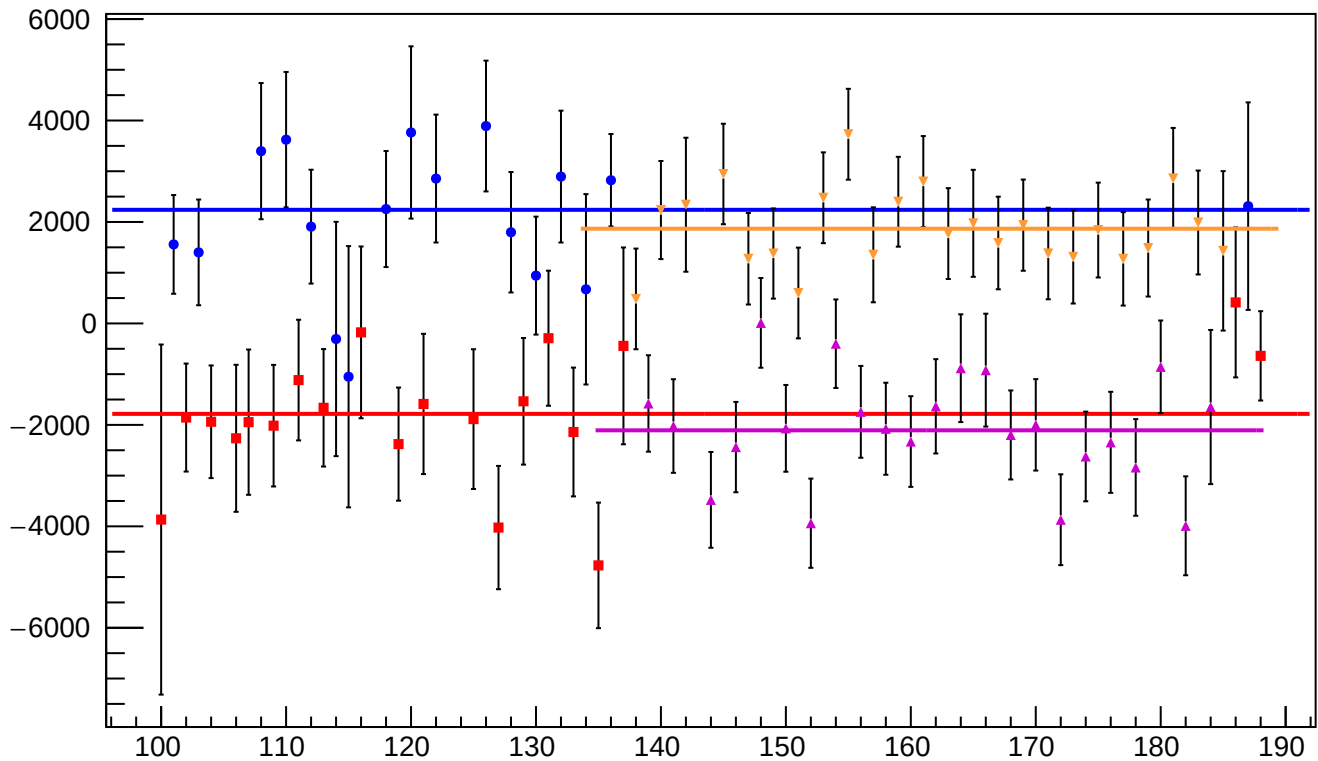


# dit\_asym\_us\_avg\_mean vs Slug



Right In: 2239.642 $\pm$ 310.984

$\chi^2/\text{NDF}$ : 11.3/16

Left Out: 1867.512 $\pm$ 194.801

$\chi^2/\text{NDF}$ : 15.1/23

Right Out: -1782.809 $\pm$ 285.554

$\chi^2/\text{NDF}$ : 17.1/19

Left In: -2107.246 $\pm$ 194.959

$\chi^2/\text{NDF}$ : 30.0/22

+ sign 1972.380 $\pm$ 165.087

$\chi^2/\text{NDF}$ : 27.5/40

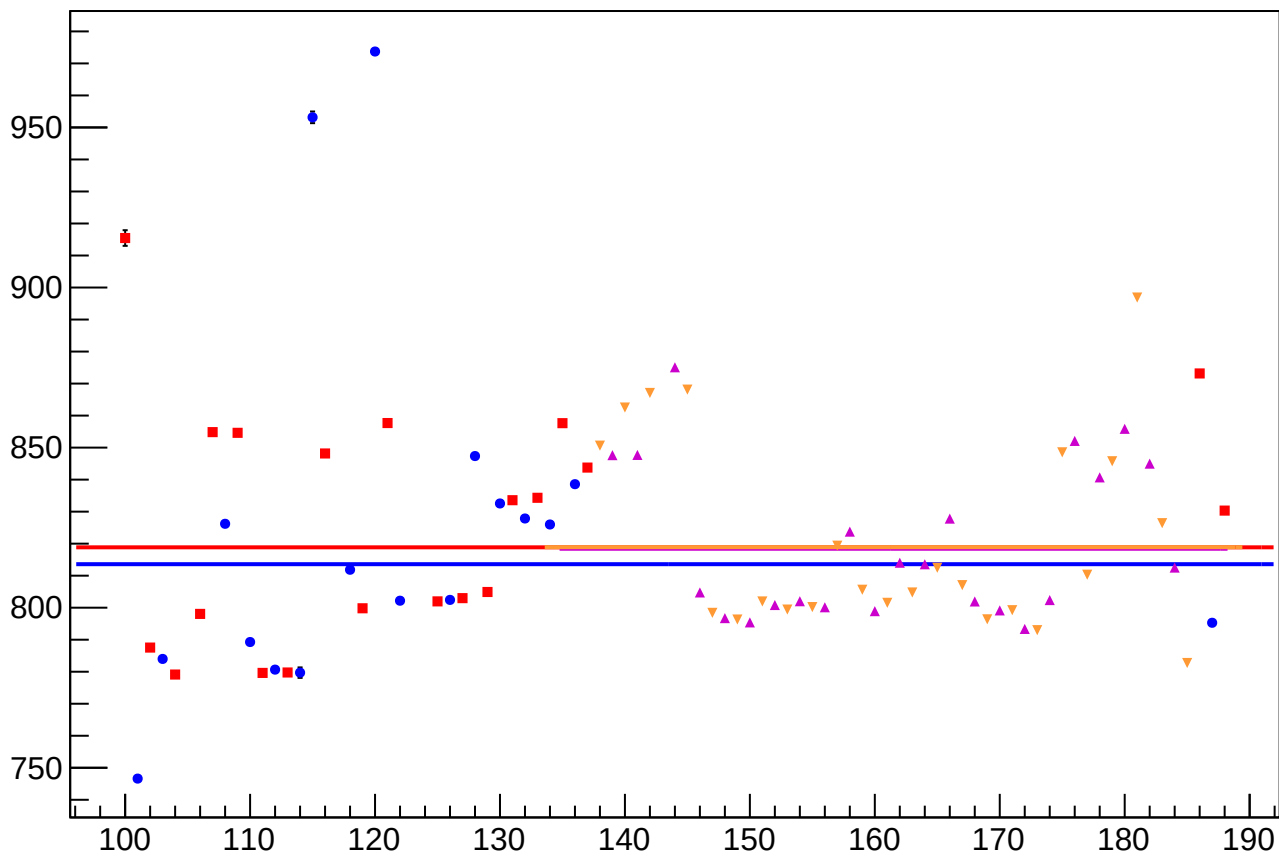
All: -65.545 $\pm$ 115.266

$\chi^2/\text{NDF}$ : 372.7/83

- sign -2004.096 $\pm$ 161.012

$\chi^2/\text{NDF}$ : 47.9/42

dit\_asym\_us\_avg\_rms vs Slug



Right In: 813.588 $\pm$ 0.220  $\chi^2$ /NDF: 42205.5/16

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

Right Out: 818.854 $\pm$ 0.202  $\chi^2$ /NDF: 23297.8/19

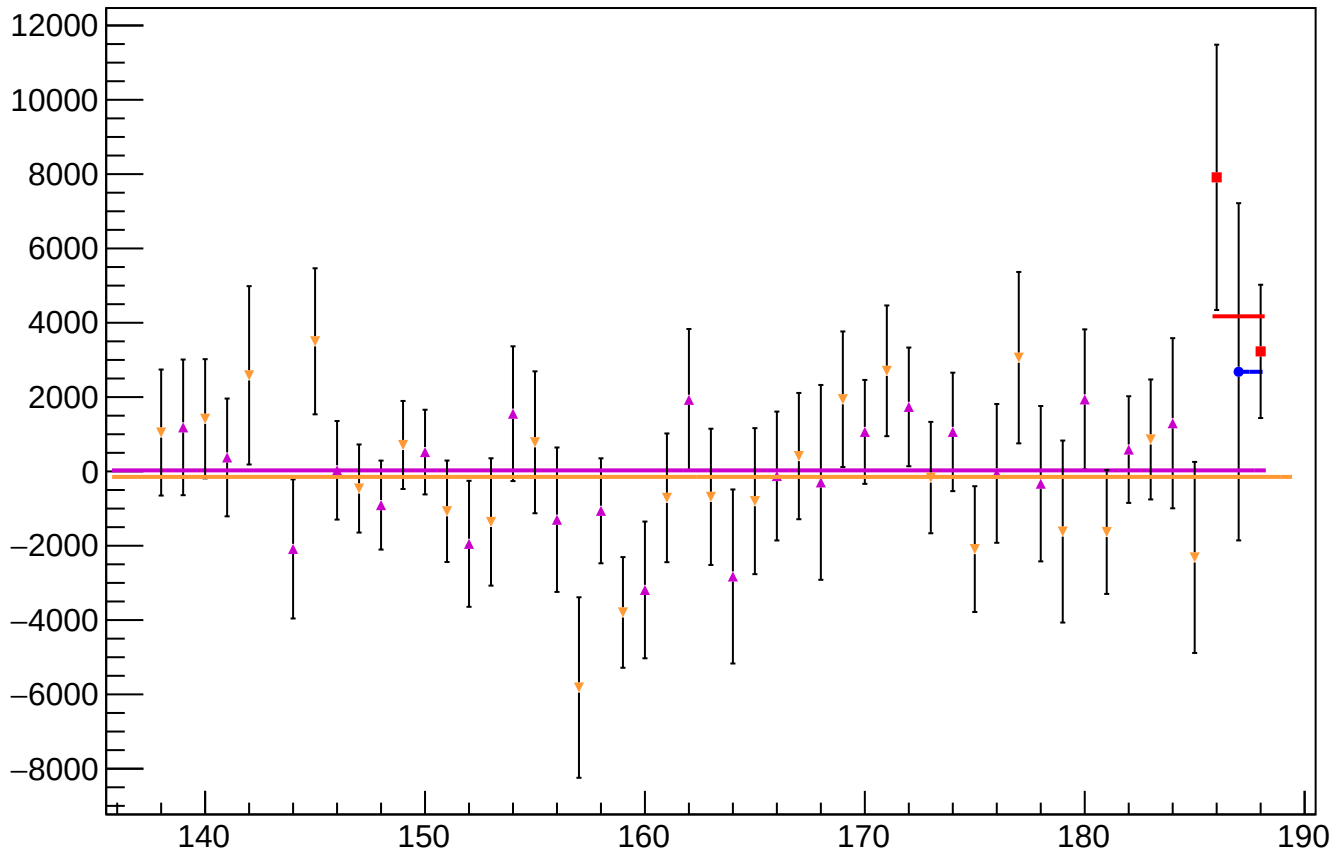
Left In: 818.403 $\pm$ 0.138  $\chi^2$ /NDF: 29907.0/22

+ sign 817.403 $\pm$ 0.117  $\chi^2$ /NDF: 84295.5/40

All: 817.989 $\pm$ 0.082  $\chi^2$ /NDF: 137552.8/83

- sign 818.547 $\pm$ 0.114  $\chi^2$ /NDF: 53208.2/42

# asym\_us\_avg\_correction\_mean vs Slug



Right In: 2680.883 $\pm$ 4537.474  $\chi^2$ /NDF: 0.0/0

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

Right Out: 4173.511 $\pm$ 1602.601  $\chi^2$ /NDF: 1.4/1

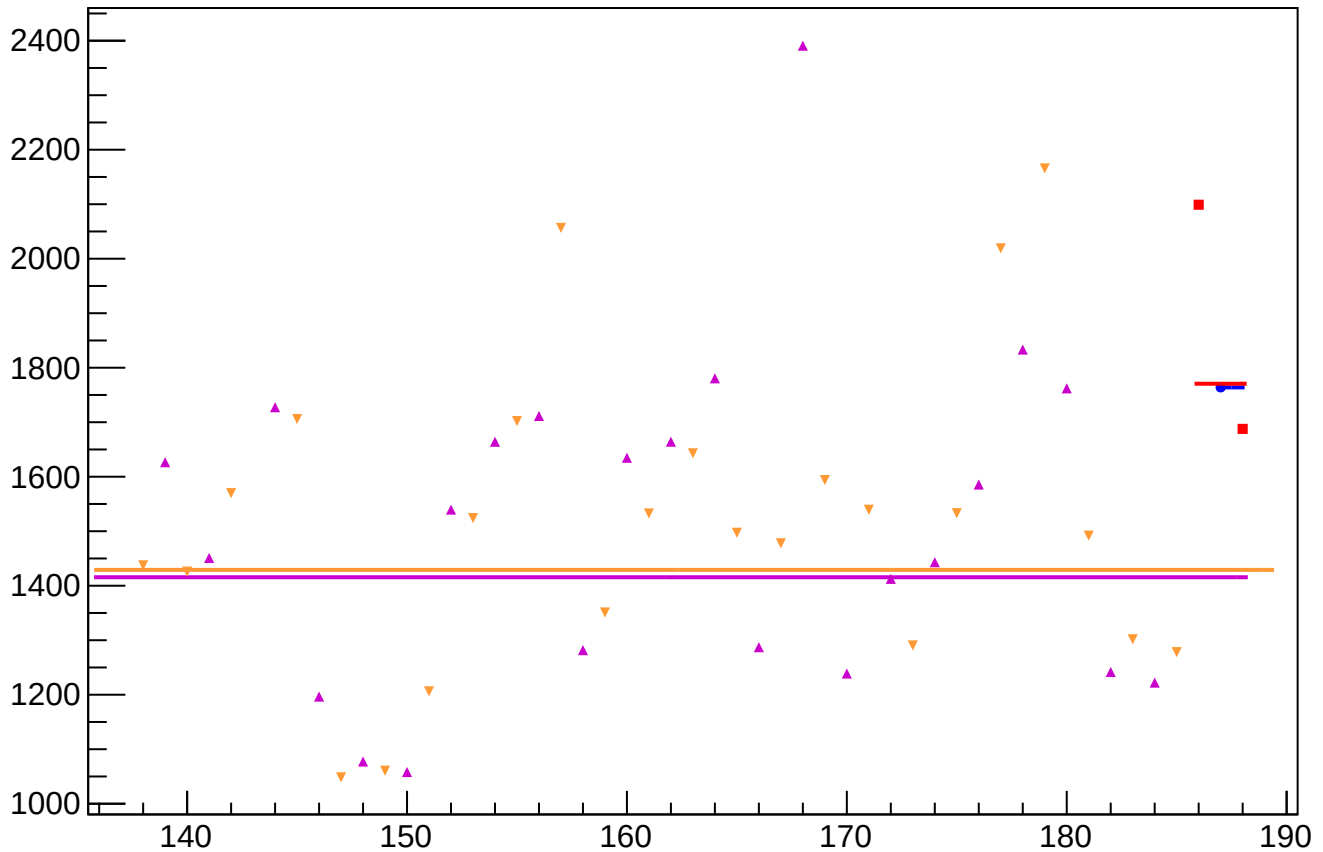
Left In: 27.722 $\pm$ 344.229  $\chi^2$ /NDF:14.8/22

+ sign -131.346 $\pm$ 346.733  $\chi^2$ /NDF: 29.7/24

All: 44.699 $\pm$ 241.498  $\chi^2$ /NDF: 52.8/49

- sign 210.559 $\pm$ 336.553  $\chi^2$ /NDF: 22.6/24

# asym\_us\_avg\_correction\_rms vs Slug



Right In: 1763.889 $\pm$ 3.208  $\chi^2$ /NDF: 0.0/0

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

Right Out: 1770.642 $\pm$ 1.133  $\chi^2$ /NDF: 21193.2/1

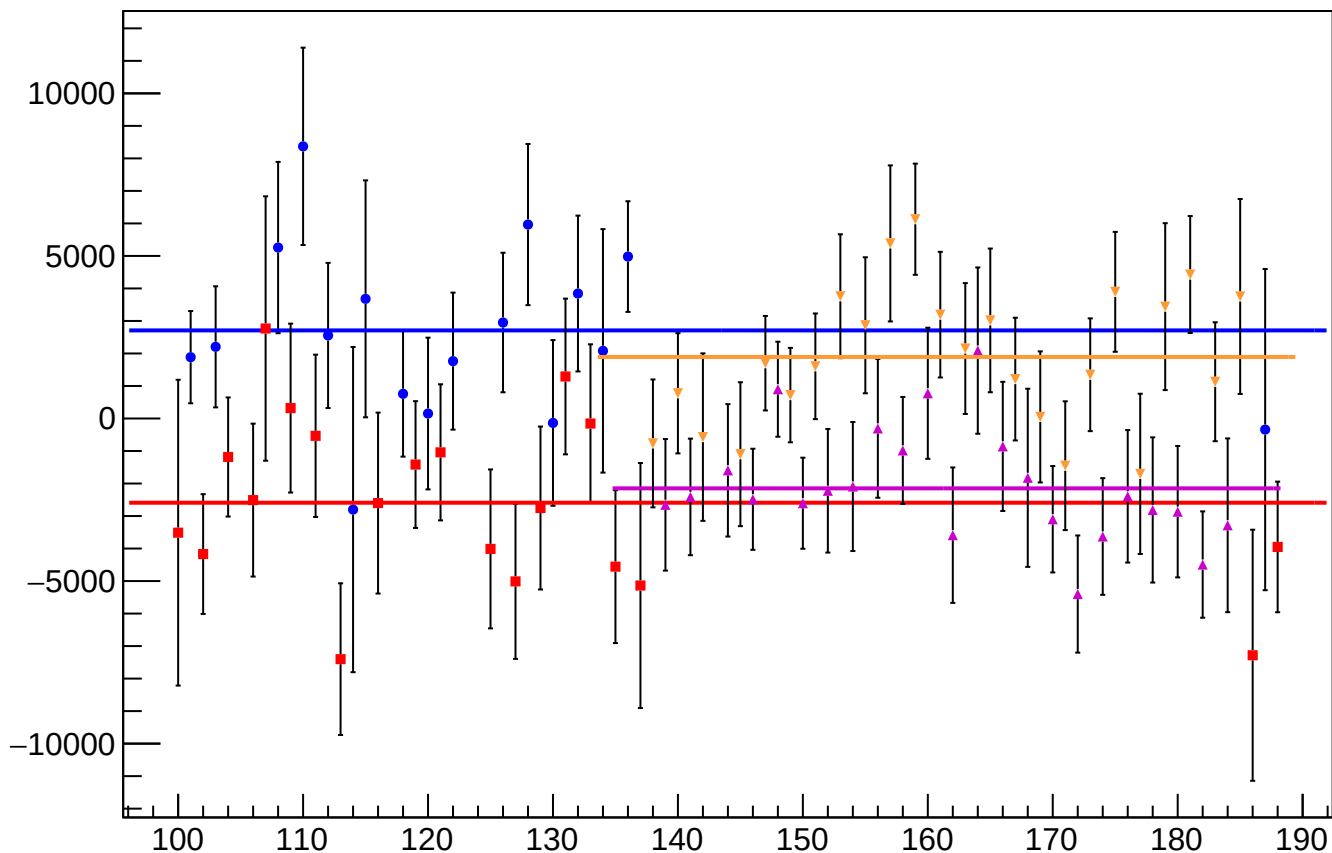
Left In: 1415.555 $\pm$ 0.243  $\chi^2$ /NDF:1245603.5/22

+ sign 1431.020 $\pm$ 0.245  $\chi^2$ /NDF: 1117776.3/24

All: 1431.120 $\pm$ 0.171  $\chi^2$ /NDF: 2478429.1/49

- sign 1431.215 $\pm$ 0.238  $\chi^2$ /NDF: 1360652.5/24

# asym\_us\_avg\_mean vs Slug



Right In: 2709.158 $\pm$ 559.323  $\chi^2$ /NDF: 13.9/16

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

Right Out: -2590.405 $\pm$ 542.020  $\chi^2$ /NDF: 18.3/19

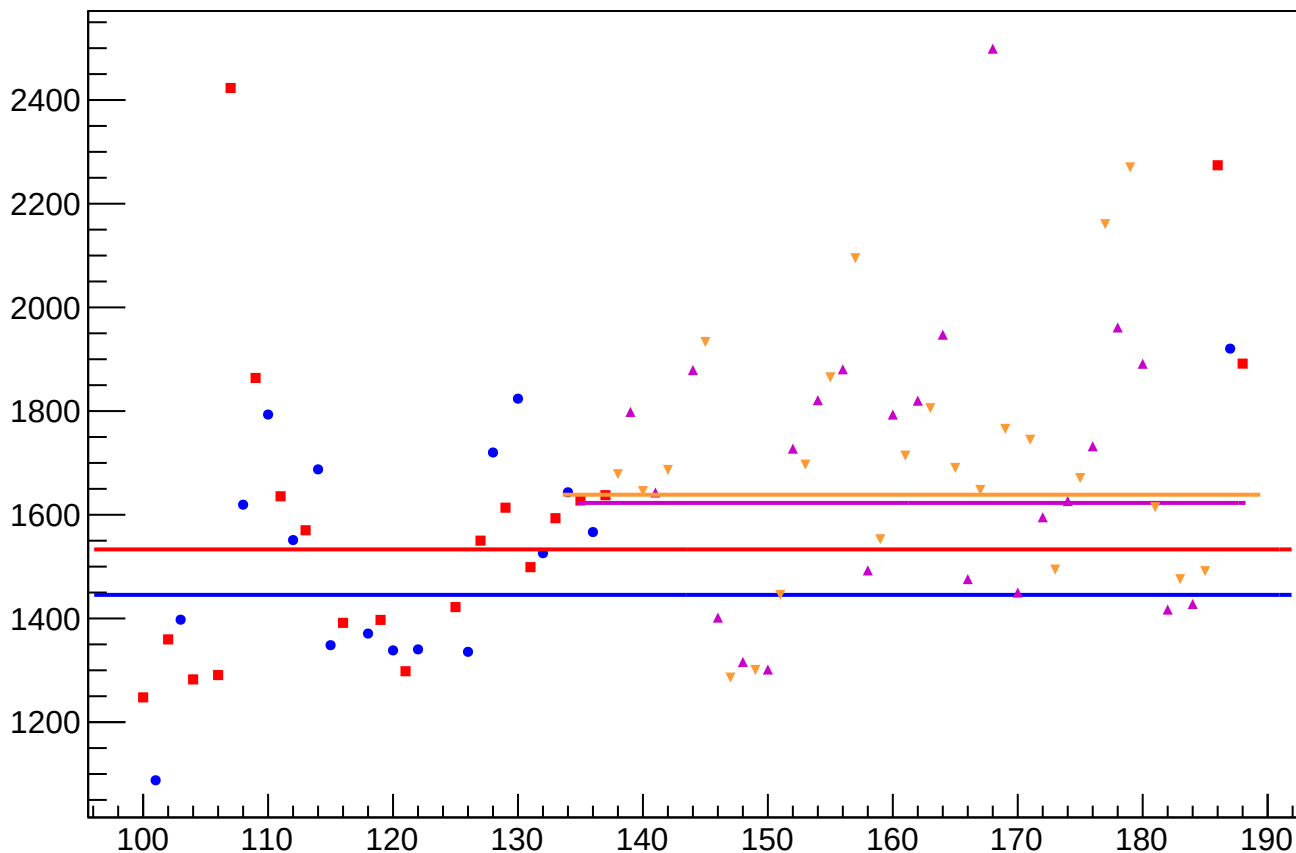
Left In: -2148.867 $\pm$ 391.716  $\chi^2$ /NDF:18.4/22

+ sign 2164.081 $\pm$ 322.542  $\chi^2$ /NDF: 41.3/40

All: -103.416 $\pm$ 226.262  $\chi^2$ /NDF: 175.7/83

- sign -2300.356 $\pm$ 317.484  $\chi^2$ /NDF: 37.1/42

# asym\_us\_avg\_rms vs Slug



Right In: 1445.501 $\pm$ 0.396  $\chi^2$ /NDF: 296590.6/16

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

Right Out: 1533.209 $\pm$ 0.383  $\chi^2$ /NDF: 406005.8/19

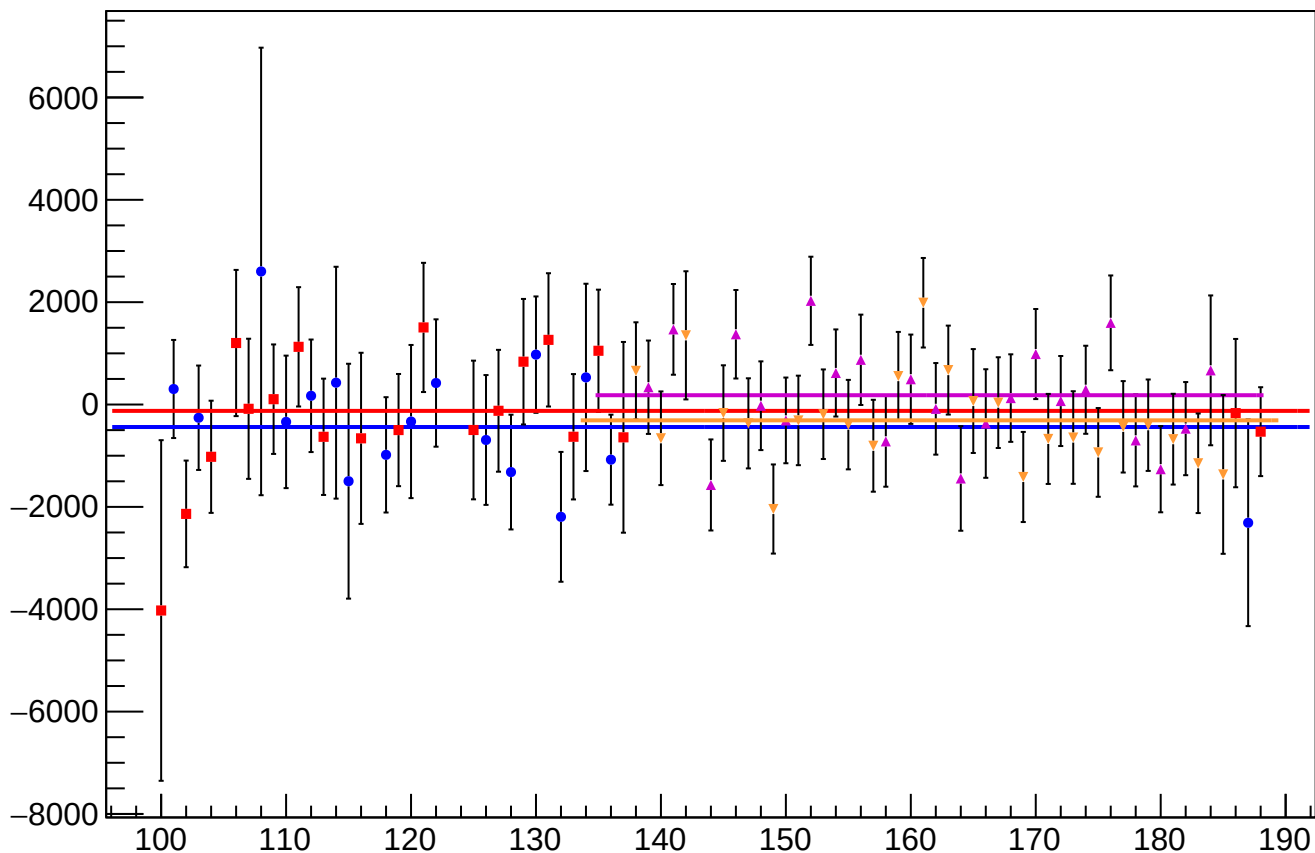
Left In: 1622.876 $\pm$ 0.277  $\chi^2$ /NDF: 780522.2/22

+ sign 1574.439 $\pm$ 0.228  $\chi^2$ /NDF: 1127811.4/40

All: 1583.415 $\pm$ 0.160  $\chi^2$ /NDF: 2353344.8/83

- sign 1592.112 $\pm$ 0.224  $\chi^2$ /NDF: 1222483.8/42

# dit\_asym\_us\_dd\_mean vs Slug



Right In:  $-439.378 \pm 309.474$   $\chi^2/\text{NDF}$ : 8.3/16

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

Right Out:  $-124.064 \pm 276.997$   $\chi^2/\text{NDF}$ : 13.2/19

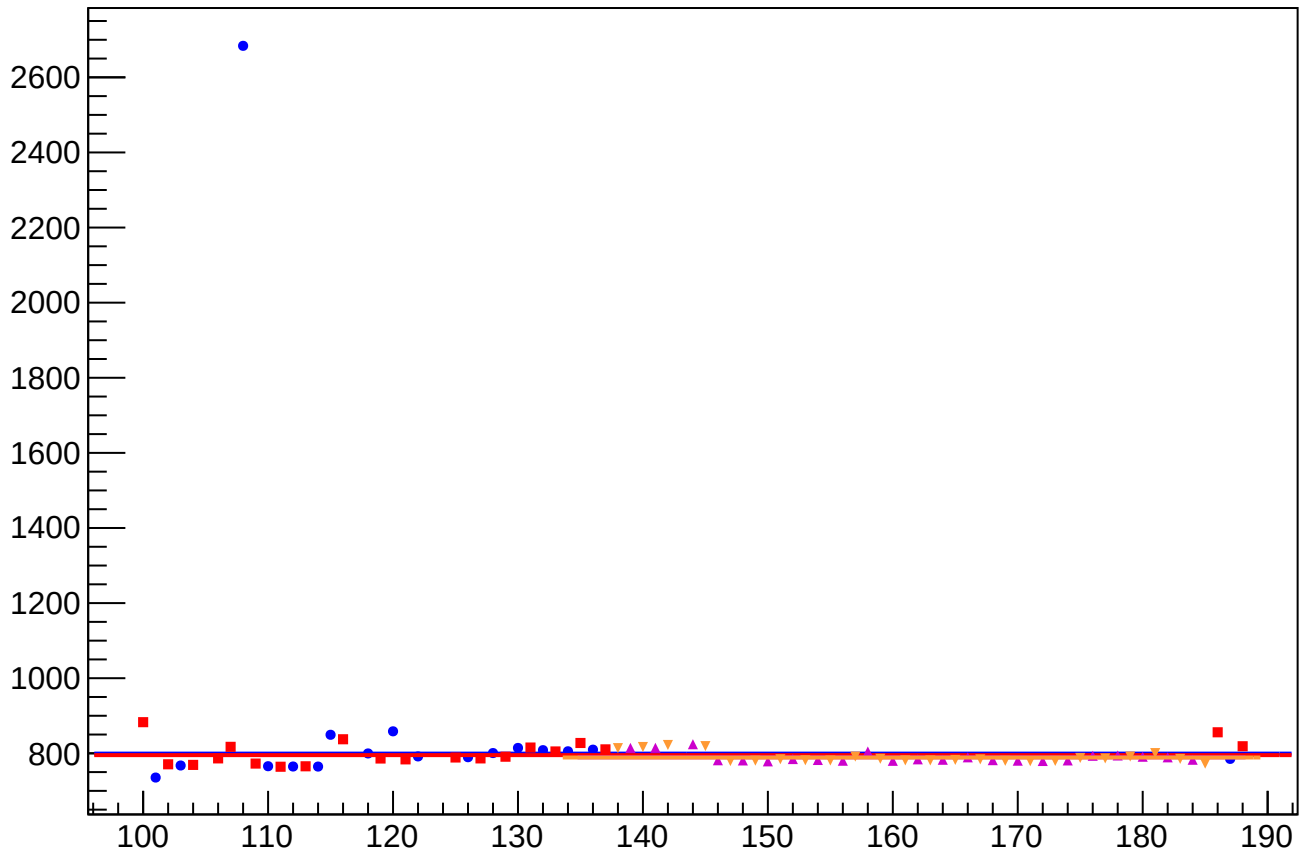
Left In:  $181.983 \pm 187.935$   $\chi^2/\text{NDF}$ : 25.6/22

+ sign  $-343.861 \pm 160.331$   $\chi^2/\text{NDF}$ : 29.0/40

All:  $-122.636 \pm 111.631$   $\chi^2/\text{NDF}$ : 72.3/83

- sign  $85.511 \pm 155.519$   $\chi^2/\text{NDF}$ : 39.6/42

# dit\_asym\_us\_dd\_rms vs Slug



Right In: 799.199 $\pm$ 0.219  $\chi^2$ /NDF: 391285.2/16

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

Right Out: 795.168 $\pm$ 0.196  $\chi^2$ /NDF: 16833.3/19

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

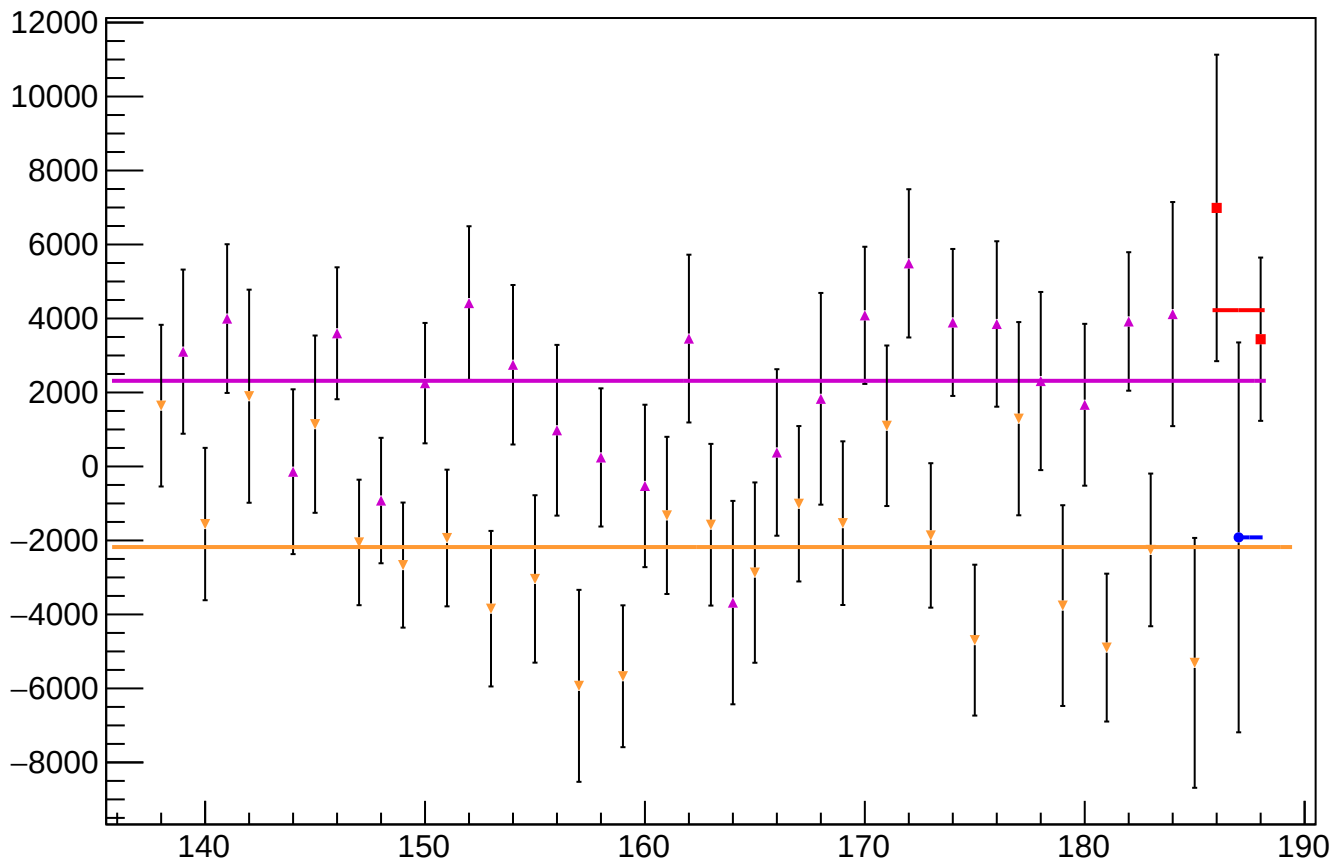
+ sign 791.654 $\pm$ 0.113  $\chi^2$ /NDF: 402252.4/40

All: 791.432 $\pm$ 0.079  $\chi^2$ /NDF: 428904.9/83

- sign 791.223 $\pm$ 0.110  $\chi^2$ /NDF: 26645.0/42



# asym\_us\_dd\_correction\_mean vs Slug



Right In: -1917.042 $\pm$ 5269.656  $\chi^2$ /NDF: 0.0/0

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

Right Out: 4224.576 $\pm$ 1947.897  $\chi^2$ /NDF: 0.6/1

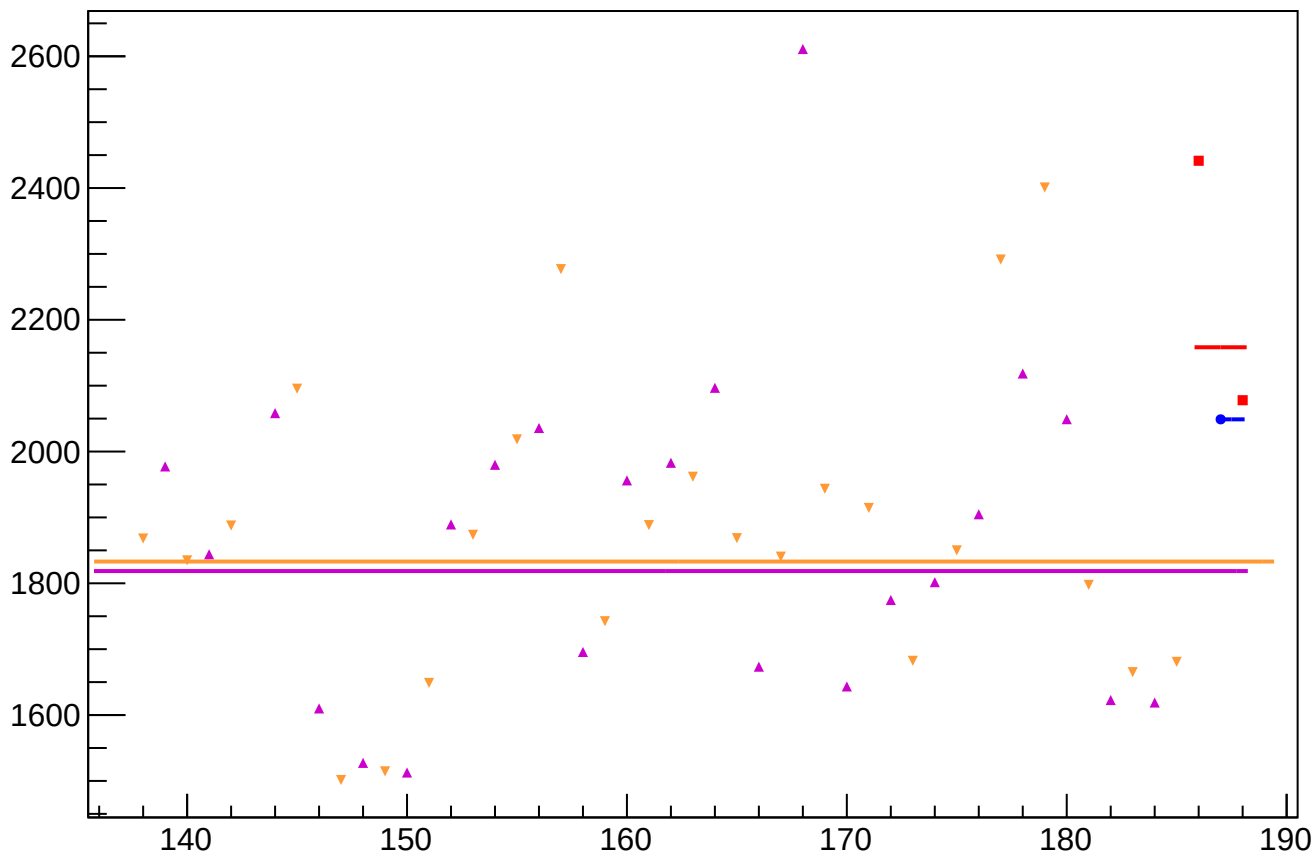
Left In: 2315.169 $\pm$ 437.003  $\chi^2$ /NDF: 22.0/22

+ sign -2176.660 $\pm$ 438.139  $\chi^2$ /NDF: 22.7/24

All: 177.203 $\pm$ 305.577  $\chi^2$ /NDF: 102.4/49

- sign 2406.667 $\pm$ 426.404  $\chi^2$ /NDF: 23.5/24

# asym\_us\_dd\_correction\_rms vs Slug



Right In: 2048.877 $\pm$ 3.726  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1833.028 $\pm$ 0.311  $\chi^2/\text{NDF}$ :465466.9/23

Right Out: 2158.293 $\pm$ 1.377  $\chi^2/\text{NDF}$ : 11994.8/1

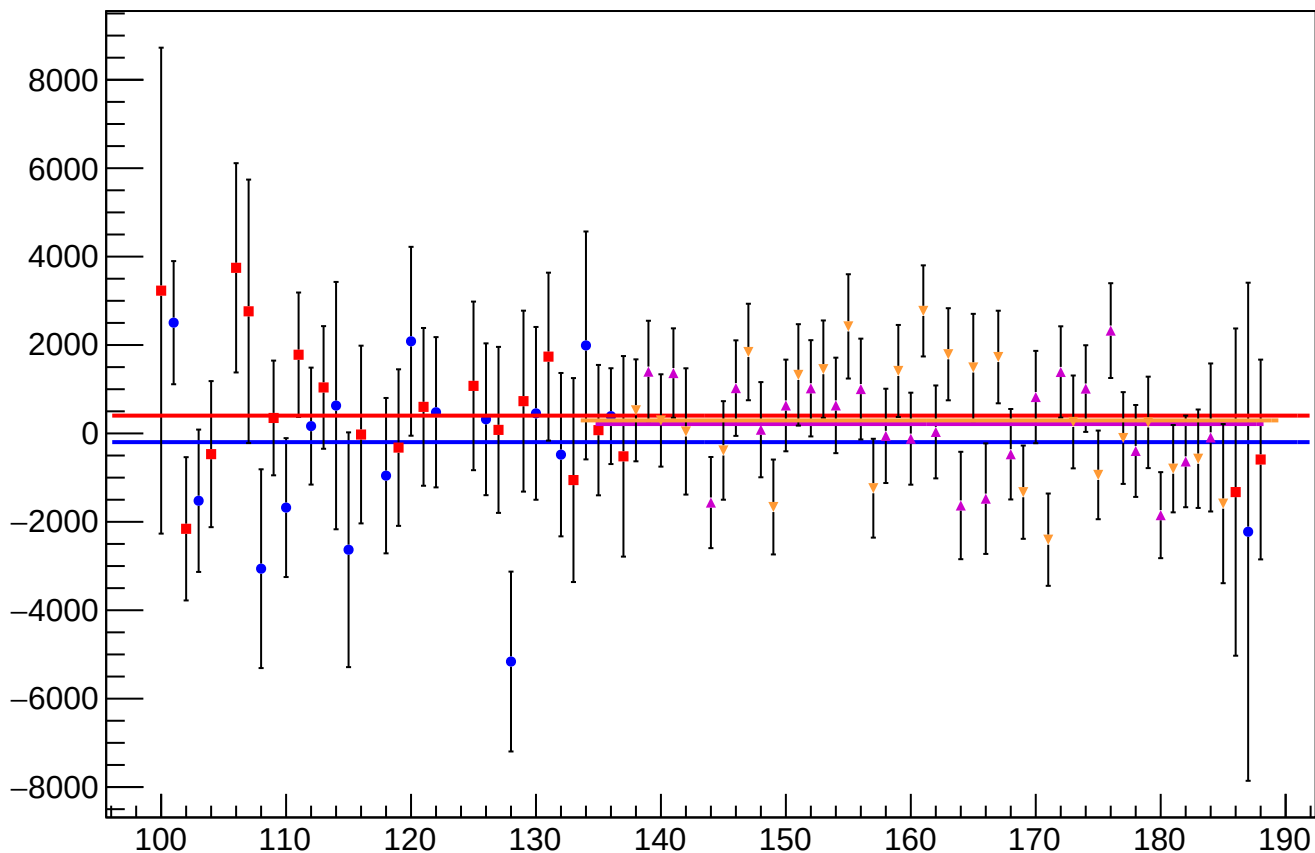
Left In: 1818.594 $\pm$ 0.309  $\chi^2/\text{NDF}$ :536826.7/22

+ sign 1834.520 $\pm$ 0.310  $\chi^2/\text{NDF}$ : 468799.3/24

All: 1834.701 $\pm$ 0.216  $\chi^2/\text{NDF}$ : 1075532.1/49

- sign 1834.872 $\pm$ 0.302  $\chi^2/\text{NDF}$ : 606732.1/24

# asym\_us\_dd\_mean vs Slug



Right In:  $-196.946 \pm 430.235$   $\chi^2/\text{NDF}$ : 16.8/16

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

Right Out:  $402.803 \pm 416.832$   $\chi^2/\text{NDF}$ : 8.8/19

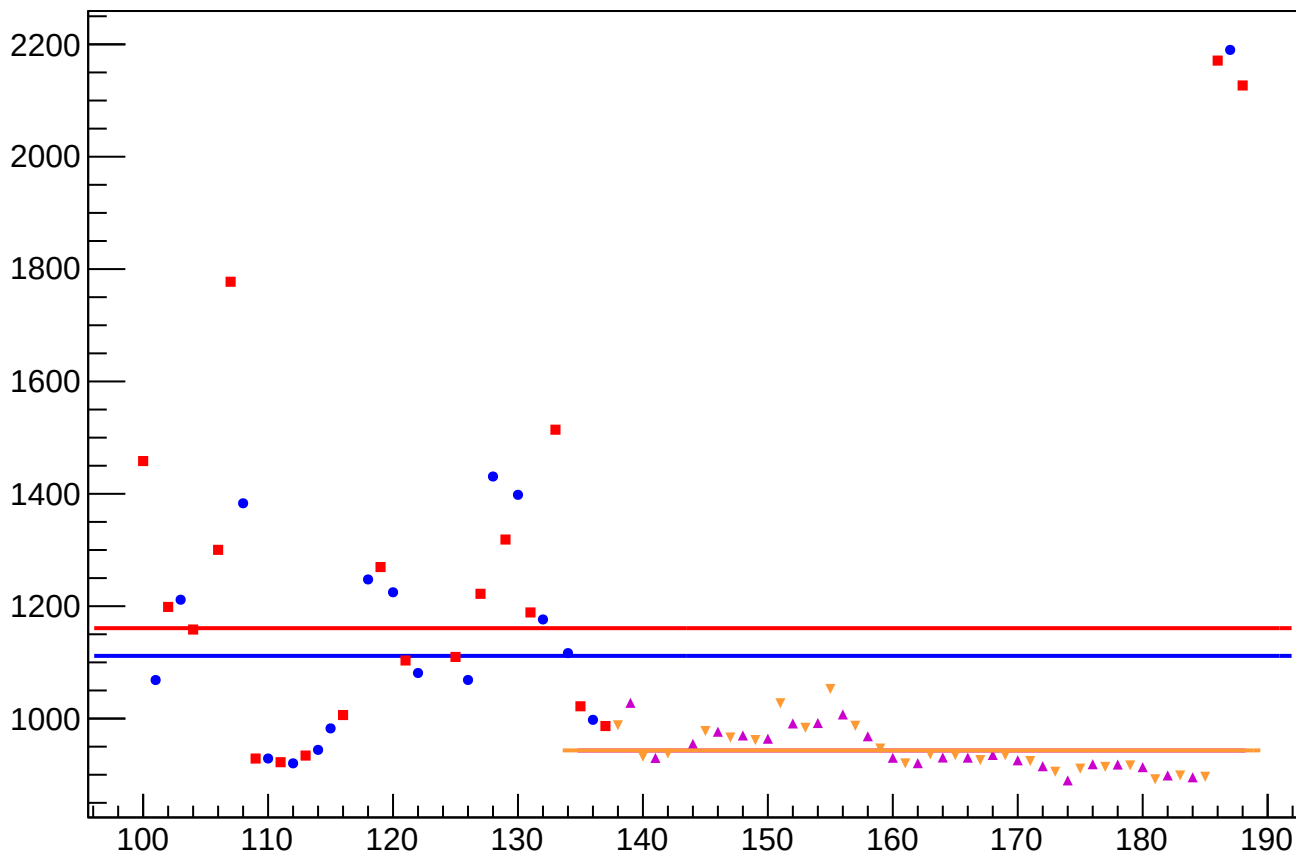
Left In:  $212.080 \pm 224.701$   $\chi^2/\text{NDF}$ : 23.7/22

+ sign  $189.558 \pm 198.924$   $\chi^2/\text{NDF}$ : 56.1/40

All:  $222.478 \pm 140.259$   $\chi^2/\text{NDF}$ : 88.8/83

- sign  $255.024 \pm 197.792$   $\chi^2/\text{NDF}$ : 32.7/42

# asym\_us\_dd\_rms vs Slug



Right In: 1111.562 $\pm$ 0.304  $\chi^2$ /NDF: 329090.1/16

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

+ sign 979.292 $\pm$ 0.141  $\chi^2$ /NDF: 629934.1/40

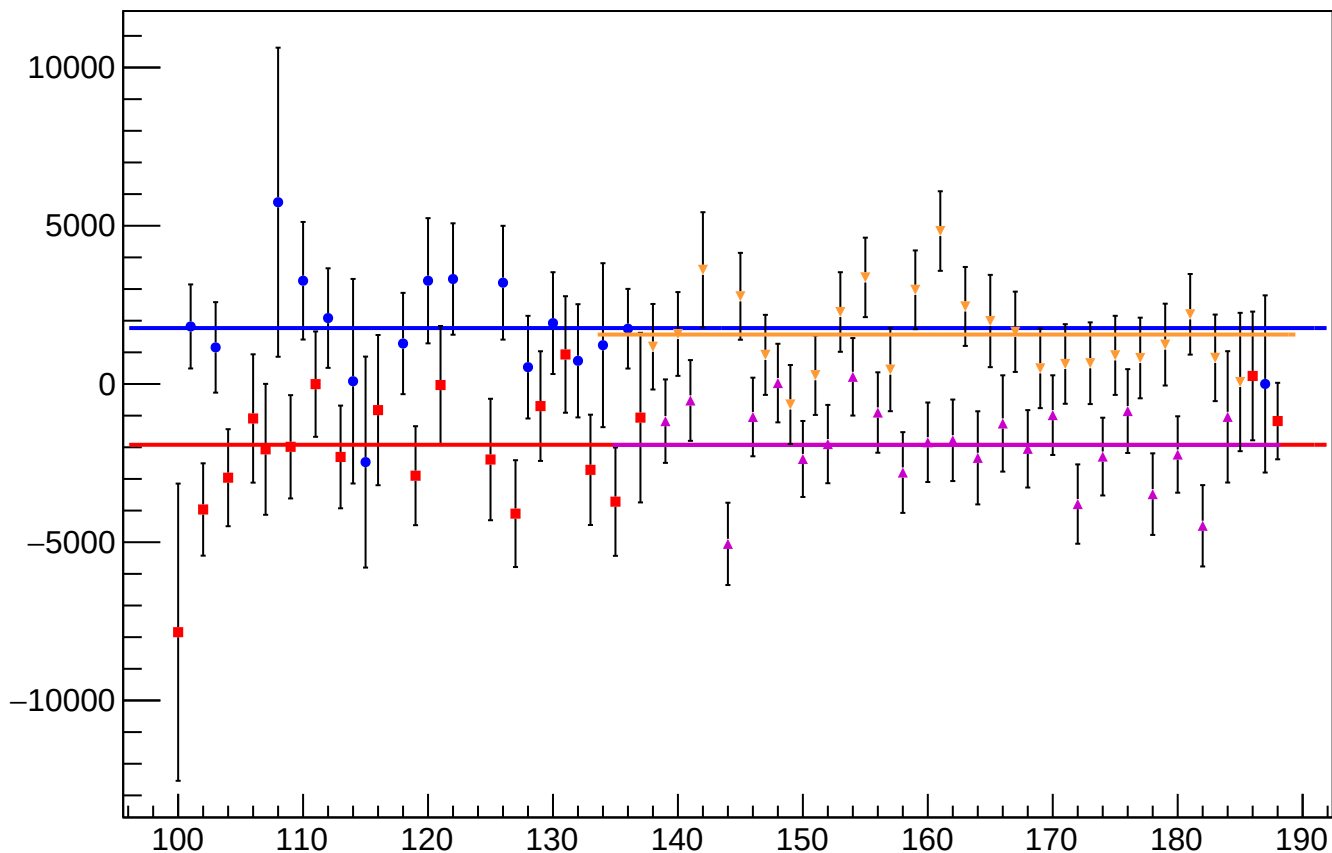
Right Out: 1160.889 $\pm$ 0.295  $\chi^2$ /NDF: 902581.3/19

All: 985.766 $\pm$ 0.099  $\chi^2$ /NDF: 2009581.4/83

- sign 992.166 $\pm$ 0.140  $\chi^2$ /NDF: 1375434.9/42

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

# dit\_asym\_usl\_mean vs Slug



Right In: 1767.004+/-436.727  $\chi^2/\text{NDF}$ : 6.9/16

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

Right Out: -1920.911+/-395.472  $\chi^2/\text{NDF}$ : 14.8/19

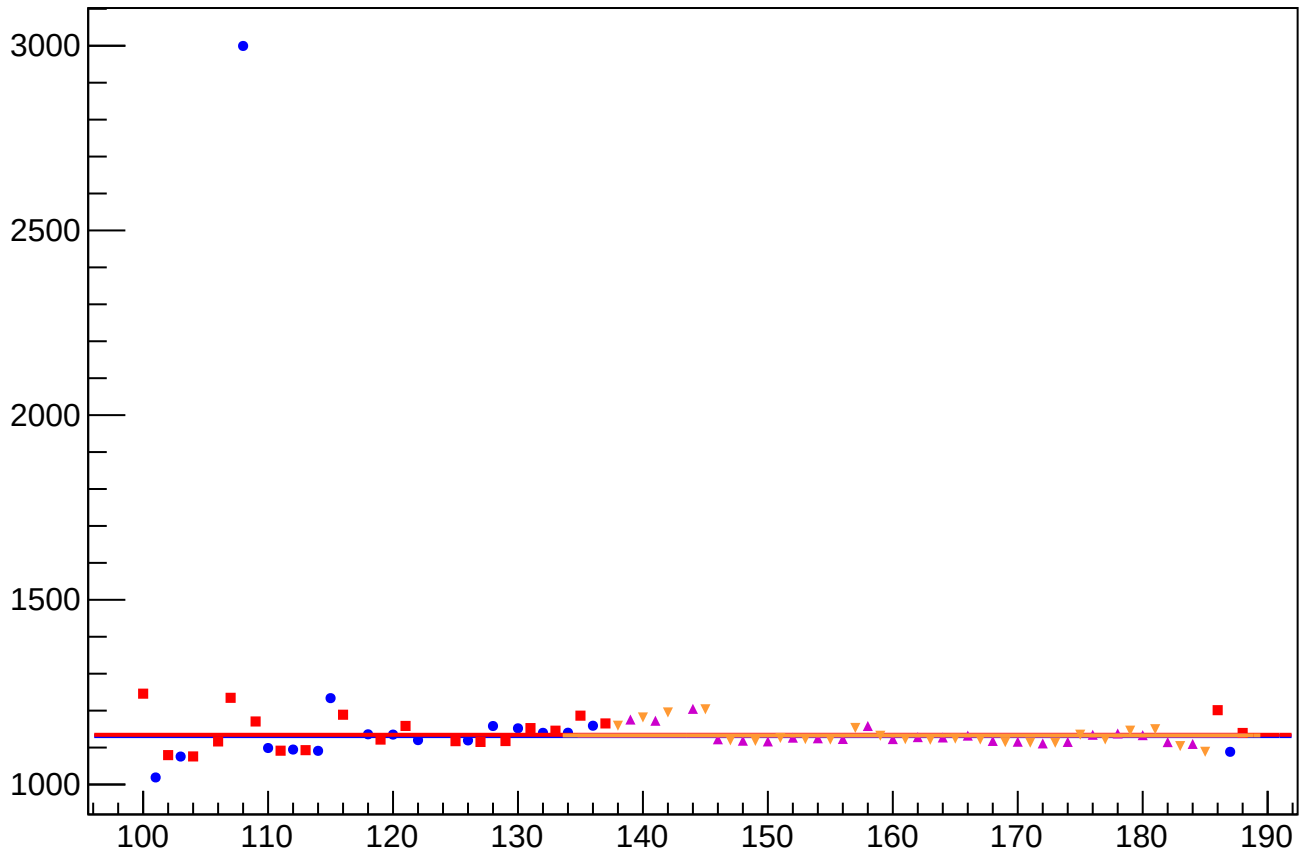
Left In: -1926.929+/-269.667  $\chi^2/\text{NDF}$ : 24.1/22

+ sign 1618.533+/-229.207  $\chi^2/\text{NDF}$ : 28.8/40

All: -203.465+/-159.760  $\chi^2/\text{NDF}$ : 190.6/83

- sign -1925.019+/-222.799  $\chi^2/\text{NDF}$ : 38.9/42

# dit\_asym\_usl\_rms vs Slug



Right In: 1131.013 $\pm$ 0.309  $\chi^2$ /NDF: 316499.6/16

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

Right Out: 1134.583 $\pm$ 0.280  $\chi^2$ /NDF: 22040.1/19

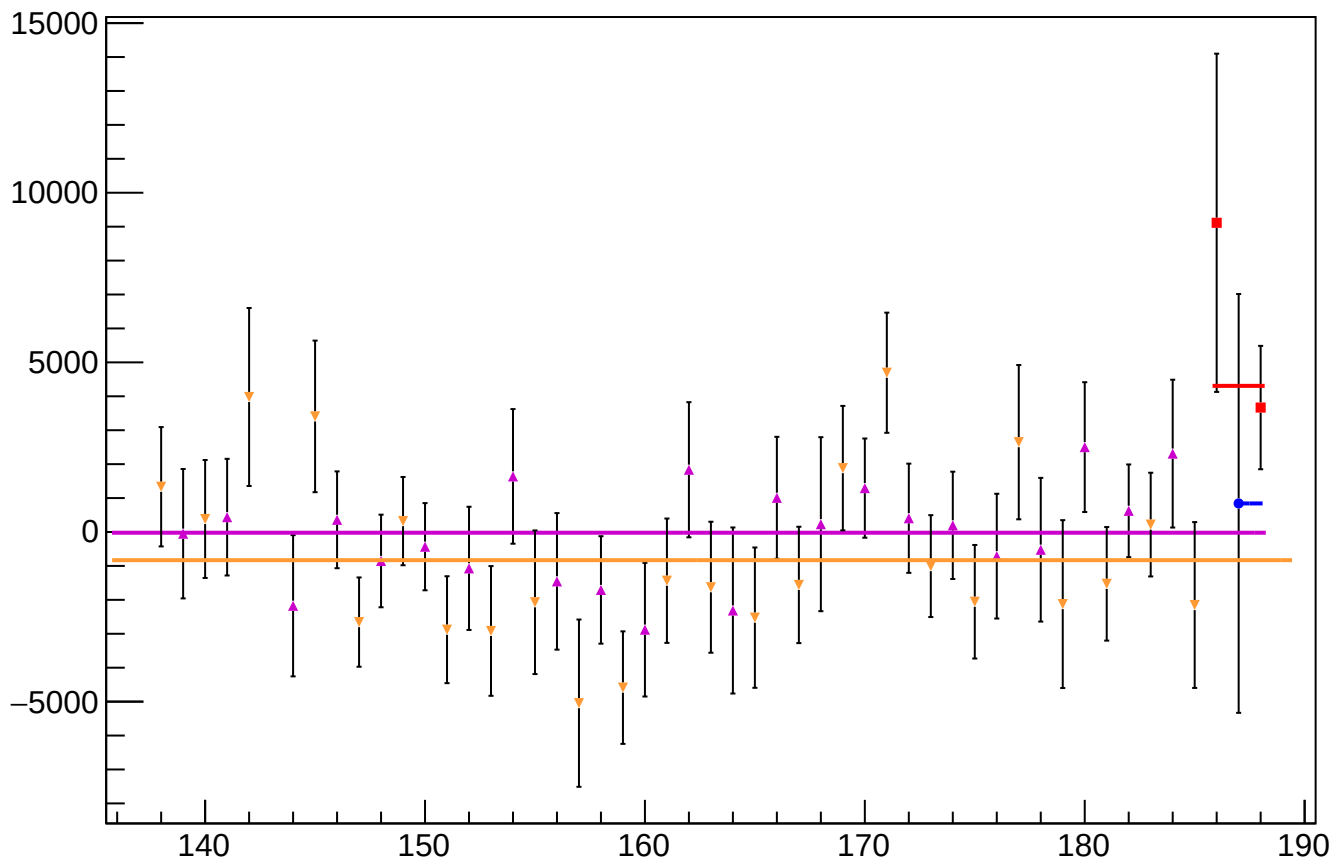
Left In: 1132.570 $\pm$ 0.191  $\chi^2$ /NDF:14524.8/22

+ sign 1132.367 $\pm$ 0.162  $\chi^2$ /NDF: 333312.9/40

All: 1132.800 $\pm$ 0.113  $\chi^2$ /NDF: 369927.0/83

- sign 1133.209 $\pm$ 0.158  $\chi^2$ /NDF: 36600.3/42

# asym\_usl\_correction\_mean vs Slug



Right In: 841.783+/-6172.519  $\chi^2/\text{NDF}$ : 0.0/0

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

Right Out: 4307.350+/-1708.079  $\chi^2/\text{NDF}$ : 1.1/1

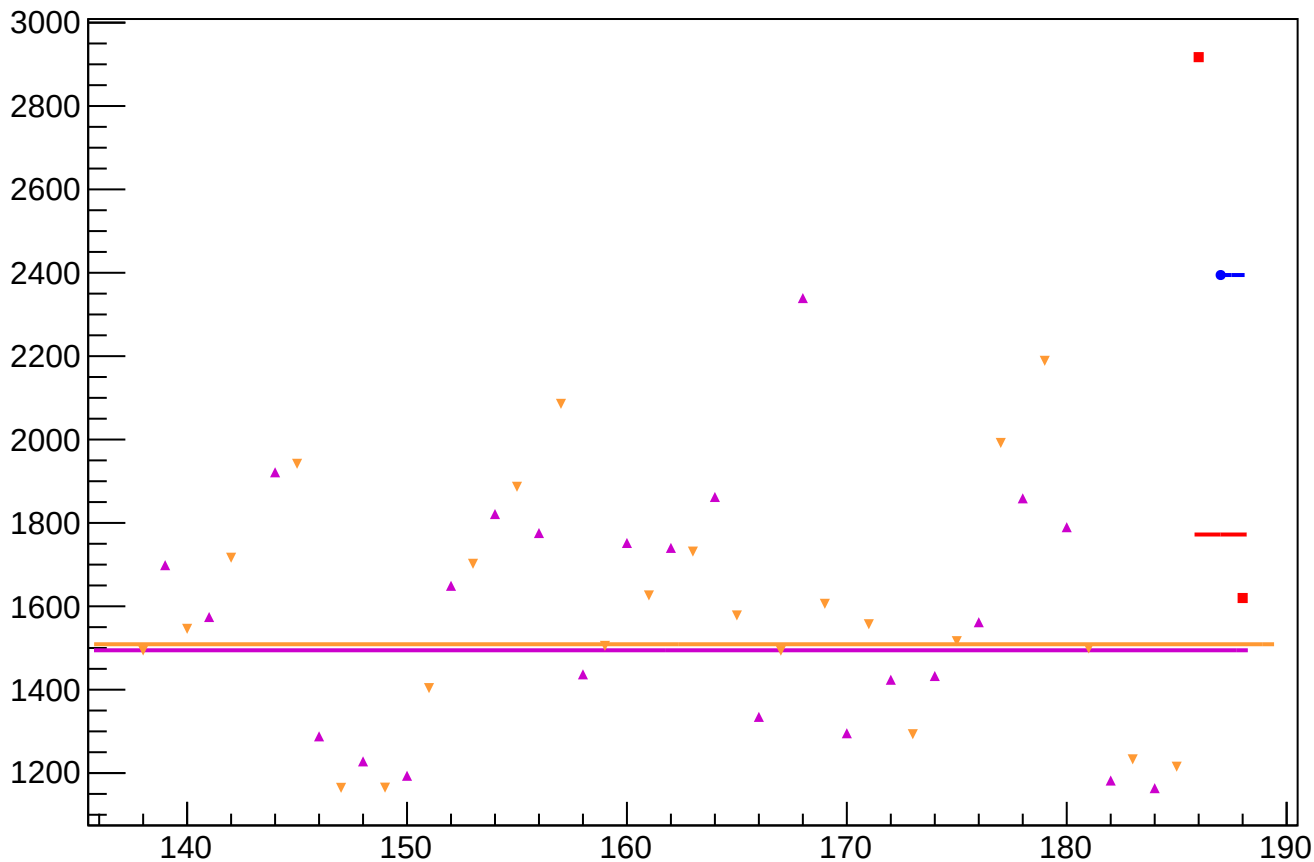
Left In: -21.419+/-362.476  $\chi^2/\text{NDF}$ : 12.8/22

+ sign -825.064+/-365.444  $\chi^2/\text{NDF}$ : 40.2/24

All: -315.033+/-254.480  $\chi^2/\text{NDF}$ : 63.9/49

- sign 165.123+/-354.580  $\chi^2/\text{NDF}$ : 20.0/24

# asym\_usl\_correction\_rms vs Slug



Right In: 2394.601 $\pm$ 4.365  $\chi^2$ /NDF: 0.0/0

Left Out: 1508.993 $\pm$ 0.259  $\chi^2$ /NDF:988673.2/23

Right Out: 1772.206 $\pm$ 1.208  $\chi^2$ /NDF: 119549.1/1

Left In: 1494.507 $\pm$ 0.256  $\chi^2$ /NDF:1096280.5/22

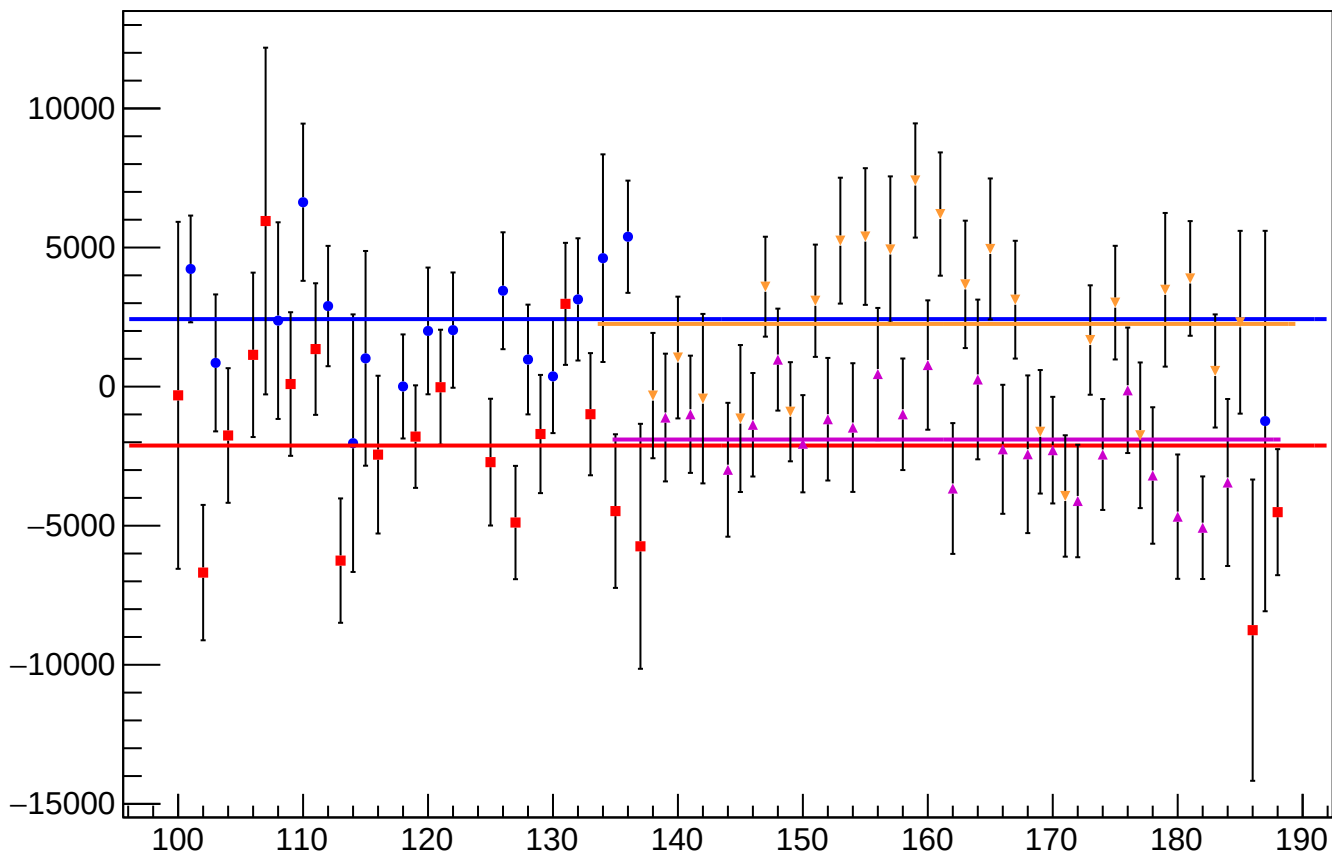
+ sign 1512.097 $\pm$ 0.258  $\chi^2$ /NDF: 1029699.6/24

All: 1509.201 $\pm$ 0.180  $\chi^2$ /NDF: 2296359.4/49

- sign 1506.474 $\pm$ 0.251  $\chi^2$ /NDF: 1266415.9/24



# asym\_usl\_mean vs Slug



Right In: 2426.914 $\pm$ 582.185  $\chi^2$ /NDF: 11.0/16

Left Out: 2253.979 $\pm$ 456.390  $\chi^2$ /NDF:38.7/23

Right Out: -2118.422 $\pm$ 561.728  $\chi^2$ /NDF: 25.5/19

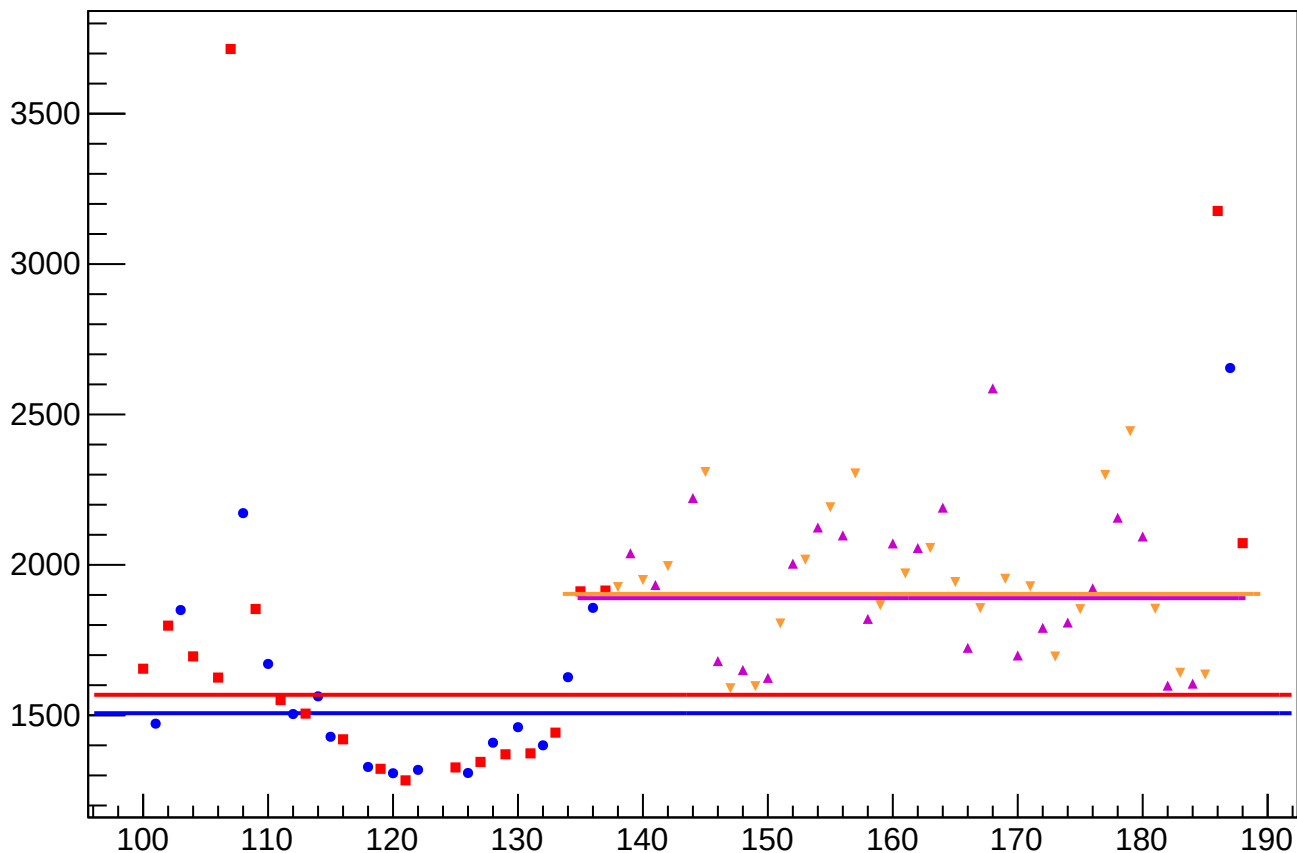
Left In: -1901.797 $\pm$ 453.879  $\chi^2$ /NDF:13.9/22

+ sign 2319.803 $\pm$ 359.179  $\chi^2$ /NDF: 49.8/40

All: 129.076 $\pm$ 251.778  $\chi^2$ /NDF: 162.4/83

- sign -1987.362 $\pm$ 353.037  $\chi^2$ /NDF: 39.5/42

# asym\_usl\_rms vs Slug



Right In: 1506.864+/-0.412  $\chi^2/\text{NDF}$ : 315552.4/16

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

Right Out: 1568.018+/-0.397  $\chi^2/\text{NDF}$ : 772036.4/19

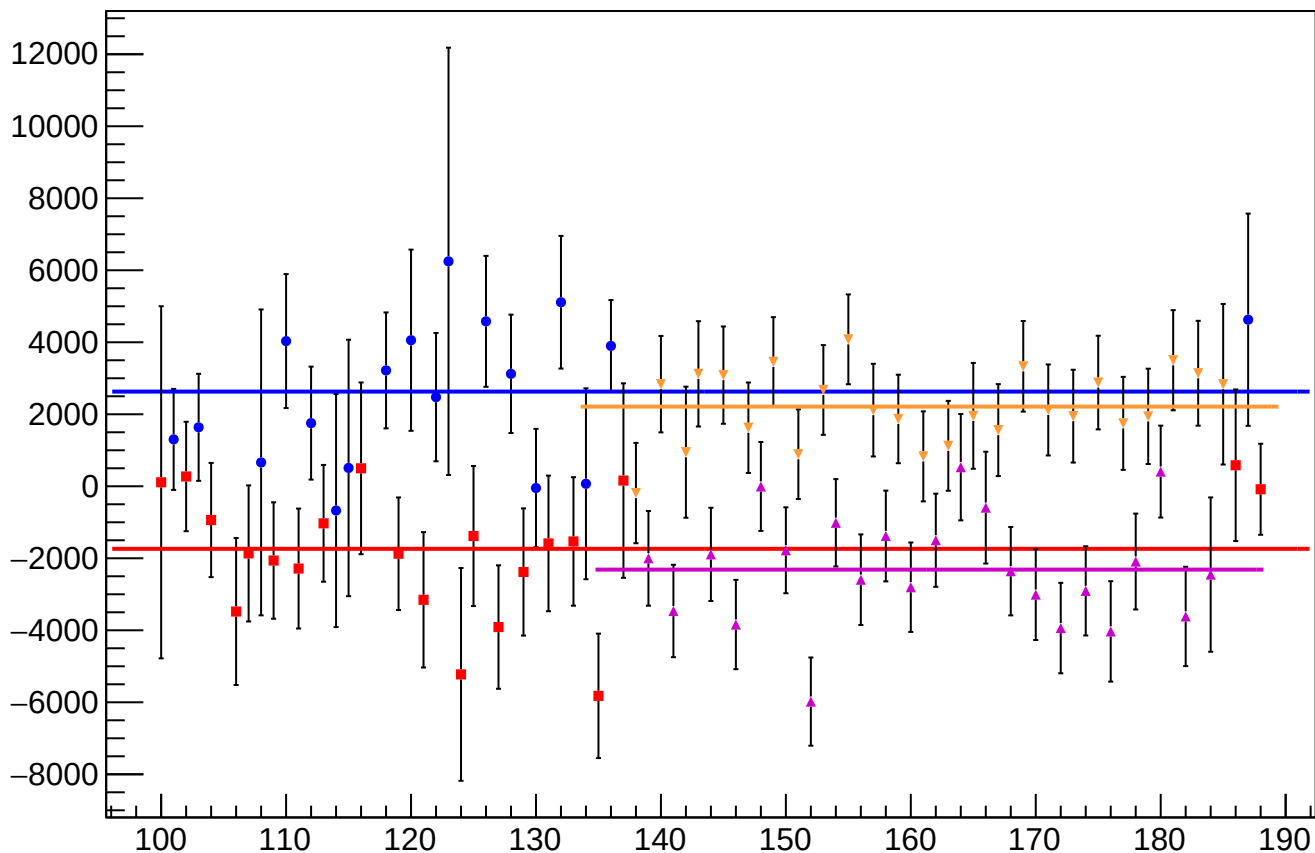
Left In: 1889.326+/-0.321  $\chi^2/\text{NDF}$ : 508648.5/22

+ sign 1752.502+/-0.254  $\chi^2/\text{NDF}$ : 1352292.4/40

All: 1757.543+/-0.178  $\chi^2/\text{NDF}$ : 3029649.1/83

- sign 1762.412+/-0.250  $\chi^2/\text{NDF}$ : 1676582.3/42

# dit\_asym\_usr\_mean vs Slug



Right In: 2630.185 $\pm$ 447.929  $\chi^2$ /NDF: 12.8/17

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

Right Out: -1736.975 $\pm$ 397.091  $\chi^2$ /NDF: 16.9/20

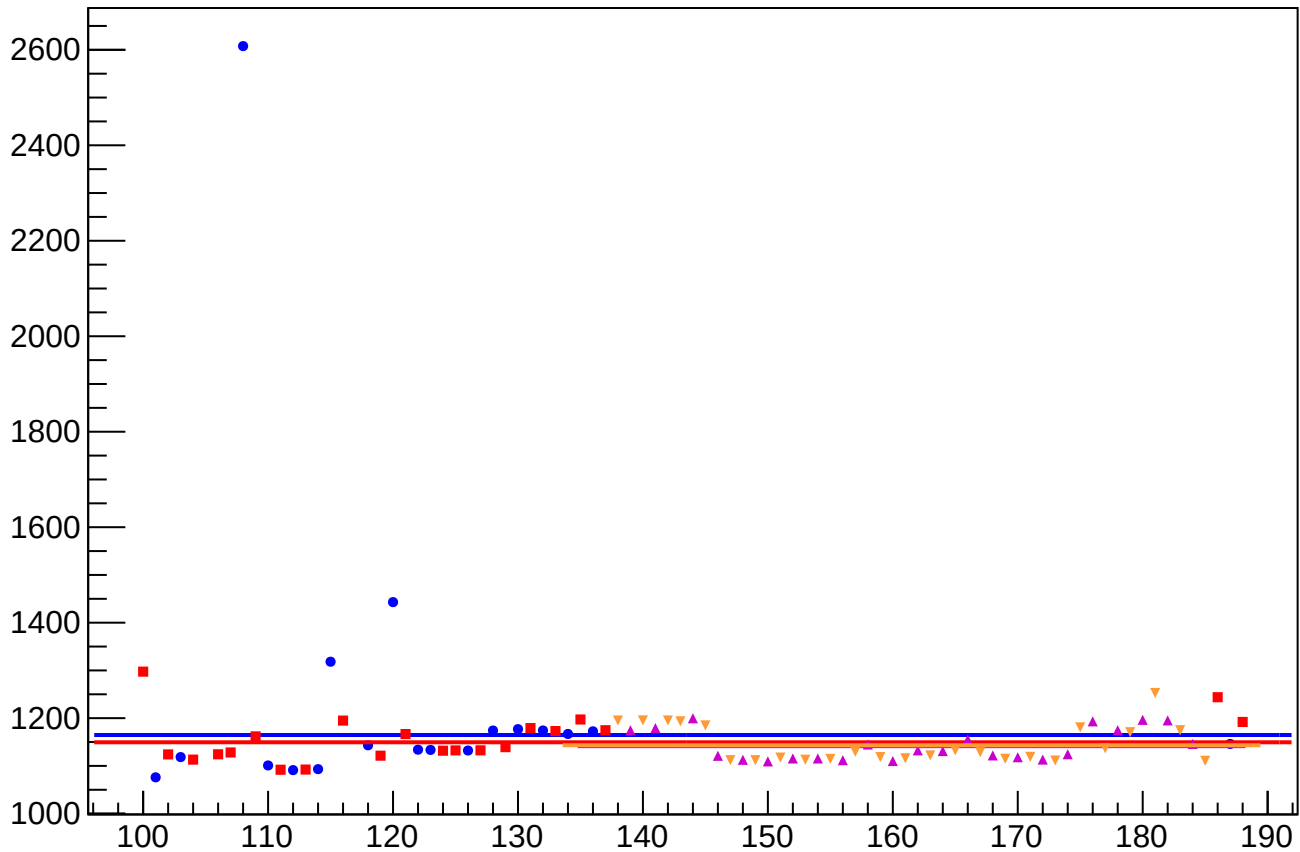
Left In: -2314.778 $\pm$ 271.873  $\chi^2$ /NDF:31.6/22

+ sign 2322.549 $\pm$ 229.297  $\chi^2$ /NDF: 27.6/42

All: 47.357 $\pm$ 160.353  $\chi^2$ /NDF: 270.1/86

- sign -2130.369 $\pm$ 224.332  $\chi^2$ /NDF: 49.9/43

# dit\_asym\_usr\_rms vs Slug



Right In: 1164.704 $\pm$ 0.317  $\chi^2$ /NDF: 278652.5/17

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

Right Out: 1149.480 $\pm$ 0.281  $\chi^2$ /NDF: 19841.6/20

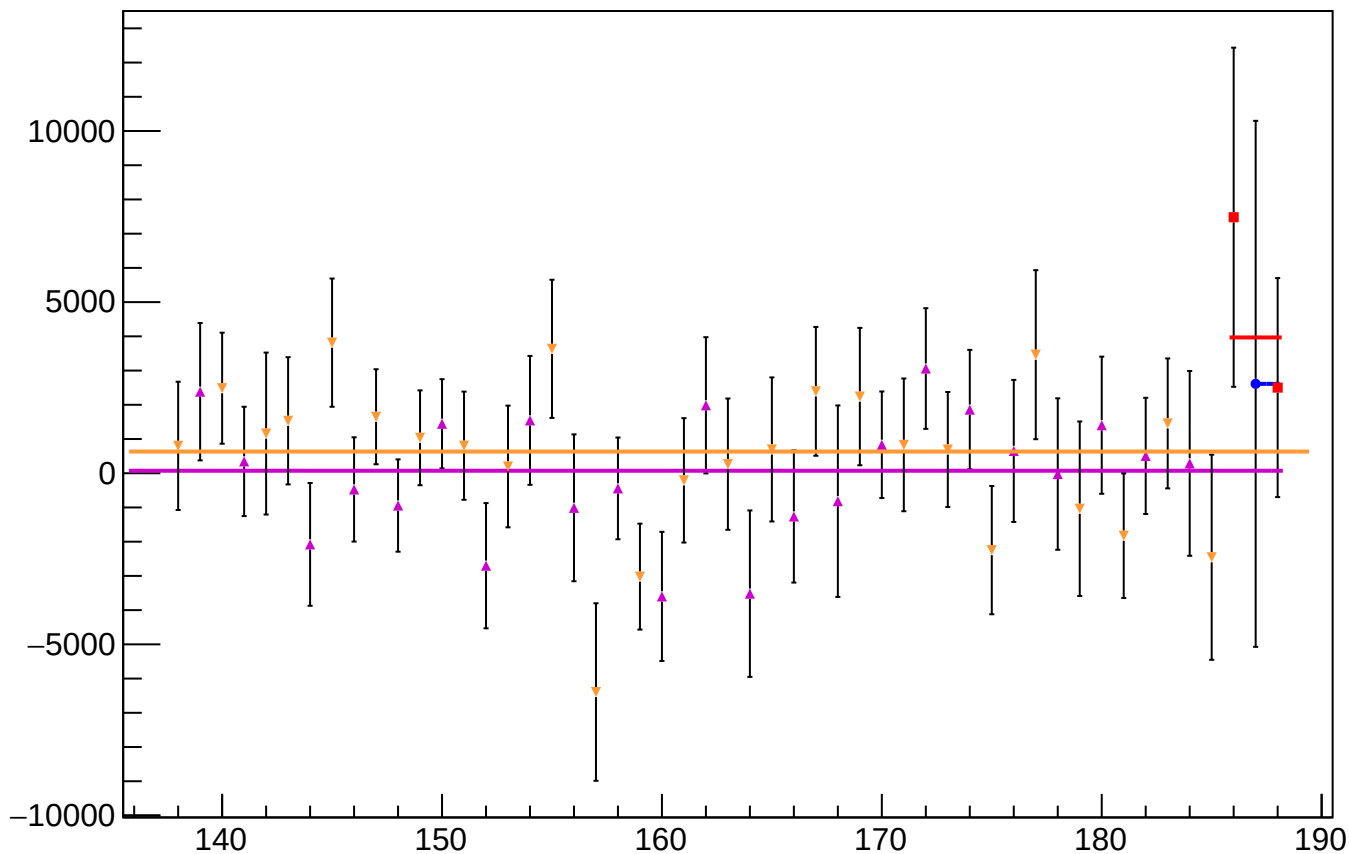
Left In: 1141.363 $\pm$ 0.192  $\chi^2$ /NDF: 28014.9/22

+ sign 1148.872 $\pm$ 0.162  $\chi^2$ /NDF: 321531.8/42

All: 1146.359 $\pm$ 0.113  $\chi^2$ /NDF: 370427.3/86

- sign 1143.954 $\pm$ 0.159  $\chi^2$ /NDF: 48425.4/43

# asym\_usr\_correction\_mean vs Slug



Right In: 2611.704+/-7685.510  $\chi^2/\text{NDF}$ : 0.0/0

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

Right Out: 3967.711+/-2688.029  $\chi^2/\text{NDF}$ : 0.7/1

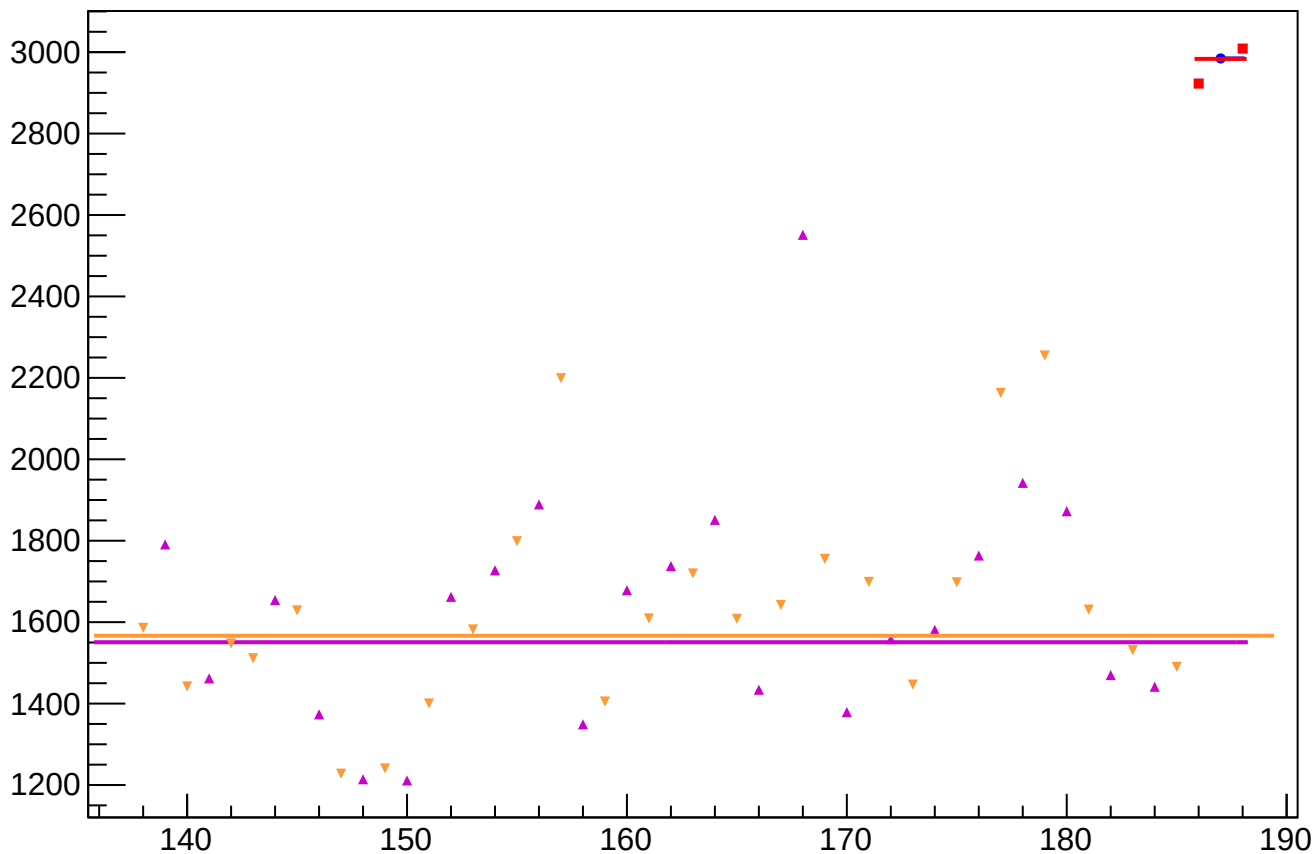
Left In: 72.962+/-375.277  $\chi^2/\text{NDF}$ : 20.1/22

+ sign 638.369+/-371.499  $\chi^2/\text{NDF}$ : 29.3/25

All: 393.011+/-262.751  $\chi^2/\text{NDF}$ : 53.1/50

- sign 147.423+/-371.673  $\chi^2/\text{NDF}$ : 22.9/24

# asym\_usr\_correction\_rms vs Slug



Right In:  $2984.539 \pm 5.434$   $\chi^2/\text{NDF}: 0.0/0$

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

Right Out:  $2983.457 \pm 1.901$   $\chi^2/\text{NDF}: 424.2/1$

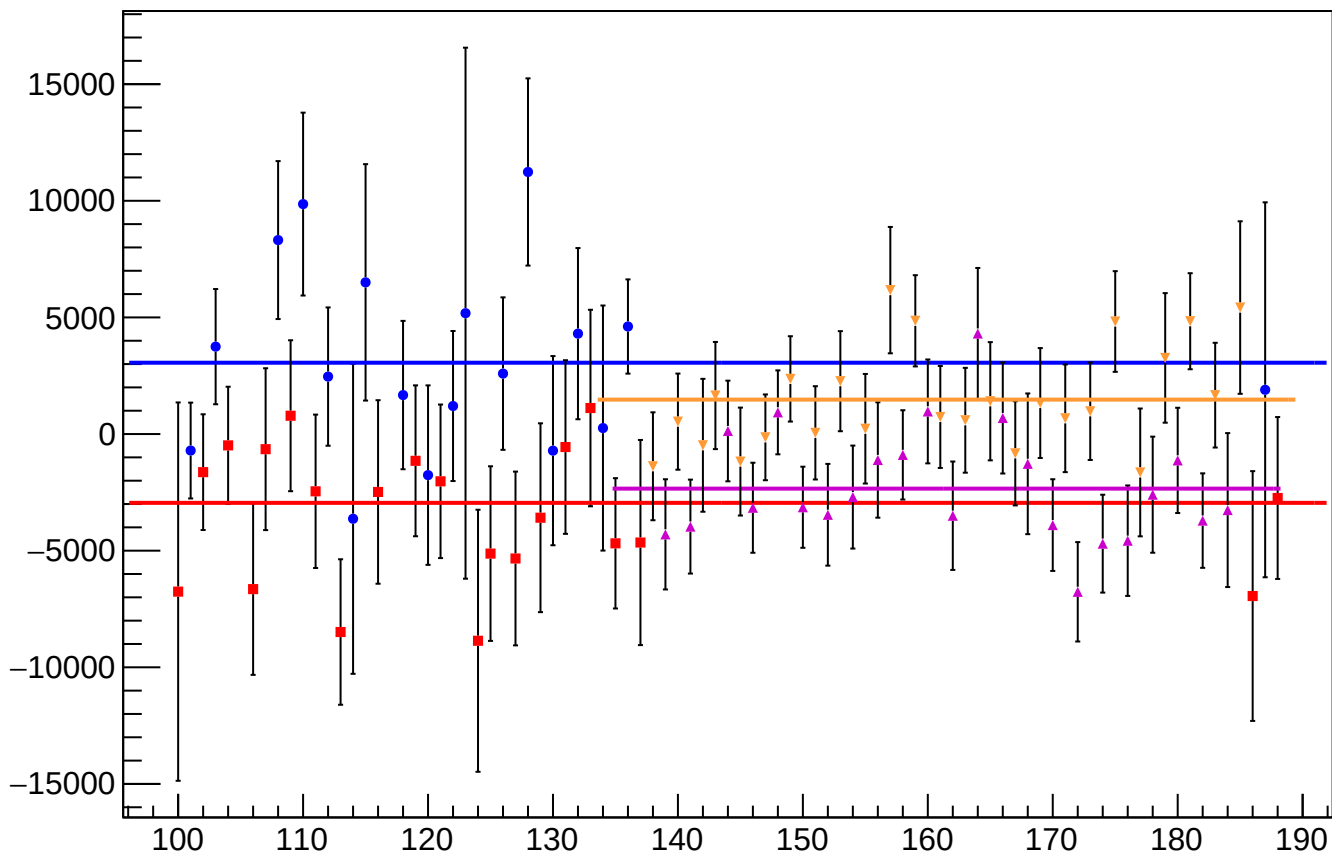
Left In:  $1550.750 \pm 0.265$   $\chi^2/\text{NDF}: 928652.8/22$

+ sign  $1569.939 \pm 0.263$   $\chi^2/\text{NDF}: 834870.5/25$

All:  $1574.038 \pm 0.186$   $\chi^2/\text{NDF}: 2321740.6/50$

- sign  $1578.141 \pm 0.263$   $\chi^2/\text{NDF}: 1486382.9/24$

# asym\_usr\_mean vs Slug



Right In: 3058.046 $\pm$ 793.840  $\chi^2$ /NDF: 18.5/17

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

Right Out: -2949.834 $\pm$ 767.249  $\chi^2$ /NDF: 12.1/20

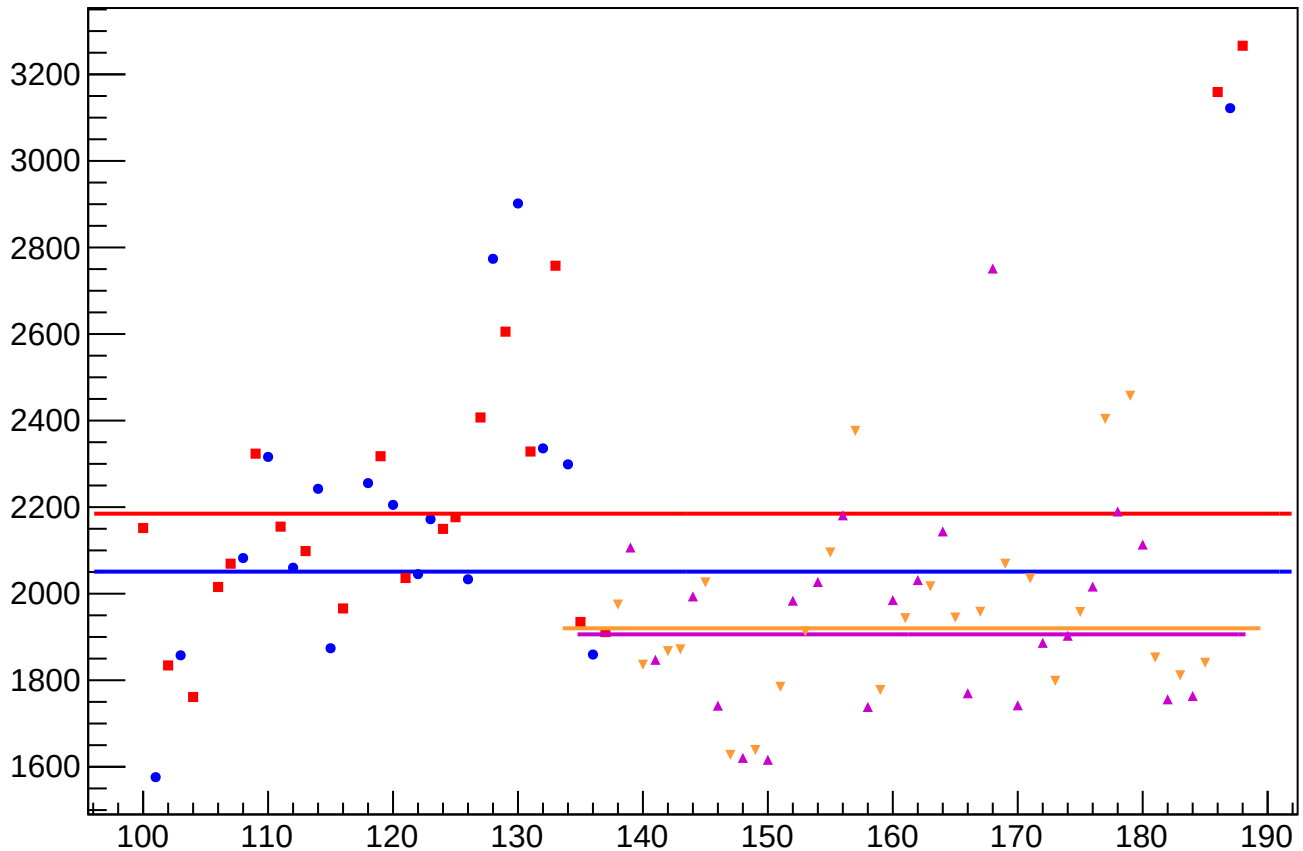
Left In: -2339.905 $\pm$ 457.448  $\chi^2$ /NDF: 25.2/22

+ sign 1862.216 $\pm$ 392.363  $\chi^2$ /NDF: 42.5/42

All: -315.768 $\pm$ 277.637  $\chi^2$ /NDF: 142.0/86

- sign -2499.860 $\pm$ 392.913  $\chi^2$ /NDF: 37.8/43

# asym\_usr\_rms vs Slug



Right In: 2050.985+/-0.561  $\chi^2/\text{NDF}$ : 367199.7/17

Left Out: 1920.082+/-0.319  $\chi^2/\text{NDF}$ : 365919.7/24

+ sign 1952.061+/-0.277  $\chi^2/\text{NDF}$ : 774216.7/42

Right Out: 2184.921+/-0.543  $\chi^2/\text{NDF}$ : 475179.8/20

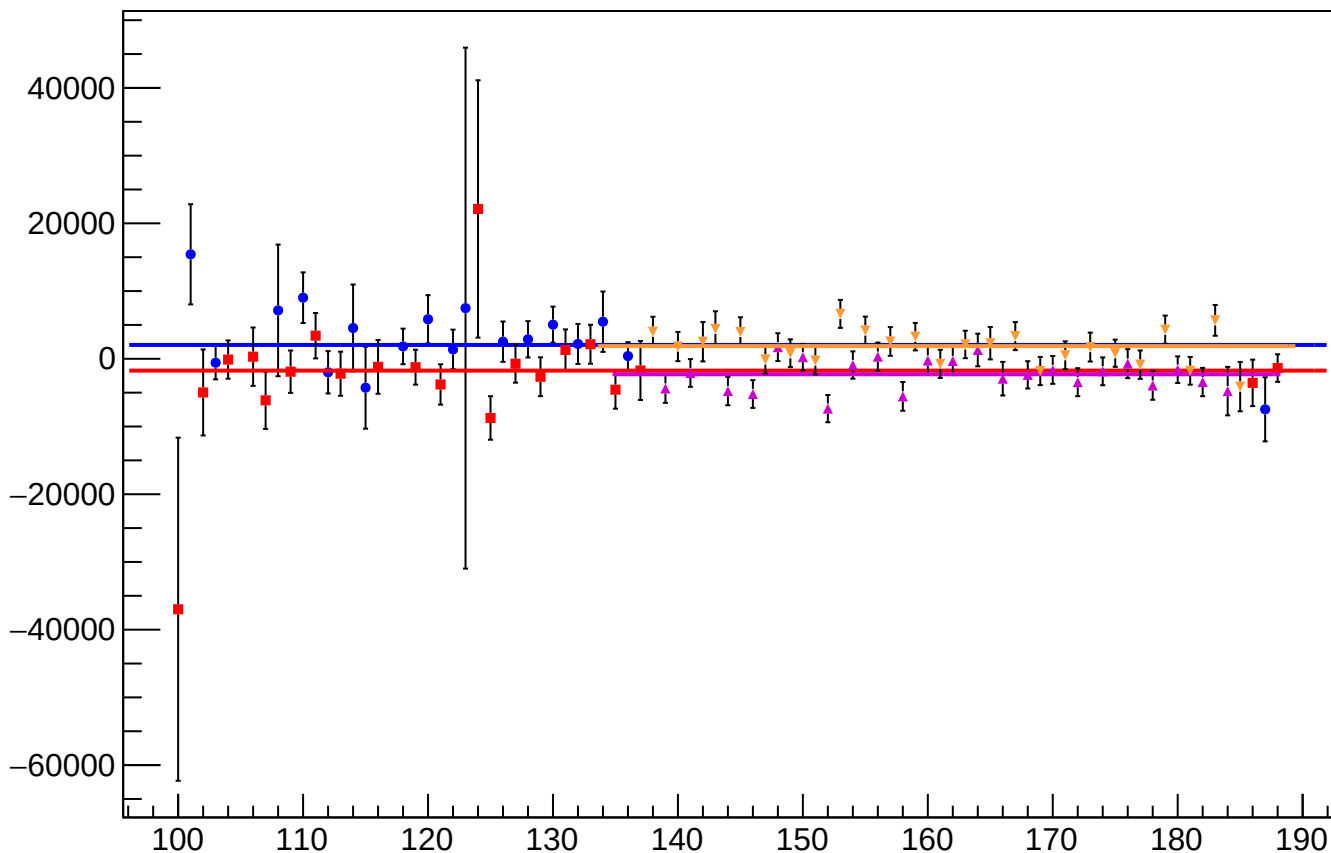
All: 1965.601+/-0.196  $\chi^2/\text{NDF}$ : 1900158.0/80

- sign 1979.179+/-0.278  $\chi^2/\text{NDF}$ : 1121171.0/43

Left In: 1906.043+/-0.323  $\chi^2/\text{NDF}$ : 451054.7/22



# dit\_asym\_at1\_avg\_mean vs Slug



Right In: 2046.595 $\pm$ 790.199  $\chi^2$ /NDF: 18.9/17

Left Out: 1875.290 $\pm$ 433.245  $\chi^2$ /NDF:30.0/24

Right Out: -1744.603 $\pm$ 714.794  $\chi^2$ /NDF: 17.5/20

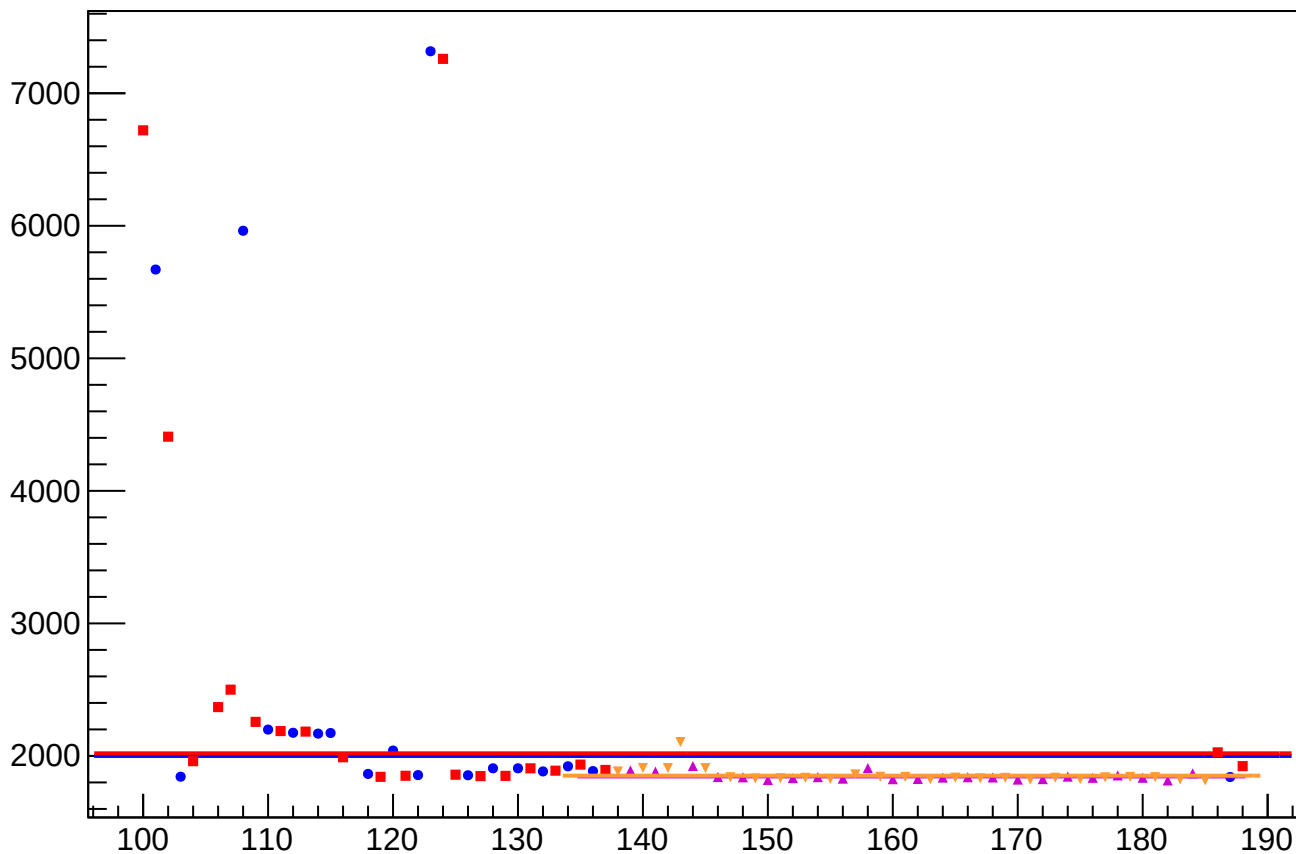
Left In: -2286.268 $\pm$ 441.005  $\chi^2$ /NDF:27.3/22

+ sign 1914.883 $\pm$ 379.893  $\chi^2$ /NDF: 49.0/42

All: -135.554 $\pm$ 266.993  $\chi^2$ /NDF: 151.8/86

- sign -2136.929 $\pm$ 375.320  $\chi^2$ /NDF: 45.2/43

# dit\_asym\_at1\_avg\_rms vs Slug



Right In: 1999.994+/-0.559  $\chi^2/\text{NDF}$ : 918334.2/17

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

Right Out: 2019.618+/-0.505  $\chi^2/\text{NDF}$ : 616142.7/20

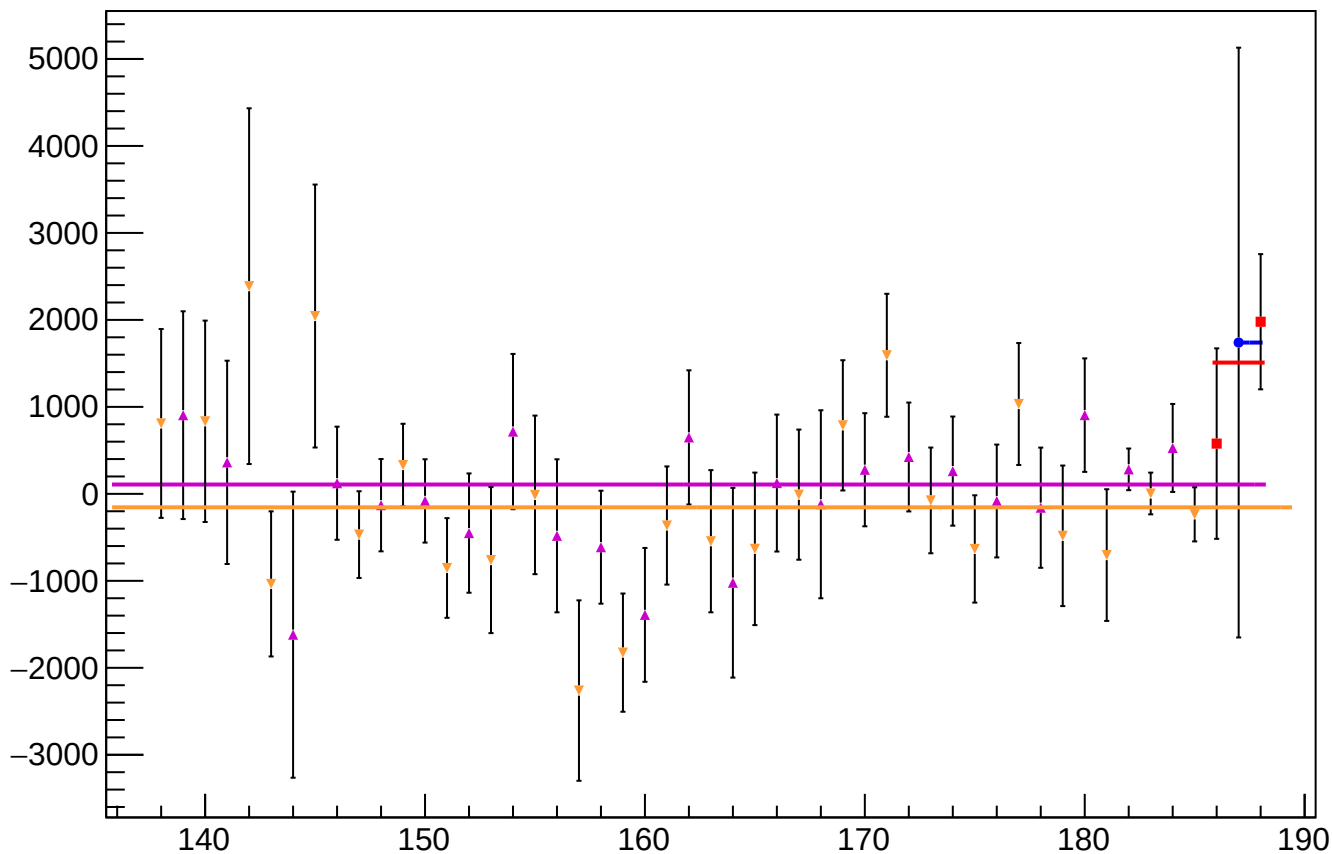
Left In: 1845.411+/-0.312  $\chi^2/\text{NDF}$ : 8318.8/22

+ sign 1885.487+/-0.269  $\chi^2/\text{NDF}$ : 999207.5/42

All: 1889.512+/-0.189  $\chi^2/\text{NDF}$ : 1710156.1/80

- sign 1893.441+/-0.265  $\chi^2/\text{NDF}$ : 710505.0/43

# asym\_at1\_avg\_correction\_mean vs Slug



Right In: 1739.451 $\pm$ 3390.395  $\chi^2$ /NDF: 0.0/0

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

Right Out: 1509.449 $\pm$ 633.812  $\chi^2$ /NDF: 1.1/1

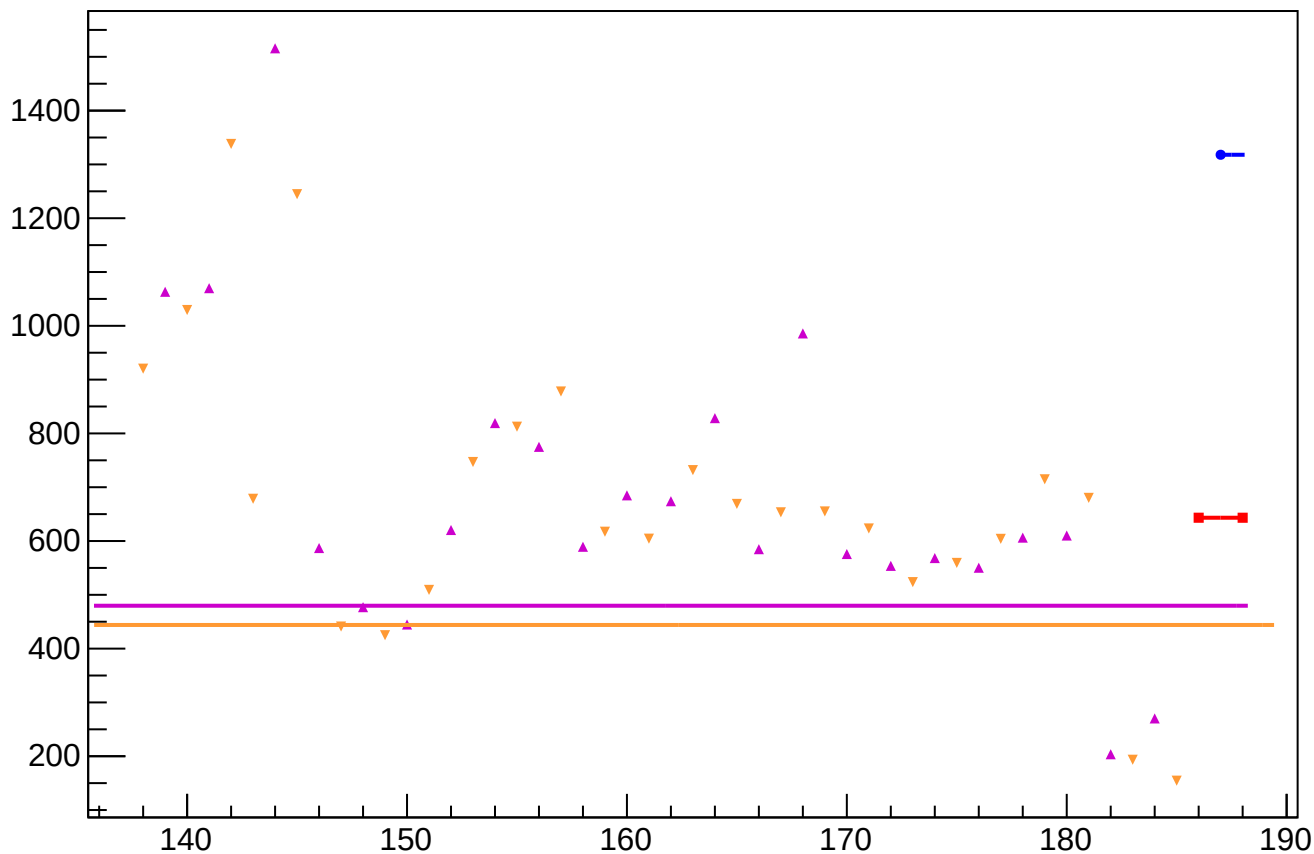
Left In: 107.387 $\pm$ 127.580  $\chi^2$ /NDF:13.5/22

+ sign -152.489 $\pm$ 119.579  $\chi^2$ /NDF: 33.3/25

All: -2.308 $\pm$ 86.432  $\chi^2$ /NDF: 55.9/50

- sign 161.984 $\pm$ 125.071  $\chi^2$ /NDF: 19.3/24

# asym\_at1\_avg\_correction\_rms vs Slug



Right In: 1317.939+/-2.397  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 443.961+/-0.085  $\chi^2/\text{NDF}$ : 8573133.3/24

Right Out: 643.286+/-0.448  $\chi^2/\text{NDF}$ : 0.0/1

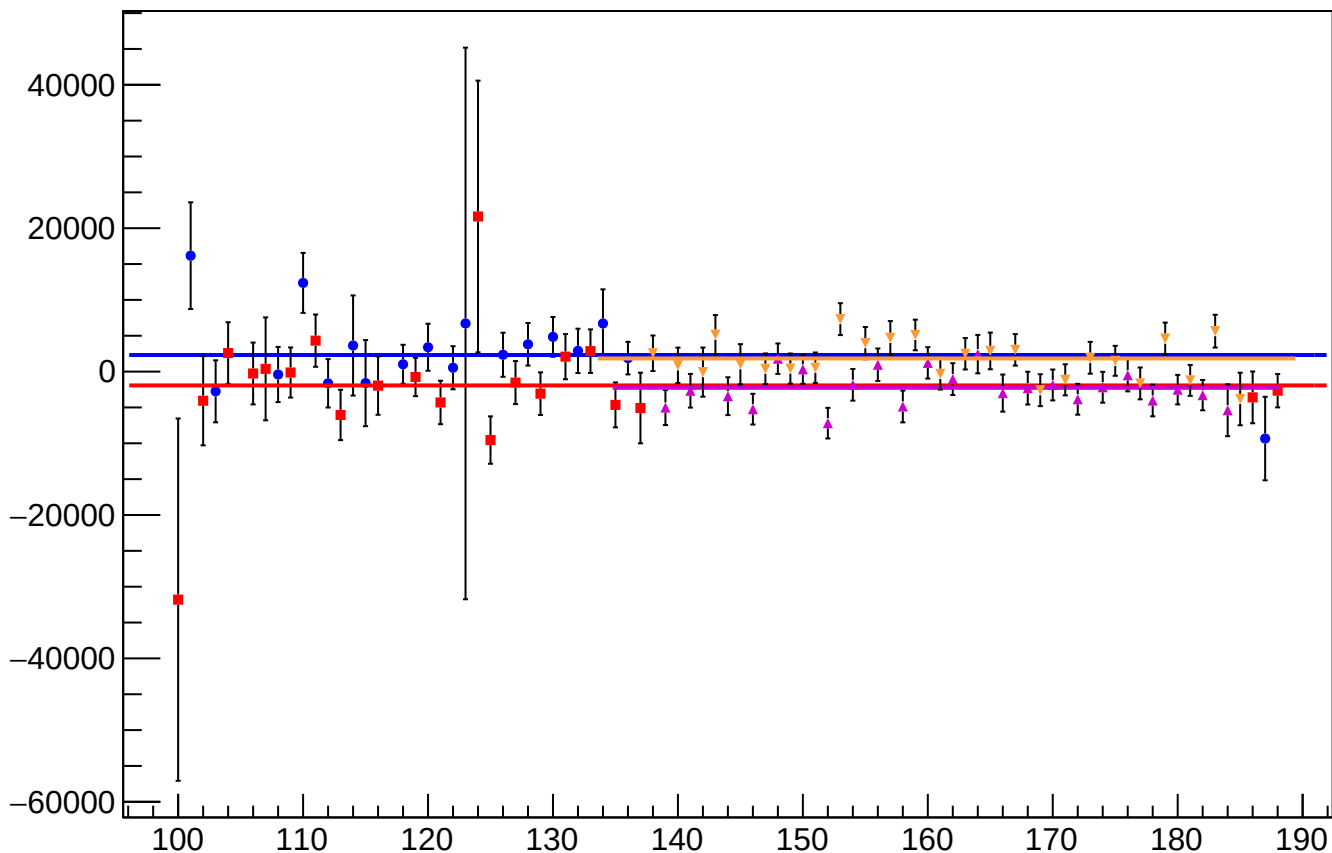
Left In: 479.723+/-0.090  $\chi^2/\text{NDF}$ : 6734597.7/22

+ sign 445.049+/-0.085  $\chi^2/\text{NDF}$ : 8705869.4/25

All: 464.649+/-0.061  $\chi^2/\text{NDF}$ : 15680994.1/50

- sign 486.092+/-0.088  $\chi^2/\text{NDF}$ : 6862604.9/24

# asym\_at1\_avg\_mean vs Slug



Right In: 2314.763 $\pm$ 846.979  $\chi^2$ /NDF: 19.7/17

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

Right Out: -1929.799 $\pm$ 781.962  $\chi^2$ /NDF: 20.9/20

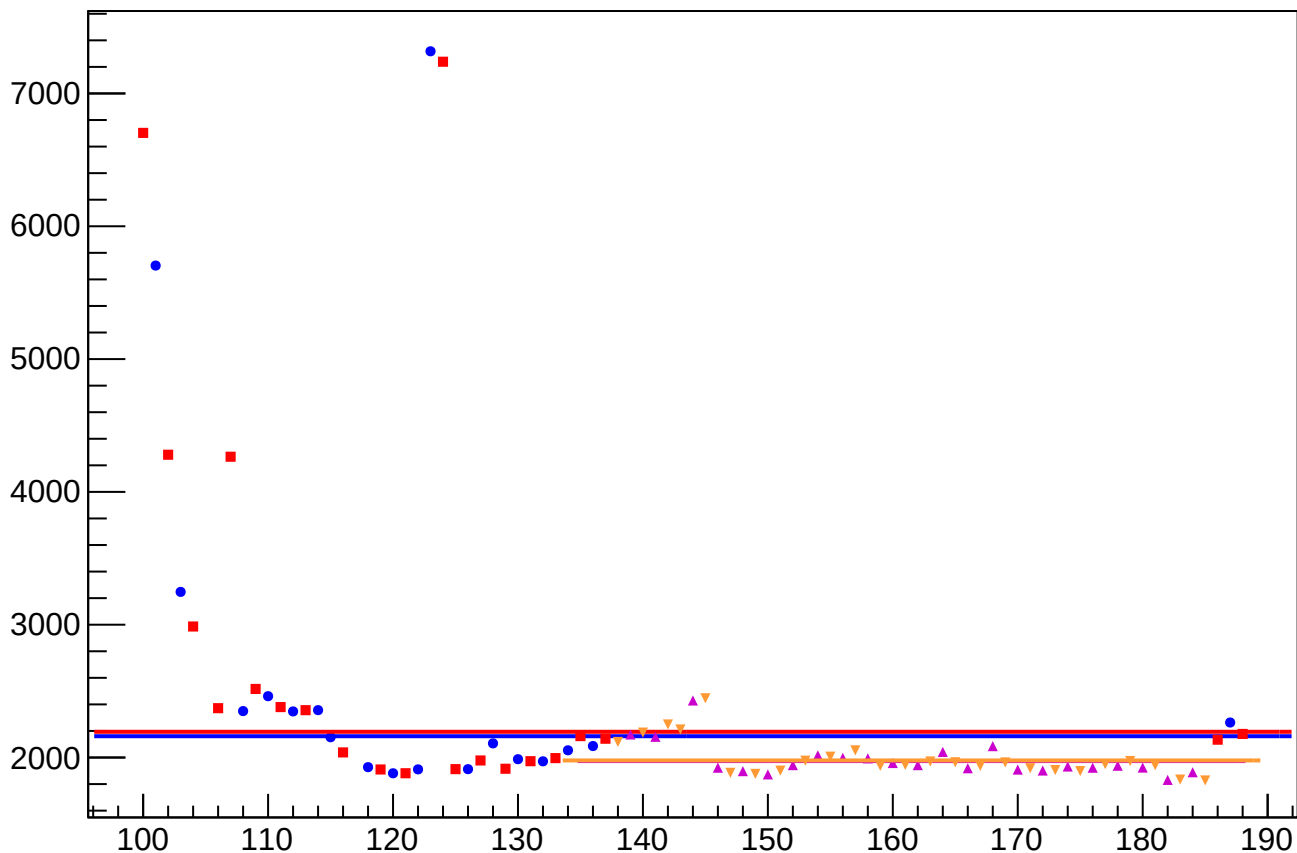
Left In: -2260.178 $\pm$ 472.324  $\chi^2$ /NDF: 26.3/22

+ sign 1945.450 $\pm$ 406.786  $\chi^2$ /NDF: 52.7/42

All: -125.852 $\pm$ 286.756  $\chi^2$ /NDF: 151.6/86

- sign -2171.862 $\pm$ 404.295  $\chi^2$ /NDF: 47.3/43

# asym\_at1\_avg\_rms vs Slug



Right In: 2160.379+/-0.599  $\chi^2/\text{NDF}$ : 714503.6/17

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

Right Out: 2193.824+/-0.553  $\chi^2/\text{NDF}$ : 803746.4/20

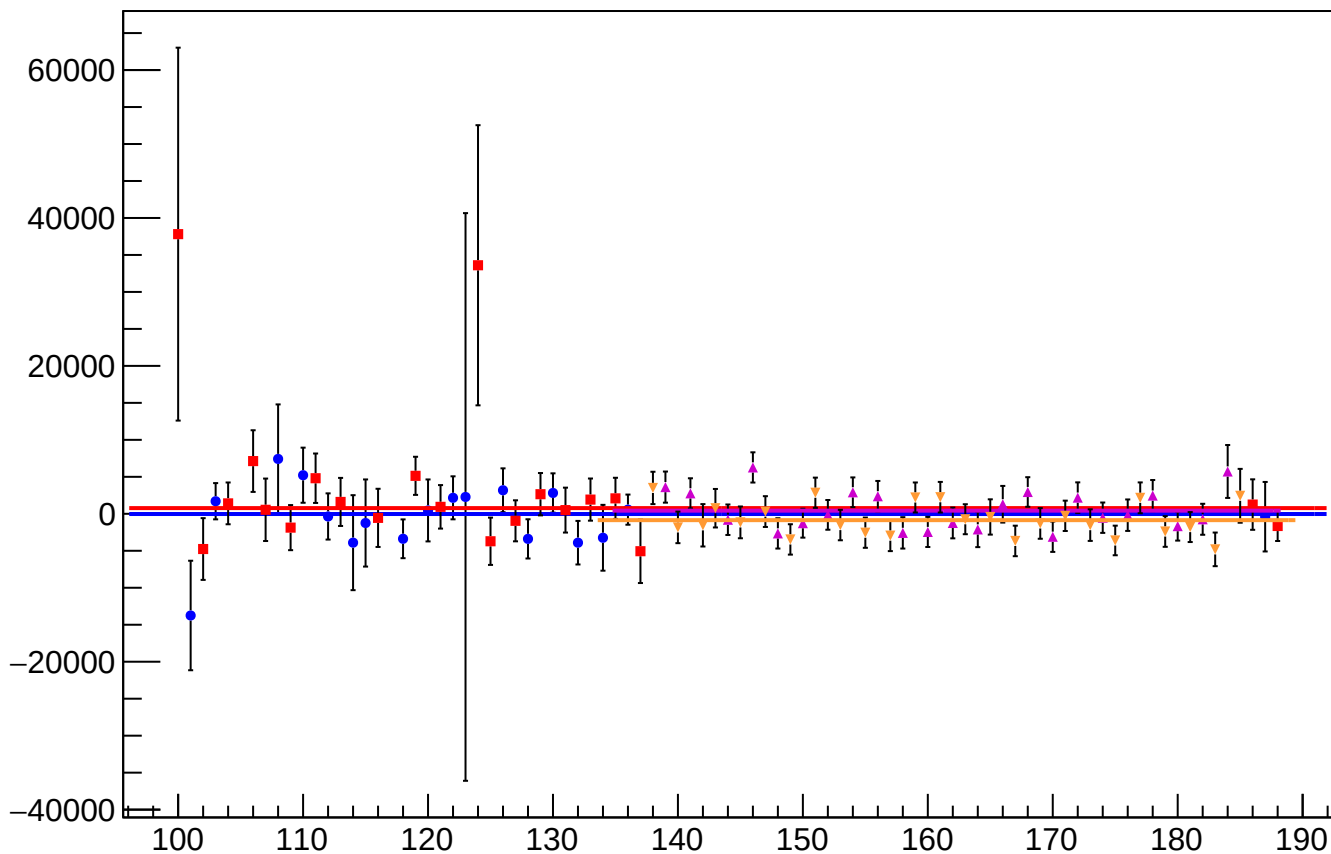
Left In: 1973.216+/-0.334  $\chi^2/\text{NDF}$ : 120479.3/22

+ sign 2020.103+/-0.288  $\chi^2/\text{NDF}$ : 923510.6/42

All: 2026.183+/-0.203  $\chi^2/\text{NDF}$ : 1965257.0/86

- sign 2032.189+/-0.286  $\chi^2/\text{NDF}$ : 1040858.3/43

# dit\_asym\_at1\_dd\_mean vs Slug



Right In:  $-28.838 \pm 790.000$   $\chi^2/\text{NDF}$ : 15.9/17

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

Right Out:  $770.588 \pm 704.094$   $\chi^2/\text{NDF}$ : 21.0/20

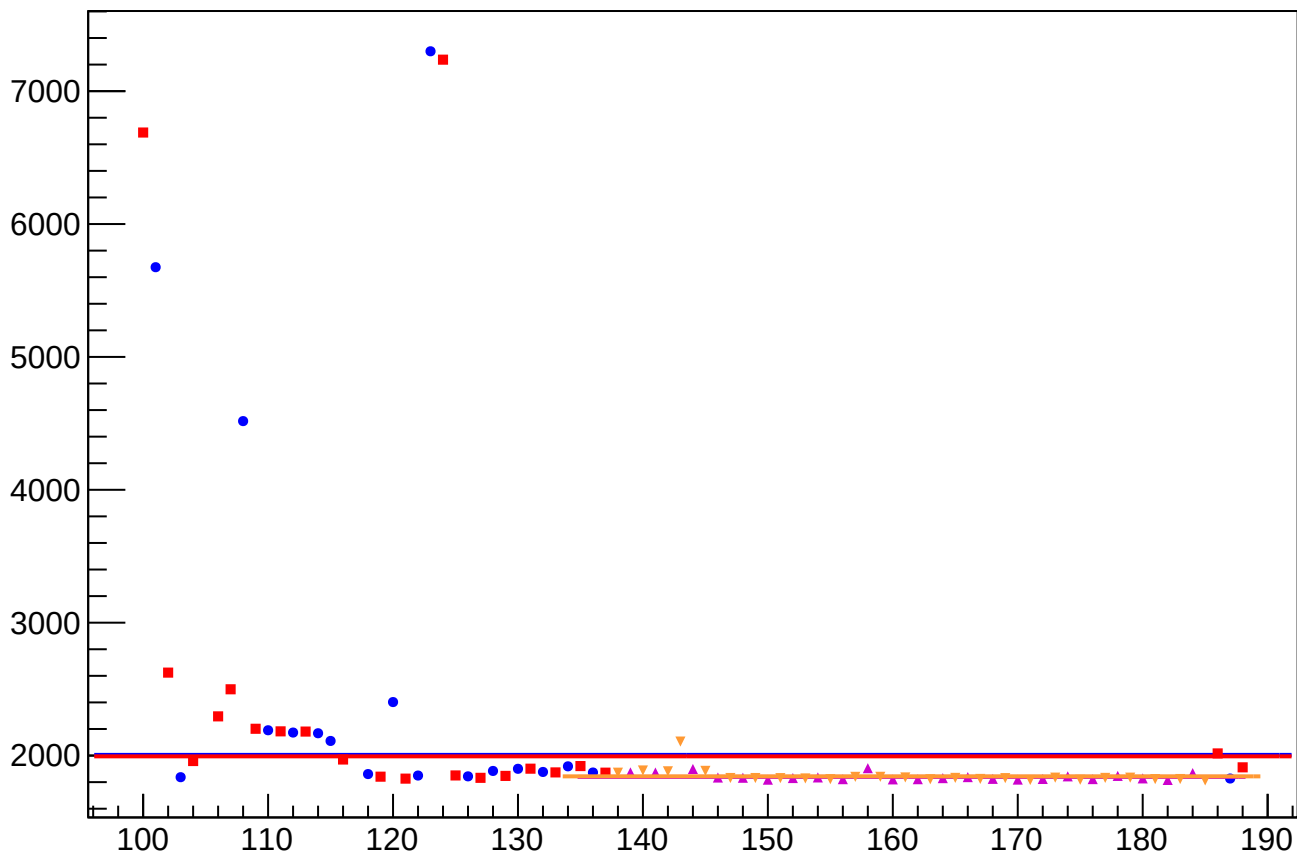
Left In:  $427.682 \pm 439.561$   $\chi^2/\text{NDF}$ : 33.7/22

+ sign  $-667.986 \pm 378.669$   $\chi^2/\text{NDF}$ : 43.6/42

All:  $-62.866 \pm 265.684$   $\chi^2/\text{NDF}$ : 103.5/86

- sign  $523.847 \pm 372.866$   $\chi^2/\text{NDF}$ : 54.9/43

dit\_asym\_at1\_dd\_rms vs Slug



Right In: 2005.102 $\pm$ 0.559  $\chi^2$ /NDF: 842692.7/17

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

Right Out: 1994.081 $\pm$ 0.498  $\chi^2$ /NDF: 371316.7/20

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

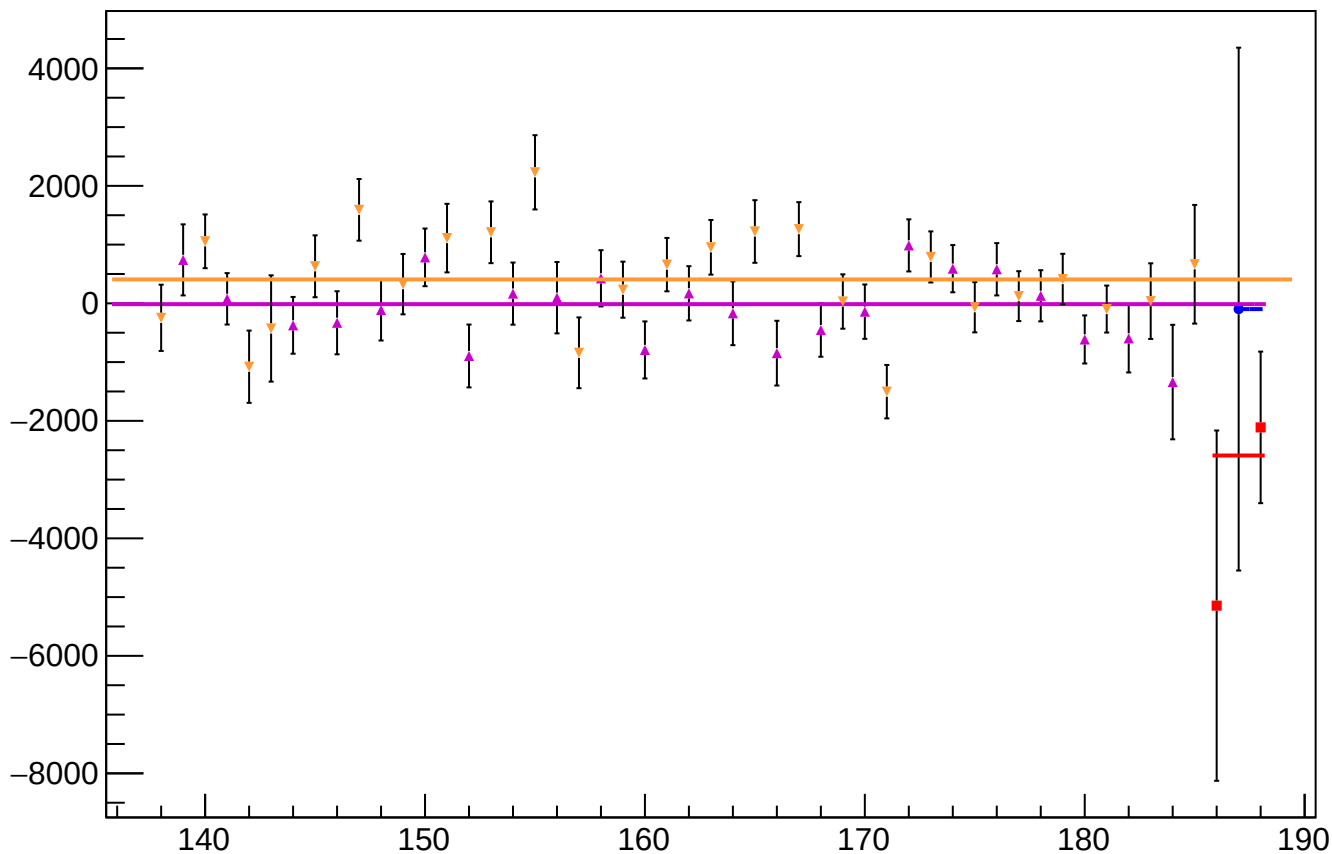
+ sign 1880.655 $\pm$ 0.268  $\chi^2$ /NDF: 932100.7/42

All: 1881.745 $\pm$ 0.188  $\chi^2$ /NDF: 1379296.9/80

- sign 1882.802 $\pm$ 0.264  $\chi^2$ /NDF: 447163.5/43



# asym\_at1\_dd\_correction\_mean vs Slug



Right In:  $-97.837 \pm 4449.956$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $407.320 \pm 101.221$   $\chi^2/\text{NDF}$ : 62.1/24

Right Out:  $-2589.751 \pm 1183.924$   $\chi^2/\text{NDF}$ : 0.9/1

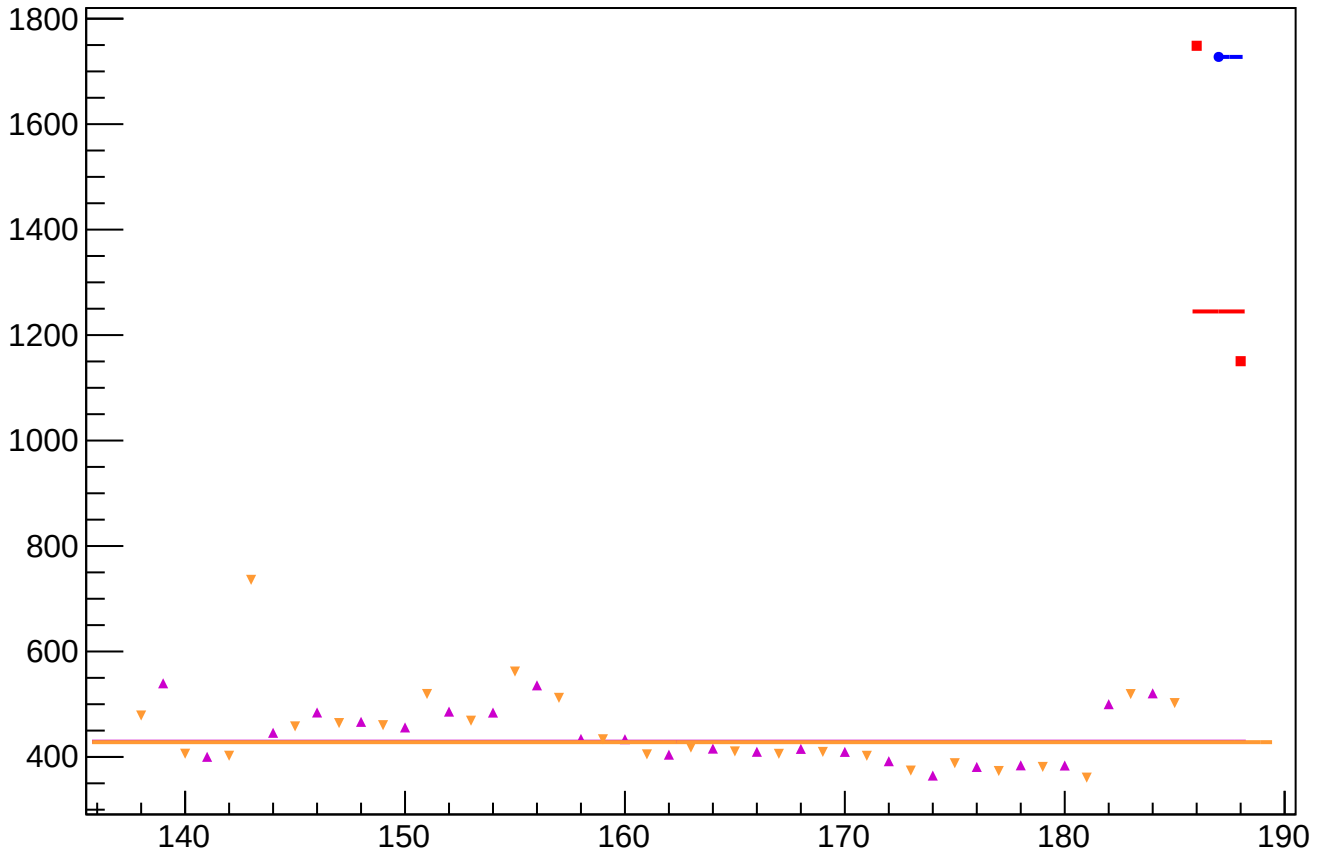
Left In:  $-13.395 \pm 102.912$   $\chi^2/\text{NDF}$ : 29.2/22

+ sign  $407.059 \pm 101.195$   $\chi^2/\text{NDF}$ : 62.1/25

All:  $190.044 \pm 72.022$   $\chi^2/\text{NDF}$ : 106.3/50

- sign  $-32.716 \pm 102.526$   $\chi^2/\text{NDF}$ : 34.8/24

# asym\_at1\_dd\_correction\_rms vs Slug



Right In: 1727.493+/-3.147  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 428.052+/-0.072  $\chi^2/\text{NDF}$ : 704731.3/24

Right Out: 1244.808+/-0.837  $\chi^2/\text{NDF}$ : 67803.2/1

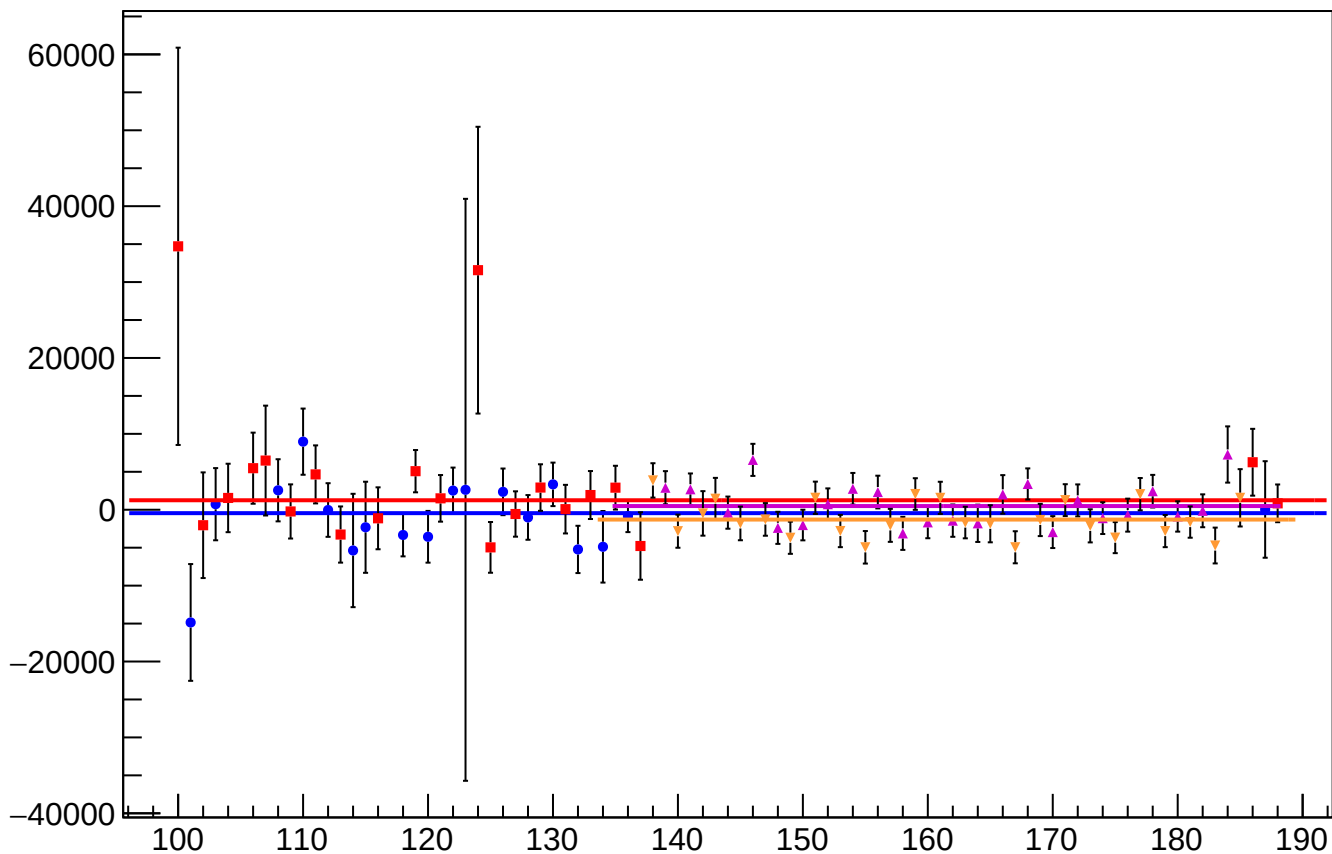
Left In: 428.926+/-0.073  $\chi^2/\text{NDF}$ : 418755.3/22

+ sign 428.724+/-0.072  $\chi^2/\text{NDF}$ : 875185.1/25

All: 431.843+/-0.051  $\chi^2/\text{NDF}$ : 2308280.4/50

- sign 435.045+/-0.072  $\chi^2/\text{NDF}$ : 1429244.6/24

# asym\_at1\_dd\_mean vs Slug



Right In:  $-449.325 \pm 857.257$   $\chi^2/\text{NDF}$ : 18.1/17

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

Right Out:  $1249.284 \pm 804.958$   $\chi^2/\text{NDF}$ : 18.3/20

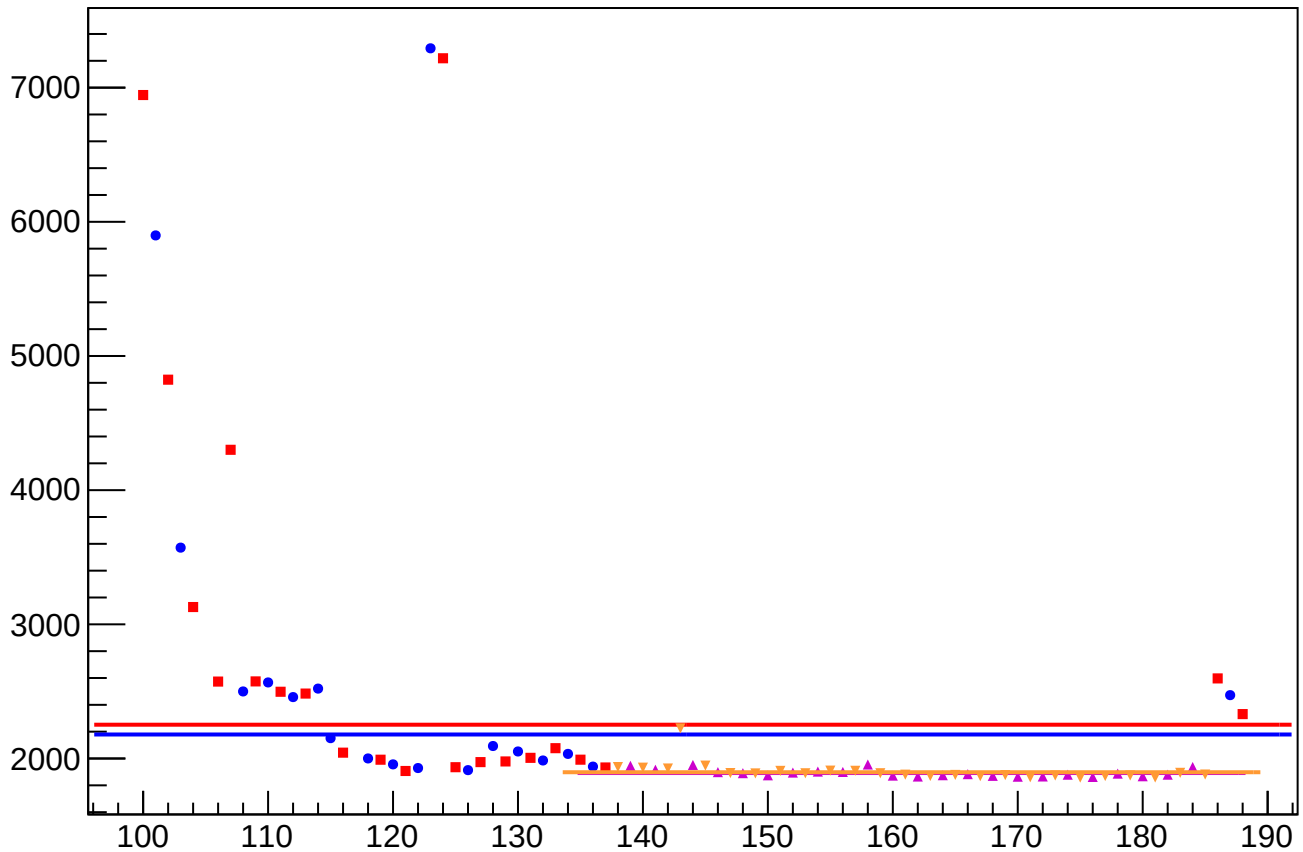
Left In:  $485.827 \pm 452.020$   $\chi^2/\text{NDF}$ : 32.4/22

+ sign  $-1115.363 \pm 394.364$   $\chi^2/\text{NDF}$ : 48.5/42

All:  $-222.727 \pm 278.775$   $\chi^2/\text{NDF}$ : 110.0/86

- sign  $668.855 \pm 394.130$   $\chi^2/\text{NDF}$ : 51.3/43

# asym\_at1\_dd\_rms vs Slug



Right In: 2178.956+/-0.606  $\chi^2/\text{NDF}$ : 809692.6/17

Left Out: 1897.670+/-0.314  $\chi^2/\text{NDF}$ : 35089.1/24

Right Out: 2251.908+/-0.569  $\chi^2/\text{NDF}$ : 911585.7/20

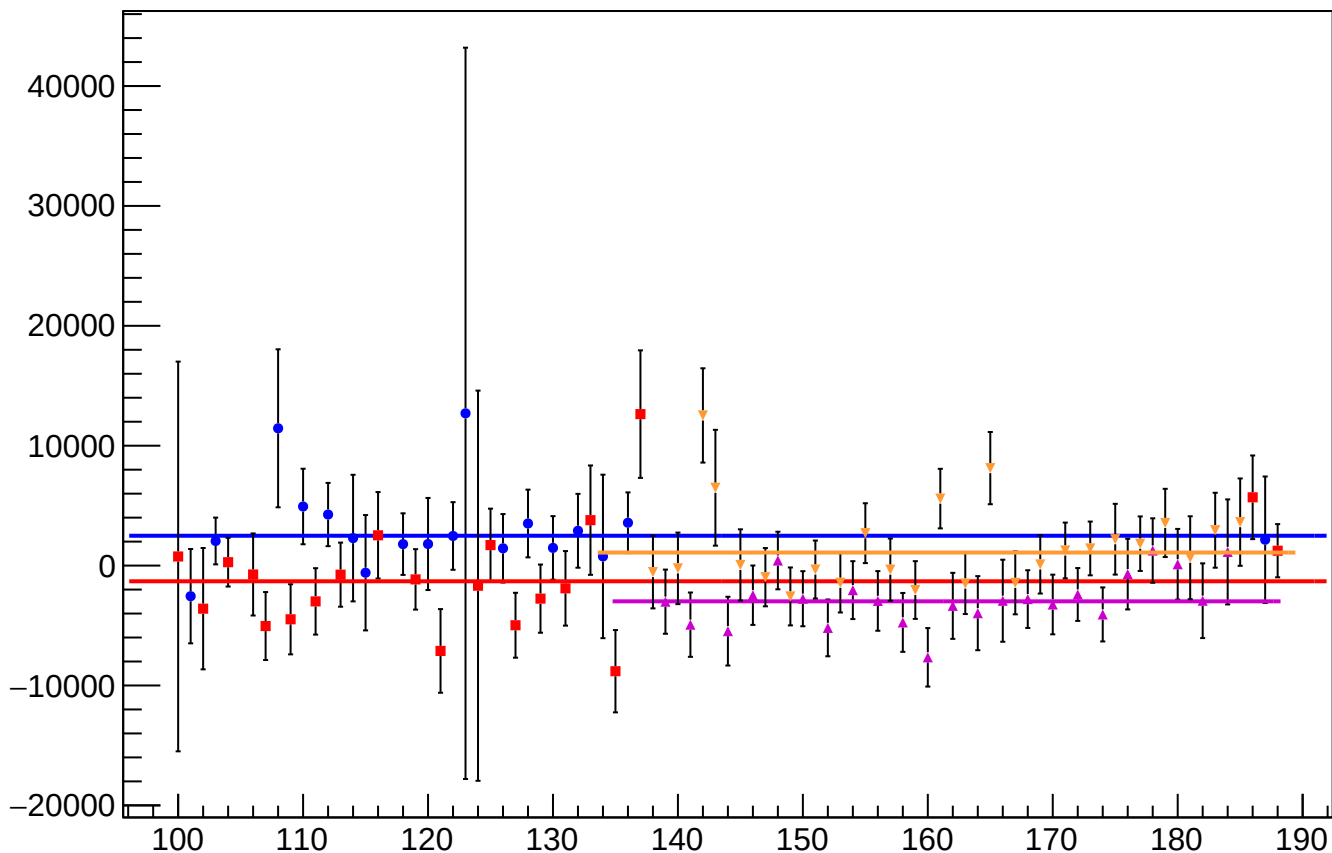
Left In: 1891.722+/-0.320  $\chi^2/\text{NDF}$ : 7584.2/22

+ sign 1957.198+/-0.279  $\chi^2/\text{NDF}$ : 1014541.5/42

All: 1967.641+/-0.197  $\chi^2/\text{NDF}$ : 2240956.5/80

- sign 1978.072+/-0.279  $\chi^2/\text{NDF}$ : 1223611.5/43

# dit\_asym\_at2\_avg\_mean vs Slug



Right In: 2489.540 $\pm$ 760.274  $\chi^2$ /NDF: 5.9/17

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

Right Out: -1309.516 $\pm$ 685.627  $\chi^2$ /NDF: 29.5/20

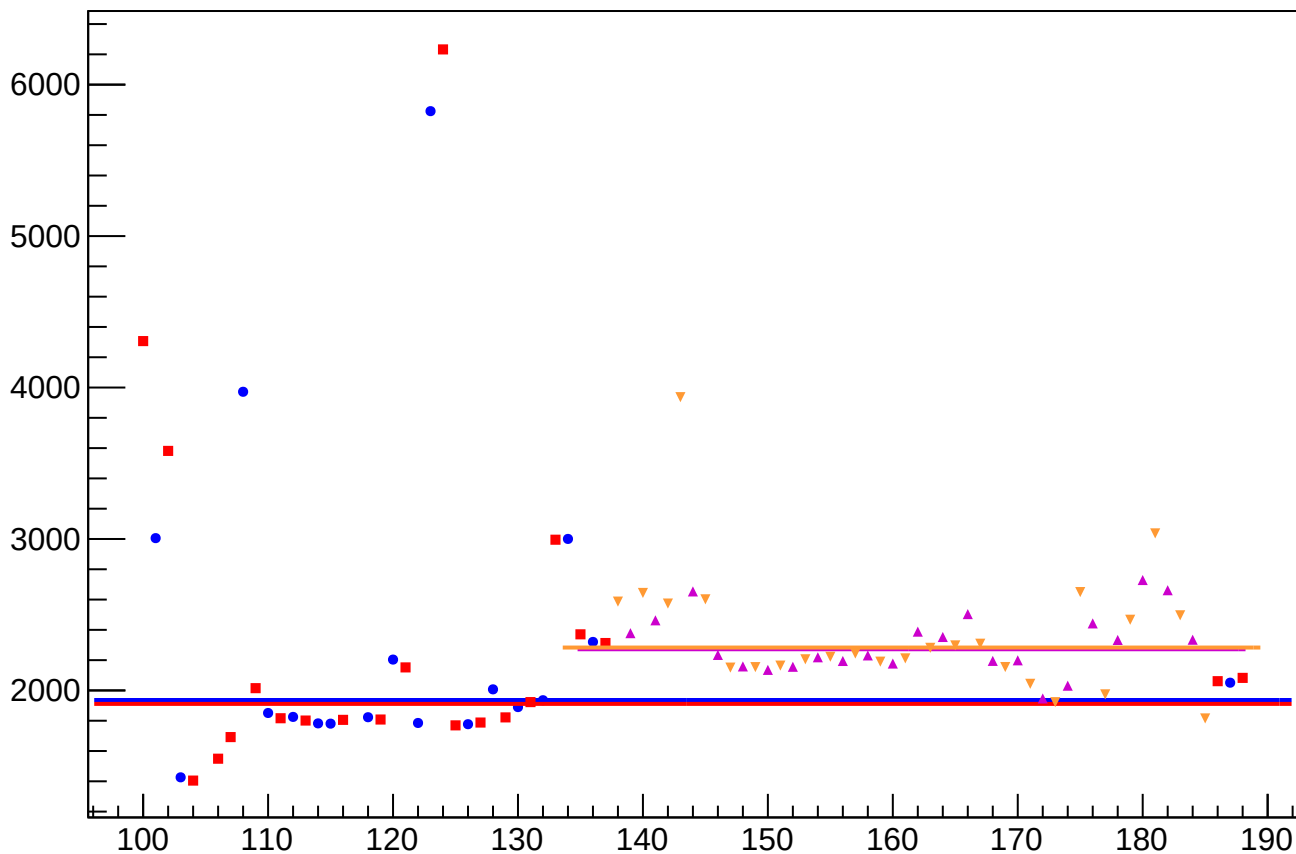
Left In: -2981.160 $\pm$ 546.107  $\chi^2$ /NDF:14.0/22

+ sign 1559.037 $\pm$ 440.783  $\chi^2$ /NDF: 38.0/42

All: -447.666 $\pm$ 306.753  $\chi^2$ /NDF: 125.4/86

- sign -2332.288 $\pm$ 427.165  $\chi^2$ /NDF: 47.1/43

# dit\_asym\_at2\_avg\_rms vs Slug



Right In: 1936.830+/-0.538  $\chi^2/\text{NDF}$ : 639880.1/17

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

Right Out: 1911.157+/-0.485  $\chi^2/\text{NDF}$ : 770182.9/20

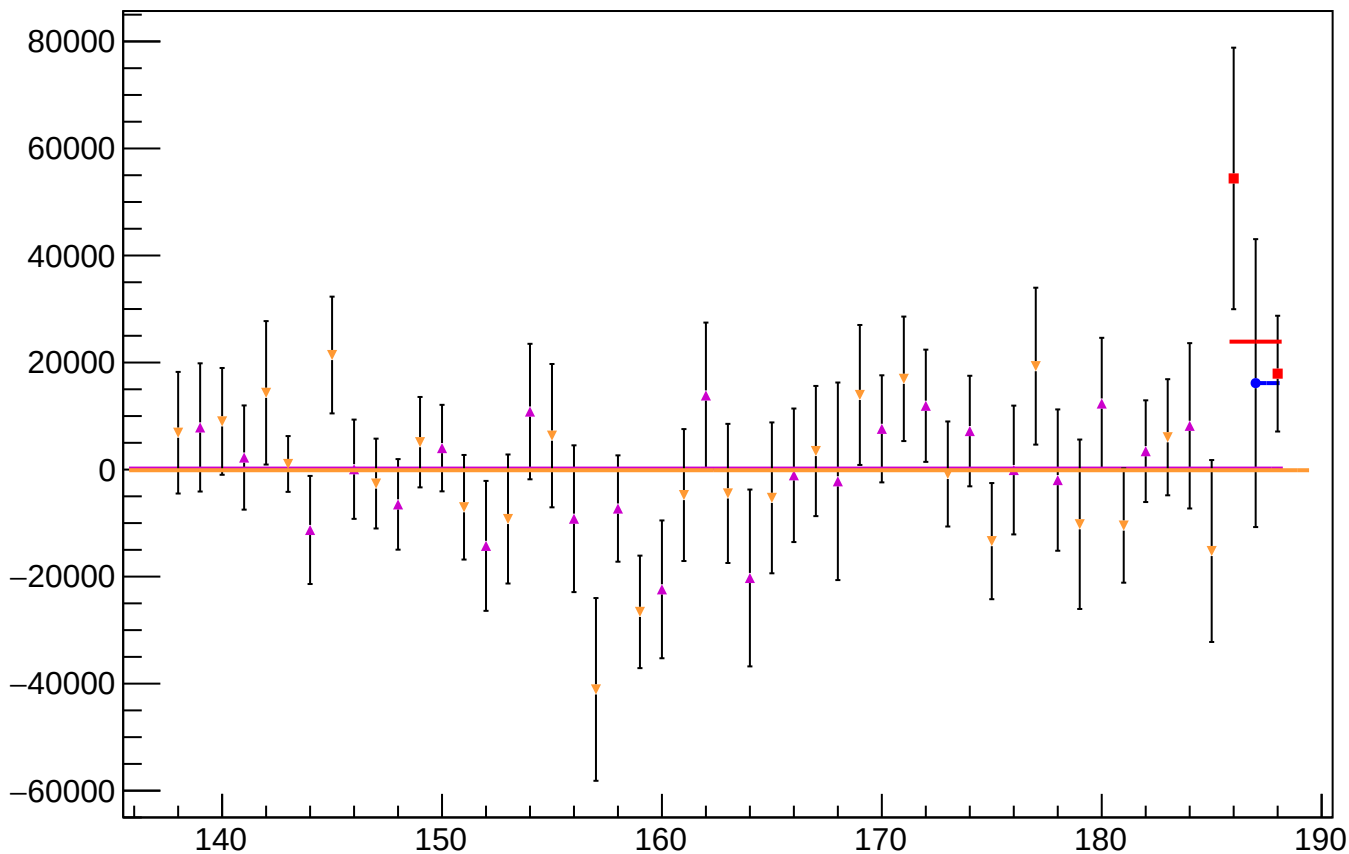
Left In: 2271.946+/-0.386  $\chi^2/\text{NDF}$ : 243546.3/22

+ sign 2166.777+/-0.312  $\chi^2/\text{NDF}$ : 1549901.8/42

All: 2148.776+/-0.217  $\chi^2/\text{NDF}$ : 2909005.4/86

- sign 2131.873+/-0.302  $\chi^2/\text{NDF}$ : 1352636.3/43

# asym\_at2\_avg\_correction\_mean vs Slug



Right In: 16157.209 $\pm$ 26900.846  $\chi^2$ /NDF: 0.0/0

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

Right Out: 23902.931 $\pm$ 9891.186  $\chi^2$ /NDF: 1.9/1

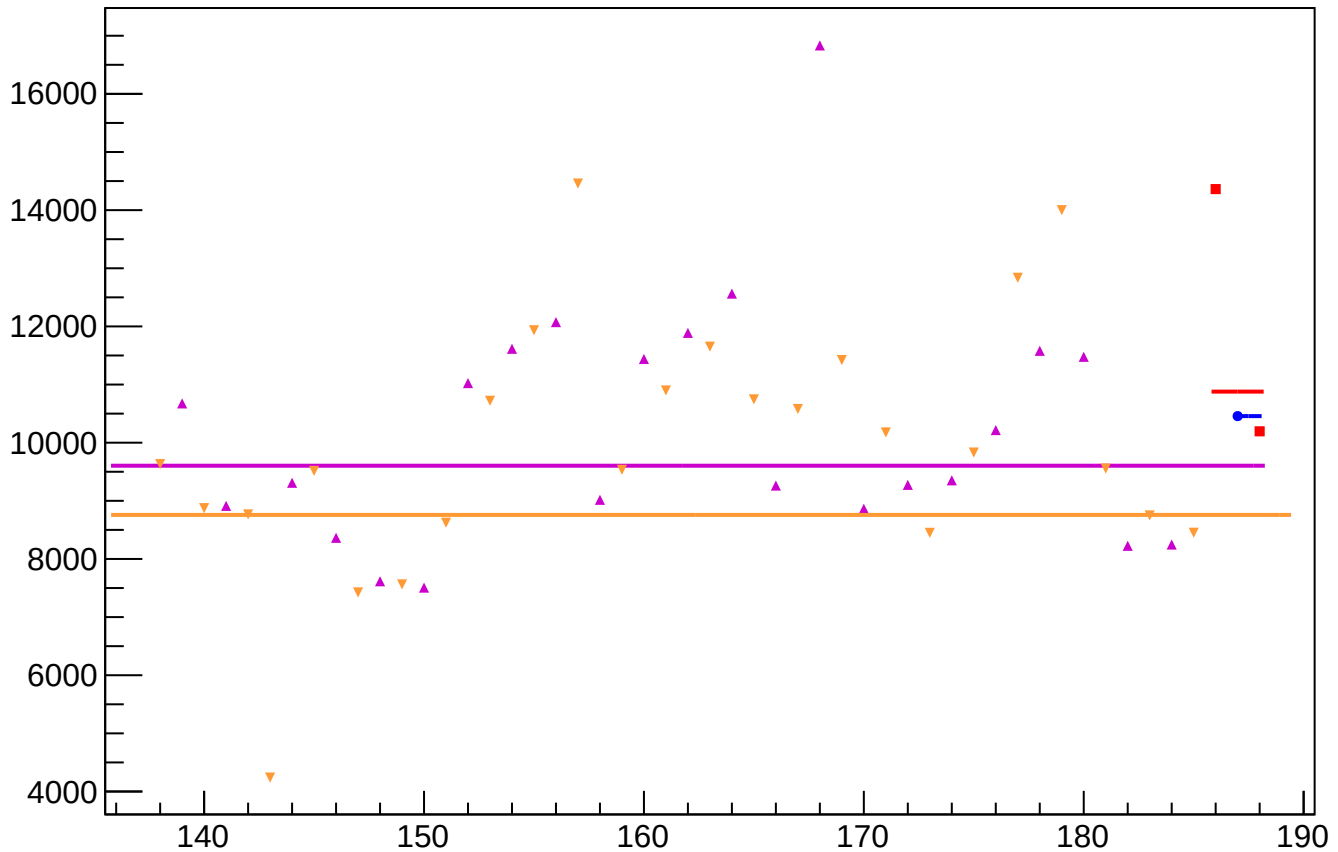
Left In: 185.013 $\pm$ 2330.398  $\chi^2$ /NDF:15.0/22

+ sign -21.793 $\pm$ 2135.218  $\chi^2$ /NDF: 30.1/25

All: 661.366 $\pm$ 1554.745  $\chi^2$ /NDF: 52.6/50

- sign 1432.333 $\pm$ 2268.293  $\chi^2$ /NDF: 22.4/24

# asym\_at2\_avg\_correction\_rms vs Slug



Right In: 10457.212 $\pm$ 19.022  $\chi^2$ /NDF: 0.0/0

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

Right Out: 10878.442 $\pm$ 6.994  $\chi^2$ /NDF: 48621.5/1

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

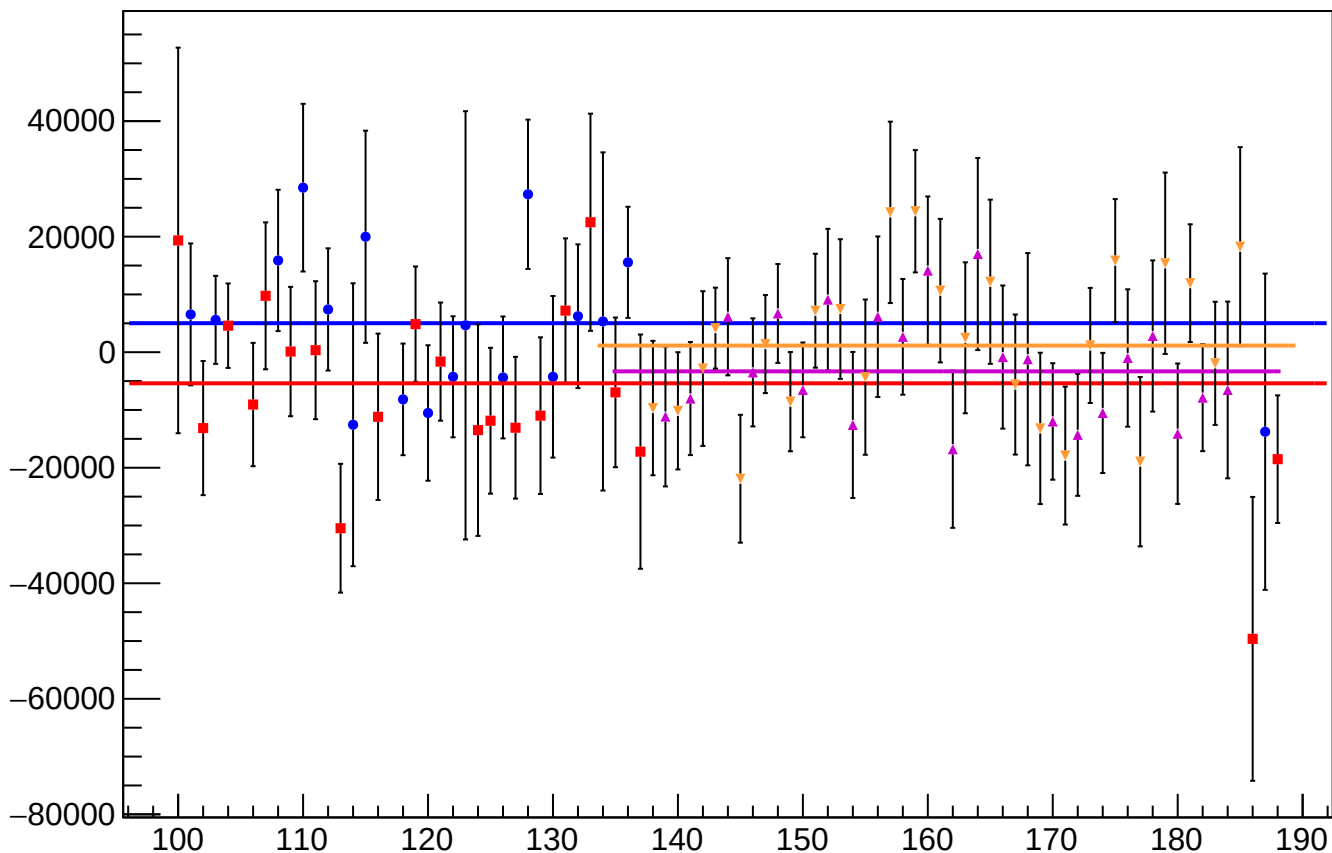
+ sign 8768.525 $\pm$ 1.510  $\chi^2$ /NDF: 2787036.2/25

All: 9192.537 $\pm$ 1.099  $\chi^2$ /NDF: 4130792.2/50

- sign 9671.048 $\pm$ 1.604  $\chi^2$ /NDF: 1175882.4/24



# asym\_at2\_avg\_mean vs Slug



Right In: 5020.947 +/- 2929.250  $\chi^2/\text{NDF}$ : 15.0/17

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

Right Out: -5384.521 +/- 2689.193  $\chi^2/\text{NDF}$ : 20.5/20

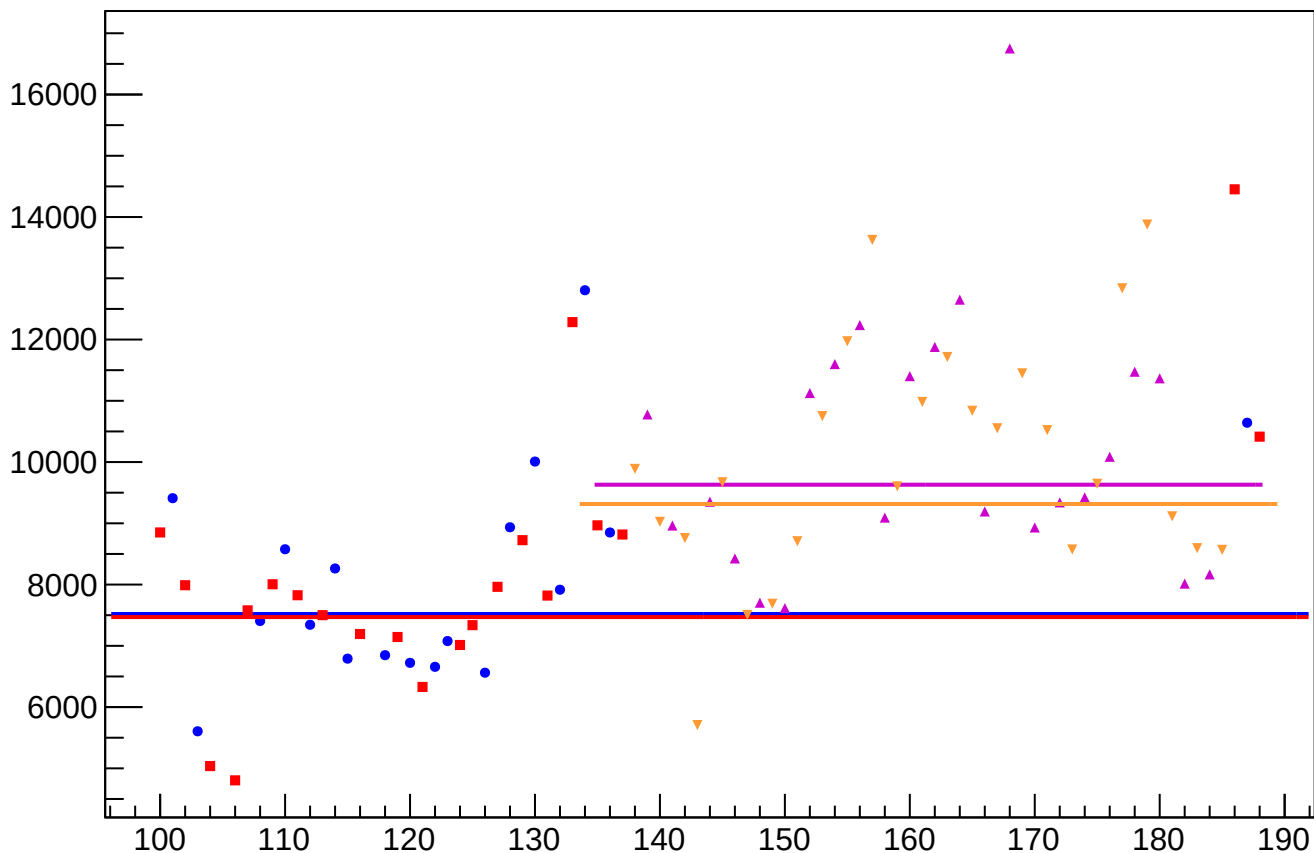
Left In: -3316.960 +/- 2336.196  $\chi^2/\text{NDF}$ : 13.4/22

+ sign 2569.136 +/- 1775.520  $\chi^2/\text{NDF}$ : 43.9/42

All: -841.302 +/- 1251.258  $\chi^2/\text{NDF}$ : 85.5/86

- sign -4206.223 +/- 1763.631  $\chi^2/\text{NDF}$ : 34.3/43

# asym\_at2\_avg\_rms vs Slug



Right In: 7519.943 $\pm$ 2.071  $\chi^2$ /NDF: 458121.6/17

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

Right Out: 7469.377 $\pm$ 1.901  $\chi^2$ /NDF: 882331.6/20

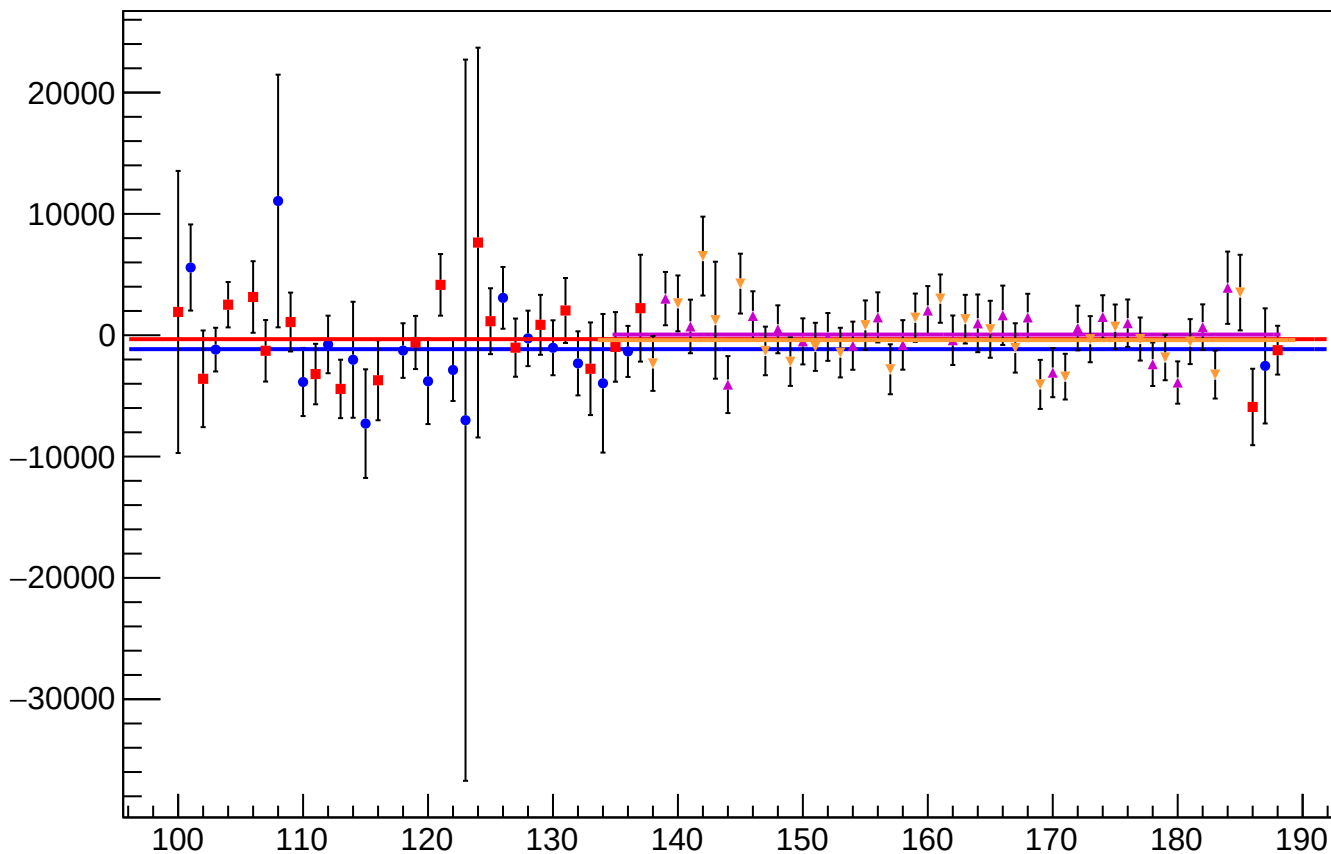
Left In: 9630.345 $\pm$ 1.652  $\chi^2$ /NDF:1074643.5/22

+ sign 8655.728 $\pm$ 1.255  $\chi^2$ /NDF: 2436978.9/42

All: 8678.407 $\pm$ 0.885  $\chi^2$ /NDF: 5130705.3/80

- sign 8700.782 $\pm$ 1.247  $\chi^2$ /NDF: 2693078.2/43

# dit\_asym\_at2\_dd\_mean vs Slug



Right In: -1148.755+/-672.308     $\chi^2/\text{NDF}$ : 12.3/17

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

Right Out: -324.821+/-598.478     $\chi^2/\text{NDF}$ : 19.1/20

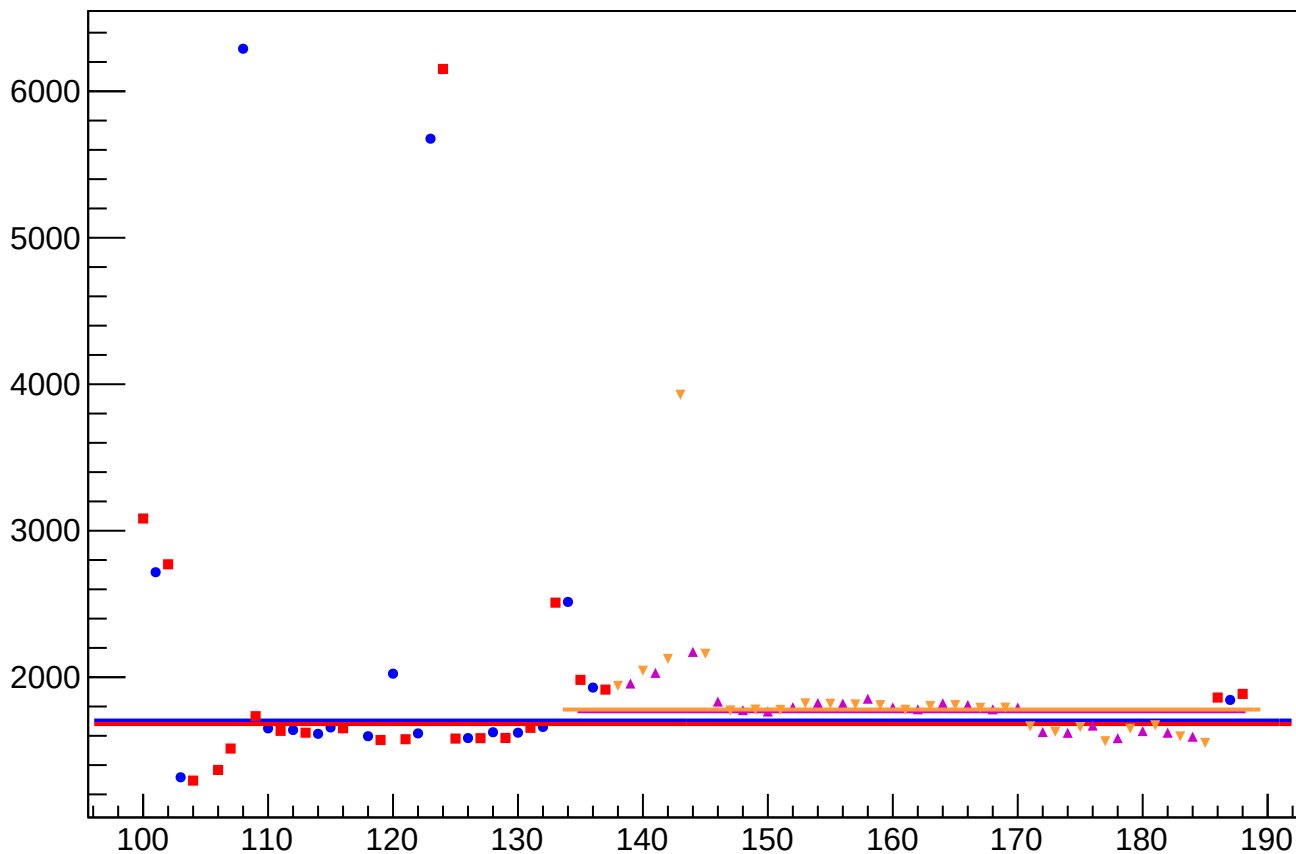
Left In: 53.539+/-422.570     $\chi^2/\text{NDF}$ : 20.9/22

+ sign -612.081+/-355.743     $\chi^2/\text{NDF}$ : 42.2/42

All: -334.087+/-247.735     $\chi^2/\text{NDF}$ : 83.6/86

- sign -72.335+/-345.195     $\chi^2/\text{NDF}$ : 40.2/43

dit\_asym\_at2\_dd\_rms vs Slug



Right In: 1704.164+/-0.475  $\chi^2/\text{NDF}$ : 780511.0/17

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

Right Out: 1680.044+/-0.423  $\chi^2/\text{NDF}$ : 620354.9/20

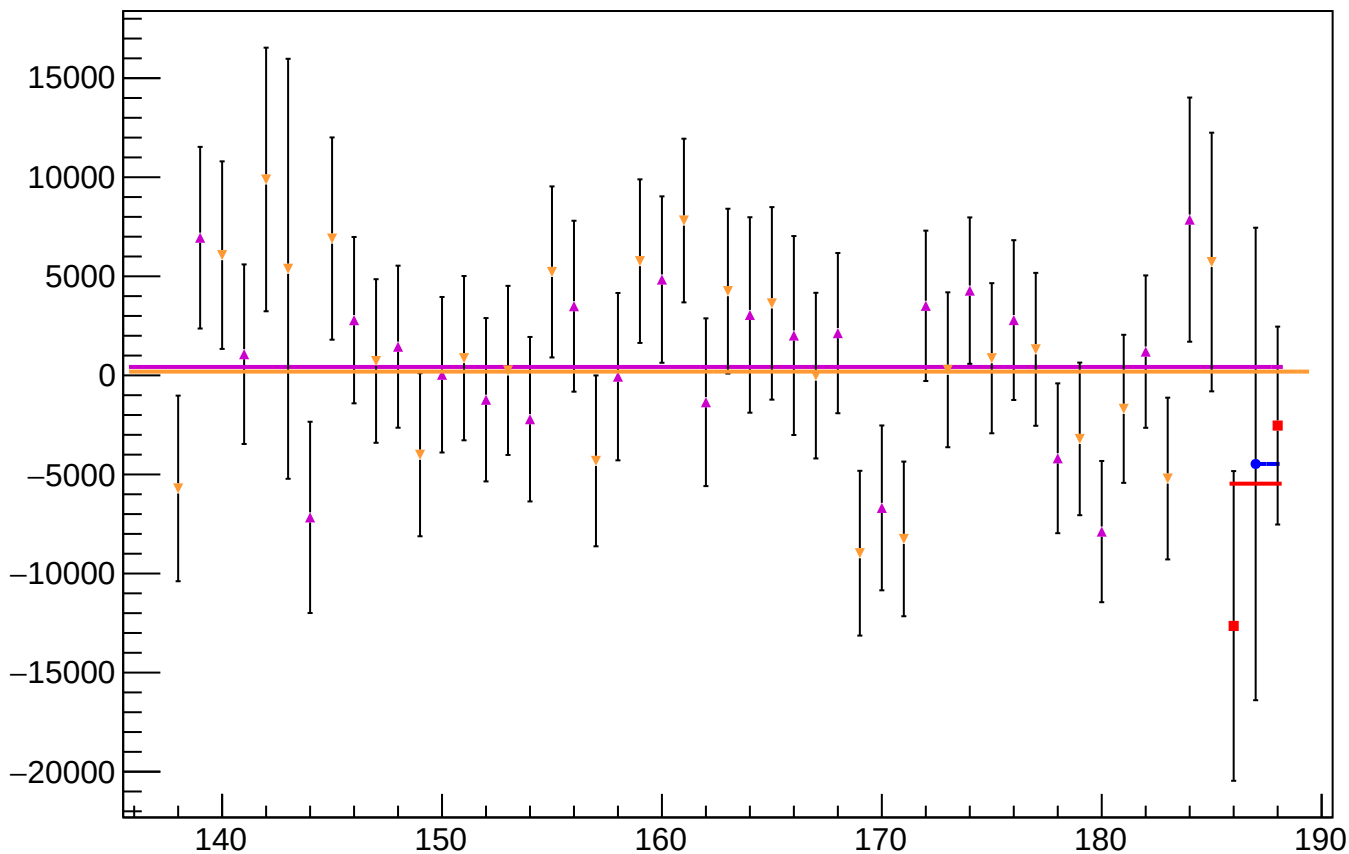
Left In: 1767.314+/-0.299  $\chi^2/\text{NDF}$ : 196583.8/22

+ sign 1758.359+/-0.252  $\chi^2/\text{NDF}$ : 1409486.3/42

All: 1748.018+/-0.175  $\chi^2/\text{NDF}$ : 2258085.3/86

- sign 1738.280+/-0.244  $\chi^2/\text{NDF}$ : 845317.4/43

# asym\_at2\_dd\_correction\_mean vs Slug



Right In: -4470.319+/-11923.582  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 191.104+/-869.912  $\chi^2/\text{NDF}$ : 30.6/24

Right Out: -5464.825+/-4208.226  $\chi^2/\text{NDF}$ : 1.2/1

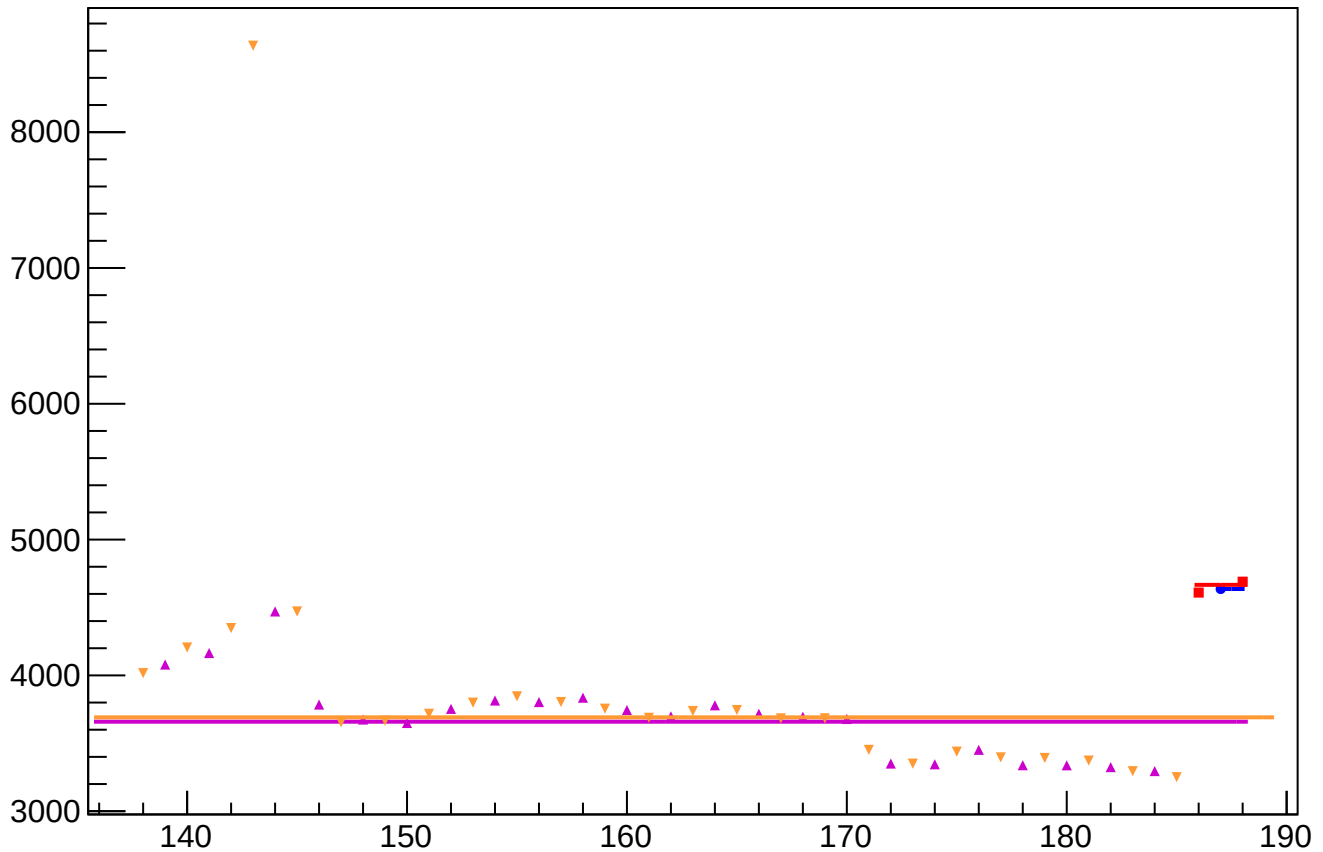
Left In: 426.004+/-874.870  $\chi^2/\text{NDF}$ : 21.3/22

+ sign 166.424+/-867.606  $\chi^2/\text{NDF}$ : 30.8/25

All: 174.286+/-609.546  $\chi^2/\text{NDF}$ : 55.1/50

- sign 181.948+/-856.556  $\chi^2/\text{NDF}$ : 24.3/24

# asym\_at2\_dd\_correction\_rms vs Slug



Right In: 4636.091 $\pm$ 8.431  $\chi^2$ /NDF: 0.0/0

Left Out: 3691.174 $\pm$ 0.615  $\chi^2$ /NDF: 639471.7/24

Right Out: 4666.759 $\pm$ 2.976  $\chi^2$ /NDF: 149.4/1

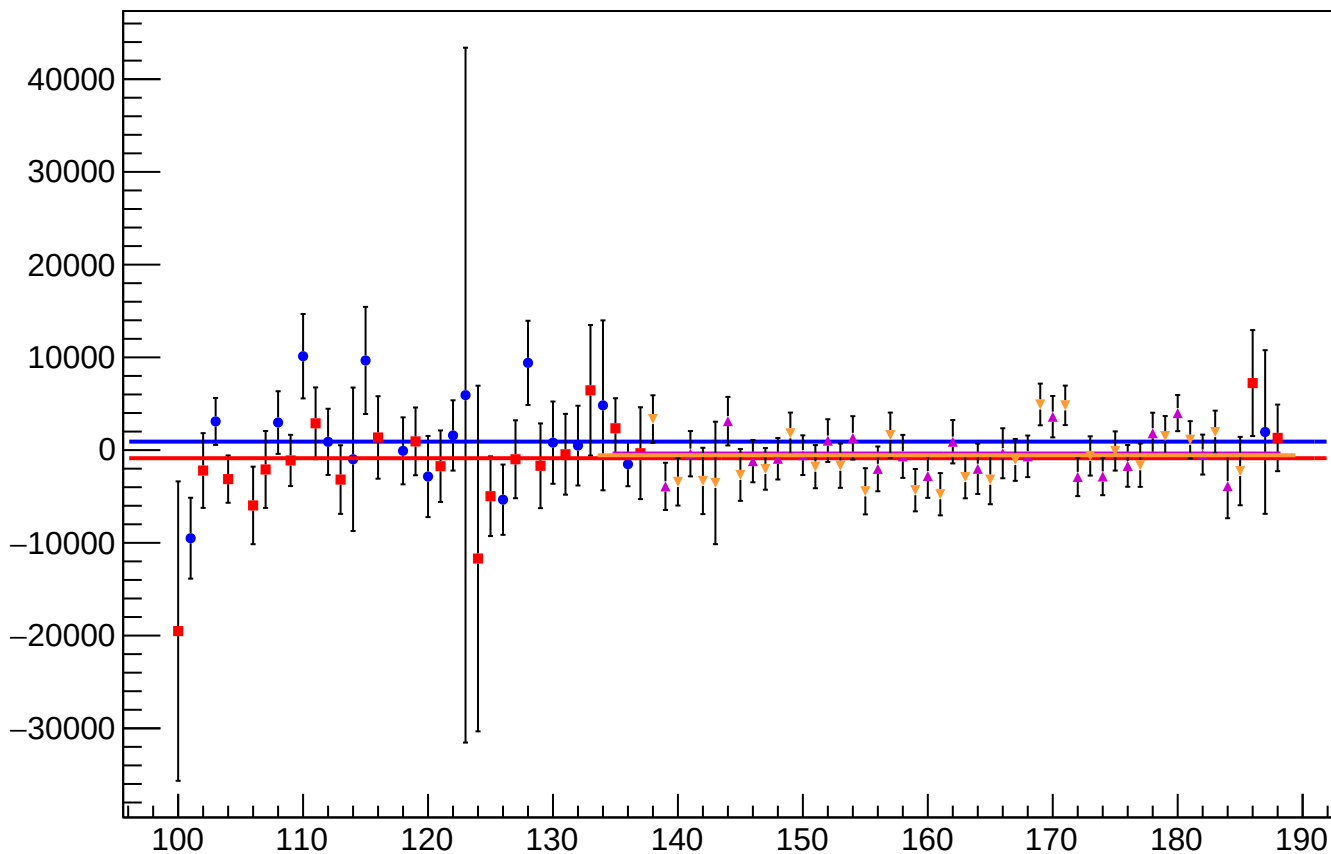
Left In: 3659.086 $\pm$ 0.619  $\chi^2$ /NDF: 198077.1/22

+ sign 3696.177 $\pm$ 0.613  $\chi^2$ /NDF: 651965.6/25

All: 3698.535 $\pm$ 0.431  $\chi^2$ /NDF: 960145.8/50

- sign 3700.834 $\pm$ 0.606  $\chi^2$ /NDF: 308151.0/24

# asym\_at2\_dd\_mean vs Slug



Right In:  $915.593 \pm 956.250$   $\chi^2/\text{NDF}$ : 21.6/17

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

Right Out:  $-872.978 \pm 884.943$   $\chi^2/\text{NDF}$ : 11.4/20

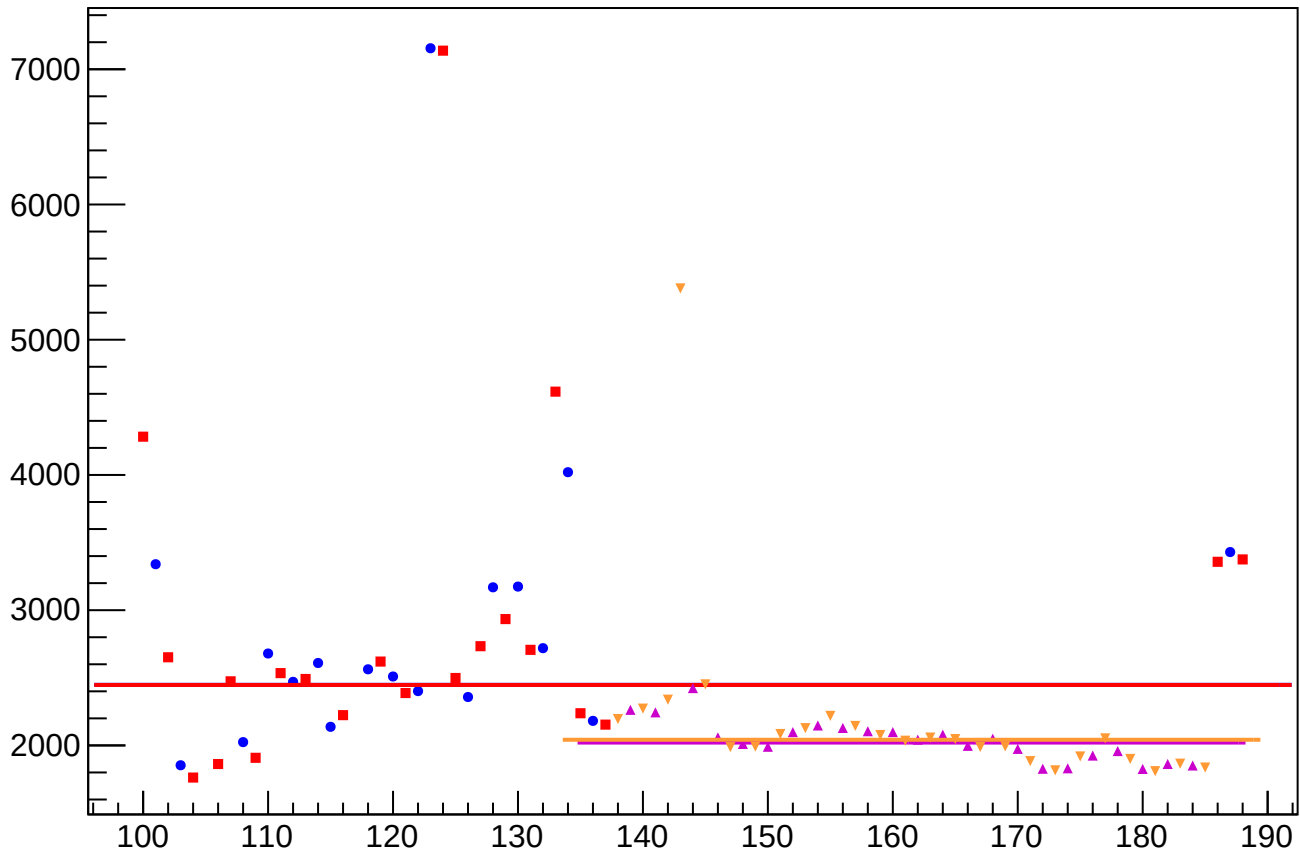
Left In:  $-366.243 \pm 483.092$   $\chi^2/\text{NDF}$ : 20.5/22

+ sign  $-254.567 \pm 430.150$   $\chi^2/\text{NDF}$ : 57.5/42

All:  $-370.211 \pm 301.973$   $\chi^2/\text{NDF}$ : 89.9/86

- sign  $-482.584 \pm 424.025$   $\chi^2/\text{NDF}$ : 32.2/43

# asym\_at2\_dd\_rms vs Slug



Right In: 2447.928+/-0.676  $\chi^2/\text{NDF}$ : 493619.1/17

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

Right Out: 2447.102+/-0.626  $\chi^2/\text{NDF}$ : 857576.6/20

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

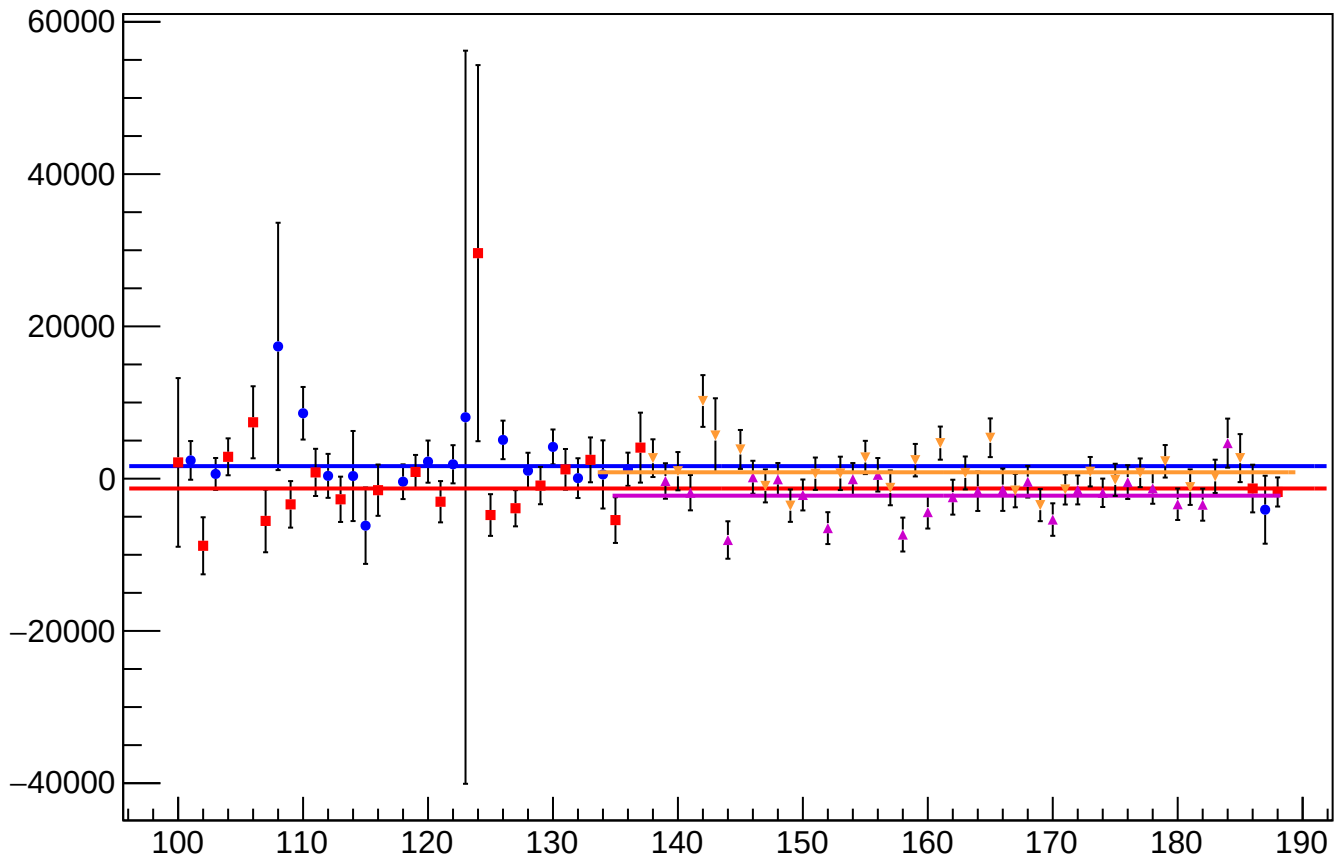
+ sign 2123.964+/-0.304  $\chi^2/\text{NDF}$ : 1488259.1/42

All: 2121.385+/-0.214  $\chi^2/\text{NDF}$ : 2881827.5/86

- sign 2118.879+/-0.300  $\chi^2/\text{NDF}$ : 1393426.7/43



# dit\_asym\_atl\_avg\_mean vs Slug



Right In: 1645.118 $\pm$ 686.158  $\chi^2$ /NDF: 14.1/17

Left Out: 837.426 $\pm$ 454.502  $\chi^2$ /NDF:32.3/24

Right Out: -1292.077 $\pm$ 649.691  $\chi^2$ /NDF: 24.3/20

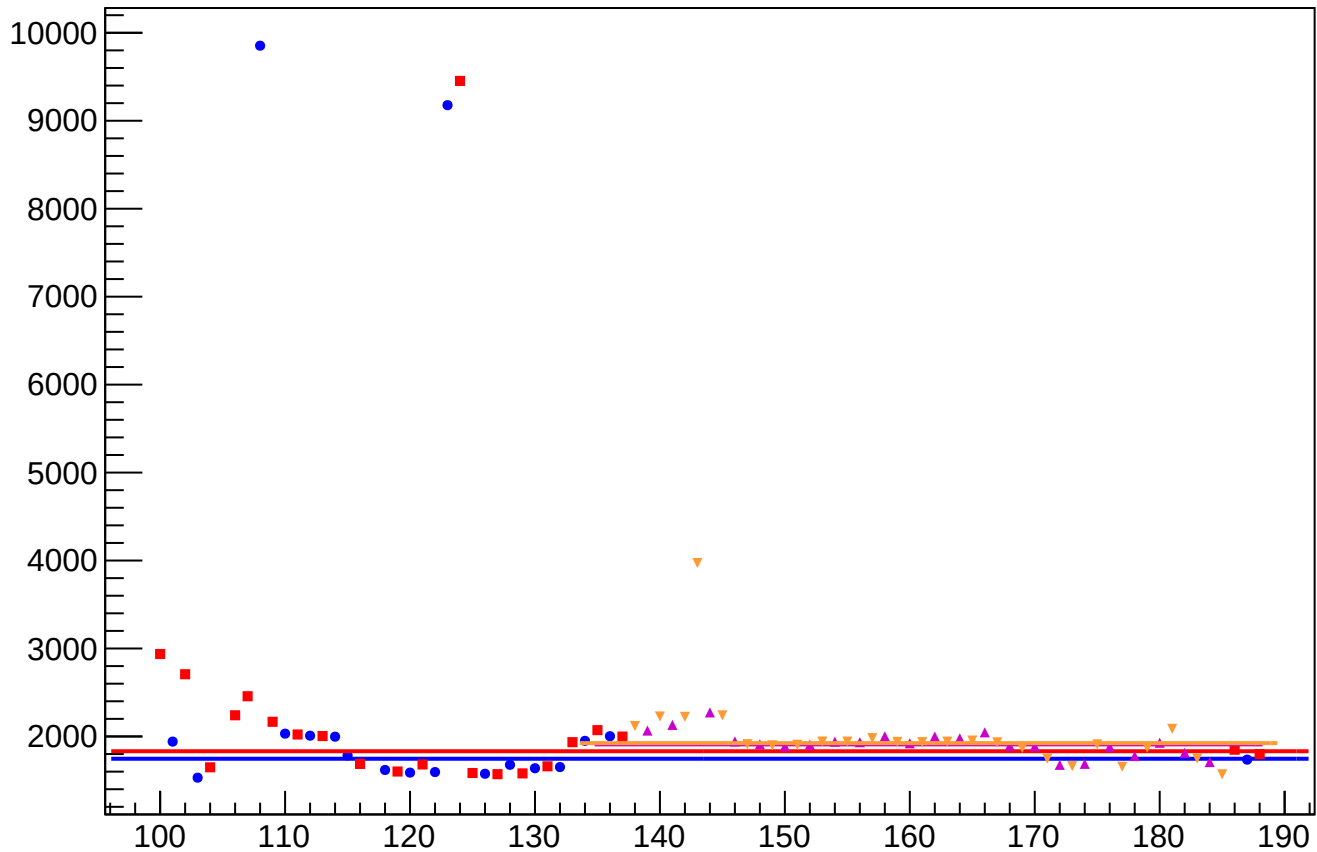
Left In: -2235.652 $\pm$ 457.720  $\chi^2$ /NDF:31.0/22

+ sign 1083.736 $\pm$ 378.915  $\chi^2$ /NDF: 47.4/42

All: -438.357 $\pm$ 266.245  $\chi^2$ /NDF: 135.9/86

- sign -1922.662 $\pm$ 374.182  $\chi^2$ /NDF: 56.7/43

# dit\_asym\_atl\_avg\_rms vs Slug



Right In: 1746.591+/-0.485  $\chi^2/\text{NDF}$ : 682495.2/17

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

Right Out: 1831.906+/-0.459  $\chi^2/\text{NDF}$ : 551081.2/20

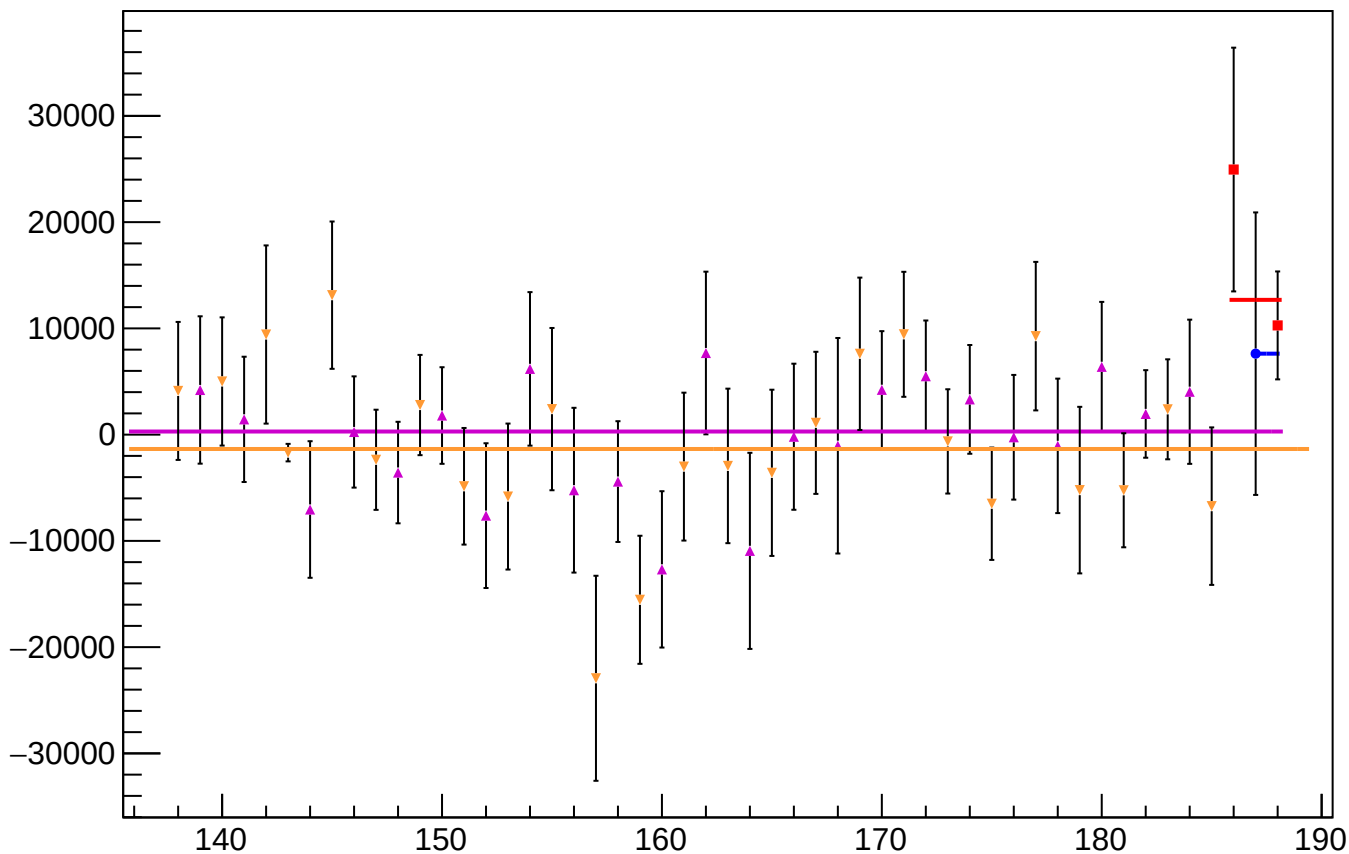
Left In: 1909.656+/-0.324  $\chi^2/\text{NDF}$ : 164475.5/22

+ sign 1869.951+/-0.268  $\chi^2/\text{NDF}$ : 1359443.5/42

All: 1876.981+/-0.188  $\chi^2/\text{NDF}$ : 2095527.2/86

- sign 1883.831+/-0.264  $\chi^2/\text{NDF}$ : 734724.6/43

# asym\_atl\_avg\_correction\_mean vs Slug



Right In: 7620.989 $\pm$ 13294.387  $\chi^2$ /NDF: 0.0/0

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

Right Out: 12685.323 $\pm$ 4643.948  $\chi^2$ /NDF: 1.4/1

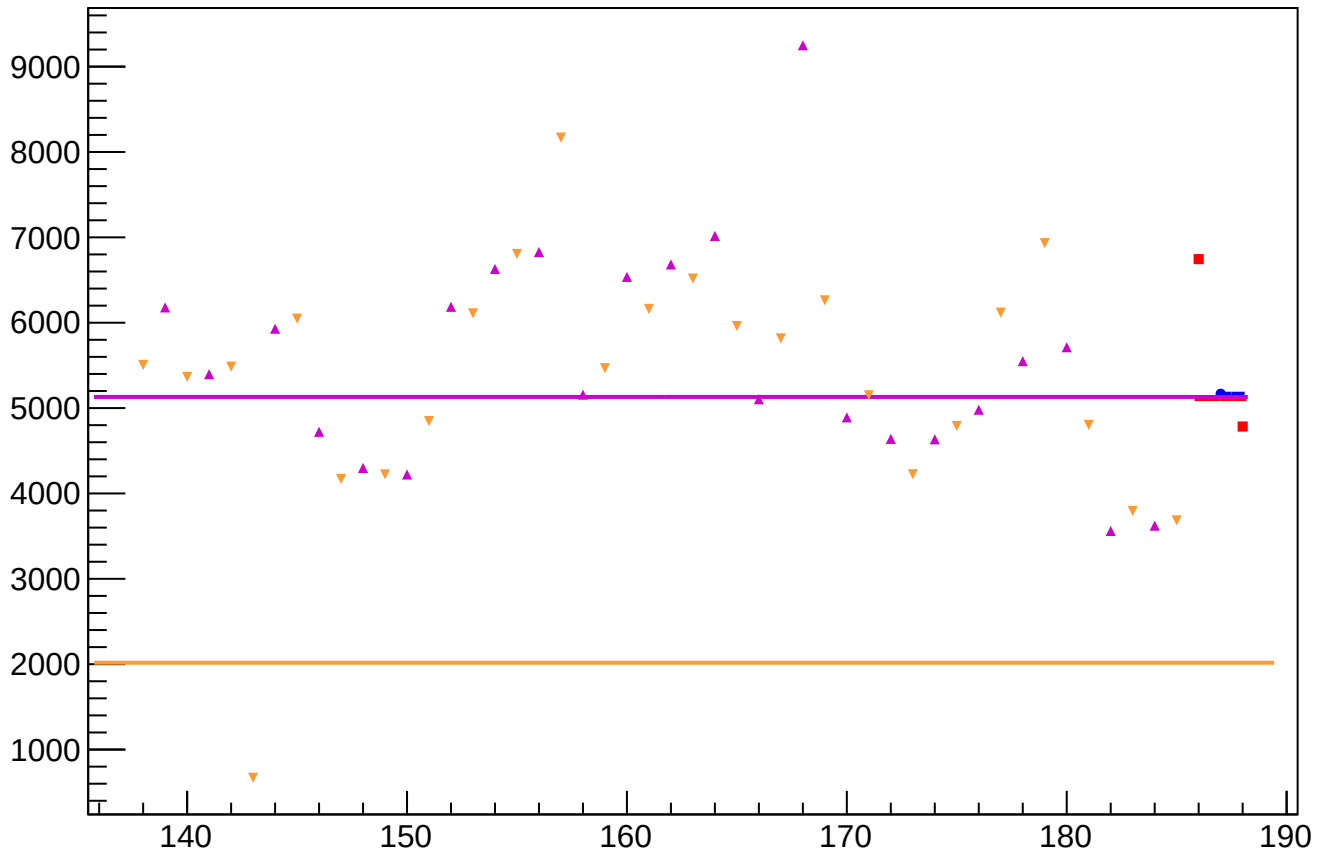
Left In: 294.047 $\pm$ 1252.274  $\chi^2$ /NDF:14.5/22

+ sign -1325.438 $\pm$ 689.728  $\chi^2$ /NDF: 31.4/25

All: -721.594 $\pm$ 599.103  $\chi^2$ /NDF: 57.0/50

- sign 1134.001 $\pm$ 1209.086  $\chi^2$ /NDF: 22.5/24

# asym\_atl\_avg\_correction\_rms vs Slug



Right In: 5168.244+/-9.401  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 2017.245+/-0.488  $\chi^2/\text{NDF}$ : 19159743.3/24

Right Out: 5105.543+/-3.284  $\chi^2/\text{NDF}$ : 48877.6/1

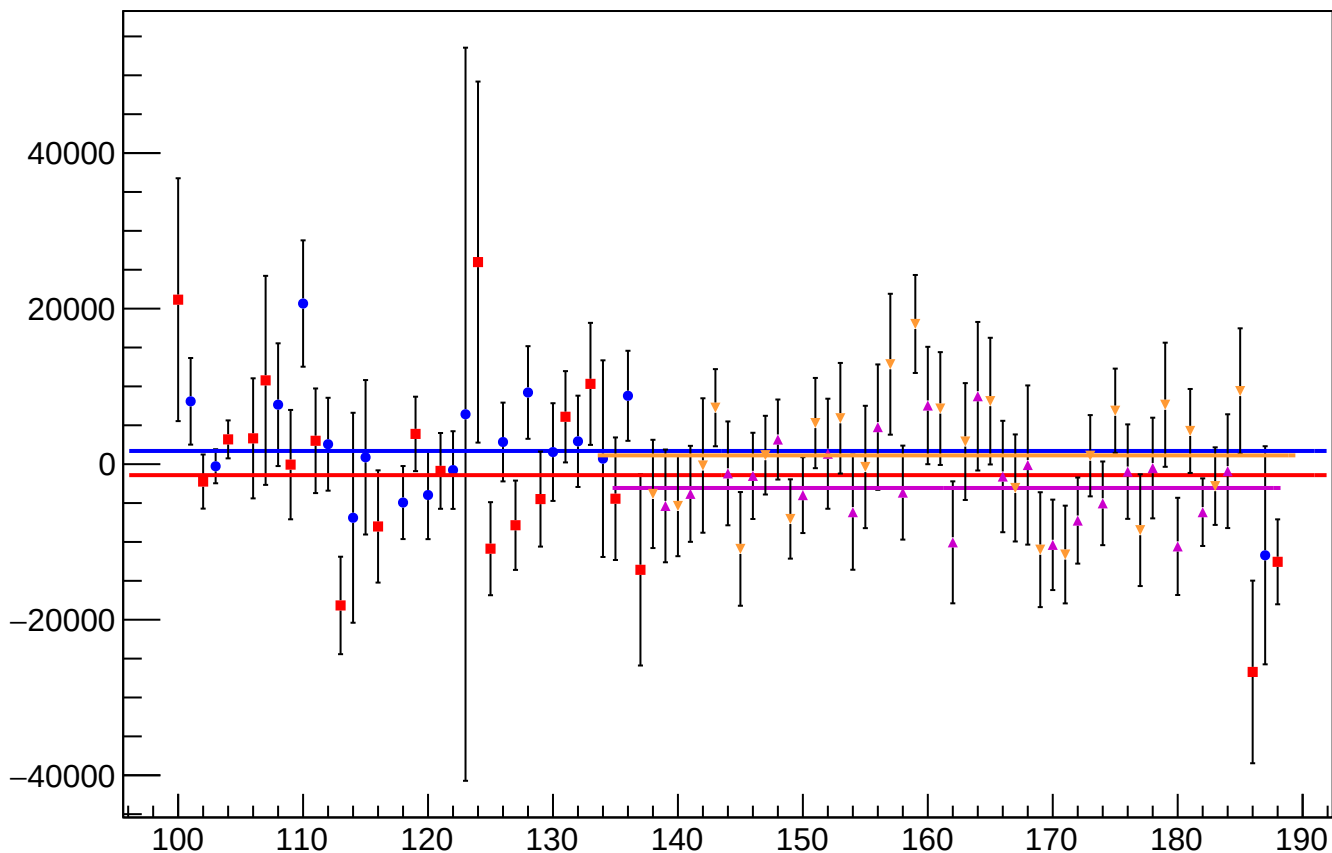
Left In: 5130.756+/-0.885  $\chi^2/\text{NDF}$ : 1489813.1/22

+ sign 2025.726+/-0.488  $\chi^2/\text{NDF}$ : 19271795.2/25

All: 2787.657+/-0.424  $\chi^2/\text{NDF}$ : 30751227.5/5

- sign 5129.047+/-0.855  $\chi^2/\text{NDF}$ : 1538745.7/24

# asym\_atl\_avg\_mean vs Slug



Right In: 1698.744+/-1295.744  $\chi^2/\text{NDF}$ : 15.9/17

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

Right Out: -1410.156+/-1244.773  $\chi^2/\text{NDF}$ : 35.8/20

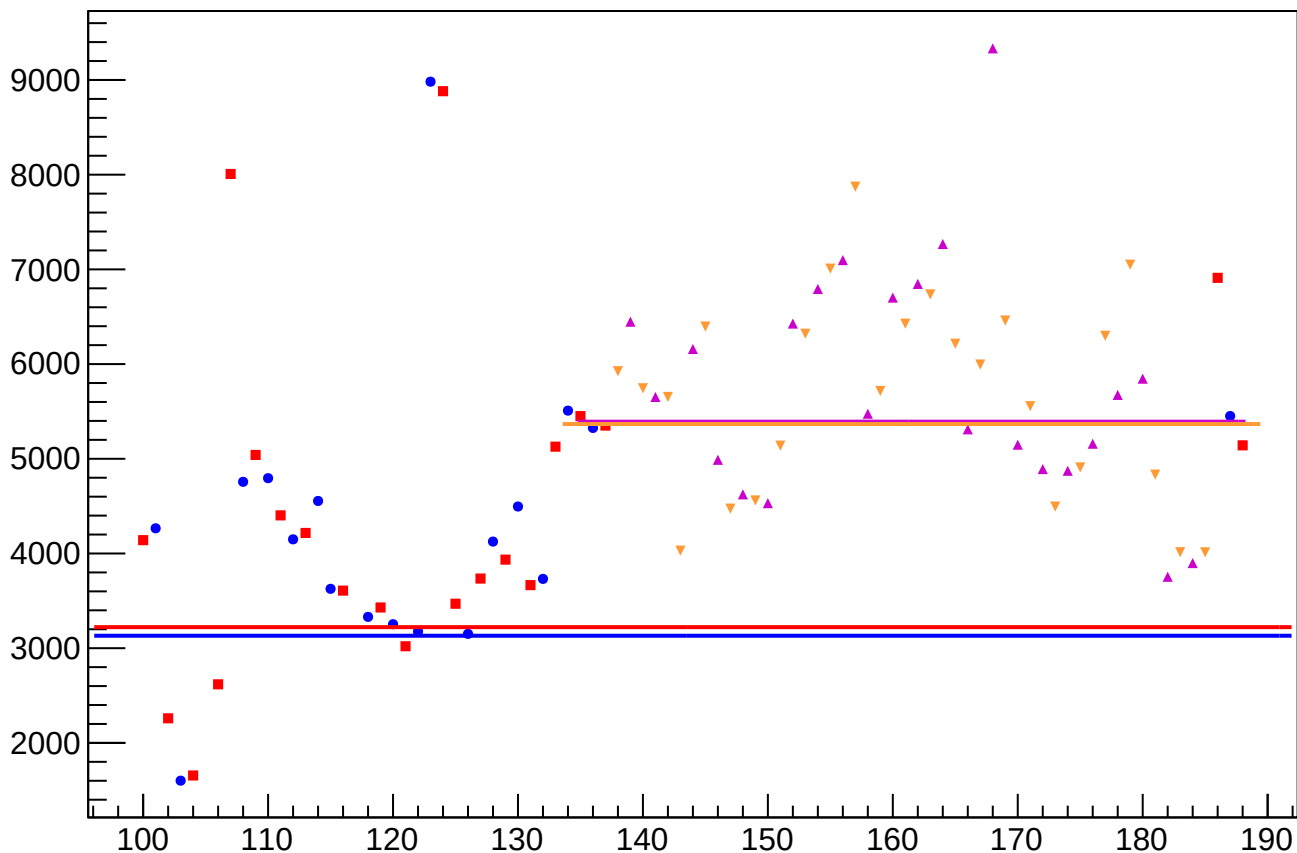
Left In: -3061.439+/-1313.197  $\chi^2/\text{NDF}$ : 12.3/22

+ sign 1412.208+/-910.688  $\chi^2/\text{NDF}$ : 48.5/42

All: -404.186+/-641.365  $\chi^2/\text{NDF}$ : 105.3/86

- sign -2191.658+/-903.409  $\chi^2/\text{NDF}$ : 49.0/43

# asym\_atl\_avg\_rms vs Slug



Right In: 3131.539+/-0.916     $\chi^2/\text{NDF}$ : 1934203.1/17

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

Right Out: 3222.204+/-0.868     $\chi^2/\text{NDF}$ : 2480836.0/20

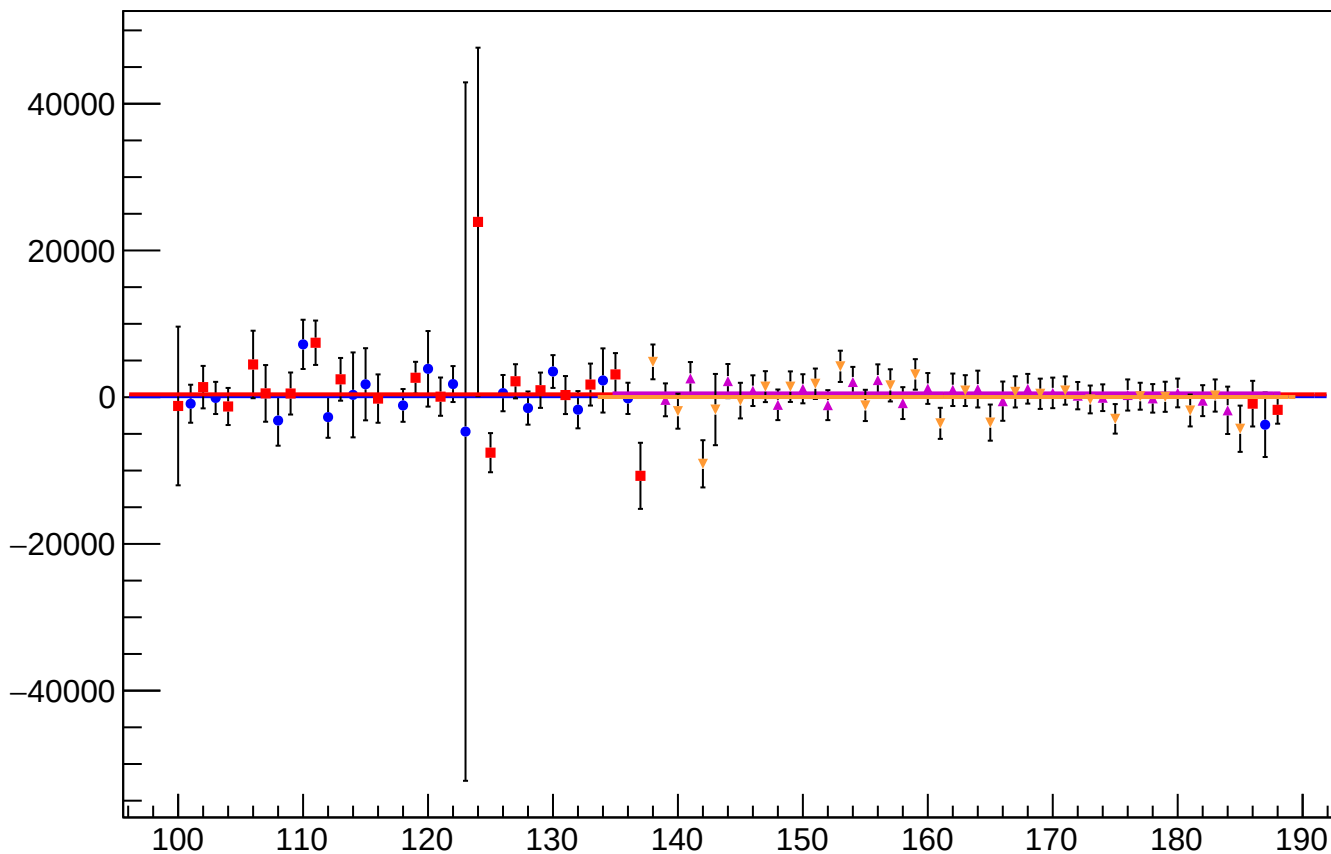
Left In: 5391.987+/-0.929     $\chi^2/\text{NDF}$ :1320415.5/22

+ sign 4262.715+/-0.644     $\chi^2/\text{NDF}$ : 6159933.3/42

All: 4248.300+/-0.452     $\chi^2/\text{NDF}$ : 12875374.1/8

- sign 4234.319+/-0.634     $\chi^2/\text{NDF}$ : 6714453.7/43

# dit\_asym\_atl\_dd\_mean vs Slug



Right In: 137.427 $\pm$ 678.565  $\chi^2$ /NDF: 12.3/17

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

Right Out: 387.156 $\pm$ 629.893  $\chi^2$ /NDF: 27.5/20

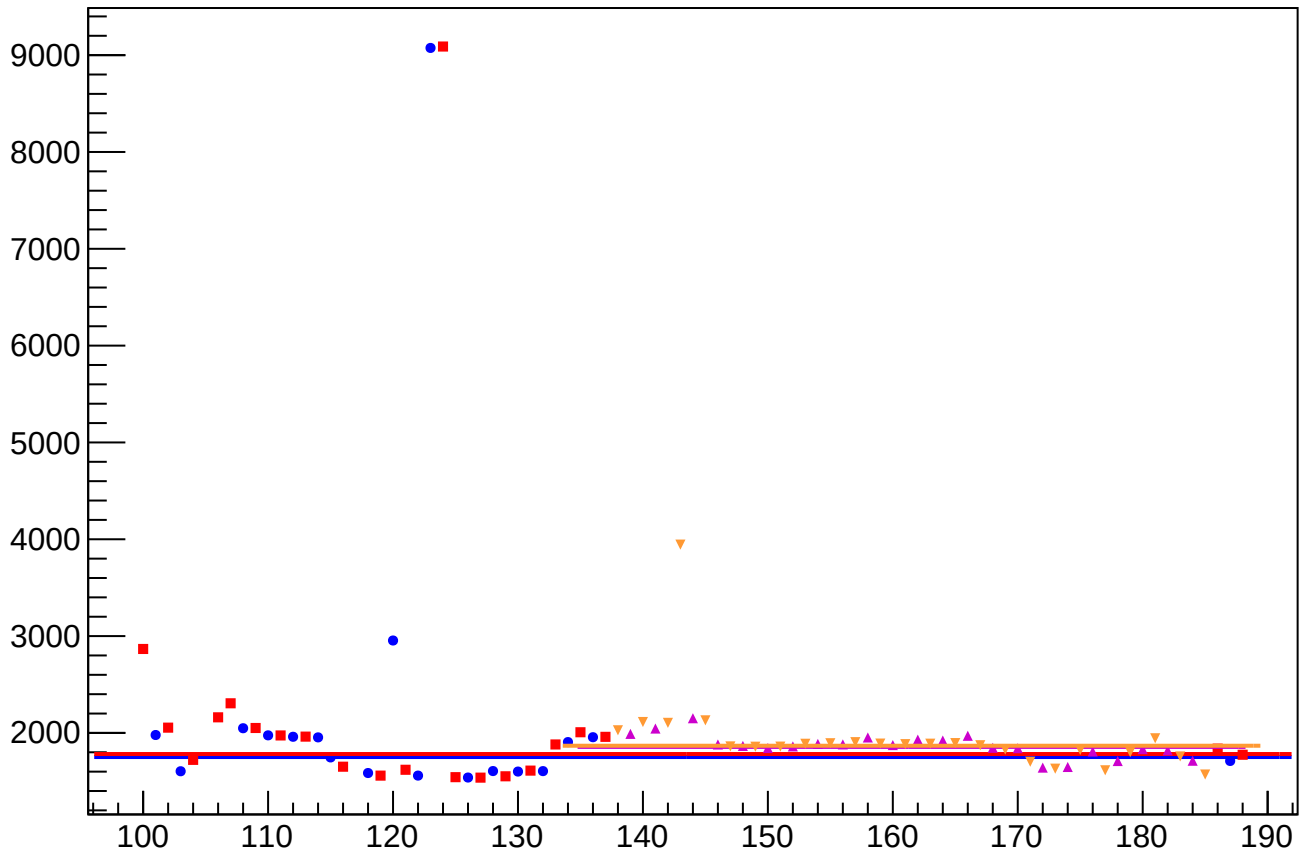
Left In: 514.693 $\pm$ 444.402  $\chi^2$ /NDF:5.9/22

+ sign 57.213 $\pm$ 369.608  $\chi^2$ /NDF: 44.0/42

All: 268.433 $\pm$ 259.029  $\chi^2$ /NDF: 78.1/86

- sign 472.307 $\pm$ 363.124  $\chi^2$ /NDF: 33.4/43

# dit\_asym\_atl\_dd\_rms vs Slug



Right In: 1750.864+/-0.480  $\chi^2/\text{NDF}$ : 301071.7/17

Left Out: 1867.539+/-0.312  $\chi^2/\text{NDF}$ : 545343.0/24

Right Out: 1781.947+/-0.445  $\chi^2/\text{NDF}$ : 429020.5/20

Left In: 1855.480+/-0.314  $\chi^2/\text{NDF}$ : 136219.4/22

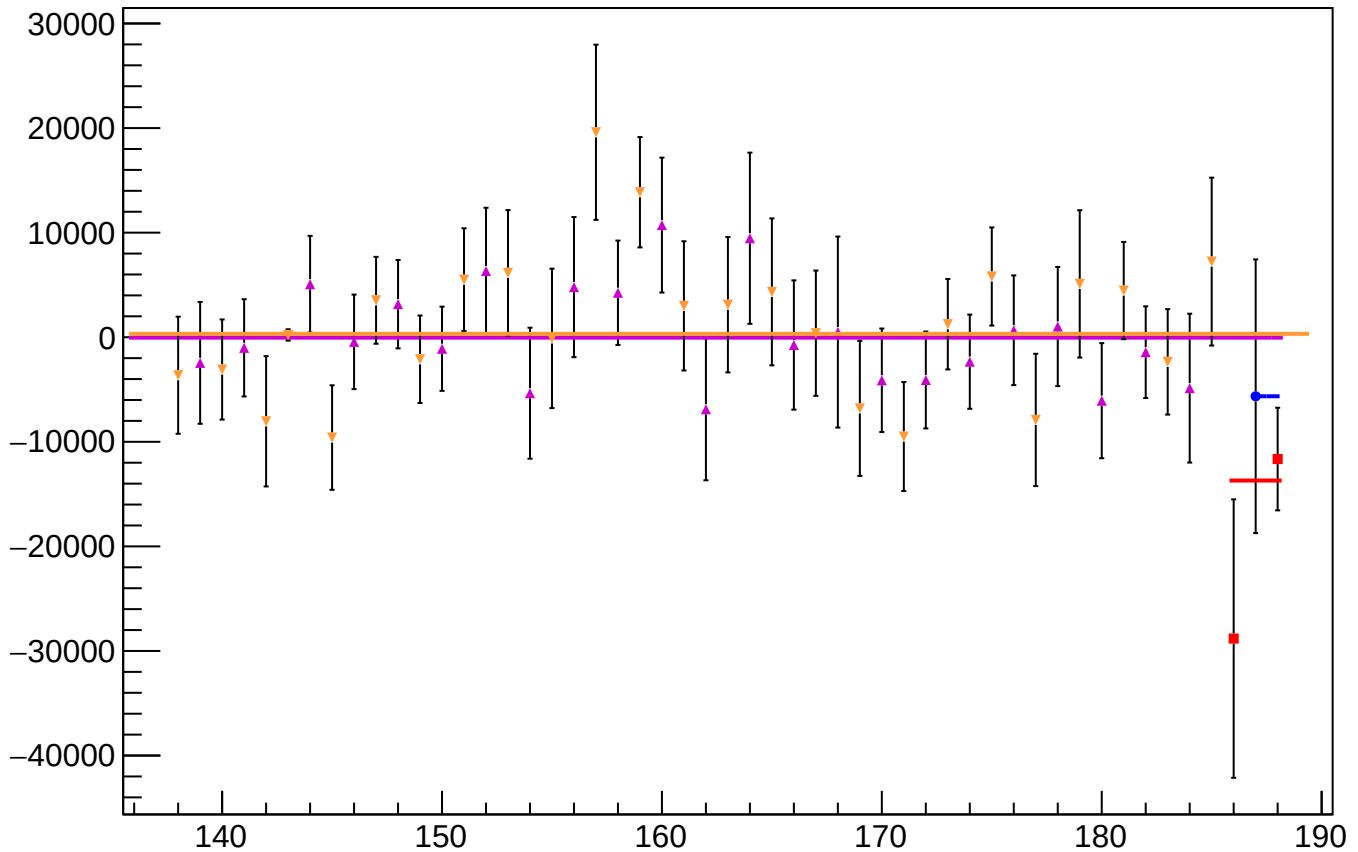
+ sign 1832.923+/-0.261  $\chi^2/\text{NDF}$ : 888001.4/42

All: 1831.943+/-0.183  $\chi^2/\text{NDF}$ : 1471499.1/80

- sign 1830.998+/-0.257  $\chi^2/\text{NDF}$ : 583470.1/43



# asym\_atl\_dd\_correction\_mean vs Slug



Right In:  $-5644.886 \pm 13087.539$   $\chi^2/\text{NDF}$ : 0.0/0

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

Right Out:  $-13701.975 \pm 4604.803$   $\chi^2/\text{NDF}$ : 1.5/1

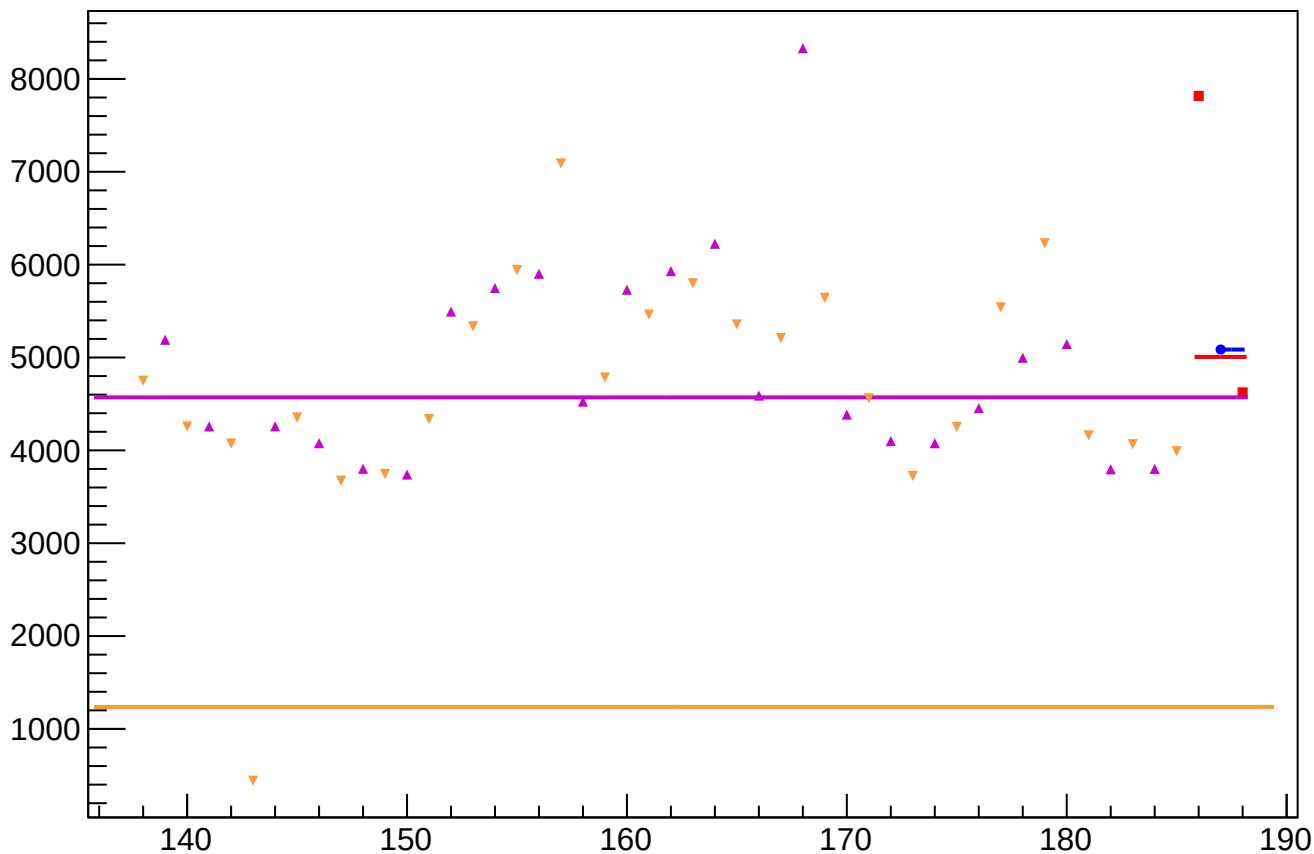
Left In:  $-40.142 \pm 1109.747$   $\chi^2/\text{NDF}$ : 13.9/22

+ sign  $316.838 \pm 487.900$   $\chi^2/\text{NDF}$ : 32.7/25

All:  $128.894 \pm 444.553$   $\chi^2/\text{NDF}$ : 57.2/50

- sign  $-790.064 \pm 1078.859$   $\chi^2/\text{NDF}$ : 23.6/24

# asym\_atl\_dd\_correction\_rms vs Slug



Right In: 5085.656 $\pm$ 9.254  $\chi^2$ /NDF: 0.0/0

Left Out: 1236.170 $\pm$ 0.345  $\chi^2$ /NDF: 23395886.7/24

Right Out: 5005.910 $\pm$ 3.256  $\chi^2$ /NDF: 101245.6/1

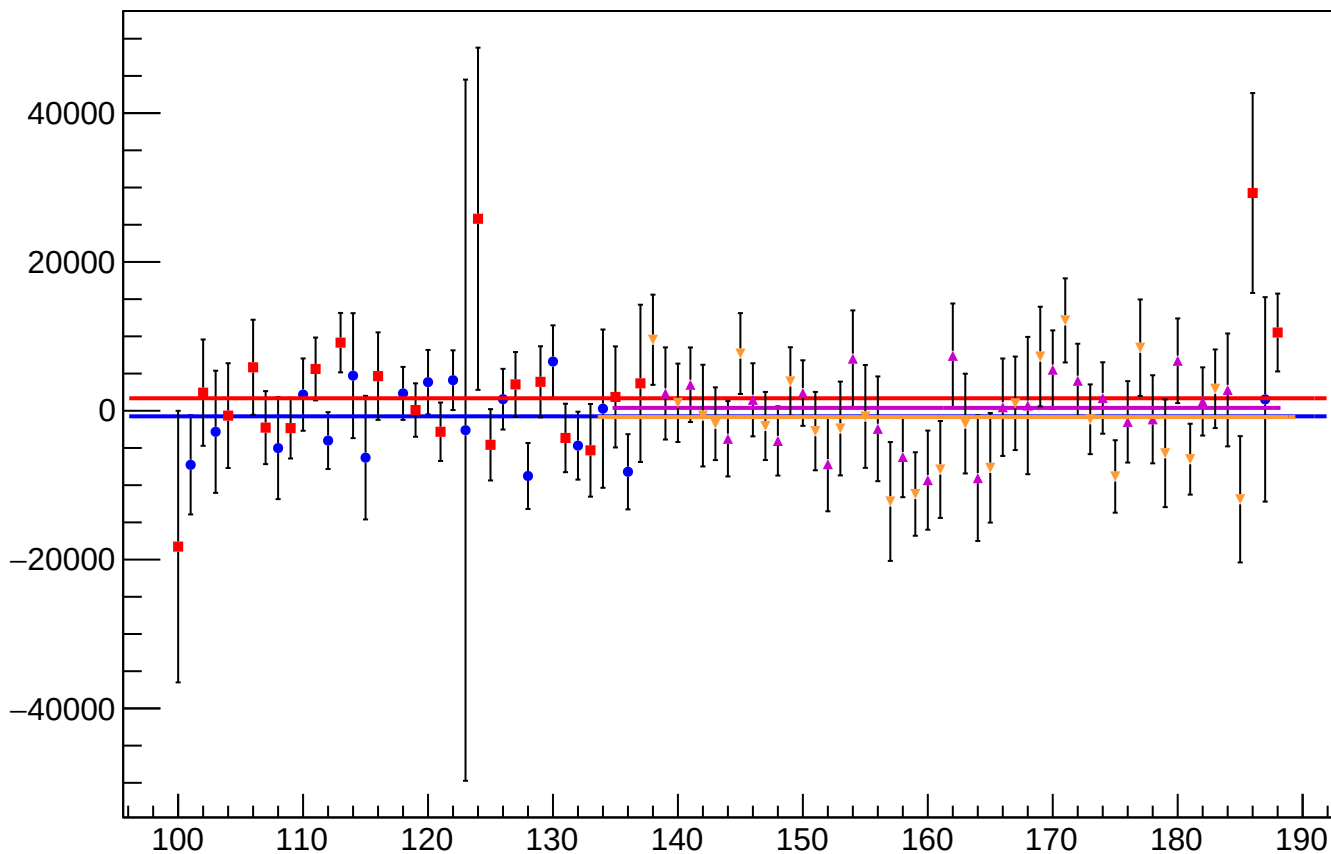
Left In: 4570.398 $\pm$ 0.785  $\chi^2$ /NDF: 1145211.6/22

+ sign 1241.520 $\pm$ 0.345  $\chi^2$ /NDF: 23568675.5/25

All: 1810.797 $\pm$ 0.314  $\chi^2$ /NDF: 40868133.0/5

- sign 4594.304 $\pm$ 0.763  $\chi^2$ /NDF: 1263365.2/24

# asym\_atl\_dd\_mean vs Slug



Right In: -746.319+/-1242.589  $\chi^2/\text{NDF}$ : 15.6/17

Left Out: -845.427+/-1152.677  $\chi^2/\text{NDF}$ : 30.0/24

Right Out: 1680.089+/-1157.052  $\chi^2/\text{NDF}$ : 22.4/20

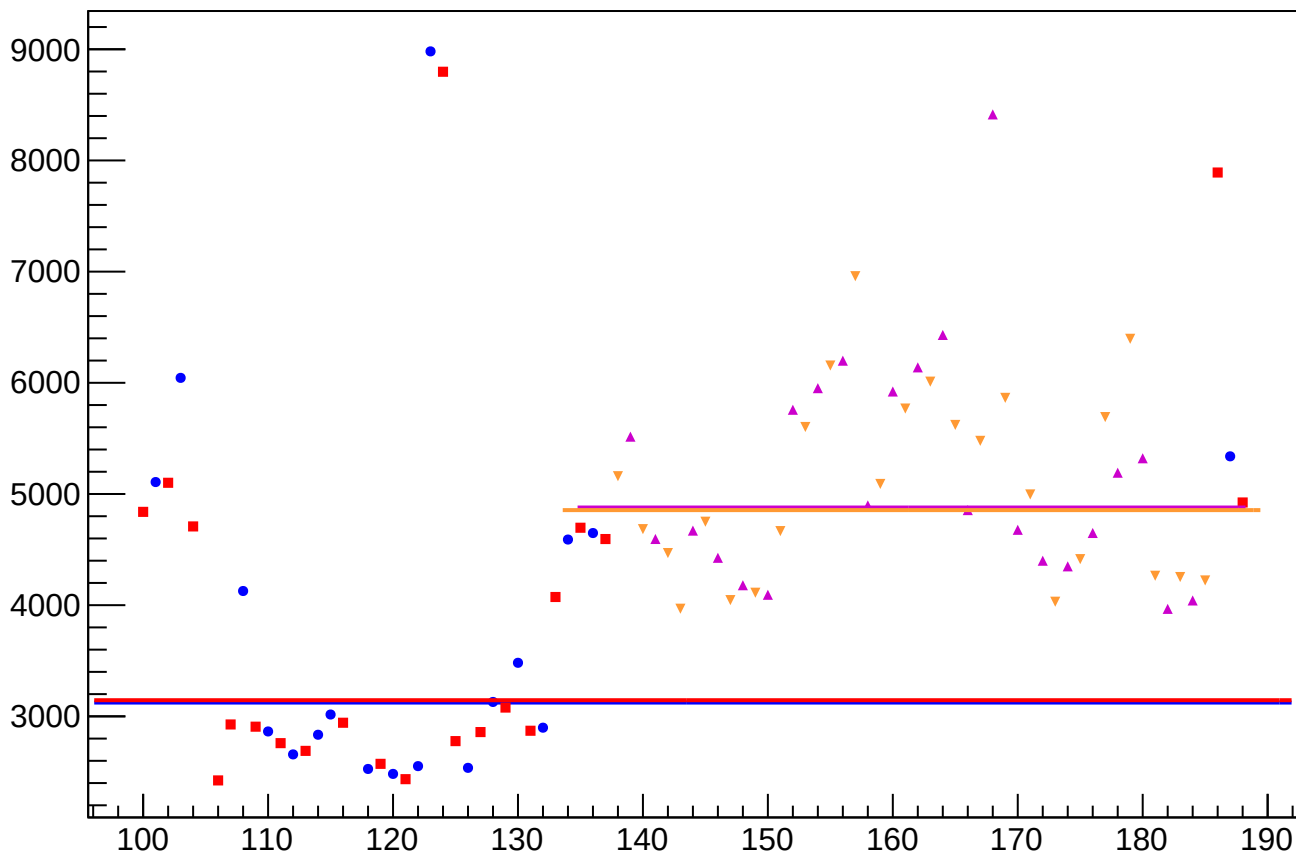
Left In: 385.098+/-1181.458  $\chi^2/\text{NDF}$ : 13.9/22

+ sign -799.588+/-845.066  $\chi^2/\text{NDF}$ : 45.6/42

All: 143.586+/-590.934  $\chi^2/\text{NDF}$ : 85.0/86

- sign 1046.107+/-826.653  $\chi^2/\text{NDF}$ : 36.9/43

# asym\_atl\_dd\_rms vs Slug



Right In: 3124.119+/-0.879  $\chi^2/\text{NDF}$ : 1012234.8/17

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

Right Out: 3145.176+/-0.809  $\chi^2/\text{NDF}$ : 1298470.5/20

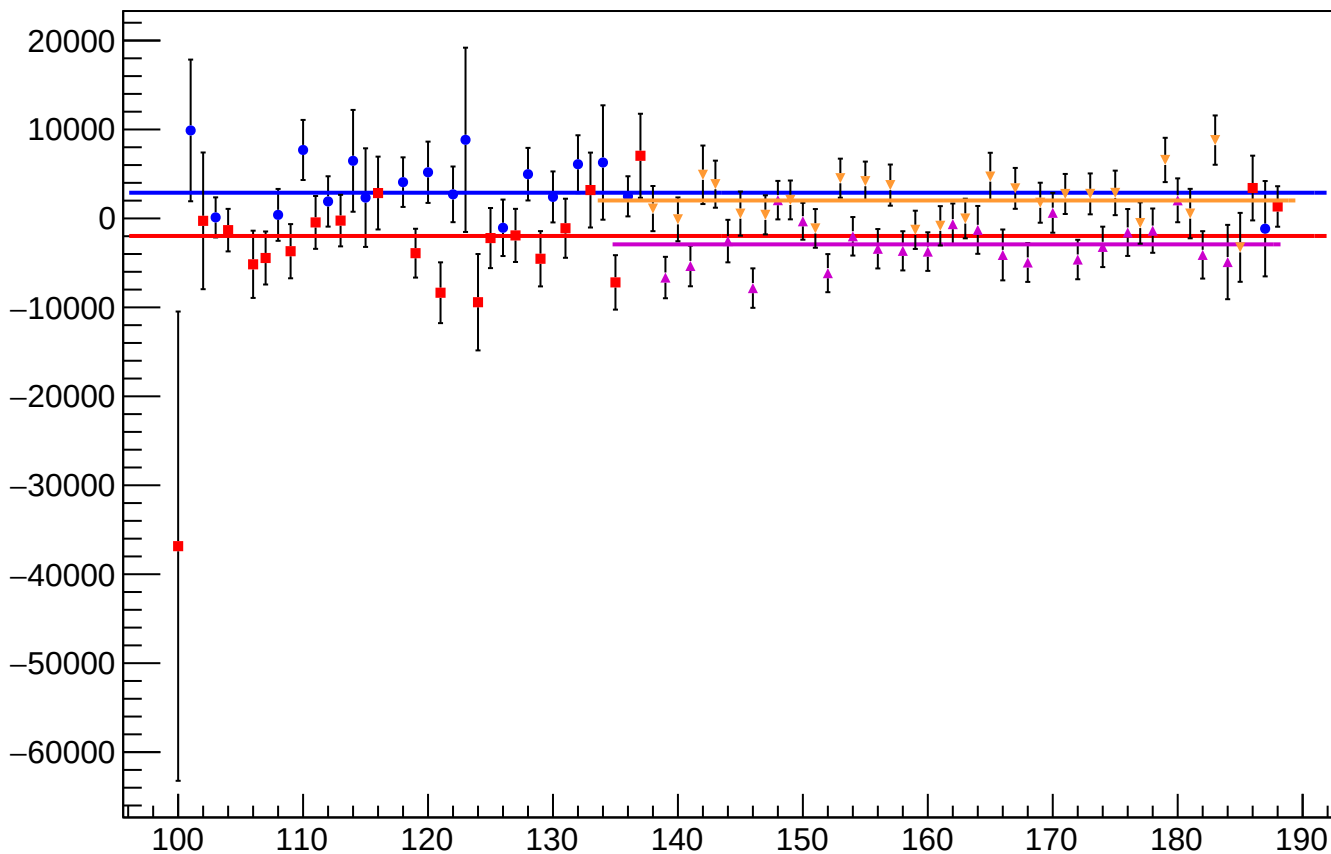
Left In: 4878.261+/-0.835  $\chi^2/\text{NDF}$ : 965222.2/22

+ sign 4054.400+/-0.598  $\chi^2/\text{NDF}$ : 3993453.3/42

All: 4017.896+/-0.417  $\chi^2/\text{NDF}$ : 8486568.5/80

- sign 3983.386+/-0.581  $\chi^2/\text{NDF}$ : 4485855.0/43

# dit\_asym\_atr\_avg\_mean vs Slug



Right In:  $2889.367 \pm 786.781$   $\chi^2/\text{NDF}$ : 10.4/17

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

Right Out:  $-1971.967 \pm 725.754$   $\chi^2/\text{NDF}$ : 24.6/20

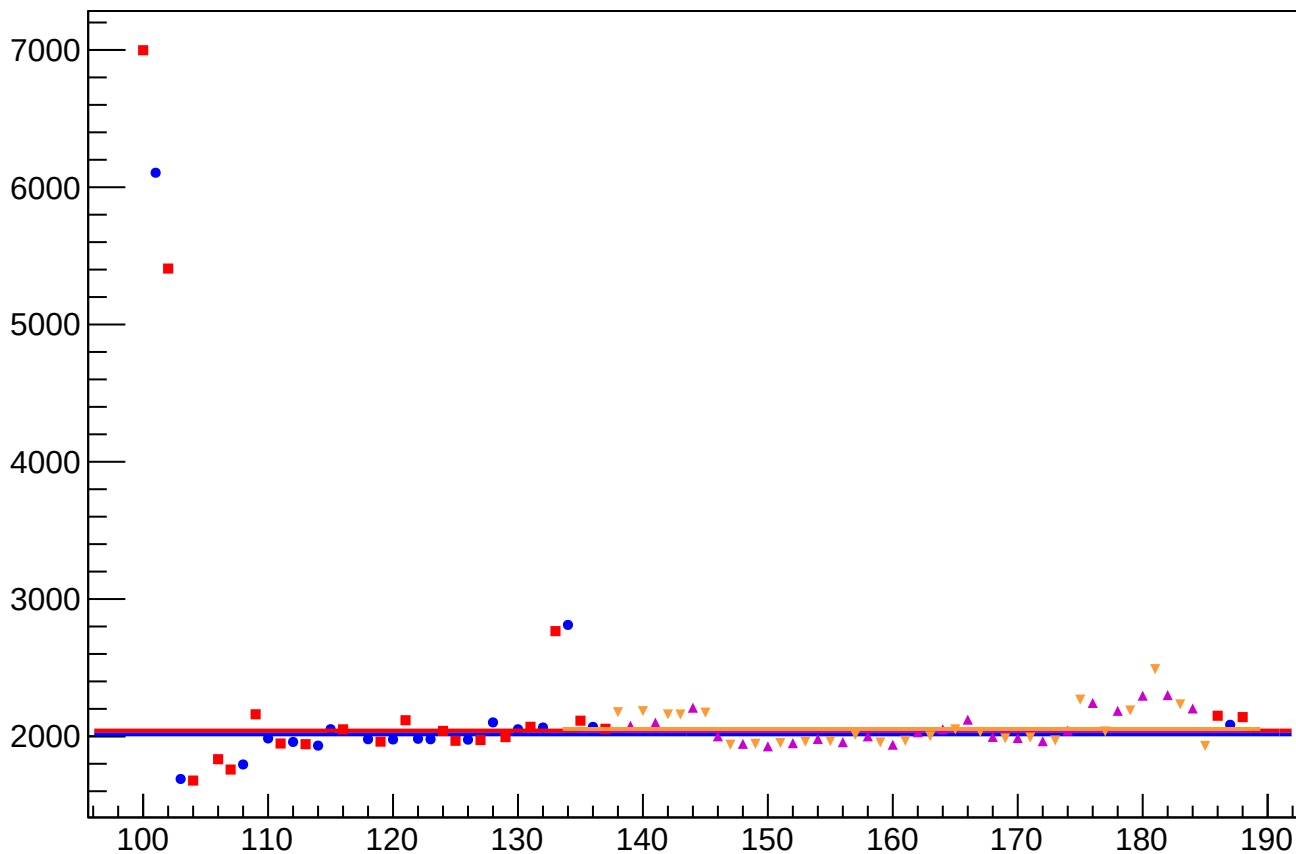
Left In:  $-2916.079 \pm 489.445$   $\chi^2/\text{NDF}$ : 28.8/22

+ sign  $2256.278 \pm 410.596$   $\chi^2/\text{NDF}$ : 38.5/42

All:  $-211.033 \pm 288.621$   $\chi^2/\text{NDF}$ : 164.4/86

- sign  $-2620.926 \pm 405.790$   $\chi^2/\text{NDF}$ : 54.6/43

# dit\_asym\_atr\_avg\_rms vs Slug



Right In: 2014.477+/-0.556  $\chi^2/\text{NDF}$ : 618051.7/17

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

Right Out: 2041.701+/-0.513  $\chi^2/\text{NDF}$ : 603819.2/20

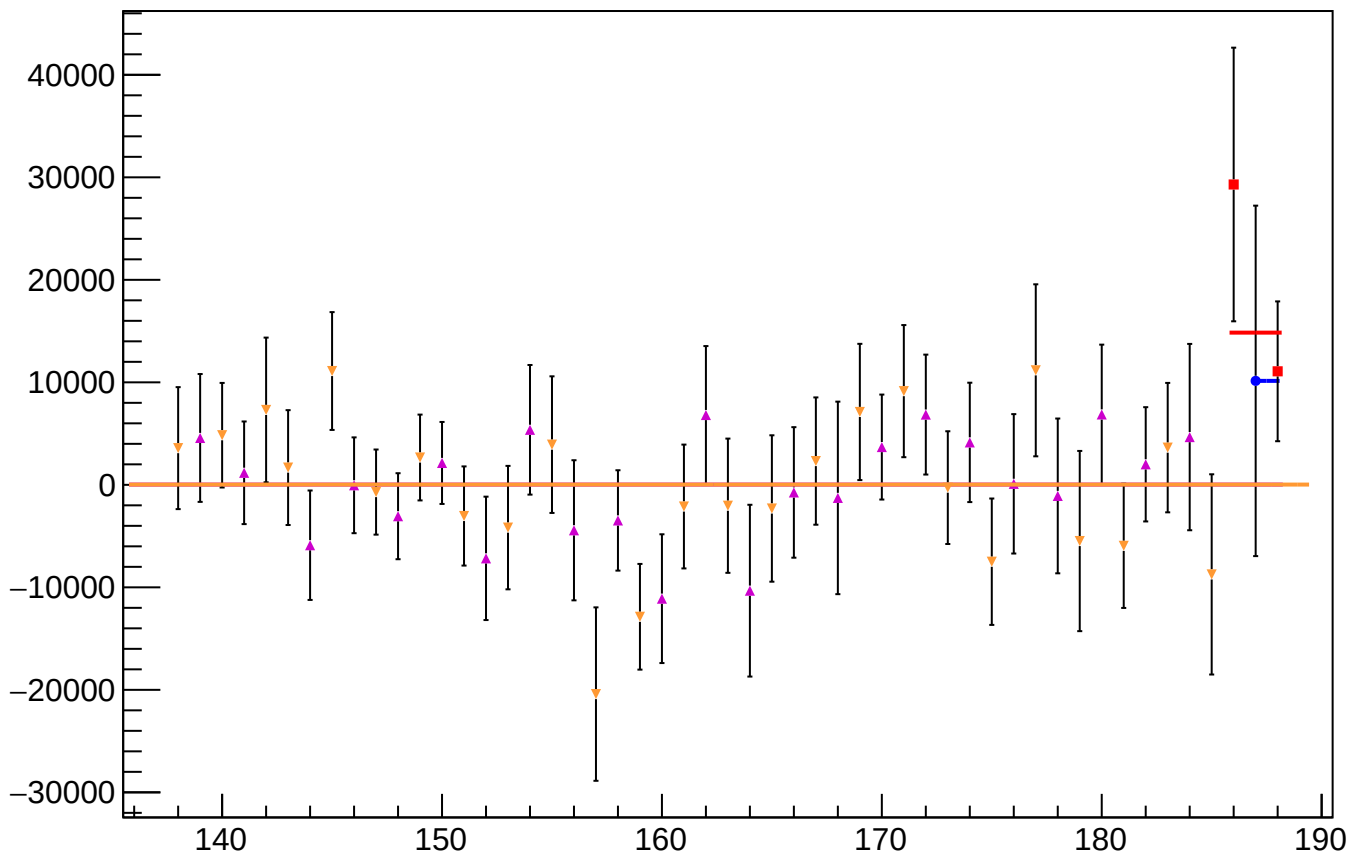
Left In: 2047.277+/-0.346  $\chi^2/\text{NDF}$ : 103001.2/22

+ sign 2042.724+/-0.290  $\chi^2/\text{NDF}$ : 758482.4/42

All: 2044.145+/-0.204  $\chi^2/\text{NDF}$ : 1465431.4/86

- sign 2045.533+/-0.287  $\chi^2/\text{NDF}$ : 706901.6/43

# asym\_atr\_avg\_correction\_mean vs Slug



Right In: 10142.297 $\pm$ 17094.933  $\chi^2$ /NDF: 0.0/0

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

Right Out: 14849.215 $\pm$ 6073.427  $\chi^2$ /NDF: 1.5/1

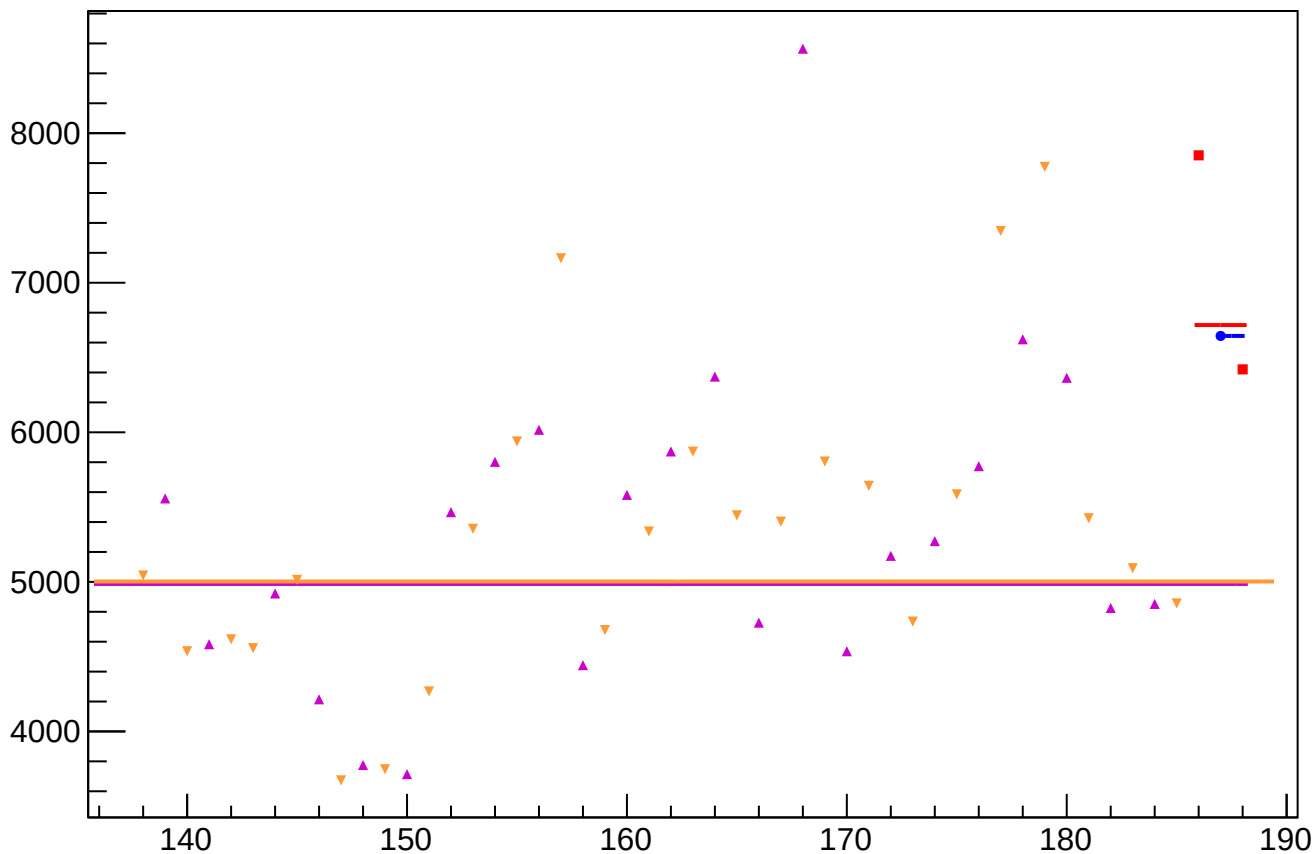
Left In: 23.765 $\pm$ 1211.652  $\chi^2$ /NDF:15.2/22

+ sign 75.139 $\pm$ 1191.719  $\chi^2$ /NDF: 29.6/25

All: 333.945 $\pm$ 841.439  $\chi^2$ /NDF: 52.1/50

- sign 591.240 $\pm$ 1188.237  $\chi^2$ /NDF: 22.4/24

# asym\_atr\_avg\_correction\_rms vs Slug



Right In: 6644.416 $\pm$ 12.088  $\chi^2$ /NDF: 0.0/0

Left Out: 5002.559 $\pm$ 0.845  $\chi^2$ /NDF:1145597.1/24

Right Out: 6717.073 $\pm$ 4.295  $\chi^2$ /NDF: 18230.8/1

Left In: 4986.169 $\pm$ 0.857  $\chi^2$ /NDF:1197602.7/22

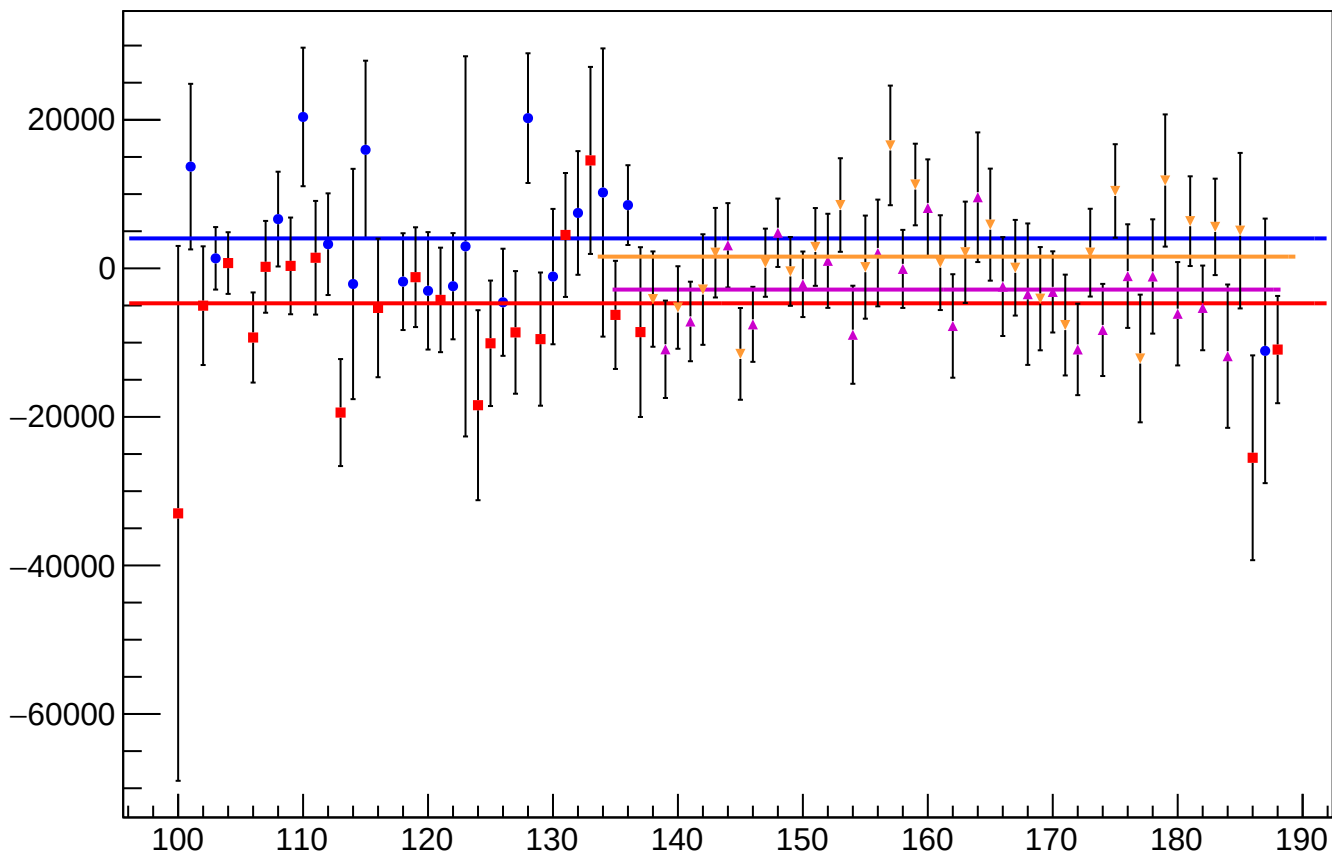
+ sign 5010.538 $\pm$ 0.843  $\chi^2$ /NDF: 1163956.2/25

All: 5031.542 $\pm$ 0.595  $\chi^2$ /NDF: 2537256.4/50

- sign 5052.423 $\pm$ 0.840  $\chi^2$ /NDF: 1372061.3/24



# asym\_atr\_avg\_mean vs Slug



Right In: 4034.010 $\pm$ 1847.778  $\chi^2$ /NDF: 14.8/17

Left Out: 1580.515 $\pm$ 1266.098  $\chi^2$ /NDF: 25.2/24

Right Out: -4704.791 $\pm$ 1665.678  $\chi^2$ /NDF: 18.0/20

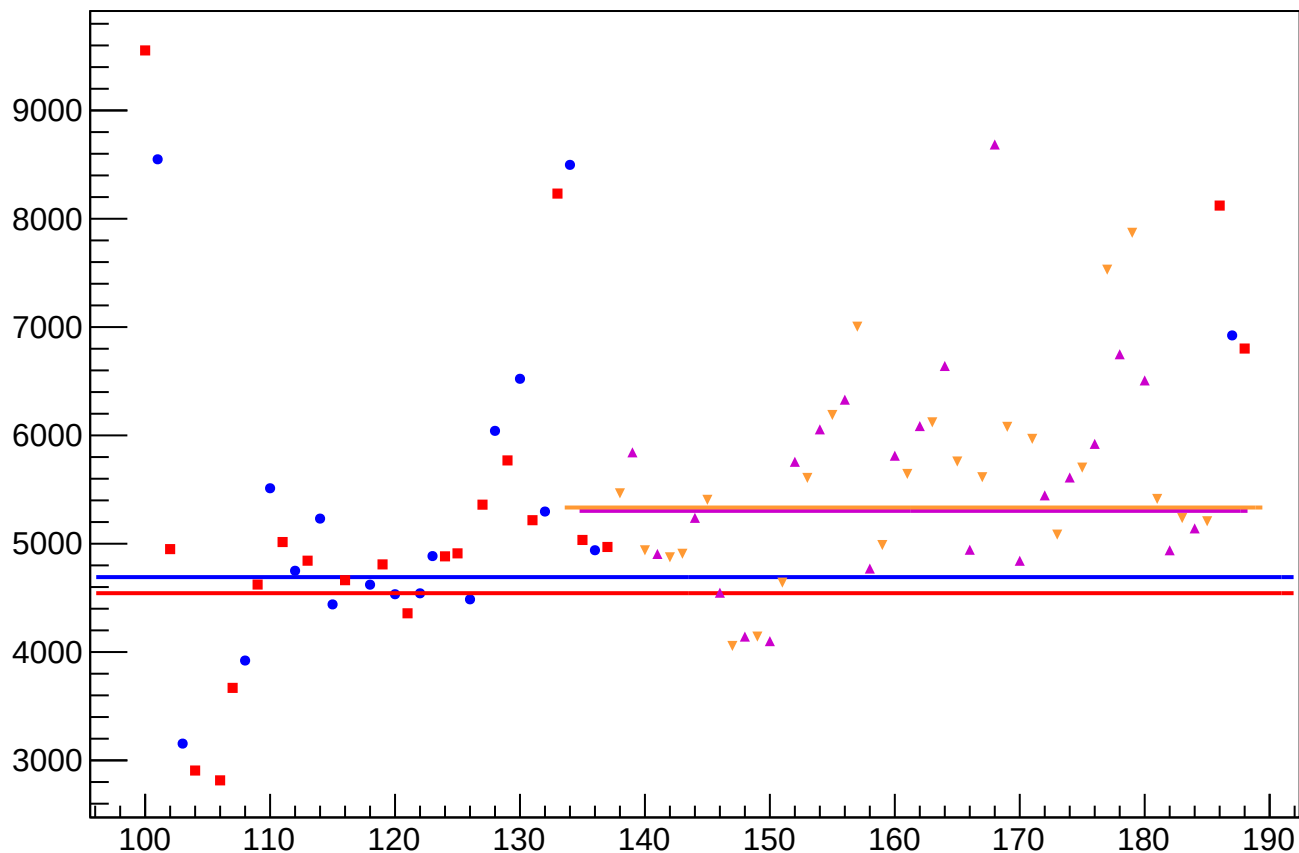
Left In: -2856.480 $\pm$ 1284.131  $\chi^2$ /NDF: 18.1/22

+ sign 2364.397 $\pm$ 1044.438  $\chi^2$ /NDF: 41.2/42

All: -669.213 $\pm$ 728.633  $\chi^2$ /NDF: 94.5/86

- sign -3545.497 $\pm$ 1016.994  $\chi^2$ /NDF: 36.9/43

# asym\_atr\_avg\_rms vs Slug



Right In: 4691.748+/-1.307  $\chi^2/\text{NDF}$ : 809589.4/17

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

Right Out: 4543.372+/-1.171  $\chi^2/\text{NDF}$ : 1185781.6/20

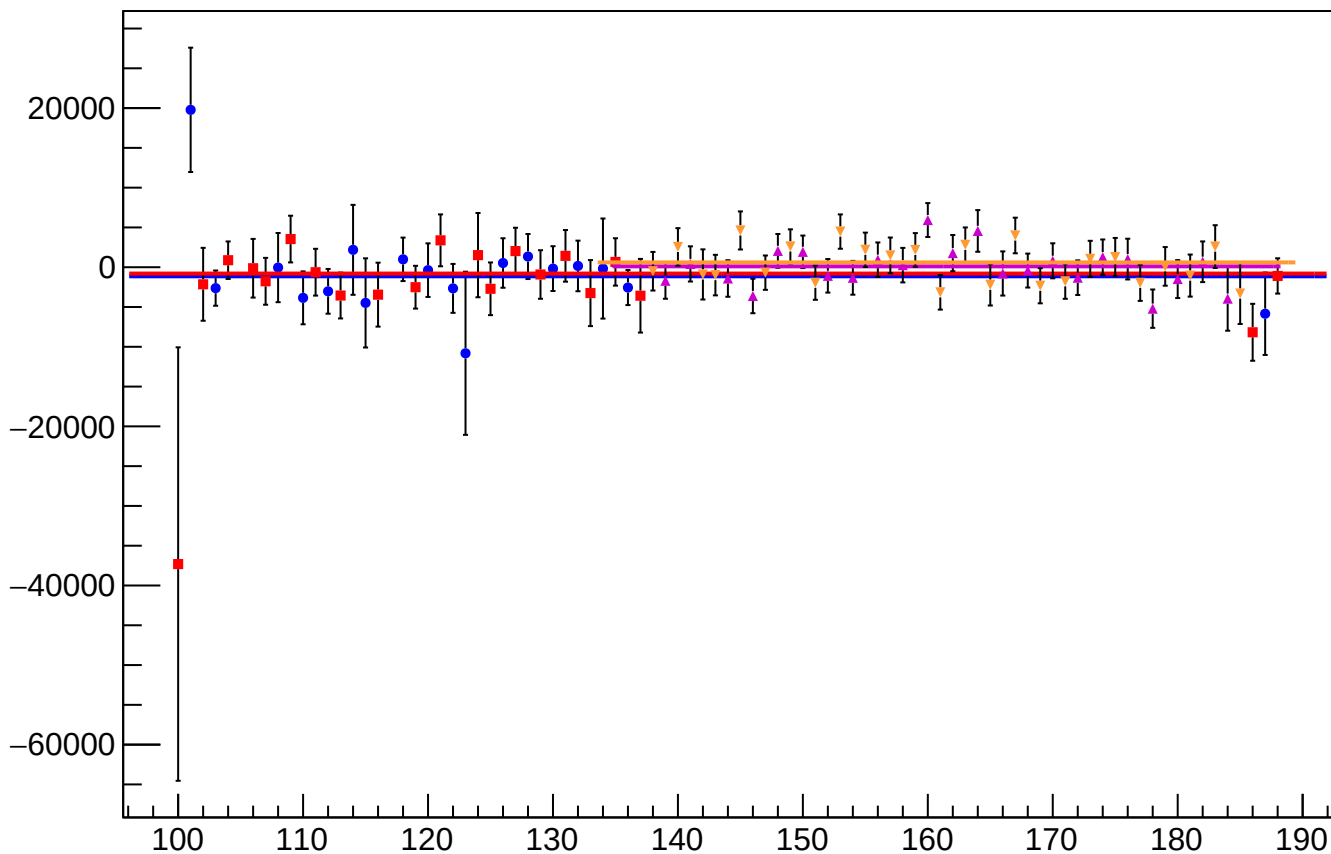
Left In: 5303.321+/-0.908  $\chi^2/\text{NDF}$ : 960356.0/22

