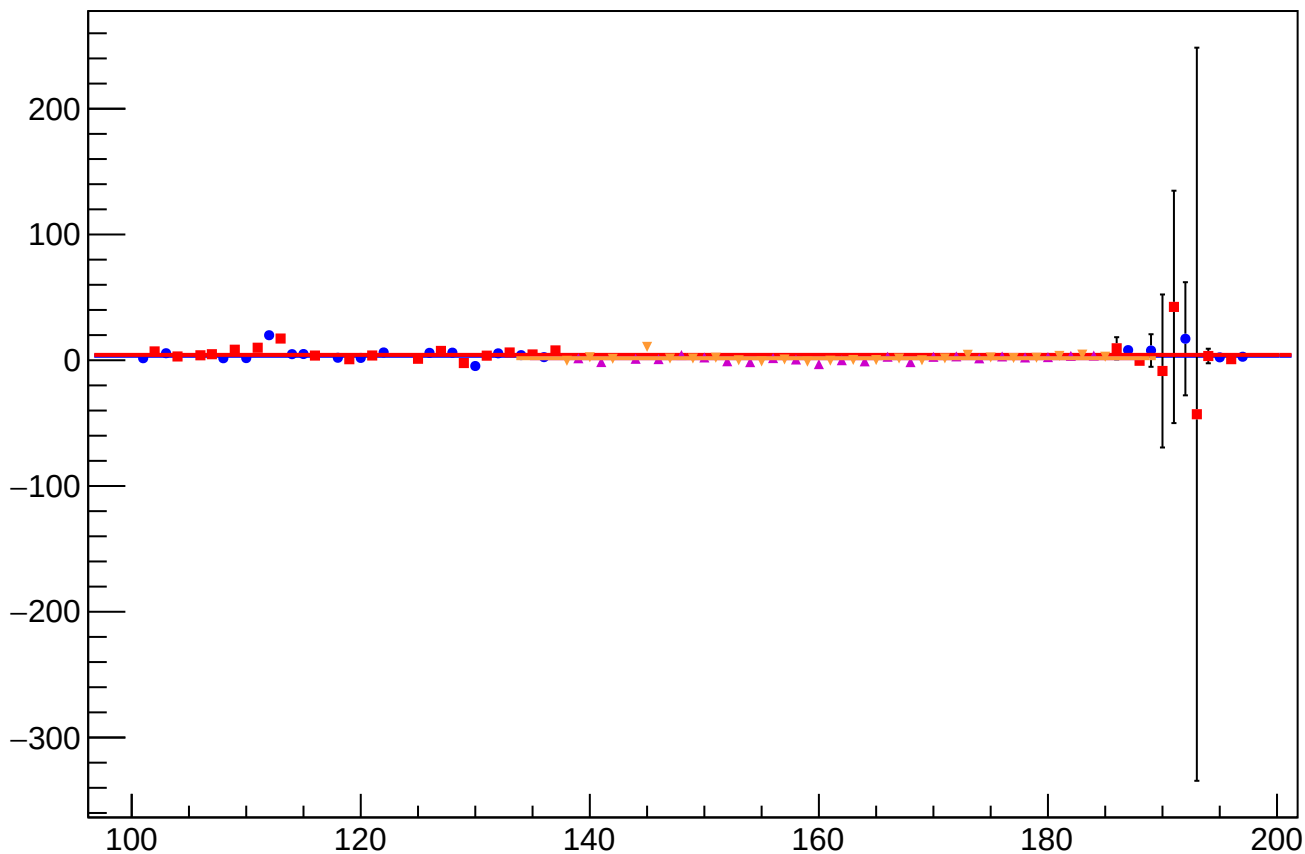
In: -35.803 $\pm$ 0.189  $\chi^2$ /NDF:900.9/27

Out: -36.004 $\pm$ 0.189  $\chi^2$ /NDF:1142.8/30

All: -35.903 $\pm$ 0.133  $\chi^2$ /NDF: 2044.3/58



reg\_asym\_left\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 3.544 $\pm$ 0.216  $\chi^2$ /NDF: 449.2/20

Left Out: 1.632 $\pm$ 0.148  $\chi^2$ /NDF:166.7/23

Right Out: 4.276 $\pm$ 0.223  $\chi^2$ /NDF: 358.9/23

Left In: 1.646 $\pm$ 0.149  $\chi^2$ /NDF:164.1/22

Left: 1.639 $\pm$ 0.105  $\chi^2$ /NDF: 330.7/46

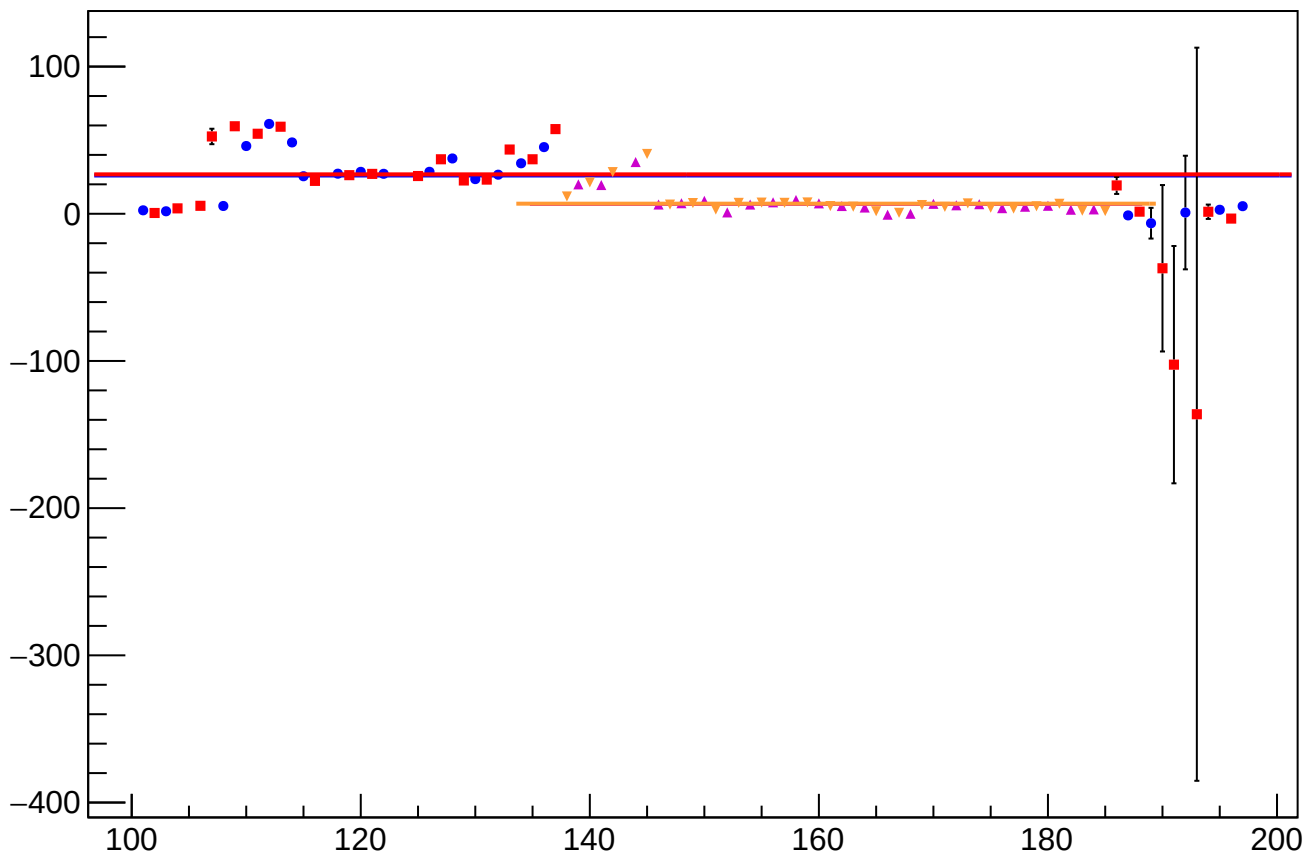
Right: 3.898 $\pm$ 0.155  $\chi^2$ /NDF: 813.7/44

In: 2.260 $\pm$ 0.123  $\chi^2$ /NDF:665.8/43

Out: 2.438 $\pm$ 0.123  $\chi^2$ /NDF:623.2/47

All: 2.349 $\pm$ 0.087  $\chi^2$ /NDF: 1290.0/91

reg\_asym\_left\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 26.004 $\pm$ 0.390  $\chi^2$ /NDF: 2075.6/20

Left Out: 6.855 $\pm$ 0.191  $\chi^2$ /NDF:1298.7/23

Right Out: 26.779 $\pm$ 0.380  $\chi^2$ /NDF: 2730.7/23

Left In: 6.639 $\pm$ 0.190  $\chi^2$ /NDF:1077.2/22

Left: 6.746 $\pm$ 0.135  $\chi^2$ /NDF: 2376.6/46

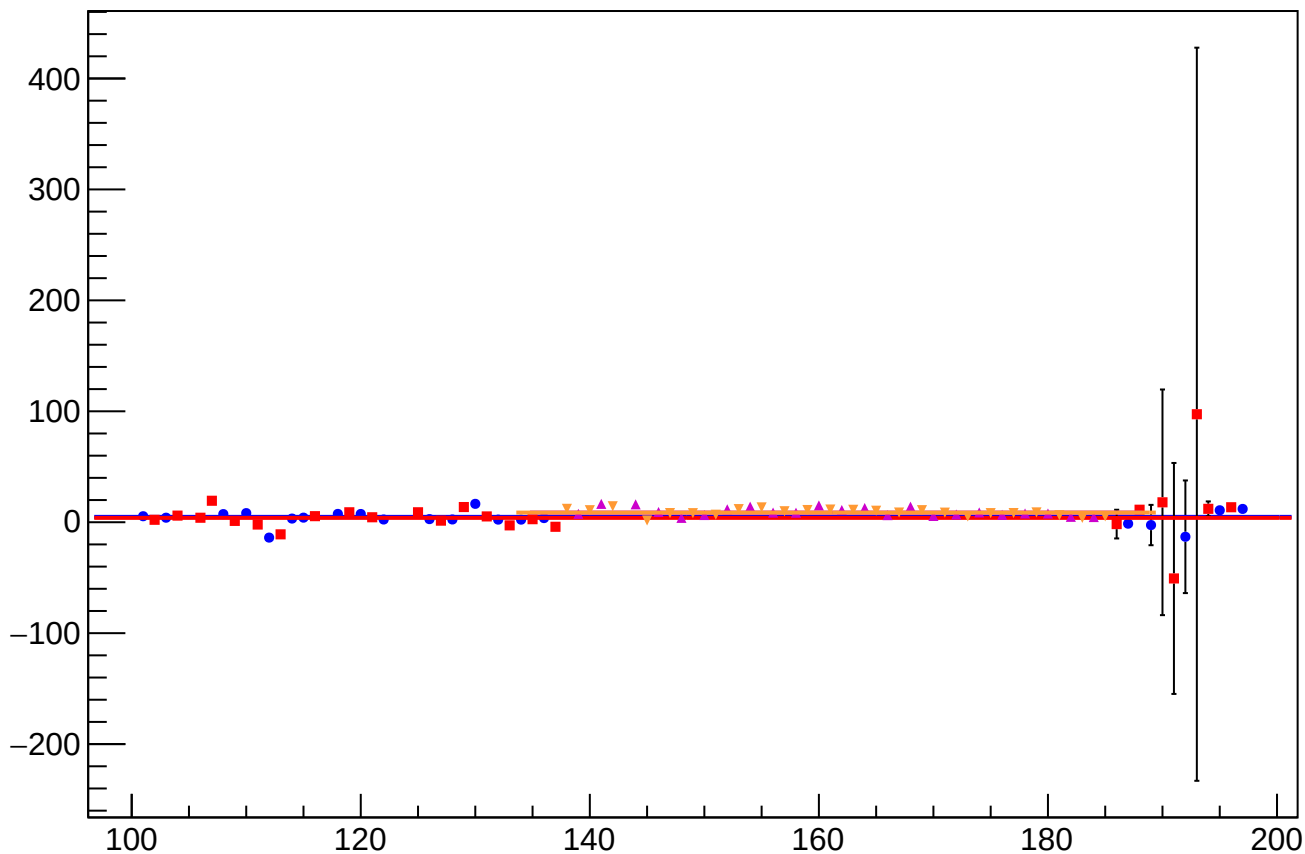
Right: 26.401 $\pm$ 0.272  $\chi^2$ /NDF: 4808.3/44

In: 10.349 $\pm$ 0.171  $\chi^2$ /NDF:5147.6/43

Out: 10.885 $\pm$ 0.171  $\chi^2$ /NDF:6221.9/47

All: 10.616 $\pm$ 0.121  $\chi^2$ /NDF: 11374.5/91

reg\_asym\_left\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 4.831 $\pm$ 0.250  $\chi^2$ /NDF: 562.9/20

Left Out: 8.697 $\pm$ 0.169  $\chi^2$ /NDF:241.1/23

Right Out: 3.935 $\pm$ 0.257  $\chi^2$ /NDF: 582.0/23

Left In: 8.659 $\pm$ 0.170  $\chi^2$ /NDF:438.0/22

Left: 8.678 $\pm$ 0.120  $\chi^2$ /NDF: 679.2/46

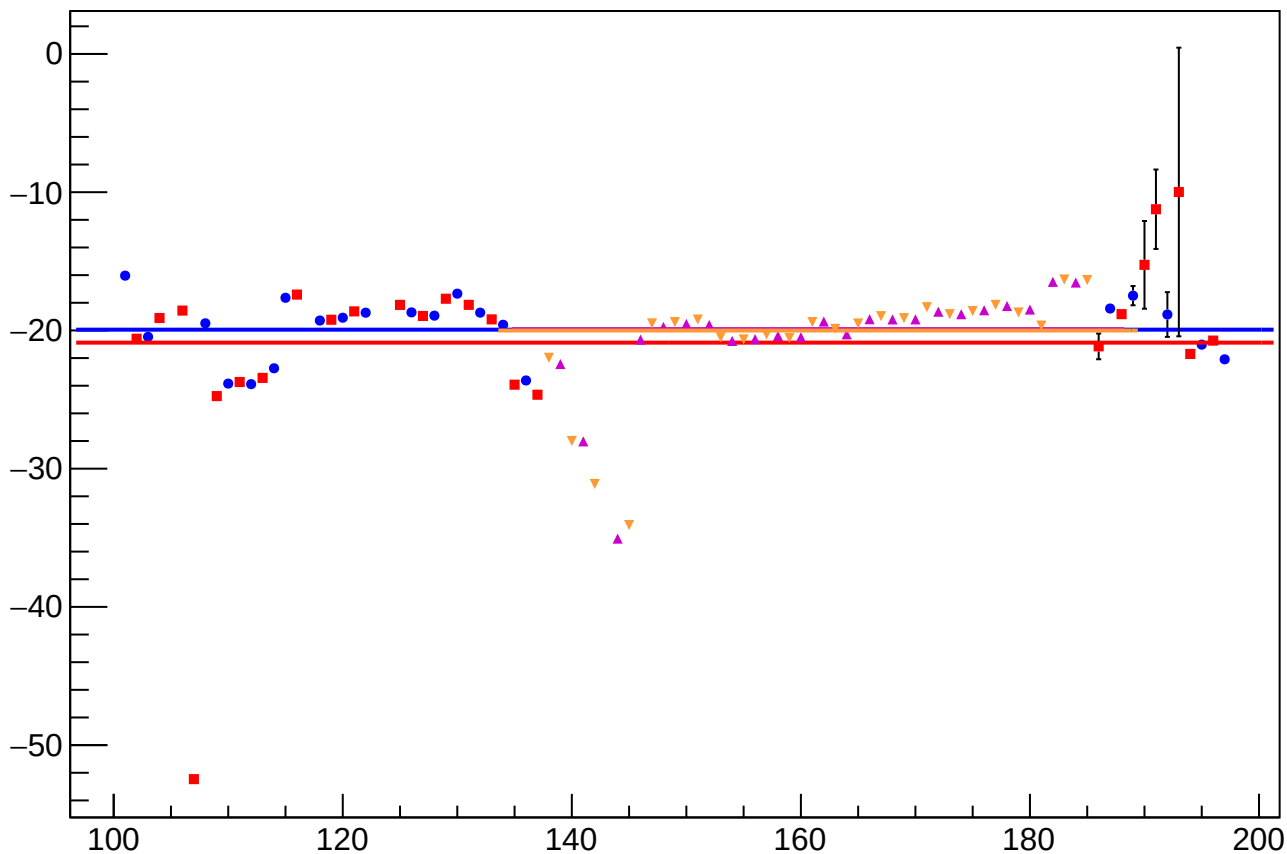
Right: 4.396 $\pm$ 0.179  $\chi^2$ /NDF: 1151.1/44

In: 7.449 $\pm$ 0.140  $\chi^2$ /NDF:1161.8/43

Out: 7.260 $\pm$ 0.141  $\chi^2$ /NDF:1062.8/47

All: 7.355 $\pm$ 0.100  $\chi^2$ /NDF: 2225.5/91

reg\_asym\_left\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -19.946 $\pm$ 0.015  $\chi^2$ /NDF: 26552.3/20

Left Out: -20.007 $\pm$ 0.008  $\chi^2$ /NDF: 171647.2/23

Right Out: -20.883 $\pm$ 0.015  $\chi^2$ /NDF: 92982.6/23

Left In: -19.912 $\pm$ 0.008  $\chi^2$ /NDF: 145487.3/22

Left: -19.959 $\pm$ 0.006  $\chi^2$ /NDF: 317207.1/46

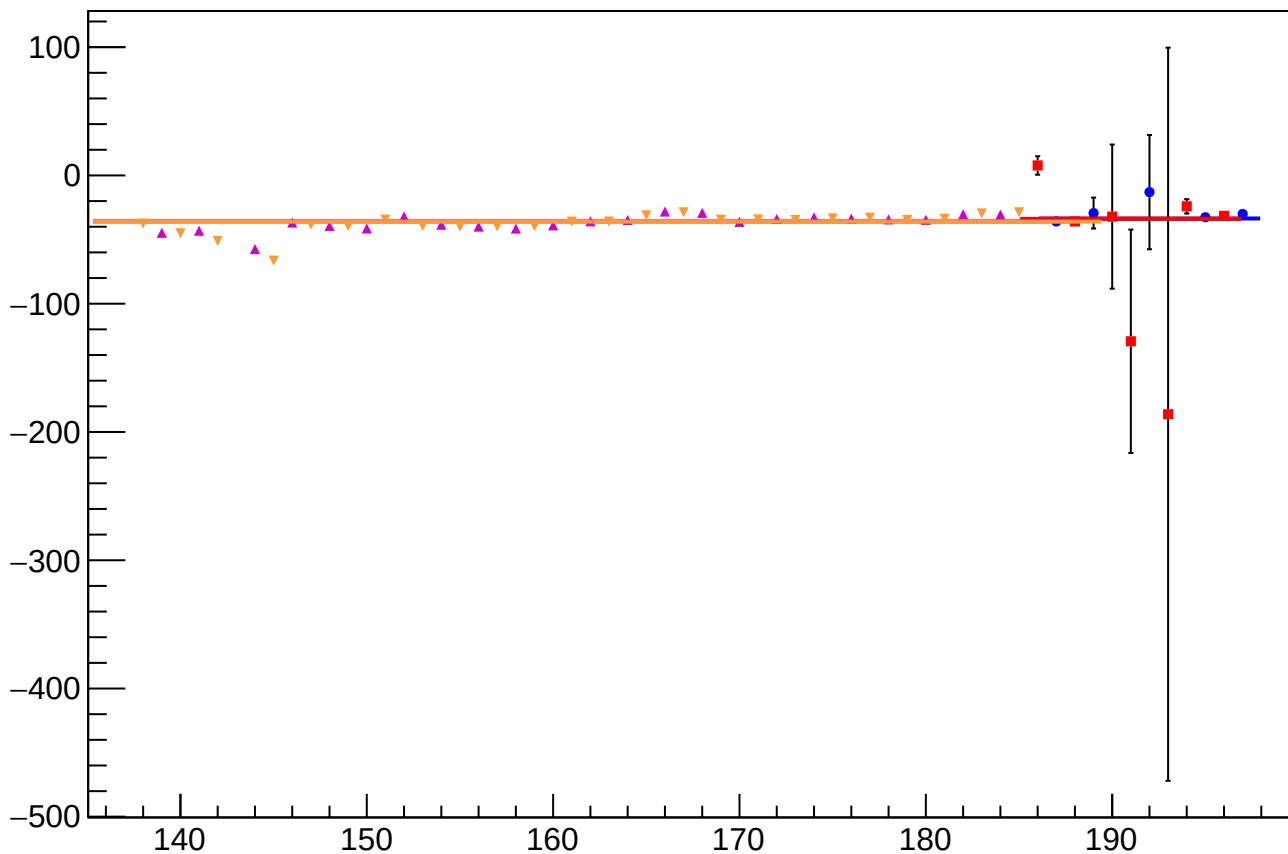
Right: -20.408 $\pm$ 0.011  $\chi^2$ /NDF: 121396.8/44

In: -19.919 $\pm$ 0.007  $\chi^2$ /NDF: 172043.4/43

Out: -20.188 $\pm$ 0.007  $\chi^2$ /NDF: 267177.1/47

All: -20.052 $\pm$ 0.005  $\chi^2$ /NDF: 439959.8/91

reg\_asym\_left\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: -33.567 $\pm$ 1.333  $\chi^2$ /NDF: 3.8/4

Left Out: -36.019 $\pm$ 0.192  $\chi^2$ /NDF:1125.4/23

Right Out: -33.958 $\pm$ 1.062  $\chi^2$ /NDF: 41.4/6

Left In: -35.856 $\pm$ 0.191  $\chi^2$ /NDF:875.9/22

Left: -35.937 $\pm$ 0.135  $\chi^2$ /NDF: 2001.6/46

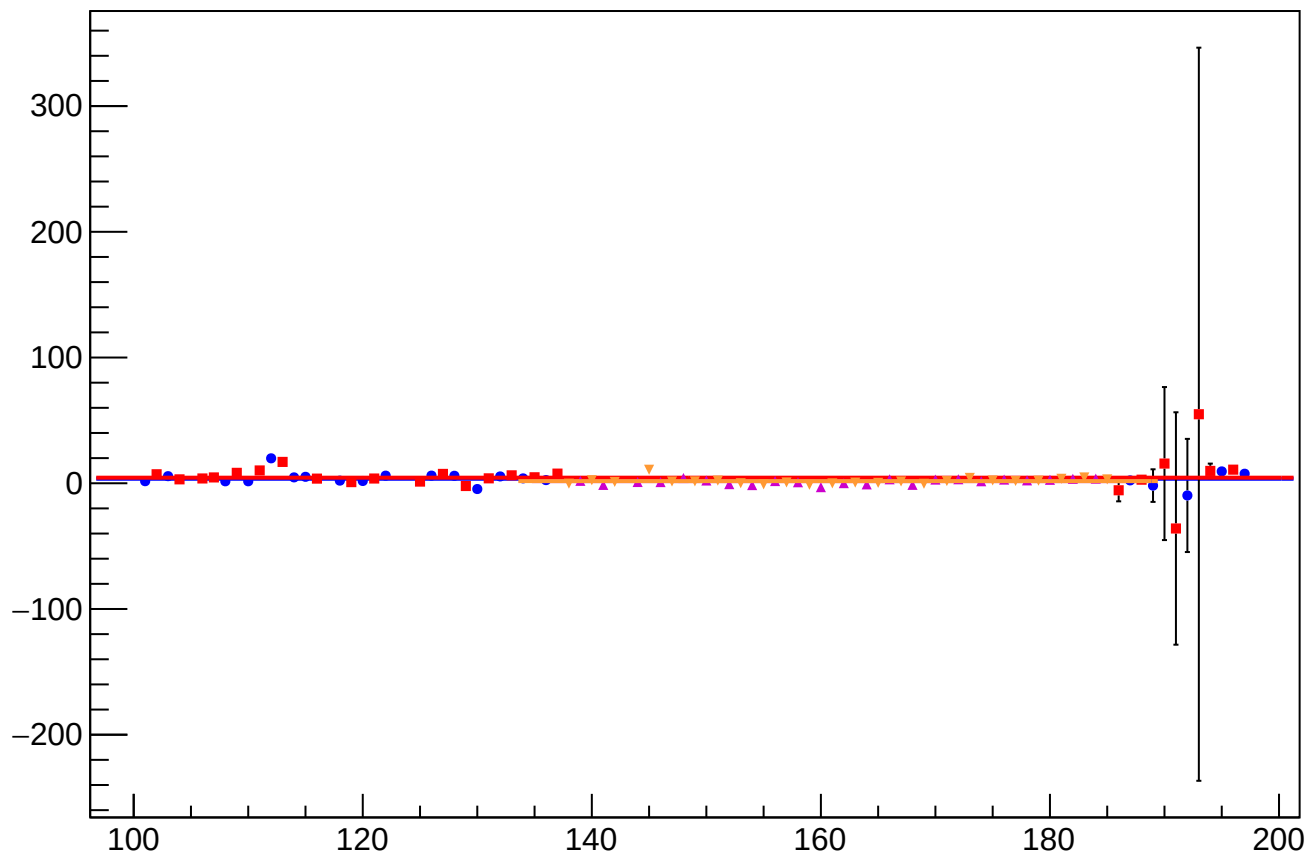
Right: -33.806 $\pm$ 0.831  $\chi^2$ /NDF: 45.2/11

In: -35.810 $\pm$ 0.189  $\chi^2$ /NDF:882.5/27

Out: -35.954 $\pm$ 0.189  $\chi^2$ /NDF:1170.5/30

All: -35.882 $\pm$ 0.133  $\chi^2$ /NDF: 2053.3/58

reg\_asym\_left\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 3.574+/-0.216  $\chi^2/\text{NDF}$ : 449.0/20

Left Out: 1.721+/-0.148  $\chi^2/\text{NDF}$ : 168.3/23

Right Out: 4.437+/-0.223  $\chi^2/\text{NDF}$ : 350.6/23

Left In: 1.712+/-0.149  $\chi^2/\text{NDF}$ : 164.1/22

Left: 1.717+/-0.105  $\chi^2/\text{NDF}$ : 332.4/46

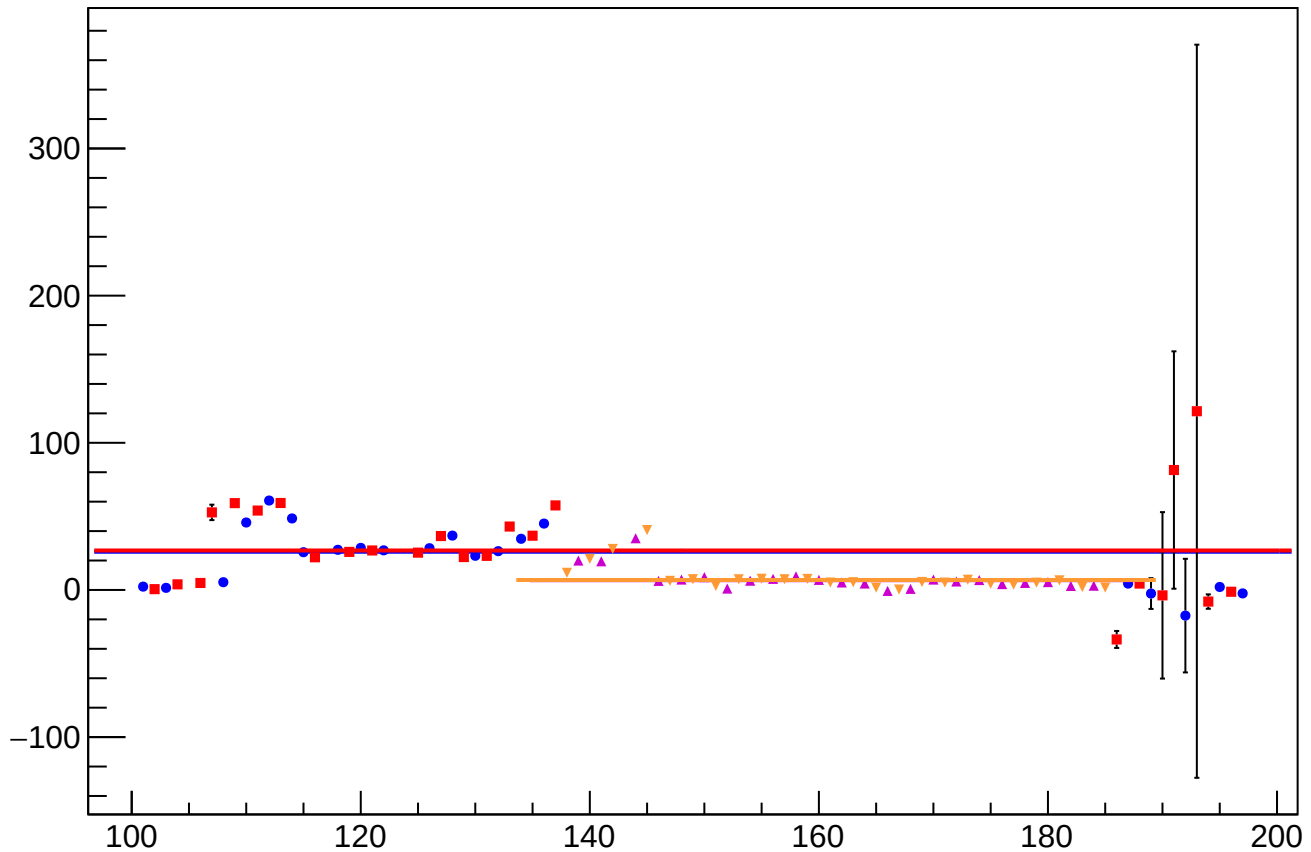
Right: 3.991+/-0.155  $\chi^2/\text{NDF}$ : 807.3/44

In: 2.315+/-0.123  $\chi^2/\text{NDF}$ : 663.6/43

Out: 2.549+/-0.123  $\chi^2/\text{NDF}$ : 622.0/47

All: 2.431+/-0.087  $\chi^2/\text{NDF}$ : 1287.4/91

reg\_asym\_left\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 25.968 $\pm$ 0.390  $\chi^2$ /NDF: 2031.9/20

Left Out: 6.767 $\pm$ 0.191  $\chi^2$ /NDF:1301.2/23

Right Out: 26.829 $\pm$ 0.380  $\chi^2$ /NDF: 2655.8/23

Left In: 6.635 $\pm$ 0.190  $\chi^2$ /NDF:1070.4/22

Left: 6.700 $\pm$ 0.135  $\chi^2$ /NDF: 2371.9/46

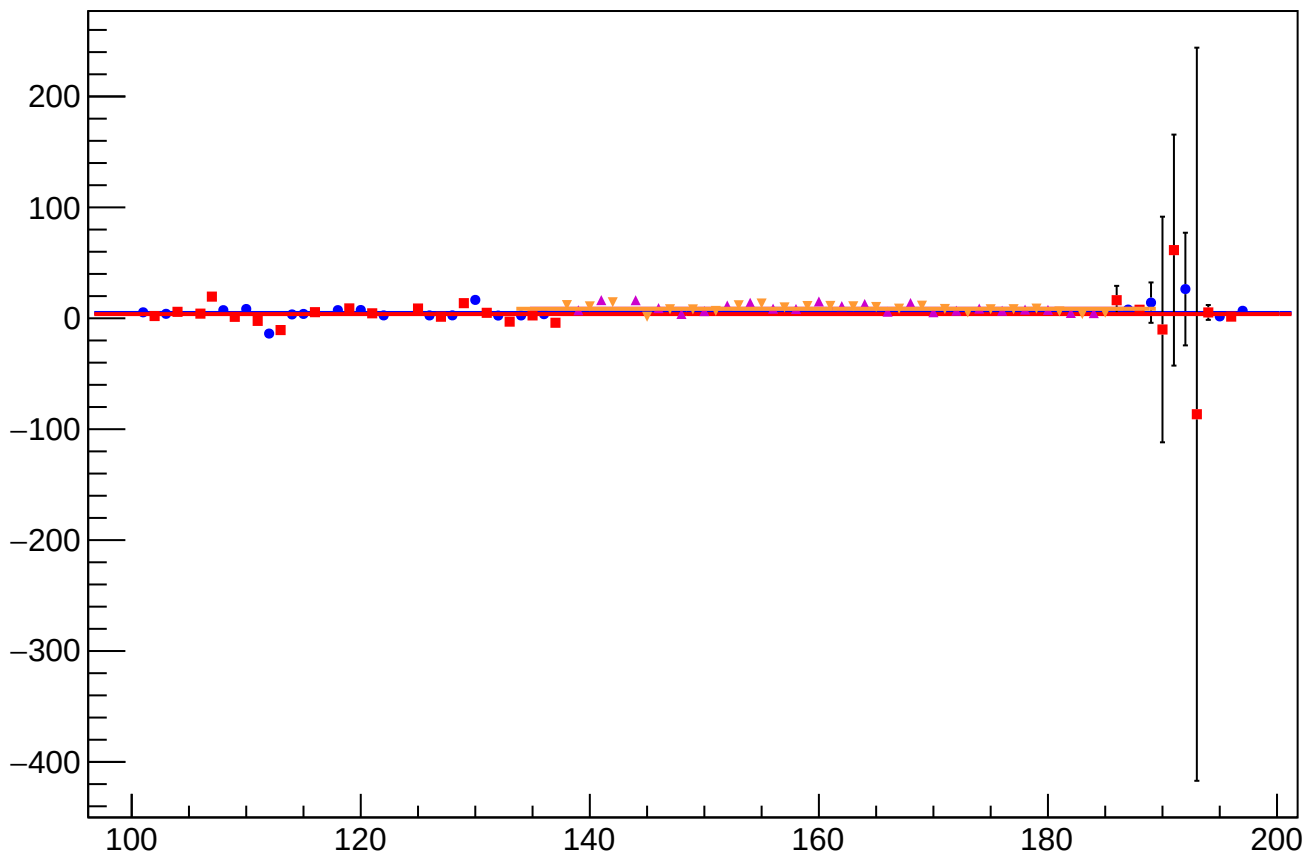
Right: 26.409 $\pm$ 0.272  $\chi^2$ /NDF: 4690.2/44

In: 10.336 $\pm$ 0.171  $\chi^2$ /NDF:5091.7/43

Out: 10.821 $\pm$ 0.171  $\chi^2$ /NDF:6180.6/47

All: 10.578 $\pm$ 0.121  $\chi^2$ /NDF: 11276.3/91

reg\_asym\_left\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 4.802 $\pm$ 0.249  $\chi^2$ /NDF: 551.9/20

Left Out: 8.588 $\pm$ 0.169  $\chi^2$ /NDF:245.6/23

Right Out: 3.774 $\pm$ 0.257  $\chi^2$ /NDF: 566.6/23

Left In: 8.573 $\pm$ 0.170  $\chi^2$ /NDF:443.4/22

Left: 8.581 $\pm$ 0.120  $\chi^2$ /NDF: 689.0/46

Right: 4.303 $\pm$ 0.179  $\chi^2$ /NDF: 1126.7/44

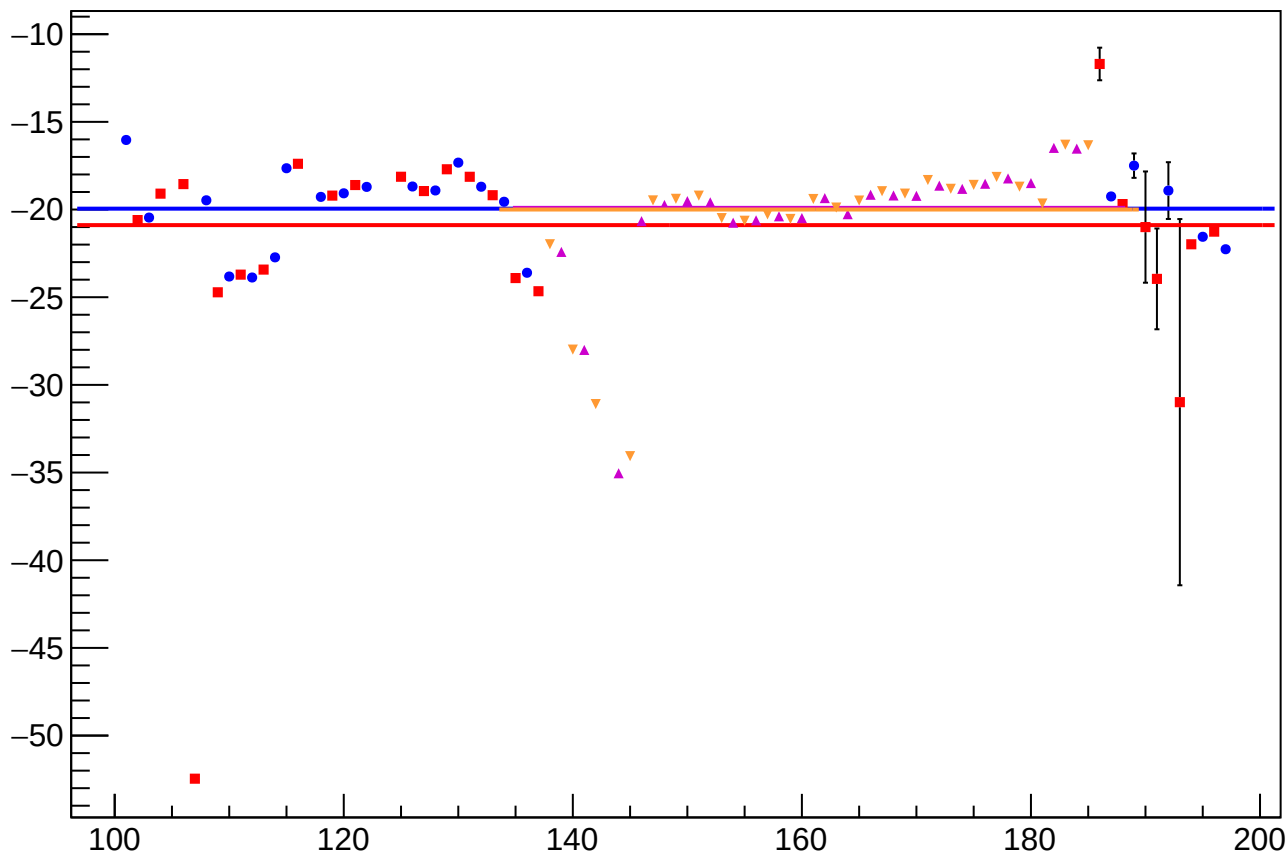
In: 7.380 $\pm$ 0.140  $\chi^2$ /NDF:1151.6/43

Out: 7.136 $\pm$ 0.141  $\chi^2$ /NDF:1057.5/47

All: 7.259 $\pm$ 0.099  $\chi^2$ /NDF: 2210.6/91



reg\_asym\_left\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -19.950 $\pm$ 0.015  $\chi^2$ /NDF: 26684.5/20

Left Out: -19.999 $\pm$ 0.008  $\chi^2$ /NDF: 171834.0/23

Right Out: -20.889 $\pm$ 0.015  $\chi^2$ /NDF: 93067.4/23

Left In: -19.905 $\pm$ 0.008  $\chi^2$ /NDF: 145346.7/22

Left: -19.951 $\pm$ 0.006  $\chi^2$ /NDF: 317253.3/46

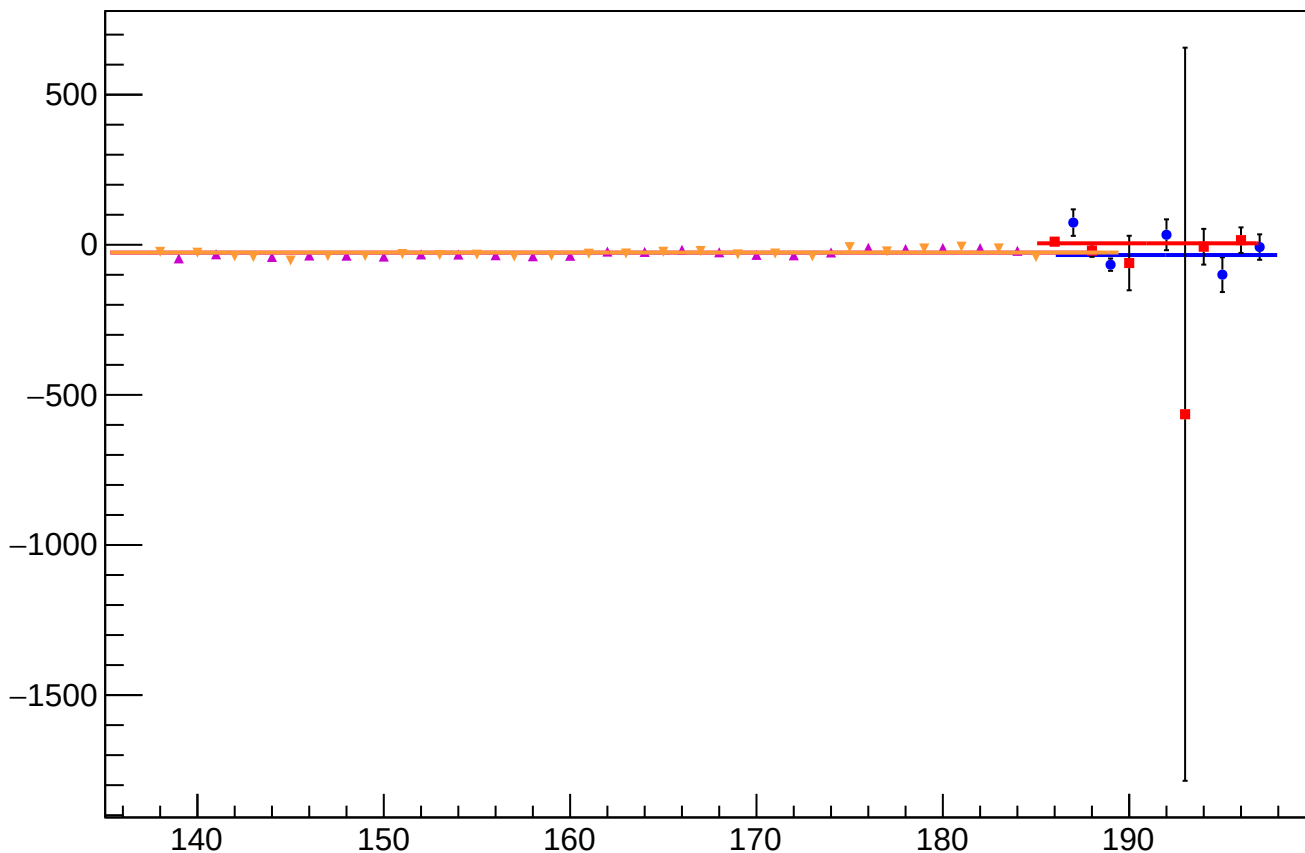
Right: -20.413 $\pm$ 0.011  $\chi^2$ /NDF: 121622.4/44

In: -19.914 $\pm$ 0.007  $\chi^2$ /NDF: 172038.2/43

Out: -20.183 $\pm$ 0.007  $\chi^2$ /NDF: 267530.7/47

All: -20.047 $\pm$ 0.005  $\chi^2$ /NDF: 440310.1/91

reg\_asym\_right\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: -34.142+/-15.590  $\chi^2/\text{NDF}$ : 11.8/4

Left Out: -25.804+/-0.192  $\chi^2/\text{NDF}$ : 4127.8/24

Right Out: 4.897+/-8.315  $\chi^2/\text{NDF}$ : 2.5/5

Left In: -26.204+/-0.194  $\chi^2/\text{NDF}$ : 3377.8/22

Left: -26.002+/-0.137  $\chi^2/\text{NDF}$ : 7507.7/47

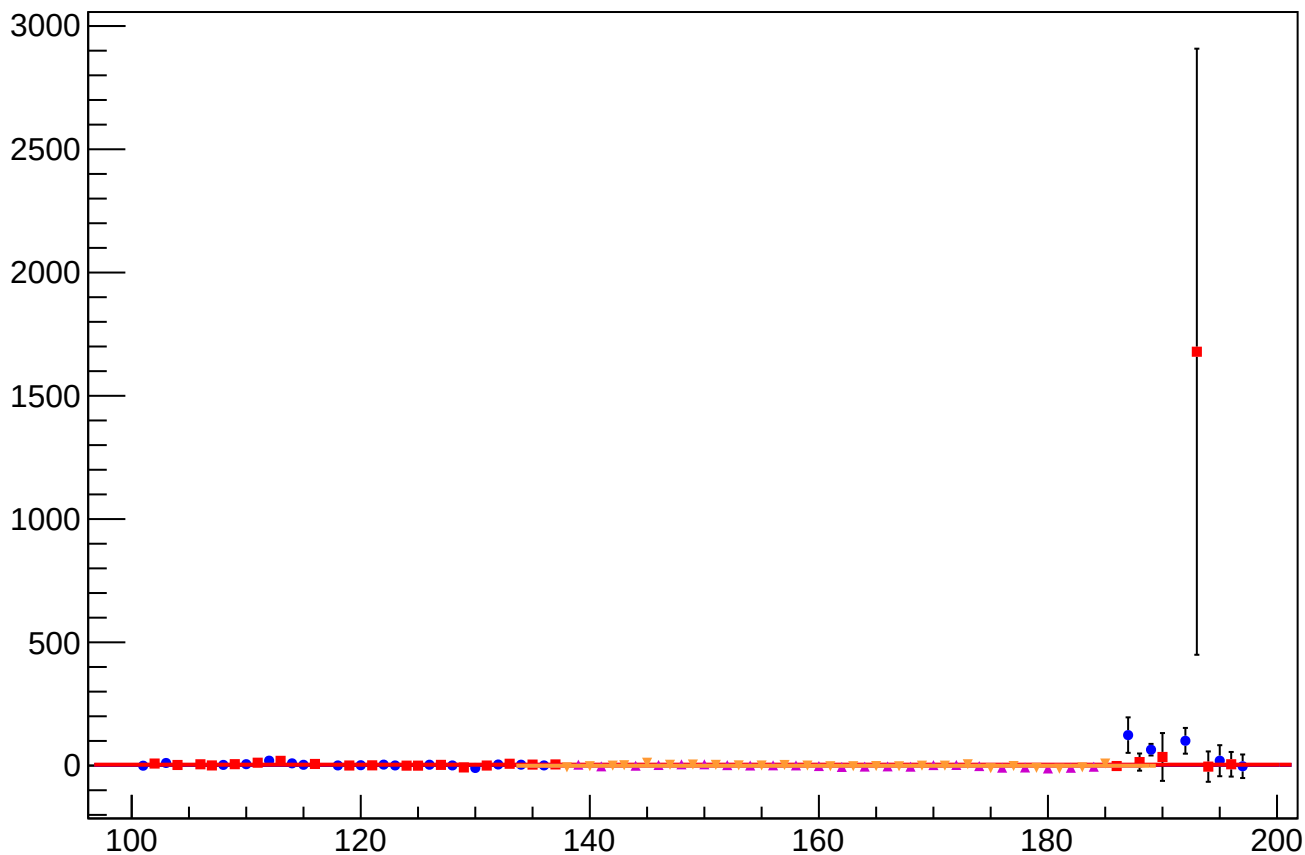
Right: -3.749+/-7.337  $\chi^2/\text{NDF}$ : 19.2/10

In: -26.205+/-0.194  $\chi^2/\text{NDF}$ : 3389.9/27

Out: -25.788+/-0.192  $\chi^2/\text{NDF}$ : 4143.9/30

All: -25.994+/-0.137  $\chi^2/\text{NDF}$ : 7536.1/58

reg\_asym\_right\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 2.460+/-0.311  $\chi^2/\text{NDF}$ : 308.7/21

Left Out: -0.681+/-0.147  $\chi^2/\text{NDF}$ :1314.3/24

Right Out: 3.723+/-0.327  $\chi^2/\text{NDF}$ : 271.4/23

Left In: -0.842+/-0.150  $\chi^2/\text{NDF}$ :1071.6/22

Left: -0.760+/-0.105  $\chi^2/\text{NDF}$ : 2386.5/47

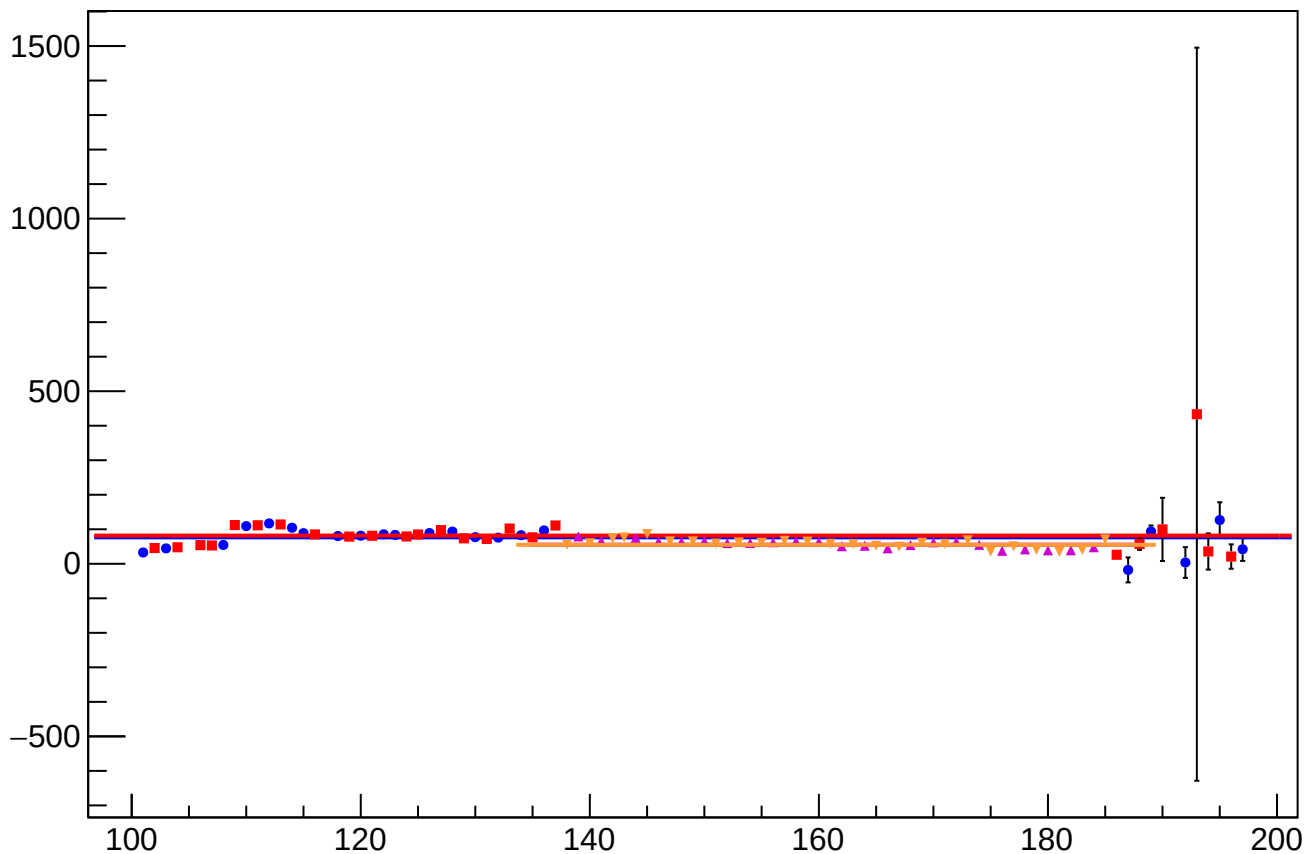
Right: 3.060+/-0.225  $\chi^2/\text{NDF}$ : 588.0/45

In: -0.218+/-0.135  $\chi^2/\text{NDF}$ :1471.8/44

Out: 0.057+/-0.134  $\chi^2/\text{NDF}$ :1736.8/48

All: -0.079+/-0.095  $\chi^2/\text{NDF}$ : 3210.7/93

reg\_asym\_right\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 76.552 $\pm$ 0.573  $\chi^2$ /NDF: 2266.0/21

Left Out: 55.000 $\pm$ 0.192  $\chi^2$ /NDF: 4524.8/24

Right Out: 81.685 $\pm$ 0.590  $\chi^2$ /NDF: 1607.9/23

Left In: 55.225 $\pm$ 0.193  $\chi^2$ /NDF: 3825.0/22

Left: 55.112 $\pm$ 0.136  $\chi^2$ /NDF: 8350.5/47

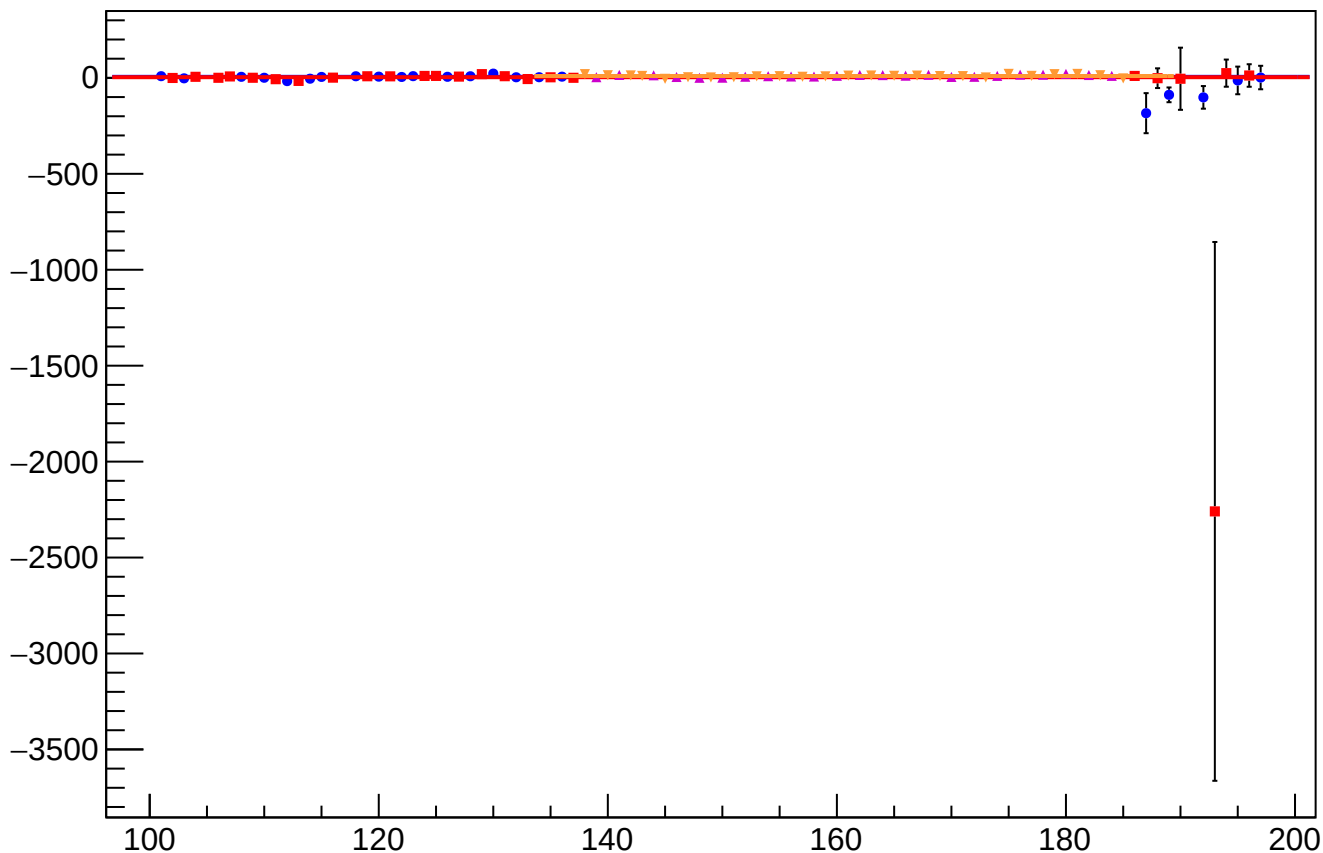
Right: 79.040 $\pm$ 0.411  $\chi^2$ /NDF: 3912.8/45

In: 57.396 $\pm$ 0.183  $\chi^2$ /NDF: 7336.3/44

Out: 57.548 $\pm$ 0.182  $\chi^2$ /NDF: 7980.0/48

All: 57.472 $\pm$ 0.129  $\chi^2$ /NDF: 15316.7/93

reg\_asym\_right\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $5.427 \pm 0.357$   $\chi^2/\text{NDF}$ : 400.1/21

Left Out:  $9.750 \pm 0.168$   $\chi^2/\text{NDF}$ : 1449.2/24

Right Out:  $3.583 \pm 0.375$   $\chi^2/\text{NDF}$ : 425.9/23

Left In:  $9.775 \pm 0.171$   $\chi^2/\text{NDF}$ : 1165.6/22

Left:  $9.762 \pm 0.120$   $\chi^2/\text{NDF}$ : 2614.7/47

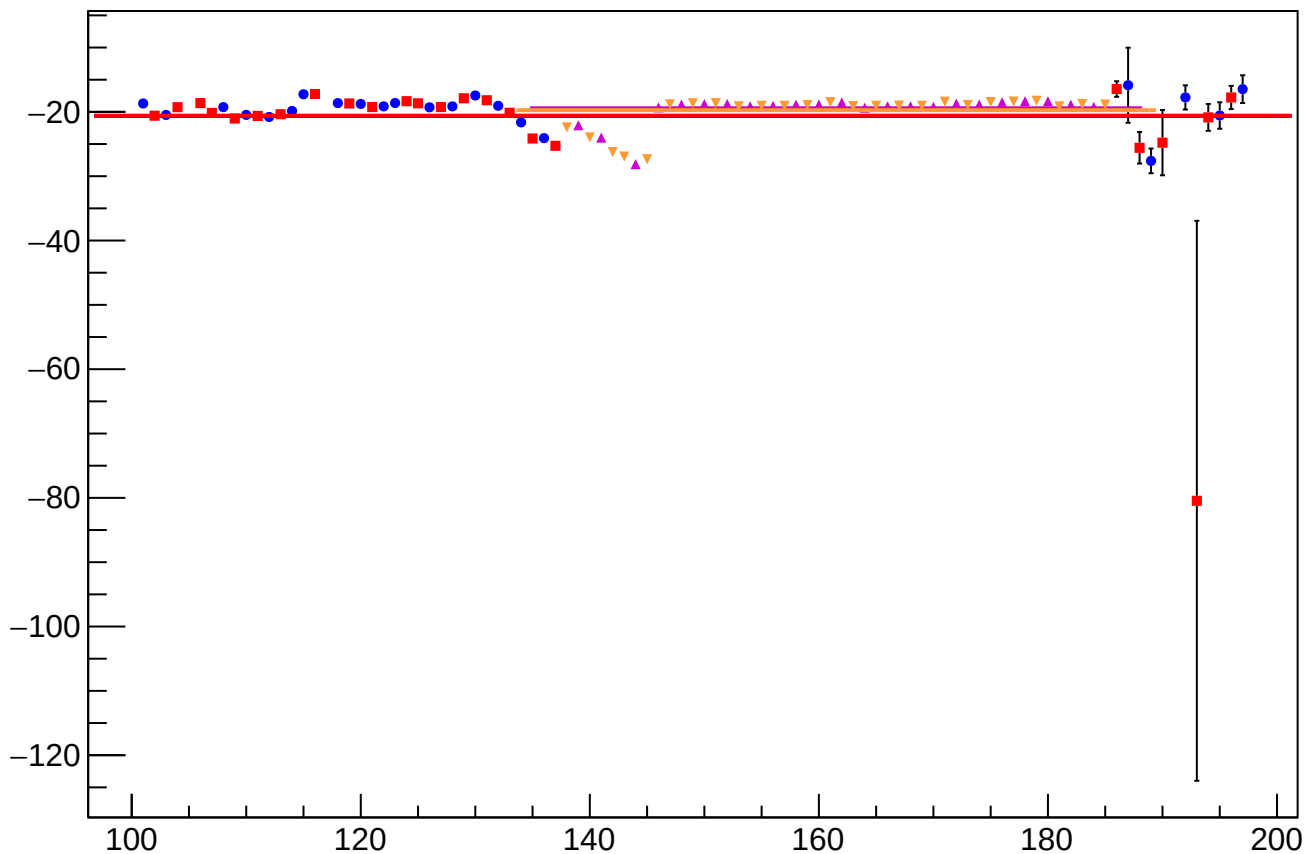
Right:  $4.551 \pm 0.259$   $\chi^2/\text{NDF}$ : 838.6/45

In:  $8.963 \pm 0.154$   $\chi^2/\text{NDF}$ : 1686.1/44

Out:  $8.719 \pm 0.153$   $\chi^2/\text{NDF}$ : 2099.9/48

All:  $8.840 \pm 0.109$   $\chi^2/\text{NDF}$ : 3787.2/93

reg\_asym\_right\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-20.630 \pm 0.019$   $\chi^2/\text{NDF}$ : 12510.5/21

Left Out:  $-19.738 \pm 0.008$   $\chi^2/\text{NDF}$ : 88495.2/24

Right Out:  $-20.601 \pm 0.019$   $\chi^2/\text{NDF}$ : 11972.1/23

Left In:  $-19.448 \pm 0.008$   $\chi^2/\text{NDF}$ : 54039.2/22

Left:  $-19.593 \pm 0.006$   $\chi^2/\text{NDF}$ : 143208.7/47

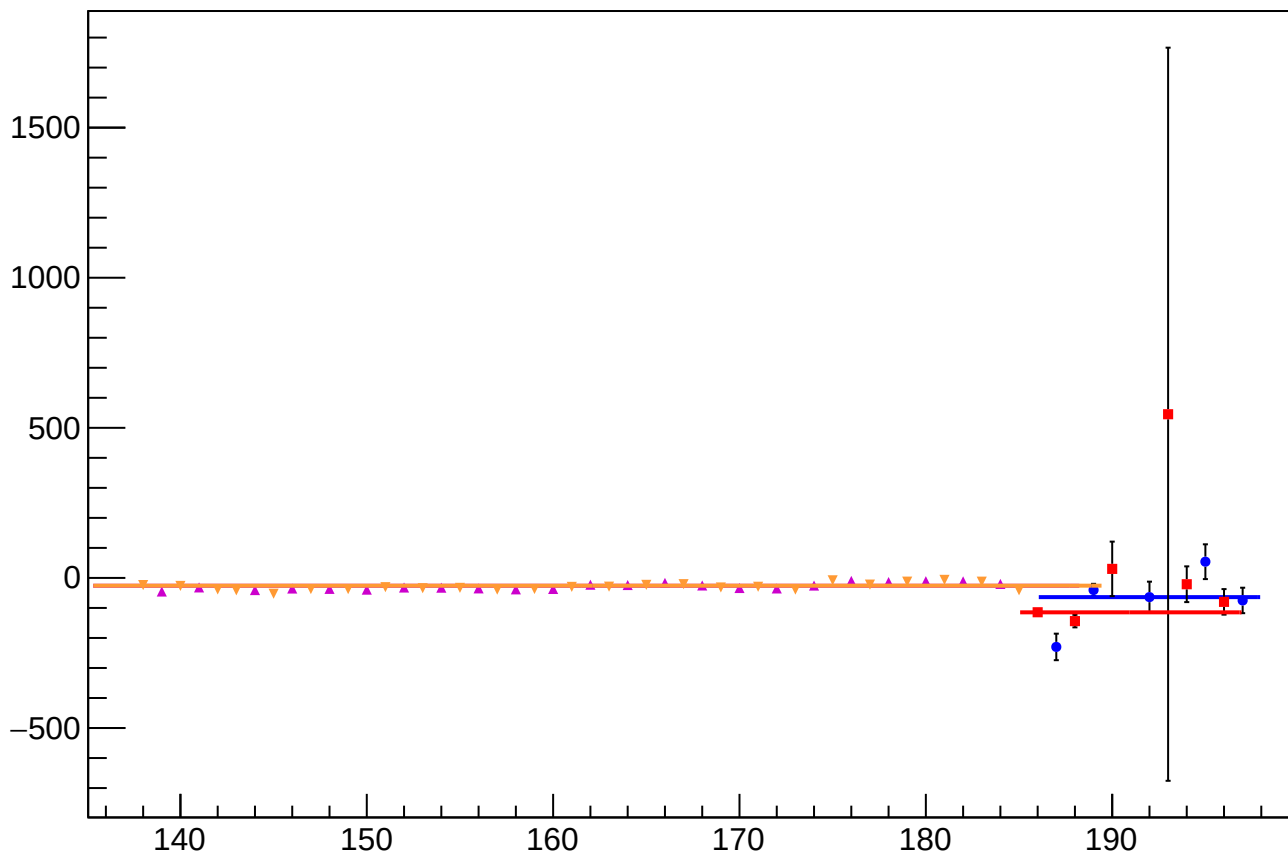
Right:  $-20.616 \pm 0.014$   $\chi^2/\text{NDF}$ : 24483.8/45

In:  $-19.619 \pm 0.007$   $\chi^2/\text{NDF}$ : 69770.7/44

Out:  $-19.861 \pm 0.007$   $\chi^2/\text{NDF}$ : 102156.9/48

All:  $-19.740 \pm 0.005$   $\chi^2/\text{NDF}$ : 172473.1/93

reg\_asym\_right\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-63.973 \pm 15.602$   $\chi^2/\text{NDF}: 19.7/4$

Left Out:  $-25.814 \pm 0.192$   $\chi^2/\text{NDF}: 4094.6/24$

Right Out:  $-114.648 \pm 8.321$   $\chi^2/\text{NDF}: 7.9/5$

Left In:  $-26.200 \pm 0.194$   $\chi^2/\text{NDF}: 3344.6/22$

Left:  $-26.005 \pm 0.137$   $\chi^2/\text{NDF}: 7441.2/47$

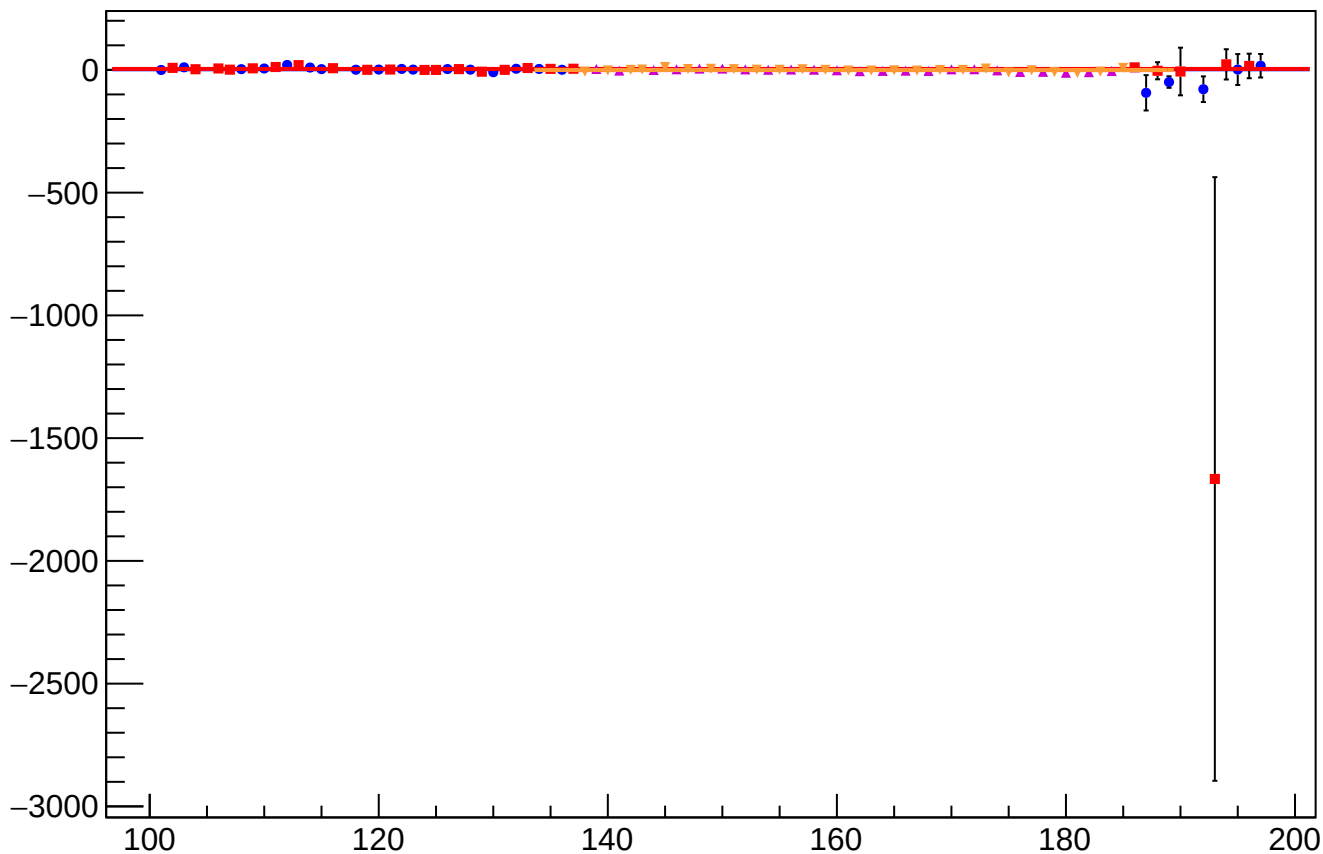
Right:  $-103.426 \pm 7.342$   $\chi^2/\text{NDF}: 35.8/10$

In:  $-26.206 \pm 0.194$   $\chi^2/\text{NDF}: 3370.2/27$

Out:  $-25.862 \pm 0.192$   $\chi^2/\text{NDF}: 4216.4/30$

All:  $-26.032 \pm 0.137$   $\chi^2/\text{NDF}: 7588.2/58$

reg\_asym\_right\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $2.435 \pm 0.311$   $\chi^2/\text{NDF}$ : 302.5/21

Left Out:  $-0.625 \pm 0.147$   $\chi^2/\text{NDF}$ : 1303.5/24

Right Out:  $3.863 \pm 0.327$   $\chi^2/\text{NDF}$ : 271.2/23

Left In:  $-0.773 \pm 0.150$   $\chi^2/\text{NDF}$ : 1111.4/22

Left:  $-0.697 \pm 0.105$   $\chi^2/\text{NDF}$ : 2415.4/47

Right:  $3.114 \pm 0.225$   $\chi^2/\text{NDF}$ : 583.8/45

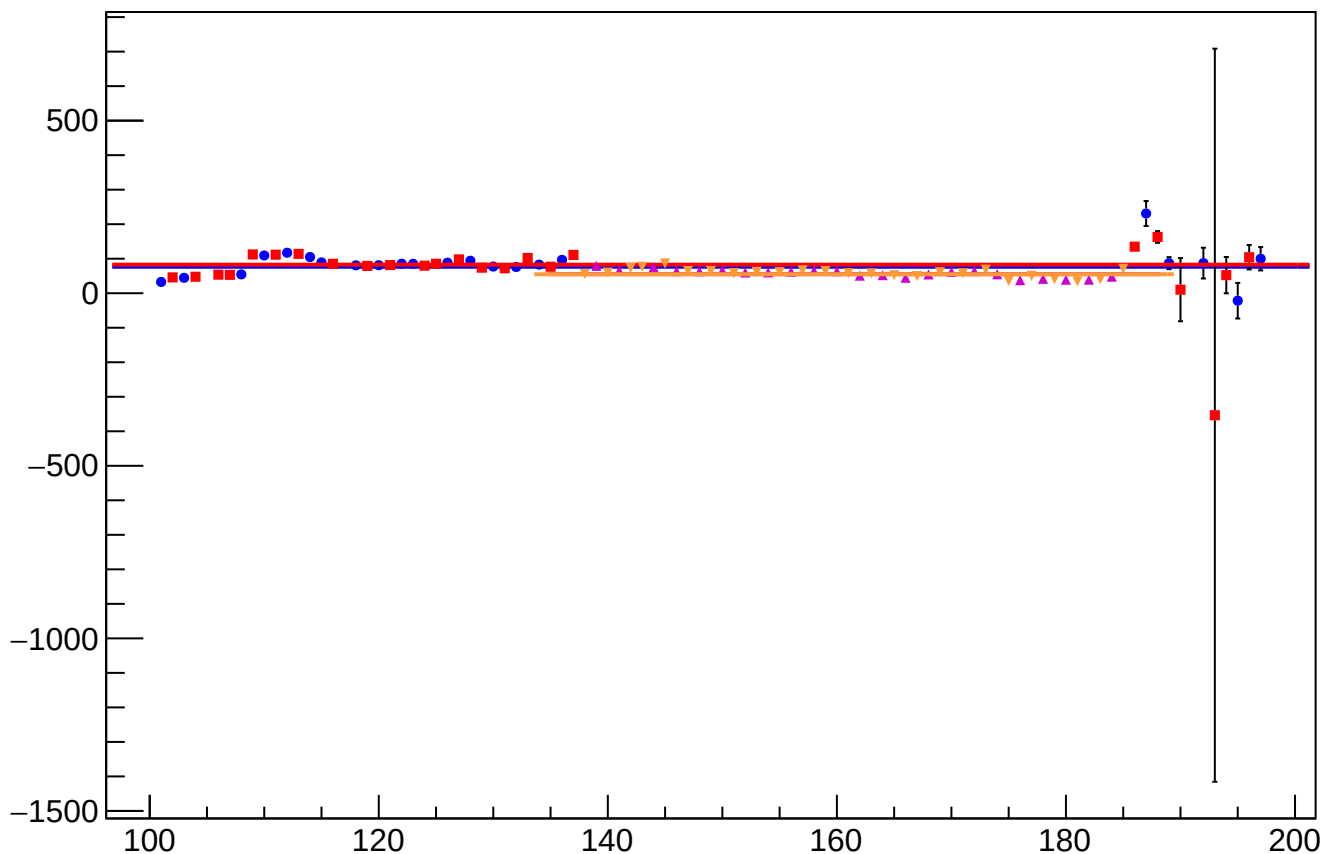
In:  $-0.167 \pm 0.135$   $\chi^2/\text{NDF}$ : 1500.1/44

Out:  $0.127 \pm 0.134$   $\chi^2/\text{NDF}$ : 1731.5/48

All:  $-0.018 \pm 0.095$   $\chi^2/\text{NDF}$ : 3234.0/93



reg\_asym\_right\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 76.733 $\pm$ 0.573  $\chi^2$ /NDF: 2287.8/21

Left Out: 55.008 $\pm$ 0.192  $\chi^2$ /NDF: 4502.1/24

Right Out: 82.670 $\pm$ 0.591  $\chi^2$ /NDF: 1622.0/23

Left In: 55.252 $\pm$ 0.193  $\chi^2$ /NDF: 3786.2/22

Left: 55.129 $\pm$ 0.136  $\chi^2$ /NDF: 8289.0/47

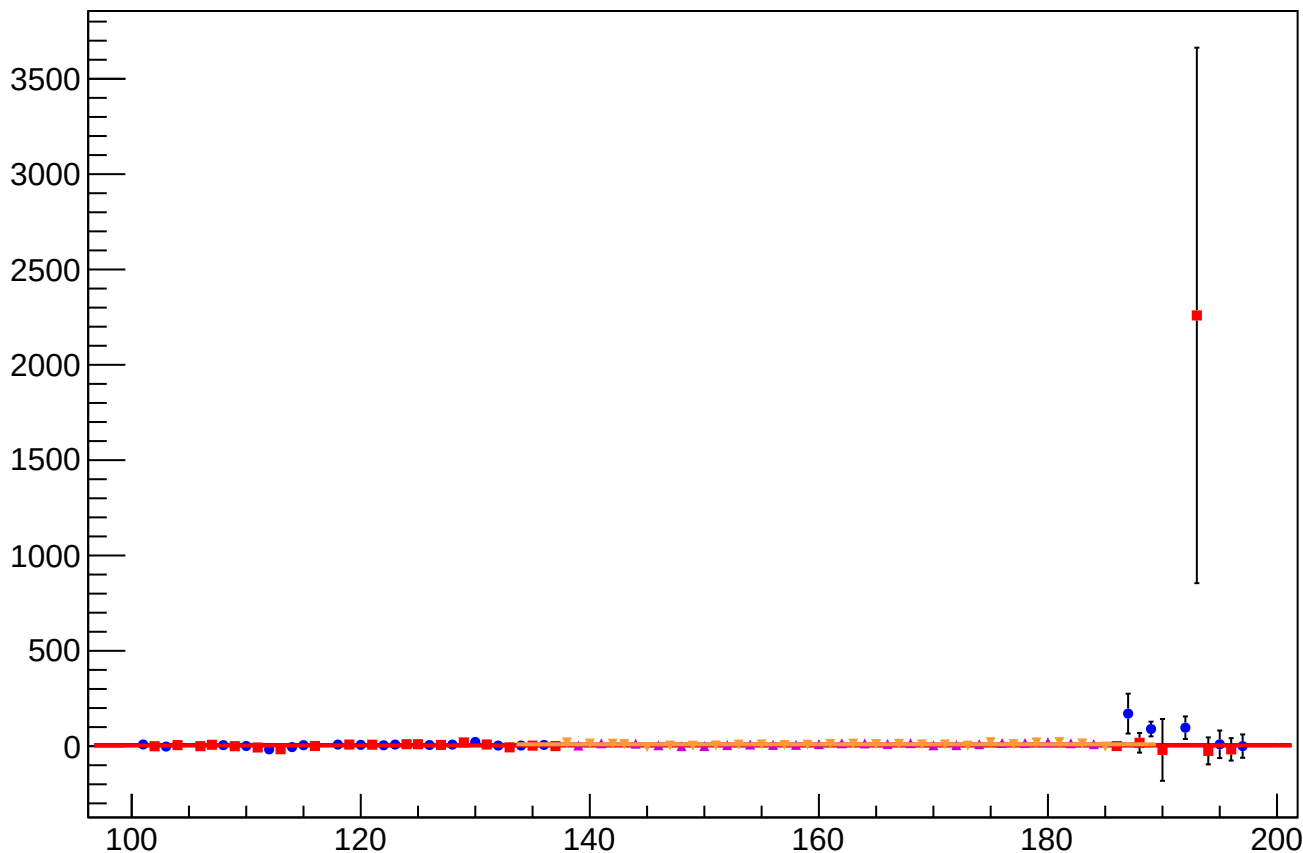
Right: 79.611 $\pm$ 0.411  $\chi^2$ /NDF: 3961.8/45

In: 57.439 $\pm$ 0.183  $\chi^2$ /NDF: 7336.1/44

Out: 57.649 $\pm$ 0.183  $\chi^2$ /NDF: 8106.8/48

All: 57.544 $\pm$ 0.129  $\chi^2$ /NDF: 15443.5/93

reg\_asym\_right\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 5.452 $\pm$ 0.357  $\chi^2$ /NDF: 395.7/21

Left Out: 9.691 $\pm$ 0.168  $\chi^2$ /NDF:1440.3/24

Right Out: 3.422 $\pm$ 0.376  $\chi^2$ /NDF: 425.8/23

Left In: 9.708 $\pm$ 0.171  $\chi^2$ /NDF:1198.0/22

Left: 9.699 $\pm$ 0.120  $\chi^2$ /NDF: 2638.3/47

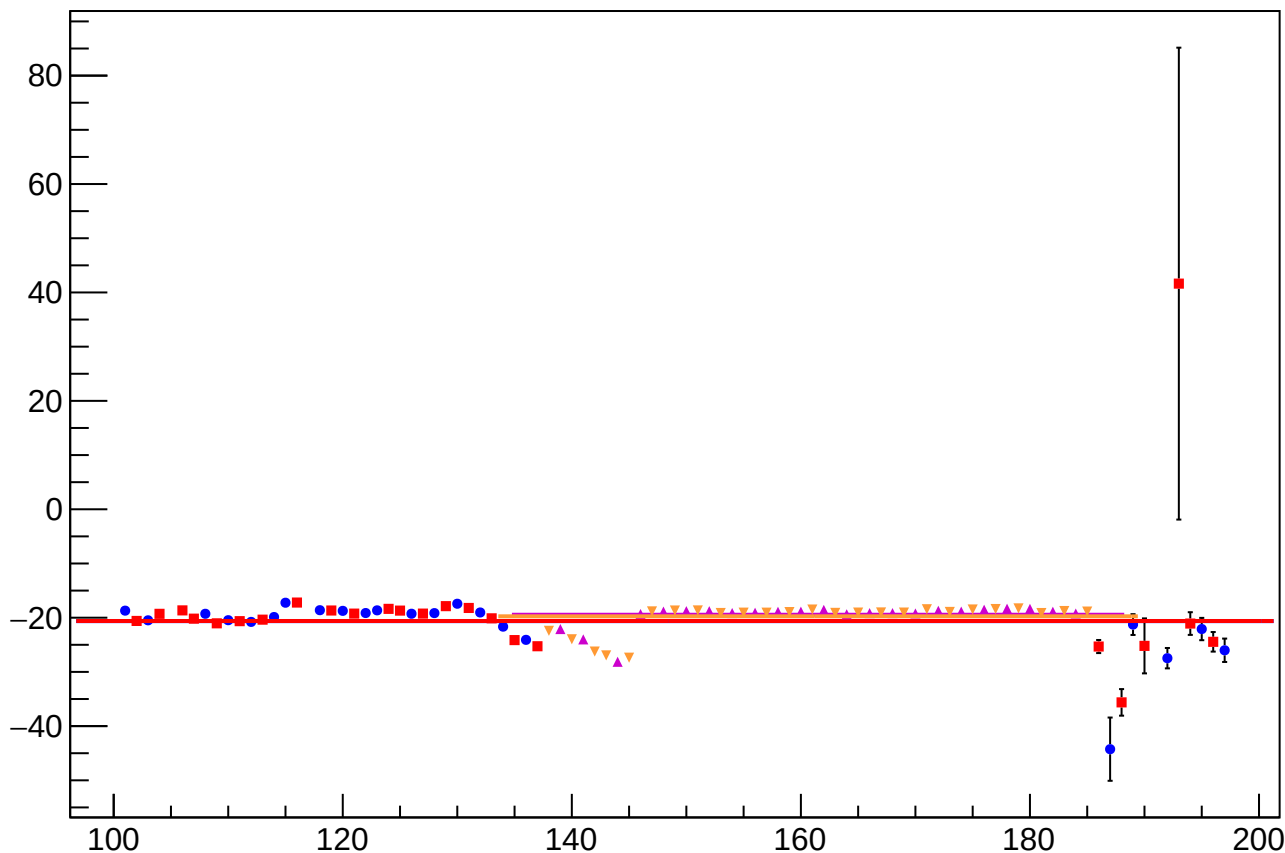
Right: 4.487 $\pm$ 0.259  $\chi^2$ /NDF: 836.8/45

In: 8.913 $\pm$ 0.155  $\chi^2$ /NDF:1709.0/44

Out: 8.643 $\pm$ 0.154  $\chi^2$ /NDF:2098.1/48

All: 8.777 $\pm$ 0.109  $\chi^2$ /NDF: 3808.6/93

reg\_asym\_right\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -20.633 $\pm$ 0.019  $\chi^2$ /NDF: 12567.2/21

Left Out: -19.746 $\pm$ 0.008  $\chi^2$ /NDF: 88374.4/24

Right Out: -20.608 $\pm$ 0.019  $\chi^2$ /NDF: 11960.6/23

Left In: -19.457 $\pm$ 0.008  $\chi^2$ /NDF: 53995.4/22

Left: -19.602 $\pm$ 0.006  $\chi^2$ /NDF: 143036.3/47

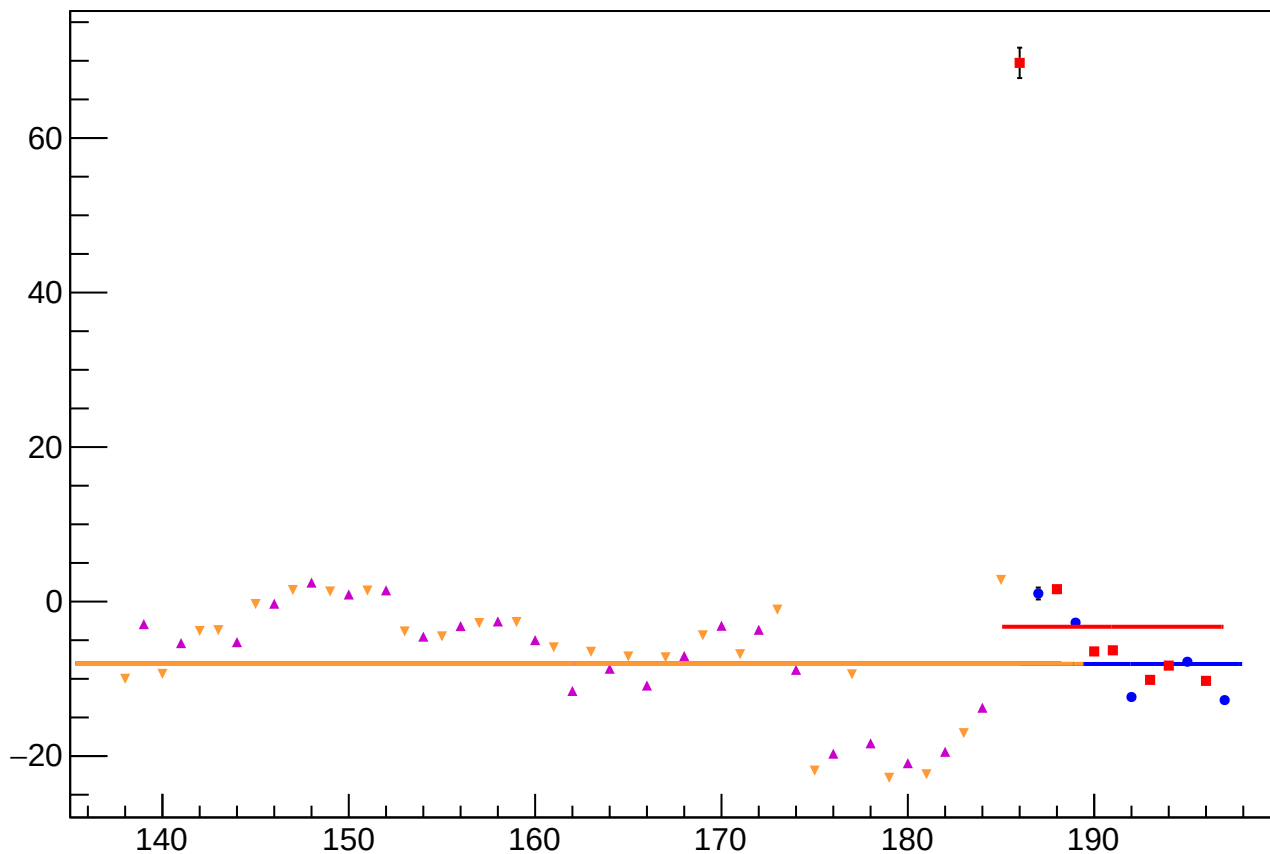
Right: -20.621 $\pm$ 0.014  $\chi^2$ /NDF: 24528.7/45

In: -19.627 $\pm$ 0.007  $\chi^2$ /NDF: 69743.5/44

Out: -19.868 $\pm$ 0.007  $\chi^2$ /NDF: 102018.6/48

All: -19.748 $\pm$ 0.005  $\chi^2$ /NDF: 172303.5/93

reg\_asym\_sam\_15\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected

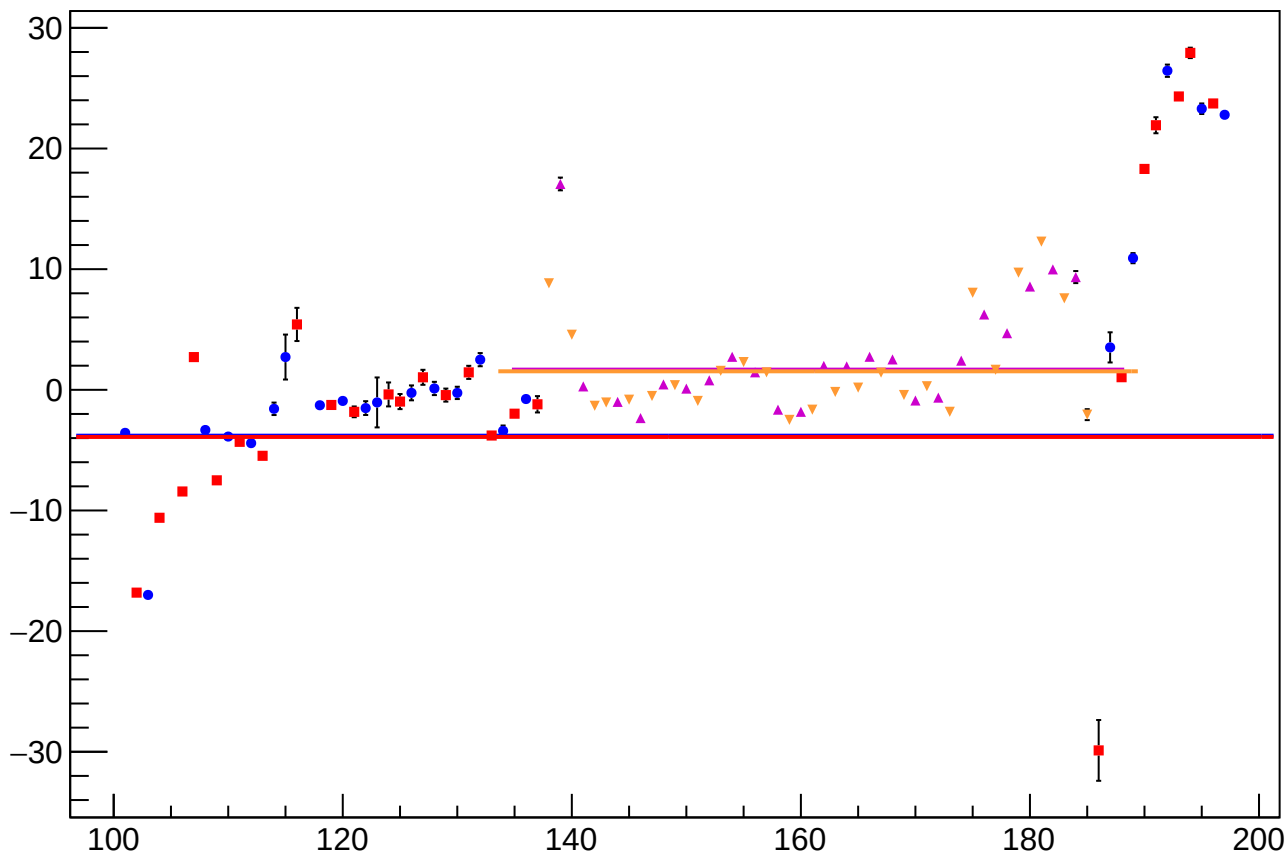


Right In:  $-8.077 \pm 0.192$   $\chi^2/\text{NDF}$ : 576.9/4  
 Left Out:  $-8.058 \pm 0.070$   $\chi^2/\text{NDF}$ : 12532.2/24  
 Right Out:  $-3.258 \pm 0.130$   $\chi^2/\text{NDF}$ : 3005.2/6  
 Left In:  $-8.010 \pm 0.071$   $\chi^2/\text{NDF}$ : 10631.2/22

Left:  $-8.034 \pm 0.050$   $\chi^2/\text{NDF}$ : 23163.6/47  
 Right:  $-4.769 \pm 0.107$   $\chi^2/\text{NDF}$ : 4015.6/11  
 In:  $-8.018 \pm 0.067$   $\chi^2/\text{NDF}$ : 11208.2/27  
 Out:  $-6.964 \pm 0.062$   $\chi^2/\text{NDF}$ : 16596.1/31

All:  $-7.450 \pm 0.045$   $\chi^2/\text{NDF}$ : 27938.2/59

reg\_asym\_sam\_15\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-3.802 \pm 0.053$   $\chi^2/\text{NDF}: 23832.2/21$

Left Out:  $1.535 \pm 0.055$   $\chi^2/\text{NDF}: 4816.7/24$

Right Out:  $-3.905 \pm 0.056$   $\chi^2/\text{NDF}: 34006.6/24$

Left In:  $1.673 \pm 0.056$   $\chi^2/\text{NDF}: 4106.3/22$

Left:  $1.602 \pm 0.039$   $\chi^2/\text{NDF}: 8926.1/47$

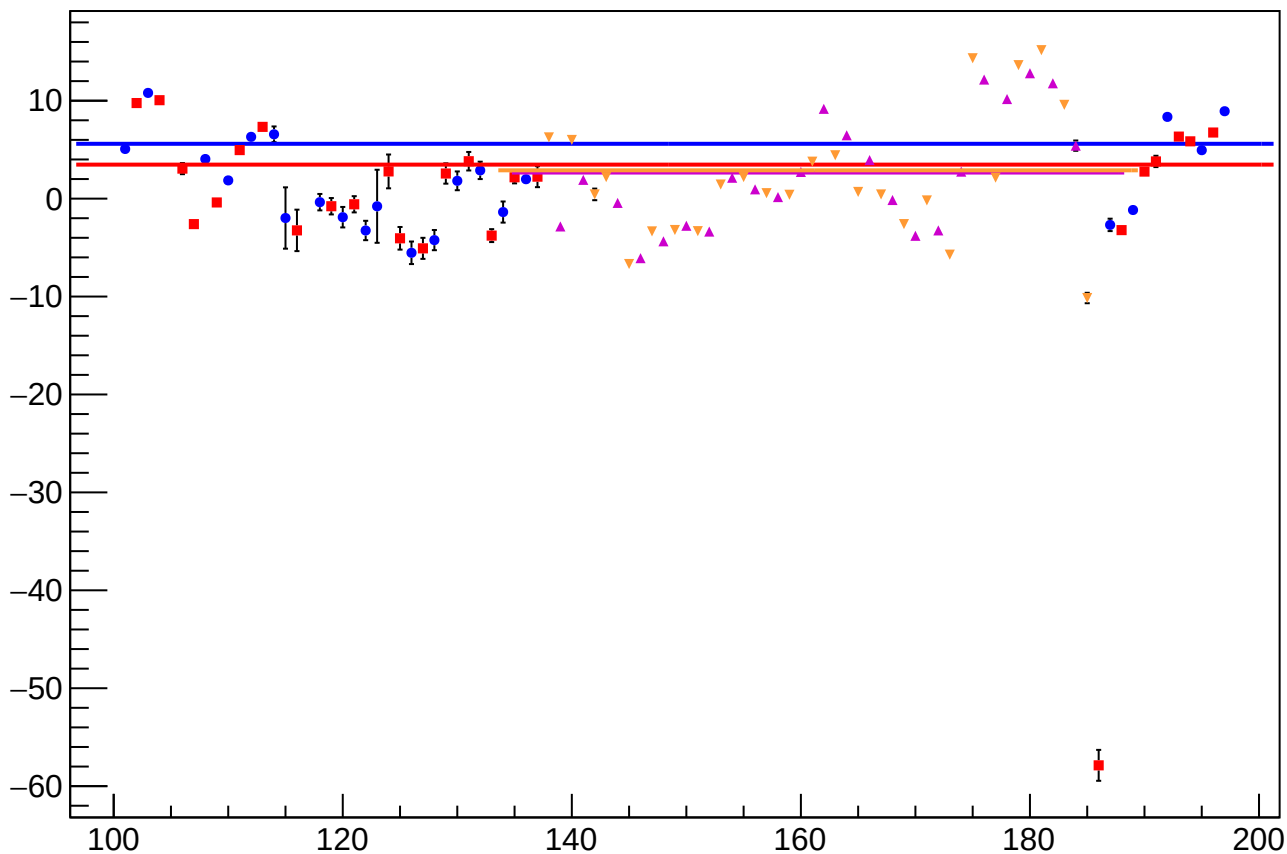
Right:  $-3.850 \pm 0.038$   $\chi^2/\text{NDF}: 57840.7/46$

In:  $-1.236 \pm 0.039$   $\chi^2/\text{NDF}: 32943.4/44$

Out:  $-1.111 \pm 0.039$   $\chi^2/\text{NDF}: 43670.0/49$

All:  $-1.174 \pm 0.027$   $\chi^2/\text{NDF}: 76618.6/94$

reg\_asym\_sam\_15\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 5.599 $\pm$ 0.079  $\chi^2$ /NDF: 2165.9/21

Left Out: 2.891 $\pm$ 0.070  $\chi^2$ /NDF:8889.4/24

Right Out: 3.473 $\pm$ 0.073  $\chi^2$ /NDF: 6785.1/24

Left In: 2.663 $\pm$ 0.071  $\chi^2$ /NDF:7308.8/22

Left: 2.778 $\pm$ 0.050  $\chi^2$ /NDF: 16203.4/47

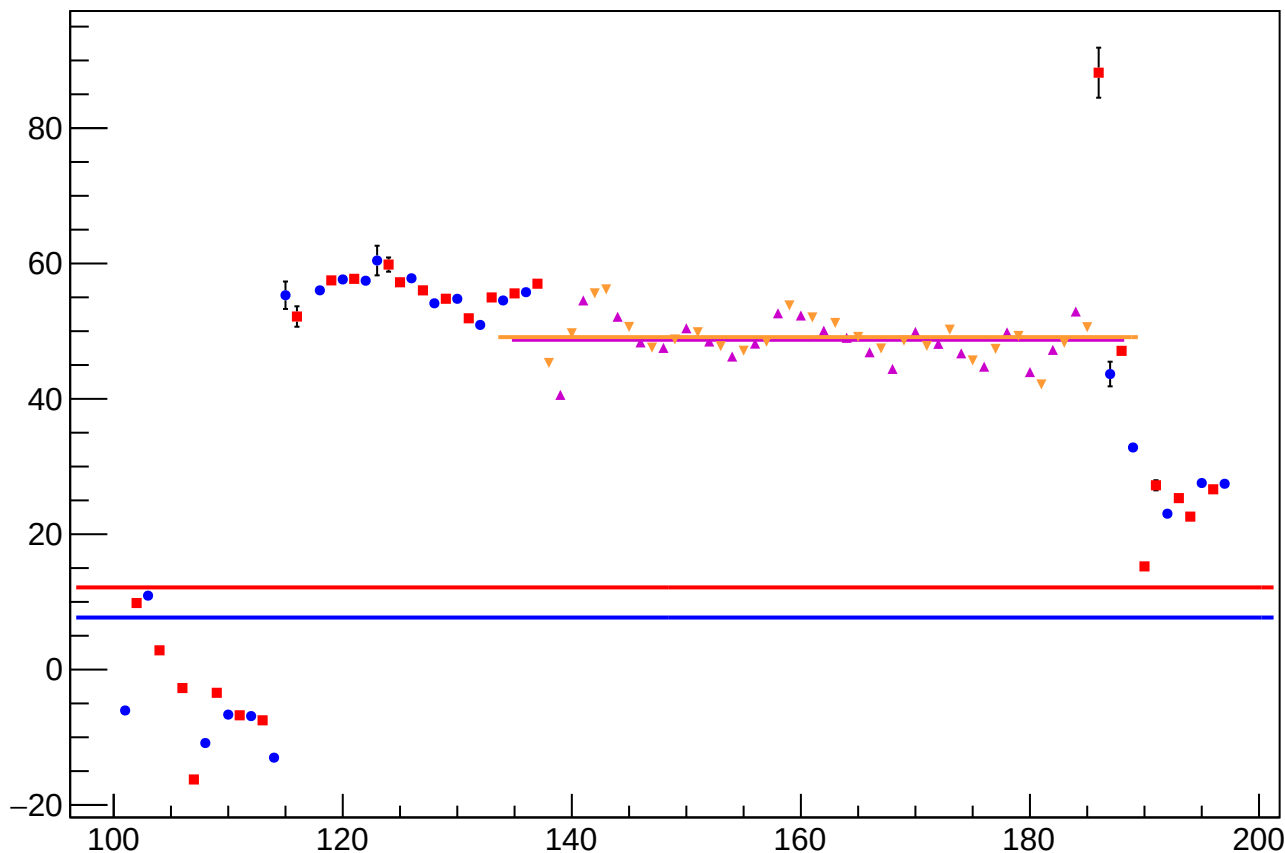
Right: 4.449 $\pm$ 0.053  $\chi^2$ /NDF: 9344.3/46

In: 3.978 $\pm$ 0.053  $\chi^2$ /NDF:10240.1/44

Out: 3.173 $\pm$ 0.051  $\chi^2$ /NDF:15707.6/49

All: 3.558 $\pm$ 0.037  $\chi^2$ /NDF: 26069.1/94

reg\_asym\_sam\_15\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $7.692 \pm 0.063$   $\chi^2/\text{NDF}$ : 130137.2/21

Left Out:  $49.121 \pm 0.062$   $\chi^2/\text{NDF}$ : 2165.4/24

Right Out:  $12.143 \pm 0.067$   $\chi^2/\text{NDF}$ : 133356.1/24

Left In:  $48.731 \pm 0.064$   $\chi^2/\text{NDF}$ : 2117.7/22

Left:  $48.931 \pm 0.044$   $\chi^2/\text{NDF}$ : 4302.5/47

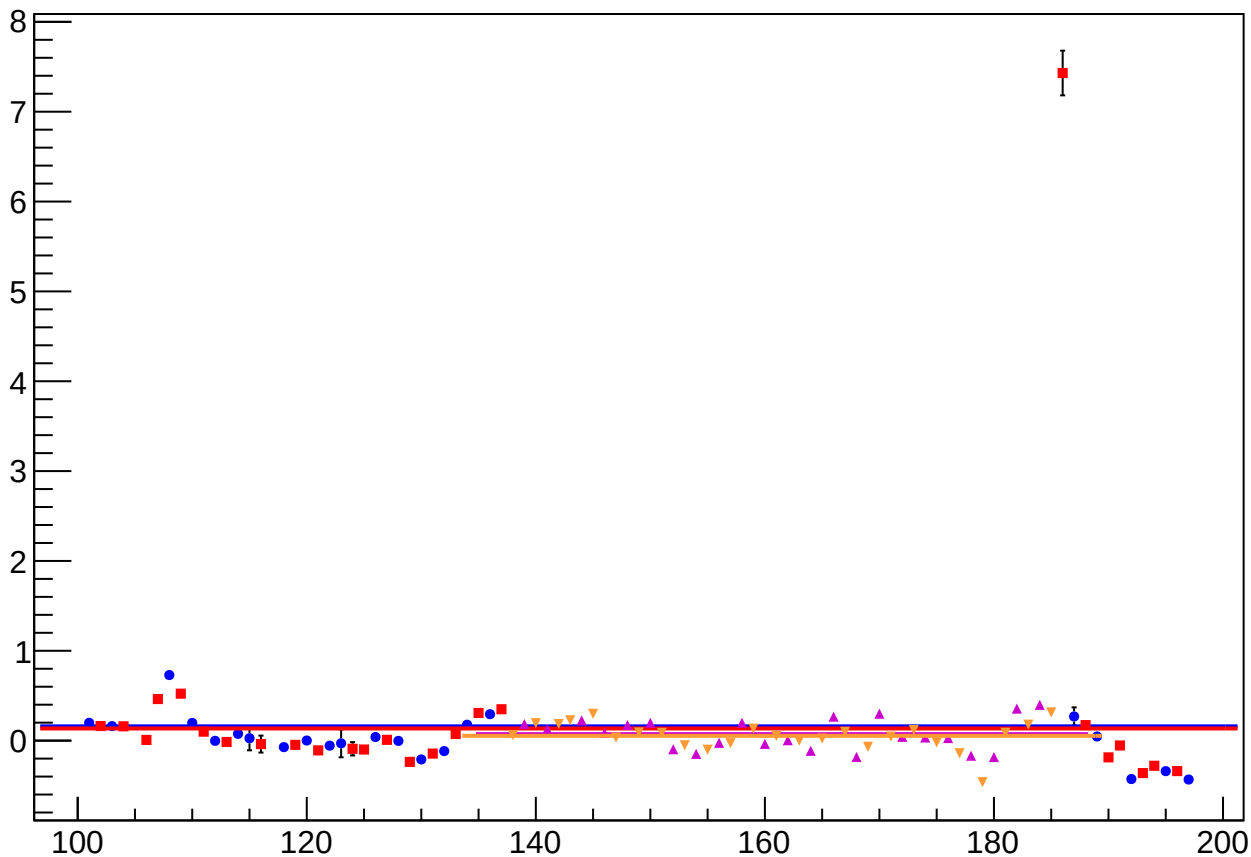
Right:  $9.777 \pm 0.046$   $\chi^2/\text{NDF}$ : 265849.5/46

In:  $27.954 \pm 0.045$   $\chi^2/\text{NDF}$ : 343331.3/44

Out:  $32.056 \pm 0.045$   $\chi^2/\text{NDF}$ : 300306.9/49

All:  $29.971 \pm 0.032$   $\chi^2/\text{NDF}$ : 647786.1/94

reg\_asym\_sam\_15\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.159+/-0.003  $\chi^2/\text{NDF}$ : 8341.6/21

Left Out: 0.053+/-0.003  $\chi^2/\text{NDF}$ : 2369.3/24

Right Out: 0.135+/-0.003  $\chi^2/\text{NDF}$ : 7361.4/24

Left In: 0.072+/-0.003  $\chi^2/\text{NDF}$ : 3272.0/22

Left: 0.063+/-0.002  $\chi^2/\text{NDF}$ : 5662.5/47

Right: 0.147+/-0.002  $\chi^2/\text{NDF}$ : 15744.8/46

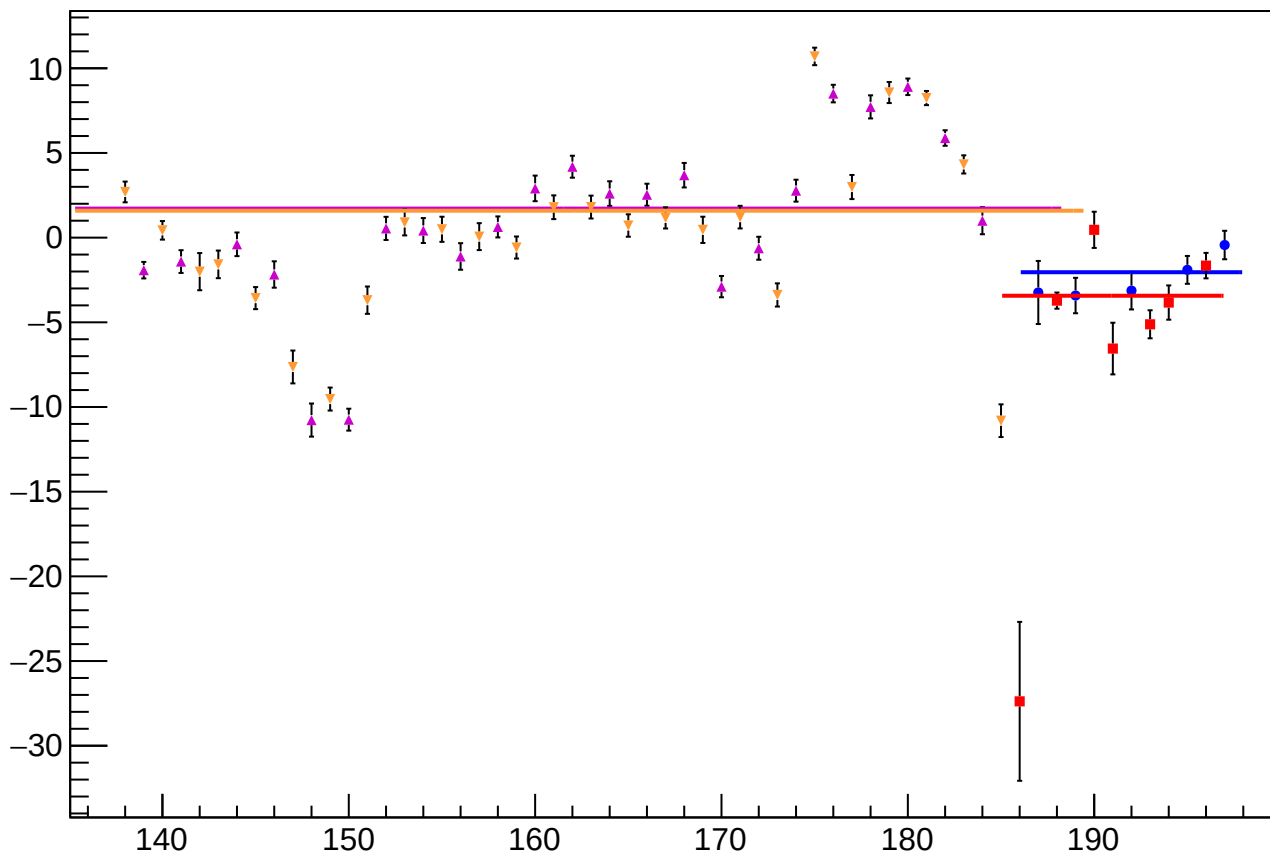
In: 0.119+/-0.002  $\chi^2/\text{NDF}$ : 12119.1/44

Out: 0.099+/-0.002  $\chi^2/\text{NDF}$ : 10194.1/49

All: 0.109+/-0.001  $\chi^2/\text{NDF}$ : 22369.1/94



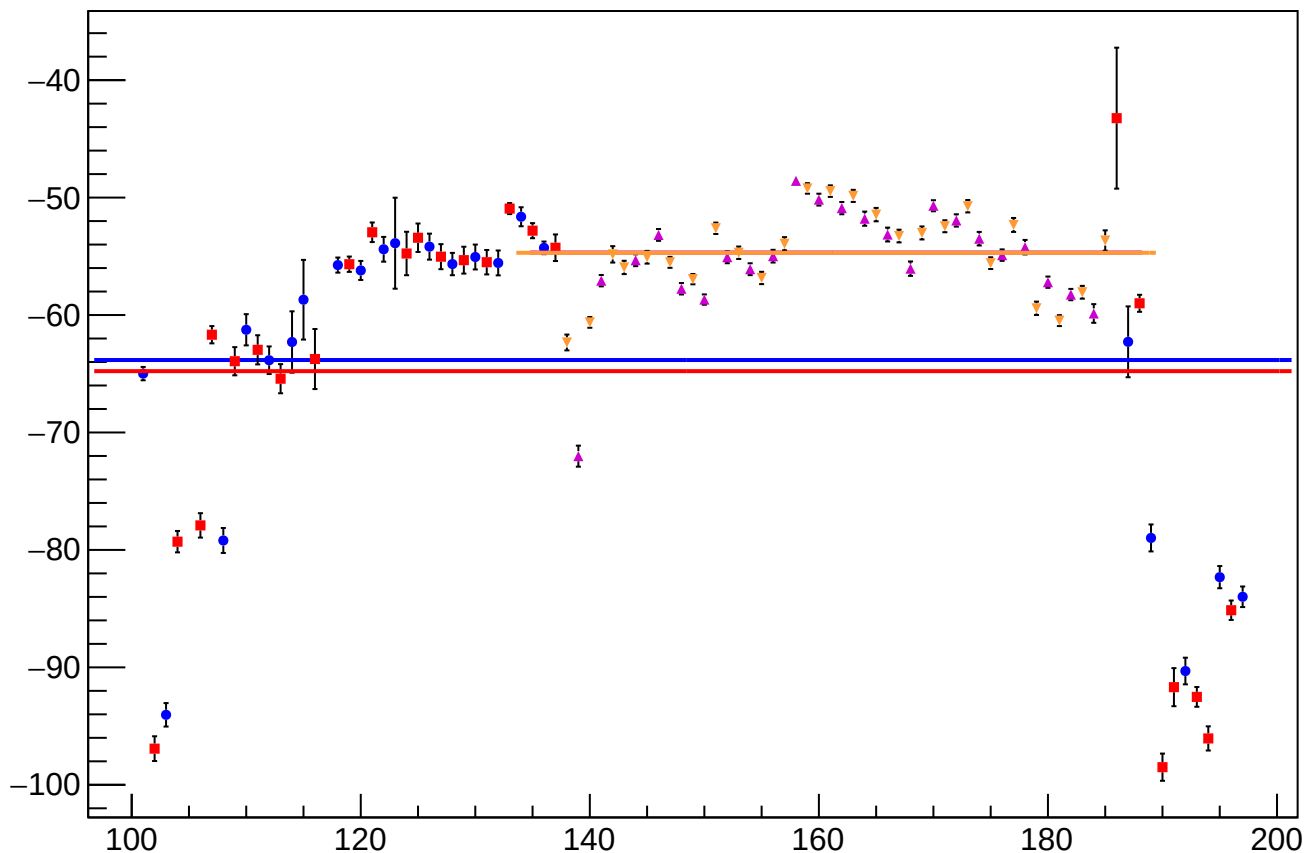
reg\_asym\_sam\_15\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-2.042 \pm 0.451$   $\chi^2/\text{NDF}$ : 6.8/4  
 Left Out:  $1.590 \pm 0.133$   $\chi^2/\text{NDF}$ : 1457.4/24  
 Right Out:  $-3.431 \pm 0.317$   $\chi^2/\text{NDF}$ : 53.8/6  
 Left In:  $1.715 \pm 0.134$   $\chi^2/\text{NDF}$ : 1313.5/22

Left:  $1.652 \pm 0.094$   $\chi^2/\text{NDF}$ : 2771.4/47  
 Right:  $-2.972 \pm 0.259$   $\chi^2/\text{NDF}$ : 66.9/11  
 In:  $1.410 \pm 0.129$   $\chi^2/\text{NDF}$ : 1384.0/27  
 Out:  $0.839 \pm 0.123$   $\chi^2/\text{NDF}$ : 1724.5/31  
 All:  $1.111 \pm 0.089$   $\chi^2/\text{NDF}$ : 3118.8/59

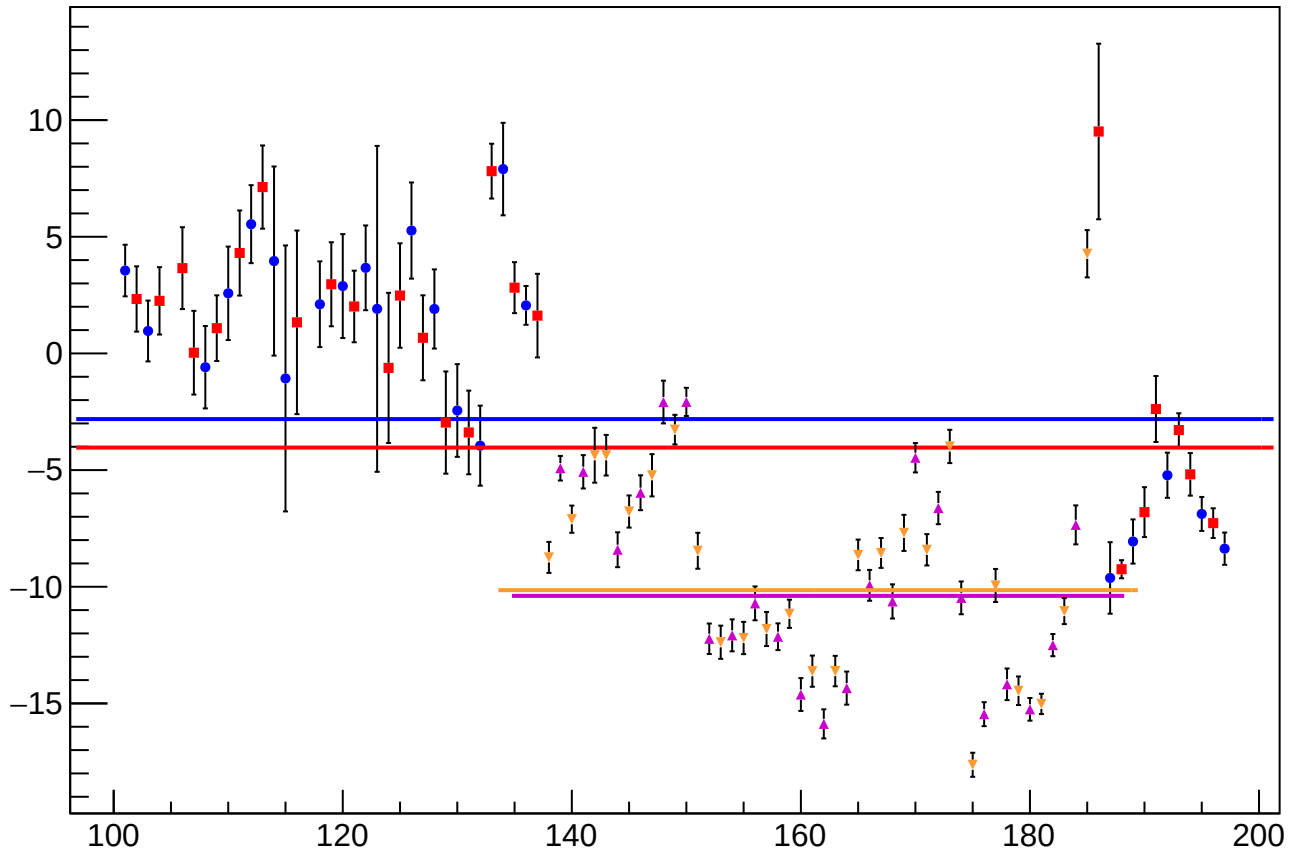
reg\_asym\_sam\_15\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-63.832 \pm 0.203$   $\chi^2/\text{NDF}: 3917.6/21$   
 Left Out:  $-54.701 \pm 0.106$   $\chi^2/\text{NDF}: 1124.5/24$   
 Right Out:  $-64.778 \pm 0.186$   $\chi^2/\text{NDF}: 7229.5/24$   
 Left In:  $-54.677 \pm 0.109$   $\chi^2/\text{NDF}: 1140.6/22$

Left:  $-54.689 \pm 0.076$   $\chi^2/\text{NDF}: 2265.1/47$   
 Right:  $-64.348 \pm 0.137$   $\chi^2/\text{NDF}: 11158.9/46$   
 In:  $-56.733 \pm 0.096$   $\chi^2/\text{NDF}: 6629.3/44$   
 Out:  $-57.176 \pm 0.092$   $\chi^2/\text{NDF}: 10574.4/49$   
 All:  $-56.965 \pm 0.067$   $\chi^2/\text{NDF}: 17214.7/94$

reg\_asym\_sam\_15\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.814 \pm 0.280$   $\chi^2/\text{NDF}$ : 344.7/21

Left Out:  $-10.146 \pm 0.133$   $\chi^2/\text{NDF}$ : 1051.2/24

Right Out:  $-4.035 \pm 0.222$   $\chi^2/\text{NDF}$ : 568.3/24

Left In:  $-10.391 \pm 0.134$   $\chi^2/\text{NDF}$ : 1024.8/22

Left:  $-10.268 \pm 0.094$   $\chi^2/\text{NDF}$ : 2077.6/47

Right:  $-3.564 \pm 0.174$   $\chi^2/\text{NDF}$ : 924.6/46

In:  $-8.987 \pm 0.121$   $\chi^2/\text{NDF}$ : 1964.3/44

Out:  $-8.534 \pm 0.114$   $\chi^2/\text{NDF}$ : 2175.8/49

All:  $-8.748 \pm 0.083$   $\chi^2/\text{NDF}$ : 4147.5/94

reg\_asym\_sam\_15\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -28.791 $\pm$ 0.234  $\chi^2$ /NDF: 6381.7/21

Left Out: -37.983 $\pm$ 0.119  $\chi^2$ /NDF:936.9/24

Right Out: -26.924 $\pm$ 0.218  $\chi^2$ /NDF: 9818.6/24

Left In: -37.784 $\pm$ 0.122  $\chi^2$ /NDF:1079.7/22

Left: -37.886 $\pm$ 0.085  $\chi^2$ /NDF: 2018.0/47

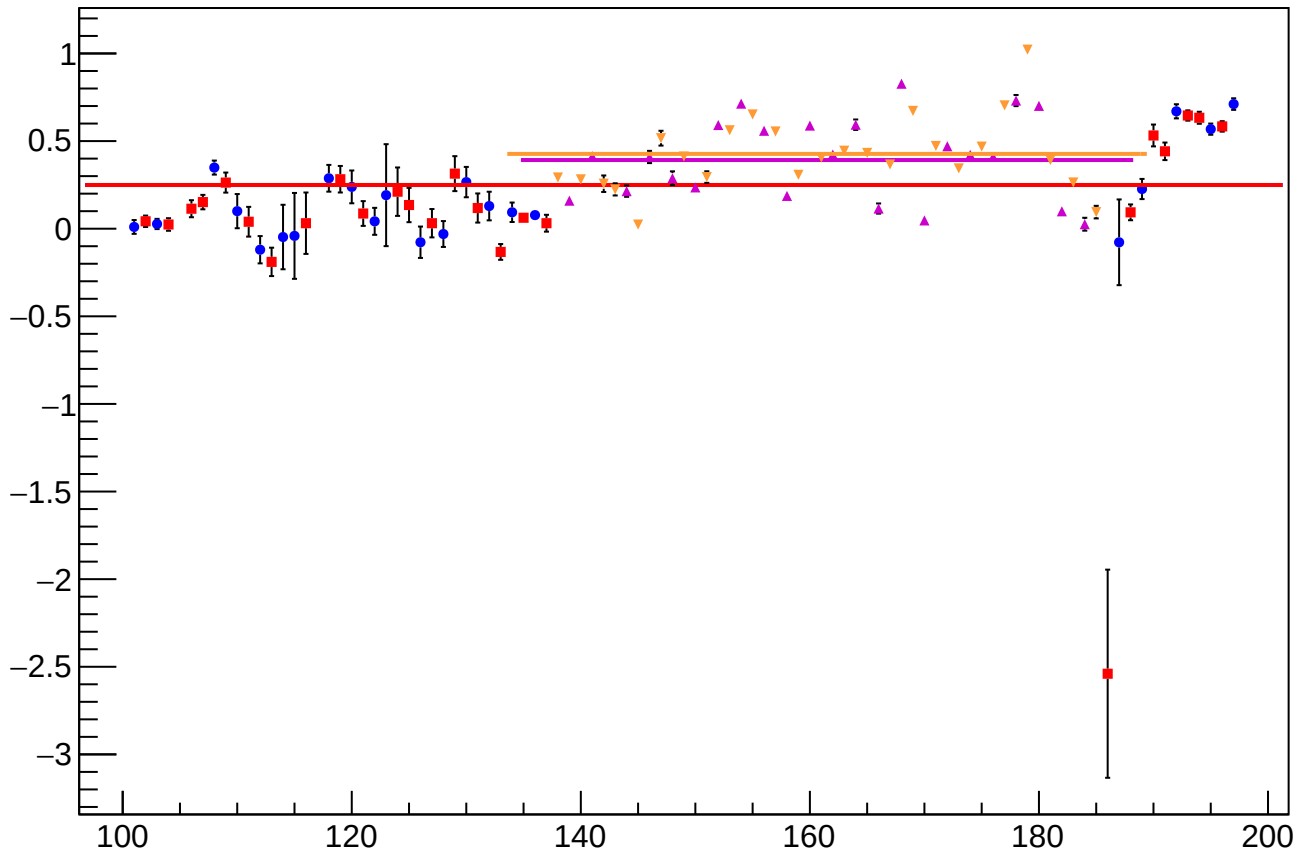
Right: -27.791 $\pm$ 0.159  $\chi^2$ /NDF: 16234.4/46

In: -35.863 $\pm$ 0.108  $\chi^2$ /NDF:8624.1/44

Out: -35.438 $\pm$ 0.104  $\chi^2$ /NDF:12743.6/49

All: -35.643 $\pm$ 0.075  $\chi^2$ /NDF: 21375.7/94

reg\_asym\_sam\_15\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.249 $\pm$ 0.011  $\chi^2$ /NDF: 641.3/21

Left Out: 0.427 $\pm$ 0.005  $\chi^2$ /NDF:1293.3/24

Right Out: 0.249 $\pm$ 0.010  $\chi^2$ /NDF: 792.9/24

Left In: 0.392 $\pm$ 0.005  $\chi^2$ /NDF:1835.6/22

Left: 0.409 $\pm$ 0.004  $\chi^2$ /NDF: 3150.1/47

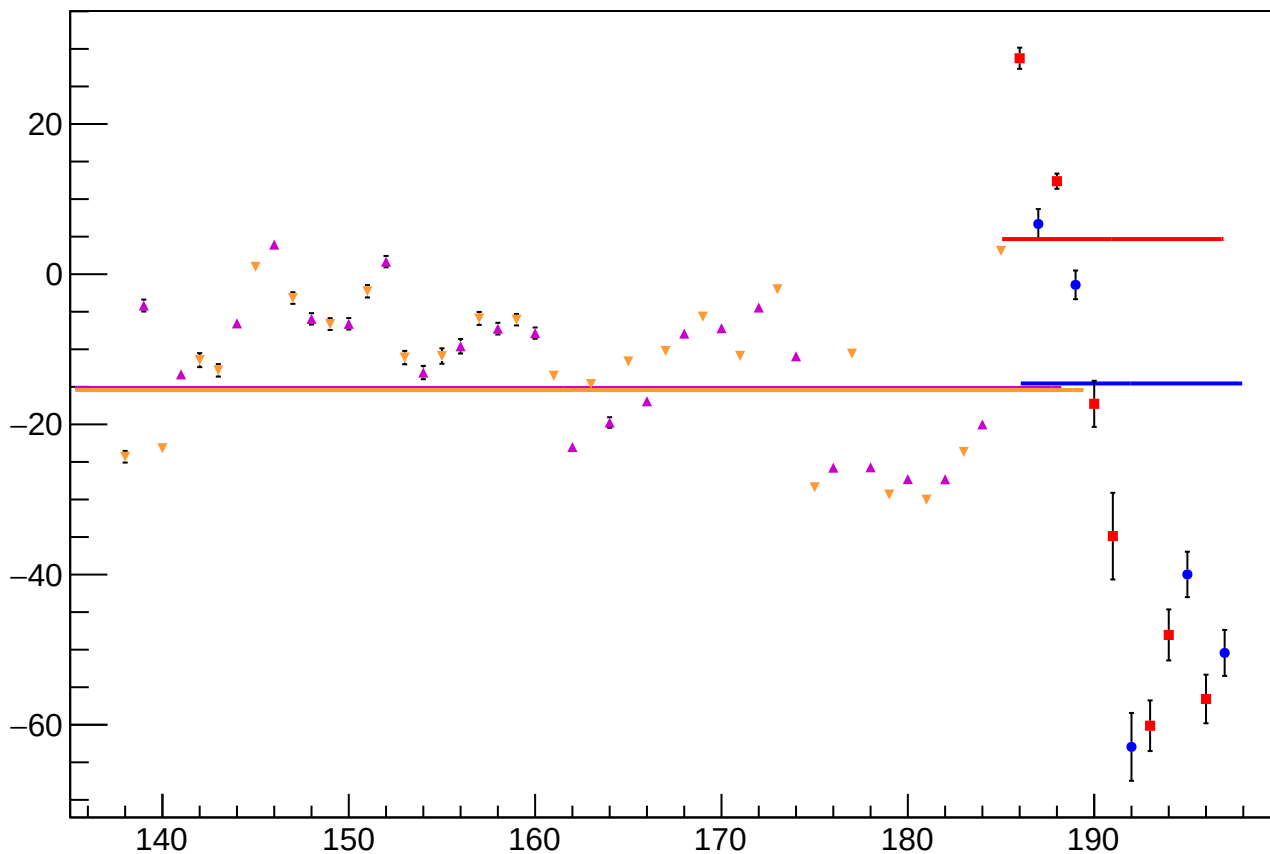
Right: 0.249 $\pm$ 0.007  $\chi^2$ /NDF: 1434.1/46

In: 0.362 $\pm$ 0.005  $\chi^2$ /NDF:2622.2/44

Out: 0.384 $\pm$ 0.005  $\chi^2$ /NDF:2347.7/49

All: 0.374 $\pm$ 0.003  $\chi^2$ /NDF: 4980.4/94

reg\_asym\_sam\_37\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: -14.551 $\pm$ 1.124  $\chi^2$ /NDF: 484.2/4  
 Left Out: -15.427 $\pm$ 0.105  $\chi^2$ /NDF:10499.6/24  
 Right Out: 4.678 $\pm$ 0.728  $\chi^2$ /NDF: 1416.1/6  
 Left In: -15.151 $\pm$ 0.106  $\chi^2$ /NDF:8744.3/22

Left: -15.290 $\pm$ 0.075  $\chi^2$ /NDF: 19247.4/47

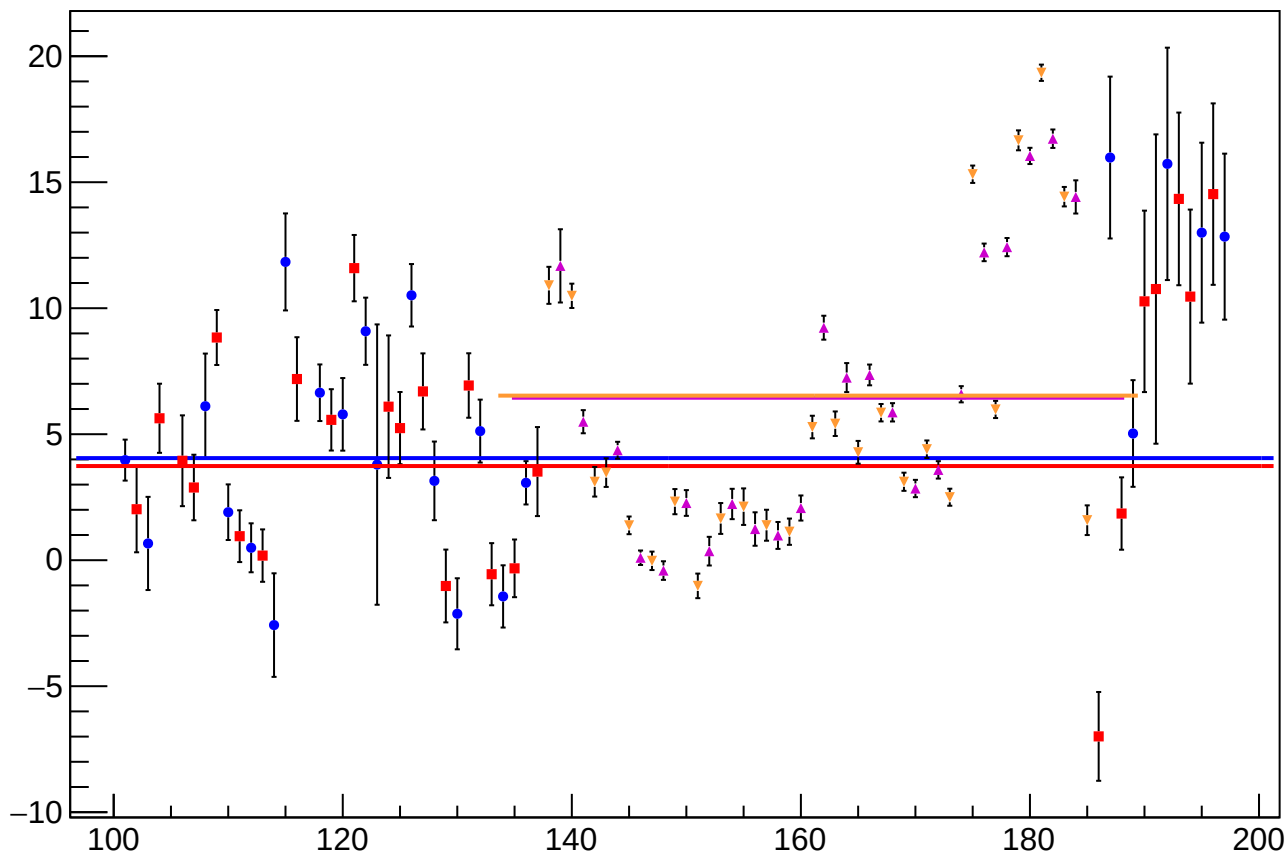
Right: -1.012 $\pm$ 0.611  $\chi^2$ /NDF: 2106.4/11

In: -15.146 $\pm$ 0.106  $\chi^2$ /NDF:9228.8/27

Out: -15.016 $\pm$ 0.104  $\chi^2$ /NDF:12661.8/31

All: -15.080 $\pm$ 0.074  $\chi^2$ /NDF: 21891.4/59

reg\_asym\_sam\_37\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $4.051 \pm 0.301$   $\chi^2/\text{NDF}$ : 171.7/21

Left Out:  $6.531 \pm 0.086$   $\chi^2/\text{NDF}$ : 4969.5/24

Right Out:  $3.737 \pm 0.300$   $\chi^2/\text{NDF}$ : 199.6/24

Left In:  $6.448 \pm 0.086$   $\chi^2/\text{NDF}$ : 3955.6/22

Left:  $6.490 \pm 0.061$   $\chi^2/\text{NDF}$ : 8925.6/47

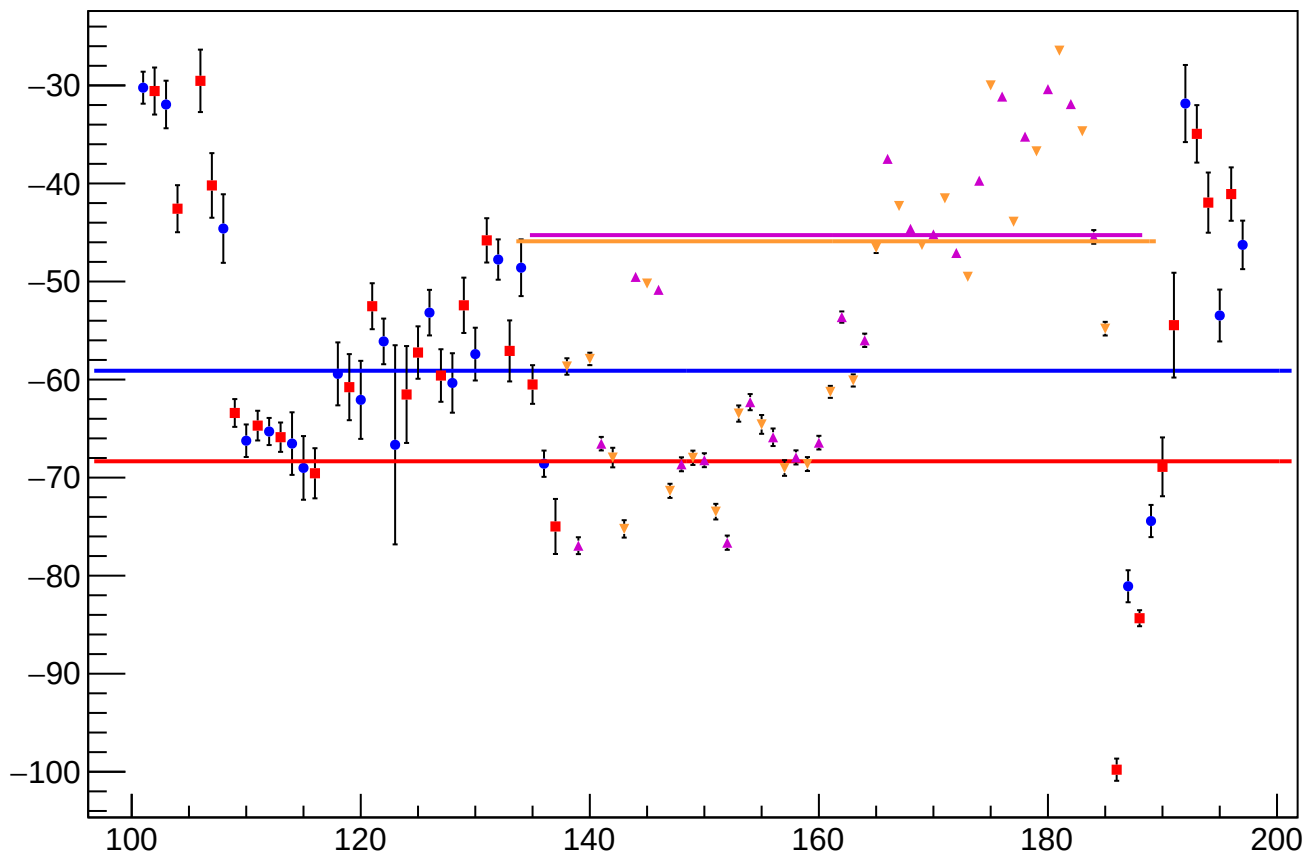
Right:  $3.893 \pm 0.212$   $\chi^2/\text{NDF}$ : 371.9/46

In:  $6.268 \pm 0.083$   $\chi^2/\text{NDF}$ : 4186.0/44

Out:  $6.320 \pm 0.082$   $\chi^2/\text{NDF}$ : 5249.6/49

All:  $6.294 \pm 0.058$   $\chi^2/\text{NDF}$ : 9435.8/94

reg\_asym\_sam\_37\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-59.101 \pm 0.470$   $\chi^2/\text{NDF}$ : 960.4/21

Left Out:  $-45.897 \pm 0.106$   $\chi^2/\text{NDF}$ : 17133.8/24

Right Out:  $-68.335 \pm 0.400$   $\chi^2/\text{NDF}$ : 2317.4/24

Left In:  $-45.268 \pm 0.107$   $\chi^2/\text{NDF}$ : 15775.7/22

Left:  $-45.584 \pm 0.075$   $\chi^2/\text{NDF}$ : 32927.0/47

Right:  $-64.459 \pm 0.305$   $\chi^2/\text{NDF}$ : 3501.6/46

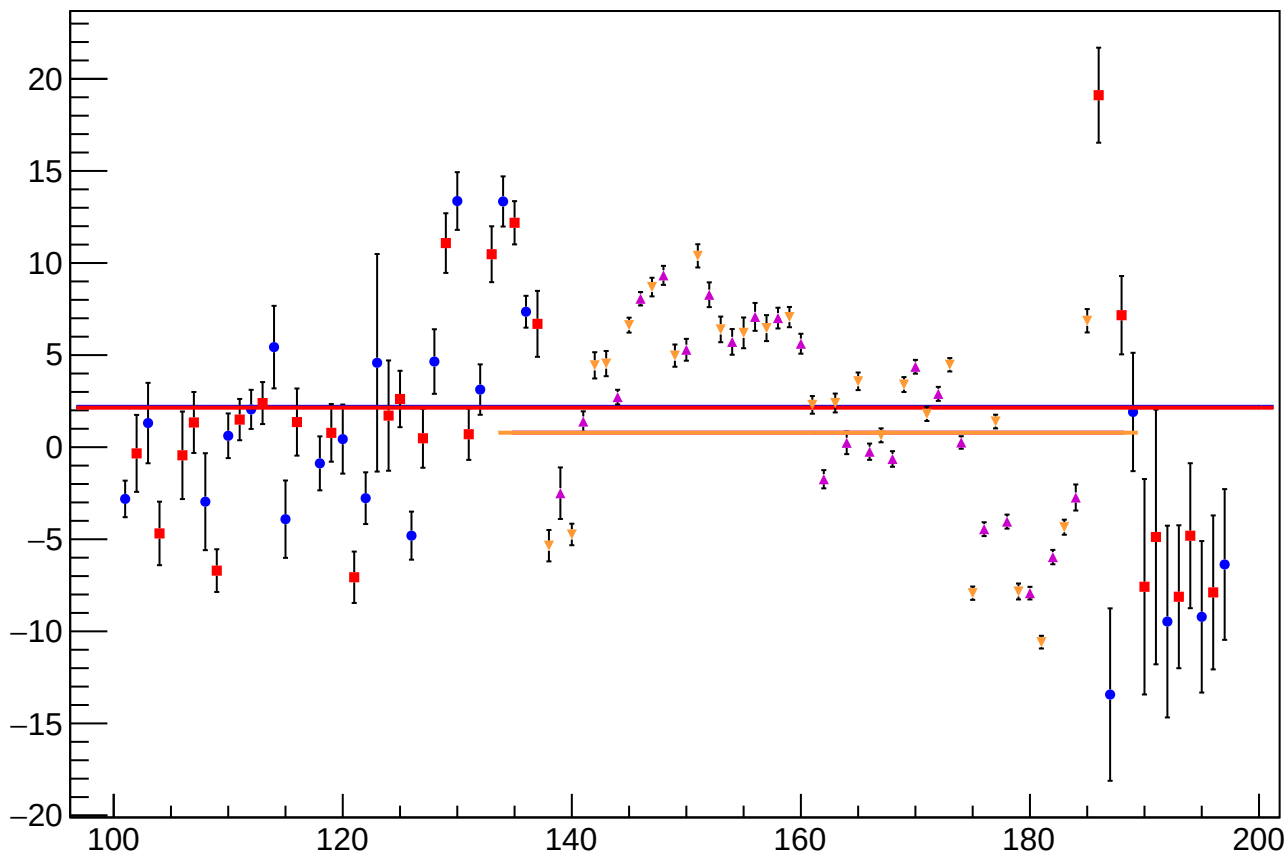
In:  $-45.946 \pm 0.104$   $\chi^2/\text{NDF}$ : 17559.0/44

Out:  $-47.379 \pm 0.103$   $\chi^2/\text{NDF}$ : 22390.8/49

All:  $-46.672 \pm 0.073$   $\chi^2/\text{NDF}$ : 40045.8/94



reg\_asym\_sam\_37\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 2.191 $\pm$ 0.340  $\chi^2$ /NDF: 272.5/21