+ sign 5128.953+/-0.739  $\chi^2/\text{NDF}$ : 1839543.6/42

All: 5071.941+/-0.515  $\chi^2/\text{NDF}$ : 4260156.0/80

- sign 5018.104+/-0.718  $\chi^2/\text{NDF}$ : 2409025.6/43

# dit\_asym\_atr\_dd\_mean vs Slug



Right In:  $-1138.388 \pm 787.337$   $\chi^2/\text{NDF}$ : 13.9/17

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

Right Out:  $-797.247 \pm 705.536$   $\chi^2/\text{NDF}$ : 15.3/20

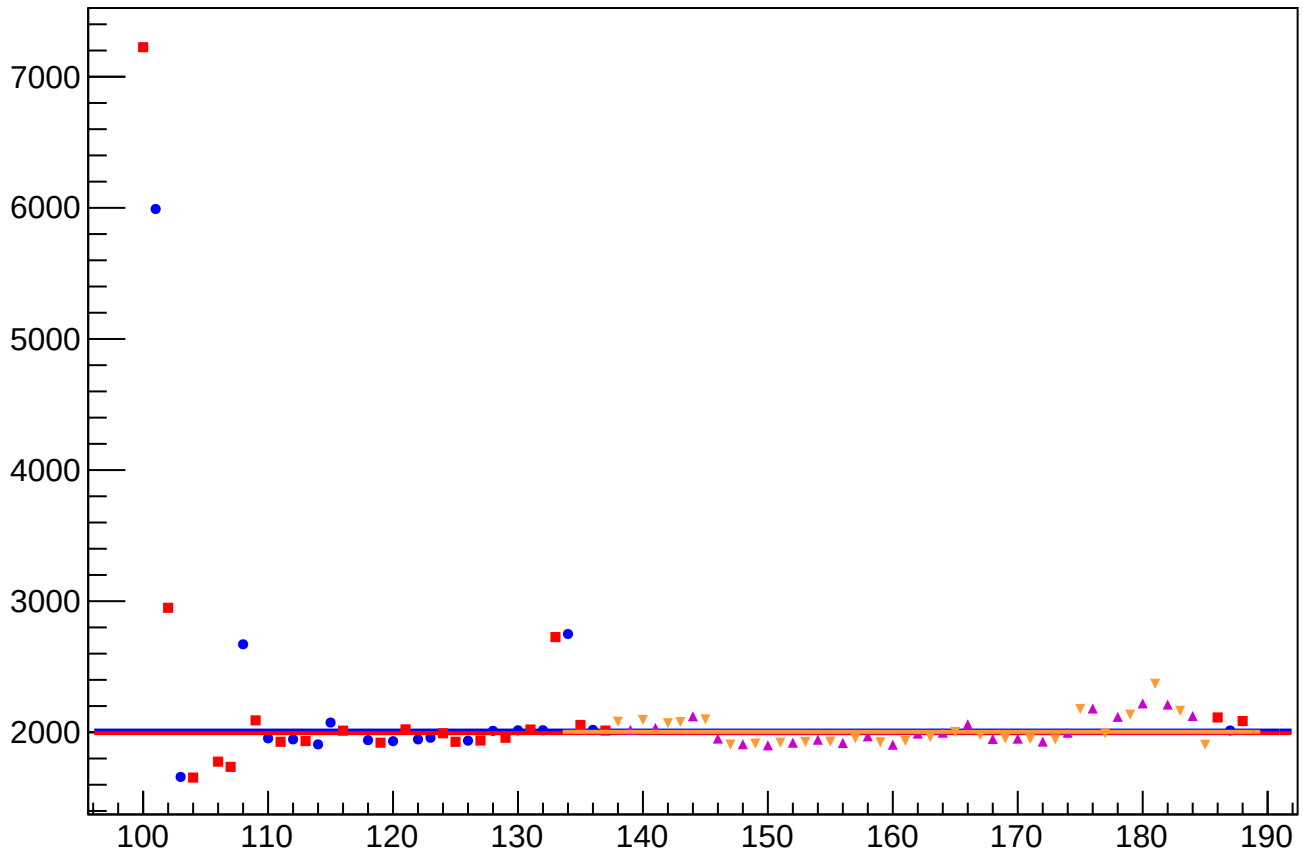
Left In:  $108.365 \pm 477.899$   $\chi^2/\text{NDF}$ : 25.0/22

+ sign  $148.420 \pm 403.182$   $\chi^2/\text{NDF}$ : 42.8/42

All:  $-17.073 \pm 282.401$   $\chi^2/\text{NDF}$ : 84.5/86

- sign  $-176.459 \pm 395.673$   $\chi^2/\text{NDF}$ : 41.4/43

# dit\_asym\_atr\_dd\_rms vs Slug



Right In: 2013.282+/-0.557  $\chi^2/\text{NDF}$ : 650048.6/17

Left Out: 2003.987+/-0.332  $\chi^2/\text{NDF}$ : 99981.7/24

Right Out: 1993.728+/-0.498  $\chi^2/\text{NDF}$ : 301471.5/20

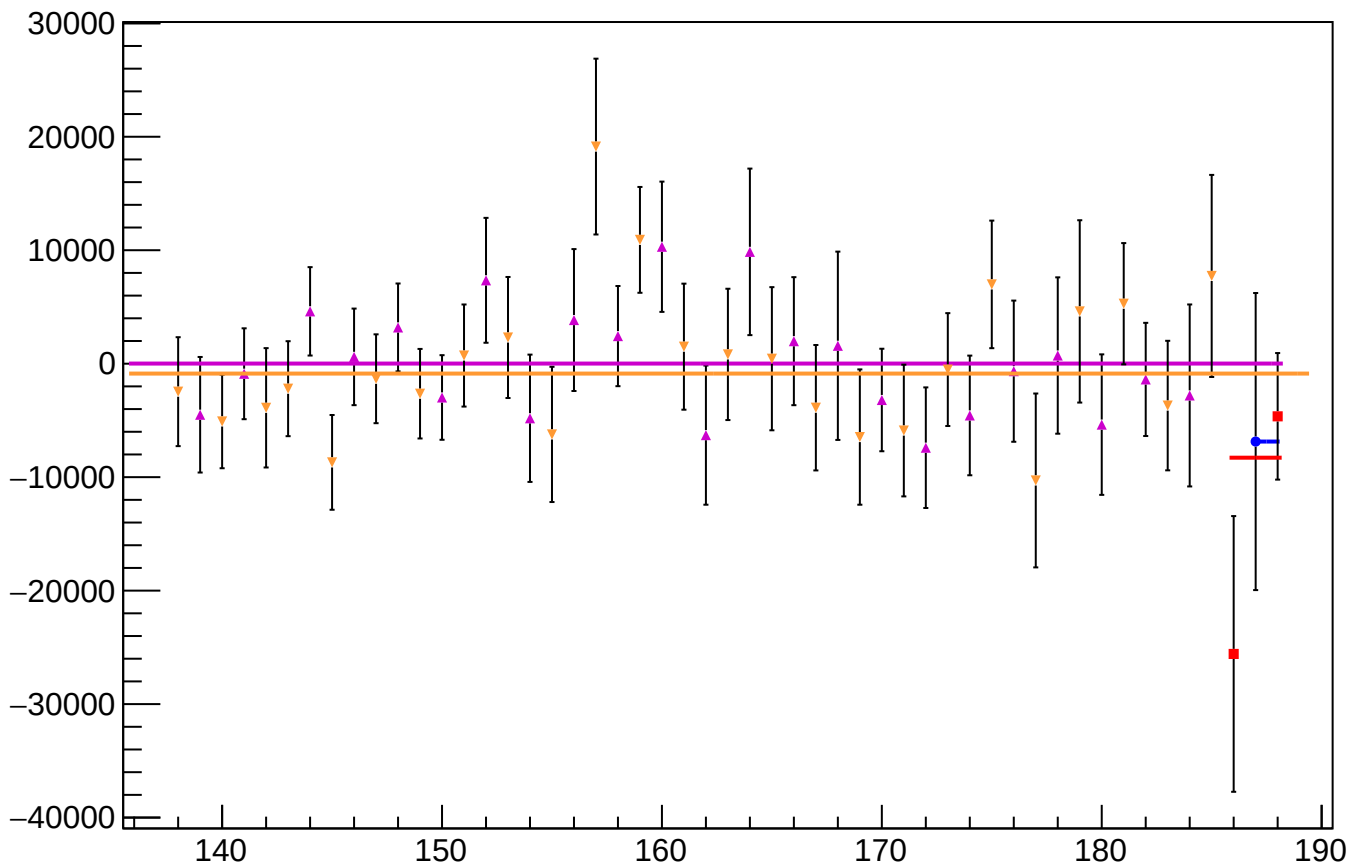
Left In: 2000.119+/-0.338  $\chi^2/\text{NDF}$ : 79688.8/22

+ sign 2006.425+/-0.285  $\chi^2/\text{NDF}$ : 750236.0/42

All: 2002.186+/-0.200  $\chi^2/\text{NDF}$ : 1131942.8/86

- sign 1998.106+/-0.280  $\chi^2/\text{NDF}$ : 381273.0/43

# asym\_atr\_dd\_correction\_mean vs Slug



Right In: -6861.860+/-13090.382  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -871.296+/-1043.390  $\chi^2/\text{NDF}$ : 28.3/24

Right Out: -8284.366+/-5068.583  $\chi^2/\text{NDF}$ : 2.5/1

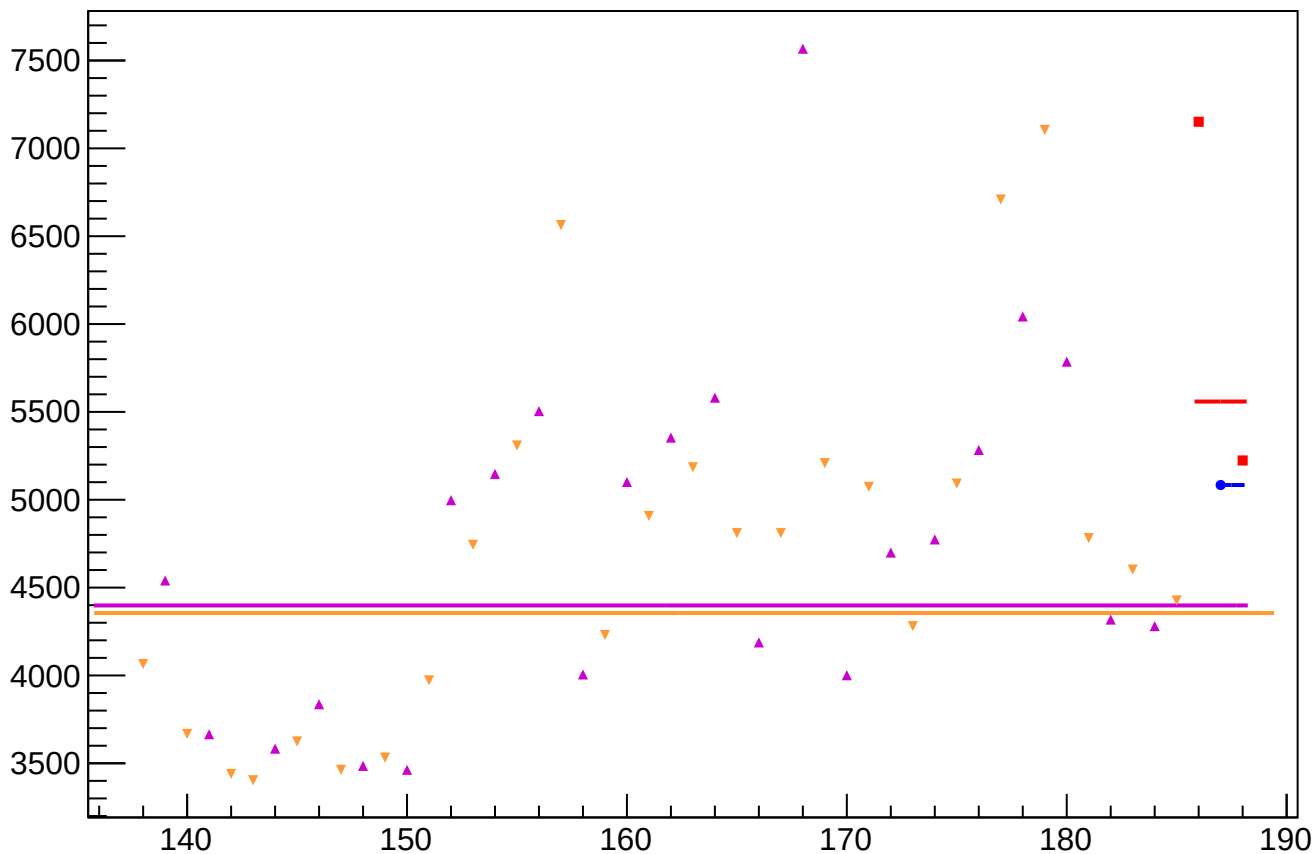
Left In: 10.945+/-1070.258  $\chi^2/\text{NDF}$ : 17.2/22

+ sign -909.114+/-1040.091  $\chi^2/\text{NDF}$ : 28.5/25

All: -628.040+/-737.945  $\chi^2/\text{NDF}$ : 50.9/50

- sign -343.128+/-1047.168  $\chi^2/\text{NDF}$ : 22.2/24

# asym\_atr\_dd\_correction\_rms vs Slug



Right In: 5083.877+/-9.256  $\chi^2/\text{NDF}$ : 0.0/0

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

Right Out: 5559.138+/-3.584  $\chi^2/\text{NDF}$ : 41591.1/1

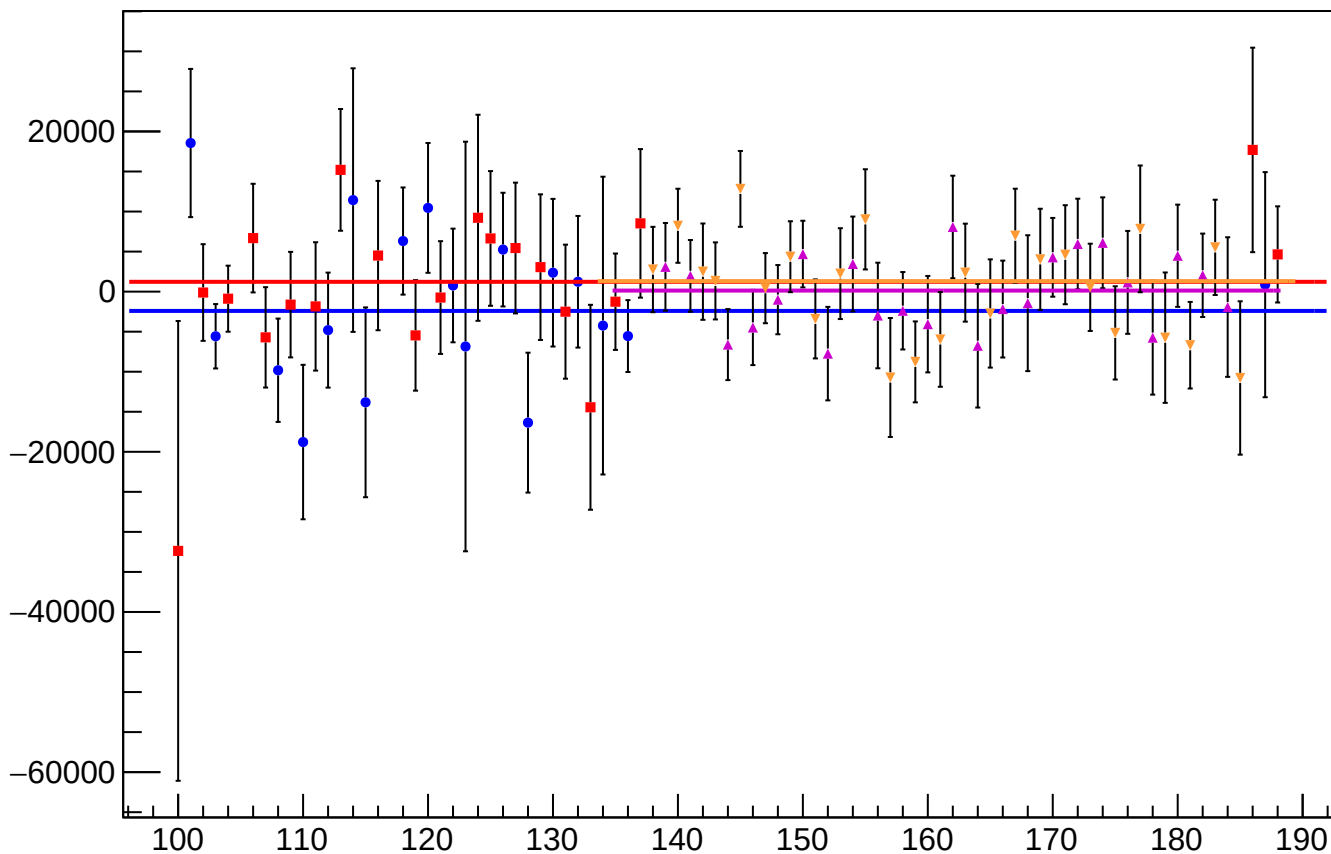
Left In: 4398.421+/-0.757  $\chi^2/\text{NDF}$ : 1278784.1/22

+ sign 4359.803+/-0.735  $\chi^2/\text{NDF}$ : 1356650.4/25

All: 4403.584+/-0.522  $\chi^2/\text{NDF}$ : 2784569.0/50

- sign 4447.964+/-0.740  $\chi^2/\text{NDF}$ : 1420782.6/24

# asym\_atr\_dd\_mean vs Slug



Right In:  $-2408.669 \pm 1782.773$   $\chi^2/\text{NDF}$ : 20.9/17

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

Right Out:  $1225.700 \pm 1613.564$   $\chi^2/\text{NDF}$ : 14.0/20

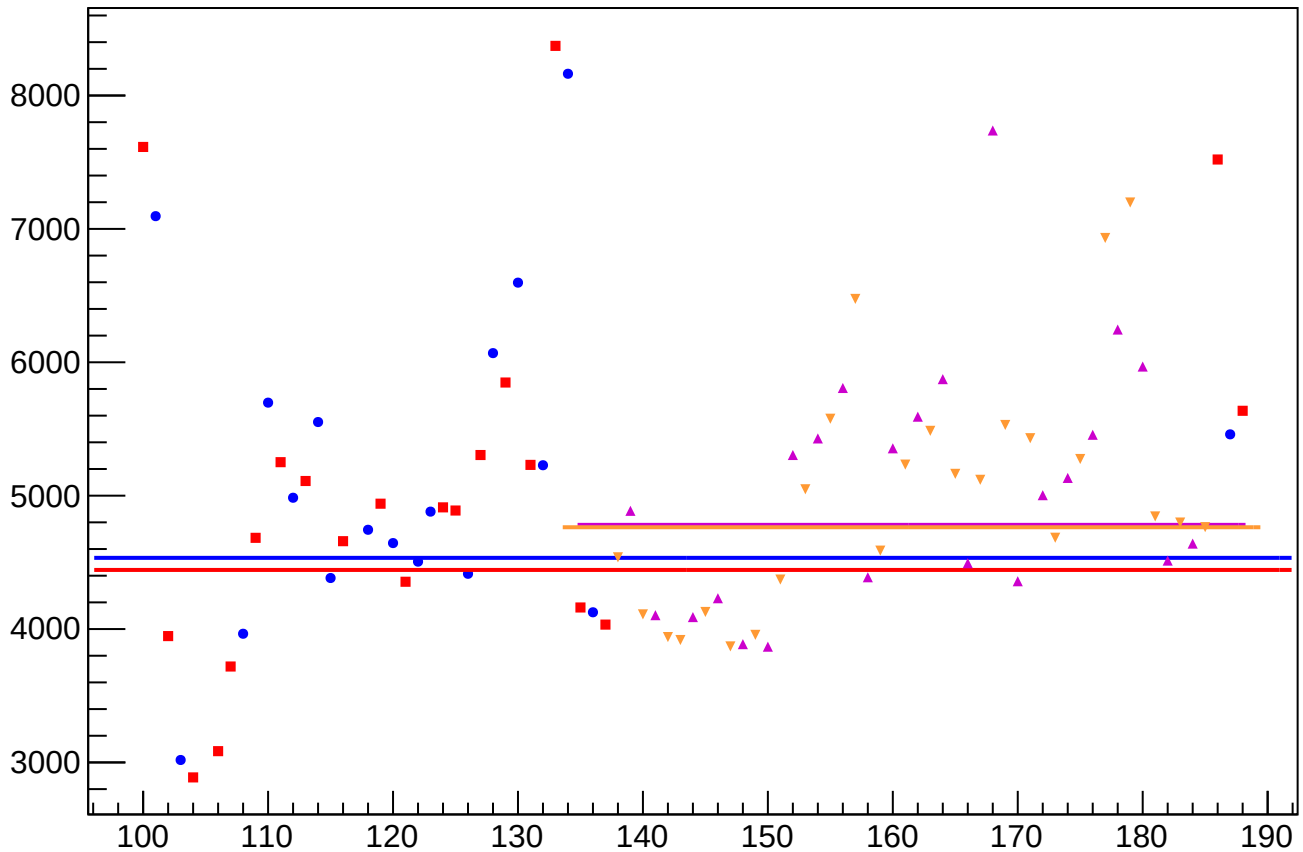
Left In:  $131.428 \pm 1157.282$   $\chi^2/\text{NDF}$ : 14.9/22

+ sign  $239.738 \pm 955.399$   $\chi^2/\text{NDF}$ : 52.1/42

All:  $373.513 \pm 670.208$   $\chi^2/\text{NDF}$ : 81.3/86

- sign  $503.125 \pm 940.412$   $\chi^2/\text{NDF}$ : 29.2/43

# asym\_atr\_dd\_rms vs Slug



Right In: 4533.828+/-1.261  $\chi^2/\text{NDF}$ : 779050.6/17

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

Right Out: 4443.169+/-1.135  $\chi^2/\text{NDF}$ : 982133.7/20

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

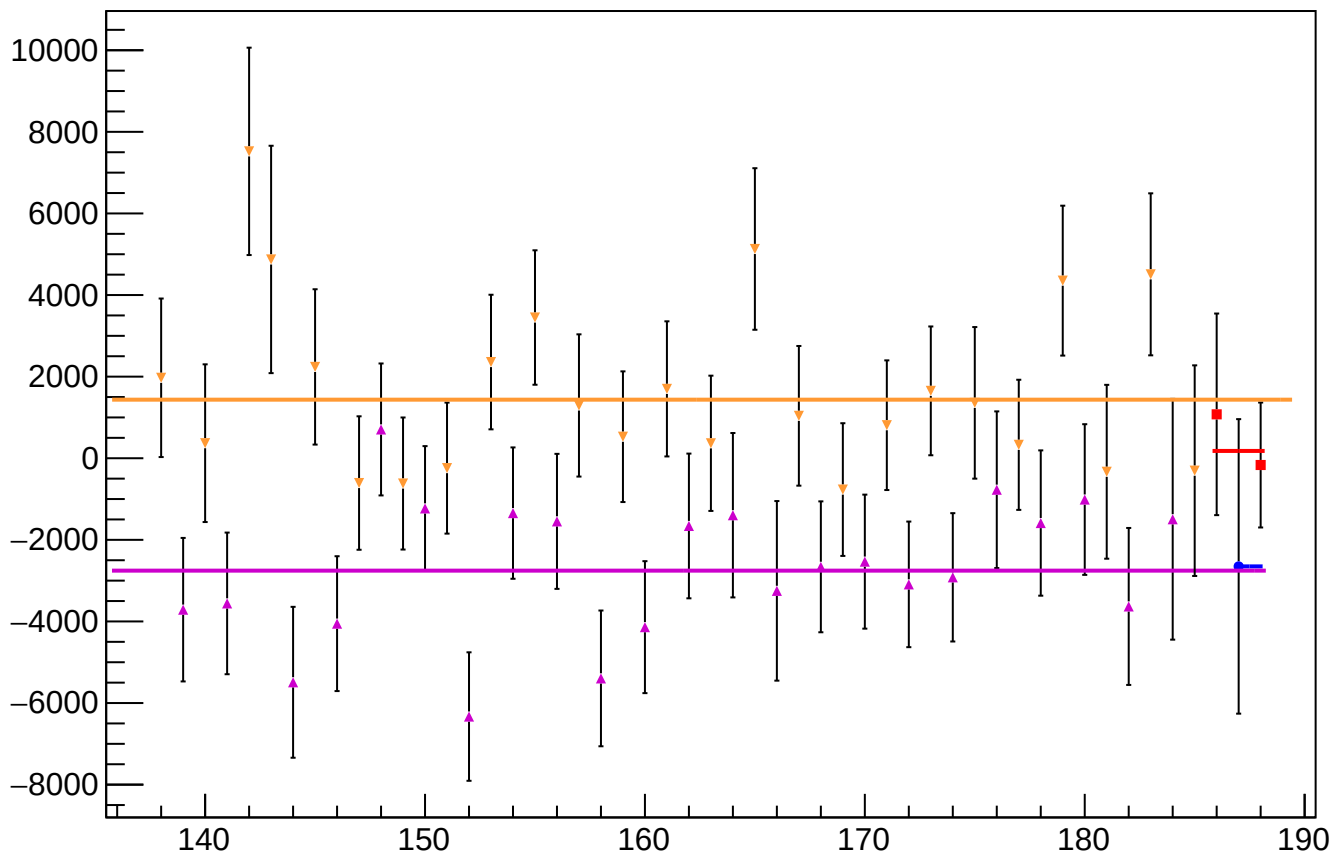
+ sign 4697.318+/-0.676  $\chi^2/\text{NDF}$ : 1744504.2/42

All: 4681.176+/-0.473  $\chi^2/\text{NDF}$ : 3737641.5/80

- sign 4665.591+/-0.664  $\chi^2/\text{NDF}$ : 1992015.2/43



# dit\_asym\_atl\_avg\_atr\_avg\_avg\_mean vs Slug



Right In:  $-2650.892 \pm 3609.305$   $\chi^2/\text{NDF}: 0.0/0$

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

Right Out:  $178.989 \pm 1301.638$   $\chi^2/\text{NDF}: 0.2/1$

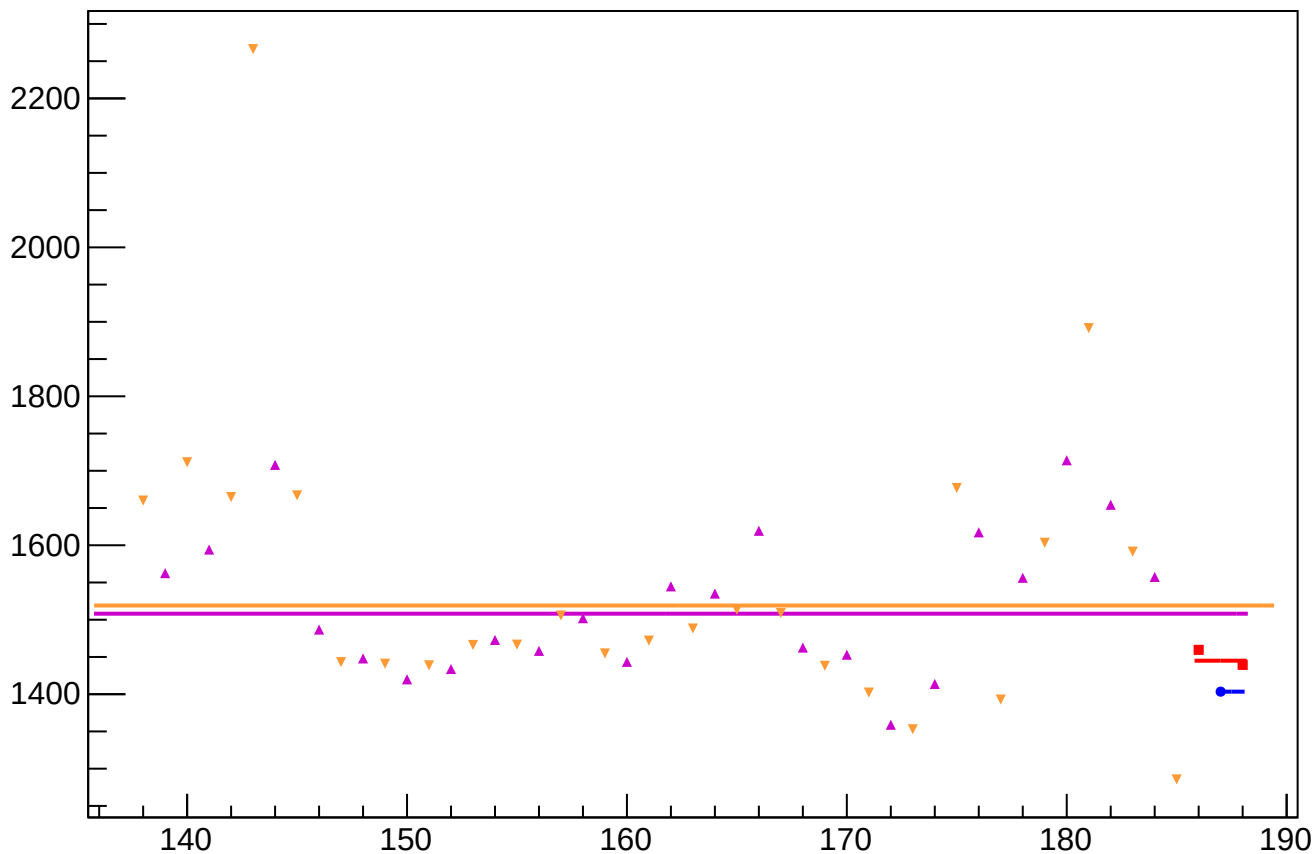
Left In:  $-2754.889 \pm 361.672$   $\chi^2/\text{NDF}: 22.4/22$

+ sign  $1395.653 \pm 356.427$   $\chi^2/\text{NDF}: 28.0/25$

All:  $-618.953 \pm 249.171$   $\chi^2/\text{NDF}: 117.7/50$

- sign  $-2544.612 \pm 348.470$   $\chi^2/\text{NDF}: 27.3/24$

dit\_asym\_atl\_avg\_atr\_avg\_avg\_rms vs Slug



Right In: 1403.425 $\pm$ 2.552  $\chi^2$ /NDF: 0.0/0

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

Right Out: 1444.994 $\pm$ 0.920  $\chi^2$ /NDF: 96.1/1

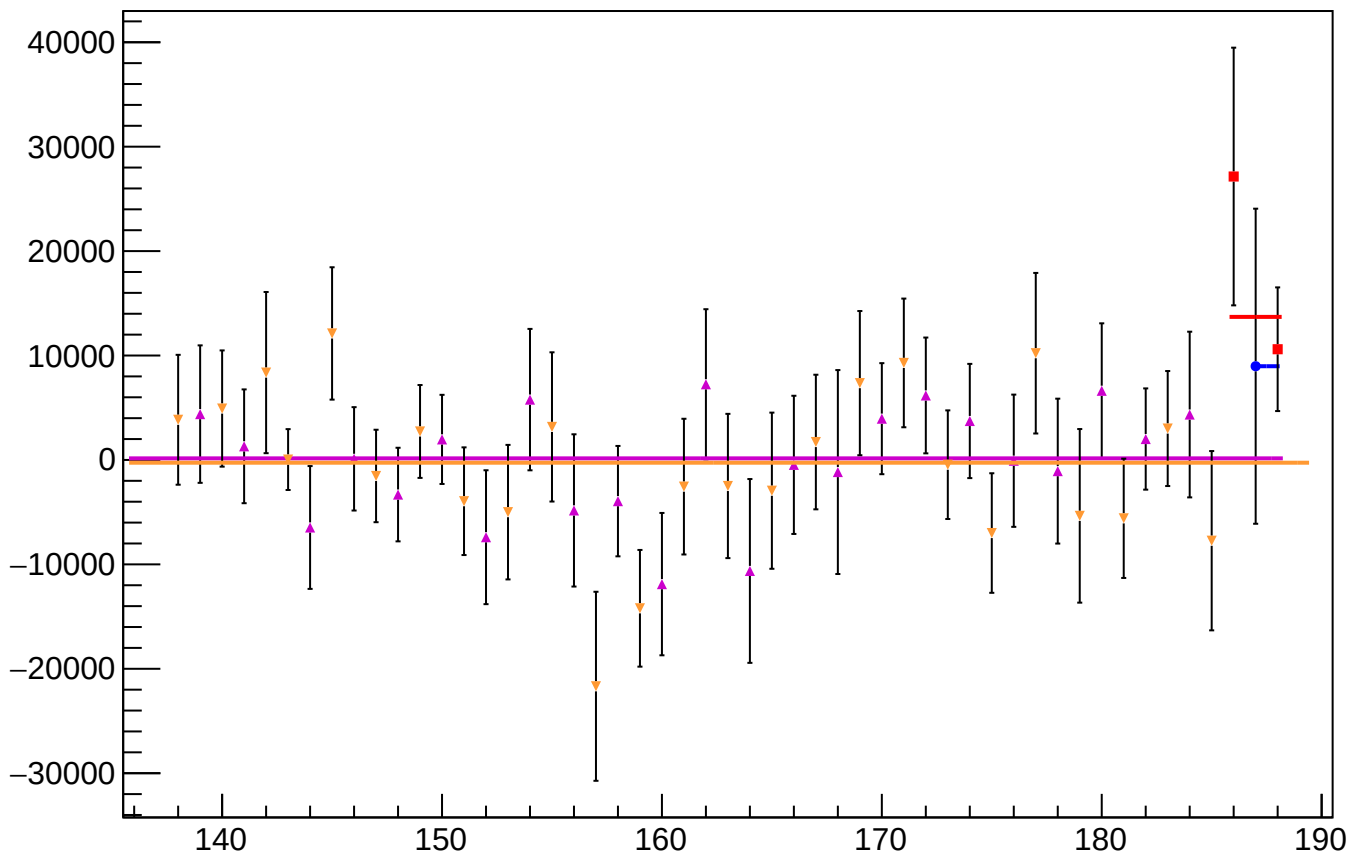
Left In: 1508.111 $\pm$ 0.256  $\chi^2$ /NDF:131488.7/22

+ sign 1517.964 $\pm$ 0.252  $\chi^2$ /NDF: 367873.1/25

All: 1510.614 $\pm$ 0.176  $\chi^2$ /NDF: 505487.2/50

- sign 1503.588 $\pm$ 0.246  $\chi^2$ /NDF: 135950.4/24

asym\_atl\_avg\_atr\_avg\_avg\_correction\_mean vs Slug



Right In: 8975.199+/-15086.703  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -264.324+/-1151.119  $\chi^2/\text{NDF}$ : 29.7/24

Right Out: 13699.226+/-5338.811  $\chi^2/\text{NDF}$ : 1.5/1

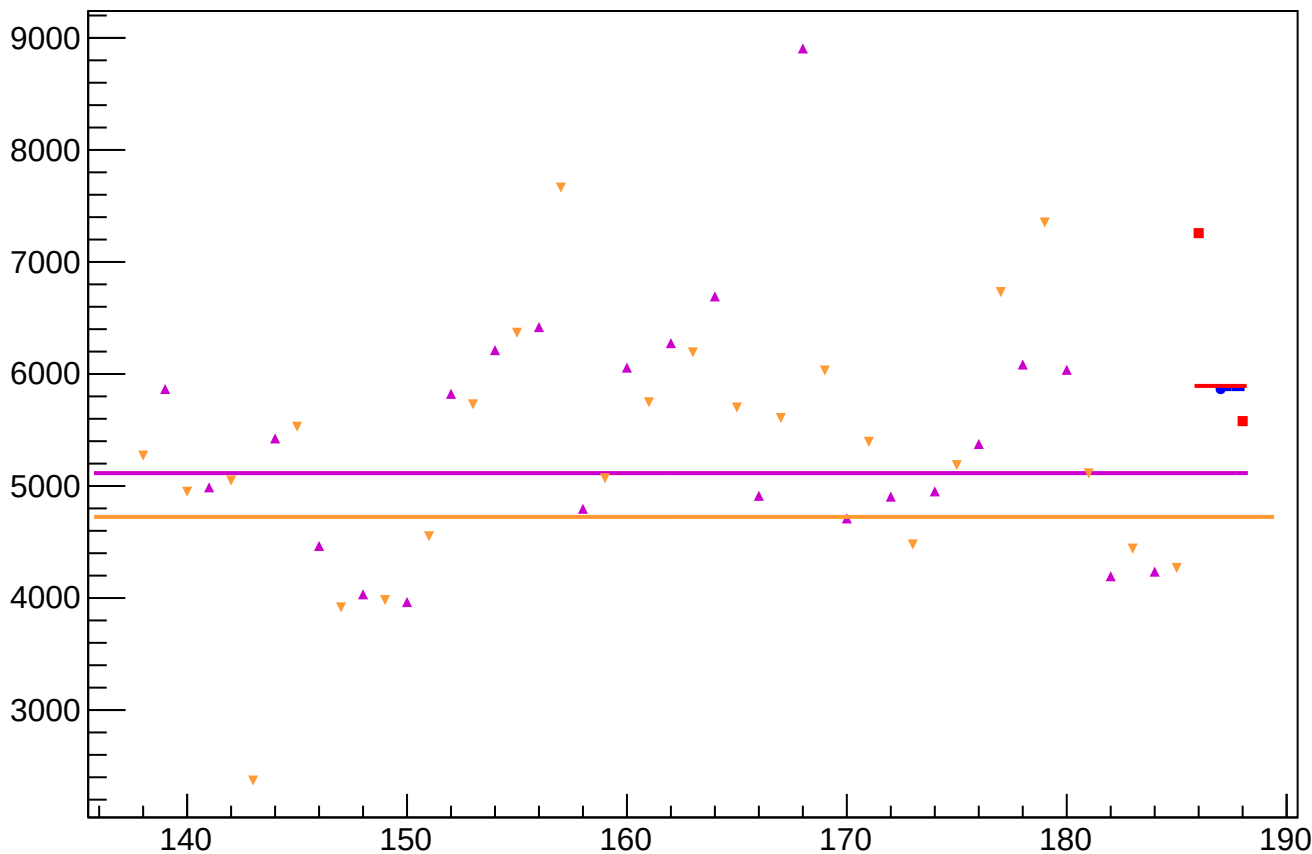
Left In: 151.239+/-1241.800  $\chi^2/\text{NDF}$ : 14.9/22

+ sign -210.845+/-1147.783  $\chi^2/\text{NDF}$ : 30.1/25

All: 290.202+/-832.573  $\chi^2/\text{NDF}$ : 52.9/50

- sign 846.593+/-1209.512  $\chi^2/\text{NDF}$ : 22.4/24

asym\_atl\_avg\_atr\_avg\_avg\_correction\_rms vs Slug



Right In: 5864.843 $\pm$ 10.668  $\chi^2/\text{NDF}$ : 0.0/0

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

Right Out: 5893.463 $\pm$ 3.775  $\chi^2/\text{NDF}$ : 30066.2/1

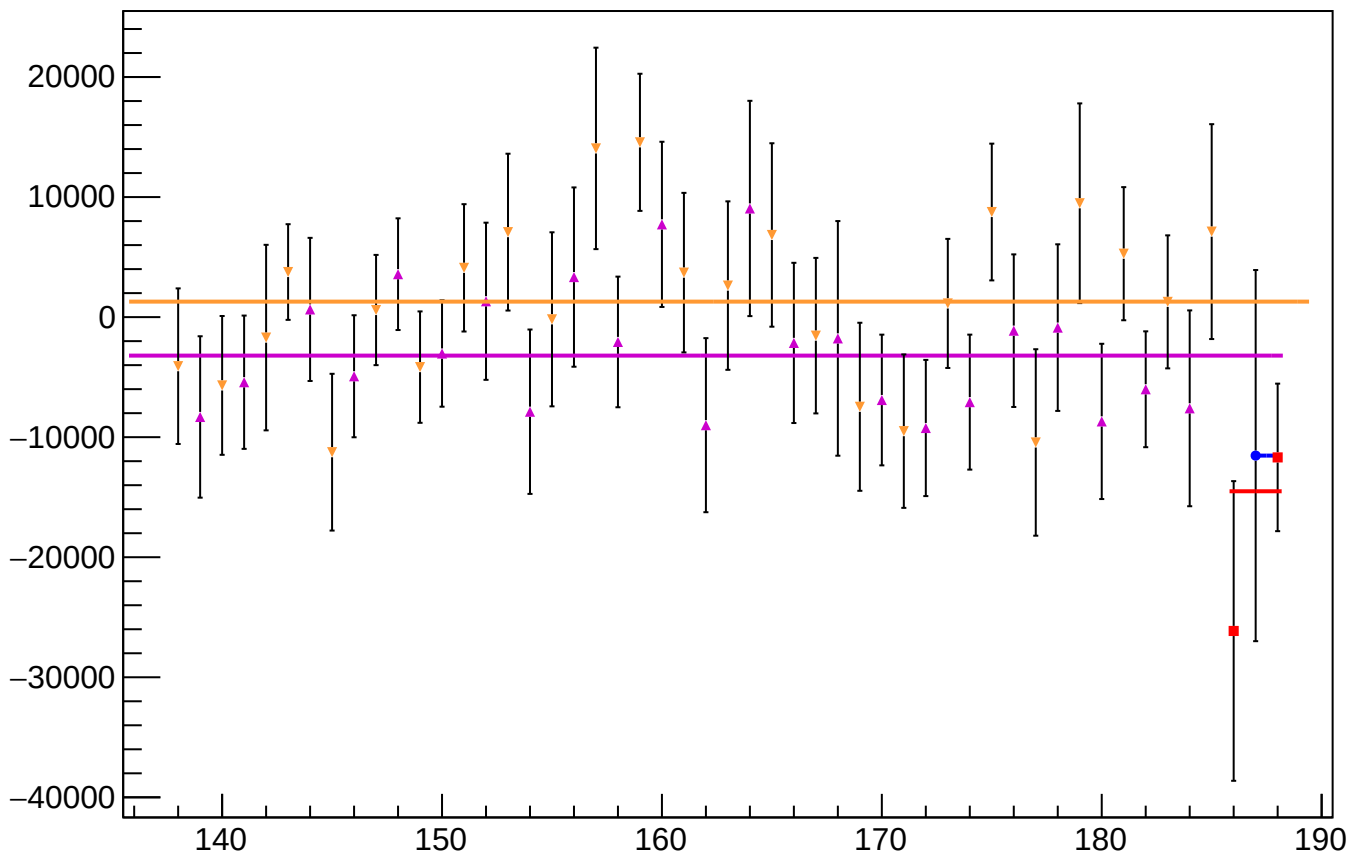
Left In: 5115.139 $\pm$ 0.878  $\chi^2/\text{NDF}$ : 1131347.2/22

+ sign 4730.630 $\pm$ 0.812  $\chi^2/\text{NDF}$ : 2548901.9/25

All: 4931.751 $\pm$ 0.589  $\chi^2/\text{NDF}$ : 3880239.8/50

- sign 5155.087 $\pm$ 0.855  $\chi^2/\text{NDF}$ : 1201738.8/24

# asym\_atl\_avg\_atr\_avg\_avg\_mean vs Slug



Right In: -11535.233+/-15458.115  $\chi^2$ /NDF: 0.0/0

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

Right Out: -14505.726+/-5512.647  $\chi^2$ /NDF: 1.1/1

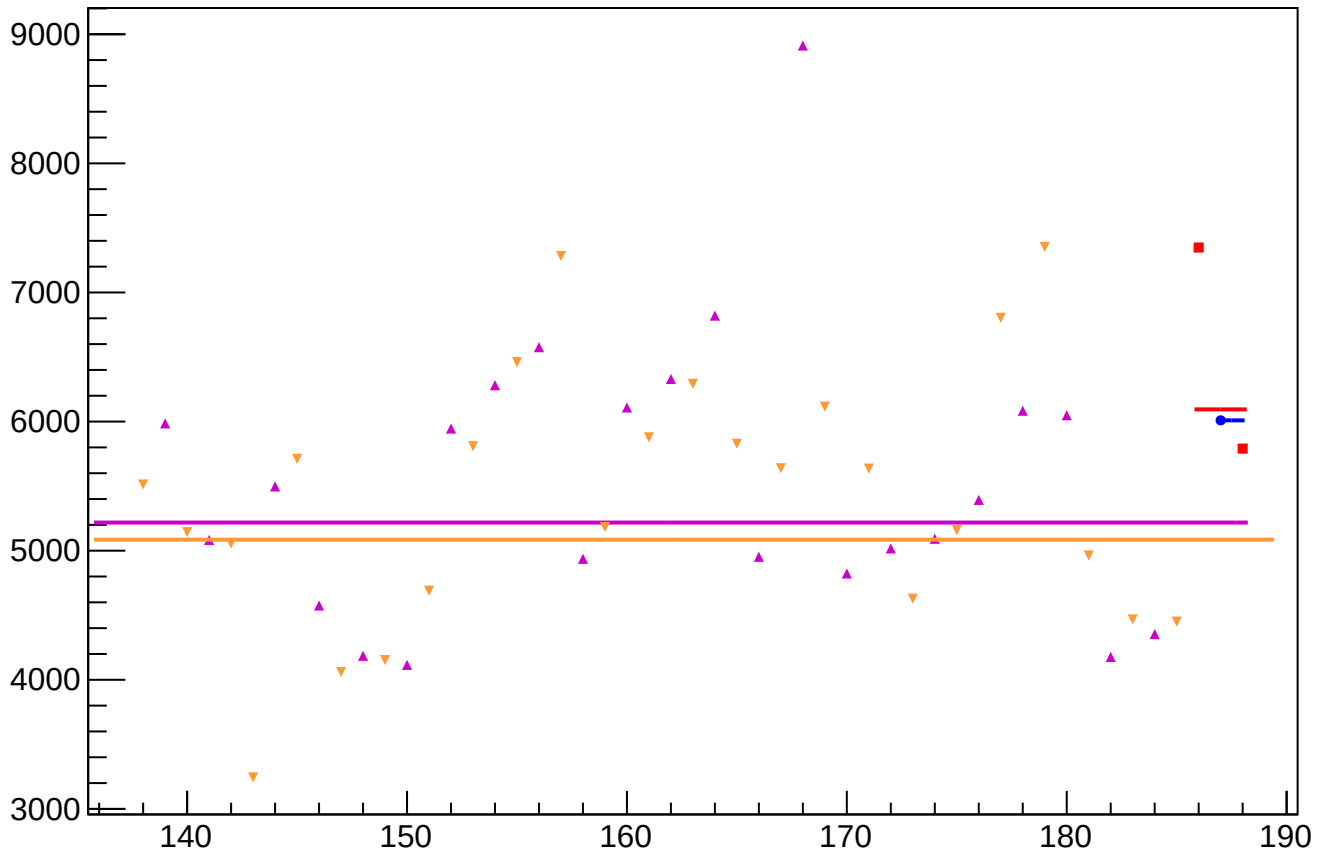
Left In: -3205.363+/-1265.586  $\chi^2$ /NDF: 13.9/22

+ sign 1213.388+/-1212.019  $\chi^2$ /NDF: 28.5/25

All: -1235.103+/-864.520  $\chi^2$ /NDF: 55.7/50

- sign -3771.144+/-1233.497  $\chi^2$ /NDF: 18.9/24

# asym\_atl\_avg\_atr\_avg\_avg\_rms vs Slug



Right In: 6009.383+/-10.931  $\chi^2/\text{NDF}$ : 0.0/0

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

Right Out: 6094.409+/-3.898  $\chi^2/\text{NDF}$ : 25064.8/1

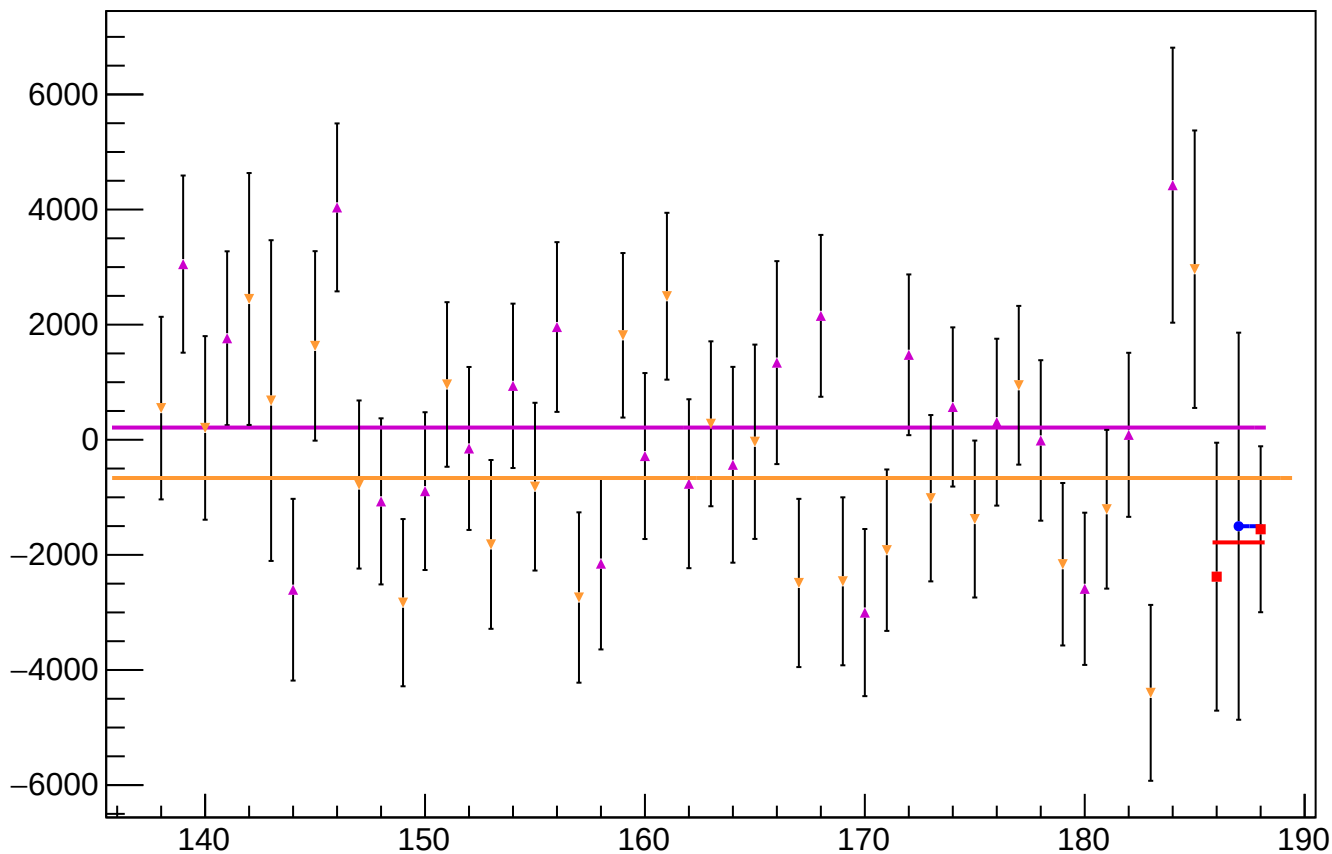
Left In: 5217.971+/-0.895  $\chi^2/\text{NDF}$ :1058996.1/22

+ sign 5090.988+/-0.857  $\chi^2/\text{NDF}$ : 1363801.6/25

All: 5174.919+/-0.611  $\chi^2/\text{NDF}$ : 2515409.9/50

- sign 5261.852+/-0.872  $\chi^2/\text{NDF}$ : 1132083.3/24

# dit\_asym\_atl\_avg\_atr\_avg\_dd\_mean vs Slug



Right In:  $-1501.989 \pm 3362.818$   $\chi^2/\text{NDF}: 0.0/0$

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

Right Out:  $-1783.340 \pm 1225.578$   $\chi^2/\text{NDF}: 0.1/1$

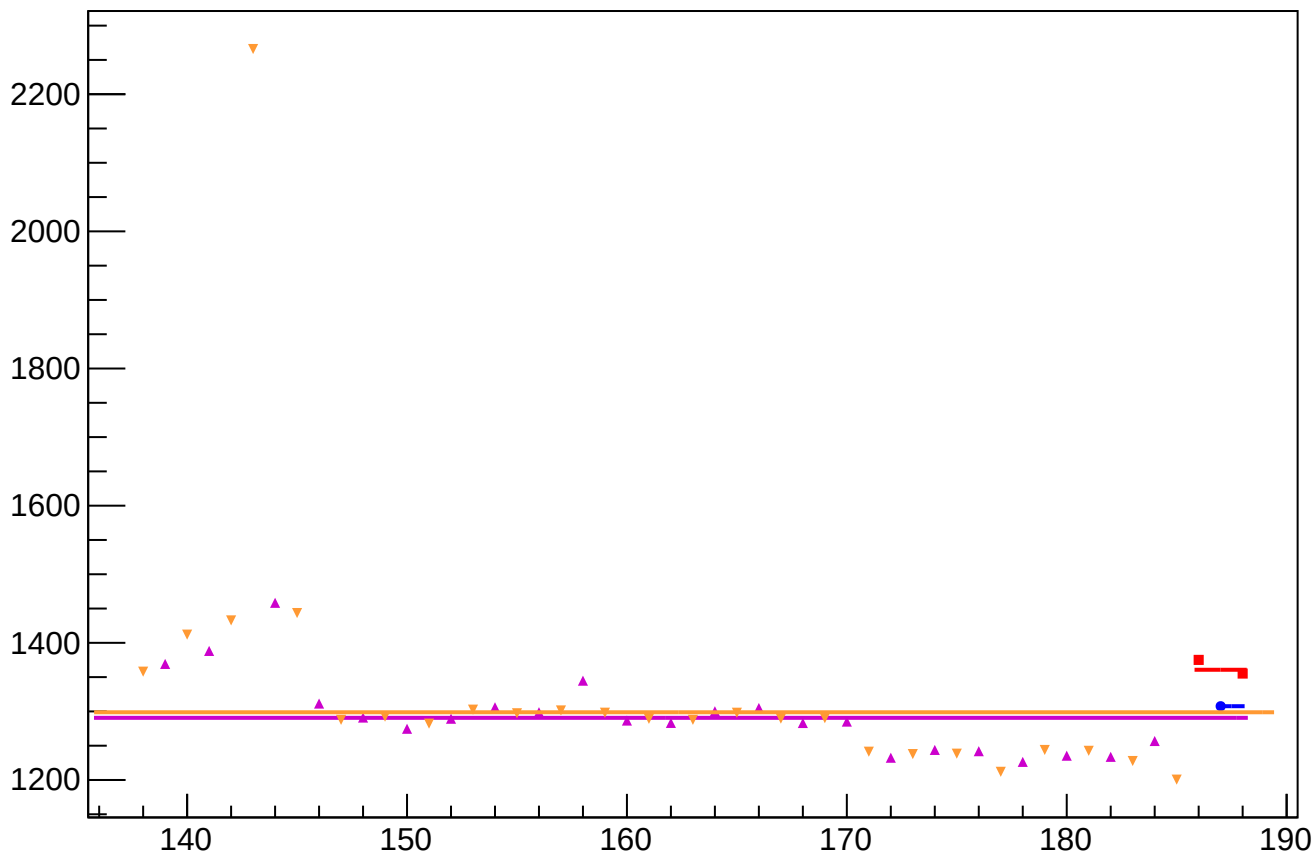
Left In:  $212.071 \pm 308.597$   $\chi^2/\text{NDF}: 36.6/22$

+ sign  $-671.202 \pm 303.871$   $\chi^2/\text{NDF}: 34.7/25$

All:  $-283.203 \pm 213.219$   $\chi^2/\text{NDF}: 77.1/50$

- sign  $93.101 \pm 299.256$   $\chi^2/\text{NDF}: 39.2/24$

dit\_asym\_atl\_avg\_atr\_avg\_dd\_rms vs Slug



Right In: 1307.598 $\pm$ 2.378  $\chi^2$ /NDF: 0.0/0

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

Right Out: 1360.720 $\pm$ 0.867  $\chi^2$ /NDF: 105.8/1

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

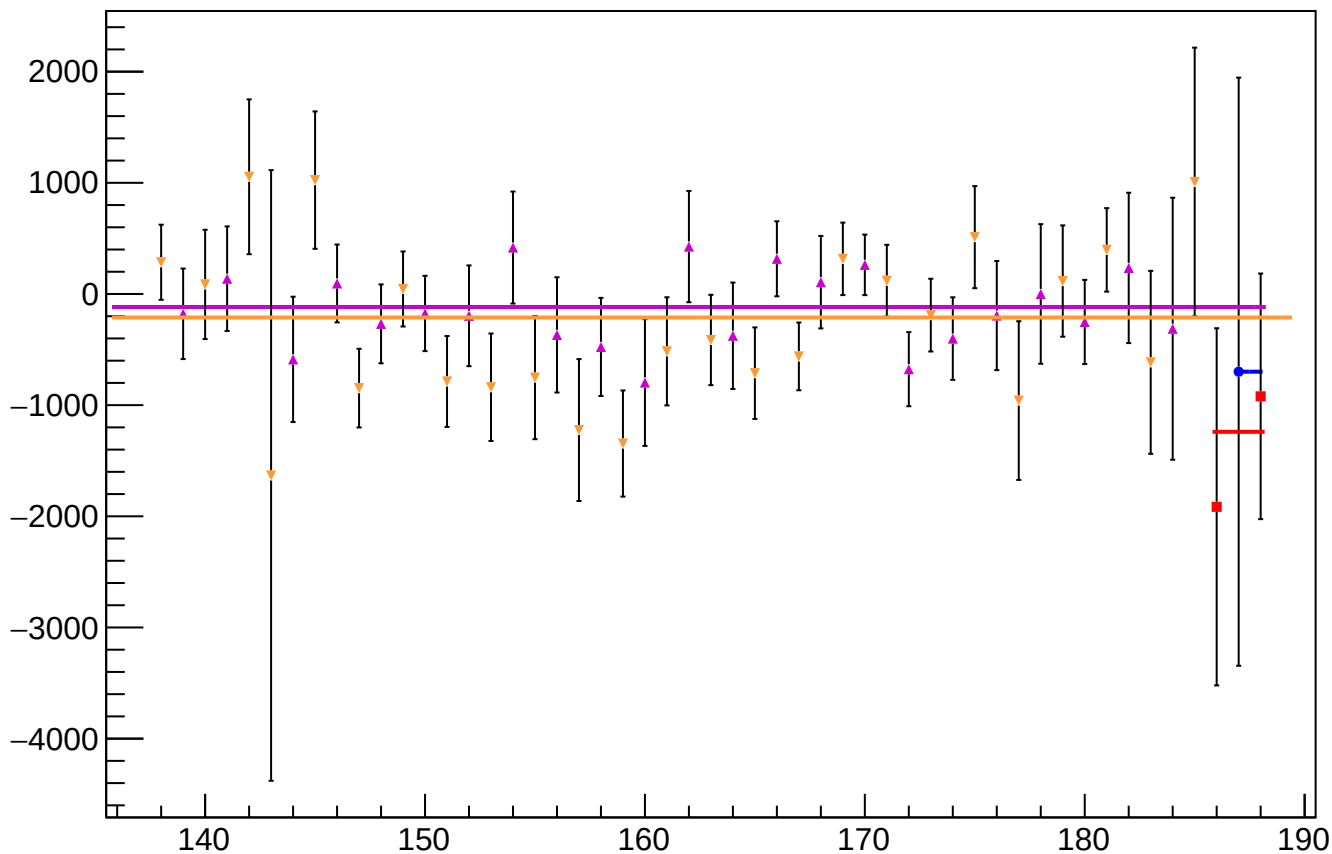
+ sign 1298.816 $\pm$ 0.215  $\chi^2$ /NDF: 310358.5/25

All: 1296.789 $\pm$ 0.151  $\chi^2$ /NDF: 376216.1/50

- sign 1294.822 $\pm$ 0.212  $\chi^2$ /NDF: 65682.3/24



asym\_atl\_avg\_atr\_avg\_dd\_correction\_mean vs Slug



Right In:  $-699.148 \pm 2645.413$   $\chi^2/\text{NDF}: 0.0/0$

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

Right Out:  $-1239.858 \pm 910.212$   $\chi^2/\text{NDF}: 0.3/1$

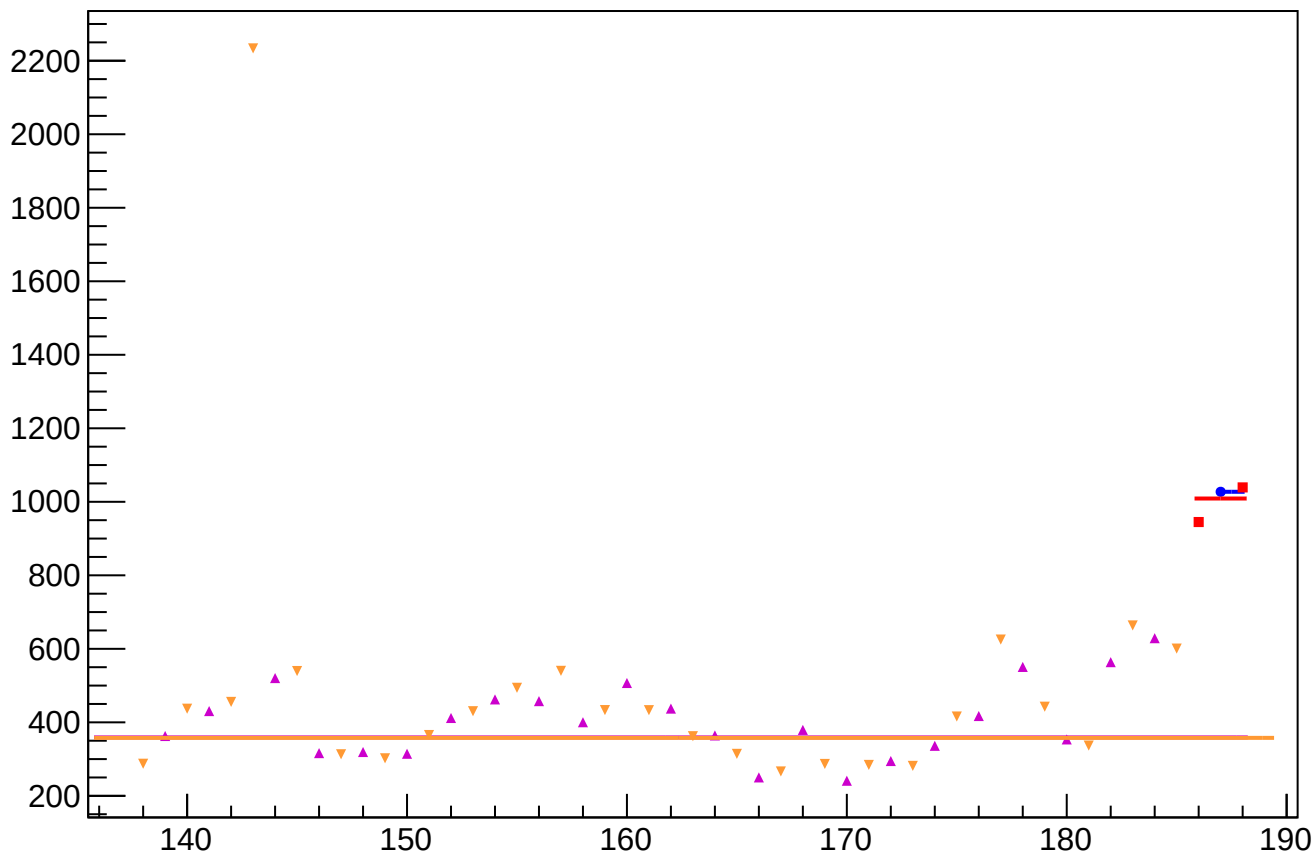
Left In:  $-117.113 \pm 88.214$   $\chi^2/\text{NDF}: 14.3/22$

+ sign  $-212.180 \pm 87.622$   $\chi^2/\text{NDF}: 41.7/25$

All:  $-169.958 \pm 62.022$   $\chi^2/\text{NDF}: 58.3/50$

- sign  $-127.561 \pm 87.803$   $\chi^2/\text{NDF}: 16.1/24$

# asym\_atl\_avg\_atr\_avg\_dd\_correction\_rms vs Slug



Right In: 1027.263+/-1.871  $\chi^2/\text{NDF}$ : 0.0/0

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

Right Out: 1008.942+/-0.644  $\chi^2/\text{NDF}$ : 4668.3/1

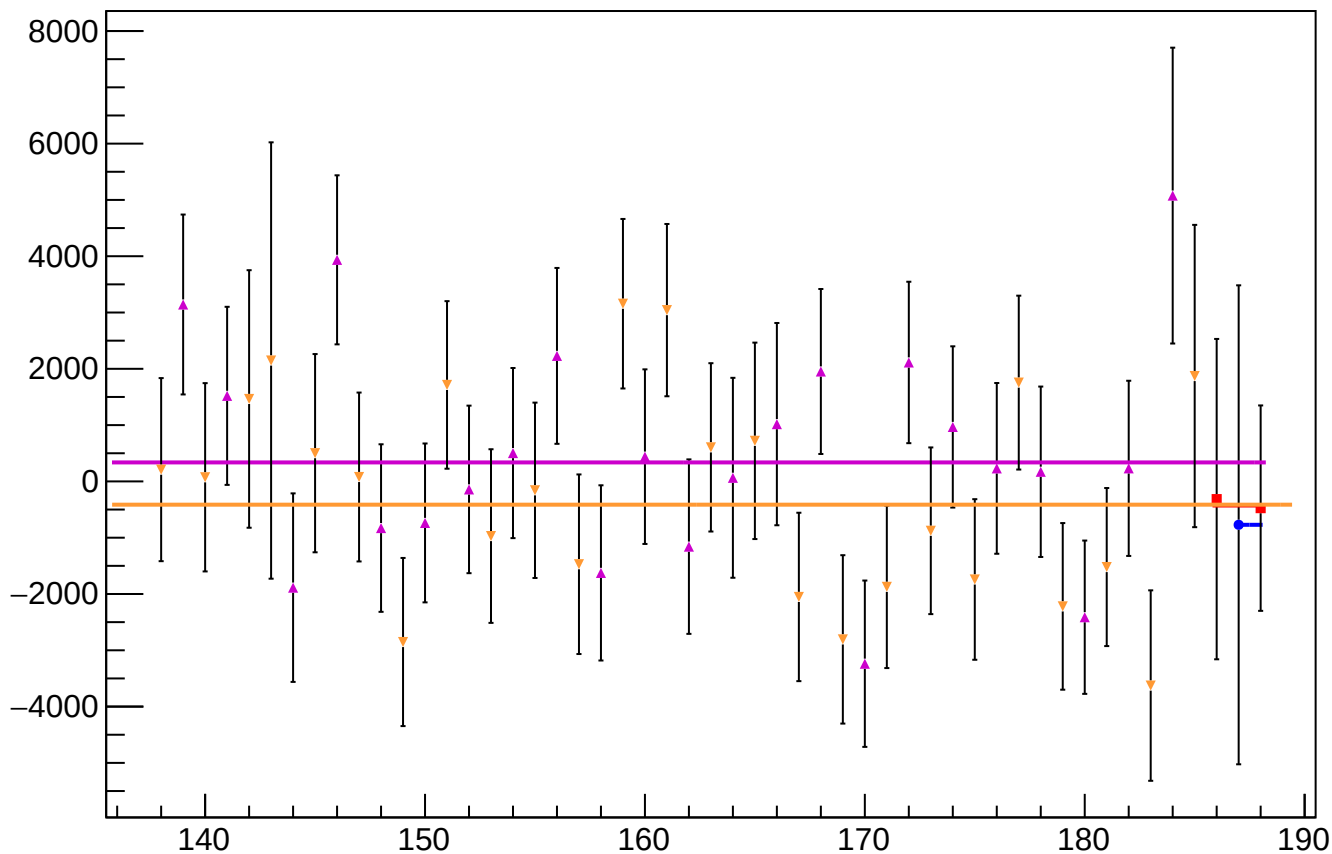
Left In: 359.000+/-0.062  $\chi^2/\text{NDF}$ : 1858849.9/22

+ sign 358.484+/-0.062  $\chi^2/\text{NDF}$ : 3170018.8/25

All: 361.759+/-0.044  $\chi^2/\text{NDF}$ : 6049399.2/50

- sign 365.048+/-0.062  $\chi^2/\text{NDF}$ : 2873779.4/24

asym\_atl\_avg\_atr\_avg\_dd\_mean vs Slug



Right In: -771.055+/-4254.110  $\chi^2/\text{NDF}$ : 0.0/0

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

Right Out: -428.311+/-1535.833  $\chi^2/\text{NDF}$ : 0.0/1

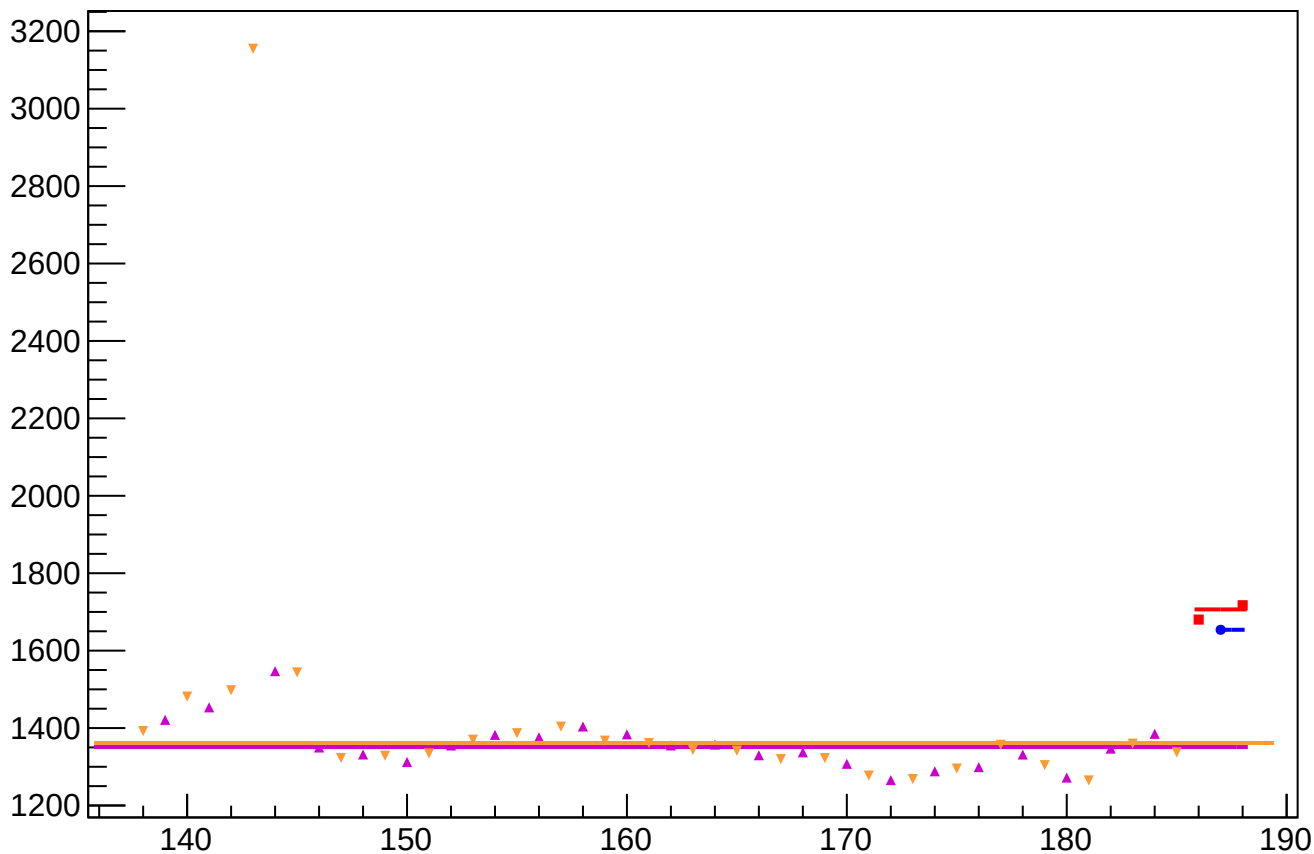
Left In: 337.193+/-323.023  $\chi^2/\text{NDF}$ : 32.8/22

+ sign -415.428+/-319.770  $\chi^2/\text{NDF}$ : 32.8/25

All: -51.184+/-224.805  $\chi^2/\text{NDF}$ : 68.4/50

- sign 304.764+/-316.107  $\chi^2/\text{NDF}$ : 33.0/24

# asym\_atl\_avg\_atr\_avg\_dd\_rms vs Slug



Right In: 1653.880+/-3.008  $\chi^2/\text{NDF}$ : 0.0/0

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

Right Out: 1706.507+/-1.086  $\chi^2/\text{NDF}$ : 240.8/1

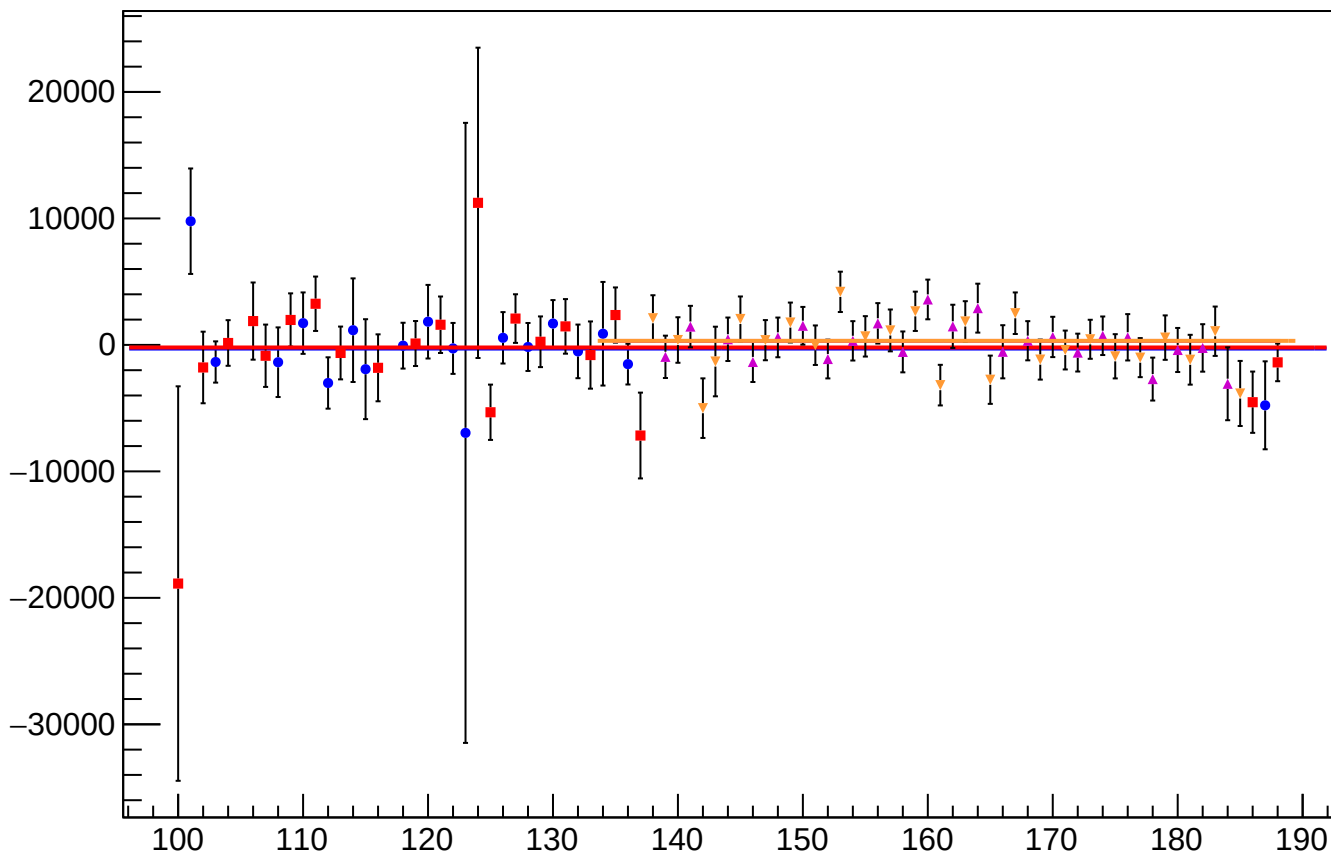
Left In: 1351.012+/-0.228  $\chi^2/\text{NDF}$ : 68978.1/22

+ sign 1363.162+/-0.226  $\chi^2/\text{NDF}$ : 517263.1/25

All: 1364.634+/-0.159  $\chi^2/\text{NDF}$ : 689180.2/50

- sign 1366.072+/-0.224  $\chi^2/\text{NDF}$ : 171833.4/24

# dit\_asym\_atl\_dd\_atr\_dd\_avg\_mean vs Slug



Right In:  $-288.984 \pm 547.736$   $\chi^2/\text{NDF}$ : 13.5/17

Left Out:  $320.058 \pm 344.642$   $\chi^2/\text{NDF}$ : 32.4/24

Right Out:  $-204.743 \pm 496.955$   $\chi^2/\text{NDF}$ : 24.9/20

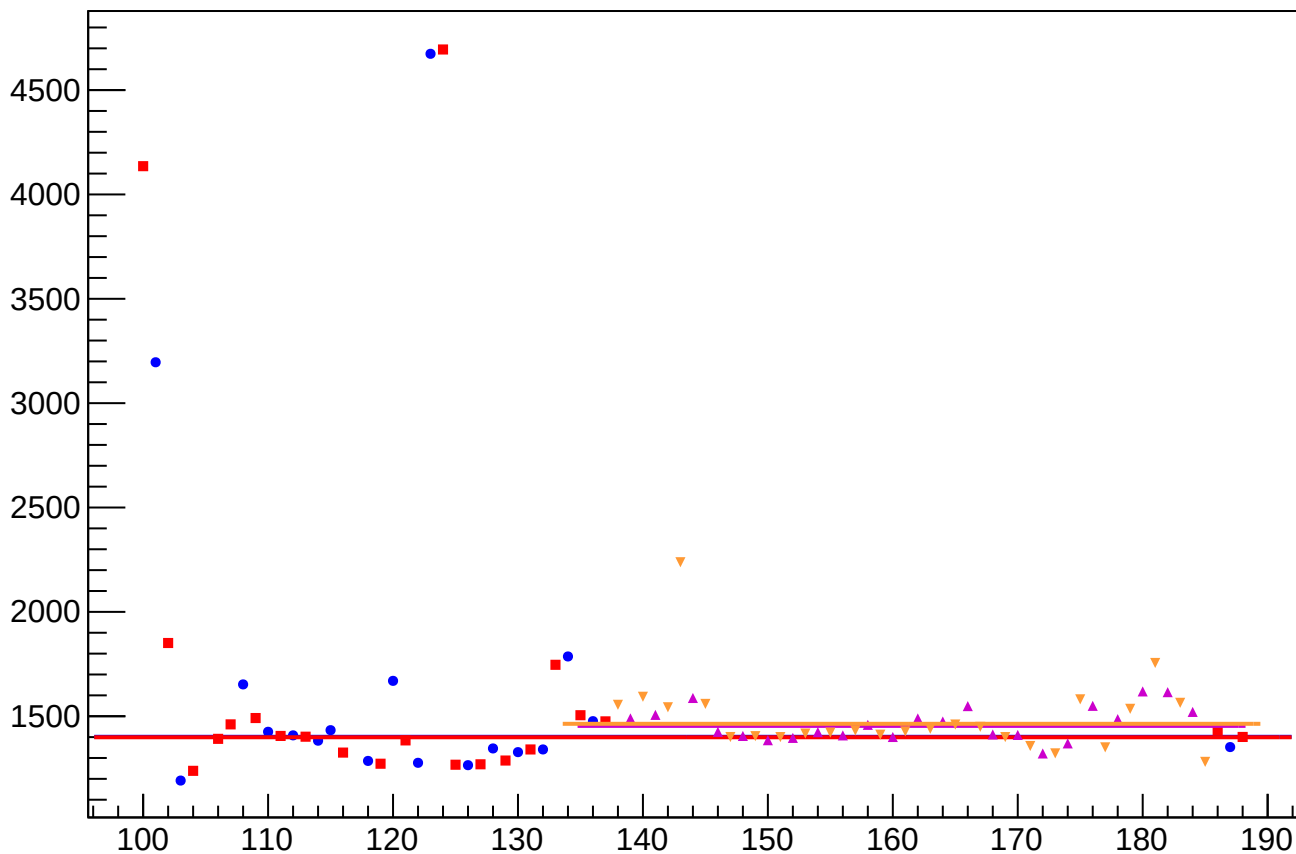
Left In:  $310.833 \pm 348.292$   $\chi^2/\text{NDF}$ : 16.8/22

+ sign  $147.322 \pm 291.702$   $\chi^2/\text{NDF}$ : 46.8/42

All:  $144.092 \pm 203.933$   $\chi^2/\text{NDF}$ : 89.3/86

- sign  $141.004 \pm 285.218$   $\chi^2/\text{NDF}$ : 42.5/43

dit\_asym\_atl\_dd\_atr\_dd\_avg\_rms vs Slug



Right In: 1401.458+/-0.387  $\chi^2/\text{NDF}$ : 526736.1/17

Left Out: 1463.714+/-0.244  $\chi^2/\text{NDF}$ : 310491.4/24

Right Out: 1399.232+/-0.351  $\chi^2/\text{NDF}$ : 353739.7/20

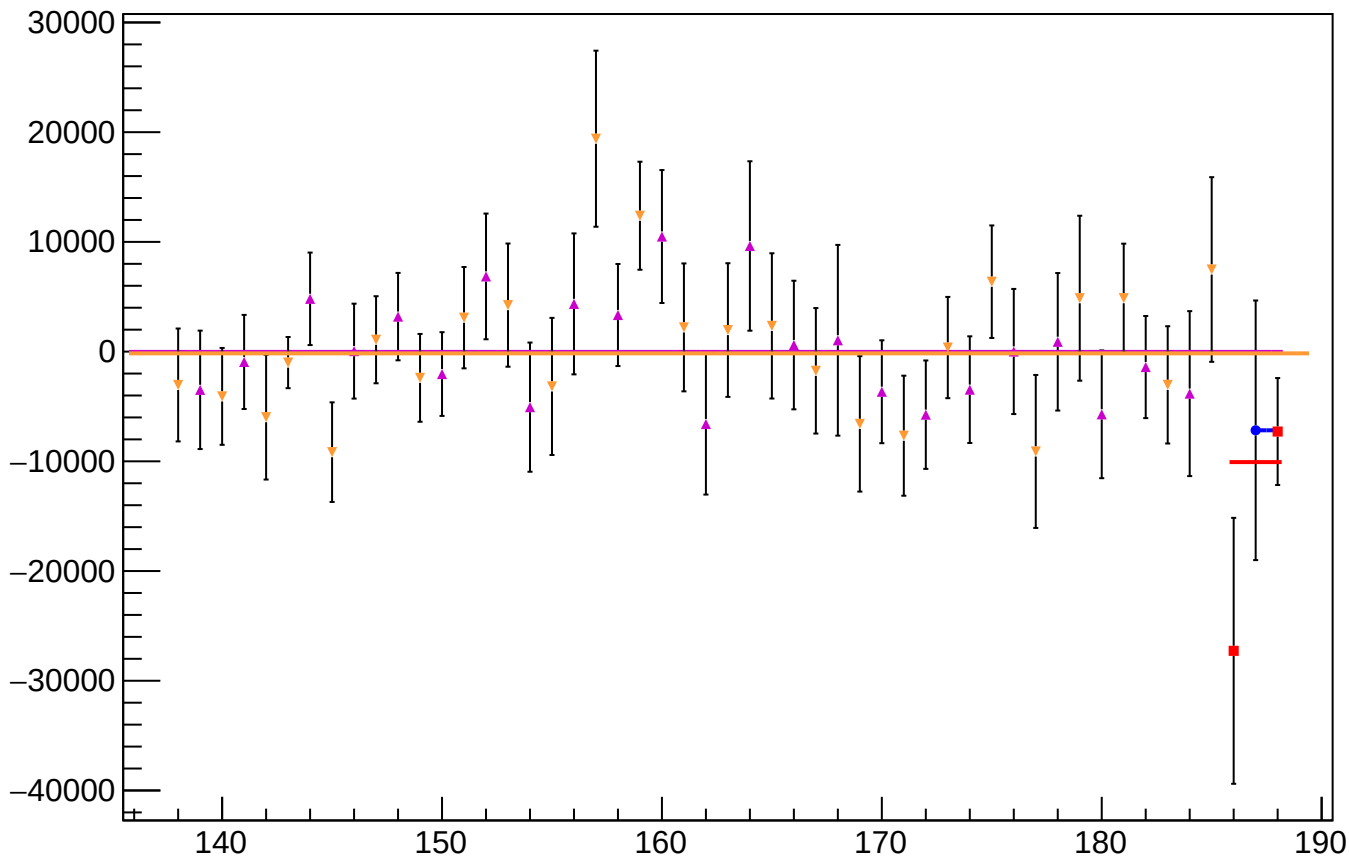
Left In: 1453.763+/-0.246  $\chi^2/\text{NDF}$ : 99224.2/22

+ sign 1446.057+/-0.206  $\chi^2/\text{NDF}$ : 855736.5/42

All: 1440.807+/-0.144  $\chi^2/\text{NDF}$ : 1326126.8/86

- sign 1435.789+/-0.202  $\chi^2/\text{NDF}$ : 469123.2/43

asym\_atl\_dd\_atr\_dd\_avg\_correction\_mean vs Slug



Right In: -7173.073+/-11830.844  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -160.118+/-989.347  $\chi^2/\text{NDF}$ : 29.7/24

Right Out: -10069.583+/-4522.830  $\chi^2/\text{NDF}$ : 2.3/1

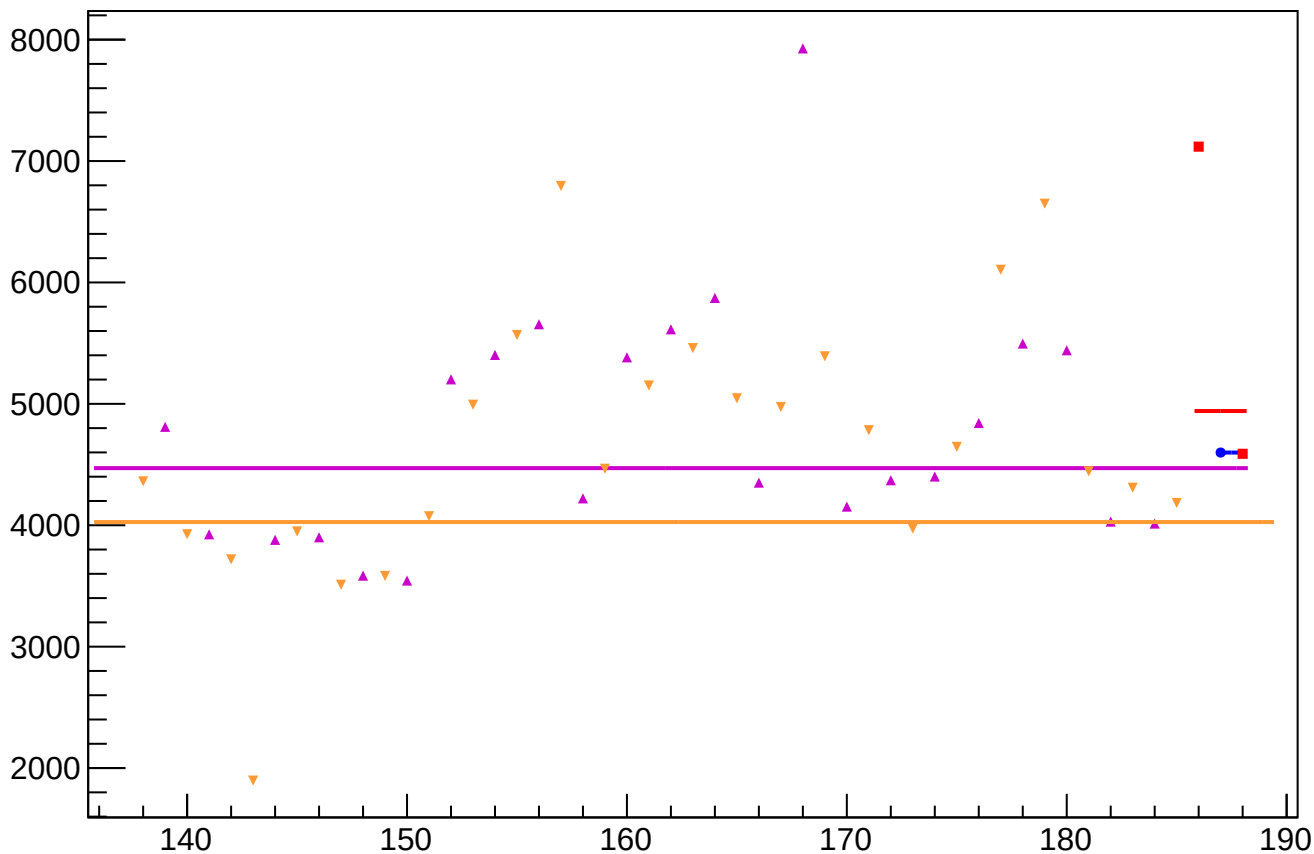
Left In: -26.926+/-1085.415  $\chi^2/\text{NDF}$ : 15.3/22

+ sign -208.820+/-985.906  $\chi^2/\text{NDF}$ : 30.1/25

All: -378.899+/-720.472  $\chi^2/\text{NDF}$ : 52.4/50

- sign -573.817+/-1055.447  $\chi^2/\text{NDF}$ : 22.3/24

asym\_atl\_dd\_atr\_dd\_avg\_correction\_rms vs Slug



Right In: 4598.824+/-8.366  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 4026.447+/-0.700  $\chi^2/\text{NDF}$ : 3071265.0/24

Right Out: 4940.974+/-3.198  $\chi^2/\text{NDF}$ : 75022.0/1

Left In: 4470.490+/-0.768  $\chi^2/\text{NDF}$ : 1132495.2/22

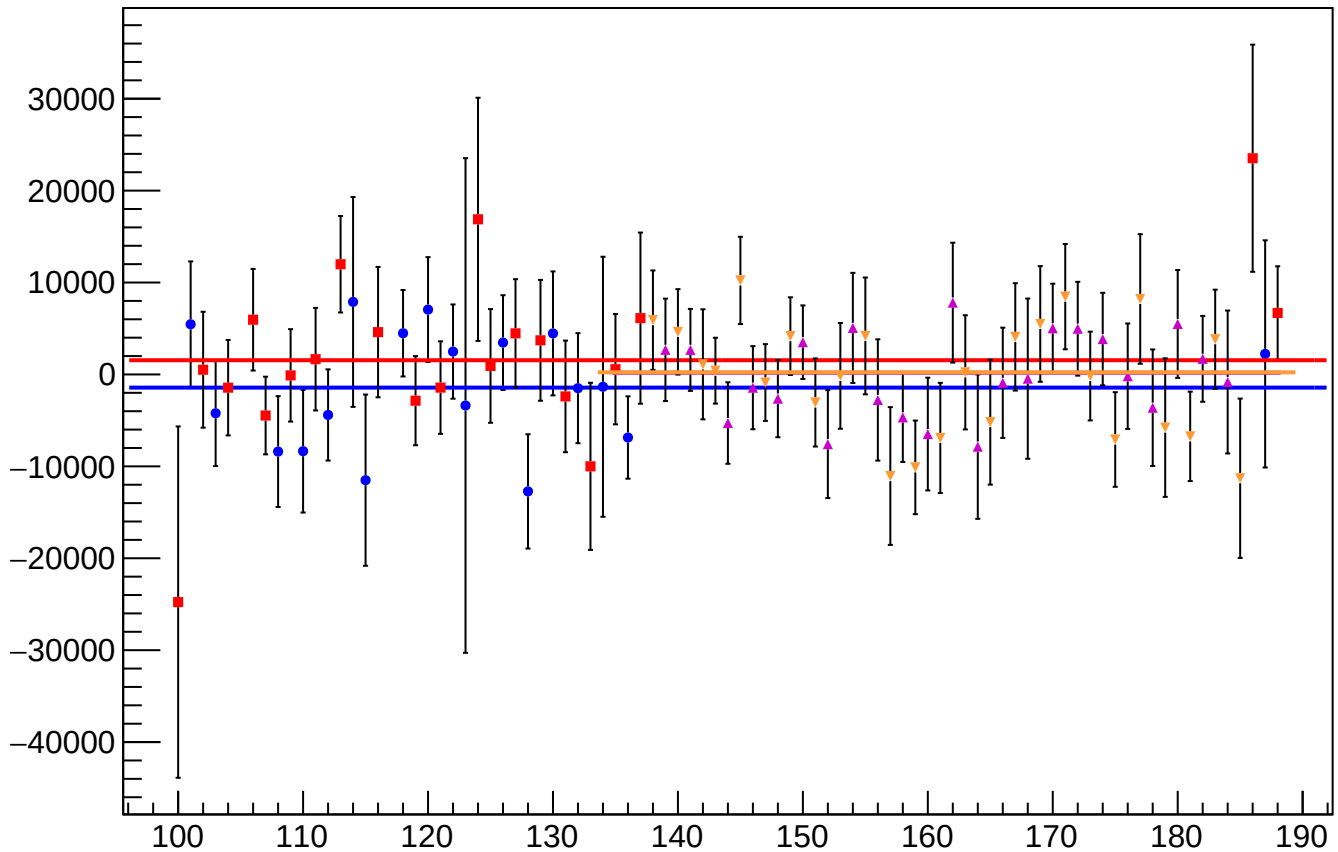
+ sign 4030.422+/-0.697  $\chi^2/\text{NDF}$ : 3075913.8/25

All: 4247.421+/-0.509  $\chi^2/\text{NDF}$ : 4511822.6/50

- sign 4496.111+/-0.746  $\chi^2/\text{NDF}$ : 1227980.7/24



# asym\_atl\_dd\_atr\_dd\_avg\_mean vs Slug



Right In:  $-1433.076 \pm 1488.208$   $\chi^2/\text{NDF}: 16.8/17$

Left Out:  $229.897 \pm 1073.528$   $\chi^2/\text{NDF}: 28.1/24$

Right Out:  $1547.277 \pm 1323.057$   $\chi^2/\text{NDF}: 18.5/20$

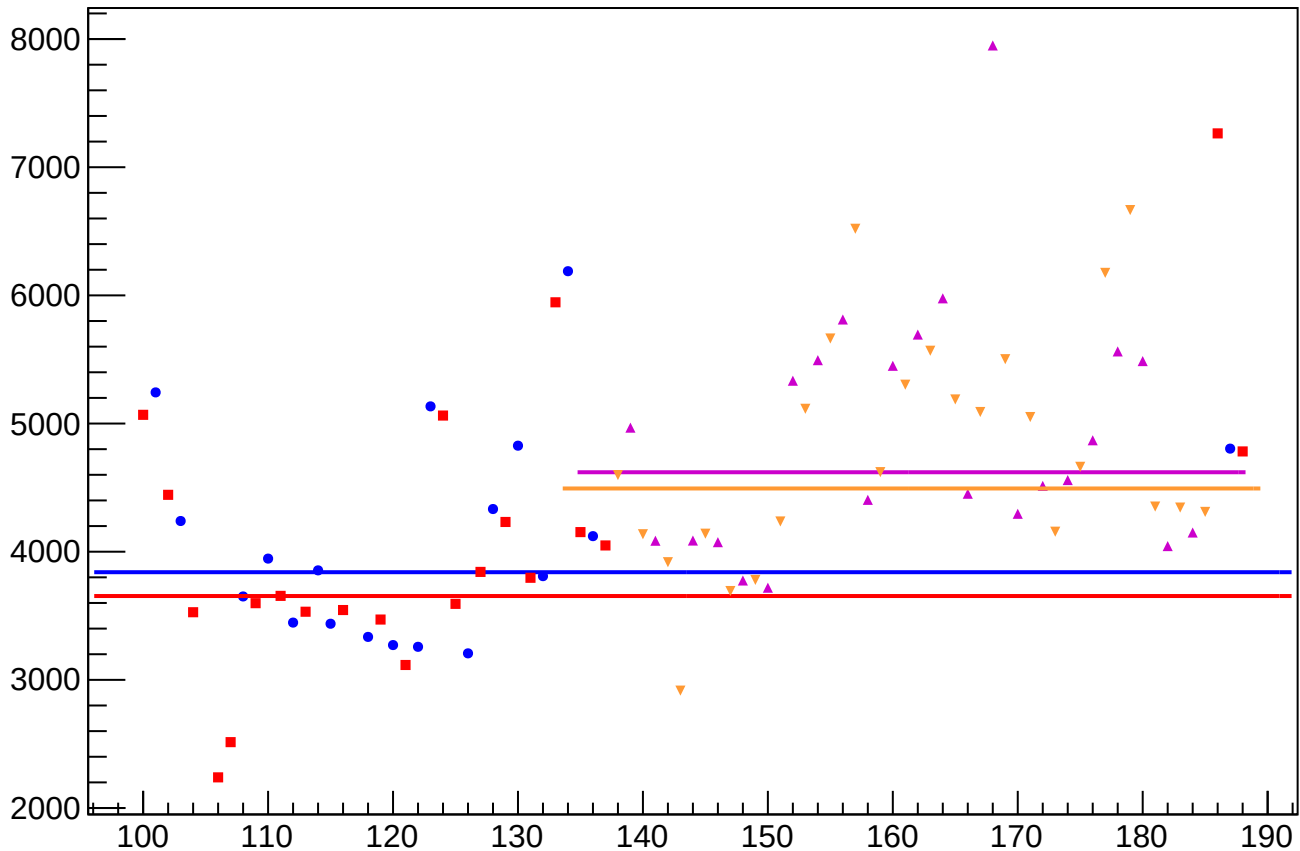
Left In:  $185.280 \pm 1119.296$   $\chi^2/\text{NDF}: 14.3/22$

+ sign  $-339.271 \pm 870.645$   $\chi^2/\text{NDF}: 45.7/42$

All:  $217.293 \pm 609.859$   $\chi^2/\text{NDF}: 79.9/86$

- sign  $753.435 \pm 854.523$   $\chi^2/\text{NDF}: 33.4/43$

# asym\_atl\_dd\_atr\_dd\_avg\_rms vs Slug



Right In:  $3840.030 \pm 1.052$   $\chi^2/\text{NDF}$ : 346757.4/17

Left Out:  $4493.314 \pm 0.759$   $\chi^2/\text{NDF}$ : 1309134.5/24

+ sign  $4269.714 \pm 0.616$   $\chi^2/\text{NDF}$ : 1909390.9/42

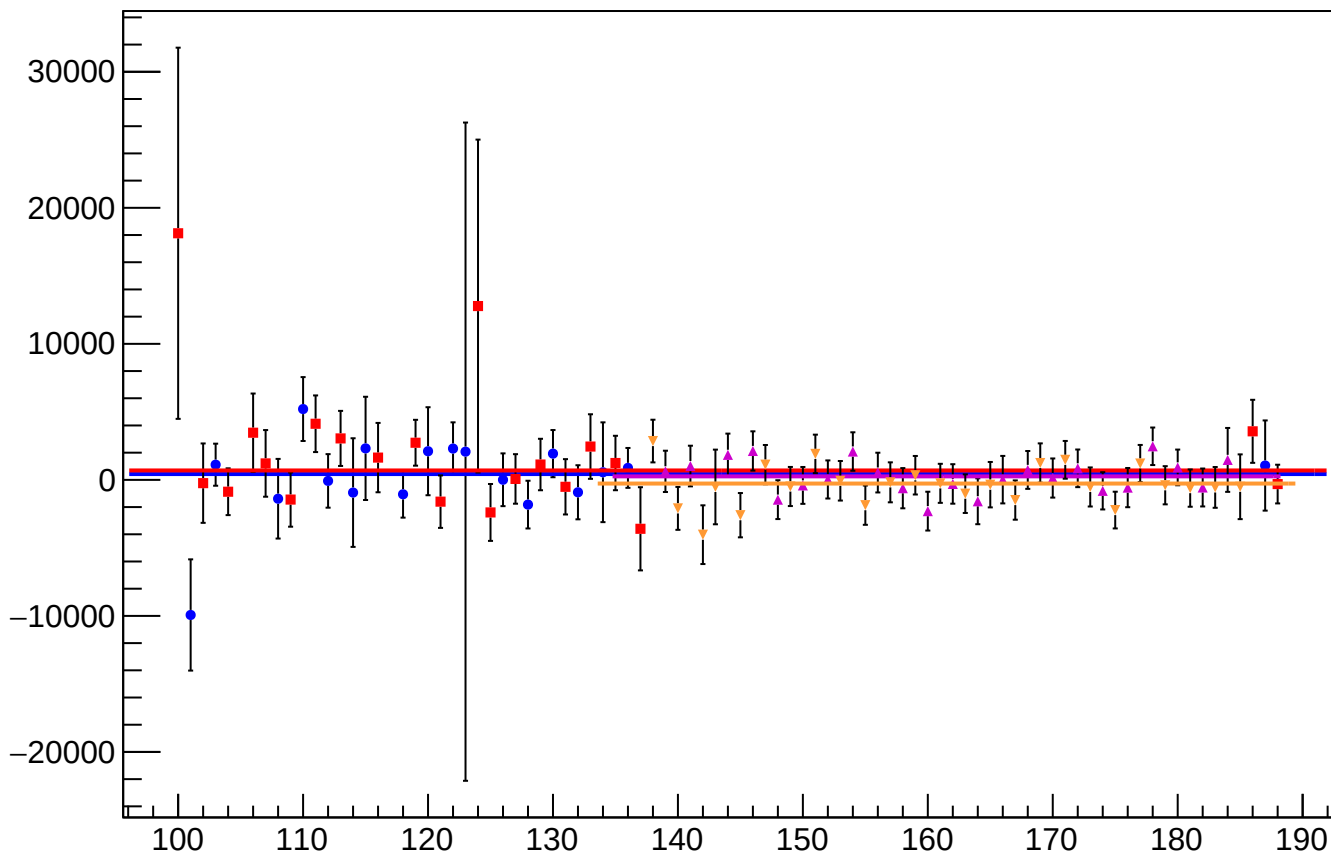
Right Out:  $3654.141 \pm 0.928$   $\chi^2/\text{NDF}$ : 841835.3/20

All:  $4240.783 \pm 0.430$   $\chi^2/\text{NDF}$ : 4384790.3/86

- sign  $4213.109 \pm 0.602$   $\chi^2/\text{NDF}$ : 2471078.5/43

Left In:  $4619.952 \pm 0.791$   $\chi^2/\text{NDF}$ : 1001966.3/22

# dit\_asym\_atl\_dd\_atr\_dd\_dd\_mean vs Slug



Right In: 427.329 $\pm$ 521.409  $\chi^2$ /NDF: 16.6/17

Left Out: -270.523 $\pm$ 302.030  $\chi^2$ /NDF:22.2/24

Right Out: 692.880 $\pm$ 470.242  $\chi^2$ /NDF: 20.1/20

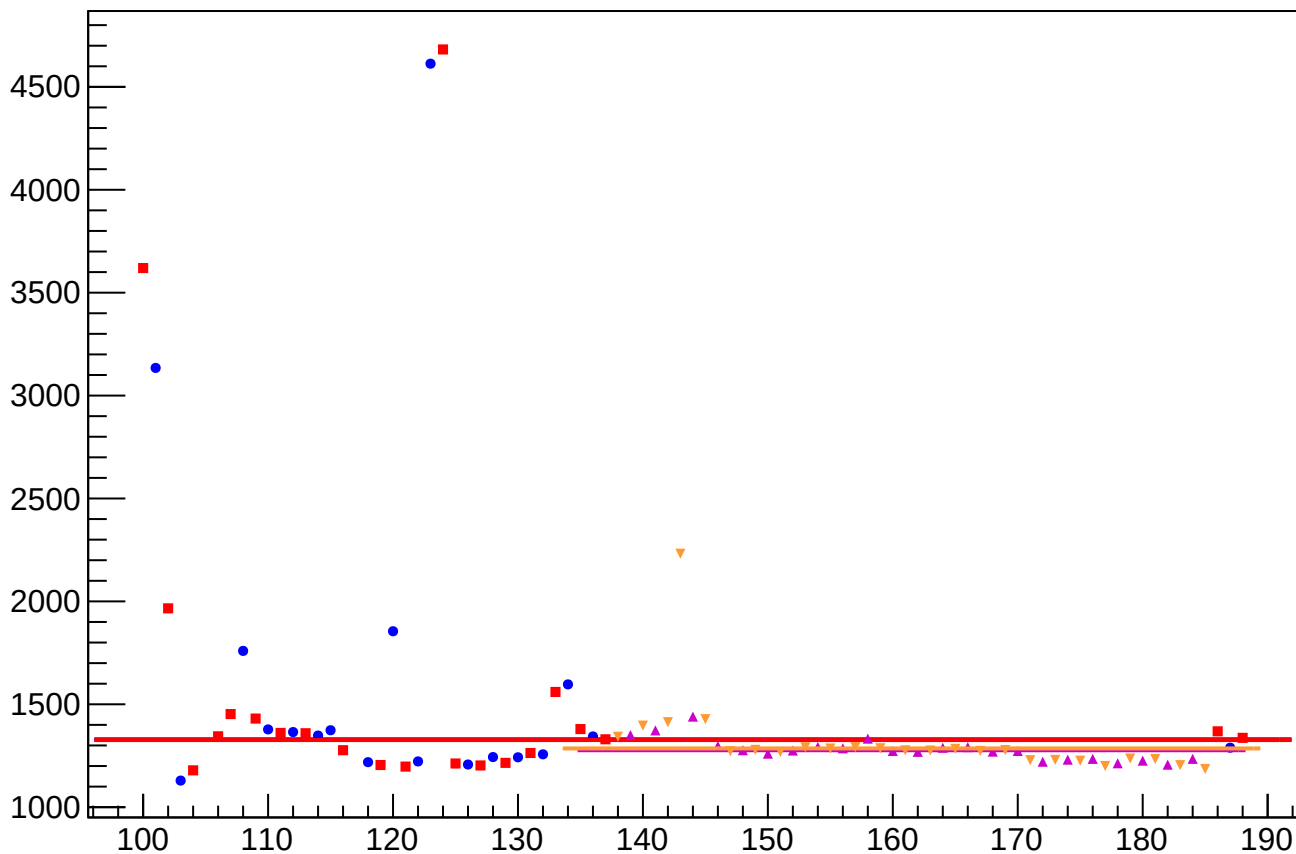
Left In: 258.285 $\pm$ 305.289  $\chi^2$ /NDF:16.0/22

+ sign -95.195 $\pm$ 261.350  $\chi^2$ /NDF: 40.1/42

All: 150.907 $\pm$ 182.903  $\chi^2$ /NDF: 78.5/86

- sign 387.146 $\pm$ 256.059  $\chi^2$ /NDF: 36.7/43

dit\_asym\_atl\_dd\_atr\_dd\_dd\_rms vs Slug



Right In: 1329.855+/-0.369  $\chi^2/\text{NDF}$ : 603784.9/17

Left Out: 1285.574+/-0.214  $\chi^2/\text{NDF}$ : 306057.6/24

Right Out: 1326.157+/-0.333  $\chi^2/\text{NDF}$ : 395294.5/20

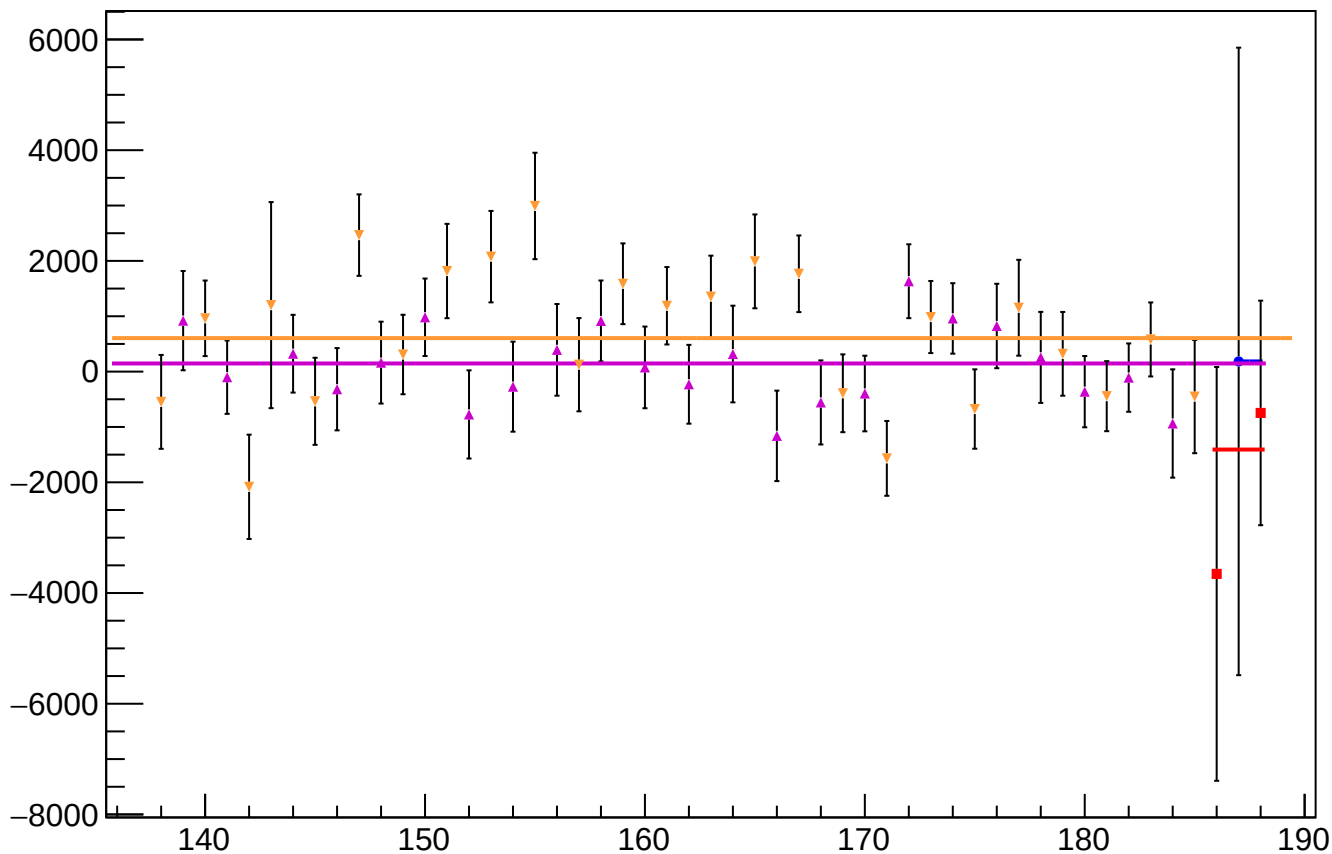
Left In: 1276.755+/-0.216  $\chi^2/\text{NDF}$ : 59434.2/22

+ sign 1296.699+/-0.185  $\chi^2/\text{NDF}$ : 920642.9/42

All: 1293.997+/-0.129  $\chi^2/\text{NDF}$ : 1391319.6/80

- sign 1291.403+/-0.181  $\chi^2/\text{NDF}$ : 470257.7/43

asym\_atl\_dd\_atr\_dd\_dd\_correction\_mean vs Slug



Right In: 183.825 $\pm$ 5668.087  $\chi^2$ /NDF: 0.0/0

Left Out: 605.167 $\pm$ 153.922  $\chi^2$ /NDF:60.0/24

Right Out: -1408.116 $\pm$ 1782.540  $\chi^2$ /NDF: 0.5/1

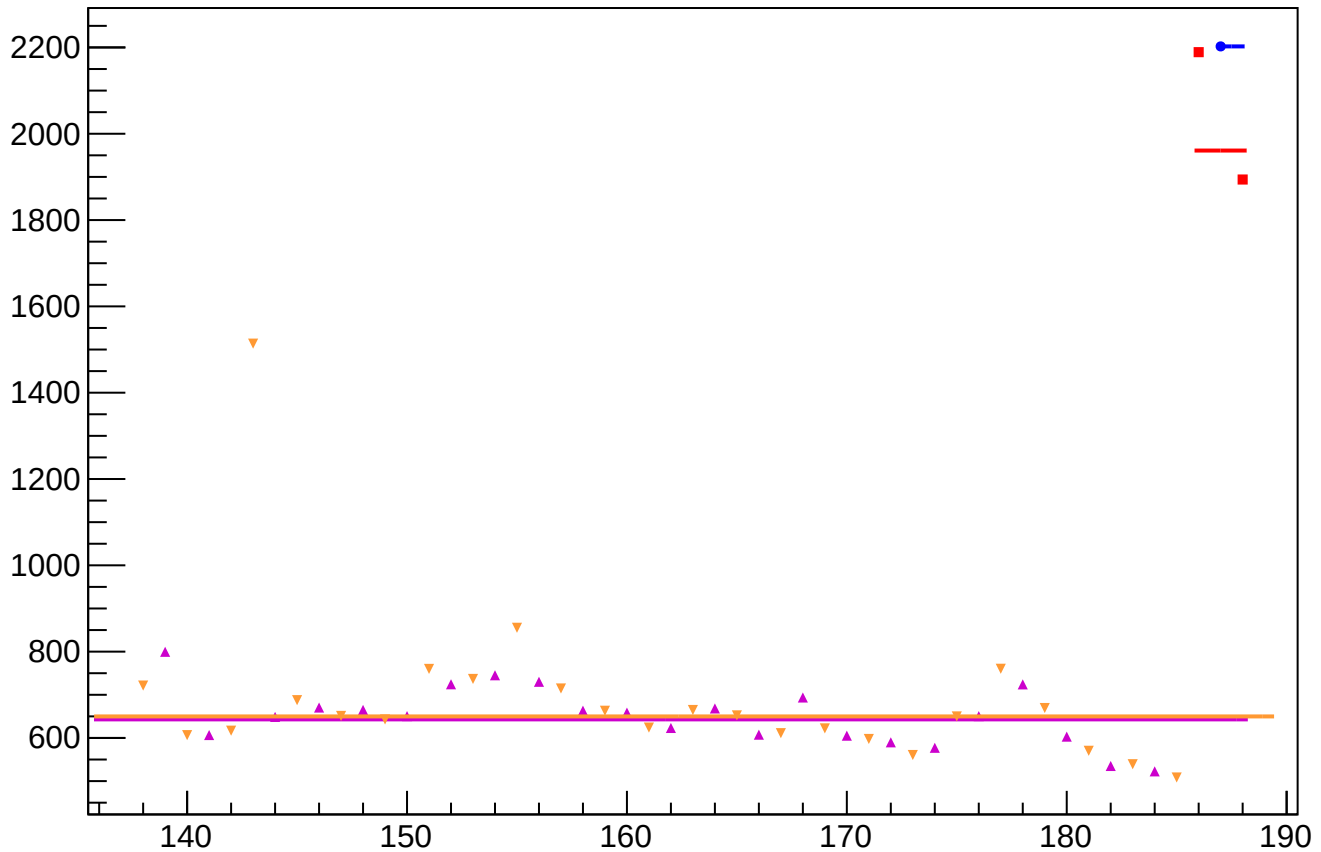
Left In: 147.044 $\pm$ 154.051  $\chi^2$ /NDF:19.4/22

+ sign 604.856 $\pm$ 153.865  $\chi^2$ /NDF: 60.0/25

All: 369.596 $\pm$ 108.662  $\chi^2$ /NDF: 85.2/50

- sign 135.515 $\pm$ 153.479  $\chi^2$ /NDF: 20.6/24

# asym\_atl\_dd\_atr\_dd\_dd\_correction\_rms vs Slug



Right In: 2202.404+/-4.008  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 649.866+/-0.109  $\chi^2/\text{NDF}$ : 840823.5/24

Right Out: 1961.075+/-1.260  $\chi^2/\text{NDF}$ : 9631.8/1

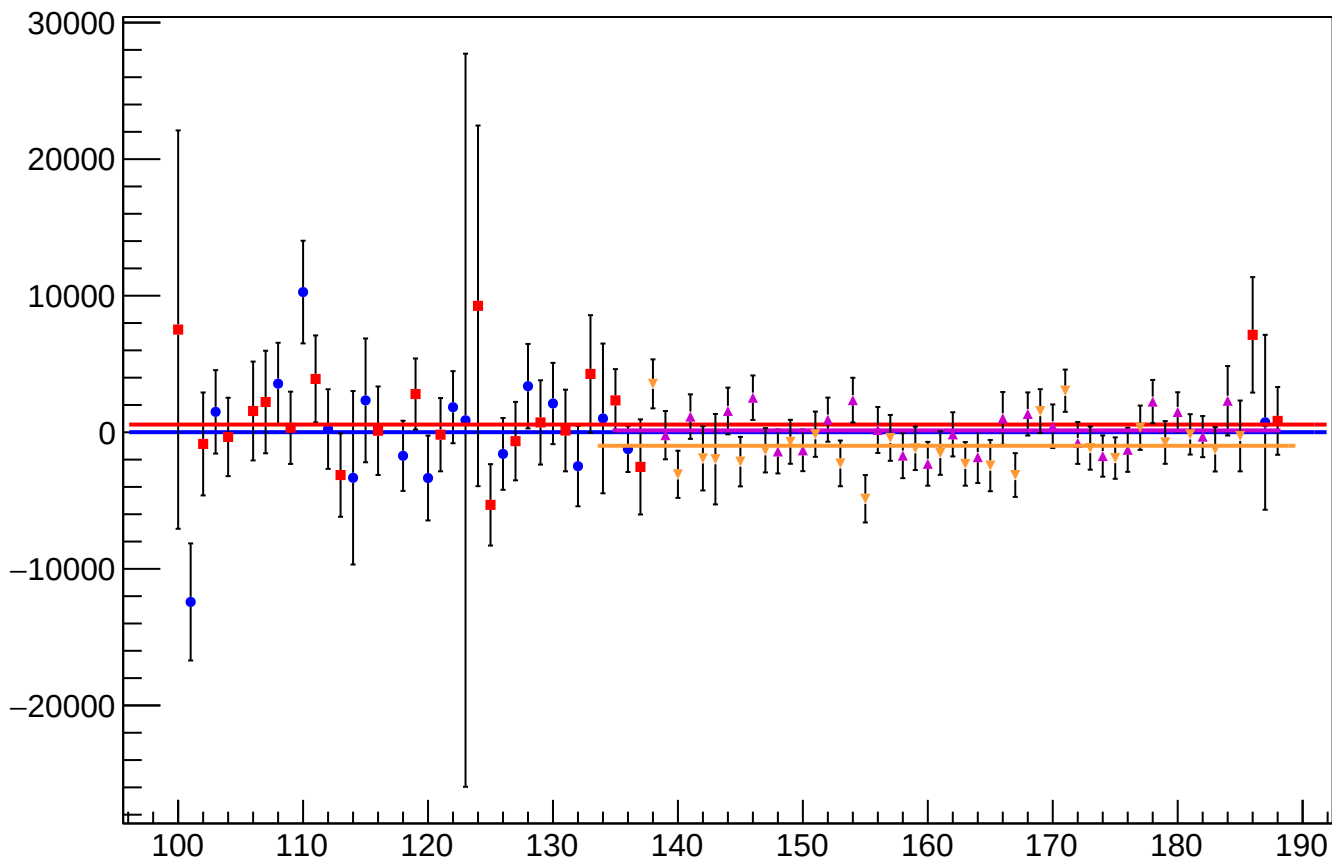
Left In: 643.008+/-0.109  $\chi^2/\text{NDF}$ : 323844.6/22

+ sign 651.010+/-0.109  $\chi^2/\text{NDF}$ : 990764.8/25

All: 651.897+/-0.077  $\chi^2/\text{NDF}$ : 2409786.4/50

- sign 652.780+/-0.109  $\chi^2/\text{NDF}$ : 1418889.0/24

# asym\_atl\_dd\_atr\_dd\_dd\_mean vs Slug



Right In: 7.593+/-740.069  $\chi^2/\text{NDF}$ : 23.5/17

Left Out: -987.247+/-339.757  $\chi^2/\text{NDF}$ : 28.5/24

Right Out: 566.283+/-694.040  $\chi^2/\text{NDF}$ : 13.2/20

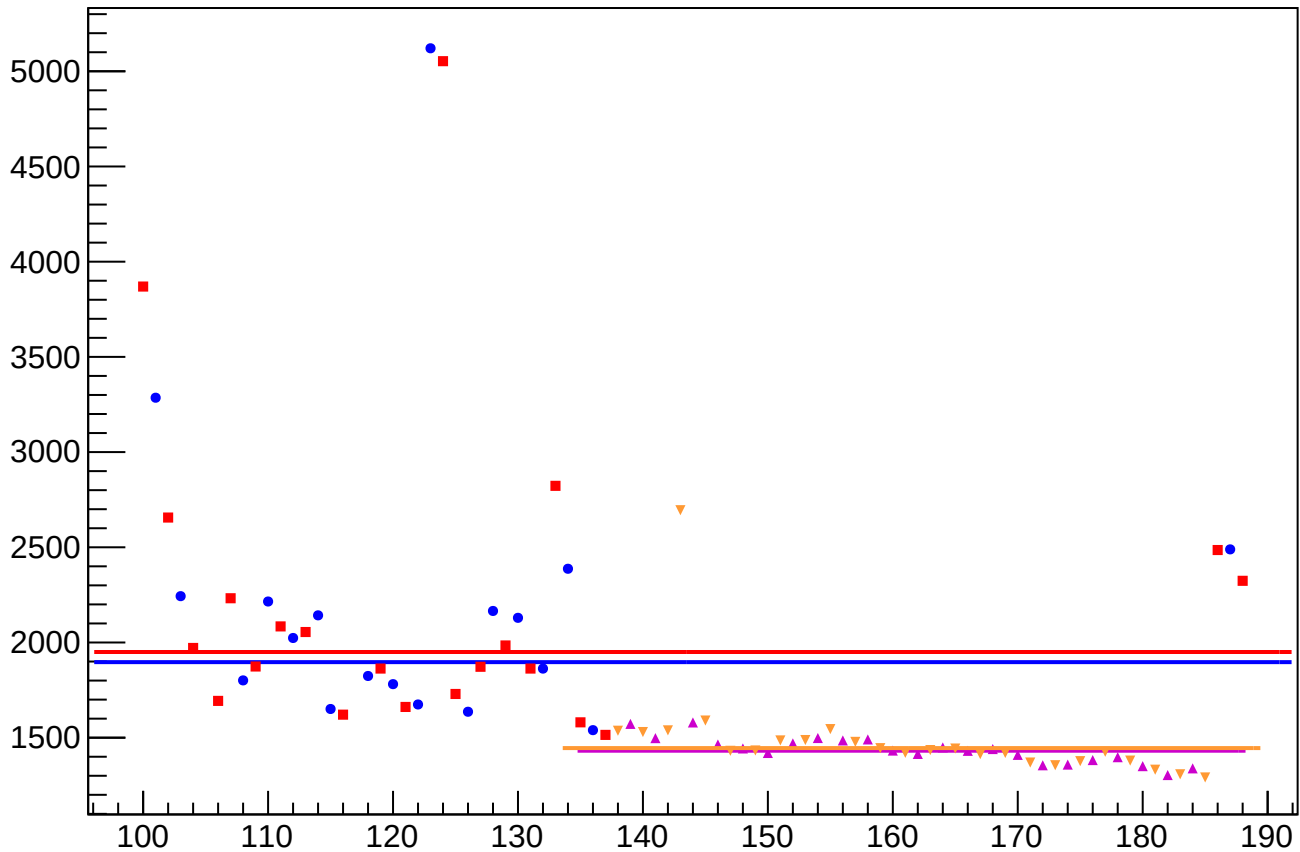
Left In: 137.780+/-342.262  $\chi^2/\text{NDF}$ : 18.8/22

+ sign -814.071+/-308.773  $\chi^2/\text{NDF}$ : 53.5/42

All: -293.195+/-217.693  $\chi^2/\text{NDF}$ : 91.5/86

- sign 221.603+/-306.965  $\chi^2/\text{NDF}$ : 32.3/43

# asym\_atl\_dd\_atr\_dd\_dd\_rms vs Slug



Right In: 1896.827+/-0.523  $\chi^2/\text{NDF}$ : 483180.2/17

Left Out: 1445.418+/-0.240  $\chi^2/\text{NDF}$ : 374859.2/24

Right Out: 1950.088+/-0.491  $\chi^2/\text{NDF}$ : 547805.1/20

Left In: 1431.663+/-0.242  $\chi^2/\text{NDF}$ : 77792.5/22

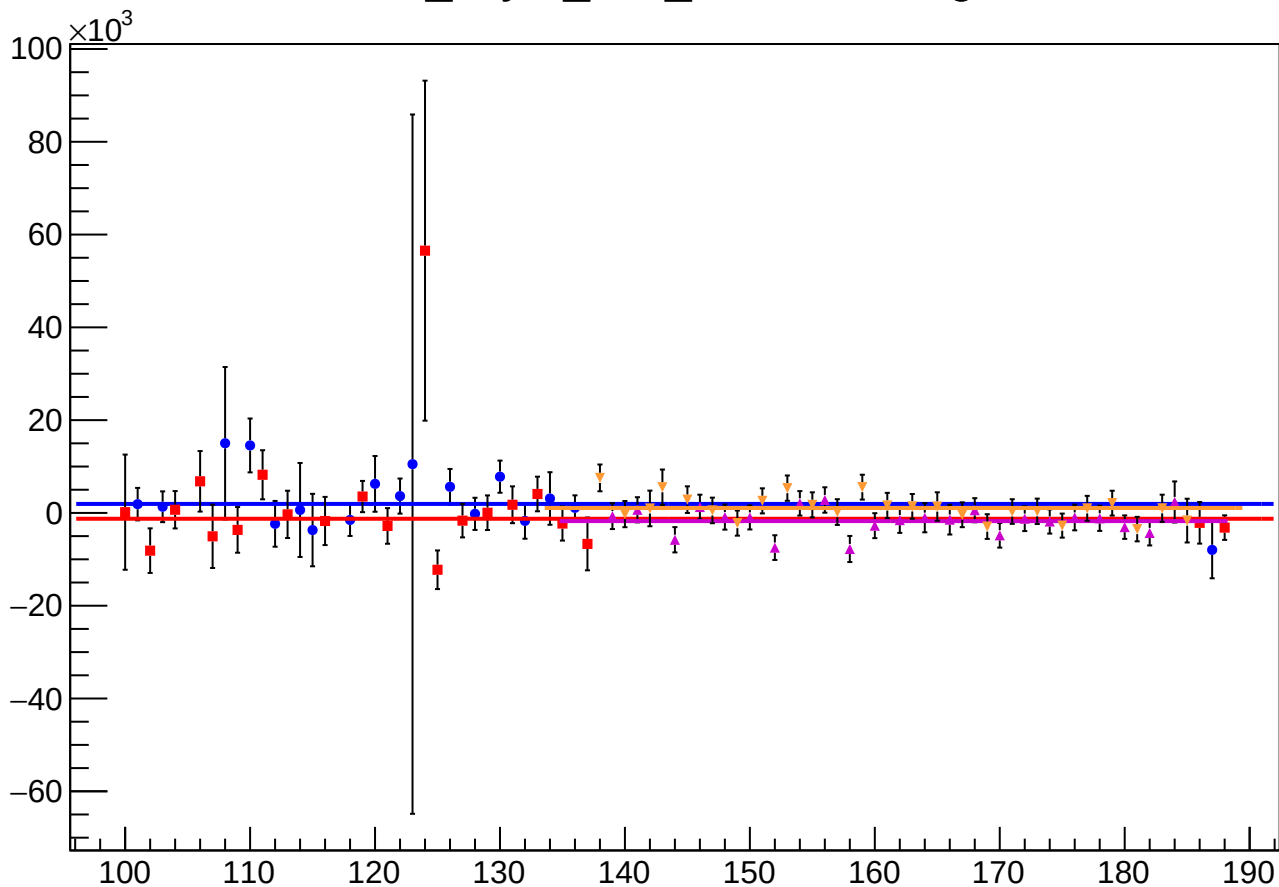
+ sign 1523.997+/-0.218  $\chi^2/\text{NDF}$ : 1472610.8/42

All: 1528.564+/-0.154  $\chi^2/\text{NDF}$ : 2996725.2/80

- sign 1533.079+/-0.217  $\chi^2/\text{NDF}$ : 1523244.3/43



# dit\_asym\_atl1\_mean vs Slug



Right In: 1941.681 $\pm$ 1024.615  $\chi^2$ /NDF: 16.3/17

Left Out: 1057.276 $\pm$ 566.243  $\chi^2$ /NDF: 22.7/24

Right Out: -1255.333 $\pm$ 951.143  $\chi^2$ /NDF: 23.6/20

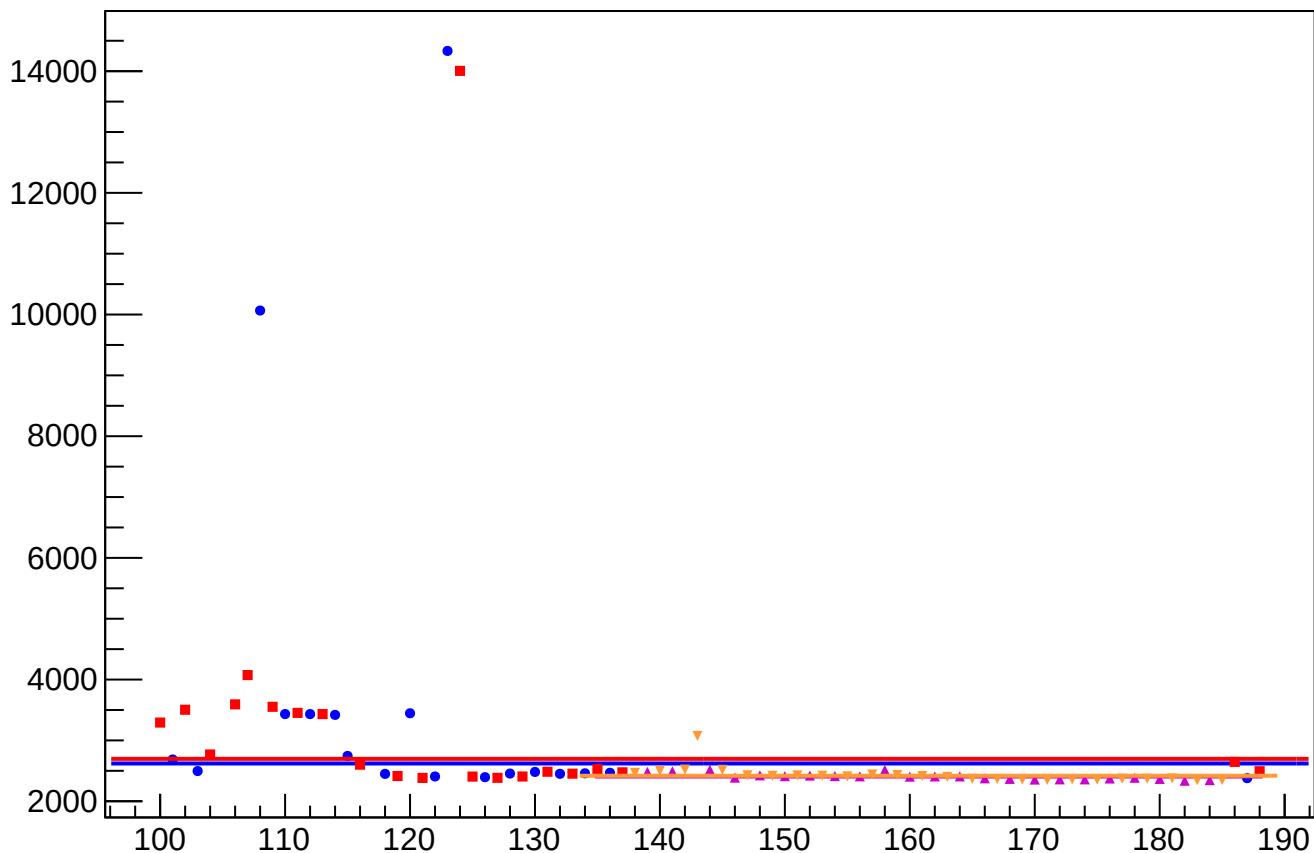
Left In: -1762.122 $\pm$ 574.660  $\chi^2$ /NDF: 23.2/22

+ sign 1264.189 $\pm$ 495.598  $\chi^2$ /NDF: 39.5/42

All: -192.153 $\pm$ 349.111  $\chi^2$ /NDF: 103.6/86

- sign -1626.598 $\pm$ 491.858  $\chi^2$ /NDF: 47.0/43

# dit\_asym\_atl1\_rms vs Slug



Right In: 2620.613+/-0.725  $\chi^2/\text{NDF}$ : 647593.7/17

Left Out: 2418.972+/-0.400  $\chi^2/\text{NDF}$ : 74779.7/24

Right Out: 2696.717+/-0.673  $\chi^2/\text{NDF}$ : 612421.5/20

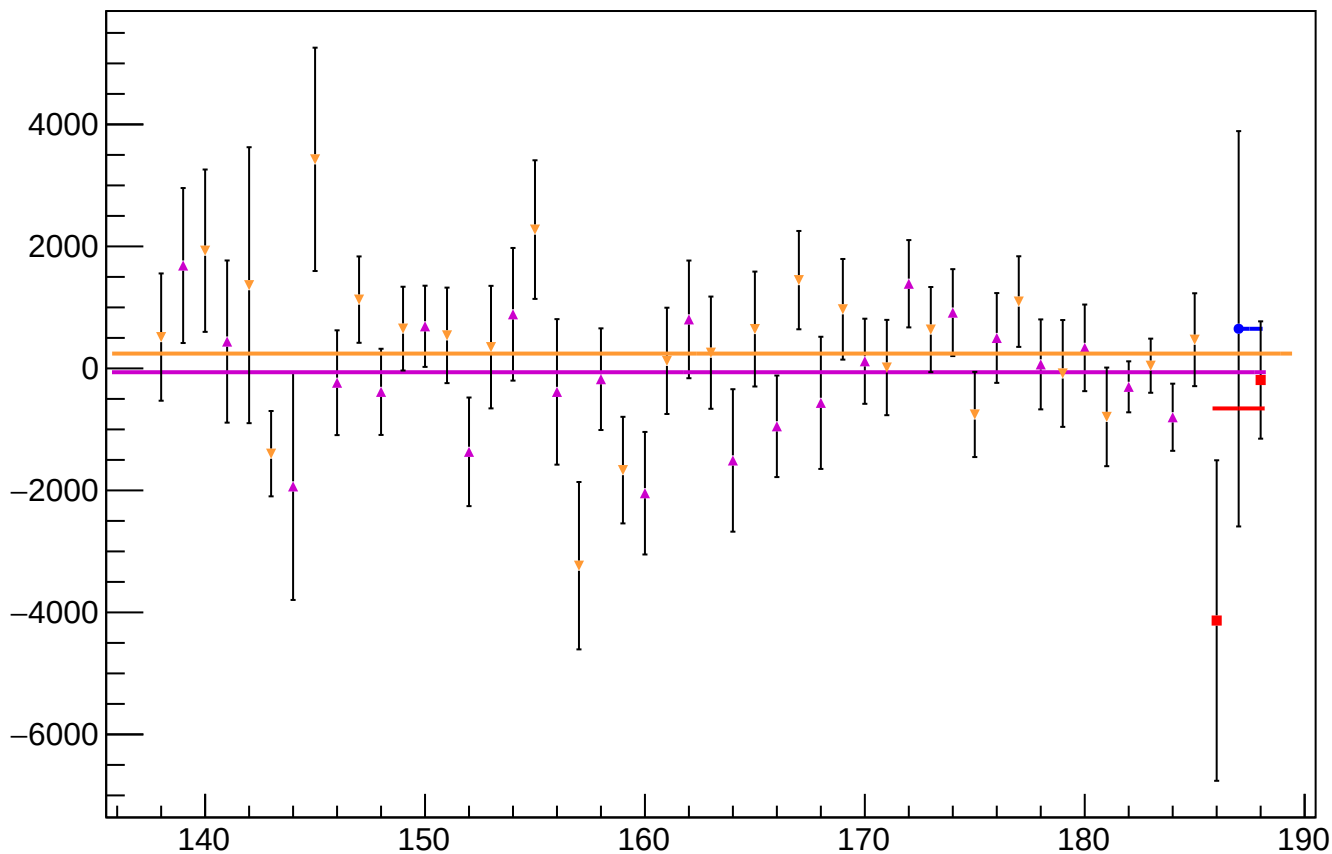
Left In: 2406.443+/-0.406  $\chi^2/\text{NDF}$ : 15245.2/22

+ sign 2466.147+/-0.350  $\chi^2/\text{NDF}$ : 781709.0/42

All: 2475.175+/-0.247  $\chi^2/\text{NDF}$ : 1547154.6/86

- sign 2484.067+/-0.348  $\chi^2/\text{NDF}$ : 764128.3/43

# asym\_atl1\_correction\_mean vs Slug



Right In: 649.589+/-3240.468  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 243.135+/-163.940  $\chi^2/\text{NDF}$ :36.0/24

Right Out: -656.181+/-903.191  $\chi^2/\text{NDF}$ : 2.0/1

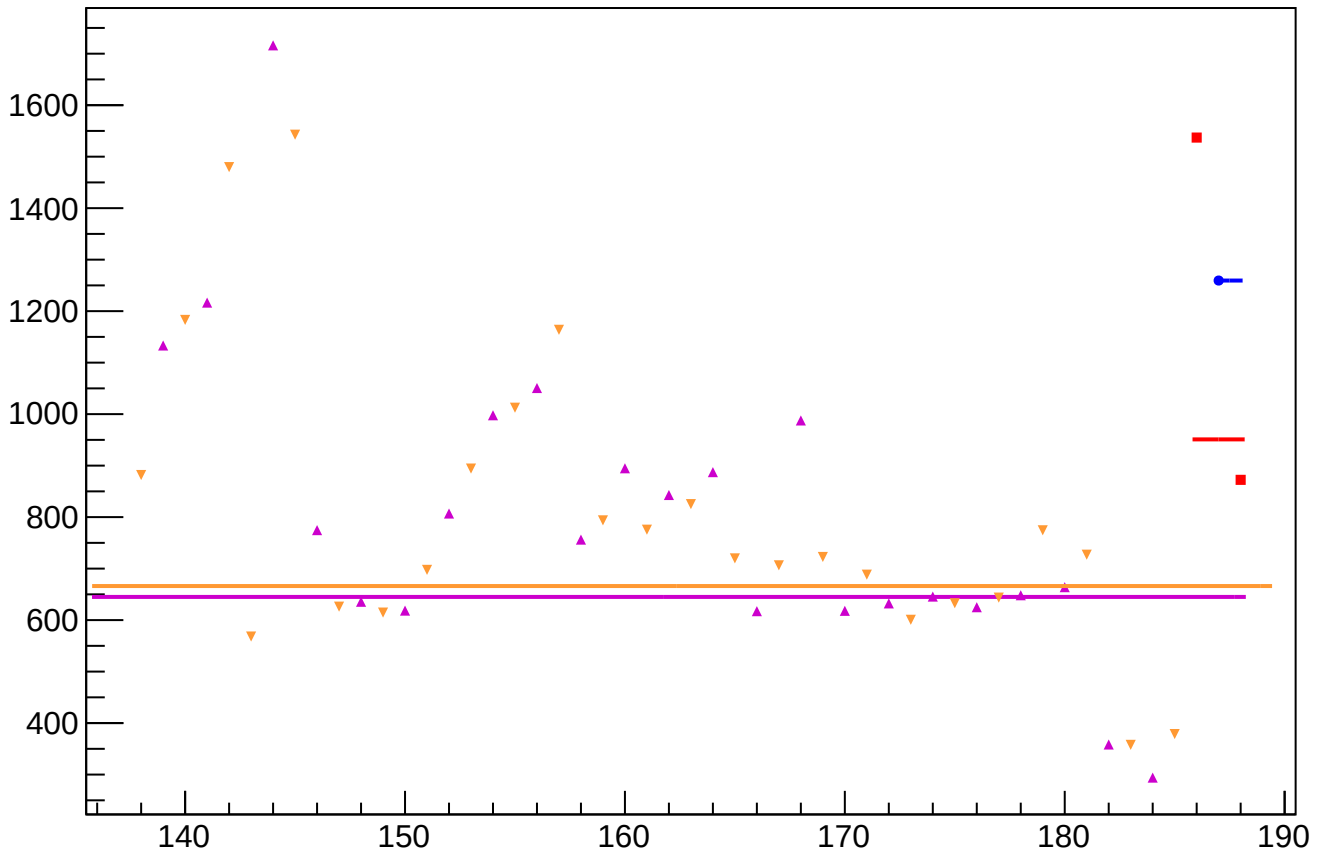
Left In: -62.569+/-164.169  $\chi^2/\text{NDF}$ :24.3/22

+ sign 244.173+/-163.731  $\chi^2/\text{NDF}$ : 36.0/25

All: 79.098+/-114.986  $\chi^2/\text{NDF}$ : 64.7/50

- sign -81.554+/-161.522  $\chi^2/\text{NDF}$ : 26.7/24

# asym\_atl1\_correction\_rms vs Slug



Right In: 1259.423+/-2.291  $\chi^2$ /NDF: 0.0/0

Left Out: 666.133+/-0.116  $\chi^2$ /NDF:3190574.7/24

Right Out: 950.939+/-0.639  $\chi^2$ /NDF: 112892.8/1

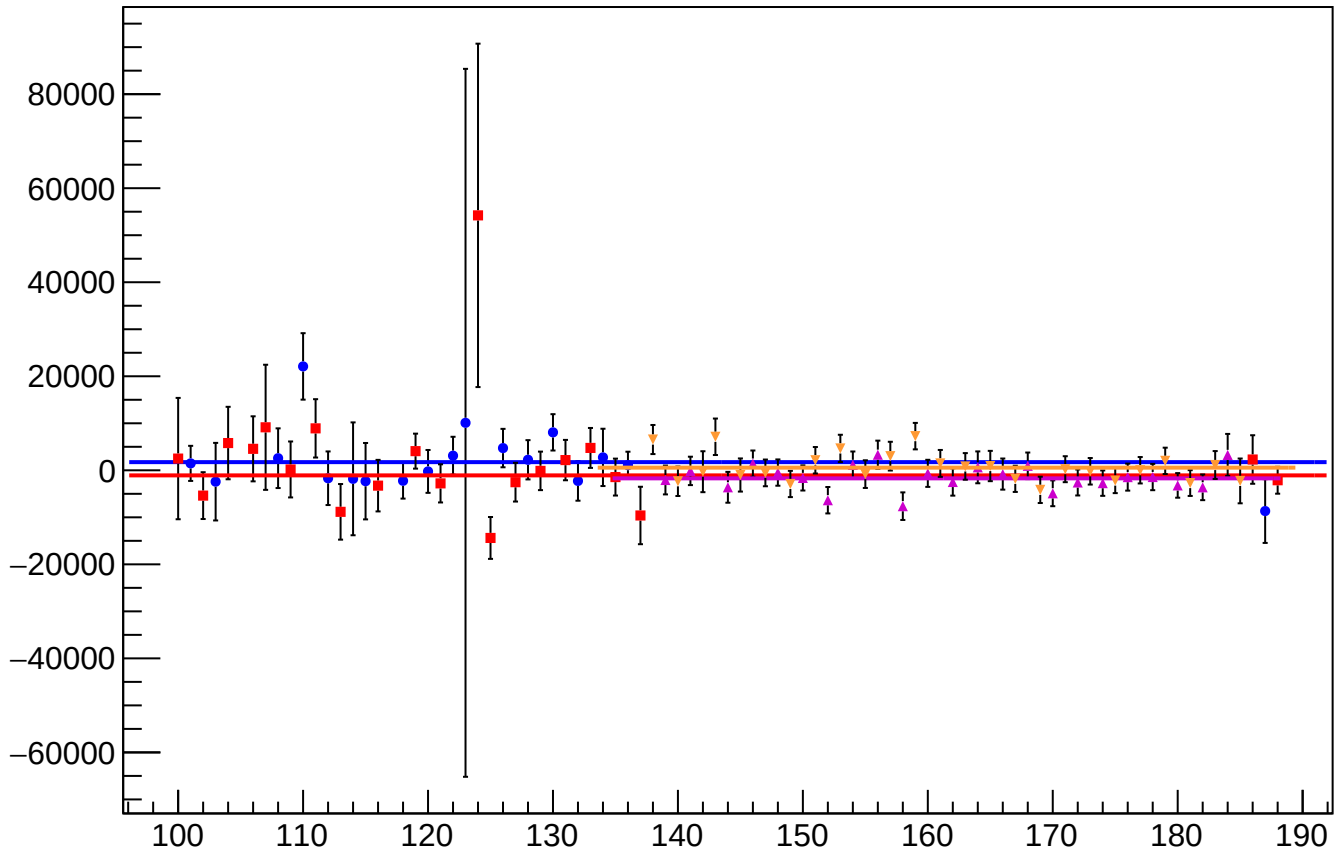
Left In: 645.011+/-0.116  $\chi^2$ /NDF:4176295.6/22

+ sign 667.648+/-0.116  $\chi^2$ /NDF: 3257445.7/25

All: 661.134+/-0.081  $\chi^2$ /NDF: 7775000.9/50

- sign 654.796+/-0.114  $\chi^2$ /NDF: 4511310.1/24

# asym\_atl1\_mean vs Slug



Right In: 1737.838 $\pm$ 1135.169  $\chi^2$ /NDF: 17.3/17

Left Out: 566.778 $\pm$ 598.308  $\chi^2$ /NDF: 25.2/24

Right Out: -1079.925 $\pm$ 1072.125  $\chi^2$ /NDF: 25.9/20

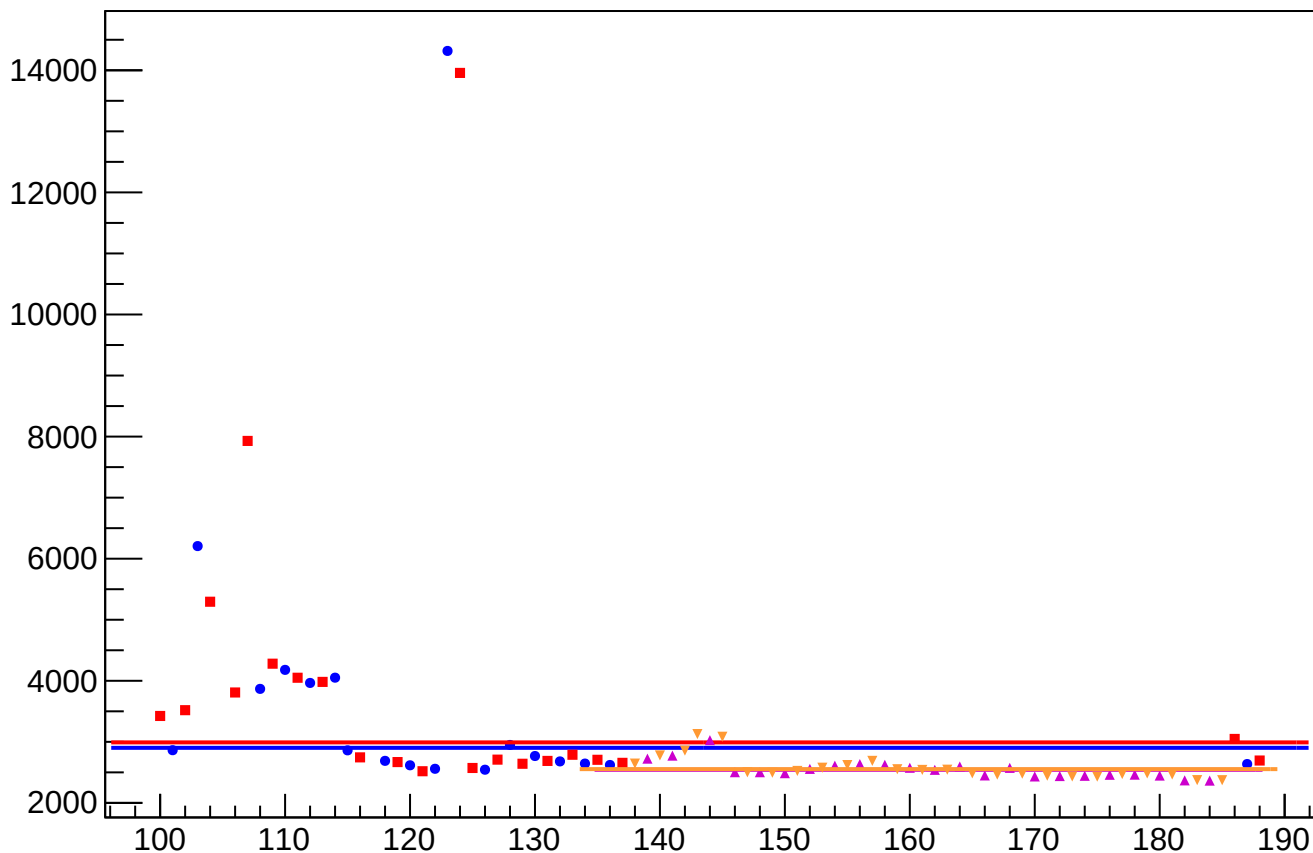
Left In: -1713.317 $\pm$ 607.775  $\chi^2$ /NDF: 18.1/22

+ sign 821.371 $\pm$ 529.290  $\chi^2$ /NDF: 43.3/42

All: -370.216 $\pm$ 374.066  $\chi^2$ /NDF: 97.6/86

- sign -1559.273 $\pm$ 528.728  $\chi^2$ /NDF: 44.2/43

# asym\_atl1\_rms vs Slug



Right In: 2902.076+/-0.803  $\chi^2/\text{NDF}$ : 645049.9/17

Left Out: 2553.097+/-0.423  $\chi^2/\text{NDF}$ : 148430.5/24

Right Out: 2990.970+/-0.758  $\chi^2/\text{NDF}$ : 1036408.9/20

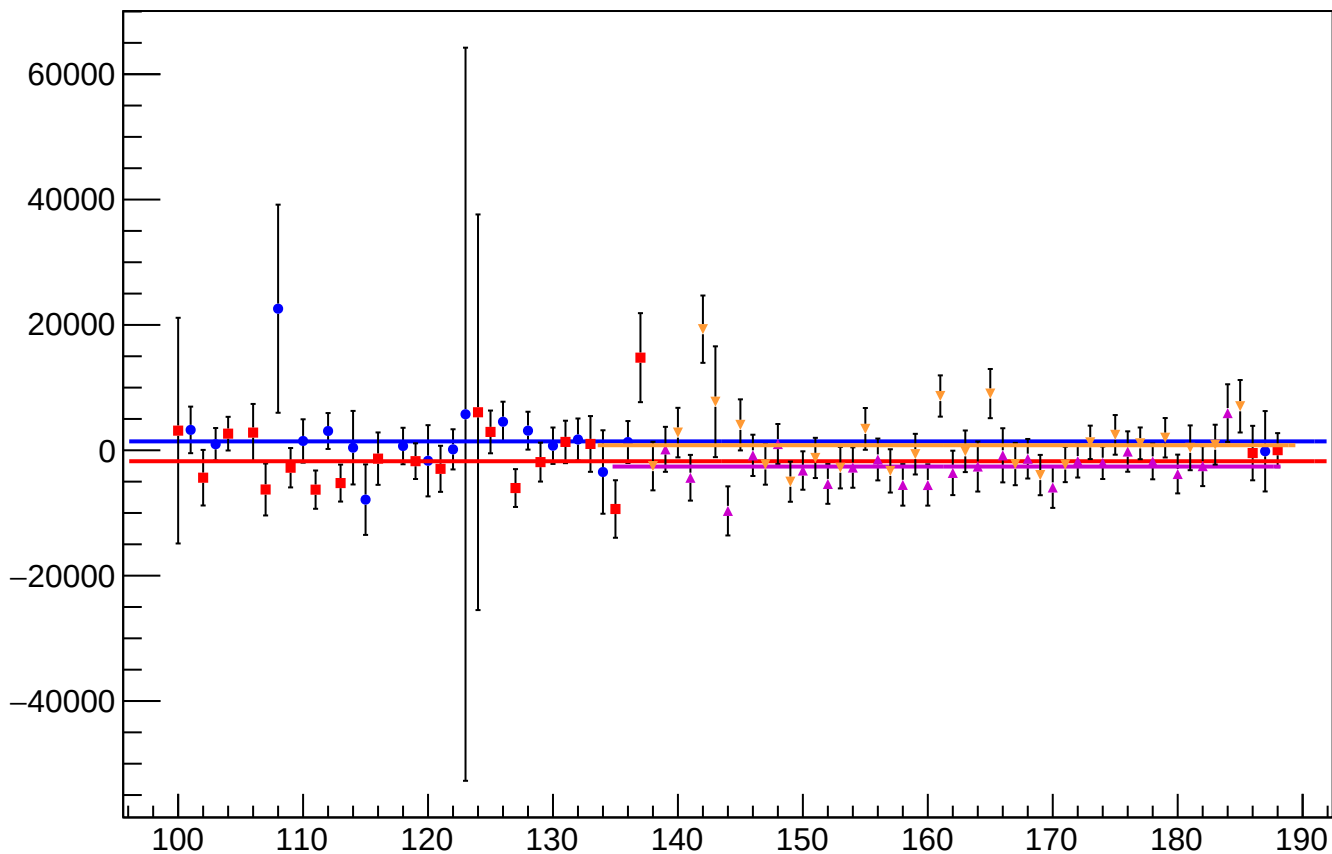
Left In: 2541.950+/-0.430  $\chi^2/\text{NDF}$ : 97238.4/22

+ sign 2628.966+/-0.374  $\chi^2/\text{NDF}$ : 941407.1/42

All: 2640.072+/-0.265  $\chi^2/\text{NDF}$ : 2342304.0/86

- sign 2651.154+/-0.374  $\chi^2/\text{NDF}$ : 1399137.7/43

# dit\_asym\_atl2\_mean vs Slug



Right In: 1421.698 $\pm$ 880.590  $\chi^2$ /NDF: 7.5/17

Left Out: 807.297 $\pm$ 677.513  $\chi^2$ /NDF:39.1/24

Right Out: -1745.933 $\pm$ 797.831  $\chi^2$ /NDF: 23.0/20

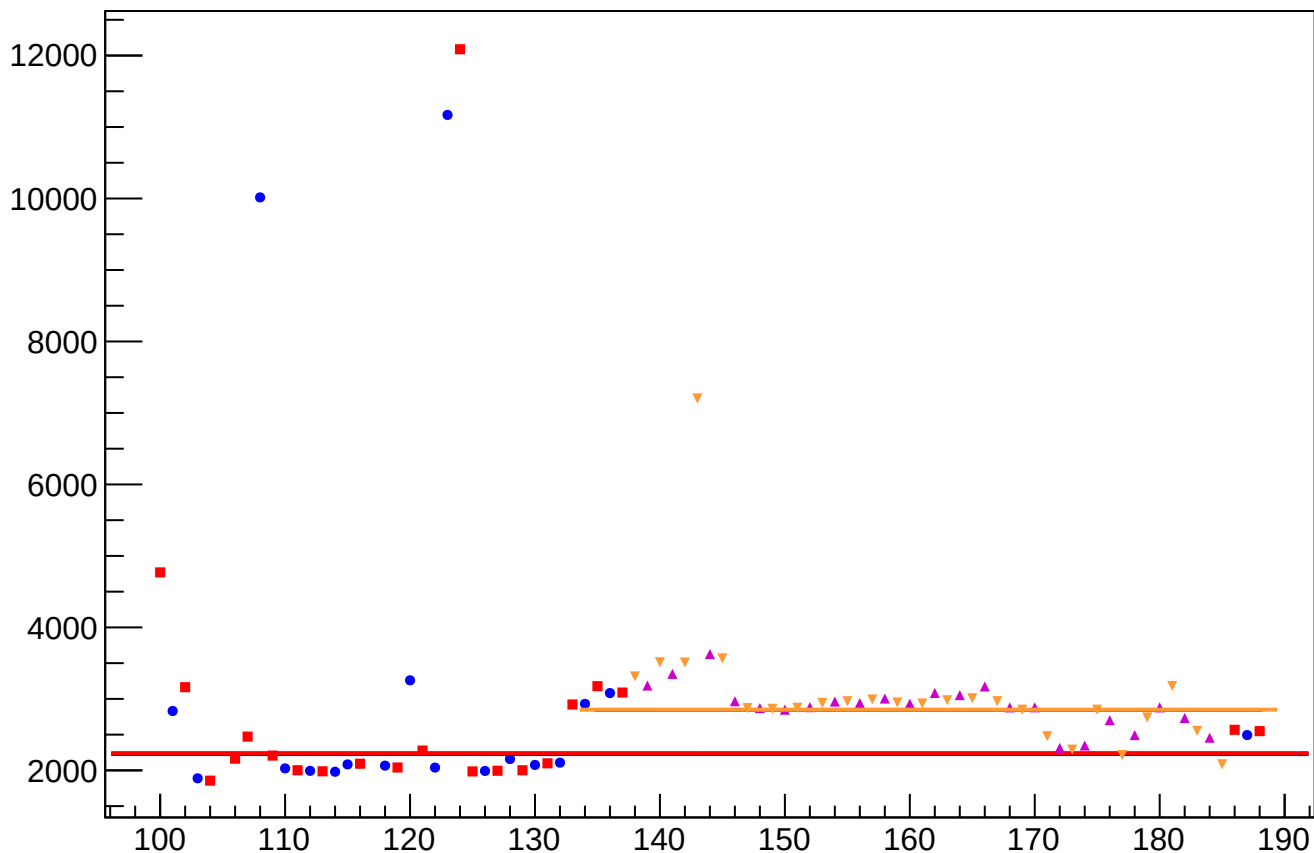
Left In: -2595.551 $\pm$ 683.824  $\chi^2$ /NDF:14.0/22

+ sign 1035.757 $\pm$ 536.973  $\chi^2$ /NDF: 46.9/42

All: -654.998 $\pm$ 373.258  $\chi^2$ /NDF: 103.7/86

- sign -2235.732 $\pm$ 519.208  $\chi^2$ /NDF: 37.6/43

# dit\_asym\_atl2\_rms vs Slug



Right In: 2228.236+/-0.623  $\chi^2/\text{NDF}$ : 853787.3/17

Left Out: 2849.256+/-0.479  $\chi^2/\text{NDF}$ : 1034478.3/24

Right Out: 2241.325+/-0.564  $\chi^2/\text{NDF}$ : 644304.0/20

Left In: 2844.779+/-0.484  $\chi^2/\text{NDF}$ : 383776.8/22

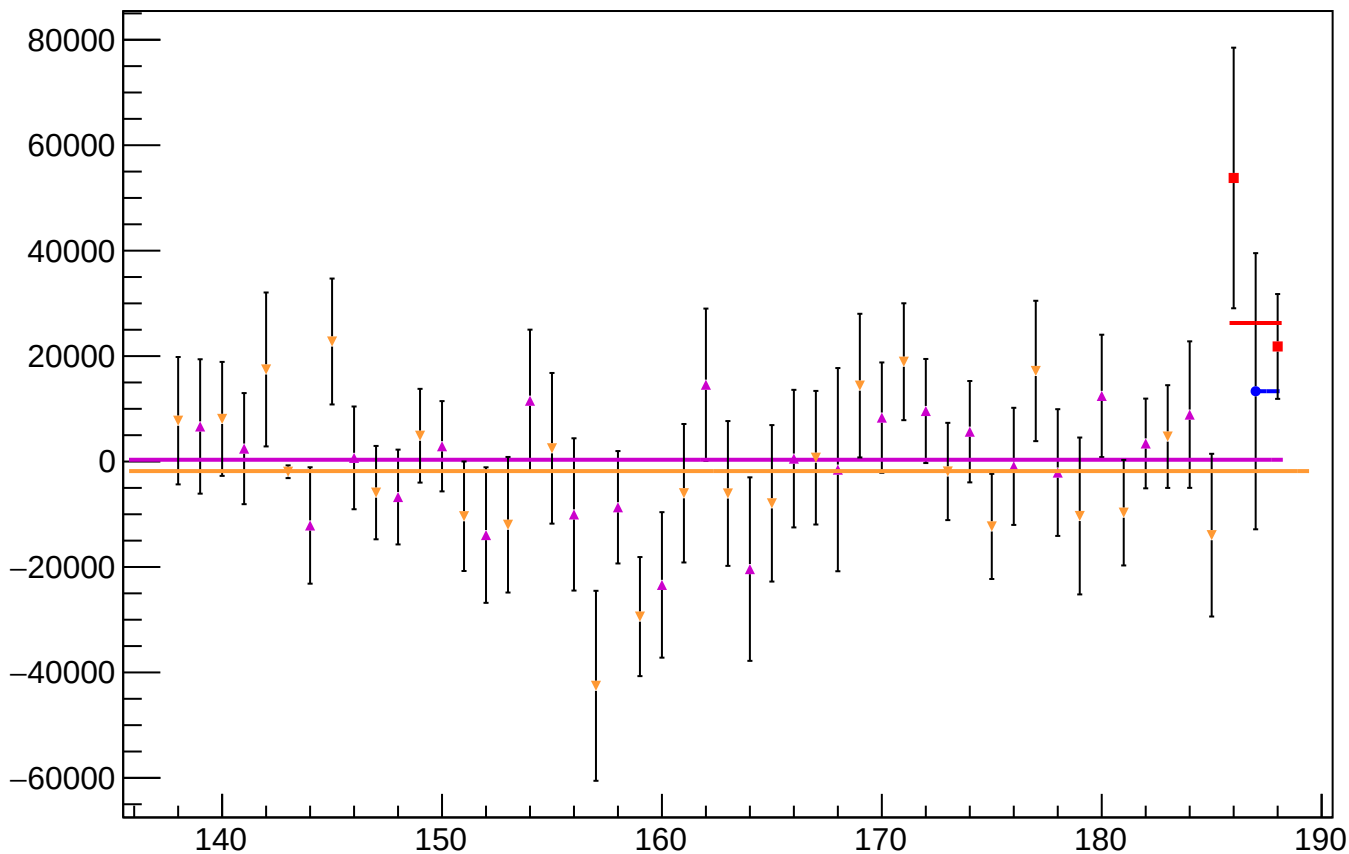
+ sign 2618.335+/-0.380  $\chi^2/\text{NDF}$ : 2513097.4/42

All: 2603.182+/-0.264  $\chi^2/\text{NDF}$ : 4204358.9/86

- sign 2589.024+/-0.367  $\chi^2/\text{NDF}$ : 1688180.8/43



# asym\_atl2\_correction\_mean vs Slug



Right In: 13338.612 $\pm$ 26189.529  $\chi^2$ /NDF: 0.0/0

Left Out: -1810.593 $\pm$ 1078.173  $\chi^2$ /NDF:31.2/24

Right Out: 26280.630 $\pm$ 9223.680  $\chi^2$ /NDF: 1.4/1

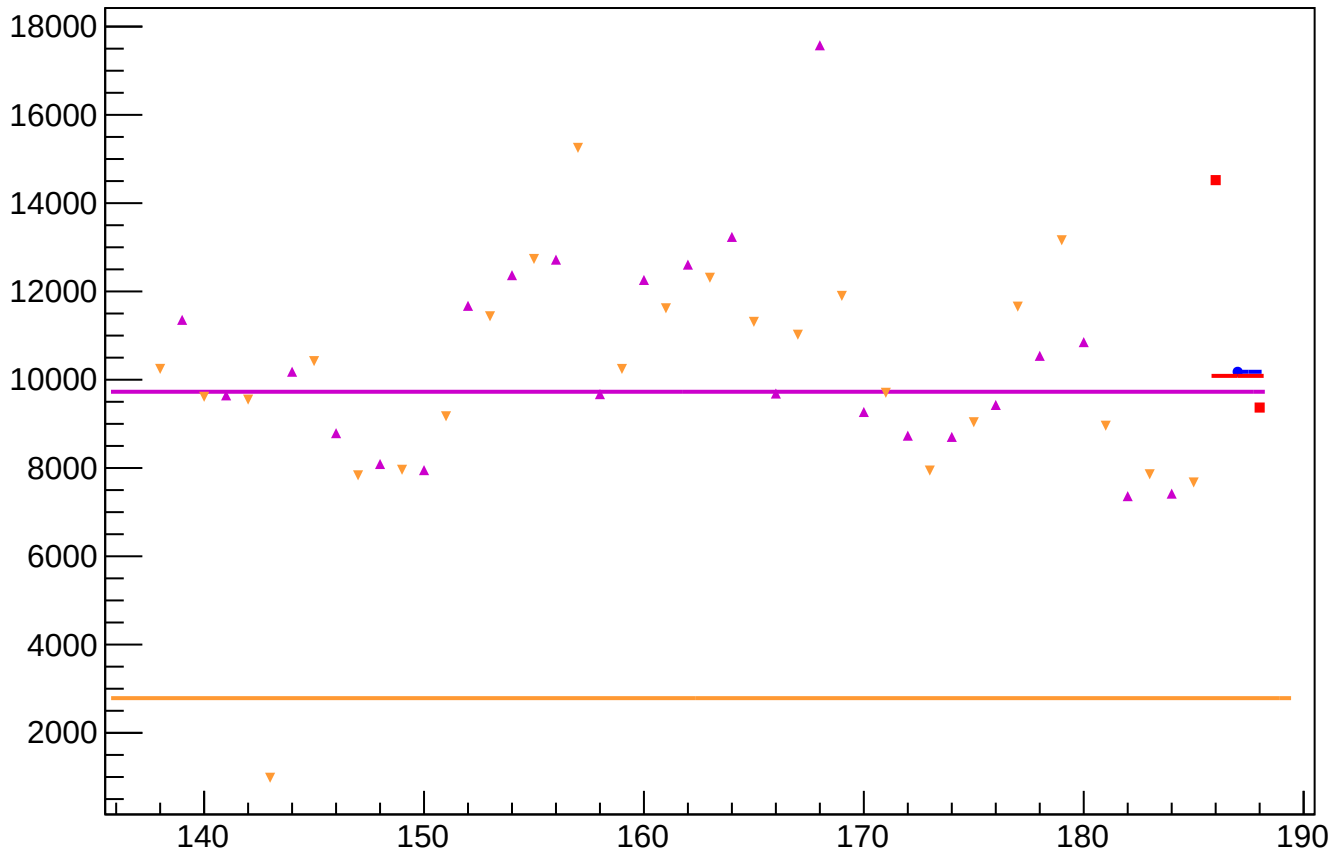
Left In: 339.260 $\pm$ 2365.986  $\chi^2$ /NDF:14.2/22

+ sign -1784.962 $\pm$ 1077.260  $\chi^2$ /NDF: 31.5/25

All: -1110.732 $\pm$ 974.927  $\chi^2$ /NDF: 56.8/50

- sign 1940.785 $\pm$ 2291.789  $\chi^2$ /NDF: 23.1/24

# asym\_atl2\_correction\_rms vs Slug



Right In: 10179.793 $\pm$ 18.519  $\chi^2$ /NDF: 0.0/0

Left Out: 2786.461 $\pm$ 0.762  $\chi^2$ /NDF:22863045.3/24

Right Out: 10087.054 $\pm$ 6.522  $\chi^2$ /NDF: 74814.8/1

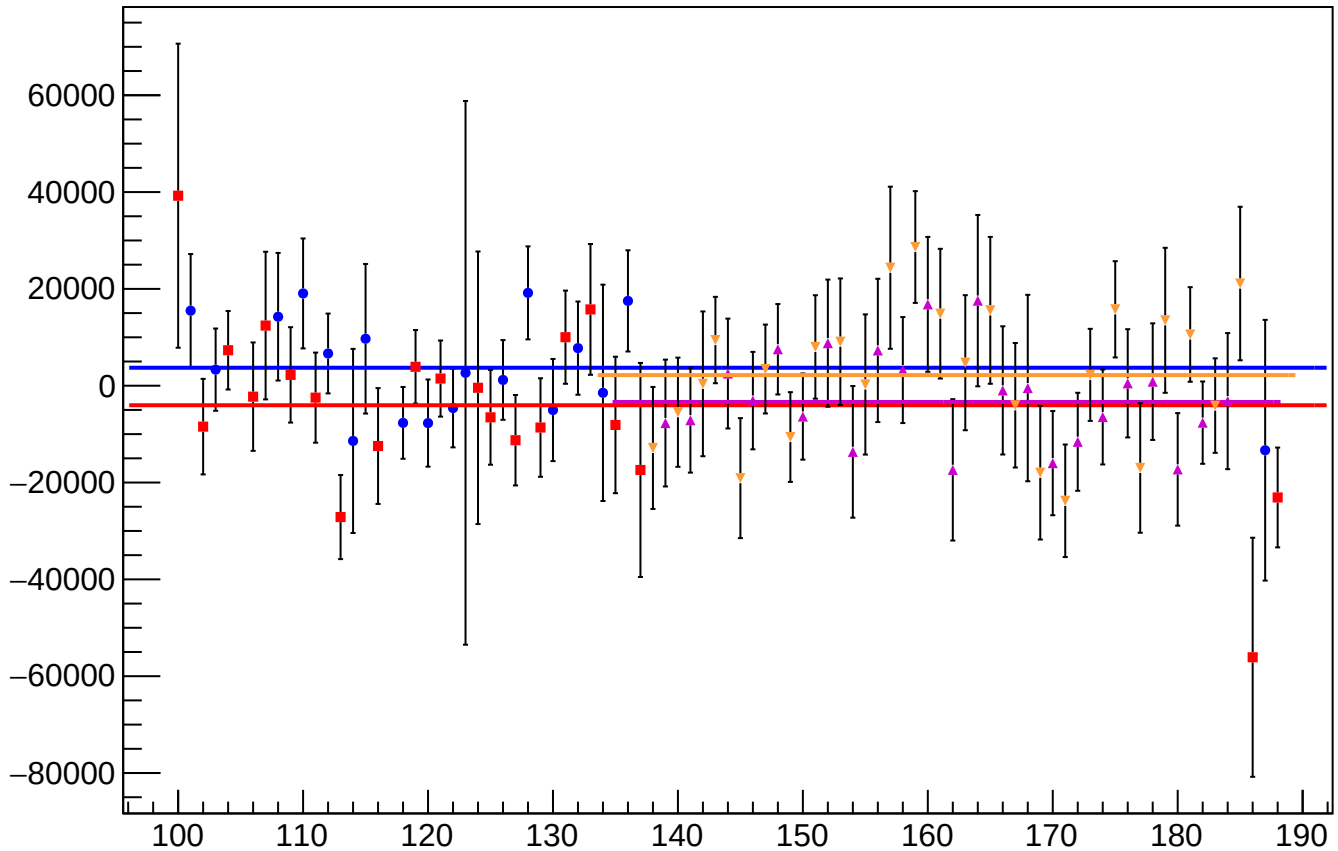
Left In: 9727.255 $\pm$ 1.673  $\chi^2$ /NDF:1261406.7/22

+ sign 2798.970 $\pm$ 0.762  $\chi^2$ /NDF: 23022163.4/25

All: 4056.767 $\pm$ 0.689  $\chi^2$ /NDF: 39427832.9/5

- sign 9749.468 $\pm$ 1.621  $\chi^2$ /NDF: 1339076.9/24

# asym\_atl2\_mean vs Slug



Right In: 3711.928 $\pm$ 2497.962  $\chi^2$ /NDF: 15.2/17

Left Out: 2192.629 $\pm$ 2346.604  $\chi^2$ /NDF:31.2/24

Right Out: -4034.730 $\pm$ 2346.477  $\chi^2$ /NDF: 28.3/20

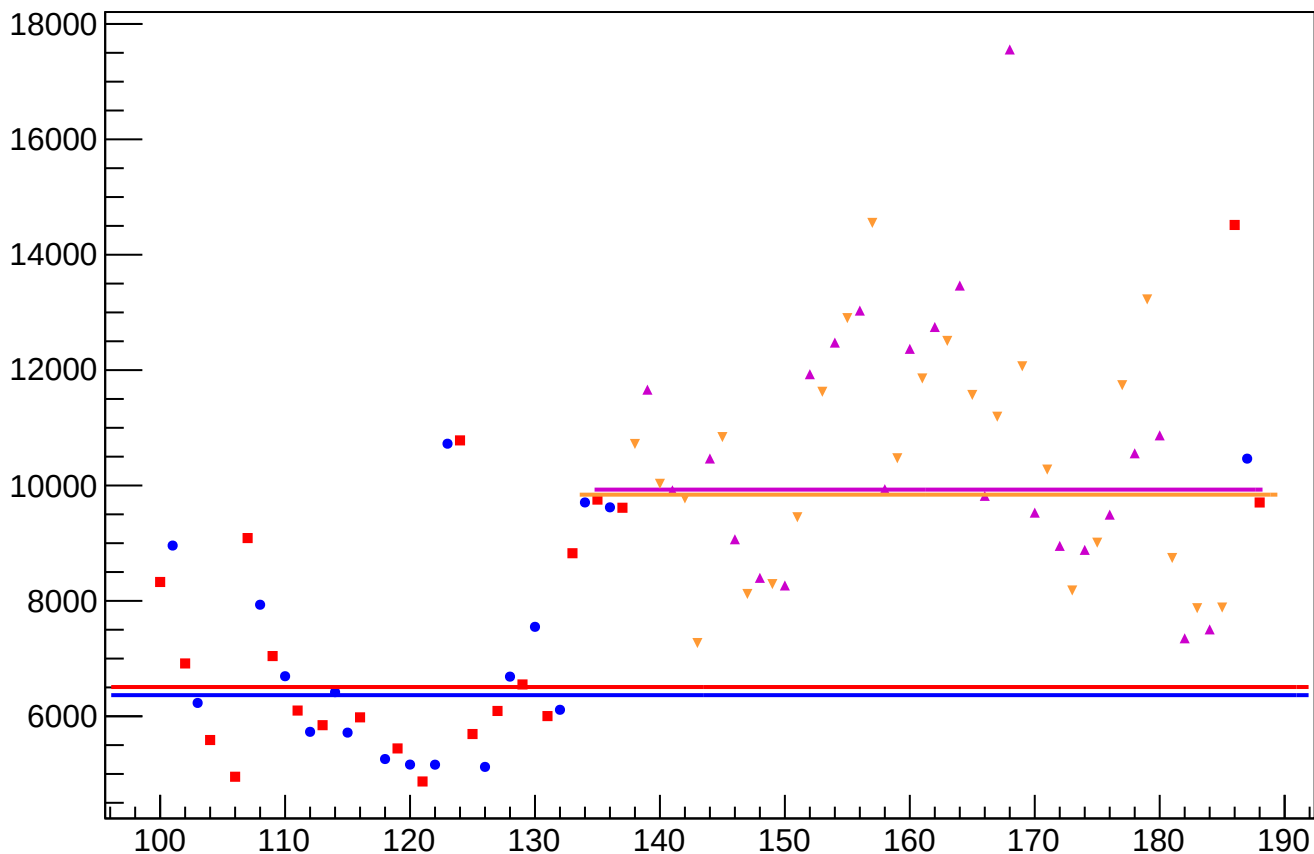
Left In: -3362.489 $\pm$ 2413.842  $\chi^2$ /NDF:12.8/22

+ sign 2904.858 $\pm$ 1710.306  $\chi^2$ /NDF: 46.5/42

All: -455.783 $\pm$ 1199.425  $\chi^2$ /NDF: 95.3/86

- sign -3708.120 $\pm$ 1682.521  $\chi^2$ /NDF: 41.2/43

# asym\_atl2\_rms vs Slug



Right In: 6365.887+/-1.766  $\chi^2/\text{NDF}$ : 640173.3/17

Left Out: 9841.227+/-1.659  $\chi^2/\text{NDF}$ : 1184767.7/24

Right Out: 6506.851+/-1.659  $\chi^2/\text{NDF}$ : 960354.3/20

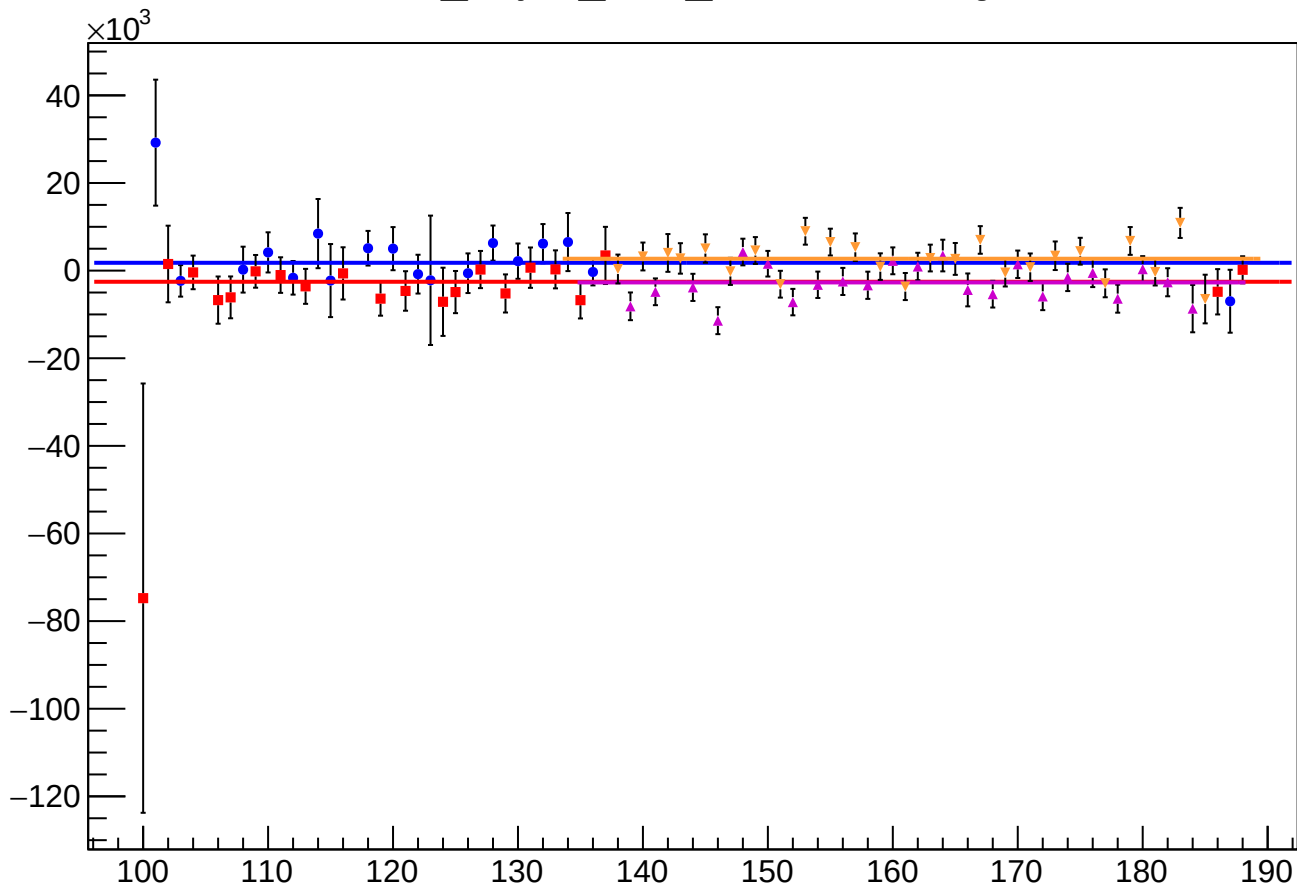
Left In: 9928.662+/-1.707  $\chi^2/\text{NDF}$ : 1220804.9/22

+ sign 8212.022+/-1.209  $\chi^2/\text{NDF}$ : 3881414.3/42

All: 8190.295+/-0.848  $\chi^2/\text{NDF}$ : 8129688.8/86

- sign 8169.269+/-1.190  $\chi^2/\text{NDF}$ : 4247639.4/43

# dit\_asym\_atr1\_mean vs Slug



Right In: 1786.358 $\pm$ 1120.347  $\chi^2$ /NDF: 13.6/17

Left Out: 2712.564 $\pm$ 648.832  $\chi^2$ /NDF:34.7/24

Right Out: -2543.846 $\pm$ 1005.141  $\chi^2$ /NDF: 10.9/20

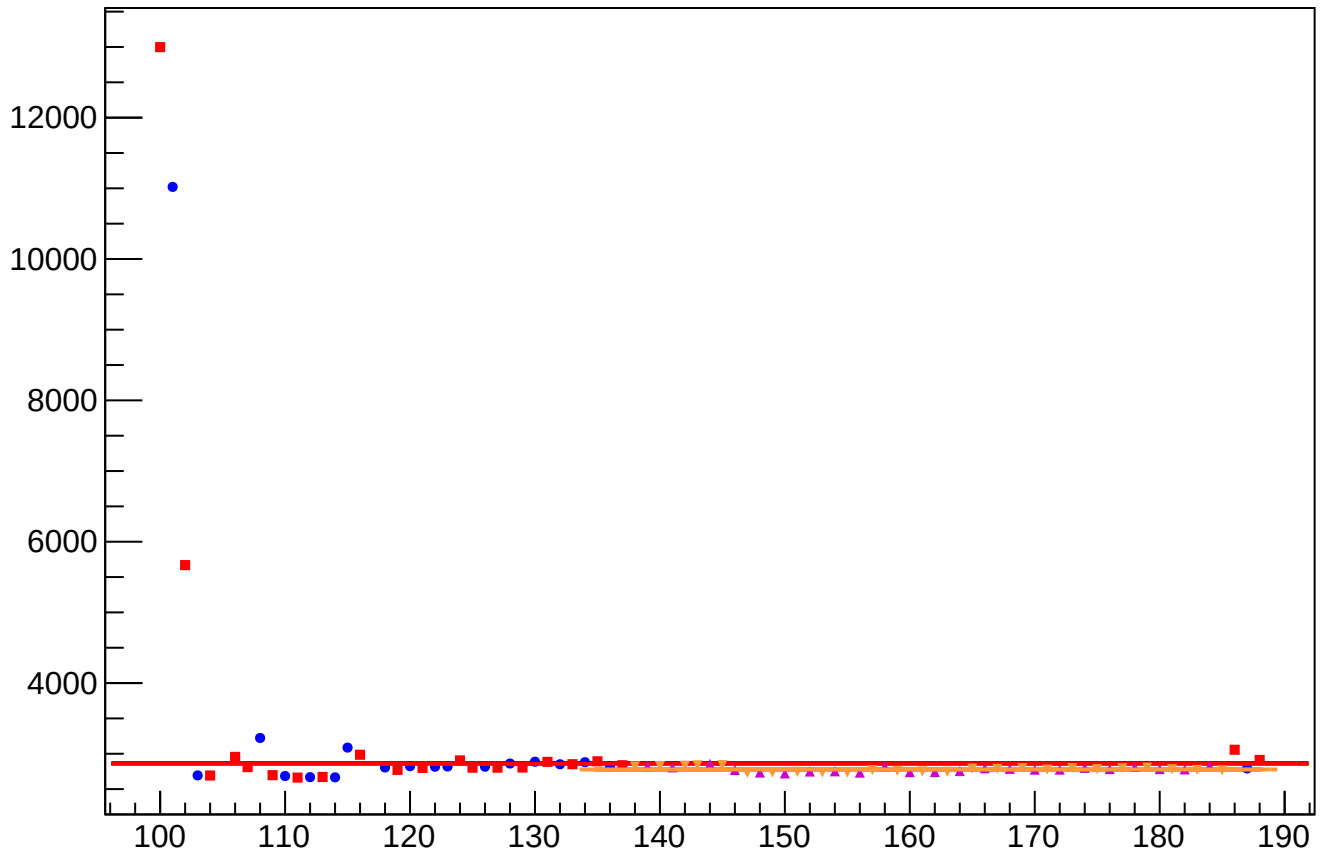
Left In: -2697.794 $\pm$ 662.544  $\chi^2$ /NDF:36.1/22

+ sign 2479.939 $\pm$ 561.471  $\chi^2$ /NDF: 48.8/42

All: -123.775 $\pm$ 394.056  $\chi^2$ /NDF: 138.2/86

- sign -2651.165 $\pm$ 553.180  $\chi^2$ /NDF: 47.0/43

# dit\_asym\_atr1\_rms vs Slug



Right In: 2867.316+/-0.792  $\chi^2/\text{NDF}$ : 670126.3/17

Left Out: 2777.450+/-0.459  $\chi^2/\text{NDF}$ : 5253.1/24

Right Out: 2857.196+/-0.711  $\chi^2/\text{NDF}$ : 316542.6/20

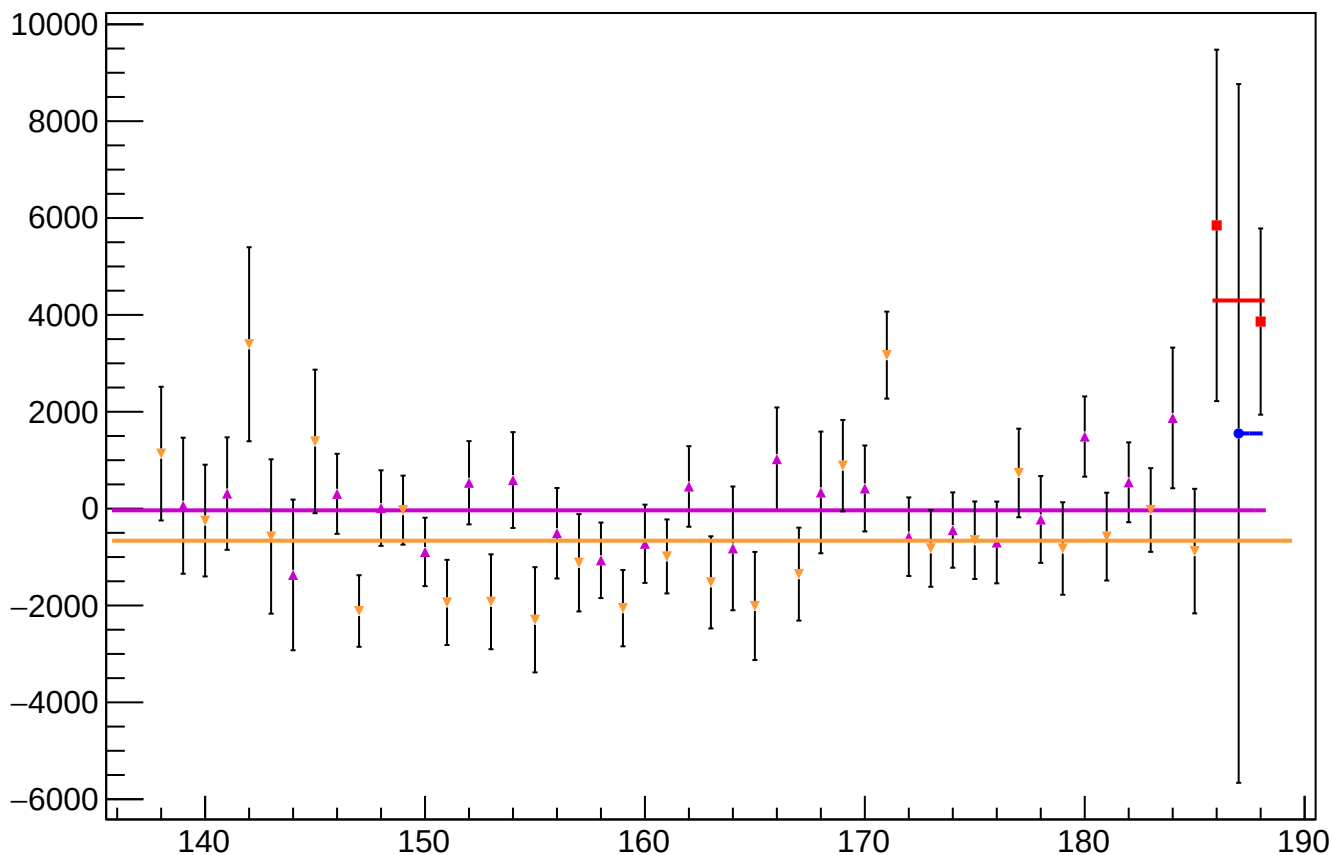
Left In: 2777.355+/-0.468  $\chi^2/\text{NDF}$ : 5488.7/22

+ sign 2800.021+/-0.397  $\chi^2/\text{NDF}$ : 685015.6/42

All: 2800.791+/-0.279  $\chi^2/\text{NDF}$ : 1015851.2/80

- sign 2801.538+/-0.391  $\chi^2/\text{NDF}$ : 330828.2/43

# asym\_atr1\_correction\_mean vs Slug



Right In: 1552.615+/-7213.588  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -661.759+/-190.222  $\chi^2/\text{NDF}$ : 48.7/24

Right Out: 4298.078+/-1698.872  $\chi^2/\text{NDF}$ : 0.2/1

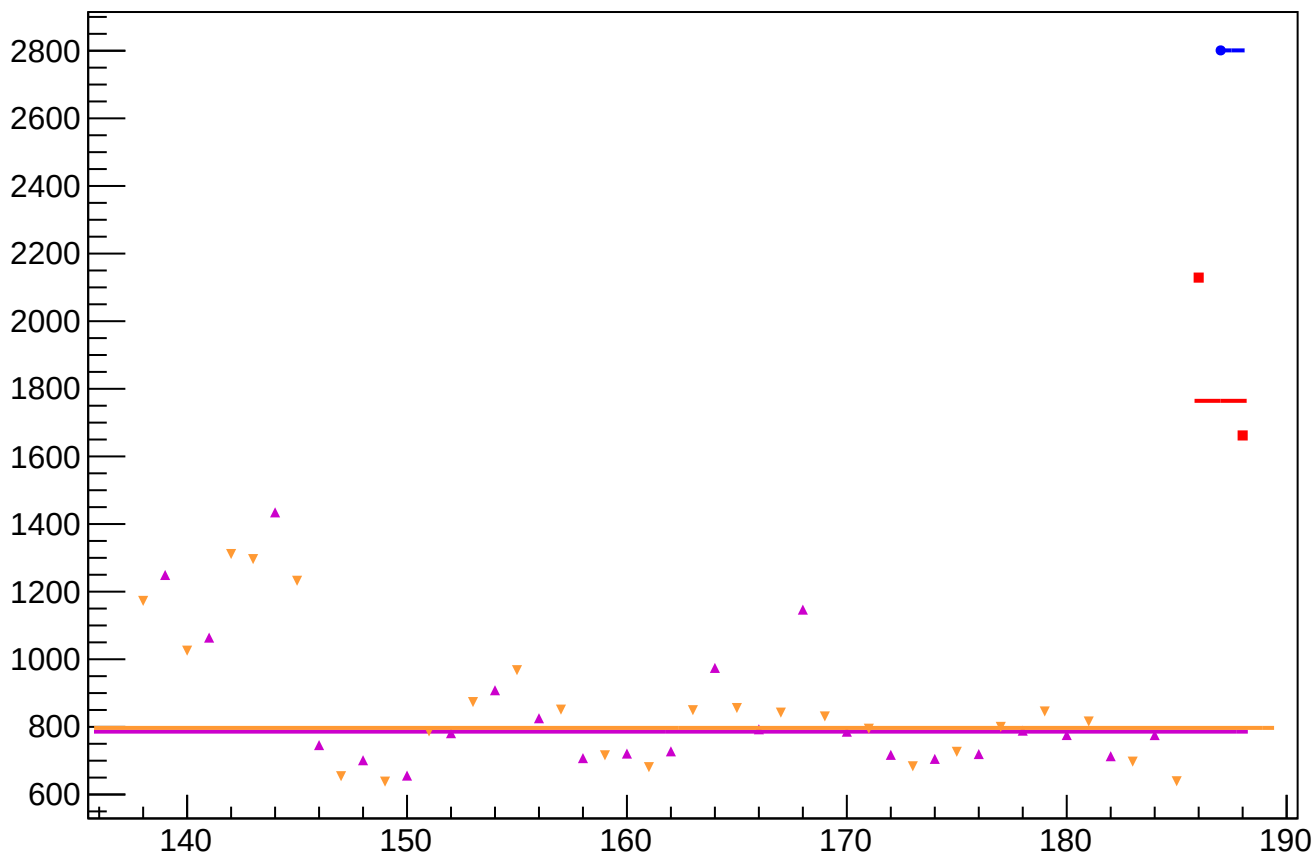
Left In: -35.366+/-190.553  $\chi^2/\text{NDF}$ : 15.1/22

+ sign -660.220+/-190.156  $\chi^2/\text{NDF}$ : 48.8/25

All: -319.459+/-134.180  $\chi^2/\text{NDF}$ : 76.9/50

- sign 18.475+/-189.366  $\chi^2/\text{NDF}$ : 21.8/24

# asym\_atr1\_correction\_rms vs Slug



Right In: 2801.017 $\pm$ 5.101  $\chi^2$ /NDF: 0.0/0

Left Out: 796.994 $\pm$ 0.135  $\chi^2$ /NDF: 1174879.0/24

Right Out: 1764.434 $\pm$ 1.201  $\chi^2$ /NDF: 25858.8/1

Left In: 785.928 $\pm$ 0.135  $\chi^2$ /NDF: 1126027.7/22

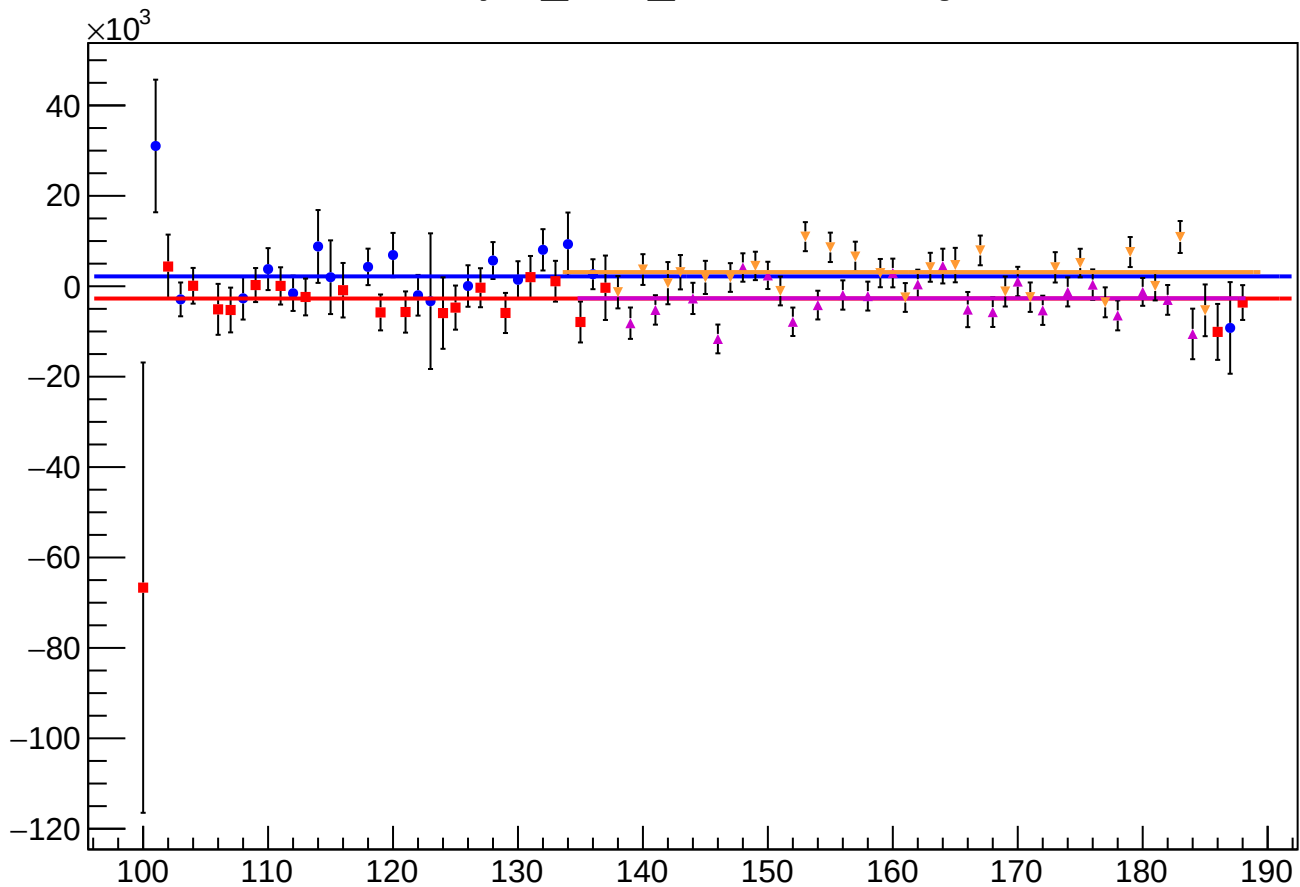
+ sign 798.386 $\pm$ 0.134  $\chi^2$ /NDF: 1329131.0/25

All: 798.235 $\pm$ 0.095  $\chi^2$ /NDF: 3136268.0/50

- sign 798.085 $\pm$ 0.134  $\chi^2$ /NDF: 1807134.5/24



# asym\_atr1\_mean vs Slug



Right In: 2181.677 $\pm$ 1149.096  $\chi^2$ /NDF: 15.7/17

Left Out: 3139.358 $\pm$ 680.222  $\chi^2$ /NDF: 38.3/24

Right Out: -2715.133 $\pm$ 1051.149  $\chi^2$ /NDF: 11.6/20

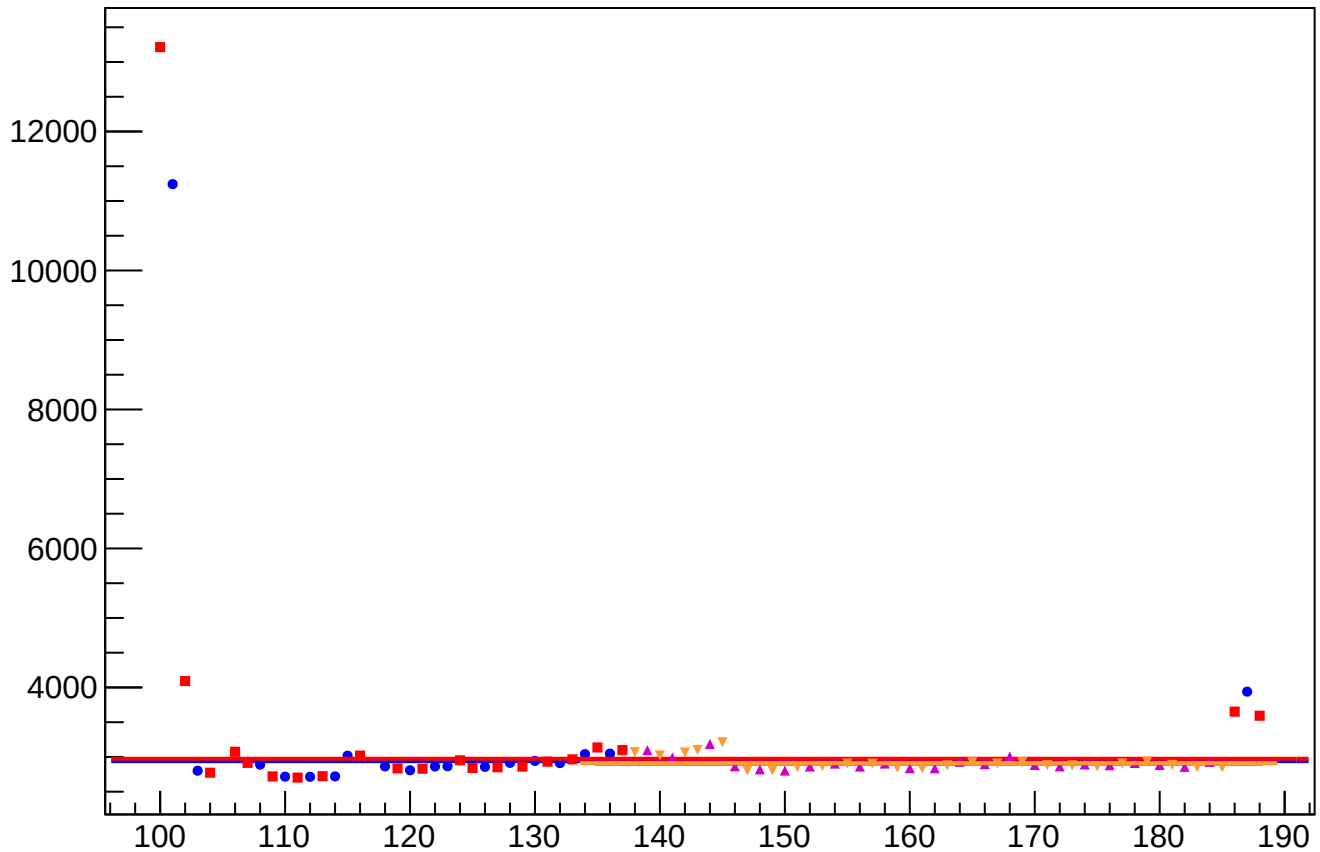
Left In: -2659.828 $\pm$ 693.121  $\chi^2$ /NDF: 36.9/22

+ sign 2890.849 $\pm$ 585.351  $\chi^2$ /NDF: 54.5/42

All: 75.066 $\pm$ 411.515  $\chi^2$ /NDF: 148.7/86

- sign -2676.587 $\pm$ 578.647  $\chi^2$ /NDF: 48.5/43

# asym\_atr1\_rms vs Slug



Right In: 2939.633+/-0.813  $\chi^2/\text{NDF}$ : 682515.9/17

Left Out: 2910.362+/-0.481  $\chi^2/\text{NDF}$ : 36080.5/24

Right Out: 2974.079+/-0.743  $\chi^2/\text{NDF}$ : 254238.6/20

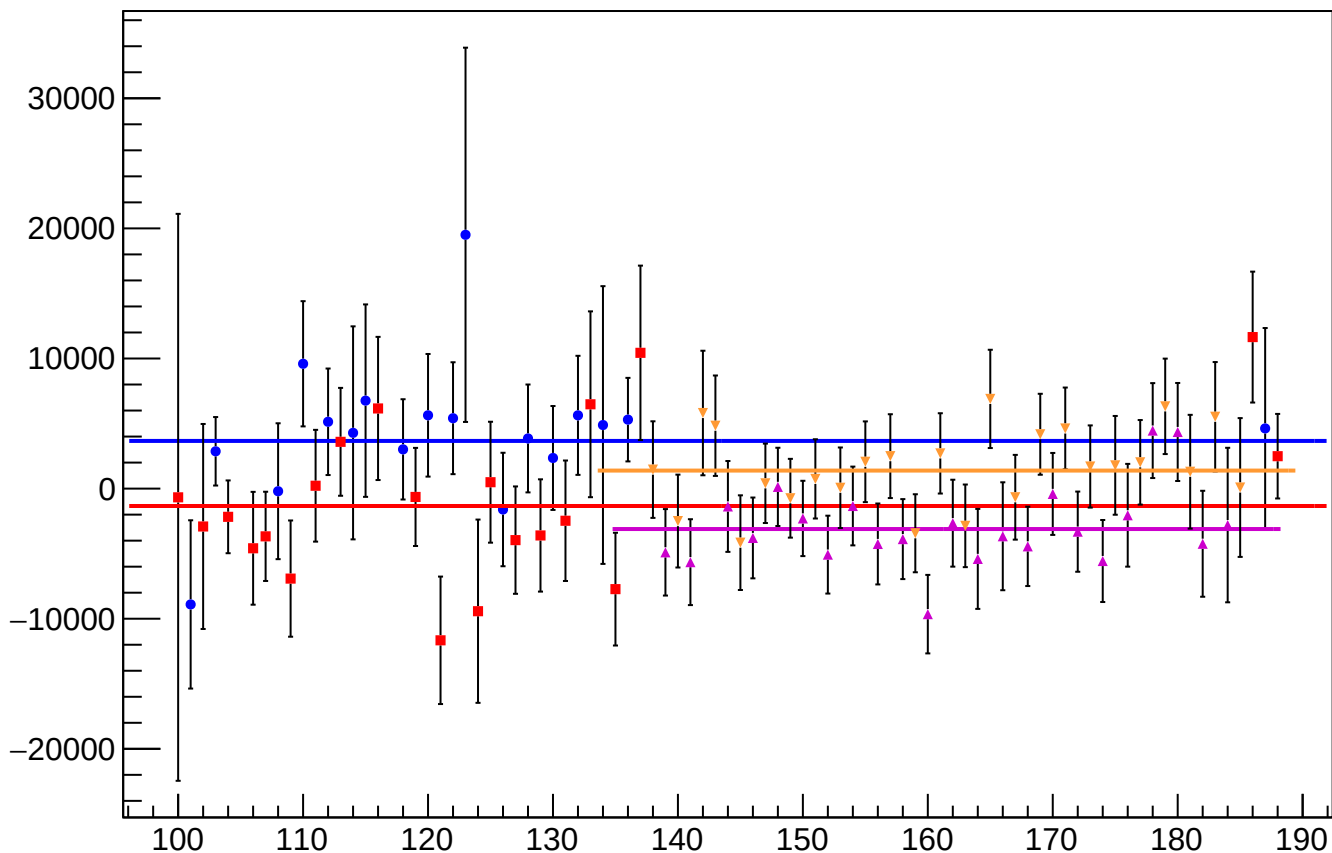
Left In: 2904.499+/-0.490  $\chi^2/\text{NDF}$ : 30423.1/22

+ sign 2917.957+/-0.414  $\chi^2/\text{NDF}$ : 719557.4/42

All: 2921.815+/-0.291  $\chi^2/\text{NDF}$ : 1010498.6/86

- sign 2925.585+/-0.409  $\chi^2/\text{NDF}$ : 290769.5/43

# dit\_asym\_atr2\_mean vs Slug



Right In: 3664.509 $\pm$ 1080.727  $\chi^2$ /NDF: 9.9/17

Left Out: 1386.275 $\pm$ 684.647  $\chi^2$ /NDF:18.0/24

Right Out: -1336.427 $\pm$ 977.450  $\chi^2$ /NDF: 27.3/20

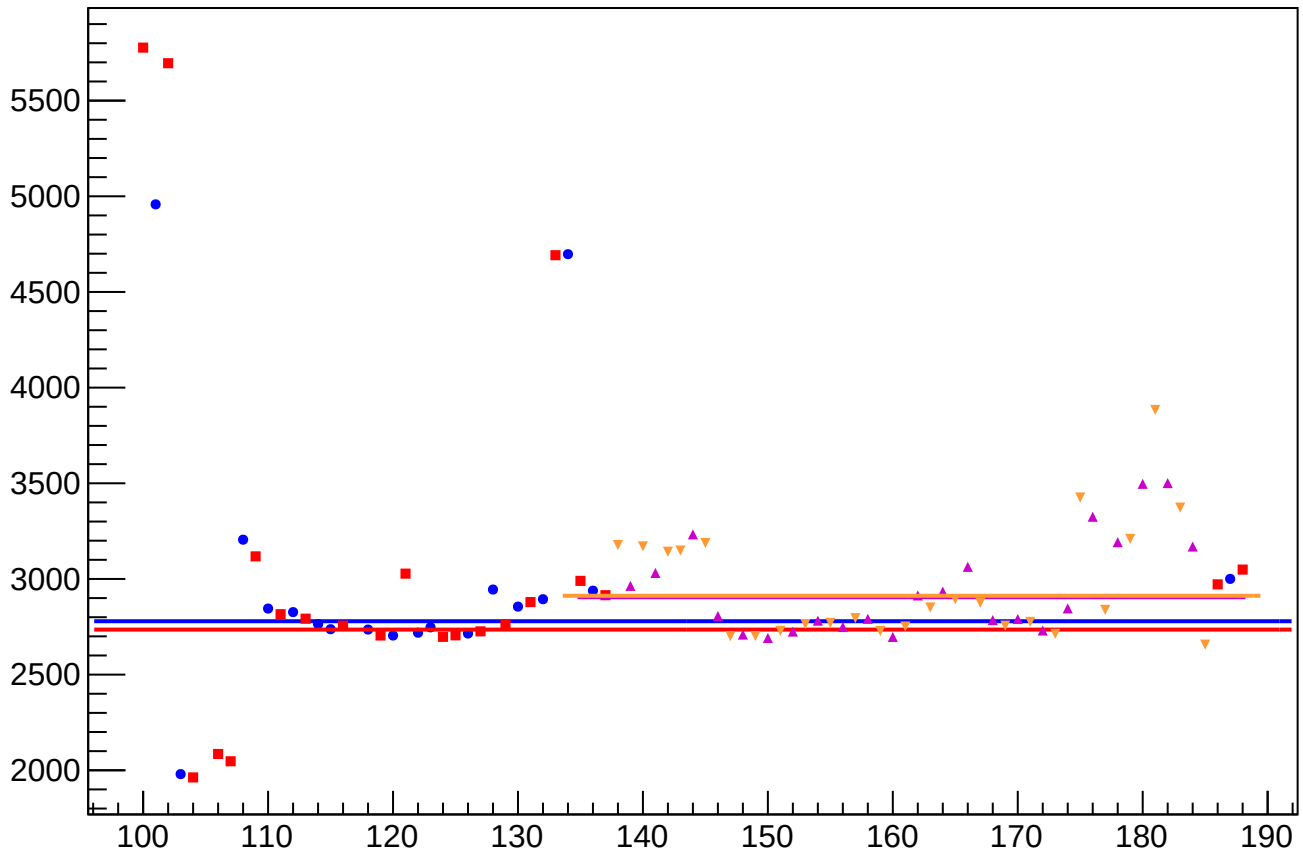
Left In: -3106.878 $\pm$ 695.685  $\chi^2$ /NDF:18.4/22

+ sign 2038.743 $\pm$ 578.358  $\chi^2$ /NDF: 31.0/42

All: -282.400 $\pm$ 404.807  $\chi^2$ /NDF: 110.5/86

- sign -2511.584 $\pm$ 566.785  $\chi^2$ /NDF: 47.9/43

# dit\_asym\_atr2\_rms vs Slug



Right In: 2779.044+/-0.764  $\chi^2/\text{NDF}$ : 503356.9/17

Left Out: 2912.211+/-0.484  $\chi^2/\text{NDF}$ : 290908.5/24

Right Out: 2735.275+/-0.691  $\chi^2/\text{NDF}$ : 806662.0/20

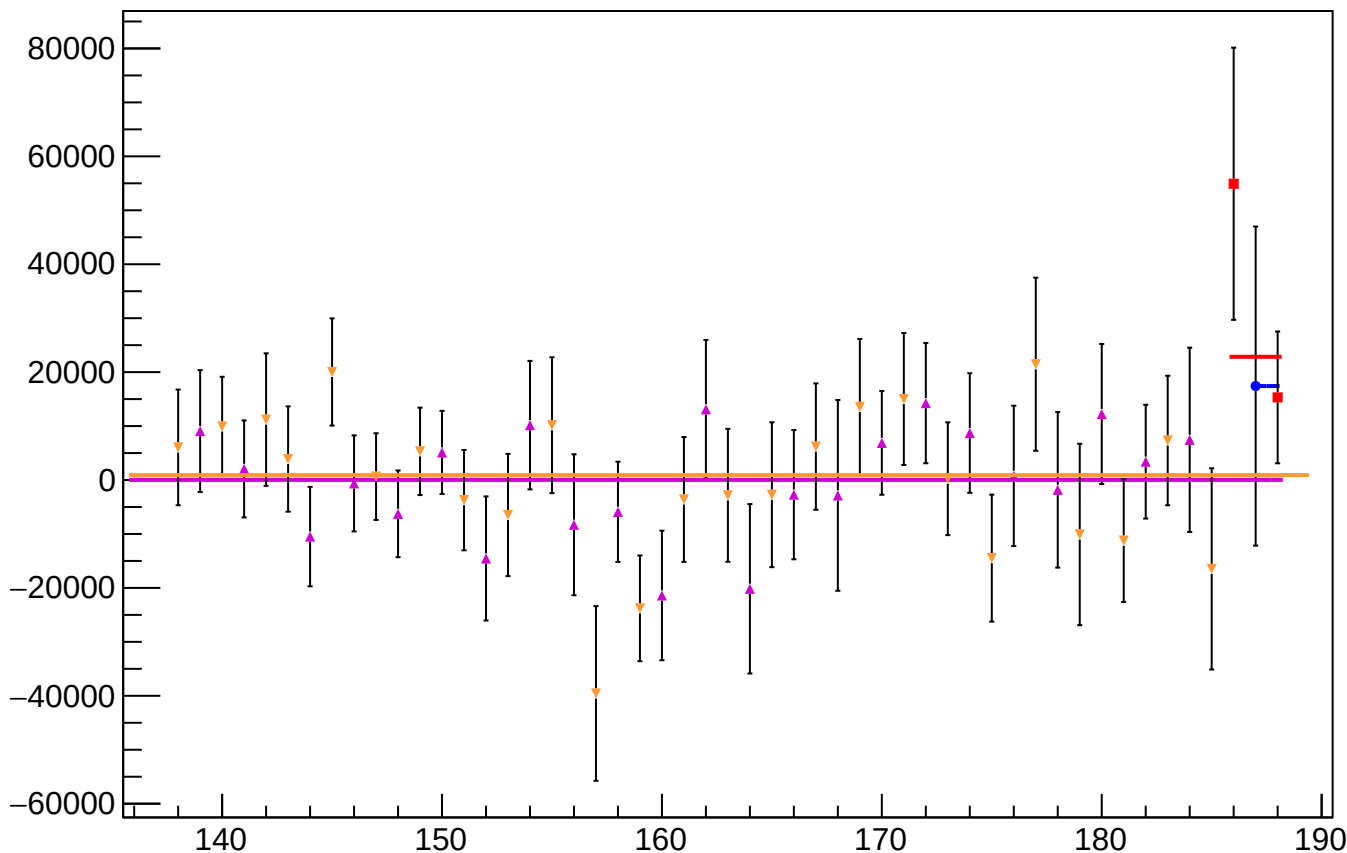
Left In: 2904.472+/-0.492  $\chi^2/\text{NDF}$ : 217578.9/22

+ sign 2874.073+/-0.409  $\chi^2/\text{NDF}$ : 815934.9/42

All: 2860.547+/-0.286  $\chi^2/\text{NDF}$ : 1882112.5/86

- sign 2847.560+/-0.401  $\chi^2/\text{NDF}$ : 1064033.4/43

# asym\_atr2\_correction\_mean vs Slug



Right In: 17416.307 $\pm$ 29570.292  $\chi^2$ /NDF: 0.0/0

Left Out: 916.096 $\pm$ 2238.762  $\chi^2$ /NDF:28.7/24

Right Out: 22842.825 $\pm$ 10997.790  $\chi^2$ /NDF: 2.0/1

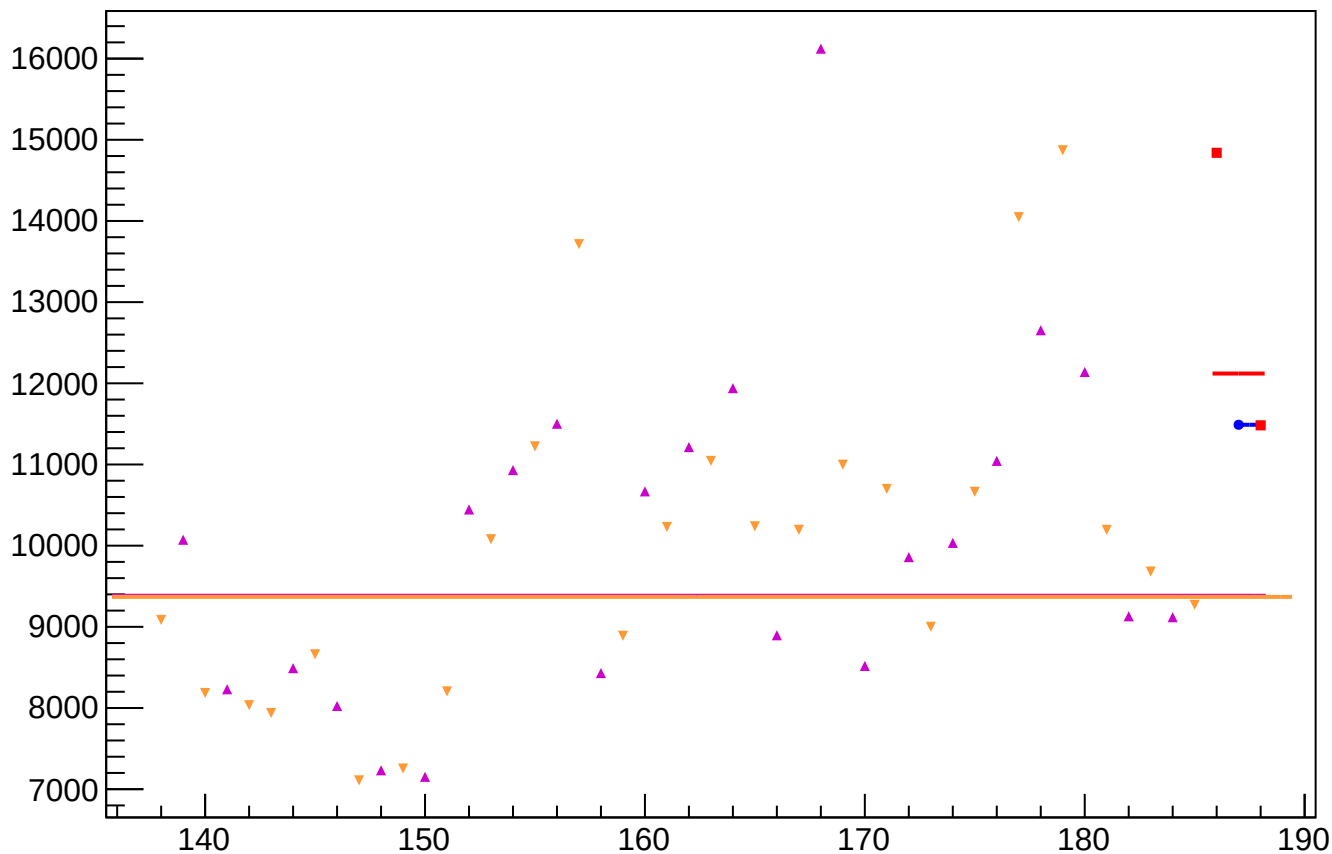
Left In: 25.729 $\pm$ 2280.428  $\chi^2$ /NDF:16.1/22

+ sign 1010.136 $\pm$ 2232.373  $\chi^2$ /NDF: 29.0/25

All: 988.232 $\pm$ 1578.723  $\chi^2$ /NDF: 51.3/50

- sign 966.318 $\pm$ 2232.930  $\chi^2$ /NDF: 22.2/24

# asym\_atr2\_correction\_rms vs Slug



Right In: 11489.144+/-20.909  $\chi^2$ /NDF: 0.0/0

Left Out: 9369.034+/-1.583  $\chi^2$ /NDF:1183012.4/24

Right Out: 12120.561+/-7.777  $\chi^2$ /NDF: 28684.0/1

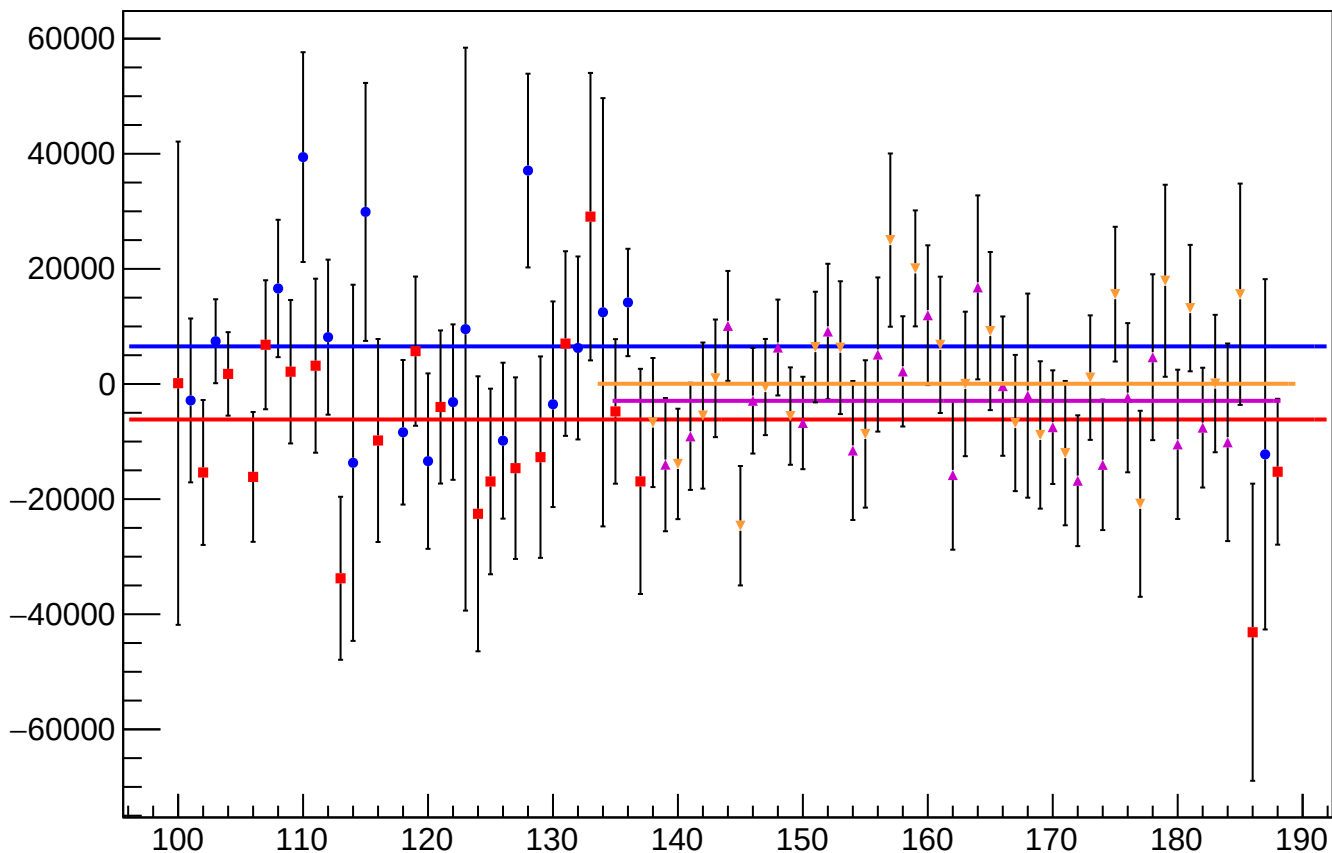
Left In: 9382.727+/-1.613  $\chi^2$ /NDF:1205648.8/22

+ sign 9381.117+/-1.579  $\chi^2$ /NDF: 1193234.8/25

All: 9438.339+/-1.116  $\chi^2$ /NDF: 2549033.1/50

- sign 9495.589+/-1.579  $\chi^2$ /NDF: 1353169.5/24

# asym\_atr2\_mean vs Slug



Right In: 6535.091 $\pm$ 3366.350  $\chi^2$ /NDF: 15.7/17

Left Out: 43.265 $\pm$ 2290.867  $\chi^2$ /NDF: 25.9/24

Right Out: -6165.222 $\pm$ 3051.517  $\chi^2$ /NDF: 16.3/20

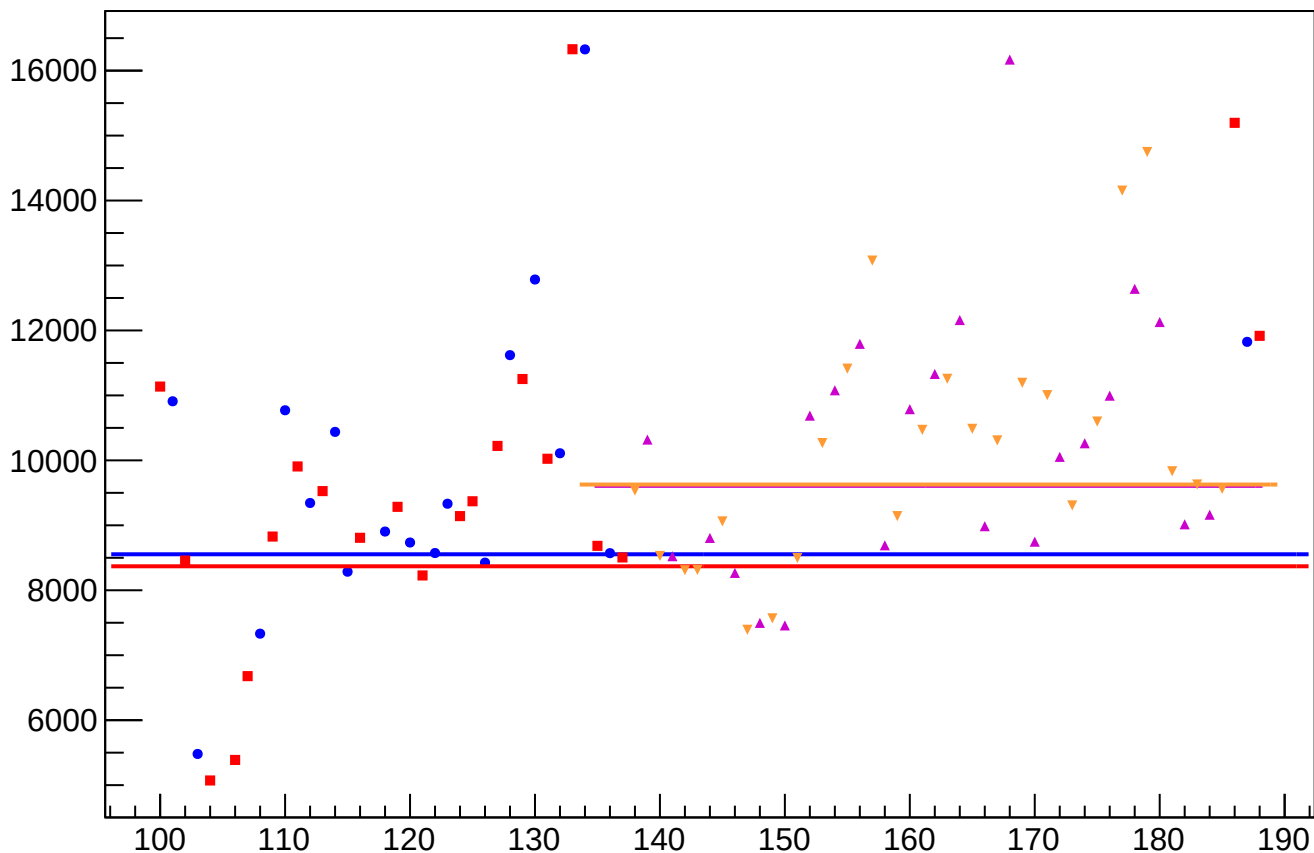
Left In: -2925.533 $\pm$ 2330.587  $\chi^2$ /NDF: 14.6/22

+ sign 2098.076 $\pm$ 1893.921  $\chi^2$ /NDF: 44.1/42

All: -1079.769 $\pm$ 1324.199  $\chi^2$ /NDF: 81.3/86

- sign -4119.072 $\pm$ 1852.177  $\chi^2$ /NDF: 31.6/43

# asym\_atr2\_rms vs Slug



Right In: 8554.182 $\pm$ 2.380  $\chi^2$ /NDF: 785999.8/17

Left Out: 9627.824 $\pm$ 1.620  $\chi^2$ /NDF:1004641.7/24

Right Out: 8369.197 $\pm$ 2.158  $\chi^2$ /NDF: 1269967.3/20

Left In: 9607.553 $\pm$ 1.648  $\chi^2$ /NDF:1085465.7/22

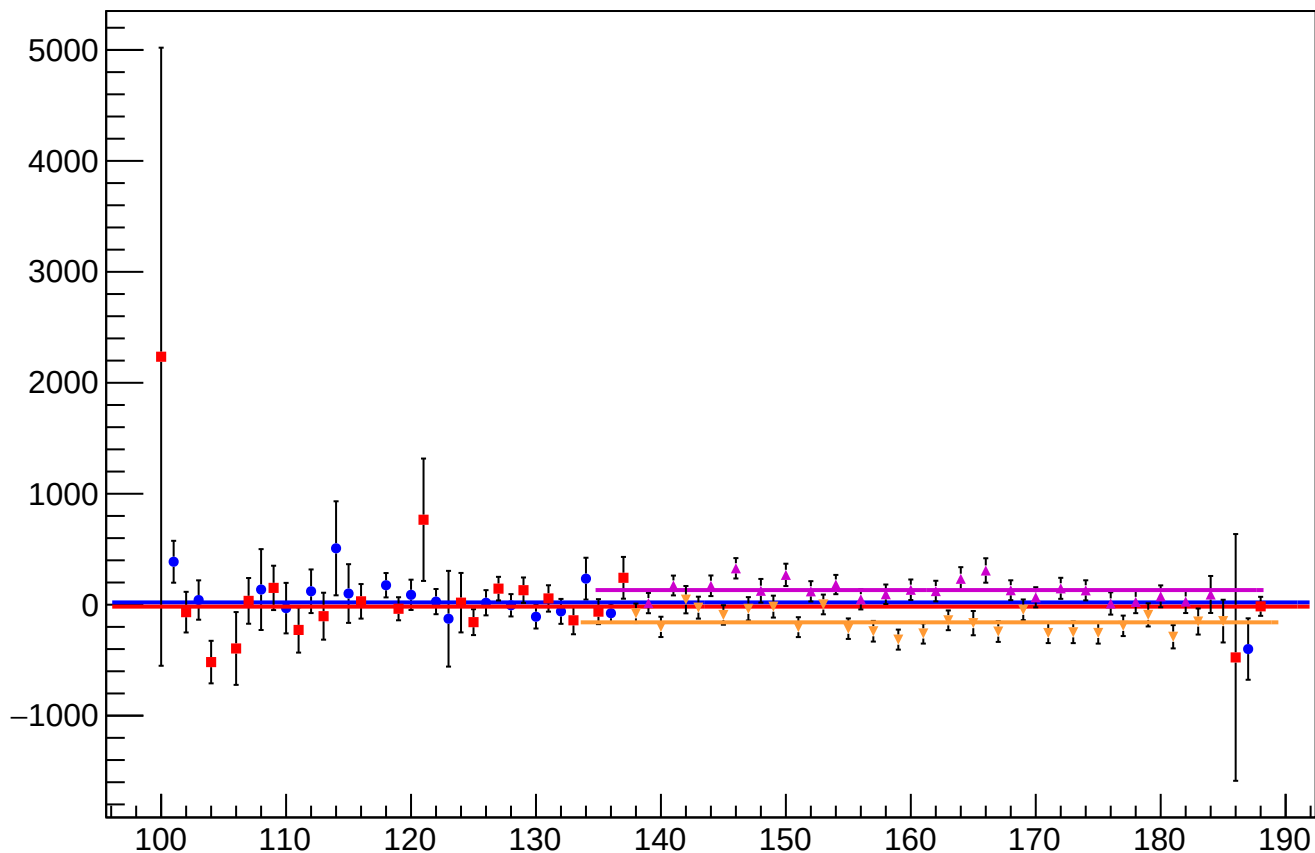
+ sign 9287.992 $\pm$ 1.339  $\chi^2$ /NDF: 1929686.1/42

All: 9218.127 $\pm$ 0.936  $\chi^2$ /NDF: 4498481.1/86

- sign 9151.310 $\pm$ 1.310  $\chi^2$ /NDF: 2563470.6/43



# dit\_asym\_sam1\_mean vs Slug



Right In: 20.585 $\pm$ 33.774  $\chi^2$ /NDF: 14.9/17

Left Out: -158.948 $\pm$ 19.453  $\chi^2$ /NDF:25.8/24

Right Out: -17.385 $\pm$ 32.819  $\chi^2$ /NDF: 22.0/20

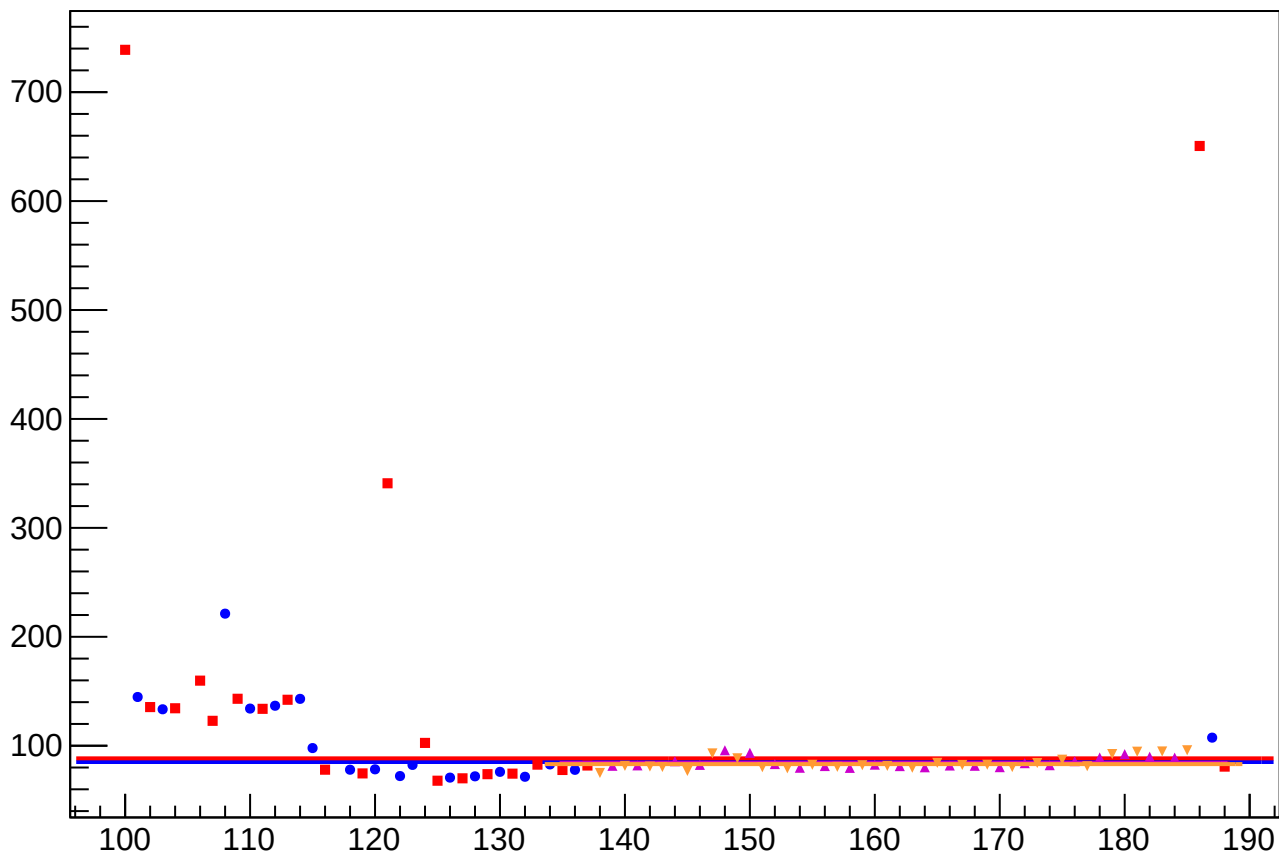
Left In: 131.879 $\pm$ 20.076  $\chi^2$ /NDF:17.8/22

+ sign -114.225 $\pm$ 16.857  $\chi^2$ /NDF: 61.9/42

All: -13.121 $\pm$ 12.014  $\chi^2$ /NDF: 189.9/86

- sign 91.234 $\pm$ 17.126  $\chi^2$ /NDF: 54.8/43

# dit\_asym\_sam1\_rms vs Slug



Right In: 85.075 $\pm$ 0.024  $\chi^2$ /NDF: 1077650.8/17

Left Out: 83.126 $\pm$ 0.014  $\chi^2$ /NDF: 138741.0/24

Right Out: 88.413 $\pm$ 0.023  $\chi^2$ /NDF: 2086965.3/20

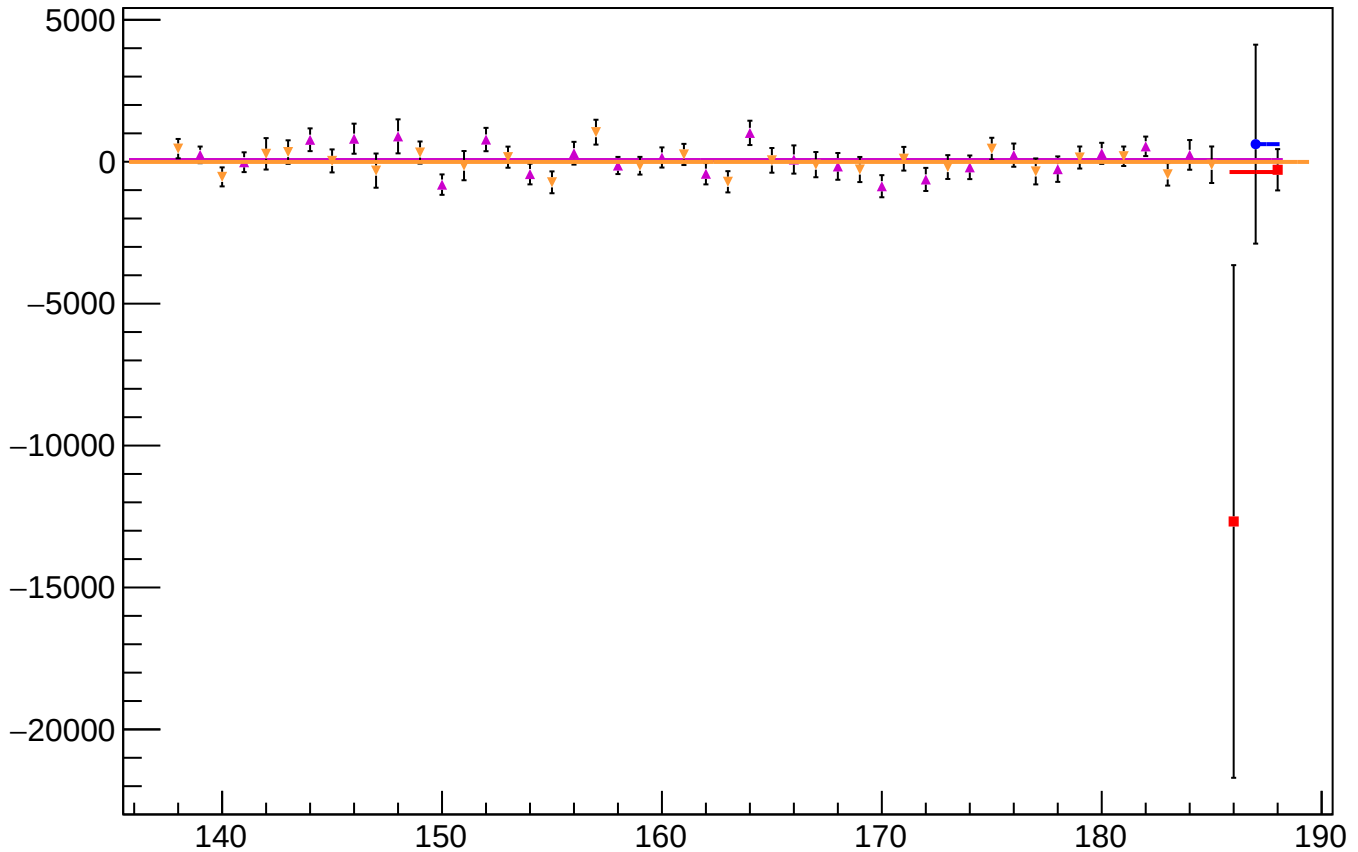
Left In: 84.108 $\pm$ 0.014  $\chi^2$ /NDF: 96934.3/22

+ sign 83.612 $\pm$ 0.012  $\chi^2$ /NDF: 1221389.8/42

All: 84.433 $\pm$ 0.008  $\chi^2$ /NDF: 3439980.7/86

- sign 85.281 $\pm$ 0.012  $\chi^2$ /NDF: 2208942.4/43

# asym\_sam1\_correction\_mean vs Slug



Right In:  $619.744 \pm 3504.878$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-6.627 \pm 81.138$   $\chi^2/\text{NDF}$ : 24.4/24

Right Out:  $-362.565 \pm 725.075$   $\chi^2/\text{NDF}$ : 1.9/1

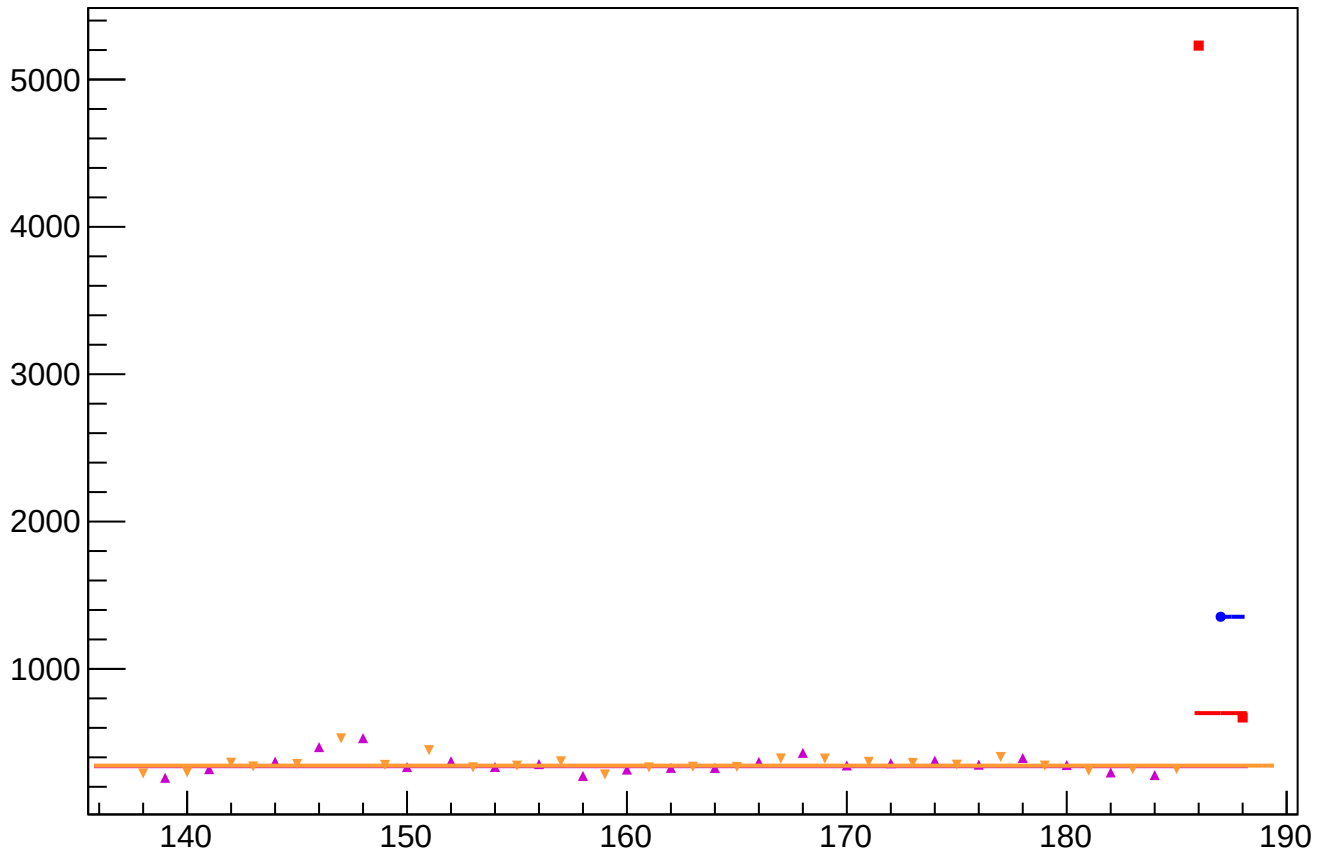
Left In:  $59.971 \pm 82.046$   $\chi^2/\text{NDF}$ : 38.0/22

+ sign  $-6.292 \pm 81.116$   $\chi^2/\text{NDF}$ : 24.4/25

All:  $24.015 \pm 57.502$   $\chi^2/\text{NDF}$ : 64.9/50

- sign  $54.630 \pm 81.526$   $\chi^2/\text{NDF}$ : 40.2/24

# asym\_sam1\_correction\_rms vs Slug



Right In: 1353.985+/-2.478  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 343.620+/-0.057  $\chi^2/\text{NDF}$ : 571090.7/24

Right Out: 699.949+/-0.513  $\chi^2/\text{NDF}$ : 506501.8/1

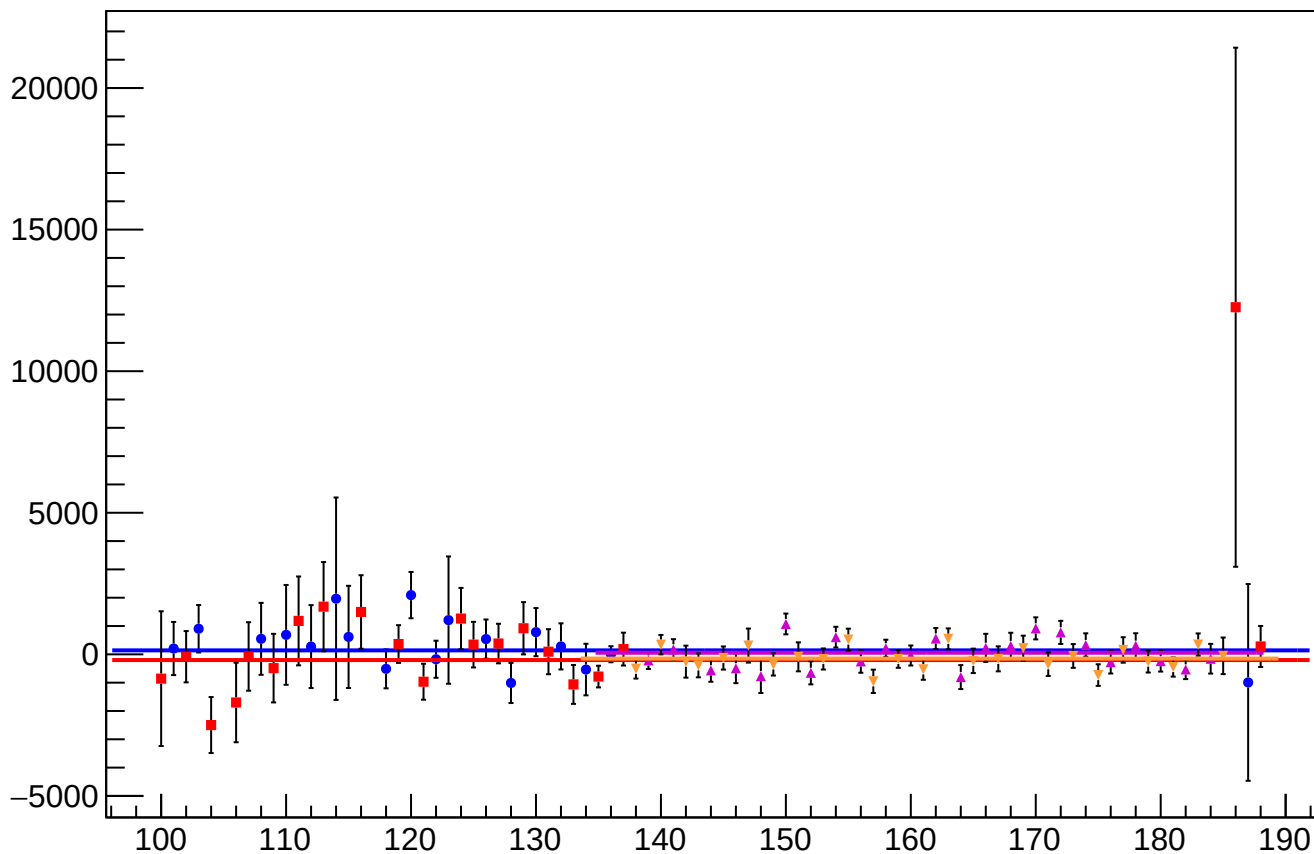
Left In: 339.804+/-0.058  $\chi^2/\text{NDF}$ : 799750.5/22

+ sign 344.161+/-0.057  $\chi^2/\text{NDF}$ : 737205.5/25

All: 344.259+/-0.041  $\chi^2/\text{NDF}$ : 2530649.0/50

- sign 344.357+/-0.058  $\chi^2/\text{NDF}$ : 1793437.7/24

# asym\_sam1\_mean vs Slug



Right In: 140.471+/-178.999  $\chi^2/\text{NDF}$ : 12.9/17

Left Out: -148.809+/-81.017  $\chi^2/\text{NDF}$ : 22.0/24

Right Out: -201.805+/-178.296  $\chi^2/\text{NDF}$ : 24.0/20

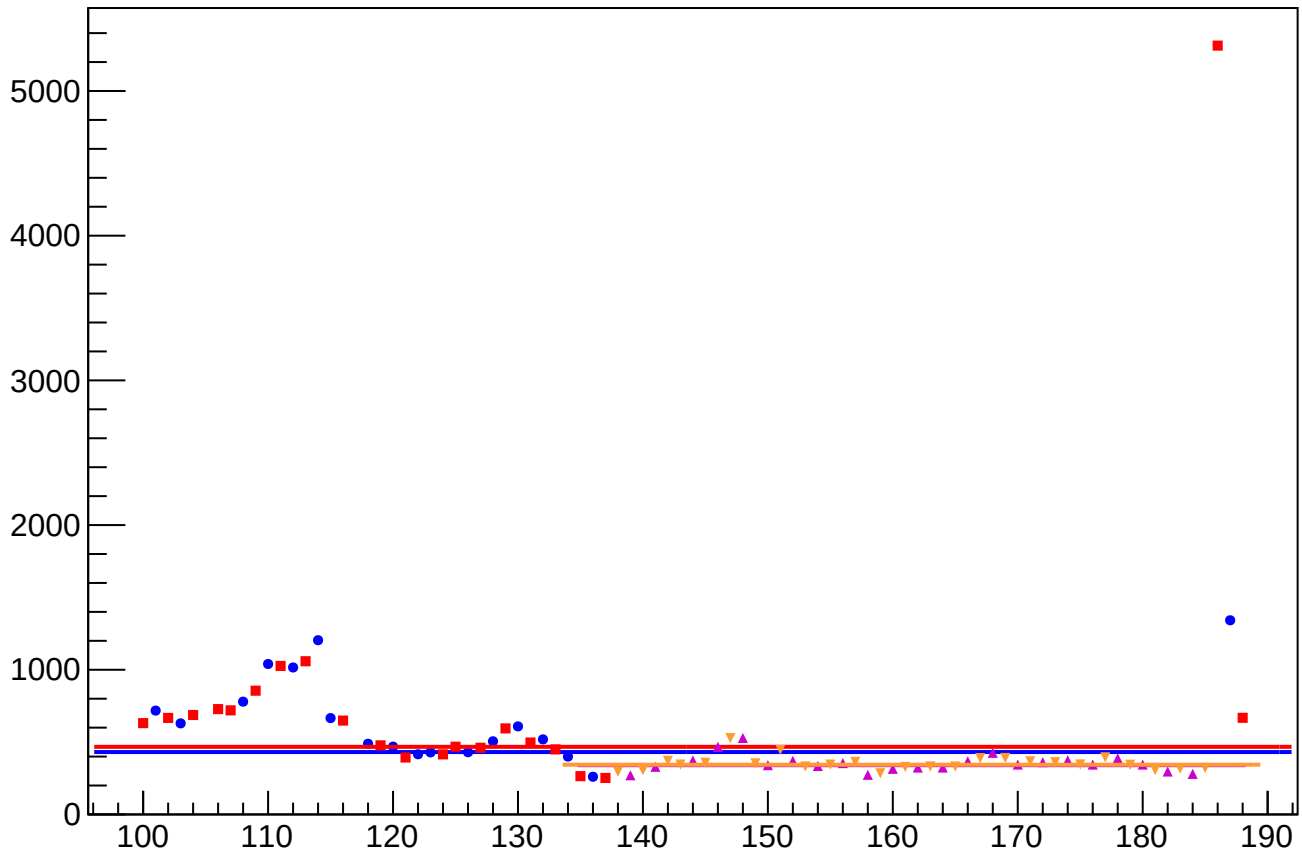
Left In: 56.402+/-82.155  $\chi^2/\text{NDF}$ : 39.7/22

+ sign -99.624+/-73.809  $\chi^2/\text{NDF}$ : 37.1/42

All: -44.823+/-52.473  $\chi^2/\text{NDF}$ : 103.6/86

- sign 11.182+/-74.615  $\chi^2/\text{NDF}$ : 65.4/43

# asym\_sam1\_rms vs Slug



Right In: 431.281+/-0.127  $\chi^2/\text{NDF}$ : 2150179.2/17

Left Out: 343.762+/-0.057  $\chi^2/\text{NDF}$ : 539246.3/24

+ sign 358.642+/-0.052  $\chi^2/\text{NDF}$ : 3086246.9/42

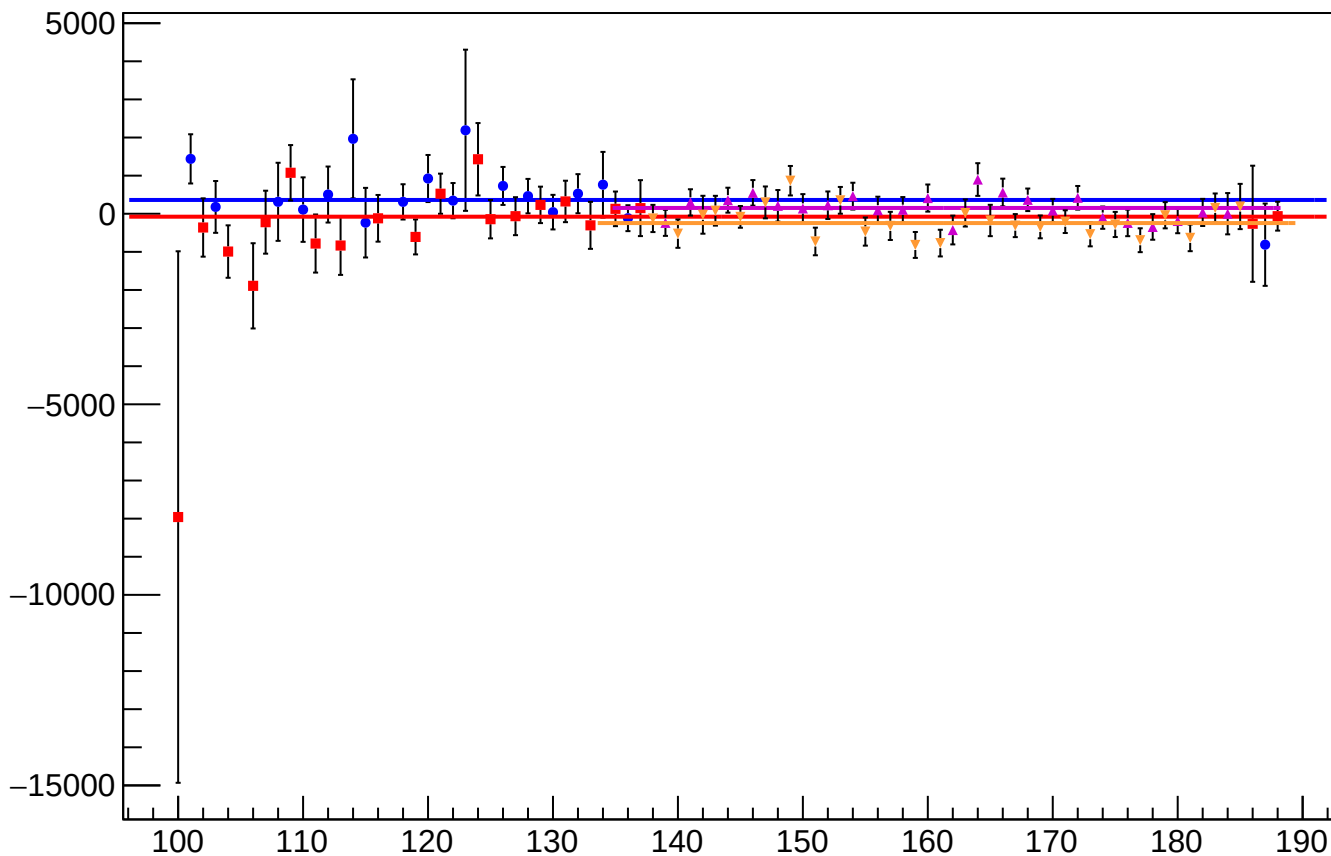
Right Out: 467.417+/-0.126  $\chi^2/\text{NDF}$ : 2764814.2/20

All: 360.671+/-0.037  $\chi^2/\text{NDF}$ : 7426836.4/86

Left In: 340.519+/-0.058  $\chi^2/\text{NDF}$ : 737049.6/22

- sign 362.743+/-0.053  $\chi^2/\text{NDF}$ : 4337536.0/43

# dit\_asym\_sam2\_mean vs Slug



Right In:  $361.818 \pm 140.000$   $\chi^2/\text{NDF}$ : 10.6/17

Left Out:  $-244.459 \pm 70.636$   $\chi^2/\text{NDF}$ : 28.9/24

Right Out:  $-77.188 \pm 133.658$   $\chi^2/\text{NDF}$ : 16.8/20

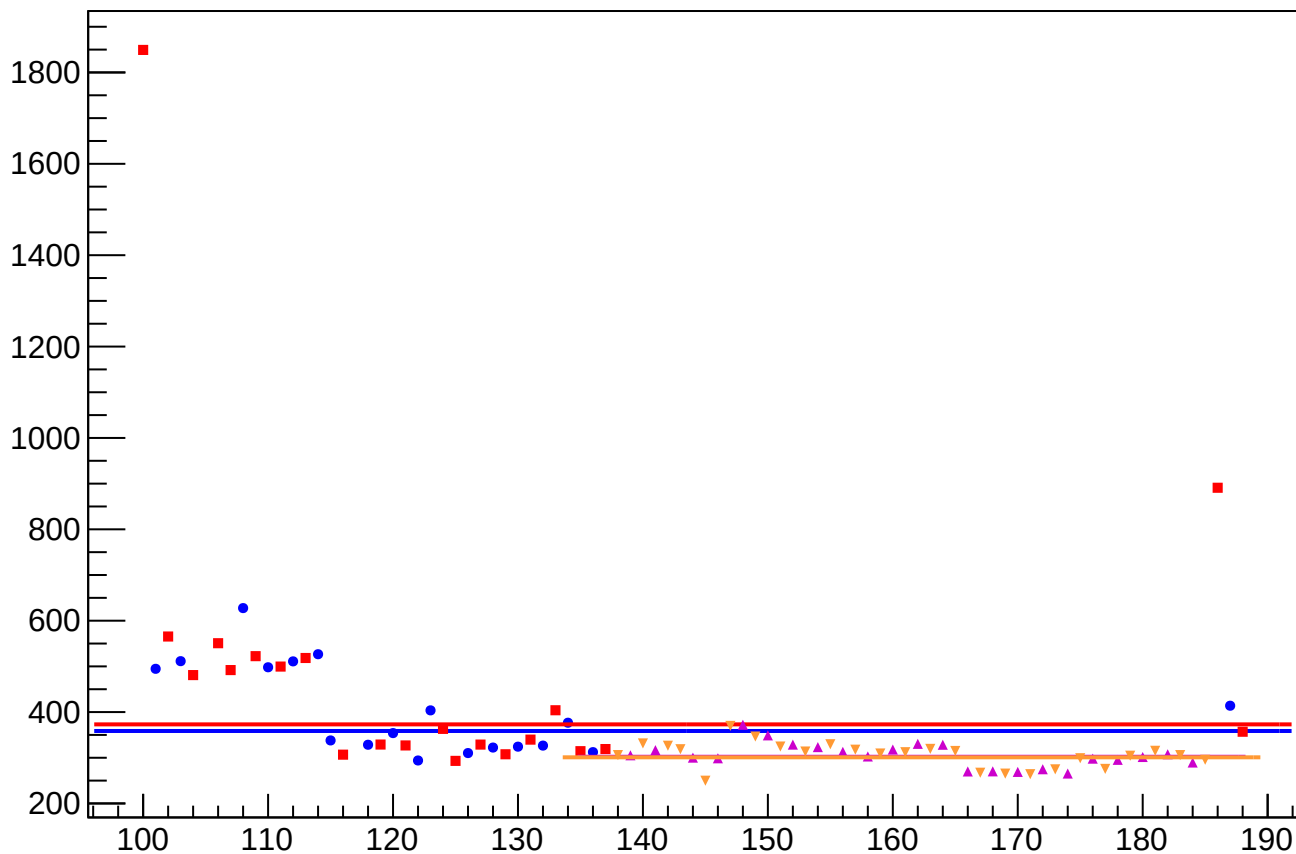
Left In:  $152.030 \pm 72.312$   $\chi^2/\text{NDF}$ : 18.2/22

+ sign  $-121.439 \pm 63.064$   $\chi^2/\text{NDF}$ : 54.5/42

All:  $-11.594 \pm 44.781$   $\chi^2/\text{NDF}$ : 97.8/86

- sign  $100.129 \pm 63.600$   $\chi^2/\text{NDF}$ : 37.2/43

# dit\_asym\_sam2\_rms vs Slug



Right In: 358.610 $\pm$ 0.099  $\chi^2$ /NDF: 635006.3/17

Left Out: 300.961 $\pm$ 0.050  $\chi^2$ /NDF:322200.5/24

Right Out: 373.077 $\pm$ 0.095  $\chi^2$ /NDF: 1020010.1/20

Left In: 302.180 $\pm$ 0.051  $\chi^2$ /NDF:247468.9/22

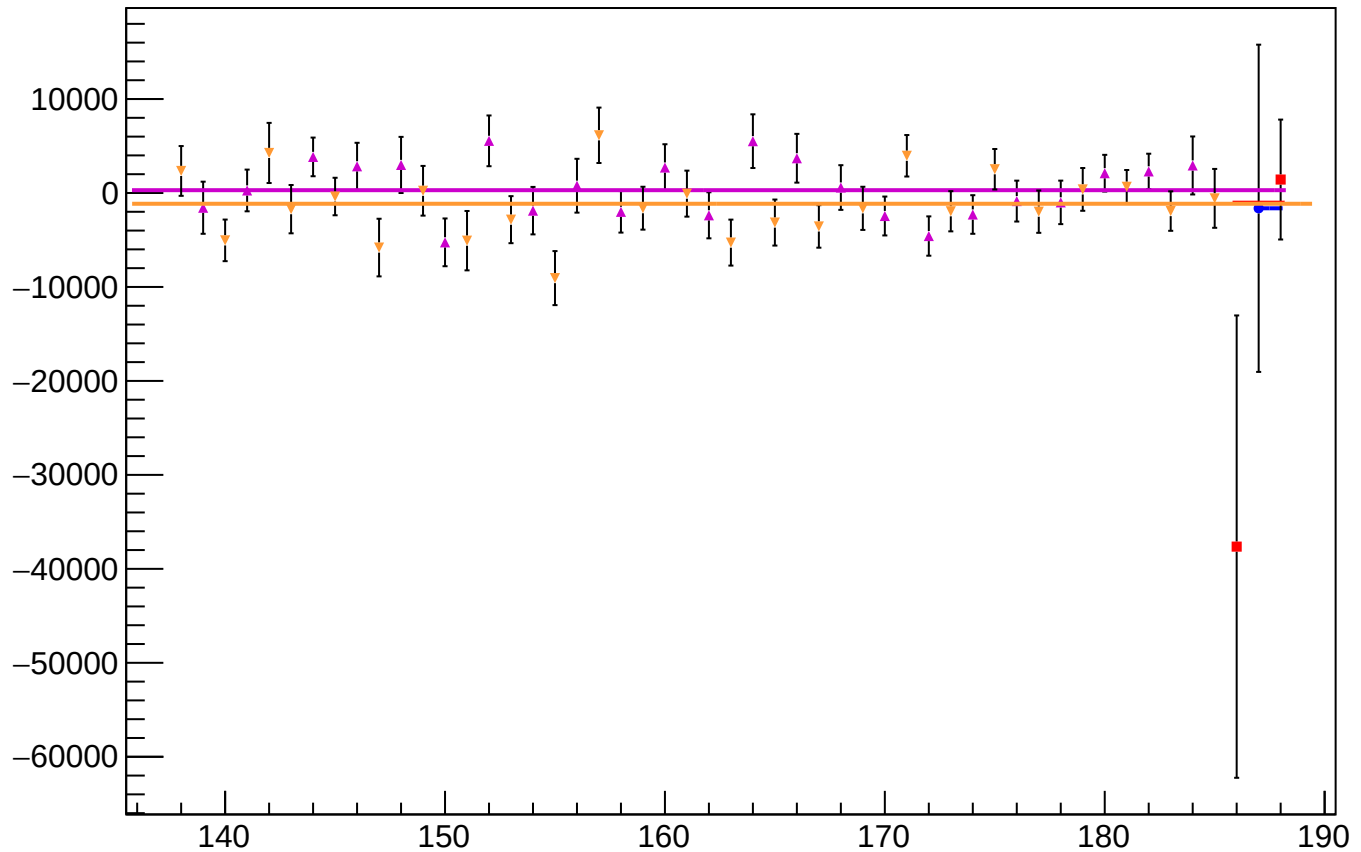
+ sign 312.658 $\pm$ 0.045  $\chi^2$ /NDF: 1227518.9/42

All: 315.422 $\pm$ 0.032  $\chi^2$ /NDF: 2938052.1/86

- sign 318.233 $\pm$ 0.045  $\chi^2$ /NDF: 1702785.8/43



# asym\_sam2\_correction\_mean vs Slug



Right In: -1628.344 $\pm$ 17412.851  $\chi^2$ /NDF: 0.0/0

Left Out: -1146.466 $\pm$ 479.950  $\chi^2$ /NDF: 41.3/24

Right Out: -1031.435 $\pm$ 6176.432  $\chi^2$ /NDF: 2.4/1

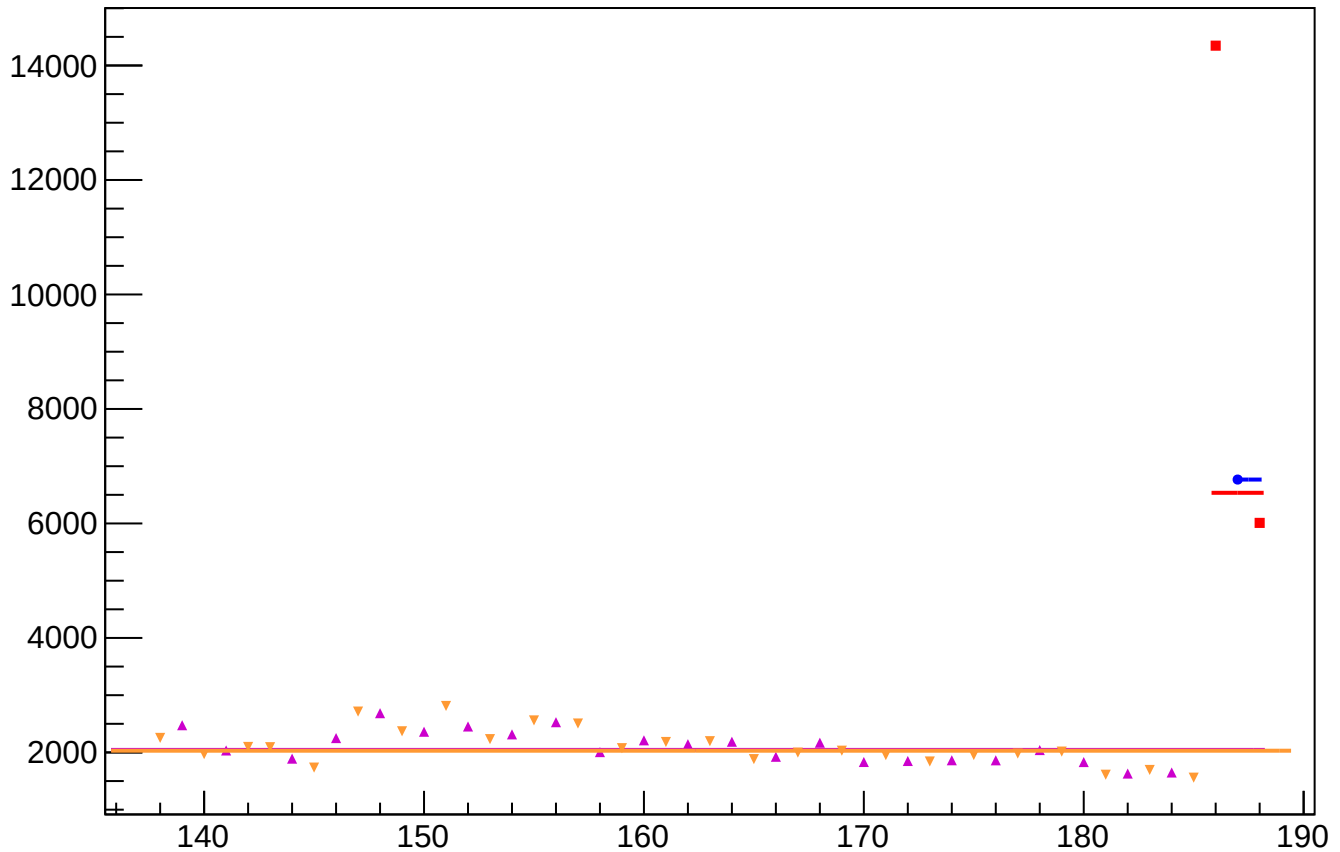
Left In: 298.915 $\pm$ 491.476  $\chi^2$ /NDF: 35.0/22

+ sign -1146.832 $\pm$ 479.768  $\chi^2$ /NDF: 41.3/25

All: -443.201 $\pm$ 342.783  $\chi^2$ /NDF: 83.0/50

- sign 290.545 $\pm$ 489.927  $\chi^2$ /NDF: 37.4/24

# asym\_sam2\_correction\_rms vs Slug



Right In: 6766.758+/-12.313  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 2030.179+/-0.339  $\chi^2/\text{NDF}$ : 702523.9/24

Right Out: 6535.314+/-4.367  $\chi^2/\text{NDF}$ : 215153.3/1

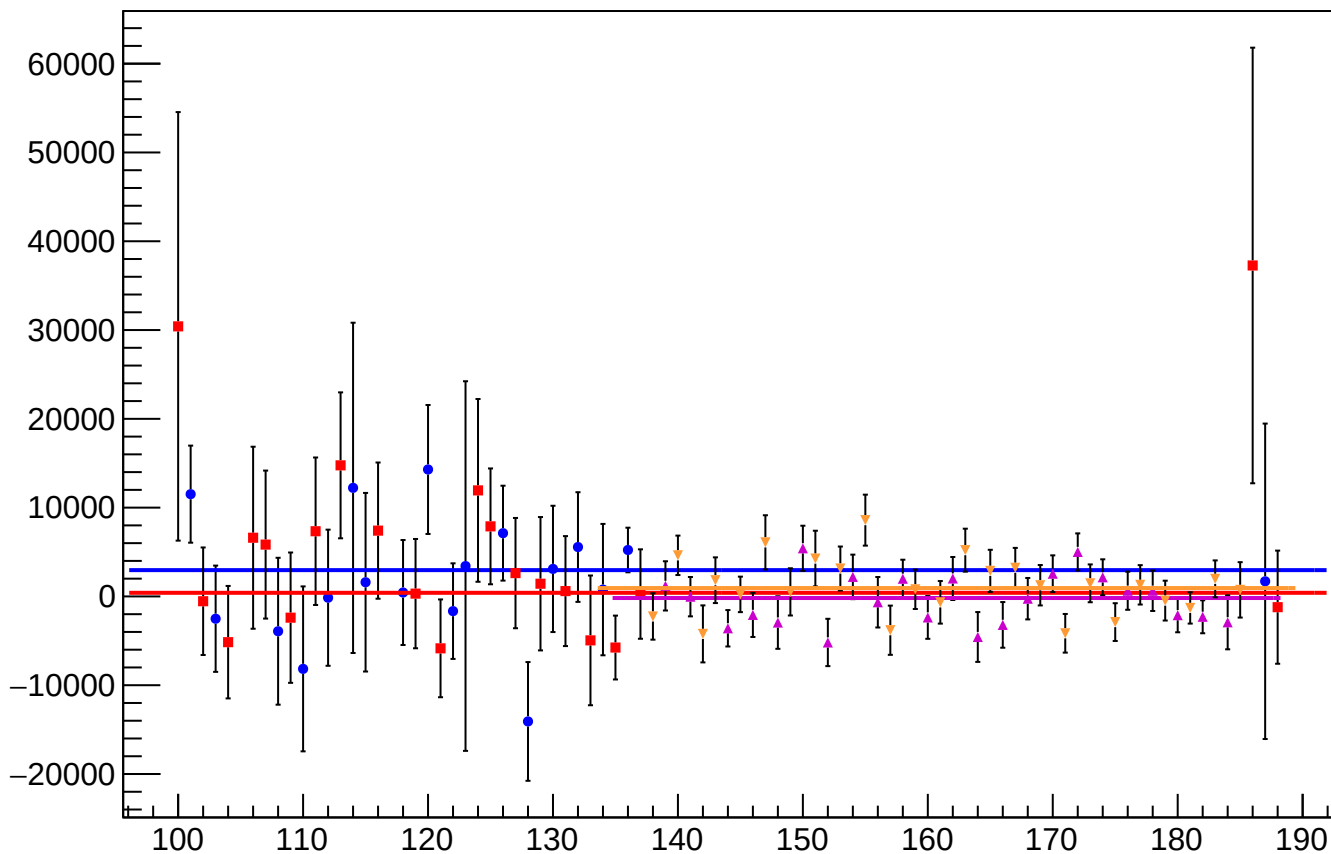
Left In: 2044.056+/-0.348  $\chi^2/\text{NDF}$ : 570535.5/22

+ sign 2033.775+/-0.339  $\chi^2/\text{NDF}$ : 850397.3/25

All: 2052.641+/-0.242  $\chi^2/\text{NDF}$ : 2693275.0/50

- sign 2072.315+/-0.346  $\chi^2/\text{NDF}$ : 1836560.1/24

# asym\_sam2\_mean vs Slug



Right In: 2960.858 $\pm$ 1435.776  $\chi^2$ /NDF: 17.4/17

Left Out: 942.775 $\pm$ 474.439  $\chi^2$ /NDF: 38.3/24

Right Out: 407.259 $\pm$ 1463.977  $\chi^2$ /NDF: 17.7/20

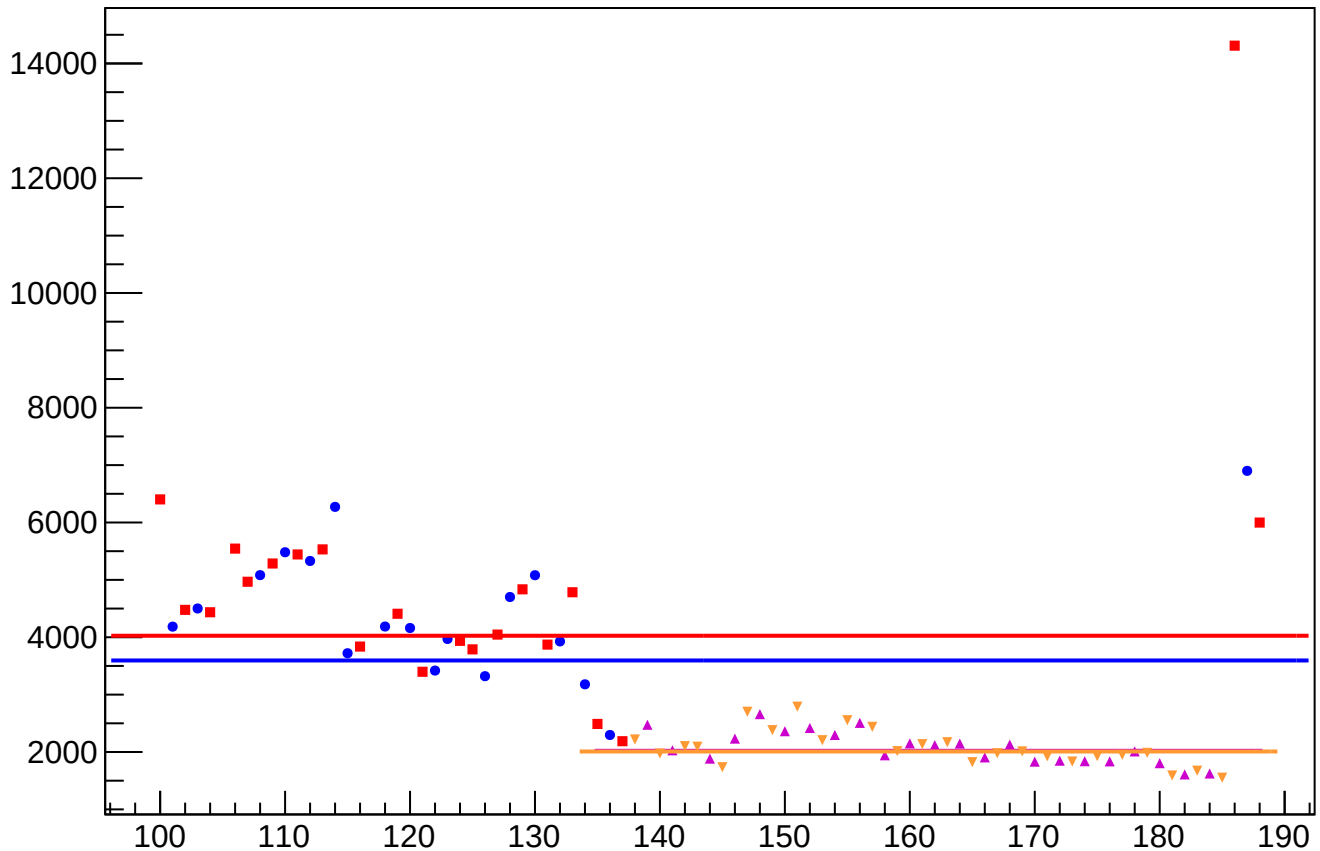
Left In: -180.087 $\pm$ 486.112  $\chi^2$ /NDF: 32.9/22

+ sign 1141.439 $\pm$ 450.482  $\chi^2$ /NDF: 57.4/42

All: 524.885 $\pm$ 322.310  $\chi^2$ /NDF: 112.0/86

- sign -121.760 $\pm$ 461.343  $\chi^2$ /NDF: 50.7/43

# asym\_sam2\_rms vs Slug



Right In: 3595.205+/-1.015  $\chi^2/\text{NDF}$ : 1158425.5/17

Left Out: 2008.897+/-0.335  $\chi^2/\text{NDF}$ : 709254.4/24

Right Out: 4026.107+/-1.035  $\chi^2/\text{NDF}$ : 1551290.2/20

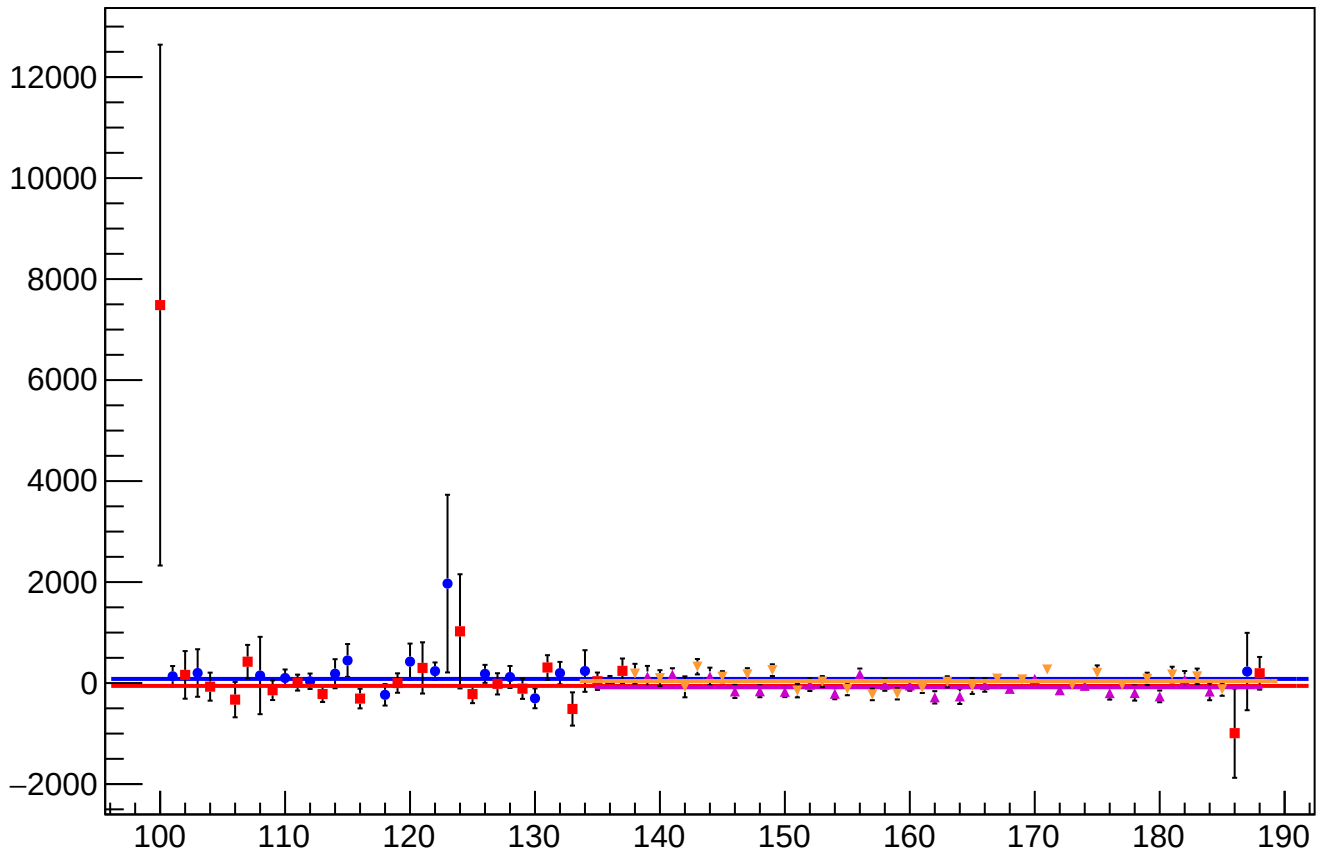
Left In: 2020.887+/-0.344  $\chi^2/\text{NDF}$ : 576363.5/22

+ sign 2165.057+/-0.319  $\chi^2/\text{NDF}$ : 4068706.4/42

All: 2191.884+/-0.228  $\chi^2/\text{NDF}$ : 9590467.3/86

- sign 2220.020+/-0.326  $\chi^2/\text{NDF}$ : 5507229.3/43

# dit\_asym\_sam3\_mean vs Slug



Right In: 82.522 $\pm$ 51.788  $\chi^2$ /NDF: 11.6/17

Left Out: 41.847 $\pm$ 23.035  $\chi^2$ /NDF: 39.1/24

Right Out: -55.666 $\pm$ 52.371  $\chi^2$ /NDF: 18.2/20

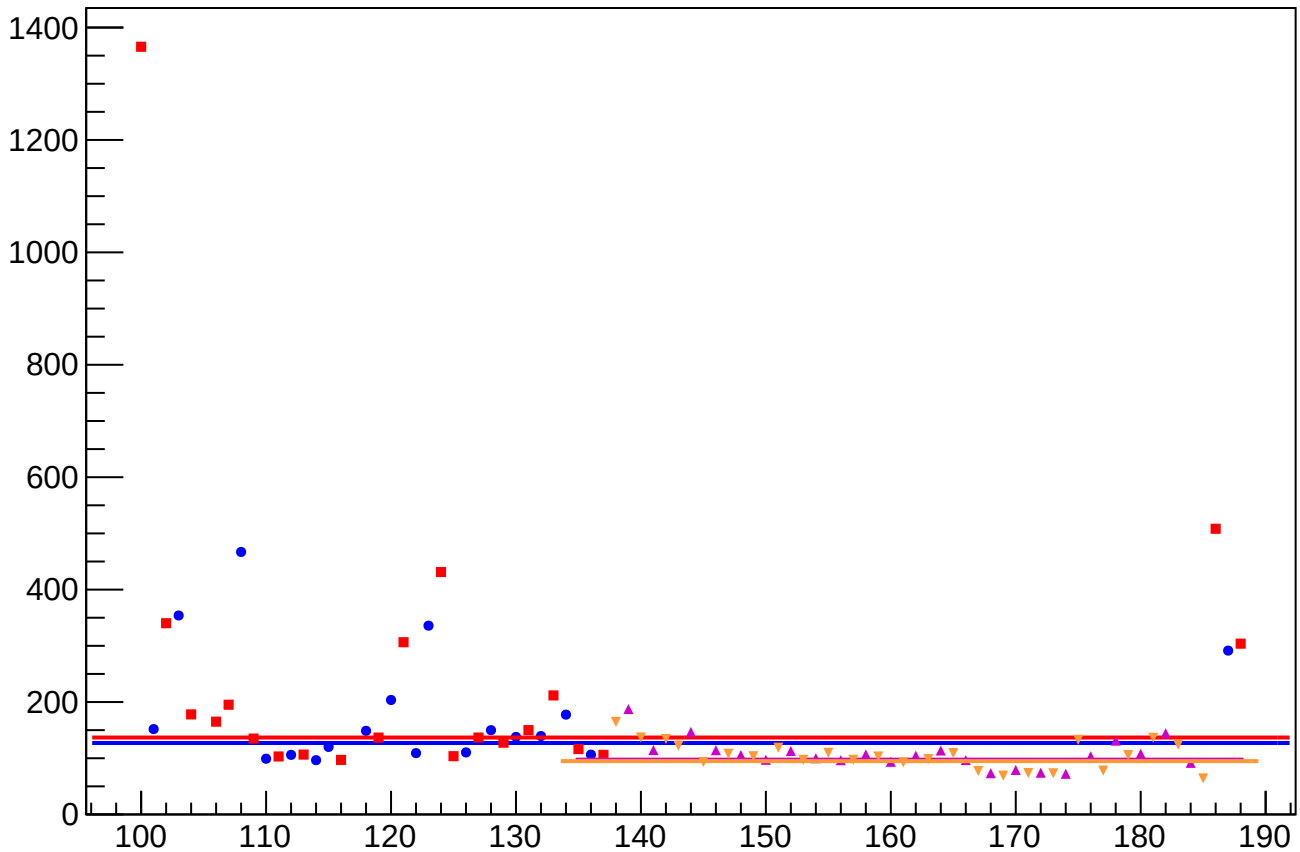
Left In: -82.630 $\pm$ 24.154  $\chi^2$ /NDF: 28.6/22

+ sign 48.565 $\pm$ 21.047  $\chi^2$ /NDF: 51.2/42

All: -12.062 $\pm$ 15.186  $\chi^2$ /NDF: 115.5/86

- sign -77.900 $\pm$ 21.933  $\chi^2$ /NDF: 47.0/43

# dit\_asym\_sam3\_rms vs Slug



Right In: 127.094 $\pm$ 0.037  $\chi^2$ /NDF: 1403117.9/17

Left Out: 94.886 $\pm$ 0.016  $\chi^2$ /NDF:1796861.0/24

Right Out: 136.852 $\pm$ 0.037  $\chi^2$ /NDF: 2338431.5/20

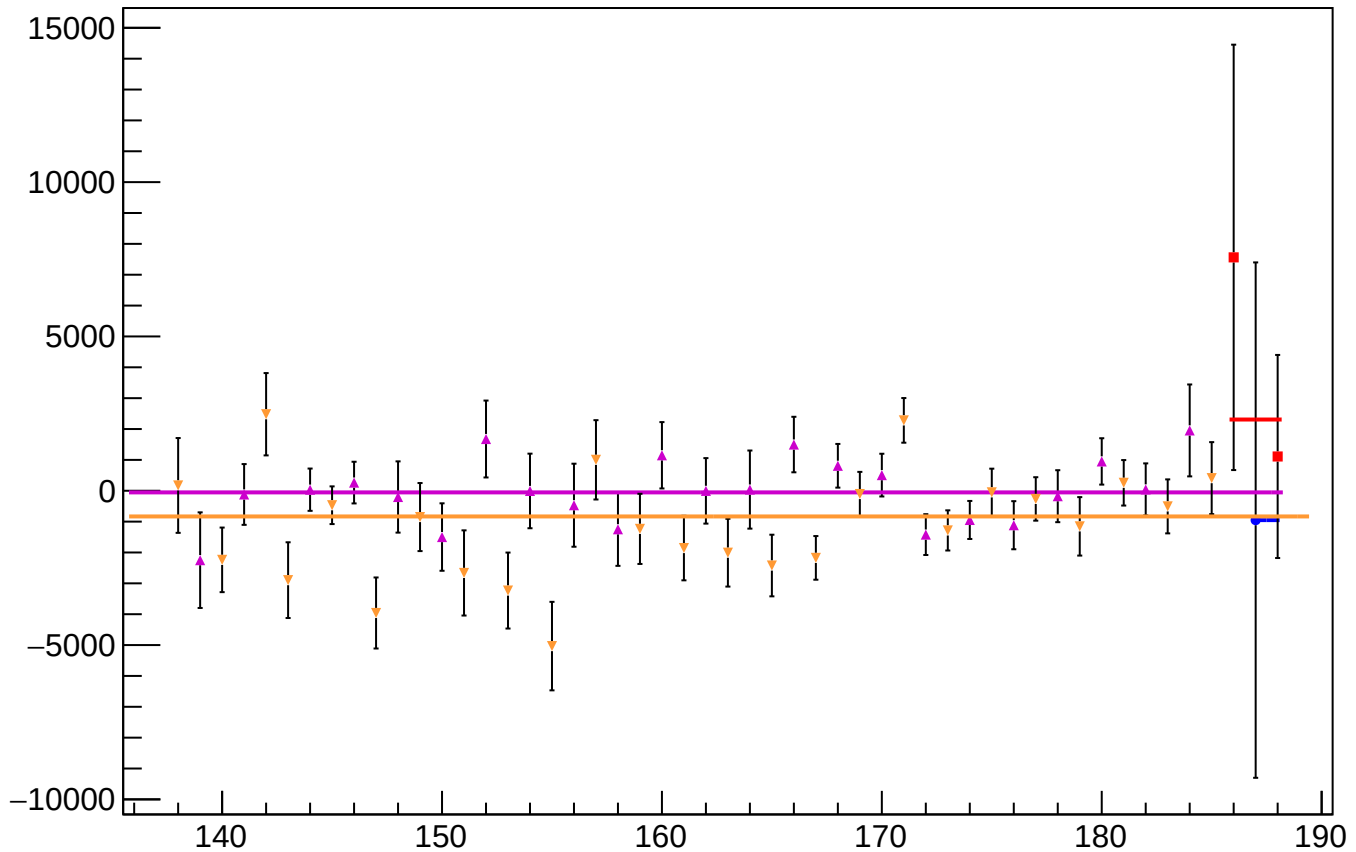
Left In: 97.499 $\pm$ 0.017  $\chi^2$ /NDF:1561333.1/22

+ sign 100.206 $\pm$ 0.015  $\chi^2$ /NDF: 3845757.9/42

All: 102.217 $\pm$ 0.011  $\chi^2$ /NDF: 8714847.6/86

- sign 104.401 $\pm$ 0.016  $\chi^2$ /NDF: 4830998.3/43

# asym\_sam3\_correction\_mean vs Slug



Right In:  $-950.967 \pm 8349.789$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-832.580 \pm 183.960$   $\chi^2/\text{NDF}$ : 68.8/24

Right Out:  $2308.116 \pm 2969.151$   $\chi^2/\text{NDF}$ : 0.7/1

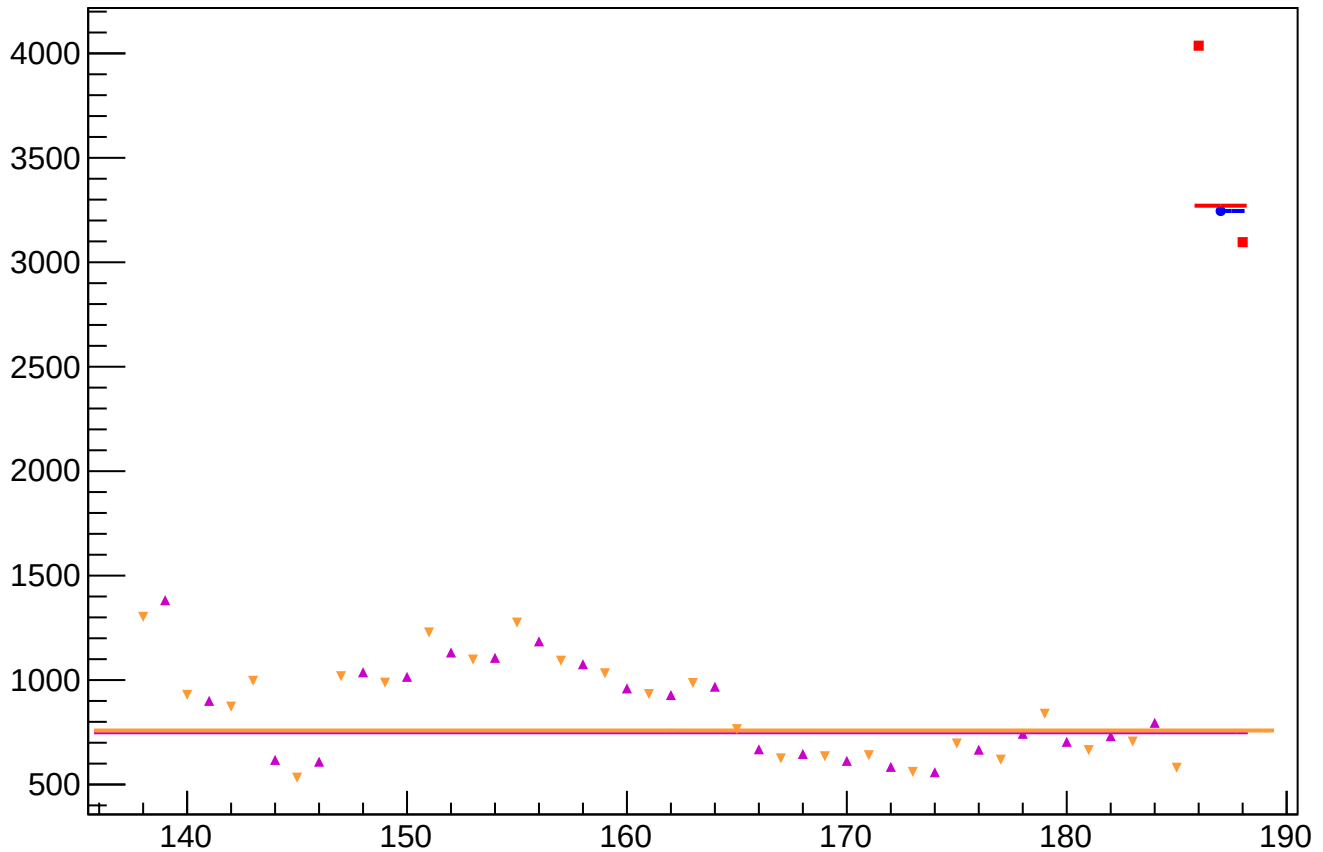
Left In:  $-53.006 \pm 184.870$   $\chi^2/\text{NDF}$ : 25.3/22

+ sign  $-832.637 \pm 183.916$   $\chi^2/\text{NDF}$ : 68.8/25

All:  $-439.541 \pm 130.259$   $\chi^2/\text{NDF}$ : 104.6/50

- sign  $-43.888 \pm 184.513$   $\chi^2/\text{NDF}$ : 26.7/24

# asym\_sam3\_correction\_rms vs Slug



Right In: 3245.385 $\pm$ 5.904  $\chi^2$ /NDF: 0.0/0

Left Out: 758.608 $\pm$ 0.130  $\chi^2$ /NDF:2453711.9/24

Right Out: 3270.937 $\pm$ 2.100  $\chi^2$ /NDF: 30337.0/1

Left In: 749.995 $\pm$ 0.131  $\chi^2$ /NDF:2186634.5/22

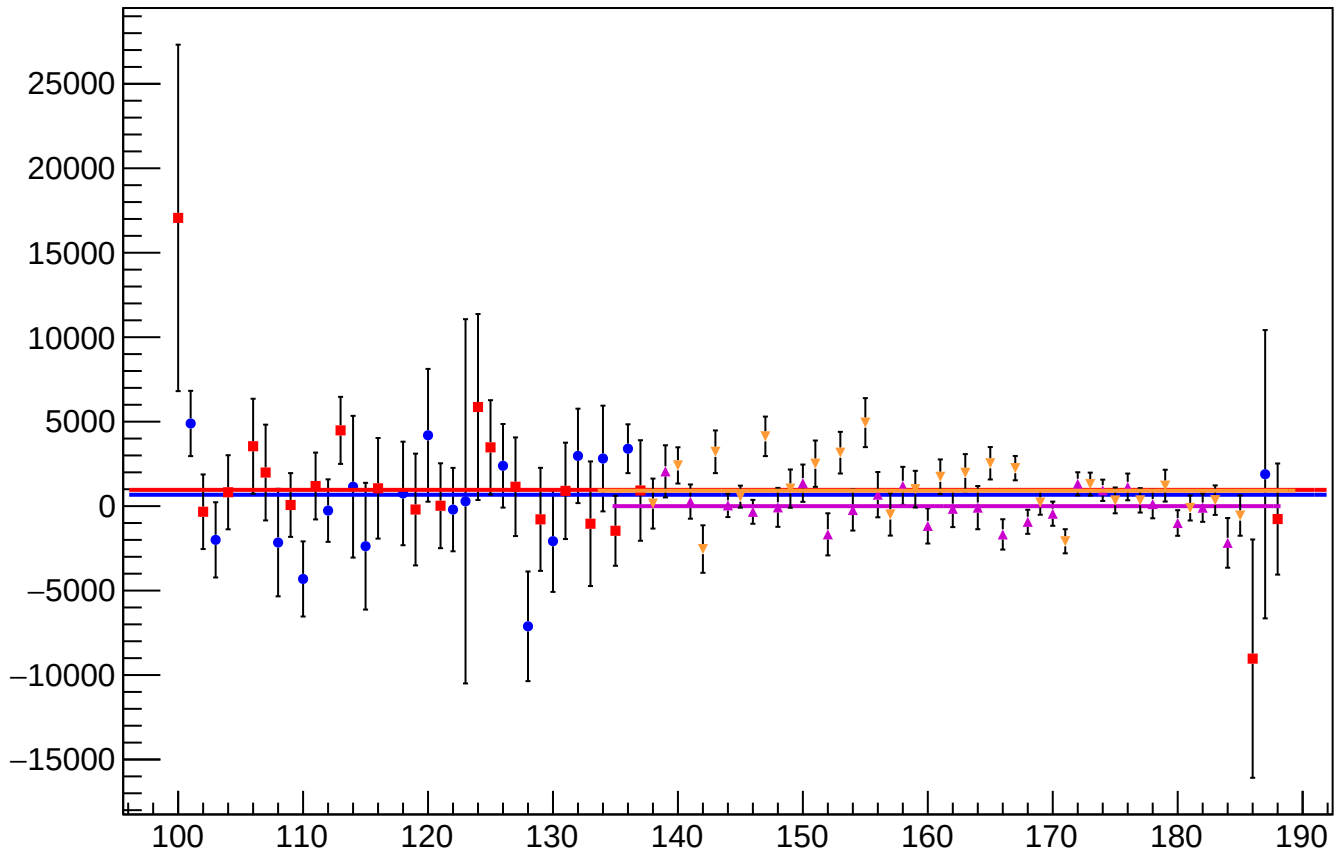
+ sign 759.814 $\pm$ 0.130  $\chi^2$ /NDF: 2631025.5/25

All: 759.773 $\pm$ 0.092  $\chi^2$ /NDF: 6284182.5/50

- sign 759.731 $\pm$ 0.130  $\chi^2$ /NDF: 3653156.8/24



# asym\_sam3\_mean vs Slug



Right In:  $672.847 \pm 617.219$   $\chi^2/\text{NDF}$ : 25.7/17

Left Out:  $911.919 \pm 186.104$   $\chi^2/\text{NDF}$ : 64.9/24

Right Out:  $963.317 \pm 590.691$   $\chi^2/\text{NDF}$ : 13.3/20

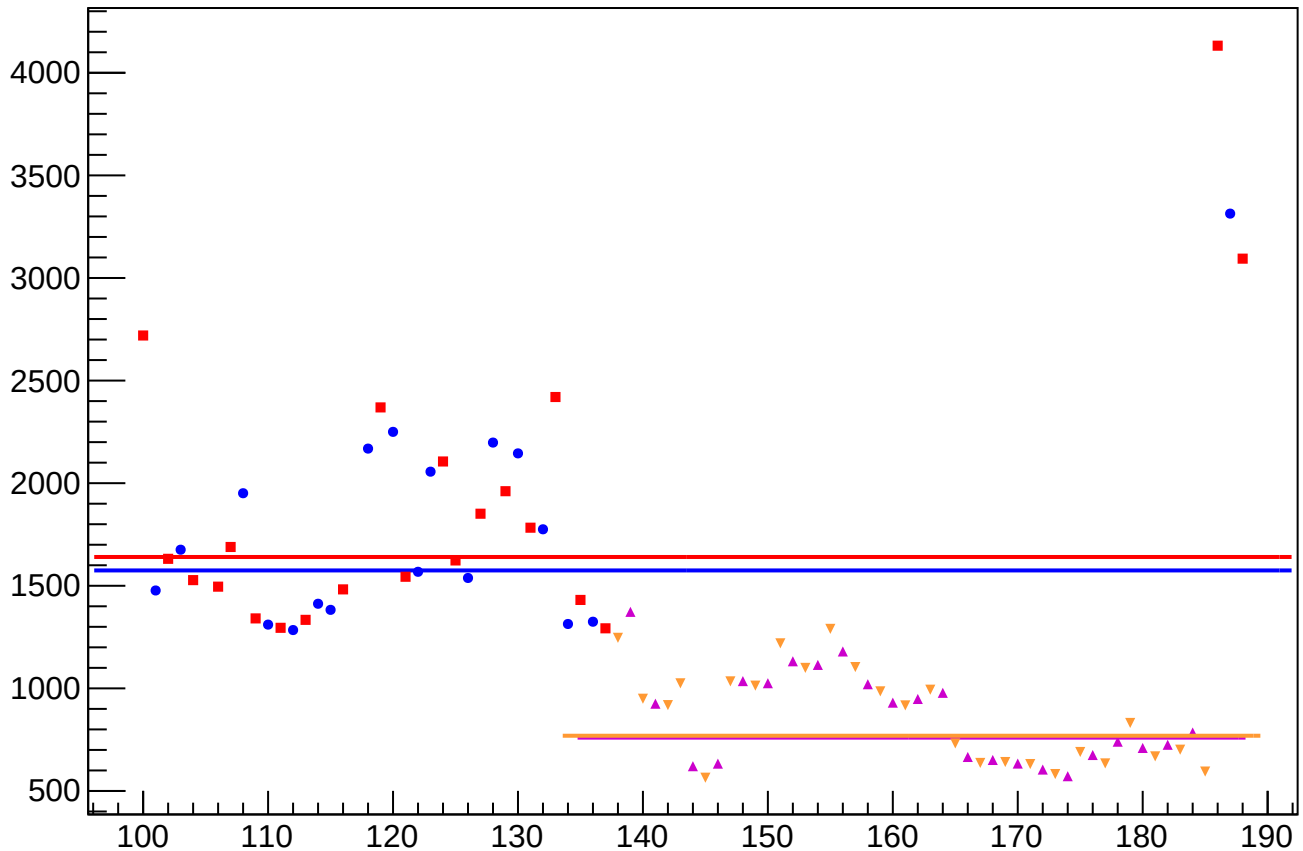
Left In:  $-2.470 \pm 187.271$   $\chi^2/\text{NDF}$ : 25.6/22

+ sign  $891.995 \pm 178.181$   $\chi^2/\text{NDF}$ : 90.7/42

All:  $489.621 \pm 126.111$   $\chi^2/\text{NDF}$ : 142.3/86

- sign  $85.738 \pm 178.514$   $\chi^2/\text{NDF}$ : 41.4/43

# asym\_sam3\_rms vs Slug



Right In: 1574.767 $\pm$ 0.436  $\chi^2$ /NDF: 574275.3/17

Left Out: 769.207 $\pm$ 0.132  $\chi^2$ /NDF: 2275390.6/24

Right Out: 1640.351 $\pm$ 0.418  $\chi^2$ /NDF: 1127009.6/20

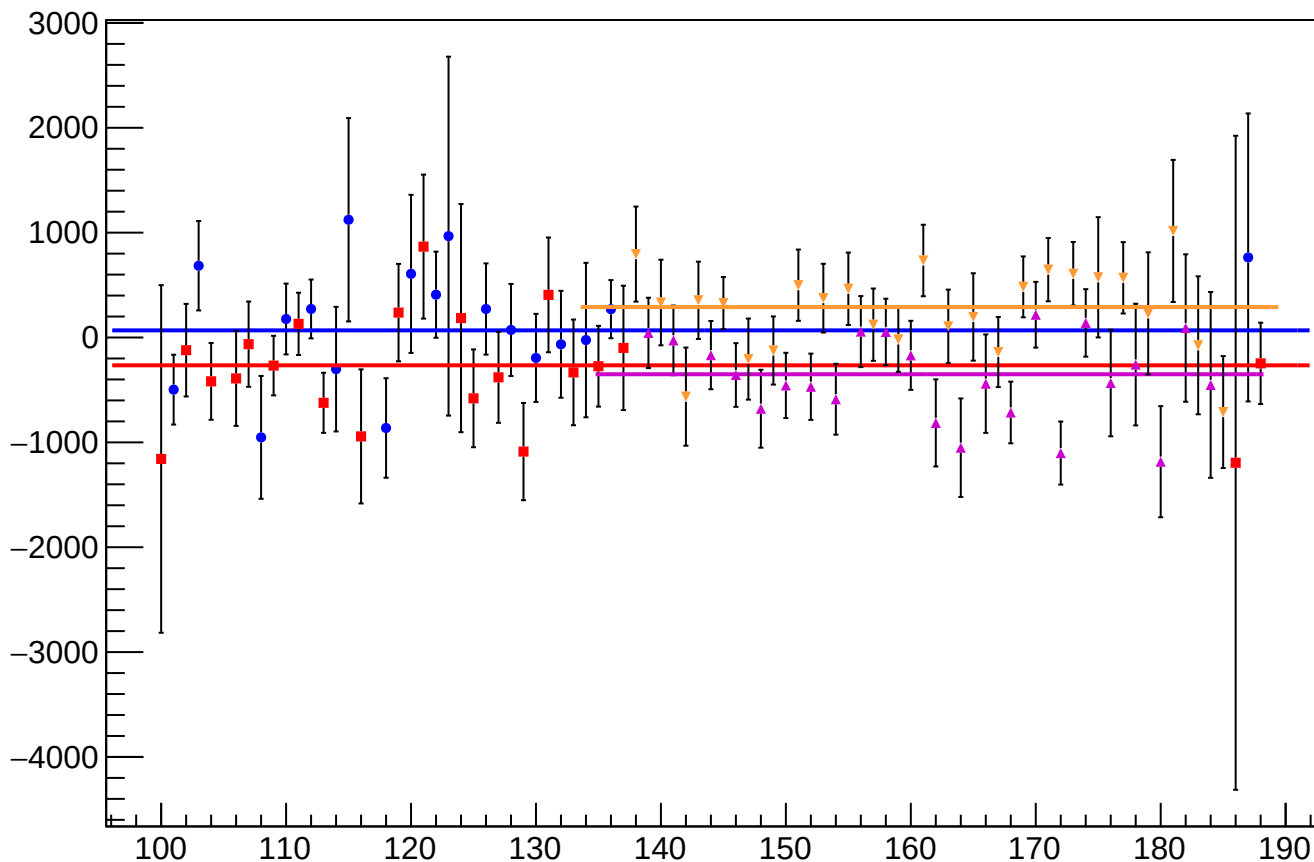
Left In: 759.935 $\pm$ 0.132  $\chi^2$ /NDF: 2014703.5/22

+ sign 836.341 $\pm$ 0.126  $\chi^2$ /NDF: 5972559.3/42

All: 838.340 $\pm$ 0.089  $\chi^2$ /NDF: 13152070.5/80

- sign 840.346 $\pm$ 0.126  $\chi^2$ /NDF: 7179007.0/43

# dit\_asym\_sam4\_mean vs Slug



Right In: 68.179+/-105.028  $\chi^2/\text{NDF}$ : 17.0/17

Left Out: 290.293+/-72.910  $\chi^2/\text{NDF}$ : 22.3/24

Right Out: -265.378+/-96.227  $\chi^2/\text{NDF}$ : 14.8/20

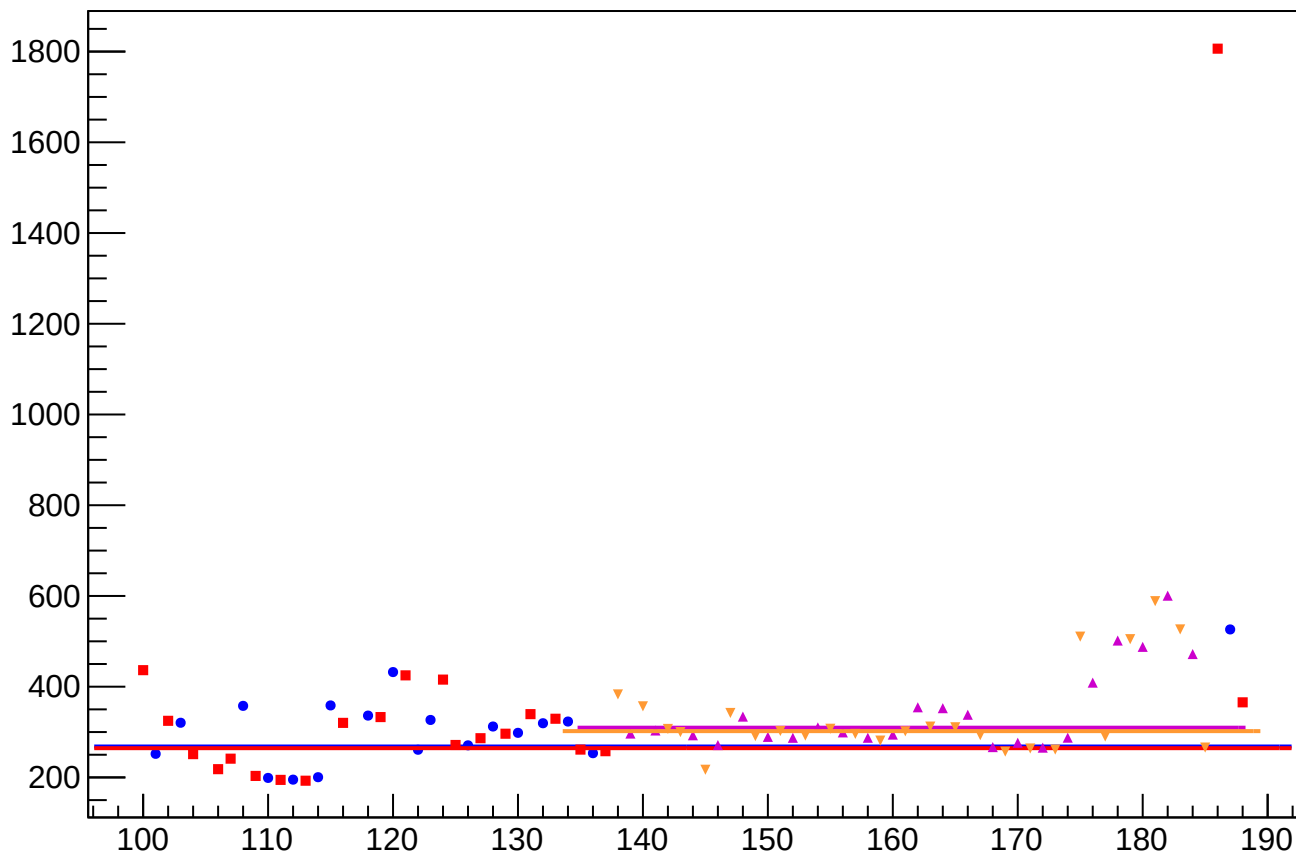
Left In: -350.522+/-75.911  $\chi^2/\text{NDF}$ : 27.4/22

+ sign 218.063+/-59.893  $\chi^2/\text{NDF}$ : 42.4/42

All: -51.220+/-42.246  $\chi^2/\text{NDF}$ : 125.2/86

- sign -317.861+/-59.598  $\chi^2/\text{NDF}$ : 42.6/43

# dit\_asym\_sam4\_rms vs Slug



Right In: 268.143 $\pm$ 0.074  $\chi^2$ /NDF: 621796.5/17

Left Out: 302.040 $\pm$ 0.052  $\chi^2$ /NDF:1597233.8/24

Right Out: 264.462 $\pm$ 0.068  $\chi^2$ /NDF: 1335022.9/20

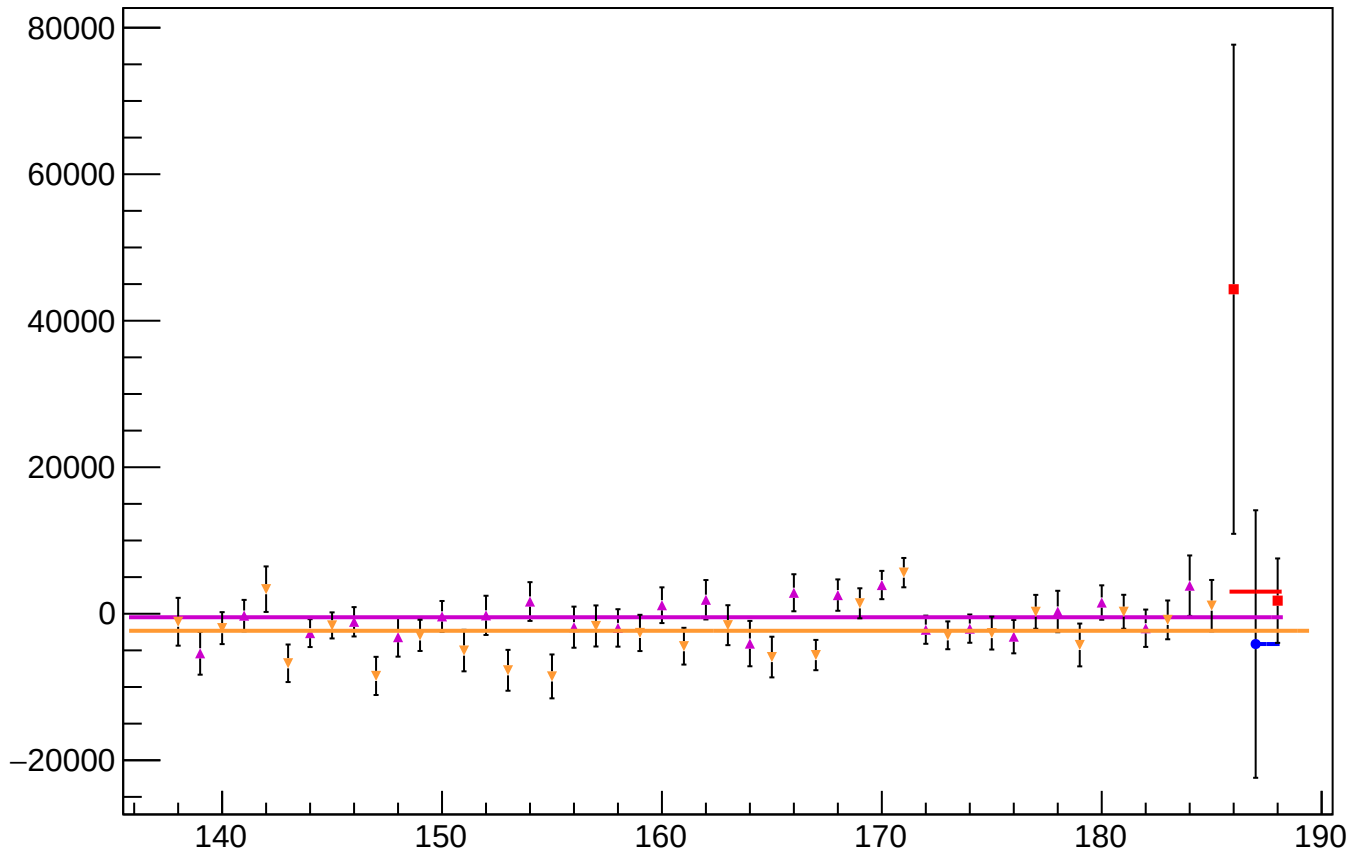
Left In: 309.609 $\pm$ 0.054  $\chi^2$ /NDF:1180280.8/22

+ sign 291.017 $\pm$ 0.042  $\chi^2$ /NDF: 2359615.4/42

All: 291.657 $\pm$ 0.030  $\chi^2$ /NDF: 5146746.5/86

- sign 292.291 $\pm$ 0.042  $\chi^2$ /NDF: 2786676.6/43

# asym\_sam4\_correction\_mean vs Slug



Right In:  $-4133.956 \pm 18260.346$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-2325.488 \pm 486.043$   $\chi^2/\text{NDF}$ : 49.8/24

Right Out:  $3018.161 \pm 5677.745$   $\chi^2/\text{NDF}$ : 1.6/1

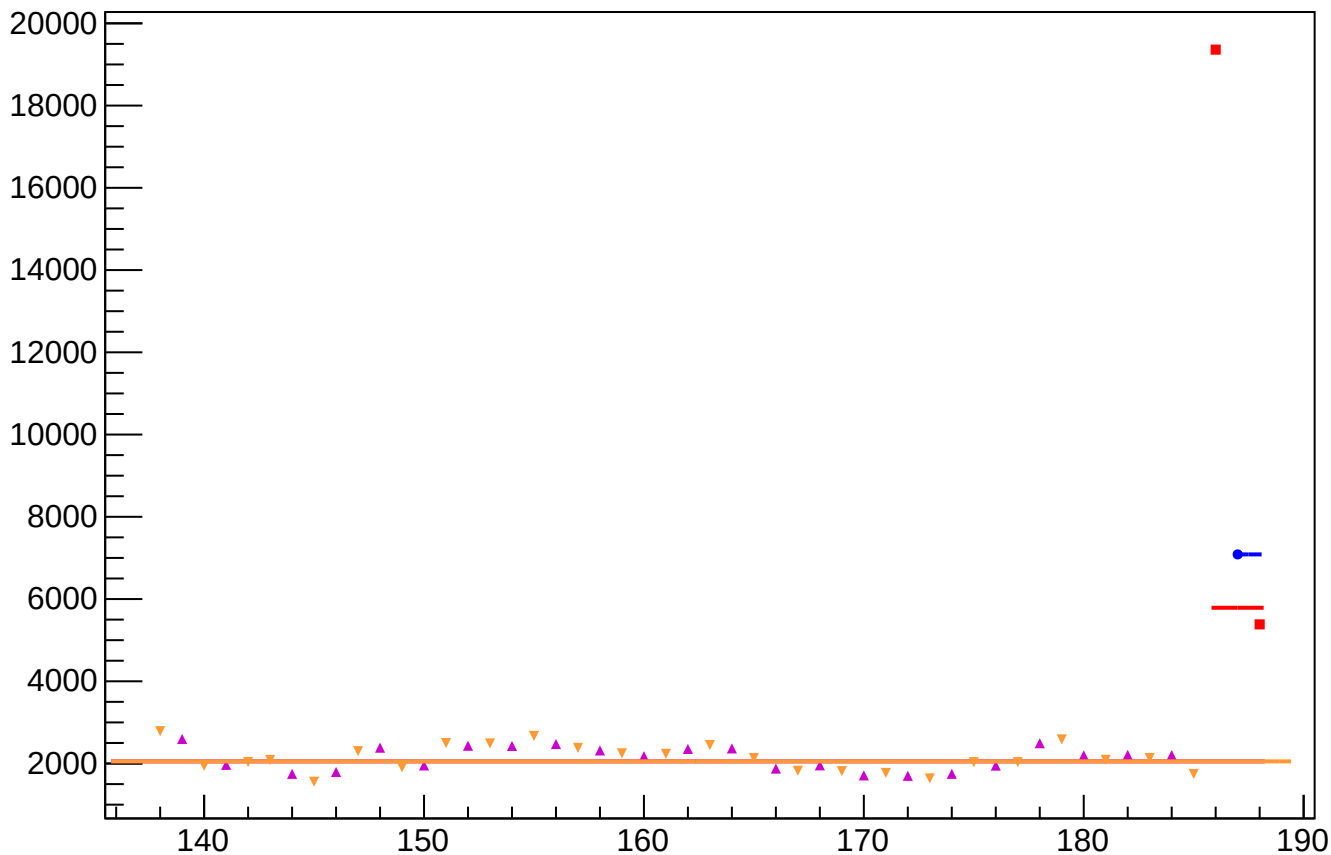
Left In:  $-477.779 \pm 494.228$   $\chi^2/\text{NDF}$ : 23.1/22

+ sign  $-2326.768 \pm 485.871$   $\chi^2/\text{NDF}$ : 49.8/25

All:  $-1401.580 \pm 345.836$   $\chi^2/\text{NDF}$ : 82.2/50

- sign  $-451.489 \pm 492.367$   $\chi^2/\text{NDF}$ : 25.0/24

# asym\_sam4\_correction\_rms vs Slug



Right In: 7085.560 $\pm$ 12.912  $\chi^2$ /NDF: 0.0/0

Left Out: 2052.401 $\pm$ 0.344  $\chi^2$ /NDF:838023.2/24

Right Out: 5788.281 $\pm$ 4.015  $\chi^2$ /NDF: 340320.3/1

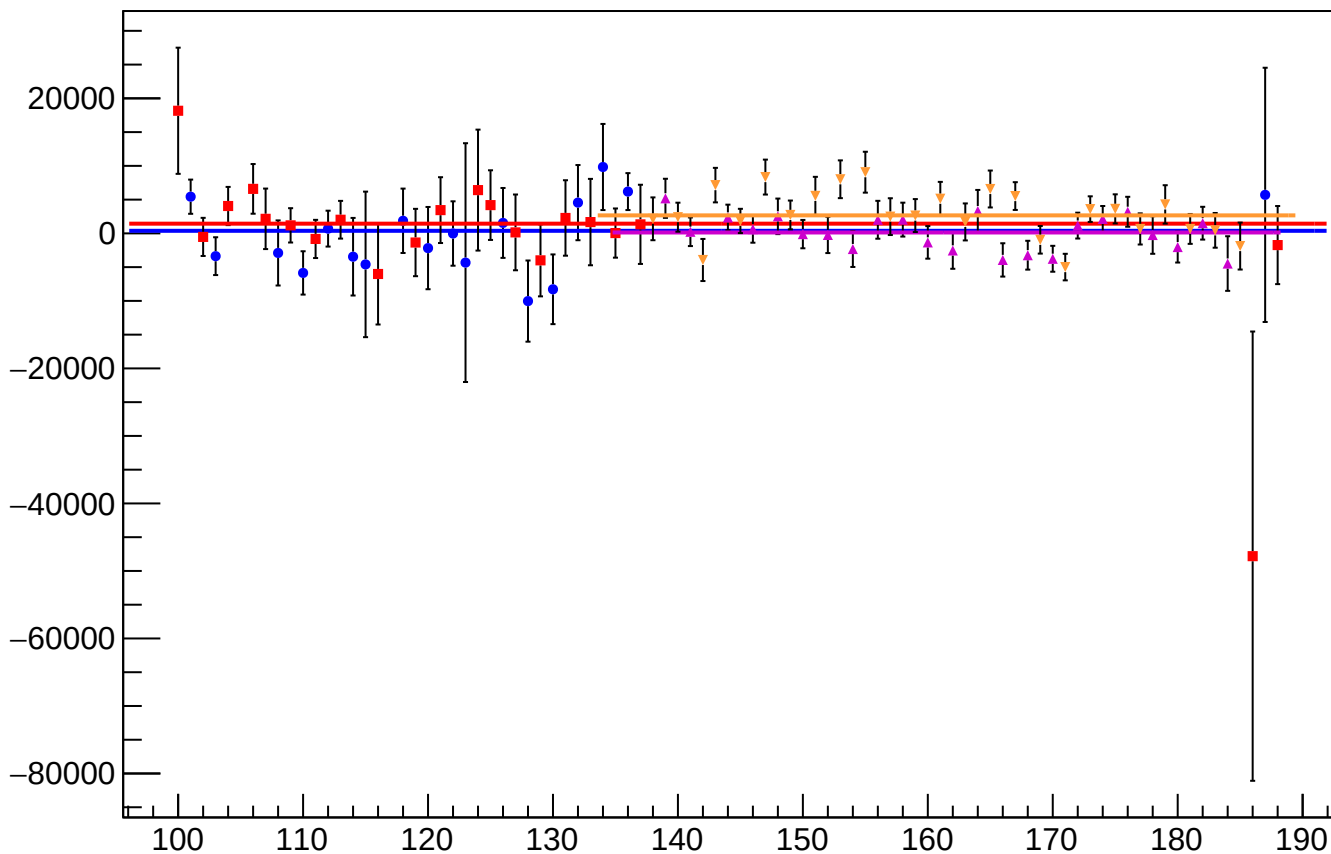
Left In: 2052.384 $\pm$ 0.349  $\chi^2$ /NDF:653872.2/22

+ sign 2055.964 $\pm$ 0.344  $\chi^2$ /NDF: 989863.0/25

All: 2068.058 $\pm$ 0.245  $\chi^2$ /NDF: 2845956.3/50

- sign 2080.478 $\pm$ 0.348  $\chi^2$ /NDF: 1853581.5/24

# asym\_sam4\_mean vs Slug



Right In: 381.247+/-991.104     $\chi^2/\text{NDF}$ : 24.3/17

Left Out: 2667.050+/-480.963     $\chi^2/\text{NDF}$ :50.0/24

Right Out: 1438.491+/-912.090     $\chi^2/\text{NDF}$ : 13.0/20

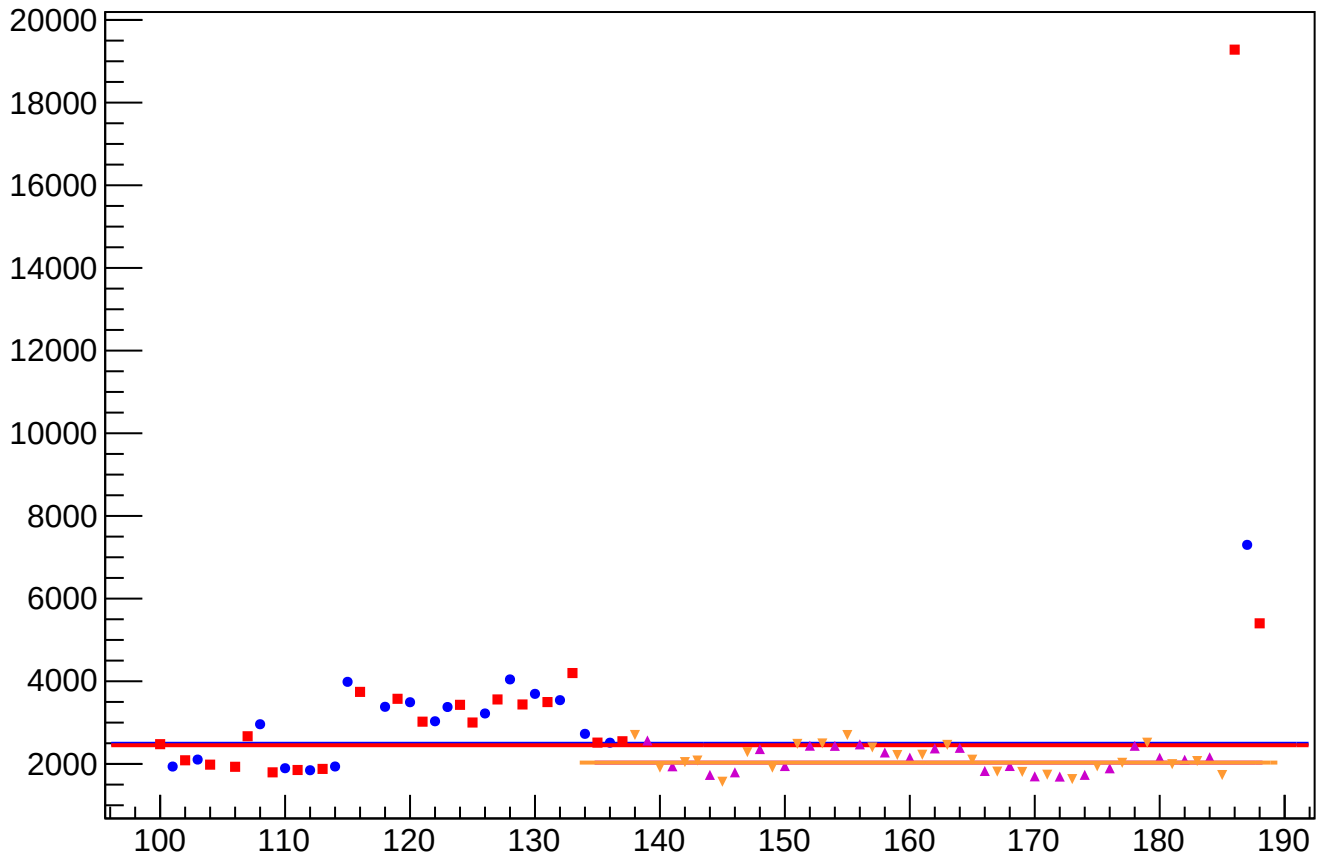
Left In: 132.307+/-489.752     $\chi^2/\text{NDF}$ :24.7/22

+ sign 2231.356+/-432.704     $\chi^2/\text{NDF}$ : 78.5/42

All: 1325.439+/-305.535     $\chi^2/\text{NDF}$ : 126.6/86

- sign 424.626+/-431.483     $\chi^2/\text{NDF}$ : 39.4/43

# asym\_sam4\_rms vs Slug



Right In: 2487.762 $\pm$ 0.701  $\chi^2$ /NDF: 1037305.0/17

Left Out: 2032.502 $\pm$ 0.340  $\chi^2$ /NDF: 824418.6/24

Right Out: 2452.747 $\pm$ 0.645  $\chi^2$ /NDF: 2073201.0/20

Left In: 2031.692 $\pm$ 0.346  $\chi^2$ /NDF: 653382.0/22

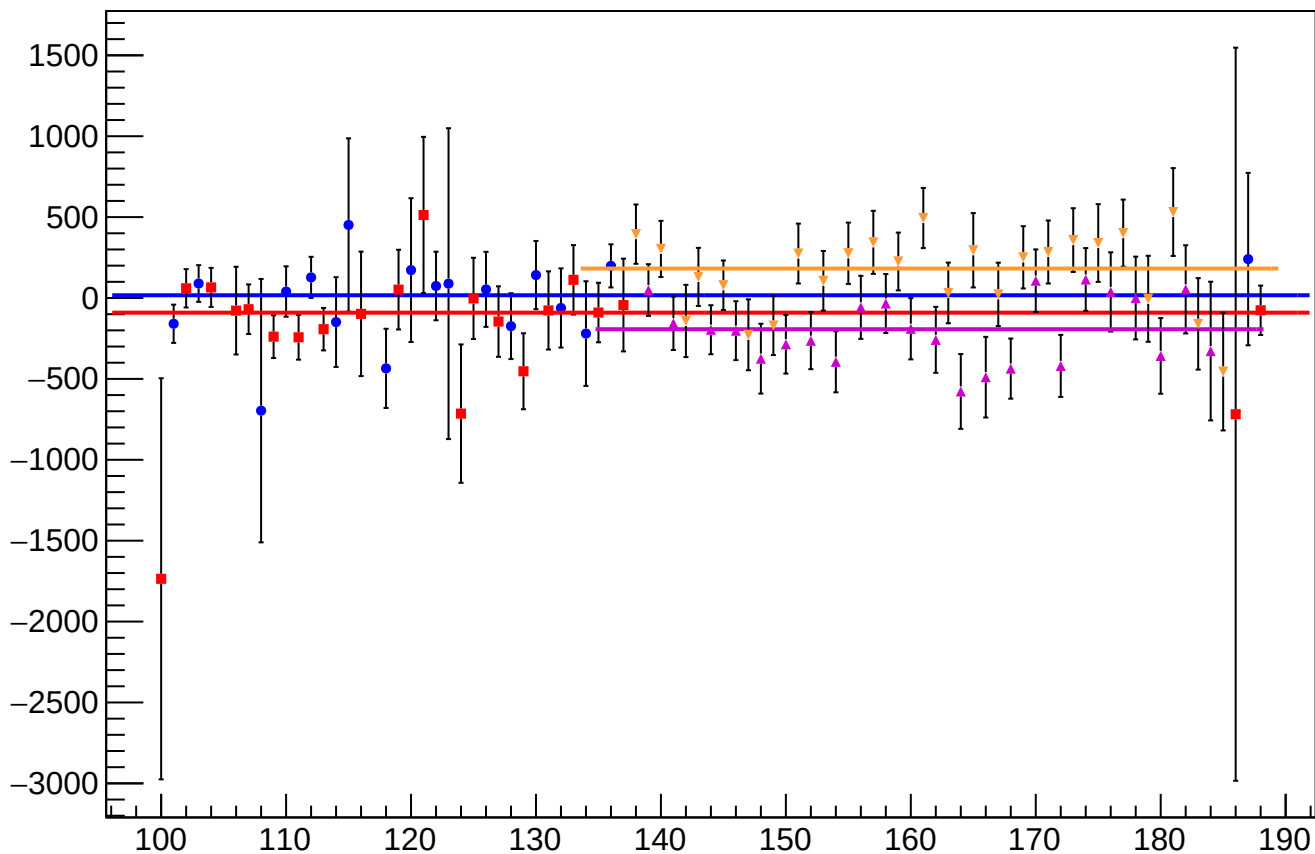
+ sign 2119.279 $\pm$ 0.306  $\chi^2$ /NDF: 2203284.5/42

All: 2122.610 $\pm$ 0.216  $\chi^2$ /NDF: 5260935.4/86

- sign 2125.922 $\pm$ 0.305  $\chi^2$ /NDF: 3057414.5/43



# dit\_asym\_sam5\_mean vs Slug



Right In:  $17.000 \pm 46.268$   $\chi^2/\text{NDF}: 12.7/17$

Left Out:  $182.238 \pm 40.102$   $\chi^2/\text{NDF}: 26.9/24$

Right Out:  $-90.672 \pm 41.664$   $\chi^2/\text{NDF}: 15.7/20$

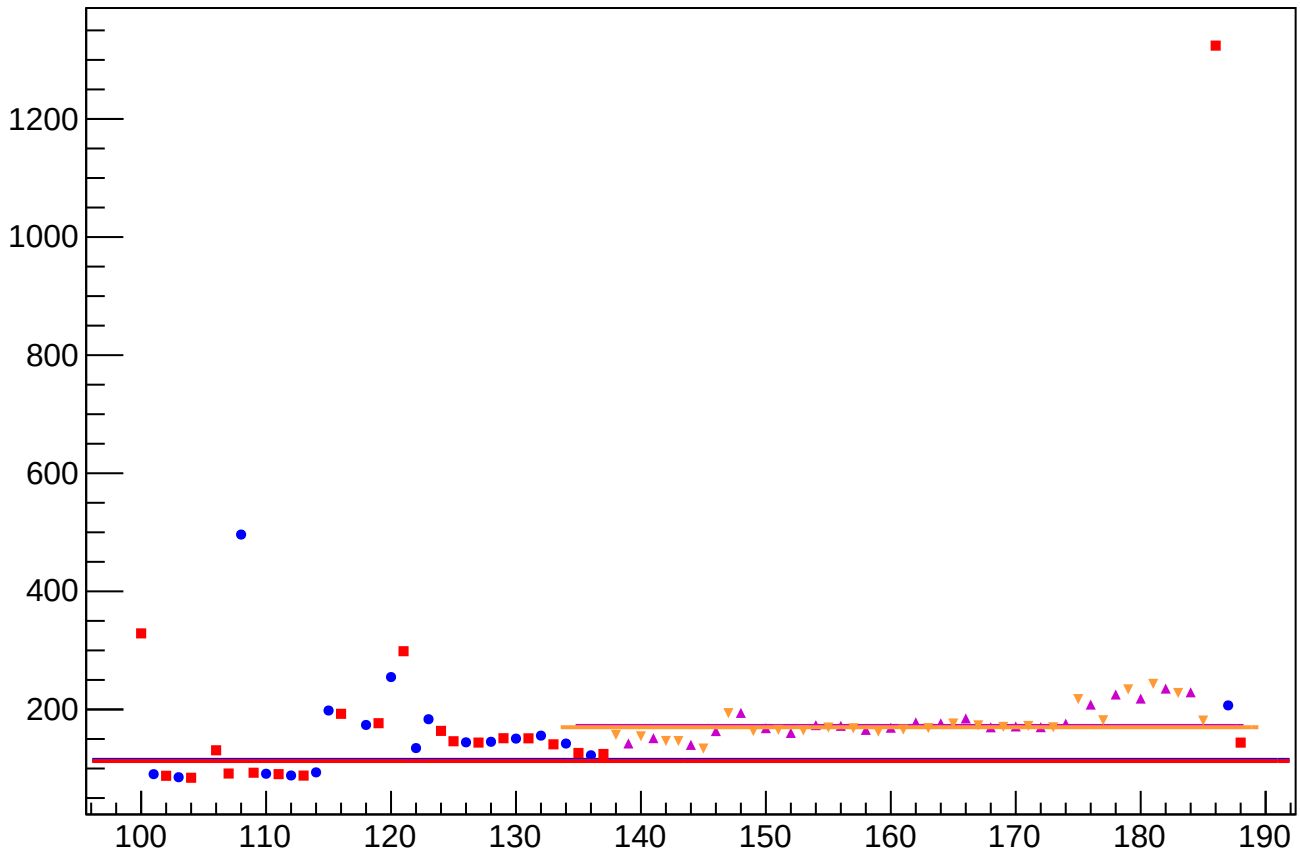
Left In:  $-193.004 \pm 41.384$   $\chi^2/\text{NDF}: 21.1/22$

+ sign  $111.356 \pm 30.304$   $\chi^2/\text{NDF}: 47.0/42$

All:  $-19.416 \pm 21.087$   $\chi^2/\text{NDF}: 122.9/86$

- sign  $-142.182 \pm 29.361$   $\chi^2/\text{NDF}: 39.8/43$

# dit\_asym\_sam5\_rms vs Slug



Right In: 114.632 $\pm$ 0.033  $\chi^2$ /NDF: 1468238.4/17

Left Out: 169.906 $\pm$ 0.028  $\chi^2$ /NDF: 663159.2/24

Right Out: 112.668 $\pm$ 0.029  $\chi^2$ /NDF: 1906846.9/20

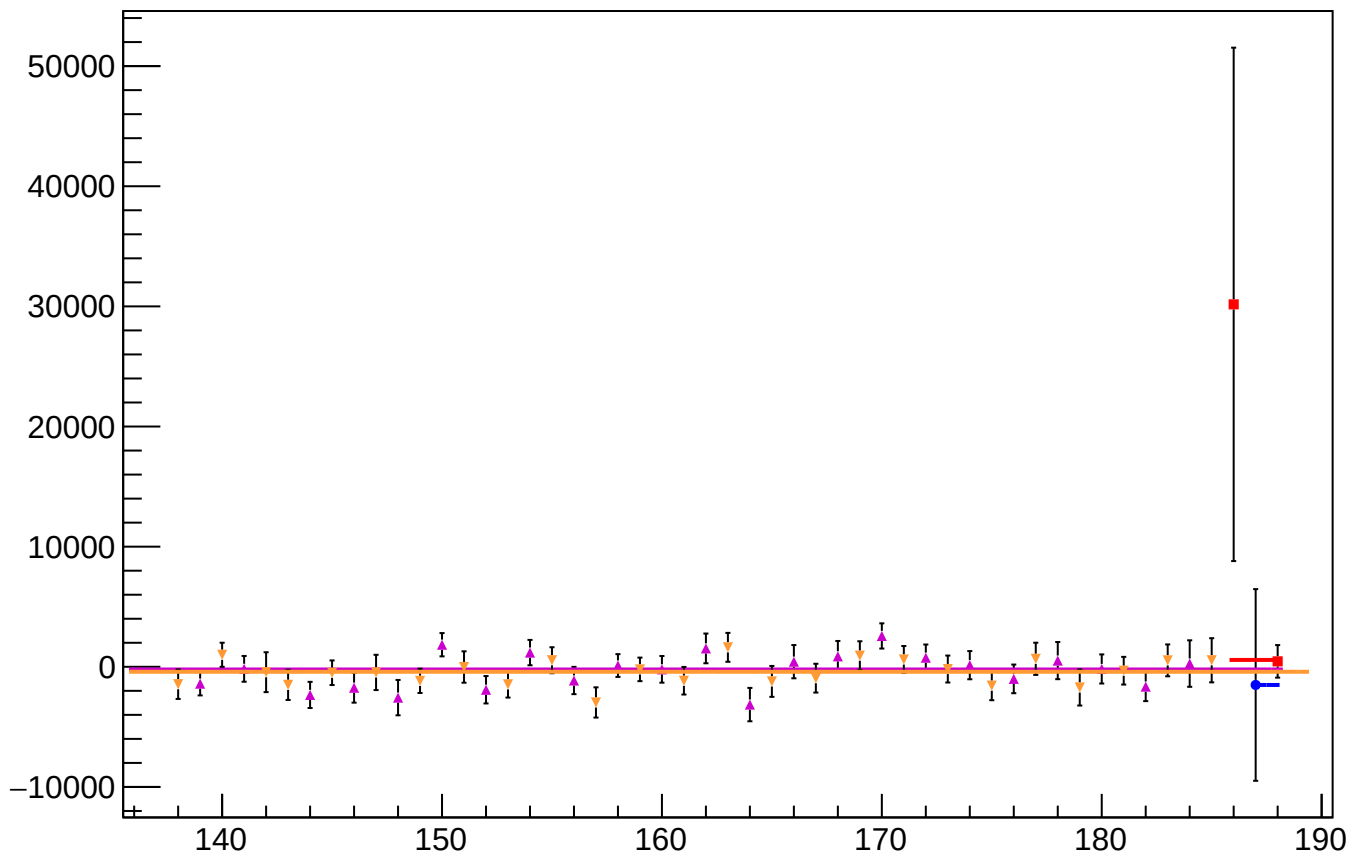
Left In: 172.065 $\pm$ 0.029  $\chi^2$ /NDF: 589733.9/22

+ sign 146.195 $\pm$ 0.021  $\chi^2$ /NDF: 3761295.6/42

All: 144.324 $\pm$ 0.015  $\chi^2$ /NDF: 8318774.9/86

- sign 142.566 $\pm$ 0.021  $\chi^2$ /NDF: 4542685.8/43

# asym\_sam5\_correction\_mean vs Slug



Right In: -1510.577 $\pm$ 7977.369  $\chi^2$ /NDF: 0.0/0

Left Out: -412.804 $\pm$ 240.278  $\chi^2$ /NDF: 19.0/24

Right Out: 572.857 $\pm$ 1351.375  $\chi^2$ /NDF: 1.9/1

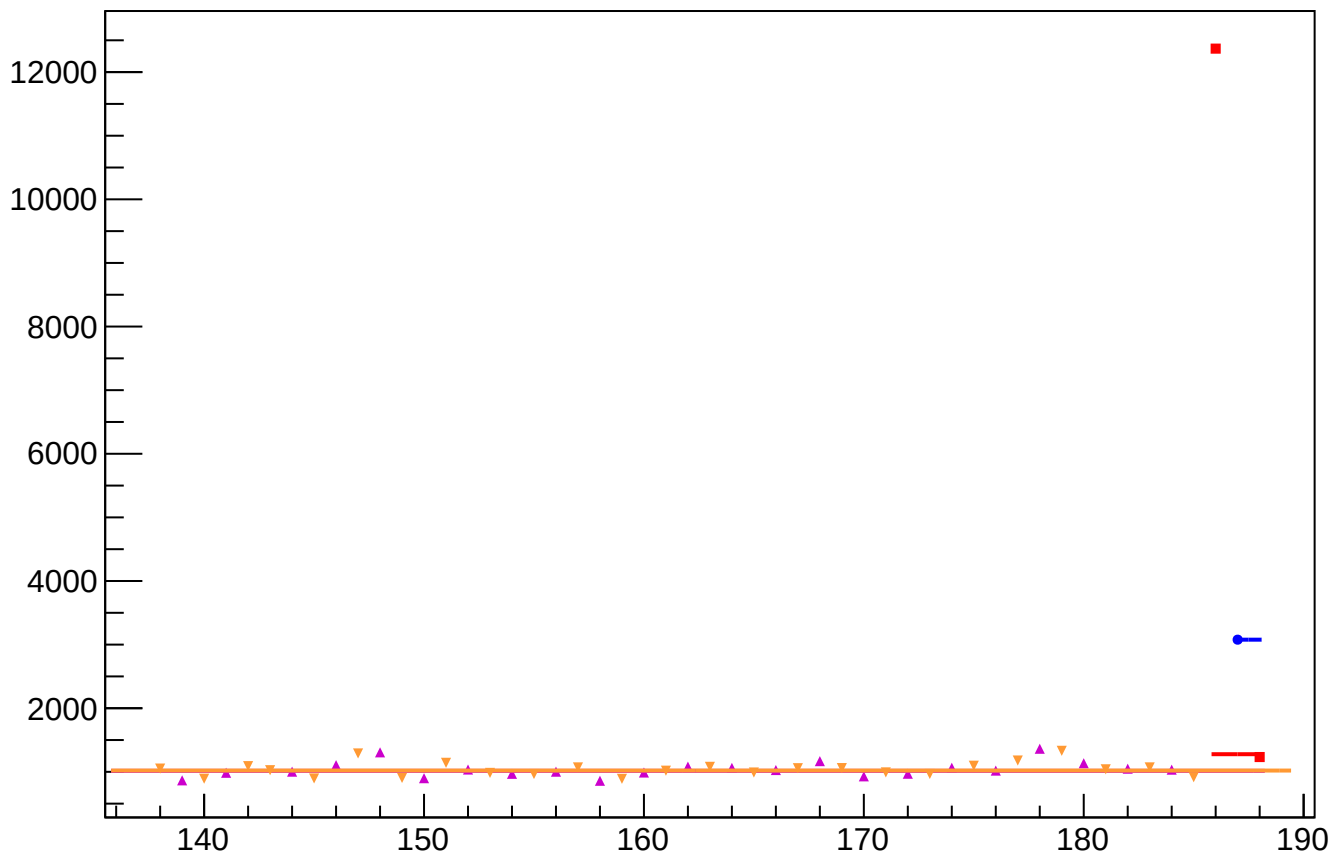
Left In: -223.332 $\pm$ 243.771  $\chi^2$ /NDF: 36.0/22

+ sign -413.799 $\pm$ 240.169  $\chi^2$ /NDF: 19.1/25

All: -305.899 $\pm$ 169.730  $\chi^2$ /NDF: 57.7/50

- sign -198.241 $\pm$ 239.899  $\chi^2$ /NDF: 38.3/24

# asym\_sam5\_correction\_rms vs Slug



Right In: 3077.567+/-5.641  $\chi^2$ /NDF: 0.0/0

Left Out: 1020.149+/-0.170  $\chi^2$ /NDF:369866.7/24

Right Out: 1277.211+/-0.956  $\chi^2$ /NDF: 541115.1/1

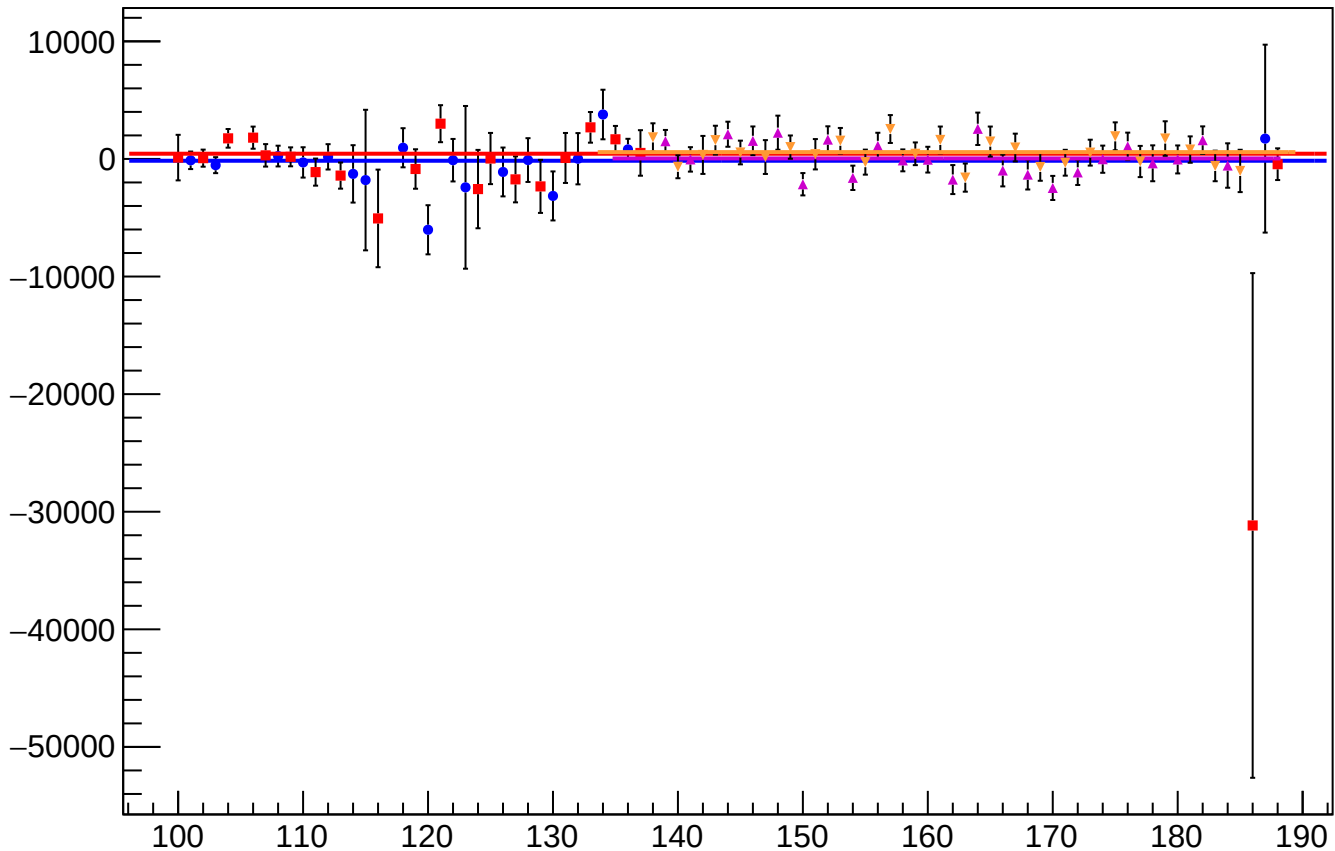
Left In: 1015.000+/-0.172  $\chi^2$ /NDF:404865.5/22

+ sign 1022.014+/-0.170  $\chi^2$ /NDF: 502778.1/25

All: 1022.639+/-0.120  $\chi^2$ /NDF: 1521710.4/50

- sign 1023.263+/-0.170  $\chi^2$ /NDF: 1018905.2/24

# asym\_sam5\_mean vs Slug



Right In:  $-154.301 \pm 312.261$   $\chi^2/\text{NDF}$ : 16.3/17

Left Out:  $580.226 \pm 235.583$   $\chi^2/\text{NDF}$ : 18.4/24

Right Out:  $443.914 \pm 276.715$   $\chi^2/\text{NDF}$ : 25.3/20

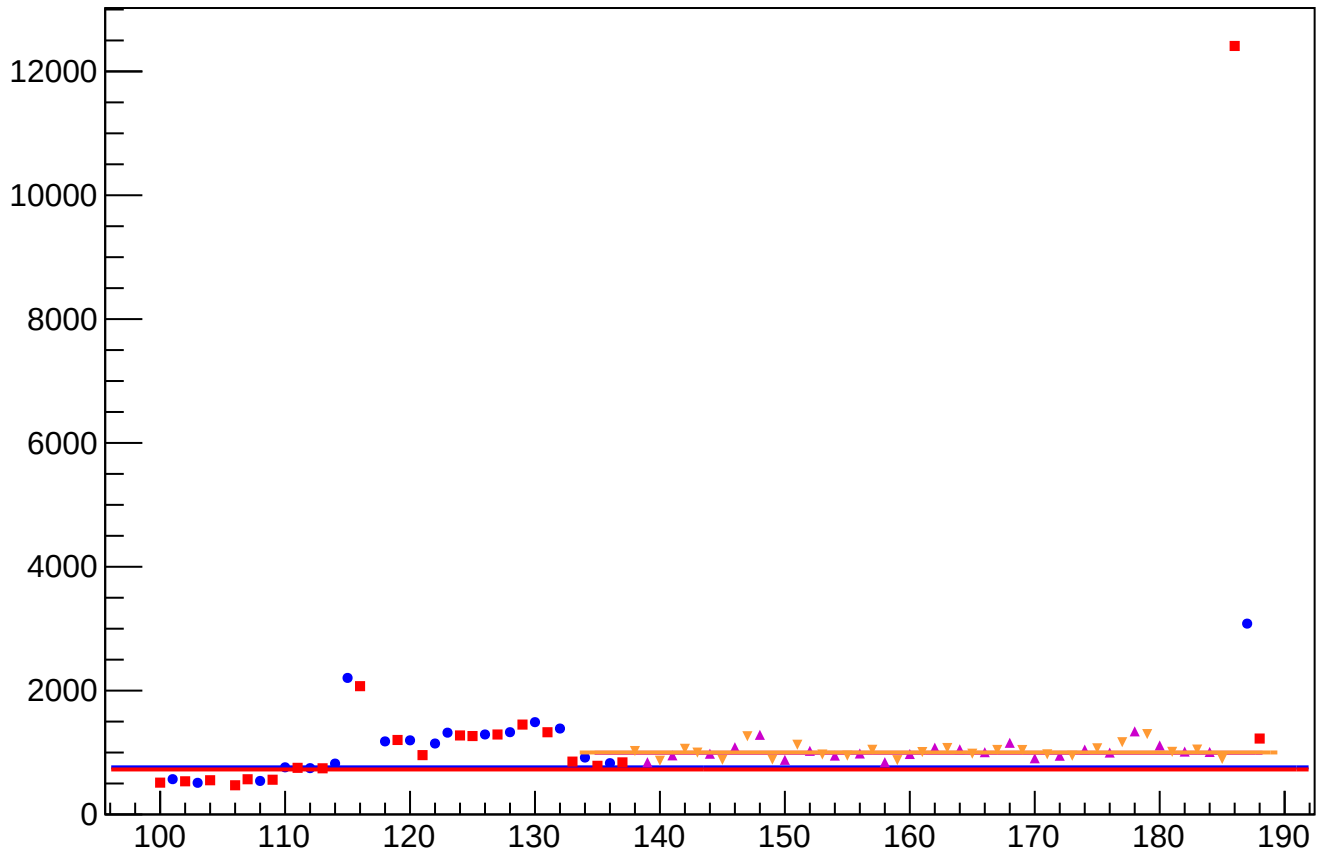
Left In:  $42.397 \pm 239.278$   $\chi^2/\text{NDF}$ : 37.9/22

+ sign  $313.794 \pm 188.065$   $\chi^2/\text{NDF}$ : 38.2/42

All:  $262.078 \pm 130.410$   $\chi^2/\text{NDF}$ : 102.7/86

- sign  $214.177 \pm 180.995$   $\chi^2/\text{NDF}$ : 64.3/43

# asym\_sam5\_rms vs Slug



Right In: 760.536 $\pm$ 0.221  $\chi^2$ /NDF: 1880392.8/17

Left Out: 1001.233 $\pm$ 0.167  $\chi^2$ /NDF: 370278.3/24

Right Out: 726.648 $\pm$ 0.196  $\chi^2$ /NDF: 2571352.2/20

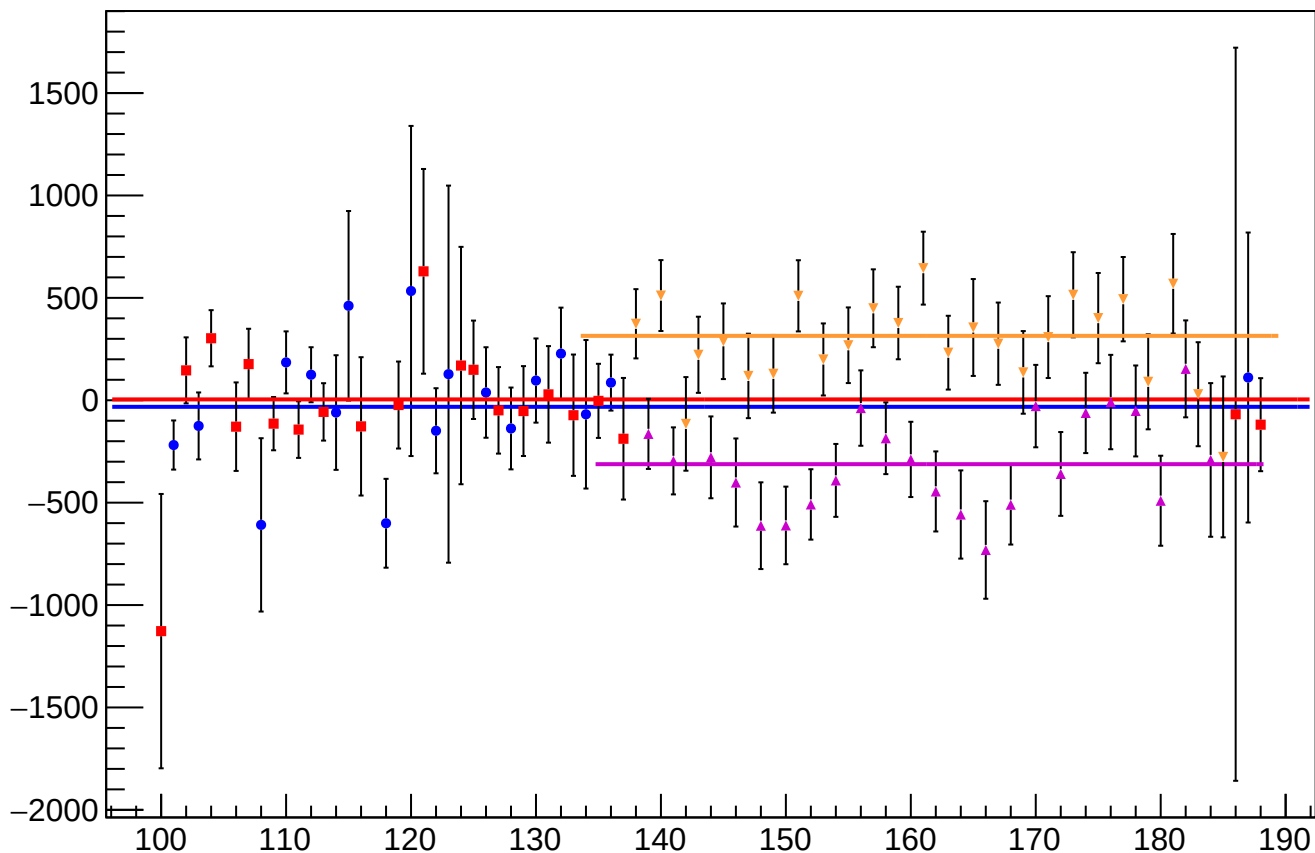
Left In: 995.590 $\pm$ 0.169  $\chi^2$ /NDF: 424434.6/22

+ sign 913.926 $\pm$ 0.133  $\chi^2$ /NDF: 3007958.6/42

All: 896.588 $\pm$ 0.092  $\chi^2$ /NDF: 7117447.4/86

- sign 880.529 $\pm$ 0.128  $\chi^2$ /NDF: 4076746.3/43

# dit\_asym\_sam6\_mean vs Slug



Right In:  $-32.024 \pm 48.318$   $\chi^2/\text{NDF}$ : 19.8/17

Left Out:  $314.517 \pm 39.818$   $\chi^2/\text{NDF}$ : 21.4/24

Right Out:  $4.251 \pm 44.693$   $\chi^2/\text{NDF}$ : 15.0/20

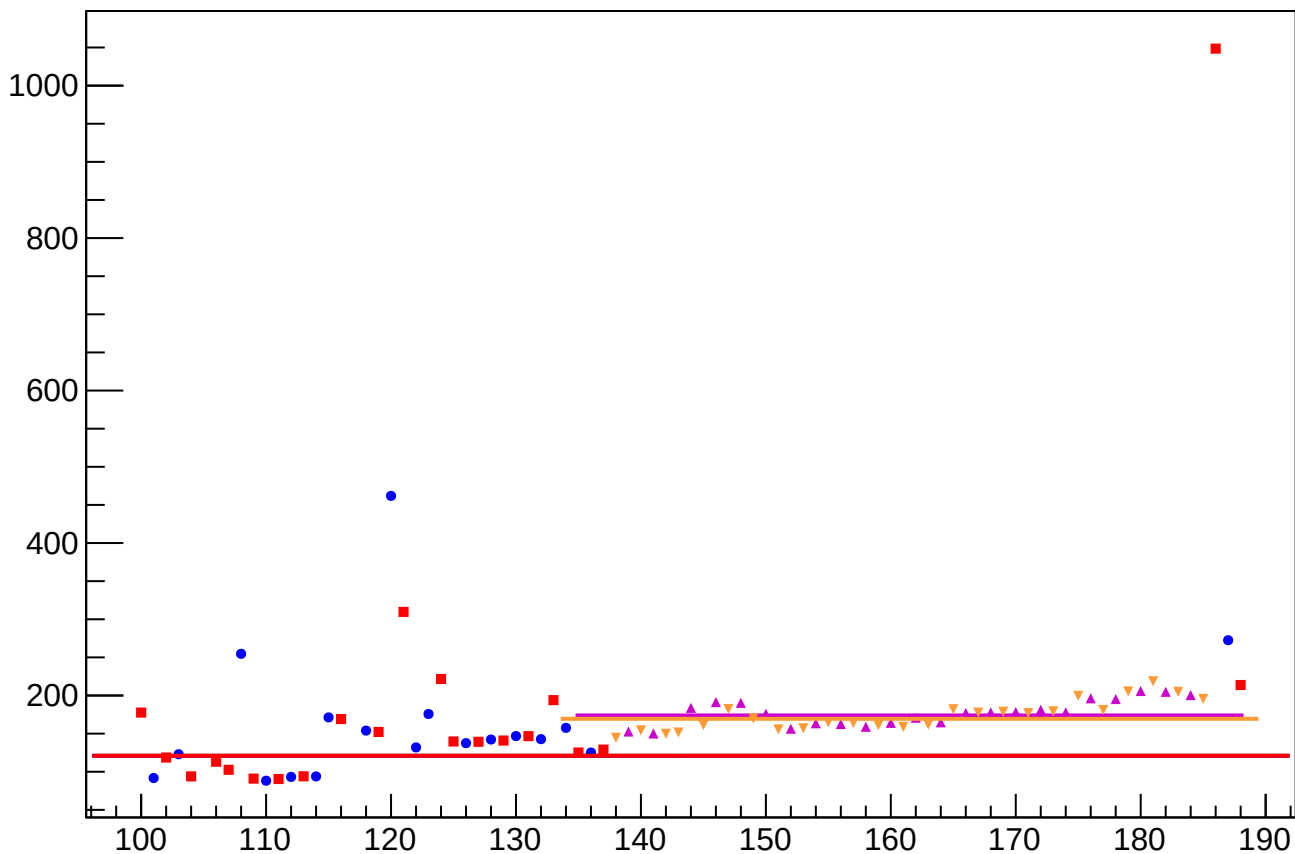
Left In:  $-312.097 \pm 41.646$   $\chi^2/\text{NDF}$ : 26.9/22

+ sign  $174.361 \pm 30.728$   $\chi^2/\text{NDF}$ : 71.8/42

All:  $3.201 \pm 21.636$   $\chi^2/\text{NDF}$ : 202.0/86

- sign  $-165.076 \pm 30.468$   $\chi^2/\text{NDF}$ : 68.7/43

# dit\_asym\_sam6\_rms vs Slug



Right In: 120.916 $\pm$ 0.034  $\chi^2$ /NDF: 1154486.5/17

Left Out: 169.432 $\pm$ 0.028  $\chi^2$ /NDF: 386461.5/24

Right Out: 120.962 $\pm$ 0.032  $\chi^2$ /NDF: 1887206.9/20

Left In: 173.847 $\pm$ 0.029  $\chi^2$ /NDF: 291729.8/22

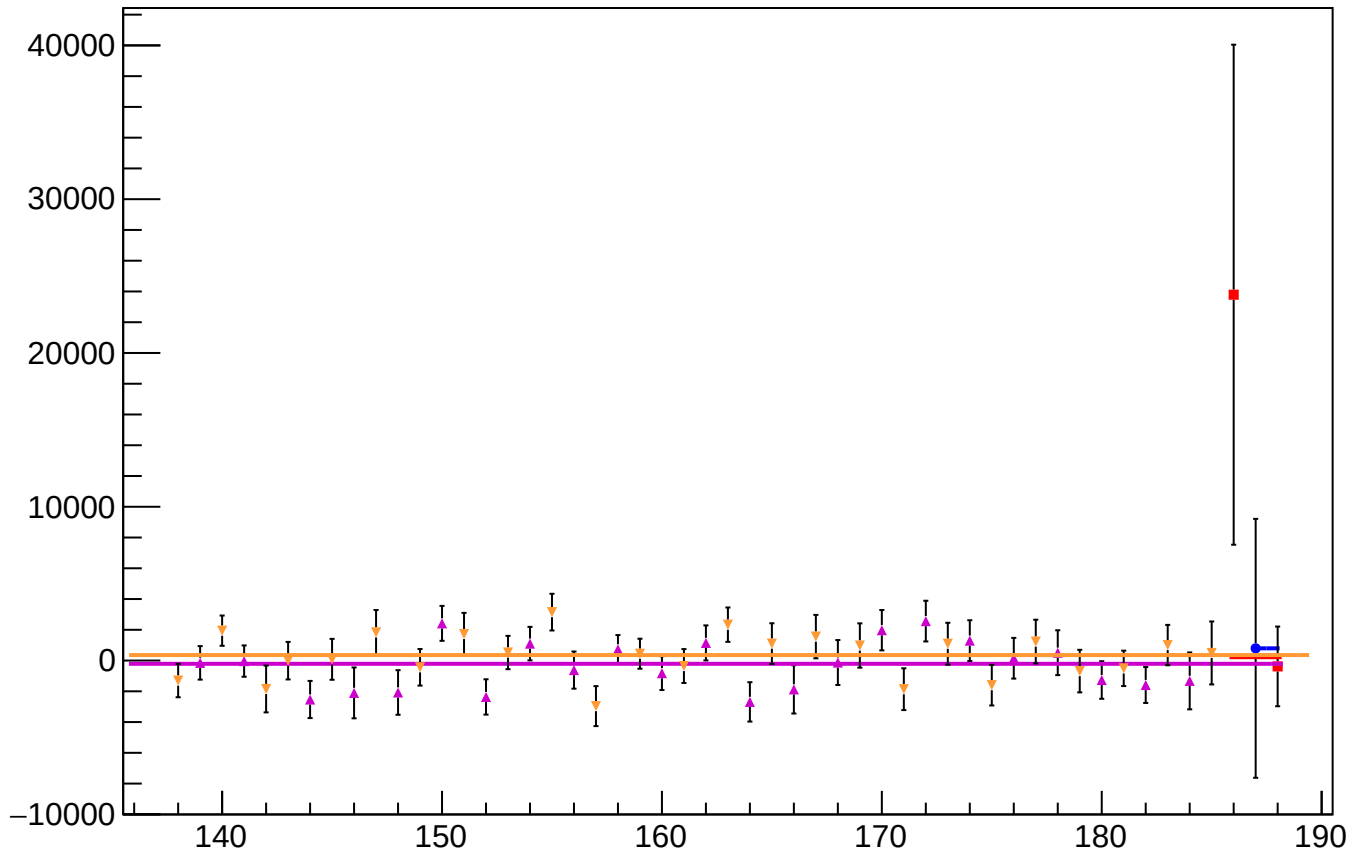
+ sign 149.810 $\pm$ 0.022  $\chi^2$ /NDF: 2741804.8/42

All: 149.537 $\pm$ 0.015  $\chi^2$ /NDF: 6419950.6/86

- sign 149.269 $\pm$ 0.022  $\chi^2$ /NDF: 3677832.9/43



# asym\_sam6\_correction\_mean vs Slug



Right In: 794.612 $\pm$ 8418.796  $\chi^2$ /NDF: 0.0/0

Left Out: 356.612 $\pm$ 250.934  $\chi^2$ /NDF:33.4/24

Right Out: 217.415 $\pm$ 2558.301  $\chi^2$ /NDF: 2.2/1

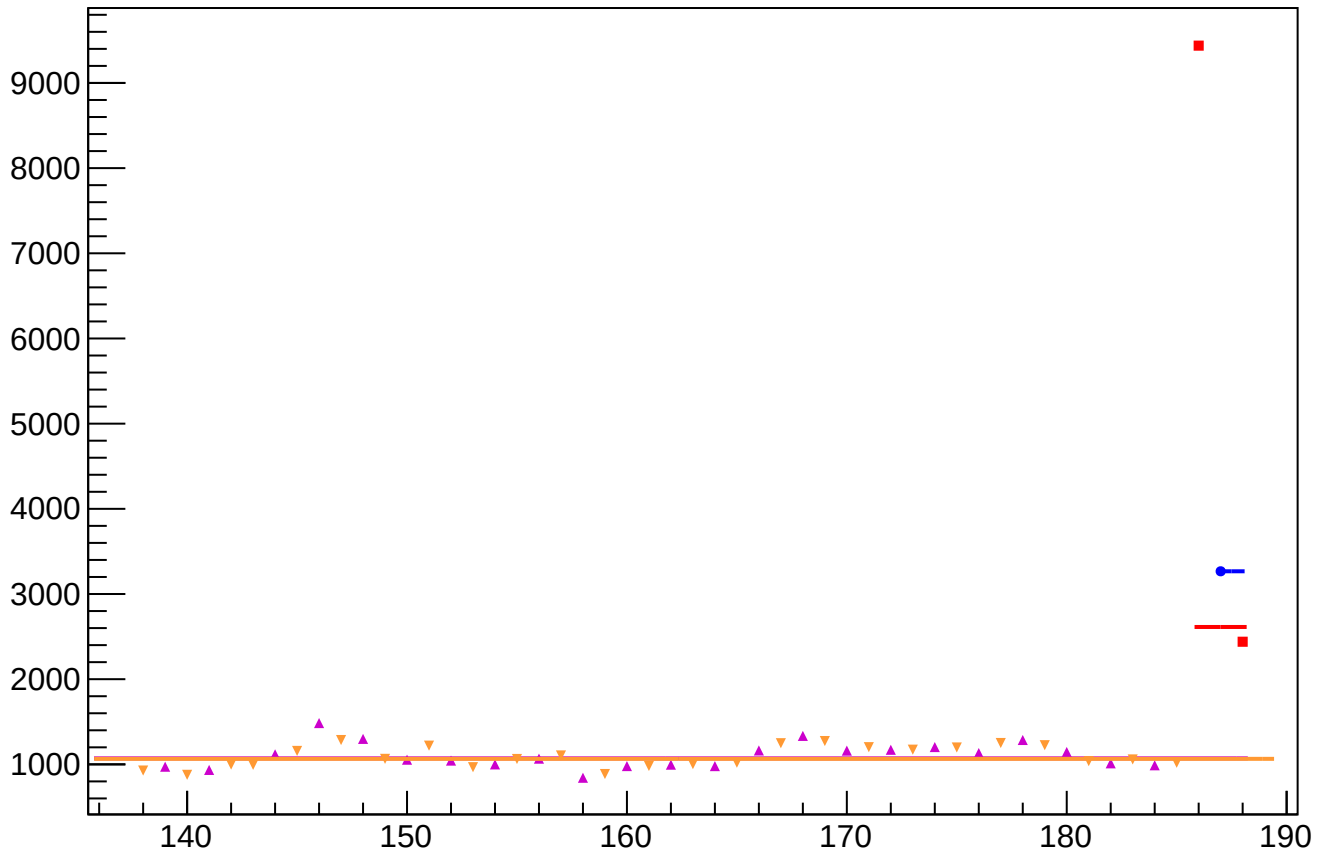
Left In: -212.007 $\pm$ 257.383  $\chi^2$ /NDF:36.0/22

+ sign 357.001 $\pm$ 250.823  $\chi^2$ /NDF: 33.4/25

All: 80.516 $\pm$ 179.192  $\chi^2$ /NDF: 74.1/50

- sign -207.704 $\pm$ 256.091  $\chi^2$ /NDF: 38.2/24

# asym\_sam6\_correction\_rms vs Slug



Right In: 3266.788 $\pm$ 5.953  $\chi^2$ /NDF: 0.0/0

Left Out: 1064.868 $\pm$ 0.177  $\chi^2$ /NDF: 493614.2/24

Right Out: 2612.969 $\pm$ 1.809  $\chi^2$ /NDF: 361355.8/1

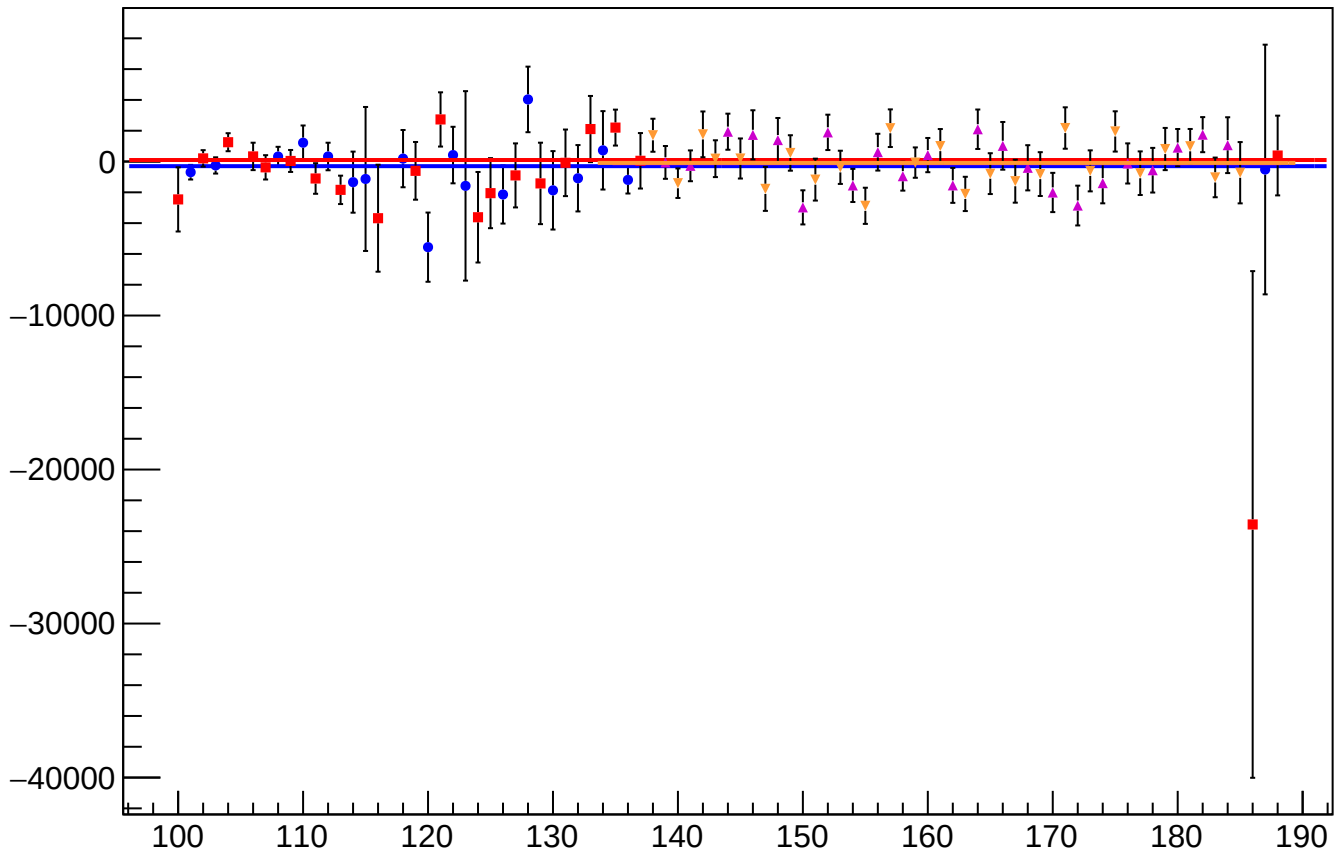
Left In: 1070.694 $\pm$ 0.182  $\chi^2$ /NDF: 570407.8/22

+ sign 1066.823 $\pm$ 0.177  $\chi^2$ /NDF: 630307.6/25

All: 1076.284 $\pm$ 0.127  $\chi^2$ /NDF: 2287460.1/50

- sign 1086.148 $\pm$ 0.181  $\chi^2$ /NDF: 1651339.8/24

# asym\_sam6\_mean vs Slug



Right In:  $-301.207 \pm 249.924$   $\chi^2/\text{NDF}$ : 16.8/17

Left Out:  $-89.632 \pm 247.271$   $\chi^2/\text{NDF}$ : 31.0/24

Right Out:  $98.196 \pm 244.851$   $\chi^2/\text{NDF}$ : 24.6/20

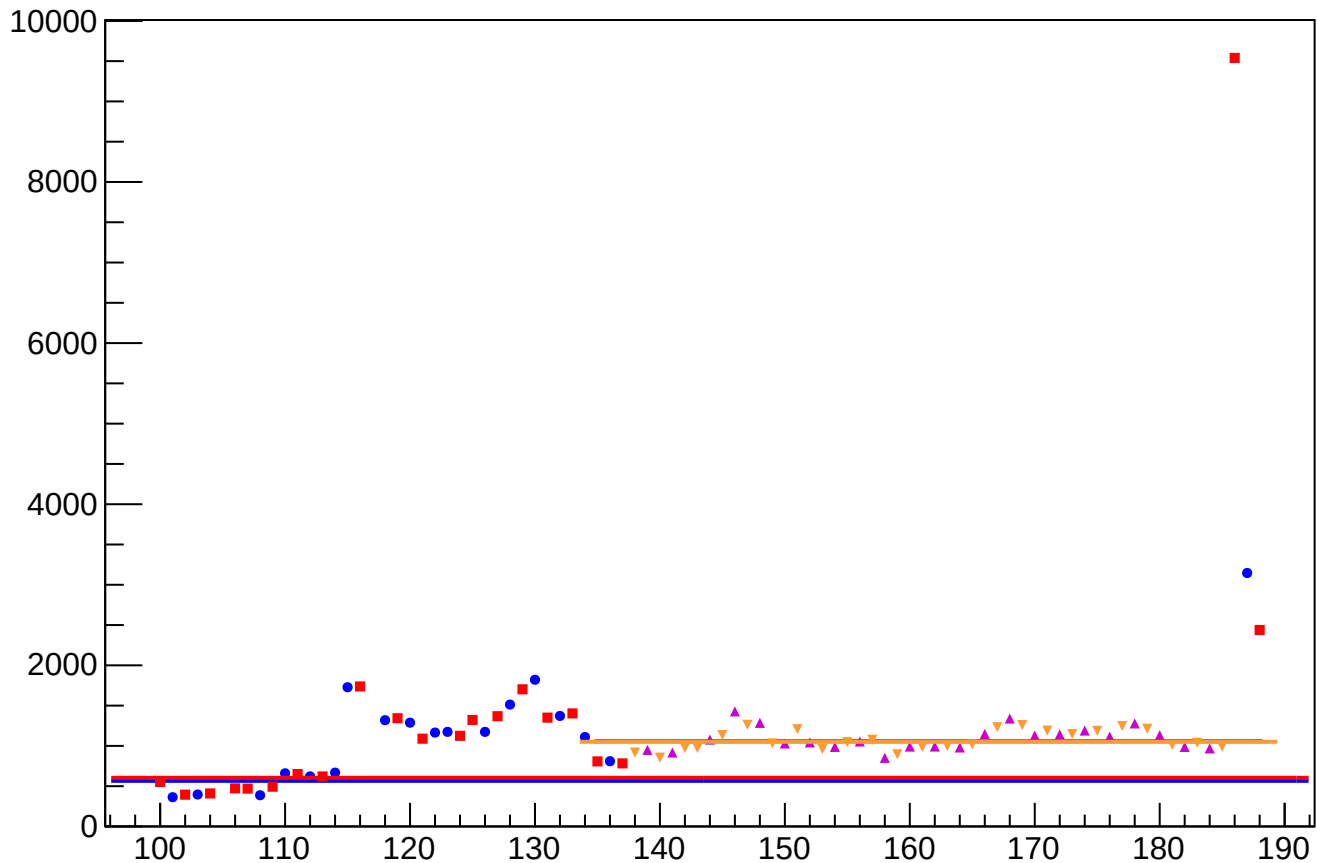
Left In:  $-110.879 \pm 254.337$   $\chi^2/\text{NDF}$ : 35.2/22

+ sign  $-194.291 \pm 175.777$   $\chi^2/\text{NDF}$ : 48.2/42

All:  $-98.666 \pm 124.511$   $\chi^2/\text{NDF}$ : 108.9/86

- sign  $-2.370 \pm 176.394$   $\chi^2/\text{NDF}$ : 60.1/43

# asym\_sam6\_rms vs Slug



Right In: 566.458 $\pm$ 0.177  $\chi^2$ /NDF: 3464253.3/17

Left Out: 1050.918 $\pm$ 0.175  $\chi^2$ /NDF:483477.5/24

Right Out: 603.633 $\pm$ 0.173  $\chi^2$ /NDF: 4427129.6/20

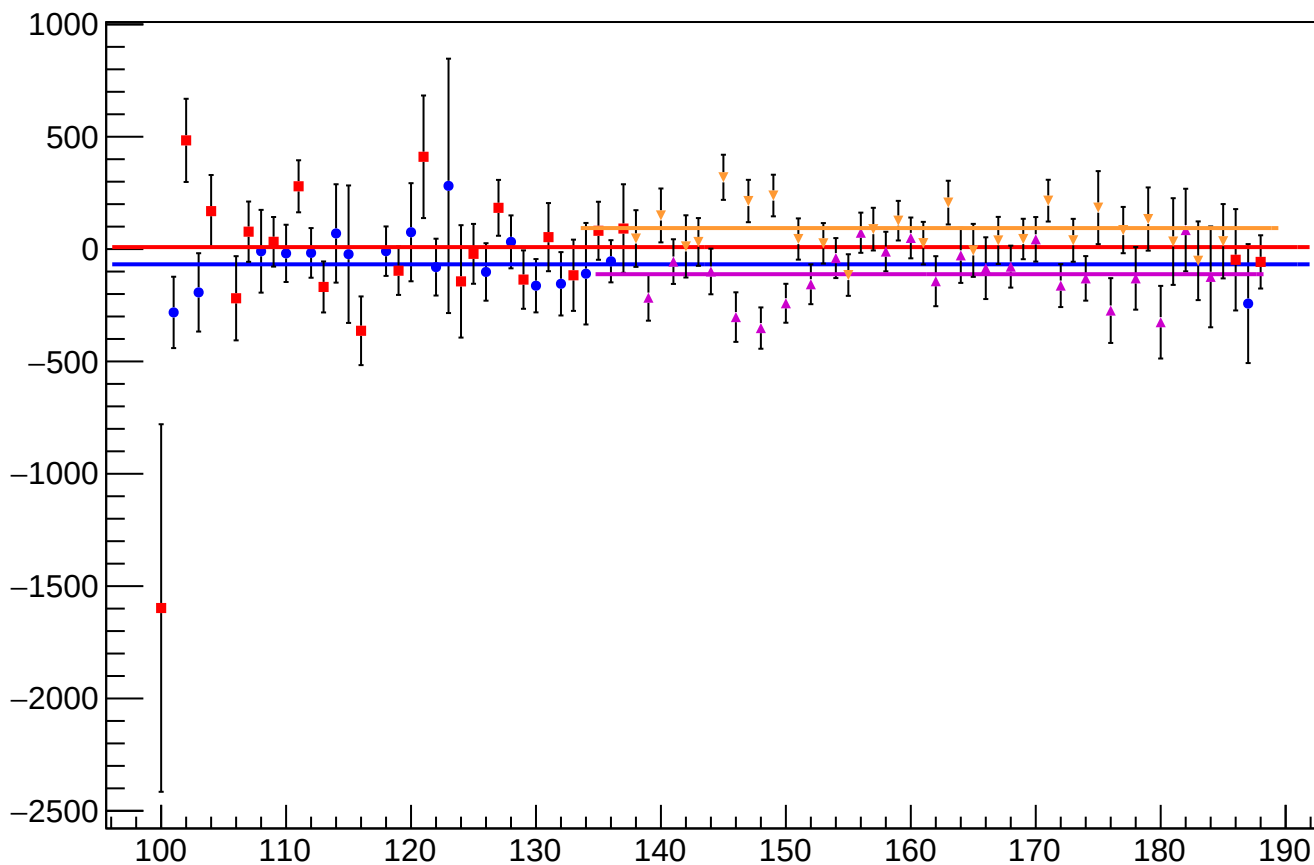
Left In: 1058.154 $\pm$ 0.180  $\chi^2$ /NDF:532260.0/22

+ sign 811.273 $\pm$ 0.124  $\chi^2$ /NDF: 7745350.8/42

All: 816.747 $\pm$ 0.088  $\chi^2$ /NDF: 16023623.7/80

- sign 822.259 $\pm$ 0.125  $\chi^2$ /NDF: 8274380.5/43

# dit\_asym\_sam7\_mean vs Slug



Right In:  $-67.786 \pm 34.337$   $\chi^2/\text{NDF}$ : 6.6/17

Left Out:  $93.496 \pm 21.284$   $\chi^2/\text{NDF}$ : 22.8/24

Right Out:  $8.818 \pm 31.845$   $\chi^2/\text{NDF}$ : 35.4/20

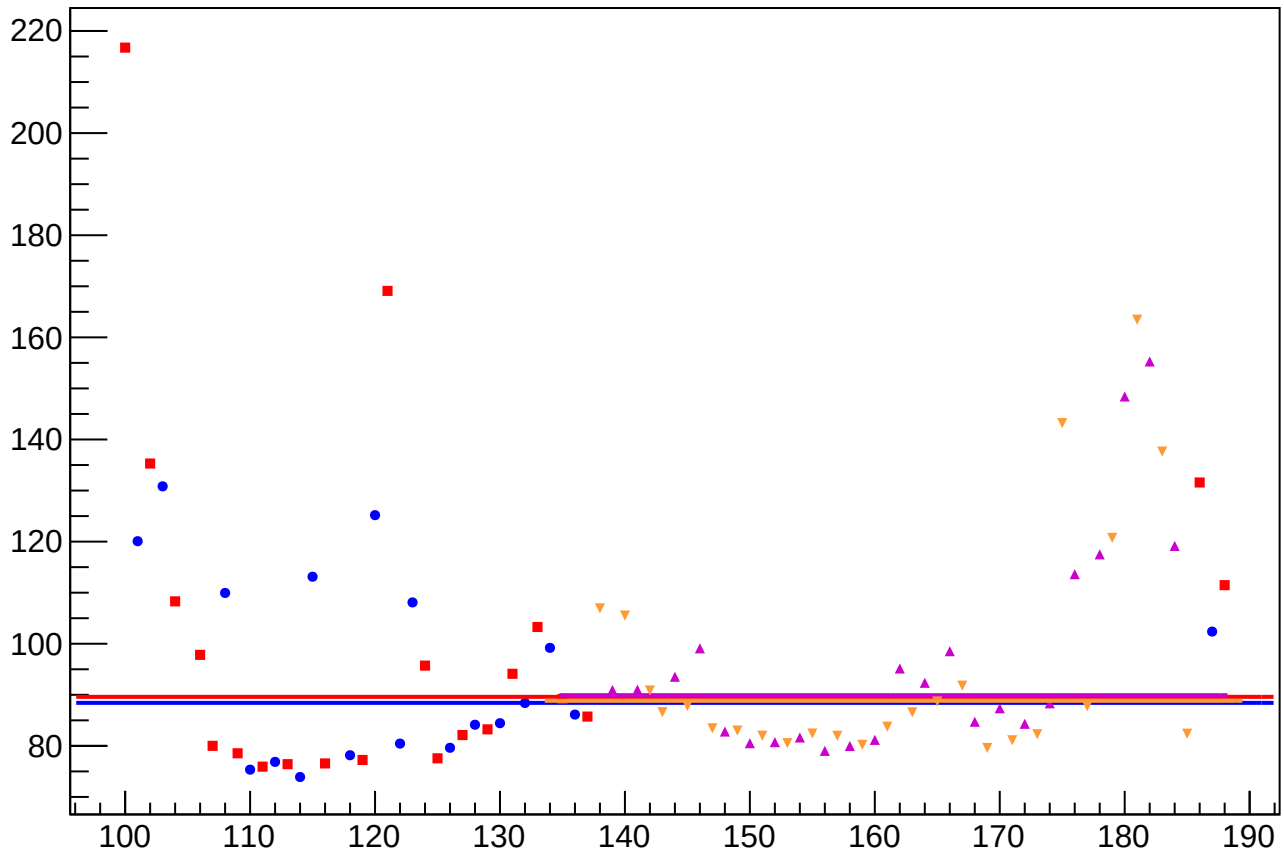
Left In:  $-111.732 \pm 21.971$   $\chi^2/\text{NDF}$ : 30.7/22

+ sign  $48.727 \pm 18.091$   $\chi^2/\text{NDF}$ : 45.3/42

All:  $-12.085 \pm 12.790$   $\chi^2/\text{NDF}$ : 143.7/86

- sign  $-72.855 \pm 18.084$   $\chi^2/\text{NDF}$ : 75.8/43

# dit\_asym\_sam7\_rms vs Slug



Right In: 88.425 $\pm$ 0.024  $\chi^2$ /NDF: 400098.4/17

Left Out: 88.830 $\pm$ 0.015  $\chi^2$ /NDF:1000651.2/24

Right Out: 89.604 $\pm$ 0.023  $\chi^2$ /NDF: 681397.4/20

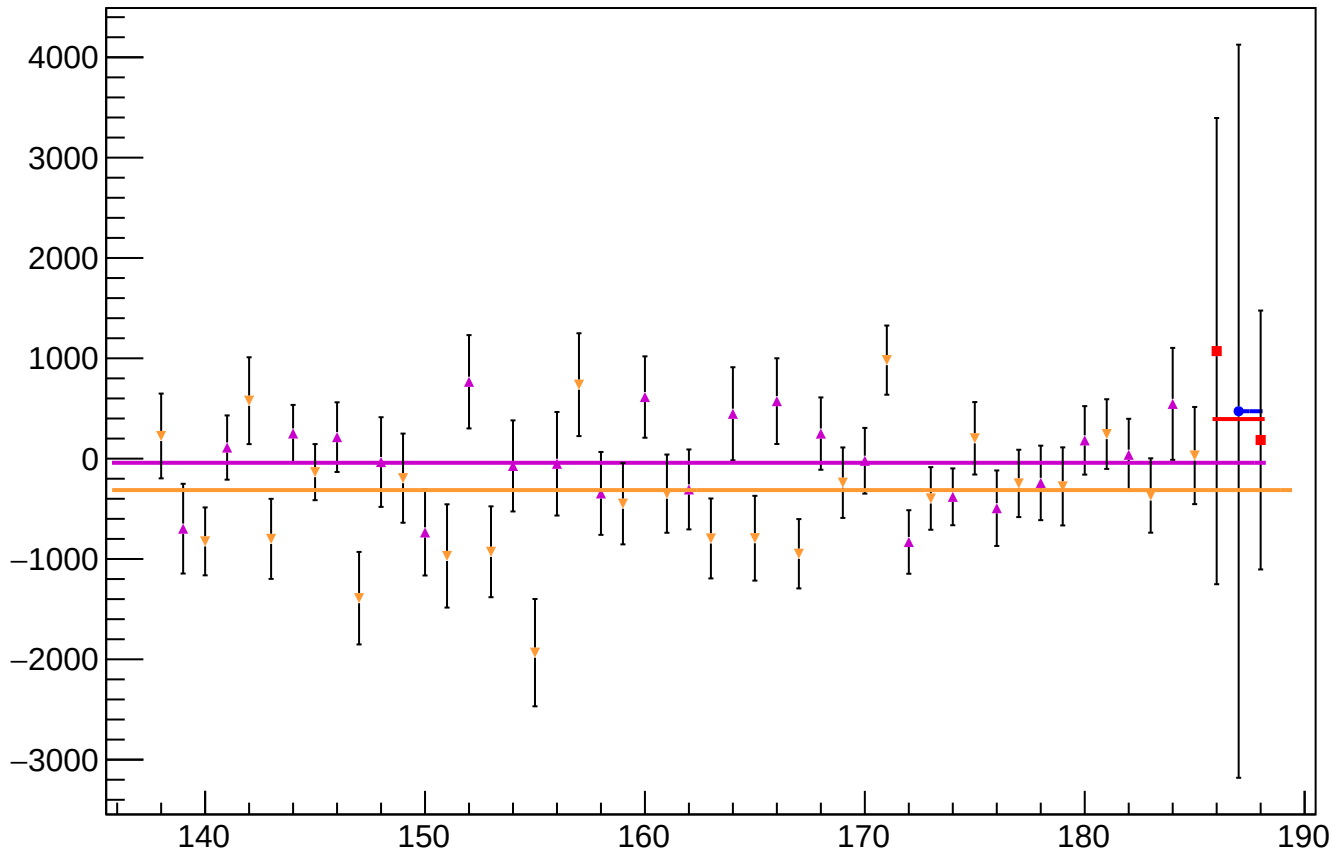
Left In: 89.934 $\pm$ 0.016  $\chi^2$ /NDF:874129.5/22

+ sign 88.717 $\pm$ 0.013  $\chi^2$ /NDF: 1400950.5/42

All: 89.273 $\pm$ 0.009  $\chi^2$ /NDF: 2960390.2/86

- sign 89.827 $\pm$ 0.013  $\chi^2$ /NDF: 1555672.8/43

# asym\_sam7\_correction\_mean vs Slug



Right In: 472.552 +/- 3653.348  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -313.446 +/- 77.334  $\chi^2/\text{NDF}$ : 58.1/24

Right Out: 394.587 +/- 1127.869  $\chi^2/\text{NDF}$ : 0.1/1

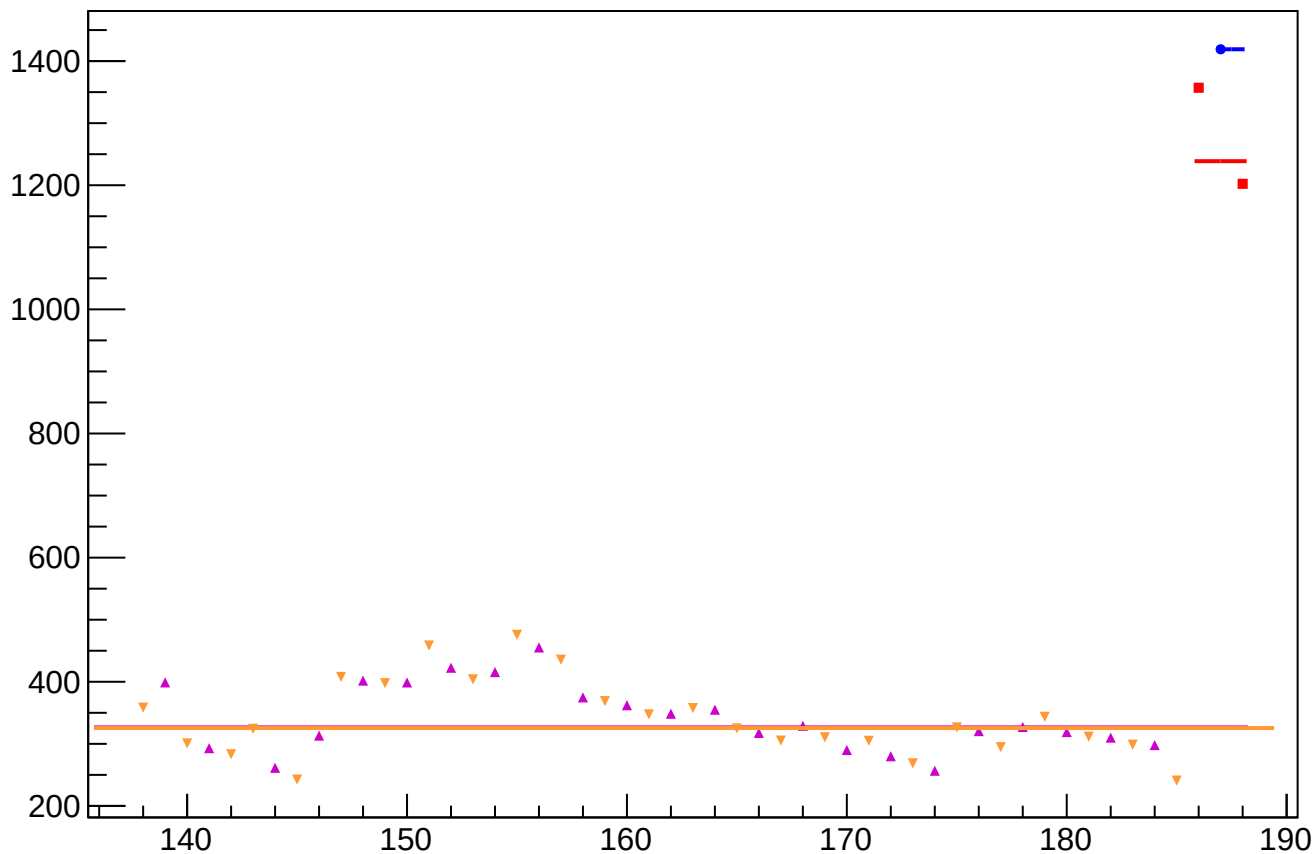
Left In: -41.244 +/- 78.858  $\chi^2/\text{NDF}$ : 28.0/22

+ sign -313.094 +/- 77.317  $\chi^2/\text{NDF}$ : 58.1/25

All: -178.477 +/- 55.142  $\chi^2/\text{NDF}$ : 92.6/50

- sign -39.123 +/- 78.666  $\chi^2/\text{NDF}$ : 28.3/24

# asym\_sam7\_correction\_rms vs Slug



Right In: 1419.047 $\pm$ 2.583  $\chi^2$ /NDF: 0.0/0

Left Out: 325.432 $\pm$ 0.055  $\chi^2$ /NDF:1000974.7/24

Right Out: 1238.759 $\pm$ 0.798  $\chi^2$ /NDF: 6782.9/1

Left In: 326.516 $\pm$ 0.056  $\chi^2$ /NDF:841153.2/22

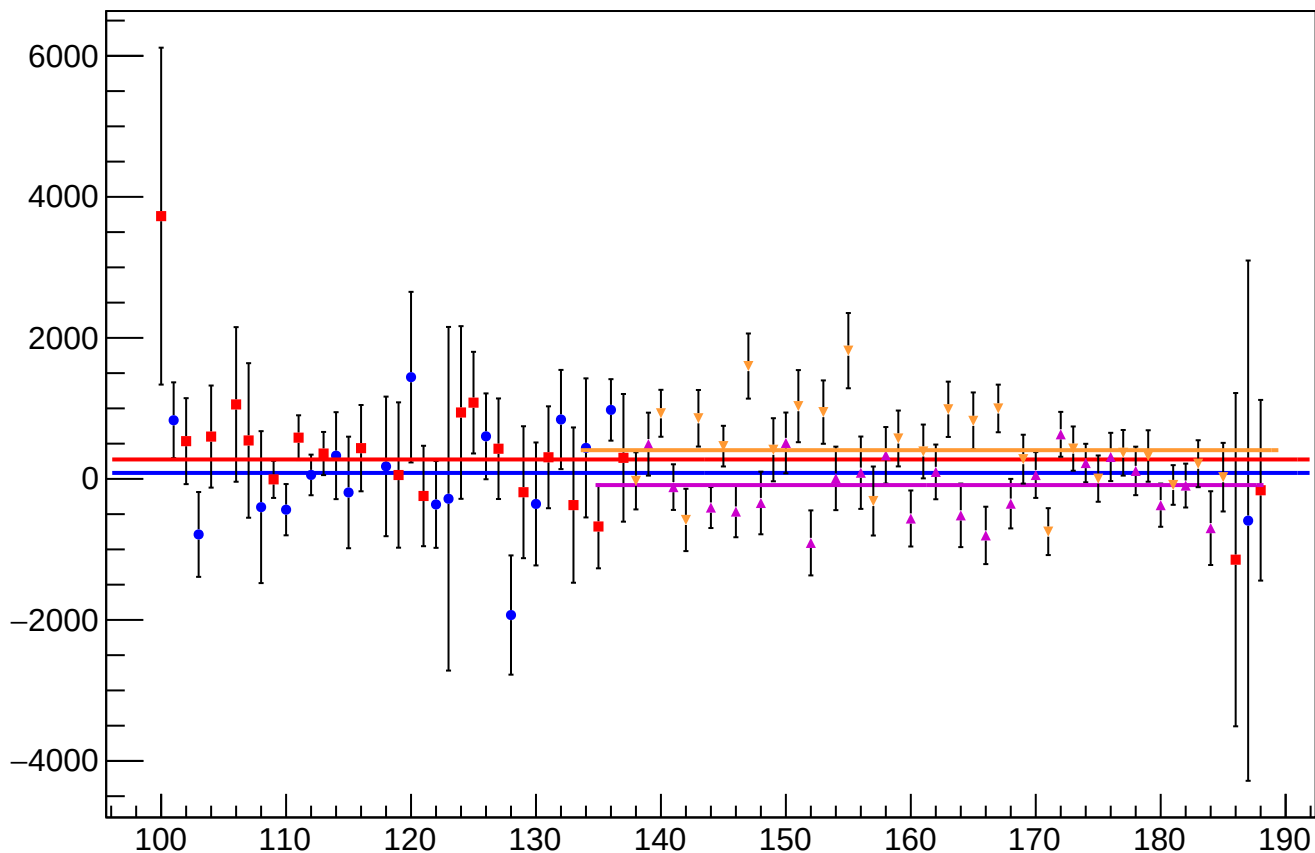
+ sign 325.922 $\pm$ 0.055  $\chi^2$ /NDF: 1180110.4/25

All: 328.394 $\pm$ 0.039  $\chi^2$ /NDF: 3334222.4/50

- sign 330.954 $\pm$ 0.056  $\chi^2$ /NDF: 2149948.9/24



# asym\_sam7\_mean vs Slug



Right In: 84.798 $\pm$ 142.494  $\chi^2$ /NDF: 20.6/17

Left Out: 407.375 $\pm$ 74.730  $\chi^2$ /NDF: 53.0/24

Right Out: 275.714 $\pm$ 128.750  $\chi^2$ /NDF: 11.1/20

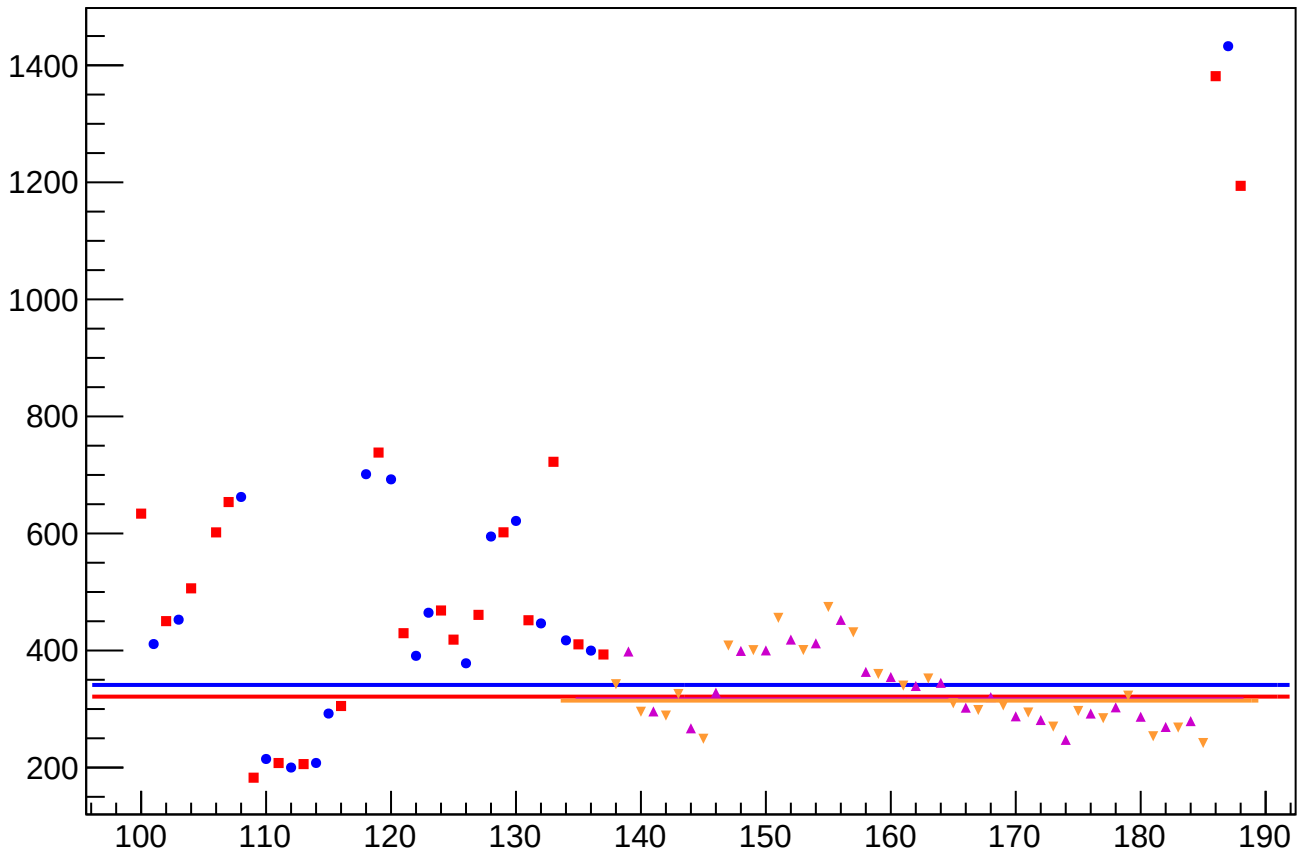
Left In: -87.657 $\pm$ 76.572  $\chi^2$ /NDF: 27.4/22

+ sign 337.791 $\pm$ 66.181  $\chi^2$ /NDF: 77.6/42

All: 171.615 $\pm$ 46.666  $\chi^2$ /NDF: 134.6/86

- sign 7.287 $\pm$ 65.812  $\chi^2$ /NDF: 44.4/43

# asym\_sam7\_rms vs Slug



Right In: 341.183+/-0.101  $\chi^2/\text{NDF}$ : 2217539.0/17

Left Out: 314.405+/-0.053  $\chi^2/\text{NDF}$ :1112244.9/24

+ sign 320.181+/-0.047  $\chi^2/\text{NDF}$ : 3385179.9/42

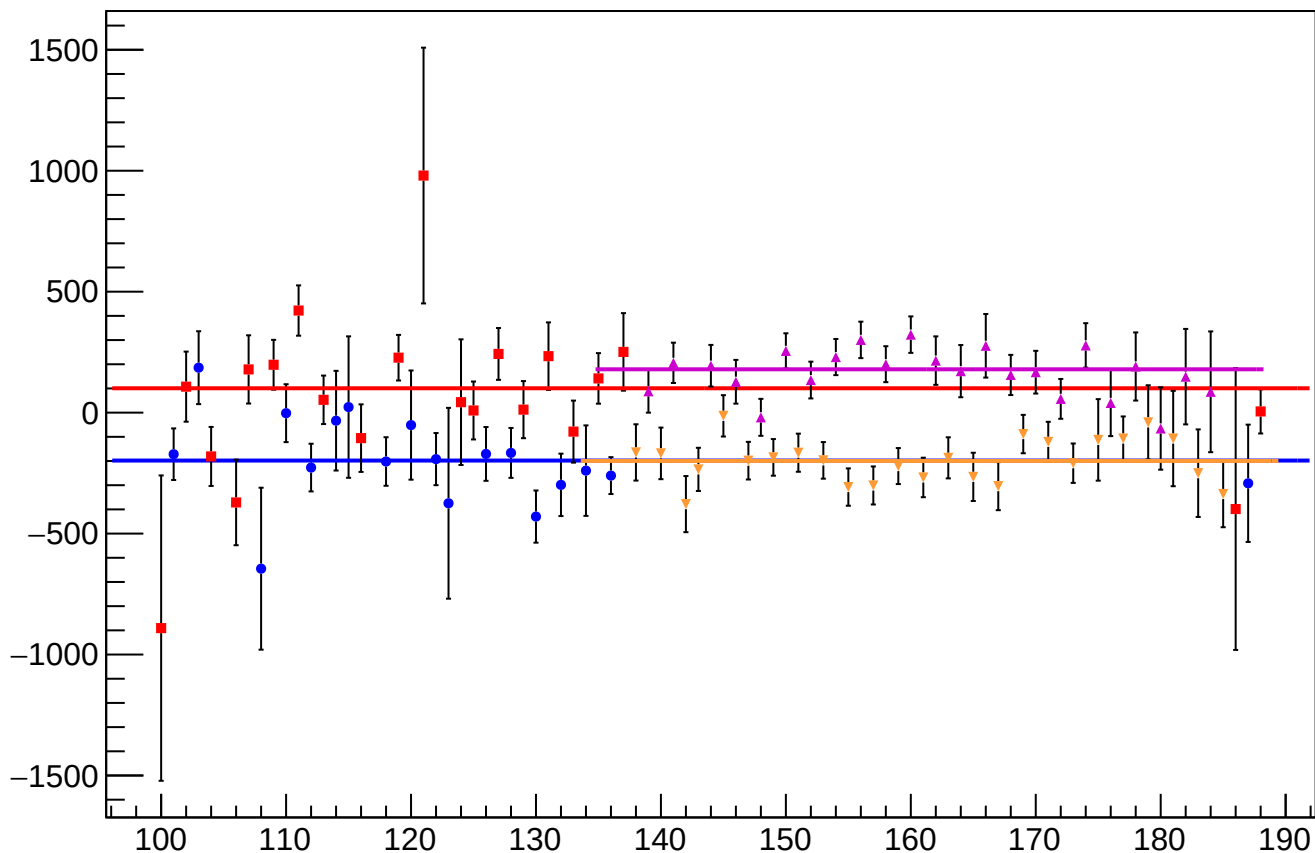
Right Out: 321.222+/-0.091  $\chi^2/\text{NDF}$ : 4078257.6/20

All: 318.994+/-0.033  $\chi^2/\text{NDF}$ : 8396260.5/86

- sign 317.820+/-0.047  $\chi^2/\text{NDF}$ : 5009800.5/43

Left In: 316.616+/-0.054  $\chi^2/\text{NDF}$ :929652.0/22

# dit\_asym\_sam8\_mean vs Slug



Right In:  $-198.077 \pm 30.163$   $\chi^2/\text{NDF}: 19.2/17$

Left Out:  $-199.640 \pm 18.452$   $\chi^2/\text{NDF}: 20.2/24$

Right Out:  $100.722 \pm 28.142$   $\chi^2/\text{NDF}: 41.3/20$

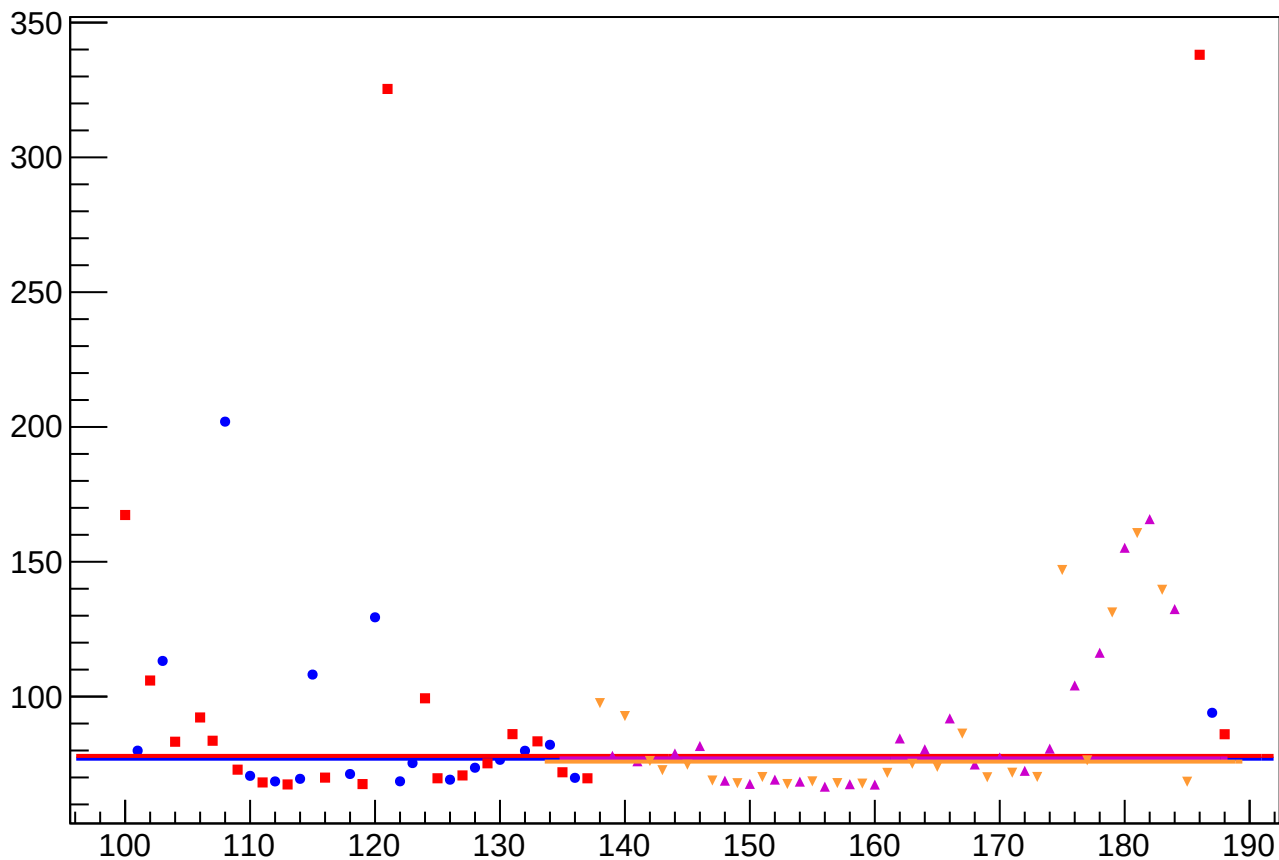
Left In:  $179.154 \pm 19.112$   $\chi^2/\text{NDF}: 23.9/22$

+ sign  $-199.214 \pm 15.740$   $\chi^2/\text{NDF}: 39.4/42$

All:  $-23.196 \pm 11.155$   $\chi^2/\text{NDF}: 361.1/86$

- sign  $154.398 \pm 15.811$   $\chi^2/\text{NDF}: 70.5/43$

# dit\_asym\_sam8\_rms vs Slug



Right In:  $76.960 \pm 0.021$   $\chi^2/\text{NDF}$ : 610372.9/17

Left Out:  $75.883 \pm 0.013$   $\chi^2/\text{NDF}$ : 1552500.3/24

Right Out:  $77.998 \pm 0.020$   $\chi^2/\text{NDF}$ : 1118841.0/20

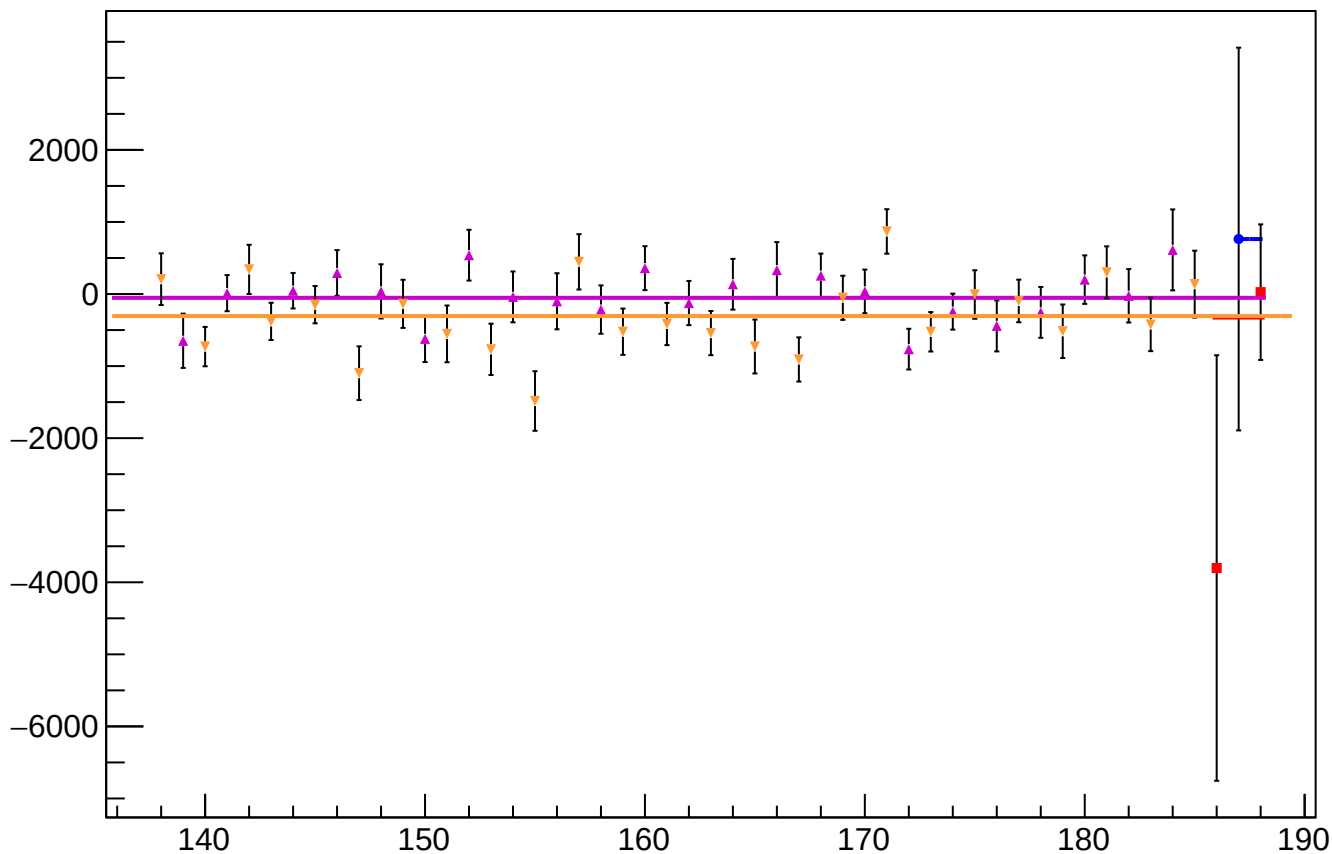
Left In:  $77.080 \pm 0.014$   $\chi^2/\text{NDF}$ : 1422981.1/22

+ sign  $76.176 \pm 0.011$   $\chi^2/\text{NDF}$ : 2164727.9/42

All:  $76.770 \pm 0.008$   $\chi^2/\text{NDF}$ : 4713728.7/86

- sign  $77.370 \pm 0.011$   $\chi^2/\text{NDF}$ : 2543280.4/43

# asym\_sam8\_correction\_mean vs Slug



Right In: 763.015 $\pm$ 2655.697  $\chi^2$ /NDF: 0.0/0

Left Out: -305.659 $\pm$ 65.327  $\chi^2$ /NDF: 54.9/24

Right Out: -326.628 $\pm$ 896.154  $\chi^2$ /NDF: 1.5/1

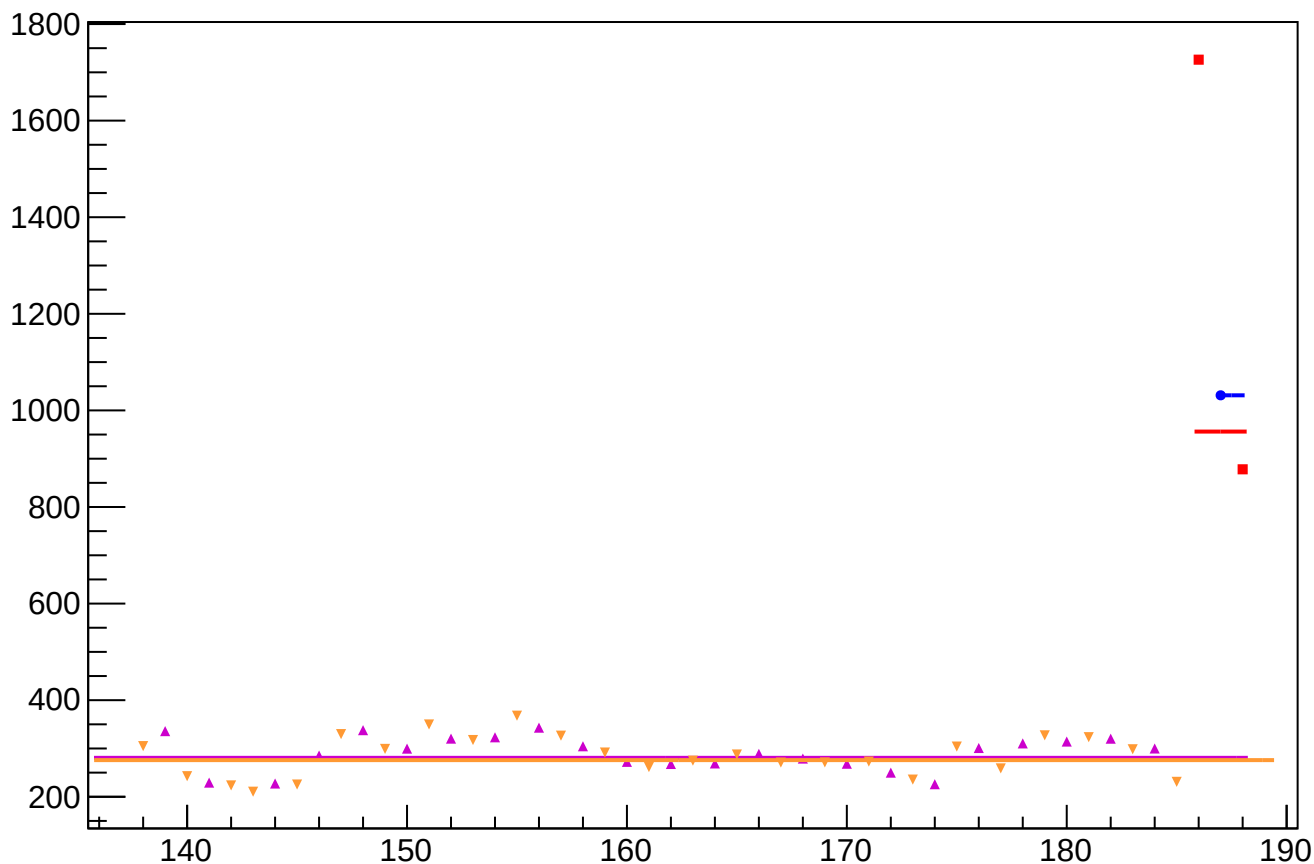
Left In: -52.759 $\pm$ 67.539  $\chi^2$ /NDF: 24.9/22

+ sign -305.013 $\pm$ 65.307  $\chi^2$ /NDF: 55.1/25

All: -183.516 $\pm$ 46.884  $\chi^2$ /NDF: 88.7/50

- sign -54.306 $\pm$ 67.348  $\chi^2$ /NDF: 26.5/24

# asym\_sam8\_correction\_rms vs Slug



Right In: 1031.251+/-1.878  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 275.901+/-0.046  $\chi^2/\text{NDF}$ : 753109.6/24

Right Out: 956.163+/-0.634  $\chi^2/\text{NDF}$ : 149824.0/1

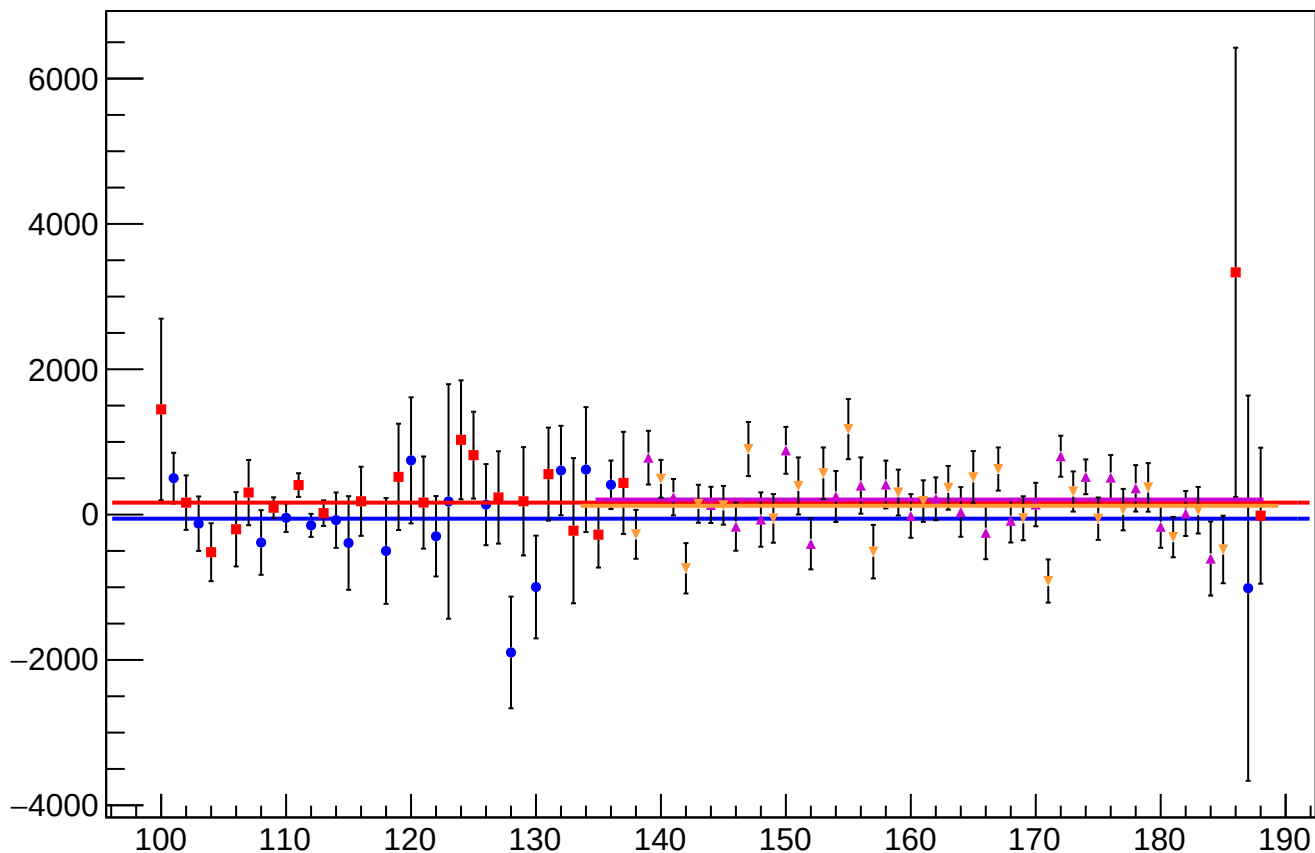
Left In: 280.628+/-0.048  $\chi^2/\text{NDF}$ : 587415.9/22

+ sign 276.358+/-0.046  $\chi^2/\text{NDF}$ : 914808.4/25

All: 280.276+/-0.033  $\chi^2/\text{NDF}$ : 2796961.7/50

- sign 284.444+/-0.048  $\chi^2/\text{NDF}$ : 1867294.2/24

# asym\_sam8\_mean vs Slug



Right In:  $-56.044 \pm 90.303$   $\chi^2/\text{NDF}$ : 16.7/17

Left Out:  $121.185 \pm 62.911$   $\chi^2/\text{NDF}$ : 49.0/24

Right Out:  $164.885 \pm 76.621$   $\chi^2/\text{NDF}$ : 13.0/20

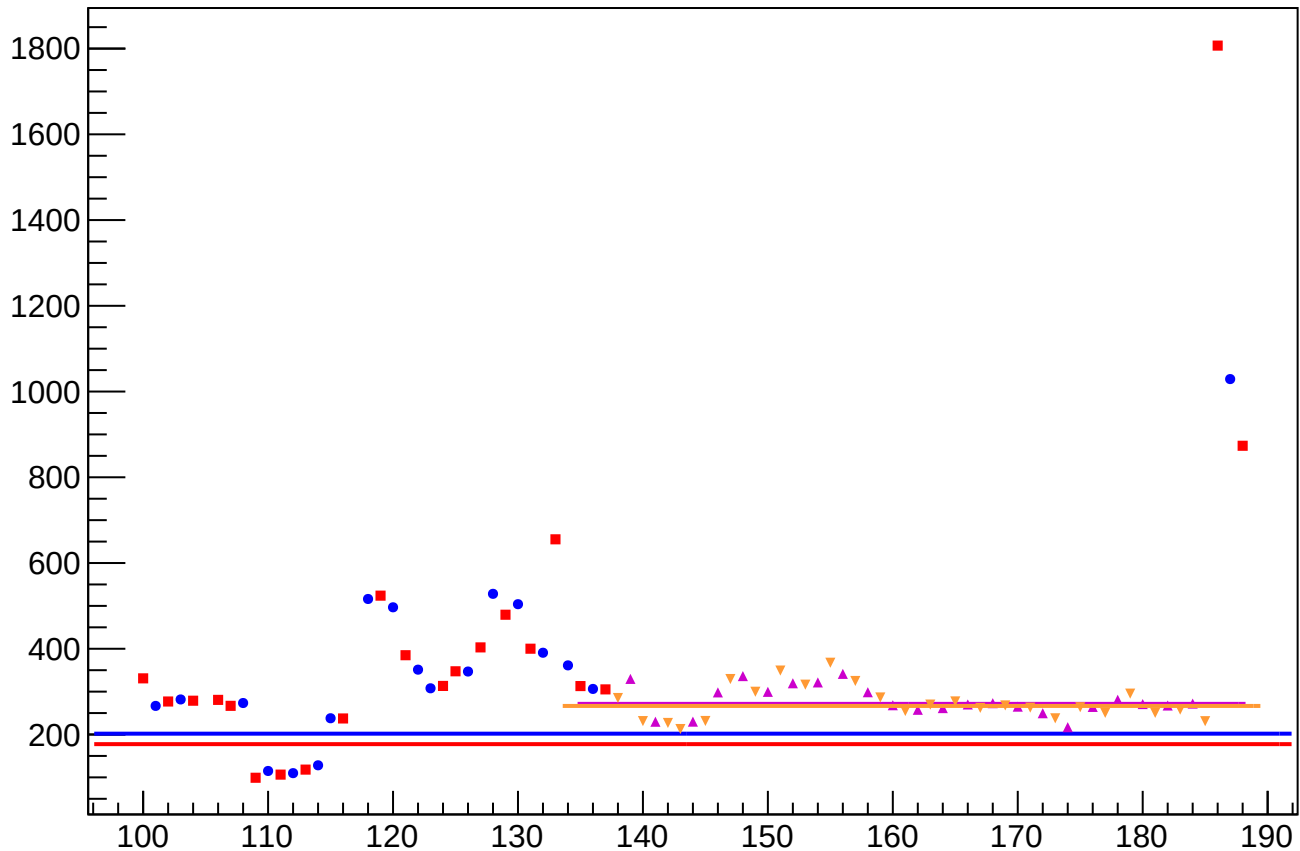
Left In:  $207.047 \pm 65.246$   $\chi^2/\text{NDF}$ : 27.8/22

+ sign  $63.274 \pm 51.619$   $\chi^2/\text{NDF}$ : 68.3/42

All:  $128.717 \pm 35.793$   $\chi^2/\text{NDF}$ : 112.3/86

- sign  $189.325 \pm 49.676$   $\chi^2/\text{NDF}$ : 40.9/43

# asym\_sam8\_rms vs Slug



Right In: 201.932 $\pm$ 0.064  $\chi^2$ /NDF: 3631127.8/17

Left Out: 266.618 $\pm$ 0.044  $\chi^2$ /NDF: 639230.8/24

Right Out: 177.505 $\pm$ 0.054  $\chi^2$ /NDF: 5766142.2/20

Left In: 271.451 $\pm$ 0.046  $\chi^2$ /NDF: 530897.8/22

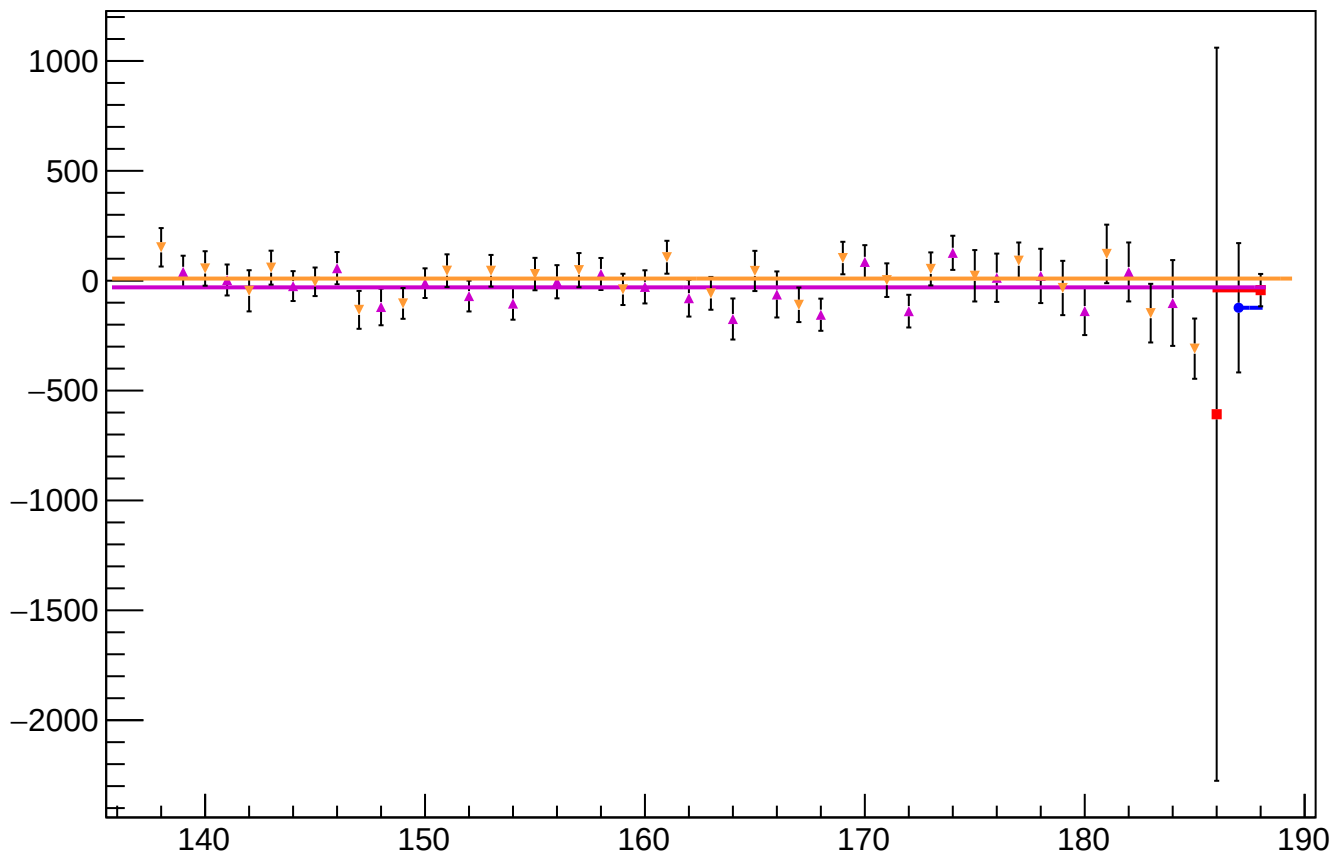
+ sign 245.481 $\pm$ 0.037  $\chi^2$ /NDF: 4961266.0/42

All: 238.462 $\pm$ 0.025  $\chi^2$ /NDF: 13072398.3/80

- sign 231.962 $\pm$ 0.035  $\chi^2$ /NDF: 8039911.1/43



dit\_asym\_sam\_15\_avg\_mean vs Slug



Right In: -123.135 $\pm$ 294.256  $\chi^2$ /NDF: 0.0/0

Left Out: 9.762 $\pm$ 16.463  $\chi^2$ /NDF:25.9/24

Right Out: -43.979 $\pm$ 73.608  $\chi^2$ /NDF: 0.1/1

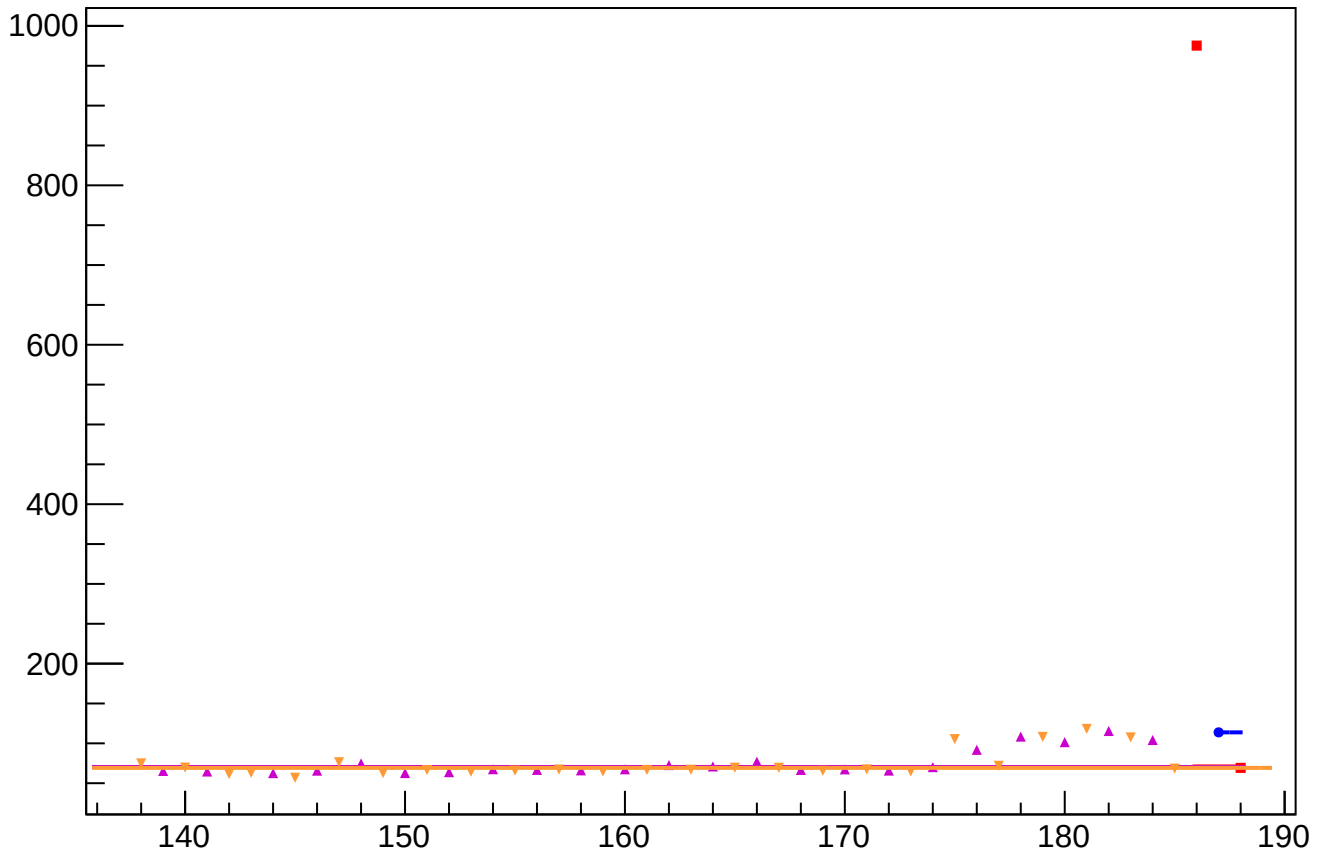
Left In: -30.236 $\pm$ 17.031  $\chi^2$ /NDF:21.9/22

+ sign 9.347 $\pm$ 16.438  $\chi^2$ /NDF: 26.1/25

All: -10.605 $\pm$ 11.677  $\chi^2$ /NDF: 51.1/50

- sign -30.934 $\pm$ 16.592  $\chi^2$ /NDF: 22.0/24

# dit\_asym\_sam\_15\_avg\_rms vs Slug



Right In: 113.763 $\pm$ 0.208  $\chi^2$ /NDF: 0.0/0

Left Out: 69.234 $\pm$ 0.012  $\chi^2$ /NDF:1005922.1/24

Right Out: 71.001 $\pm$ 0.052  $\chi^2$ /NDF: 588833.6/1

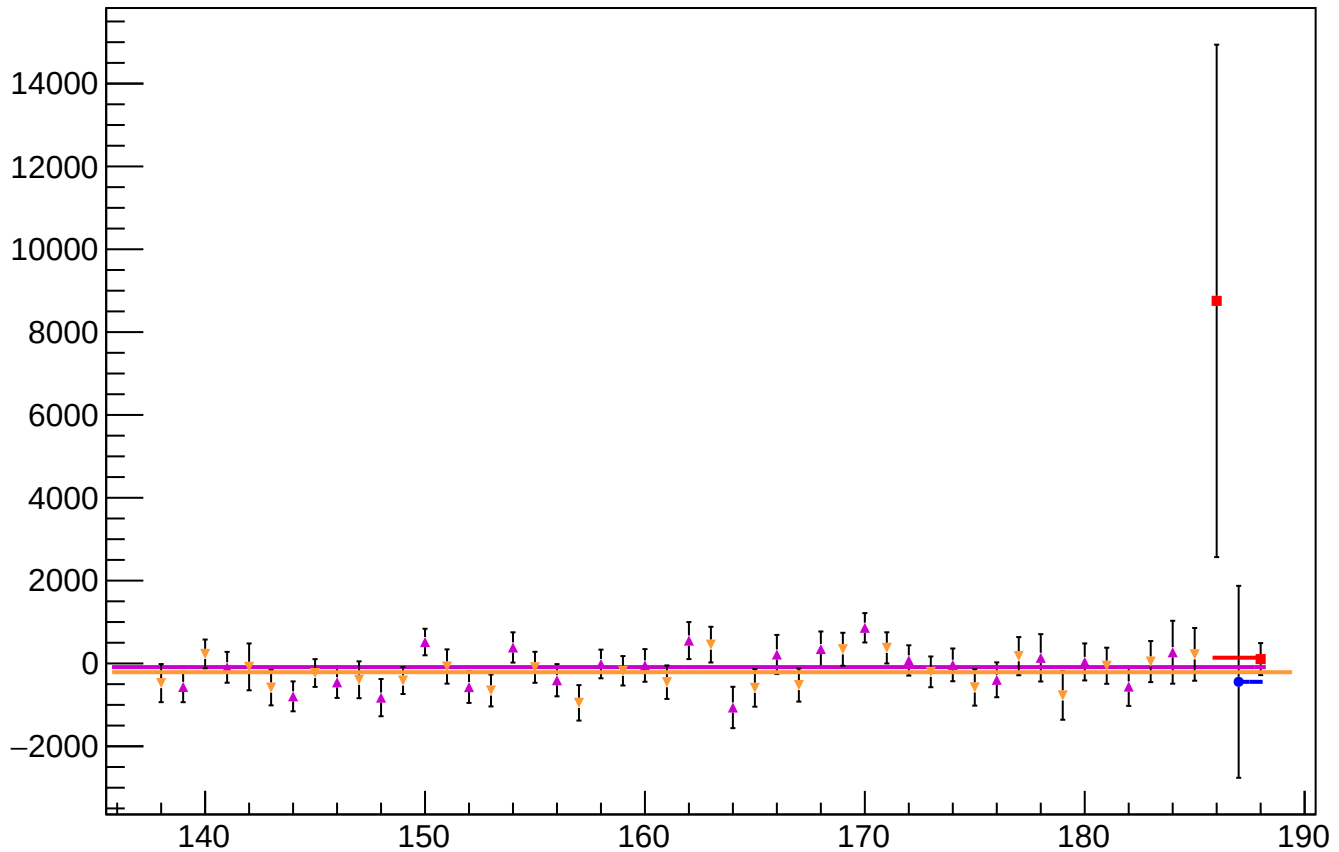
Left In: 70.322 $\pm$ 0.012  $\chi^2$ /NDF:862105.7/22

+ sign 69.373 $\pm$ 0.012  $\chi^2$ /NDF: 1051580.0/25

All: 69.860 $\pm$ 0.008  $\chi^2$ /NDF: 2506231.2/50

- sign 70.357 $\pm$ 0.012  $\chi^2$ /NDF: 1451100.8/24

# asym\_sam\_15\_avg\_correction\_mean vs Slug



Right In: -443.440+/-2317.322  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -211.526+/-82.780  $\chi^2/\text{NDF}$ : 19.4/24

Right Out: 138.888+/-385.647  $\chi^2/\text{NDF}$ : 1.9/1

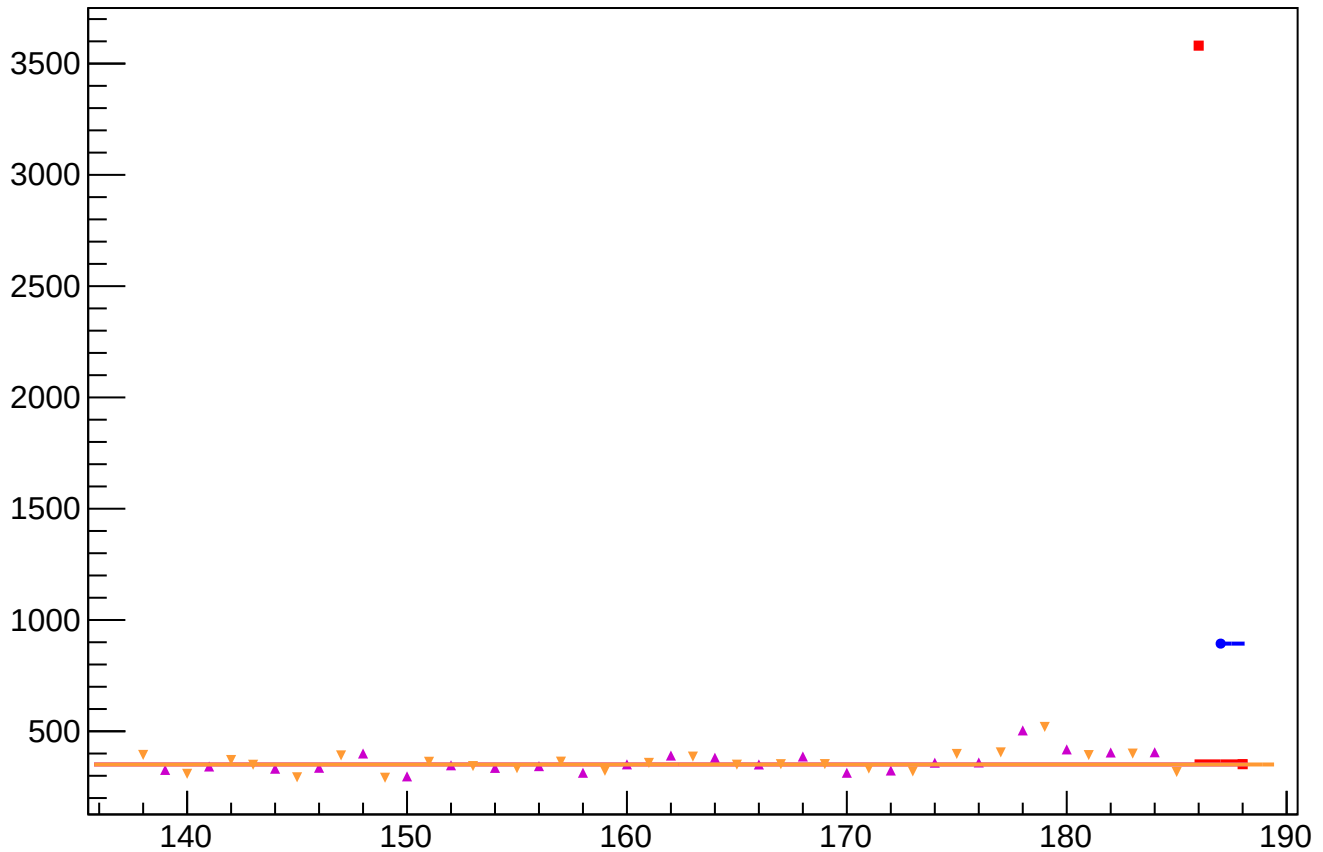
Left In: -88.062+/-84.309  $\chi^2/\text{NDF}$ : 33.5/22

+ sign -211.822+/-82.727  $\chi^2/\text{NDF}$ : 19.4/25

All: -144.471+/-58.368  $\chi^2/\text{NDF}$ : 56.5/50

- sign -77.710+/-82.364  $\chi^2/\text{NDF}$ : 35.7/24

# asym\_sam\_15\_avg\_correction\_rms vs Slug



Right In: 893.872 $\pm$ 1.639  $\chi^2$ /NDF: 0.0/0

Left Out: 350.780 $\pm$ 0.059  $\chi^2$ /NDF: 506274.4/24

Right Out: 364.719 $\pm$ 0.273  $\chi^2$ /NDF: 542669.8/1

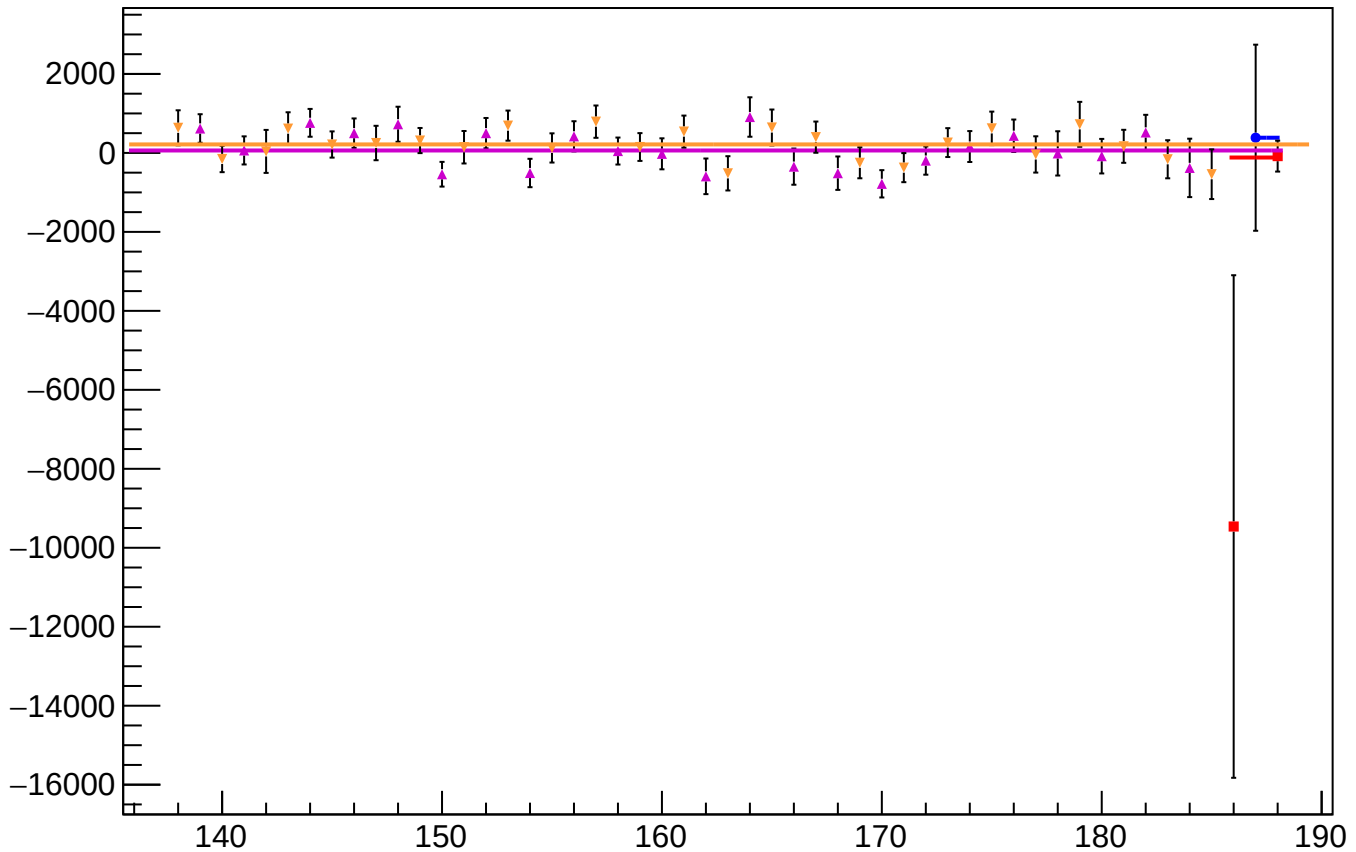
Left In: 350.944 $\pm$ 0.060  $\chi^2$ /NDF: 424876.4/22

+ sign 351.473 $\pm$ 0.058  $\chi^2$ /NDF: 615985.1/25

All: 351.523 $\pm$ 0.041  $\chi^2$ /NDF: 1585967.8/50

- sign 351.573 $\pm$ 0.058  $\chi^2$ /NDF: 969981.2/24

# asym\_sam\_15\_avg\_mean vs Slug



Right In:  $384.844 \pm 2356.540$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $215.214 \pm 81.235$   $\chi^2/\text{NDF}$ : 19.6/24

Right Out:  $-116.523 \pm 390.808$   $\chi^2/\text{NDF}$ : 2.2/1

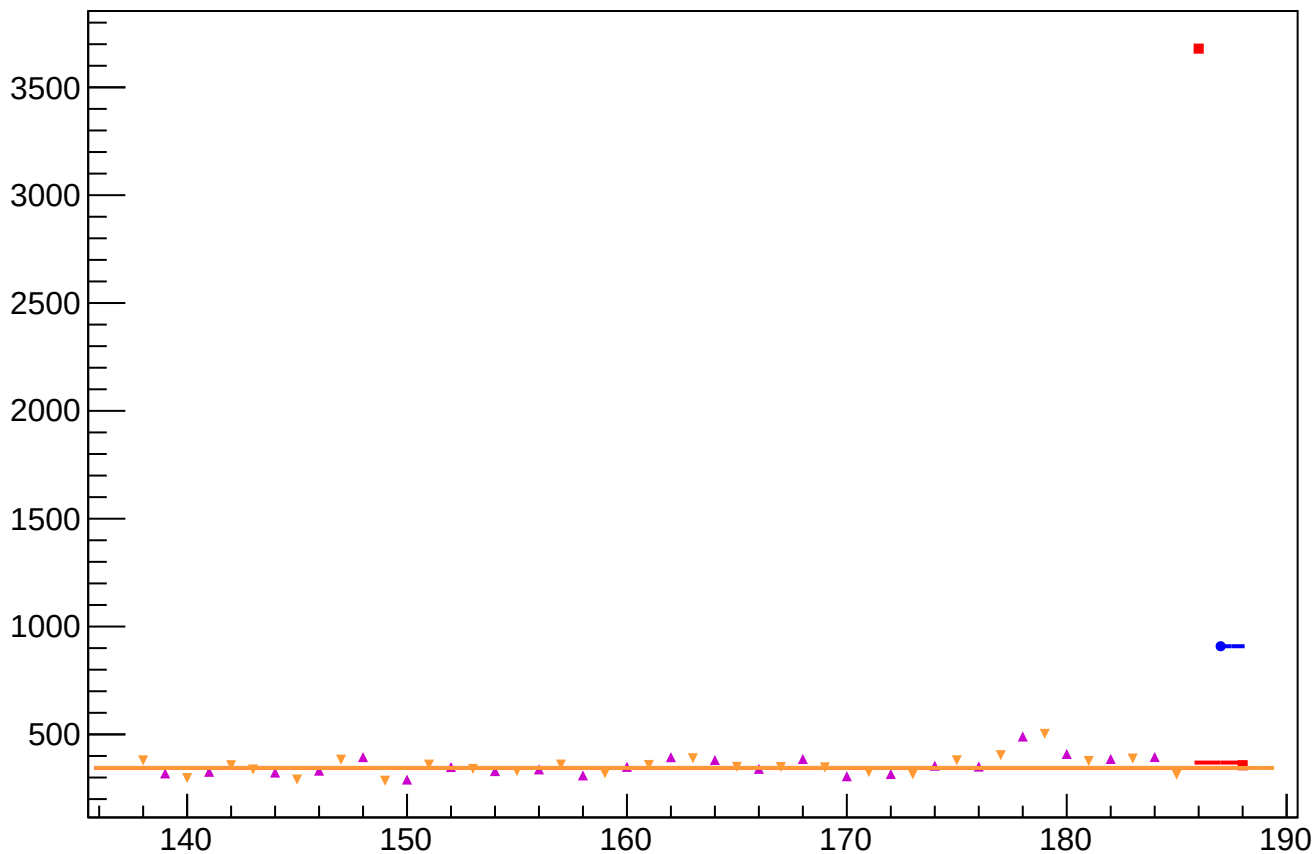
Left In:  $61.730 \pm 82.841$   $\chi^2/\text{NDF}$ : 34.9/22

+ sign  $215.415 \pm 81.187$   $\chi^2/\text{NDF}$ : 19.6/25

All:  $134.595 \pm 57.356$   $\chi^2/\text{NDF}$ : 58.9/50

- sign  $54.065 \pm 81.040$   $\chi^2/\text{NDF}$ : 37.3/24

# asym\_sam\_15\_avg\_rms vs Slug



Right In: 908.760+/-1.666     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 344.439+/-0.057     $\chi^2/\text{NDF}$ : 488381.9/24

Right Out: 369.327+/-0.276     $\chi^2/\text{NDF}$ : 543117.9/1

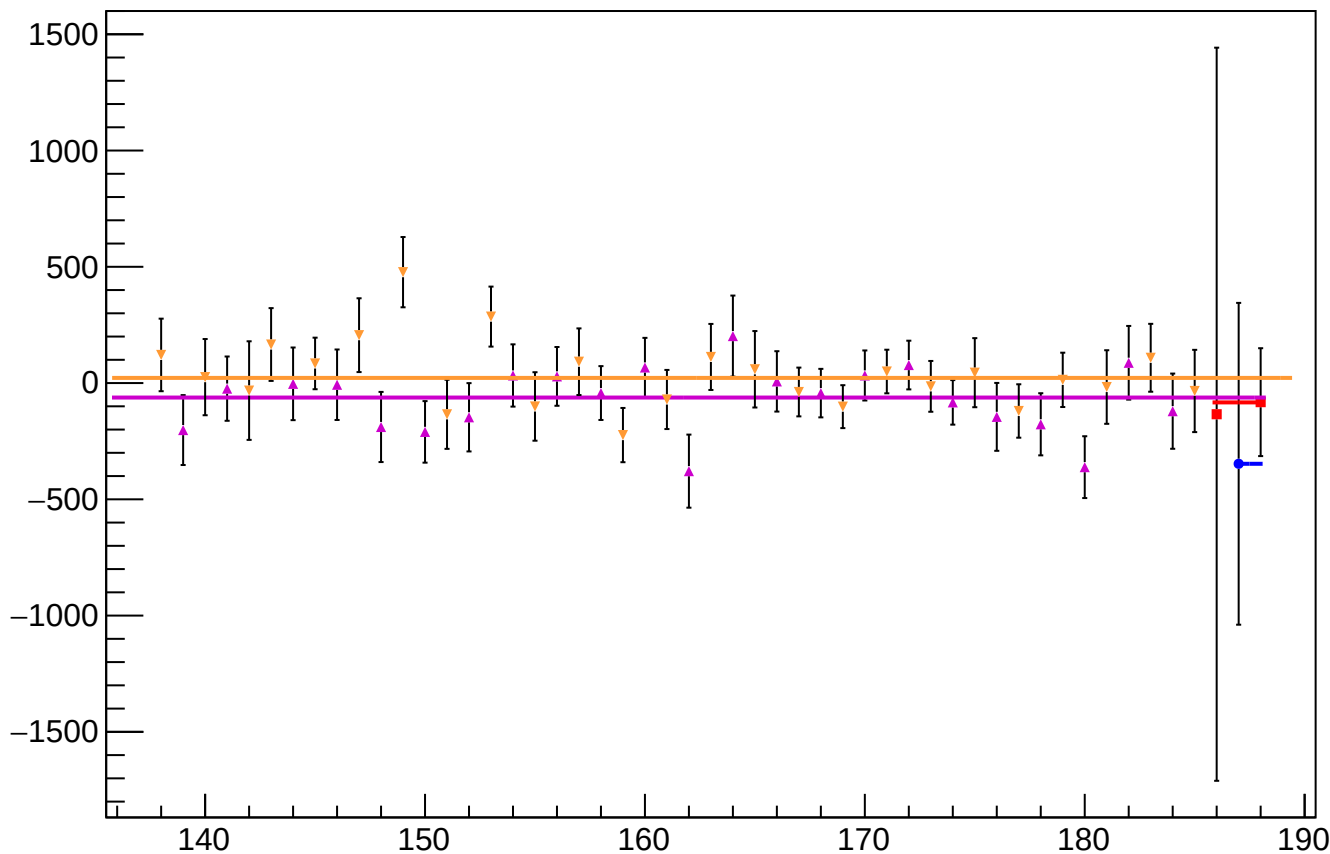
Left In: 344.475+/-0.059     $\chi^2/\text{NDF}$ : 433401.7/22

+ sign 345.109+/-0.057     $\chi^2/\text{NDF}$ : 602937.5/25

All: 345.327+/-0.041     $\chi^2/\text{NDF}$ : 1587225.5/50

- sign 345.544+/-0.057     $\chi^2/\text{NDF}$ : 984259.4/24

dit\_asym\_sam\_26\_avg\_mean vs Slug



Right In: -347.208 $\pm$ 691.999  $\chi^2$ /NDF: 0.0/0

Left Out: 22.164 $\pm$ 26.284  $\chi^2$ /NDF:28.1/24

Right Out: -83.205 $\pm$ 229.509  $\chi^2$ /NDF: 0.0/1

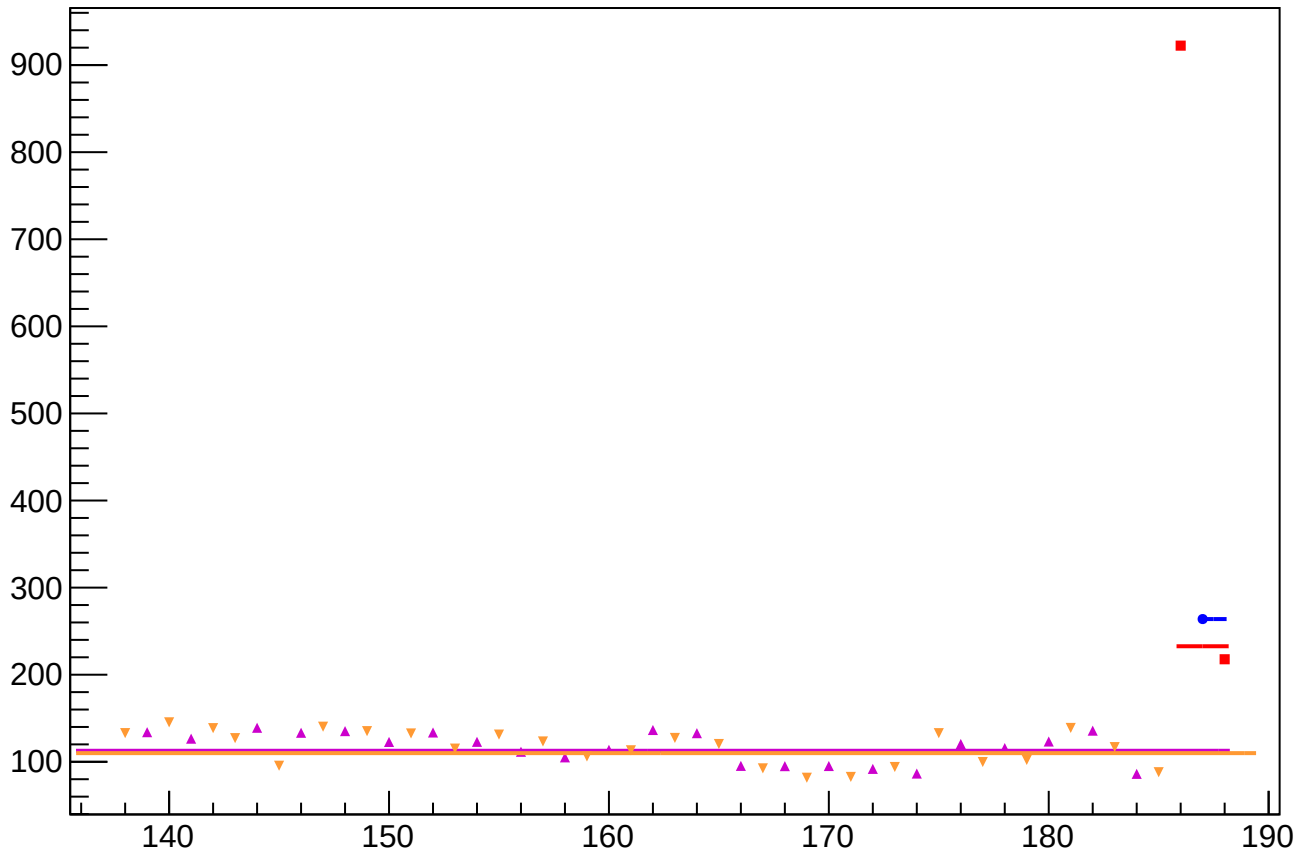
Left In: -62.310 $\pm$ 27.398  $\chi^2$ /NDF:22.0/22

+ sign 21.632 $\pm$ 26.265  $\chi^2$ /NDF: 28.4/25

All: -19.005 $\pm$ 18.896  $\chi^2$ /NDF: 55.3/50

- sign -62.604 $\pm$ 27.205  $\chi^2$ /NDF: 22.0/24

# dit\_asym\_sam\_26\_avg\_rms vs Slug



Right In: 263.896+/-0.489  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 109.953+/-0.019  $\chi^2/\text{NDF}$ :1140626.9/24

Right Out: 232.676+/-0.162  $\chi^2/\text{NDF}$ : 391047.6/1

Left In: 112.657+/-0.019  $\chi^2/\text{NDF}$ :835831.1/22

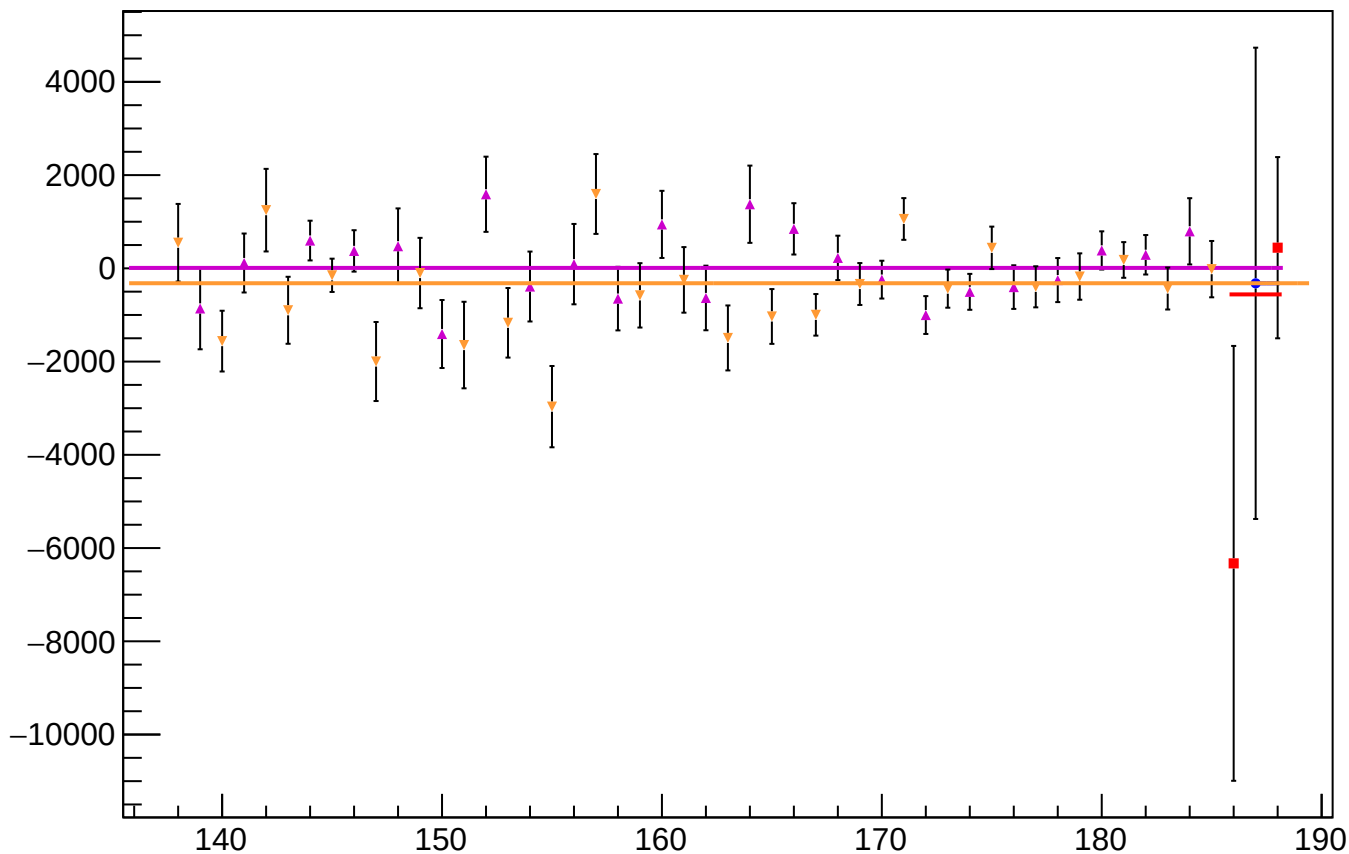
+ sign 110.174+/-0.019  $\chi^2/\text{NDF}$ : 1239463.2/25

All: 112.186+/-0.013  $\chi^2/\text{NDF}$ : 3029889.4/50

- sign 114.343+/-0.019  $\chi^2/\text{NDF}$ : 1766117.0/24



# asym\_sam\_26\_avg\_correction\_mean vs Slug



Right In: -321.221 $\pm$ 5054.780  $\chi^2$ /NDF: 0.0/0

Left Out: -319.391 $\pm$ 110.306  $\chi^2$ /NDF: 51.5/24

Right Out: -558.942 $\pm$ 1794.057  $\chi^2$ /NDF: 1.8/1

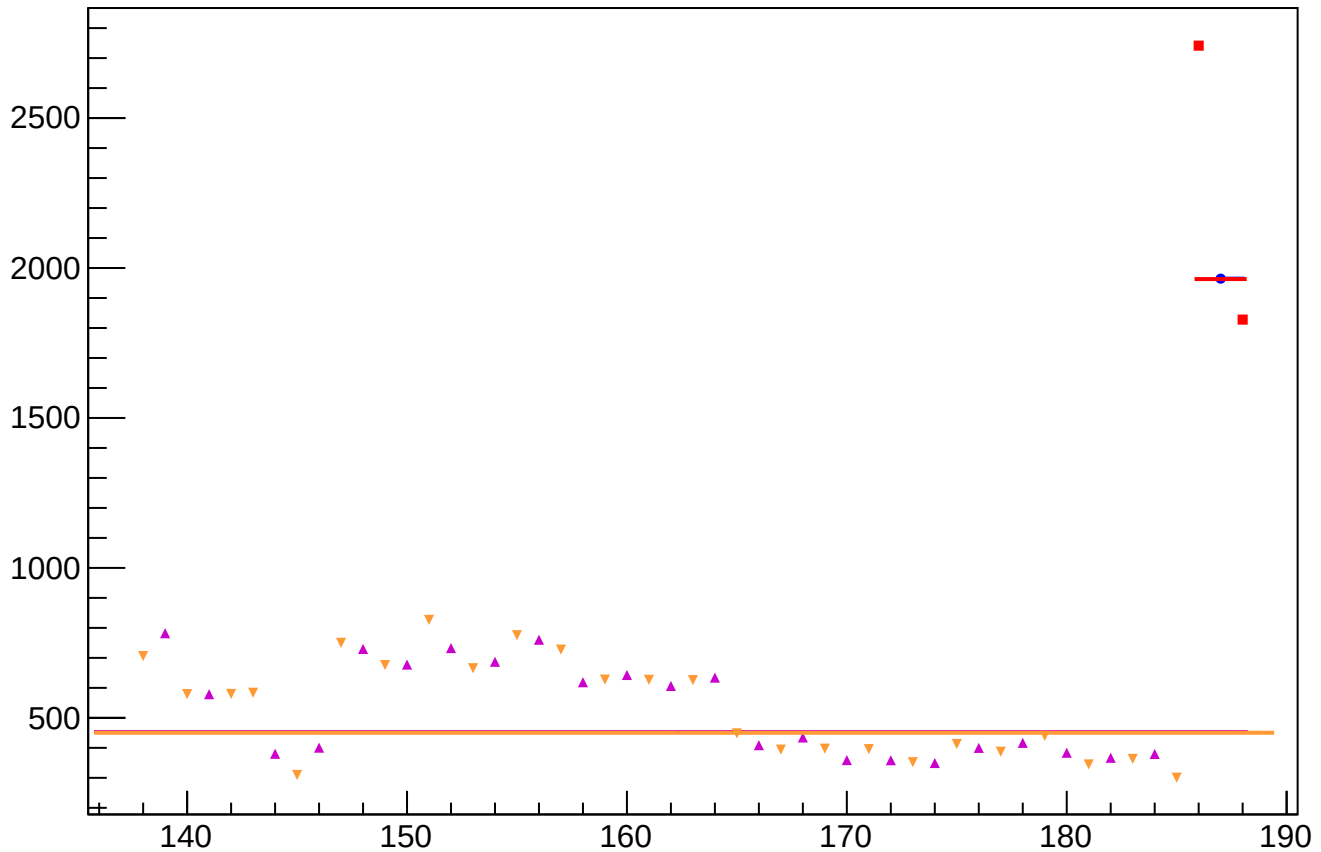
Left In: 9.462 $\pm$ 112.340  $\chi^2$ /NDF: 32.5/22

+ sign -319.392 $\pm$ 110.279  $\chi^2$ /NDF: 51.5/25

All: -158.779 $\pm$ 78.622  $\chi^2$ /NDF: 90.2/50

- sign 7.242 $\pm$ 112.121  $\chi^2$ /NDF: 34.4/24

# asym\_sam\_26\_avg\_correction\_rms vs Slug



Right In: 1964.500 $\pm$ 3.574  $\chi^2$ /NDF: 0.0/0

Left Out: 450.363 $\pm$ 0.078  $\chi^2$ /NDF:3096435.8/24

Right Out: 1963.153 $\pm$ 1.269  $\chi^2$ /NDF: 65359.9/1

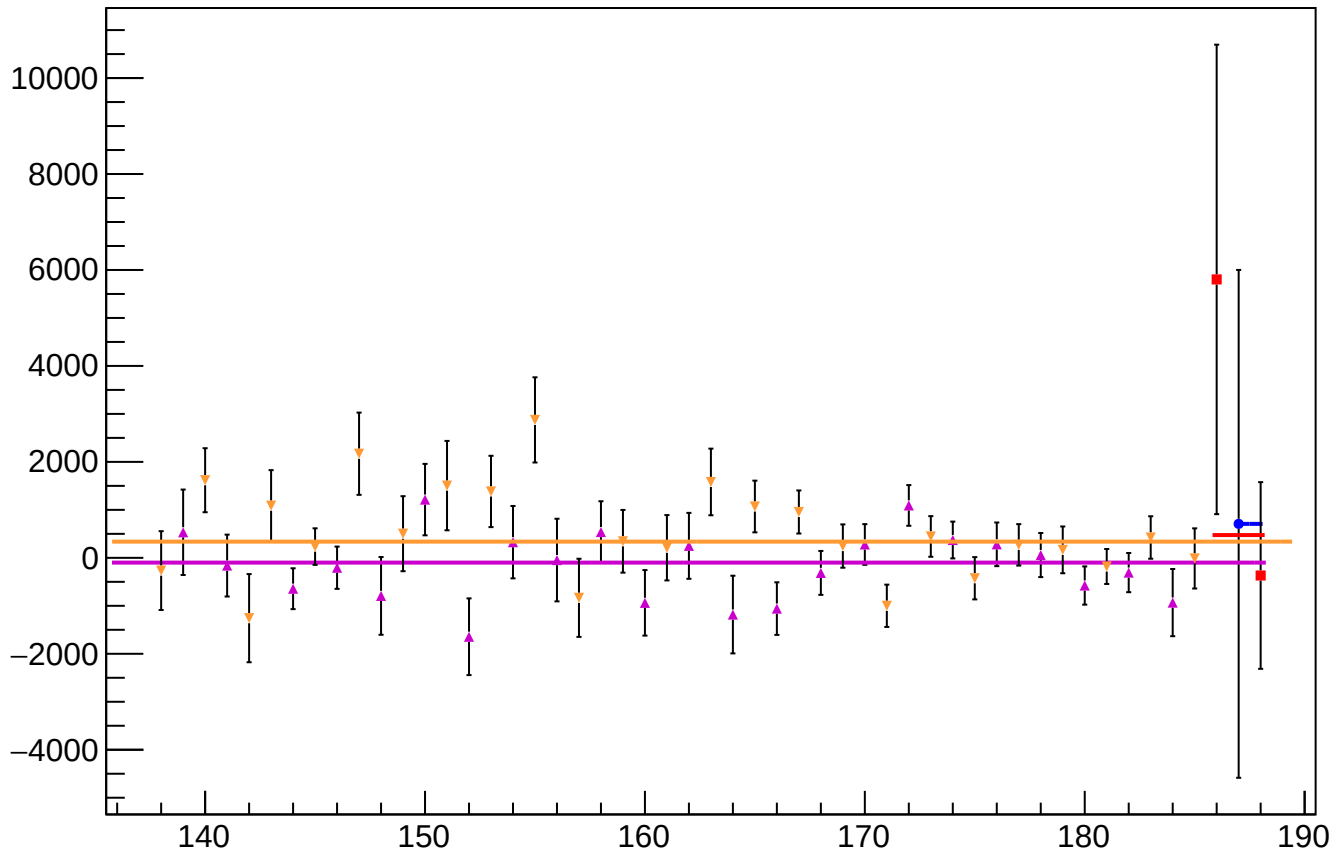
Left In: 452.694 $\pm$ 0.079  $\chi^2$ /NDF:2586032.2/22

+ sign 451.084 $\pm$ 0.078  $\chi^2$ /NDF: 3275805.5/25

All: 454.776 $\pm$ 0.056  $\chi^2$ /NDF: 7343893.1/50

- sign 458.593 $\pm$ 0.079  $\chi^2$ /NDF: 4063527.0/24

# asym\_sam\_26\_avg\_mean vs Slug



Right In: 707.944 $\pm$ 5292.618  $\chi^2$ /NDF: 0.0/0

Left Out: 337.948 $\pm$ 109.831  $\chi^2$ /NDF: 48.6/24

Right Out: 474.538 $\pm$ 1807.825  $\chi^2$ /NDF: 1.4/1

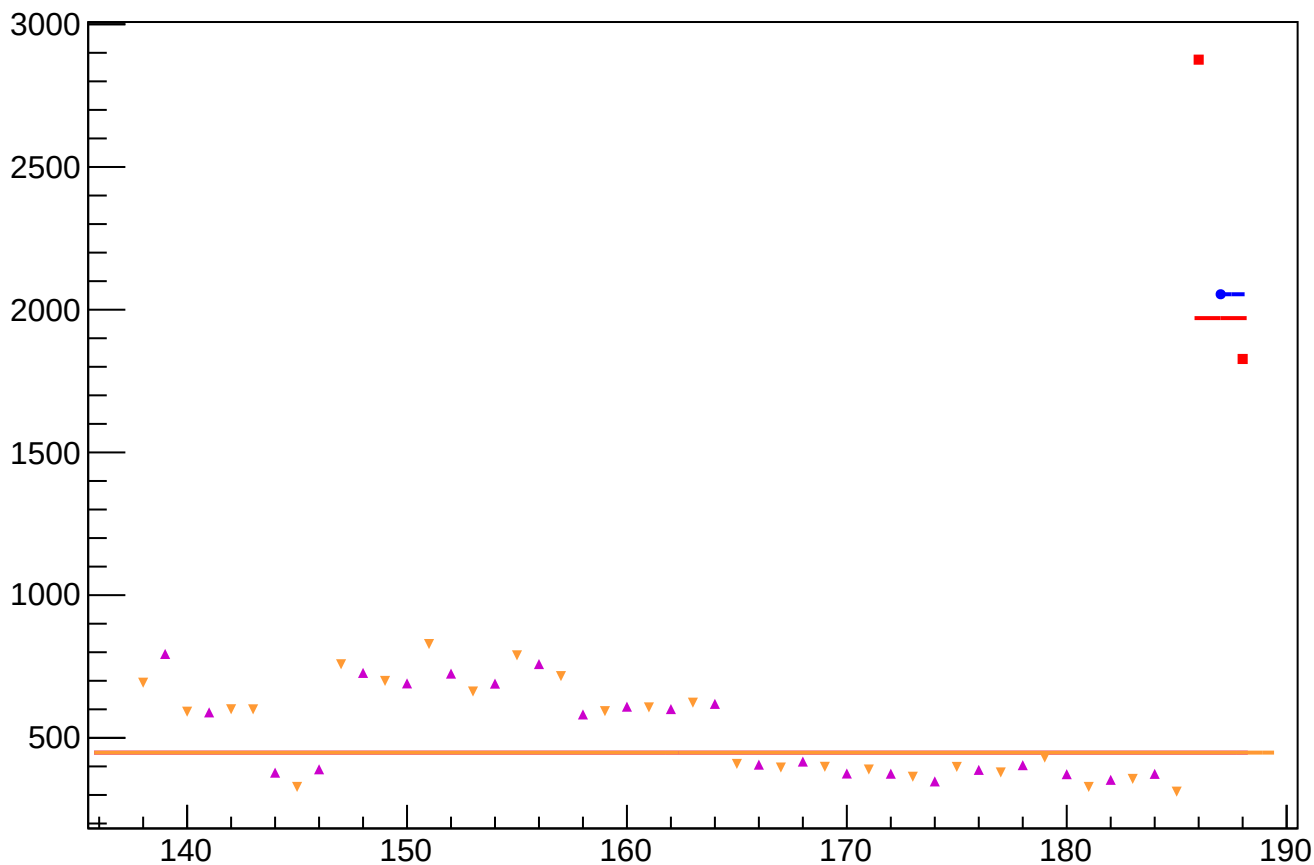
Left In: -99.475 $\pm$ 111.475  $\chi^2$ /NDF: 32.1/22

+ sign 338.107 $\pm$ 109.807  $\chi^2$ /NDF: 48.6/25

All: 123.271 $\pm$ 78.155  $\chi^2$ /NDF: 89.9/50

- sign -97.301 $\pm$ 111.264  $\chi^2$ /NDF: 33.5/24

# asym\_sam\_26\_avg\_rms vs Slug



Right In: 2054.143+/-3.742  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 448.397+/-0.078  $\chi^2/\text{NDF}$ : 3077183.0/24

Right Out: 1970.563+/-1.278  $\chi^2/\text{NDF}$ : 79322.0/1

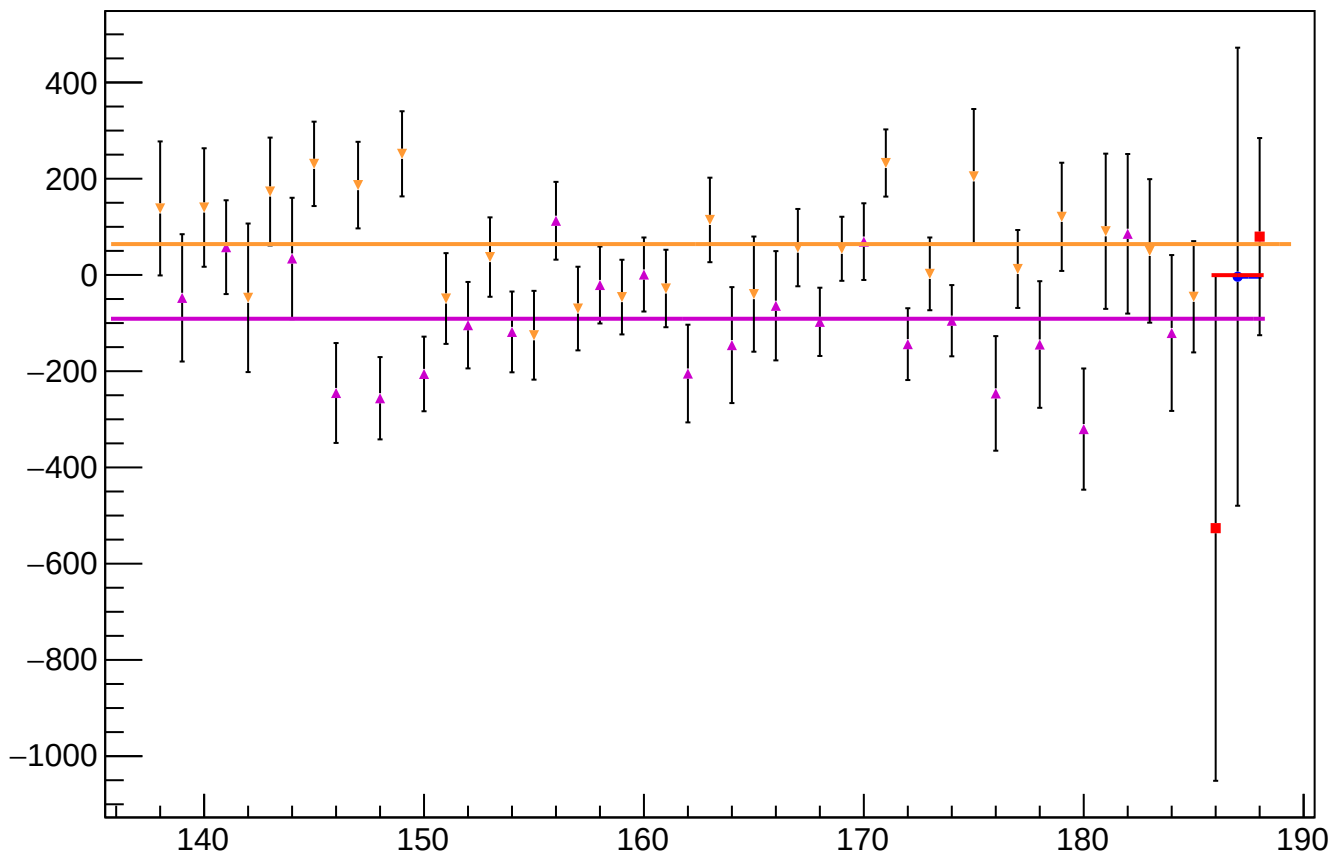
Left In: 448.238+/-0.079  $\chi^2/\text{NDF}$ : 2563455.5/22

+ sign 449.088+/-0.078  $\chi^2/\text{NDF}$ : 3261199.2/25

All: 451.514+/-0.055  $\chi^2/\text{NDF}$ : 7318764.8/50

- sign 454.005+/-0.079  $\chi^2/\text{NDF}$ : 4055586.9/24

# dit\_asym\_sam\_37\_avg\_mean vs Slug



Right In:  $-3.663 \pm 475.968$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $64.142 \pm 18.728$   $\chi^2/\text{NDF}: 33.8/24$

Right Out:  $-0.420 \pm 190.848$   $\chi^2/\text{NDF}: 1.2/1$

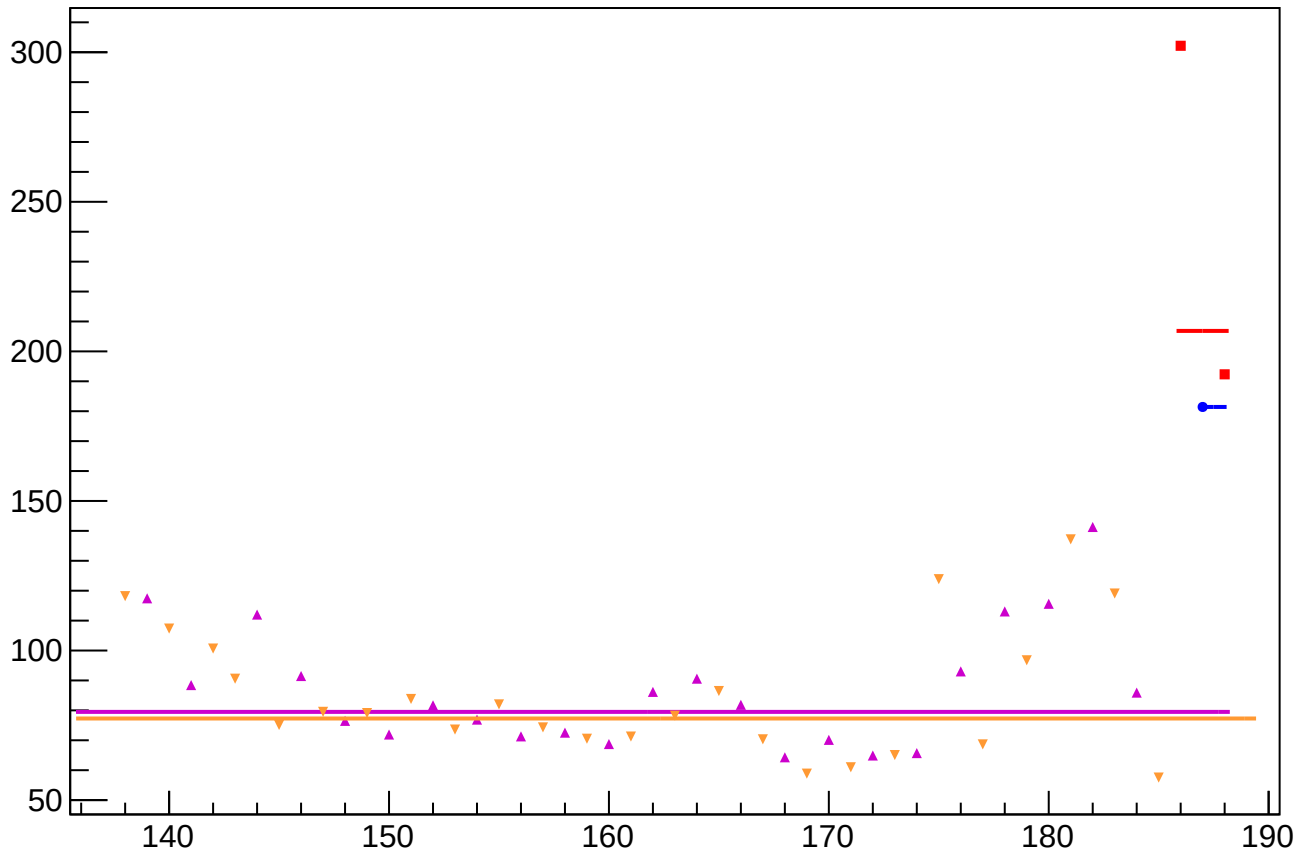
Left In:  $-91.028 \pm 19.637$   $\chi^2/\text{NDF}: 32.6/22$

+ sign  $64.037 \pm 18.713$   $\chi^2/\text{NDF}: 33.8/25$

All:  $-9.714 \pm 13.513$   $\chi^2/\text{NDF}: 100.3/50$

- sign  $-90.079 \pm 19.534$   $\chi^2/\text{NDF}: 34.0/24$

# dit\_asym\_sam\_37\_avg\_rms vs Slug



Right In: 181.423 $\pm$ 0.337  $\chi^2$ /NDF: 0.0/0

Left Out: 77.280 $\pm$ 0.013  $\chi^2$ /NDF: 1553410.1/24

Right Out: 206.842 $\pm$ 0.135  $\chi^2$ /NDF: 75953.4/1

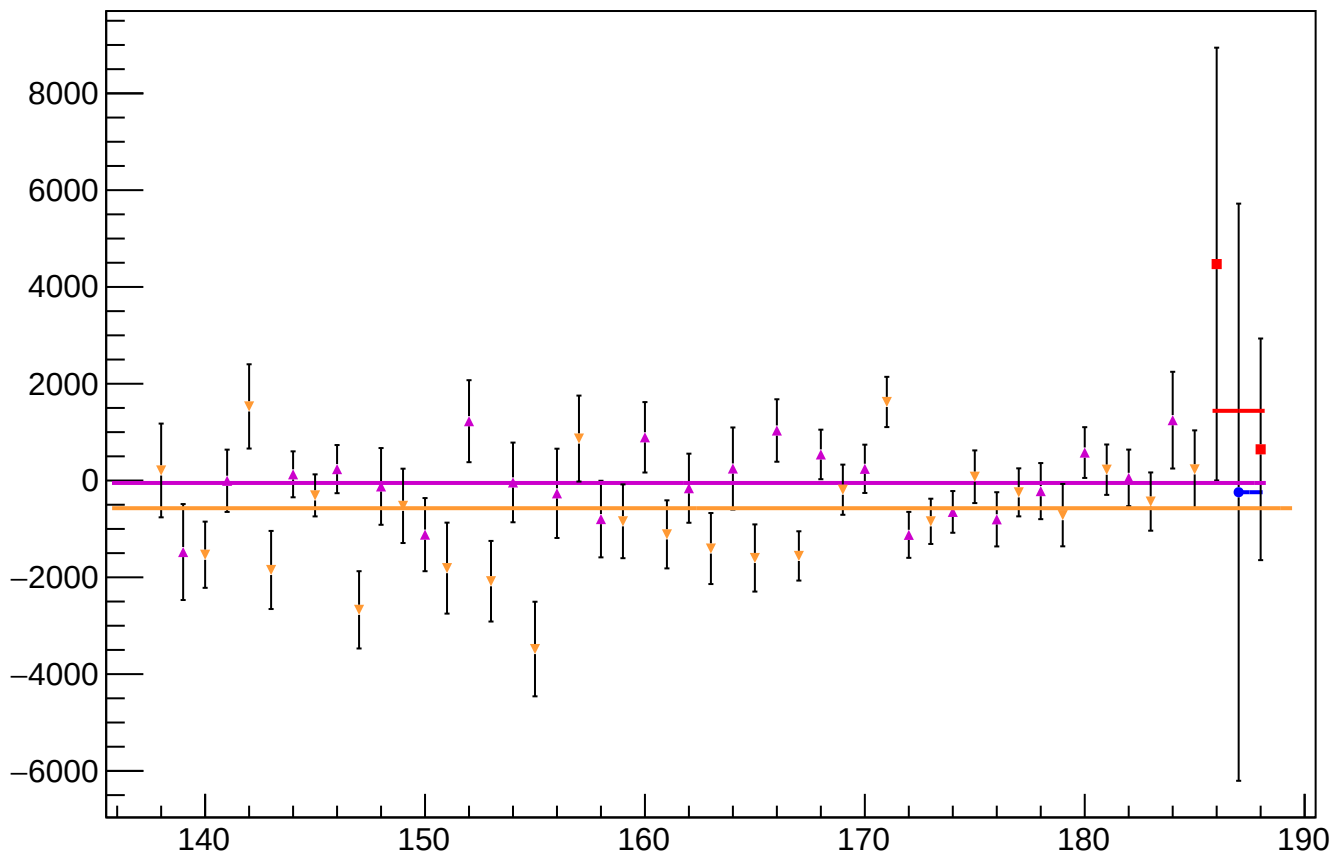
Left In: 79.491 $\pm$ 0.014  $\chi^2$ /NDF: 1333774.9/22

+ sign 77.441 $\pm$ 0.013  $\chi^2$ /NDF: 1649012.3/25

All: 79.061 $\pm$ 0.010  $\chi^2$ /NDF: 3971277.0/50

- sign 80.826 $\pm$ 0.014  $\chi^2$ /NDF: 2290947.2/24

# asym\_sam\_37\_avg\_correction\_mean vs Slug



Right In: -241.319+/-5962.902  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -571.669+/-128.158  $\chi^2/\text{NDF}$ : 66.8/24

Right Out: 1440.323+/-2037.972  $\chi^2/\text{NDF}$ : 0.6/1

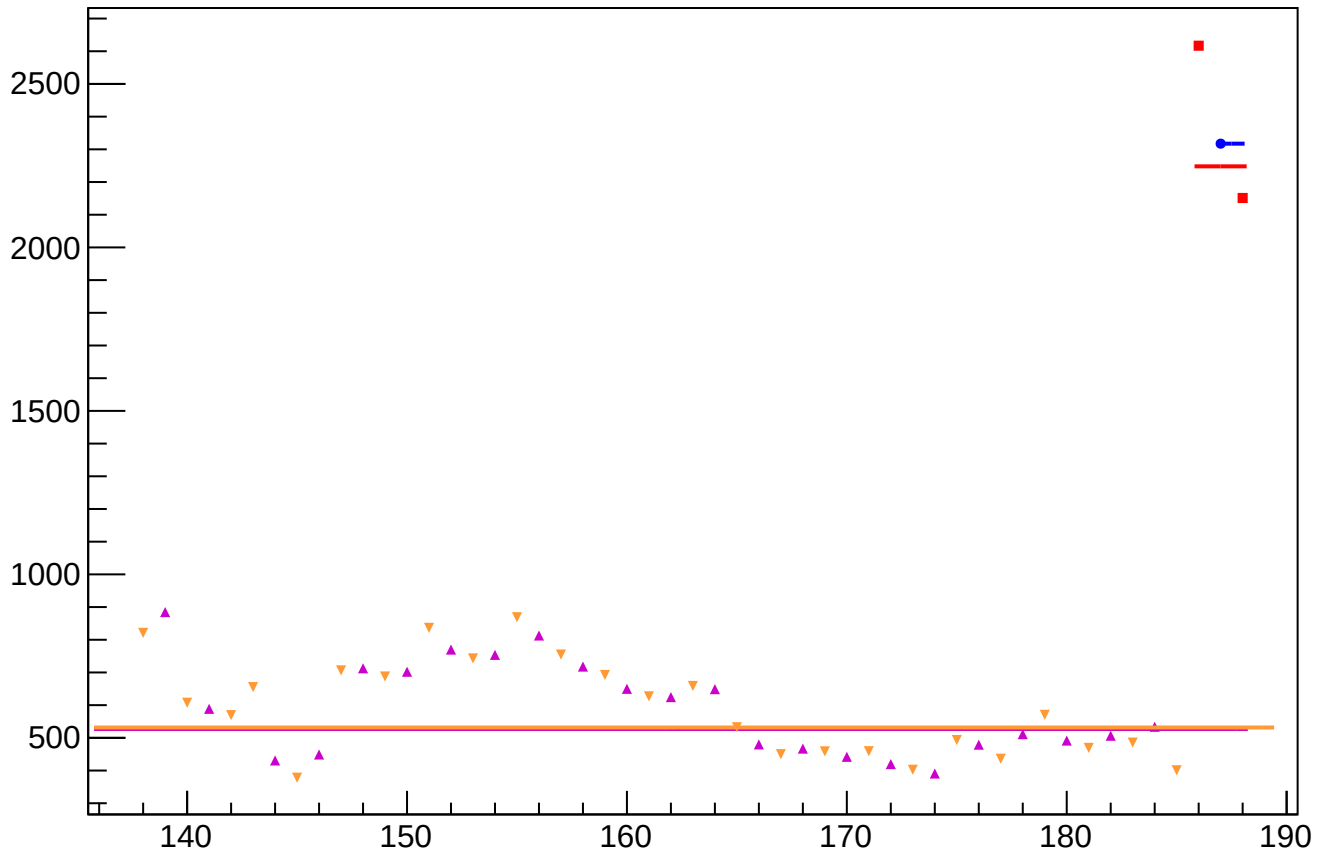
Left In: -50.077+/-129.187  $\chi^2/\text{NDF}$ : 26.1/22

+ sign -571.516+/-128.128  $\chi^2/\text{NDF}$ : 66.8/25

All: -309.455+/-90.882  $\chi^2/\text{NDF}$ : 102.5/50

- sign -44.112+/-128.928  $\chi^2/\text{NDF}$ : 27.3/24

# asym\_sam\_37\_avg\_correction\_rms vs Slug



Right In: 2317.334 $\pm$ 4.216  $\chi^2$ /NDF: 0.0/0

Left Out: 531.643 $\pm$ 0.091  $\chi^2$ /NDF:2038304.3/24

Right Out: 2247.984 $\pm$ 1.441  $\chi^2$ /NDF: 17190.5/1

Left In: 527.182 $\pm$ 0.091  $\chi^2$ /NDF:1813383.7/22

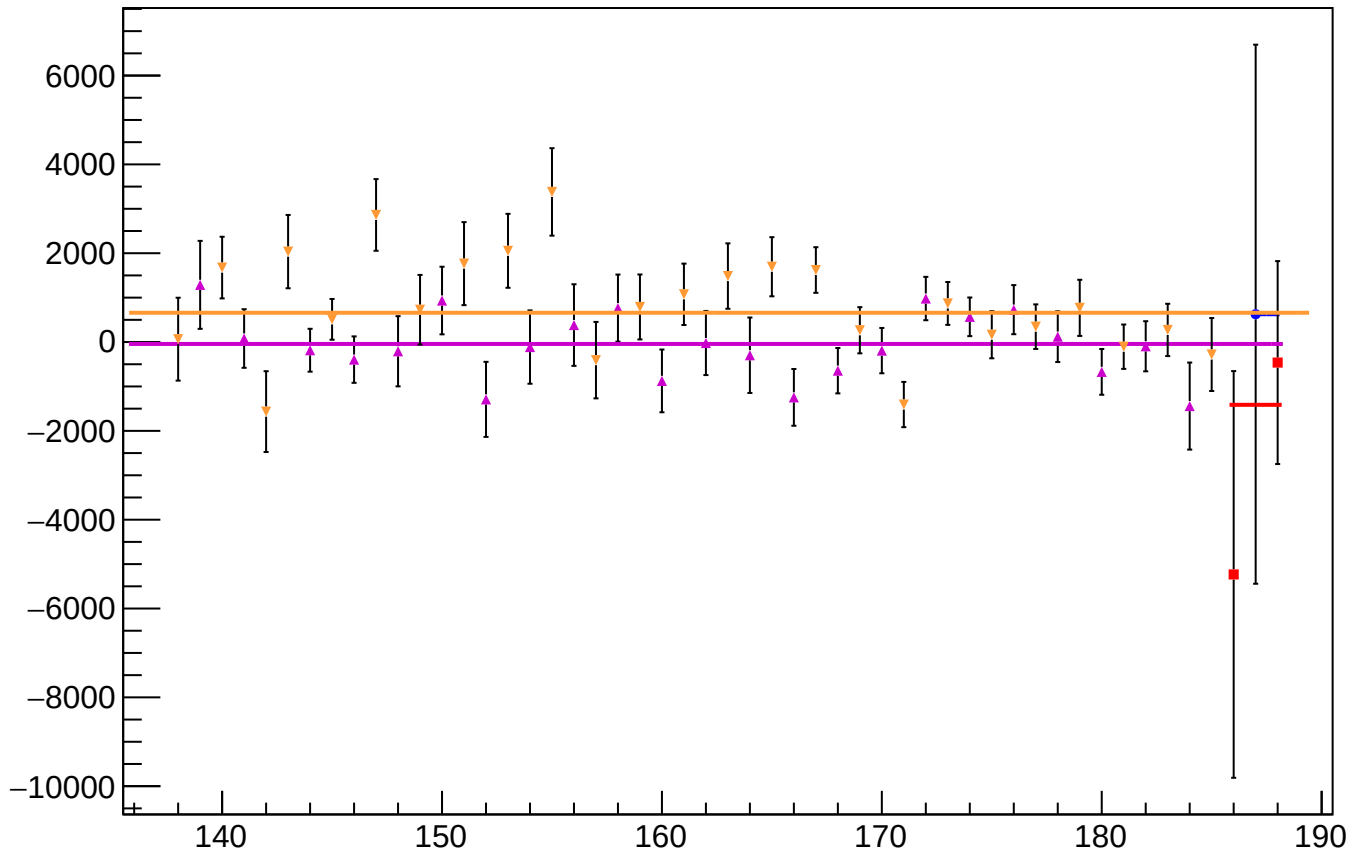
+ sign 532.467 $\pm$ 0.091  $\chi^2$ /NDF: 2217582.3/25

All: 533.263 $\pm$ 0.064  $\chi^2$ /NDF: 5468525.2/50

- sign 534.069 $\pm$ 0.091  $\chi^2$ /NDF: 3250787.5/24



# asym\_sam\_37\_avg\_mean vs Slug



Right In: 626.605 $\pm$ 6068.801  $\chi^2$ /NDF: 0.0/0

Left Out: 659.523 $\pm$ 128.164  $\chi^2$ /NDF: 62.4/24

Right Out: -1413.344 $\pm$ 2044.299  $\chi^2$ /NDF: 0.9/1

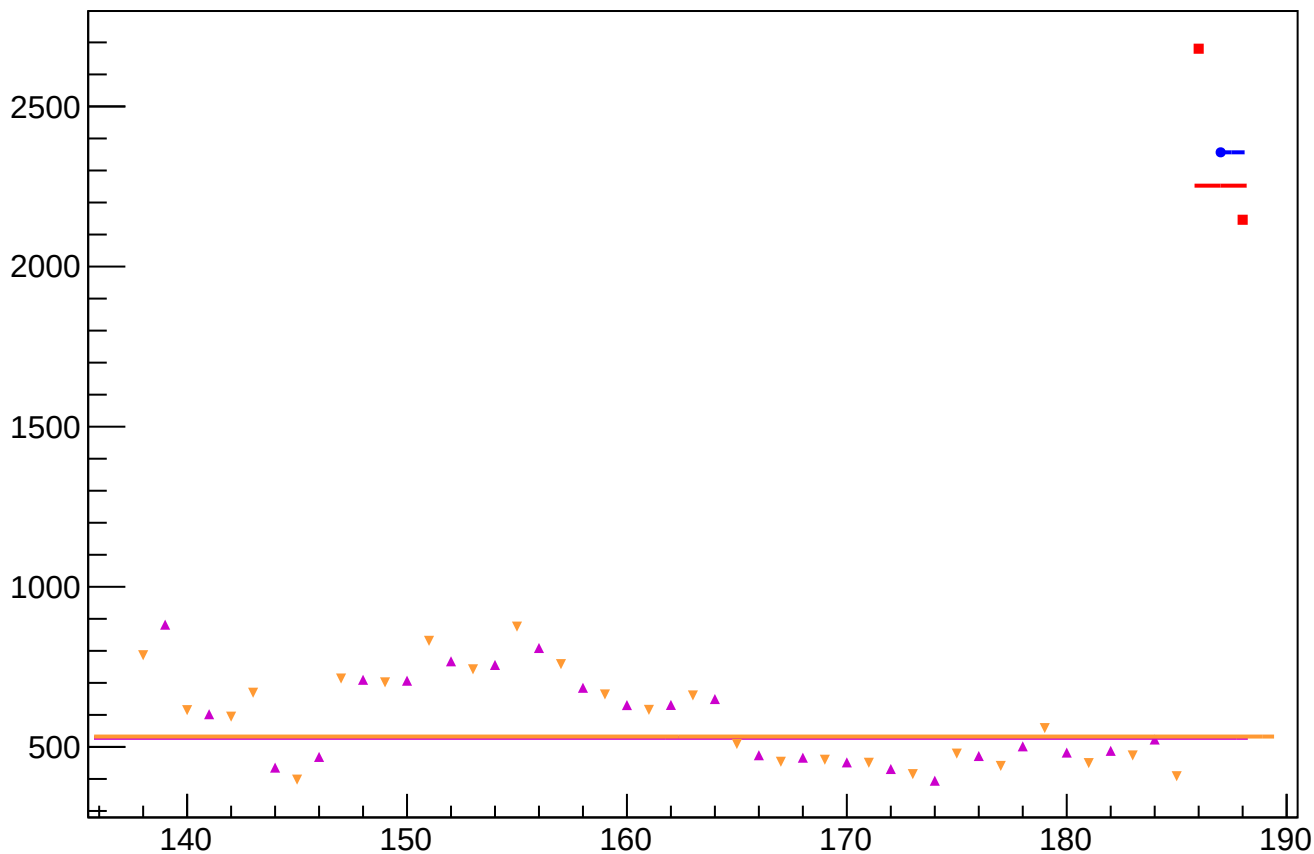
Left In: -43.183 $\pm$ 129.538  $\chi^2$ /NDF: 26.0/22

+ sign 659.508 $\pm$ 128.136  $\chi^2$ /NDF: 62.4/25

All: 308.567 $\pm$ 91.007  $\chi^2$ /NDF: 104.9/50

- sign -48.662 $\pm$ 129.279  $\chi^2$ /NDF: 27.4/24

# asym\_sam\_37\_avg\_rms vs Slug



Right In: 2356.743+/-4.291  $\chi^2$ /NDF: 0.0/0

Left Out: 532.393+/-0.091  $\chi^2$ /NDF:1943066.8/24

Right Out: 2252.645+/-1.446  $\chi^2$ /NDF: 21793.3/1

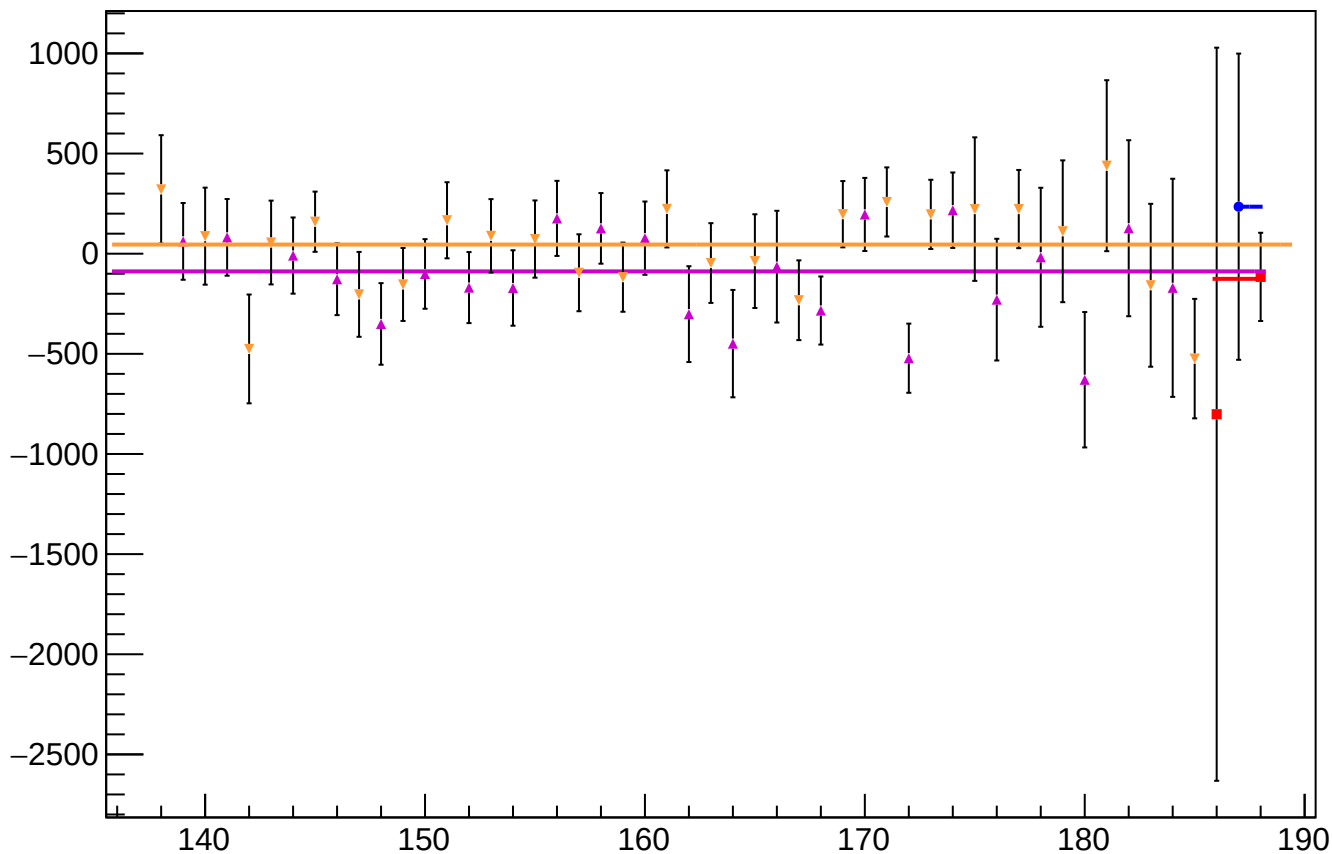
Left In: 528.464+/-0.092  $\chi^2$ /NDF:1712049.5/22

+ sign 533.206+/-0.091  $\chi^2$ /NDF: 2123720.6/25

All: 534.273+/-0.064  $\chi^2$ /NDF: 5274831.4/50

- sign 535.360+/-0.091  $\chi^2$ /NDF: 3150830.8/24

dit\_asym\_sam\_48\_avg\_mean vs Slug



Right In: 234.621 $\pm$ 764.459  $\chi^2$ /NDF: 0.0/0

Left Out: 45.675 $\pm$ 41.779  $\chi^2$ /NDF:21.9/24

Right Out: -125.576 $\pm$ 218.725  $\chi^2$ /NDF: 0.1/1

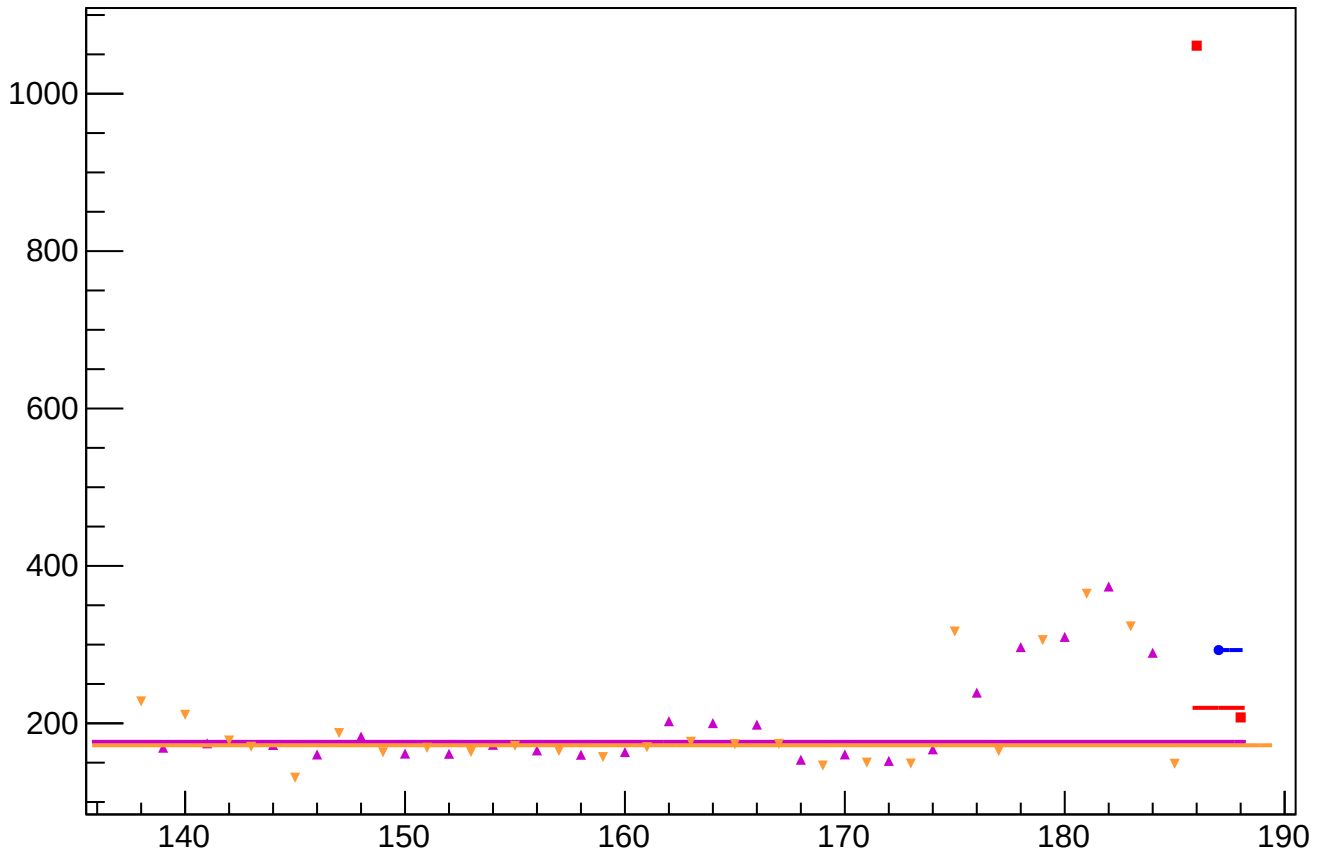
Left In: -88.356 $\pm$ 43.518  $\chi^2$ /NDF:26.4/22

+ sign 46.238 $\pm$ 41.717  $\chi^2$ /NDF: 22.0/25

All: -20.213 $\pm$ 29.833  $\chi^2$ /NDF: 53.7/50

- sign -89.773 $\pm$ 42.682  $\chi^2$ /NDF: 26.5/24

# dit\_asym\_sam\_48\_avg\_rms vs Slug



Right In: 293.079 $\pm$ 0.541  $\chi^2$ /NDF: 0.0/0

Left Out: 172.097 $\pm$ 0.030  $\chi^2$ /NDF: 1752497.1/24

Right Out: 219.679 $\pm$ 0.155  $\chi^2$ /NDF: 428768.4/1

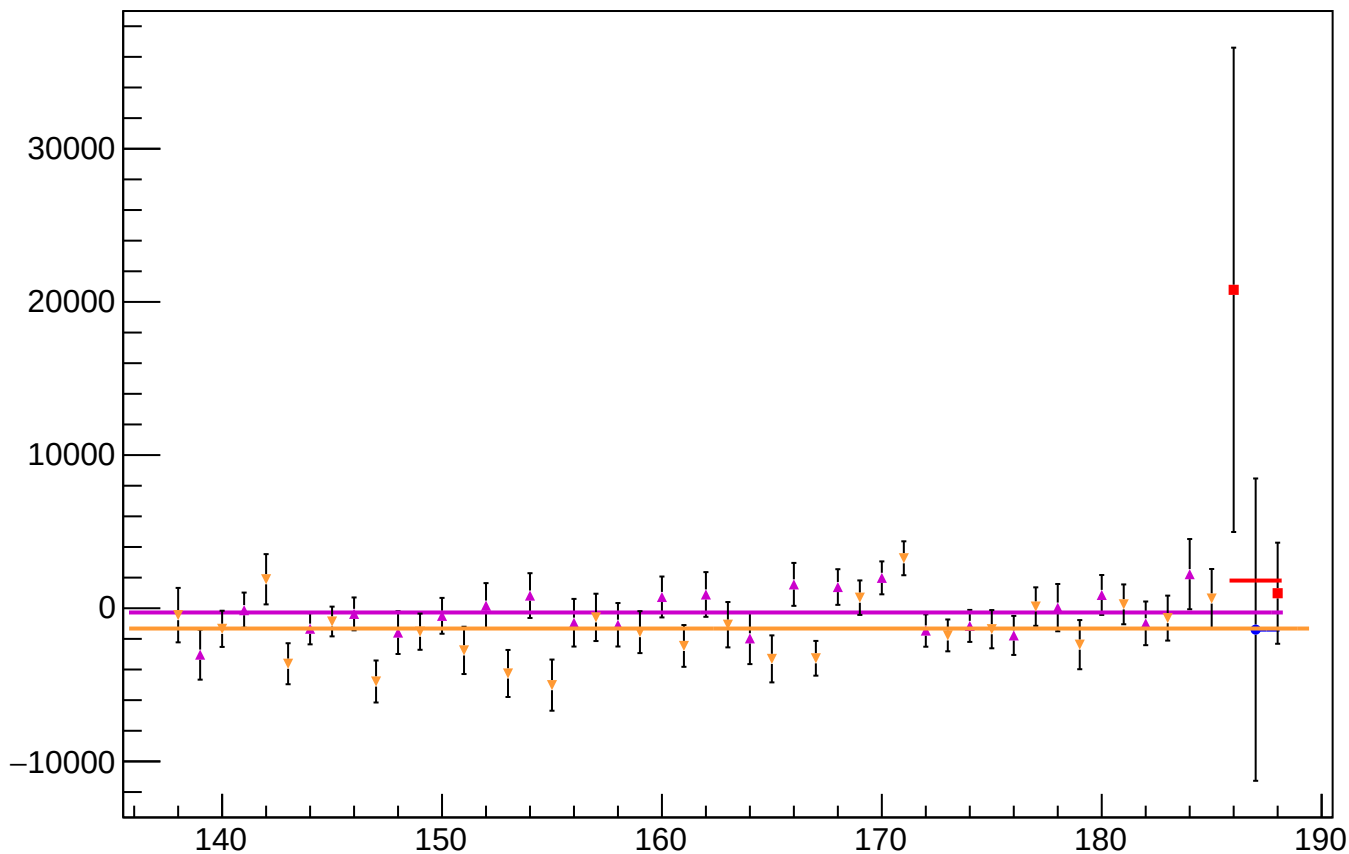
Left In: 176.425 $\pm$ 0.031  $\chi^2$ /NDF: 1360607.7/22

+ sign 172.457 $\pm$ 0.029  $\chi^2$ /NDF: 1802439.4/25

All: 175.200 $\pm$ 0.021  $\chi^2$ /NDF: 3684753.1/50

- sign 178.072 $\pm$ 0.030  $\chi^2$ /NDF: 1864611.9/24

# asym\_sam\_48\_avg\_correction\_mean vs Slug



Right In:  $-1396.663 \pm 9869.299$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-1324.367 \pm 265.950$   $\chi^2/\text{NDF}$ : 53.6/24

Right Out:  $1807.655 \pm 3230.544$   $\chi^2/\text{NDF}$ : 1.5/1

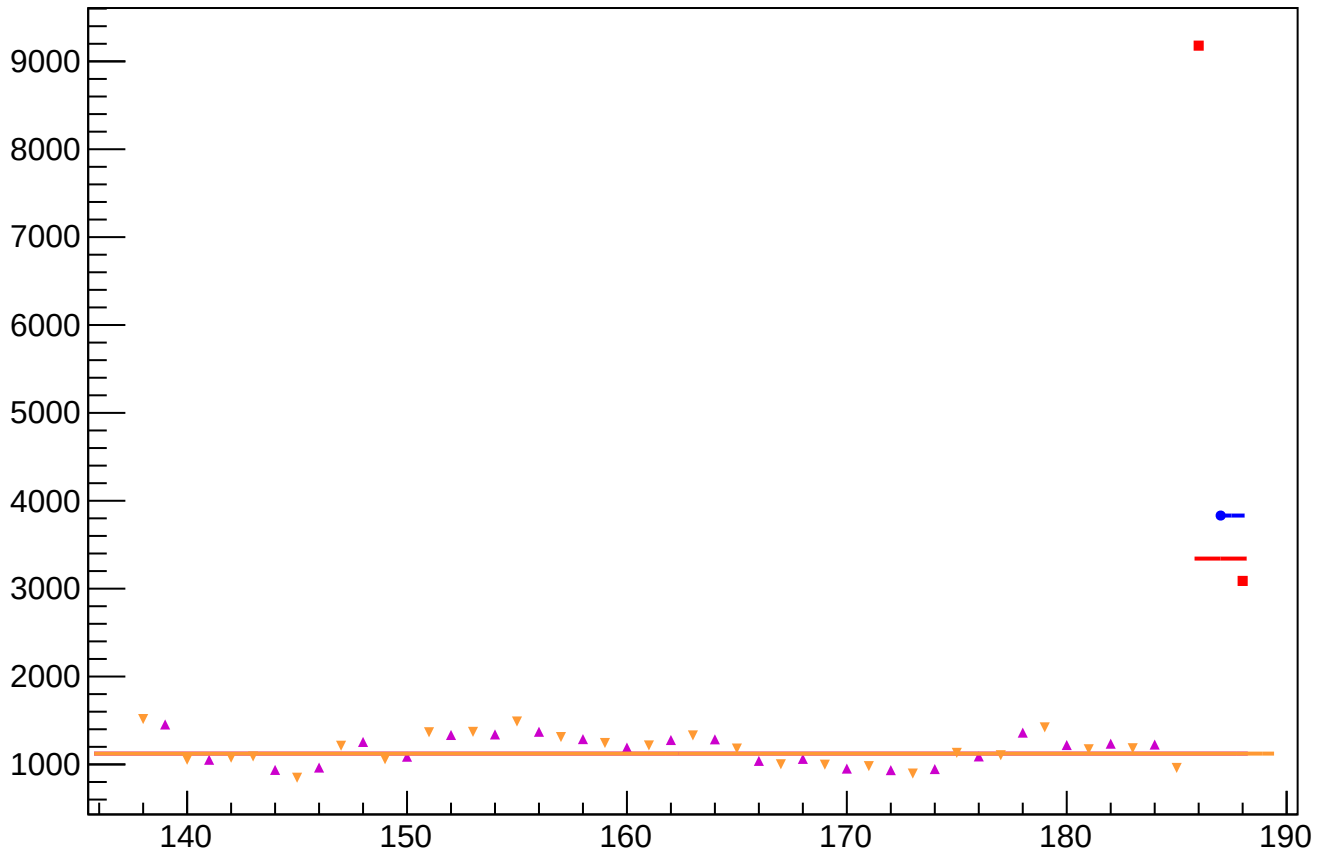
Left In:  $-276.678 \pm 270.547$   $\chi^2/\text{NDF}$ : 22.0/22

+ sign  $-1324.419 \pm 265.853$   $\chi^2/\text{NDF}$ : 53.6/25

All:  $-800.728 \pm 189.298$   $\chi^2/\text{NDF}$ : 85.4/50

- sign  $-262.161 \pm 269.603$   $\chi^2/\text{NDF}$ : 23.9/24

# asym\_sam\_48\_avg\_correction\_rms vs Slug



Right In: 3831.746 $\pm$ 6.979  $\chi^2$ /NDF: 0.0/0

Left Out: 1123.022 $\pm$ 0.188  $\chi^2$ /NDF: 842393.5/24

Right Out: 3342.181 $\pm$ 2.284  $\chi^2$ /NDF: 284416.6/1

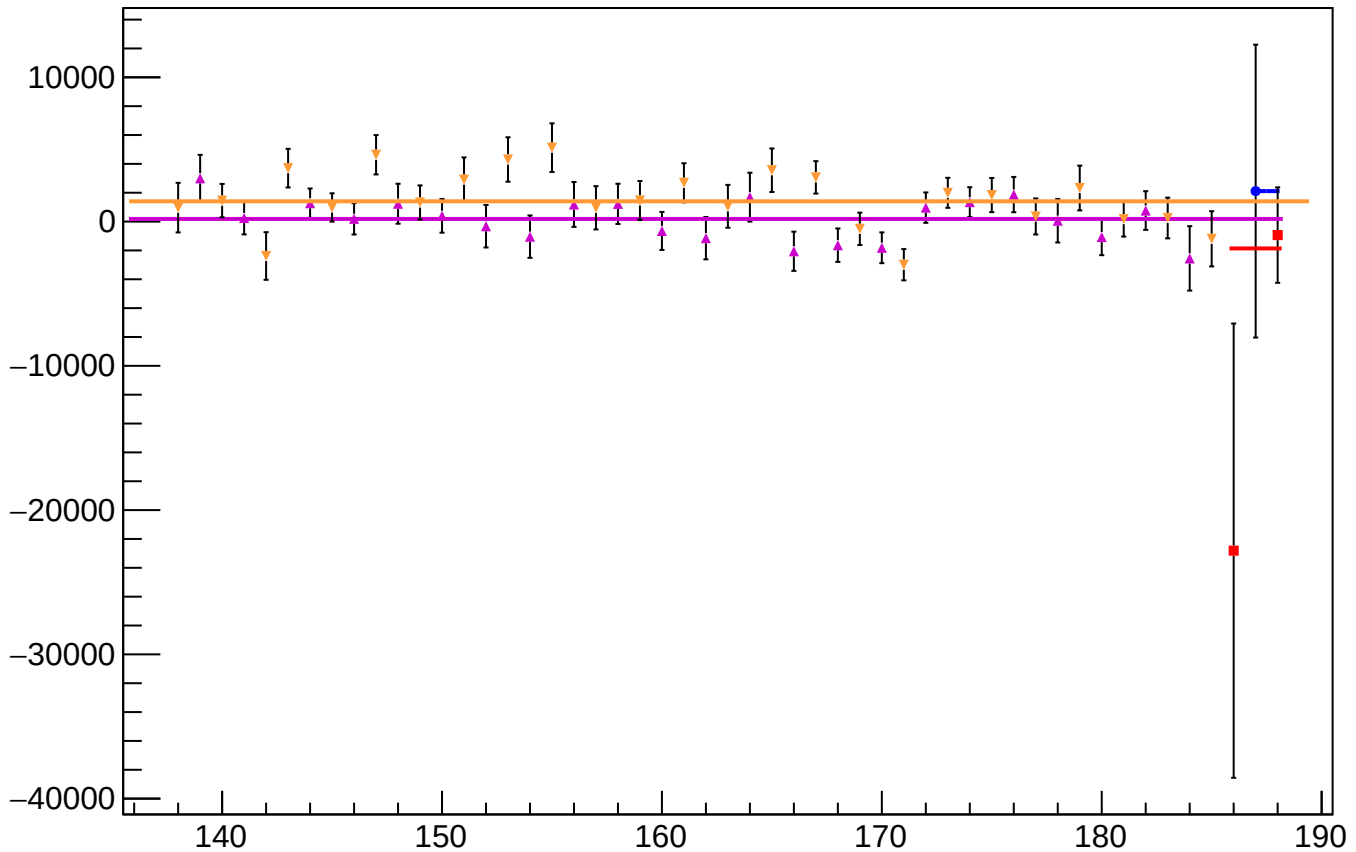
Left In: 1123.148 $\pm$ 0.191  $\chi^2$ /NDF: 689778.4/22

+ sign 1124.987 $\pm$ 0.188  $\chi^2$ /NDF: 992940.3/25

All: 1131.700 $\pm$ 0.134  $\chi^2$ /NDF: 2906788.7/50

- sign 1138.602 $\pm$ 0.191  $\chi^2$ /NDF: 1911262.4/24

# asym\_sam\_48\_avg\_mean vs Slug



Right In: 2111.622 $\pm$ 10151.201  $\chi^2$ /NDF: 0.0/0

Left Out: 1404.763 $\pm$ 262.517  $\chi^2$ /NDF: 53.1/24

Right Out: -1861.921 $\pm$ 3237.855  $\chi^2$ /NDF: 1.8/1

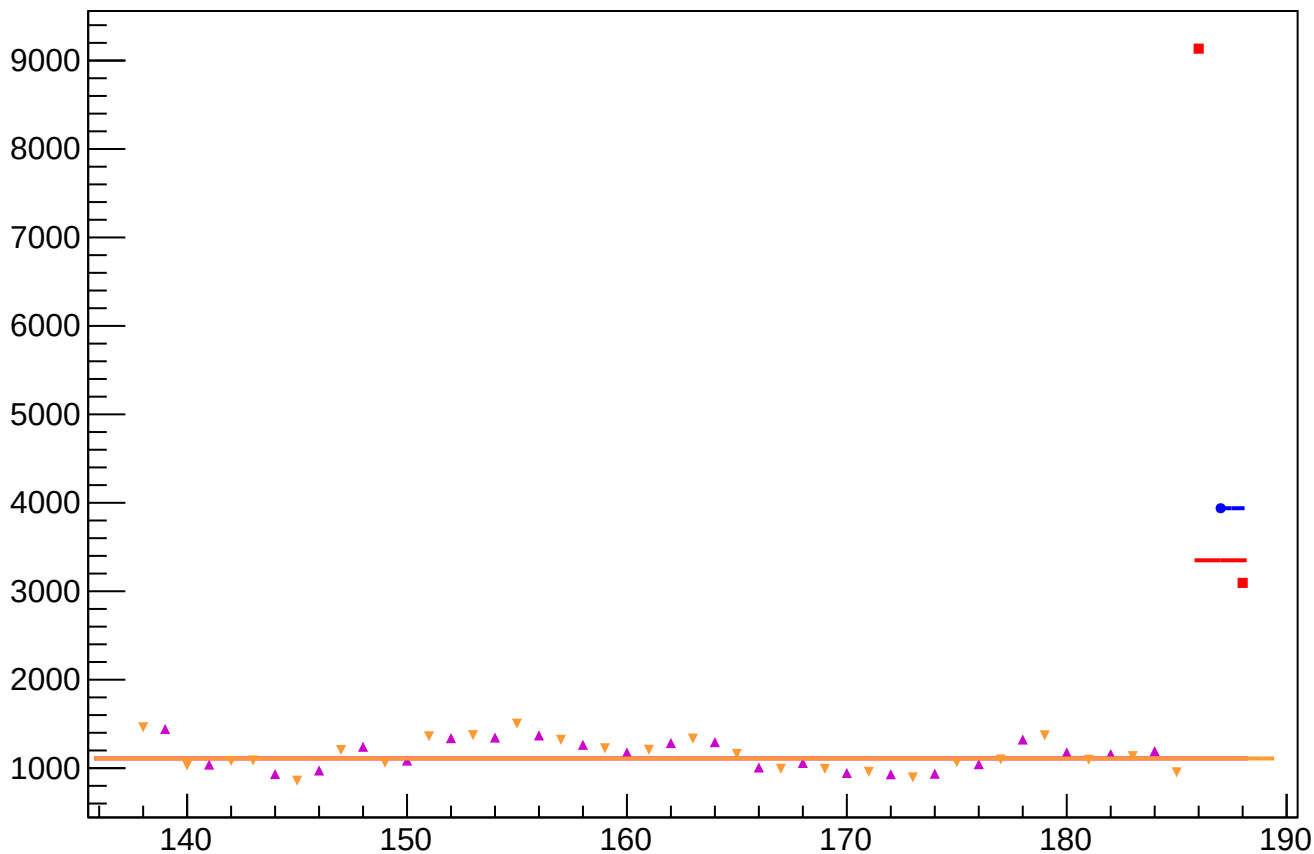
Left In: 183.249 $\pm$ 267.620  $\chi^2$ /NDF: 23.7/22

+ sign 1405.235 $\pm$ 262.429  $\chi^2$ /NDF: 53.1/25

All: 797.302 $\pm$ 187.061  $\chi^2$ /NDF: 90.0/50

- sign 169.372 $\pm$ 266.711  $\chi^2$ /NDF: 26.0/24

# asym\_sam\_48\_avg\_rms vs Slug



Right In: 3938.513+/-7.178  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 1109.574+/-0.186  $\chi^2/\text{NDF}$ : 812957.8/24

Right Out: 3349.902+/-2.290  $\chi^2/\text{NDF}$ : 281896.7/1

Left In: 1110.162+/-0.189  $\chi^2/\text{NDF}$ : 673229.2/22

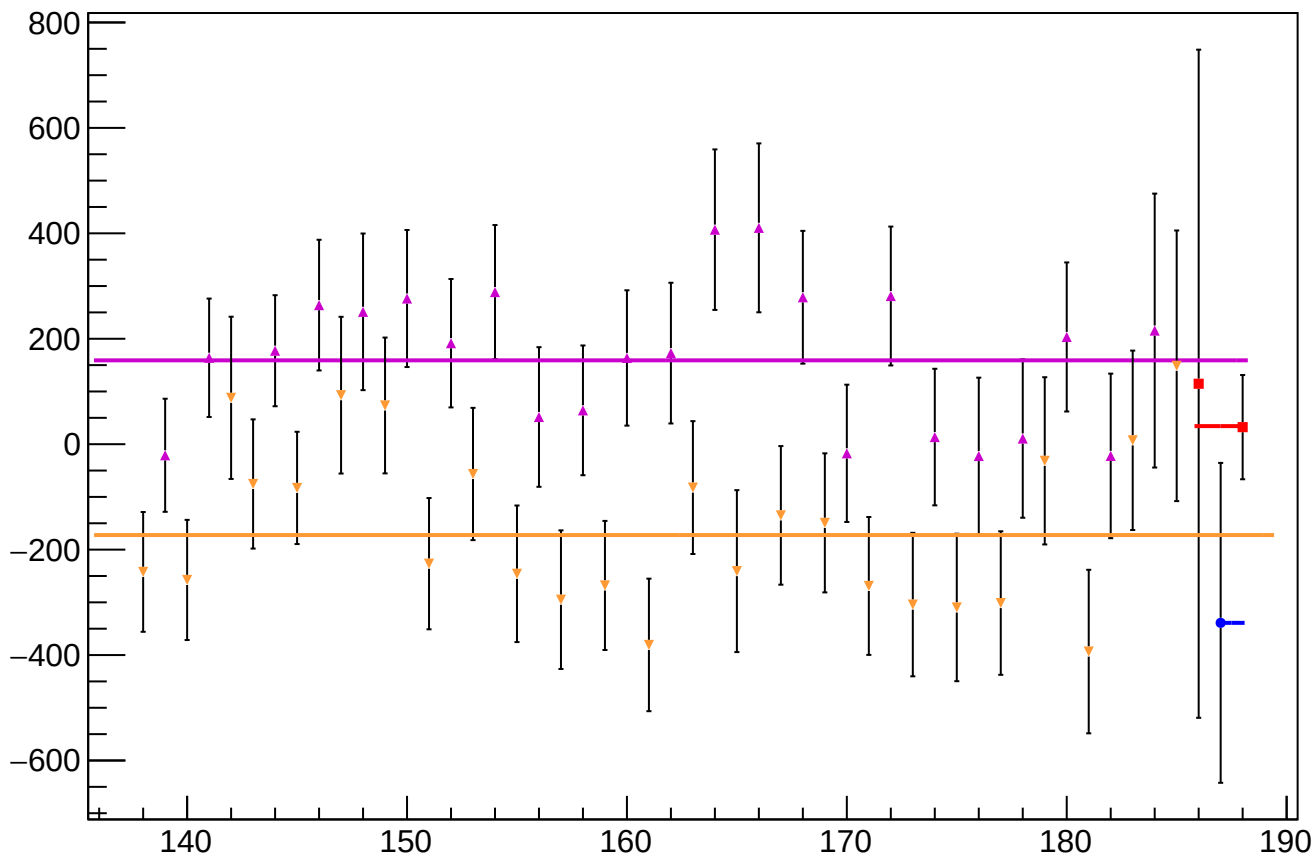
+ sign 1111.465+/-0.186  $\chi^2/\text{NDF}$ : 968179.3/25

All: 1118.300+/-0.132  $\chi^2/\text{NDF}$ : 2876566.5/50

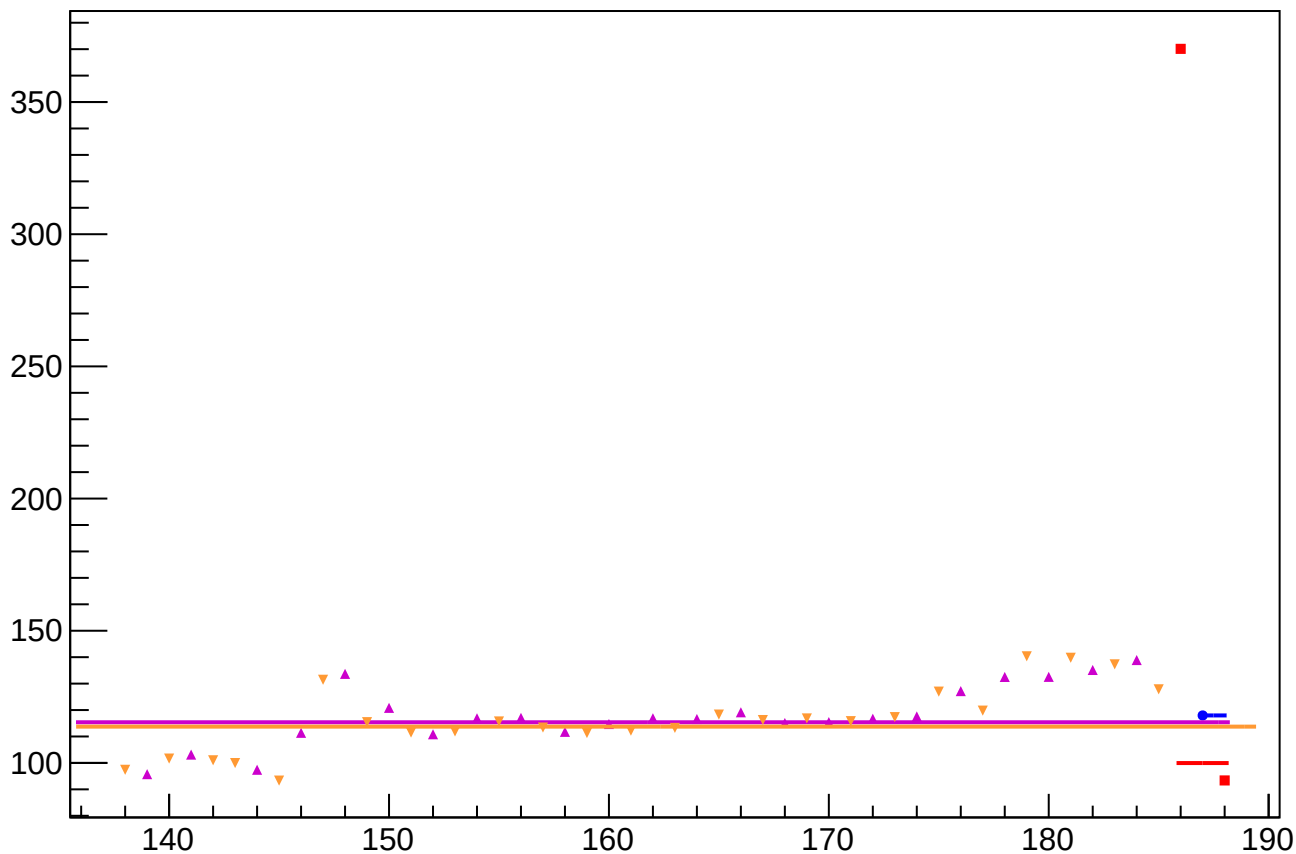
- sign 1125.359+/-0.189  $\chi^2/\text{NDF}$ : 1905629.3/24



# dit\_asym\_sam\_15\_dd\_mean vs Slug



# dit\_asym\_sam\_15\_dd\_rms vs Slug



Right In: 117.962 $\pm$ 0.215  $\chi^2$ /NDF: 0.0/0

Left Out: 113.727 $\pm$ 0.019  $\chi^2$ /NDF: 392153.8/24

Right Out: 99.948 $\pm$ 0.069  $\chi^2$ /NDF: 372374.6/1

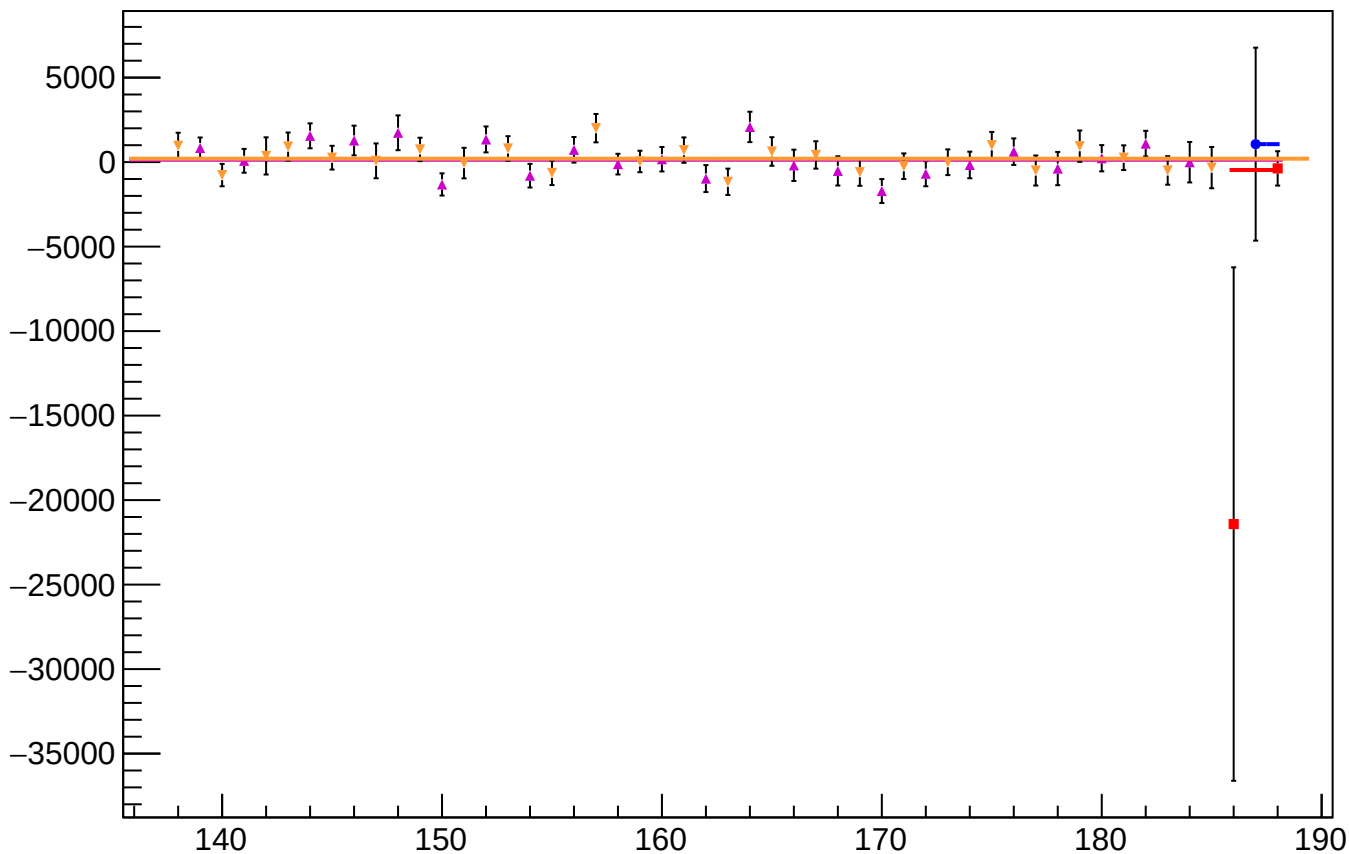
Left In: 115.377 $\pm$ 0.020  $\chi^2$ /NDF: 309034.7/22

+ sign 113.760 $\pm$ 0.019  $\chi^2$ /NDF: 392540.4/25

All: 113.998 $\pm$ 0.013  $\chi^2$ /NDF: 1120467.5/50

- sign 114.235 $\pm$ 0.019  $\chi^2$ /NDF: 727606.8/24

# asym\_sam\_15\_dd\_correction\_mean vs Slug



Right In: 1062.045 $\pm$ 5709.122  $\chi^2$ /NDF: 0.0/0

Left Out: 202.466 $\pm$ 159.030  $\chi^2$ /NDF: 19.8/24

Right Out: -467.204 $\pm$ 1014.594  $\chi^2$ /NDF: 1.9/1

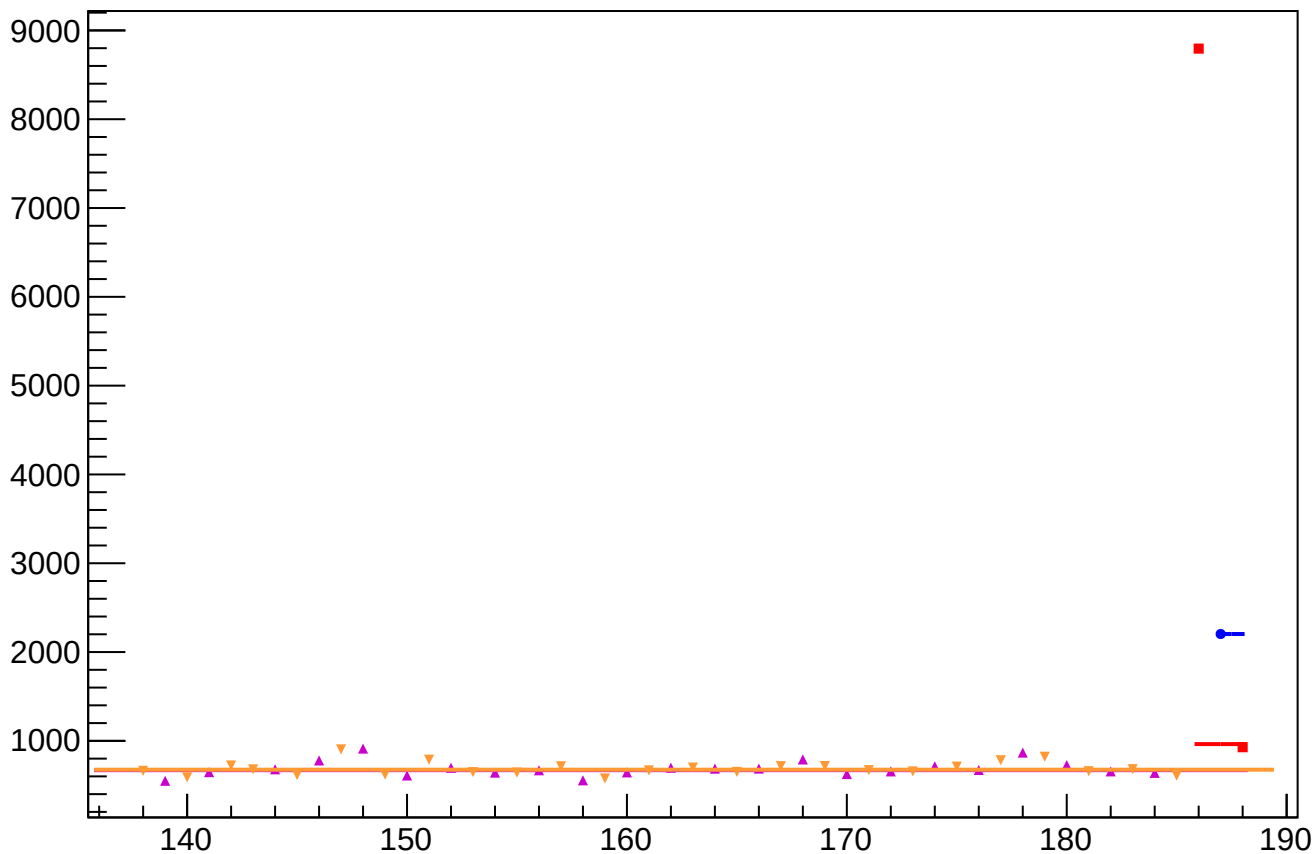
Left In: 140.039 $\pm$ 161.024  $\chi^2$ /NDF: 36.9/22

+ sign 203.132 $\pm$ 158.968  $\chi^2$ /NDF: 19.8/25

All: 164.142 $\pm$ 112.431  $\chi^2$ /NDF: 59.1/50

- sign 125.119 $\pm$ 159.034  $\chi^2$ /NDF: 39.1/24

# asym\_sam\_15\_dd\_correction\_rms vs Slug



Right In: 2203.147 $\pm$ 4.037  $\chi^2$ /NDF: 0.0/0

Left Out: 675.335 $\pm$ 0.112  $\chi^2$ /NDF: 358713.6/24

Right Out: 963.576 $\pm$ 0.717  $\chi^2$ /NDF: 533874.5/1

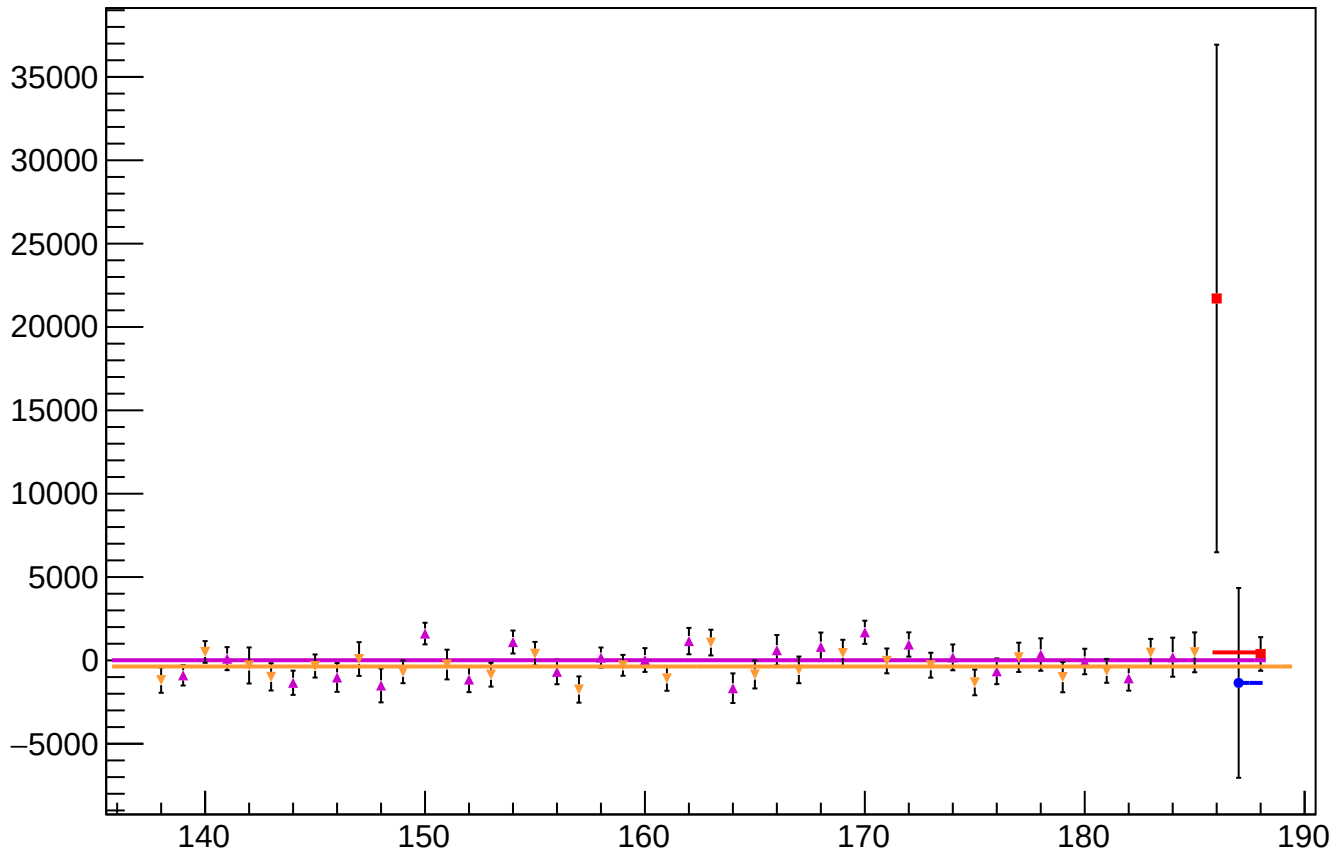
Left In: 669.938 $\pm$ 0.114  $\chi^2$ /NDF: 464085.7/22

+ sign 676.519 $\pm$ 0.112  $\chi^2$ /NDF: 501831.7/25

All: 676.836 $\pm$ 0.080  $\chi^2$ /NDF: 1663213.5/50

- sign 677.152 $\pm$ 0.112  $\chi^2$ /NDF: 1161366.0/24

# asym\_sam\_15\_dd\_mean vs Slug



Right In:  $-1349.629 \pm 5692.387$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-365.394 \pm 156.301$   $\chi^2/\text{NDF}$ : 18.7/24

Right Out:  $479.189 \pm 1008.351$   $\chi^2/\text{NDF}$ : 2.0/1

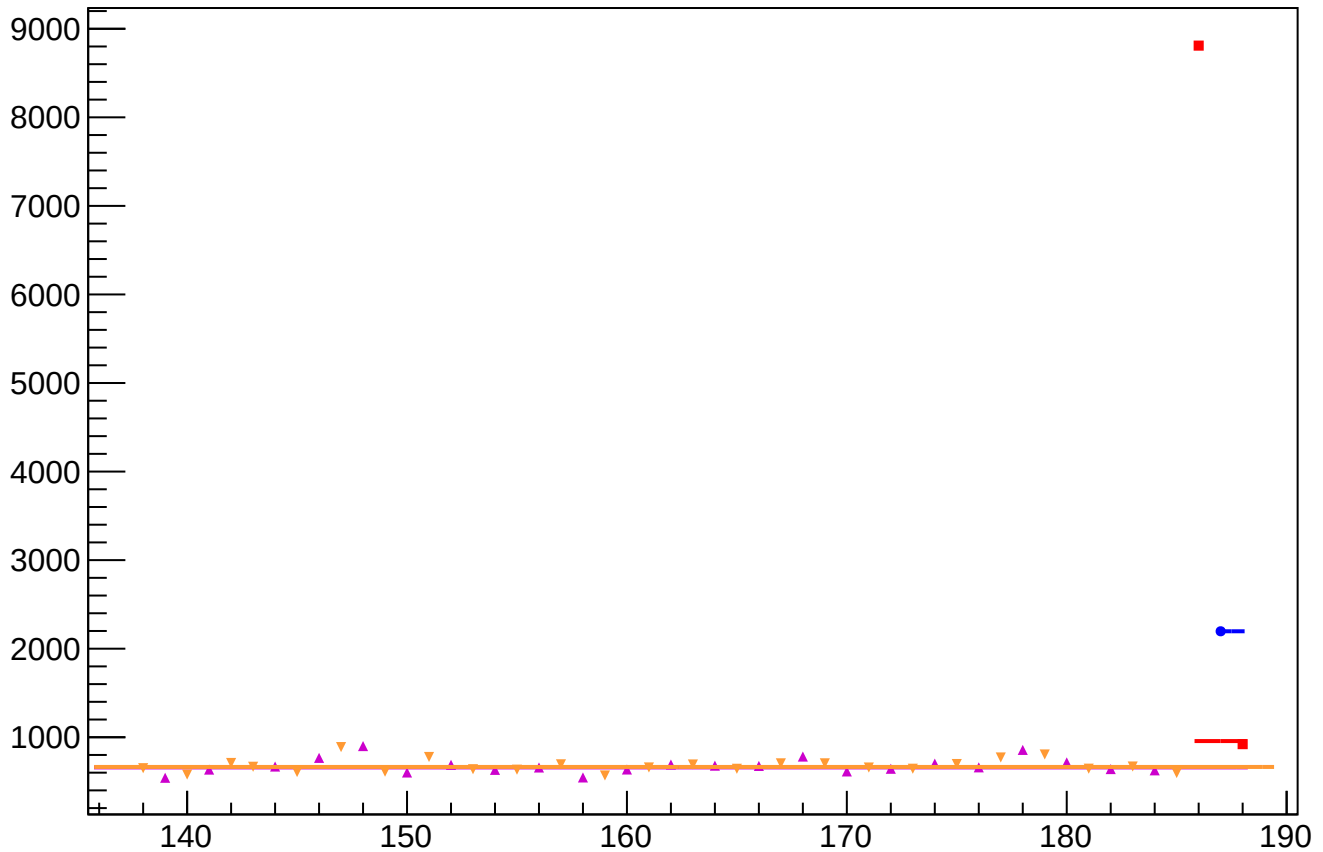
Left In:  $11.243 \pm 158.497$   $\chi^2/\text{NDF}$ : 38.8/22