Left Out: 0.787 $\pm$ 0.096  $\chi^2$ /NDF:3746.7/24

Right Out: 2.144 $\pm$ 0.342  $\chi^2$ /NDF: 332.4/24

Left In: 0.791 $\pm$ 0.096  $\chi^2$ /NDF:2697.7/22

Left: 0.789 $\pm$ 0.068  $\chi^2$ /NDF: 6444.4/47

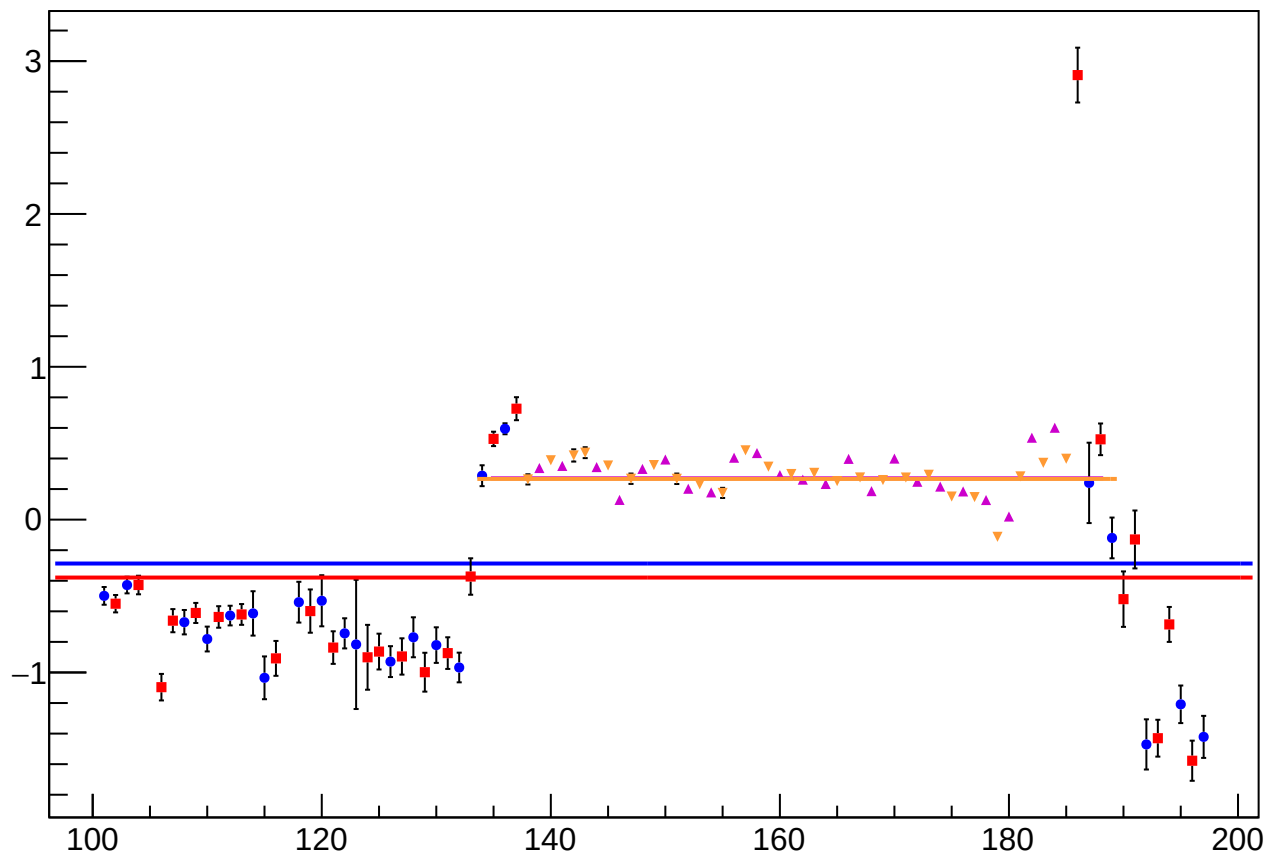
Right: 2.168 $\pm$ 0.241  $\chi^2$ /NDF: 604.9/46

In: 0.895 $\pm$ 0.093  $\chi^2$ /NDF:2985.9/44

Out: 0.885 $\pm$ 0.092  $\chi^2$ /NDF:4093.8/49

All: 0.890 $\pm$ 0.065  $\chi^2$ /NDF: 7079.7/94

reg\_asym\_sam\_37\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.287 \pm 0.018$   $\chi^2/\text{NDF}: 1147.9/21$

Left Out:  $0.266 \pm 0.004$   $\chi^2/\text{NDF}: 698.1/24$

Right Out:  $-0.379 \pm 0.018$   $\chi^2/\text{NDF}: 1428.5/24$

Left In:  $0.270 \pm 0.004$   $\chi^2/\text{NDF}: 973.5/22$

Left:  $0.268 \pm 0.003$   $\chi^2/\text{NDF}: 1672.0/47$

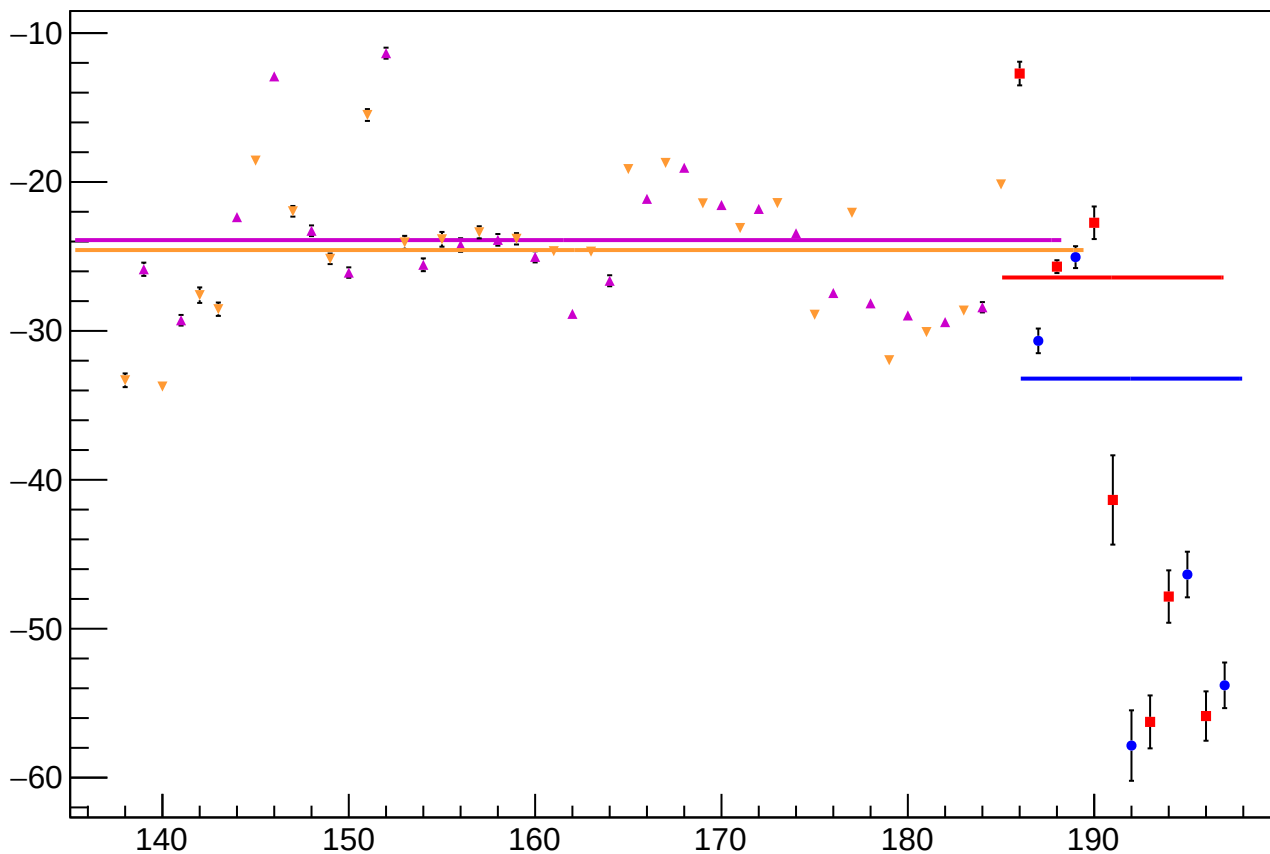
Right:  $-0.334 \pm 0.013$   $\chi^2/\text{NDF}: 2589.4/46$

In:  $0.239 \pm 0.004$   $\chi^2/\text{NDF}: 3012.4/44$

Out:  $0.230 \pm 0.004$   $\chi^2/\text{NDF}: 3366.3/49$

All:  $0.234 \pm 0.003$   $\chi^2/\text{NDF}: 6381.3/94$

reg\_asym\_sam\_37\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-33.204 \pm 0.480$   $\chi^2/\text{NDF}: 495.6/4$   
 Left Out:  $-24.571 \pm 0.051$   $\chi^2/\text{NDF}: 8610.0/24$   
 Right Out:  $-26.413 \pm 0.335$   $\chi^2/\text{NDF}: 1082.5/6$   
 Left In:  $-23.902 \pm 0.051$   $\chi^2/\text{NDF}: 9158.9/22$

Left:  $-24.236 \pm 0.036$   $\chi^2/\text{NDF}: 17855.2/47$

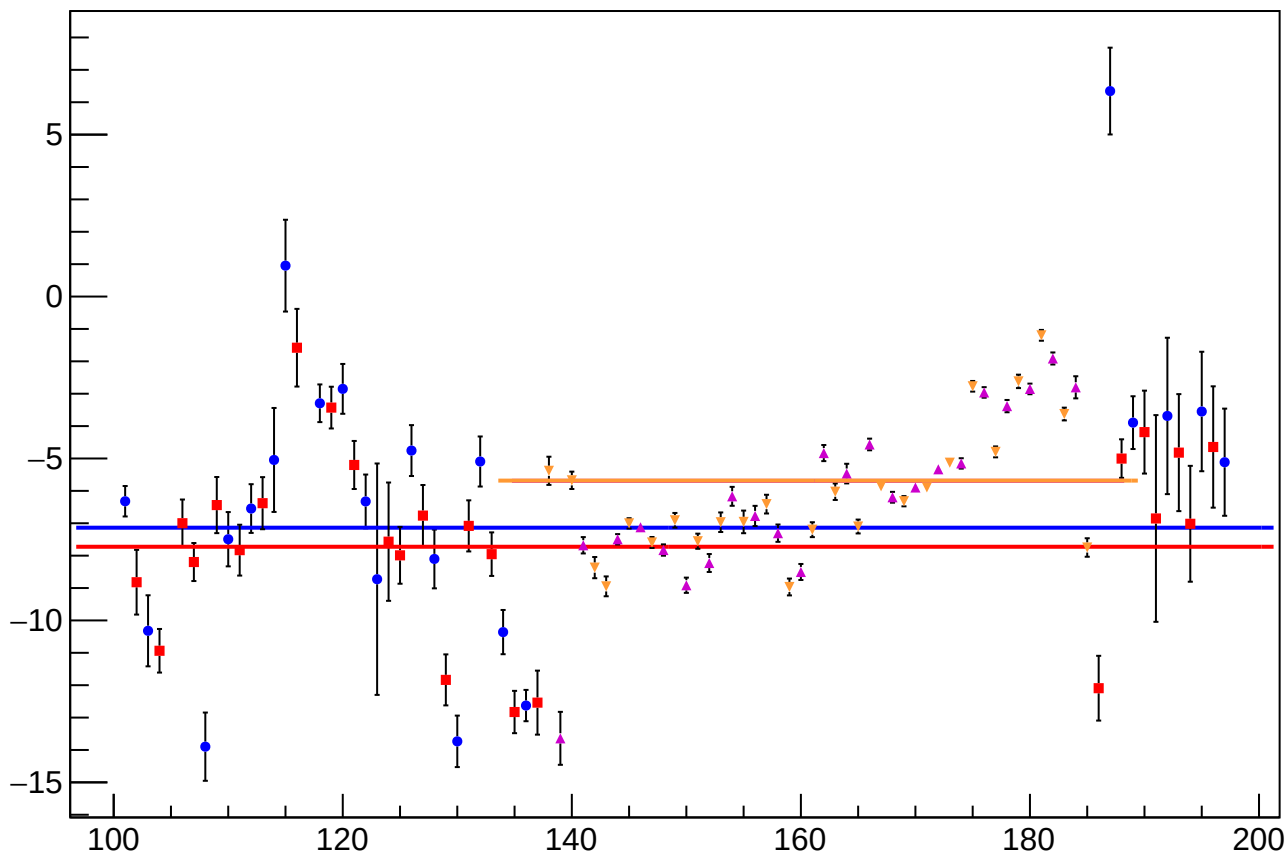
Right:  $-28.635 \pm 0.275$   $\chi^2/\text{NDF}: 1712.7/11$

In:  $-24.005 \pm 0.051$   $\chi^2/\text{NDF}: 10025.9/27$

Out:  $-24.613 \pm 0.050$   $\chi^2/\text{NDF}: 9722.1/31$

All:  $-24.310 \pm 0.036$   $\chi^2/\text{NDF}: 19820.4/59$

reg\_asym\_sam\_37\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-7.137 \pm 0.177$   $\chi^2/\text{NDF}$ : 525.6/21

Left Out:  $-5.683 \pm 0.041$   $\chi^2/\text{NDF}$ : 2231.0/24

Right Out:  $-7.725 \pm 0.171$   $\chi^2/\text{NDF}$ : 280.0/24

Left In:  $-5.690 \pm 0.041$   $\chi^2/\text{NDF}$ : 2328.2/22

Left:  $-5.686 \pm 0.029$   $\chi^2/\text{NDF}$ : 4559.2/47

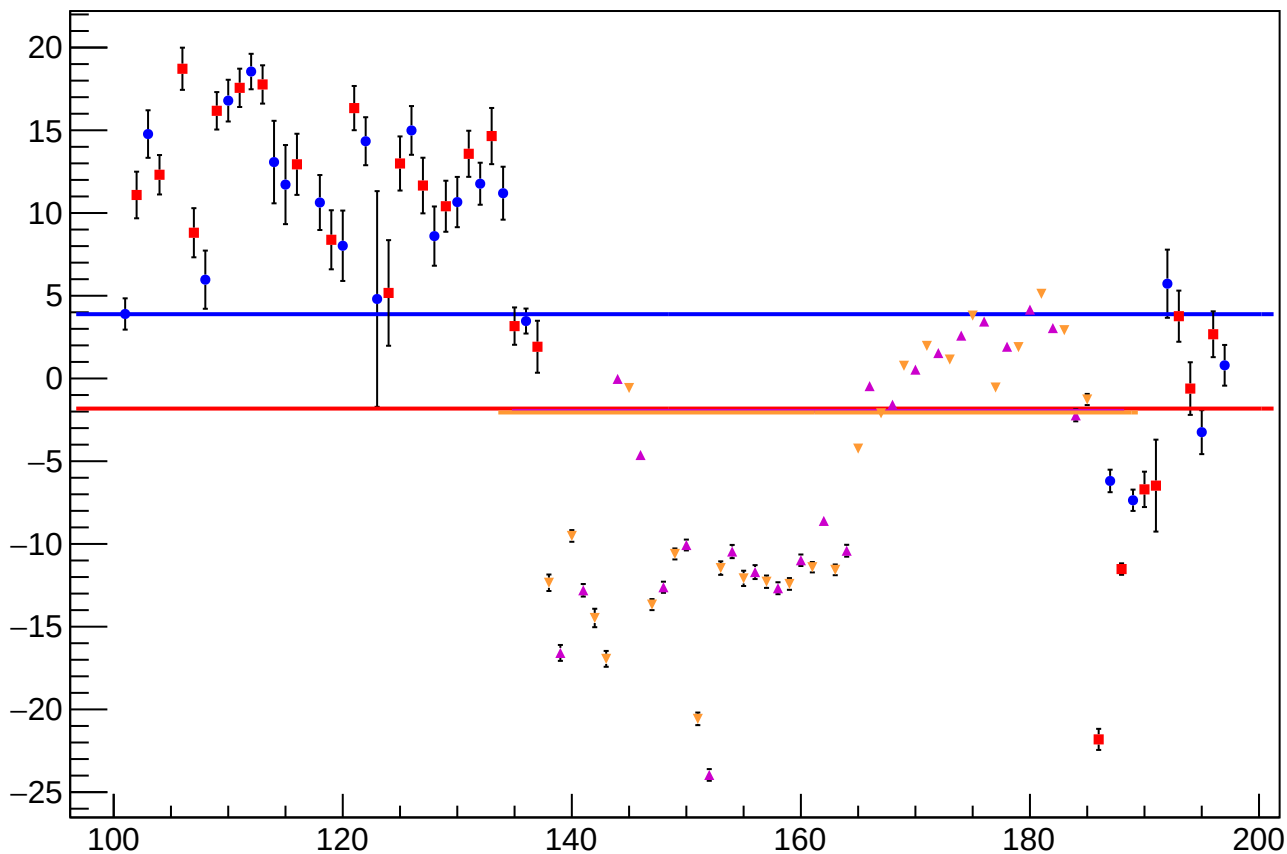
Right:  $-7.442 \pm 0.123$   $\chi^2/\text{NDF}$ : 811.3/46

In:  $-5.762 \pm 0.040$   $\chi^2/\text{NDF}$ : 2917.3/44

Out:  $-5.795 \pm 0.040$   $\chi^2/\text{NDF}$ : 2646.4/49

All:  $-5.778 \pm 0.028$   $\chi^2/\text{NDF}$ : 5564.0/94

reg\_asym\_sam\_37\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected

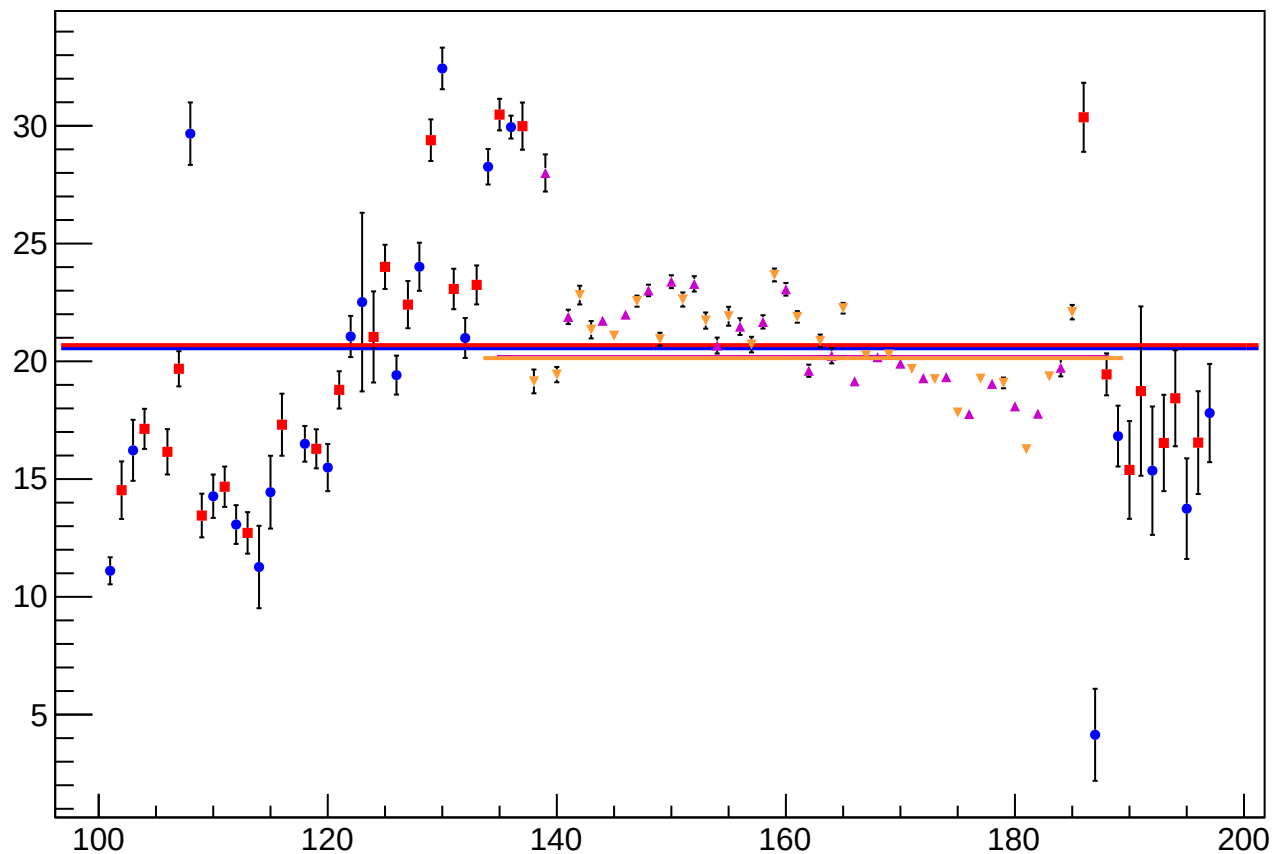


Right In:  $3.886 \pm 0.259$   $\chi^2/\text{NDF}: 1151.7/21$   
 Left Out:  $-2.055 \pm 0.051$   $\chi^2/\text{NDF}: 16042.5/24$   
 Right Out:  $-1.819 \pm 0.212$   $\chi^2/\text{NDF}: 3908.6/24$   
 Left In:  $-1.963 \pm 0.051$   $\chi^2/\text{NDF}: 15492.9/22$

Left:  $-2.009 \pm 0.036$   $\chi^2/\text{NDF}: 31537.0/47$   
 Right:  $0.471 \pm 0.164$   $\chi^2/\text{NDF}: 5349.7/46$   
 In:  $-1.745 \pm 0.050$   $\chi^2/\text{NDF}: 17133.8/44$   
 Out:  $-2.042 \pm 0.050$   $\chi^2/\text{NDF}: 19952.2/49$

All:  $-1.894 \pm 0.035$   $\chi^2/\text{NDF}: 37103.7/94$

reg\_asym\_sam\_37\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 20.555 $\pm$ 0.203  $\chi^2$ /NDF: 1323.7/21

Left Out: 20.136 $\pm$ 0.046  $\chi^2$ /NDF:1414.2/24

Right Out: 20.687 $\pm$ 0.201  $\chi^2$ /NDF: 789.7/24

Left In: 20.184 $\pm$ 0.046  $\chi^2$ /NDF:1470.7/22

Left: 20.160 $\pm$ 0.032  $\chi^2$ /NDF: 2885.5/47

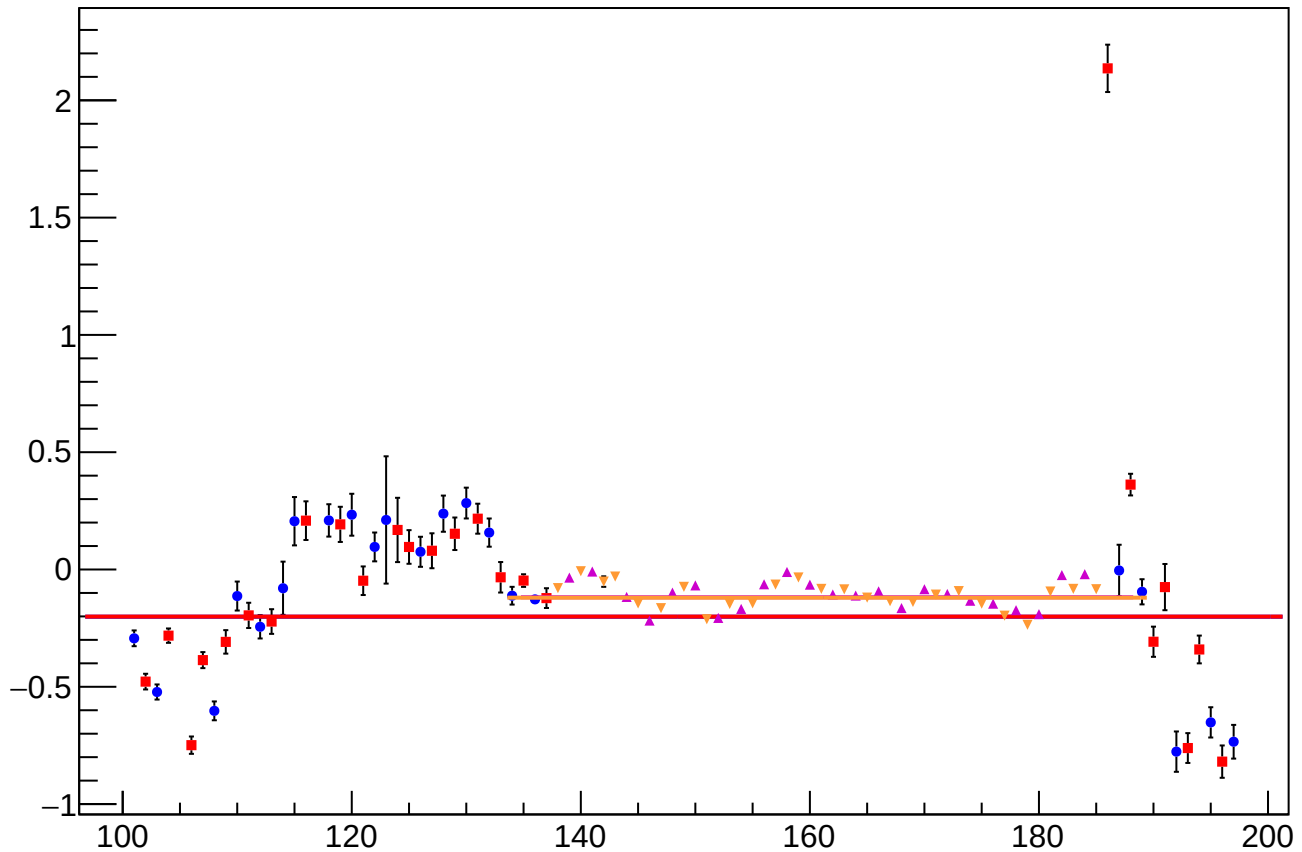
Right: 20.622 $\pm$ 0.143  $\chi^2$ /NDF: 2113.6/46

In: 20.202 $\pm$ 0.045  $\chi^2$ /NDF:2797.6/44

Out: 20.163 $\pm$ 0.045  $\chi^2$ /NDF:2211.1/49

All: 20.183 $\pm$ 0.032  $\chi^2$ /NDF: 5009.0/94

reg\_asym\_sam\_37\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.201 \pm 0.011$   $\chi^2/\text{NDF}$ : 626.8/21

Left Out:  $-0.120 \pm 0.002$   $\chi^2/\text{NDF}$ : 532.4/24

Right Out:  $-0.201 \pm 0.010$   $\chi^2/\text{NDF}$ : 1391.0/24

Left In:  $-0.118 \pm 0.002$   $\chi^2/\text{NDF}$ : 727.5/22

Left:  $-0.119 \pm 0.001$   $\chi^2/\text{NDF}$ : 1260.2/47

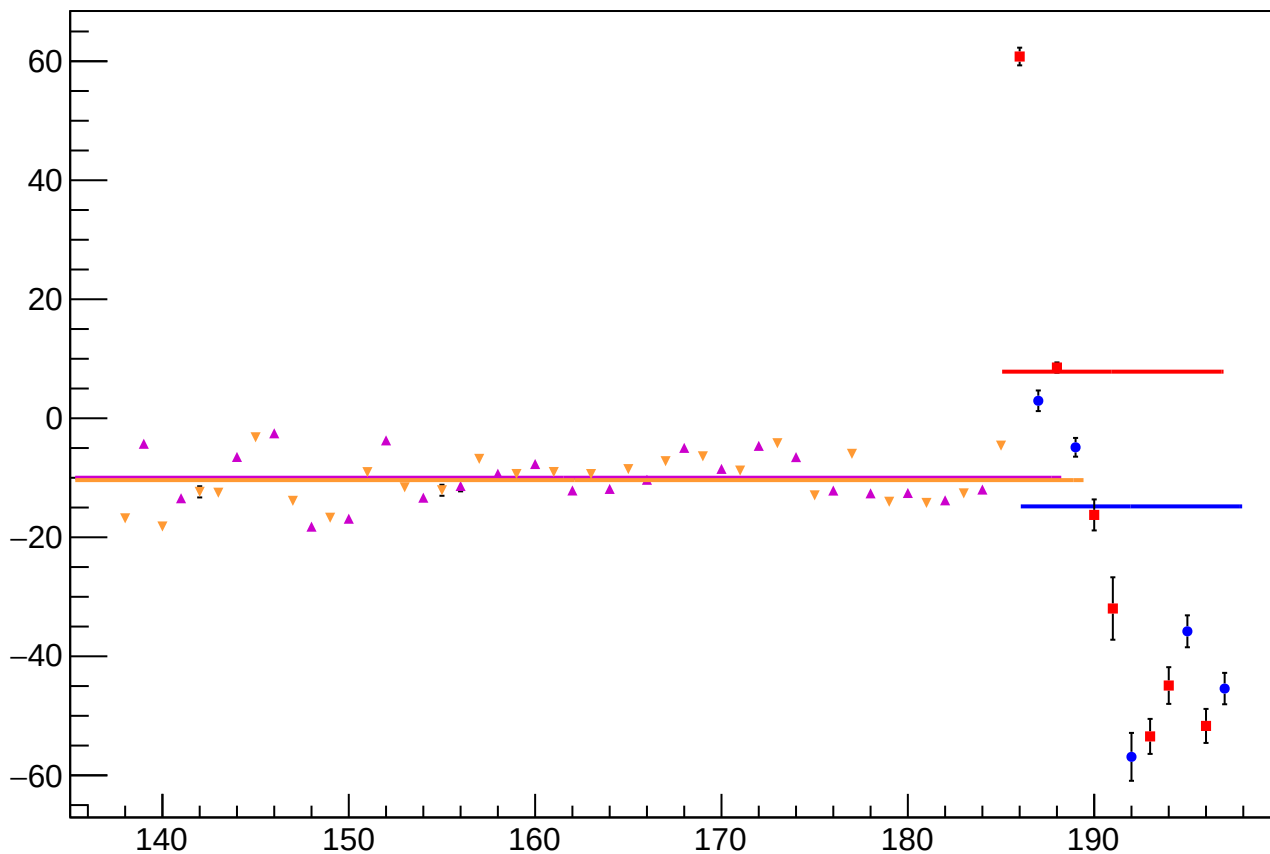
Right:  $-0.201 \pm 0.007$   $\chi^2/\text{NDF}$ : 2017.8/46

In:  $-0.122 \pm 0.002$   $\chi^2/\text{NDF}$ : 1413.6/44

Out:  $-0.124 \pm 0.002$   $\chi^2/\text{NDF}$ : 1985.6/49

All:  $-0.123 \pm 0.001$   $\chi^2/\text{NDF}$ : 3399.6/94

reg\_asym\_sam\_26\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-14.807 \pm 0.962$   $\chi^2/\text{NDF}: 450.0/4$

Left Out:  $-10.392 \pm 0.088$   $\chi^2/\text{NDF}: 2112.5/24$

Right Out:  $7.835 \pm 0.655$   $\chi^2/\text{NDF}: 2573.1/6$

Left In:  $-9.990 \pm 0.089$   $\chi^2/\text{NDF}: 1794.2/22$

Left:  $-10.194 \pm 0.063$   $\chi^2/\text{NDF}: 3917.0/47$

Right:  $0.670 \pm 0.541$   $\chi^2/\text{NDF}: 3401.7/11$

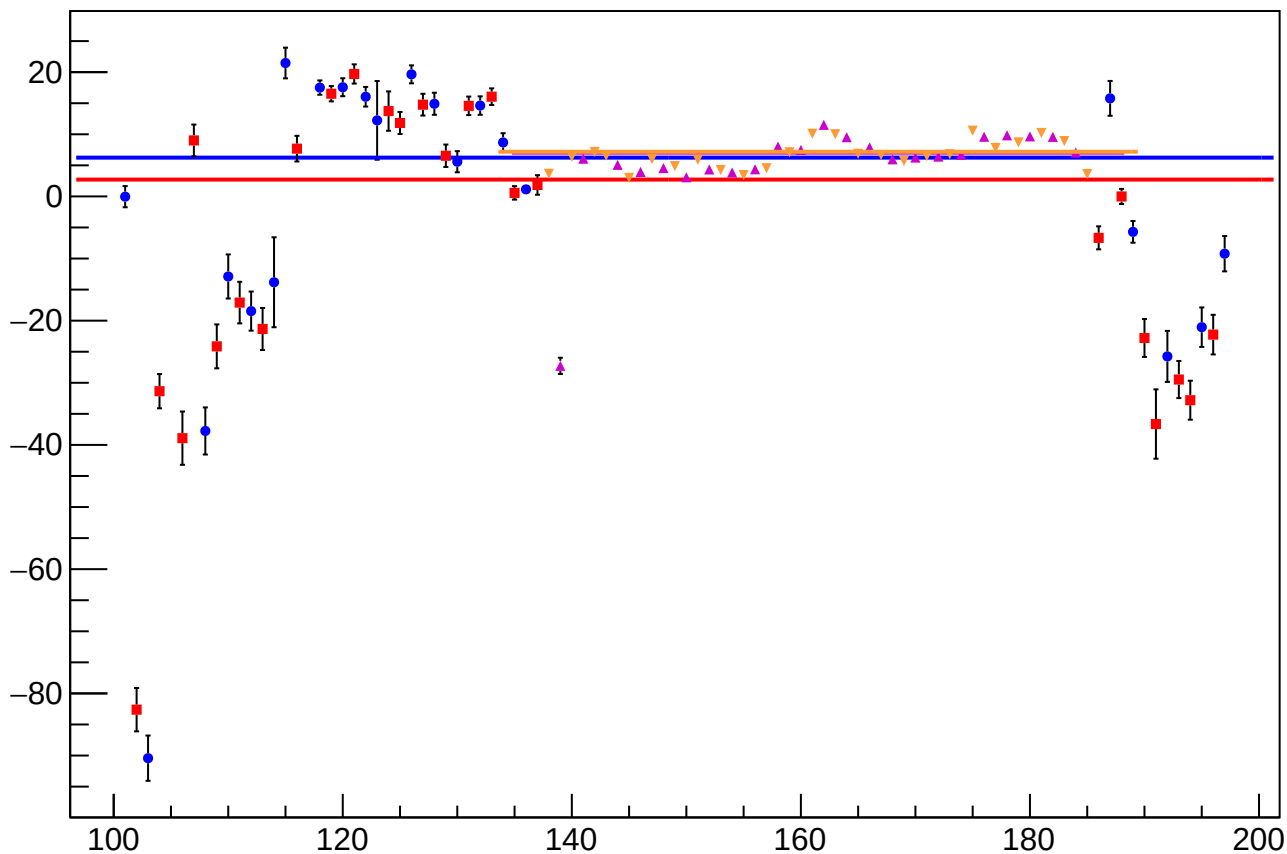
In:  $-10.031 \pm 0.089$   $\chi^2/\text{NDF}: 2269.0/27$

Out:  $-10.069 \pm 0.087$   $\chi^2/\text{NDF}: 5447.3/31$

All:  $-10.050 \pm 0.062$   $\chi^2/\text{NDF}: 7716.4/59$



reg\_asym\_sam\_26\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $6.242 \pm 0.381$   $\chi^2/\text{NDF}$ : 1594.7/21

Left Out:  $7.187 \pm 0.074$   $\chi^2/\text{NDF}$ : 916.3/24

Right Out:  $2.709 \pm 0.386$   $\chi^2/\text{NDF}$ : 1959.3/24

Left In:  $7.043 \pm 0.074$   $\chi^2/\text{NDF}$ : 1604.6/22

Left:  $7.115 \pm 0.052$   $\chi^2/\text{NDF}$ : 2522.8/47

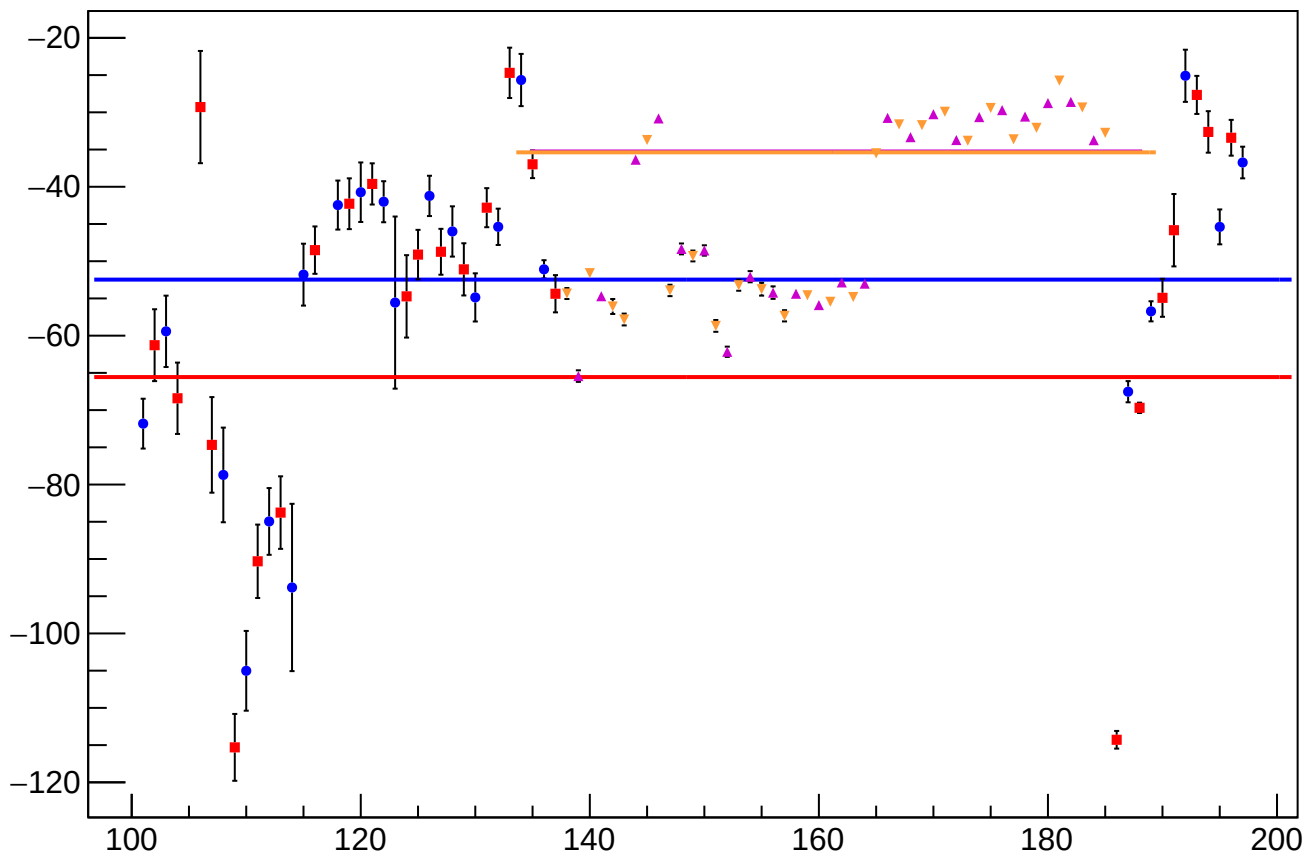
Right:  $4.499 \pm 0.271$   $\chi^2/\text{NDF}$ : 3596.6/46

In:  $7.014 \pm 0.073$   $\chi^2/\text{NDF}$ : 3203.6/44

Out:  $7.030 \pm 0.072$   $\chi^2/\text{NDF}$ : 3005.6/49

All:  $7.022 \pm 0.051$   $\chi^2/\text{NDF}$ : 6209.2/94

reg\_asym\_sam\_26\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-52.471 \pm 0.545$   $\chi^2/\text{NDF}$ : 583.6/21

Left Out:  $-35.377 \pm 0.089$   $\chi^2/\text{NDF}$ : 12628.3/24

Right Out:  $-65.563 \pm 0.447$   $\chi^2/\text{NDF}$ : 3194.1/24

Left In:  $-35.260 \pm 0.090$   $\chi^2/\text{NDF}$ : 11769.2/22

Left:  $-35.319 \pm 0.063$   $\chi^2/\text{NDF}$ : 24398.4/47

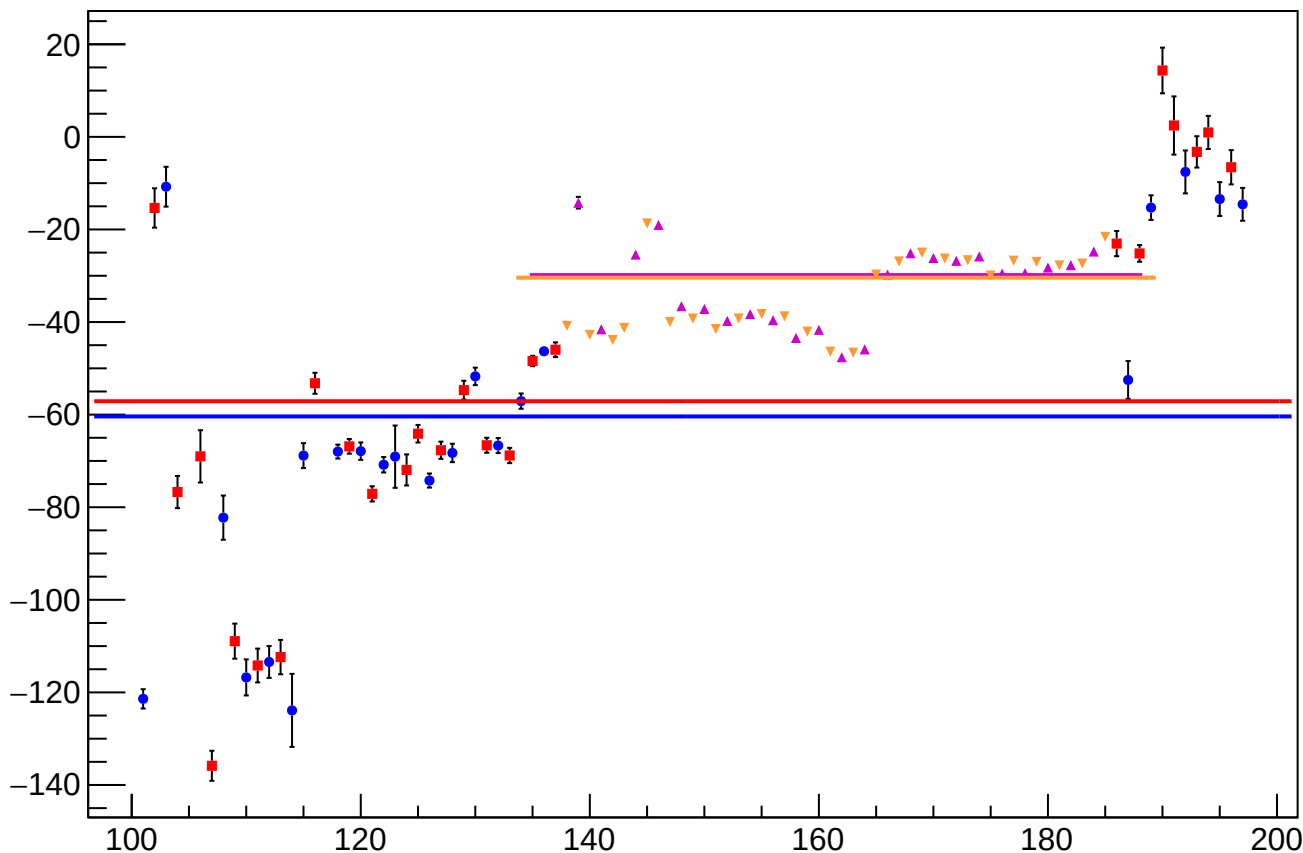
Right:  $-60.305 \pm 0.345$   $\chi^2/\text{NDF}$ : 4122.8/46

In:  $-35.714 \pm 0.089$   $\chi^2/\text{NDF}$ : 13323.2/44

Out:  $-36.532 \pm 0.087$   $\chi^2/\text{NDF}$ : 20216.1/49

All:  $-36.129 \pm 0.062$   $\chi^2/\text{NDF}$ : 33582.5/94

reg\_asym\_sam\_26\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-60.390 \pm 0.429$   $\chi^2/\text{NDF}: 2821.7/21$

Left Out:  $-30.415 \pm 0.082$   $\chi^2/\text{NDF}: 8132.2/24$

Right Out:  $-57.114 \pm 0.445$   $\chi^2/\text{NDF}: 3300.3/24$

Left In:  $-29.863 \pm 0.082$   $\chi^2/\text{NDF}: 7145.9/22$

Left:  $-30.141 \pm 0.058$   $\chi^2/\text{NDF}: 15300.8/47$

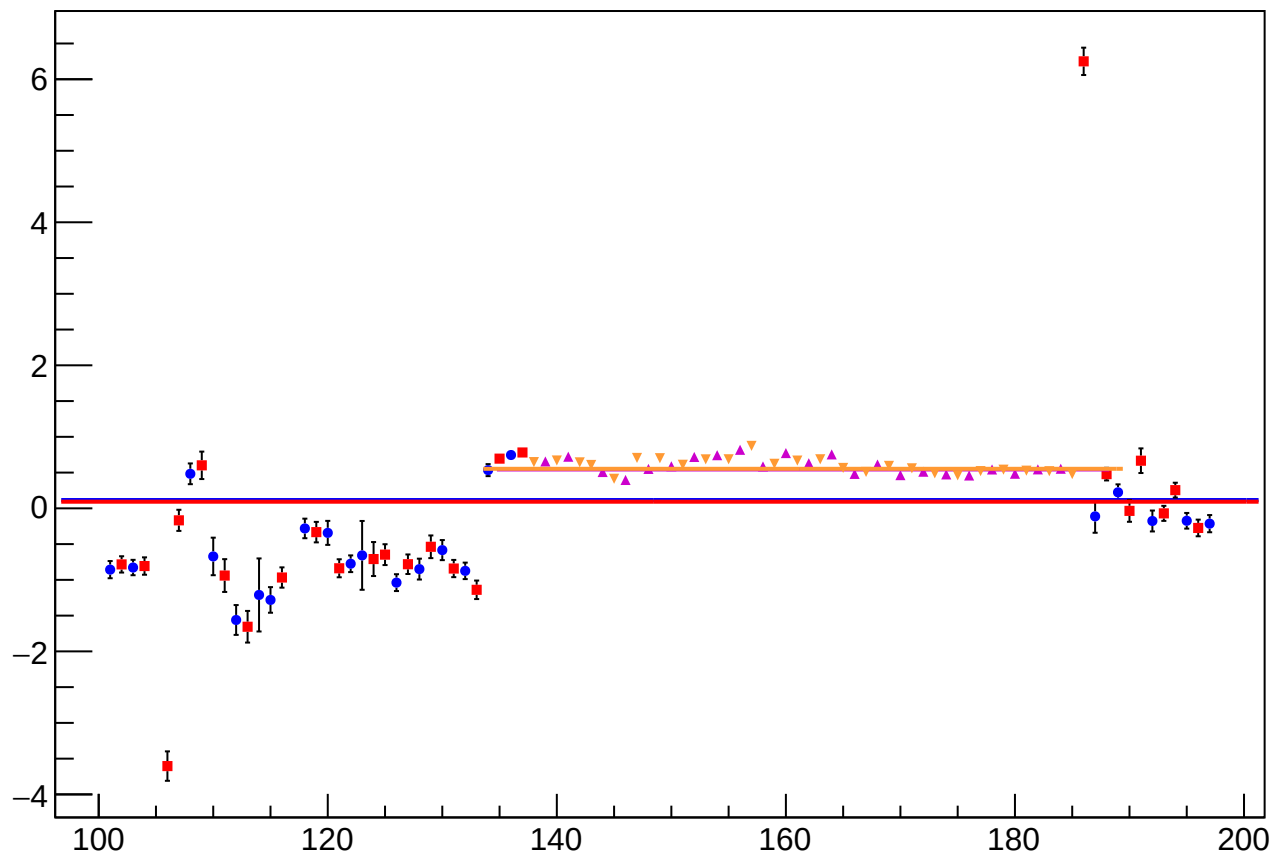
Right:  $-58.815 \pm 0.309$   $\chi^2/\text{NDF}: 6150.0/46$

In:  $-30.948 \pm 0.081$   $\chi^2/\text{NDF}: 14860.5/44$

Out:  $-31.282 \pm 0.080$   $\chi^2/\text{NDF}: 14908.3/49$

All:  $-31.116 \pm 0.057$   $\chi^2/\text{NDF}: 29777.4/94$

reg\_asym\_sam\_26\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.116 $\pm$ 0.022  $\chi^2$ /NDF: 1012.3/21

Left Out: 0.553 $\pm$ 0.004  $\chi^2$ /NDF:542.9/24

Right Out: 0.093 $\pm$ 0.023  $\chi^2$ /NDF: 2263.8/24

Left In: 0.544 $\pm$ 0.004  $\chi^2$ /NDF:659.2/22

Left: 0.548 $\pm$ 0.003  $\chi^2$ /NDF: 1205.2/47

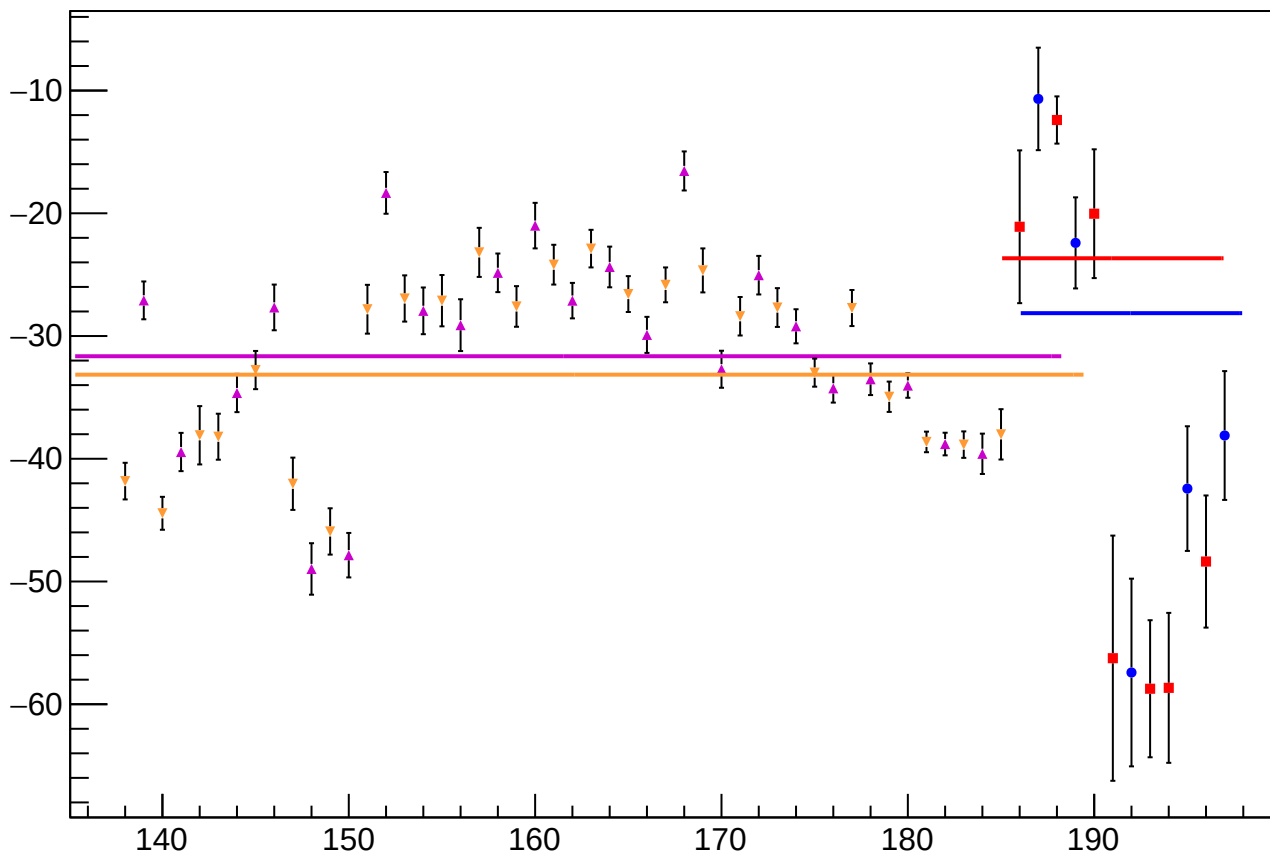
Right: 0.105 $\pm$ 0.016  $\chi^2$ /NDF: 3276.7/46

In: 0.532 $\pm$ 0.004  $\chi^2$ /NDF:2032.9/44

Out: 0.541 $\pm$ 0.004  $\chi^2$ /NDF:3207.3/49

All: 0.536 $\pm$ 0.003  $\chi^2$ /NDF: 5243.4/94

reg\_asym\_sam\_26\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-28.137 \pm 2.121$   $\chi^2/\text{NDF}: 46.0/4$   
 Left Out:  $-33.148 \pm 0.301$   $\chi^2/\text{NDF}: 500.0/24$   
 Right Out:  $-23.666 \pm 1.515$   $\chi^2/\text{NDF}: 138.9/6$   
 Left In:  $-31.647 \pm 0.308$   $\chi^2/\text{NDF}: 546.9/22$

Left:  $-32.414 \pm 0.215$   $\chi^2/\text{NDF}: 1059.0/47$   
 Right:  $-25.176 \pm 1.233$   $\chi^2/\text{NDF}: 187.9/11$   
 In:  $-31.575 \pm 0.304$   $\chi^2/\text{NDF}: 595.6/27$   
 Out:  $-32.789 \pm 0.295$   $\chi^2/\text{NDF}: 676.6/31$   
 All:  $-32.201 \pm 0.212$   $\chi^2/\text{NDF}: 1280.4/59$

reg\_asym\_sam\_26\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-49.717 \pm 0.695$   $\chi^2/\text{NDF}: 1515.9/21$

Left Out:  $-34.256 \pm 0.242$   $\chi^2/\text{NDF}: 693.3/24$

Right Out:  $-53.531 \pm 0.711$   $\chi^2/\text{NDF}: 2239.7/24$

Left In:  $-34.189 \pm 0.250$   $\chi^2/\text{NDF}: 1546.1/22$

Left:  $-34.224 \pm 0.174$   $\chi^2/\text{NDF}: 2239.5/47$

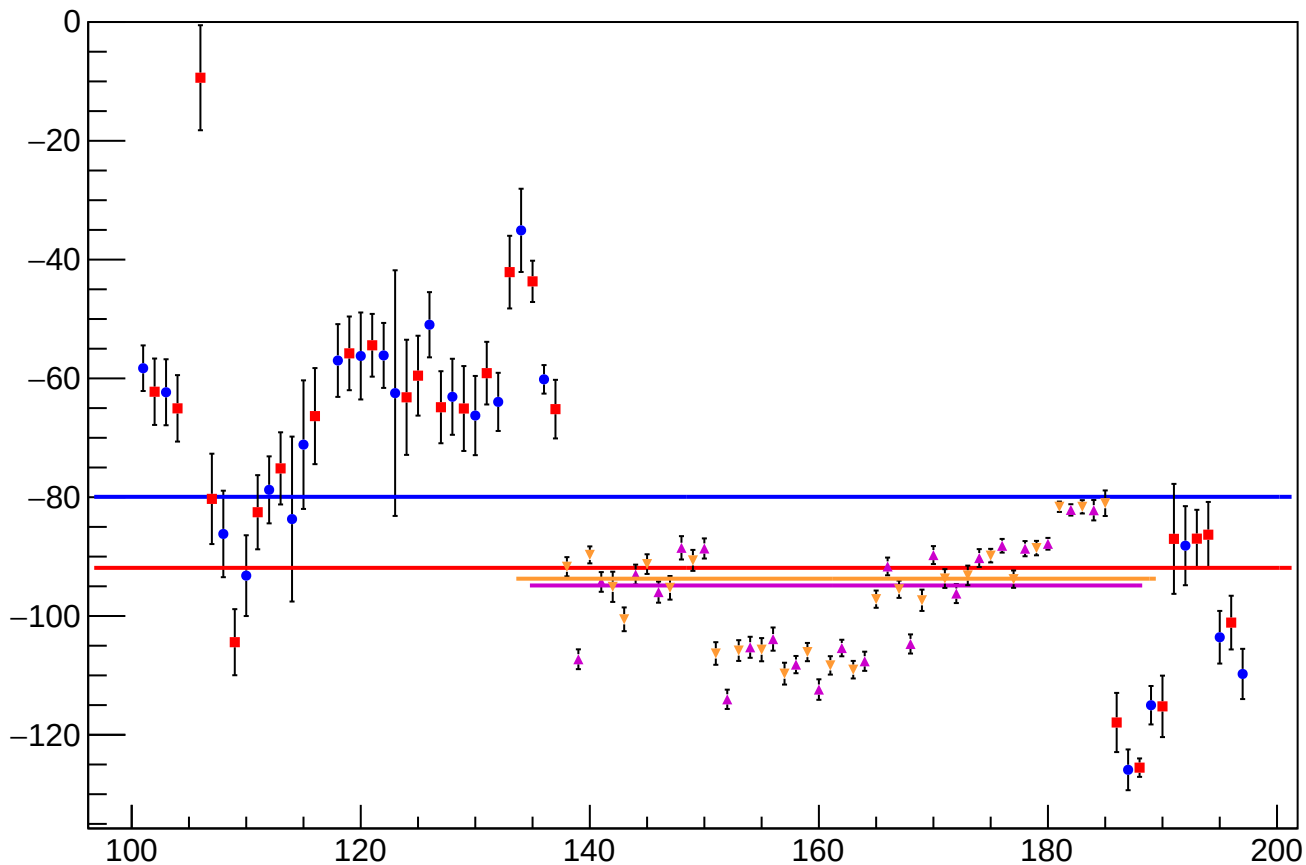
Right:  $-51.581 \pm 0.497$   $\chi^2/\text{NDF}: 3770.4/46$

In:  $-35.971 \pm 0.235$   $\chi^2/\text{NDF}: 3504.0/44$

Out:  $-36.259 \pm 0.229$   $\chi^2/\text{NDF}: 3591.7/49$

All:  $-36.119 \pm 0.164$   $\chi^2/\text{NDF}: 7096.5/94$

reg\_asym\_sam\_26\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-79.936 \pm 1.059$   $\chi^2/\text{NDF}: 626.4/21$

Left Out:  $-93.719 \pm 0.302$   $\chi^2/\text{NDF}: 878.2/24$

Right Out:  $-91.895 \pm 0.932$   $\chi^2/\text{NDF}: 1166.7/24$

Left In:  $-94.861 \pm 0.307$   $\chi^2/\text{NDF}: 985.5/22$

Left:  $-94.280 \pm 0.215$   $\chi^2/\text{NDF}: 1870.7/47$

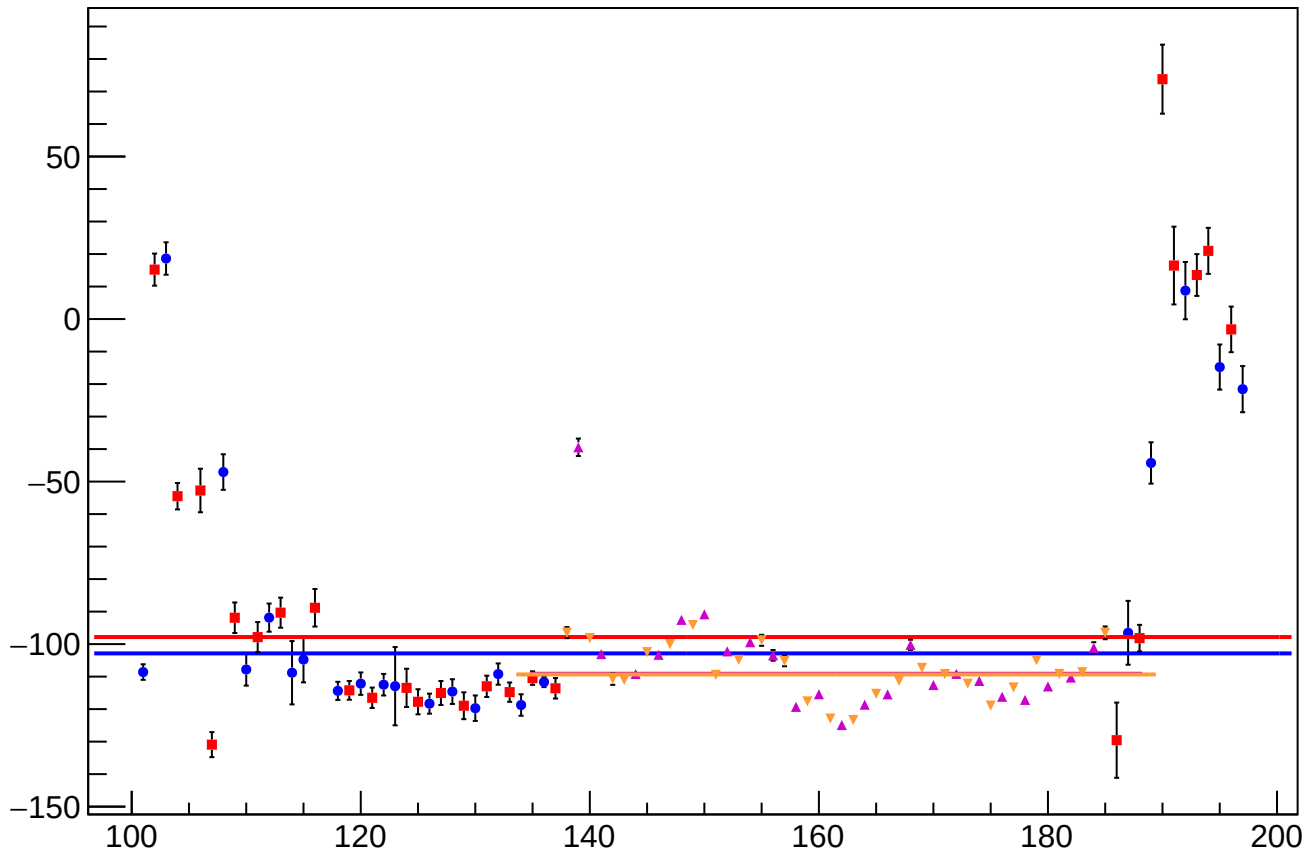
Right:  $-86.674 \pm 0.699$   $\chi^2/\text{NDF}: 1865.0/46$

In:  $-93.701 \pm 0.295$   $\chi^2/\text{NDF}: 1795.2/44$

Out:  $-93.545 \pm 0.288$   $\chi^2/\text{NDF}: 2048.4/49$

All:  $-93.621 \pm 0.206$   $\chi^2/\text{NDF}: 3843.7/94$

reg\_asym\_sam\_26\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-102.858 \pm 0.789$   $\chi^2/\text{NDF}: 1393.2/21$

Left Out:  $-109.338 \pm 0.272$   $\chi^2/\text{NDF}: 826.2/24$

Right Out:  $-97.826 \pm 0.818$   $\chi^2/\text{NDF}: 2152.9/24$

Left In:  $-109.126 \pm 0.279$   $\chi^2/\text{NDF}: 1578.7/22$

Left:  $-109.235 \pm 0.195$   $\chi^2/\text{NDF}: 2405.2/47$

Right:  $-100.435 \pm 0.568$   $\chi^2/\text{NDF}: 3565.7/46$

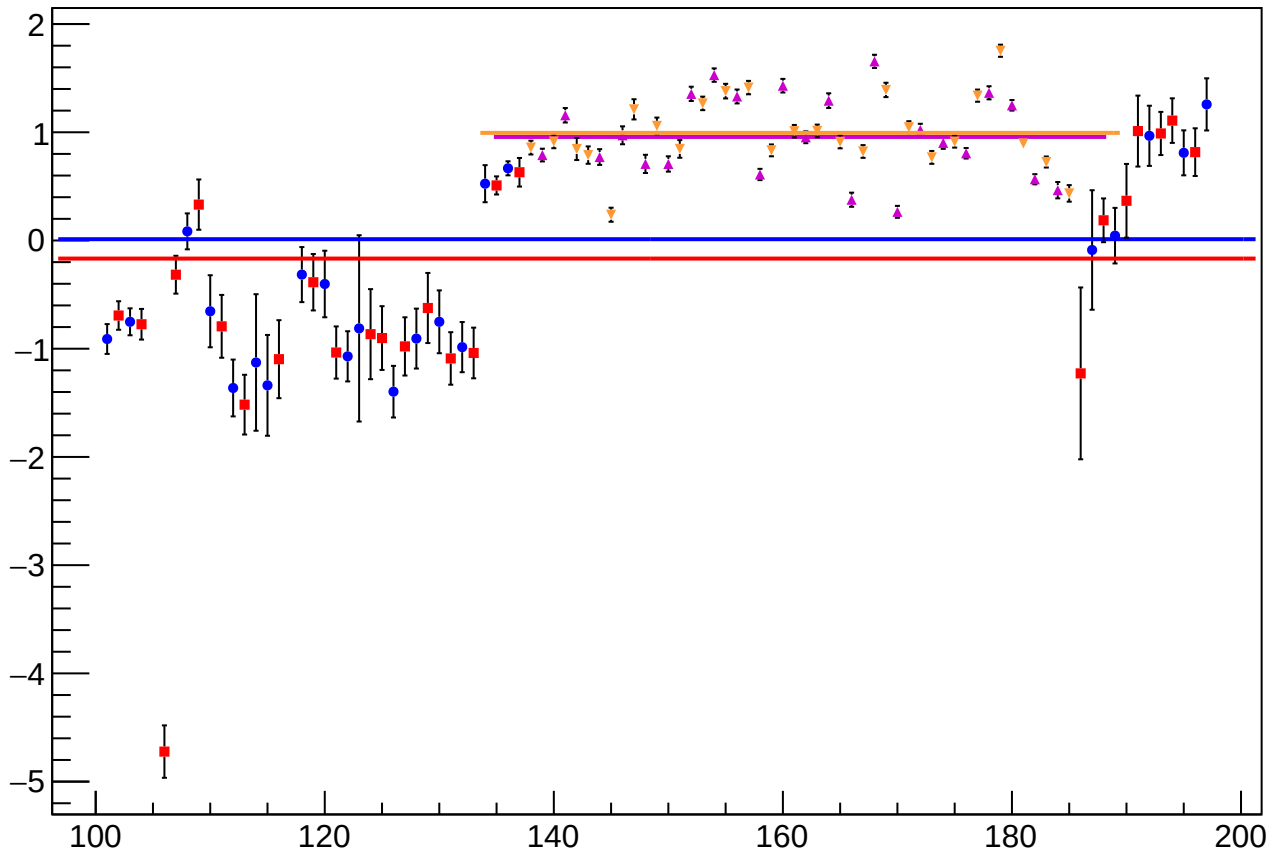
In:  $-108.429 \pm 0.263$   $\chi^2/\text{NDF}: 3028.0/44$

Out:  $-108.194 \pm 0.258$   $\chi^2/\text{NDF}: 3157.4/49$

All:  $-108.309 \pm 0.184$   $\chi^2/\text{NDF}: 6185.8/94$



reg\_asym\_sam\_26\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.012 $\pm$ 0.040  $\chi^2$ /NDF: 387.2/21

Left Out: 0.995 $\pm$ 0.012  $\chi^2$ /NDF:635.3/24

Right Out: -0.167 $\pm$ 0.040  $\chi^2$ /NDF: 704.4/24

Left In: 0.957 $\pm$ 0.013  $\chi^2$ /NDF:896.5/22

Left: 0.976 $\pm$ 0.009  $\chi^2$ /NDF: 1536.3/47

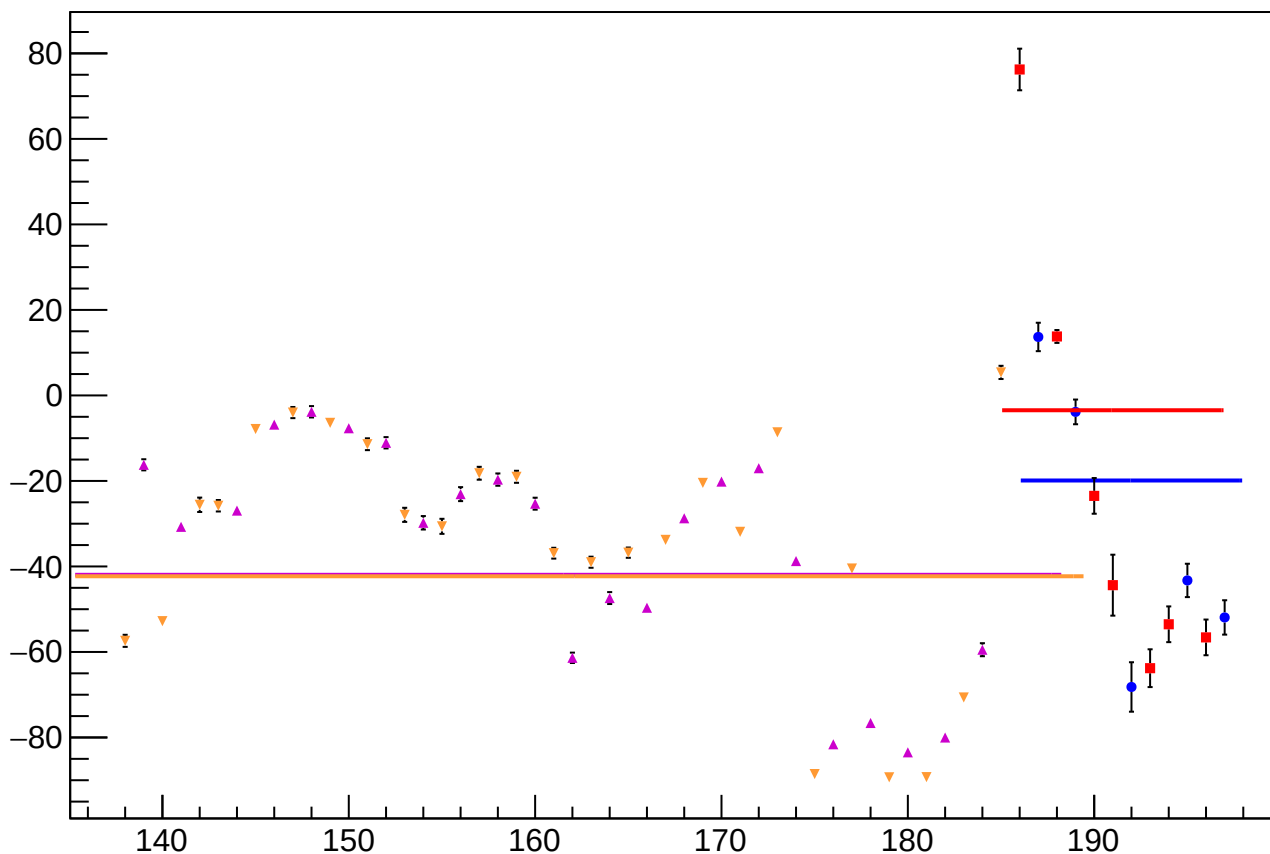
Right: -0.077 $\pm$ 0.028  $\chi^2$ /NDF: 1101.7/46

In: 0.870 $\pm$ 0.012  $\chi^2$ /NDF:1798.1/44

Out: 0.892 $\pm$ 0.012  $\chi^2$ /NDF:2113.6/49

All: 0.881 $\pm$ 0.008  $\chi^2$ /NDF: 3913.3/94

reg\_asym\_sam\_48\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-19.897 \pm 1.649$   $\chi^2/\text{NDF}: 302.0/4$   
 Left Out:  $-42.295 \pm 0.222$   $\chi^2/\text{NDF}: 18267.5/24$   
 Right Out:  $-3.467 \pm 1.174$   $\chi^2/\text{NDF}: 946.9/6$   
 Left In:  $-41.955 \pm 0.226$   $\chi^2/\text{NDF}: 14723.4/22$

Left:  $-42.128 \pm 0.159$   $\chi^2/\text{NDF}: 32992.1/47$

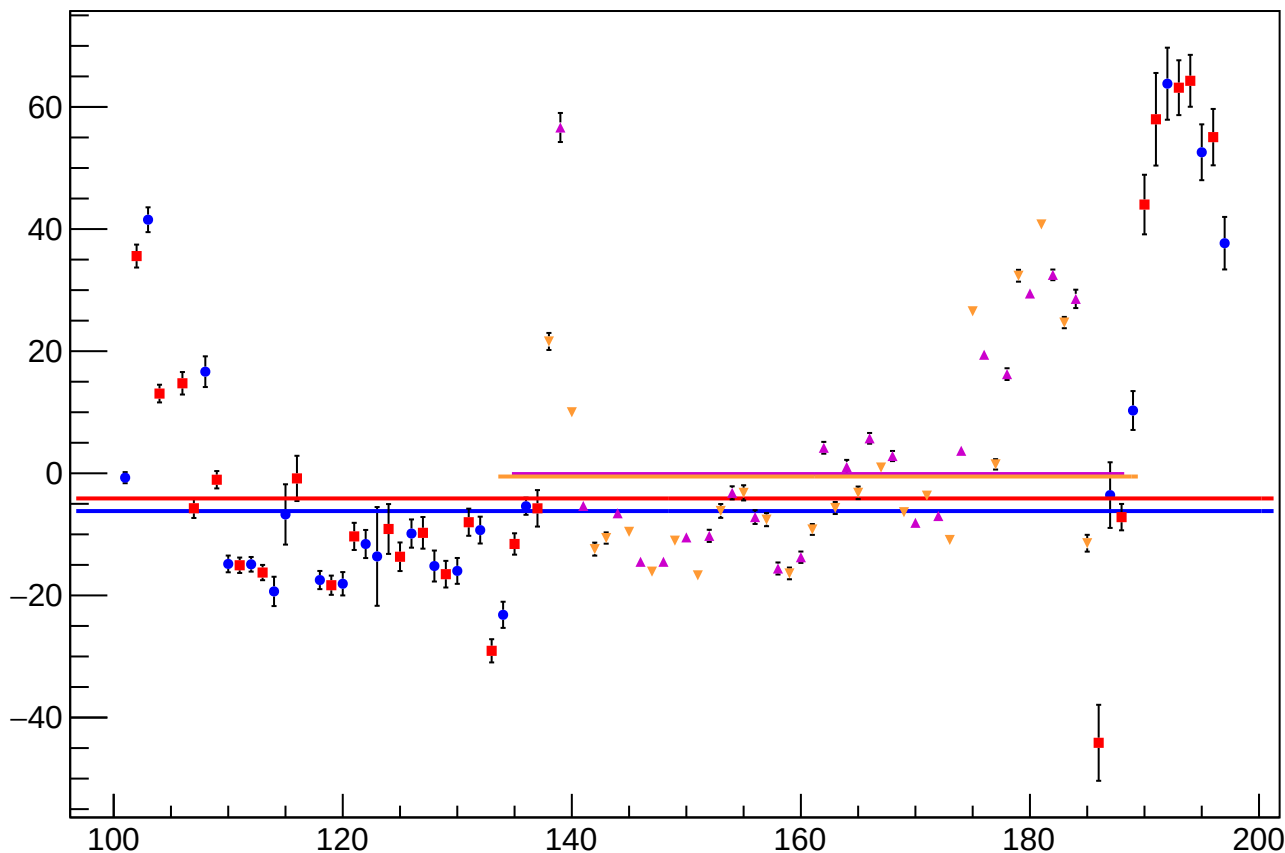
Right:  $-8.997 \pm 0.957$   $\chi^2/\text{NDF}: 1314.7/11$

In:  $-41.549 \pm 0.224$   $\chi^2/\text{NDF}: 15201.1/27$

Out:  $-40.951 \pm 0.219$   $\chi^2/\text{NDF}: 20269.6/31$

All:  $-41.242 \pm 0.156$   $\chi^2/\text{NDF}: 35474.3/59$

reg\_asym\_sam\_48\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected

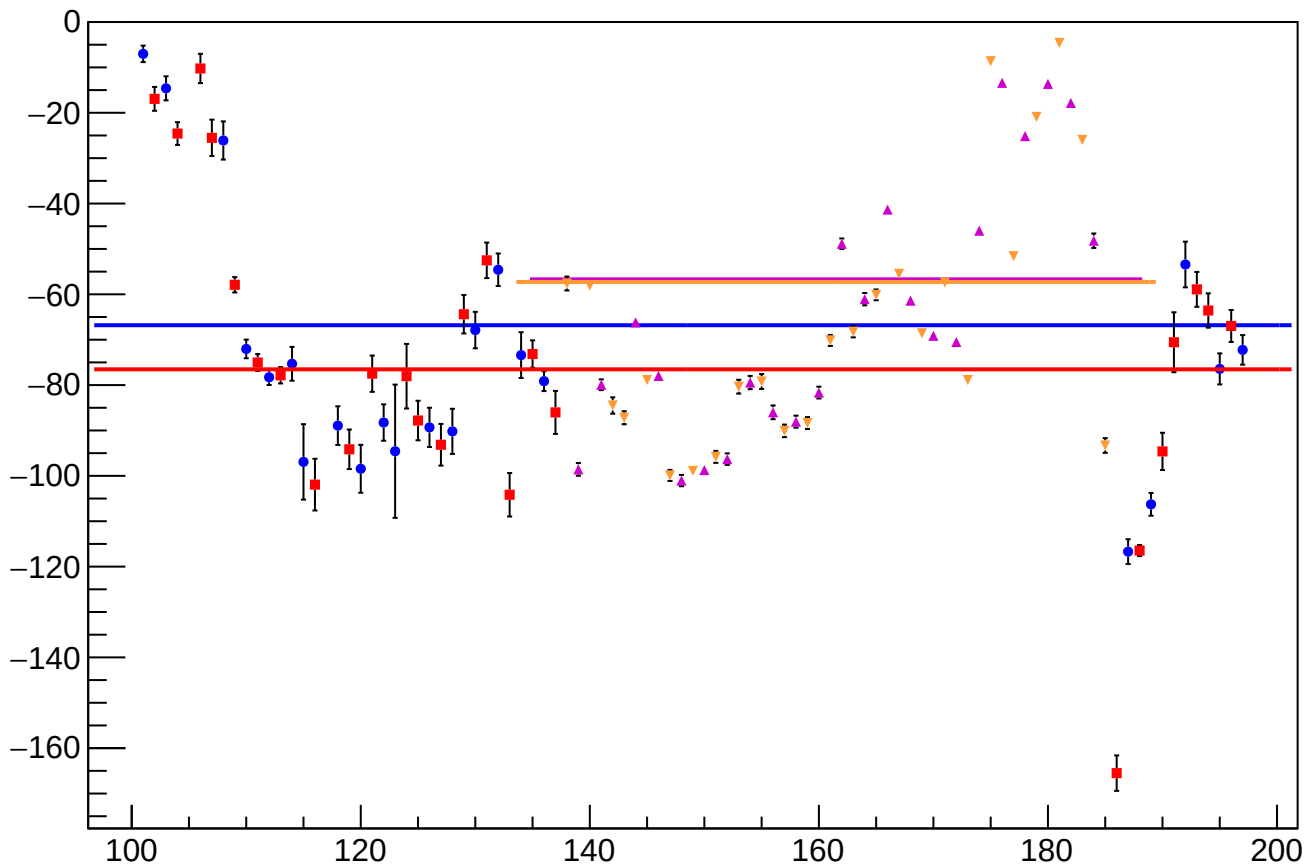


Right In:  $-6.186 \pm 0.417$   $\chi^2/\text{NDF}$ : 1434.1/21  
 Left Out:  $-0.527 \pm 0.175$   $\chi^2/\text{NDF}$ : 8707.9/24  
 Right Out:  $-4.116 \pm 0.413$   $\chi^2/\text{NDF}$ : 2060.8/24  
 Left In:  $-0.125 \pm 0.179$   $\chi^2/\text{NDF}$ : 6925.0/22

Left:  $-0.331 \pm 0.125$   $\chi^2/\text{NDF}$ : 15635.5/47  
 Right:  $-5.141 \pm 0.294$   $\chi^2/\text{NDF}$ : 3507.3/46  
 In:  $-1.063 \pm 0.164$   $\chi^2/\text{NDF}$ : 8537.4/44  
 Out:  $-1.072 \pm 0.161$   $\chi^2/\text{NDF}$ : 10832.7/49

All:  $-1.067 \pm 0.115$   $\chi^2/\text{NDF}$ : 19370.1/94

reg\_asym\_sam\_48\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-66.811 \pm 0.657$   $\chi^2/\text{NDF}$ : 2422.4/21

Left Out:  $-57.276 \pm 0.224$   $\chi^2/\text{NDF}$ : 18511.1/24

Right Out:  $-76.528 \pm 0.574$   $\chi^2/\text{NDF}$ : 3445.3/24

Left In:  $-56.705 \pm 0.226$   $\chi^2/\text{NDF}$ : 16547.5/22

Left:  $-56.993 \pm 0.159$   $\chi^2/\text{NDF}$ : 35061.8/47

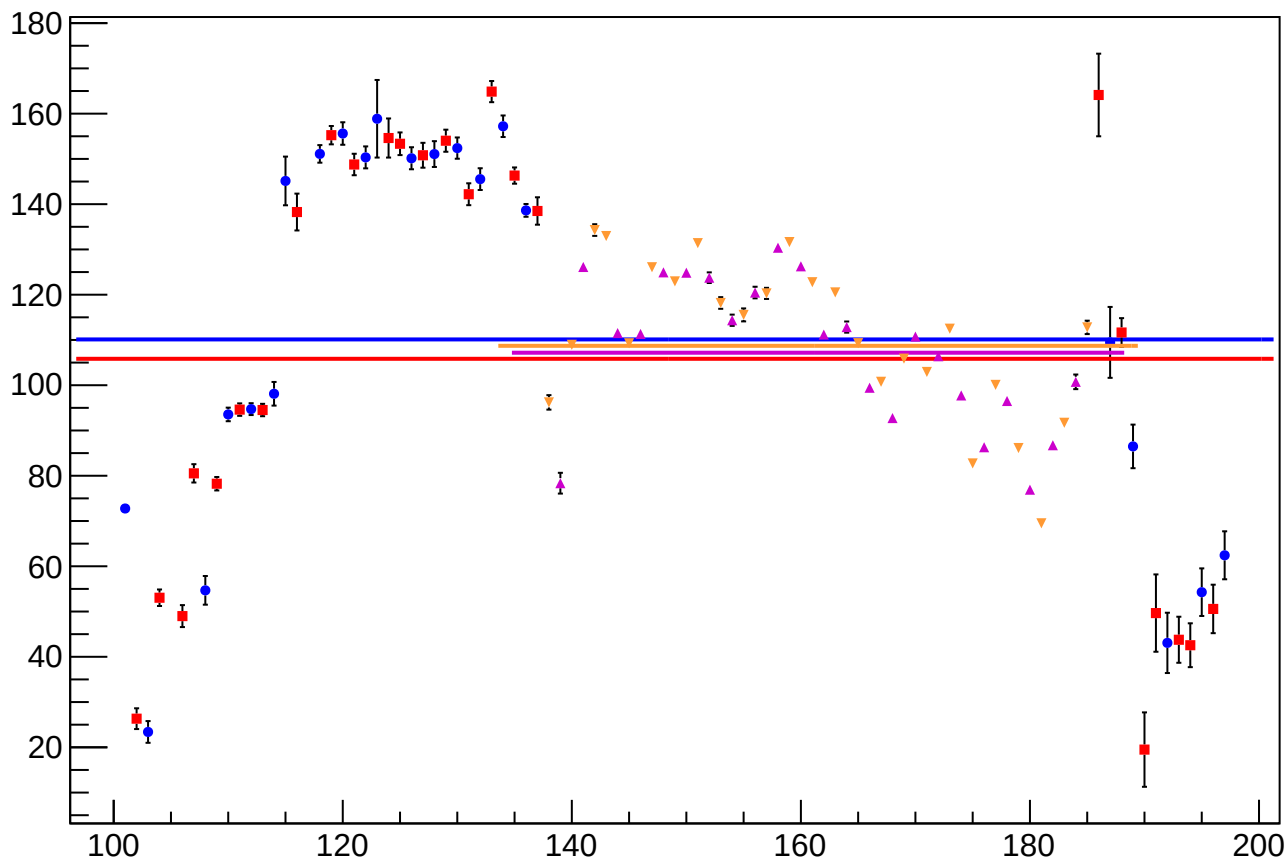
Right:  $-72.321 \pm 0.432$   $\chi^2/\text{NDF}$ : 5991.9/46

In:  $-57.775 \pm 0.214$   $\chi^2/\text{NDF}$ : 19181.7/44

Out:  $-59.813 \pm 0.208$   $\chi^2/\text{NDF}$ : 22933.6/49

All:  $-58.820 \pm 0.149$   $\chi^2/\text{NDF}$ : 42161.9/94

reg\_asym\_sam\_48\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $110.117 \pm 0.478$   $\chi^2/\text{NDF}: 6287.9/21$

Left Out:  $108.709 \pm 0.198$   $\chi^2/\text{NDF}: 7297.0/24$

Right Out:  $105.838 \pm 0.474$   $\chi^2/\text{NDF}: 7467.1/24$

Left In:  $107.180 \pm 0.202$   $\chi^2/\text{NDF}: 5592.3/22$

Left:  $107.959 \pm 0.141$   $\chi^2/\text{NDF}: 12918.6/47$

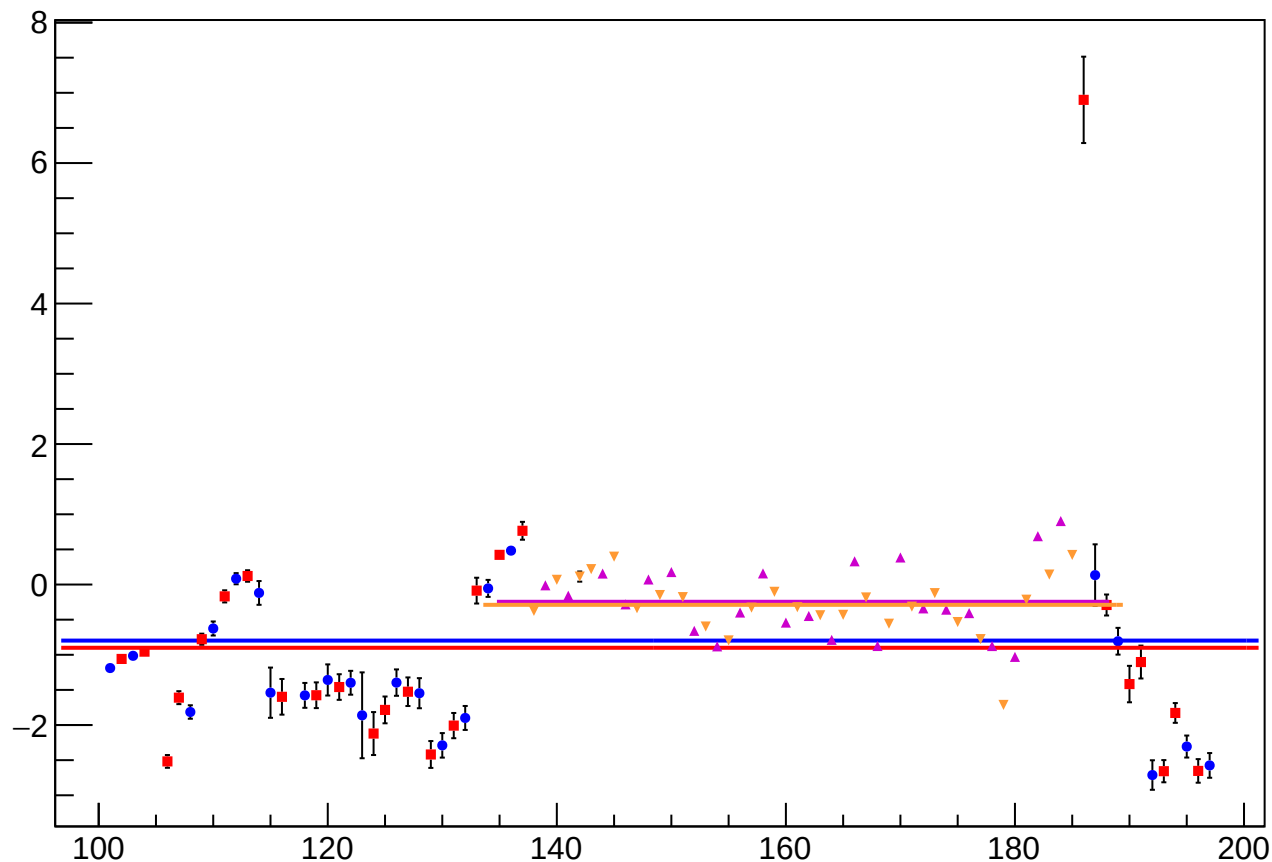
Right:  $107.962 \pm 0.337$   $\chi^2/\text{NDF}: 13795.4/46$

In:  $107.624 \pm 0.186$   $\chi^2/\text{NDF}: 11912.3/44$

Out:  $108.284 \pm 0.183$   $\chi^2/\text{NDF}: 14795.3/49$

All:  $107.960 \pm 0.130$   $\chi^2/\text{NDF}: 26713.9/94$

reg\_asym\_sam\_48\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.798 \pm 0.025$   $\chi^2/\text{NDF}$ : 1291.8/21

Left Out:  $-0.289 \pm 0.009$   $\chi^2/\text{NDF}$ : 2039.6/24

Right Out:  $-0.900 \pm 0.023$   $\chi^2/\text{NDF}$ : 1780.7/24

Left In:  $-0.246 \pm 0.009$   $\chi^2/\text{NDF}$ : 2804.3/22

Left:  $-0.267 \pm 0.006$   $\chi^2/\text{NDF}$ : 4855.1/47

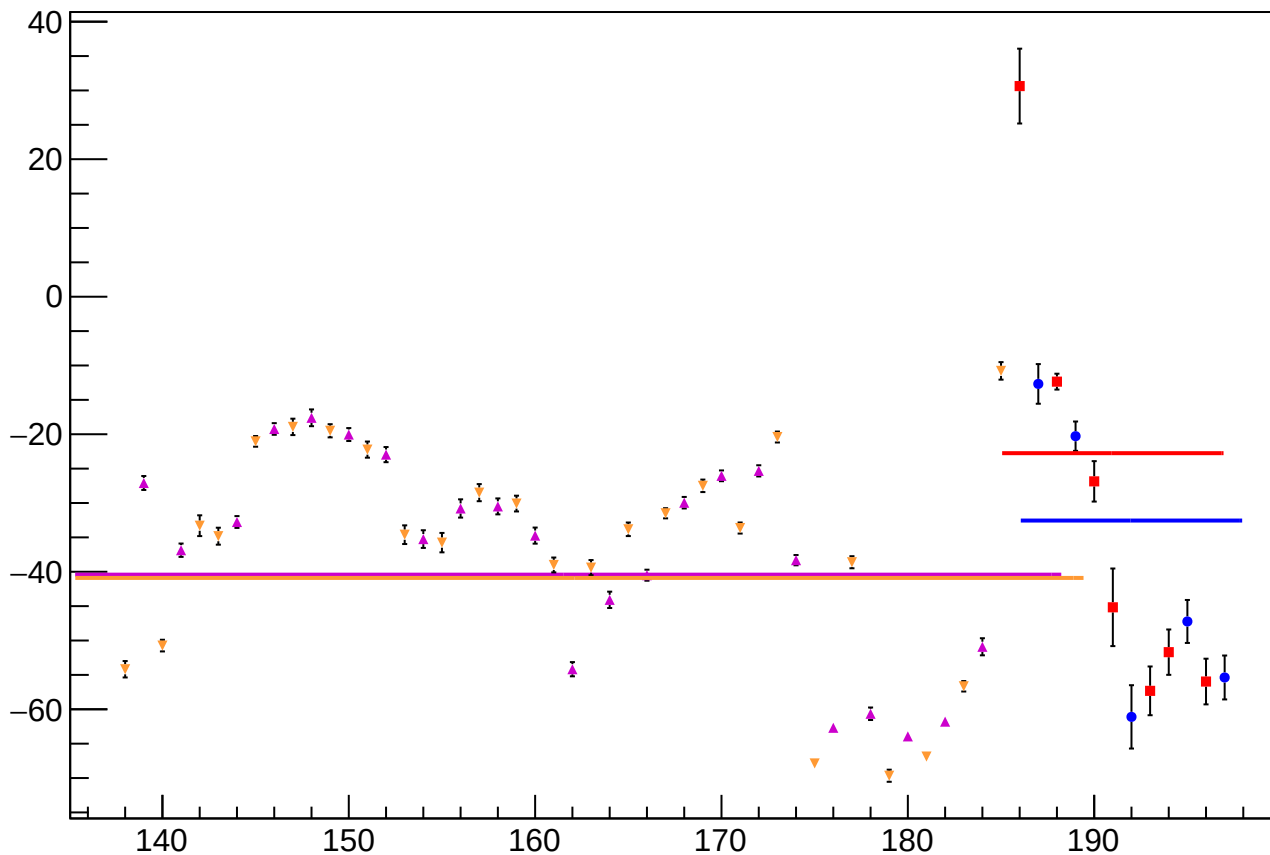
Right:  $-0.853 \pm 0.017$   $\chi^2/\text{NDF}$ : 3081.6/46

In:  $-0.313 \pm 0.009$   $\chi^2/\text{NDF}$ : 4533.7/44

Out:  $-0.371 \pm 0.008$   $\chi^2/\text{NDF}$ : 4427.1/49

All:  $-0.342 \pm 0.006$   $\chi^2/\text{NDF}$ : 8983.9/94

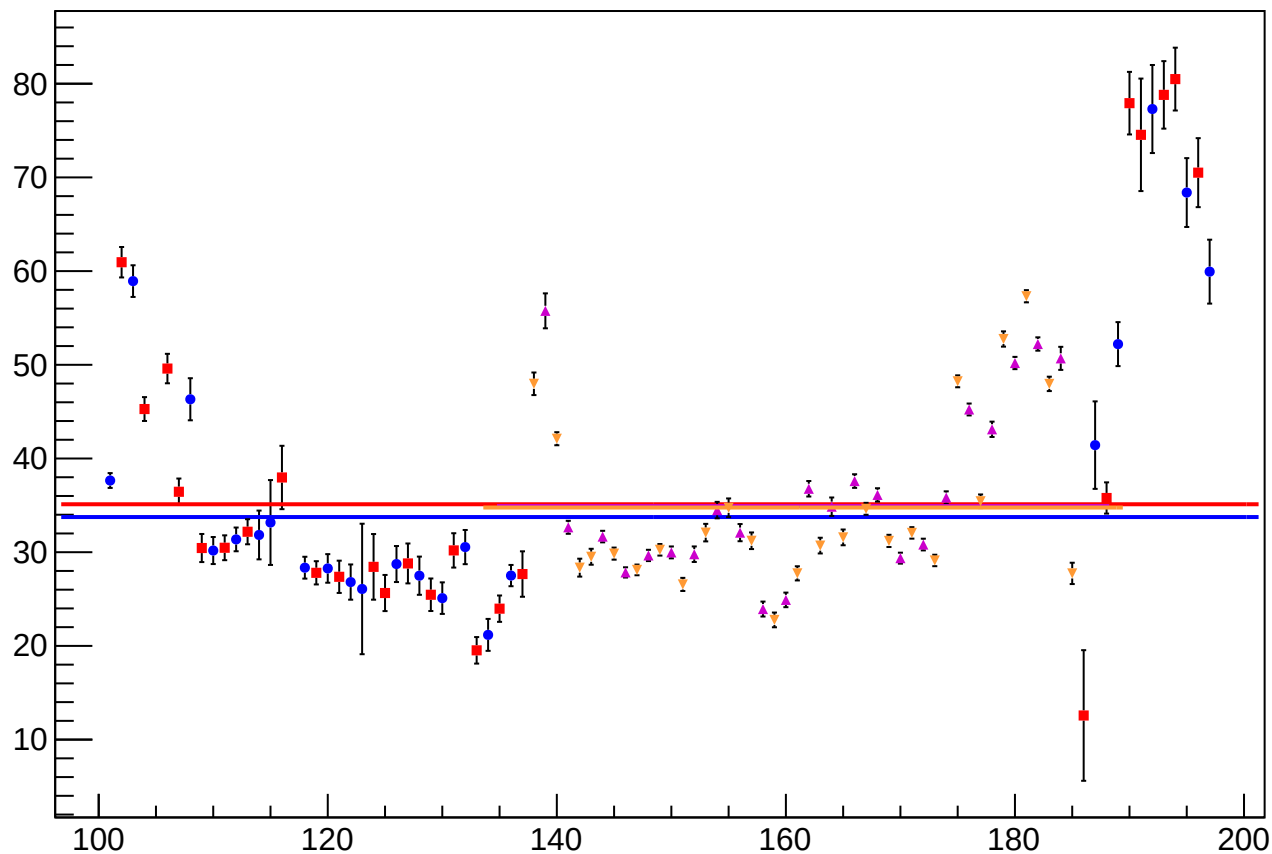
reg\_asym\_sam\_48\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-32.553 \pm 1.305$   $\chi^2/\text{NDF}: 192.1/4$   
 Left Out:  $-40.897 \pm 0.186$   $\chi^2/\text{NDF}: 9114.7/24$   
 Right Out:  $-22.754 \pm 0.916$   $\chi^2/\text{NDF}: 467.2/6$   
 Left In:  $-40.422 \pm 0.189$   $\chi^2/\text{NDF}: 7030.2/22$

Left:  $-40.662 \pm 0.133$   $\chi^2/\text{NDF}: 16148.1/47$   
 Right:  $-25.988 \pm 0.749$   $\chi^2/\text{NDF}: 697.1/11$   
 In:  $-40.260 \pm 0.187$   $\chi^2/\text{NDF}: 7257.9/27$   
 Out:  $-40.174 \pm 0.183$   $\chi^2/\text{NDF}: 9958.9/31$   
 All:  $-40.216 \pm 0.131$   $\chi^2/\text{NDF}: 17216.9/59$

reg\_asym\_sam\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected

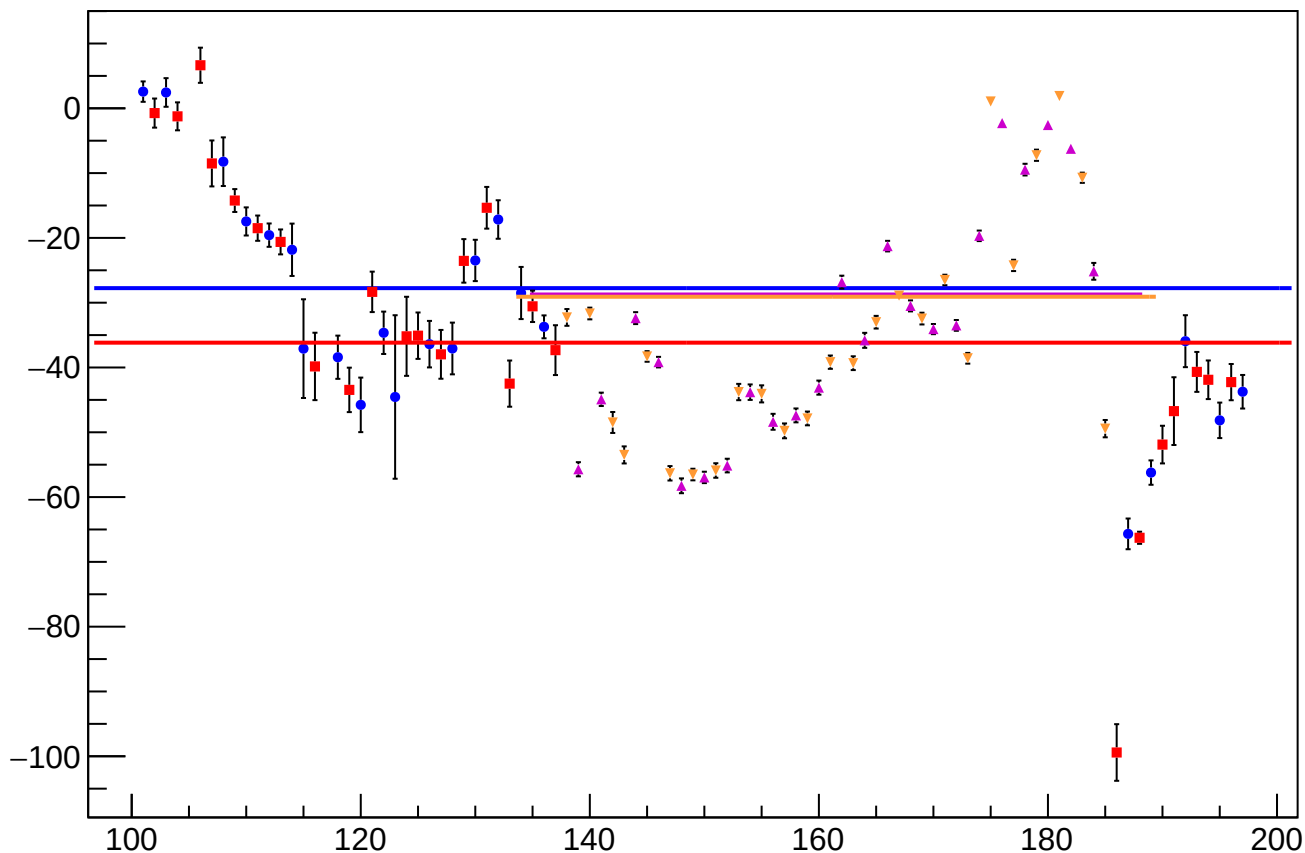


Right In: 33.752 $\pm$ 0.362  $\chi^2$ /NDF: 765.8/21  
 Left Out: 34.768 $\pm$ 0.148  $\chi^2$ /NDF:3677.3/24  
 Right Out: 35.117 $\pm$ 0.361  $\chi^2$ /NDF: 1393.8/24  
 Left In: 34.928 $\pm$ 0.151  $\chi^2$ /NDF:2688.4/22

Left: 34.846 $\pm$ 0.106  $\chi^2$ /NDF: 6366.3/47  
 Right: 34.436 $\pm$ 0.256  $\chi^2$ /NDF: 2166.6/46  
 In: 34.754 $\pm$ 0.139  $\chi^2$ /NDF:3463.1/44  
 Out: 34.818 $\pm$ 0.137  $\chi^2$ /NDF:5071.9/49  
 All: 34.786 $\pm$ 0.098  $\chi^2$ /NDF: 8535.2/94



reg\_asym\_sam\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-27.753 \pm 0.571$   $\chi^2/\text{NDF}$ : 1286.5/21

Left Out:  $-29.080 \pm 0.187$   $\chi^2/\text{NDF}$ : 10059.5/24

Right Out:  $-36.169 \pm 0.495$   $\chi^2/\text{NDF}$ : 2491.2/24

Left In:  $-28.735 \pm 0.189$   $\chi^2/\text{NDF}$ : 9155.5/22

Left:  $-28.909 \pm 0.133$   $\chi^2/\text{NDF}$ : 19216.6/47

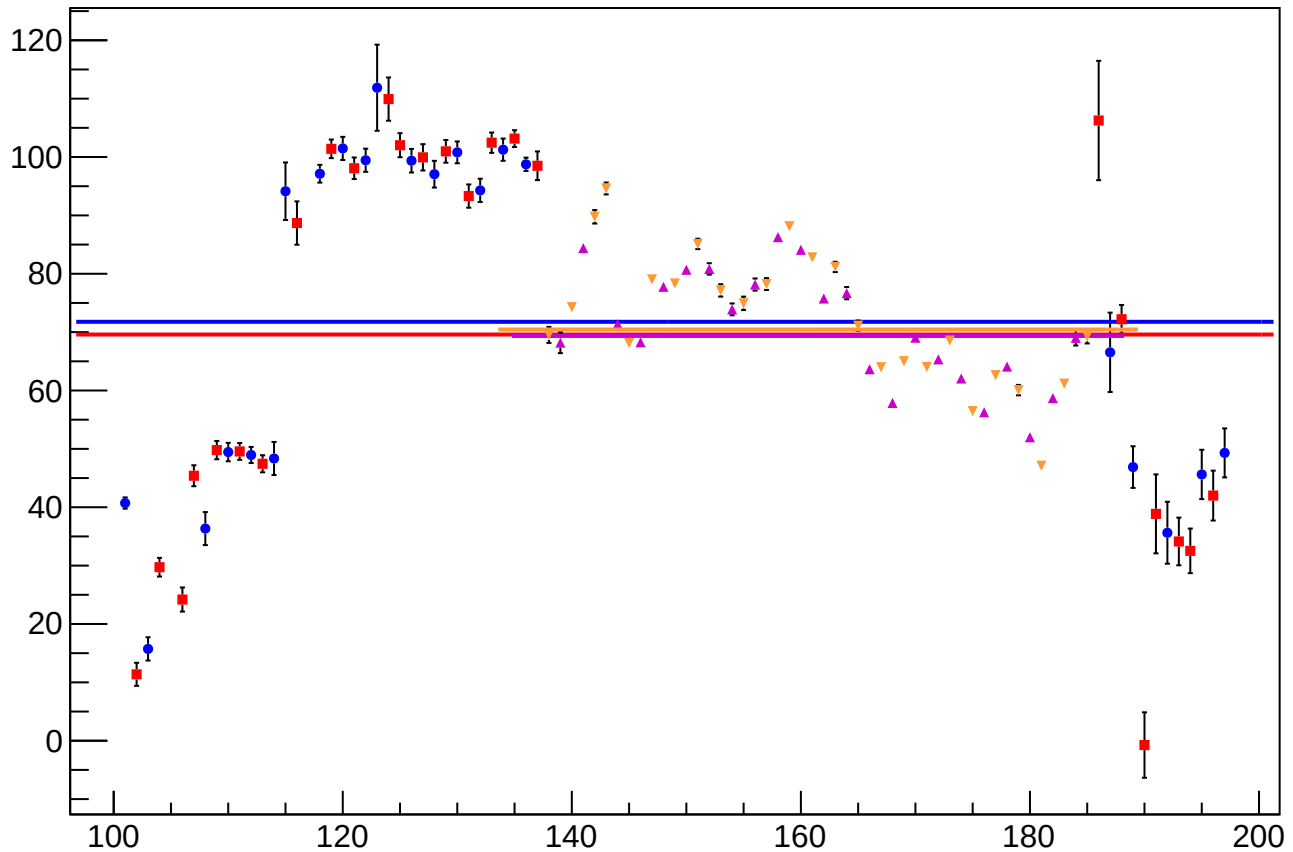
Right:  $-32.561 \pm 0.374$   $\chi^2/\text{NDF}$ : 3901.7/46

In:  $-28.639 \pm 0.179$   $\chi^2/\text{NDF}$ : 10444.6/44

Out:  $-29.968 \pm 0.175$   $\chi^2/\text{NDF}$ : 12730.2/49

All:  $-29.319 \pm 0.125$   $\chi^2/\text{NDF}$ : 23202.9/94

reg\_asym\_sam\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 71.771 $\pm$ 0.417  $\chi^2$ /NDF: 4907.3/21

Left Out: 70.450 $\pm$ 0.167  $\chi^2$ /NDF: 4484.7/24

Right Out: 69.590 $\pm$ 0.418  $\chi^2$ /NDF: 5785.3/24

Left In: 69.350 $\pm$ 0.170  $\chi^2$ /NDF: 3330.7/22

Left: 69.910 $\pm$ 0.119  $\chi^2$ /NDF: 7836.8/47

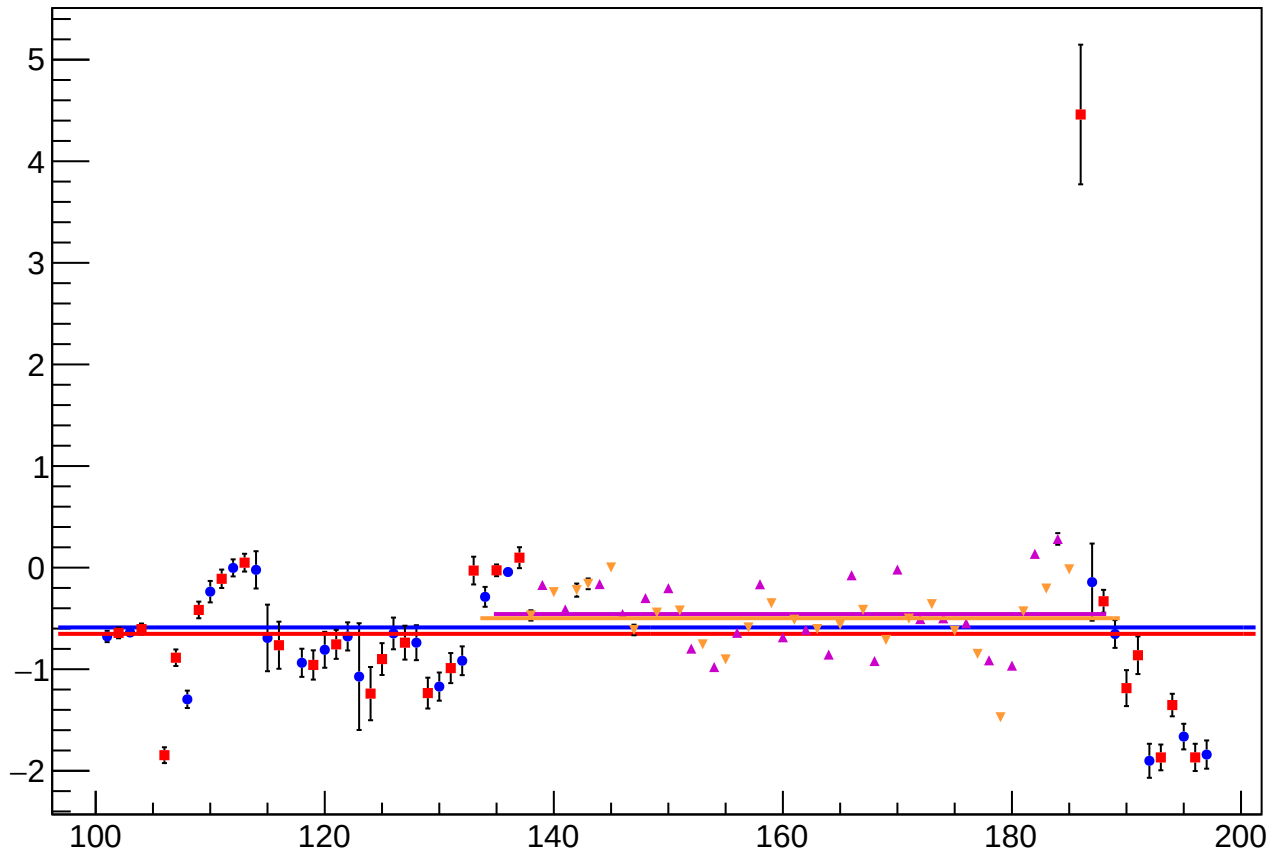
Right: 70.685 $\pm$ 0.295  $\chi^2$ /NDF: 10706.2/46

In: 69.695 $\pm$ 0.157  $\chi^2$ /NDF: 8267.0/44

Out: 70.332 $\pm$ 0.155  $\chi^2$ /NDF: 10273.6/49

All: 70.018 $\pm$ 0.110  $\chi^2$ /NDF: 18548.9/94

reg\_asym\_sam\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.589 \pm 0.021$   $\chi^2/\text{NDF}$ : 536.4/21

Left Out:  $-0.498 \pm 0.008$   $\chi^2/\text{NDF}$ : 1440.7/24

Right Out:  $-0.652 \pm 0.020$   $\chi^2/\text{NDF}$ : 864.2/24

Left In:  $-0.457 \pm 0.008$   $\chi^2/\text{NDF}$ : 1975.2/22

Left:  $-0.478 \pm 0.005$   $\chi^2/\text{NDF}$ : 3430.2/47

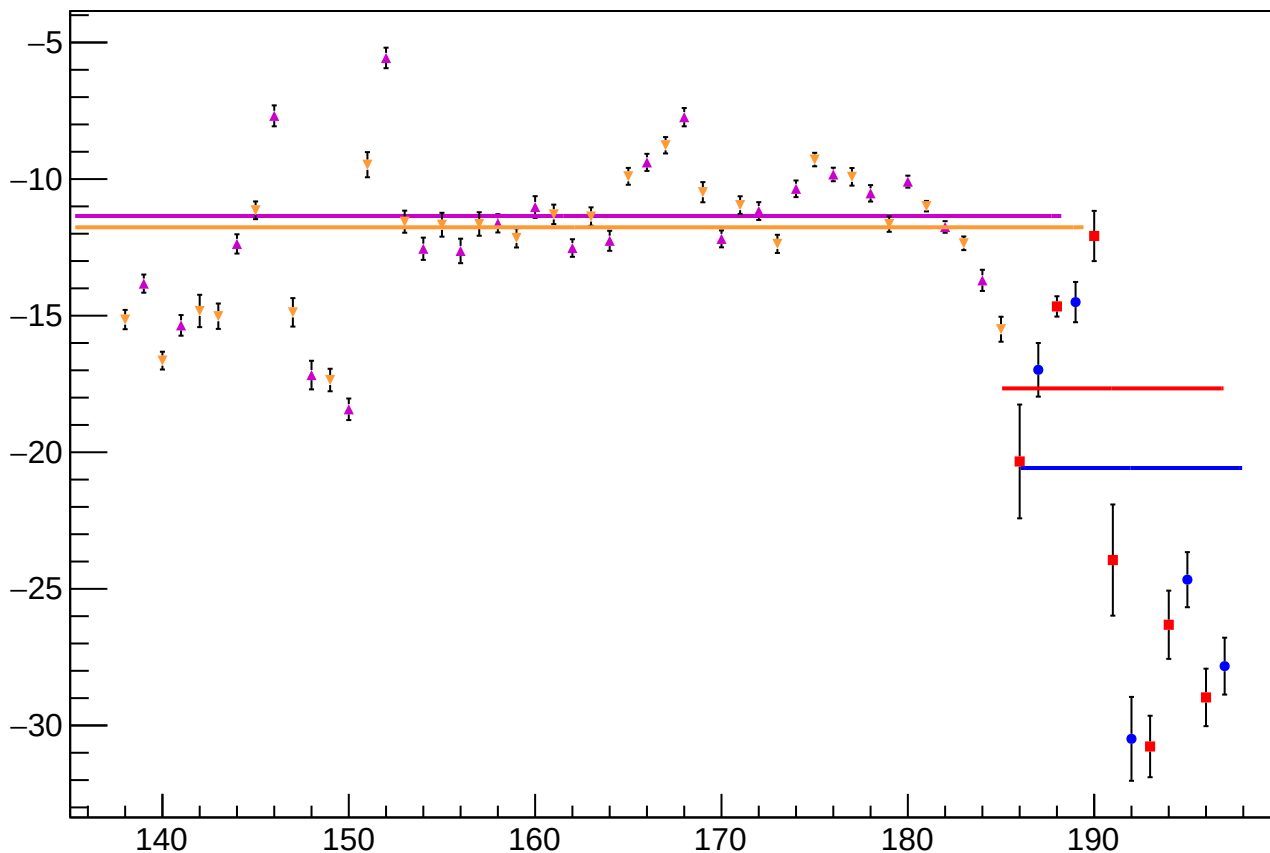
Right:  $-0.622 \pm 0.015$   $\chi^2/\text{NDF}$ : 1405.3/46

In:  $-0.472 \pm 0.007$   $\chi^2/\text{NDF}$ : 2545.6/44

Out:  $-0.517 \pm 0.007$   $\chi^2/\text{NDF}$ : 2356.7/49

All:  $-0.495 \pm 0.005$   $\chi^2/\text{NDF}$ : 4922.0/94

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected

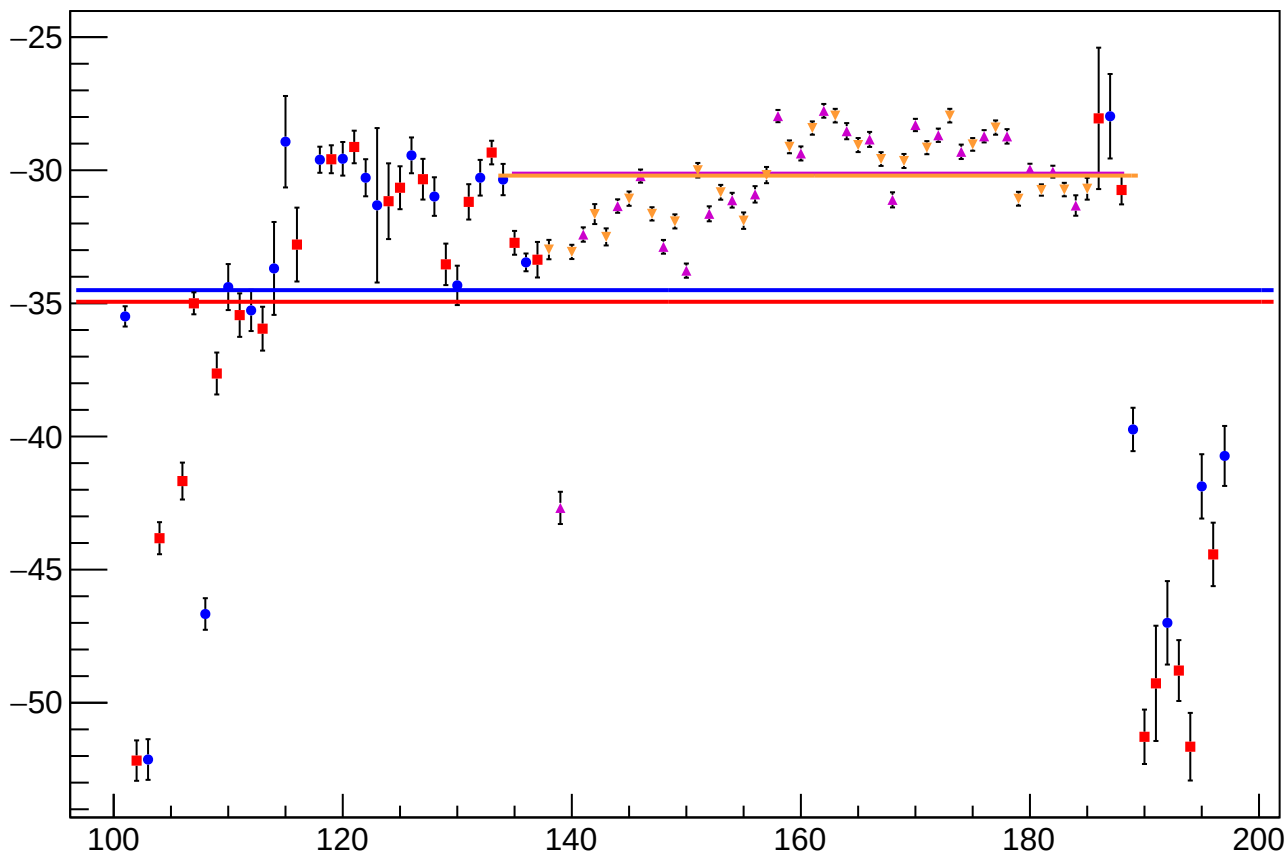


Right In:  $-20.576 \pm 0.438$   $\chi^2/\text{NDF}: 187.9/4$   
 Left Out:  $-11.764 \pm 0.067$   $\chi^2/\text{NDF}: 1025.9/24$   
 Right Out:  $-17.662 \pm 0.299$   $\chi^2/\text{NDF}: 412.3/6$   
 Left In:  $-11.352 \pm 0.068$   $\chi^2/\text{NDF}: 1280.6/22$

Left:  $-11.561 \pm 0.048$   $\chi^2/\text{NDF}: 2325.4/47$   
 Right:  $-18.587 \pm 0.247$   $\chi^2/\text{NDF}: 630.4/11$   
 In:  $-11.567 \pm 0.067$   $\chi^2/\text{NDF}: 1901.4/27$   
 Out:  $-12.045 \pm 0.065$   $\chi^2/\text{NDF}: 1809.4/31$

All:  $-11.812 \pm 0.047$   $\chi^2/\text{NDF}: 3737.1/59$

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-34.503 \pm 0.145$   $\chi^2/\text{NDF}$ : 1539.6/21

Left Out:  $-30.201 \pm 0.054$   $\chi^2/\text{NDF}$ : 725.7/24

Right Out:  $-34.940 \pm 0.140$   $\chi^2/\text{NDF}$ : 2084.7/24

Left In:  $-30.128 \pm 0.055$   $\chi^2/\text{NDF}$ : 1290.4/22

Left:  $-30.165 \pm 0.039$   $\chi^2/\text{NDF}$ : 2017.0/47

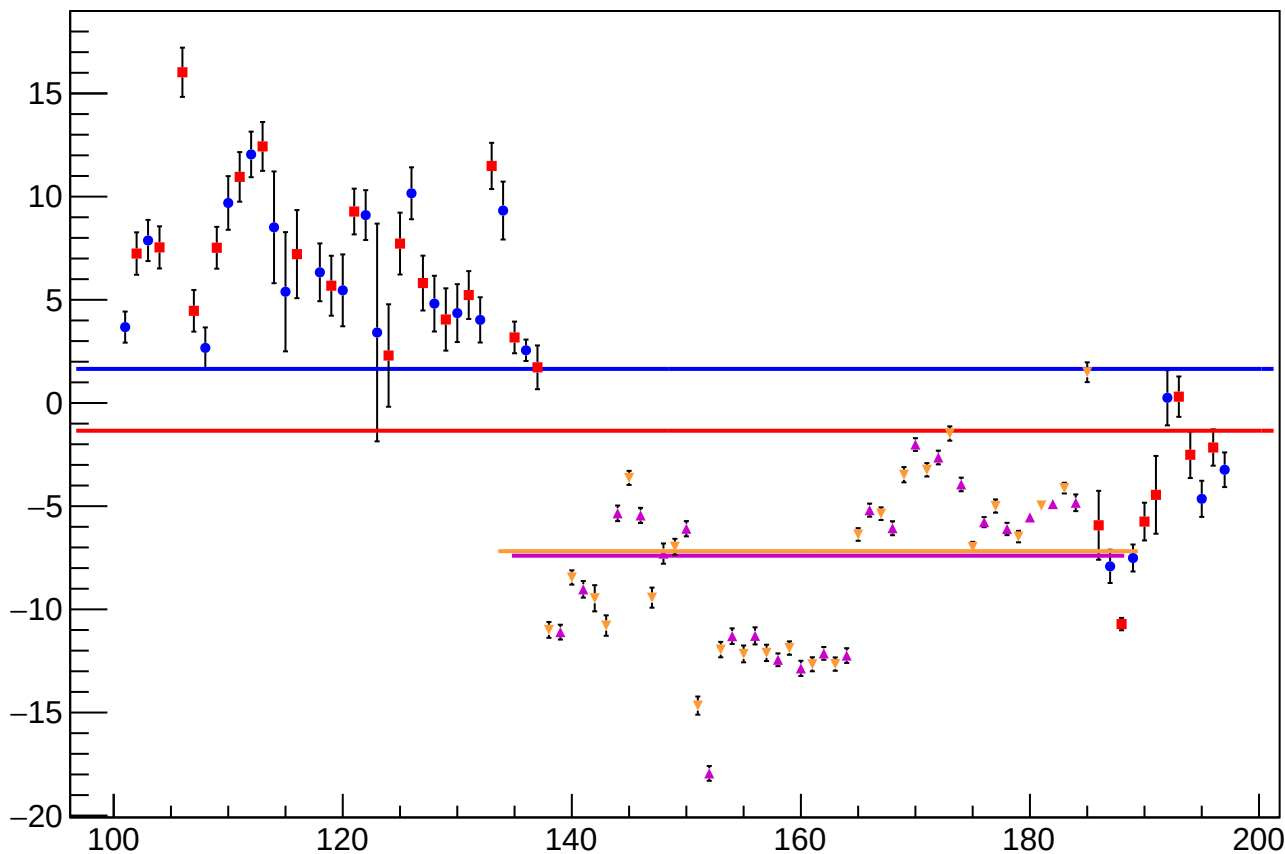
Right:  $-34.728 \pm 0.101$   $\chi^2/\text{NDF}$ : 3629.0/46

In:  $-30.687 \pm 0.052$   $\chi^2/\text{NDF}$ : 3628.6/44

Out:  $-30.811 \pm 0.050$   $\chi^2/\text{NDF}$ : 3802.5/49

All:  $-30.751 \pm 0.036$   $\chi^2/\text{NDF}$ : 7433.9/94

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $1.652 \pm 0.219$   $\chi^2/\text{NDF}: 752.6/21$   
 Left Out:  $-7.180 \pm 0.067$   $\chi^2/\text{NDF}: 3015.8/24$   
 Right Out:  $-1.343 \pm 0.185$   $\chi^2/\text{NDF}: 2137.9/24$   
 Left In:  $-7.400 \pm 0.068$   $\chi^2/\text{NDF}: 3134.9/22$

Left:  $-7.289 \pm 0.048$   $\chi^2/\text{NDF}: 6156.0/47$   
 Right:  $-0.095 \pm 0.141$   $\chi^2/\text{NDF}: 2999.9/46$

In:  $-6.611 \pm 0.065$   $\chi^2/\text{NDF}: 5452.2/44$   
 Out:  $-6.503 \pm 0.063$   $\chi^2/\text{NDF}: 6035.3/49$

All:  $-6.556 \pm 0.045$   $\chi^2/\text{NDF}: 11488.9/94$

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-5.095 \pm 0.165$   $\chi^2/\text{NDF}: 2302.8/21$

Left Out:  $-8.965 \pm 0.060$   $\chi^2/\text{NDF}: 876.6/24$

Right Out:  $-4.051 \pm 0.164$   $\chi^2/\text{NDF}: 2655.3/24$

Left In:  $-8.898 \pm 0.061$   $\chi^2/\text{NDF}: 1584.0/22$

Left:  $-8.932 \pm 0.043$   $\chi^2/\text{NDF}: 2461.2/47$

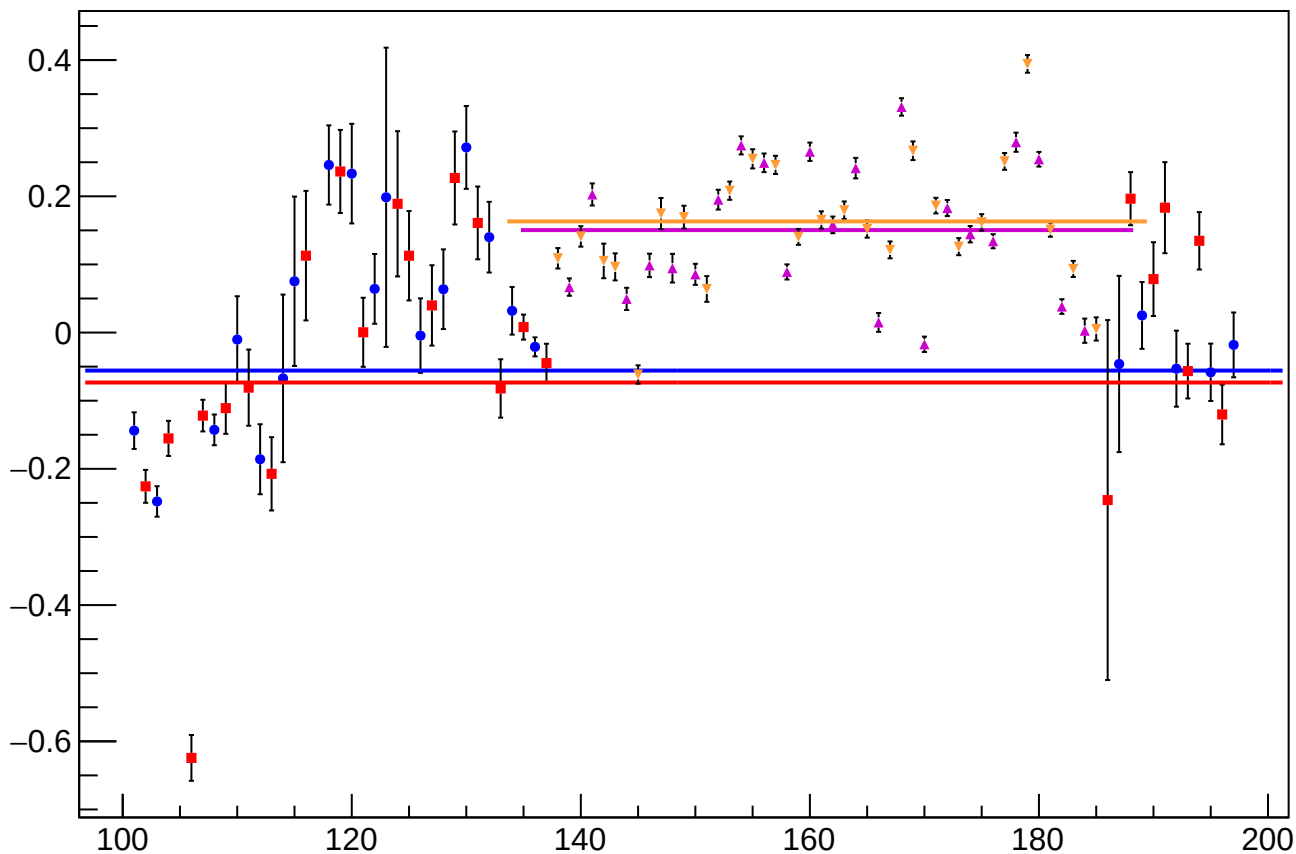
Right:  $-4.570 \pm 0.116$   $\chi^2/\text{NDF}: 4978.2/46$

In:  $-8.433 \pm 0.058$   $\chi^2/\text{NDF}: 4353.9/44$

Out:  $-8.381 \pm 0.057$   $\chi^2/\text{NDF}: 4322.3/49$

All:  $-8.407 \pm 0.040$   $\chi^2/\text{NDF}: 8676.6/94$

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.056 \pm 0.008$   $\chi^2/\text{NDF}$ : 221.1/21

Left Out:  $0.163 \pm 0.003$   $\chi^2/\text{NDF}$ : 1011.4/24

Right Out:  $-0.073 \pm 0.008$   $\chi^2/\text{NDF}$ : 535.8/24

Left In:  $0.150 \pm 0.003$   $\chi^2/\text{NDF}$ : 1296.5/22

Left:  $0.157 \pm 0.002$   $\chi^2/\text{NDF}$ : 2318.7/47

Right:  $-0.065 \pm 0.006$   $\chi^2/\text{NDF}$ : 759.5/46

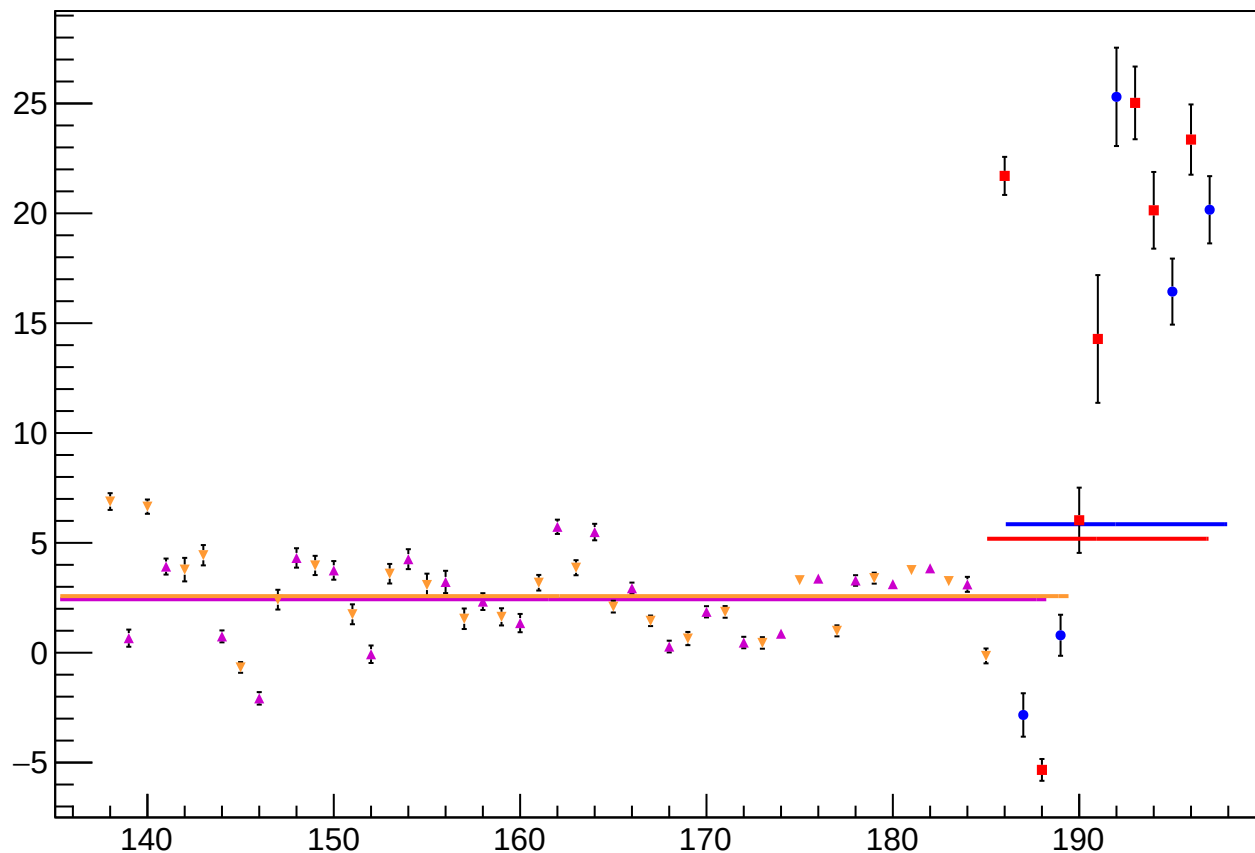
In:  $0.128 \pm 0.003$   $\chi^2/\text{NDF}$ : 2124.7/44

Out:  $0.137 \pm 0.003$   $\chi^2/\text{NDF}$ : 2389.5/49

All:  $0.132 \pm 0.002$   $\chi^2/\text{NDF}$ : 4519.5/94



reg\_asym\_sam\_15\_37\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $5.849 \pm 0.556$   $\chi^2/\text{NDF}: 319.0/4$

Left Out:  $2.575 \pm 0.058$   $\chi^2/\text{NDF}: 868.1/24$

Right Out:  $5.187 \pm 0.377$   $\chi^2/\text{NDF}: 1169.0/6$

Left In:  $2.433 \pm 0.059$   $\chi^2/\text{NDF}: 882.9/22$

Left:  $2.505 \pm 0.042$   $\chi^2/\text{NDF}: 1754.0/47$

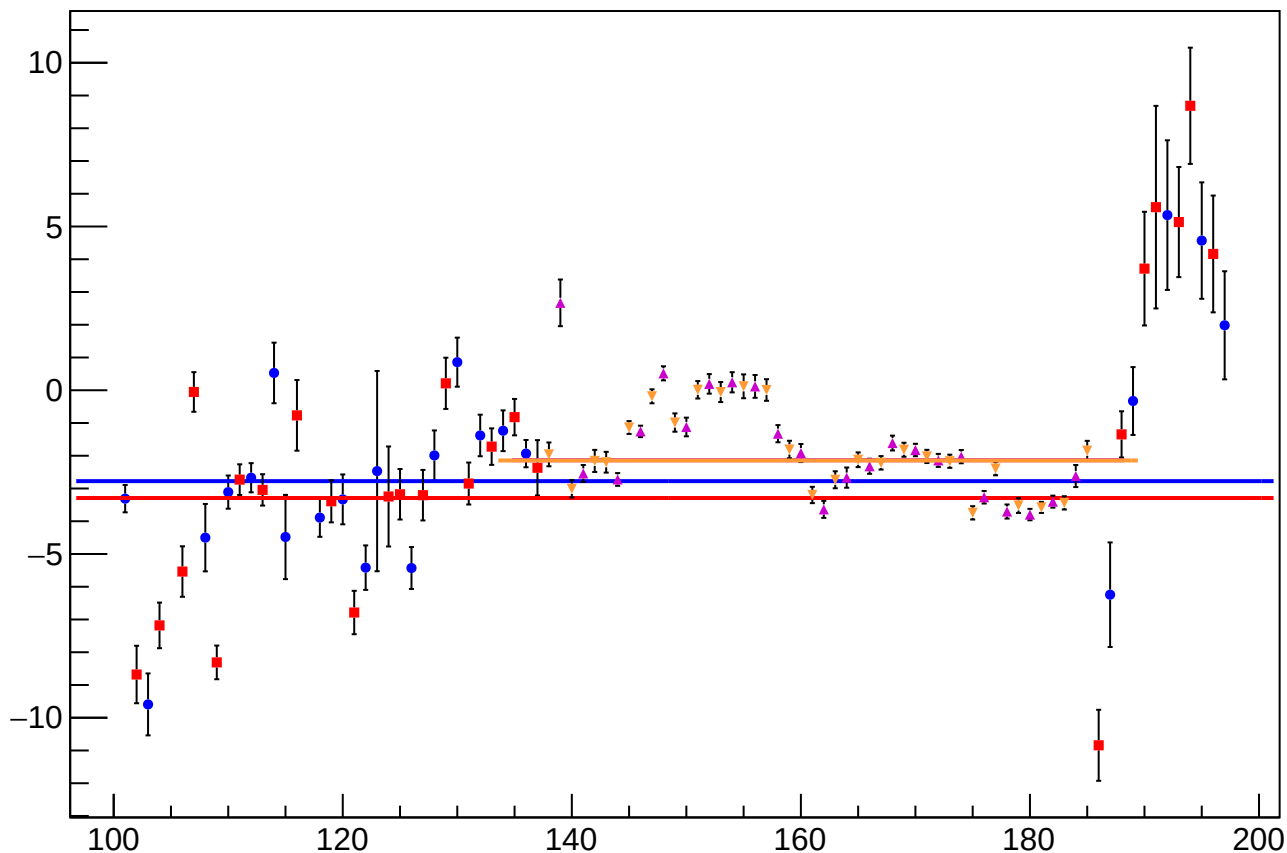
Right:  $5.396 \pm 0.312$   $\chi^2/\text{NDF}: 1489.0/11$

In:  $2.471 \pm 0.059$   $\chi^2/\text{NDF}: 1239.3/27$

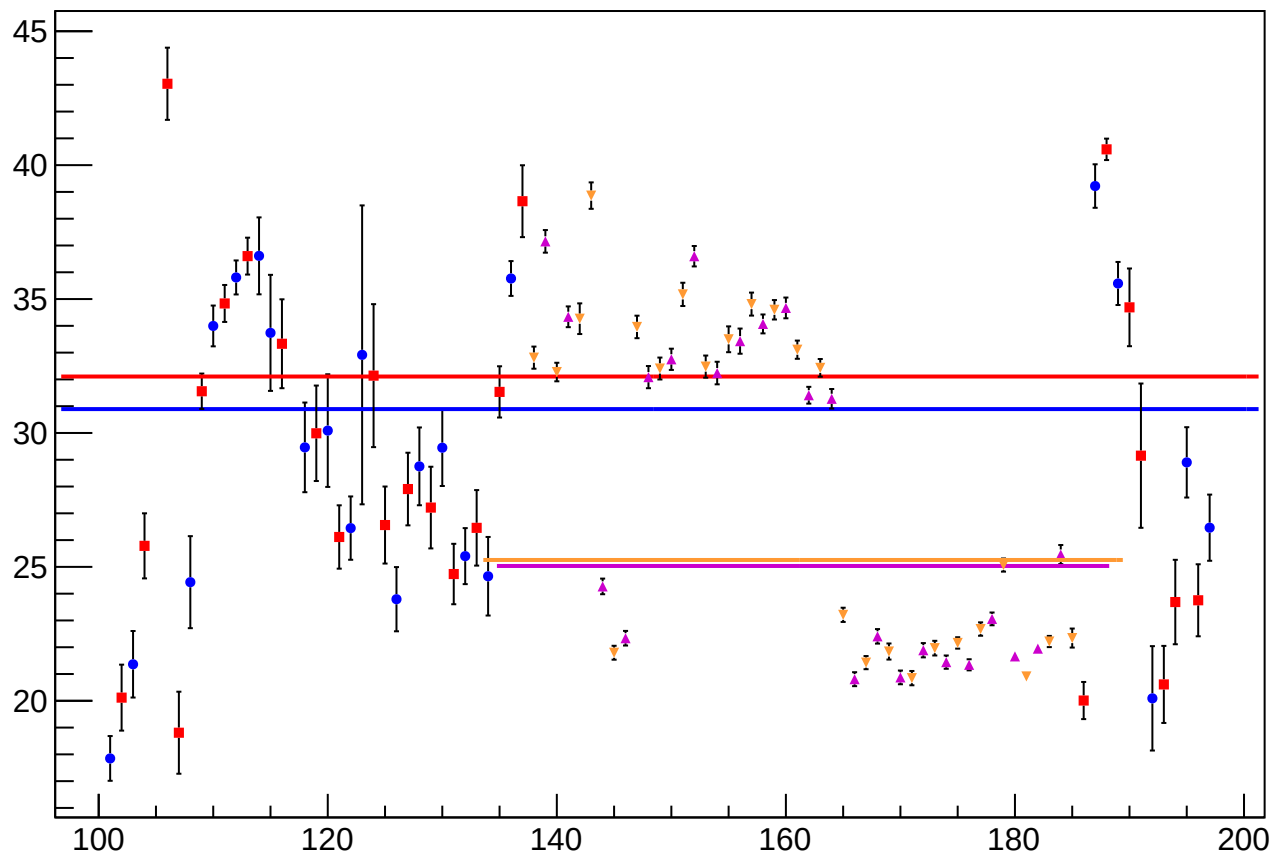
Out:  $2.637 \pm 0.058$   $\chi^2/\text{NDF}: 2084.0/31$

All:  $2.556 \pm 0.041$   $\chi^2/\text{NDF}: 3327.4/59$

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



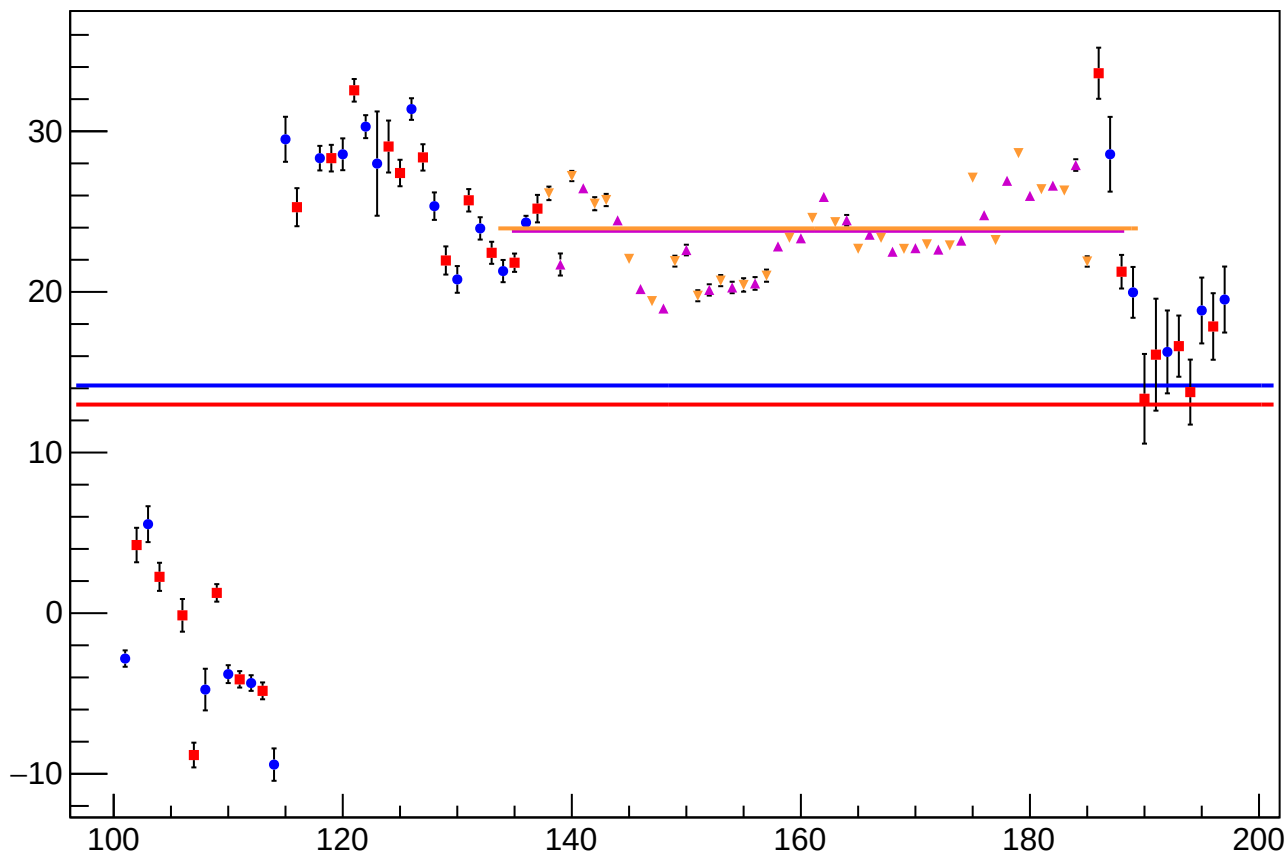
reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 30.892 $\pm$ 0.232  $\chi^2$ /NDF: 751.3/21  
 Left Out: 25.258 $\pm$ 0.059  $\chi^2$ /NDF:8135.5/24  
 Right Out: 32.108 $\pm$ 0.200  $\chi^2$ /NDF: 1356.5/24  
 Left In: 25.034 $\pm$ 0.059  $\chi^2$ /NDF:7690.0/22