+ sign  $-366.135 \pm 156.242$   $\chi^2/\text{NDF}$ : 18.8/25

All:  $-172.218 \pm 110.597$   $\chi^2/\text{NDF}$ : 62.8/50

- sign  $22.526 \pm 156.575$   $\chi^2/\text{NDF}$ : 41.0/24

# asym\_sam\_15\_dd\_rms vs Slug



Right In: 2196.584 $\pm$ 4.025  $\chi^2$ /NDF: 0.0/0

Left Out: 664.618 $\pm$ 0.111  $\chi^2$ /NDF: 356964.3/24

Right Out: 956.831 $\pm$ 0.713  $\chi^2$ /NDF: 534527.9/1

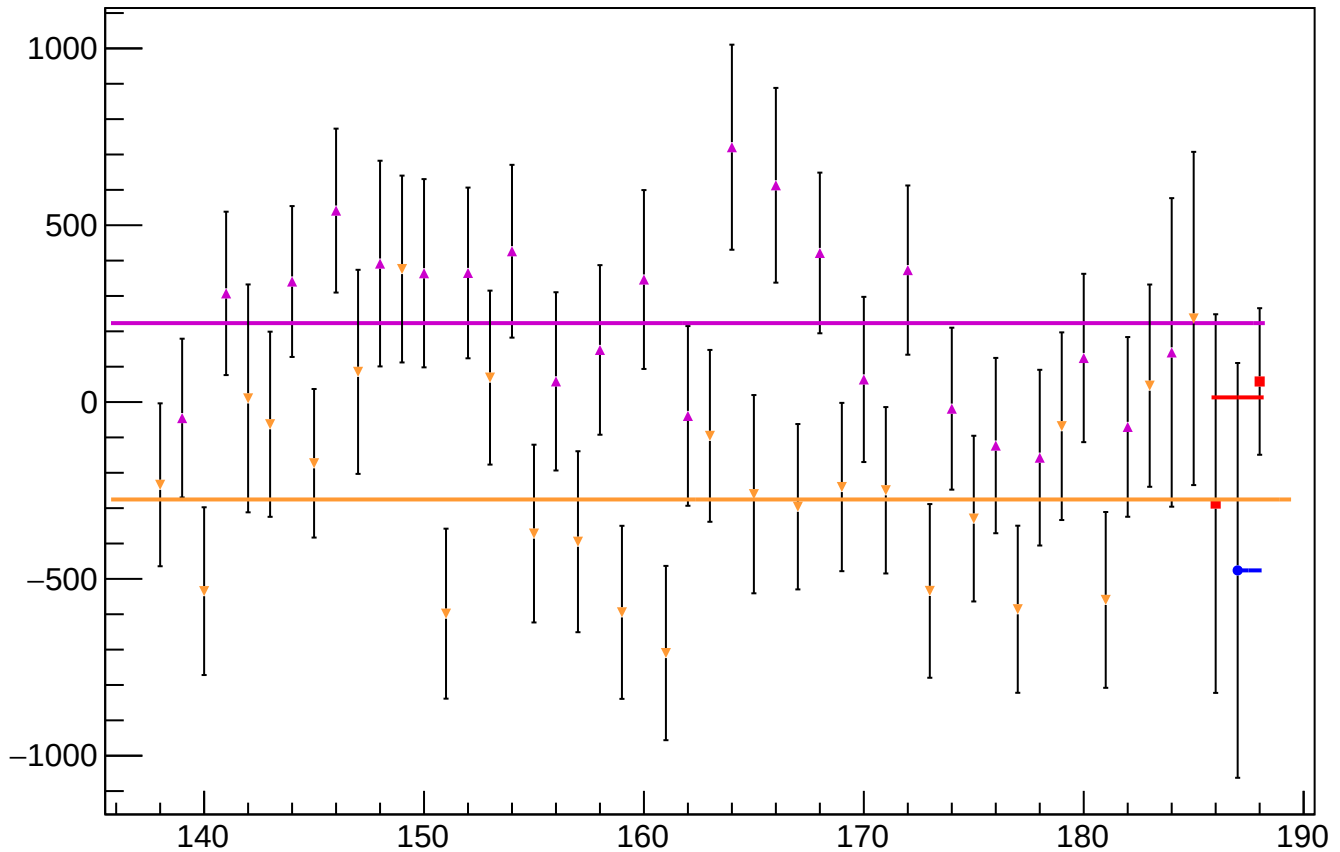
Left In: 659.230 $\pm$ 0.112  $\chi^2$ /NDF: 472744.9/22

+ sign 665.772 $\pm$ 0.110  $\chi^2$ /NDF: 501712.2/25

All: 666.088 $\pm$ 0.078  $\chi^2$ /NDF: 1679011.3/50

- sign 666.405 $\pm$ 0.111  $\chi^2$ /NDF: 1177282.7/24

# dit\_asym\_sam\_26\_dd\_mean vs Slug



Right In: -476.011+/-586.449  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -275.447+/-50.539  $\chi^2/\text{NDF}$ : 27.3/24

Right Out: 13.179+/-193.270  $\chi^2/\text{NDF}$ : 0.4/1

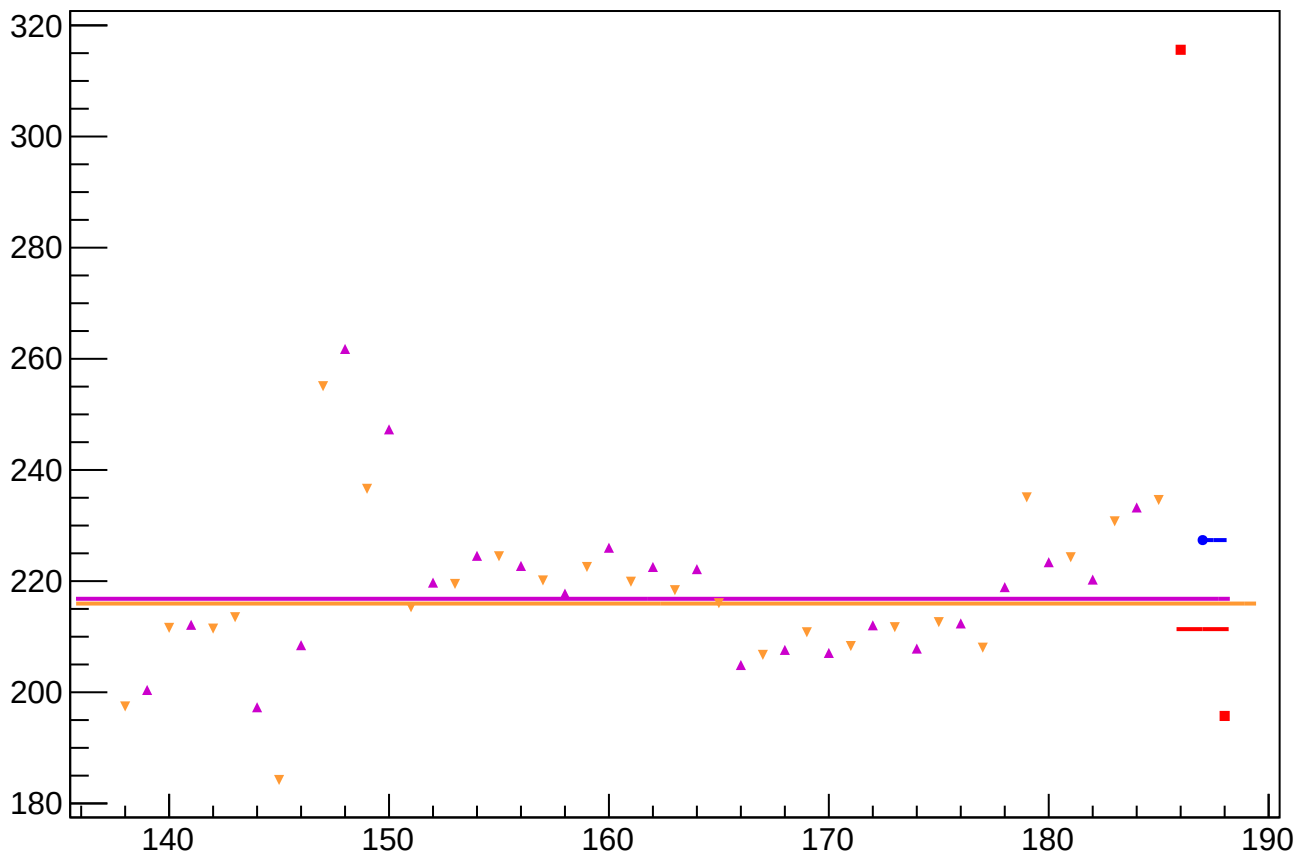
Left In: 223.195+/-51.742  $\chi^2/\text{NDF}$ : 20.8/22

+ sign -276.925+/-50.353  $\chi^2/\text{NDF}$ : 27.5/25

All: -32.089+/-35.473  $\chi^2/\text{NDF}$ : 96.6/50

- sign 209.149+/-49.981  $\chi^2/\text{NDF}$ : 22.2/24

# dit\_asym\_sam\_26\_dd\_rms vs Slug



Right In: 227.383 $\pm$ 0.415  $\chi^2$ /NDF: 0.0/0

Left Out: 215.963 $\pm$ 0.036  $\chi^2$ /NDF:144735.1/24

Right Out: 211.363 $\pm$ 0.137  $\chi^2$ /NDF: 87200.6/1

Left In: 216.821 $\pm$ 0.037  $\chi^2$ /NDF:132518.8/22

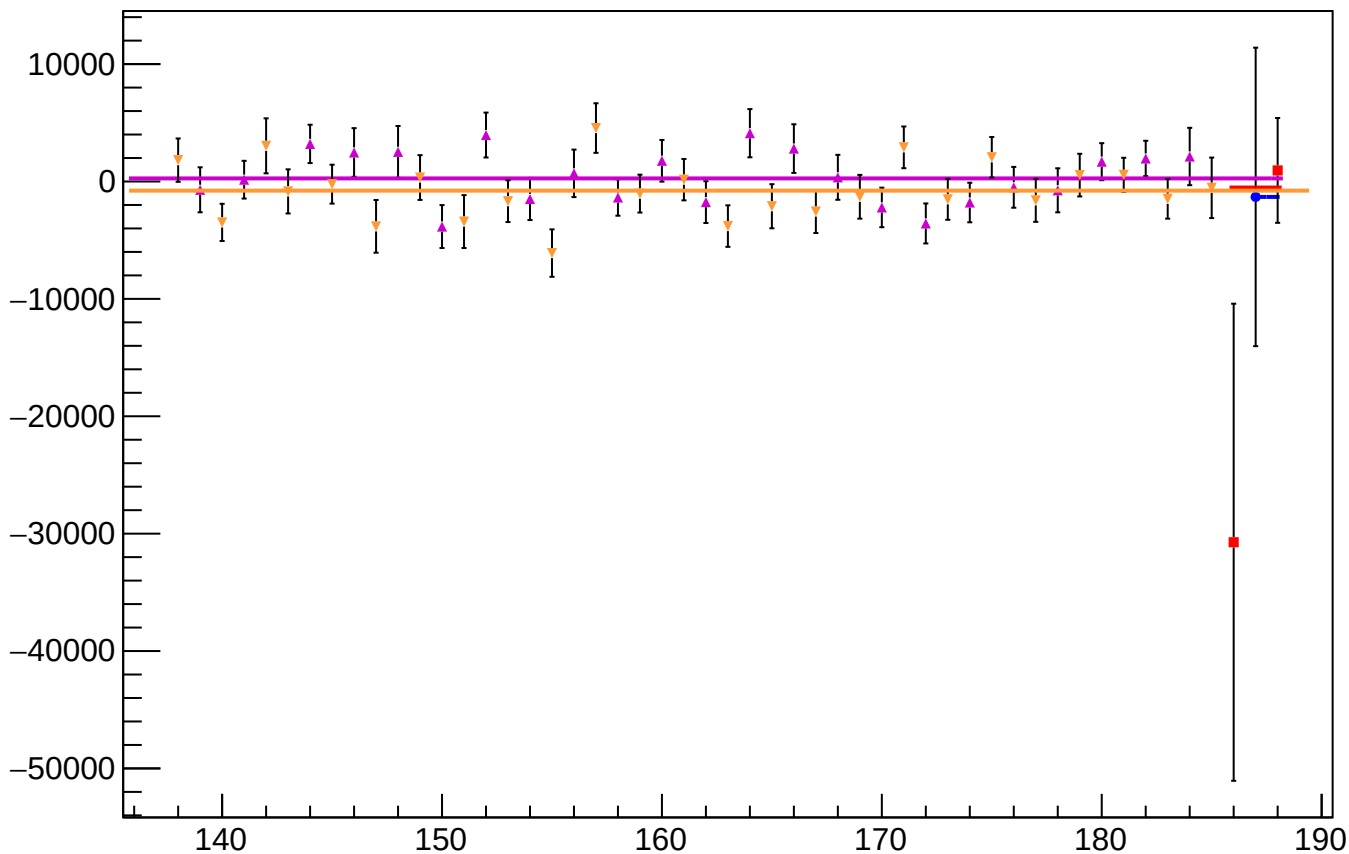
+ sign 216.047 $\pm$ 0.036  $\chi^2$ /NDF: 145488.0/25

All: 216.253 $\pm$ 0.025  $\chi^2$ /NDF: 366762.2/50

- sign 216.456 $\pm$ 0.035  $\chi^2$ /NDF: 221207.9/24



# asym\_sam\_26\_dd\_correction\_mean vs Slug



Right In: -1314.000+/-12713.694  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -779.146+/-366.965  $\chi^2/\text{NDF}$ : 38.5/24

Right Out: -515.537+/-4361.139  $\chi^2/\text{NDF}$ : 2.3/1

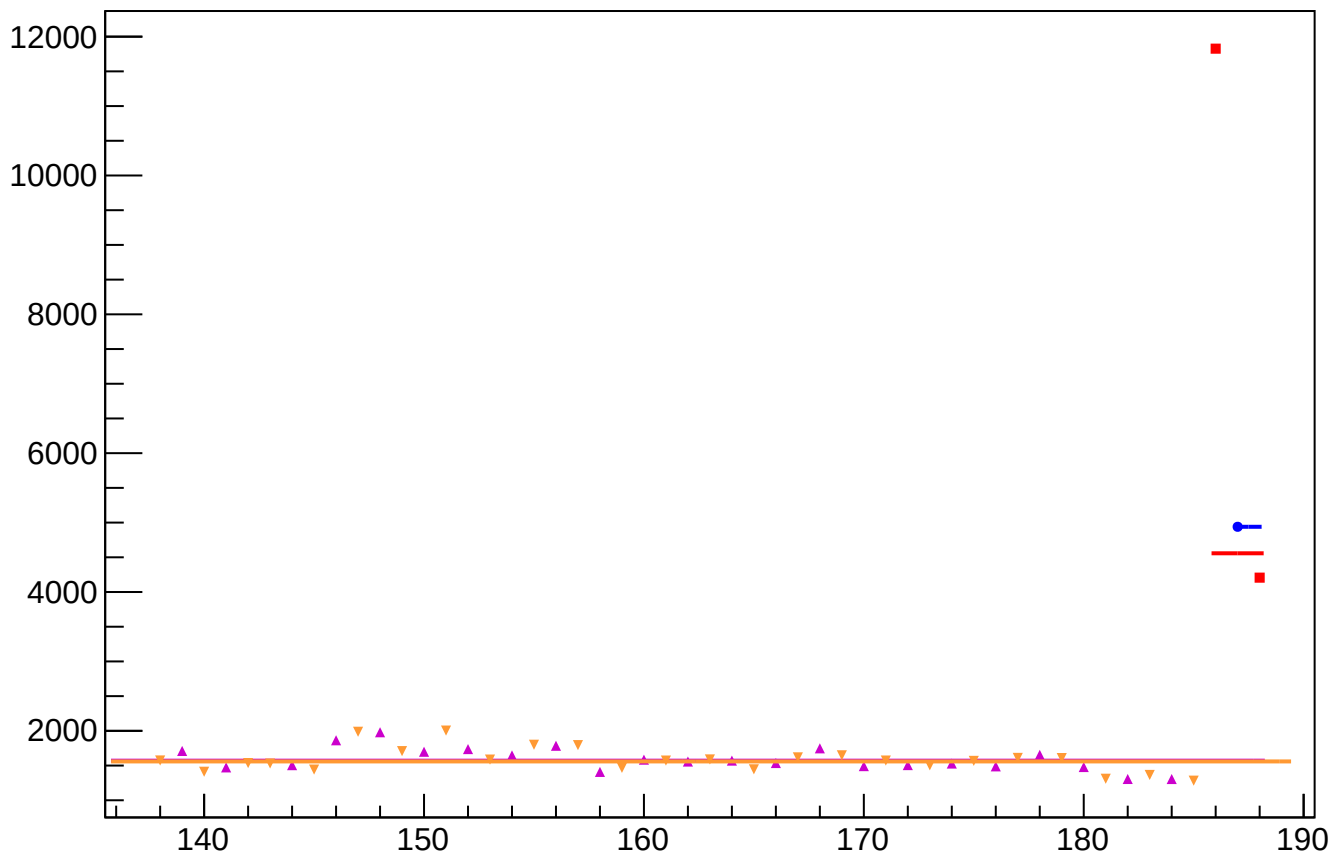
Left In: 261.815+/-376.203  $\chi^2/\text{NDF}$ : 35.4/22

+ sign -779.591+/-366.812  $\chi^2/\text{NDF}$ : 38.5/25

All: -272.928+/-262.157  $\chi^2/\text{NDF}$ : 80.2/50

- sign 256.073+/-374.811  $\chi^2/\text{NDF}$ : 37.8/24

# asym\_sam\_26\_dd\_correction\_rms vs Slug



Right In: 4939.505 $\pm$ 8.990  $\chi^2$ /NDF: 0.0/0

Left Out: 1559.504 $\pm$ 0.259  $\chi^2$ /NDF: 379160.1/24

Right Out: 4557.720 $\pm$ 3.084  $\chi^2$ /NDF: 268288.2/1

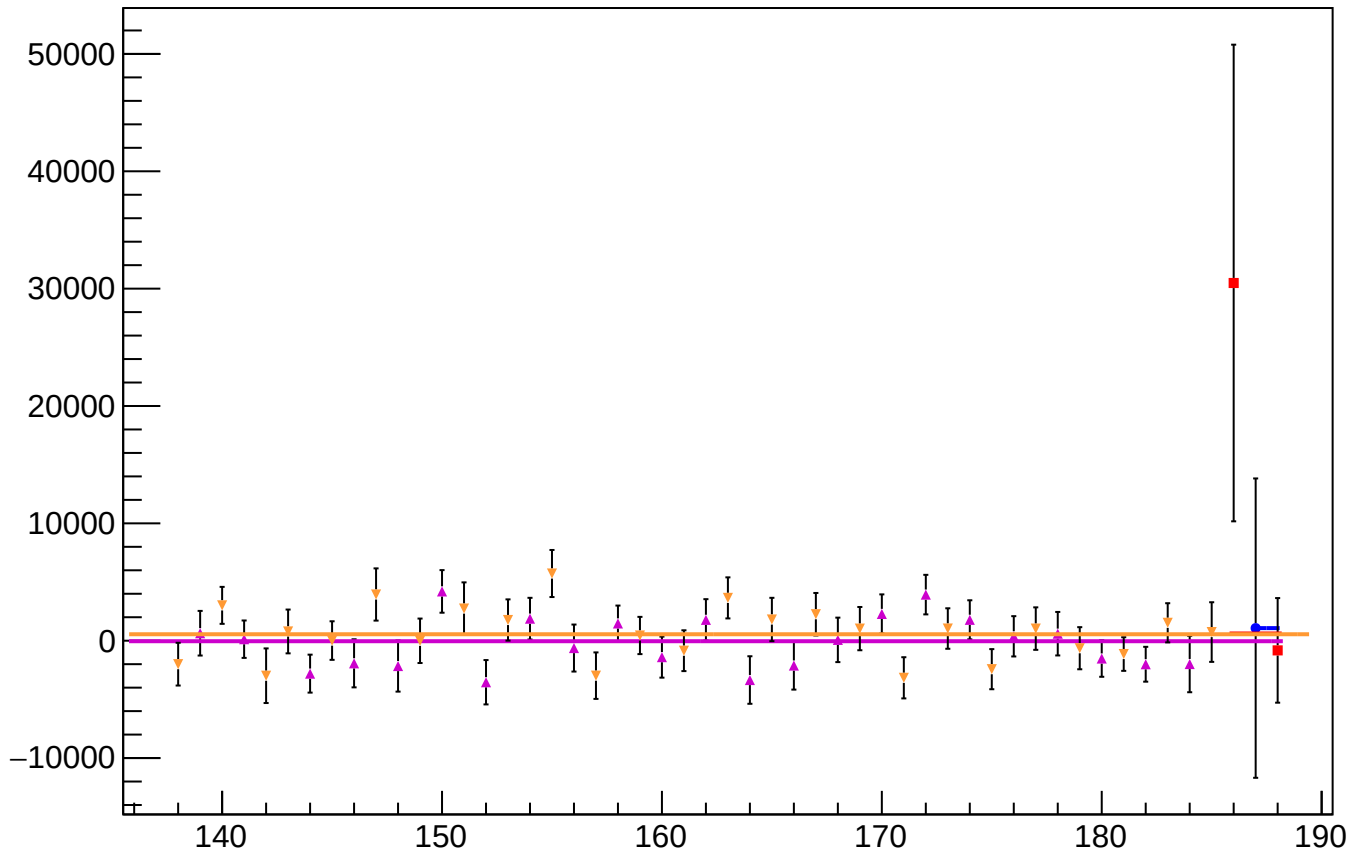
Left In: 1570.331 $\pm$ 0.266  $\chi^2$ /NDF: 329434.5/22

+ sign 1562.318 $\pm$ 0.259  $\chi^2$ /NDF: 520400.2/25

All: 1577.033 $\pm$ 0.185  $\chi^2$ /NDF: 2056225.8/50

- sign 1592.396 $\pm$ 0.265  $\chi^2$ /NDF: 1529246.8/24

# asym\_sam\_26\_dd\_mean vs Slug



Right In: 1071.971 $\pm$ 12754.068  $\chi^2$ /NDF: 0.0/0

Left Out: 550.093 $\pm$ 362.172  $\chi^2$ /NDF:35.6/24

Right Out: 614.205 $\pm$ 4353.604  $\chi^2$ /NDF: 2.3/1

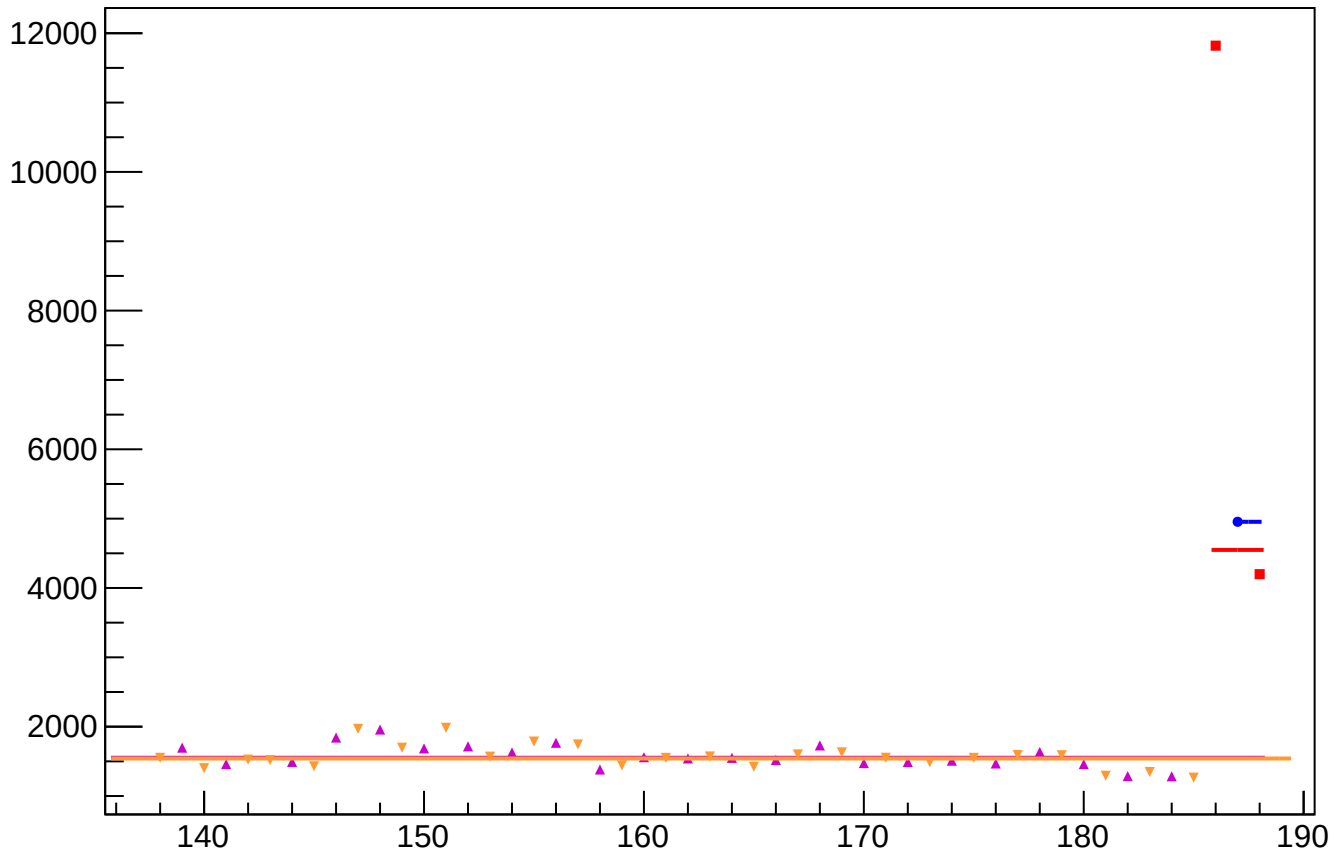
Left In: -43.949 $\pm$ 371.765  $\chi^2$ /NDF:33.5/22

+ sign 550.514 $\pm$ 362.026  $\chi^2$ /NDF: 35.6/25

All: 262.420 $\pm$ 258.907  $\chi^2$ /NDF: 72.7/50

- sign -39.184 $\pm$ 370.417  $\chi^2$ /NDF: 35.8/24

# asym\_sam\_26\_dd\_rms vs Slug



Right In: 4954.641 $\pm$ 9.018  $\chi^2$ /NDF: 0.0/0

Left Out: 1541.149 $\pm$ 0.256  $\chi^2$ /NDF: 382077.8/24

Right Out: 4549.185 $\pm$ 3.078  $\chi^2$ /NDF: 268759.5/1

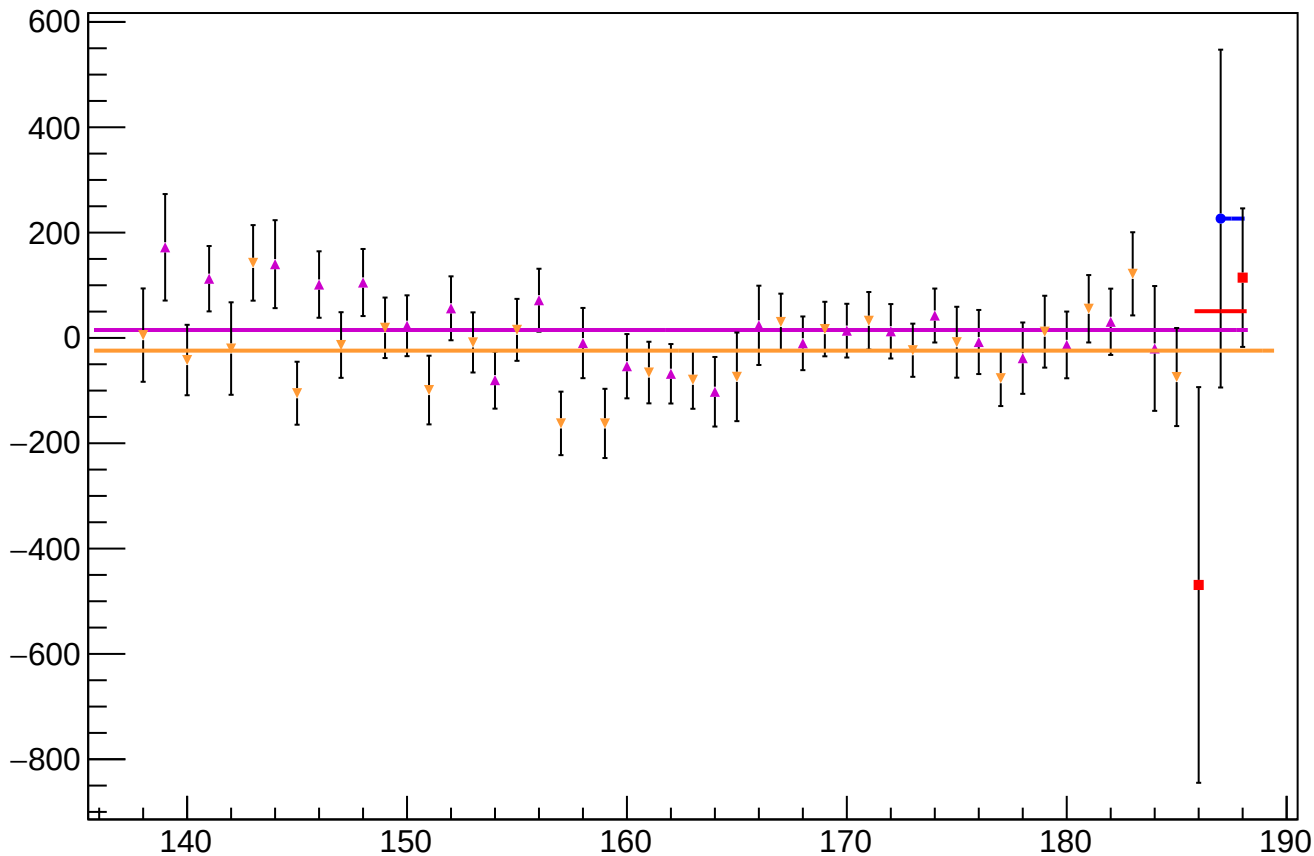
Left In: 1551.481 $\pm$ 0.263  $\chi^2$ /NDF: 339002.9/22

+ sign 1543.899 $\pm$ 0.256  $\chi^2$ /NDF: 525224.2/25

All: 1558.205 $\pm$ 0.183  $\chi^2$ /NDF: 2080736.1/50

- sign 1573.181 $\pm$ 0.262  $\chi^2$ /NDF: 1549119.4/24

# dit\_asym\_sam\_37\_dd\_mean vs Slug



Right In: 226.608 $\pm$ 320.736  $\chi^2$ /NDF: 0.0/0

Left Out: -24.126 $\pm$ 12.525  $\chi^2$ /NDF:30.7/24

Right Out: 50.743 $\pm$ 124.142  $\chi^2$ /NDF: 2.1/1

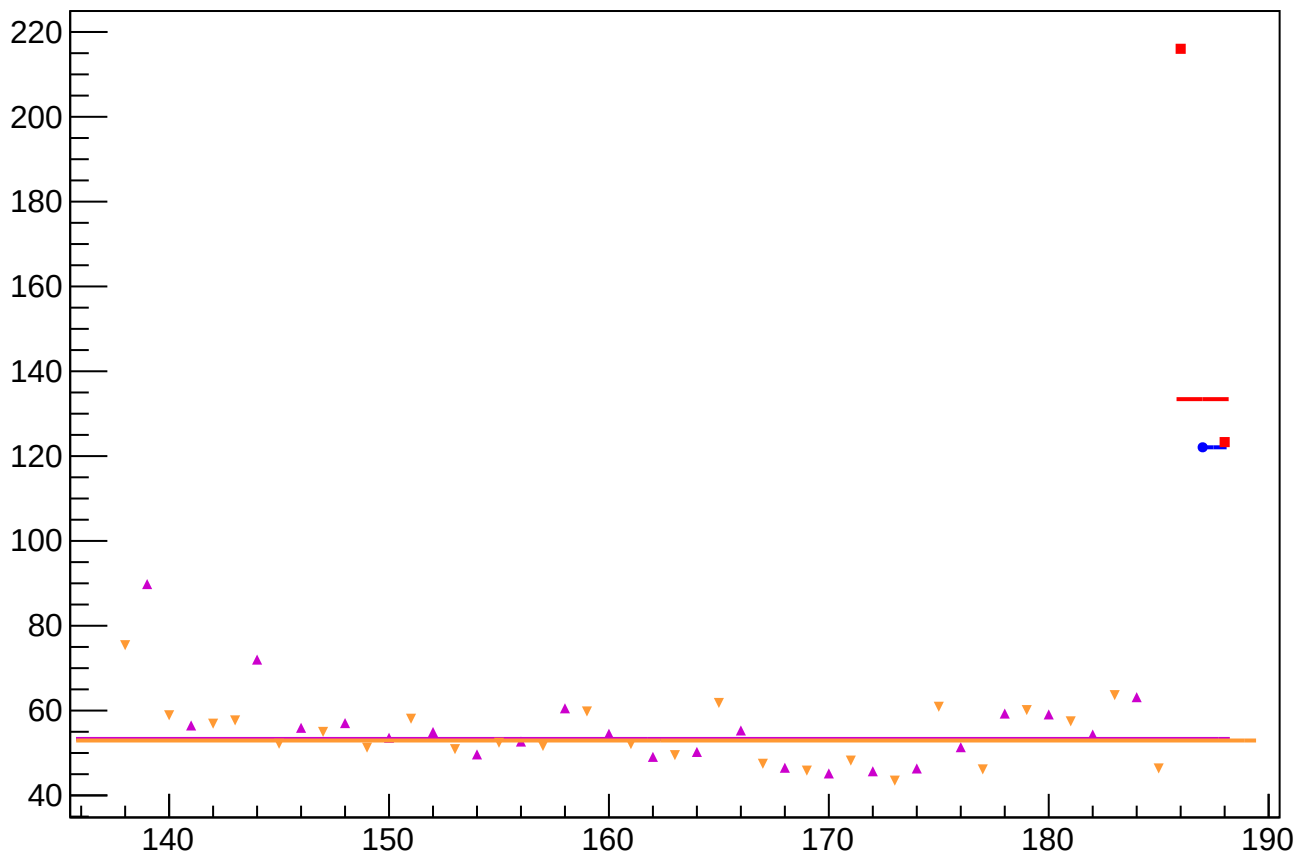
Left In: 15.058 $\pm$ 12.921  $\chi^2$ /NDF:23.8/22

+ sign -23.744 $\pm$ 12.515  $\chi^2$ /NDF: 31.3/25

All: -4.672 $\pm$ 8.966  $\chi^2$ /NDF: 62.1/50

- sign 15.441 $\pm$ 12.852  $\chi^2$ /NDF: 26.1/24

# dit\_asym\_sam\_37\_dd\_rms vs Slug



Right In: 122.074 $\pm$ 0.227  $\chi^2$ /NDF: 0.0/0

Left Out: 52.942 $\pm$ 0.009  $\chi^2$ /NDF: 513146.0/24

Right Out: 133.430 $\pm$ 0.088  $\chi^2$ /NDF: 108559.4/1

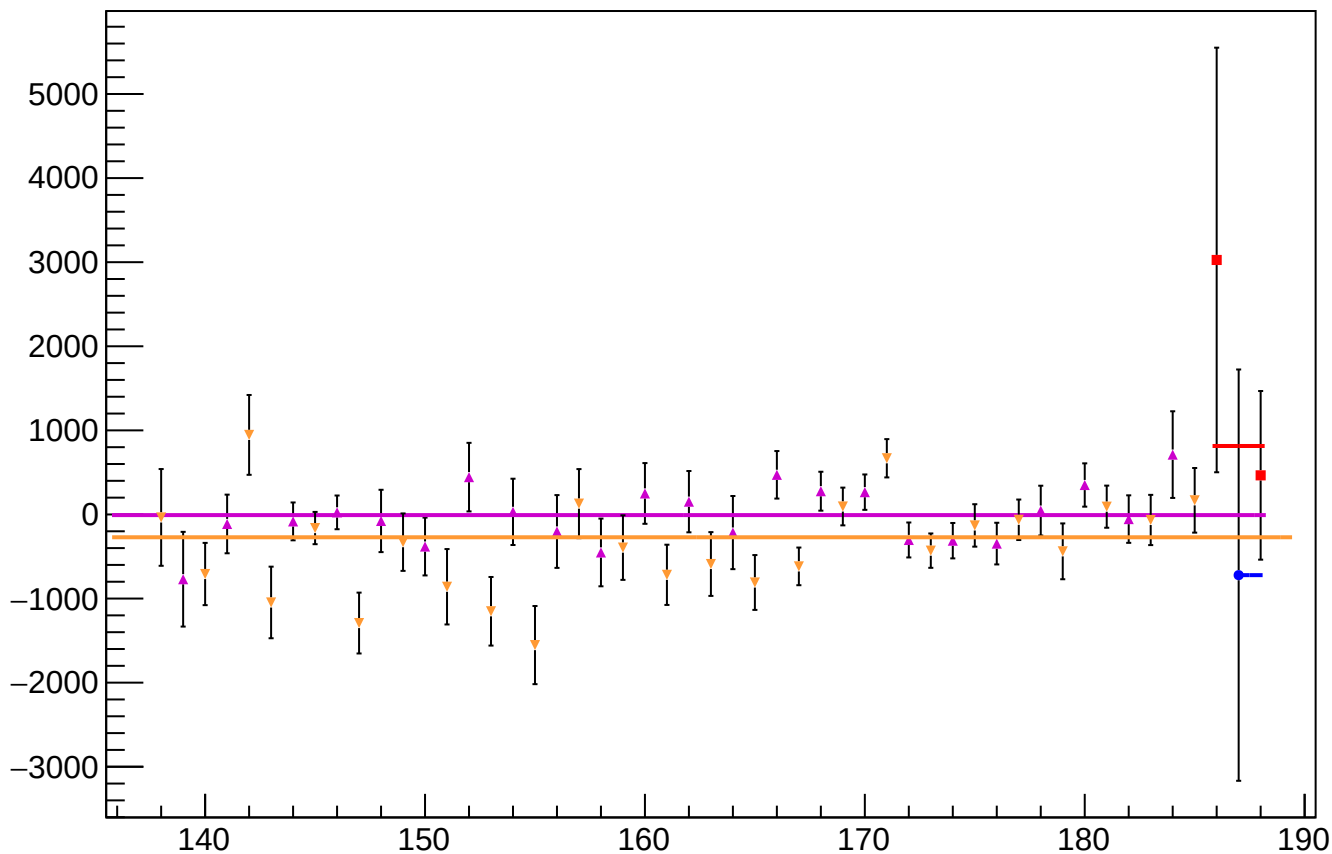
Left In: 53.312 $\pm$ 0.009  $\chi^2$ /NDF: 644220.1/22

+ sign 53.047 $\pm$ 0.009  $\chi^2$ /NDF: 605921.4/25

All: 53.594 $\pm$ 0.006  $\chi^2$ /NDF: 2190617.8/50

- sign 54.171 $\pm$ 0.009  $\chi^2$ /NDF: 1576853.7/24

# asym\_sam\_37\_dd\_correction\_mean vs Slug



Right In: -721.606 $\pm$ 2445.605  $\chi^2$ /NDF: 0.0/0

Left Out: -271.240 $\pm$ 60.285  $\chi^2$ /NDF: 67.7/24

Right Out: 814.172 $\pm$ 931.920  $\chi^2$ /NDF: 0.9/1

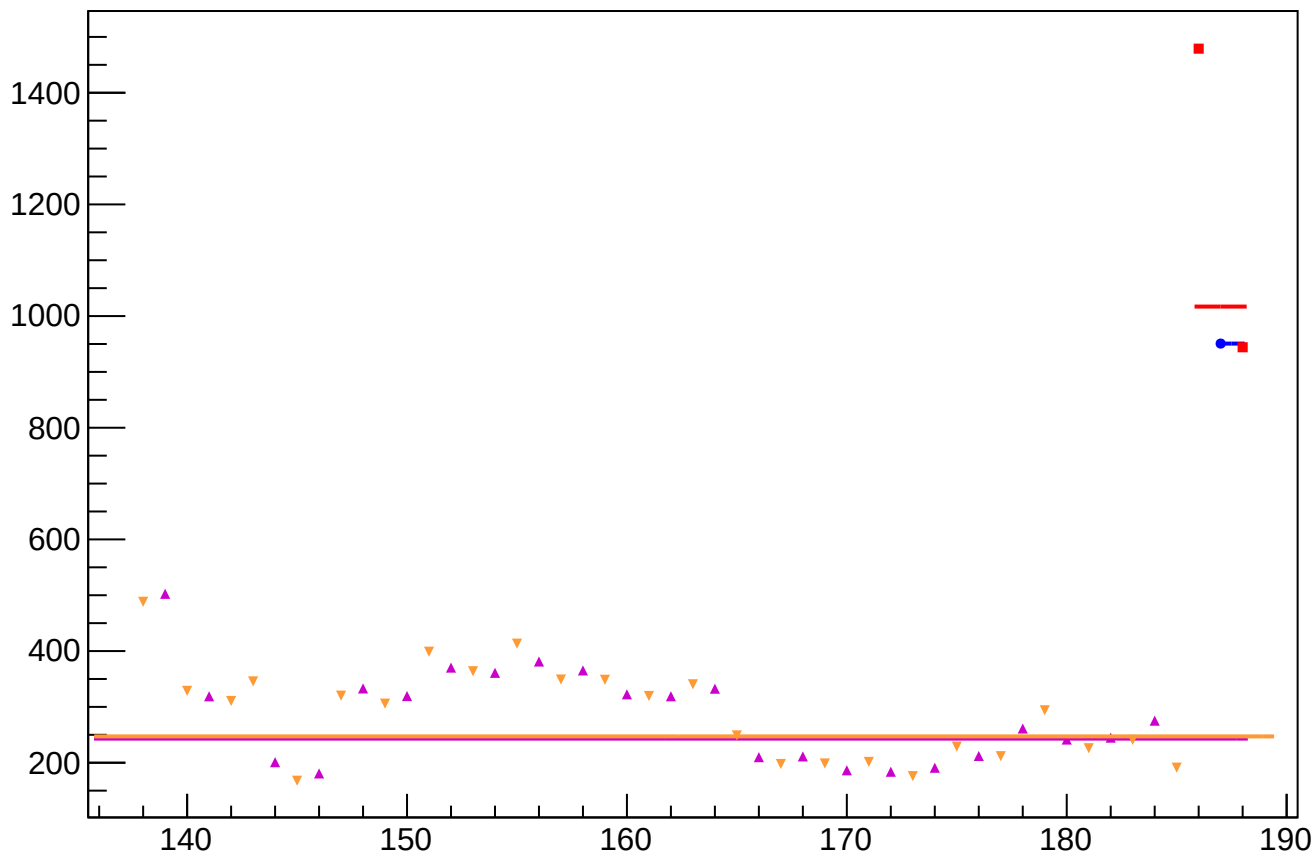
Left In: -7.535 $\pm$ 60.328  $\chi^2$ /NDF: 22.9/22

+ sign -271.514 $\pm$ 60.266  $\chi^2$ /NDF: 67.7/25

All: -137.666 $\pm$ 42.592  $\chi^2$ /NDF: 102.1/50

- sign -4.105 $\pm$ 60.202  $\chi^2$ /NDF: 24.5/24

# asym\_sam\_37\_dd\_correction\_rms vs Slug



Right In: 950.726 $\pm$ 1.729  $\chi^2$ /NDF: 0.0/0

Left Out: 247.166 $\pm$ 0.043  $\chi^2$ /NDF: 2853302.0/24

Right Out: 1017.028 $\pm$ 0.659  $\chi^2$ /NDF: 77521.8/1

Left In: 243.189 $\pm$ 0.043  $\chi^2$ /NDF: 2571190.8/22

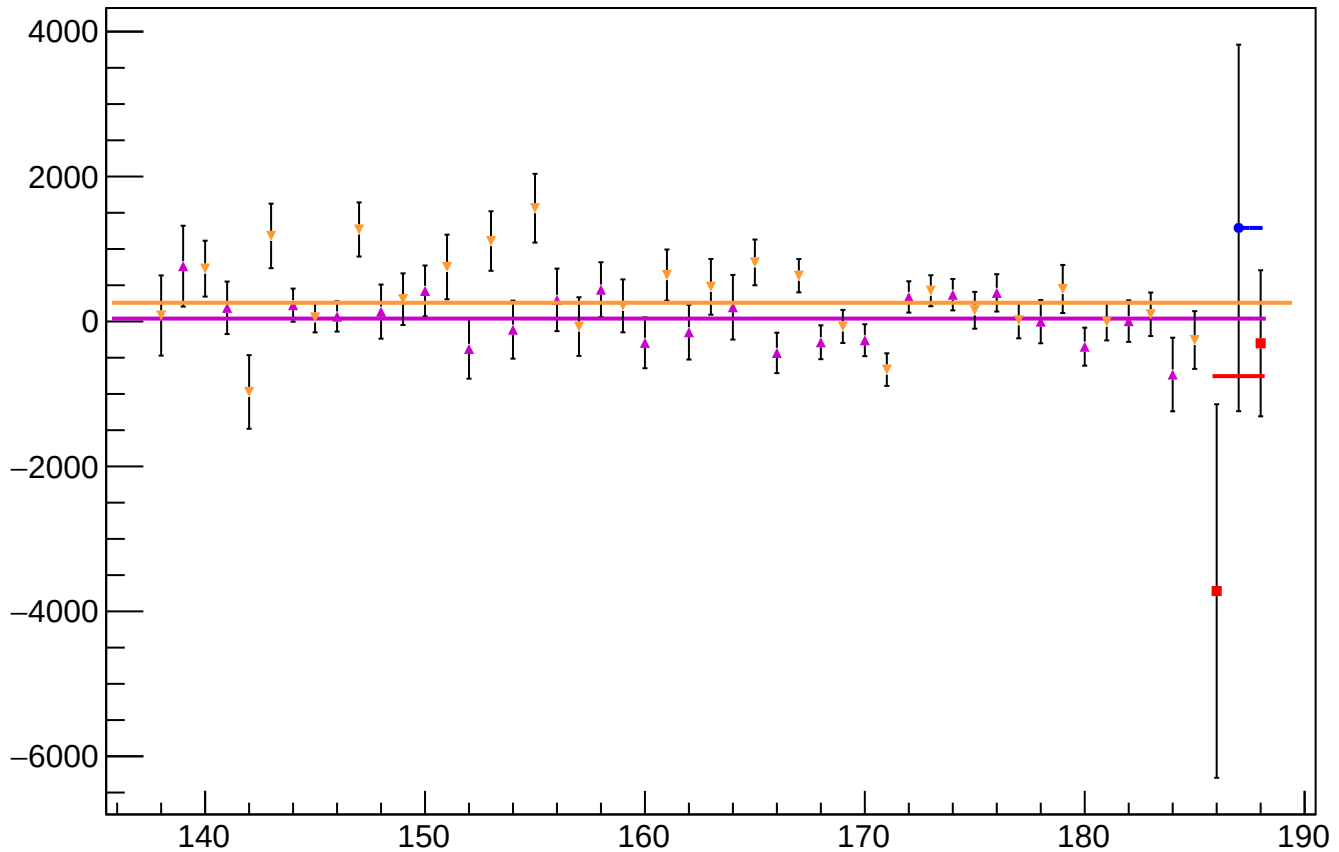
+ sign 247.593 $\pm$ 0.043  $\chi^2$ /NDF: 3018725.0/25

All: 247.005 $\pm$ 0.030  $\chi^2$ /NDF: 7041093.8/50

- sign 246.418 $\pm$ 0.043  $\chi^2$ /NDF: 4021988.4/24



# asym\_sam\_37\_dd\_mean vs Slug



Right In: 1290.959 $\pm$ 2528.638  $\chi^2$ /NDF: 0.0/0

Left Out: 258.044 $\pm$ 61.488  $\chi^2$ /NDF: 65.0/24

Right Out: -754.177 $\pm$ 938.501  $\chi^2$ /NDF: 1.5/1

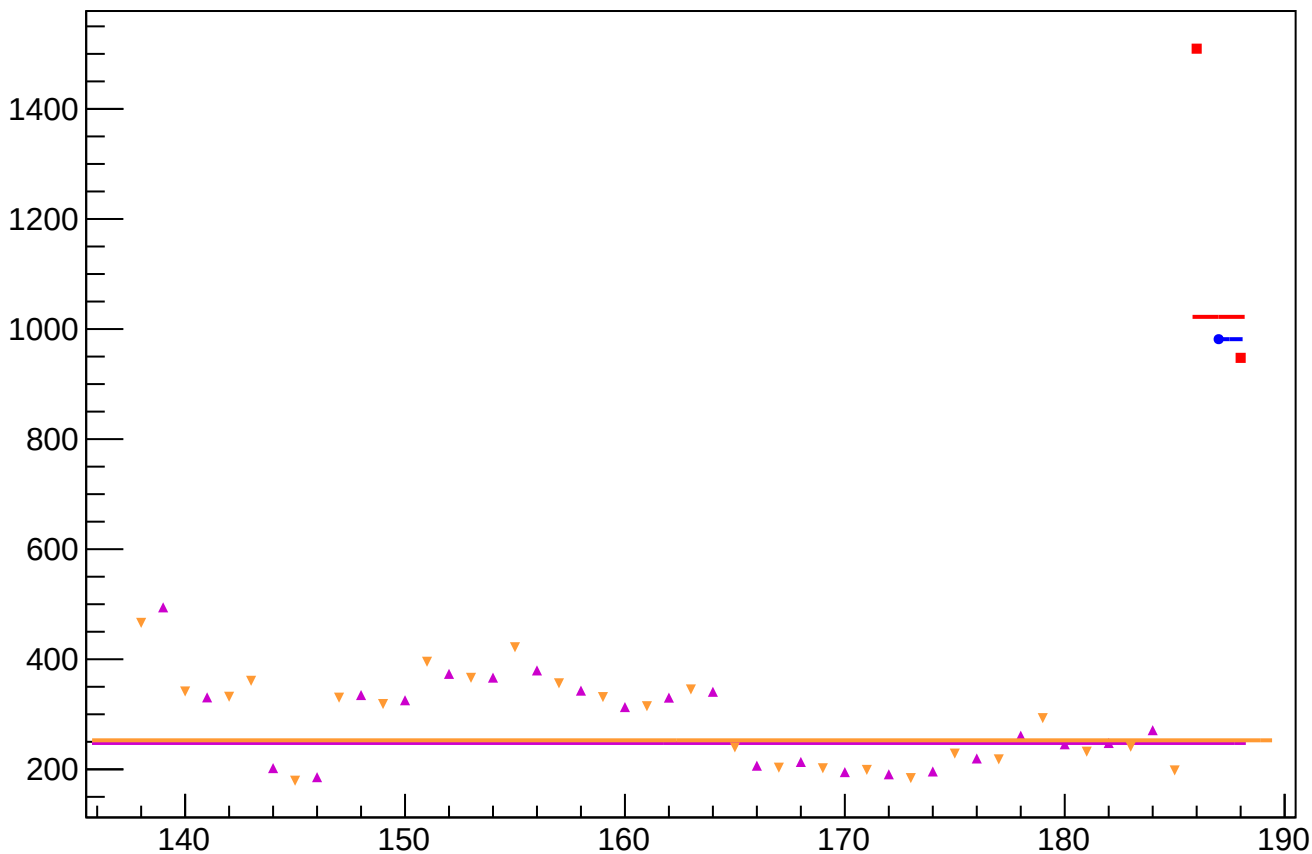
Left In: 40.015 $\pm$ 61.495  $\chi^2$ /NDF: 25.0/22

+ sign 258.654 $\pm$ 61.469  $\chi^2$ /NDF: 65.2/25

All: 147.446 $\pm$ 43.428  $\chi^2$ /NDF: 99.0/50

- sign 36.620 $\pm$ 61.364  $\chi^2$ /NDF: 27.3/24

# asym\_sam\_37\_dd\_rms vs Slug



Right In: 981.598 $\pm$ 1.788  $\chi^2$ /NDF: 0.0/0

Left Out: 252.721 $\pm$ 0.043  $\chi^2$ /NDF: 2648800.3/24

Right Out: 1022.157 $\pm$ 0.664  $\chi^2$ /NDF: 82438.9/1

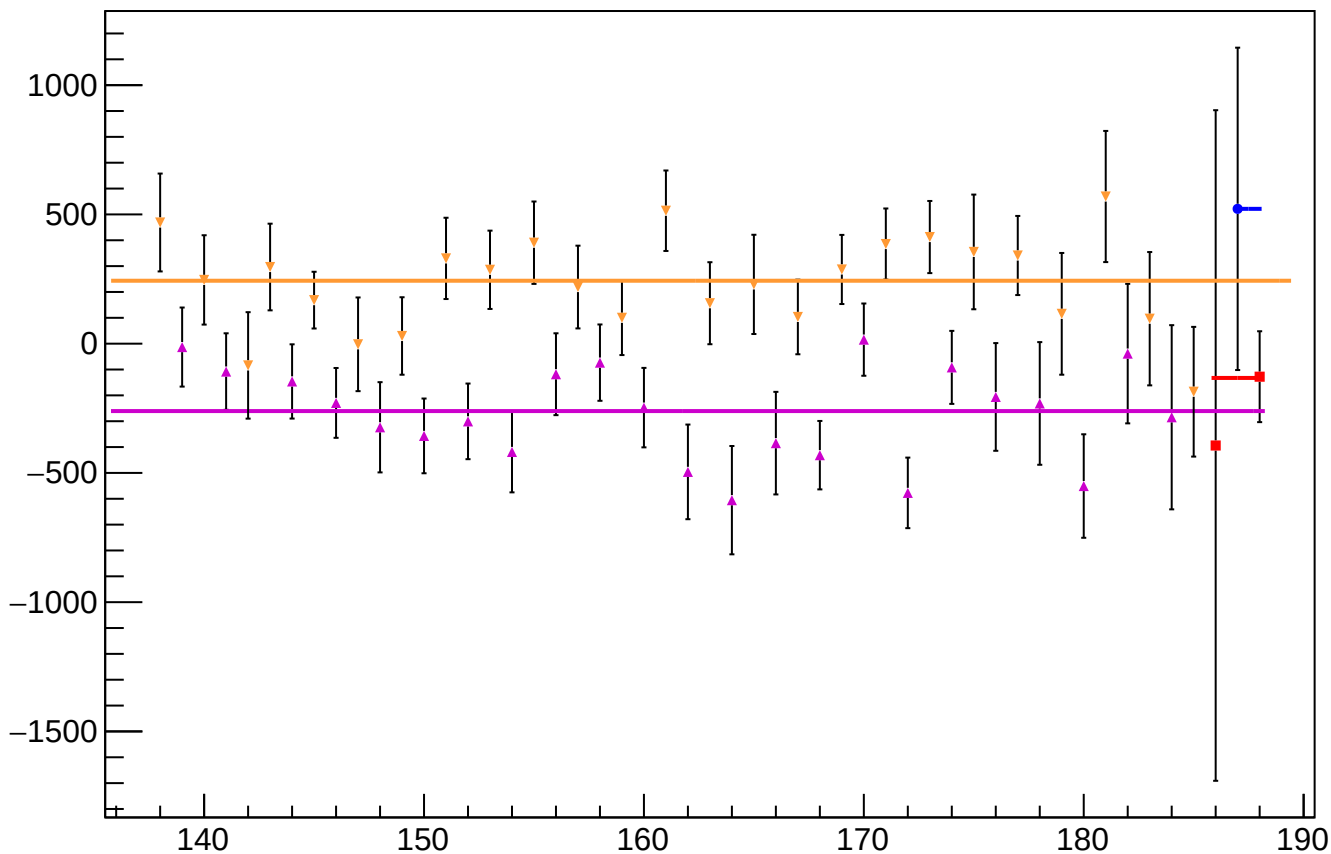
Left In: 247.919 $\pm$ 0.043  $\chi^2$ /NDF: 2374698.8/22

+ sign 253.151 $\pm$ 0.043  $\chi^2$ /NDF: 2814877.0/25

All: 252.188 $\pm$ 0.031  $\chi^2$ /NDF: 6628338.8/50

- sign 251.229 $\pm$ 0.043  $\chi^2$ /NDF: 3812481.5/24

# dit\_asym\_sam\_48\_dd\_mean vs Slug



Right In: 521.513 $\pm$ 623.512  $\chi^2$ /NDF: 0.0/0

Left Out: 243.442 $\pm$ 32.738  $\chi^2$ /NDF:23.4/24

Right Out: -132.580 $\pm$ 174.192  $\chi^2$ /NDF: 0.0/1

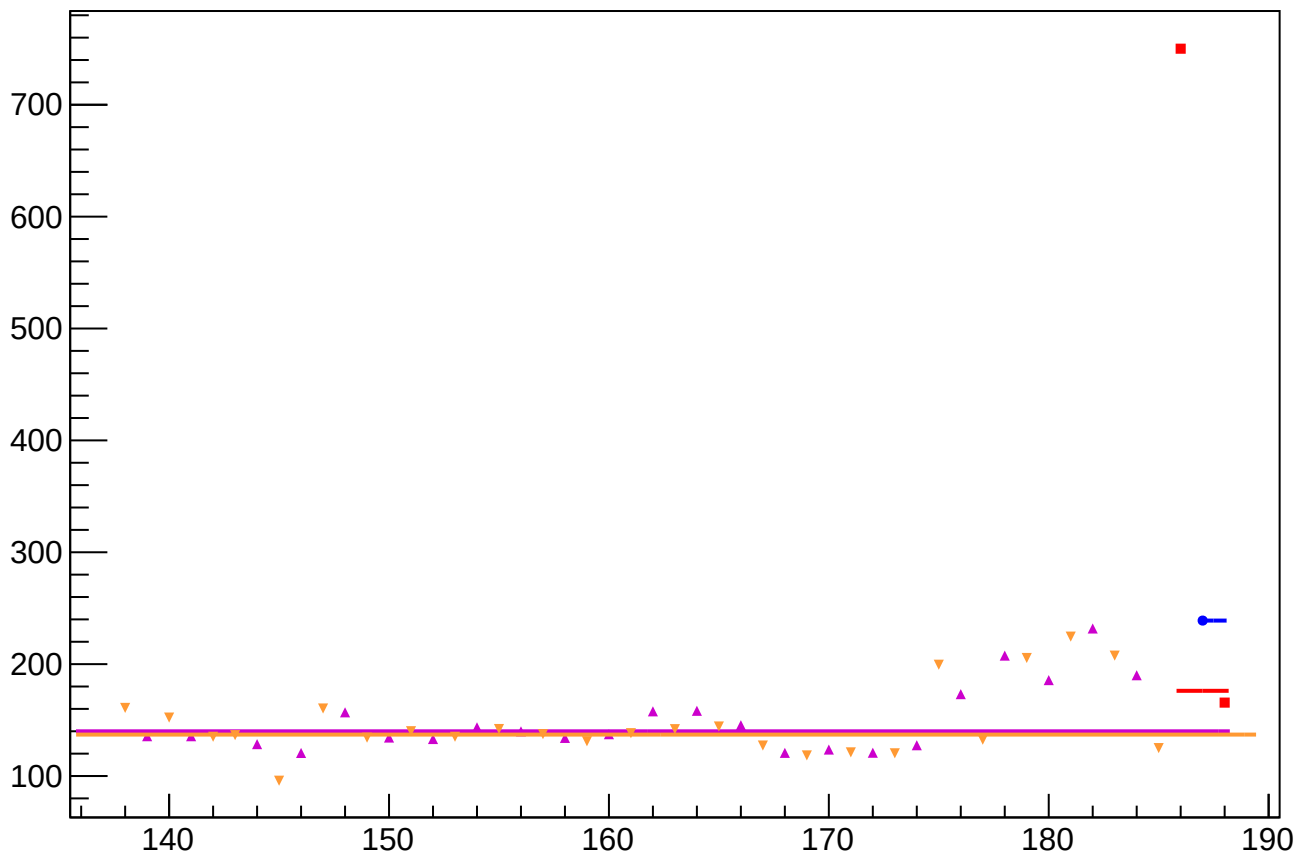
Left In: -260.749 $\pm$ 33.988  $\chi^2$ /NDF:28.5/22

+ sign 244.207 $\pm$ 32.693  $\chi^2$ /NDF: 23.6/25

All: -0.880 $\pm$ 23.349  $\chi^2$ /NDF: 167.3/50

- sign -256.049 $\pm$ 33.359  $\chi^2$ /NDF: 29.0/24

# dit\_asym\_sam\_48\_dd\_rms vs Slug



Right In: 238.938 $\pm$ 0.441  $\chi^2$ /NDF: 0.0/0

Left Out: 137.036 $\pm$ 0.023  $\chi^2$ /NDF:1200381.2/24

Right Out: 176.154 $\pm$ 0.123  $\chi^2$ /NDF: 398816.1/1

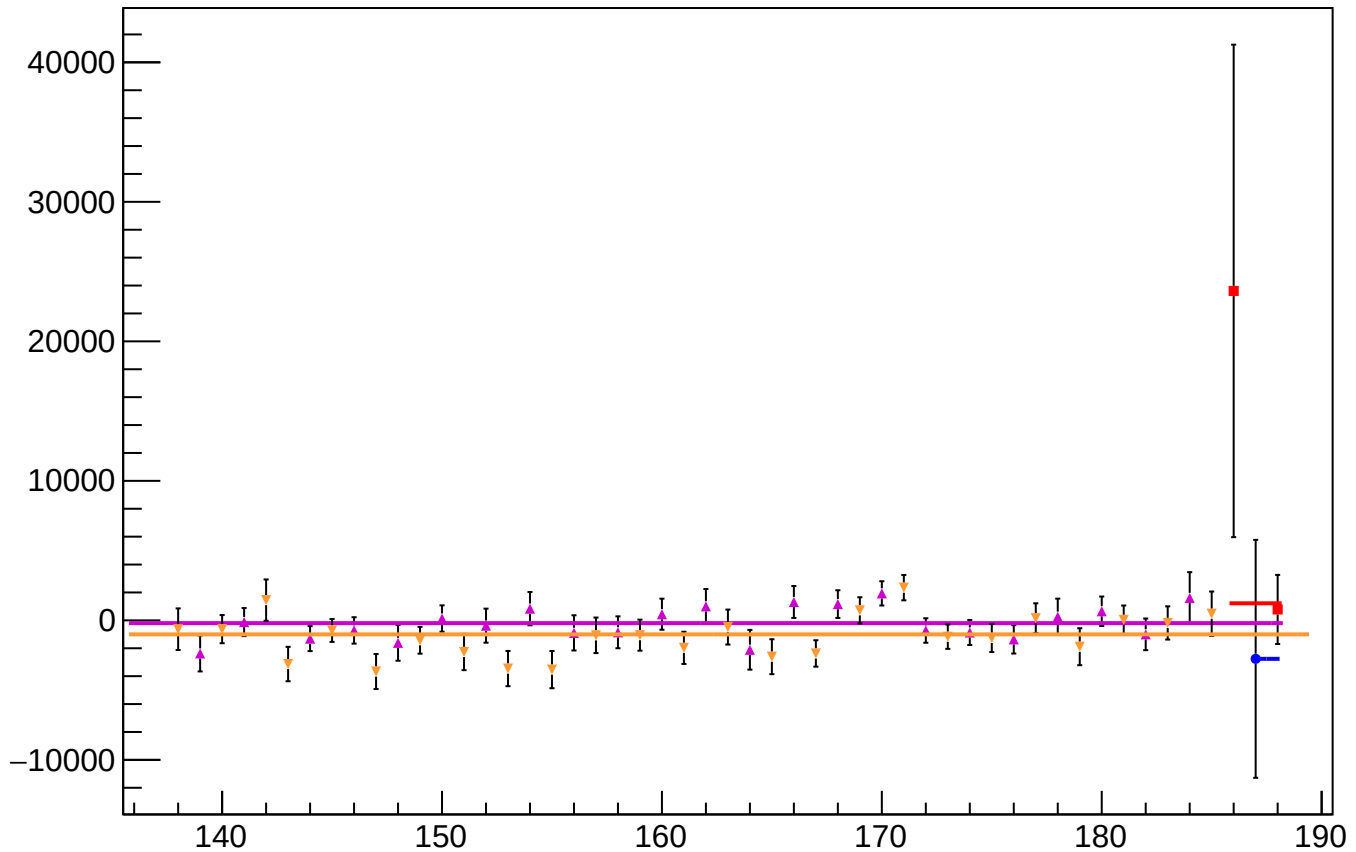
Left In: 139.966 $\pm$ 0.024  $\chi^2$ /NDF:838127.9/22

+ sign 137.316 $\pm$ 0.023  $\chi^2$ /NDF: 1253654.9/25

All: 139.264 $\pm$ 0.017  $\chi^2$ /NDF: 2588251.8/50

- sign 141.293 $\pm$ 0.024  $\chi^2$ /NDF: 1320095.5/24

# asym\_sam\_48\_dd\_correction\_mean vs Slug



Right In:  $-2757.834 \pm 8527.436$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-1004.364 \pm 222.387$   $\chi^2/\text{NDF}$ : 44.7/24

Right Out:  $1222.551 \pm 2452.842$   $\chi^2/\text{NDF}$ : 1.6/1

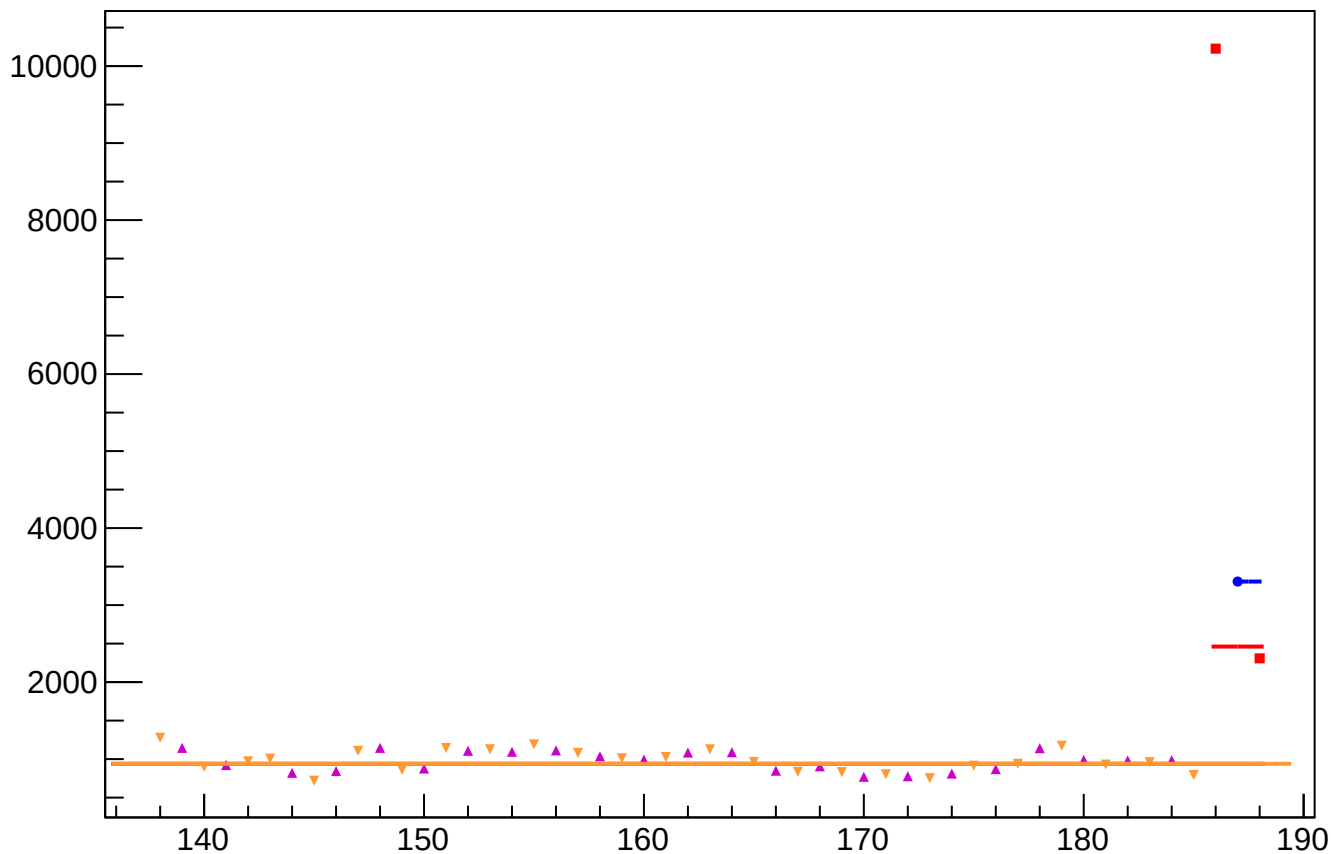
Left In:  $-198.654 \pm 225.997$   $\chi^2/\text{NDF}$ : 24.6/22

+ sign  $-1005.556 \pm 222.312$   $\chi^2/\text{NDF}$ : 44.7/25

All:  $-601.125 \pm 158.155$   $\chi^2/\text{NDF}$ : 78.0/50

- sign  $-186.691 \pm 225.044$   $\chi^2/\text{NDF}$ : 26.6/24

# asym\_sam\_48\_dd\_correction\_rms vs Slug



Right In: 3305.812 $\pm$ 6.030  $\chi^2$ /NDF: 0.0/0

Left Out: 938.988 $\pm$ 0.157  $\chi^2$ /NDF:828400.0/24

Right Out: 2461.524 $\pm$ 1.734  $\chi^2$ /NDF: 394658.2/1

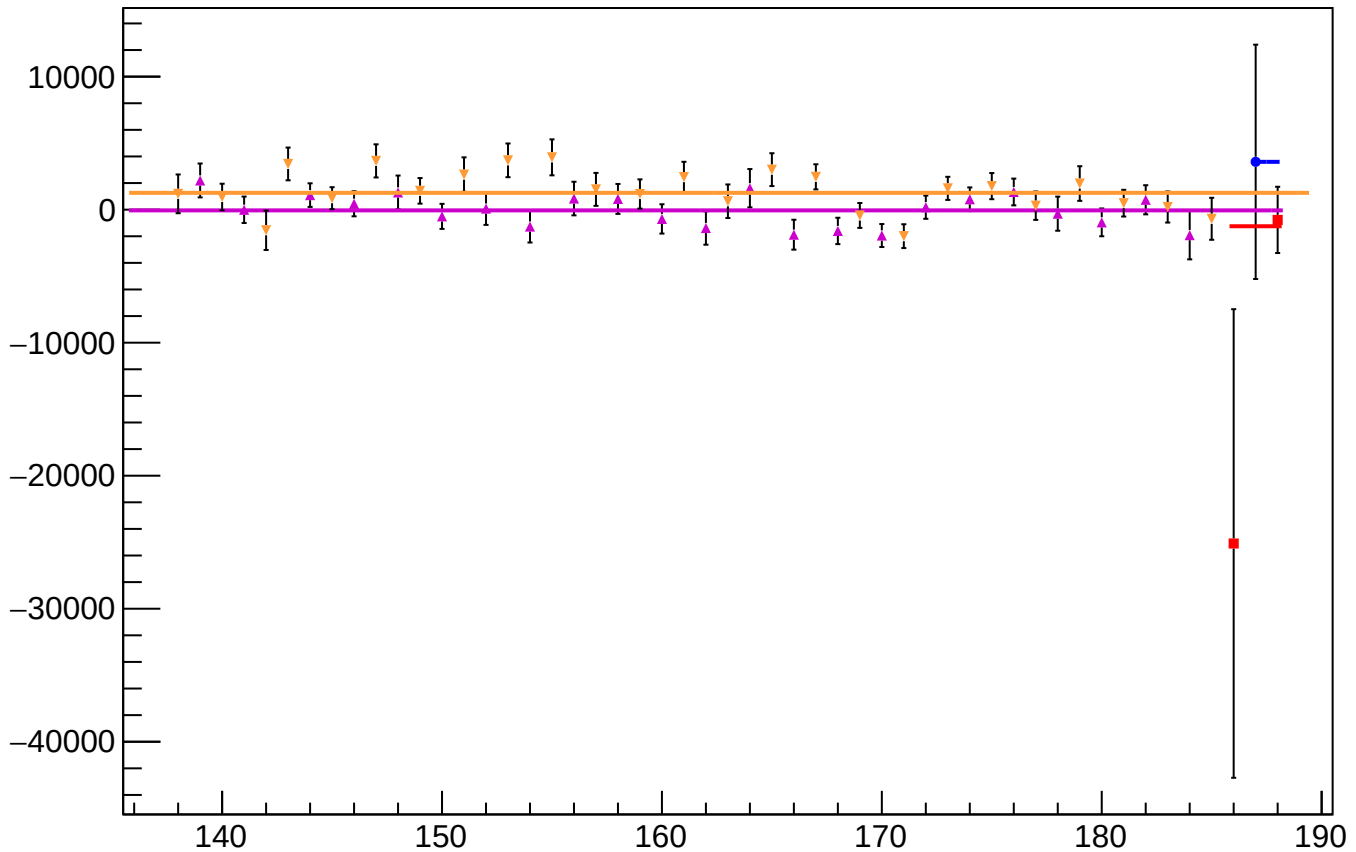
Left In: 938.755 $\pm$ 0.160  $\chi^2$ /NDF:611419.0/22

+ sign 940.597 $\pm$ 0.157  $\chi^2$ /NDF: 982367.6/25

All: 946.018 $\pm$ 0.112  $\chi^2$ /NDF: 2755194.3/50

- sign 951.573 $\pm$ 0.159  $\chi^2$ /NDF: 1770418.7/24

# asym\_sam\_48\_dd\_mean vs Slug



Right In:  $3594.886 \pm 8808.527$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $1264.940 \pm 220.626$   $\chi^2/\text{NDF}$ : 45.5/24

Right Out:  $-1246.702 \pm 2465.600$   $\chi^2/\text{NDF}$ : 1.9/1

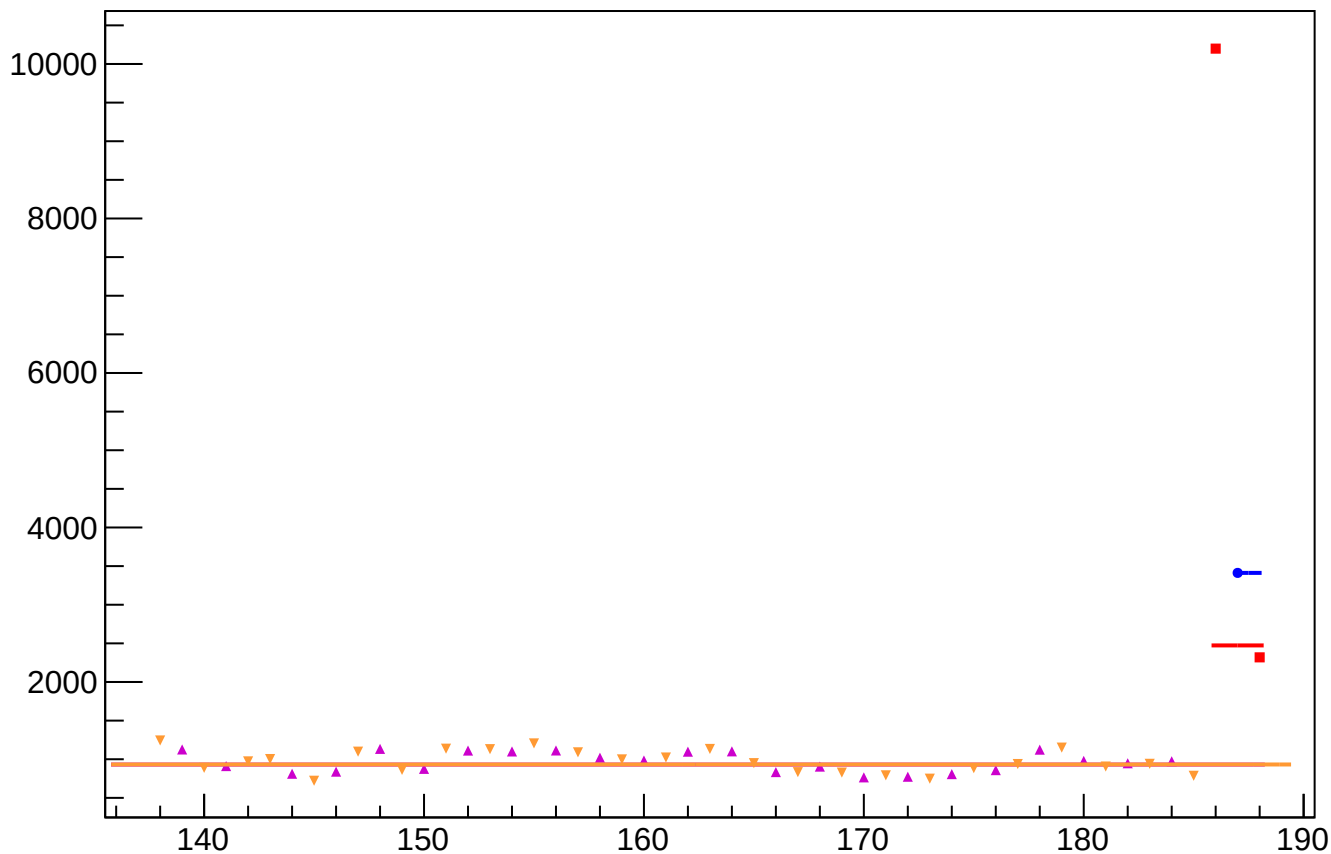
Left In:  $-53.940 \pm 224.371$   $\chi^2/\text{NDF}$ : 26.4/22

+ sign  $1266.400 \pm 220.557$   $\chi^2/\text{NDF}$ : 45.6/25

All:  $609.993 \pm 156.969$   $\chi^2/\text{NDF}$ : 92.1/50

- sign  $-63.736 \pm 223.448$   $\chi^2/\text{NDF}$ : 28.5/24

# asym\_sam\_48\_dd\_rms vs Slug



Right In: 3412.225+/-6.229  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 932.170+/-0.156  $\chi^2/\text{NDF}$ : 828733.8/24

Right Out: 2473.322+/-1.743  $\chi^2/\text{NDF}$ : 392422.5/1

Left In: 930.854+/-0.159  $\chi^2/\text{NDF}$ : 621985.5/22

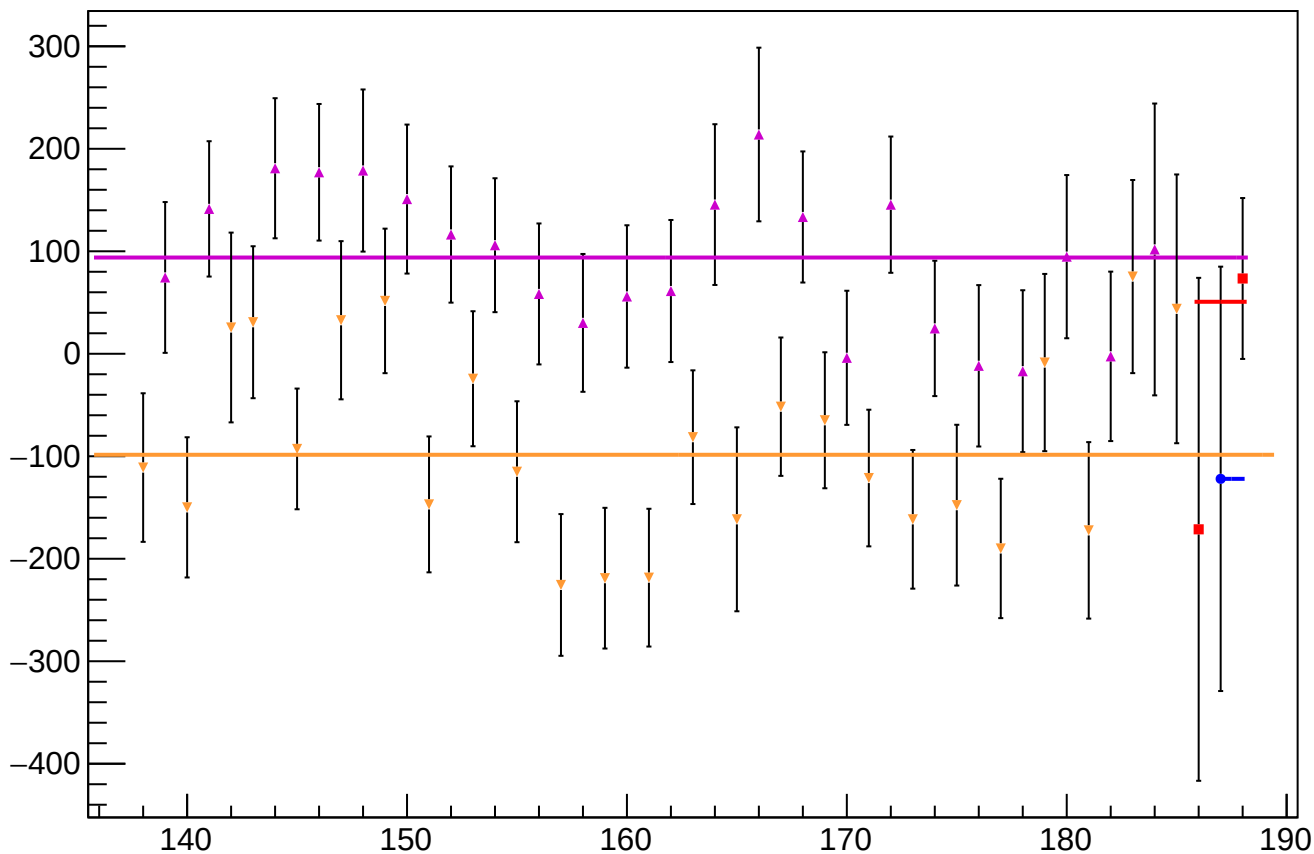
+ sign 933.725+/-0.156  $\chi^2/\text{NDF}$ : 987177.0/25

All: 938.560+/-0.111  $\chi^2/\text{NDF}$ : 2779842.5/50

- sign 943.522+/-0.158  $\chi^2/\text{NDF}$ : 1790717.9/24



# dit\_asym\_sam\_13\_57\_dd\_mean vs Slug



Right In:  $-122.041 \pm 207.032$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-98.557 \pm 14.525$   $\chi^2/\text{NDF}$ : 35.2/24

Right Out:  $50.728 \pm 74.762$   $\chi^2/\text{NDF}$ : 0.9/1

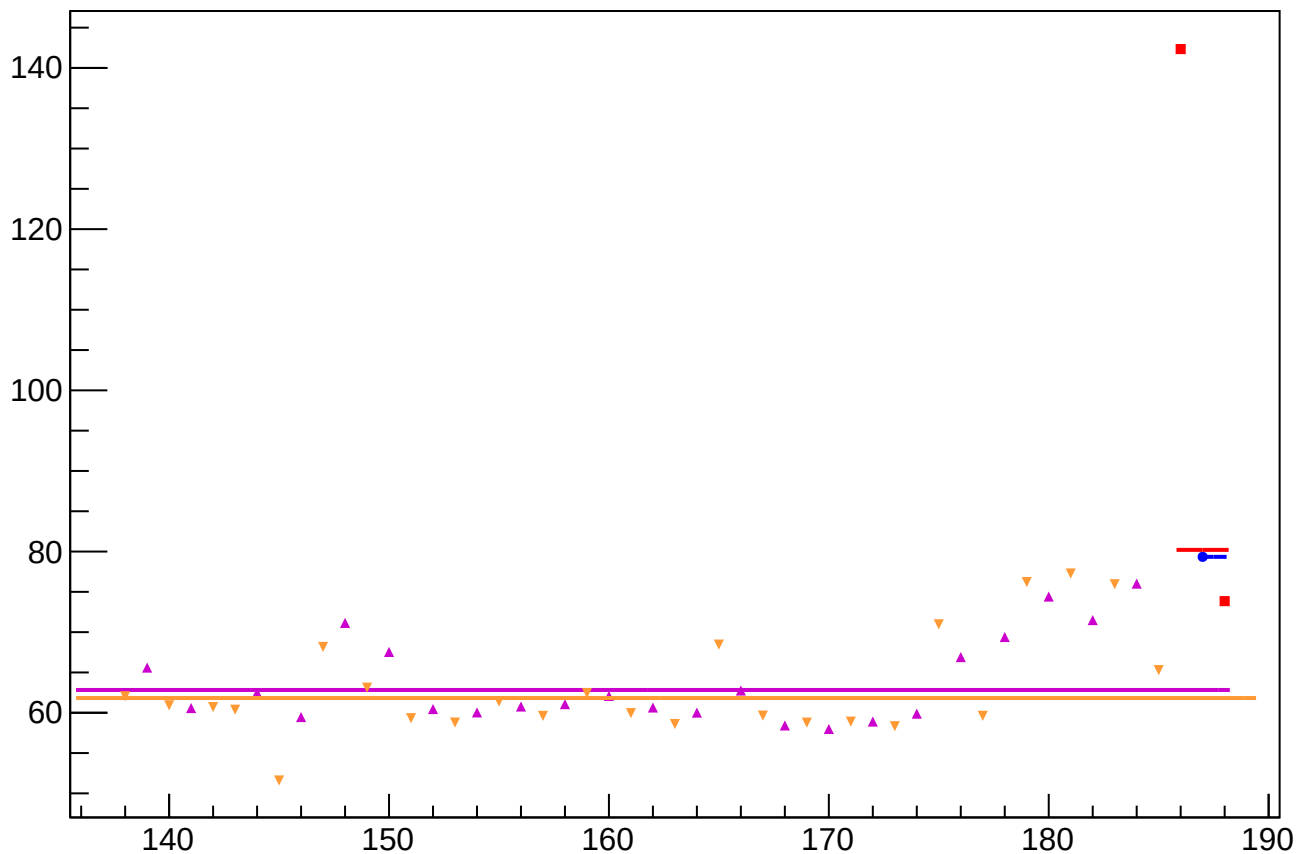
Left In:  $93.899 \pm 15.039$   $\chi^2/\text{NDF}$ : 19.3/22

+ sign  $-98.672 \pm 14.489$   $\chi^2/\text{NDF}$ : 35.3/25

All:  $-4.886 \pm 10.334$   $\chi^2/\text{NDF}$ : 141.0/50

- sign  $92.220 \pm 14.744$   $\chi^2/\text{NDF}$ : 20.5/24

# dit\_asym\_sam\_13\_57\_dd\_rms vs Slug



Right In: 79.343+/-0.146  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 61.827+/-0.010  $\chi^2/\text{NDF}$ : 313572.8/24

Right Out: 80.207+/-0.053  $\chi^2/\text{NDF}$ : 141373.5/1

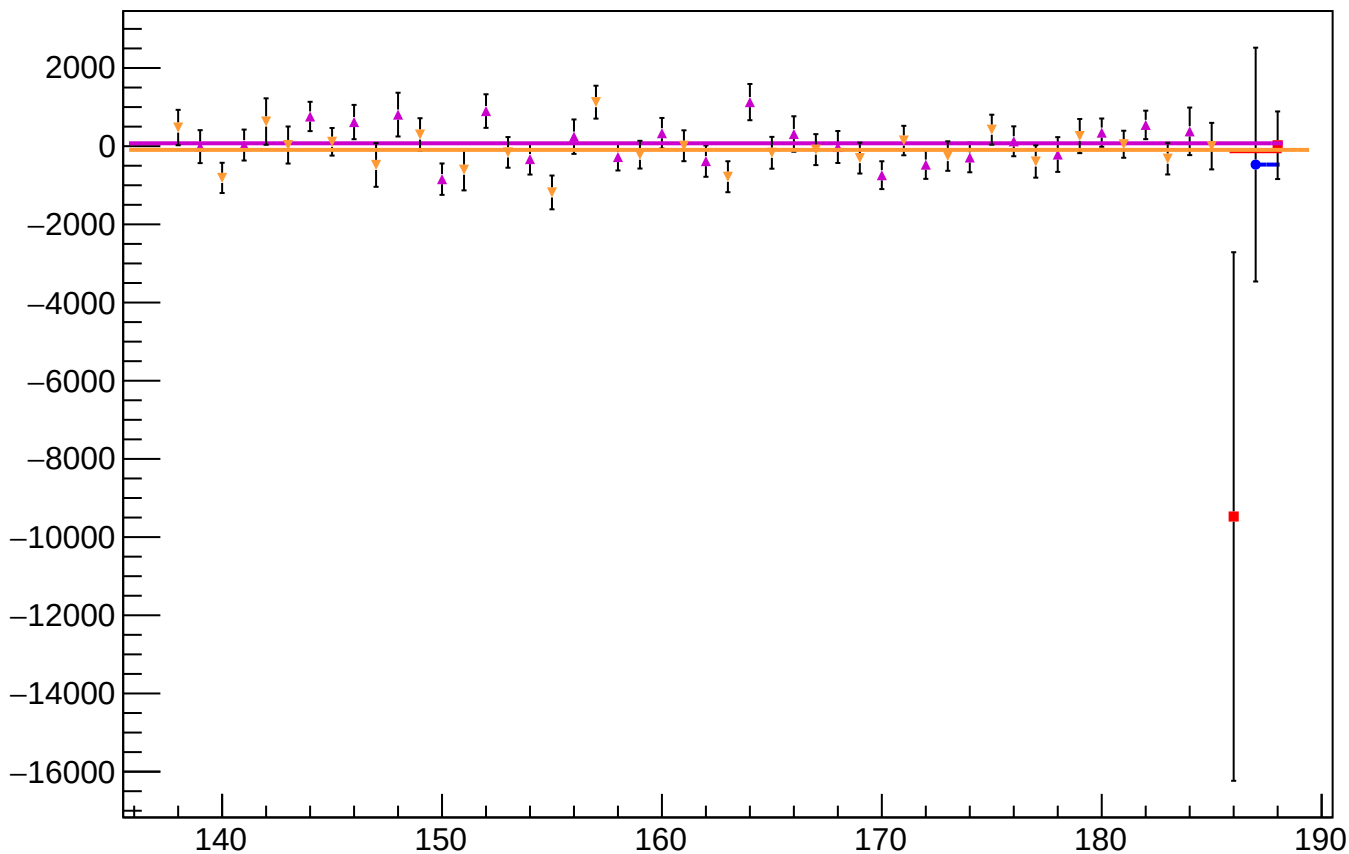
Left In: 62.827+/-0.011  $\chi^2/\text{NDF}$ : 187007.2/22

+ sign 61.913+/-0.010  $\chi^2/\text{NDF}$ : 327818.2/25

All: 62.694+/-0.007  $\chi^2/\text{NDF}$ : 771923.4/50

- sign 63.503+/-0.010  $\chi^2/\text{NDF}$ : 432266.6/24

# asym\_sam\_13\_57\_dd\_correction\_mean vs Slug



Right In: -470.985 $\pm$ 2990.746  $\chi^2$ /NDF: 0.0/0

Left Out: -94.907 $\pm$ 82.850  $\chi^2$ /NDF:31.6/24

Right Out: -128.990 $\pm$ 857.752  $\chi^2$ /NDF: 1.9/1

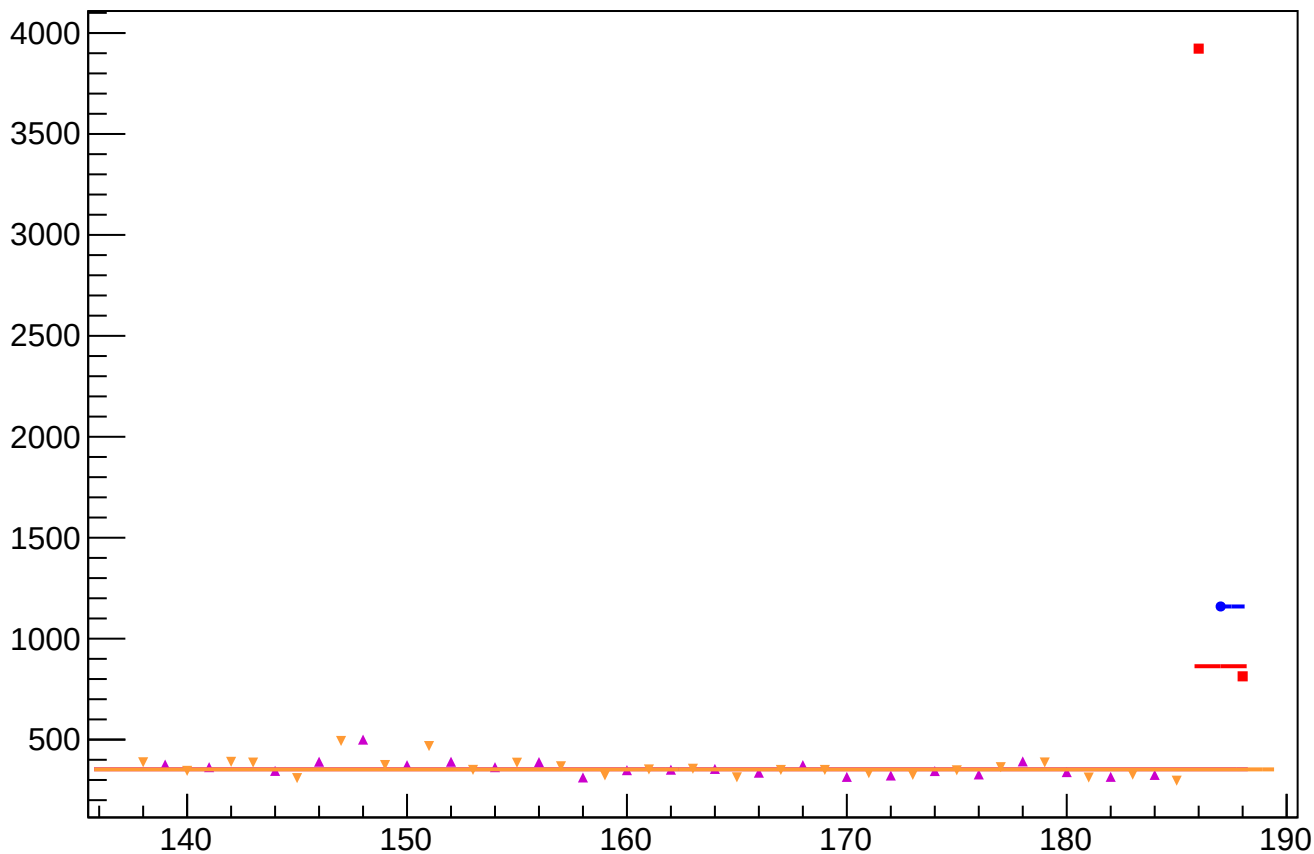
Left In: 73.914 $\pm$ 84.652  $\chi^2$ /NDF:36.4/22

+ sign -95.195 $\pm$ 82.818  $\chi^2$ /NDF: 31.6/25

All: -13.045 $\pm$ 59.058  $\chi^2$ /NDF: 71.9/50

- sign 71.957 $\pm$ 84.243  $\chi^2$ /NDF: 38.4/24

# asym\_sam\_13\_57\_dd\_correction\_rms vs Slug



Right In: 1159.437 $\pm$ 2.115  $\chi^2$ /NDF: 0.0/0

Left Out: 352.403 $\pm$ 0.059  $\chi^2$ /NDF: 418506.2/24

Right Out: 863.435 $\pm$ 0.607  $\chi^2$ /NDF: 416277.4/1

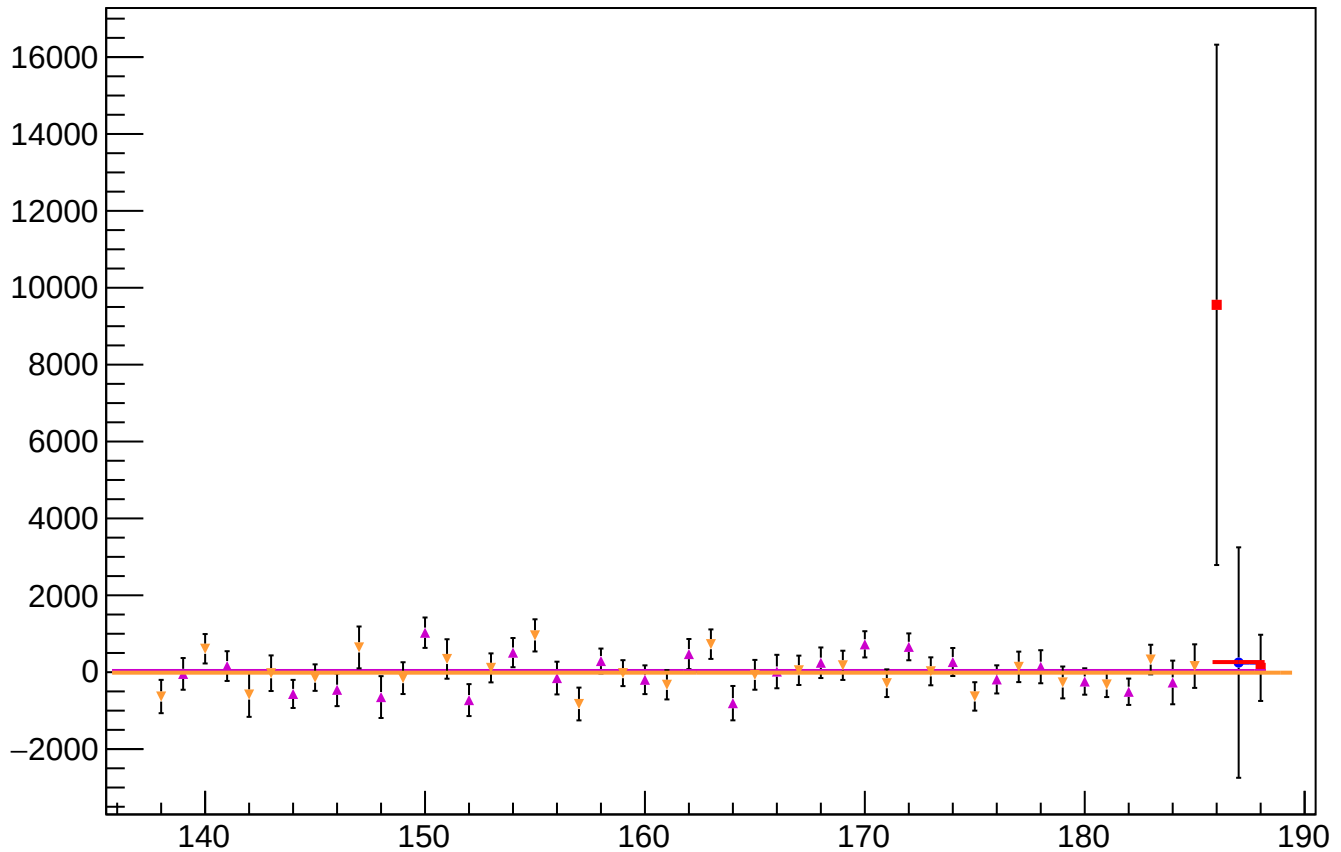
Left In: 353.197 $\pm$ 0.060  $\chi^2$ /NDF: 321761.0/22

+ sign 353.021 $\pm$ 0.059  $\chi^2$ /NDF: 564026.0/25

All: 355.527 $\pm$ 0.042  $\chi^2$ /NDF: 2006665.4/50

- sign 358.119 $\pm$ 0.060  $\chi^2$ /NDF: 1438915.8/24

# asym\_sam\_13\_57\_dd\_mean vs Slug



Right In: 250.414 $\pm$ 2997.389  $\chi^2$ /NDF: 0.0/0

Left Out: -12.545 $\pm$ 79.984  $\chi^2$ /NDF:27.3/24

Right Out: 263.289 $\pm$ 854.217  $\chi^2$ /NDF: 1.9/1

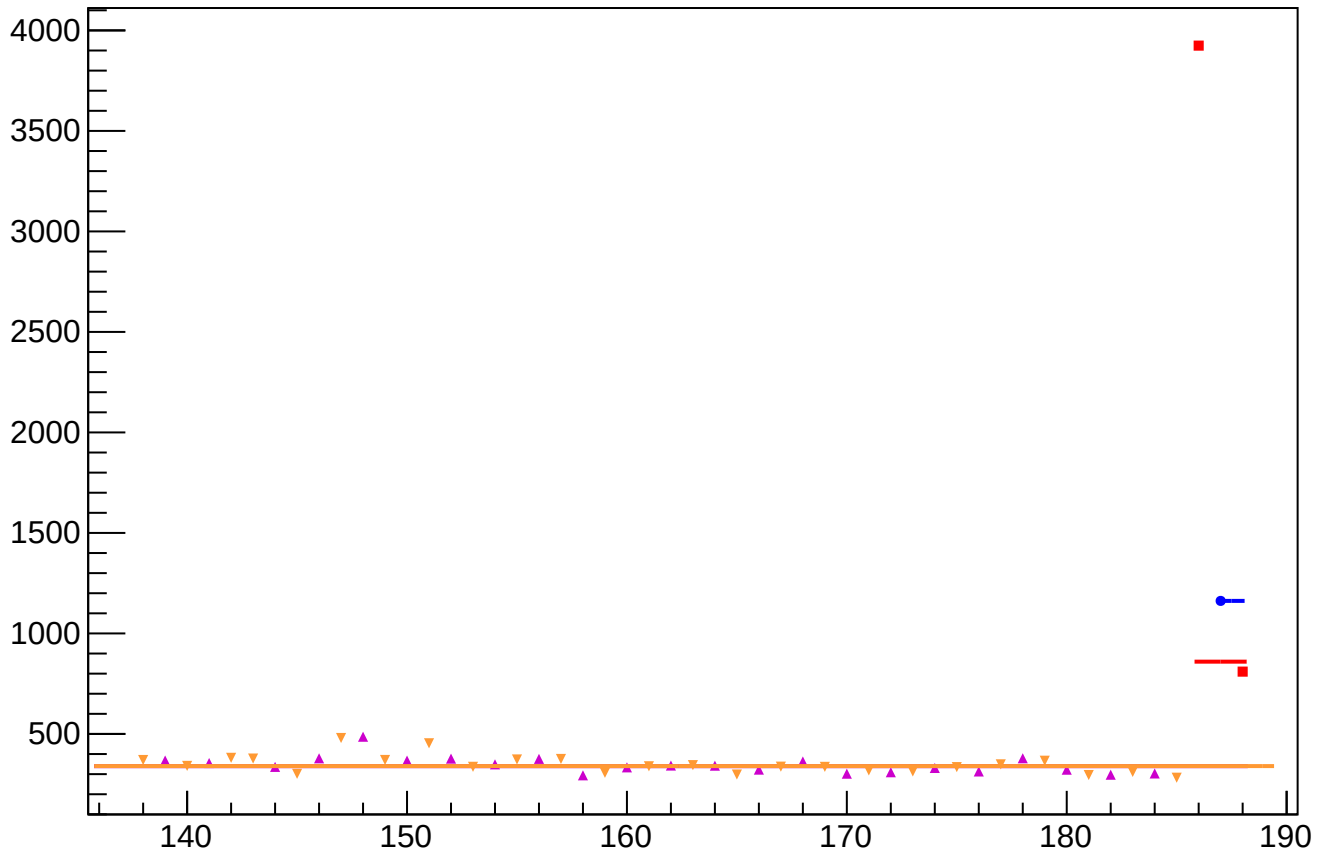
Left In: 31.531 $\pm$ 81.476  $\chi^2$ /NDF:34.8/22

+ sign -12.358 $\pm$ 79.956  $\chi^2$ /NDF: 27.4/25

All: 10.303 $\pm$ 56.940  $\chi^2$ /NDF: 64.3/50

- sign 33.621 $\pm$ 81.108  $\chi^2$ /NDF: 36.8/24

# asym\_sam\_13\_57\_dd\_rms vs Slug



Right In: 1161.863 $\pm$ 2.119  $\chi^2$ /NDF: 0.0/0

Left Out: 340.018 $\pm$ 0.057  $\chi^2$ /NDF: 465345.1/24

Right Out: 859.591 $\pm$ 0.604  $\chi^2$ /NDF: 416759.1/1

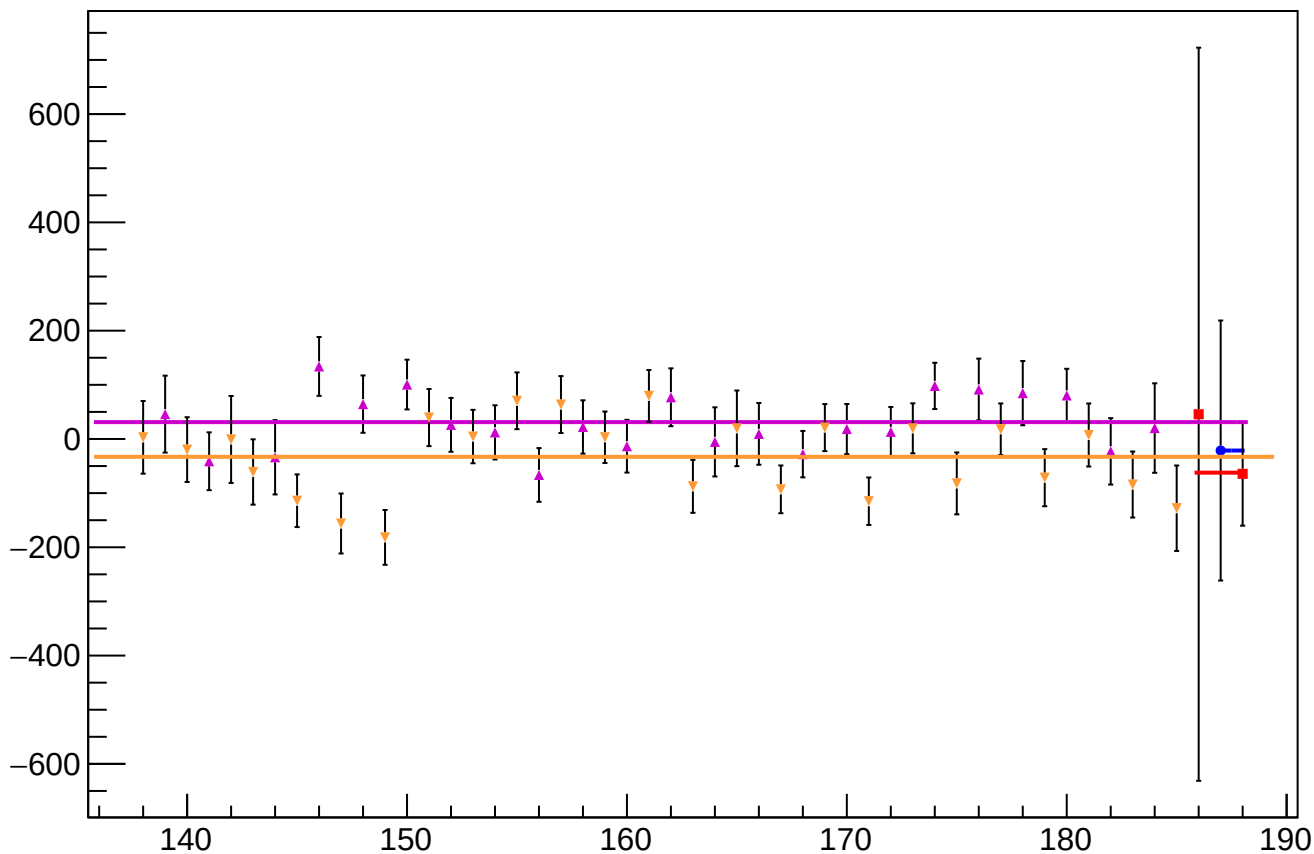
Left In: 339.571 $\pm$ 0.058  $\chi^2$ /NDF: 377816.0/22

+ sign 340.603 $\pm$ 0.057  $\chi^2$ /NDF: 615594.9/25

All: 342.405 $\pm$ 0.040  $\chi^2$ /NDF: 2146745.8/50

- sign 344.259 $\pm$ 0.057  $\chi^2$ /NDF: 1529090.0/24

# dit\_asym\_sam\_15\_37\_dd\_mean vs Slug



Right In:  $-21.355 \pm 240.102$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-32.964 \pm 10.578$   $\chi^2/\text{NDF}$ : 48.0/24

Right Out:  $-62.216 \pm 94.779$   $\chi^2/\text{NDF}$ : 0.0/1

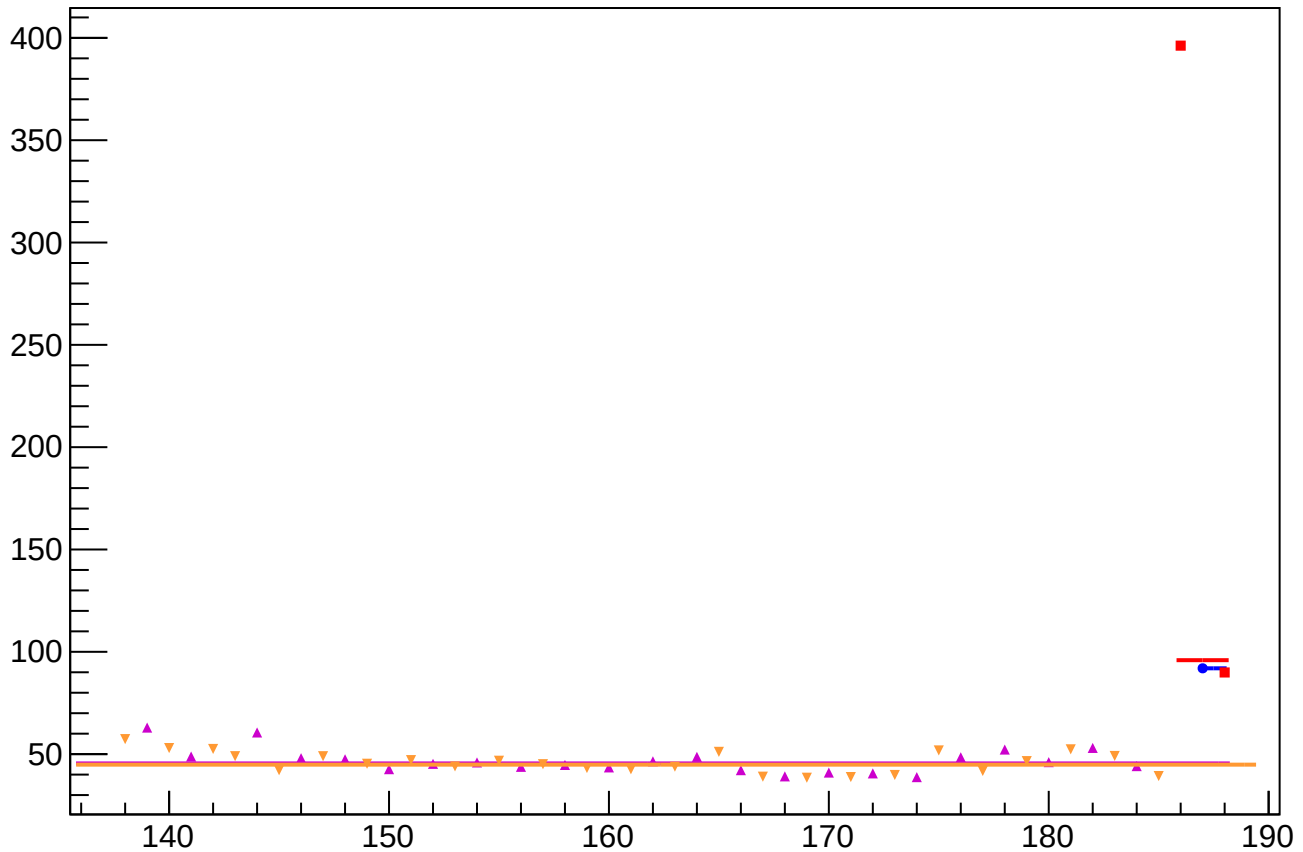
Left In:  $31.144 \pm 10.958$   $\chi^2/\text{NDF}$ : 23.4/22

+ sign  $-32.942 \pm 10.567$   $\chi^2/\text{NDF}$ : 48.0/25

All:  $-2.446 \pm 7.582$   $\chi^2/\text{NDF}$ : 89.6/50

- sign  $29.912 \pm 10.885$   $\chi^2/\text{NDF}$ : 24.4/24

# dit\_asym\_sam\_15\_37\_dd\_rms vs Slug



Right In: 91.939 $\pm$ 0.170  $\chi^2$ /NDF: 0.0/0

Left Out: 44.862 $\pm$ 0.007  $\chi^2$ /NDF: 415524.3/24

Right Out: 95.911 $\pm$ 0.067  $\chi^2$ /NDF: 401444.4/1

Left In: 45.465 $\pm$ 0.008  $\chi^2$ /NDF: 457021.7/22

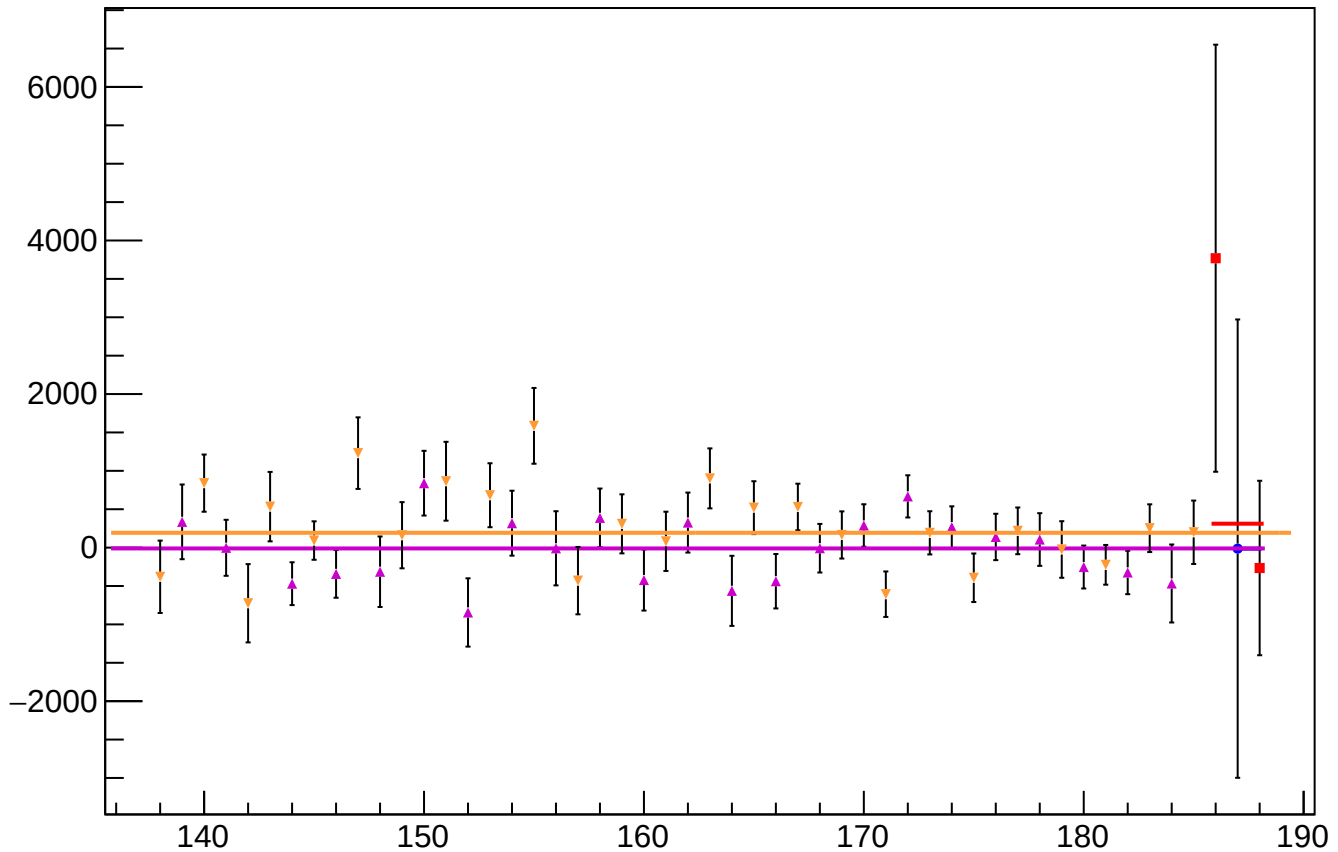
+ sign 44.953 $\pm$ 0.007  $\chi^2$ /NDF: 492262.5/25

All: 45.524 $\pm$ 0.005  $\chi^2$ /NDF: 1921879.9/50

- sign 46.130 $\pm$ 0.008  $\chi^2$ /NDF: 1417574.0/24



# asym\_sam\_15\_37\_dd\_correction\_mean vs Slug



Right In:  $-13.231 \pm 2984.722$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $192.946 \pm 70.968$   $\chi^2/\text{NDF}$ : 45.8/24

Right Out:  $311.452 \pm 1051.759$   $\chi^2/\text{NDF}$ : 1.8/1

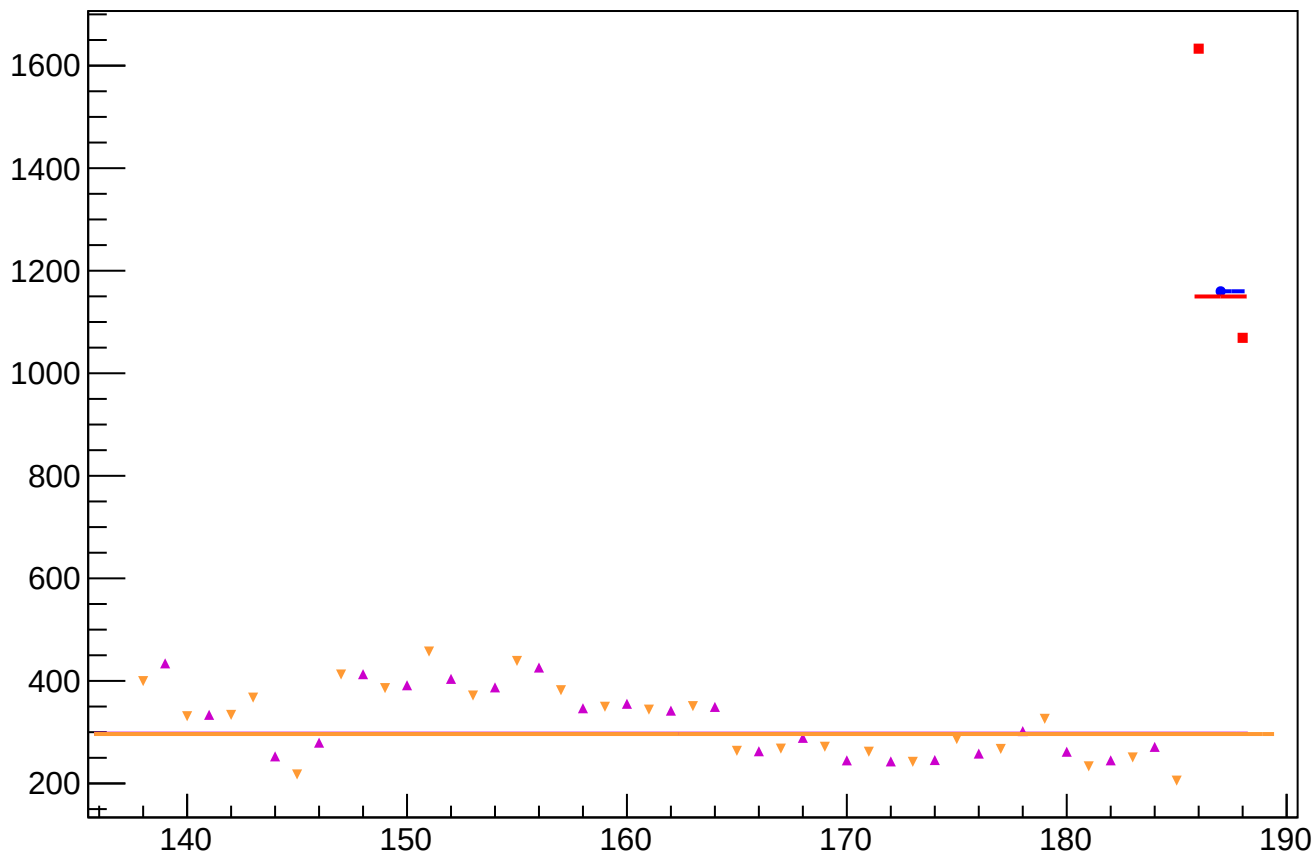
Left In:  $-10.801 \pm 72.300$   $\chi^2/\text{NDF}$ : 30.2/22

+ sign  $192.829 \pm 70.948$   $\chi^2/\text{NDF}$ : 45.8/25

All:  $93.442 \pm 50.580$   $\chi^2/\text{NDF}$ : 81.9/50

- sign  $-9.285 \pm 72.130$   $\chi^2/\text{NDF}$ : 32.1/24

# asym\_sam\_15\_37\_dd\_correction\_rms vs Slug



Right In: 1159.918 $\pm$ 2.111  $\chi^2$ /NDF: 0.0/0

Left Out: 296.383 $\pm$ 0.050  $\chi^2$ /NDF: 1635498.4/24

Right Out: 1149.773 $\pm$ 0.744  $\chi^2$ /NDF: 70471.5/1

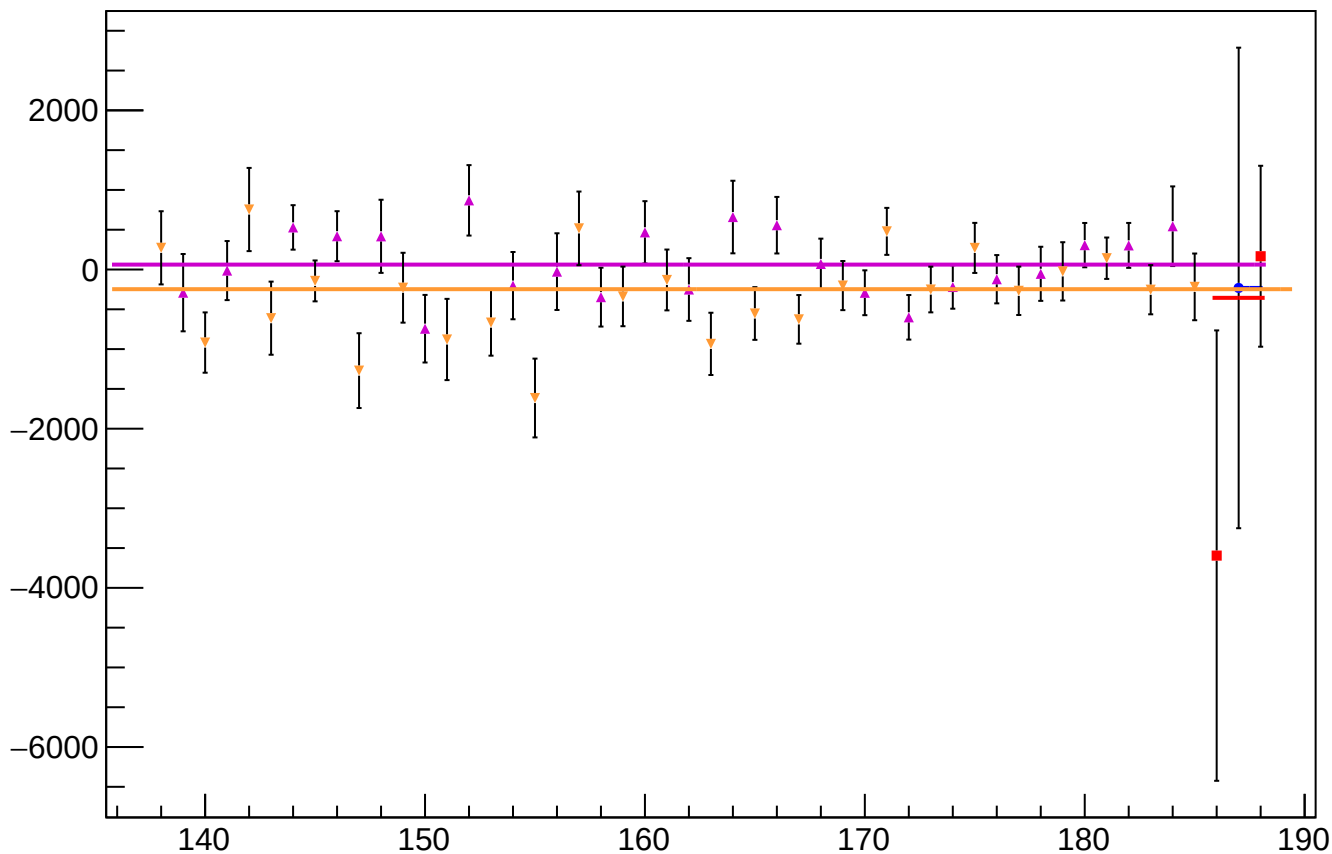
Left In: 297.137 $\pm$ 0.051  $\chi^2$ /NDF: 1320750.3/22

+ sign 296.871 $\pm$ 0.050  $\chi^2$ /NDF: 1802813.8/25

All: 298.974 $\pm$ 0.036  $\chi^2$ /NDF: 4505817.9/50

- sign 301.147 $\pm$ 0.051  $\chi^2$ /NDF: 2699431.7/24

# asym\_sam\_15\_37\_dd\_mean vs Slug



Right In:  $-231.571 \pm 3019.116$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-247.108 \pm 71.218$   $\chi^2/\text{NDF}: 43.6/24$

Right Out:  $-355.868 \pm 1054.774$   $\chi^2/\text{NDF}: 1.5/1$

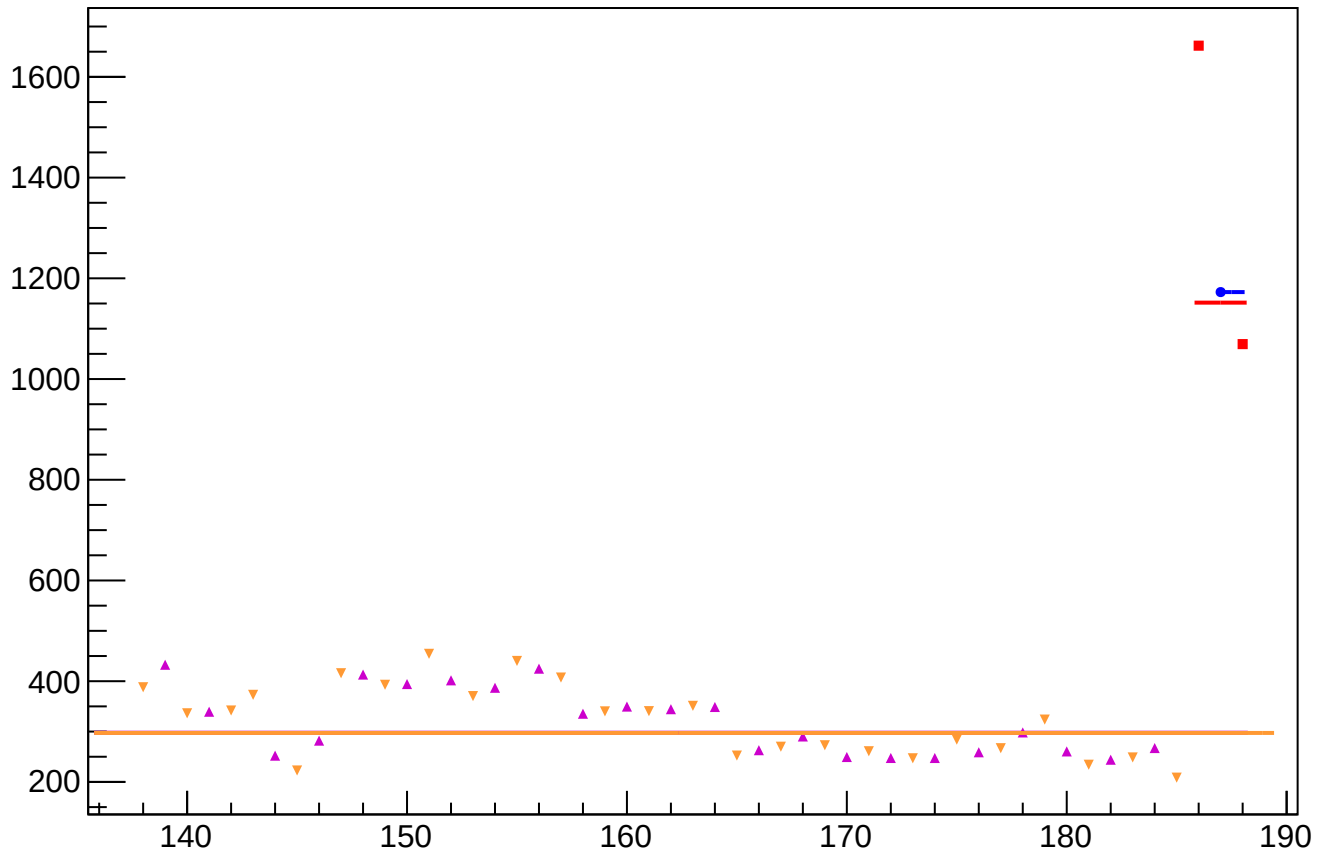
Left In:  $61.707 \pm 72.478$   $\chi^2/\text{NDF}: 30.3/22$

+ sign  $-247.099 \pm 71.198$   $\chi^2/\text{NDF}: 43.6/25$

All:  $-96.048 \pm 50.732$   $\chi^2/\text{NDF}: 84.7/50$

- sign  $59.744 \pm 72.307$   $\chi^2/\text{NDF}: 32.0/24$

# asym\_sam\_15\_37\_dd\_rms vs Slug



Right In: 1172.669 $\pm$ 2.135  $\chi^2$ /NDF: 0.0/0

Left Out: 297.273 $\pm$ 0.050  $\chi^2$ /NDF:1627904.5/24

Right Out: 1151.722 $\pm$ 0.746  $\chi^2$ /NDF: 75521.8/1

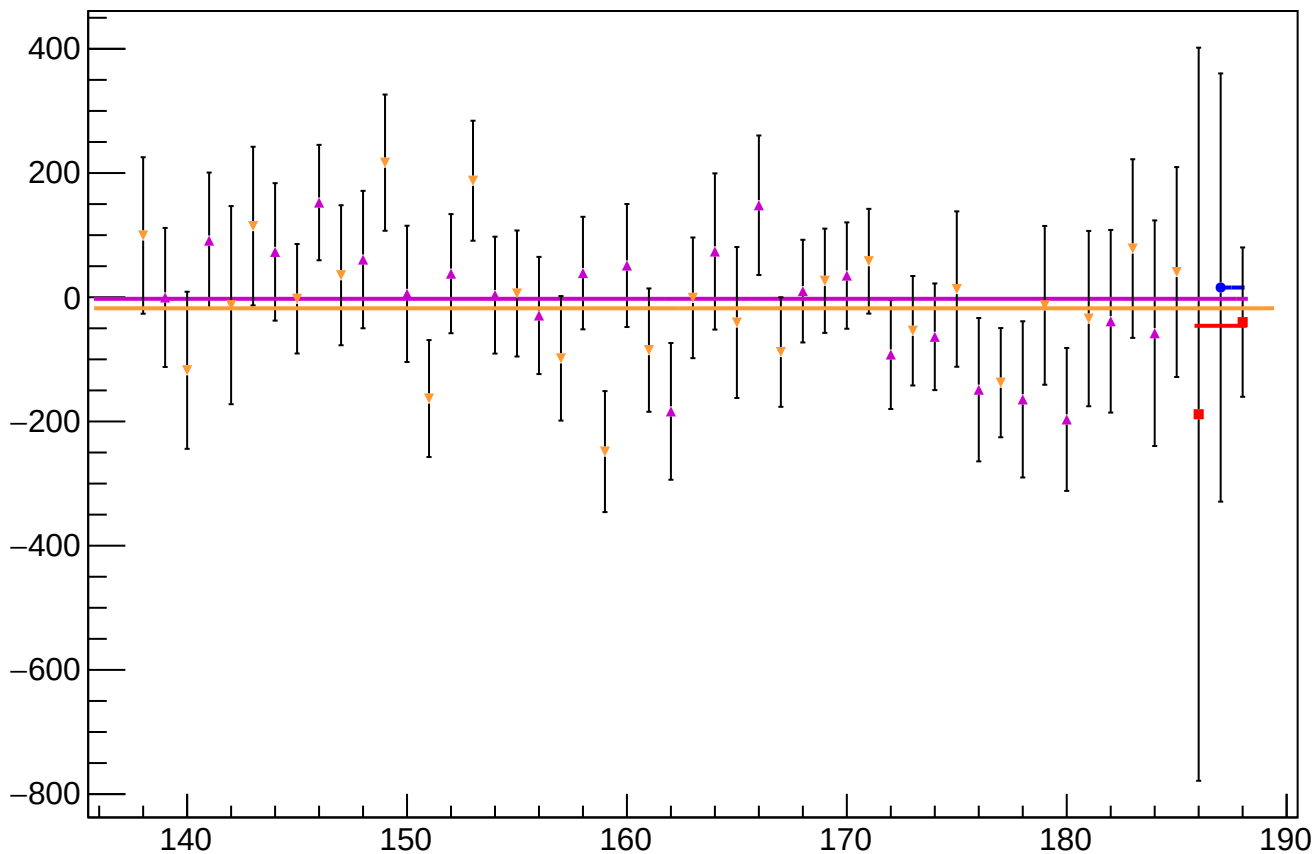
Left In: 297.696 $\pm$ 0.051  $\chi^2$ /NDF:1274607.7/22

+ sign 297.760 $\pm$ 0.050  $\chi^2$ /NDF: 1795954.2/25

All: 299.704 $\pm$ 0.036  $\chi^2$ /NDF: 4454103.5/50

- sign 301.710 $\pm$ 0.051  $\chi^2$ /NDF: 2655119.0/24

dit\_asym\_sam\_24\_68\_dd\_mean vs Slug



Right In: 15.653+/-344.749  $\chi^2$ /NDF: 0.0/0

Left Out: -17.764+/-21.121  $\chi^2$ /NDF:25.5/24

Right Out: -45.937+/-117.798  $\chi^2$ /NDF: 0.1/1

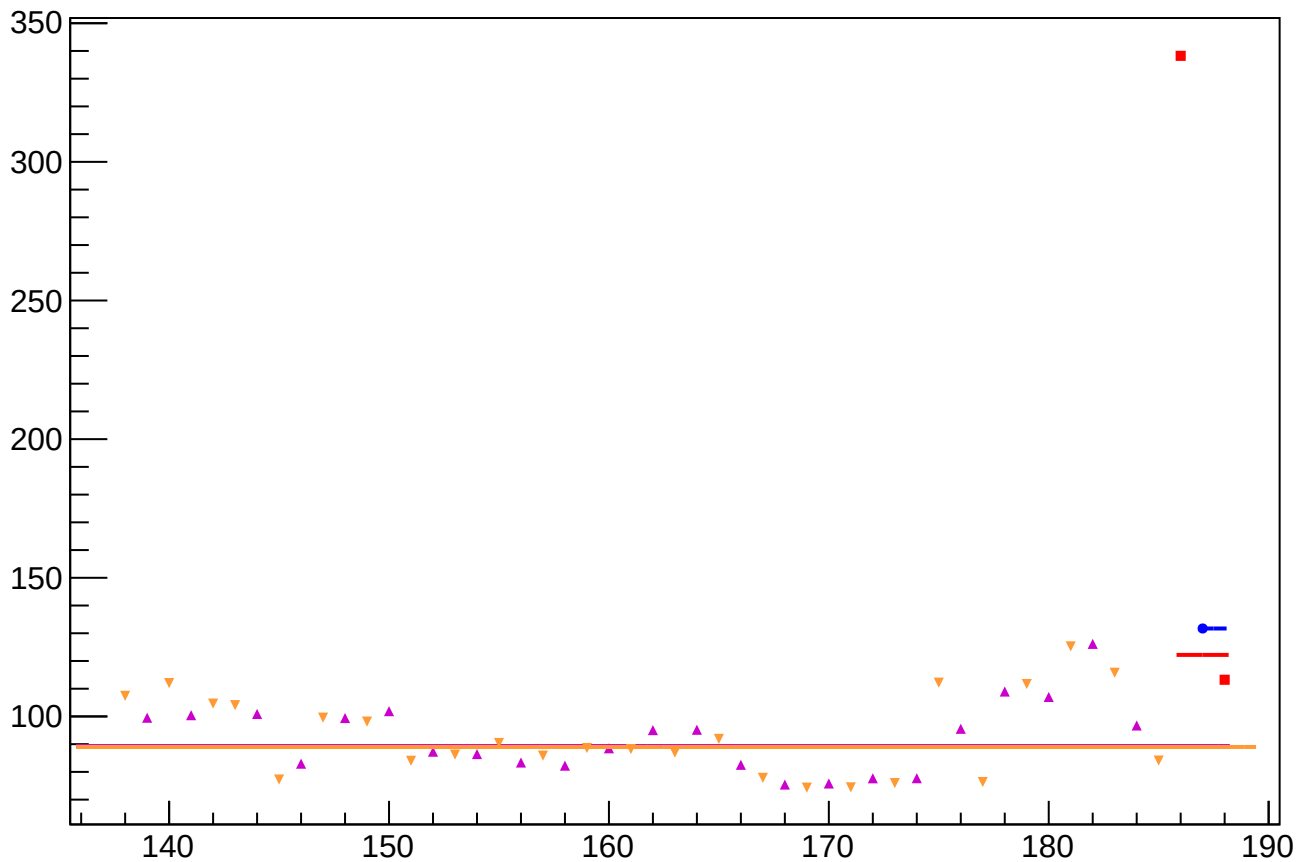
Left In: -2.505+/-21.582  $\chi^2$ /NDF:18.0/22

+ sign -17.639+/-21.081  $\chi^2$ /NDF: 25.5/25

All: -10.825+/-14.959  $\chi^2$ /NDF: 43.9/50

- sign -3.916+/-21.229  $\chi^2$ /NDF: 18.2/24

dit\_asym\_sam\_24\_68\_dd\_rms vs Slug



Right In: 131.717 $\pm$ 0.244  $\chi^2$ /NDF: 0.0/0

Left Out: 88.991 $\pm$ 0.015  $\chi^2$ /NDF: 807471.2/24

Right Out: 122.195 $\pm$ 0.083  $\chi^2$ /NDF: 279105.3/1

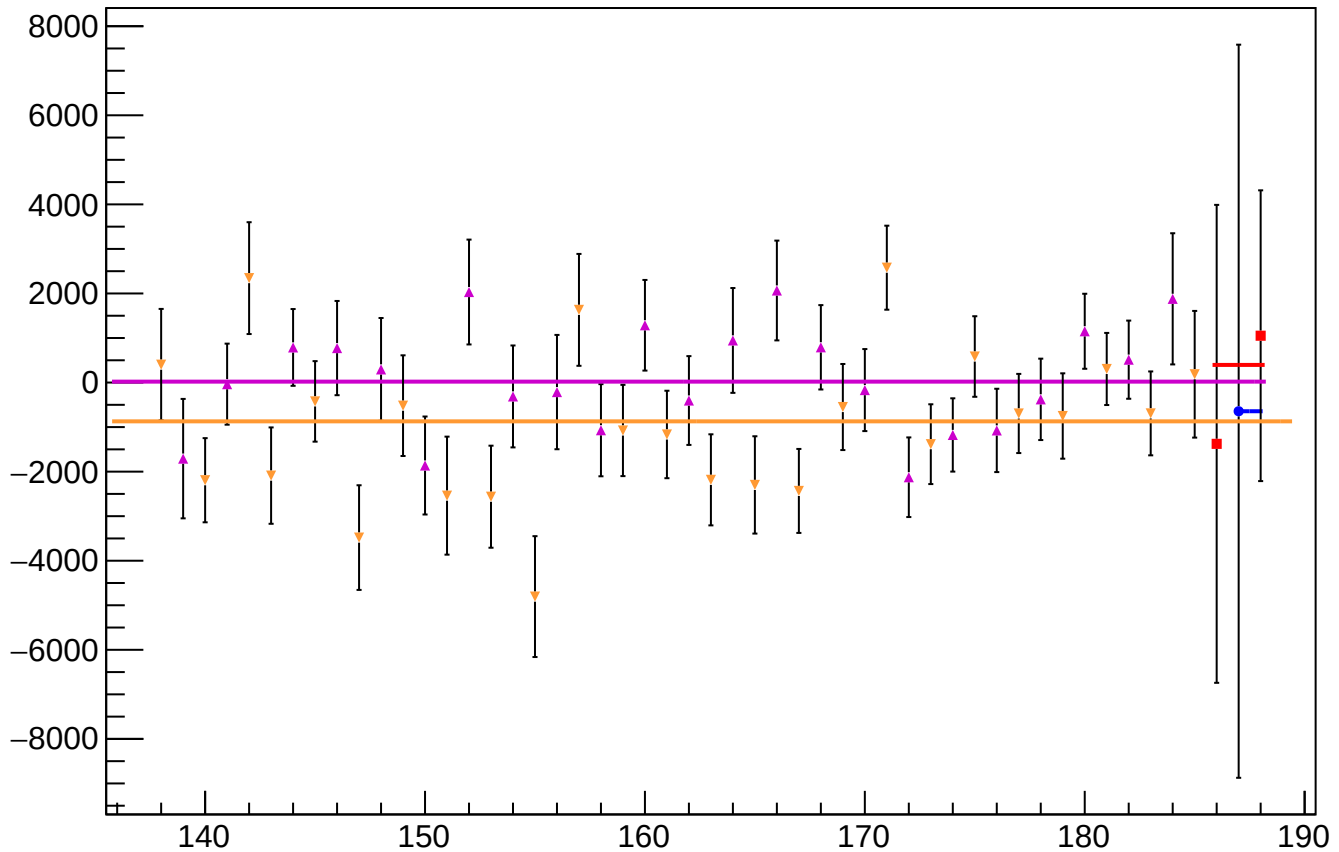
Left In: 89.321 $\pm$ 0.015  $\chi^2$ /NDF: 560433.9/22

+ sign 89.150 $\pm$ 0.015  $\chi^2$ /NDF: 838076.5/25

All: 89.765 $\pm$ 0.011  $\chi^2$ /NDF: 1831739.0/50

- sign 90.389 $\pm$ 0.015  $\chi^2$ /NDF: 990234.8/24

# asym\_sam\_24\_68\_dd\_correction\_mean vs Slug



Right In: -644.011+/-8229.378  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -871.061+/-205.986  $\chi^2/\text{NDF}$ : 57.6/24

Right Out: 395.691+/-2788.401  $\chi^2/\text{NDF}$ : 0.1/1

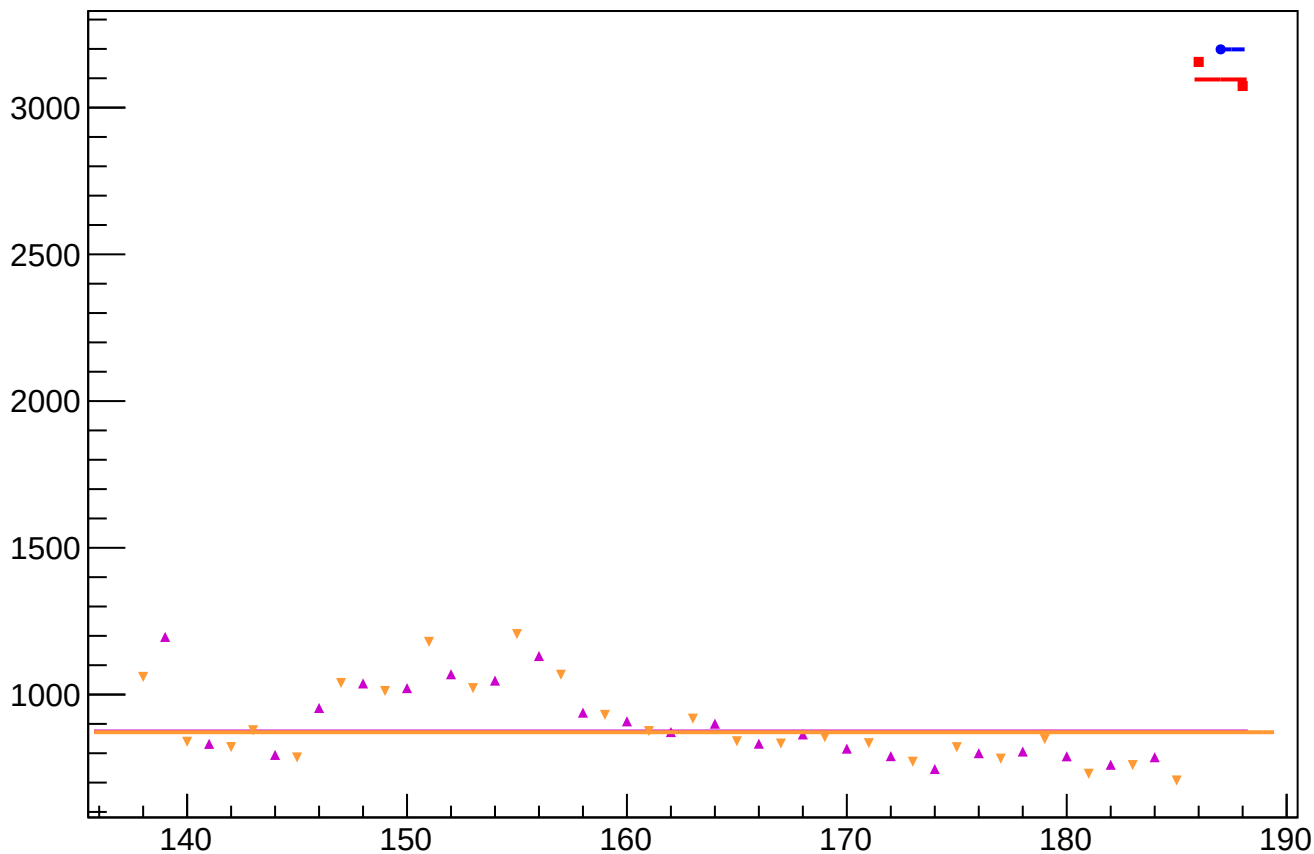
Left In: 20.573+/-210.177  $\chi^2/\text{NDF}$ : 29.7/22

+ sign -870.919+/-205.921  $\chi^2/\text{NDF}$ : 57.6/25

All: -431.986+/-146.885  $\chi^2/\text{NDF}$ : 96.7/50

- sign 22.693+/-209.582  $\chi^2/\text{NDF}$ : 29.8/24

# asym\_sam\_24\_68\_dd\_correction\_rms vs Slug



Right In: 3198.428 $\pm$ 5.819  $\chi^2$ /NDF: 0.0/0

Left Out: 871.690 $\pm$ 0.146  $\chi^2$ /NDF: 642403.4/24

Right Out: 3095.881 $\pm$ 1.972  $\chi^2$ /NDF: 340.0/1

Left In: 874.055 $\pm$ 0.149  $\chi^2$ /NDF: 578510.6/22

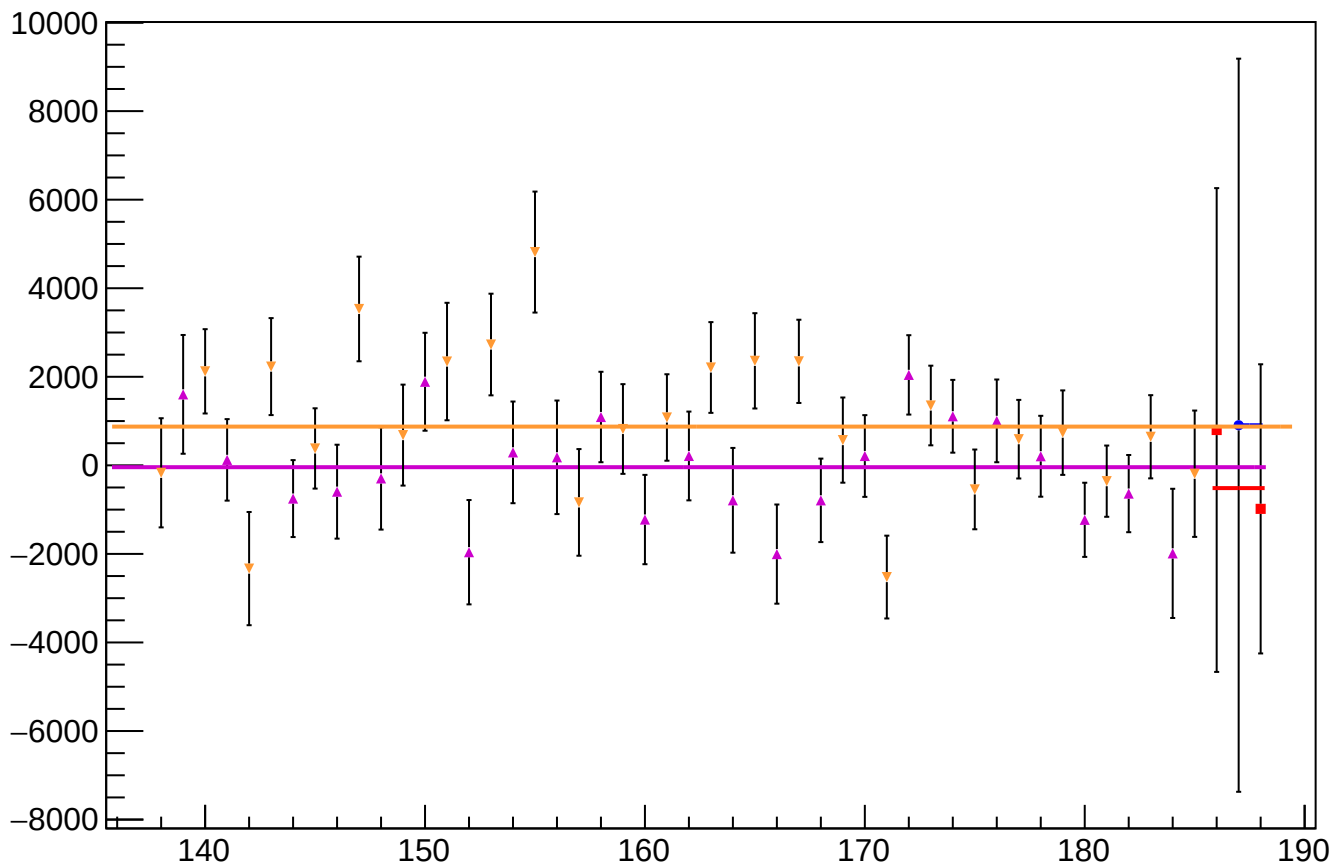
+ sign 873.147 $\pm$ 0.146  $\chi^2$ /NDF: 802182.0/25

All: 879.759 $\pm$ 0.104  $\chi^2$ /NDF: 2647868.4/50

- sign 886.607 $\pm$ 0.148  $\chi^2$ /NDF: 1841489.0/24



# asym\_sam\_24\_68\_dd\_mean vs Slug



Right In: 905.920 $\pm$ 8278.654  $\chi^2$ /NDF: 0.0/0

Left Out: 875.084 $\pm$ 205.572  $\chi^2$ /NDF:55.1/24

Right Out: -513.997 $\pm$ 2802.864  $\chi^2$ /NDF: 0.1/1

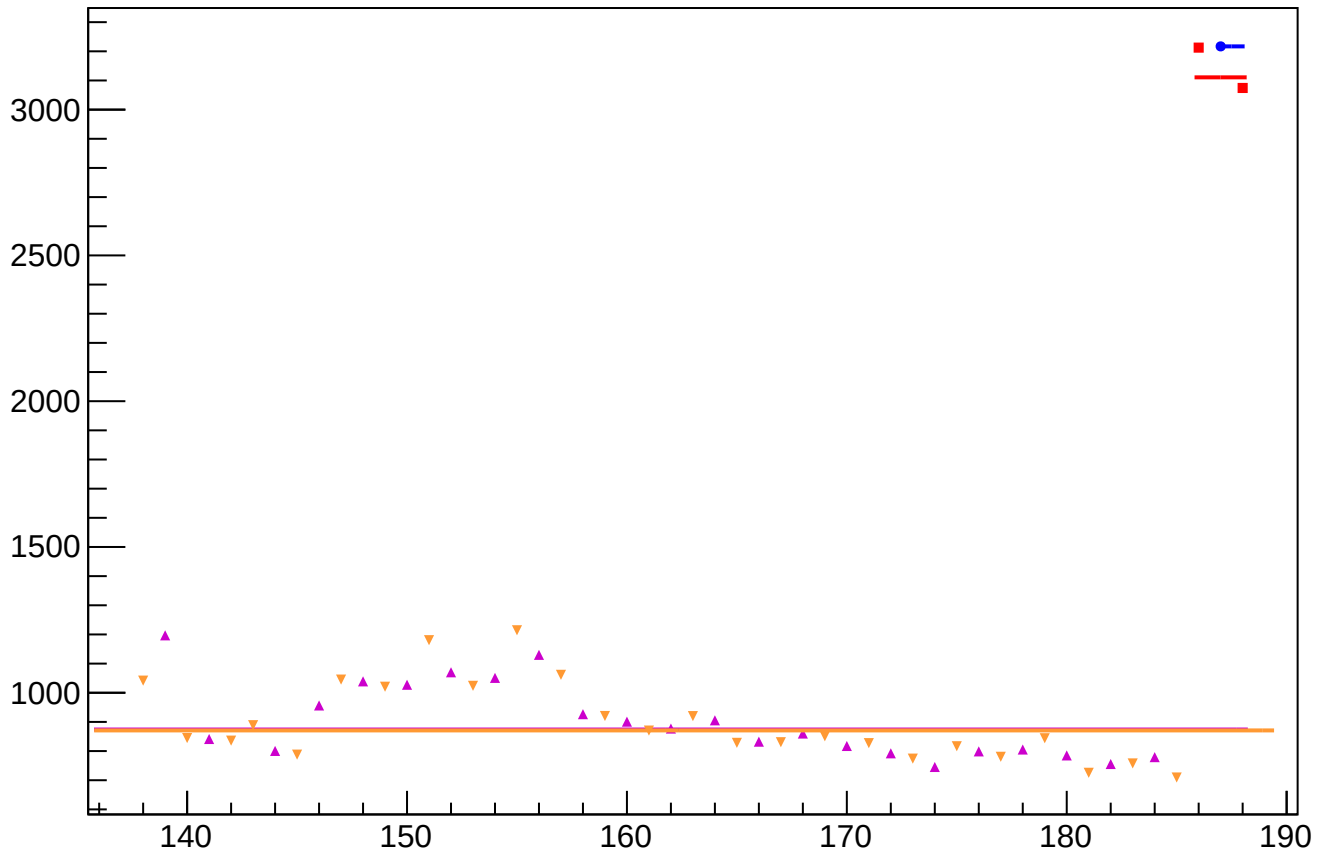
Left In: -41.523 $\pm$ 210.209  $\chi^2$ /NDF:28.1/22

+ sign 875.103 $\pm$ 205.509  $\chi^2$ /NDF: 55.1/25

All: 424.572 $\pm$ 146.749  $\chi^2$ /NDF: 93.1/50

- sign -44.166 $\pm$ 209.620  $\chi^2$ /NDF: 28.2/24

# asym\_sam\_24\_68\_dd\_rms vs Slug



Right In: 3216.942 $\pm$ 5.854  $\chi^2$ /NDF: 0.0/0

Left Out: 870.853 $\pm$ 0.145  $\chi^2$ /NDF: 651805.6/24

Right Out: 3110.720 $\pm$ 1.982  $\chi^2$ /NDF: 945.0/1

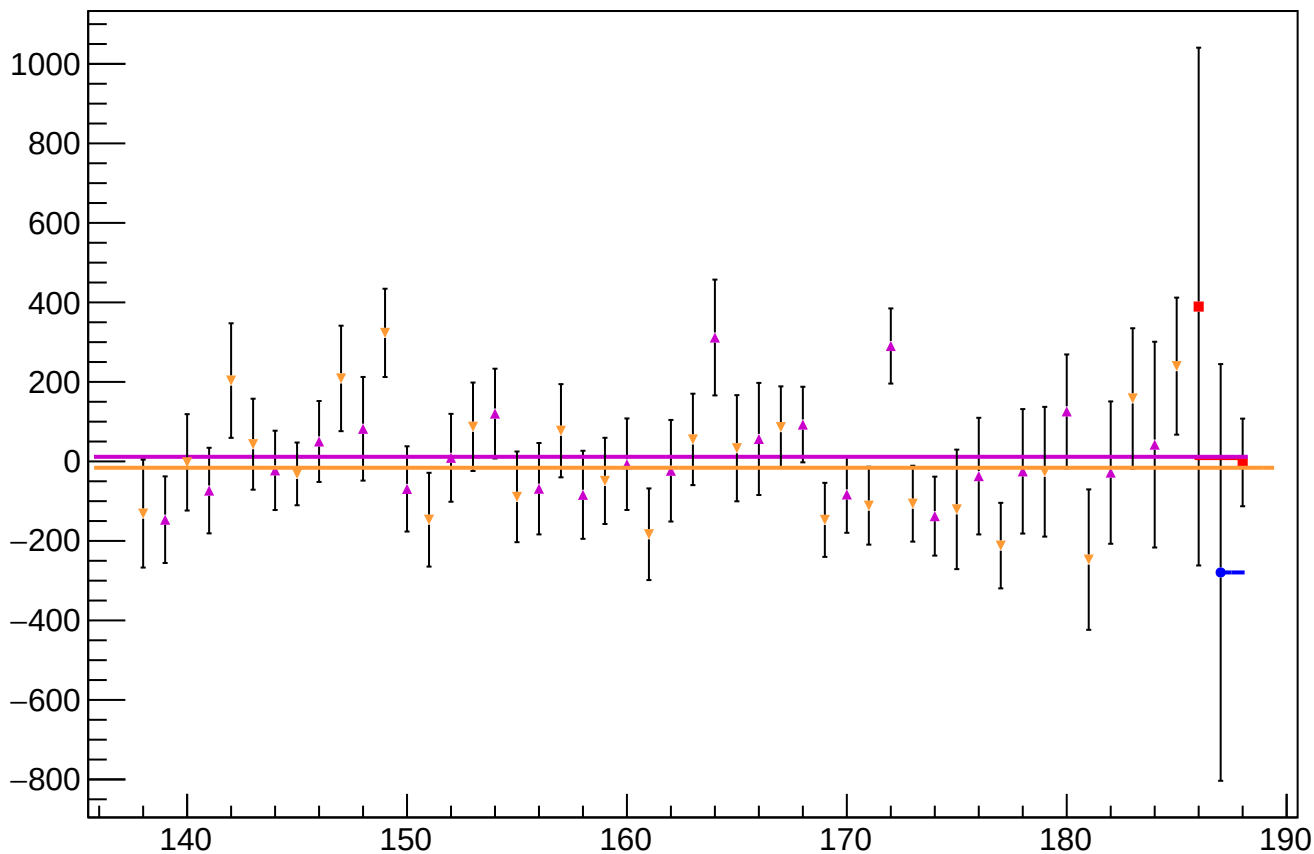
Left In: 873.902 $\pm$ 0.149  $\chi^2$ /NDF: 583344.5/22

+ sign 872.299 $\pm$ 0.145  $\chi^2$ /NDF: 812326.6/25

All: 879.216 $\pm$ 0.104  $\chi^2$ /NDF: 2667873.8/50

- sign 886.413 $\pm$ 0.148  $\chi^2$ /NDF: 1850923.6/24

# dit\_asym\_sam\_26\_48\_dd\_mean vs Slug



Right In:  $-279.336 \pm 524.108$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-15.956 \pm 23.377$   $\chi^2/\text{NDF}$ : 34.9/24

Right Out:  $8.309 \pm 108.678$   $\chi^2/\text{NDF}$ : 0.4/1

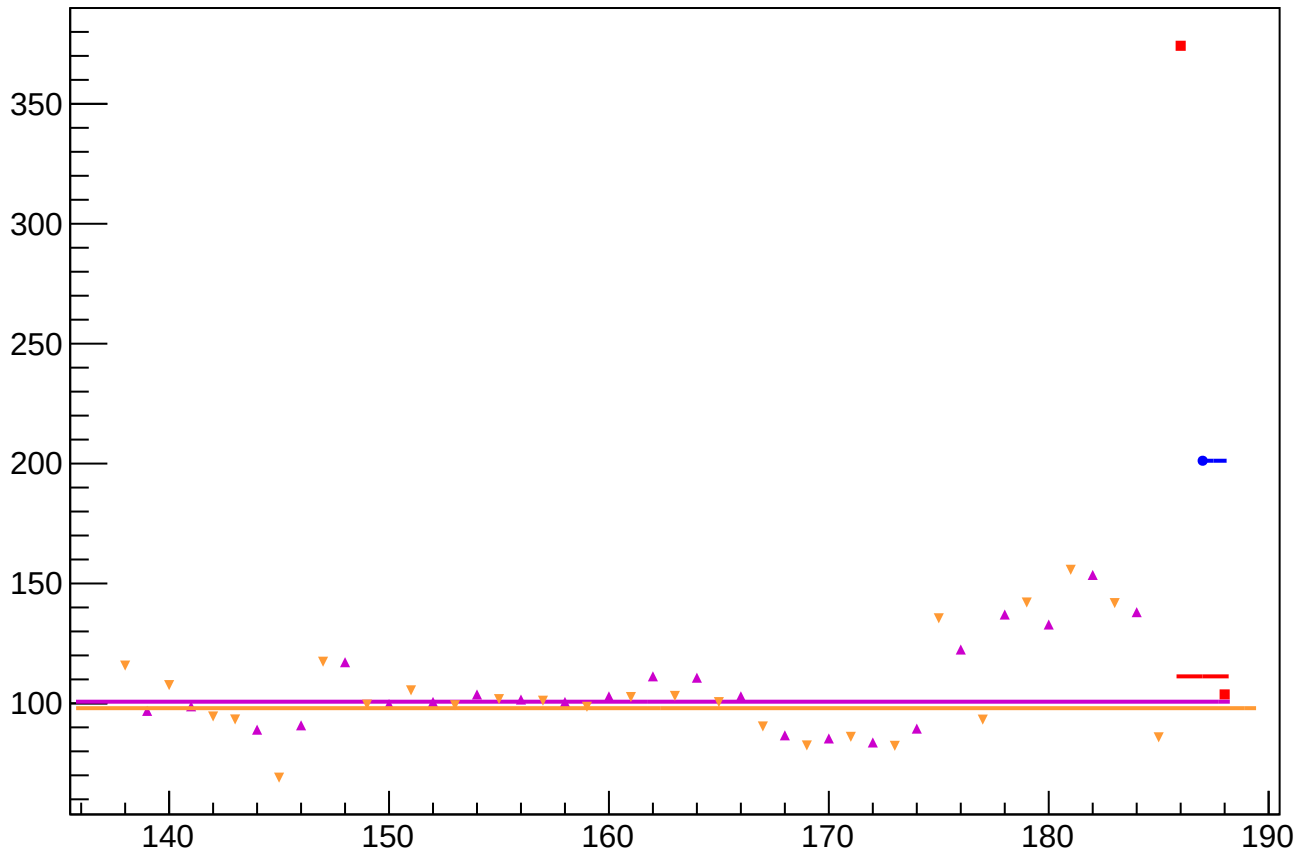
Left In:  $11.570 \pm 24.412$   $\chi^2/\text{NDF}$ : 24.0/22

+ sign  $-16.478 \pm 23.354$   $\chi^2/\text{NDF}$ : 35.2/25

All:  $-2.807 \pm 16.676$   $\chi^2/\text{NDF}$ : 60.2/50

- sign  $11.413 \pm 23.818$   $\chi^2/\text{NDF}$ : 24.3/24

dit\_asym\_sam\_26\_48\_dd\_rms vs Slug



Right In: 201.182+/-0.371  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 98.001+/-0.017  $\chi^2/\text{NDF}$ : 1155021.9/24

Right Out: 111.265+/-0.077  $\chi^2/\text{NDF}$ : 335360.1/1

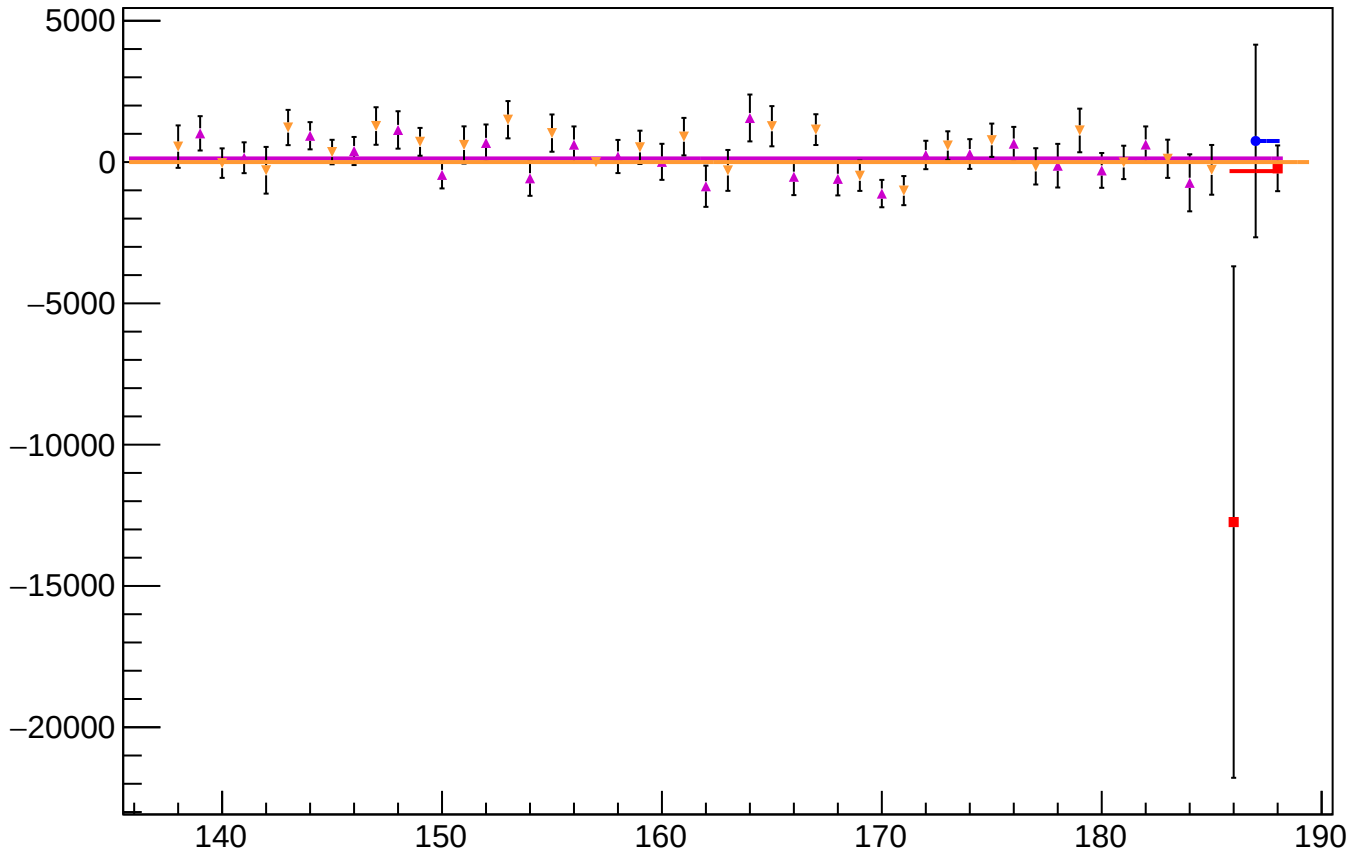
Left In: 100.704+/-0.017  $\chi^2/\text{NDF}$ : 759922.8/22

+ sign 98.206+/-0.017  $\chi^2/\text{NDF}$ : 1232382.8/25

All: 99.679+/-0.012  $\chi^2/\text{NDF}$ : 2361873.5/50

- sign 101.211+/-0.017  $\chi^2/\text{NDF}$ : 1113263.0/24

# asym\_sam\_26\_48\_dd\_correction\_mean vs Slug



Right In: 746.321 $\pm$ 3408.355  $\chi^2$ /NDF: 0.0/0

Left Out: -0.000 $\pm$ -0.000  $\chi^2$ /NDF:39.9/24

Right Out: -319.826 $\pm$ -805.841  $\chi^2$ /NDF: 1.9/1

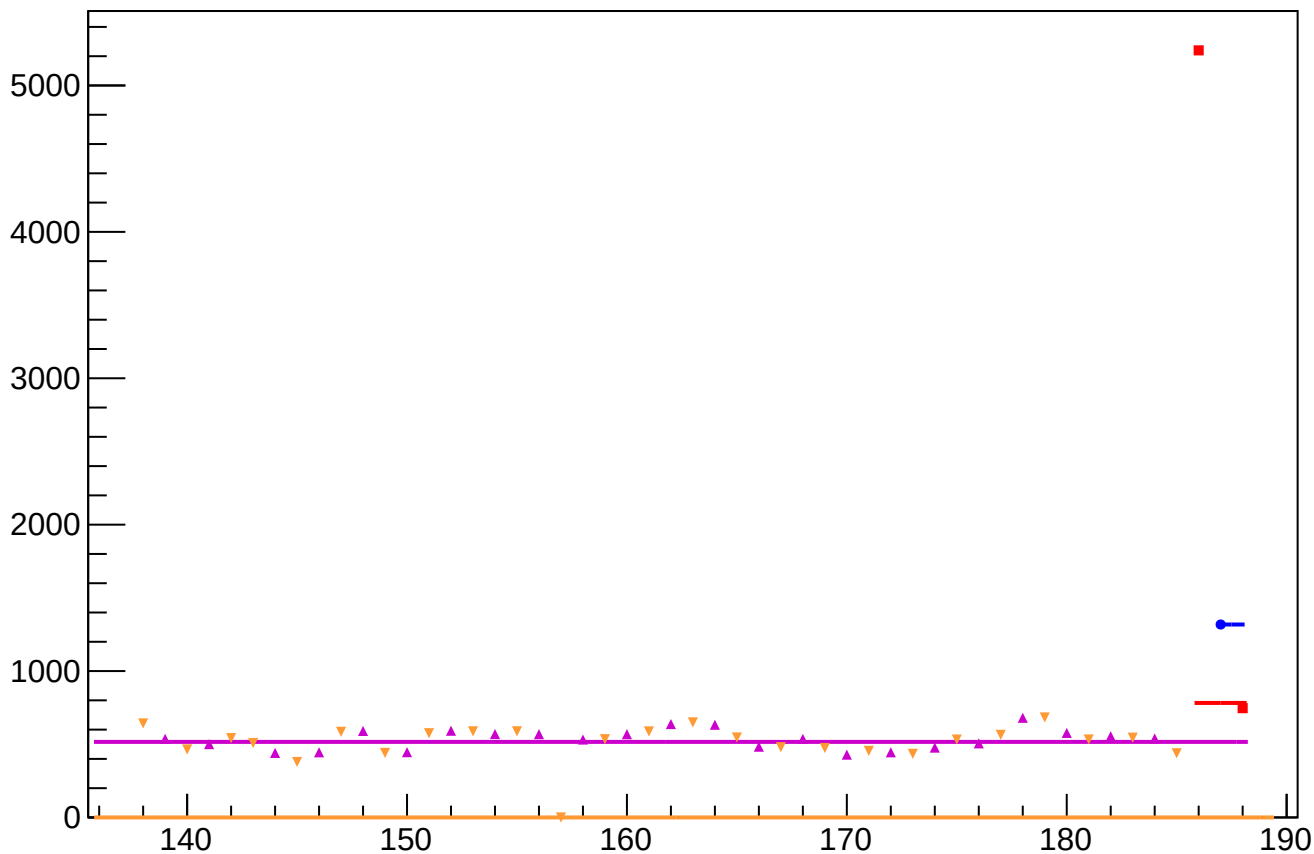
Left In: 129.094 $\pm$ -124.247  $\chi^2$ /NDF:28.3/22

+ sign -0.000 $\pm$ -0.000  $\chi^2$ /NDF: 39.9/25

All: -0.000 $\pm$ -0.000  $\chi^2$ /NDF: 71.4/50

- sign 118.670 $\pm$ -122.796  $\chi^2$ /NDF: 30.5/24

# asym\_sam\_26\_48\_dd\_correction\_rms vs Slug



Right In: 1318.004 $\pm$ 2.410  $\chi^2$ /NDF: 0.0/0

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 34974091.9/24

Right Out: 782.246 $\pm$ 0.570  $\chi^2$ /NDF: 489113.9/1

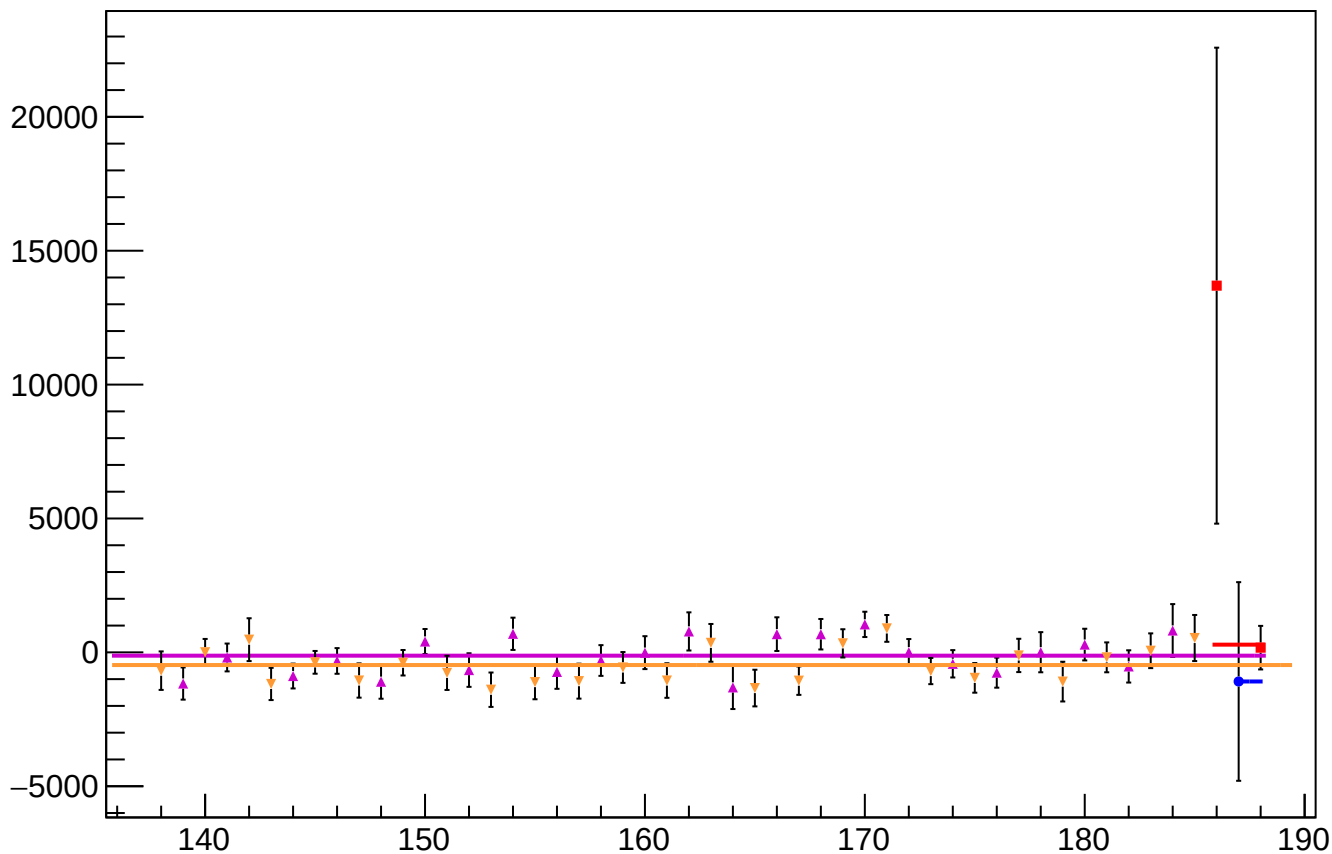
Left In: 516.120 $\pm$ 0.088  $\chi^2$ /NDF: 571744.7/22

+ sign 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 35273162.5/25

All: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 72729946.8/50

- sign 522.300 $\pm$ 0.087  $\chi^2$ /NDF: 1273918.9/24

# asym\_sam\_26\_48\_dd\_mean vs Slug



Right In:  $-1087.606 \pm 3709.487$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-473.870 \pm 117.977$   $\chi^2/\text{NDF}$ : 27.9/24

Right Out:  $287.613 \pm 809.898$   $\chi^2/\text{NDF}$ : 2.3/1

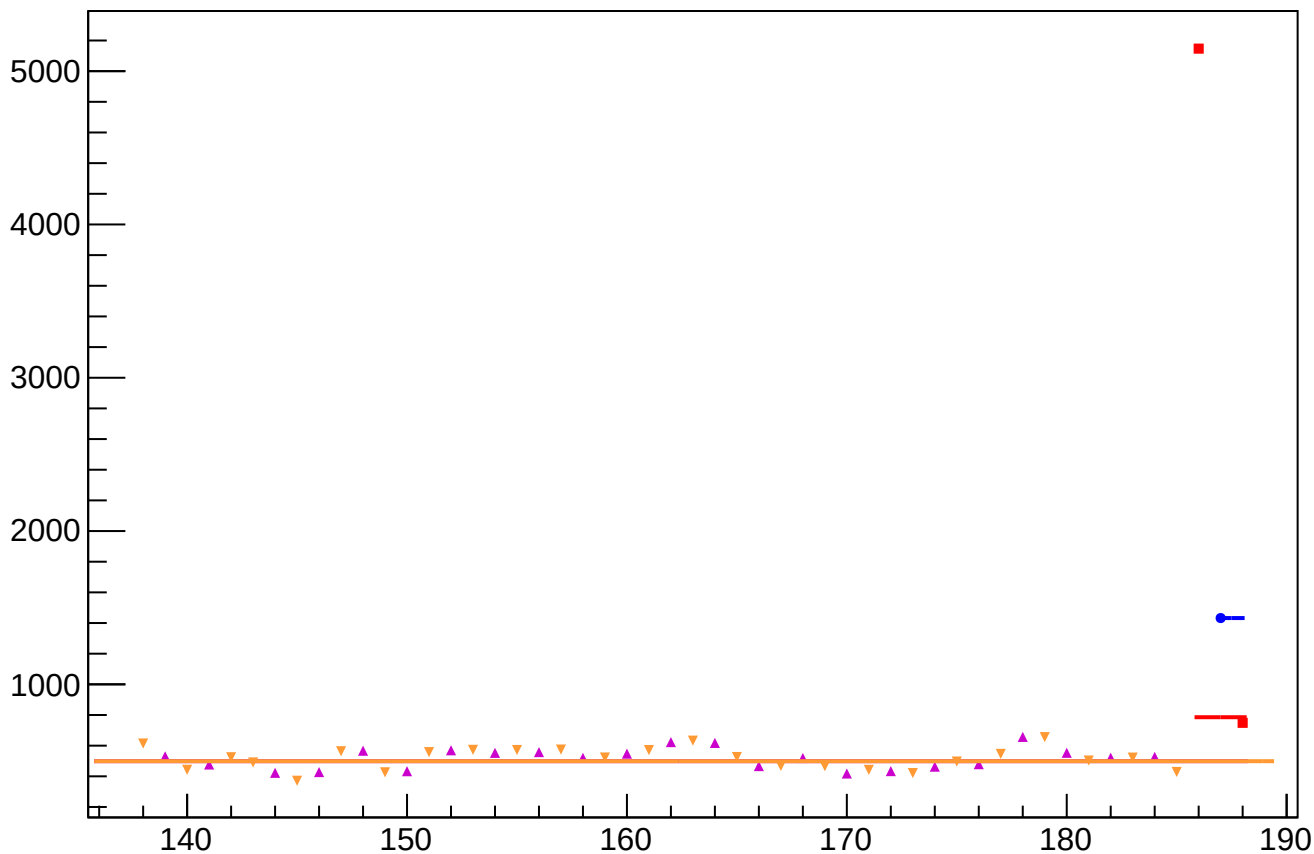
Left In:  $-124.022 \pm 120.216$   $\chi^2/\text{NDF}$ : 30.2/22

+ sign  $-474.491 \pm 117.918$   $\chi^2/\text{NDF}$ : 28.0/25

All:  $-296.330 \pm 83.730$   $\chi^2/\text{NDF}$ : 65.3/50

- sign  $-115.148 \pm 118.913$   $\chi^2/\text{NDF}$ : 32.7/24

# asym\_sam\_26\_48\_dd\_rms vs Slug



Right In: 1432.394 $\pm$ 2.623  $\chi^2$ /NDF: 0.0/0

Left Out: 498.662 $\pm$ 0.083  $\chi^2$ /NDF: 734652.4/24

Right Out: 785.543 $\pm$ 0.573  $\chi^2$ /NDF: 485568.5/1

Left In: 498.835 $\pm$ 0.085  $\chi^2$ /NDF: 572334.3/22

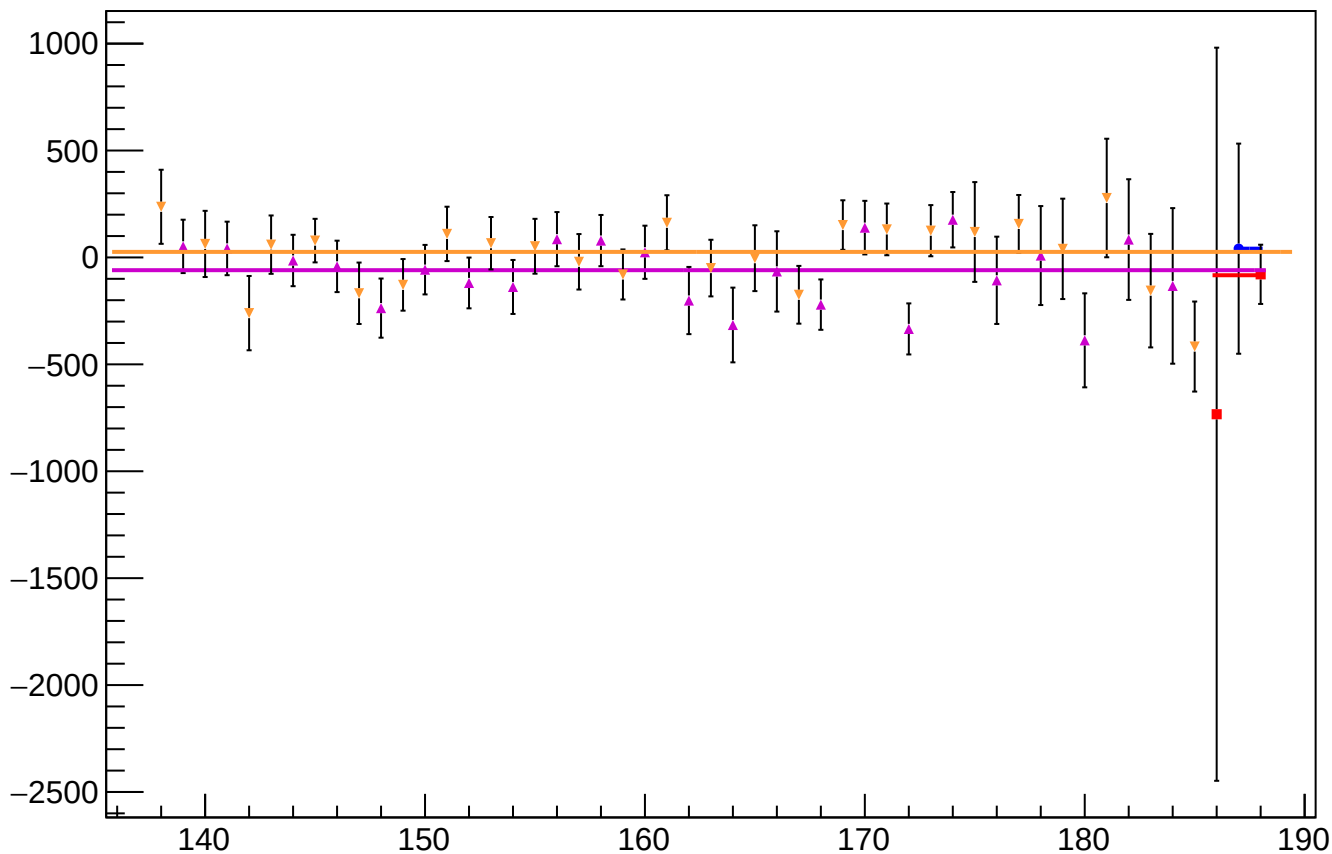
+ sign 499.606 $\pm$ 0.083  $\chi^2$ /NDF: 861244.8/25

All: 502.288 $\pm$ 0.059  $\chi^2$ /NDF: 2166470.6/50

- sign 505.016 $\pm$ 0.084  $\chi^2$ /NDF: 1303138.8/24



dit\_asym\_sam\_1548\_avg\_mean vs Slug



Right In: 40.971 $\pm$ 491.377  $\chi^2$ /NDF: 0.0/0

Left Out: 25.940 $\pm$ 28.120  $\chi^2$ /NDF:22.7/24

Right Out: -83.270 $\pm$ 138.062  $\chi^2$ /NDF: 0.1/1

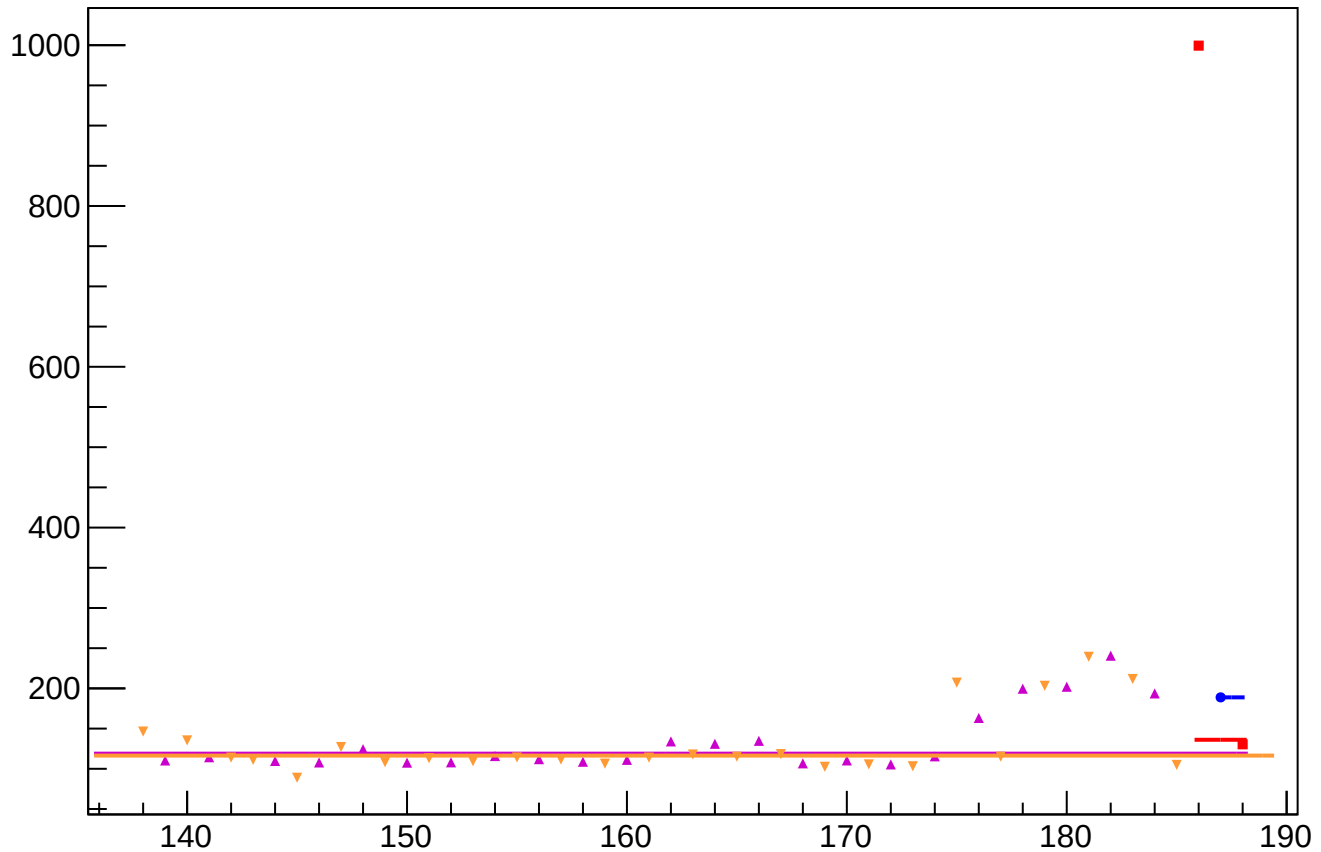
Left In: -59.603 $\pm$ 29.184  $\chi^2$ /NDF:25.6/22

+ sign 25.989 $\pm$ 28.075  $\chi^2$ /NDF: 22.7/25

All: -16.582 $\pm$ 20.019  $\chi^2$ /NDF: 53.2/50

- sign -60.616 $\pm$ 28.553  $\chi^2$ /NDF: 25.8/24

# dit\_asym\_sam\_1548\_avg\_rms vs Slug



Right In: 188.839 $\pm$ 0.347  $\chi^2$ /NDF: 0.0/0

Left Out: 116.427 $\pm$ 0.020  $\chi^2$ /NDF:1589669.4/24

Right Out: 136.092 $\pm$ 0.098  $\chi^2$ /NDF: 510505.9/1

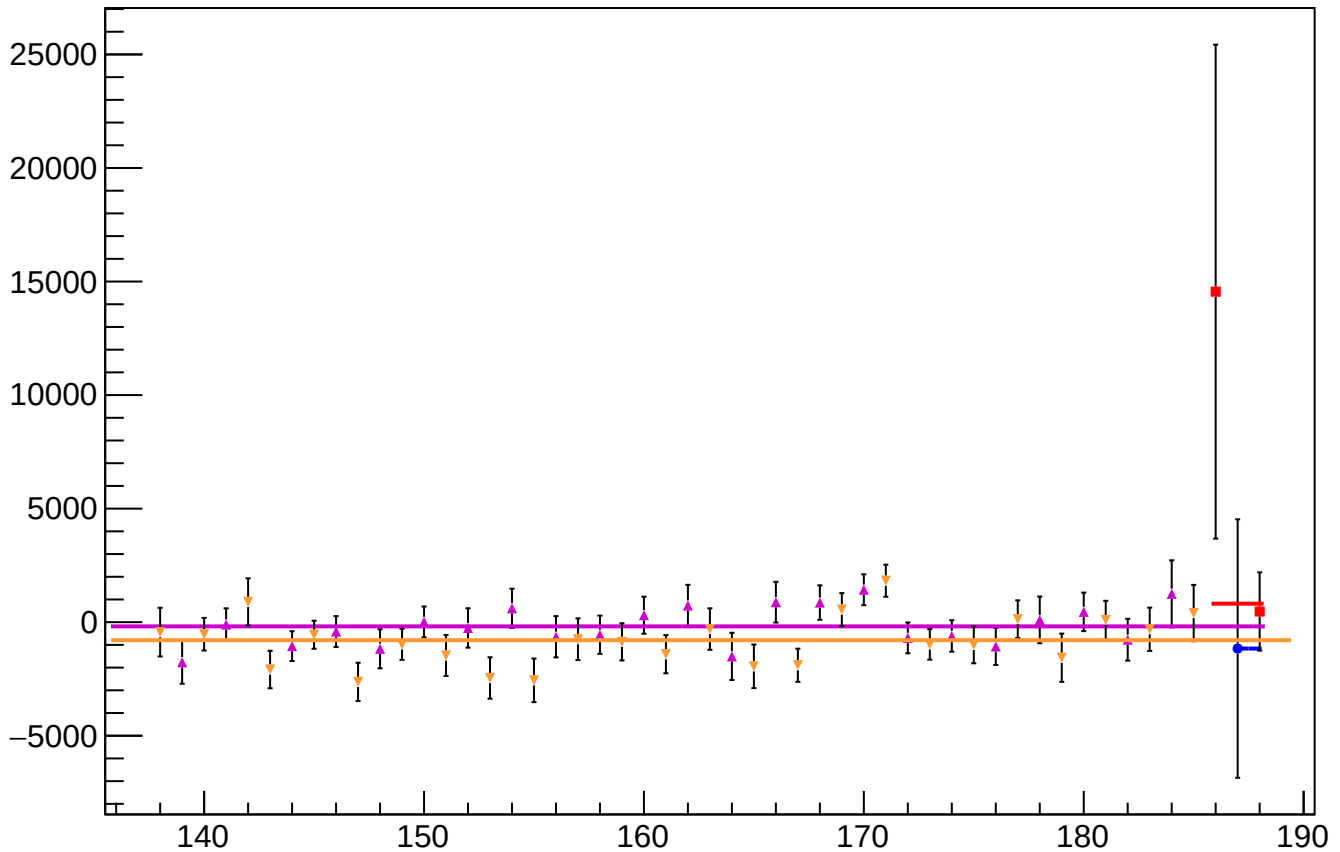
Left In: 118.822 $\pm$ 0.021  $\chi^2$ /NDF:1289178.7/22

+ sign 116.664 $\pm$ 0.020  $\chi^2$ /NDF: 1632960.6/25

All: 118.088 $\pm$ 0.014  $\chi^2$ /NDF: 3473069.6/50

- sign 119.561 $\pm$ 0.020  $\chi^2$ /NDF: 1829641.7/24

# asym\_sam\_1548\_avg\_correction\_mean vs Slug



Right In: -1161.362 $\pm$ 5691.023  $\chi^2$ /NDF: 0.0/0

Left Out: -791.963 $\pm$ 165.971  $\chi^2$ /NDF: 43.6/24

Right Out: 815.614 $\pm$ 1701.973  $\chi^2$ /NDF: 1.6/1

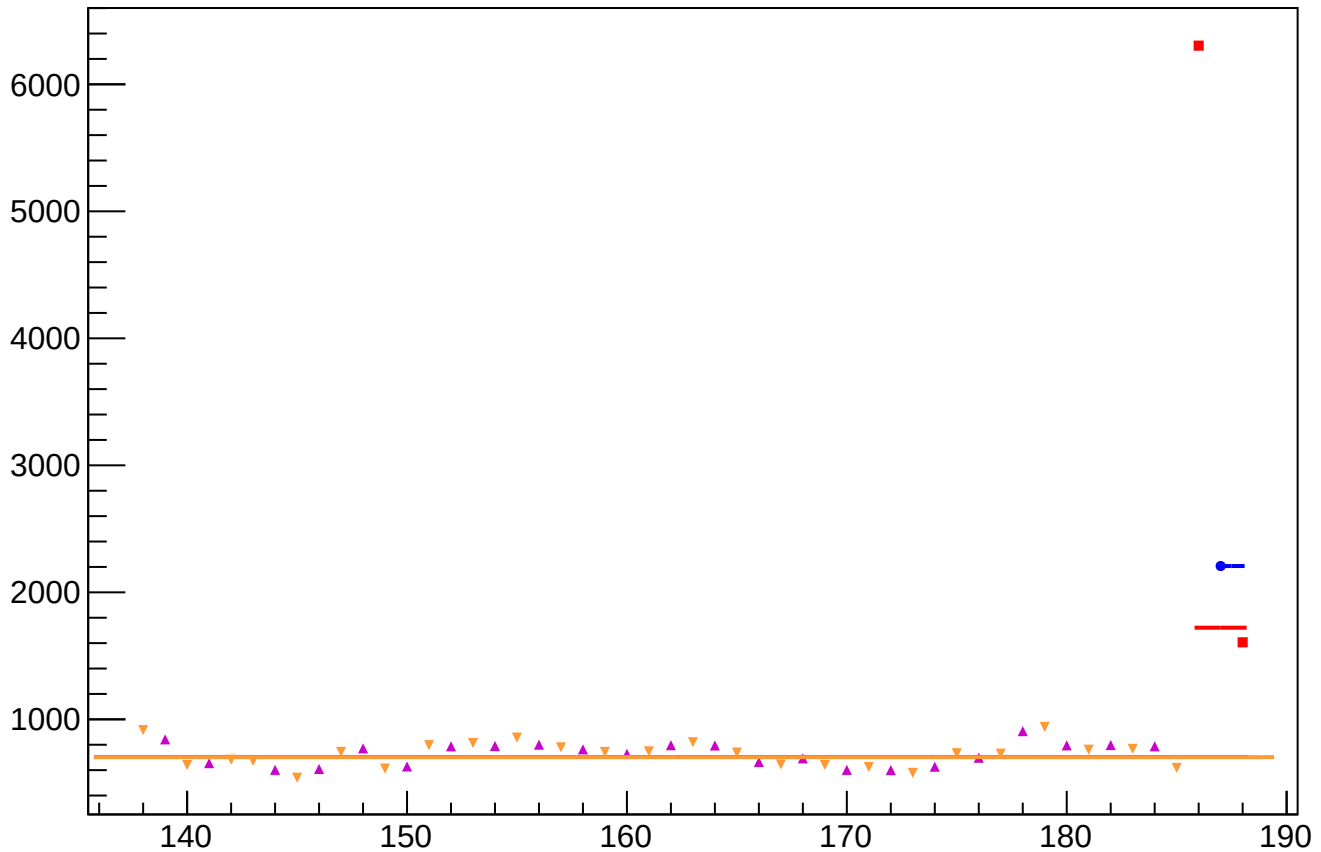
Left In: -185.191 $\pm$ 169.174  $\chi^2$ /NDF: 23.4/22

+ sign -792.277 $\pm$ 165.900  $\chi^2$ /NDF: 43.6/25

All: -488.349 $\pm$ 118.164  $\chi^2$ /NDF: 75.8/50

- sign -175.399 $\pm$ 168.345  $\chi^2$ /NDF: 25.4/24

# asym\_sam\_1548\_avg\_correction\_rms vs Slug



Right In: 2207.161 $\pm$ 4.024  $\chi^2$ /NDF: 0.0/0

Left Out: 702.152 $\pm$ 0.117  $\chi^2$ /NDF: 691552.2/24

Right Out: 1721.632 $\pm$ 1.203  $\chi^2$ /NDF: 364068.5/1

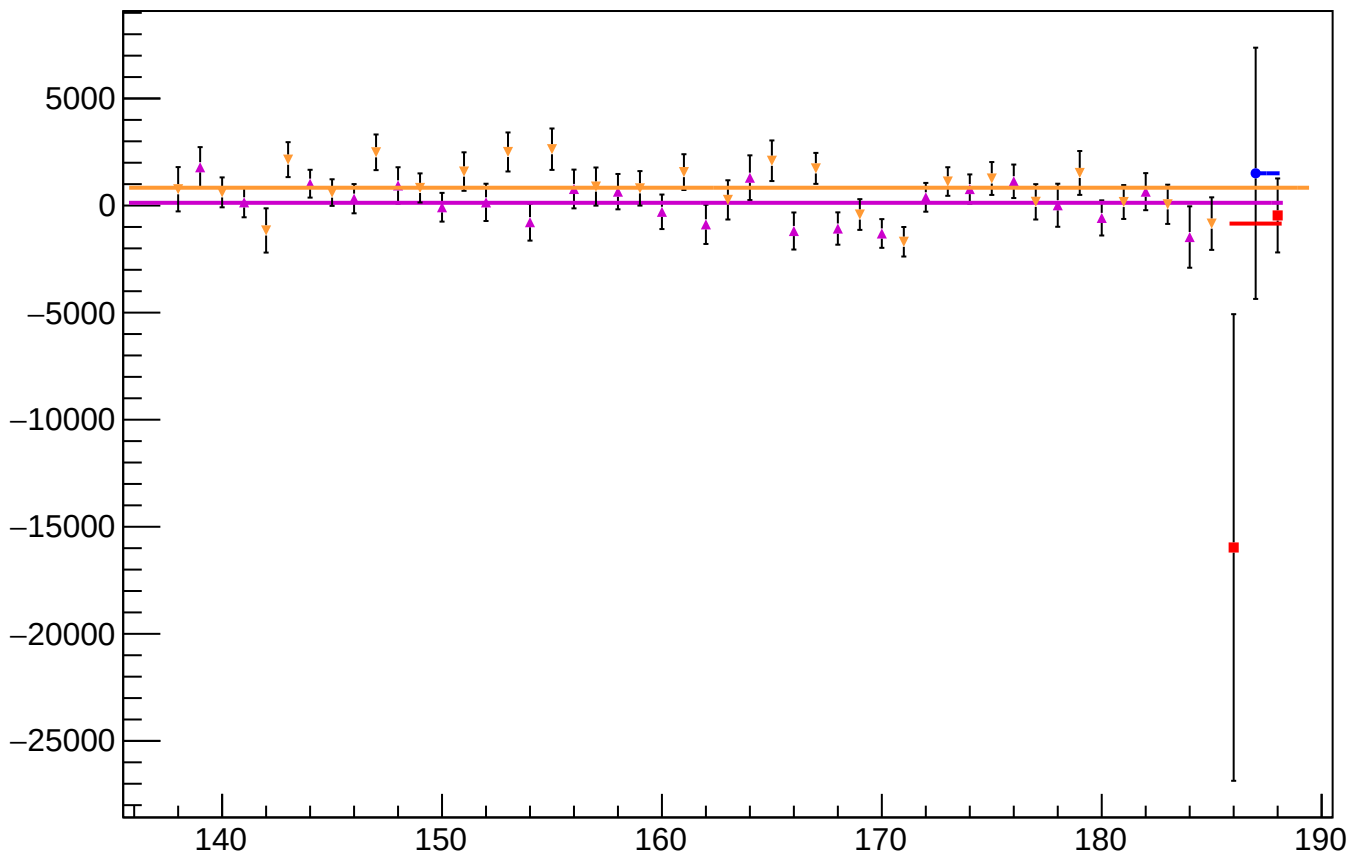
Left In: 703.710 $\pm$ 0.120  $\chi^2$ /NDF: 533573.3/22

+ sign 703.431 $\pm$ 0.117  $\chi^2$ /NDF: 831304.3/25

All: 708.475 $\pm$ 0.084  $\chi^2$ /NDF: 2441108.0/50

- sign 713.669 $\pm$ 0.119  $\chi^2$ /NDF: 1606051.3/24

# asym\_sam\_1548\_avg\_mean vs Slug



Right In: 1506.366 $\pm$ 5866.523  $\chi^2$ /NDF: 0.0/0

Left Out: 832.553 $\pm$ 163.428  $\chi^2$ /NDF: 43.8/24

Right Out: -842.082 $\pm$ 1706.241  $\chi^2$ /NDF: 2.0/1

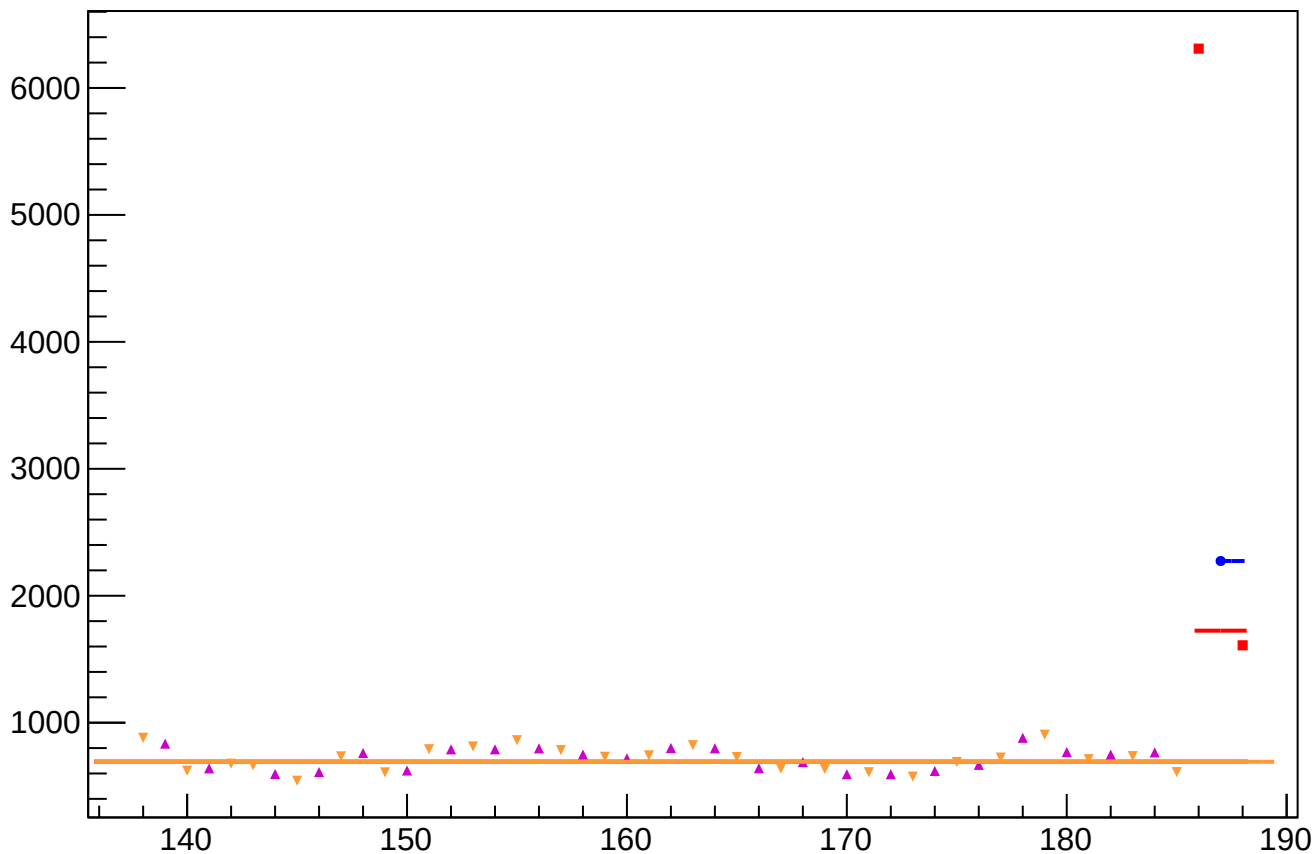
Left In: 128.120 $\pm$ 166.866  $\chi^2$ /NDF: 25.3/22

+ sign 833.076 $\pm$ 163.365  $\chi^2$ /NDF: 43.8/25

All: 481.874 $\pm$ 116.462  $\chi^2$ /NDF: 80.8/50

- sign 118.928 $\pm$ 166.073  $\chi^2$ /NDF: 27.6/24

# asym\_sam\_1548\_avg\_rms vs Slug



Right In: 2273.510+/-4.148  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 692.071+/-0.116  $\chi^2/\text{NDF}$ : 657636.6/24

Right Out: 1724.953+/-1.206  $\chi^2/\text{NDF}$ : 363064.3/1

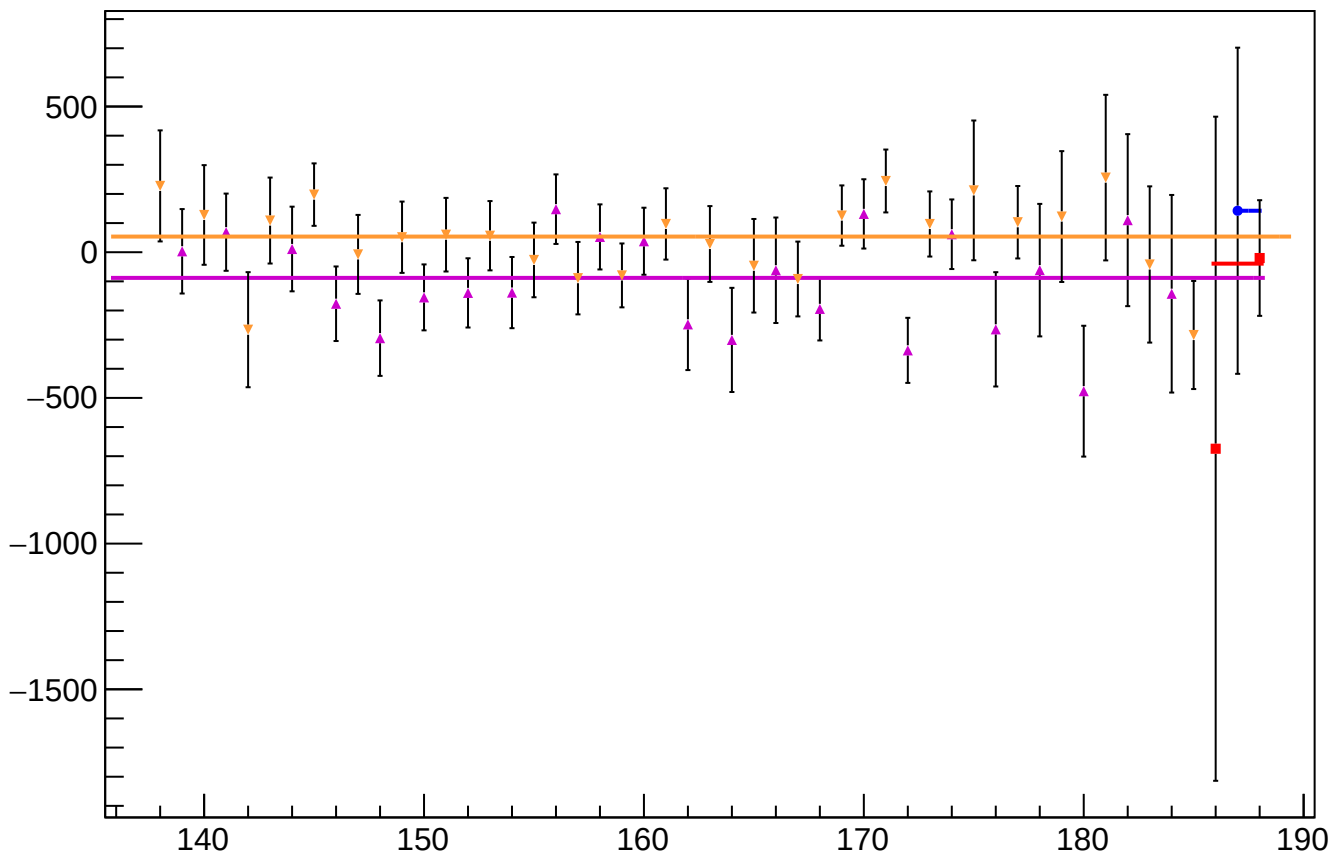
Left In: 693.615+/-0.118  $\chi^2/\text{NDF}$ : 520692.6/22

+ sign 693.297+/-0.116  $\chi^2/\text{NDF}$ : 802860.1/25

All: 698.259+/-0.082  $\chi^2/\text{NDF}$ : 2414165.1/50

- sign 703.386+/-0.117  $\chi^2/\text{NDF}$ : 1607553.7/24

dit\_asym\_sam\_3748\_avg\_mean vs Slug



Right In: 142.315 $\pm$ 559.659  $\chi^2$ /NDF: 0.0/0

Left Out: 53.701 $\pm$ 27.462  $\chi^2$ /NDF:19.2/24

Right Out: -39.206 $\pm$ 195.510  $\chi^2$ /NDF: 0.3/1

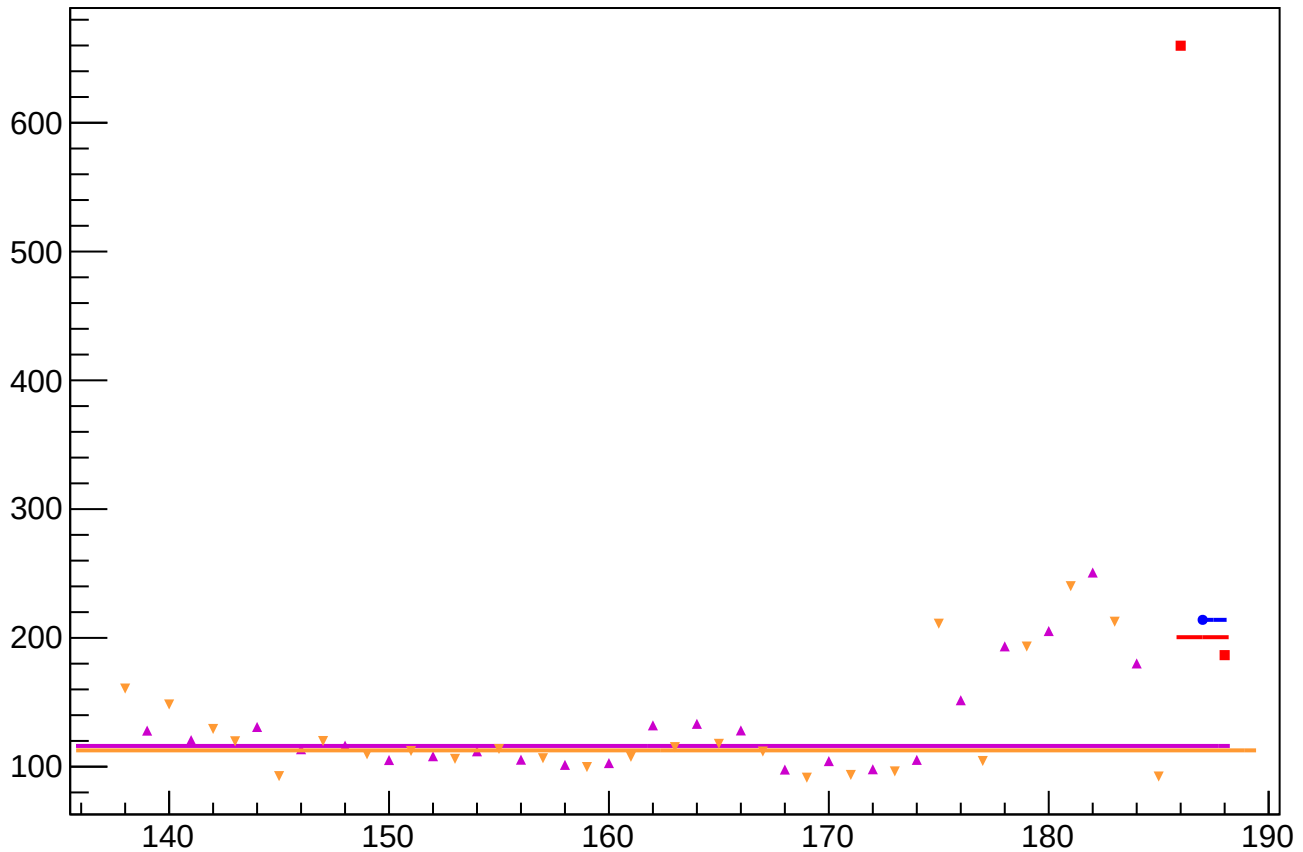
Left In: -88.085 $\pm$ 28.764  $\chi^2$ /NDF:30.4/22

+ sign 53.914 $\pm$ 27.429  $\chi^2$ /NDF: 19.2/25

All: -13.975 $\pm$ 19.749  $\chi^2$ /NDF: 62.7/50

- sign -87.049 $\pm$ 28.457  $\chi^2$ /NDF: 30.8/24

dit\_asym\_sam\_3748\_avg\_rms vs Slug



Right In: 214.020 $\pm$ 0.396  $\chi^2$ /NDF: 0.0/0

Left Out: 112.668 $\pm$ 0.019  $\chi^2$ /NDF: 1851455.7/24

Right Out: 200.543 $\pm$ 0.138  $\chi^2$ /NDF: 334723.9/1

Left In: 116.108 $\pm$ 0.020  $\chi^2$ /NDF: 1438879.3/22

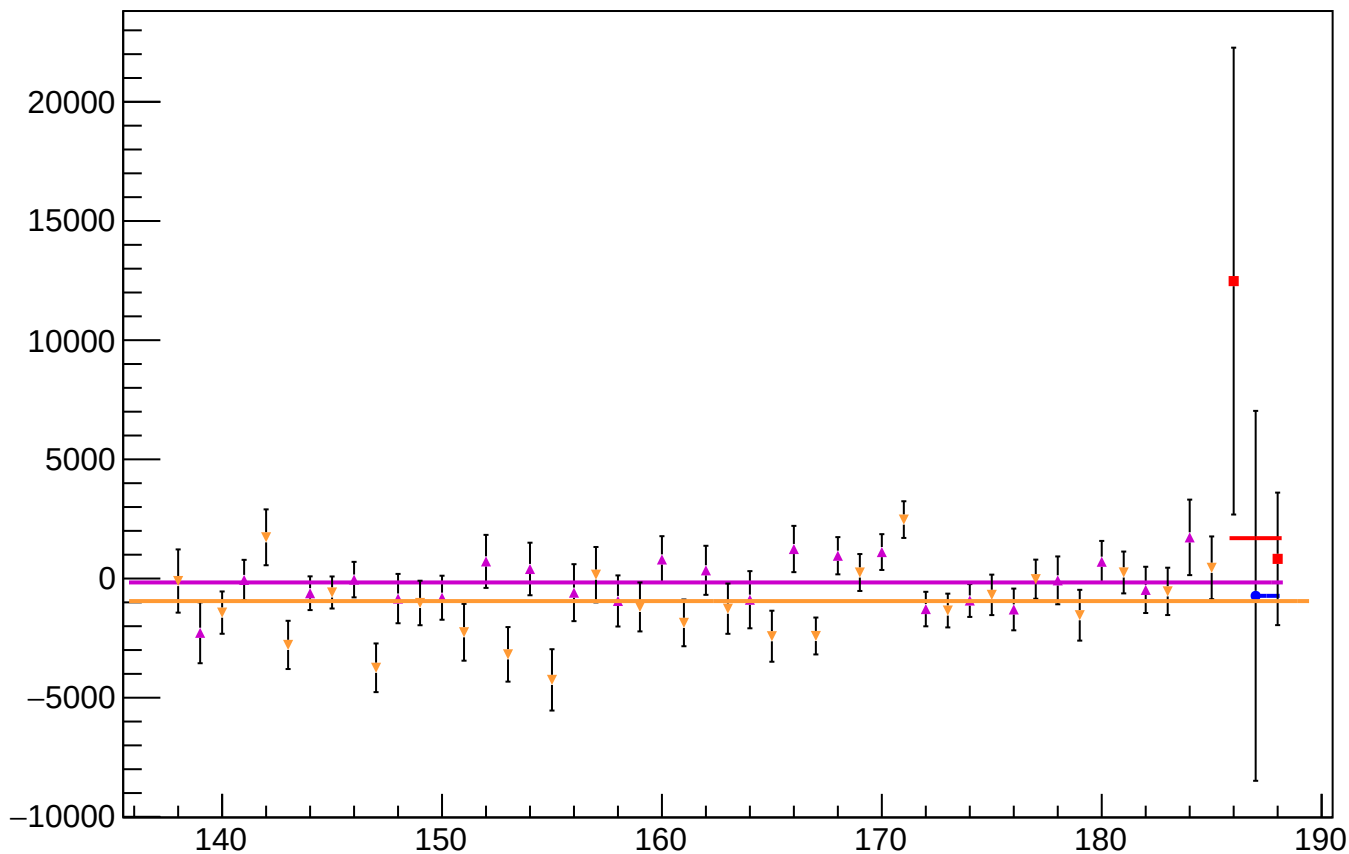
+ sign 112.911 $\pm$ 0.019  $\chi^2$ /NDF: 1916889.3/25

All: 115.312 $\pm$ 0.014  $\chi^2$ /NDF: 4087432.4/50

- sign 117.896 $\pm$ 0.020  $\chi^2$ /NDF: 2138726.9/24



# asym\_sam\_3748\_avg\_correction\_mean vs Slug



Right In:  $-726.191 \pm 7759.842$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-946.412 \pm 188.668$   $\chi^2/\text{NDF}$ : 63.3/24

Right Out:  $1693.615 \pm 2673.875$   $\chi^2/\text{NDF}$ : 1.3/1

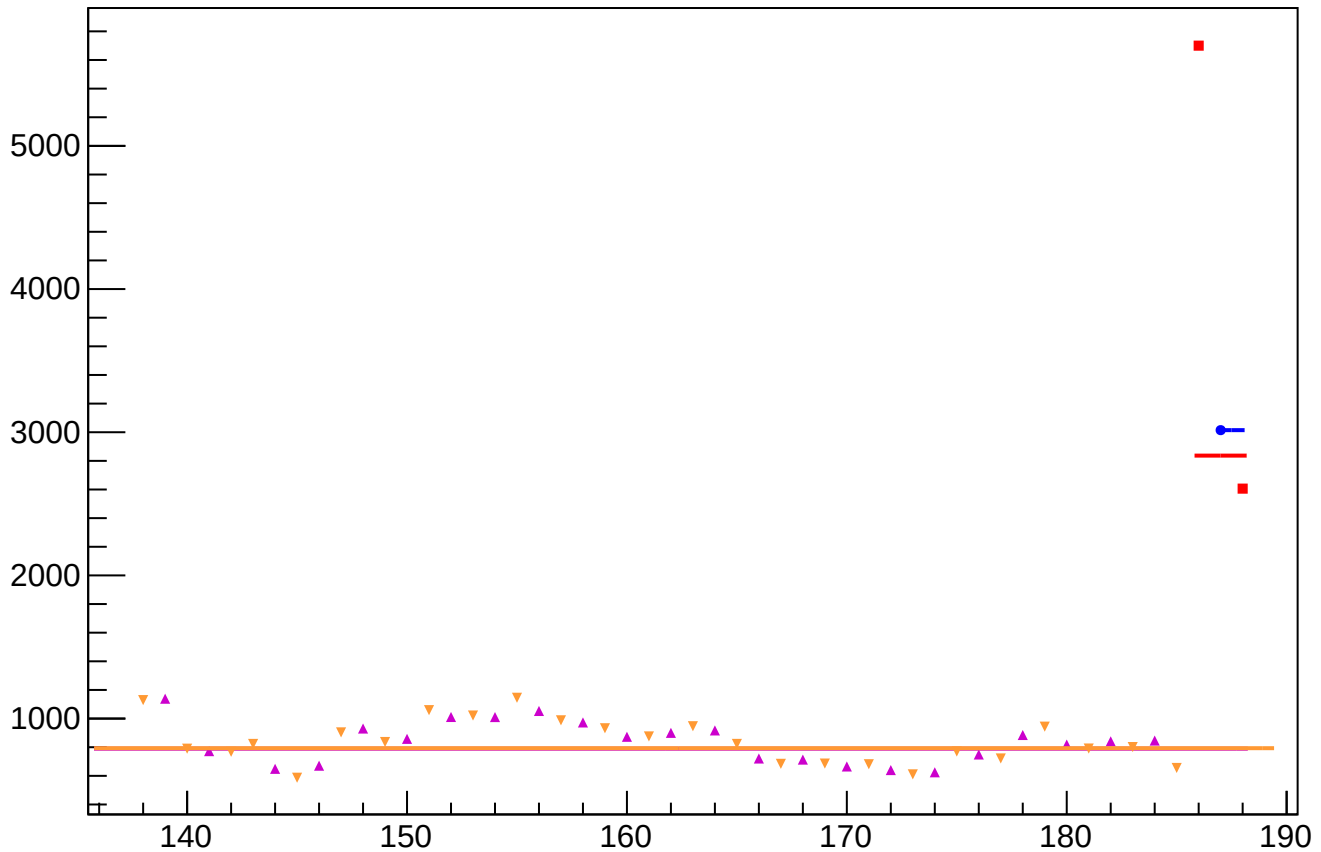
Left In:  $-164.202 \pm 191.131$   $\chi^2/\text{NDF}$ : 22.0/22

+ sign  $-946.282 \pm 188.613$   $\chi^2/\text{NDF}$ : 63.3/25

All:  $-554.760 \pm 134.082$   $\chi^2/\text{NDF}$ : 95.8/50

- sign  $-154.757 \pm 190.645$   $\chi^2/\text{NDF}$ : 23.8/24

# asym\_sam\_3748\_avg\_correction\_rms vs Slug



Right In: 3014.582 $\pm$ 5.487  $\chi^2$ /NDF: 0.0/0

Left Out: 793.154 $\pm$ 0.133  $\chi^2$ /NDF:1158856.1/24

Right Out: 2836.725 $\pm$ 1.891  $\chi^2$ /NDF: 184731.4/1

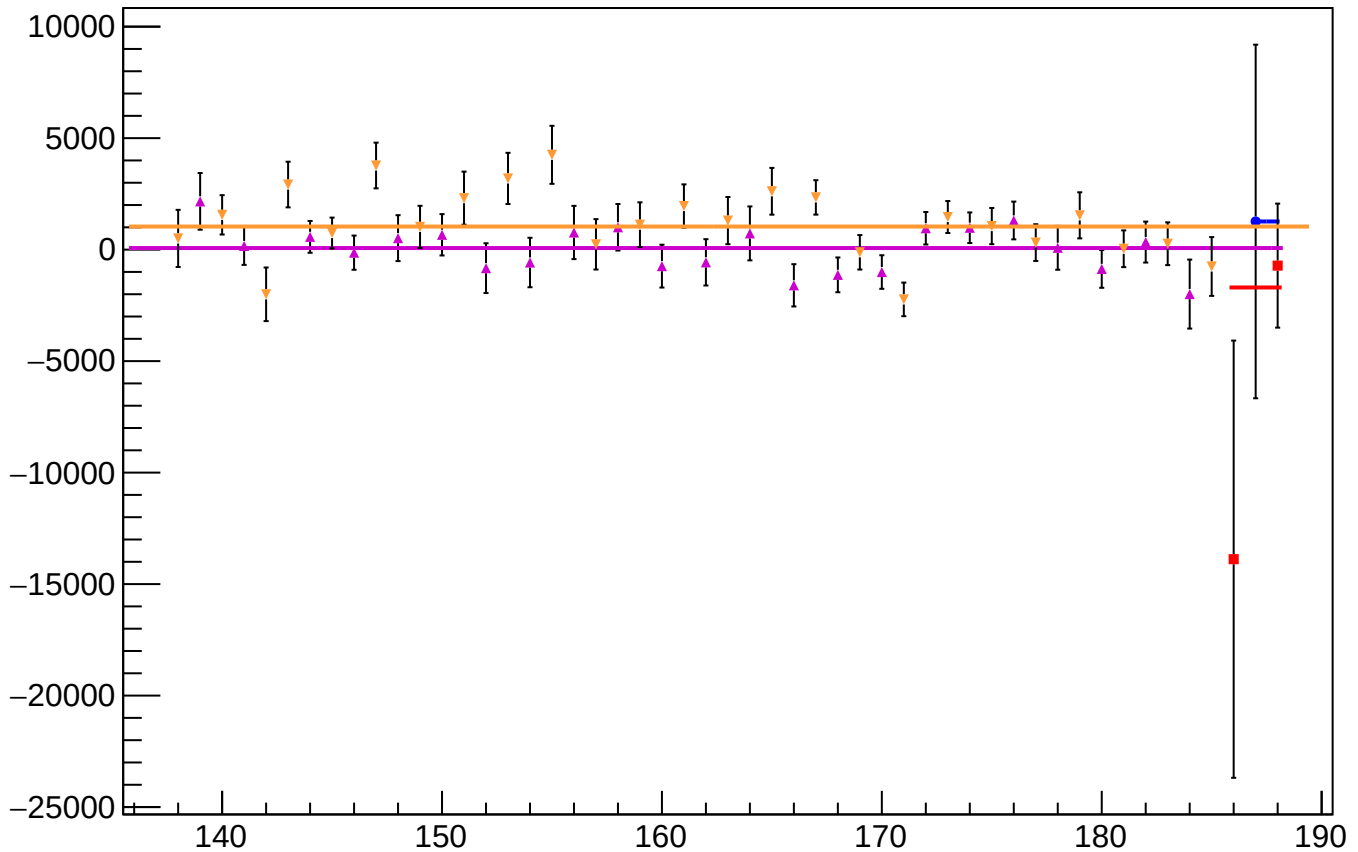
Left In: 789.699 $\pm$ 0.135  $\chi^2$ /NDF:1019959.0/22

+ sign 794.467 $\pm$ 0.133  $\chi^2$ /NDF: 1322662.9/25

All: 797.256 $\pm$ 0.095  $\chi^2$ /NDF: 3694459.0/50

- sign 800.105 $\pm$ 0.135  $\chi^2$ /NDF: 2370912.1/24

# asym\_sam\_3748\_avg\_mean vs Slug



Right In: 1262.741 $\pm$ 7929.221  $\chi^2$ /NDF: 0.0/0

Left Out: 1035.605 $\pm$ 187.244  $\chi^2$ /NDF: 61.4/24

Right Out: -1697.609 $\pm$ 2675.410  $\chi^2$ /NDF: 1.7/1

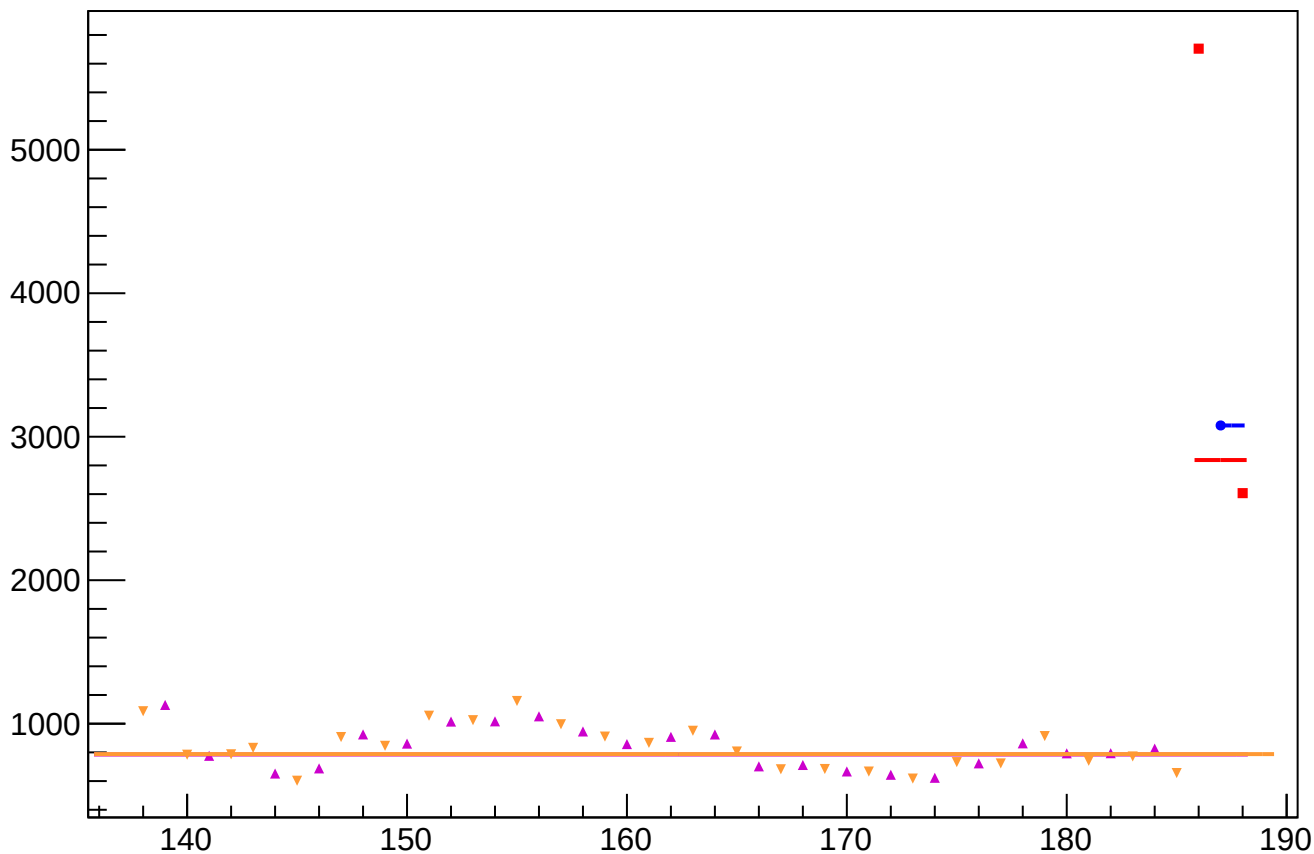
Left In: 70.852 $\pm$ 190.155  $\chi^2$ /NDF: 23.4/22

+ sign 1035.731 $\pm$ 187.191  $\chi^2$ /NDF: 61.4/25

All: 555.269 $\pm$ 133.234  $\chi^2$ /NDF: 100.2/50

- sign 61.963 $\pm$ 189.677  $\chi^2$ /NDF: 25.5/24

# asym\_sam\_3748\_avg\_rms vs Slug



Right In: 3078.464 $\pm$ 5.607  $\chi^2$ /NDF: 0.0/0

Left Out: 787.981 $\pm$ 0.132  $\chi^2$ /NDF:1113986.0/24

Right Out: 2837.518 $\pm$ 1.892  $\chi^2$ /NDF: 184802.9/1

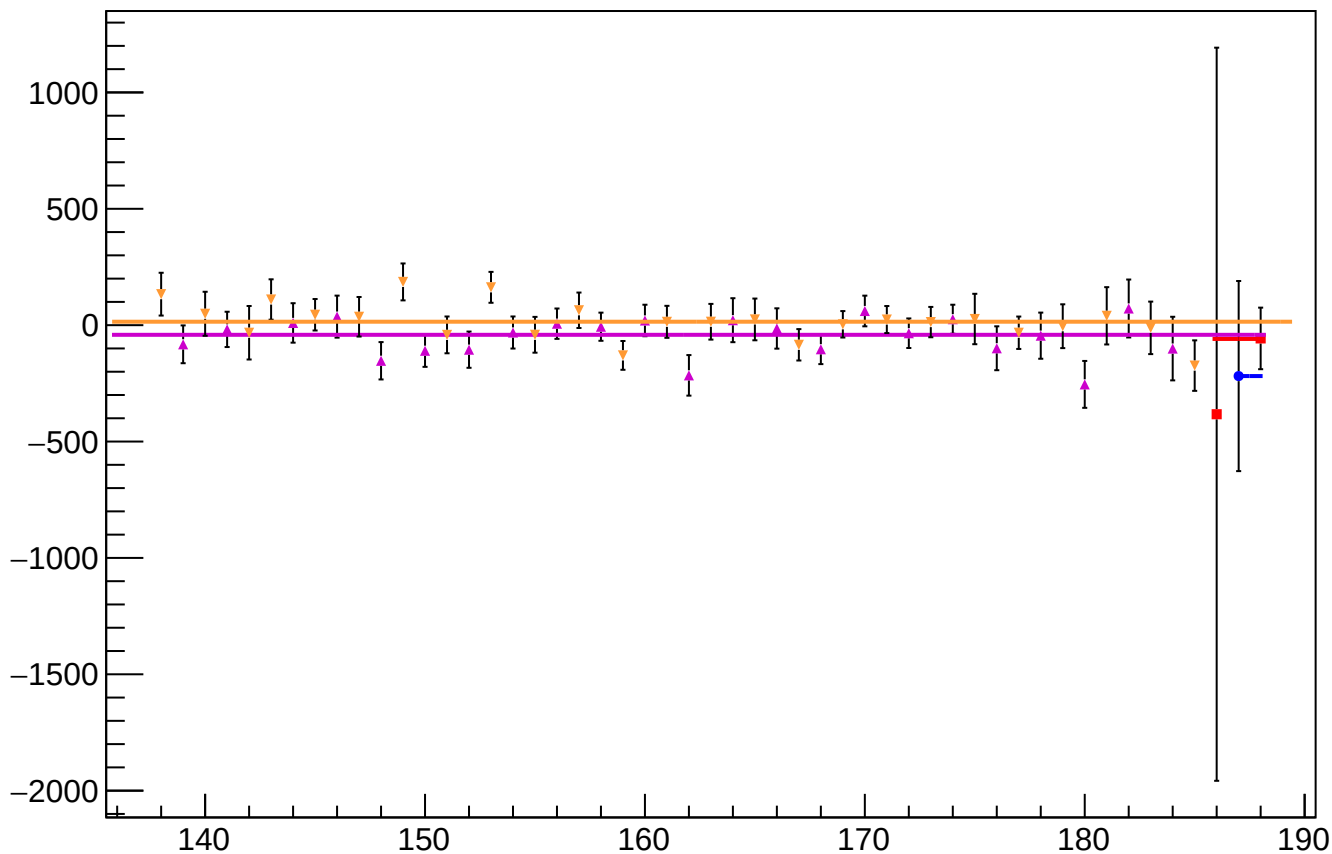
Left In: 785.179 $\pm$ 0.134  $\chi^2$ /NDF:976942.0/22

+ sign 789.258 $\pm$ 0.132  $\chi^2$ /NDF: 1280780.2/25

All: 792.335 $\pm$ 0.094  $\chi^2$ /NDF: 3614627.4/50

- sign 795.495 $\pm$ 0.134  $\chi^2$ /NDF: 2332751.7/24

# dit\_asym\_sam\_1526\_avg\_mean vs Slug



Right In:  $-218.640 \pm 408.440$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $14.879 \pm 15.529$   $\chi^2/\text{NDF}$ : 25.8/24

Right Out:  $-59.181 \pm 131.789$   $\chi^2/\text{NDF}$ : 0.0/1

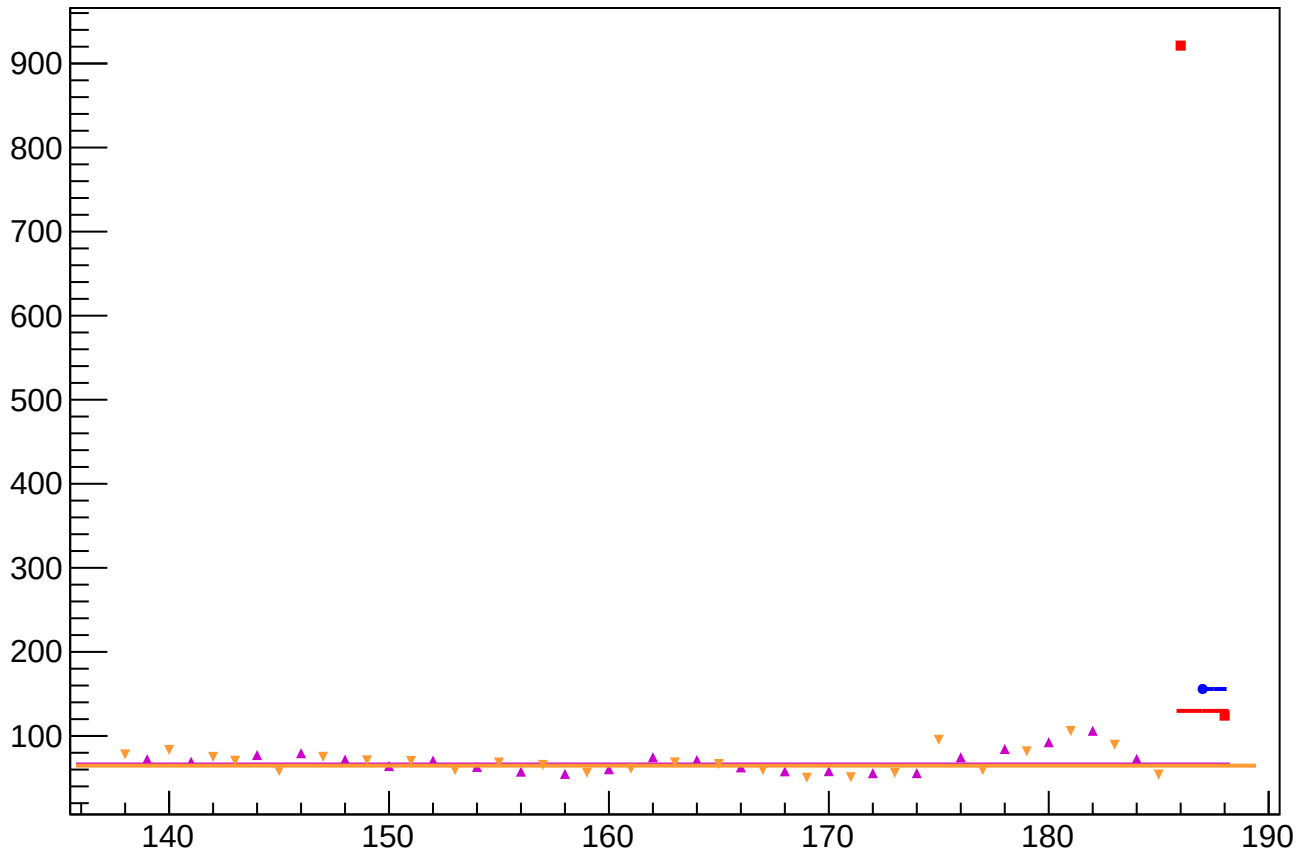
Left In:  $-41.428 \pm 16.130$   $\chi^2/\text{NDF}$ : 21.7/22

+ sign  $14.542 \pm 15.518$   $\chi^2/\text{NDF}$ : 26.2/25

All:  $-12.696 \pm 11.143$   $\chi^2/\text{NDF}$ : 54.3/50

- sign  $-41.690 \pm 16.011$   $\chi^2/\text{NDF}$ : 21.7/24

# dit\_asym\_sam\_1526\_avg\_rms vs Slug



Right In: 155.887 $\pm$ 0.289  $\chi^2$ /NDF: 0.0/0

Left Out: 64.680 $\pm$ 0.011  $\chi^2$ /NDF: 1150386.4/24

Right Out: 129.826 $\pm$ 0.093  $\chi^2$ /NDF: 508618.4/1

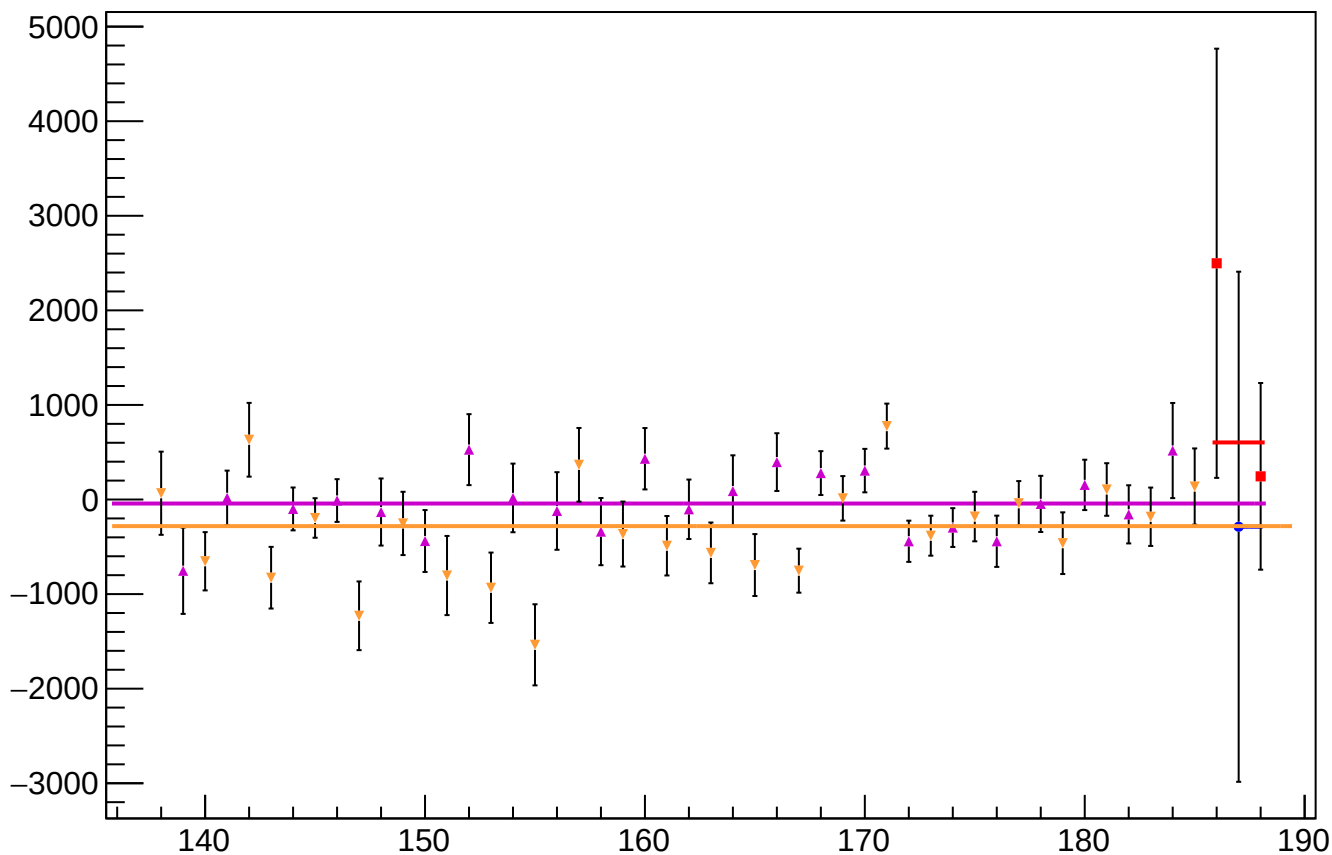
Left In: 66.016 $\pm$ 0.011  $\chi^2$ /NDF: 868433.2/22

+ sign 64.811 $\pm$ 0.011  $\chi^2$ /NDF: 1249974.0/25

All: 65.851 $\pm$ 0.008  $\chi^2$ /NDF: 3107512.3/50

- sign 66.958 $\pm$ 0.011  $\chi^2$ /NDF: 1839006.5/24

# asym\_sam\_1526\_avg\_correction\_mean vs Slug



Right In: -287.925+/-2696.737  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -281.407+/-59.534  $\chi^2/\text{NDF}$ : 66.5/24

Right Out: 603.381+/-905.037  $\chi^2/\text{NDF}$ : 0.8/1

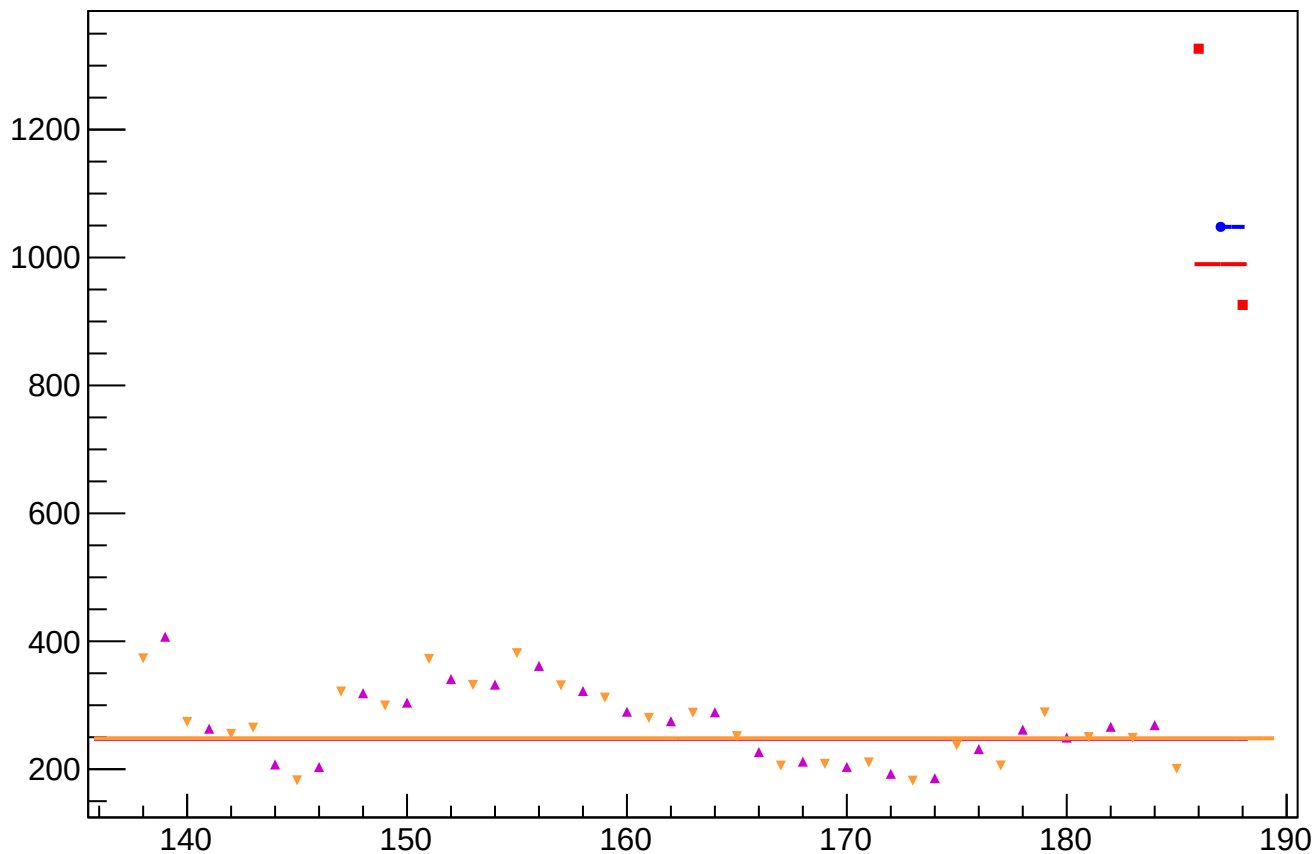
Left In: -42.368+/-60.284  $\chi^2/\text{NDF}$ : 24.7/22

+ sign -281.410+/-59.519  $\chi^2/\text{NDF}$ : 66.5/25

All: -161.739+/-42.308  $\chi^2/\text{NDF}$ : 100.7/50

- sign -39.515+/-60.151  $\chi^2/\text{NDF}$ : 26.0/24

# asym\_sam\_1526\_avg\_correction\_rms vs Slug



Right In: 1047.925 $\pm$ 1.907  $\chi^2$ /NDF: 0.0/0

Left Out: 248.297 $\pm$ 0.042  $\chi^2$ /NDF: 1687698.9/24

Right Out: 989.630 $\pm$ 0.640  $\chi^2$ /NDF: 52418.8/1

Left In: 247.105 $\pm$ 0.043  $\chi^2$ /NDF: 1539330.1/22

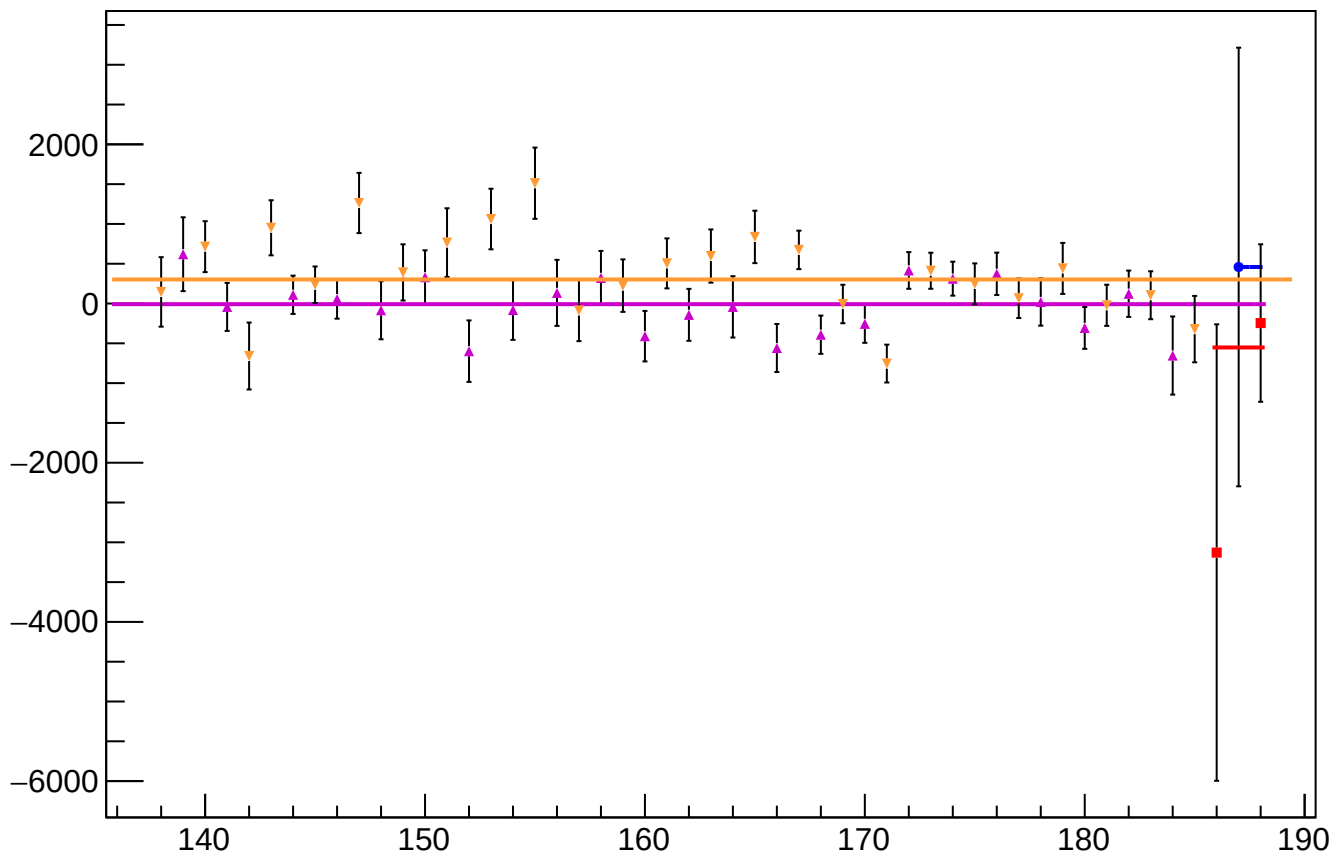
+ sign 248.686 $\pm$ 0.042  $\chi^2$ /NDF: 1863457.7/25

All: 249.527 $\pm$ 0.030  $\chi^2$ /NDF: 4796296.6/50

- sign 250.385 $\pm$ 0.043  $\chi^2$ /NDF: 2932032.6/24



# asym\_sam\_1526\_avg\_mean vs Slug



Right In: 459.027 $\pm$ 2755.597  $\chi^2$ /NDF: 0.0/0

Left Out: 302.420 $\pm$ 60.991  $\chi^2$ /NDF:63.8/24

Right Out: -551.980 $\pm$ 935.202  $\chi^2$ /NDF: 0.9/1

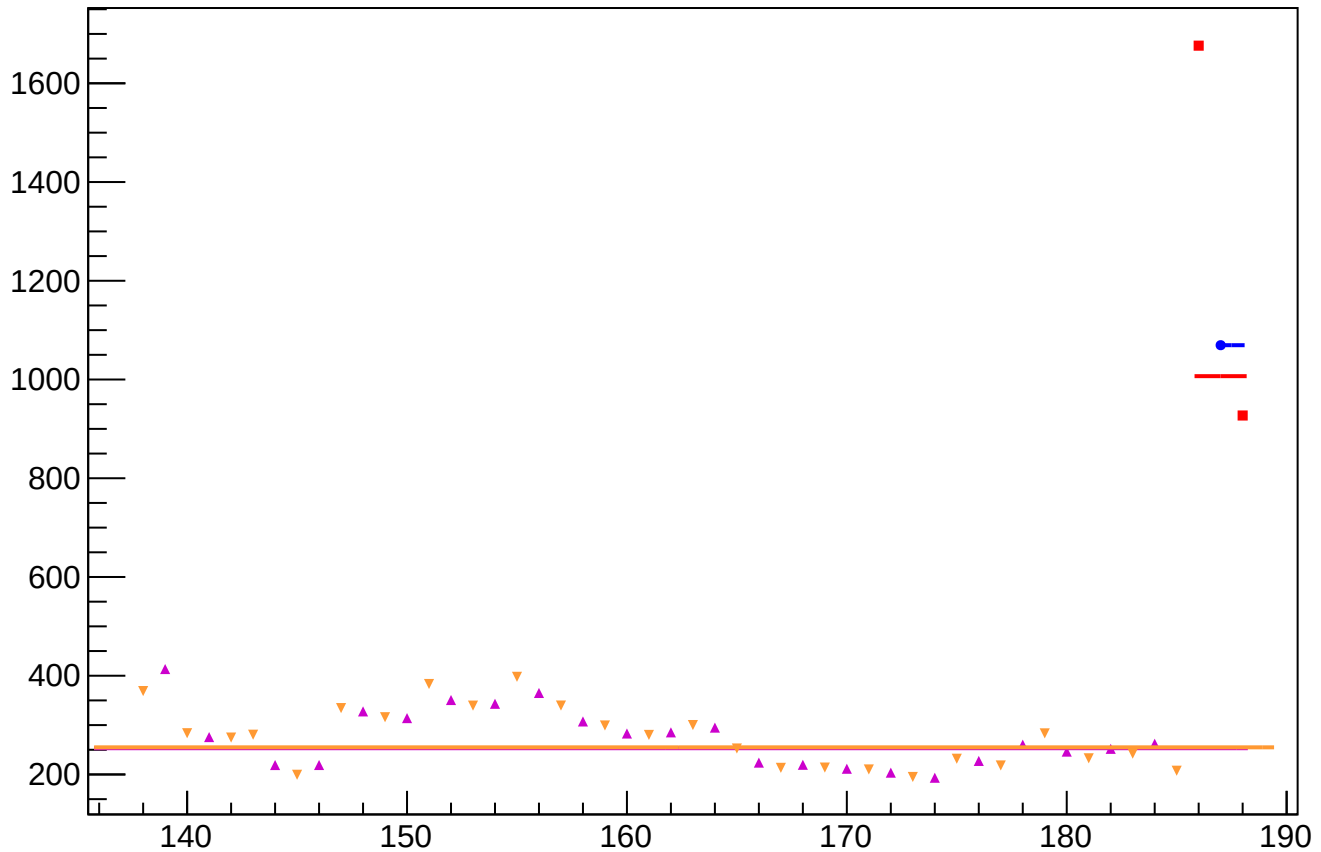
Left In: -7.915 $\pm$ 61.726  $\chi^2$ /NDF:26.3/22

+ sign 302.497 $\pm$ 60.976  $\chi^2$ /NDF: 63.8/25

All: 147.683 $\pm$ 43.332  $\chi^2$ /NDF: 104.4/50

- sign -10.275 $\pm$ 61.592  $\chi^2$ /NDF: 27.5/24

# asym\_sam\_1526\_avg\_rms vs Slug



Right In: 1069.513 $\pm$ 1.949  $\chi^2$ /NDF: 0.0/0

Left Out: 254.937 $\pm$ 0.043  $\chi^2$ /NDF: 1541708.7/24

Right Out: 1006.787 $\pm$ 0.661  $\chi^2$ /NDF: 121979.7/1

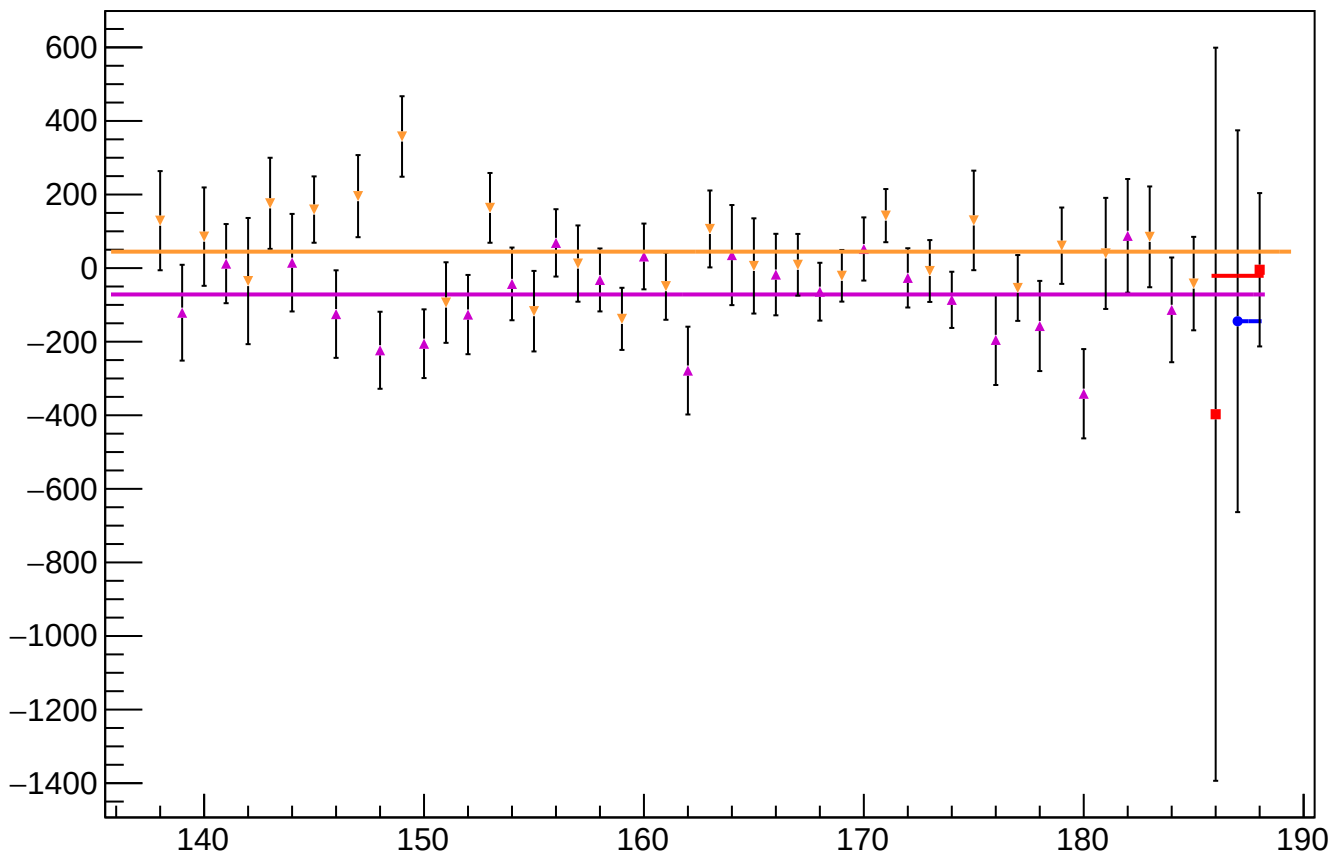
Left In: 253.170 $\pm$ 0.044  $\chi^2$ /NDF: 1366527.6/22

+ sign 255.336 $\pm$ 0.043  $\chi^2$ /NDF: 1716390.9/25

All: 255.882 $\pm$ 0.031  $\chi^2$ /NDF: 4498322.9/50

- sign 256.439 $\pm$ 0.044  $\chi^2$ /NDF: 2781608.3/24

# dit\_asym\_sam\_3726\_avg\_mean vs Slug



Right In: -144.367+/-518.899  $\chi^2$ /NDF: 0.0/0

Left Out: 44.746+/-20.460  $\chi^2$ /NDF:30.5/24

Right Out: -20.935+/-204.005  $\chi^2$ /NDF: 0.1/1

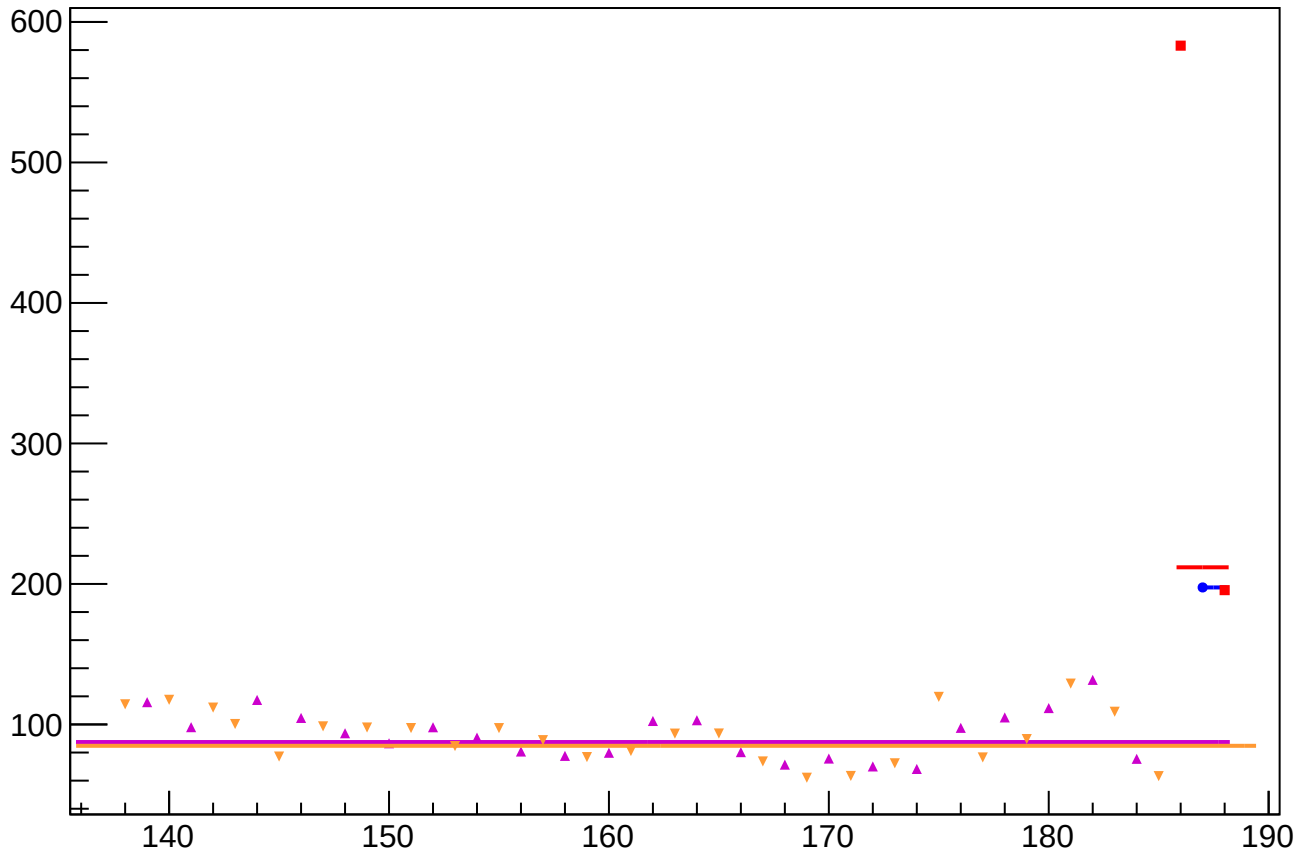
Left In: -71.620+/-21.469  $\chi^2$ /NDF:23.7/22

+ sign 44.452+/-20.444  $\chi^2$ /NDF: 30.7/25

All: -10.800+/-14.766  $\chi^2$ /NDF: 69.8/50

- sign -71.065+/-21.351  $\chi^2$ /NDF: 23.9/24

# dit\_asym\_sam\_3726\_avg\_rms vs Slug



Right In: 197.508 $\pm$ 0.367  $\chi^2$ /NDF: 0.0/0

Left Out: 84.793 $\pm$ 0.014  $\chi^2$ /NDF:1382881.3/24

Right Out: 211.839 $\pm$ 0.144  $\chi^2$ /NDF: 289882.1/1

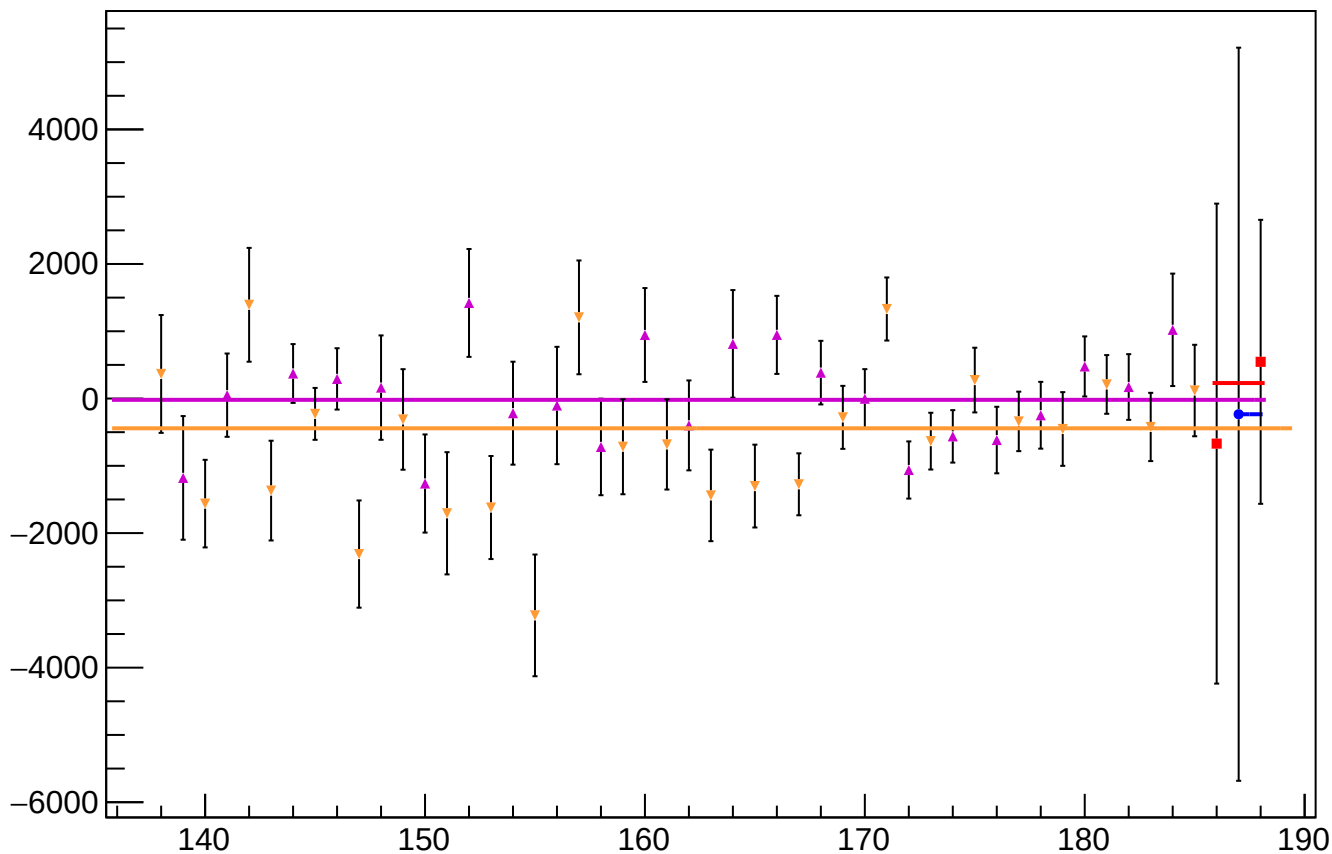
Left In: 87.477 $\pm$ 0.015  $\chi^2$ /NDF:1056450.2/22

+ sign 84.968 $\pm$ 0.014  $\chi^2$ /NDF: 1477104.8/25

All: 86.820 $\pm$ 0.010  $\chi^2$ /NDF: 3592841.5/50

- sign 88.839 $\pm$ 0.015  $\chi^2$ /NDF: 2081425.1/24

# asym\_sam\_3726\_avg\_correction\_mean vs Slug



Right In: -233.311+/-5448.451  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -442.284+/-115.425  $\chi^2/\text{NDF}$ :60.9/24

Right Out: 230.383+/-1816.374  $\chi^2/\text{NDF}$ : 0.1/1

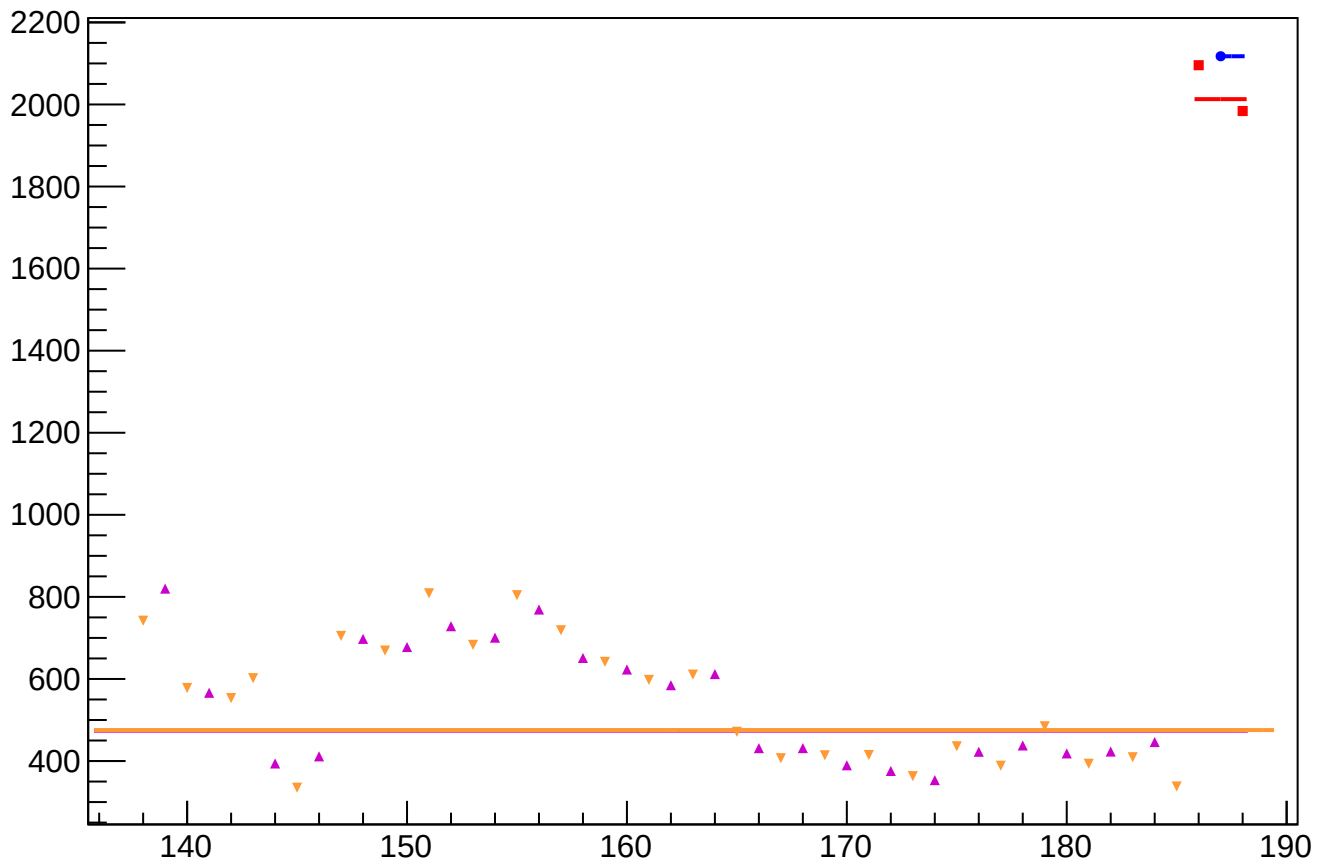
Left In: -19.322+/-116.820  $\chi^2/\text{NDF}$ :29.5/22

+ sign -442.191+/-115.399  $\chi^2/\text{NDF}$ : 60.9/25

All: -232.399+/-82.014  $\chi^2/\text{NDF}$ : 97.2/50

- sign -18.293+/-116.580  $\chi^2/\text{NDF}$ : 29.6/24

# asym\_sam\_3726\_avg\_correction\_rms vs Slug



Right In: 2117.477 $\pm$ 3.853     $\chi^2$ /NDF: 0.0/0

Left Out: 475.415 $\pm$ 0.082     $\chi^2$ /NDF:2509706.1/24

Right Out: 2012.963 $\pm$ 1.284     $\chi^2$ /NDF: 1449.7/1

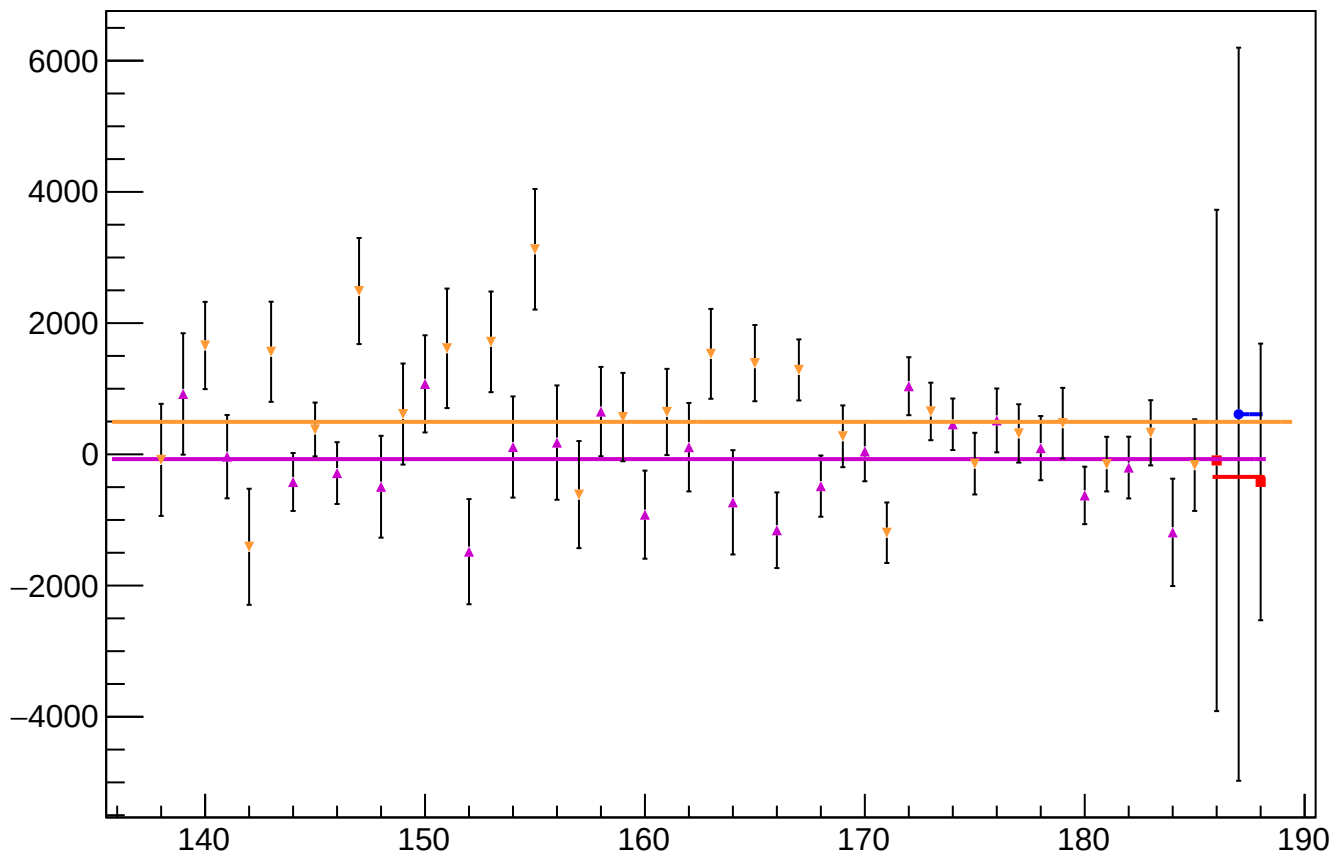
Left In: 473.947 $\pm$ 0.083     $\chi^2$ /NDF:2174476.6/22

+ sign 476.152 $\pm$ 0.082     $\chi^2$ /NDF: 2691286.1/25

All: 478.198 $\pm$ 0.058     $\chi^2$ /NDF: 6298407.5/50

- sign 480.286 $\pm$ 0.082     $\chi^2$ /NDF: 3605850.8/24

# asym\_sam\_3726\_avg\_mean vs Slug



Right In:  $611.320 \pm 5587.050$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $495.259 \pm 115.521$   $\chi^2/\text{NDF}$ : 57.2/24

Right Out:  $-343.806 \pm 1845.735$   $\chi^2/\text{NDF}$ : 0.0/1

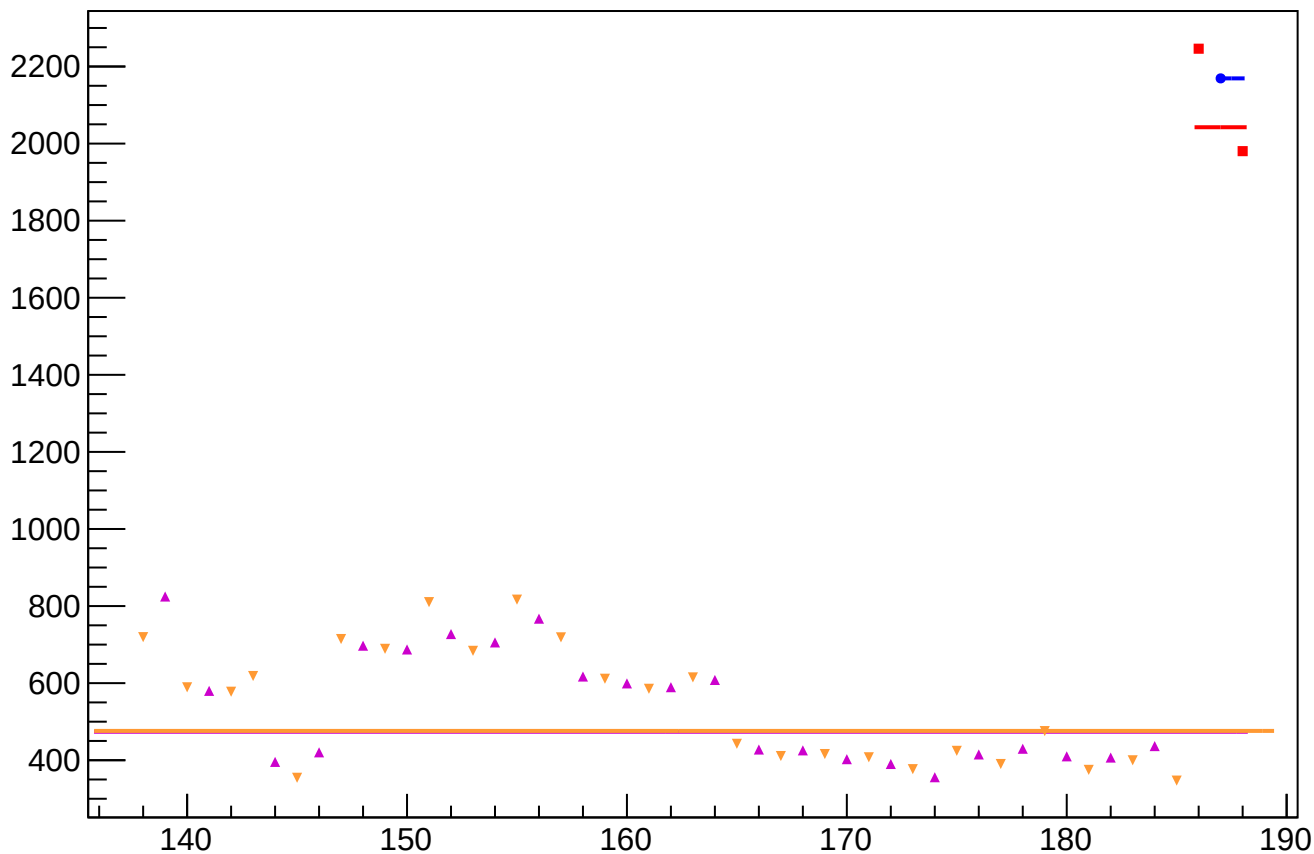
Left In:  $-72.627 \pm 116.927$   $\chi^2/\text{NDF}$ : 29.1/22

+ sign  $495.309 \pm 115.497$   $\chi^2/\text{NDF}$ : 57.2/25

All:  $213.731 \pm 82.088$   $\chi^2/\text{NDF}$ : 98.3/50

- sign  $-73.711 \pm 116.693$   $\chi^2/\text{NDF}$ : 29.1/24

# asym\_sam\_3726\_avg\_rms vs Slug



Right In: 2169.209 $\pm$ 3.951  $\chi^2$ /NDF: 0.0/0

Left Out: 476.057 $\pm$ 0.082  $\chi^2$ /NDF:2461838.6/24

Right Out: 2042.433 $\pm$ 1.305  $\chi^2$ /NDF: 7419.9/1

Left In: 473.824 $\pm$ 0.083  $\chi^2$ /NDF:2113753.1/22

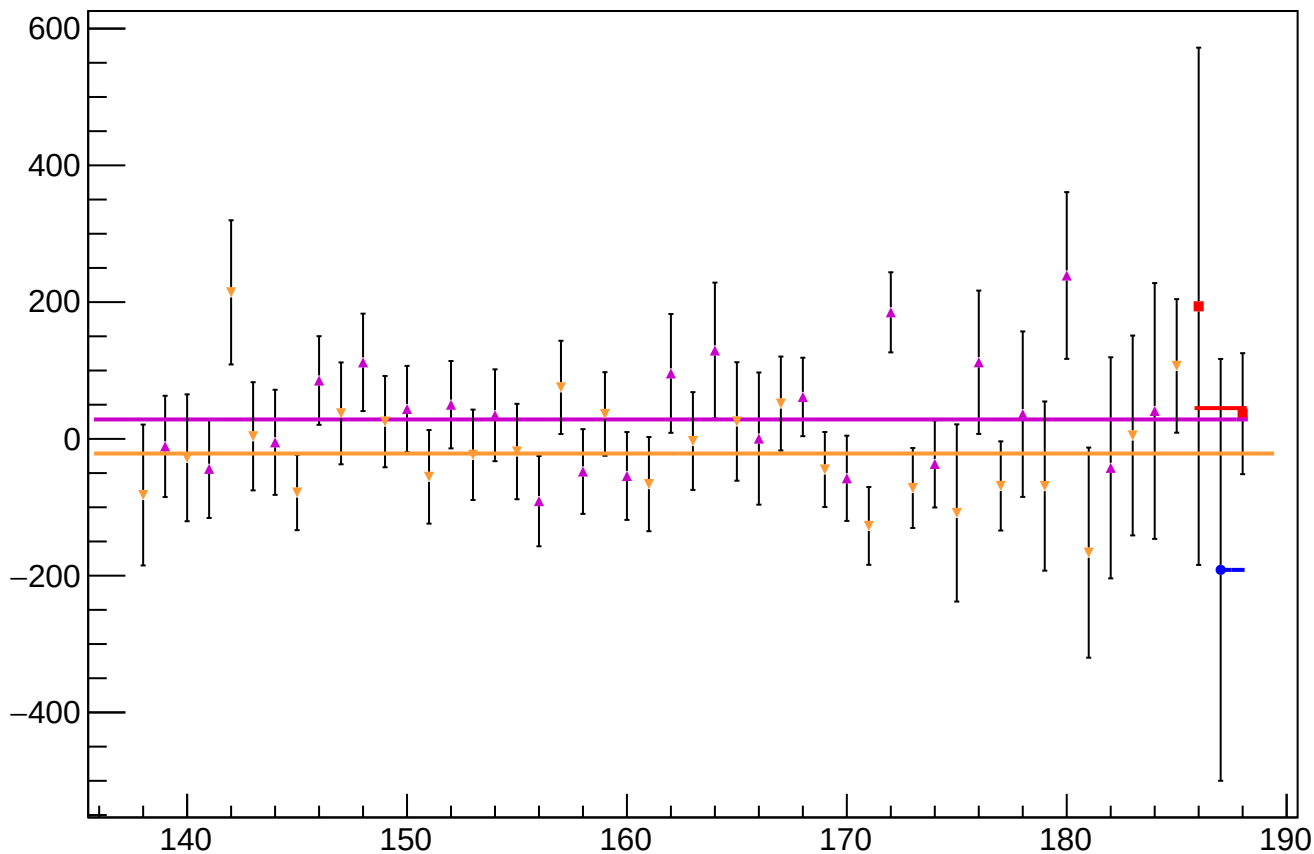
+ sign 476.780 $\pm$ 0.082  $\chi^2$ /NDF: 2645438.1/25

All: 478.420 $\pm$ 0.058  $\chi^2$ /NDF: 6206162.3/50

- sign 480.094 $\pm$ 0.083  $\chi^2$ /NDF: 3559909.7/24



# dit\_asym\_sam\_15\_48\_dd\_mean vs Slug



Right In:  $-191.542 \pm 308.432$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-21.397 \pm 14.800$   $\chi^2/\text{NDF}$ : 20.9/24

Right Out:  $45.025 \pm 86.141$   $\chi^2/\text{NDF}$ : 0.2/1

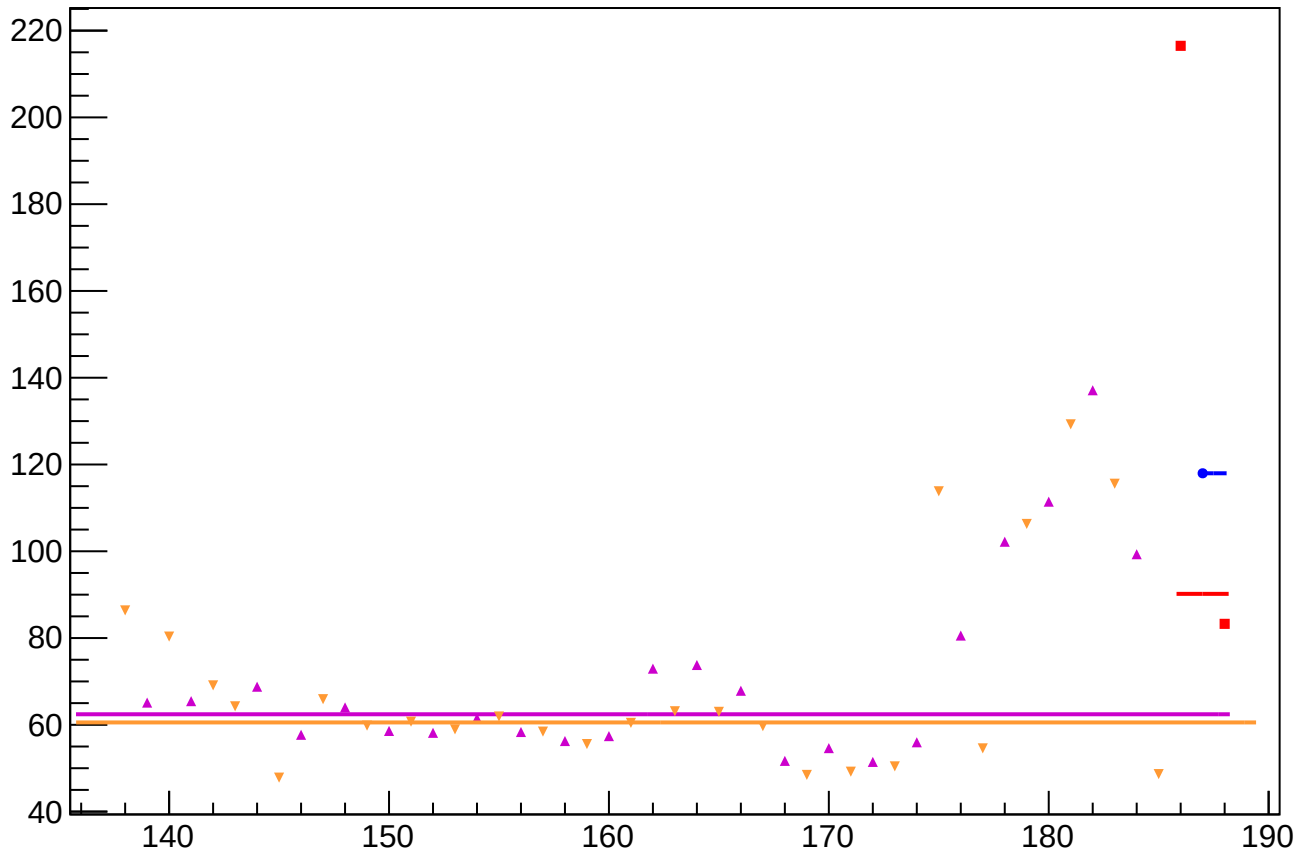
Left In:  $28.435 \pm 15.494$   $\chi^2/\text{NDF}$ : 26.2/22

+ sign  $-21.788 \pm 14.783$   $\chi^2/\text{NDF}$ : 21.2/25

All:  $2.796 \pm 10.614$   $\chi^2/\text{NDF}$ : 53.3/50

- sign  $28.955 \pm 15.249$   $\chi^2/\text{NDF}$ : 26.4/24

# dit\_asym\_sam\_15\_48\_dd\_rms vs Slug



Right In: 117.975 $\pm$ 0.218  $\chi^2$ /NDF: 0.0/0

Left Out: 60.551 $\pm$ 0.010  $\chi^2$ /NDF: 1951663.1/24

Right Out: 90.184 $\pm$ 0.061  $\chi^2$ /NDF: 235280.0/1

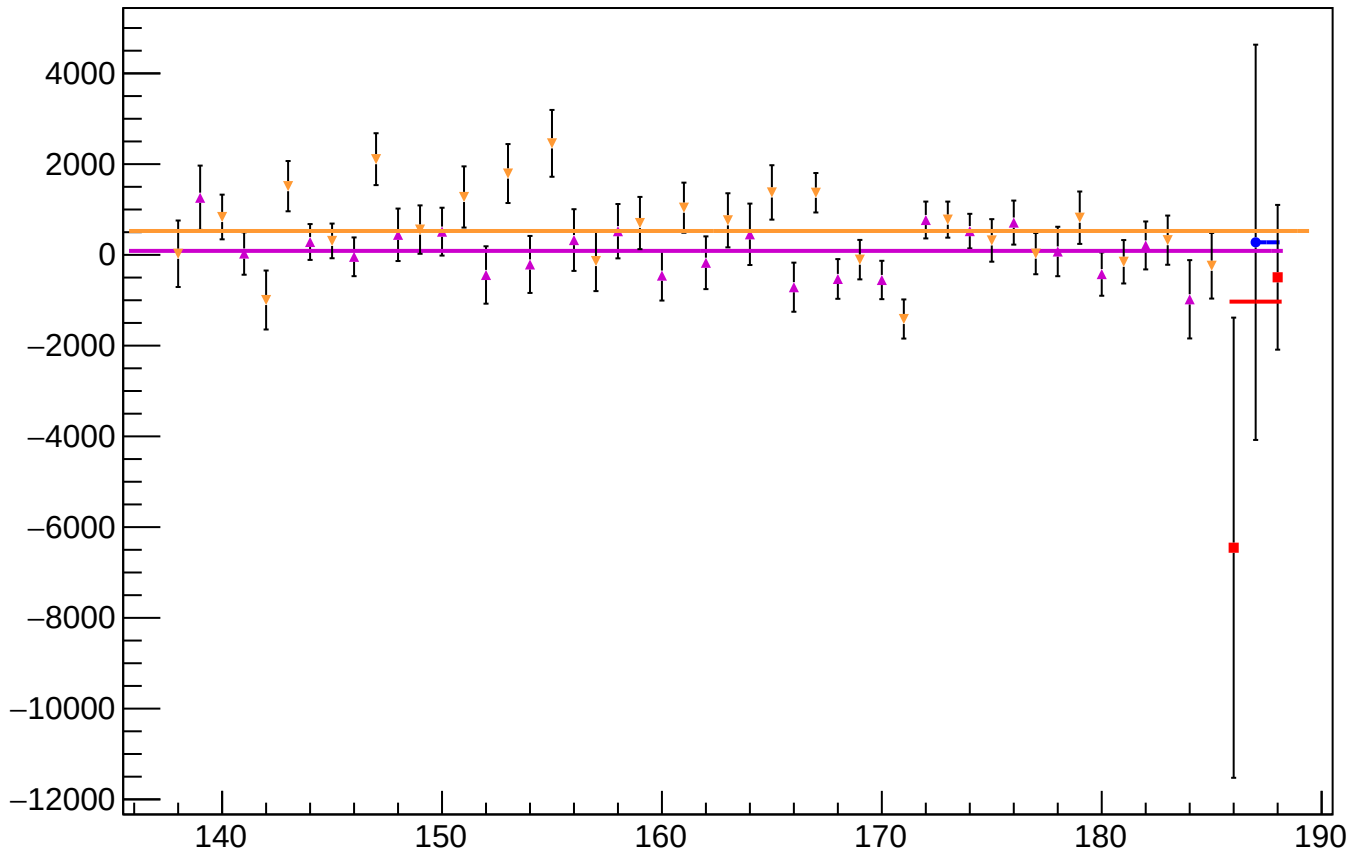
Left In: 62.435 $\pm$ 0.011  $\chi^2$ /NDF: 1445748.2/22

+ sign 60.683 $\pm$ 0.010  $\chi^2$ /NDF: 2020831.9/25

All: 61.953 $\pm$ 0.008  $\chi^2$ /NDF: 3933376.1/50

- sign 63.304 $\pm$ 0.011  $\chi^2$ /NDF: 1882073.3/24

# asym\_sam\_15\_48\_dd\_correction\_mean vs Slug



Right In: 277.121 $\pm$ 4355.700  $\chi^2$ /NDF: 0.0/0

Left Out: 526.705 $\pm$ 105.414  $\chi^2$ /NDF:65.0/24

Right Out: -1030.491 $\pm$ 1521.625  $\chi^2$ /NDF: 1.3/1

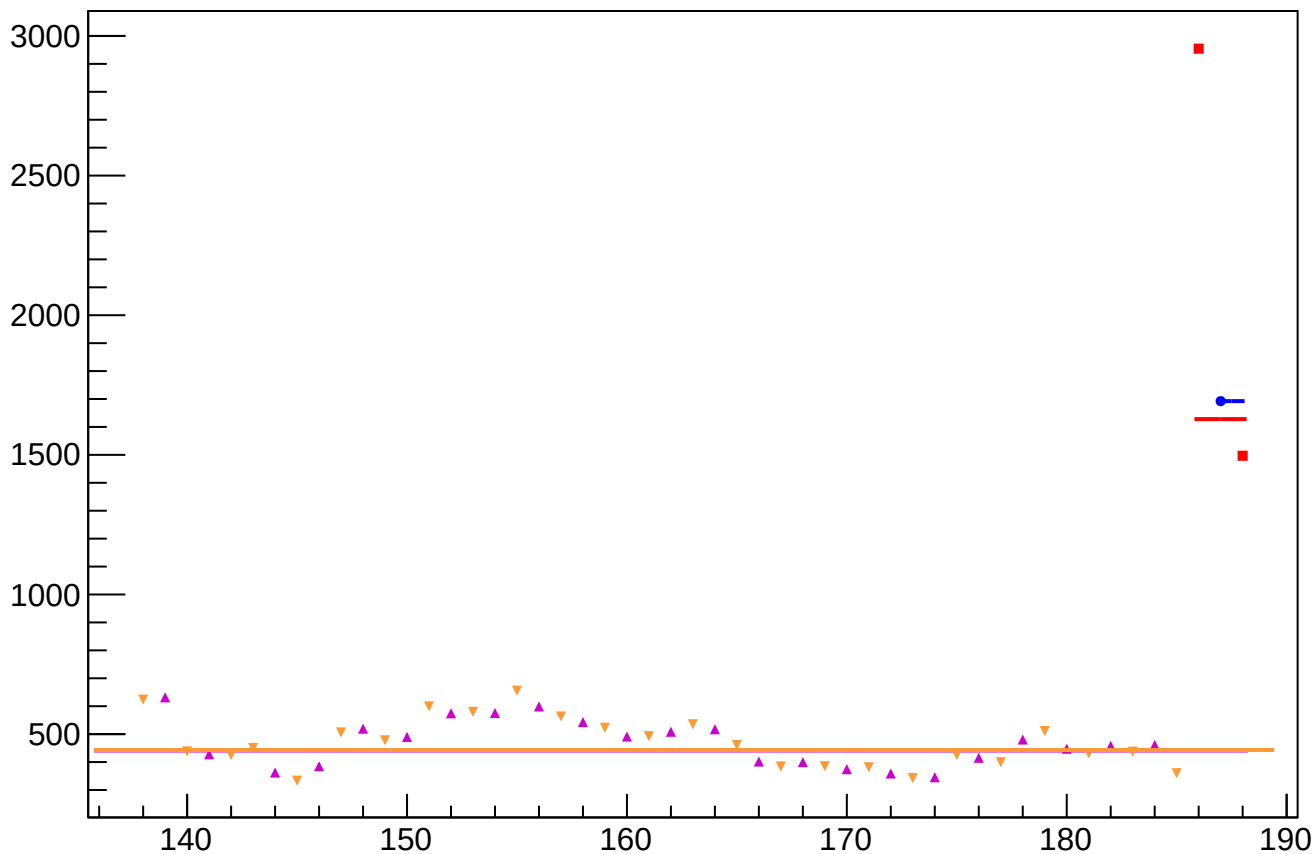
Left In: 87.989 $\pm$ 106.843  $\chi^2$ /NDF:22.1/22

+ sign 526.559 $\pm$ 105.384  $\chi^2$ /NDF: 65.0/25

All: 307.037 $\pm$ 74.937  $\chi^2$ /NDF: 97.7/50

- sign 82.502 $\pm$ 106.580  $\chi^2$ /NDF: 23.9/24

# asym\_sam\_15\_48\_dd\_correction\_rms vs Slug



Right In: 1692.346+/-3.080  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 443.031+/-0.075  $\chi^2/\text{NDF}$ : 1171662.6/24

Right Out: 1628.046+/-1.076  $\chi^2/\text{NDF}$ : 150379.6/1

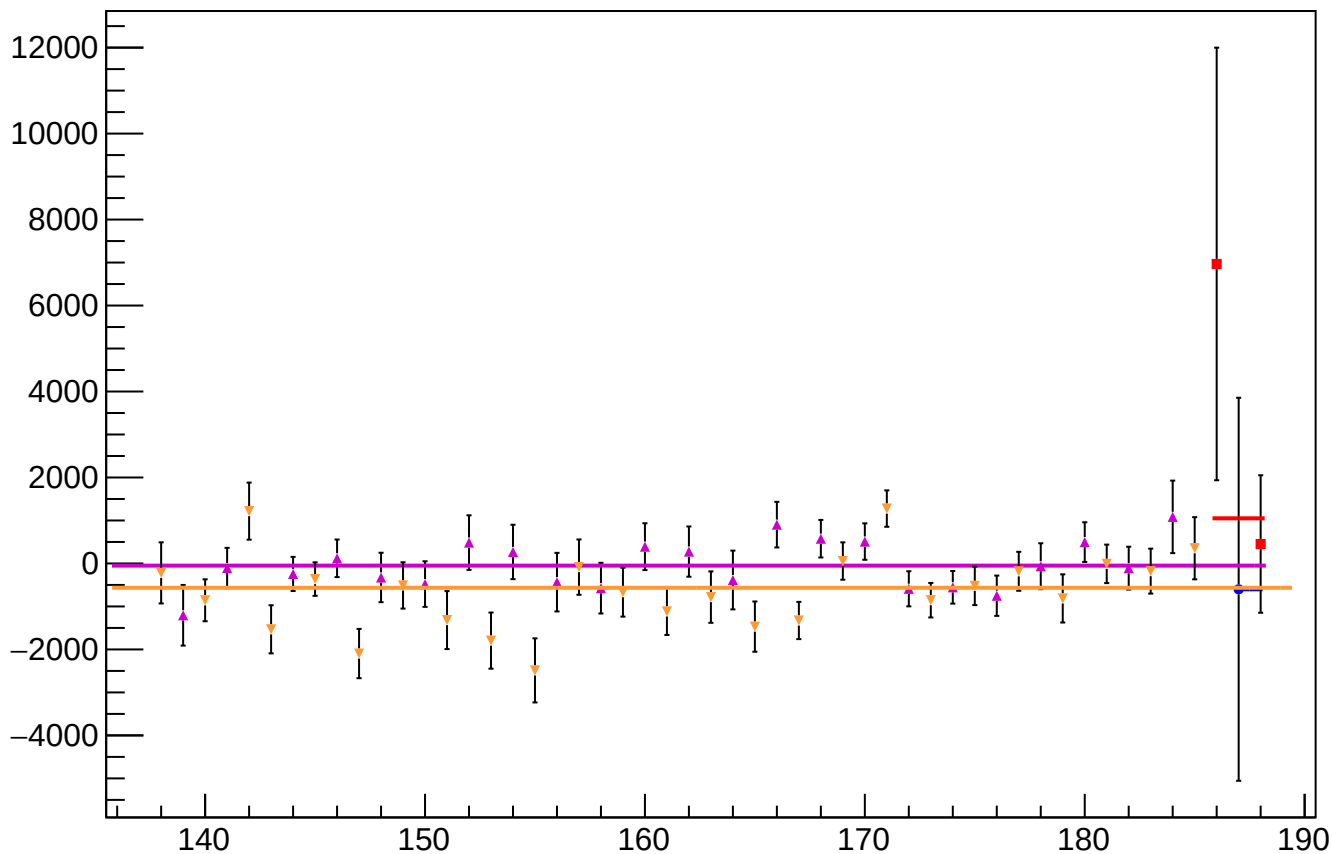
Left In: 441.359+/-0.076  $\chi^2/\text{NDF}$ : 1035839.5/22

+ sign 443.763+/-0.075  $\chi^2/\text{NDF}$ : 1336101.1/25

All: 445.452+/-0.053  $\chi^2/\text{NDF}$ : 3733822.4/50

- sign 447.181+/-0.075  $\chi^2/\text{NDF}$ : 2396681.0/24

# asym\_sam\_15\_48\_dd\_mean vs Slug



Right In: -600.770 $\pm$ 4455.156  $\chi^2$ /NDF: 0.0/0

Left Out: -565.545 $\pm$ 104.460  $\chi^2$ /NDF: 62.9/24

Right Out: 1050.275 $\pm$ 1524.239  $\chi^2$ /NDF: 1.5/1

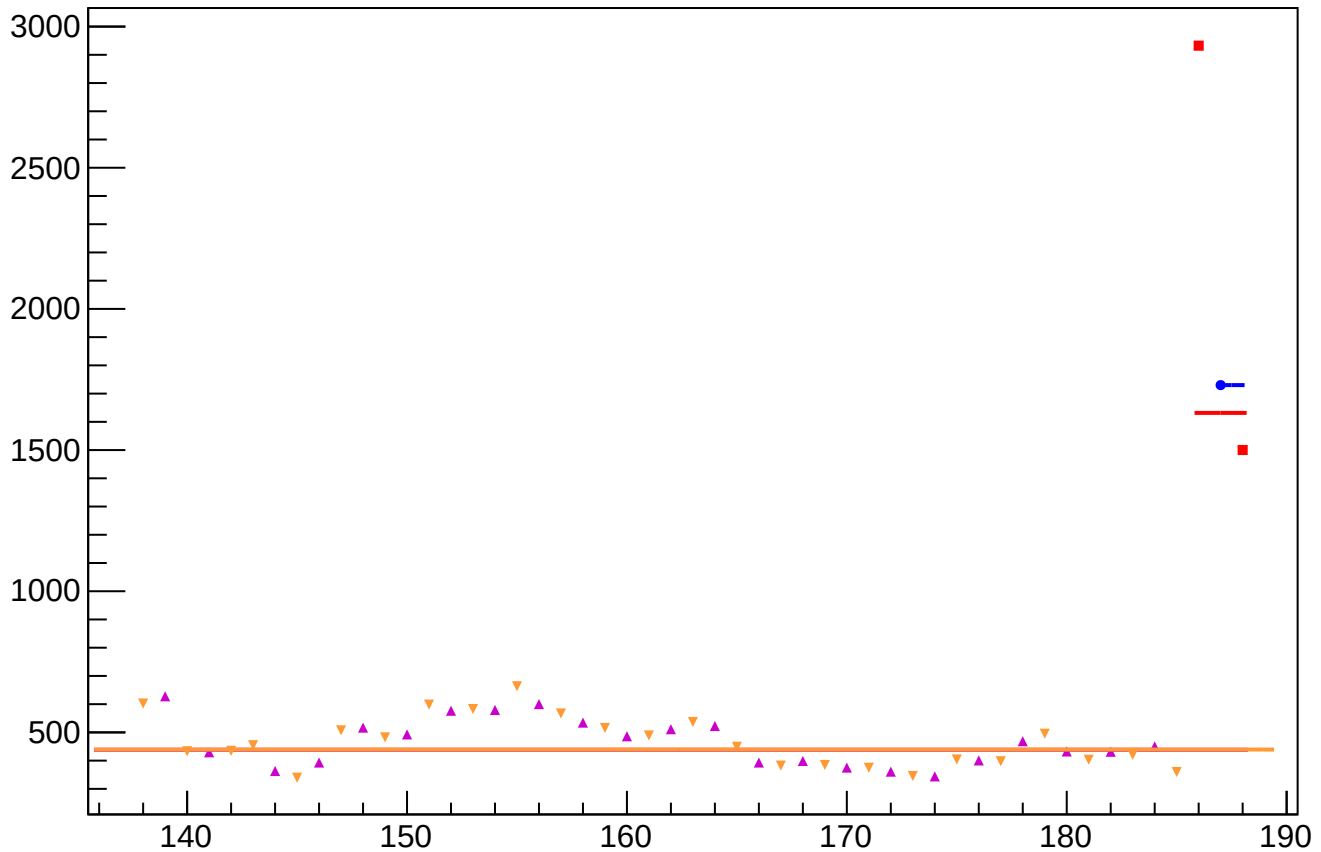
Left In: -50.387 $\pm$ 106.218  $\chi^2$ /NDF: 23.3/22

+ sign -565.564 $\pm$ 104.432  $\chi^2$ /NDF: 62.9/25

All: -309.100 $\pm$ 74.379  $\chi^2$ /NDF: 100.5/50

- sign -45.068 $\pm$ 105.961  $\chi^2$ /NDF: 25.3/24

# asym\_sam\_15\_48\_dd\_rms vs Slug



Right In: 1730.123+/-3.150  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 439.314+/-0.074  $\chi^2/\text{NDF}$ :1164031.3/24

Right Out: 1631.684+/-1.078  $\chi^2/\text{NDF}$ : 147146.4/1

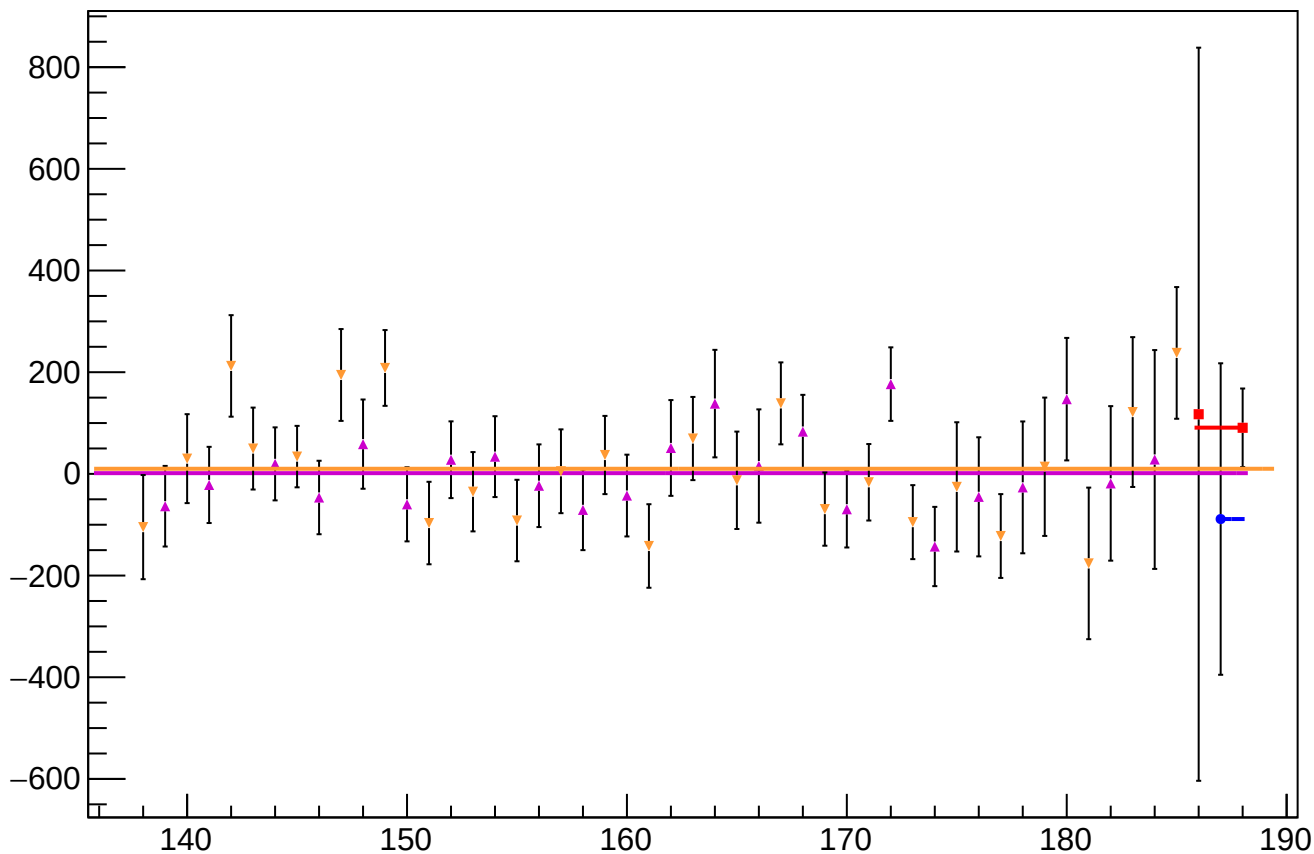
Left In: 438.365+/-0.075  $\chi^2/\text{NDF}$ :1024661.1/22

+ sign 440.023+/-0.074  $\chi^2/\text{NDF}$ : 1331830.4/25

All: 442.048+/-0.053  $\chi^2/\text{NDF}$ : 3725088.3/50

- sign 444.132+/-0.075  $\chi^2/\text{NDF}$ : 2391732.8/24

# dit\_asym\_sam\_37\_48\_dd\_mean vs Slug



Right In:  $-88.820 \pm 306.352$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $10.078 \pm 17.207$   $\chi^2/\text{NDF}$ : 38.7/24

Right Out:  $90.956 \pm 76.830$   $\chi^2/\text{NDF}$ : 0.0/1

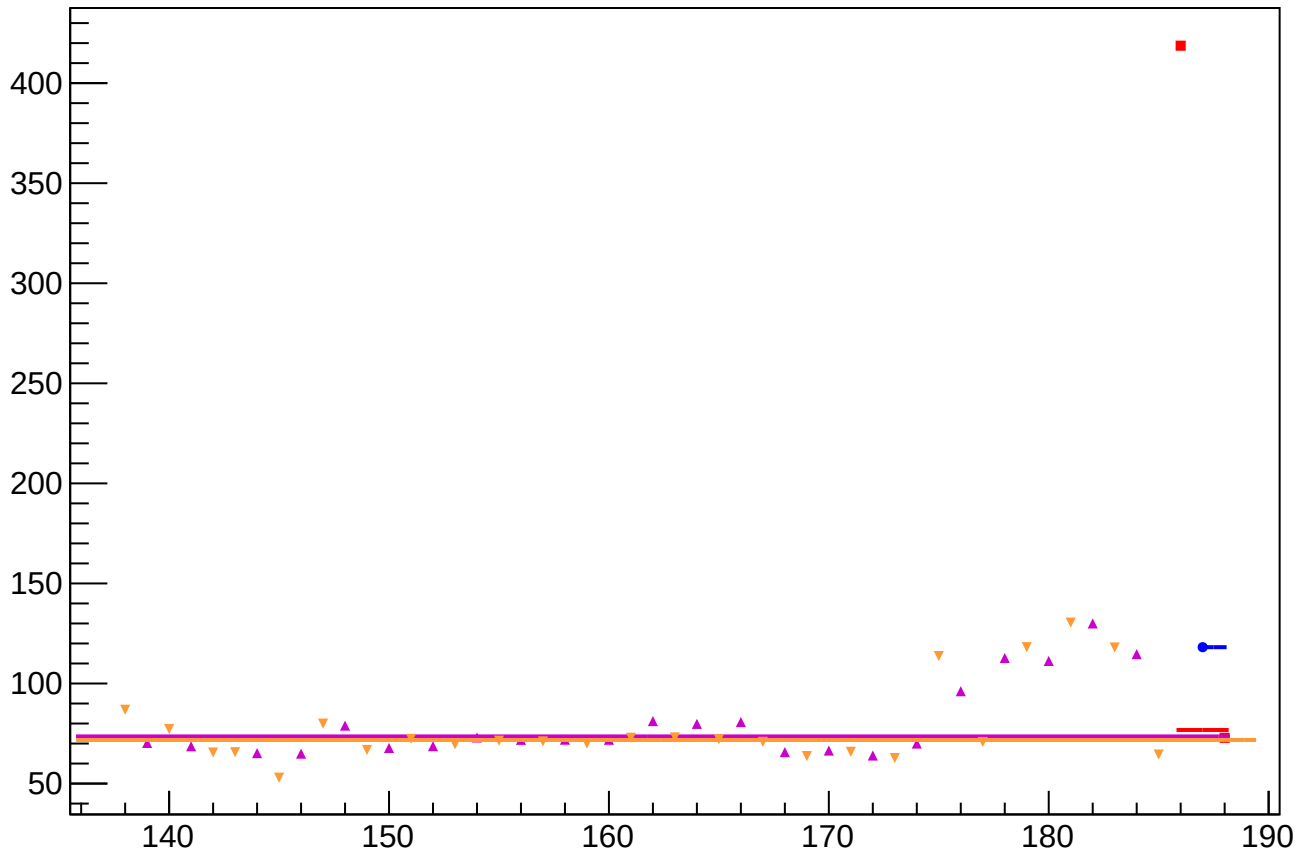
Left In:  $1.434 \pm 17.926$   $\chi^2/\text{NDF}$ : 19.0/22

+ sign  $9.767 \pm 17.180$   $\chi^2/\text{NDF}$ : 38.8/25

All:  $7.941 \pm 12.245$   $\chi^2/\text{NDF}$ : 59.2/50

- sign  $6.056 \pm 17.457$   $\chi^2/\text{NDF}$ : 20.3/24

# dit\_asym\_sam\_37\_48\_dd\_rms vs Slug



Right In: 118.153 $\pm$ 0.217  $\chi^2$ /NDF: 0.0/0

Left Out: 71.785 $\pm$ 0.012  $\chi^2$ /NDF: 1325726.8/24

Right Out: 76.780 $\pm$ 0.054  $\chi^2$ /NDF: 454951.4/1

Left In: 73.558 $\pm$ 0.013  $\chi^2$ /NDF: 1009353.9/22

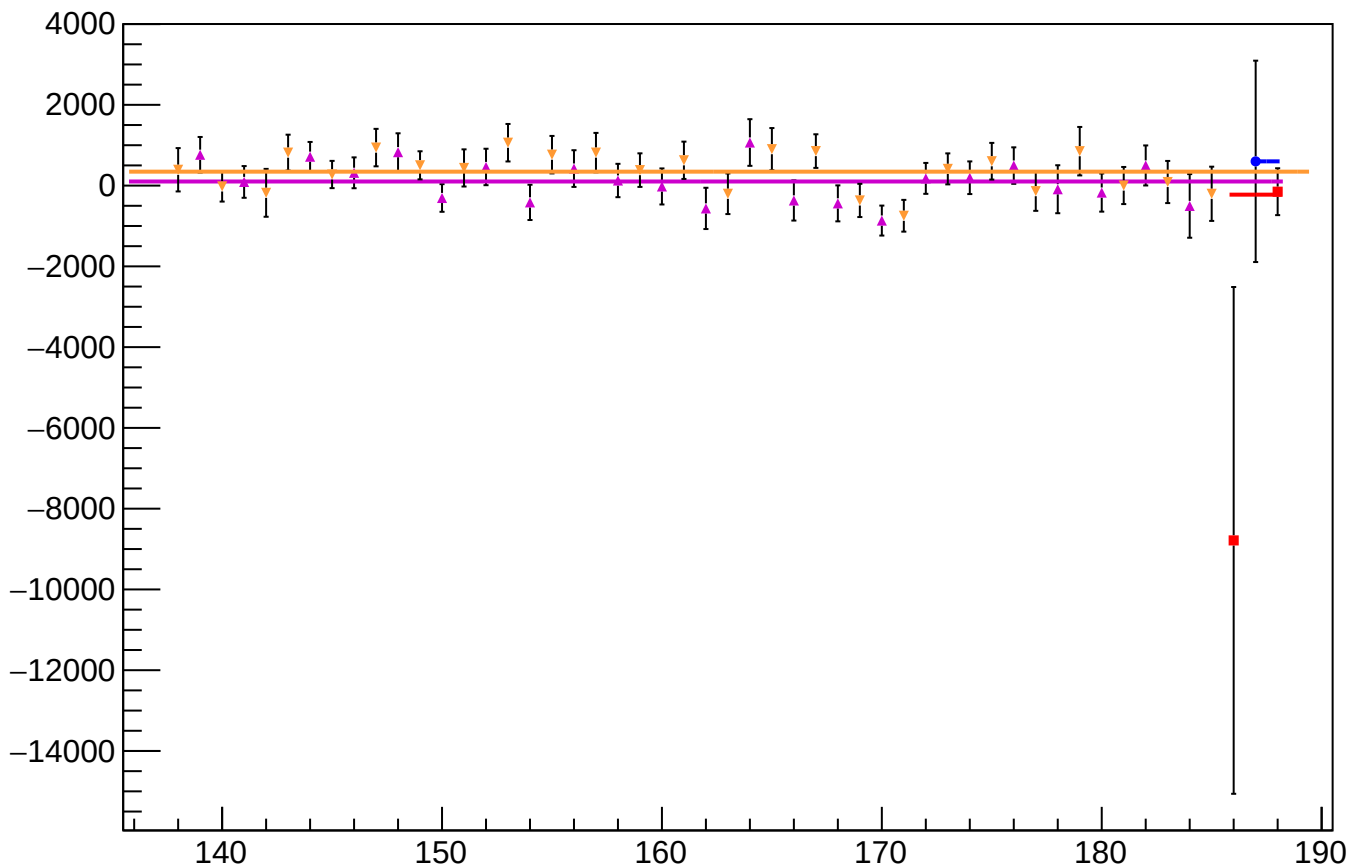
+ sign 71.931 $\pm$ 0.012  $\chi^2$ /NDF: 1371400.1/25

All: 72.813 $\pm$ 0.009  $\chi^2$ /NDF: 2849769.3/50

- sign 73.725 $\pm$ 0.012  $\chi^2$ /NDF: 1467639.8/24



# asym\_sam\_37\_48\_dd\_correction\_mean vs Slug



Right In: 600.290 $\pm$ 2493.297  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 345.360 $\pm$ 89.857  $\chi^2/\text{NDF}$ : 27.4/24

Right Out: -224.167 $\pm$ 577.800  $\chi^2/\text{NDF}$ : 1.9/1

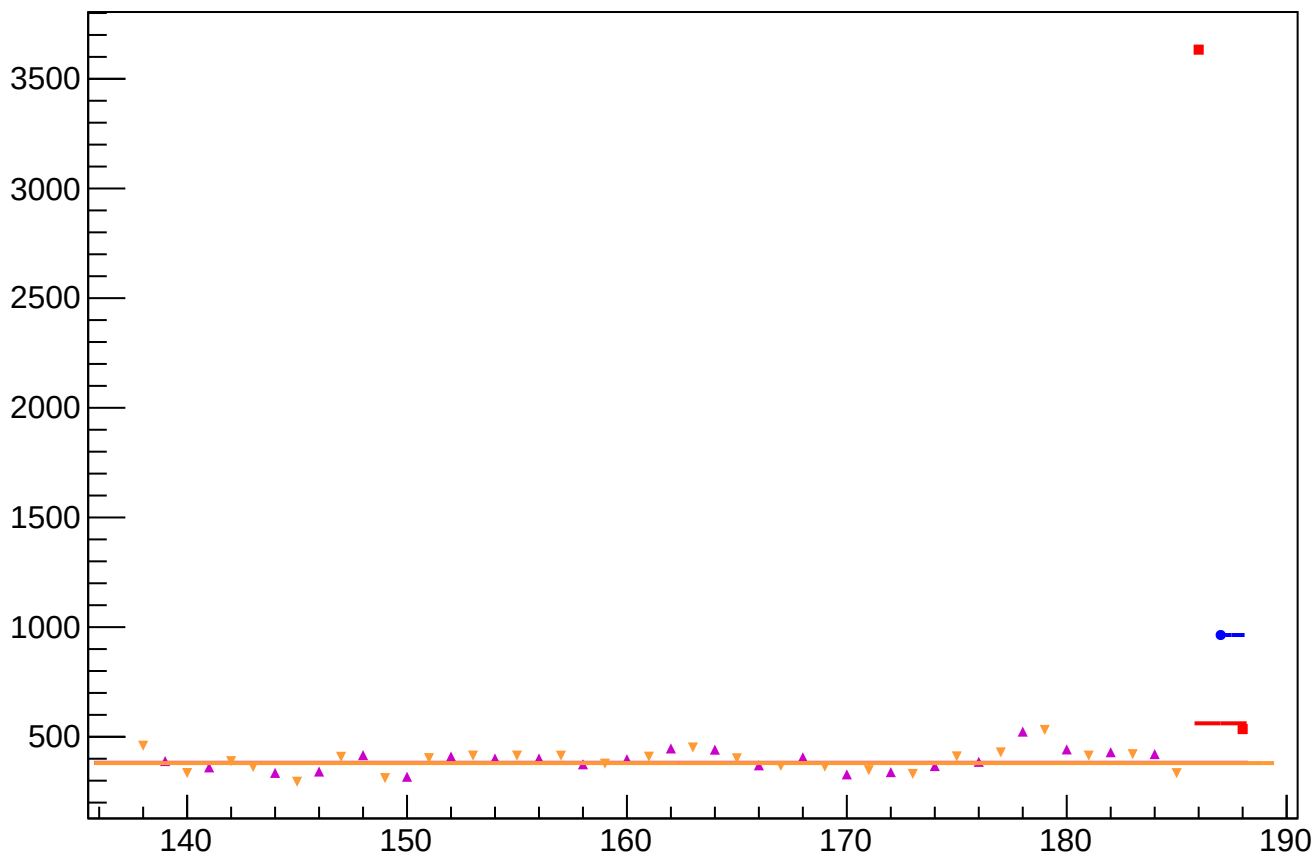
Left In: 101.648 $\pm$ 91.670  $\chi^2/\text{NDF}$ : 28.1/22

+ sign 345.691 $\pm$ 89.799  $\chi^2/\text{NDF}$ : 27.4/25

All: 220.702 $\pm$ 63.757  $\chi^2/\text{NDF}$ : 61.5/50

- sign 93.648 $\pm$ 90.538  $\chi^2/\text{NDF}$ : 30.2/24

# asym\_sam\_37\_48\_dd\_correction\_rms vs Slug



Right In: 964.097 $\pm$ 1.763  $\chi^2$ /NDF: 0.0/0

Left Out: 380.206 $\pm$ 0.064  $\chi^2$ /NDF: 616620.6/24

Right Out: 561.466 $\pm$ 0.409  $\chi^2$ /NDF: 483352.3/1

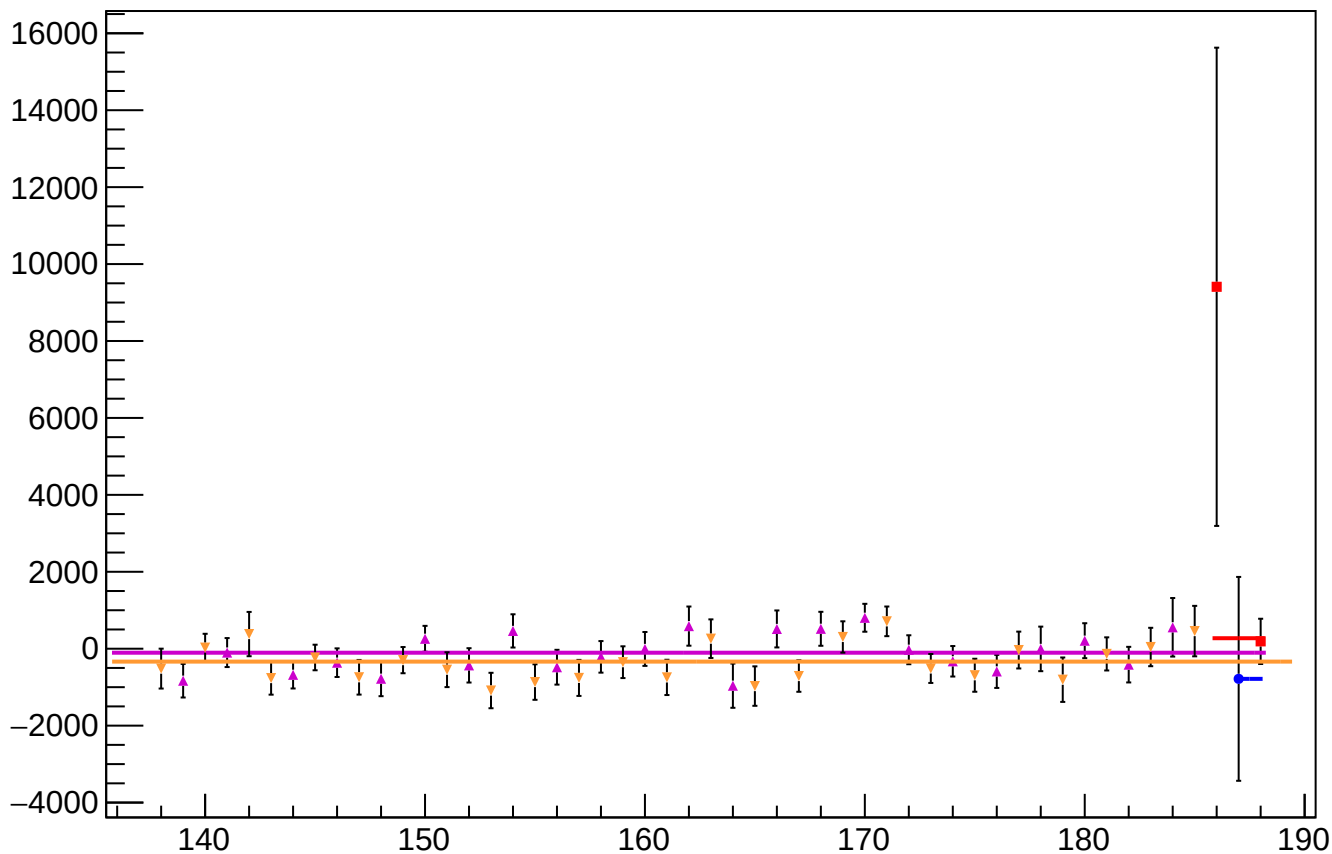
Left In: 381.474 $\pm$ 0.065  $\chi^2$ /NDF: 461021.8/22

+ sign 380.964 $\pm$ 0.063  $\chi^2$ /NDF: 726162.7/25

All: 383.408 $\pm$ 0.045  $\chi^2$ /NDF: 1862840.8/50

- sign 385.893 $\pm$ 0.064  $\chi^2$ /NDF: 1133689.0/24

# asym\_sam\_37\_48\_dd\_mean vs Slug



Right In: -783.813 $\pm$ 2650.230  $\chi^2$ /NDF: 0.0/0

Left Out: -335.242 $\pm$ 87.706  $\chi^2$ /NDF: 28.3/24

Right Out: 272.822 $\pm$ 585.309  $\chi^2$ /NDF: 2.2/1

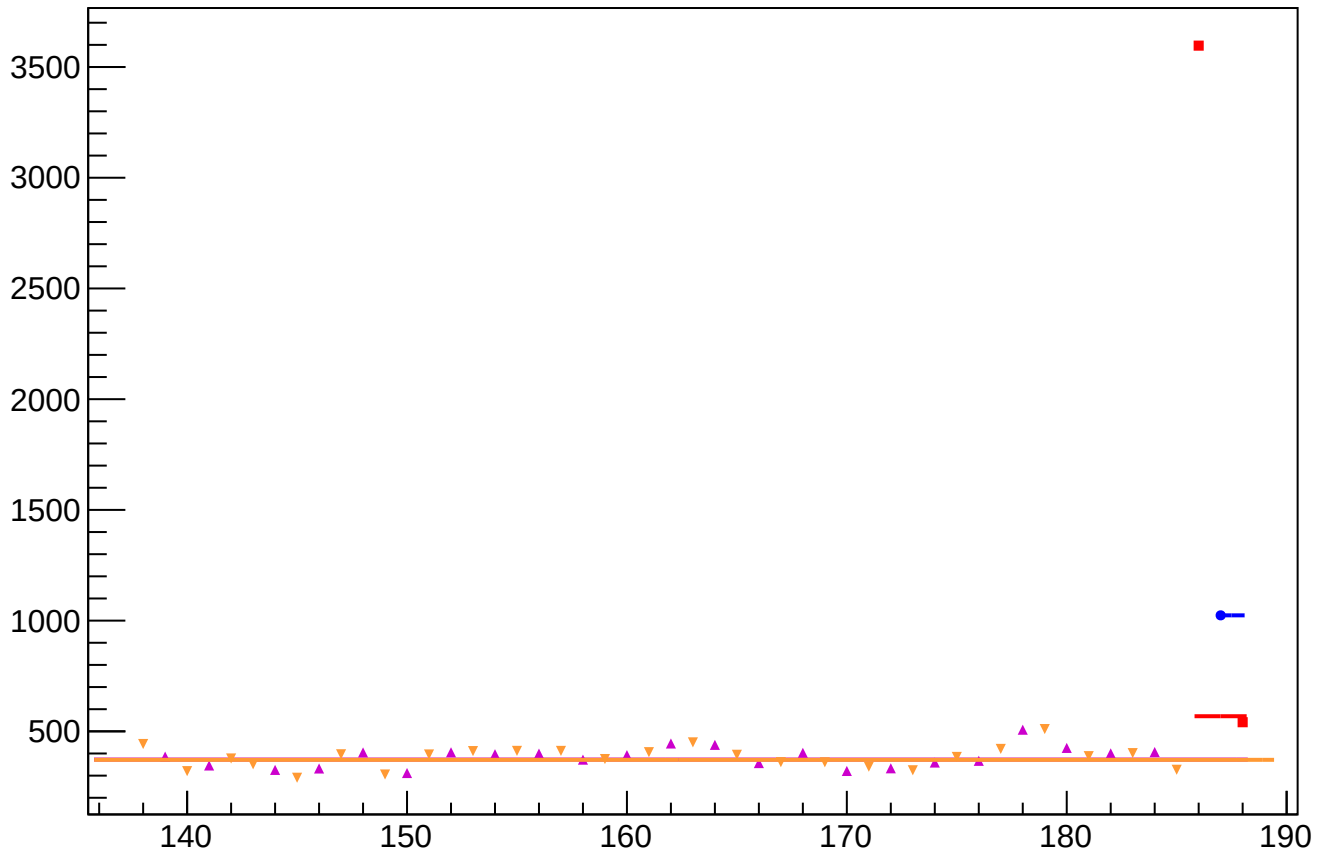
Left In: -104.117 $\pm$ 89.613  $\chi^2$ /NDF: 29.7/22

+ sign -335.733 $\pm$ 87.658  $\chi^2$ /NDF: 28.3/25

All: -216.866 $\pm$ 62.307  $\chi^2$ /NDF: 64.3/50

- sign -95.484 $\pm$ 88.581  $\chi^2$ /NDF: 32.2/24

# asym\_sam\_37\_48\_dd\_rms vs Slug



Right In: 1023.828+/-1.874  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 371.375+/-0.062  $\chi^2/\text{NDF}$ : 604123.3/24

Right Out: 568.284+/-0.414  $\chi^2/\text{NDF}$ : 478771.0/1

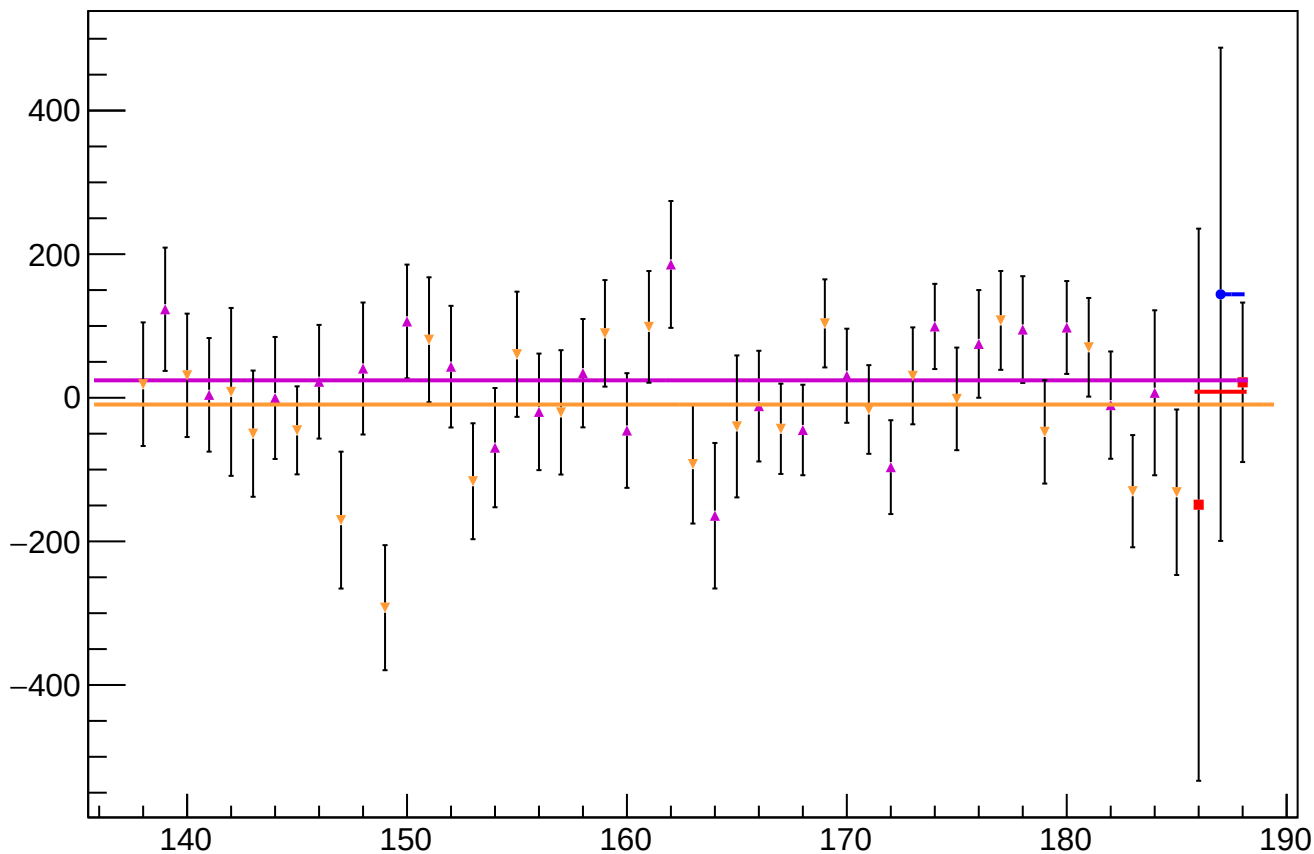
Left In: 372.574+/-0.063  $\chi^2/\text{NDF}$ : 464397.2/22

+ sign 372.089+/-0.062  $\chi^2/\text{NDF}$ : 725207.1/25

All: 374.547+/-0.044  $\chi^2/\text{NDF}$ : 1890039.0/50

- sign 377.057+/-0.063  $\chi^2/\text{NDF}$ : 1161654.0/24

dit\_asym\_sam\_15\_26\_dd\_mean vs Slug



Right In: 144.116 $\pm$ 343.470  $\chi^2$ /NDF: 0.0/0

Left Out: -9.398 $\pm$ 15.471  $\chi^2$ /NDF:34.7/24

Right Out: 8.401 $\pm$ 106.703  $\chi^2$ /NDF: 0.2/1

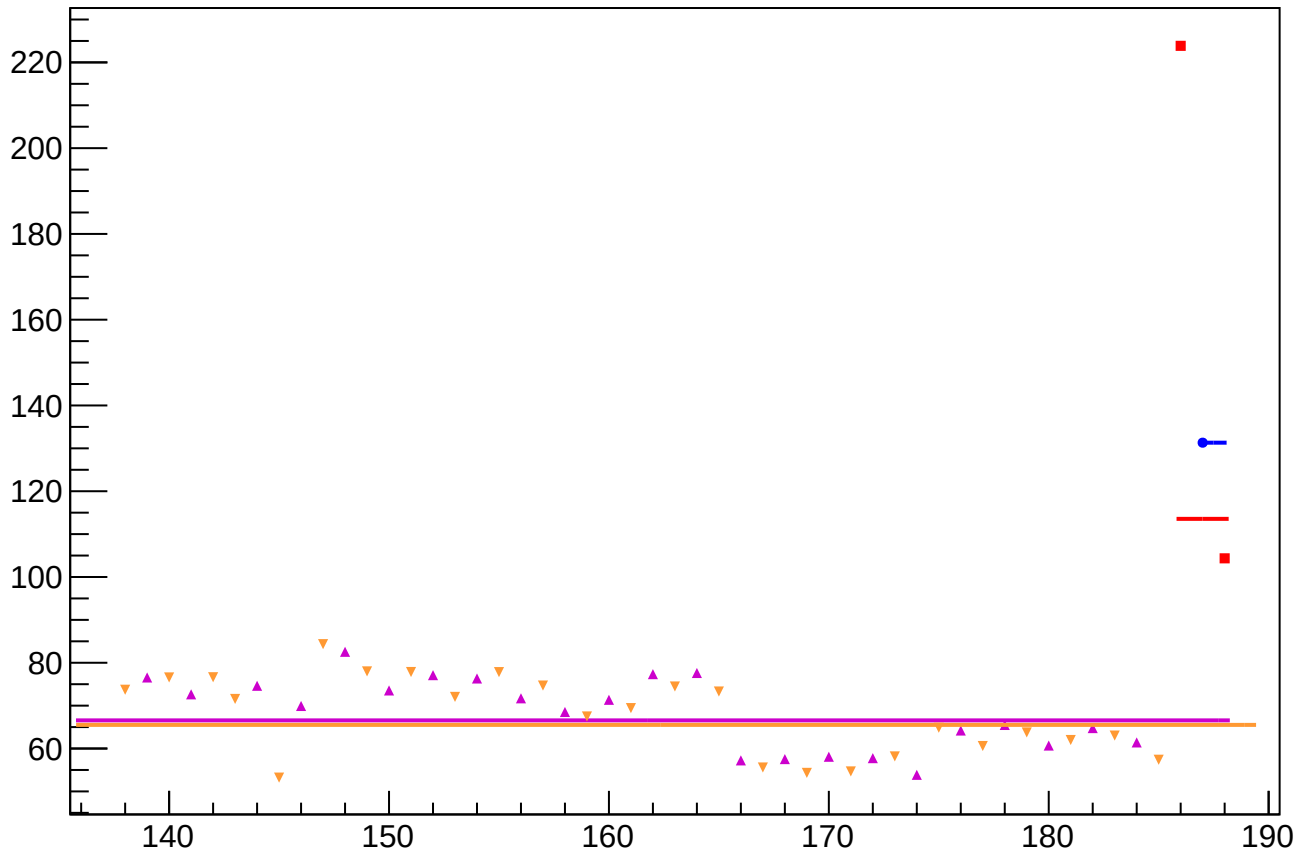
Left In: 24.293 $\pm$ 16.034  $\chi^2$ /NDF:21.1/22

+ sign -9.087 $\pm$ 15.455  $\chi^2$ /NDF: 34.9/25

All: 7.006 $\pm$ 11.067  $\chi^2$ /NDF: 58.5/50

- sign 23.942 $\pm$ 15.856  $\chi^2$ /NDF: 21.3/24

# dit\_asym\_sam\_15\_26\_dd\_rms vs Slug



Right In: 131.320 $\pm$ 0.243  $\chi^2$ /NDF: 0.0/0

Left Out: 65.512 $\pm$ 0.011  $\chi^2$ /NDF: 666993.4/24

Right Out: 113.557 $\pm$ 0.075  $\chi^2$ /NDF: 178342.9/1

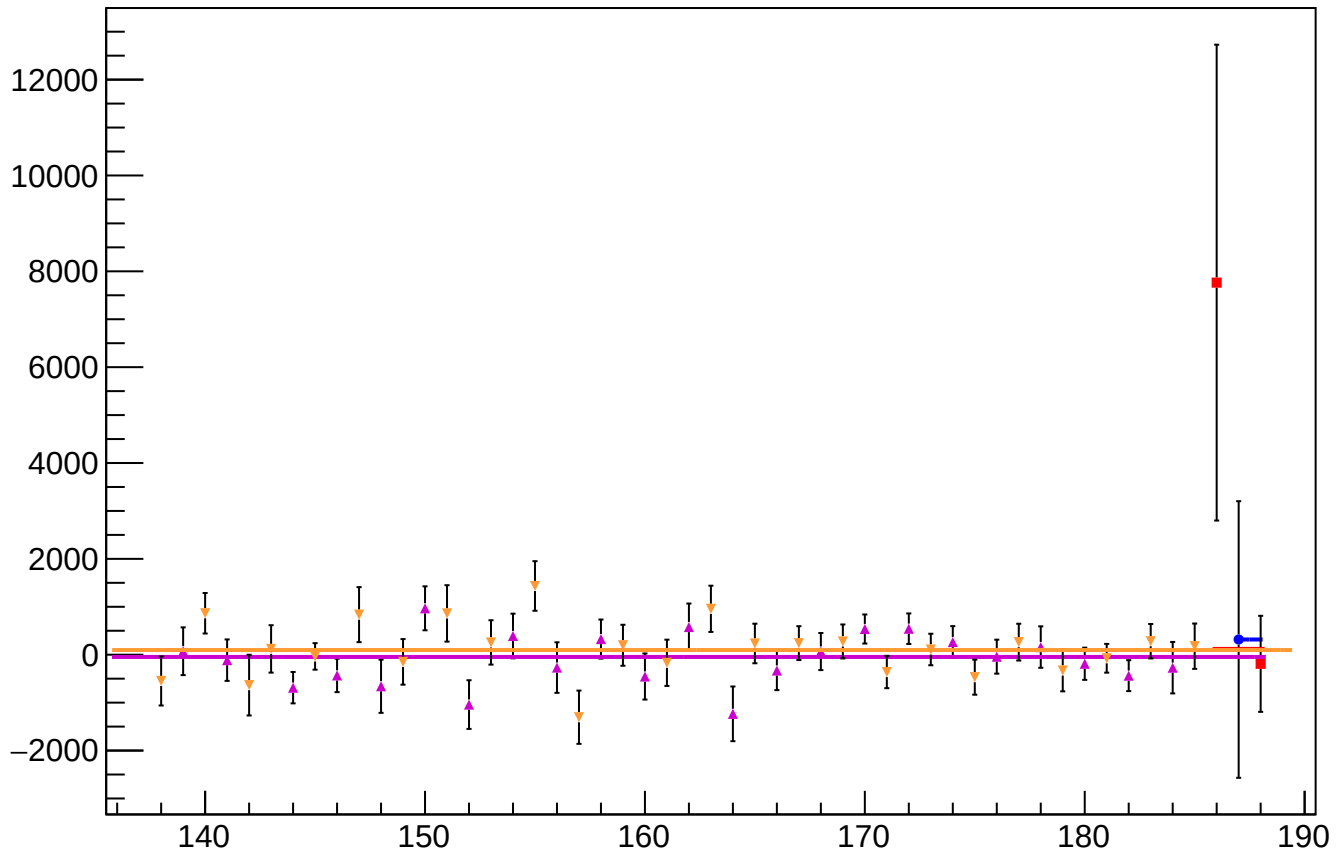
Left In: 66.564 $\pm$ 0.011  $\chi^2$ /NDF: 521302.1/22

+ sign 65.645 $\pm$ 0.011  $\chi^2$ /NDF: 740265.4/25

All: 66.598 $\pm$ 0.008  $\chi^2$ /NDF: 1834874.4/50

- sign 67.601 $\pm$ 0.011  $\chi^2$ /NDF: 1078999.3/24

# asym\_sam\_15\_26\_dd\_correction\_mean vs Slug



Right In:  $317.423 \pm 2885.854$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $97.420 \pm 82.238$   $\chi^2/\text{NDF}$ : 33.3/24

Right Out:  $121.149 \pm 982.243$   $\chi^2/\text{NDF}$ : 2.5/1

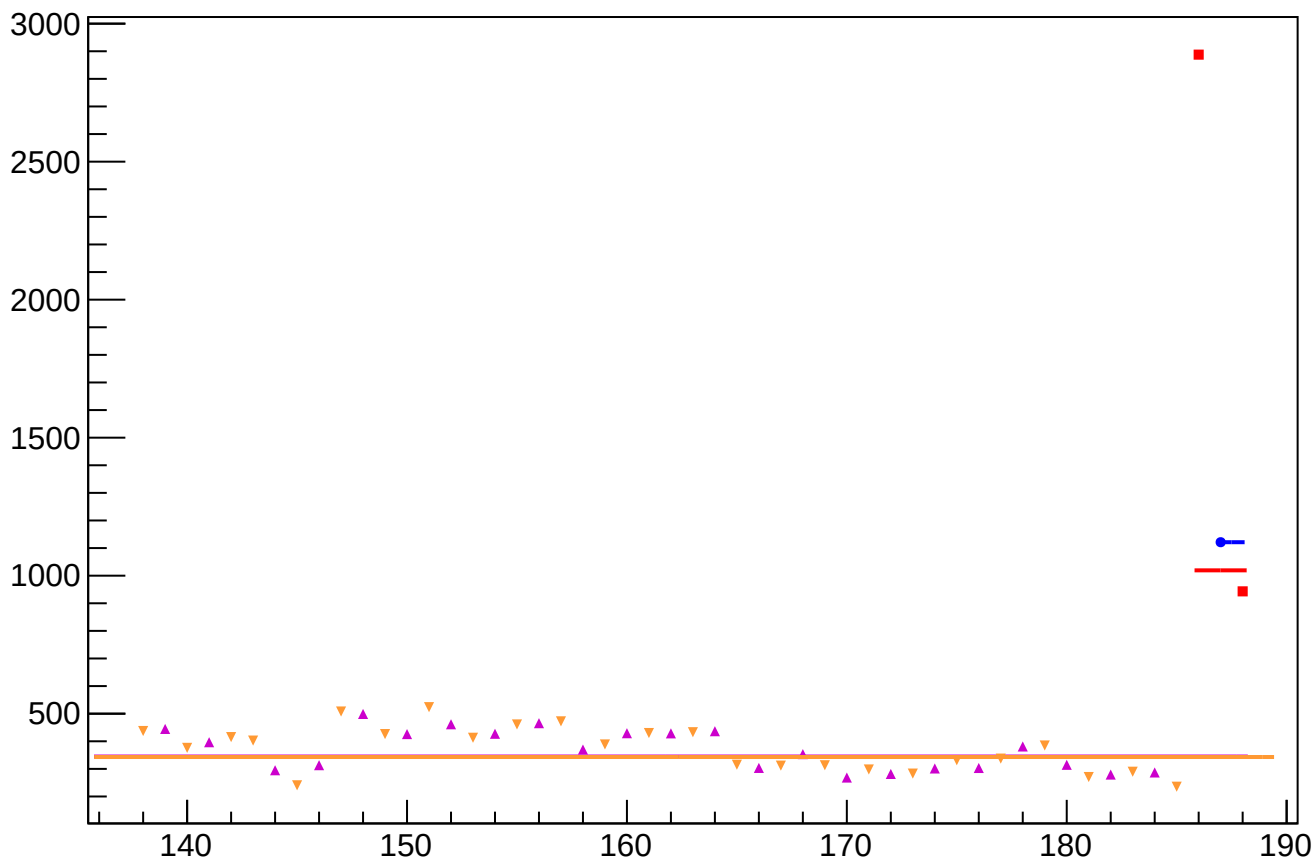
Left In:  $-46.660 \pm 83.857$   $\chi^2/\text{NDF}$ : 34.2/22

+ sign  $97.599 \pm 82.205$   $\chi^2/\text{NDF}$ : 33.3/25

All:  $27.240 \pm 58.598$   $\chi^2/\text{NDF}$ : 71.5/50

- sign  $-45.446 \pm 83.553$   $\chi^2/\text{NDF}$ : 36.7/24

# asym\_sam\_15\_26\_dd\_correction\_rms vs Slug



Right In: 1121.257 $\pm$ 2.041  $\chi^2$ /NDF: 0.0/0

Left Out: 342.995 $\pm$ 0.058  $\chi^2$ /NDF: 1665121.0/24

Right Out: 1019.310 $\pm$ 0.695  $\chi^2$ /NDF: 294773.8/1

Left In: 344.818 $\pm$ 0.059  $\chi^2$ /NDF: 1264545.0/22

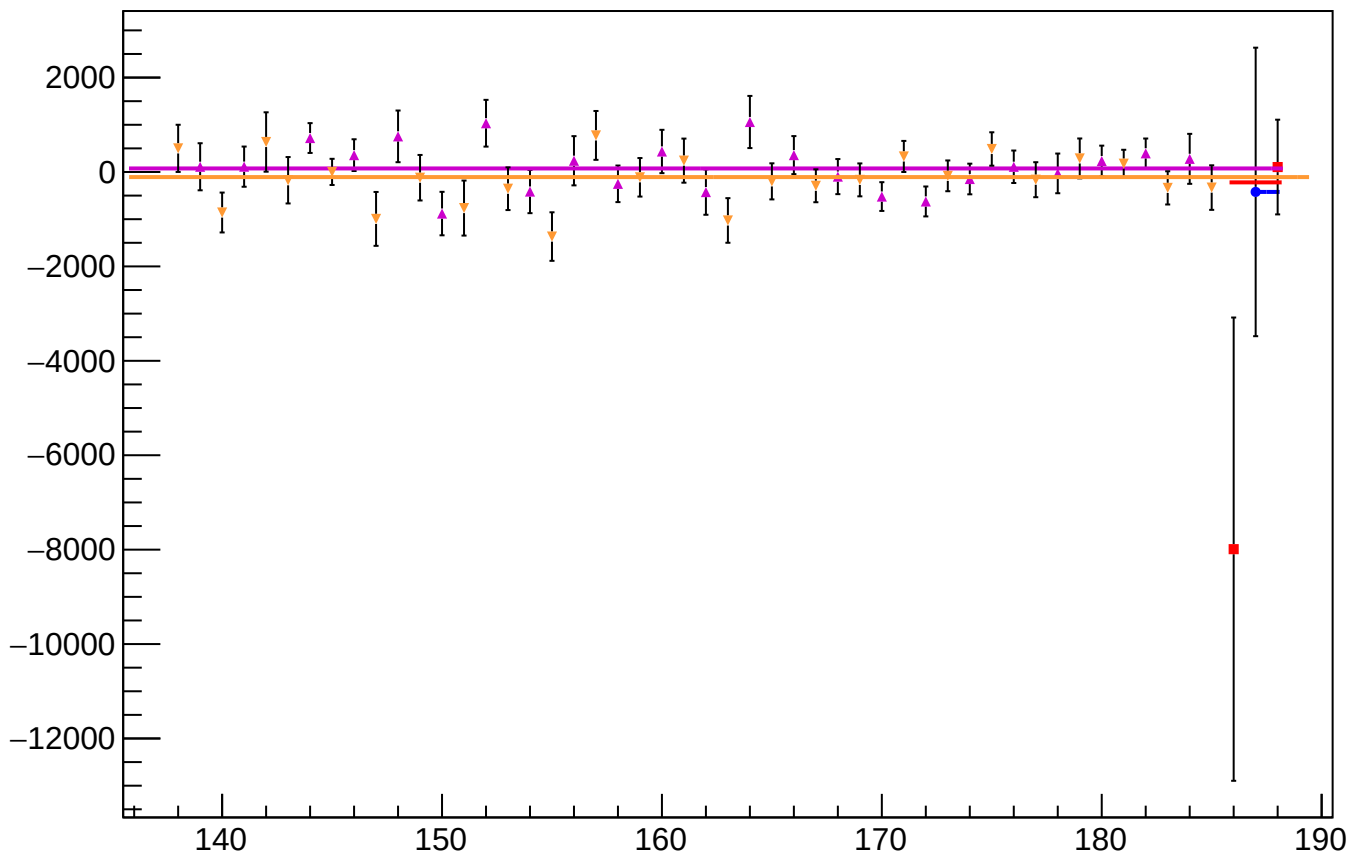
+ sign 343.627 $\pm$ 0.058  $\chi^2$ /NDF: 1810459.1/25

All: 346.613 $\pm$ 0.041  $\chi^2$ /NDF: 4311394.3/50

- sign 349.699 $\pm$ 0.059  $\chi^2$ /NDF: 2495568.2/24



# asym\_sam\_15\_26\_dd\_mean vs Slug



Right In:  $-422.369 \pm 3055.841$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-108.037 \pm 80.579$   $\chi^2/\text{NDF}$ : 30.9/24

Right Out:  $-219.996 \pm 982.725$   $\chi^2/\text{NDF}$ : 2.6/1

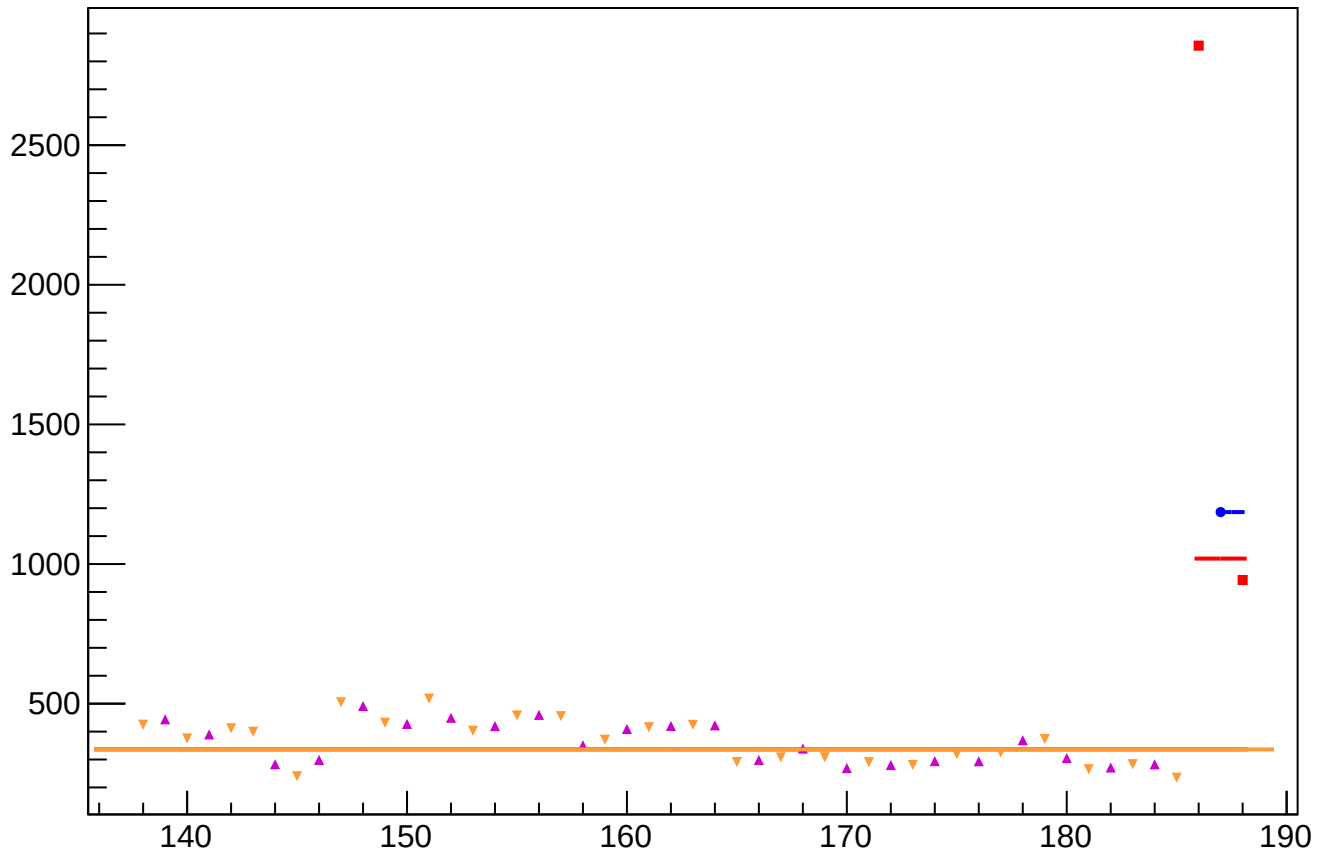
Left In:  $74.986 \pm 81.949$   $\chi^2/\text{NDF}$ : 32.7/22

+ sign  $-108.255 \pm 80.551$   $\chi^2/\text{NDF}$ : 30.9/25

All:  $-18.898 \pm 57.348$   $\chi^2/\text{NDF}$ : 68.7/50

- sign  $72.949 \pm 81.666$   $\chi^2/\text{NDF}$ : 35.4/24

# asym\_sam\_15\_26\_dd\_rms vs Slug



Right In: 1186.048 $\pm$ 2.161  $\chi^2$ /NDF: 0.0/0

Left Out: 336.231 $\pm$ 0.057  $\chi^2$ /NDF: 1659693.0/24

Right Out: 1019.601 $\pm$ 0.695  $\chi^2$ /NDF: 291973.3/1

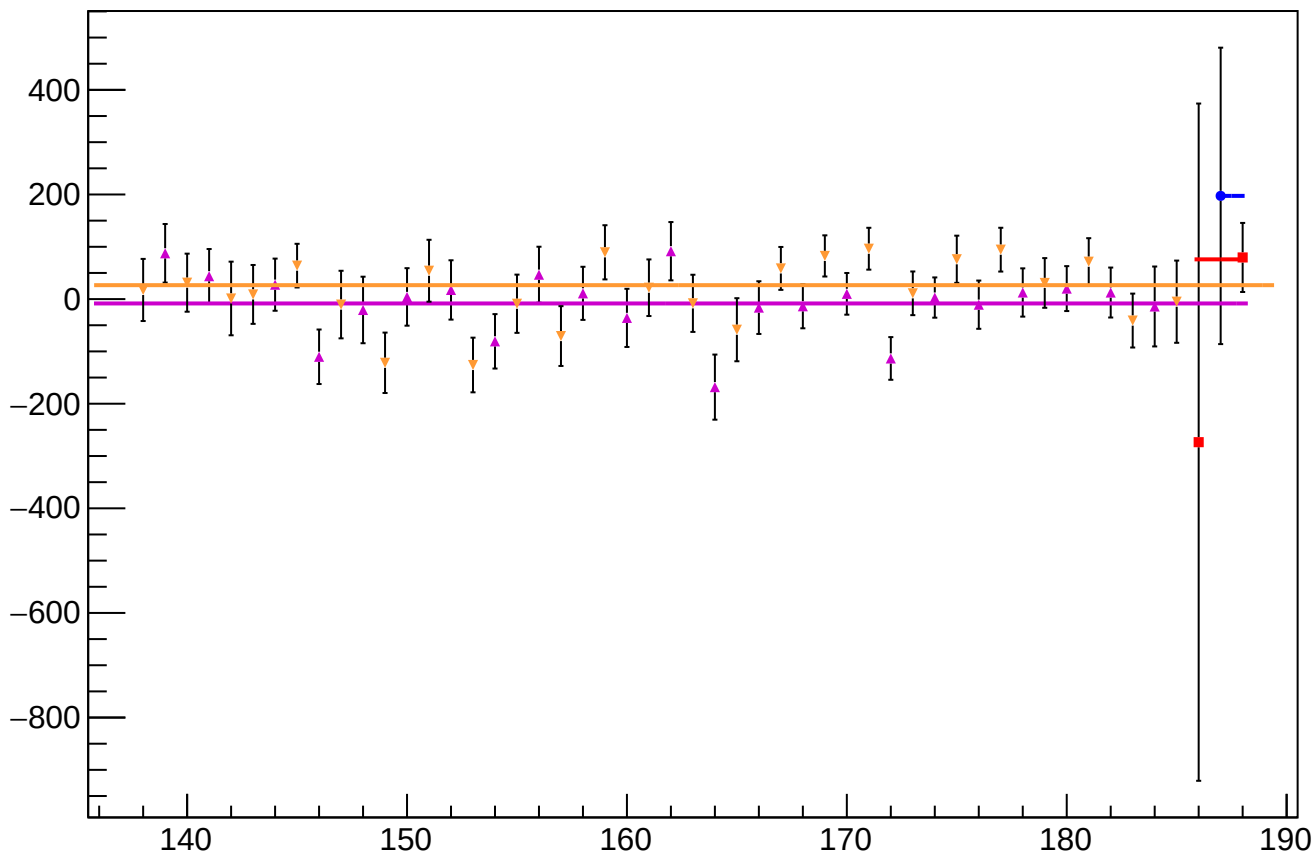
Left In: 336.396 $\pm$ 0.058  $\chi^2$ /NDF: 1269587.6/22

+ sign 336.821 $\pm$ 0.057  $\chi^2$ /NDF: 1814260.3/25

All: 338.938 $\pm$ 0.041  $\chi^2$ /NDF: 4338594.5/50

- sign 341.114 $\pm$ 0.058  $\chi^2$ /NDF: 2521533.5/24

# dit\_asym\_sam\_37\_26\_dd\_mean vs Slug



Right In: 197.326 $\pm$ 283.352  $\chi^2$ /NDF: 0.0/0

Left Out: 26.633 $\pm$ 10.090  $\chi^2$ /NDF:36.5/24

Right Out: 75.975 $\pm$ 65.685  $\chi^2$ /NDF: 0.3/1

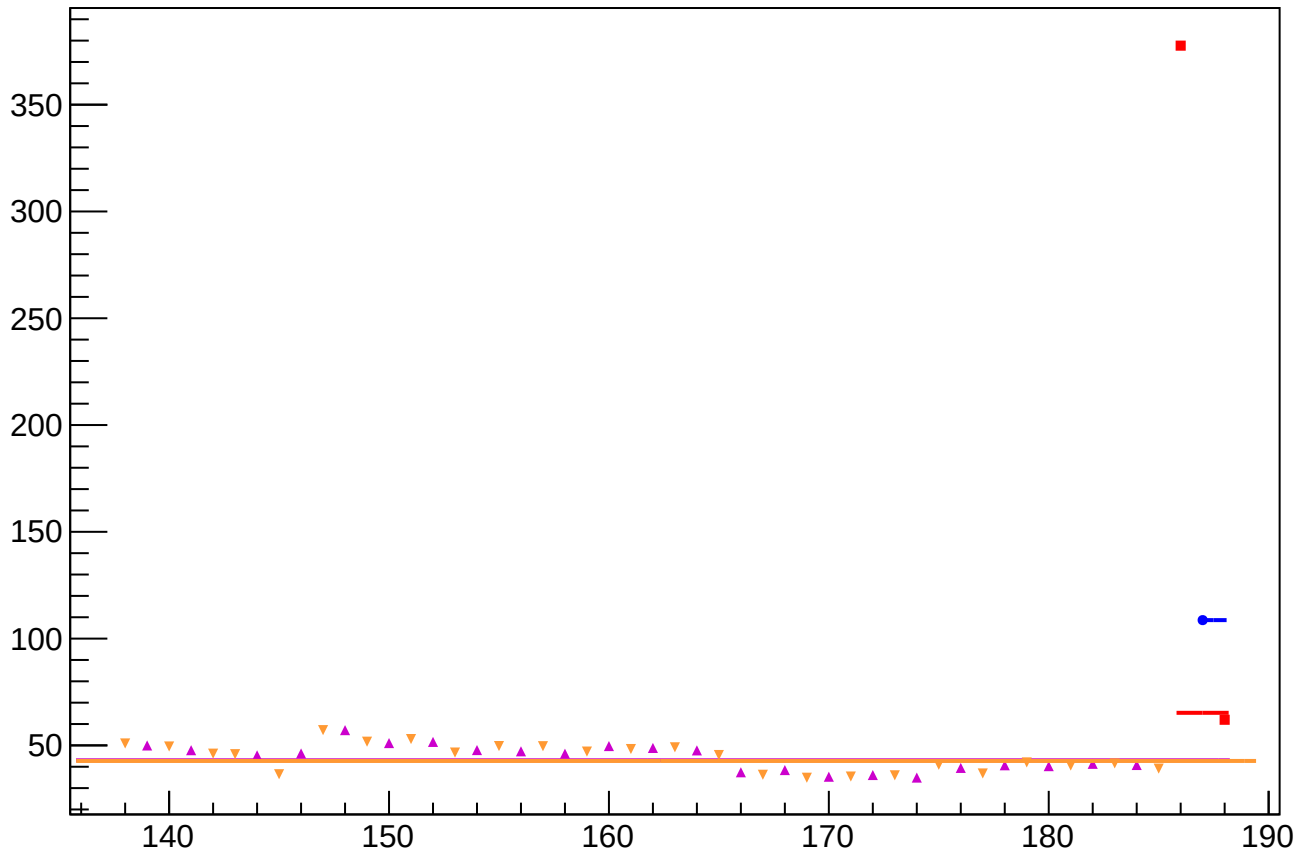
Left In: -8.325 $\pm$ 10.361  $\chi^2$ /NDF:29.6/22

+ sign 26.849 $\pm$ 10.084  $\chi^2$ /NDF: 36.8/25

All: 10.530 $\pm$ 7.183  $\chi^2$ /NDF: 73.6/50

- sign -6.279 $\pm$ 10.234  $\chi^2$ /NDF: 31.5/24

# dit\_asym\_sam\_37\_26\_dd\_rms vs Slug



Right In: 108.657 $\pm$ 0.200  $\chi^2$ /NDF: 0.0/0

Left Out: 42.716 $\pm$ 0.007  $\chi^2$ /NDF: 771558.7/24

Right Out: 65.252 $\pm$ 0.046  $\chi^2$ /NDF: 470537.2/1

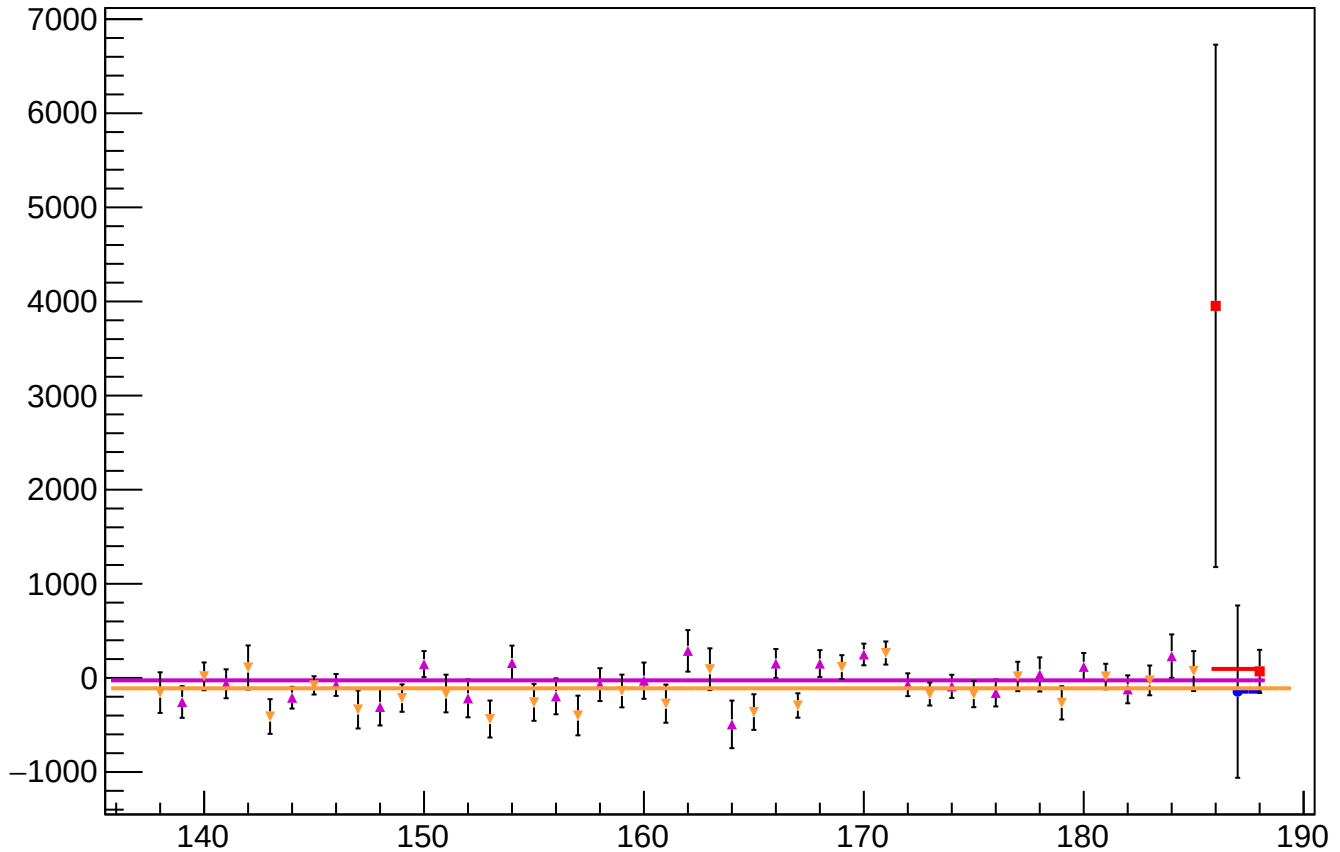
Left In: 43.021 $\pm$ 0.007  $\chi^2$ /NDF: 642598.9/22

+ sign 42.799 $\pm$ 0.007  $\chi^2$ /NDF: 879735.2/25

All: 43.175 $\pm$ 0.005  $\chi^2$ /NDF: 2222009.6/50

- sign 43.561 $\pm$ 0.007  $\chi^2$ /NDF: 1336653.7/24

# asym\_sam\_37\_26\_dd\_correction\_mean vs Slug



Right In: -145.893 $\pm$ 915.579  $\chi^2$ /NDF: 0.0/0

Left Out: -110.340 $\pm$ 31.717  $\chi^2$ /NDF:33.0/24

Right Out: 95.576 $\pm$ 228.105  $\chi^2$ /NDF: 1.9/1

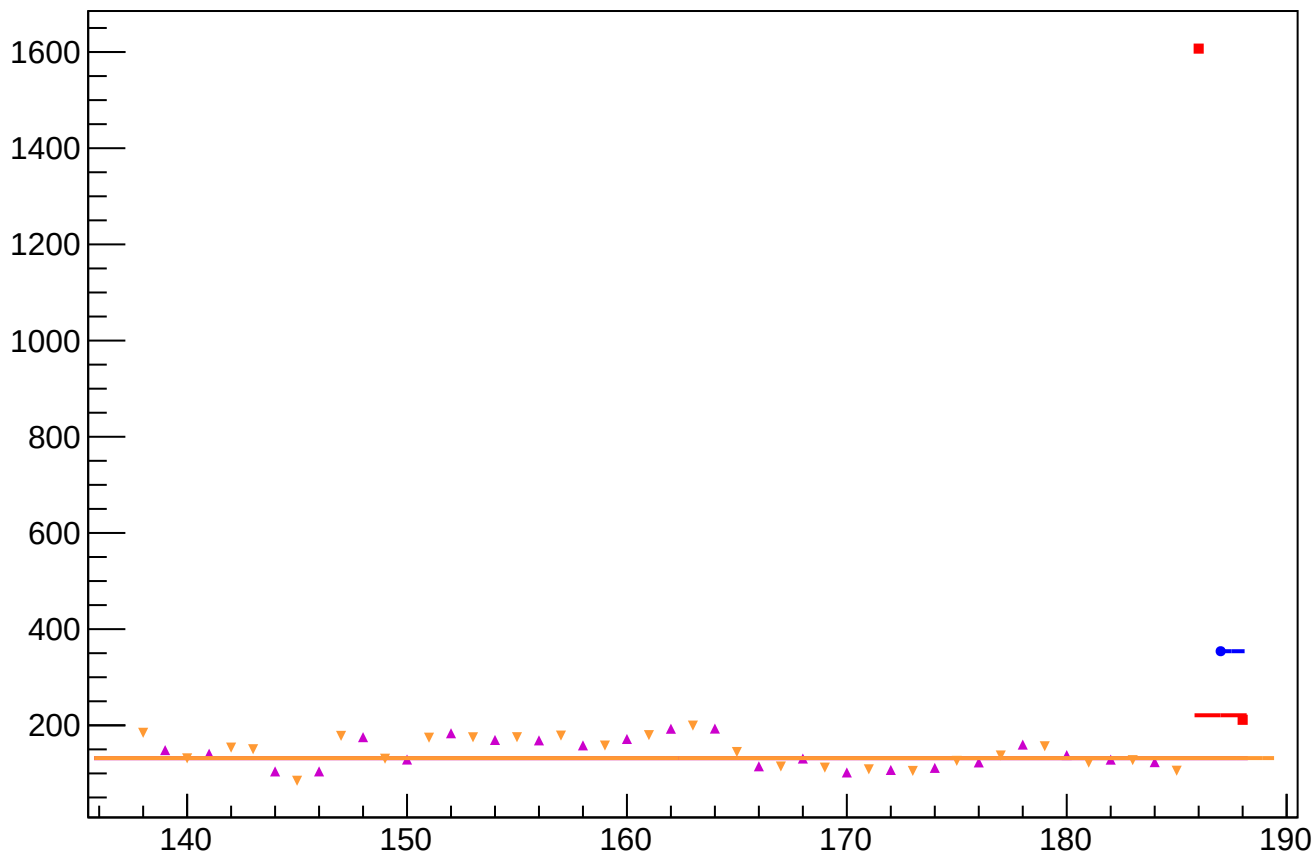
Left In: -25.828 $\pm$ 32.100  $\chi^2$ /NDF:29.0/22

+ sign -110.383 $\pm$ 31.698  $\chi^2$ /NDF: 33.0/25

All: -67.048 $\pm$ 22.445  $\chi^2$ /NDF: 67.9/50

- sign -23.470 $\pm$ 31.786  $\chi^2$ /NDF: 31.2/24

# asym\_sam\_37\_26\_dd\_correction\_rms vs Slug



Right In: 354.110 $\pm$ 0.647  $\chi^2$ /NDF: 0.0/0

Left Out: 131.875 $\pm$ 0.022  $\chi^2$ /NDF:1806379.2/24

Right Out: 220.910 $\pm$ 0.161  $\chi^2$ /NDF: 502220.0/1

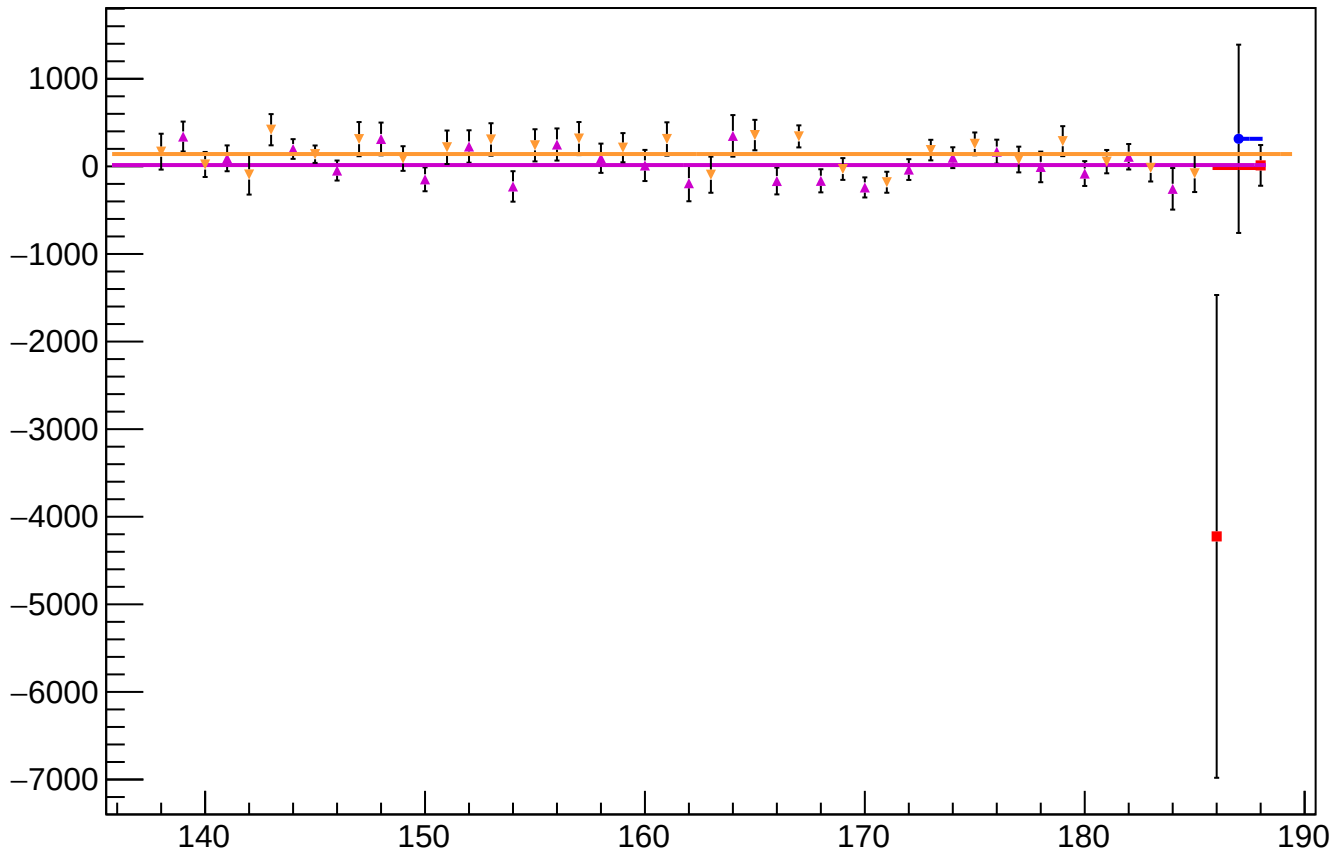
Left In: 131.630 $\pm$ 0.023  $\chi^2$ /NDF:1403692.5/22

+ sign 132.141 $\pm$ 0.022  $\chi^2$ /NDF: 1924070.4/25

All: 132.750 $\pm$ 0.016  $\chi^2$ /NDF: 4131908.7/50

- sign 133.363 $\pm$ 0.022  $\chi^2$ /NDF: 2206355.6/24

# asym\_sam\_37\_26\_dd\_mean vs Slug



Right In:  $314.856 \pm 1074.786$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $141.008 \pm 30.636$   $\chi^2/\text{NDF}$ : 27.1/24

Right Out:  $-18.590 \pm 231.589$   $\chi^2/\text{NDF}$ : 2.3/1

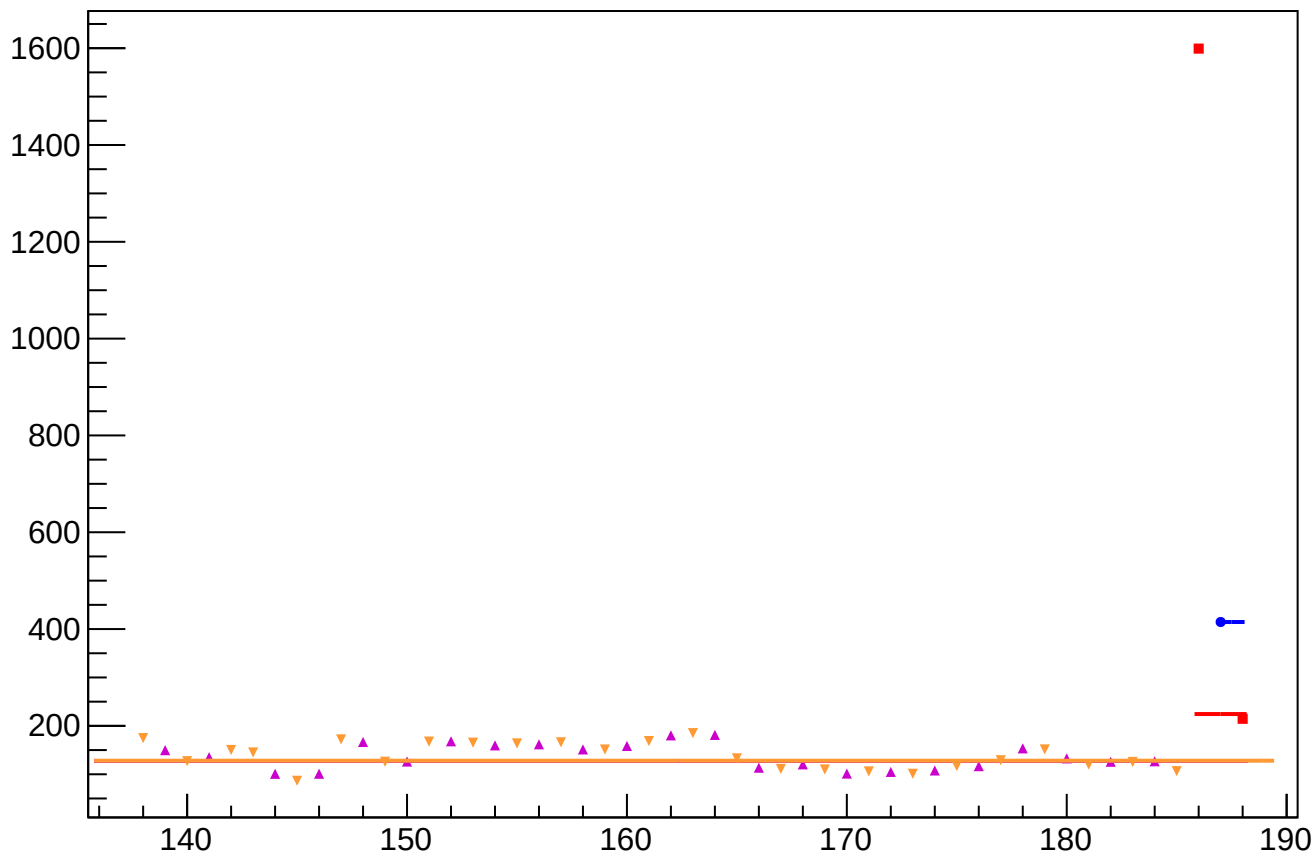
Left In:  $15.199 \pm 31.033$   $\chi^2/\text{NDF}$ : 31.4/22

+ sign  $141.149 \pm 30.623$   $\chi^2/\text{NDF}$ : 27.2/25

All:  $78.154 \pm 21.701$   $\chi^2/\text{NDF}$ : 69.4/50

- sign  $14.603 \pm 30.758$   $\chi^2/\text{NDF}$ : 33.7/24

# asym\_sam\_37\_26\_dd\_rms vs Slug



Right In: 414.557 $\pm$ 0.760  $\chi^2$ /NDF: 0.0/0

Left Out: 128.060 $\pm$ 0.022  $\chi^2$ /NDF:1530283.7/24

Right Out: 224.418 $\pm$ 0.164  $\chi^2$ /NDF: 501114.0/1

Left In: 127.380 $\pm$ 0.022  $\chi^2$ /NDF:1229899.0/22

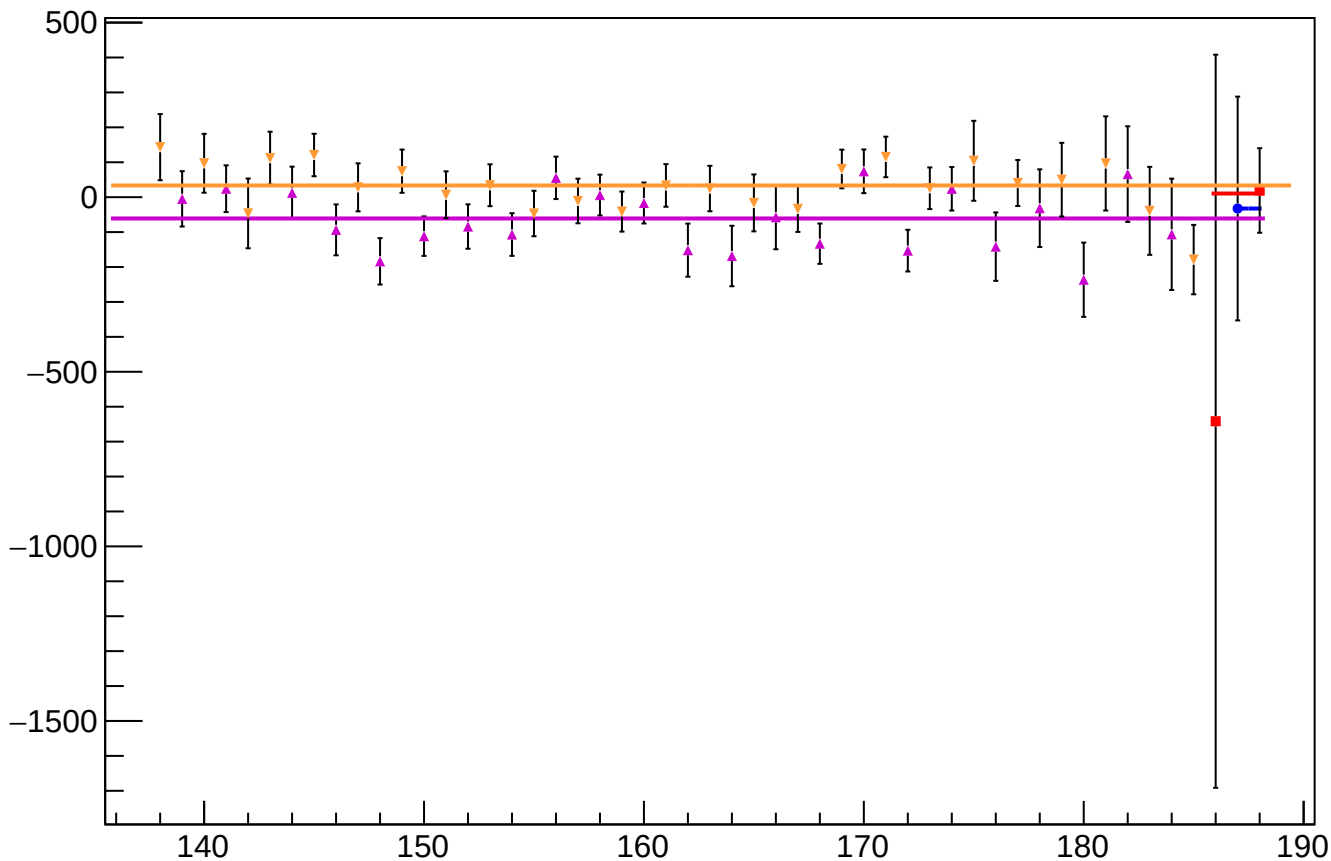
+ sign 128.292 $\pm$ 0.022  $\chi^2$ /NDF: 1672279.5/25

All: 128.690 $\pm$ 0.015  $\chi^2$ /NDF: 3748917.7/50

- sign 129.091 $\pm$ 0.022  $\chi^2$ /NDF: 2075960.1/24



dit\_asym\_sam\_1357\_avg\_mean vs Slug



Right In:  $-32.489 \pm 320.407$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $33.535 \pm 14.197$   $\chi^2/\text{NDF}$ : 19.7/24

Right Out:  $10.479 \pm 120.271$   $\chi^2/\text{NDF}$ : 0.4/1

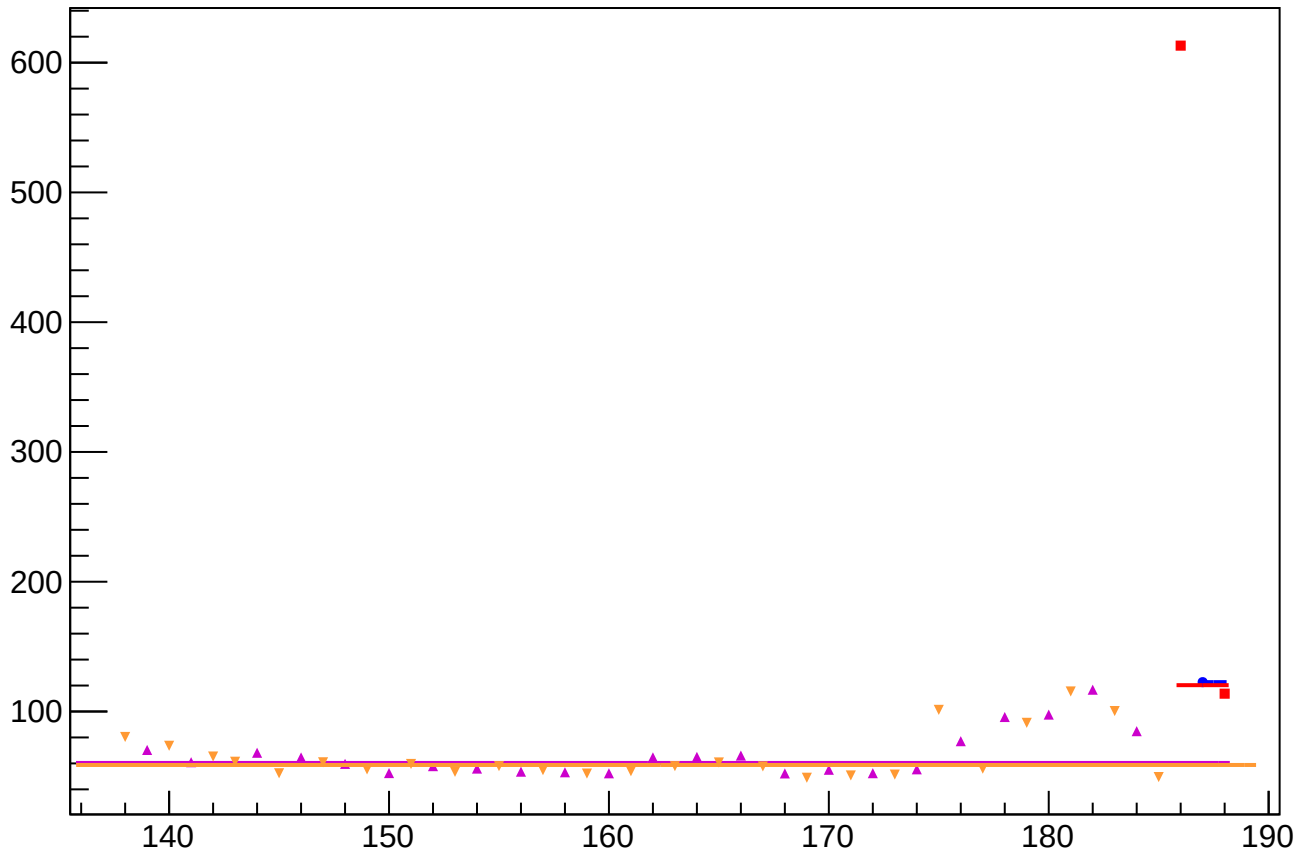
Left In:  $-60.992 \pm 14.839$   $\chi^2/\text{NDF}$ : 31.6/22

+ sign  $33.405 \pm 14.183$   $\chi^2/\text{NDF}$ : 19.7/25

All:  $-11.500 \pm 10.216$   $\chi^2/\text{NDF}$ : 72.9/50

- sign  $-59.920 \pm 14.727$   $\chi^2/\text{NDF}$ : 32.3/24

# dit\_asym\_sam\_1357\_avg\_rms vs Slug



Right In: 122.616 $\pm$ 0.227  $\chi^2$ /NDF: 0.0/0

Left Out: 58.793 $\pm$ 0.010  $\chi^2$ /NDF:1460561.7/24

Right Out: 120.288 $\pm$ 0.085  $\chi^2$ /NDF: 446662.5/1

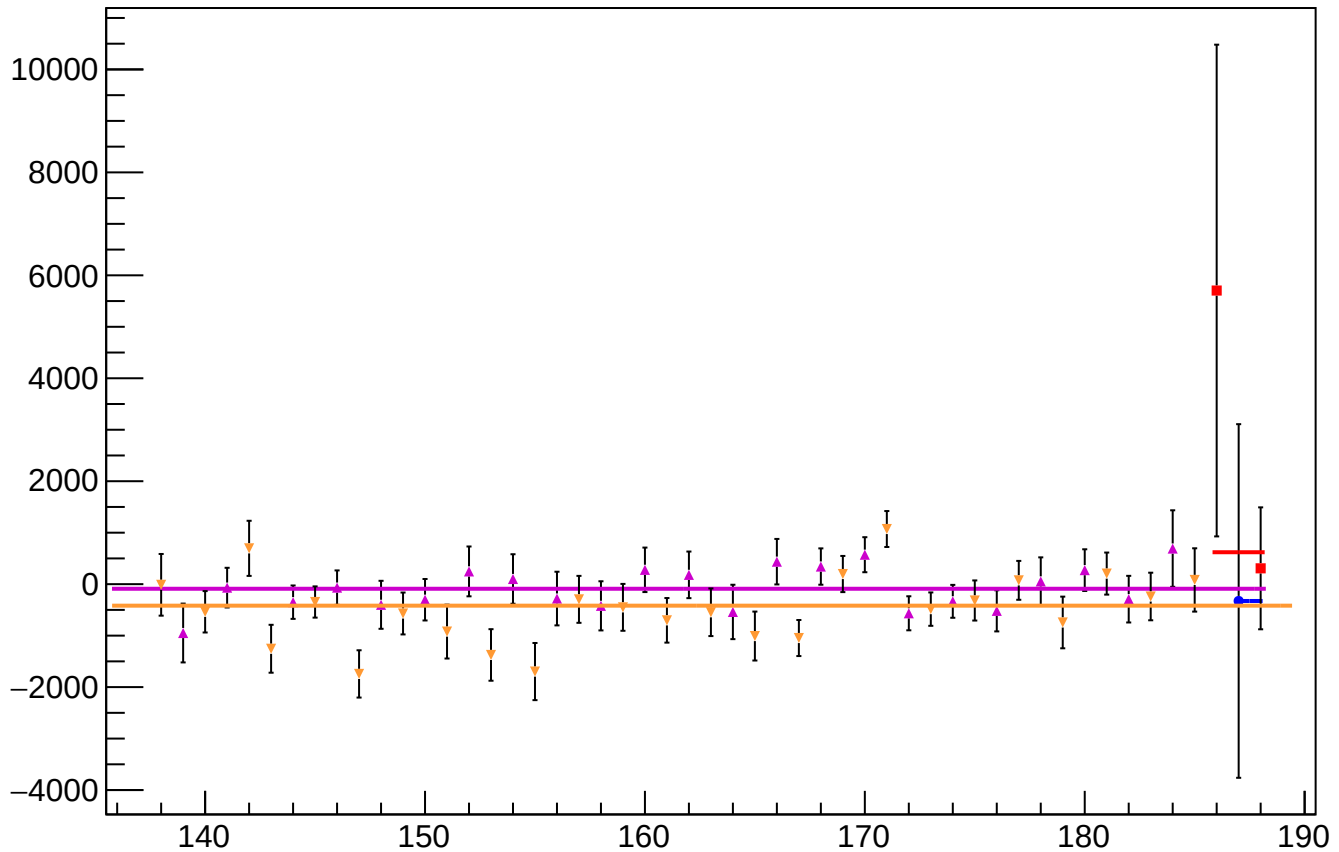
Left In: 60.355 $\pm$ 0.010  $\chi^2$ /NDF:1217671.4/22

+ sign 58.918 $\pm$ 0.010  $\chi^2$ /NDF: 1539761.9/25

All: 60.042 $\pm$ 0.007  $\chi^2$ /NDF: 3719380.0/50

- sign 61.254 $\pm$ 0.010  $\chi^2$ /NDF: 2153522.1/24

# asym\_sam\_1357\_avg\_correction\_mean vs Slug



Right In:  $-326.908 \pm 3435.164$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-417.817 \pm 84.969$   $\chi^2/\text{NDF}$ : 58.5/24

Right Out:  $620.175 \pm 1149.636$   $\chi^2/\text{NDF}$ : 1.2/1

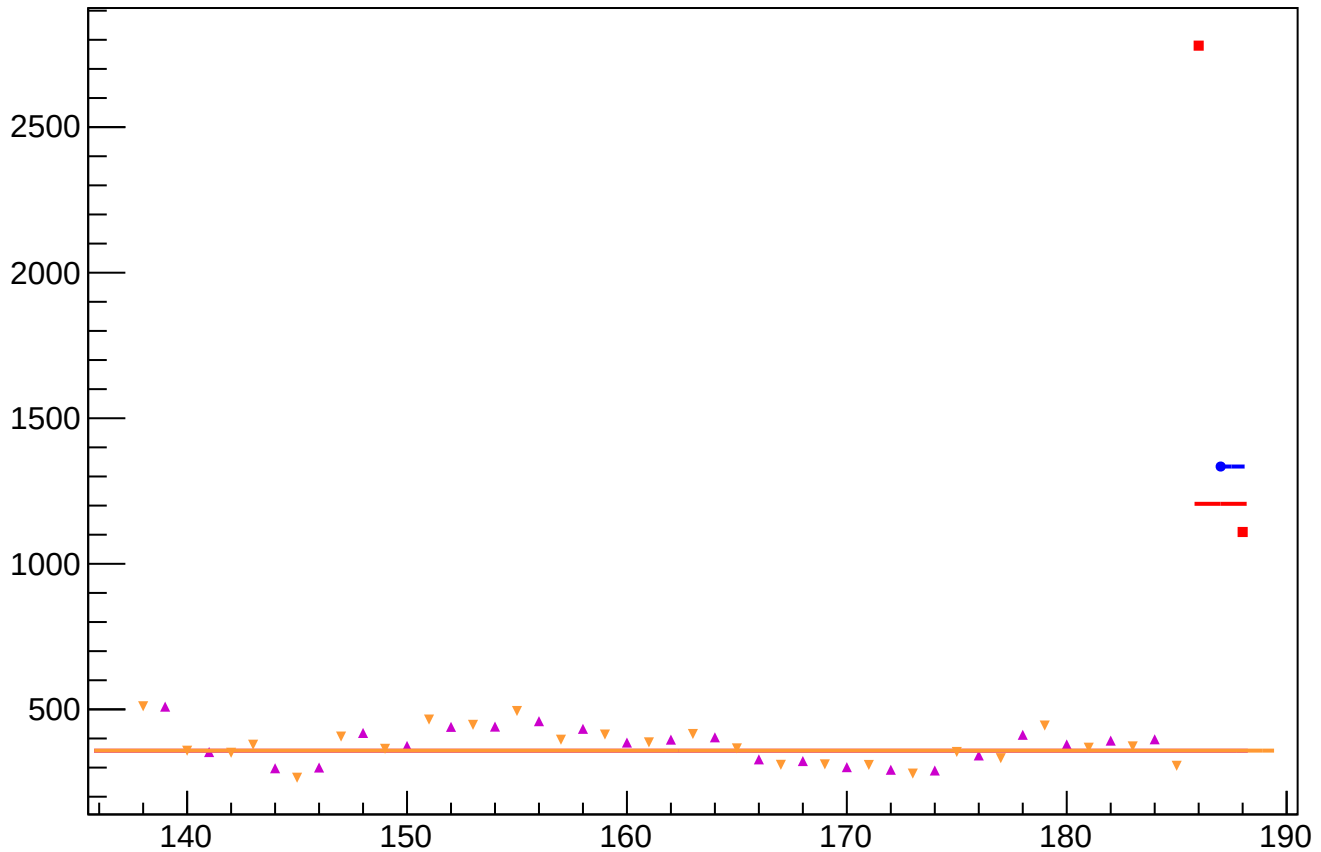
Left In:  $-89.505 \pm 86.438$   $\chi^2/\text{NDF}$ : 19.4/22

+ sign  $-417.762 \pm 84.943$   $\chi^2/\text{NDF}$ : 58.5/25

All:  $-254.069 \pm 60.502$   $\chi^2/\text{NDF}$ : 87.0/50

- sign  $-85.516 \pm 86.195$   $\chi^2/\text{NDF}$ : 21.0/24

# asym\_sam\_1357\_avg\_correction\_rms vs Slug



Right In: 1334.167 $\pm$ 2.429  $\chi^2$ /NDF: 0.0/0

Left Out: 358.349 $\pm$ 0.060  $\chi^2$ /NDF:1011872.8/24

Right Out: 1206.072 $\pm$ 0.813  $\chi^2$ /NDF: 230461.8/1

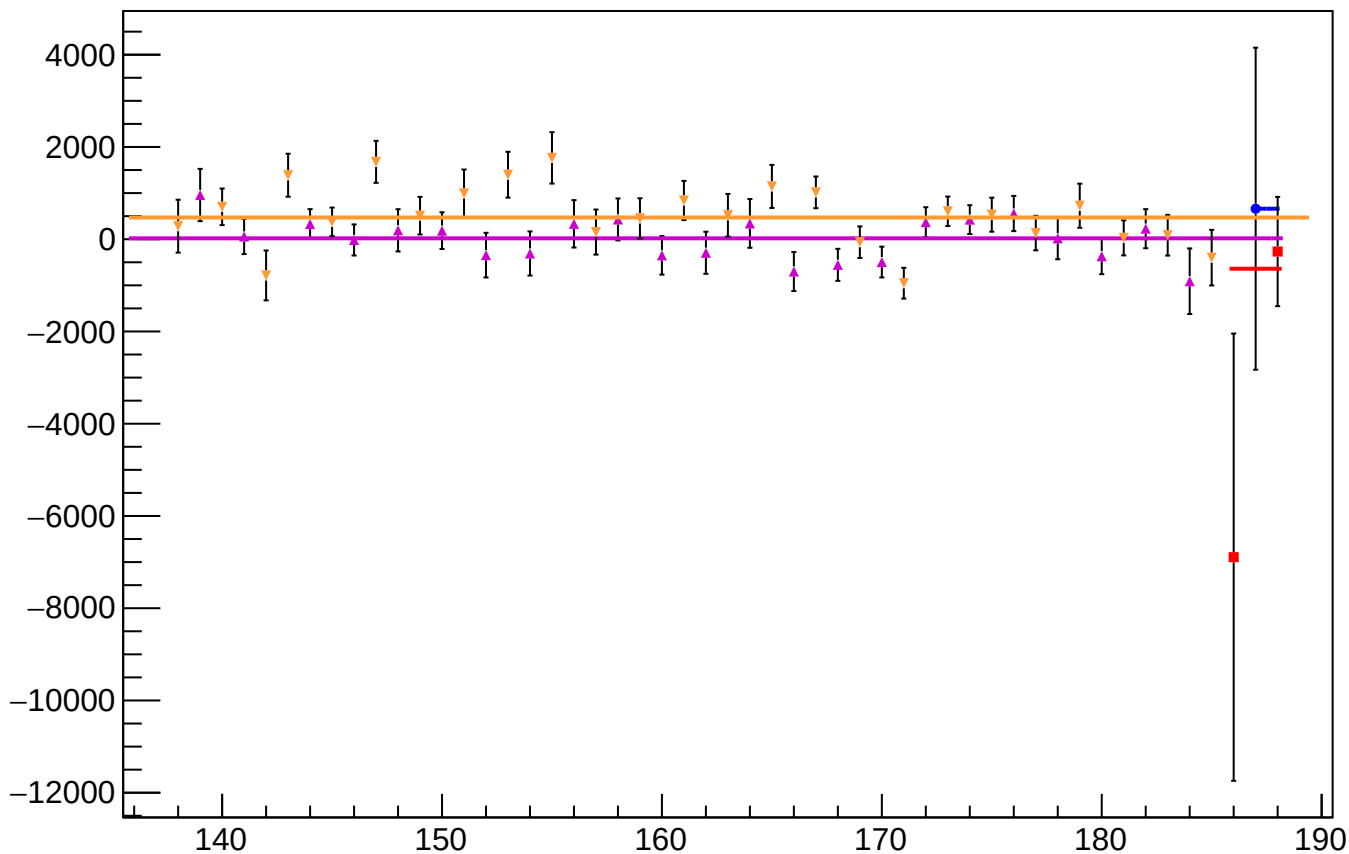
Left In: 357.802 $\pm$ 0.061  $\chi^2$ /NDF:893330.5/22

+ sign 358.946 $\pm$ 0.060  $\chi^2$ /NDF: 1173162.7/25

All: 360.731 $\pm$ 0.043  $\chi^2$ /NDF: 3381500.7/50

- sign 362.570 $\pm$ 0.061  $\chi^2$ /NDF: 2206544.1/24

# asym\_sam\_1357\_avg\_mean vs Slug



Right In: 661.464 $\pm$ 3491.212  $\chi^2$ /NDF: 0.0/0

Left Out: 470.804 $\pm$ 83.480  $\chi^2$ /NDF:58.7/24

Right Out: -640.169 $\pm$ 1150.738  $\chi^2$ /NDF: 1.8/1

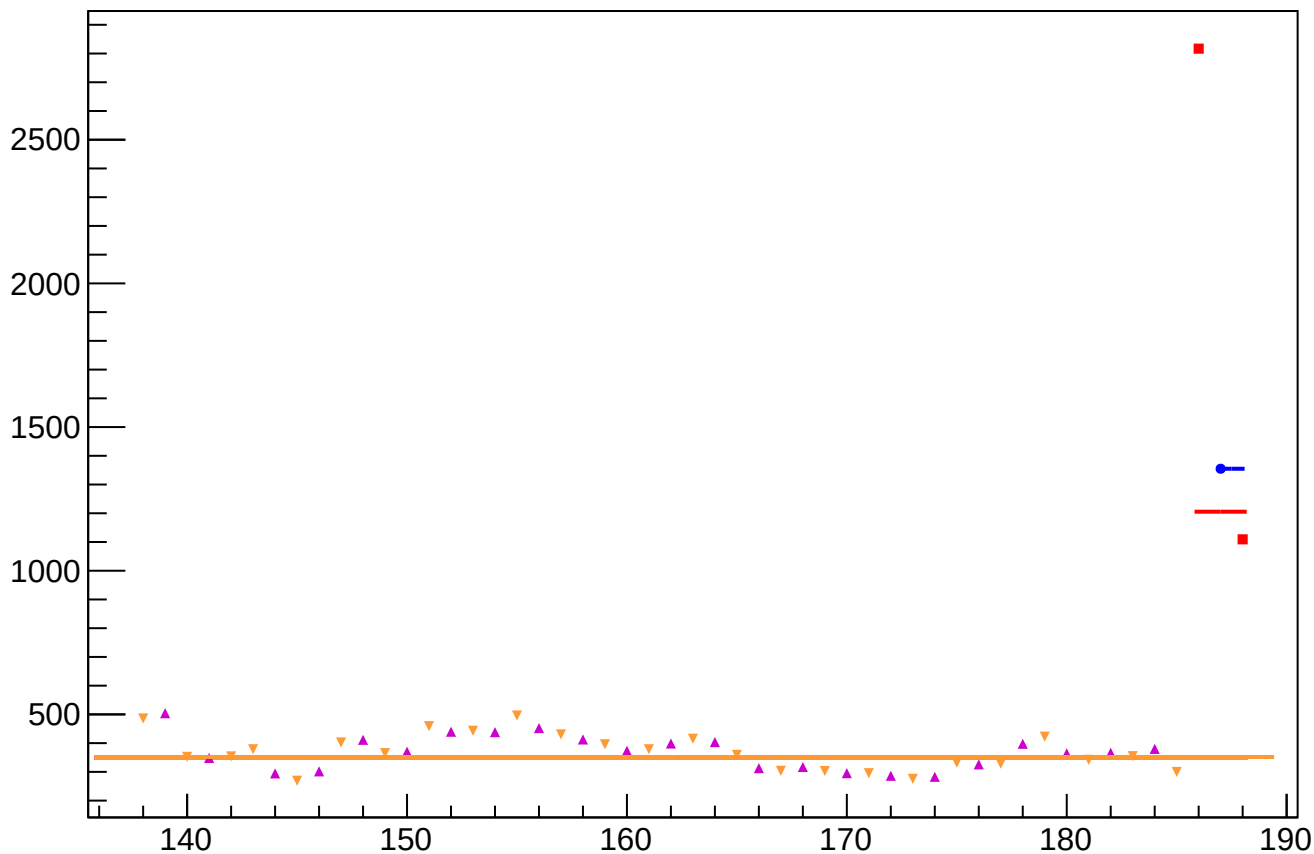
Left In: 19.328 $\pm$ 84.679  $\chi^2$ /NDF:23.7/22

+ sign 470.913 $\pm$ 83.456  $\chi^2$ /NDF: 58.7/25

All: 246.042 $\pm$ 59.361  $\chi^2$ /NDF: 99.2/50

- sign 15.776 $\pm$ 84.451  $\chi^2$ /NDF: 25.8/24

# asym\_sam\_1357\_avg\_rms vs Slug



Right In: 1354.921 $\pm$ 2.469  $\chi^2$ /NDF: 0.0/0

Left Out: 351.777 $\pm$ 0.059  $\chi^2$ /NDF:1016791.1/24

Right Out: 1205.454 $\pm$ 0.814  $\chi^2$ /NDF: 234151.0/1

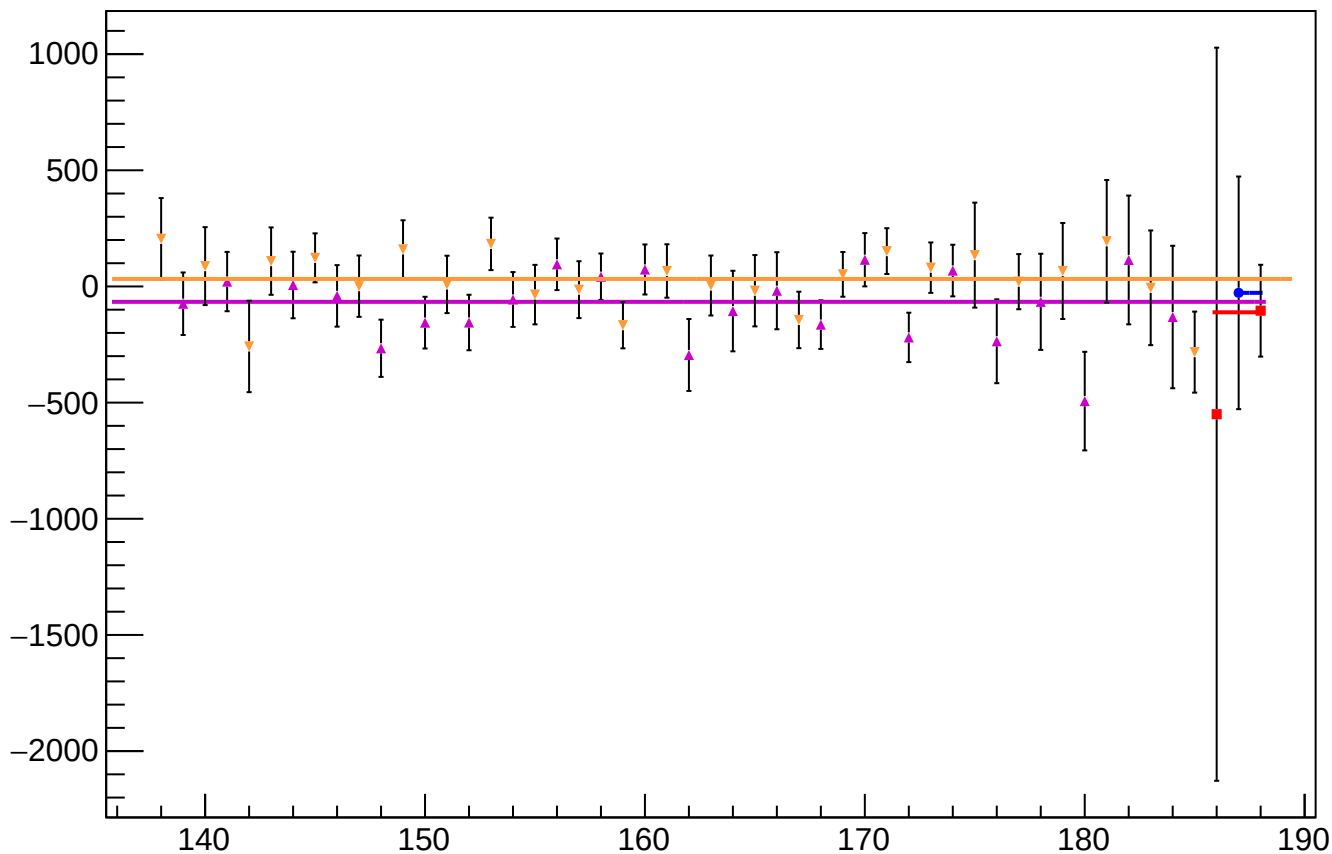
Left In: 350.037 $\pm$ 0.060  $\chi^2$ /NDF:889435.7/22

+ sign 352.350 $\pm$ 0.059  $\chi^2$ /NDF: 1181818.3/25

All: 353.484 $\pm$ 0.042  $\chi^2$ /NDF: 3405379.1/50

- sign 354.644 $\pm$ 0.060  $\chi^2$ /NDF: 2222814.2/24

dit\_asym\_sam\_2468\_avg\_mean vs Slug



Right In:  $-27.511 \pm 500.634$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $32.332 \pm 26.320$   $\chi^2/\text{NDF}$ : 19.6/24

Right Out:  $-111.238 \pm 196.054$   $\chi^2/\text{NDF}$ : 0.1/1

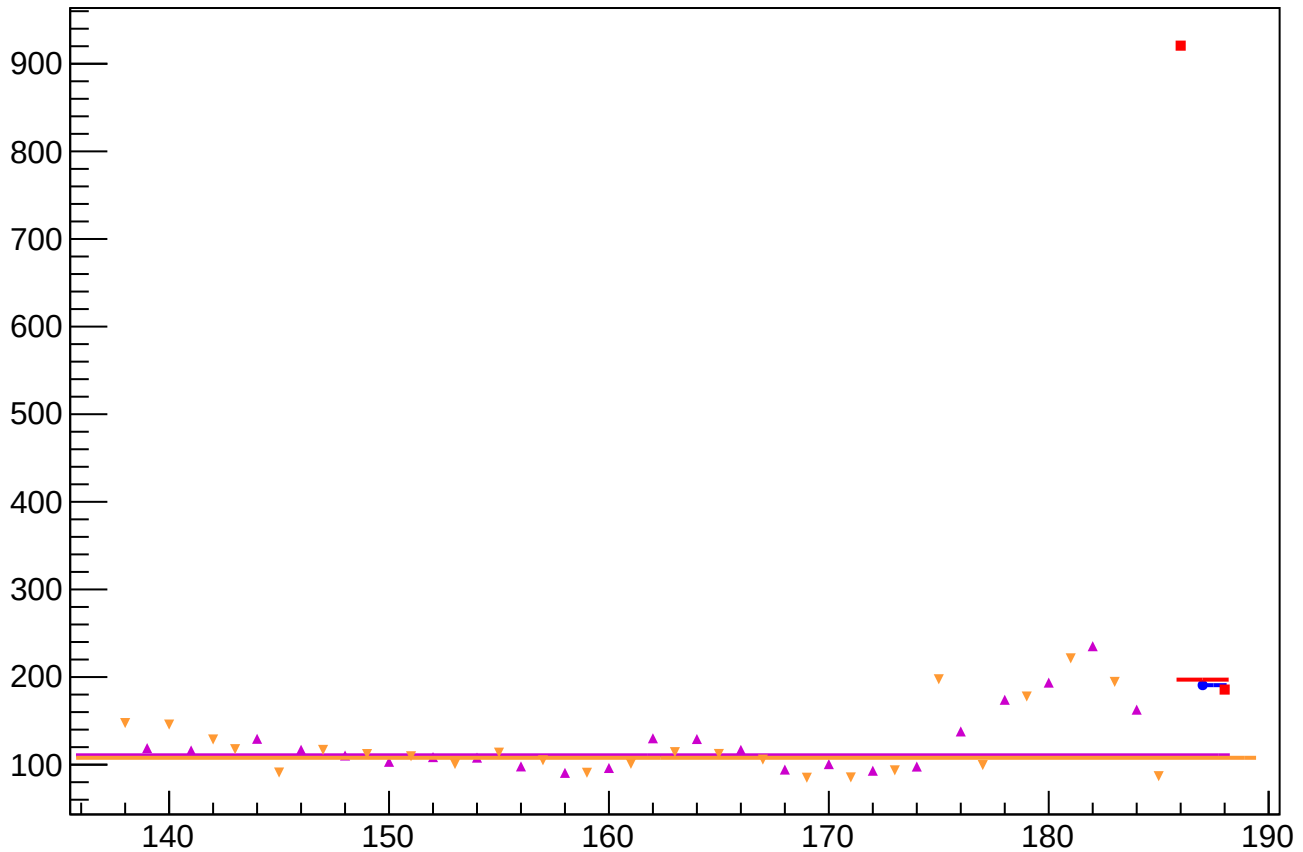
Left In:  $-66.254 \pm 27.450$   $\chi^2/\text{NDF}$ : 24.2/22

+ sign  $32.167 \pm 26.284$   $\chi^2/\text{NDF}$ : 19.6/25

All:  $-15.803 \pm 18.896$   $\chi^2/\text{NDF}$ : 50.8/50

- sign  $-67.119 \pm 27.185$   $\chi^2/\text{NDF}$ : 24.4/24

# dit\_asym\_sam\_2468\_avg\_rms vs Slug



Right In: 190.736 $\pm$ 0.354  $\chi^2$ /NDF: 0.0/0

Left Out: 107.852 $\pm$ 0.019  $\chi^2$ /NDF: 1833747.9/24

Right Out: 197.063 $\pm$ 0.139  $\chi^2$ /NDF: 427251.7/1

Left In: 110.691 $\pm$ 0.019  $\chi^2$ /NDF: 1406587.3/22

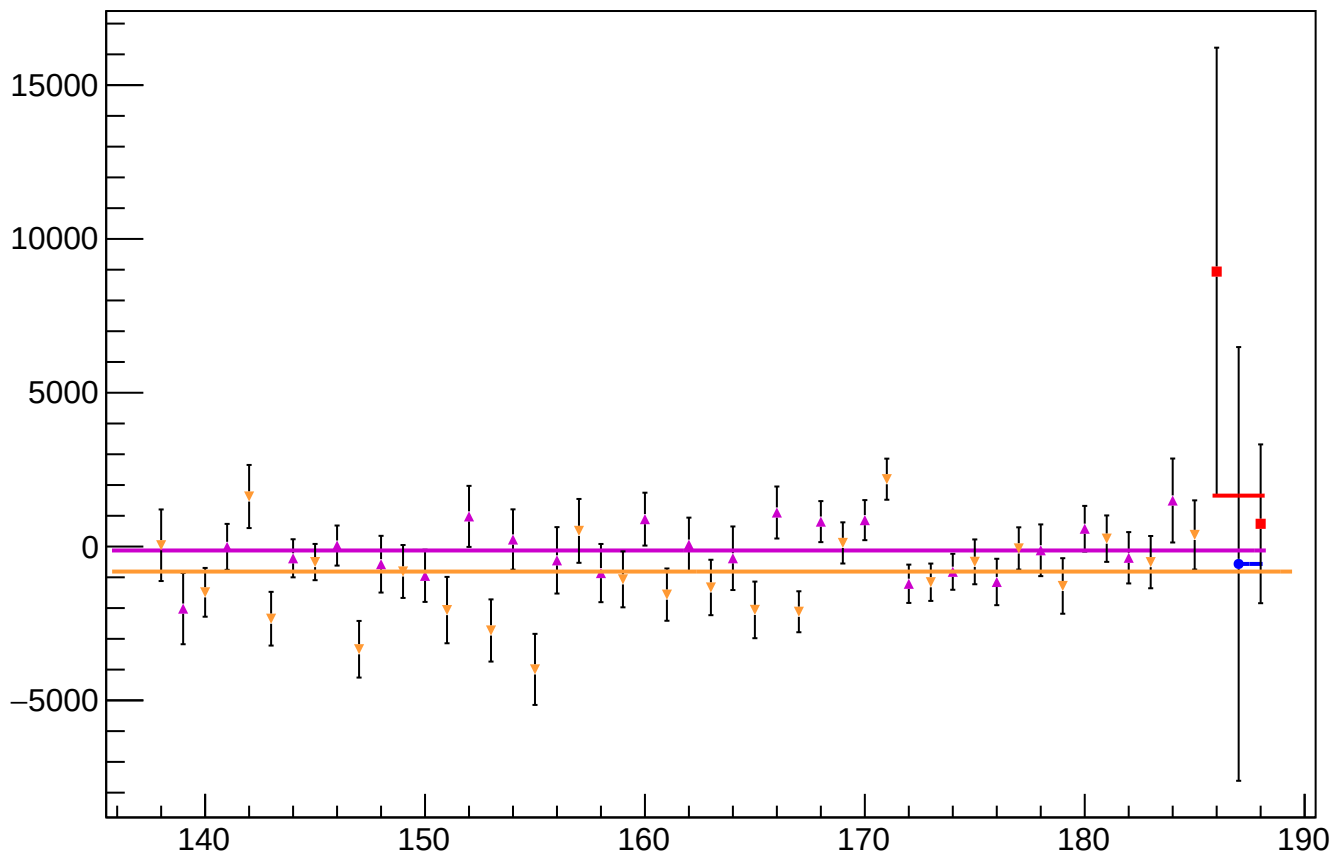
+ sign 108.081 $\pm$ 0.019  $\chi^2$ /NDF: 1888416.1/25

All: 110.144 $\pm$ 0.013  $\chi^2$ /NDF: 4128482.0/50

- sign 112.352 $\pm$ 0.019  $\chi^2$ /NDF: 2214551.4/24



# asym\_sam\_2468\_avg\_correction\_mean vs Slug



Right In: -565.094 $\pm$ 7049.637  $\chi^2$ /NDF: 0.0/0

Left Out: -813.029 $\pm$ 164.102  $\chi^2$ /NDF:66.2/24

Right Out: 1655.426 $\pm$ 2432.738  $\chi^2$ /NDF: 1.1/1

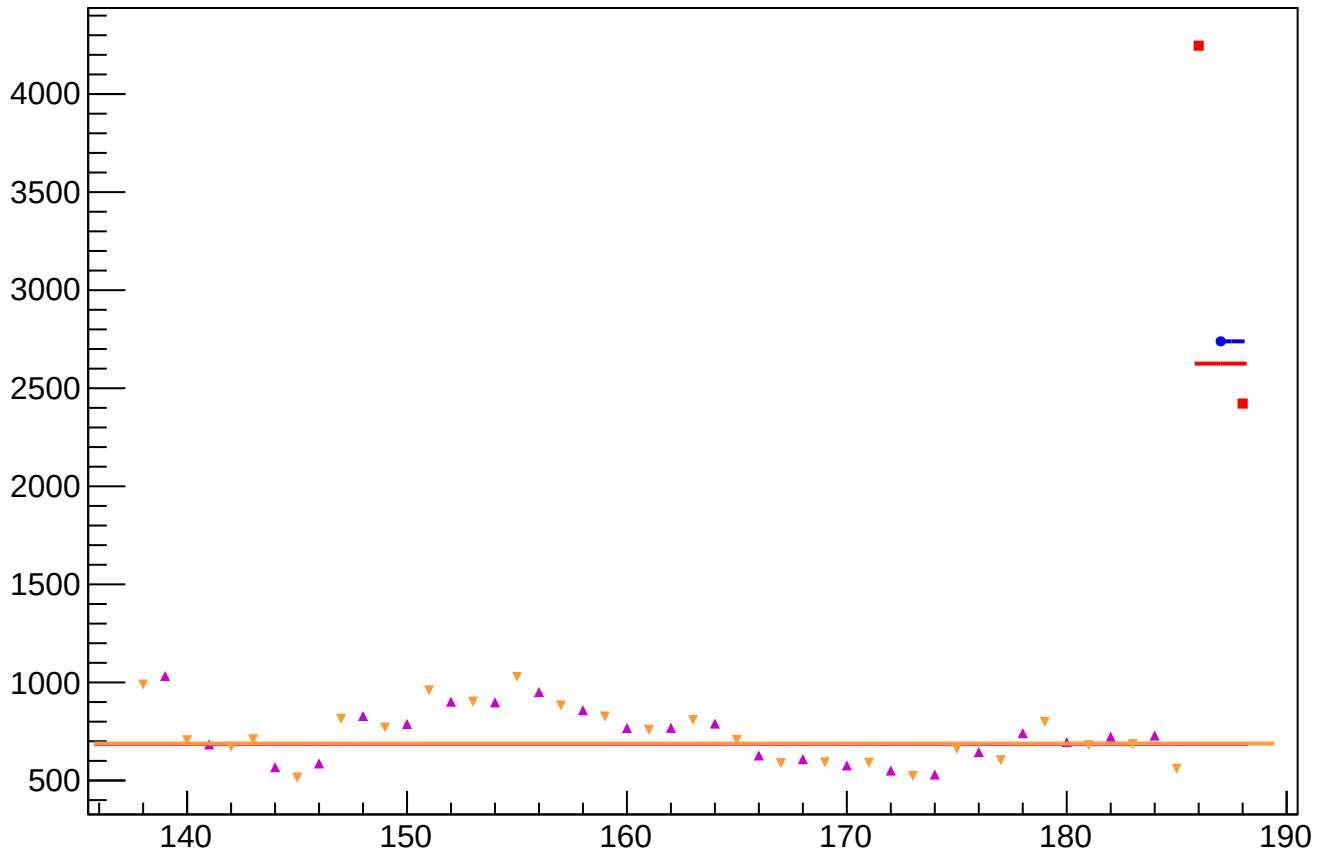
Left In: -127.427 $\pm$ 166.308  $\chi^2$ /NDF:22.8/22

+ sign -812.895 $\pm$ 164.058  $\chi^2$ /NDF: 66.2/25

All: -469.932 $\pm$ 116.660  $\chi^2$ /NDF: 99.5/50

- sign -119.134 $\pm$ 165.921  $\chi^2$ /NDF: 24.4/24

# asym\_sam\_2468\_avg\_correction\_rms vs Slug



Right In: 2739.191 $\pm$ 4.985  $\chi^2$ /NDF: 0.0/0

Left Out: 688.513 $\pm$ 0.116  $\chi^2$ /NDF:1287701.8/24

Right Out: 2625.710 $\pm$ 1.720  $\chi^2$ /NDF: 111655.2/1

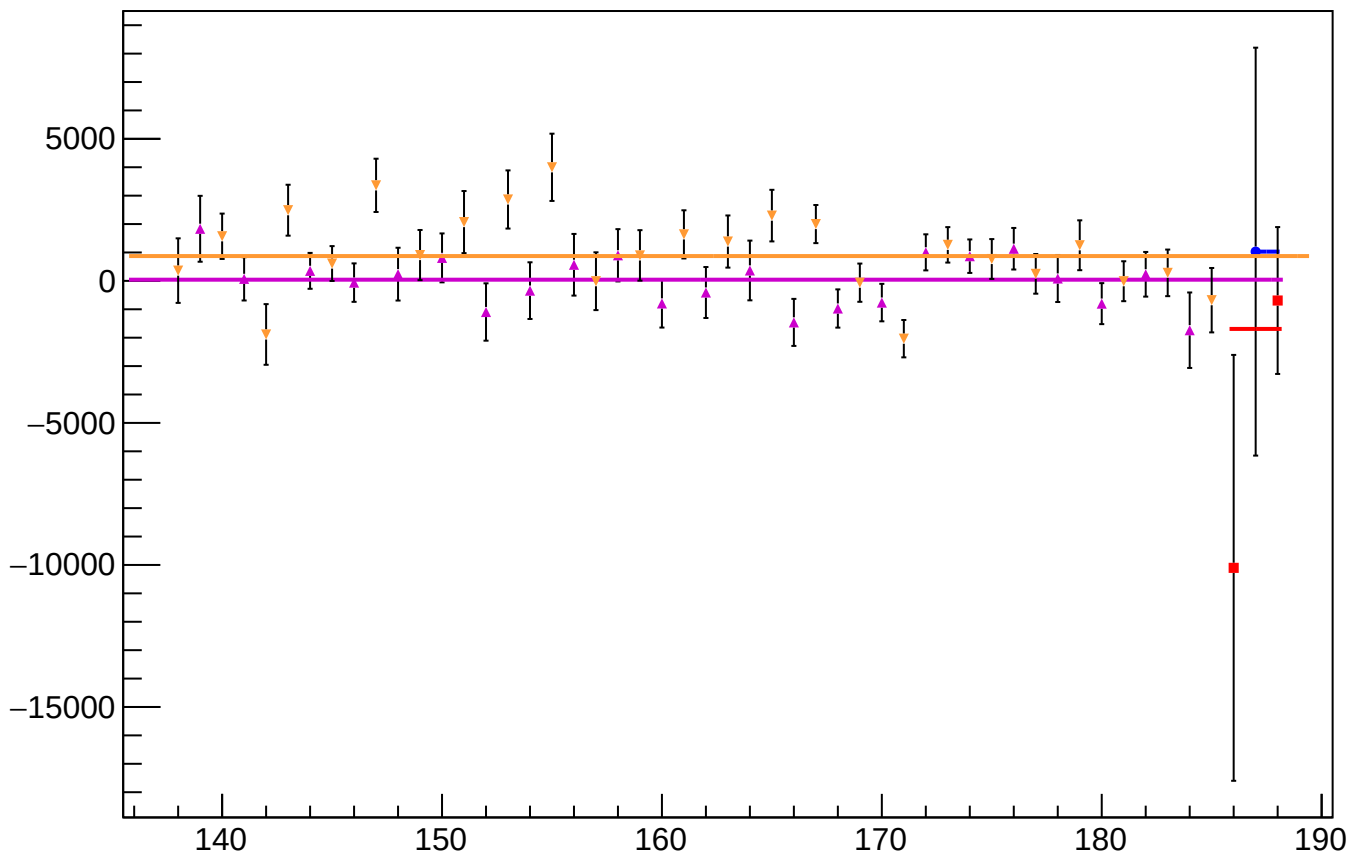
Left In: 685.733 $\pm$ 0.118  $\chi^2$ /NDF:1156263.7/22

+ sign 689.623 $\pm$ 0.116  $\chi^2$ /NDF: 1456845.7/25

All: 692.161 $\pm$ 0.082  $\chi^2$ /NDF: 3991656.9/50

- sign 694.758 $\pm$ 0.117  $\chi^2$ /NDF: 2533842.9/24

# asym\_sam\_2468\_avg\_mean vs Slug



Right In: 1029.252 $\pm$ 7179.977  $\chi^2$ /NDF: 0.0/0

Left Out: 873.446 $\pm$ 164.269  $\chi^2$ /NDF: 64.1/24

Right Out: -1691.548 $\pm$ 2443.796  $\chi^2$ /NDF: 1.4/1

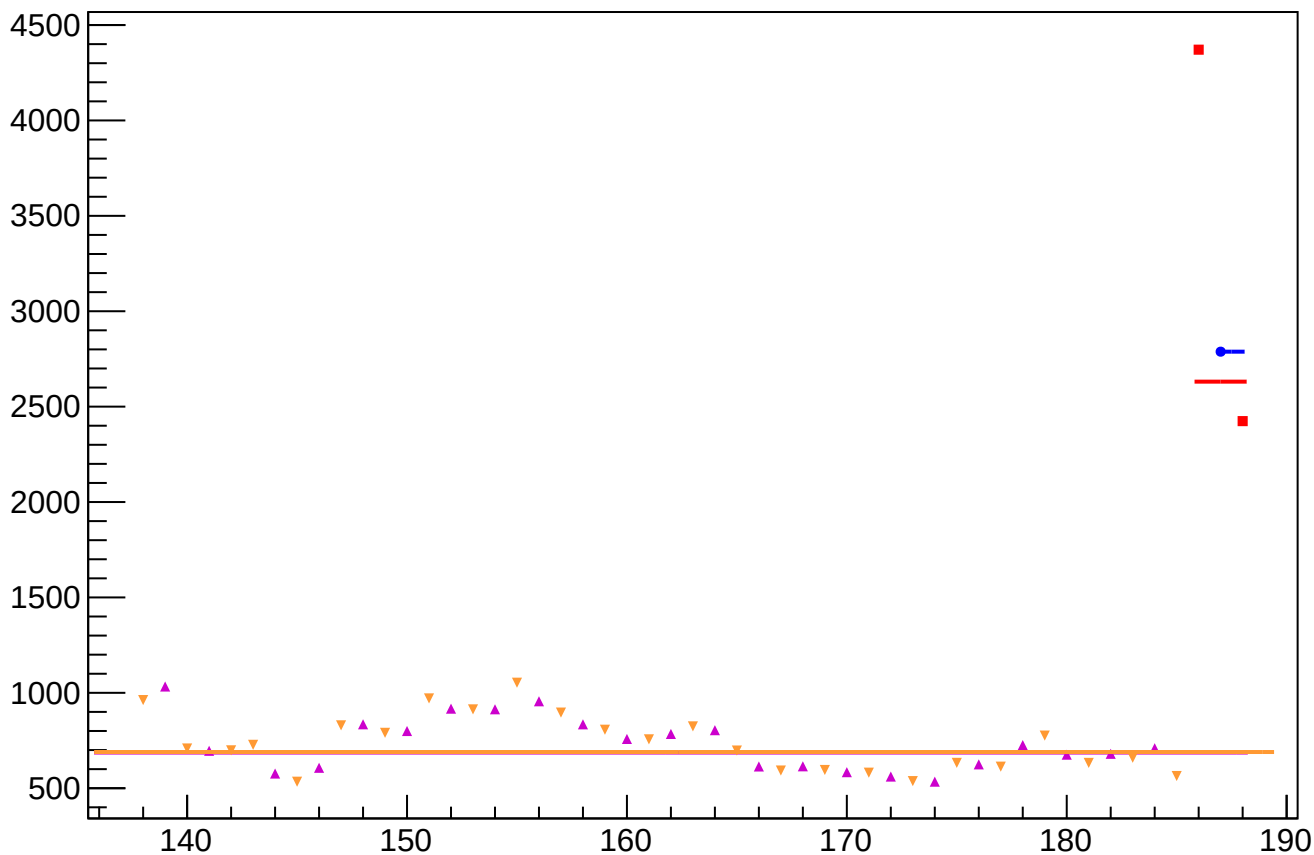
Left In: 41.522 $\pm$ 166.728  $\chi^2$ /NDF: 24.1/22

+ sign 873.528 $\pm$ 164.226  $\chi^2$ /NDF: 64.1/25

All: 458.885 $\pm$ 116.866  $\chi^2$ /NDF: 103.1/50

- sign 33.493 $\pm$ 166.341  $\chi^2$ /NDF: 26.0/24

# asym\_sam\_2468\_avg\_rms vs Slug



Right In: 2788.062 $\pm$ 5.077  $\chi^2$ /NDF: 0.0/0

Left Out: 689.767 $\pm$ 0.116  $\chi^2$ /NDF:1258608.7/24

Right Out: 2630.982 $\pm$ 1.728  $\chi^2$ /NDF: 120561.4/1

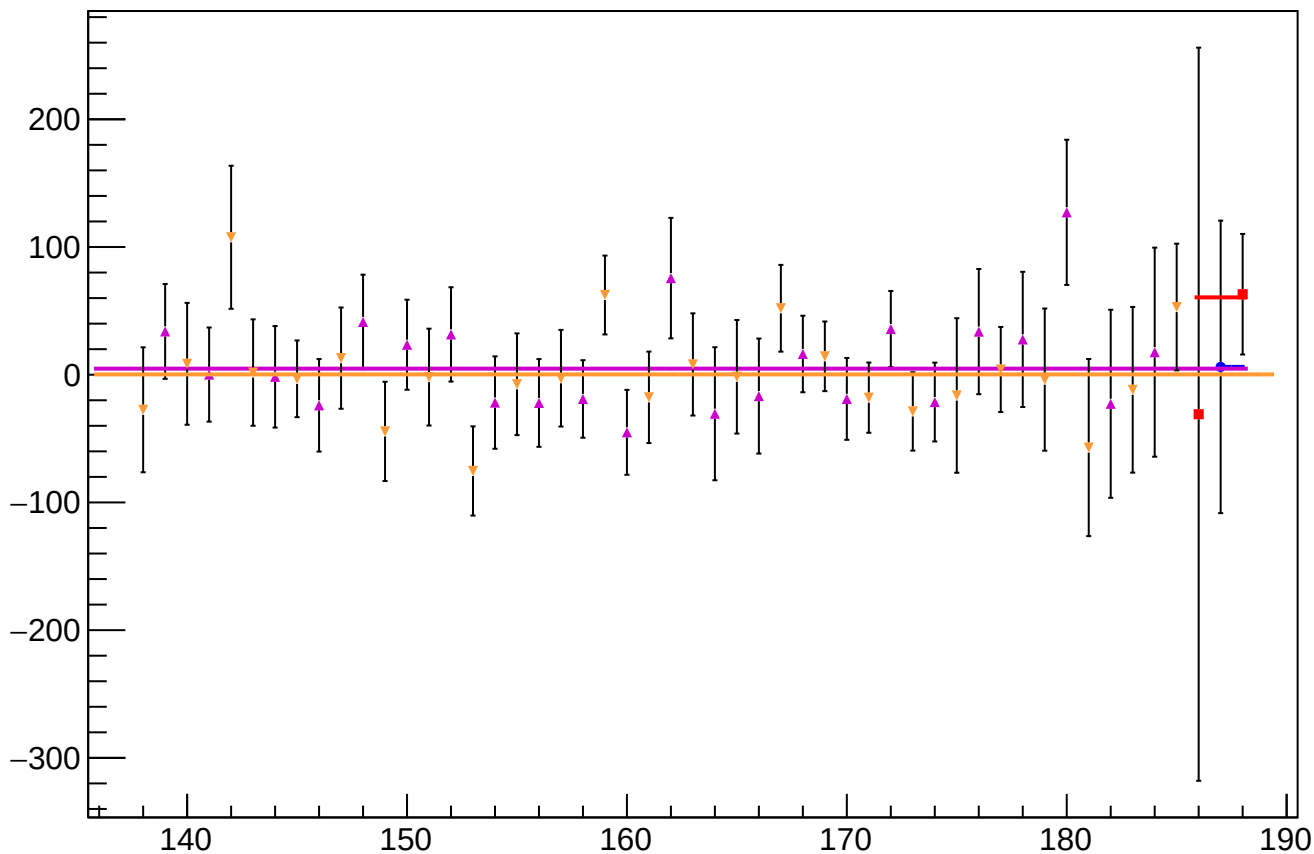
Left In: 686.944 $\pm$ 0.118  $\chi^2$ /NDF:1116042.4/22

+ sign 690.864 $\pm$ 0.116  $\chi^2$ /NDF: 1429330.9/25

All: 693.375 $\pm$ 0.083  $\chi^2$ /NDF: 3926656.4/50

- sign 695.951 $\pm$ 0.118  $\chi^2$ /NDF: 2496378.6/24

# dit\_asym\_sam\_1357\_2468\_dd\_mean vs Slug



Right In: 6.142 $\pm$ 114.514  $\chi^2$ /NDF: 0.0/0

Left Out: 0.254 $\pm$ 7.690  $\chi^2$ /NDF:20.4/24

Right Out: 60.558 $\pm$ 46.568  $\chi^2$ /NDF: 0.1/1

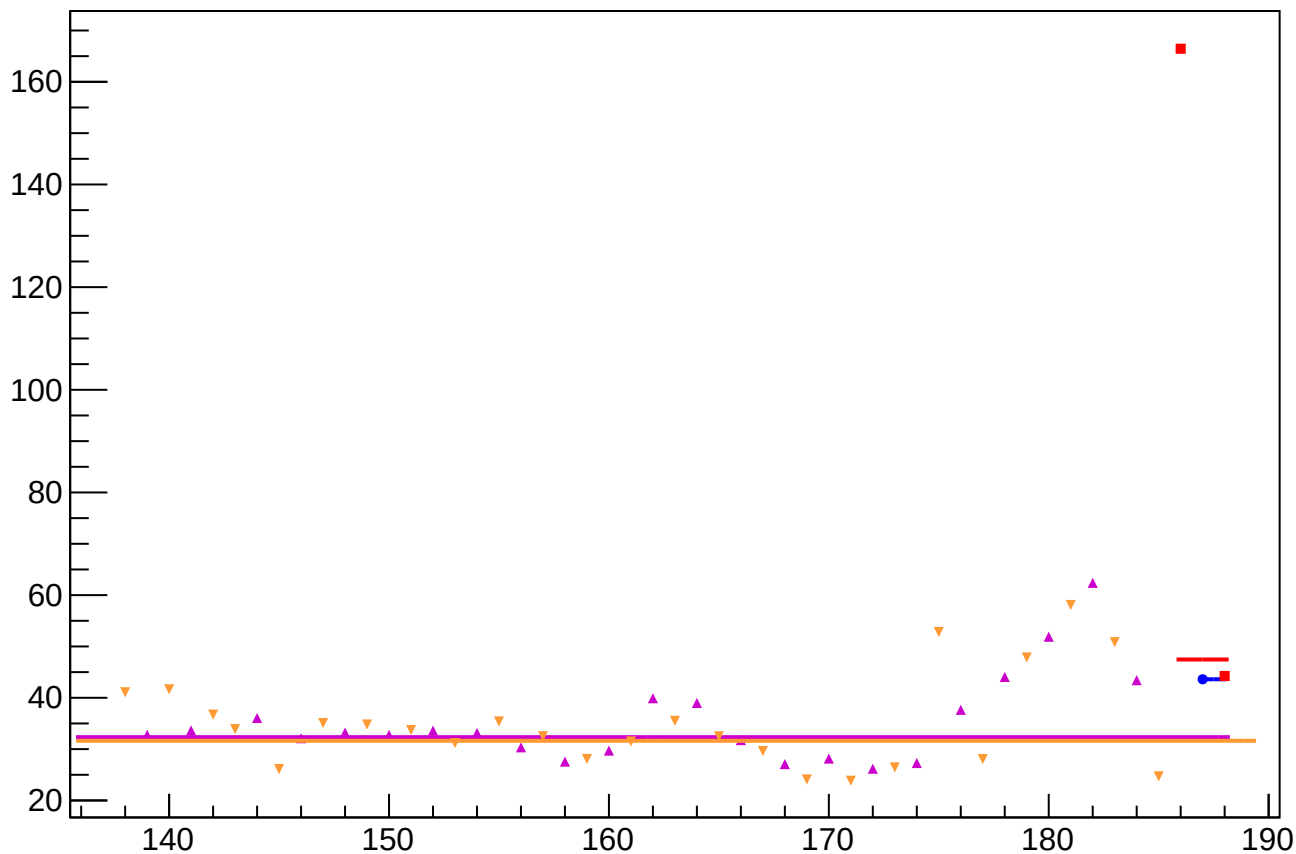
Left In: 4.745 $\pm$ 7.976  $\chi^2$ /NDF:17.9/22

+ sign 0.280 $\pm$ 7.673  $\chi^2$ /NDF: 20.4/25

All: 3.235 $\pm$ 5.491  $\chi^2$ /NDF: 40.1/50

- sign 6.336 $\pm$ 7.861  $\chi^2$ /NDF: 19.4/24

dit\_asym\_sam\_1357\_2468\_dd\_rms vs Slug



Right In: 43.608 $\pm$ 0.081  $\chi^2$ /NDF: 0.0/0

Left Out: 31.624 $\pm$ 0.005  $\chi^2$ /NDF:1673431.1/24

Right Out: 47.461 $\pm$ 0.033  $\chi^2$ /NDF: 353033.3/1

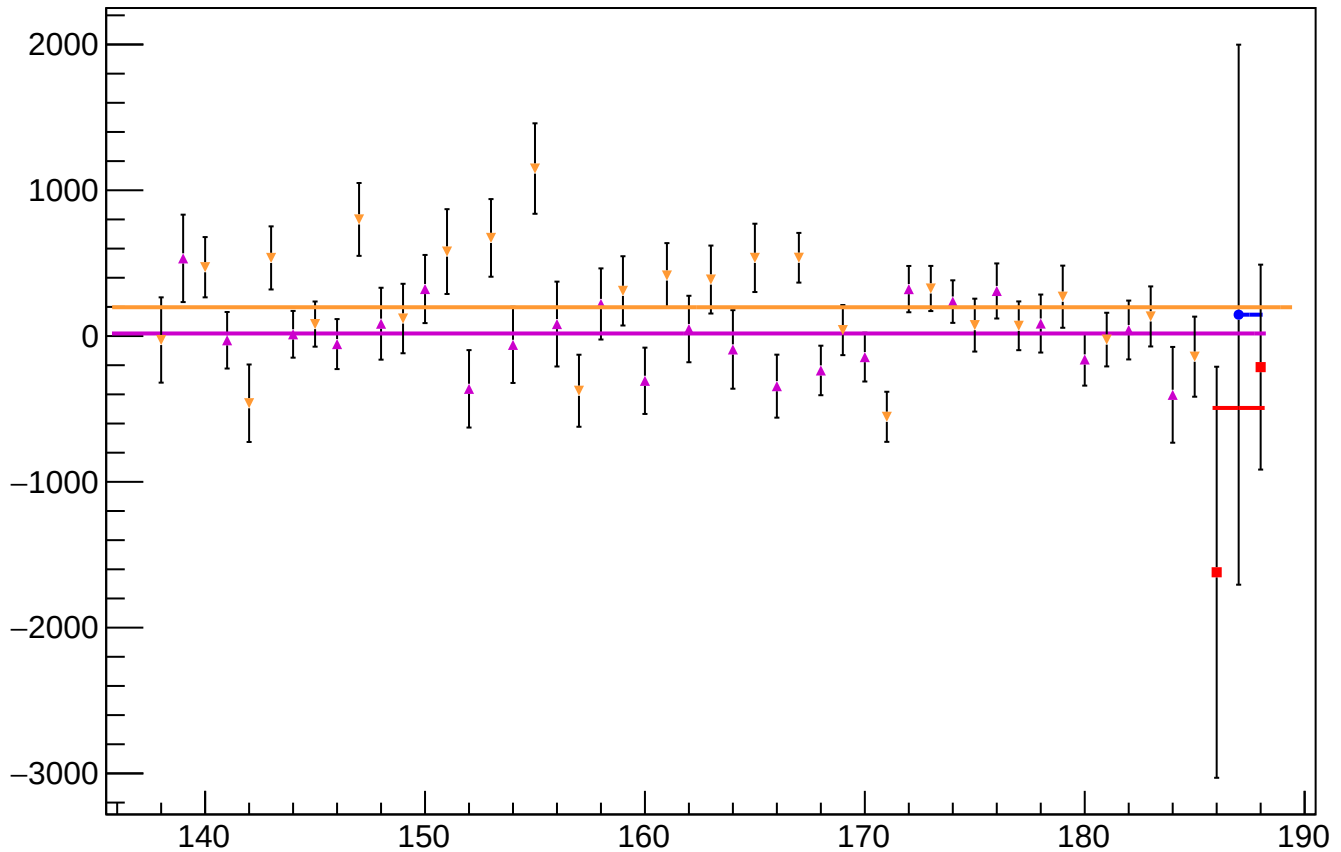
Left In: 32.331 $\pm$ 0.006  $\chi^2$ /NDF:1141501.0/22

+ sign 31.678 $\pm$ 0.005  $\chi^2$ /NDF: 1695235.4/25

All: 32.207 $\pm$ 0.004  $\chi^2$ /NDF: 3414335.8/50

- sign 32.762 $\pm$ 0.006  $\chi^2$ /NDF: 1699620.8/24

asym\_sam\_1357\_2468\_dd\_correction\_mean vs Slug



Right In: 146.623+/-1852.132  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 197.682+/-41.831  $\chi^2/\text{NDF}$ : 69.9/24

Right Out: -493.140+/-629.034  $\chi^2/\text{NDF}$ : 0.8/1

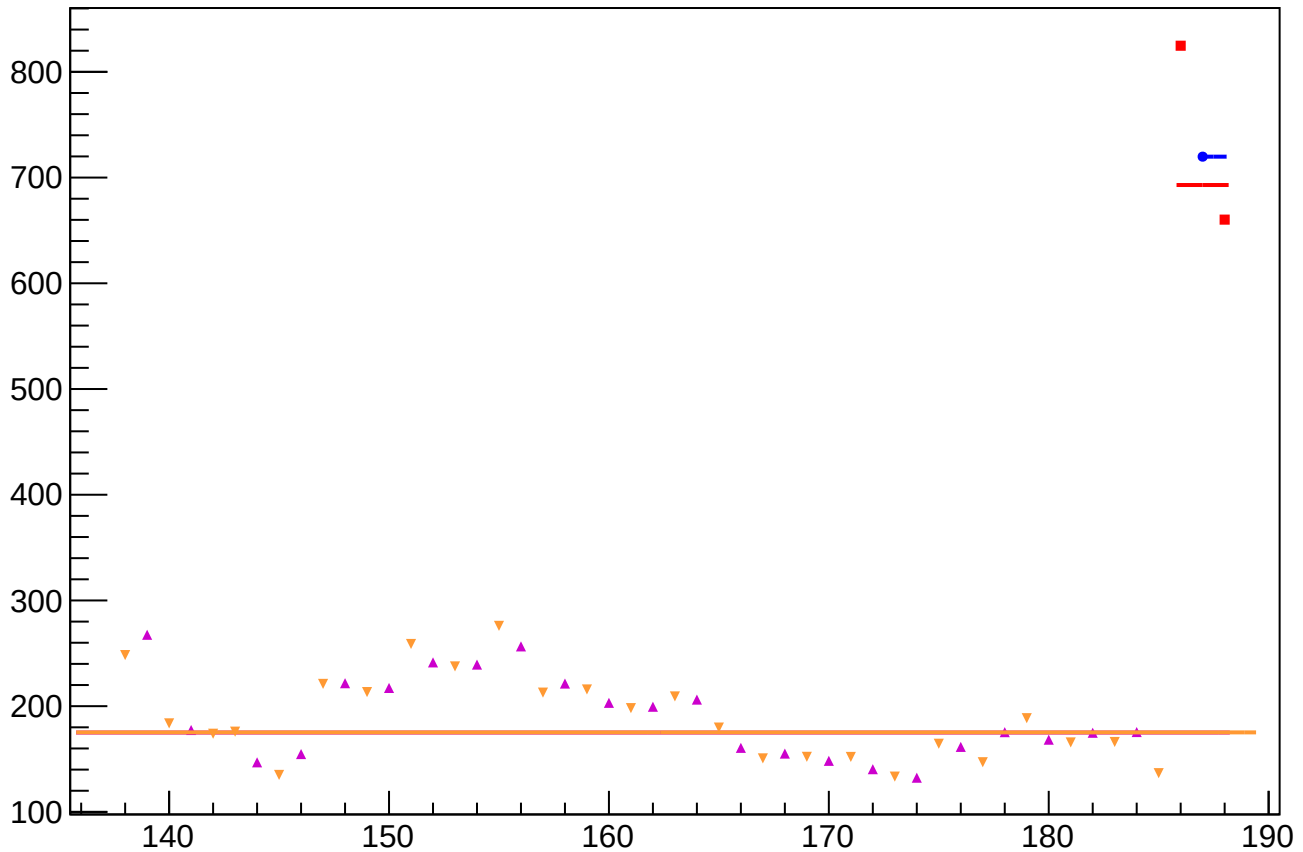
Left In: 17.742+/-42.576  $\chi^2/\text{NDF}$ : 27.1/22

+ sign 197.656+/-41.821  $\chi^2/\text{NDF}$ : 69.9/25

All: 107.957+/-29.802  $\chi^2/\text{NDF}$ : 107.8/50

- sign 15.412+/-42.479  $\chi^2/\text{NDF}$ : 28.5/24

asym\_sam\_1357\_2468\_dd\_correction\_rms vs Slug



Right In: 719.784 $\pm$ 1.310  $\chi^2$ /NDF: 0.0/0

Left Out: 175.207 $\pm$ 0.030  $\chi^2$ /NDF: 1418225.0/24

Right Out: 692.966 $\pm$ 0.445  $\chi^2$ /NDF: 21806.5/1

Left In: 175.051 $\pm$ 0.030  $\chi^2$ /NDF: 1339755.1/22

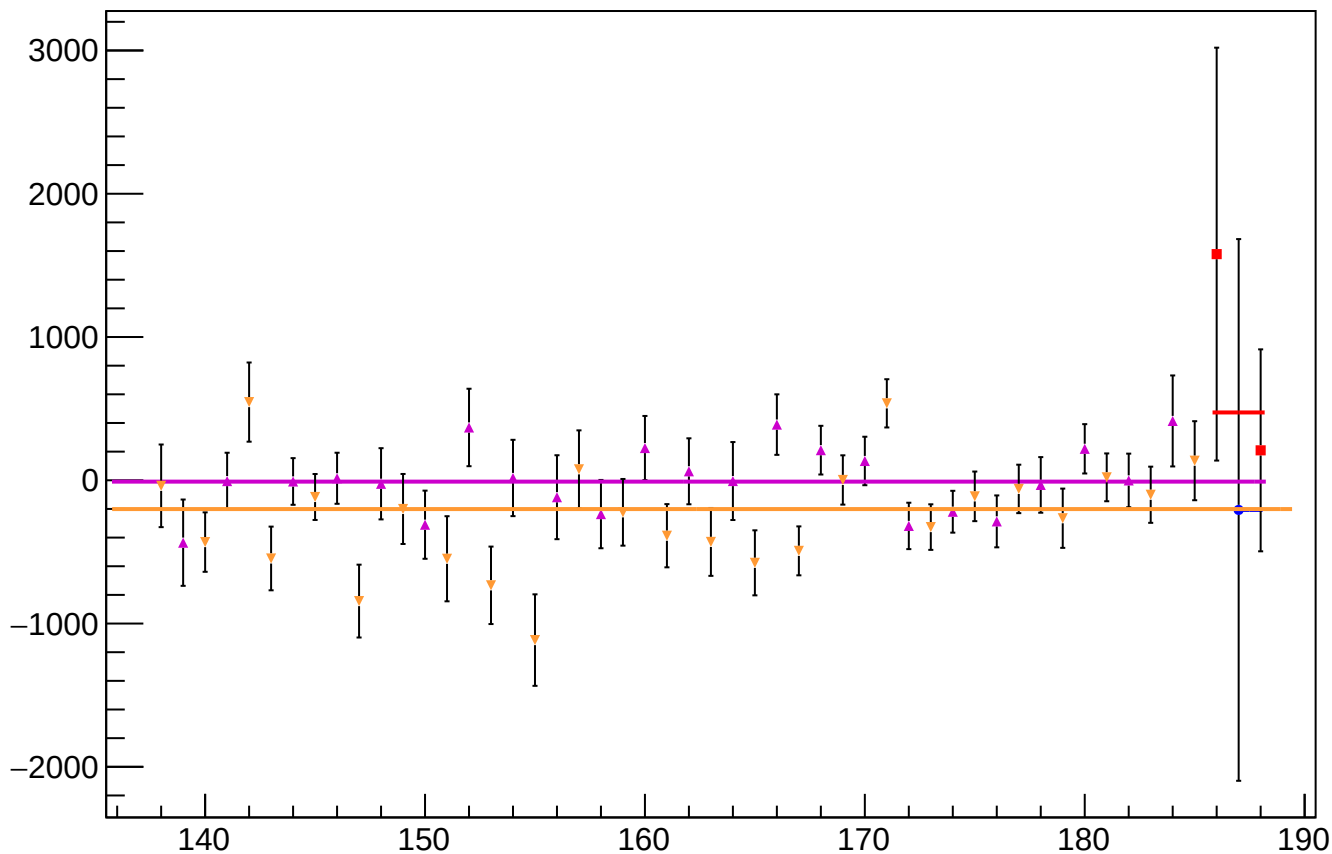
+ sign 175.485 $\pm$ 0.030  $\chi^2$ /NDF: 1591040.3/25

All: 176.434 $\pm$ 0.021  $\chi^2$ /NDF: 4304319.0/50

- sign 177.413 $\pm$ 0.030  $\chi^2$ /NDF: 2711186.7/24



# asym\_sam\_1357\_2468\_dd\_mean vs Slug



Right In: -207.026+/-1890.566  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -200.930+/-41.741  $\chi^2/\text{NDF}$ : 65.5/24

Right Out: 473.423+/-633.148  $\chi^2/\text{NDF}$ : 0.7/1

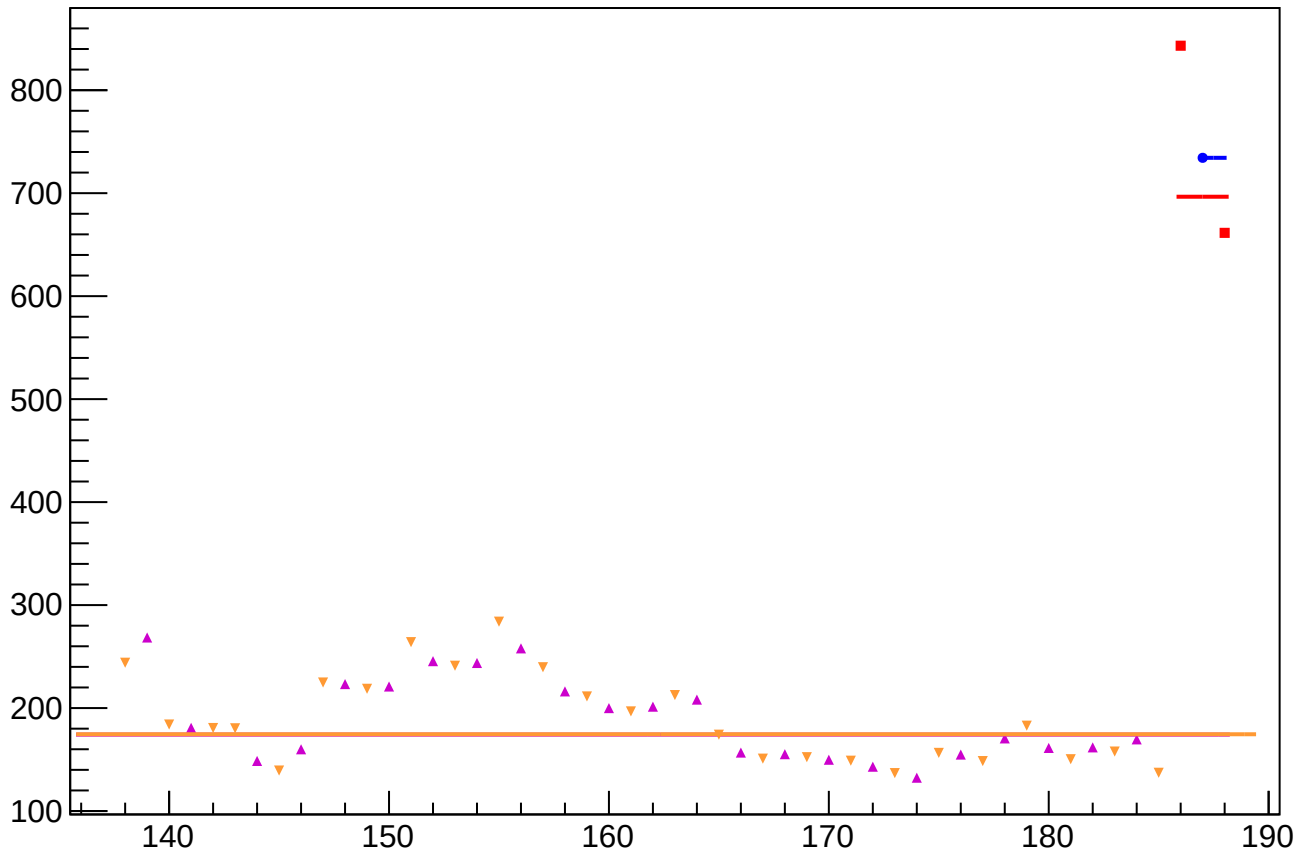
Left In: -9.384+/-42.437  $\chi^2/\text{NDF}$ : 25.4/22

+ sign -200.933+/-41.731  $\chi^2/\text{NDF}$ : 65.5/25

All: -105.486+/-29.722  $\chi^2/\text{NDF}$ : 102.8/50

- sign -7.224+/-42.342  $\chi^2/\text{NDF}$ : 26.7/24

# asym\_sam\_1357\_2468\_dd\_rms vs Slug



Right In: 734.330+/-1.337  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 174.567+/-0.030  $\chi^2/\text{NDF}$ :1532900.3/24

Right Out: 696.549+/-0.448  $\chi^2/\text{NDF}$ : 25665.9/1

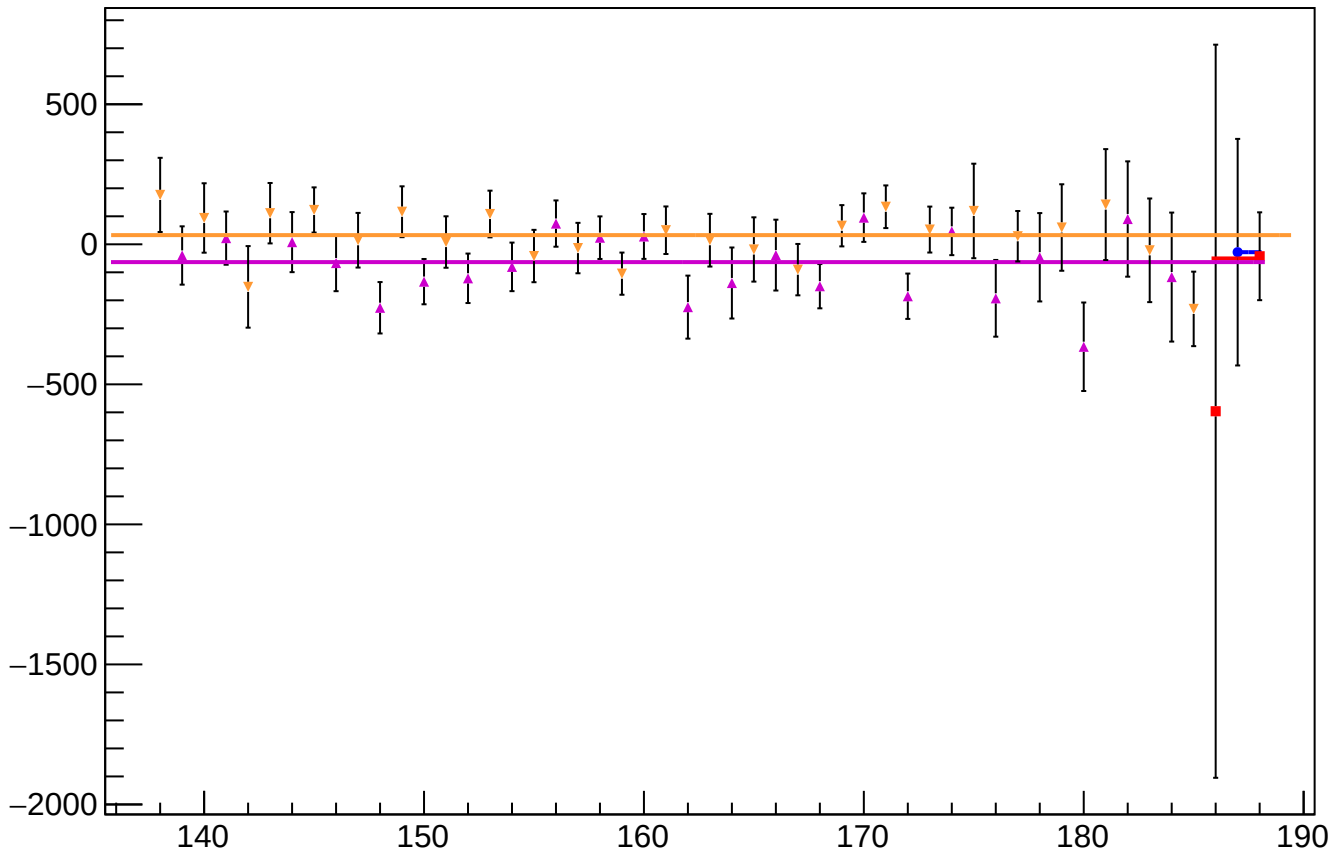
Left In: 174.217+/-0.030  $\chi^2/\text{NDF}$ :1364600.9/22

+ sign 174.839+/-0.030  $\chi^2/\text{NDF}$ : 1708144.5/25

All: 175.684+/-0.021  $\chi^2/\text{NDF}$ : 4455152.9/50

- sign 176.553+/-0.030  $\chi^2/\text{NDF}$ : 2745347.0/24

# dit\_asym\_sam\_12345678\_avg\_mean vs Slug



Right In:  $-28.121 \pm 404.486$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $32.793 \pm 19.705$   $\chi^2/\text{NDF}$ : 19.5/24

Right Out:  $-50.489 \pm 155.701$   $\chi^2/\text{NDF}$ : 0.2/1

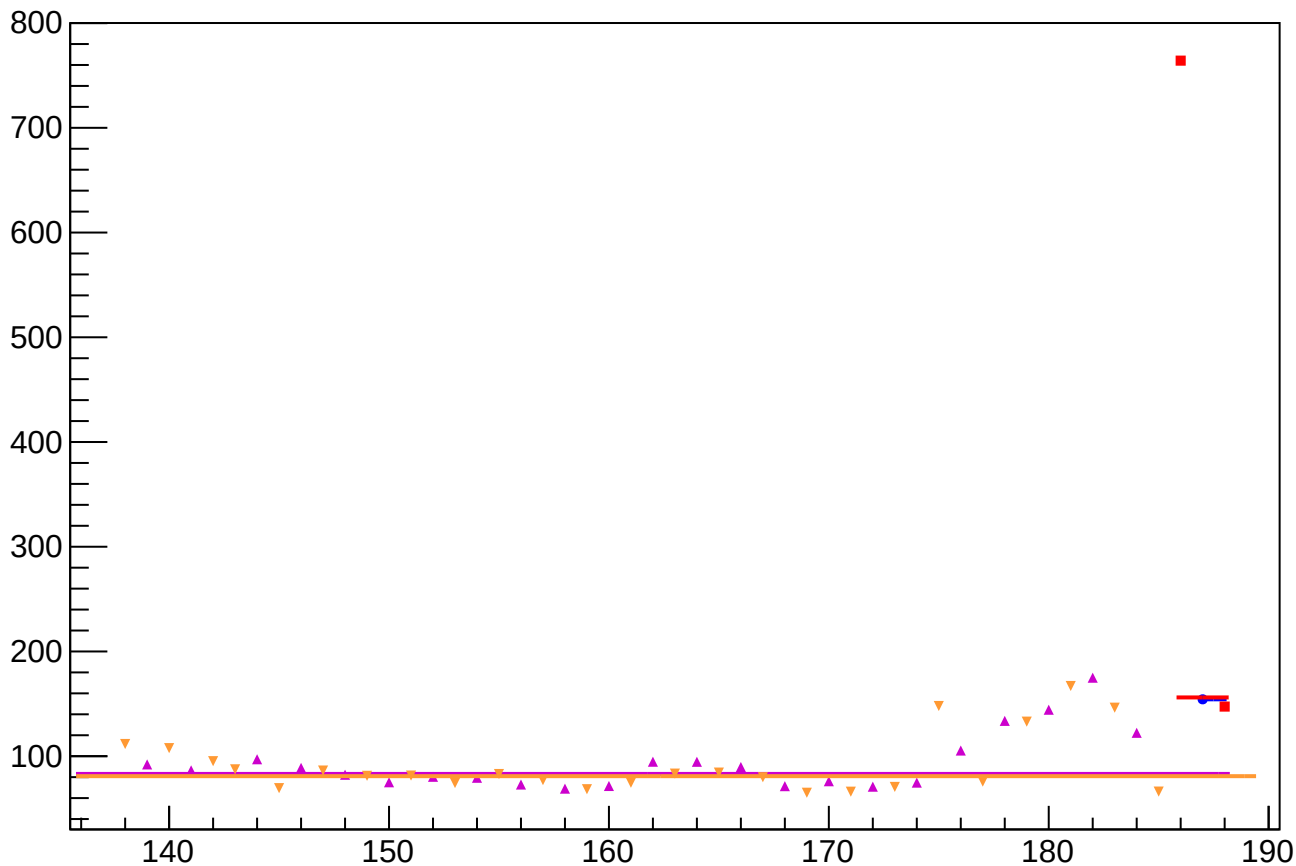
Left In:  $-63.566 \pm 20.573$   $\chi^2/\text{NDF}$ : 27.2/22

+ sign  $32.649 \pm 19.682$   $\chi^2/\text{NDF}$ : 19.6/25

All:  $-13.636 \pm 14.163$   $\chi^2/\text{NDF}$ : 58.4/50

- sign  $-63.342 \pm 20.396$   $\chi^2/\text{NDF}$ : 27.3/24

dit asym sam 12345678 avg rms vs Slug



Right In: 154.310+/-0.286     $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $80.926 \pm 0.014$      $\chi^2/\text{NDF}: 1760910.0/24$

Right Out: 156.109+/-0.110     $\chi^2/\text{NDF}$ : 437842.8/1

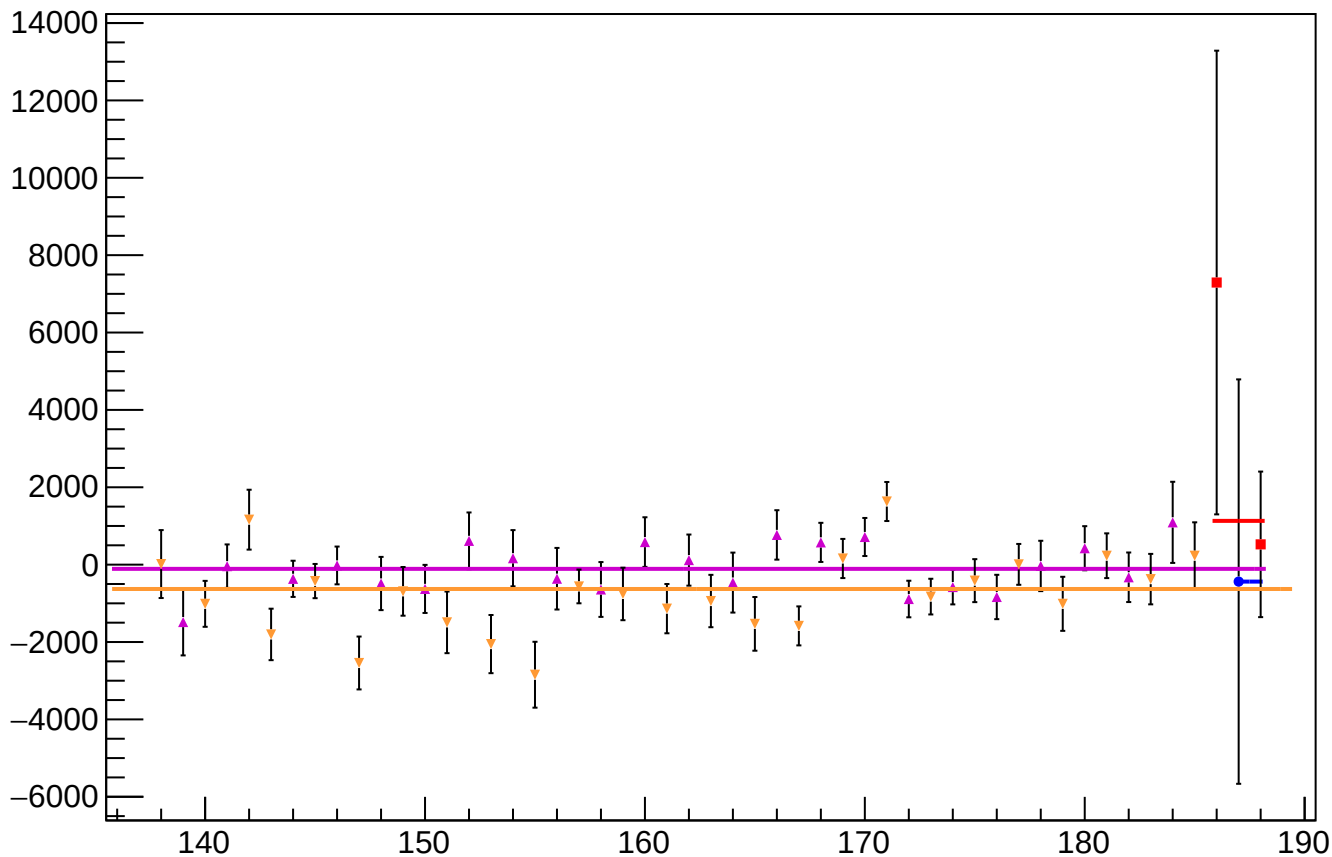
Left In: 83.071+/-0.015     $\chi^2/\text{NDF}$ :1405124.8/22

+ sign 81.100 $\pm$ 0.014     $\chi^2$ /NDF: 1826583.3/25

All: 82.655+/-0.010     $\chi^2/\text{NDF}$ : 4127967.5/50

- sign 84.324+/-0.014     $\chi^2/\text{NDF}$ : 2275512.9/24

asym\_sam\_12345678\_avg\_correction\_mean vs Slug



Right In:  $-437.935 \pm 5226.879$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-629.005 \pm 120.608$   $\chi^2/\text{NDF}$ : 63.2/24

Right Out:  $1131.535 \pm 1794.825$   $\chi^2/\text{NDF}$ : 1.2/1

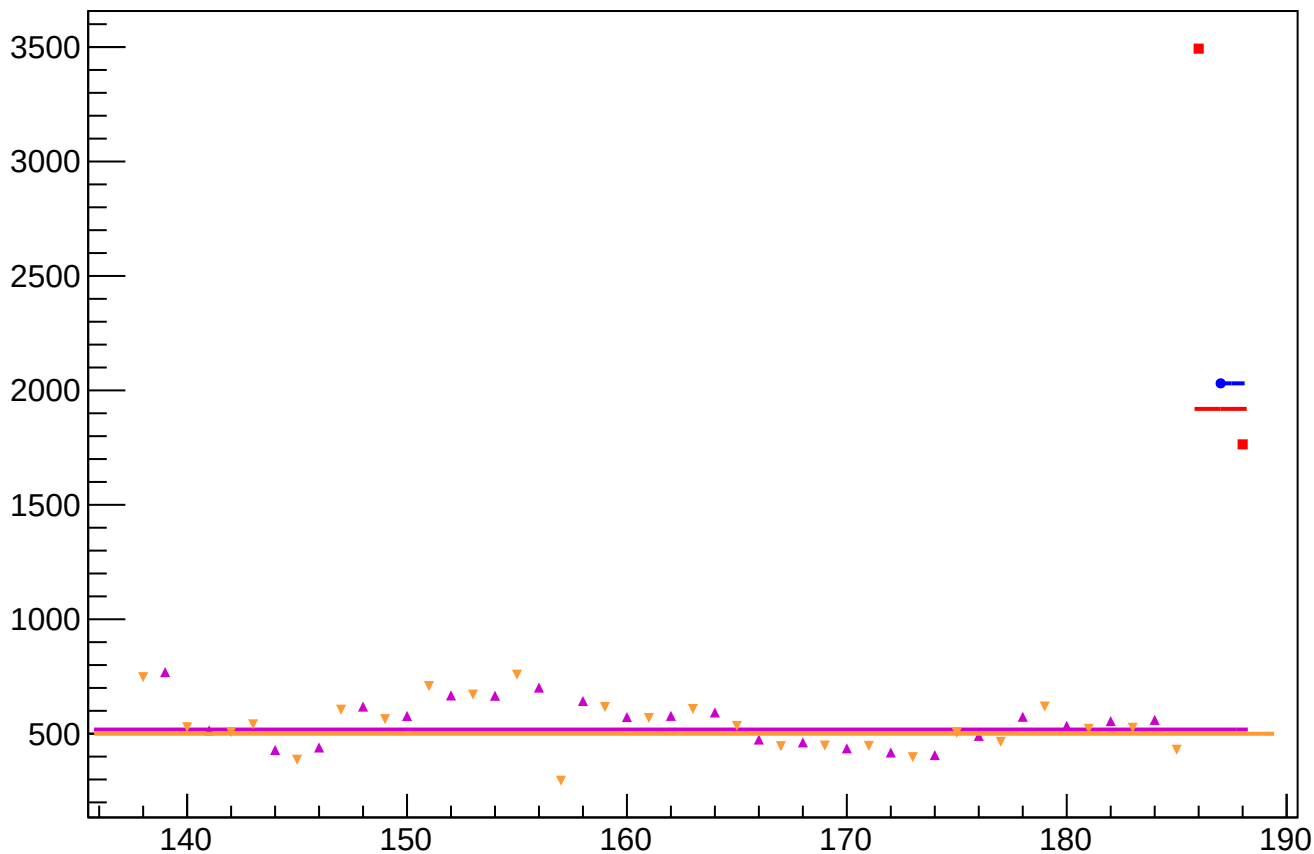
Left In:  $-108.821 \pm 125.527$   $\chi^2/\text{NDF}$ : 21.4/22

+ sign  $-628.903 \pm 120.576$   $\chi^2/\text{NDF}$ : 63.2/25

All:  $-375.784 \pm 86.856$   $\chi^2/\text{NDF}$ : 95.4/50

- sign  $-102.784 \pm 125.221$   $\chi^2/\text{NDF}$ : 23.1/24

asym\_sam\_12345678\_avg\_correction\_rms vs Slug



Right In: 2030.722+/-3.696  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 499.813+/-0.085  $\chi^2/\text{NDF}$ : 1626530.8/24

Right Out: 1919.236+/-1.269  $\chi^2/\text{NDF}$ : 151524.2/1

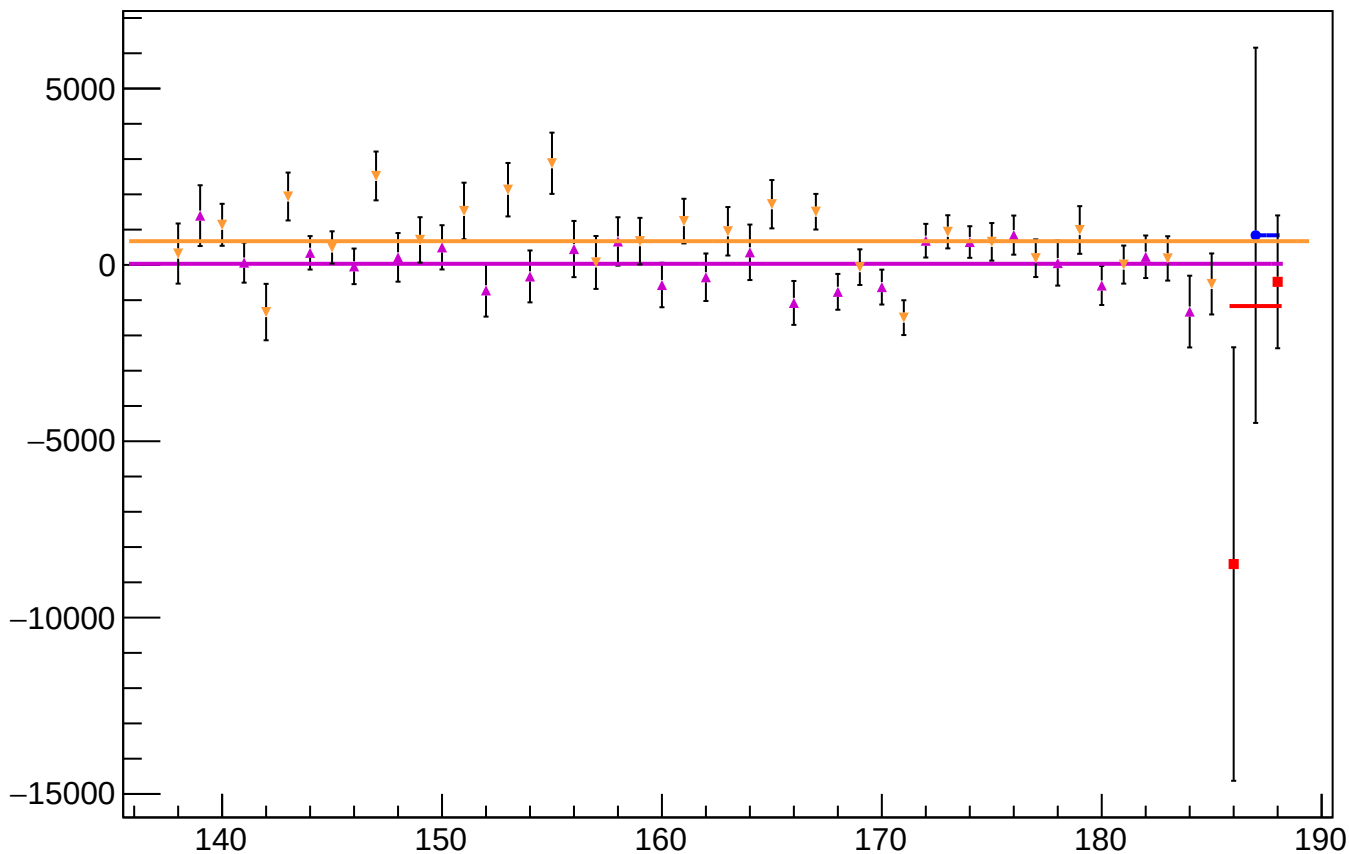
Left In: 518.244+/-0.089  $\chi^2/\text{NDF}$ : 1071993.3/22

+ sign 500.628+/-0.085  $\chi^2/\text{NDF}$ : 1798010.5/25

All: 512.384+/-0.061  $\chi^2/\text{NDF}$ : 4273705.2/50

- sign 525.064+/-0.089  $\chi^2/\text{NDF}$ : 2436175.0/24

# asym\_sam\_12345678\_avg\_mean vs Slug



Right In:  $839.132 \pm 5319.599$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $672.498 \pm 123.428$   $\chi^2/\text{NDF}: 62.8/24$

Right Out:  $-1167.111 \pm 1800.501$   $\chi^2/\text{NDF}: 1.5/1$

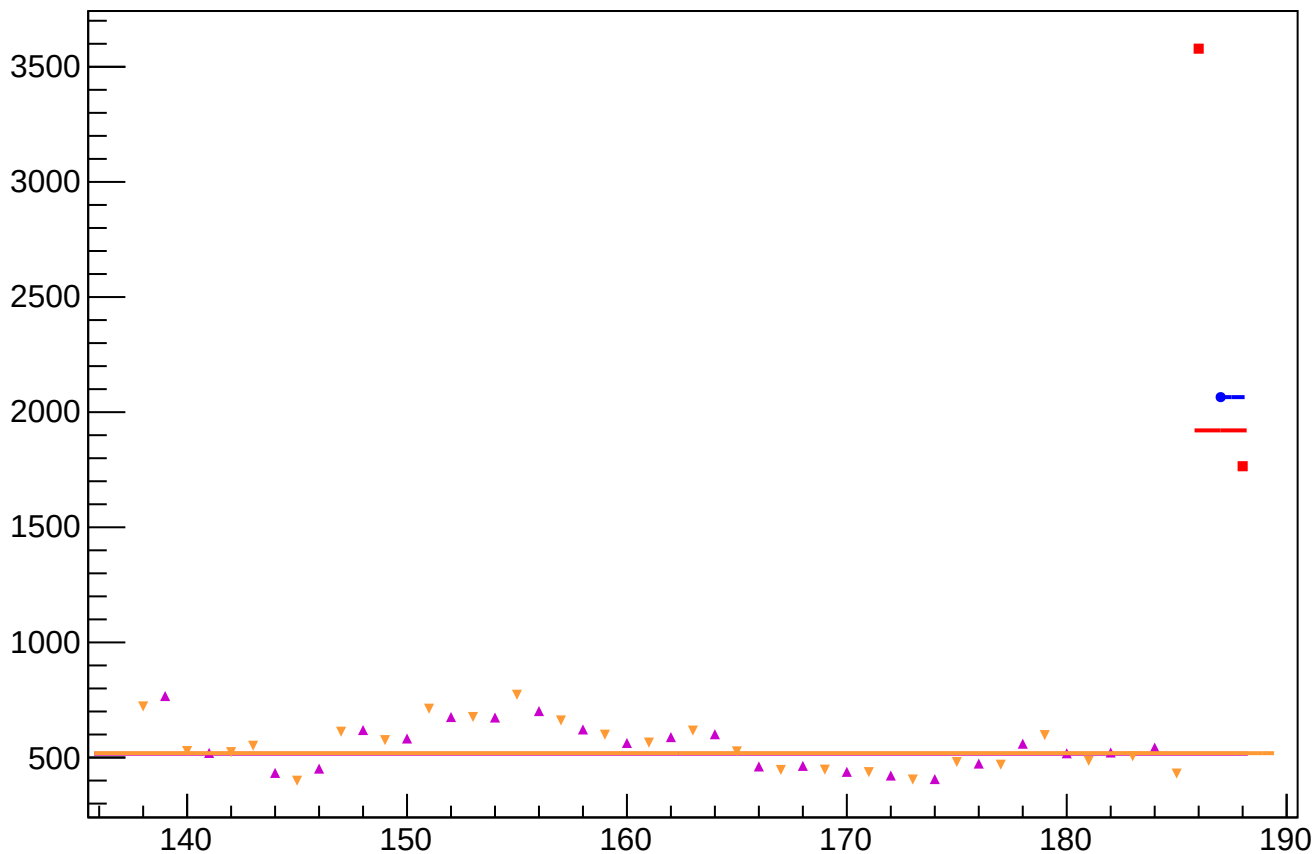
Left In:  $31.056 \pm 125.236$   $\chi^2/\text{NDF}: 23.8/22$

+ sign  $672.588 \pm 123.395$   $\chi^2/\text{NDF}: 62.8/25$

All:  $352.951 \pm 87.793$   $\chi^2/\text{NDF}: 102.2/50$

- sign  $25.287 \pm 124.935$   $\chi^2/\text{NDF}: 25.8/24$

# asym\_sam\_12345678\_avg\_rms vs Slug



Right In: 2065.356+/-3.762  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 518.935+/-0.087  $\chi^2/\text{NDF}$ :1172613.9/24

Right Out: 1920.854+/-1.273  $\chi^2/\text{NDF}$ : 159213.0/1

Left In: 516.594+/-0.089  $\chi^2/\text{NDF}$ :1036092.8/22

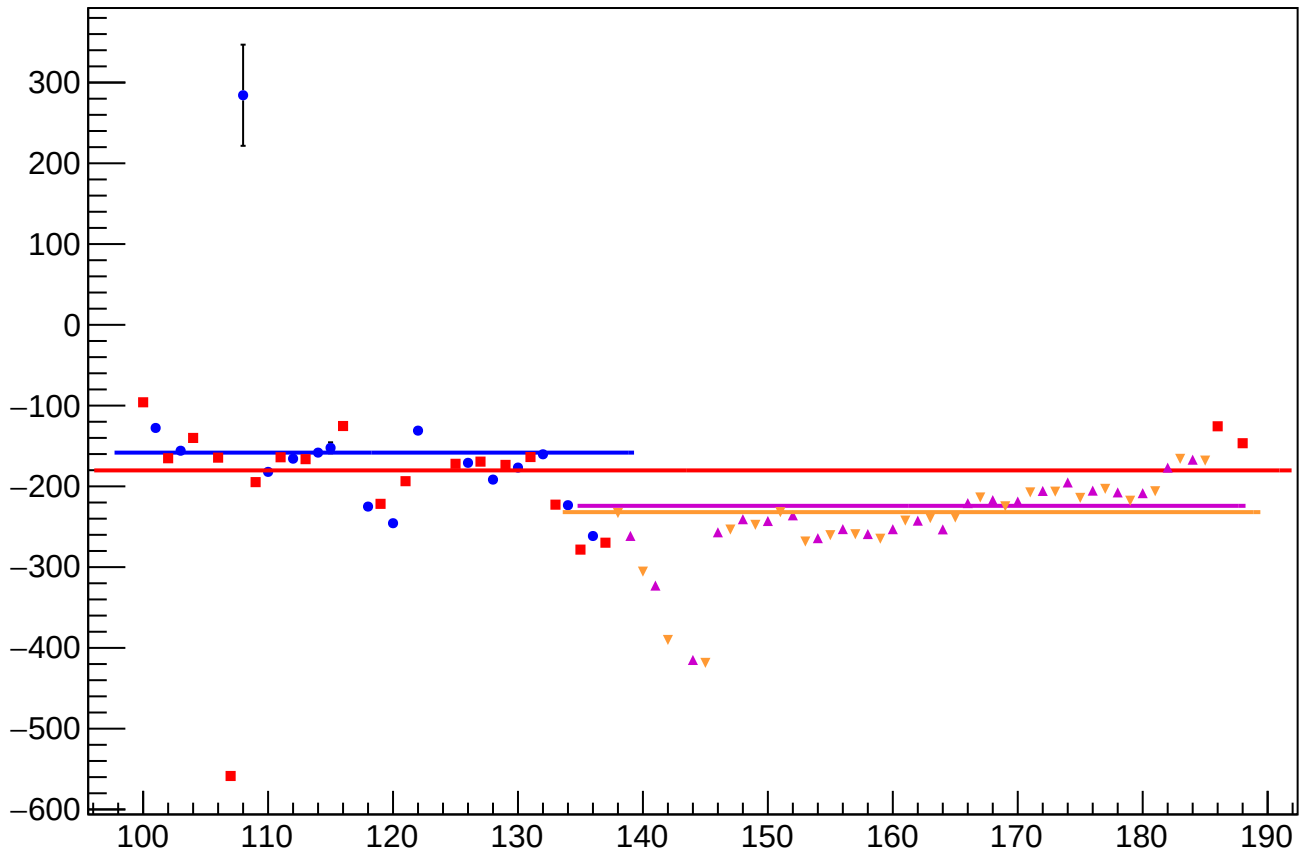
+ sign 519.767+/-0.087  $\chi^2/\text{NDF}$ : 1341538.9/25

All: 521.539+/-0.062  $\chi^2/\text{NDF}$ : 3748395.5/50

- sign 523.355+/-0.088  $\chi^2/\text{NDF}$ : 2406021.5/24



# dit\_usl\_4aX\_slope vs Slug



Right In:  $-158.222 \pm 0.000$   $\chi^2/\text{NDF}$ : 117166.2/15

Left Out:  $-231.902 \pm 0.108$   $\chi^2/\text{NDF}$ : 110473.4/23

Right Out:  $-180.236 \pm 0.141$   $\chi^2/\text{NDF}$ : 204263.5/19

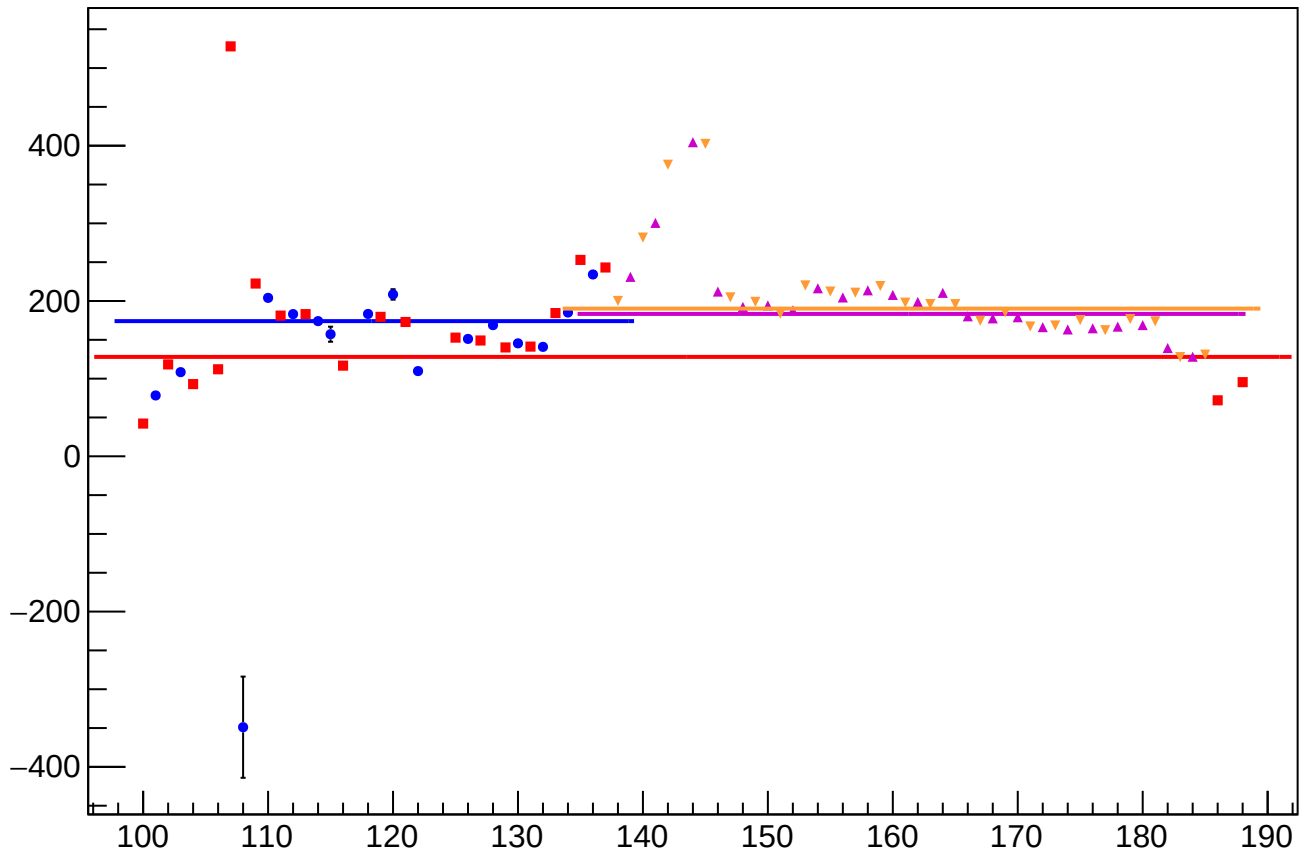
Left In:  $-224.103 \pm 0.098$   $\chi^2/\text{NDF}$ : 153347.0/22

+ sign  $-158.222 \pm 0.000$   $\chi^2/\text{NDF}$ : 691803.3/39

All:  $-158.222 \pm 0.000$   $\chi^2/\text{NDF}$ : 1523081.3/82

- sign  $-209.772 \pm 0.081$   $\chi^2/\text{NDF}$ : 422690.7/42

# dit\_usl\_4eX\_slope vs Slug



Right In: 174.085 $\pm$ 0.000  $\chi^2$ /NDF: 53377.4/15

Left Out: 190.208 $\pm$ 0.109  $\chi^2$ /NDF: 99613.5/23

Right Out: 128.015 $\pm$ 0.156  $\chi^2$ /NDF: 204422.1/19

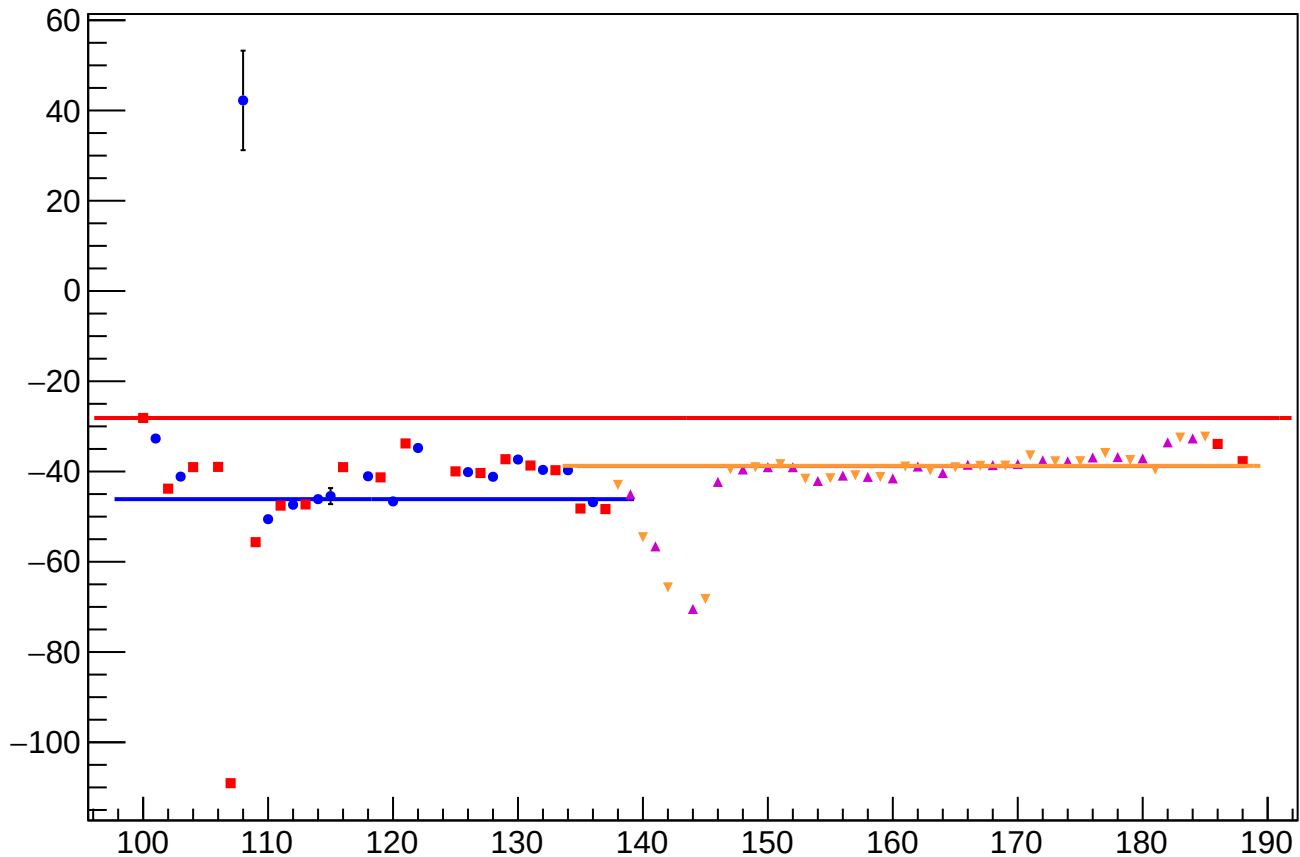
Left In: 183.362 $\pm$ 0.099  $\chi^2$ /NDF: 155441.6/22

+ sign 174.085 $\pm$ 0.000  $\chi^2$ /NDF: 175004.6/39

All: 174.085 $\pm$ 0.000  $\chi^2$ /NDF: 630366.0/82

- sign 167.543 $\pm$ 0.084  $\chi^2$ /NDF: 449243.3/42

# dit\_usl\_11X12X\_slope vs Slug



Right In:  $-46.126 \pm 0.000$   $\chi^2/\text{NDF}$ : 201273.7/15

Left Out:  $-38.745 \pm 0.006$   $\chi^2/\text{NDF}$ : 400638.0/23

Right Out:  $-28.139 \pm 0.000$   $\chi^2/\text{NDF}$ : 802516.3/19

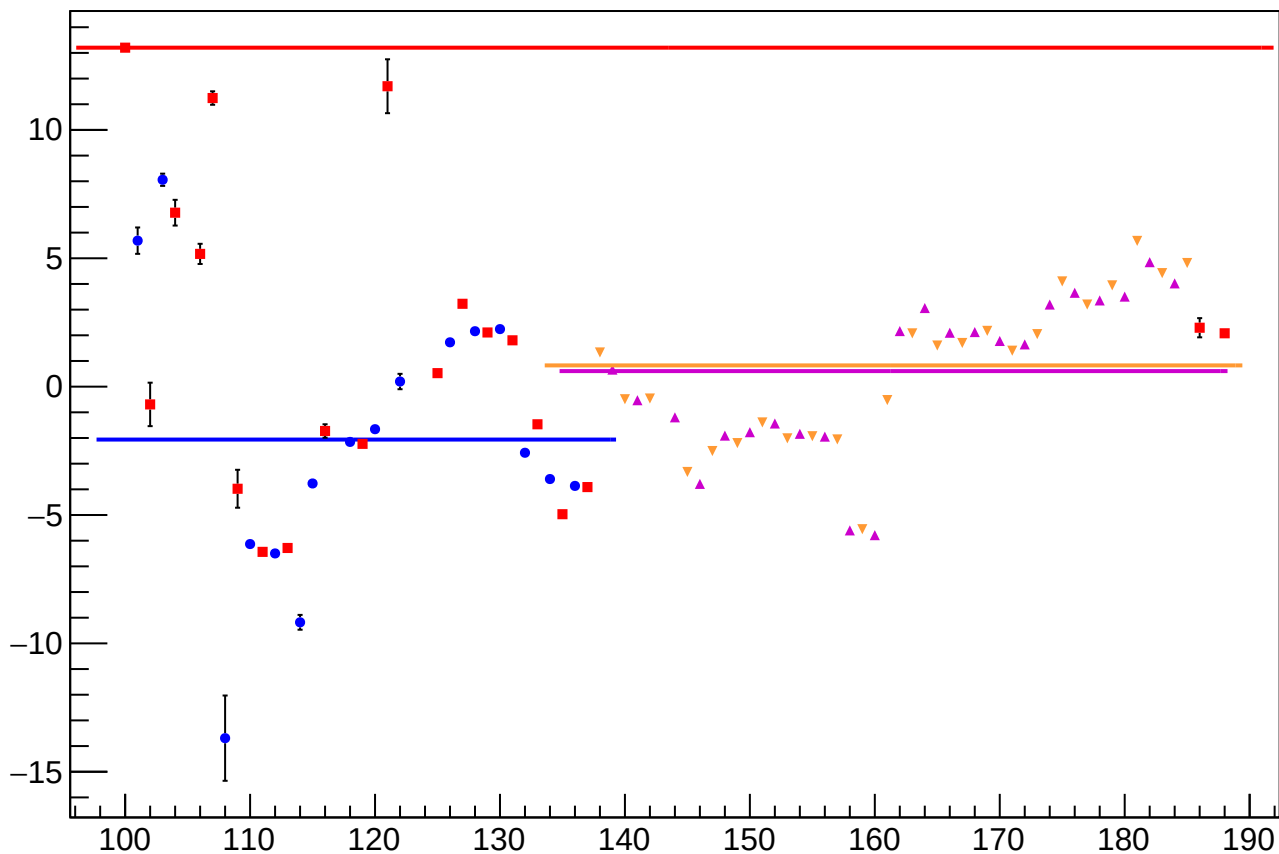
Left In:  $-38.794 \pm 0.007$   $\chi^2/\text{NDF}$ : 321993.9/22

+ sign  $-46.126 \pm 0.000$   $\chi^2/\text{NDF}$ : 2179096.9/39

All:  $-39.778 \pm 0.000$   $\chi^2/\text{NDF}$ : 248795993231

- sign  $-28.139 \pm 0.000$   $\chi^2/\text{NDF}$ : 3776279.3/42

# dit\_usl\_4aY\_slope vs Slug



Right In:  $-2.061 \pm 0.018$   $\chi^2/\text{NDF}$ : 25665.1/15

Left Out:  $0.828 \pm 0.006$   $\chi^2/\text{NDF}$ : 255303.5/23

Right Out:  $13.204 \pm 0.000$   $\chi^2/\text{NDF}$ : 529432.3/19

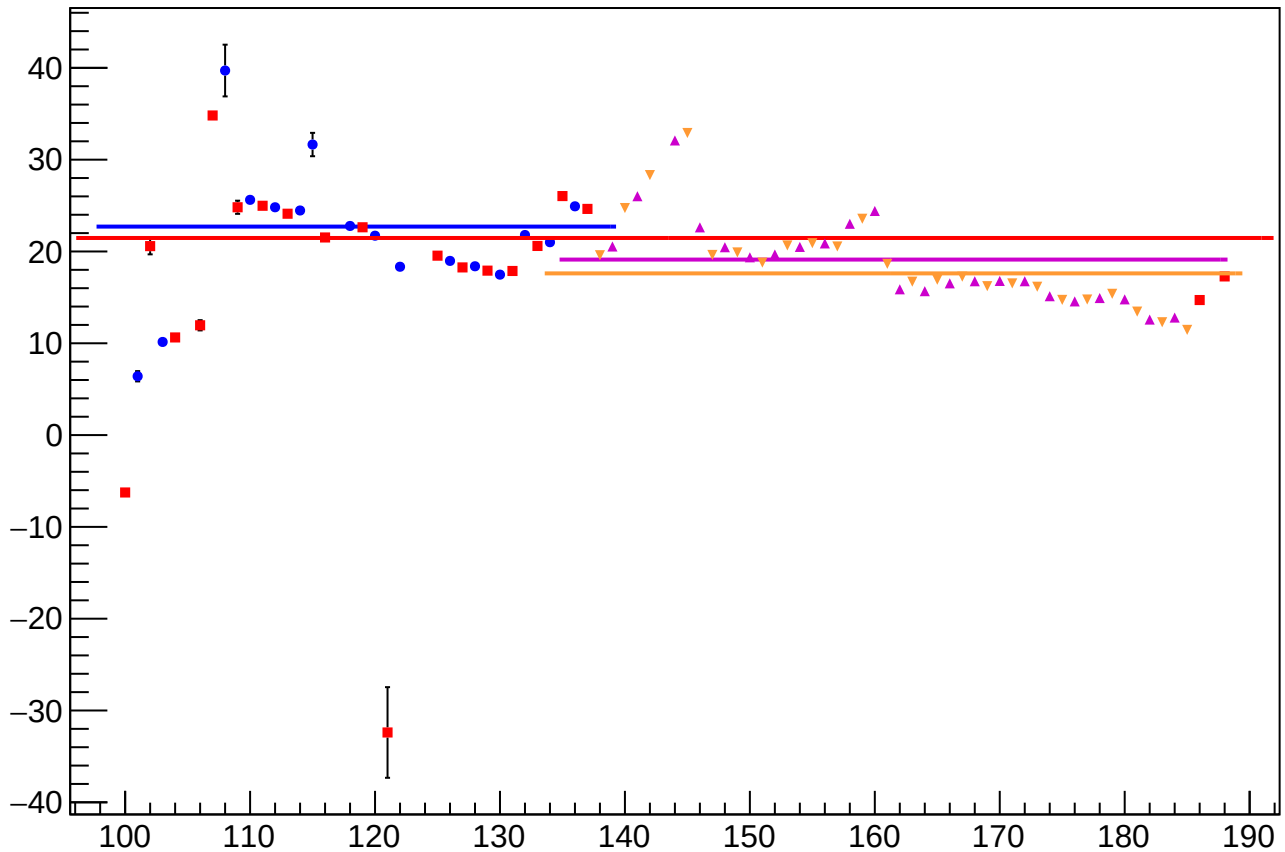
Left In:  $0.606 \pm 0.005$   $\chi^2/\text{NDF}$ : 331282.7/22

+ sign  $0.523 \pm 0.006$   $\chi^2/\text{NDF}$ : 304460.0/39

All:  $13.204 \pm 0.000$   $\chi^2/\text{NDF}$ : 12176848.6/82

- sign  $13.204 \pm 0.000$   $\chi^2/\text{NDF}$ : 7080960.3/42

# dit\_usl\_4eY\_slope vs Slug



Right In: 22.711 $\pm$ 0.019  $\chi^2$ /NDF: 22767.9/15

Left Out: 17.613 $\pm$ 0.007  $\chi^2$ /NDF: 178438.8/23

Right Out: 21.470 $\pm$ 0.021  $\chi^2$ /NDF: 29888.5/19

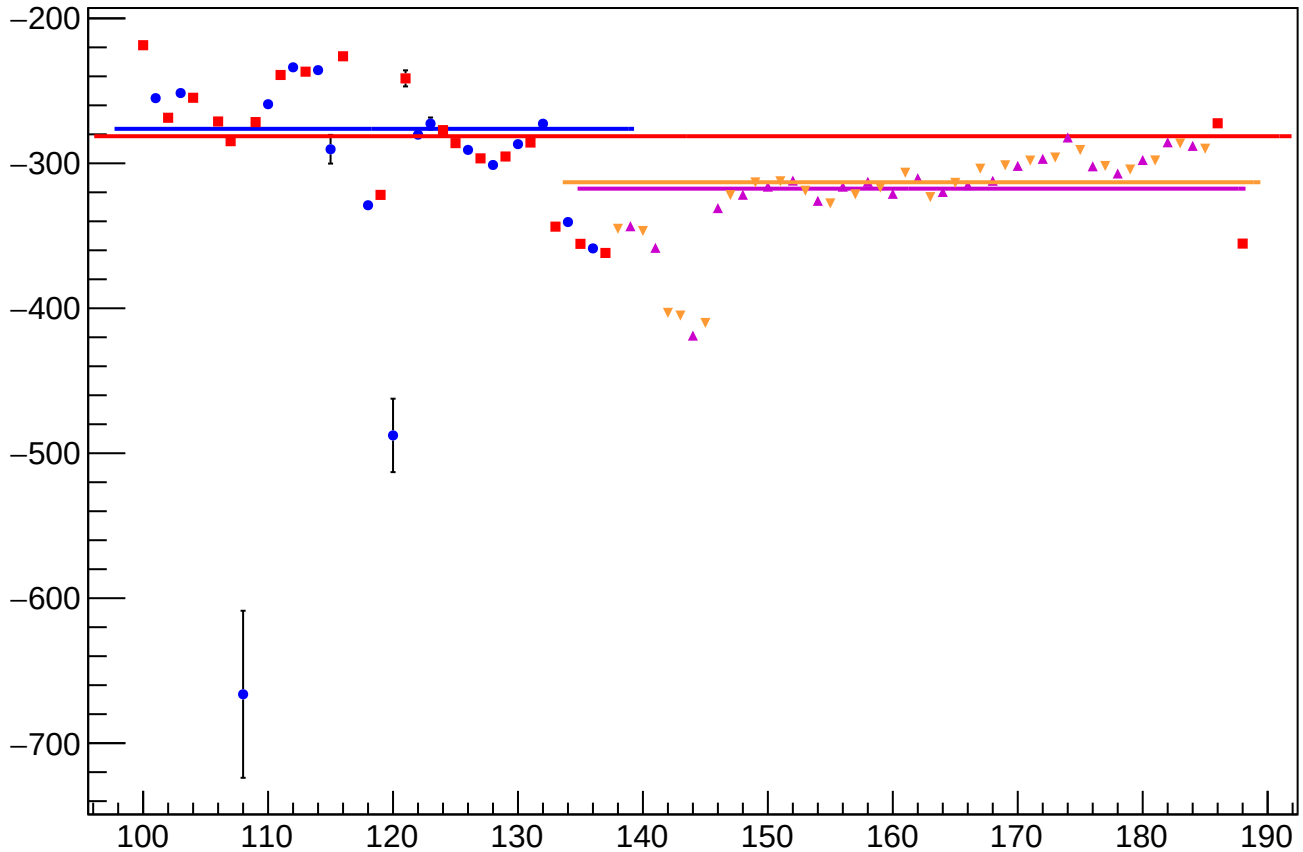
Left In: 19.117 $\pm$ 0.007  $\chi^2$ /NDF: 229353.0/22

+ sign 18.256 $\pm$ 0.007  $\chi^2$ /NDF: 265773.7/39

All: 18.805 $\pm$ 0.005  $\chi^2$ /NDF: 550230.8/82

- sign 19.363 $\pm$ 0.007  $\chi^2$ /NDF: 270744.5/42

# dit\_usr\_4aX\_slope vs Slug



Right In:  $-276.201 \pm 0.167$   $\chi^2/\text{NDF}$ : 58107.7/16

Left Out:  $-313.052 \pm 0.096$   $\chi^2/\text{NDF}$ : 54405.8/24

Right Out:  $-281.299 \pm 0.136$   $\chi^2/\text{NDF}$ : 83574.0/20

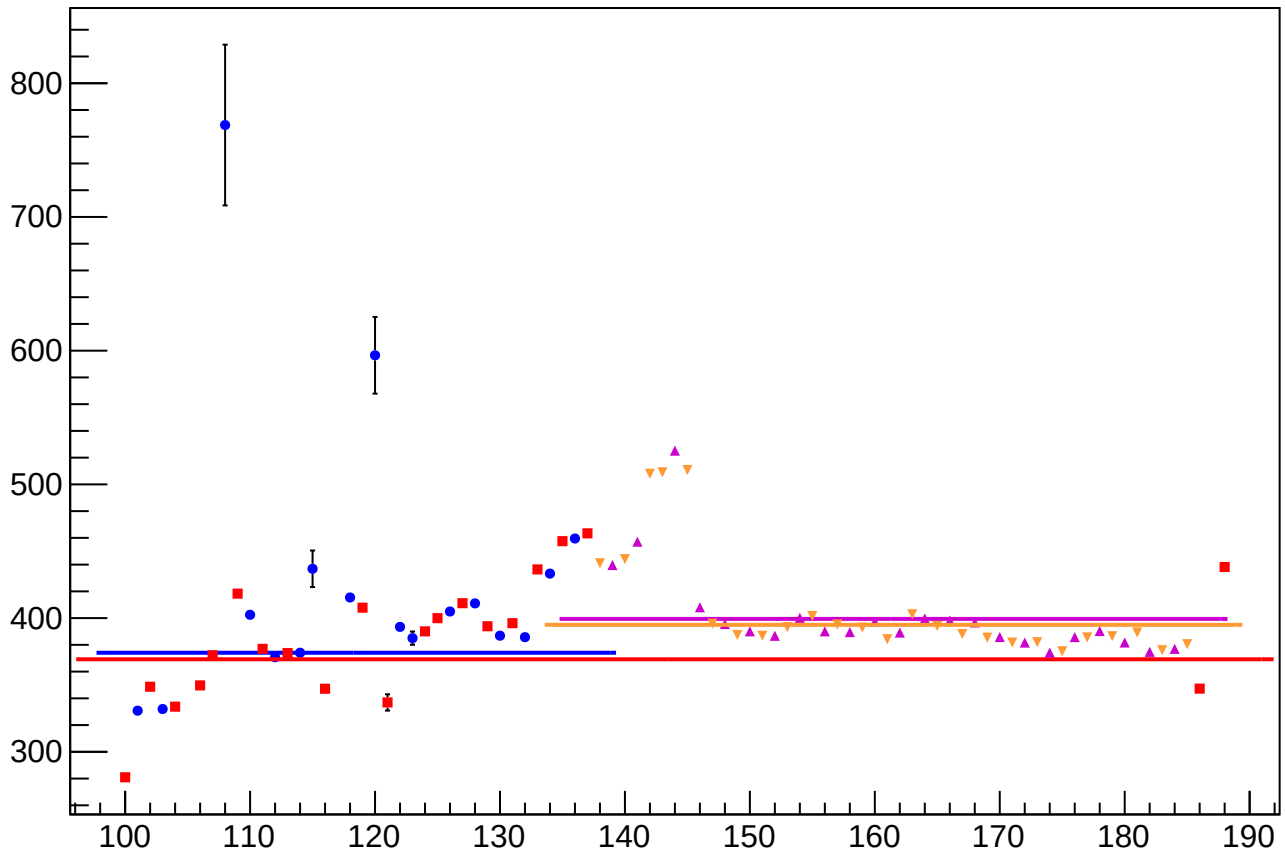
Left In:  $-317.471 \pm 0.095$   $\chi^2/\text{NDF}$ : 63067.6/22

+ sign  $-303.888 \pm 0.083$   $\chi^2/\text{NDF}$ : 149286.9/41

All:  $-304.768 \pm 0.057$   $\chi^2/\text{NDF}$ : 343732.8/85

- sign  $-305.543 \pm 0.078$   $\chi^2/\text{NDF}$ : 194234.7/43

# dit\_usr\_4eX\_slope vs Slug



Right In: 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 35072.0/16

Left Out: 394.968 $\pm$ 0.096  $\chi^2$ /NDF: 68076.2/24

Right Out: 369.216 $\pm$ 0.140  $\chi^2$ /NDF: 117600.9/20

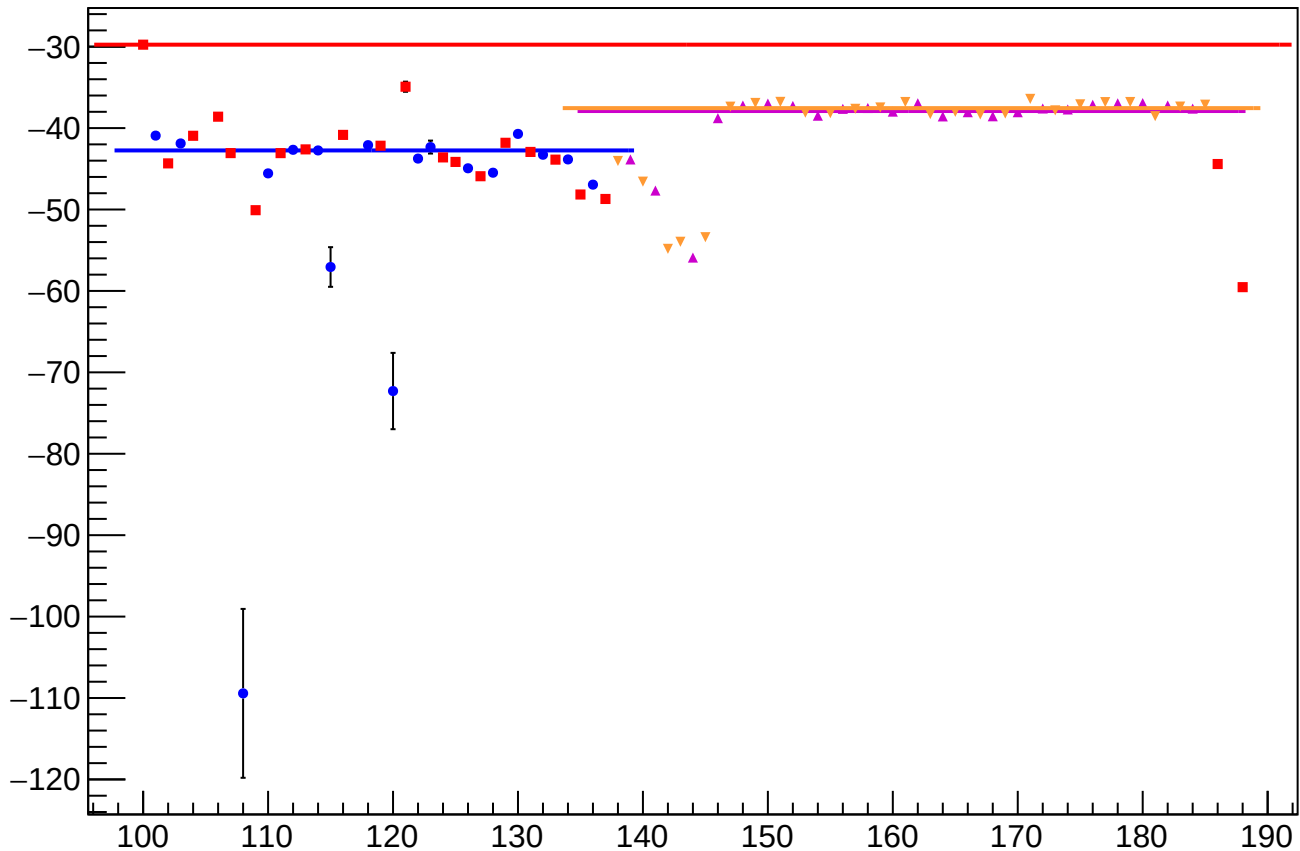
Left In: 399.410 $\pm$ 0.097  $\chi^2$ /NDF: 77209.0/22

+ sign 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 150418.9/41

All: 374.094 $\pm$ 0.000  $\chi^2$ /NDF: 414741.7/85

- sign 389.669 $\pm$ 0.080  $\chi^2$ /NDF: 226155.7/43

# dit\_usr\_11X12X\_slope vs Slug



Right In:  $-42.744 \pm 0.000$   $\chi^2/\text{NDF}$ : 13262.6/16

Left Out:  $-37.547 \pm 0.004$   $\chi^2/\text{NDF}$ : 267131.7/24

Right Out:  $-29.754 \pm 0.000$   $\chi^2/\text{NDF}$ : 537447.2/20

Left In:  $-37.903 \pm 0.004$   $\chi^2/\text{NDF}$ : 156960.8/22

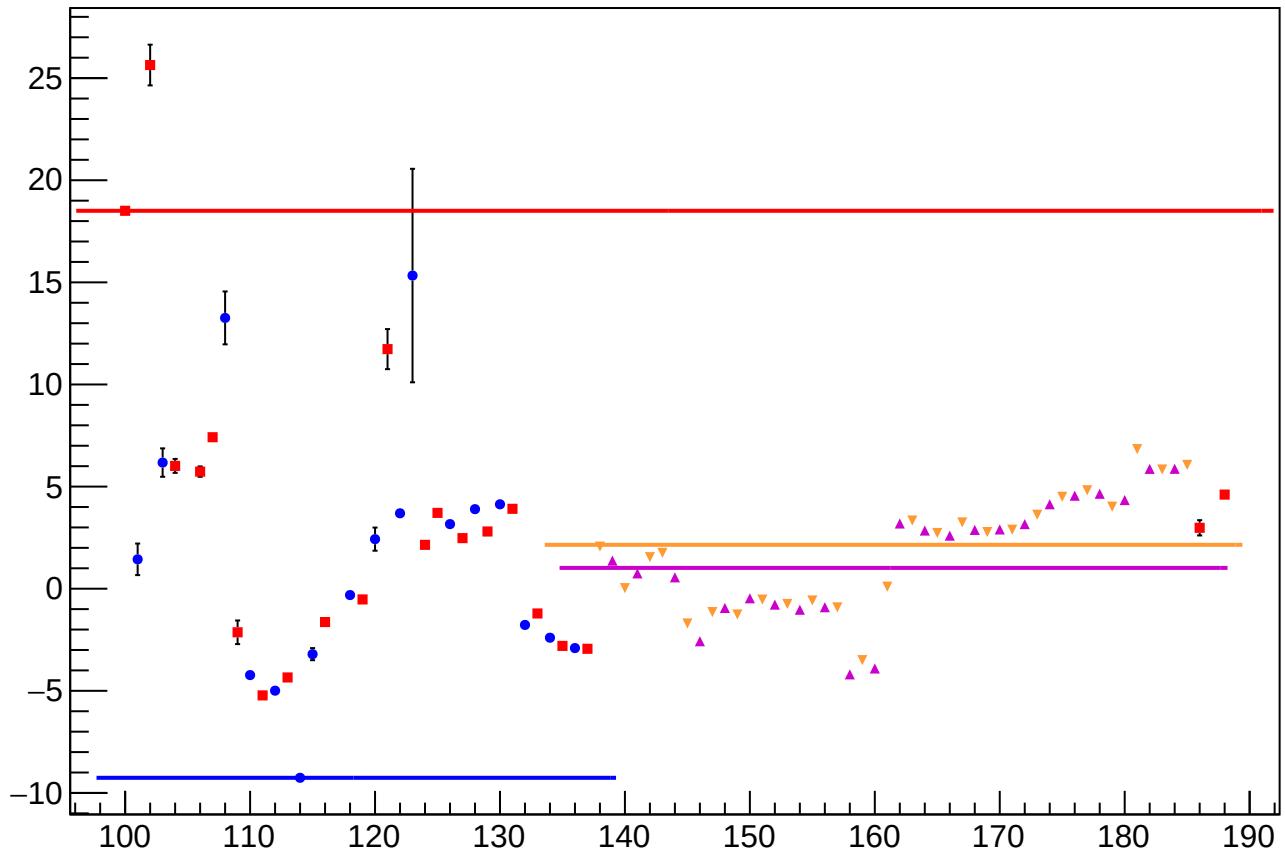
+ sign  $-42.744 \pm 0.000$   $\chi^2/\text{NDF}$ : 2115942.3/41

All:  $-38.159 \pm 0.000$   $\chi^2/\text{NDF}$ : 129765212680

- sign  $-29.754 \pm 0.000$   $\chi^2/\text{NDF}$ : 4554759.9/43



# dit\_usr\_4aY\_slope vs Slug



Right In:  $-9.259 \pm 0.000$   $\chi^2/\text{NDF}$ : 405850.5/16

Left Out:  $2.149 \pm 0.005$   $\chi^2/\text{NDF}$ : 290739.3/24

Right Out:  $18.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 7381788.7/20

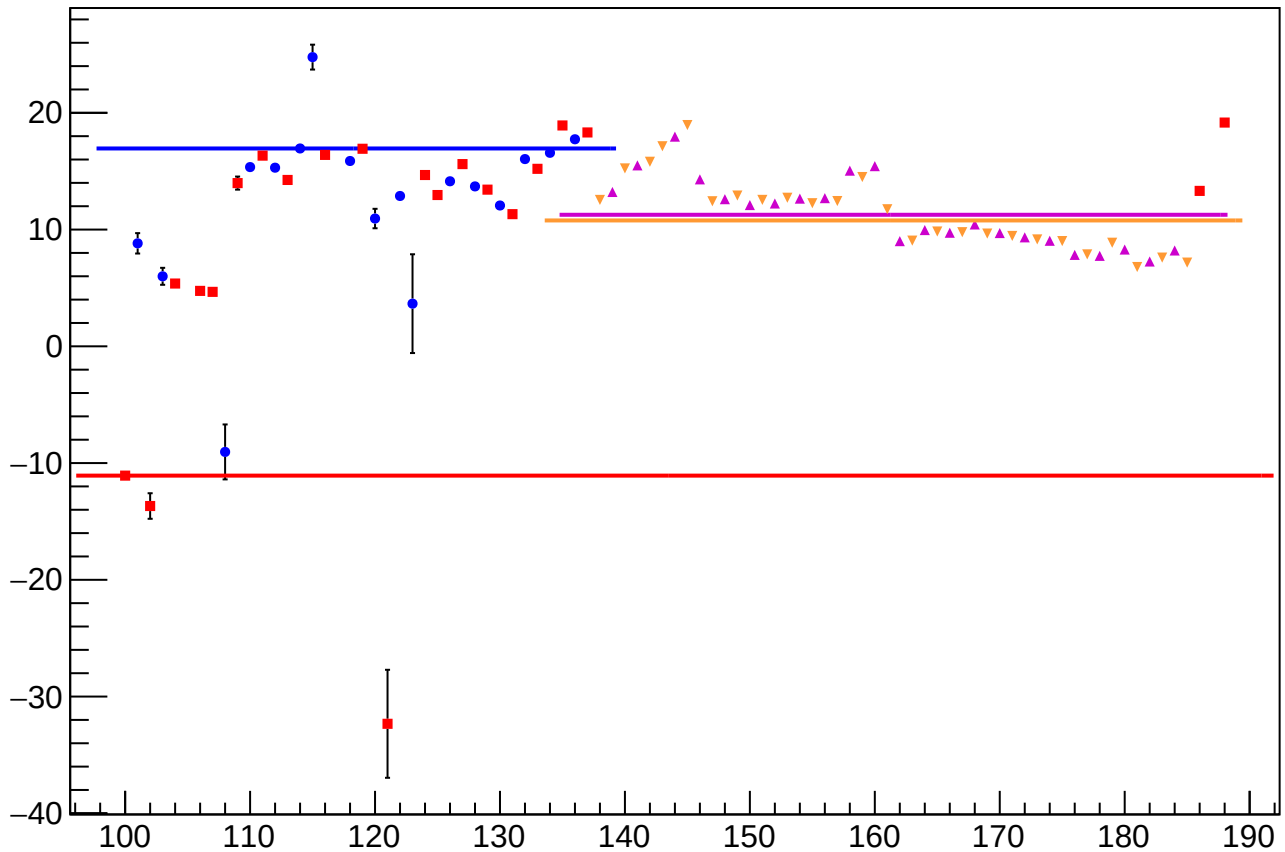
Left In:  $1.019 \pm 0.006$   $\chi^2/\text{NDF}$ : 250029.0/22

+ sign  $-9.259 \pm 0.000$   $\chi^2/\text{NDF}$ : 6139448.0/41

All:  $6.039 \pm 0.000$   $\chi^2/\text{NDF}$ : 1645057450595

- sign  $18.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 17032728.0/43

# dit\_usr\_4eY\_slope vs Slug



Right In: 16.947 $\pm$ 0.000  $\chi^2$ /NDF: 11231.8/16

Left Out: 10.782 $\pm$ 0.007  $\chi^2$ /NDF:129427.5/24

Right Out: -11.075 $\pm$ 0.000  $\chi^2$ /NDF: 2783034.5/20

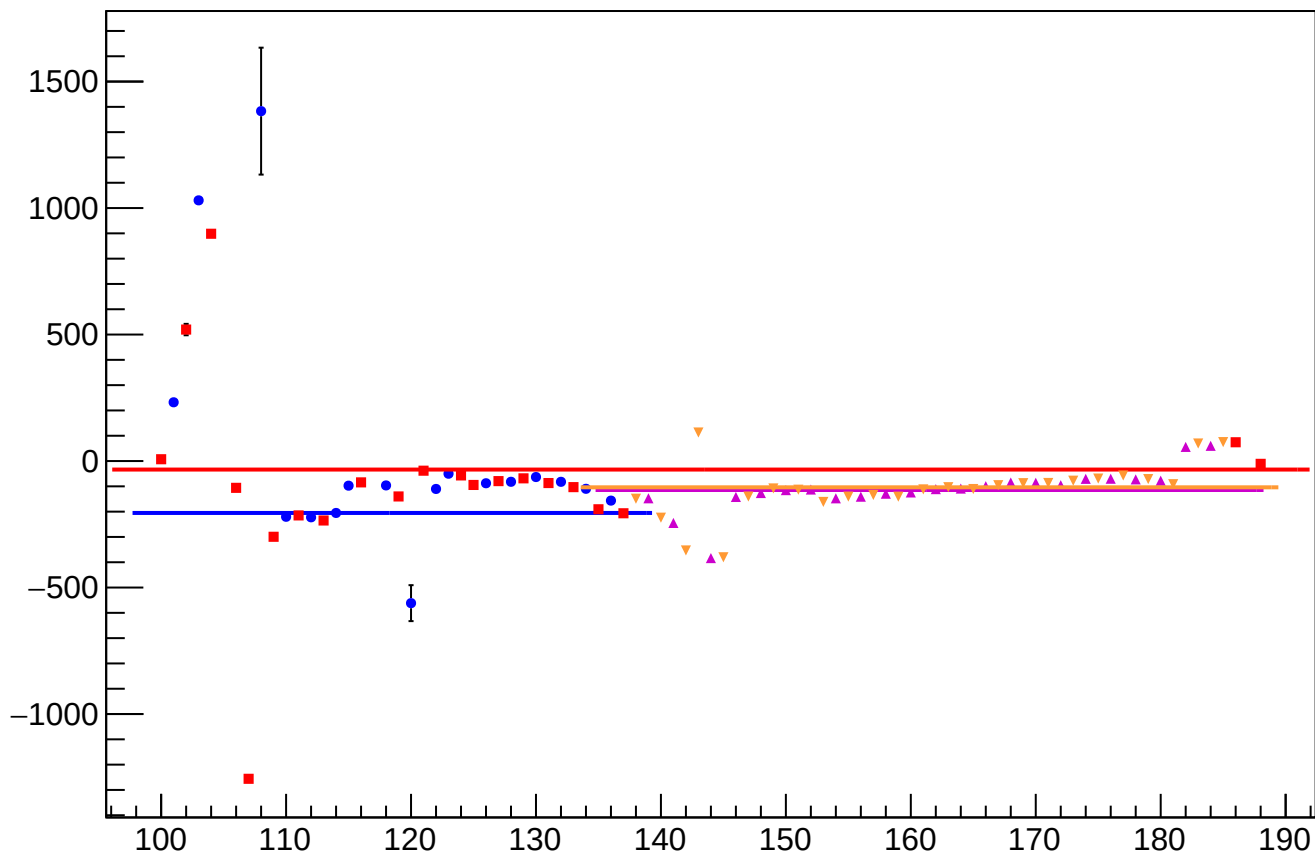
Left In: 11.267 $\pm$ 0.008  $\chi^2$ /NDF:98438.0/22

+ sign 16.947 $\pm$ 0.000  $\chi^2$ /NDF: 995588.1/41

All: -2.268 $\pm$ 0.000  $\chi^2$ /NDF: 4692527454635

- sign -11.075 $\pm$ 0.000  $\chi^2$ /NDF: 11000522.4/43

# dit\_atl1\_4aX\_slope vs Slug



Right In:  $-205.160 \pm 0.000$   $\chi^2/\text{NDF}: 582775.6/16$

Left Out:  $-103.842 \pm 0.192$   $\chi^2/\text{NDF}: 94751.7/24$

Right Out:  $-33.651 \pm 0.251$   $\chi^2/\text{NDF}: 152724.6/20$

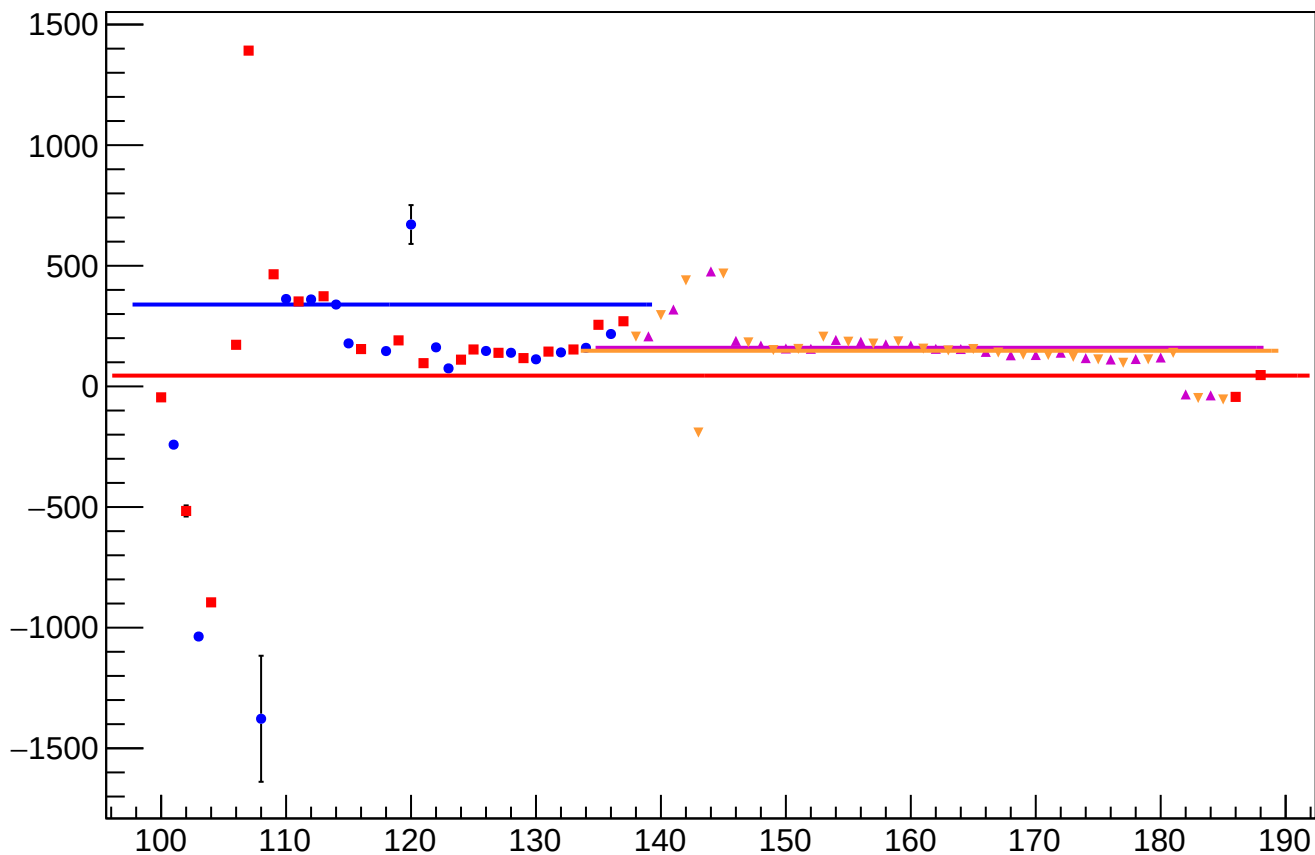
Left In:  $-114.444 \pm 0.225$   $\chi^2/\text{NDF}: 76837.7/22$

+ sign  $-205.160 \pm 0.000$   $\chi^2/\text{NDF}: 956897.5/41$

All:  $-205.160 \pm 0.000$   $\chi^2/\text{NDF}: 1816936.4/85$

- sign  $-78.458 \pm 0.167$   $\chi^2/\text{NDF}: 287108.7/43$

# dit\_atl1\_4eX\_slope vs Slug



Right In: 339.325+/-0.000  $\chi^2/\text{NDF}$ : 1030606.3/16

Left Out: 147.771+/-0.196  $\chi^2/\text{NDF}$ : 134281.2/24

Right Out: 44.745+/-0.249  $\chi^2/\text{NDF}$ : 304190.6/20

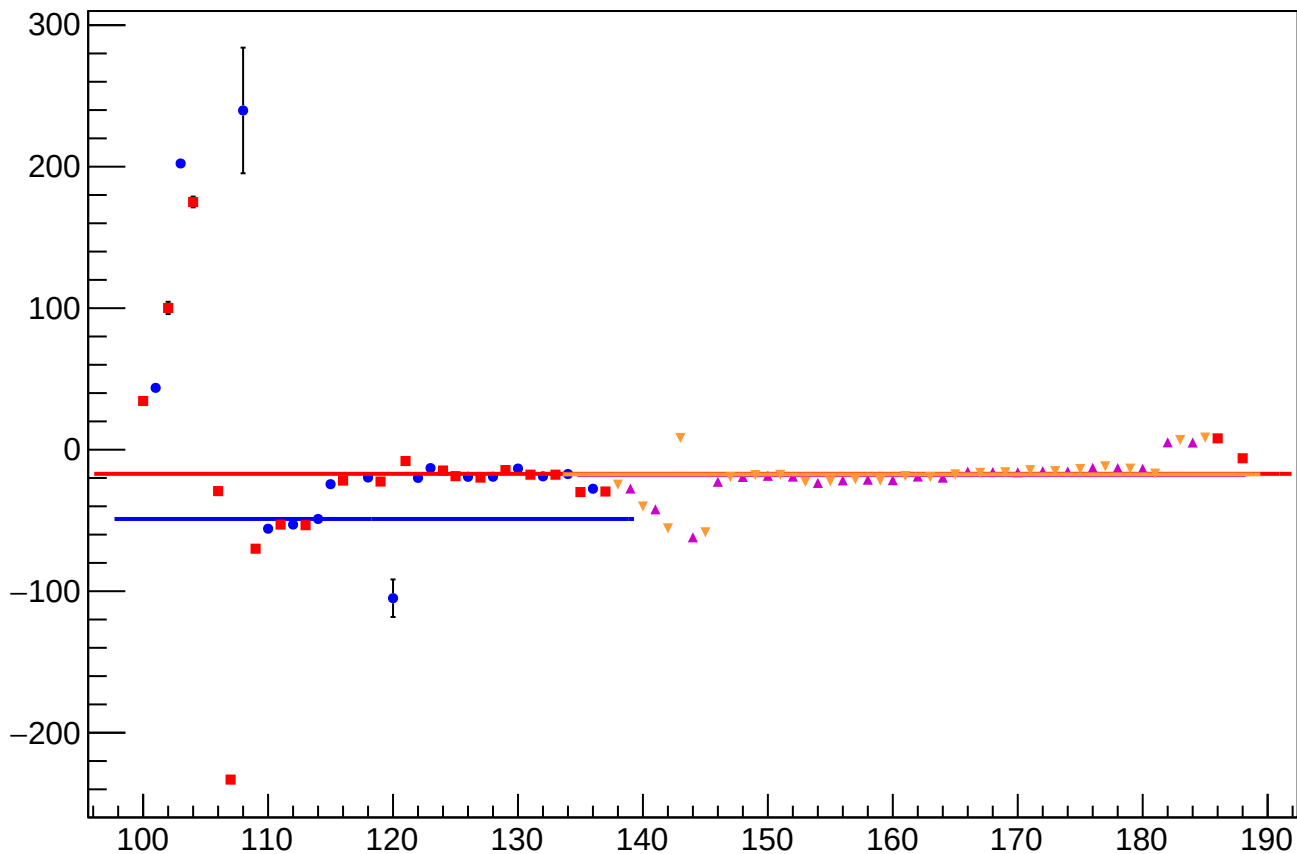
Left In: 160.049+/-0.230  $\chi^2/\text{NDF}$ : 83579.0/22

+ sign 339.325+/-0.000  $\chi^2/\text{NDF}$ : 2118512.7/41

All: 339.325+/-0.000  $\chi^2/\text{NDF}$ : 4520250.6/85

- sign 106.945+/-0.169  $\chi^2/\text{NDF}$ : 503859.5/43

# dit\_atl1\_11X12X\_slope vs Slug



Right In: -48.945 $\pm$ 0.000  $\chi^2$ /NDF: 5408370.4/16

Left Out: -17.446 $\pm$ 0.010  $\chi^2$ /NDF: 714044.4/24

Right Out: -17.055 $\pm$ 0.043  $\chi^2$ /NDF: 298881.2/20

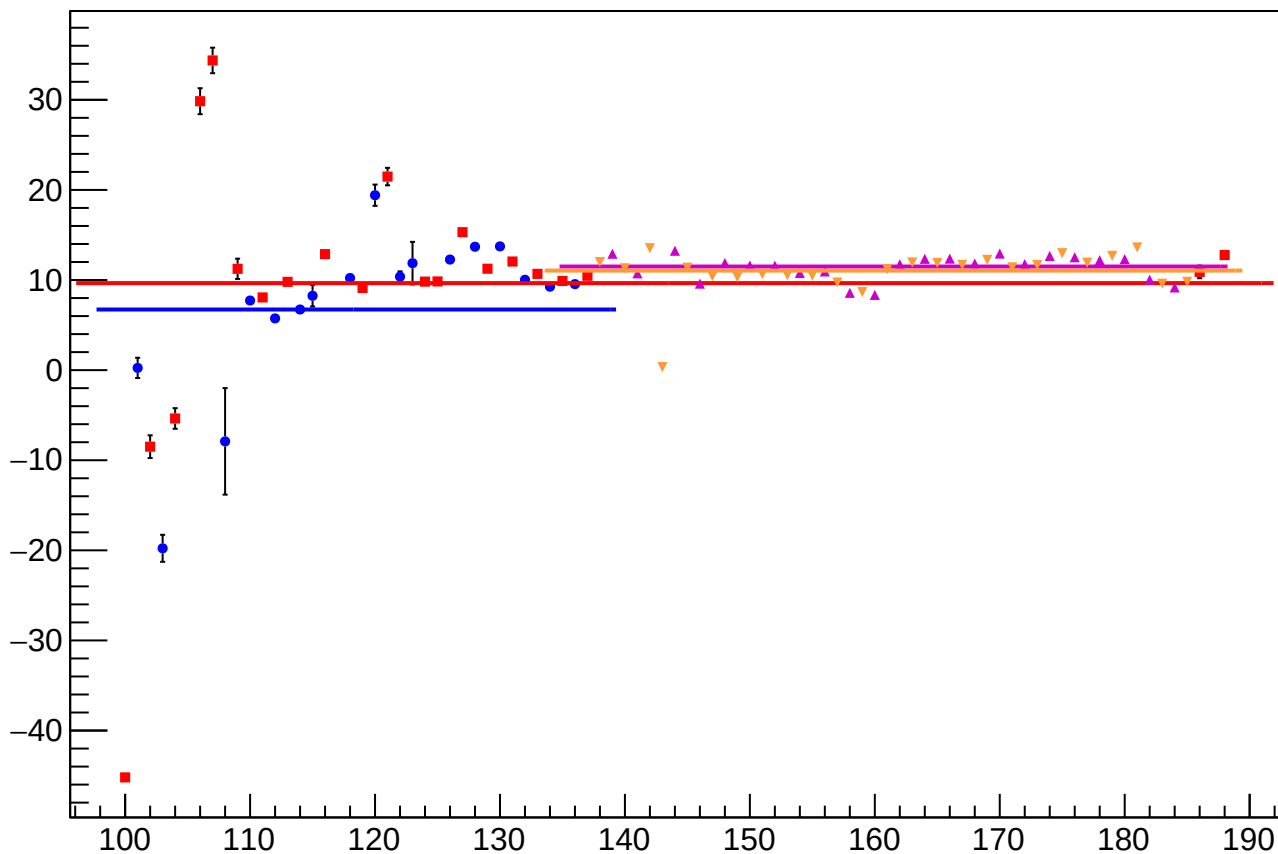
Left In: -17.951 $\pm$ 0.012  $\chi^2$ /NDF: 252123.1/22

+ sign -48.945 $\pm$ 0.000  $\chi^2$ /NDF: 16025853.7/41

All: -48.945 $\pm$ 0.000  $\chi^2$ /NDF: 23515834.6/85

- sign -17.883 $\pm$ 0.012  $\chi^2$ /NDF: 551407.1/43

# dit\_atl1\_4aY\_slope vs Slug



Right In: 6.728 $\pm$ 0.000  $\chi^2$ /NDF: 13749.2/16

Left Out: 11.049 $\pm$ 0.012  $\chi^2$ /NDF: 31618.4/24

Right Out: 9.658 $\pm$ 0.035  $\chi^2$ /NDF: 27219.5/20

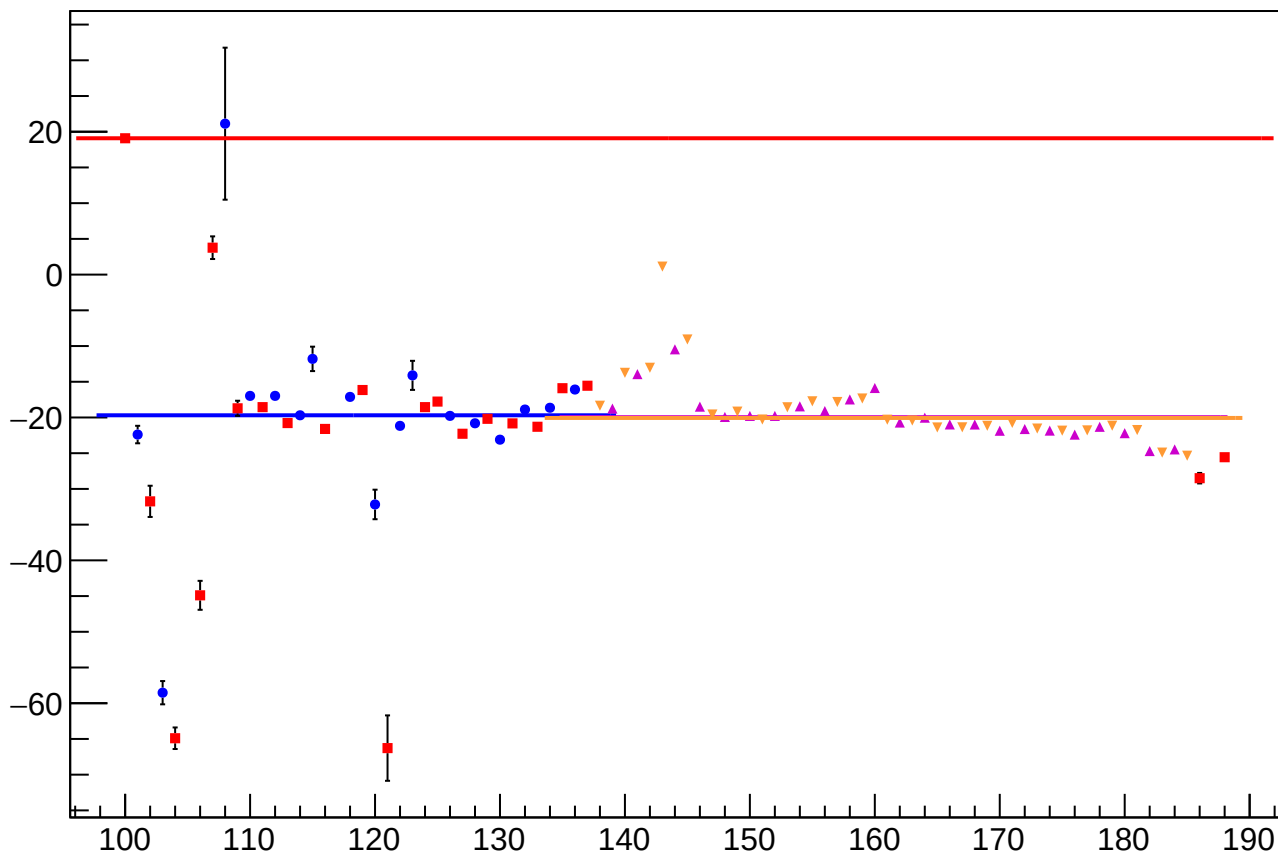
Left In: 11.498 $\pm$ 0.010  $\chi^2$ /NDF: 15848.8/22

+ sign 6.728 $\pm$ 0.000  $\chi^2$ /NDF: 169822.4/41

All: 6.728 $\pm$ 0.000  $\chi^2$ /NDF: 429210.9/85

- sign 11.346 $\pm$ 0.010  $\chi^2$ /NDF: 45643.3/43

# dit\_atl1\_4eY\_slope vs Slug



Right In:  $-19.693 \pm 0.000$   $\chi^2/\text{NDF}$ : 7579.0/16

Left Out:  $-20.065 \pm 0.014$   $\chi^2/\text{NDF}$ : 71466.1/24

Right Out:  $19.086 \pm 0.000$   $\chi^2/\text{NDF}$ : 670750.0/20

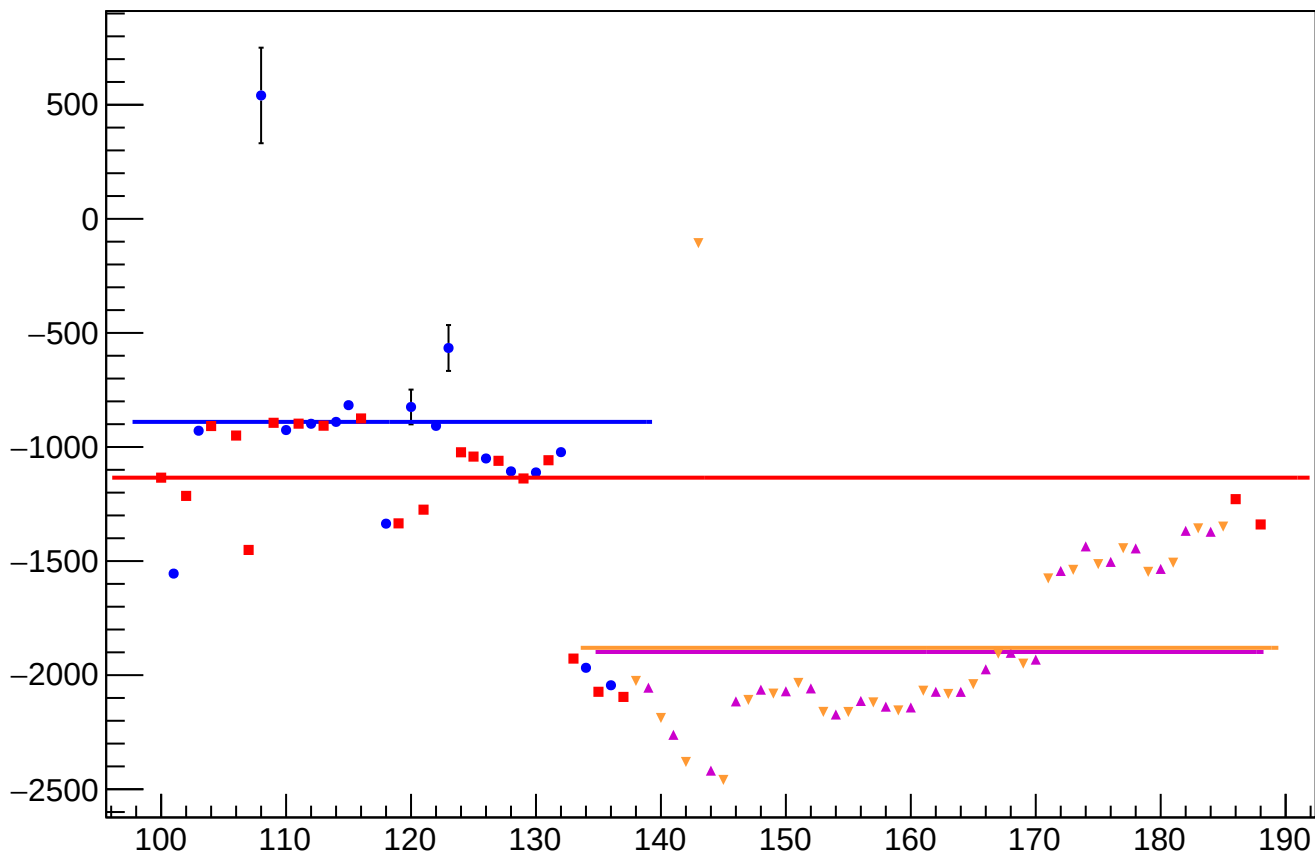
Left In:  $-19.955 \pm 0.015$   $\chi^2/\text{NDF}$ : 22657.6/22

+ sign  $-19.693 \pm 0.000$   $\chi^2/\text{NDF}$ : 79766.9/41

All:  $-6.006 \pm 0.000$   $\chi^2/\text{NDF}$ : 4625637731292

- sign  $19.086 \pm 0.000$   $\chi^2/\text{NDF}$ : 7358114.8/43

# dit\_atl2\_4aX\_slope vs Slug



Right In:  $-889.928 \pm 0.000$   $\chi^2/\text{NDF}$ : 775896.0/16

Left Out:  $-1880.162 \pm 0.353$   $\chi^2/\text{NDF}$ : 873293.0/24

Right Out:  $-1134.421 \pm 0.000$   $\chi^2/\text{NDF}$ : 764568.4/20

Left In:  $-1898.497 \pm 0.364$   $\chi^2/\text{NDF}$ : 698003.8/22

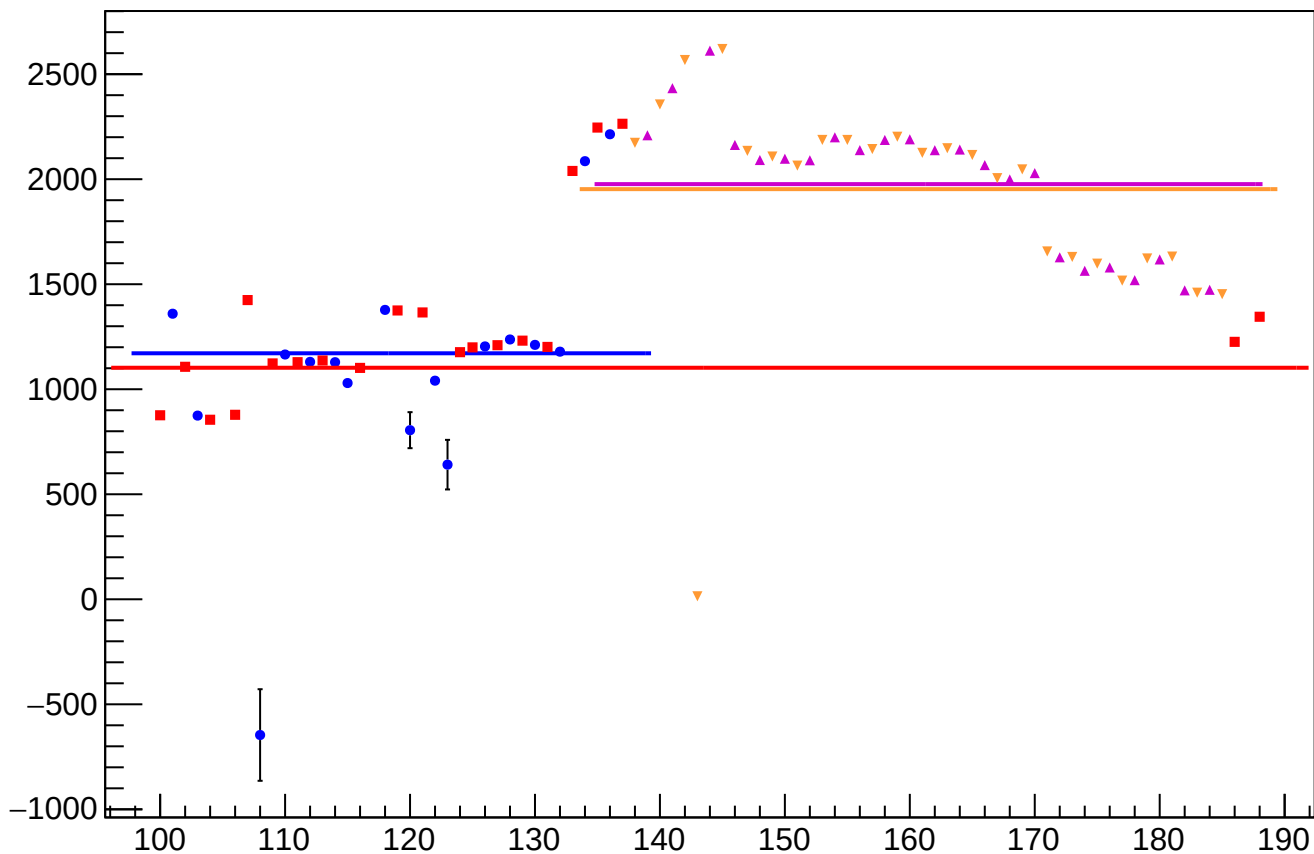
+ sign  $-889.928 \pm 0.000$   $\chi^2/\text{NDF}$ : 9520910.5/41