Left: 25.147 $\pm$ 0.042  $\chi^2$ /NDF: 15832.7/47  
 Right: 31.590 $\pm$ 0.151  $\chi^2$ /NDF: 2123.6/46  
 In: 25.395 $\pm$ 0.058  $\chi^2$ /NDF:9040.8/44  
 Out: 25.807 $\pm$ 0.056  $\chi^2$ /NDF:10576.1/49  
 All: 25.605 $\pm$ 0.040  $\chi^2$ /NDF: 19643.1/94

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 14.175 $\pm$ 0.169  $\chi^2$ /NDF: 7457.9/21

Left Out: 23.953 $\pm$ 0.053  $\chi^2$ /NDF:1915.9/24

Right Out: 12.987 $\pm$ 0.168  $\chi^2$ /NDF: 7213.5/24

Left In: 23.804 $\pm$ 0.054  $\chi^2$ /NDF:1760.4/22

Left: 23.880 $\pm$ 0.038  $\chi^2$ /NDF: 3680.1/47

Right: 13.578 $\pm$ 0.119  $\chi^2$ /NDF: 14696.3/46

In: 22.915 $\pm$ 0.051  $\chi^2$ /NDF:12166.4/44

Out: 22.955 $\pm$ 0.051  $\chi^2$ /NDF:12996.2/49

All: 22.935 $\pm$ 0.036  $\chi^2$ /NDF: 25162.9/94

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.217 \pm 0.009$   $\chi^2/\text{NDF}: 896.7/21$

Left Out:  $-0.114 \pm 0.002$   $\chi^2/\text{NDF}: 290.8/24$

Right Out:  $0.161 \pm 0.009$   $\chi^2/\text{NDF}: 3568.6/24$

Left In:  $-0.107 \pm 0.002$   $\chi^2/\text{NDF}: 322.0/22$

Left:  $-0.110 \pm 0.002$   $\chi^2/\text{NDF}: 616.8/47$

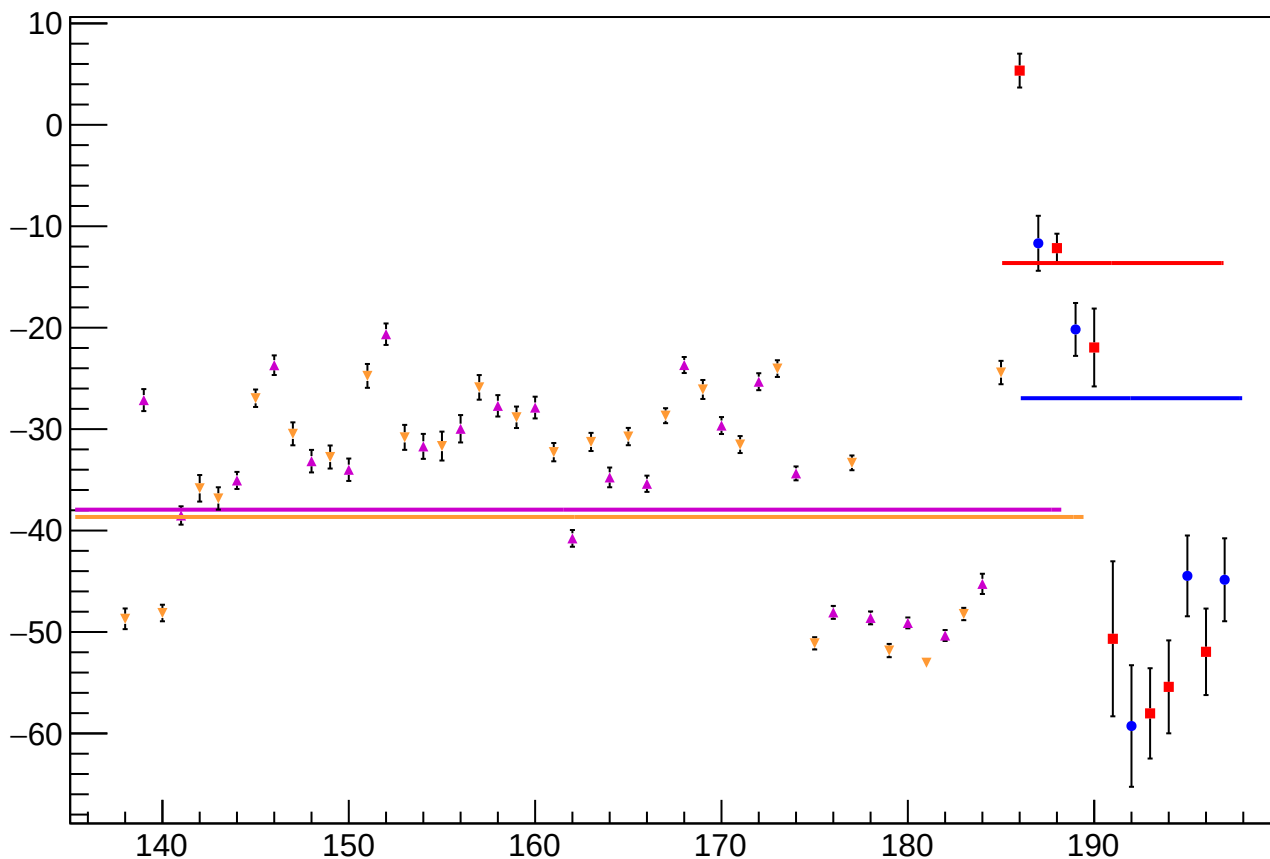
Right:  $0.188 \pm 0.006$   $\chi^2/\text{NDF}: 4485.4/46$

In:  $-0.084 \pm 0.002$   $\chi^2/\text{NDF}: 2419.6/44$

Out:  $-0.094 \pm 0.002$   $\chi^2/\text{NDF}: 4786.8/49$

All:  $-0.089 \pm 0.002$   $\chi^2/\text{NDF}: 7214.3/94$

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected

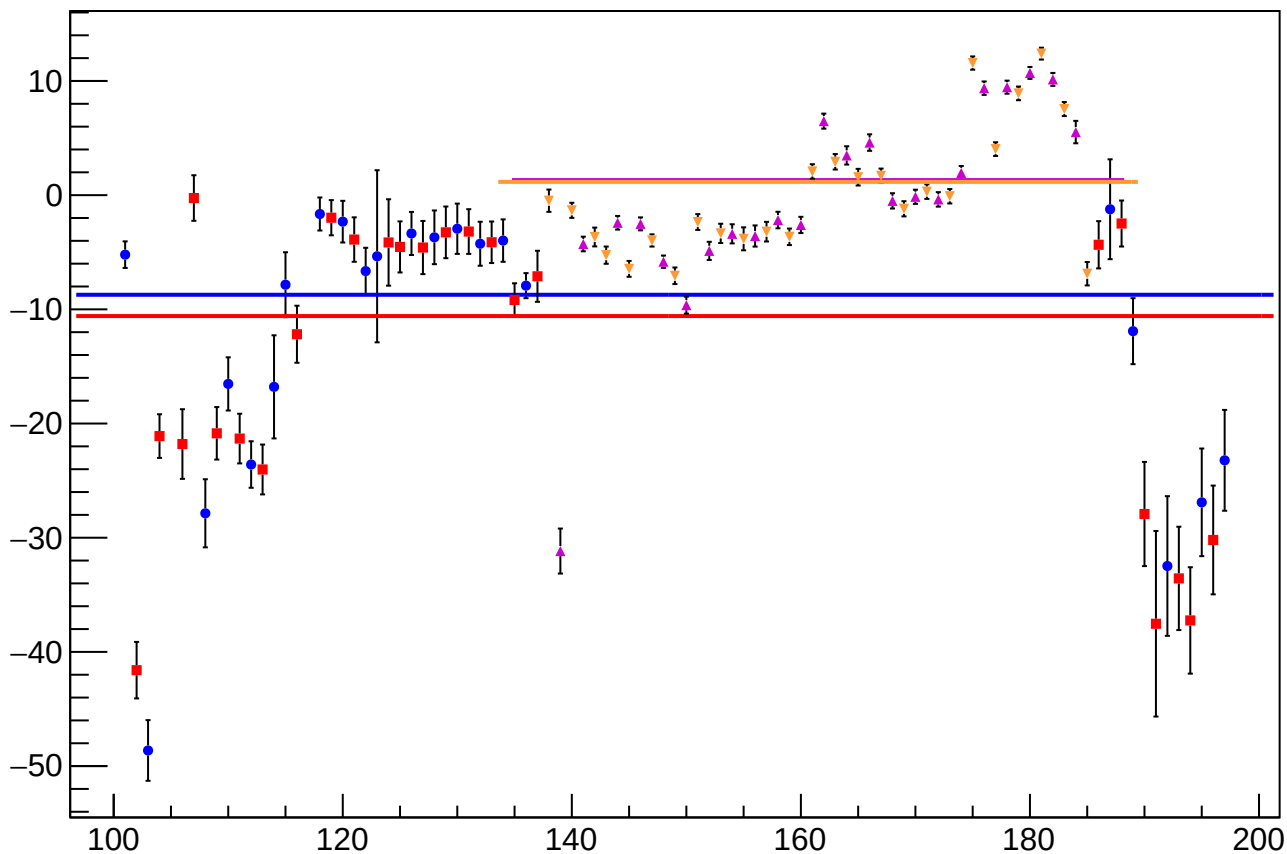


Right In:  $-26.951 \pm 1.518$   $\chi^2/\text{NDF}: 106.1/4$   
 Left Out:  $-38.660 \pm 0.169$   $\chi^2/\text{NDF}: 4073.8/24$   
 Right Out:  $-13.626 \pm 0.957$   $\chi^2/\text{NDF}: 421.9/6$   
 Left In:  $-37.939 \pm 0.173$   $\chi^2/\text{NDF}: 3133.2/22$

Left:  $-38.306 \pm 0.121$   $\chi^2/\text{NDF}: 7216.0/47$   
 Right:  $-17.414 \pm 0.810$   $\chi^2/\text{NDF}: 583.1/11$   
 In:  $-37.799 \pm 0.171$   $\chi^2/\text{NDF}: 3291.0/27$   
 Out:  $-37.900 \pm 0.167$   $\chi^2/\text{NDF}: 5159.4/31$

All:  $-37.851 \pm 0.120$   $\chi^2/\text{NDF}: 8450.6/59$

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-8.724 \pm 0.448$   $\chi^2/\text{NDF}: 458.0/21$

Left Out:  $1.163 \pm 0.136$   $\chi^2/\text{NDF}: 1786.1/24$

Right Out:  $-10.588 \pm 0.456$   $\chi^2/\text{NDF}: 537.1/24$

Left In:  $1.319 \pm 0.139$   $\chi^2/\text{NDF}: 2080.7/22$

Left:  $1.239 \pm 0.097$   $\chi^2/\text{NDF}: 3867.4/47$

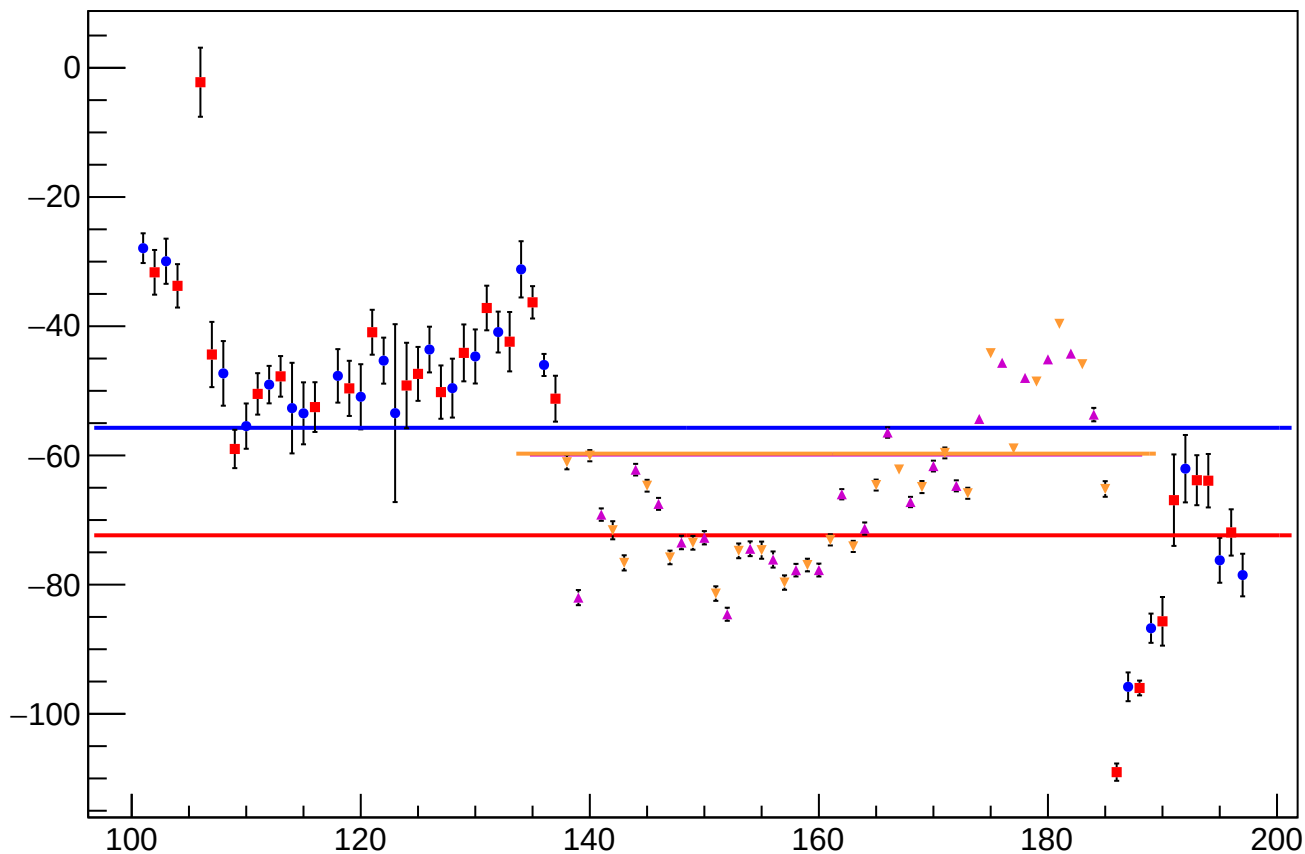
Right:  $-9.641 \pm 0.320$   $\chi^2/\text{NDF}: 1003.7/46$

In:  $0.432 \pm 0.133$   $\chi^2/\text{NDF}: 2996.5/44$

Out:  $0.197 \pm 0.131$   $\chi^2/\text{NDF}: 2933.7/49$

All:  $0.313 \pm 0.093$   $\chi^2/\text{NDF}: 5931.8/94$

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-55.723 \pm 0.699$   $\chi^2/\text{NDF}$ : 924.7/21

Left Out:  $-59.724 \pm 0.170$   $\chi^2/\text{NDF}$ : 5789.8/24

Right Out:  $-72.364 \pm 0.583$   $\chi^2/\text{NDF}$ : 2443.3/24

Left In:  $-59.864 \pm 0.173$   $\chi^2/\text{NDF}$ : 5275.1/22

Left:  $-59.793 \pm 0.121$   $\chi^2/\text{NDF}$ : 11065.1/47

Right:  $-65.534 \pm 0.448$   $\chi^2/\text{NDF}$ : 3701.9/46

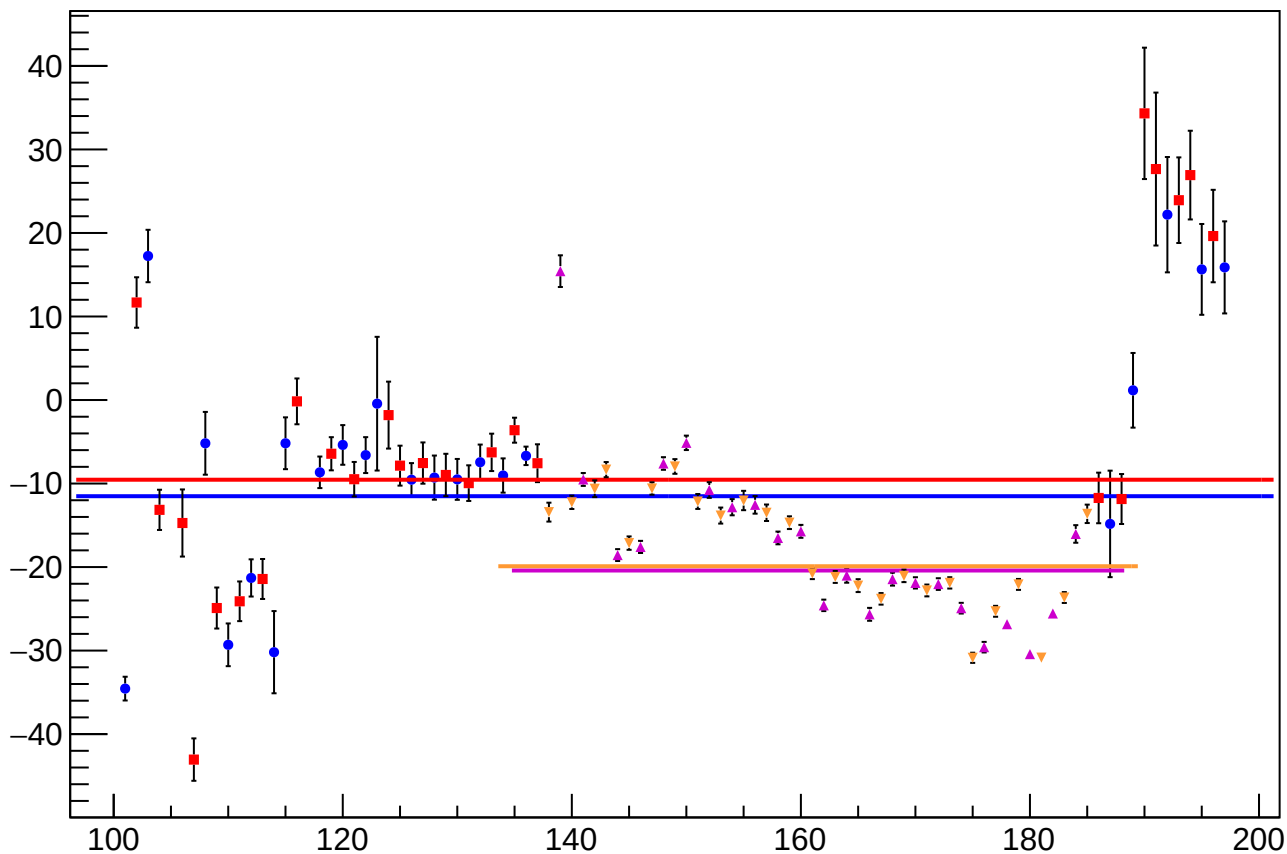
In:  $-59.626 \pm 0.168$   $\chi^2/\text{NDF}$ : 6232.8/44

Out:  $-60.718 \pm 0.164$   $\chi^2/\text{NDF}$ : 8665.5/49

All:  $-60.185 \pm 0.117$   $\chi^2/\text{NDF}$ : 14920.0/94



reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected

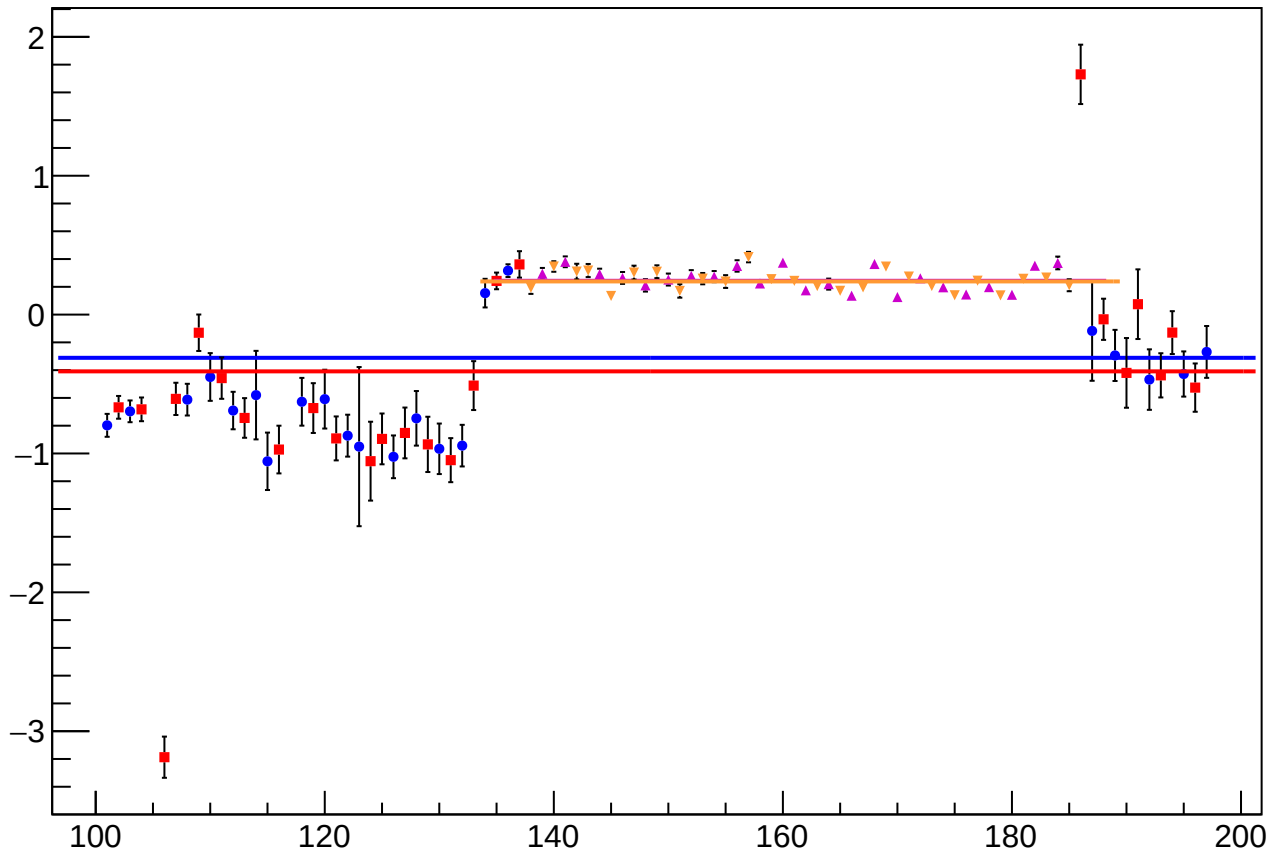


Right In:  $-11.516 \pm 0.509$   $\chi^2/\text{NDF}: 560.3/21$   
 Left Out:  $-19.902 \pm 0.153$   $\chi^2/\text{NDF}: 1904.7/24$   
 Right Out:  $-9.543 \pm 0.526$   $\chi^2/\text{NDF}: 532.8/24$   
 Left In:  $-20.412 \pm 0.156$   $\chi^2/\text{NDF}: 2345.4/22$

Left:  $-20.152 \pm 0.109$   $\chi^2/\text{NDF}: 4255.5/47$   
 Right:  $-10.563 \pm 0.366$   $\chi^2/\text{NDF}: 1100.4/46$   
 In:  $-19.646 \pm 0.149$   $\chi^2/\text{NDF}: 3185.2/44$   
 Out:  $-19.094 \pm 0.147$   $\chi^2/\text{NDF}: 2794.7/49$

All:  $-19.365 \pm 0.105$   $\chi^2/\text{NDF}: 5986.8/94$

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.311 \pm 0.026$   $\chi^2/\text{NDF}$ : 373.8/21

Left Out:  $0.239 \pm 0.007$   $\chi^2/\text{NDF}$ : 93.5/24

Right Out:  $-0.409 \pm 0.026$   $\chi^2/\text{NDF}$ : 745.3/24

Left In:  $0.243 \pm 0.007$   $\chi^2/\text{NDF}$ : 139.2/22

Left:  $0.241 \pm 0.005$   $\chi^2/\text{NDF}$ : 232.9/47

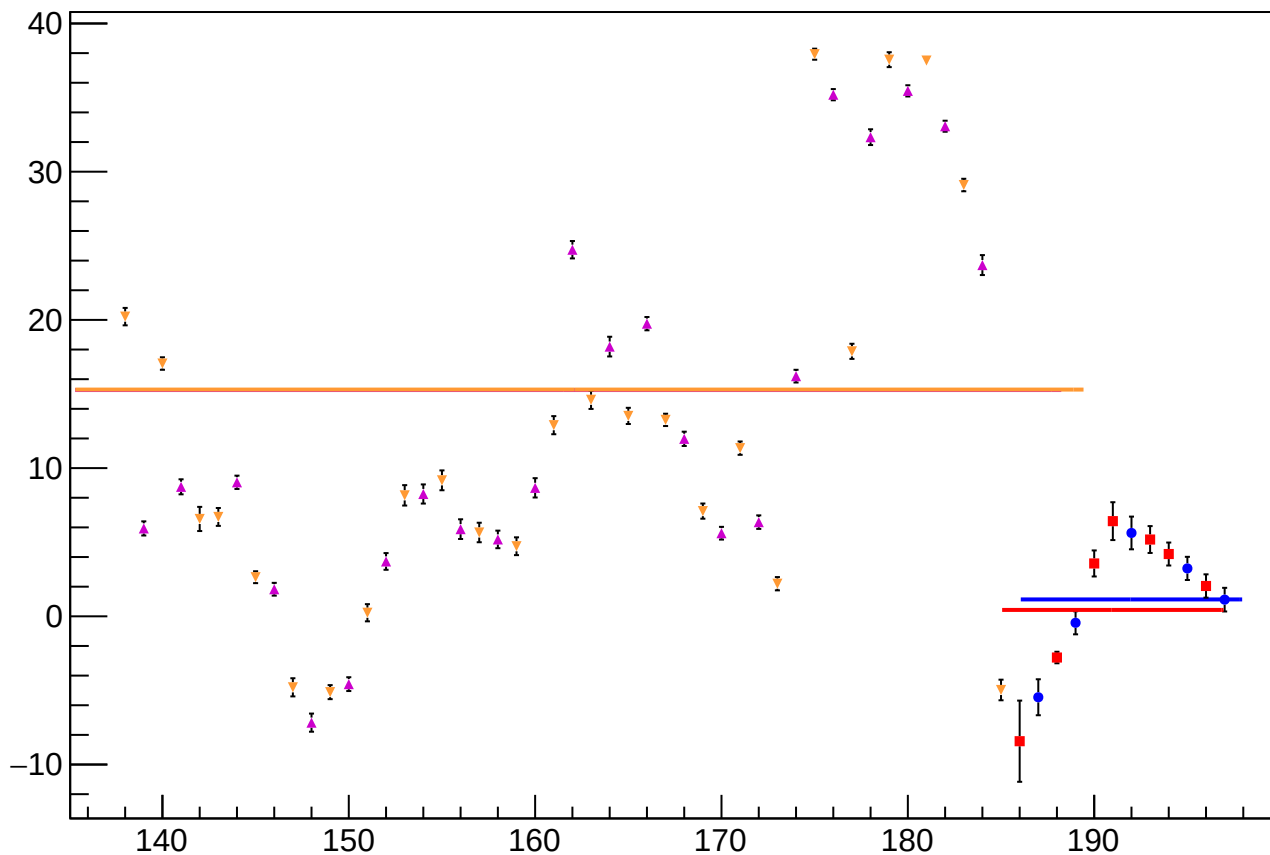
Right:  $-0.360 \pm 0.019$   $\chi^2/\text{NDF}$ : 1126.0/46

In:  $0.205 \pm 0.007$   $\chi^2/\text{NDF}$ : 927.2/44

Out:  $0.196 \pm 0.007$   $\chi^2/\text{NDF}$ : 1400.5/49

All:  $0.201 \pm 0.005$   $\chi^2/\text{NDF}$ : 2328.7/94

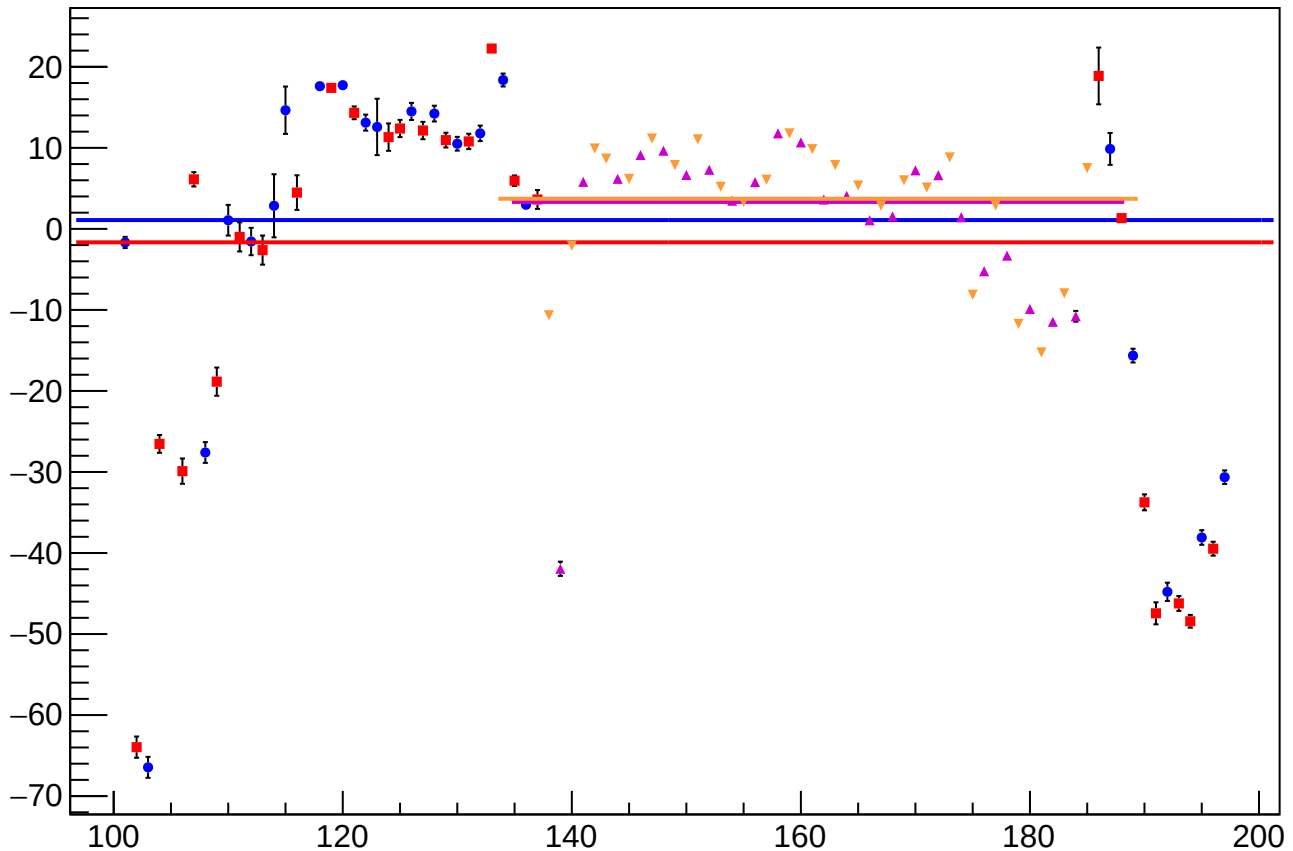
reg\_asym\_sam\_26\_48\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 1.140 $\pm$ 0.396  $\chi^2$ /NDF: 57.4/4  
 Left Out: 15.298 $\pm$ 0.101  $\chi^2$ /NDF:19135.0/24  
 Right Out: 0.432 $\pm$ 0.276  $\chi^2$ /NDF: 168.8/6  
 Left In: 15.268 $\pm$ 0.102  $\chi^2$ /NDF:16406.3/22

Left: 15.283 $\pm$ 0.072  $\chi^2$ /NDF: 35541.3/47  
 Right: 0.662 $\pm$ 0.226  $\chi^2$ /NDF: 228.3/11  
 In: 14.389 $\pm$ 0.099  $\chi^2$ /NDF:17654.4/27  
 Out: 13.549 $\pm$ 0.095  $\chi^2$ /NDF:21869.2/31  
 All: 13.950 $\pm$ 0.068  $\chi^2$ /NDF: 39561.3/59

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.088 $\pm$ 0.194  $\chi^2$ /NDF: 11789.9/21

Left Out: 3.717 $\pm$ 0.079  $\chi^2$ /NDF: 9201.0/24

Right Out: -1.659 $\pm$ 0.180  $\chi^2$ /NDF: 18669.3/24

Left In: 3.327 $\pm$ 0.081  $\chi^2$ /NDF: 8830.5/22

Left: 3.527 $\pm$ 0.057  $\chi^2$ /NDF: 18043.4/47

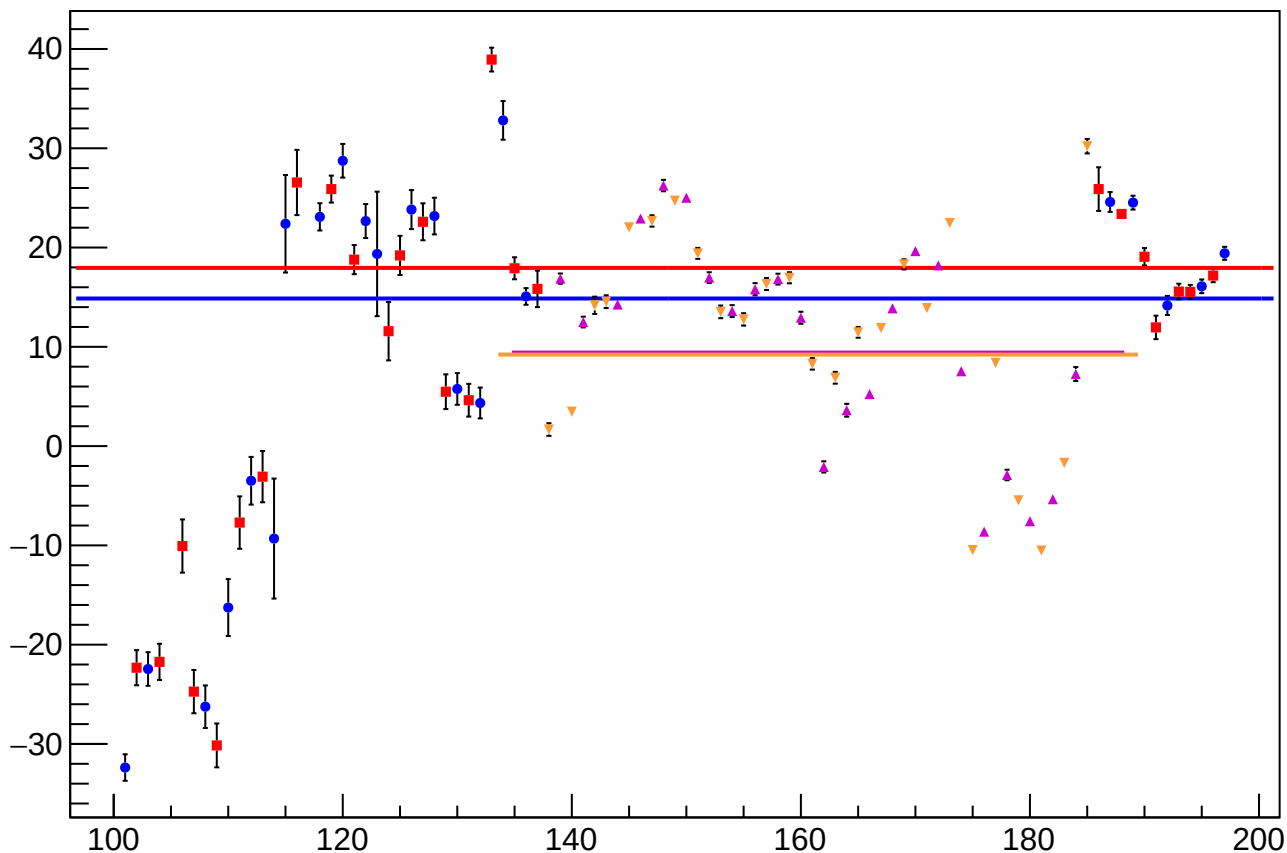
Right: -0.384 $\pm$ 0.132  $\chi^2$ /NDF: 30567.0/46

In: 2.993 $\pm$ 0.075  $\chi^2$ /NDF: 20734.2/44

Out: 2.852 $\pm$ 0.072  $\chi^2$ /NDF: 28616.7/49

All: 2.920 $\pm$ 0.052  $\chi^2$ /NDF: 49352.8/94

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 14.866 $\pm$ 0.264  $\chi^2$ /NDF: 2968.2/21

Left Out: 9.220 $\pm$ 0.101  $\chi^2$ /NDF:13617.0/24

Right Out: 17.951 $\pm$ 0.204  $\chi^2$ /NDF: 2954.1/24

Left In: 9.420 $\pm$ 0.102  $\chi^2$ /NDF:12078.1/22

Left: 9.319 $\pm$ 0.072  $\chi^2$ /NDF: 25697.1/47

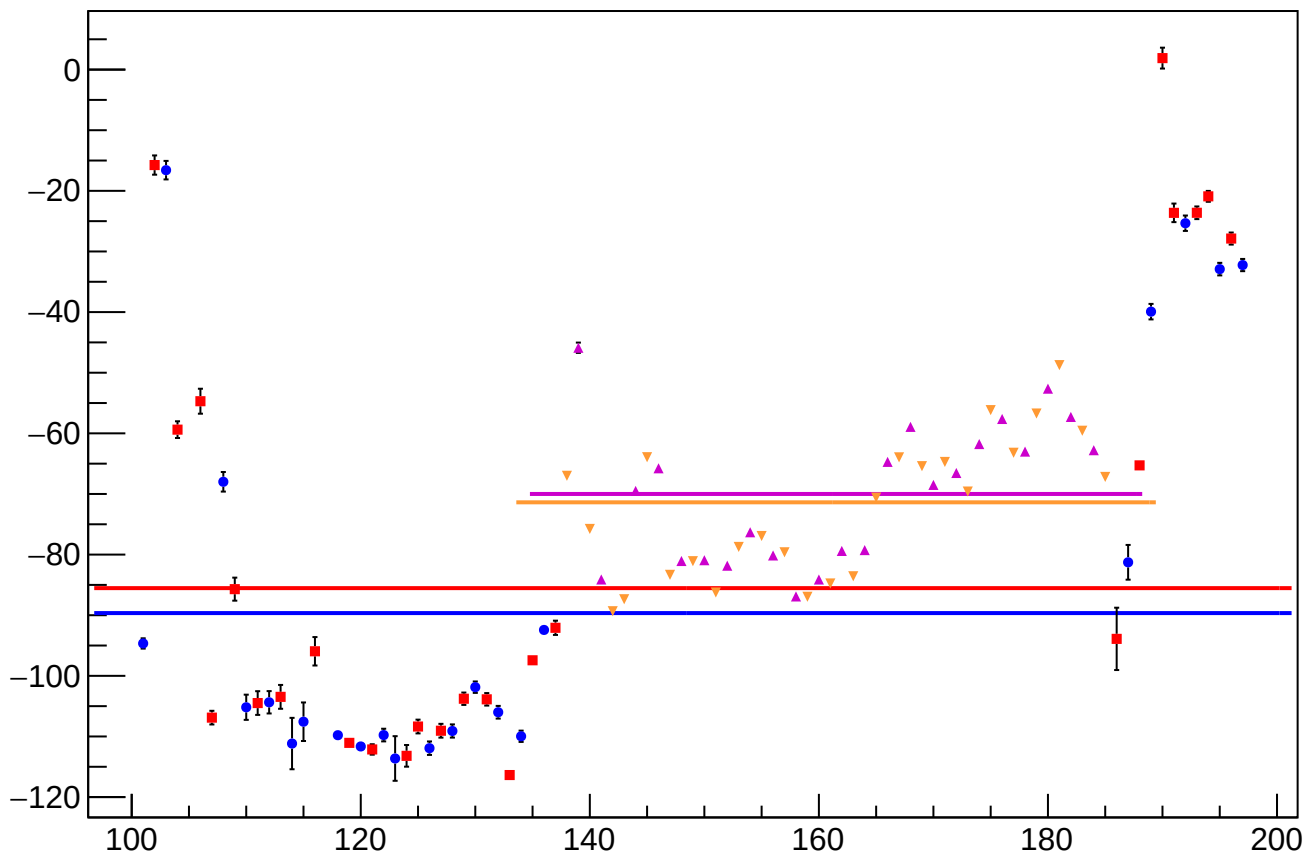
Right: 16.794 $\pm$ 0.162  $\chi^2$ /NDF: 6007.7/46

In: 10.128 $\pm$ 0.095  $\chi^2$ /NDF:15417.0/44

Out: 10.935 $\pm$ 0.091  $\chi^2$ /NDF:18036.0/49

All: 10.551 $\pm$ 0.066  $\chi^2$ /NDF: 33490.6/94

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-89.648 \pm 0.226$   $\chi^2/\text{NDF}: 16847.2/21$

Left Out:  $-71.379 \pm 0.089$   $\chi^2/\text{NDF}: 16226.2/24$

Right Out:  $-85.532 \pm 0.214$   $\chi^2/\text{NDF}: 27361.8/24$

Left In:  $-69.999 \pm 0.091$   $\chi^2/\text{NDF}: 13188.0/22$

Left:  $-70.704 \pm 0.064$   $\chi^2/\text{NDF}: 29530.5/47$

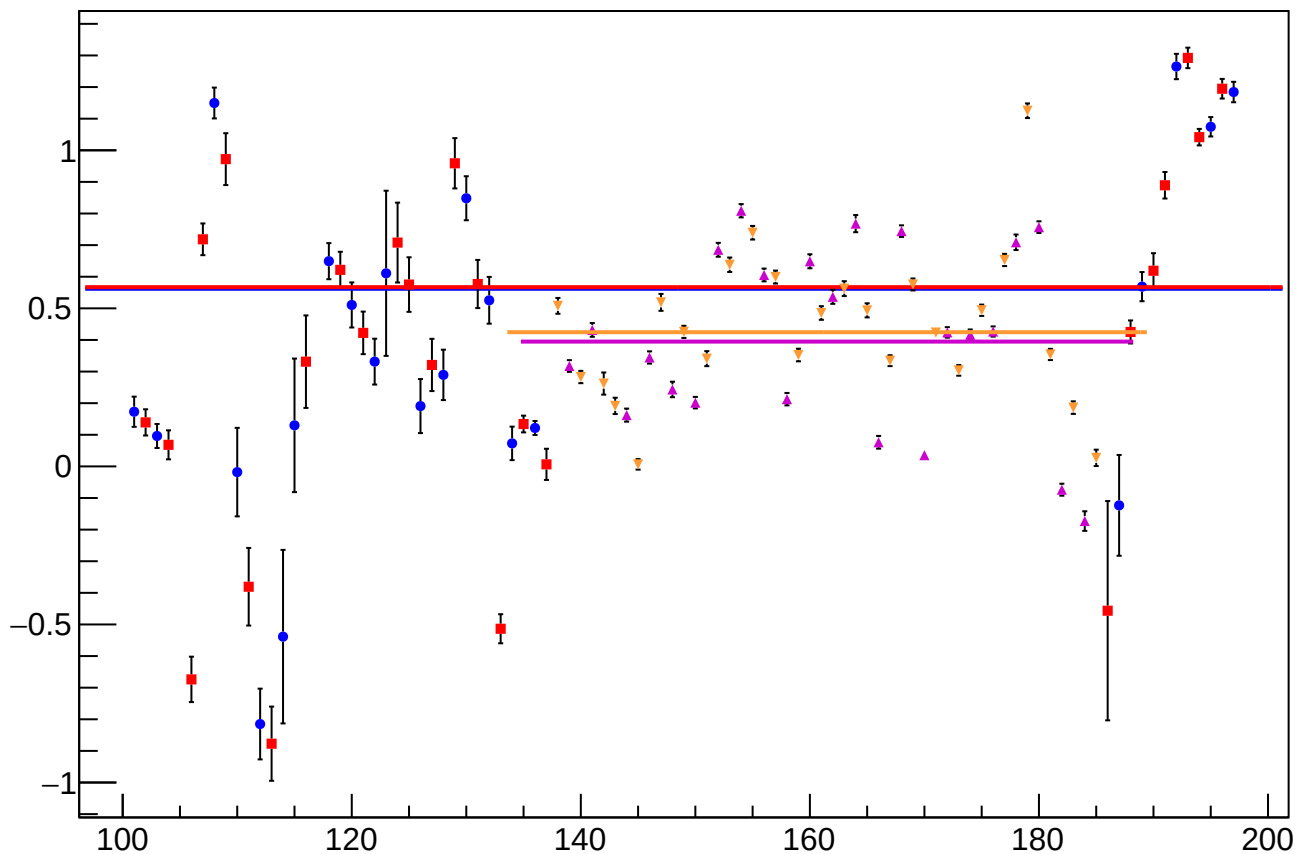
Right:  $-87.472 \pm 0.155$   $\chi^2/\text{NDF}: 44383.9/46$

In:  $-72.755 \pm 0.085$   $\chi^2/\text{NDF}: 36516.6/44$

Out:  $-73.490 \pm 0.083$   $\chi^2/\text{NDF}: 47319.3/49$

All:  $-73.132 \pm 0.059$   $\chi^2/\text{NDF}: 83874.4/94$

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.562 \pm 0.011$   $\chi^2/\text{NDF}$ : 2069.6/21

Left Out:  $0.425 \pm 0.004$   $\chi^2/\text{NDF}$ : 2866.9/24

Right Out:  $0.567 \pm 0.010$   $\chi^2/\text{NDF}$ : 3082.8/24

Left In:  $0.395 \pm 0.004$   $\chi^2/\text{NDF}$ : 4063.1/22

Left:  $0.410 \pm 0.003$   $\chi^2/\text{NDF}$ : 6956.2/47

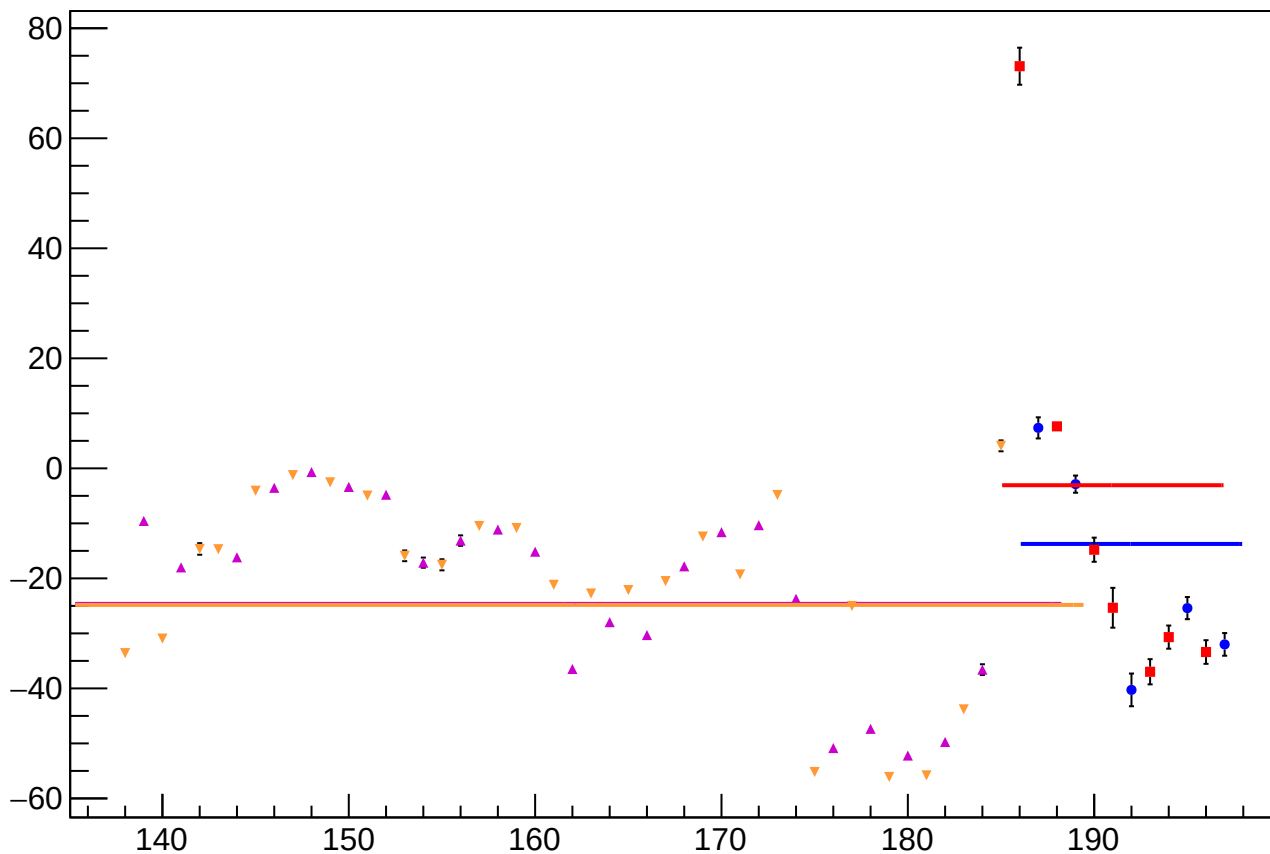
Right:  $0.565 \pm 0.007$   $\chi^2/\text{NDF}$ : 5152.5/46

In:  $0.416 \pm 0.004$   $\chi^2/\text{NDF}$ : 6343.5/44

Out:  $0.446 \pm 0.004$   $\chi^2/\text{NDF}$ : 6132.2/49

All:  $0.432 \pm 0.003$   $\chi^2/\text{NDF}$ : 12506.0/94

reg\_asym\_sam\_1548\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-13.742 \pm 0.885$   $\chi^2/\text{NDF}: 360.9/4$   
 Left Out:  $-24.824 \pm 0.140$   $\chi^2/\text{NDF}: 18274.6/24$   
 Right Out:  $-3.068 \pm 0.624$   $\chi^2/\text{NDF}: 1346.7/6$   
 Left In:  $-24.635 \pm 0.142$   $\chi^2/\text{NDF}: 14947.9/22$

Left:  $-24.731 \pm 0.100$   $\chi^2/\text{NDF}: 33223.4/47$

Right:  $-6.616 \pm 0.510$   $\chi^2/\text{NDF}: 1804.7/11$

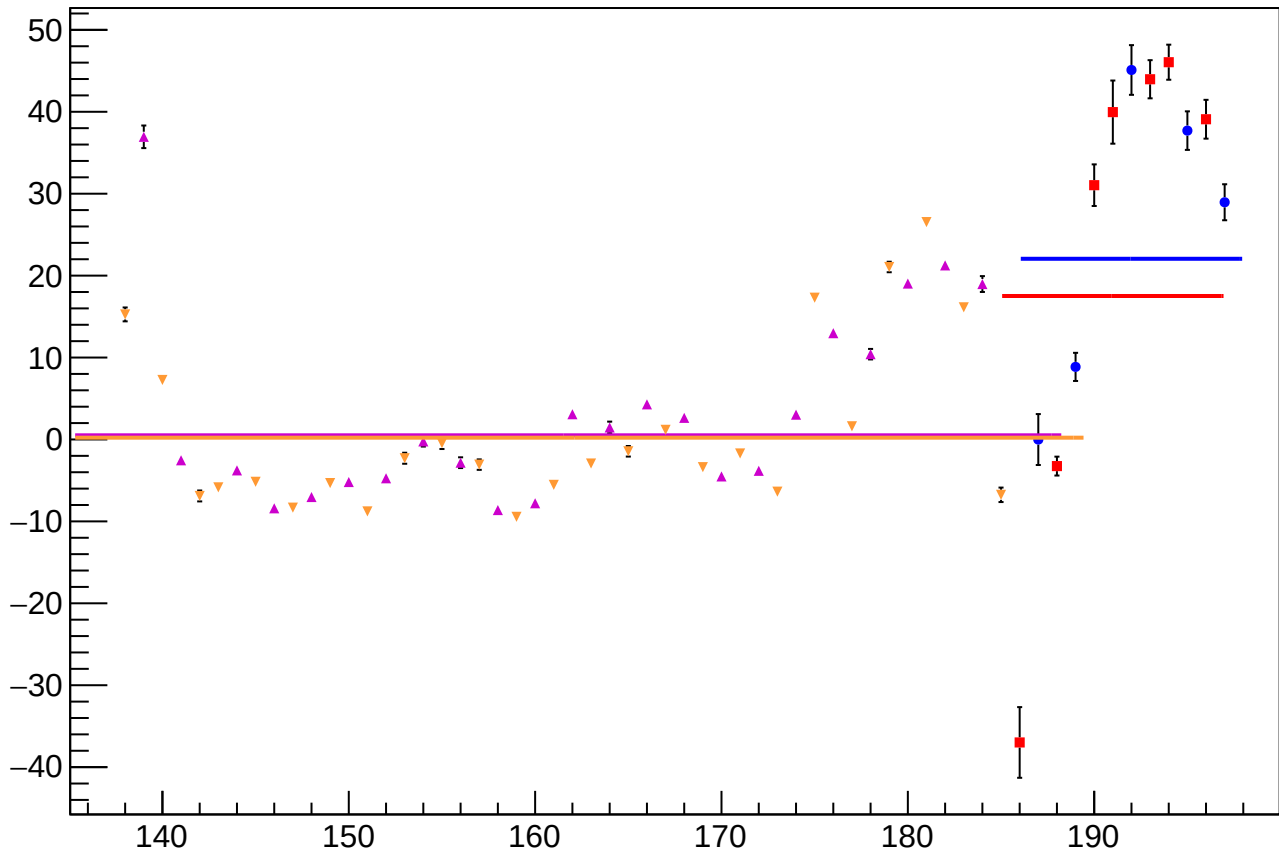
In:  $-24.361 \pm 0.140$   $\chi^2/\text{NDF}: 15456.5/27$

Out:  $-23.787 \pm 0.136$   $\chi^2/\text{NDF}: 20777.5/31$

All:  $-24.066 \pm 0.098$   $\chi^2/\text{NDF}: 36242.7/59$



reg\_asym\_sam\_1548\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 22.056+/-1.032  $\chi^2$ /NDF: 221.2/4

Left Out: 0.218+/-0.109  $\chi^2$ /NDF:8252.6/24

Right Out: 17.513+/-0.788  $\chi^2$ /NDF: 936.2/6

Left In: 0.507+/-0.112  $\chi^2$ /NDF:6626.9/22

Left: 0.358+/-0.078  $\chi^2$ /NDF: 14883.0/47

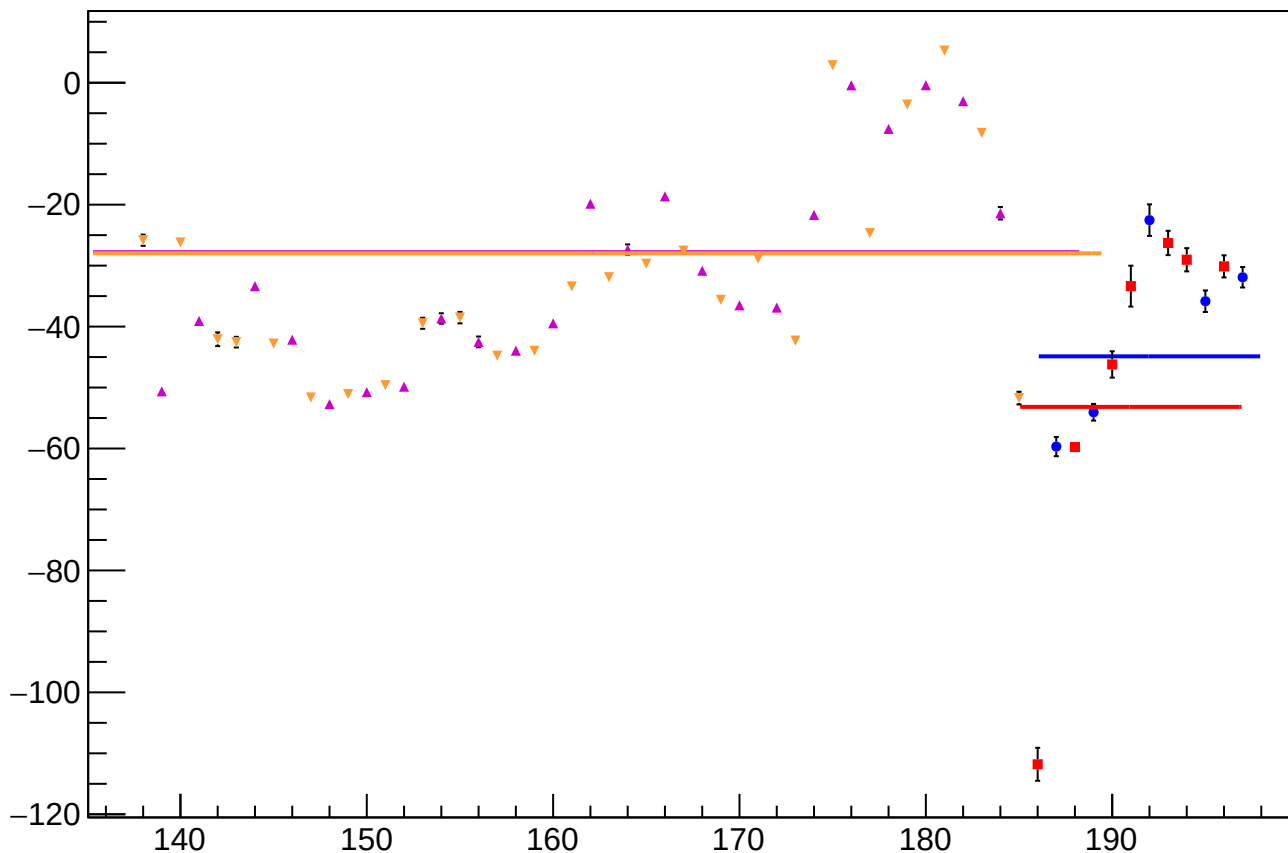
Right: 19.187+/-0.626  $\chi^2$ /NDF: 1169.6/11

In: 0.757+/-0.111  $\chi^2$ /NDF:7279.0/27

Out: 0.541+/-0.108  $\chi^2$ /NDF:9661.3/31

All: 0.646+/-0.077  $\chi^2$ /NDF: 16942.2/59

reg\_asym\_sam\_1548\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-44.882 \pm 0.753$   $\chi^2/\text{NDF}$ : 293.9/4

Left Out:  $-27.977 \pm 0.140$   $\chi^2/\text{NDF}$ : 17079.0/24

Right Out:  $-53.172 \pm 0.523$   $\chi^2/\text{NDF}$ : 1123.4/6

Left In:  $-27.796 \pm 0.142$   $\chi^2/\text{NDF}$ : 15193.3/22

Left:  $-27.888 \pm 0.100$   $\chi^2/\text{NDF}$ : 32273.2/47

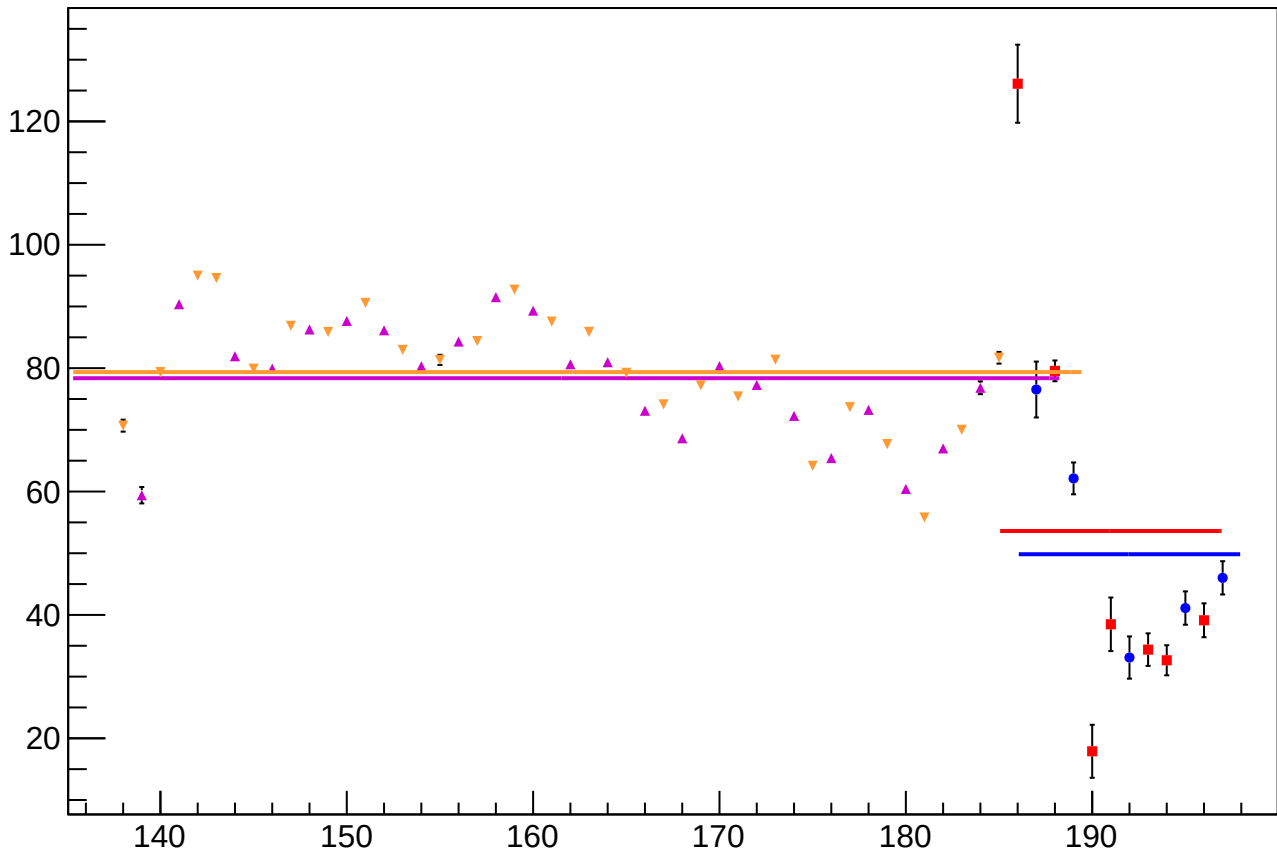
Right:  $-50.474 \pm 0.429$   $\chi^2/\text{NDF}$ : 1499.1/11

In:  $-28.381 \pm 0.139$   $\chi^2/\text{NDF}$ : 15984.7/27

Out:  $-29.666 \pm 0.135$   $\chi^2/\text{NDF}$ : 20369.0/31

All:  $-29.042 \pm 0.097$   $\chi^2/\text{NDF}$ : 36397.4/59

reg\_asym\_sam\_1548\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 49.838+/-1.338  $\chi^2/\text{NDF}$ : 93.8/4

Left Out: 79.364+/-0.123  $\chi^2/\text{NDF}$ : 5966.3/24

Right Out: 53.605+/-1.038  $\chi^2/\text{NDF}$ : 604.1/6

Left In: 78.367+/-0.126  $\chi^2/\text{NDF}$ : 4735.5/22

Left: 78.877+/-0.088  $\chi^2/\text{NDF}$ : 10733.6/47

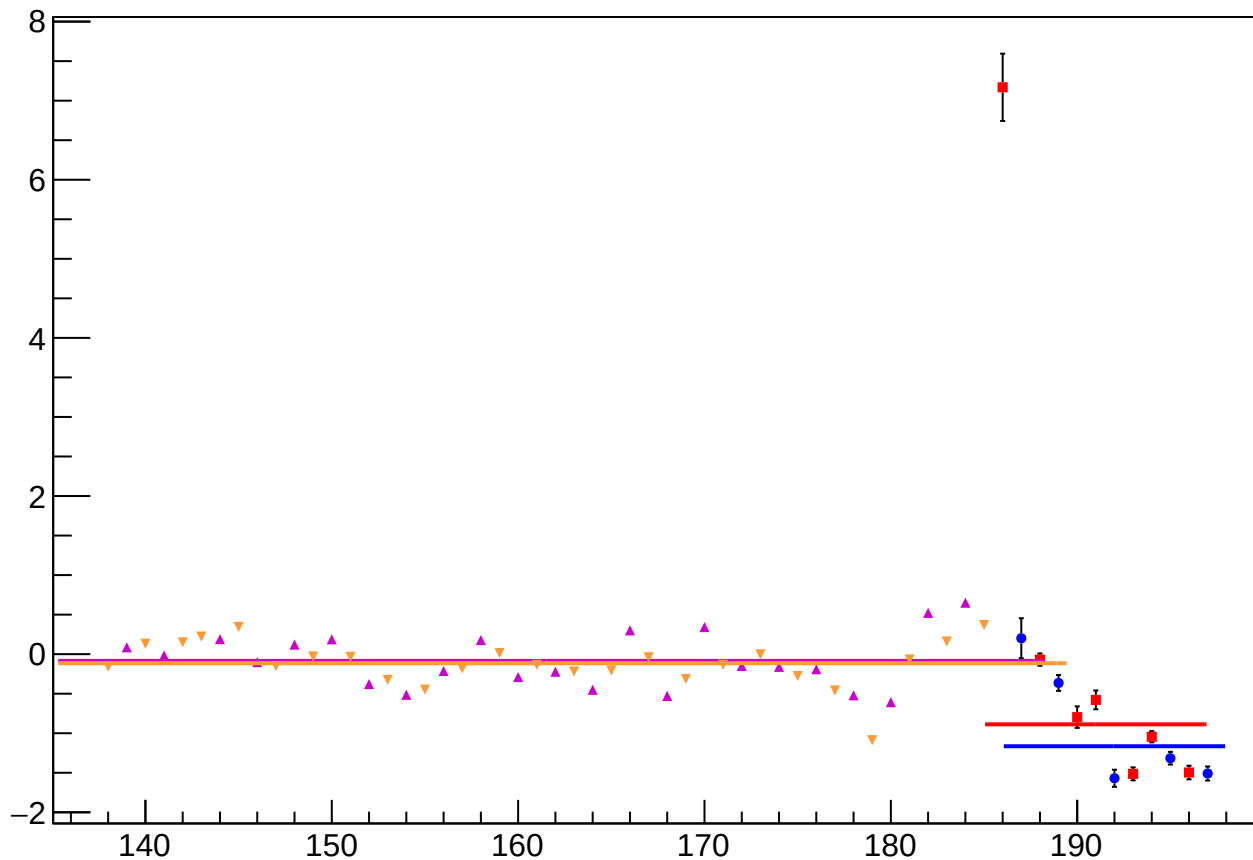
Right: 52.190+/-0.820  $\chi^2/\text{NDF}$ : 702.8/11

In: 78.115+/-0.126  $\chi^2/\text{NDF}$ : 5279.6/27

Out: 79.004+/-0.123  $\chi^2/\text{NDF}$ : 7177.6/31

All: 78.571+/-0.088  $\chi^2/\text{NDF}$ : 12482.9/59

reg\_asym\_sam\_1548\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-1.165 \pm 0.046$   $\chi^2/\text{NDF}: 126.0/4$

Left Out:  $-0.115 \pm 0.006$   $\chi^2/\text{NDF}: 2288.7/24$

Right Out:  $-0.888 \pm 0.036$   $\chi^2/\text{NDF}: 589.8/6$

Left In:  $-0.085 \pm 0.006$   $\chi^2/\text{NDF}: 3148.4/22$

Left:  $-0.100 \pm 0.004$   $\chi^2/\text{NDF}: 5450.5/47$

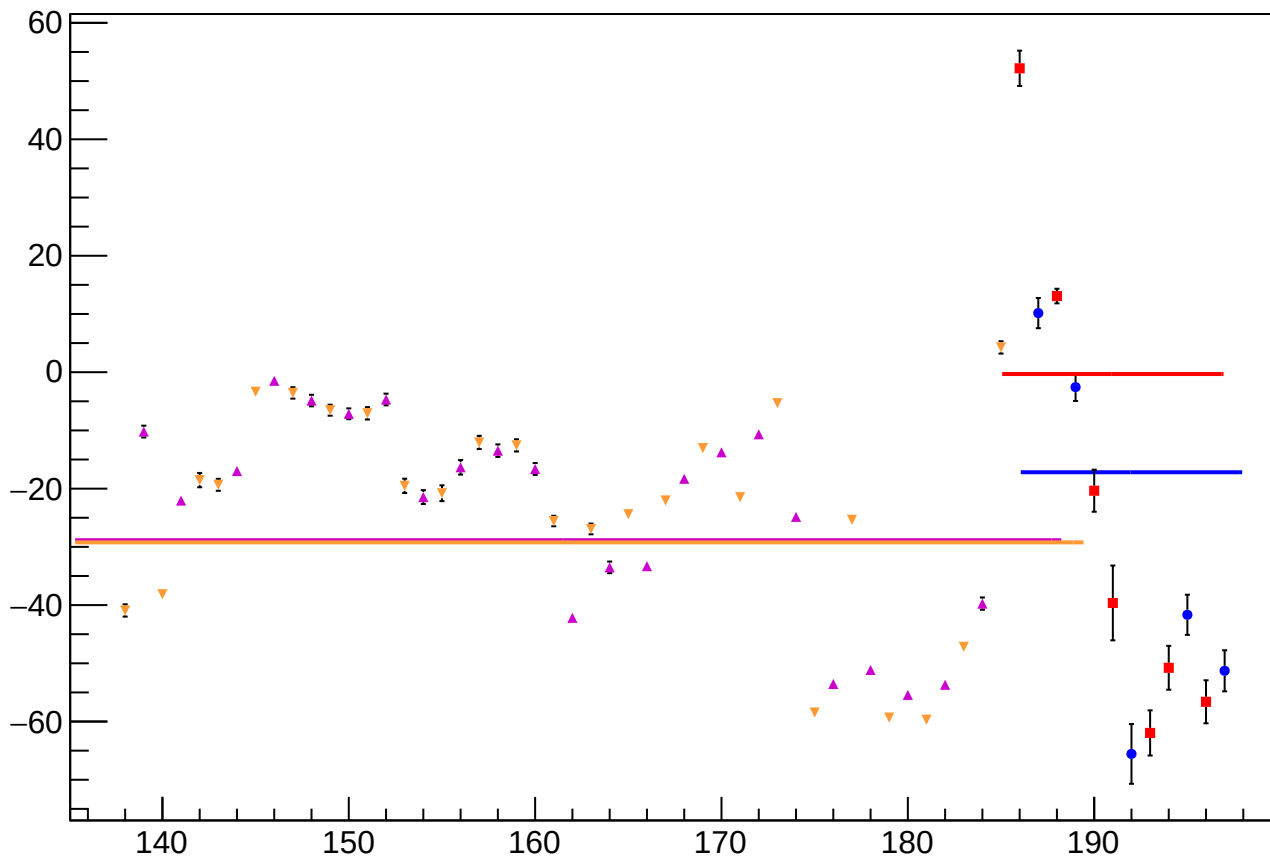
Right:  $-0.994 \pm 0.028$   $\chi^2/\text{NDF}: 738.6/11$

In:  $-0.102 \pm 0.006$   $\chi^2/\text{NDF}: 3827.4/27$

Out:  $-0.134 \pm 0.006$   $\chi^2/\text{NDF}: 3332.2/31$

All:  $-0.118 \pm 0.004$   $\chi^2/\text{NDF}: 7175.1/59$

reg\_asym\_sam\_3748\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-17.184 \pm 1.377$   $\chi^2/\text{NDF}: 381.3/4$   
 Left Out:  $-29.227 \pm 0.157$   $\chi^2/\text{NDF}: 16880.0/24$   
 Right Out:  $-0.315 \pm 0.972$   $\chi^2/\text{NDF}: 1146.7/6$   
 Left In:  $-28.857 \pm 0.159$   $\chi^2/\text{NDF}: 13553.6/22$

Left:  $-29.044 \pm 0.112$   $\chi^2/\text{NDF}: 30436.3/47$

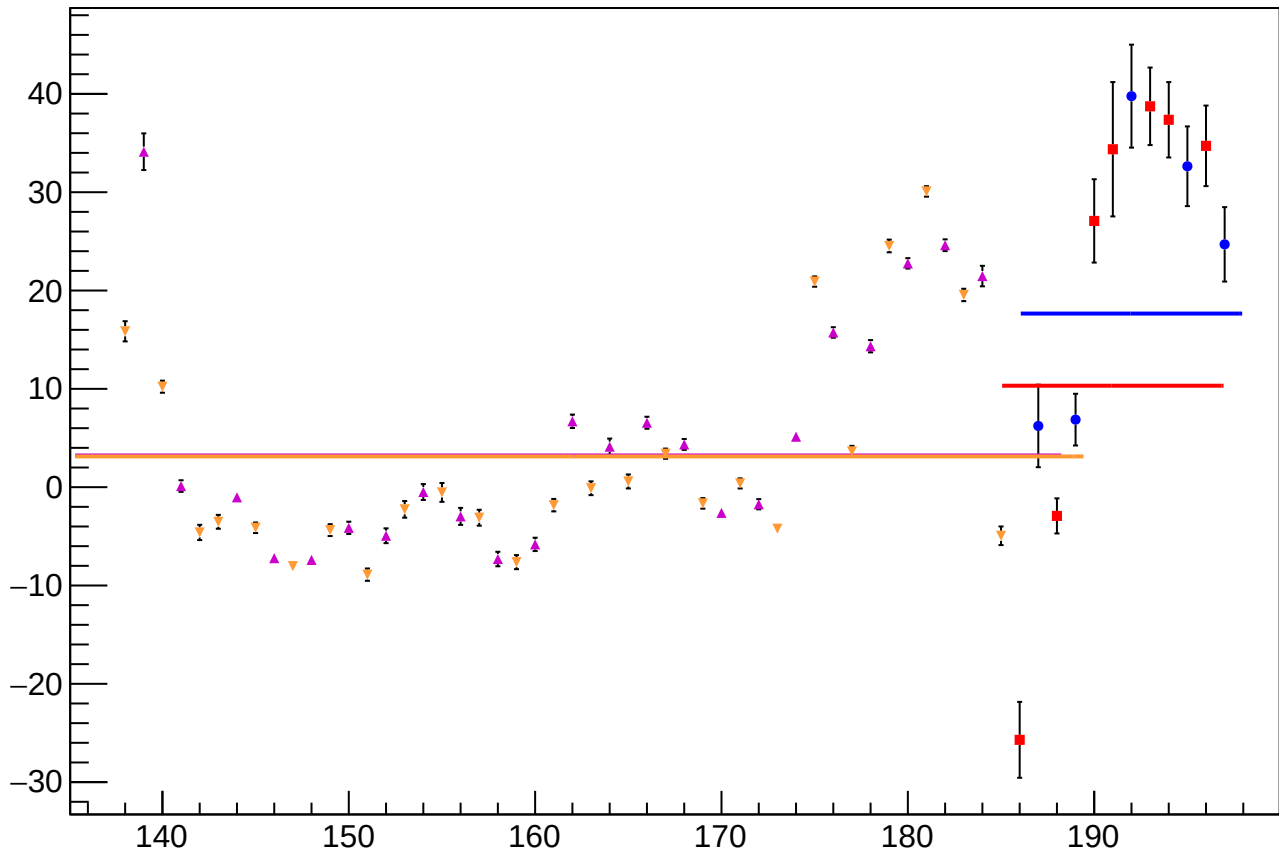
Right:  $-5.927 \pm 0.794$   $\chi^2/\text{NDF}: 1628.2/11$

In:  $-28.703 \pm 0.158$   $\chi^2/\text{NDF}: 14005.8/27$

Out:  $-28.492 \pm 0.155$   $\chi^2/\text{NDF}: 18888.3/31$

All:  $-28.596 \pm 0.111$   $\chi^2/\text{NDF}: 32895.0/59$

reg\_asym\_sam\_3748\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



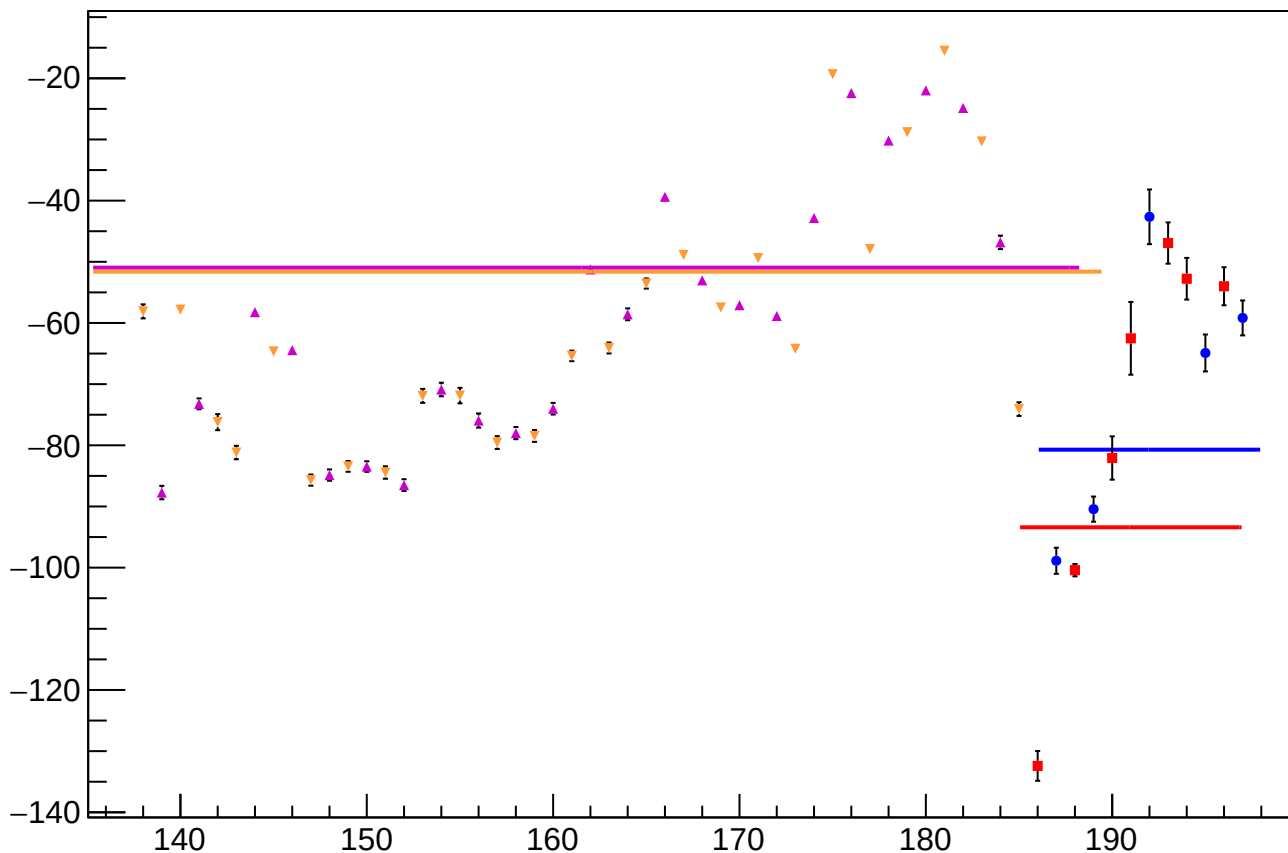
Right In: 17.657 $\pm$ 1.647  $\chi^2$ /NDF: 59.2/4  
 Left Out: 3.126 $\pm$ 0.125  $\chi^2$ /NDF:8049.0/24  
 Right Out: 10.319 $\pm$ 1.240  $\chi^2$ /NDF: 307.3/6  
 Left In: 3.224 $\pm$ 0.127  $\chi^2$ /NDF:6274.0/22

Left: 3.174 $\pm$ 0.089  $\chi^2$ /NDF: 14323.3/47  
 Right: 12.974 $\pm$ 0.991  $\chi^2$ /NDF: 379.2/11

In: 3.309 $\pm$ 0.126  $\chi^2$ /NDF:6409.5/27  
 Out: 3.198 $\pm$ 0.124  $\chi^2$ /NDF:8389.7/31

All: 3.252 $\pm$ 0.088  $\chi^2$ /NDF: 14799.6/59

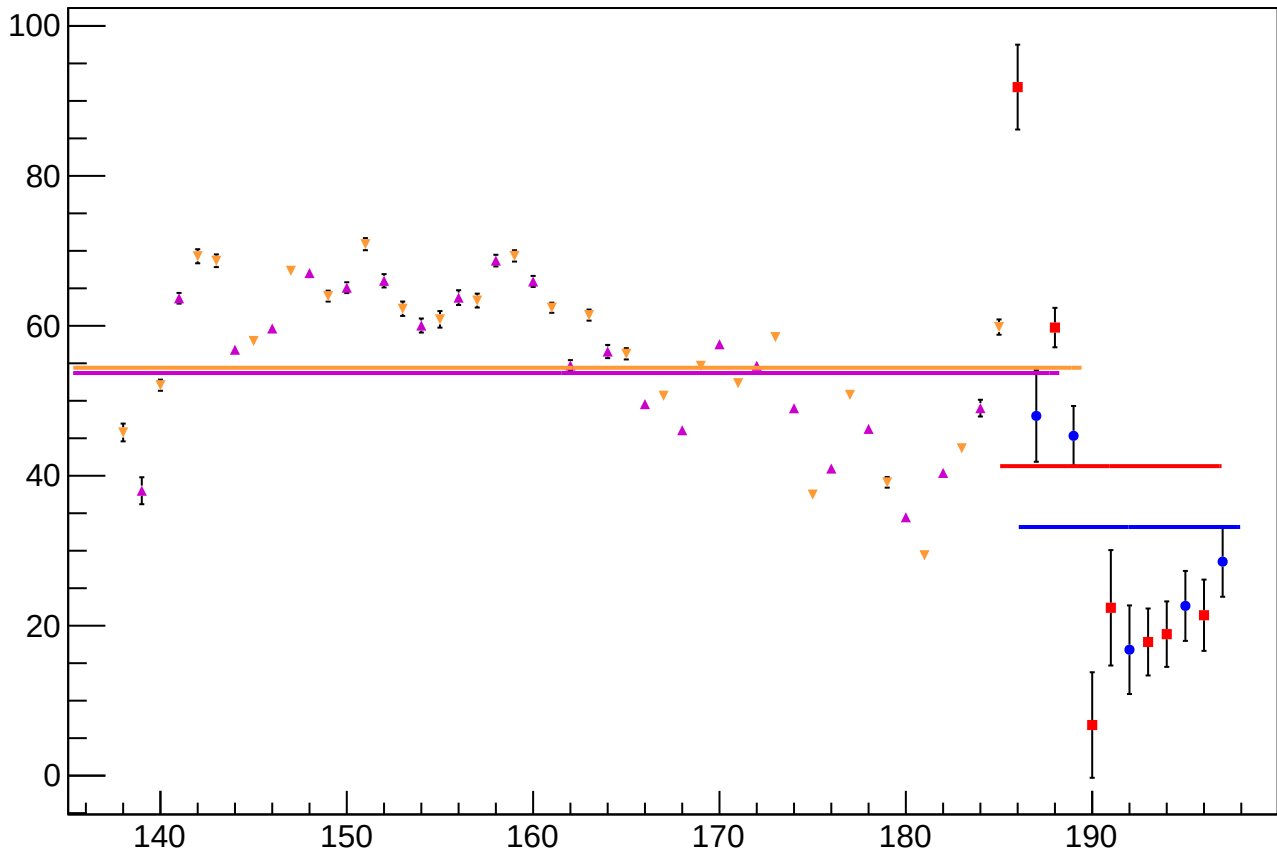
reg\_asym\_sam\_3748\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-80.713 \pm 1.164$   $\chi^2/\text{NDF}$ : 251.7/4  
 Left Out:  $-51.610 \pm 0.158$   $\chi^2/\text{NDF}$ : 19384.9/24  
 Right Out:  $-93.406 \pm 0.808$   $\chi^2/\text{NDF}$ : 834.4/6  
 Left In:  $-50.954 \pm 0.159$   $\chi^2/\text{NDF}$ : 17472.2/22

Left:  $-51.285 \pm 0.112$   $\chi^2/\text{NDF}$ : 36865.6/47  
 Right:  $-89.281 \pm 0.664$   $\chi^2/\text{NDF}$ : 1166.3/11  
 In:  $-51.502 \pm 0.158$   $\chi^2/\text{NDF}$ : 18365.3/27  
 Out:  $-53.153 \pm 0.155$   $\chi^2/\text{NDF}$ : 22798.3/31  
 All:  $-52.342 \pm 0.111$   $\chi^2/\text{NDF}$ : 41219.2/59

reg\_asym\_sam\_3748\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected

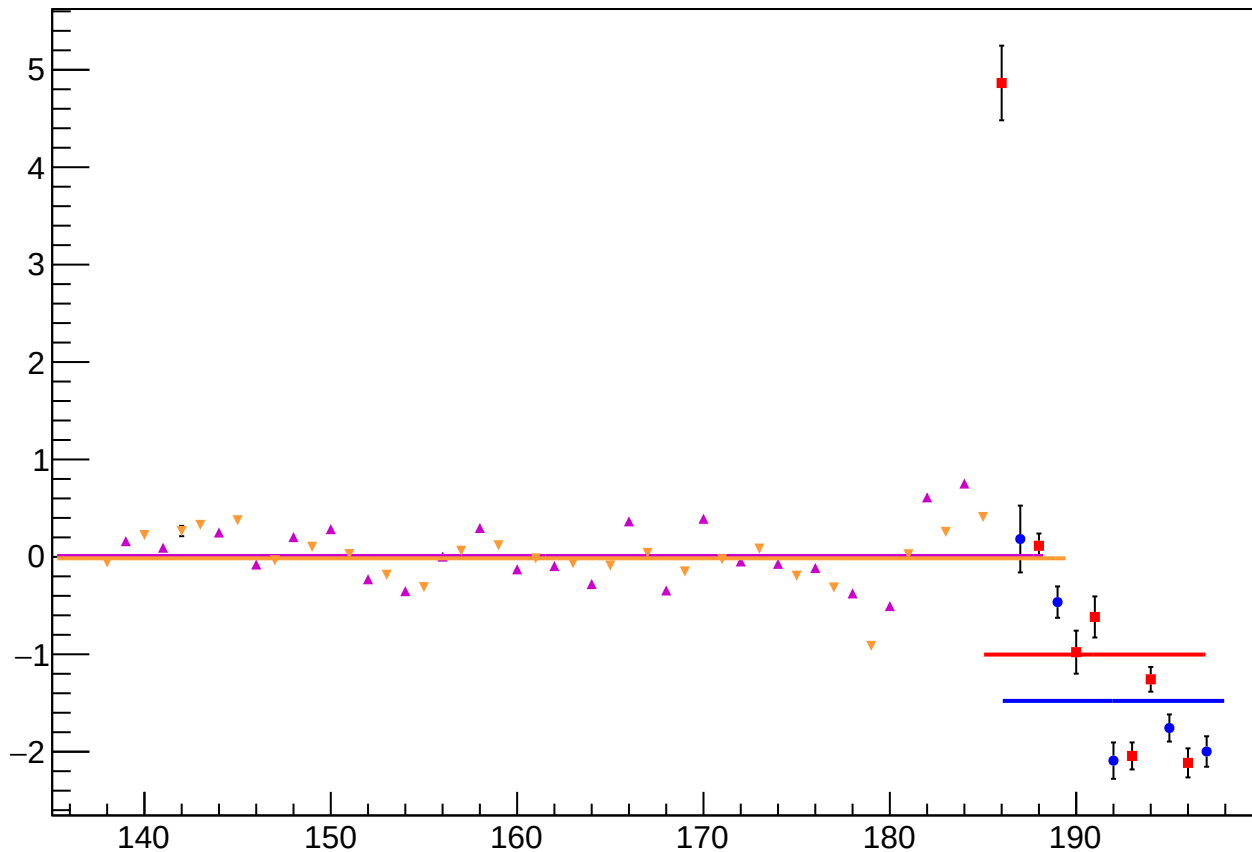


Right In: 33.164 $\pm$ 2.182  $\chi^2$ /NDF: 28.9/4  
 Left Out: 54.407 $\pm$ 0.141  $\chi^2$ /NDF:6200.4/24  
 Right Out: 41.285 $\pm$ 1.668  $\chi^2$ /NDF: 230.6/6  
 Left In: 53.704 $\pm$ 0.143  $\chi^2$ /NDF:4603.5/22

Left: 54.060 $\pm$ 0.100  $\chi^2$ /NDF: 10816.3/47  
 Right: 38.291 $\pm$ 1.325  $\chi^2$ /NDF: 268.3/11  
 In: 53.616 $\pm$ 0.142  $\chi^2$ /NDF:4720.6/27  
 Out: 54.314 $\pm$ 0.140  $\chi^2$ /NDF:6492.6/31  
 All: 53.971 $\pm$ 0.100  $\chi^2$ /NDF: 11225.4/59



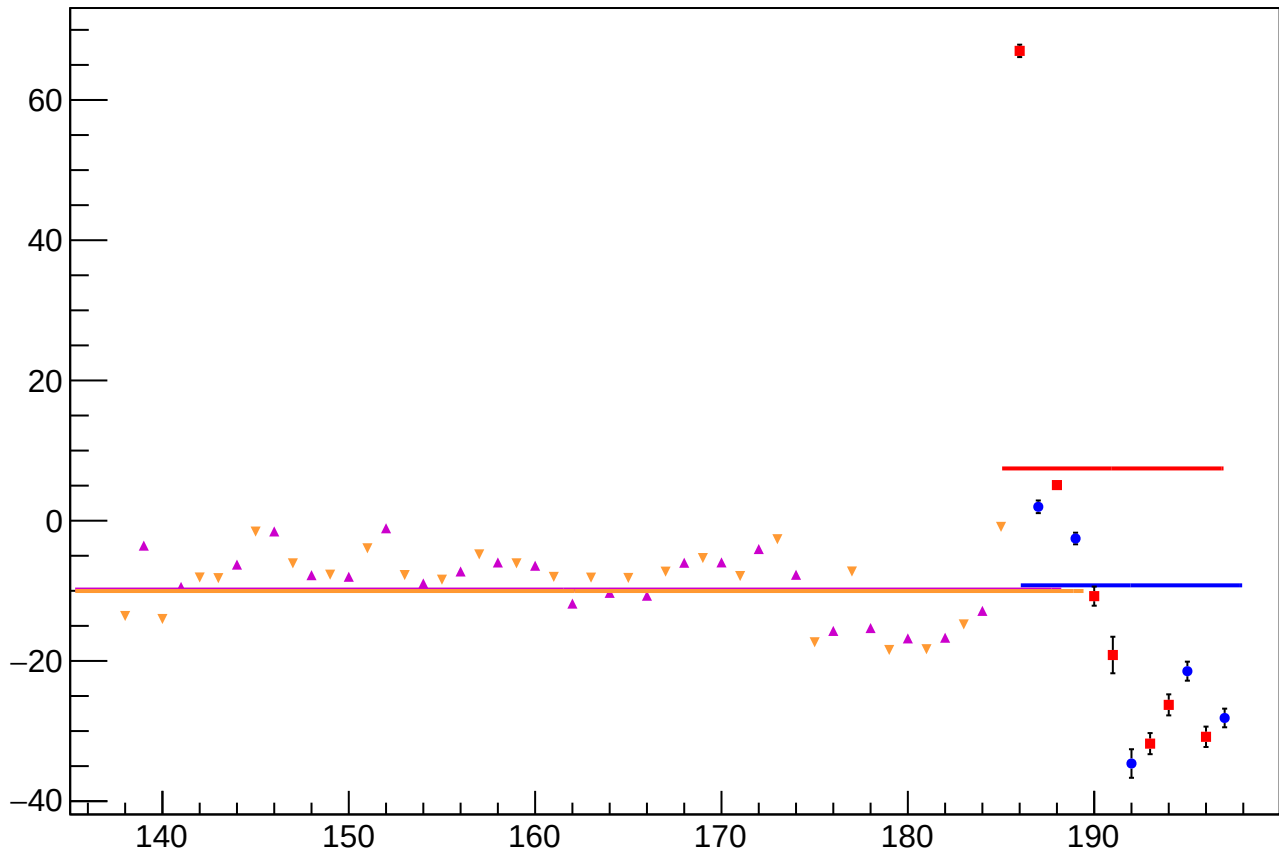
reg\_asym\_sam\_3748\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-1.478 \pm 0.077$   $\chi^2/\text{NDF}: 89.0/4$   
 Left Out:  $-0.015 \pm 0.006$   $\chi^2/\text{NDF}: 1645.9/24$   
 Right Out:  $-1.003 \pm 0.061$   $\chi^2/\text{NDF}: 432.7/6$   
 Left In:  $0.009 \pm 0.007$   $\chi^2/\text{NDF}: 2228.9/22$

Left:  $-0.003 \pm 0.005$   $\chi^2/\text{NDF}: 3881.7/47$   
 Right:  $-1.185 \pm 0.048$   $\chi^2/\text{NDF}: 545.2/11$   
 In:  $-0.001 \pm 0.007$   $\chi^2/\text{NDF}: 2688.0/27$   
 Out:  $-0.026 \pm 0.006$   $\chi^2/\text{NDF}: 2341.2/31$   
 All:  $-0.014 \pm 0.005$   $\chi^2/\text{NDF}: 5036.5/59$

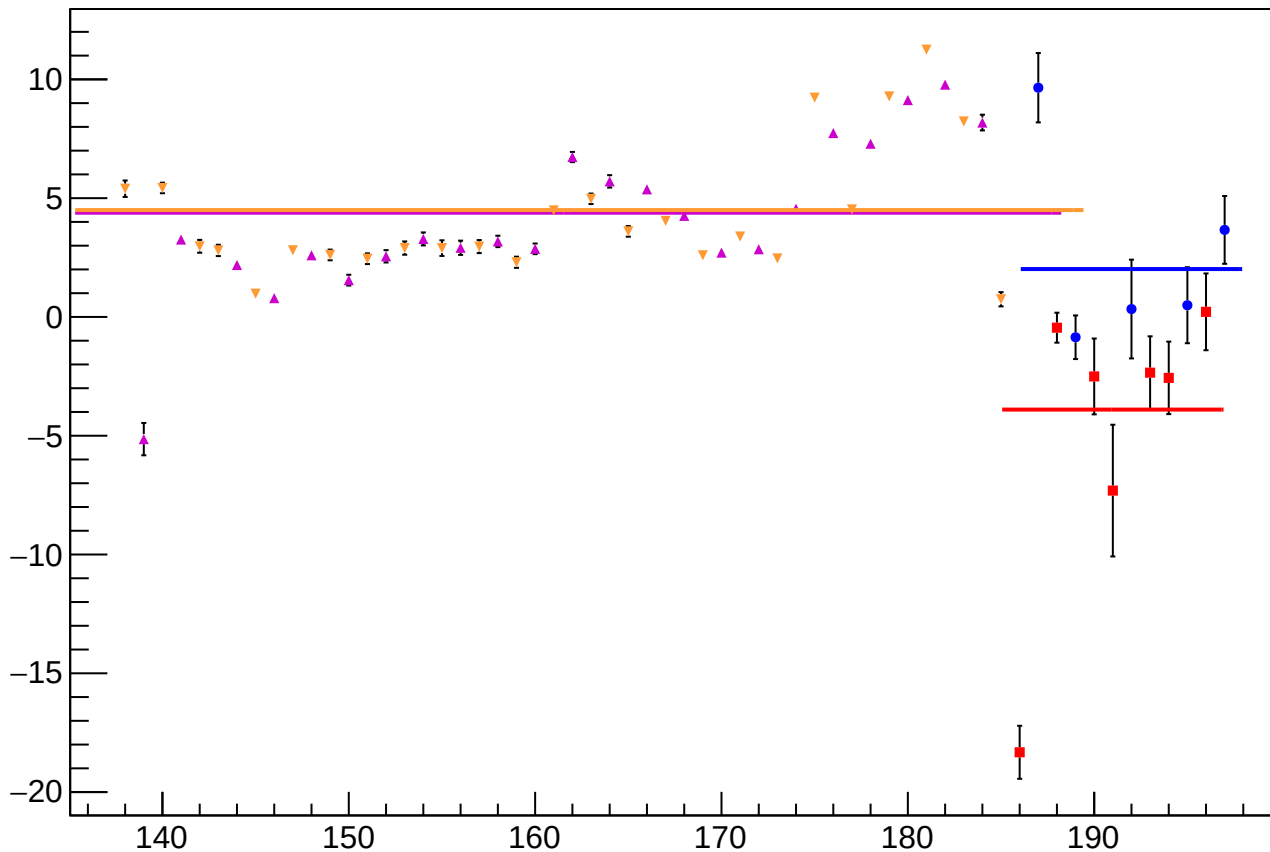
reg\_asym\_sam\_1526\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-9.219 \pm 0.498$   $\chi^2/\text{NDF}: 658.8/4$   
 Left Out:  $-10.030 \pm 0.051$   $\chi^2/\text{NDF}: 12530.2/24$   
 Right Out:  $7.451 \pm 0.346$   $\chi^2/\text{NDF}: 6718.0/6$   
 Left In:  $-9.820 \pm 0.051$   $\chi^2/\text{NDF}: 9468.8/22$

Left:  $-9.926 \pm 0.036$   $\chi^2/\text{NDF}: 22007.5/47$   
 Right:  $2.023 \pm 0.284$   $\chi^2/\text{NDF}: 8133.1/11$   
 In:  $-9.814 \pm 0.051$   $\chi^2/\text{NDF}: 10129.1/27$   
 Out:  $-9.662 \pm 0.050$   $\chi^2/\text{NDF}: 21748.2/31$   
 All:  $-9.737 \pm 0.036$   $\chi^2/\text{NDF}: 31881.8/59$

reg\_asym\_sam\_1526\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $2.016 \pm 0.601$   $\chi^2/\text{NDF}: 40.0/4$

Left Out:  $4.499 \pm 0.041$   $\chi^2/\text{NDF}: 4809.3/24$

Right Out:  $-3.899 \pm 0.444$   $\chi^2/\text{NDF}: 207.5/6$

Left In:  $4.388 \pm 0.041$   $\chi^2/\text{NDF}: 4266.4/22$

Left:  $4.444 \pm 0.029$   $\chi^2/\text{NDF}: 9079.4/47$

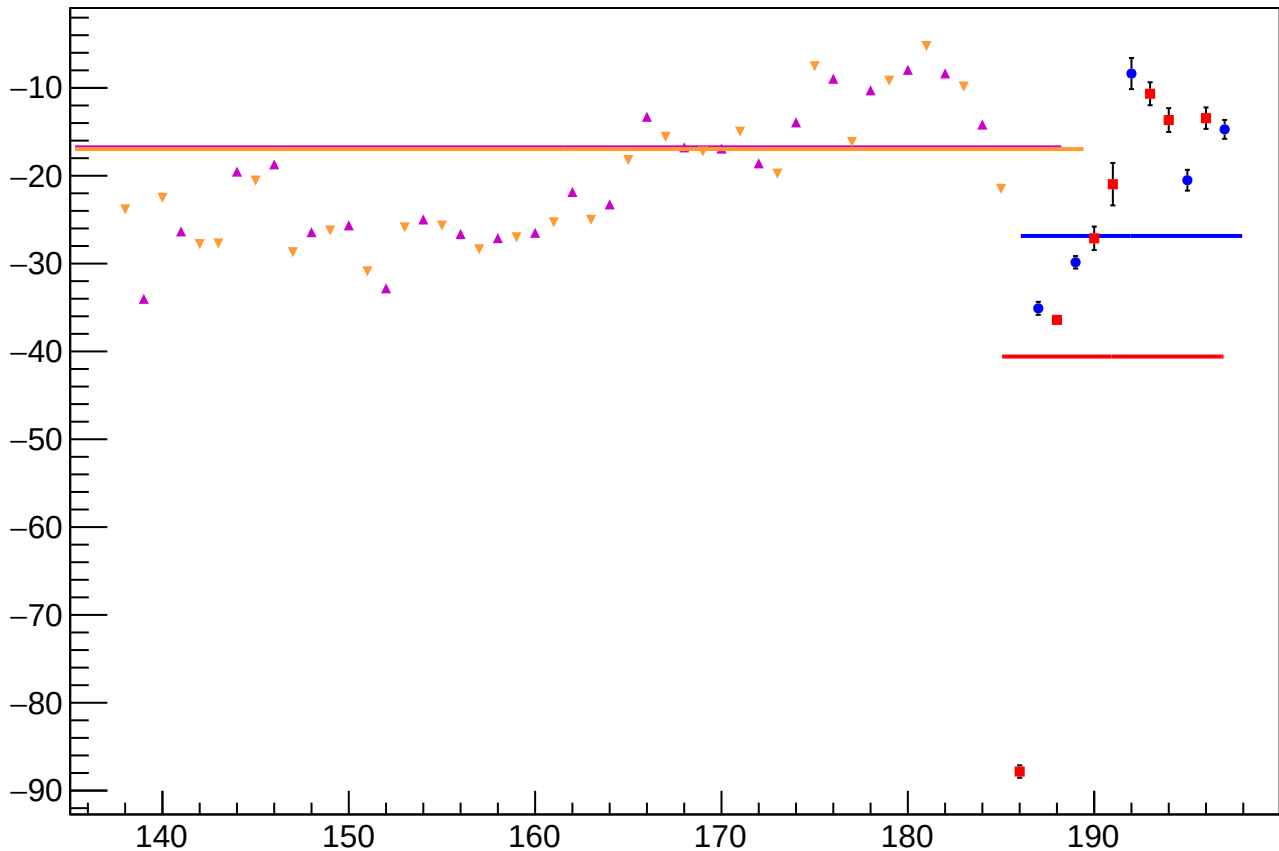
Right:  $-1.812 \pm 0.357$   $\chi^2/\text{NDF}: 310.2/11$

In:  $4.377 \pm 0.041$   $\chi^2/\text{NDF}: 4321.9/27$

Out:  $4.428 \pm 0.041$   $\chi^2/\text{NDF}: 5371.9/31$

All:  $4.403 \pm 0.029$   $\chi^2/\text{NDF}: 9694.7/59$

reg\_asym\_sam\_1526\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-26.855 \pm 0.419$   $\chi^2/\text{NDF}$ : 406.6/4

Left Out:  $-16.965 \pm 0.051$   $\chi^2/\text{NDF}$ : 21902.1/24

Right Out:  $-40.584 \pm 0.286$   $\chi^2/\text{NDF}$ : 6129.3/6

Left In:  $-16.764 \pm 0.051$   $\chi^2/\text{NDF}$ : 19037.7/22

Left:  $-16.865 \pm 0.036$   $\chi^2/\text{NDF}$ : 40947.4/47

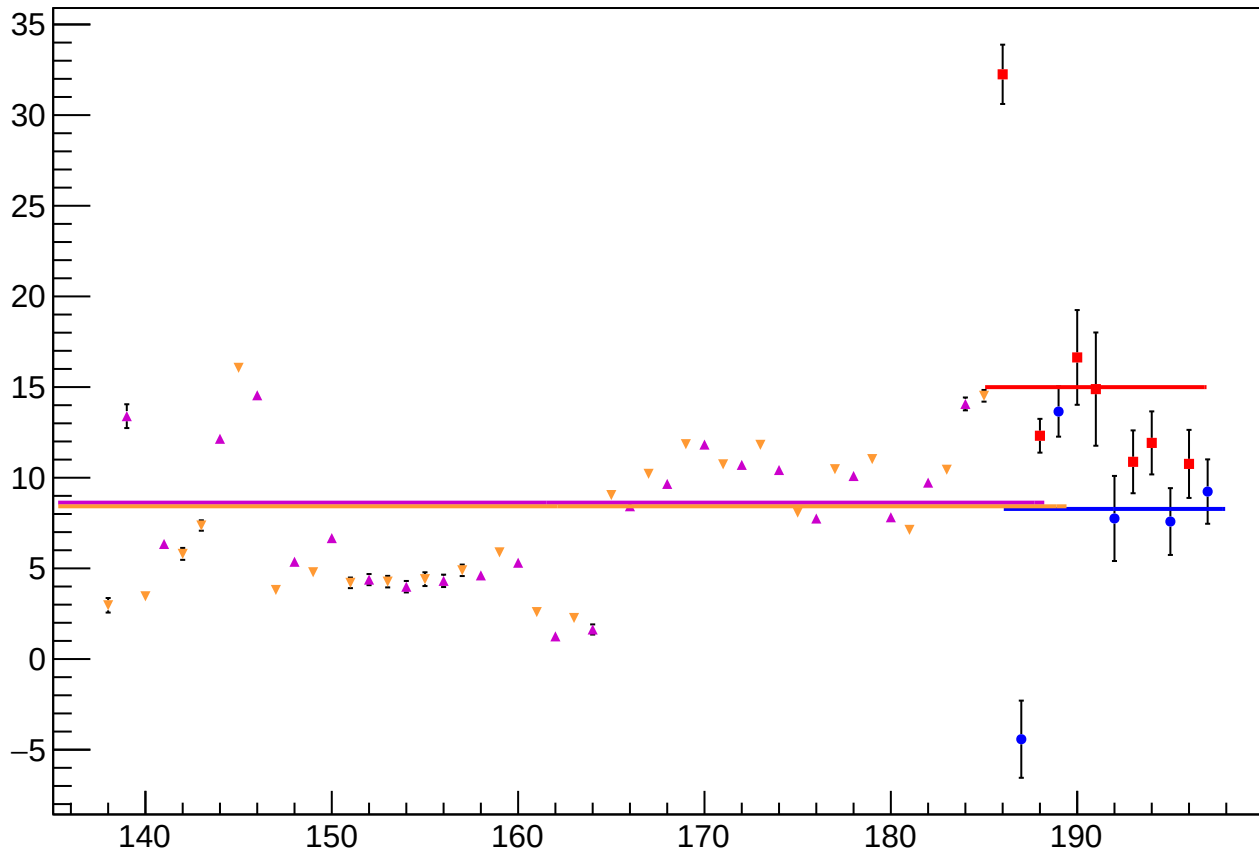
Right:  $-36.224 \pm 0.236$   $\chi^2/\text{NDF}$ : 7268.9/11

In:  $-16.913 \pm 0.051$   $\chi^2/\text{NDF}$ : 20016.0/27

Out:  $-17.698 \pm 0.050$   $\chi^2/\text{NDF}$ : 34650.7/31

All:  $-17.310 \pm 0.036$   $\chi^2/\text{NDF}$ : 54786.6/59

reg\_asym\_sam\_1526\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 8.279+/-0.807  $\chi^2/\text{NDF}$ : 51.1/4

Left Out: 8.424+/-0.046  $\chi^2/\text{NDF}$ : 6478.6/24

Right Out: 14.996+/-0.606  $\chi^2/\text{NDF}$ : 133.9/6

Left In: 8.626+/-0.046  $\chi^2/\text{NDF}$ : 5531.9/22

Left: 8.524+/-0.032  $\chi^2/\text{NDF}$ : 12020.2/47

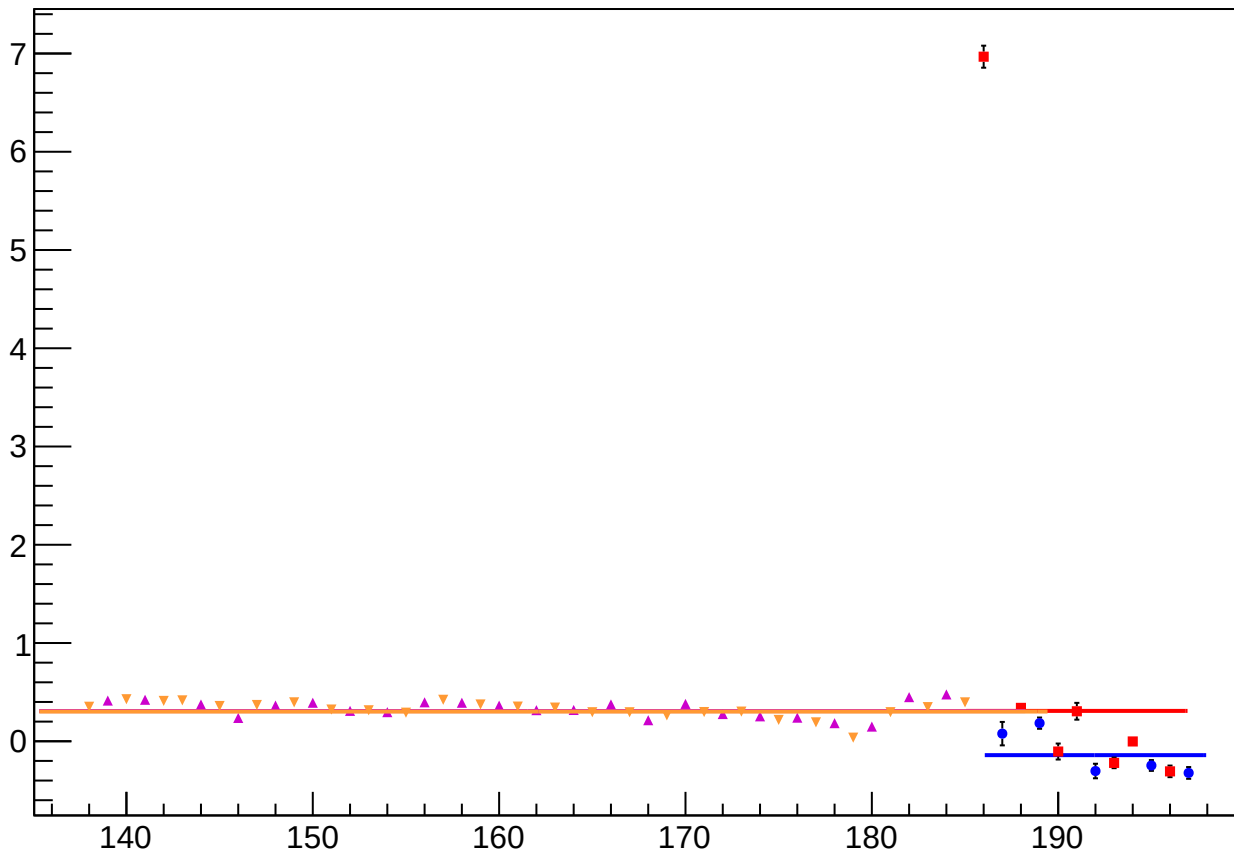
Right: 12.574+/-0.485  $\chi^2/\text{NDF}$ : 229.3/11

In: 8.625+/-0.046  $\chi^2/\text{NDF}$ : 5583.2/27

Out: 8.461+/-0.046  $\chi^2/\text{NDF}$ : 6729.4/31

All: 8.542+/-0.032  $\chi^2/\text{NDF}$ : 12319.0/59

reg\_asym\_sam\_1526\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.141 \pm 0.029$   $\chi^2/\text{NDF}$ : 53.2/4

Left Out:  $0.302 \pm 0.002$   $\chi^2/\text{NDF}$ : 1589.8/24

Right Out:  $0.309 \pm 0.023$   $\chi^2/\text{NDF}$ : 3792.3/6

Left In:  $0.307 \pm 0.002$   $\chi^2/\text{NDF}$ : 1716.8/22

Left:  $0.305 \pm 0.001$   $\chi^2/\text{NDF}$ : 3309.3/47

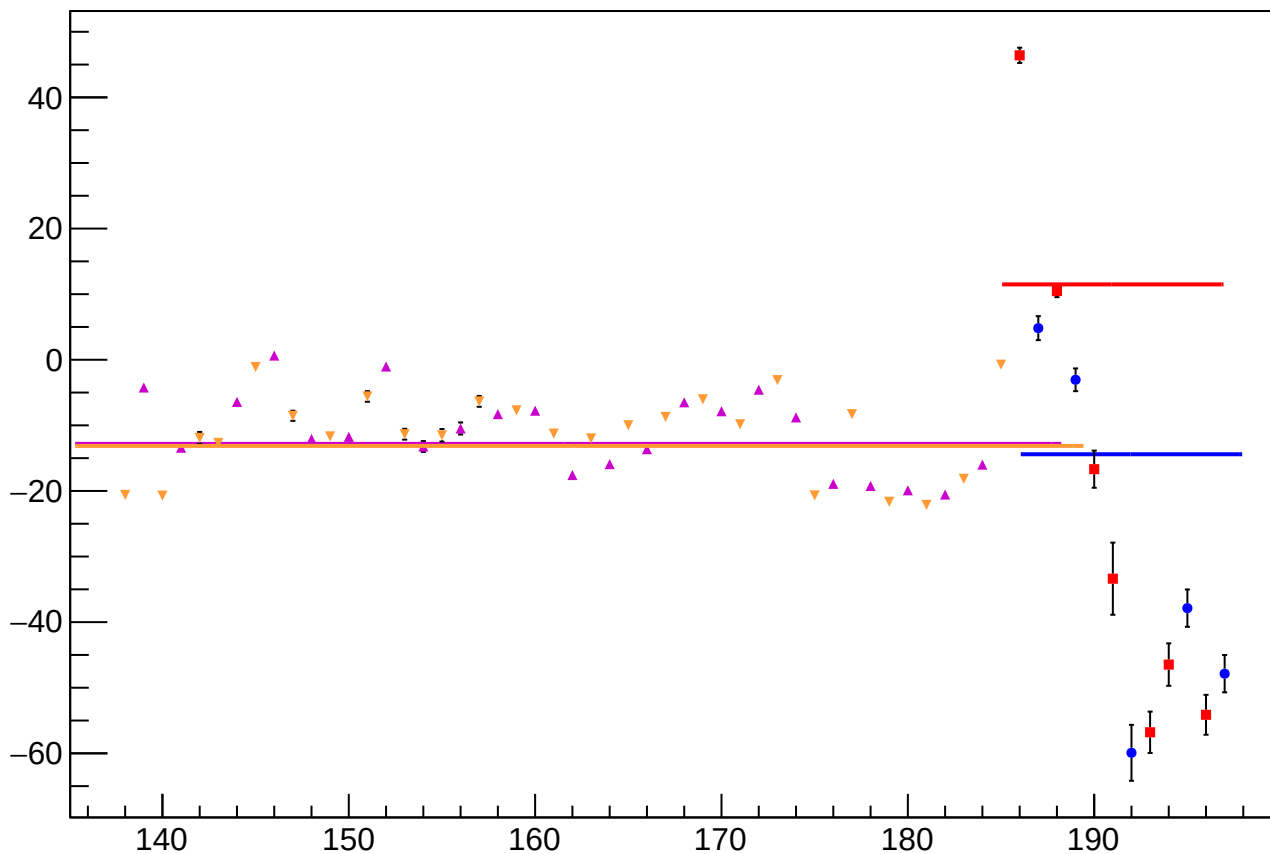
Right:  $0.137 \pm 0.018$   $\chi^2/\text{NDF}$ : 3991.8/11

In:  $0.305 \pm 0.002$   $\chi^2/\text{NDF}$ : 2003.4/27

Out:  $0.302 \pm 0.002$   $\chi^2/\text{NDF}$ : 5382.2/31

All:  $0.304 \pm 0.001$   $\chi^2/\text{NDF}$ : 7386.3/59

reg\_asym\_sam\_3726\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-14.407 \pm 1.035$   $\chi^2/\text{NDF}: 473.3/4$   
 Left Out:  $-13.133 \pm 0.094$   $\chi^2/\text{NDF}: 5974.5/24$   
 Right Out:  $11.489 \pm 0.653$   $\chi^2/\text{NDF}: 2318.2/6$   
 Left In:  $-12.823 \pm 0.095$   $\chi^2/\text{NDF}: 4841.5/22$

Left:  $-12.979 \pm 0.067$   $\chi^2/\text{NDF}: 10821.3/47$

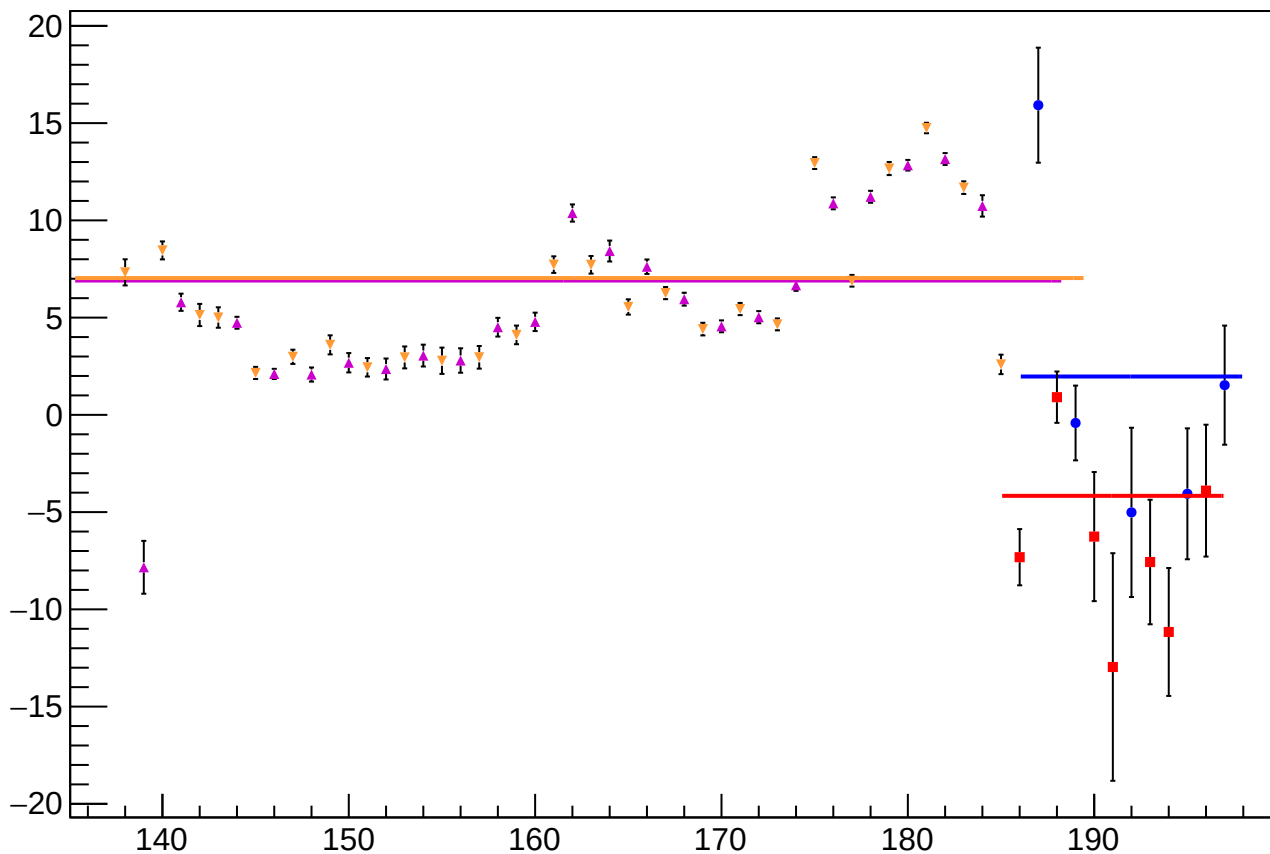
Right:  $4.122 \pm 0.552$   $\chi^2/\text{NDF}: 3239.4/11$

In:  $-12.836 \pm 0.094$   $\chi^2/\text{NDF}: 5317.1/27$

Out:  $-12.635 \pm 0.093$   $\chi^2/\text{NDF}: 9687.1/31$

All:  $-12.734 \pm 0.066$   $\chi^2/\text{NDF}: 15006.5/59$

reg\_asym\_sam\_3726\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.972 $\pm$ 1.257  $\chi^2$ /NDF: 29.6/4

Left Out: 7.034 $\pm$ 0.077  $\chi^2$ /NDF:2657.5/24

Right Out: -4.164 $\pm$ 0.831  $\chi^2$ /NDF: 27.9/6

Left In: 6.906 $\pm$ 0.077  $\chi^2$ /NDF:2442.8/22

Left: 6.970 $\pm$ 0.055  $\chi^2$ /NDF: 5101.7/47

Right: -2.299 $\pm$ 0.693  $\chi^2$ /NDF: 74.1/11

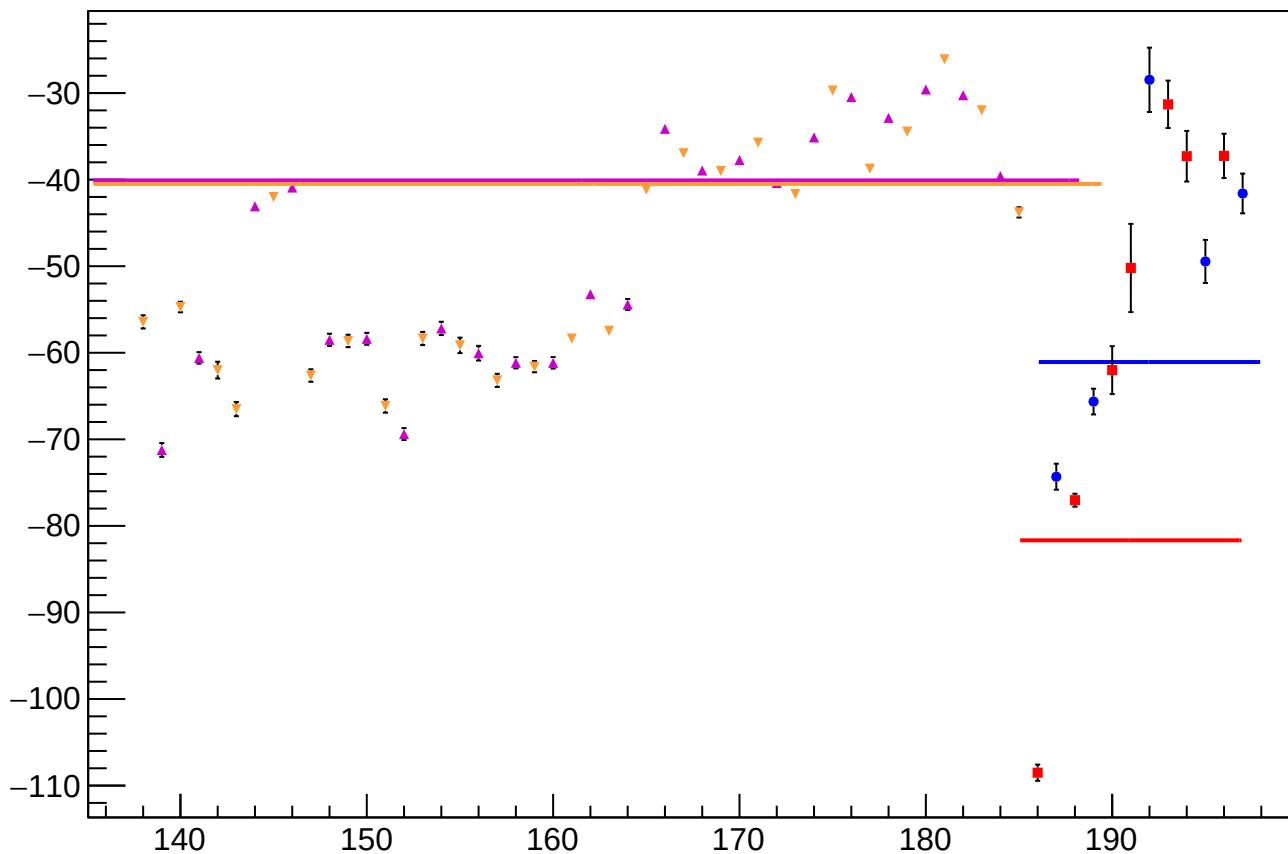
In: 6.888 $\pm$ 0.077  $\chi^2$ /NDF:2487.8/27

Out: 6.938 $\pm$ 0.077  $\chi^2$ /NDF:2865.6/31

All: 6.913 $\pm$ 0.055  $\chi^2$ /NDF: 5353.6/59



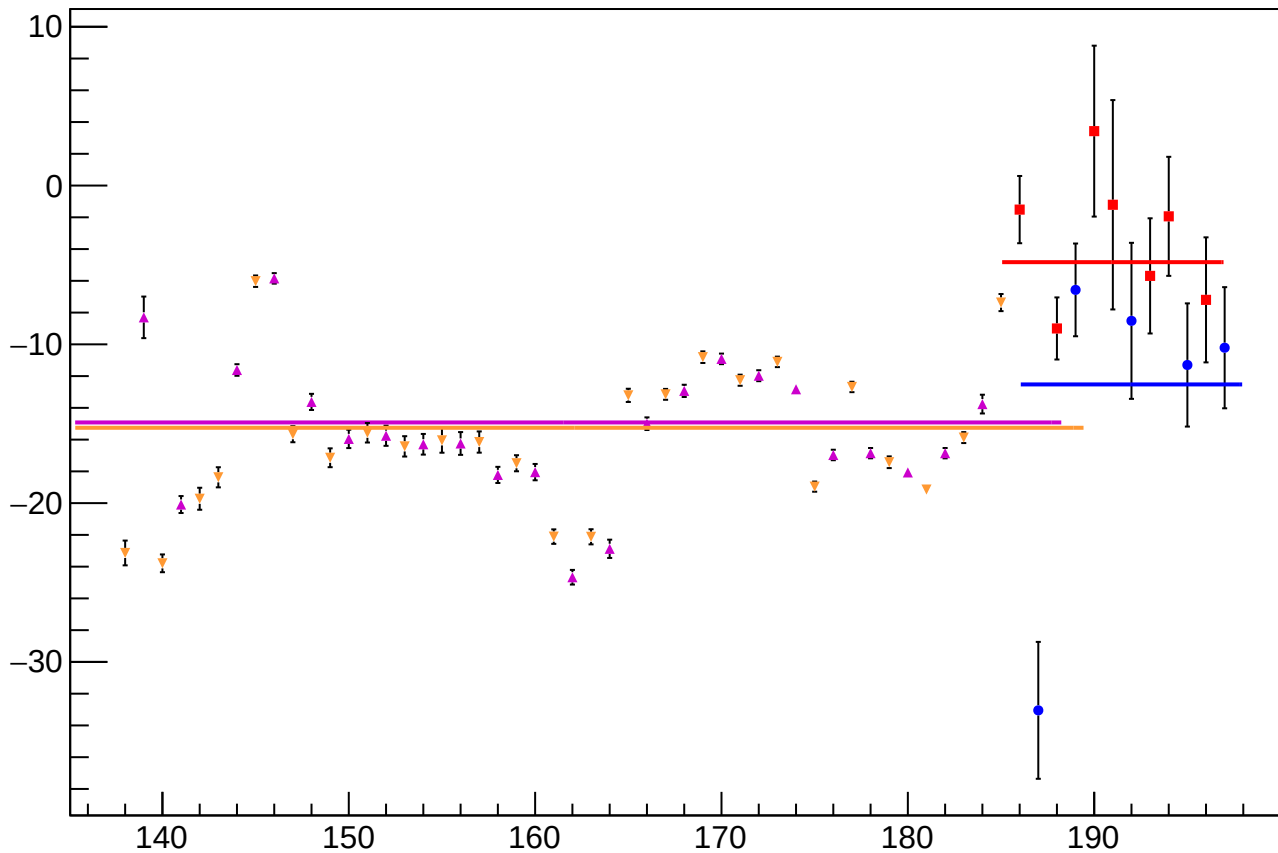
reg\_asym\_sam\_3726\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-61.069 \pm 0.871$   $\chi^2/\text{NDF}$ : 257.9/4  
 Left Out:  $-40.492 \pm 0.095$   $\chi^2/\text{NDF}$ : 15435.0/24  
 Right Out:  $-81.666 \pm 0.536$   $\chi^2/\text{NDF}$ : 1819.2/6  
 Left In:  $-40.091 \pm 0.095$   $\chi^2/\text{NDF}$ : 14103.5/22

Left:  $-40.292 \pm 0.067$   $\chi^2/\text{NDF}$ : 29547.4/47  
 Right:  $-76.012 \pm 0.456$   $\chi^2/\text{NDF}$ : 2482.9/11  
 In:  $-40.339 \pm 0.095$   $\chi^2/\text{NDF}$ : 14934.9/27  
 Out:  $-41.743 \pm 0.093$   $\chi^2/\text{NDF}$ : 22982.3/31  
 All:  $-41.051 \pm 0.066$   $\chi^2/\text{NDF}$ : 38028.7/59

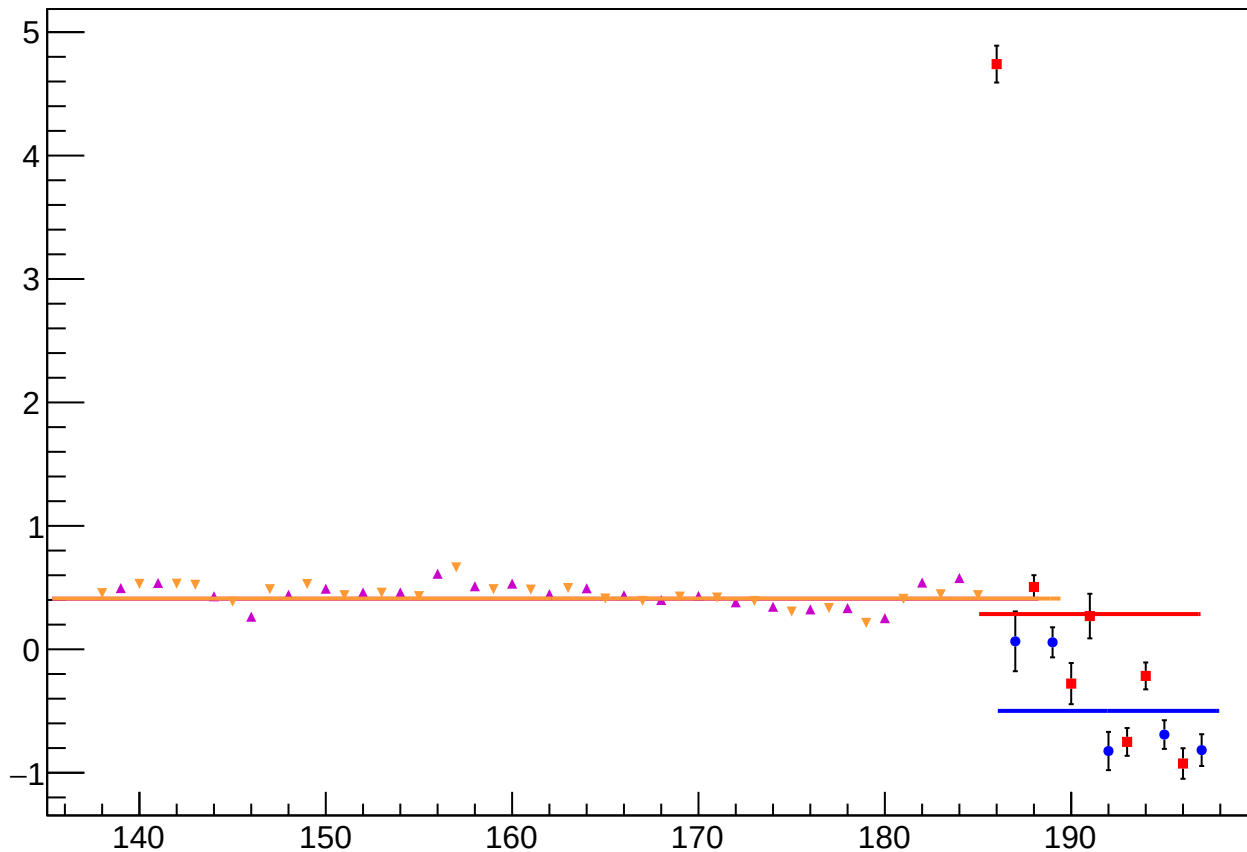
reg\_asym\_sam\_3726\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-12.524 \pm 1.696$   $\chi^2/\text{NDF}: 28.0/4$   
 Left Out:  $-15.254 \pm 0.086$   $\chi^2/\text{NDF}: 2594.4/24$   
 Right Out:  $-4.824 \pm 1.152$   $\chi^2/\text{NDF}: 10.7/6$   
 Left In:  $-14.919 \pm 0.087$   $\chi^2/\text{NDF}: 2207.7/22$

Left:  $-15.088 \pm 0.061$   $\chi^2/\text{NDF}: 4809.7/47$   
 Right:  $-7.254 \pm 0.953$   $\chi^2/\text{NDF}: 52.7/11$   
 In:  $-14.913 \pm 0.086$   $\chi^2/\text{NDF}: 2237.7/27$   
 Out:  $-15.197 \pm 0.086$   $\chi^2/\text{NDF}: 2686.6/31$   
 All:  $-15.056 \pm 0.061$   $\chi^2/\text{NDF}: 4929.7/59$

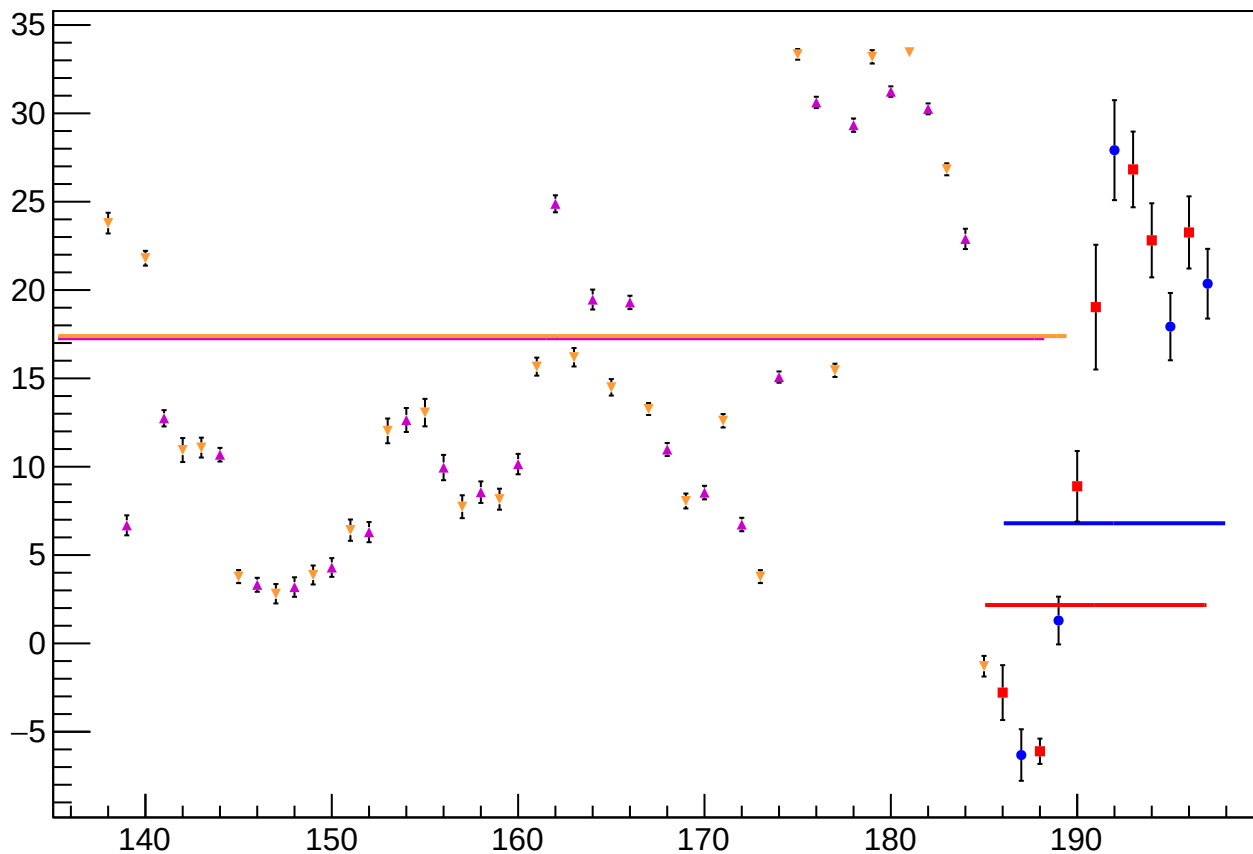
reg\_asym\_sam\_3726\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.499 \pm 0.062$   $\chi^2/\text{NDF}$ : 39.4/4  
 Left Out:  $0.411 \pm 0.004$   $\chi^2/\text{NDF}$ : 428.8/24  
 Right Out:  $0.286 \pm 0.047$   $\chi^2/\text{NDF}$ : 1107.8/6  
 Left In:  $0.409 \pm 0.004$   $\chi^2/\text{NDF}$ : 561.9/22

Left:  $0.410 \pm 0.003$   $\chi^2/\text{NDF}$ : 990.8/47  
 Right:  $-0.002 \pm 0.038$   $\chi^2/\text{NDF}$ : 1248.6/11  
 In:  $0.406 \pm 0.004$   $\chi^2/\text{NDF}$ : 815.3/27  
 Out:  $0.410 \pm 0.004$   $\chi^2/\text{NDF}$ : 1543.6/31  
 All:  $0.408 \pm 0.003$   $\chi^2/\text{NDF}$ : 2359.7/59

reg\_asym\_sam\_15\_48\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $6.799 \pm 0.773$   $\chi^2/\text{NDF}$ : 234.5/4

Left Out:  $17.393 \pm 0.087$   $\chi^2/\text{NDF}$ : 16305.7/24

Right Out:  $2.171 \pm 0.544$   $\chi^2/\text{NDF}$ : 513.6/6

Left In:  $17.271 \pm 0.088$   $\chi^2/\text{NDF}$ : 12892.2/22

Left:  $17.333 \pm 0.062$   $\chi^2/\text{NDF}$ : 29198.9/47

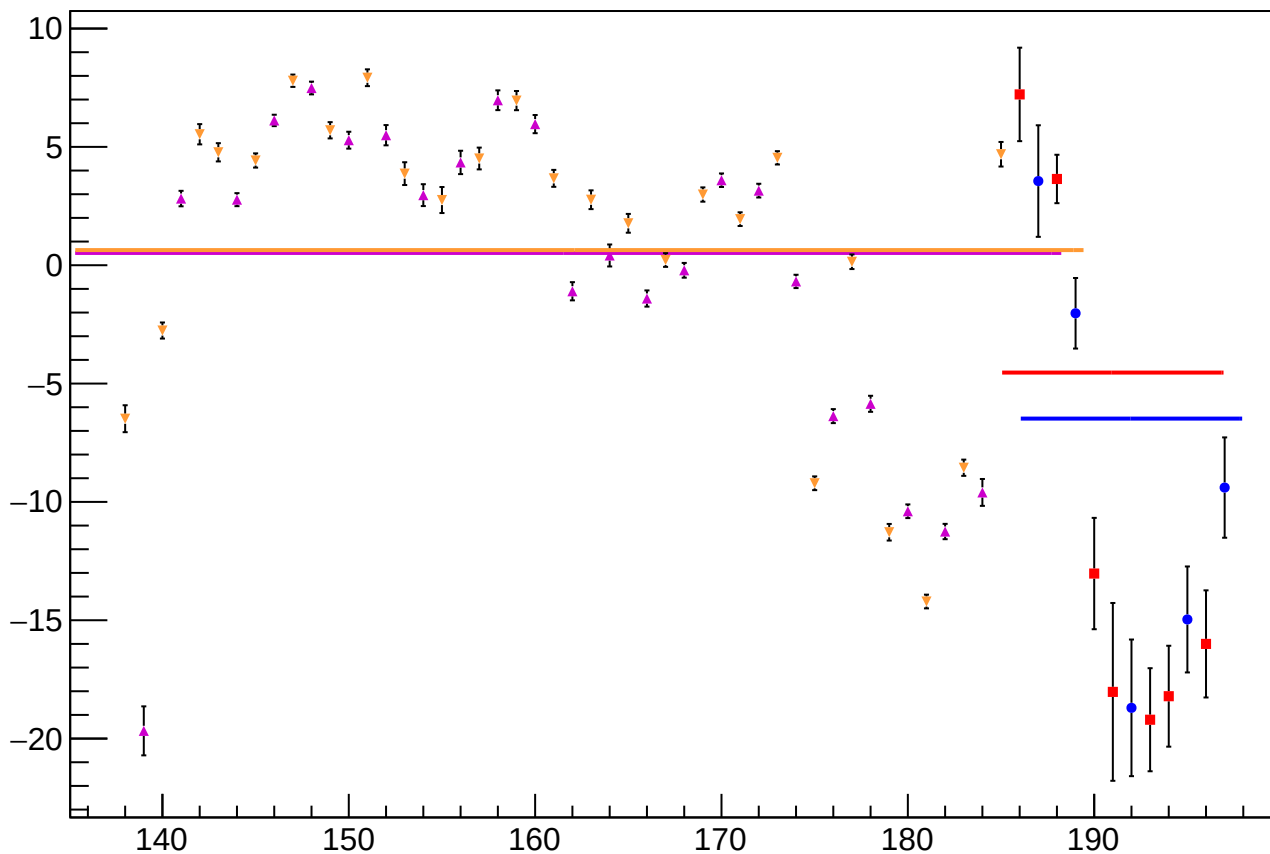
Right:  $3.705 \pm 0.445$   $\chi^2/\text{NDF}$ : 772.1/11