All:  $-976.220 \pm 0.000$   $\chi^2/\text{NDF}$ : 44889787387

- sign  $-1134.421 \pm 0.000$   $\chi^2/\text{NDF}$ : 5875432.8/43



# dit\_atl2\_4eX\_slope vs Slug



Right In: 1171.188 $\pm$ 0.245  $\chi^2$ /NDF: 508989.2/16

Left Out: 1952.706 $\pm$ 0.354  $\chi^2$ /NDF: 820225.3/24

Right Out: 1102.331 $\pm$ 0.245  $\chi^2$ /NDF: 1143389.0/20

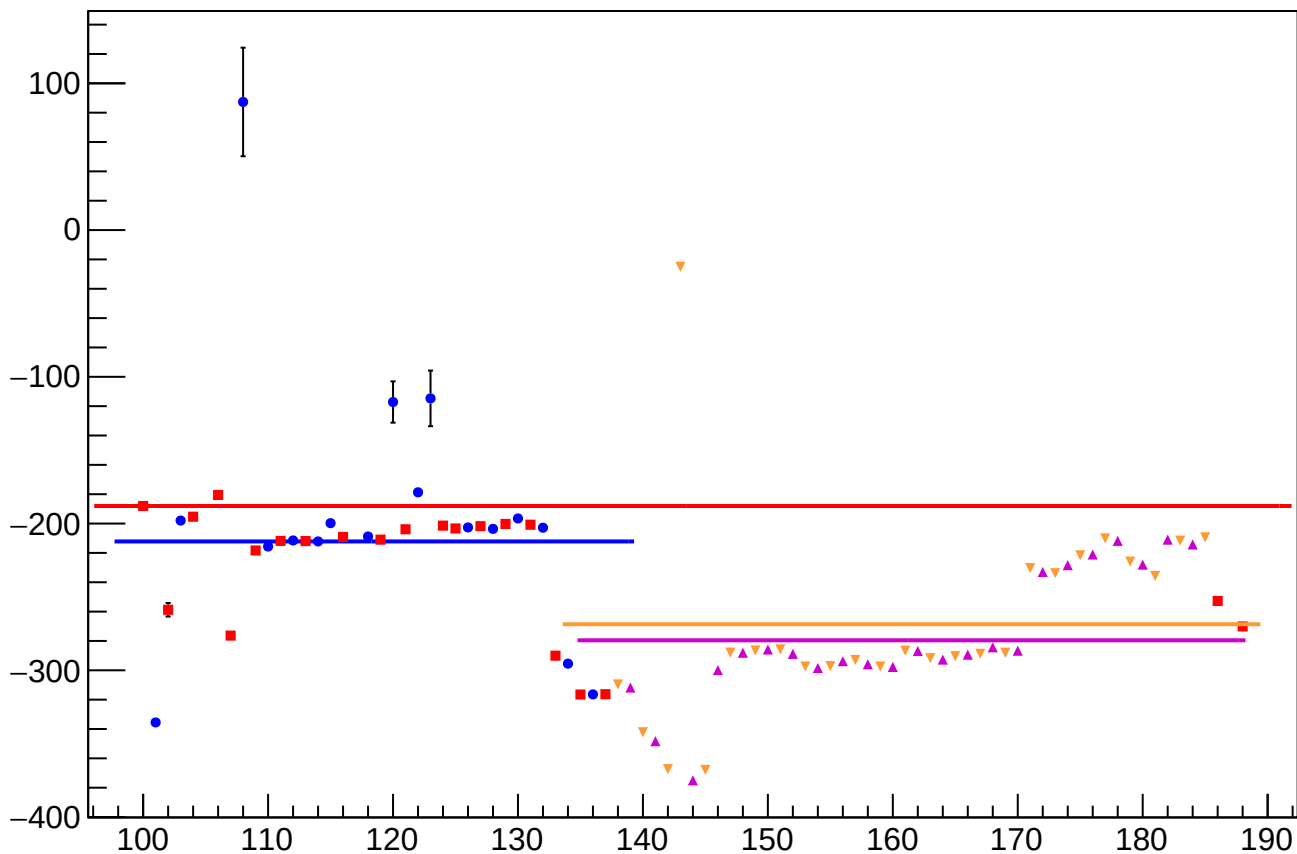
Left In: 1976.603 $\pm$ 0.367  $\chi^2$ /NDF: 625684.0/22

+ sign 1424.815 $\pm$ 0.202  $\chi^2$ /NDF: 4621372.7/41

All: 1398.753 $\pm$ 0.143  $\chi^2$ /NDF: 10342947.9/6

- sign 1372.085 $\pm$ 0.204  $\chi^2$ /NDF: 5687783.8/43

# dit\_atl2\_11X12X\_slope vs Slug



Right In: -212.190+/-0.000  $\chi^2/\text{NDF}$ : 1149195.1/16

Left Out: -268.611+/-0.022  $\chi^2/\text{NDF}$ : 7041710.3/24

Right Out: -188.033+/-0.000  $\chi^2/\text{NDF}$ : 875686.9/20

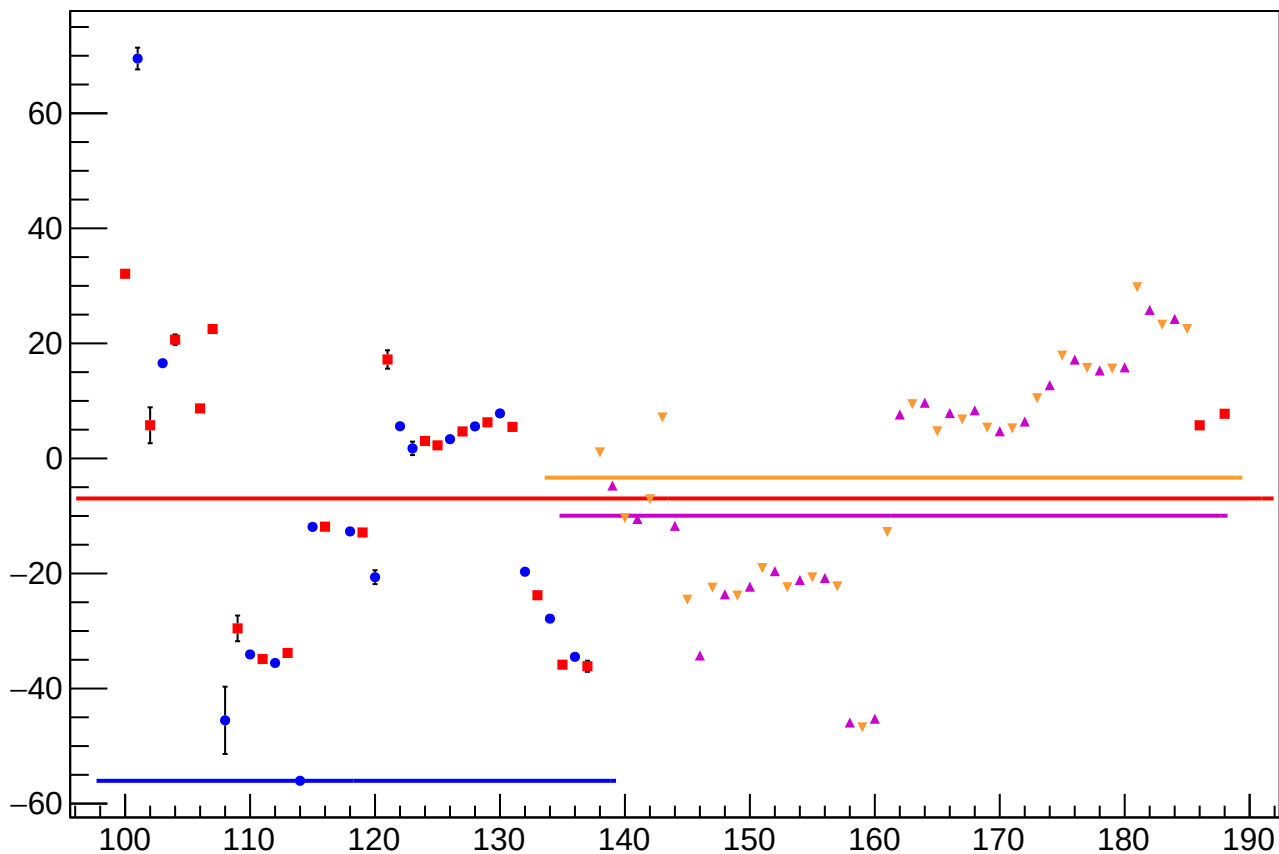
Left In: -279.563+/-0.022  $\chi^2/\text{NDF}$ : 2298119.7/22

+ sign -212.190+/-0.000  $\chi^2/\text{NDF}$ : 14747222.2/41

All: -195.625+/-0.000  $\chi^2/\text{NDF}$ : 13622303625

- sign -188.033+/-0.000  $\chi^2/\text{NDF}$ : 21024530.1/43

# dit\_atl2\_4aY\_slope vs Slug



Right In:  $-56.037 \pm 0.000$   $\chi^2/\text{NDF}$ : 1585420.7/16

Left Out:  $-3.341 \pm 0.018$   $\chi^2/\text{NDF}$ : 1399746.6/24

Right Out:  $-6.958 \pm 0.041$   $\chi^2/\text{NDF}$ : 178301.8/20

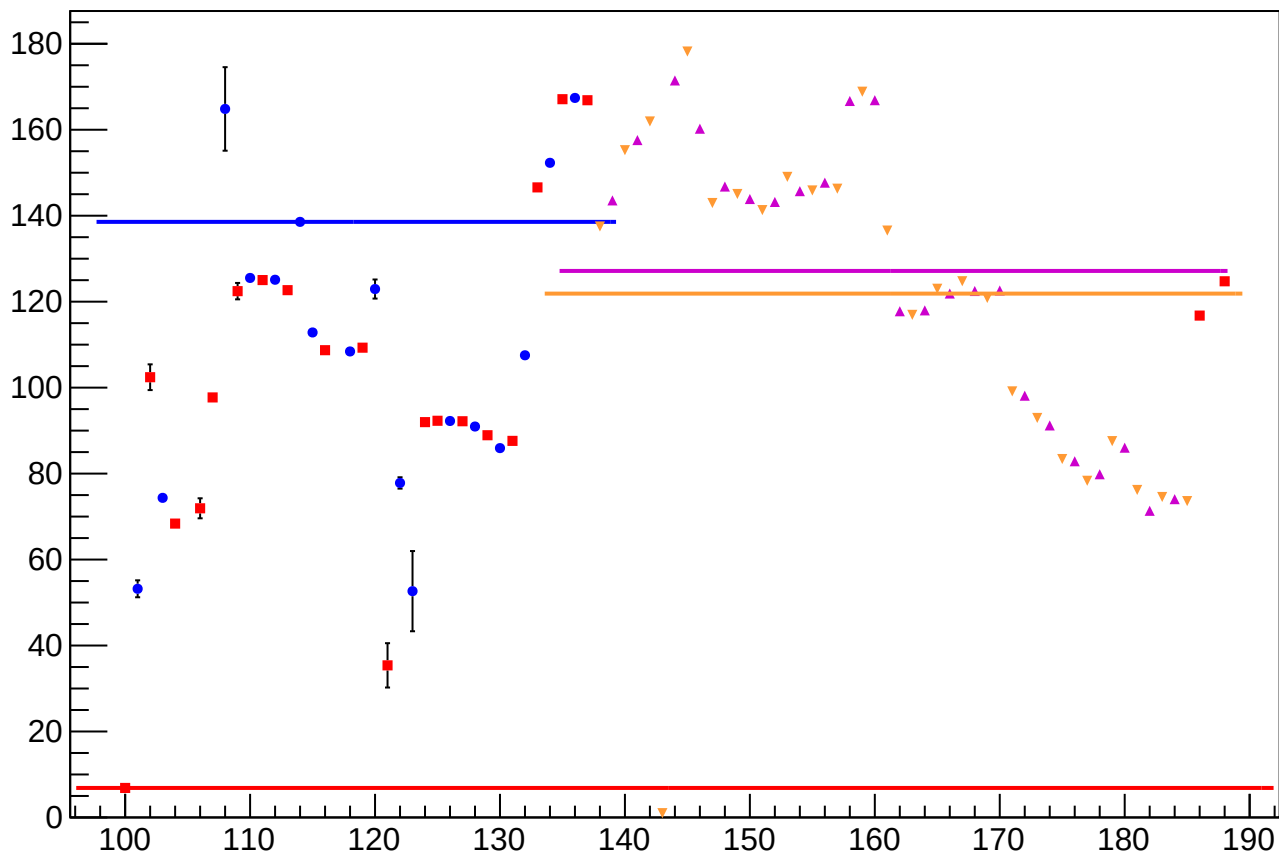
Left In:  $-9.956 \pm 0.018$   $\chi^2/\text{NDF}$ : 1689839.0/22

+ sign  $-56.037 \pm 0.000$   $\chi^2/\text{NDF}$ : 11972986.7/41

All:  $-56.037 \pm 0.000$   $\chi^2/\text{NDF}$ : 21467690.8/85

- sign  $-9.459 \pm 0.017$   $\chi^2/\text{NDF}$ : 1872506.1/43

# dit\_atl2\_4eY\_slope vs Slug



Right In: 138.565 $\pm$ 0.000  $\chi^2$ /NDF: 901159.7/16

Left Out: 121.875 $\pm$ 0.024  $\chi^2$ /NDF:1617383.6/24

Right Out: 6.866 $\pm$ 0.000  $\chi^2$ /NDF: 8313693.1/20

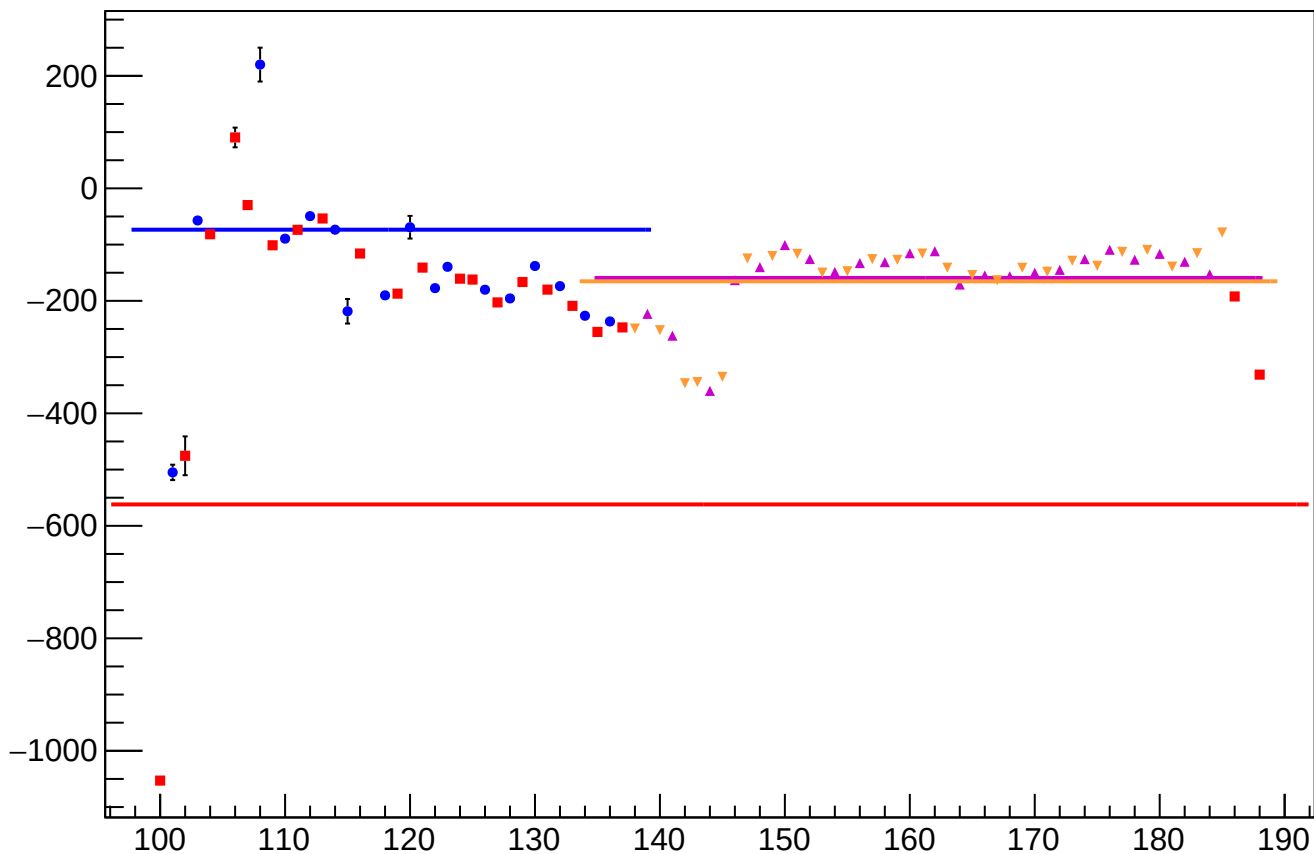
Left In: 127.150 $\pm$ 0.026  $\chi^2$ /NDF:1340248.6/22

+ sign 138.565 $\pm$ 0.000  $\chi^2$ /NDF: 2990281.0/41

All: 7.101 $\pm$ 0.000  $\chi^2$ /NDF: 23576822681928

- sign 6.866 $\pm$ 0.000  $\chi^2$ /NDF: 30772749.5/43

# dit\_atr1\_4aX\_slope vs Slug



Right In: -73.485 $\pm$ 0.000  $\chi^2$ /NDF: 98703.2/16

Left Out: -165.282 $\pm$ 0.232  $\chi^2$ /NDF: 84301.0/24

Right Out: -561.957 $\pm$ 0.254  $\chi^2$ /NDF: 3128353.5/20

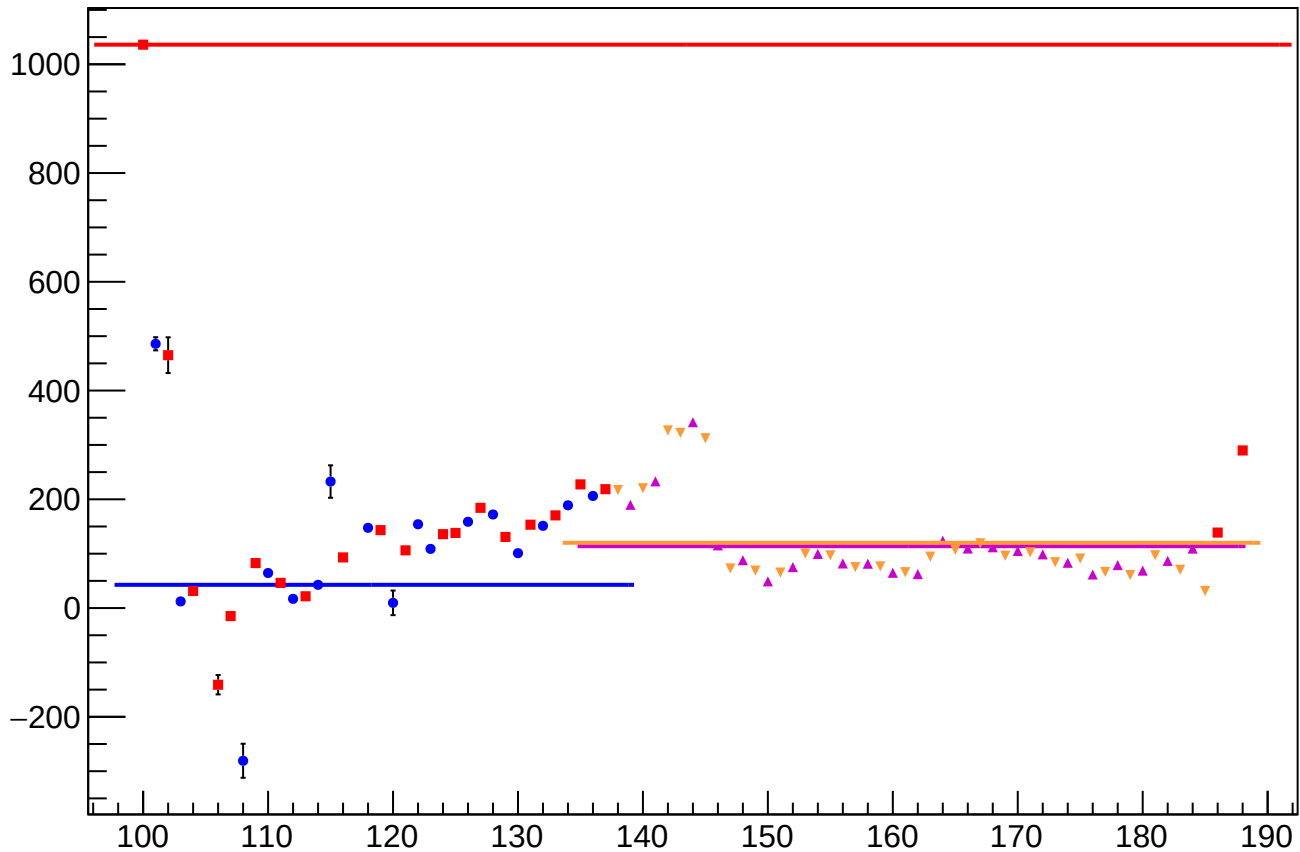
Left In: -159.346 $\pm$ 0.239  $\chi^2$ /NDF: 73885.5/22

+ sign -73.485 $\pm$ 0.000  $\chi^2$ /NDF: 339919.4/41

All: -73.485 $\pm$ 0.000  $\chi^2$ /NDF: 7369961.8/85

- sign -348.547 $\pm$ 0.174  $\chi^2$ /NDF: 4534209.5/43

# dit\_atr1\_4eX\_slope vs Slug



Right In: 42.743+/-0.000  $\chi^2/\text{NDF}$ : 84599.8/16

Left Out: 120.053+/-0.237  $\chi^2/\text{NDF}$ : 97926.9/24

Right Out: 1036.068+/-0.000  $\chi^2/\text{NDF}$ : 553585.2/20

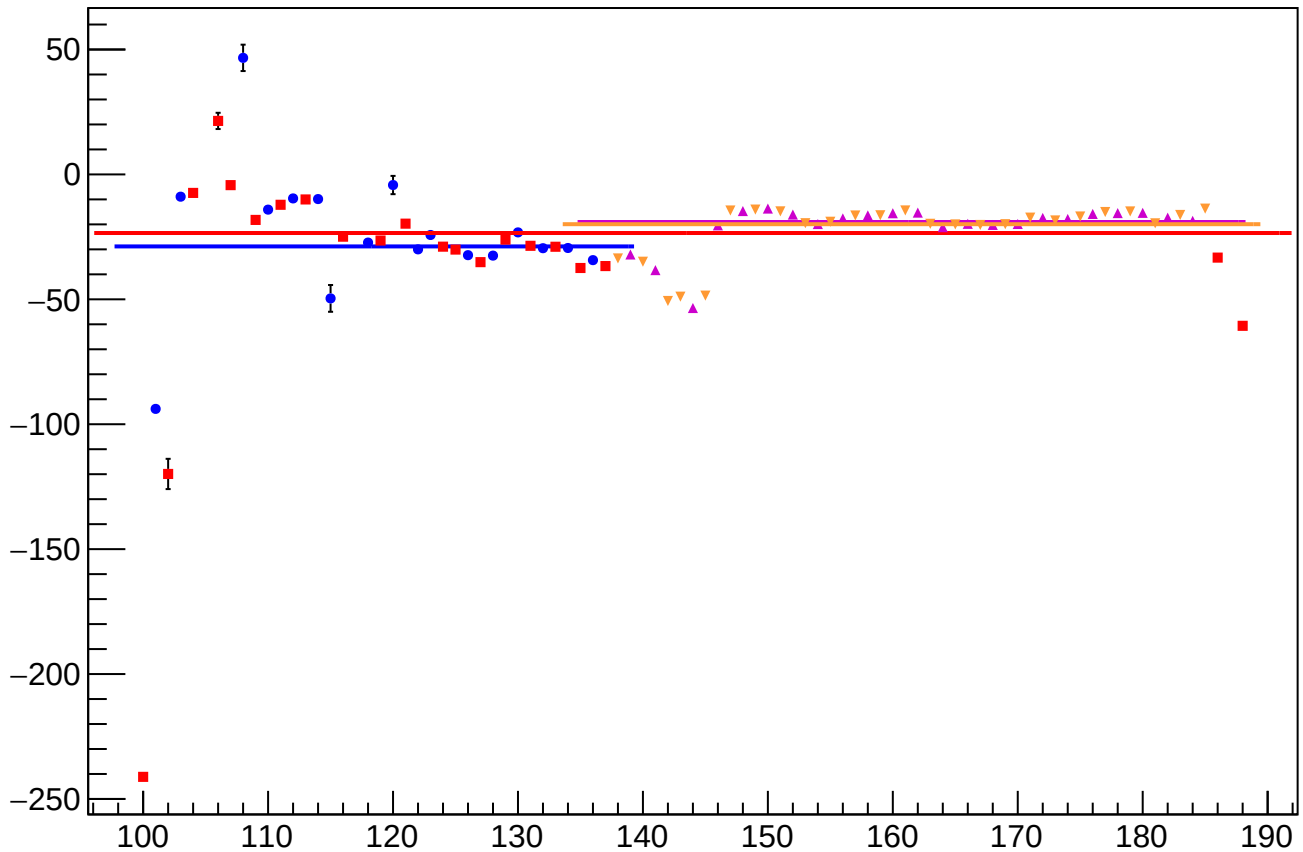
Left In: 113.733+/-0.246  $\chi^2/\text{NDF}$ : 81886.4/22

+ sign 42.743+/-0.000  $\chi^2/\text{NDF}$ : 288957.8/41

All: 43.272+/-0.000  $\chi^2/\text{NDF}$ : 114451749726

- sign 1036.068+/-0.000  $\chi^2/\text{NDF}$ : 19638818.5/43

# dit\_atr1\_11X12X\_slope vs Slug



Right In:  $-28.822 \pm 0.035$   $\chi^2/\text{NDF}$ : 49503.4/16

Left Out:  $-19.926 \pm 0.012$   $\chi^2/\text{NDF}$ : 374900.2/24

Right Out:  $-23.454 \pm 0.037$   $\chi^2/\text{NDF}$ : 423172.7/20

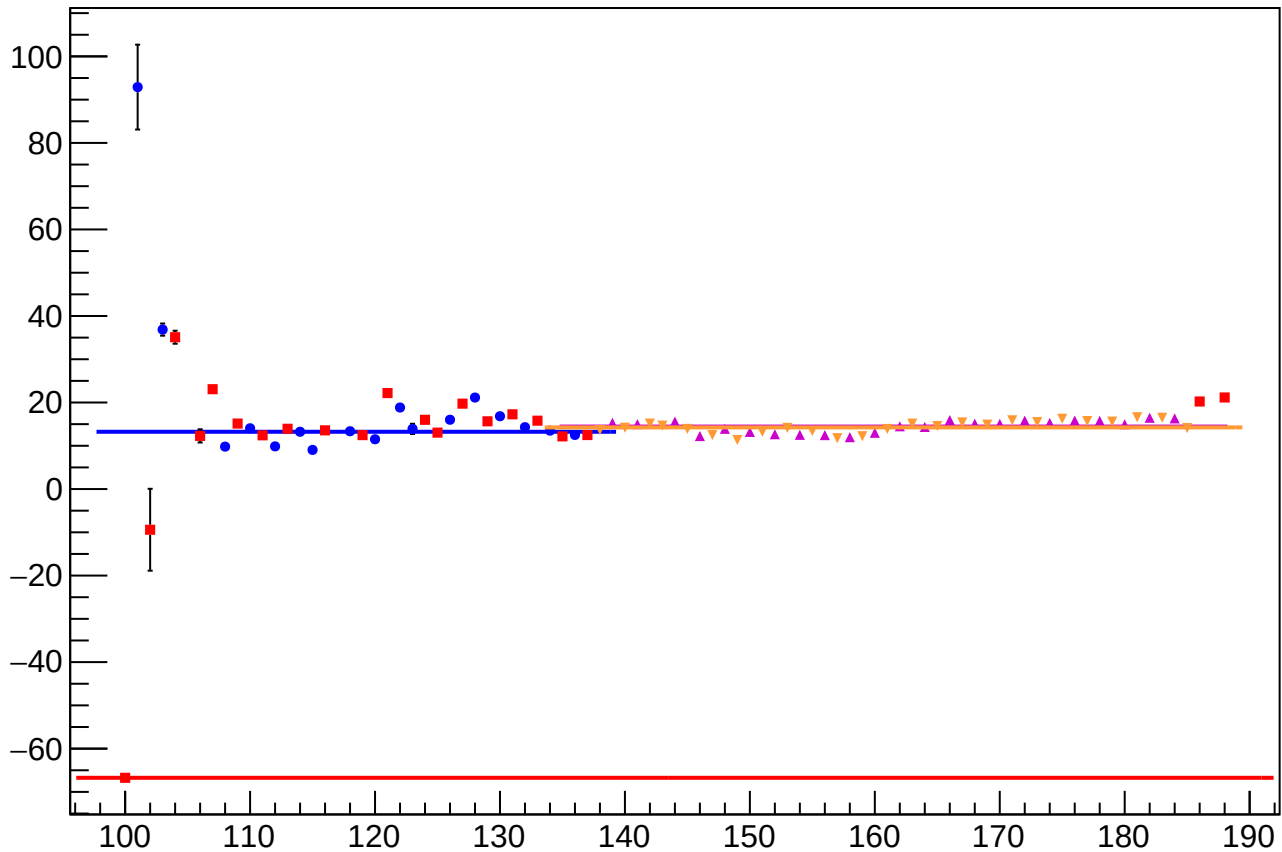
Left In:  $-19.047 \pm 0.014$   $\chi^2/\text{NDF}$ : 214747.8/22

+ sign  $-20.911 \pm 0.012$   $\chi^2/\text{NDF}$ : 482719.6/41

All:  $-20.331 \pm 0.009$   $\chi^2/\text{NDF}$ : 1138664.0/85

- sign  $-19.589 \pm 0.013$   $\chi^2/\text{NDF}$ : 650200.0/43

# dit\_atr1\_4aY\_slope vs Slug



Right In: 13.238 $\pm$ 0.000  $\chi^2$ /NDF: 5756.1/16

Left Out: 14.245 $\pm$ 0.012  $\chi^2$ /NDF:12367.6/24

Right Out: -66.739 $\pm$ 0.000  $\chi^2$ /NDF: 3186899.3/20

Left In: 14.441 $\pm$ 0.012  $\chi^2$ /NDF:12955.9/22

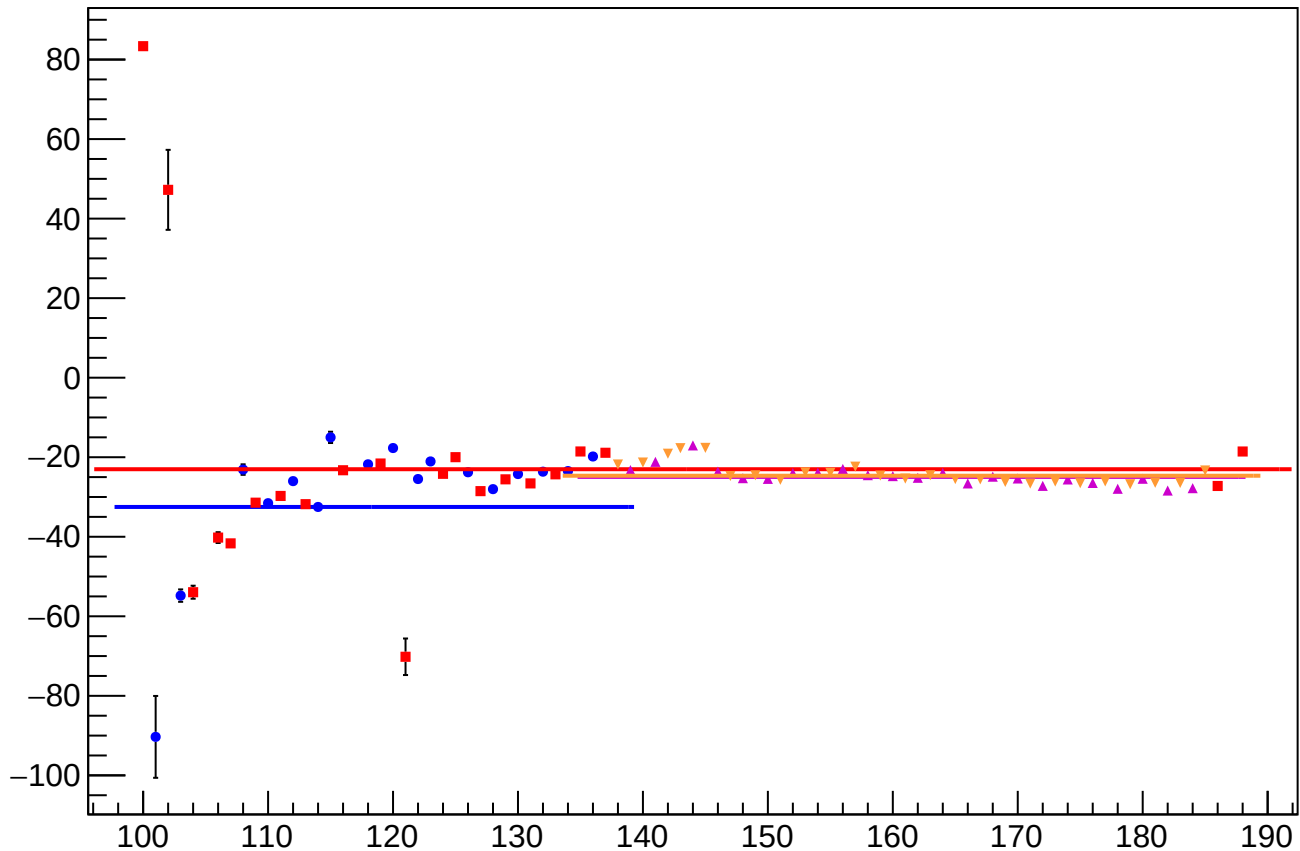
+ sign 13.238 $\pm$ 0.000  $\chi^2$ /NDF: 25193.4/41

All: 12.562 $\pm$ 0.000  $\chi^2$ /NDF: 1884310027651

- sign -66.739 $\pm$ 0.000  $\chi^2$ /NDF: 51778879.3/43



# dit\_atr1\_4eY\_slope vs Slug



Right In:  $-32.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 74187.4/16

Left Out:  $-24.652 \pm 0.015$   $\chi^2/\text{NDF}$ : 23058.0/24

Right Out:  $-23.017 \pm 0.047$   $\chi^2/\text{NDF}$ : 91093.6/20

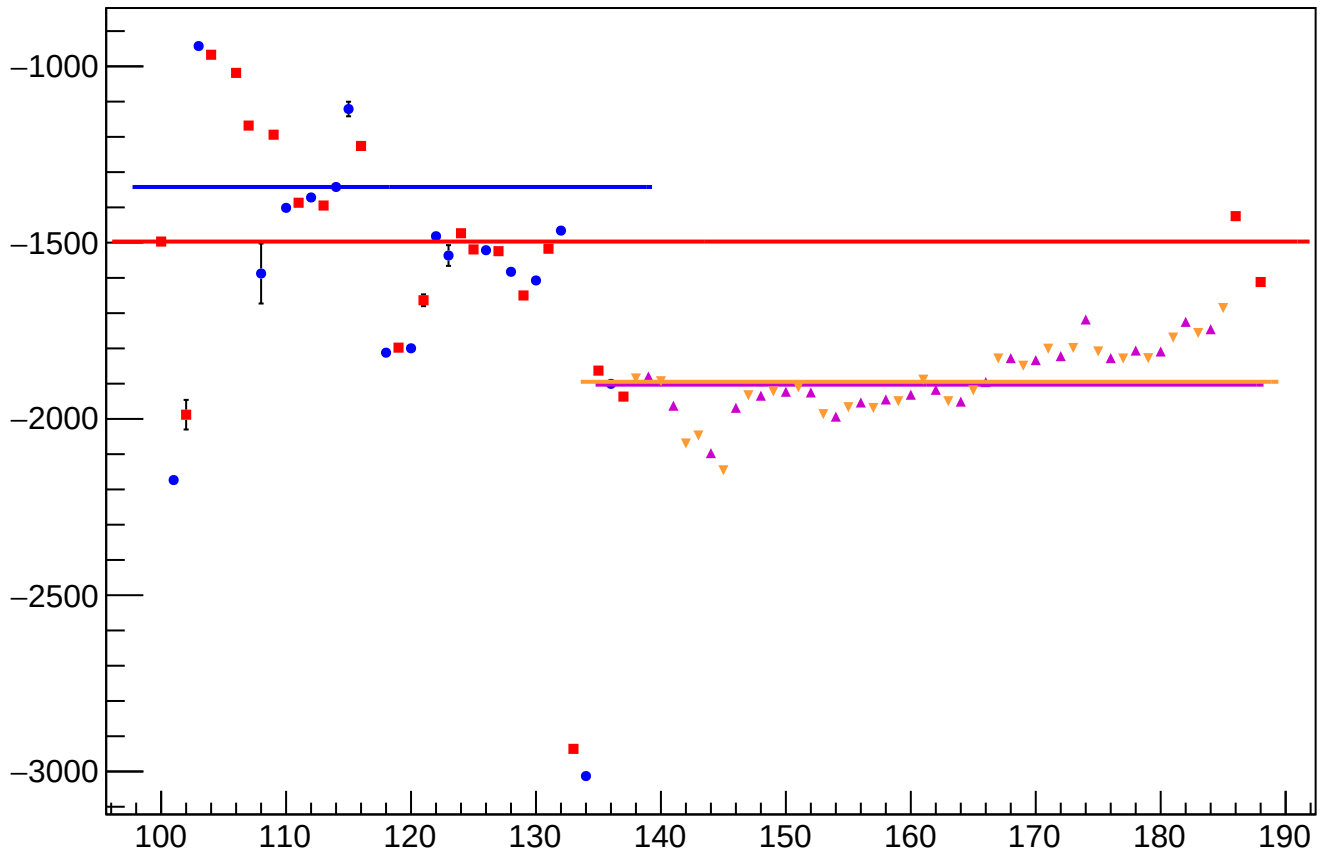
Left In:  $-24.948 \pm 0.015$   $\chi^2/\text{NDF}$ : 14049.6/22

+ sign  $-32.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 372575.4/41

All:  $-32.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 766863.9/85

- sign  $-24.764 \pm 0.014$   $\chi^2/\text{NDF}$ : 106689.1/43

# dit\_atr2\_4aX\_slope vs Slug



Right In: -1342.107 $\pm$ 0.000  $\chi^2$ /NDF: 370901.4/16

Left Out: -1894.646 $\pm$ 0.318  $\chi^2$ /NDF: 67387.8/24

Right Out: -1496.932 $\pm$ 0.000  $\chi^2$ /NDF: 509875.1/20

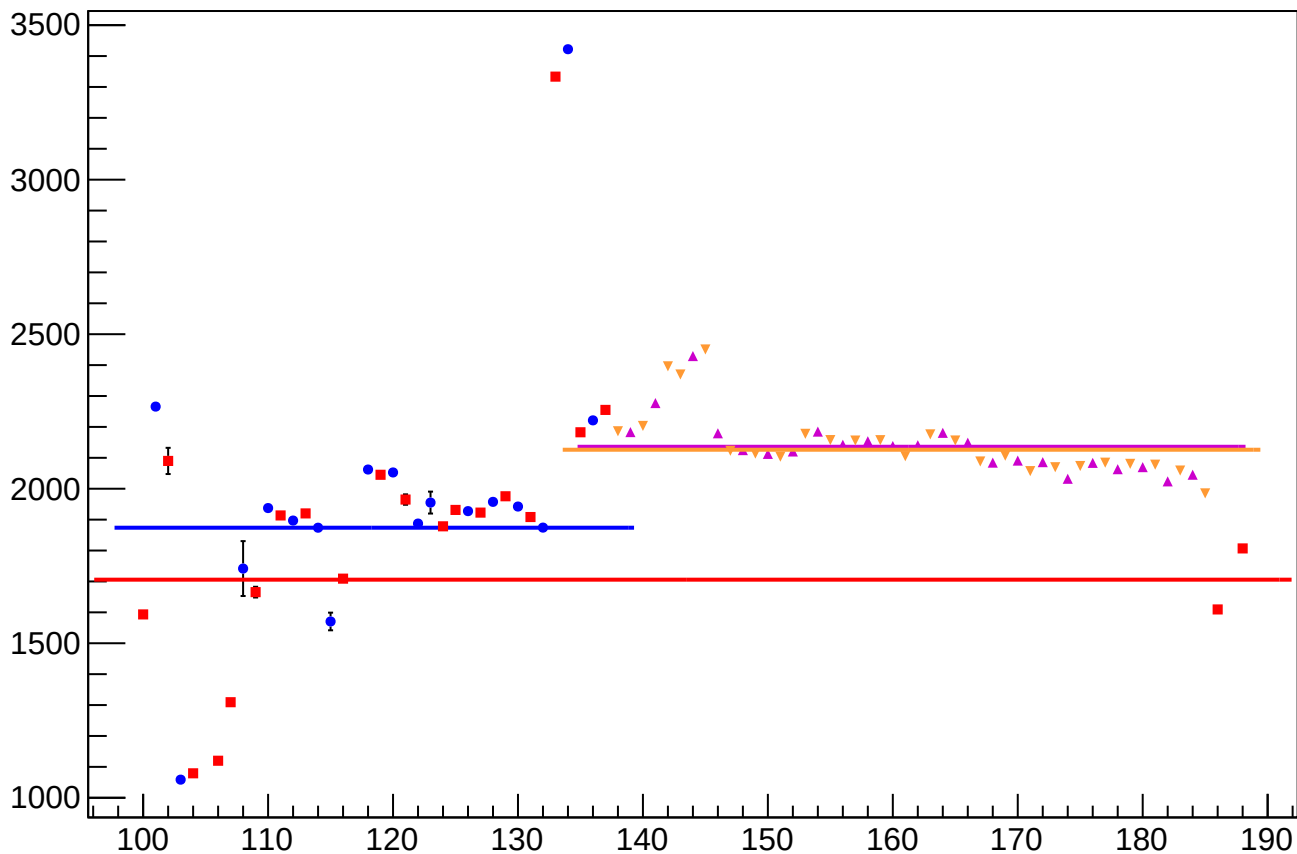
Left In: -1902.803 $\pm$ 0.289  $\chi^2$ /NDF: 69208.9/22

+ sign -1342.107 $\pm$ 0.000  $\chi^2$ /NDF: 3461585.6/41

All: -1396.751 $\pm$ 0.000  $\chi^2$ /NDF: 1800086126

- sign -1496.932 $\pm$ 0.000  $\chi^2$ /NDF: 2554568.8/43

dit\_atr2\_4eX\_slope vs Slug



Right In: 1873.852 $\pm$ 0.000  $\chi^2$ /NDF: 201563.9/16

Left Out: 2126.160 $\pm$ 0.317  $\chi^2$ /NDF: 48244.0/24

Right Out: 1705.722 $\pm$ 0.294  $\chi^2$ /NDF: 843834.0/20

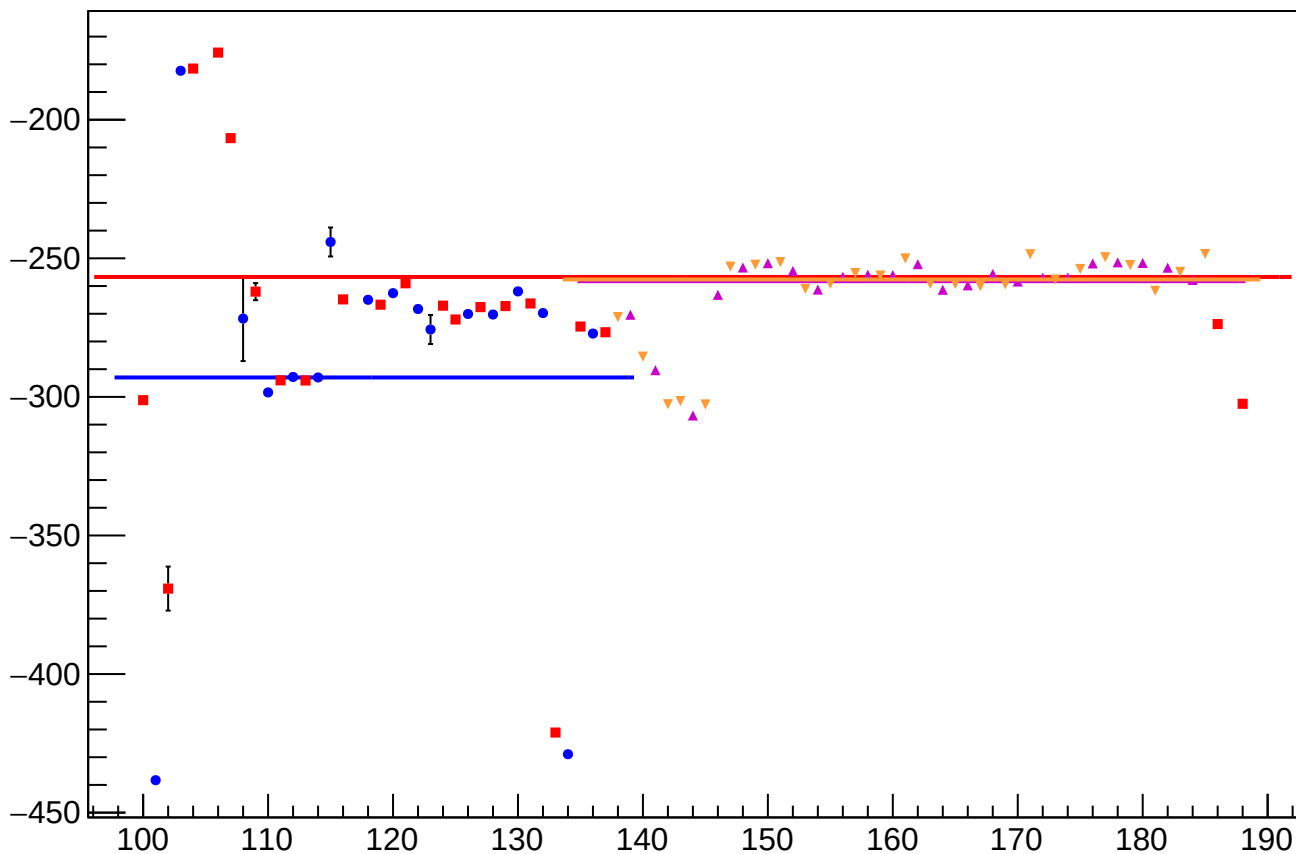
Left In: 2135.770 $\pm$ 0.290  $\chi^2$ /NDF: 58031.3/22

+ sign 1873.852 $\pm$ 0.000  $\chi^2$ /NDF: 882175.6/41

All: 1873.852 $\pm$ 0.000  $\chi^2$ /NDF: 2928854.9/85

- sign 1924.271 $\pm$ 0.206  $\chi^2$ /NDF: 1987000.2/43

# dit\_atr2\_11X12X\_slope vs Slug



Right In:  $-292.986 \pm 0.000$   $\chi^2/\text{NDF}$ : 1015592.4/16

Left Out:  $-257.631 \pm 0.020$   $\chi^2/\text{NDF}$ : 226942.0/24

Right Out:  $-256.726 \pm 0.056$   $\chi^2/\text{NDF}$ : 530100.7/20

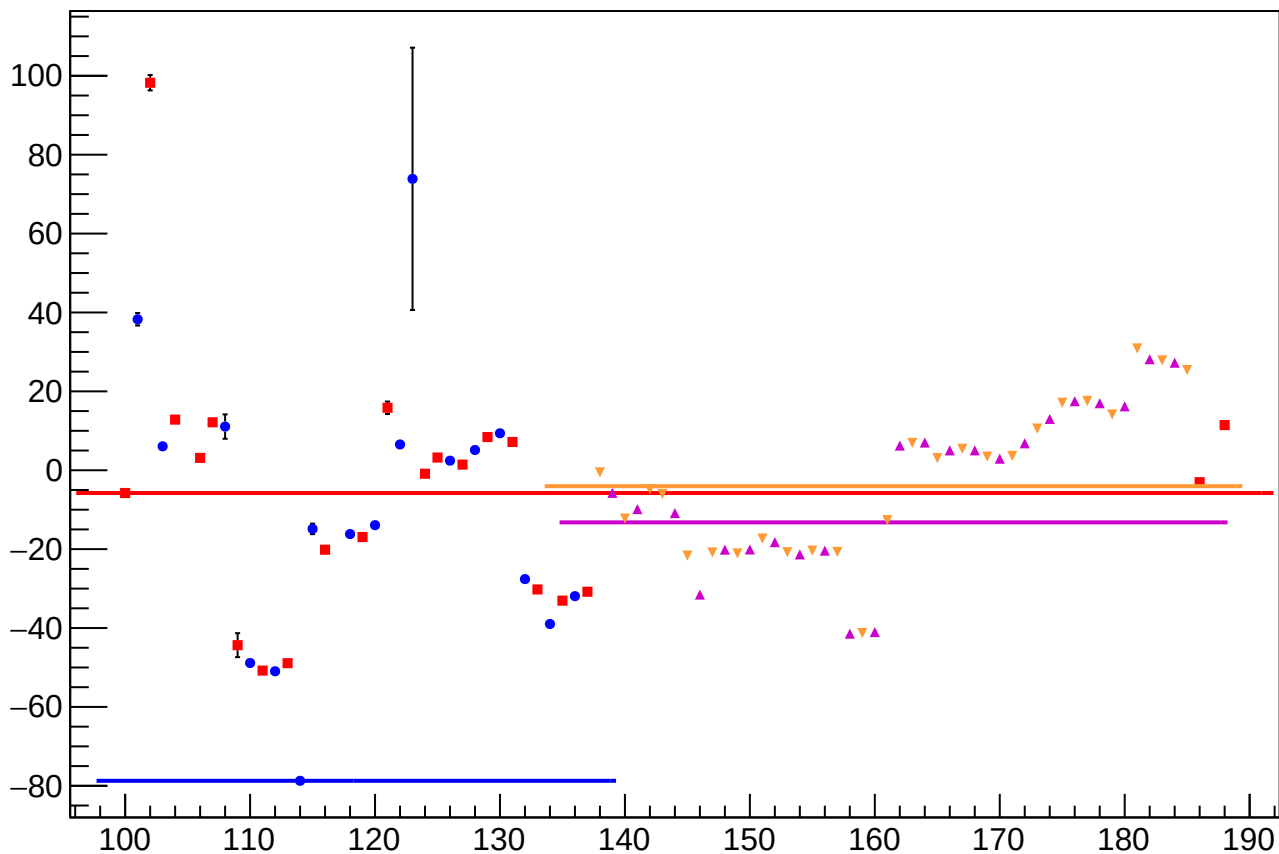
Left In:  $-258.240 \pm 0.017$   $\chi^2/\text{NDF}$ : 268186.3/22

+ sign  $-292.986 \pm 0.000$   $\chi^2/\text{NDF}$ : 4412520.1/41

All:  $-292.986 \pm 0.000$   $\chi^2/\text{NDF}$ : 9571532.8/85

- sign  $-258.107 \pm 0.017$   $\chi^2/\text{NDF}$ : 798946.0/43

# dit\_atr2\_4aY\_slope vs Slug



Right In:  $-78.728 \pm 0.000$   $\chi^2/\text{NDF}: 1399088.3/16$

Left Out:  $-4.036 \pm 0.017$   $\chi^2/\text{NDF}: 1369619.3/24$

Right Out:  $-5.769 \pm 0.000$   $\chi^2/\text{NDF}: 115501.9/20$

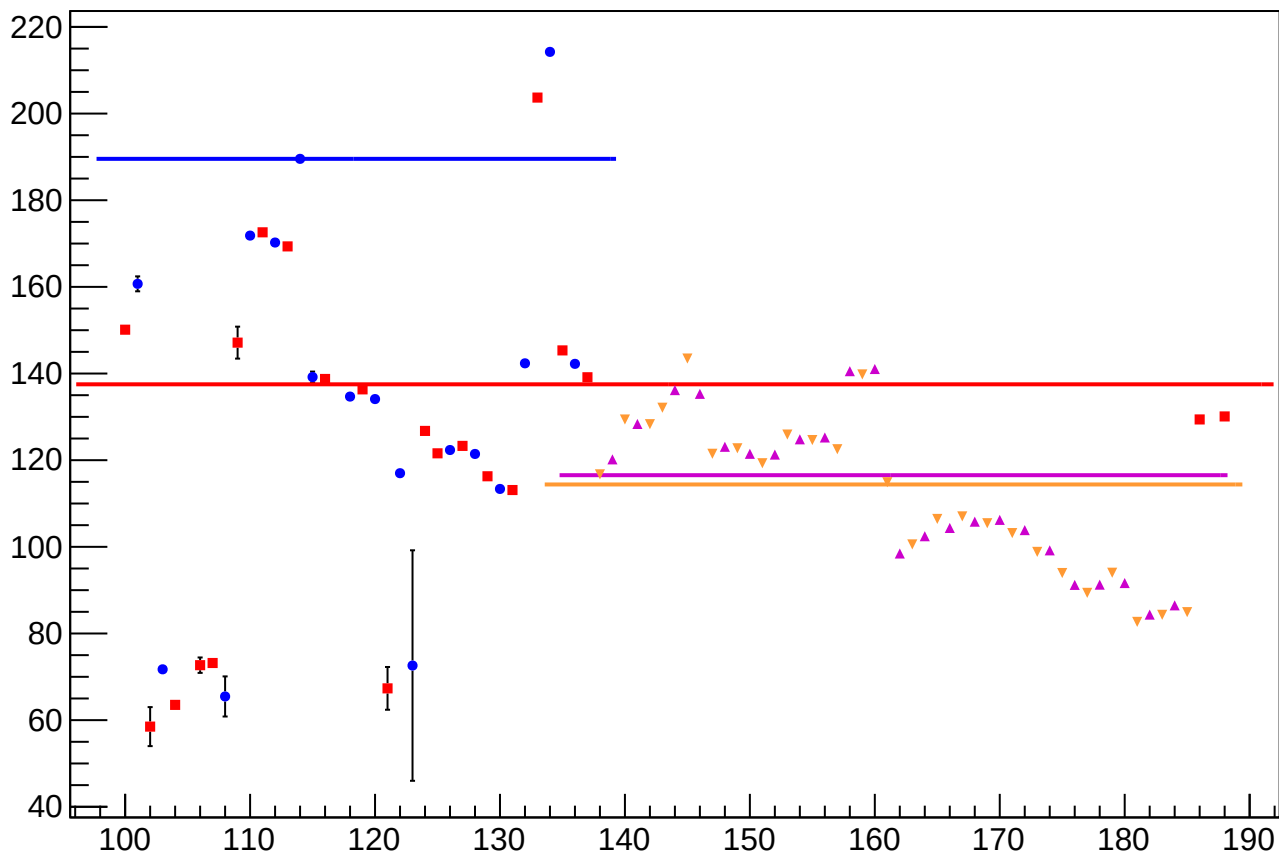
Left In:  $-13.213 \pm 0.017$   $\chi^2/\text{NDF}: 1356033.4/22$

+ sign  $-78.728 \pm 0.000$   $\chi^2/\text{NDF}: 21909401.2/41$

All:  $-6.288 \pm 0.000$   $\chi^2/\text{NDF}: 2878797679293$

- sign  $-5.769 \pm 0.000$   $\chi^2/\text{NDF}: 1665090.2/43$

# dit\_atr2\_4eY\_slope vs Slug



Right In: 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 927391.8/16

Left Out: 114.395 $\pm$ 0.023  $\chi^2$ /NDF: 434871.2/24

Right Out: 137.511 $\pm$ 0.057  $\chi^2$ /NDF: 118487.9/20

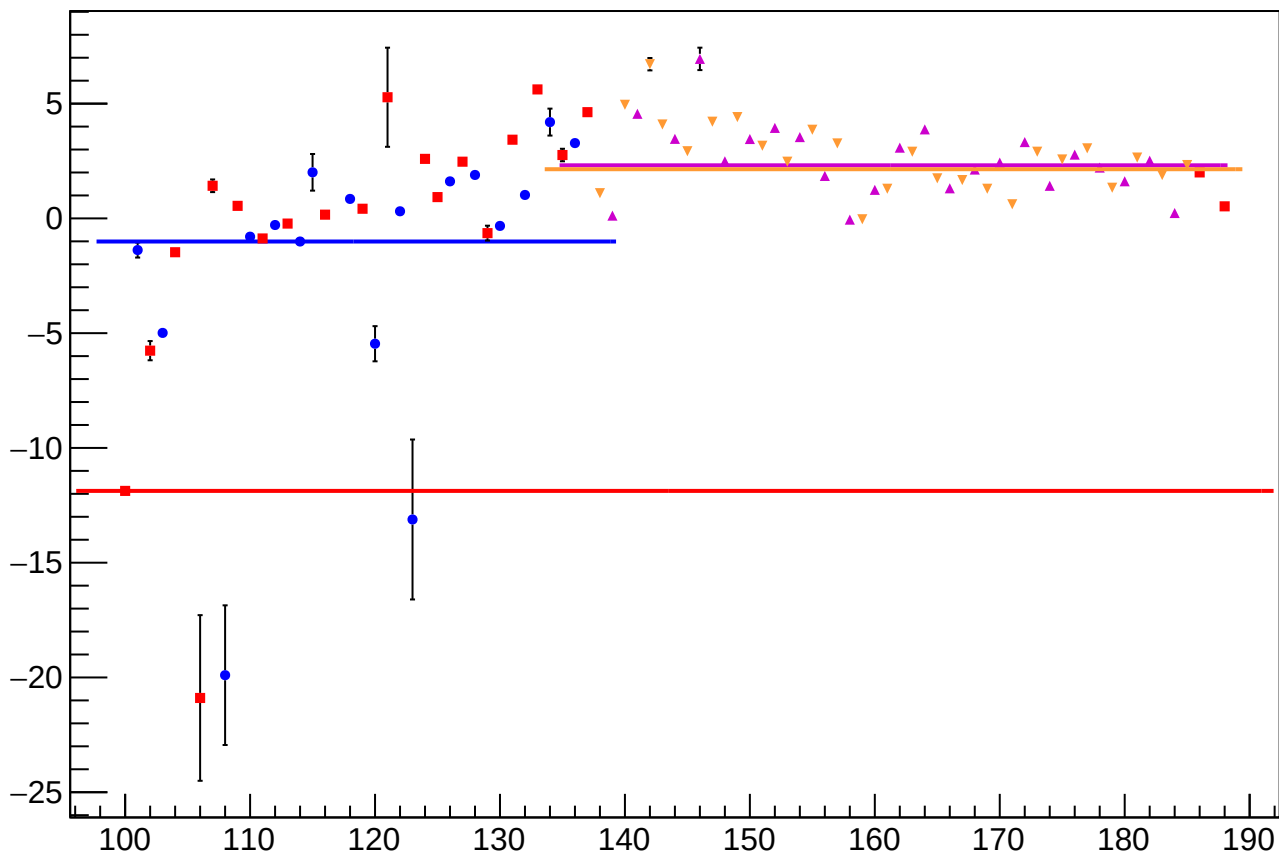
Left In: 116.538 $\pm$ 0.024  $\chi^2$ /NDF: 458128.6/22

+ sign 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 12448519.0/41

All: 189.551 $\pm$ 0.000  $\chi^2$ /NDF: 23413724.1/85

- sign 119.588 $\pm$ 0.022  $\chi^2$ /NDF: 691380.2/43

# dit\_sam1\_4aX\_slope vs Slug



Right In:  $-1.007 \pm 0.000$   $\chi^2/\text{NDF}$ : 7057.7/16

Left Out:  $2.143 \pm 0.015$   $\chi^2/\text{NDF}$ : 6585.0/24

Right Out:  $-11.872 \pm 0.000$   $\chi^2/\text{NDF}$ : 586164.9/20

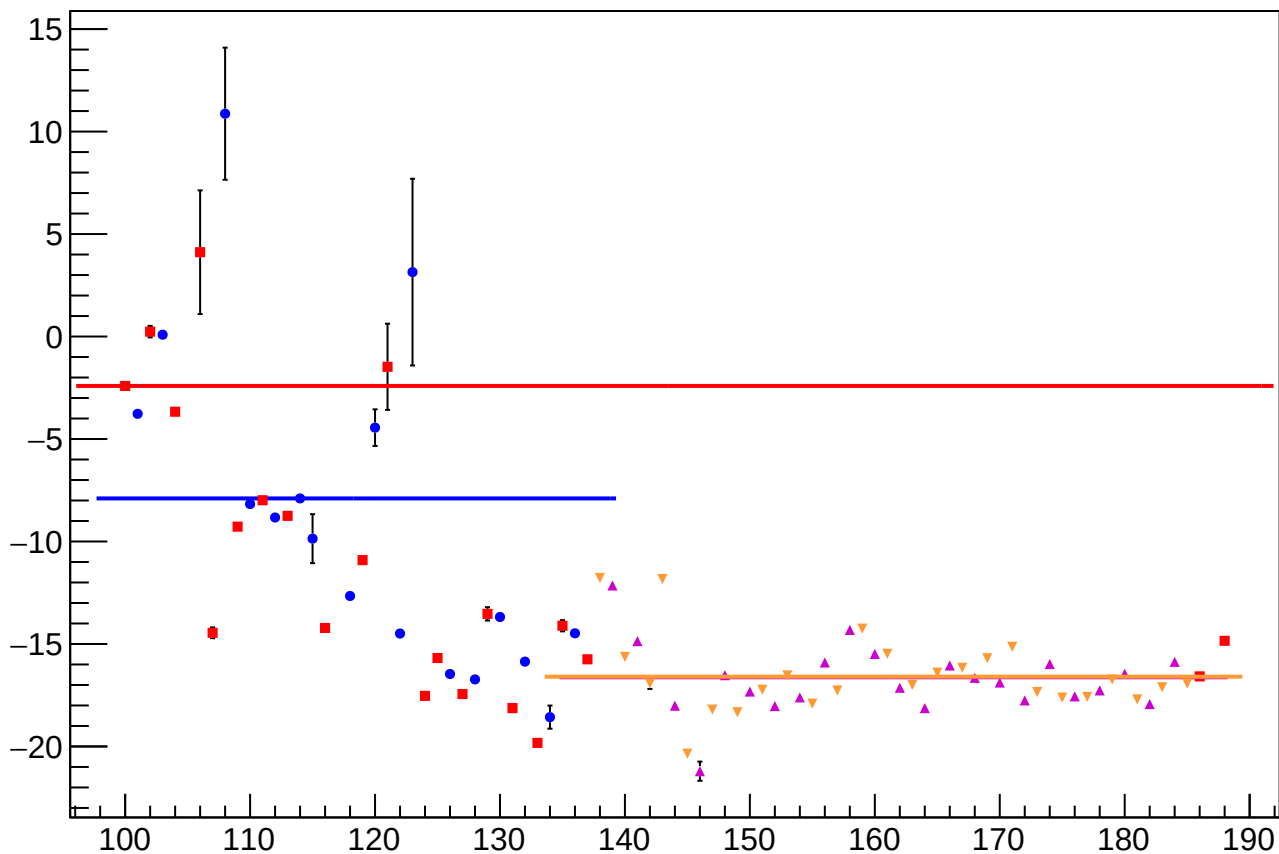
Left In:  $2.313 \pm 0.014$   $\chi^2/\text{NDF}$ : 7446.3/22

+ sign  $-1.007 \pm 0.000$   $\chi^2/\text{NDF}$ : 59864.1/41

All:  $-1.365 \pm 0.000$   $\chi^2/\text{NDF}$ : 2170760676638

- sign  $-11.872 \pm 0.000$   $\chi^2/\text{NDF}$ : 1611020.0/43

# dit\_sam1\_4eX\_slope vs Slug



Right In:  $-7.899 \pm 0.000$   $\chi^2/\text{NDF}$ : 39443.5/16

Left Out:  $-16.595 \pm 0.014$   $\chi^2/\text{NDF}$ : 8432.7/24

Right Out:  $-2.410 \pm 0.000$   $\chi^2/\text{NDF}$ : 303748.4/20

Left In:  $-16.625 \pm 0.015$   $\chi^2/\text{NDF}$ : 6289.5/22

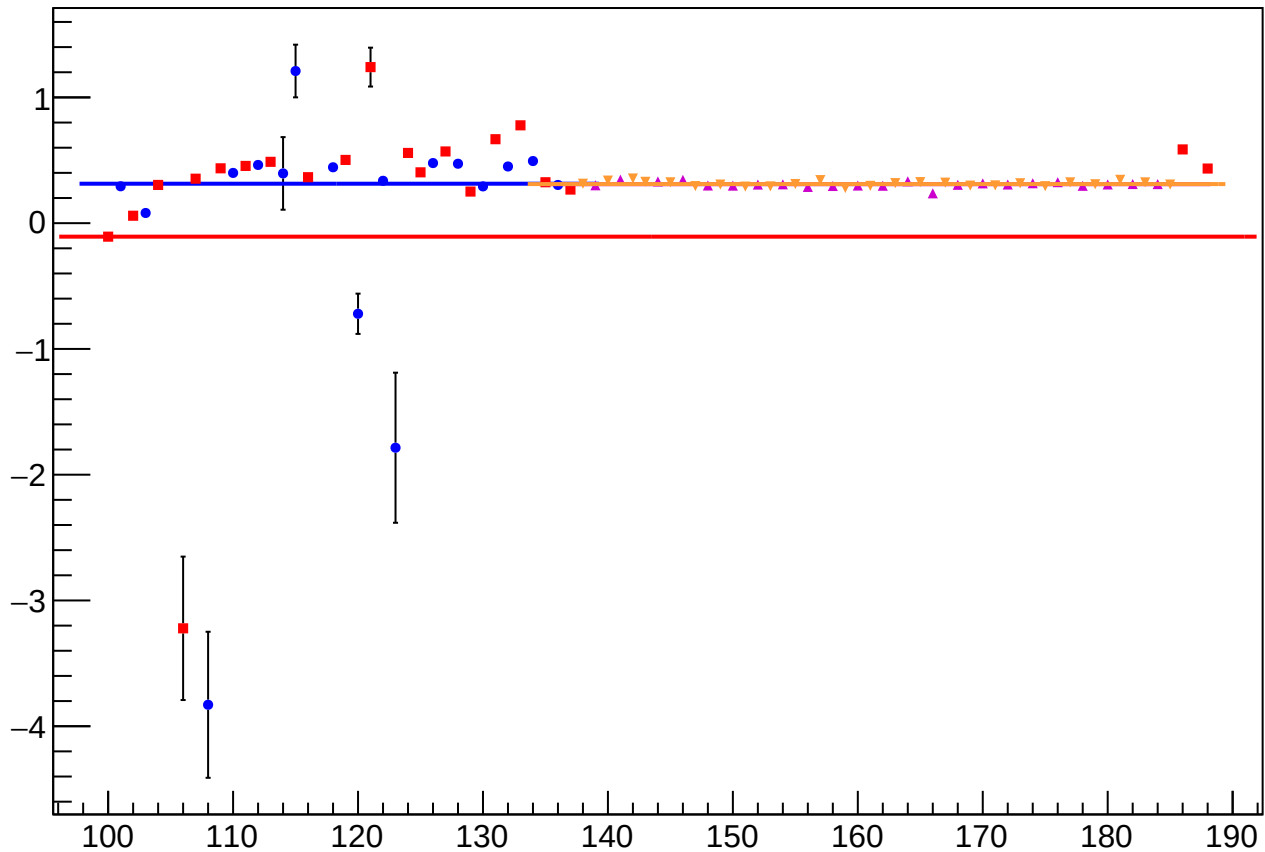
+ sign  $-7.899 \pm 0.000$   $\chi^2/\text{NDF}$ : 413721.7/41

All:  $-4.135 \pm 0.000$   $\chi^2/\text{NDF}$ : 2879850560728

- sign  $-2.410 \pm 0.000$   $\chi^2/\text{NDF}$ : 1246140.8/43



# dit\_sam1\_11X12X\_slope vs Slug



Right In:  $0.314 \pm 0.001$   $\chi^2/\text{NDF}$ : 2748.0/16

Left Out:  $0.311 \pm 0.000$   $\chi^2/\text{NDF}$ : 4975.7/24

Right Out:  $-0.107 \pm 0.000$   $\chi^2/\text{NDF}$ : 229008.3/20

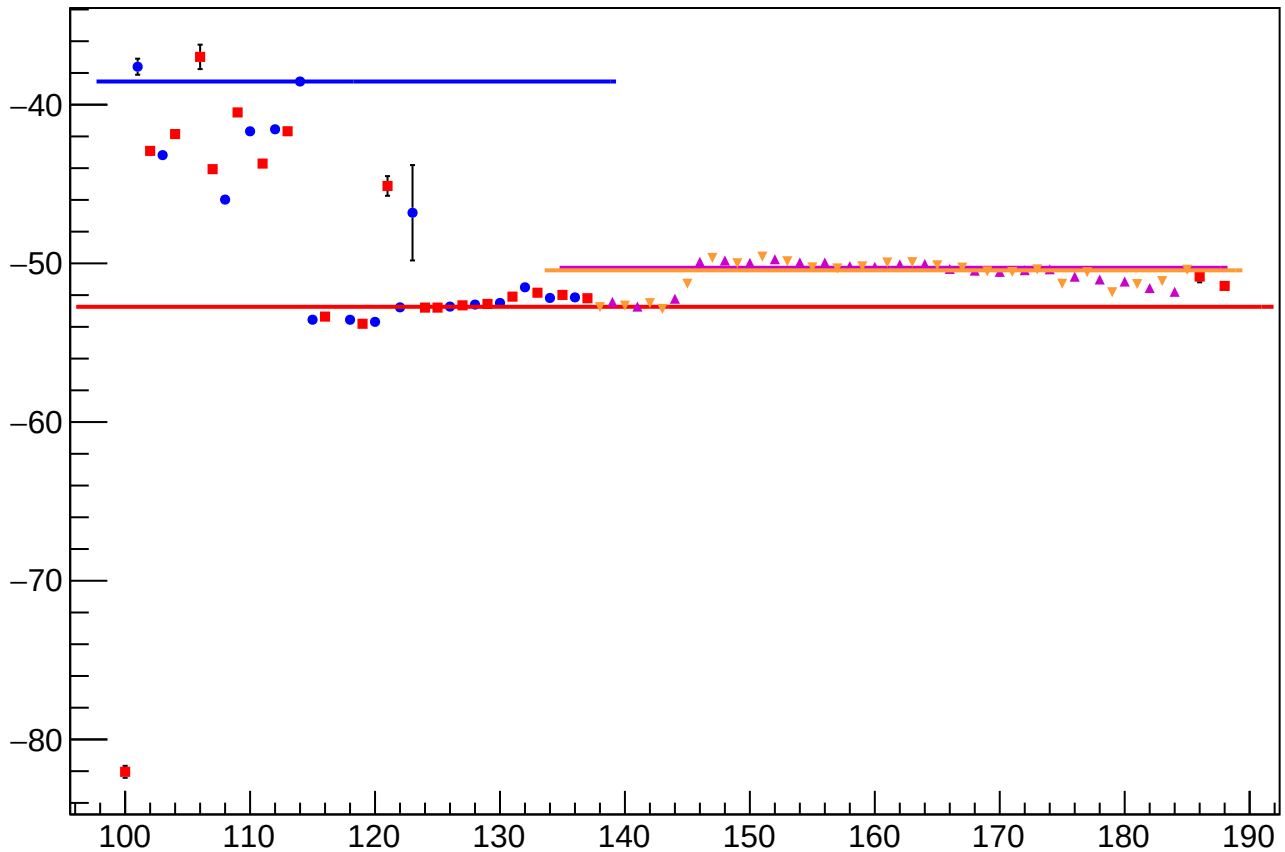
Left In:  $0.310 \pm 0.000$   $\chi^2/\text{NDF}$ : 3074.6/22

+ sign  $0.311 \pm 0.000$   $\chi^2/\text{NDF}$ : 7732.6/41

All:  $-0.107 \pm 0.000$   $\chi^2/\text{NDF}$ : 7165878.2/85

- sign  $-0.107 \pm 0.000$   $\chi^2/\text{NDF}$ : 3534534.0/43

# dit\_sam1\_4aY\_slope vs Slug



Right In:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}$ : 14950854.6/16

Left Out:  $-50.438 \pm 0.001$   $\chi^2/\text{NDF}$ : 299897.3/24

Right Out:  $-52.736 \pm 0.002$   $\chi^2/\text{NDF}$ : 87839.8/20

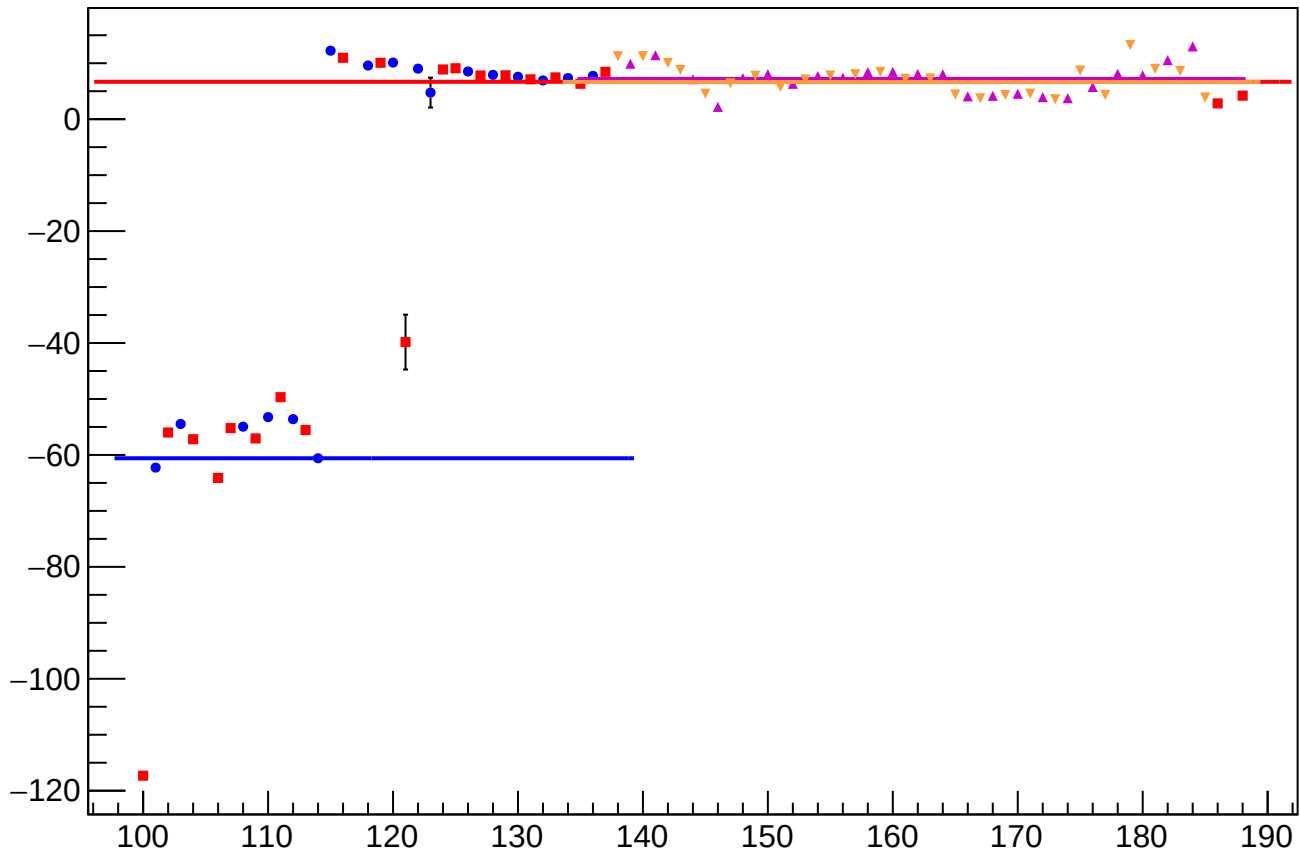
Left In:  $-50.276 \pm 0.001$   $\chi^2/\text{NDF}$ : 190236.3/22

+ sign  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}$ : 90830081.0/41

All:  $-38.539 \pm 0.000$   $\chi^2/\text{NDF}$ : 236176861.7/8

- sign  $-51.032 \pm 0.001$   $\chi^2/\text{NDF}$ : 1465670.7/43

# dit\_sam1\_4eY\_slope vs Slug



Right In:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 26122838.1/16$

Left Out:  $6.641 \pm 0.004$   $\chi^2/\text{NDF}: 340462.4/24$

Right Out:  $6.677 \pm 0.011$   $\chi^2/\text{NDF}: 1268122.2/20$

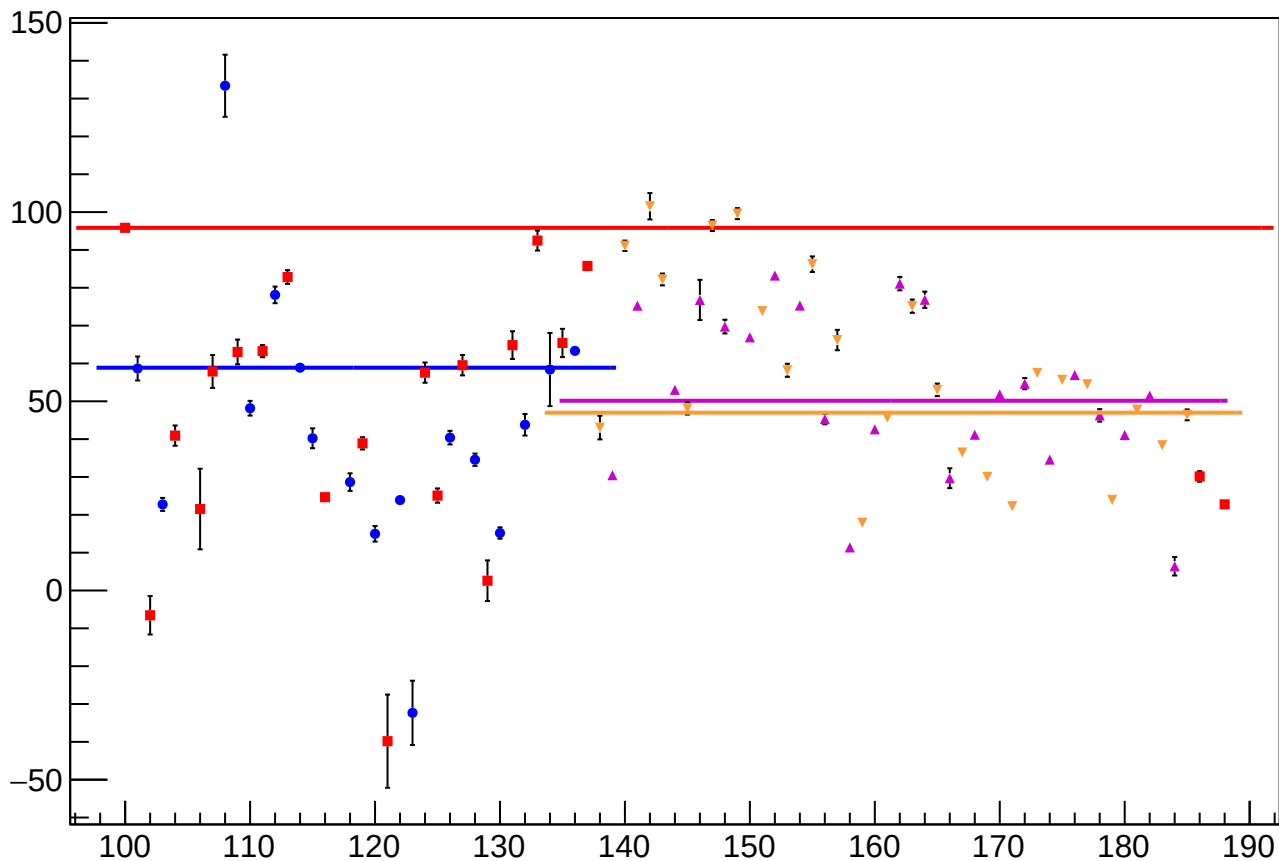
Left In:  $7.179 \pm 0.003$   $\chi^2/\text{NDF}: 214127.6/22$

+ sign  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 360528428.6/41$

All:  $-60.594 \pm 0.000$   $\chi^2/\text{NDF}: 784231572.4/8$

- sign  $7.133 \pm 0.003$   $\chi^2/\text{NDF}: 1484187.0/43$

# dit\_sam2\_4aX\_slope vs Slug



Right In:  $58.880 \pm 0.000$   $\chi^2/\text{NDF}$ : 3814.7/16

Left Out:  $46.995 \pm 0.215$   $\chi^2/\text{NDF}$ : 9203.7/24

Right Out:  $95.846 \pm 0.000$   $\chi^2/\text{NDF}$ : 60245.0/20

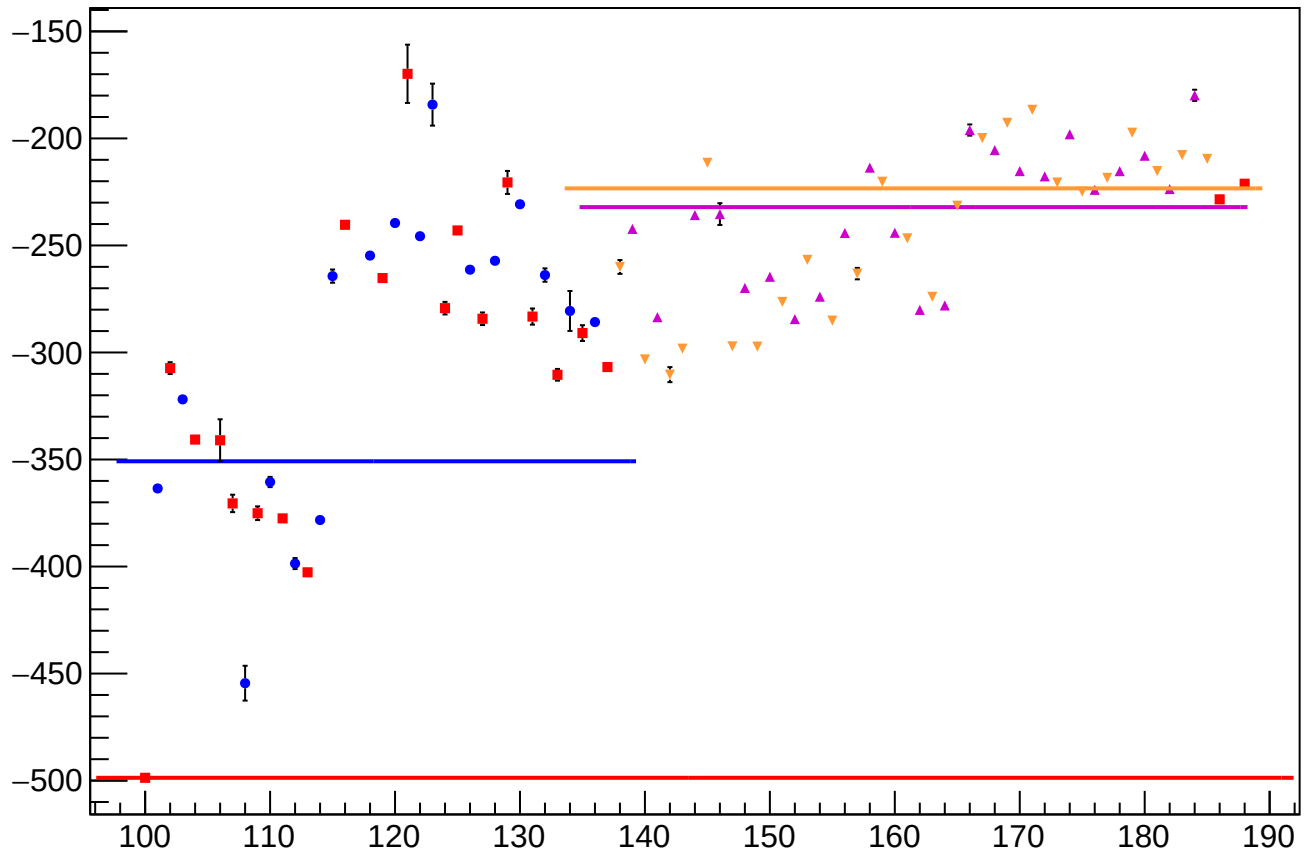
Left In:  $50.144 \pm 0.212$   $\chi^2/\text{NDF}$ : 6667.7/22

+ sign  $58.880 \pm 0.000$   $\chi^2/\text{NDF}$ : 16075.0/41

All:  $60.098 \pm 0.000$   $\chi^2/\text{NDF}$ : 9815233945666

- sign  $95.846 \pm 0.000$   $\chi^2/\text{NDF}$ : 113600.4/43

# dit\_sam2\_4eX\_slope vs Slug



Right In:  $-350.833 \pm 0.245$   $\chi^2/\text{NDF}$ : 41301.1/16

Left Out:  $-223.342 \pm 0.215$   $\chi^2/\text{NDF}$ : 22293.9/24

Right Out:  $-498.692 \pm 0.000$   $\chi^2/\text{NDF}$ : 837418.5/20

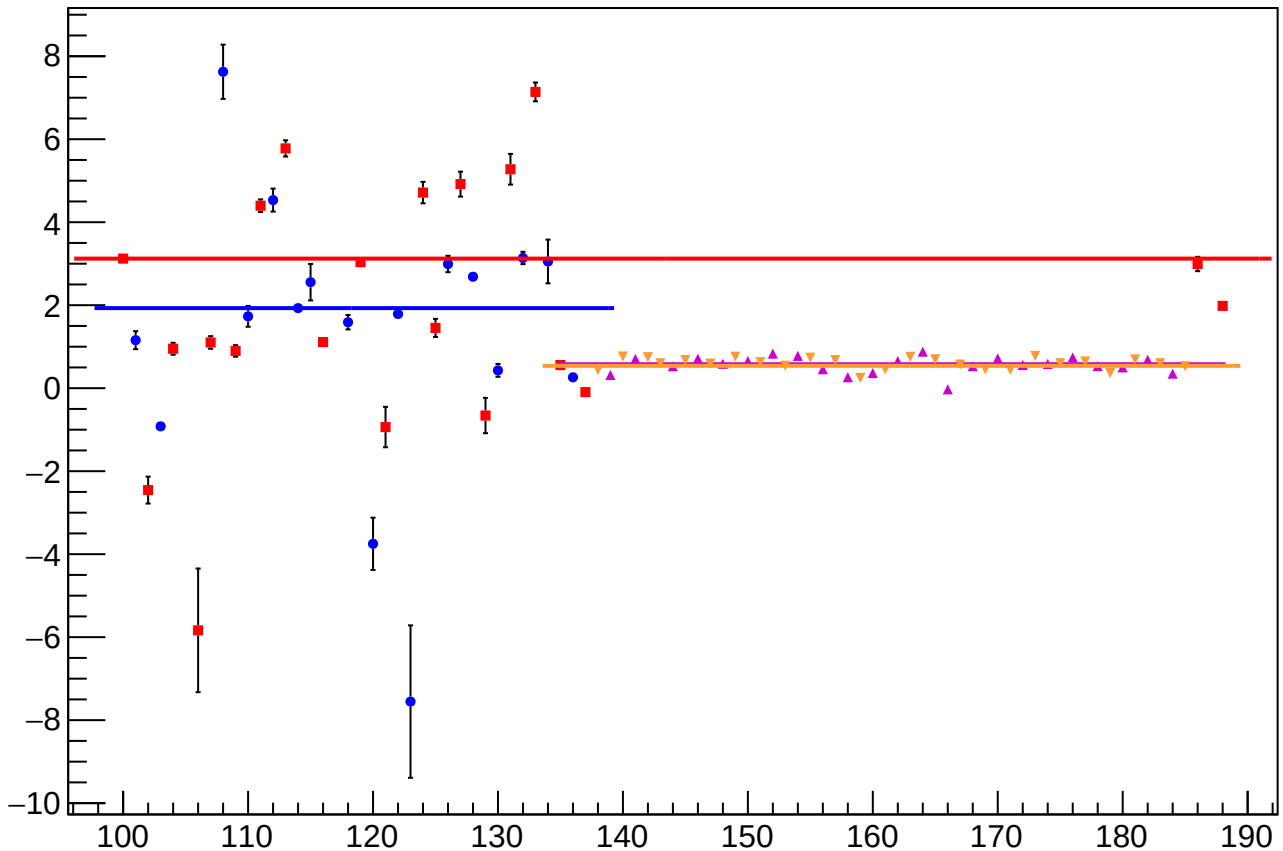
Left In:  $-232.094 \pm 0.217$   $\chi^2/\text{NDF}$ : 17468.1/22

+ sign  $-279.052 \pm 0.162$   $\chi^2/\text{NDF}$ : 216636.0/41

All:  $-498.692 \pm 0.000$   $\chi^2/\text{NDF}$ : 4421413.5/85

- sign  $-498.692 \pm 0.000$   $\chi^2/\text{NDF}$ : 2358546.2/43

# dit\_sam2\_11X12X\_slope vs Slug



Right In: 1.930 $\pm$ 0.000  $\chi^2$ /NDF: 59970.9/16

Left Out: 0.539 $\pm$ 0.002  $\chi^2$ /NDF:10792.6/24

Right Out: 3.123 $\pm$ 0.000  $\chi^2$ /NDF: 512815.3/20

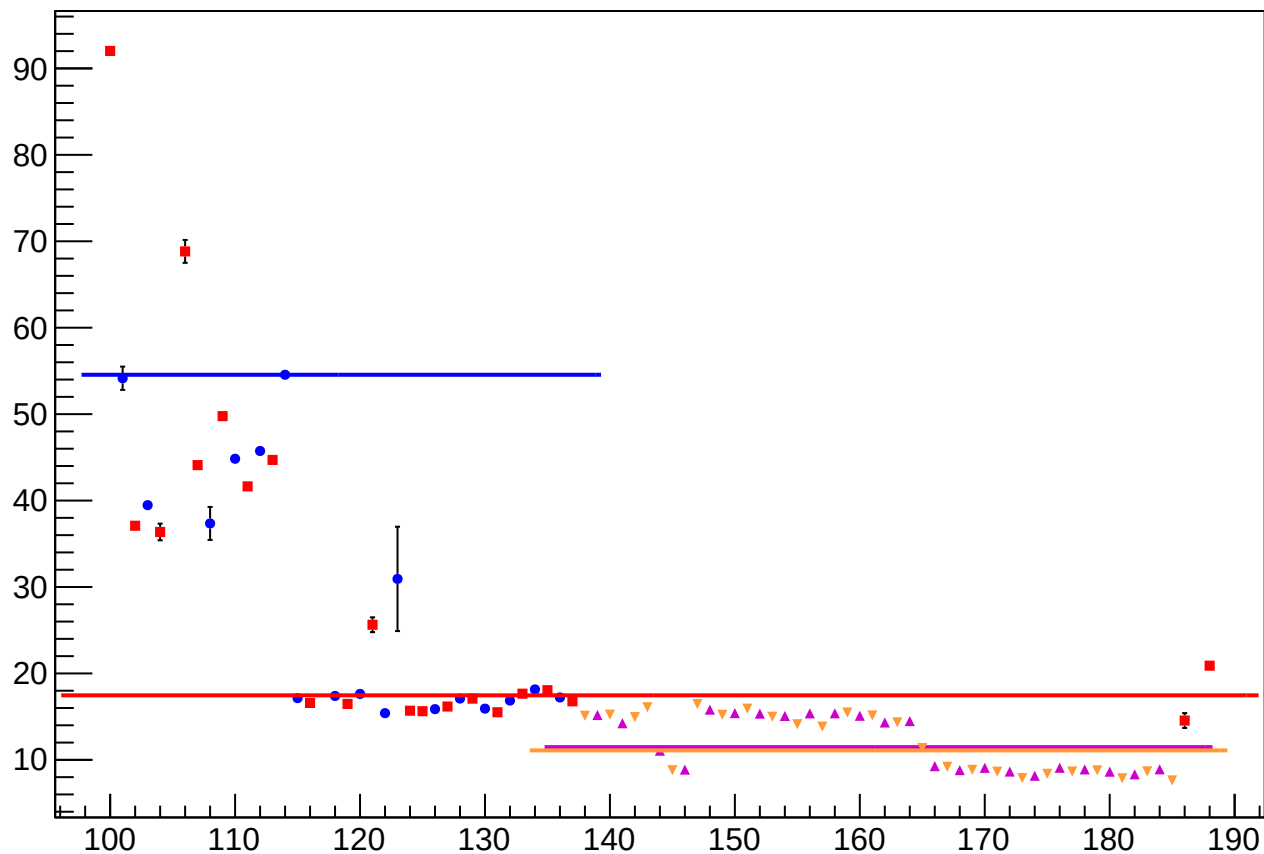
Left In: 0.577 $\pm$ 0.001  $\chi^2$ /NDF:15533.6/22

+ sign 1.930 $\pm$ 0.000  $\chi^2$ /NDF: 762047.5/41

All: 2.073 $\pm$ 0.000  $\chi^2$ /NDF: 3809953457808

- sign 3.123 $\pm$ 0.000  $\chi^2$ /NDF: 3606615.5/43

# dit\_sam2\_4aY\_slope vs Slug



Right In: 54.556 $\pm$ 0.000  $\chi^2$ /NDF: 7238433.0/16

Left Out: 11.095 $\pm$ 0.005  $\chi^2$ /NDF: 381518.3/24

Right Out: 17.467 $\pm$ 0.018  $\chi^2$ /NDF: 99426.5/20

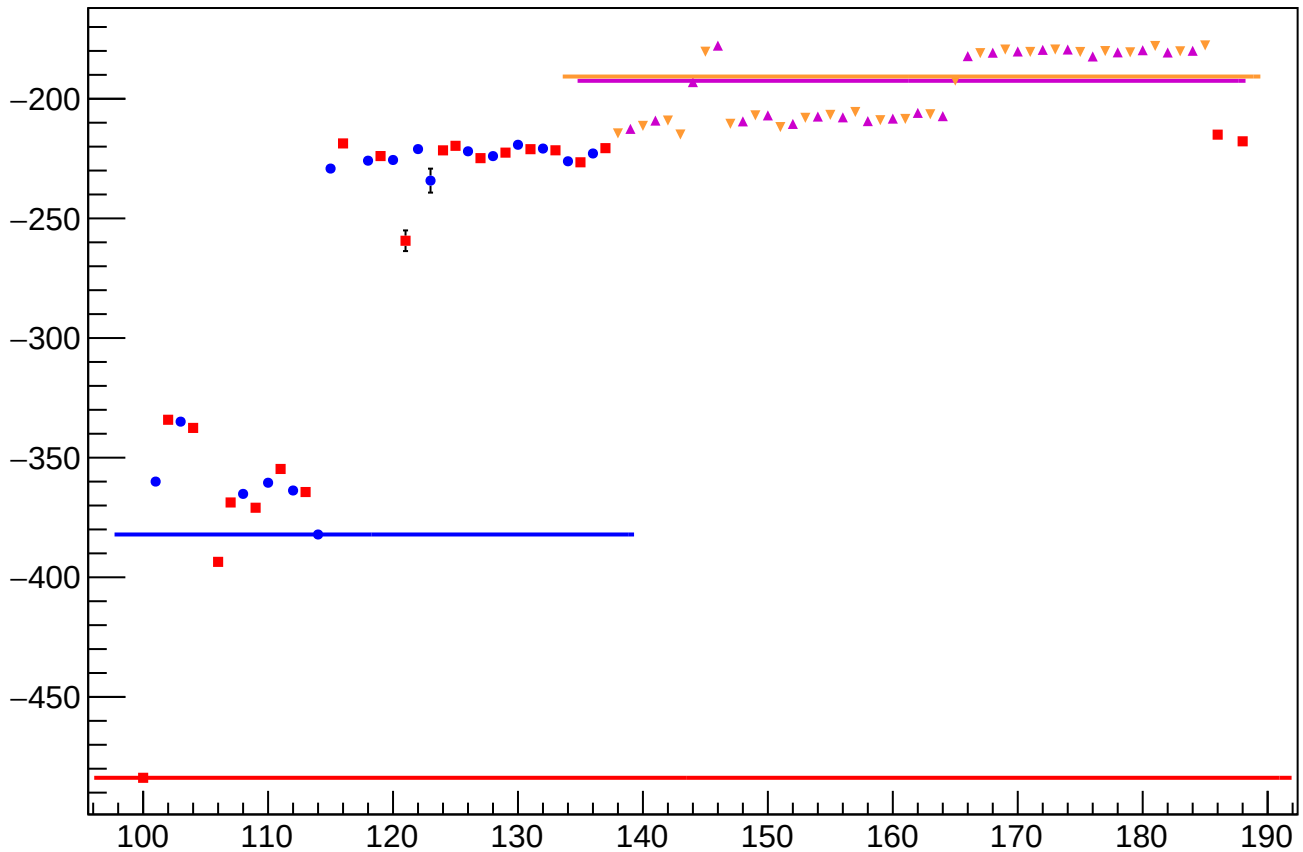
Left In: 11.477 $\pm$ 0.005  $\chi^2$ /NDF: 381285.2/22

+ sign 54.556 $\pm$ 0.000  $\chi^2$ /NDF: 73445231.7/41

All: 54.556 $\pm$ 0.000  $\chi^2$ /NDF: 145999867.7/85

- sign 11.931 $\pm$ 0.005  $\chi^2$ /NDF: 580244.7/43

# dit\_sam2\_4eY\_slope vs Slug



Right In:  $-382.108 \pm 0.000$   $\chi^2/\text{NDF}$ : 18398024.3/16

Left Out:  $-190.703 \pm 0.011$   $\chi^2/\text{NDF}$ : 1602184.8/24

+ sign  $-382.108 \pm 0.000$   $\chi^2/\text{NDF}$ : 314336854.7/41

Right Out:  $-483.800 \pm 0.000$   $\chi^2/\text{NDF}$ : 25014195.8/20

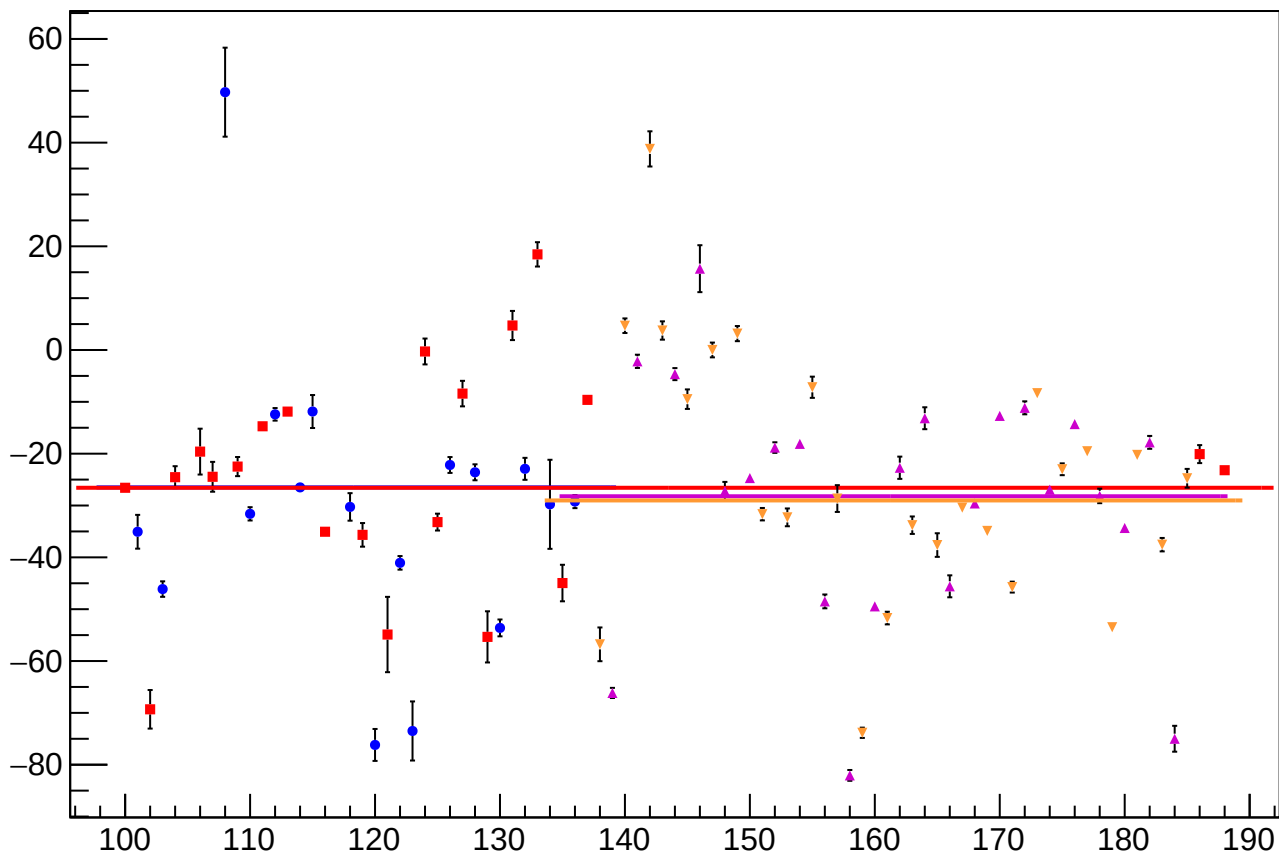
All:  $-417.999 \pm 0.000$   $\chi^2/\text{NDF}$ : 12425488813

Left In:  $-192.488 \pm 0.011$   $\chi^2/\text{NDF}$ : 1500910.9/22

- sign  $-483.800 \pm 0.000$   $\chi^2/\text{NDF}$ : 680560150.5/43



# dit\_sam3\_4aX\_slope vs Slug



Right In:  $-26.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 1180.7/16

Left Out:  $-29.022 \pm 0.235$   $\chi^2/\text{NDF}$ : 7110.5/24

Right Out:  $-26.577 \pm 0.000$   $\chi^2/\text{NDF}$ : 2685.9/20

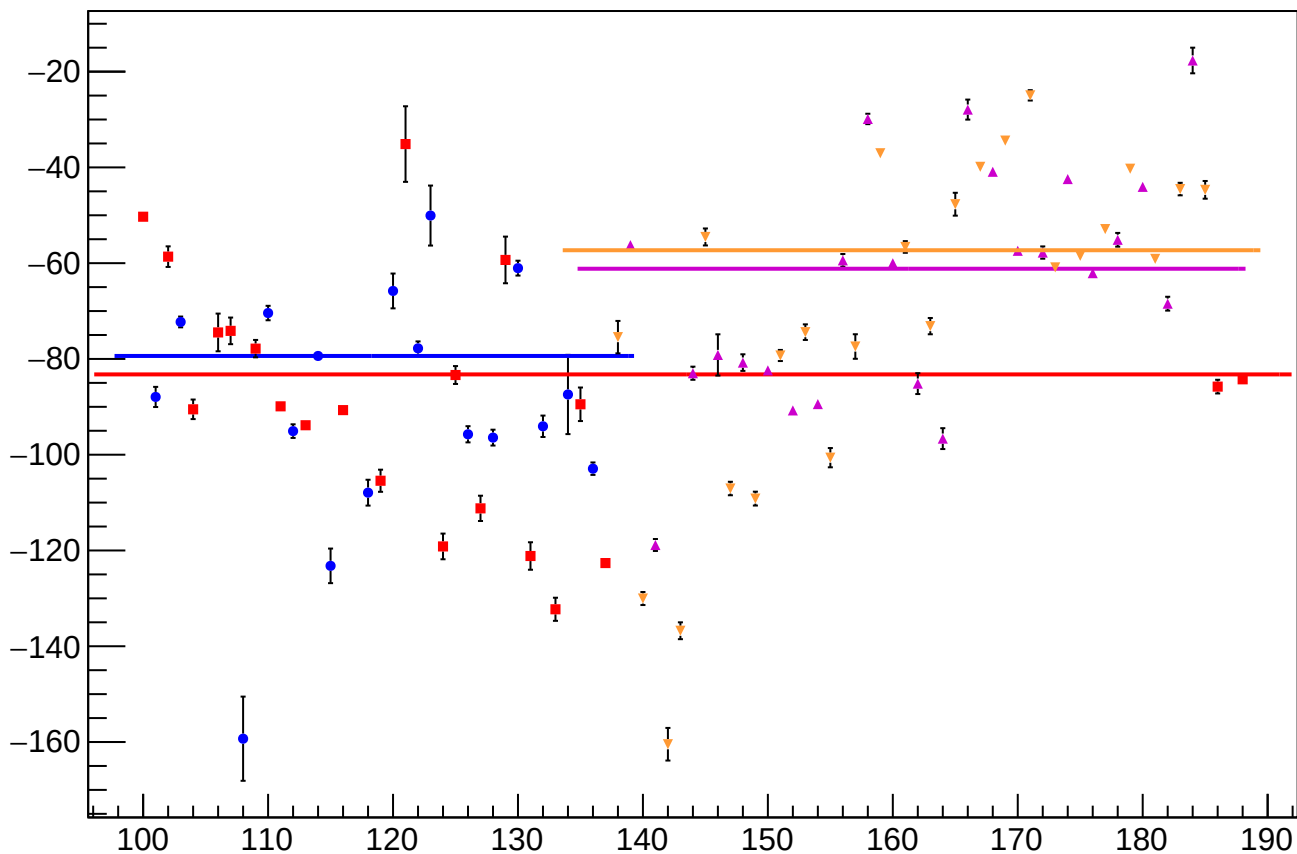
Left In:  $-28.215 \pm 0.215$   $\chi^2/\text{NDF}$ : 7786.5/22

+ sign  $-26.504 \pm 0.000$   $\chi^2/\text{NDF}$ : 8406.2/41

All:  $-26.530 \pm 0.000$   $\chi^2/\text{NDF}$ : 412159279654

- sign  $-26.577 \pm 0.000$   $\chi^2/\text{NDF}$ : 10530.7/43

# dit\_sam3\_4eX\_slope vs Slug



Right In:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}: 1304.6/16$

Left Out:  $-57.300 \pm 0.229$   $\chi^2/\text{NDF}: 13067.7/24$

Right Out:  $-83.229 \pm 0.170$   $\chi^2/\text{NDF}: 11922.5/20$

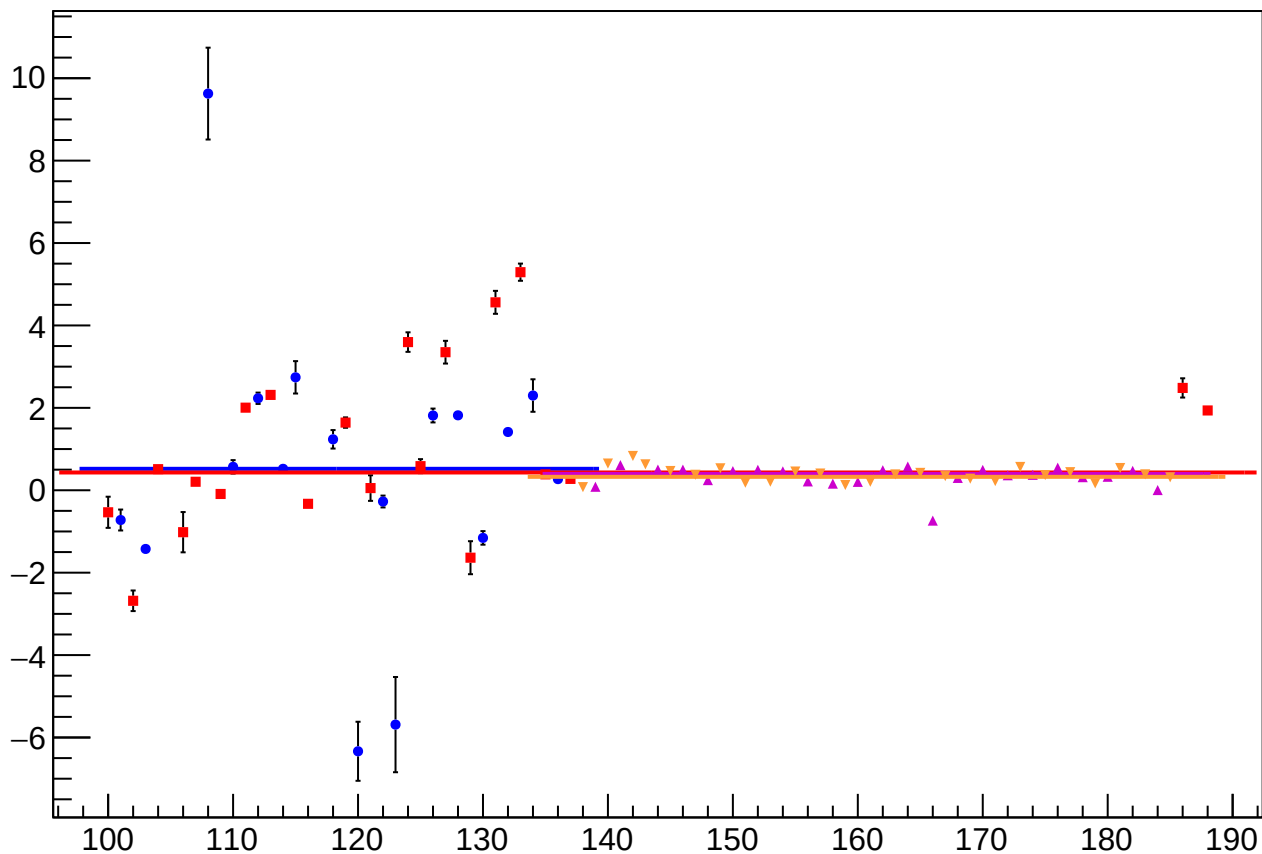
Left In:  $-61.164 \pm 0.218$   $\chi^2/\text{NDF}: 8941.7/22$

+ sign  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}: 23650.0/41$

All:  $-79.376 \pm 0.000$   $\chi^2/\text{NDF}: 52036.3/85$

- sign  $-74.891 \pm 0.134$   $\chi^2/\text{NDF}: 27262.0/43$

# dit\_sam3\_11X12X\_slope vs Slug



Right In:  $0.521 \pm 0.000$   $\chi^2/\text{NDF}$ : 3370.8/16

Left Out:  $0.326 \pm 0.002$   $\chi^2/\text{NDF}$ : 10419.3/24

Right Out:  $0.431 \pm 0.011$   $\chi^2/\text{NDF}$ : 3114.1/20

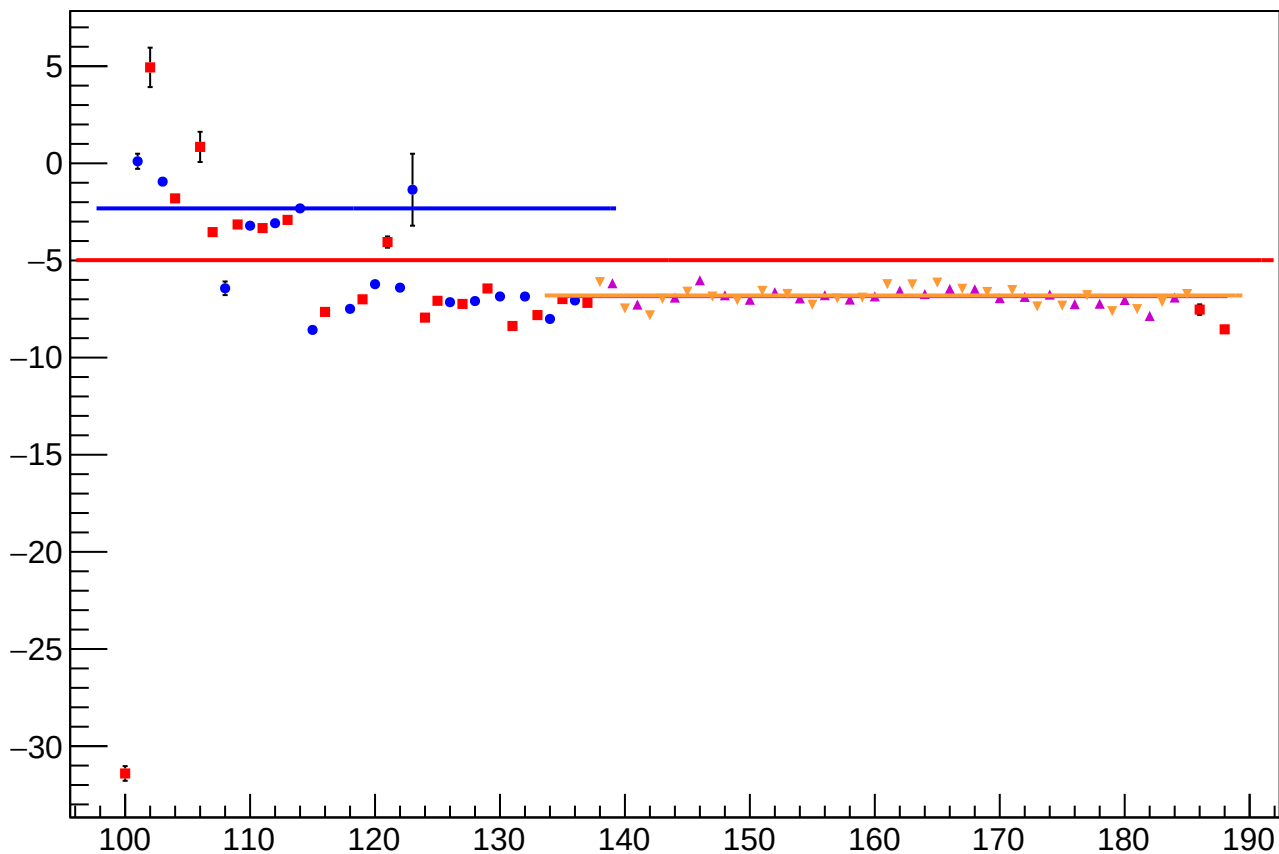
Left In:  $0.396 \pm 0.001$   $\chi^2/\text{NDF}$ : 11392.0/22

+ sign  $0.521 \pm 0.000$   $\chi^2/\text{NDF}$ : 28543.2/41

All:  $0.521 \pm 0.000$   $\chi^2/\text{NDF}$ : 50634.8/85

- sign  $0.397 \pm 0.001$   $\chi^2/\text{NDF}$ : 14516.8/43

# dit\_sam3\_4aY\_slope vs Slug



Right In:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}$ : 270771.9/16

Left Out:  $-6.802 \pm 0.002$   $\chi^2/\text{NDF}$ : 14918.8/24

Right Out:  $-4.985 \pm 0.010$   $\chi^2/\text{NDF}$ : 53517.5/20

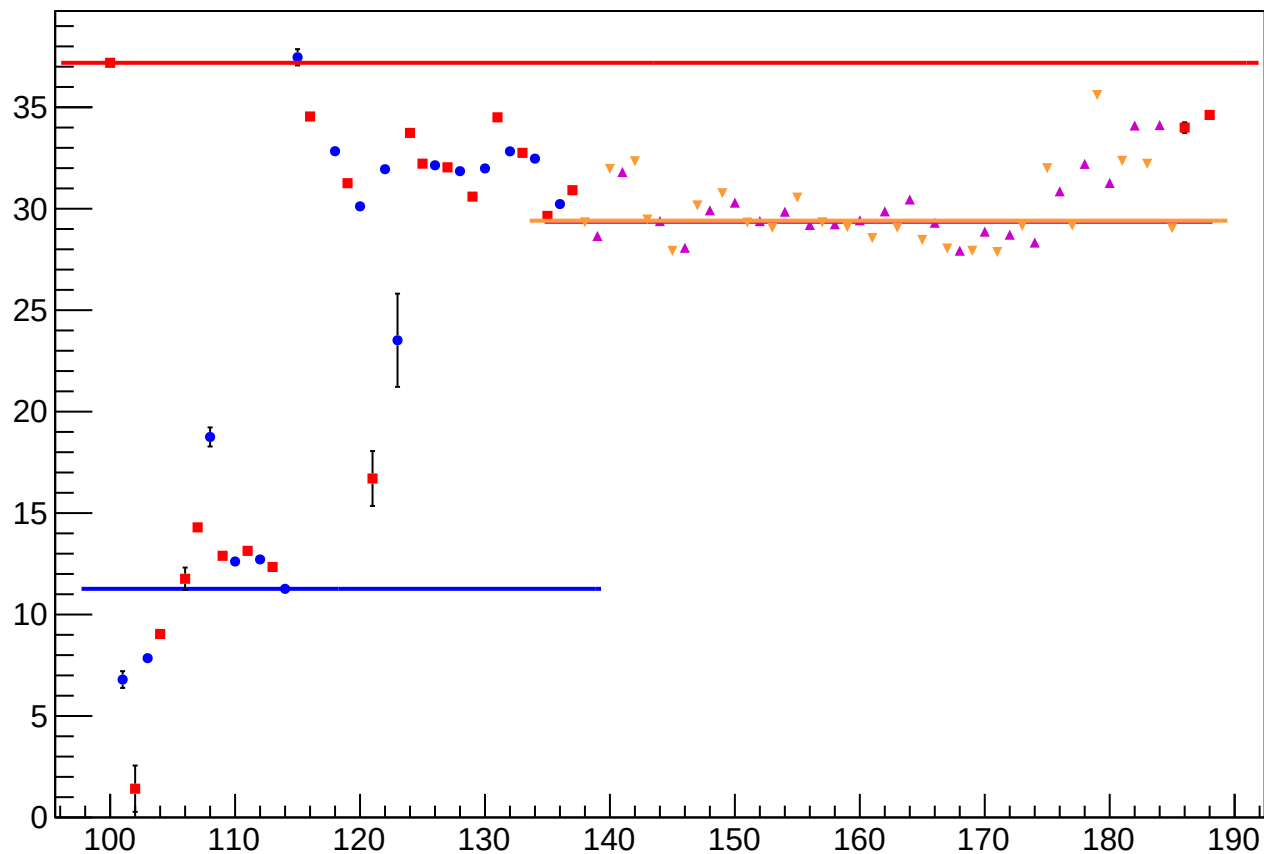
Left In:  $-6.836 \pm 0.002$   $\chi^2/\text{NDF}$ : 9245.1/22

+ sign  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}$ : 3533597.7/41

All:  $-2.320 \pm 0.000$   $\chi^2/\text{NDF}$ : 7177645.2/85

- sign  $-6.737 \pm 0.002$   $\chi^2/\text{NDF}$ : 94362.8/43

# dit\_sam3\_4eY\_slope vs Slug



Right In:  $11.268 \pm 0.000$   $\chi^2/\text{NDF}$ : 958029.3/16

Left Out:  $29.411 \pm 0.008$   $\chi^2/\text{NDF}$ : 44374.5/24

Right Out:  $37.191 \pm 0.000$   $\chi^2/\text{NDF}$ : 1124118.9/20

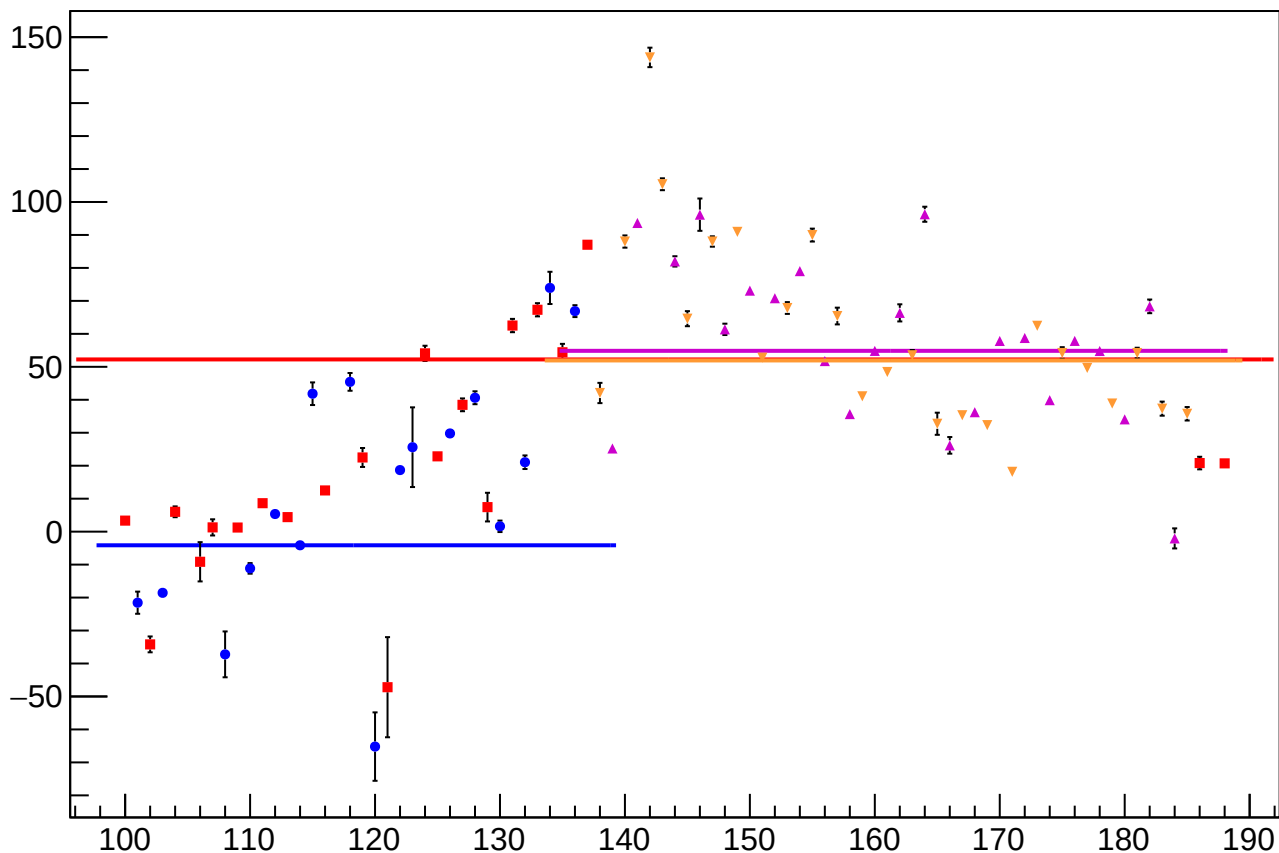
Left In:  $29.354 \pm 0.008$   $\chi^2/\text{NDF}$ : 14741.7/22

+ sign  $11.268 \pm 0.000$   $\chi^2/\text{NDF}$ : 5917654.2/41

All:  $12.122 \pm 0.000$   $\chi^2/\text{NDF}$ : 7723055694978

- sign  $37.191 \pm 0.000$   $\chi^2/\text{NDF}$ : 2127356.3/43

# dit\_sam4\_4aX\_slope vs Slug



Right In:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}$ : 4654.2/16

Left Out:  $51.931 \pm 0.276$   $\chi^2/\text{NDF}$ : 6225.4/24

Right Out:  $52.239 \pm 0.165$   $\chi^2/\text{NDF}$ : 56543.1/20

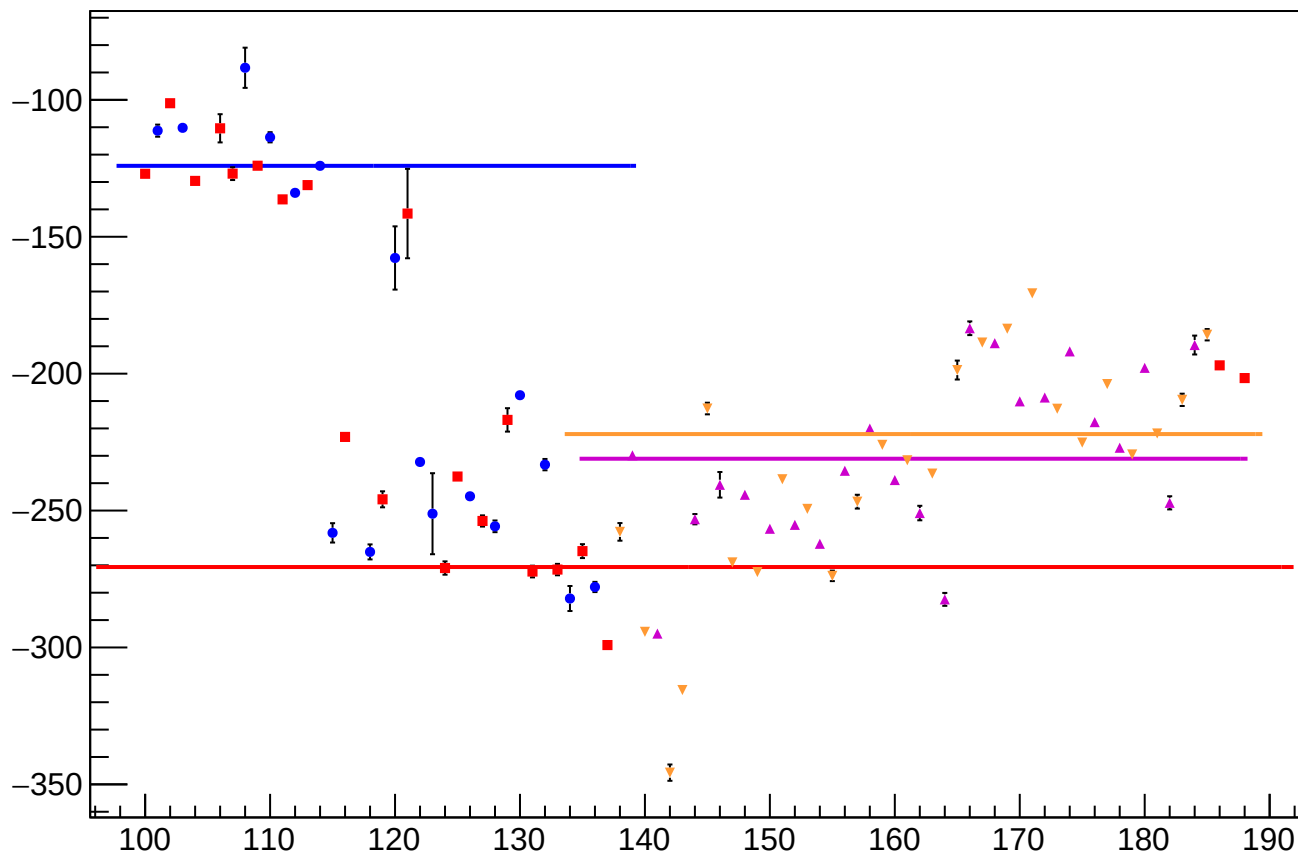
Left In:  $54.849 \pm 0.247$   $\chi^2/\text{NDF}$ : 6325.8/22

+ sign  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}$ : 52285.7/41

All:  $-4.139 \pm 0.000$   $\chi^2/\text{NDF}$ : 289421.7/85

- sign  $53.041 \pm 0.137$   $\chi^2/\text{NDF}$ : 62946.1/43

# dit\_sam4\_4eX\_slope vs Slug



Right In:  $-124.095 \pm 0.000$   $\chi^2/\text{NDF}$ : 38152.5/16

Left Out:  $-222.063 \pm 0.272$   $\chi^2/\text{NDF}$ : 15812.2/24

Right Out:  $-270.622 \pm 0.111$   $\chi^2/\text{NDF}$ : 294488.9/20

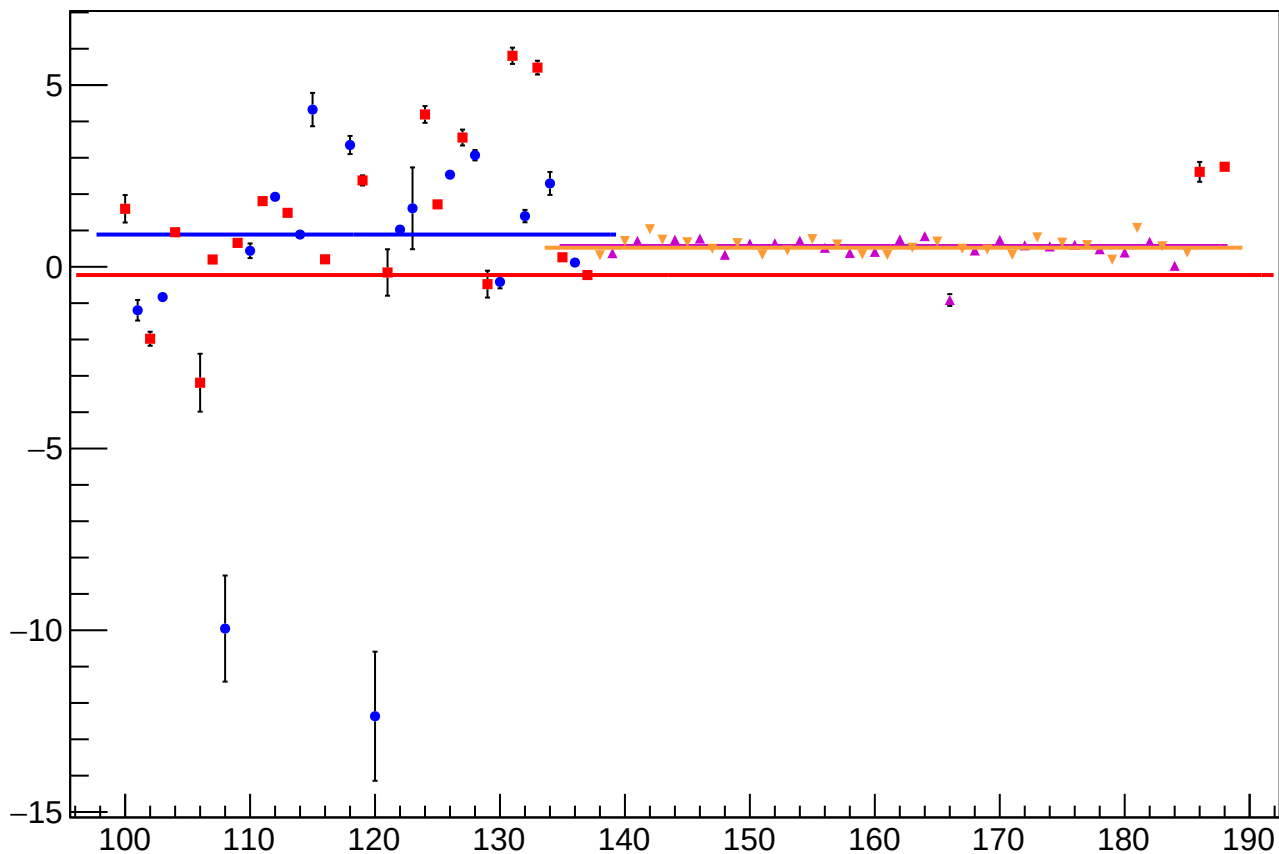
Left In:  $-231.069 \pm 0.249$   $\chi^2/\text{NDF}$ : 12005.6/22

+ sign  $-124.095 \pm 0.000$   $\chi^2/\text{NDF}$ : 183519.0/41

All:  $-124.095 \pm 0.000$   $\chi^2/\text{NDF}$ : 2424805.9/85

- sign  $-264.112 \pm 0.101$   $\chi^2/\text{NDF}$ : 327494.6/43

# dit\_sam4\_11X12X\_slope vs Slug



Right In: 0.888 $\pm$ 0.000  $\chi^2$ /NDF: 8672.0/16

Left Out: 0.525 $\pm$ 0.002  $\chi^2$ /NDF:9207.9/24

Right Out: -0.226 $\pm$ 0.000  $\chi^2$ /NDF: 6070.4/20

Left In: 0.572 $\pm$ 0.002  $\chi^2$ /NDF:5600.2/22

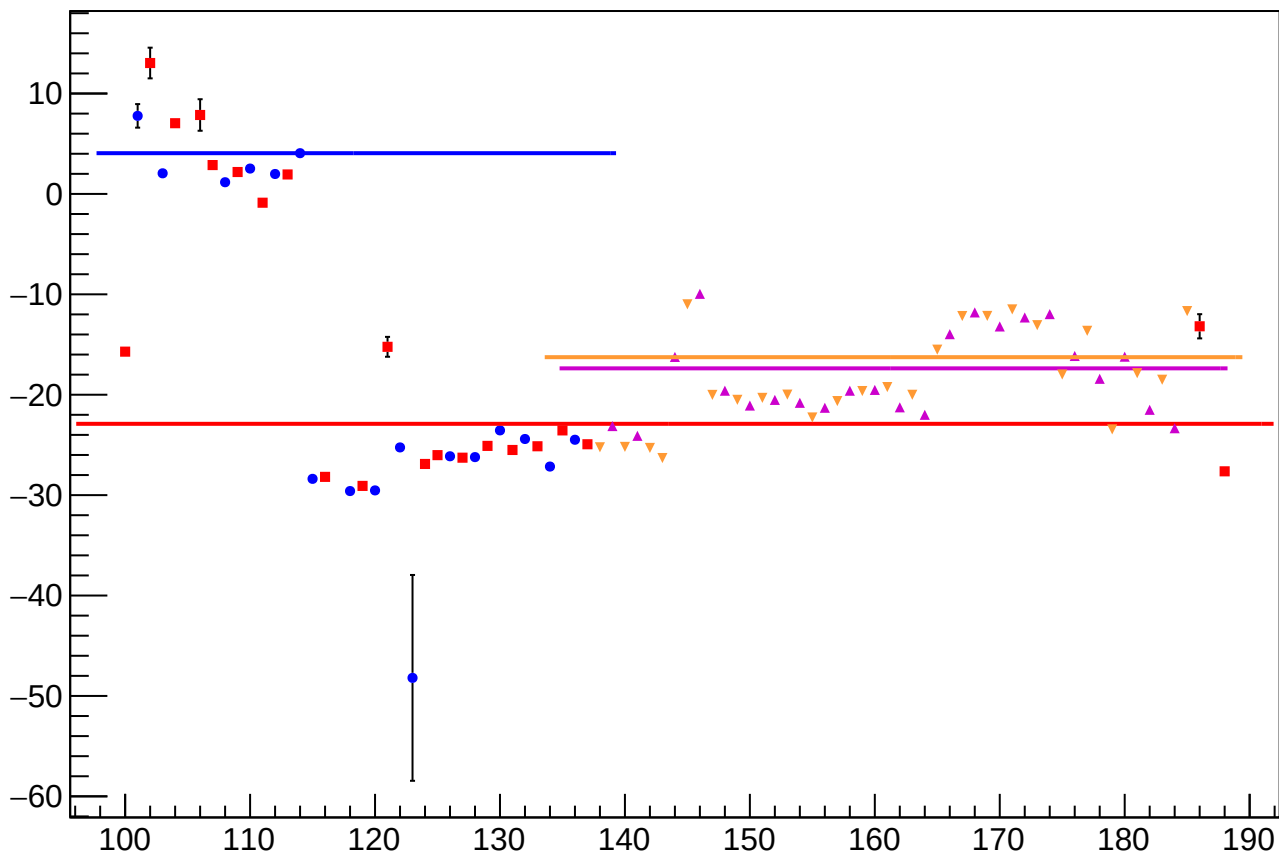
+ sign 0.888 $\pm$ 0.000  $\chi^2$ /NDF: 50219.3/41

All: 0.888 $\pm$ 0.000  $\chi^2$ /NDF: 422293511.7/85

- sign -0.225 $\pm$ 0.000  $\chi^2$ /NDF: 173565.0/43



# dit\_sam4\_4aY\_slope vs Slug



Right In:  $4.057 \pm 0.000$   $\chi^2/\text{NDF}$ : 1247888.2/16

Left Out:  $-16.260 \pm 0.010$   $\chi^2/\text{NDF}$ : 188515.0/24

Right Out:  $-22.897 \pm 0.026$   $\chi^2/\text{NDF}$ : 116689.3/20

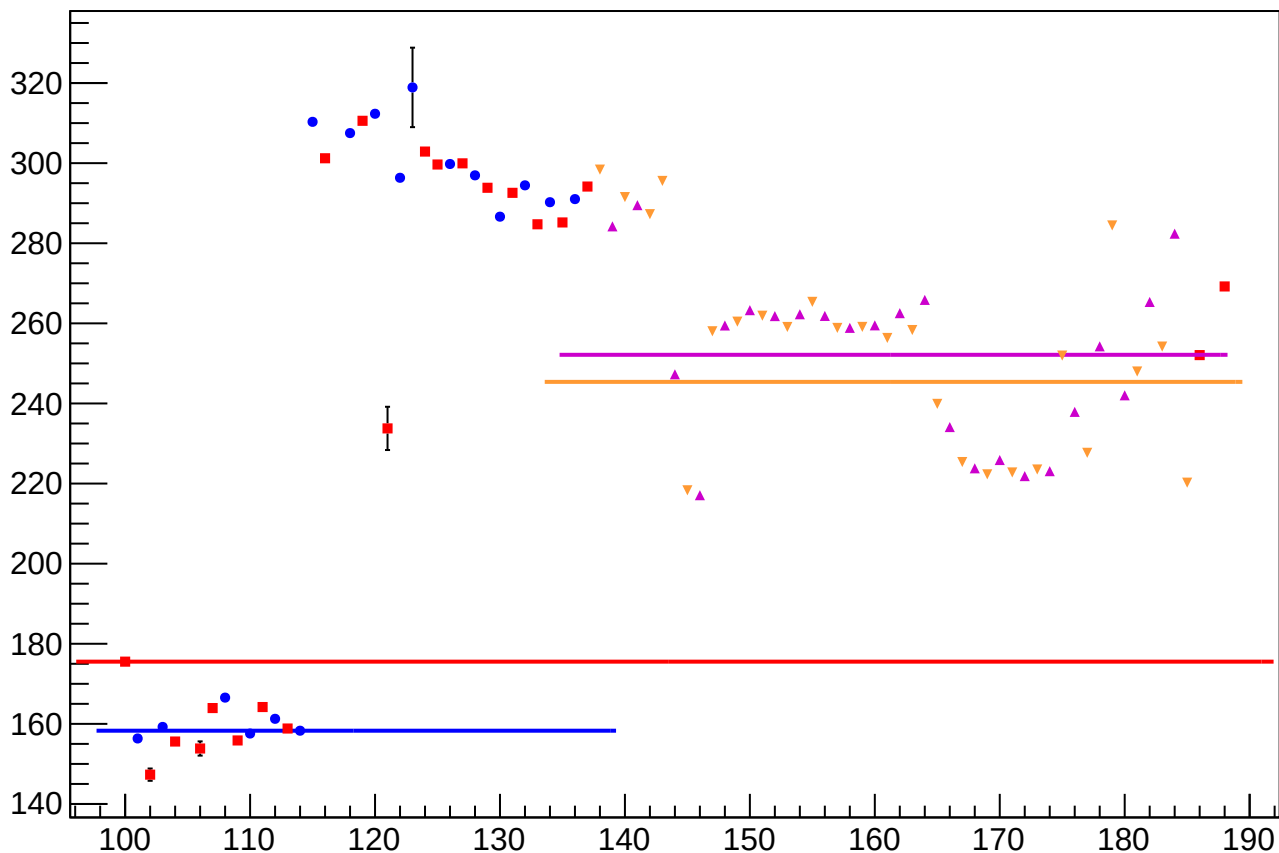
Left In:  $-17.374 \pm 0.009$   $\chi^2/\text{NDF}$ : 169487.5/22

+ sign  $4.057 \pm 0.000$   $\chi^2/\text{NDF}$ : 5552298.3/41

All:  $4.057 \pm 0.000$   $\chi^2/\text{NDF}$ : 12121708.9/85

- sign  $-17.997 \pm 0.009$   $\chi^2/\text{NDF}$ : 325402.4/43

# dit\_sam4\_4eY\_slope vs Slug



Right In: 158.293+/-0.000  $\chi^2/\text{NDF}$ : 2410913.3/16

Left Out: 245.391+/-0.027  $\chi^2/\text{NDF}$ : 723564.6/24

Right Out: 175.536+/-0.000  $\chi^2/\text{NDF}$ : 2153426.3/20

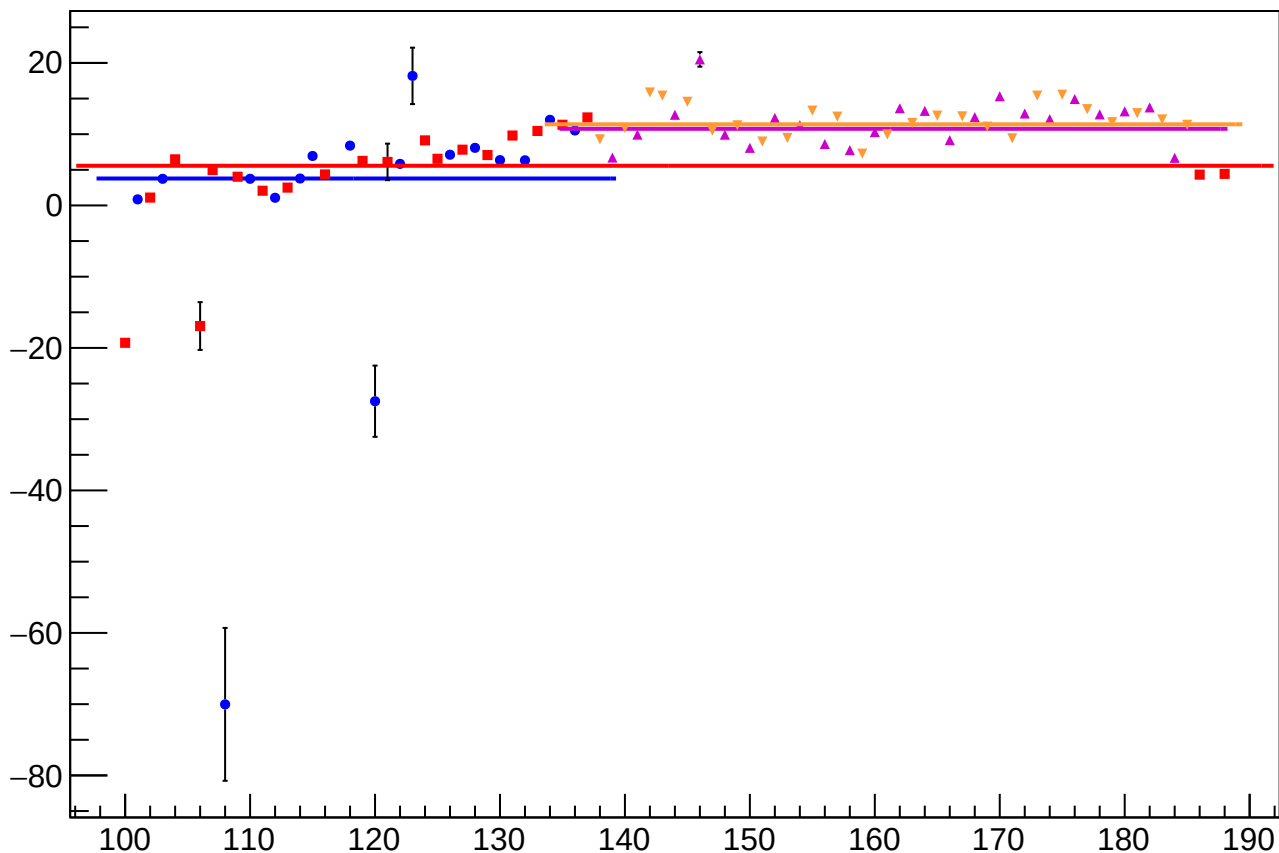
Left In: 252.148+/-0.028  $\chi^2/\text{NDF}$ : 359416.7/22

+ sign 158.293+/-0.000  $\chi^2/\text{NDF}$ : 13265078.0/41

All: 172.618+/-0.000  $\chi^2/\text{NDF}$ : 373727491225

- sign 175.536+/-0.000  $\chi^2/\text{NDF}$ : 9818072.6/43

# dit\_sam5\_4aX\_slope vs Slug



Right In:  $3.778 \pm 0.000$   $\chi^2/\text{NDF}$ : 6871.4/16

Left Out:  $11.389 \pm 0.030$   $\chi^2/\text{NDF}$ : 4296.1/24

Right Out:  $5.567 \pm 0.024$   $\chi^2/\text{NDF}$ : 22674.4/20

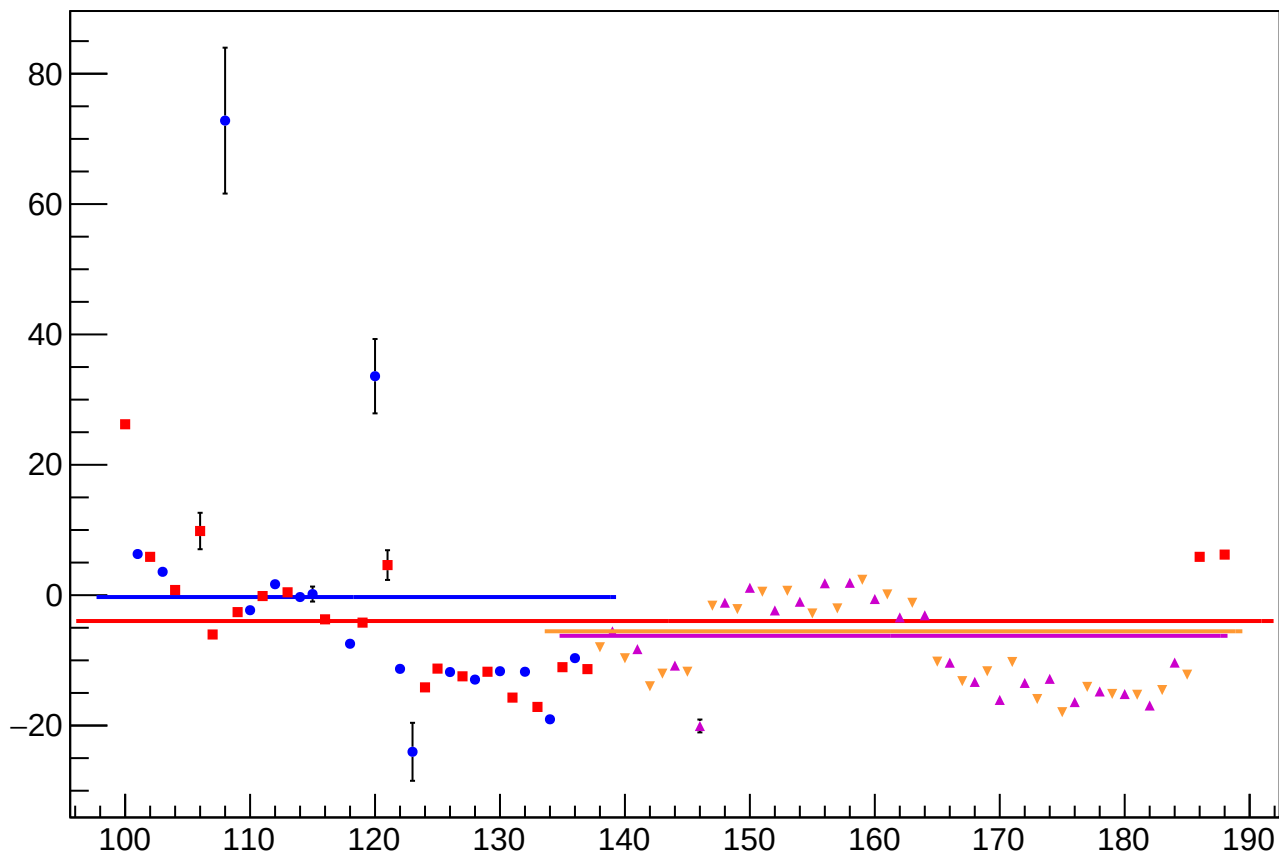
Left In:  $10.753 \pm 0.028$   $\chi^2/\text{NDF}$ : 9950.6/22

+ sign  $3.778 \pm 0.000$   $\chi^2/\text{NDF}$ : 75163.6/41

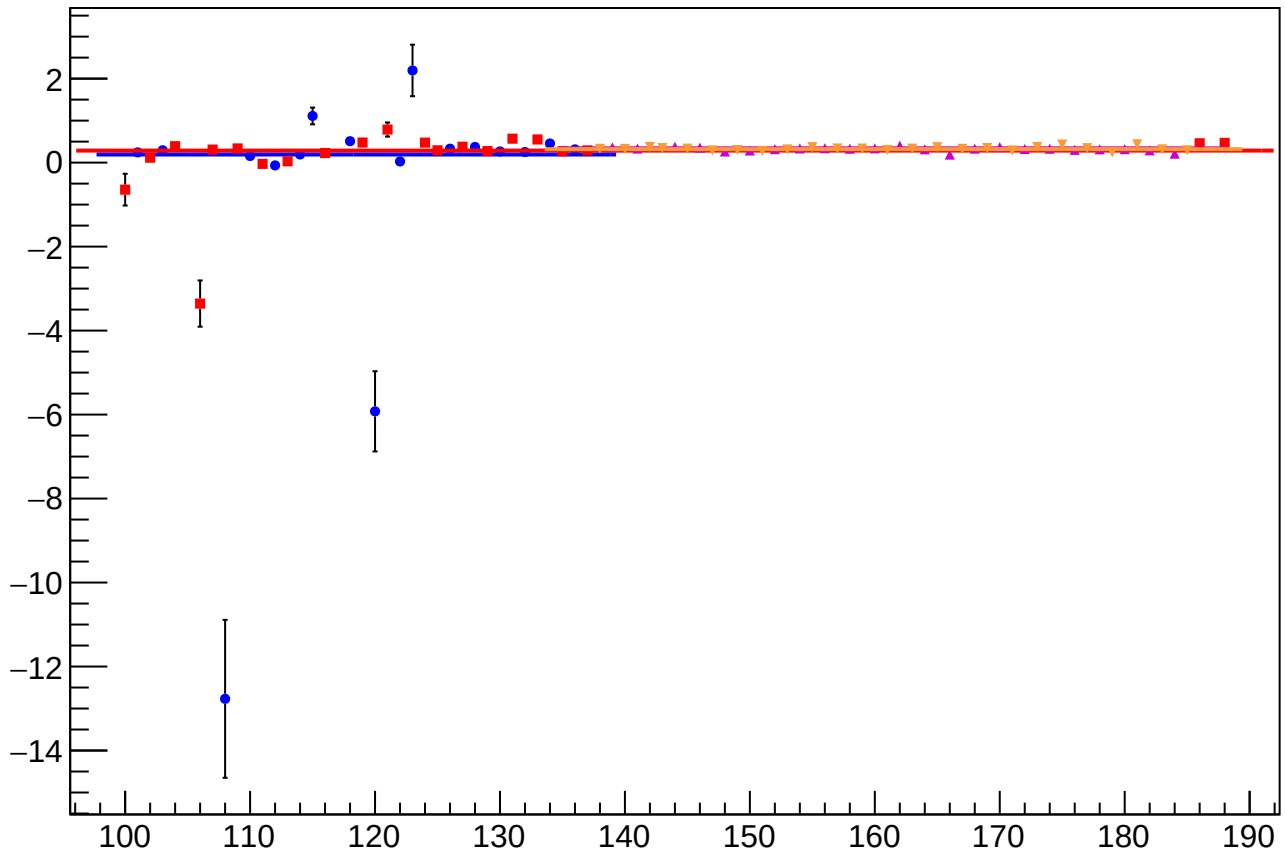
All:  $3.778 \pm 0.000$   $\chi^2/\text{NDF}$ : 176732.0/85

- sign  $7.777 \pm 0.018$   $\chi^2/\text{NDF}$ : 52719.2/43

# dit\_sam5\_4eX\_slope vs Slug



# dit\_sam5\_11X12X\_slope vs Slug



Right In: 0.193 $\pm$ 0.000  $\chi^2$ /NDF: 10027.5/16

Left Out: 0.320 $\pm$ 0.001  $\chi^2$ /NDF: 3374.4/24

Right Out: 0.286 $\pm$ 0.001  $\chi^2$ /NDF: 6560.4/20

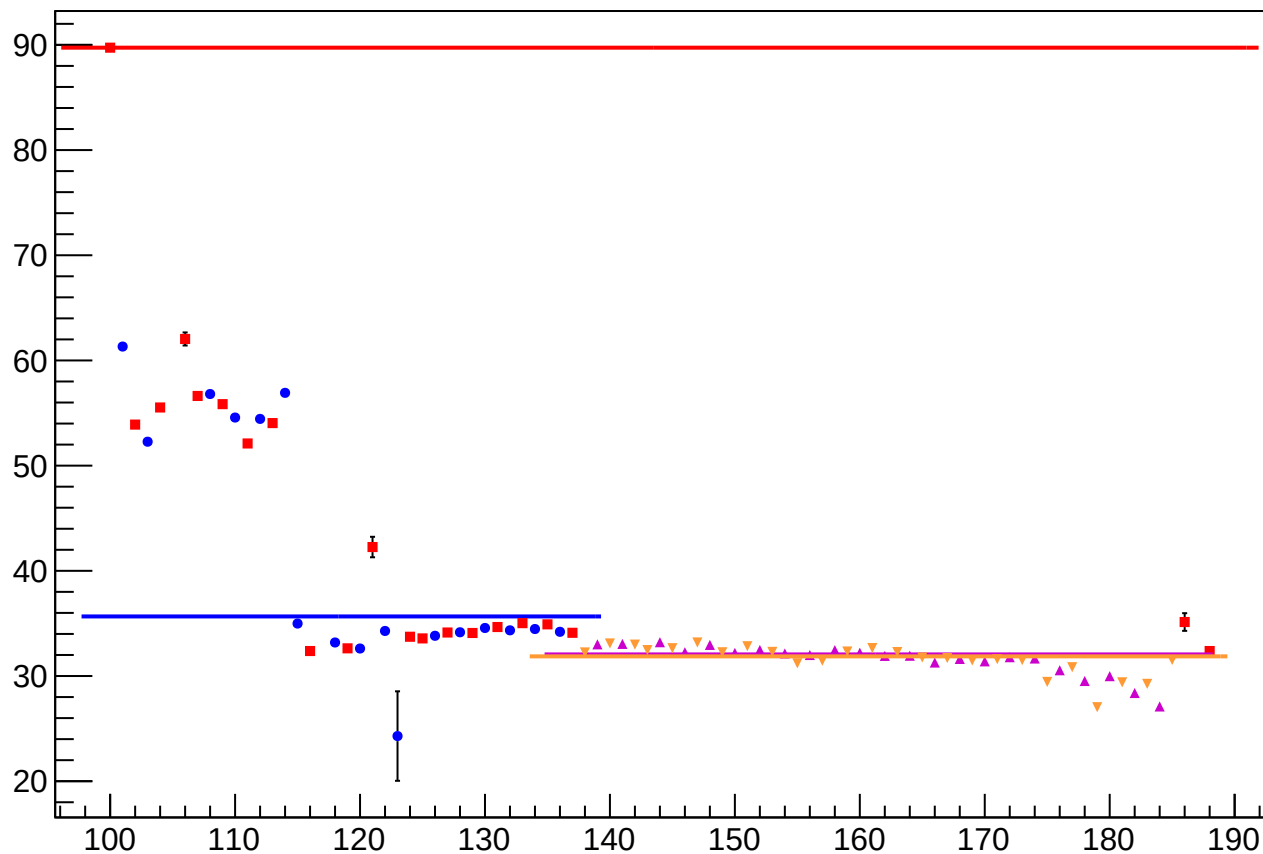
Left In: 0.340 $\pm$ 0.001  $\chi^2$ /NDF: 4171.9/22

+ sign 0.193 $\pm$ 0.000  $\chi^2$ /NDF: 76618.6/41

All: 0.193 $\pm$ 0.000  $\chi^2$ /NDF: 168048.6/85

- sign 0.334 $\pm$ 0.000  $\chi^2$ /NDF: 11938.2/43

# dit\_sam5\_4aY\_slope vs Slug



Right In: 35.664+/-0.011     $\chi^2/\text{NDF}$ : 218662.5/16

Left Out: 31.869+/-0.003     $\chi^2/\text{NDF}$ :61955.3/24

+ sign 32.134 $\pm$ 0.003     $\chi^2$ /NDF: 384313.4/41

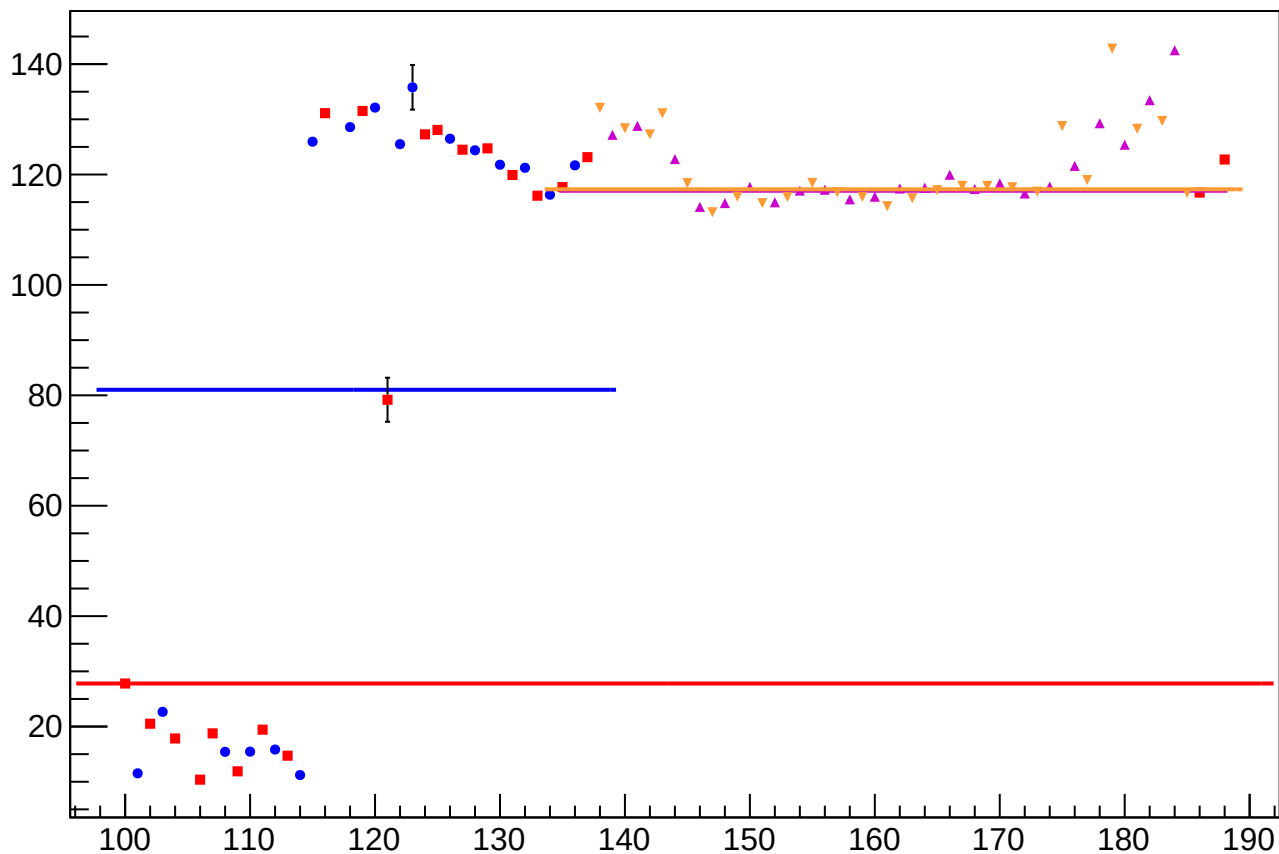
Right Out: 89.735+/-0.000     $\chi^2/\text{NDF}$ : 25964124.2/20

All: 89.735+/-0.000     $\chi^2/\text{NDF}$ : 679088047.3/85

- sign 89.735+/-0.000  $\chi^2/\text{NDF}$ : 311277276.4/43

Left In: 32.053+/-0.003     $\chi^2/\text{NDF}$ :32470.5/22

# dit\_sam5\_4eY\_slope vs Slug



Right In: 81.005 $\pm$ 0.035  $\chi^2$ /NDF: 2228881.4/16

Left Out: 117.323 $\pm$ 0.008  $\chi^2$ /NDF: 172684.3/24

Right Out: 27.798 $\pm$ 0.000  $\chi^2$ /NDF: 9650560.5/20

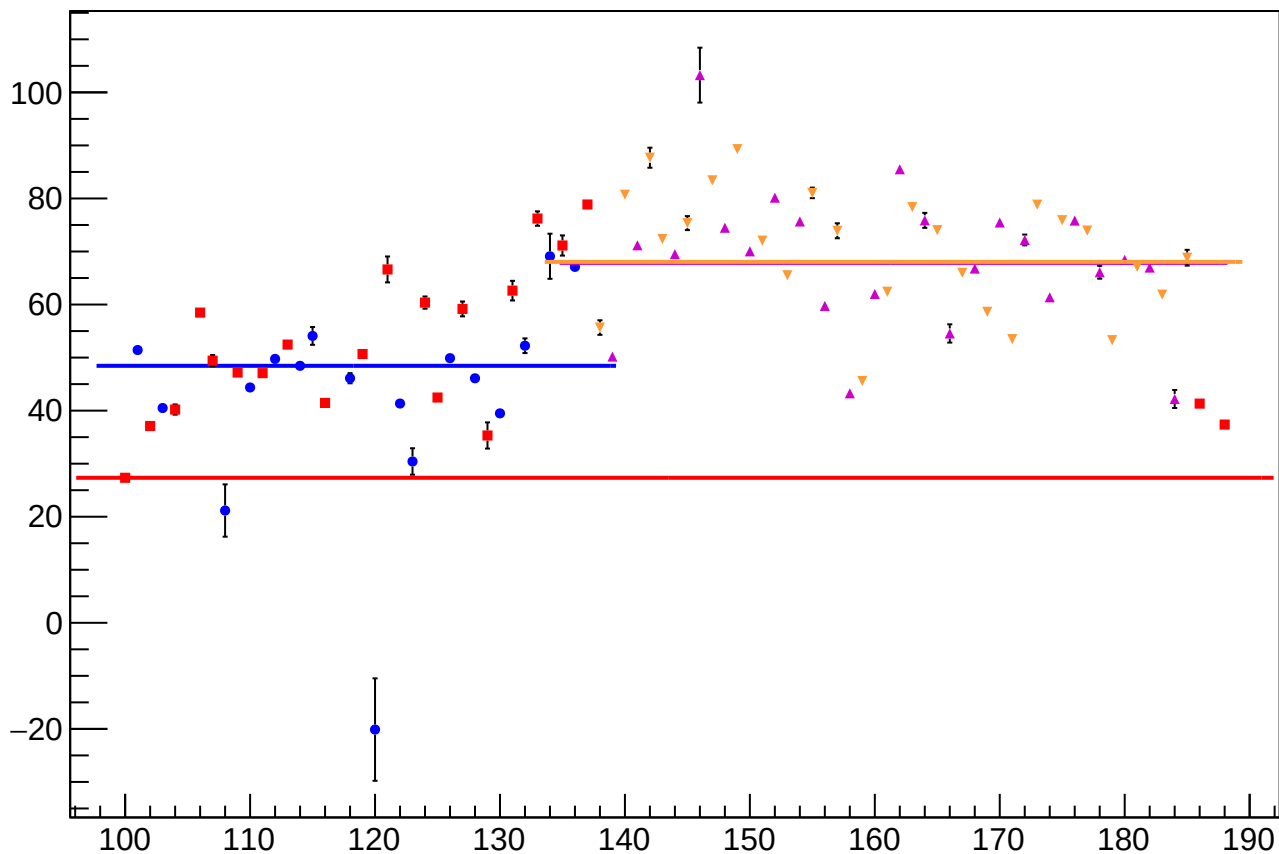
Left In: 117.061 $\pm$ 0.009  $\chi^2$ /NDF: 62905.3/22

+ sign 115.541 $\pm$ 0.008  $\chi^2$ /NDF: 3453409.8/41

All: 27.798 $\pm$ 0.000  $\chi^2$ /NDF: 247386254.7/85

- sign 27.798 $\pm$ 0.000  $\chi^2$ /NDF: 112358360.8/43

# dit\_sam6\_4aX\_slope vs Slug



Right In: 48.450+/-0.000  $\chi^2$ /NDF: 2751.4/16

Left Out: 68.044+/-0.132  $\chi^2$ /NDF: 6670.6/24

Right Out: 27.342+/-0.000  $\chi^2$ /NDF: 27435.3/20

Left In: 67.852+/-0.126  $\chi^2$ /NDF: 5519.9/22

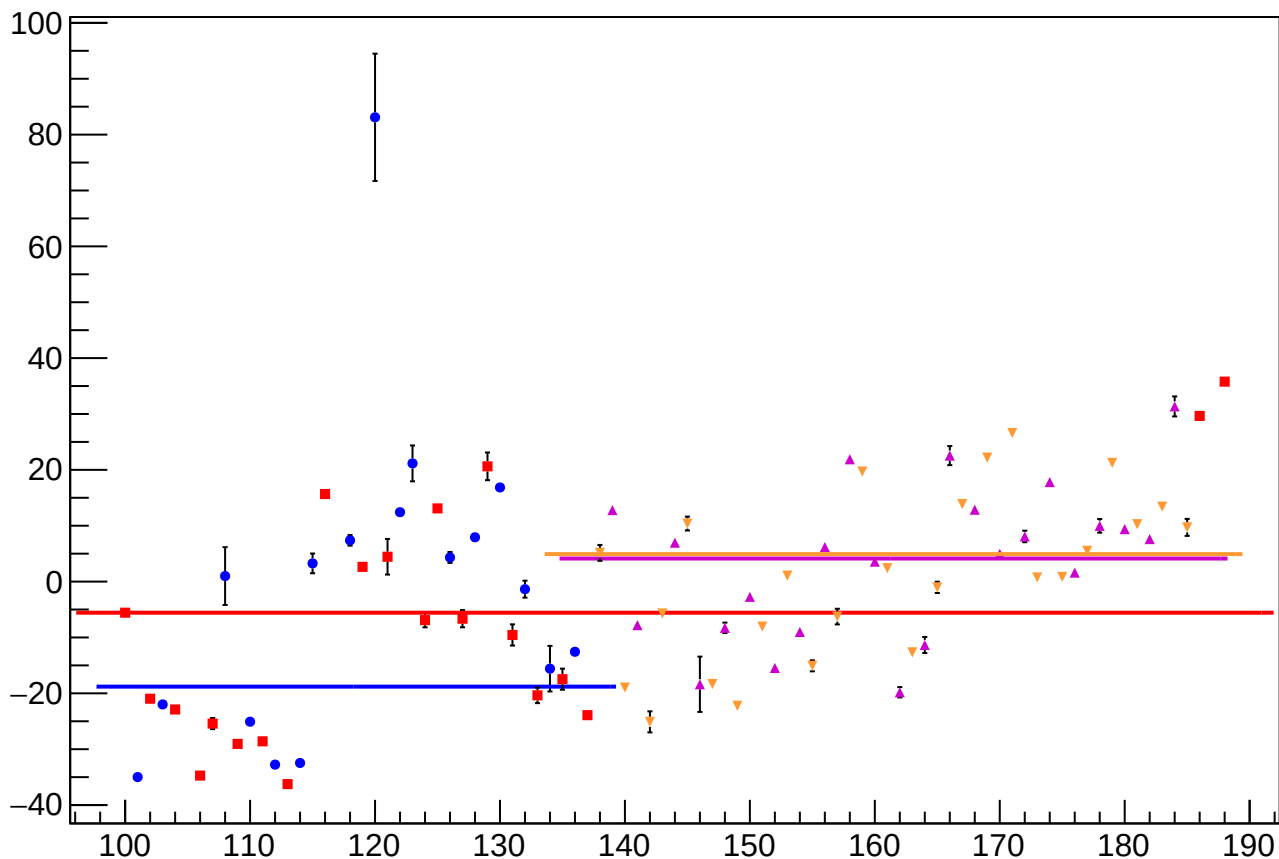
+ sign 48.450+/-0.000  $\chi^2$ /NDF: 31373.2/41

All: 28.365+/-0.000  $\chi^2$ /NDF: 102629010488

- sign 27.342+/-0.000  $\chi^2$ /NDF: 136950.7/43



# dit\_sam6\_4eX\_slope vs Slug



Right In:  $-18.800 \pm 0.148$   $\chi^2/\text{NDF}$ : 11764.7/16

Left Out:  $4.920 \pm 0.132$   $\chi^2/\text{NDF}$ : 10378.5/24

Right Out:  $-5.568 \pm 0.000$   $\chi^2/\text{NDF}$ : 49152.1/20

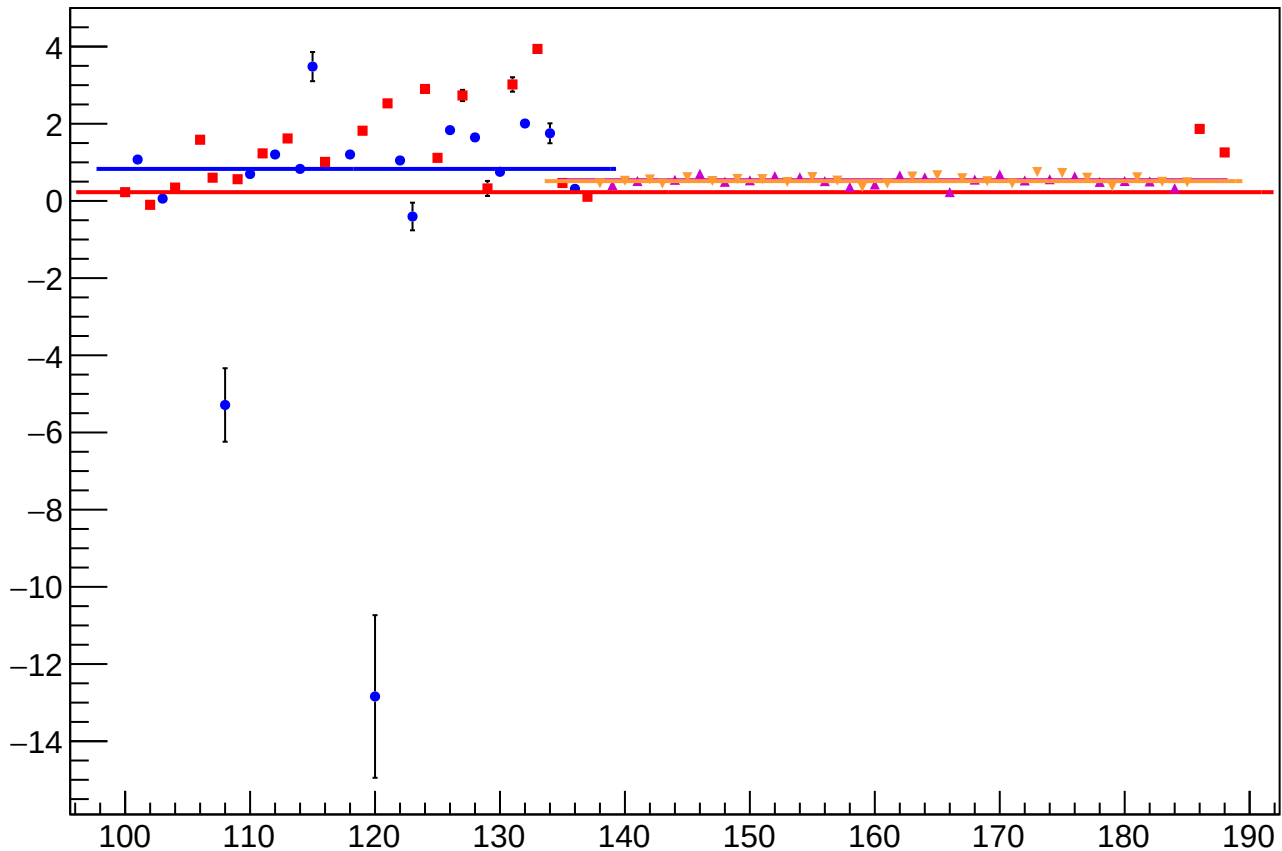
Left In:  $4.129 \pm 0.127$   $\chi^2/\text{NDF}$ : 6161.4/22

+ sign  $-5.573 \pm 0.099$   $\chi^2/\text{NDF}$ : 36382.6/41

All:  $-5.568 \pm 0.000$   $\chi^2/\text{NDF}$ : 97533.3/85

- sign  $-5.568 \pm 0.000$   $\chi^2/\text{NDF}$ : 61150.7/43

# dit\_sam6\_11X12X\_slope vs Slug



Right In:  $0.830 \pm 0.000$   $\chi^2/\text{NDF}$ : 14882.7/16

Left Out:  $0.513 \pm 0.001$   $\chi^2/\text{NDF}$ : 15206.1/24

Right Out:  $0.227 \pm 0.000$   $\chi^2/\text{NDF}$ : 12933.2/20

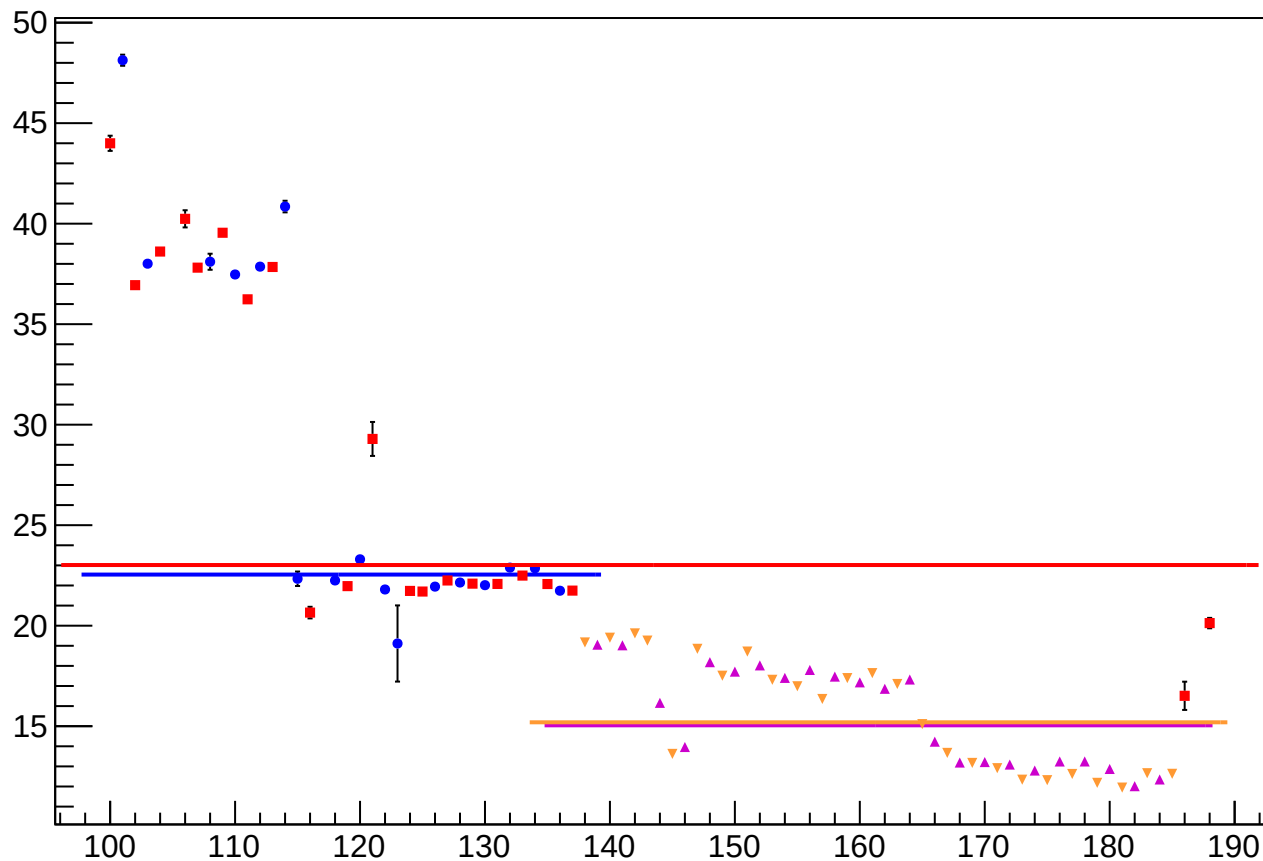
Left In:  $0.536 \pm 0.001$   $\chi^2/\text{NDF}$ : 11764.8/22

+ sign  $0.830 \pm 0.000$   $\chi^2/\text{NDF}$ : 138294.6/41

All:  $0.289 \pm 0.000$   $\chi^2/\text{NDF}$ : 29066082561457

- sign  $0.227 \pm 0.000$   $\chi^2/\text{NDF}$ : 152063.7/43

# dit\_sam6\_4aY\_slope vs Slug



Right In: 22.543 $\pm$ 0.009  $\chi^2$ /NDF: 105452.8/16

Left Out: 15.194 $\pm$ 0.004  $\chi^2$ /NDF: 417095.1/24

Right Out: 23.018 $\pm$ 0.009  $\chi^2$ /NDF: 166048.6/20

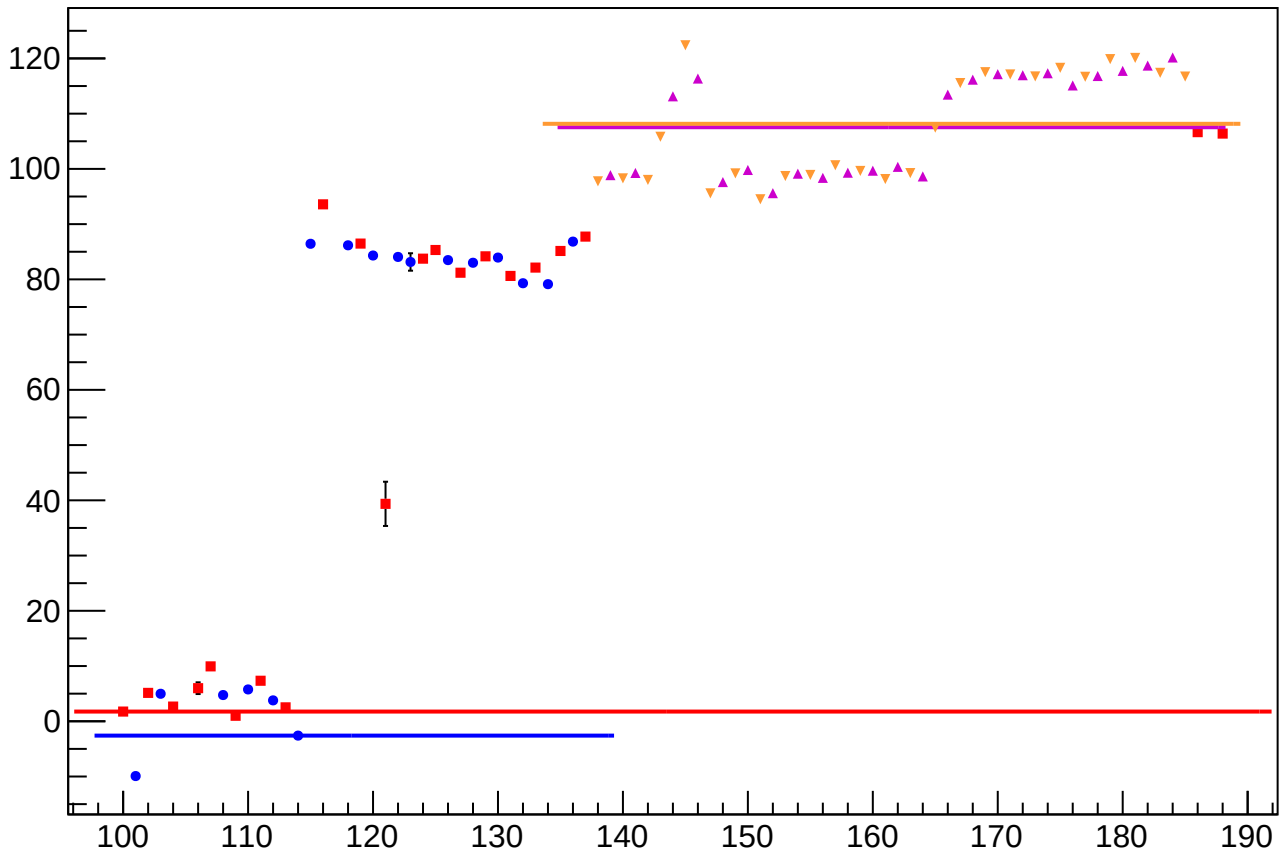
Left In: 15.044 $\pm$ 0.005  $\chi^2$ /NDF: 285851.6/22

+ sign 16.470 $\pm$ 0.004  $\chi^2$ /NDF: 1037442.2/41

All: 16.576 $\pm$ 0.003  $\chi^2$ /NDF: 2107927.5/85

- sign 16.695 $\pm$ 0.004  $\chi^2$ /NDF: 1068899.8/43

# dit\_sam6\_4eY\_slope vs Slug



Right In: -2.596+/-0.000  $\chi^2/\text{NDF}$ : 7395182.7/16

Left Out: 108.162+/-0.009  $\chi^2/\text{NDF}$ :1076822.4/24

Right Out: 1.758+/-0.000  $\chi^2/\text{NDF}$ : 4409960.5/20

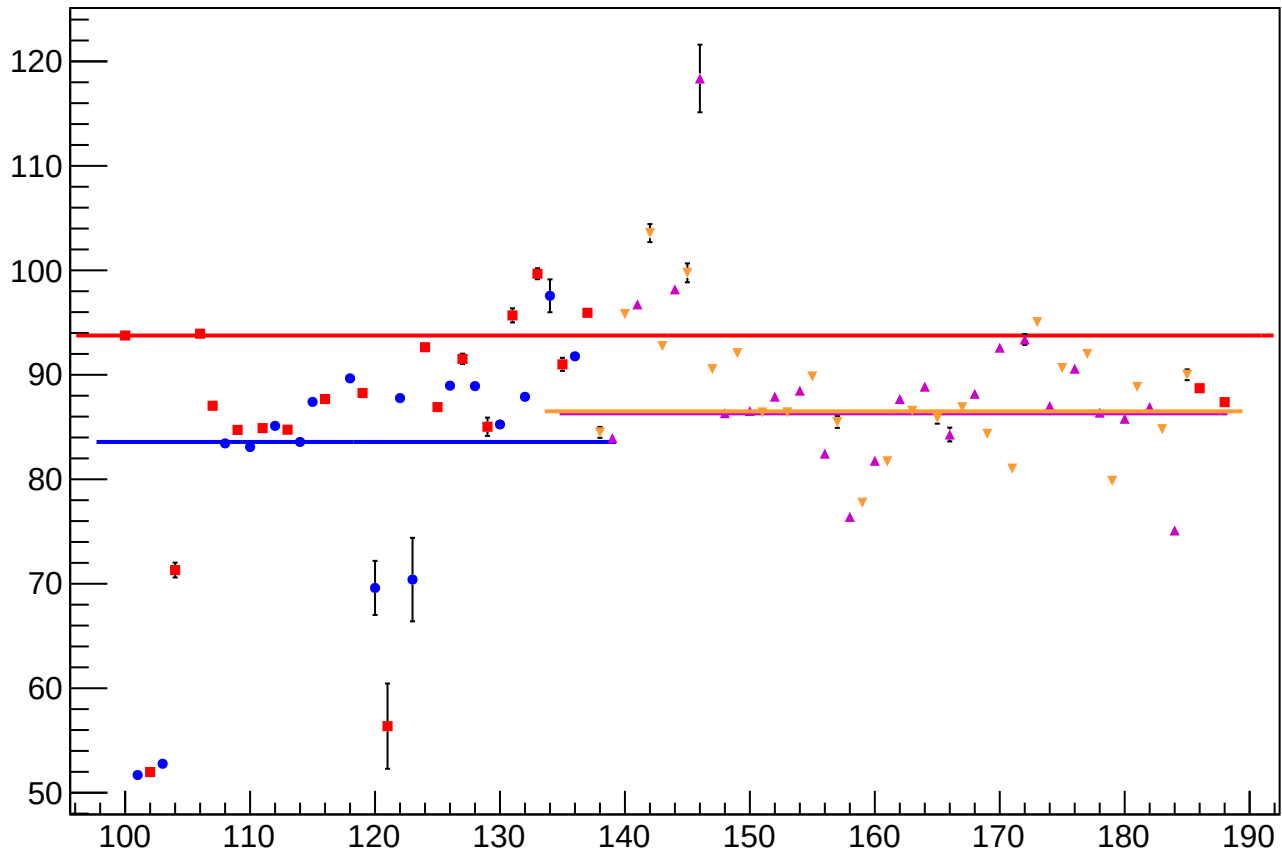
Left In: 107.543+/-0.009  $\chi^2/\text{NDF}$ :988940.0/22

+ sign -2.596+/-0.000  $\chi^2/\text{NDF}$ : 150183165.0/41

All: -1.059+/-0.000  $\chi^2/\text{NDF}$ : 3731791751577

- sign 1.758+/-0.000  $\chi^2/\text{NDF}$ : 134149513.4/43

# dit\_sam7\_4aX\_slope vs Slug



Right In: 83.573+/-0.000  $\chi^2$ /NDF: 49468.0/16

Left Out: 86.505+/-0.060  $\chi^2$ /NDF:8553.0/24

Right Out: 93.762+/-0.000  $\chi^2$ /NDF: 85091.7/20

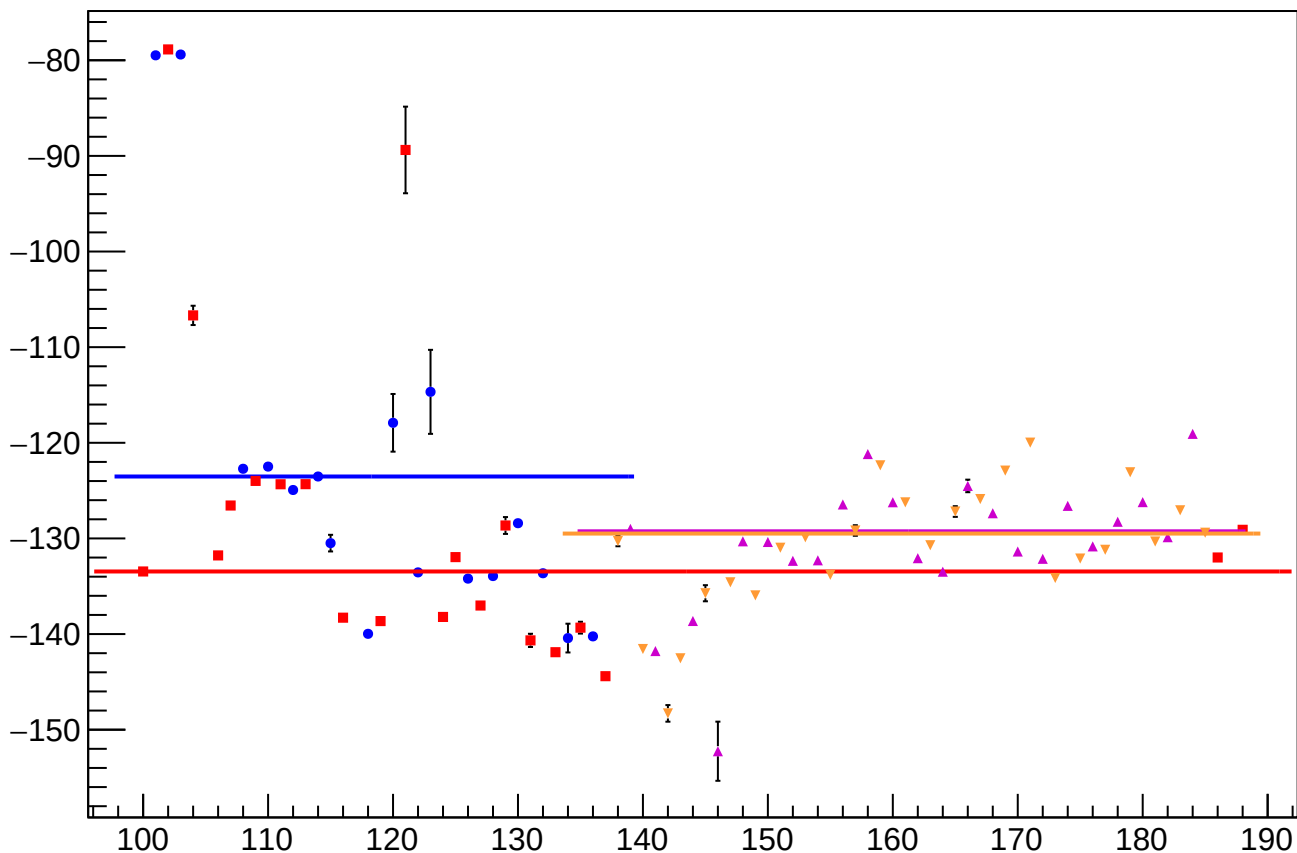
Left In: 86.310+/-0.051  $\chi^2$ /NDF:8666.5/22

+ sign 83.573+/-0.000  $\chi^2$ /NDF: 60415.2/41

All: 87.169+/-0.000  $\chi^2$ /NDF: 1995684404141

- sign 93.762+/-0.000  $\chi^2$ /NDF: 114756.1/43

# dit\_sam7\_4eX\_slope vs Slug



Right In: -123.524+/-0.000  $\chi^2/\text{NDF}$ : 160356.5/16

Left Out: -129.492+/-0.059  $\chi^2/\text{NDF}$ :10775.3/24

Right Out: -133.456+/-0.000  $\chi^2/\text{NDF}$ : 396108.0/20

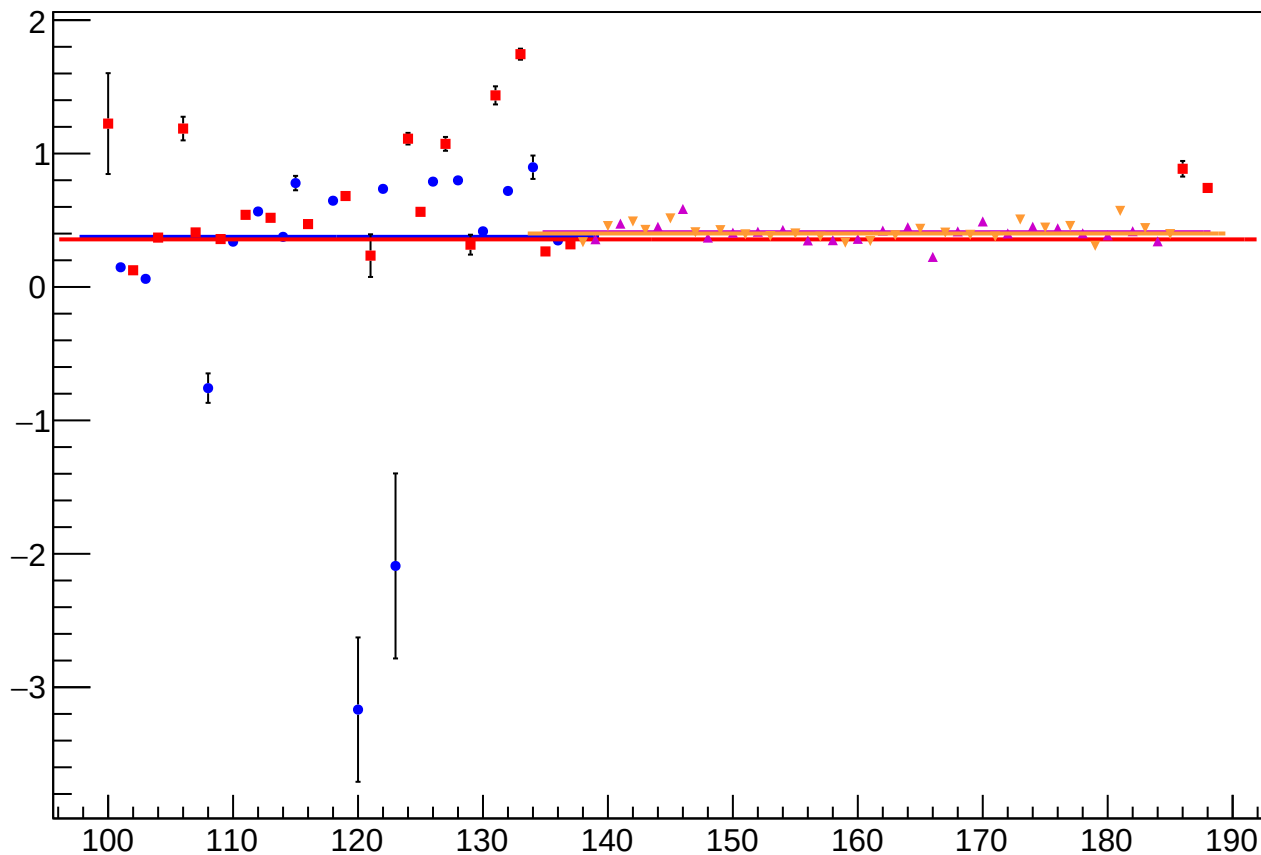
Left In: -129.256+/-0.052  $\chi^2/\text{NDF}$ :6558.2/22

+ sign -123.524+/-0.000  $\chi^2/\text{NDF}$ : 181291.5/41

All: -124.716+/-0.000  $\chi^2/\text{NDF}$ : 64467869901

- sign -133.456+/-0.000  $\chi^2/\text{NDF}$ : 409303.6/43

# dit\_sam7\_11X12X\_slope vs Slug



Right In:  $0.376 \pm 0.000$   $\chi^2/\text{NDF}$ : 3961.7/16

Left Out:  $0.401 \pm 0.000$   $\chi^2/\text{NDF}$ : 9030.9/24

Right Out:  $0.357 \pm 0.002$   $\chi^2/\text{NDF}$ : 5068.6/20

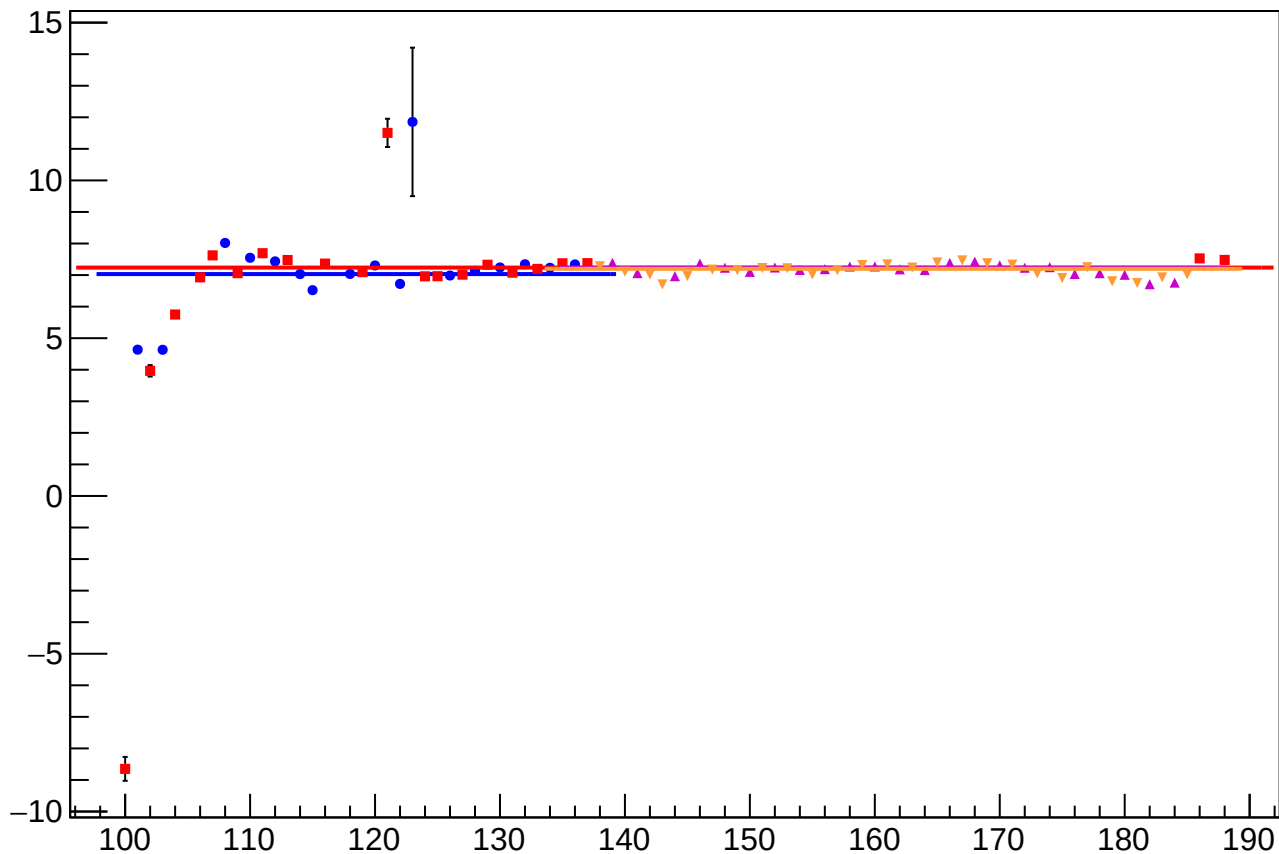
Left In:  $0.410 \pm 0.000$   $\chi^2/\text{NDF}$ : 8478.2/22

+ sign  $0.376 \pm 0.000$   $\chi^2/\text{NDF}$ : 15502.1/41

All:  $0.376 \pm 0.000$   $\chi^2/\text{NDF}$ : 35102.8/85

- sign  $0.406 \pm 0.000$   $\chi^2/\text{NDF}$ : 14719.2/43

# dit\_sam7\_4aY\_slope vs Slug



Right In:  $7.032 \pm 0.000$   $\chi^2/\text{NDF}$ : 19770.1/16

Left Out:  $7.199 \pm 0.001$   $\chi^2/\text{NDF}$ : 37453.7/24

Right Out:  $7.238 \pm 0.002$   $\chi^2/\text{NDF}$ : 10256.5/20

Left In:  $7.233 \pm 0.001$   $\chi^2/\text{NDF}$ : 23085.0/22

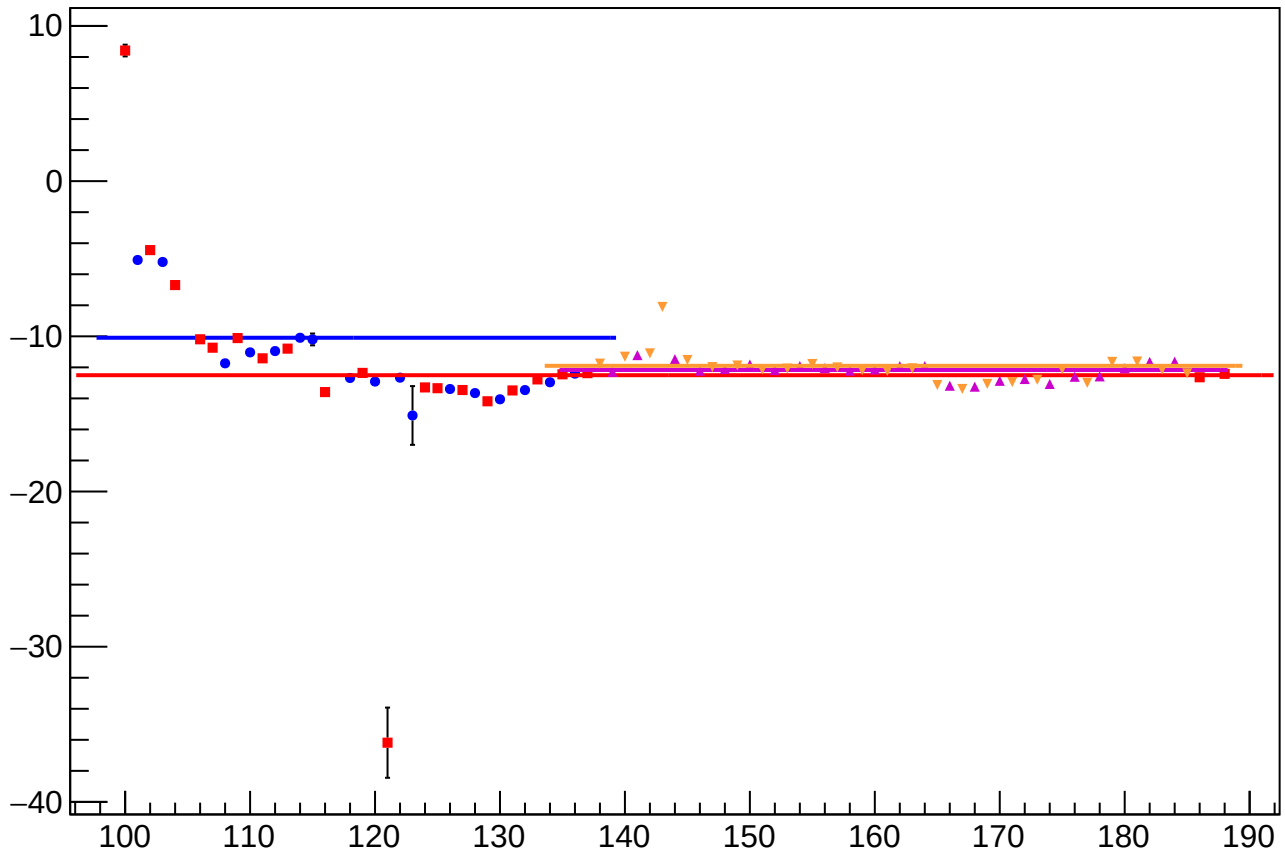
+ sign  $7.032 \pm 0.000$   $\chi^2/\text{NDF}$ : 91574.8/41

All:  $7.032 \pm 0.000$   $\chi^2/\text{NDF}$ : 191290.2/85

- sign  $7.234 \pm 0.001$   $\chi^2/\text{NDF}$ : 33344.6/43



# dit\_sam7\_4eY\_slope vs Slug



Right In: -10.092 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 543504.2/16

Left Out: -11.899 $\pm$ 0.002  $\chi^2/\text{NDF}$ : 498866.6/24

Right Out: -12.505 $\pm$ 0.004  $\chi^2/\text{NDF}$ : 103538.7/20

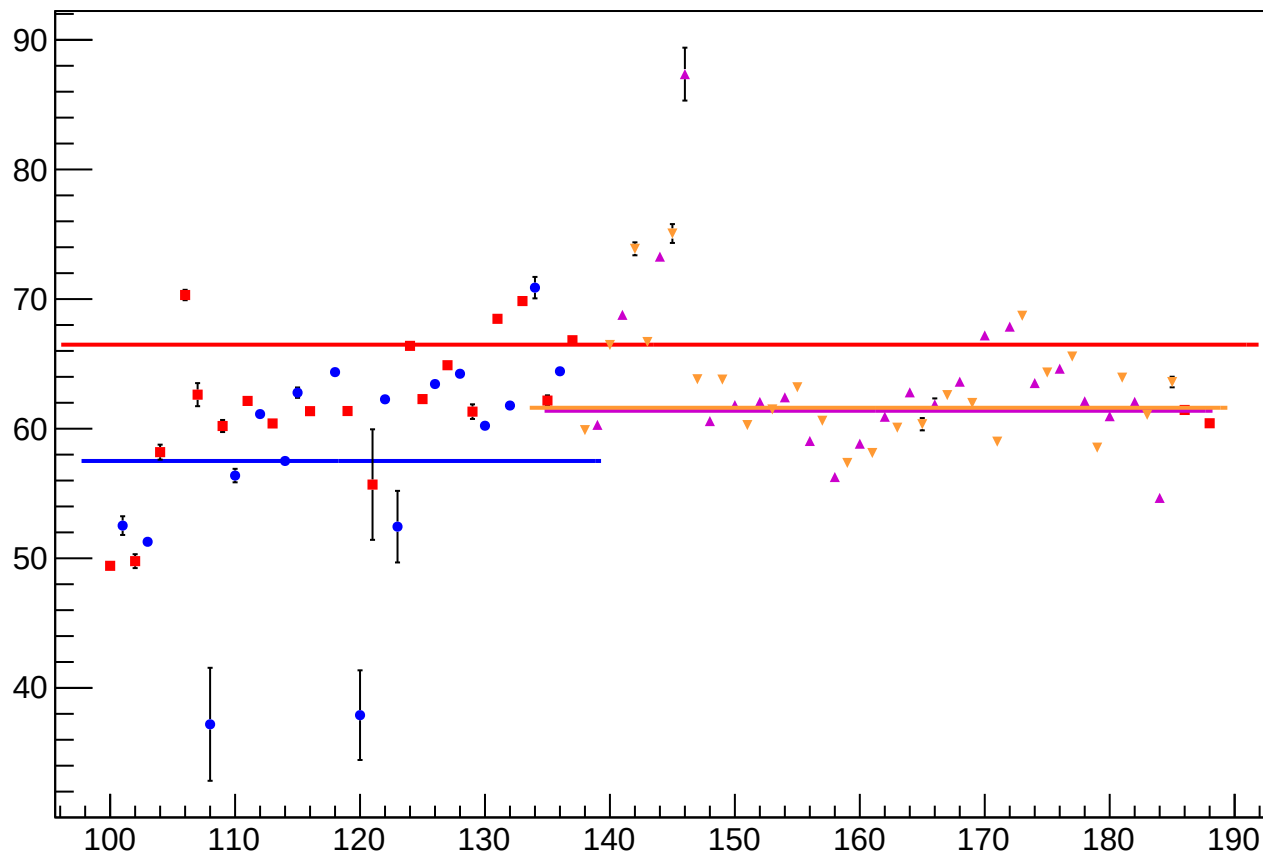
Left In: -12.169 $\pm$ 0.002  $\chi^2/\text{NDF}$ : 49568.3/22

+ sign -10.092 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 2185467.8/41

All: -10.092 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 4255727.0/85

- sign -12.229 $\pm$ 0.002  $\chi^2/\text{NDF}$ : 160020.6/43

# dit\_sam8\_4aX\_slope vs Slug



Right In:  $57.510 \pm 0.000$   $\chi^2/\text{NDF}$ : 8108.6/16

Left Out:  $61.615 \pm 0.039$   $\chi^2/\text{NDF}$ : 7756.9/24

Right Out:  $66.483 \pm 0.013$   $\chi^2/\text{NDF}$ : 13995.8/20

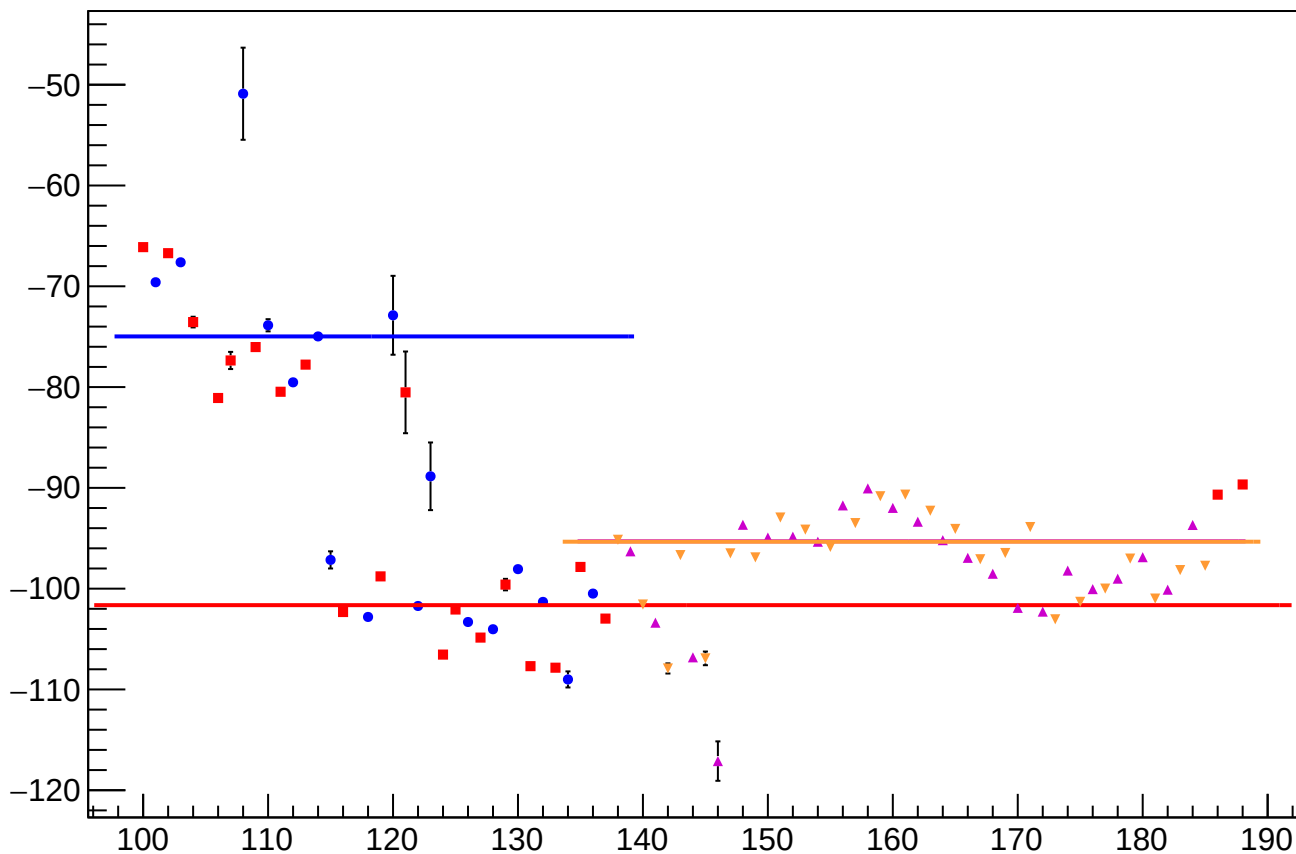
Left In:  $61.383 \pm 0.033$   $\chi^2/\text{NDF}$ : 8900.0/22

+ sign  $57.510 \pm 0.000$   $\chi^2/\text{NDF}$ : 27006.4/41

All:  $57.510 \pm 0.000$   $\chi^2/\text{NDF}$ : 547802.6/85

- sign  $65.791 \pm 0.012$   $\chi^2/\text{NDF}$ : 44102.8/43

# dit\_sam8\_4eX\_slope vs Slug



Right In: -74.974 $\pm$ 0.000  $\chi^2$ /NDF: 130544.0/16

Left Out: -95.342 $\pm$ 0.039  $\chi^2$ /NDF: 9387.4/24

Right Out: -101.637 $\pm$ 0.017  $\chi^2$ /NDF: 82086.1/20

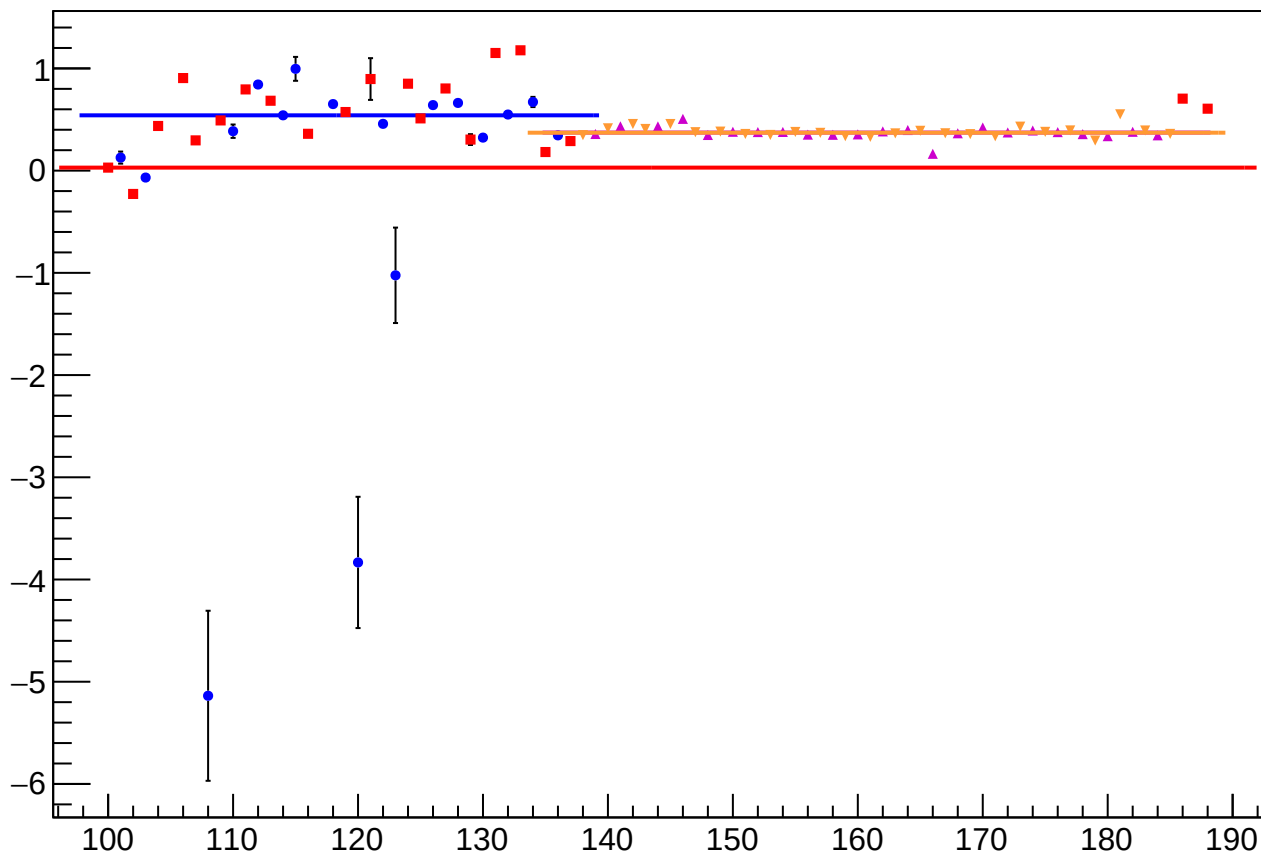
Left In: -95.301 $\pm$ 0.033  $\chi^2$ /NDF: 11271.5/22

+ sign -74.974 $\pm$ 0.000  $\chi^2$ /NDF: 416892.7/41

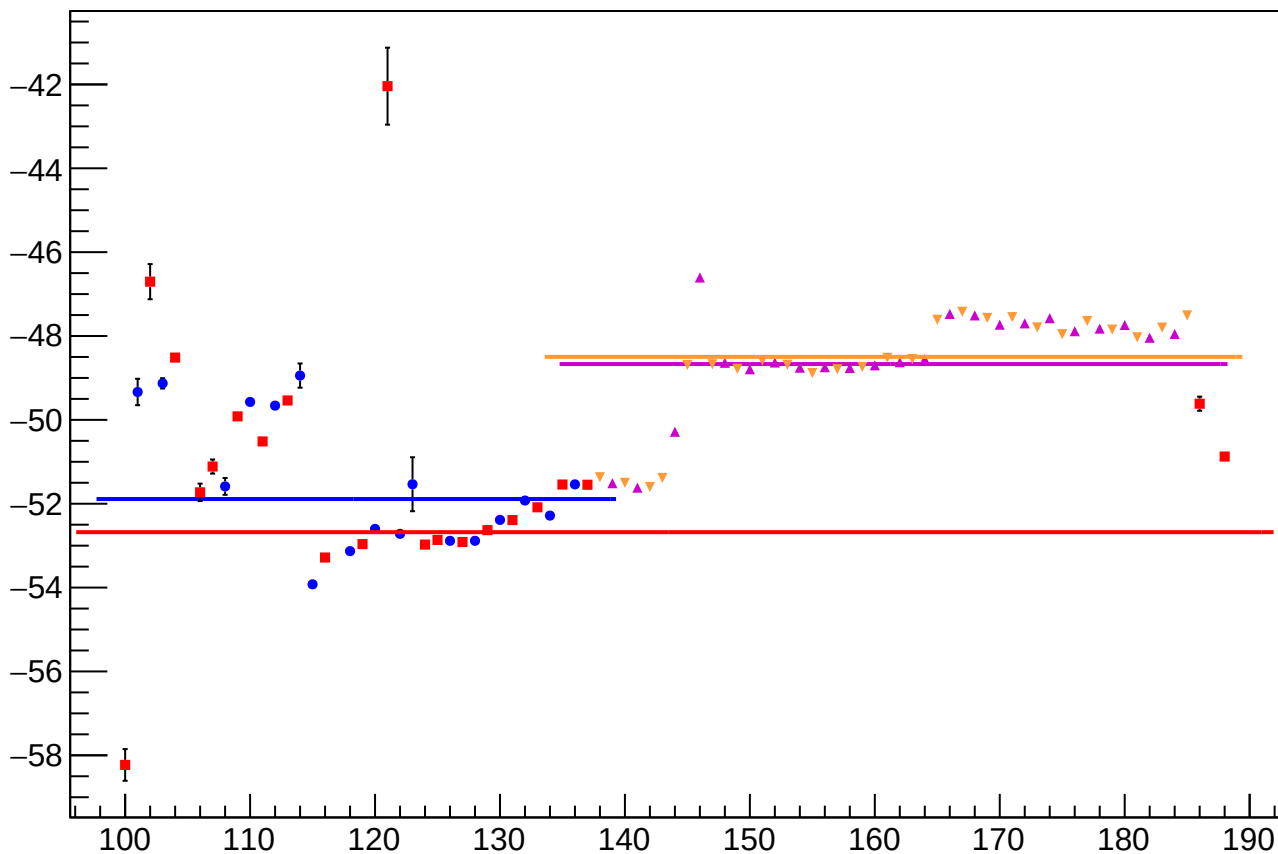
All: -74.974 $\pm$ 0.000  $\chi^2$ /NDF: 3274965.7/85

- sign -100.291 $\pm$ 0.015  $\chi^2$ /NDF: 122042.1/43

# dit\_sam8\_11X12X\_slope vs Slug



# dit\_sam8\_4aY\_slope vs Slug



Right In:  $-51.888 \pm 0.002$   $\chi^2/\text{NDF}$ : 77585.2/16

Left Out:  $-48.497 \pm 0.001$   $\chi^2/\text{NDF}$ : 699790.4/24

Right Out:  $-52.678 \pm 0.003$   $\chi^2/\text{NDF}$ : 57753.5/20

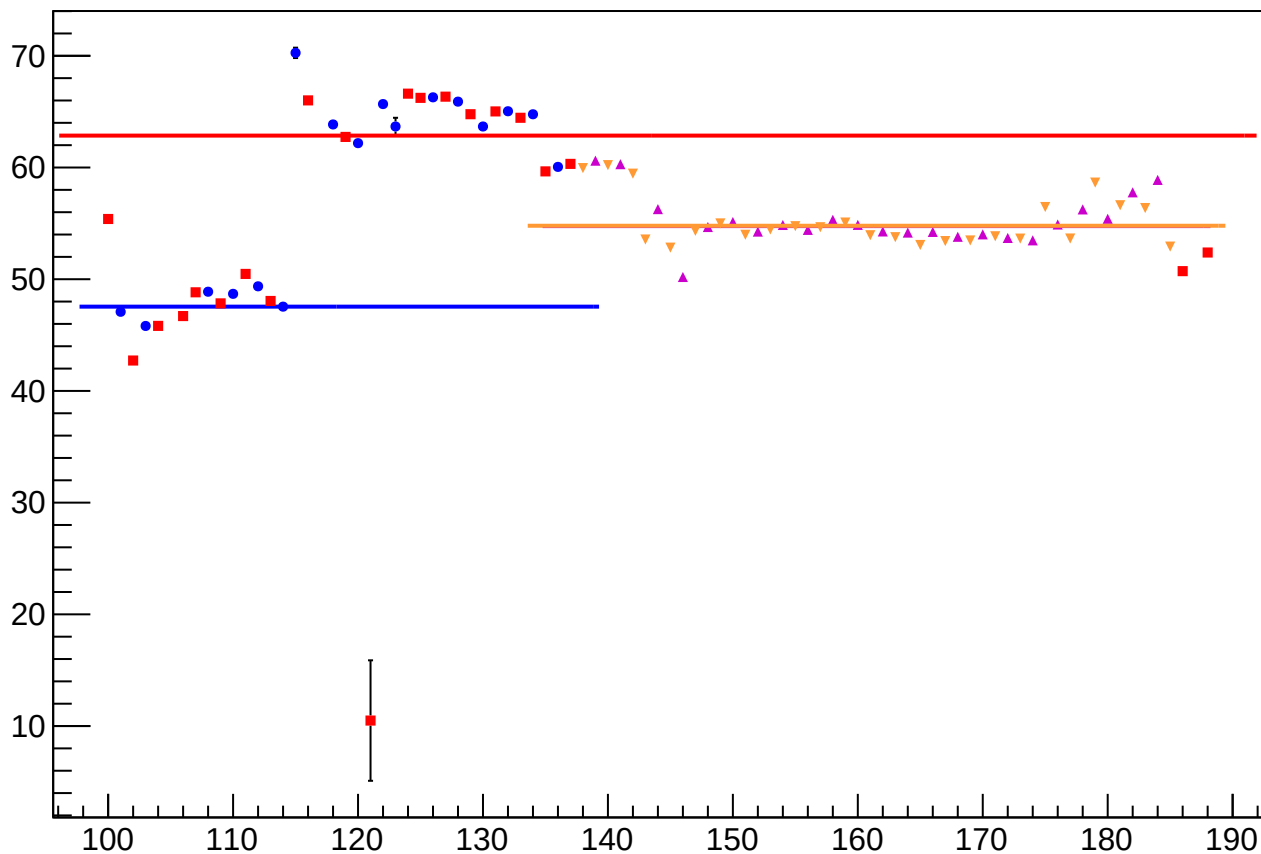
Left In:  $-48.669 \pm 0.001$   $\chi^2/\text{NDF}$ : 809321.2/22

+ sign  $-49.128 \pm 0.001$   $\chi^2/\text{NDF}$ : 2662579.0/41

All:  $-49.136 \pm 0.001$   $\chi^2/\text{NDF}$ : 5699747.6/85

- sign  $-49.143 \pm 0.001$   $\chi^2/\text{NDF}$ : 3037037.5/43

# dit\_sam8\_4eY\_slope vs Slug



Right In: 47.545 $\pm$ 0.000  $\chi^2$ /NDF: 3491700.1/16

Left Out: 54.787 $\pm$ 0.003  $\chi^2$ /NDF:301226.3/24

Right Out: 62.857 $\pm$ 0.007  $\chi^2$ /NDF: 380023.2/20

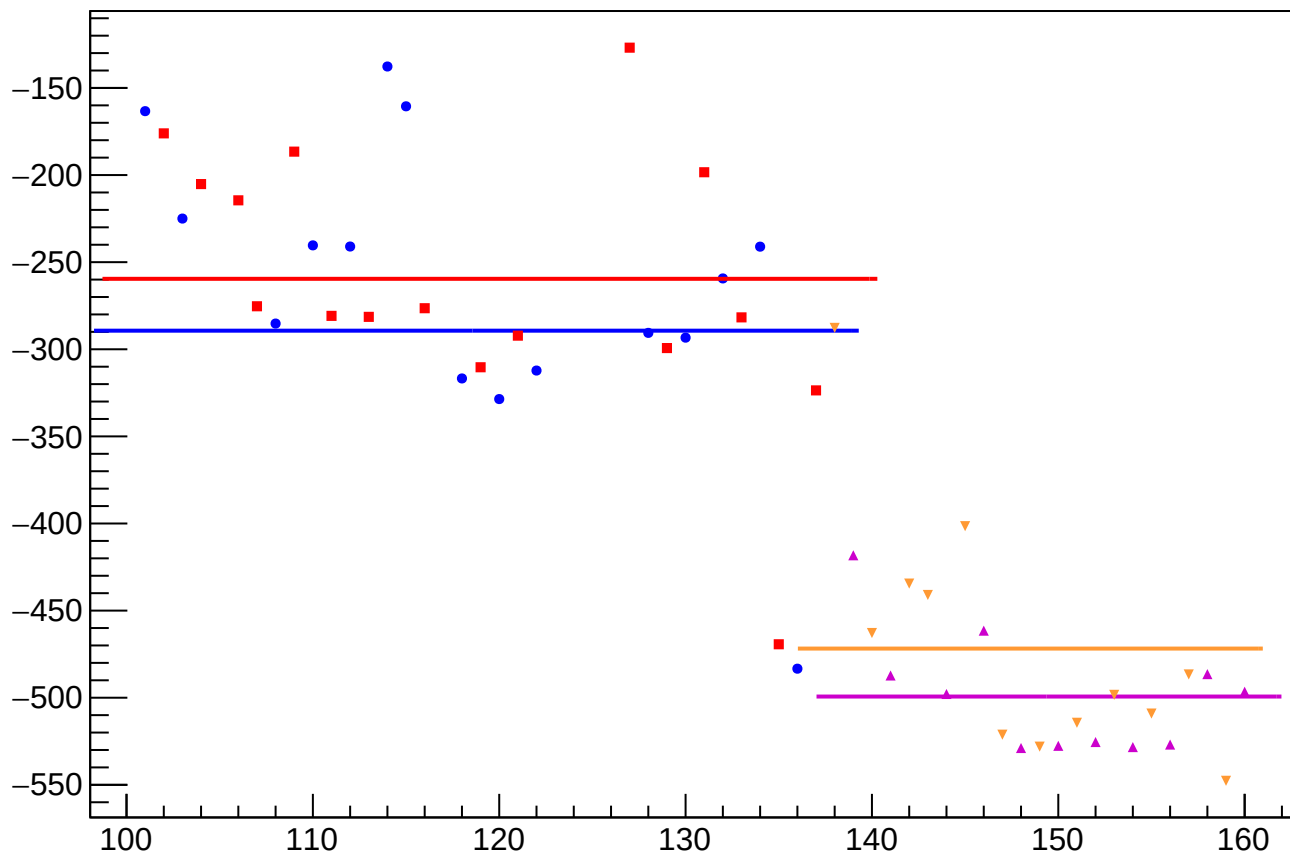
Left In: 54.755 $\pm$ 0.003  $\chi^2$ /NDF:100763.3/22

+ sign 47.545 $\pm$ 0.000  $\chi^2$ /NDF: 9840550.9/41

All: 47.545 $\pm$ 0.000  $\chi^2$ /NDF: 22268396.1/85

- sign 55.651 $\pm$ 0.002  $\chi^2$ /NDF: 1549549.9/43

# dit\_4aX\_coil1\_mean vs Slug



Right In: -289.322+/-0.000  $\chi^2/\text{NDF}$ : 5369681640484891478649585392183934976.0/14

Left Out: -471.791+/-0.000  $\chi^2/\text{NDF}$ : 4407577357733372304653153526381281280.0/11

Right Out: -259.558+/-0.000  $\chi^2/\text{NDF}$ : 4299886792692123970784563983770714112.0/15

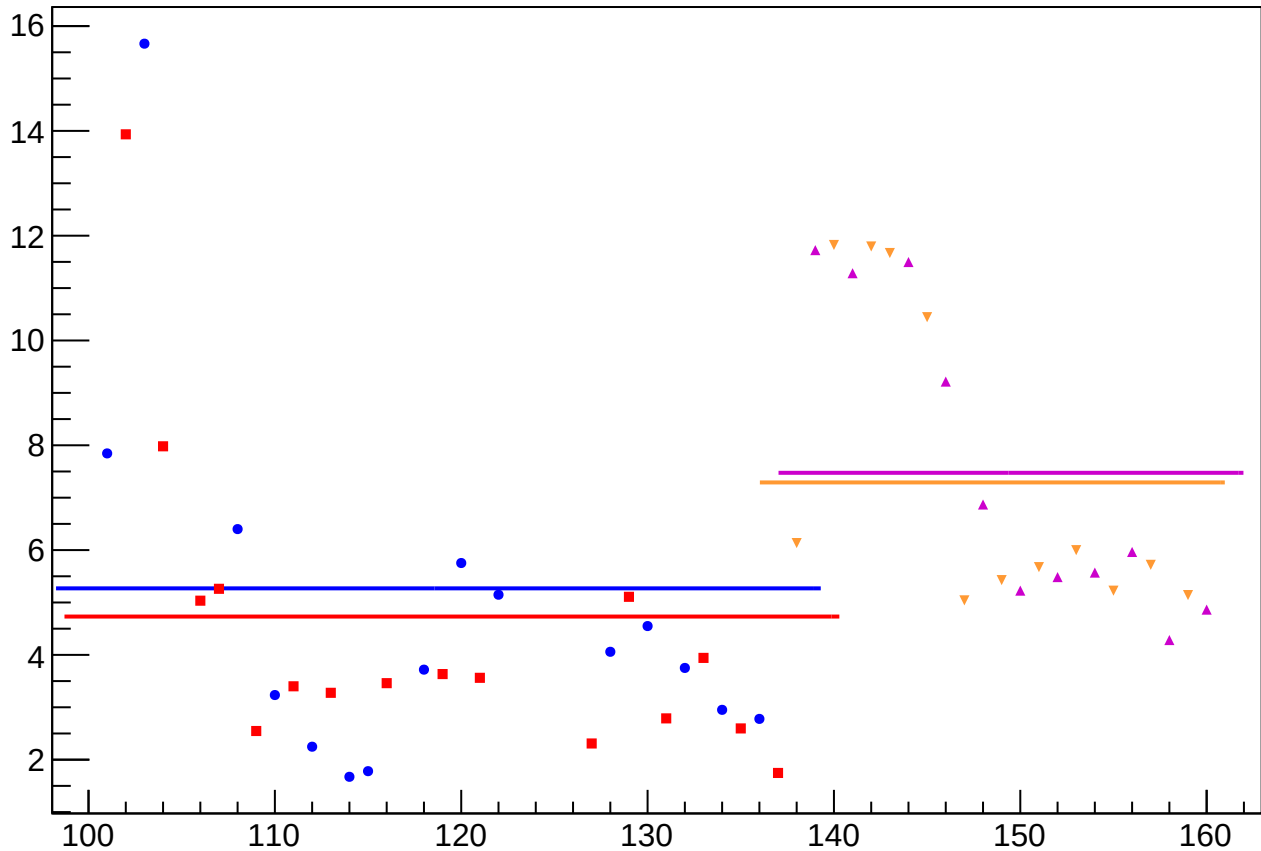
Left In: -499.323+/-0.000  $\chi^2/\text{NDF}$ : 1018789461606644410107221718465511424.0/10

+ sign -396.025+/-0.000  $\chi^2/\text{NDF}$ : 22413307403279

All: -397.428+/-0.000  $\chi^2/\text{NDF}$ : 50007078016

- sign -398.805+/-0.000  $\chi^2/\text{NDF}$ : 275876765804894

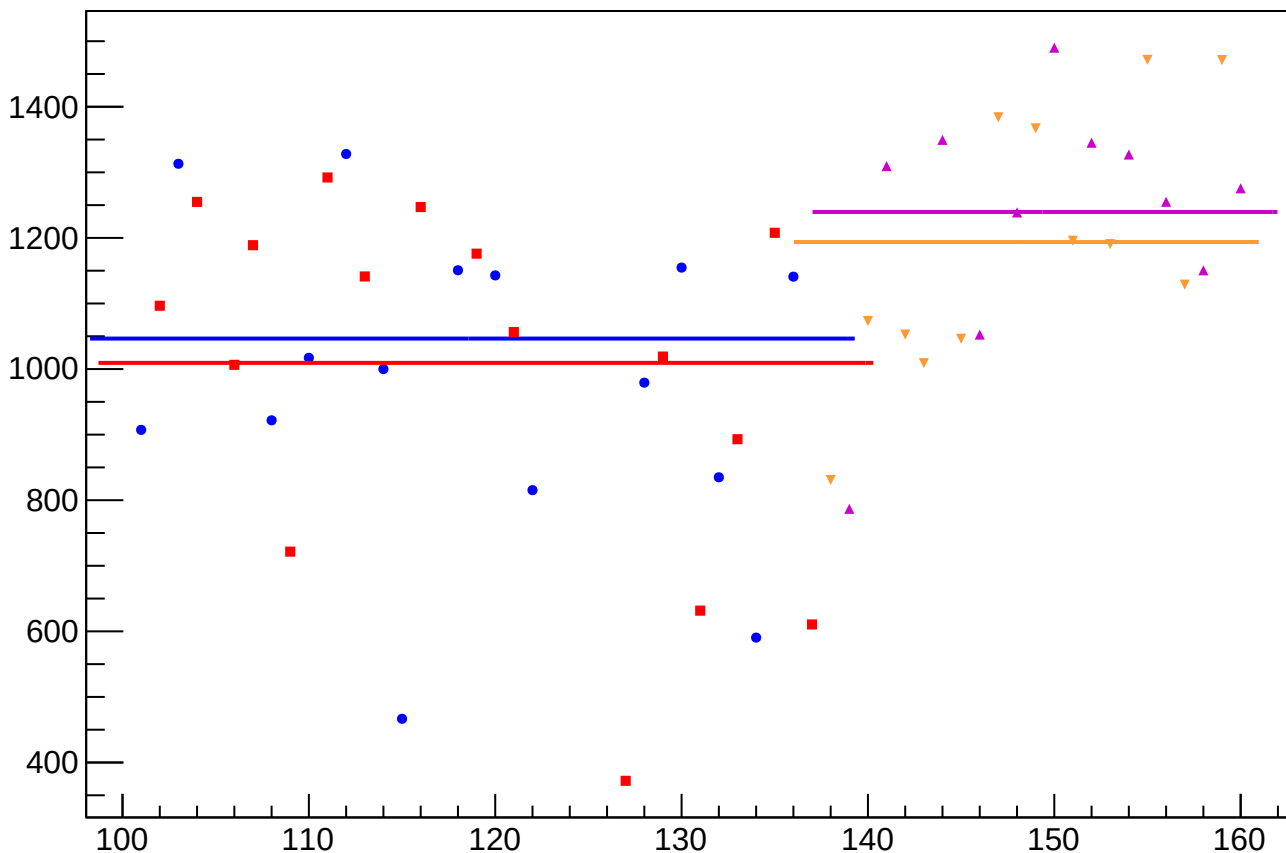
# dit\_4aX\_coil1\_err\_mean vs Slug



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

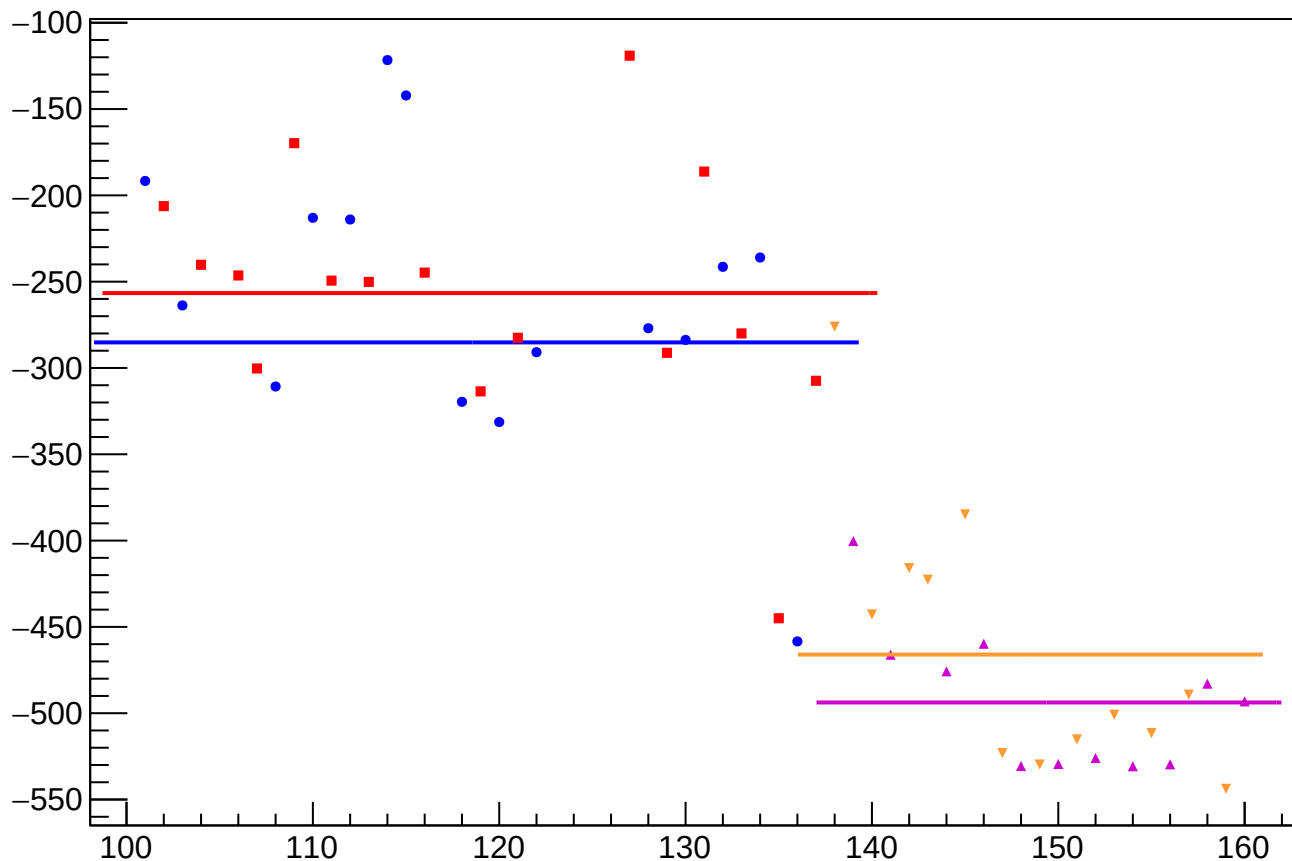


dit\_4aX\_coil1\_Ndata\_mean vs Slug



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

# dit\_4eX\_coil1\_mean vs Slug



Right In: -285.187+/-0.000  $\chi^2/\text{NDF}$ : 4479585262853549838092521921291747328.0/14

Left Out: -466.012+/-0.000  $\chi^2/\text{NDF}$ : 5190970068830574132794472761412026368.0/11

Right Out: -256.599+/-0.000  $\chi^2/\text{NDF}$ : 3648271535971039165952602563191767040.0/15

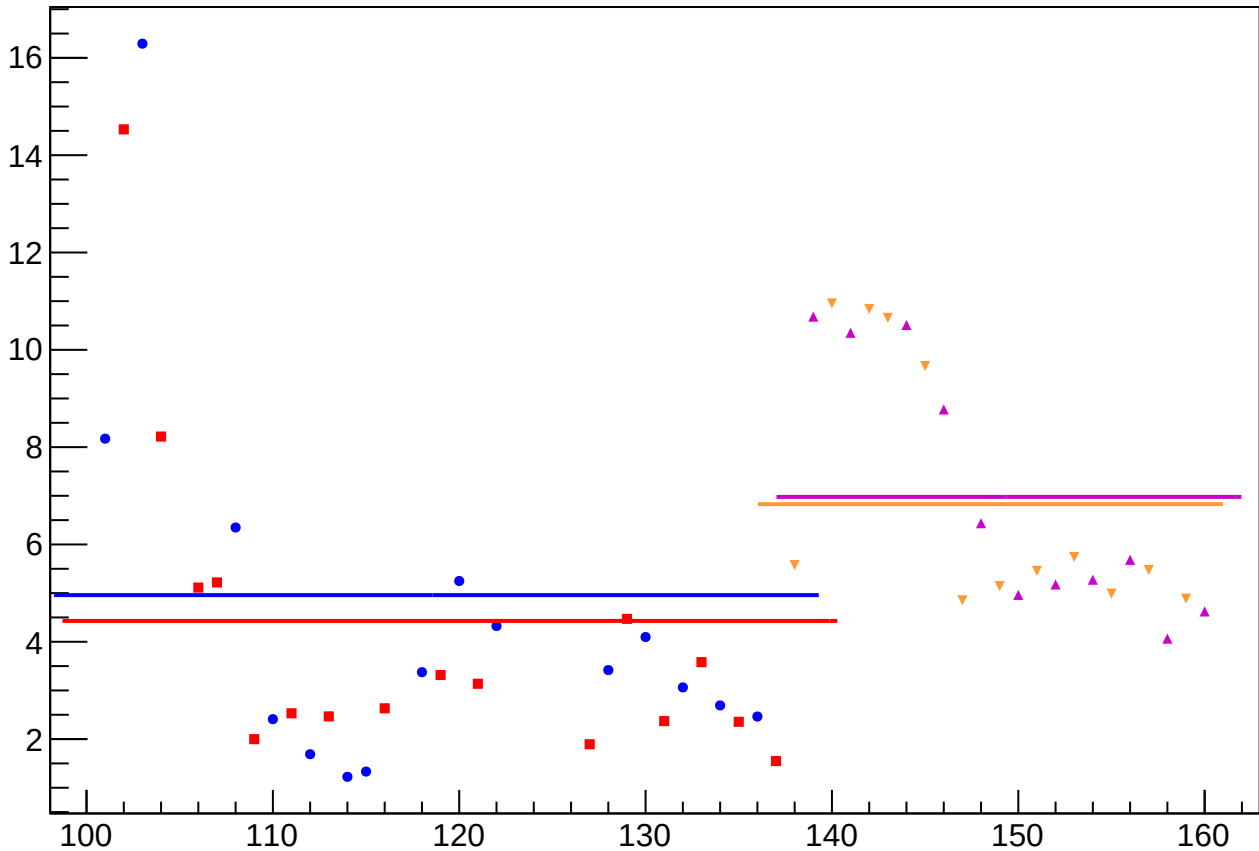
Left In: -493.780+/-0.000  $\chi^2/\text{NDF}$ : 1451794731277142230901460532226686976.0/10

+ sign -390.928+/-0.000  $\chi^2/\text{NDF}$ : 22079891664929

All: -392.652+/-0.000  $\chi^2/\text{NDF}$ : 48980613059

- sign -394.346+/-0.000  $\chi^2/\text{NDF}$ : 268915126522349

dit\_4eX\_coil1\_err\_mean vs Slug



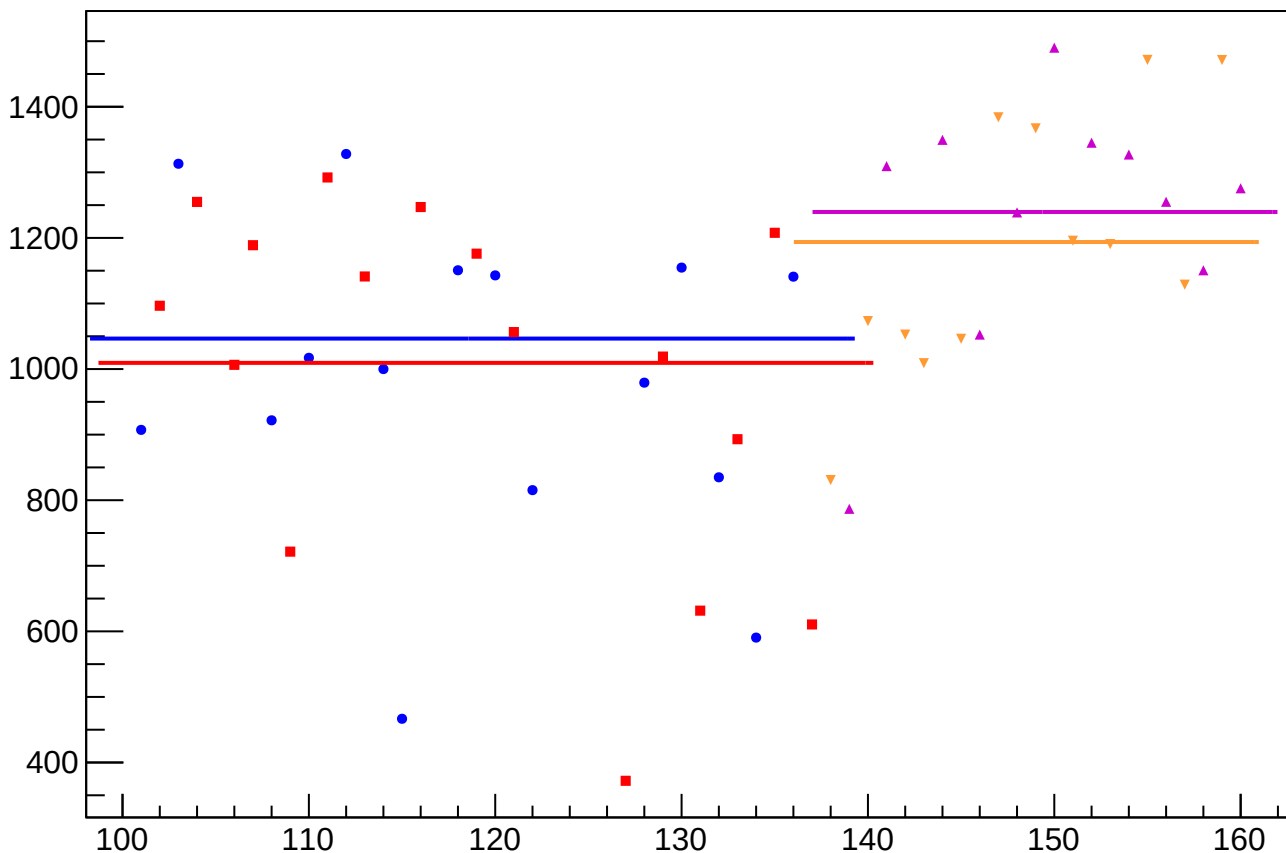
Right In: 4.959+/-0.000  $\chi^2/\text{NDF}$ : 10465467057143371817371681641463808.0/14

Left Out: 6.828+/-0.000  $\chi^2/\text{NDF}$ : 5374095498583312473439971131260928.0/11

Right Out: 4.429+/-0.000  $\chi^2/\text{NDF}$ : 8371440400334524571131796772618240.0/15

Left In: 6.978+/-0.000  $\chi^2/\text{NDF}$ : 5622697014277754941158413236699136.0/10

dit\_4eX\_coil1\_Ndata\_mean vs Slug



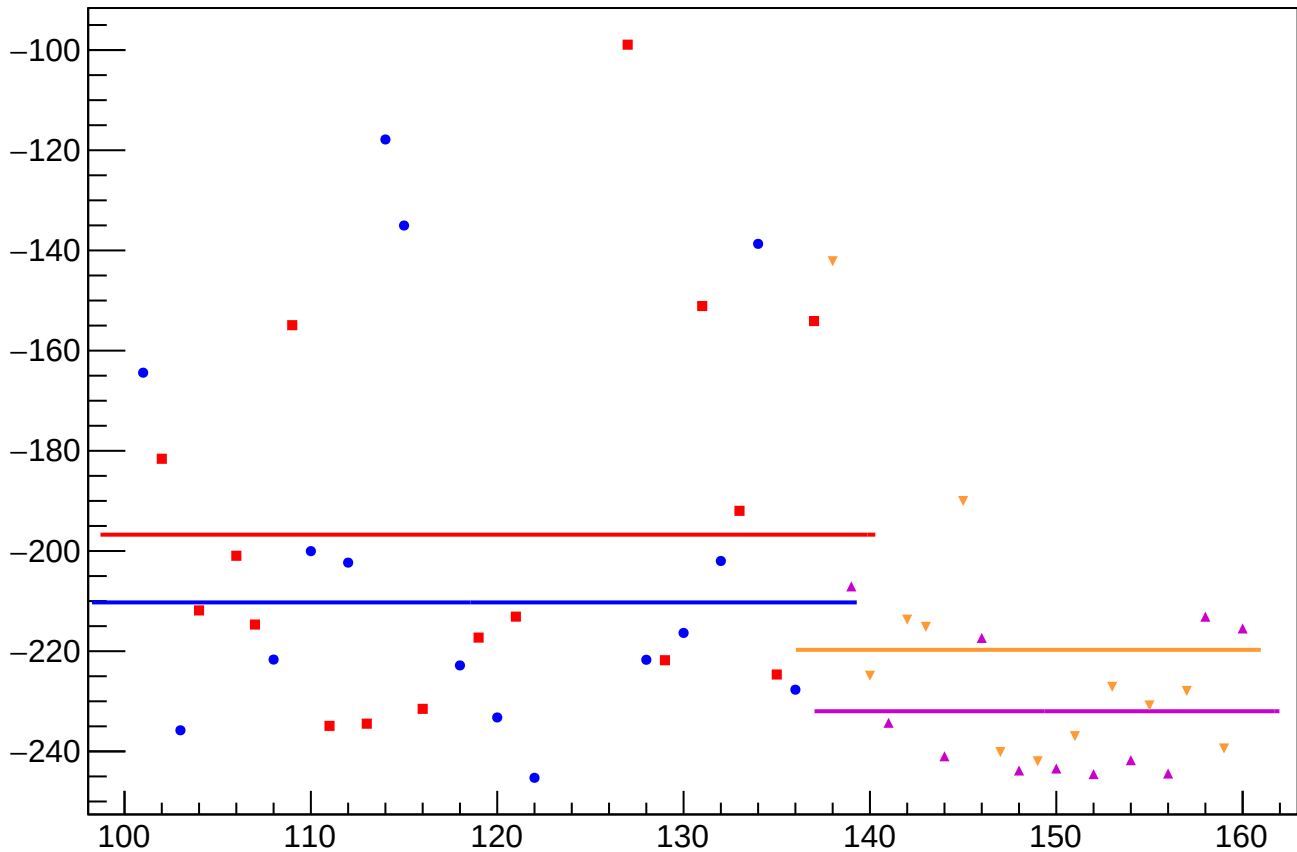
Right In:  $1046.490 \pm 0.000$   $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14

Left Out:  $1193.726 \pm 0.000$   $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11

Right Out:  $1009.445 \pm 0.000$   $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15

Left In:  $1239.553 \pm 0.000$   $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

dit\_11X12X\_coil1\_mean vs Slug



Right In: -210.261+/-0.000  $\chi^2/\text{NDF}$ : 567711076568068409192467700494893056.0/14

Left Out: -219.729+/-0.000  $\chi^2/\text{NDF}$ : 691090878567021644145539364306288640.0/11

Right Out: -196.736+/-0.000  $\chi^2/\text{NDF}$ : 909588895093044840633640514790359040.0/15

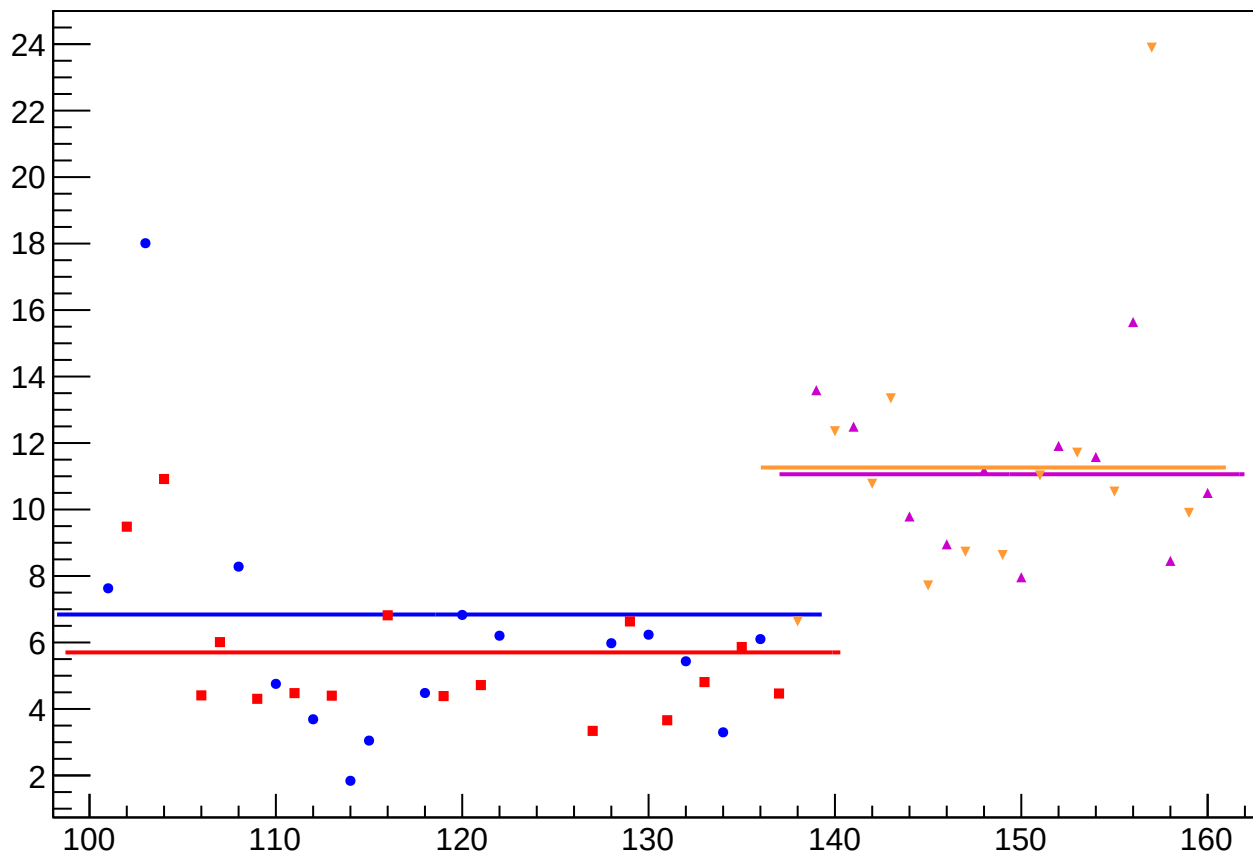
Left In: -231.985+/-0.000  $\chi^2/\text{NDF}$ : 182992027280401463139065105290887168.0/10

+ sign -215.798+/-0.000  $\chi^2/\text{NDF}$ : 12928194150556

All: -216.509+/-0.000  $\chi^2/\text{NDF}$ : 28682587905

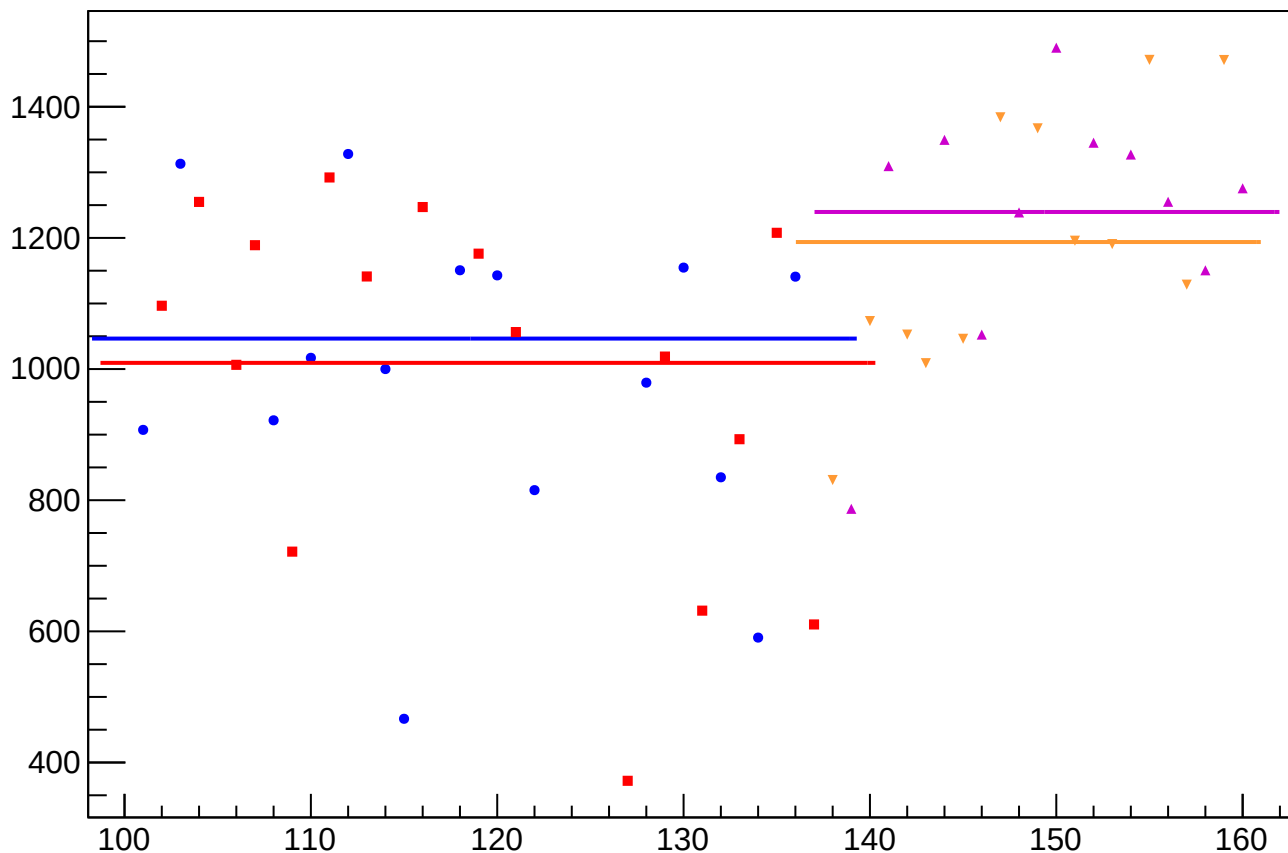
- sign -217.208+/-0.000  $\chi^2/\text{NDF}$ : 157387232918828

dit\_11X12X\_coil1\_err\_mean vs Slug



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

dit\_11X12X\_coil1\_Ndata\_mean vs Slug



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

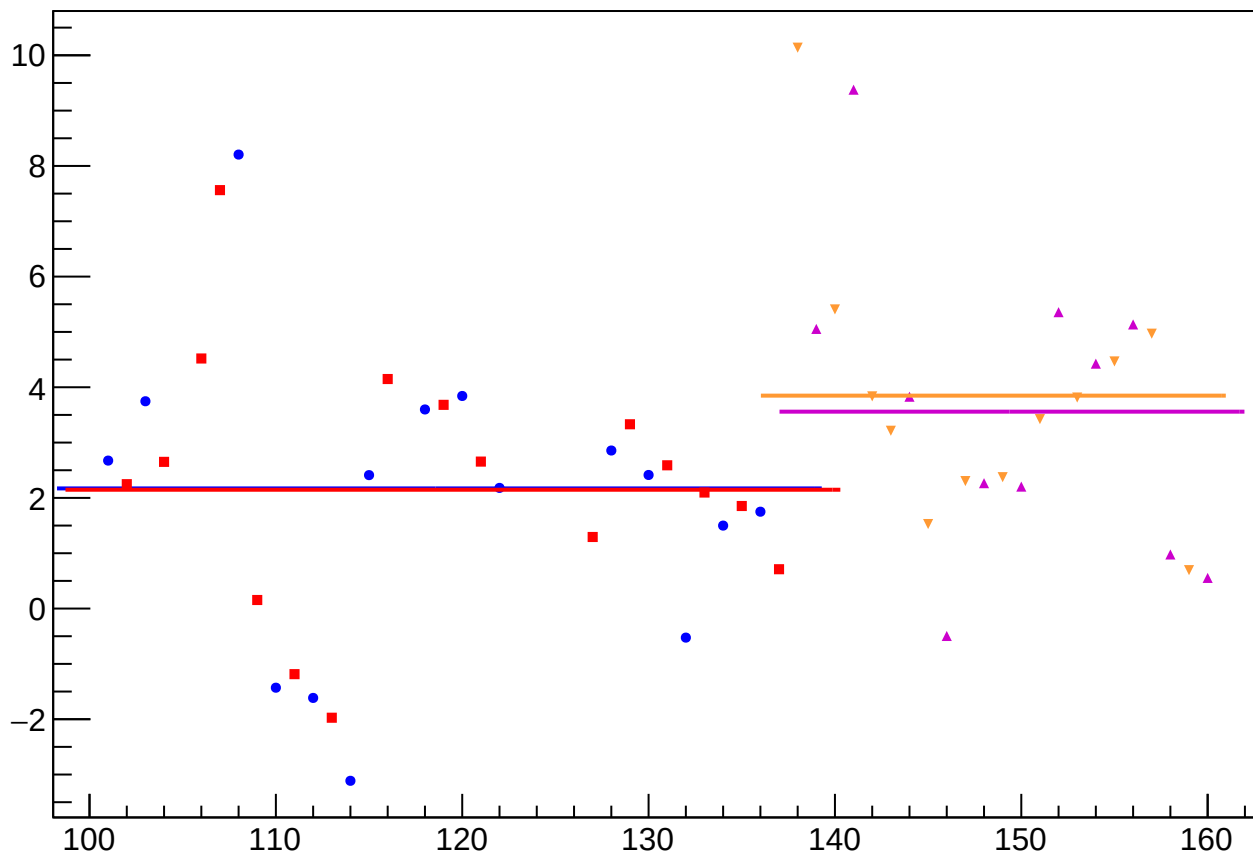
Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

+ sign 1132.590+/-0.000  $\chi^2/\text{NDF}$ : 67482648076441

All: 1137.884+/-0.000  $\chi^2/\text{NDF}$ : 16179959910

- sign 1143.084+/-0.000  $\chi^2/\text{NDF}$ : 94230119572030

# dit\_4aY\_coil1\_mean vs Slug



Right In: 2.171+/-0.000

$\chi^2/\text{NDF}$ : 3599819246909975678410499691642880.0/14

Left Out: 3.848+/-0.000

$\chi^2/\text{NDF}$ : 5039599457588936759406360166137856.0/11

Right Out: 2.148+/-0.000

$\chi^2/\text{NDF}$ : 3093887336239378959606321931878400.0/15

Left In: 3.559+/-0.000

$\chi^2/\text{NDF}$ : 6492667345109962540652165758713856.0/10

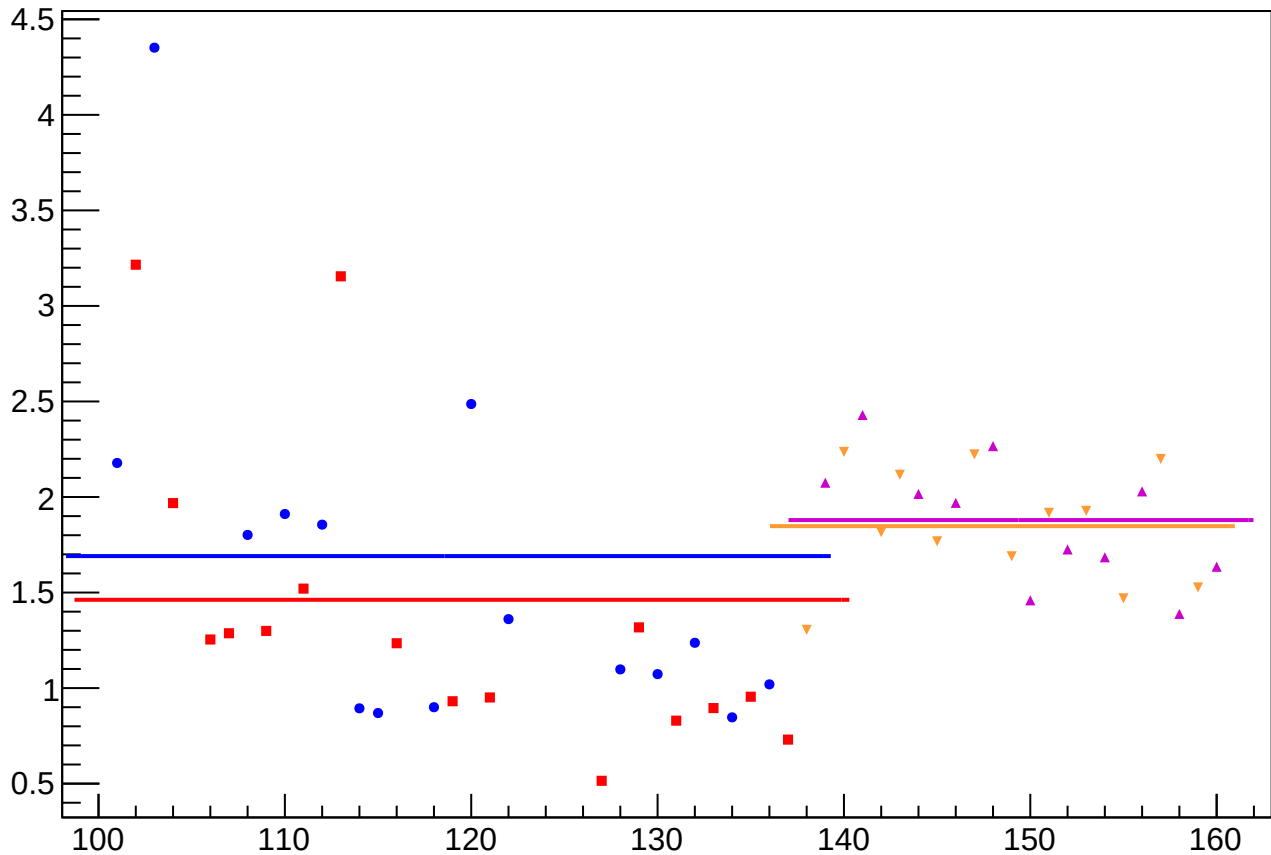
+ sign 3.152+/-0.000  $\chi^2/\text{NDF}$ : 97067404303844652

All: 3.059+/-0.000  $\chi^2/\text{NDF}$ : 20091616900140

- sign 2.967+/-0.000  $\chi^2/\text{NDF}$ : 10357923461678180

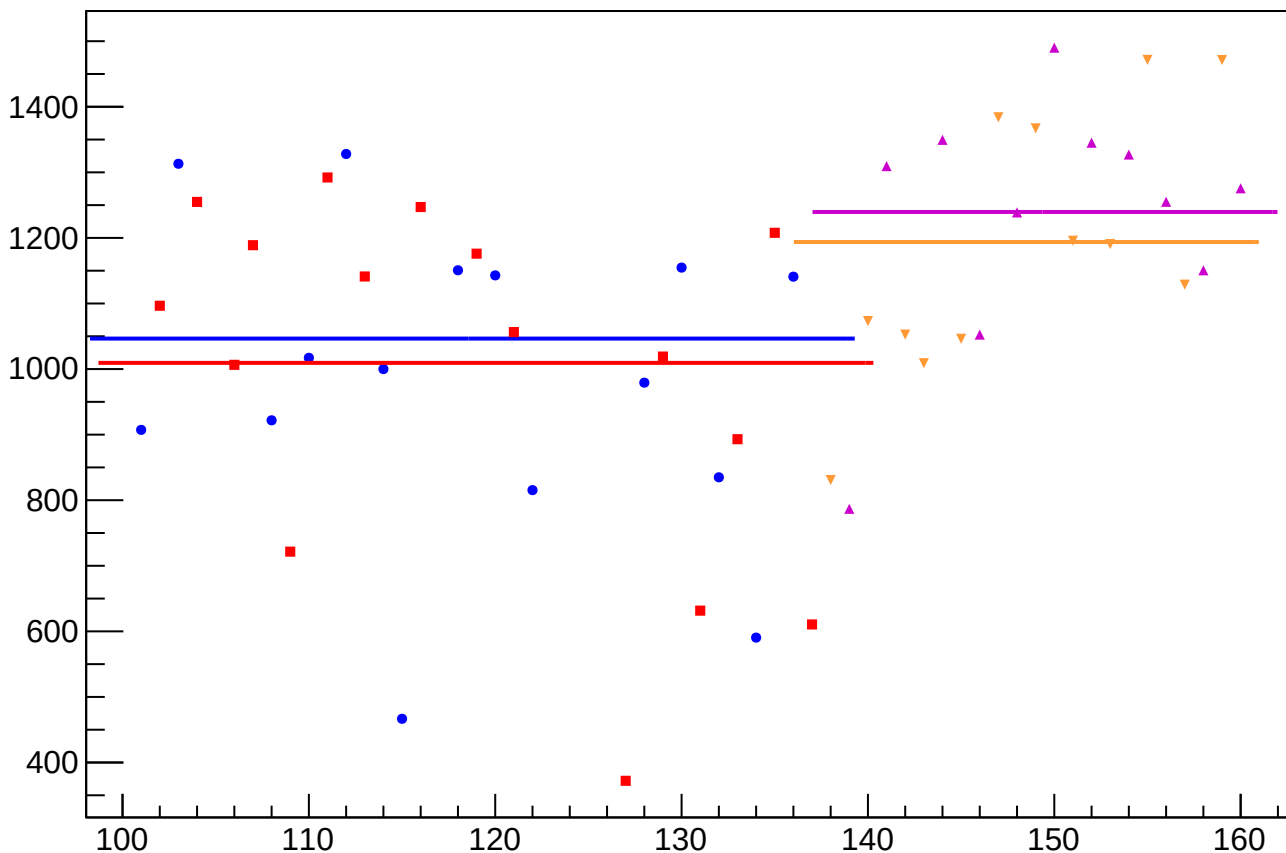


dit\_4aY\_coil1\_err\_mean vs Slug



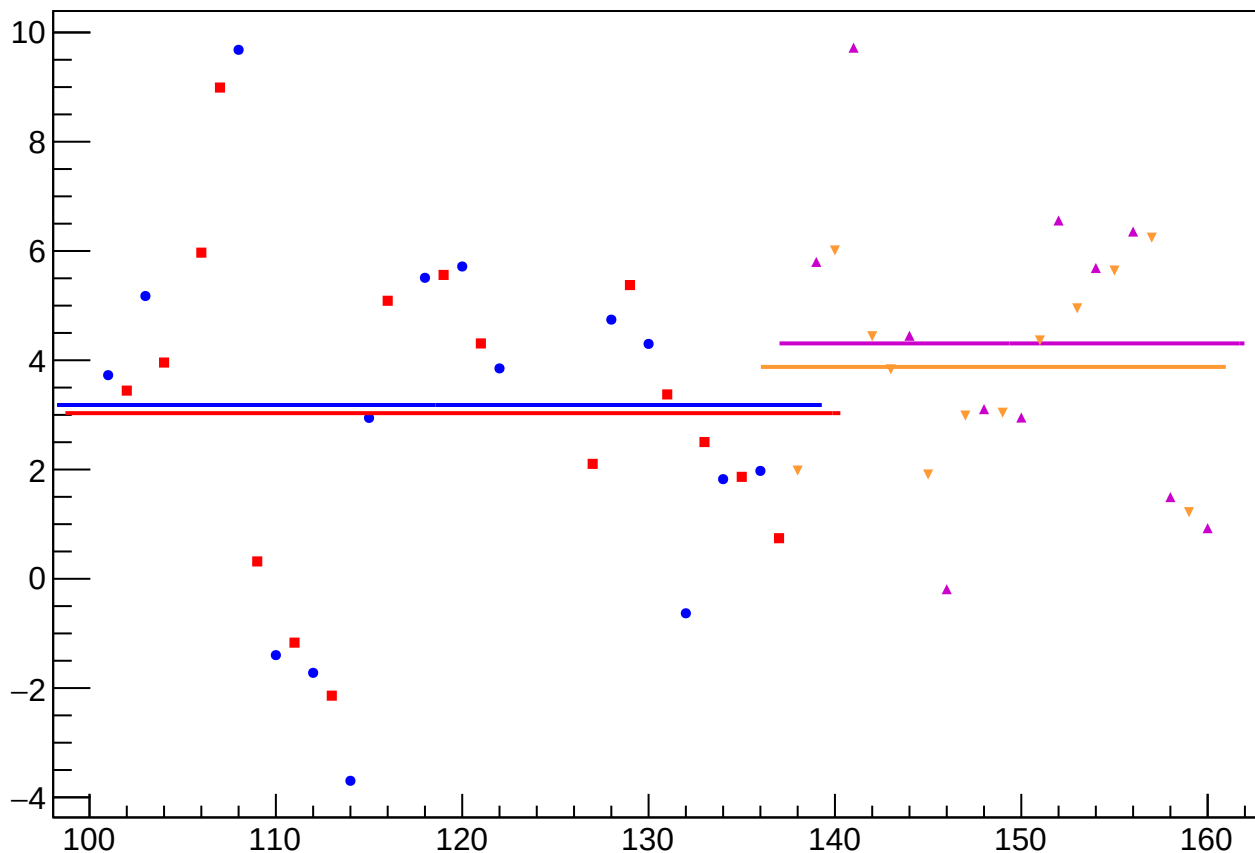
Right In: 1.691 $\pm$ 0.000  $\chi^2$ /NDF: 612163393317609859674079412355072.0/14  
 Left Out: 1.847 $\pm$ 0.000  $\chi^2$ /NDF: 84162850183102511254837045231616.0/11  
 Right Out: 1.462 $\pm$ 0.000  $\chi^2$ /NDF: 444384511662519040022371754835968.0/15  
 Left In: 1.879 $\pm$ 0.000  $\chi^2$ /NDF: 90968052268112309617342982127616.0/10

dit\_4aY\_coil1\_Ndata\_mean vs Slug



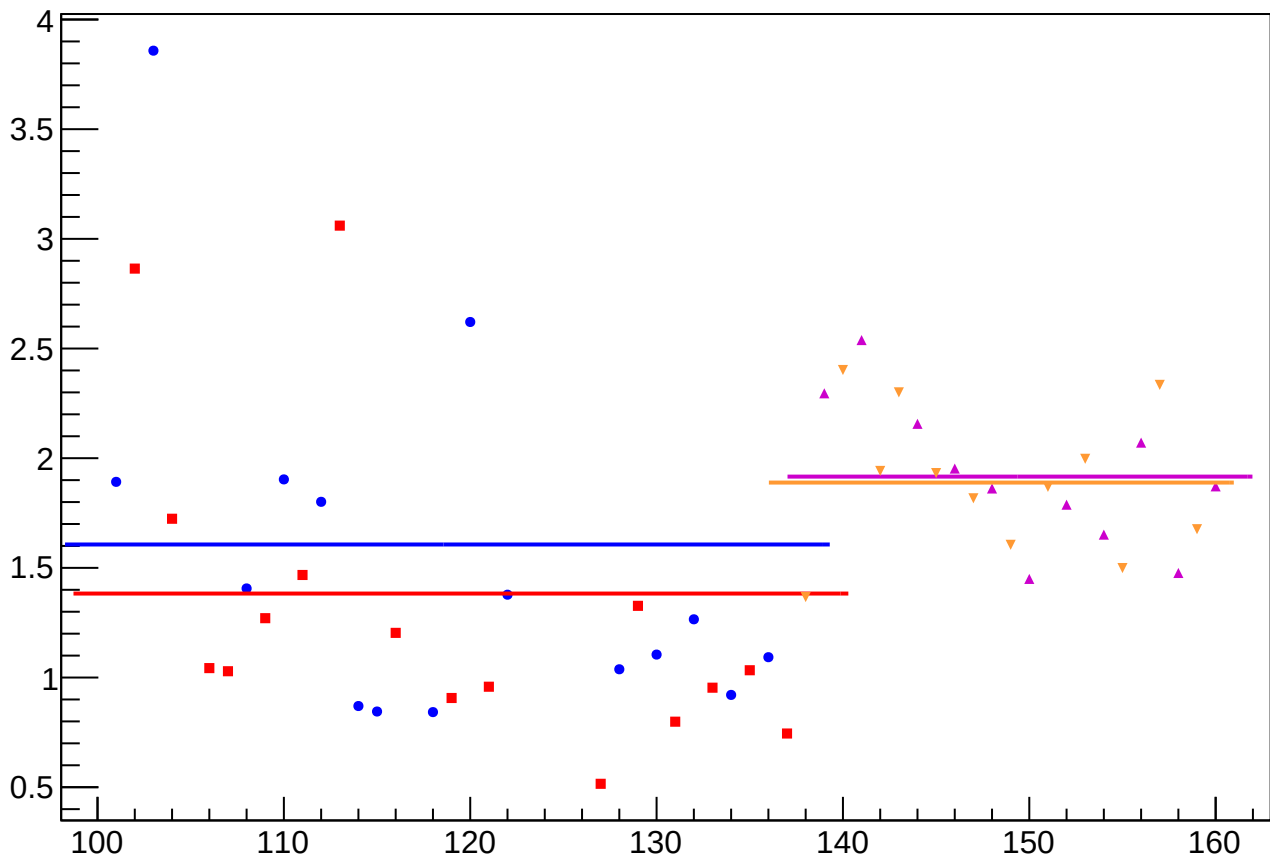
|                             |                                                                   |                         |                                      |
|-----------------------------|-------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 1046.490+/-0.000  | $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14 | + sign 1132.590+/-0.000 | $\chi^2/\text{NDF}$ : 67482648076441 |
| Left Out: 1193.726+/-0.000  | $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11 | All: 1137.884+/-0.000   | $\chi^2/\text{NDF}$ : 16179959910    |
| Right Out: 1009.445+/-0.000 | $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15 | - sign 1143.084+/-0.000 | $\chi^2/\text{NDF}$ : 94230119572030 |
| Left In: 1239.553+/-0.000   | $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10 |                         |                                      |

# dit\_4eY\_coil1\_mean vs Slug



|                          |                                                               |
|--------------------------|---------------------------------------------------------------|
| Right In: 3.181+/-0.000  | $\chi^2/\text{NDF}$ : 5833303227868252617704566394191872.0/14 |
| Left Out: 3.878+/-0.000  | $\chi^2/\text{NDF}$ : 2463584640289158504459219897417728.0/11 |
| Right Out: 3.032+/-0.000 | $\chi^2/\text{NDF}$ : 4937209831371793945496546833334272.0/15 |
| Left In: 4.308+/-0.000   | $\chi^2/\text{NDF}$ : 7073495667694280351803168107003904.0/10 |
| All: 3.682+/-0.000       | $\chi^2/\text{NDF}$ : 21150064748618.0/10                     |

dit\_4eY\_coil1\_err\_mean vs Slug



Right In: 1.607+/-0.000  $\chi^2/\text{NDF}$ : 460949628640148184181205735833600.0/14

Left Out: 1.889+/-0.000  $\chi^2/\text{NDF}$ : 94097326064066188177587241484288.0/11

Right Out: 1.383+/-0.000  $\chi^2/\text{NDF}$ : 358348897016286200957650337792000.0/15

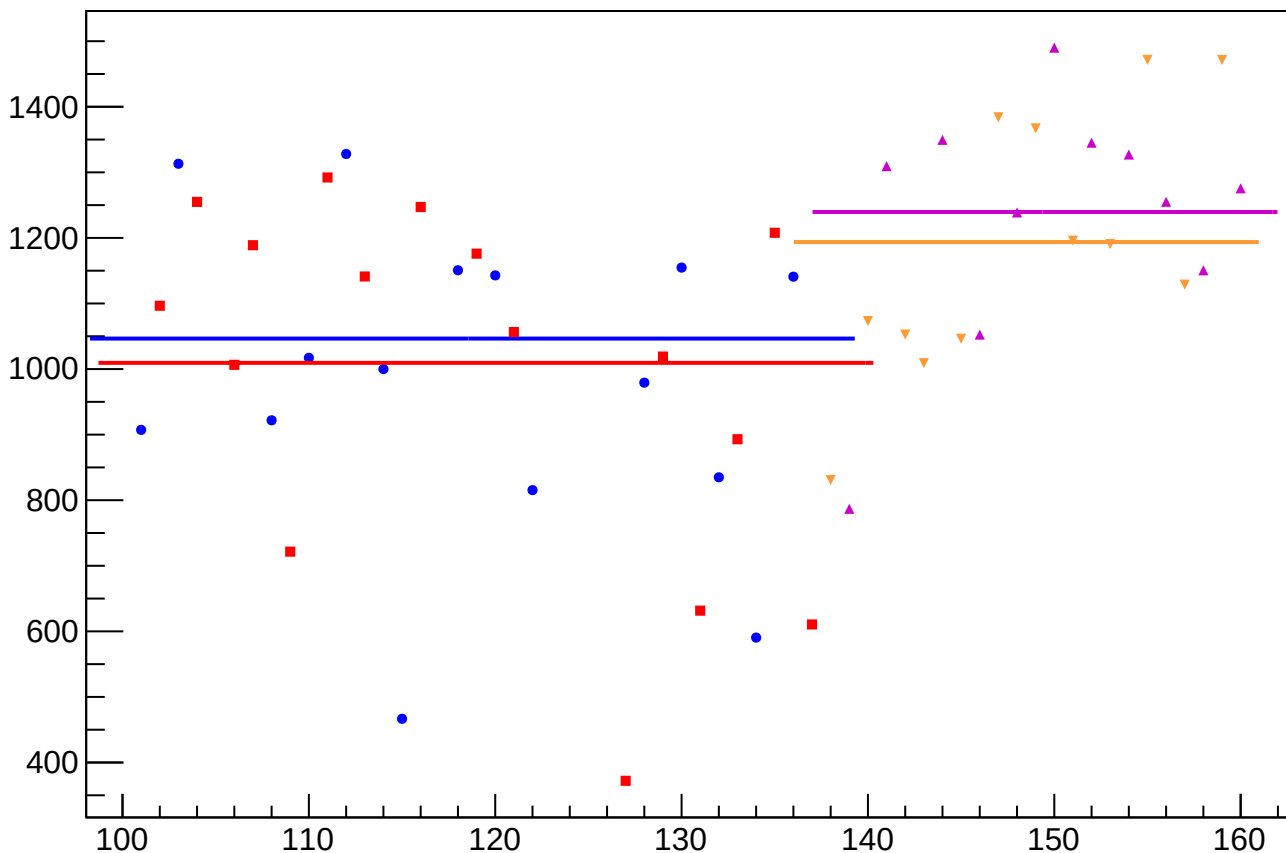
Left In: 1.916+/-0.000  $\chi^2/\text{NDF}$ : 95276515809016209875699691945984.0/10