In:  $17.135 \pm 0.088$   $\chi^2/\text{NDF}$ : 13307.9/27

Out:  $17.012 \pm 0.086$   $\chi^2/\text{NDF}$ : 17582.2/31

All:  $17.072 \pm 0.062$   $\chi^2/\text{NDF}$ : 30891.1/59

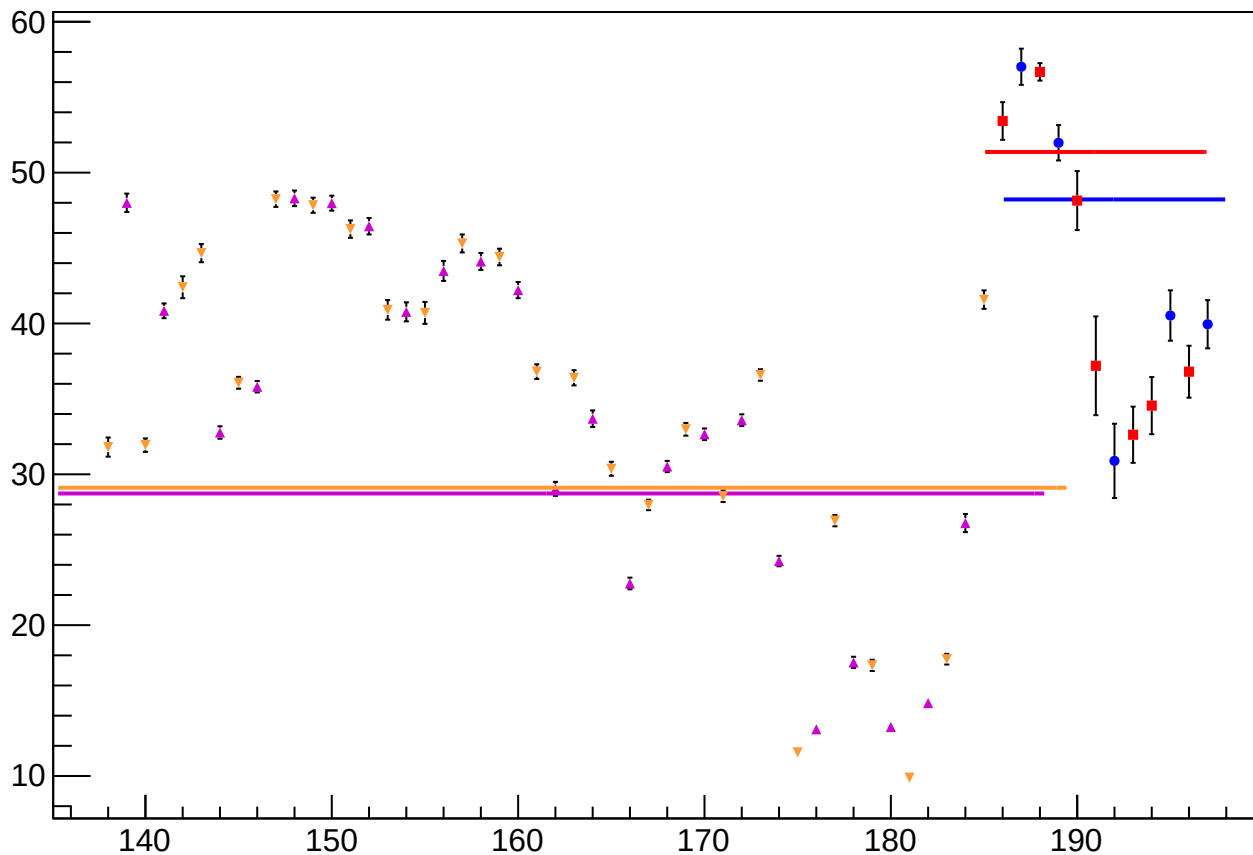
reg\_asym\_sam\_15\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-6.480 \pm 0.924$   $\chi^2/\text{NDF}$ : 61.2/4  
 Left Out:  $0.639 \pm 0.070$   $\chi^2/\text{NDF}$ : 8514.9/24  
 Right Out:  $-4.536 \pm 0.692$   $\chi^2/\text{NDF}$ : 237.5/6  
 Left In:  $0.519 \pm 0.071$   $\chi^2/\text{NDF}$ : 6776.8/22

Left:  $0.580 \pm 0.050$   $\chi^2/\text{NDF}$ : 15293.1/47  
 Right:  $-5.234 \pm 0.554$   $\chi^2/\text{NDF}$ : 301.5/11  
 In:  $0.479 \pm 0.070$   $\chi^2/\text{NDF}$ : 6895.1/27  
 Out:  $0.587 \pm 0.069$   $\chi^2/\text{NDF}$ : 8807.7/31  
 All:  $0.534 \pm 0.049$   $\chi^2/\text{NDF}$ : 15704.1/59

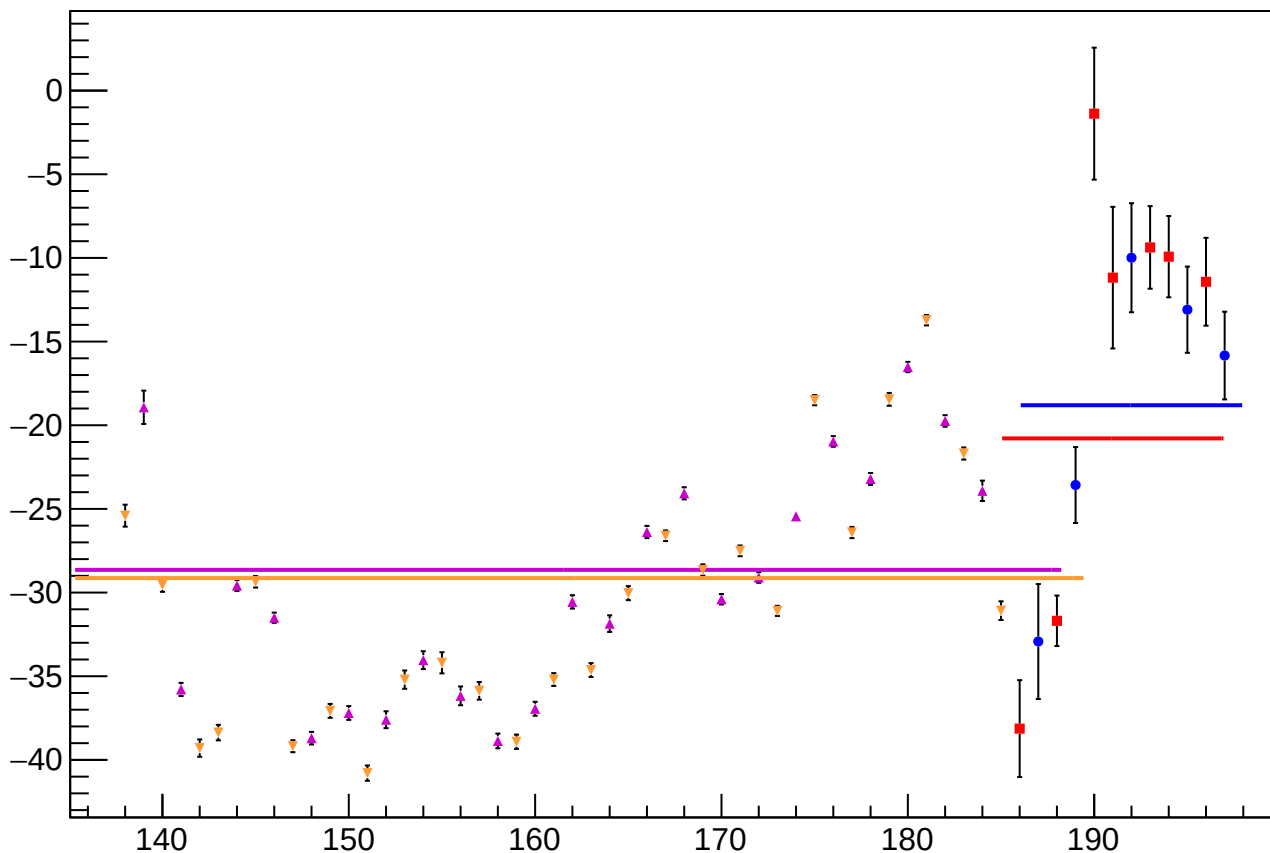
reg\_asym\_sam\_15\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 48.223 $\pm$ 0.654  $\chi^2$ /NDF: 161.7/4  
 Left Out: 29.110 $\pm$ 0.088  $\chi^2$ /NDF:18845.8/24  
 Right Out: 51.370 $\pm$ 0.452  $\chi^2$ /NDF: 360.1/6  
 Left In: 28.728 $\pm$ 0.089  $\chi^2$ /NDF:17037.4/22

Left: 28.921 $\pm$ 0.062  $\chi^2$ /NDF: 35892.6/47  
 Right: 50.351 $\pm$ 0.372  $\chi^2$ /NDF: 537.5/11  
 In: 29.081 $\pm$ 0.088  $\chi^2$ /NDF:18072.1/27  
 Out: 29.920 $\pm$ 0.086  $\chi^2$ /NDF:21540.1/31  
 All: 29.509 $\pm$ 0.062  $\chi^2$ /NDF: 39658.6/59

reg\_asym\_sam\_15\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



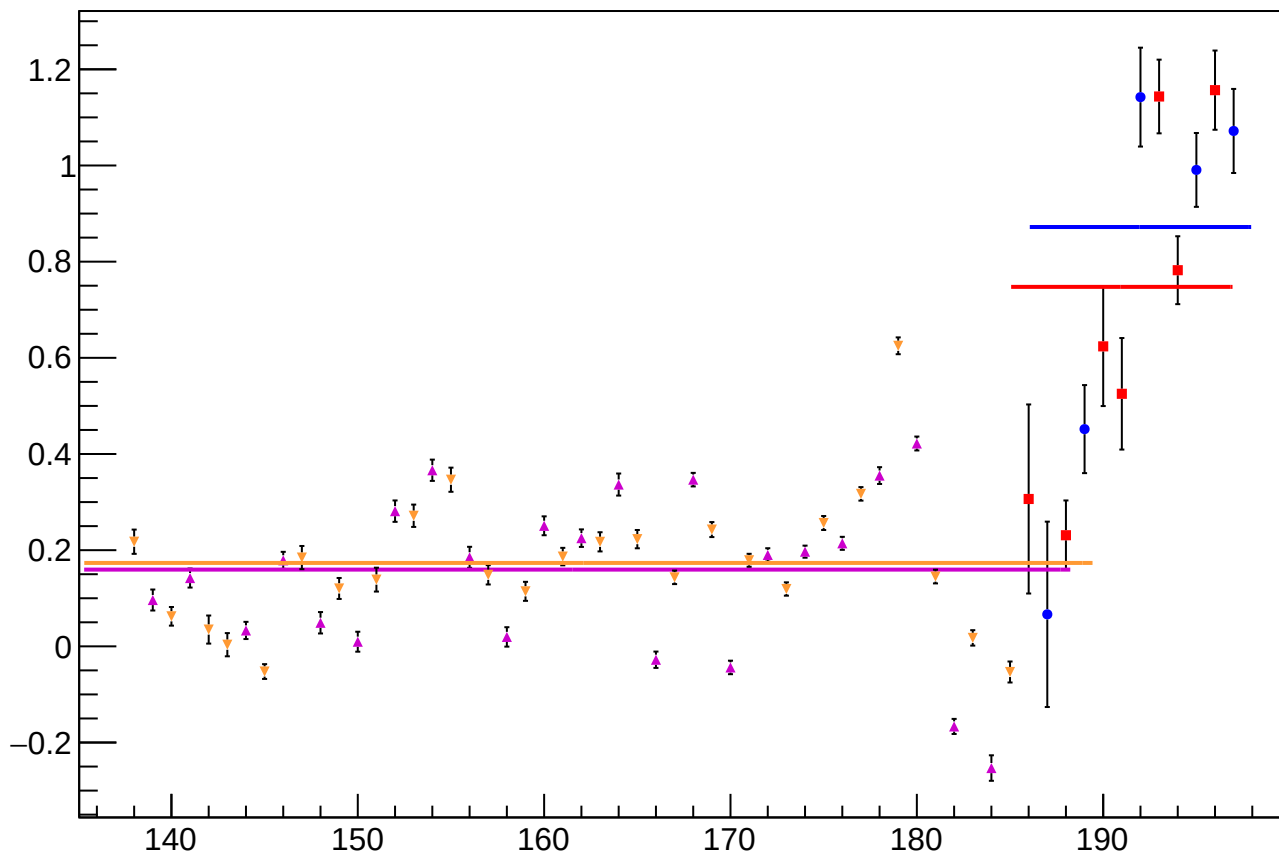
Right In:  $-18.804 \pm 1.222$   $\chi^2/\text{NDF}: 34.8/4$   
 Left Out:  $-29.134 \pm 0.078$   $\chi^2/\text{NDF}: 8998.0/24$   
 Right Out:  $-20.786 \pm 0.930$   $\chi^2/\text{NDF}: 171.5/6$   
 Left In:  $-28.645 \pm 0.080$   $\chi^2/\text{NDF}: 6693.5/22$

Left:  $-28.893 \pm 0.056$   $\chi^2/\text{NDF}: 15710.7/47$   
 Right:  $-20.059 \pm 0.740$   $\chi^2/\text{NDF}: 208.0/11$

In:  $-28.603 \pm 0.079$   $\chi^2/\text{NDF}: 6792.9/27$   
 Out:  $-29.075 \pm 0.078$   $\chi^2/\text{NDF}: 9249.7/31$

All:  $-28.843 \pm 0.056$   $\chi^2/\text{NDF}: 16060.5/59$

reg\_asym\_sam\_15\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.872 \pm 0.043$   $\chi^2/\text{NDF}: 53.0/4$

Left Out:  $0.173 \pm 0.004$   $\chi^2/\text{NDF}: 1468.8/24$

Right Out:  $0.748 \pm 0.034$   $\chi^2/\text{NDF}: 112.3/6$

Left In:  $0.160 \pm 0.004$   $\chi^2/\text{NDF}: 2063.7/22$

Left:  $0.167 \pm 0.003$   $\chi^2/\text{NDF}: 3539.9/47$

Right:  $0.795 \pm 0.027$   $\chi^2/\text{NDF}: 170.5/11$

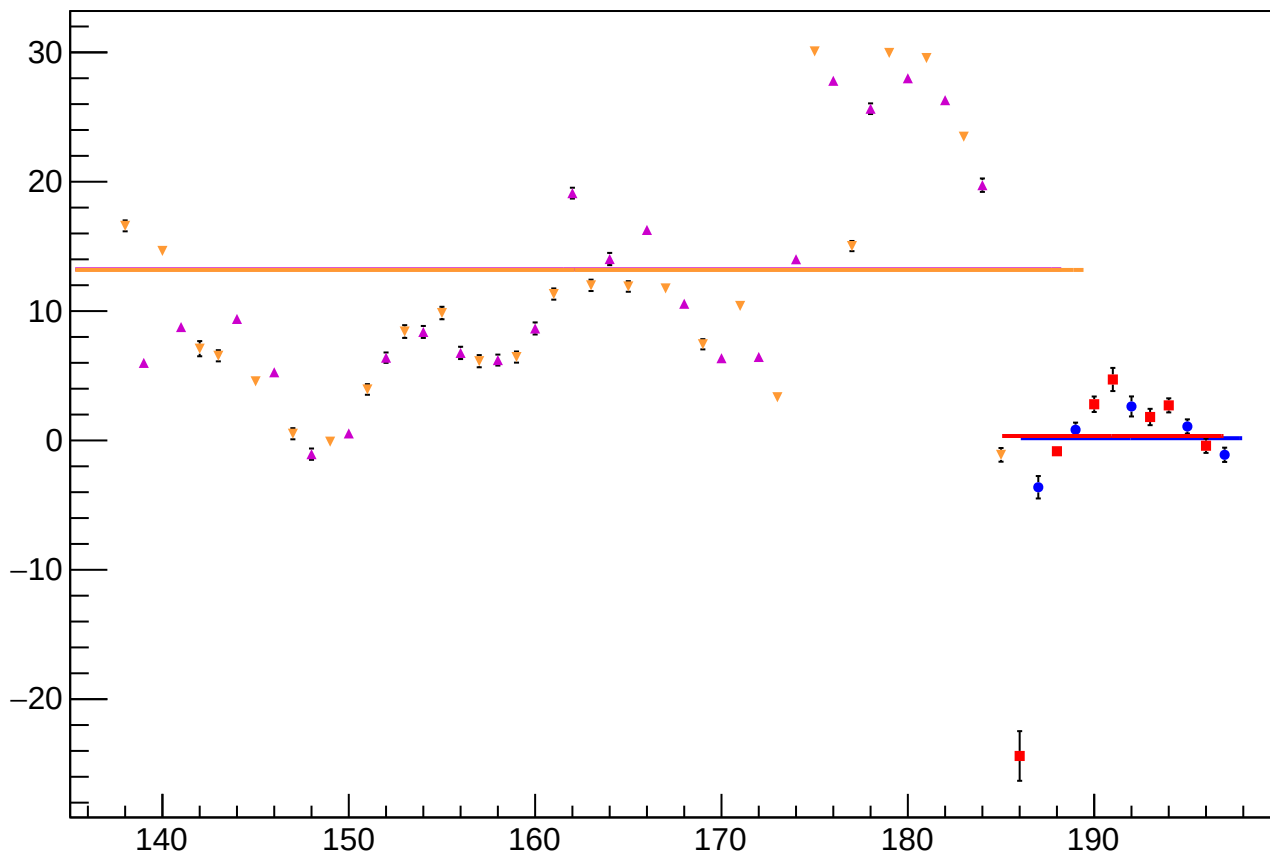
In:  $0.165 \pm 0.004$   $\chi^2/\text{NDF}: 2389.5/27$

Out:  $0.180 \pm 0.004$   $\chi^2/\text{NDF}: 1866.2/31$

All:  $0.172 \pm 0.003$   $\chi^2/\text{NDF}: 4264.6/59$



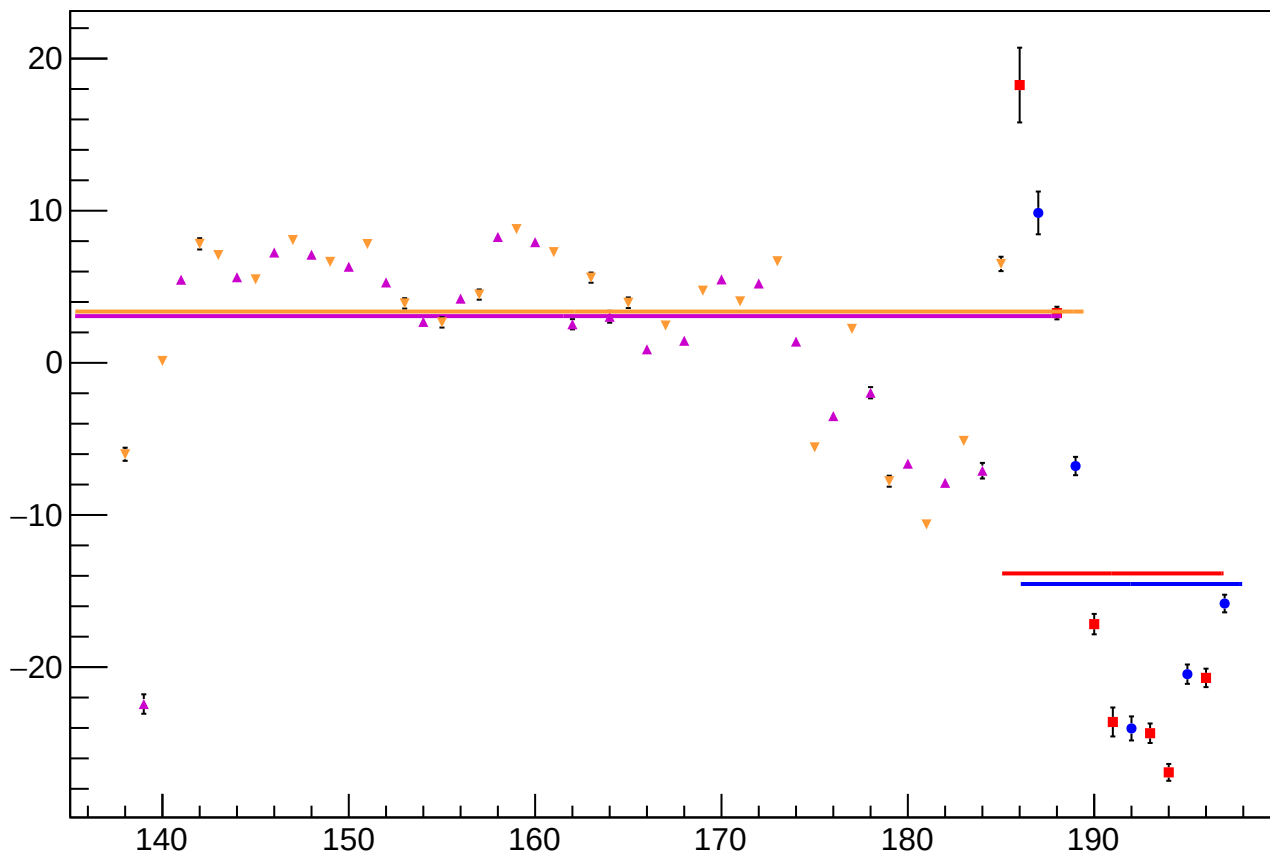
reg\_asym\_sam\_37\_48\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 0.173+/-0.279     $\chi^2/\text{NDF}$ : 38.7/4  
 Left Out: 13.181+/-0.075     $\chi^2/\text{NDF}$ : 17039.3/24  
 Right Out: 0.343+/-0.196     $\chi^2/\text{NDF}$ : 250.4/6  
 Left In: 13.228+/-0.077     $\chi^2/\text{NDF}$ : 14126.1/22

Left: 13.204+/-0.054     $\chi^2/\text{NDF}$ : 31165.6/47  
 Right: 0.287+/-0.160     $\chi^2/\text{NDF}$ : 289.3/11  
 In: 12.310+/-0.074     $\chi^2/\text{NDF}$ : 16205.6/27  
 Out: 11.527+/-0.070     $\chi^2/\text{NDF}$ : 21025.8/31  
 All: 11.900+/-0.051     $\chi^2/\text{NDF}$ : 37290.2/59

reg\_asym\_sam\_37\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-14.537 \pm 0.311$   $\chi^2/\text{NDF}$ : 703.2/4

Left Out:  $3.372 \pm 0.059$   $\chi^2/\text{NDF}$ : 8053.7/24

Right Out:  $-13.843 \pm 0.238$   $\chi^2/\text{NDF}$ : 2959.8/6

Left In:  $3.071 \pm 0.060$   $\chi^2/\text{NDF}$ : 7269.0/22

Left:  $3.226 \pm 0.042$   $\chi^2/\text{NDF}$ : 15335.5/47

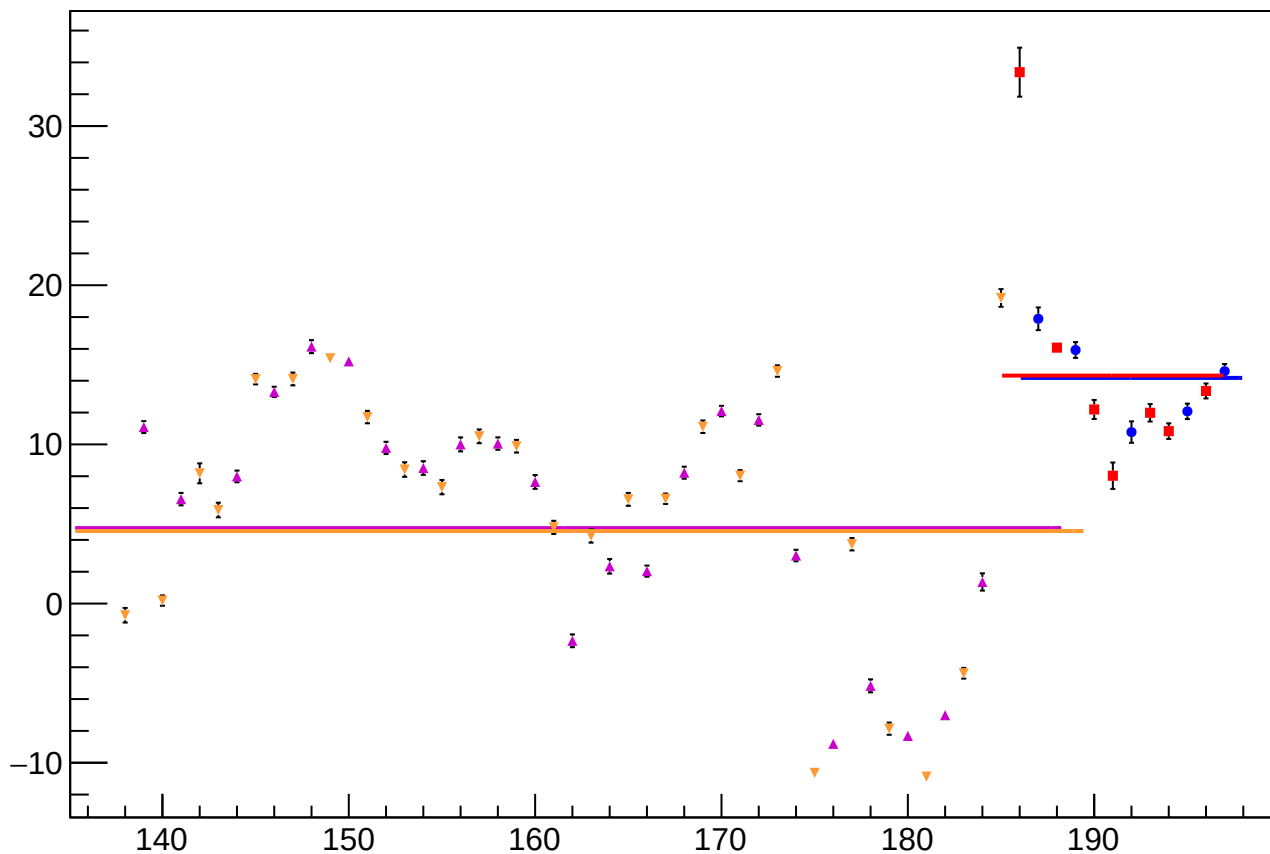
Right:  $-14.098 \pm 0.189$   $\chi^2/\text{NDF}$ : 3666.1/11

In:  $2.433 \pm 0.059$   $\chi^2/\text{NDF}$ : 11054.8/27

Out:  $2.386 \pm 0.057$   $\chi^2/\text{NDF}$ : 15964.0/31

All:  $2.409 \pm 0.041$   $\chi^2/\text{NDF}$ : 27019.1/59

reg\_asym\_sam\_37\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 14.179+/-0.240  $\chi^2/\text{NDF}$ : 84.7/4

Left Out: 4.557+/-0.076  $\chi^2/\text{NDF}$ :13588.4/24

Right Out: 14.322+/-0.167  $\chi^2/\text{NDF}$ : 355.2/6

Left In: 4.741+/-0.076  $\chi^2/\text{NDF}$ :11418.2/22

Left: 4.648+/-0.054  $\chi^2/\text{NDF}$ : 25009.5/47

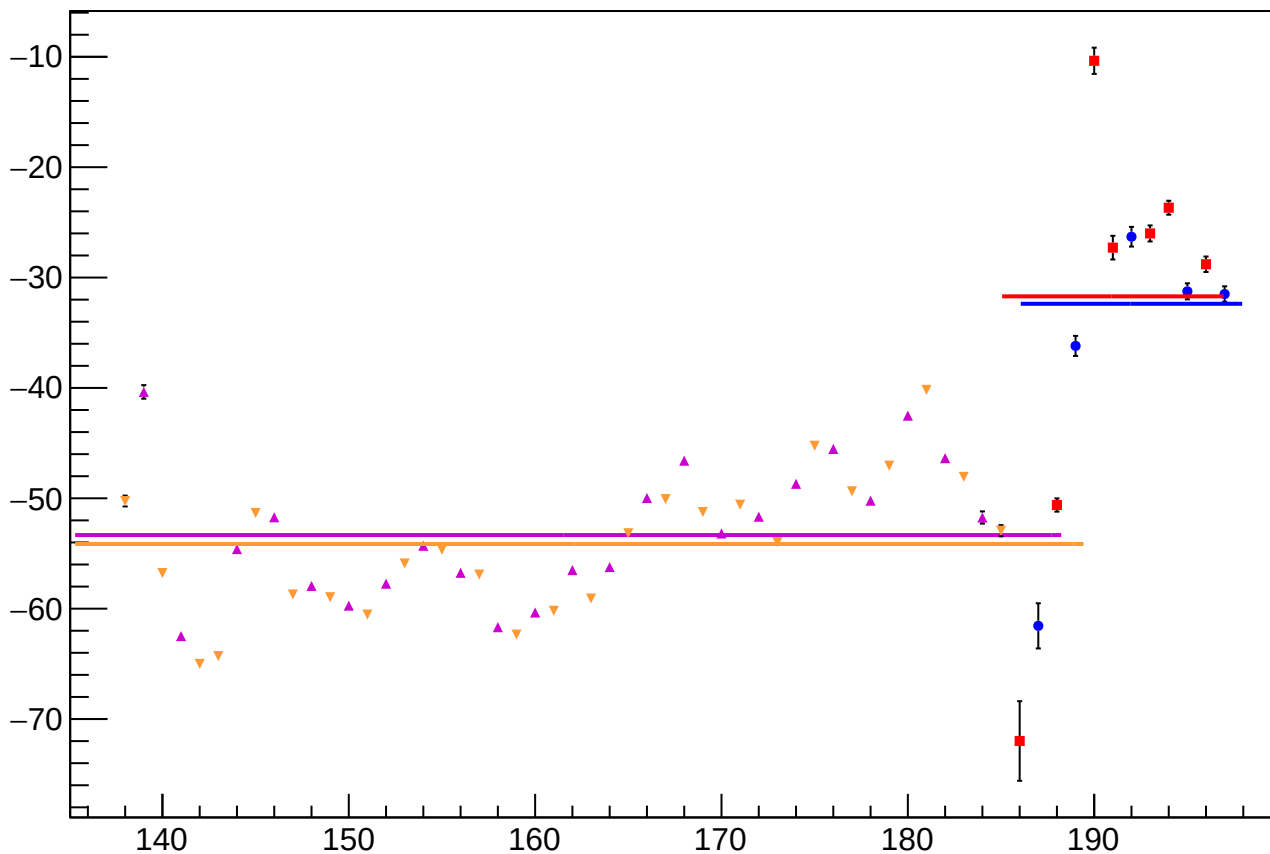
Right: 14.275+/-0.137  $\chi^2/\text{NDF}$ : 440.1/11

In: 5.609+/-0.073  $\chi^2/\text{NDF}$ :12906.0/27

Out: 6.213+/-0.069  $\chi^2/\text{NDF}$ :16777.1/31

All: 5.928+/-0.050  $\chi^2/\text{NDF}$ : 29719.4/59

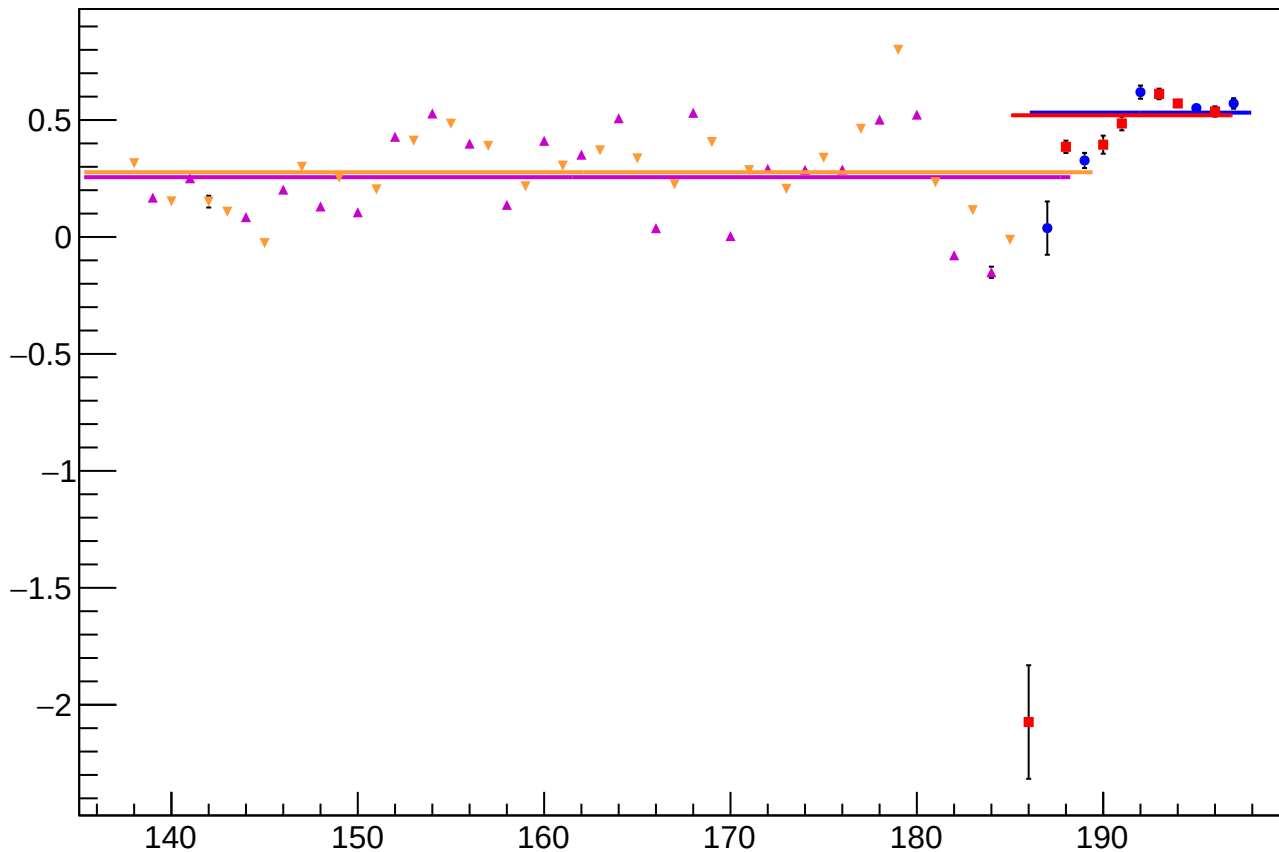
reg\_asym\_sam\_37\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-32.376 \pm 0.388$   $\chi^2/\text{NDF}: 271.3/4$   
 Left Out:  $-54.139 \pm 0.067$   $\chi^2/\text{NDF}: 8301.1/24$   
 Right Out:  $-31.703 \pm 0.303$   $\chi^2/\text{NDF}: 1701.3/6$   
 Left In:  $-53.330 \pm 0.068$   $\chi^2/\text{NDF}: 6940.2/22$

Left:  $-53.745 \pm 0.048$   $\chi^2/\text{NDF}: 15313.2/47$   
 Right:  $-31.958 \pm 0.239$   $\chi^2/\text{NDF}: 1974.5/11$   
 In:  $-52.701 \pm 0.067$   $\chi^2/\text{NDF}: 10043.4/27$   
 Out:  $-53.108 \pm 0.065$   $\chi^2/\text{NDF}: 15224.8/31$   
 All:  $-52.911 \pm 0.047$   $\chi^2/\text{NDF}: 25287.2/59$

reg\_asym\_sam\_37\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $0.532 \pm 0.012$   $\chi^2/\text{NDF}$ : 71.8/4

Left Out:  $0.277 \pm 0.003$   $\chi^2/\text{NDF}$ : 2606.0/24

Right Out:  $0.520 \pm 0.010$   $\chi^2/\text{NDF}$ : 176.9/6

Left In:  $0.256 \pm 0.003$   $\chi^2/\text{NDF}$ : 3644.0/22

Left:  $0.266 \pm 0.002$   $\chi^2/\text{NDF}$ : 6273.6/47

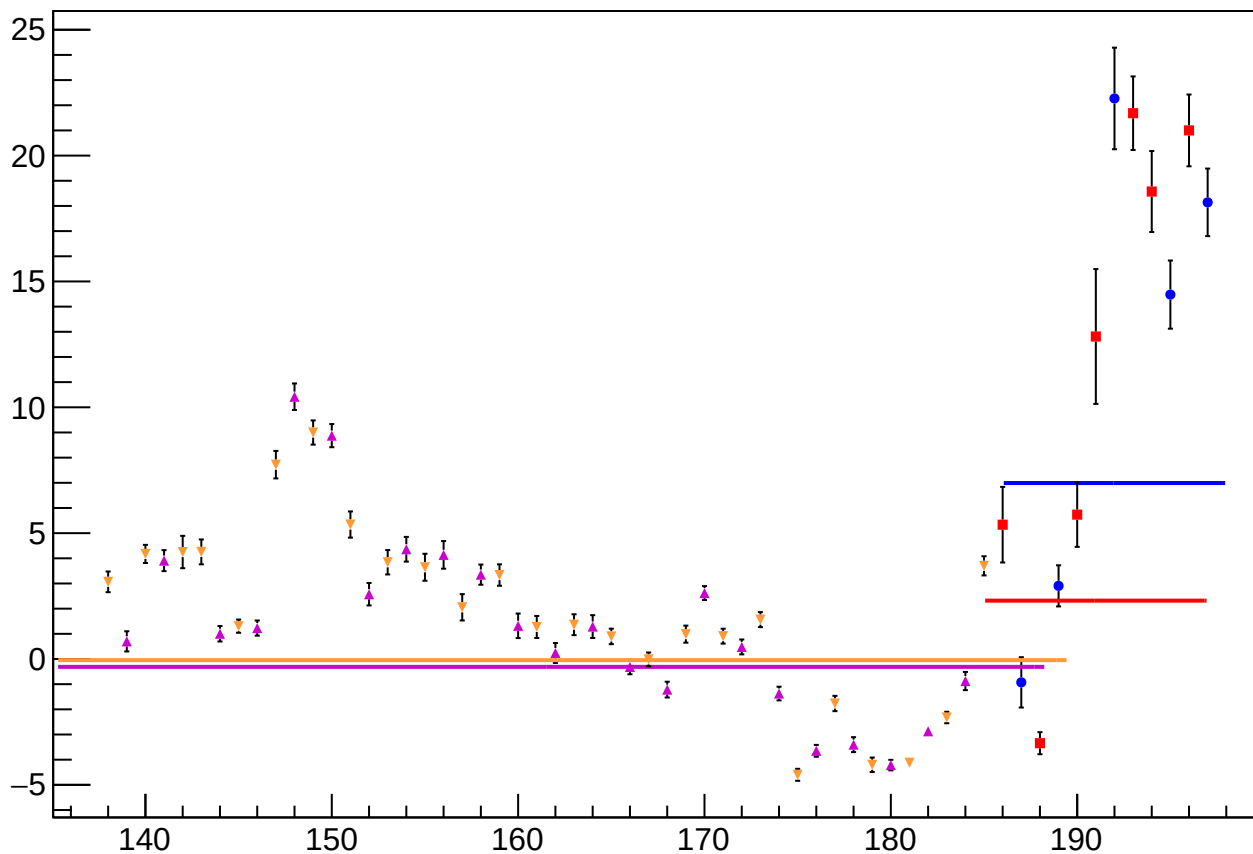
Right:  $0.525 \pm 0.008$   $\chi^2/\text{NDF}$ : 249.2/11

In:  $0.272 \pm 0.003$   $\chi^2/\text{NDF}$ : 4177.6/27

Out:  $0.298 \pm 0.003$   $\chi^2/\text{NDF}$ : 3340.6/31

All:  $0.285 \pm 0.002$   $\chi^2/\text{NDF}$ : 7558.4/59

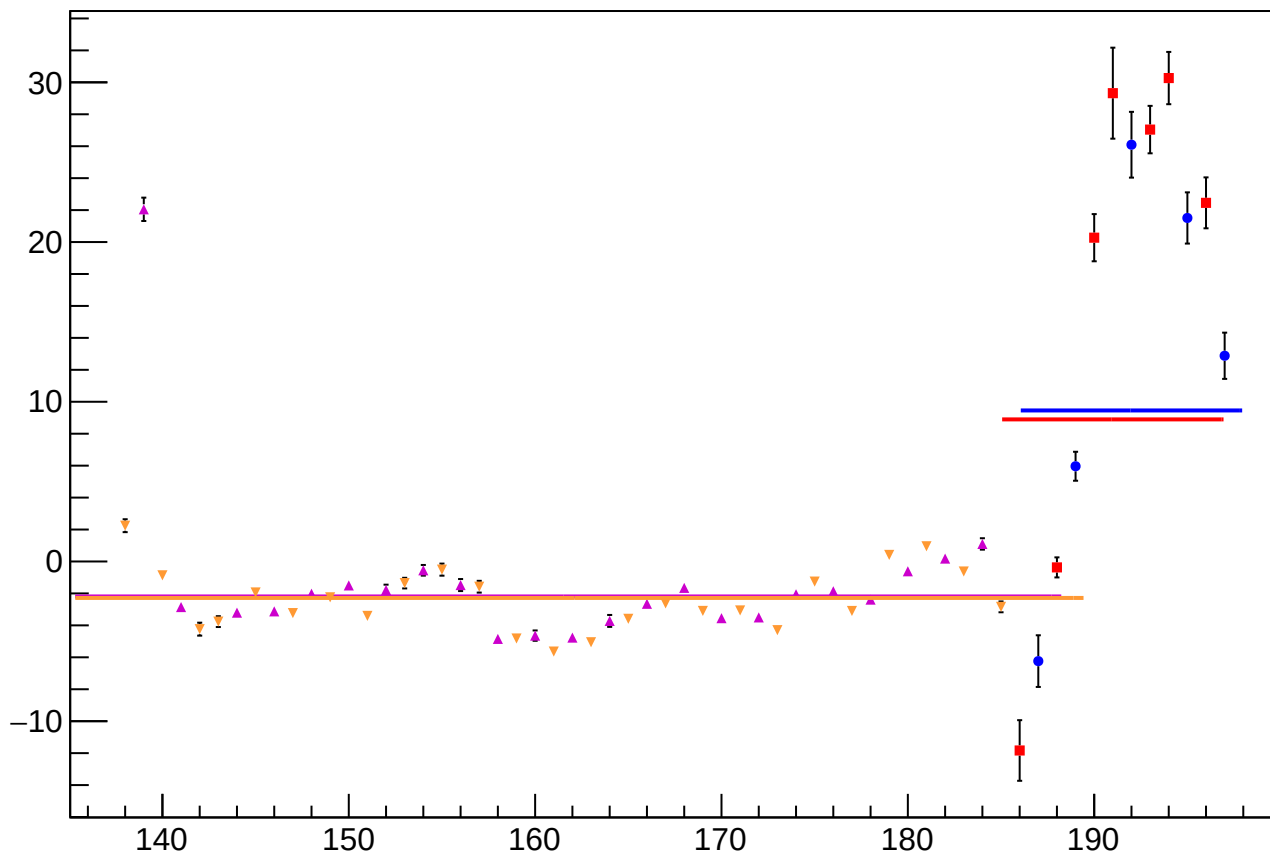
reg\_asym\_sam\_15\_26\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $6.991 \pm 0.510$   $\chi^2/\text{NDF}: 244.7/4$   
 Left Out:  $-0.046 \pm 0.066$   $\chi^2/\text{NDF}: 2628.9/24$   
 Right Out:  $2.319 \pm 0.360$   $\chi^2/\text{NDF}: 642.1/6$   
 Left In:  $-0.312 \pm 0.067$   $\chi^2/\text{NDF}: 2252.6/22$

Left:  $-0.177 \pm 0.047$   $\chi^2/\text{NDF}: 4889.5/47$   
 Right:  $3.871 \pm 0.294$   $\chi^2/\text{NDF}: 942.7/11$   
 In:  $-0.188 \pm 0.066$   $\chi^2/\text{NDF}: 2698.8/27$   
 Out:  $0.031 \pm 0.065$   $\chi^2/\text{NDF}: 3312.8/31$   
 All:  $-0.076 \pm 0.046$   $\chi^2/\text{NDF}: 6017.1/59$

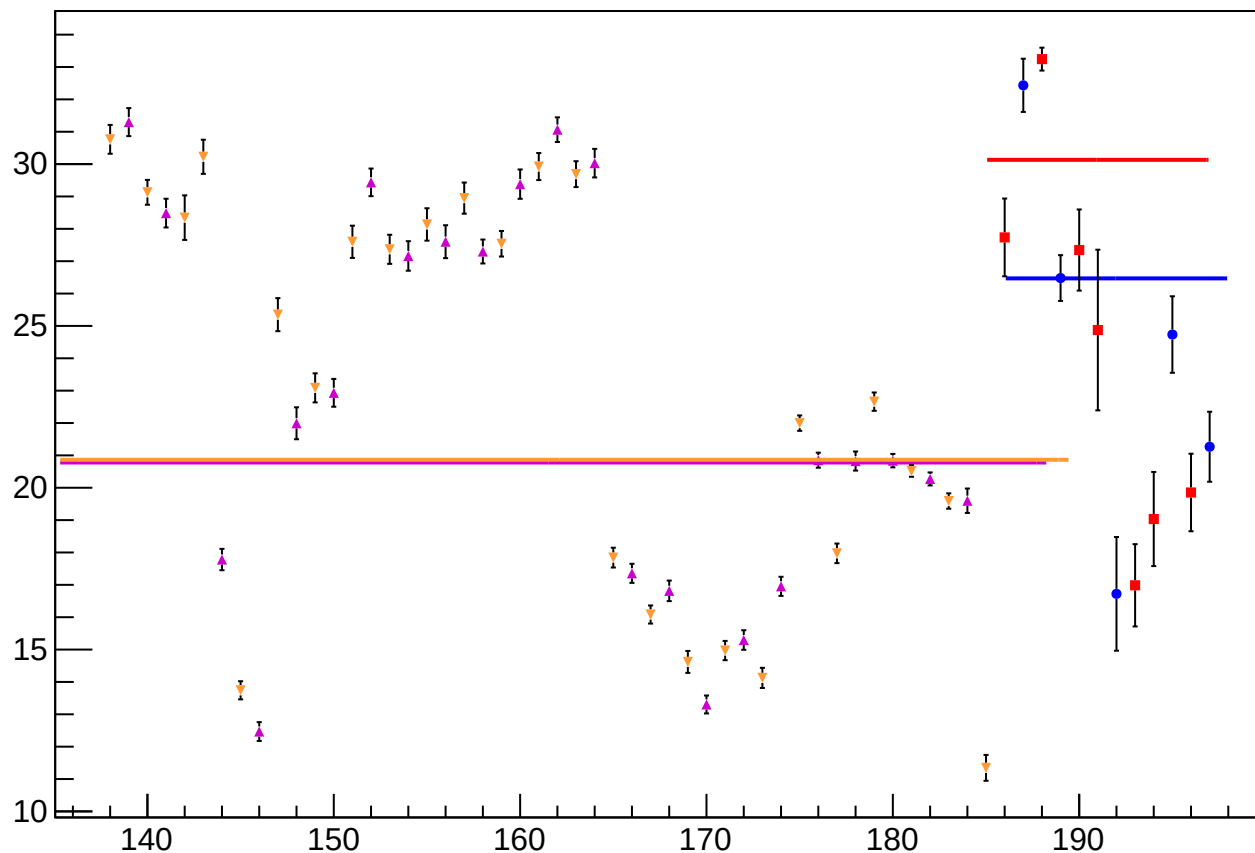
reg\_asym\_sam\_15\_26\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $9.456 \pm 0.609$   $\chi^2/\text{NDF}: 236.3/4$   
 Left Out:  $-2.283 \pm 0.054$   $\chi^2/\text{NDF}: 1132.1/24$   
 Right Out:  $8.896 \pm 0.465$   $\chi^2/\text{NDF}: 839.9/6$   
 Left In:  $-2.190 \pm 0.055$   $\chi^2/\text{NDF}: 1785.1/22$

Left:  $-2.237 \pm 0.039$   $\chi^2/\text{NDF}: 2918.6/47$   
 Right:  $9.103 \pm 0.370$   $\chi^2/\text{NDF}: 1076.7/11$   
 In:  $-2.096 \pm 0.055$   $\chi^2/\text{NDF}: 2384.6/27$   
 Out:  $-2.133 \pm 0.054$   $\chi^2/\text{NDF}: 2541.1/31$   
 All:  $-2.115 \pm 0.038$   $\chi^2/\text{NDF}: 4926.0/59$

reg\_asym\_sam\_15\_26\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected

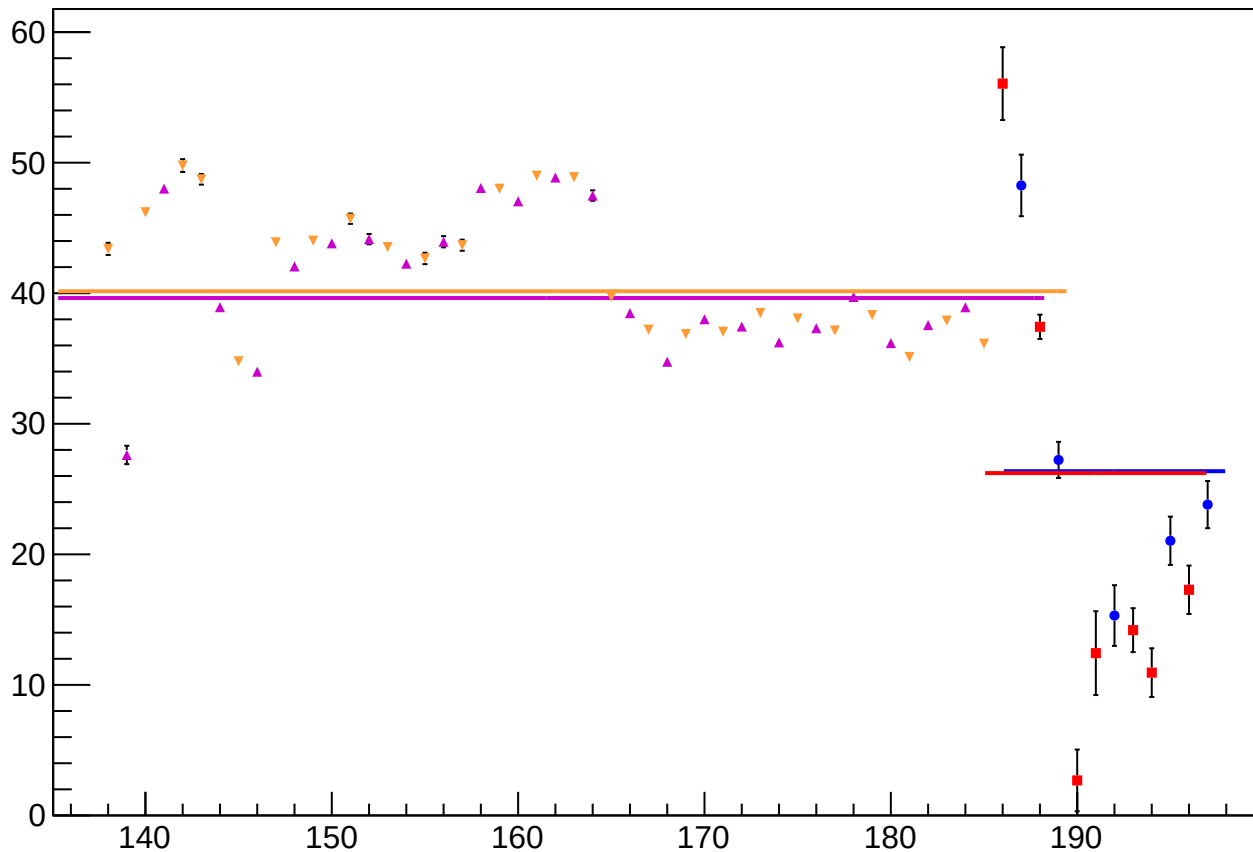


Right In: 26.469 $\pm$ 0.431  $\chi^2$ /NDF: 108.7/4  
 Left Out: 20.865 $\pm$ 0.067  $\chi^2$ /NDF:6608.4/24  
 Right Out: 30.132 $\pm$ 0.298  $\chi^2$ /NDF: 329.5/6  
 Left In: 20.780 $\pm$ 0.067  $\chi^2$ /NDF:5988.0/22

Left: 20.823 $\pm$ 0.047  $\chi^2$ /NDF: 12597.2/47  
 Right: 28.949 $\pm$ 0.245  $\chi^2$ /NDF: 487.1/11  
 In: 20.915 $\pm$ 0.066  $\chi^2$ /NDF:6266.6/27  
 Out: 21.308 $\pm$ 0.065  $\chi^2$ /NDF:7858.8/31  
 All: 21.115 $\pm$ 0.047  $\chi^2$ /NDF: 14143.2/59



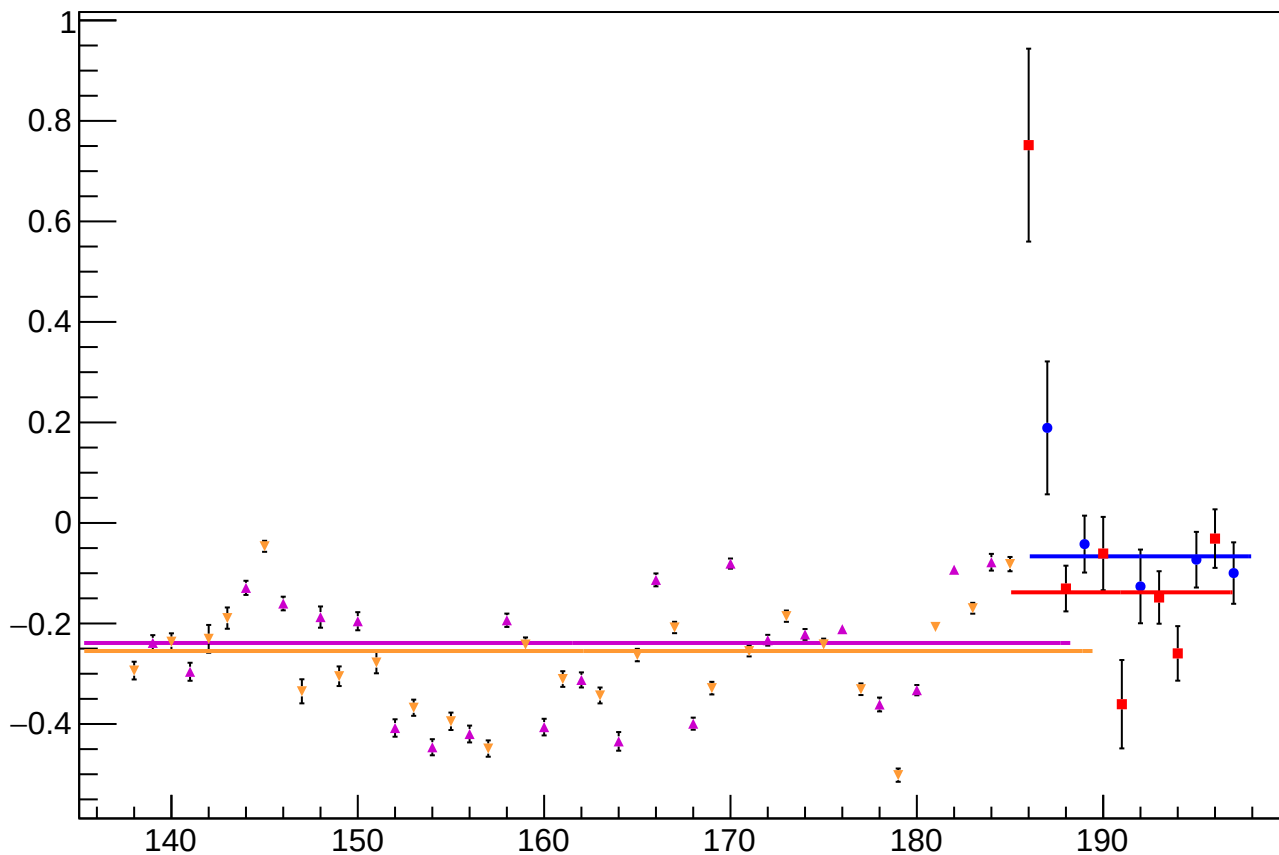
reg\_asym\_sam\_15\_26\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $26.368 \pm 0.821$   $\chi^2/\text{NDF}$ : 119.5/4  
 Left Out:  $40.154 \pm 0.060$   $\chi^2/\text{NDF}$ : 5861.6/24  
 Right Out:  $26.223 \pm 0.633$   $\chi^2/\text{NDF}$ : 518.6/6  
 Left In:  $39.632 \pm 0.061$   $\chi^2/\text{NDF}$ : 5343.3/22

Left:  $39.896 \pm 0.043$   $\chi^2/\text{NDF}$ : 11241.6/47  
 Right:  $26.277 \pm 0.501$   $\chi^2/\text{NDF}$ : 638.1/11  
 In:  $39.559 \pm 0.061$   $\chi^2/\text{NDF}$ : 5722.5/27  
 Out:  $40.028 \pm 0.060$   $\chi^2/\text{NDF}$ : 6859.5/31  
 All:  $39.797 \pm 0.043$   $\chi^2/\text{NDF}$ : 12612.0/59

reg\_asym\_sam\_15\_26\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.066 \pm 0.030$   $\chi^2/\text{NDF}$ : 4.9/4

Left Out:  $-0.255 \pm 0.003$   $\chi^2/\text{NDF}$ : 1417.7/24

Right Out:  $-0.138 \pm 0.023$   $\chi^2/\text{NDF}$ : 37.5/6

Left In:  $-0.239 \pm 0.003$   $\chi^2/\text{NDF}$ : 1750.0/22

Left:  $-0.247 \pm 0.002$   $\chi^2/\text{NDF}$ : 3184.5/47

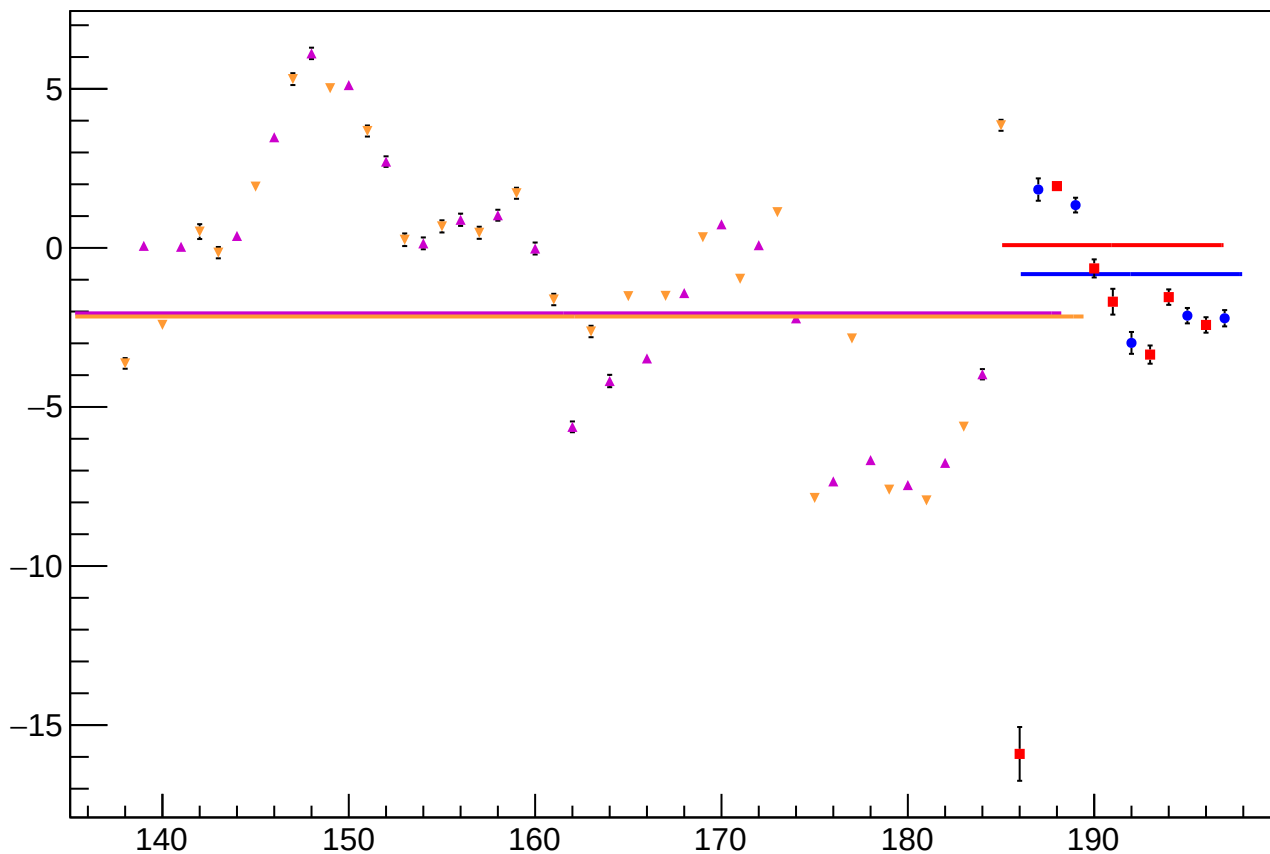
Right:  $-0.110 \pm 0.018$   $\chi^2/\text{NDF}$ : 46.0/11

In:  $-0.237 \pm 0.003$   $\chi^2/\text{NDF}$ : 1788.8/27

Out:  $-0.253 \pm 0.003$   $\chi^2/\text{NDF}$ : 1479.7/31

All:  $-0.245 \pm 0.002$   $\chi^2/\text{NDF}$ : 3285.3/59

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected

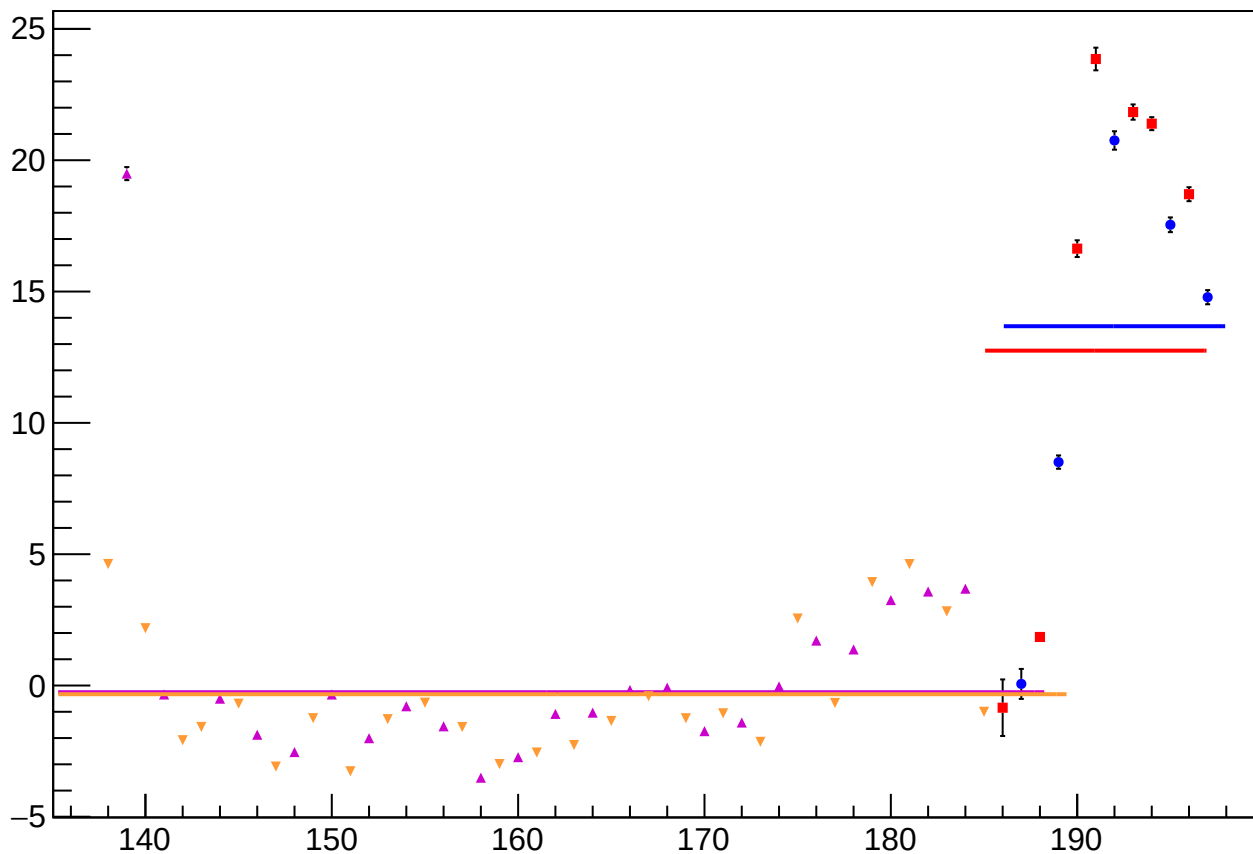


Right In:  $-0.824 \pm 0.122$   $\chi^2/\text{NDF}$ : 242.6/4  
 Left Out:  $-2.156 \pm 0.026$   $\chi^2/\text{NDF}$ : 24501.3/24  
 Right Out:  $0.087 \pm 0.082$   $\chi^2/\text{NDF}$ : 966.3/6  
 Left In:  $-2.058 \pm 0.026$   $\chi^2/\text{NDF}$ : 23343.8/22

Left:  $-2.107 \pm 0.018$   $\chi^2/\text{NDF}$ : 47852.3/47  
 Right:  $-0.197 \pm 0.068$   $\chi^2/\text{NDF}$ : 1247.4/11  
 In:  $-2.004 \pm 0.025$   $\chi^2/\text{NDF}$ : 23684.5/27  
 Out:  $-1.956 \pm 0.024$   $\chi^2/\text{NDF}$ : 26150.5/31

All:  $-1.979 \pm 0.018$   $\chi^2/\text{NDF}$ : 49836.9/59

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 13.680+/-0.137  $\chi^2/\text{NDF}$ : 1595.2/4

Left Out: -0.331+/-0.021  $\chi^2/\text{NDF}$ :12552.3/24

Right Out: 12.750+/-0.102  $\chi^2/\text{NDF}$ : 8227.0/6

Left In: -0.255+/-0.021  $\chi^2/\text{NDF}$ :14162.0/22

Left: -0.293+/-0.015  $\chi^2/\text{NDF}$ : 26721.1/47

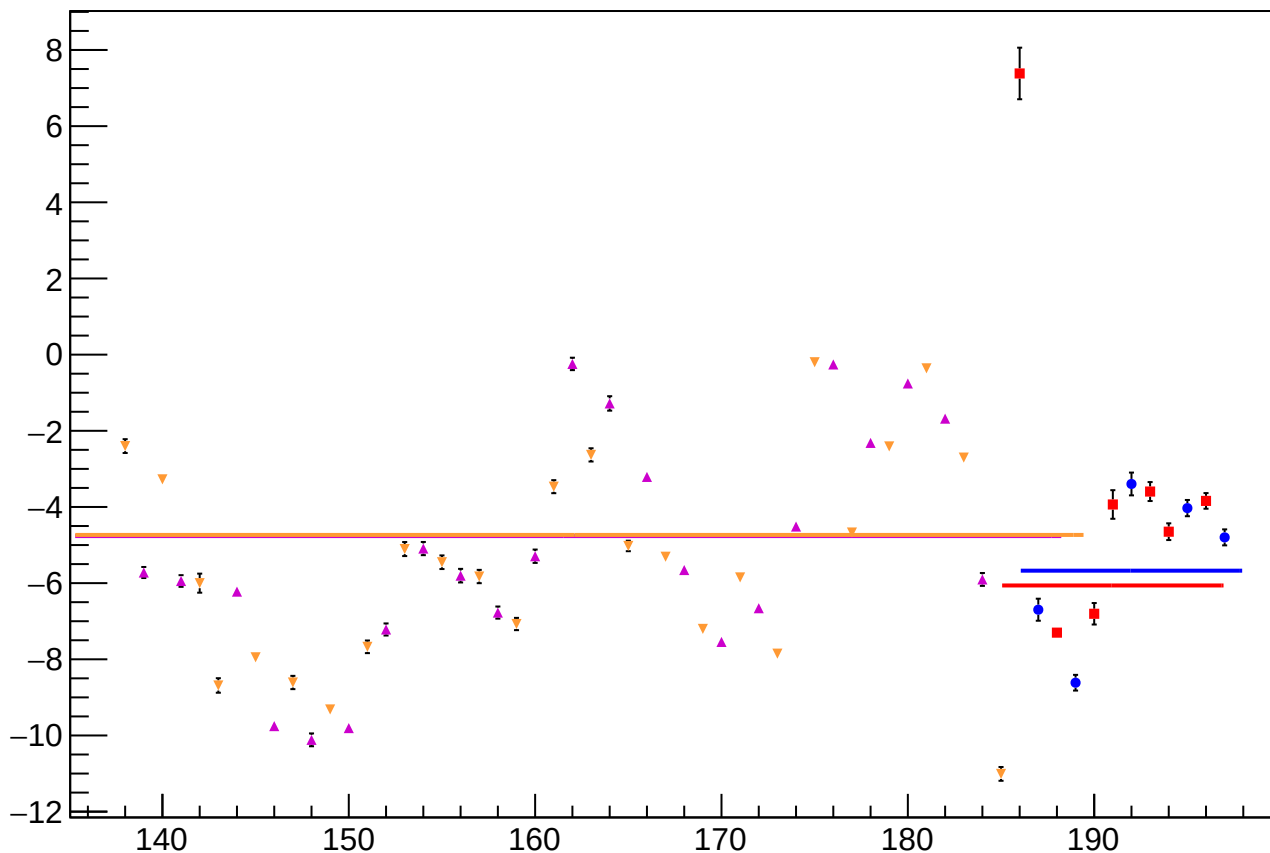
Right: 13.080+/-0.082  $\chi^2/\text{NDF}$ : 9851.9/11

In: 0.060+/-0.021  $\chi^2/\text{NDF}$ :25823.8/27

Out: 0.186+/-0.020  $\chi^2/\text{NDF}$ :36676.5/31

All: 0.124+/-0.014  $\chi^2/\text{NDF}$ : 62519.4/59

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -5.673 $\pm$ 0.105  $\chi^2$ /NDF: 350.5/4  
 Left Out: -4.734 $\pm$ 0.026  $\chi^2$ /NDF:13188.7/24  
 Right Out: -6.061 $\pm$ 0.069  $\chi^2$ /NDF: 883.4/6  
 Left In: -4.764 $\pm$ 0.026  $\chi^2$ /NDF:14163.2/22

Left: -4.749 $\pm$ 0.018  $\chi^2$ /NDF: 27352.6/47

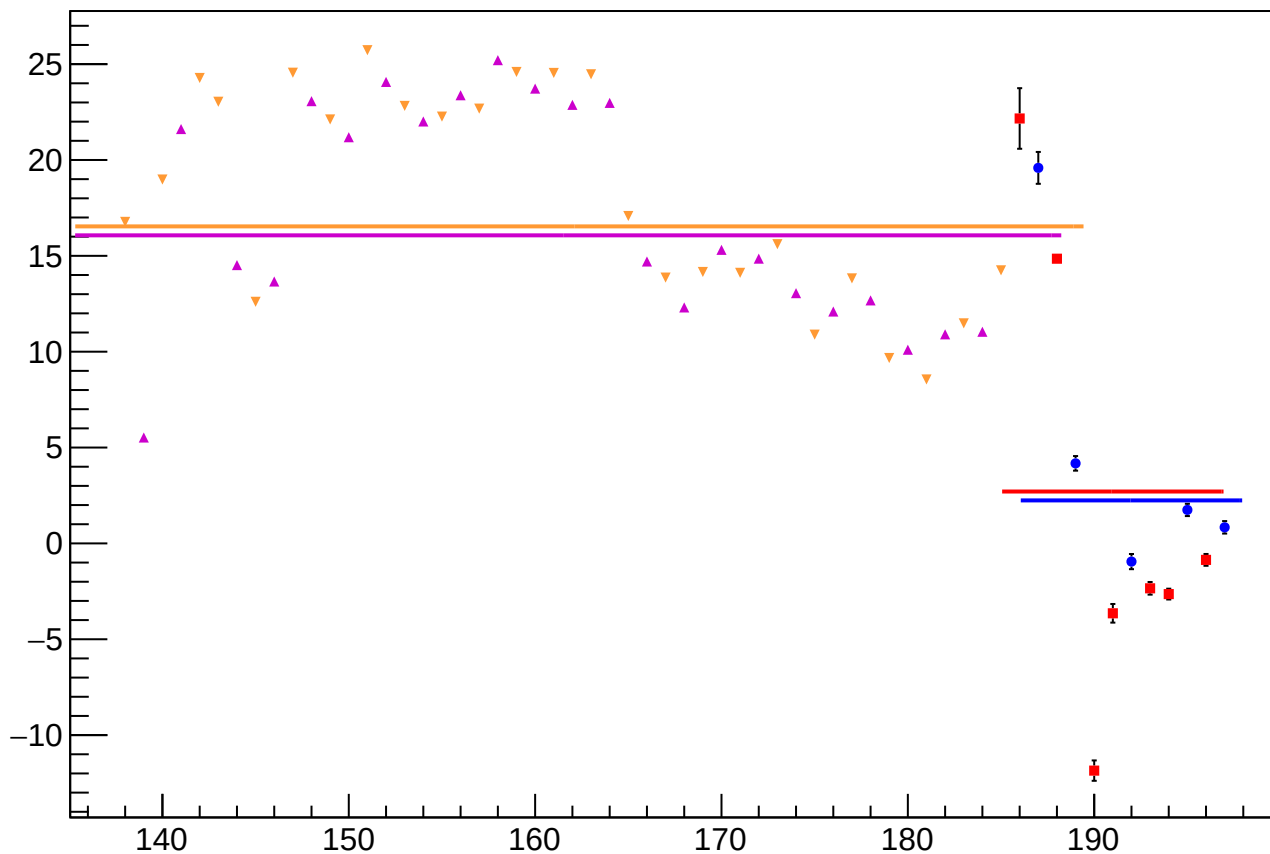
Right: -5.943 $\pm$ 0.058  $\chi^2$ /NDF: 1243.5/11

In: -4.817 $\pm$ 0.025  $\chi^2$ /NDF:14584.6/27

Out: -4.897 $\pm$ 0.024  $\chi^2$ /NDF:14395.0/31

All: -4.859 $\pm$ 0.017  $\chi^2$ /NDF: 28984.8/59

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $2.243 \pm 0.172$   $\chi^2/\text{NDF}$ : 547.2/4

Left Out:  $16.536 \pm 0.023$   $\chi^2/\text{NDF}$ : 53546.9/24

Right Out:  $2.706 \pm 0.130$   $\chi^2/\text{NDF}$ : 4496.3/6

Left In:  $16.069 \pm 0.023$   $\chi^2/\text{NDF}$ : 42736.3/22

Left:  $16.306 \pm 0.016$   $\chi^2/\text{NDF}$ : 96483.6/47

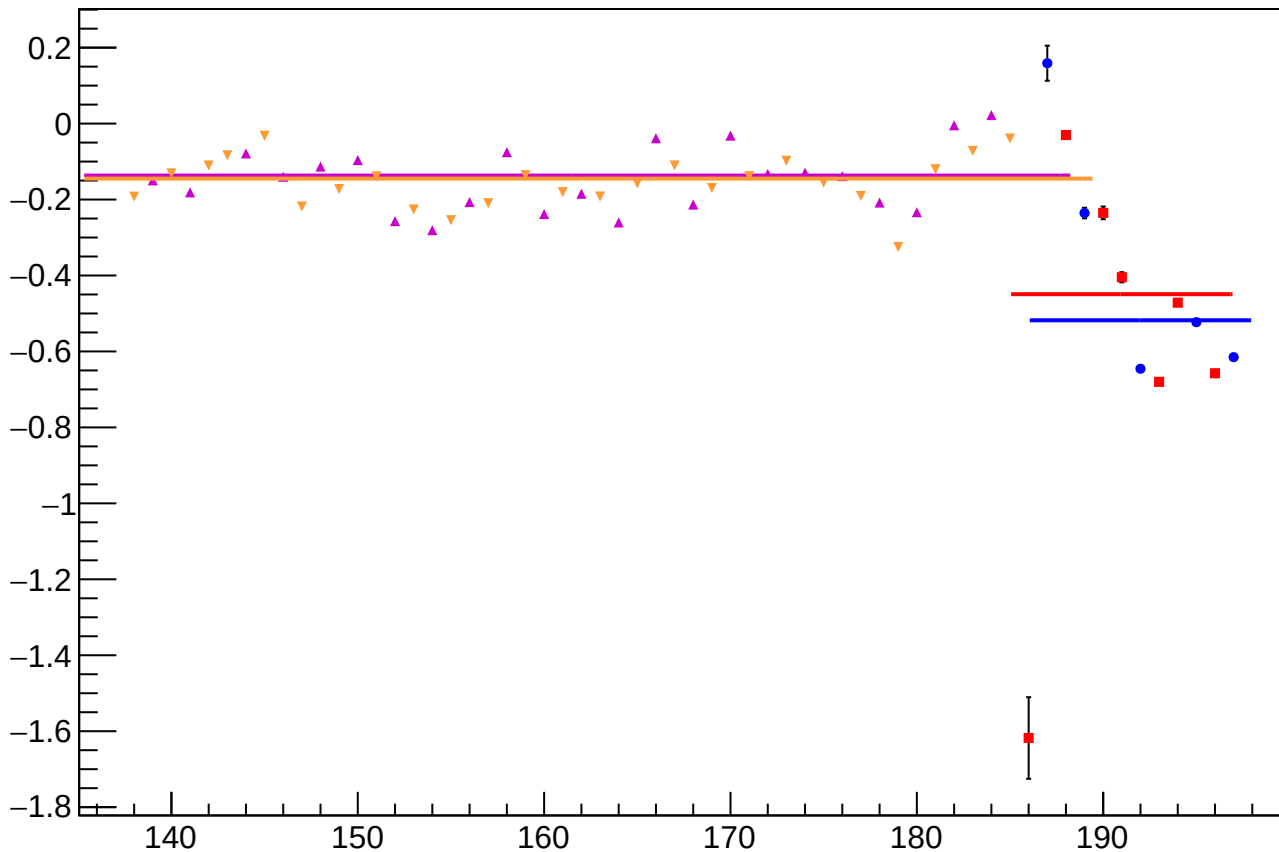
Right:  $2.537 \pm 0.104$   $\chi^2/\text{NDF}$ : 5048.1/11

In:  $15.816 \pm 0.023$   $\chi^2/\text{NDF}$ : 49632.8/27

Out:  $16.113 \pm 0.023$   $\chi^2/\text{NDF}$ : 68934.9/31

All:  $15.967 \pm 0.016$   $\chi^2/\text{NDF}$ : 118650.6/59

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.518 \pm 0.006$   $\chi^2/\text{NDF}: 814.0/4$

Left Out:  $-0.145 \pm 0.001$   $\chi^2/\text{NDF}: 3755.1/24$

Right Out:  $-0.449 \pm 0.004$   $\chi^2/\text{NDF}: 2895.0/6$

Left In:  $-0.137 \pm 0.001$   $\chi^2/\text{NDF}: 5383.4/22$

Left:  $-0.141 \pm 0.001$   $\chi^2/\text{NDF}: 9167.1/47$

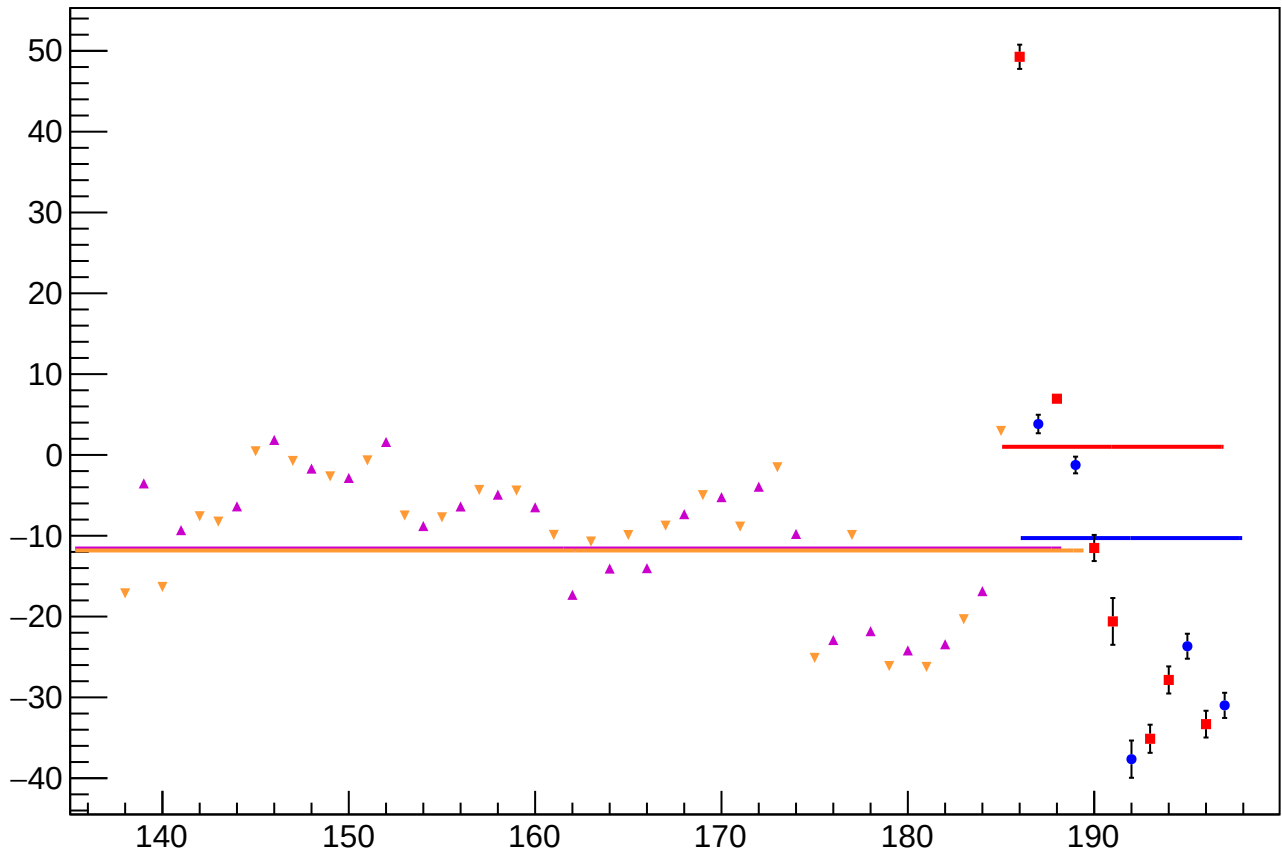
Right:  $-0.475 \pm 0.003$   $\chi^2/\text{NDF}: 3804.1/11$

In:  $-0.150 \pm 0.001$   $\chi^2/\text{NDF}: 10708.5/27$

Out:  $-0.162 \pm 0.001$   $\chi^2/\text{NDF}: 11343.6/31$

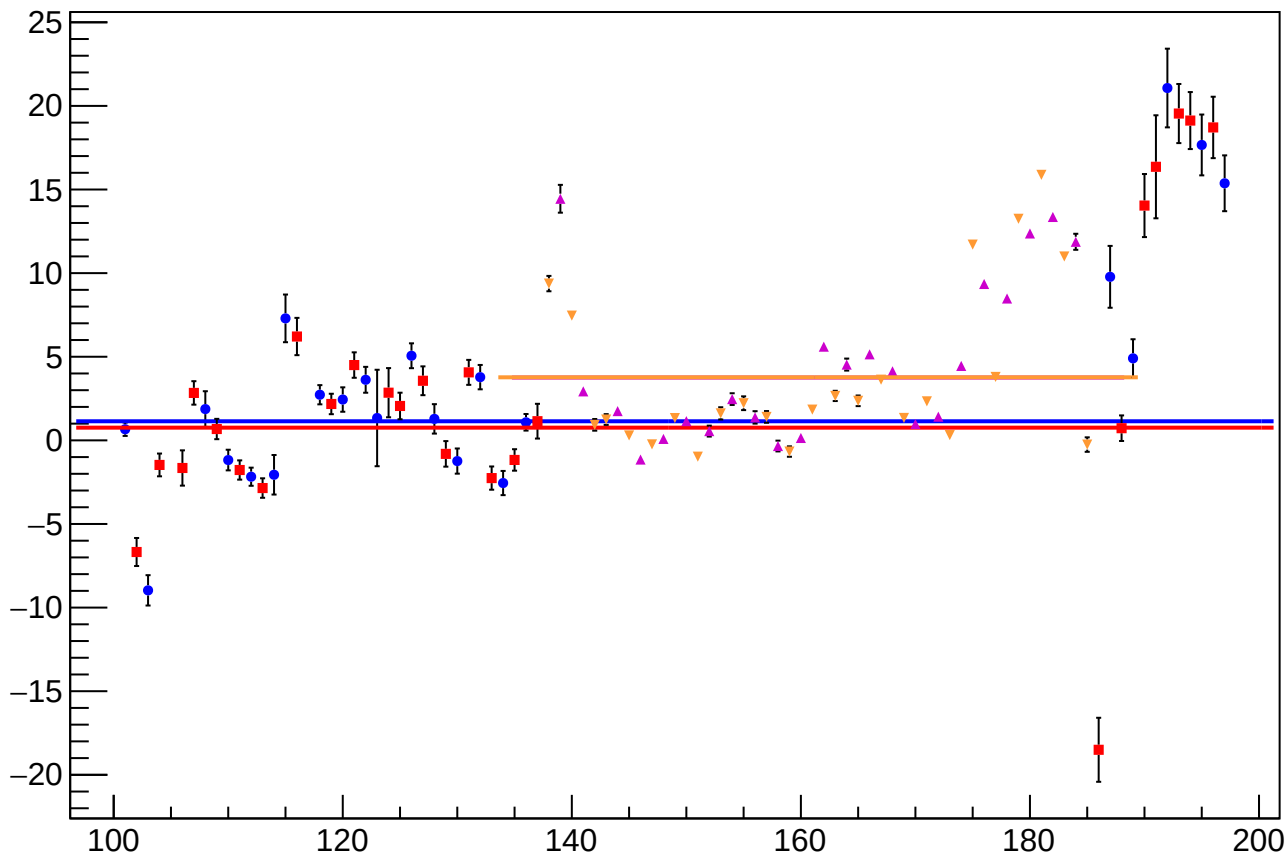
All:  $-0.156 \pm 0.001$   $\chi^2/\text{NDF}: 22116.9/59$

reg\_asym\_sam\_1357\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected





reg\_asym\_sam\_1357\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.142 $\pm$ 0.165  $\chi^2$ /NDF: 561.2/21

Left Out: 3.770 $\pm$ 0.056  $\chi^2$ /NDF: 7420.4/24

Right Out: 0.760 $\pm$ 0.167  $\chi^2$ /NDF: 782.8/24

Left In: 3.755 $\pm$ 0.056  $\chi^2$ /NDF: 5655.2/22

Left: 3.763 $\pm$ 0.040  $\chi^2$ /NDF: 13075.6/47

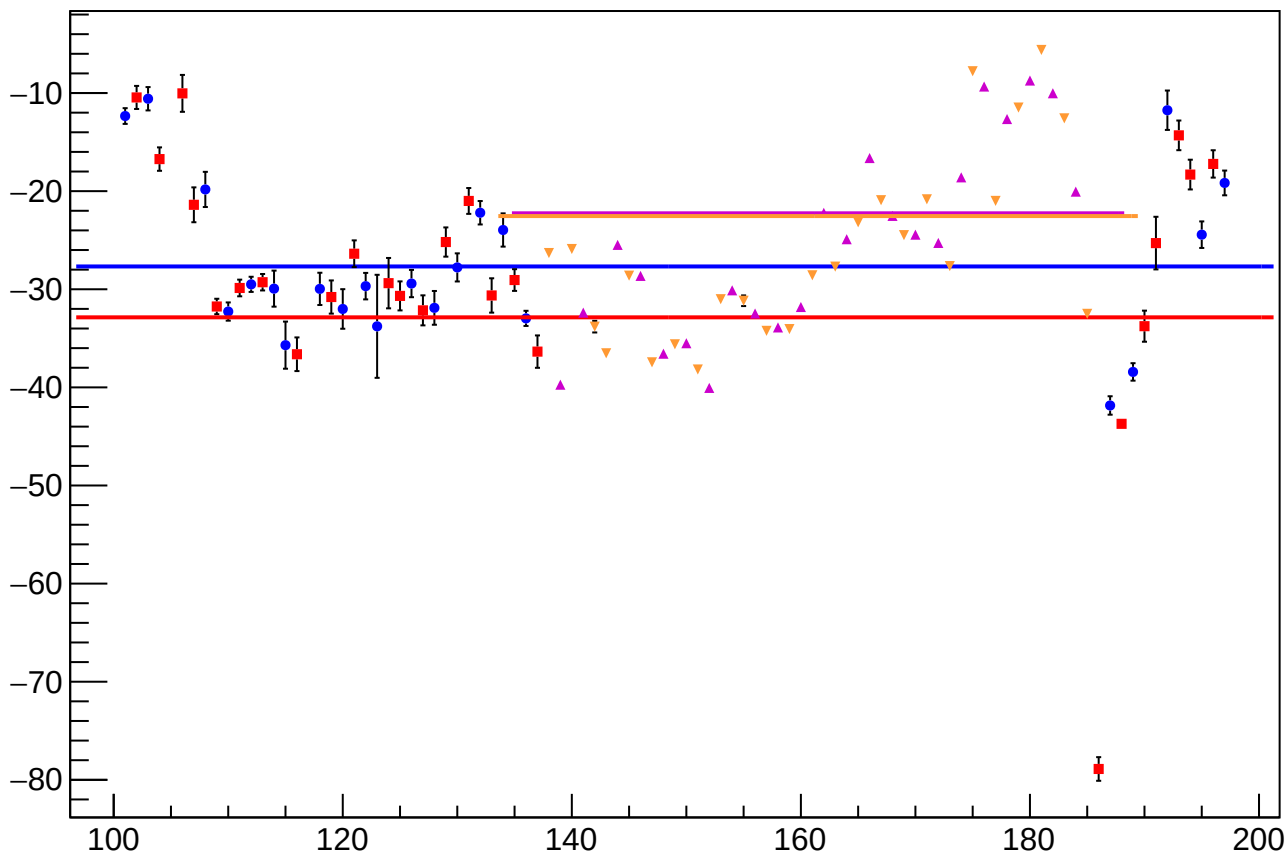
Right: 0.953 $\pm$ 0.117  $\chi^2$ /NDF: 1346.7/46

In: 3.480 $\pm$ 0.053  $\chi^2$ /NDF: 6442.1/44

Out: 3.468 $\pm$ 0.053  $\chi^2$ /NDF: 8497.1/49

All: 3.474 $\pm$ 0.038  $\chi^2$ /NDF: 14939.2/94

reg\_asym\_sam\_1357\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-27.675 \pm 0.259$   $\chi^2/\text{NDF}: 1211.2/21$   
 Left Out:  $-22.540 \pm 0.071$   $\chi^2/\text{NDF}: 19751.6/24$   
 Right Out:  $-32.862 \pm 0.228$   $\chi^2/\text{NDF}: 3389.1/24$   
 Left In:  $-22.258 \pm 0.071$   $\chi^2/\text{NDF}: 17838.4/22$

Left:  $-22.400 \pm 0.050$   $\chi^2/\text{NDF}: 37597.8/47$

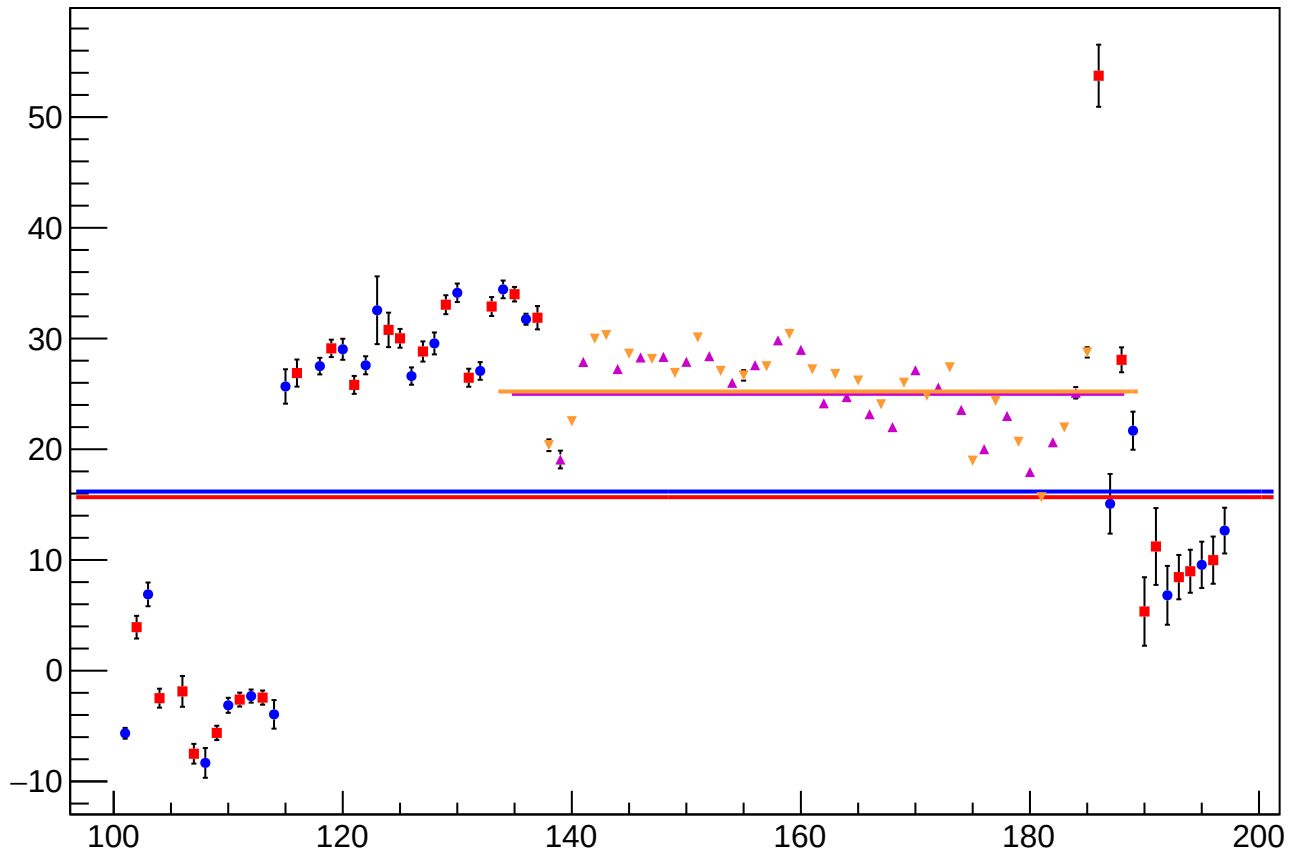
Right:  $-30.589 \pm 0.171$   $\chi^2/\text{NDF}: 4826.4/46$

In:  $-22.641 \pm 0.069$   $\chi^2/\text{NDF}: 19457.5/44$

Out:  $-23.445 \pm 0.068$   $\chi^2/\text{NDF}: 25005.1/49$

All:  $-23.050 \pm 0.048$   $\chi^2/\text{NDF}: 44532.2/94$

reg\_asym\_sam\_1357\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 16.182 $\pm$ 0.187  $\chi^2$ /NDF: 7647.2/21

Left Out: 25.216 $\pm$ 0.063  $\chi^2$ /NDF:3738.3/24

Right Out: 15.672 $\pm$ 0.190  $\chi^2$ /NDF: 7620.9/24

Left In: 25.005 $\pm$ 0.064  $\chi^2$ /NDF:2733.7/22

Left: 25.112 $\pm$ 0.045  $\chi^2$ /NDF: 6477.5/47

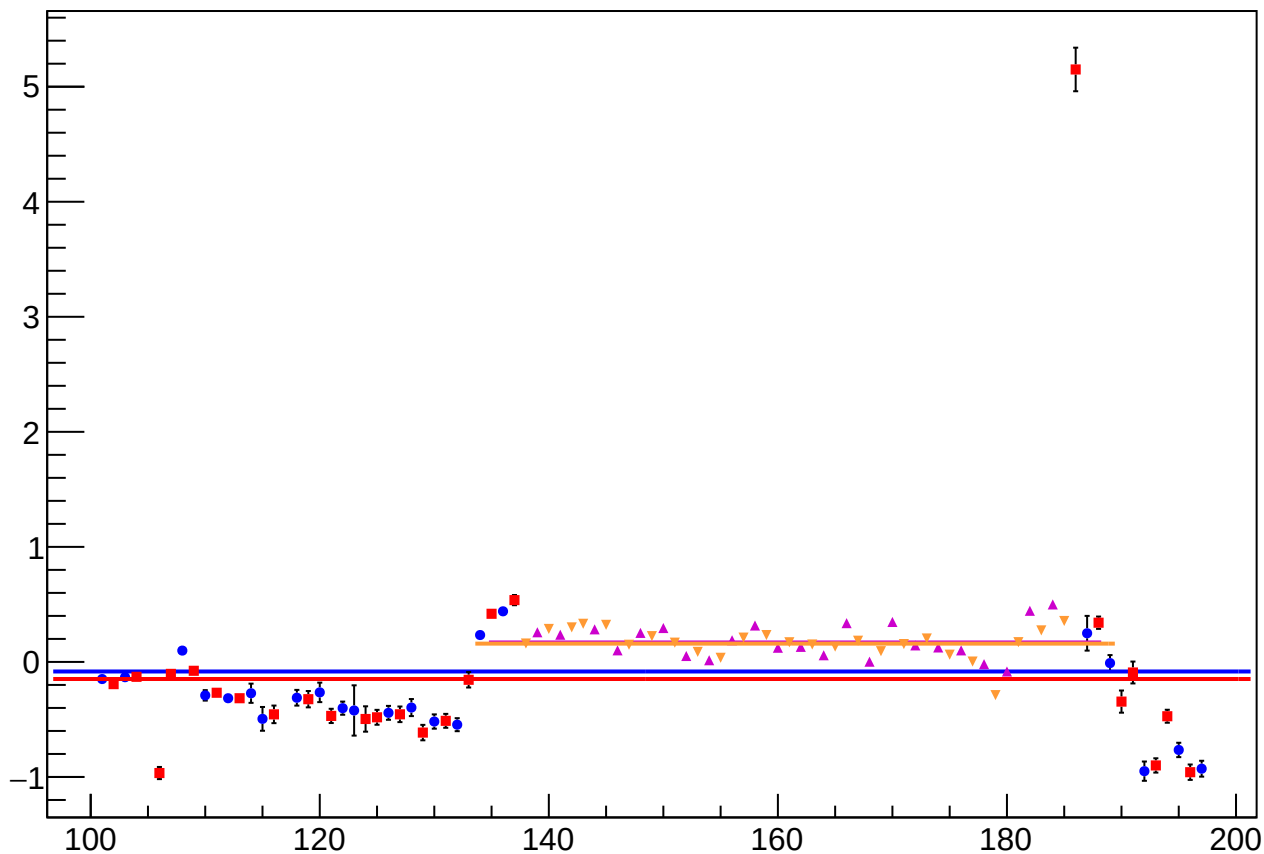
Right: 15.931 $\pm$ 0.134  $\chi^2$ /NDF: 15271.8/46

In: 24.093 $\pm$ 0.060  $\chi^2$ /NDF:12369.2/44

Out: 24.282 $\pm$ 0.060  $\chi^2$ /NDF:13624.0/49

All: 24.189 $\pm$ 0.042  $\chi^2$ /NDF: 25998.2/94

reg\_asym\_sam\_1357\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.083 \pm 0.010$   $\chi^2/\text{NDF}$ : 1417.6/21

Left Out:  $0.159 \pm 0.003$   $\chi^2/\text{NDF}$ : 1856.8/24

Right Out:  $-0.148 \pm 0.010$   $\chi^2/\text{NDF}$ : 2362.0/24

Left In:  $0.169 \pm 0.003$   $\chi^2/\text{NDF}$ : 2430.7/22

Left:  $0.164 \pm 0.002$   $\chi^2/\text{NDF}$ : 4293.8/47

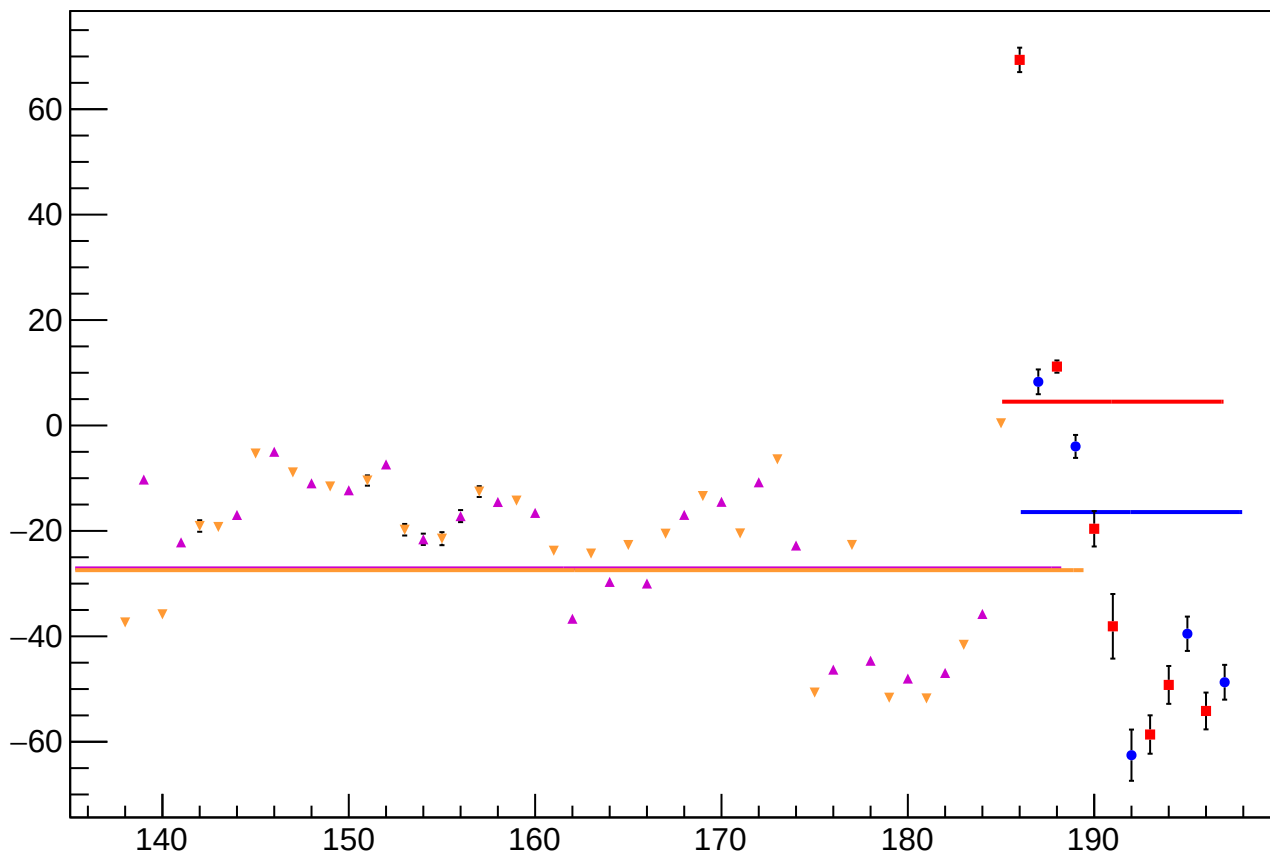
Right:  $-0.116 \pm 0.007$   $\chi^2/\text{NDF}$ : 3801.9/46

In:  $0.149 \pm 0.003$   $\chi^2/\text{NDF}$ : 4449.4/44

Out:  $0.134 \pm 0.003$   $\chi^2/\text{NDF}$ : 5144.2/49

All:  $0.141 \pm 0.002$   $\chi^2/\text{NDF}$ : 9608.2/94

reg\_asym\_sam\_2468\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Left:  $-27.283 \pm 0.097$   $\chi^2/\text{NDF}: 26267.3/47$

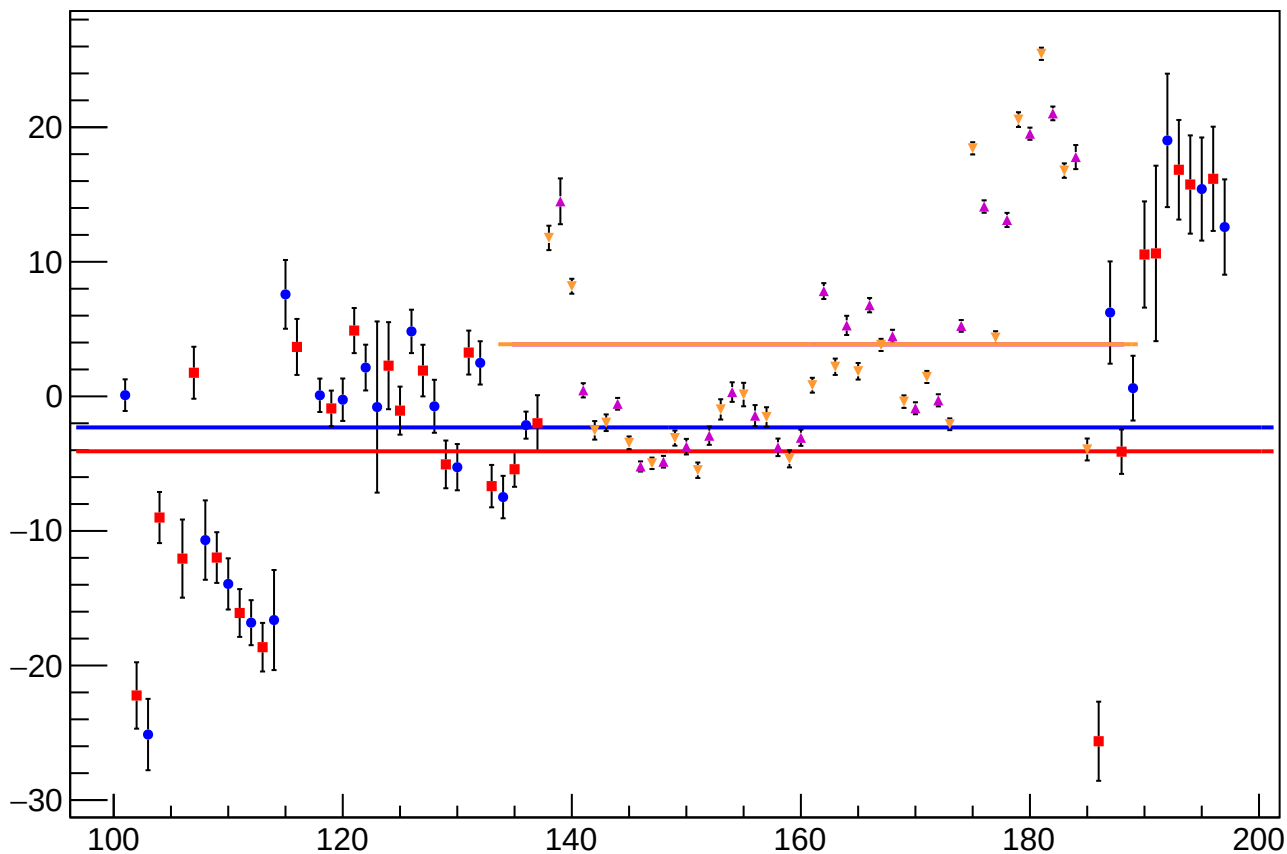
Right:  $-2.327 \pm 0.726$   $\chi^2/\text{NDF}: 2284.9/11$

In:  $-26.988 \pm 0.138$   $\chi^2/\text{NDF}: 11893.1/27$

Out:  $-26.697 \pm 0.135$   $\chi^2/\text{NDF}: 17818.4/31$

All:  $-26.840 \pm 0.097$   $\chi^2/\text{NDF}: 29713.8/59$

reg\_asym\_sam\_2468\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-2.307 \pm 0.394$   $\chi^2/\text{NDF}$ : 348.0/21

Left Out:  $3.873 \pm 0.109$   $\chi^2/\text{NDF}$ : 6906.0/24

Right Out:  $-4.082 \pm 0.399$   $\chi^2/\text{NDF}$ : 457.1/24

Left In:  $3.861 \pm 0.111$   $\chi^2/\text{NDF}$ : 5438.4/22

Left:  $3.867 \pm 0.078$   $\chi^2/\text{NDF}$ : 12344.4/47

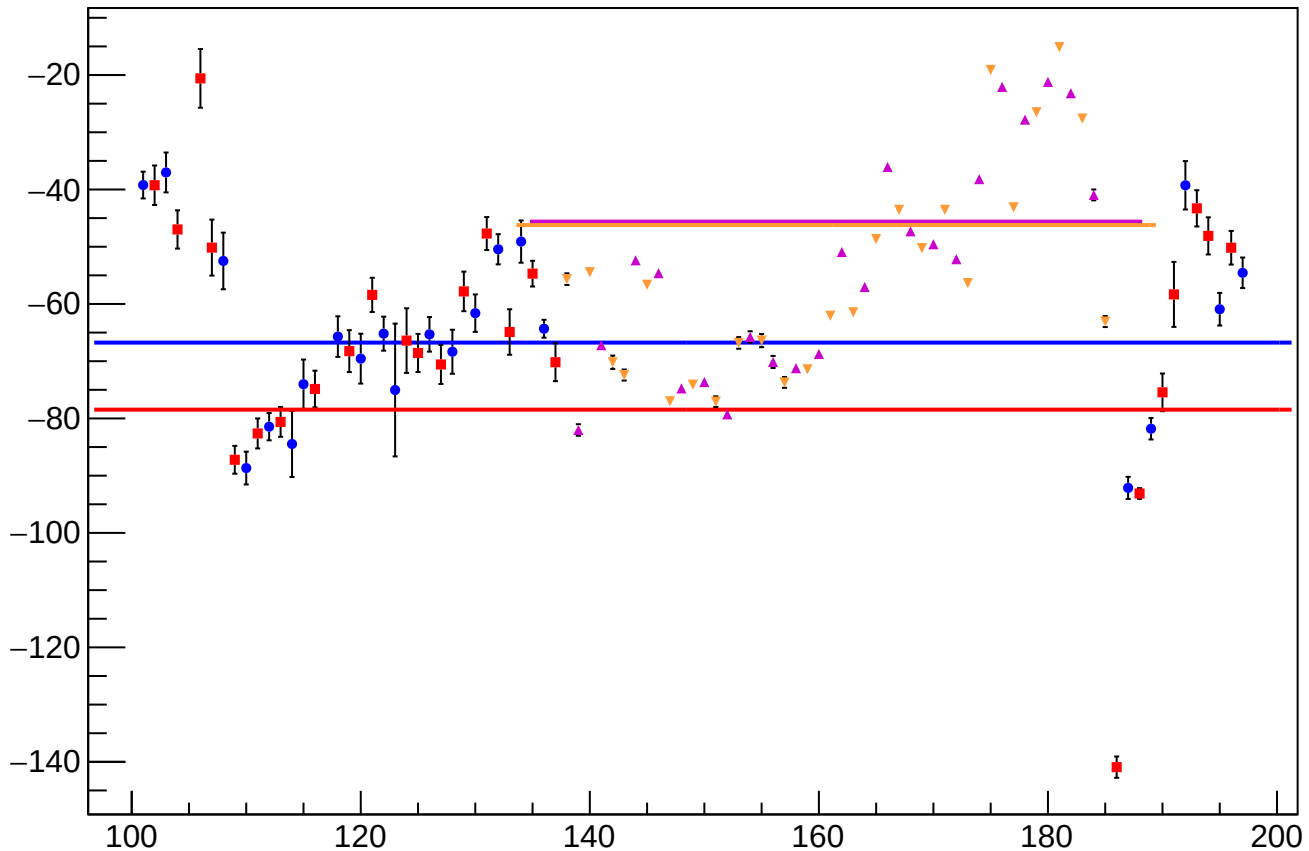
Right:  $-3.182 \pm 0.280$   $\chi^2/\text{NDF}$ : 815.2/46

In:  $3.408 \pm 0.107$   $\chi^2/\text{NDF}$ : 6013.8/44

Out:  $3.317 \pm 0.106$   $\chi^2/\text{NDF}$ : 7732.1/49

All:  $3.362 \pm 0.075$   $\chi^2/\text{NDF}$ : 13746.3/94

reg\_asym\_sam\_2468\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-66.749 \pm 0.608$   $\chi^2/\text{NDF}$ : 700.2/21

Left Out:  $-46.213 \pm 0.138$   $\chi^2/\text{NDF}$ : 19981.0/24

Right Out:  $-78.466 \pm 0.525$   $\chi^2/\text{NDF}$ : 2432.2/24

Left In:  $-45.616 \pm 0.139$   $\chi^2/\text{NDF}$ : 17743.8/22

Left:  $-45.917 \pm 0.098$   $\chi^2/\text{NDF}$ : 37734.0/47

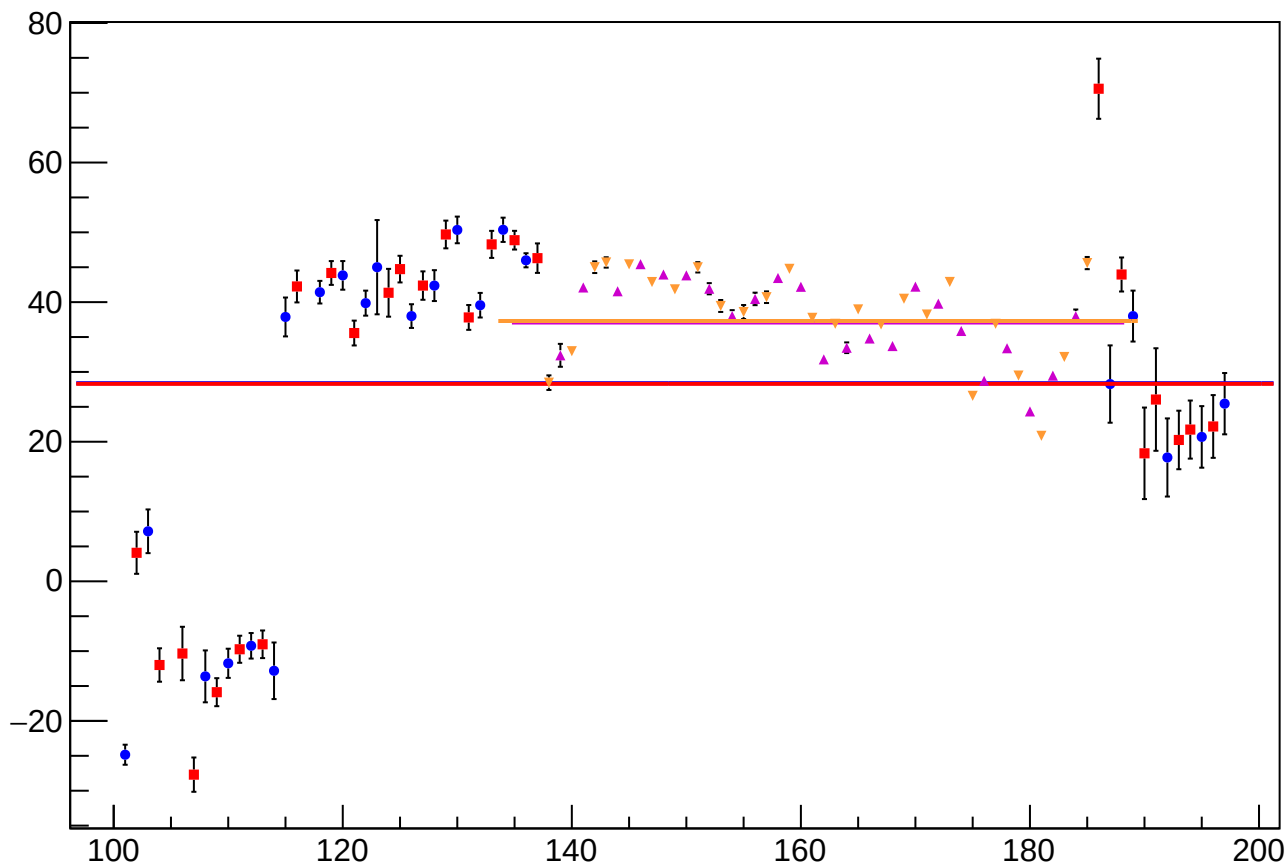
Right:  $-73.457 \pm 0.397$   $\chi^2/\text{NDF}$ : 3345.2/46

In:  $-46.669 \pm 0.136$   $\chi^2/\text{NDF}$ : 19592.7/44

Out:  $-48.299 \pm 0.134$   $\chi^2/\text{NDF}$ : 25939.7/49

All:  $-47.496 \pm 0.095$   $\chi^2/\text{NDF}$ : 45605.7/94

reg\_asym\_sam\_2468\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 28.389 $\pm$ 0.446  $\chi^2$ /NDF: 3344.3/21

Left Out: 37.298 $\pm$ 0.123  $\chi^2$ /NDF:3113.0/24

Right Out: 28.294 $\pm$ 0.457  $\chi^2$ /NDF: 3178.2/24

Left In: 37.079 $\pm$ 0.125  $\chi^2$ /NDF:2405.4/22

Left: 37.190 $\pm$ 0.088  $\chi^2$ /NDF: 5519.9/47

Right: 28.343 $\pm$ 0.319  $\chi^2$ /NDF: 6522.6/46

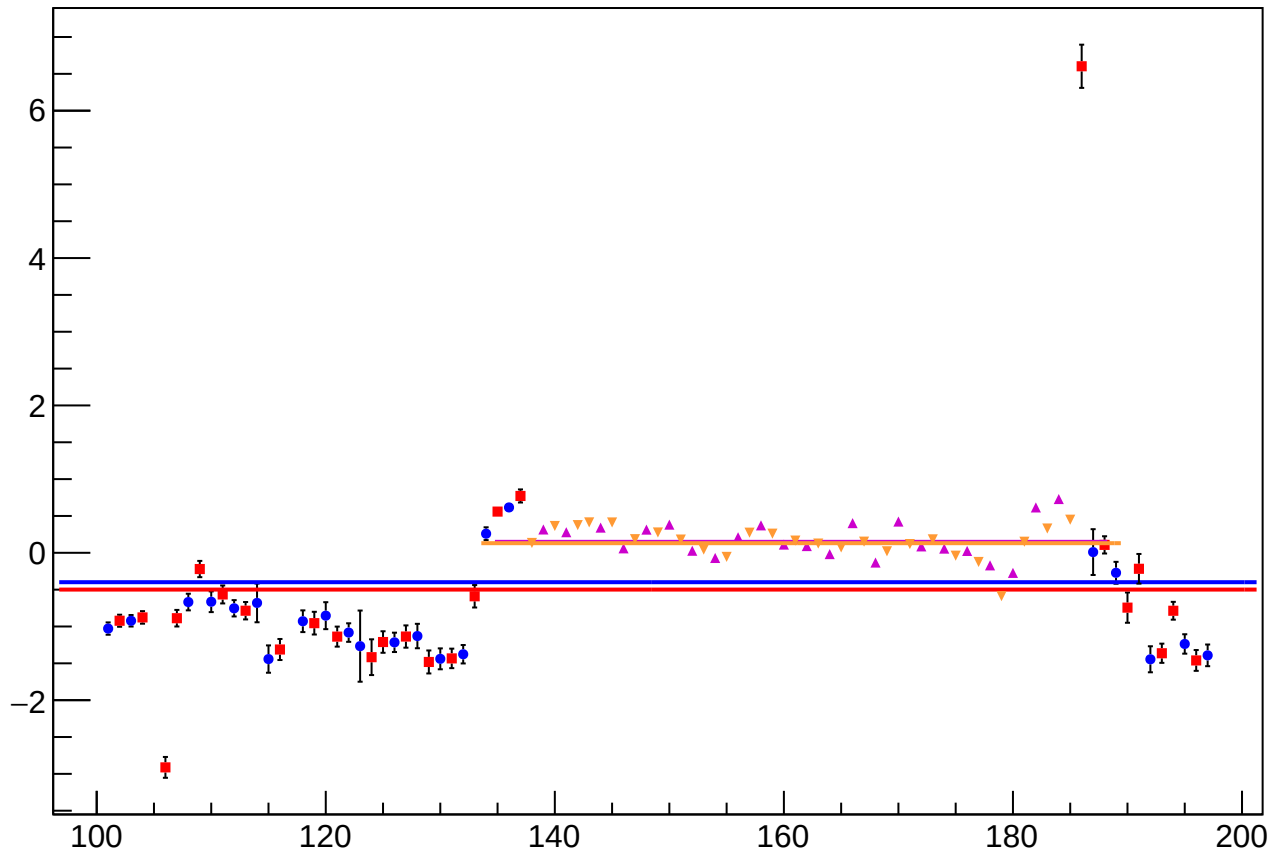
In: 36.449 $\pm$ 0.120  $\chi^2$ /NDF:6102.0/44

Out: 36.689 $\pm$ 0.119  $\chi^2$ /NDF:6653.0/49

All: 36.570 $\pm$ 0.084  $\chi^2$ /NDF: 12756.9/94



reg\_asym\_sam\_2468\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.399 \pm 0.024$   $\chi^2/\text{NDF}$ : 1145.3/21

Left Out:  $0.130 \pm 0.006$   $\chi^2/\text{NDF}$ : 1419.7/24

Right Out:  $-0.499 \pm 0.023$   $\chi^2/\text{NDF}$ : 1876.6/24

Left In:  $0.149 \pm 0.006$   $\chi^2/\text{NDF}$ : 1813.7/22

Left:  $0.139 \pm 0.004$   $\chi^2/\text{NDF}$ : 3238.6/47

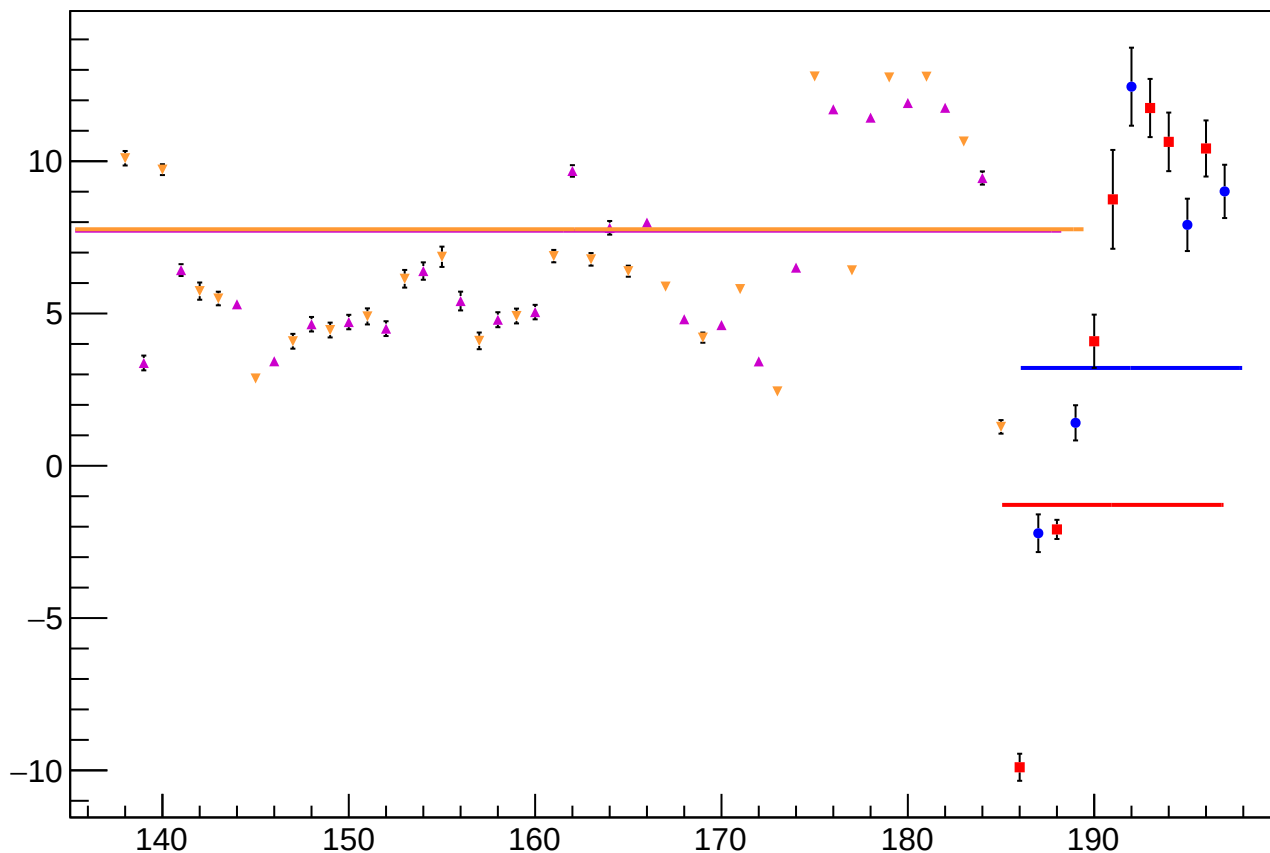
Right:  $-0.449 \pm 0.017$   $\chi^2/\text{NDF}$ : 3030.9/46

In:  $0.118 \pm 0.006$   $\chi^2/\text{NDF}$ : 3470.1/44

Out:  $0.096 \pm 0.005$   $\chi^2/\text{NDF}$ : 3976.9/49

All:  $0.107 \pm 0.004$   $\chi^2/\text{NDF}$ : 7455.2/94

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $3.212 \pm 0.336$   $\chi^2/\text{NDF}$ : 212.3/4

Left Out:  $7.766 \pm 0.034$   $\chi^2/\text{NDF}$ : 11703.8/24

Right Out:  $-1.284 \pm 0.222$   $\chi^2/\text{NDF}$ : 959.6/6

Left In:  $7.719 \pm 0.035$   $\chi^2/\text{NDF}$ : 8490.5/22

Left:  $7.743 \pm 0.025$   $\chi^2/\text{NDF}$ : 20195.2/47

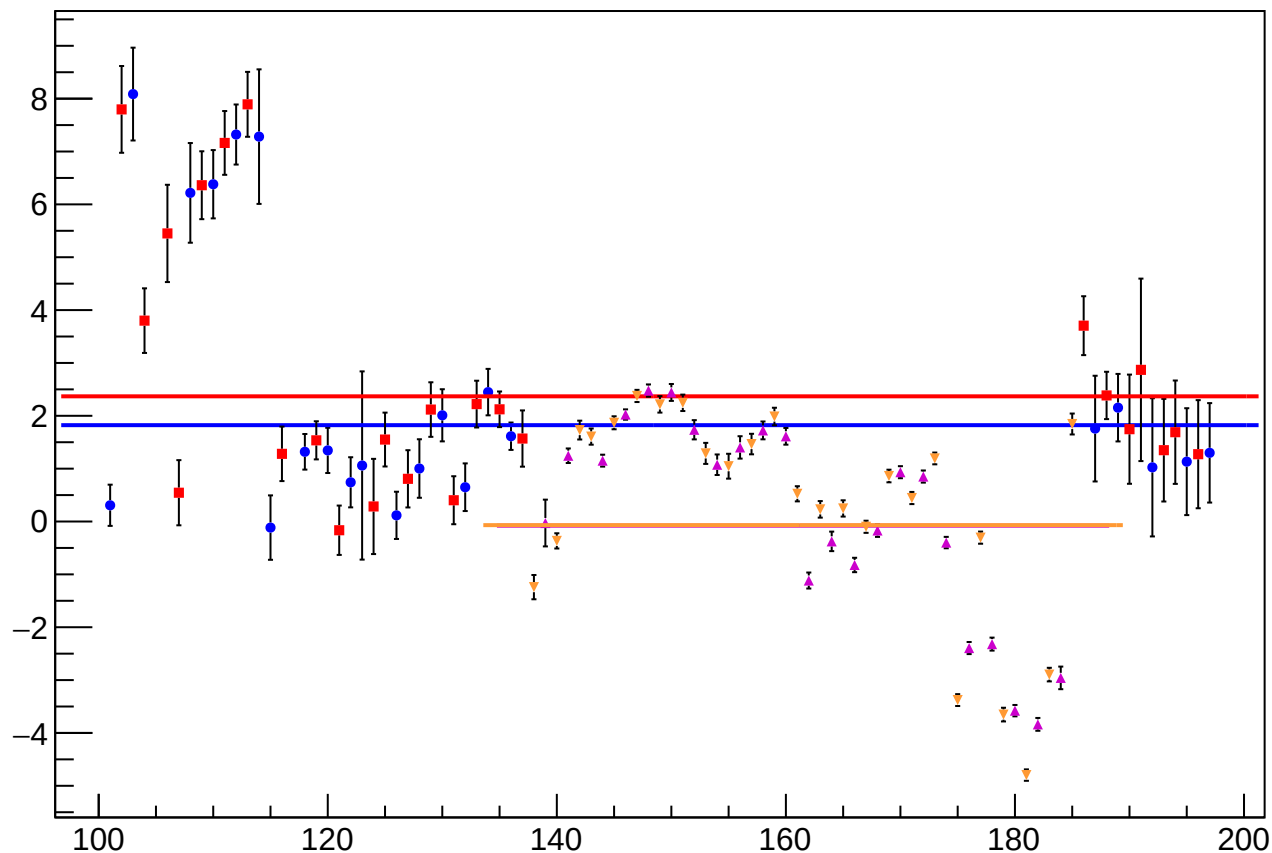
Right:  $0.087 \pm 0.185$   $\chi^2/\text{NDF}$ : 1296.6/11

In:  $7.671 \pm 0.035$   $\chi^2/\text{NDF}$ : 8881.1/27

Out:  $7.554 \pm 0.034$   $\chi^2/\text{NDF}$ : 14280.2/31

All:  $7.612 \pm 0.024$   $\chi^2/\text{NDF}$ : 23167.1/59

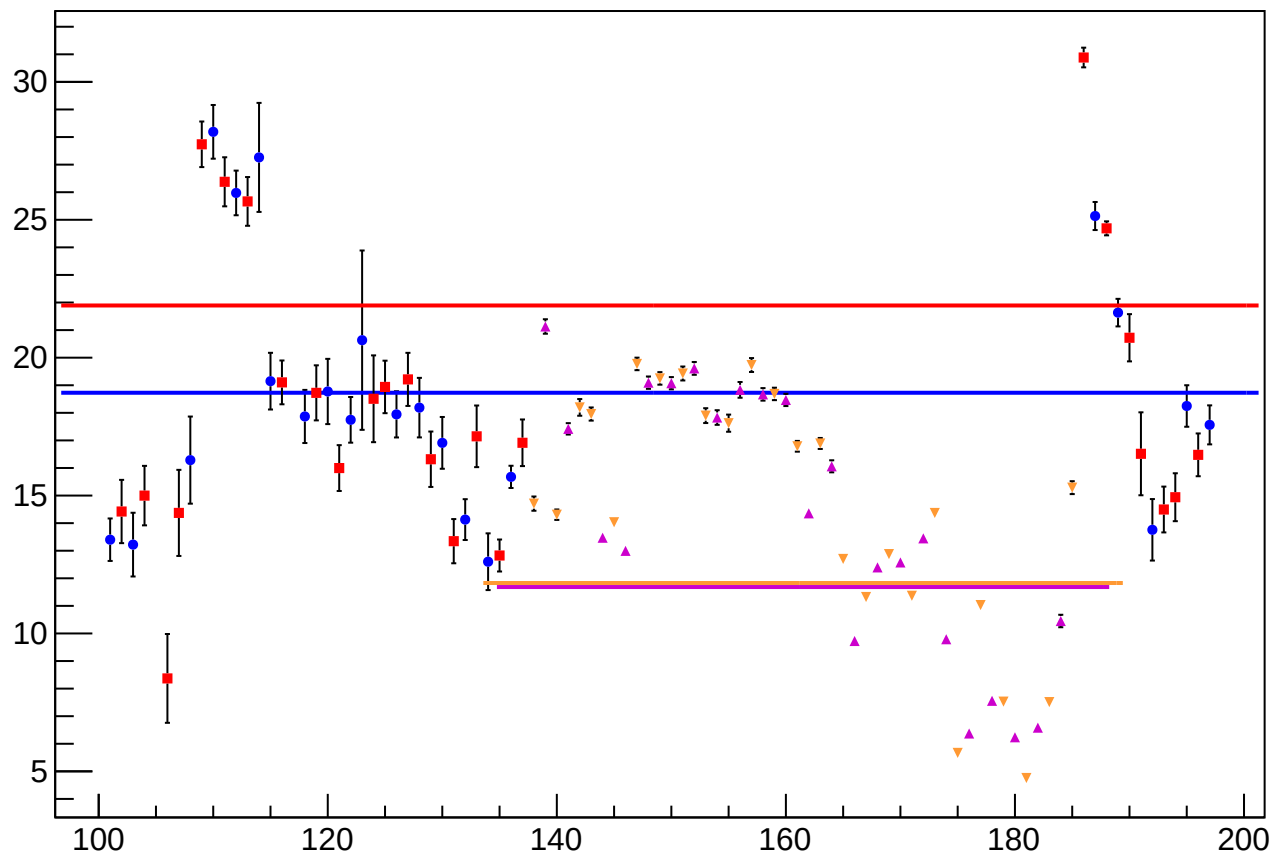
reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $1.823 \pm 0.112$   $\chi^2/\text{NDF}: 296.3/21$   
 Left Out:  $-0.069 \pm 0.028$   $\chi^2/\text{NDF}: 6033.5/24$   
 Right Out:  $2.368 \pm 0.113$   $\chi^2/\text{NDF}: 338.2/24$   
 Left In:  $-0.079 \pm 0.028$   $\chi^2/\text{NDF}: 4989.1/22$

Left:  $-0.074 \pm 0.020$   $\chi^2/\text{NDF}: 11022.7/47$   
 Right:  $2.093 \pm 0.079$   $\chi^2/\text{NDF}: 646.4/46$   
 In:  $0.035 \pm 0.027$   $\chi^2/\text{NDF}: 5558.7/44$   
 Out:  $0.072 \pm 0.027$   $\chi^2/\text{NDF}: 6813.5/49$   
 All:  $0.054 \pm 0.019$   $\chi^2/\text{NDF}: 12373.1/94$

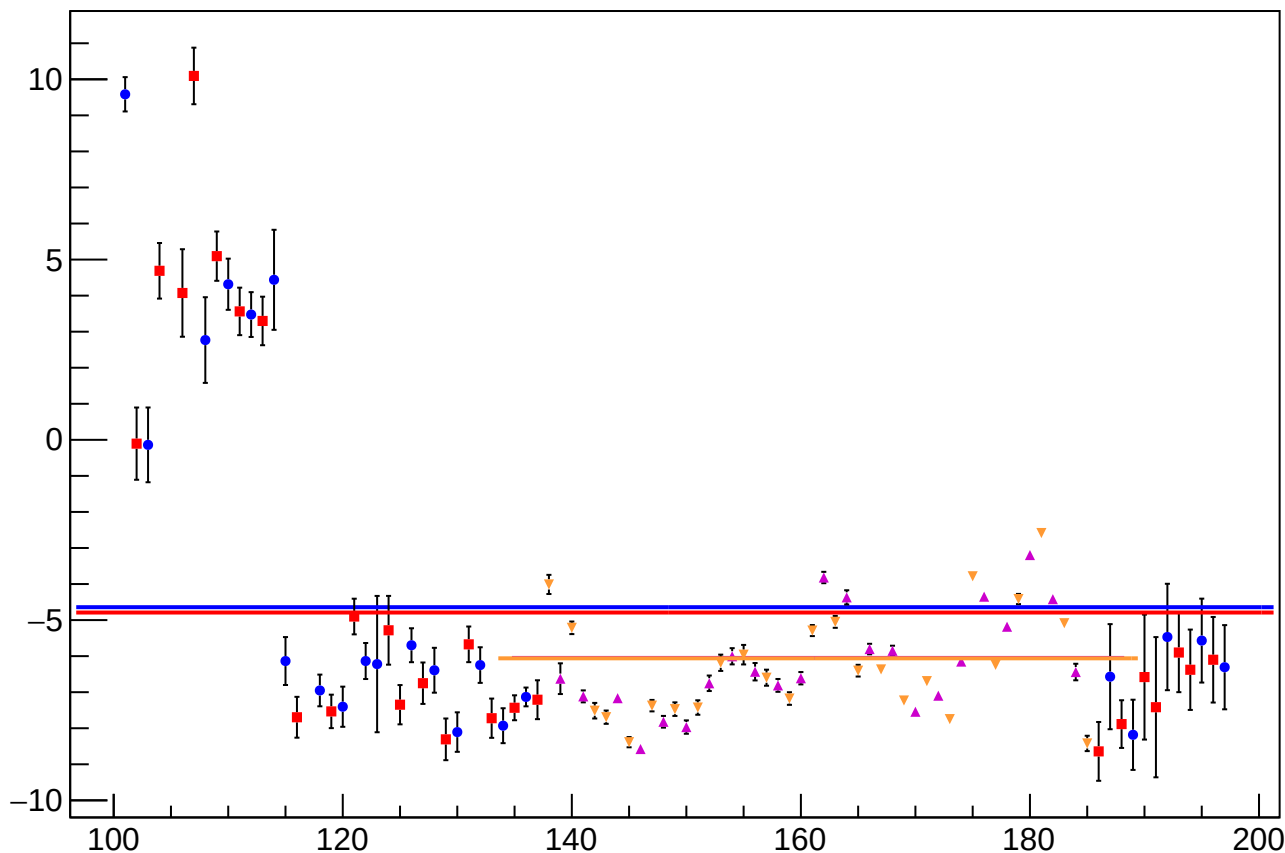
reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $18.728 \pm 0.170$   $\chi^2/\text{NDF}$ : 620.6/21  
 Left Out:  $11.830 \pm 0.035$   $\chi^2/\text{NDF}$ : 19032.5/24  
 Right Out:  $21.893 \pm 0.141$   $\chi^2/\text{NDF}$ : 1769.5/24  
 Left In:  $11.683 \pm 0.035$   $\chi^2/\text{NDF}$ : 16927.3/22

Left:  $11.757 \pm 0.025$   $\chi^2/\text{NDF}$ : 35968.6/47  
 Right:  $20.601 \pm 0.108$   $\chi^2/\text{NDF}$ : 2596.0/46  
 In:  $11.972 \pm 0.034$   $\chi^2/\text{NDF}$ : 19201.7/44  
 Out:  $12.406 \pm 0.034$   $\chi^2/\text{NDF}$ : 25611.1/49  
 All:  $12.193 \pm 0.024$   $\chi^2/\text{NDF}$ : 44894.4/94

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-4.642 \pm 0.126$   $\chi^2/\text{NDF}$ : 1608.9/21

Left Out:  $-6.061 \pm 0.031$   $\chi^2/\text{NDF}$ : 2649.3/24

Right Out:  $-4.790 \pm 0.129$   $\chi^2/\text{NDF}$ : 1394.5/24

Left In:  $-6.050 \pm 0.032$   $\chi^2/\text{NDF}$ : 2303.3/22

Left:  $-6.055 \pm 0.022$   $\chi^2/\text{NDF}$ : 4952.7/47

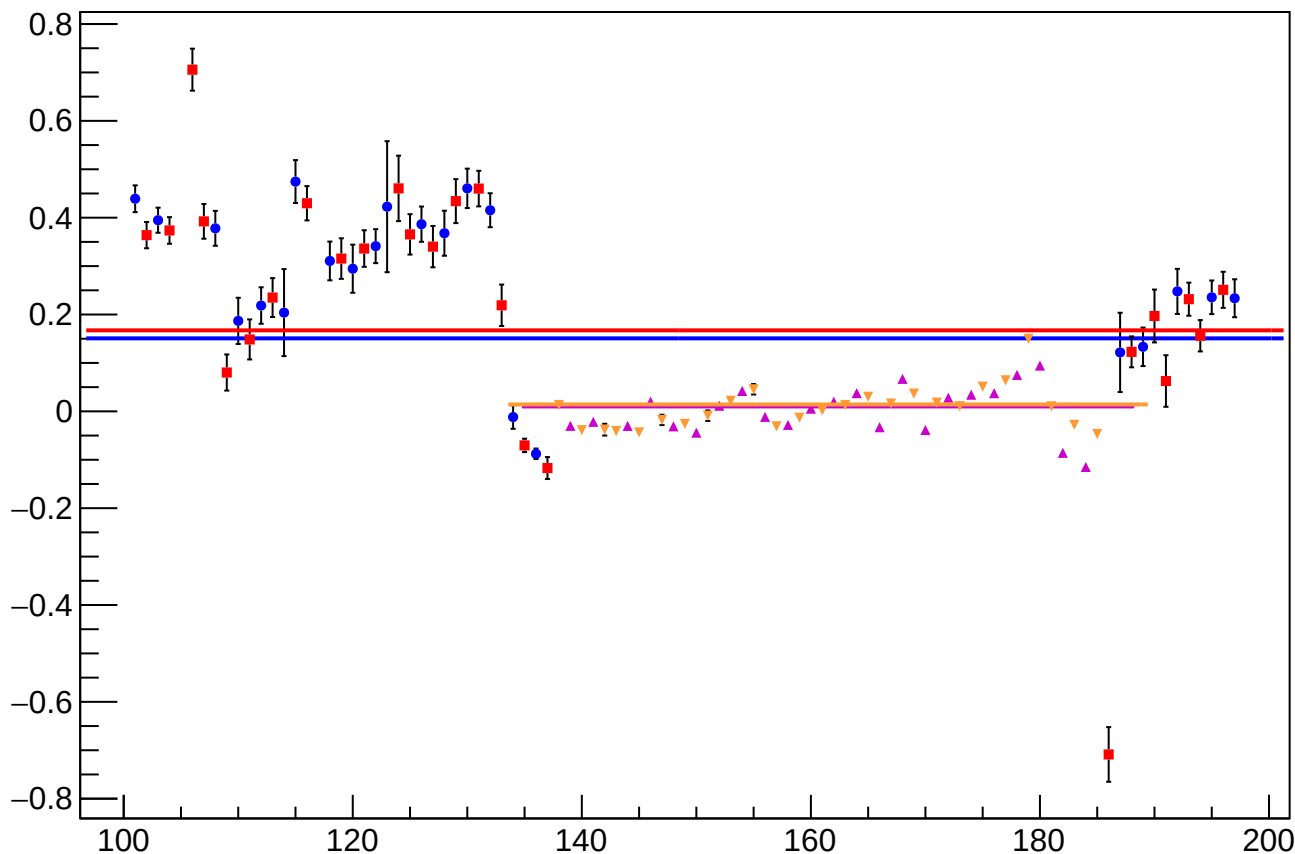
Right:  $-4.714 \pm 0.090$   $\chi^2/\text{NDF}$ : 3004.1/46