+ sign 1.772+/-0.000  $\chi^2/\text{NDF}$ : 58529175260763022

All: 1.732+/-0.000  $\chi^2/\text{NDF}$ : 11539749951204

- sign 1.693+/-0.000  $\chi^2/\text{NDF}$ : 56374596109463105

dit\_4eY\_coil1\_Ndata\_mean vs Slug



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

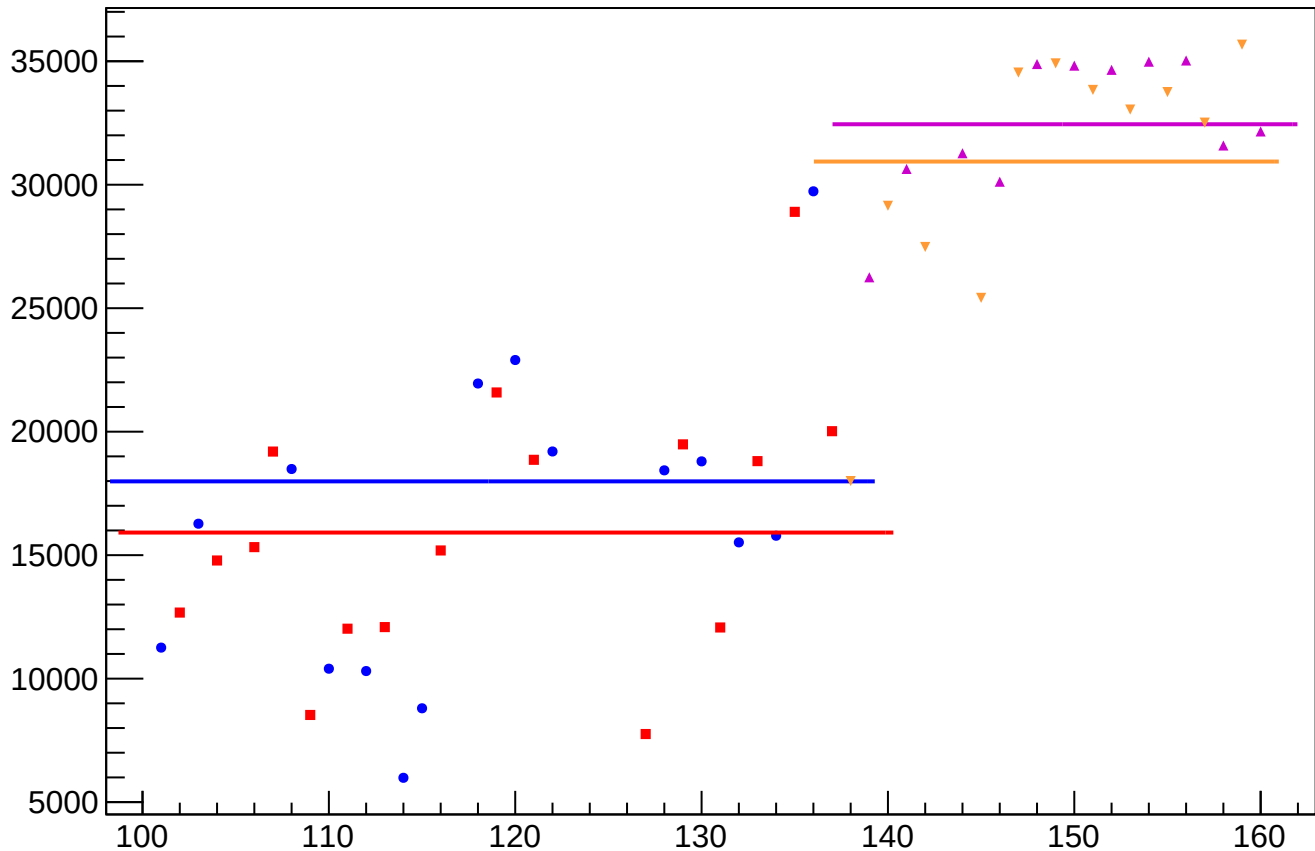
Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

+ sign 1132.590+/-0.000  $\chi^2/\text{NDF}$ : 67482648076441

All: 1137.884+/-0.000  $\chi^2/\text{NDF}$ : 16179959910

- sign 1143.084+/-0.000  $\chi^2/\text{NDF}$ : 94230119572030

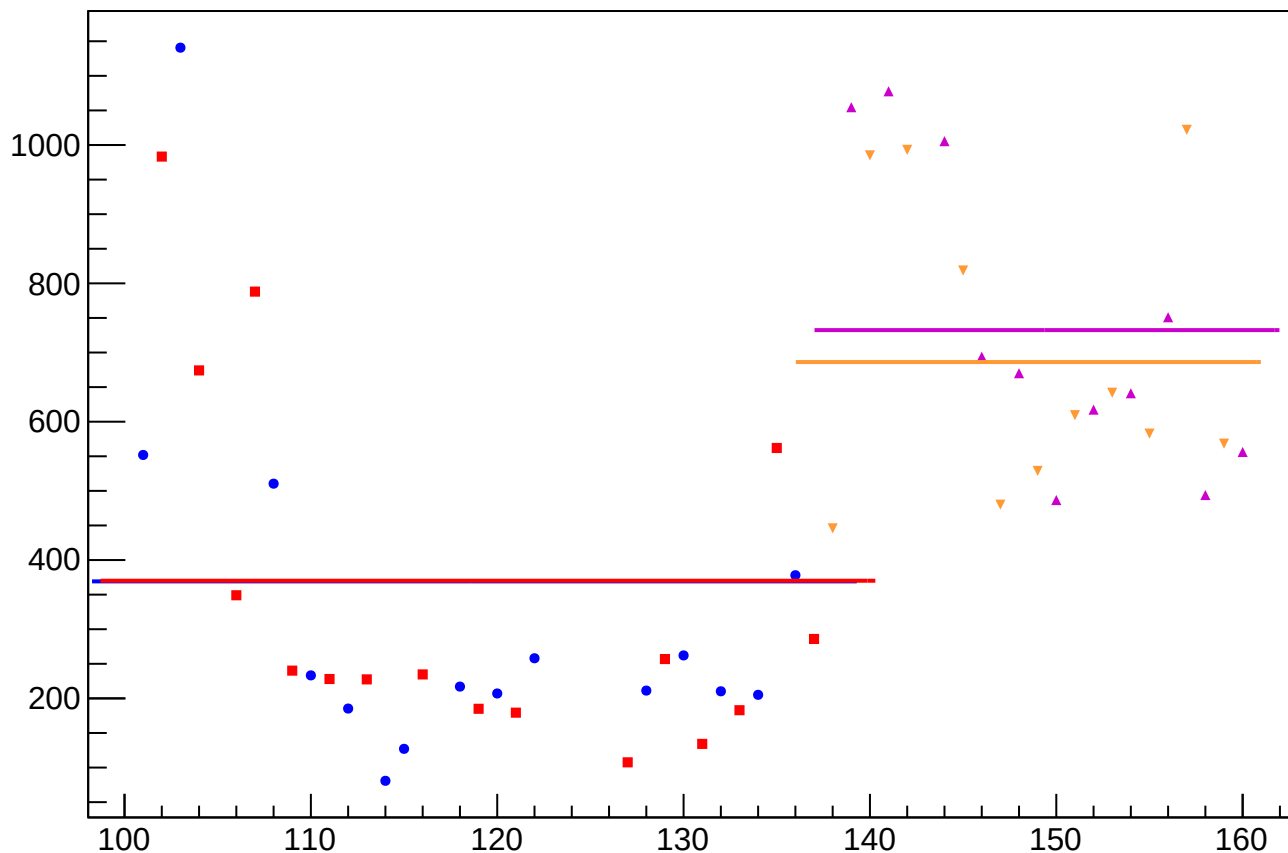
dit\_usl\_coil1\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| 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  |

+ sign 25320.173+/-0.000  $\chi^2/\text{NDF}$ : 1086683983858  
 All: 25421.772+/-0.000  $\chi^2/\text{NDF}$ : 2411086165  
 - sign 25517.305+/-0.000  $\chi^2/\text{NDF}$ : 1324102555101

dit\_usl\_coil1\_err\_mean vs Slug



Right In: 369.169+/-0.000  $\chi^2/\text{NDF}$ : 48053036789565485994195833341370957824.0/14

+ sign 548.687+/-0.000  $\chi^2/\text{NDF}$ : 119411567412423

Left Out: 686.240+/-0.000  $\chi^2/\text{NDF}$ : 34417236167842983766159212562513657856.0/10

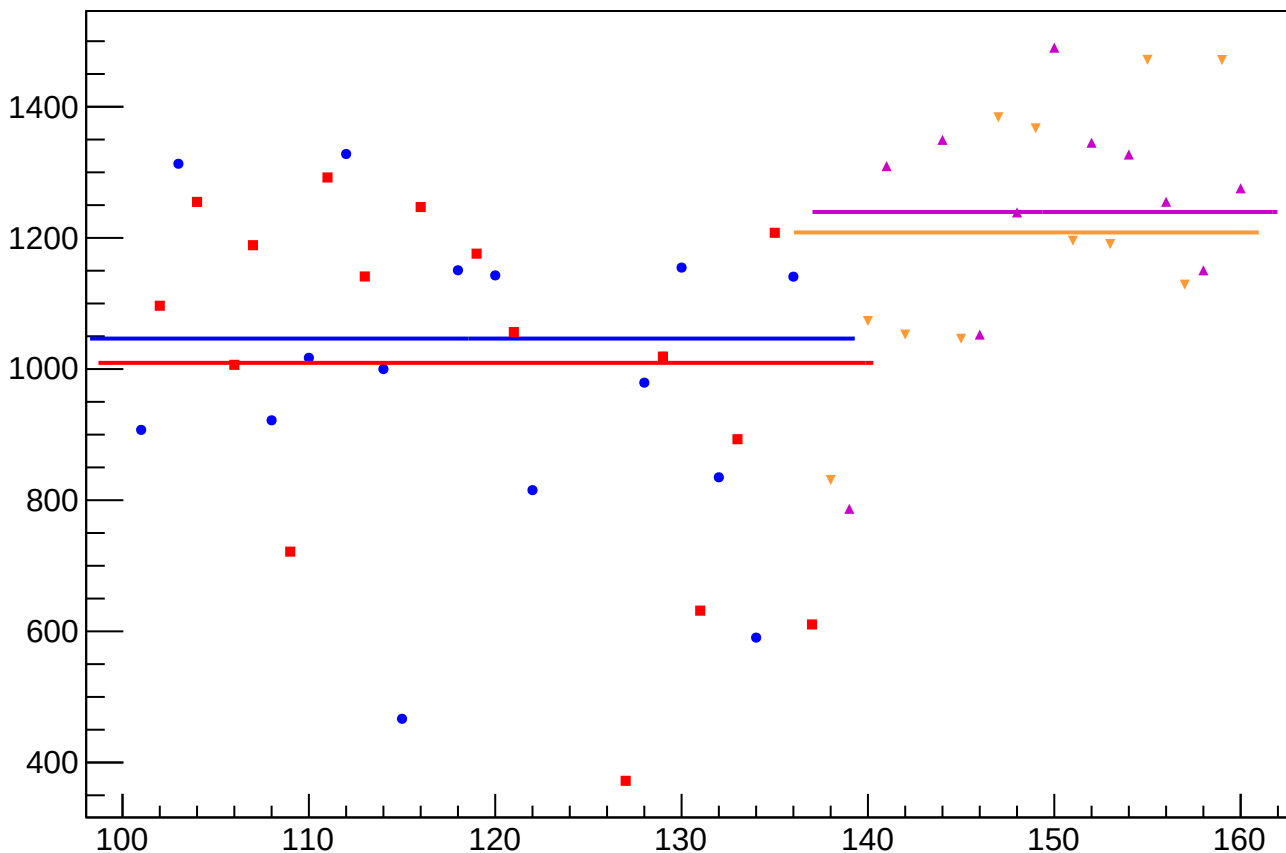
All: 565.091+/-0.000  $\chi^2/\text{NDF}$ : 259202401082

Right Out: 370.091+/-0.000  $\chi^2/\text{NDF}$ : 48214462907052107543037037125316902912.0/15

- sign 580.516+/-0.000  $\chi^2/\text{NDF}$ : 139009735968020

Left In: 732.414+/-0.000  $\chi^2/\text{NDF}$ : 39942105840529115736569596950263889920.0/10

dit\_usl\_coil1\_Ndata\_mean vs Slug



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

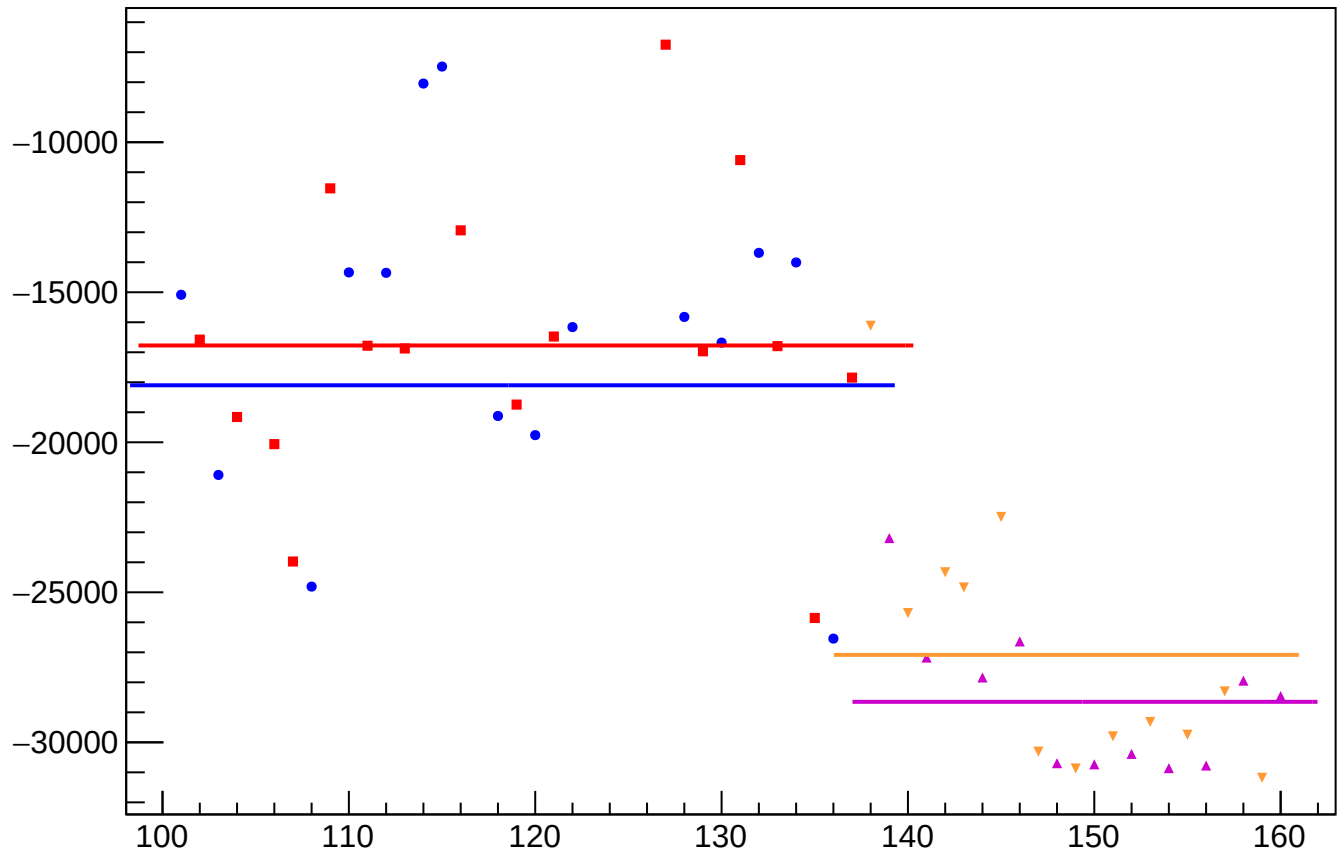
Right Out: 1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15

Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

All: 1140.682+/-0.000  $\chi^2/\text{NDF}$ : 16066171729

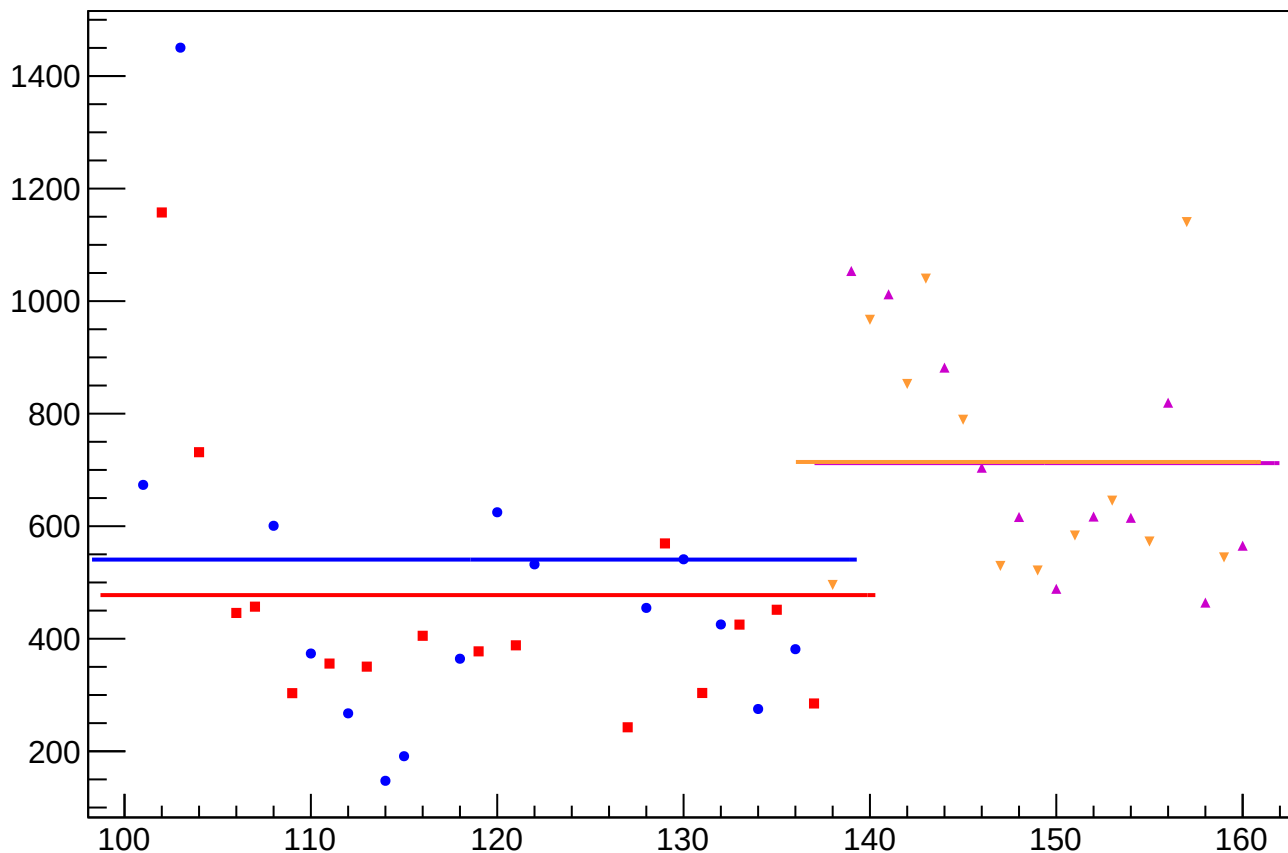


dit\_usr\_coil1\_mean vs Slug



Right In: -18100.637+/-0.000  $\chi^2/\text{NDF}$ : 14634967546173586967632040765428699496448.0/14  
 Left Out: -27085.326+/-0.000  $\chi^2/\text{NDF}$ : 16913671790830002451724713056210492850176.0/11  
 Right Out: -16773.604+/-0.000  $\chi^2/\text{NDF}$ : 14234547931135812277474342886568366178304.0/15  
 Left In: -28650.410+/-0.000  $\chi^2/\text{NDF}$ : 4838827535981080826725947474344765554688.0/10  
 + sign -23354.640+/-0.000  $\chi^2/\text{NDF}$ : 621850607090  
 All: -23514.355+/-0.000  $\chi^2/\text{NDF}$ : 135979518  
 - sign -23671.259+/-0.000  $\chi^2/\text{NDF}$ : 7371541854107

dit\_usr\_coil1\_err\_mean vs Slug



Right In: 540.663+/-0.000  $\chi^2/\text{NDF}$ : 64546819695986774721678785082975846400.0/14

Left Out: 714.147+/-0.000  $\chi^2/\text{NDF}$ : 43160975478631460248575745928156151808.0/11

Right Out: 477.546+/-0.000  $\chi^2/\text{NDF}$ : 38798306504296954461537116809760604160.0/15

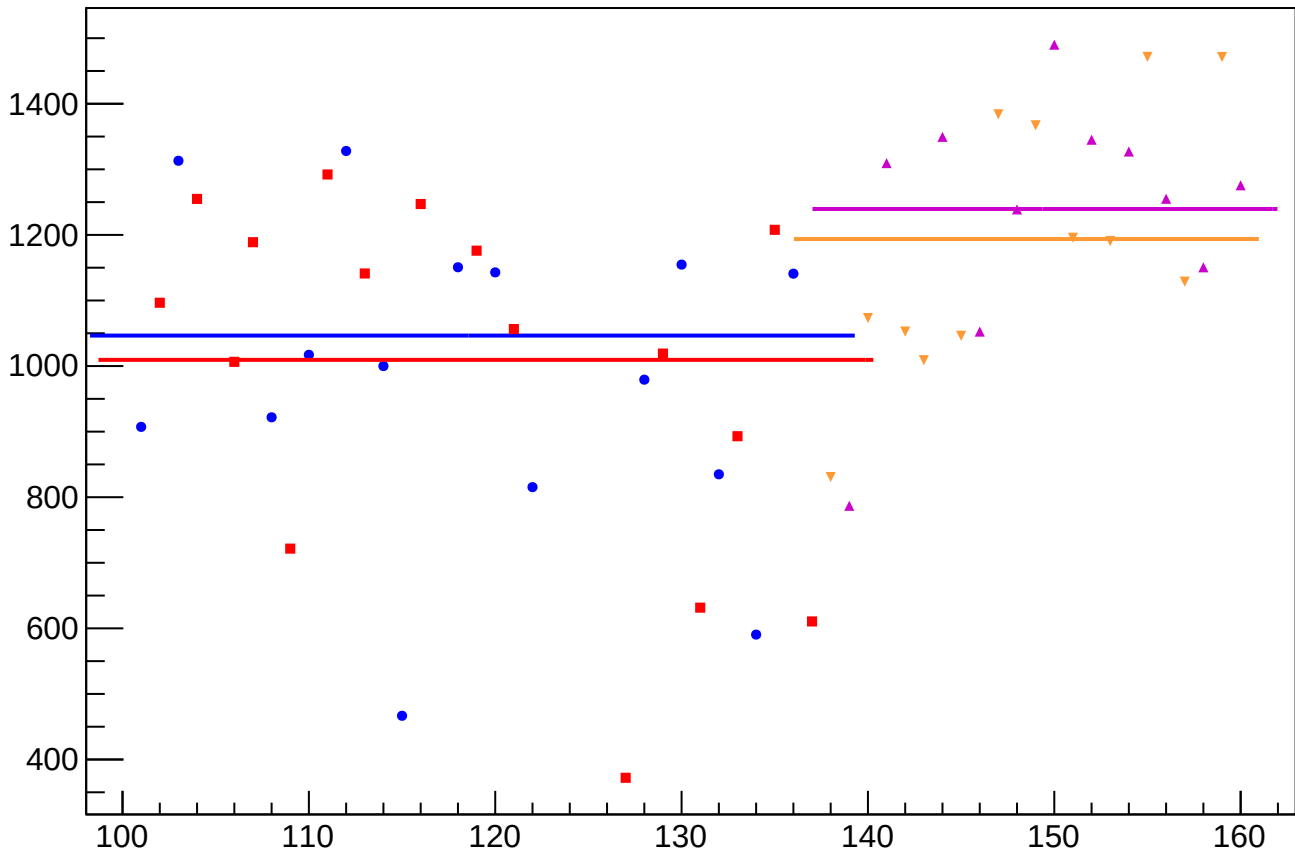
Left In: 712.092+/-0.000  $\chi^2/\text{NDF}$ : 34092045920503284936427855101460217856.0/10

+ sign 642.112+/-0.000  $\chi^2/\text{NDF}$ : 119130077802778

All: 627.811+/-0.000  $\chi^2/\text{NDF}$ : 213964106683

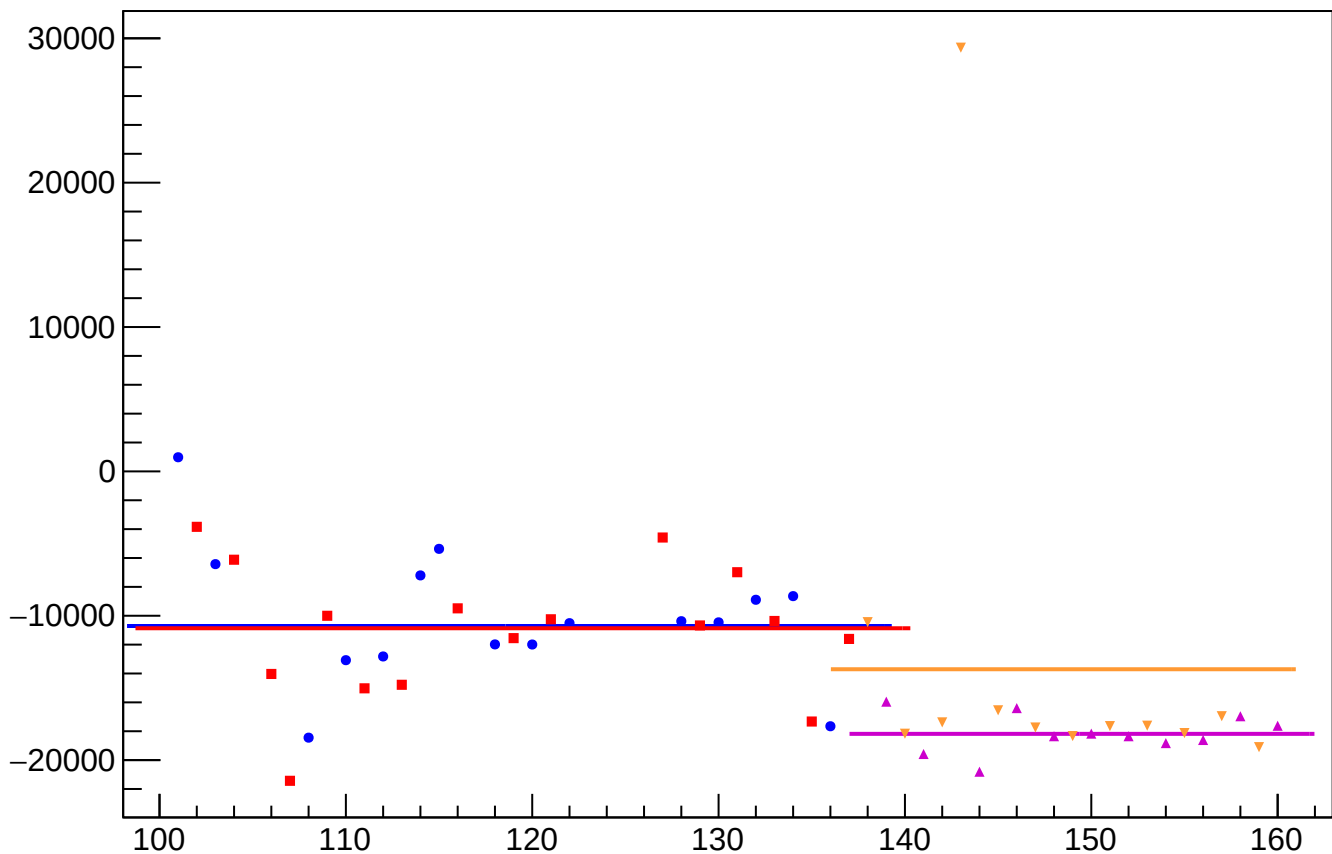
- sign 613.763+/-0.000  $\chi^2/\text{NDF}$ : 942003984332138

dit\_usr\_coil1\_Ndata\_mean vs Slug



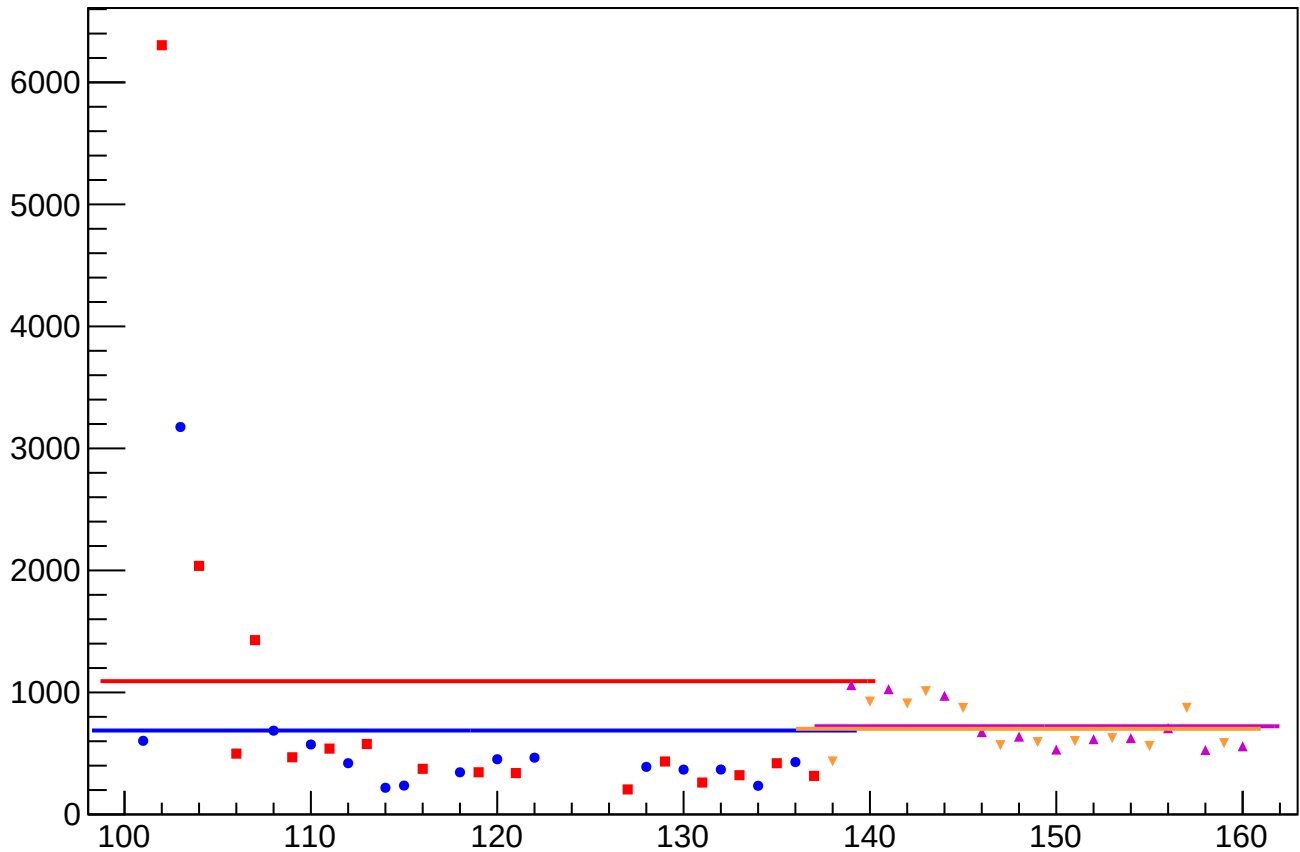
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: 1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

# dit\_atl1\_coil1\_mean vs Slug



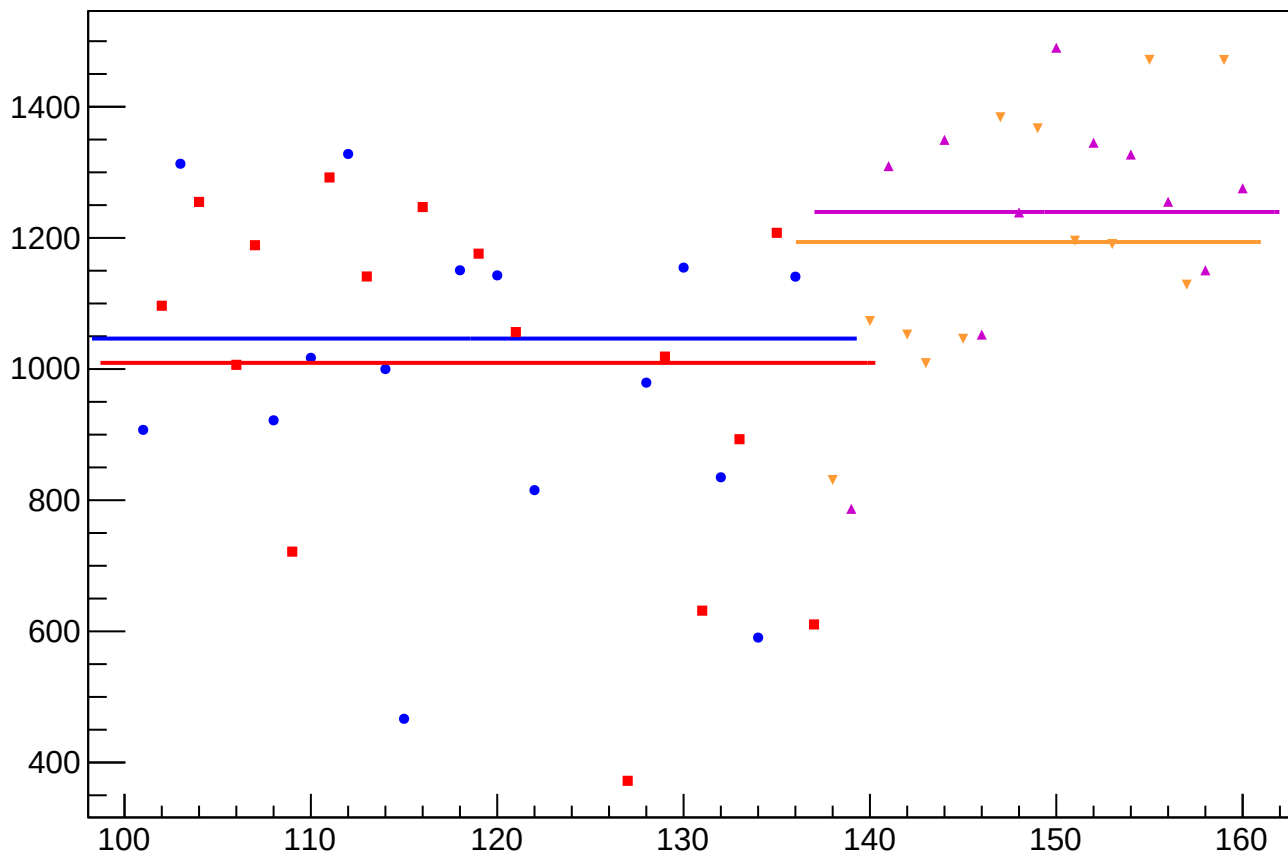
Right In:  $-10710.292 \pm 0.000$   $\chi^2/\text{NDF}: 16945226152053511840482618402250170564608.0/14$   
 Left Out:  $-13705.488 \pm 0.000$   $\chi^2/\text{NDF}: 138226511026527050662319693841079709204480.0/11$   
 Right Out:  $-10866.264 \pm 0.000$   $\chi^2/\text{NDF}: 14234762838858382484525901644131626647552.0/15$   
 Left In:  $-18181.504 \pm 0.000$   $\chi^2/\text{NDF}: 1643617183572647868818914289162838343680.0/10$

dit\_atl1\_coil1\_err\_mean vs Slug



Right In: 687.939+/-0.000  $\chi^2/\text{NDF}$ : 409297141104301509817753390759024787456.0/14  
 Left Out: 701.825+/-0.000  $\chi^2/\text{NDF}$ : 29011752452264624264282448573098885120.0/11  
 Right Out: 1092.265+/-0.000  $\chi^2/\text{NDF}$ : 1883198142929605813456233812946948456448.0/15  
 Left In: 722.743+/-0.000  $\chi^2/\text{NDF}$ : 33693137116513948077860330410535288832.0/10  
 + sign 696.059+/-0.000  $\chi^2/\text{NDF}$ : 438382078457774  
 All: 787.665+/-0.000  $\chi^2/\text{NDF}$ : 24341689483  
 - sign 877.659+/-0.000  $\chi^2/\text{NDF}$ : 196978539018965

dit\_atl1\_coil1\_Ndata\_mean vs Slug



Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14

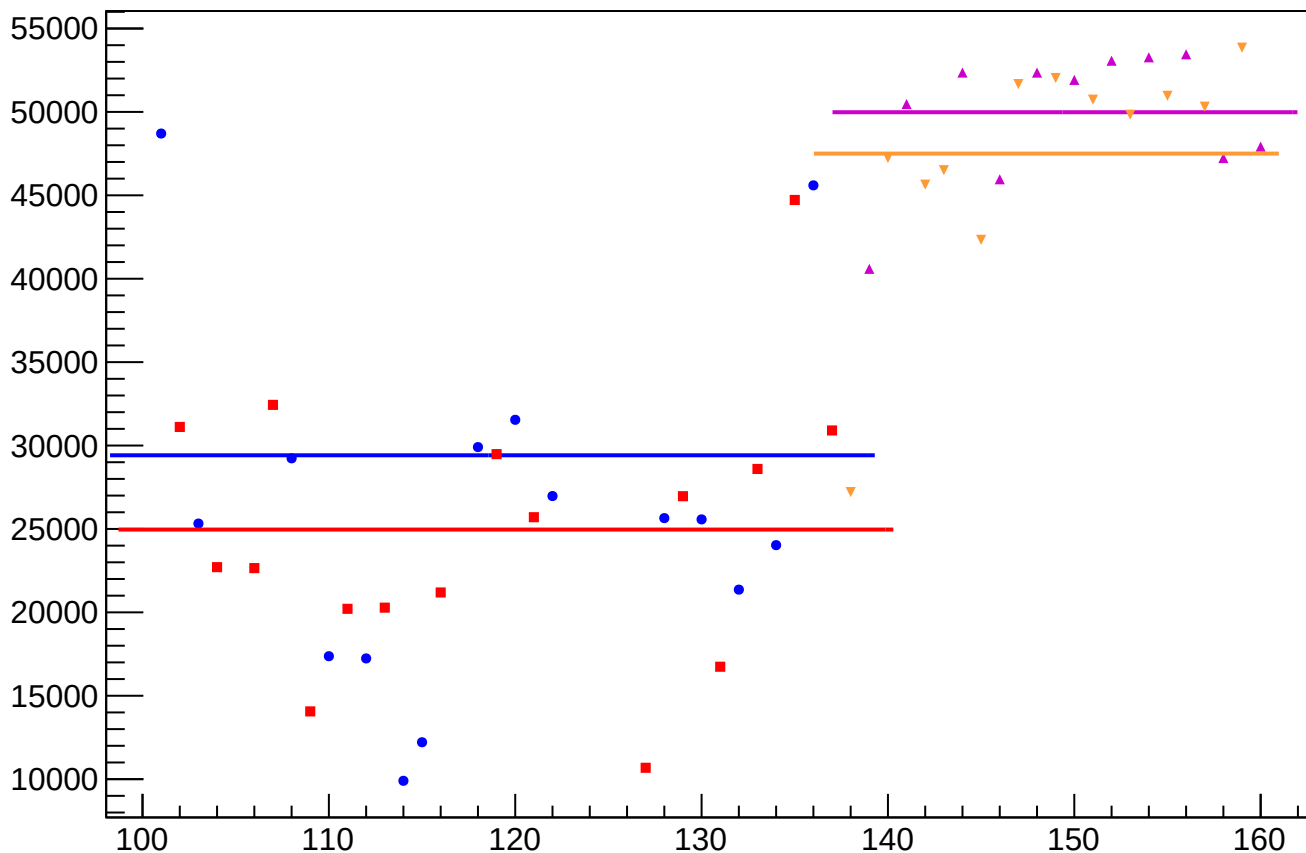
Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11

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: 1137.884+/-0.000  $\chi^2/\text{NDF}$ : 16179959910.0/40

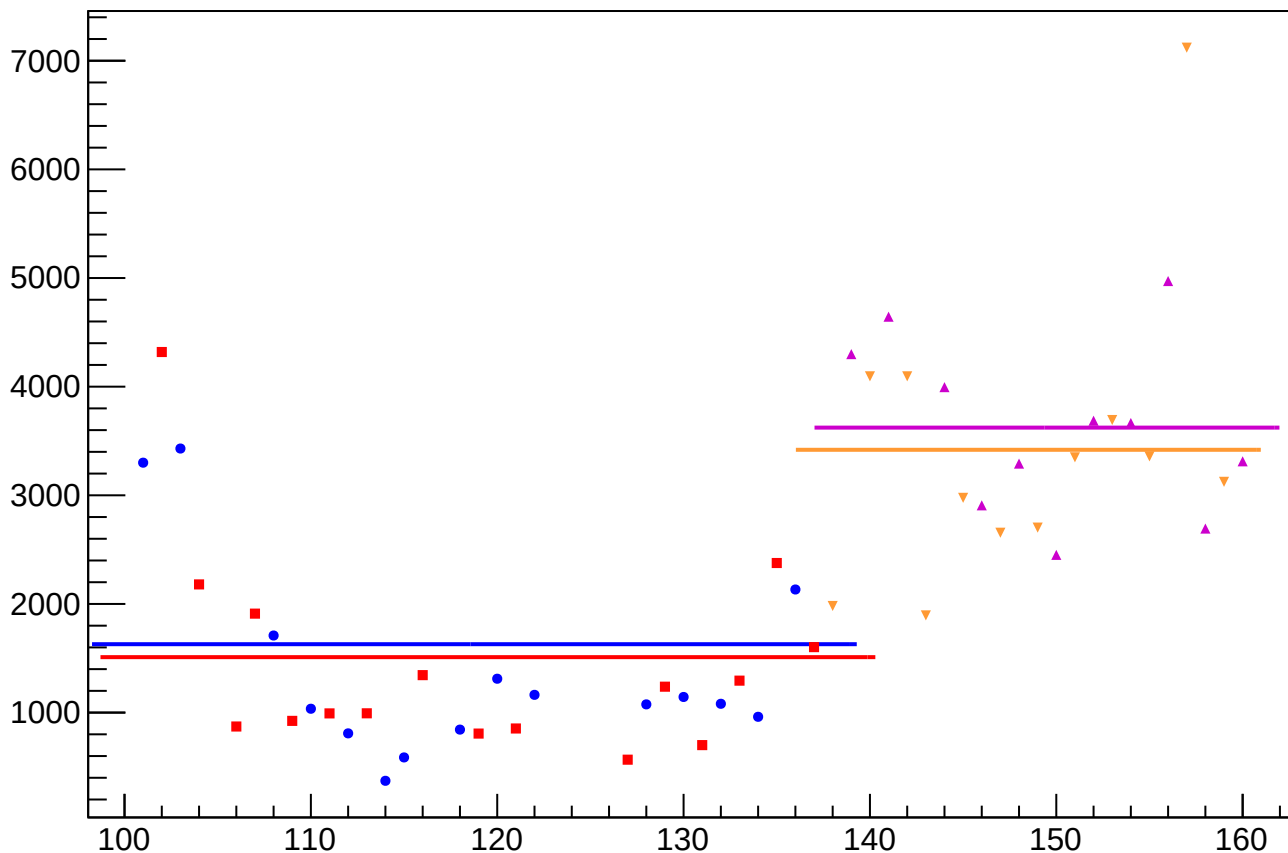
dit\_atl2\_coil1\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| 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 |

+ sign 39992.082+/-0.000  $\chi^2/\text{NDF}$ : 2394993878358  
 All: 39740.450+/-0.000  $\chi^2/\text{NDF}$ : 5413093002  
 - sign 39493.245+/-0.000  $\chi^2/\text{NDF}$ : 3016137188389

dit\_atl2\_coil1\_err\_mean vs Slug



Right In: 1629.542+/-0.000  $\chi^2/\text{NDF}$ : 551738555355028902194697896437152219136.0/14

Left Out: 3418.927+/-0.000  $\chi^2/\text{NDF}$ : 1575515144069936231955966928879934767104.0/11

Right Out: 1510.293+/-0.000  $\chi^2/\text{NDF}$ : 688231904046816211321774524619745656832.0/15

Left In: 3623.095+/-0.000  $\chi^2/\text{NDF}$ : 537714450371269509719141411292840984576.0/10

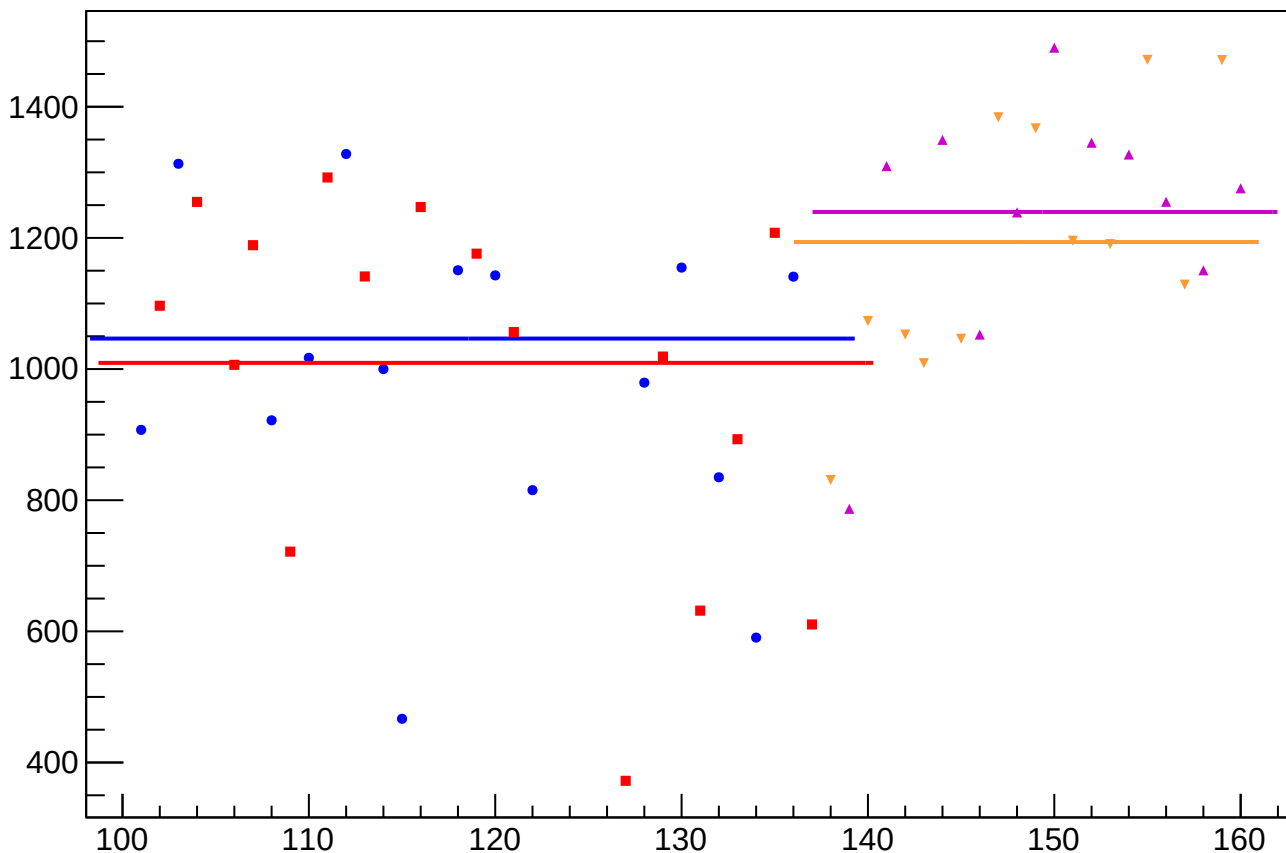
+ sign 2675.926+/-0.000  $\chi^2/\text{NDF}$ : 33424300848042

All: 2706.904+/-0.000  $\chi^2/\text{NDF}$ : 63005491565

- sign 2737.338+/-0.000  $\chi^2/\text{NDF}$ : 29551454832887



dit\_atl2\_coil1\_Ndata\_mean vs Slug



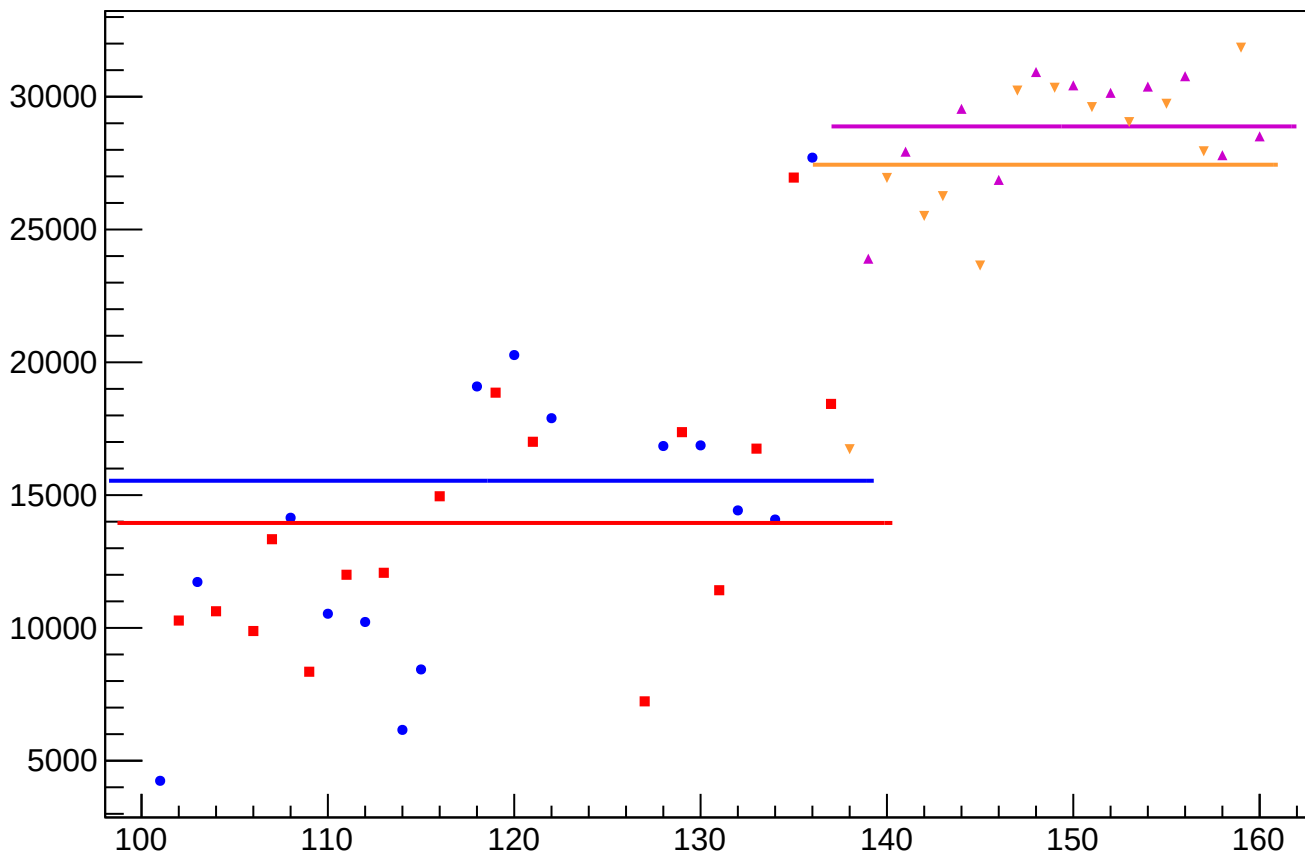
Right In:  $1046.490 \pm 0.000$   $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14

Left Out:  $1193.726 \pm 0.000$   $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11

Right Out:  $1009.445 \pm 0.000$   $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15

Left In:  $1239.553 \pm 0.000$   $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

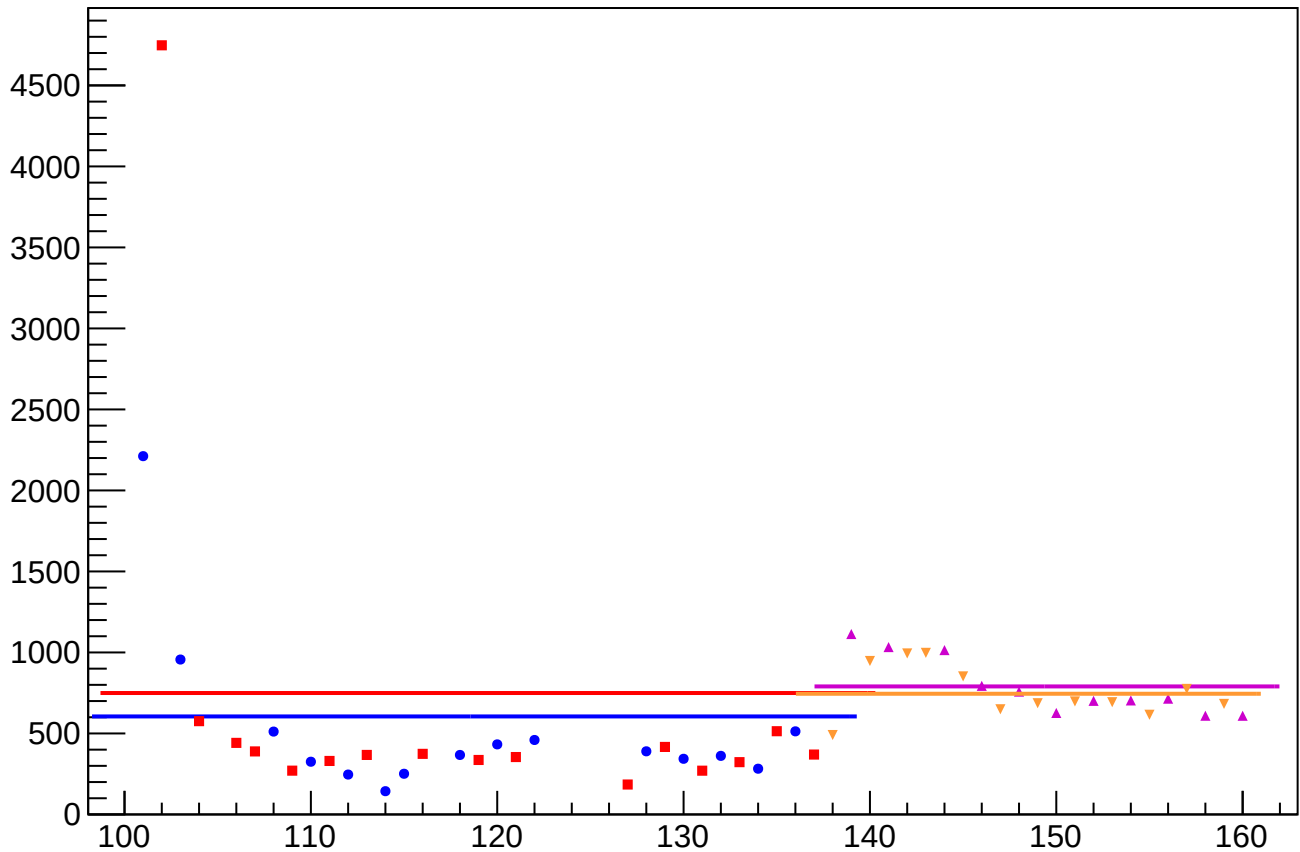
dit\_atr1\_coil1\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| 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  |

+ sign 22498.900+/-0.000  $\chi^2/\text{NDF}$ : 9536357865964  
 All: 22561.315+/-0.000  $\chi^2/\text{NDF}$ : 2024381611  
 - sign 22622.631+/-0.000  $\chi^2/\text{NDF}$ : 1070625118466

dit\_atr1\_coil1\_err\_mean vs Slug



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

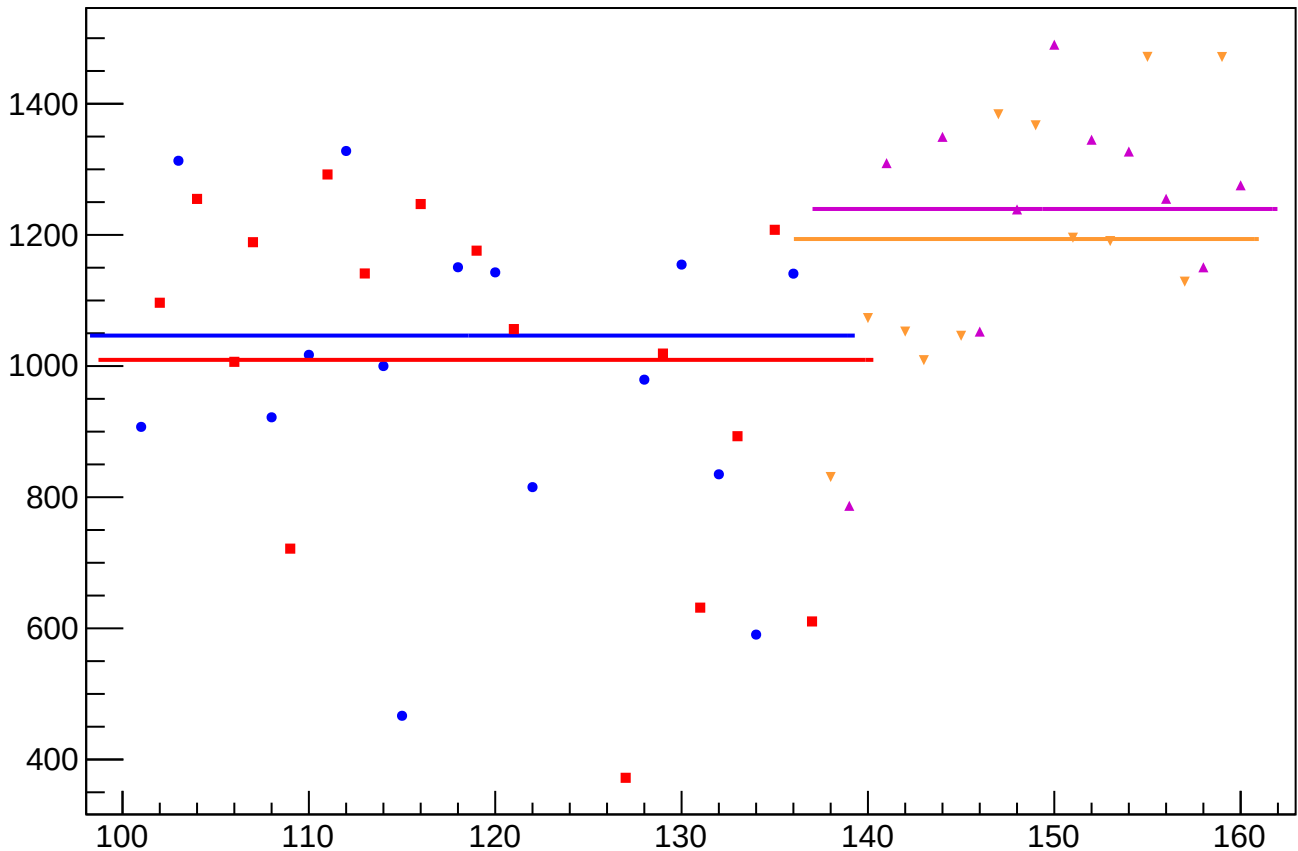
Left In: 790.283+/-0.000  $\chi^2/\text{NDF}$ : 27375995163011560101349166949437800448.0/10

+ sign 686.873+/-0.000  $\chi^2/\text{NDF}$ : 216406275122554

All: 730.430+/-0.000  $\chi^2/\text{NDF}$ : 127166116576

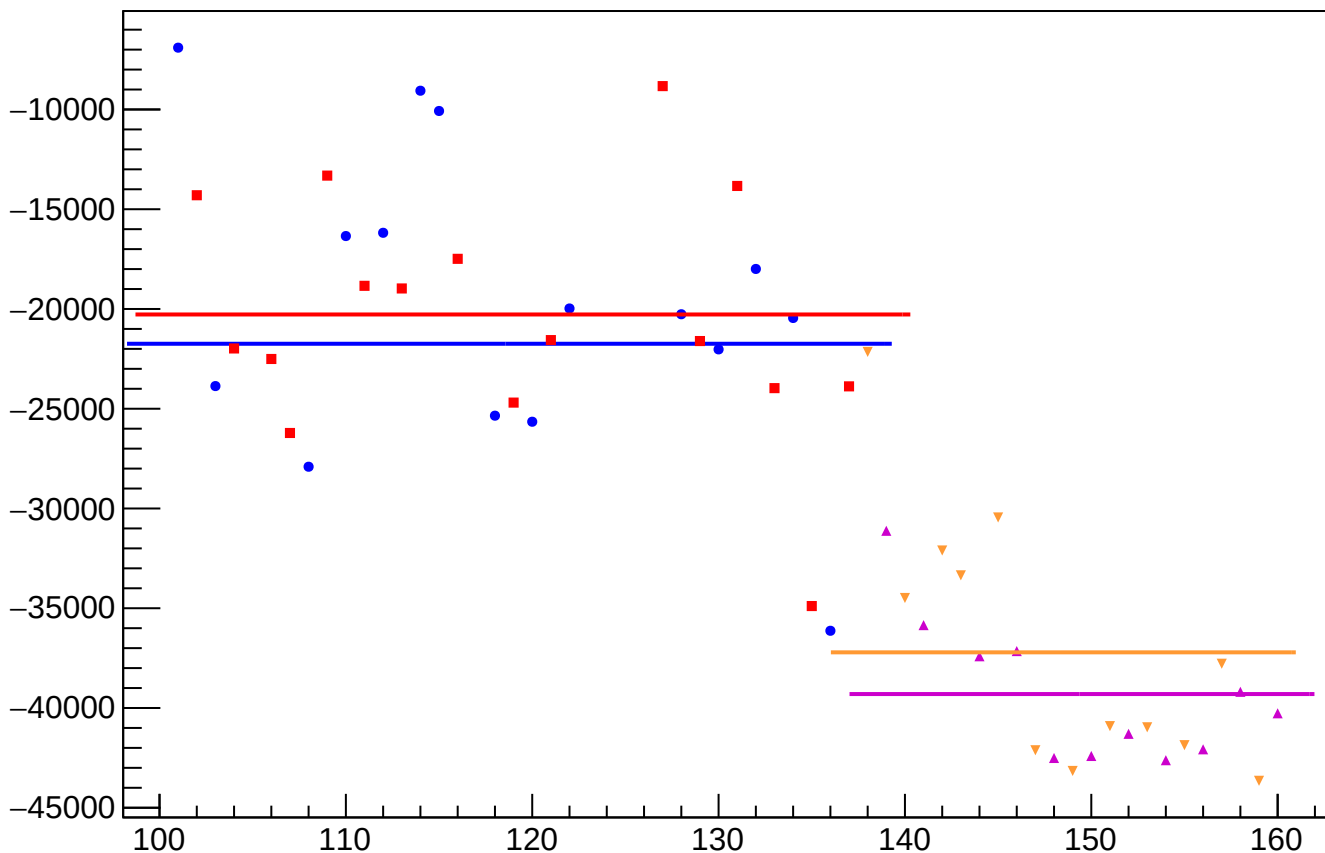
- sign 773.220+/-0.000  $\chi^2/\text{NDF}$ : 104937647672496

dit\_atr1\_coil1\_Ndata\_mean vs Slug



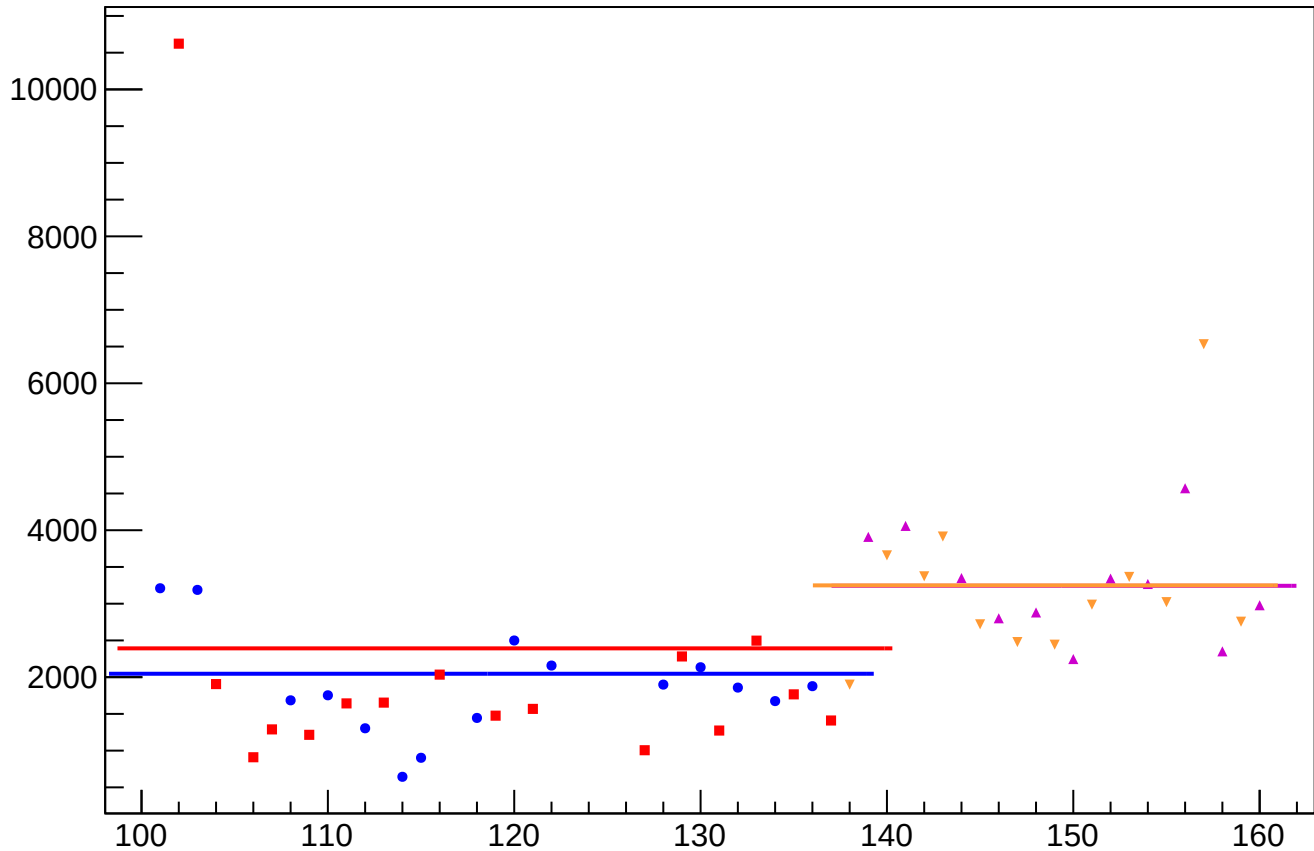
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: 1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

dit\_atr2\_coil1\_mean vs Slug



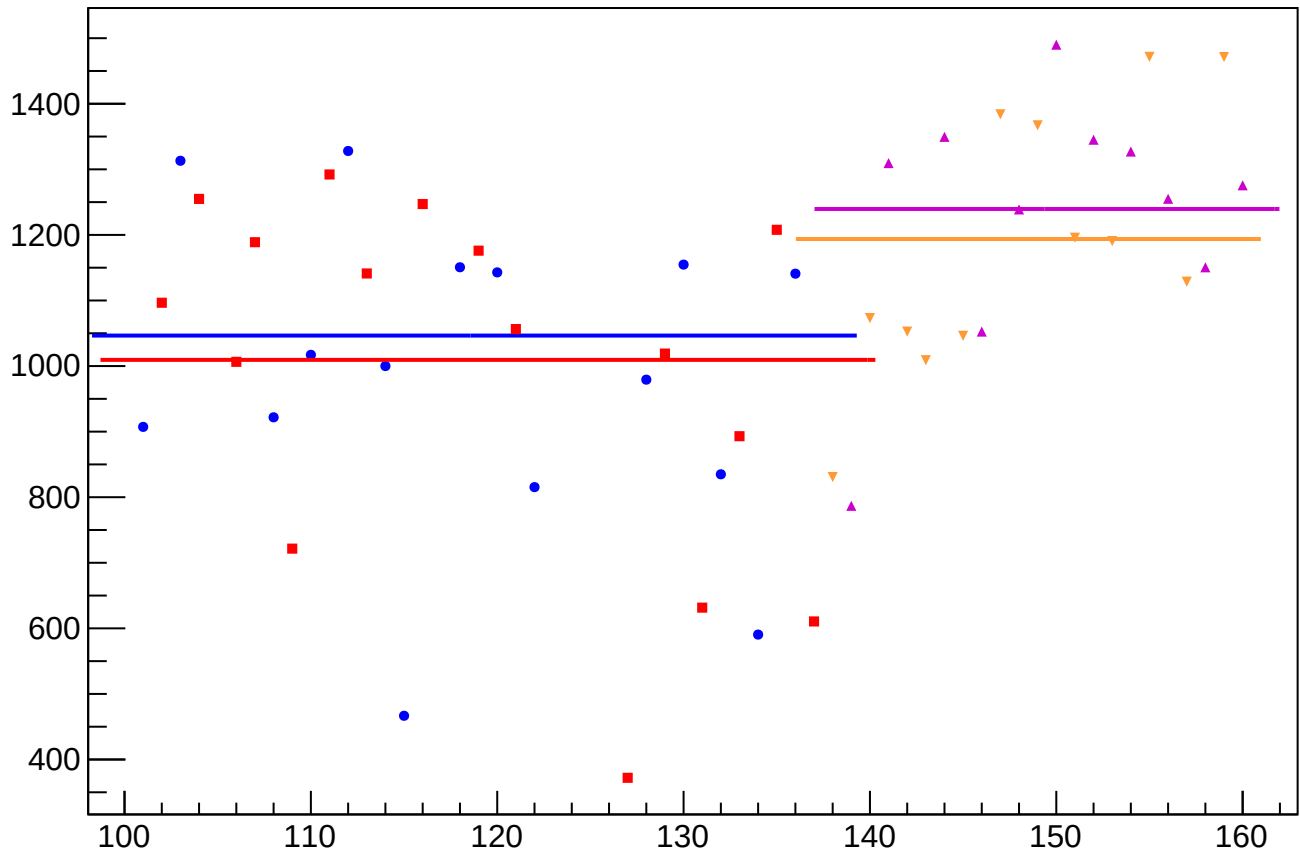
Right In: -21743.360+/-0.000  $\chi^2/\text{NDF}$ : 41106858823579527325198675675398793068544.0/14  
 Left Out: -37210.761+/-0.000  $\chi^2/\text{NDF}$ : 36234813568101266501920845904945520574464.0/11  
 Right Out: -20275.415+/-0.000  $\chi^2/\text{NDF}$ : 25935869132092920231681532417627320745984.0/15  
 Left In: -39301.203+/-0.000  $\chi^2/\text{NDF}$ : 10890557195828480655850873156116452212736.0/10

# dit\_atr2\_coil1\_err\_mean vs Slug



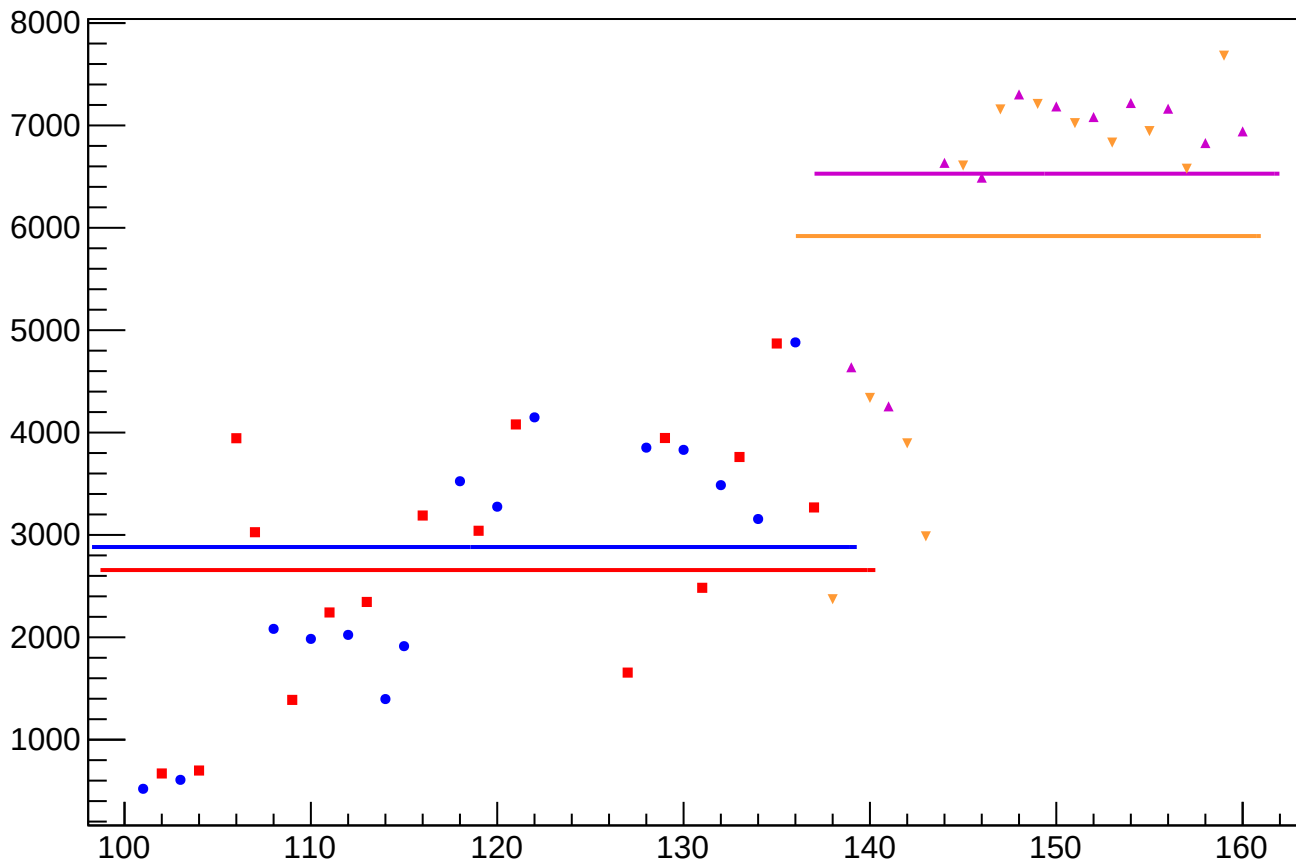
|                             |                                                                     |                         |                                      |
|-----------------------------|---------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 2046.354+/-0.000  | $\chi^2/\text{NDF}$ : 266555515927348892036833058355226345472.0/14  | + sign 2749.812+/-0.000 | $\chi^2/\text{NDF}$ : 20064864272112 |
| Left Out: 3249.314+/-0.000  | $\chi^2/\text{NDF}$ : 1190726211956001849078073092083852247040.0/11 | All: 2818.755+/-0.000   | $\chi^2/\text{NDF}$ : 71401525067    |
| Right Out: 2391.939+/-0.000 | $\chi^2/\text{NDF}$ : 4415294964789778815259357544579499819008.0/15 | - sign 2886.485+/-0.000 | $\chi^2/\text{NDF}$ : 51189384320628 |
| Left In: 3243.479+/-0.000   | $\chi^2/\text{NDF}$ : 422752345809564414875941115453230809088.0/10  |                         |                                      |

dit\_atr2\_coil1\_Ndata\_mean vs Slug



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

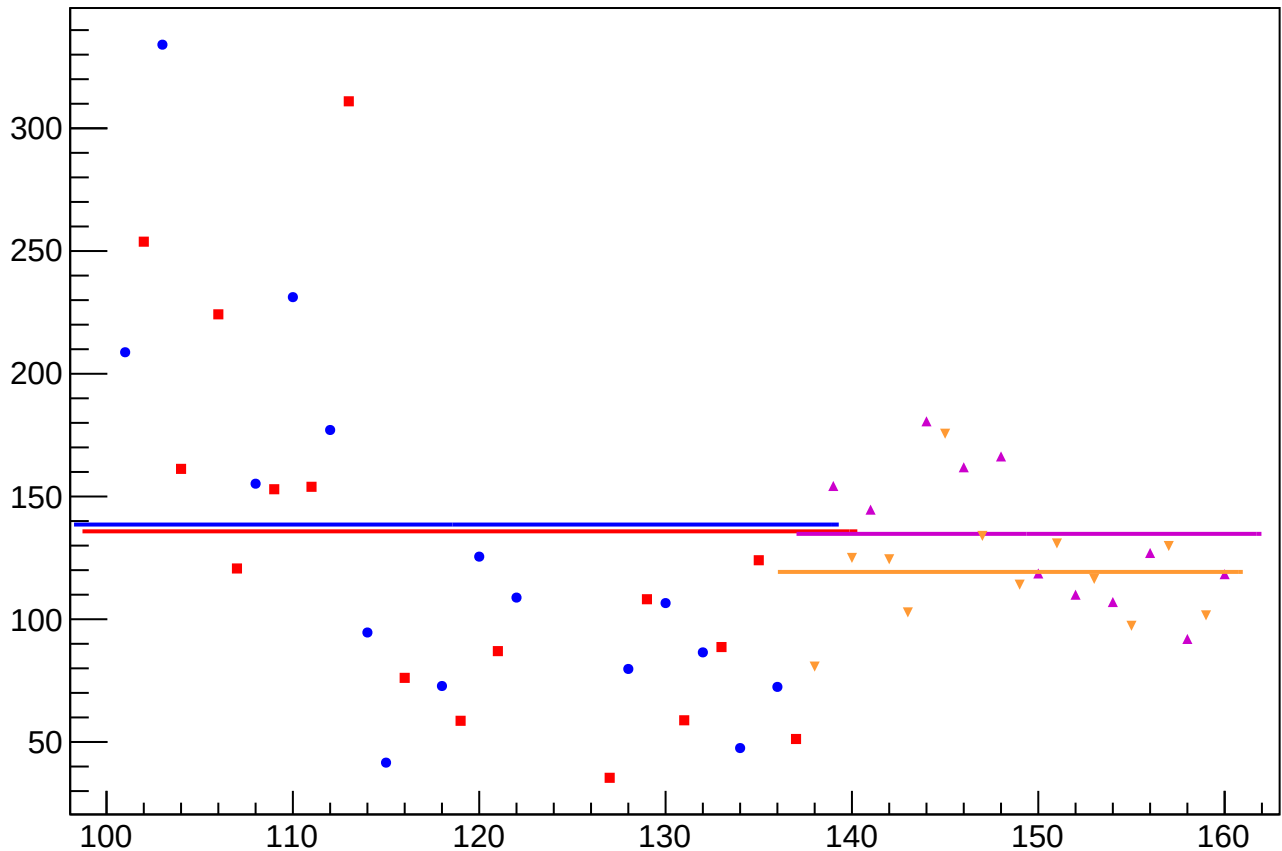
# dit\_sam1\_coil1\_mean vs Slug



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

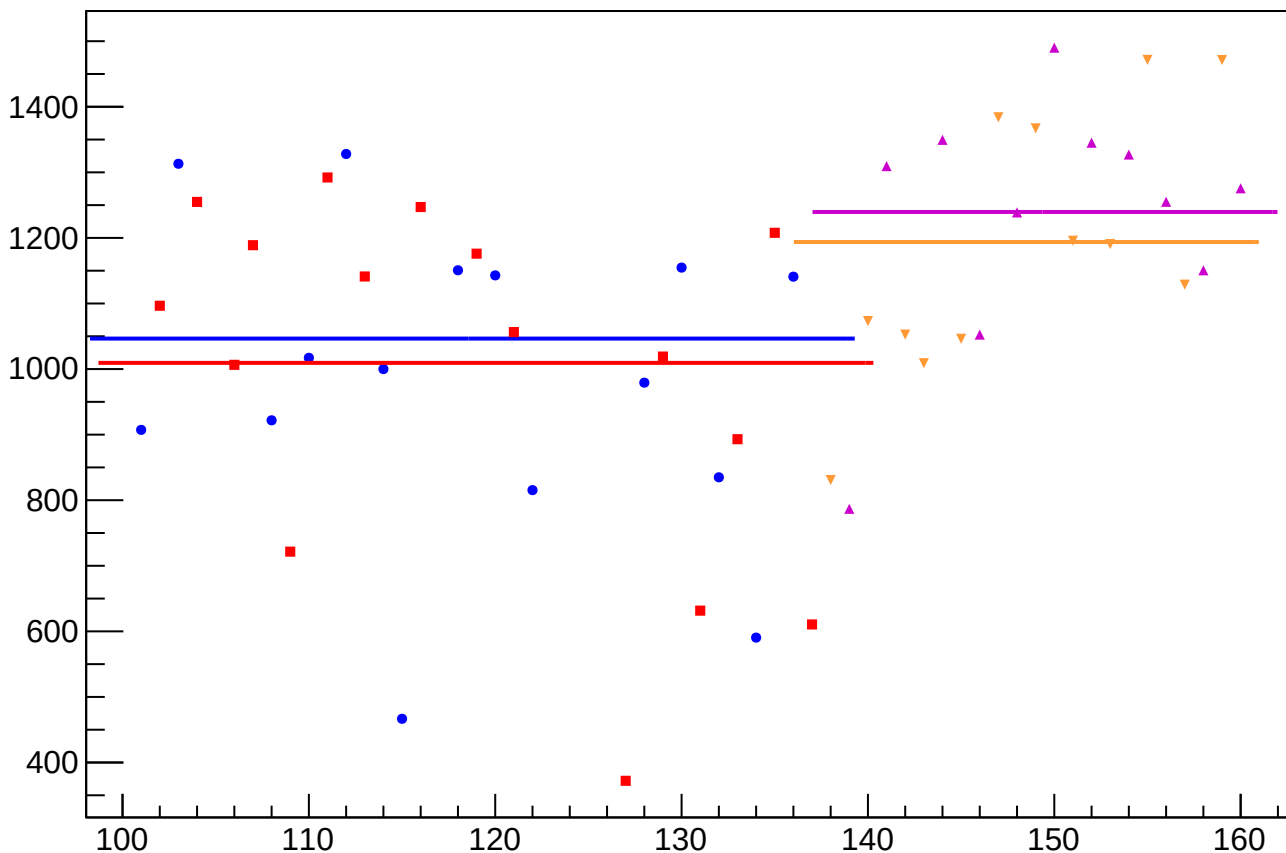


dit\_sam1\_coil1\_err\_mean vs Slug



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

dit\_sam1\_coil1\_Ndata\_mean vs Slug



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

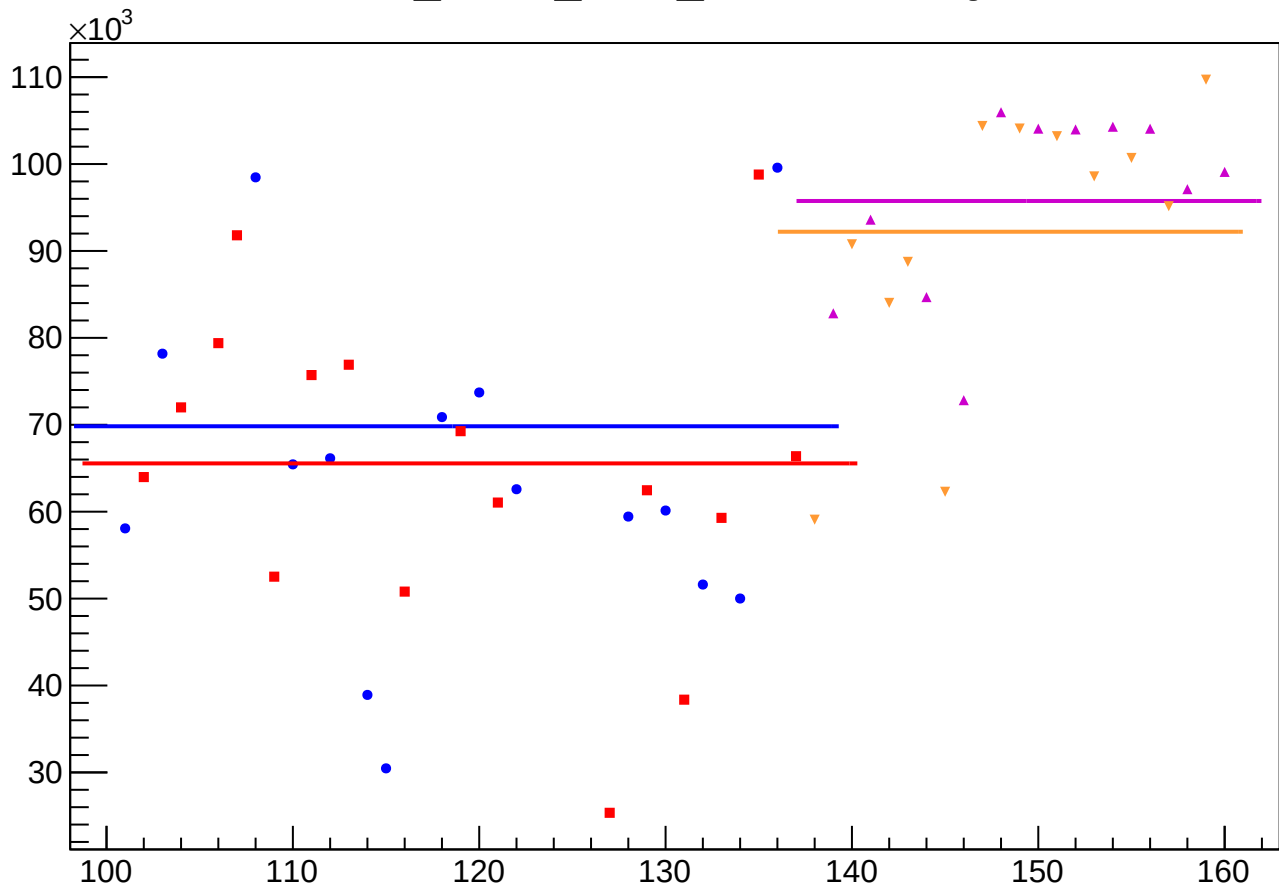
Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

+ sign 1132.590+/-0.000  $\chi^2/\text{NDF}$ : 67482648076441

All: 1137.884+/-0.000  $\chi^2/\text{NDF}$ : 16179959910

- sign 1143.084+/-0.000  $\chi^2/\text{NDF}$ : 94230119572030

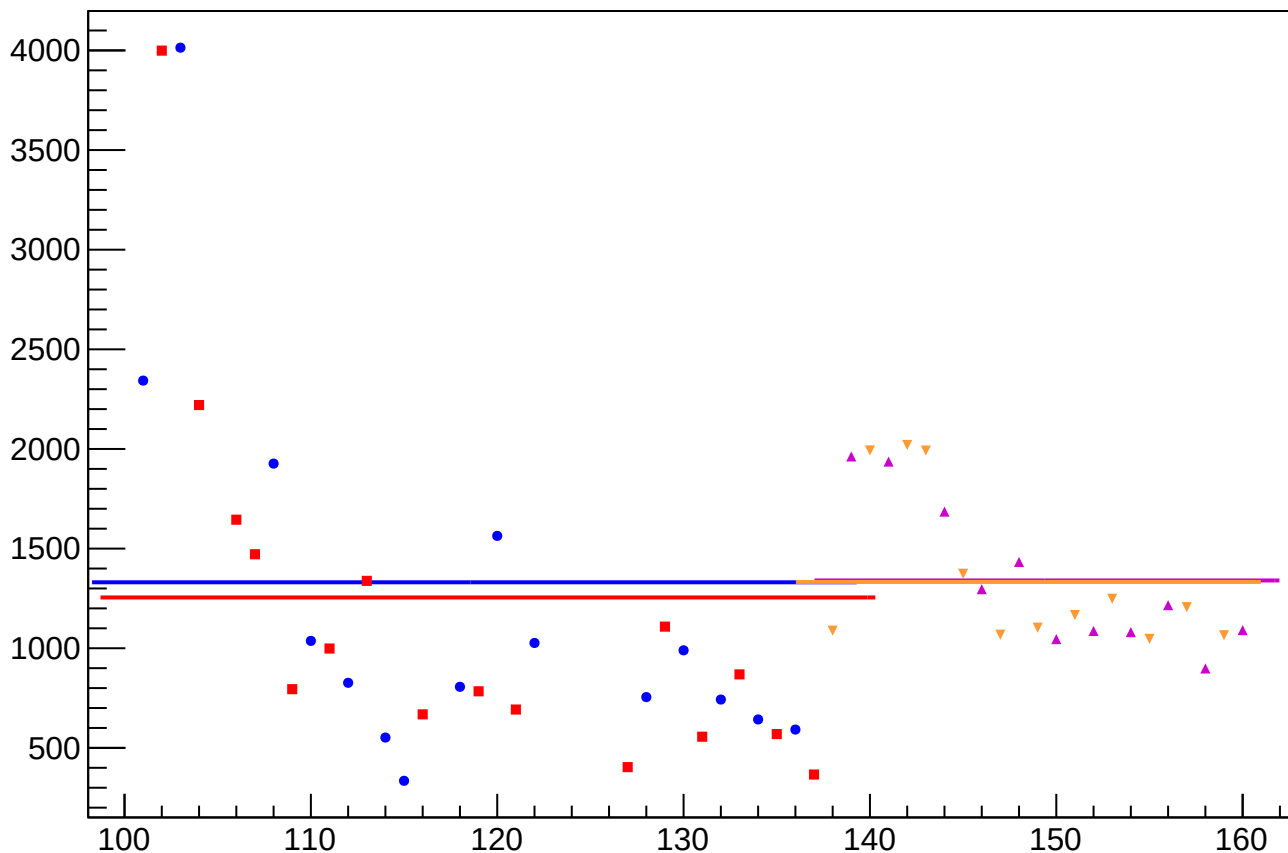
# dit\_sam2\_coil1\_mean vs Slug



|                                  |                                                                |
|----------------------------------|----------------------------------------------------------------|
| Right In: 69827.797 $\pm$ 0.000  | $\chi^2$ /NDF: 187803282116493131197684060541288926150656.0/14 |
| Left Out: 92210.698 $\pm$ 0.000  | $\chi^2$ /NDF: 226577476657807585202083767685360289579008.0/11 |
| Right Out: 65555.147 $\pm$ 0.000 | $\chi^2$ /NDF: 212001467811386750910625783195999741673472.0/15 |
| Left In: 95749.411 $\pm$ 0.000   | $\chi^2$ /NDF: 102376761881530271427340284738693826084864.0/10 |

+ sign 82916.711 $\pm$ 0.000  $\chi^2$ /NDF: 6045168976255  
 All: 83004.616 $\pm$ 0.000  $\chi^2$ /NDF: 1272083143  
 - sign 83090.974 $\pm$ 0.000  $\chi^2$ /NDF: 6675423024903

dit\_sam2\_coil1\_err\_mean vs Slug



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

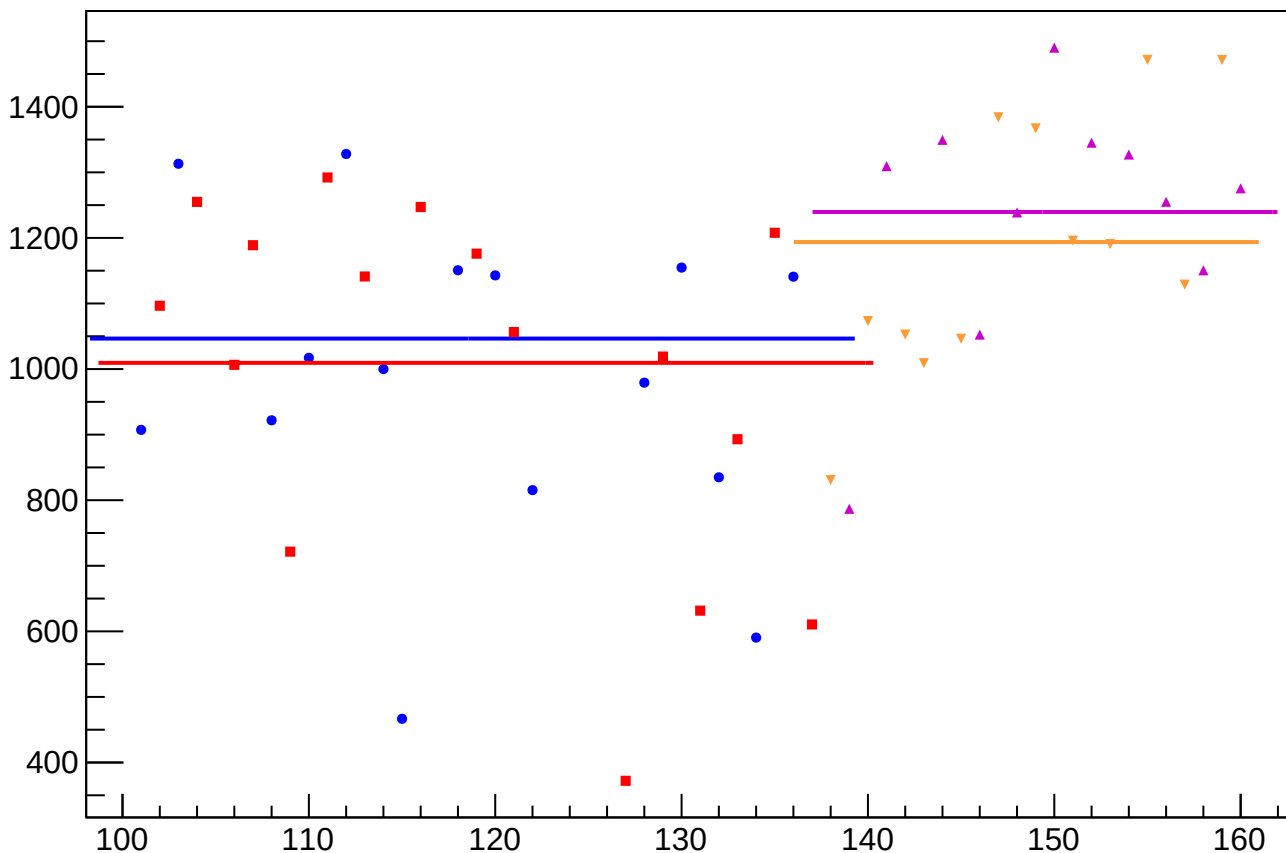
Left In: 1340.185+/-0.000  $\chi^2/\text{NDF}$ : 114204911168201277023830767366477709312.0/10

+ sign 1331.958+/-0.000  $\chi^2/\text{NDF}$ : 76697117094463

All: 1318.066+/-0.000  $\chi^2/\text{NDF}$ : 15167335846

- sign 1304.419+/-0.000  $\chi^2/\text{NDF}$ : 74916446361161

dit\_sam2\_coil1\_Ndata\_mean vs Slug



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

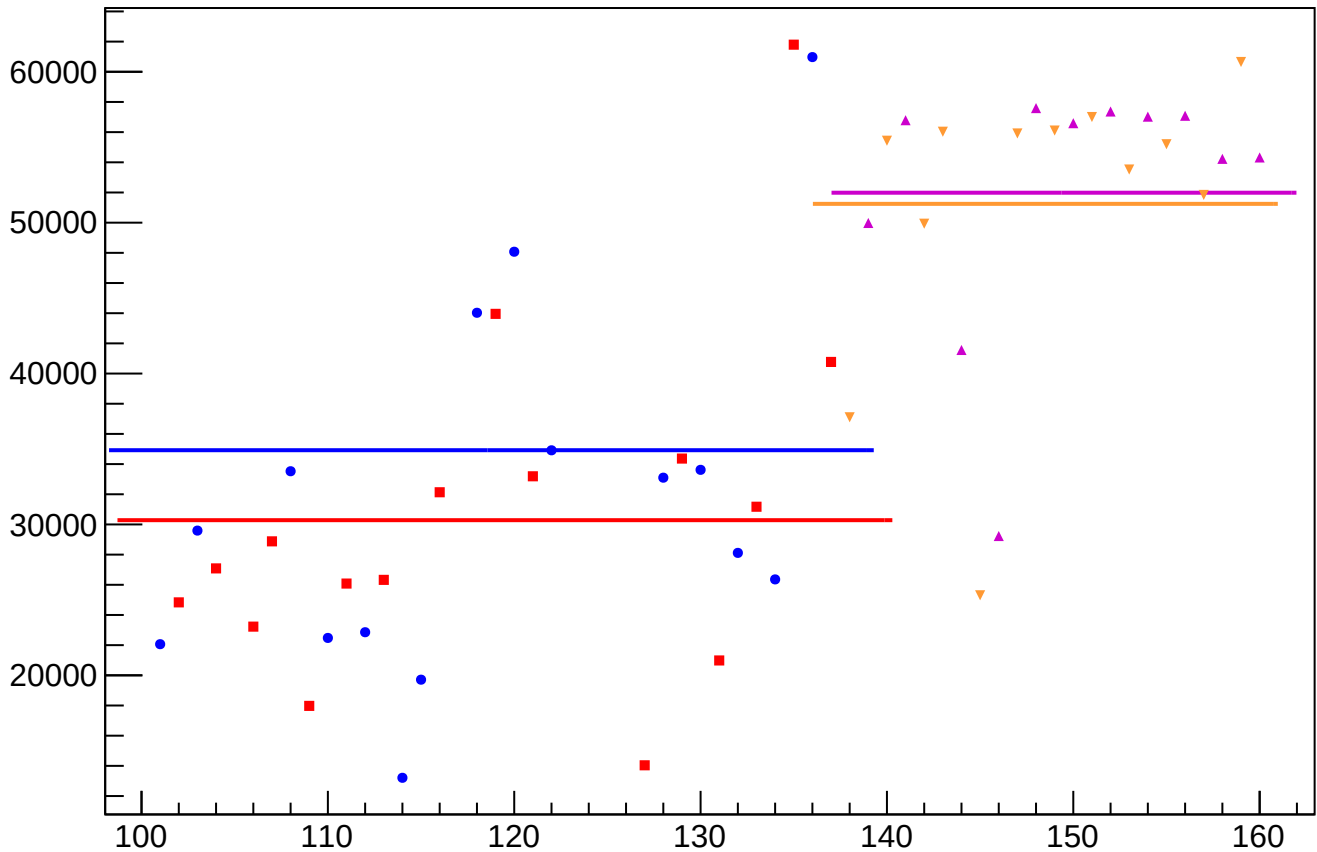
Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

+ sign 1132.590+/-0.000  $\chi^2/\text{NDF}$ : 67482648076441

All: 1137.884+/-0.000  $\chi^2/\text{NDF}$ : 16179959910

- sign 1143.084+/-0.000  $\chi^2/\text{NDF}$ : 94230119572030

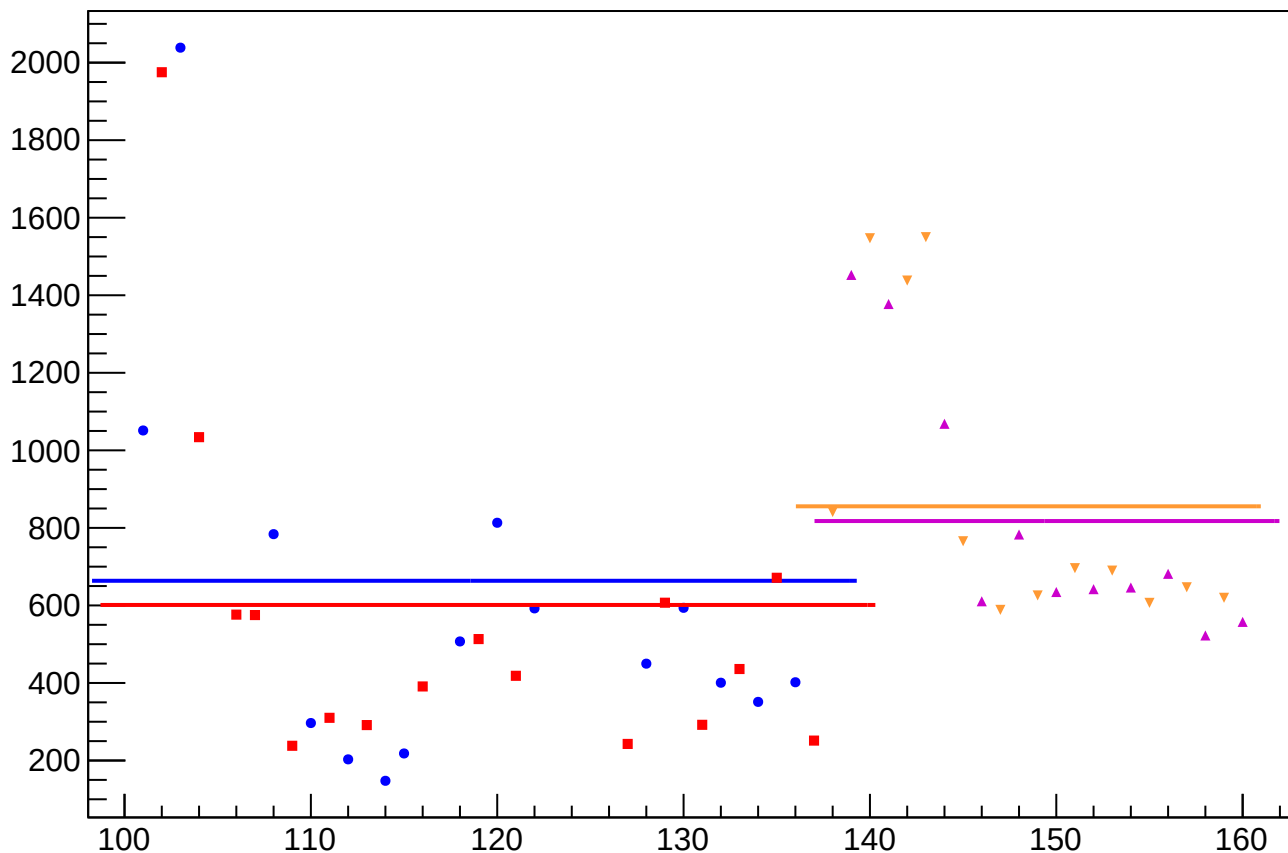
dit\_sam3\_coil1\_mean vs Slug



|                              |                                                                       |
|------------------------------|-----------------------------------------------------------------------|
| 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  |

+ sign 44467.216+/-0.000  $\chi^2/\text{NDF}$ : 2937224586407  
 All: 43669.971+/-0.000  $\chi^2/\text{NDF}$ : 6336704207  
 - sign 42886.756+/-0.000  $\chi^2/\text{NDF}$ : 3379785593938

dit\_sam3\_coil1\_err\_mean vs Slug



Right In: 663.574+/-0.000  $\chi^2/\text{NDF}$ : 157691812872720822886914966597312446464.0/14

Left Out: 855.627+/-0.000  $\chi^2/\text{NDF}$ : 114895226746628689144721696446463606784.0/11

Right Out: 601.216+/-0.000  $\chi^2/\text{NDF}$ : 149717884331889332339995334350831878144.0/15

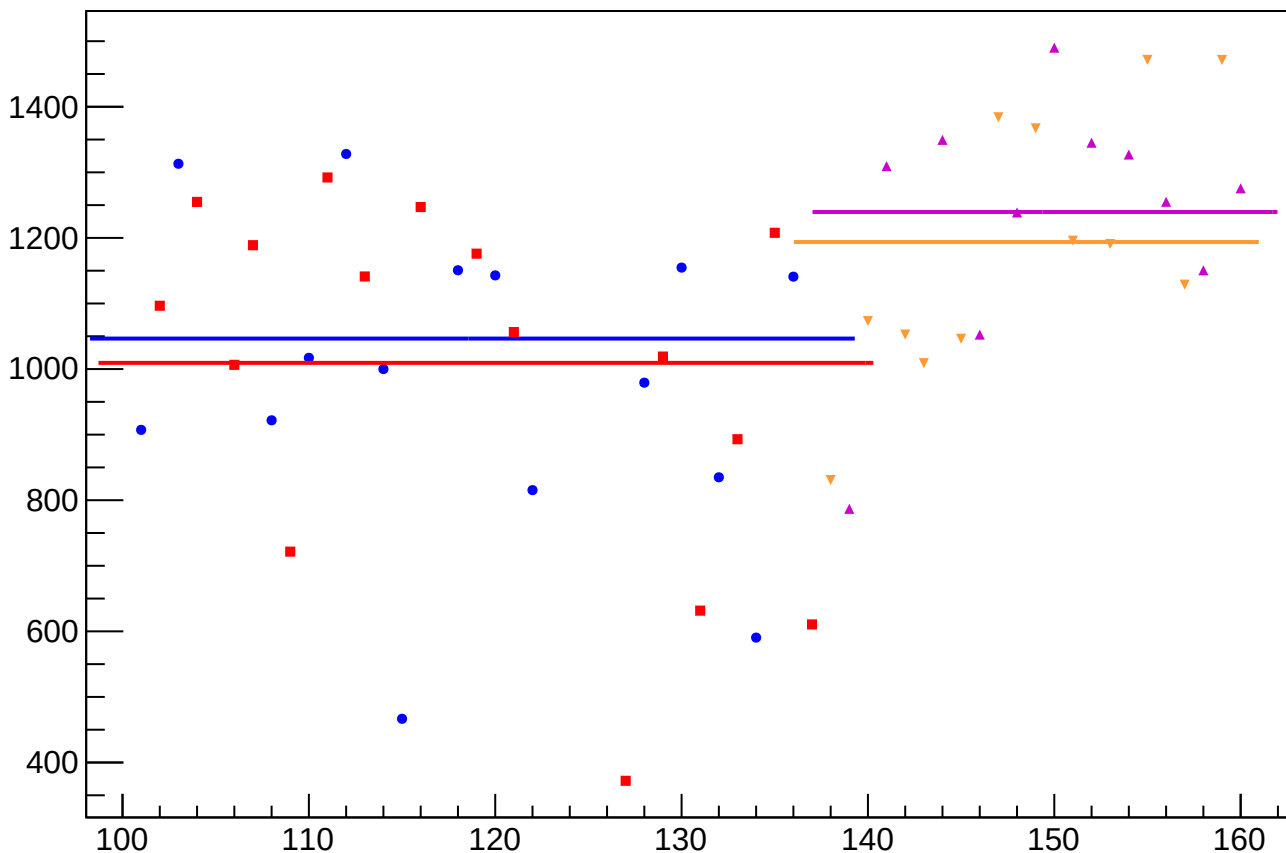
Left In: 817.657+/-0.000  $\chi^2/\text{NDF}$ : 90429548723715663326805299076811194368.0/10

+ sign 775.881+/-0.000  $\chi^2/\text{NDF}$ : 286585359117303

All: 751.182+/-0.000  $\chi^2/\text{NDF}$ : 546770040595

- sign 726.918+/-0.000  $\chi^2/\text{NDF}$ : 258294460548114

dit\_sam3\_coil1\_Ndata\_mean vs Slug



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

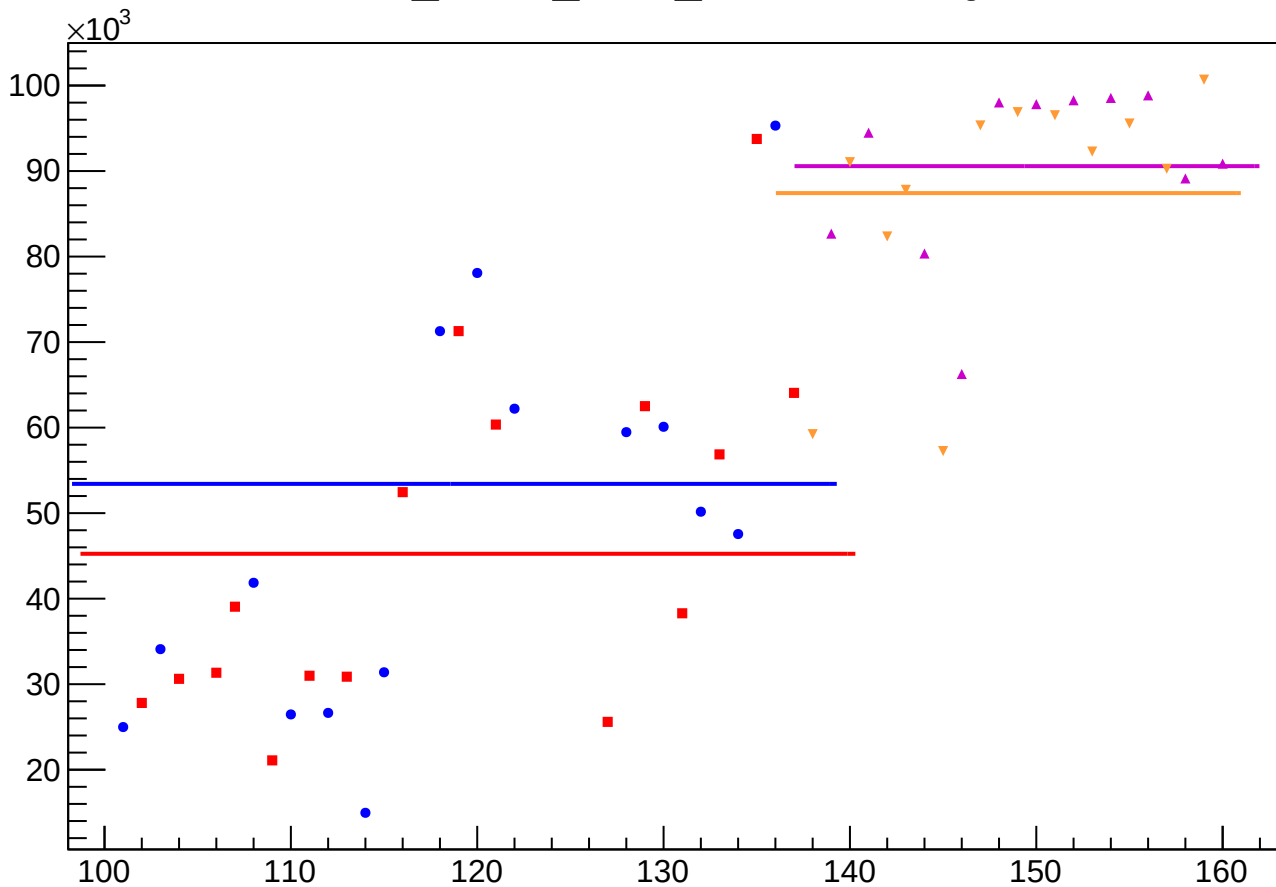
+ sign 1132.590+/-0.000  $\chi^2/\text{NDF}$ : 67482648076441

All: 1137.884+/-0.000  $\chi^2/\text{NDF}$ : 16179959910

- sign 1143.084+/-0.000  $\chi^2/\text{NDF}$ : 94230119572030

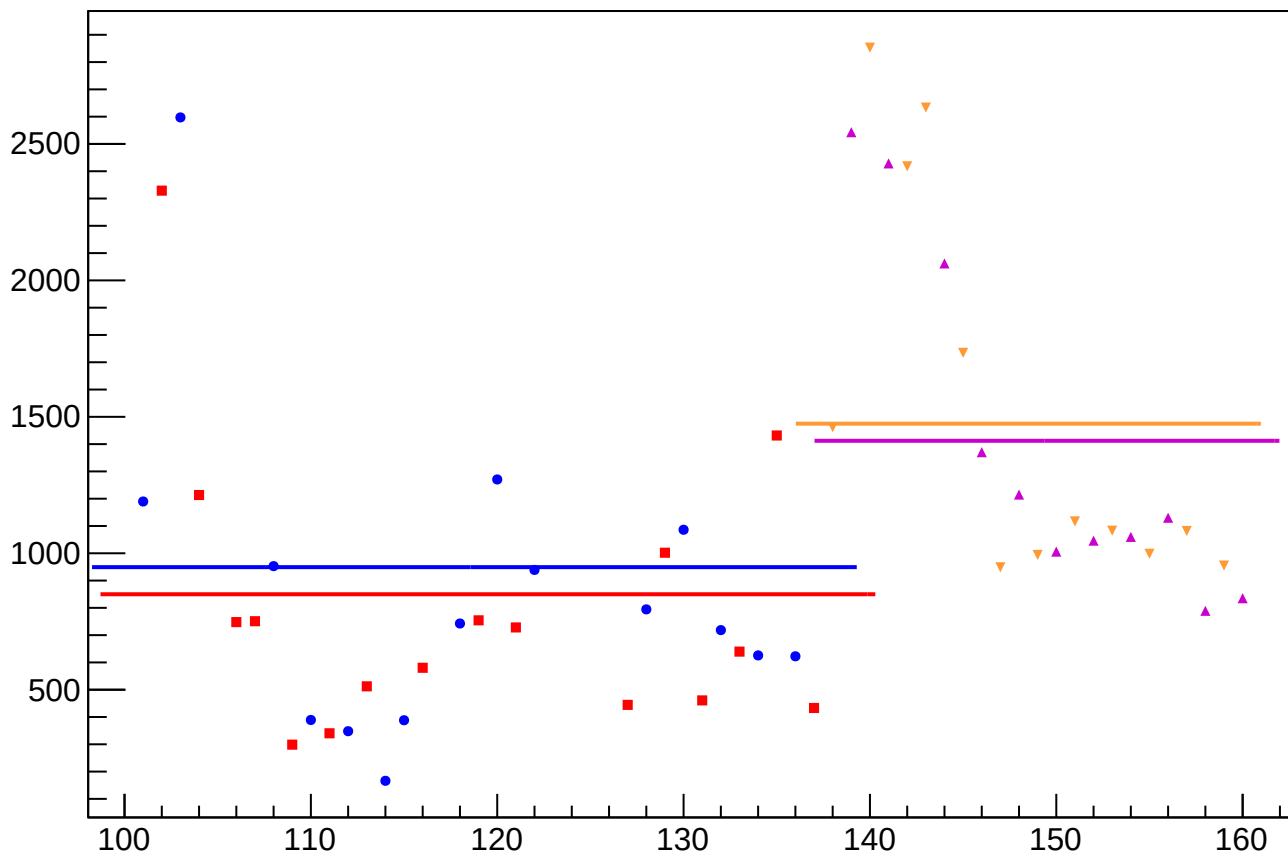


# dit\_sam4\_coil1\_mean vs Slug



Right In:  $53422.452 \pm 0.000$   $\chi^2/\text{NDF}$ : 360635757315133800133751123167777346551808.0/14  
 Left Out:  $87421.965 \pm 0.000$   $\chi^2/\text{NDF}$ : 176009447933973172298765808269588074332160.0/11  
 Right Out:  $45247.617 \pm 0.000$   $\chi^2/\text{NDF}$ : 286060196488034430215784613374055547928576.0/15  
 Left In:  $90573.760 \pm 0.000$   $\chi^2/\text{NDF}$ : 90574081394354221593949262312406685581312.0/10

dit\_sam4\_coil1\_err\_mean vs Slug



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

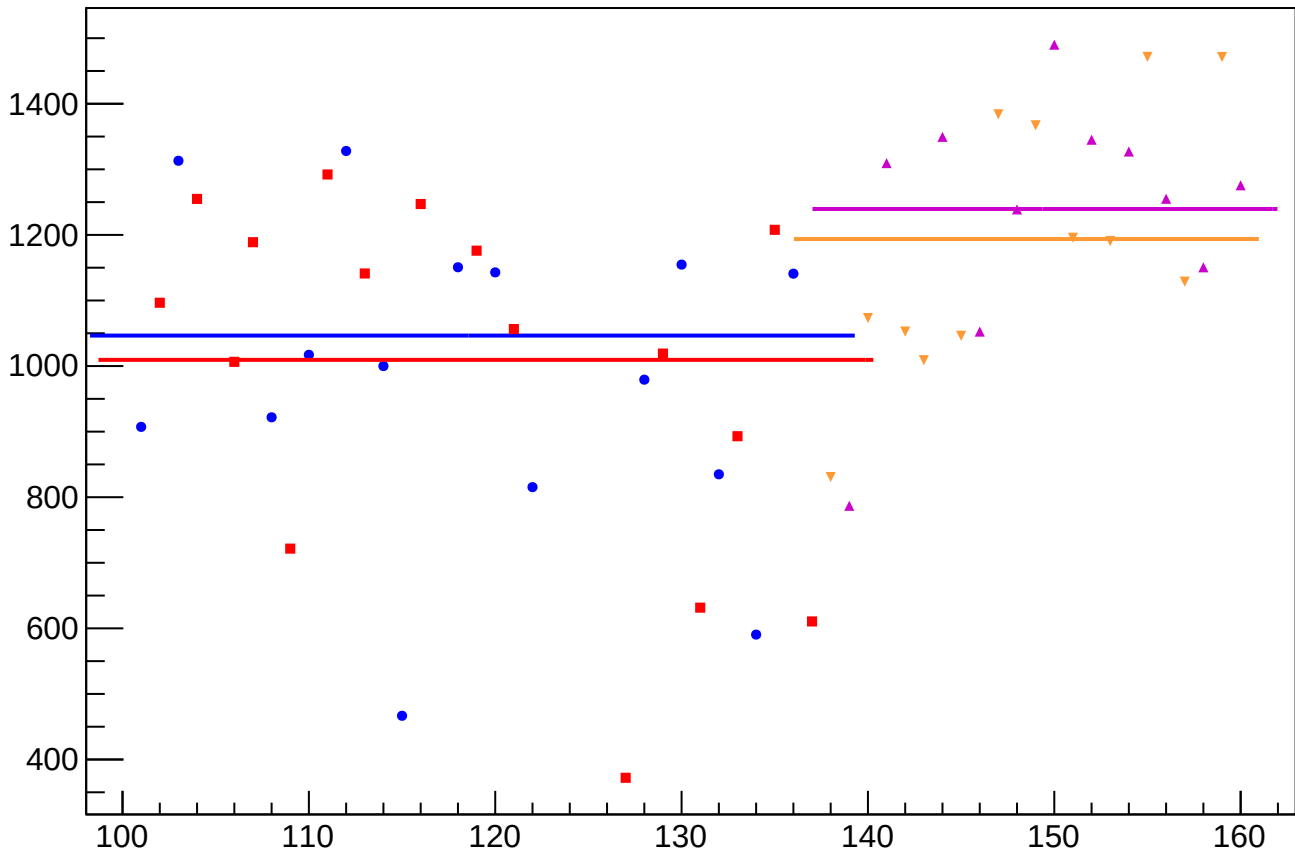
Left In: 1412.186+/-0.000  $\chi^2/\text{NDF}$ : 332529390934897118157875972661756035072.0/10

+ sign 1256.670+/-0.000  $\chi^2/\text{NDF}$ : 73839035869210

All: 1216.192+/-0.000  $\chi^2/\text{NDF}$ : 14031243171

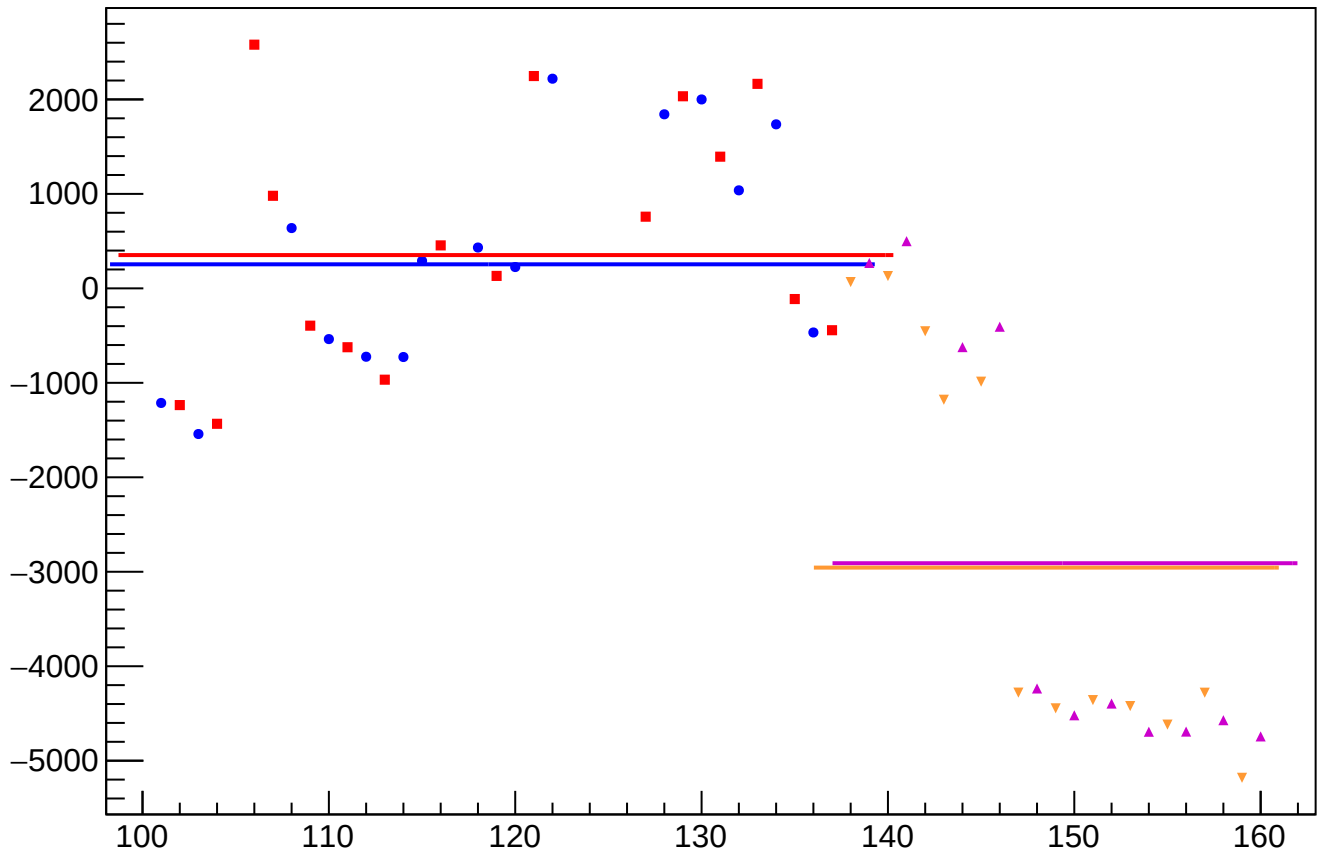
- sign 1176.426+/-0.000  $\chi^2/\text{NDF}$ : 65965720923462

dit\_sam4\_coil1\_Ndata\_mean vs Slug



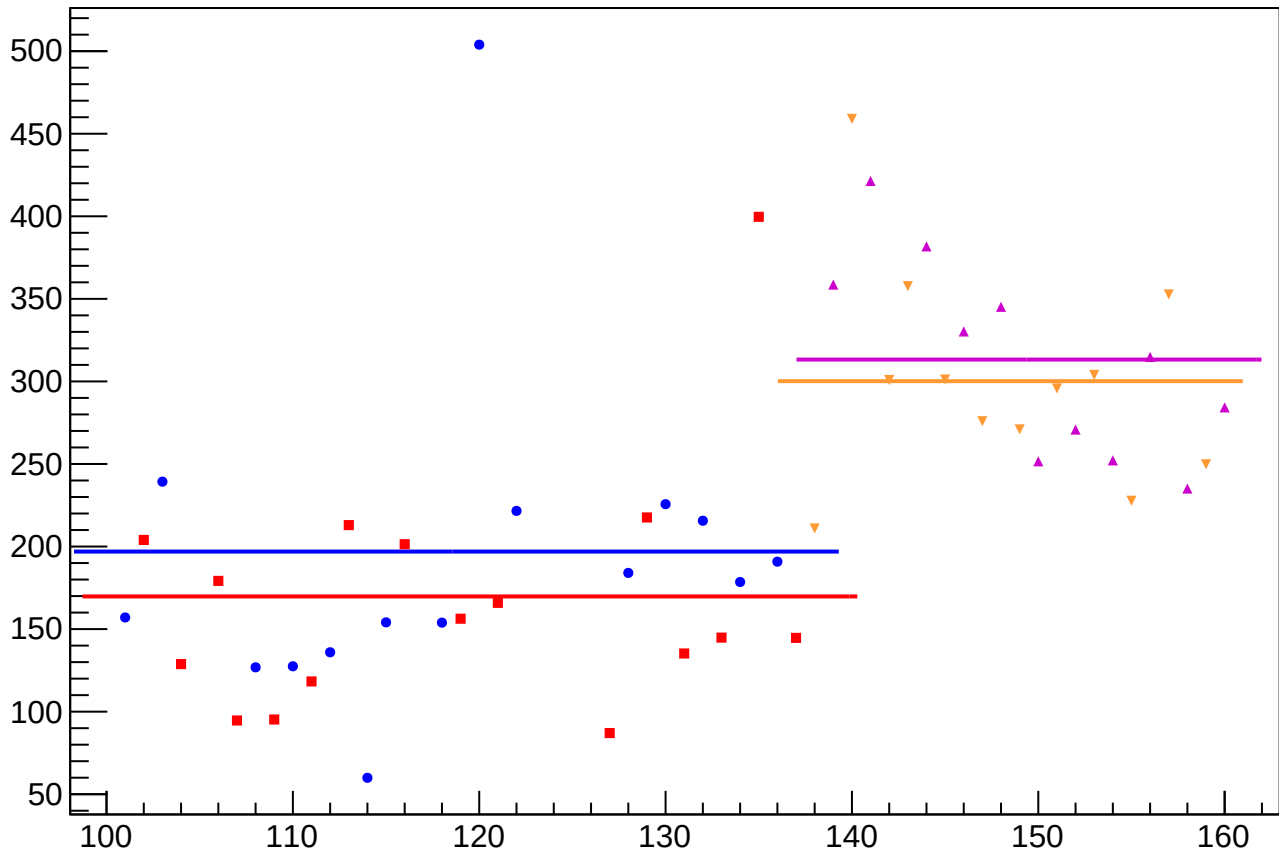
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: 1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

# dit\_sam5\_coil1\_mean vs Slug



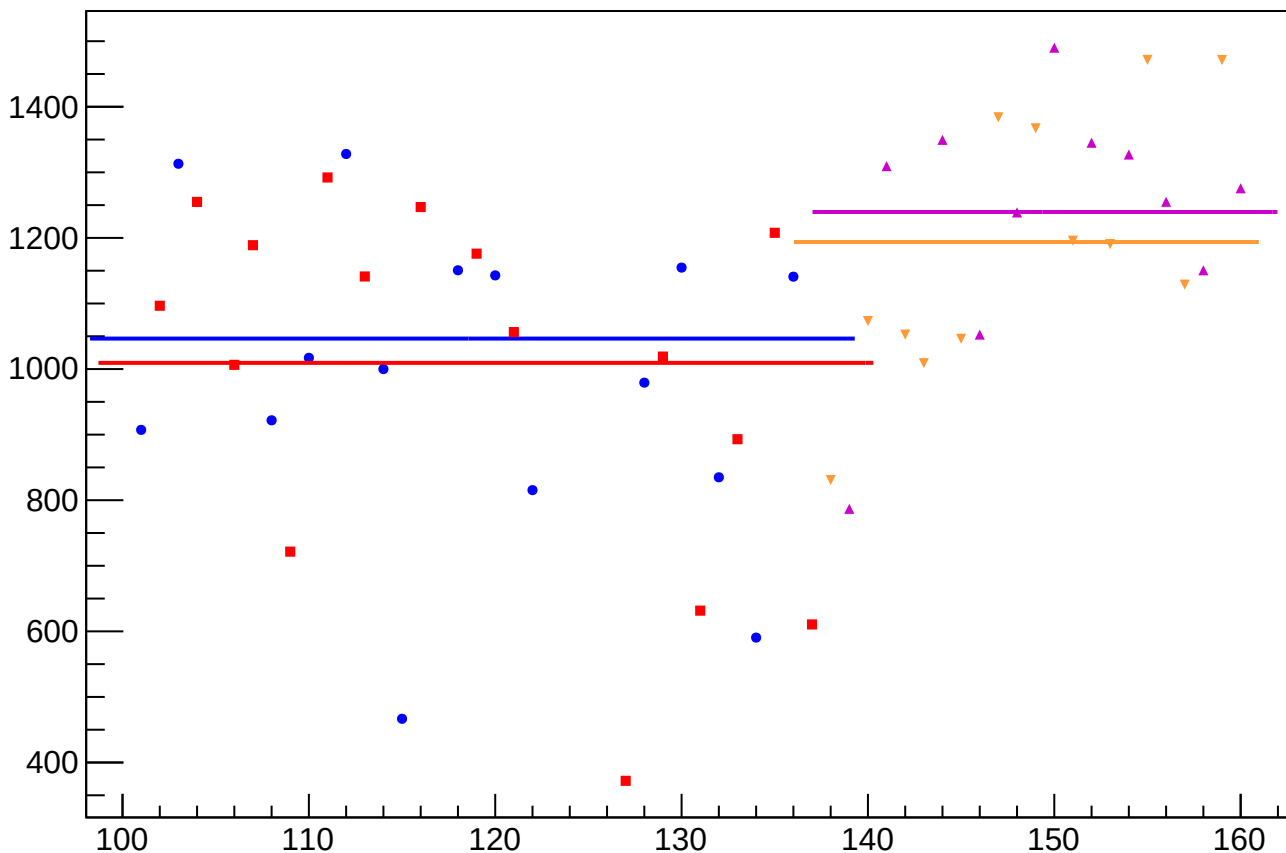
Right In: 254.578+/-0.000  $\chi^2/\text{NDF}$ : 978402113531006640741569223967249530880.0/14  
 Left Out: -2955.997+/-0.000  $\chi^2/\text{NDF}$ : 3707818280907677847342876591435129290752.0/11  
 Right Out: 352.308+/-0.000  $\chi^2/\text{NDF}$ : 1100813647101508513447529068154010468352.0/15  
 Left In: -2909.545+/-0.000  $\chi^2/\text{NDF}$ : 4377323512278558404902073126276443406336.0/10

dit\_sam5\_coil1\_err\_mean vs Slug



|                            |                                                                  |                        |                                       |
|----------------------------|------------------------------------------------------------------|------------------------|---------------------------------------|
| Right In: 196.955+/-0.000  | $\chi^2/\text{NDF}$ : 4485245160329657914621372425838788608.0/14 | + sign 257.303+/-0.000 | $\chi^2/\text{NDF}$ : 124000774019819 |
| Left Out: 300.154+/-0.000  | $\chi^2/\text{NDF}$ : 3873021428685352941137053448690204672.0/11 | All: 255.177+/-0.000   | $\chi^2/\text{NDF}$ : 273569793225    |
| Right Out: 169.778+/-0.000 | $\chi^2/\text{NDF}$ : 3892609445494845784493558646385410048.0/15 | - sign 253.089+/-0.000 | $\chi^2/\text{NDF}$ : 149429007533601 |
| Left In: 313.228+/-0.000   | $\chi^2/\text{NDF}$ : 3079061701843560714774529768142405632.0/10 |                        |                                       |

dit\_sam5\_coil1\_Ndata\_mean vs Slug



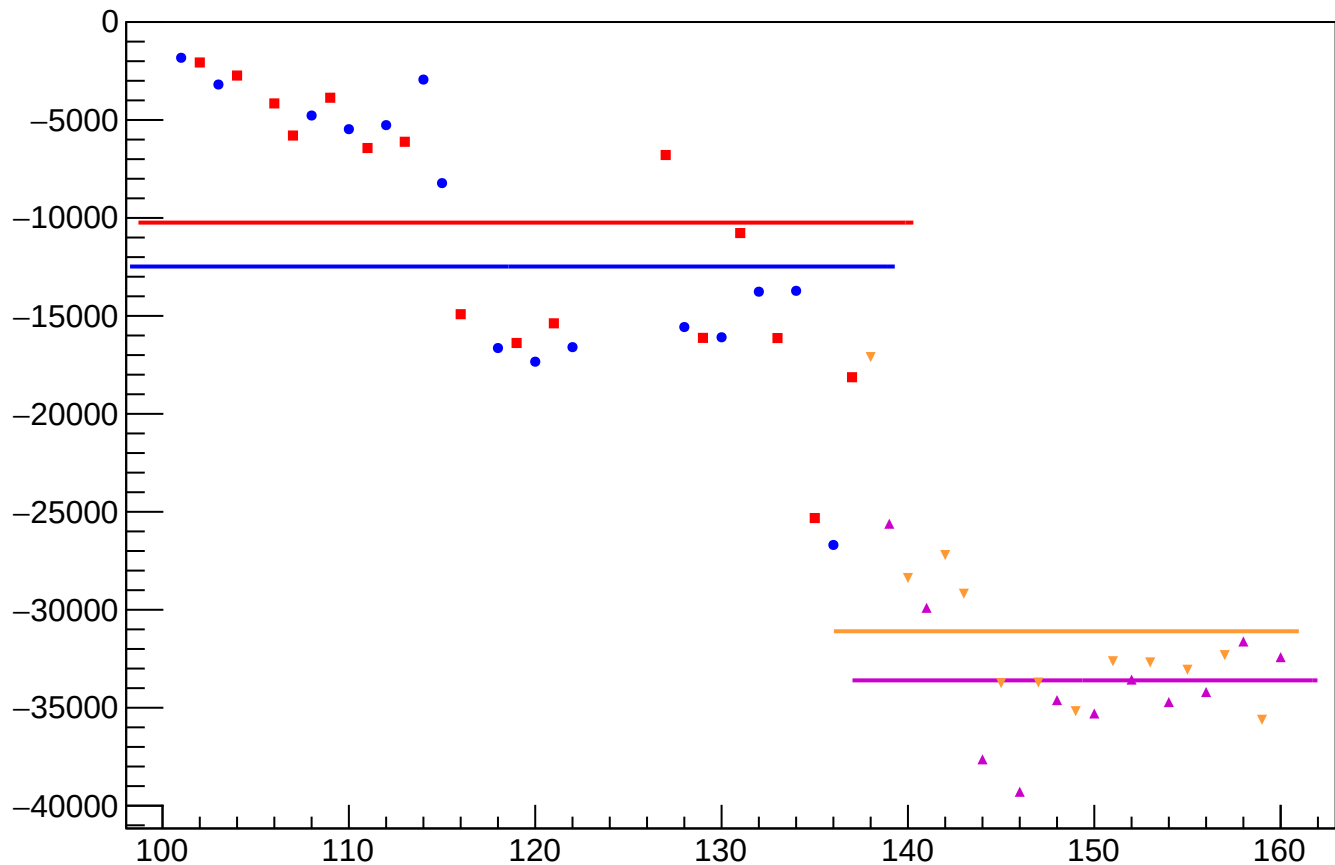
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14

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

dit\_sam6\_coil1\_mean vs Slug



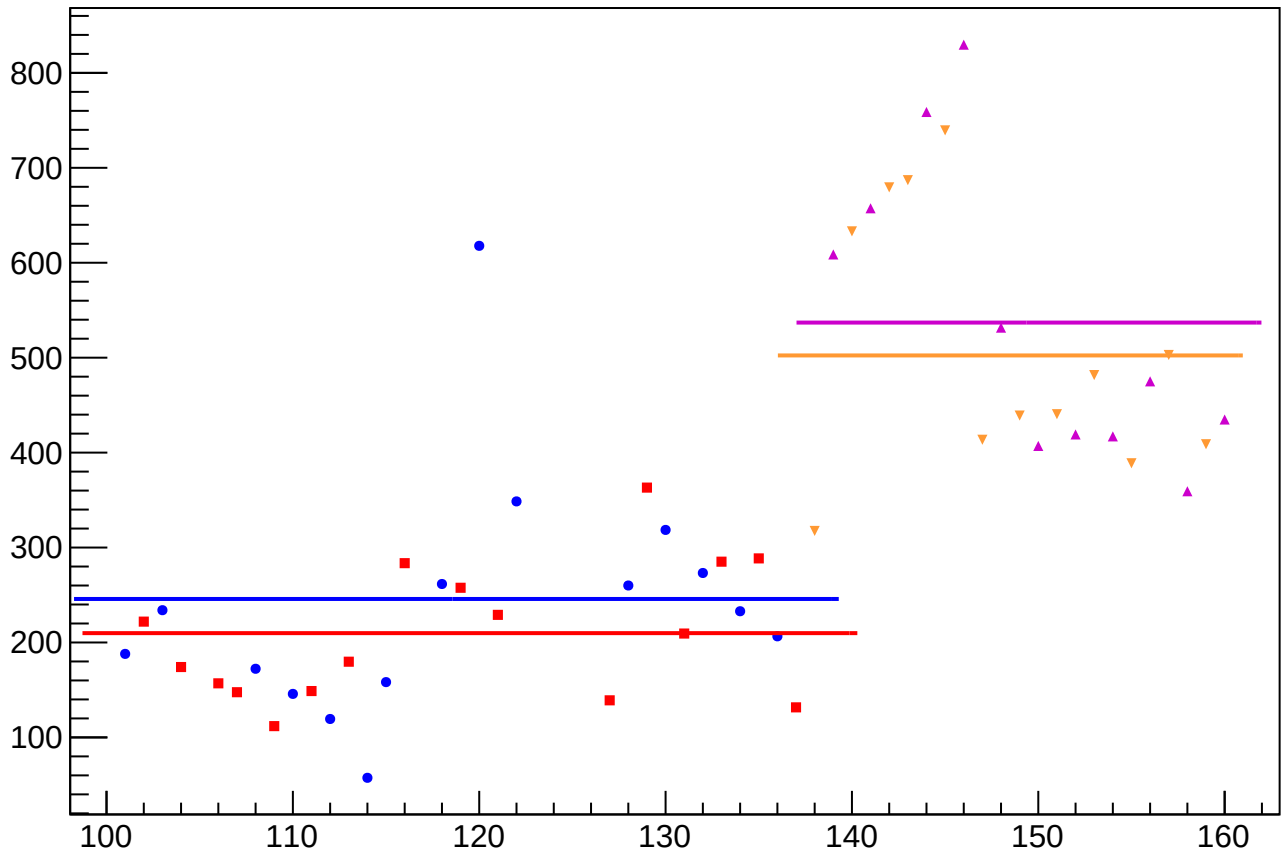
|                               |                                                                      |
|-------------------------------|----------------------------------------------------------------------|
| Right In: -12479.653+/-0.000  | $\chi^2/\text{NDF}$ : 41178633231253805317353333973475271901184.0/14 |
| 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 |

+ sign -23366.201+/-0.000  $\chi^2/\text{NDF}$ : 194472008437

All: -23588.925+/-0.000  $\chi^2/\text{NDF}$ : 448707023

- sign -23807.730+/-0.000  $\chi^2/\text{NDF}$ : 2540813105175

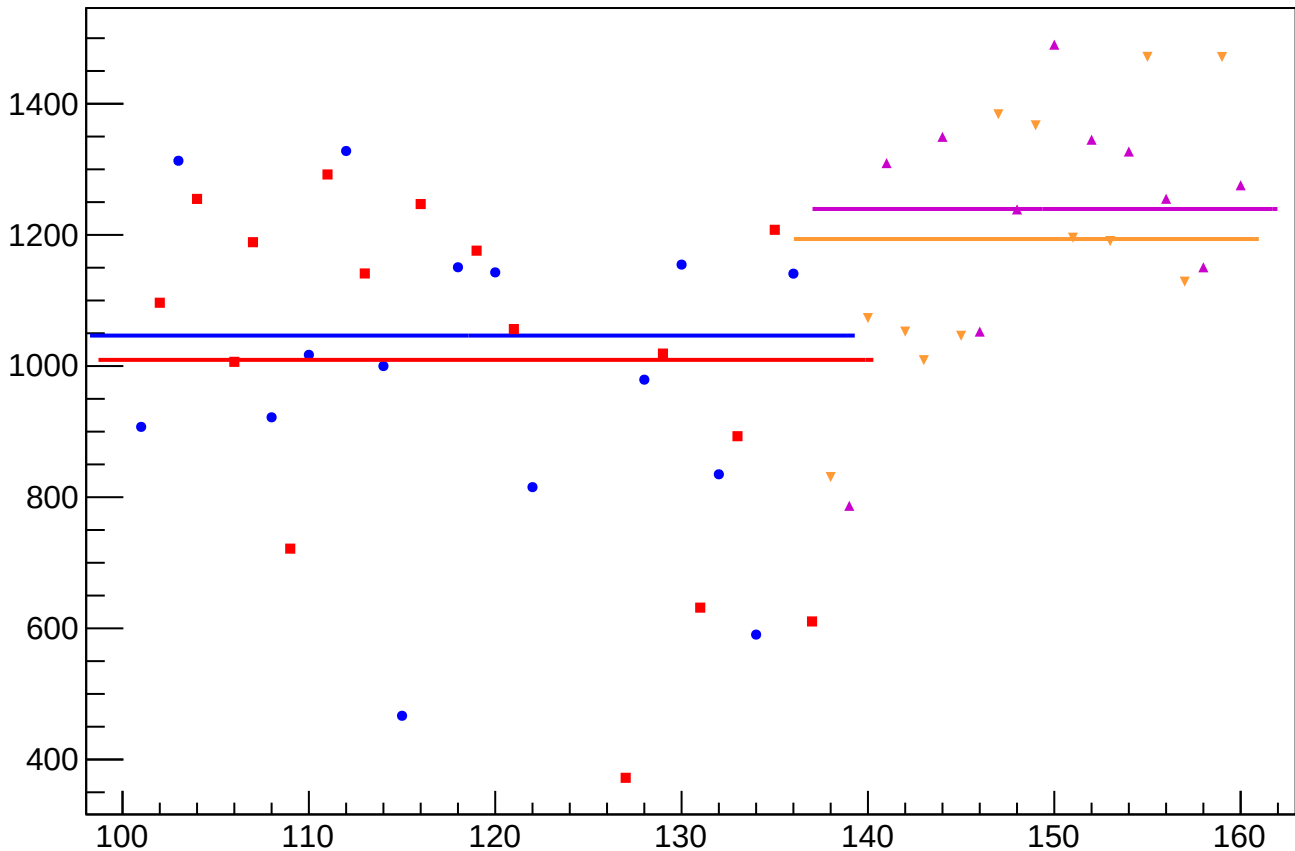
dit\_sam6\_coil1\_err\_mean vs Slug



|                            |                                                                   |                        |                                       |
|----------------------------|-------------------------------------------------------------------|------------------------|---------------------------------------|
| Right In: 245.832+/-0.000  | $\chi^2/\text{NDF}$ : 7828269009300013139414476154059358208.0/14  | + sign 395.846+/-0.000 | $\chi^2/\text{NDF}$ : 479955291741577 |
| Left Out: 502.365+/-0.000  | $\chi^2/\text{NDF}$ : 15191566092864942113763626663922368512.0/11 | All: 397.856+/-0.000   | $\chi^2/\text{NDF}$ : 113394044527    |
| Right Out: 209.844+/-0.000 | $\chi^2/\text{NDF}$ : 3128489258838765241921217786024034304.0/15  | - sign 399.831+/-0.000 | $\chi^2/\text{NDF}$ : 653859962401754 |
| Left In: 536.975+/-0.000   | $\chi^2/\text{NDF}$ : 20803022486400810956958367719555596288.0/10 |                        |                                       |

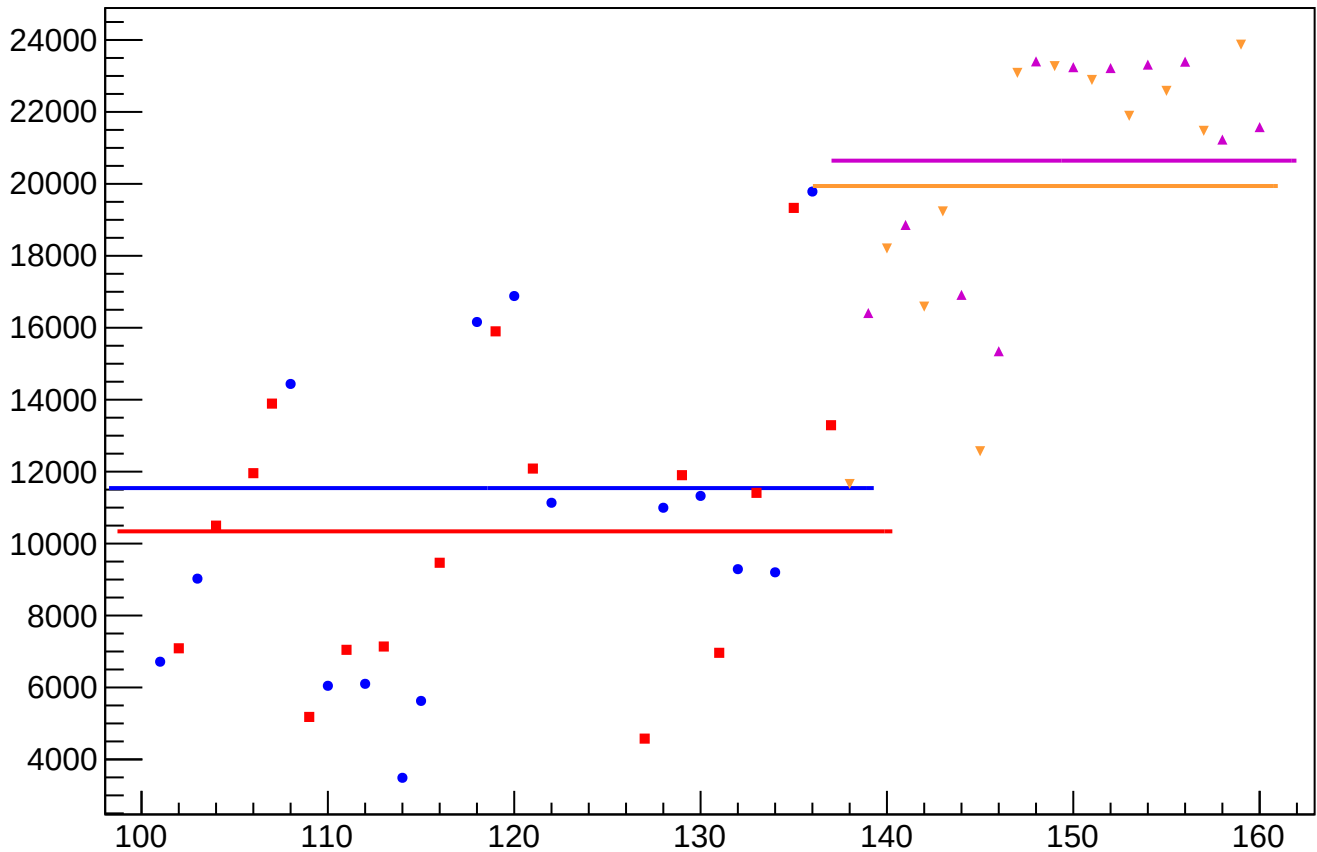


dit\_sam6\_coil1\_Ndata\_mean vs Slug



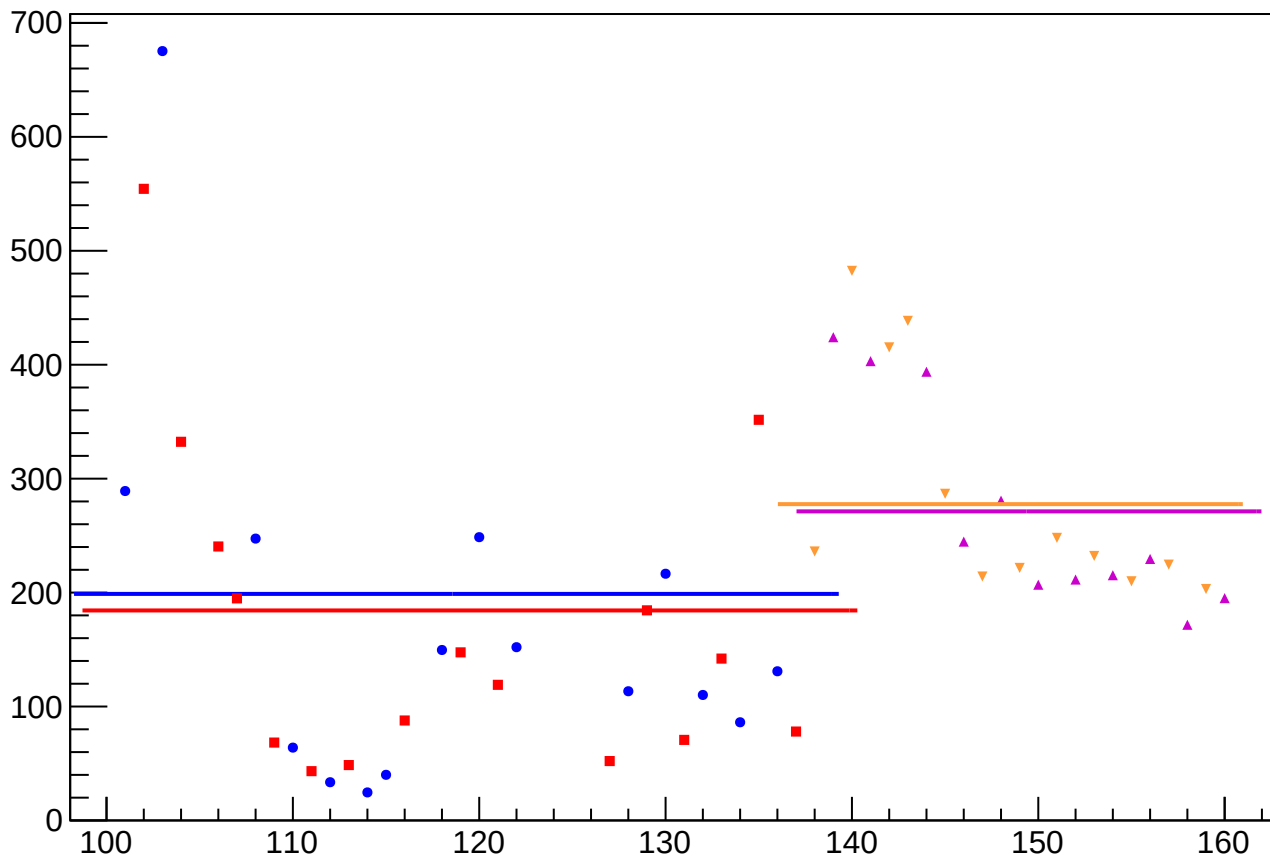
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: 1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

# dit\_sam7\_coil1\_mean vs Slug



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

dit\_sam7\_coil1\_err\_mean vs Slug



Right In: 198.850+/-0.000  $\chi^2/\text{NDF}$ : 18333995109503438037075916944440295424.0/14

Left Out: 277.638+/-0.000  $\chi^2/\text{NDF}$ : 8038613705890486227984688847014330368.0/11

Right Out: 184.328+/-0.000  $\chi^2/\text{NDF}$ : 14927434931395588601024961538372403200.0/15

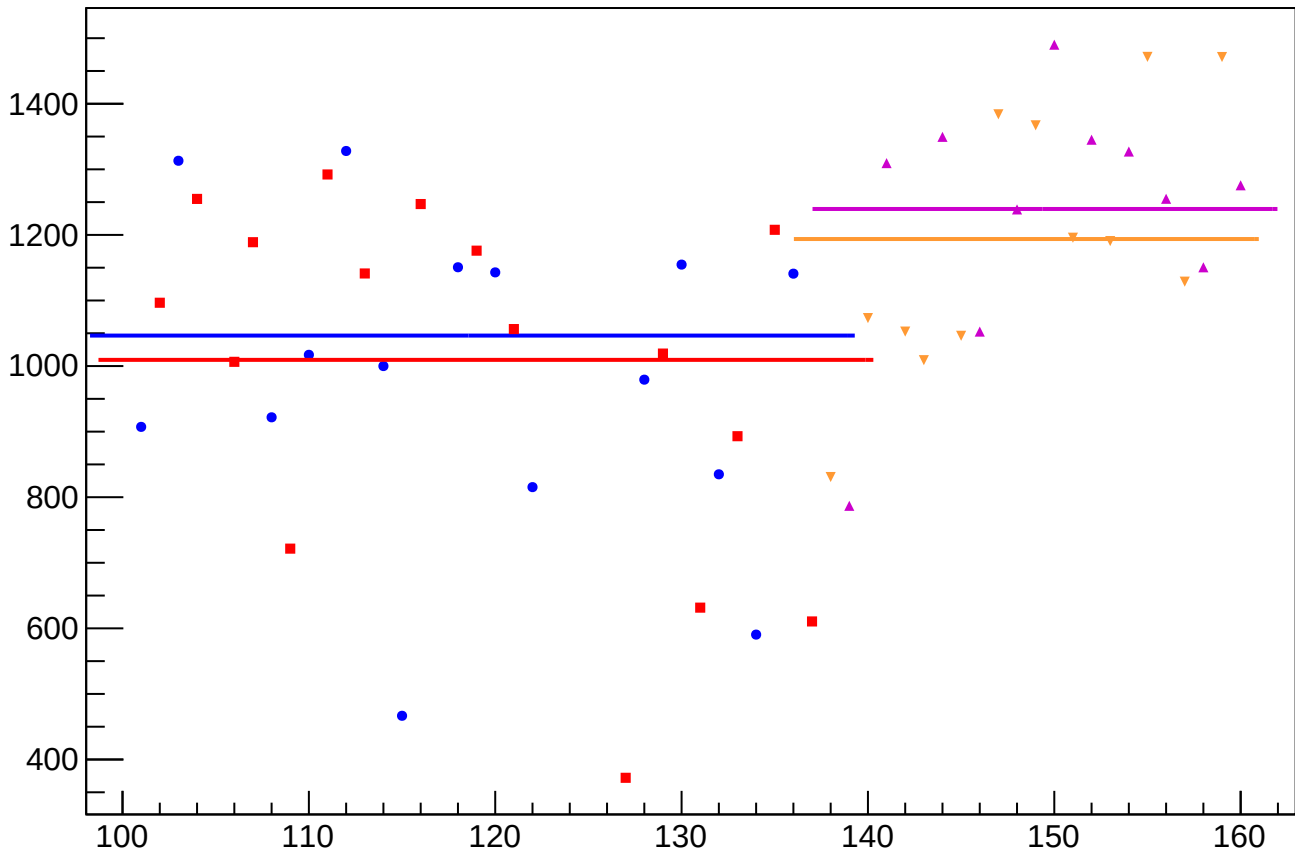
Left In: 271.291+/-0.000  $\chi^2/\text{NDF}$ : 7112445981030520145066814103974051840.0/10

+ sign 244.923+/-0.000  $\chi^2/\text{NDF}$ : 287284397950927

All: 239.833+/-0.000  $\chi^2/\text{NDF}$ : 537780837700

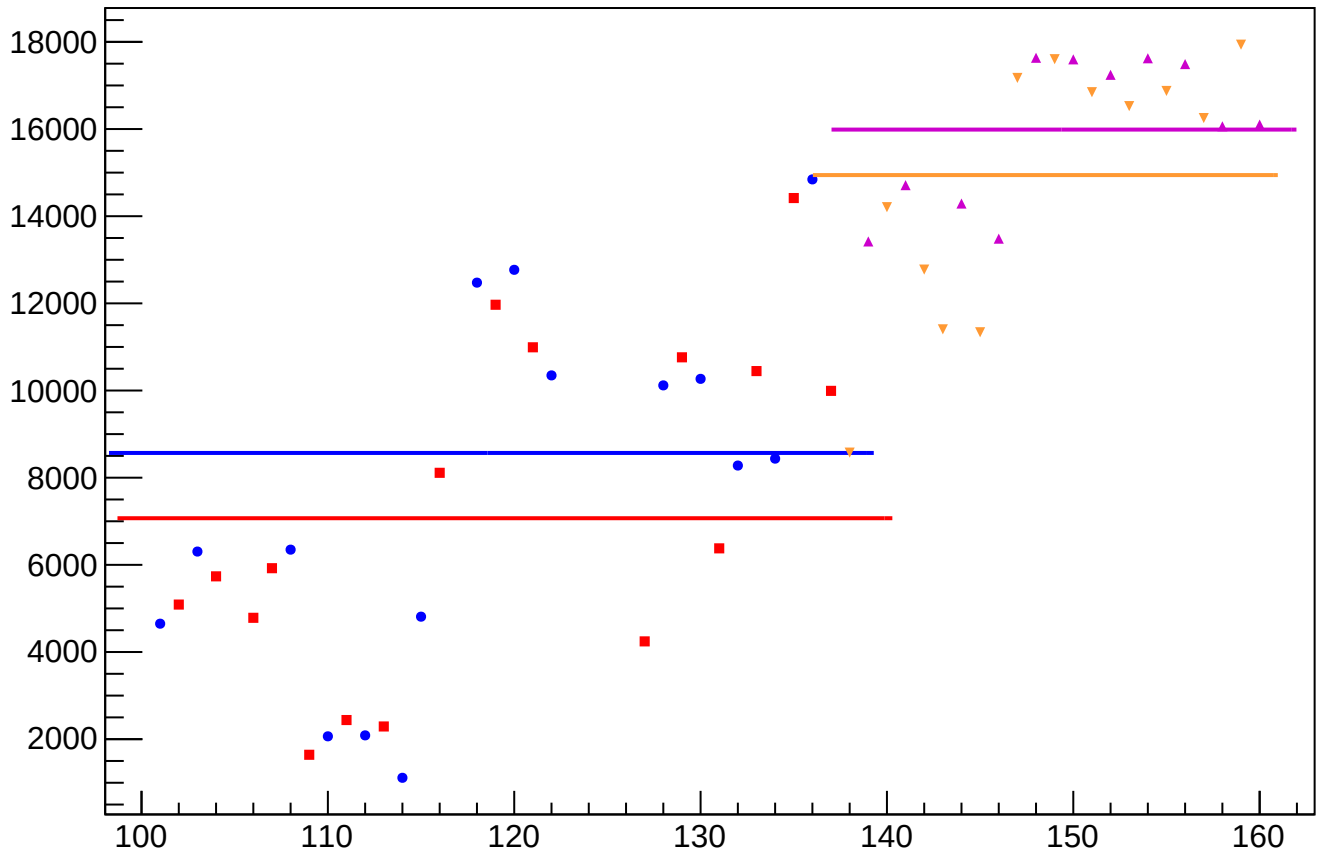
- sign 234.833+/-0.000  $\chi^2/\text{NDF}$ : 249693821998186

dit\_sam7\_coil1\_Ndata\_mean vs Slug



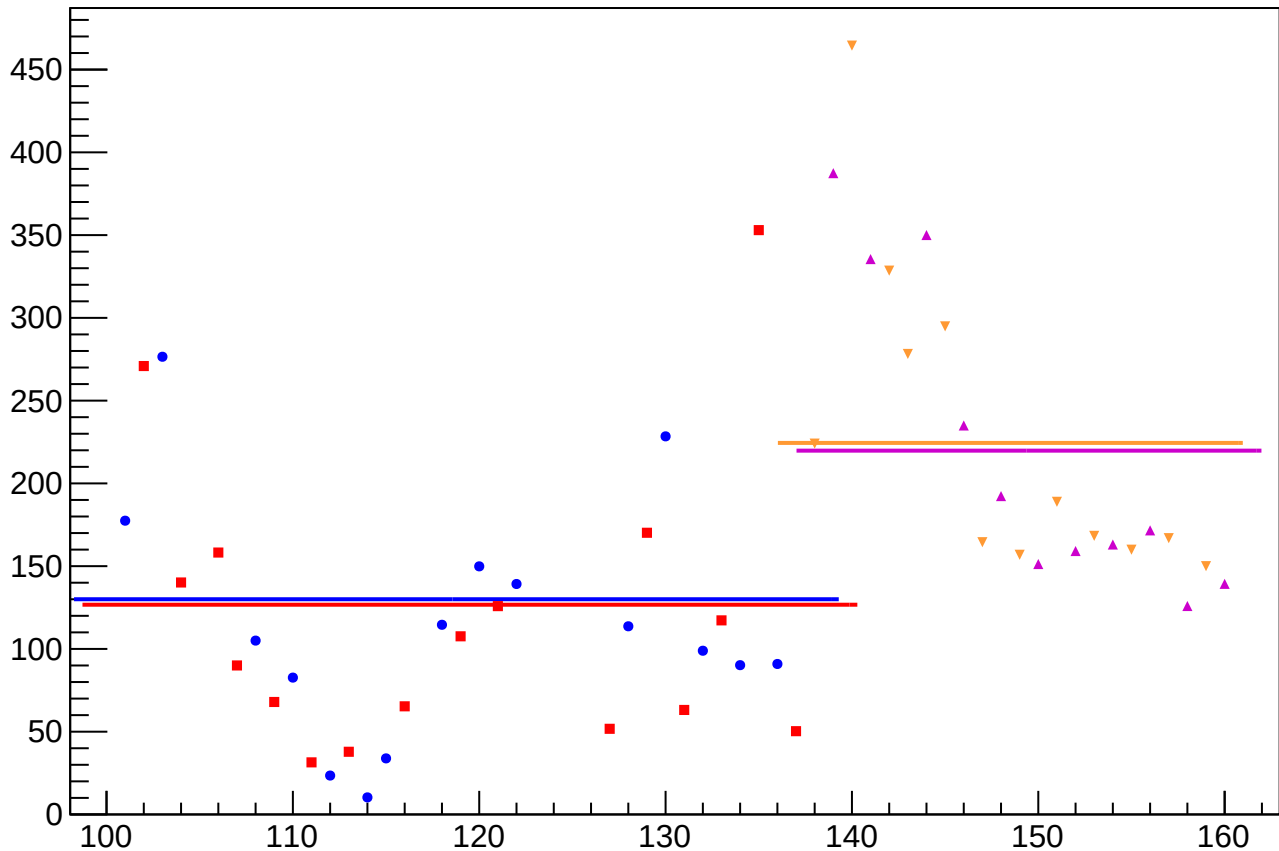
Right In: 1046.490+/-0.000  $\chi^2/\text{NDF}$ : 24866624766048512267031234680614551552.0/14  
 Left Out: 1193.726+/-0.000  $\chi^2/\text{NDF}$ : 34388618994267285012310712301196935168.0/11  
 Right Out: 1009.445+/-0.000  $\chi^2/\text{NDF}$ : 44602783681728168935494176019868286976.0/15  
 Left In: 1239.553+/-0.000  $\chi^2/\text{NDF}$ : 29116180330425505242594030704390045696.0/10

# dit\_sam8\_coil1\_mean vs Slug



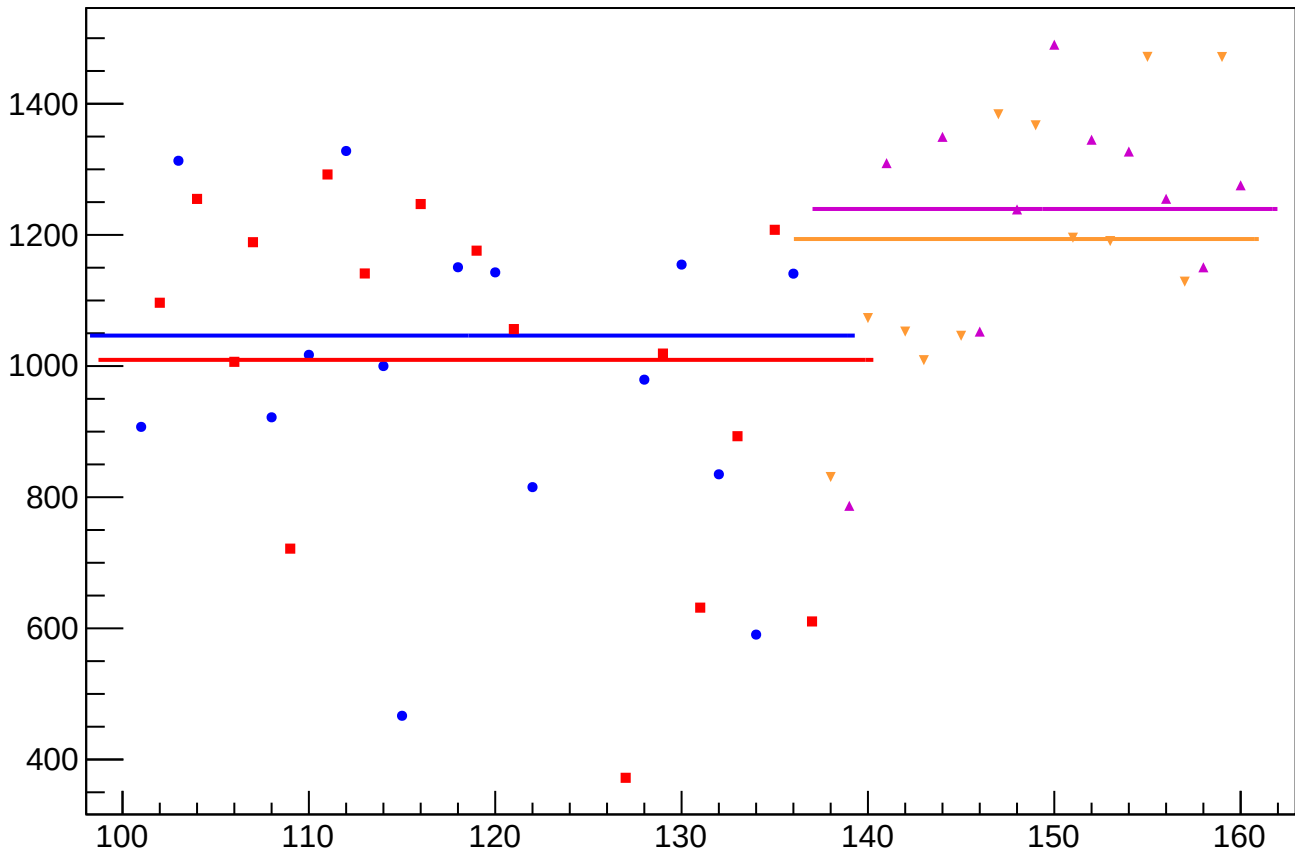
Right In: 8567.784+/-0.000  $\chi^2/\text{NDF}$ : 11106048878972501366429055679645708451840.0/14  
 Left Out: 14943.560+/-0.000  $\chi^2/\text{NDF}$ : 7900539606524387386359998406585036570624.0/11  
 Right Out: 7069.884+/-0.000  $\chi^2/\text{NDF}$ : 10076862363502652111378210539664387866624.0/15  
 Left In: 15987.436+/-0.000  $\chi^2/\text{NDF}$ : 2470393428254815728629083332629999124480.0/10

dit\_sam8\_coil1\_err\_mean vs Slug



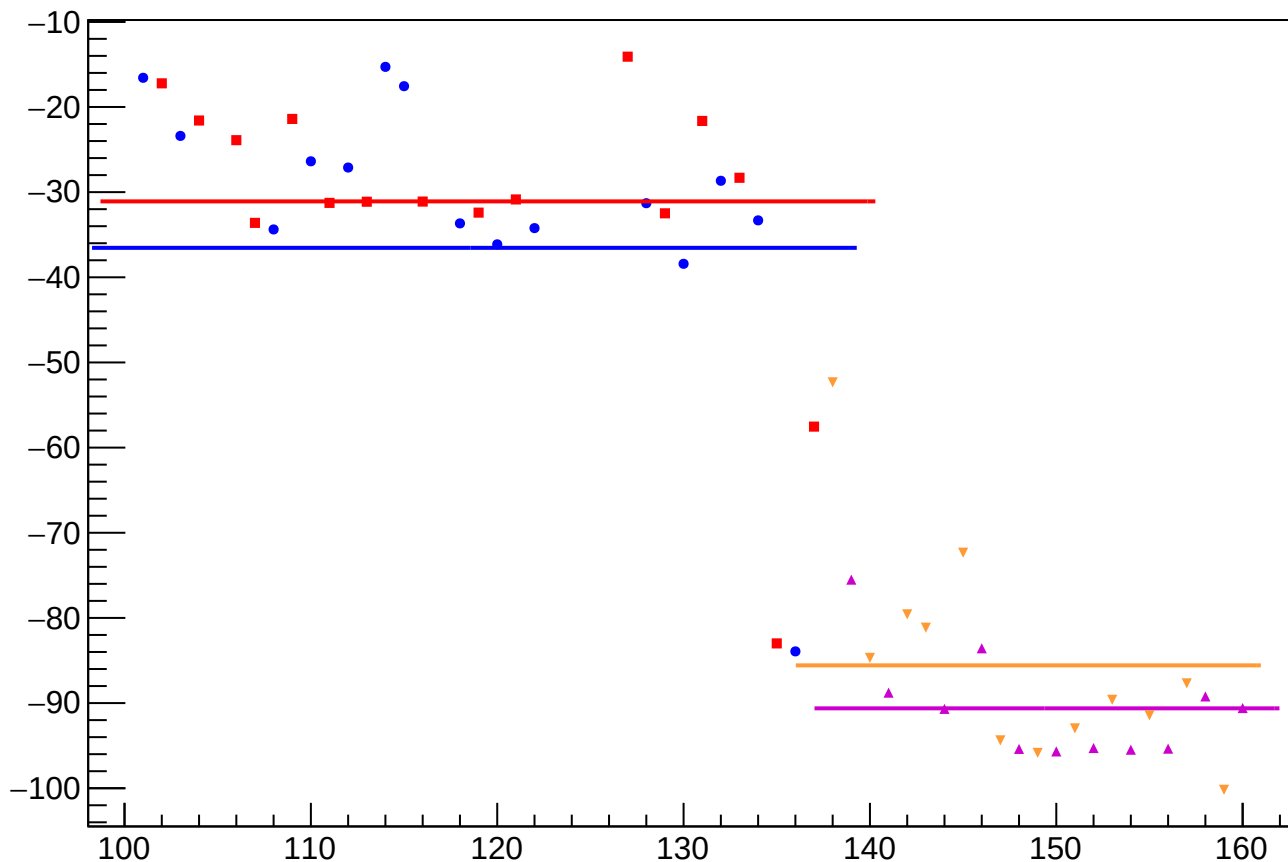
Right In: 130.021+/-0.000  $\chi^2/\text{NDF}$ : 3115259987552341725946418665378283520.0/14  
 Left Out: 224.458+/-0.000  $\chi^2/\text{NDF}$ : 7870394140048491055430374232164401152.0/11  
 Right Out: 126.709+/-0.000  $\chi^2/\text{NDF}$ : 5397122581297664561308621600668516352.0/15  
 Left In: 219.787+/-0.000  $\chi^2/\text{NDF}$ : 7418609629454172879787970620999860224.0/10

dit\_sam8\_coil1\_Ndata\_mean vs Slug



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

# dit\_4aX\_coil3\_mean vs Slug



Right In: -36.540+/-0.000  $\chi^2/\text{NDF}$ : 254351867861444609202637633864335360.0/14

Left Out: -85.570+/-0.000  $\chi^2/\text{NDF}$ : 143557776257547990865591640732467200.0/11

Right Out: -31.085+/-0.000  $\chi^2/\text{NDF}$ : 181291079119381636178408498876383232.0/15

Left In: -90.618+/-0.000  $\chi^2/\text{NDF}$ : 33089833083626408117297955498622976.0/10

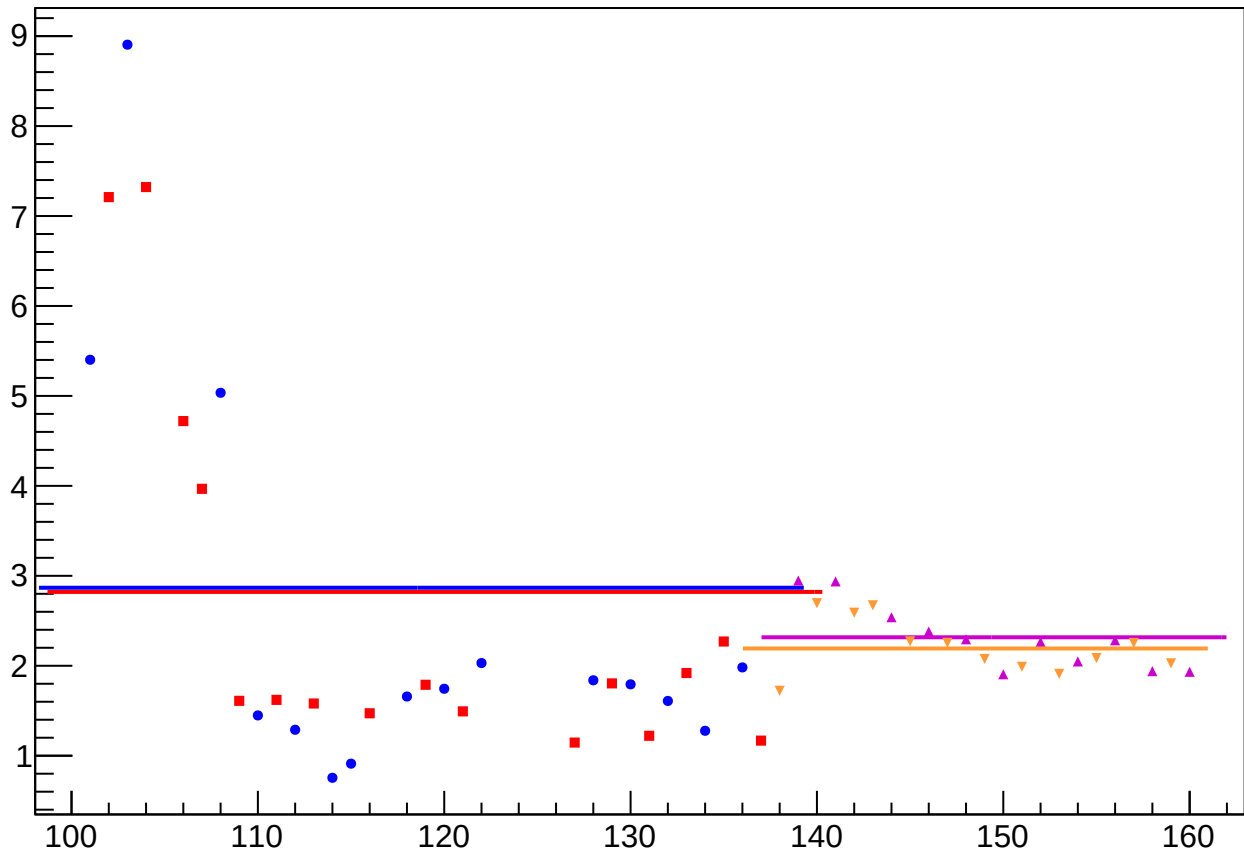
+ sign -65.212+/-0.000  $\chi^2/\text{NDF}$ : 131026728865009

All: -65.438+/-0.000  $\chi^2/\text{NDF}$ : 289770508585

- sign -65.660+/-0.000  $\chi^2/\text{NDF}$ : 1587279434769043

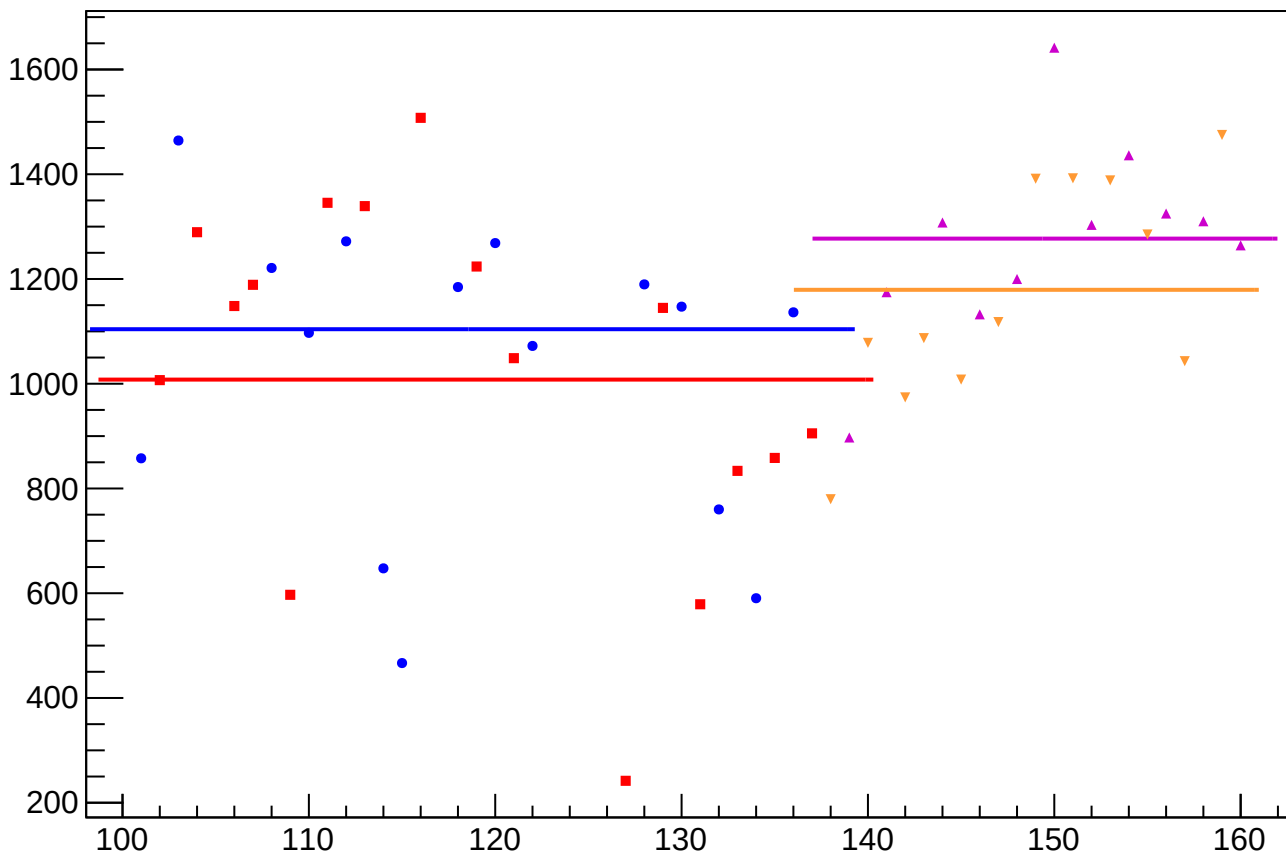


dit\_4aX\_coil3\_err\_mean vs Slug



Right In: 2.867 +/- 0.000  $\chi^2/\text{NDF}$ : 3455499087584693564208174061322240.0/14  
 Left Out: 2.192 +/- 0.000  $\chi^2/\text{NDF}$ : 76043906789141561084580015898624.0/11  
 Right Out: 2.821 +/- 0.000  $\chi^2/\text{NDF}$ : 3052948718107902490497172912472064.0/15  
 Left In: 2.317 +/- 0.000  $\chi^2/\text{NDF}$ : 114372564725079889099013285216256.0/10

dit\_4aX\_coil3\_Ndata\_mean vs Slug



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

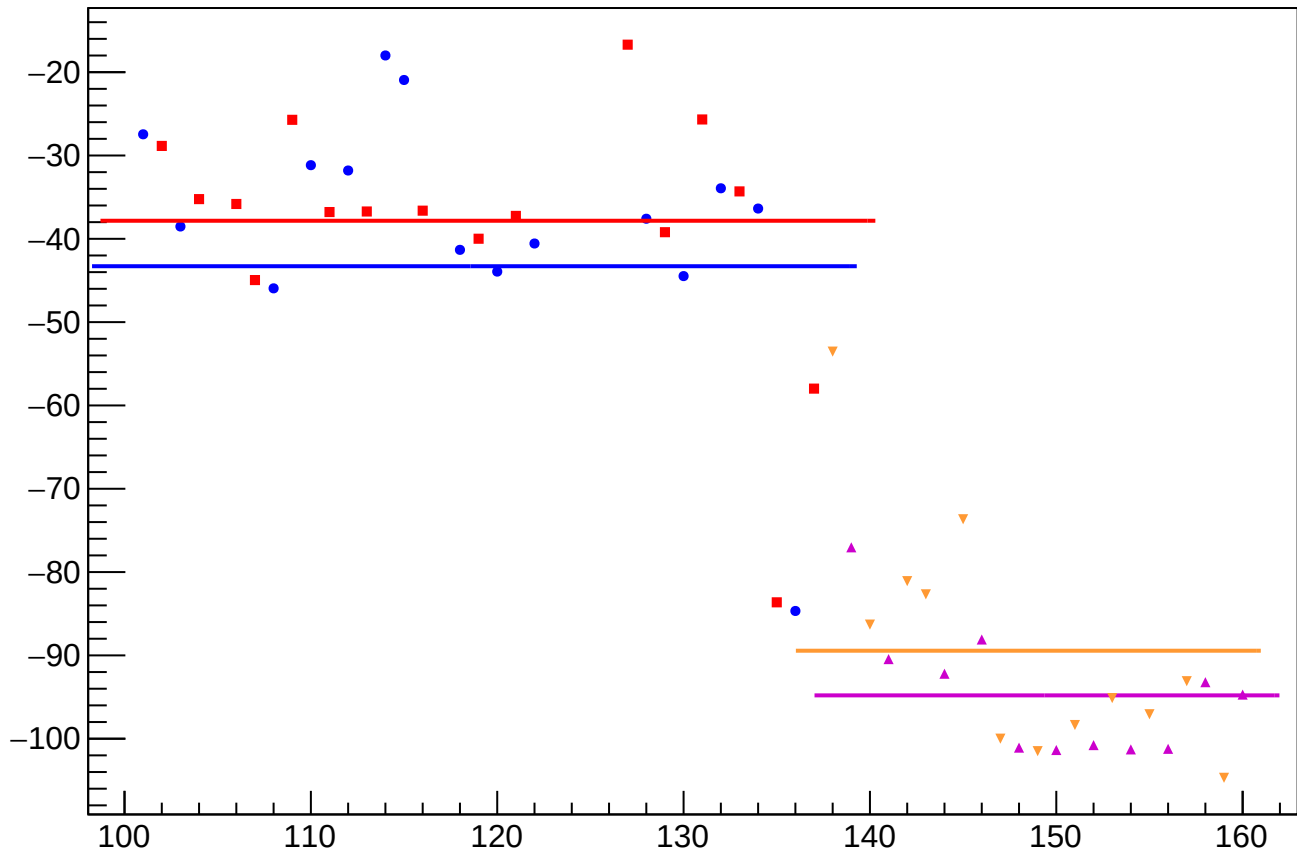
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

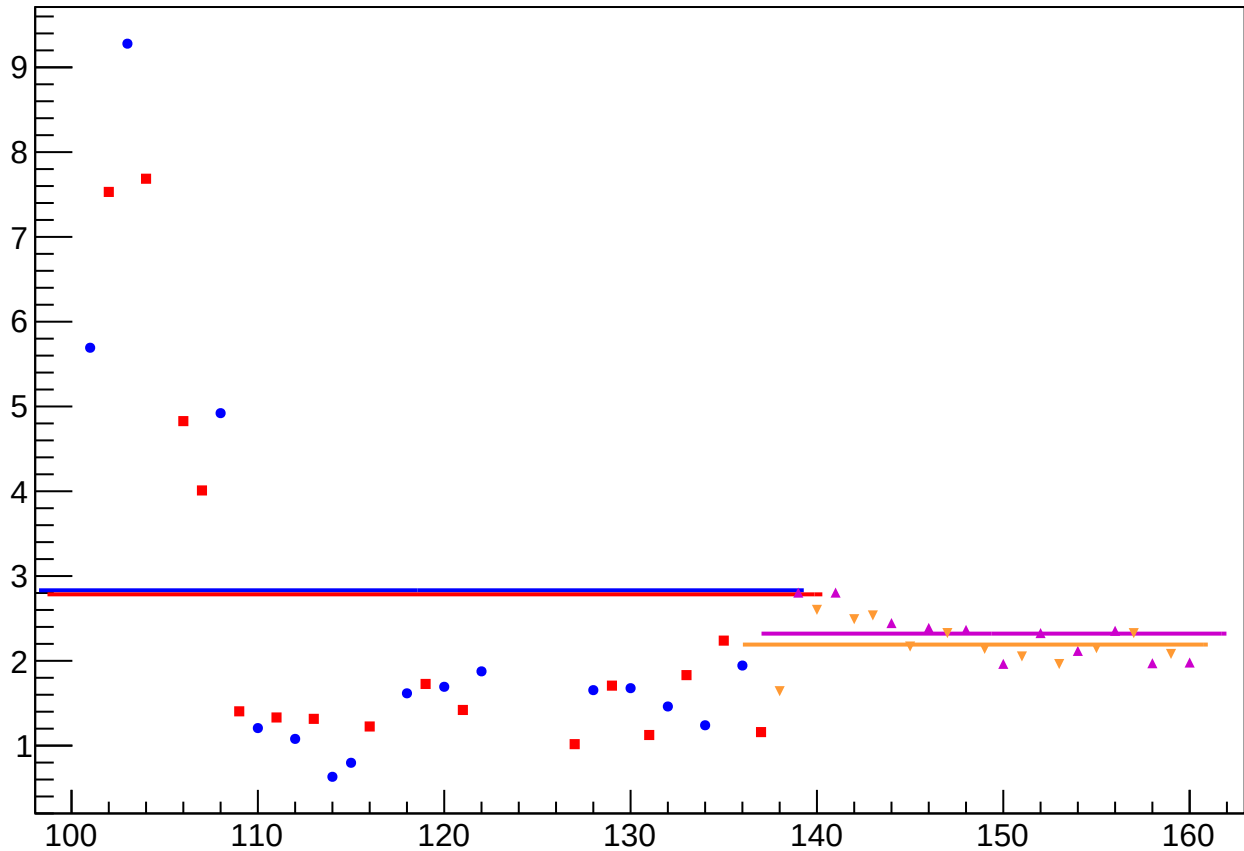
# dit\_4eX\_coil3\_mean vs Slug



|                            |                                                                 |
|----------------------------|-----------------------------------------------------------------|
| Right In: -43.289+/-0.000  | $\chi^2/\text{NDF}$ : 199342736778845281087197523996573696.0/14 |
| Left Out: -89.439+/-0.000  | $\chi^2/\text{NDF}$ : 181119962985690841138788427972476928.0/11 |
| Right Out: -37.832+/-0.000 | $\chi^2/\text{NDF}$ : 148683933977204936634636843897323520.0/15 |
| Left In: -94.799+/-0.000   | $\chi^2/\text{NDF}$ : 49077050032611006982156968074936320.0/10  |

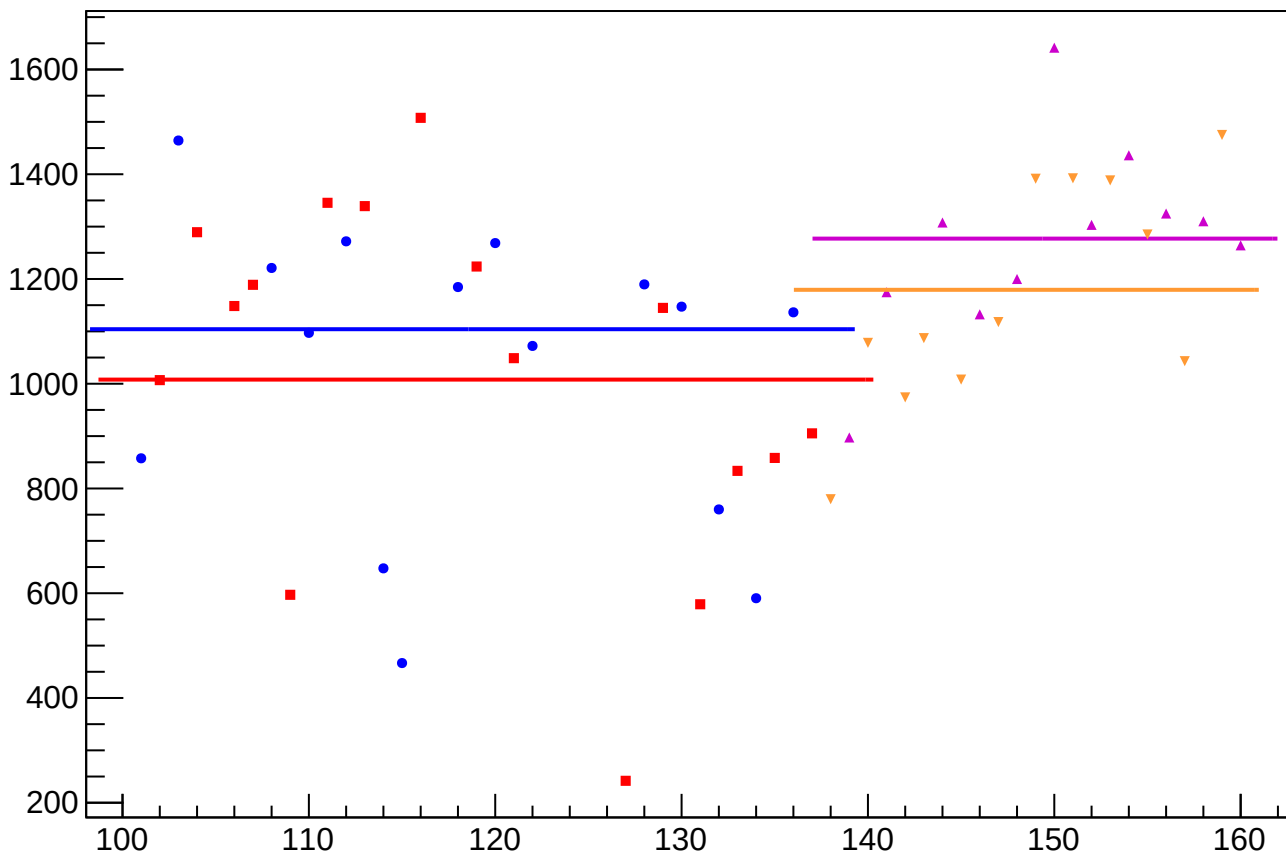
+ sign -70.276+/-0.000  $\chi^2/\text{NDF}$ : 118874483717720  
 All: -70.599+/-0.000  $\chi^2/\text{NDF}$ : 264393332090  
 - sign -70.917+/-0.000  $\chi^2/\text{NDF}$ : 1454865139874700

dit\_4eX\_coil3\_err\_mean vs Slug



Right In:  $2.832 \pm 0.000$   $\chi^2/\text{NDF}$ : 3957672531929017328512564323155968.0/14  
 Left Out:  $2.192 \pm 0.000$   $\chi^2/\text{NDF}$ : 59601559247415008947816525463552.0/11  
 Right Out:  $2.784 \pm 0.000$   $\chi^2/\text{NDF}$ : 3589544956108116898091236897849344.0/15  
 Left In:  $2.321 \pm 0.000$   $\chi^2/\text{NDF}$ : 74619123224616324544404505231360.0/10

dit\_4eX\_coil3\_Ndata\_mean vs Slug



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

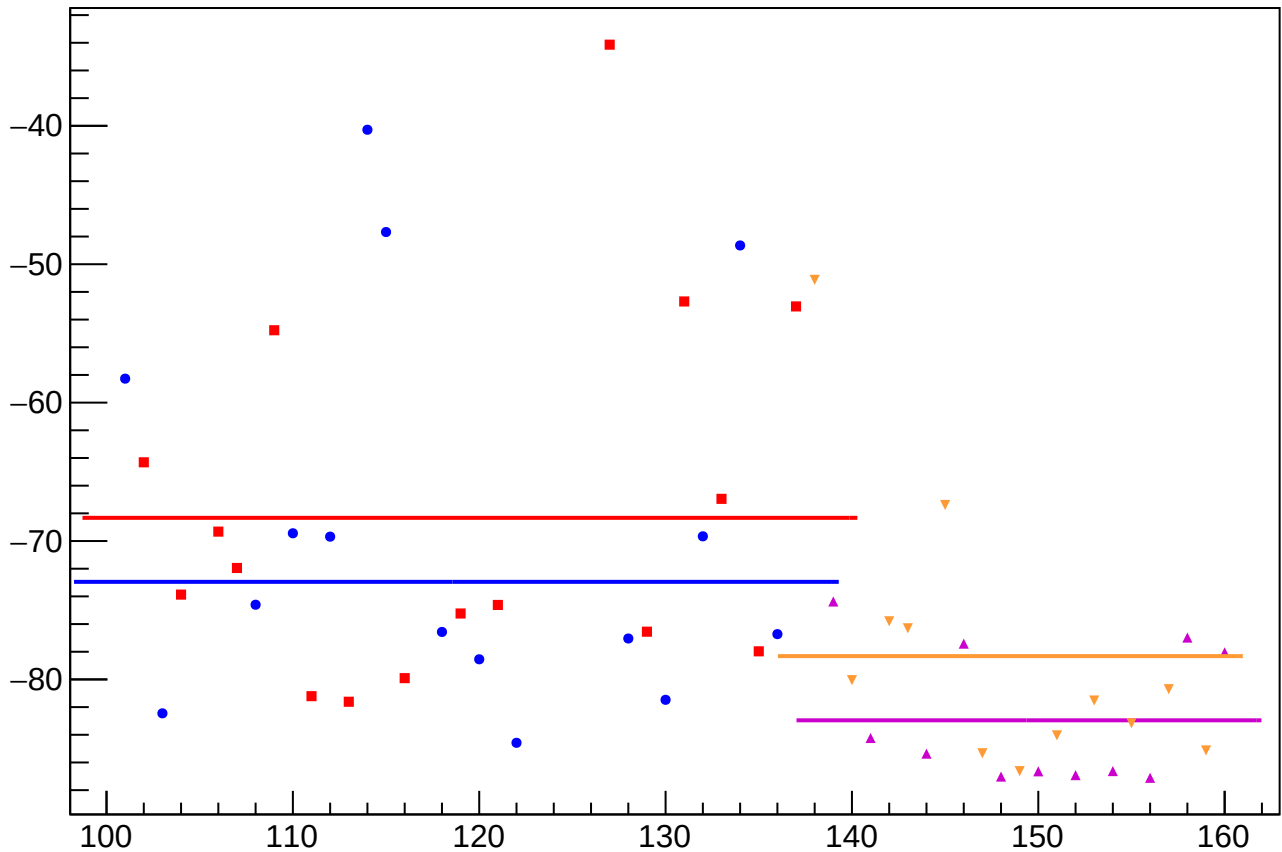
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

dit\_11X12X\_coil3\_mean vs Slug



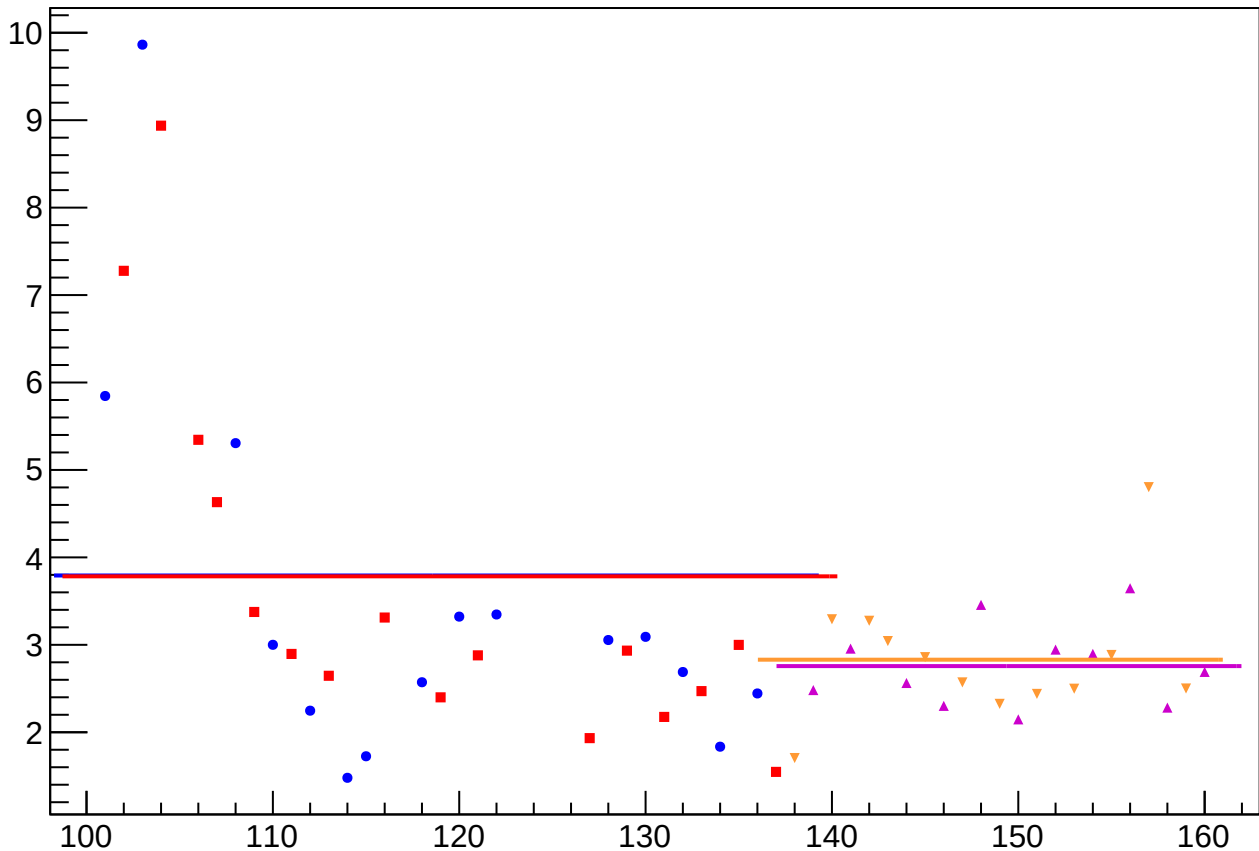
Right In: -72.949+/-0.000  $\chi^2/\text{NDF}$ : 65755428464857980306879126291087360.0/14

Left Out: -78.317+/-0.000  $\chi^2/\text{NDF}$ : 86858932587671188594087415160766464.0/11

Right Out: -68.324+/-0.000  $\chi^2/\text{NDF}$ : 106694344898202364483367131372584960.0/15

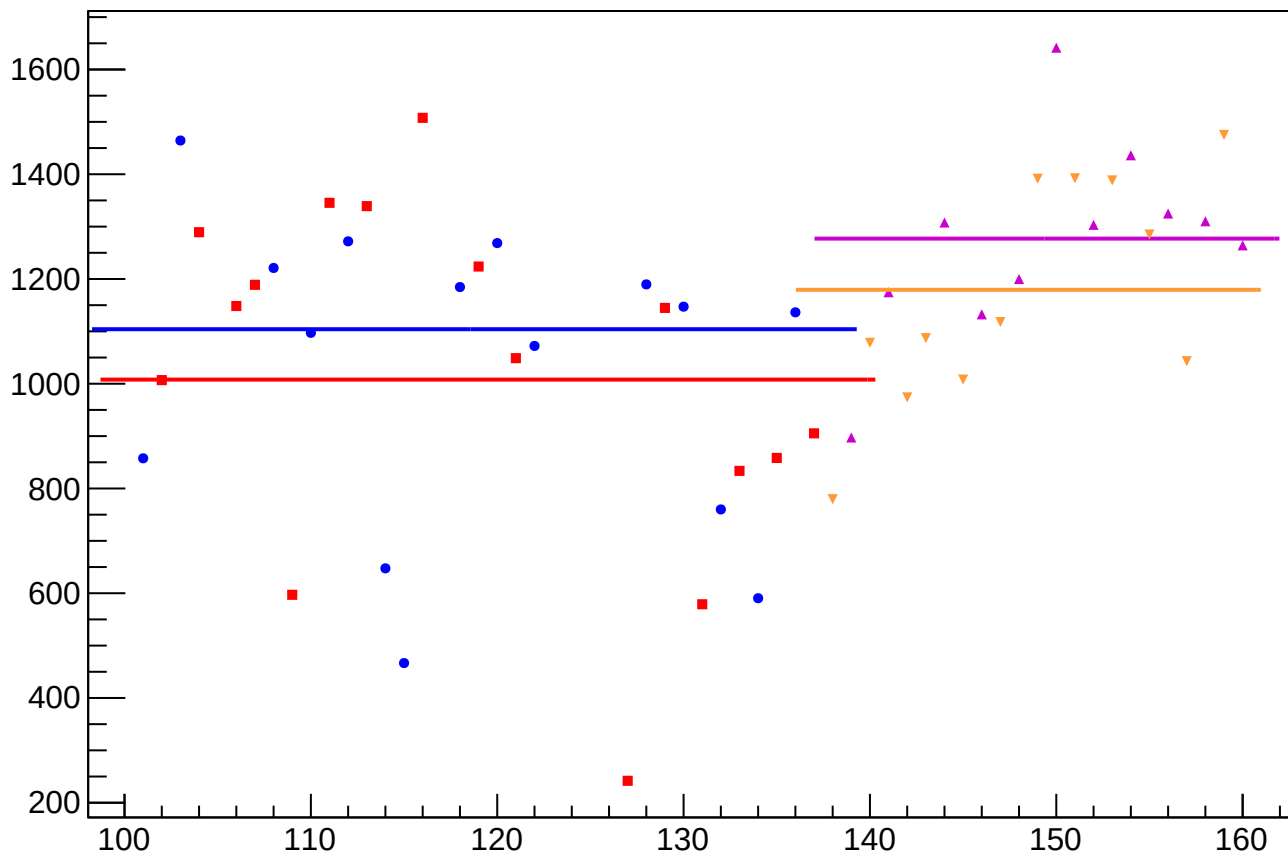
Left In: -82.954+/-0.000  $\chi^2/\text{NDF}$ : 20419157774877297849205303170564096.0/10

dit\_11X12X\_coil3\_err\_mean vs Slug



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

dit\_11X12X\_coil3\_Ndata\_mean vs Slug



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

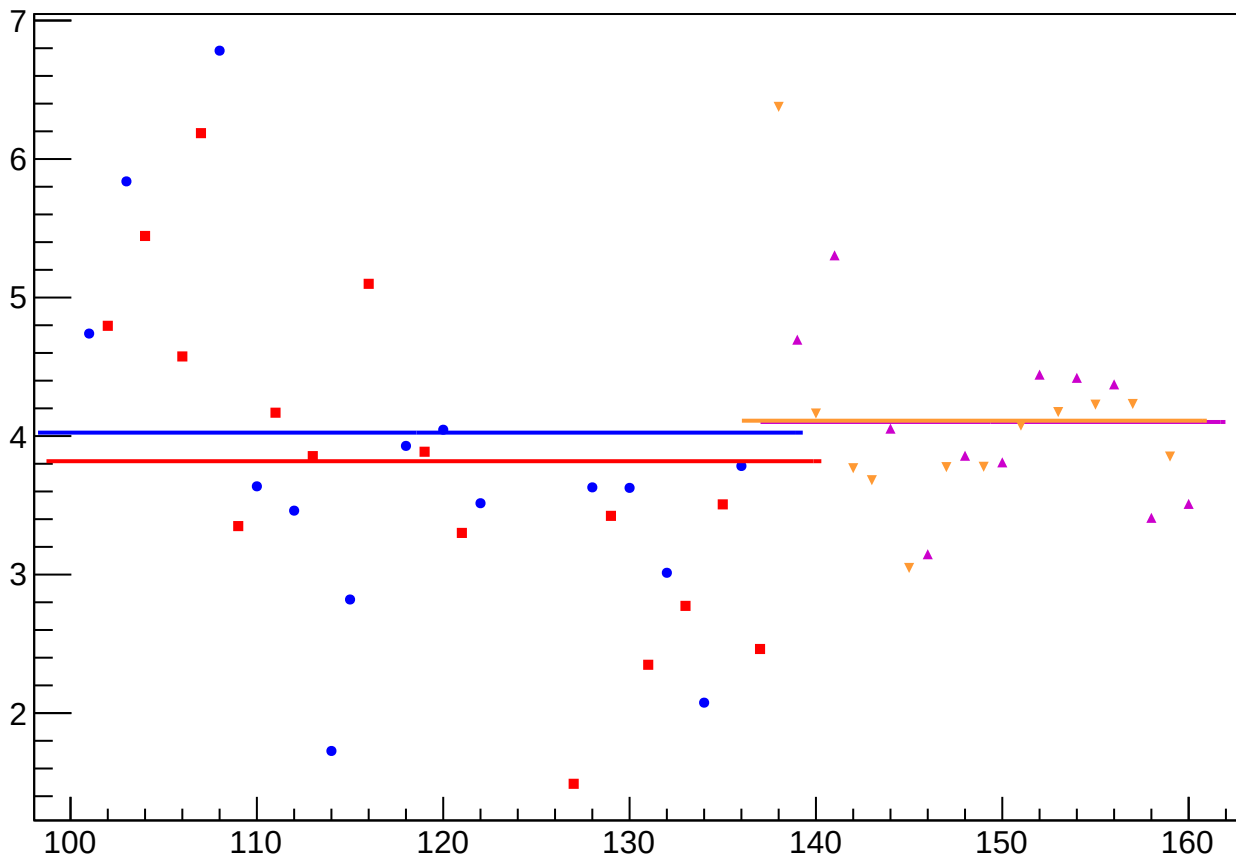
+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309



# dit\_4aY\_coil3\_mean vs Slug



Right In: 4.025+/-0.000  $\chi^2/\text{NDF}$ : 769001650442321928129473832550400.0/14

Left Out: 4.111+/-0.000  $\chi^2/\text{NDF}$ : 532620096510613693690902891986944.0/11

Right Out: 3.819+/-0.000  $\chi^2/\text{NDF}$ : 888232240226434329114859171479552.0/15

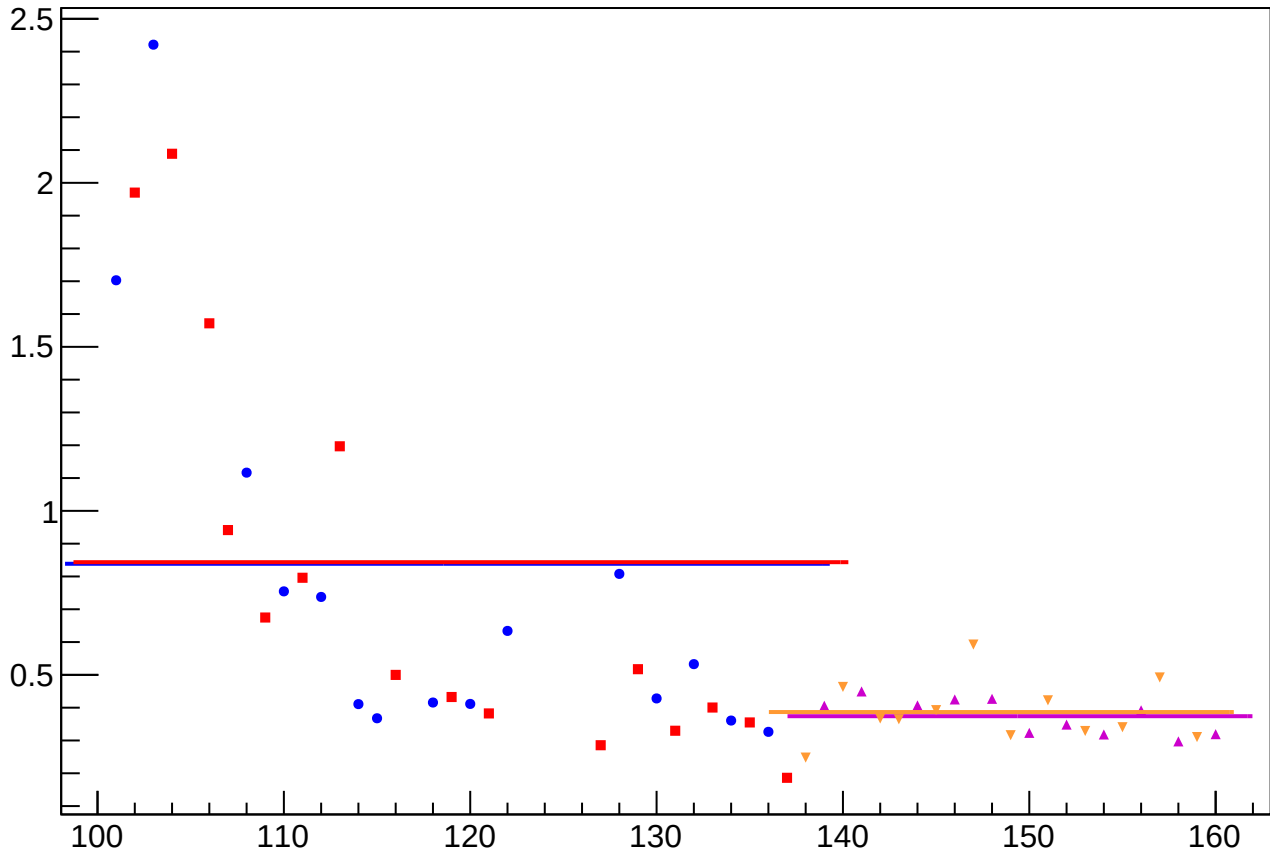
Left In: 4.102+/-0.000  $\chi^2/\text{NDF}$ : 329978343606173709019066465779712.0/10

+ sign 4.075+/-0.000  $\chi^2/\text{NDF}$ : 13044380384615704

All: 4.029+/-0.000  $\chi^2/\text{NDF}$ : 2560414246886

- sign 3.983+/-0.000  $\chi^2/\text{NDF}$ : 12492685976346881

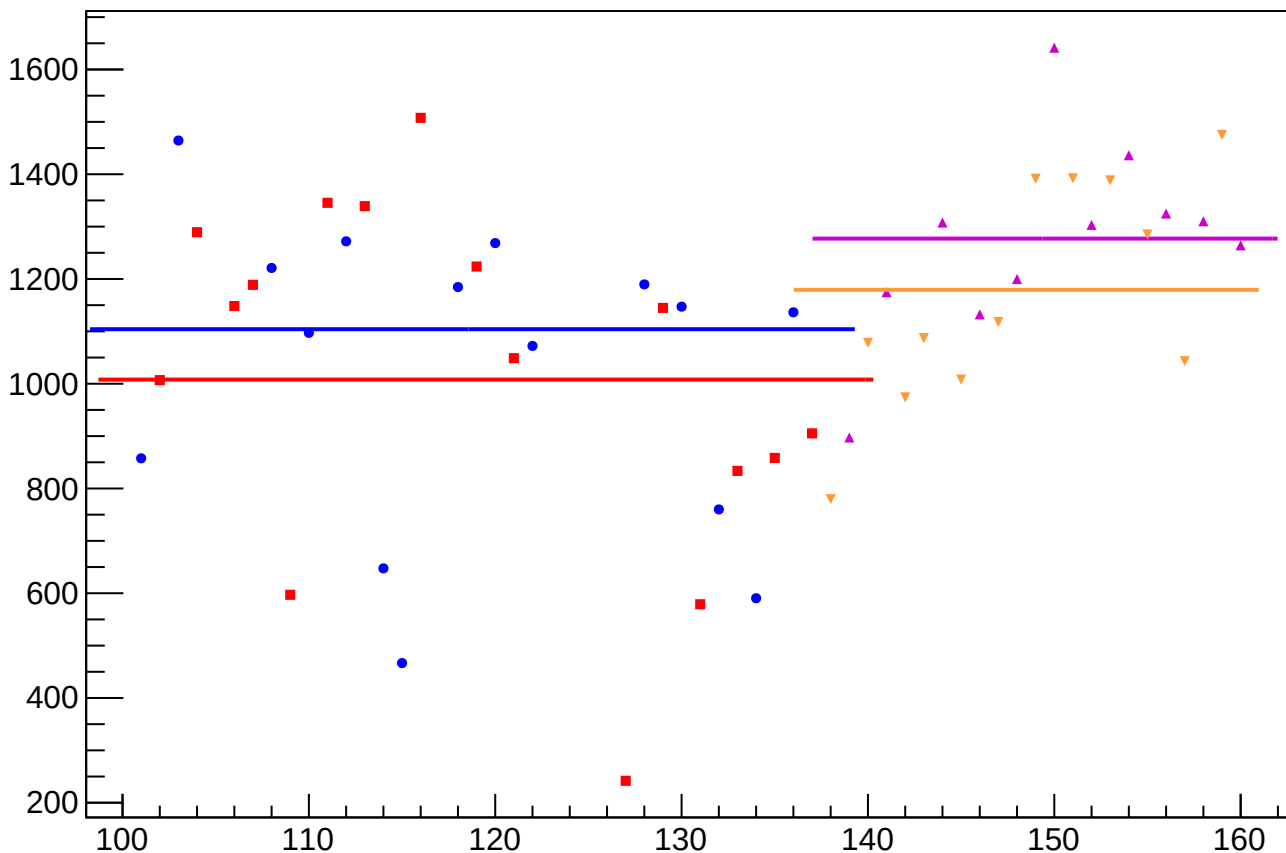
dit\_4aY\_coil3\_err\_mean vs Slug



Right In:  $0.839 \pm 0.000$   $\chi^2/\text{NDF}$ : 258416025334615661521163083841536.0/14  
 Left Out:  $0.387 \pm 0.000$   $\chi^2/\text{NDF}$ : 7656532010606705303389852401664.0/11  
 Right Out:  $0.844 \pm 0.000$   $\chi^2/\text{NDF}$ : 252917509393432760240648918925312.0/15  
 Left In:  $0.374 \pm 0.000$   $\chi^2/\text{NDF}$ : 2408191855928929204652403064832.0/10

+ sign  $0.574 \pm 0.000$   $\chi^2/\text{NDF}$ : 34361299710521939  
 All:  $0.573 \pm 0.000$   $\chi^2/\text{NDF}$ : 68434990603829  
 - sign  $0.571 \pm 0.000$   $\chi^2/\text{NDF}$ : 34072705828258961

dit\_4aY\_coil3\_Ndata\_mean vs Slug



Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14

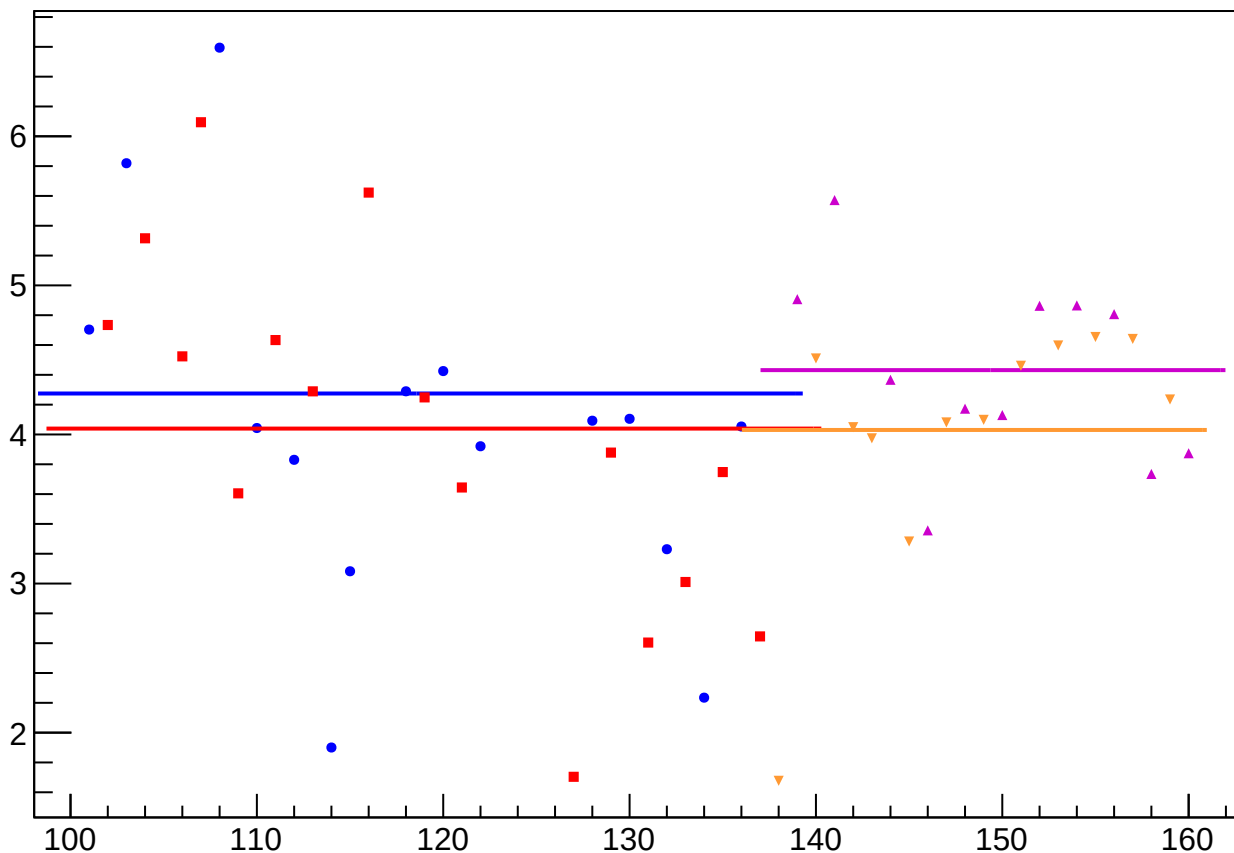
Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11

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: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

# dit\_4eY\_coil3\_mean vs Slug



Right In: 4.275+/-0.000  $\chi^2/\text{NDF}$ : 597188707898198851792415435522048.0/14

Left Out: 4.039+/-0.000  $\chi^2/\text{NDF}$ : 600797720921367466879695481470976.0/11

Right Out: 4.039+/-0.000  $\chi^2/\text{NDF}$ : 772368848194464324973108765130752.0/15

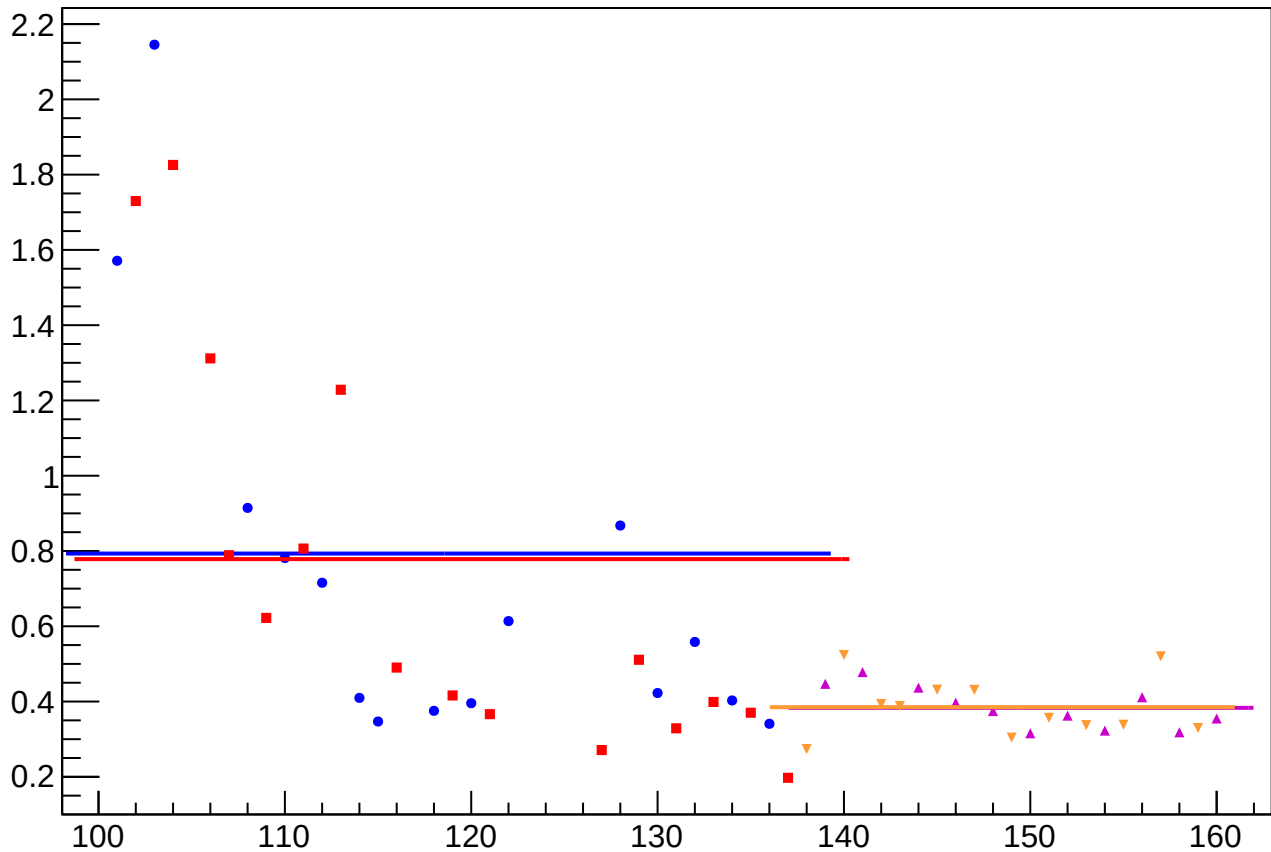
Left In: 4.432+/-0.000  $\chi^2/\text{NDF}$ : 345602703191245770554210363899904.0/10

+ sign 4.132+/-0.000  $\chi^2/\text{NDF}$ : 12206851457134436

All: 4.200+/-0.000  $\chi^2/\text{NDF}$ : 24126758137667

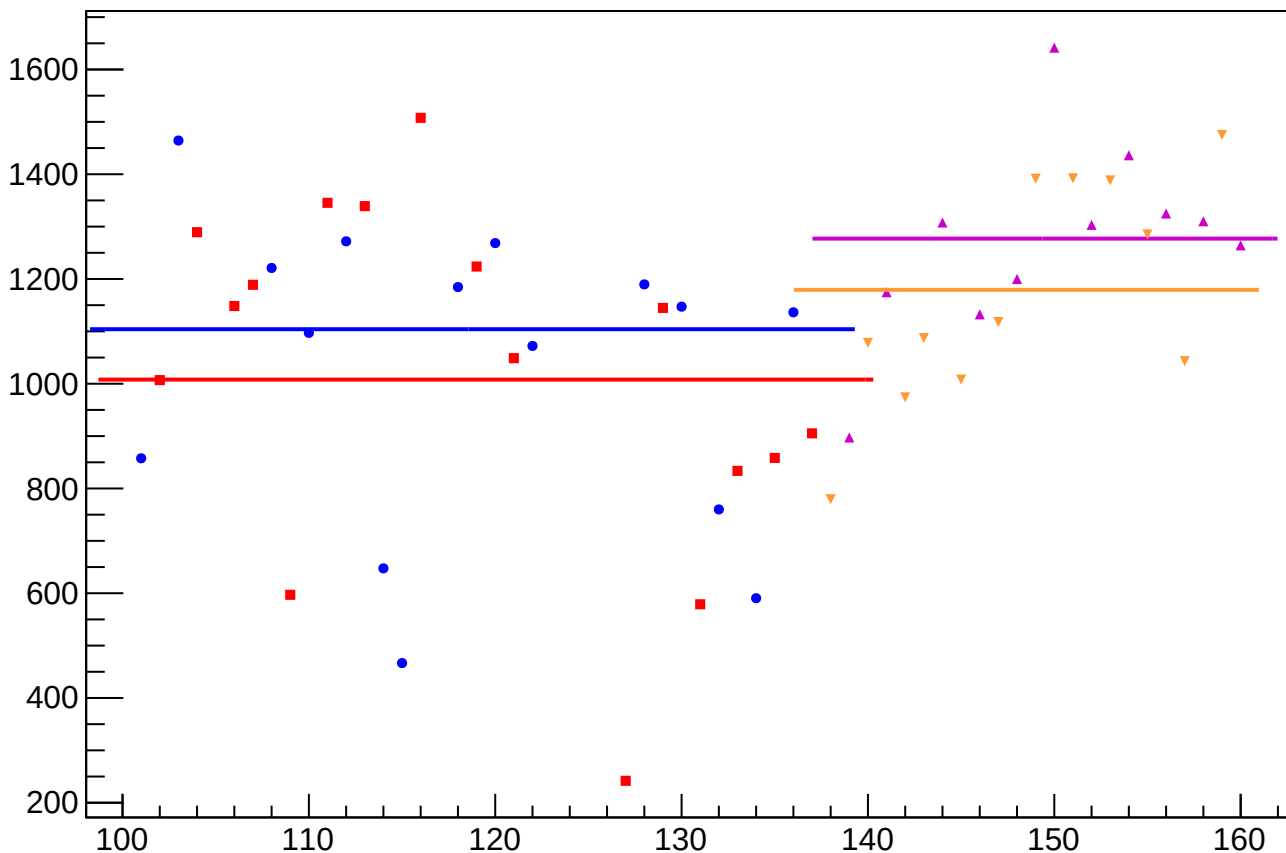
- sign 4.267+/-0.000  $\chi^2/\text{NDF}$ : 11775319216859441

dit\_4eY\_coil3\_err\_mean vs Slug



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

dit\_4eY\_coil3\_Ndata\_mean vs Slug



Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14

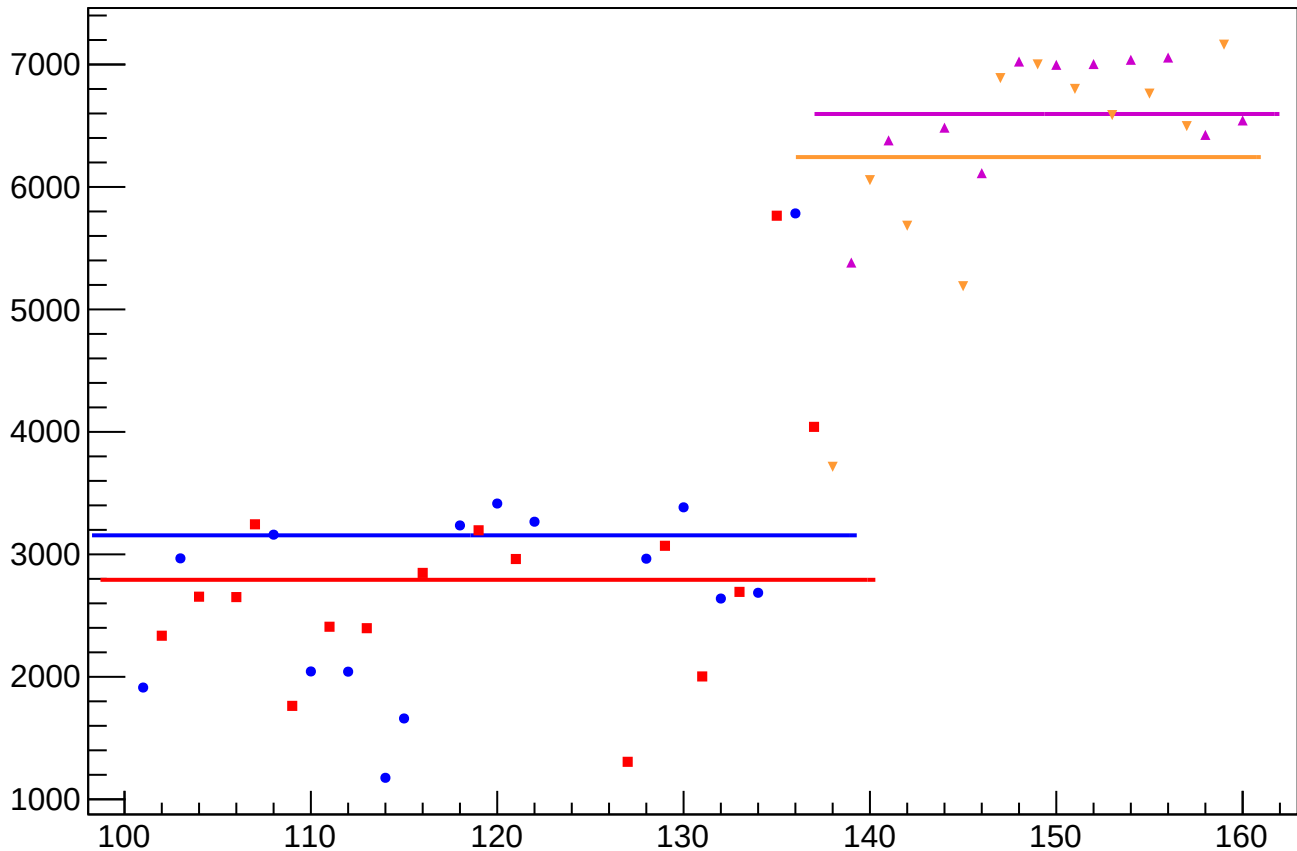
Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11

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

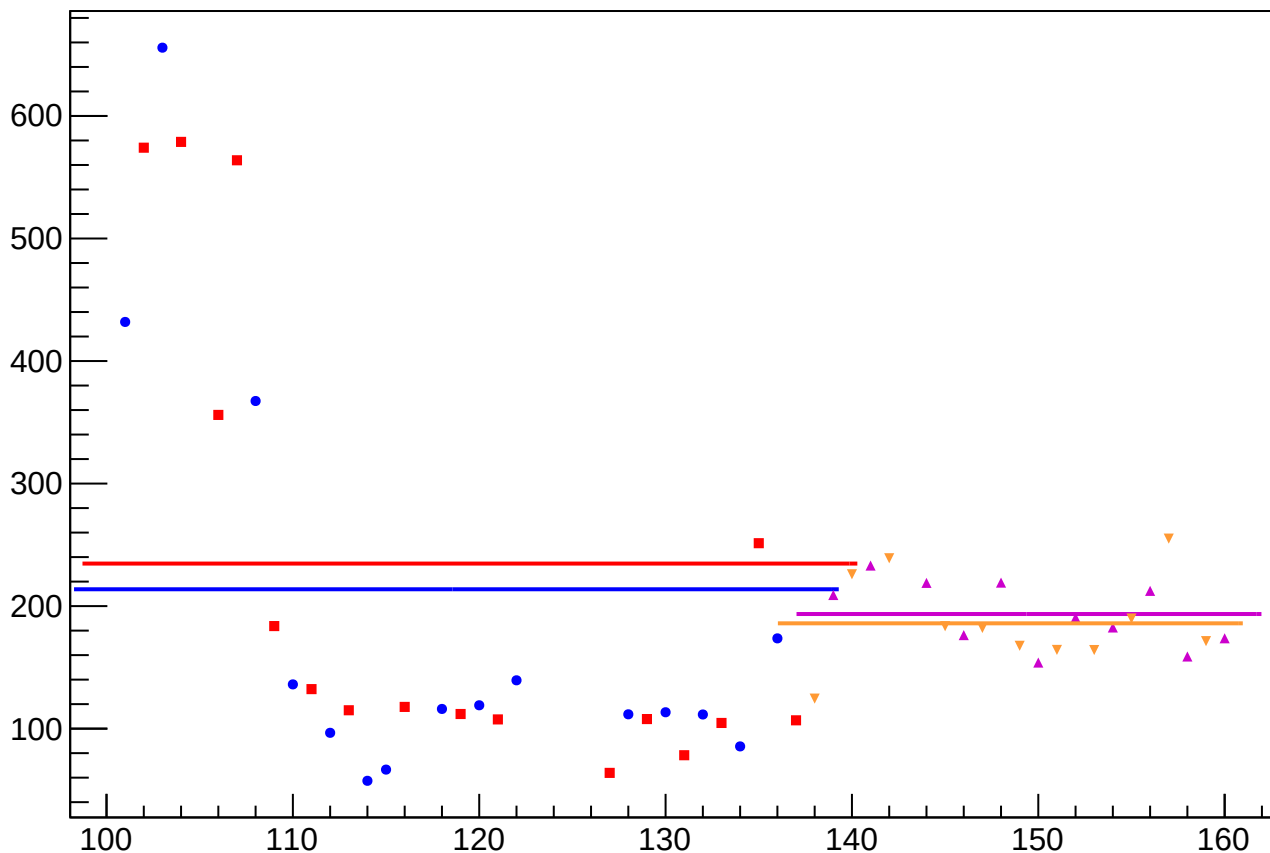
All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

dit\_usl\_coil3\_mean vs Slug



|                             |                                                                    |                         |                                      |
|-----------------------------|--------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 3155.434+/-0.000  | $\chi^2/\text{NDF}$ : 903550534773622902110918214033612996608.0/14 | + sign 4904.094+/-0.000 | $\chi^2/\text{NDF}$ : 52199055193135 |
| Left Out: 6243.976+/-0.000  | $\chi^2/\text{NDF}$ : 811230786168378302780139165688711348224.0/10 | All: 4954.171+/-0.000   | $\chi^2/\text{NDF}$ : 1173127883     |
| Right Out: 2792.245+/-0.000 | $\chi^2/\text{NDF}$ : 674635749324173001973264427530986717184.0/15 | - sign 5001.259+/-0.000 | $\chi^2/\text{NDF}$ : 65040940380317 |
| Left In: 6595.861+/-0.000   | $\chi^2/\text{NDF}$ : 225164805715400368671043826745864093696.0/10 |                         |                                      |

dit\_usl\_coil3\_err\_mean vs Slug



Right In:  $213.739 \pm 0.000$   $\chi^2/\text{NDF}$ : 19718138109054002114361149860507287552.0/14

+ sign  $198.004 \pm 0.000$   $\chi^2/\text{NDF}$ : 210596499701990

Left Out:  $185.948 \pm 0.000$   $\chi^2/\text{NDF}$ : 1057706607595767583587974846640816128.0/10

All:  $204.600 \pm 0.000$   $\chi^2/\text{NDF}$ : 464545737853

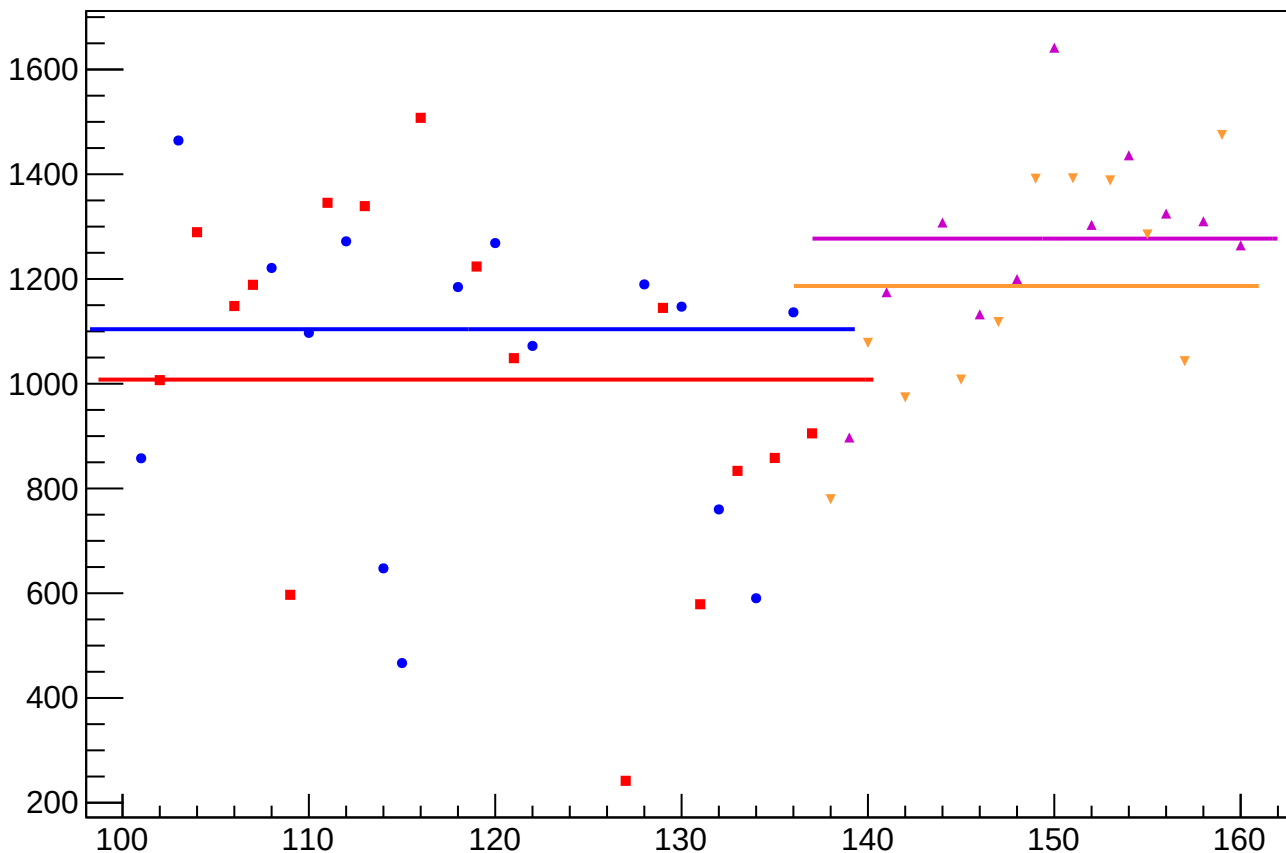
Right Out:  $234.712 \pm 0.000$   $\chi^2/\text{NDF}$ : 24013134107167214895189050481067425792.0/15

- sign  $210.803 \pm 0.000$   $\chi^2/\text{NDF}$ : 252686308073901

Left In:  $193.543 \pm 0.000$   $\chi^2/\text{NDF}$ : 598931150644293332680217057881489408.0/10



dit\_usl\_coil3\_Ndata\_mean vs Slug



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

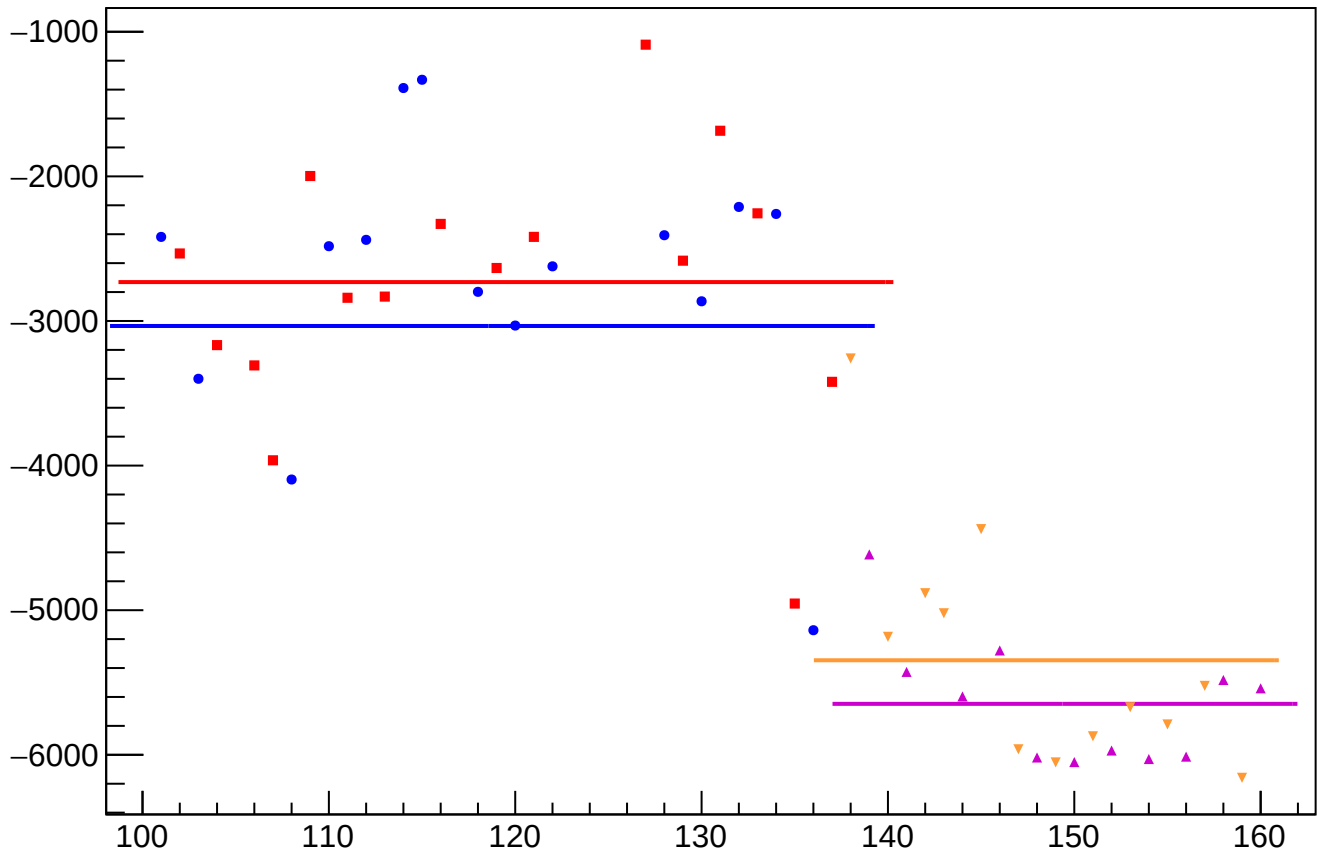
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1150.834+/-0.000  $\chi^2/\text{NDF}$ : 73367548377833

All: 1157.745+/-0.000  $\chi^2/\text{NDF}$ : 20023337148

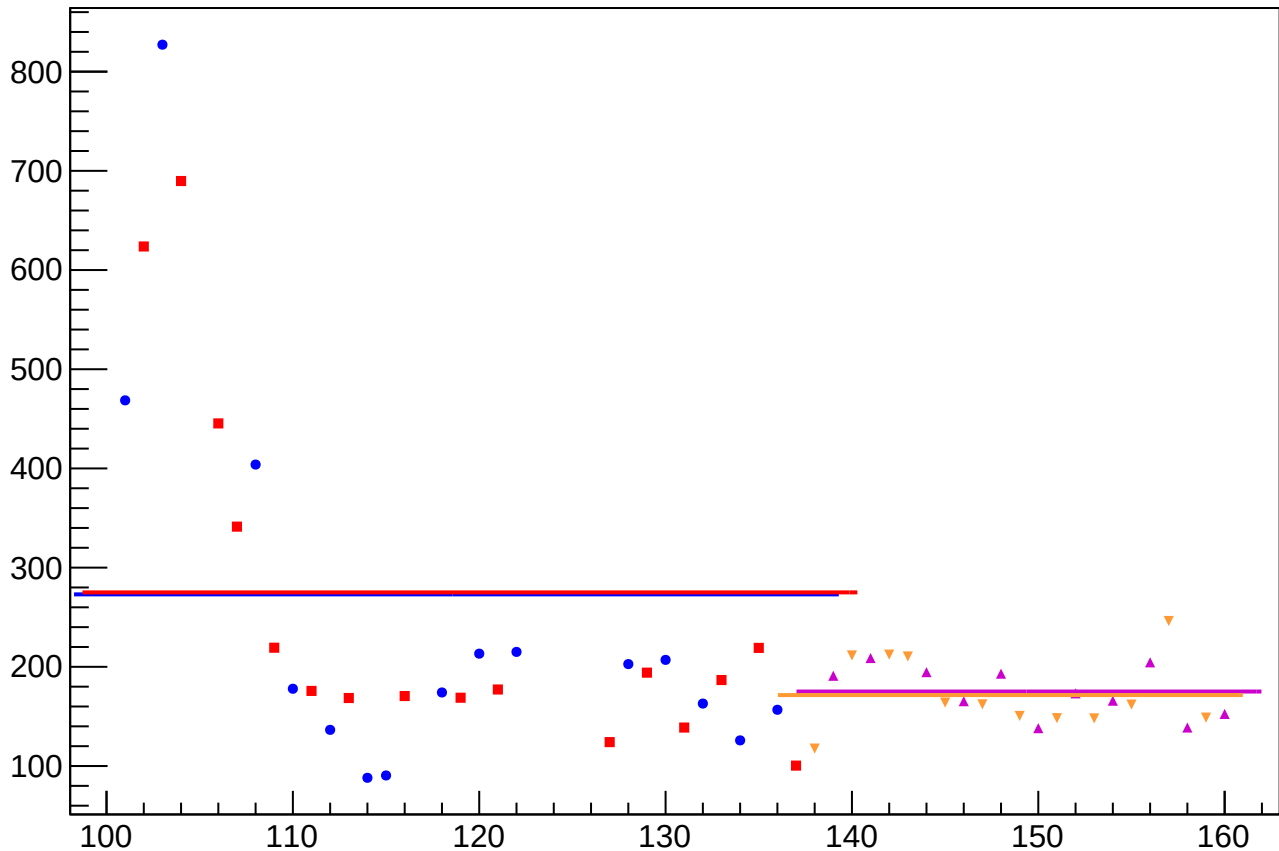
- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

# dit\_usr\_coil3\_mean vs Slug



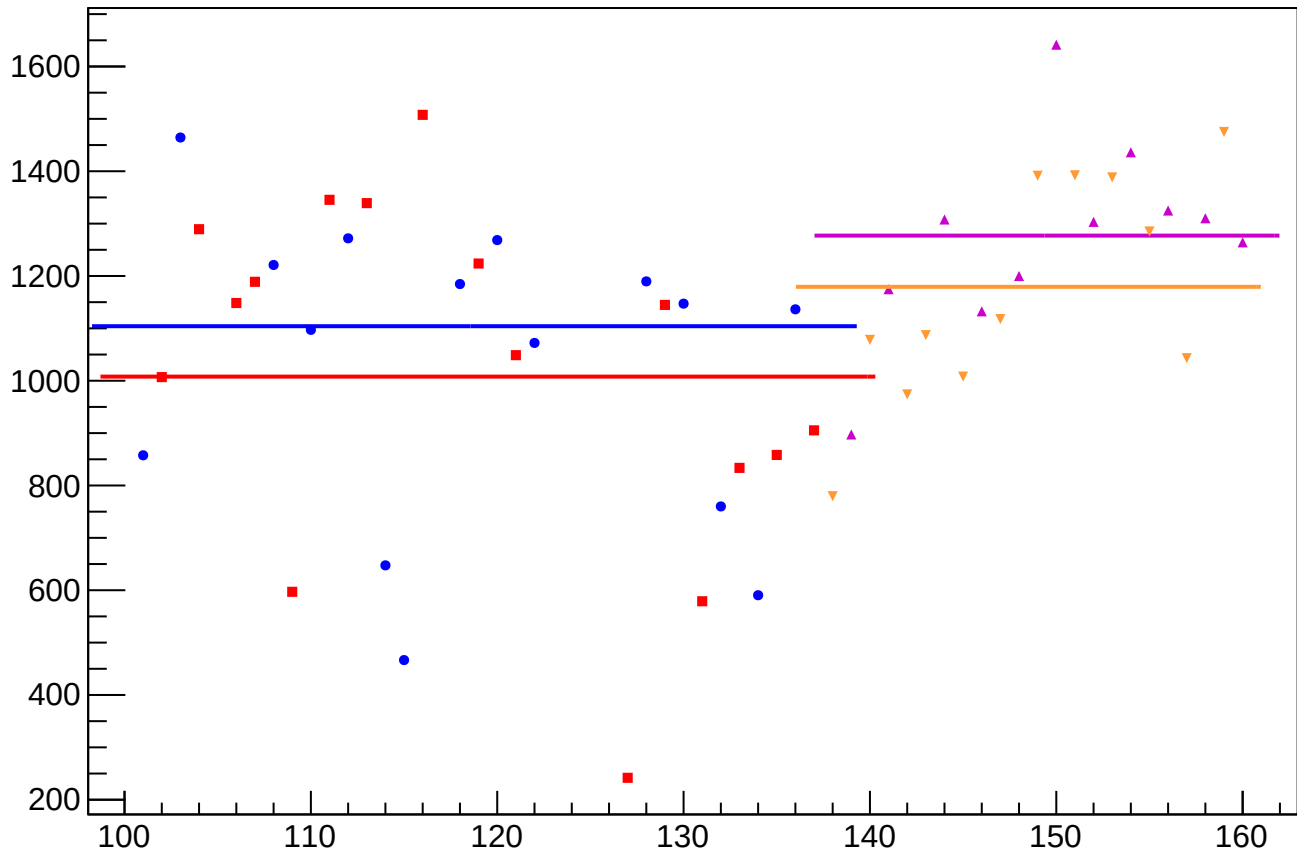
Right In:  $-3034.527 \pm 0.000$   $\chi^2/\text{NDF}$ : 630694553353463868547335175090919702528.0/14  
 Left Out:  $-5346.287 \pm 0.000$   $\chi^2/\text{NDF}$ : 595830455774800553383002095782337708032.0/11  
 Right Out:  $-2731.035 \pm 0.000$   $\chi^2/\text{NDF}$ : 528290847703567991555694629239211950080.0/15  
 Left In:  $-5647.632 \pm 0.000$   $\chi^2/\text{NDF}$ : 164214312908035645215126356935491715072.0/10  
 All:  $-4405.811 \pm 0.000$   $\chi^2/\text{NDF}$ : 7243621292  
 + sign  $-4386.382 \pm 0.000$   $\chi^2/\text{NDF}$ : 3254755460990  
 - sign  $-4424.898 \pm 0.000$   $\chi^2/\text{NDF}$ : 39876961959130

dit\_usr\_coil3\_err\_mean vs Slug



Right In:  $273.039 \pm 0.000$   $\chi^2/\text{NDF}$ : 26485935053341175092913795212184125440.0/14  
 Left Out:  $171.517 \pm 0.000$   $\chi^2/\text{NDF}$ : 1162204446124418452265763444206075904.0/11  
 Right Out:  $275.044 \pm 0.000$   $\chi^2/\text{NDF}$ : 22264760088752901792561892991657050112.0/15  
 Left In:  $175.100 \pm 0.000$   $\chi^2/\text{NDF}$ : 532319905760316522814470909096624128.0/10

# dit\_usr\_coil3\_Ndata\_mean vs Slug



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

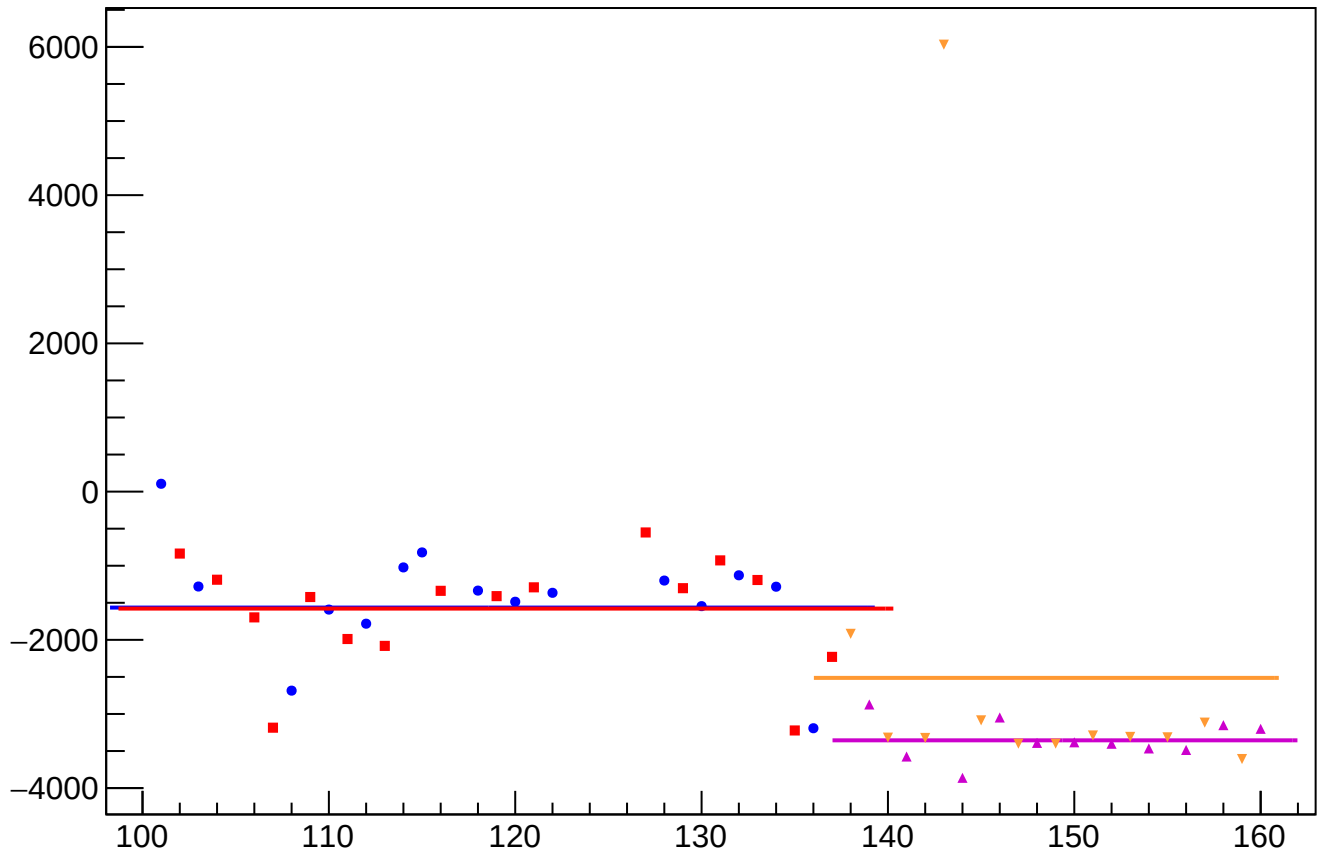
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

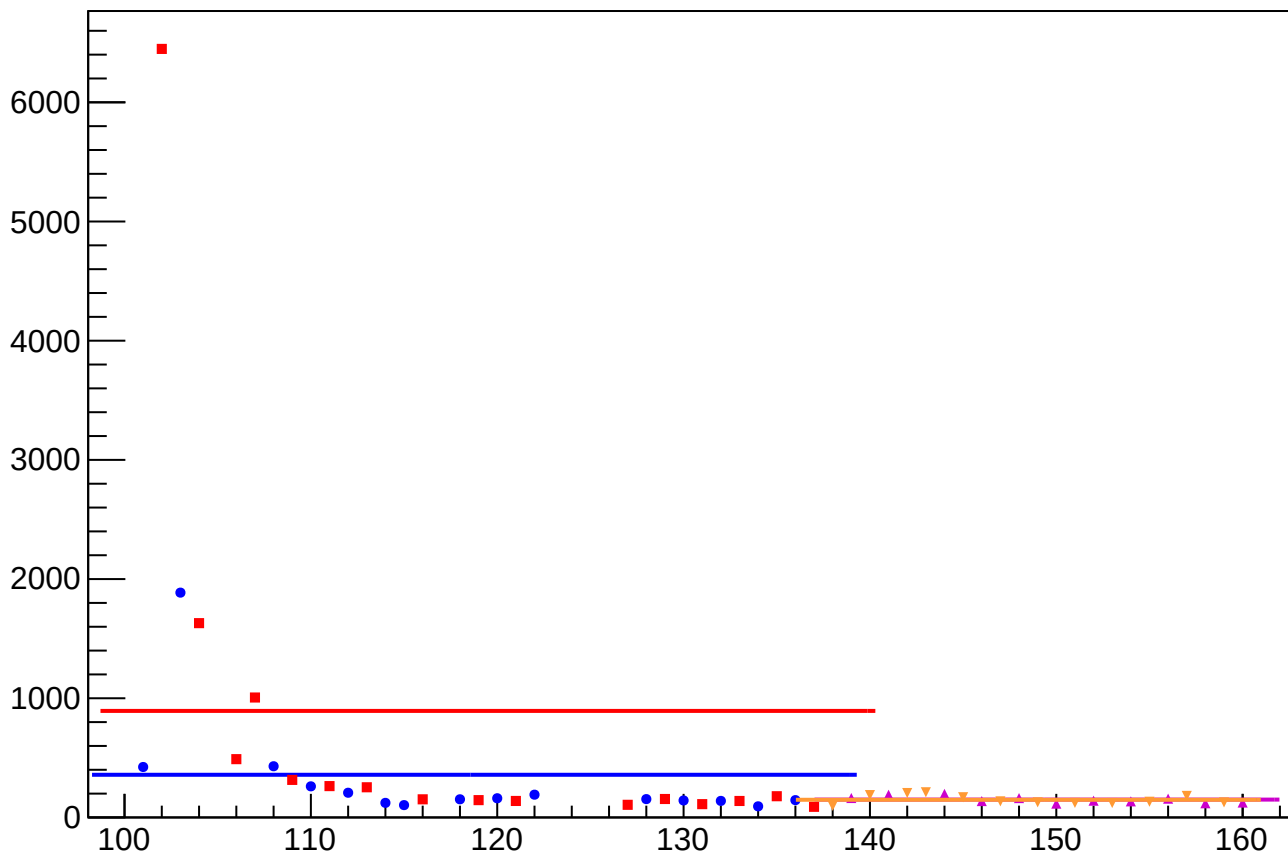
- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

# dit\_atl1\_coil3\_mean vs Slug



Right In: -1564.595 +/- 0.000  $\chi^2/\text{NDF}$ : 483874800978571042578975757029039144960.0/14  
 Left Out: -2513.182 +/- 0.000  $\chi^2/\text{NDF}$ : 5431127813565364988673729418683400323072.0/11  
 Right Out: -1578.178 +/- 0.000  $\chi^2/\text{NDF}$ : 368450572556217564071963203581098590208.0/15  
 Left In: -3355.712 +/- 0.000  $\chi^2/\text{NDF}$ : 61603128430044333980990125877093203968.0/10  
 All: -2367.087 +/- 0.000  $\chi^2/\text{NDF}$ : 8100740550  
 + sign -2119.303 +/- 0.000  $\chi^2/\text{NDF}$ : 6256498974115  
 - sign -2610.511 +/- 0.000  $\chi^2/\text{NDF}$ : 1654003244515

dit\_atl1\_coil3\_err\_mean vs Slug



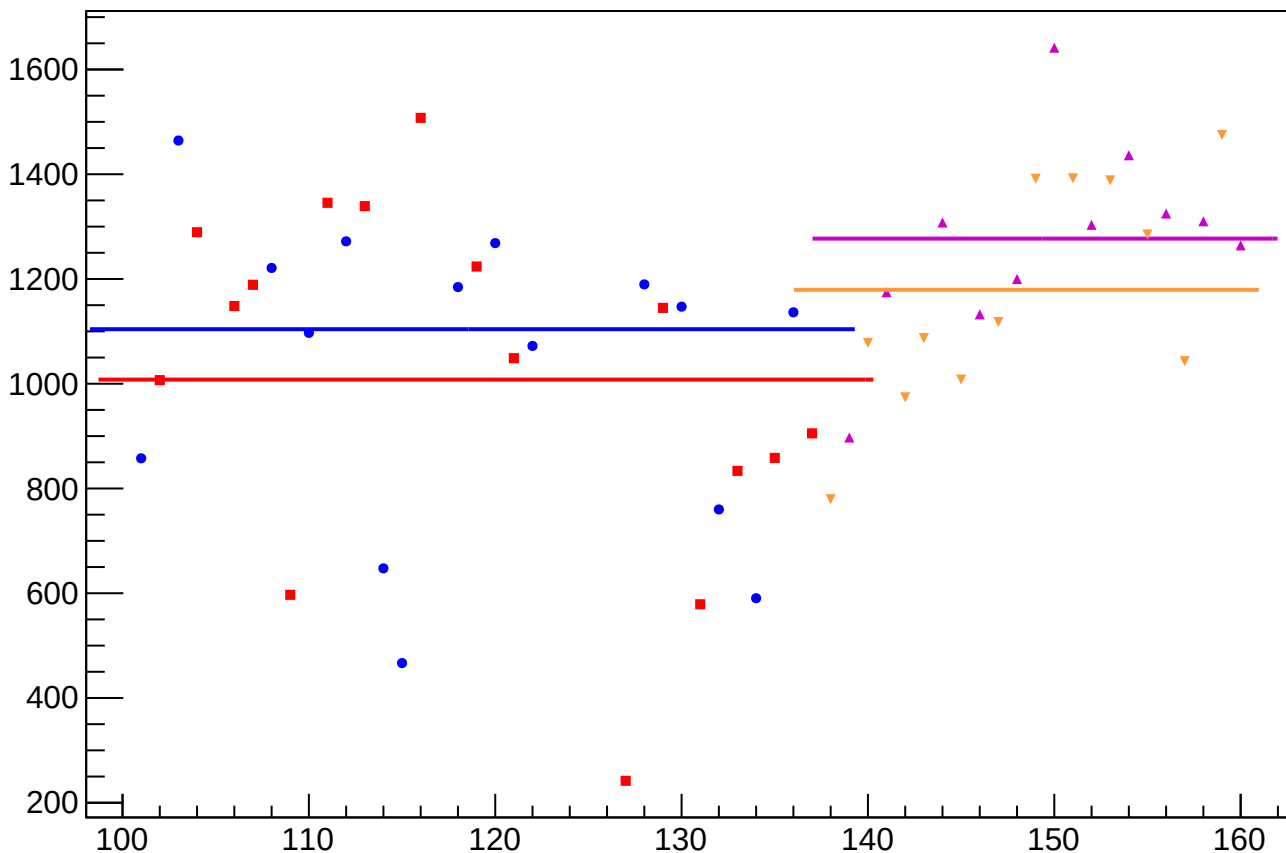
Right In: 358.080+/-0.000  $\chi^2/\text{NDF}$ : 157922789145697858165644452090202816512.0/14

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

dit\_atl1\_coil3\_Ndata\_mean vs Slug



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

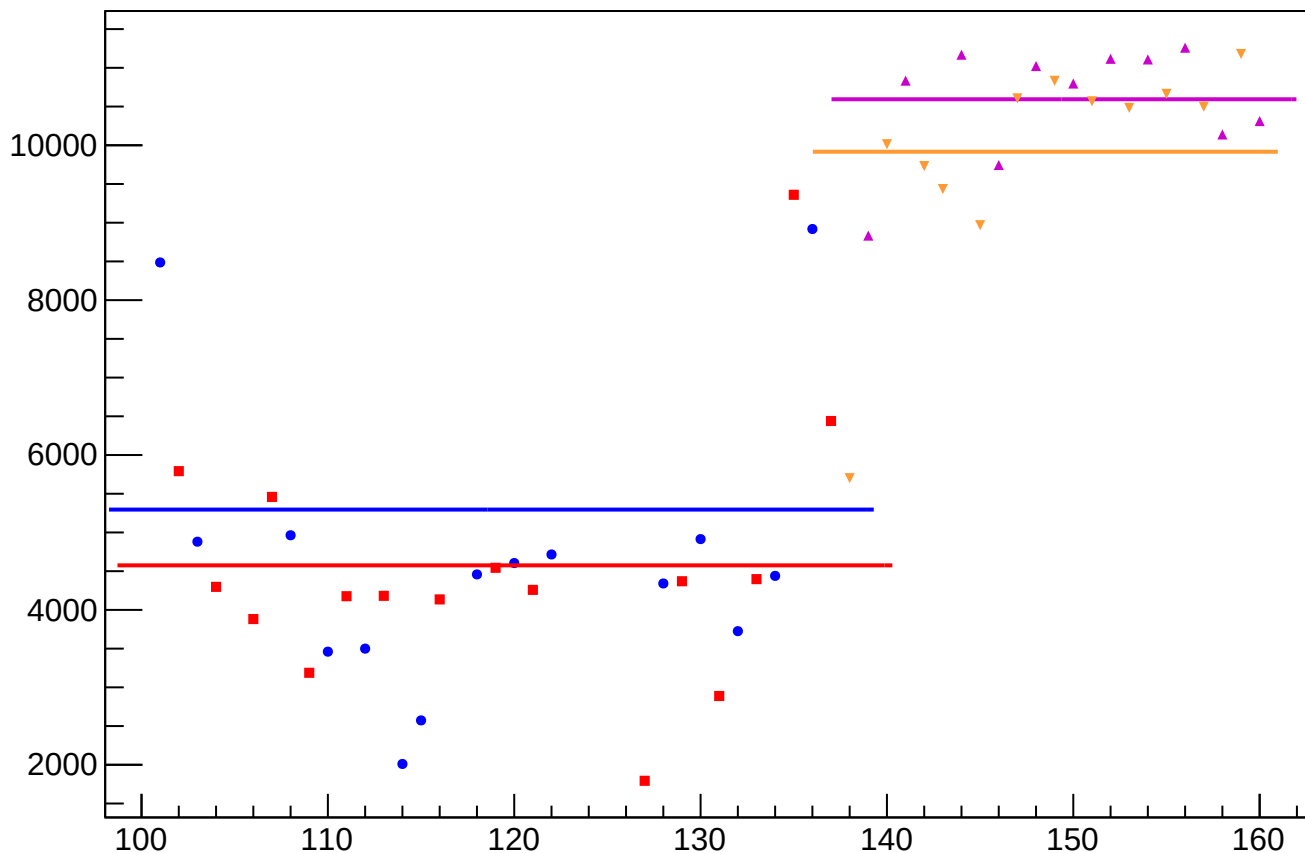
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

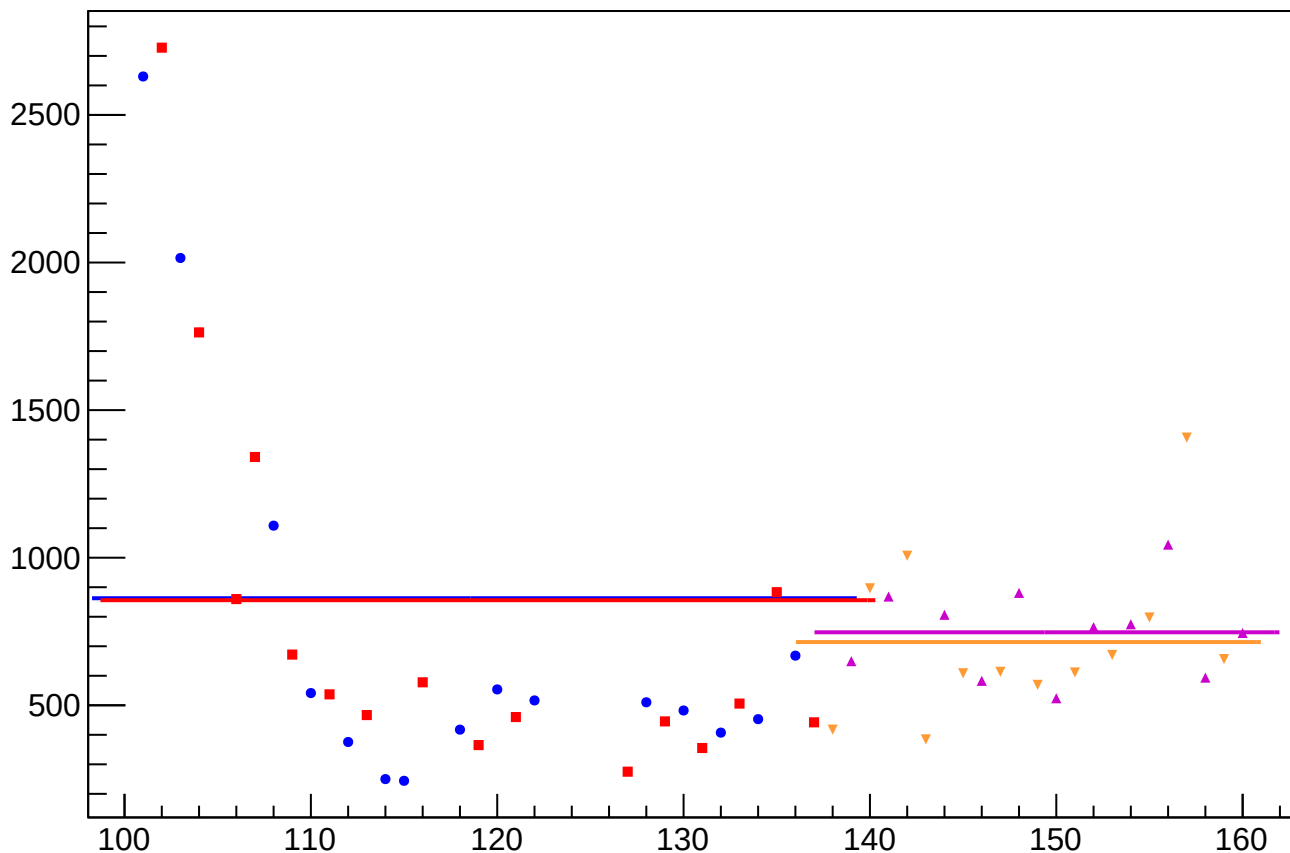
dit\_atl2\_coil3\_mean vs Slug



Right In: 5295.485 $\pm$ 0.000  $\chi^2$ /NDF: 2505645232968263275444048016093183213568.0/14  
 Left Out: 9916.420 $\pm$ 0.000  $\chi^2$ /NDF: 1840714392757174837254481771479116546048.0/11  
 Right Out: 4575.270 $\pm$ 0.000  $\chi^2$ /NDF: 1863322094770403739096100800072716910592.0/15  
 Left In: 10594.095 $\pm$ 0.000  $\chi^2$ /NDF: 469955671378487676963254464485150162944.0/10



dit\_atl2\_coil3\_err\_mean vs Slug



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

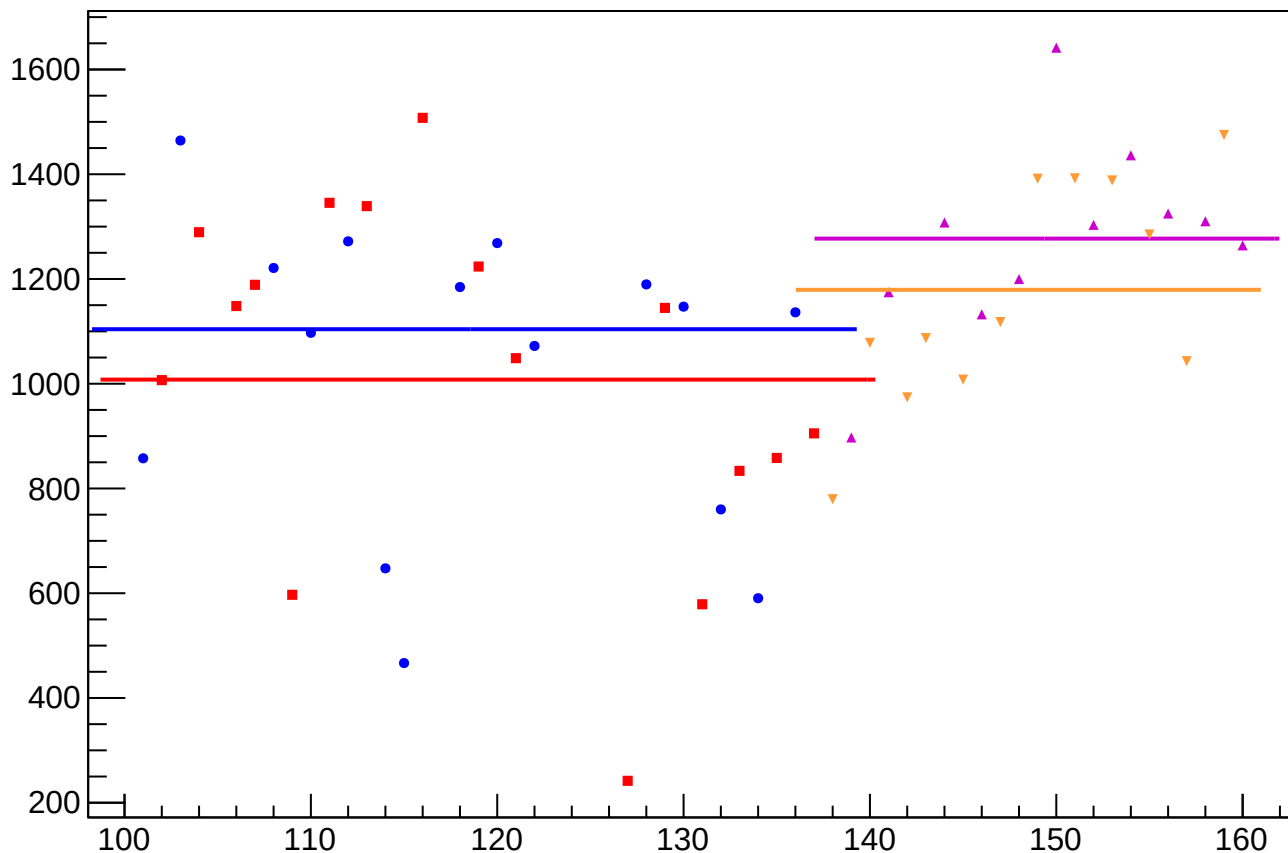
Left In: 747.275+/-0.000  $\chi^2/\text{NDF}$ : 19678847395727730098310642242030665728.0/10

+ sign 775.866+/-0.000  $\chi^2/\text{NDF}$ : 409985766107580

All: 784.449+/-0.000  $\chi^2/\text{NDF}$ : 76167219523

- sign 792.881+/-0.000  $\chi^2/\text{NDF}$ : 351458177247538

dit\_atl2\_coil3\_Ndata\_mean vs Slug



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

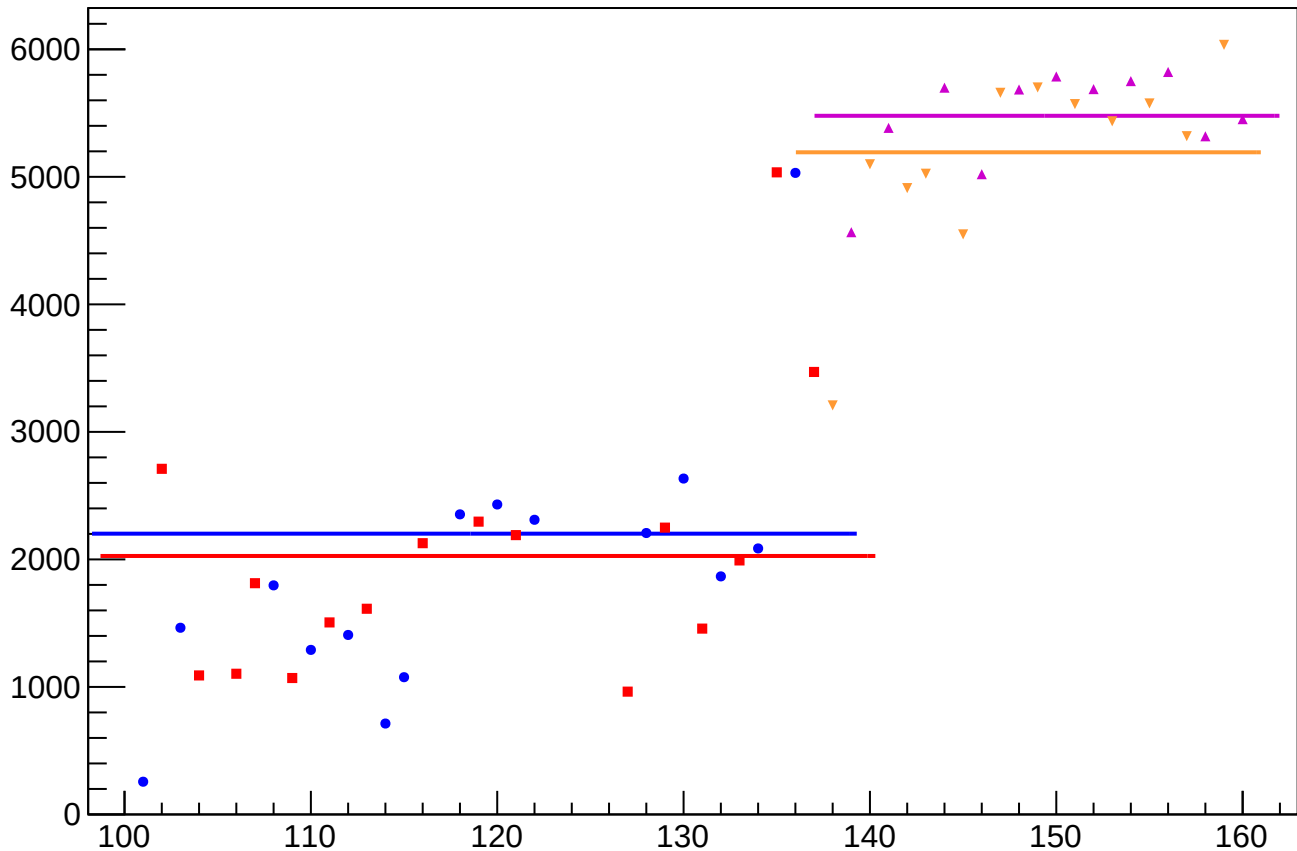
Left In: 1277.097 +/- 0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100 +/- 0.000  $\chi^2/\text{NDF}$ : 73628368958625.0/11