In:  $-5.966 \pm 0.031$   $\chi^2/\text{NDF}$ : 4029.8/44

Out:  $-5.991 \pm 0.030$   $\chi^2/\text{NDF}$ : 4135.3/49

All:  $-5.979 \pm 0.022$   $\chi^2/\text{NDF}$ : 8165.4/94

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.151 $\pm$ 0.007  $\chi^2$ /NDF: 1076.6/21

Left Out: 0.014 $\pm$ 0.001  $\chi^2$ /NDF:950.9/24

Right Out: 0.167 $\pm$ 0.007  $\chi^2$ /NDF: 1261.8/24

Left In: 0.010 $\pm$ 0.001  $\chi^2$ /NDF:1224.5/22

Left: 0.012 $\pm$ 0.001  $\chi^2$ /NDF: 2179.5/47

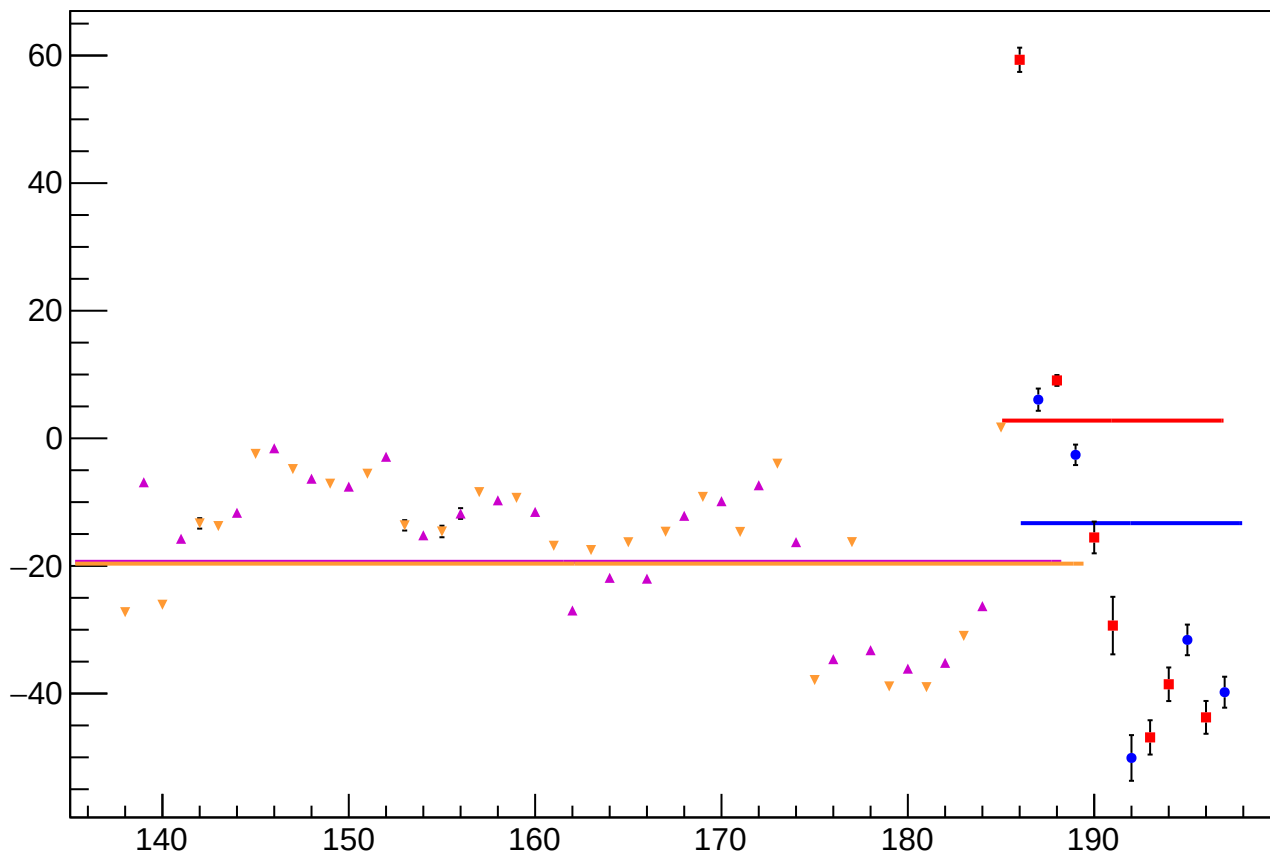
Right: 0.159 $\pm$ 0.005  $\chi^2$ /NDF: 2341.6/46

In: 0.017 $\pm$ 0.001  $\chi^2$ /NDF:2732.0/44

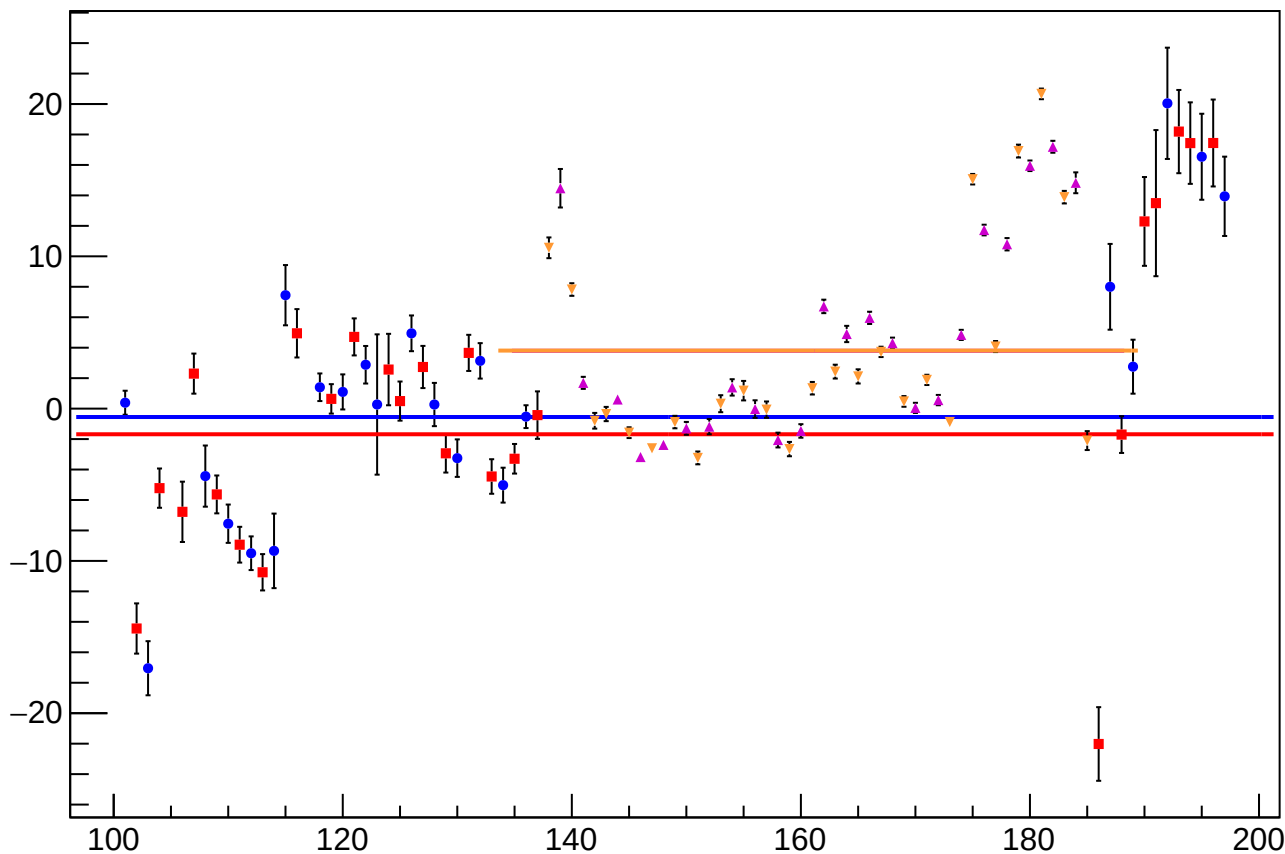
Out: 0.021 $\pm$ 0.001  $\chi^2$ /NDF:2722.0/49

All: 0.019 $\pm$ 0.001  $\chi^2$ /NDF: 5459.0/94

reg\_asym\_sam\_12345678\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



reg\_asym\_sam\_12345678\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-0.551 \pm 0.281$   $\chi^2/\text{NDF}$ : 396.0/21

Left Out:  $3.811 \pm 0.082$   $\chi^2/\text{NDF}$ : 7118.3/24

Right Out:  $-1.684 \pm 0.285$   $\chi^2/\text{NDF}$ : 539.4/24

Left In:  $3.795 \pm 0.083$   $\chi^2/\text{NDF}$ : 5534.4/22

Left:  $3.803 \pm 0.059$   $\chi^2/\text{NDF}$ : 12652.7/47

Right:  $-1.109 \pm 0.200$   $\chi^2/\text{NDF}$ : 943.5/46

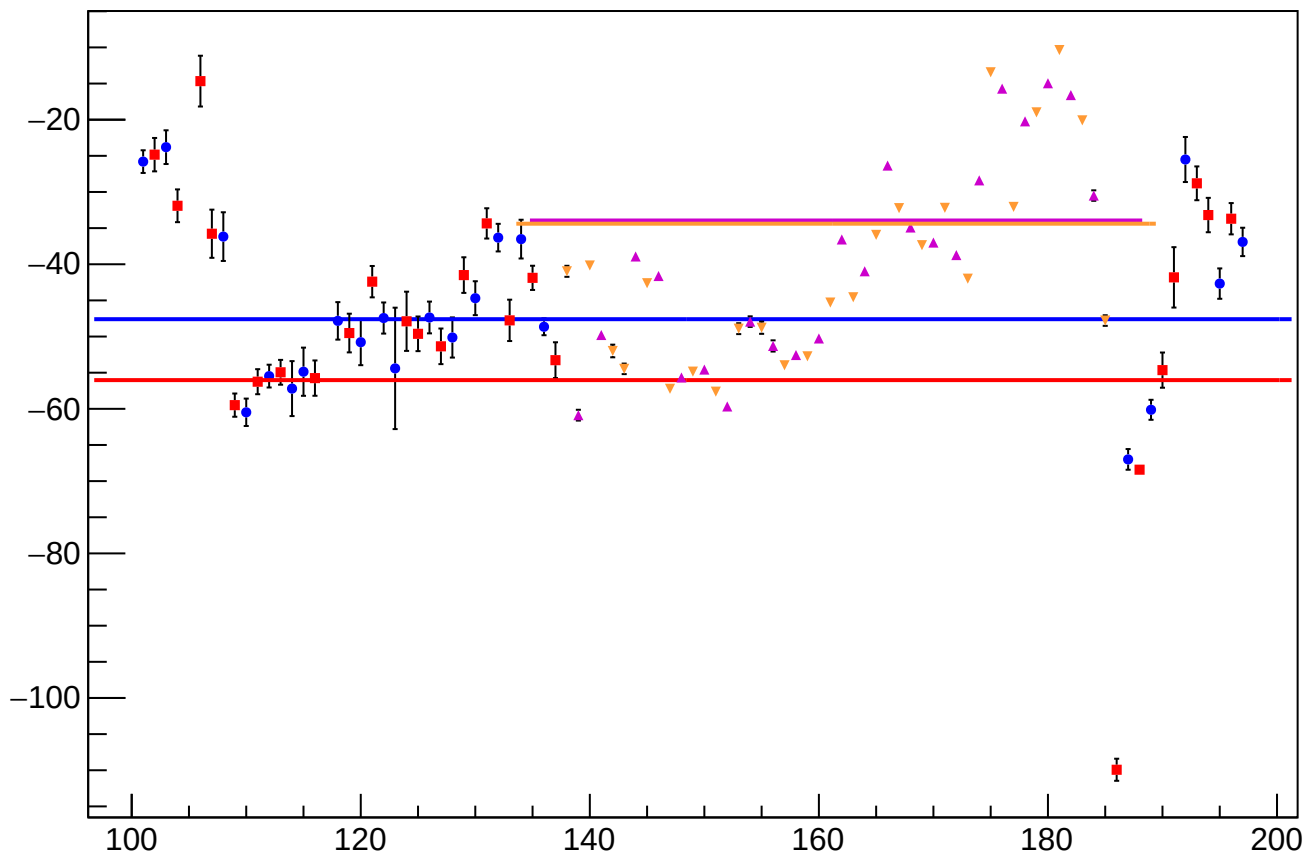
In:  $3.444 \pm 0.080$   $\chi^2/\text{NDF}$ : 6150.6/44

Out:  $3.388 \pm 0.079$   $\chi^2/\text{NDF}$ : 8001.2/49

All:  $3.415 \pm 0.056$   $\chi^2/\text{NDF}$ : 14152.1/94



reg\_asym\_sam\_12345678\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-47.599 \pm 0.436$   $\chi^2/\text{NDF}$ : 798.8/21

Left Out:  $-34.389 \pm 0.104$   $\chi^2/\text{NDF}$ : 20032.2/24

Right Out:  $-56.028 \pm 0.380$   $\chi^2/\text{NDF}$ : 2678.0/24

Left In:  $-33.946 \pm 0.105$   $\chi^2/\text{NDF}$ : 17855.4/22

Left:  $-34.169 \pm 0.074$   $\chi^2/\text{NDF}$ : 37896.7/47

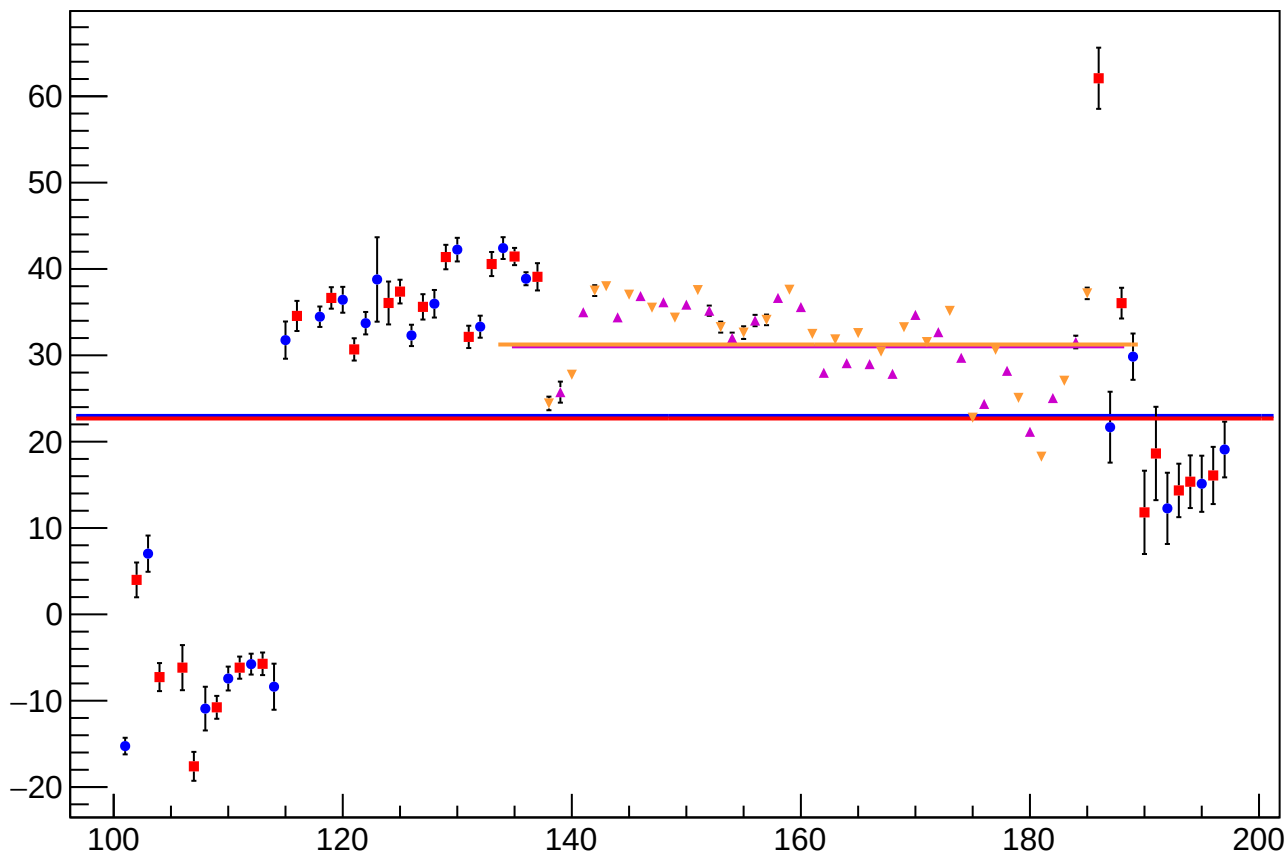
Right:  $-52.389 \pm 0.286$   $\chi^2/\text{NDF}$ : 3689.3/46

In:  $-34.693 \pm 0.102$   $\chi^2/\text{NDF}$ : 19581.5/44

Out:  $-35.900 \pm 0.100$   $\chi^2/\text{NDF}$ : 25727.4/49

All:  $-35.306 \pm 0.072$   $\chi^2/\text{NDF}$ : 45380.1/94

reg\_asym\_sam\_12345678\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 22.981+/-0.319  $\chi^2/\text{NDF}$ : 4366.7/21

Left Out: 31.252+/-0.093  $\chi^2/\text{NDF}$ :3305.3/24

Right Out: 22.683+/-0.326  $\chi^2/\text{NDF}$ : 4231.6/24

Left In: 31.040+/-0.094  $\chi^2/\text{NDF}$ :2488.6/22

Left: 31.147+/-0.066  $\chi^2/\text{NDF}$ : 5796.5/47

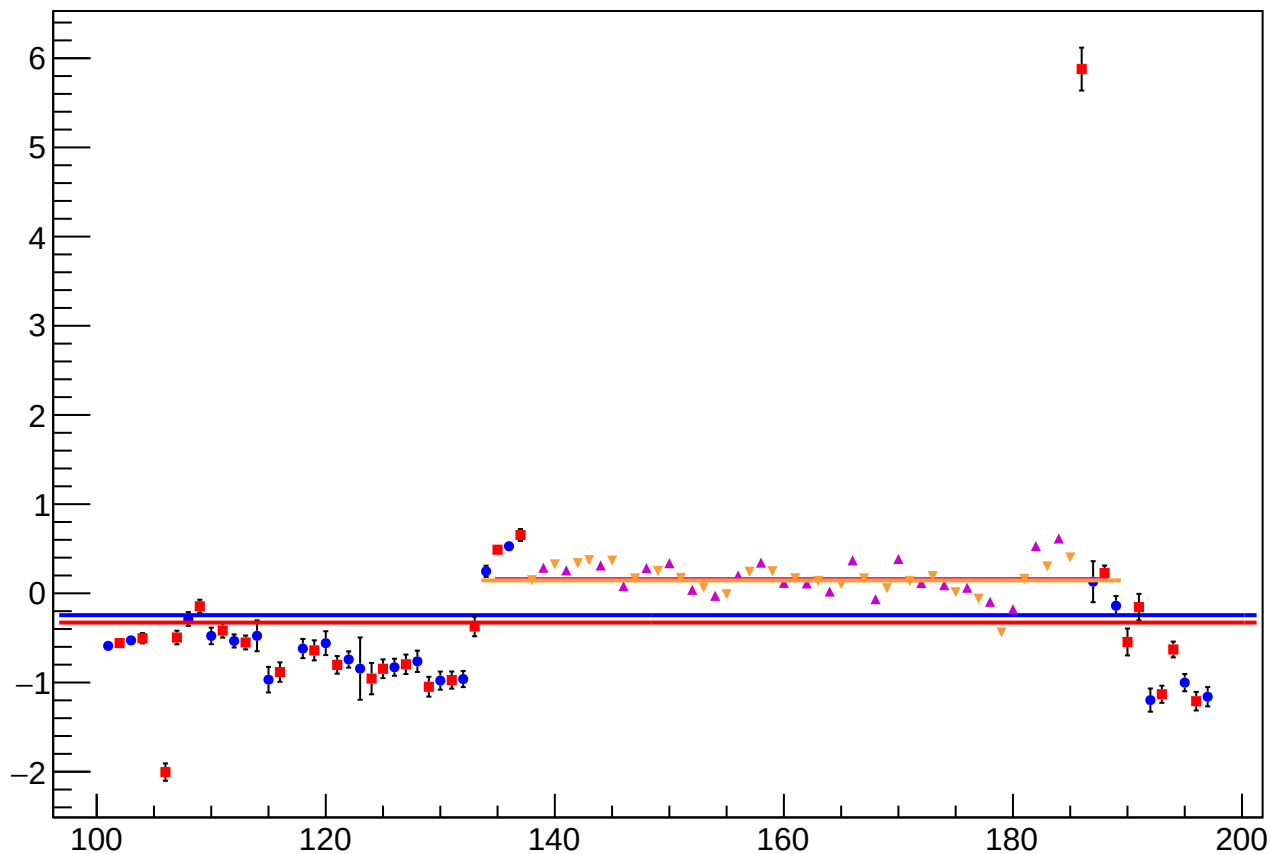
Right: 22.835+/-0.228  $\chi^2/\text{NDF}$ : 8598.8/46

In: 30.396+/-0.090  $\chi^2/\text{NDF}$ :7444.4/44

Out: 30.613+/-0.089  $\chi^2/\text{NDF}$ :8176.8/49

All: 30.506+/-0.063  $\chi^2/\text{NDF}$ : 15624.2/94

reg\_asym\_sam\_12345678\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.245 \pm 0.017$   $\chi^2/\text{NDF}: 1200.2/21$

Left Out:  $0.145 \pm 0.004$   $\chi^2/\text{NDF}: 1572.6/24$

Right Out:  $-0.328 \pm 0.017$   $\chi^2/\text{NDF}: 2044.5/24$

Left In:  $0.159 \pm 0.004$   $\chi^2/\text{NDF}: 2020.5/22$

Left:  $0.152 \pm 0.003$   $\chi^2/\text{NDF}: 3598.6/47$

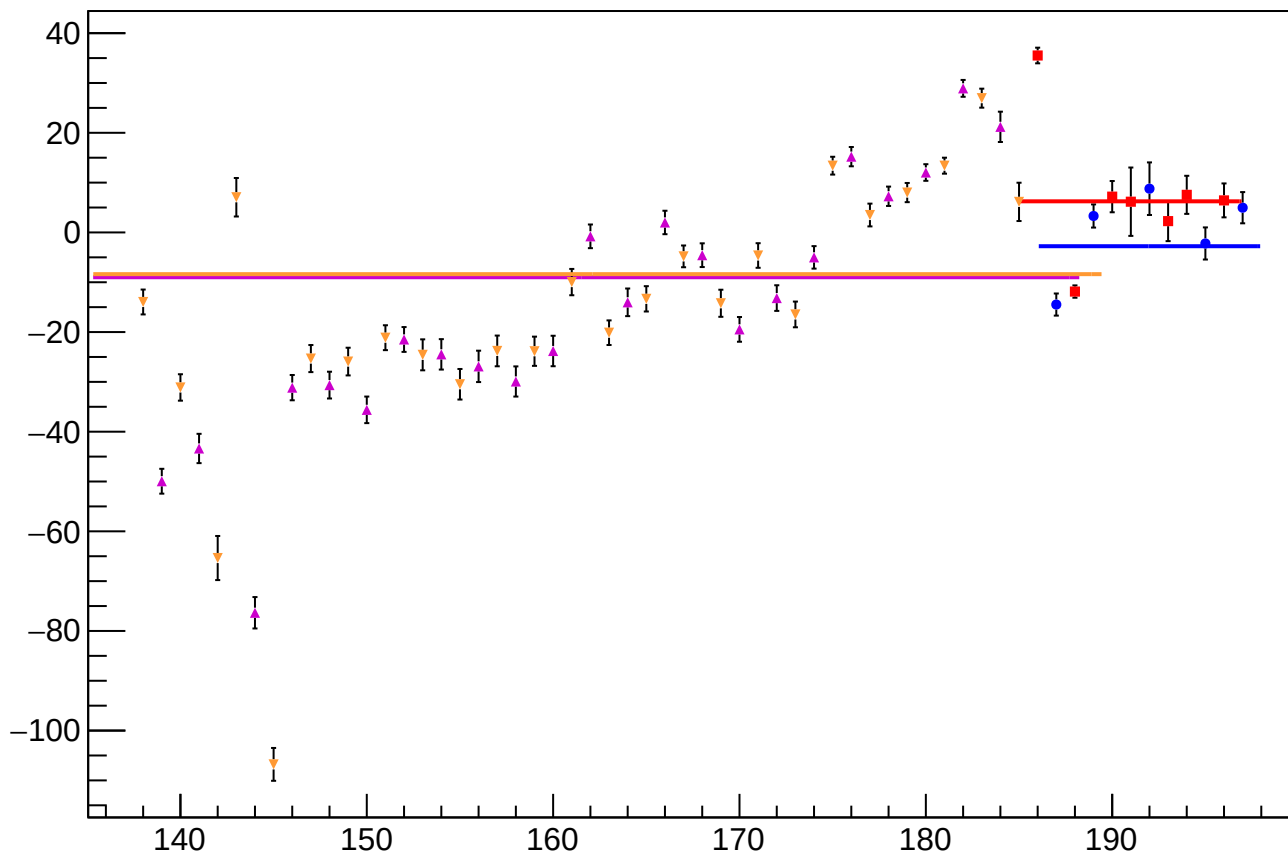
Right:  $-0.287 \pm 0.012$   $\chi^2/\text{NDF}: 3257.0/46$

In:  $0.134 \pm 0.004$   $\chi^2/\text{NDF}: 3762.1/44$

Out:  $0.116 \pm 0.004$   $\chi^2/\text{NDF}: 4370.3/49$

All:  $0.125 \pm 0.003$   $\chi^2/\text{NDF}: 8142.0/94$

reg\_asym\_atl1\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-2.767 \pm 1.268$   $\chi^2/\text{NDF}: 45.5/4$

Left Out:  $-8.375 \pm 0.500$   $\chi^2/\text{NDF}: 2224.0/24$

Right Out:  $6.245 \pm 0.846$   $\chi^2/\text{NDF}: 562.1/6$

Left In:  $-8.995 \pm 0.505$   $\chi^2/\text{NDF}: 2308.2/22$

Left:  $-8.682 \pm 0.355$   $\chi^2/\text{NDF}: 4533.0/47$

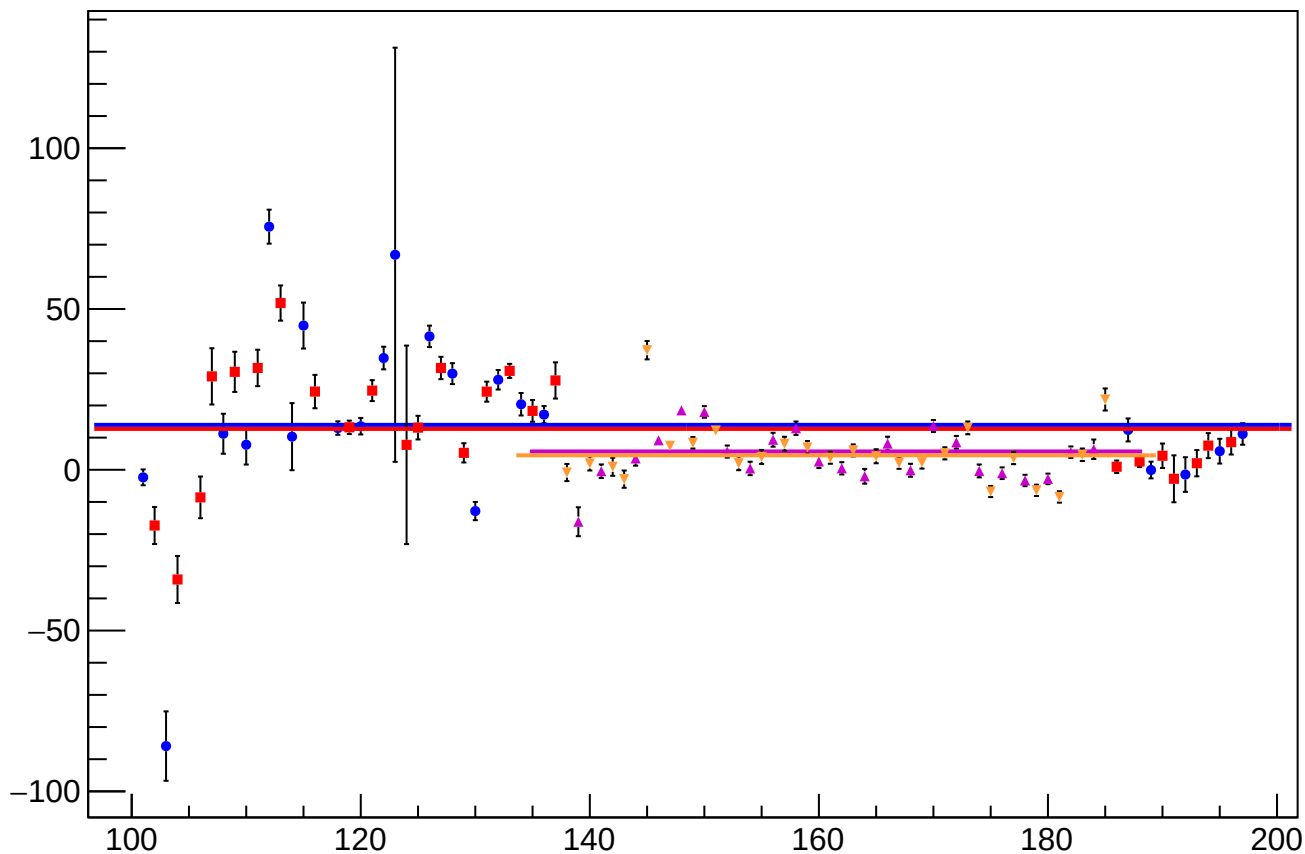
Right:  $3.468 \pm 0.704$   $\chi^2/\text{NDF}: 642.6/11$

In:  $-8.143 \pm 0.469$   $\chi^2/\text{NDF}: 2374.6/27$

Out:  $-4.589 \pm 0.431$   $\chi^2/\text{NDF}: 3007.3/31$

All:  $-6.214 \pm 0.317$   $\chi^2/\text{NDF}: 5413.0/59$

reg\_asym\_atl1\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 13.969 $\pm$ 0.743  $\chi^2$ /NDF: 571.5/21

Left Out: 4.494 $\pm$ 0.393  $\chi^2$ /NDF: 372.1/24

Right Out: 12.709 $\pm$ 0.688  $\chi^2$ /NDF: 389.1/24

Left In: 5.699 $\pm$ 0.403  $\chi^2$ /NDF: 329.1/22

Left: 5.081 $\pm$ 0.281  $\chi^2$ /NDF: 705.8/47

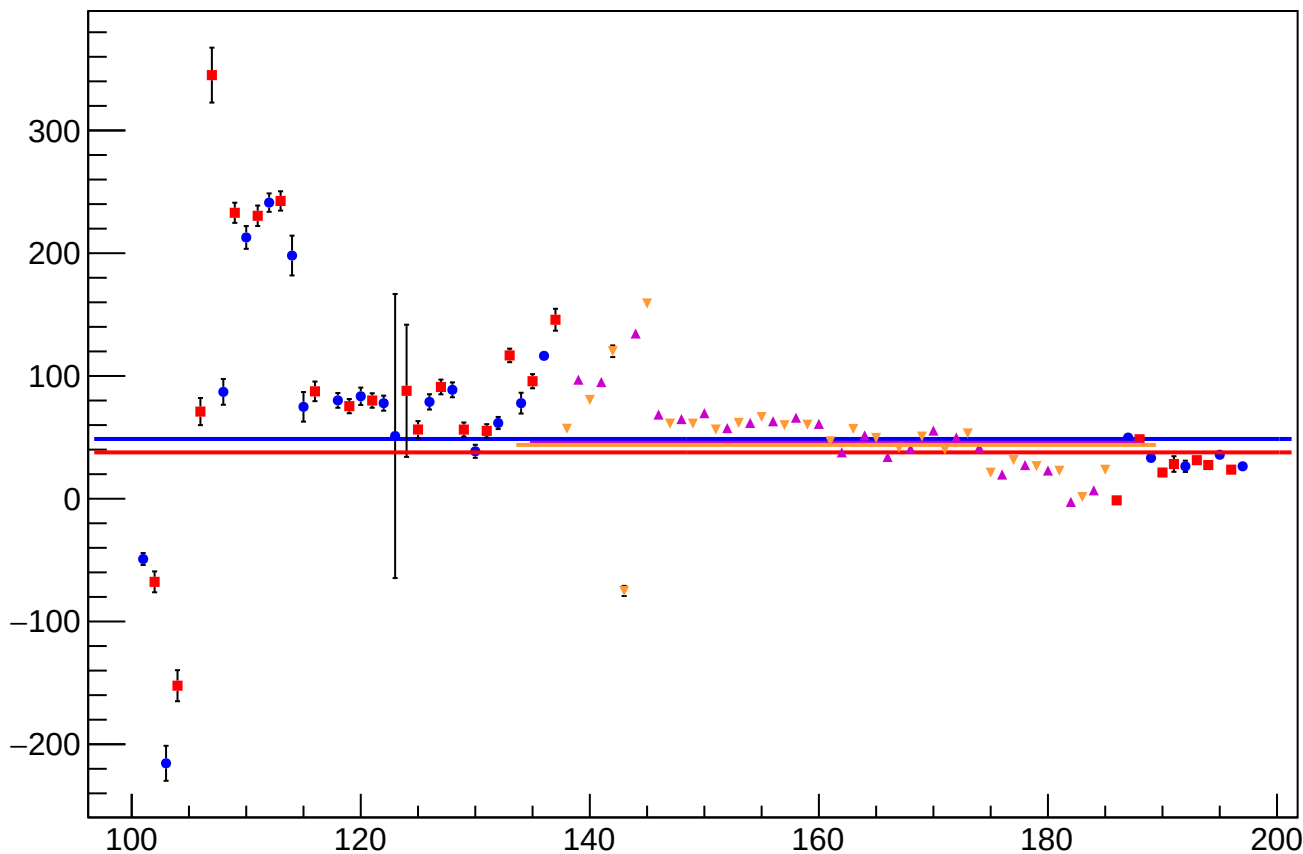
Right: 13.290 $\pm$ 0.505  $\chi^2$ /NDF: 962.1/46

In: 7.579 $\pm$ 0.354  $\chi^2$ /NDF: 996.3/44

Out: 6.515 $\pm$ 0.341  $\chi^2$ /NDF: 868.8/49

All: 7.027 $\pm$ 0.246  $\chi^2$ /NDF: 1869.8/94

reg\_asym\_atl1\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 48.683+/-0.889  $\chi^2/\text{NDF}$ : 2442.6/21

Left Out: 43.840+/-0.499  $\chi^2/\text{NDF}$ : 3680.9/24

Right Out: 37.753+/-0.646  $\chi^2/\text{NDF}$ : 4193.0/24

Left In: 45.559+/-0.502  $\chi^2/\text{NDF}$ : 3152.4/22

Left: 44.693+/-0.354  $\chi^2/\text{NDF}$ : 6839.2/47

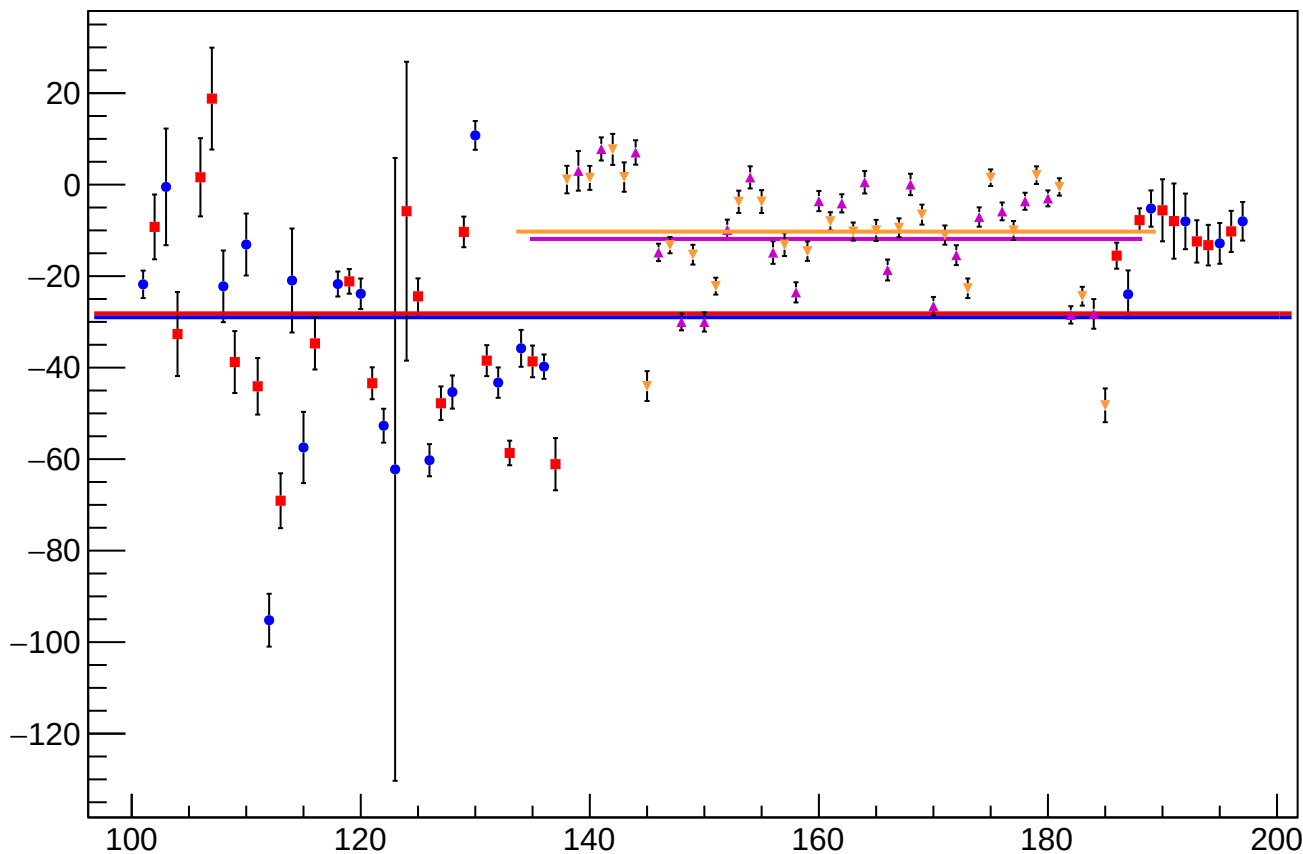
Right: 41.528+/-0.523  $\chi^2/\text{NDF}$ : 6734.5/46

In: 46.315+/-0.437  $\chi^2/\text{NDF}$ : 5604.4/44

Out: 41.565+/-0.395  $\chi^2/\text{NDF}$ : 7929.5/49

All: 43.697+/-0.293  $\chi^2/\text{NDF}$ : 13598.9/94

reg\_asym\_atl1\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-28.984 \pm 0.879$   $\chi^2/\text{NDF}$ : 596.8/21

Left Out:  $-10.267 \pm 0.445$   $\chi^2/\text{NDF}$ : 553.7/24

Right Out:  $-28.132 \pm 0.843$   $\chi^2/\text{NDF}$ : 496.7/24

Left In:  $-11.875 \pm 0.455$   $\chi^2/\text{NDF}$ : 668.4/22

Left:  $-11.053 \pm 0.318$   $\chi^2/\text{NDF}$ : 1228.5/47

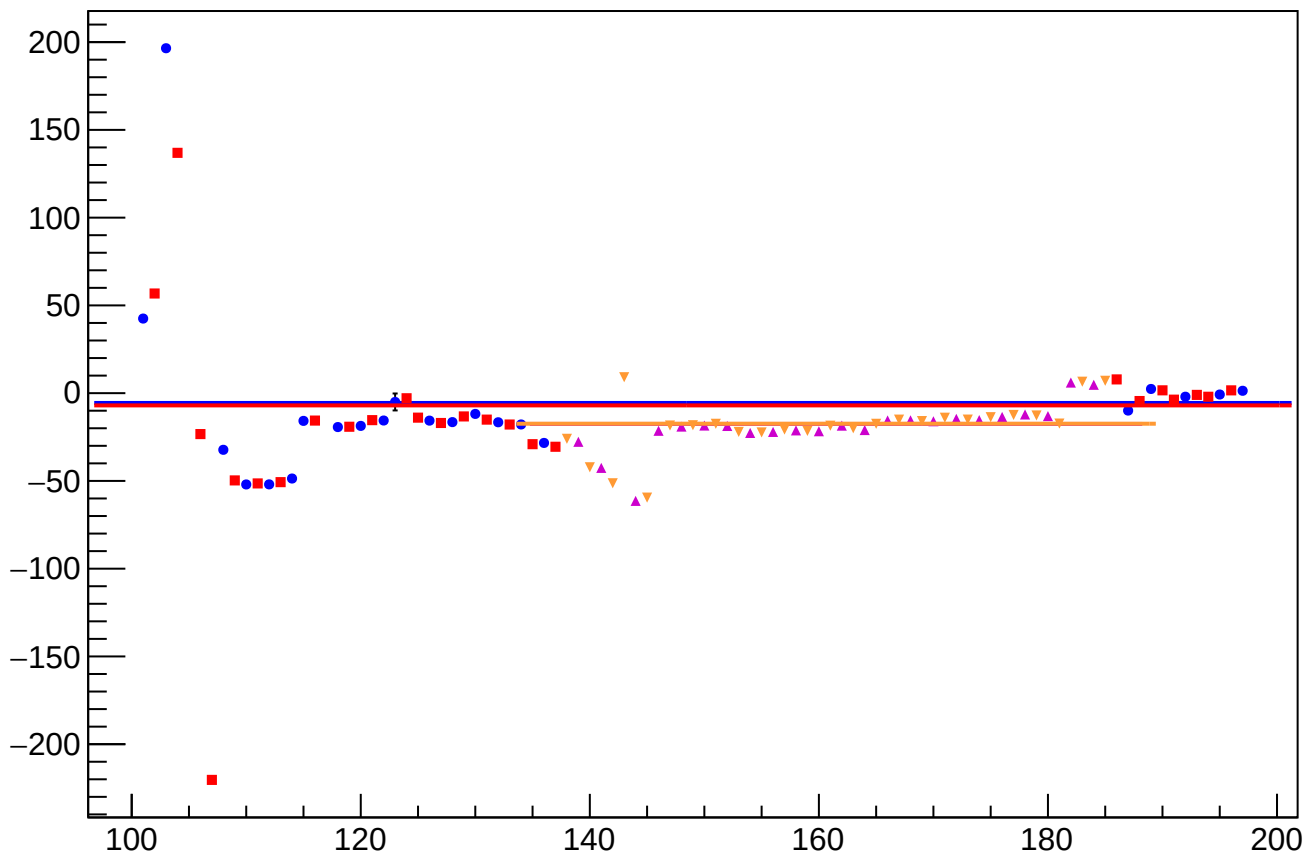
Right:  $-28.541 \pm 0.609$   $\chi^2/\text{NDF}$ : 1094.1/46

In:  $-15.485 \pm 0.404$   $\chi^2/\text{NDF}$ : 1563.9/44

Out:  $-14.156 \pm 0.394$   $\chi^2/\text{NDF}$ : 1401.4/49

All:  $-14.803 \pm 0.282$   $\chi^2/\text{NDF}$ : 2970.8/94

reg\_asym\_atl1\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-5.585 \pm 0.046$   $\chi^2/\text{NDF}: 585206.6/21$

Left Out:  $-17.411 \pm 0.020$   $\chi^2/\text{NDF}: 320231.3/24$

Right Out:  $-6.973 \pm 0.043$   $\chi^2/\text{NDF}: 575822.0/24$

Left In:  $-17.552 \pm 0.021$   $\chi^2/\text{NDF}: 261900.3/22$

Left:  $-17.481 \pm 0.015$   $\chi^2/\text{NDF}: 582155.3/47$

Right:  $-6.332 \pm 0.032$   $\chi^2/\text{NDF}: 1161510.7/46$

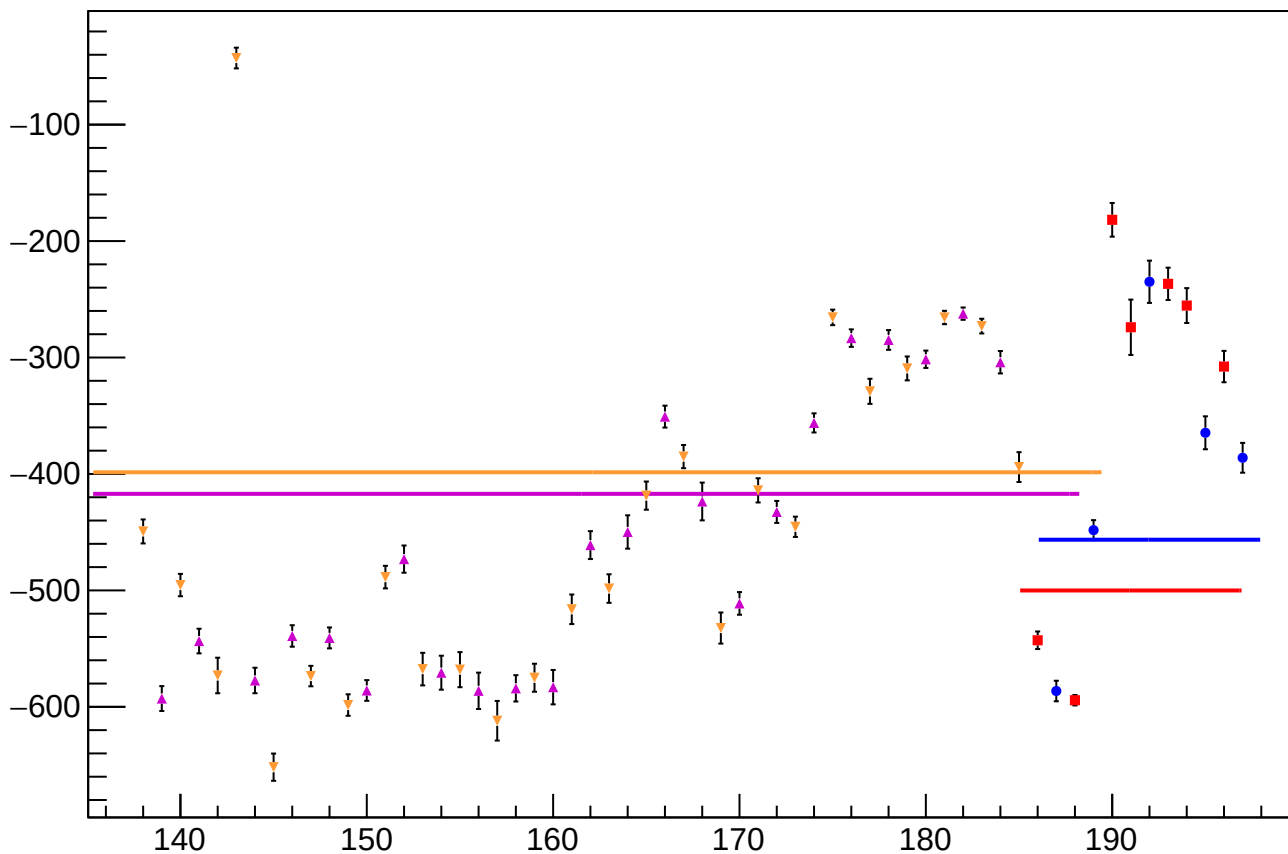
In:  $-15.581 \pm 0.019$   $\chi^2/\text{NDF}: 902737.3/44$

Out:  $-15.485 \pm 0.018$   $\chi^2/\text{NDF}: 944221.1/49$

All:  $-15.532 \pm 0.013$   $\chi^2/\text{NDF}: 1846971.7/94$



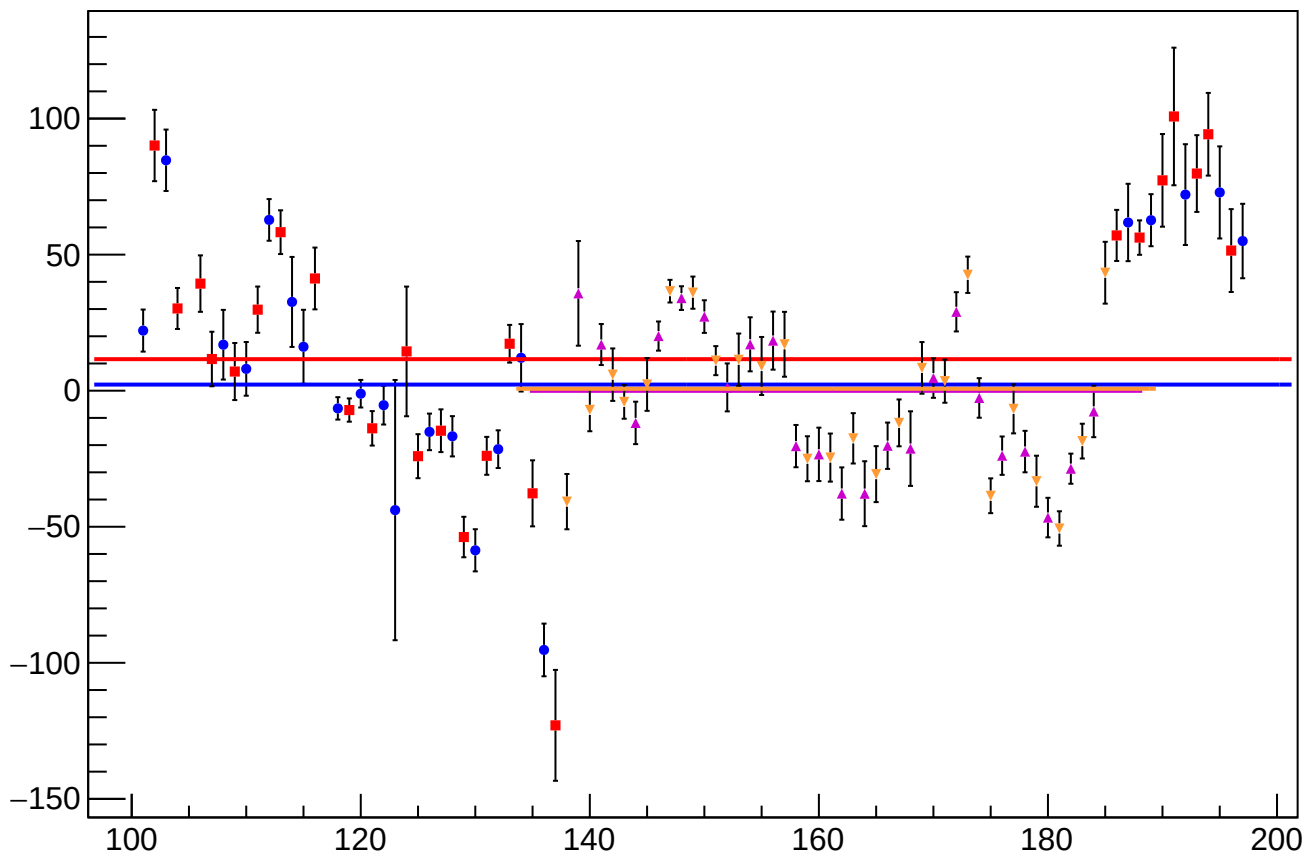
reg\_asym\_atl2\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: -456.461 $\pm$ 4.964  $\chi^2$ /NDF: 439.3/4  
 Left Out: -398.556 $\pm$ 1.962  $\chi^2$ /NDF:5659.5/24  
 Right Out: -500.064 $\pm$ 3.353  $\chi^2$ /NDF: 1877.9/6  
 Left In: -417.080 $\pm$ 1.997  $\chi^2$ /NDF:3958.5/22

Left: -407.653 $\pm$ 1.399  $\chi^2$ /NDF: 9661.9/47  
 Right: -486.402 $\pm$ 2.779  $\chi^2$ /NDF: 2370.2/11  
 In: -422.564 $\pm$ 1.853  $\chi^2$ /NDF:4452.0/27  
 Out: -424.435 $\pm$ 1.693  $\chi^2$ /NDF:8220.2/31  
 All: -423.584 $\pm$ 1.250  $\chi^2$ /NDF: 12672.8/59

reg\_asym\_atl2\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $2.246 \pm 1.802$   $\chi^2/\text{NDF}$ : 428.5/21

Left Out:  $0.697 \pm 1.510$   $\chi^2/\text{NDF}$ : 349.9/24

Right Out:  $11.585 \pm 1.753$   $\chi^2/\text{NDF}$ : 484.9/24

Left In:  $-0.052 \pm 1.571$   $\chi^2/\text{NDF}$ : 264.1/22

Left:  $0.337 \pm 1.089$   $\chi^2/\text{NDF}$ : 614.1/47

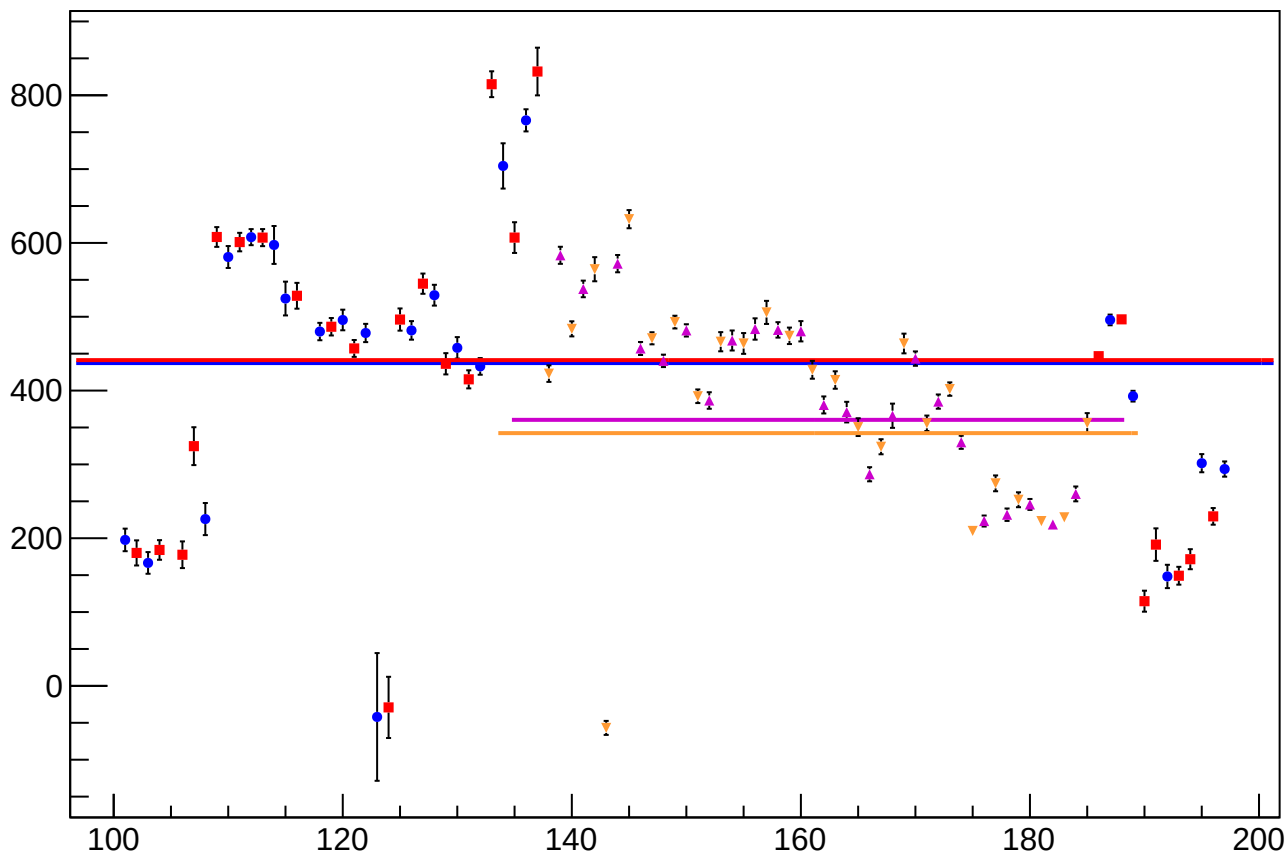
Right:  $7.045 \pm 1.256$   $\chi^2/\text{NDF}$ : 927.1/46

In:  $0.940 \pm 1.184$   $\chi^2/\text{NDF}$ : 693.5/44

Out:  $5.337 \pm 1.144$   $\chi^2/\text{NDF}$ : 856.9/49

All:  $3.214 \pm 0.823$   $\chi^2/\text{NDF}$ : 1557.6/94

reg\_asym\_atl2\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 437.248 $\pm$ 2.734     $\chi^2$ /NDF: 2510.7/21

Left Out: 342.368 $\pm$ 1.970     $\chi^2$ /NDF:5181.7/24

Right Out: 441.242 $\pm$ 2.178     $\chi^2$ /NDF: 4501.8/24

Left In: 360.355 $\pm$ 1.996     $\chi^2$ /NDF:3449.9/22

Left: 351.245 $\pm$ 1.402     $\chi^2$ /NDF: 8672.8/47

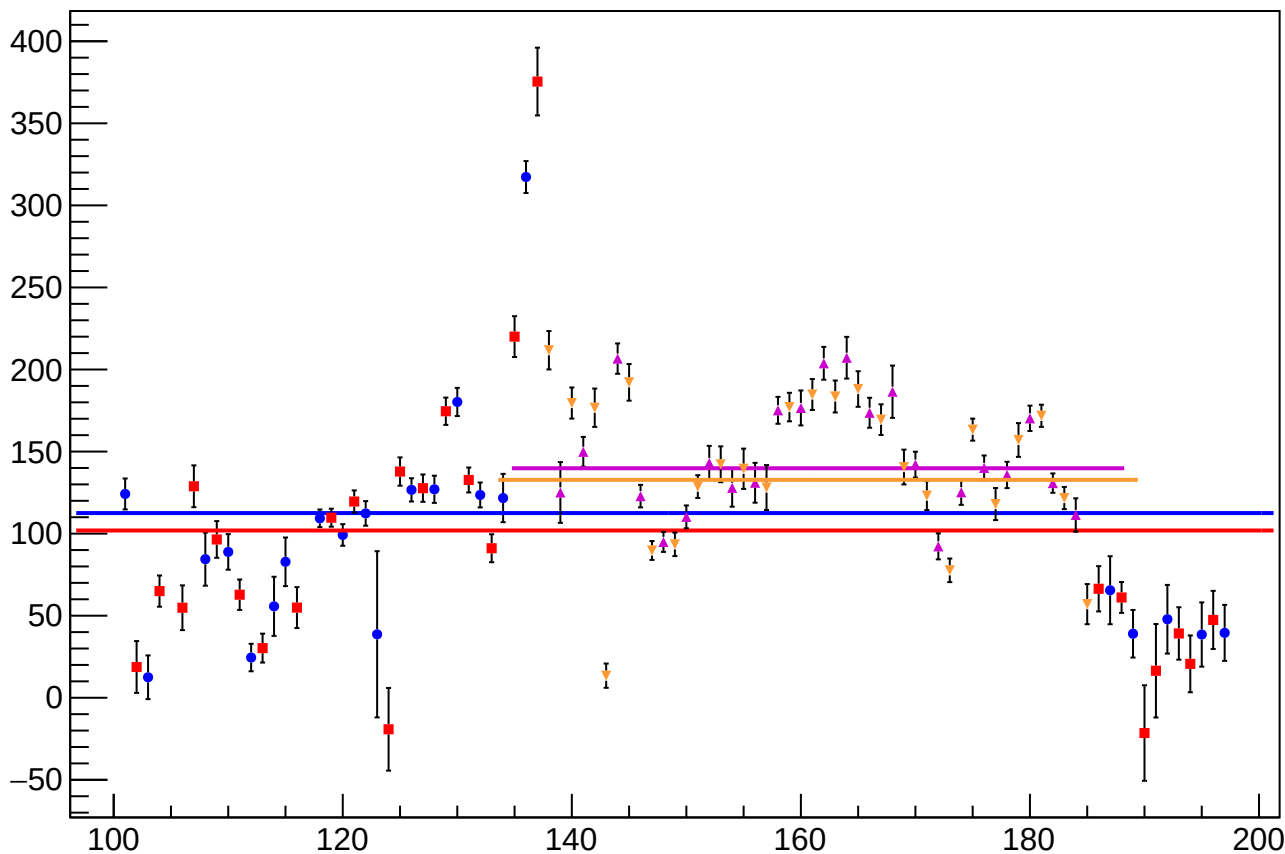
Right: 439.691 $\pm$ 1.704     $\chi^2$ /NDF: 7013.8/46

In: 387.082 $\pm$ 1.612     $\chi^2$ /NDF:6476.7/44

Out: 386.855 $\pm$ 1.461     $\chi^2$ /NDF:10817.1/49

All: 386.957 $\pm$ 1.082     $\chi^2$ /NDF: 17293.9/94

reg\_asym\_atl2\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $112.532 \pm 2.116$   $\chi^2/\text{NDF}: 785.2/21$

Left Out:  $132.762 \pm 1.736$   $\chi^2/\text{NDF}: 749.6/24$

Right Out:  $101.908 \pm 2.068$   $\chi^2/\text{NDF}: 675.7/24$

Left In:  $139.828 \pm 1.790$   $\chi^2/\text{NDF}: 321.7/22$

Left:  $136.187 \pm 1.246$   $\chi^2/\text{NDF}: 1079.3/47$

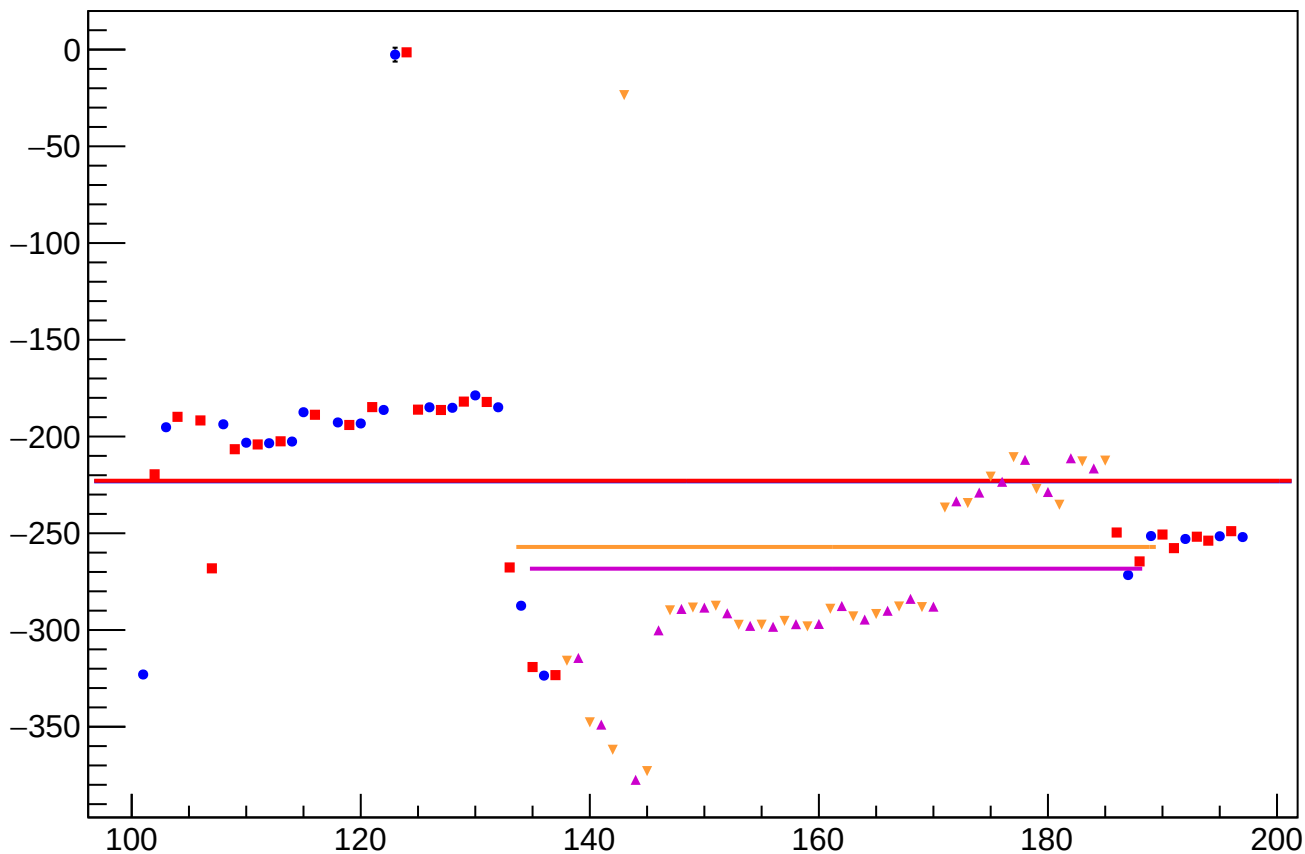
Right:  $107.100 \pm 1.479$   $\chi^2/\text{NDF}: 1473.8/46$

In:  $128.444 \pm 1.366$   $\chi^2/\text{NDF}: 1203.9/44$

Out:  $120.014 \pm 1.330$   $\chi^2/\text{NDF}: 1555.8/49$

All:  $124.114 \pm 0.953$   $\chi^2/\text{NDF}: 2779.3/94$

reg\_asym\_atl2\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-223.163 \pm 0.123$   $\chi^2/\text{NDF}$ : 159834.3/21

Left Out:  $-257.067 \pm 0.082$   $\chi^2/\text{NDF}$ : 665762.3/24

Right Out:  $-222.847 \pm 0.113$   $\chi^2/\text{NDF}$ : 139712.2/24

Left In:  $-268.305 \pm 0.083$   $\chi^2/\text{NDF}$ : 264853.3/22

Left:  $-262.619 \pm 0.059$   $\chi^2/\text{NDF}$ : 939831.3/47

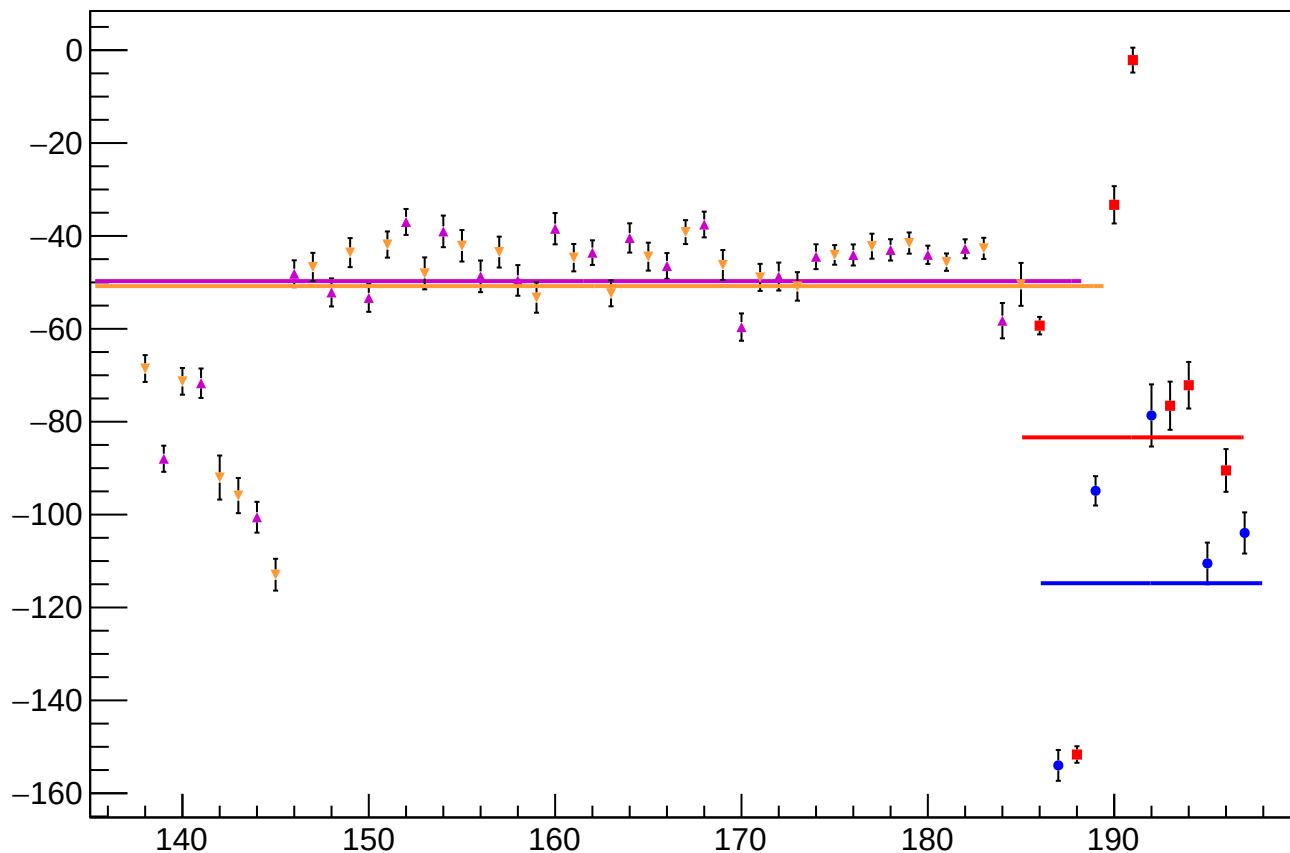
Right:  $-222.991 \pm 0.083$   $\chi^2/\text{NDF}$ : 299550.0/46

In:  $-254.152 \pm 0.069$   $\chi^2/\text{NDF}$ : 516836.1/44

Out:  $-245.224 \pm 0.067$   $\chi^2/\text{NDF}$ : 865339.0/49

All:  $-249.526 \pm 0.048$   $\chi^2/\text{NDF}$ : 1390851.3/94

# reg\_asym\_atr1\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-114.775 \pm 1.784$   $\chi^2/\text{NDF}$ : 215.4/4

Left Out:  $-50.802 \pm 0.574$   $\chi^2/\text{NDF}$ : 752.7/24

Right Out:  $-83.372 \pm 1.041$   $\chi^2/\text{NDF}$ : 2717.5/6

Left In:  $-49.728 \pm 0.581$   $\chi^2/\text{NDF}$ : 601.0/22

Left:  $-50.272 \pm 0.408$   $\chi^2/\text{NDF}$ : 1355.3/47

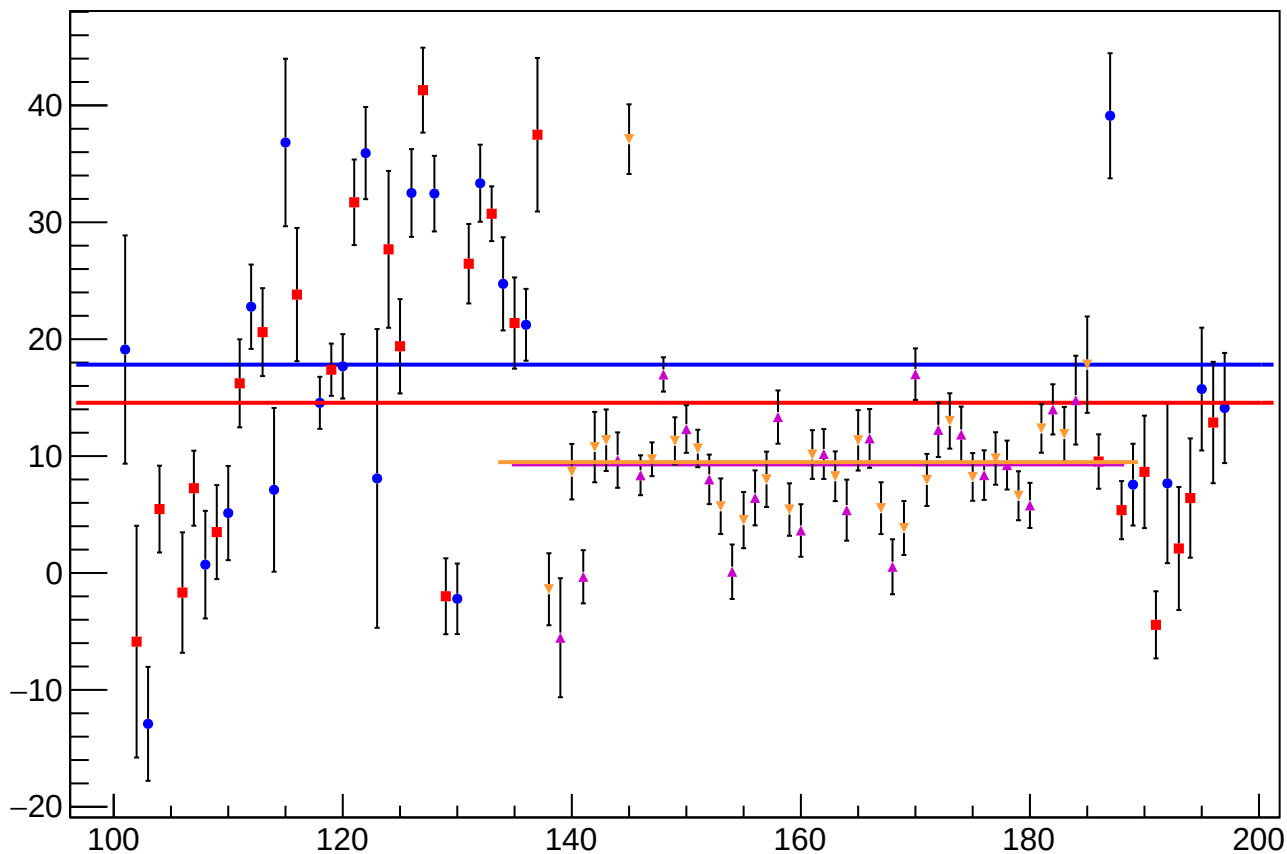
Right:  $-91.349 \pm 0.899$   $\chi^2/\text{NDF}$ : 3163.9/11

In:  $-55.972 \pm 0.553$   $\chi^2/\text{NDF}$ : 2017.6/27

Out:  $-58.388 \pm 0.503$   $\chi^2/\text{NDF}$ : 4220.5/31

All:  $-57.295 \pm 0.372$   $\chi^2/\text{NDF}$ : 6248.6/59

reg\_asym\_atr1\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 17.823+/-0.834  $\chi^2/\text{NDF}$ : 232.3/21

Left Out: 9.483+/-0.447  $\chi^2/\text{NDF}$ :133.0/24

Right Out: 14.561+/-0.714  $\chi^2/\text{NDF}$ : 294.3/24

Left In: 9.289+/-0.461  $\chi^2/\text{NDF}$ :125.6/22

Left: 9.389+/-0.321  $\chi^2/\text{NDF}$ : 258.8/47

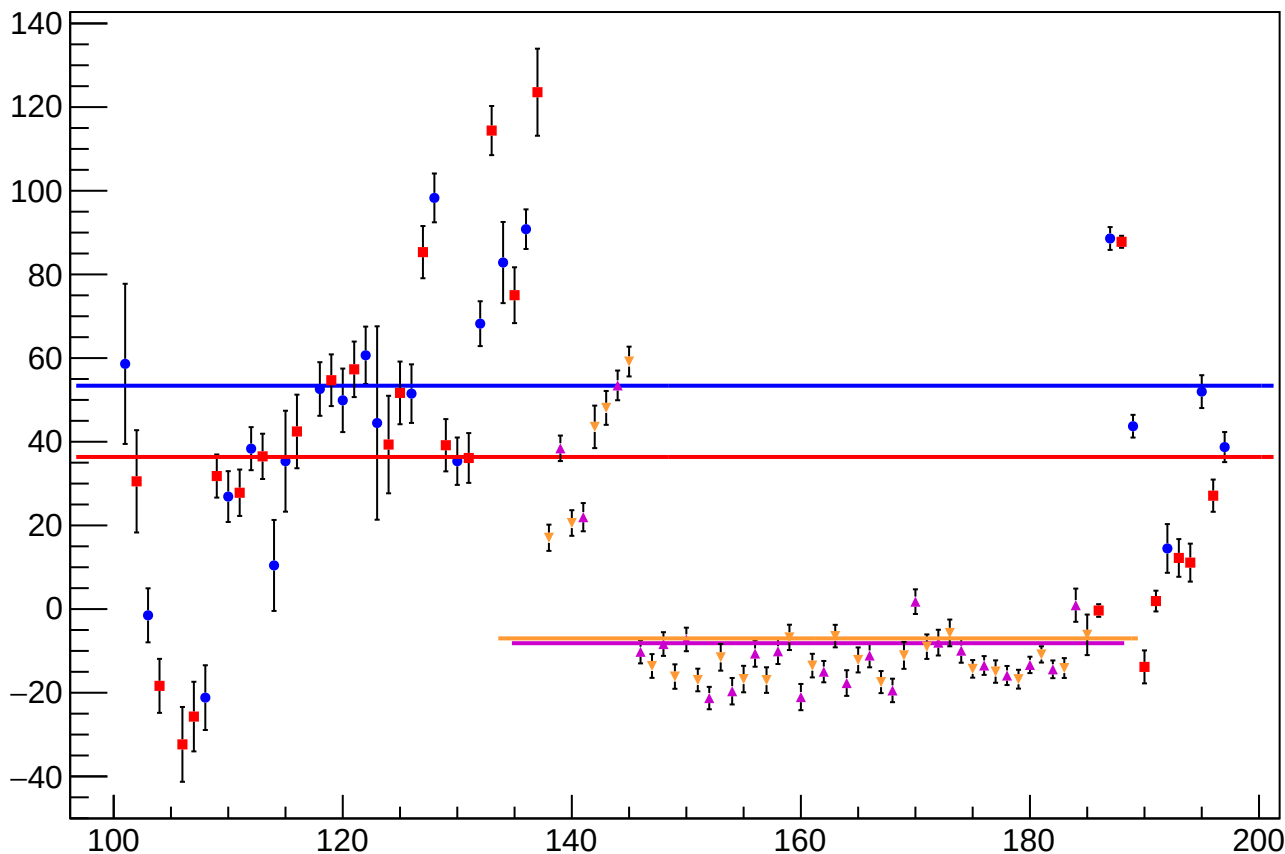
Right: 15.942+/-0.542  $\chi^2/\text{NDF}$ : 535.4/46

In: 11.285+/-0.403  $\chi^2/\text{NDF}$ :438.2/44

Out: 10.912+/-0.379  $\chi^2/\text{NDF}$ :463.7/49

All: 11.087+/-0.276  $\chi^2/\text{NDF}$ : 902.3/94

reg\_asym\_atr1\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $53.396 \pm 1.117$   $\chi^2/\text{NDF}: 601.7/21$

Left Out:  $-7.007 \pm 0.572$   $\chi^2/\text{NDF}: 899.2/24$

Right Out:  $36.366 \pm 0.766$   $\chi^2/\text{NDF}: 2849.2/24$

Left In:  $-8.158 \pm 0.578$   $\chi^2/\text{NDF}: 753.9/22$

Left:  $-7.577 \pm 0.406$   $\chi^2/\text{NDF}: 1655.2/47$

Right:  $41.812 \pm 0.632$   $\chi^2/\text{NDF}: 3609.0/46$

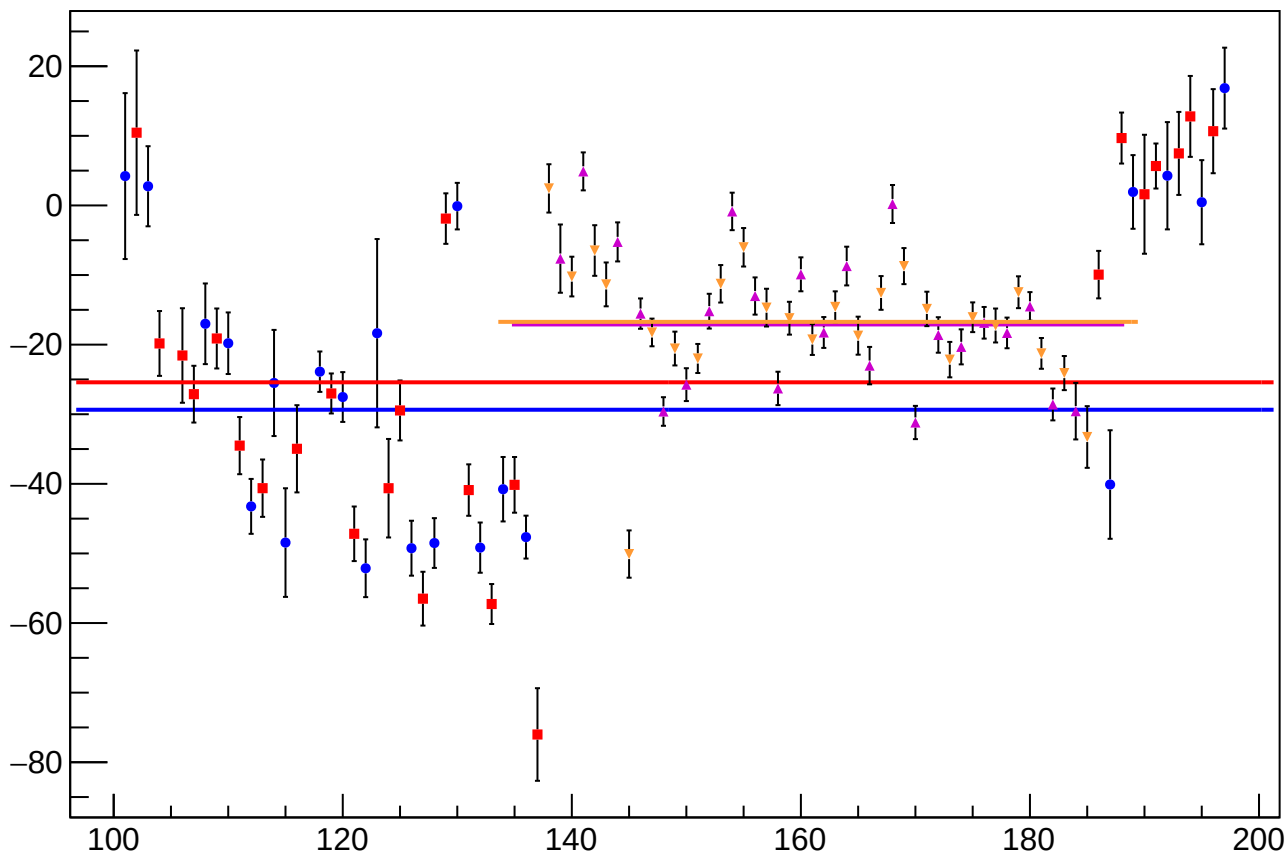
In:  $4.830 \pm 0.513$   $\chi^2/\text{NDF}: 3751.3/44$

Out:  $8.519 \pm 0.458$   $\chi^2/\text{NDF}: 5807.3/49$

All:  $6.882 \pm 0.342$   $\chi^2/\text{NDF}: 9587.3/94$



reg\_asym\_atr1\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-29.354 \pm 0.970$   $\chi^2/\text{NDF}$ : 447.1/21

Left Out:  $-16.727 \pm 0.508$   $\chi^2/\text{NDF}$ : 223.3/24

Right Out:  $-25.414 \pm 0.854$   $\chi^2/\text{NDF}$ : 713.5/24

Left In:  $-17.100 \pm 0.520$   $\chi^2/\text{NDF}$ : 328.1/22

Left:  $-16.909 \pm 0.363$   $\chi^2/\text{NDF}$ : 551.7/47

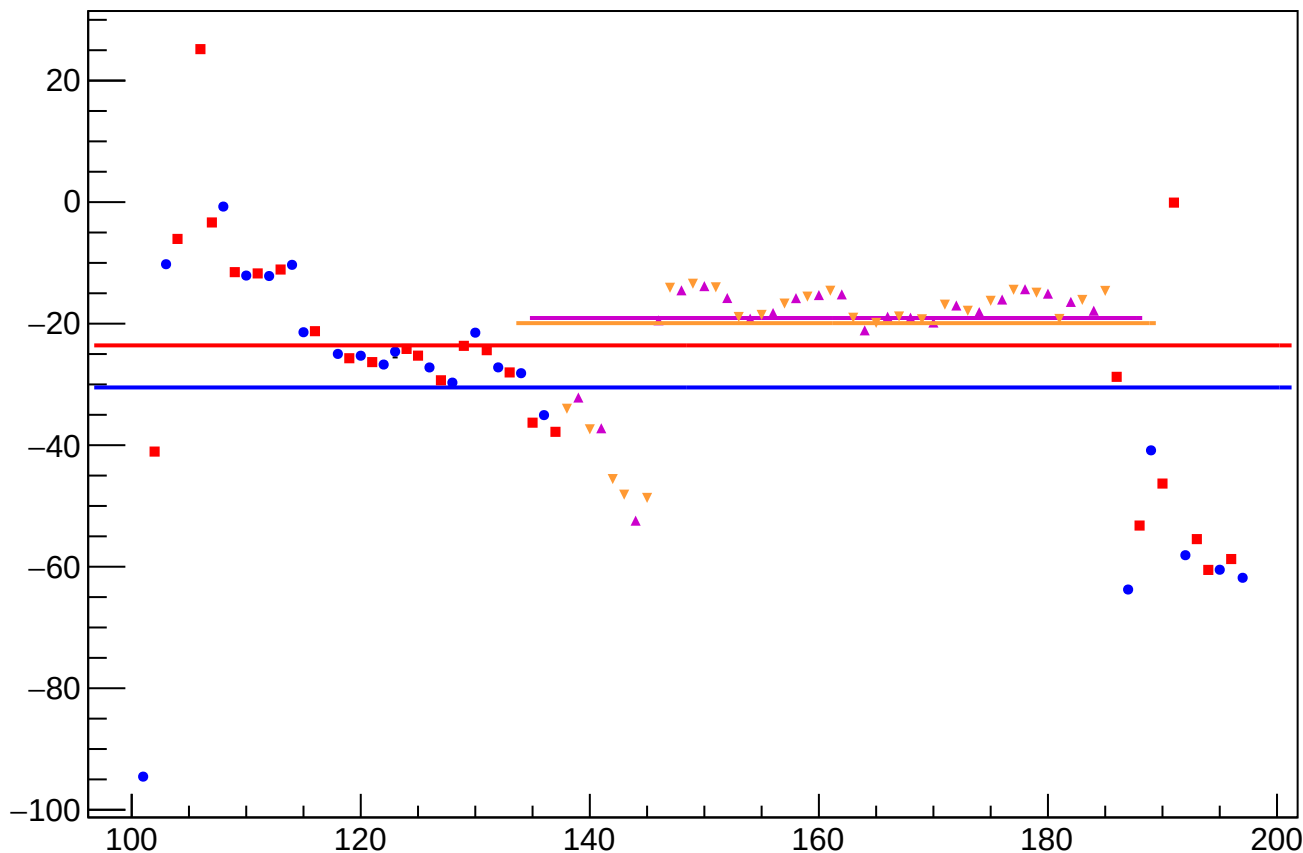
Right:  $-27.135 \pm 0.641$   $\chi^2/\text{NDF}$ : 1169.8/46

In:  $-19.840 \pm 0.459$   $\chi^2/\text{NDF}$ : 899.0/44

Out:  $-18.994 \pm 0.436$   $\chi^2/\text{NDF}$ : 1013.2/49

All:  $-19.396 \pm 0.316$   $\chi^2/\text{NDF}$ : 1914.0/94

reg\_asym\_atr1\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-30.499 \pm 0.051$   $\chi^2/\text{NDF}$ : 147476.7/21

Left Out:  $-19.915 \pm 0.023$   $\chi^2/\text{NDF}$ : 141090.6/24

Right Out:  $-23.576 \pm 0.041$   $\chi^2/\text{NDF}$ : 304239.4/24

Left In:  $-19.068 \pm 0.024$   $\chi^2/\text{NDF}$ : 92702.3/22

Left:  $-19.496 \pm 0.017$   $\chi^2/\text{NDF}$ : 234444.5/47

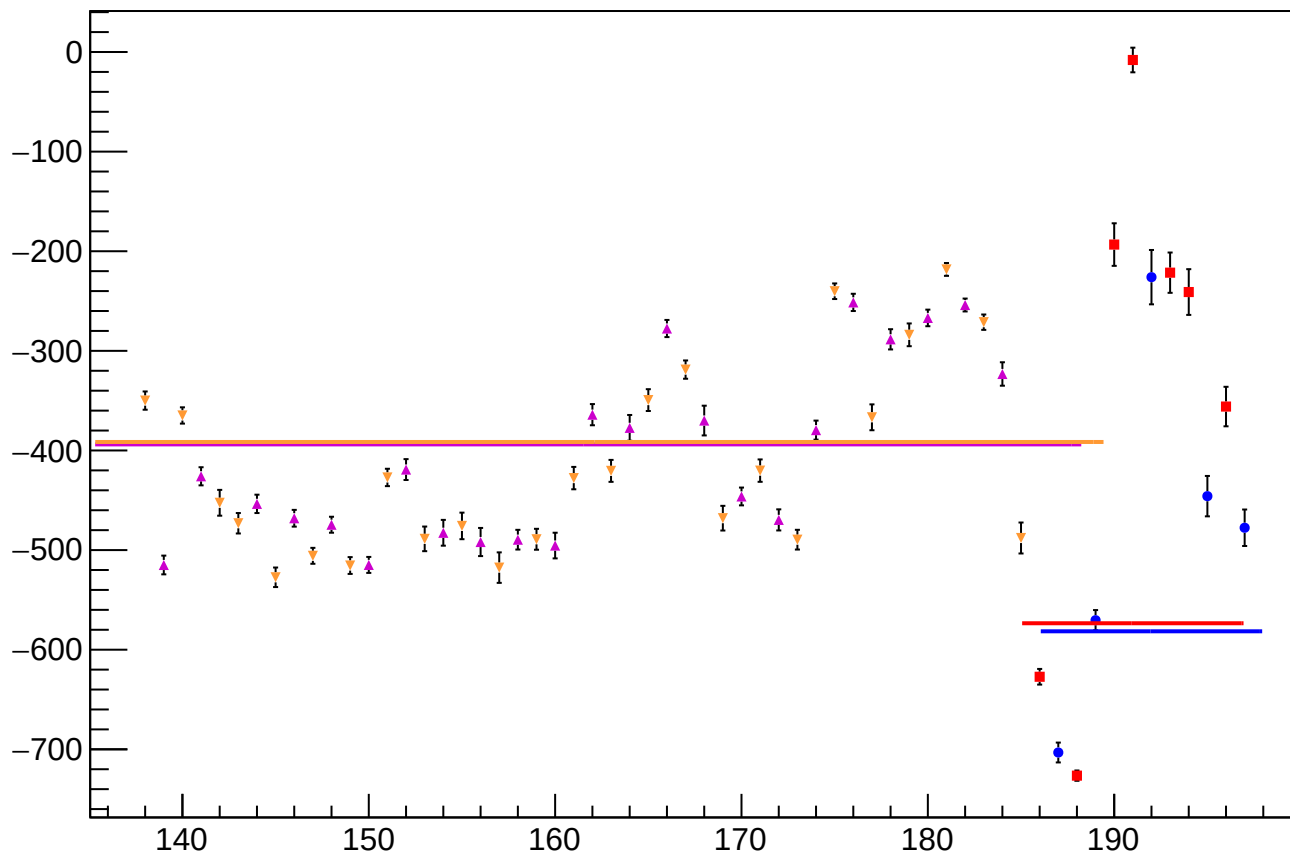
Right:  $-26.347 \pm 0.032$   $\chi^2/\text{NDF}$ : 462964.5/46

In:  $-21.110 \pm 0.021$   $\chi^2/\text{NDF}$ : 282176.6/44

Out:  $-20.801 \pm 0.020$   $\chi^2/\text{NDF}$ : 451288.6/49

All:  $-20.948 \pm 0.015$   $\chi^2/\text{NDF}$ : 733574.6/94

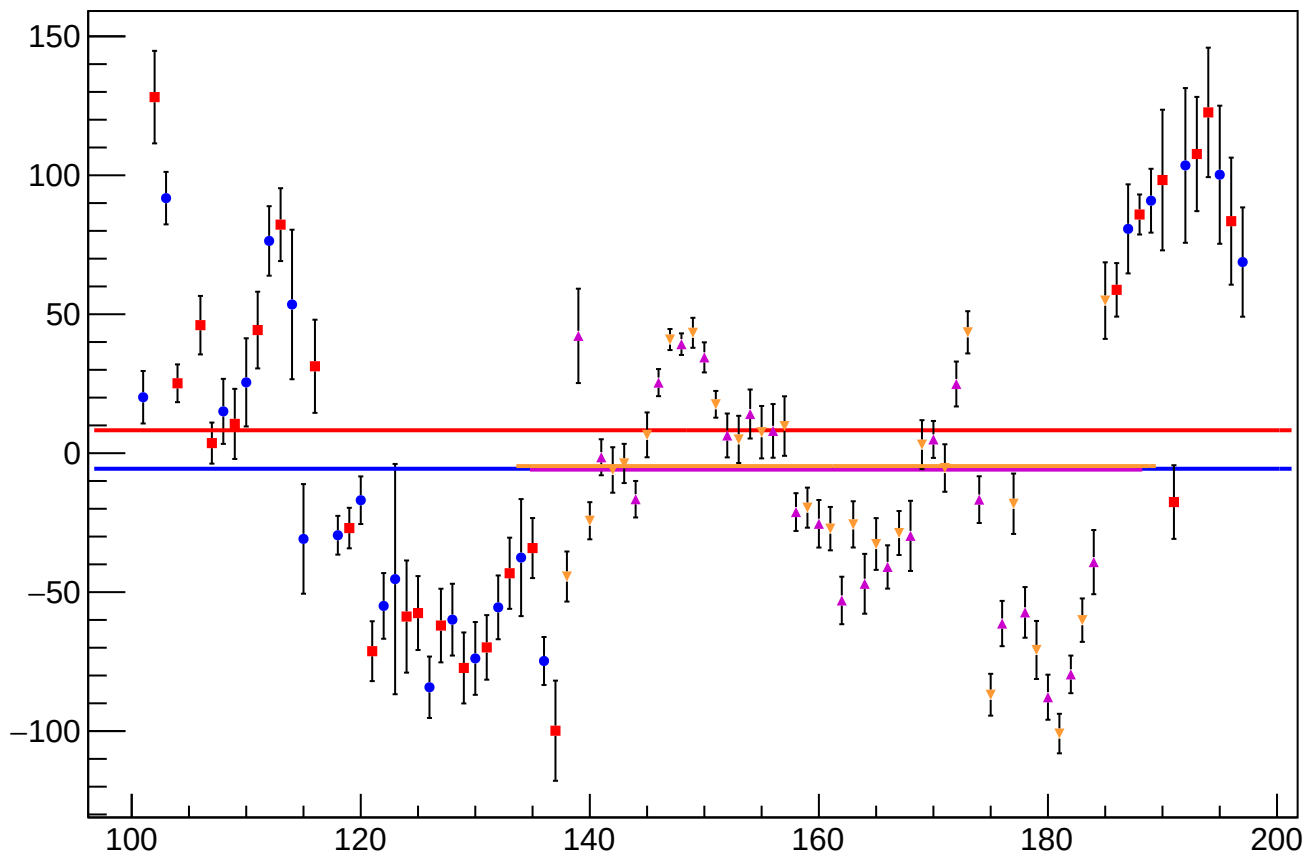
reg\_asym\_atr2\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: -581.533+/-6.143  $\chi^2/\text{NDF}$ : 397.1/4  
 Left Out: -391.476+/-1.973  $\chi^2/\text{NDF}$ : 2708.6/24  
 Right Out: -573.454+/-3.805  $\chi^2/\text{NDF}$ : 3959.0/6  
 Left In: -393.904+/-1.998  $\chi^2/\text{NDF}$ : 2280.8/22

Left: -392.674+/-1.404  $\chi^2/\text{NDF}$ : 4990.1/47  
 Right: -575.694+/-3.234  $\chi^2/\text{NDF}$ : 4357.3/11  
 In: -411.852+/-1.900  $\chi^2/\text{NDF}$ : 3521.6/27  
 Out: -430.027+/-1.751  $\chi^2/\text{NDF}$ : 8470.7/31  
 All: -421.679+/-1.288  $\chi^2/\text{NDF}$ : 12041.8/59

reg\_asym\_atr2\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-5.601 \pm 2.615$   $\chi^2/\text{NDF}: 530.4/21$

Left Out:  $-4.635 \pm 1.467$   $\chi^2/\text{NDF}: 771.4/24$

Right Out:  $8.248 \pm 2.297$   $\chi^2/\text{NDF}: 629.6/24$

Left In:  $-5.906 \pm 1.513$   $\chi^2/\text{NDF}: 657.5/22$

Left:  $-5.251 \pm 1.053$   $\chi^2/\text{NDF}: 1429.3/47$

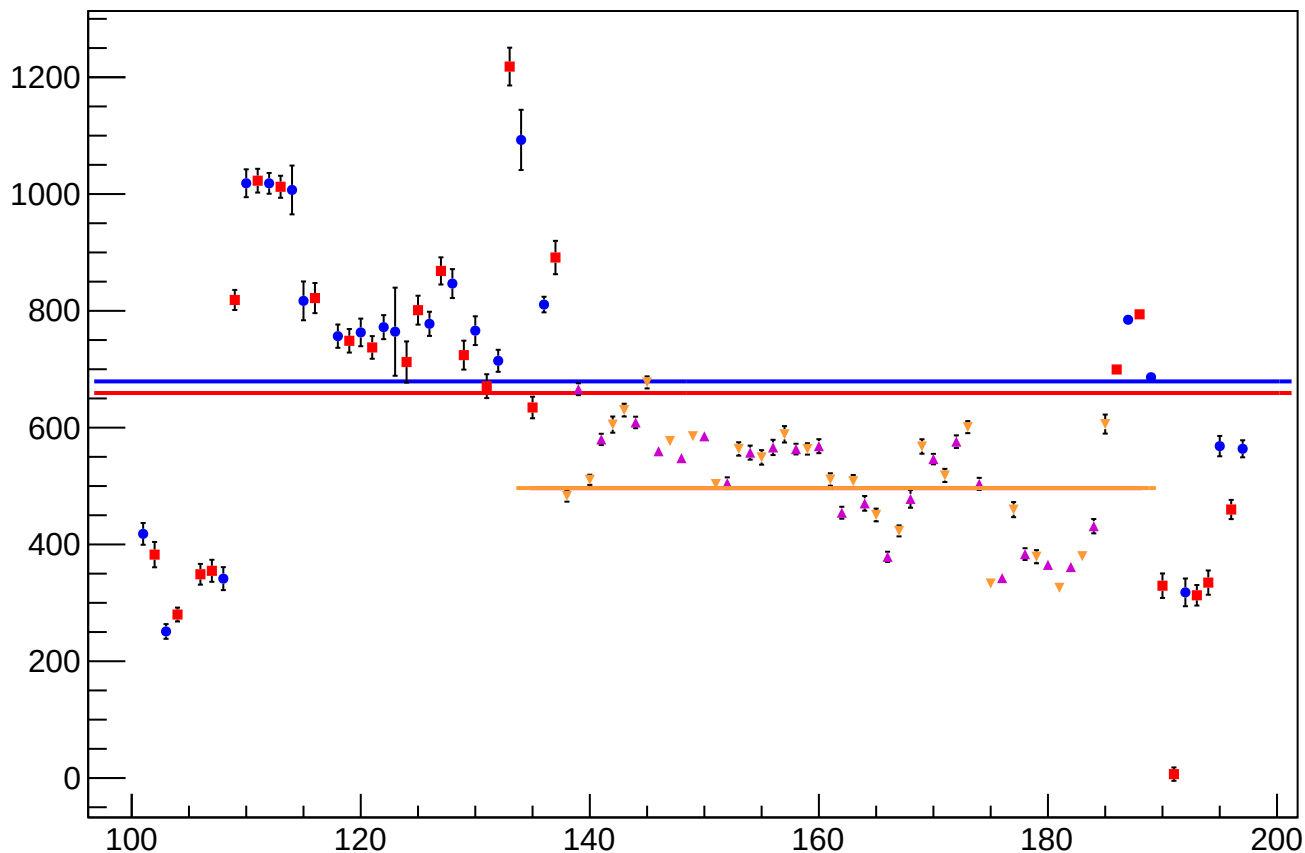
Right:  $2.216 \pm 1.726$   $\chi^2/\text{NDF}: 1175.8/46$

In:  $-5.829 \pm 1.310$   $\chi^2/\text{NDF}: 1187.9/44$

Out:  $-0.901 \pm 1.237$   $\chi^2/\text{NDF}: 1423.3/49$

All:  $-3.224 \pm 0.899$   $\chi^2/\text{NDF}: 2618.8/94$

reg\_asym\_atr2\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 679.178+/-3.580  $\chi^2/\text{NDF}$ : 3088.1/21

Left Out: 496.535+/-1.971  $\chi^2/\text{NDF}$ :2589.1/24

Right Out: 659.317+/-2.615  $\chi^2/\text{NDF}$ : 8432.0/24

Left In: 496.393+/-1.985  $\chi^2/\text{NDF}$ :2295.8/22

Left: 496.465+/-1.399  $\chi^2/\text{NDF}$ : 4884.9/47

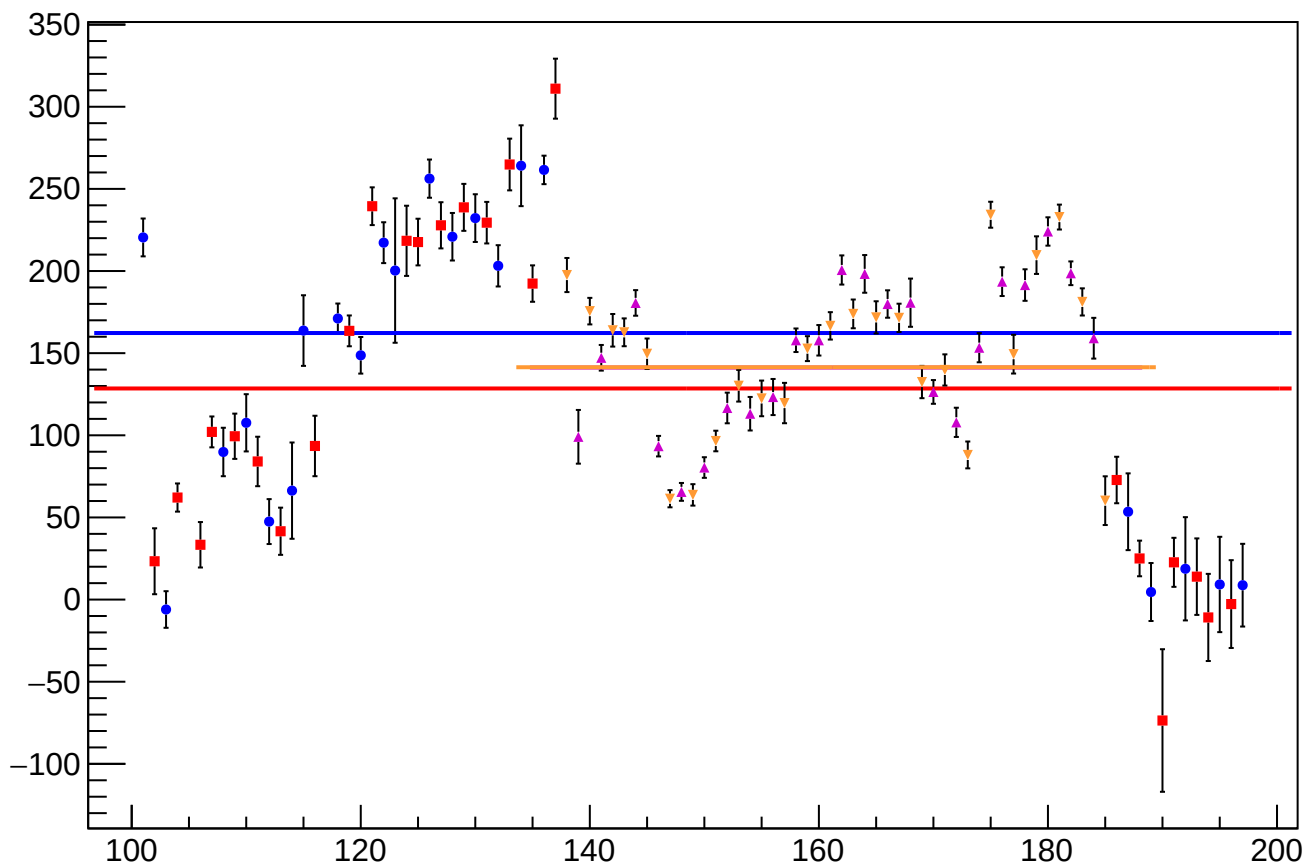
Right: 666.226+/-2.111  $\chi^2/\text{NDF}$ : 11540.2/46

In: 539.388+/-1.736  $\chi^2/\text{NDF}$ :7377.5/44

Out: 555.523+/-1.574  $\chi^2/\text{NDF}$ :13492.5/49

All: 548.245+/-1.166  $\chi^2/\text{NDF}$ : 20917.4/94

reg\_asym\_atr2\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 162.264 $\pm$ 3.067  $\chi^2$ /NDF: 842.5/21

Left Out: 141.430 $\pm$ 1.704  $\chi^2$ /NDF:957.7/24

Right Out: 128.506 $\pm$ 2.765  $\chi^2$ /NDF: 995.9/24

Left In: 141.248 $\pm$ 1.744  $\chi^2$ /NDF:744.2/22

Left: 141.341 $\pm$ 1.219  $\chi^2$ /NDF: 1701.9/47

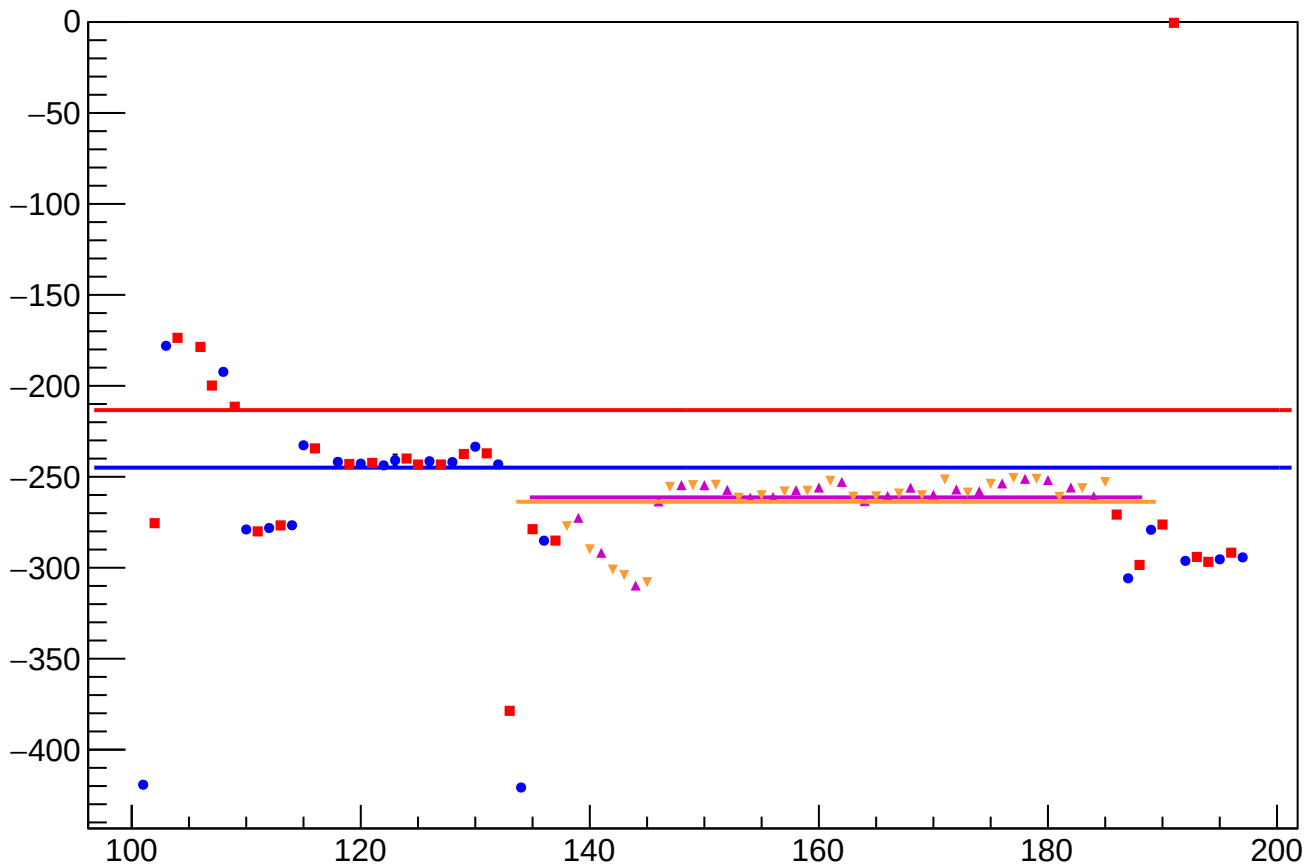
Right: 143.643 $\pm$ 2.054  $\chi^2$ /NDF: 1905.2/46

In: 146.382 $\pm$ 1.516  $\chi^2$ /NDF:1622.1/44

Out: 137.873 $\pm$ 1.451  $\chi^2$ /NDF:1969.5/49

All: 141.941 $\pm$ 1.048  $\chi^2$ /NDF: 3608.1/94

reg\_asym\_atr2\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -244.970+/-0.150  $\chi^2/\text{NDF}$ : 181670.4/21

Left Out: -263.734+/-0.081  $\chi^2/\text{NDF}$ : 37922.0/24

Right Out: -213.357+/-0.130  $\chi^2/\text{NDF}$ : 433239.8/24

Left In: -261.325+/-0.082  $\chi^2/\text{NDF}$ : 23449.2/22

Left: -262.533+/-0.058  $\chi^2/\text{NDF}$ : 61807.4/47

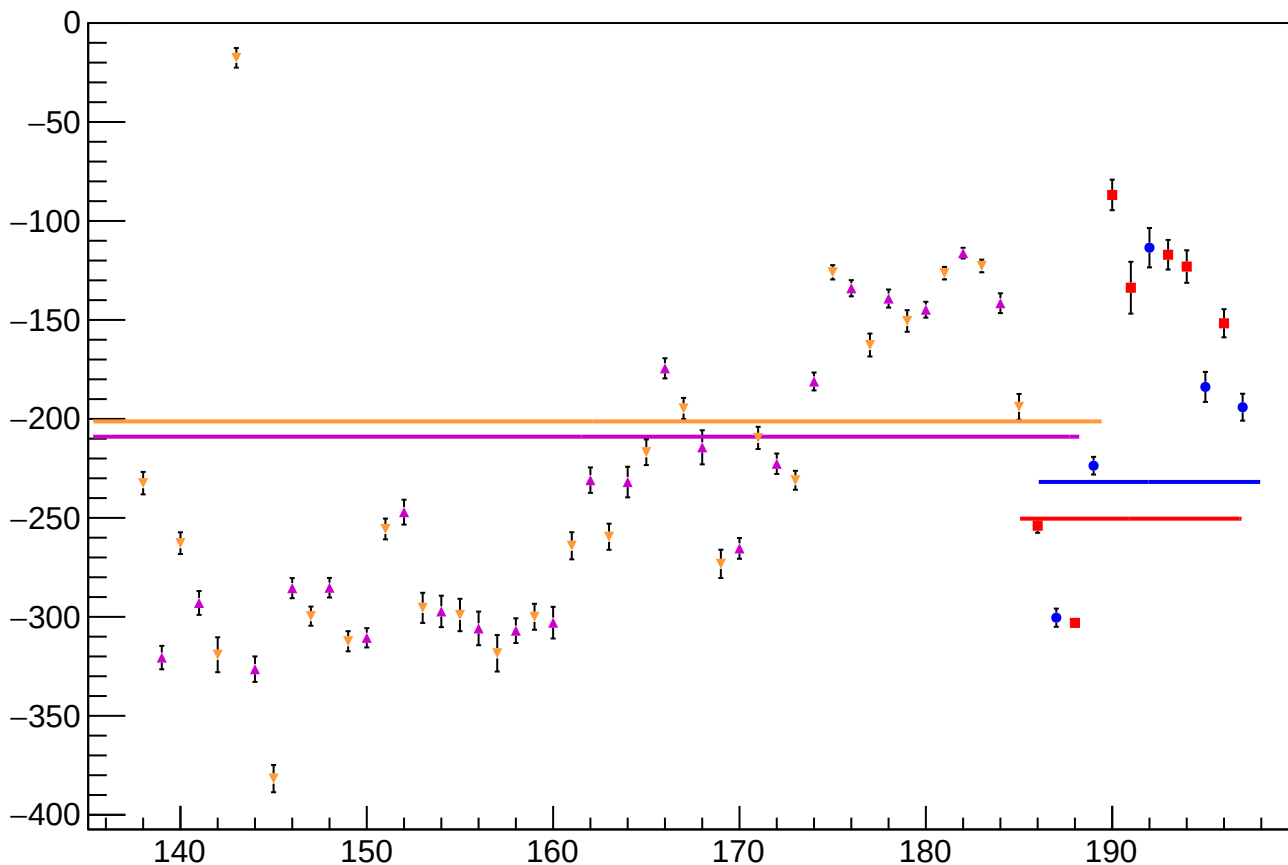
Right: -226.990+/-0.098  $\chi^2/\text{NDF}$ : 640306.7/46

In: -257.572+/-0.072  $\chi^2/\text{NDF}$ : 214327.8/44

Out: -249.571+/-0.069  $\chi^2/\text{NDF}$ : 578663.9/49

All: -253.424+/-0.050  $\chi^2/\text{NDF}$ : 799452.9/94

reg\_asym\_atl\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: -231.839+/-2.612  $\chi^2/\text{NDF}$ : 438.4/4

Left Out: -201.261+/-1.065  $\chi^2/\text{NDF}$ : 6110.1/24

Right Out: -250.396+/-1.739  $\chi^2/\text{NDF}$ : 1773.1/6

Left In: -208.981+/-1.078  $\chi^2/\text{NDF}$ : 4865.2/22

Left: -205.075+/-0.758  $\chi^2/\text{NDF}$ : 11001.2/47

Right: -244.697+/-1.448  $\chi^2/\text{NDF}$ : 2246.5/11

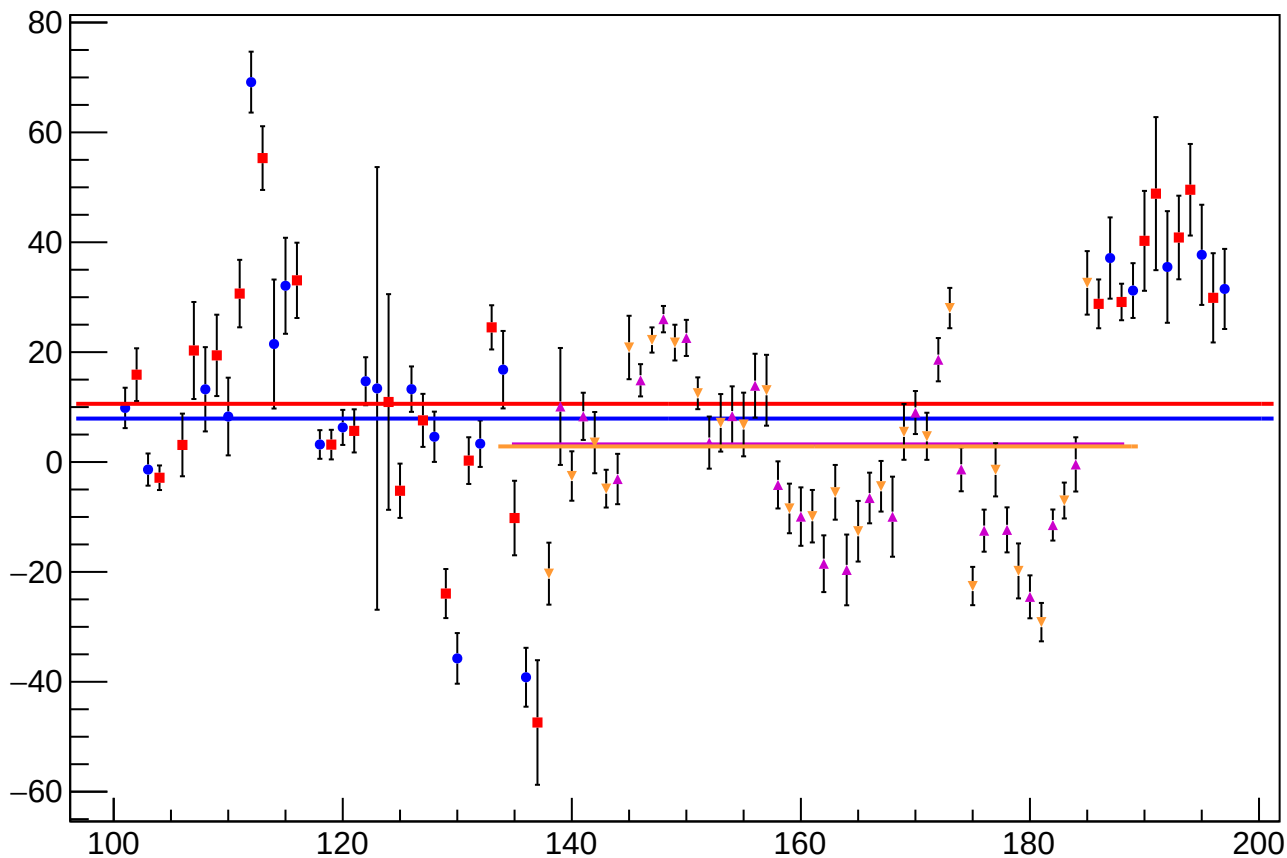
In: -212.308+/-0.997  $\chi^2/\text{NDF}$ : 5369.1/27

Out: -214.670+/-0.909  $\chi^2/\text{NDF}$ : 8463.6/31

All: -213.598+/-0.671  $\chi^2/\text{NDF}$ : 13835.7/59



reg\_asym\_atl\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $7.910 \pm 1.030$   $\chi^2/\text{NDF}: 385.6/21$

Left Out:  $2.841 \pm 0.824$   $\chi^2/\text{NDF}: 420.6/24$

Right Out:  $10.595 \pm 0.965$   $\chi^2/\text{NDF}: 365.1/24$

Left In:  $3.208 \pm 0.854$   $\chi^2/\text{NDF}: 323.8/22$

Left:  $3.018 \pm 0.593$   $\chi^2/\text{NDF}: 744.6/47$

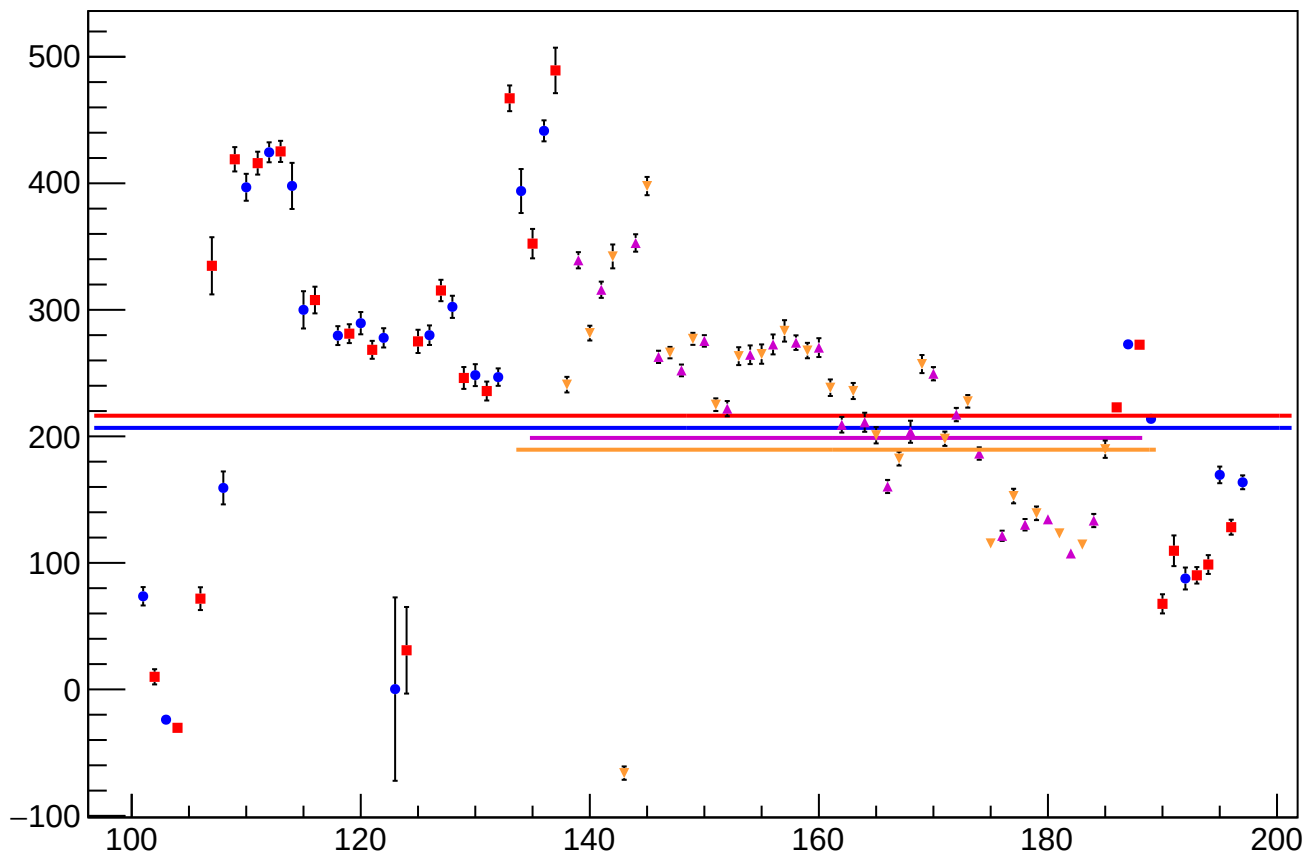
Right:  $9.341 \pm 0.704$   $\chi^2/\text{NDF}: 754.3/46$

In:  $5.124 \pm 0.658$   $\chi^2/\text{NDF}: 721.8/44$

Out:  $6.111 \pm 0.627$   $\chi^2/\text{NDF}: 823.1/49$

All:  $5.641 \pm 0.454$   $\chi^2/\text{NDF}: 1546.0/94$

reg\_asym\_atl\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 206.699 $\pm$ 1.463  $\chi^2$ /NDF: 7352.5/21

Left Out: 189.453 $\pm$ 1.070  $\chi^2$ /NDF:6649.7/24

Right Out: 216.325 $\pm$ 1.148  $\chi^2$ /NDF: 10463.2/24

Left In: 198.762 $\pm$ 1.078  $\chi^2$ /NDF:4590.0/22

Left: 194.072 $\pm$ 0.759  $\chi^2$ /NDF: 11277.3/47

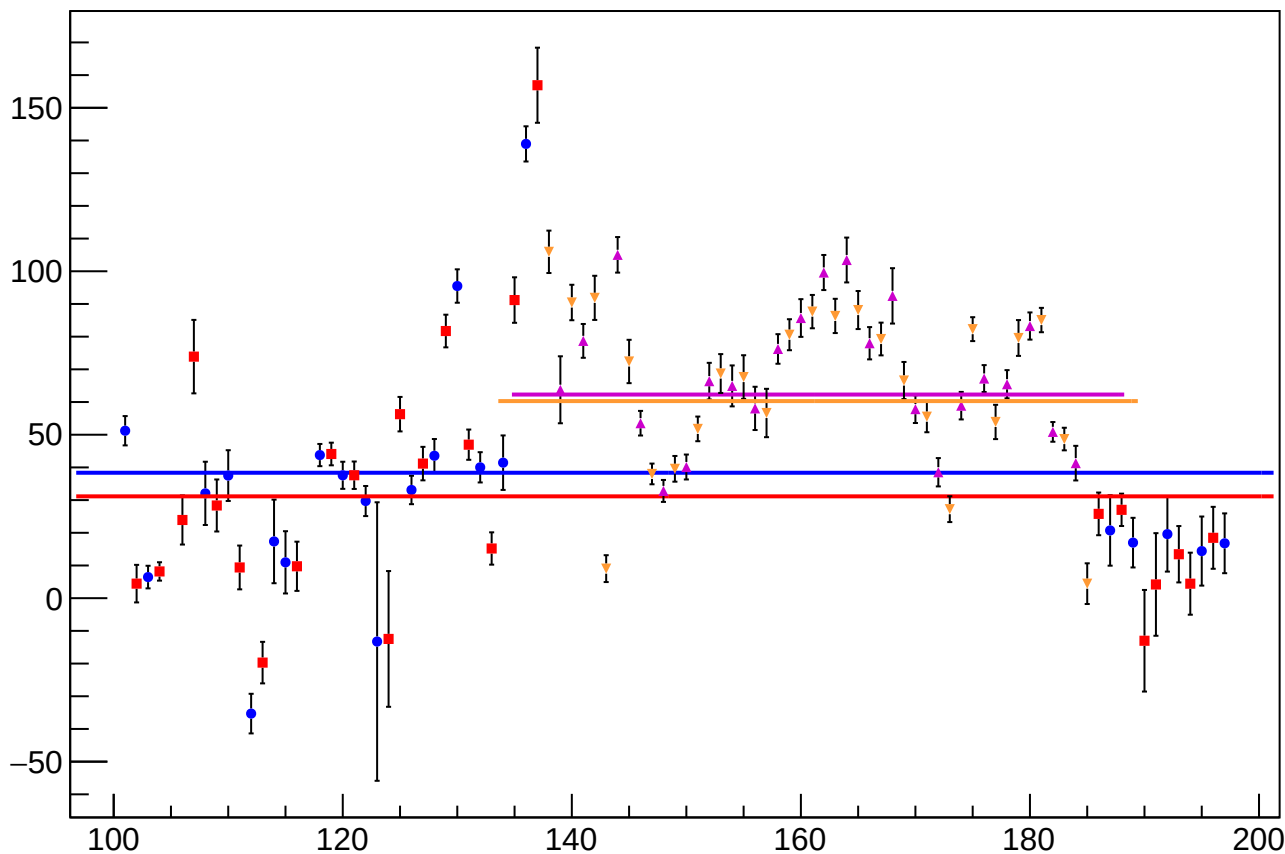
Right: 212.655 $\pm$ 0.903  $\chi^2$ /NDF: 17842.5/46

In: 201.554 $\pm$ 0.868  $\chi^2$ /NDF:11961.6/44

Out: 201.938 $\pm$ 0.783  $\chi^2$ /NDF:17406.1/49

All: 201.766 $\pm$ 0.581  $\chi^2$ /NDF: 29367.8/94

reg\_asym\_atl\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 38.368 $\pm$ 1.215  $\chi^2$ /NDF: 761.0/21

Left Out: 60.287 $\pm$ 0.945  $\chi^2$ /NDF: 714.8/24

Right Out: 31.149 $\pm$ 1.160  $\chi^2$ /NDF: 579.1/24

Left In: 62.290 $\pm$ 0.971  $\chi^2$ /NDF: 411.6/22

Left: 61.261 $\pm$ 0.677  $\chi^2$ /NDF: 1128.6/47

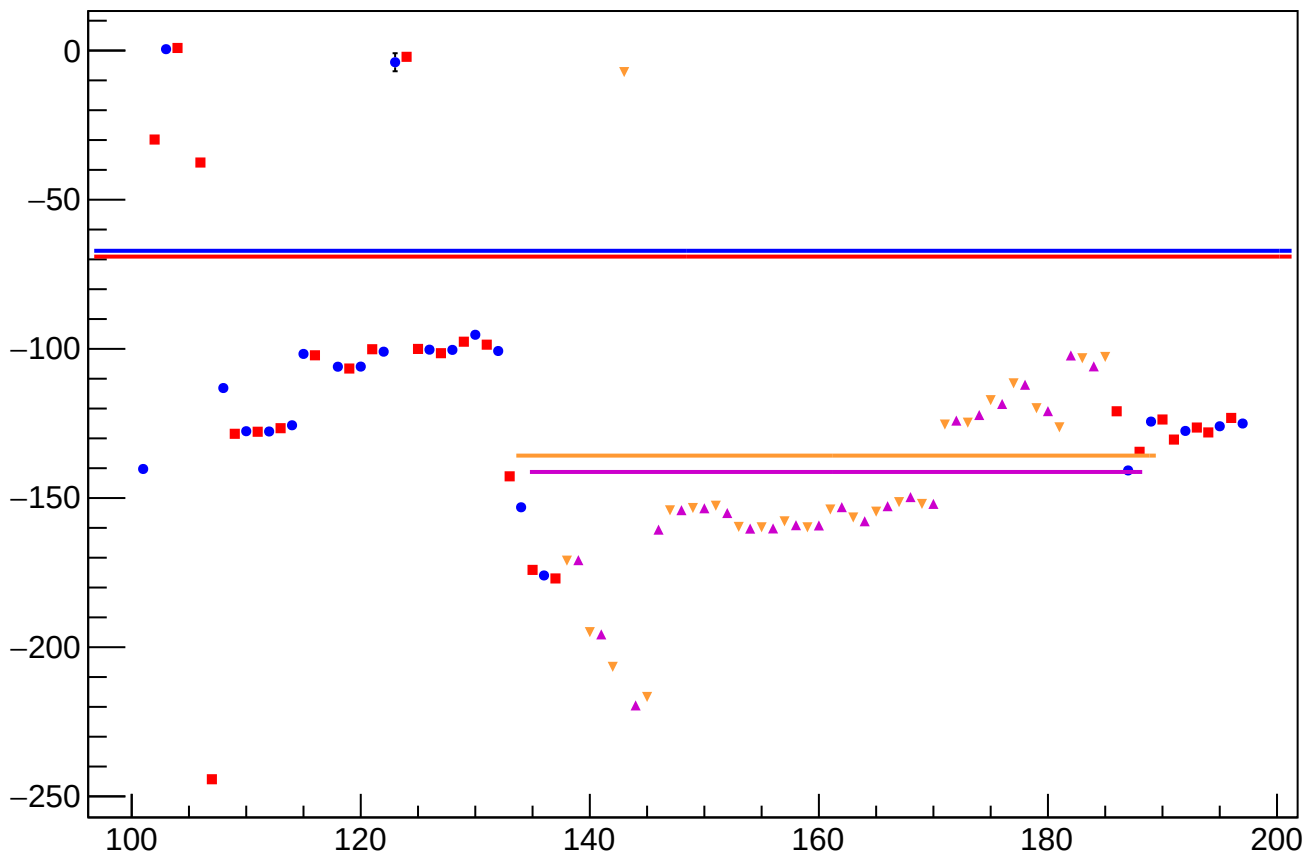
Right: 34.589 $\pm$ 0.839  $\chi^2$ /NDF: 1358.6/46

In: 52.968 $\pm$ 0.759  $\chi^2$ /NDF: 1409.1/44

Out: 48.658 $\pm$ 0.733  $\chi^2$ /NDF: 1673.3/49

All: 50.737 $\pm$ 0.527  $\chi^2$ /NDF: 3099.1/94

reg\_asym\_atl\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -67.124 $\pm$ 0.057  $\chi^2$ /NDF: 1268128.9/21

Left Out: -135.775 $\pm$ 0.045  $\chi^2$ /NDF: 742021.1/24

Right Out: -69.070 $\pm$ 0.054  $\chi^2$ /NDF: 1289383.1/24

Left In: -141.259 $\pm$ 0.045  $\chi^2$ /NDF: 350045.9/22

Left: -138.491 $\pm$ 0.032  $\chi^2$ /NDF: 1099530.1/47

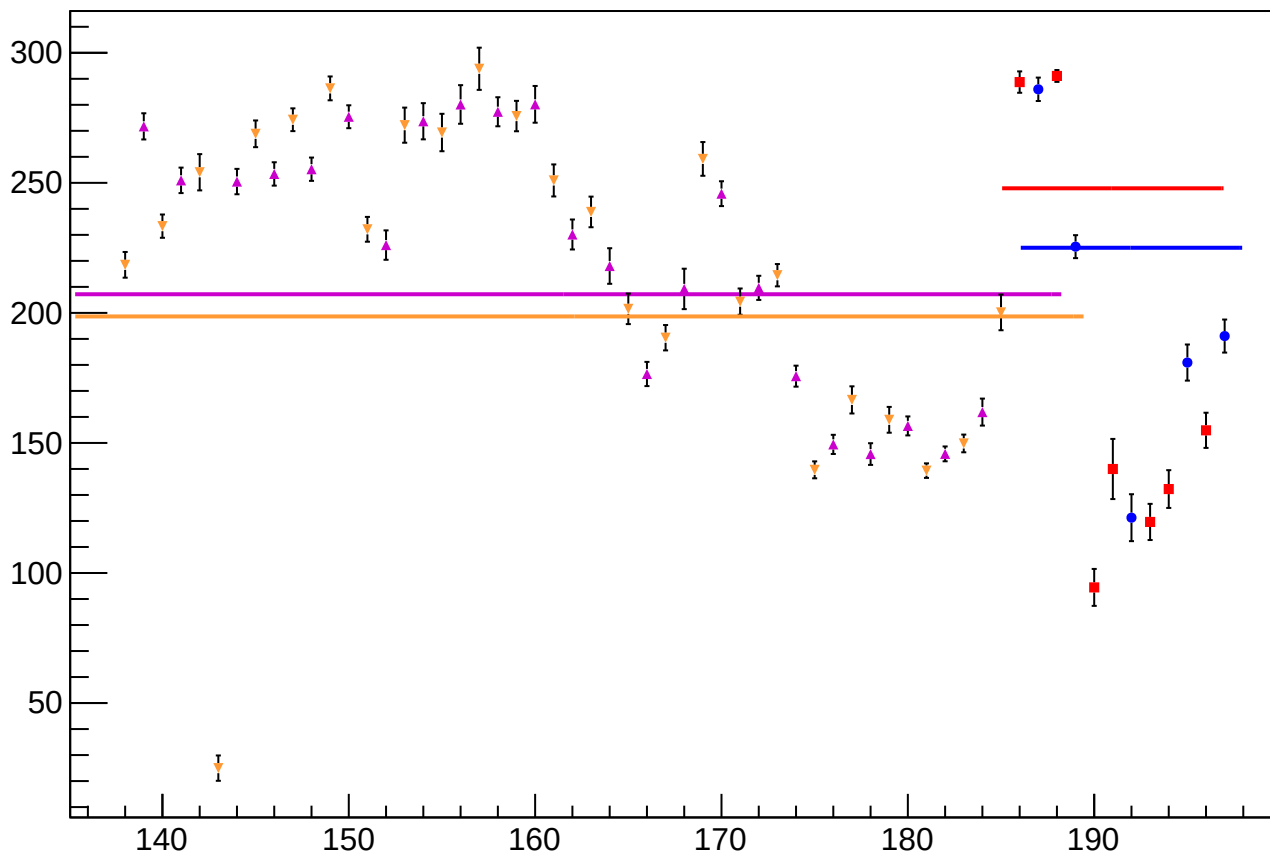
Right: -68.155 $\pm$ 0.039  $\chi^2$ /NDF: 2558121.3/46

In: -112.956 $\pm$ 0.035  $\chi^2$ /NDF: 2649456.2/44

Out: -108.703 $\pm$ 0.034  $\chi^2$ /NDF: 2936335.6/49

All: -110.767 $\pm$ 0.025  $\chi^2$ /NDF: 5593196.5/94

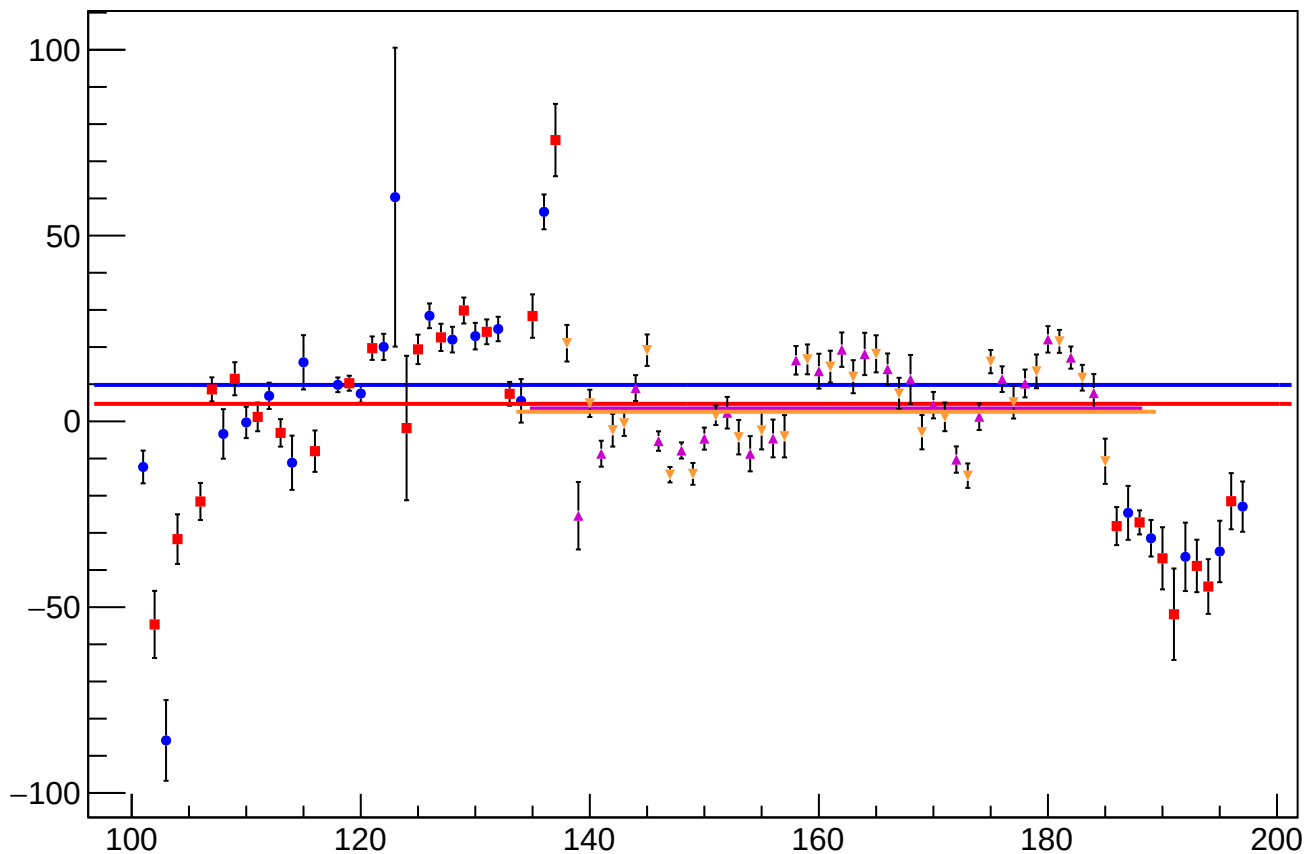
# reg\_asym\_atl\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 225.045 $\pm$ 2.512  $\chi^2$ /NDF: 384.8/4  
 Left Out: 198.637 $\pm$ 0.966  $\chi^2$ /NDF:4146.6/24  
 Right Out: 247.904 $\pm$ 1.714  $\chi^2$ /NDF: 1795.2/6  
 Left In: 207.171 $\pm$ 0.986  $\chi^2$ /NDF:2631.6/22

Left: 202.817 $\pm$ 0.690  $\chi^2$ /NDF: 6816.4/47  
 Right: 240.644 $\pm$ 1.416  $\chi^2$ /NDF: 2236.5/11  
 In: 209.558 $\pm$ 0.918  $\chi^2$ /NDF:3060.2/27  
 Out: 210.520 $\pm$ 0.842  $\chi^2$ /NDF:6569.0/31  
 All: 210.080 $\pm$ 0.620  $\chi^2$ /NDF: 9629.8/59

reg\_asym\_atl\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $9.809 \pm 0.880$   $\chi^2/\text{NDF}: 481.5/21$

Left Out:  $2.595 \pm 0.744$   $\chi^2/\text{NDF}: 274.3/24$

Right Out:  $4.716 \pm 0.845$   $\chi^2/\text{NDF}: 617.6/24$

Left In:  $3.478 \pm 0.772$   $\chi^2/\text{NDF}: 194.7/22$

Left:  $3.020 \pm 0.536$   $\chi^2/\text{NDF}: 469.7/47$

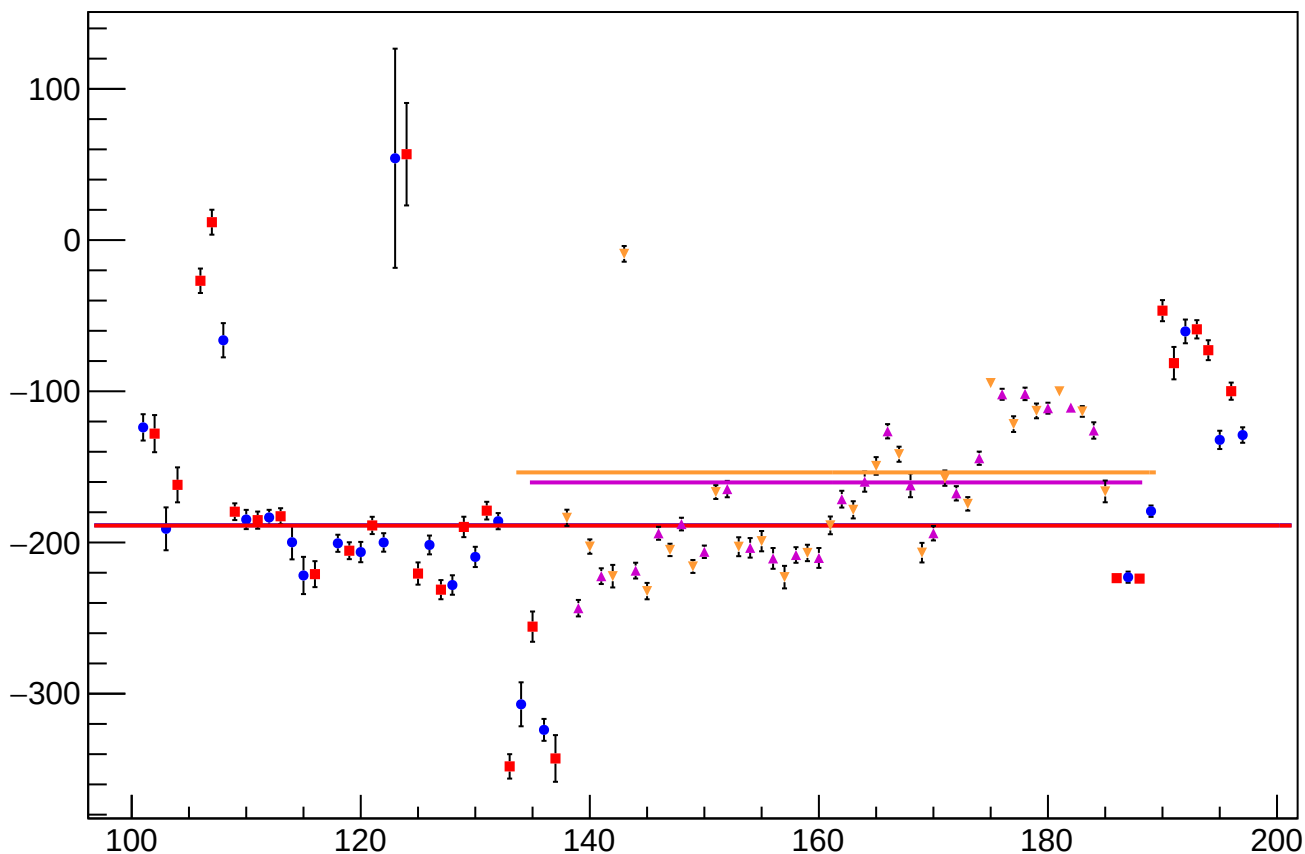
Right:  $7.159 \pm 0.610$   $\chi^2/\text{NDF}: 1116.5/46$

In:  $6.231 \pm 0.580$   $\chi^2/\text{NDF}: 705.5/44$

Out:  $3.521 \pm 0.558$   $\chi^2/\text{NDF}: 895.4/49$

All:  $4.824 \pm 0.402$   $\chi^2/\text{NDF}: 1612.2/94$

reg\_asym\_atl\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -188.603+/-1.359  $\chi^2$ /NDF: 1256.6/21

Left Out: -153.649+/-0.970  $\chi^2$ /NDF:2930.9/24

Right Out: -188.814+/-1.088  $\chi^2$ /NDF: 3710.7/24

Left In: -160.279+/-0.985  $\chi^2$ /NDF:2049.4/22

Left: -156.913+/-0.691  $\chi^2$ /NDF: 5003.3/47

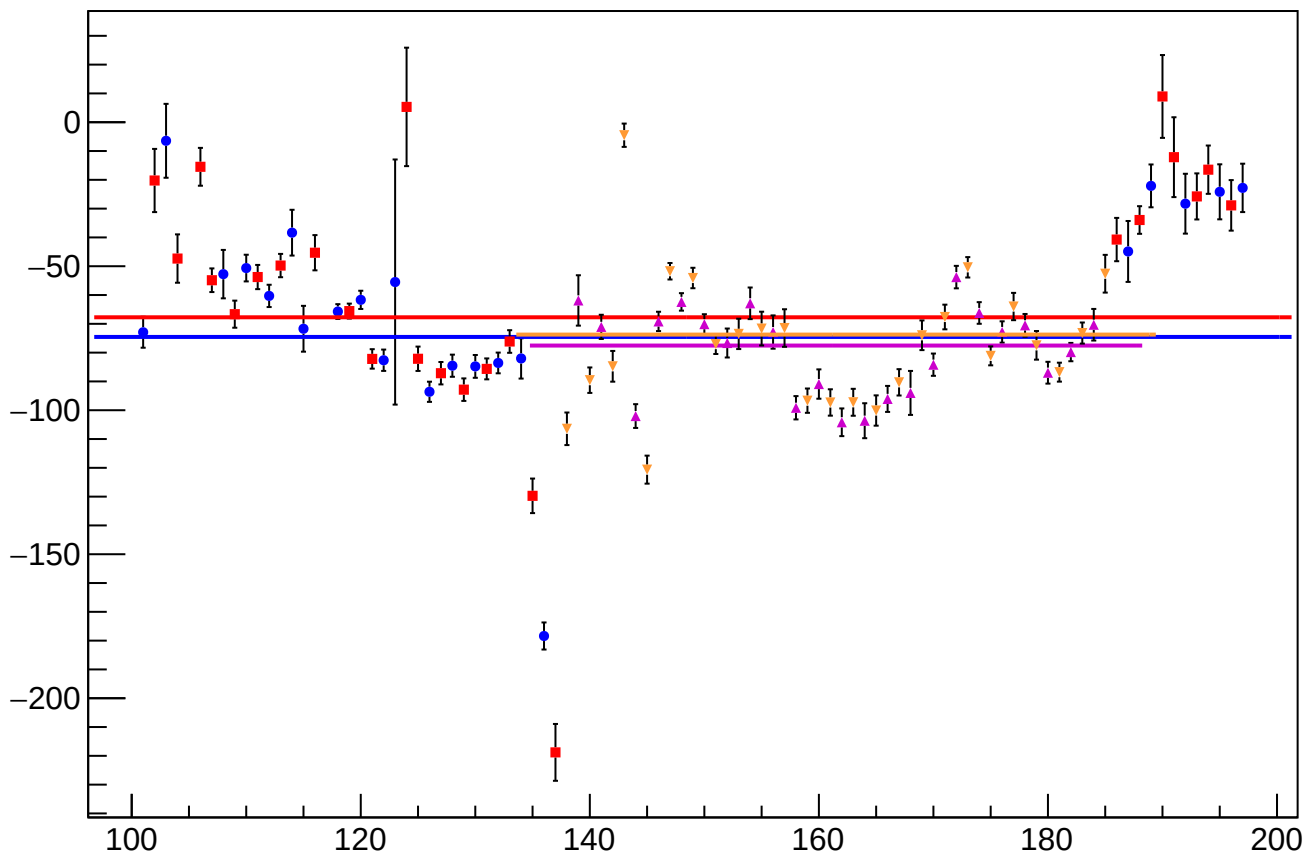
Right: -188.731+/-0.850  $\chi^2$ /NDF: 4967.3/46

In: -170.033+/-0.798  $\chi^2$ /NDF:3590.9/44

Out: -169.212+/-0.724  $\chi^2$ /NDF:7223.4/49

All: -169.583+/-0.536  $\chi^2$ /NDF: 10814.8/94

reg\_asym\_atl\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-74.552 \pm 1.030$   $\chi^2/\text{NDF}$ : 811.1/21

Left Out:  $-73.741 \pm 0.855$   $\chi^2/\text{NDF}$ : 728.3/24

Right Out:  $-67.732 \pm 0.994$   $\chi^2/\text{NDF}$ : 812.9/24

Left In:  $-77.545 \pm 0.880$   $\chi^2/\text{NDF}$ : 252.7/22

Left:  $-75.587 \pm 0.613$   $\chi^2/\text{NDF}$ : 990.6/47

Right:  $-71.018 \pm 0.715$   $\chi^2/\text{NDF}$ : 1646.7/46

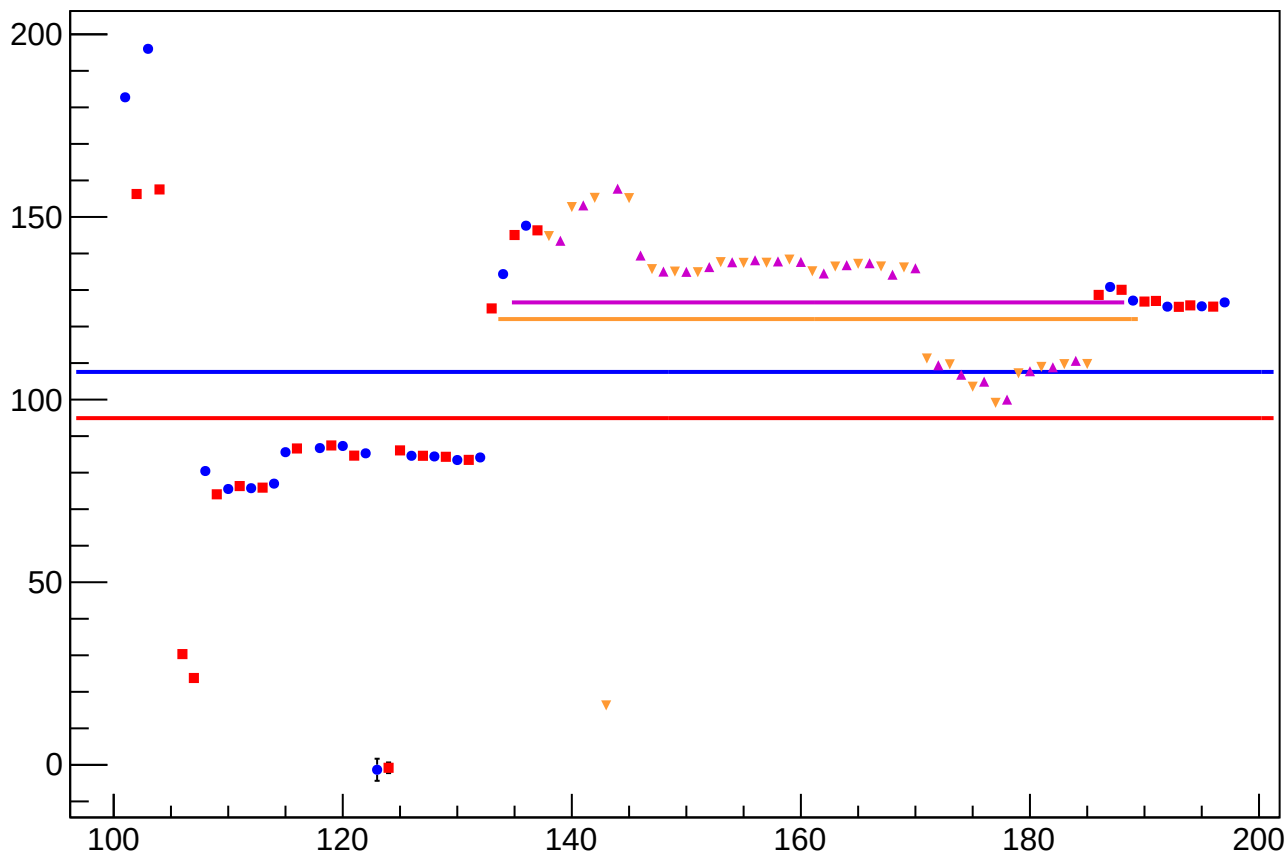
In:  $-76.283 \pm 0.669$   $\chi^2/\text{NDF}$ : 1068.8/44

Out:  $-71.186 \pm 0.648$   $\chi^2/\text{NDF}$ : 1562.2/49

All:  $-73.652 \pm 0.465$   $\chi^2/\text{NDF}$ : 2660.9/94



reg\_asym\_atl\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 107.575 $\pm$ 0.063  $\chi^2$ /NDF: 294306.2/21

Left Out: 122.046 $\pm$ 0.040  $\chi^2$ /NDF: 437985.3/24

Right Out: 94.927 $\pm$ 0.056  $\chi^2$ /NDF: 519117.8/24

Left In: 126.605 $\pm$ 0.041  $\chi^2$ /NDF: 164757.9/22

Left: 124.300 $\pm$ 0.029  $\chi^2$ /NDF: 609027.6/47

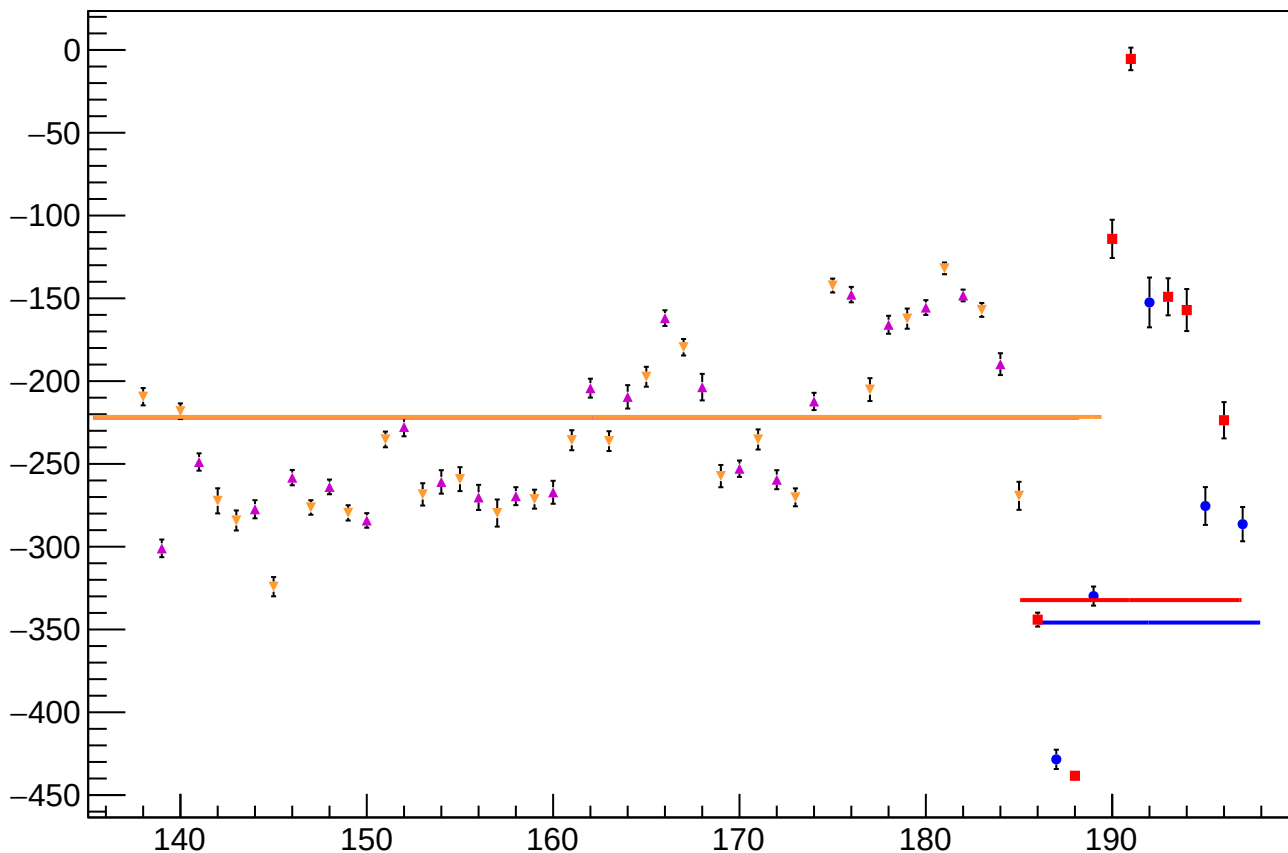
Right: 100.425 $\pm$ 0.042  $\chi^2$ /NDF: 835952.9/46

In: 121.009 $\pm$ 0.034  $\chi^2$ /NDF: 522746.4/44

Out: 112.656 $\pm$ 0.033  $\chi^2$ /NDF: 1112883.3/49

All: 116.625 $\pm$ 0.024  $\chi^2$ /NDF: 1666654.1/94

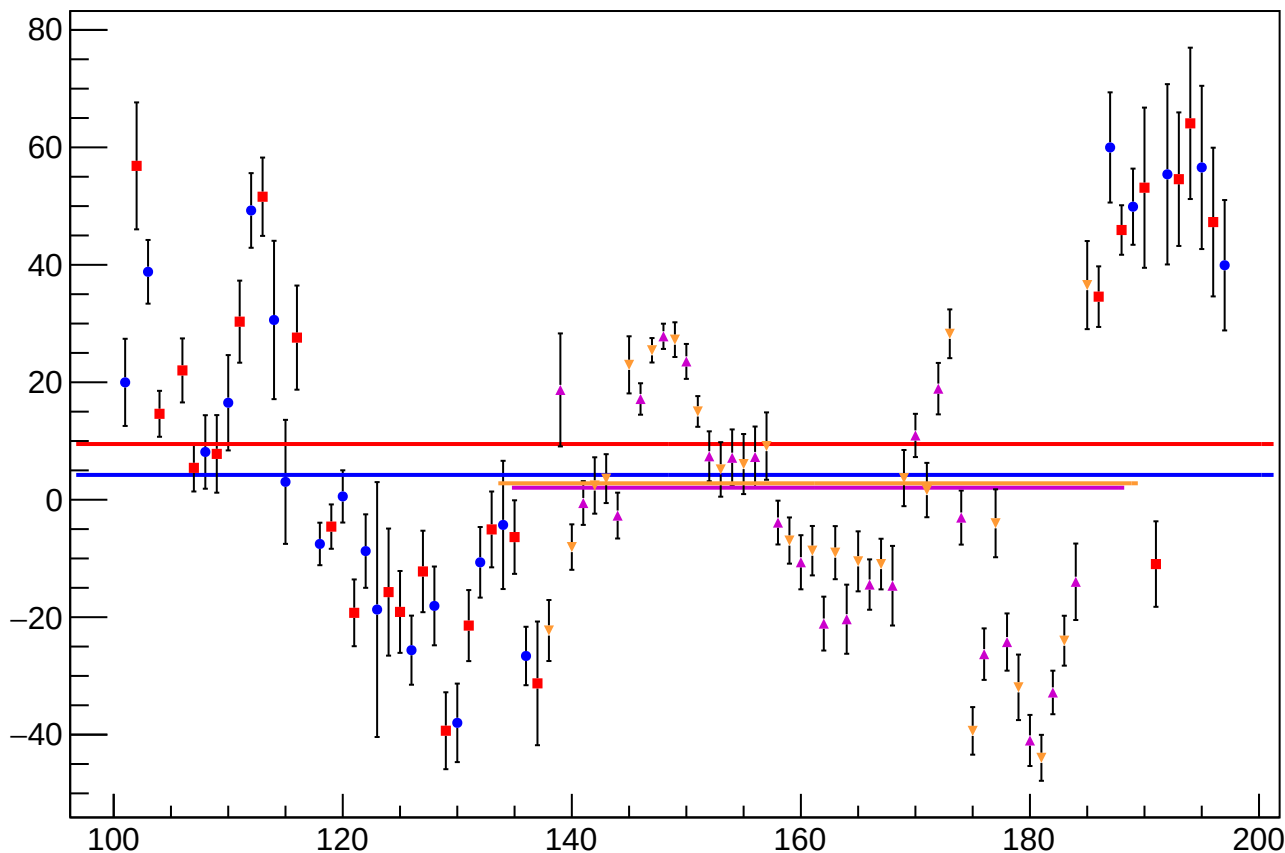
reg\_asym\_atr\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-345.813 \pm 3.517$   $\chi^2/\text{NDF}: 444.5/4$   
 Left Out:  $-221.606 \pm 1.087$   $\chi^2/\text{NDF}: 2565.8/24$   
 Right Out:  $-332.244 \pm 2.148$   $\chi^2/\text{NDF}: 4454.3/6$   
 Left In:  $-221.980 \pm 1.098$   $\chi^2/\text{NDF}: 2190.6/22$

Left:  $-221.791 \pm 0.773$   $\chi^2/\text{NDF}: 4756.5/47$   
 Right:  $-335.932 \pm 1.833$   $\chi^2/\text{NDF}: 4909.6/11$   
 In:  $-232.982 \pm 1.048$   $\chi^2/\text{NDF}: 3764.9/27$   
 Out:  $-244.165 \pm 0.970$   $\chi^2/\text{NDF}: 9131.4/31$   
 All:  $-239.006 \pm 0.712$   $\chi^2/\text{NDF}: 12957.6/59$

reg\_asym\_atr\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $4.227 \pm 1.430$   $\chi^2/\text{NDF}: 361.0/21$

Left Out:  $2.800 \pm 0.810$   $\chi^2/\text{NDF}: 685.5/24$

Right Out:  $9.486 \pm 1.244$   $\chi^2/\text{NDF}: 418.9/24$

Left In:  $2.050 \pm 0.833$   $\chi^2/\text{NDF}: 592.6/22$

Left:  $2.436 \pm 0.581$   $\chi^2/\text{NDF}: 1278.5/47$

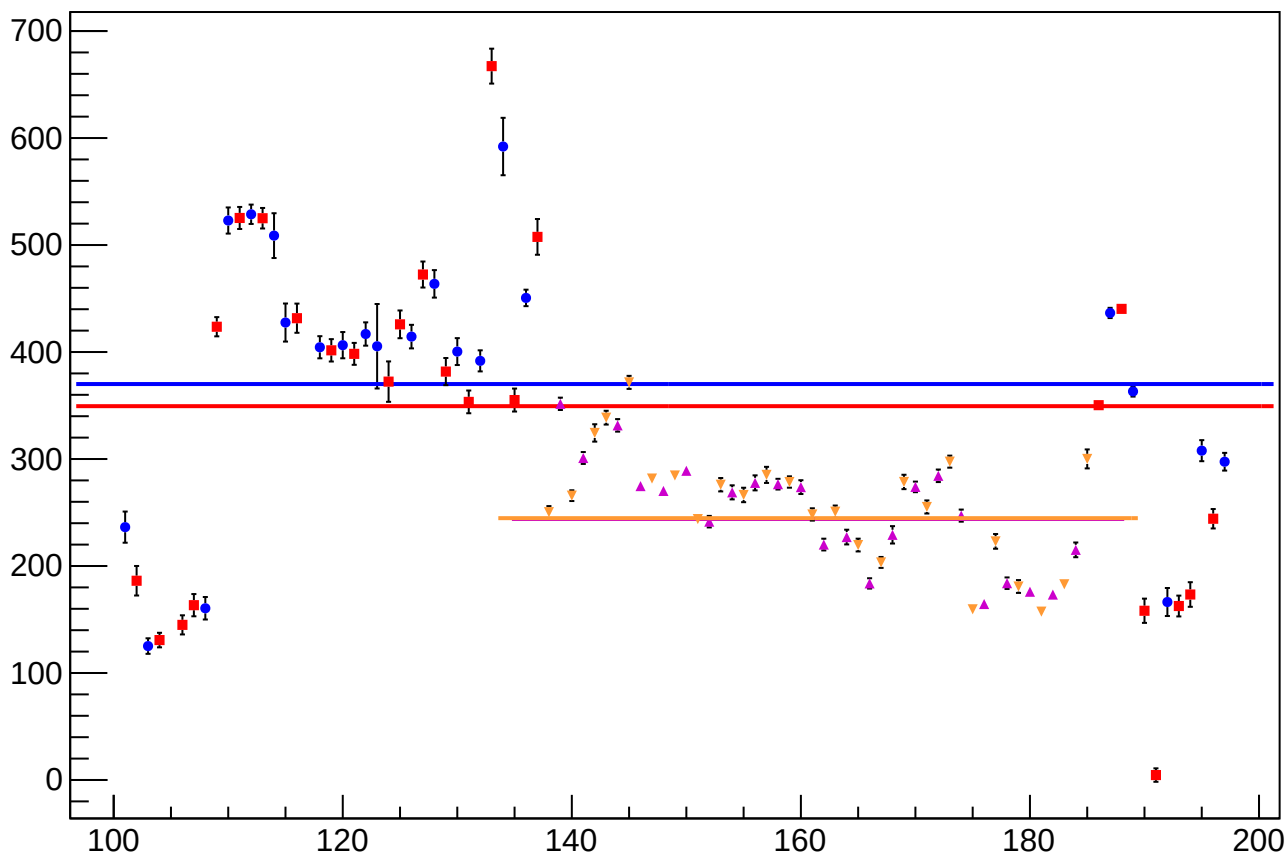
Right:  $7.220 \pm 0.938$   $\chi^2/\text{NDF}: 787.6/46$

In:  $2.602 \pm 0.720$   $\chi^2/\text{NDF}: 955.3/44$

Out:  $4.789 \pm 0.679$   $\chi^2/\text{NDF}: 1124.7/49$

All:  $3.760 \pm 0.494$   $\chi^2/\text{NDF}: 2084.9/94$

reg\_asym\_atr\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $370.067 \pm 2.007$   $\chi^2/\text{NDF}: 2987.2/21$

Left Out:  $244.716 \pm 1.085$   $\chi^2/\text{NDF}: 2565.7/24$

Right Out:  $349.392 \pm 1.455$   $\chi^2/\text{NDF}: 8819.6/24$

Left In:  $243.933 \pm 1.090$   $\chi^2/\text{NDF}: 2294.8/22$

Left:  $244.327 \pm 0.769$   $\chi^2/\text{NDF}: 4860.7/47$

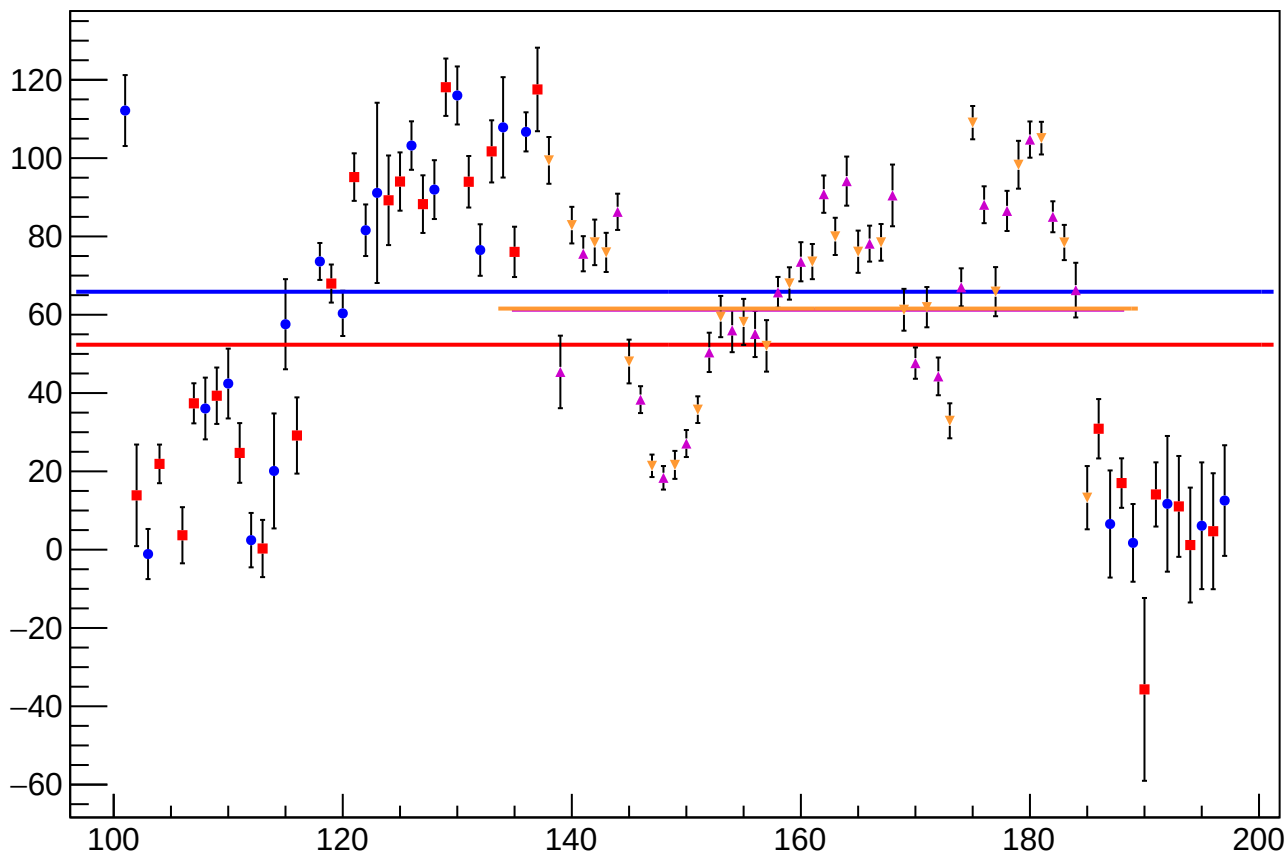
Right:  $356.519 \pm 1.178$   $\chi^2/\text{NDF}: 11876.4/46$

In:  $272.674 \pm 0.958$   $\chi^2/\text{NDF}: 8332.9/44$

Out:  $282.086 \pm 0.870$   $\chi^2/\text{NDF}: 14711.1/49$

All:  $277.833 \pm 0.644$   $\chi^2/\text{NDF}: 23096.9/94$

reg\_asym\_atr\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 65.874+/-1.674  $\chi^2/\text{NDF}$ : 533.4/21

Left Out: 61.575+/-0.939  $\chi^2/\text{NDF}$ : 870.3/24

Right Out: 52.345+/-1.492  $\chi^2/\text{NDF}$ : 618.1/24

Left In: 61.286+/-0.959  $\chi^2/\text{NDF}$ : 702.8/22

Left: 61.434+/-0.671  $\chi^2/\text{NDF}$ : 1573.1/47

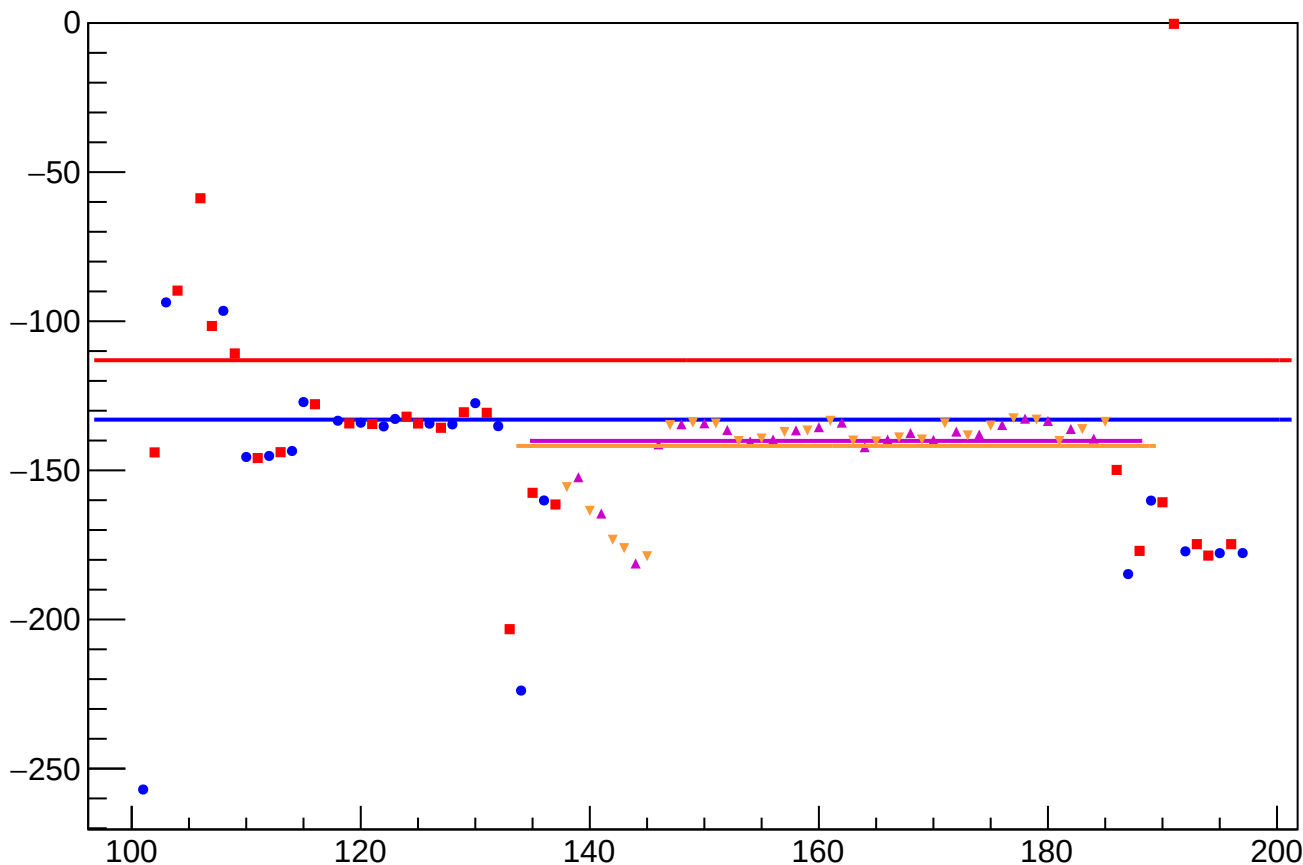
Right: 58.337+/-1.114  $\chi^2/\text{NDF}$ : 1187.9/46

In: 62.420+/-0.832  $\chi^2/\text{NDF}$ : 1241.8/44

Out: 58.958+/-0.795  $\chi^2/\text{NDF}$ : 1515.8/49

All: 60.609+/-0.575  $\chi^2/\text{NDF}$ : 2766.7/94

reg\_asym\_atr\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -132.988+/-0.084  $\chi^2/\text{NDF}$ : 202459.9/21

Left Out: -141.811+/-0.045  $\chi^2/\text{NDF}$ : 77727.6/24

Right Out: -113.073+/-0.072  $\chi^2/\text{NDF}$ : 523620.9/24

Left In: -140.112+/-0.045  $\chi^2/\text{NDF}$ : 48400.6/22

Left: -140.962+/-0.032  $\chi^2/\text{NDF}$ : 126846.5/47

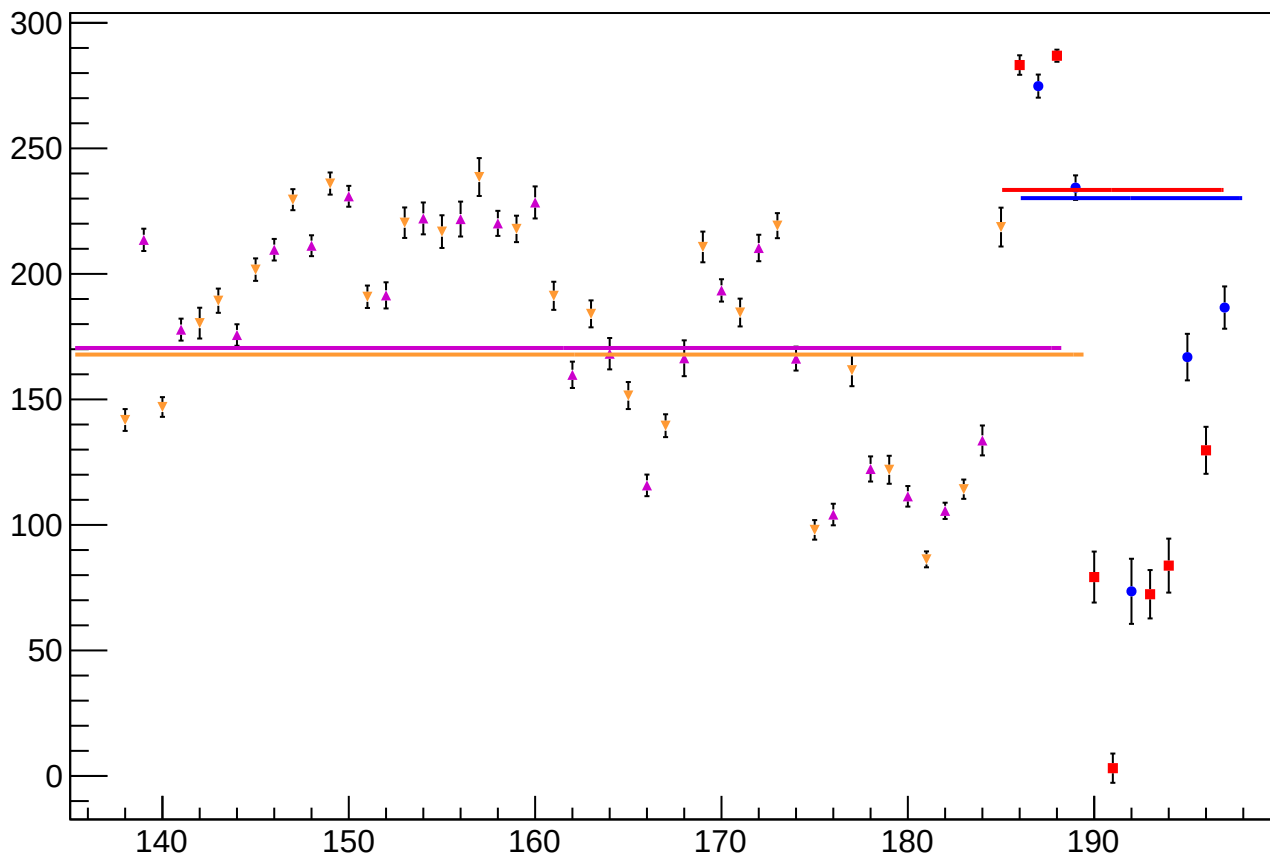
Right: -121.493+/-0.054  $\chi^2/\text{NDF}$ : 758862.8/46

In: -138.520+/-0.040  $\chi^2/\text{NDF}$ : 256503.7/44

Out: -133.710+/-0.038  $\chi^2/\text{NDF}$ : 717298.1/49

All: -136.020+/-0.027  $\chi^2/\text{NDF}$ : 981506.5/94

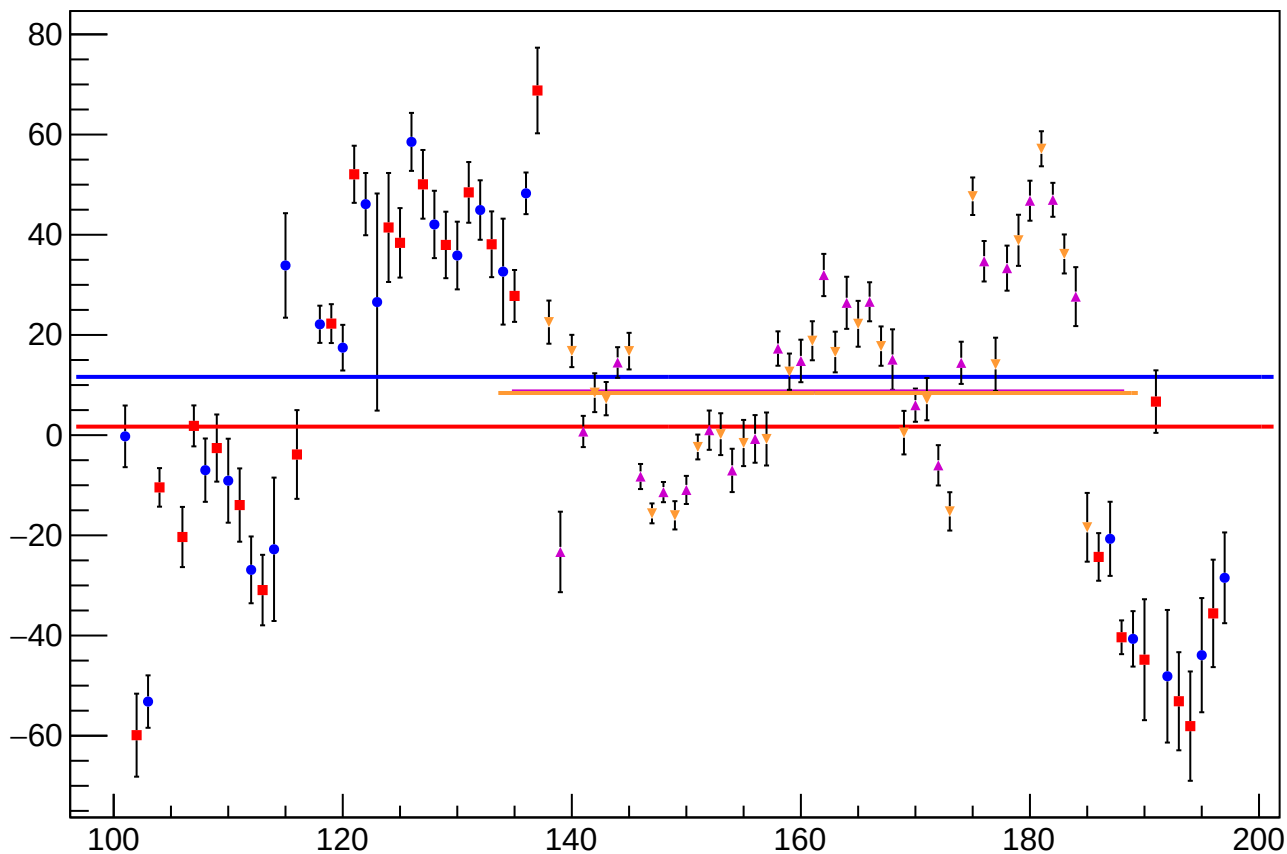
# reg\_asym\_atr\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $230.185 \pm 2.878$   $\chi^2/\text{NDF}: 314.0/4$   
 Left Out:  $167.868 \pm 0.973$   $\chi^2/\text{NDF}: 2465.4/24$   
 Right Out:  $233.443 \pm 1.801$   $\chi^2/\text{NDF}: 3046.2/6$   
 Left In:  $170.487 \pm 0.991$   $\chi^2/\text{NDF}: 2036.5/22$

Left:  $169.154 \pm 0.695$   $\chi^2/\text{NDF}: 4505.5/47$   
 Right:  $232.526 \pm 1.527$   $\chi^2/\text{NDF}: 3361.1/11$   
 In:  $176.817 \pm 0.937$   $\chi^2/\text{NDF}: 2735.1/27$   
 Out:  $182.695 \pm 0.856$   $\chi^2/\text{NDF}: 6537.7/31$   
 All:  $180.021 \pm 0.632$   $\chi^2/\text{NDF}: 9294.2/59$

reg\_asym\_atr\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 11.630+/-1.369  $\chi^2/\text{NDF}$ : 640.9/21

Left Out: 8.415+/-0.731  $\chi^2/\text{NDF}$ : 750.6/24

Right Out: 1.700+/-1.189  $\chi^2/\text{NDF}$ : 784.4/24

Left In: 8.730+/-0.757  $\chi^2/\text{NDF}$ : 630.1/22

Left: 8.567+/-0.526  $\chi^2/\text{NDF}$ : 1380.7/47

Right: 5.967+/-0.898  $\chi^2/\text{NDF}$ : 1455.2/46

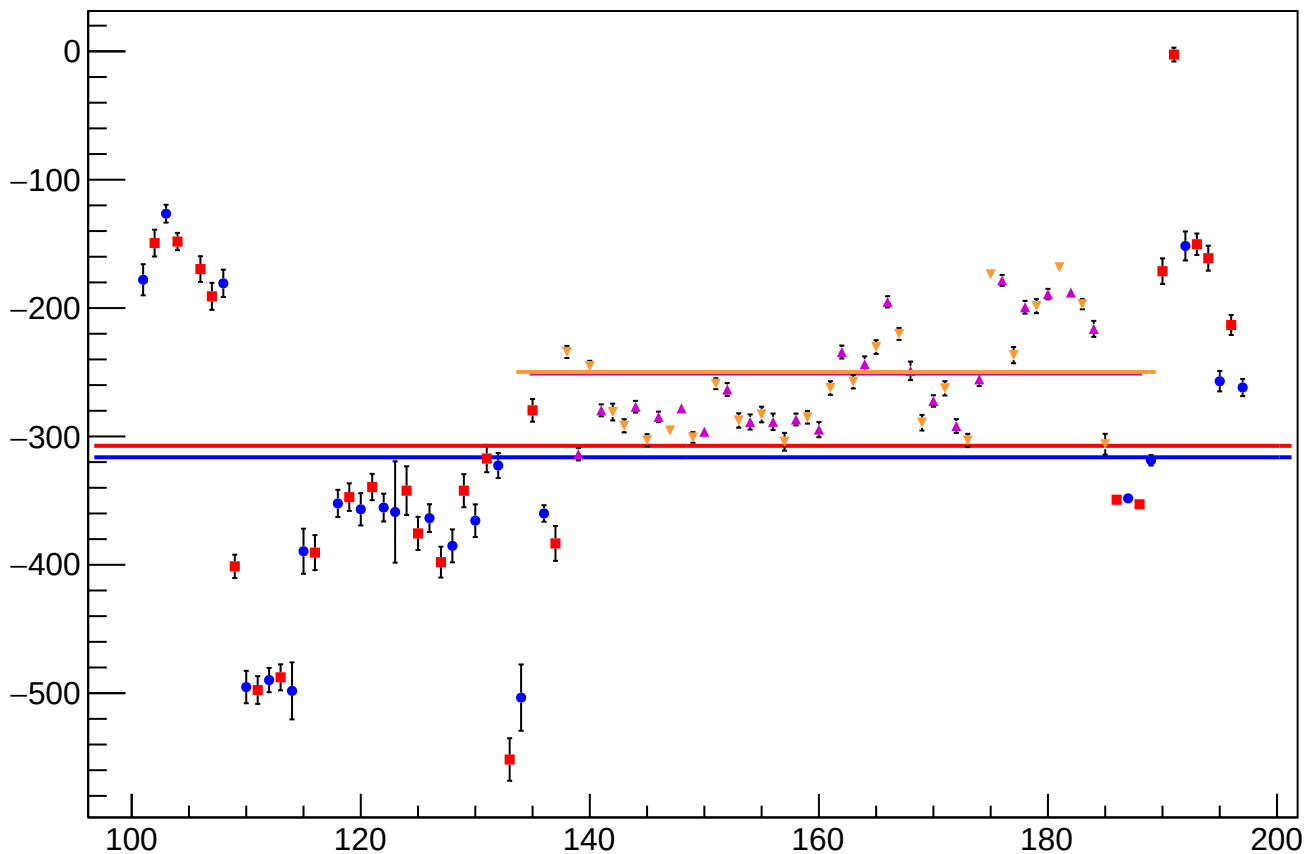
In: 9.408+/-0.662  $\chi^2/\text{NDF}$ : 1274.4/44

Out: 6.573+/-0.623  $\chi^2/\text{NDF}$ : 1558.1/49

All: 7.903+/-0.454  $\chi^2/\text{NDF}$ : 2842.2/94



reg\_asym\_atr\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-316.238 \pm 1.776$   $\chi^2/\text{NDF}$ : 2264.4/21

Left Out:  $-249.759 \pm 0.975$   $\chi^2/\text{NDF}$ : 2232.5/24

Right Out:  $-307.326 \pm 1.277$   $\chi^2/\text{NDF}$ : 7088.2/24

Left In:  $-251.002 \pm 0.987$   $\chi^2/\text{NDF}$ : 1958.3/22

Left:  $-250.374 \pm 0.694$   $\chi^2/\text{NDF}$ : 4191.7/47

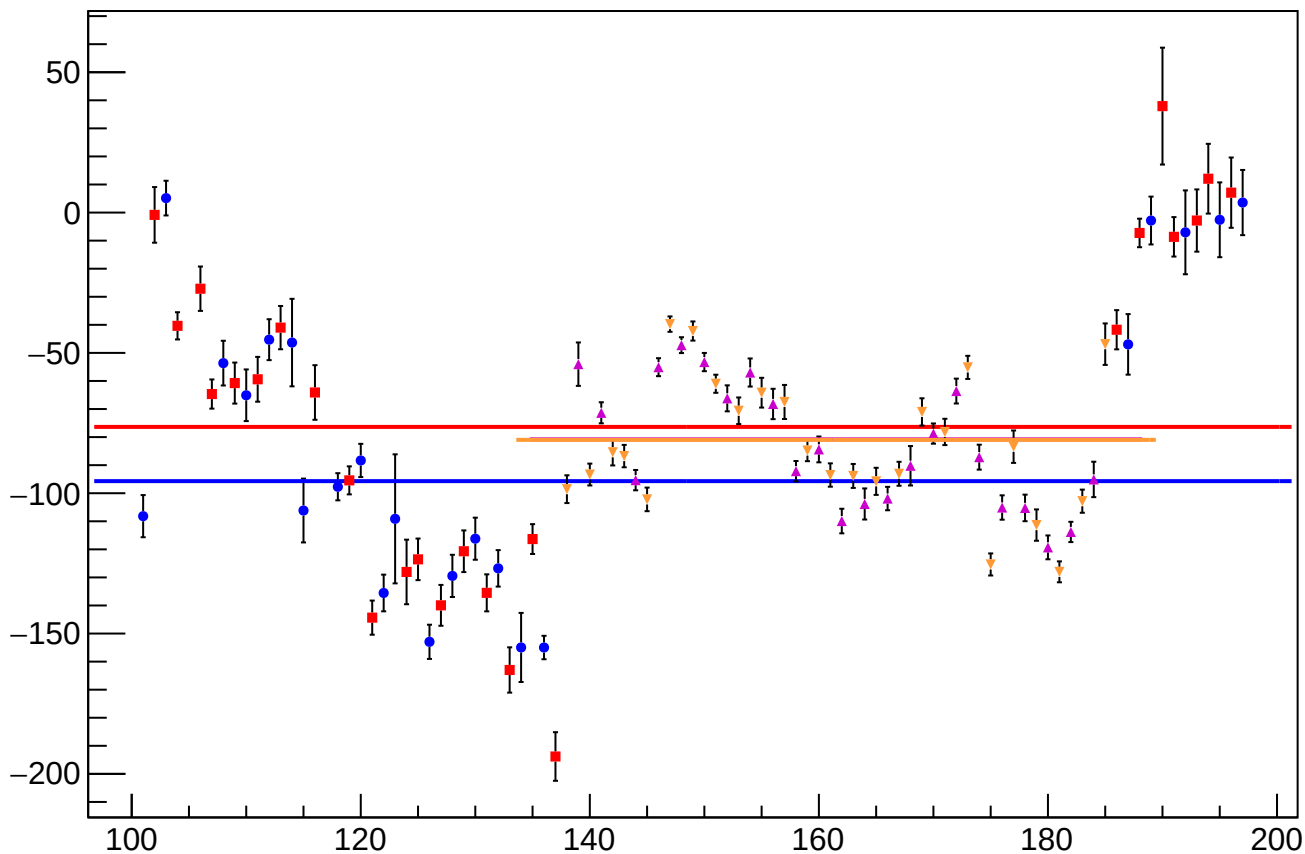
Right:  $-310.362 \pm 1.037$   $\chi^2/\text{NDF}$ : 9369.2/46

In:  $-266.386 \pm 0.863$   $\chi^2/\text{NDF}$ : 5253.5/44

Out:  $-270.970 \pm 0.775$   $\chi^2/\text{NDF}$ : 10604.8/49

All:  $-268.923 \pm 0.576$   $\chi^2/\text{NDF}$ : 15873.9/94

reg\_asym\_atr\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-95.692 \pm 1.604$   $\chi^2/\text{NDF}$ : 1065.9/21

Left Out:  $-80.981 \pm 0.846$   $\chi^2/\text{NDF}$ : 911.2/24

Right Out:  $-76.370 \pm 1.433$   $\chi^2/\text{NDF}$ : 1408.0/24

Left In:  $-80.803 \pm 0.870$   $\chi^2/\text{NDF}$ : 695.4/22

Left:  $-80.895 \pm 0.606$   $\chi^2/\text{NDF}$ : 1606.6/47

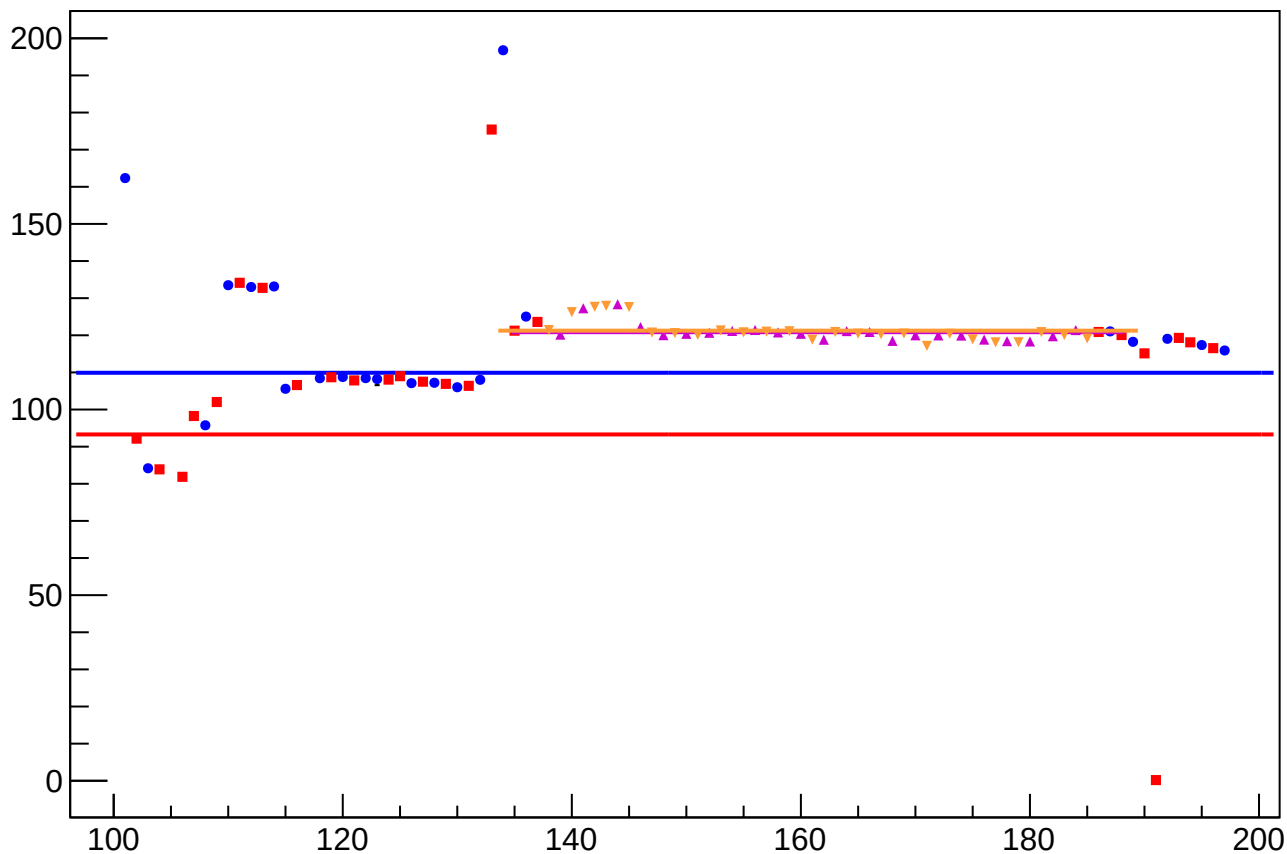
Right:  $-84.944 \pm 1.069$   $\chi^2/\text{NDF}$ : 2554.6/46

In:  $-84.186 \pm 0.765$   $\chi^2/\text{NDF}$ : 1827.9/44

Out:  $-79.789 \pm 0.729$   $\chi^2/\text{NDF}$ : 2326.9/49

All:  $-81.881 \pm 0.527$   $\chi^2/\text{NDF}$ : 4172.1/94

reg\_asym\_atr\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 109.905 $\pm$ 0.078  $\chi^2$ /NDF: 75265.5/21

Left Out: 121.248 $\pm$ 0.040  $\chi^2$ /NDF: 4820.1/24

Right Out: 93.290 $\pm$ 0.066  $\chi^2$ /NDF: 328094.2/24

Left In: 120.834 $\pm$ 0.041  $\chi^2$ /NDF: 3372.4/22

Left: 121.043 $\pm$ 0.029  $\chi^2$ /NDF: 8245.1/47

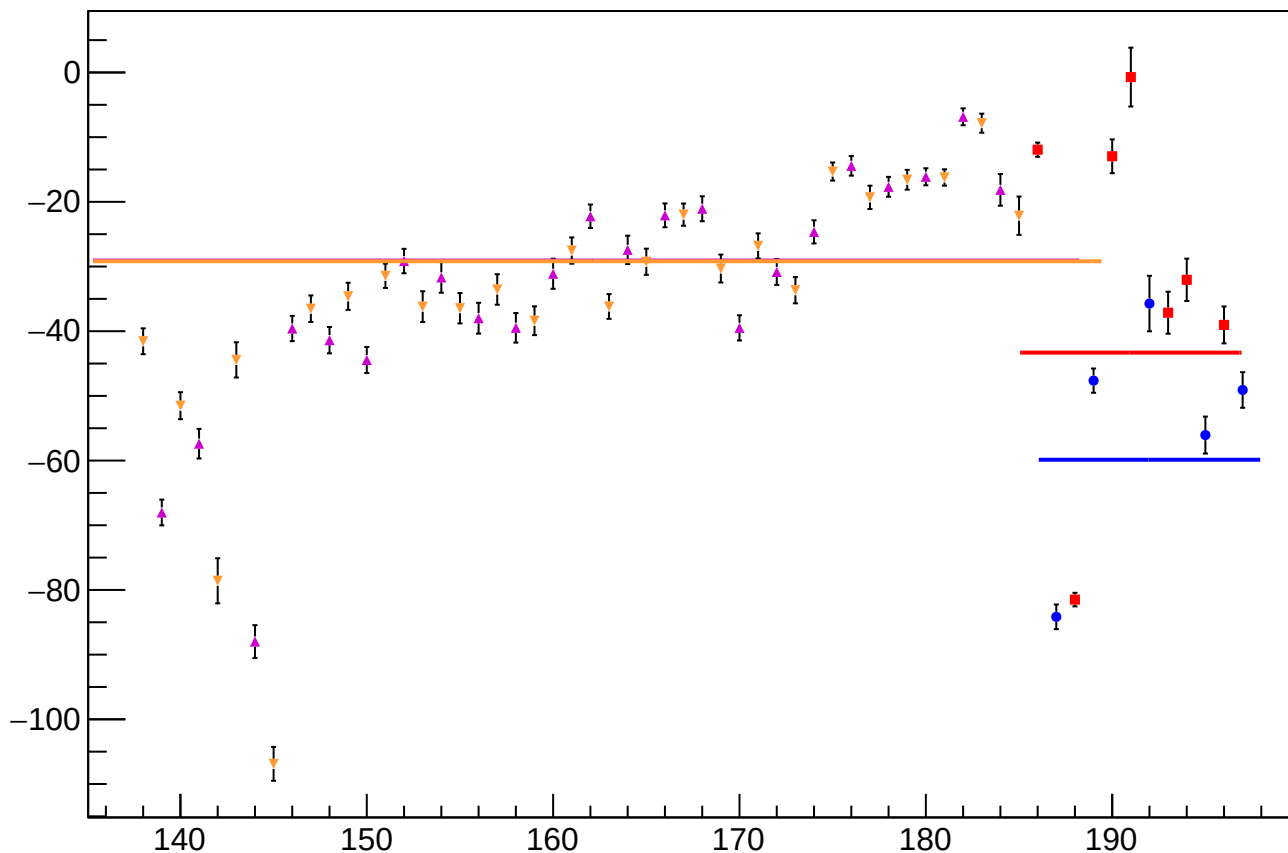
Right: 100.276 $\pm$ 0.051  $\chi^2$ /NDF: 429657.4/46

In: 118.512 $\pm$ 0.036  $\chi^2$ /NDF: 94102.9/44

Out: 113.749 $\pm$ 0.034  $\chi^2$ /NDF: 462511.4/49

All: 116.026 $\pm$ 0.025  $\chi^2$ /NDF: 565772.1/94

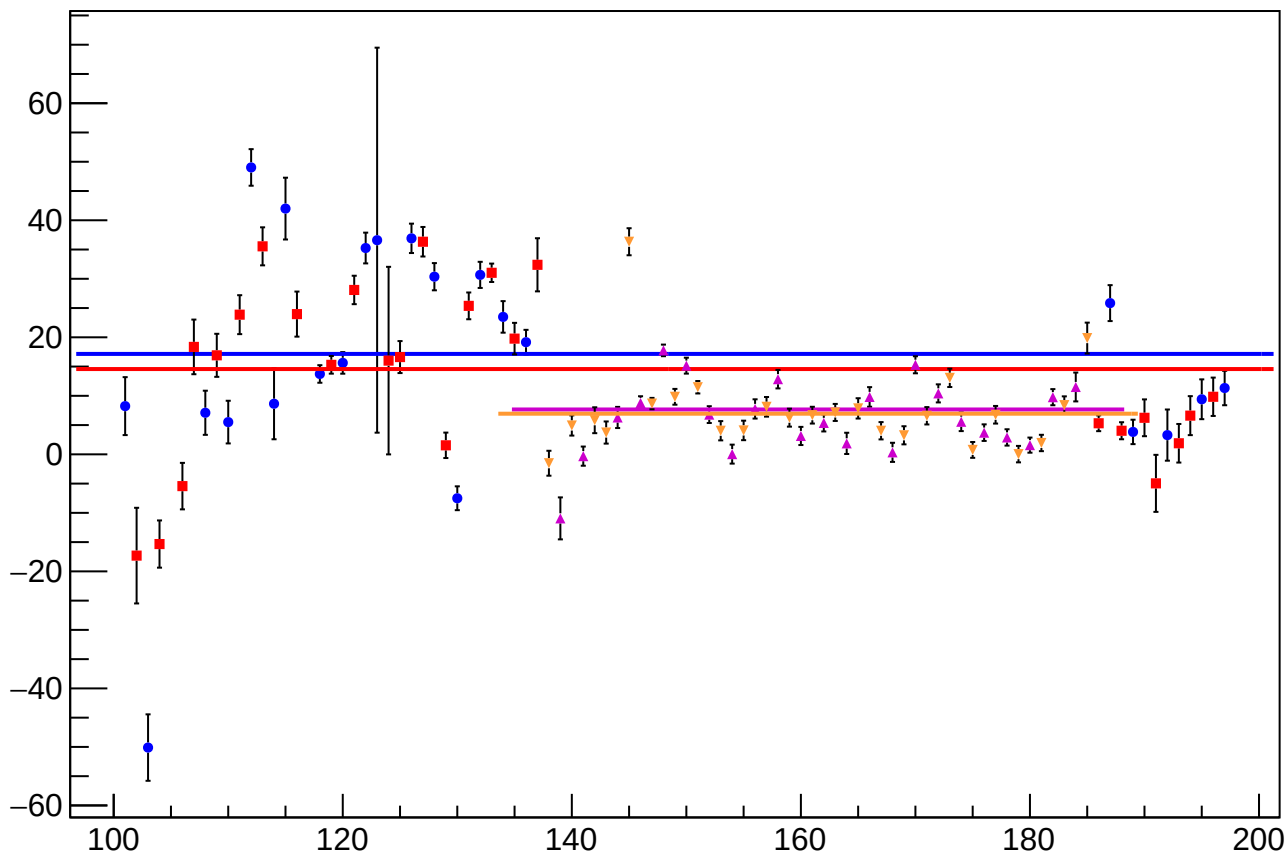
reg\_asym\_at1\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-59.871 \pm 1.073$   $\chi^2/\text{NDF}$ : 253.8/4  
 Left Out:  $-29.182 \pm 0.389$   $\chi^2/\text{NDF}$ : 1880.4/24  
 Right Out:  $-43.309 \pm 0.668$   $\chi^2/\text{NDF}$ : 2380.7/6  
 Left In:  $-29.073 \pm 0.394$   $\chi^2/\text{NDF}$ : 1872.4/22

Left:  $-29.128 \pm 0.277$   $\chi^2/\text{NDF}$ : 3752.8/47  
 Right:  $-47.933 \pm 0.567$   $\chi^2/\text{NDF}$ : 2806.3/11  
 In:  $-32.731 \pm 0.370$   $\chi^2/\text{NDF}$ : 2852.5/27  
 Out:  $-32.765 \pm 0.336$   $\chi^2/\text{NDF}$ : 4595.2/31  
 All:  $-32.749 \pm 0.249$   $\chi^2/\text{NDF}$ : 7447.7/59

reg\_asym\_at1\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 17.161 $\pm$ 0.577  $\chi^2$ /NDF: 694.4/21

Left Out: 6.943 $\pm$ 0.304  $\chi^2$ /NDF:322.6/24

Right Out: 14.575 $\pm$ 0.509  $\chi^2$ /NDF: 590.5/24

Left In: 7.666 $\pm$ 0.313  $\chi^2$ /NDF:341.1/22

Left: 7.294 $\pm$ 0.218  $\chi^2$ /NDF: 666.5/47

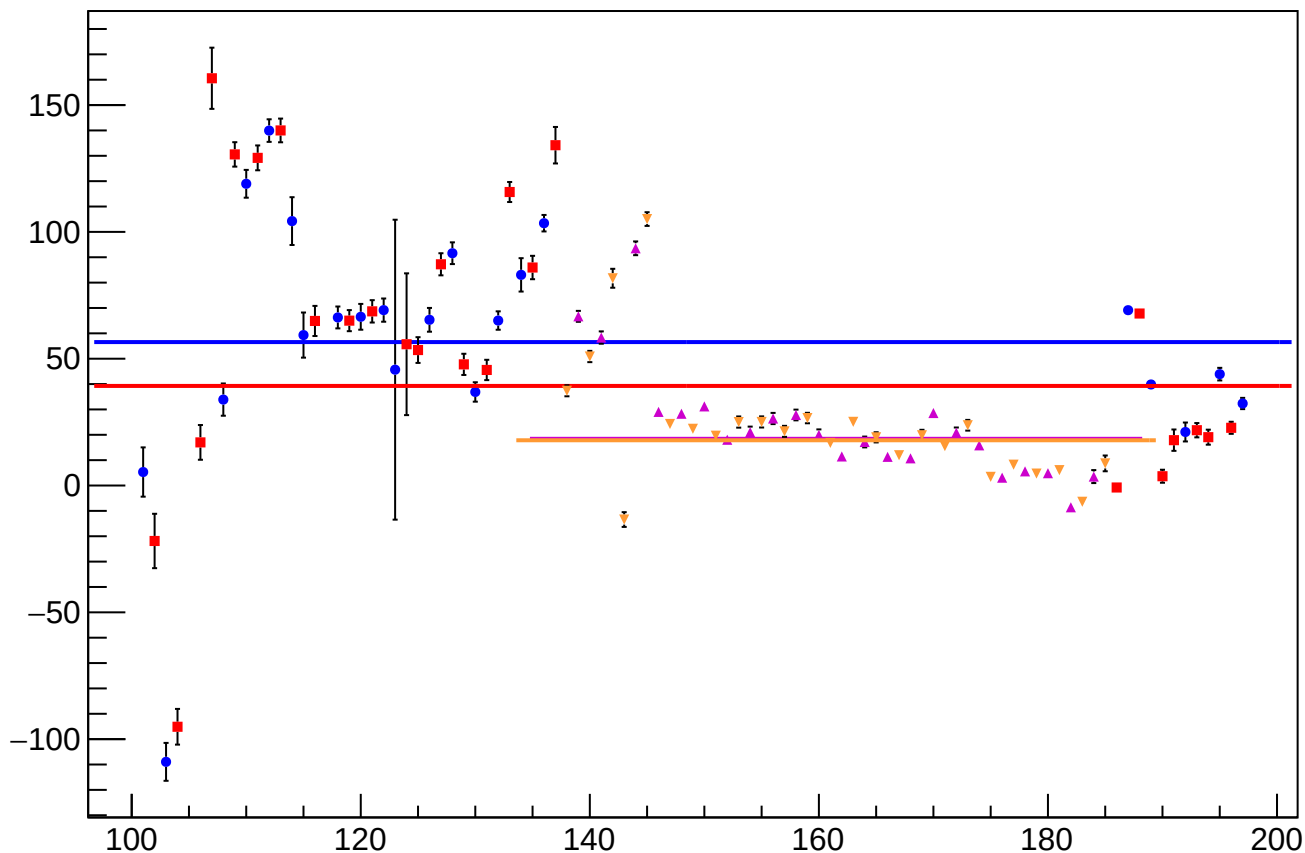
Right: 15.708 $\pm$ 0.382  $\chi^2$ /NDF: 1296.2/46

In: 9.823 $\pm$ 0.275  $\chi^2$ /NDF:1244.8/44

Out: 8.944 $\pm$ 0.261  $\chi^2$ /NDF:1078.8/49

All: 9.360 $\pm$ 0.189  $\chi^2$ /NDF: 2329.0/94

reg\_asym\_at1\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 56.556 $\pm$ 0.725  $\chi^2$ /NDF: 1790.5/21

Left Out: 17.841 $\pm$ 0.388  $\chi^2$ /NDF: 2399.7/24

Right Out: 39.268 $\pm$ 0.501  $\chi^2$ /NDF: 6131.6/24

Left In: 18.416 $\pm$ 0.391  $\chi^2$ /NDF: 2468.4/22

Left: 18.126 $\pm$ 0.275  $\chi^2$ /NDF: 4869.1/47

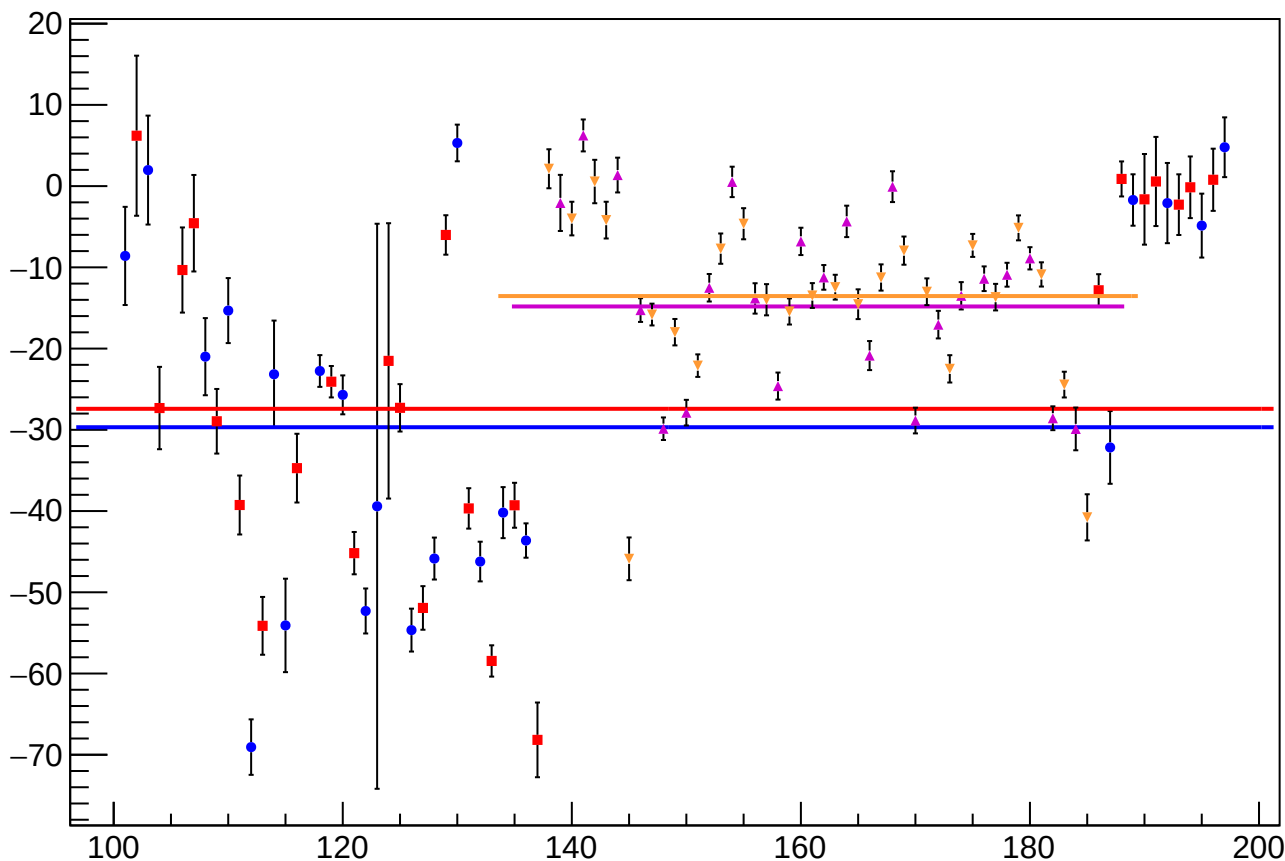
Right: 44.847 $\pm$ 0.412  $\chi^2$ /NDF: 8307.0/46

In: 27.014 $\pm$ 0.344  $\chi^2$ /NDF: 6401.2/44

Out: 25.878 $\pm$ 0.307  $\chi^2$ /NDF: 9676.1/49

All: 26.380 $\pm$ 0.229  $\chi^2$ /NDF: 16083.5/94

reg\_asym\_at1\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-29.681 \pm 0.678$   $\chi^2/\text{NDF}: 991.3/21$

Left Out:  $-13.535 \pm 0.345$   $\chi^2/\text{NDF}: 574.6/24$

Right Out:  $-27.413 \pm 0.622$   $\chi^2/\text{NDF}: 1124.1/24$

Left In:  $-14.815 \pm 0.353$   $\chi^2/\text{NDF}: 838.2/22$

Left:  $-14.159 \pm 0.247$   $\chi^2/\text{NDF}: 1419.5/47$

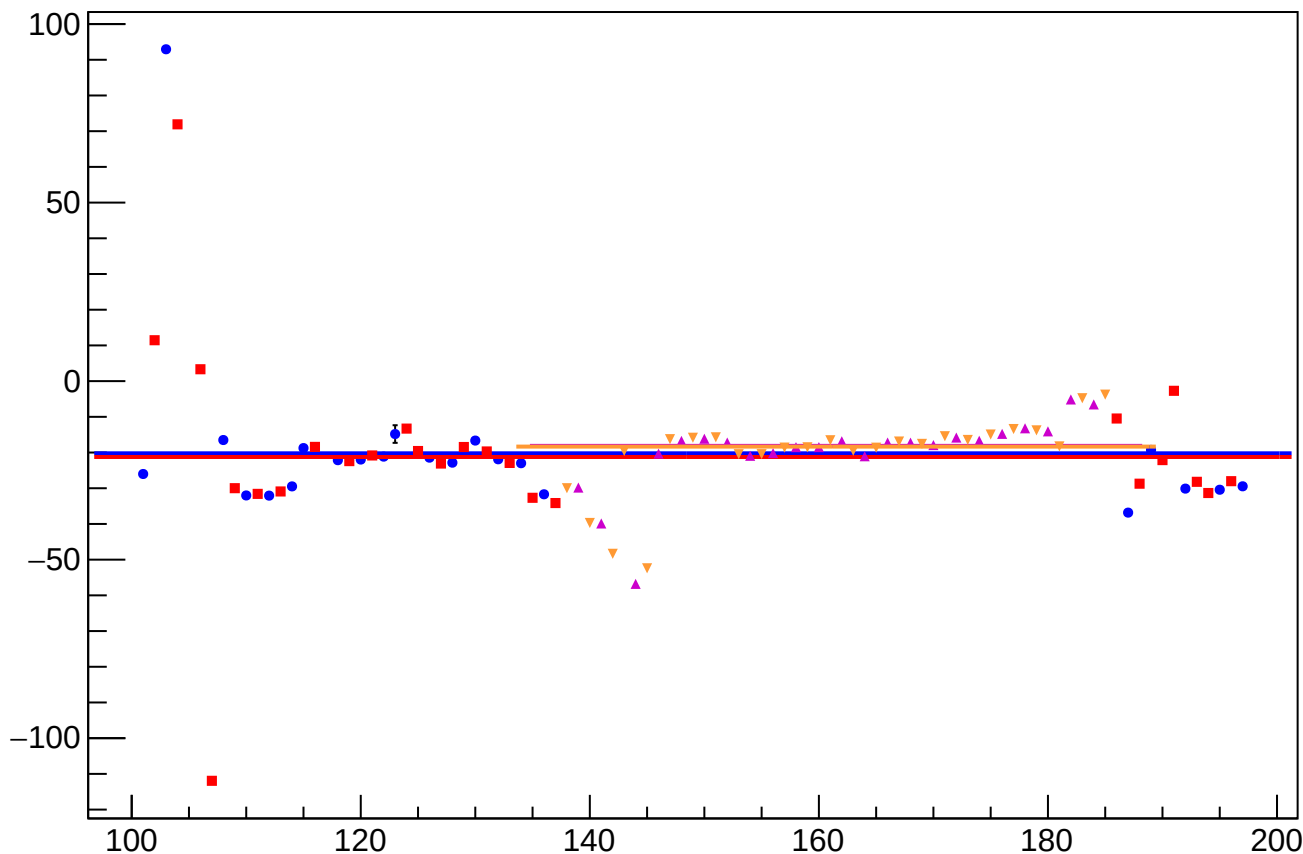
Right:  $-28.449 \pm 0.458$   $\chi^2/\text{NDF}: 2121.5/46$

In:  $-17.986 \pm 0.313$   $\chi^2/\text{NDF}: 2207.5/44$

Out:  $-16.798 \pm 0.301$   $\chi^2/\text{NDF}: 2079.8/49$

All:  $-17.369 \pm 0.217$   $\chi^2/\text{NDF}: 4294.8/94$

reg\_asym\_at1\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -20.218+/-0.036  $\chi^2/\text{NDF}$ : 502989.8/21

Left Out: -18.337+/-0.016  $\chi^2/\text{NDF}$ : 283793.3/24

Right Out: -21.245+/-0.033  $\chi^2/\text{NDF}$ : 477287.4/24

Left In: -18.135+/-0.016  $\chi^2/\text{NDF}$ : 245650.3/22

Left: -18.237+/-0.011  $\chi^2/\text{NDF}$ : 529524.6/47

Right: -20.785+/-0.024  $\chi^2/\text{NDF}$ : 980715.9/46

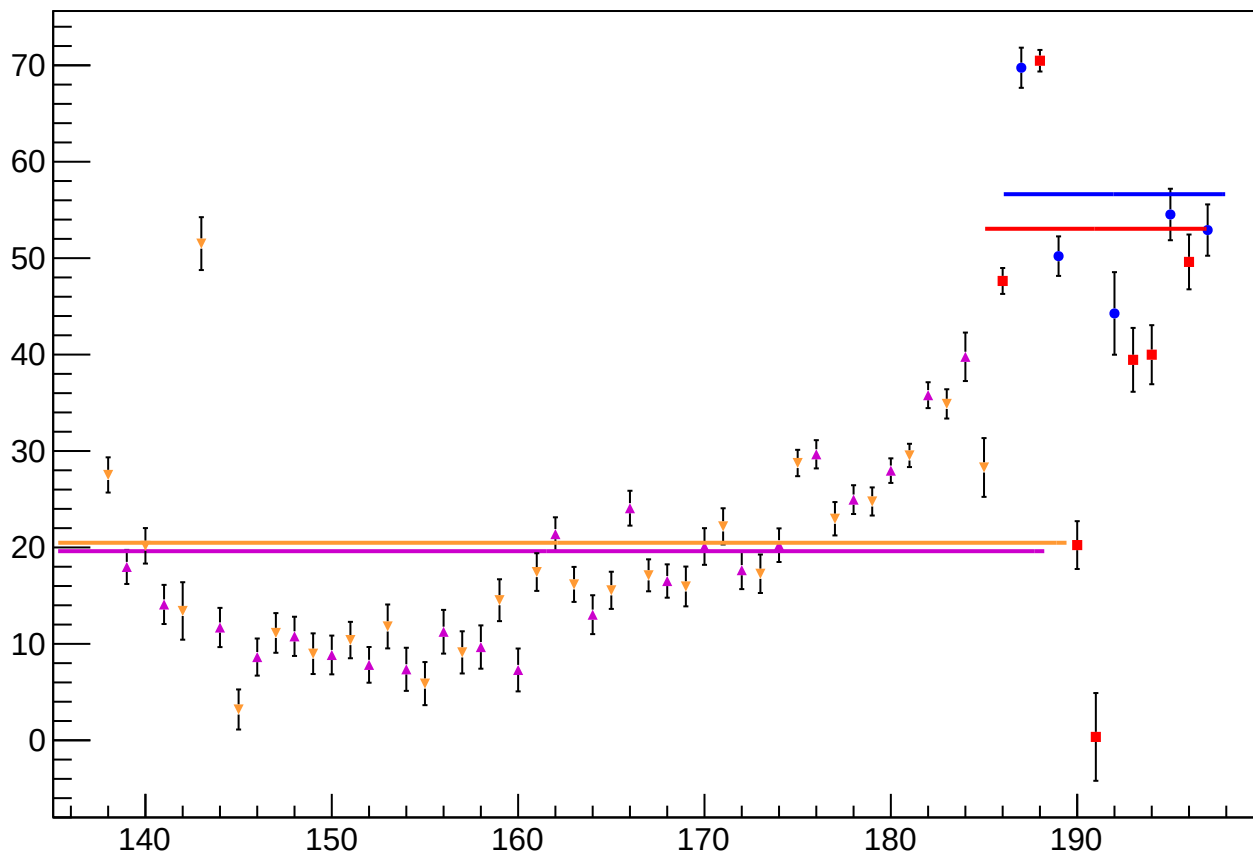
In: -18.473+/-0.015  $\chi^2/\text{NDF}$ : 751384.7/44

Out: -18.888+/-0.014  $\chi^2/\text{NDF}$ : 767438.3/49

All: -18.686+/-0.010  $\chi^2/\text{NDF}$ : 1519234.2/94



reg\_asym\_at1\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 56.634 $\pm$ 1.115  $\chi^2$ /NDF: 60.4/4

Left Out: 20.485 $\pm$ 0.374  $\chi^2$ /NDF: 615.7/24

Right Out: 53.047 $\pm$ 0.728  $\chi^2$ /NDF: 604.7/6

Left In: 19.612 $\pm$ 0.379  $\chi^2$ /NDF: 572.7/22

Left: 20.054 $\pm$ 0.266  $\chi^2$ /NDF: 1191.1/47

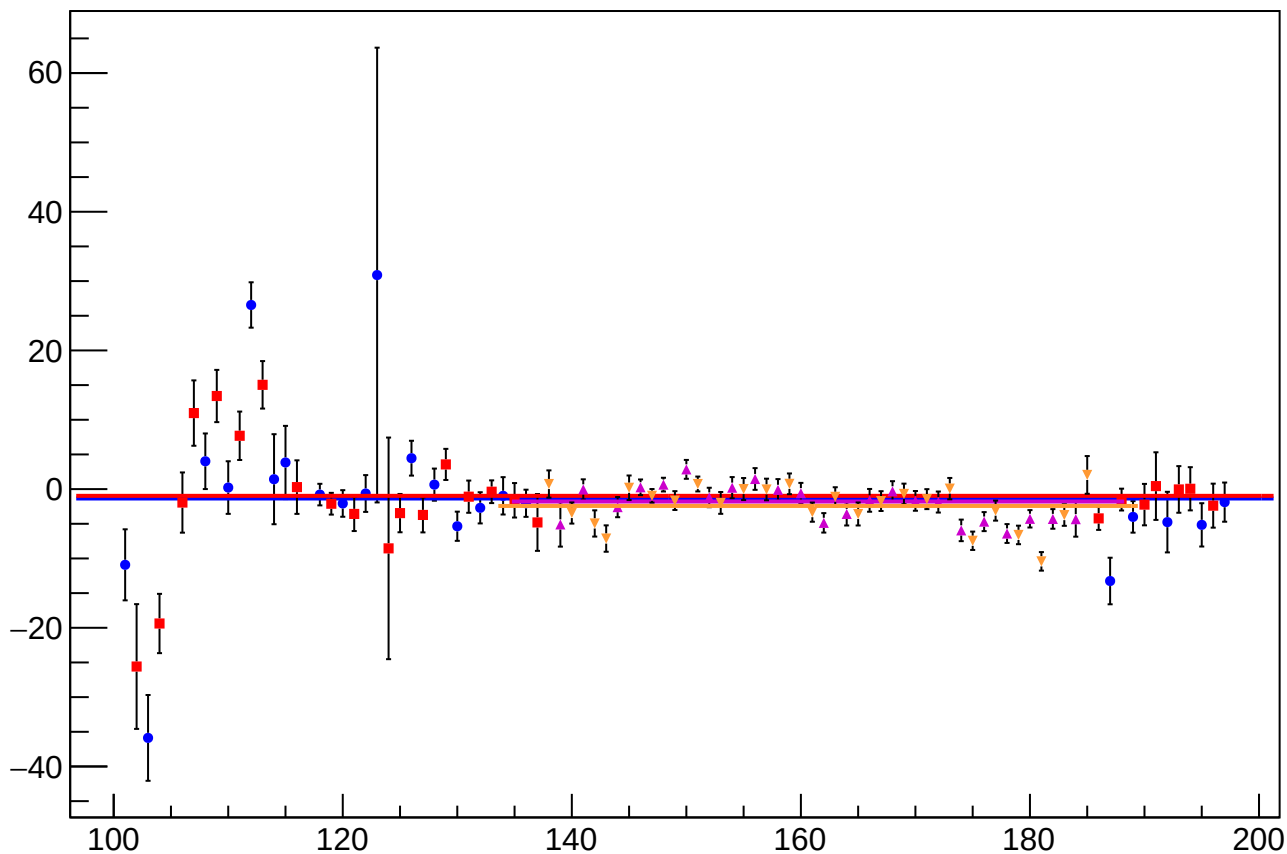
Right: 54.120 $\pm$ 0.610  $\chi^2$ /NDF: 672.3/11

In: 23.441 $\pm$ 0.359  $\chi^2$ /NDF: 1621.8/27

Out: 27.273 $\pm$ 0.332  $\chi^2$ /NDF: 2803.6/31

All: 25.501 $\pm$ 0.244  $\chi^2$ /NDF: 4486.8/59

reg\_asym\_at1\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-1.354 \pm 0.587$   $\chi^2/\text{NDF}$ : 138.1/21

Left Out:  $-2.429 \pm 0.293$   $\chi^2/\text{NDF}$ : 103.7/24

Right Out:  $-0.969 \pm 0.533$   $\chi^2/\text{NDF}$ : 88.8/24

Left In:  $-1.791 \pm 0.301$   $\chi^2/\text{NDF}$ : 70.1/22

Left:  $-2.119 \pm 0.210$   $\chi^2/\text{NDF}$ : 176.1/47

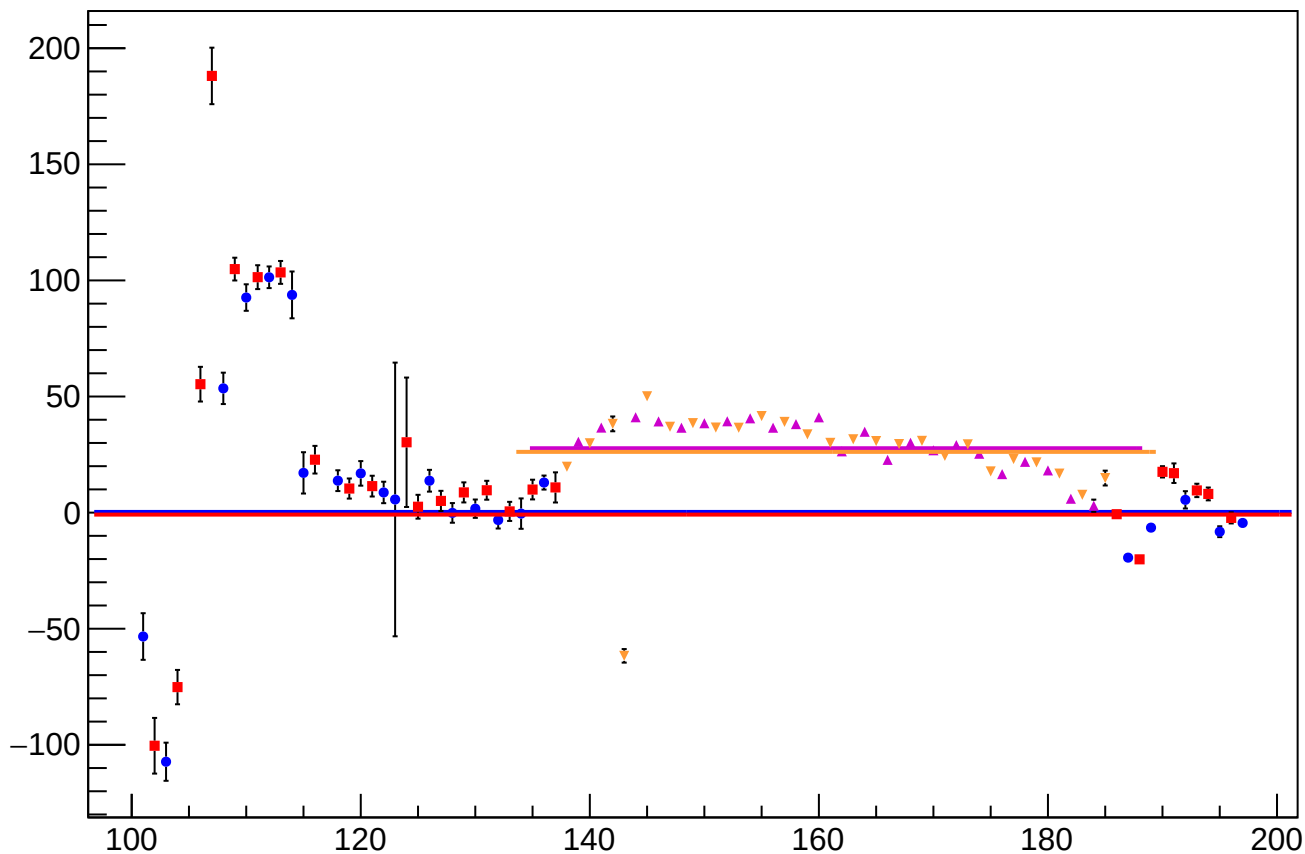
Right:  $-1.143 \pm 0.394$   $\chi^2/\text{NDF}$ : 227.1/46

In:  $-1.700 \pm 0.268$   $\chi^2/\text{NDF}$ : 208.6/44

Out:  $-2.090 \pm 0.257$   $\chi^2/\text{NDF}$ : 198.3/49

All:  $-1.904 \pm 0.185$   $\chi^2/\text{NDF}$ : 408.0/94

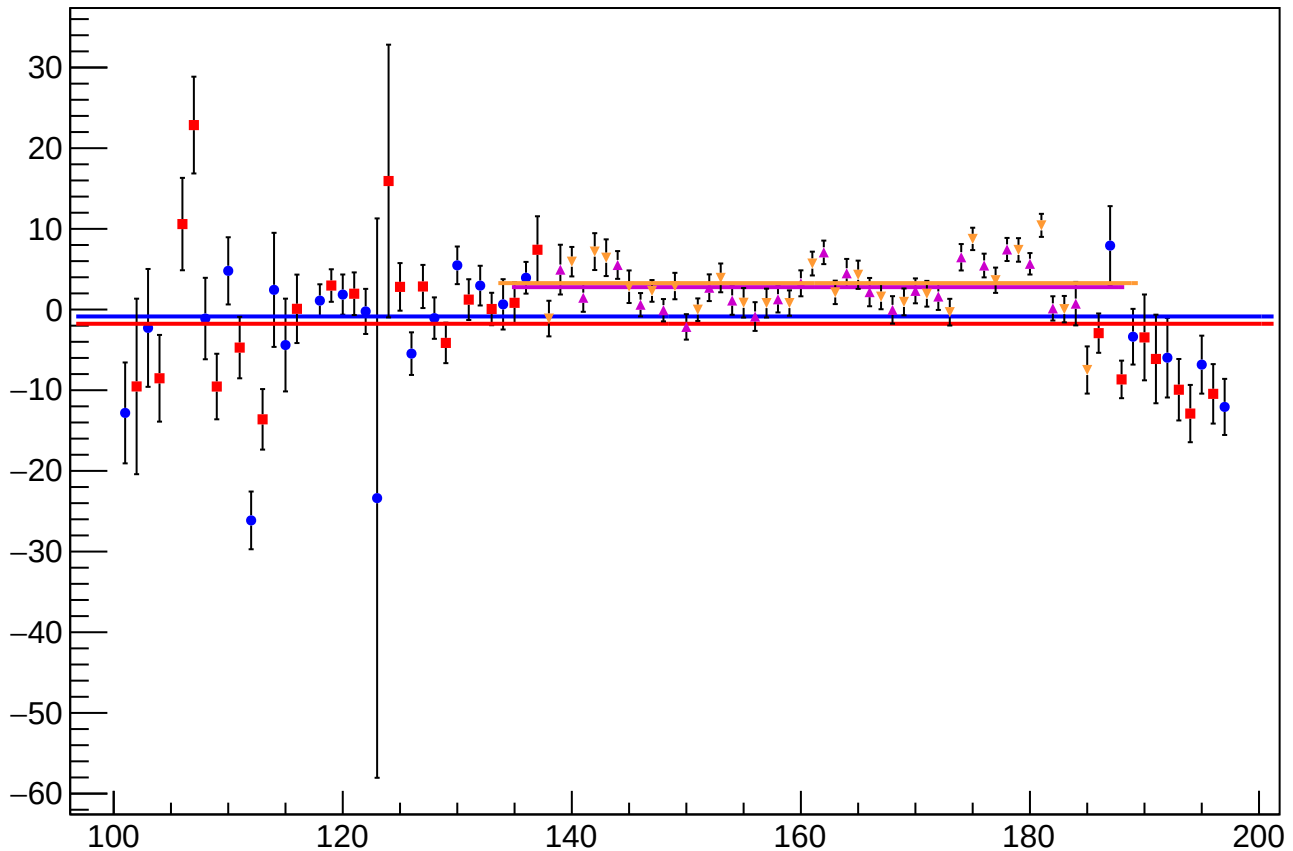
reg\_asym\_at1\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $0.295 \pm 0.748$   $\chi^2/\text{NDF}: 1299.3/21$   
 Left Out:  $26.164 \pm 0.373$   $\chi^2/\text{NDF}: 1577.6/24$   
 Right Out:  $-0.852 \pm 0.543$   $\chi^2/\text{NDF}: 2386.2/24$   
 Left In:  $27.725 \pm 0.377$   $\chi^2/\text{NDF}: 805.1/22$

Left:  $26.936 \pm 0.265$   $\chi^2/\text{NDF}: 2391.3/47$   
 Right:  $-0.456 \pm 0.440$   $\chi^2/\text{NDF}: 3687.1/46$   
 In:  $22.182 \pm 0.336$   $\chi^2/\text{NDF}: 3176.0/44$   
 Out:  $17.508 \pm 0.307$   $\chi^2/\text{NDF}: 5646.0/49$   
 All:  $19.634 \pm 0.227$   $\chi^2/\text{NDF}: 8927.2/94$

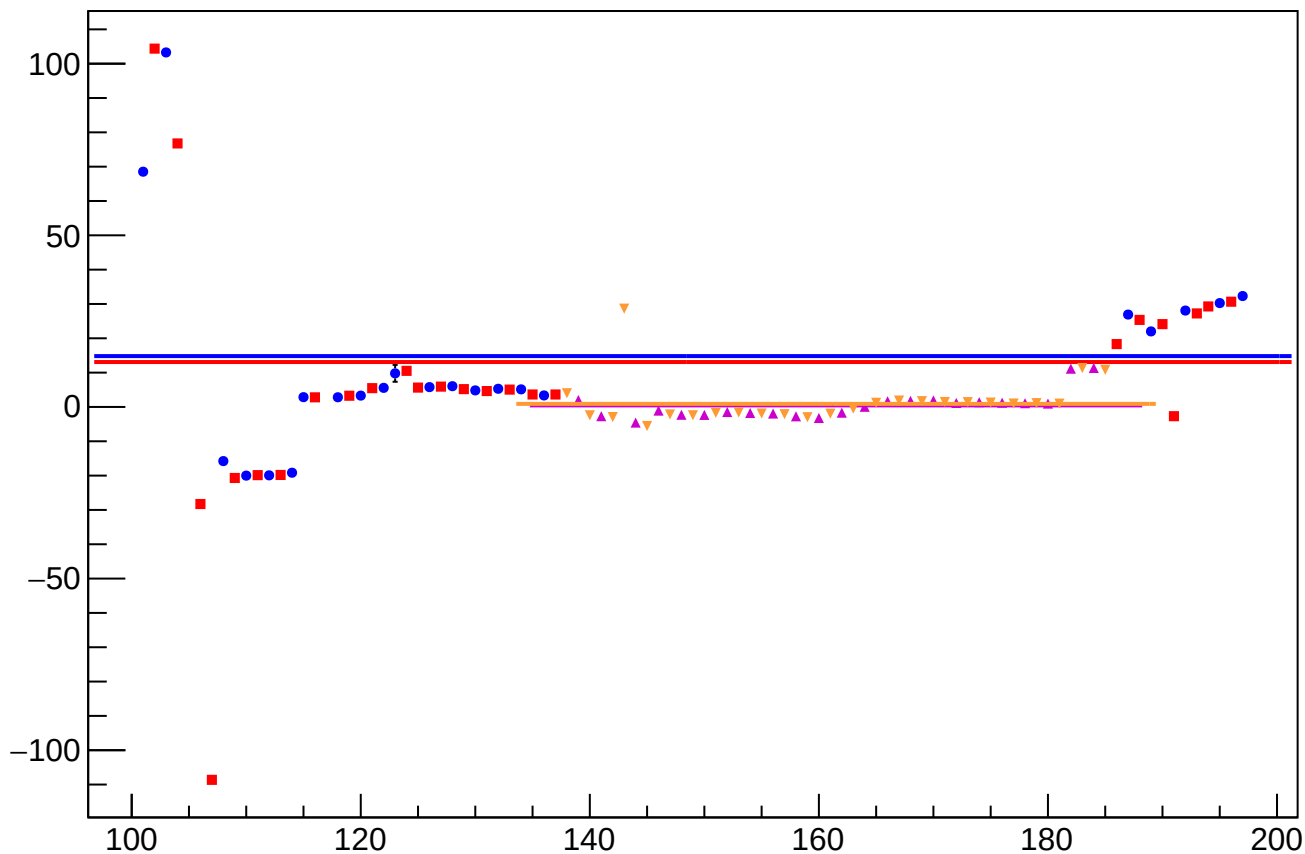
reg\_asym\_at1\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-0.858 \pm 0.684$   $\chi^2/\text{NDF}$ : 95.7/21  
 Left Out:  $3.275 \pm 0.332$   $\chi^2/\text{NDF}$ : 101.8/24  
 Right Out:  $-1.764 \pm 0.642$   $\chi^2/\text{NDF}$ : 90.8/24  
 Left In:  $2.777 \pm 0.340$   $\chi^2/\text{NDF}$ : 66.5/22

Left:  $3.032 \pm 0.238$   $\chi^2/\text{NDF}$ : 169.4/47  
 Right:  $-1.340 \pm 0.468$   $\chi^2/\text{NDF}$ : 187.4/46  
 In:  $2.056 \pm 0.305$   $\chi^2/\text{NDF}$ : 184.8/44  
 Out:  $2.213 \pm 0.295$   $\chi^2/\text{NDF}$ : 241.2/49  
 All:  $2.137 \pm 0.212$   $\chi^2/\text{NDF}$ : 426.1/94

reg\_asym\_at1\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 14.815+/-0.036  $\chi^2/\text{NDF}$ : 439174.3/21

Left Out: 0.898+/-0.015  $\chi^2/\text{NDF}$ : 108195.0/24

Right Out: 13.086+/-0.033  $\chi^2/\text{NDF}$ : 640552.5/24

Left In: 0.448+/-0.015  $\chi^2/\text{NDF}$ : 50533.6/22

Left: 0.675+/-0.011  $\chi^2/\text{NDF}$ : 159162.0/47

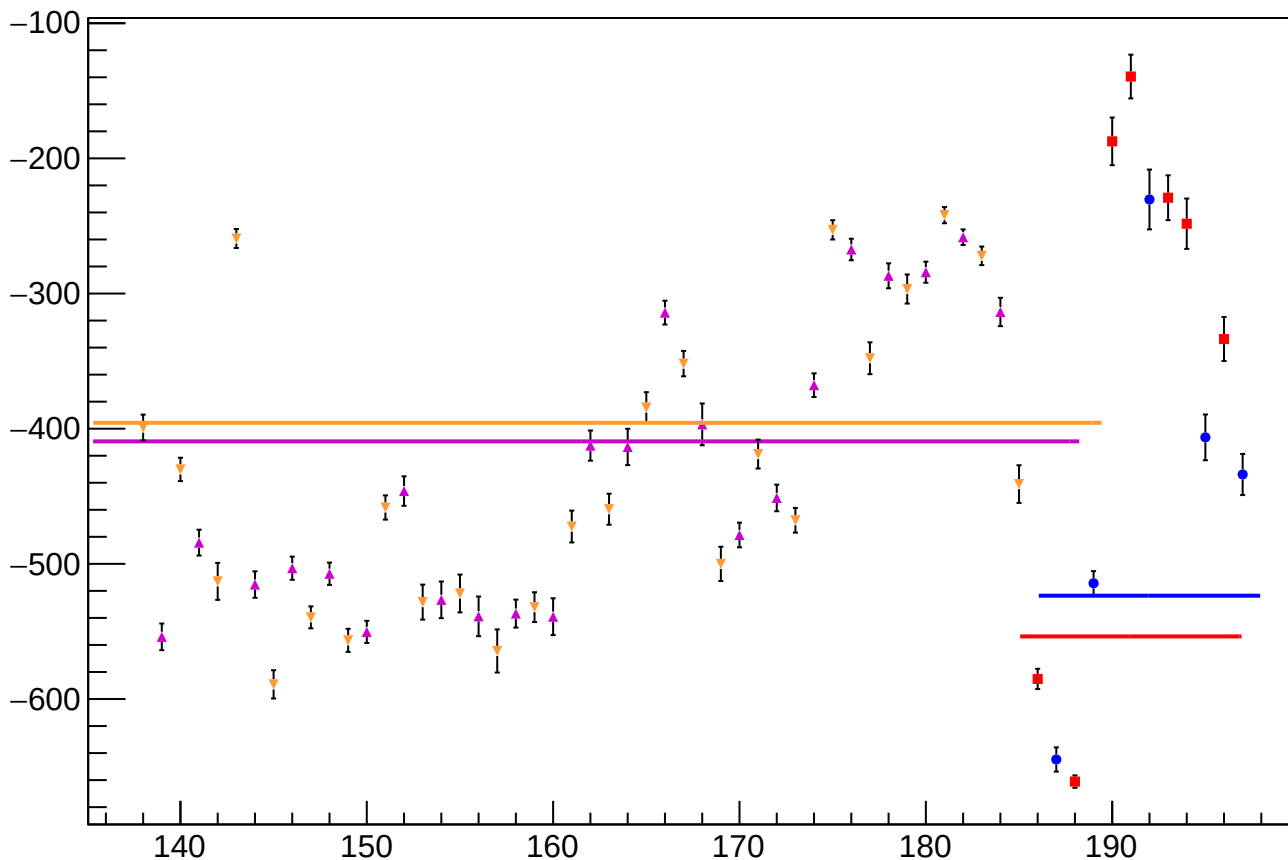
Right: 13.879+/-0.024  $\chi^2/\text{NDF}$ : 1080978.0/46

In: 2.664+/-0.014  $\chi^2/\text{NDF}$ : 624687.9/44

Out: 3.023+/-0.014  $\chi^2/\text{NDF}$ : 860683.2/49

All: 2.847+/-0.010  $\chi^2/\text{NDF}$ : 1485701.9/94

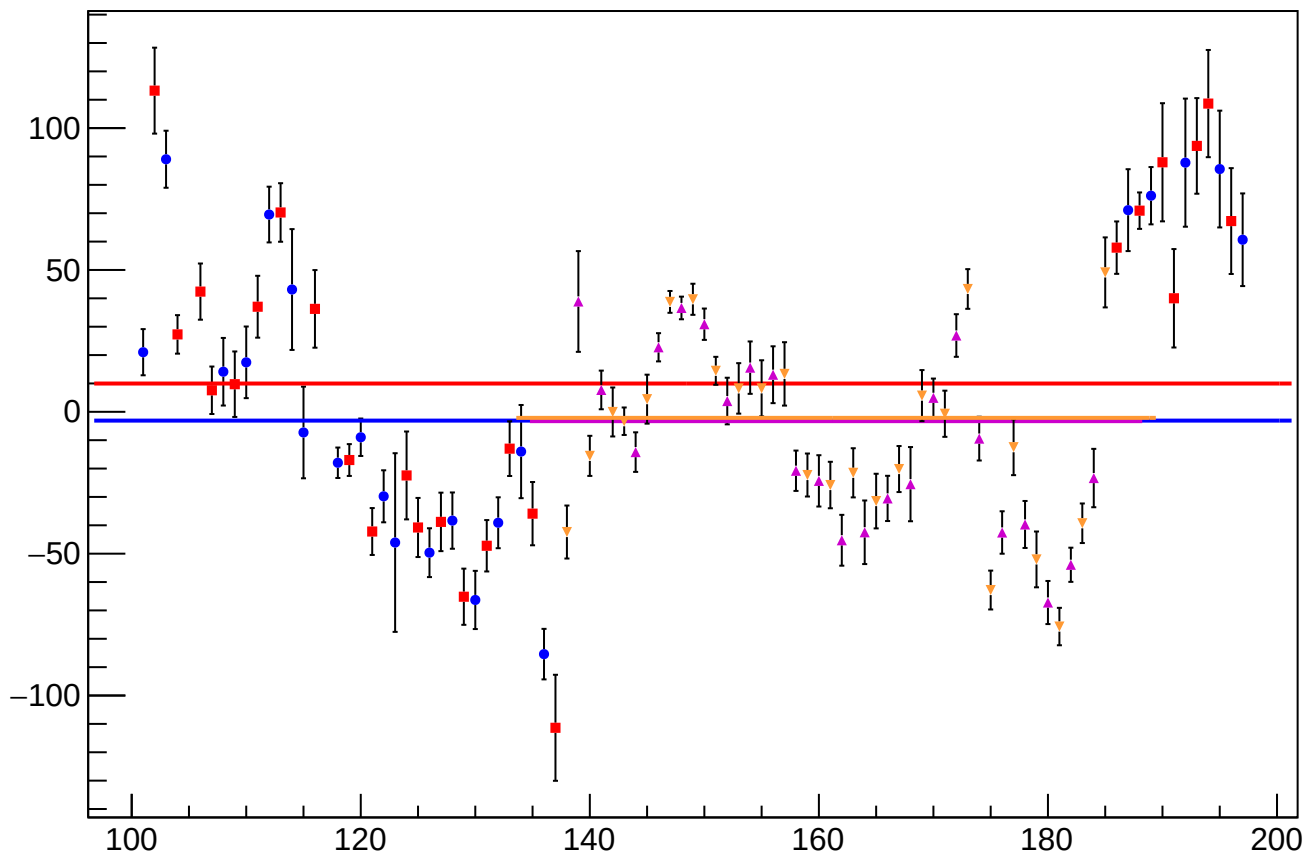
reg\_asym\_at2\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: -523.554 $\pm$ 5.369  $\chi^2$ /NDF: 441.8/4  
 Left Out: -395.638 $\pm$ 1.909  $\chi^2$ /NDF:3704.0/24  
 Right Out: -553.686 $\pm$ 3.482  $\chi^2$ /NDF: 2485.0/6  
 Left In: -409.377 $\pm$ 1.971  $\chi^2$ /NDF:3096.1/22

Left: -402.287 $\pm$ 1.371  $\chi^2$ /NDF: 6825.2/47  
 Right: -544.765 $\pm$ 2.921  $\chi^2$ /NDF: 2949.0/11  
 In: -422.943 $\pm$ 1.851  $\chi^2$ /NDF:3936.5/27  
 Out: -432.171 $\pm$ 1.674  $\chi^2$ /NDF:7773.4/31  
 All: -428.018 $\pm$ 1.241  $\chi^2$ /NDF: 11723.5/59

reg\_asym\_at2\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-3.098 \pm 2.182$   $\chi^2/\text{NDF}: 495.7/21$

Left Out:  $-2.133 \pm 1.435$   $\chi^2/\text{NDF}: 562.8/24$

Right Out:  $9.971 \pm 2.019$   $\chi^2/\text{NDF}: 578.7/24$

Left In:  $-3.290 \pm 1.517$   $\chi^2/\text{NDF}: 454.5/22$

Left:  $-2.680 \pm 1.042$   $\chi^2/\text{NDF}: 1017.6/47$

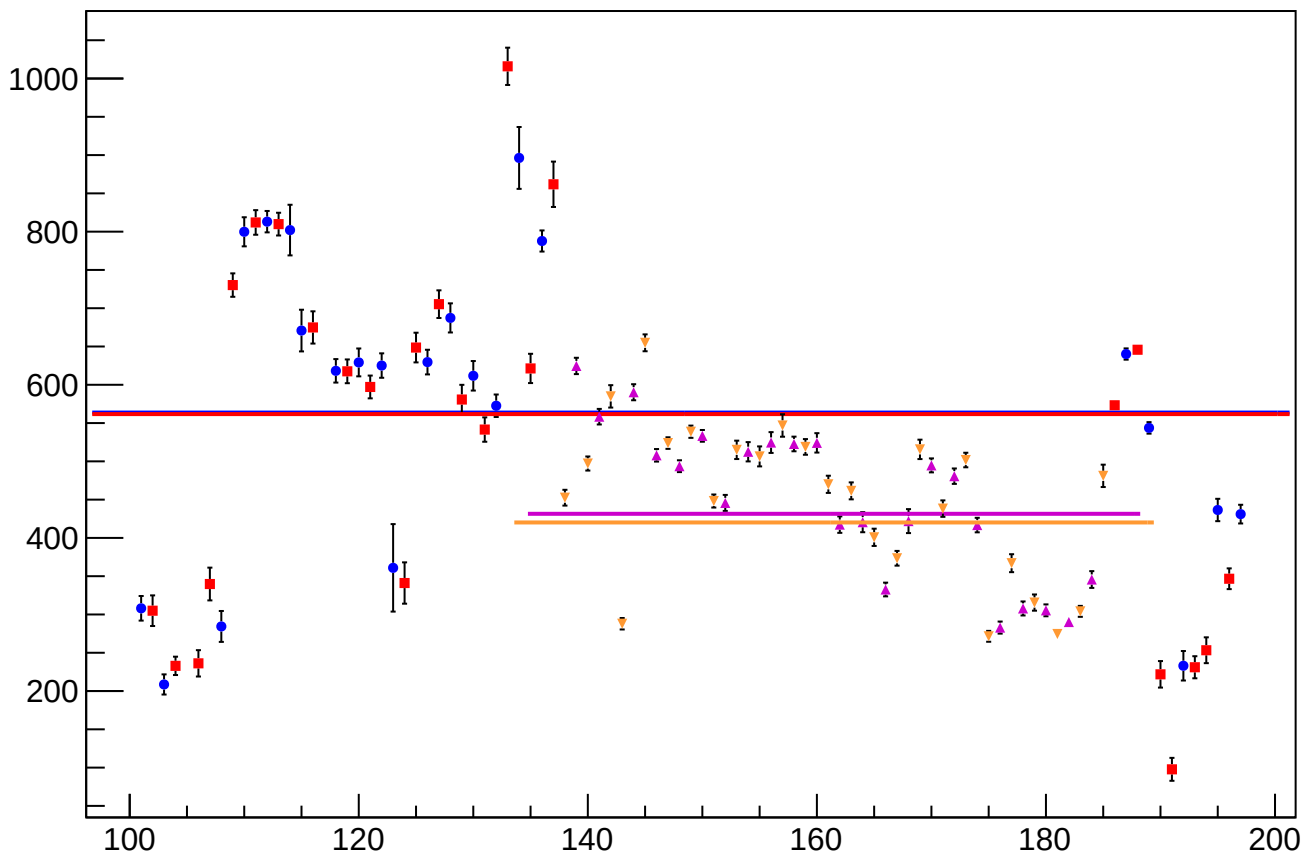
Right:  $3.944 \pm 1.482$   $\chi^2/\text{NDF}: 1093.7/46$

In:  $-3.227 \pm 1.245$   $\chi^2/\text{NDF}: 950.2/44$

Out:  $1.929 \pm 1.170$   $\chi^2/\text{NDF}: 1165.4/49$

All:  $-0.488 \pm 0.853$   $\chi^2/\text{NDF}: 2124.7/94$

reg\_asym\_at2\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 563.712 $\pm$ 3.104  $\chi^2$ /NDF: 2766.8/21

Left Out: 420.181 $\pm$ 1.916  $\chi^2$ /NDF:3241.0/24

Right Out: 561.711 $\pm$ 2.352  $\chi^2$ /NDF: 5665.3/24

Left In: 431.487 $\pm$ 1.964  $\chi^2$ /NDF:2897.1/22

Left: 425.693 $\pm$ 1.371  $\chi^2$ /NDF: 6155.1/47

Right: 562.441 $\pm$ 1.874  $\chi^2$ /NDF: 8432.4/46

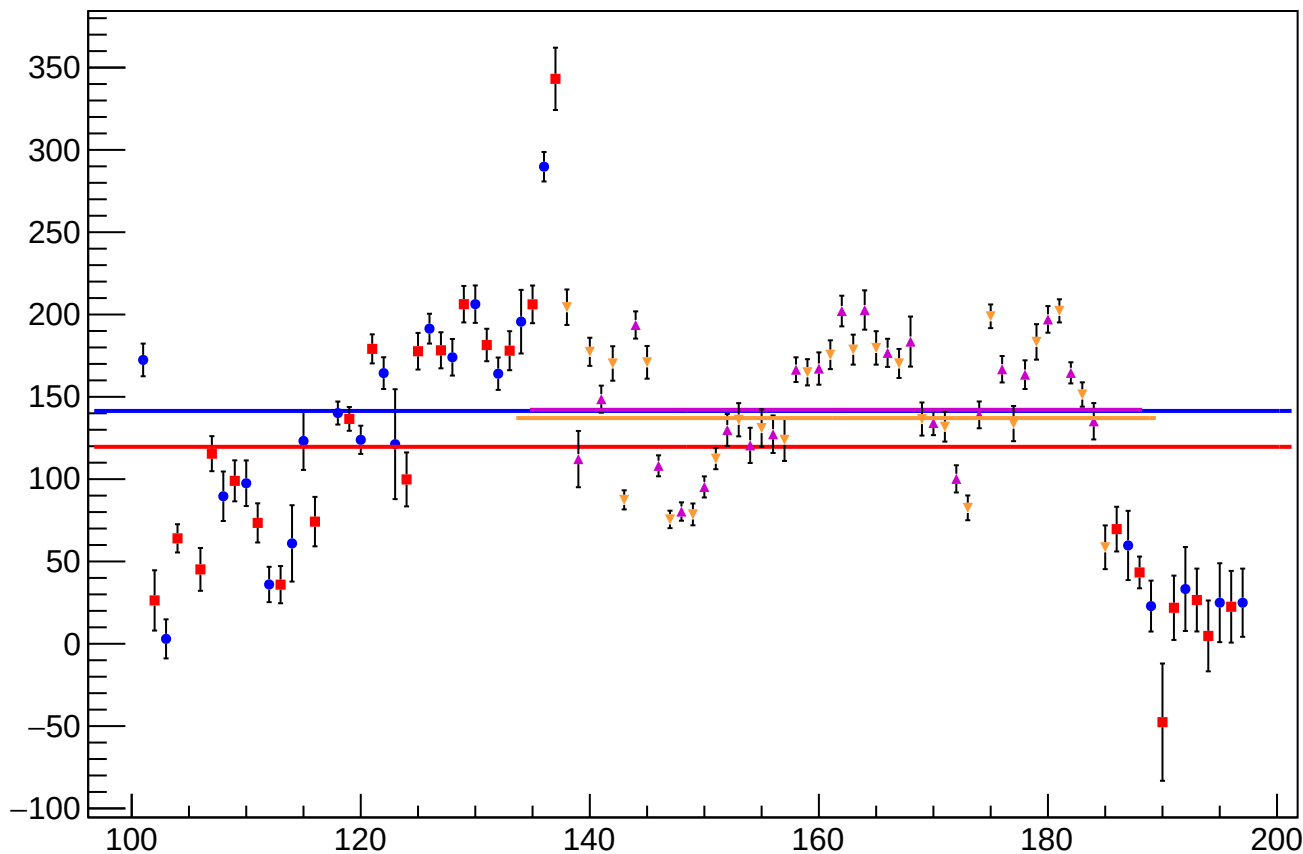
In: 469.288 $\pm$ 1.660  $\chi^2$ /NDF:6959.7/44

Out: 476.637 $\pm$ 1.485  $\chi^2$ /NDF:11083.7/49

All: 473.369 $\pm$ 1.107  $\chi^2$ /NDF: 18054.3/94



reg\_asym\_at2\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $141.441 \pm 2.566$   $\chi^2/\text{NDF}: 794.5/21$

Left Out:  $137.107 \pm 1.663$   $\chi^2/\text{NDF}: 738.9/24$

Right Out:  $119.641 \pm 2.412$   $\chi^2/\text{NDF}: 808.1/24$

Left In:  $142.123 \pm 1.740$   $\chi^2/\text{NDF}: 463.8/22$

Left:  $139.501 \pm 1.202$   $\chi^2/\text{NDF}: 1207.0/47$

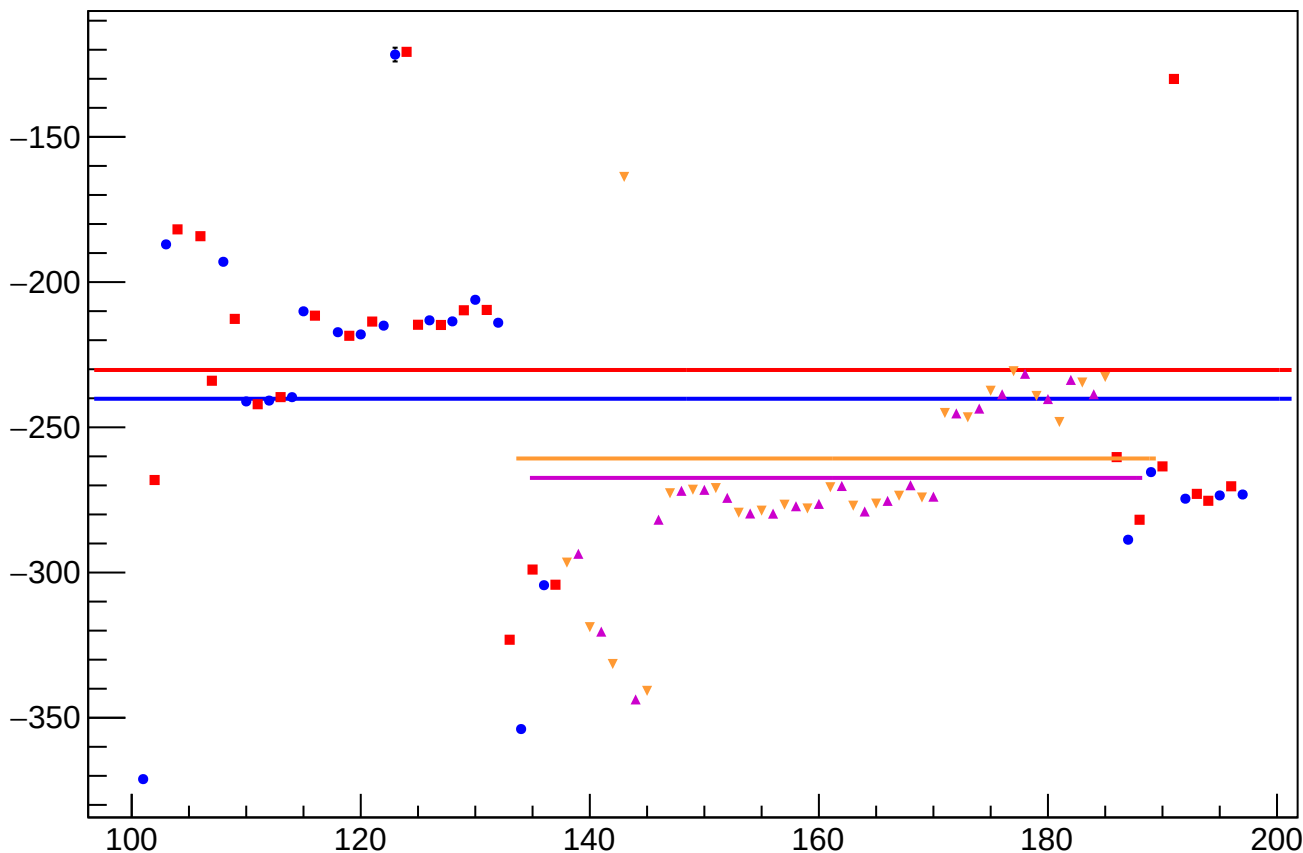
Right:  $129.868 \pm 1.757$   $\chi^2/\text{NDF}: 1640.9/46$

In:  $141.908 \pm 1.440$   $\chi^2/\text{NDF}: 1258.3/44$

Out:  $131.480 \pm 1.369$   $\chi^2/\text{NDF}: 1582.5/49$

All:  $136.430 \pm 0.992$   $\chi^2/\text{NDF}: 2868.4/94$

reg\_asym\_at2\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-240.167 \pm 0.137$   $\chi^2/\text{NDF}: 155675.2/21$

Left Out:  $-260.729 \pm 0.080$   $\chi^2/\text{NDF}: 220125.6/24$

Right Out:  $-230.258 \pm 0.123$   $\chi^2/\text{NDF}: 155003.2/24$

Left In:  $-267.416 \pm 0.081$   $\chi^2/\text{NDF}: 98892.0/22$

Left:  $-263.998 \pm 0.057$   $\chi^2/\text{NDF}: 322472.0/47$

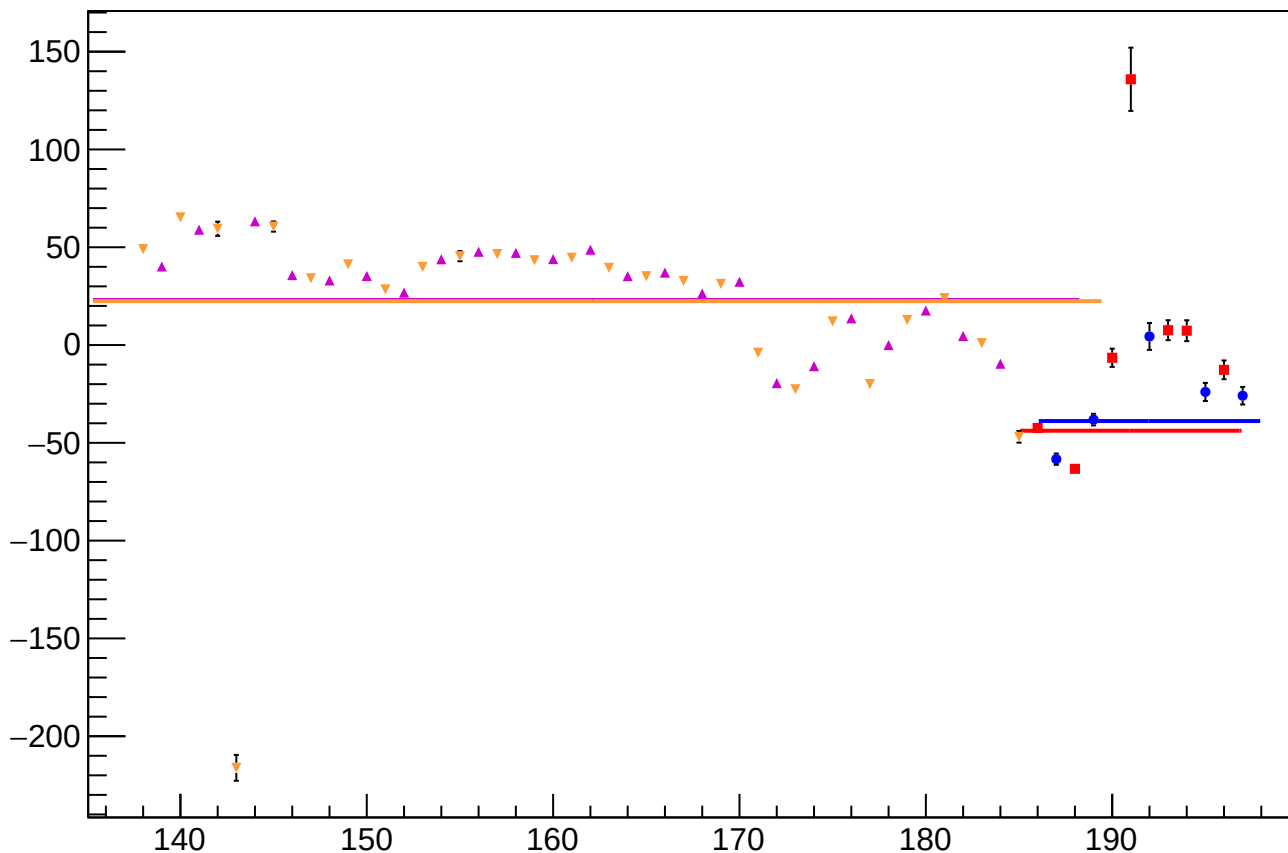
Right:  $-234.684 \pm 0.091$   $\chi^2/\text{NDF}: 313588.2/46$

In:  $-260.287 \pm 0.070$   $\chi^2/\text{NDF}: 283928.5/44$

Out:  $-251.719 \pm 0.067$   $\chi^2/\text{NDF}: 418521.5/49$

All:  $-255.806 \pm 0.048$   $\chi^2/\text{NDF}: 710308.3/94$

reg\_asym\_at2\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-38.866 \pm 1.691$   $\chi^2/\text{NDF}: 103.8/4$

Left Out:  $22.446 \pm 0.399$   $\chi^2/\text{NDF}: 4935.8/24$

Right Out:  $-43.804 \pm 1.051$   $\chi^2/\text{NDF}: 580.1/6$

Left In:  $23.019 \pm 0.400$   $\chi^2/\text{NDF}: 2819.9/22$

Left:  $22.732 \pm 0.282$   $\chi^2/\text{NDF}: 7756.7/47$

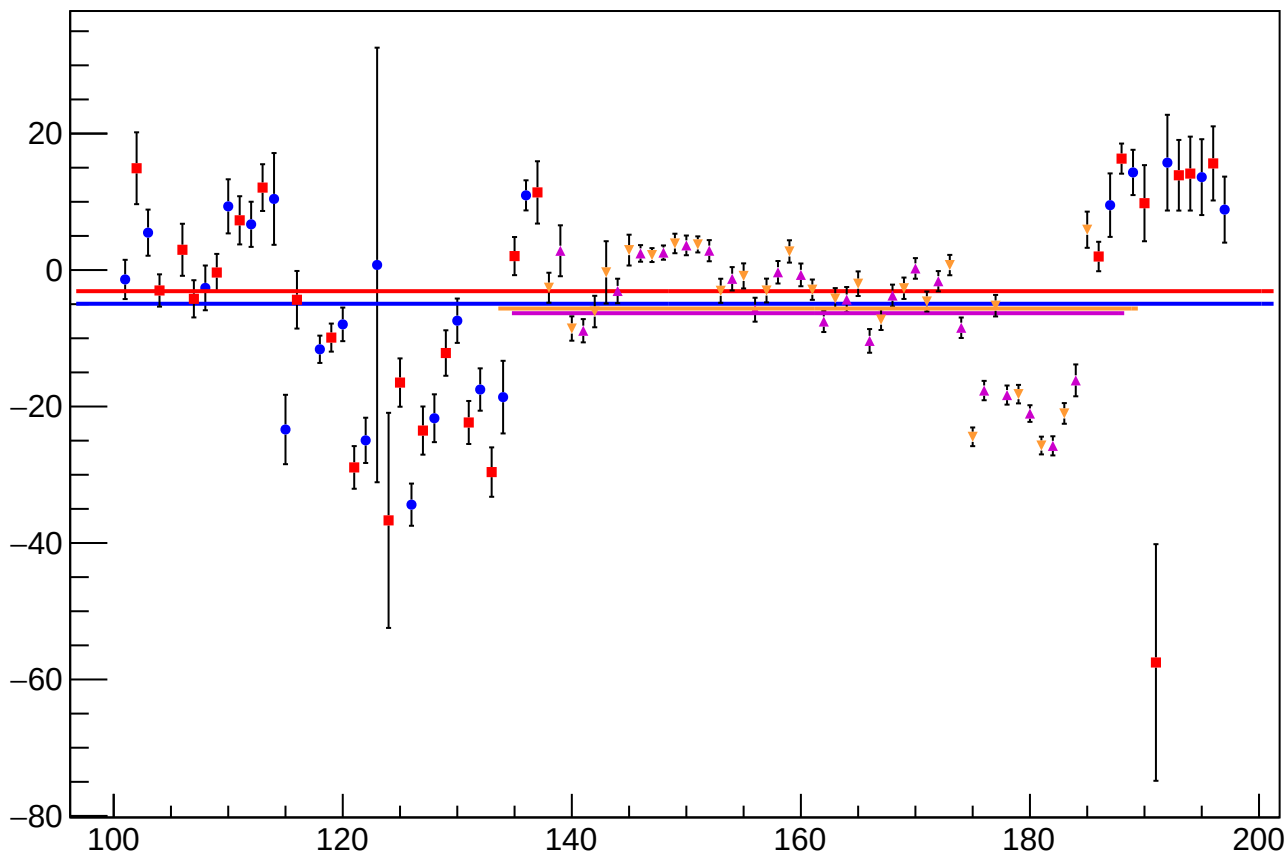
Right:  $-42.428 \pm 0.892$   $\chi^2/\text{NDF}: 690.1/11$

In:  $19.742 \pm 0.389$   $\chi^2/\text{NDF}: 4192.8/27$

Out:  $14.101 \pm 0.373$   $\chi^2/\text{NDF}: 8991.3/31$

All:  $16.802 \pm 0.269$   $\chi^2/\text{NDF}: 13293.6/59$

reg\_asym\_at2\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-4.940 \pm 0.729$   $\chi^2/\text{NDF}$ : 364.7/21

Left Out:  $-5.639 \pm 0.316$   $\chi^2/\text{NDF}$ : 891.5/24

Right Out:  $-3.096 \pm 0.662$   $\chi^2/\text{NDF}$ : 418.0/24

Left In:  $-6.323 \pm 0.320$   $\chi^2/\text{NDF}$ : 784.4/22

Left:  $-5.976 \pm 0.225$   $\chi^2/\text{NDF}$ : 1678.2/47

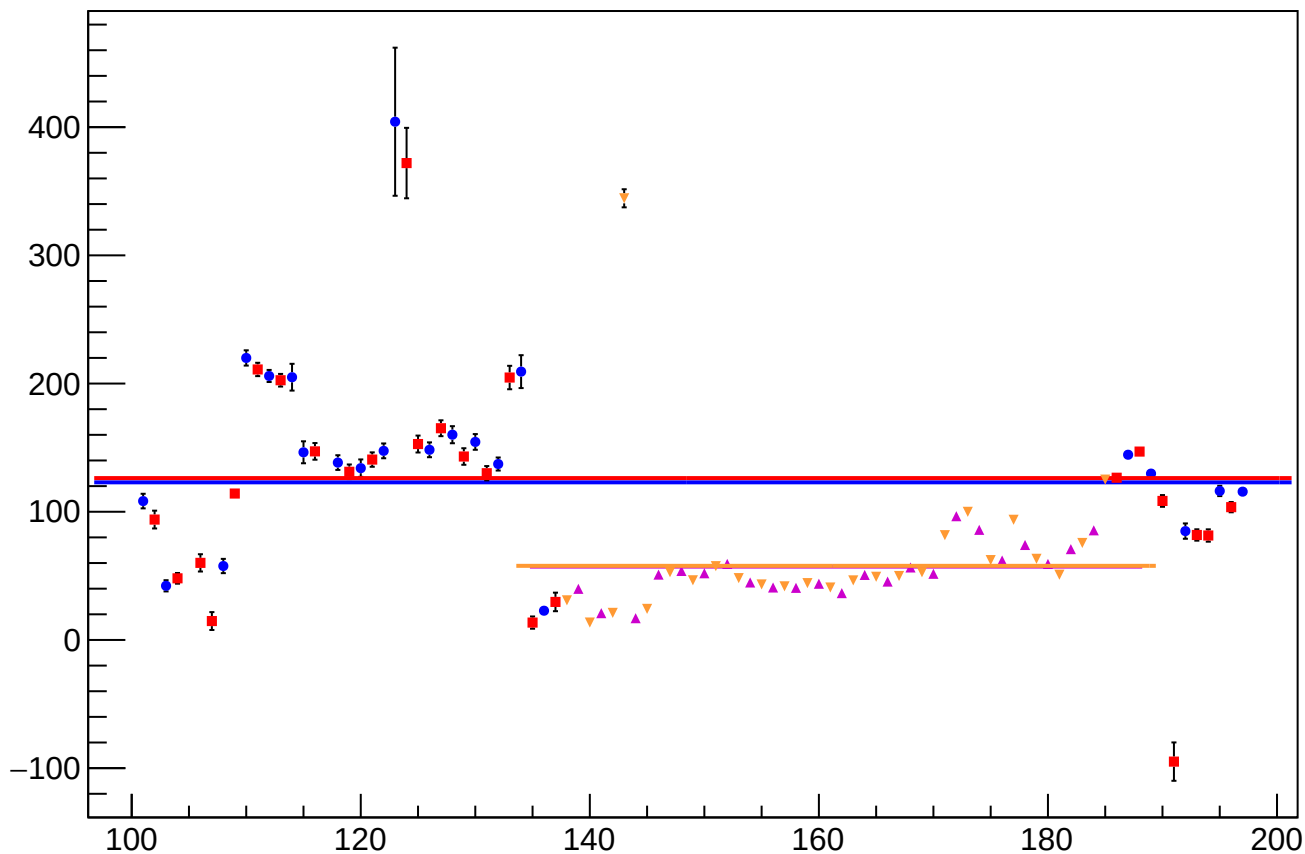
Right:  $-3.930 \pm 0.490$   $\chi^2/\text{NDF}$ : 786.2/46

In:  $-6.100 \pm 0.293$   $\chi^2/\text{NDF}$ : 1152.1/44

Out:  $-5.168 \pm 0.285$   $\chi^2/\text{NDF}$ : 1321.5/49

All:  $-5.620 \pm 0.204$   $\chi^2/\text{NDF}$ : 2478.8/94

reg\_asym\_at2\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 122.945 $\pm$ 0.998  $\chi^2$ /NDF: 2314.1/21

Left Out: 57.816 $\pm$ 0.398  $\chi^2$ /NDF:4331.5/24

Right Out: 126.262 $\pm$ 0.727  $\chi^2$ /NDF: 2934.0/24

Left In: 57.226 $\pm$ 0.398  $\chi^2$ /NDF:1860.6/22

Left: 57.521 $\pm$ 0.281  $\chi^2$ /NDF: 6193.2/47

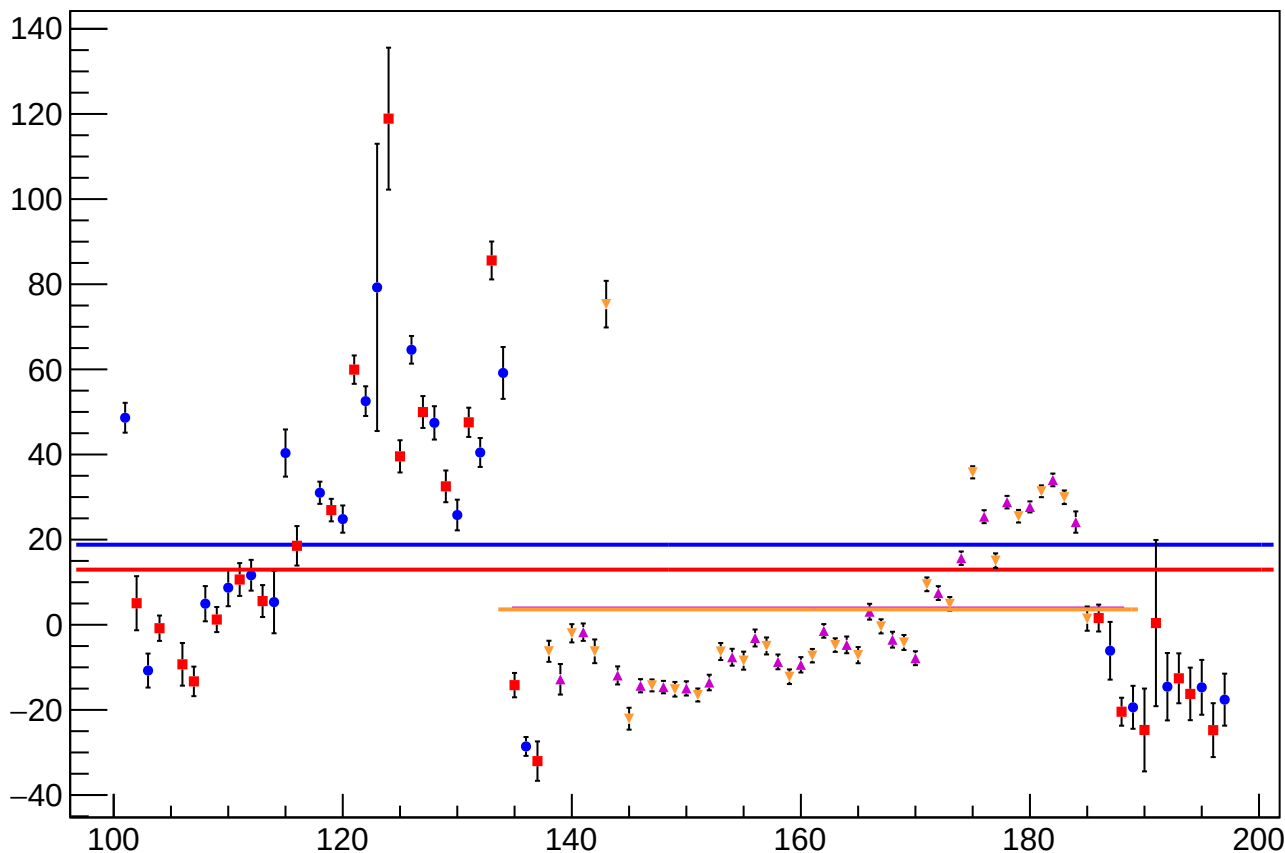
Right: 125.111 $\pm$ 0.588  $\chi^2$ /NDF: 5255.3/46

In: 66.245 $\pm$ 0.370  $\chi^2$ /NDF:7915.3/44

Out: 73.584 $\pm$ 0.349  $\chi^2$ /NDF:14078.3/49

All: 70.124 $\pm$ 0.254  $\chi^2$ /NDF: 22201.9/94

reg\_asym\_at2\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 18.807 $\pm$ 0.847  $\chi^2$ /NDF: 1237.5/21

Left Out: 3.615 $\pm$ 0.357  $\chi^2$ /NDF:2501.2/24

Right Out: 12.952 $\pm$ 0.790  $\chi^2$ /NDF: 1323.8/24

Left In: 3.812 $\pm$ 0.361  $\chi^2$ /NDF:2203.5/22

Left: 3.712 $\pm$ 0.254  $\chi^2$ /NDF: 4704.8/47

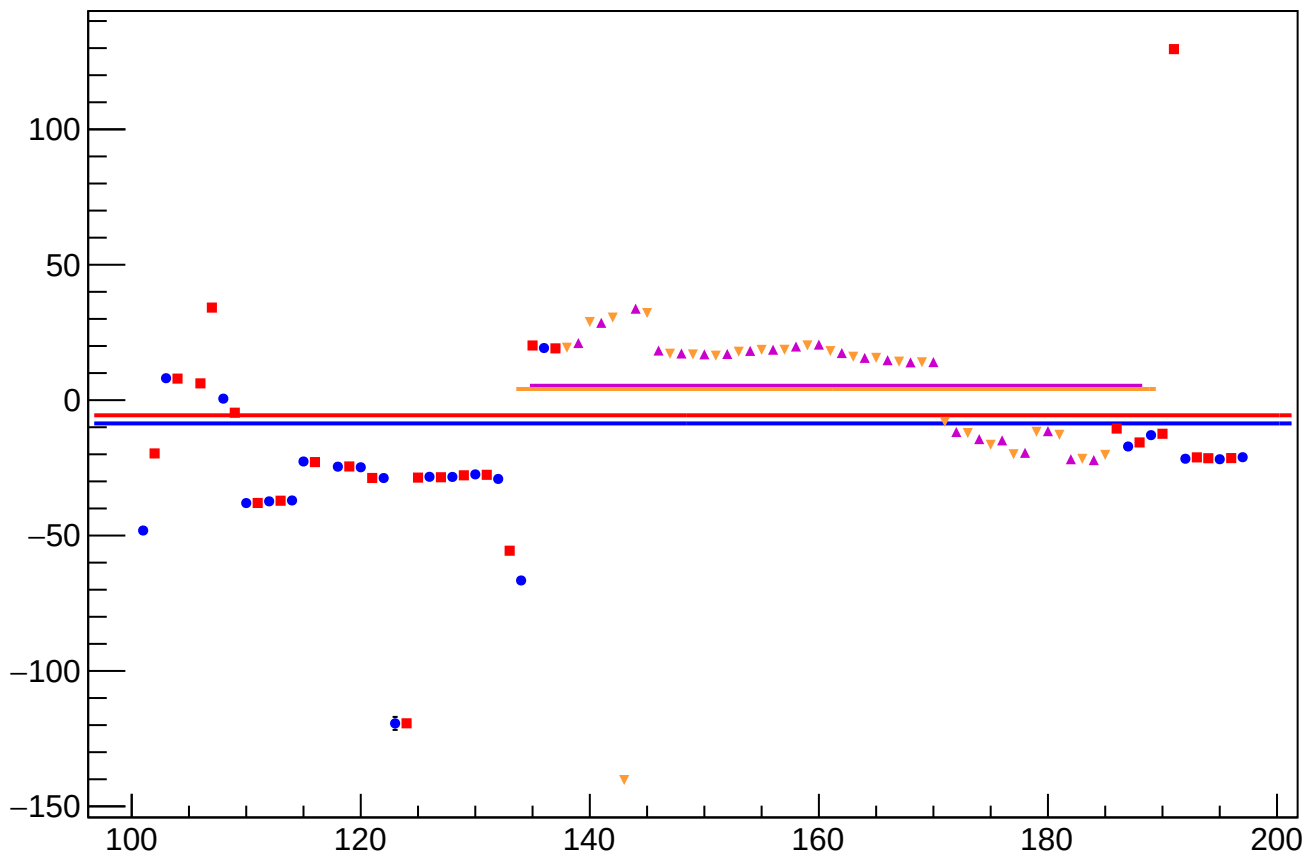
Right: 15.677 $\pm$ 0.578  $\chi^2$ /NDF: 2586.8/46

In: 6.112 $\pm$ 0.332  $\chi^2$ /NDF:3706.1/44

Out: 5.195 $\pm$ 0.325  $\chi^2$ /NDF:3940.9/49

All: 5.644 $\pm$ 0.232  $\chi^2$ /NDF: 7650.9/94

reg\_asym\_at2\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-8.595 \pm 0.042$   $\chi^2/\text{NDF}: 279660.8/21$

Left Out:  $4.121 \pm 0.016$   $\chi^2/\text{NDF}: 1340176.5/24$

Right Out:  $-5.596 \pm 0.040$   $\chi^2/\text{NDF}: 357894.6/24$

Left In:  $5.305 \pm 0.016$   $\chi^2/\text{NDF}: 1089610.2/22$

Left:  $4.714 \pm 0.012$   $\chi^2/\text{NDF}: 2432407.5/47$

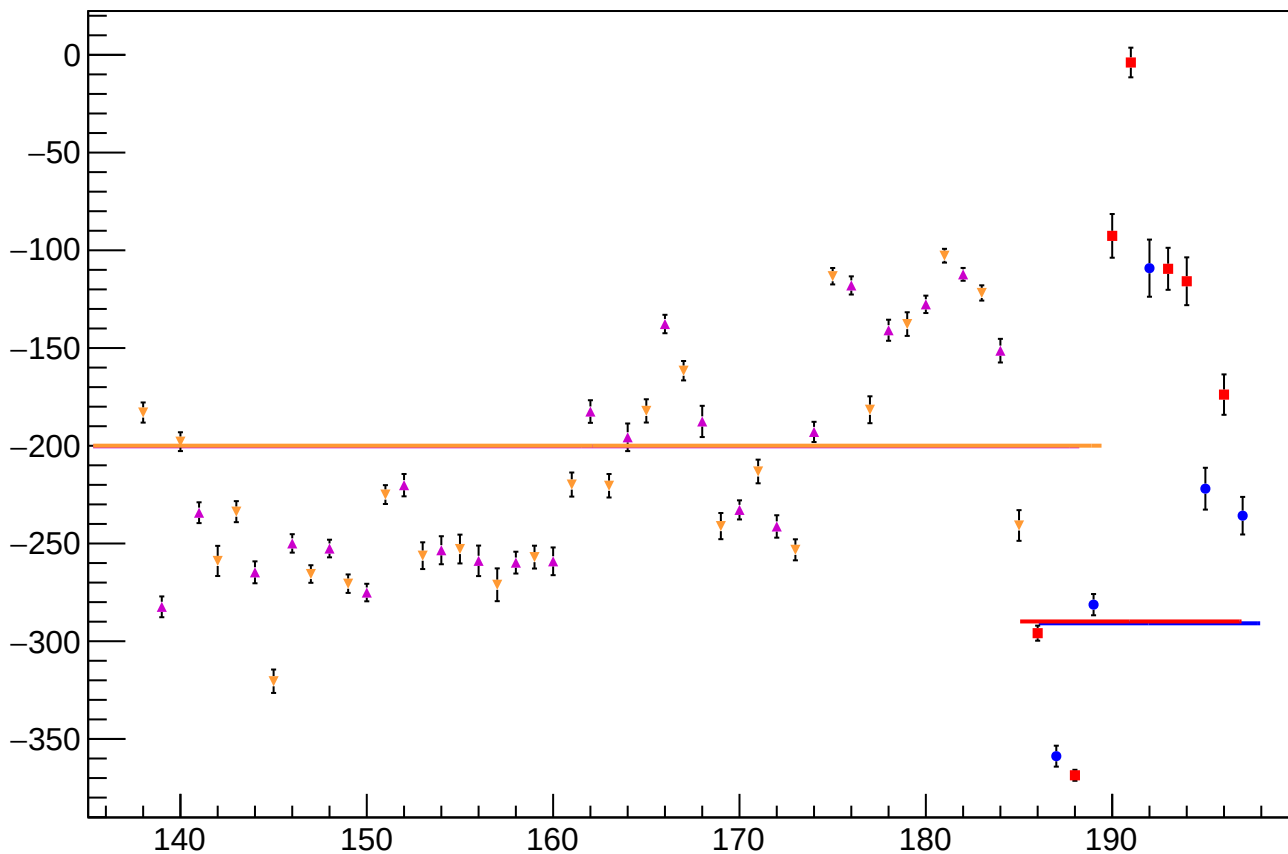
Right:  $-7.005 \pm 0.029$   $\chi^2/\text{NDF}: 640239.2/46$

In:  $3.487 \pm 0.015$   $\chi^2/\text{NDF}: 1463785.9/44$

Out:  $2.708 \pm 0.015$   $\chi^2/\text{NDF}: 1749305.1/49$

All:  $3.095 \pm 0.011$   $\chi^2/\text{NDF}: 3214404.8/94$

reg\_asym\_atl1r2\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-290.831 \pm 3.281$   $\chi^2/\text{NDF}$ : 392.8/4

Left Out:  $-199.957 \pm 1.082$   $\chi^2/\text{NDF}$ : 3220.5/24

Right Out:  $-289.887 \pm 2.025$   $\chi^2/\text{NDF}$ : 3127.8/6

Left In:  $-200.276 \pm 1.093$   $\chi^2/\text{NDF}$ : 3013.8/22

Left:  $-200.115 \pm 0.769$   $\chi^2/\text{NDF}$ : 6234.3/47

Right:  $-290.147 \pm 1.723$   $\chi^2/\text{NDF}$ : 3520.6/11

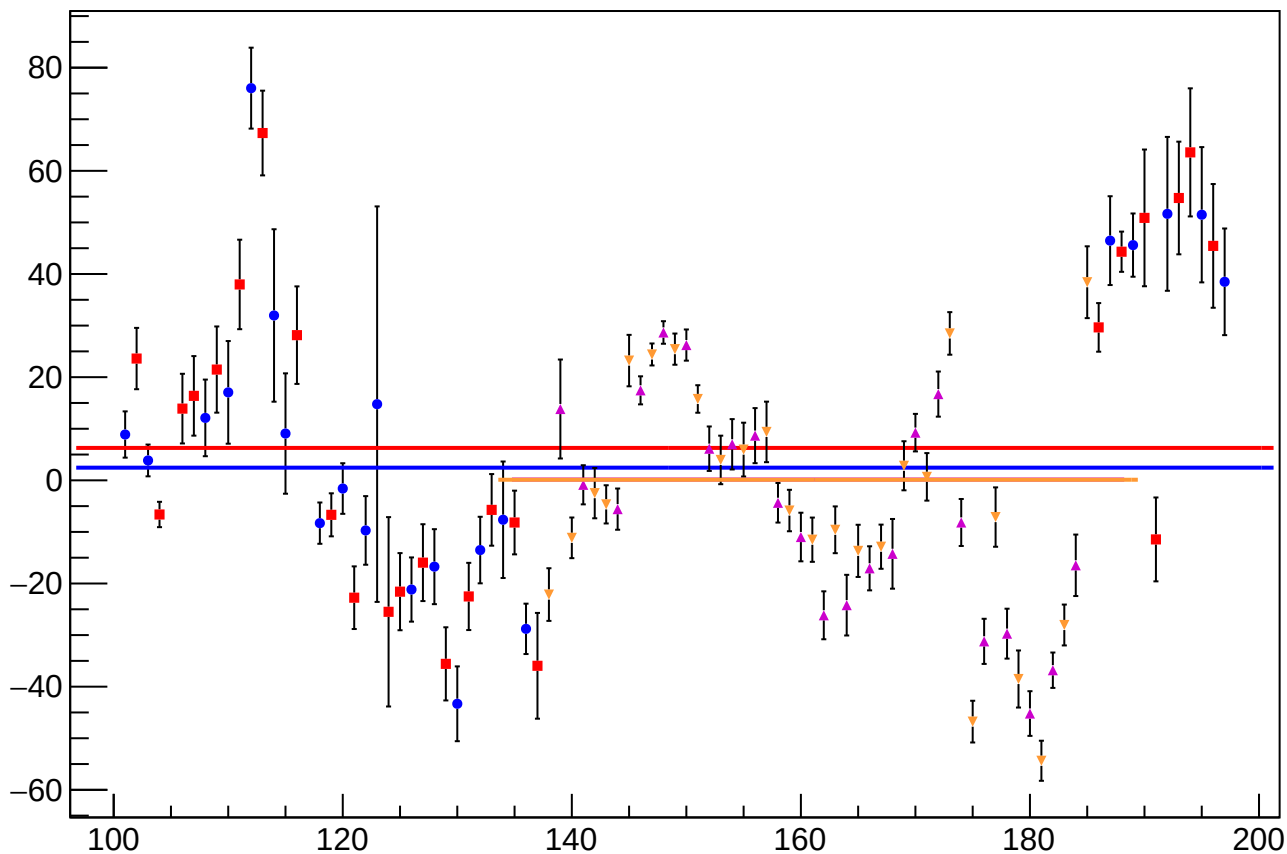
In:  $-209.328 \pm 1.037$   $\chi^2/\text{NDF}$ : 4092.3/27

Out:  $-219.912 \pm 0.954$   $\chi^2/\text{NDF}$ : 7882.4/31

All:  $-215.062 \pm 0.702$   $\chi^2/\text{NDF}$ : 12031.1/59



reg\_asym\_atl1r2\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $2.457 \pm 1.367$   $\chi^2/\text{NDF}$ : 330.6/21

Left Out:  $0.116 \pm 0.810$   $\chi^2/\text{NDF}$ : 830.1/24

Right Out:  $6.285 \pm 1.228$   $\chi^2/\text{NDF}$ : 441.9/24

Left In:  $0.153 \pm 0.836$   $\chi^2/\text{NDF}$ : 719.6/22

Left:  $0.134 \pm 0.582$   $\chi^2/\text{NDF}$ : 1549.7/47

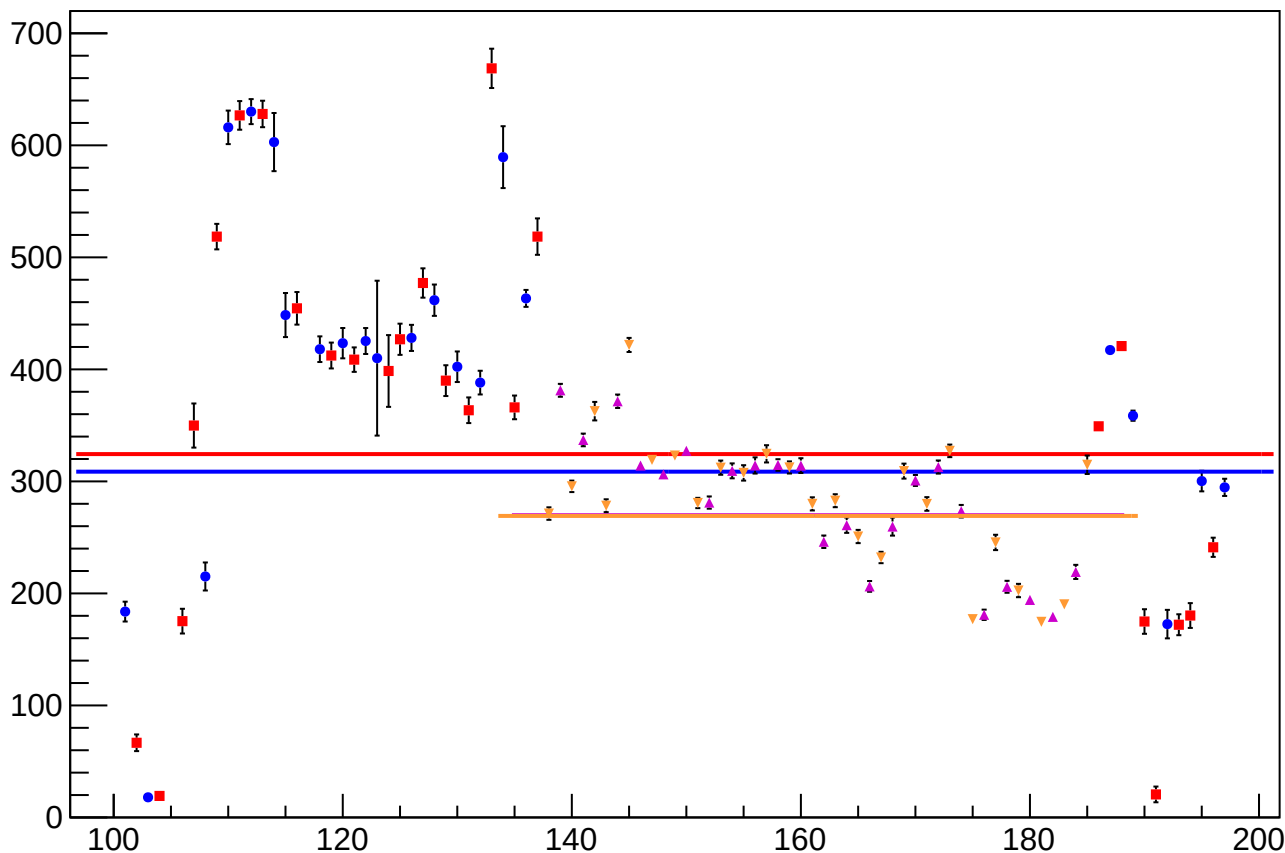
Right:  $4.575 \pm 0.914$   $\chi^2/\text{NDF}$ : 776.9/46

In:  $0.780 \pm 0.713$   $\chi^2/\text{NDF}$ : 1052.3/44

Out:  $1.988 \pm 0.676$   $\chi^2/\text{NDF}$ : 1289.6/49

All:  $1.416 \pm 0.491$   $\chi^2/\text{NDF}$ : 2343.5/94

reg\_asym\_atl1r2\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 308.681+/-1.832  $\chi^2/\text{NDF}$ : 8799.7/21

Left Out: 269.181+/-1.081  $\chi^2/\text{NDF}$ : 3148.5/24

Right Out: 324.373+/-1.376  $\chi^2/\text{NDF}$ : 13267.2/24

Left In: 269.798+/-1.087  $\chi^2/\text{NDF}$ : 3234.9/22

Left: 269.488+/-0.766  $\chi^2/\text{NDF}$ : 6383.6/47

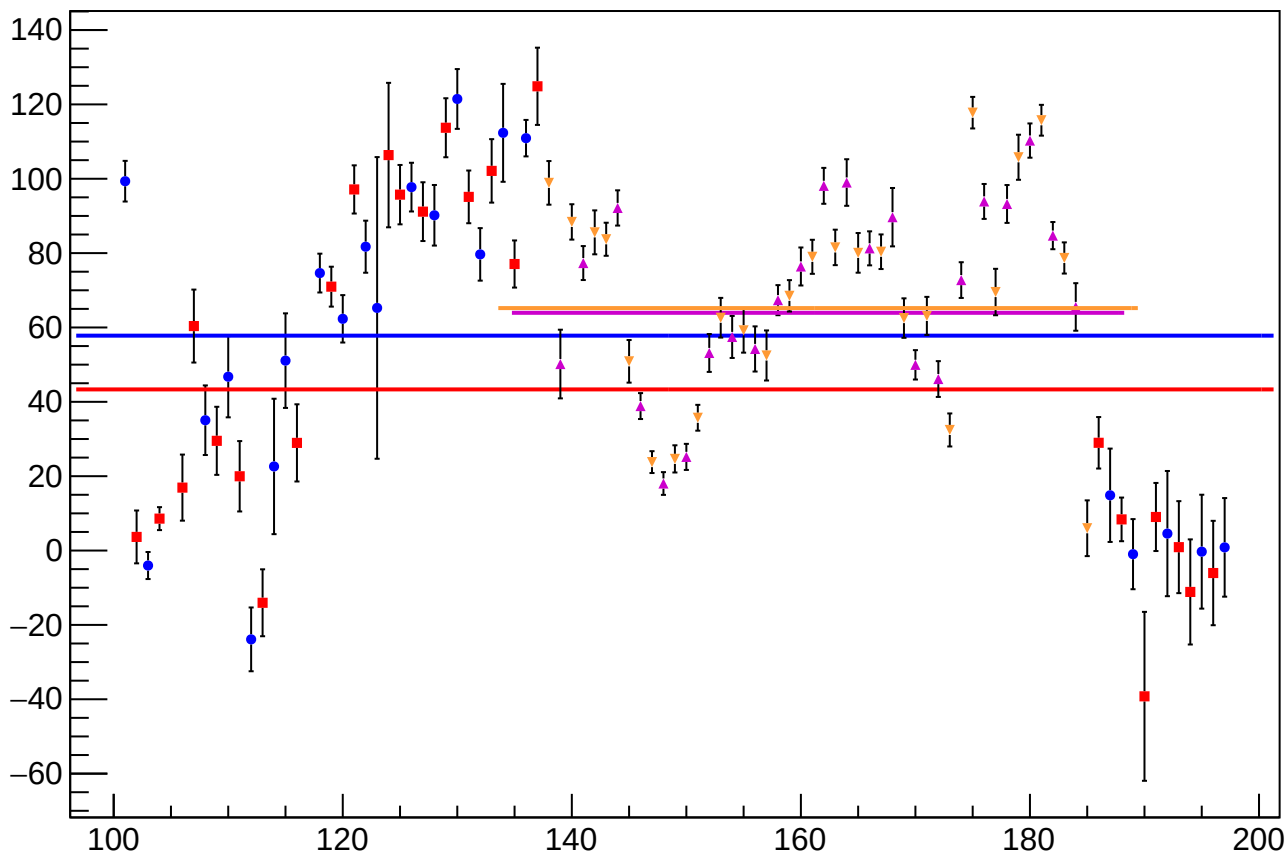
Right: 318.711+/-1.100  $\chi^2/\text{NDF}$ : 22113.8/46

In: 279.927+/-0.935  $\chi^2/\text{NDF}$ : 12367.9/44

Out: 290.237+/-0.850  $\chi^2/\text{NDF}$ : 17410.5/49

All: 285.571+/-0.629  $\chi^2/\text{NDF}$ : 29845.0/94

reg\_asym\_atl1r2\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 57.800 $\pm$ 1.609  $\chi^2$ /NDF: 823.8/21

Left Out: 65.214 $\pm$ 0.938  $\chi^2$ /NDF:1005.7/24

Right Out: 43.340 $\pm$ 1.492  $\chi^2$ /NDF: 781.7/24

Left In: 63.944 $\pm$ 0.961  $\chi^2$ /NDF:803.4/22

Left: 64.594 $\pm$ 0.671  $\chi^2$ /NDF: 1809.9/47

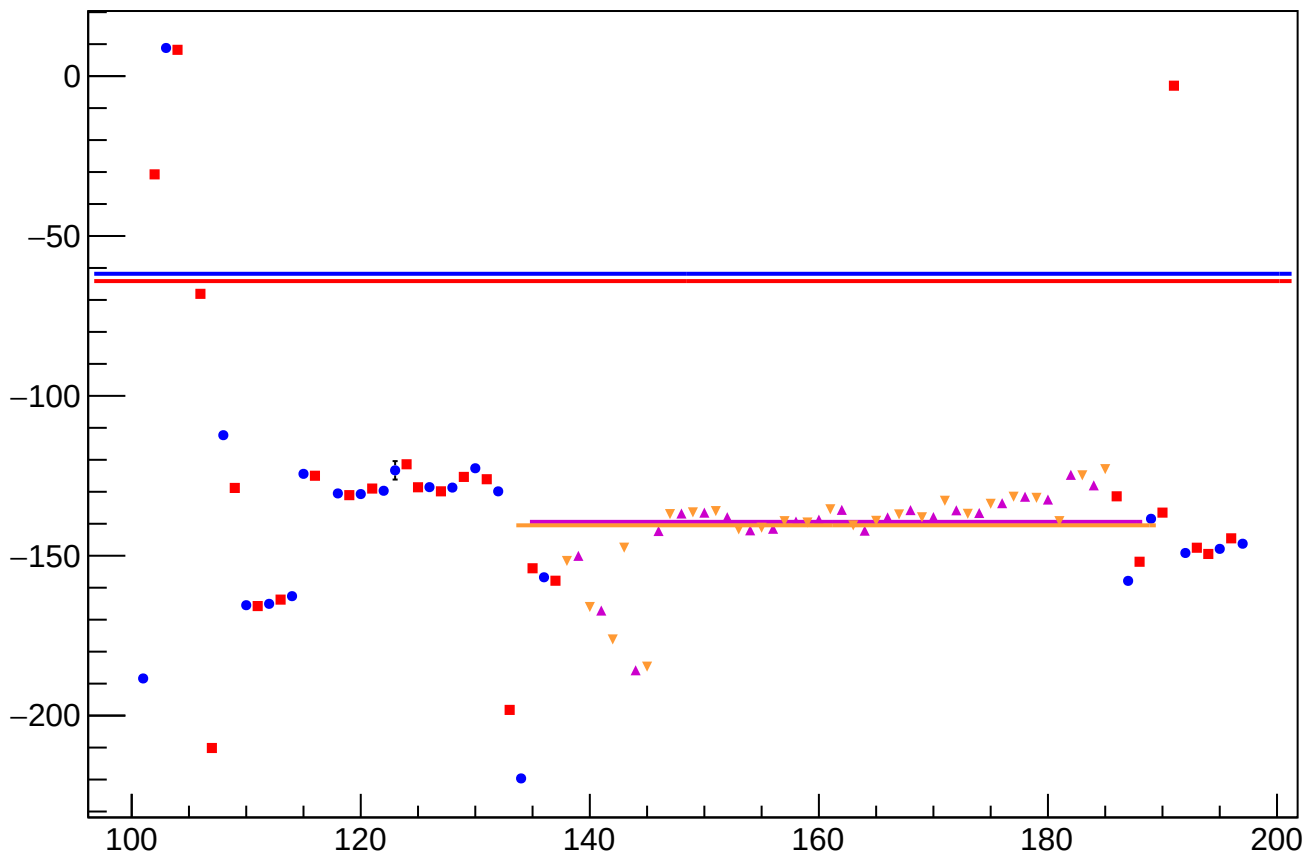
Right: 50.022 $\pm$ 1.094  $\chi^2$ /NDF: 1648.9/46

In: 62.330 $\pm$ 0.825  $\chi^2$ /NDF:1637.9/44

Out: 59.014 $\pm$ 0.794  $\chi^2$ /NDF:1941.5/49

All: 60.609 $\pm$ 0.572  $\chi^2$ /NDF: 3587.8/94

reg\_asym\_atl1r2\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-61.820 \pm 0.067$   $\chi^2/\text{NDF}: 1385708.3/21$

Left Out:  $-140.489 \pm 0.045$   $\chi^2/\text{NDF}: 77350.7/24$

Right Out:  $-64.107 \pm 0.064$   $\chi^2/\text{NDF}: 1257947.5/24$

Left In:  $-139.406 \pm 0.045$   $\chi^2/\text{NDF}: 62878.4/22$

Left:  $-139.949 \pm 0.032$   $\chi^2/\text{NDF}: 140521.6/47$

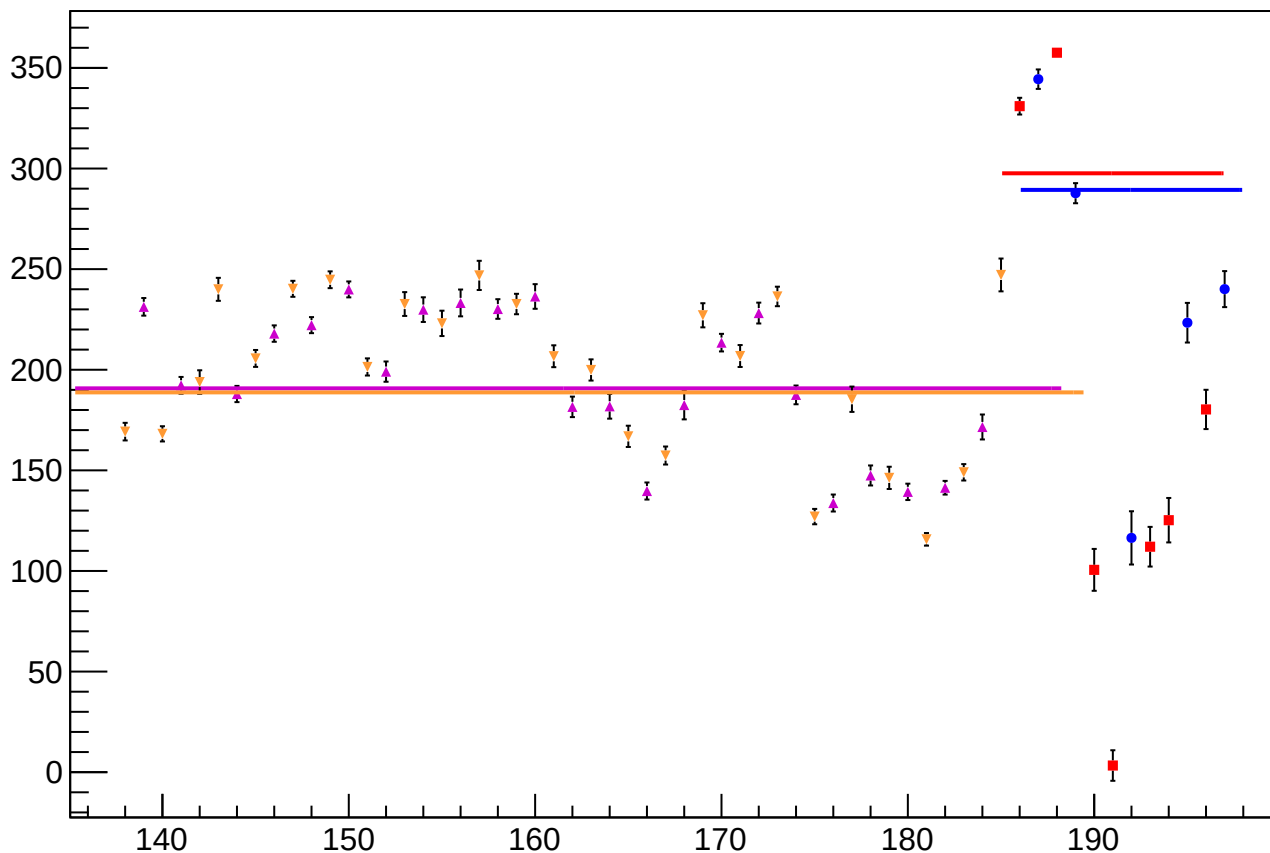
Right:  $-63.011 \pm 0.046$   $\chi^2/\text{NDF}: 2644262.0/46$

In:  $-115.443 \pm 0.037$   $\chi^2/\text{NDF}: 2373413.1/44$

Out:  $-115.610 \pm 0.037$   $\chi^2/\text{NDF}: 2286711.2/49$

All:  $-115.527 \pm 0.026$   $\chi^2/\text{NDF}: 4660134.5/94$

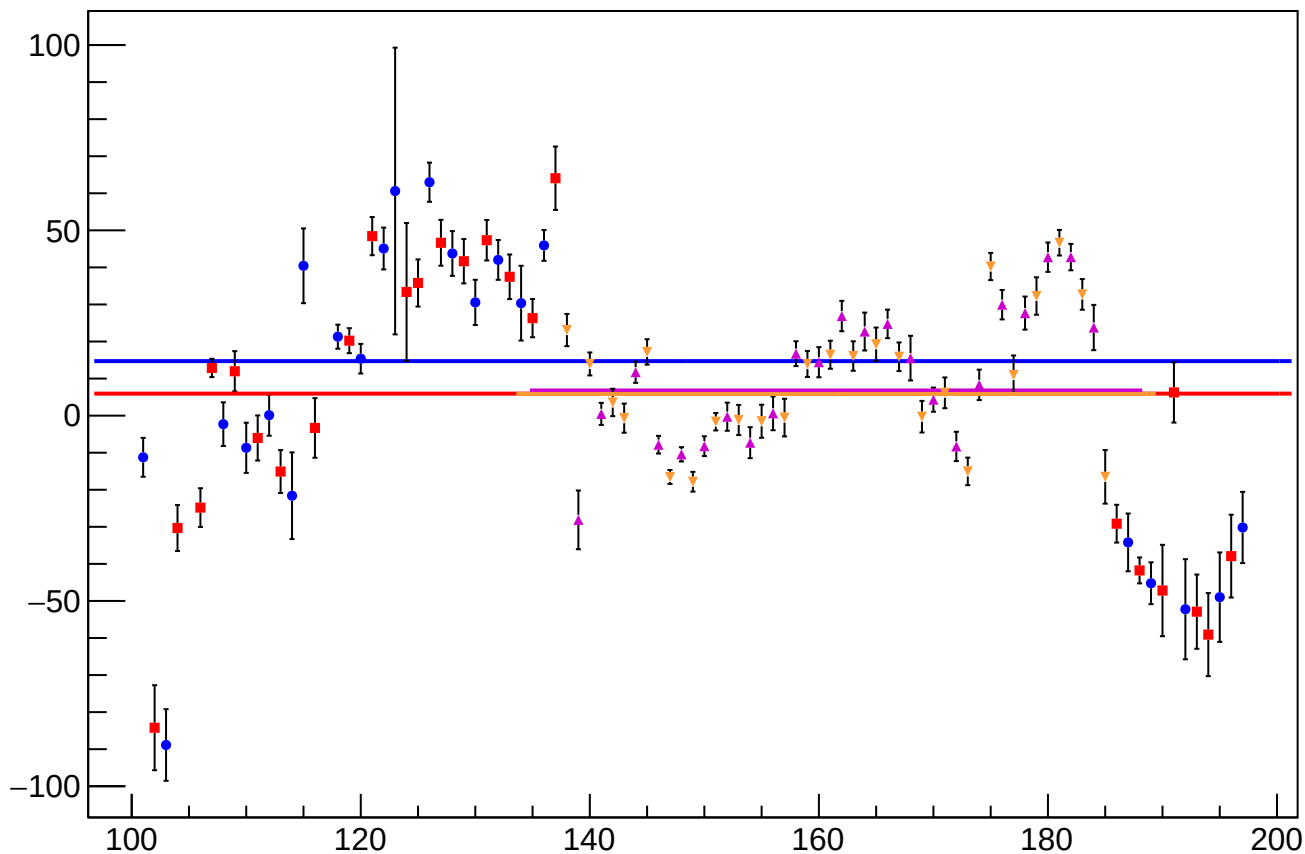
reg\_asym\_atl1r2\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 289.384 $\pm$ 2.998  $\chi^2$ /NDF: 375.4/4  
 Left Out: 188.749 $\pm$ 0.958  $\chi^2$ /NDF:1968.6/24  
 Right Out: 297.627 $\pm$ 1.915  $\chi^2$ /NDF: 3241.5/6  
 Left In: 190.753 $\pm$ 0.971  $\chi^2$ /NDF:1421.8/22

Left: 189.737 $\pm$ 0.682  $\chi^2$ /NDF: 3392.5/47  
 Right: 295.239 $\pm$ 1.614  $\chi^2$ /NDF: 3622.2/11  
 In: 200.116 $\pm$ 0.924  $\chi^2$ /NDF:2776.7/27  
 Out: 210.553 $\pm$ 0.857  $\chi^2$ /NDF:7796.4/31  
 All: 205.726 $\pm$ 0.628  $\chi^2$ /NDF: 10641.6/59

reg\_asym\_atl1r2\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 14.712 $\pm$ 1.290  $\chi^2$ /NDF: 642.0/21

Left Out: 5.851 $\pm$ 0.714  $\chi^2$ /NDF:650.6/24

Right Out: 5.942 $\pm$ 1.099  $\chi^2$ /NDF: 828.8/24

Left In: 6.797 $\pm$ 0.735  $\chi^2$ /NDF:525.8/22

Left: 6.311 $\pm$ 0.512  $\chi^2$ /NDF: 1177.3/47

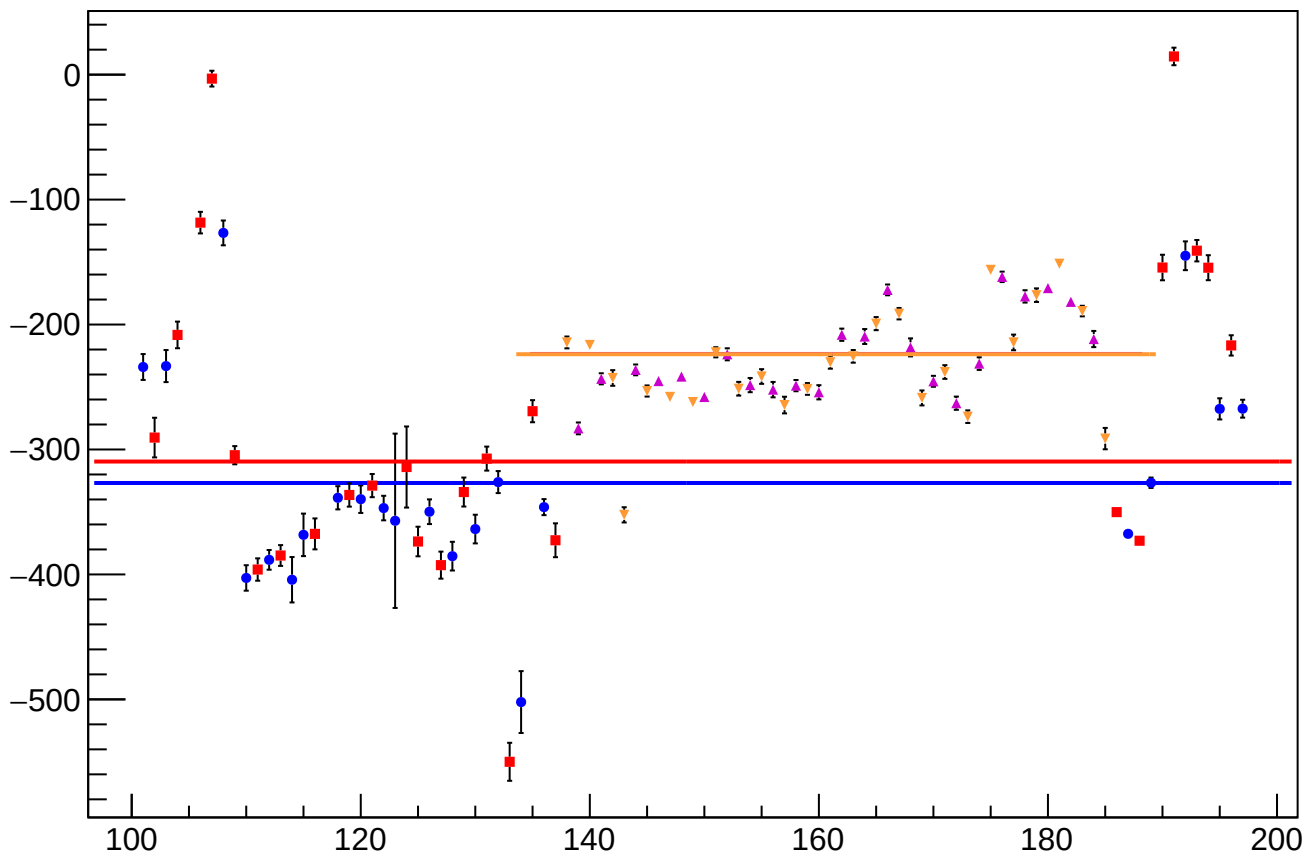
Right: 9.630 $\pm$ 0.837  $\chi^2$ /NDF: 1497.5/46

In: 8.736 $\pm$ 0.638  $\chi^2$ /NDF:1196.2/44

Out: 5.878 $\pm$ 0.599  $\chi^2$ /NDF:1479.4/49

All: 7.216 $\pm$ 0.437  $\chi^2$ /NDF: 2686.3/94

reg\_asym\_atl1r2\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-326.809 \pm 1.783$   $\chi^2/\text{NDF}: 1261.3/21$

Left Out:  $-223.752 \pm 0.958$   $\chi^2/\text{NDF}: 2021.5/24$

Right Out:  $-309.640 \pm 1.301$   $\chi^2/\text{NDF}: 7791.8/24$

Left In:  $-223.554 \pm 0.966$   $\chi^2/\text{NDF}: 1286.5/22$

Left:  $-223.654 \pm 0.680$   $\chi^2/\text{NDF}: 3308.0/47$

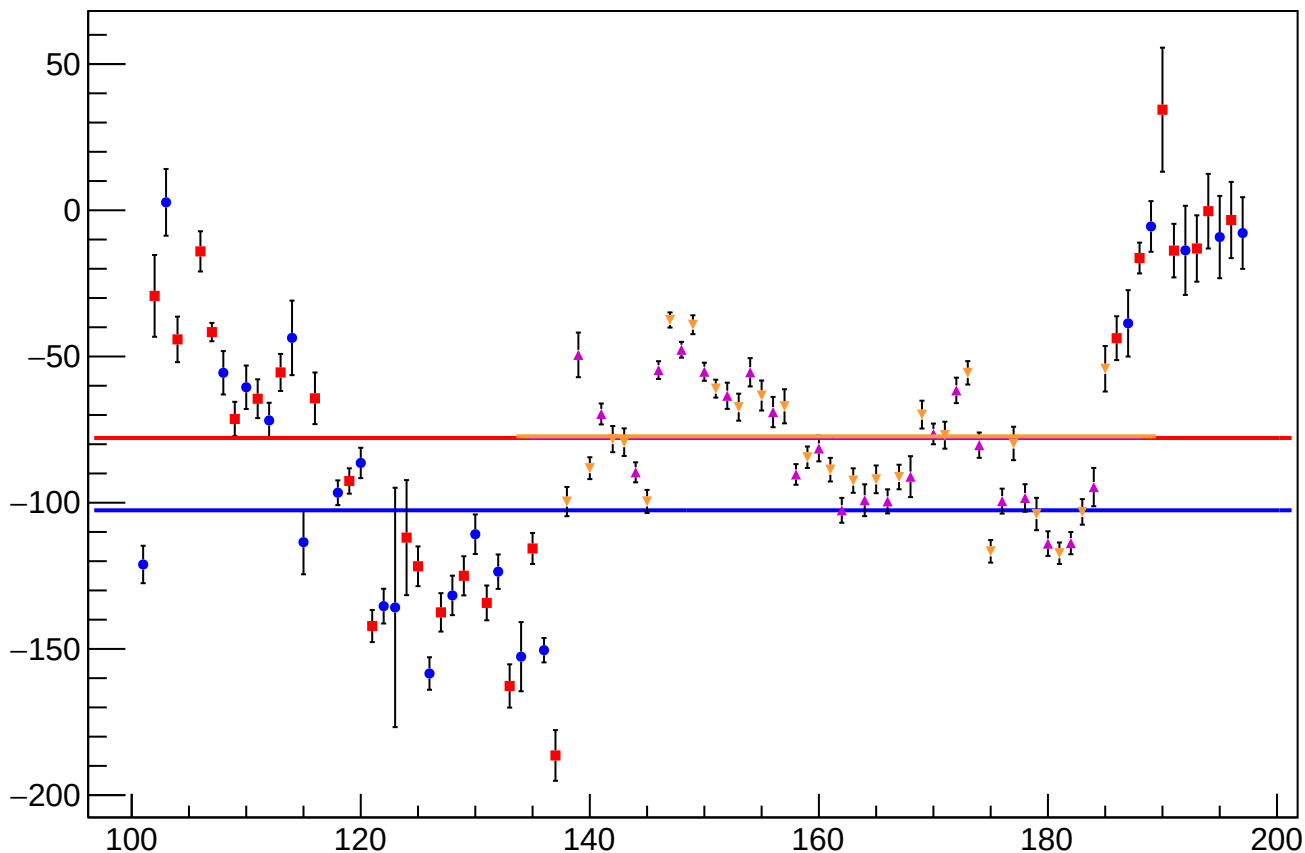
Right:  $-315.604 \pm 1.051$   $\chi^2/\text{NDF}: 9113.6/46$

In:  $-246.969 \pm 0.849$   $\chi^2/\text{NDF}: 5140.9/44$

Out:  $-253.950 \pm 0.771$   $\chi^2/\text{NDF}: 12639.7/49$

All:  $-250.794 \pm 0.571$   $\chi^2/\text{NDF}: 17817.6/94$

reg\_asym\_atl1r2\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-102.595 \pm 1.509$   $\chi^2/\text{NDF}$ : 835.3/21

Left Out:  $-77.296 \pm 0.829$   $\chi^2/\text{NDF}$ : 844.6/24

Right Out:  $-77.868 \pm 1.321$   $\chi^2/\text{NDF}$ : 1360.3/24

Left In:  $-77.777 \pm 0.847$   $\chi^2/\text{NDF}$ : 624.5/22

Left:  $-77.531 \pm 0.592$   $\chi^2/\text{NDF}$ : 1469.2/47

Right:  $-88.595 \pm 0.994$   $\chi^2/\text{NDF}$ : 2347.5/46

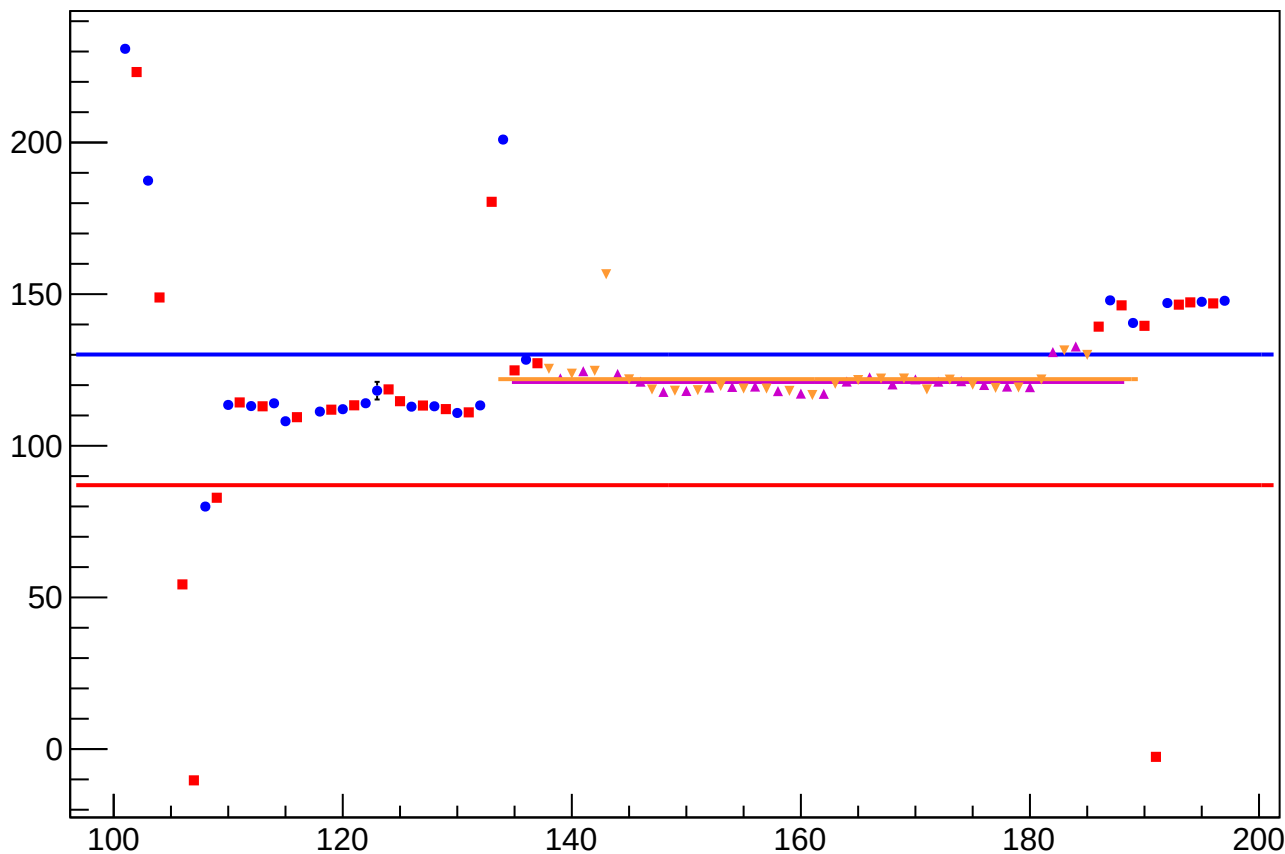
In:  $-83.717 \pm 0.738$   $\chi^2/\text{NDF}$ : 1665.4/44

Out:  $-77.457 \pm 0.702$   $\chi^2/\text{NDF}$ : 2205.0/49

All:  $-80.429 \pm 0.509$   $\chi^2/\text{NDF}$ : 3908.1/94



reg\_asym\_atl1r2\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 130.098 $\pm$ 0.082  $\chi^2$ /NDF: 195116.6/21

Left Out: 121.972 $\pm$ 0.039  $\chi^2$ /NDF: 27431.1/24

Right Out: 87.013 $\pm$ 0.066  $\chi^2$ /NDF: 1017544.4/24

Left In: 121.045 $\pm$ 0.040  $\chi^2$ /NDF: 7903.5/22

Left: 121.510 $\pm$ 0.028  $\chi^2$ /NDF: 35609.5/47

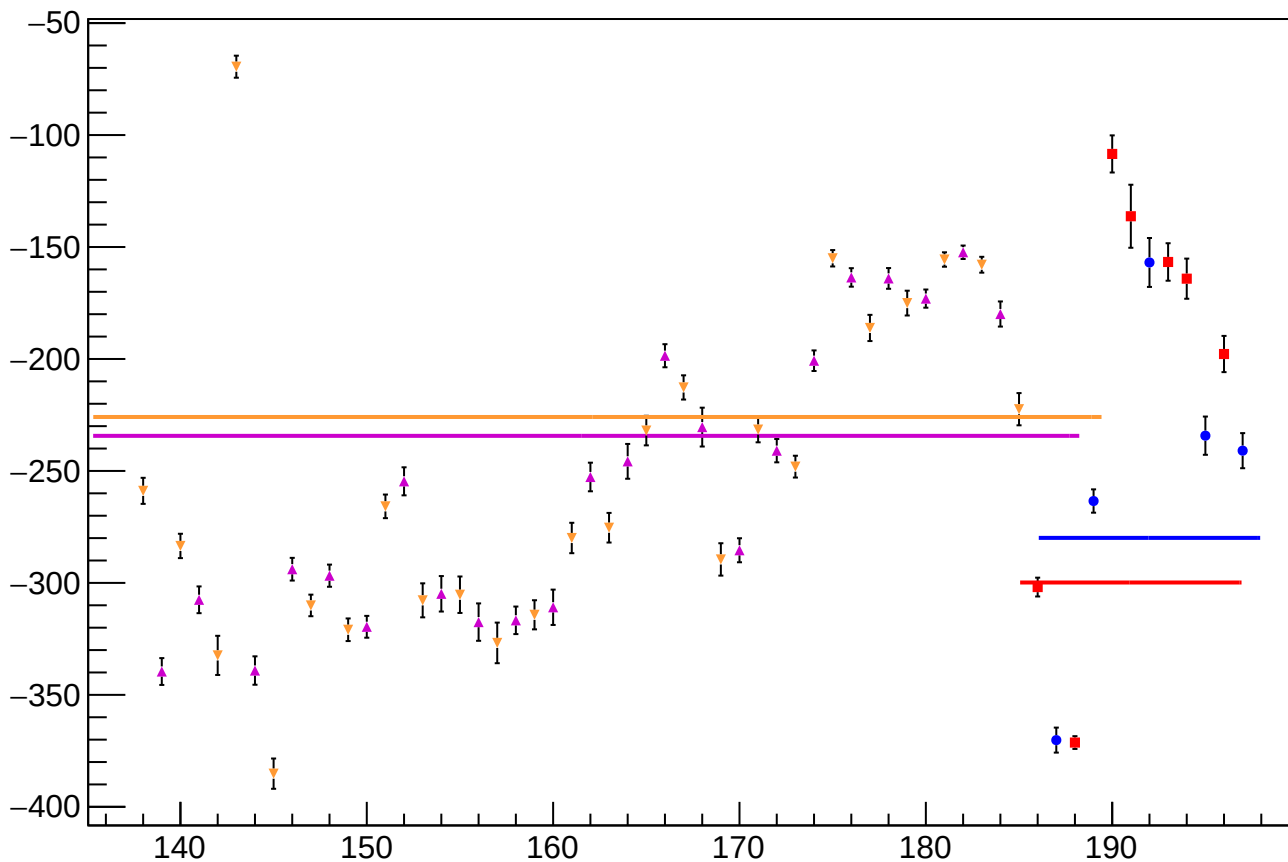
Right: 103.970 $\pm$ 0.051  $\chi^2$ /NDF: 1381205.6/46

In: 122.764 $\pm$ 0.036  $\chi^2$ /NDF: 212960.1/44

Out: 112.722 $\pm$ 0.034  $\chi^2$ /NDF: 1252312.3/49

All: 117.491 $\pm$ 0.025  $\chi^2$ /NDF: 1507030.3/94

reg\_asym\_atr1l2\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-279.893 \pm 3.053$   $\chi^2/\text{NDF}: 451.5/4$

Left Out:  $-225.905 \pm 1.083$   $\chi^2/\text{NDF}: 4669.2/24$

Right Out:  $-299.822 \pm 2.037$   $\chi^2/\text{NDF}: 1976.9/6$

Left In:  $-234.328 \pm 1.104$   $\chi^2/\text{NDF}: 3591.9/22$

Left:  $-230.037 \pm 0.773$   $\chi^2/\text{NDF}: 8290.7/47$

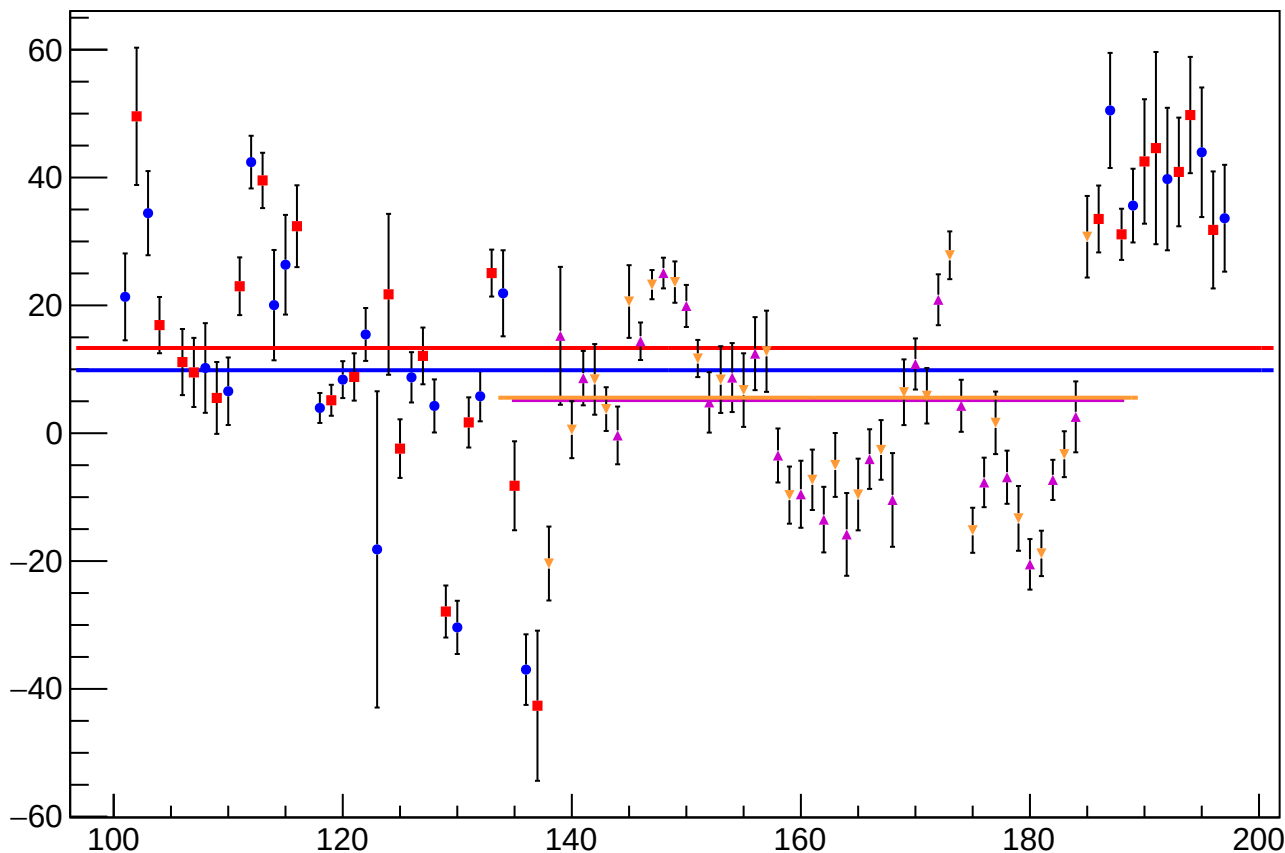
Right:  $-293.684 \pm 1.694$   $\chi^2/\text{NDF}: 2458.0/11$

In:  $-239.600 \pm 1.038$   $\chi^2/\text{NDF}: 4240.5/27$

Out:  $-242.211 \pm 0.957$   $\chi^2/\text{NDF}: 7672.8/31$

All:  $-241.012 \pm 0.704$   $\chi^2/\text{NDF}: 11916.7/59$

reg\_asym\_atr1l2\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 9.854 $\pm$ 1.039  $\chi^2/\text{NDF}$ : 333.6/21

Left Out: 5.558 $\pm$ 0.832  $\chi^2/\text{NDF}$ :313.4/24

Right Out: 13.336 $\pm$ 0.991  $\chi^2/\text{NDF}$ : 322.4/24

Left In: 5.186 $\pm$ 0.867  $\chi^2/\text{NDF}$ :243.2/22

Left: 5.380 $\pm$ 0.600  $\chi^2/\text{NDF}$ : 556.7/47

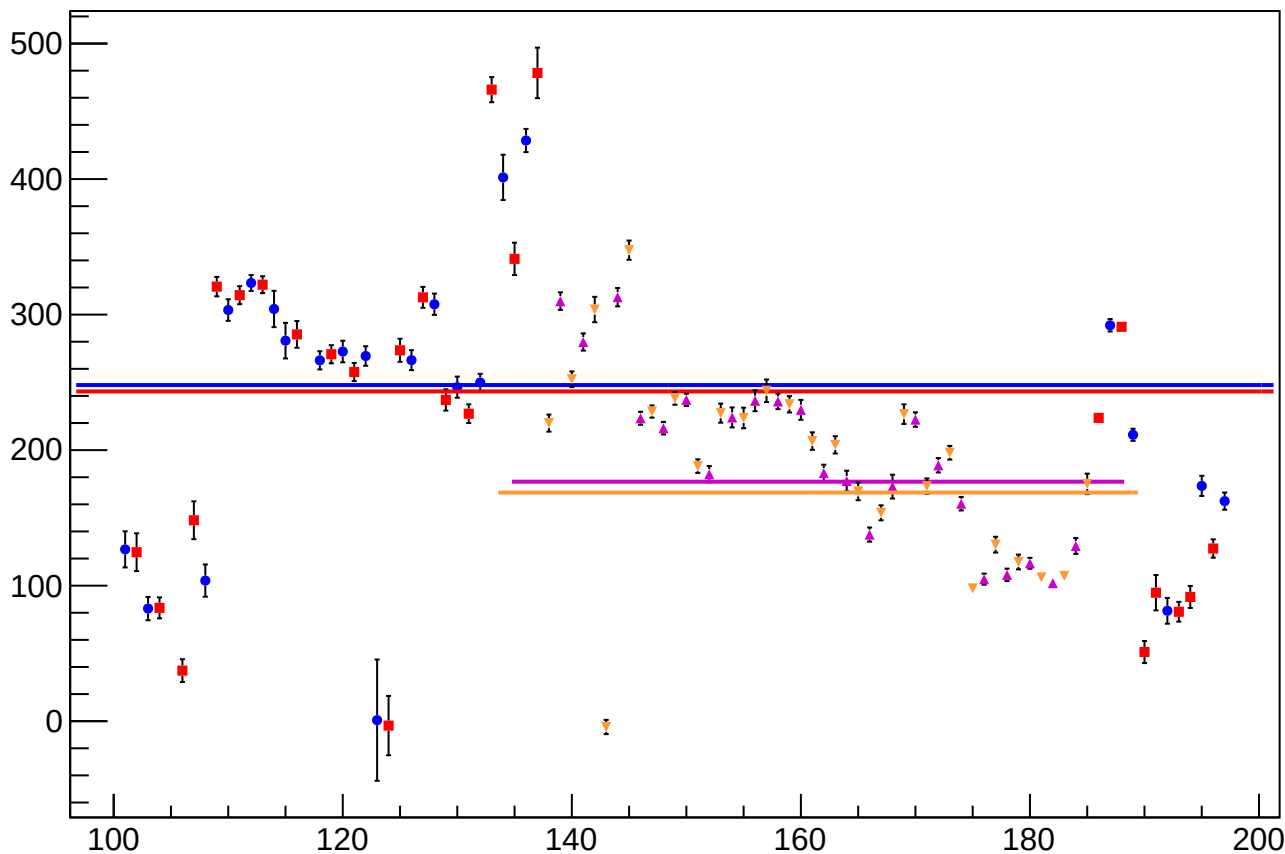
Right: 11.677 $\pm$ 0.717  $\chi^2/\text{NDF}$ : 661.8/46

In: 7.101 $\pm$ 0.666  $\chi^2/\text{NDF}$ :588.7/44

Out: 8.772 $\pm$ 0.637  $\chi^2/\text{NDF}$ :671.9/49

All: 7.973 $\pm$ 0.460  $\chi^2/\text{NDF}$ : 1263.9/94

reg\_asym\_atr1l2\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 248.024 $\pm$ 1.612  $\chi^2$ /NDF: 2233.4/21

Left Out: 168.699 $\pm$ 1.086  $\chi^2$ /NDF:4238.2/24

Right Out: 243.326 $\pm$ 1.281  $\chi^2$ /NDF: 4892.1/24

Left In: 176.711 $\pm$ 1.102  $\chi^2$ /NDF:3234.3/22

Left: 172.648 $\pm$ 0.774  $\chi^2$ /NDF: 7499.3/47

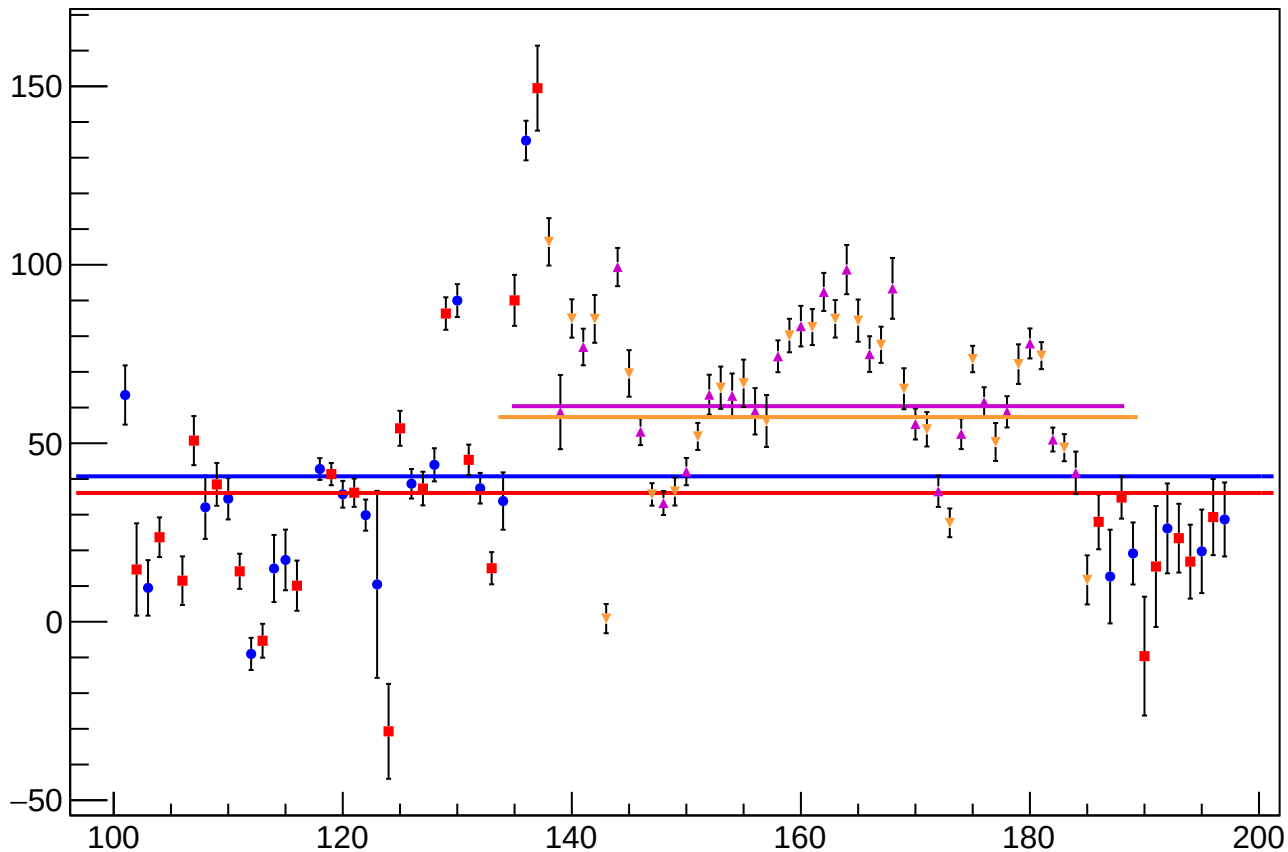
Right: 245.144 $\pm$ 1.003  $\chi^2$ /NDF: 7130.7/46

In: 199.417 $\pm$ 0.910  $\chi^2$ /NDF:6801.4/44

Out: 199.918 $\pm$ 0.829  $\chi^2$ /NDF:11104.1/49

All: 199.691 $\pm$ 0.613  $\chi^2$ /NDF: 17905.7/94

reg\_asym\_atr1l2\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 40.735 $\pm$ 1.216  $\chi^2$ /NDF: 593.3/21

Left Out: 57.343 $\pm$ 0.956  $\chi^2$ /NDF: 641.5/24

Right Out: 36.077 $\pm$ 1.167  $\chi^2$ /NDF: 489.3/24

Left In: 60.392 $\pm$ 0.987  $\chi^2$ /NDF: 341.2/22

Left: 58.819 $\pm$ 0.687  $\chi^2$ /NDF: 987.6/47

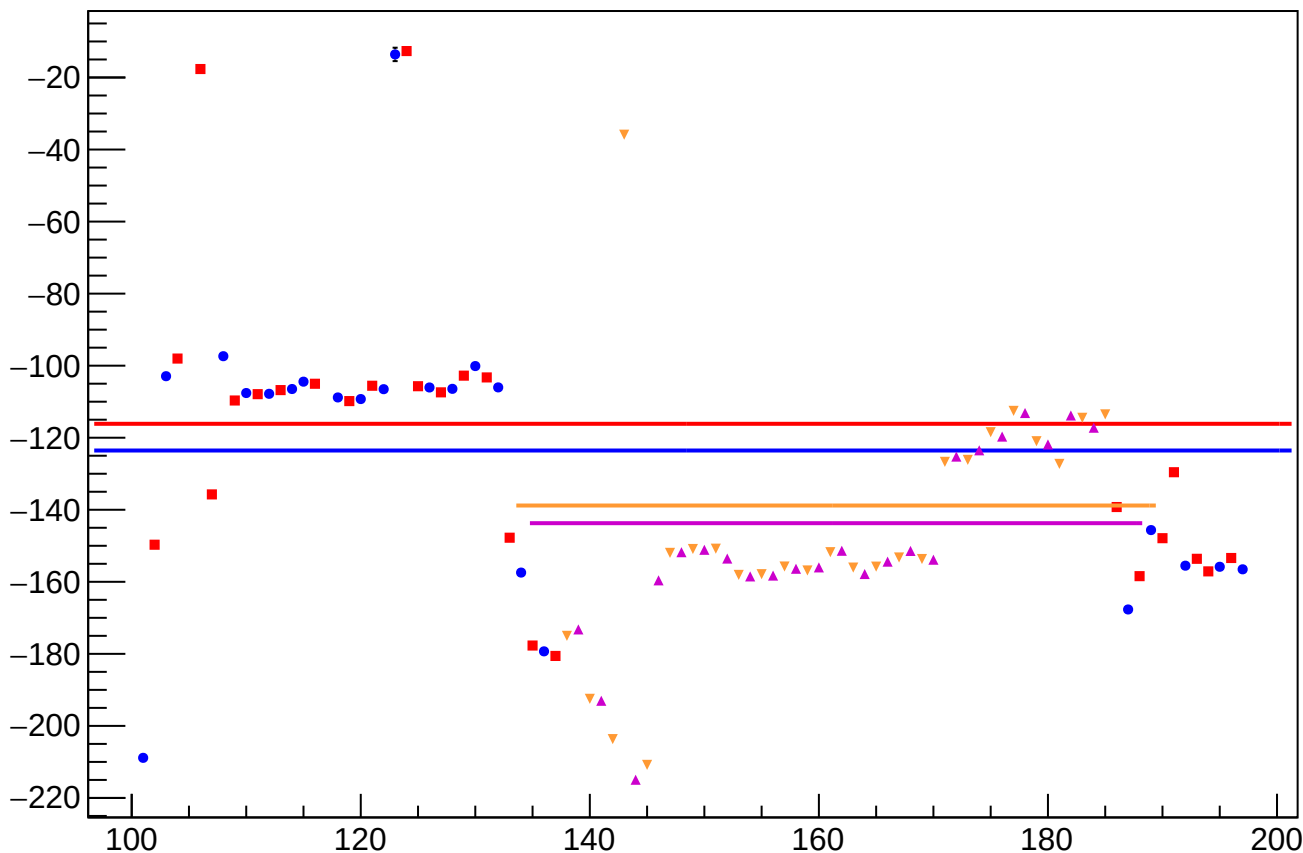
Right: 38.311 $\pm$ 0.842  $\chi^2$ /NDF: 1090.2/46

In: 52.582 $\pm$ 0.766  $\chi^2$ /NDF: 1092.0/44

Out: 48.800 $\pm$ 0.740  $\chi^2$ /NDF: 1329.5/49

All: 50.624 $\pm$ 0.532  $\chi^2$ /NDF: 2434.1/94

reg\_asym\_atr1l2\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -123.552 $\pm$ 0.071  $\chi^2$ /NDF: 179341.3/21

Left Out: -138.821 $\pm$ 0.045  $\chi^2$ /NDF: 525537.6/24

Right Out: -116.137 $\pm$ 0.064  $\chi^2$ /NDF: 413615.6/24

Left In: -143.726 $\pm$ 0.046  $\chi^2$ /NDF: 260994.5/22

Left: -141.241 $\pm$ 0.032  $\chi^2$ /NDF: 792316.4/47

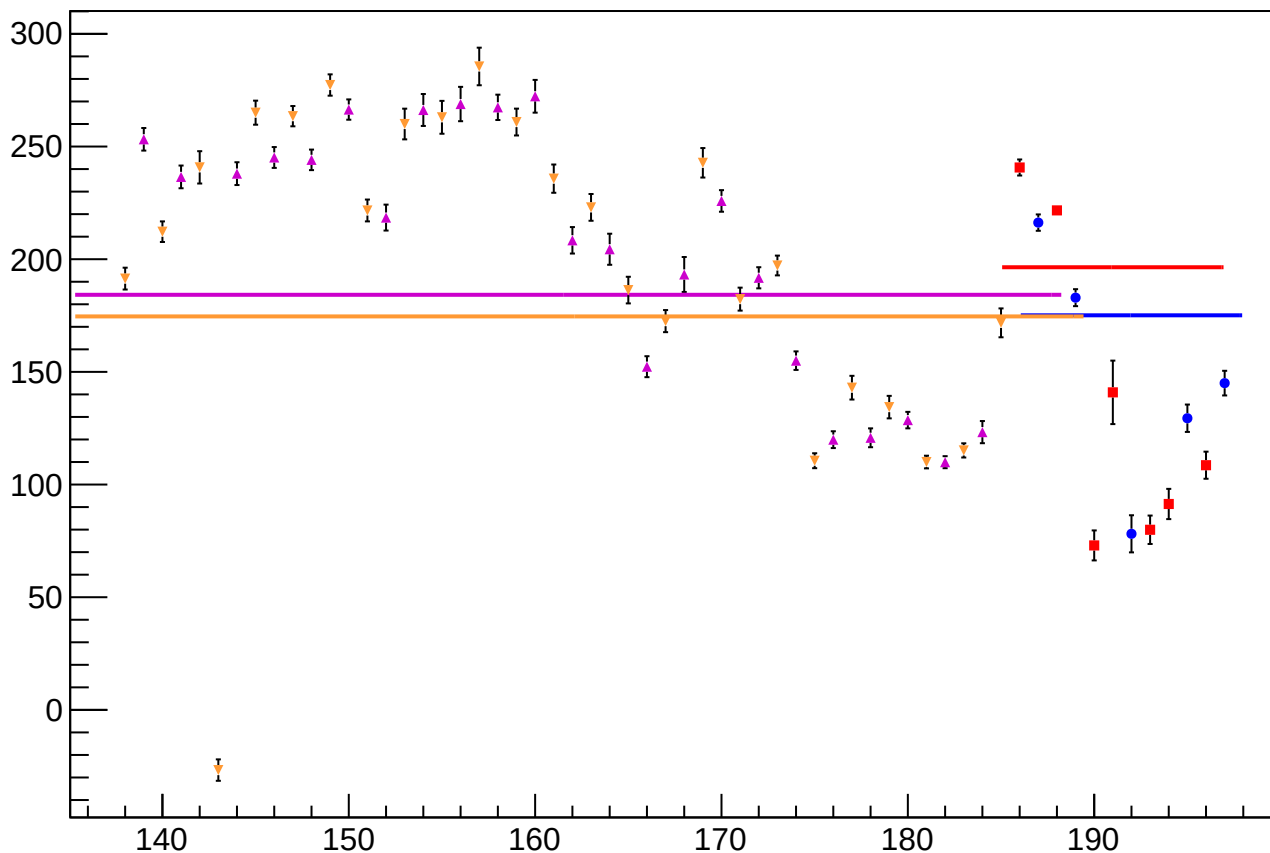
Right: -119.451 $\pm$ 0.048  $\chi^2$ /NDF: 598940.0/46

In: -137.812 $\pm$ 0.039  $\chi^2$ /NDF: 496947.3/44

Out: -131.263 $\pm$ 0.037  $\chi^2$ /NDF: 1022686.9/49

All: -134.399 $\pm$ 0.027  $\chi^2$ /NDF: 1534639.3/94

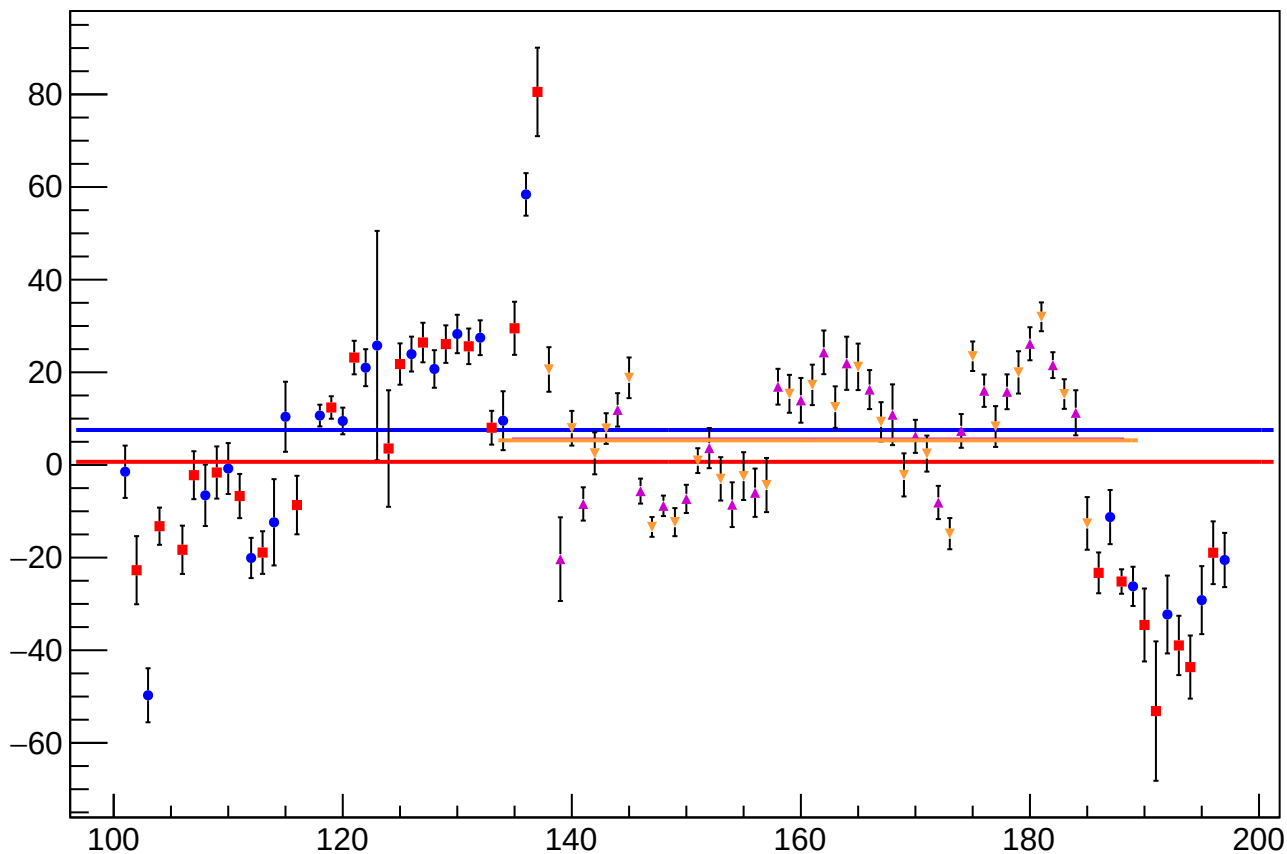
reg\_asym\_atr1l2\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 175.104 $\pm$ 2.124  $\chi^2$ /NDF: 358.1/4  
 Left Out: 174.613 $\pm$ 0.969  $\chi^2$ /NDF:5551.3/24  
 Right Out: 196.431 $\pm$ 1.459  $\chi^2$ /NDF: 1497.5/6  
 Left In: 184.205 $\pm$ 0.987  $\chi^2$ /NDF:3637.1/22

Left: 179.321 $\pm$ 0.691  $\chi^2$ /NDF: 9236.5/47  
 Right: 189.592 $\pm$ 1.203  $\chi^2$ /NDF: 1924.1/11  
 In: 182.589 $\pm$ 0.895  $\chi^2$ /NDF:4010.3/27  
 Out: 181.288 $\pm$ 0.807  $\chi^2$ /NDF:7203.9/31  
 All: 181.872 $\pm$ 0.599  $\chi^2$ /NDF: 11215.3/59

reg\_asym\_atr1l2\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $7.549 \pm 0.979$   $\chi^2/\text{NDF}: 514.7/21$

Left Out:  $5.314 \pm 0.750$   $\chi^2/\text{NDF}: 345.1/24$

Right Out:  $0.674 \pm 0.917$   $\chi^2/\text{NDF}: 607.4/24$

Left In:  $5.483 \pm 0.779$   $\chi^2/\text{NDF}: 259.1/22$

Left:  $5.396 \pm 0.540$   $\chi^2/\text{NDF}: 604.2/47$

Right:  $3.890 \pm 0.669$   $\chi^2/\text{NDF}: 1148.3/46$

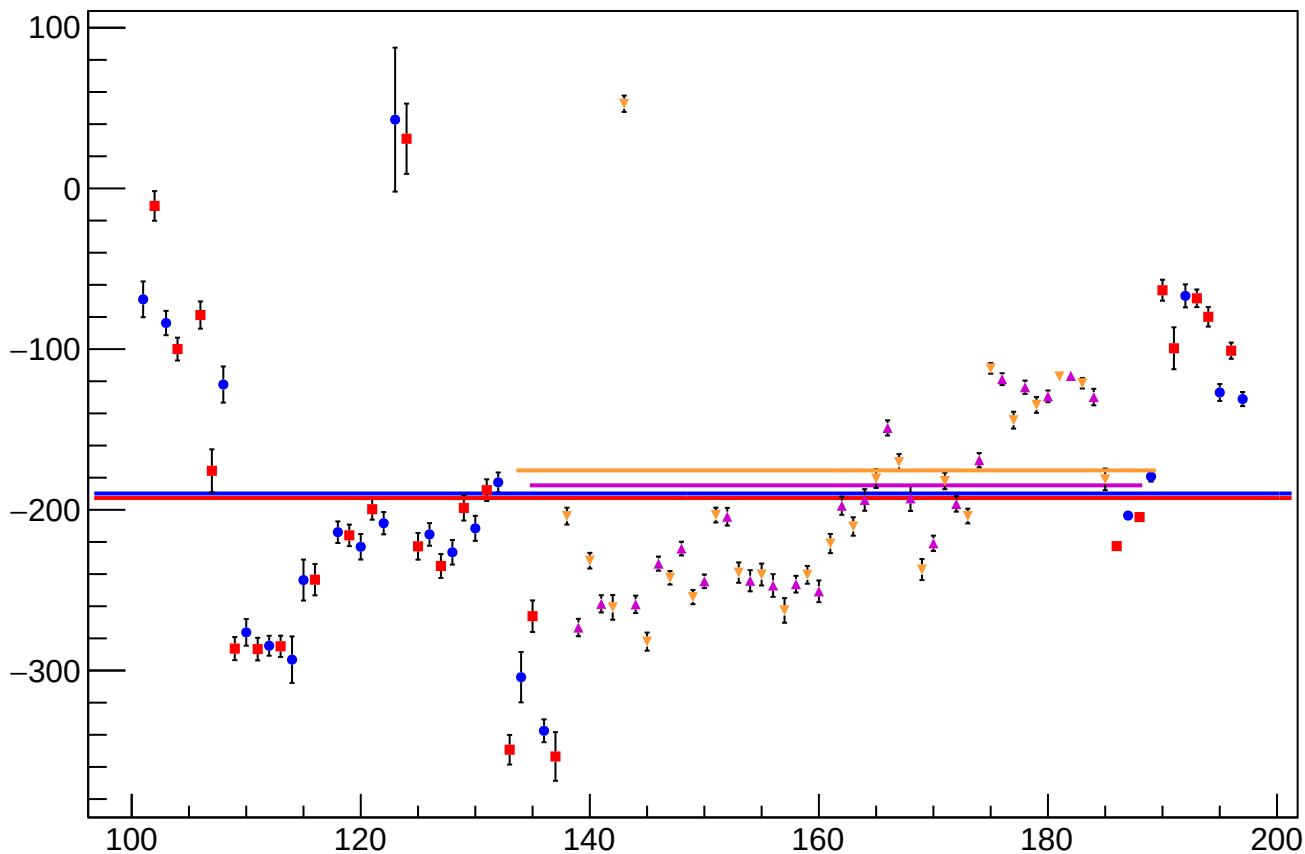
In:  $6.285 \pm 0.609$   $\chi^2/\text{NDF}: 776.5/44$

Out:  $3.453 \pm 0.581$   $\chi^2/\text{NDF}: 967.8/49$

All:  $4.801 \pm 0.420$   $\chi^2/\text{NDF}: 1755.6/94$



reg\_asym\_atr1l2\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-189.851 \pm 1.326$   $\chi^2/\text{NDF}$ : 2005.3/21

Left Out:  $-175.470 \pm 0.974$   $\chi^2/\text{NDF}$ : 5103.8/24

Right Out:  $-192.672 \pm 1.017$   $\chi^2/\text{NDF}$ : 3740.5/24

Left In:  $-184.774 \pm 0.987$   $\chi^2/\text{NDF}$ : 3082.4/22

Left:  $-180.060 \pm 0.693$   $\chi^2/\text{NDF}$ : 8231.2/47

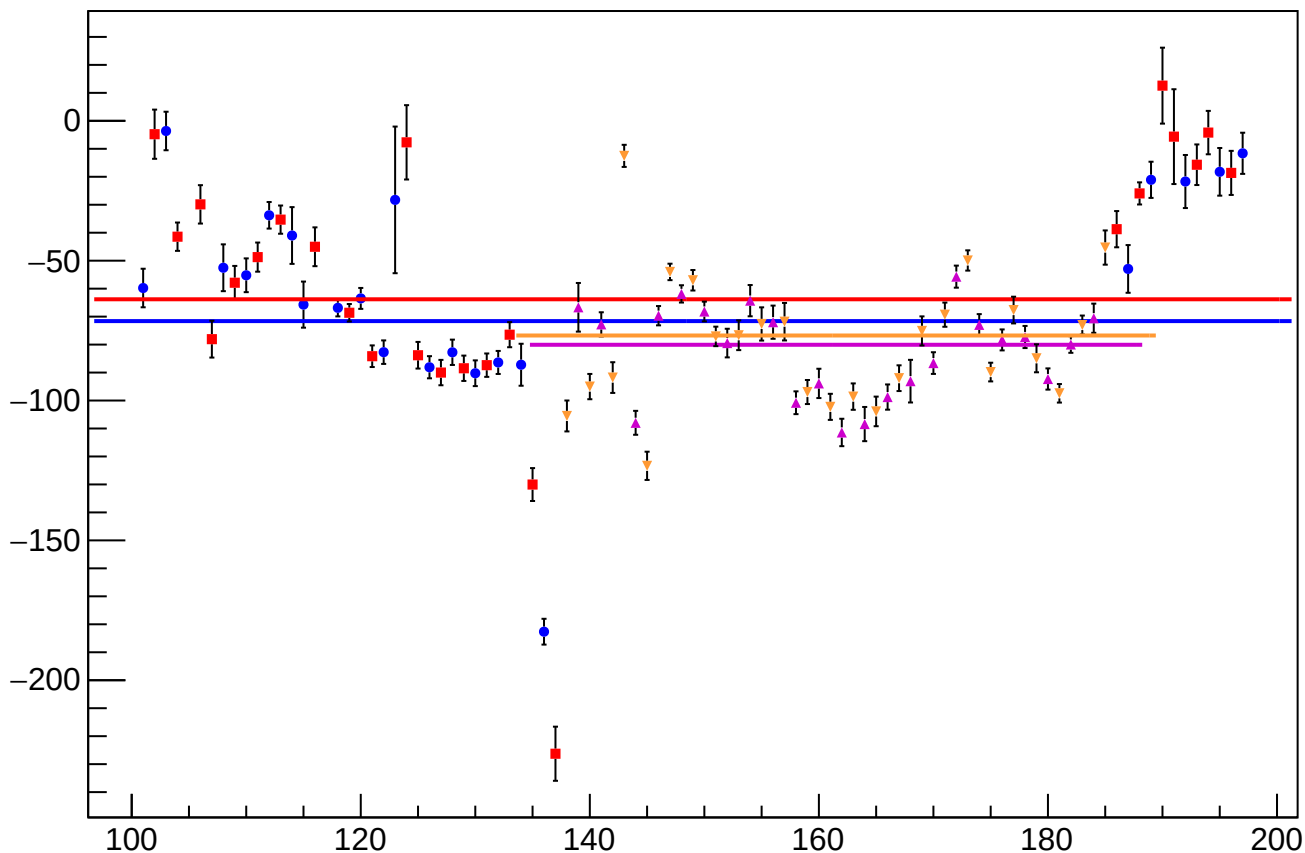
Right:  $-191.628 \pm 0.807$   $\chi^2/\text{NDF}$ : 5748.6/46

In:  $-186.583 \pm 0.792$   $\chi^2/\text{NDF}$ : 5097.1/44

Out:  $-183.700 \pm 0.703$   $\chi^2/\text{NDF}$ : 8993.5/49

All:  $-184.971 \pm 0.526$   $\chi^2/\text{NDF}$ : 14098.1/94

reg\_asym\_atr1l2\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-71.601 \pm 1.152$   $\chi^2/\text{NDF}: 1038.5/21$

Left Out:  $-76.747 \pm 0.861$   $\chi^2/\text{NDF}: 746.8/24$

Right Out:  $-63.803 \pm 1.096$   $\chi^2/\text{NDF}: 1005.1/24$

Left In:  $-80.068 \pm 0.886$   $\chi^2/\text{NDF}: 286.8/22$

Left:  $-78.359 \pm 0.617$   $\chi^2/\text{NDF}: 1040.8/47$

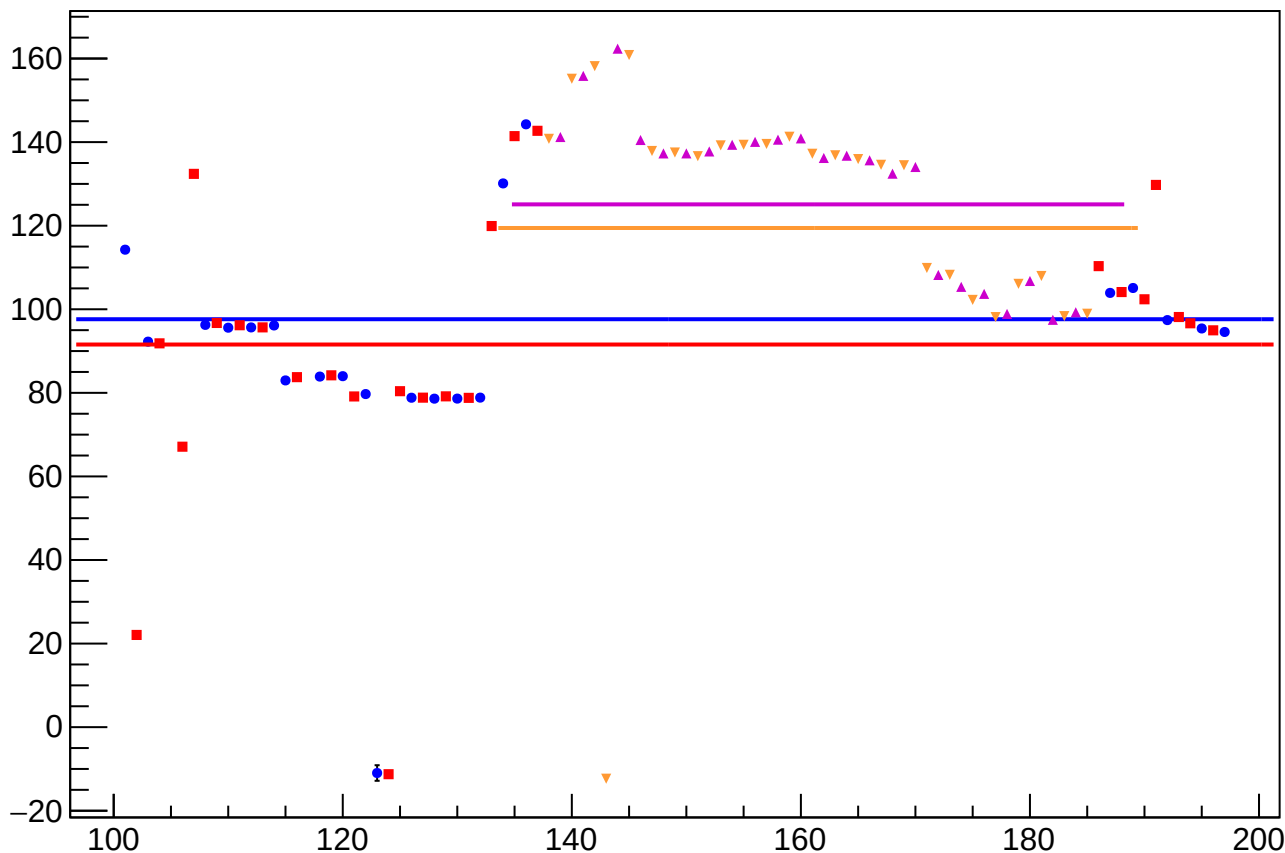
Right:  $-67.508 \pm 0.794$   $\chi^2/\text{NDF}: 2067.7/46$

In:  $-76.920 \pm 0.702$   $\chi^2/\text{NDF}: 1359.3/44$

Out:  $-71.810 \pm 0.677$   $\chi^2/\text{NDF}: 1838.2/49$

All:  $-74.270 \pm 0.487$   $\chi^2/\text{NDF}: 3224.9/94$

reg\_asym\_atr1l2\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 97.617 $\pm$ 0.064  $\chi^2$ /NDF: 95526.0/21

Left Out: 119.448 $\pm$ 0.041  $\chi^2$ /NDF: 660075.8/24

Right Out: 91.564 $\pm$ 0.057  $\chi^2$ /NDF: 239974.5/24

Left In: 125.101 $\pm$ 0.041  $\chi^2$ /NDF: 222793.3/22

Left: 122.242 $\pm$ 0.029  $\chi^2$ /NDF: 892441.6/47

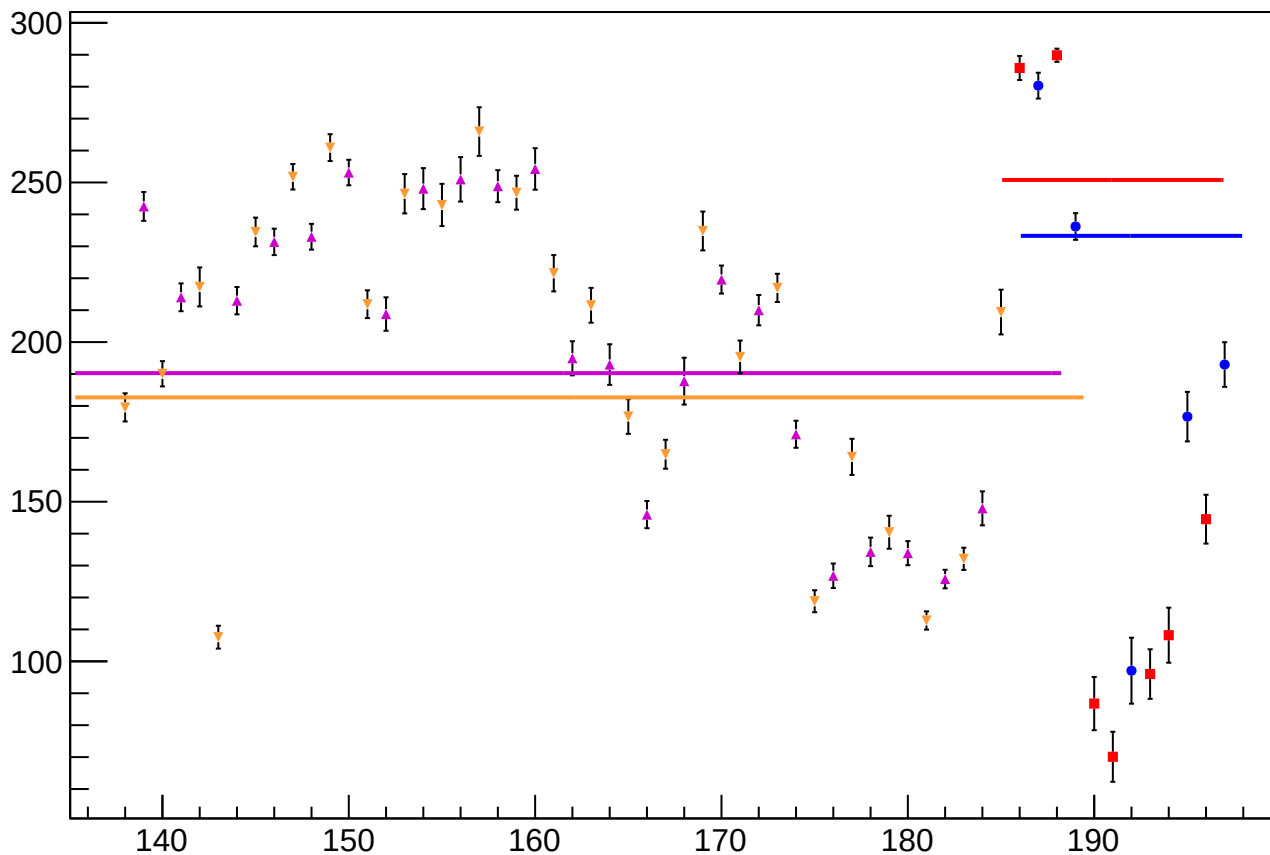
Right: 94.242 $\pm$ 0.043  $\chi^2$ /NDF: 340491.4/46

In: 117.074 $\pm$ 0.035  $\chi^2$ /NDF: 448932.2/44

Out: 110.051 $\pm$ 0.033  $\chi^2$ /NDF: 1058798.1/49

All: 113.407 $\pm$ 0.024  $\chi^2$ /NDF: 1529269.6/94

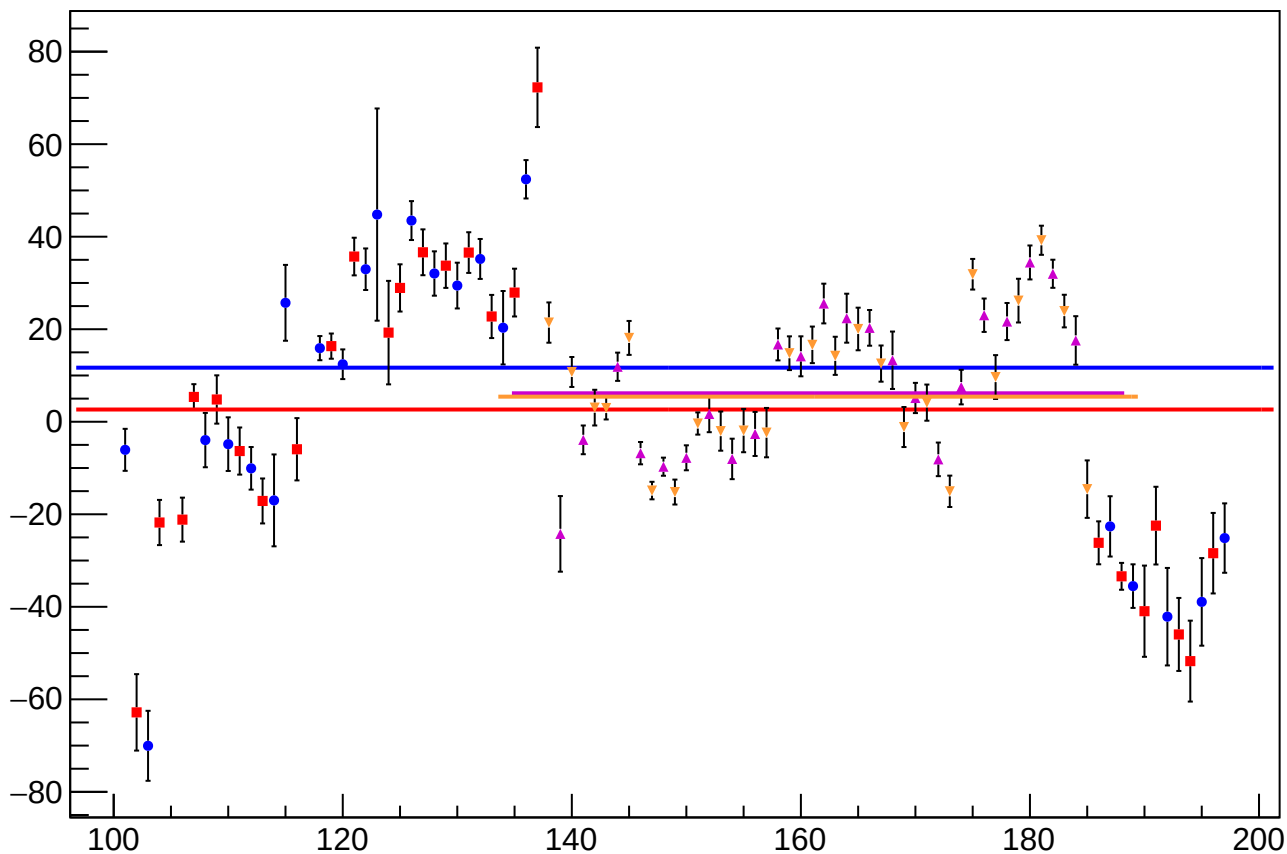
reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $233.284 \pm 2.463$   $\chi^2/\text{NDF}: 396.1/4$   
 Left Out:  $182.672 \pm 0.919$   $\chi^2/\text{NDF}: 3230.7/24$   
 Right Out:  $250.793 \pm 1.618$   $\chi^2/\text{NDF}: 2225.7/6$   
 Left In:  $190.279 \pm 0.949$   $\chi^2/\text{NDF}: 2452.9/22$

Left:  $186.352 \pm 0.660$   $\chi^2/\text{NDF}: 5716.7/47$   
 Right:  $245.516 \pm 1.352$   $\chi^2/\text{NDF}: 2657.1/11$   
 In:  $195.837 \pm 0.885$   $\chi^2/\text{NDF}: 3114.4/27$   
 Out:  $199.279 \pm 0.799$   $\chi^2/\text{NDF}: 6797.3/31$   
 All:  $197.735 \pm 0.593$   $\chi^2/\text{NDF}: 9920.0/59$

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $11.690 \pm 1.074$   $\chi^2/\text{NDF}: 630.3/21$

Left Out:  $5.425 \pm 0.693$   $\chi^2/\text{NDF}: 525.2/24$

Right Out:  $2.645 \pm 0.963$   $\chi^2/\text{NDF}: 822.7/24$

Left In:  $6.151 \pm 0.730$   $\chi^2/\text{NDF}: 410.6/22$

Left:  $5.769 \pm 0.502$   $\chi^2/\text{NDF}: 936.2/47$

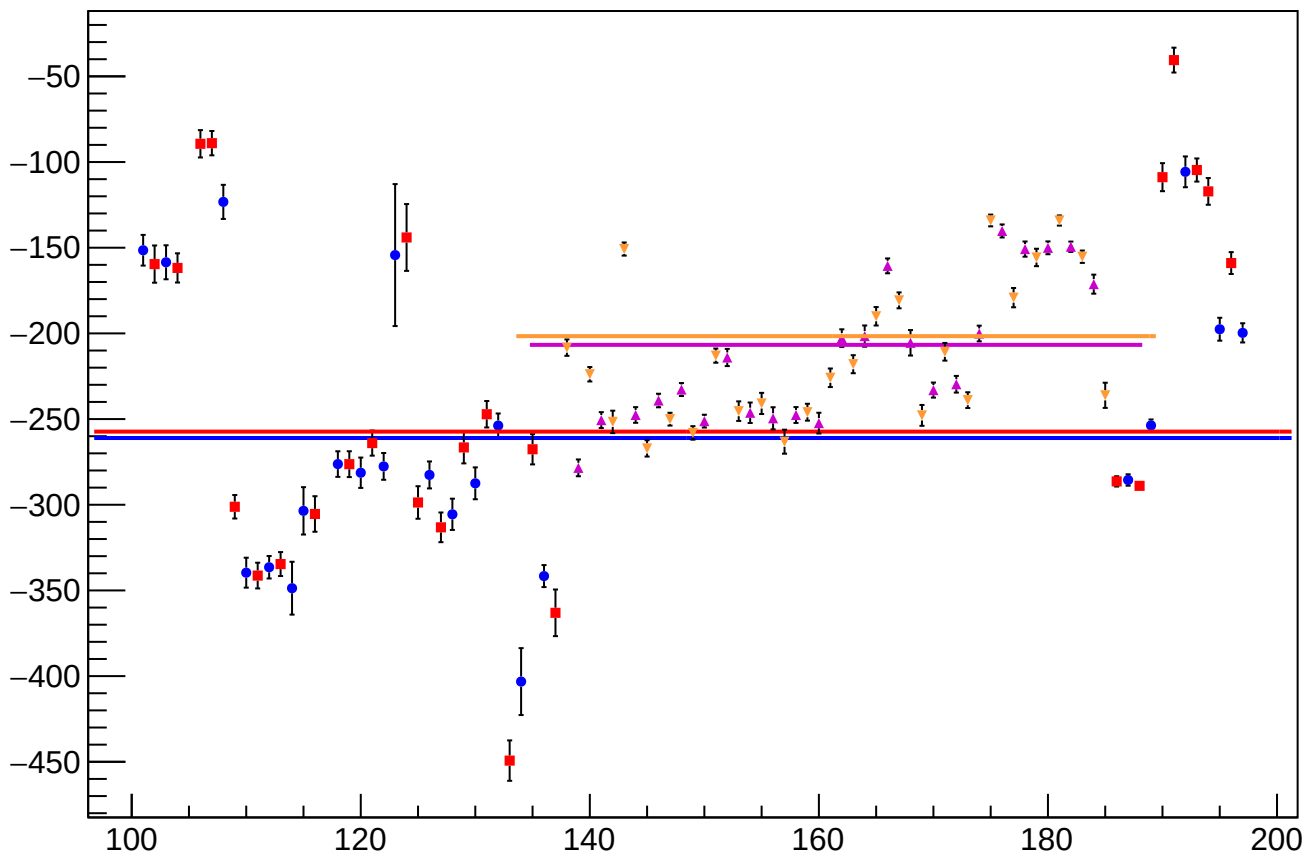
Right:  $6.678 \pm 0.717$   $\chi^2/\text{NDF}: 1492.3/46$

In:  $7.902 \pm 0.604$   $\chi^2/\text{NDF}: 1059.1/44$

Out:  $4.477 \pm 0.562$   $\chi^2/\text{NDF}: 1353.3/49$

All:  $6.068 \pm 0.411$   $\chi^2/\text{NDF}: 2429.6/94$

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -261.052 $\pm$ 1.487  $\chi^2$ /NDF: 1542.2/21

Left Out: -201.610 $\pm$ 0.922  $\chi^2$ /NDF:2462.4/24

Right Out: -257.319 $\pm$ 1.109  $\chi^2$ /NDF: 4703.1/24

Left In: -206.700 $\pm$ 0.946  $\chi^2$ /NDF:2134.9/22

Left: -204.091 $\pm$ 0.660  $\chi^2$ /NDF: 4612.2/47

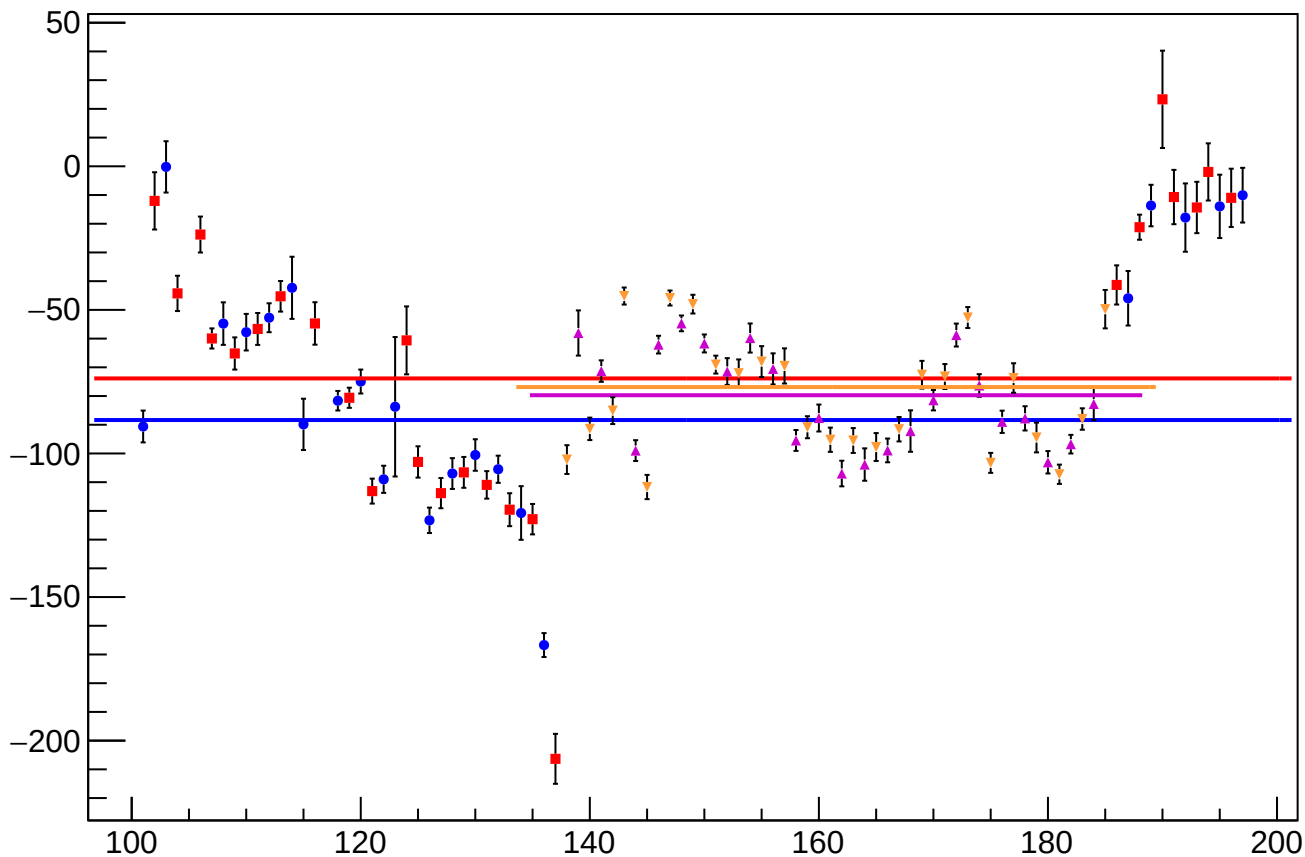
Right: -258.653 $\pm$ 0.889  $\chi^2$ /NDF: 6249.4/46

In: -222.369 $\pm$ 0.798  $\chi^2$ /NDF:4628.5/44

Out: -224.398 $\pm$ 0.709  $\chi^2$ /NDF:8657.5/49

All: -223.503 $\pm$ 0.530  $\chi^2$ /NDF: 13289.7/94

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-88.359 \pm 1.262$   $\chi^2/\text{NDF}$ : 976.2/21

Left Out:  $-76.870 \pm 0.802$   $\chi^2/\text{NDF}$ : 758.7/24

Right Out:  $-73.866 \pm 1.154$   $\chi^2/\text{NDF}$ : 1220.6/24

Left In:  $-79.719 \pm 0.837$   $\chi^2/\text{NDF}$ : 415.2/22

Left:  $-78.232 \pm 0.579$   $\chi^2/\text{NDF}$ : 1179.9/47

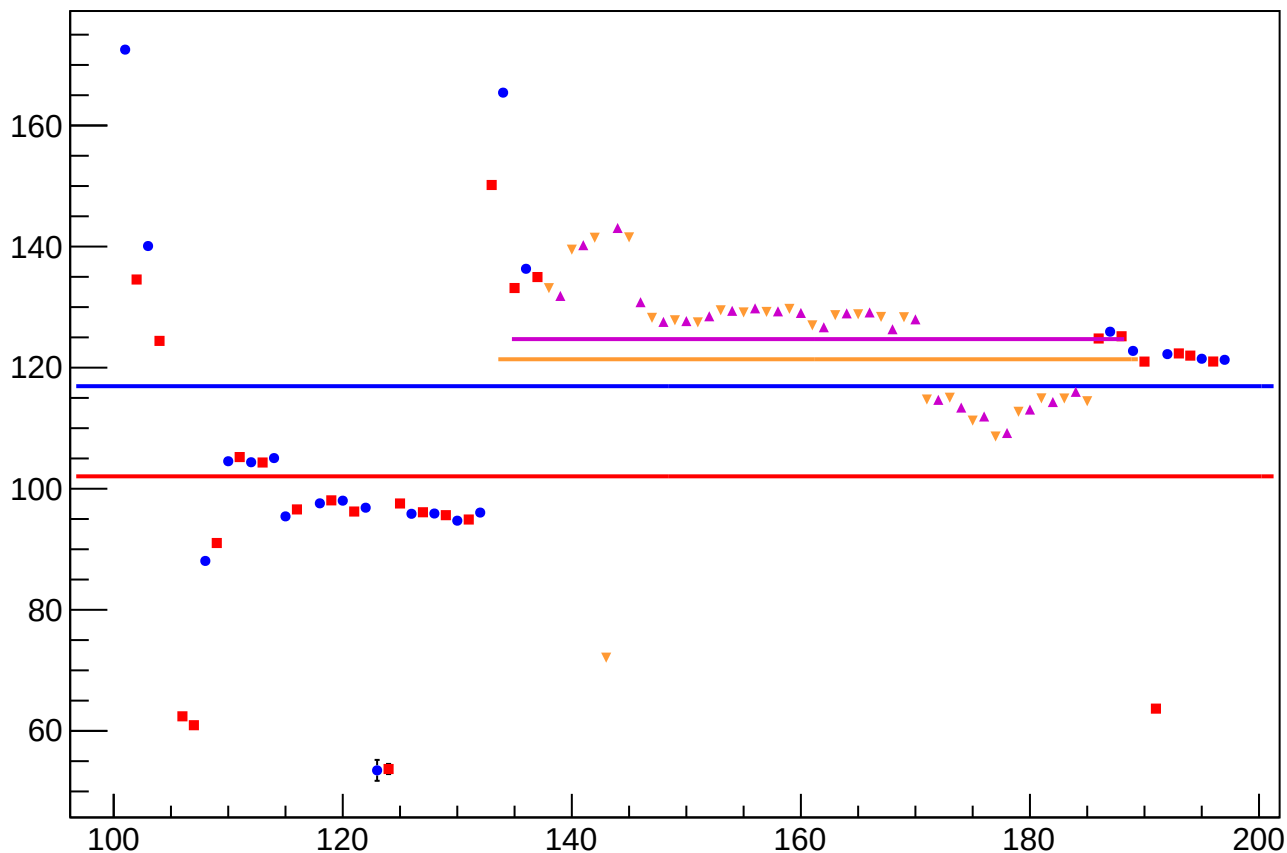
Right:  $-80.470 \pm 0.852$   $\chi^2/\text{NDF}$ : 2268.7/46

In:  $-82.362 \pm 0.698$   $\chi^2/\text{NDF}$ : 1423.9/44

Out:  $-75.892 \pm 0.658$   $\chi^2/\text{NDF}$ : 1983.9/49

All:  $-78.940 \pm 0.479$   $\chi^2/\text{NDF}$ : 3453.3/94

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 116.938 $\pm$ 0.070  $\chi^2$ /NDF: 107763.9/21

Left Out: 121.385 $\pm$ 0.038  $\chi^2$ /NDF:164871.1/24

Right Out: 102.048 $\pm$ 0.059  $\chi^2$ /NDF: 221353.4/24

Left In: 124.714 $\pm$ 0.039  $\chi^2$ /NDF:51750.7/22

Left: 123.014 $\pm$ 0.027  $\chi^2$ /NDF: 220328.2/47

Right: 108.190 $\pm$ 0.045  $\chi^2$ /NDF: 355399.3/46

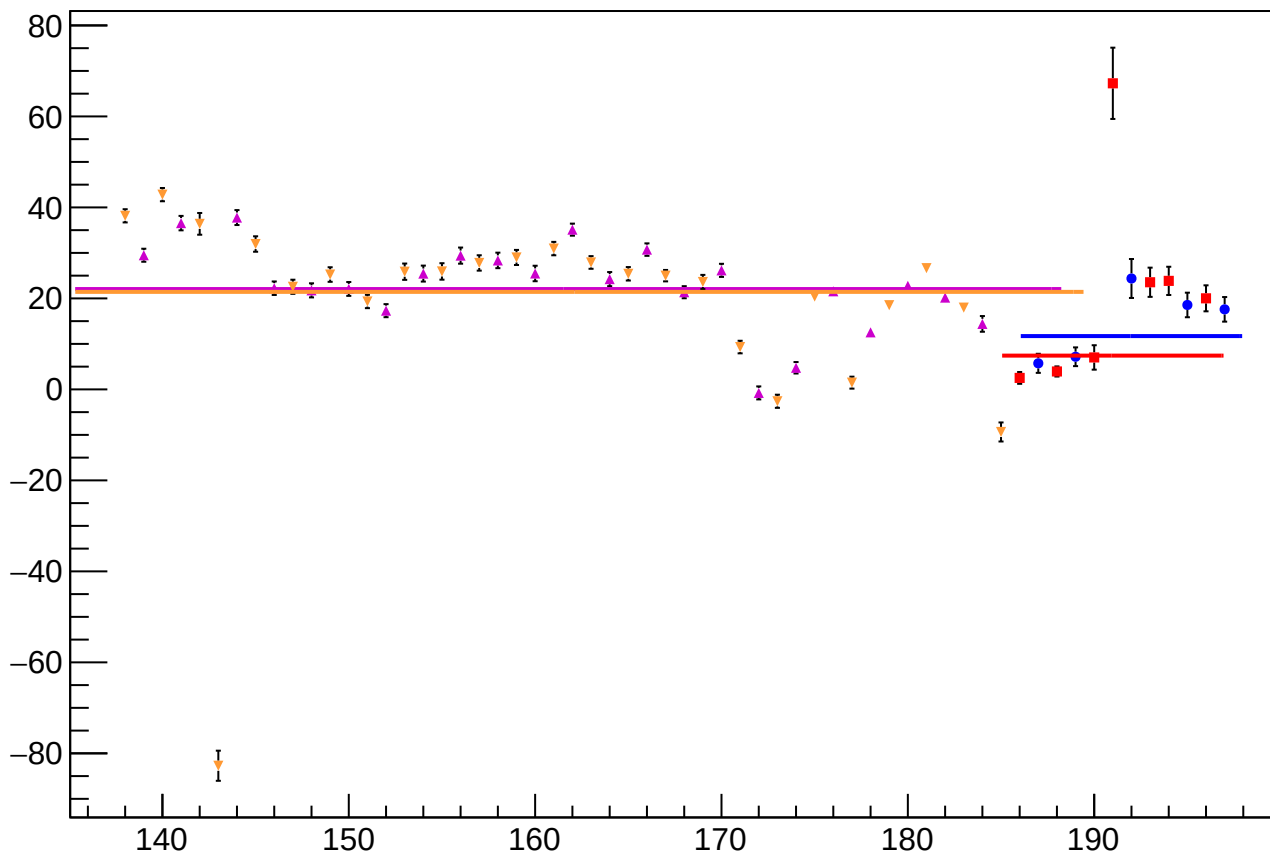
In: 122.883 $\pm$ 0.034  $\chi^2$ /NDF:168839.5/44

Out: 115.661 $\pm$ 0.032  $\chi^2$ /NDF:461865.8/49

All: 119.046 $\pm$ 0.023  $\chi^2$ /NDF: 654437.2/94



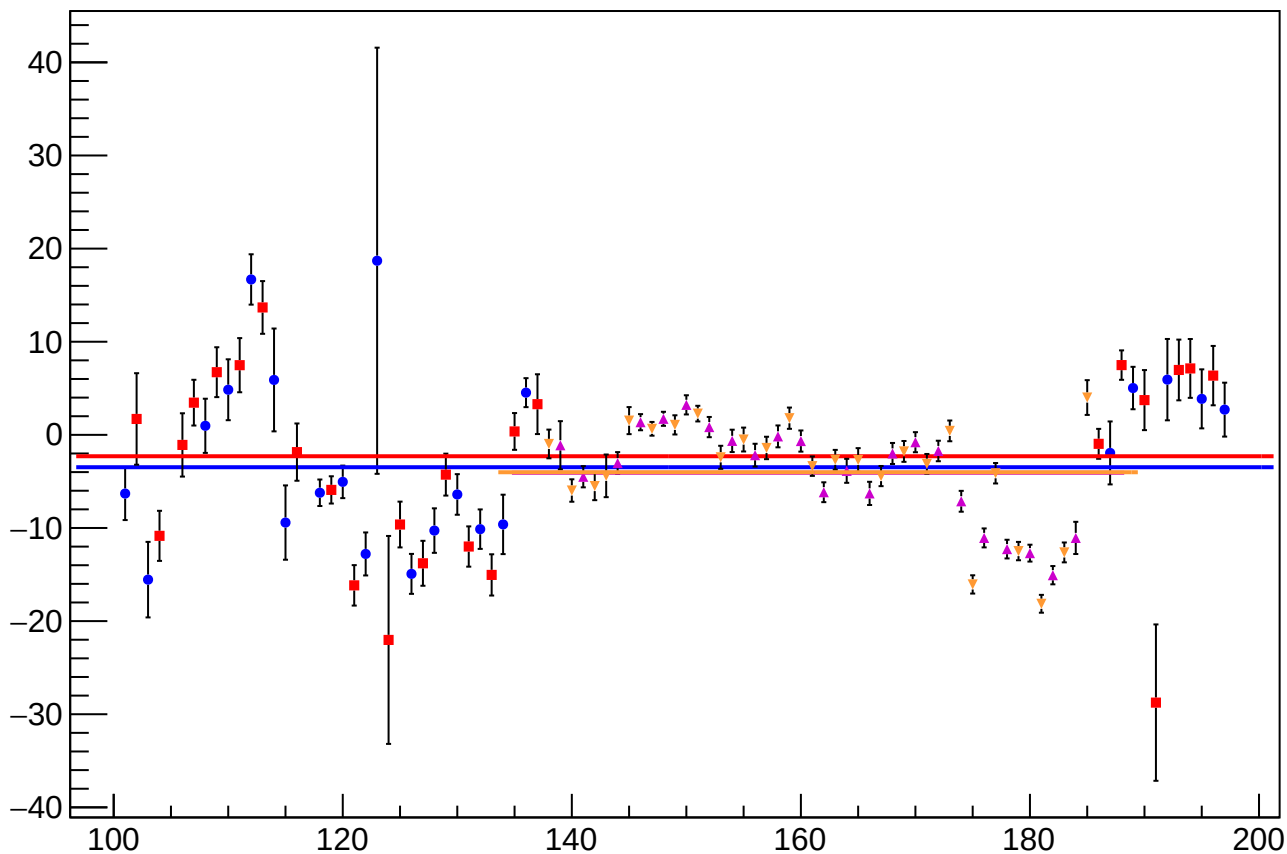
reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 11.716 $\pm$ 1.124  $\chi^2$ /NDF: 32.9/4  
 Left Out: 21.435 $\pm$ 0.283  $\chi^2$ /NDF:2406.2/24  
 Right Out: 7.423 $\pm$ 0.729  $\chi^2$ /NDF: 155.2/6  
 Left In: 22.055 $\pm$ 0.284  $\chi^2$ /NDF:941.3/22

Left: 21.743 $\pm$ 0.200  $\chi^2$ /NDF: 3349.9/47  
 Right: 8.695 $\pm$ 0.612  $\chi^2$ /NDF: 198.4/11  
 In: 21.433 $\pm$ 0.276  $\chi^2$ /NDF:1053.7/27  
 Out: 19.605 $\pm$ 0.263  $\chi^2$ /NDF:2882.5/31  
 All: 20.478 $\pm$ 0.190  $\chi^2$ /NDF: 3959.2/59

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-3.475 \pm 0.532$   $\chi^2/\text{NDF}: 208.2/21$

Left Out:  $-4.015 \pm 0.223$   $\chi^2/\text{NDF}: 731.7/24$

Right Out:  $-2.297 \pm 0.494$   $\chi^2/\text{NDF}: 288.2/24$

Left In:  $-4.069 \pm 0.227$   $\chi^2/\text{NDF}: 580.1/22$

Left:  $-4.042 \pm 0.159$   $\chi^2/\text{NDF}: 1311.8/47$

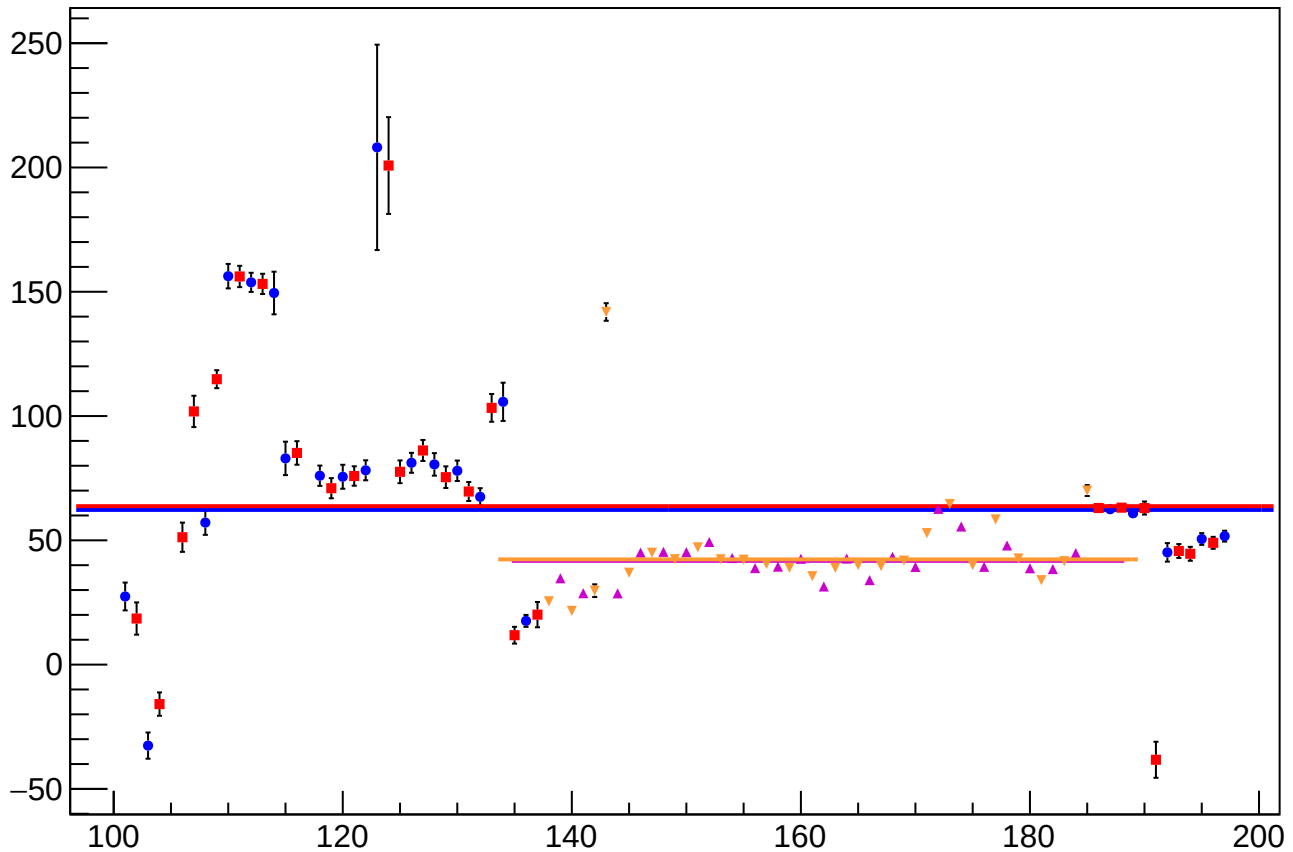
Right:  $-2.842 \pm 0.362$   $\chi^2/\text{NDF}: 499.0/46$

In:  $-3.978 \pm 0.209$   $\chi^2/\text{NDF}: 789.4/44$

Out:  $-3.723 \pm 0.203$   $\chi^2/\text{NDF}: 1029.9/49$

All:  $-3.847 \pm 0.146$   $\chi^2/\text{NDF}: 1820.0/94$

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $62.241 \pm 0.711$   $\chi^2/\text{NDF}$ : 1957.3/21

Left Out:  $42.322 \pm 0.282$   $\chi^2/\text{NDF}$ : 1855.5/24

Right Out:  $63.740 \pm 0.525$   $\chi^2/\text{NDF}$ : 2339.3/24

Left In:  $41.755 \pm 0.283$   $\chi^2/\text{NDF}$ : 659.6/22

Left:  $42.039 \pm 0.200$   $\chi^2/\text{NDF}$ : 2517.1/47

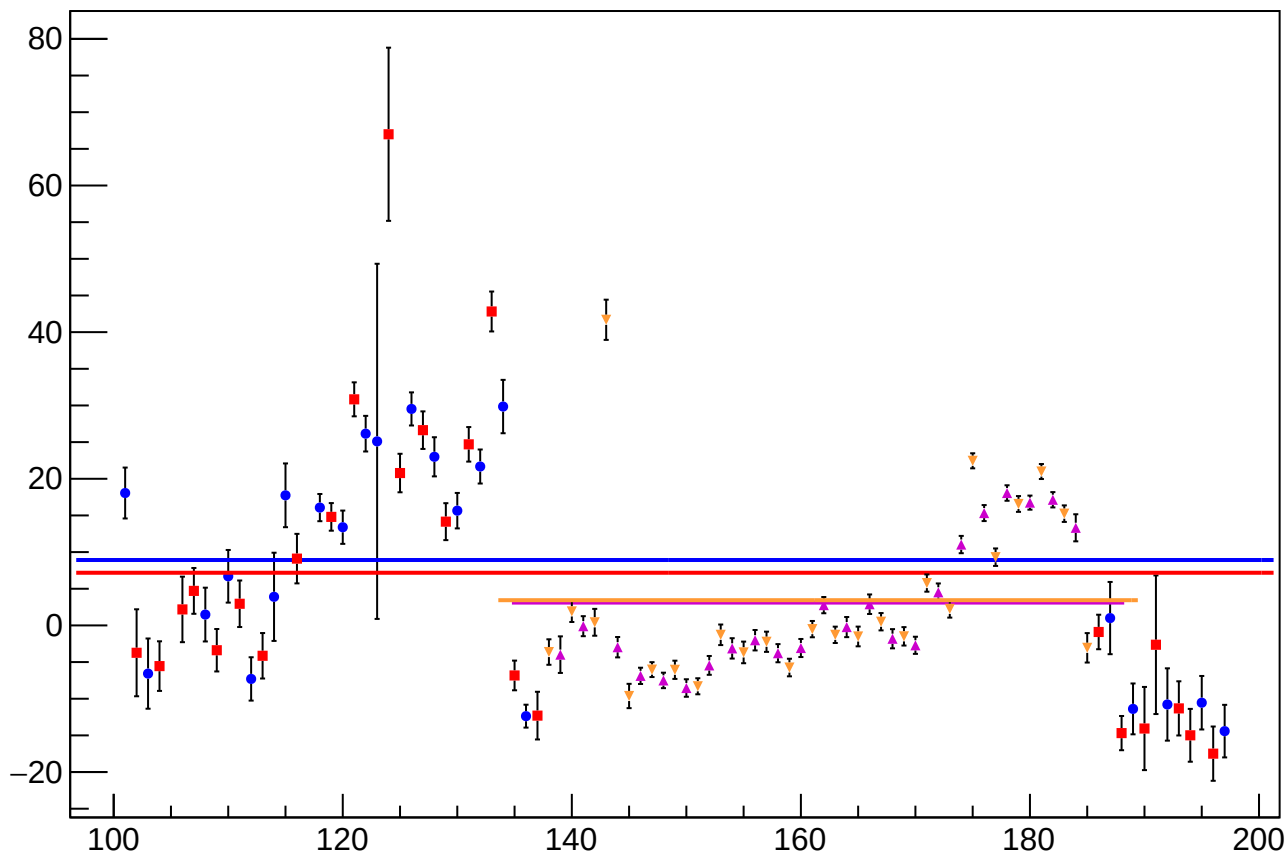
Right:  $63.212 \pm 0.422$   $\chi^2/\text{NDF}$ : 4299.5/46

In:  $44.555 \pm 0.263$   $\chi^2/\text{NDF}$ : 3332.9/44

Out:  $47.120 \pm 0.248$   $\chi^2/\text{NDF}$ : 5486.4/49

All:  $45.910 \pm 0.181$   $\chi^2/\text{NDF}$ : 8869.6/94

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $8.921 \pm 0.617$   $\chi^2/\text{NDF}$ : 618.0/21

Left Out:  $3.439 \pm 0.252$   $\chi^2/\text{NDF}$ : 1647.7/24

Right Out:  $7.182 \pm 0.588$   $\chi^2/\text{NDF}$ : 818.9/24

Left In:  $3.114 \pm 0.256$   $\chi^2/\text{NDF}$ : 1273.1/22

Left:  $3.279 \pm 0.180$   $\chi^2/\text{NDF}$ : 2921.5/47

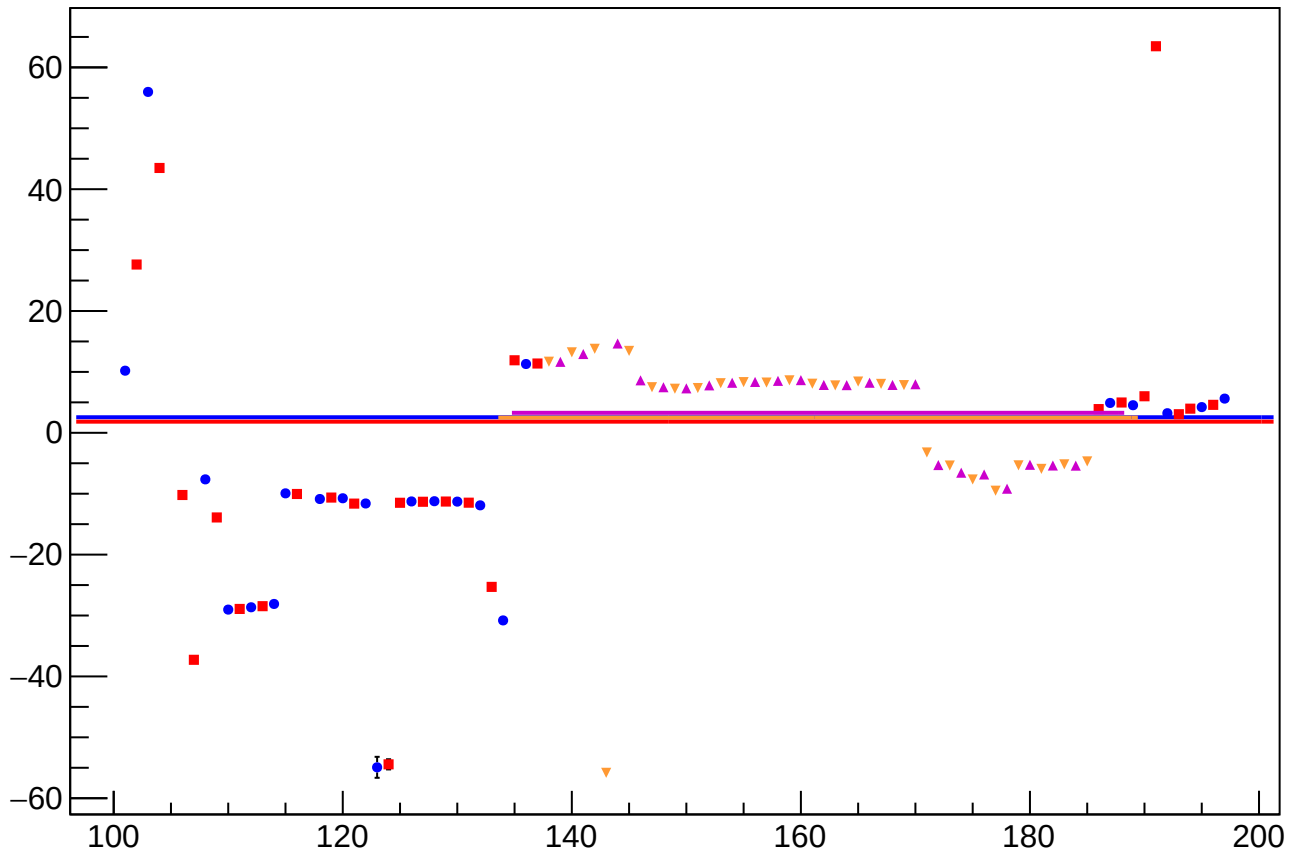
Right:  $8.010 \pm 0.426$   $\chi^2/\text{NDF}$ : 1441.1/46

In:  $3.968 \pm 0.237$   $\chi^2/\text{NDF}$ : 1966.6/44

Out:  $4.022 \pm 0.232$   $\chi^2/\text{NDF}$ : 2500.8/49

All:  $3.996 \pm 0.166$   $\chi^2/\text{NDF}$ : 4467.5/94

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 2.554 $\pm$ 0.032  $\chi^2$ /NDF: 360941.8/21

Left Out: 2.497 $\pm$ 0.012  $\chi^2$ /NDF: 588138.5/24

Right Out: 1.831 $\pm$ 0.030  $\chi^2$ /NDF: 423916.6/24

Left In: 3.281 $\pm$ 0.012  $\chi^2$ /NDF: 409605.3/22

Left: 2.888 $\pm$ 0.008  $\chi^2$ /NDF: 1000035.7/47

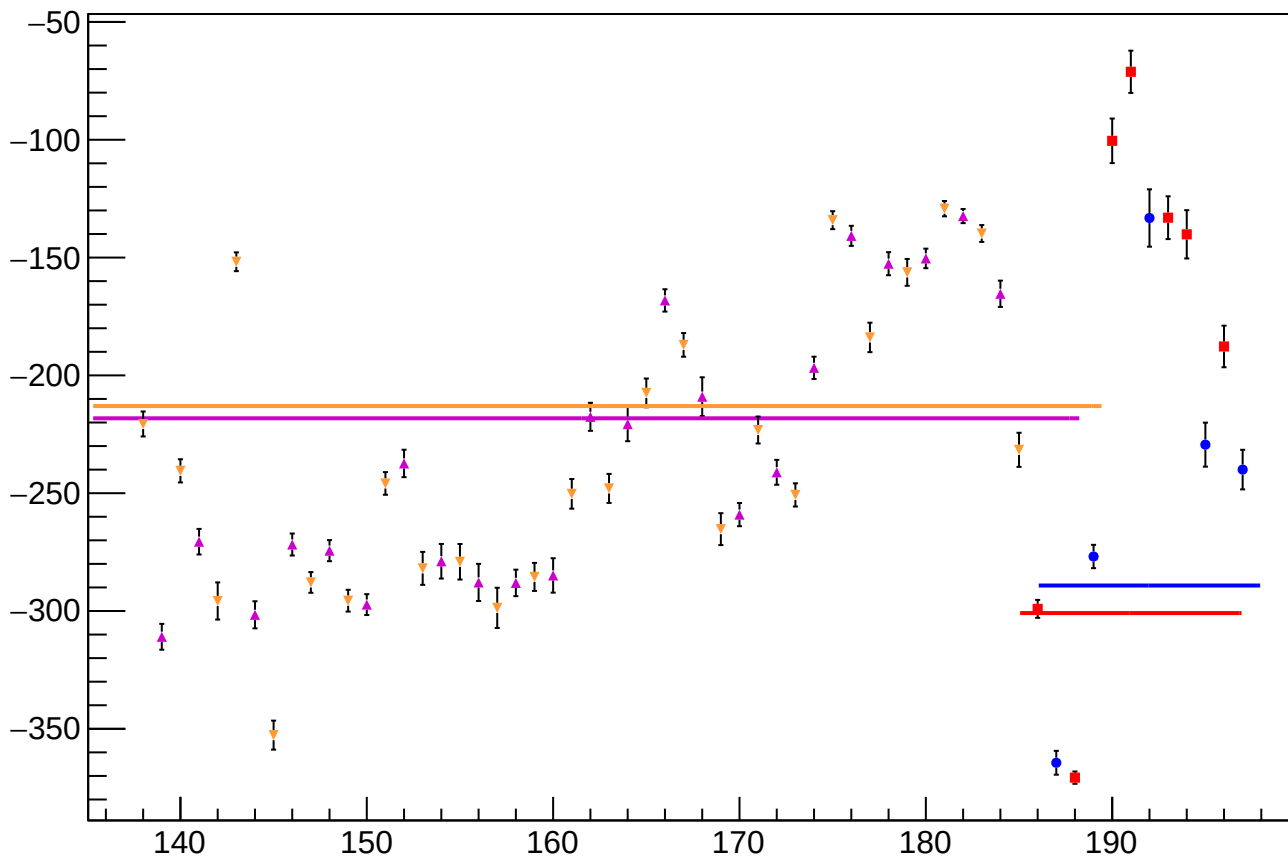
Right: 2.169 $\pm$ 0.022  $\chi^2$ /NDF: 785133.5/46

In: 3.196 $\pm$ 0.011  $\chi^2$ /NDF: 771008.8/44

Out: 2.409 $\pm$ 0.011  $\chi^2$ /NDF: 1012489.3/49

All: 2.798 $\pm$ 0.008  $\chi^2$ /NDF: 1786127.6/94

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $-289.184 \pm 2.986$   $\chi^2/\text{NDF}: 466.5/4$

Left Out:  $-213.020 \pm 1.035$   $\chi^2/\text{NDF}: 3826.2/24$

Right Out:  $-300.874 \pm 1.912$   $\chi^2/\text{NDF}: 2571.9/6$

Left In:  $-218.216 \pm 1.063$   $\chi^2/\text{NDF}: 3499.0/22$

Left:  $-215.550 \pm 0.742$   $\chi^2/\text{NDF}: 7337.5/47$

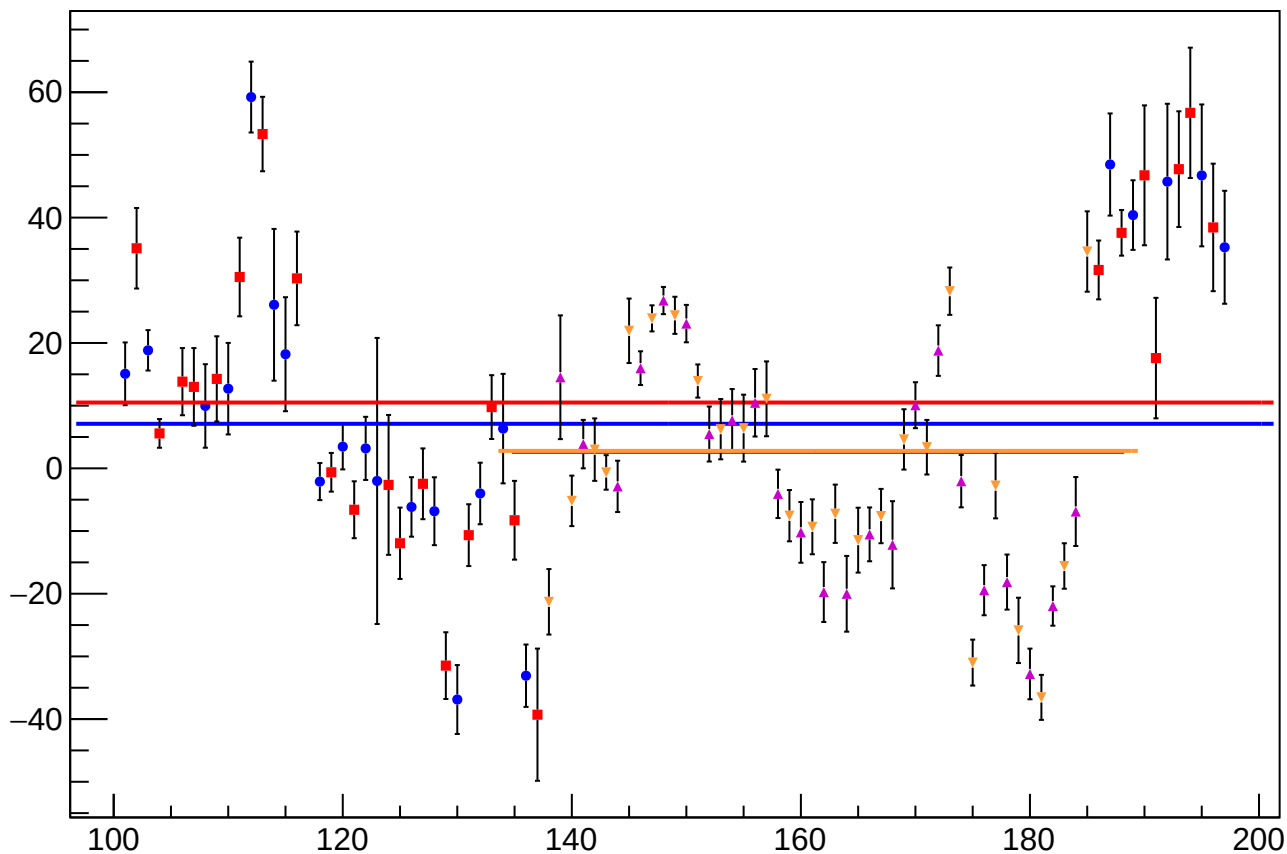
Right:  $-297.475 \pm 1.610$   $\chi^2/\text{NDF}: 3049.3/11$

In:  $-226.195 \pm 1.001$   $\chi^2/\text{NDF}: 4466.8/27$

Out:  $-232.942 \pm 0.911$   $\chi^2/\text{NDF}: 8030.6/31$

All:  $-229.888 \pm 0.674$   $\chi^2/\text{NDF}: 12522.2/59$

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $7.106 \pm 1.162$   $\chi^2/\text{NDF}: 359.3/21$

Left Out:  $2.786 \pm 0.780$   $\chi^2/\text{NDF}: 582.0/24$

Right Out:  $10.500 \pm 1.047$   $\chi^2/\text{NDF}: 381.0/24$

Left In:  $2.619 \pm 0.821$   $\chi^2/\text{NDF}: 477.6/22$

Left:  $2.707 \pm 0.565$   $\chi^2/\text{NDF}: 1059.7/47$

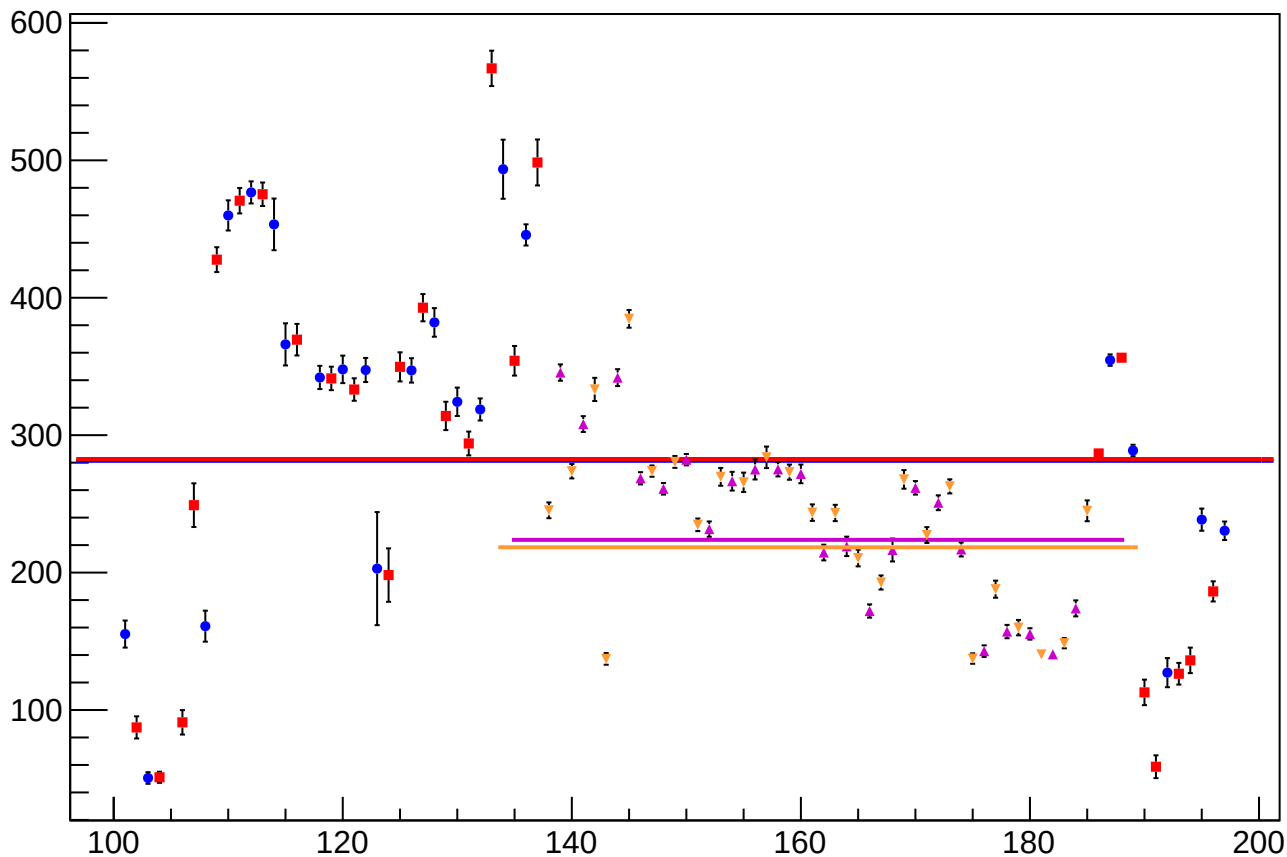
Right:  $8.980 \pm 0.778$   $\chi^2/\text{NDF}: 745.0/46$

In:  $4.111 \pm 0.670$   $\chi^2/\text{NDF}: 846.8/44$

Out:  $5.541 \pm 0.625$   $\chi^2/\text{NDF}: 997.9/49$

All:  $4.876 \pm 0.457$   $\chi^2/\text{NDF}: 1847.2/94$

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $281.347 \pm 1.644$   $\chi^2/\text{NDF}: 5733.8/21$

Left Out:  $218.389 \pm 1.038$   $\chi^2/\text{NDF}: 3696.7/24$

Right Out:  $282.663 \pm 1.253$   $\chi^2/\text{NDF}: 9678.0/24$

Left In:  $223.827 \pm 1.058$   $\chi^2/\text{NDF}: 3444.7/22$

Left:  $221.054 \pm 0.741$   $\chi^2/\text{NDF}: 7154.8/47$

Right:  $282.180 \pm 0.996$   $\chi^2/\text{NDF}: 15412.2/46$

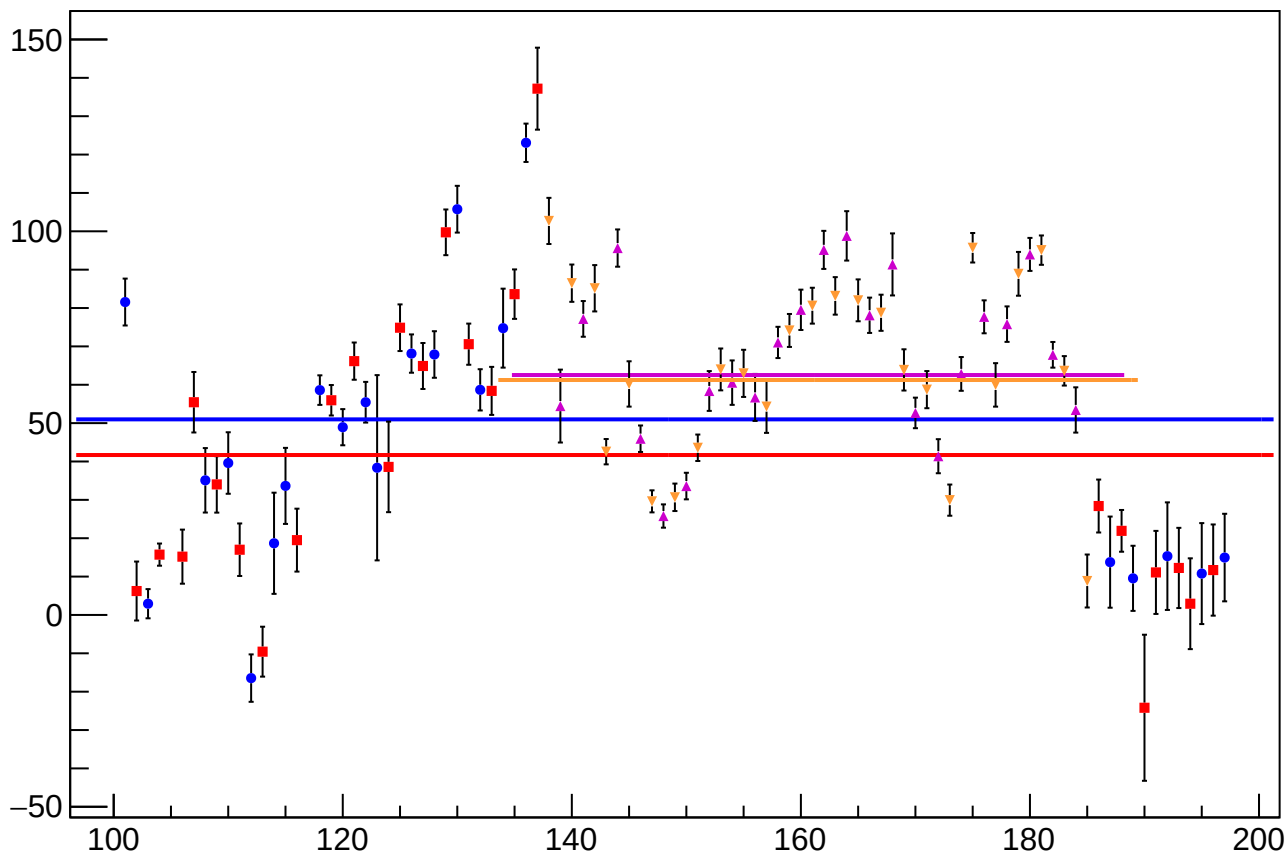
In:  $240.679 \pm 0.890$   $\chi^2/\text{NDF}: 10043.8/44$

Out:  $244.548 \pm 0.799$   $\chi^2/\text{NDF}: 14936.0/49$

All:  $242.821 \pm 0.595$   $\chi^2/\text{NDF}: 24990.2/94$



reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $50.979 \pm 1.367$   $\chi^2/\text{NDF}$ : 698.5/21

Left Out:  $61.240 \pm 0.903$   $\chi^2/\text{NDF}$ : 718.8/24

Right Out:  $41.686 \pm 1.260$   $\chi^2/\text{NDF}$ : 601.0/24

Left In:  $62.538 \pm 0.940$   $\chi^2/\text{NDF}$ : 520.0/22

Left:  $61.862 \pm 0.651$   $\chi^2/\text{NDF}$ : 1239.8/47

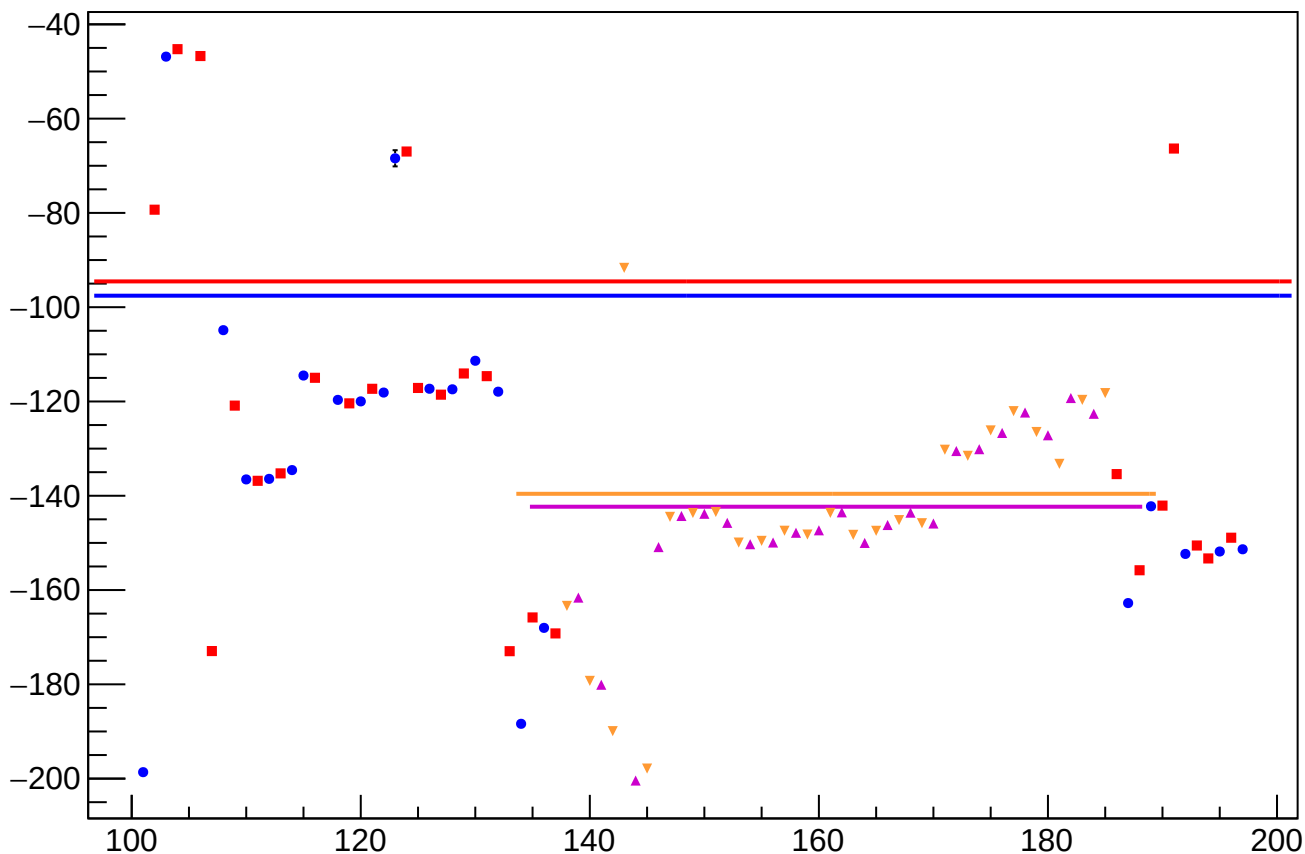
Right:  $45.955 \pm 0.926$   $\chi^2/\text{NDF}$ : 1324.6/46

In:  $58.826 \pm 0.775$   $\chi^2/\text{NDF}$ : 1267.0/44

Out:  $54.609 \pm 0.734$   $\chi^2/\text{NDF}$ : 1479.0/49

All:  $56.603 \pm 0.533$   $\chi^2/\text{NDF}$ : 2761.7/94

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-97.562 \pm 0.064$   $\chi^2/\text{NDF}: 619614.2/21$

Left Out:  $-139.585 \pm 0.043$   $\chi^2/\text{NDF}: 243895.1/24$

Right Out:  $-94.531 \pm 0.059$   $\chi^2/\text{NDF}: 652727.9/24$

Left In:  $-142.326 \pm 0.044$   $\chi^2/\text{NDF}: 144642.3/22$

Left:  $-140.930 \pm 0.031$   $\chi^2/\text{NDF}: 390521.6/47$

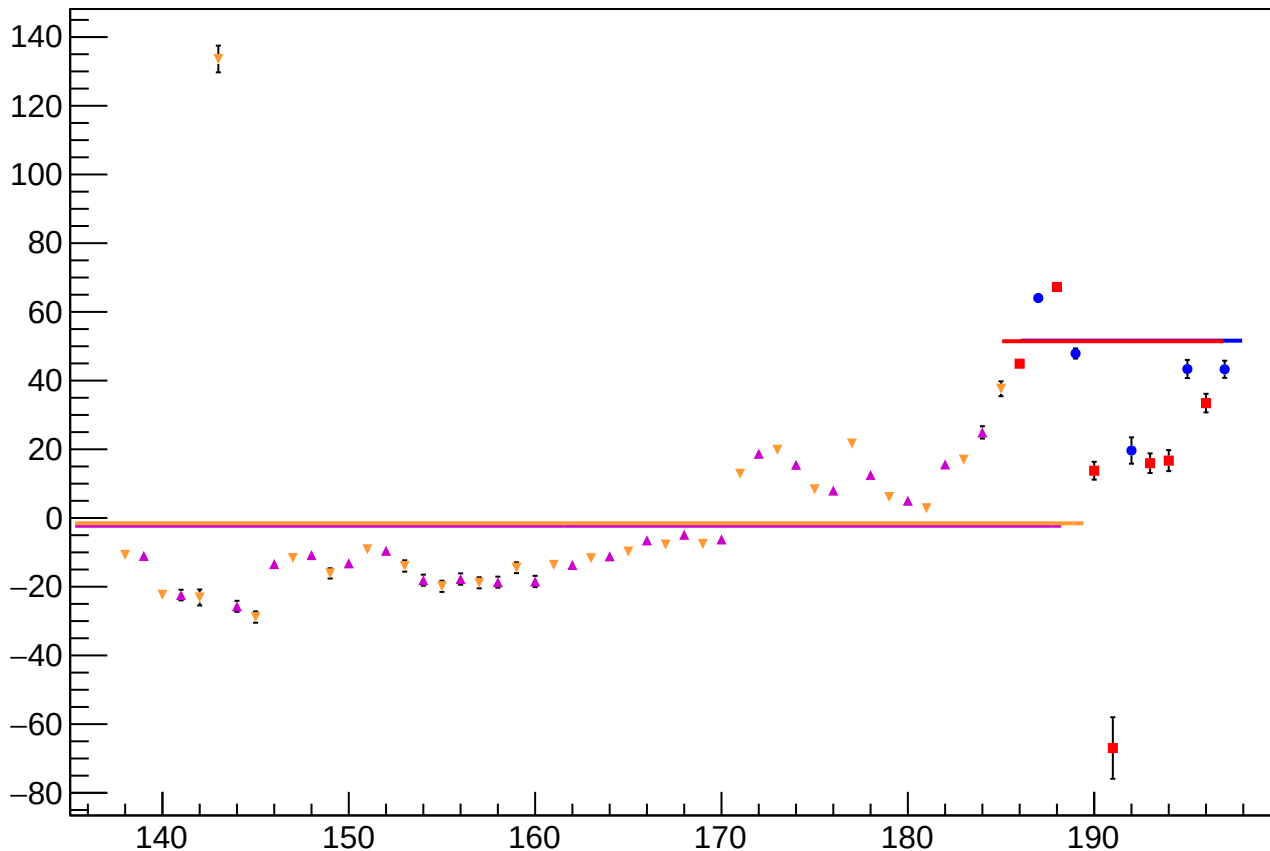
Right:  $-95.919 \pm 0.043$   $\chi^2/\text{NDF}: 1273568.2/46$

In:  $-127.914 \pm 0.036$   $\chi^2/\text{NDF}: 1098915.5/44$

Out:  $-123.766 \pm 0.035$   $\chi^2/\text{NDF}: 1280299.7/49$

All:  $-125.756 \pm 0.025$   $\chi^2/\text{NDF}: 2386061.7/94$

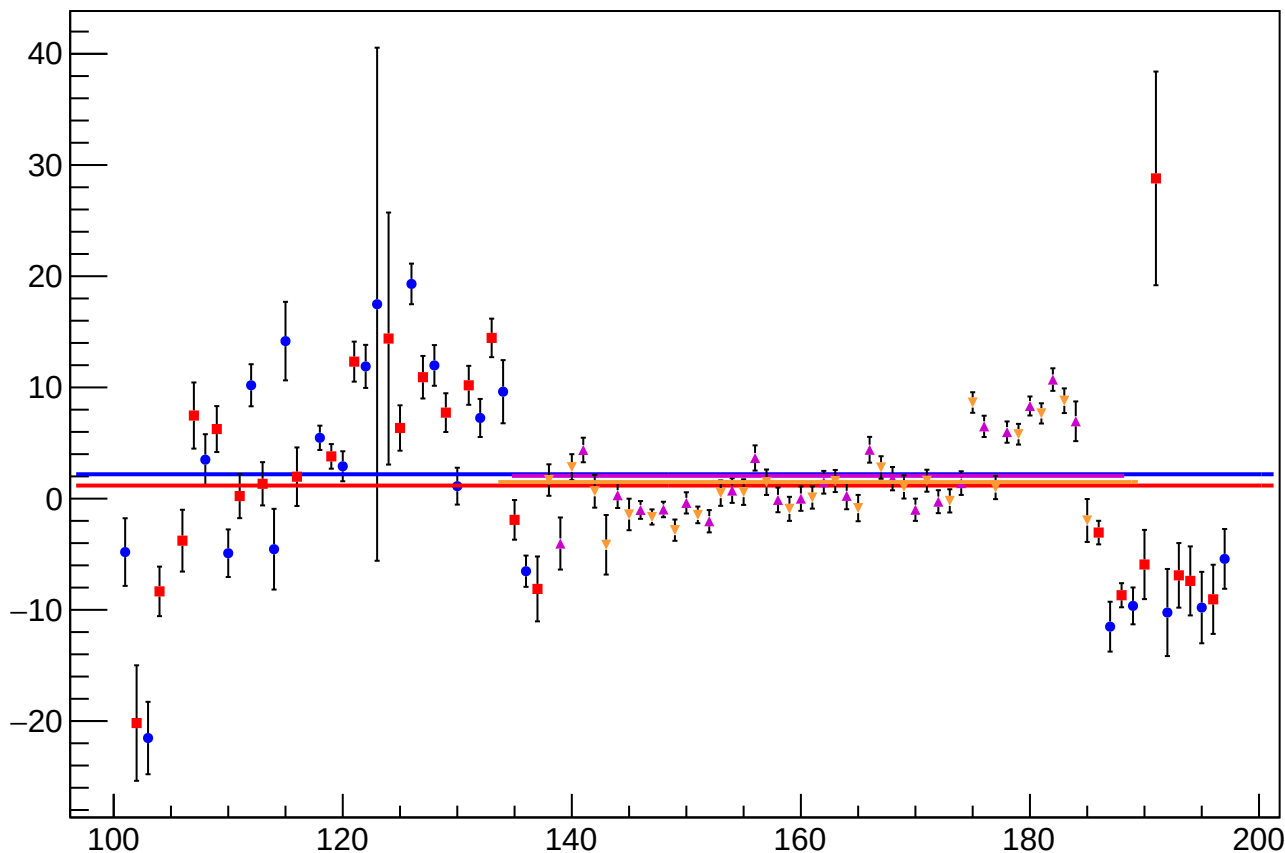
reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In: 51.627 $\pm$ 0.862  $\chi^2$ /NDF: 176.0/4  
 Left Out: -1.540 $\pm$ 0.268  $\chi^2$ /NDF: 4129.1/24  
 Right Out: 51.460 $\pm$ 0.532  $\chi^2$ /NDF: 1185.3/6  
 Left In: -2.244 $\pm$ 0.270  $\chi^2$ /NDF: 2561.6/22

Left: -1.890 $\pm$ 0.190  $\chi^2$ /NDF: 6694.2/47  
 Right: 51.506 $\pm$ 0.453  $\chi^2$ /NDF: 1361.3/11  
 In: 2.554 $\pm$ 0.257  $\chi^2$ /NDF: 6295.2/27  
 Out: 9.164 $\pm$ 0.239  $\chi^2$ /NDF: 13229.8/31  
 All: 6.099 $\pm$ 0.175  $\chi^2$ /NDF: 19879.2/59

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $2.191 \pm 0.426$   $\chi^2/\text{NDF}: 428.7/21$

Left Out:  $1.492 \pm 0.210$   $\chi^2/\text{NDF}: 258.3/24$

Right Out:  $1.177 \pm 0.388$   $\chi^2/\text{NDF}: 377.8/24$

Left In:  $2.051 \pm 0.215$   $\chi^2/\text{NDF}: 275.4/22$

Left:  $1.766 \pm 0.150$   $\chi^2/\text{NDF}: 537.2/47$

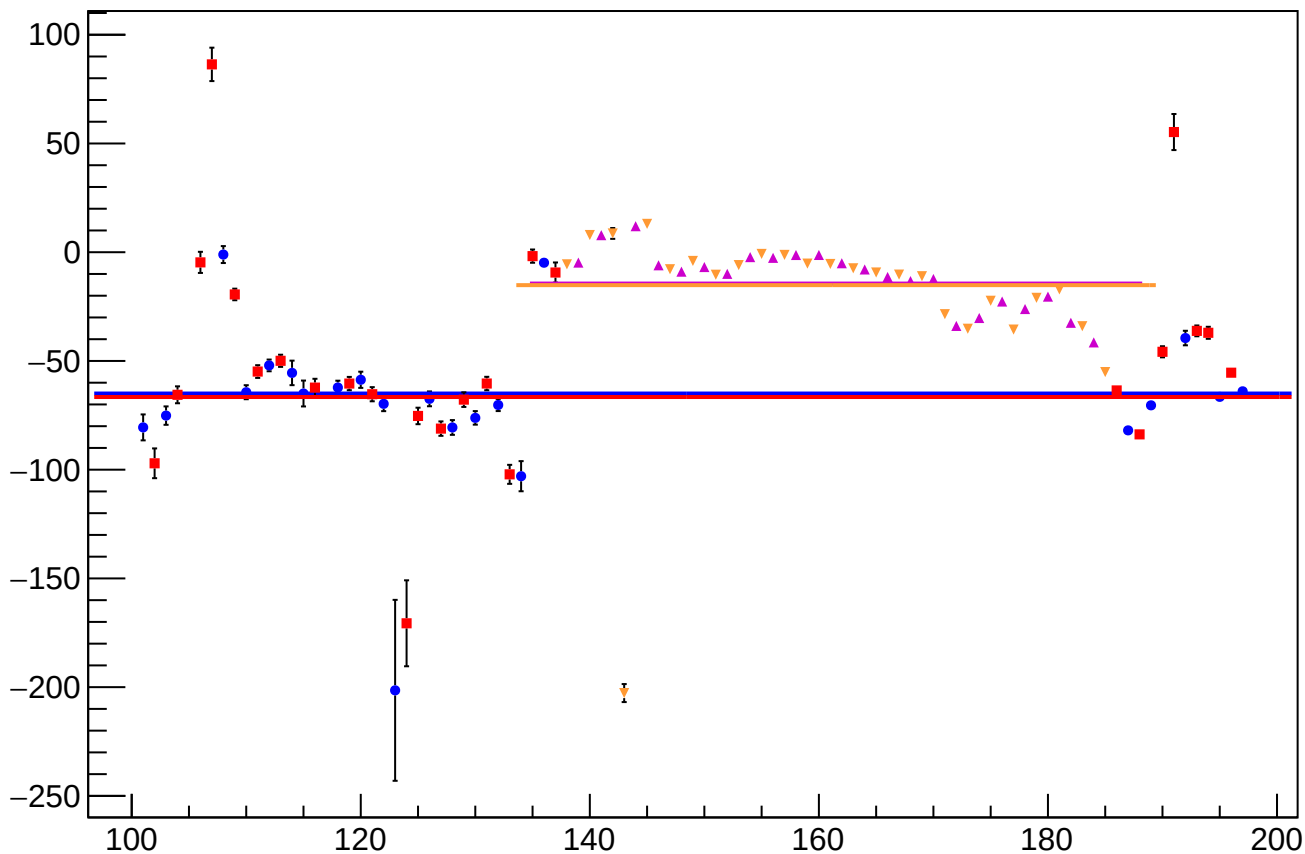
Right:  $1.637 \pm 0.287$   $\chi^2/\text{NDF}: 809.6/46$

In:  $2.080 \pm 0.192$   $\chi^2/\text{NDF}: 704.2/44$

Out:  $1.420 \pm 0.185$   $\chi^2/\text{NDF}: 636.6/49$

All:  $1.738 \pm 0.133$   $\chi^2/\text{NDF}: 1347.0/94$

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-64.983 \pm 0.551$   $\chi^2/\text{NDF}$ : 1461.6/21

Left Out:  $-15.140 \pm 0.267$   $\chi^2/\text{NDF}$ : 4451.9/24

Right Out:  $-66.583 \pm 0.387$   $\chi^2/\text{NDF}$ : 3029.7/24

Left In:  $-14.415 \pm 0.268$   $\chi^2/\text{NDF}$ : 2065.7/22

Left:  $-14.779 \pm 0.189$   $\chi^2/\text{NDF}$ : 6521.3/47

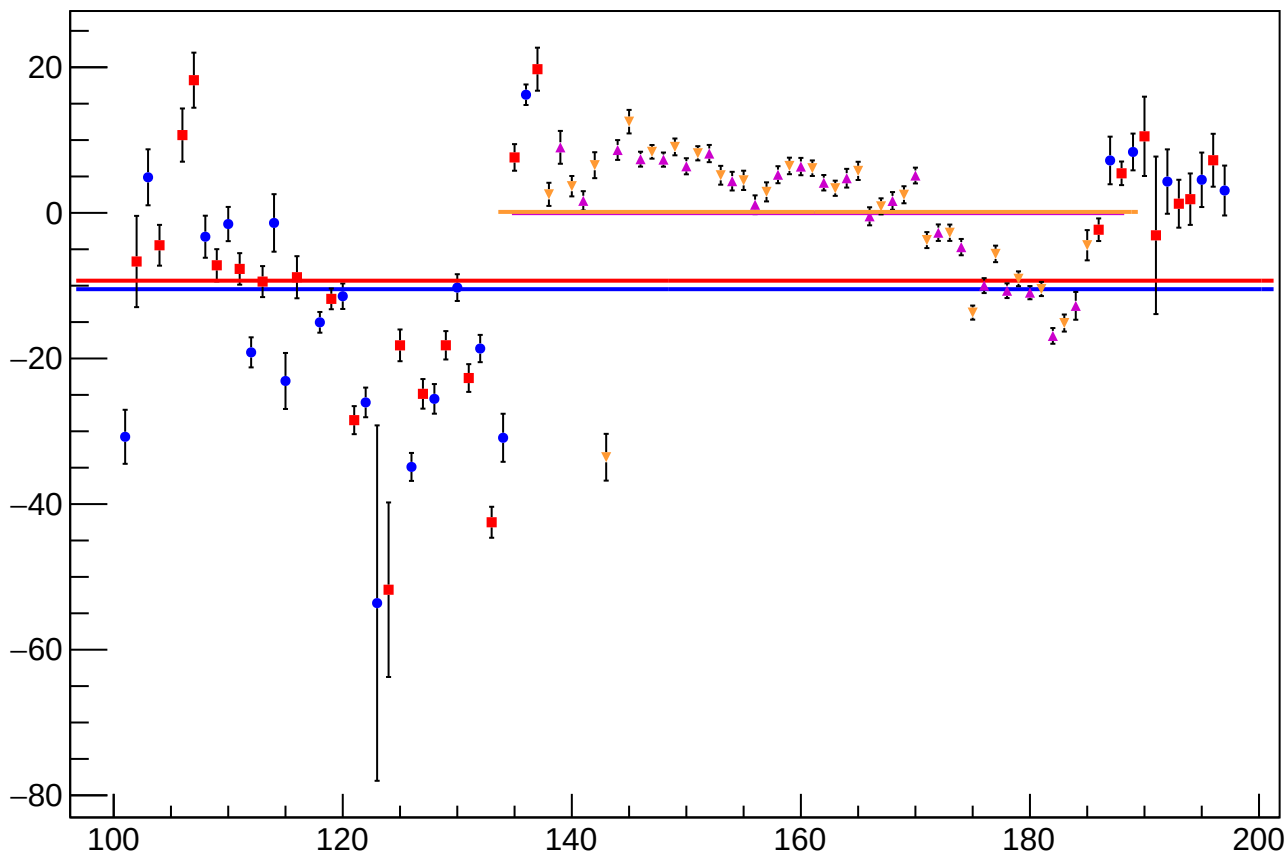
Right:  $-66.055 \pm 0.317$   $\chi^2/\text{NDF}$ : 4497.0/46

In:  $-24.093 \pm 0.241$   $\chi^2/\text{NDF}$ : 10338.2/44

Out:  $-31.732 \pm 0.220$   $\chi^2/\text{NDF}$ : 19467.2/49

All:  $-28.267 \pm 0.162$   $\chi^2/\text{NDF}$ : 30354.0/94

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-10.481 \pm 0.499$   $\chi^2/\text{NDF}$ : 932.4/21

Left Out:  $0.133 \pm 0.238$   $\chi^2/\text{NDF}$ : 1146.9/24

Right Out:  $-9.313 \pm 0.470$   $\chi^2/\text{NDF}$ : 930.5/24

Left In:  $-0.036 \pm 0.242$   $\chi^2/\text{NDF}$ : 1027.6/22

Left:  $0.049 \pm 0.170$   $\chi^2/\text{NDF}$ : 2174.8/47

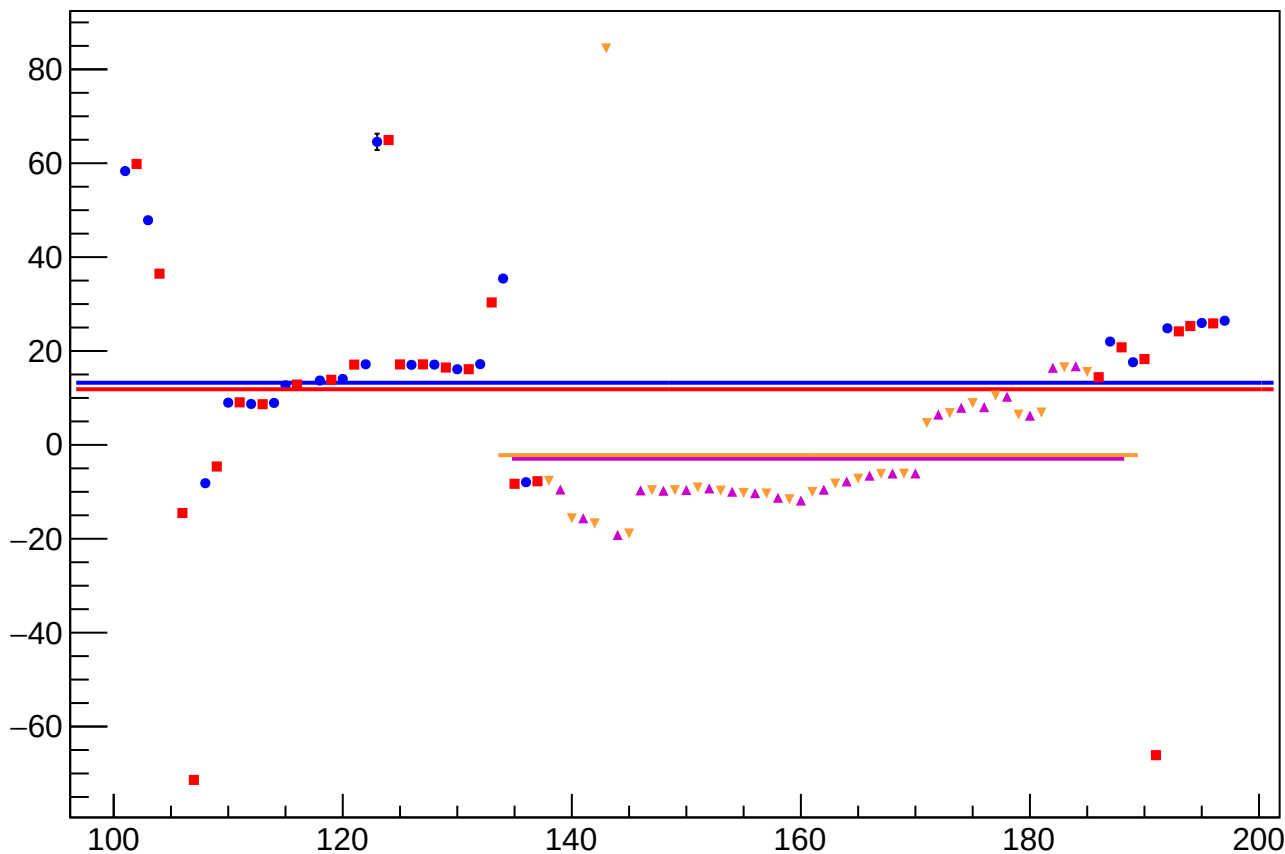
Right:  $-9.861 \pm 0.342$   $\chi^2/\text{NDF}$ : 1865.7/46

In:  $-2.030 \pm 0.218$   $\chi^2/\text{NDF}$ : 2314.5/44

Out:  $-1.803 \pm 0.213$   $\chi^2/\text{NDF}$ : 2399.1/49

All:  $-1.913 \pm 0.152$   $\chi^2/\text{NDF}$ : 4714.2/94

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 13.240 $\pm$ 0.027  $\chi^2$ /NDF: 425021.4/21

Left Out: -2.176 $\pm$ 0.011  $\chi^2$ /NDF: 1047394.9/24

Right Out: 11.855 $\pm$ 0.025  $\chi^2$ /NDF: 686197.7/24

Left In: -2.949 $\pm$ 0.011  $\chi^2$ /NDF: 770702.4/22

Left: -2.562 $\pm$ 0.008  $\chi^2$ /NDF: 1820593.2/47

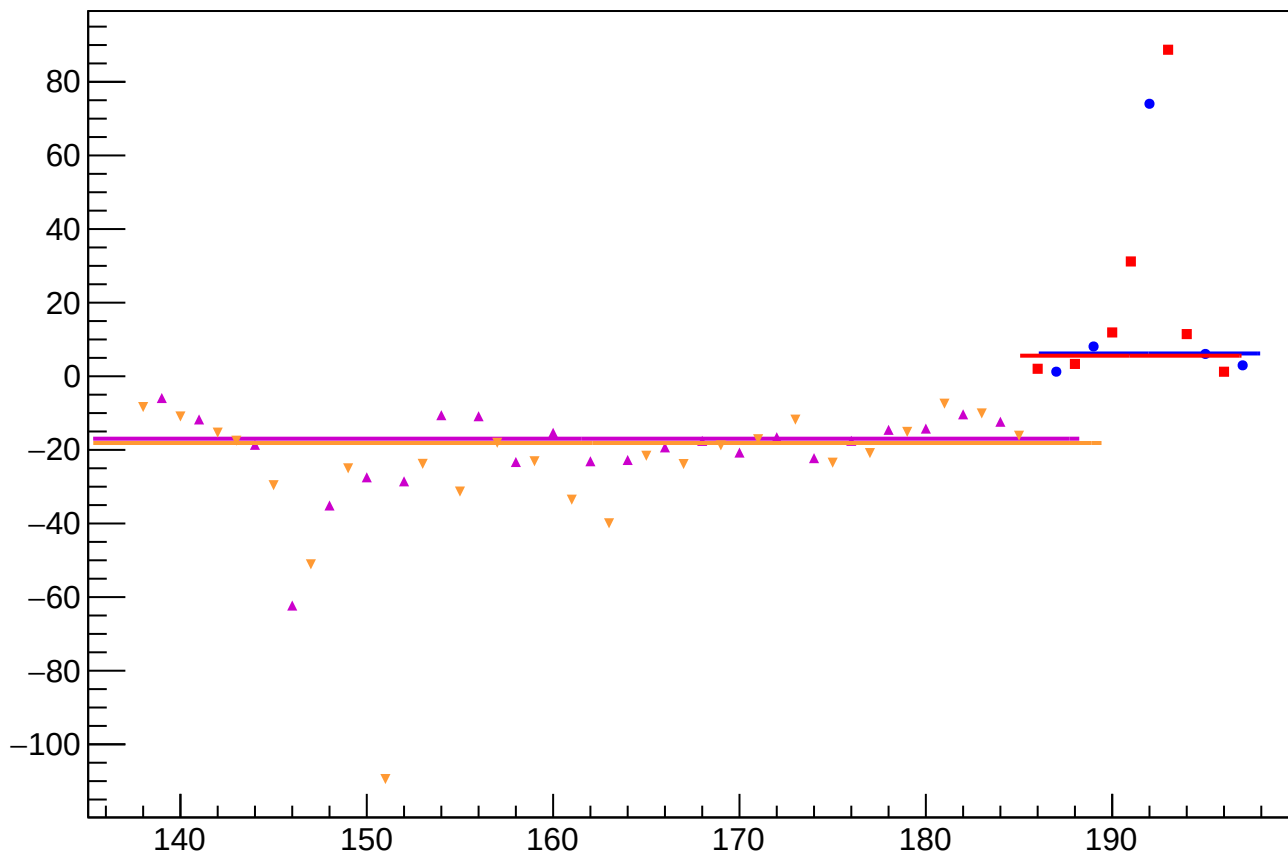
Right: 12.505 $\pm$ 0.018  $\chi^2$ /NDF: 1112619.8/46

In: -0.655 $\pm$ 0.010  $\chi^2$ /NDF: 1505383.5/44

Out: 0.022 $\pm$ 0.010  $\chi^2$ /NDF: 1992048.2/49

All: -0.313 $\pm$ 0.007  $\chi^2$ /NDF: 3499685.0/94

reg\_asym\_bcm\_an\_ds3\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $6.196 \pm 0.099$   $\chi^2/\text{NDF}: 11330.6/4$   
 Left Out:  $-18.127 \pm 0.039$   $\chi^2/\text{NDF}: 88514.4/24$   
 Right Out:  $5.595 \pm 0.079$   $\chi^2/\text{NDF}: 24770.1/6$   
 Left In:  $-16.958 \pm 0.038$   $\chi^2/\text{NDF}: 44759.9/22$

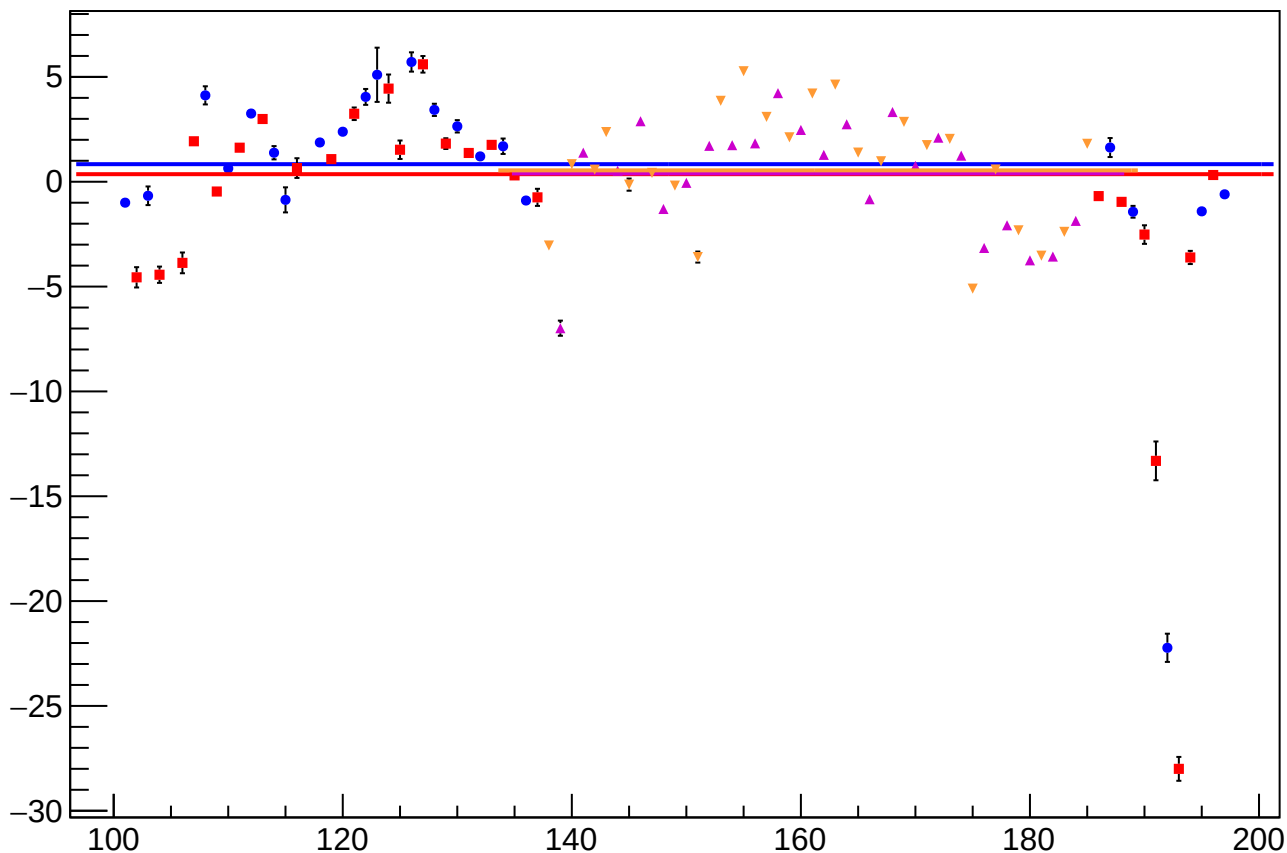
Left:  $-17.528 \pm 0.027$   $\chi^2/\text{NDF}: 133736.2/47$   
 Right:  $5.827 \pm 0.062$   $\chi^2/\text{NDF}: 36123.1/11$

In:  $-14.002 \pm 0.035$   $\chi^2/\text{NDF}: 103490.3/27$   
 Out:  $-13.476 \pm 0.035$   $\chi^2/\text{NDF}: 185988.8/31$

All:  $-13.735 \pm 0.025$   $\chi^2/\text{NDF}: 289590.5/59$



reg\_asym\_bcm\_an\_ds3\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $0.838 \pm 0.054$   $\chi^2/\text{NDF}: 2255.6/21$

Left Out:  $0.543 \pm 0.032$   $\chi^2/\text{NDF}: 7067.6/24$

Right Out:  $0.361 \pm 0.050$   $\chi^2/\text{NDF}: 4095.2/24$

Left In:  $0.398 \pm 0.031$   $\chi^2/\text{NDF}: 6286.3/22$

Left:  $0.467 \pm 0.022$   $\chi^2/\text{NDF}: 13364.5/47$

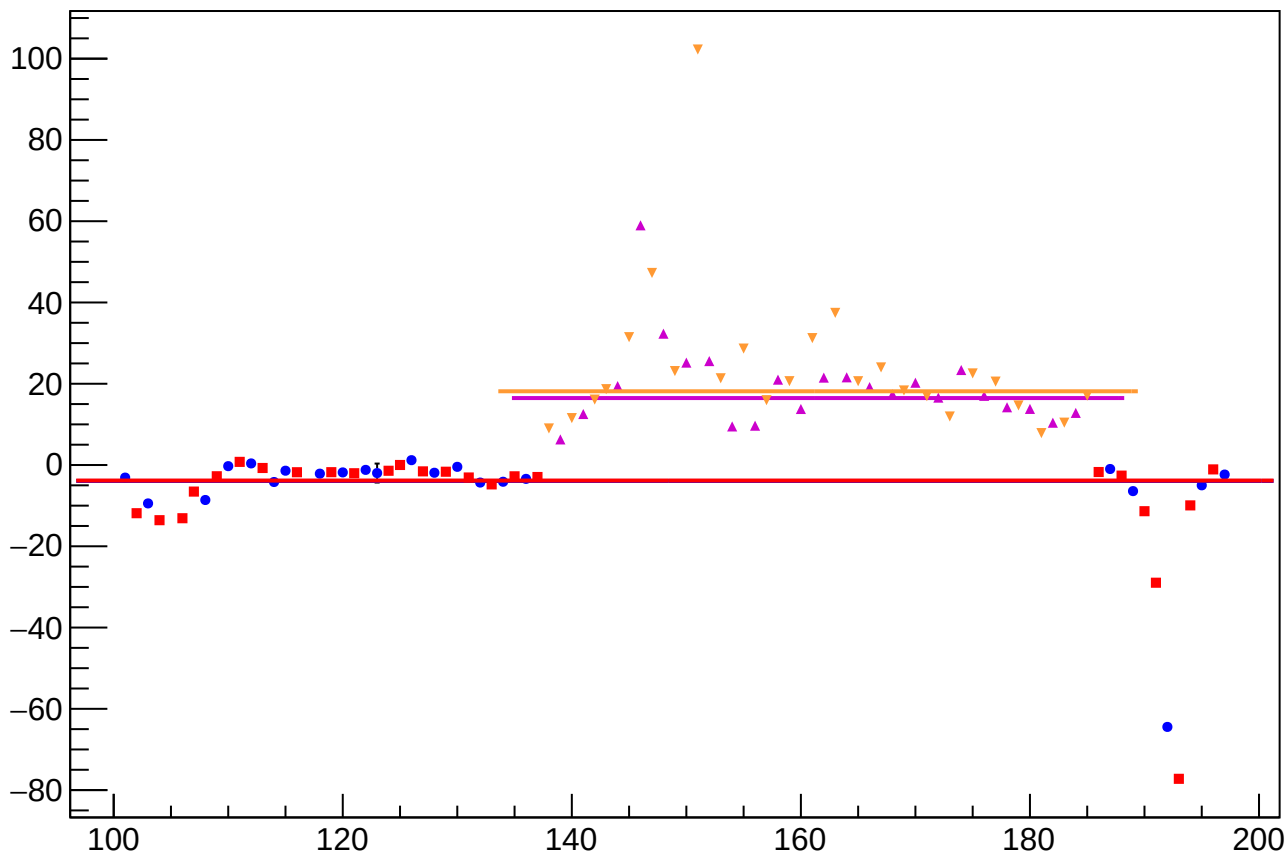
Right:  $0.584 \pm 0.037$   $\chi^2/\text{NDF}: 6392.5/46$

In:  $0.506 \pm 0.027$   $\chi^2/\text{NDF}: 8592.2/44$

Out:  $0.490 \pm 0.027$   $\chi^2/\text{NDF}: 11172.0/49$

All:  $0.498 \pm 0.019$   $\chi^2/\text{NDF}: 19764.4/94$

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -3.923+/-0.066  $\chi^2/\text{NDF}$ : 12302.6/21

Left Out: 18.147+/-0.039  $\chi^2/\text{NDF}$ : 77805.7/24

Right Out: -3.825+/-0.054  $\chi^2/\text{NDF}$ : 26267.7/24

Left In: 16.477+/-0.038  $\chi^2/\text{NDF}$ : 41326.5/22

Left: 17.279+/-0.027  $\chi^2/\text{NDF}$ : 120078.9/47

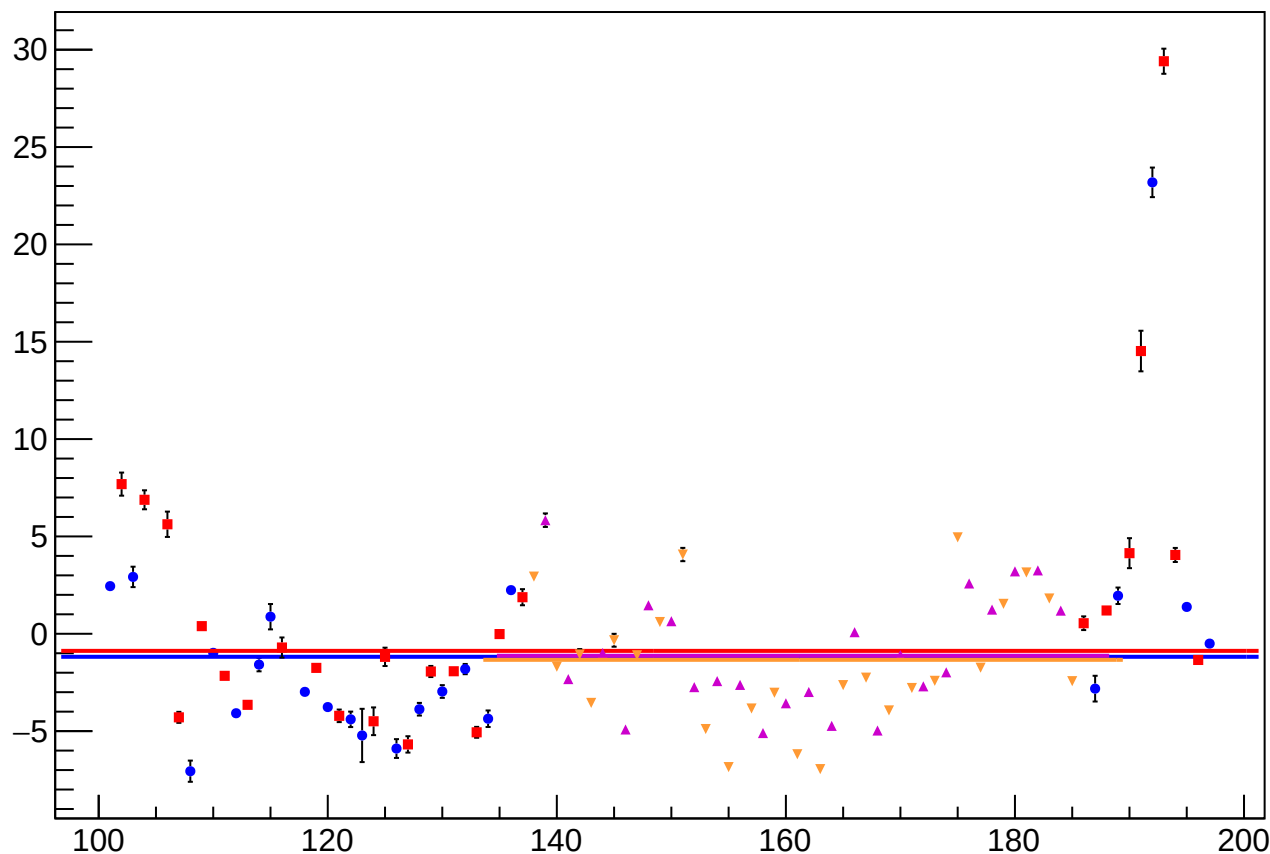
Right: -3.864+/-0.042  $\chi^2/\text{NDF}$ : 38571.6/46

In: 11.511+/-0.033  $\chi^2/\text{NDF}$ : 125198.2/44

Out: 10.647+/-0.032  $\chi^2/\text{NDF}$ : 211666.2/49

All: 11.066+/-0.023  $\chi^2/\text{NDF}$ : 337222.7/94

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-1.182 \pm 0.063$   $\chi^2/\text{NDF}: 2627.4/21$

Left Out:  $-1.338 \pm 0.036$   $\chi^2/\text{NDF}: 7920.8/24$

Right Out:  $-0.878 \pm 0.059$   $\chi^2/\text{NDF}: 4356.5/24$

Left In:  $-1.129 \pm 0.034$   $\chi^2/\text{NDF}: 6778.7/22$

Left:  $-1.228 \pm 0.025$   $\chi^2/\text{NDF}: 14717.3/47$

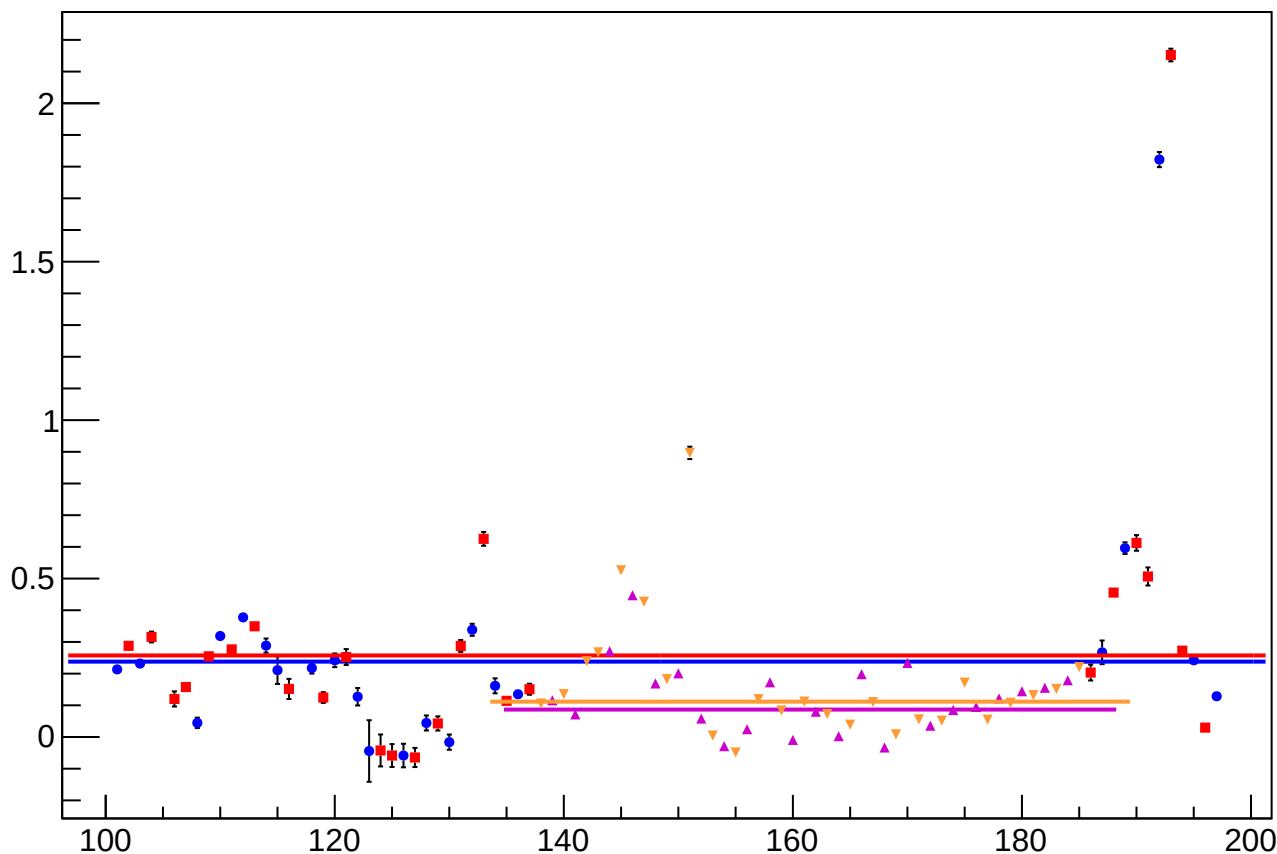
Right:  $-1.020 \pm 0.043$   $\chi^2/\text{NDF}: 6996.2/46$

In:  $-1.141 \pm 0.030$   $\chi^2/\text{NDF}: 9406.7/44$

Out:  $-1.214 \pm 0.031$   $\chi^2/\text{NDF}: 12321.4/49$

All:  $-1.176 \pm 0.021$   $\chi^2/\text{NDF}: 21730.9/94$

reg\_asym\_bcm\_an\_ds3\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.238 $\pm$ 0.003  $\chi^2$ /NDF: 5707.8/21

Left Out: 0.112 $\pm$ 0.002  $\chi^2$ /NDF:4459.9/24

Right Out: 0.257 $\pm$ 0.003  $\chi^2$ /NDF: 11592.7/24

Left In: 0.087 $\pm$ 0.001  $\chi^2$ /NDF:3661.4/22

Left: 0.098 $\pm$ 0.001  $\chi^2$ /NDF: 8251.0/47

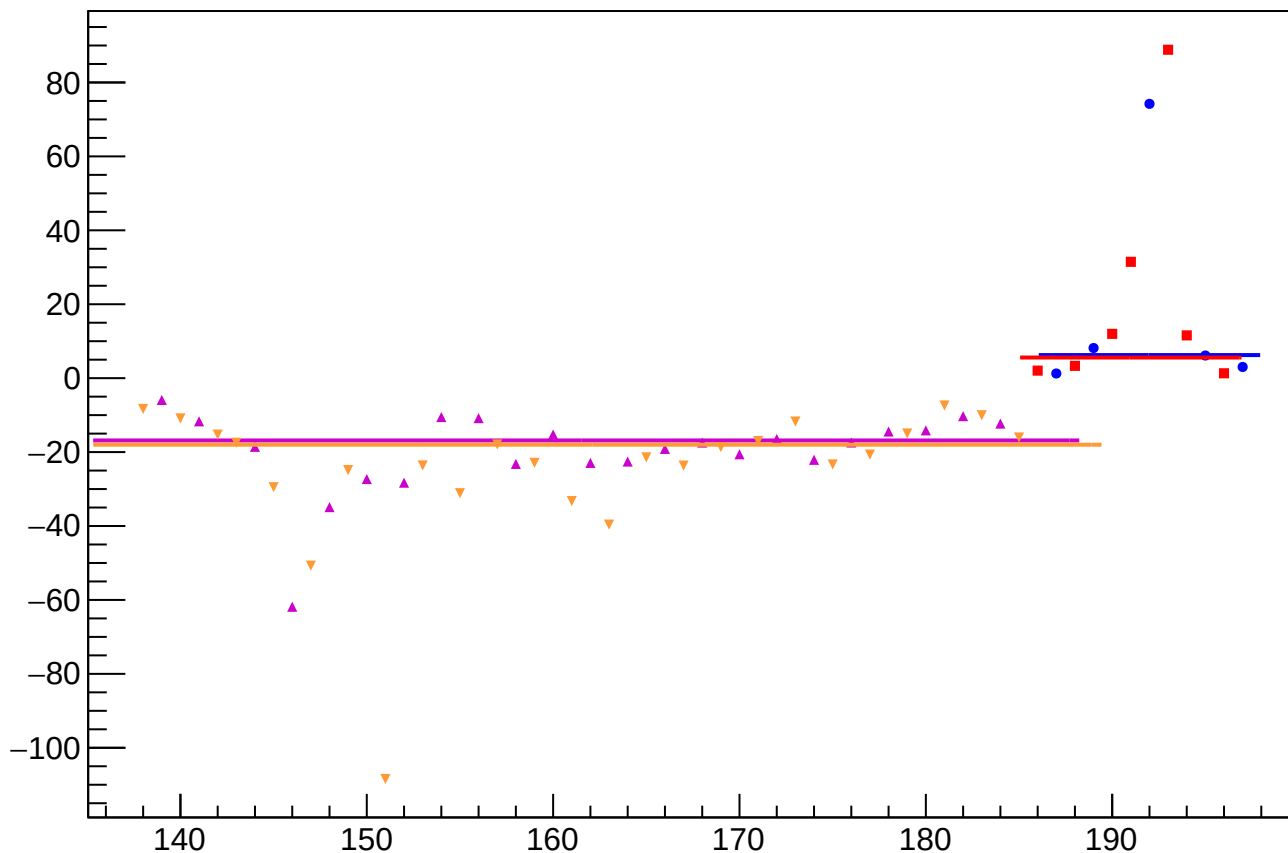
Right: 0.248 $\pm$ 0.002  $\chi^2$ /NDF: 17320.7/46

In: 0.115 $\pm$ 0.001  $\chi^2$ /NDF:11257.9/44

Out: 0.144 $\pm$ 0.001  $\chi^2$ /NDF:17898.4/49

All: 0.129 $\pm$ 0.001  $\chi^2$ /NDF: 29386.4/94

reg\_asym\_bcm\_an\_ds\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $6.246 \pm 0.099$   $\chi^2/\text{NDF}: 11459.3/4$

Left Out:  $-18.004 \pm 0.039$   $\chi^2/\text{NDF}: 88352.2/24$

Right Out:  $5.585 \pm 0.078$   $\chi^2/\text{NDF}: 25099.8/6$

Left In:  $-16.854 \pm 0.038$   $\chi^2/\text{NDF}: 44680.7/22$

Left:  $-17.415 \pm 0.027$   $\chi^2/\text{NDF}: 133485.7/47$

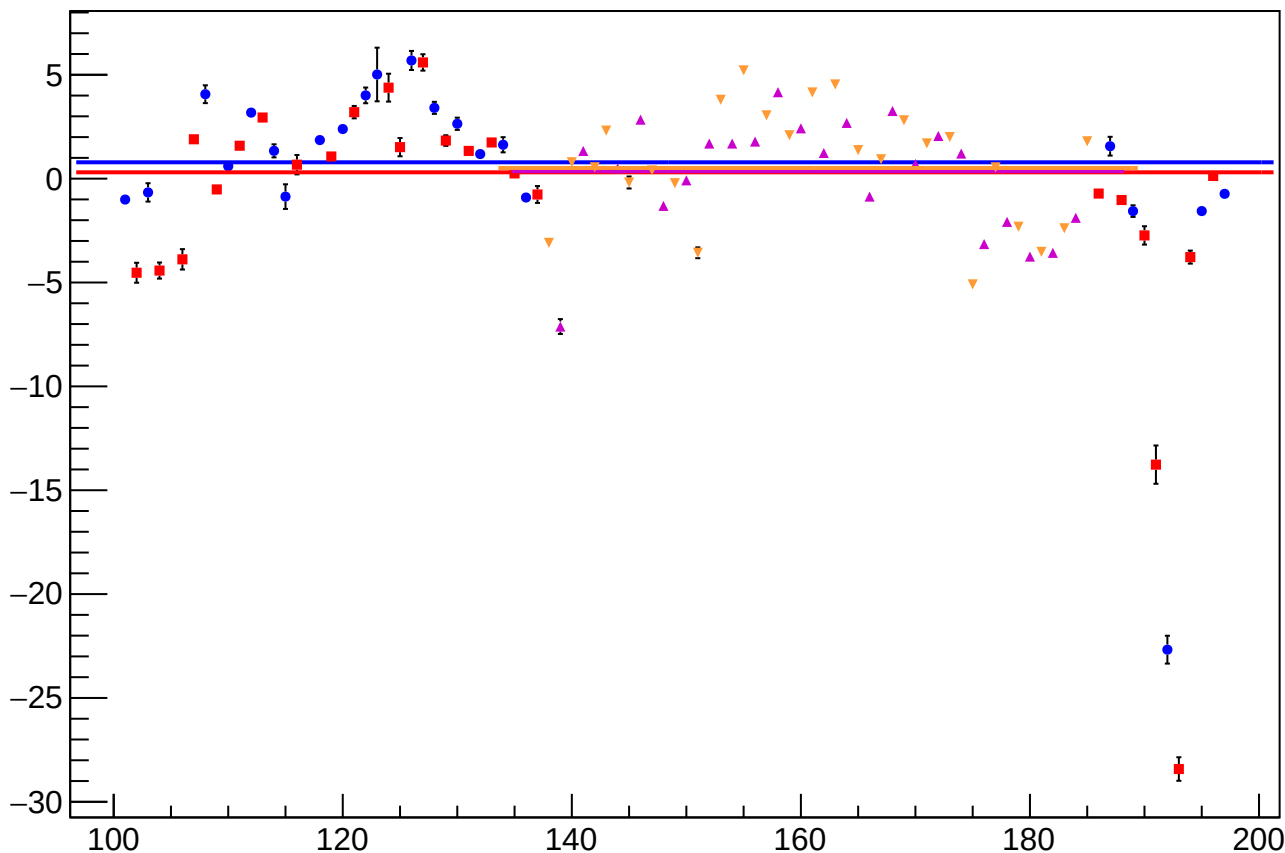
Right:  $5.840 \pm 0.061$   $\chi^2/\text{NDF}: 36586.6/11$

In:  $-13.916 \pm 0.035$   $\chi^2/\text{NDF}: 103768.5/27$

Out:  $-13.361 \pm 0.035$   $\chi^2/\text{NDF}: 186648.1/31$

All:  $-13.634 \pm 0.025$   $\chi^2/\text{NDF}: 290542.6/59$

reg\_asym\_bcm\_an\_ds\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $0.787 \pm 0.054$   $\chi^2/\text{NDF}: 2340.4/21$

Left Out:  $0.511 \pm 0.032$   $\chi^2/\text{NDF}: 7053.0/24$

Right Out:  $0.305 \pm 0.050$   $\chi^2/\text{NDF}: 4233.3/24$

Left In:  $0.361 \pm 0.030$   $\chi^2/\text{NDF}: 6273.5/22$

Left:  $0.432 \pm 0.022$   $\chi^2/\text{NDF}: 13338.0/47$

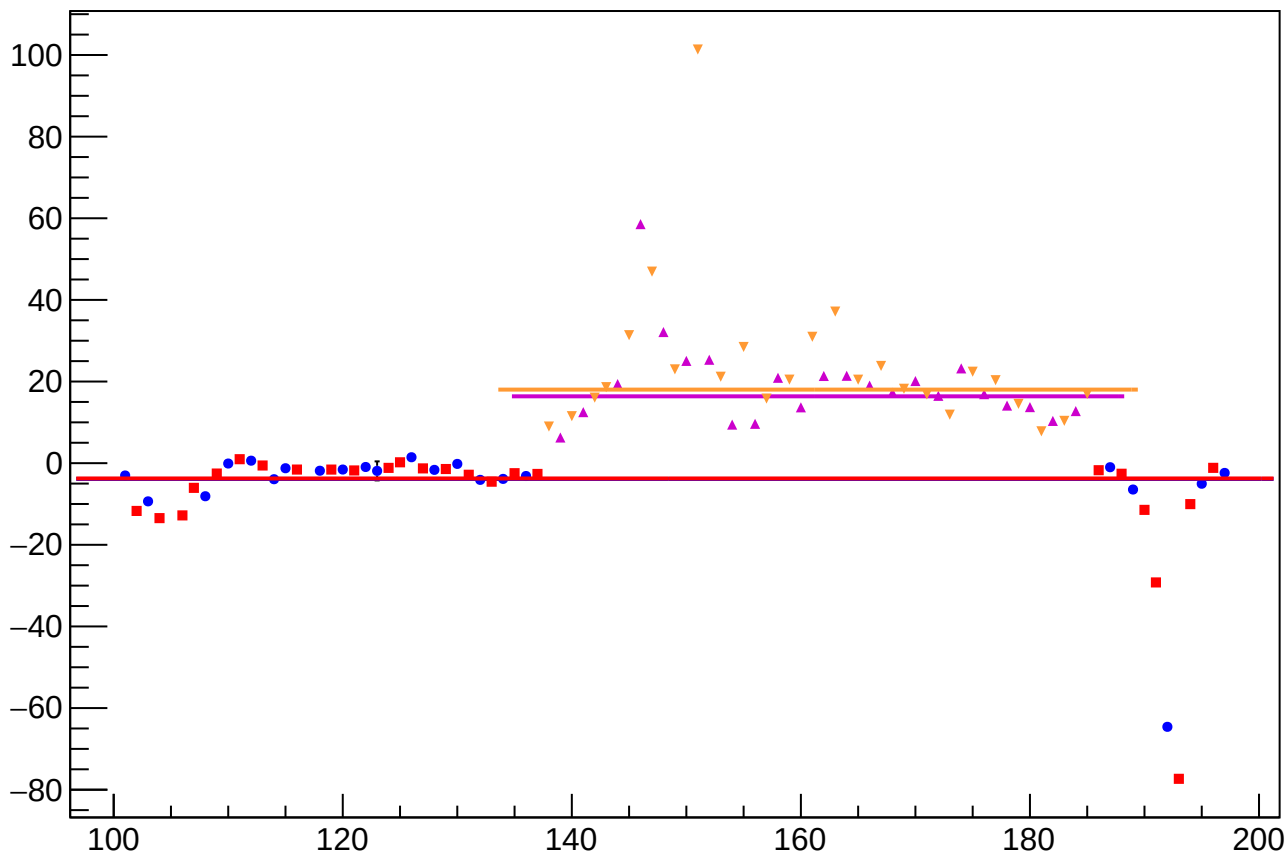
Right:  $0.530 \pm 0.037$   $\chi^2/\text{NDF}: 6616.6/46$

In:  $0.465 \pm 0.026$   $\chi^2/\text{NDF}: 8661.5/44$

Out:  $0.451 \pm 0.027$   $\chi^2/\text{NDF}: 11298.2/49$

All:  $0.458 \pm 0.019$   $\chi^2/\text{NDF}: 19959.8/94$

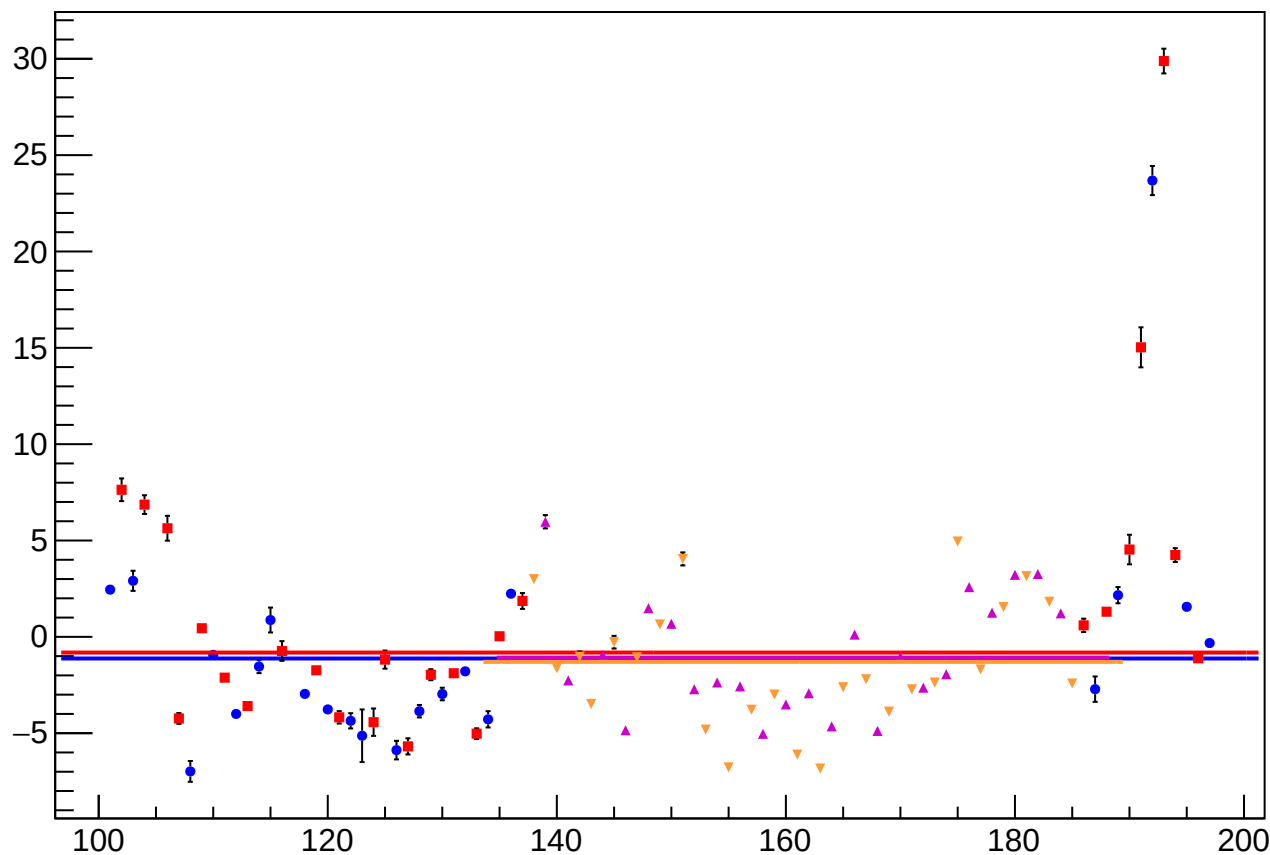
reg\_asym\_bcm\_an\_ds\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-3.866 \pm 0.066$   $\chi^2/\text{NDF}: 12515.3/21$   
 Left Out:  $18.023 \pm 0.039$   $\chi^2/\text{NDF}: 77674.0/24$   
 Right Out:  $-3.753 \pm 0.054$   $\chi^2/\text{NDF}: 26667.0/24$   
 Left In:  $16.377 \pm 0.037$   $\chi^2/\text{NDF}: 41253.5/22$

Left:  $17.168 \pm 0.027$   $\chi^2/\text{NDF}: 119859.6/47$   
 Right:  $-3.798 \pm 0.042$   $\chi^2/\text{NDF}: 39184.0/46$   
 In:  $11.464 \pm 0.033$   $\chi^2/\text{NDF}: 124968.4/44$   
 Out:  $10.578 \pm 0.032$   $\chi^2/\text{NDF}: 211719.0/49$   
 All:  $11.007 \pm 0.023$   $\chi^2/\text{NDF}: 337070.2/94$

reg\_asym\_bcm\_an\_ds\_diff\_bpm4eY\_slope vs Slug, Sign Corrected

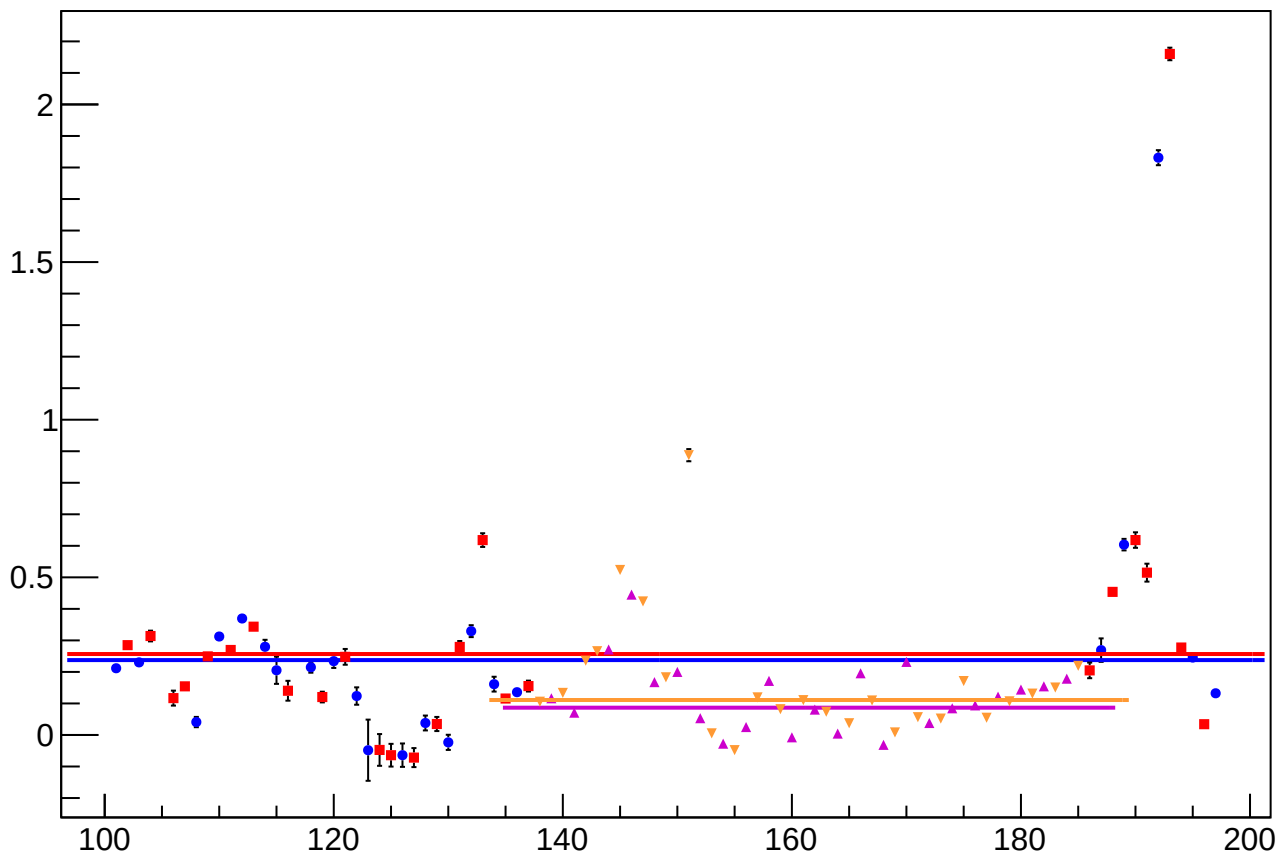


Right In:  $-1.123 \pm 0.063$   $\chi^2/\text{NDF}: 2699.2/21$   
 Left Out:  $-1.297 \pm 0.036$   $\chi^2/\text{NDF}: 7903.2/24$   
 Right Out:  $-0.815 \pm 0.059$   $\chi^2/\text{NDF}: 4488.9/24$   
 Left In:  $-1.081 \pm 0.034$   $\chi^2/\text{NDF}: 6764.0/22$

Left:  $-1.183 \pm 0.025$   $\chi^2/\text{NDF}: 14686.6/47$   
 Right:  $-0.959 \pm 0.043$   $\chi^2/\text{NDF}: 7201.0/46$   
 In:  $-1.090 \pm 0.030$   $\chi^2/\text{NDF}: 9463.6/44$   
 Out:  $-1.168 \pm 0.031$   $\chi^2/\text{NDF}: 12441.2/49$   
 All:  $-1.128 \pm 0.021$   $\chi^2/\text{NDF}: 21908.1/94$



reg\_asym\_bcm\_an\_ds\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.238 $\pm$ 0.003  $\chi^2$ /NDF: 5799.4/21

Left Out: 0.111 $\pm$ 0.002  $\chi^2$ /NDF:4452.0/24

Right Out: 0.257 $\pm$ 0.003  $\chi^2$ /NDF: 11740.5/24

Left In: 0.087 $\pm$ 0.001  $\chi^2$ /NDF:3631.4/22

Left: 0.098 $\pm$ 0.001  $\chi^2$ /NDF: 8208.0/47

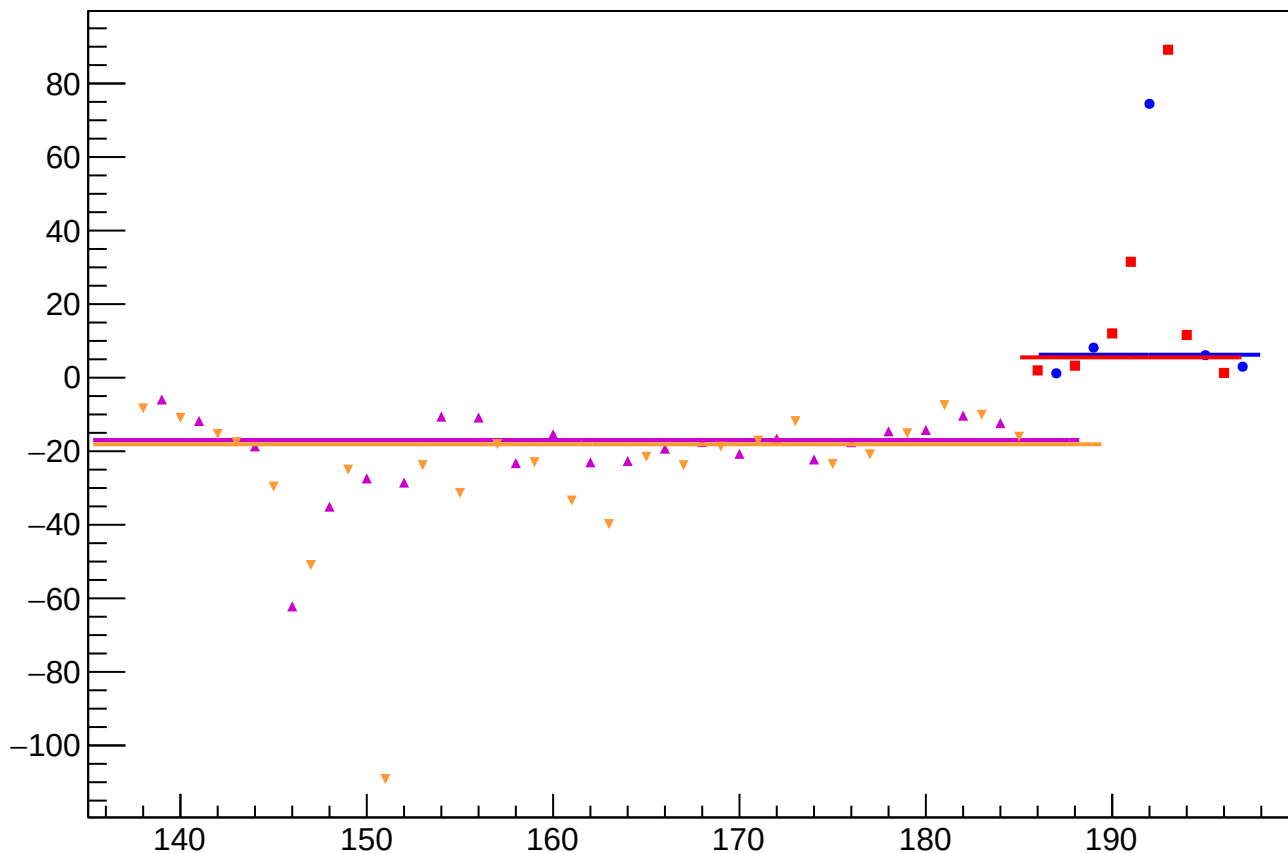
Right: 0.248 $\pm$ 0.002  $\chi^2$ /NDF: 17559.8/46

In: 0.114 $\pm$ 0.001  $\chi^2$ /NDF:11330.2/44

Out: 0.143 $\pm$ 0.001  $\chi^2$ /NDF:18060.8/49

All: 0.128 $\pm$ 0.001  $\chi^2$ /NDF: 29614.5/94

reg\_asym\_bcm\_an\_us\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $6.237 \pm 0.099$   $\chi^2/\text{NDF}: 11471.3/4$

Left Out:  $-18.112 \pm 0.039$   $\chi^2/\text{NDF}: 88488.2/24$

Right Out:  $5.527 \pm 0.078$   $\chi^2/\text{NDF}: 25111.8/6$

Left In:  $-16.945 \pm 0.038$   $\chi^2/\text{NDF}: 44756.2/22$

Left:  $-17.514 \pm 0.027$   $\chi^2/\text{NDF}: 133707.4/47$

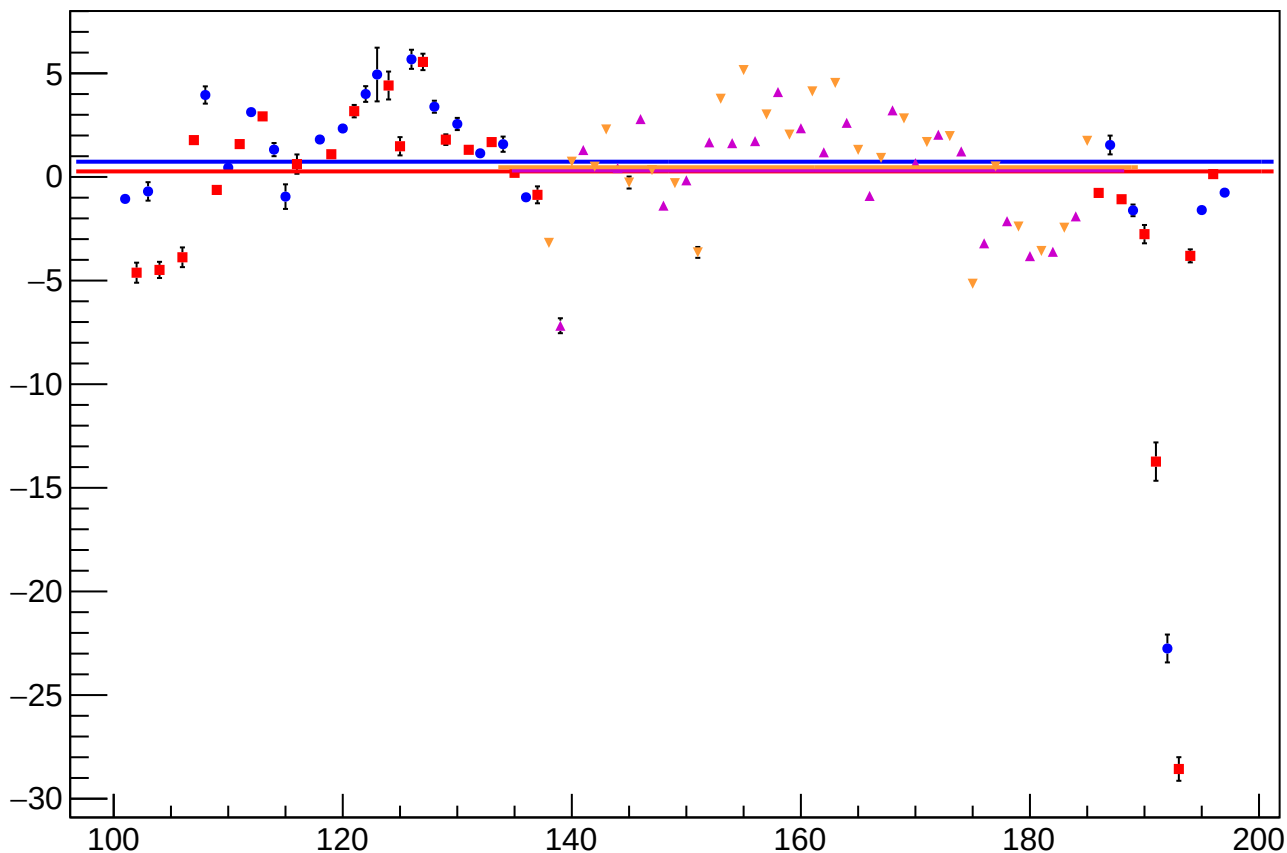
Right:  $5.798 \pm 0.061$   $\chi^2/\text{NDF}: 36614.5/11$

In:  $-14.007 \pm 0.035$   $\chi^2/\text{NDF}: 103644.3/27$

Out:  $-13.432 \pm 0.035$   $\chi^2/\text{NDF}: 186910.2/31$

All:  $-13.714 \pm 0.025$   $\chi^2/\text{NDF}: 290688.9/59$

reg\_asym\_bcm\_an\_us\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.736 $\pm$ 0.054  $\chi^2$ /NDF: 2329.9/21

Left Out: 0.469 $\pm$ 0.032  $\chi^2$ /NDF: 7076.8/24

Right Out: 0.267 $\pm$ 0.050  $\chi^2$ /NDF: 4232.5/24

Left In: 0.313 $\pm$ 0.031  $\chi^2$ /NDF: 6235.0/22

Left: 0.386 $\pm$ 0.022  $\chi^2$ /NDF: 13324.1/47

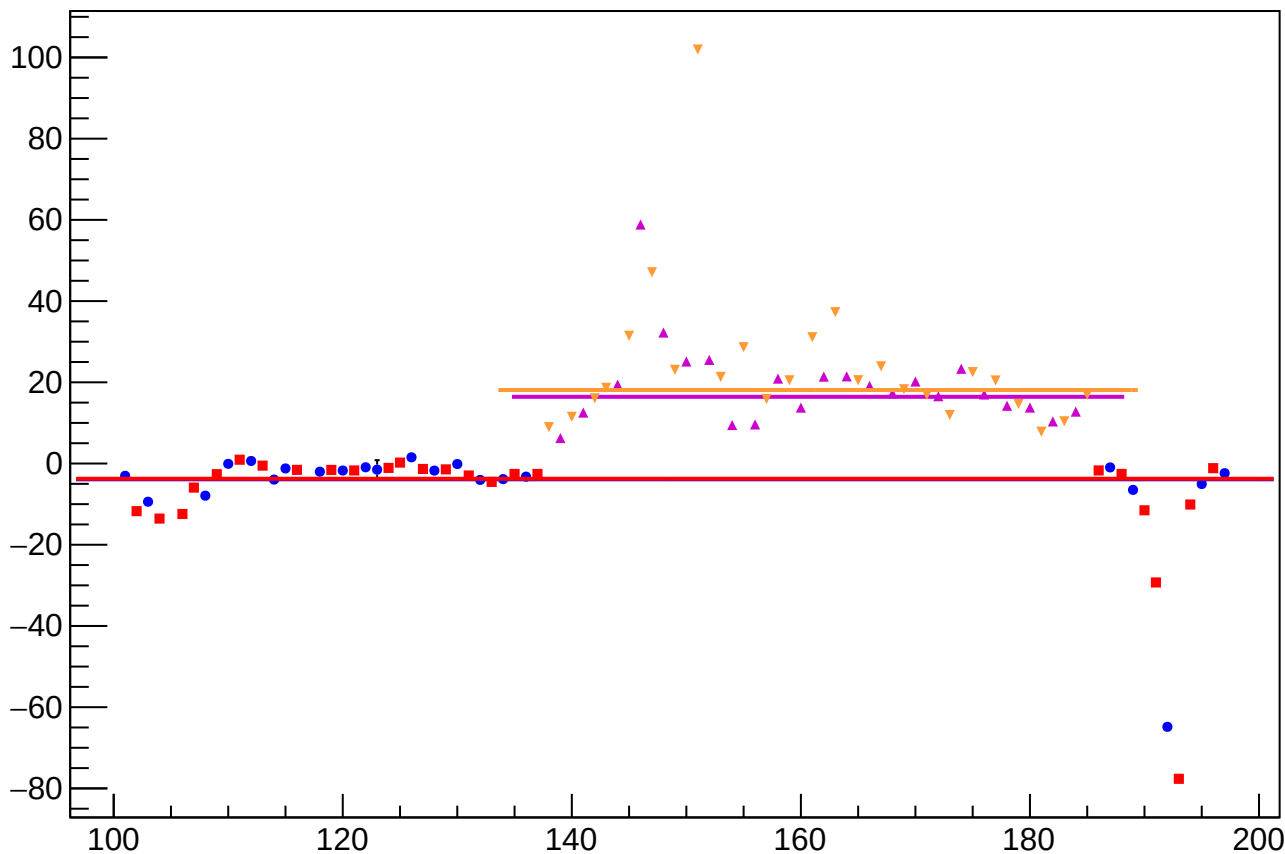
Right: 0.485 $\pm$ 0.037  $\chi^2$ /NDF: 6602.8/46

In: 0.416 $\pm$ 0.027  $\chi^2$ /NDF: 8611.6/44

Out: 0.410 $\pm$ 0.027  $\chi^2$ /NDF: 11320.6/49

All: 0.413 $\pm$ 0.019  $\chi^2$ /NDF: 19932.2/94

reg\_asym\_bcm\_an\_us\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-3.884 \pm 0.066$   $\chi^2/\text{NDF}: 12519.1/21$

Left Out:  $18.098 \pm 0.039$   $\chi^2/\text{NDF}: 77793.7/24$

Right Out:  $-3.751 \pm 0.054$   $\chi^2/\text{NDF}: 26654.3/24$

Left In:  $16.431 \pm 0.038$   $\chi^2/\text{NDF}: 41337.1/22$

Left:  $17.232 \pm 0.027$   $\chi^2/\text{NDF}: 120078.5/47$

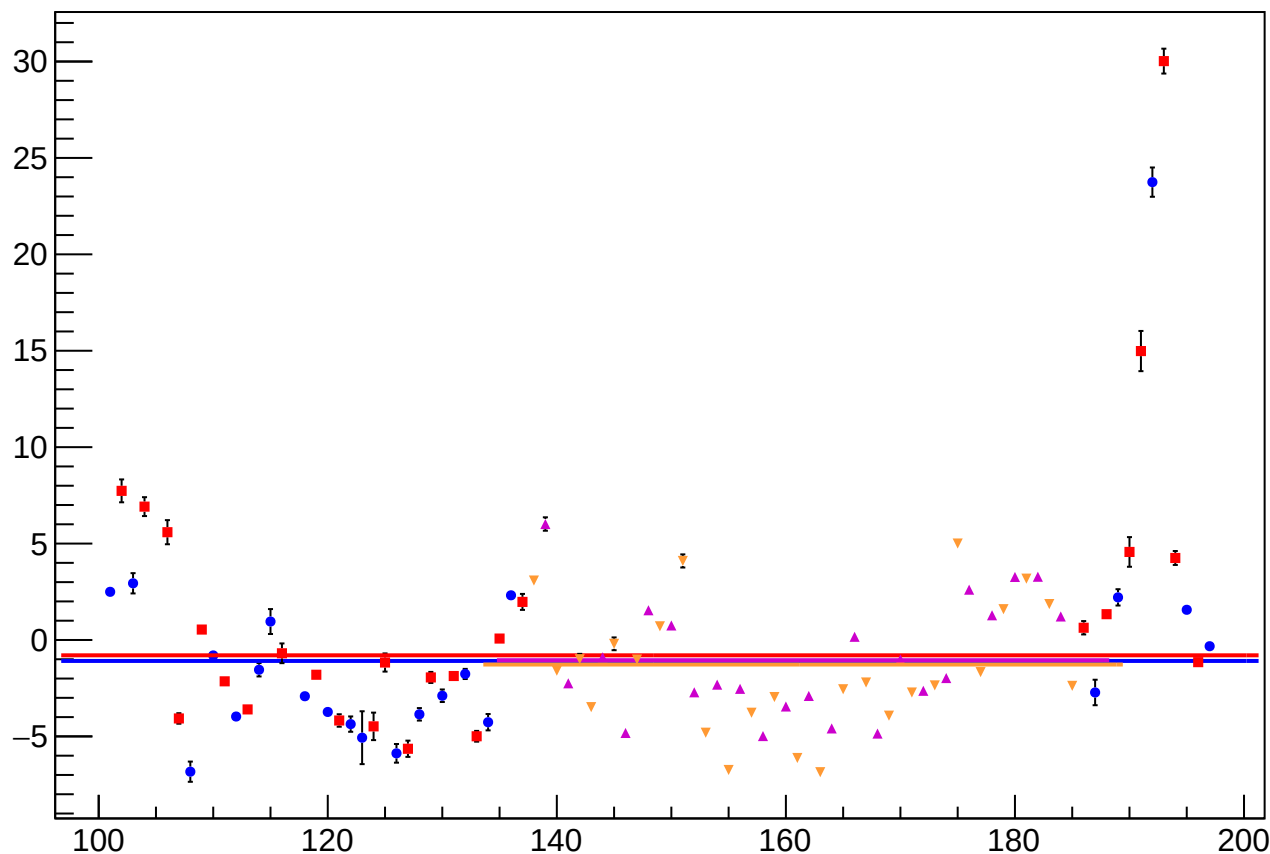
Right:  $-3.804 \pm 0.042$   $\chi^2/\text{NDF}: 39175.9/46$

In:  $11.515 \pm 0.033$   $\chi^2/\text{NDF}: 124808.9/44$

Out:  $10.603 \pm 0.032$   $\chi^2/\text{NDF}: 211974.3/49$

All:  $11.044 \pm 0.023$   $\chi^2/\text{NDF}: 337185.6/94$

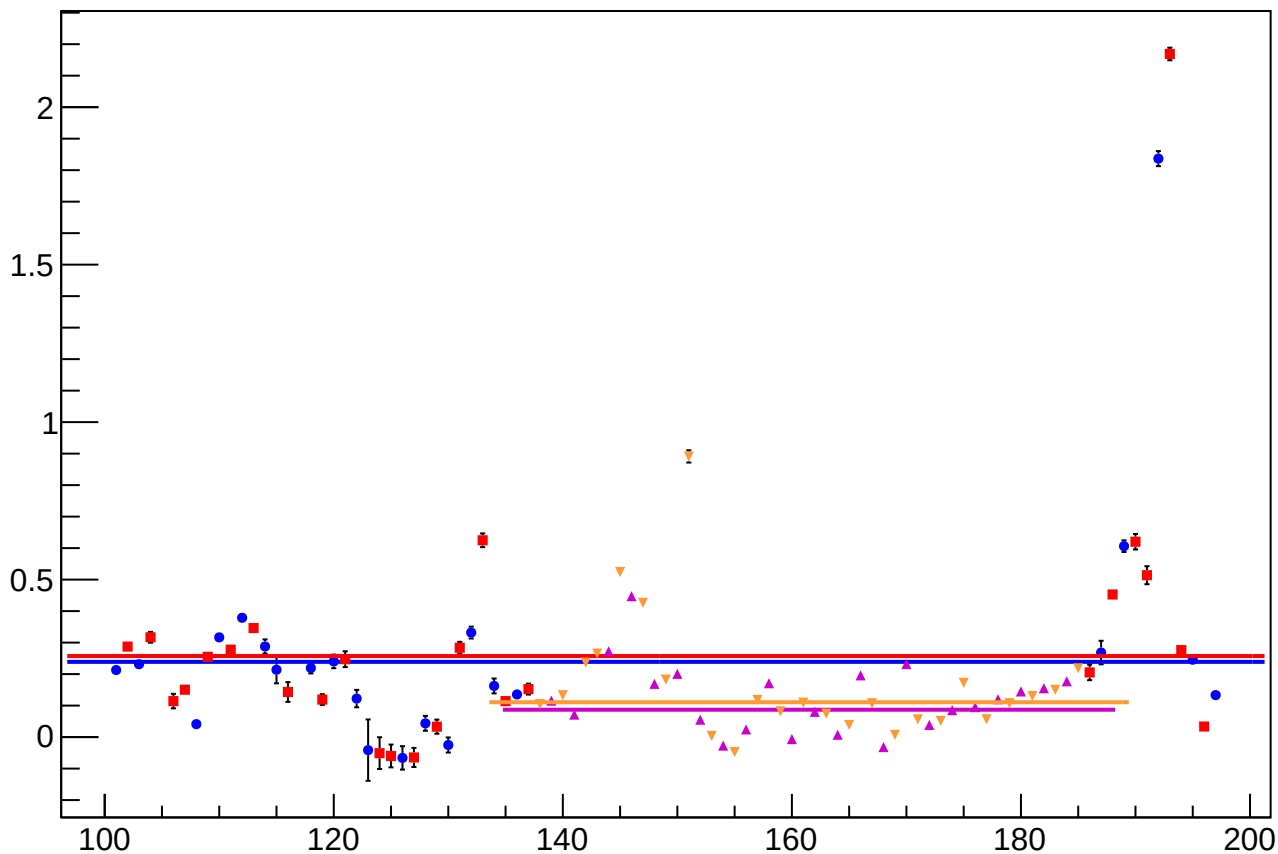
reg\_asym\_bcm\_an\_us\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-1.087 \pm 0.063$   $\chi^2/\text{NDF}: 2692.4/21$   
 Left Out:  $-1.273 \pm 0.036$   $\chi^2/\text{NDF}: 7931.0/24$   
 Right Out:  $-0.795 \pm 0.059$   $\chi^2/\text{NDF}: 4492.3/24$   
 Left In:  $-1.050 \pm 0.034$   $\chi^2/\text{NDF}: 6713.0/22$

Left:  $-1.156 \pm 0.025$   $\chi^2/\text{NDF}: 14664.3/47$   
 Right:  $-0.931 \pm 0.043$   $\chi^2/\text{NDF}: 7196.0/46$   
 In:  $-1.058 \pm 0.030$   $\chi^2/\text{NDF}: 9405.6/44$   
 Out:  $-1.144 \pm 0.031$   $\chi^2/\text{NDF}: 12471.1/49$   
 All:  $-1.100 \pm 0.021$   $\chi^2/\text{NDF}: 21880.7/94$

reg\_asym\_bcm\_an\_us\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.239 $\pm$ 0.003  $\chi^2$ /NDF: 5815.5/21

Left Out: 0.111 $\pm$ 0.002  $\chi^2$ /NDF:4430.3/24

Right Out: 0.257 $\pm$ 0.003  $\chi^2$ /NDF: 11756.2/24

Left In: 0.087 $\pm$ 0.001  $\chi^2$ /NDF:3604.3/22

Left: 0.098 $\pm$ 0.001  $\chi^2$ /NDF: 8153.0/47

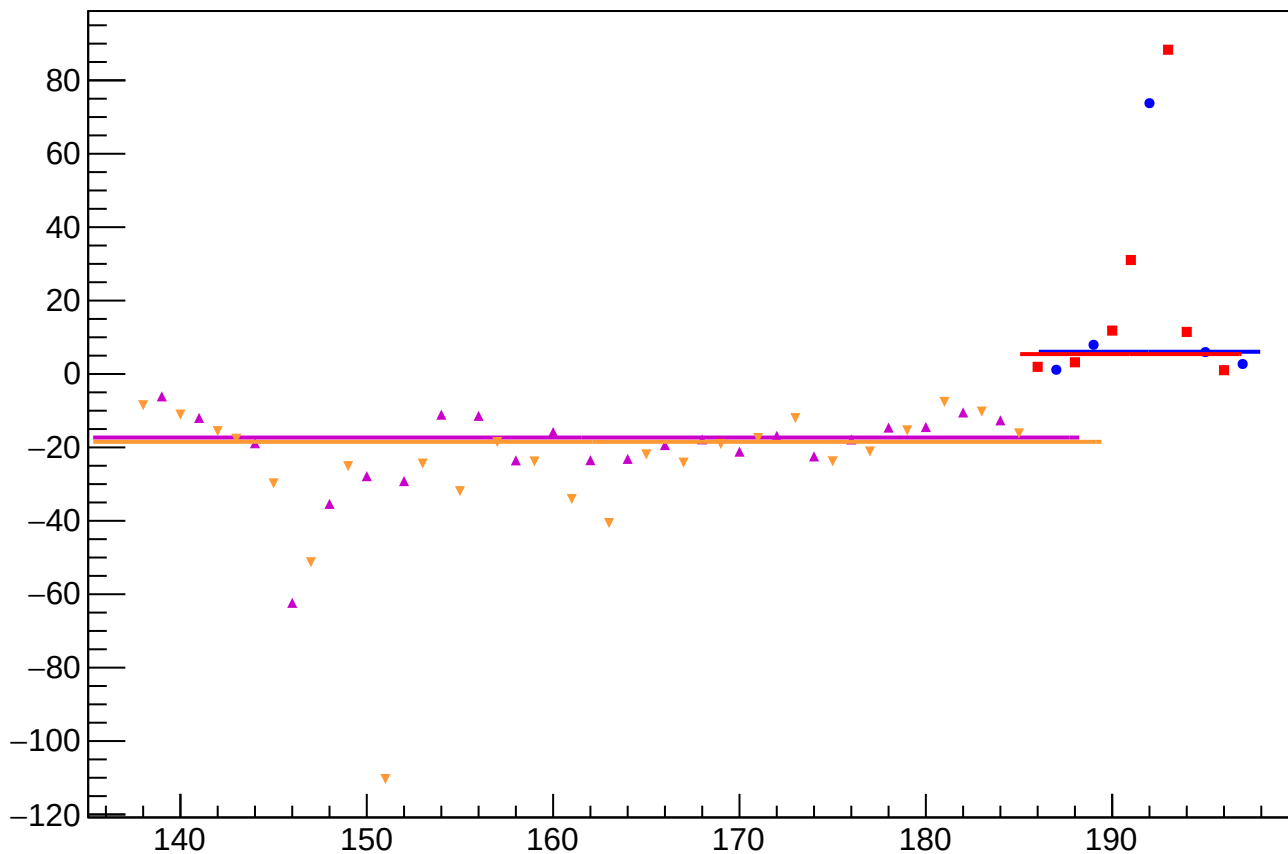
Right: 0.249 $\pm$ 0.002  $\chi^2$ /NDF: 17589.9/46

In: 0.115 $\pm$ 0.001  $\chi^2$ /NDF:11326.7/44

Out: 0.143 $\pm$ 0.001  $\chi^2$ /NDF:18062.4/49

All: 0.128 $\pm$ 0.001  $\chi^2$ /NDF: 29604.9/94

reg\_asym\_bcm\_dg\_ds\_diff\_bpm1X\_slope vs Slug, Sign Corrected



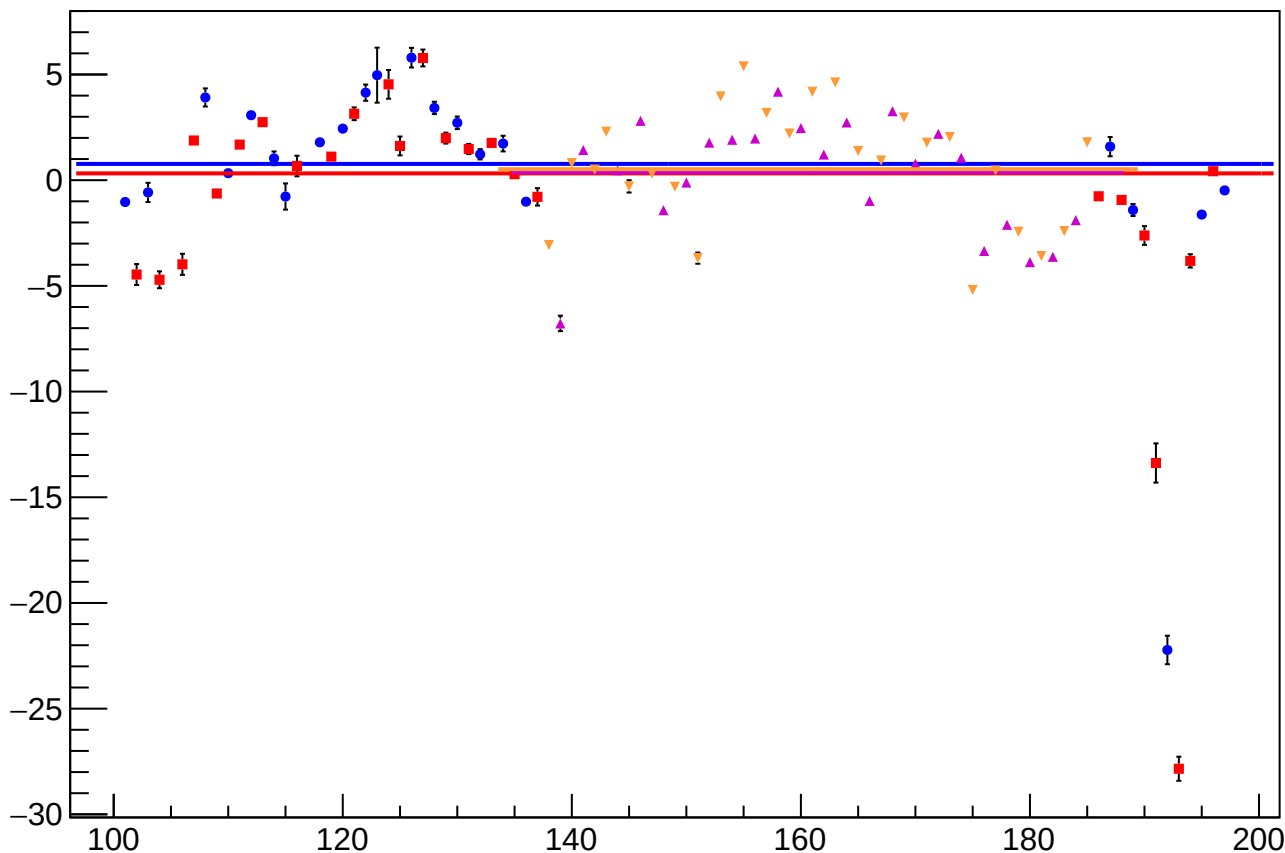
Right In:  $6.061 \pm 0.100$   $\chi^2/\text{NDF}: 11252.1/4$   
 Left Out:  $-18.478 \pm 0.040$   $\chi^2/\text{NDF}: 87856.5/24$   
 Right Out:  $5.423 \pm 0.079$   $\chi^2/\text{NDF}: 24620.3/6$   
 Left In:  $-17.309 \pm 0.039$   $\chi^2/\text{NDF}: 43807.0/22$

Left:  $-17.879 \pm 0.028$   $\chi^2/\text{NDF}: 132106.2/47$   
 Right:  $5.666 \pm 0.062$   $\chi^2/\text{NDF}: 35897.5/11$

In:  $-14.254 \pm 0.036$   $\chi^2/\text{NDF}: 102483.6/27$   
 Out:  $-13.603 \pm 0.035$   $\chi^2/\text{NDF}: 186220.4/31$

All:  $-13.922 \pm 0.025$   $\chi^2/\text{NDF}: 288869.0/59$

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.770 $\pm$ 0.055  $\chi^2$ /NDF: 2234.8/21

Left Out: 0.522 $\pm$ 0.033  $\chi^2$ /NDF: 7038.3/24

Right Out: 0.322 $\pm$ 0.051  $\chi^2$ /NDF: 4059.9/24

Left In: 0.373 $\pm$ 0.031  $\chi^2$ /NDF: 6263.9/22

Left: 0.443 $\pm$ 0.023  $\chi^2$ /NDF: 13312.8/47

Right: 0.531 $\pm$ 0.037  $\chi^2$ /NDF: 6330.5/46

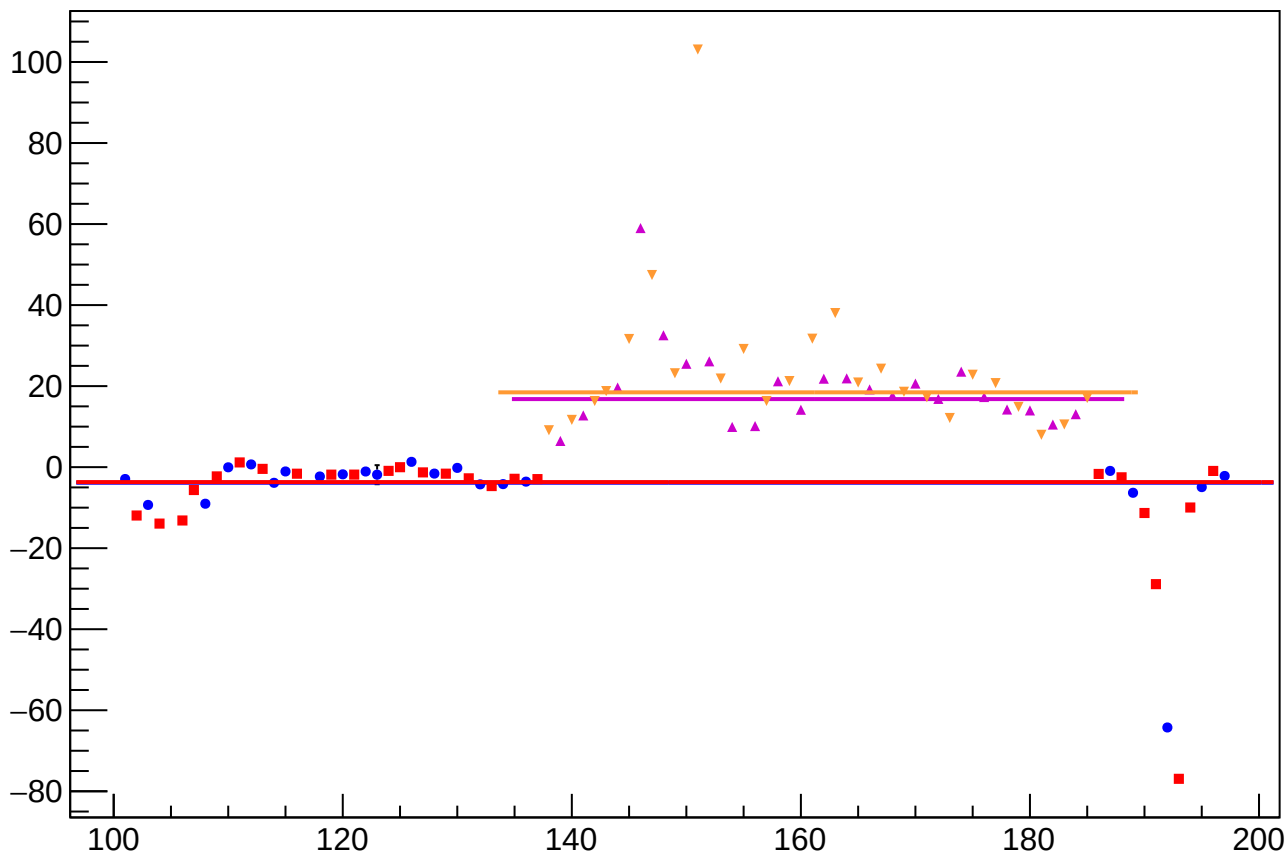
In: 0.471 $\pm$ 0.027  $\chi^2$ /NDF: 8538.3/44

Out: 0.463 $\pm$ 0.028  $\chi^2$ /NDF: 11108.9/49

All: 0.467 $\pm$ 0.019  $\chi^2$ /NDF: 19647.3/94



reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -3.841+/-0.067  $\chi^2/\text{NDF}$ : 12239.9/21

Left Out: 18.463+/-0.040  $\chi^2/\text{NDF}$ : 77193.5/24

Right Out: -3.690+/-0.055  $\chi^2/\text{NDF}$ : 26155.8/24

Left In: 16.798+/-0.038  $\chi^2/\text{NDF}$ : 40258.9/22

Left: 17.599+/-0.028  $\chi^2/\text{NDF}$ : 118354.8/47

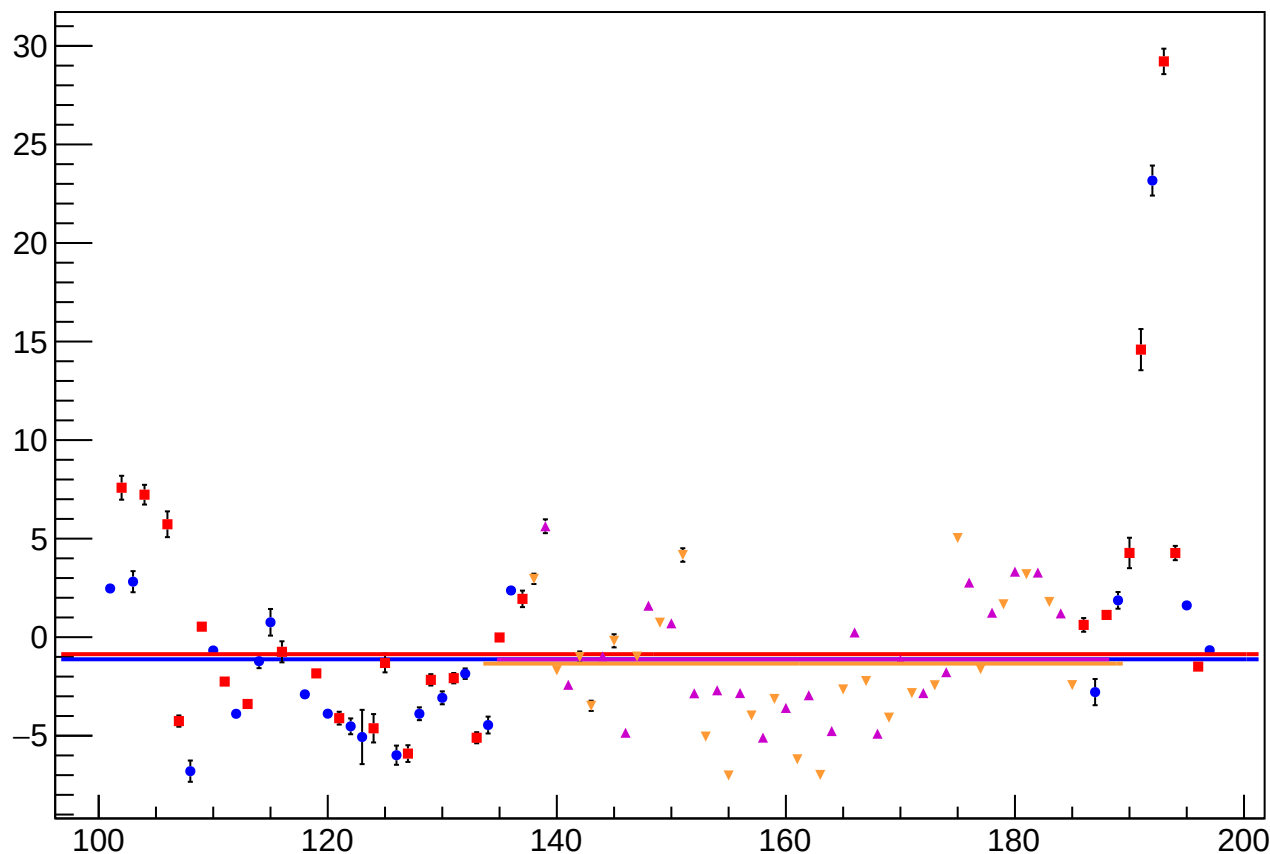
Right: -3.750+/-0.042  $\chi^2/\text{NDF}$ : 38398.8/46

In: 11.698+/-0.033  $\chi^2/\text{NDF}$ : 123792.6/44

Out: 10.727+/-0.032  $\chi^2/\text{NDF}$ : 210866.7/49

All: 11.195+/-0.023  $\chi^2/\text{NDF}$ : 335098.3/94

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eY\_slope vs Slug, Sign Corrected

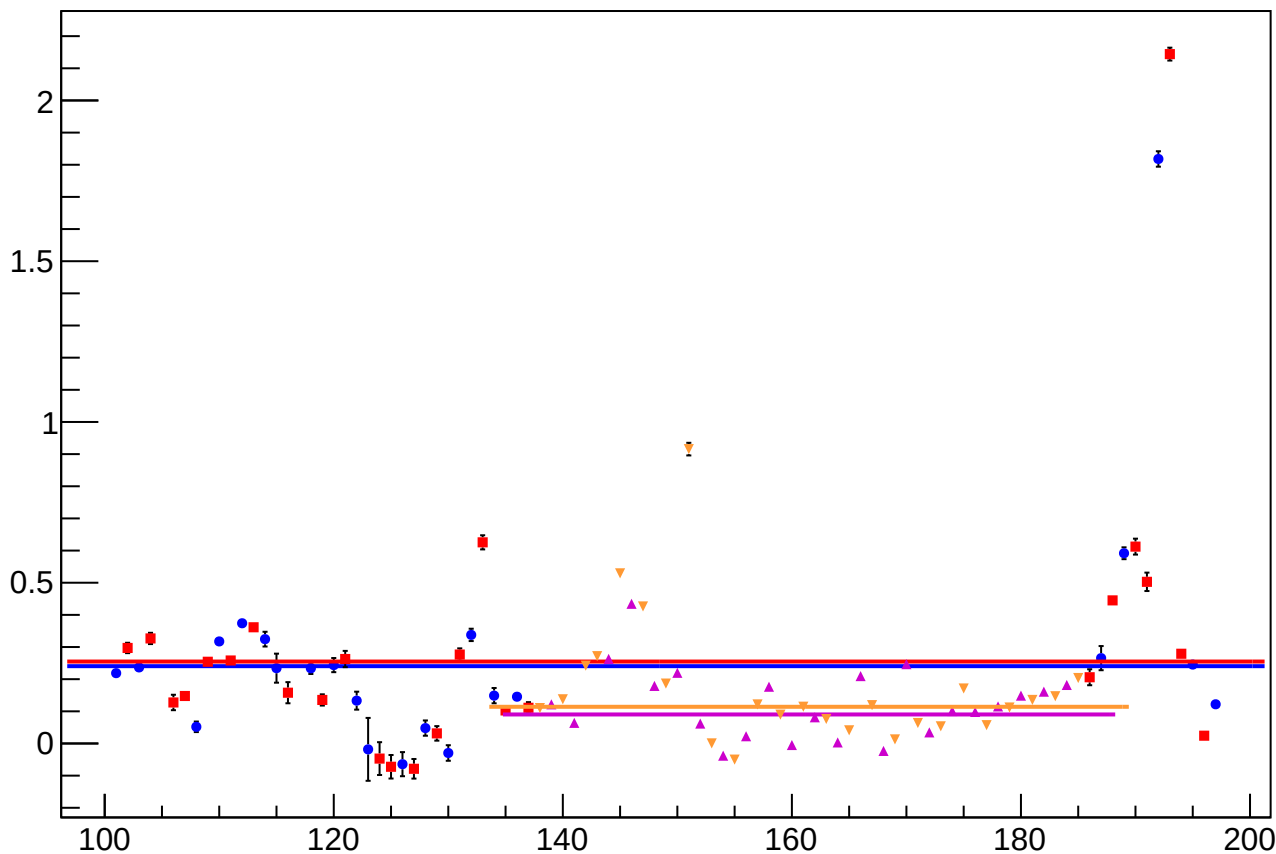


Right In: -1.122+/-0.064  $\chi^2/\text{NDF}$ : 2607.5/21  
 Left Out: -1.341+/-0.037  $\chi^2/\text{NDF}$ : 7886.0/24  
 Right Out: -0.863+/-0.060  $\chi^2/\text{NDF}$ : 4320.9/24  
 Left In: -1.132+/-0.035  $\chi^2/\text{NDF}$ : 6743.4/22

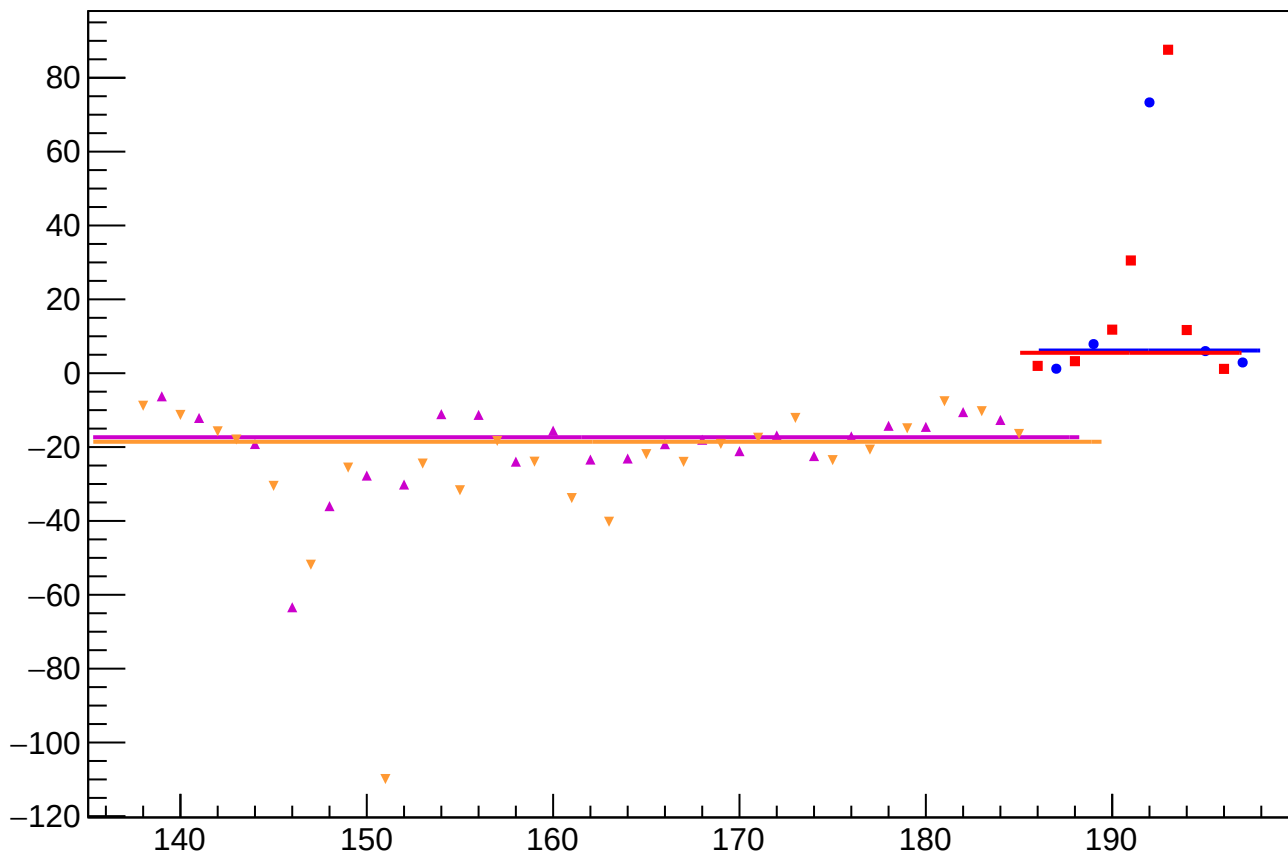
Left: -1.231+/-0.025  $\chi^2/\text{NDF}$ : 14646.5/47  
 Right: -0.984+/-0.044  $\chi^2/\text{NDF}$ : 6937.1/46  
 In: -1.129+/-0.031  $\chi^2/\text{NDF}$ : 9350.9/44  
 Out: -1.211+/-0.031  $\chi^2/\text{NDF}$ : 12253.0/49

All: -1.169+/-0.022  $\chi^2/\text{NDF}$ : 21607.5/94

reg\_asym\_bcm\_dg\_ds\_diff\_bpm12X\_slope vs Slug, Sign Corrected



reg\_asym\_bcm\_dg\_us\_diff\_bpm1X\_slope vs Slug, Sign Corrected



Right In:  $6.145 \pm 0.101$   $\chi^2/\text{NDF}: 10940.8/4$

Left Out:  $-18.565 \pm 0.040$   $\chi^2/\text{NDF}: 86349.5/24$

Right Out:  $5.529 \pm 0.080$   $\chi^2/\text{NDF}: 24020.2/6$

Left In:  $-17.335 \pm 0.039$   $\chi^2/\text{NDF}: 44078.7/22$

Left:  $-17.934 \pm 0.028$   $\chi^2/\text{NDF}: 130909.9/47$

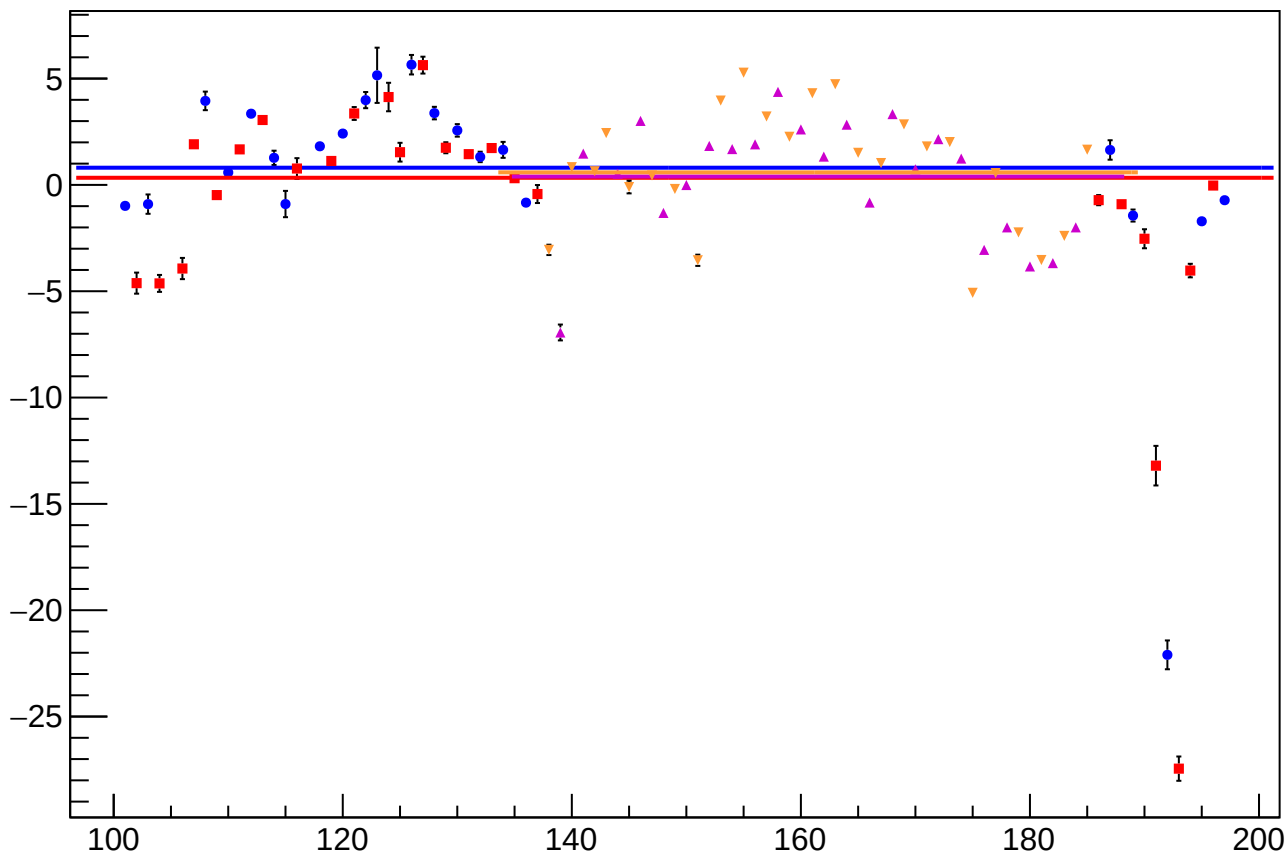
Right:  $5.765 \pm 0.063$   $\chi^2/\text{NDF}: 34983.8/11$

In:  $-14.273 \pm 0.037$   $\chi^2/\text{NDF}: 101940.9/27$

Out:  $-13.673 \pm 0.036$   $\chi^2/\text{NDF}: 183517.3/31$

All:  $-13.968 \pm 0.026$   $\chi^2/\text{NDF}: 285595.5/59$

reg\_asym\_bcm\_dg\_us\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $0.809 \pm 0.055$   $\chi^2/\text{NDF}: 2223.3/21$

Left Out:  $0.590 \pm 0.033$   $\chi^2/\text{NDF}: 6780.3/24$

Right Out:  $0.335 \pm 0.052$   $\chi^2/\text{NDF}: 3983.8/24$

Left In:  $0.394 \pm 0.032$   $\chi^2/\text{NDF}: 6112.7/22$

Left:  $0.487 \pm 0.023$   $\chi^2/\text{NDF}: 12911.2/47$

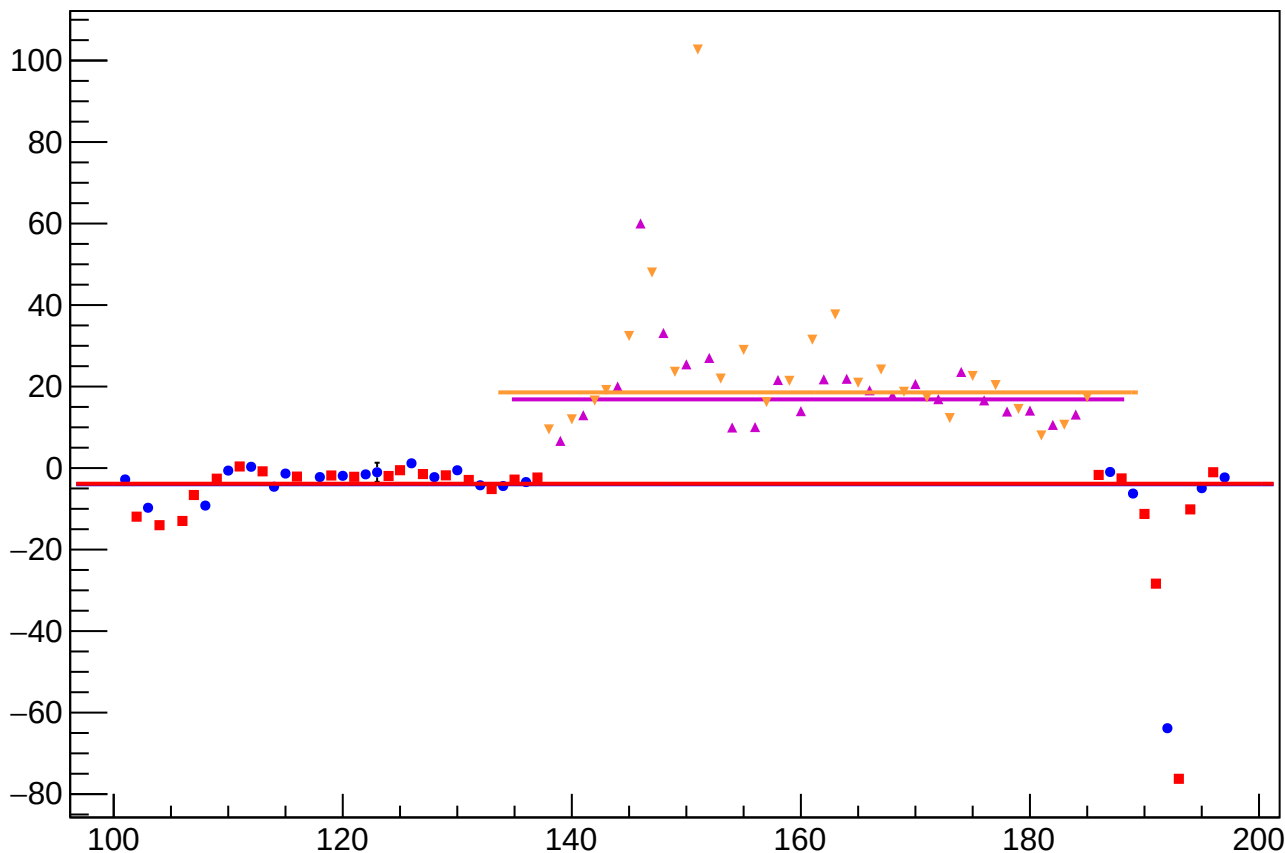
Right:  $0.557 \pm 0.038$   $\chi^2/\text{NDF}: 6246.2/46$

In:  $0.497 \pm 0.027$   $\chi^2/\text{NDF}: 8378.4/44$

Out:  $0.516 \pm 0.028$   $\chi^2/\text{NDF}: 10781.2/49$

All:  $0.506 \pm 0.020$   $\chi^2/\text{NDF}: 19159.8/94$

reg\_asym\_bcm\_dg\_us\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-3.970 \pm 0.068$   $\chi^2/\text{NDF}: 11818.0/21$

Left Out:  $18.569 \pm 0.040$   $\chi^2/\text{NDF}: 75983.2/24$

Right Out:  $-3.840 \pm 0.055$   $\chi^2/\text{NDF}: 25396.2/24$

Left In:  $16.854 \pm 0.039$   $\chi^2/\text{NDF}: 40590.0/22$

Left:  $17.679 \pm 0.028$   $\chi^2/\text{NDF}: 117514.0/47$

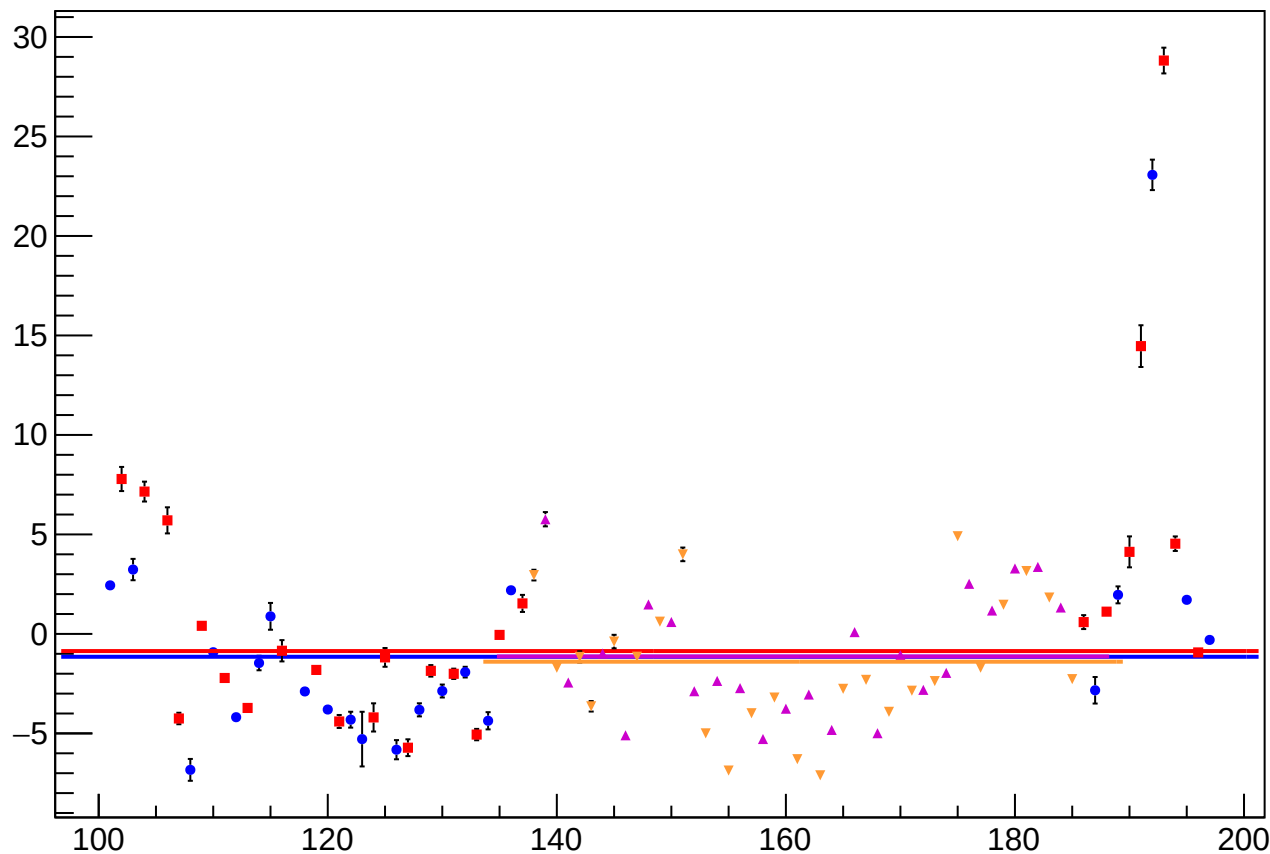
Right:  $-3.892 \pm 0.043$   $\chi^2/\text{NDF}: 37216.5/46$

In:  $11.732 \pm 0.034$   $\chi^2/\text{NDF}: 123365.8/44$

Out:  $10.804 \pm 0.033$   $\chi^2/\text{NDF}: 208526.9/49$

All:  $11.253 \pm 0.023$   $\chi^2/\text{NDF}: 332285.0/94$

reg\_asym\_bcm\_dg\_us\_diff\_bpm4eY\_slope vs Slug, Sign Corrected

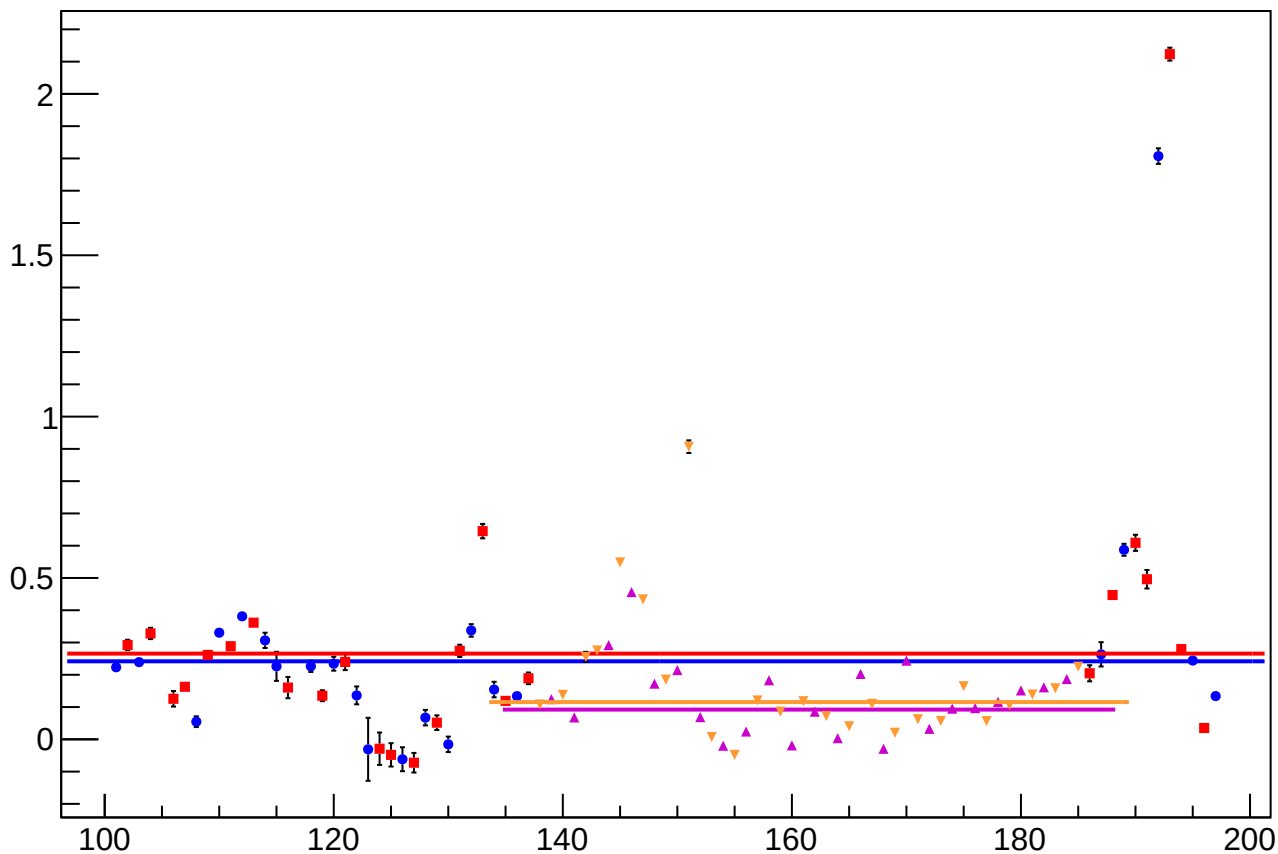


Right In: -1.149+/-0.065  $\chi^2/\text{NDF}$ : 2565.3/21  
 Left Out: -1.397+/-0.037  $\chi^2/\text{NDF}$ : 7631.3/24  
 Right Out: -0.862+/-0.061  $\chi^2/\text{NDF}$ : 4231.2/24  
 Left In: -1.132+/-0.035  $\chi^2/\text{NDF}$ : 6638.3/22

Left: -1.258+/-0.025  $\chi^2/\text{NDF}$ : 14296.5/47  
 Right: -0.996+/-0.044  $\chi^2/\text{NDF}$ : 6806.9/46  
 In: -1.136+/-0.031  $\chi^2/\text{NDF}$ : 9203.7/44  
 Out: -1.253+/-0.032  $\chi^2/\text{NDF}$ : 11918.7/49

All: -1.193+/-0.022  $\chi^2/\text{NDF}$ : 21129.4/94

reg\_asym\_bcm\_dg\_us\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.242 $\pm$ 0.003  $\chi^2$ /NDF: 5468.3/21

Left Out: 0.115 $\pm$ 0.002  $\chi^2$ /NDF:4423.4/24

Right Out: 0.266 $\pm$ 0.003  $\chi^2$ /NDF: 11053.4/24

Left In: 0.092 $\pm$ 0.002  $\chi^2$ /NDF:3632.6/22

Left: 0.103 $\pm$ 0.001  $\chi^2$ /NDF: 8162.4/47

Right: 0.254 $\pm$ 0.002  $\chi^2$ /NDF: 16550.2/46

In: 0.120 $\pm$ 0.001  $\chi^2$ /NDF:10853.4/44

Out: 0.149 $\pm$ 0.001  $\chi^2$ /NDF:17319.0/49

All: 0.134 $\pm$ 0.001  $\chi^2$ /NDF: 28377.2/94