All: 1156.244 +/- 0.000  $\chi^2/\text{NDF}$ : 20056102034.0/11

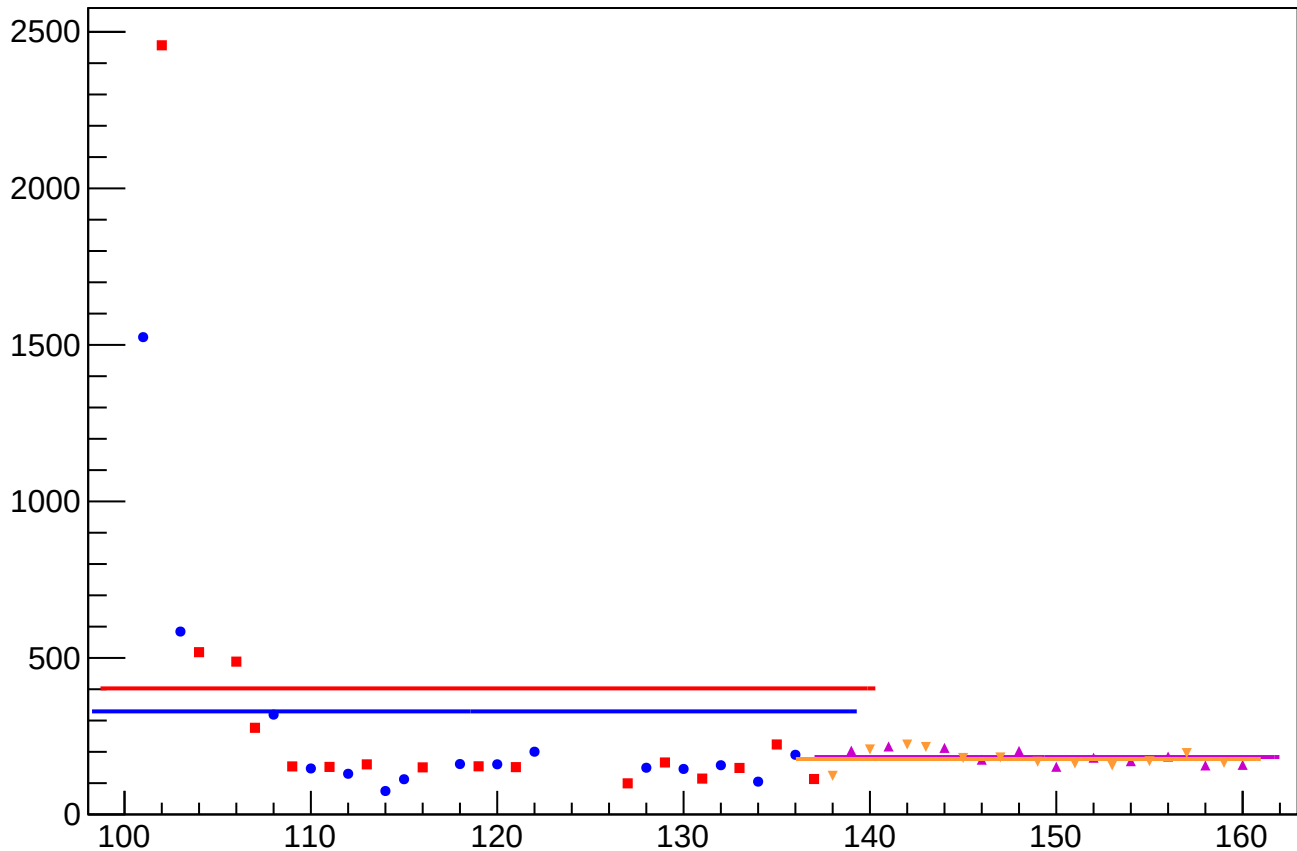
- sign 1164.243 +/- 0.000  $\chi^2/\text{NDF}$ : 12672719249309.0/11

dit\_atr1\_coil3\_mean vs Slug



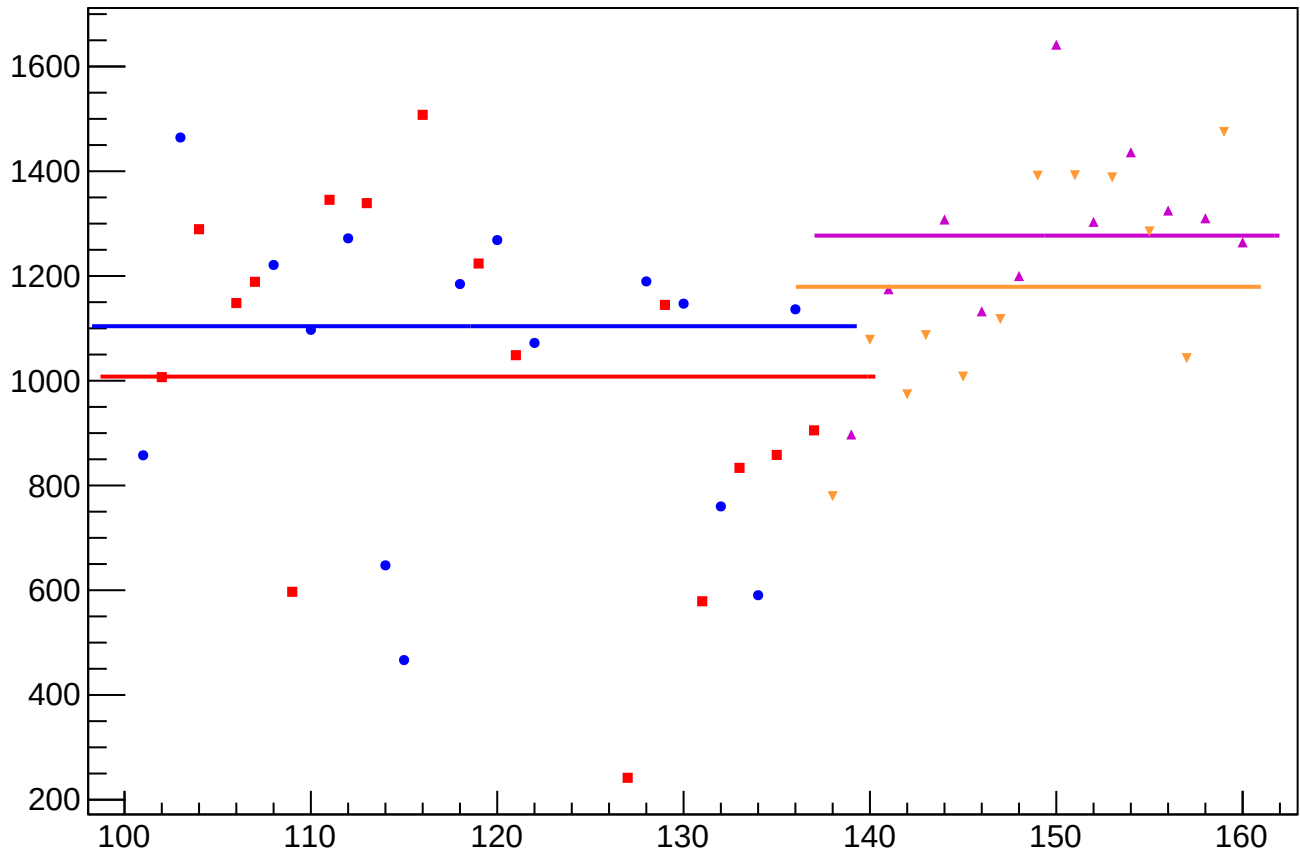
Right In: 2201.844+/-0.000  $\chi^2/\text{NDF}$ : 1086544775216266395419904724422998622208.0/14  
 Left Out: 5192.476+/-0.000  $\chi^2/\text{NDF}$ : 470317118435532937200148346508624789504.0/11  
 Right Out: 2026.969+/-0.000  $\chi^2/\text{NDF}$ : 708626456603410705124518299956645199872.0/15  
 Left In: 5478.713+/-0.000  $\chi^2/\text{NDF}$ : 124186054771424011873849346802583601152.0/10

dit\_atr1\_coil3\_err\_mean vs Slug



|                            |                                                                    |                        |                                       |
|----------------------------|--------------------------------------------------------------------|------------------------|---------------------------------------|
| Right In: 329.229+/-0.000  | $\chi^2/\text{NDF}$ : 103285029091922742033837903437132464128.0/14 | + sign 240.268+/-0.000 | $\chi^2/\text{NDF}$ : 112672514913123 |
| Left Out: 177.101+/-0.000  | $\chi^2/\text{NDF}$ : 604256347376555065664943941601984512.0/11    | All: 257.960+/-0.000   | $\chi^2/\text{NDF}$ : 41035727361     |
| Right Out: 402.690+/-0.000 | $\chi^2/\text{NDF}$ : 277636056793293374242116053515003494400.0/15 | - sign 275.340+/-0.000 | $\chi^2/\text{NDF}$ : 296714971855196 |
| Left In: 183.411+/-0.000   | $\chi^2/\text{NDF}$ : 452789814018275751637875535657304064.0/10    |                        |                                       |

dit\_atr1\_coil3\_Ndata\_mean vs Slug



Right In: 1104.111+/-0.000  $\chi^2/\text{NDF}$ : 32737841591587454251521906421545304064.0/14

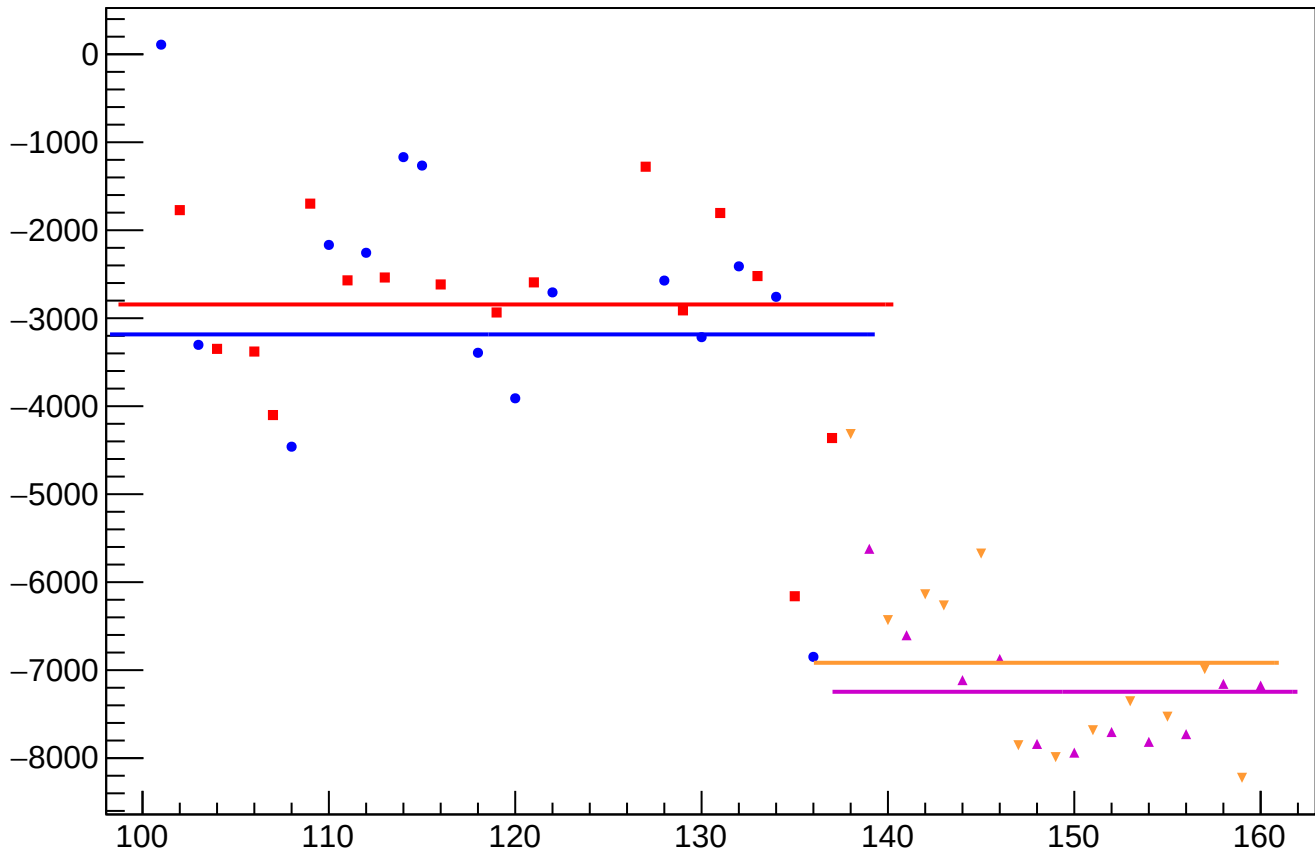
Left Out: 1179.336+/-0.000  $\chi^2/\text{NDF}$ : 38742916032610862911819544133355175936.0/11

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

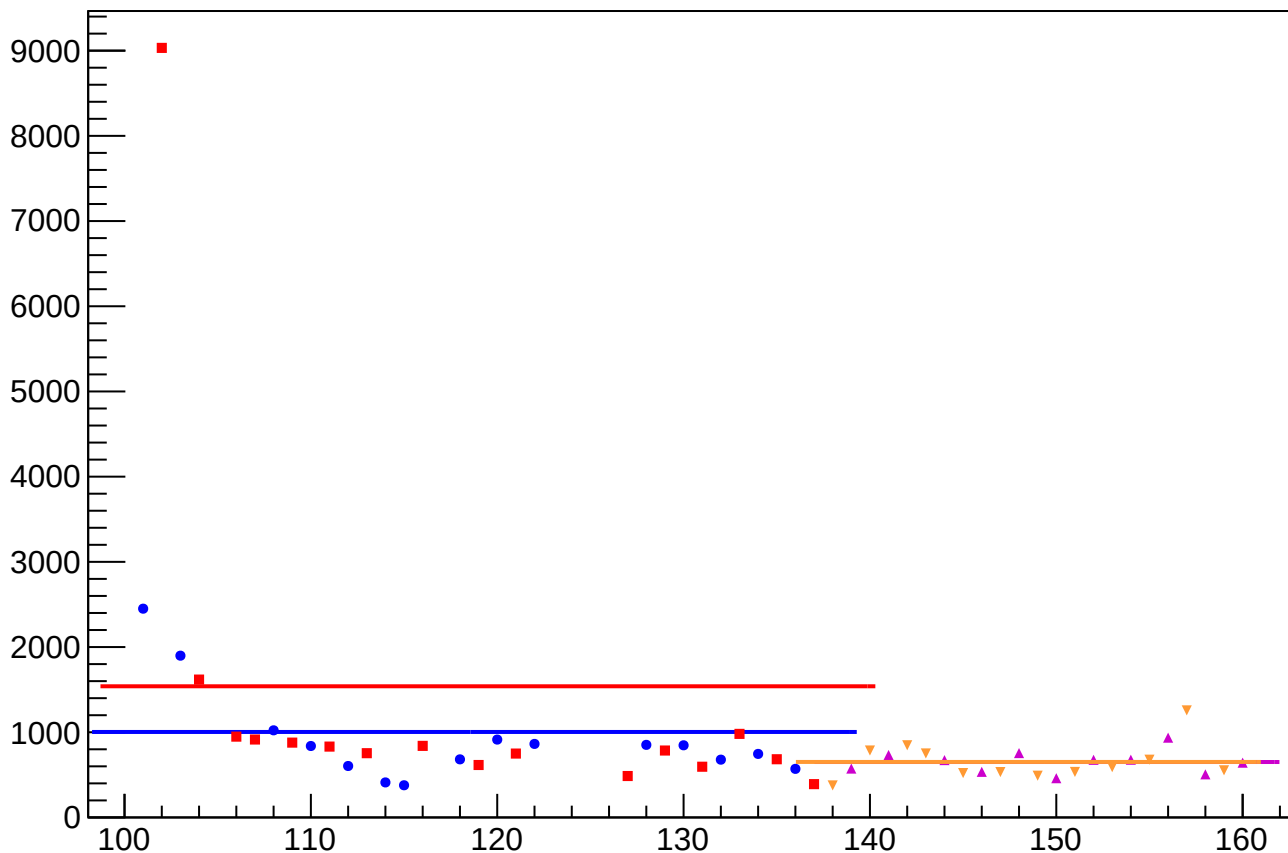
All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

dit\_atr2\_coil3\_mean vs Slug



Right In: -3183.928+/-0.000  $\chi^2/\text{NDF}$ : 2134923281384422537296044119642733543424.0/14  
 Left Out: -6916.269+/-0.000  $\chi^2/\text{NDF}$ : 1116807093678978049721043579861444067328.0/11  
 Right Out: -2843.597+/-0.000  $\chi^2/\text{NDF}$ : 947077611563723244705531091944015396864.0/15  
 Left In: -7245.920+/-0.000  $\chi^2/\text{NDF}$ : 401760462783969098772010925007315140608.0/10

dit\_atr2\_coil3\_err\_mean vs Slug



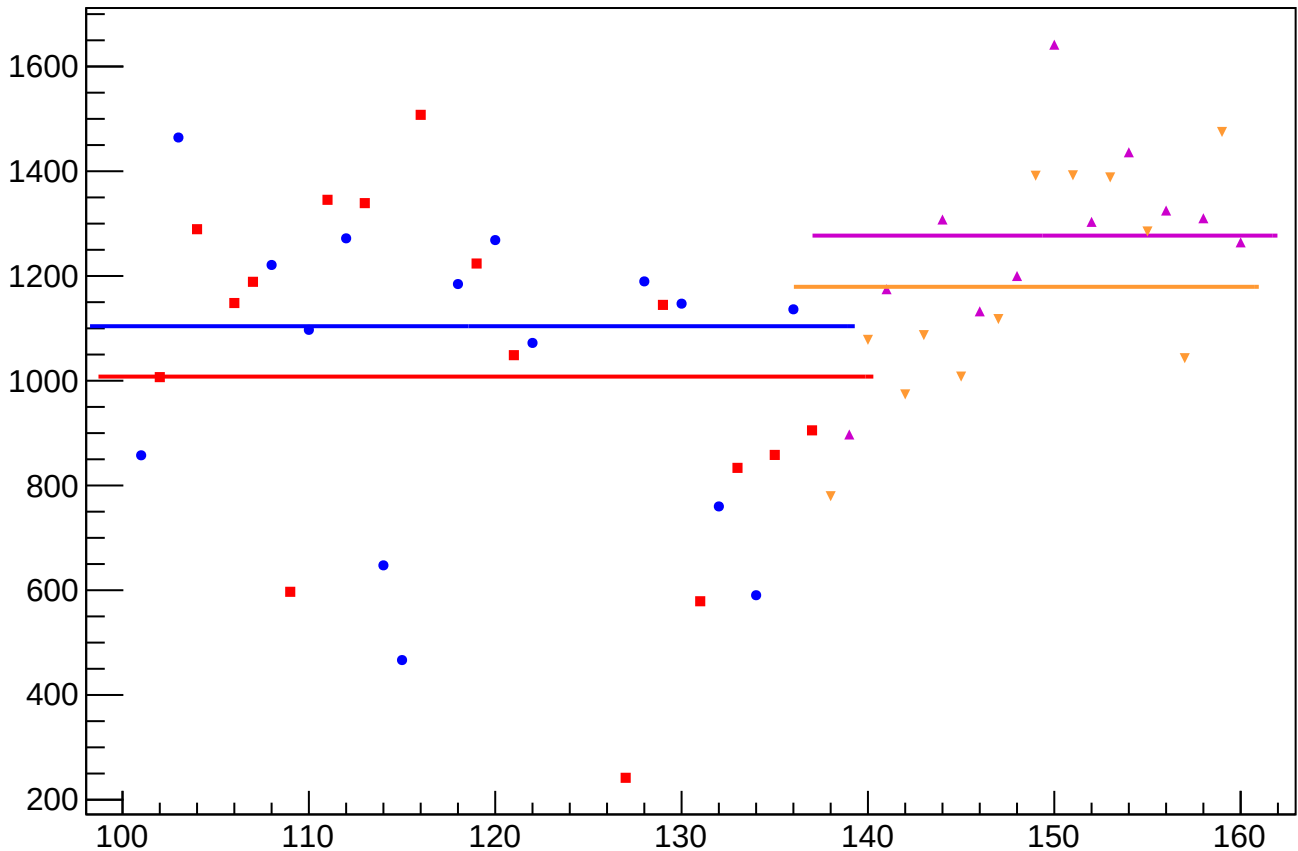
Right In: 1003.407+/-0.000  $\chi^2/\text{NDF}$ : 219815257294811198811064619822196195328.0/14

Left Out: 651.582+/-0.000  $\chi^2/\text{NDF}$ : 45579416700188389340899783793497341952.0/11

Right Out: 1539.568+/-0.000  $\chi^2/\text{NDF}$ : 3614774785297482293145354574125437288448.0/15

Left In: 650.769+/-0.000  $\chi^2/\text{NDF}$ : 14776465774858799846922535858394365952.0/10

dit\_atr2\_coil3\_Ndata\_mean vs Slug



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

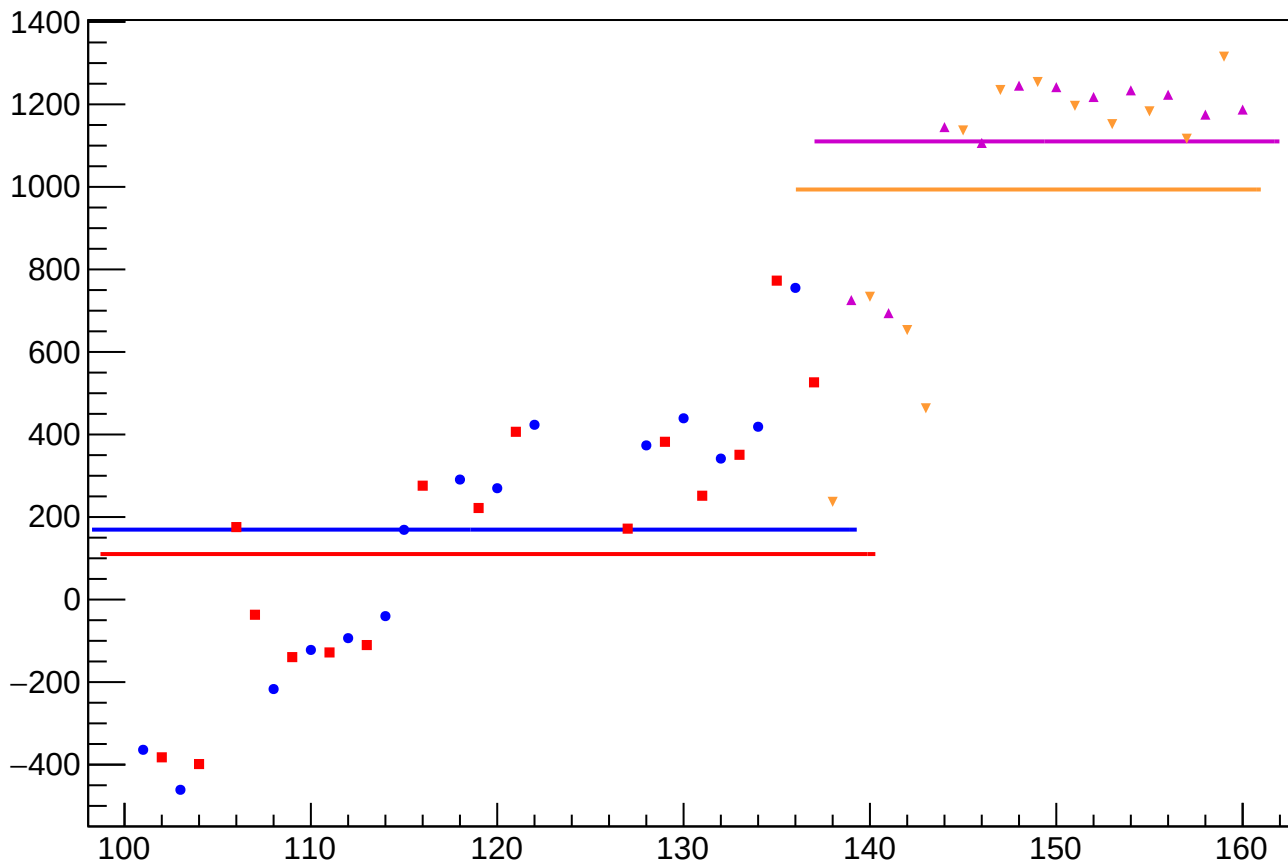
+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309



# dit\_sam1\_coil3\_mean vs Slug



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

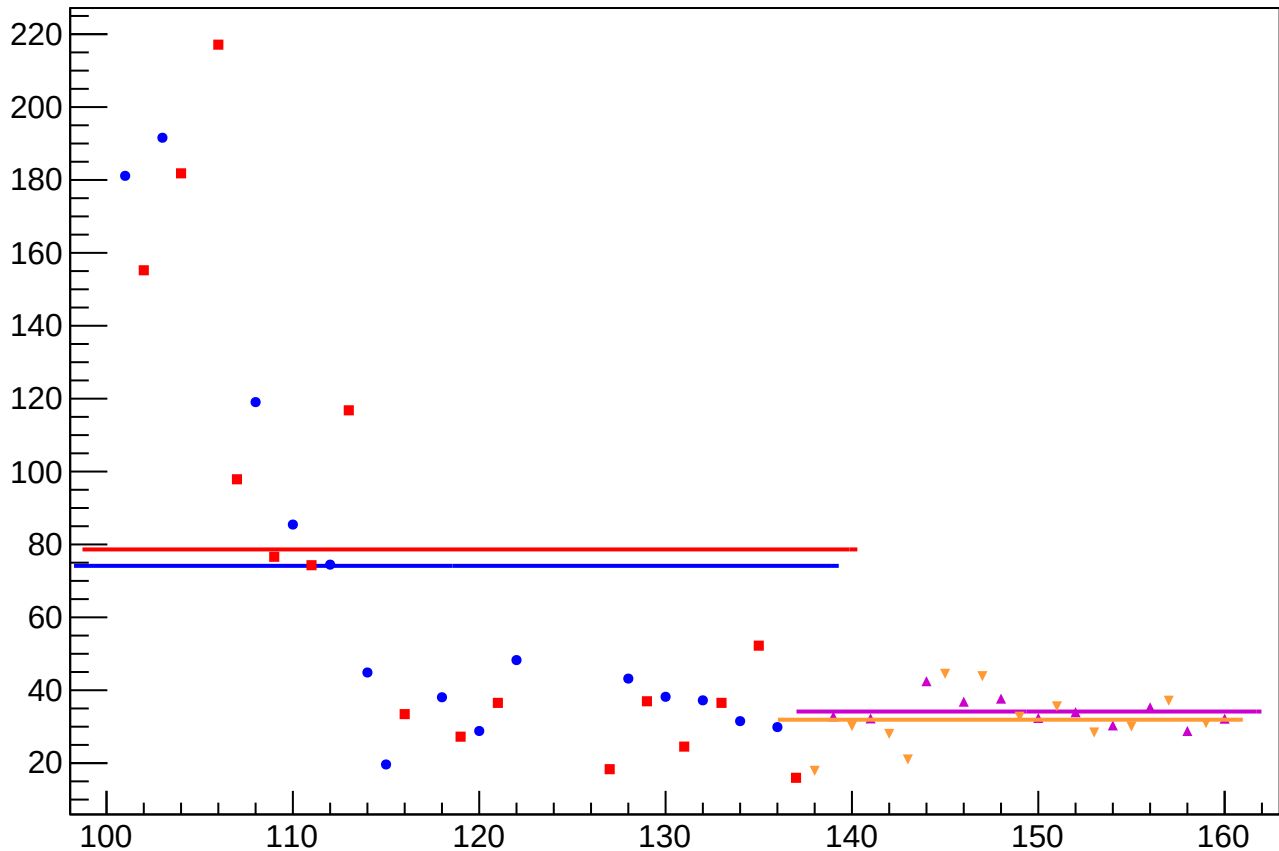
Left In: 1110.204+/-0.000  $\chi^2/\text{NDF}$ : 34078671675207101758695575343264169984.0/10

+ sign 651.454+/-0.000  $\chi^2/\text{NDF}$ : 457110601754155

All: 671.406+/-0.000  $\chi^2/\text{NDF}$ : 951499306925

- sign 691.006+/-0.000  $\chi^2/\text{NDF}$ : 493155274089920

dit\_sam1\_coil3\_err\_mean vs Slug



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

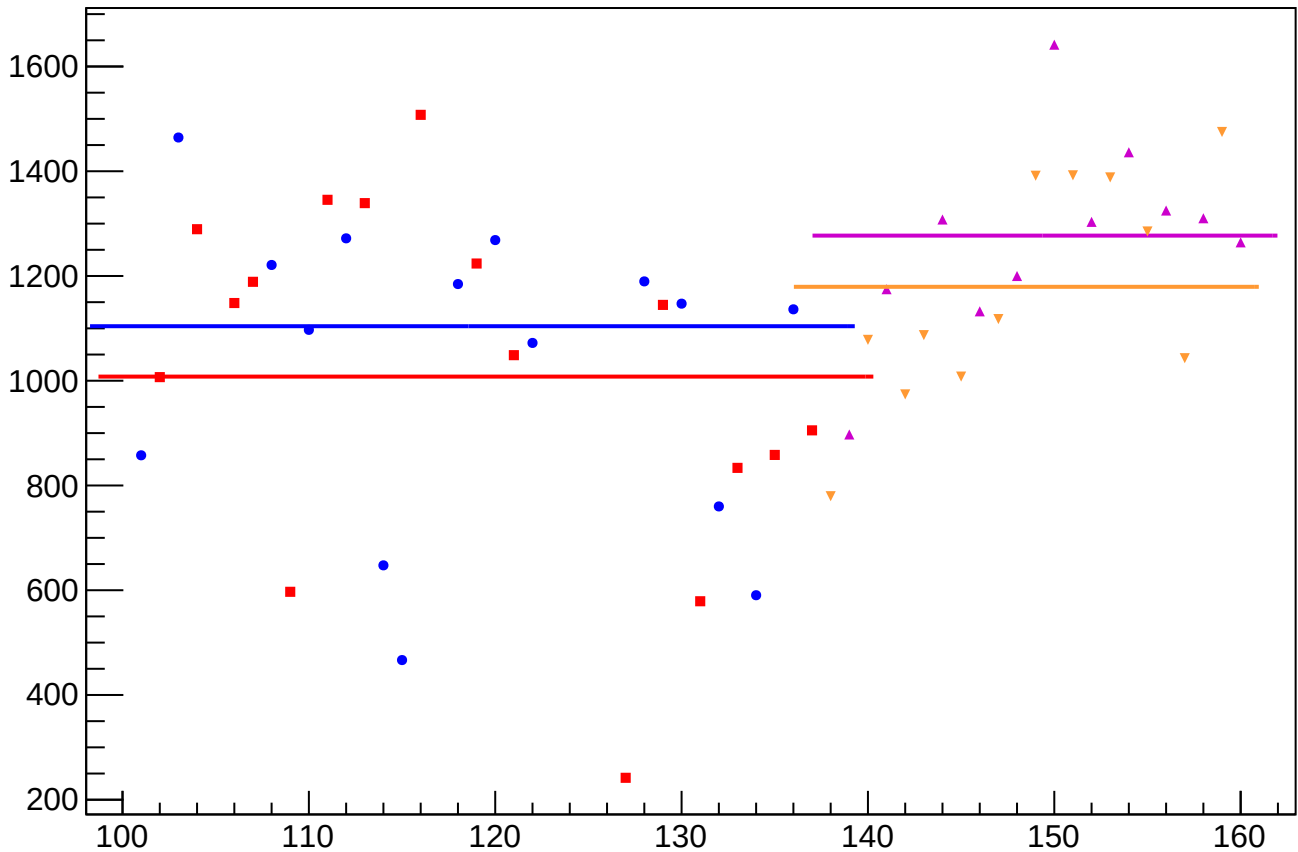
Left In: 34.158+/-0.000  $\chi^2/\text{NDF}$ : 12535781757096828038064244290224128.0/10

+ sign 49.444+/-0.000  $\chi^2/\text{NDF}$ : 2897043511629601

All: 51.139+/-0.000  $\chi^2/\text{NDF}$ : 6027926549606

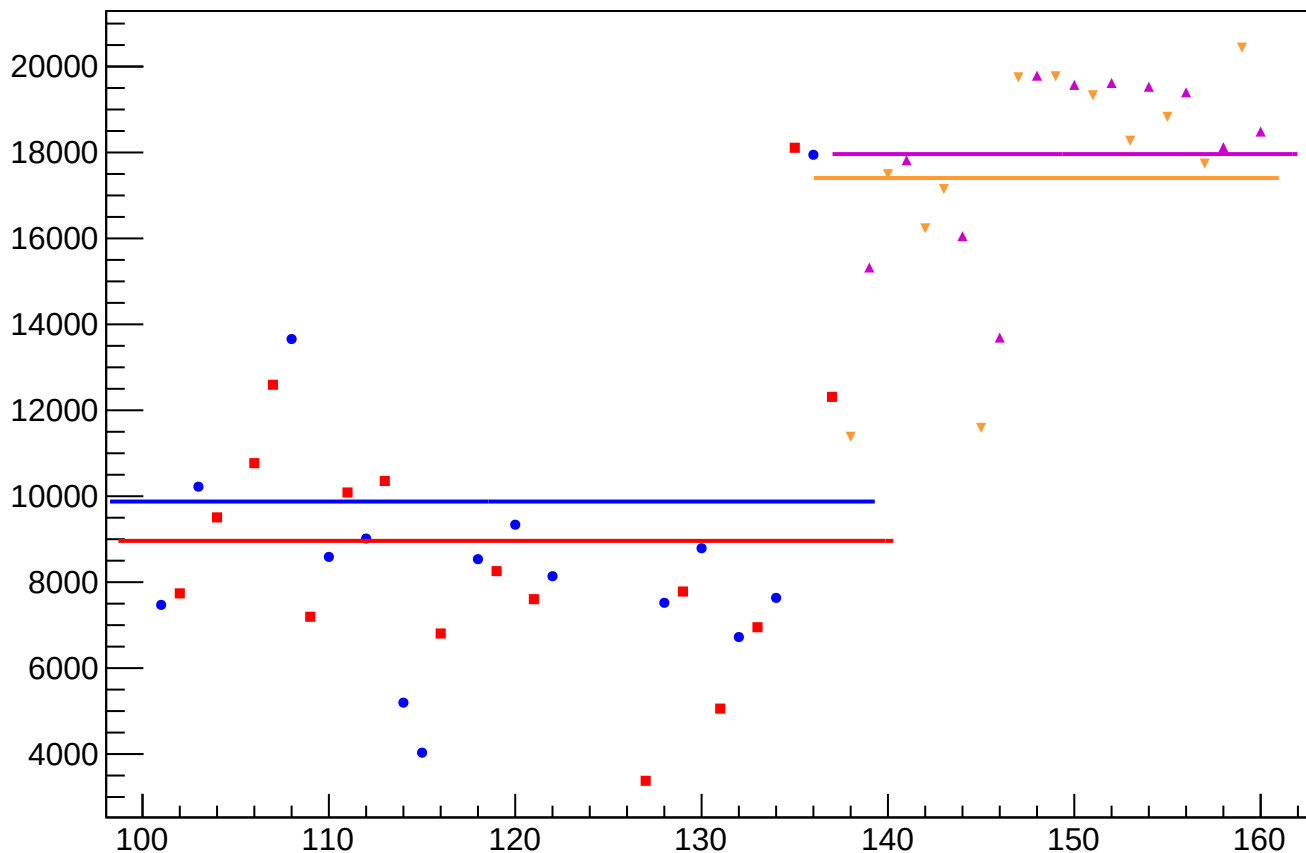
- sign 52.804+/-0.000  $\chi^2/\text{NDF}$ : 3121982731392082

# dit\_sam1\_coil3\_Ndata\_mean vs Slug



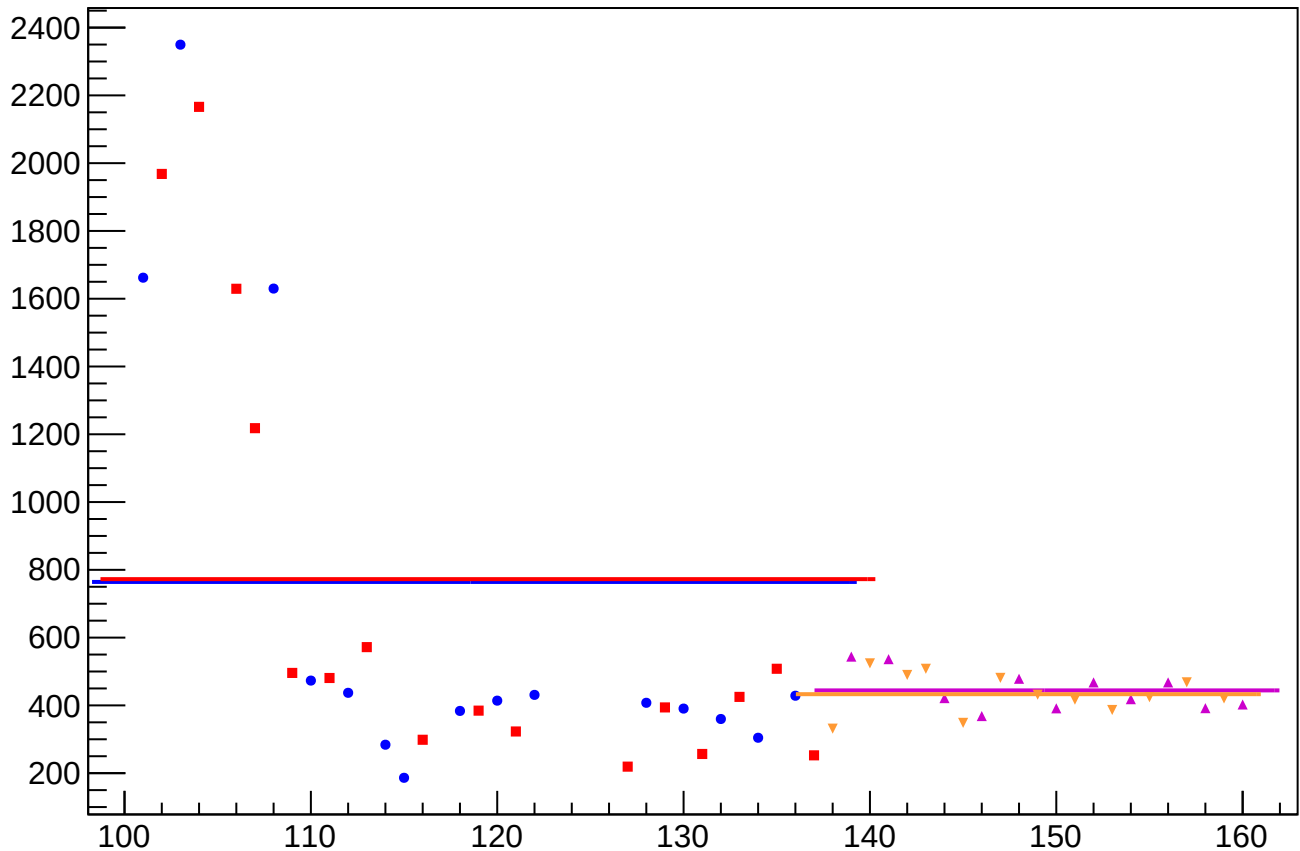
+ sign 1148.100 +/- 0.000  $\chi^2/\text{NDF}$ : 73628368958625  
 All: 1156.244 +/- 0.000  $\chi^2/\text{NDF}$ : 20056102034  
 - sign 1164.243 +/- 0.000  $\chi^2/\text{NDF}$ : 12672719249309

dit\_sam2\_coil3\_mean vs Slug



Right In: 9876.530+/-0.000  $\chi^2/\text{NDF}$ : 8483360287053054122301651905797133697024.0/14  
 Left Out: 17405.049+/-0.000  $\chi^2/\text{NDF}$ : 7689801671099378791544545422175664865280.0/11  
 Right Out: 8961.593+/-0.000  $\chi^2/\text{NDF}$ : 7583728644146461427304320888408335450112.0/15  
 Left In: 17962.529+/-0.000  $\chi^2/\text{NDF}$ : 3564698291142811133043344688261317525504.0/10

dit\_sam2\_coil3\_err\_mean vs Slug



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

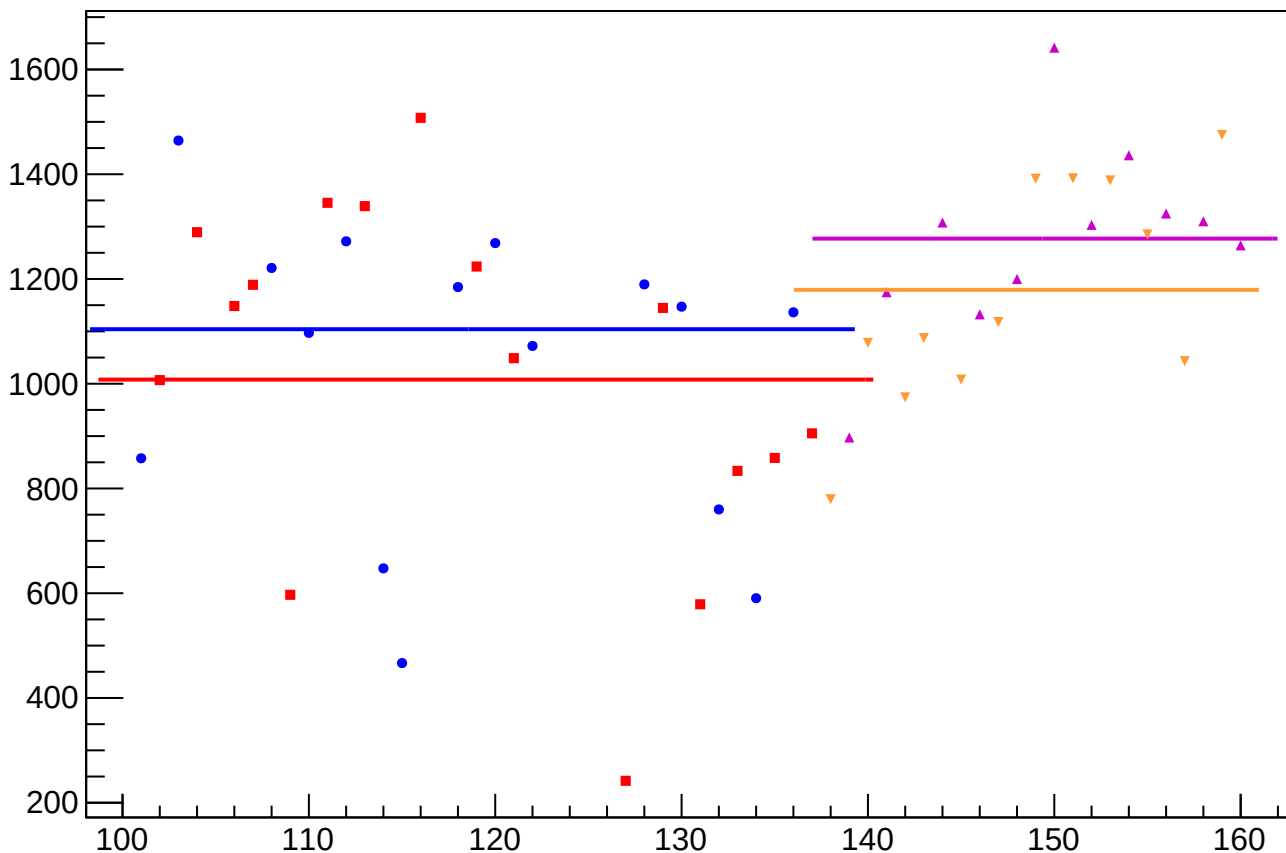
Left In: 444.245+/-0.000  $\chi^2/\text{NDF}$ : 2906625839452991270105053894151241728.0/10

+ sign 570.604+/-0.000  $\chi^2/\text{NDF}$ : 335667061264854

All: 576.292+/-0.000  $\chi^2/\text{NDF}$ : 666328037619

- sign 581.880+/-0.000  $\chi^2/\text{NDF}$ : 330560730510906

dit\_sam2\_coil3\_Ndata\_mean vs Slug



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

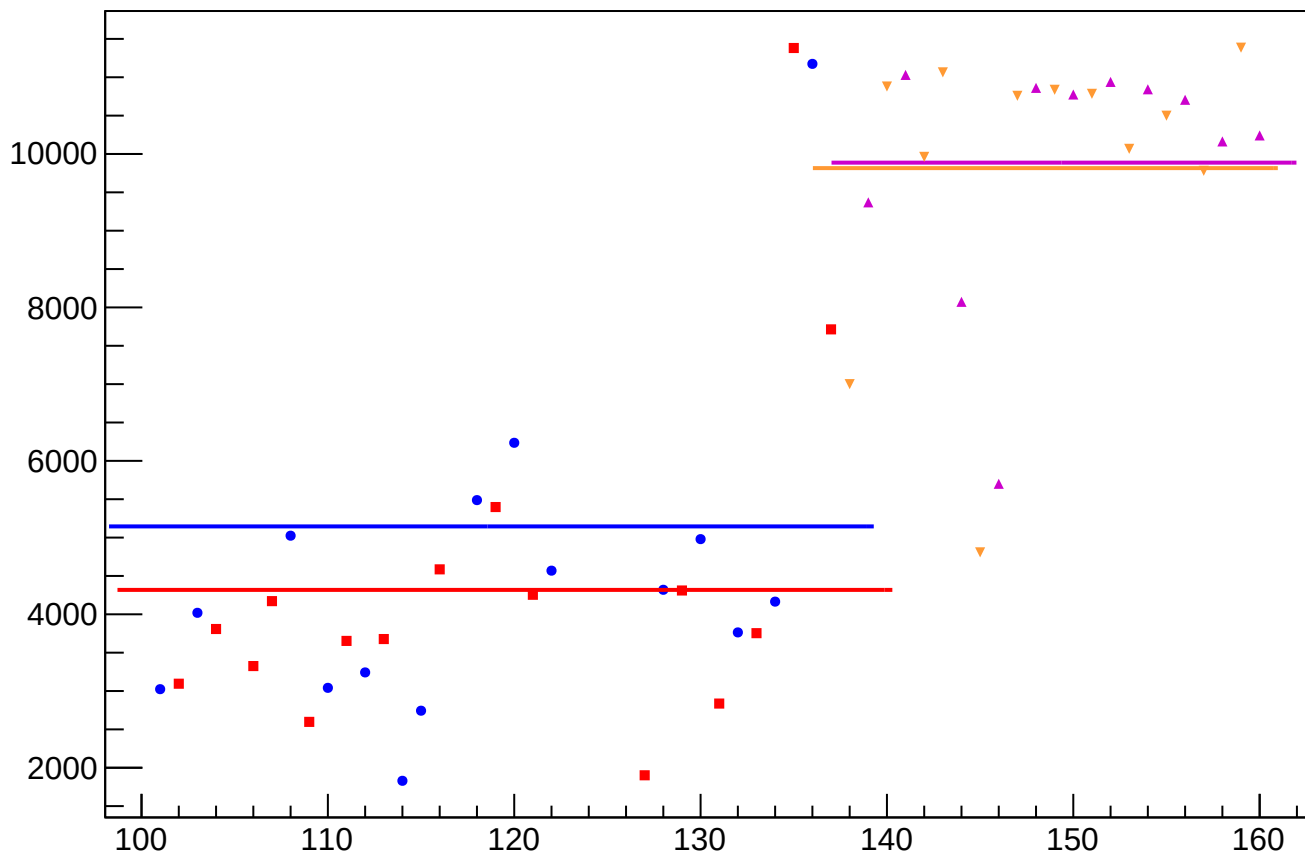
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

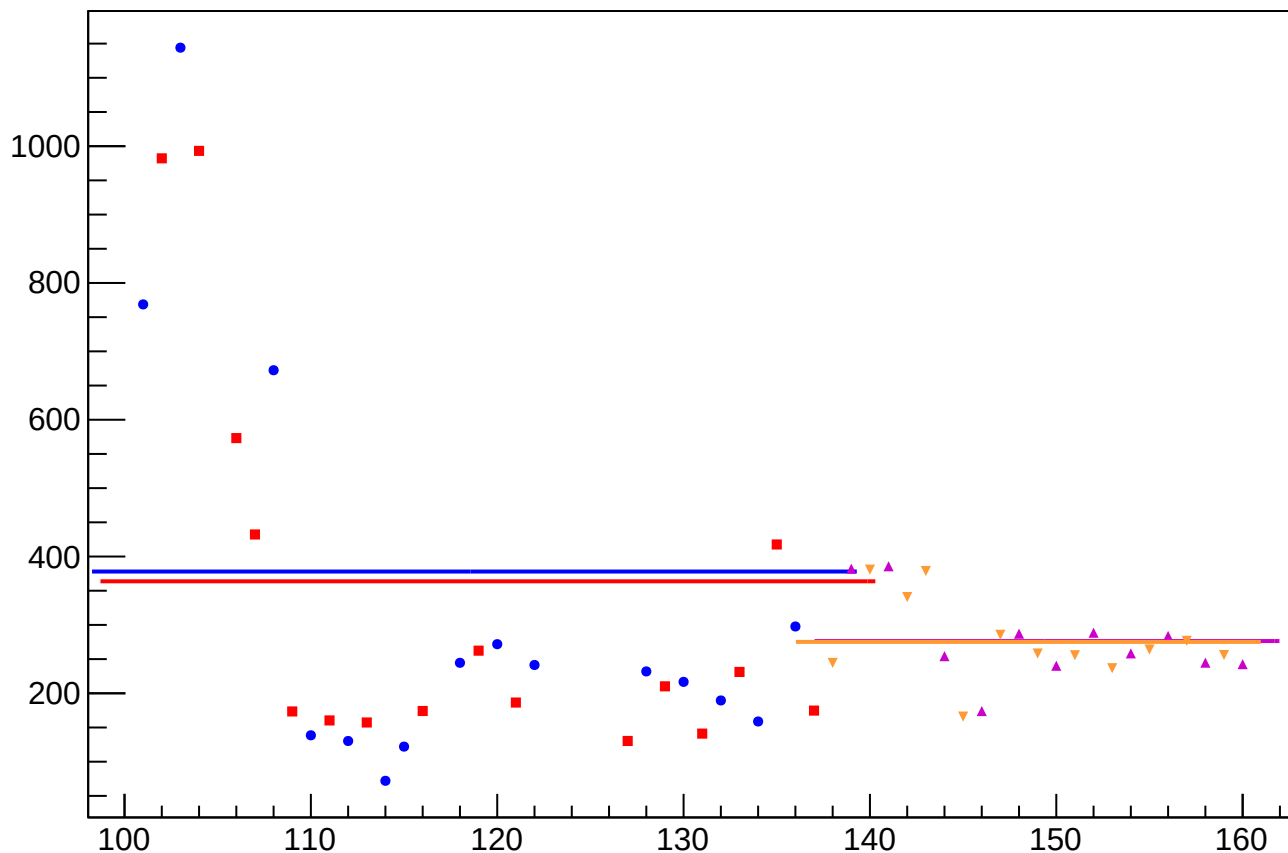
- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

dit\_sam3\_coil3\_mean vs Slug



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

# dit\_sam3\_coil3\_err\_mean vs Slug



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

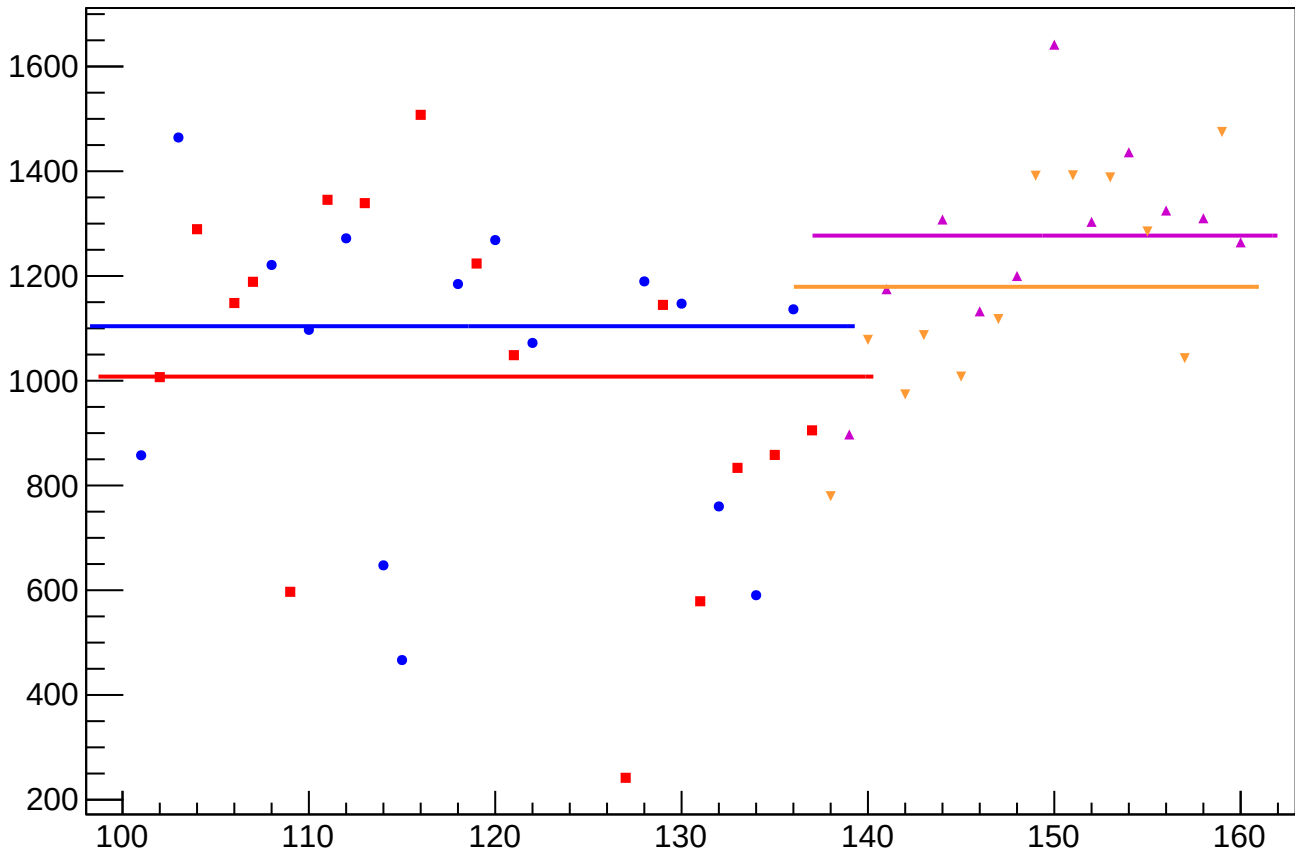
+ sign 317.896+/-0.000  $\chi^2/\text{NDF}$ : 685967694208858

All: 315.450+/-0.000  $\chi^2/\text{NDF}$ : 133778300115

- sign 313.047+/-0.000  $\chi^2/\text{NDF}$ : 651629892548713



# dit\_sam3\_coil3\_Ndata\_mean vs Slug



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

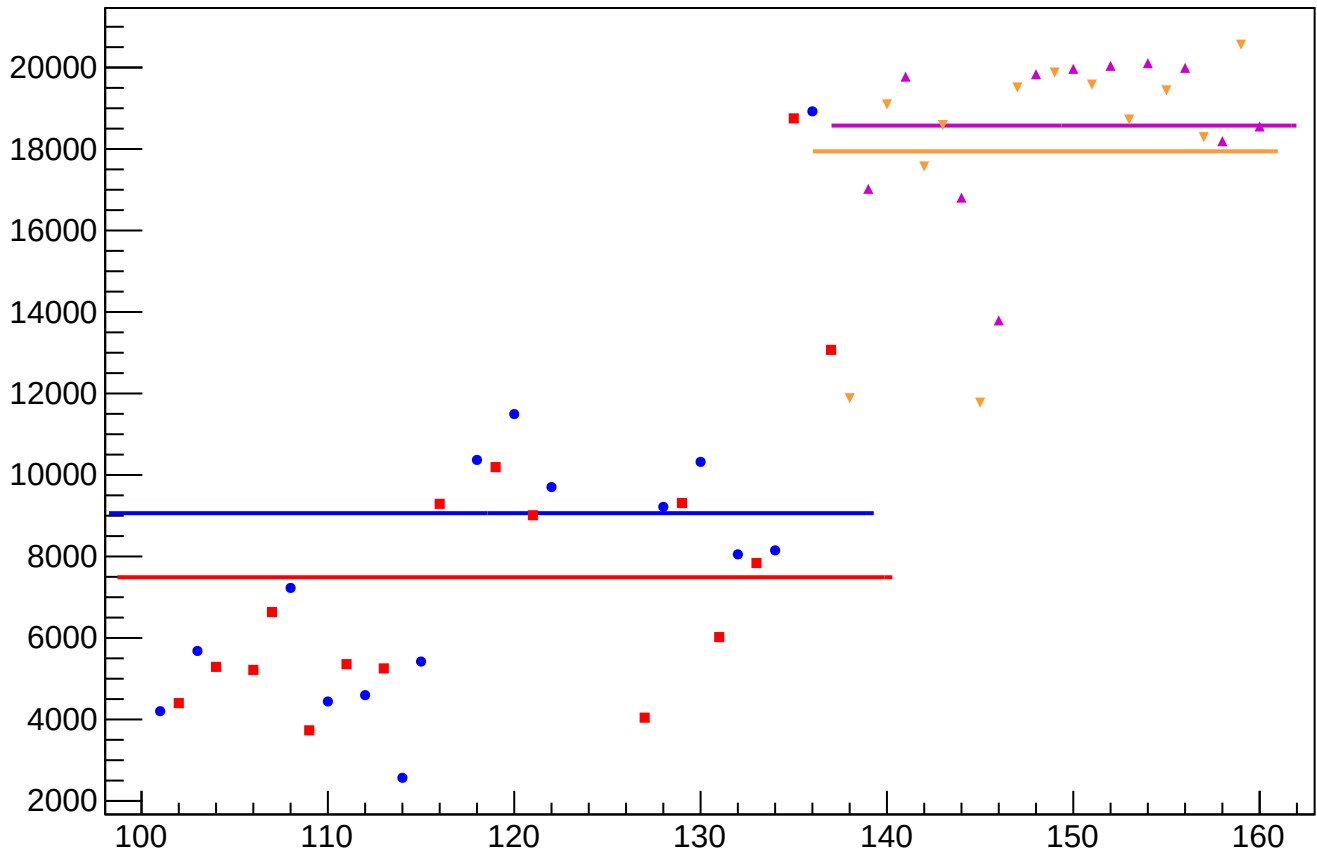
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

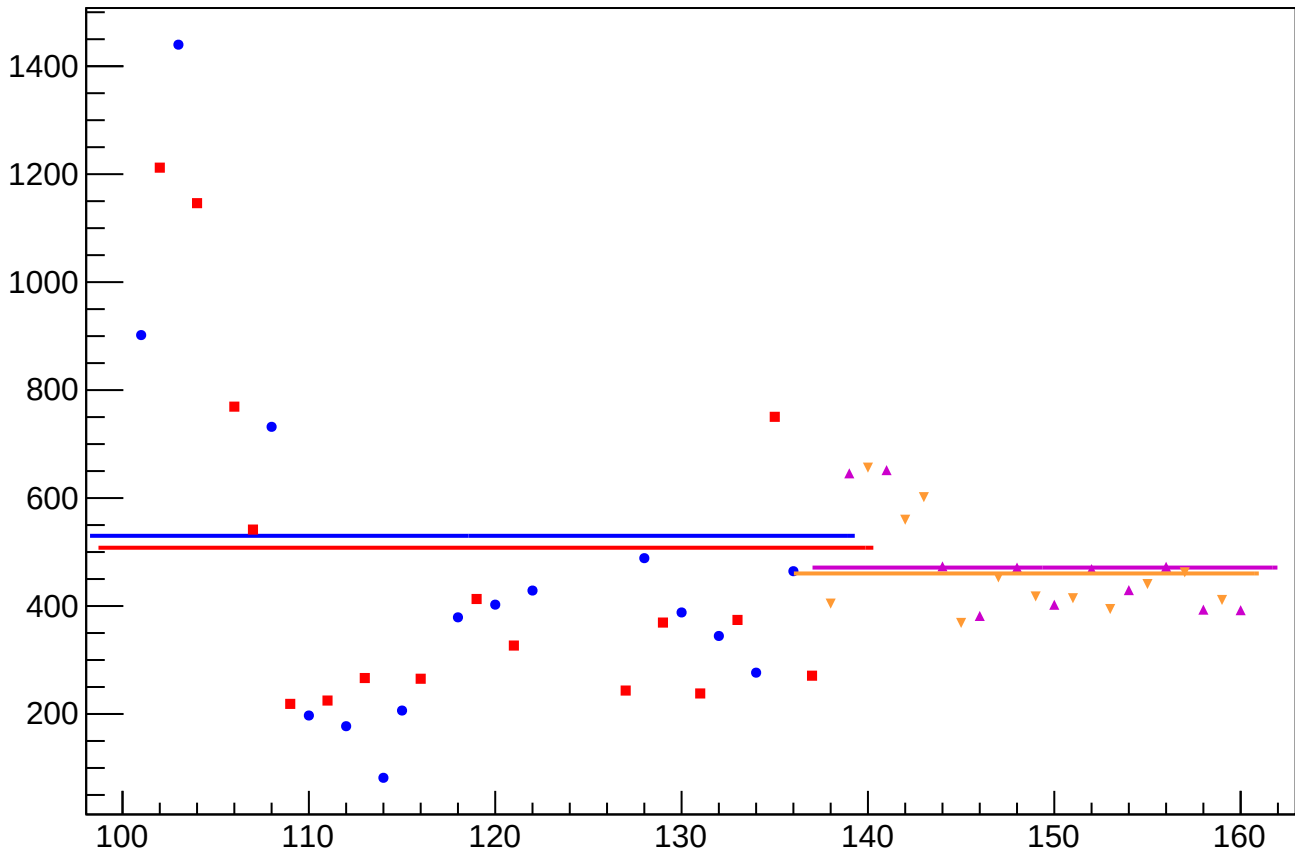
- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

# dit\_sam4\_coil3\_mean vs Slug



Right In: 9062.710+/-0.000  $\chi^2/\text{NDF}$ : 13621066943114354594159252409175431446528.0/14  
 Left Out: 17943.531+/-0.000  $\chi^2/\text{NDF}$ : 7473617733274816603280469921274378846208.0/11  
 Right Out: 7490.147+/-0.000  $\chi^2/\text{NDF}$ : 10108202124204139932285006457388239159296.0/15  
 Left In: 18574.874+/-0.000  $\chi^2/\text{NDF}$ : 3371752936319538414648384836142763081728.0/10

dit\_sam4\_coil3\_err\_mean vs Slug



Right In: 530.057+/-0.000  $\chi^2/\text{NDF}$ : 78754676063063255524046471751880671232.0/14

Left Out: 460.312+/-0.000  $\chi^2/\text{NDF}$ : 6754606428371283053517529701630869504.0/11

Right Out: 507.987+/-0.000  $\chi^2/\text{NDF}$ : 76689734698308464337881841969555046400.0/15

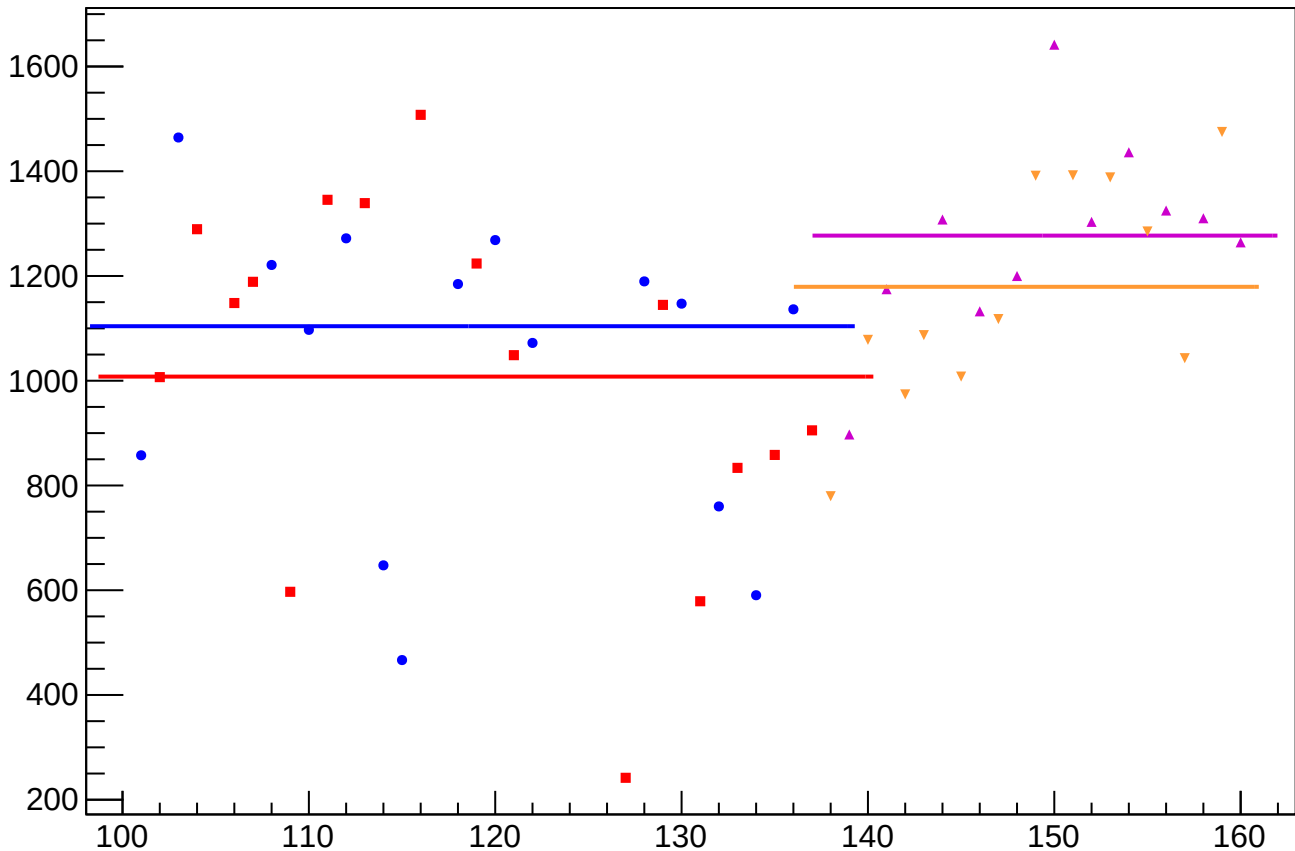
Left In: 471.219+/-0.000  $\chi^2/\text{NDF}$ : 744597321916033625746772011051745280.0/10

+ sign 489.272+/-0.000  $\chi^2/\text{NDF}$ : 873553872862030

All: 487.941+/-0.000  $\chi^2/\text{NDF}$ : 172020251630

- sign 486.633+/-0.000  $\chi^2/\text{NDF}$ : 846593738129805

dit\_sam4\_coil3\_Ndata\_mean vs Slug



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

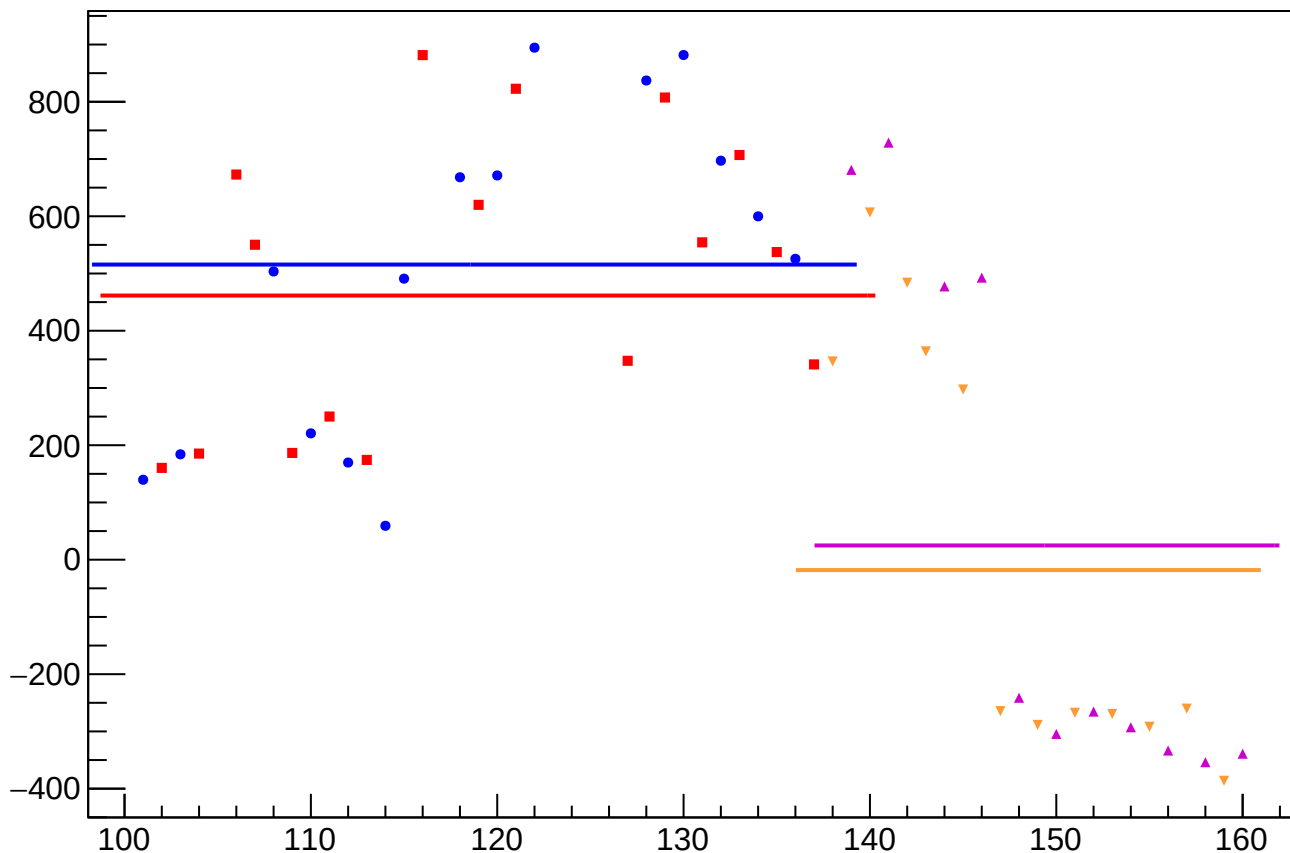
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

# dit\_sam5\_coil3\_mean vs Slug



Right In: 515.635+/-0.000  $\chi^2/\text{NDF}$ : 48465403420573957292673062371162324992.0/14

+ sign 203.495+/-0.000  $\chi^2/\text{NDF}$ : 270613075260864

Left Out: -18.146+/-0.000  $\chi^2/\text{NDF}$ : 114014627327363890146179797072763420672.0/11

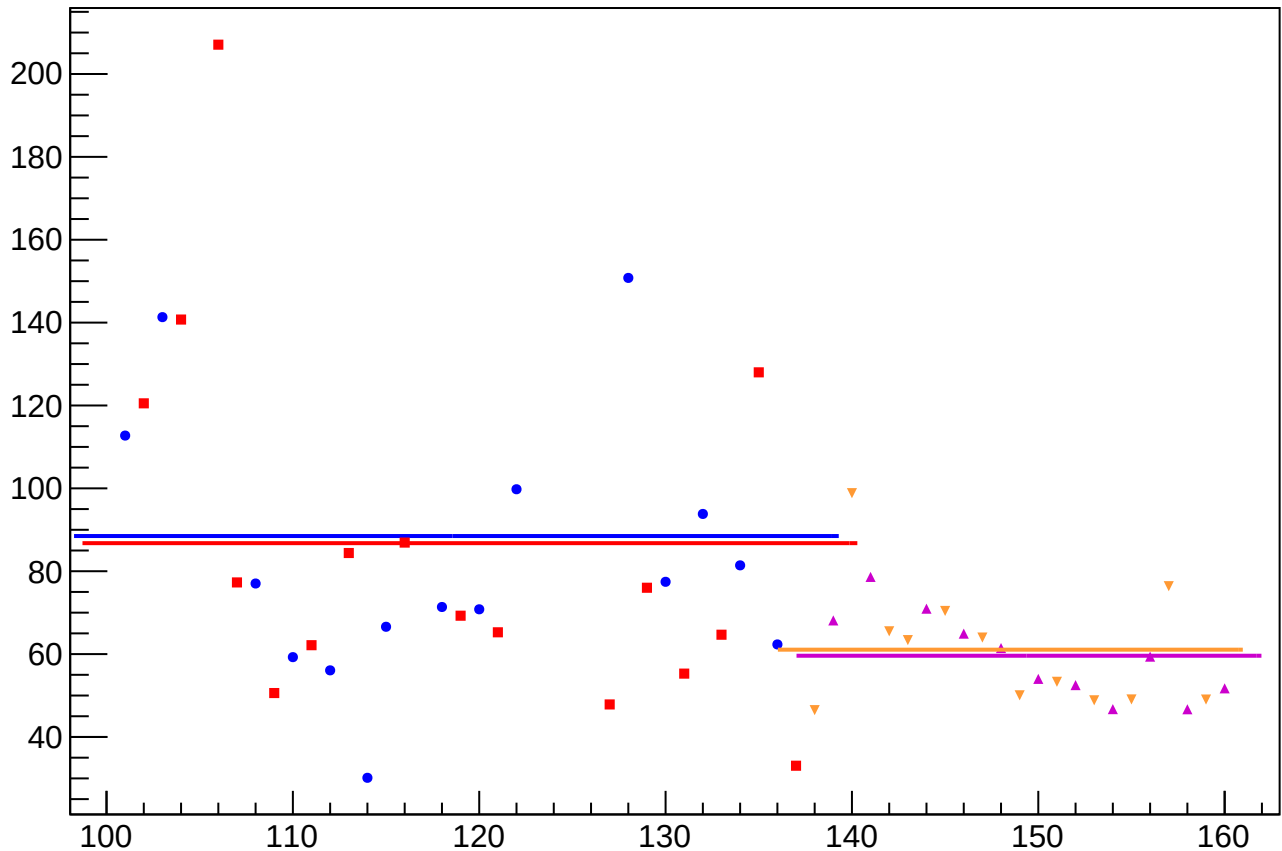
All: 205.734+/-0.000  $\chi^2/\text{NDF}$ : 562112865205

Right Out: 461.497+/-0.000  $\chi^2/\text{NDF}$ : 40473746660091355928063306884368564224.0/15

- sign 207.935+/-0.000  $\chi^2/\text{NDF}$ : 291484247202932

Left In: 24.898+/-0.000  $\chi^2/\text{NDF}$ : 177170083146066340419686697250307702784.0/10

dit\_sam5\_coil3\_err\_mean vs Slug



Right In: 88.493+/-0.000  $\chi^2/\text{NDF}$ : 643231155193035512625817963208900608.0/14

Left Out: 61.067+/-0.000  $\chi^2/\text{NDF}$ : 211507080213048507647331077961285632.0/11

Right Out: 86.773+/-0.000  $\chi^2/\text{NDF}$ : 1059206766314086021240525003228708864.0/15

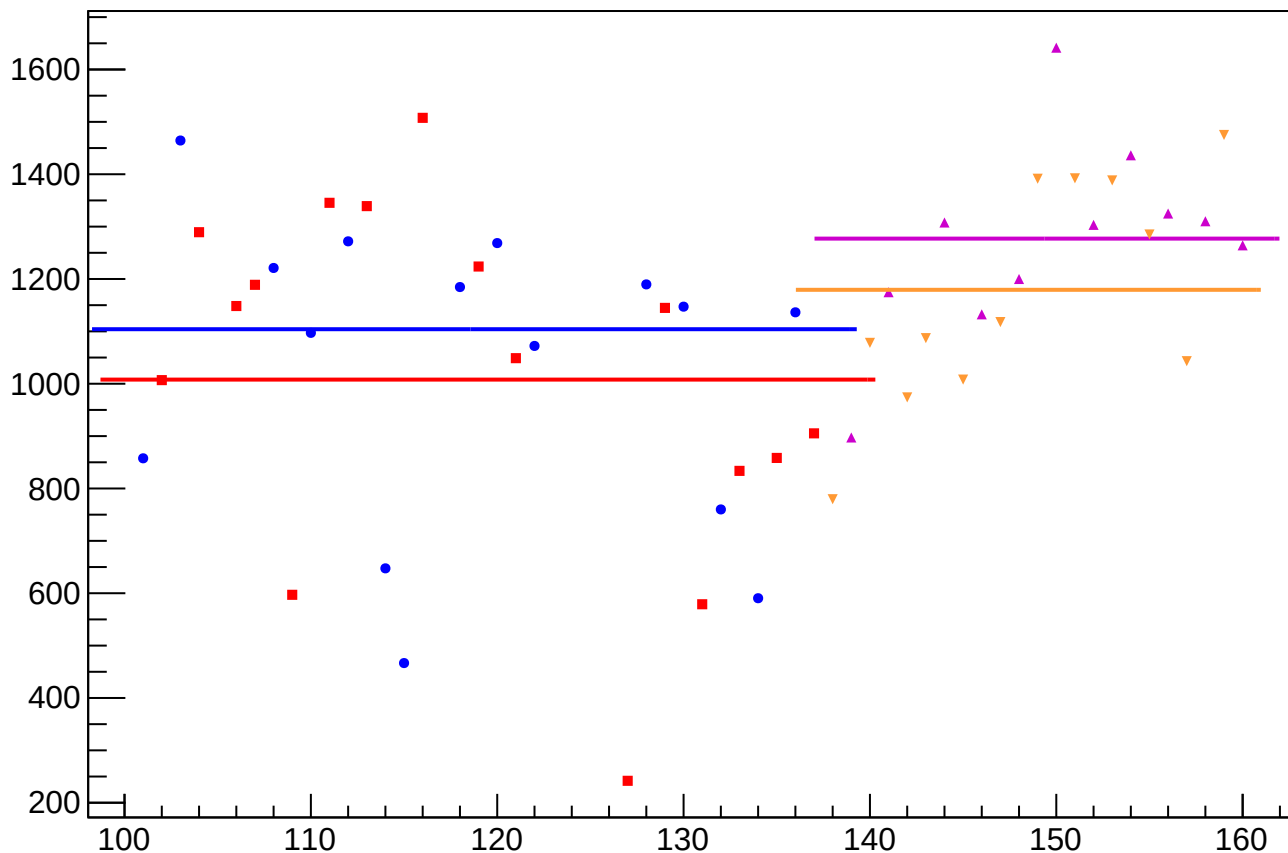
Left In: 59.604+/-0.000  $\chi^2/\text{NDF}$ : 90862625181985664375323463168032768.0/10

+ sign 72.455+/-0.000  $\chi^2/\text{NDF}$ : 1140205339739572

All: 71.718+/-0.000  $\chi^2/\text{NDF}$ : 2577899671839

- sign 70.994+/-0.000  $\chi^2/\text{NDF}$ : 1436012461961461

dit\_sam5\_coil3\_Ndata\_mean vs Slug



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

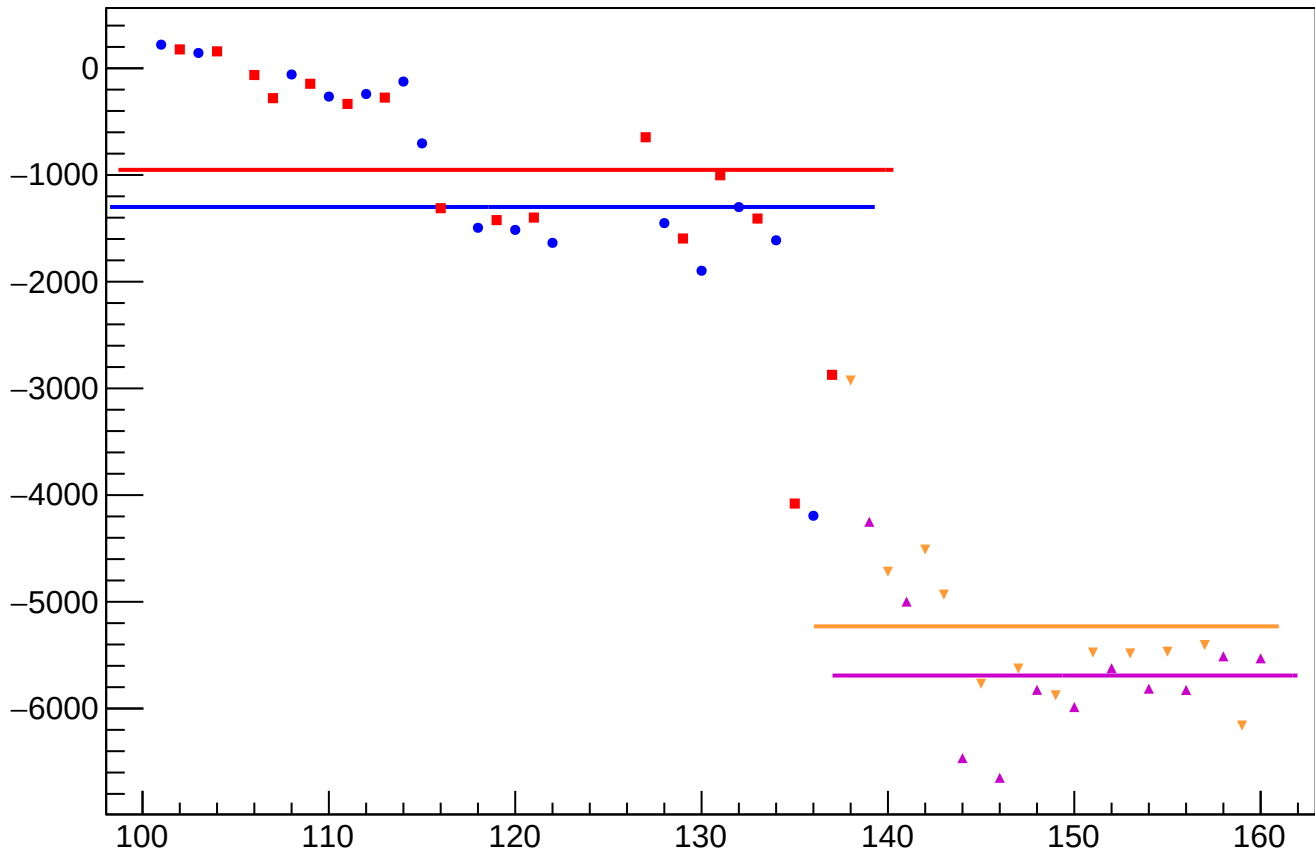
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

dit\_sam6\_coil3\_mean vs Slug



Right In: -1299.904+/-0.000

$\chi^2/\text{NDF}$ : 1199649252163216367086408691577524322304.0/14

Left Out: -5230.164+/-0.000

+ sign -3598.213+/-0.000  $\chi^2/\text{NDF}$ : 7683373457426

Right Out: -951.903+/-0.000

All: -3651.666+/-0.000  $\chi^2/\text{NDF}$ : 1758908860

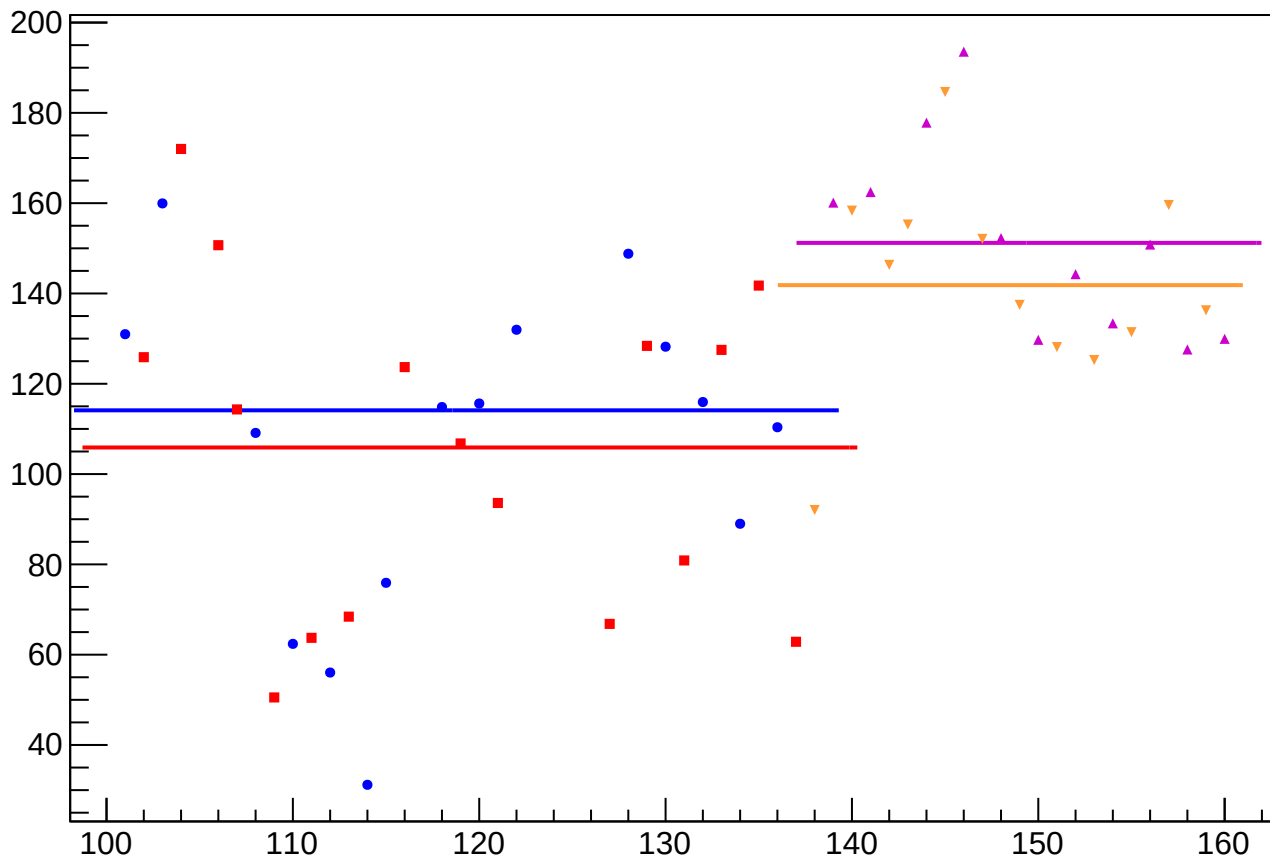
Left In: -5690.941+/-0.000

- sign -3704.179+/-0.000  $\chi^2/\text{NDF}$ : 98968619860202

$\chi^2/\text{NDF}$ : 355774620722948866968040460749891436544.0/10



dit\_sam6\_coil3\_err\_mean vs Slug



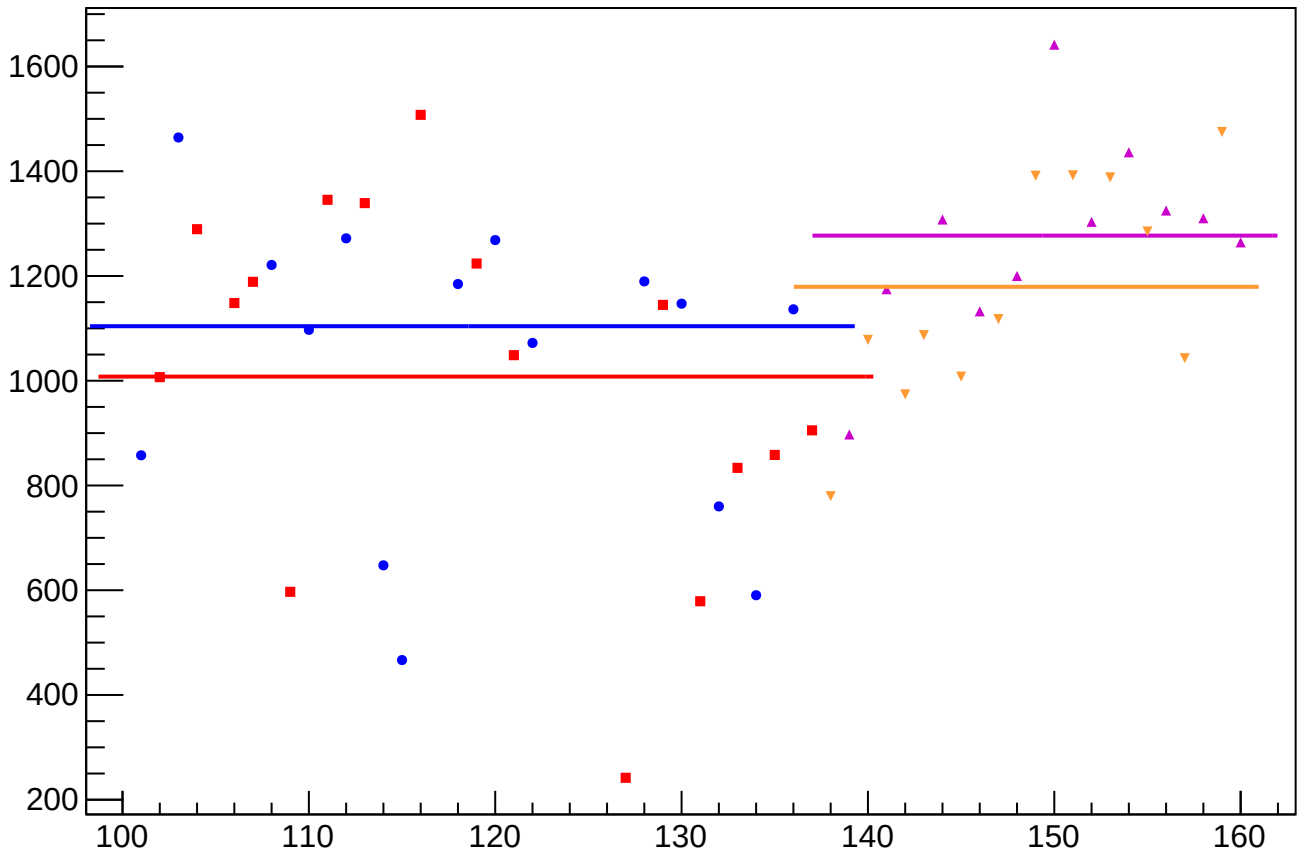
Right In: 114.118+/-0.000  $\chi^2/\text{NDF}$ : 607226770891525118881736460452495360.0/14

Left Out: 141.844+/-0.000  $\chi^2/\text{NDF}$ : 455273254245846333149237795723673600.0/11

Right Out: 105.890+/-0.000  $\chi^2/\text{NDF}$ : 851861355270591521058611007535972352.0/15

Left In: 151.203+/-0.000  $\chi^2/\text{NDF}$ : 382227652604999337577431549784096768.0/10

dit\_sam6\_coil3\_Ndata\_mean vs Slug



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

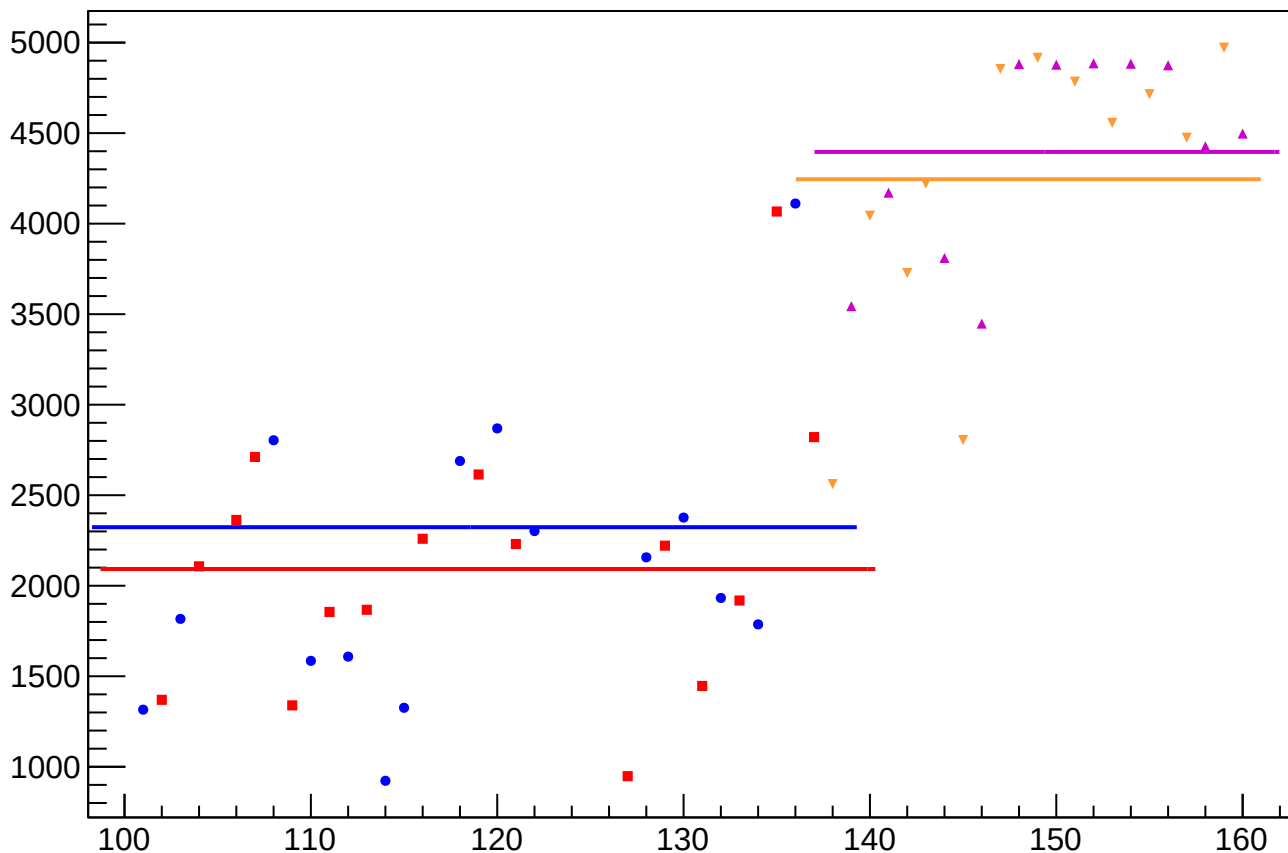
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

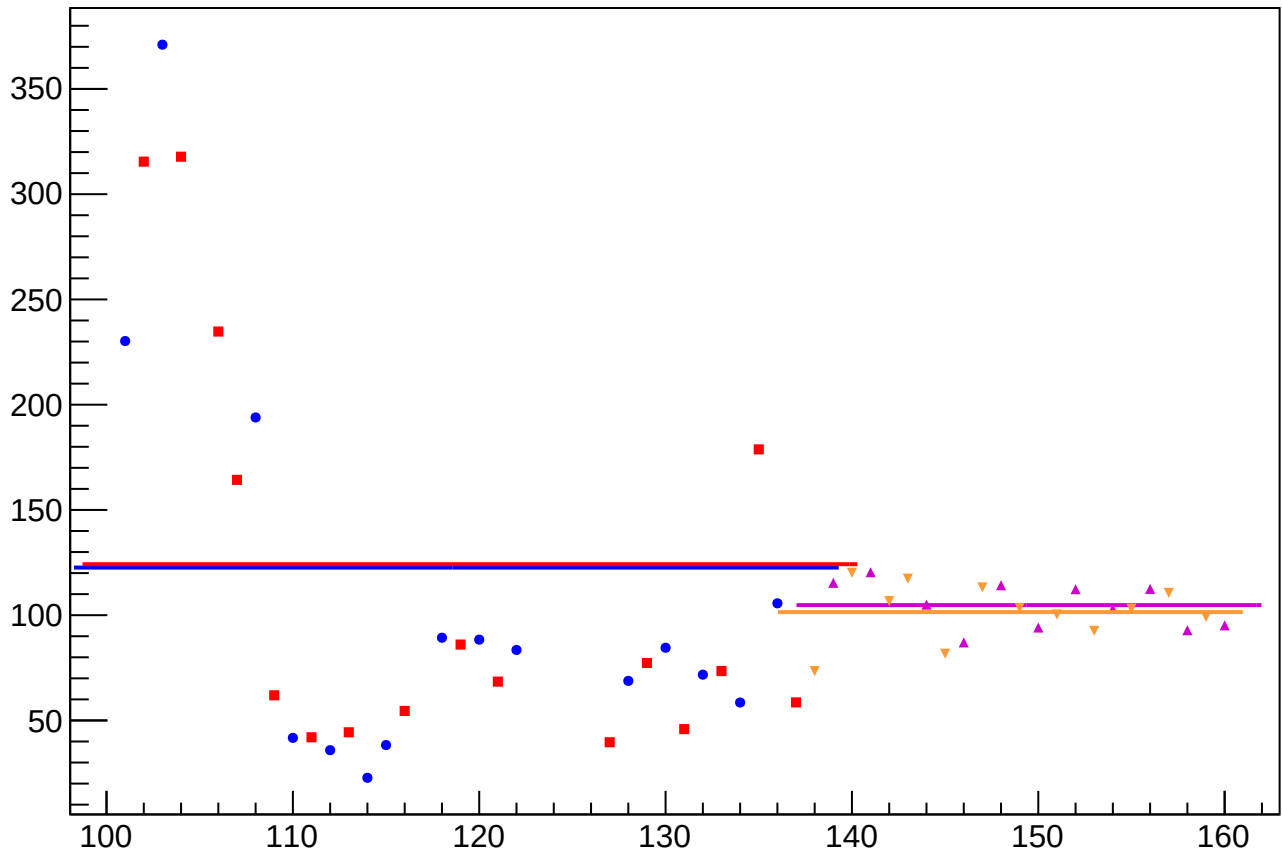
- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

# dit\_sam7\_coil3\_mean vs Slug



|                             |                                                                    |                         |                                      |
|-----------------------------|--------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 2323.372+/-0.000  | $\chi^2/\text{NDF}$ : 476371189888349375964725620757728591872.0/14 | + sign 3447.245+/-0.000 | $\chi^2/\text{NDF}$ : 24382907413963 |
| Left Out: 4245.269+/-0.000  | $\chi^2/\text{NDF}$ : 560100037882540295630660663570463719424.0/11 | All: 3438.707+/-0.000   | $\chi^2/\text{NDF}$ : 51316040482    |
| Right Out: 2092.458+/-0.000 | $\chi^2/\text{NDF}$ : 367126080872166122663684022473339174912.0/15 | - sign 3430.319+/-0.000 | $\chi^2/\text{NDF}$ : 26930874223674 |
| Left In: 4396.069+/-0.000   | $\chi^2/\text{NDF}$ : 270326441631367265143713722564756897792.0/10 |                         |                                      |

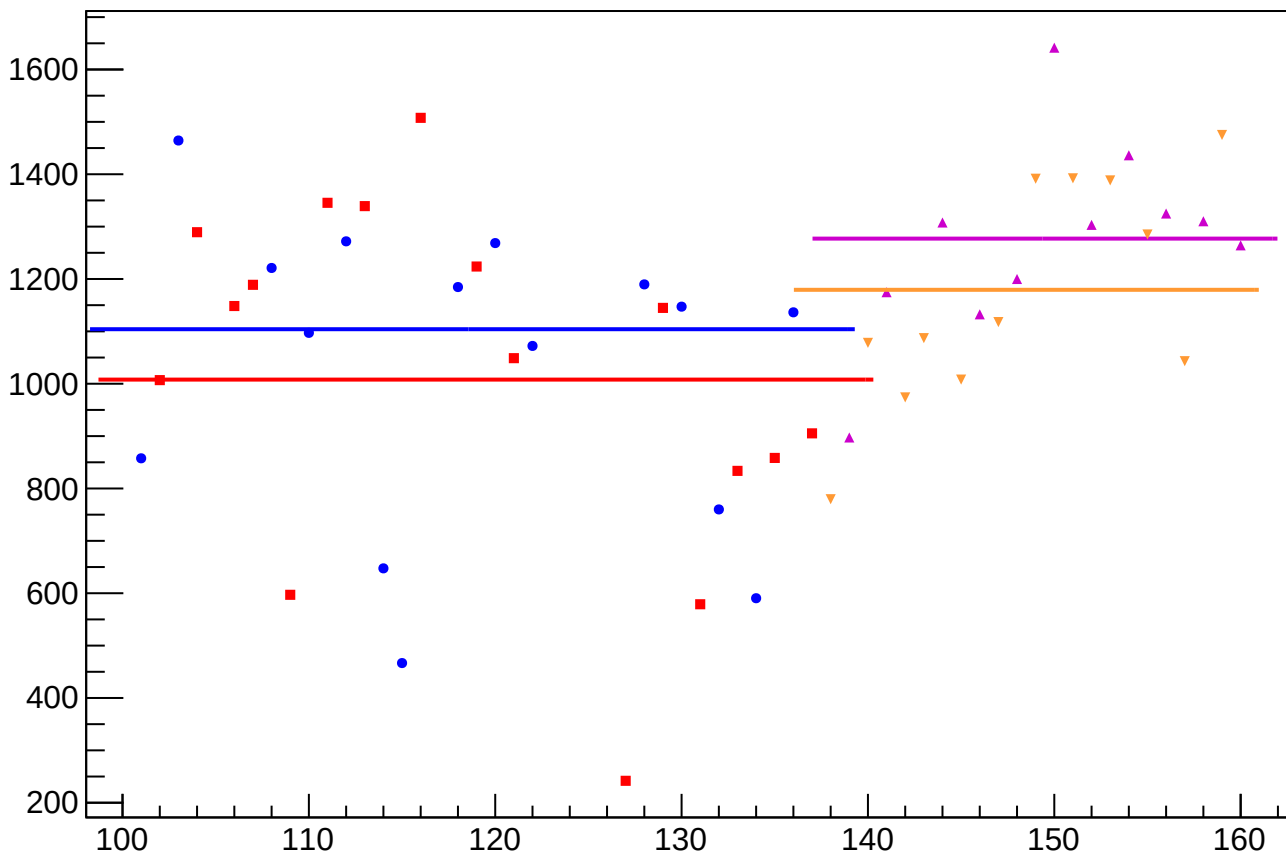
# dit\_sam7\_coil3\_err\_mean vs Slug



|                            |                                                                  |
|----------------------------|------------------------------------------------------------------|
| Right In: 122.622+/-0.000  | $\chi^2/\text{NDF}$ : 5937504661187691145903235842749497344.0/14 |
| Left Out: 101.470+/-0.000  | $\chi^2/\text{NDF}$ : 163606586609215515174601139620413440.0/11  |
| Right Out: 124.216+/-0.000 | $\chi^2/\text{NDF}$ : 6549627589629012958791202941129719808.0/15 |
| Left In: 104.786+/-0.000   | $\chi^2/\text{NDF}$ : 102013785381333837493435451846950912.0/10  |

+ sign 110.253+/-0.000  $\chi^2/\text{NDF}$ : 627090967671002  
 All: 111.604+/-0.000  $\chi^2/\text{NDF}$ : 130744524723  
 - sign 112.932+/-0.000  $\chi^2/\text{NDF}$ : 679788337218710

dit\_sam7\_coil3\_Ndata\_mean vs Slug



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

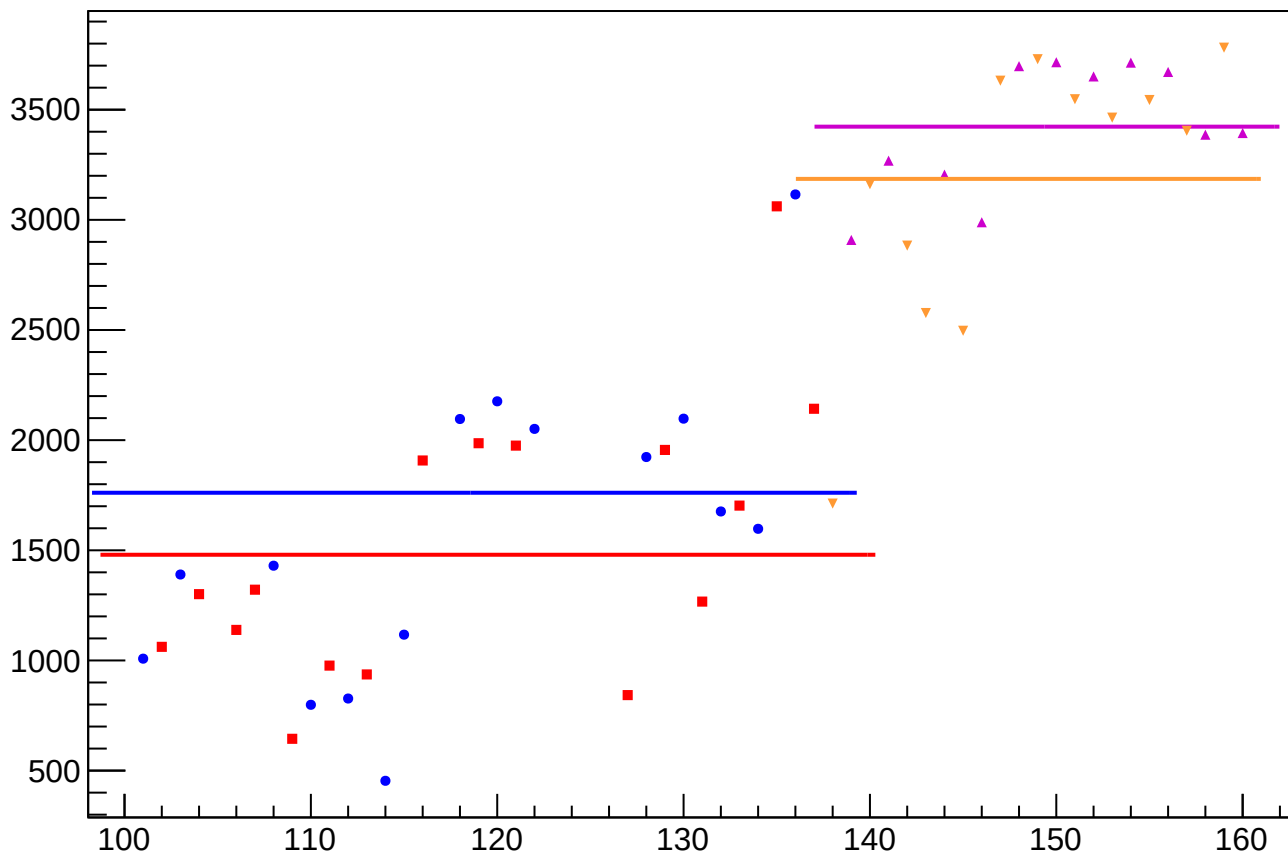
Left In: 1277.097+/-0.000  $\chi^2/\text{NDF}$ : 29578729901602647998073818936097374208.0/10

+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309

# dit\_sam8\_coil3\_mean vs Slug



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

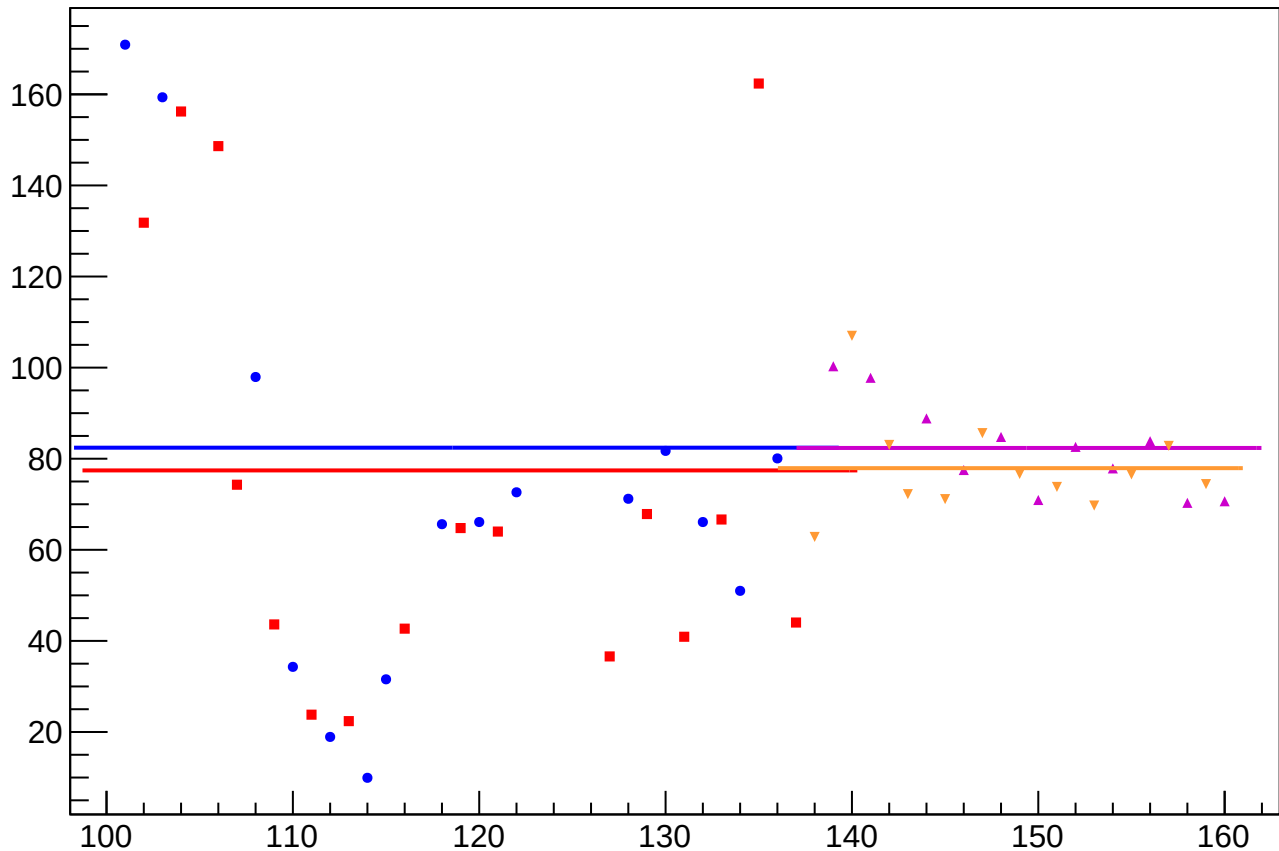
Left In: 3423.018+/-0.000  $\chi^2/\text{NDF}$ : 74537038842088882463869581727568494592.0/10

+ sign 2594.359+/-0.000  $\chi^2/\text{NDF}$ : 14374646884324

All: 2601.420+/-0.000  $\chi^2/\text{NDF}$ : 32383742993

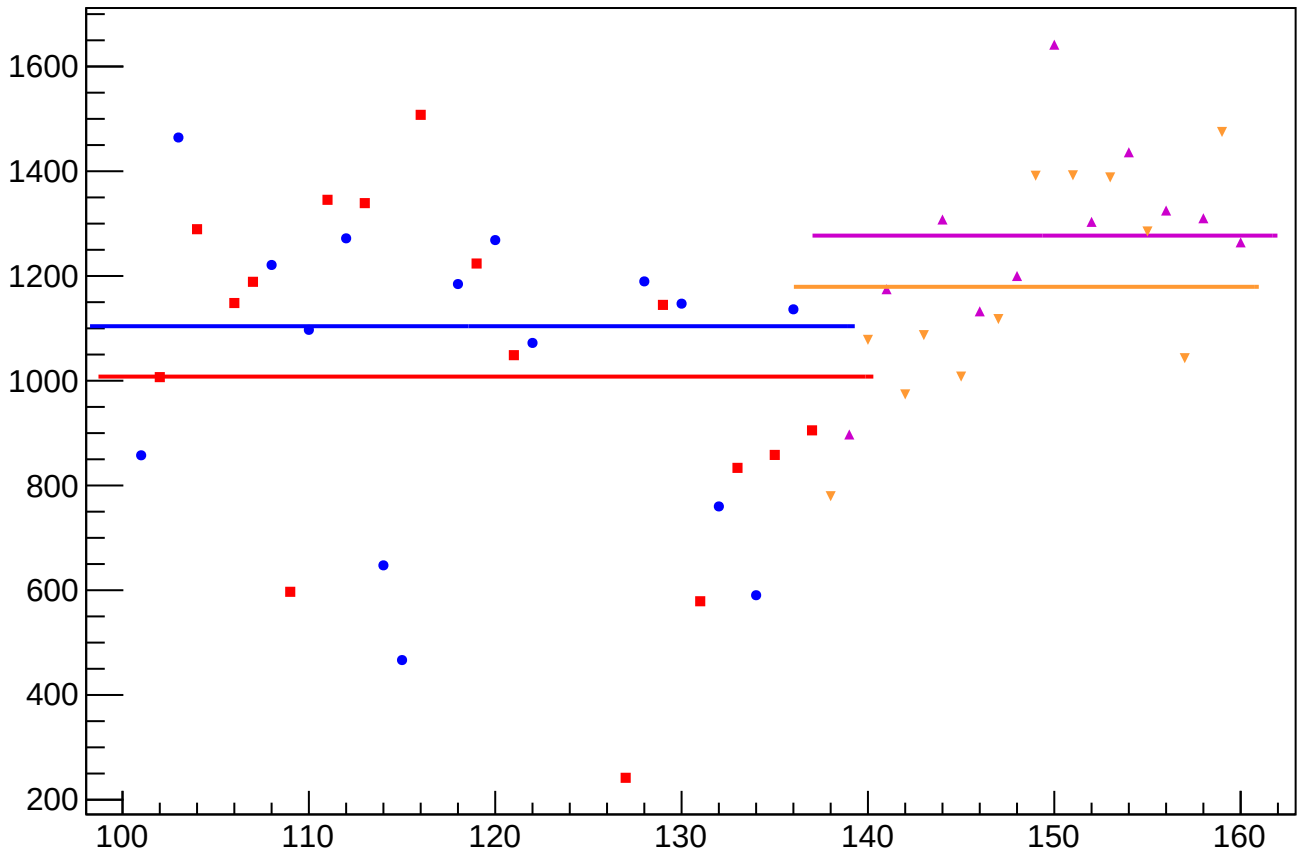
- sign 2608.357+/-0.000  $\chi^2/\text{NDF}$ : 18007551336700

dit\_sam8\_coil3\_err\_mean vs Slug



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

dit\_sam8\_coil3\_Ndata\_mean vs Slug



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

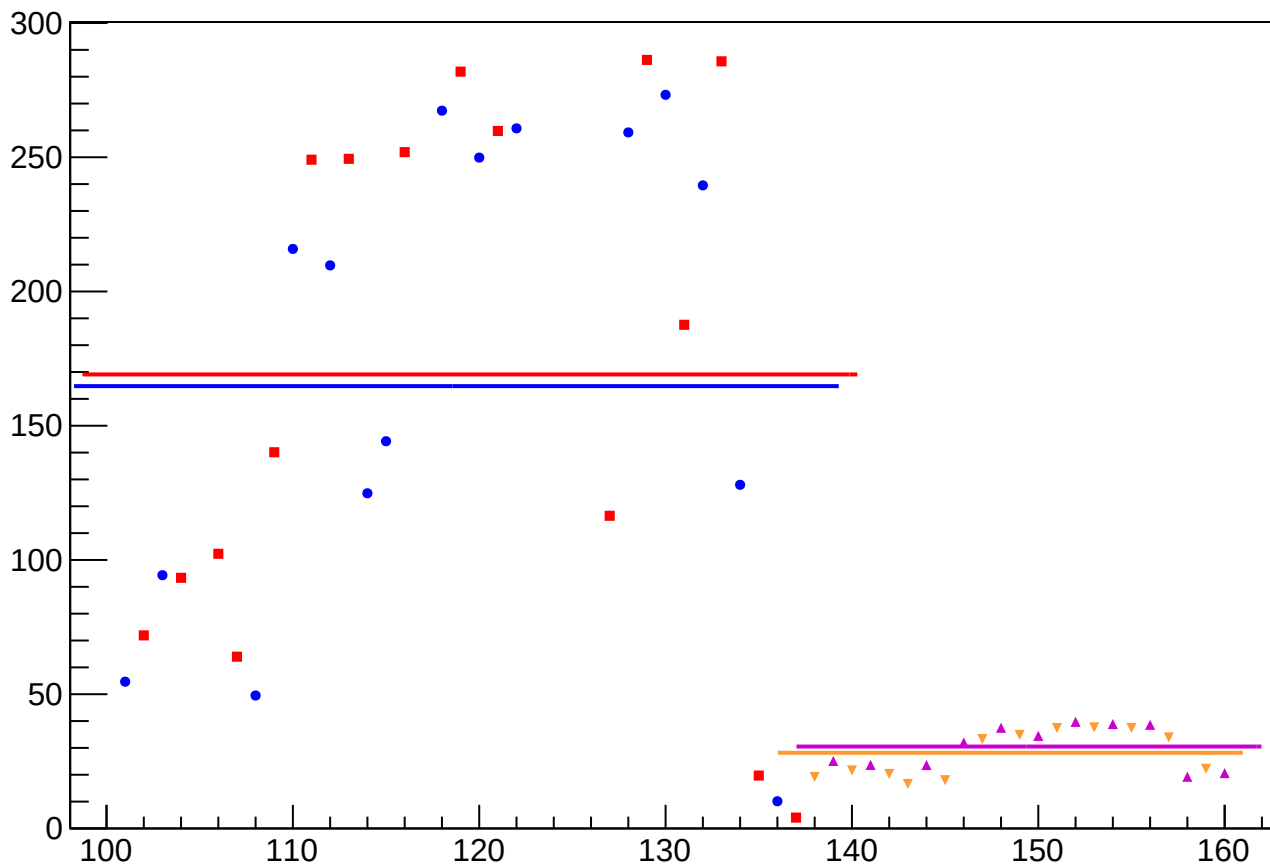
+ sign 1148.100+/-0.000  $\chi^2/\text{NDF}$ : 73628368958625

All: 1156.244+/-0.000  $\chi^2/\text{NDF}$ : 20056102034

- sign 1164.243+/-0.000  $\chi^2/\text{NDF}$ : 12672719249309



# dit\_4aX\_coil7\_mean vs Slug



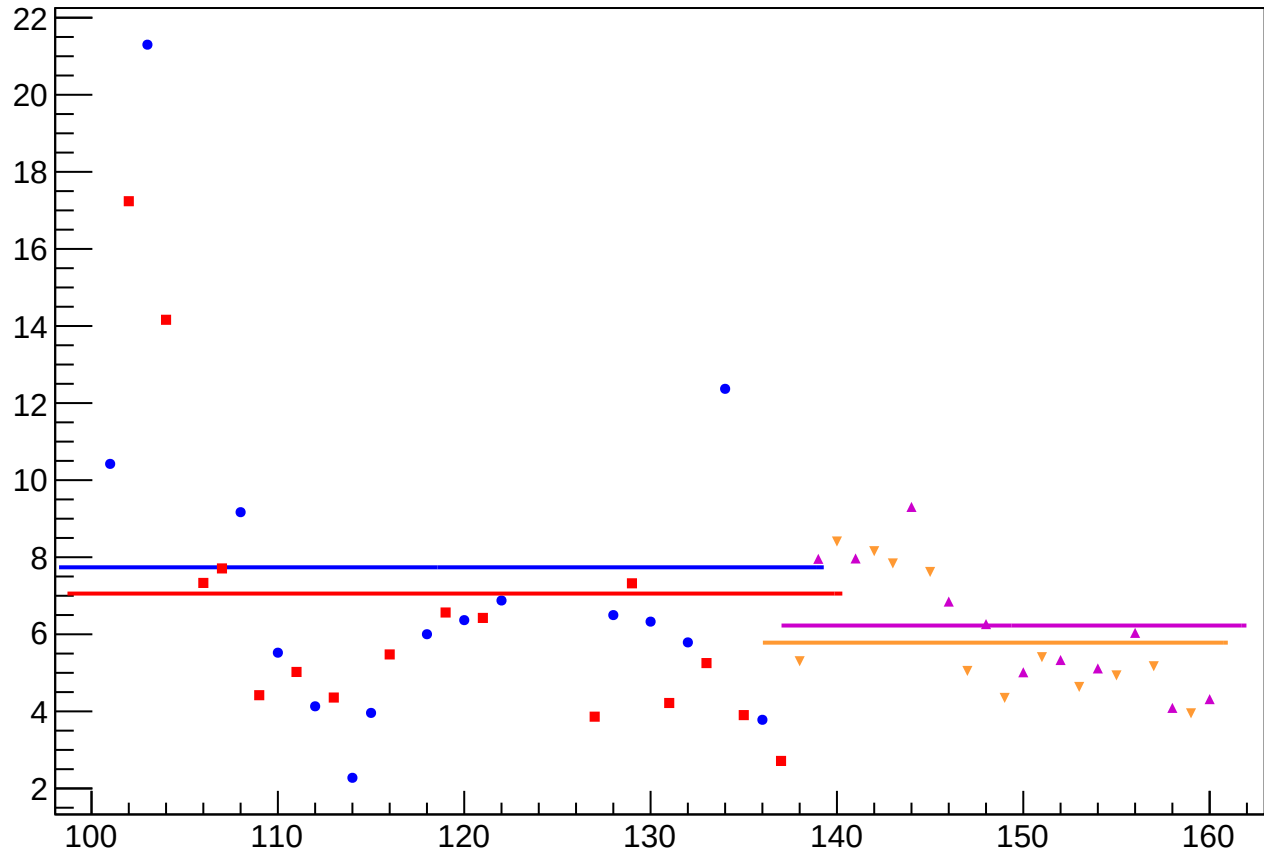
Right In: 164.752+/-0.000  $\chi^2/\text{NDF}$ : 6369828943181833917425699916554960896.0/14

Left Out: 28.192+/-0.000  $\chi^2/\text{NDF}$ : 62073928949862768083975059378536448.0/11

Right Out: 169.108+/-0.000  $\chi^2/\text{NDF}$ : 6040721802042936822766910687819071488.0/15

Left In: 30.507+/-0.000  $\chi^2/\text{NDF}$ : 52600700148274049801586699671699456.0/10

dit\_4aX\_coil7\_err\_mean vs Slug



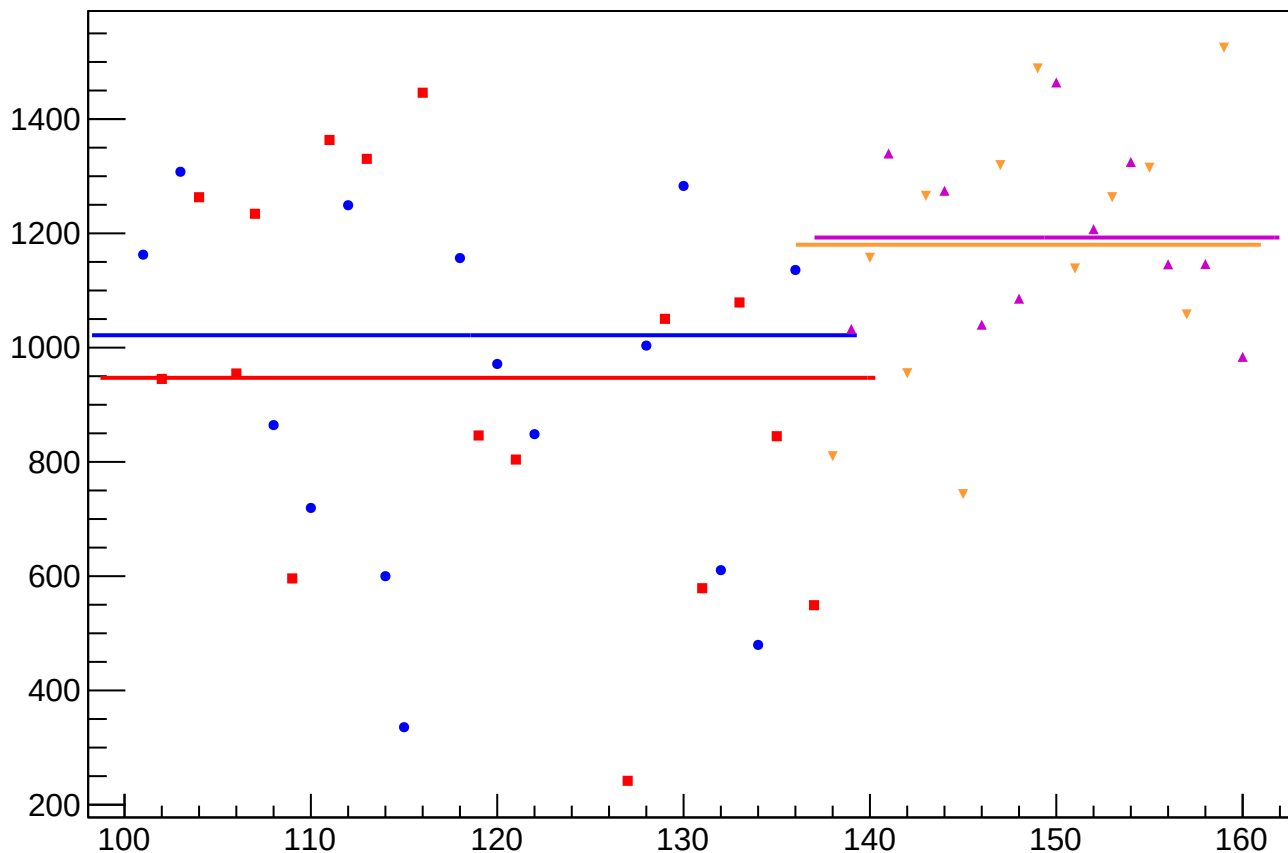
Right In: 7.738+/-0.000  $\chi^2/\text{NDF}$ : 15127215479234506007469492768079872.0/14

Left Out: 5.783+/-0.000  $\chi^2/\text{NDF}$ : 2082103650411209995862519006101504.0/11

Right Out: 7.057+/-0.000  $\chi^2/\text{NDF}$ : 11292441204139394792341242753581056.0/15

Left In: 6.228+/-0.000  $\chi^2/\text{NDF}$ : 2331911751655733809355489024147456.0/10

dit\_4aX\_coil7\_Ndata\_mean vs Slug



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

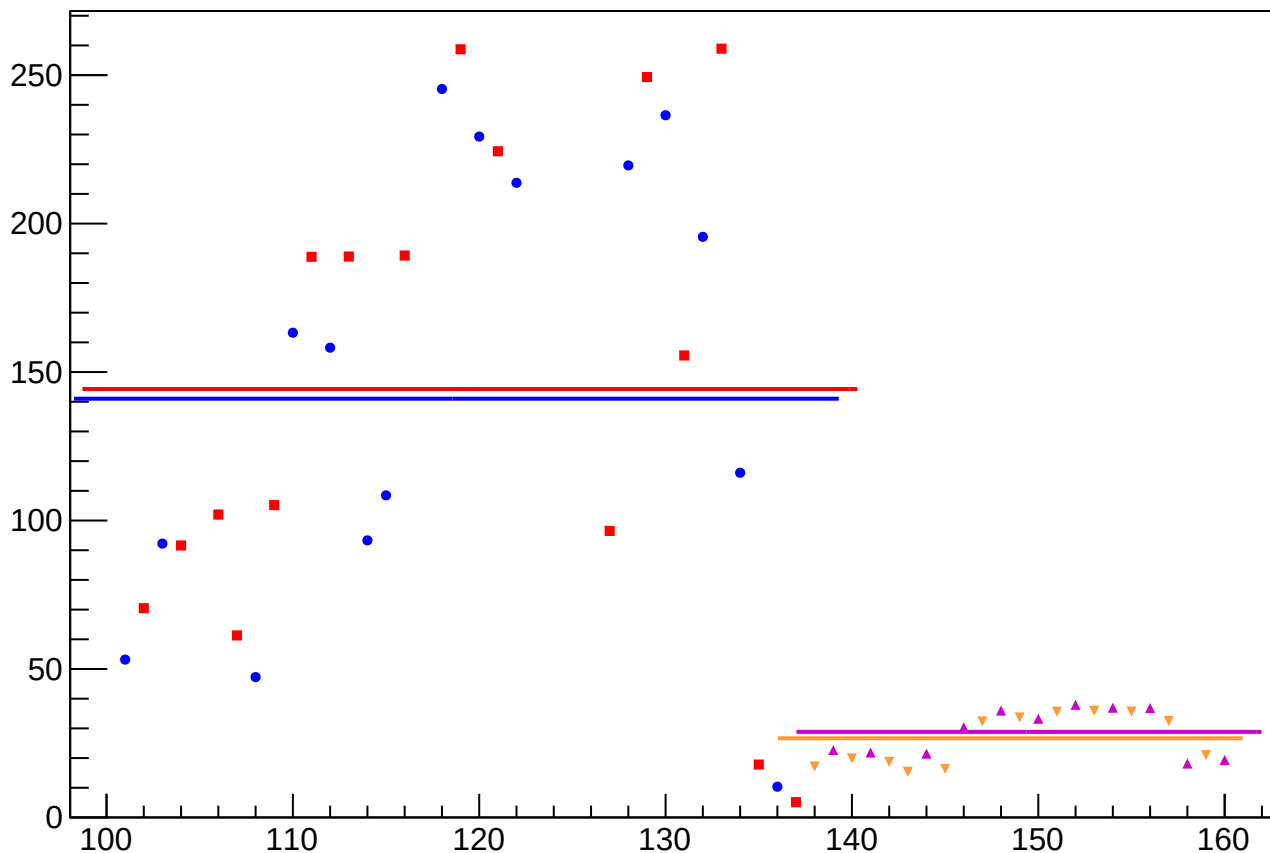
Left In: 1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

+ sign 1114.323+/-0.000  $\chi^2/\text{NDF}$ : 10080626753263

All: 1101.926+/-0.000  $\chi^2/\text{NDF}$ : 21167730452

- sign 1089.748+/-0.000  $\chi^2/\text{NDF}$ : 11039486982366

# dit\_4eX\_coil7\_mean vs Slug



Right In: 141.032+/-0.000  $\chi^2/\text{NDF}$ : 4507992585512923332587415612245934080.0/14

Left Out: 26.669+/-0.000  $\chi^2/\text{NDF}$ : 62522343114115856238629096966324224.0/11

Right Out: 144.283+/-0.000  $\chi^2/\text{NDF}$ : 4268333571517740886065361663928827904.0/15

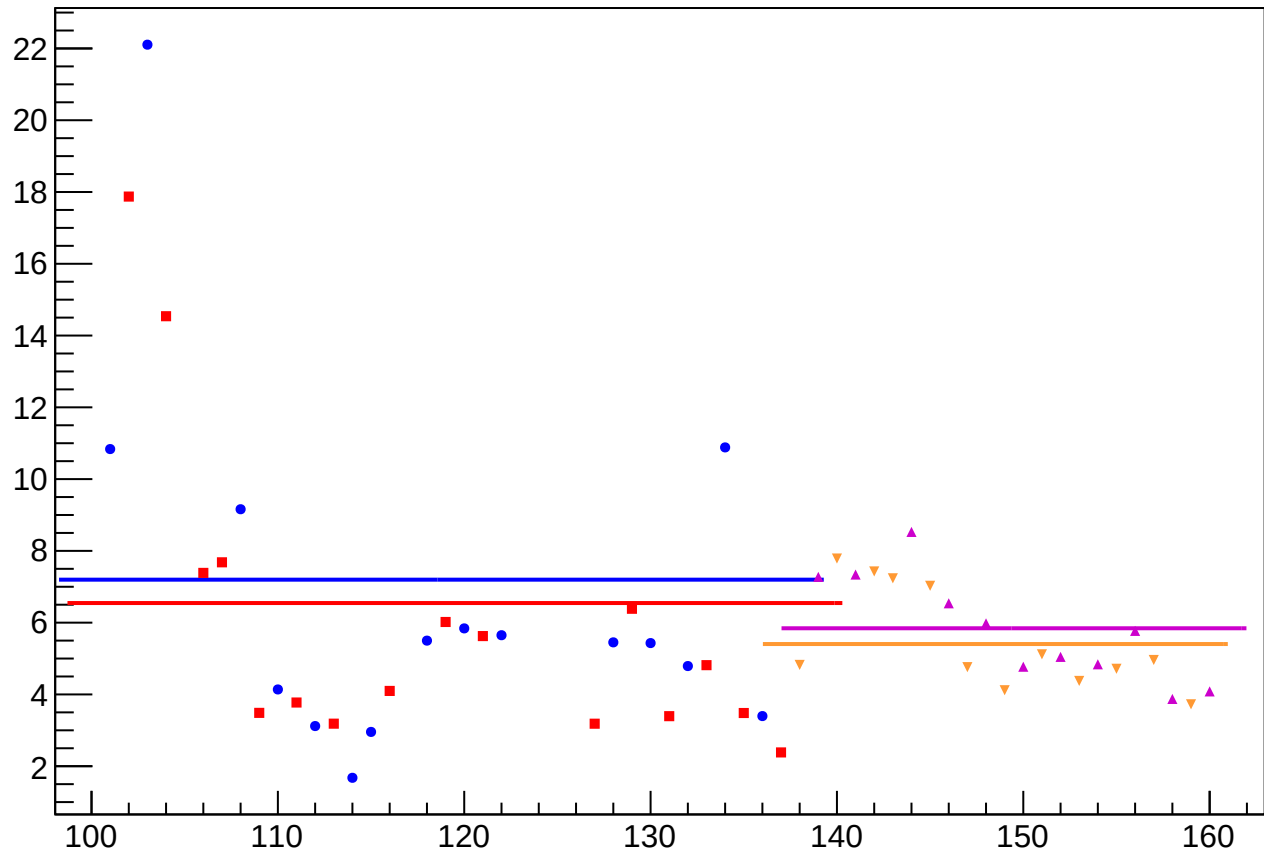
Left In: 28.817+/-0.000  $\chi^2/\text{NDF}$ : 52309797532132393990553277307027456.0/10

+ sign 74.155+/-0.000  $\chi^2/\text{NDF}$ : 9534162342398363

All: 75.703+/-0.000  $\chi^2/\text{NDF}$ : 1902686413208

- sign 77.224+/-0.000  $\chi^2/\text{NDF}$ : 9485278065945565

dit\_4eX\_coil7\_err\_mean vs Slug



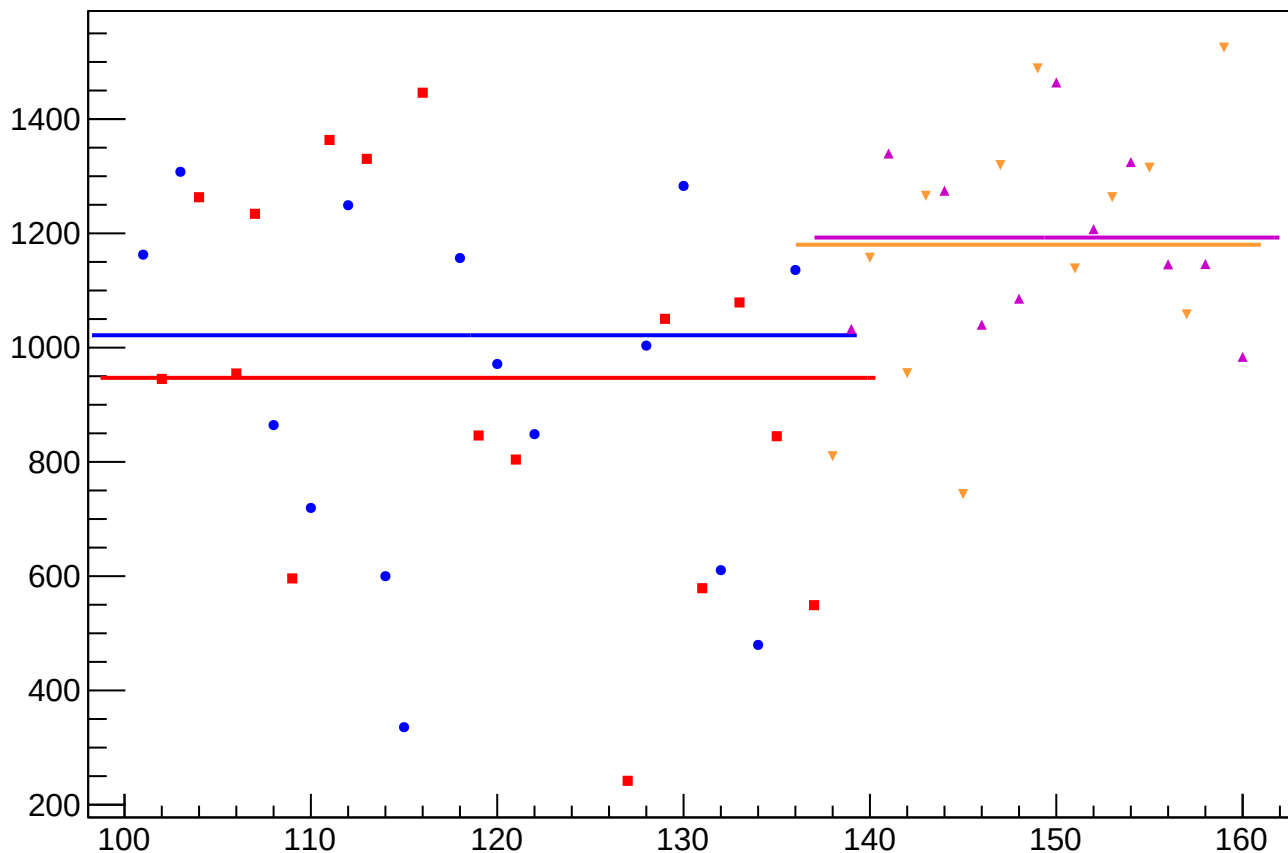
Right In: 7.198+/-0.000  $\chi^2/\text{NDF}$ : 18212640728502785337831966963138560.0/14

Left Out: 5.404+/-0.000  $\chi^2/\text{NDF}$ : 1657476673222734549536062415306752.0/11

Right Out: 6.547+/-0.000  $\chi^2/\text{NDF}$ : 14078912505116068936230809834094592.0/15

Left In: 5.843+/-0.000  $\chi^2/\text{NDF}$ : 1832786837102707862400537806766080.0/10

dit\_4eX\_coil7\_Ndata\_mean vs Slug



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

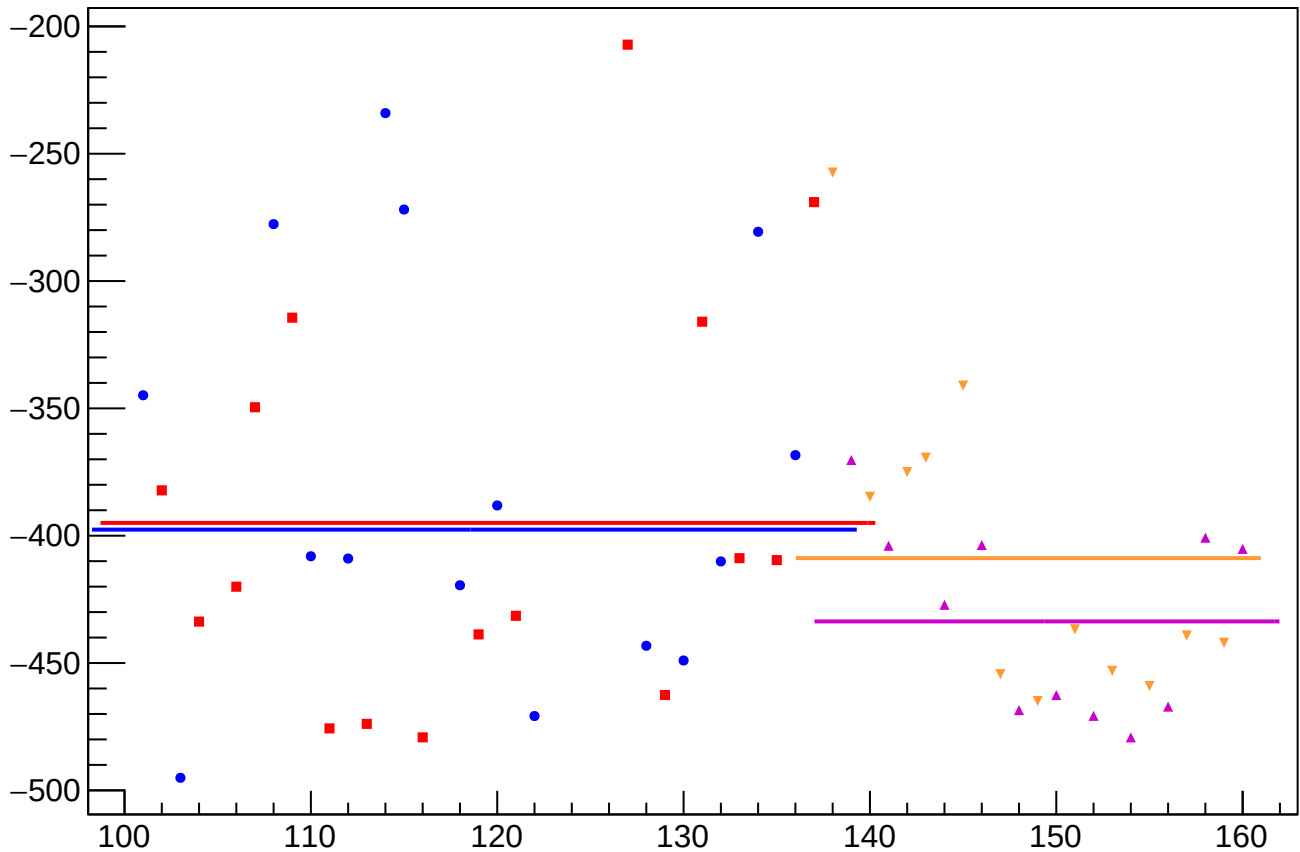
Left In: 1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

+ sign 1114.323+/-0.000  $\chi^2/\text{NDF}$ : 10080626753263

All: 1101.926+/-0.000  $\chi^2/\text{NDF}$ : 21167730452

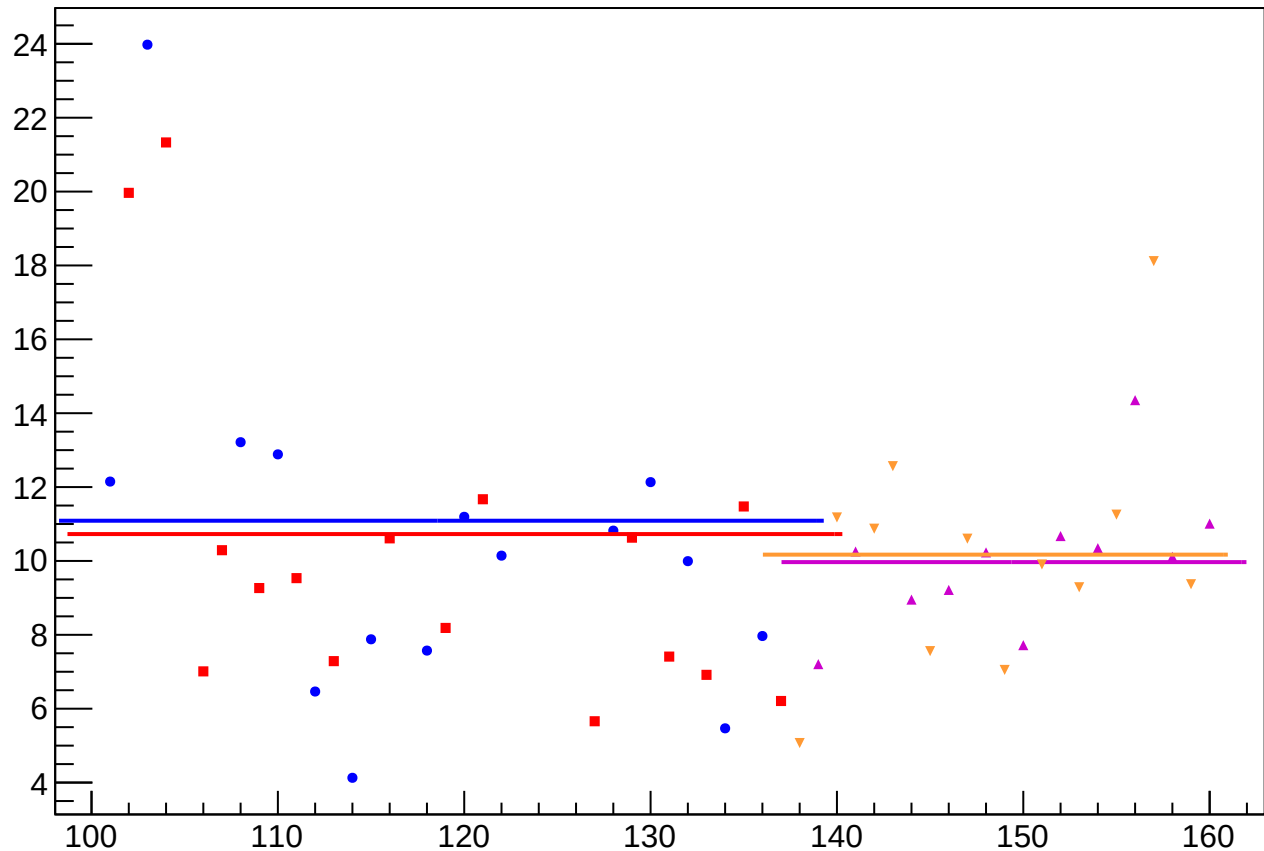
- sign 1089.748+/-0.000  $\chi^2/\text{NDF}$ : 11039486982366

dit\_11X12X\_coil7\_mean vs Slug



Right In:  $-397.613 \pm 0.000$   $\chi^2/\text{NDF}$ : 2661280785384633207096106229474263040.0/14  
 Left Out:  $-408.794 \pm 0.000$   $\chi^2/\text{NDF}$ : 3366573213961692909439105040404971520.0/11  
 Right Out:  $-394.973 \pm 0.000$   $\chi^2/\text{NDF}$ : 3685595513427183501596165280874102784.0/15  
 Left In:  $-433.664 \pm 0.000$   $\chi^2/\text{NDF}$ : 1198237421385461104687495484599697408.0/10

dit\_11X12X\_coil7\_err\_mean vs Slug



Right In: 11.089±/-0.000  $\chi^2/\text{NDF}$ : 14235991122014984478163351266918400.0/14

Left Out: 10.171±/-0.000  $\chi^2/\text{NDF}$ : 9089684940831859823552687731900416.0/11

Right Out: 10.728±/-0.000  $\chi^2/\text{NDF}$ : 14767238290725260908081124437131264.0/15

Left In: 9.968±/-0.000  $\chi^2/\text{NDF}$ : 2905664542402179840795878184976384.0/10

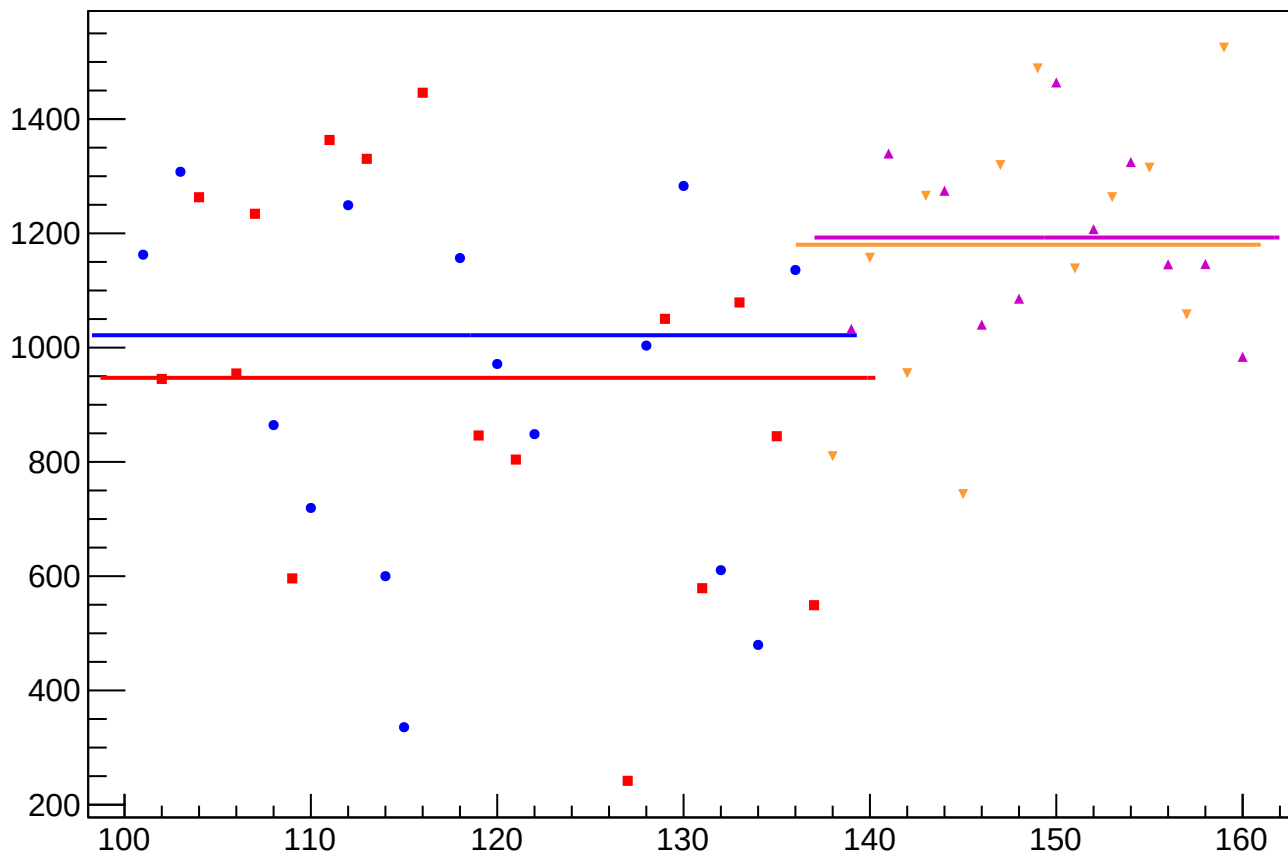
+ sign 10.552±/-0.000  $\chi^2/\text{NDF}$ : 2364557431902666

All: 10.418±/-0.000  $\chi^2/\text{NDF}$ : 4159719349794

- sign 10.287±/-0.000  $\chi^2/\text{NDF}$ : 1789615499240610



dit\_11X12X\_coil7\_Ndata\_mean vs Slug



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

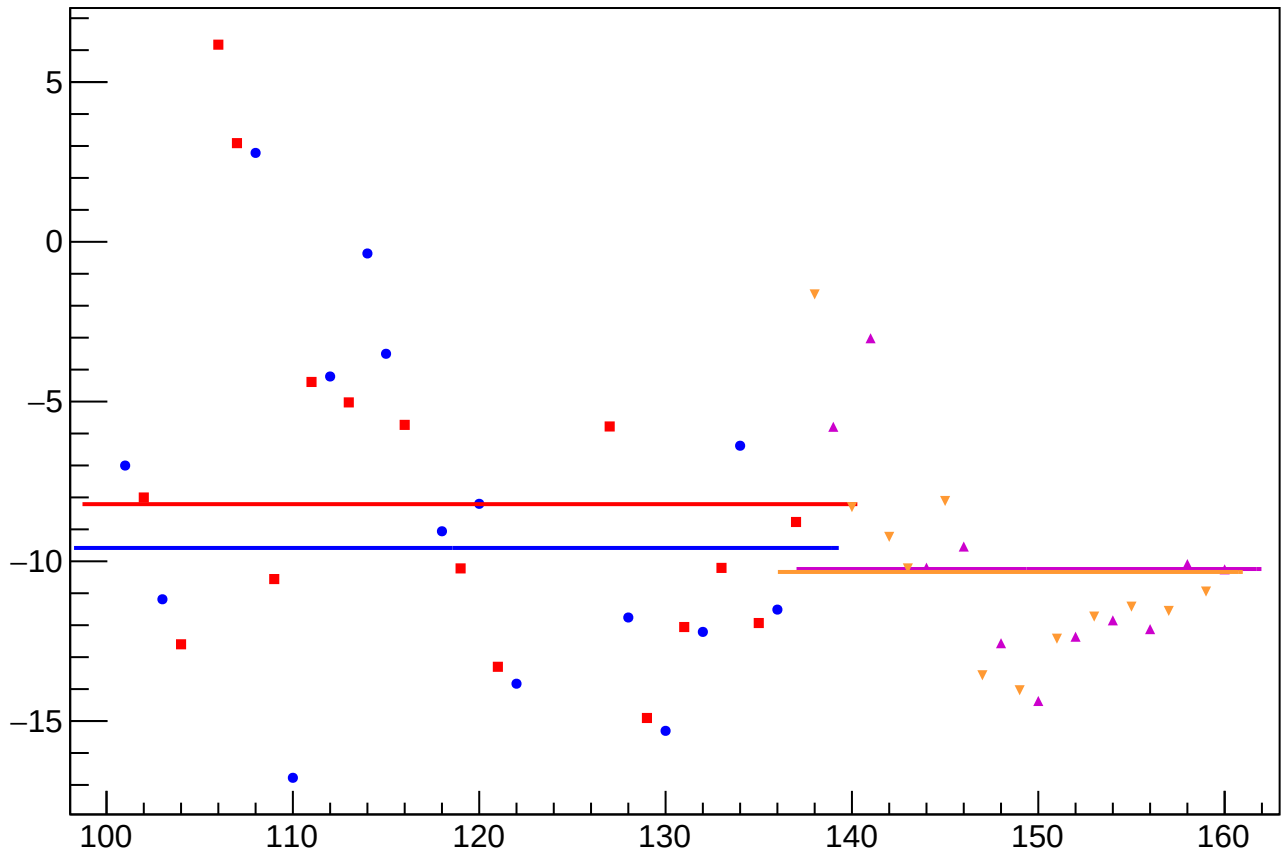
Left In: 1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10

+ sign 1114.323 $\pm$ 0.000  $\chi^2$ /NDF: 10080626753263

All: 1101.926 $\pm$ 0.000  $\chi^2$ /NDF: 21167730452

- sign 1089.748 $\pm$ 0.000  $\chi^2$ /NDF: 11039486982366

dit\_4aY\_coil7\_mean vs Slug



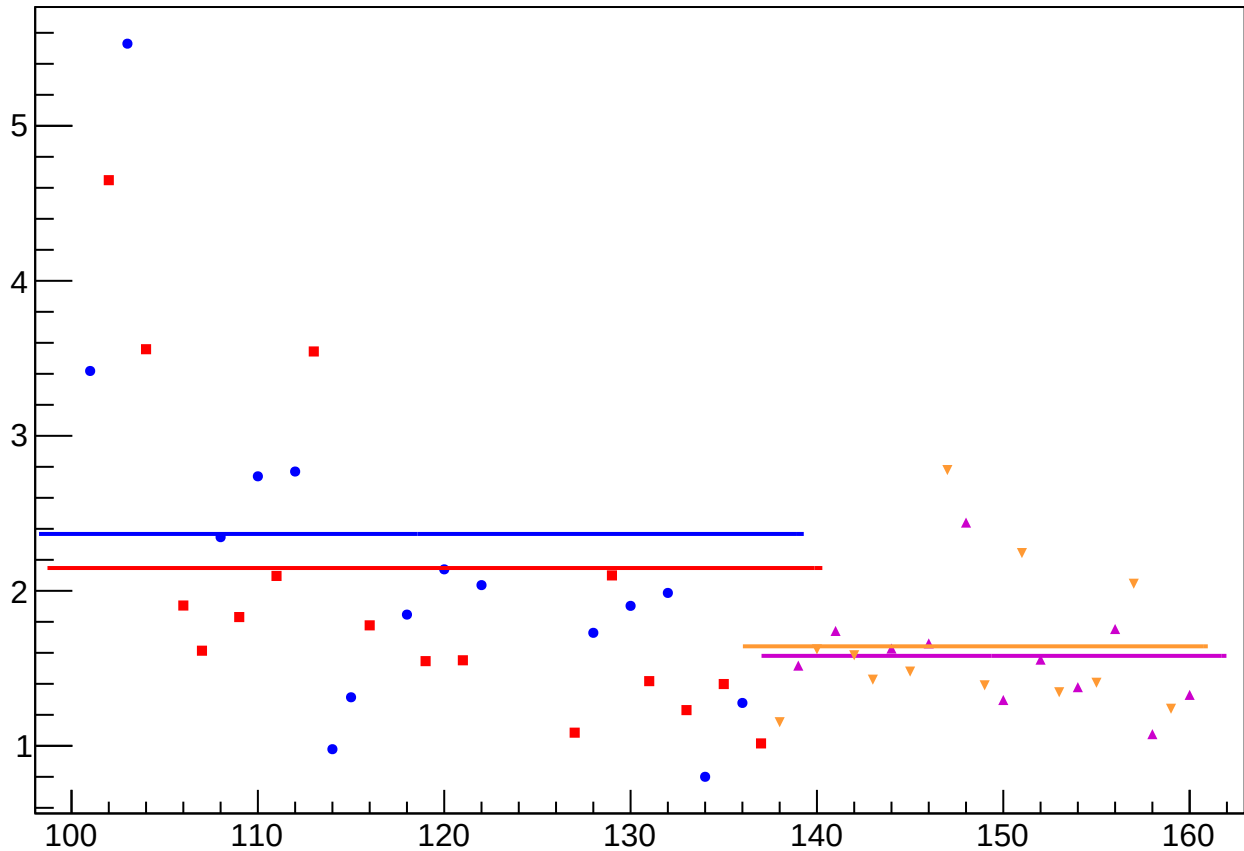
Right In:  $-9.582 \pm 0.000$   $\chi^2/\text{NDF}$ : 14702679983940002820806471963377664.0/14

Left Out:  $-10.333 \pm 0.000$   $\chi^2/\text{NDF}$ : 9377692425026365375047041474887680.0/11

Right Out:  $-8.211 \pm 0.000$   $\chi^2/\text{NDF}$ : 18304237293835961465605754204454912.0/15

Left In:  $-10.241 \pm 0.000$   $\chi^2/\text{NDF}$ : 8992829088408430483485977772818432.0/10

dit\_4aY\_coil7\_err\_mean vs Slug



Right In: 2.367 $\pm$ 0.000  $\chi^2$ /NDF: 920633294546152876922066767446016.0/14

Left Out: 1.642 $\pm$ 0.000  $\chi^2$ /NDF: 195842148226043527039909915262976.0/11

Right Out: 2.147 $\pm$ 0.000  $\chi^2$ /NDF: 764171992480224478656127555338240.0/15

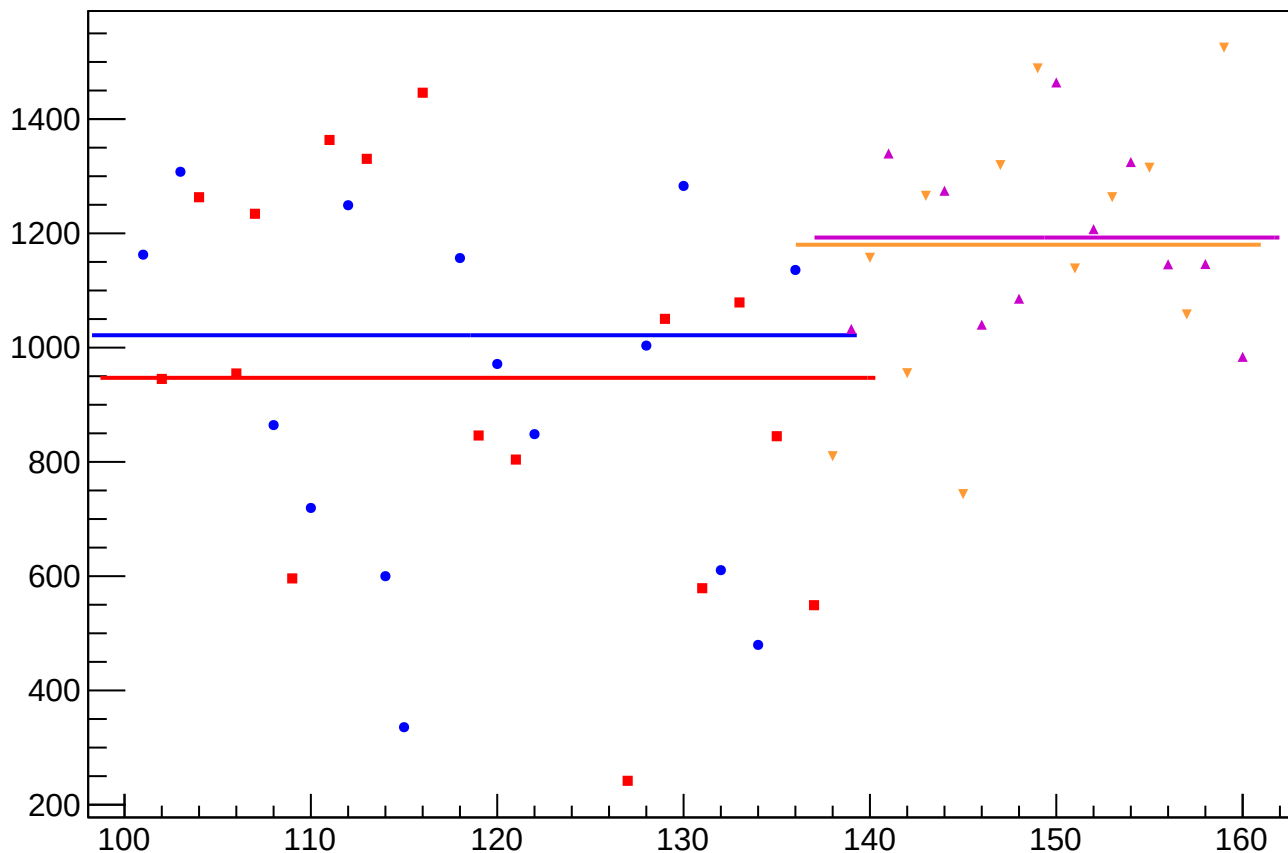
Left In: 1.580 $\pm$ 0.000  $\chi^2$ /NDF: 104159820106689813353171792166912.0/10

+ sign 1.943 $\pm$ 0.000  $\chi^2$ /NDF: 13159834417677760

All: 1.880 $\pm$ 0.000  $\chi^2$ /NDF: 23210295231068

- sign 1.818 $\pm$ 0.000  $\chi^2$ /NDF: 99272780450860702

dit\_4aY\_coil7\_Ndata\_mean vs Slug



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

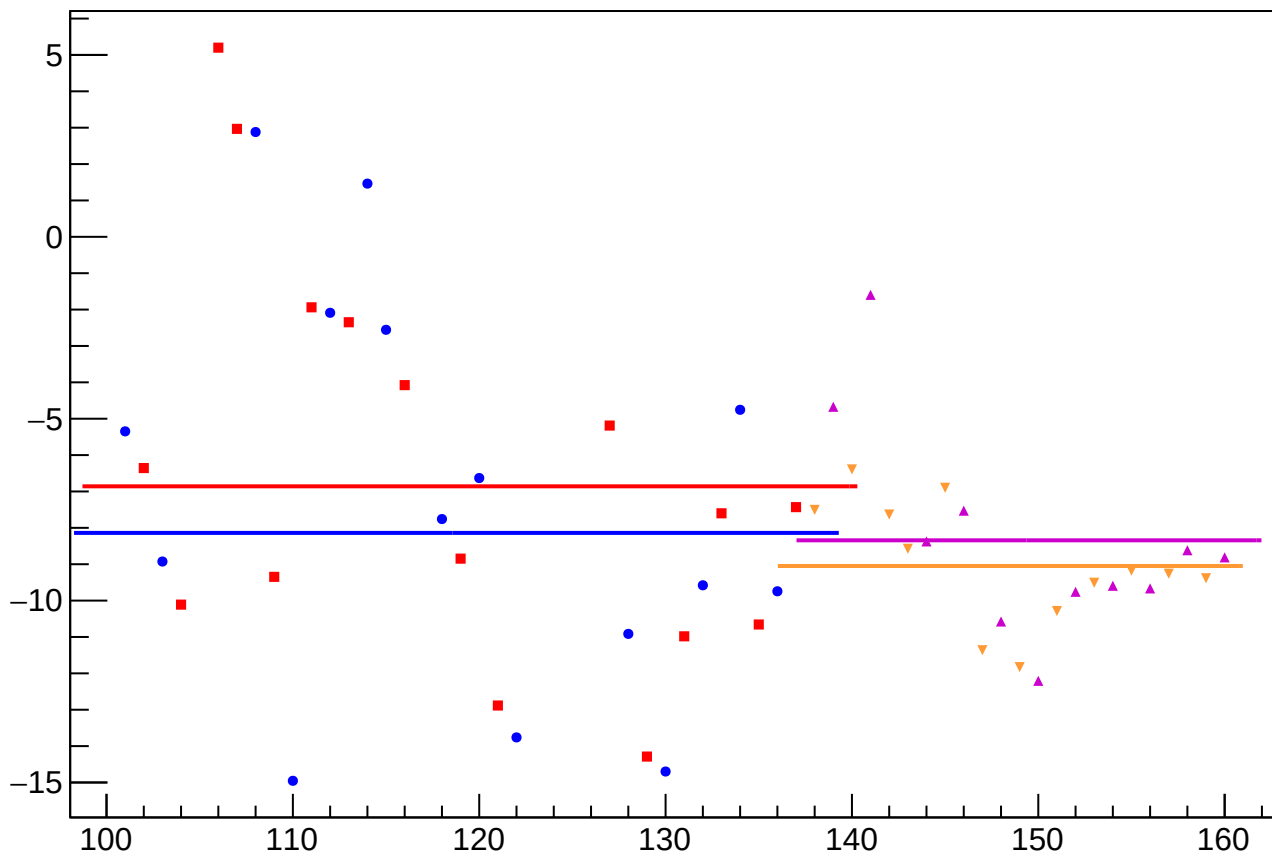
Left In: 1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

+ sign 1114.323+/-0.000  $\chi^2/\text{NDF}$ : 10080626753263

All: 1101.926+/-0.000  $\chi^2/\text{NDF}$ : 21167730452

- sign 1089.748+/-0.000  $\chi^2/\text{NDF}$ : 11039486982366

# dit\_4eY\_coil7\_mean vs Slug



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

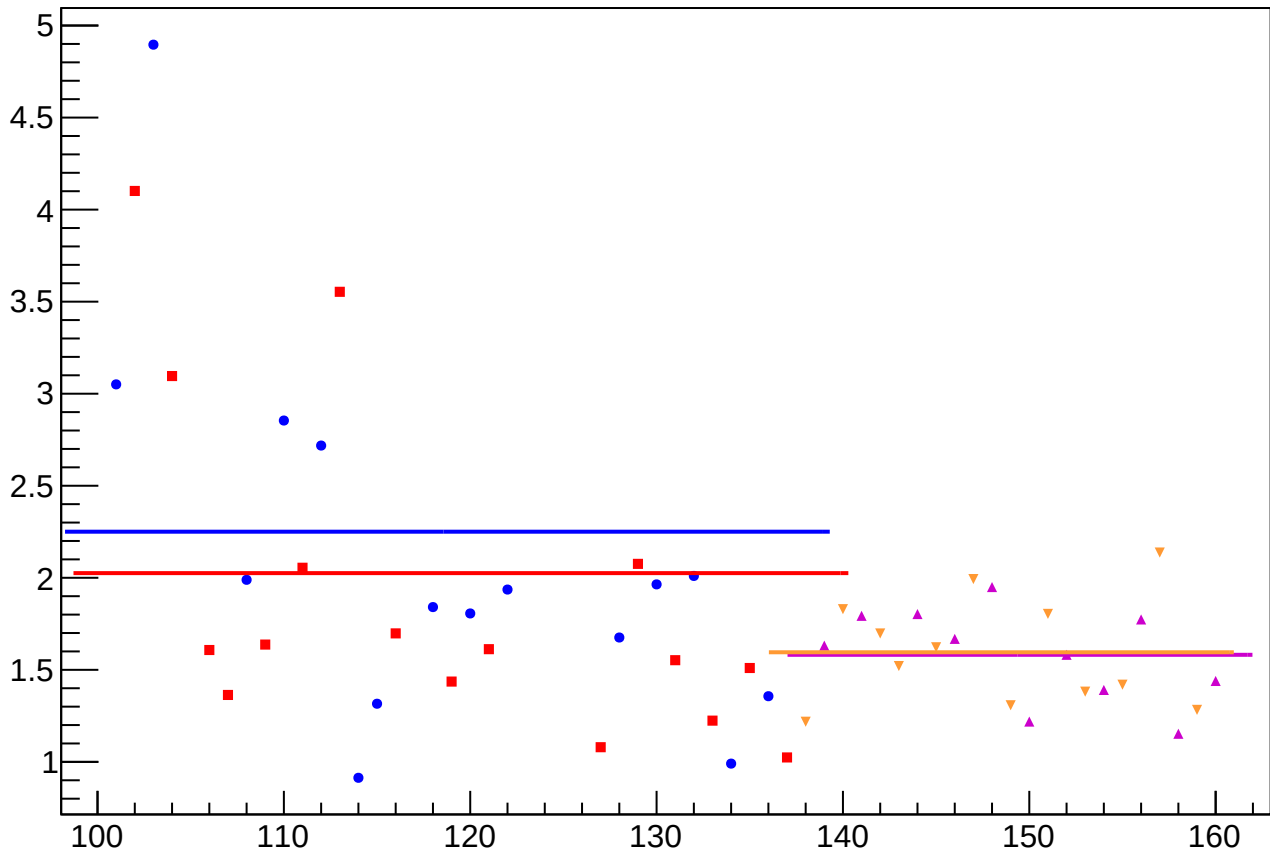
Left In:  $-8.343 \pm 0.000$   $\chi^2/\text{NDF}$ : 7268690948063694771204756789526528.0/10

+ sign  $-8.671 \pm 0.000$   $\chi^2/\text{NDF}$ : 1743954297052969

All:  $-8.191 \pm 0.000$   $\chi^2/\text{NDF}$ : 4275682258895

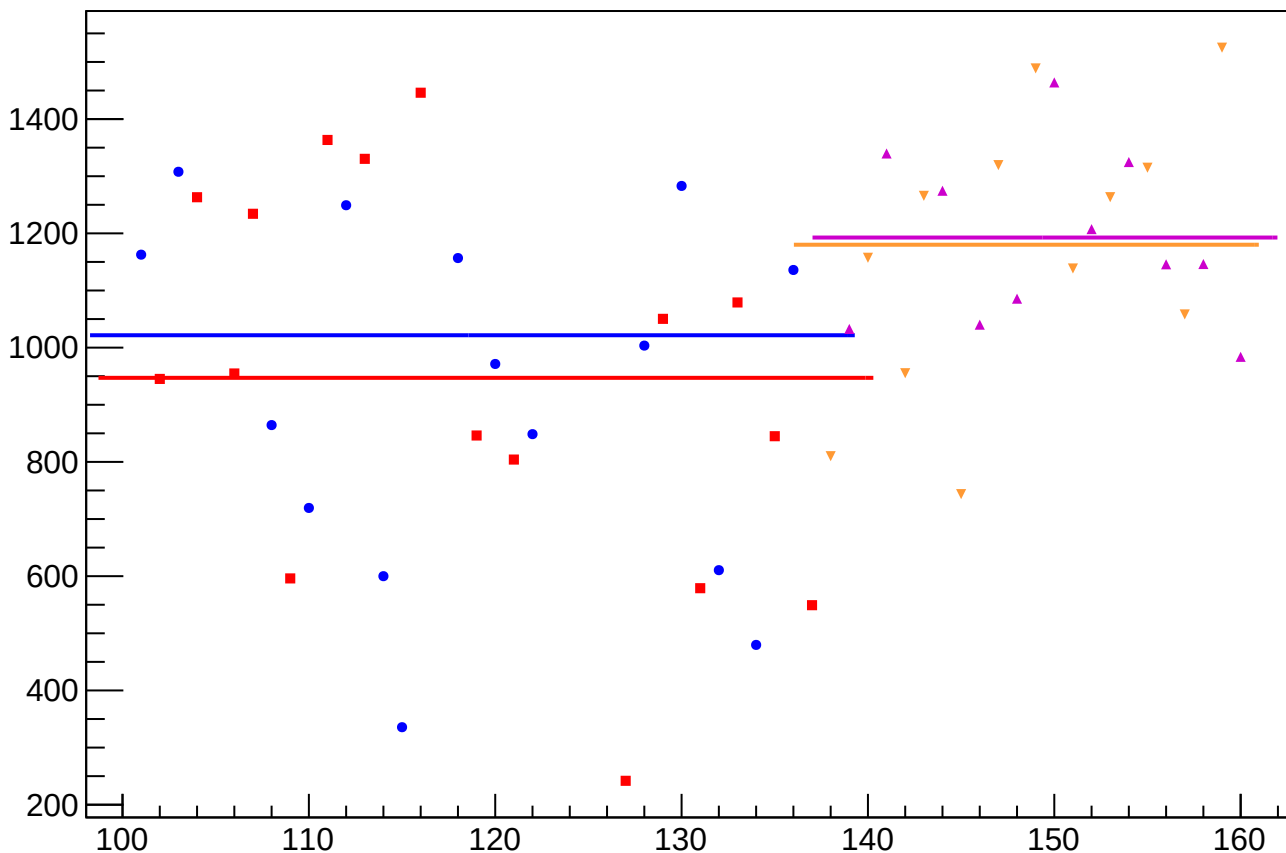
- sign  $-7.721 \pm 0.000$   $\chi^2/\text{NDF}$ : 24605417695217650

dit\_4eY\_coil7\_err\_mean vs Slug



Right In:  $2.250 \pm 0.000$   $\chi^2/\text{NDF}$ : 656774588136274816295442701090816.0/14  
 Left Out:  $1.595 \pm 0.000$   $\chi^2/\text{NDF}$ : 76549213292208781148545230045184.0/11  
 Right Out:  $2.025 \pm 0.000$   $\chi^2/\text{NDF}$ : 578717441762956454616505599918080.0/15  
 Left In:  $1.582 \pm 0.000$   $\chi^2/\text{NDF}$ : 54930988145763434904897999339520.0/10  
 All:  $1.817 \pm 0.000$   $\chi^2/\text{NDF}$ : 16139323147650  
 + sign  $1.867 \pm 0.000$   $\chi^2/\text{NDF}$ : 89616849039259009  
 - sign  $1.768 \pm 0.000$   $\chi^2/\text{NDF}$ : 70992647799477177

dit\_4eY\_coil7\_Ndata\_mean vs Slug



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

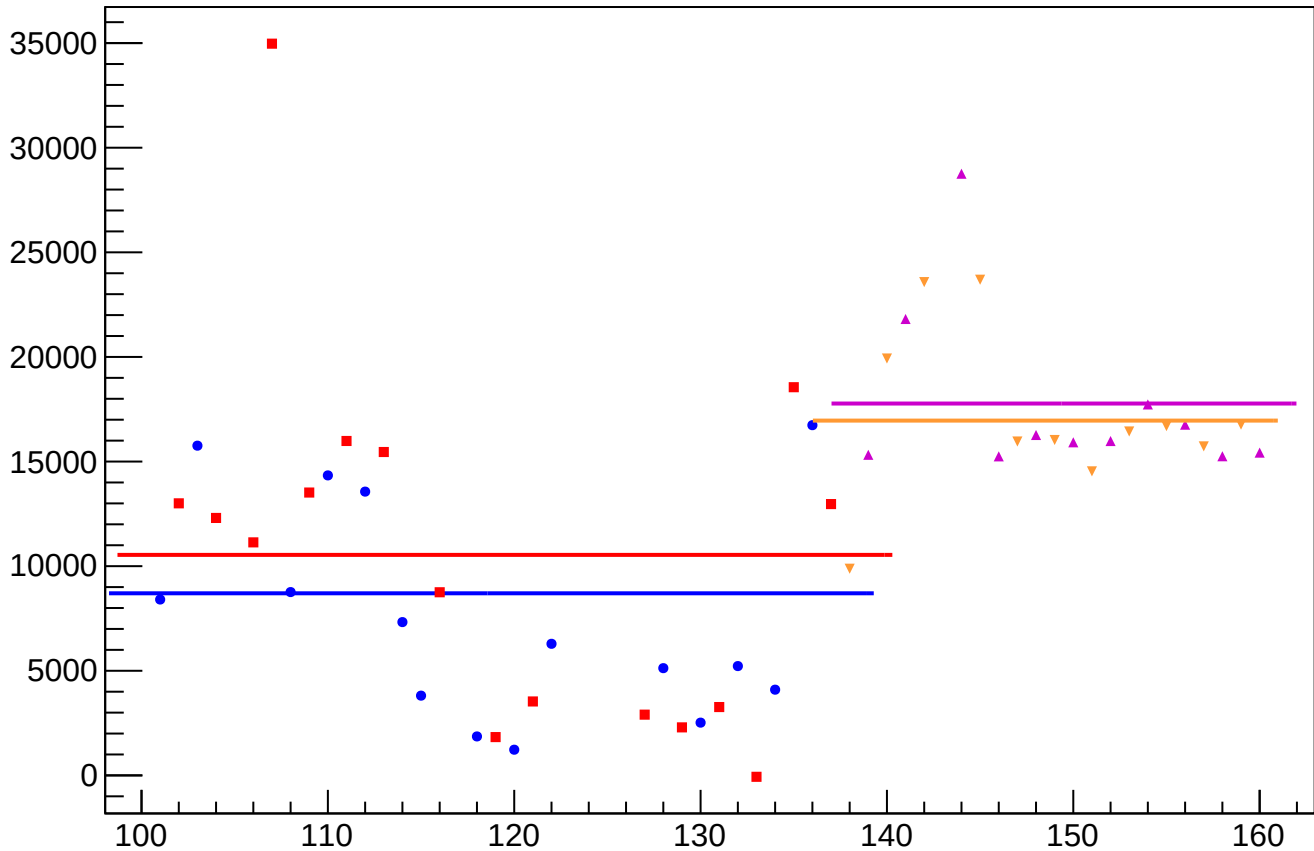
Left In: 1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

+ sign 1114.323+/-0.000  $\chi^2/\text{NDF}$ : 10080626753263

All: 1101.926+/-0.000  $\chi^2/\text{NDF}$ : 21167730452

- sign 1089.748+/-0.000  $\chi^2/\text{NDF}$ : 11039486982366

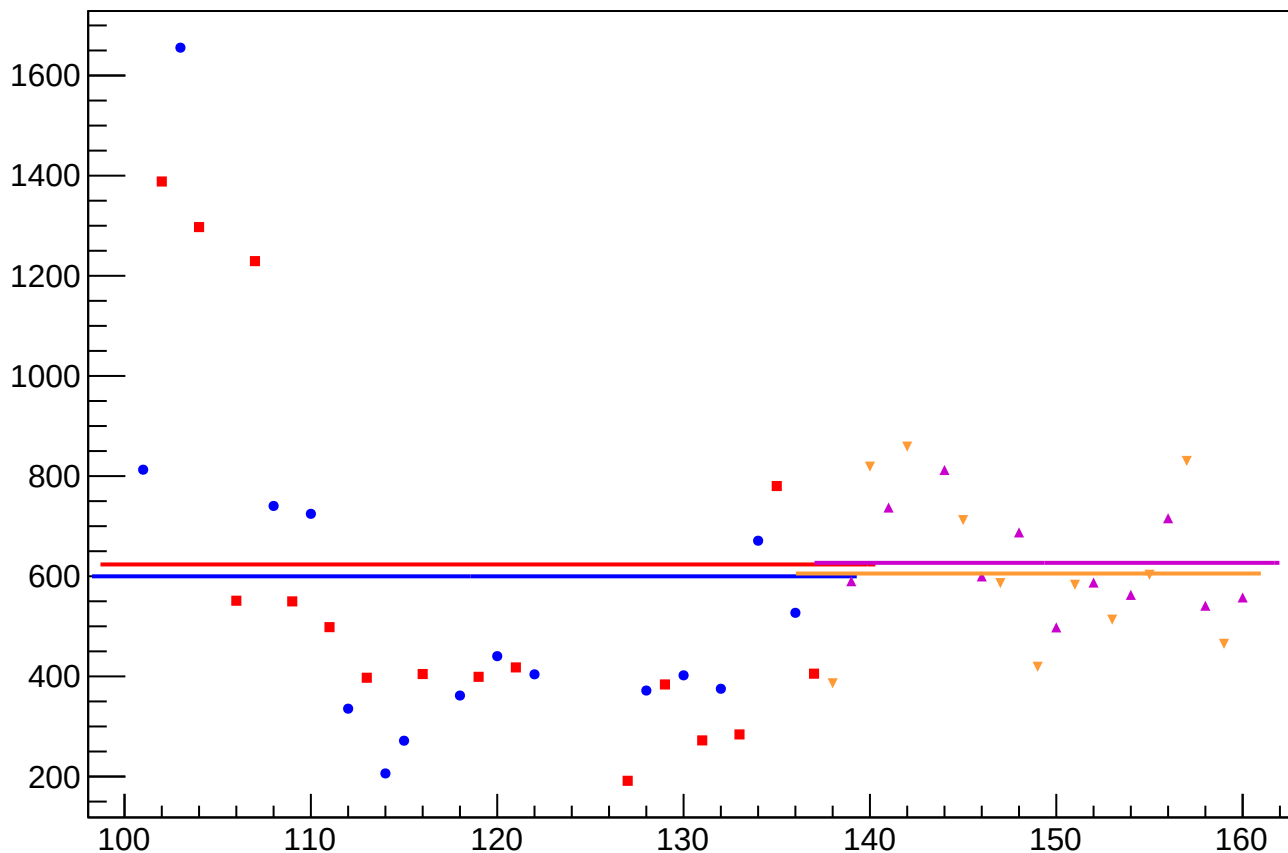
dit\_usl\_coil7\_mean vs Slug



Right In: 8703.332+/-0.000  $\chi^2/\text{NDF}$ : 19501133067308426859536304500819191922688.0/14  
 Left Out: 16957.575+/-0.000  $\chi^2/\text{NDF}$ : 10938008625550561770285254297697243889664.0/10  
 Right Out: 10539.327+/-0.000  $\chi^2/\text{NDF}$ : 46226684227836109273394062569753758662656.0/15  
 Left In: 17773.103+/-0.000  $\chi^2/\text{NDF}$ : 14926066991142889452676587552618632445952.0/10



dit\_usl\_coil7\_err\_mean vs Slug



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

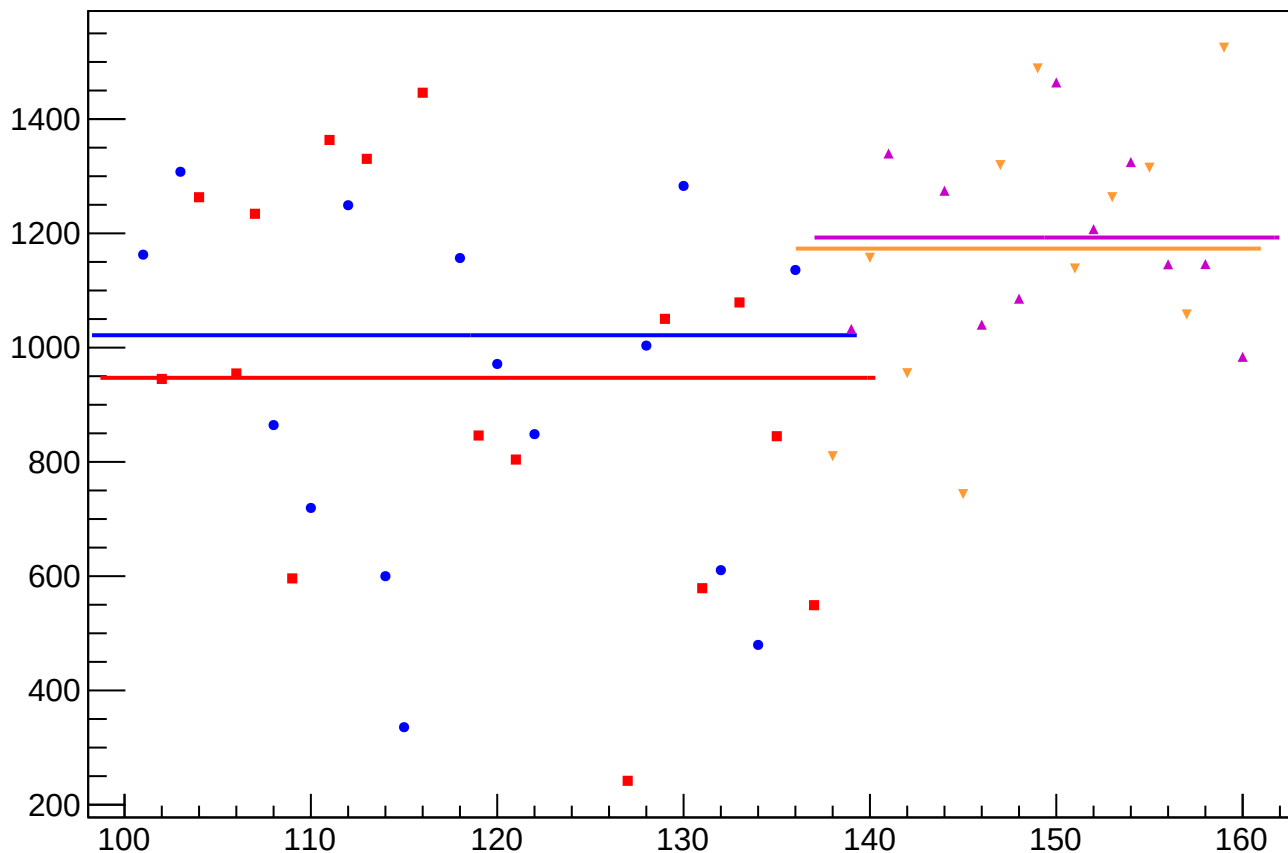
Left In: 626.785+/-0.000  $\chi^2/\text{NDF}$ : 8170989429665370050254275774703992832.0/10

All: 614.575+/-0.000  $\chi^2/\text{NDF}$ : 219881740645

+ sign 603.023+/-0.000  $\chi^2/\text{NDF}$ : 109870540550335

- sign 625.437+/-0.000  $\chi^2/\text{NDF}$ : 109623841978162

dit\_usl\_coil7\_Ndata\_mean vs Slug



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

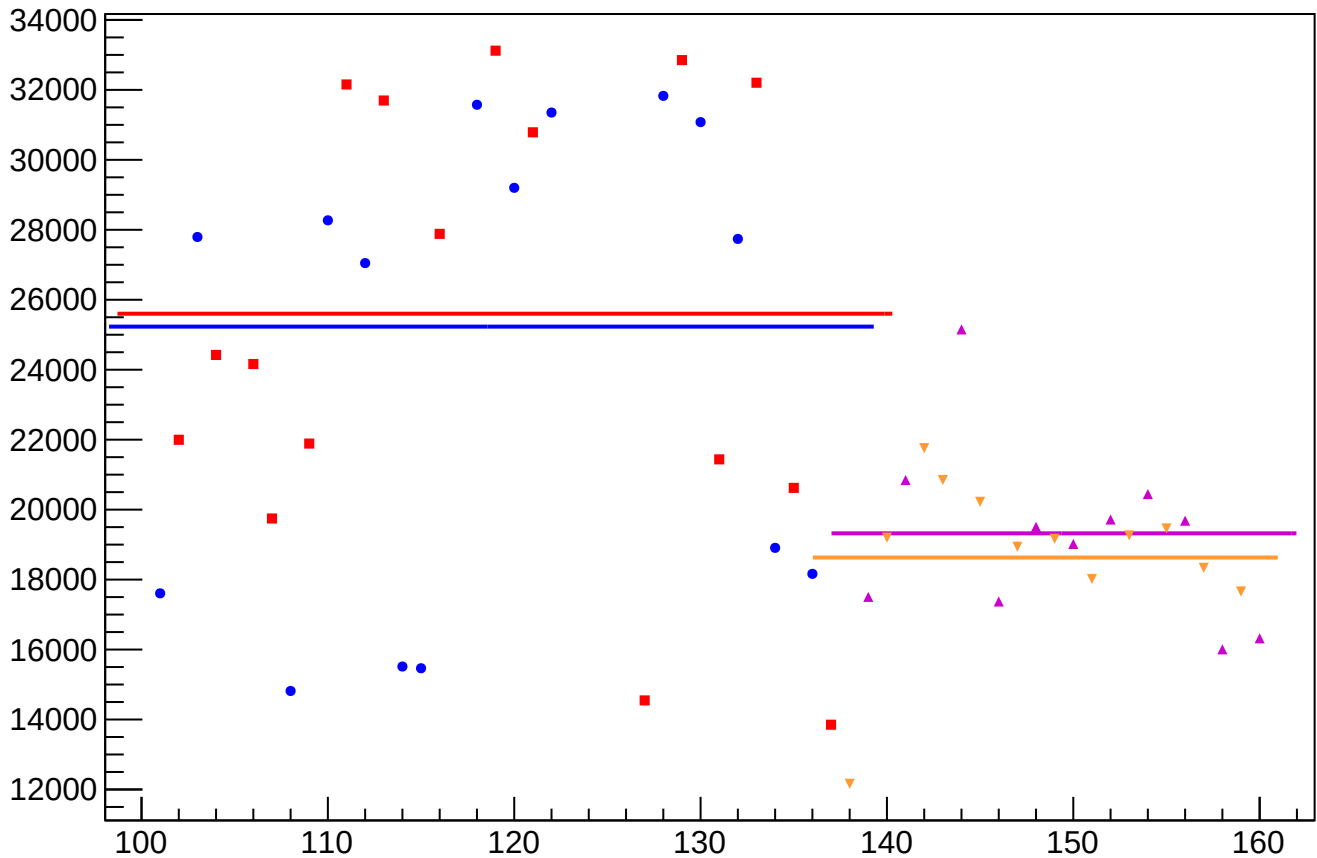
Left In: 1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

+ sign 1107.545+/-0.000  $\chi^2/\text{NDF}$ : 99202805471874

All: 1098.373+/-0.000  $\chi^2/\text{NDF}$ : 20984187795

- sign 1089.748+/-0.000  $\chi^2/\text{NDF}$ : 11039486982366

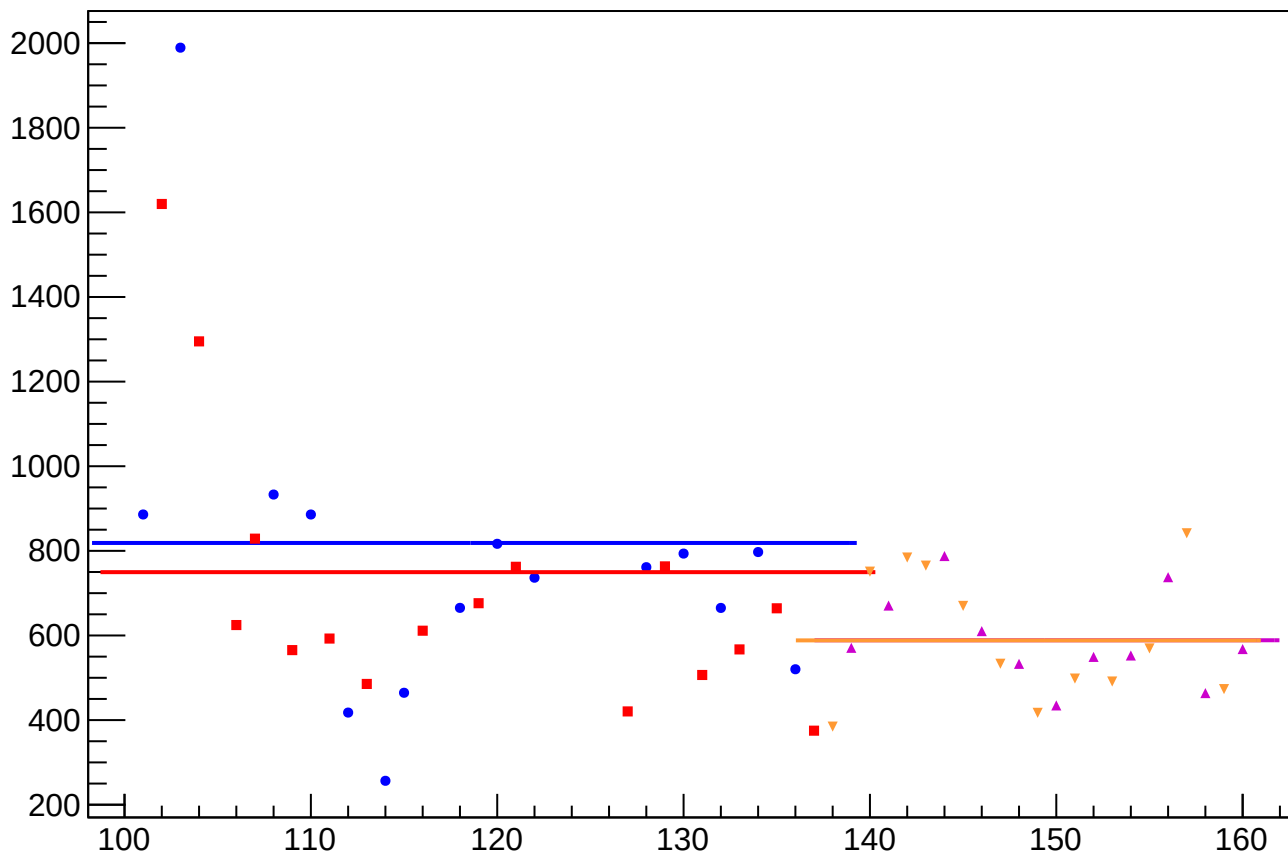
# dit\_usr\_coil7\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| 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  |

+ sign 21371.781+/-0.000  $\chi^2/\text{NDF}$ : 4557364101800  
 All: 21666.026+/-0.000  $\chi^2/\text{NDF}$ : 9098110501  
 - sign 21955.094+/-0.000  $\chi^2/\text{NDF}$ : 4513919478175

dit\_usr\_coil7\_err\_mean vs Slug



Right In: 818.668 $\pm$ 0.000  $\chi^2$ /NDF: 105606527096911974489496802318373355520.0/14

+ sign 684.008 $\pm$ 0.000  $\chi^2$ /NDF: 145791569069388

Left Out: 588.391 $\pm$ 0.000  $\chi^2$ /NDF: 20060197377989114991296665666078113792.0/11

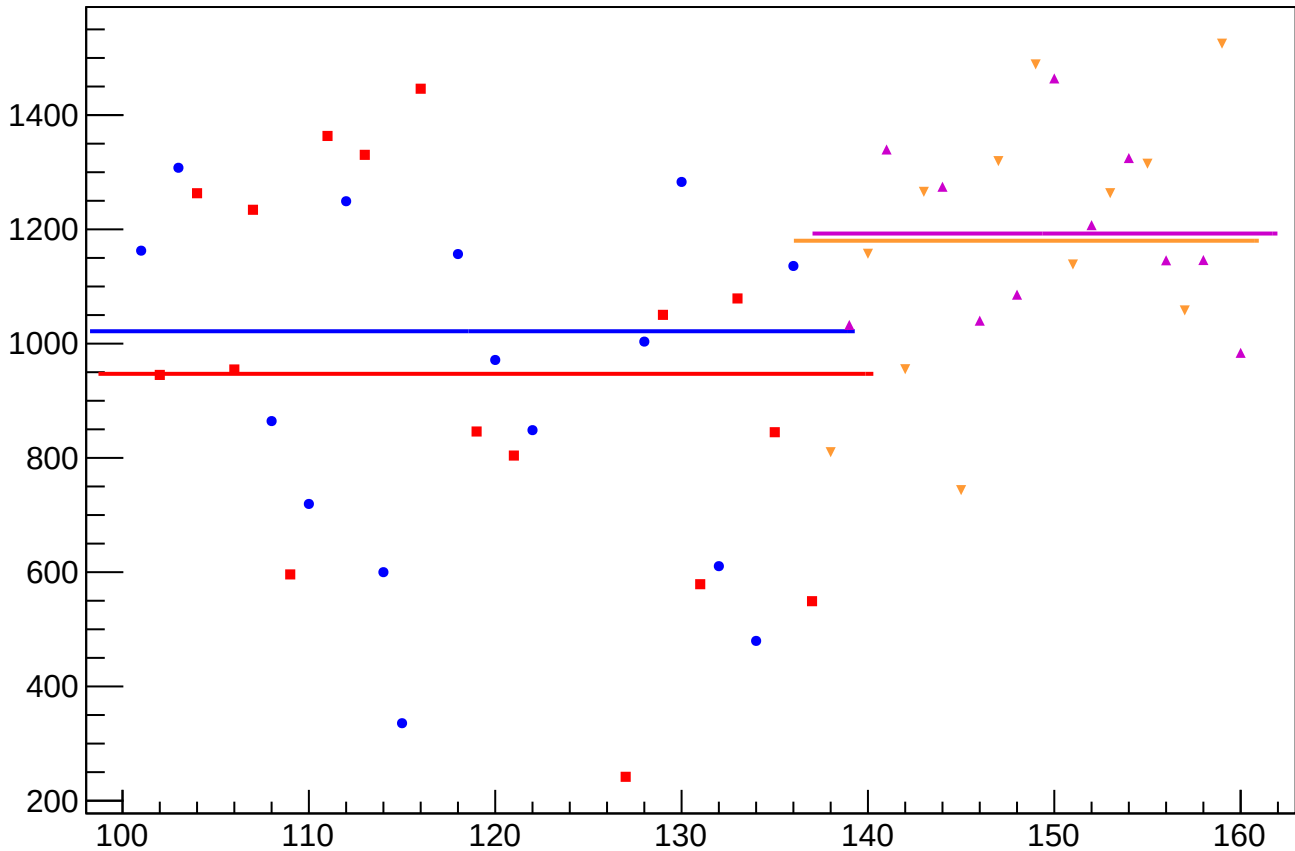
All: 669.969 $\pm$ 0.000  $\chi^2$ /NDF: 244316509040

Right Out: 749.661 $\pm$ 0.000  $\chi^2$ /NDF: 77972691834605708706145461250669150208.0/15

- sign 656.176 $\pm$ 0.000  $\chi^2$ /NDF: 979142023590546

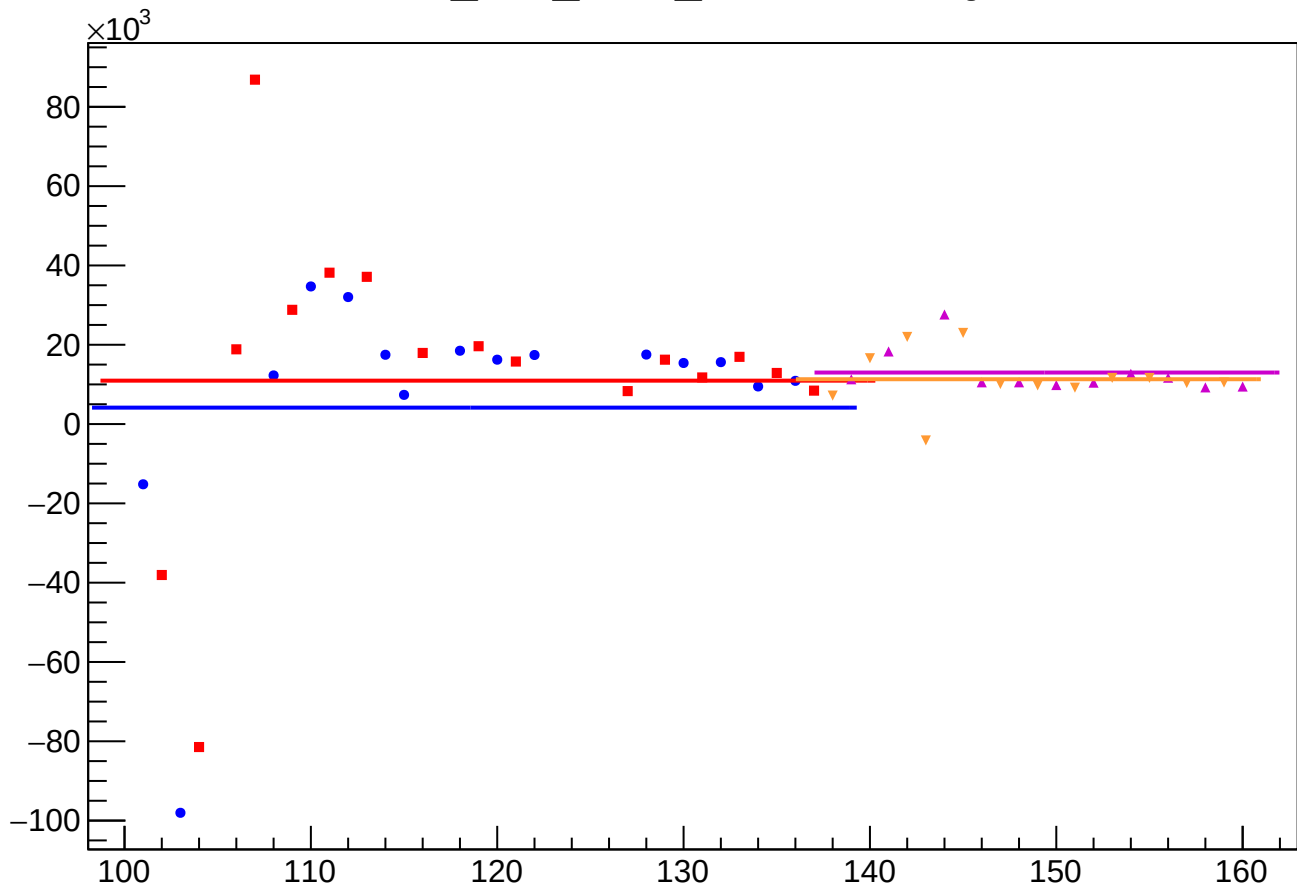
Left In: 588.693 $\pm$ 0.000  $\chi^2$ /NDF: 9904386894828699094725074481582178304.0/10

dit\_usr\_coil7\_Ndata\_mean vs Slug



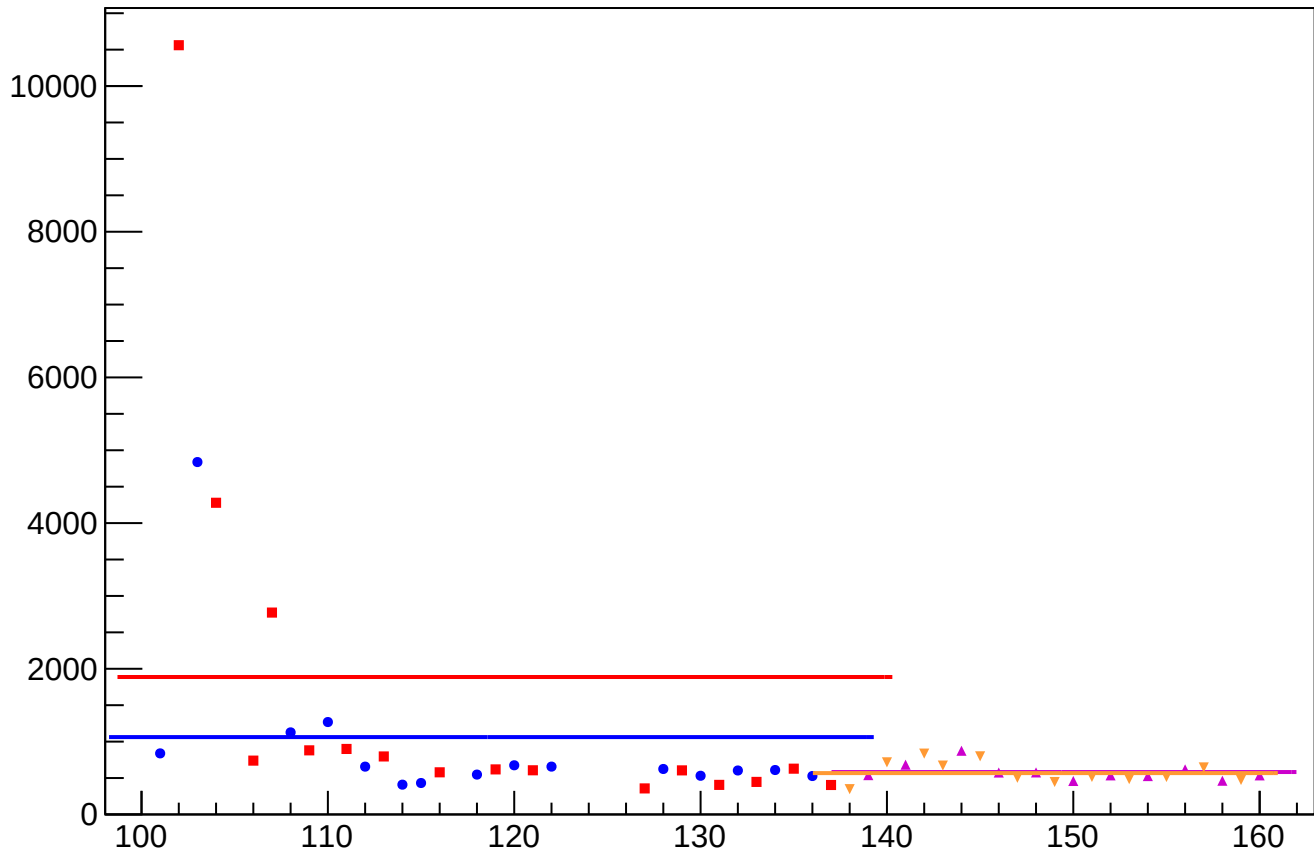
|                            |                                                                   |                         |                                      |
|----------------------------|-------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 1021.684+/-0.000 | $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14 | + sign 1114.323+/-0.000 | $\chi^2/\text{NDF}$ : 10080626753263 |
| Left Out: 1180.103+/-0.000 | $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11 | All: 1101.926+/-0.000   | $\chi^2/\text{NDF}$ : 21167730452    |
| Right Out: 947.145+/-0.000 | $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15 | - sign 1089.748+/-0.000 | $\chi^2/\text{NDF}$ : 11039486982366 |
| Left In: 1192.687+/-0.000  | $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10 |                         |                                      |

dit\_atl1\_coil7\_mean vs Slug



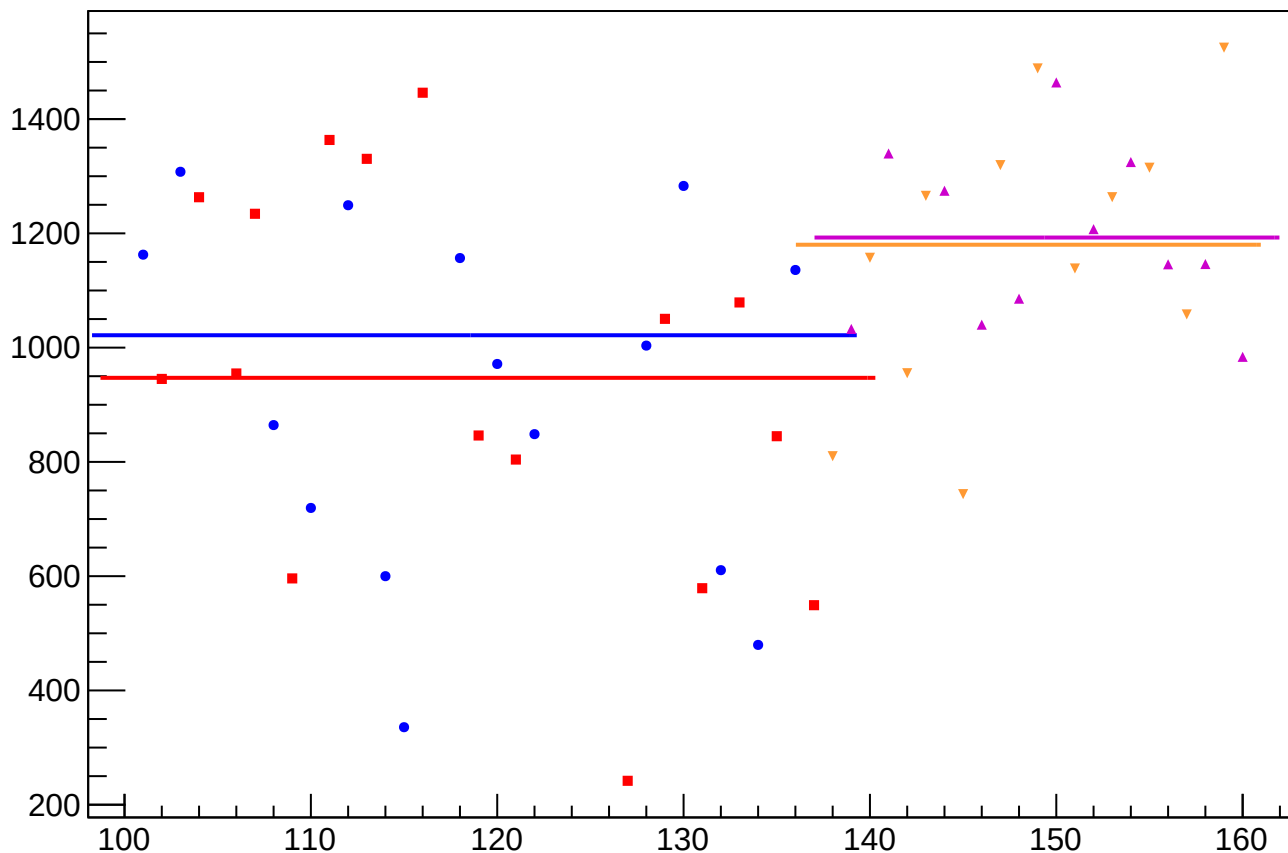
Right In:  $4145.268 \pm 0.000$   $\chi^2/\text{NDF}$ : 763693998395064689637972381933507648159744.0/14  
 Left Out:  $11307.773 \pm 0.000$   $\chi^2/\text{NDF}$ : 36281065862244259787300982388178548686848.0/11  
 Right Out:  $10948.073 \pm 0.000$   $\chi^2/\text{NDF}$ : 873949668510327201514601463115396191092736.0/15  
 Left In:  $12994.239 \pm 0.000$   $\chi^2/\text{NDF}$ : 26399397473209063315648711040224276250624.0/10

dit\_atl1\_coil7\_err\_mean vs Slug



Right In: 1062.141 $\pm$ 0.000  $\chi^2$ /NDF: 952806231926530012715872184655778152448.0/14  
 Left Out: 567.733 $\pm$ 0.000  $\chi^2$ /NDF: 17522884747687495168010192179255312384.0/11  
 Right Out: 1887.077 $\pm$ 0.000  $\chi^2$ /NDF: 5525872718363845620366029387569058283520.0/15  
 Left In: 582.413 $\pm$ 0.000  $\chi^2$ /NDF: 11860144462538181813814678965729624064.0/10  
 All: 952.780 $\pm$ 0.000  $\chi^2$ /NDF: 736031273480  
 + sign 773.025 $\pm$ 0.000  $\chi^2$ /NDF: 106309785539188  
 - sign 1129.371 $\pm$ 0.000  $\chi^2$ /NDF: 61970965674299

dit\_atl1\_coil7\_Ndata\_mean vs Slug



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

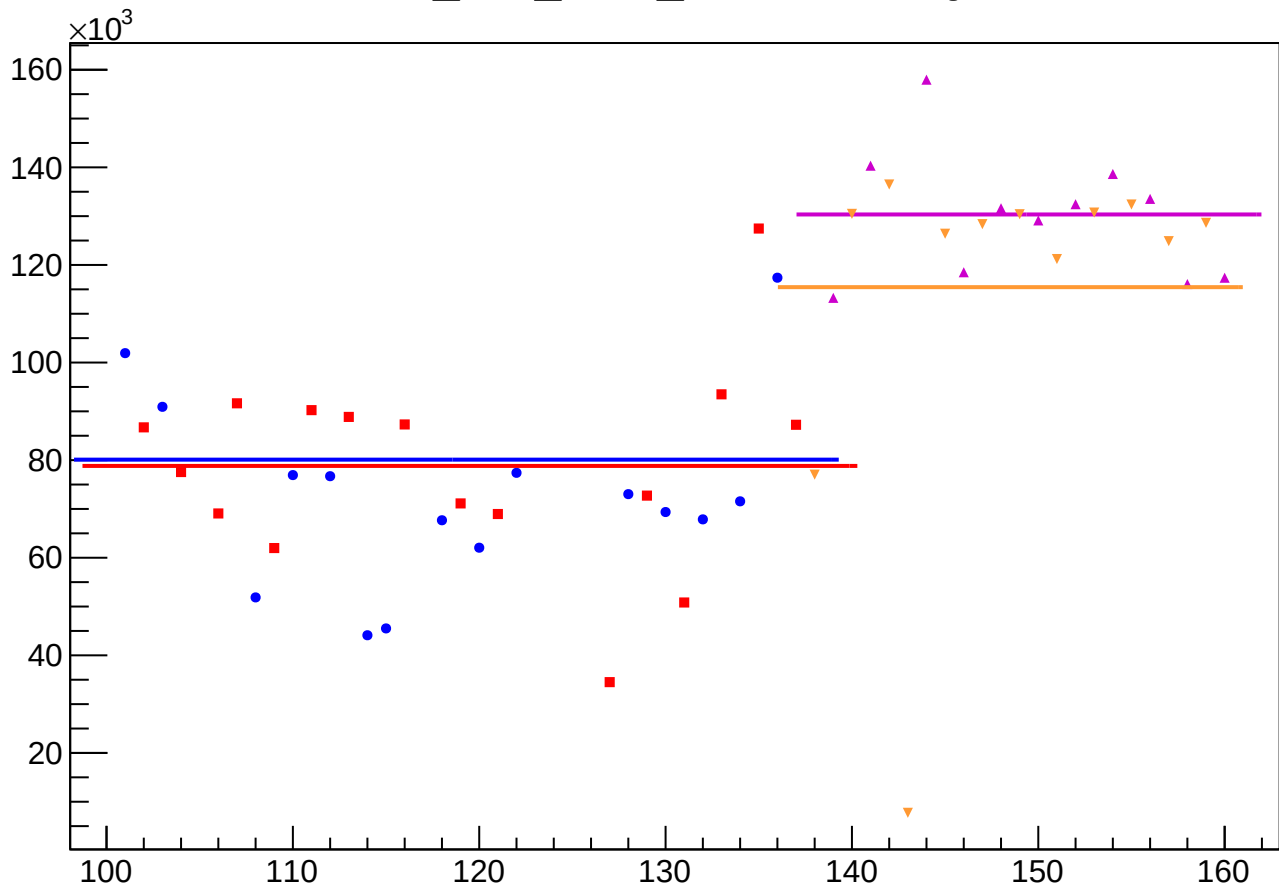
+ sign 1114.323+/-0.000  $\chi^2/\text{NDF}$ : 10080626753263

All: 1101.926+/-0.000  $\chi^2/\text{NDF}$ : 21167730452

- sign 1089.748+/-0.000  $\chi^2/\text{NDF}$ : 11039486982366



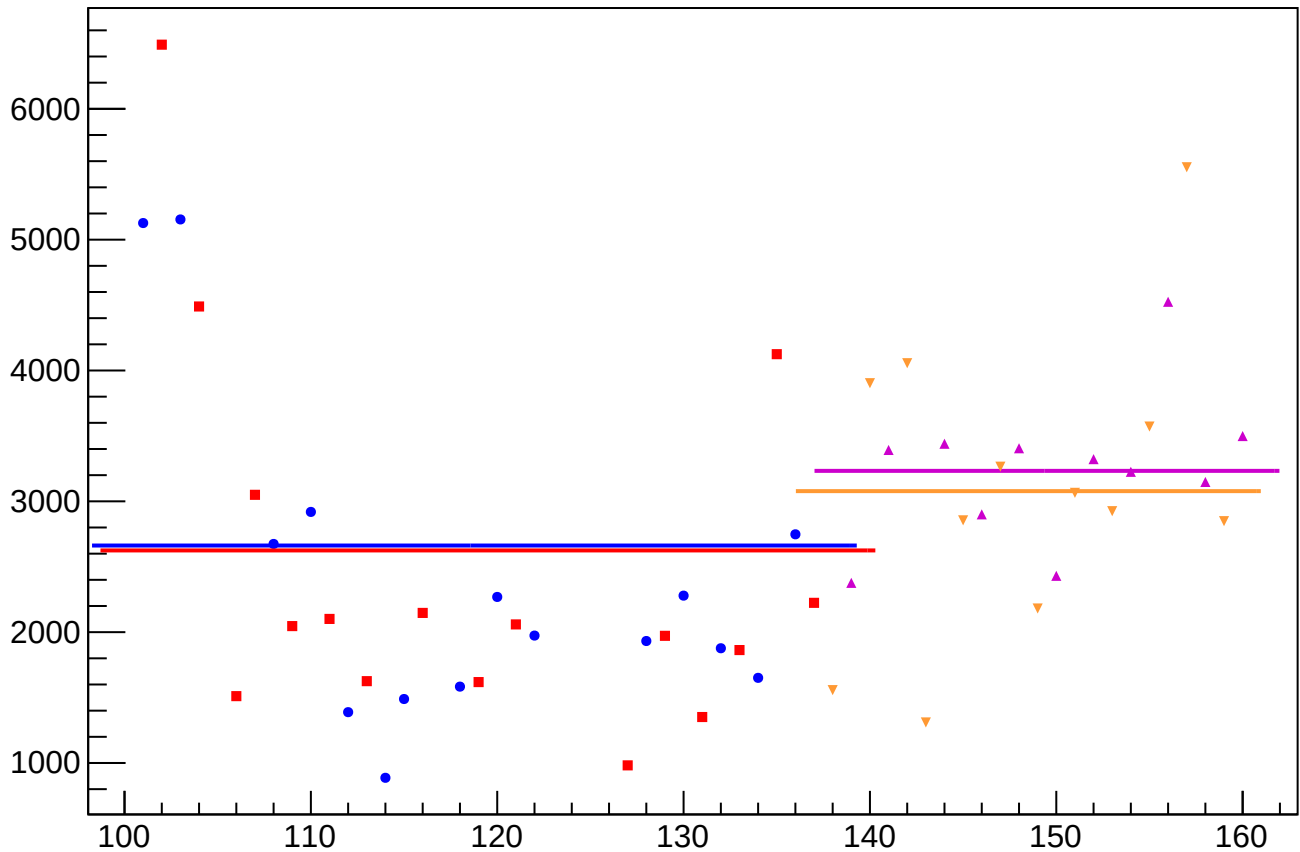
dit\_atl2\_coil7\_mean vs Slug



|                              |                                                                        |
|------------------------------|------------------------------------------------------------------------|
| 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  |

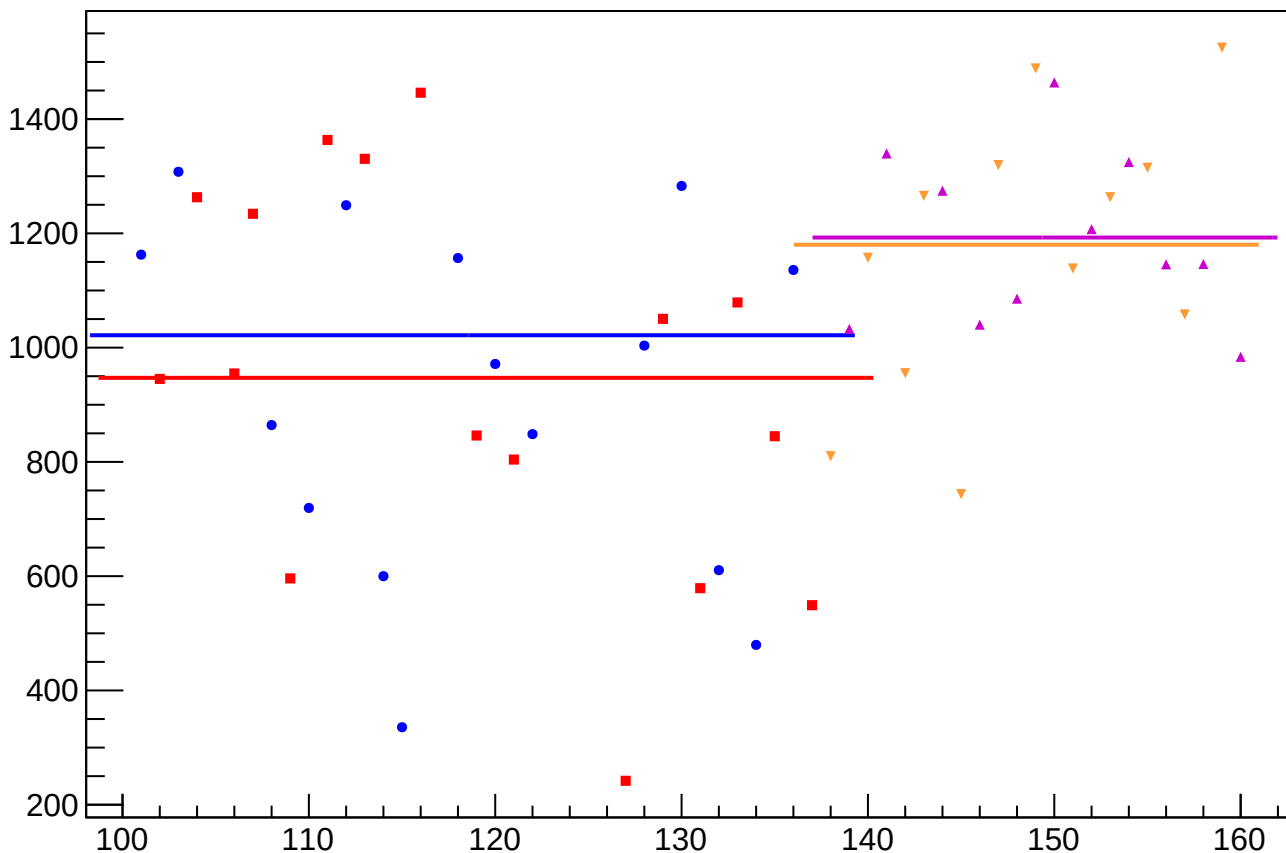
+ sign 100772.113+/-0.000  $\chi^2/\text{NDF}$ : 176748026895  
 All: 104792.930+/-0.000  $\chi^2/\text{NDF}$ : 328044500  
 - sign 108742.985+/-0.000  $\chi^2/\text{NDF}$ : 146287150012

dit\_atl2\_coil7\_err\_mean vs Slug



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

dit\_atl2\_coil7\_Ndata\_mean vs Slug



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

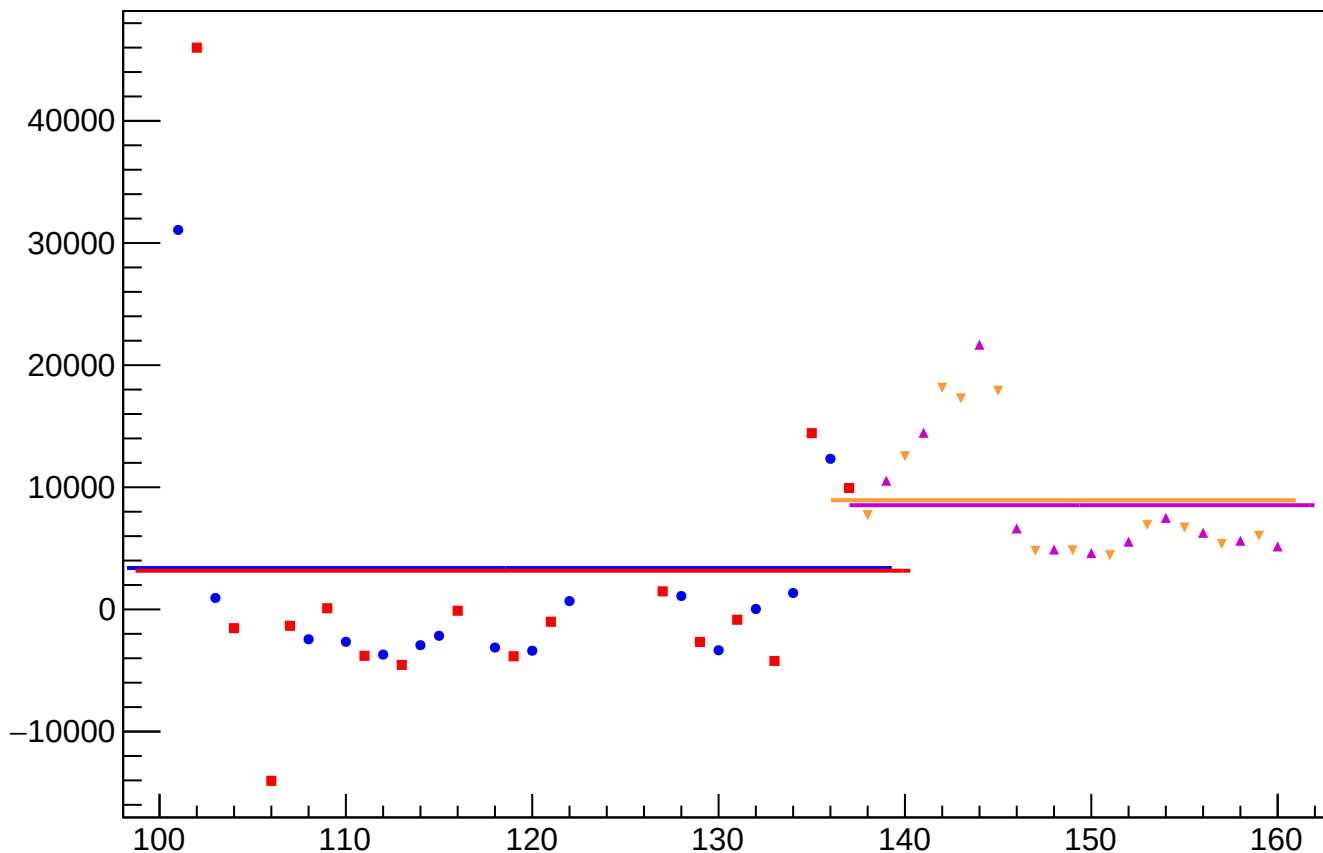
Left In: 1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

+ sign 1114.323+/-0.000  $\chi^2/\text{NDF}$ : 10080626753263

All: 1101.926+/-0.000  $\chi^2/\text{NDF}$ : 21167730452

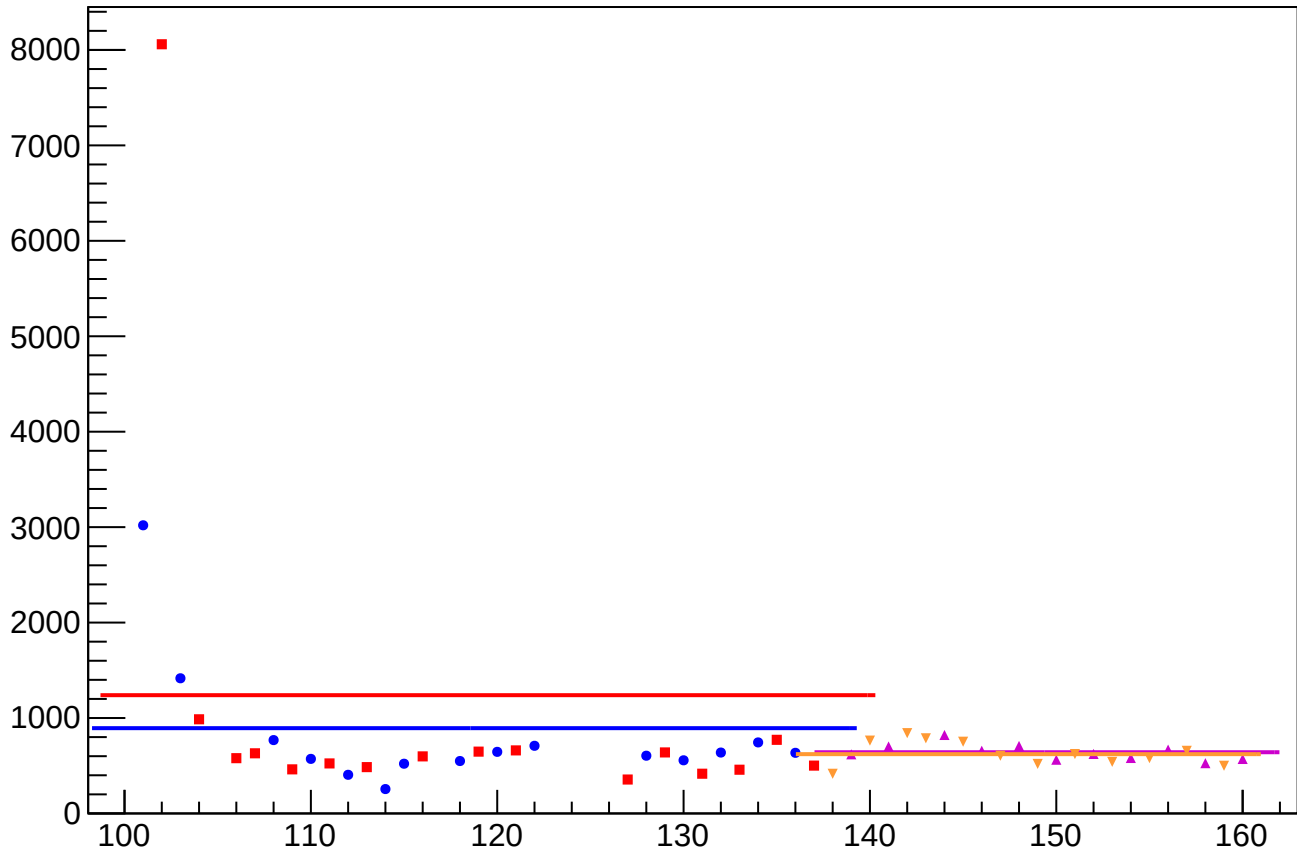
- sign 1089.748+/-0.000  $\chi^2/\text{NDF}$ : 11039486982366

dit\_atr1\_coil7\_mean vs Slug



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

dit\_atr1\_coil7\_err\_mean vs Slug



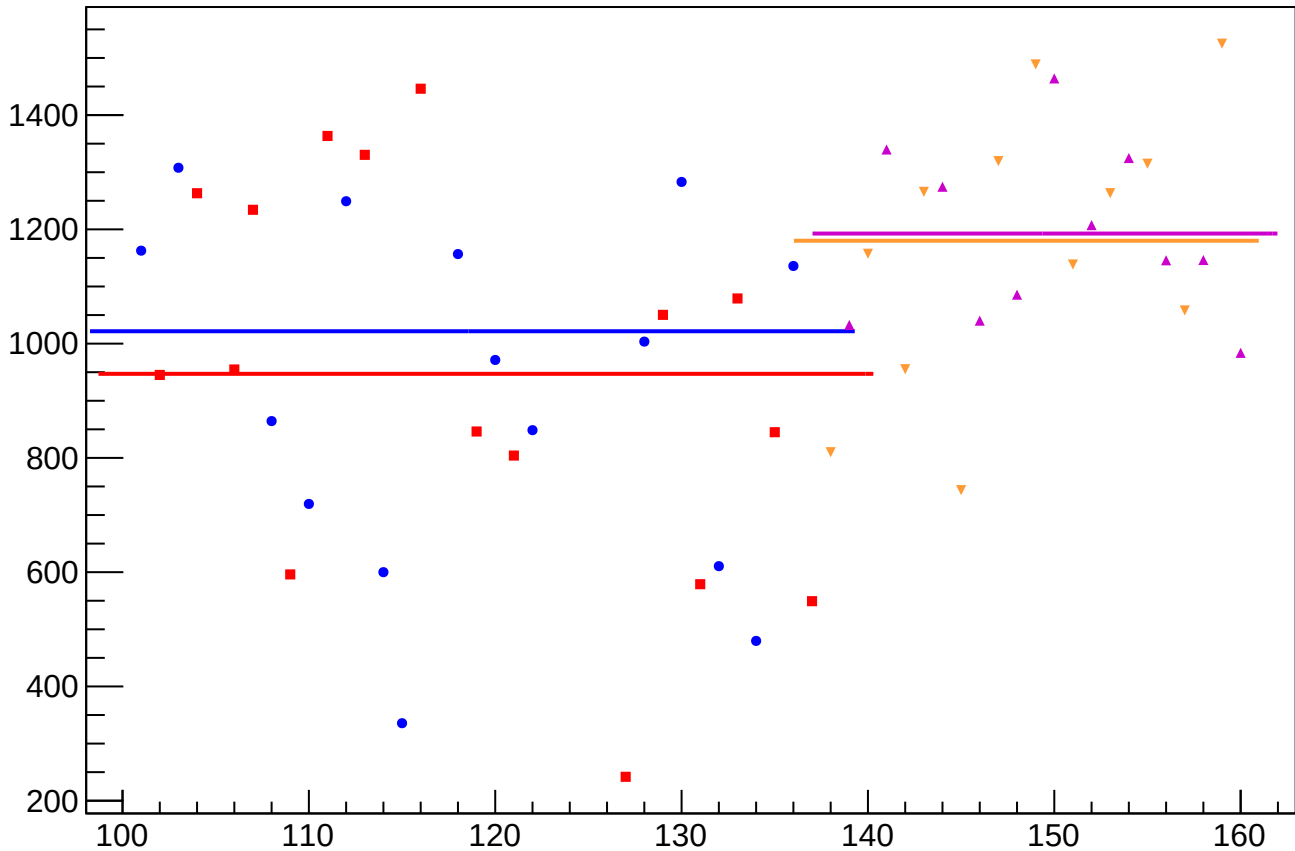
Right In: 893.683+/-0.000  $\chi^2/\text{NDF}$ : 334583619078631008932404228227359309824.0/14

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

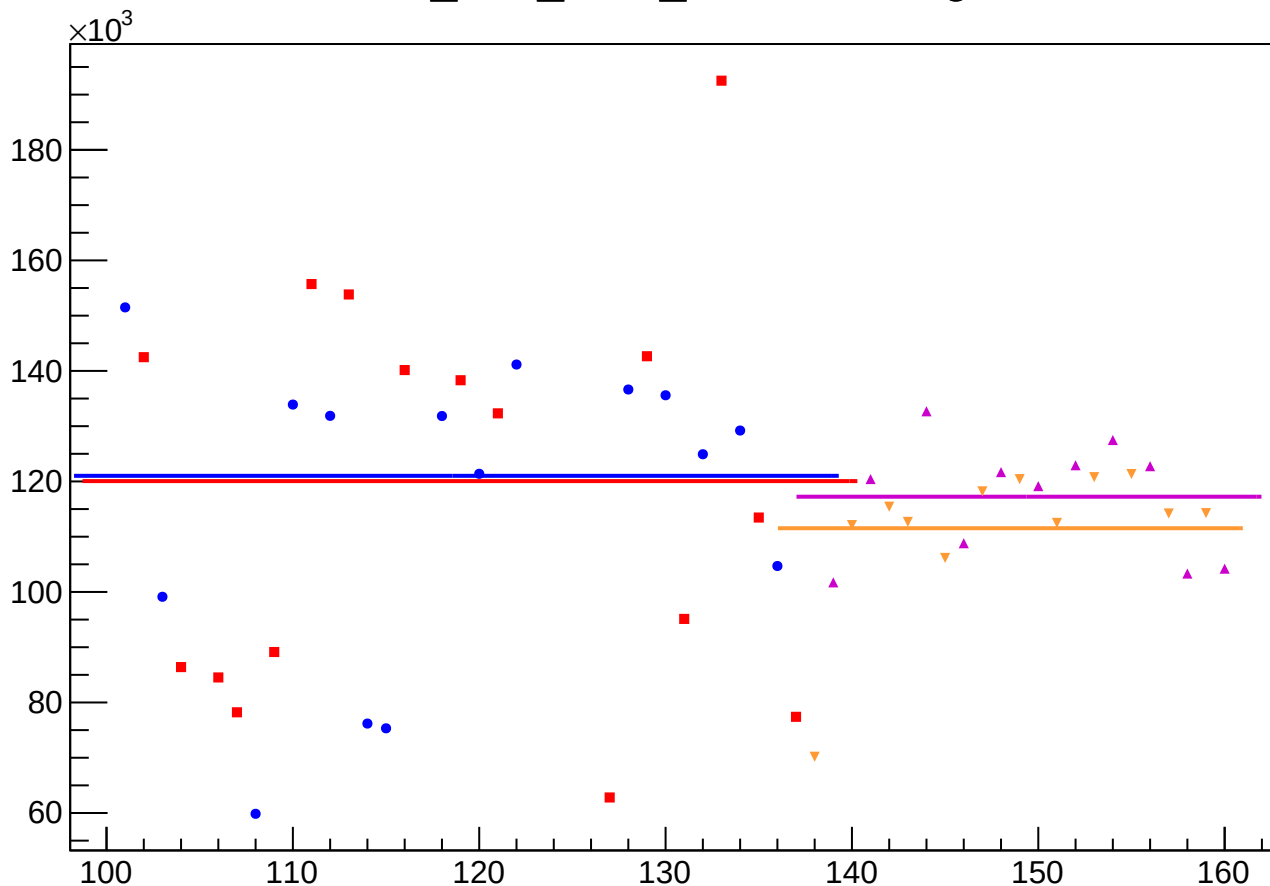
Left In: 641.490+/-0.000  $\chi^2/\text{NDF}$ : 6047241871046466320943152926715543552.0/10

dit\_atr1\_coil7\_Ndata\_mean vs Slug



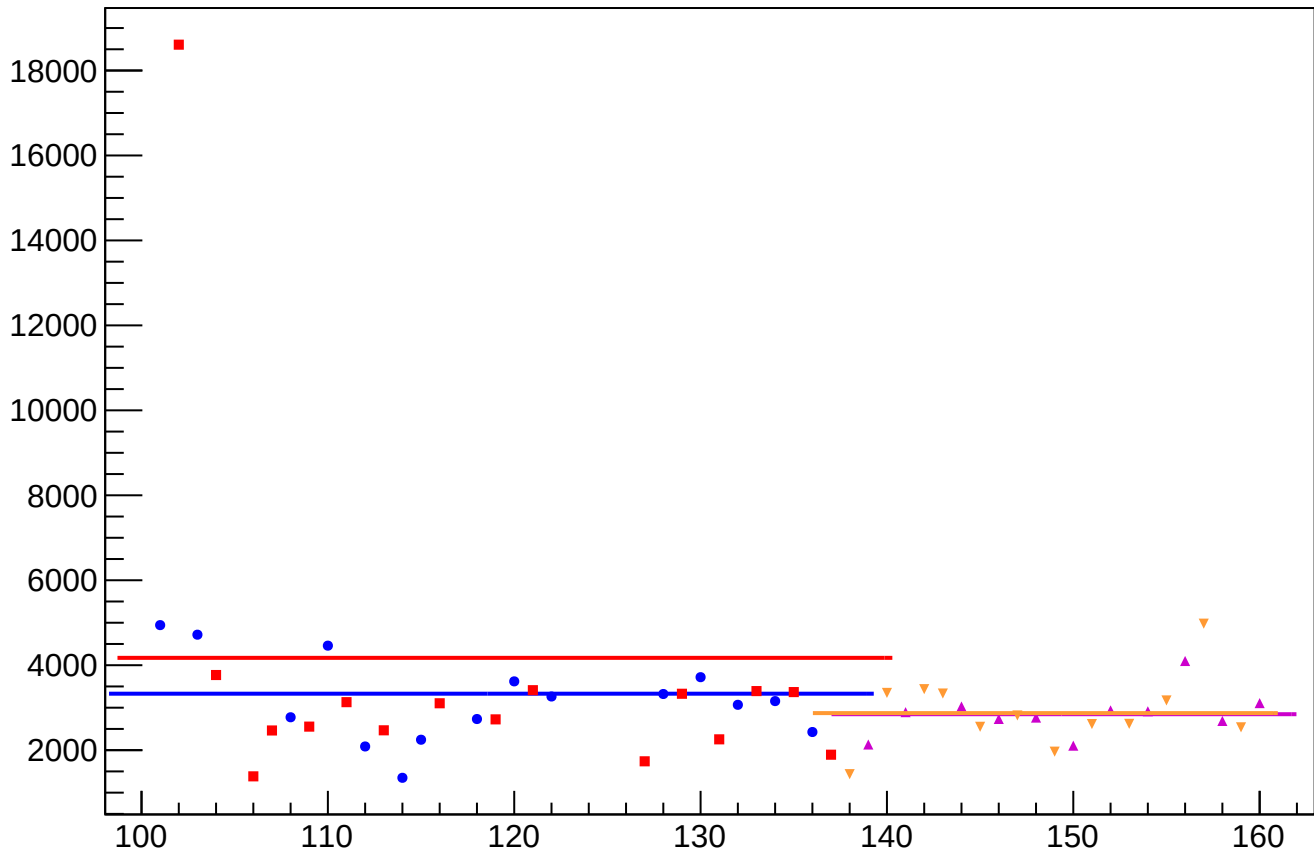
Right In: 1021.684+/-0.000  $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103+/-0.000  $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11  
 Right Out: 947.145+/-0.000  $\chi^2/\text{NDF}$ : 6778465601193652151169668028018196480.0/15  
 Left In: 1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

# dit\_atr2\_coil7\_mean vs Slug



Right In: 121016.482 $\pm$ 0.000  $\chi^2$ /NDF: 358713856404303554987784975983609668173824.0/14  
 Left Out: 111531.681 $\pm$ 0.000  $\chi^2$ /NDF: 162724299829921950370834246417372913074176.0/11  
 Right Out: 120060.693 $\pm$ 0.000  $\chi^2$ /NDF: 828419782346707601448620310014135952736256.0/15  
 Left In: 117237.465 $\pm$ 0.000  $\chi^2$ /NDF: 92299527706158063096544434206678792011776.0/10

dit\_atr2\_coil7\_err\_mean vs Slug

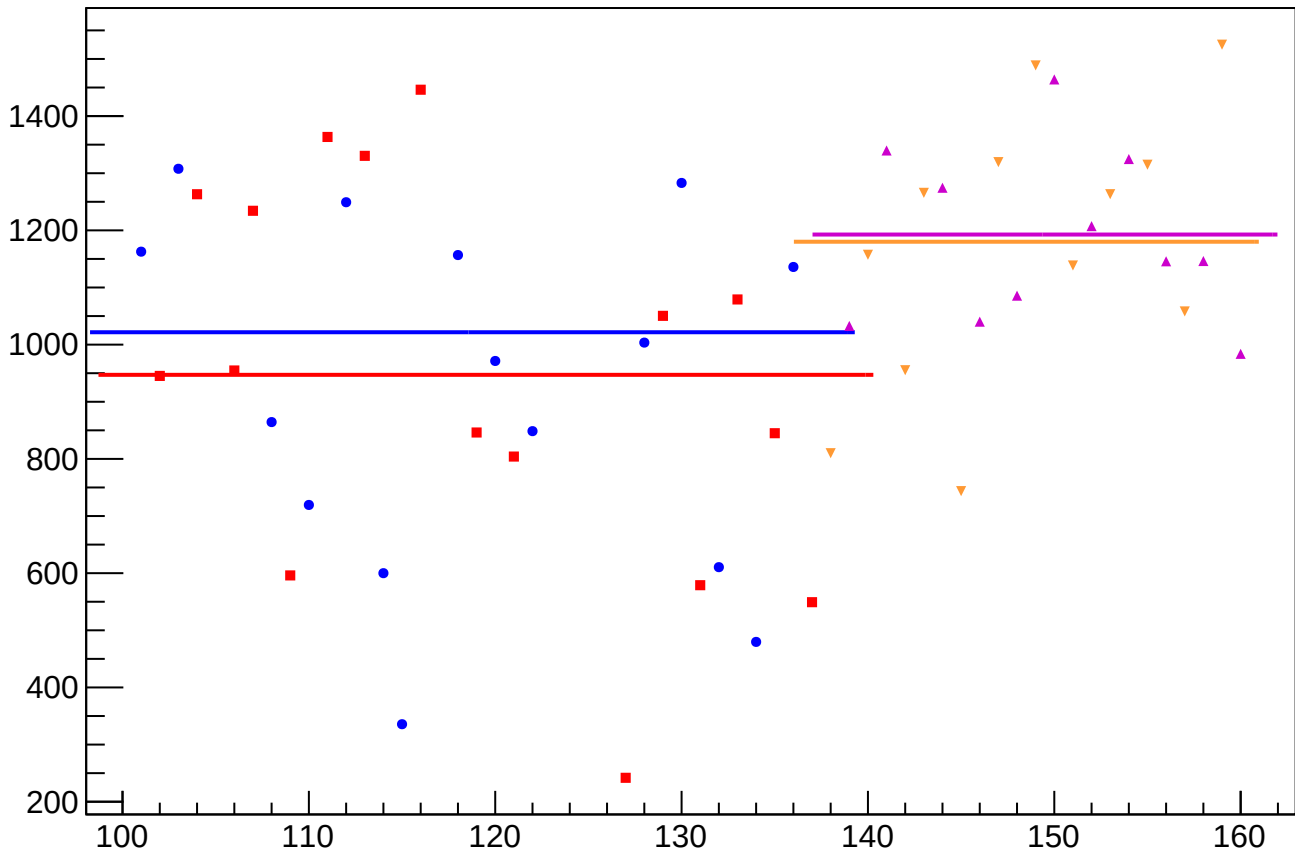


Right In: 3329.488 $\pm$ 0.000  $\chi^2$ /NDF: 567034774398456376227526824513721335808.0/14  
 Left Out: 2872.567 $\pm$ 0.000  $\chi^2$ /NDF: 662883582778902790585902196636778496000.0/11  
 Right Out: 4173.434 $\pm$ 0.000  $\chi^2$ /NDF: 13498246551537992400095003154682468106240.0/15  
 Left In: 2846.559 $\pm$ 0.000  $\chi^2$ /NDF: 229557109736682123603885764134616170496.0/10

+ sign 3062.293 $\pm$ 0.000  $\chi^2$ /NDF: 13091528183331  
 All: 3234.072 $\pm$ 0.000  $\chi^2$ /NDF: 15810392876  
 - sign 3402.829 $\pm$ 0.000  $\chi^2$ /NDF: 14409809055061

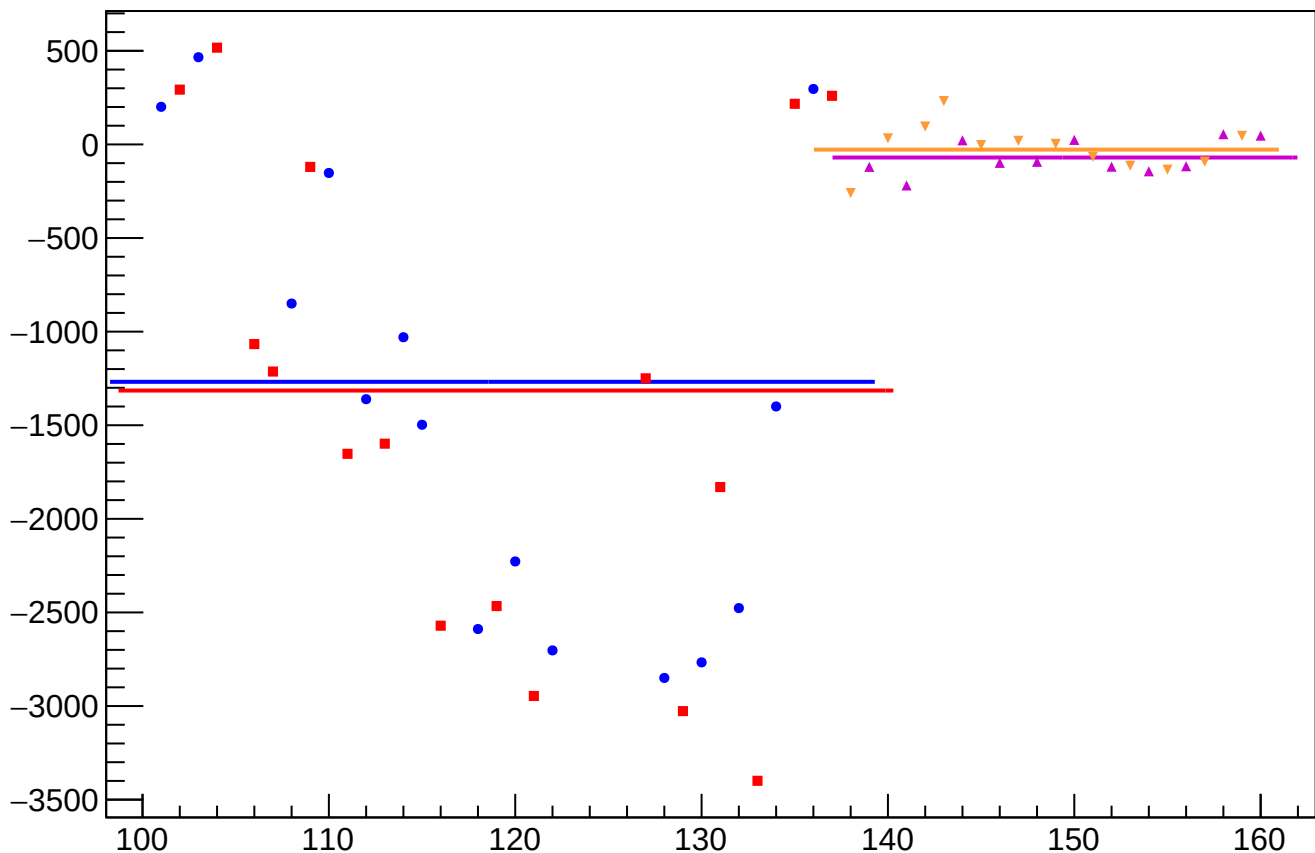


dit\_atr2\_coil7\_Ndata\_mean vs Slug



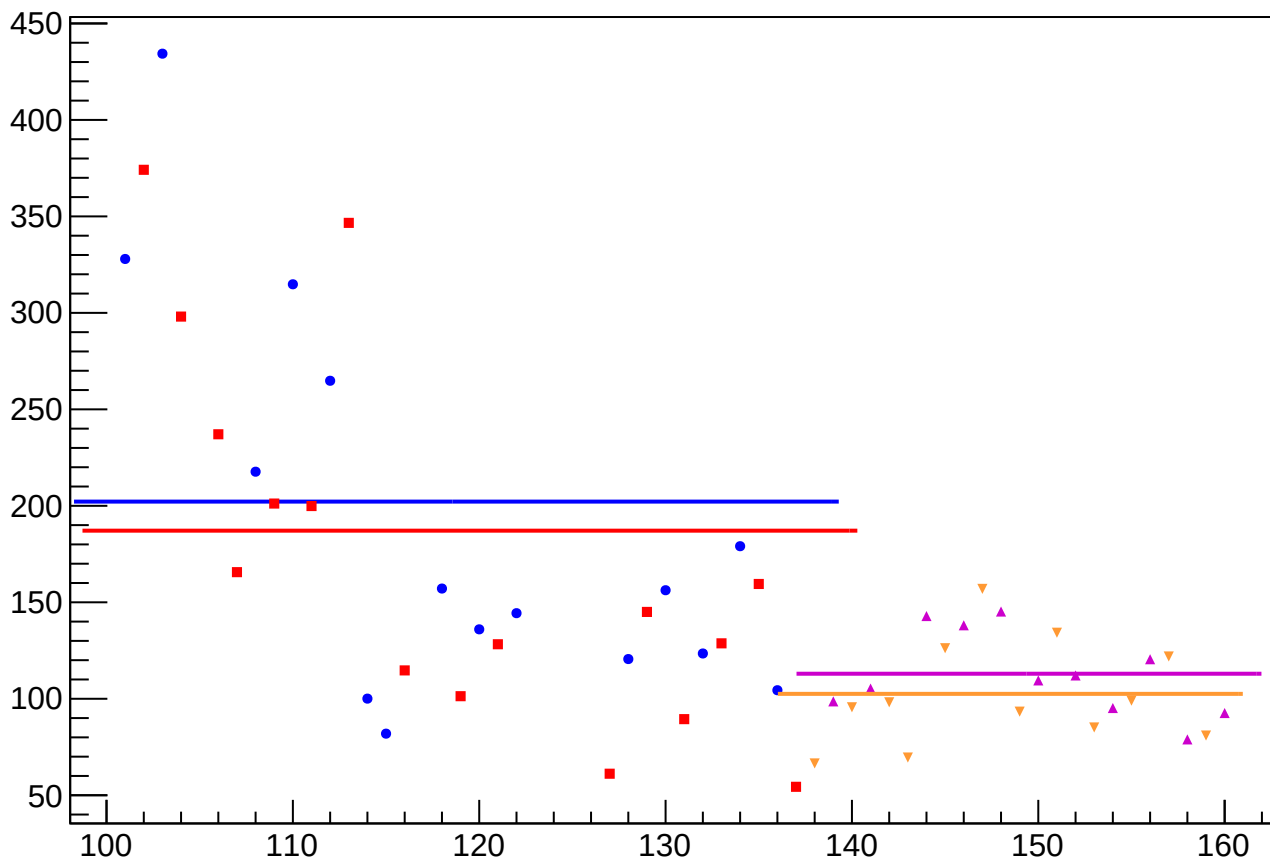
Right In: 1021.684+/-0.000  $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103+/-0.000  $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11  
 Right Out: 947.145+/-0.000  $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15  
 Left In: 1192.687+/-0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10

# dit\_sam1\_coil7\_mean vs Slug



Right In: -1268.061+/-0.000  $\chi^2/\text{NDF}$ : 1092280760288833856070470490800647045120.0/14  
 Left Out: -27.745+/-0.000  $\chi^2/\text{NDF}$ : 12401866293776389782406733193877127168.0/11  
 Right Out: -1314.767+/-0.000  $\chi^2/\text{NDF}$ : 1098471313864079013714609379653260935168.0/15  
 Left In: -69.887+/-0.000  $\chi^2/\text{NDF}$ : 6896729055106095492675290775544659968.0/10

dit\_sam1\_coil7\_err\_mean vs Slug



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

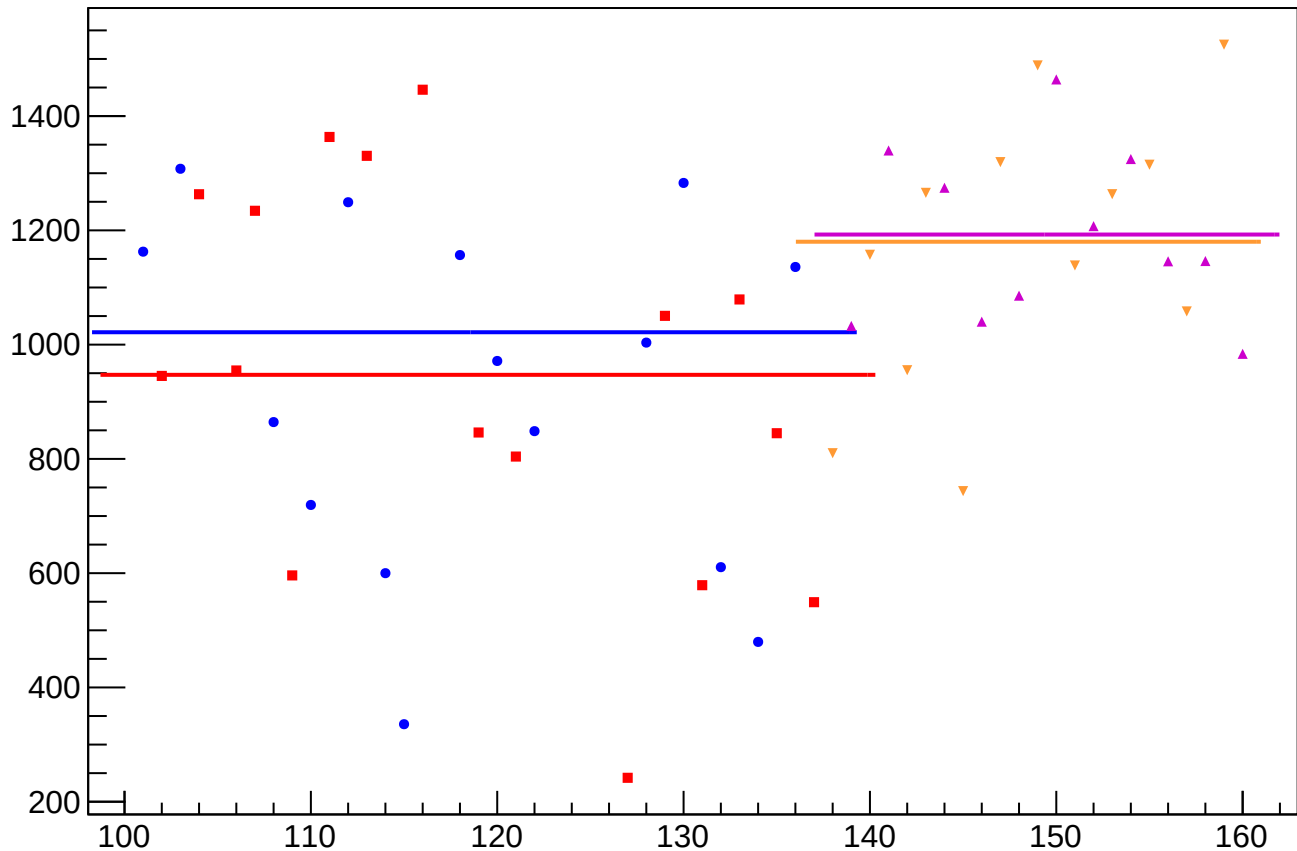
Left In: 112.981+/-0.000  $\chi^2/\text{NDF}$ : 399082569166702797505998561799569408.0/10

+ sign 143.922+/-0.000  $\chi^2/\text{NDF}$ : 114280634979740

All: 143.994+/-0.000  $\chi^2/\text{NDF}$ : 20186723766

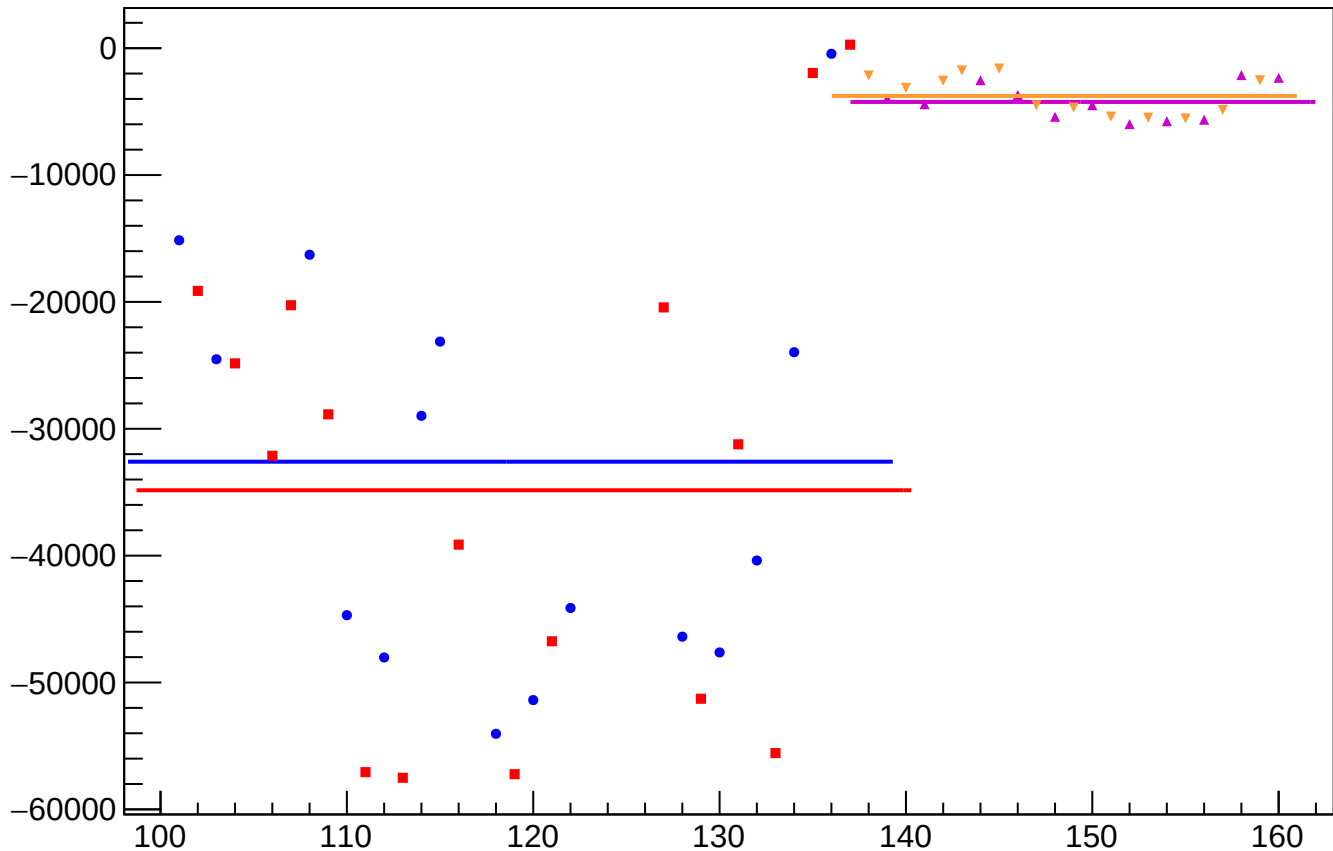
- sign 144.065+/-0.000  $\chi^2/\text{NDF}$ : 875864401174807

dit\_sam1\_coil7\_Ndata\_mean vs Slug



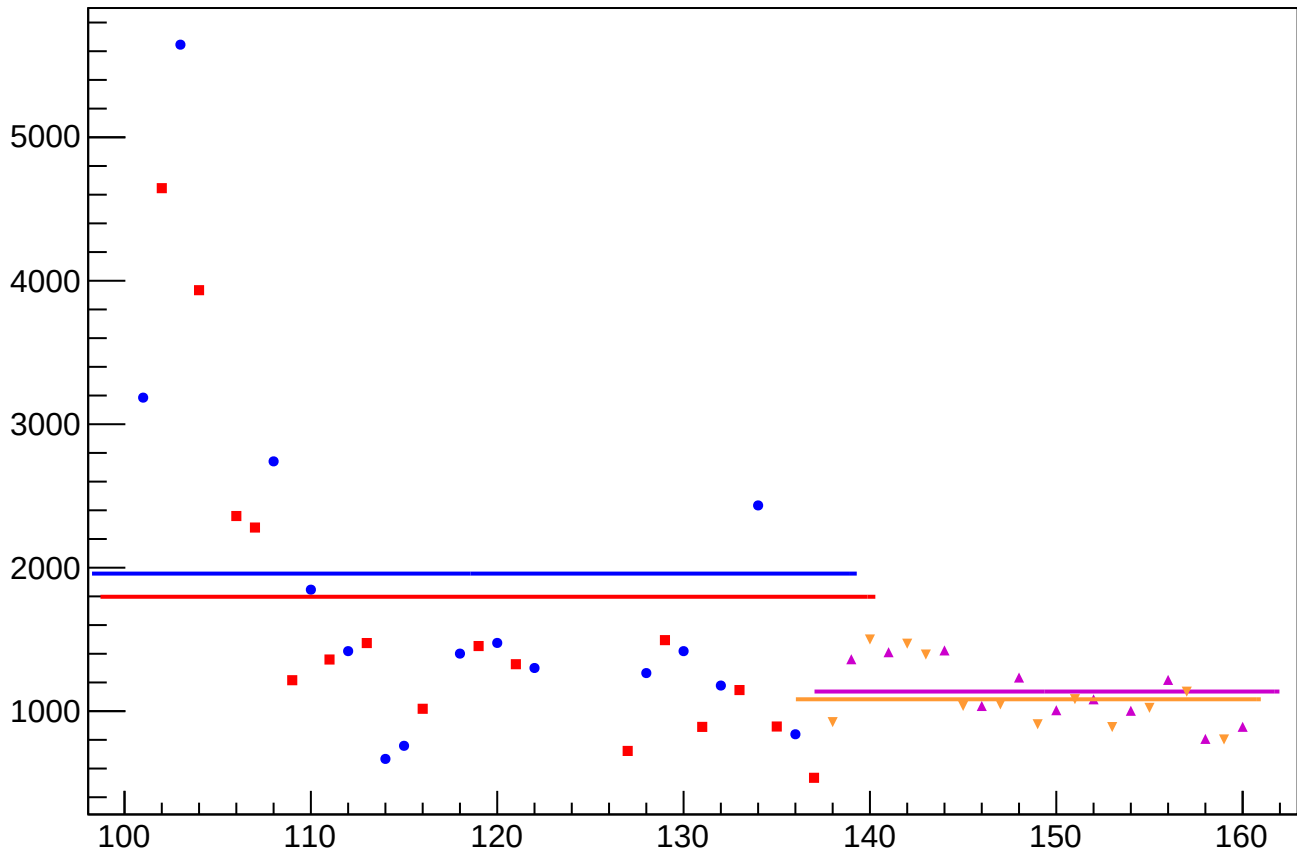
Right In: 1021.684 $\pm$ 0.000  $\chi^2$ /NDF: 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103 $\pm$ 0.000  $\chi^2$ /NDF: 50788606804690292724539730503787347968.0/11  
 Right Out: 947.145 $\pm$ 0.000  $\chi^2$ /NDF: 67784656011936521511169668028018196480.0/15  
 Left In: 1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10

# dit\_sam2\_coil7\_mean vs Slug



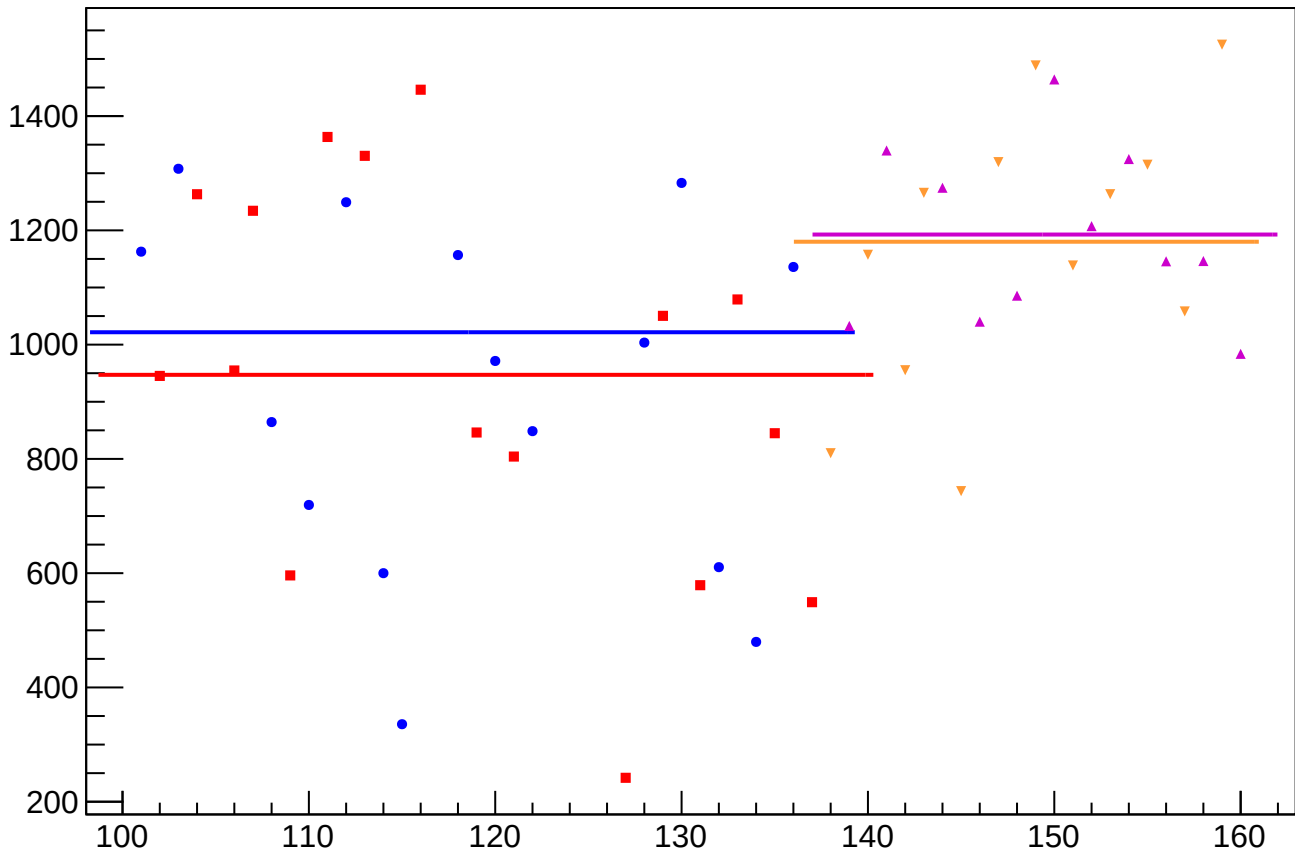
Right In:  $-32594.962 \pm 0.000$   $\chi^2/\text{NDF}: 209150369207000564489724529020922520141824.0/14$   
 Left Out:  $-3764.764 \pm 0.000$   $\chi^2/\text{NDF}: 1969097651481267133720686593450373545984.0/11$   
 Right Out:  $-34848.046 \pm 0.000$   $\chi^2/\text{NDF}: 221127702024811719232559434097324967591936.0/15$   
 Left In:  $-4238.758 \pm 0.000$   $\chi^2/\text{NDF}: 1676258877466067471746283067125033598976.0/10$

dit\_sam2\_coil7\_err\_mean vs Slug



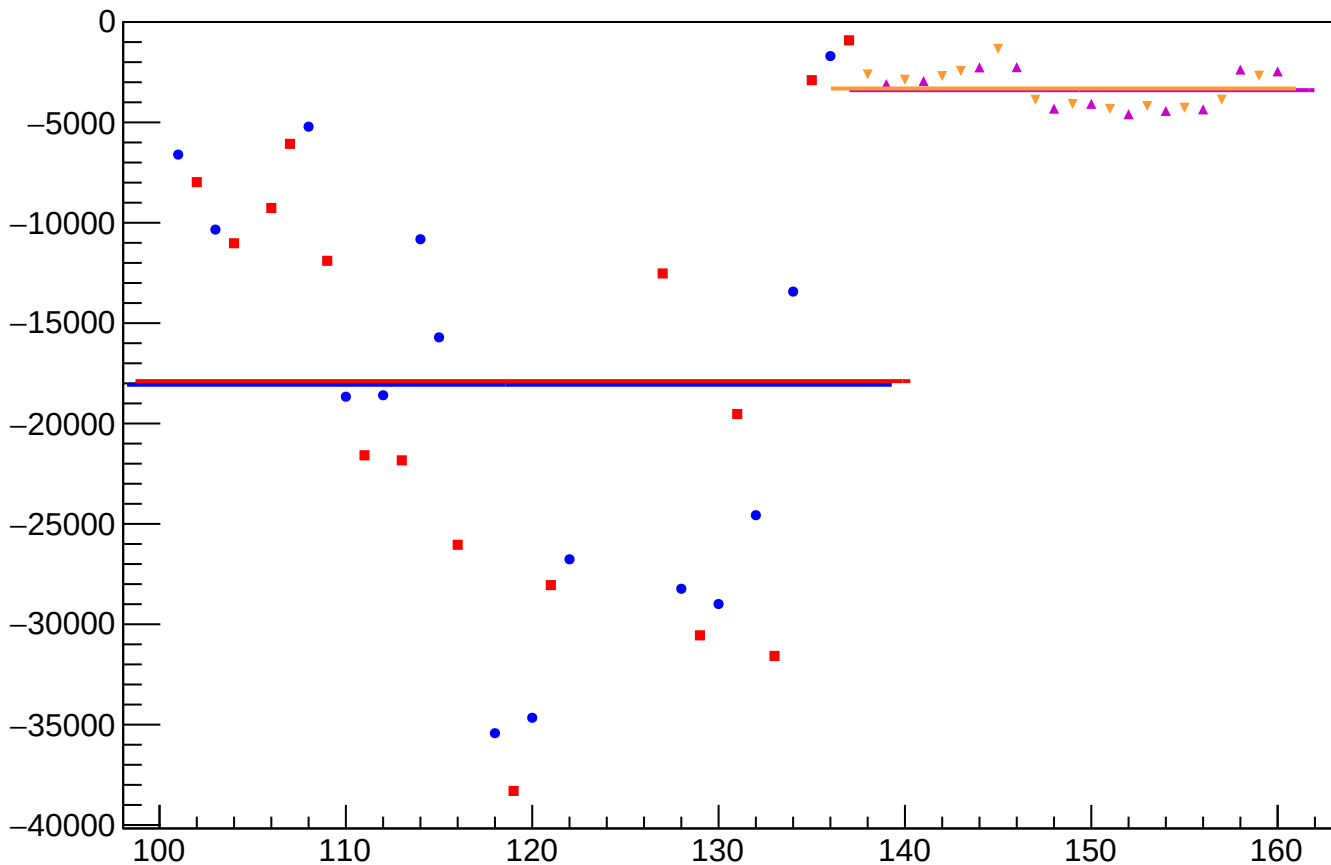
Right In: 1958.835+/-0.000  $\chi^2/\text{NDF}$ : 1189322999631358431600643692981190131712.0/14  
 Left Out: 1082.769+/-0.000  $\chi^2/\text{NDF}$ : 42435467592938018504955570075058831360.0/11  
 Right Out: 1797.392+/-0.000  $\chi^2/\text{NDF}$ : 955096623879958195657195074614240215040.0/15  
 Left In: 1136.738+/-0.000  $\chi^2/\text{NDF}$ : 36660640388160233770492299797174681600.0/10

dit\_sam2\_coil7\_Ndata\_mean vs Slug



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: 6778465601193652151169668028018196480.0/15  
 Left In: 1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10

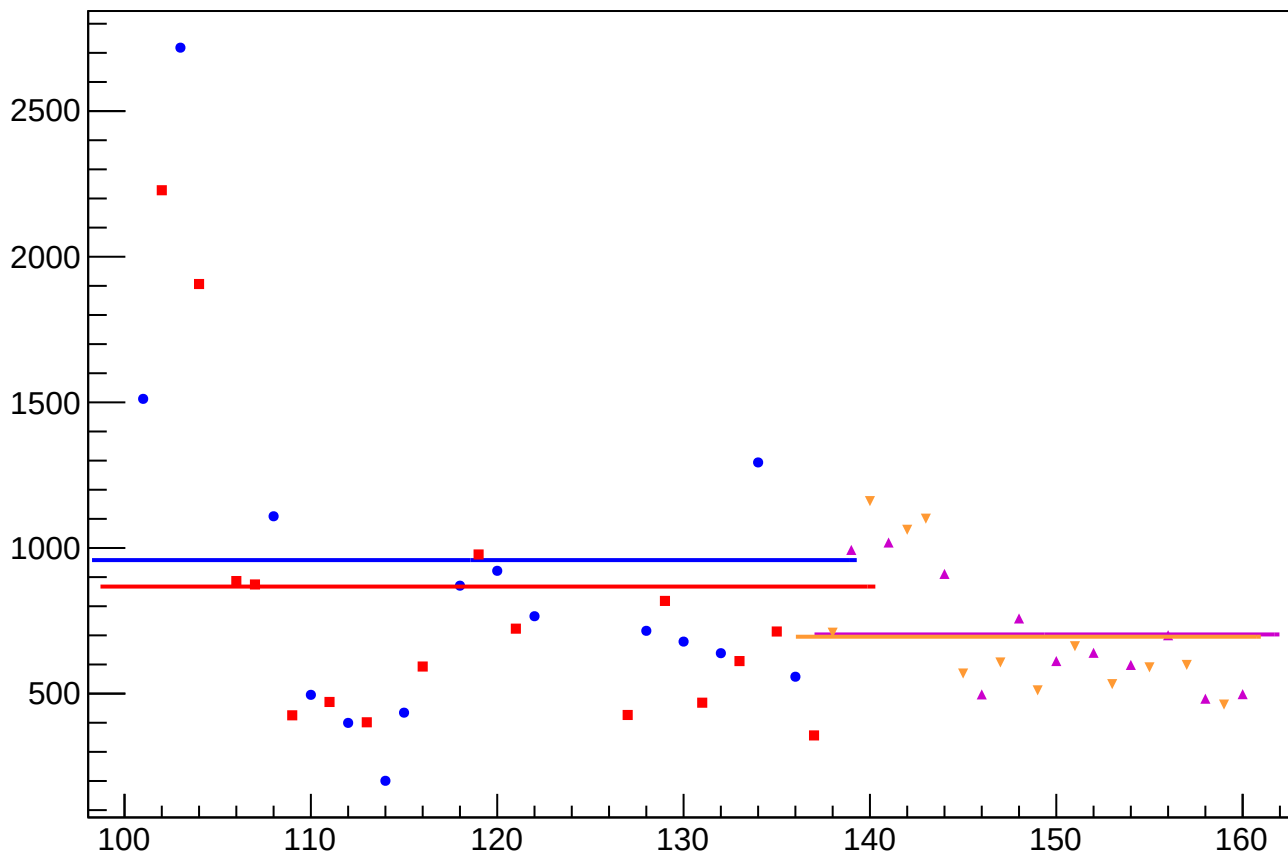
dit\_sam3\_coil7\_mean vs Slug



Right In: -18068.550+/-0.000  $\chi^2/\text{NDF}$ : 84312156443533553417760933497753760169984.0/14  
 Left Out: -3312.000+/-0.000  $\chi^2/\text{NDF}$ : 776933675153970093414497932746986356736.0/11  
 Right Out: -17888.149+/-0.000  $\chi^2/\text{NDF}$ : 78405915612914252869875231068795393015808.0/15  
 Left In: -3394.339+/-0.000  $\chi^2/\text{NDF}$ : 804969095824057391704293669390893711360.0/10



dit\_sam3\_coil7\_err\_mean vs Slug



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

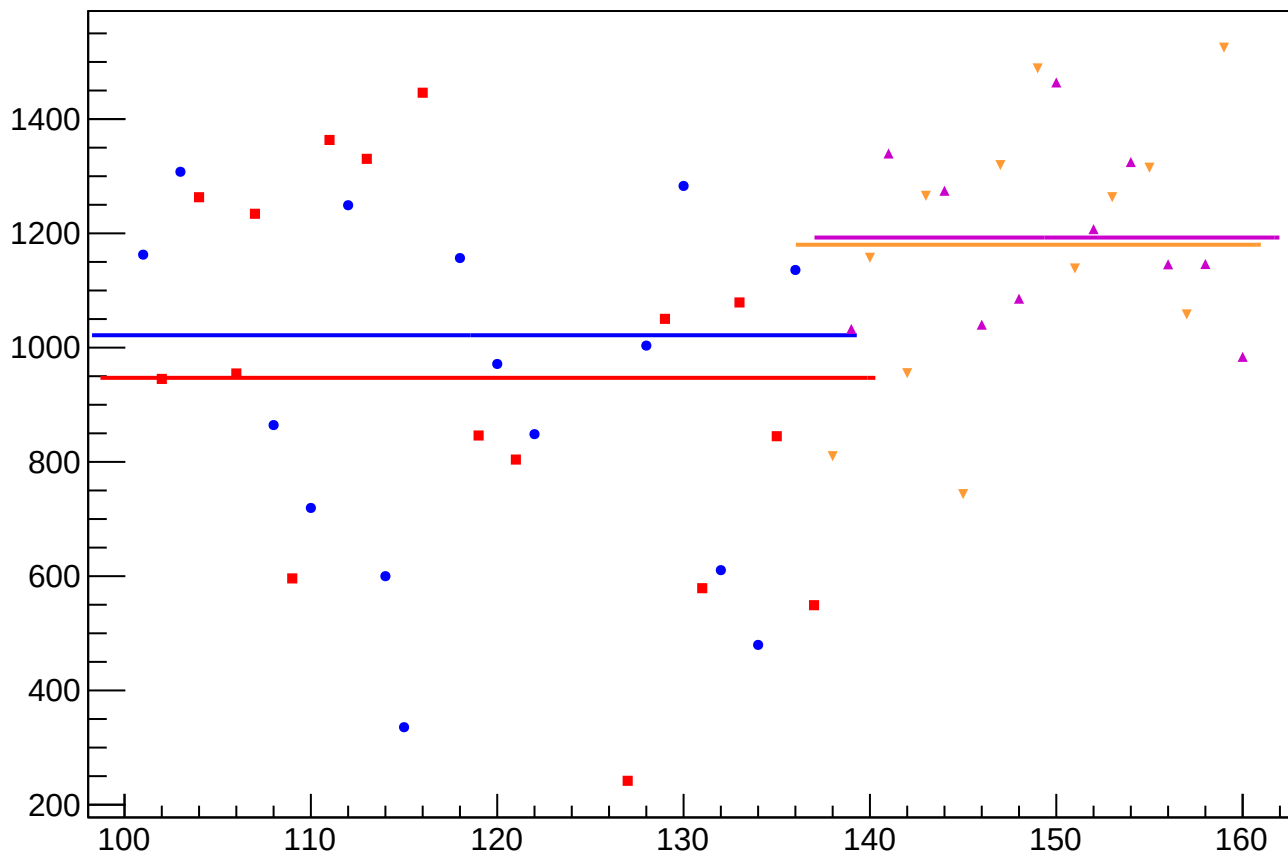
Left In: 703.169+/-0.000  $\chi^2/\text{NDF}$ : 32040531861451426969939944767733366784.0/10

+ sign 804.584+/-0.000  $\chi^2/\text{NDF}$ : 338998928620433

All: 788.186+/-0.000  $\chi^2/\text{NDF}$ : 598468024963

- sign 772.078+/-0.000  $\chi^2/\text{NDF}$ : 258636009193620

# dit\_sam3\_coil7\_Ndata\_mean vs Slug



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

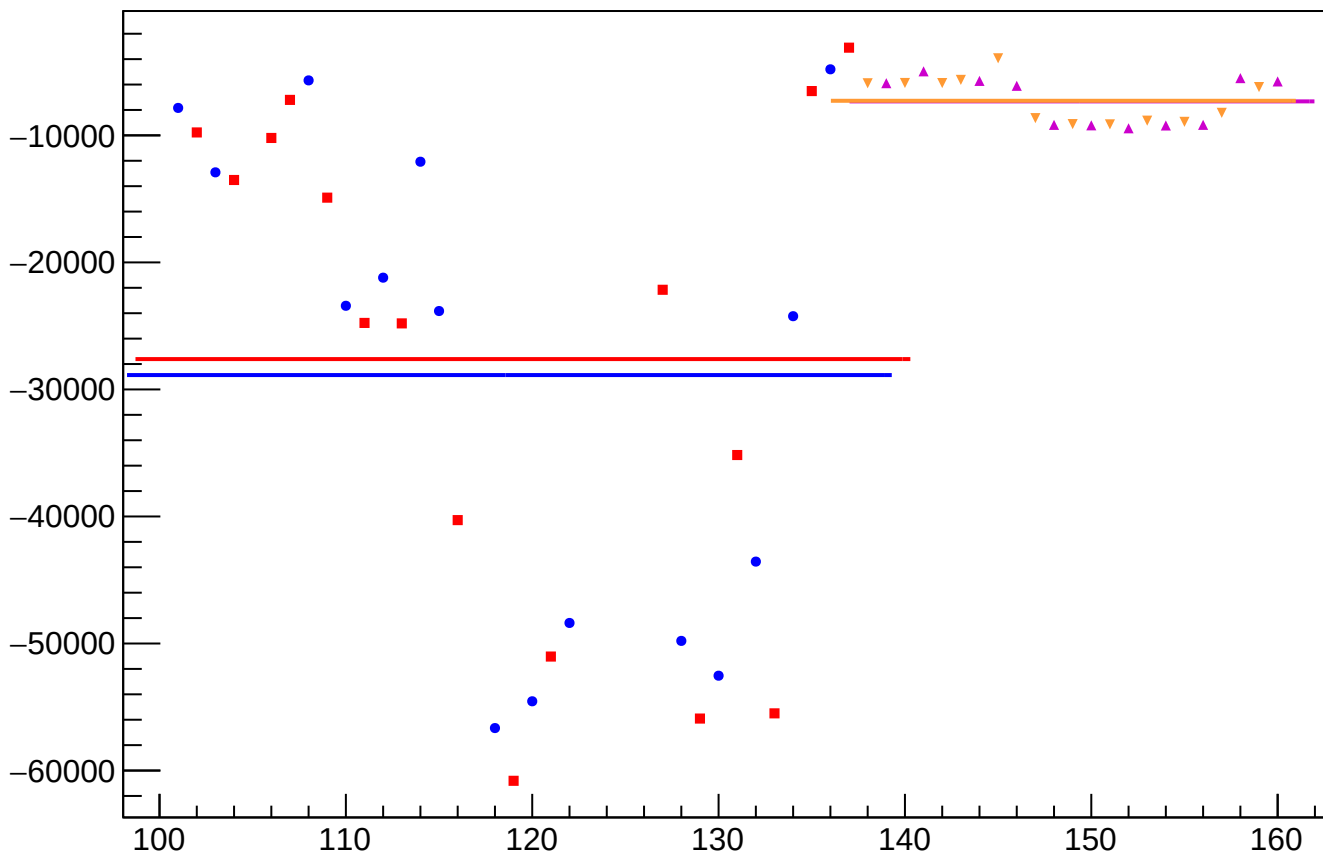
Left In: 1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10

+ sign 1114.323 $\pm$ 0.000  $\chi^2$ /NDF: 10080626753263

All: 1101.926 $\pm$ 0.000  $\chi^2$ /NDF: 21167730452

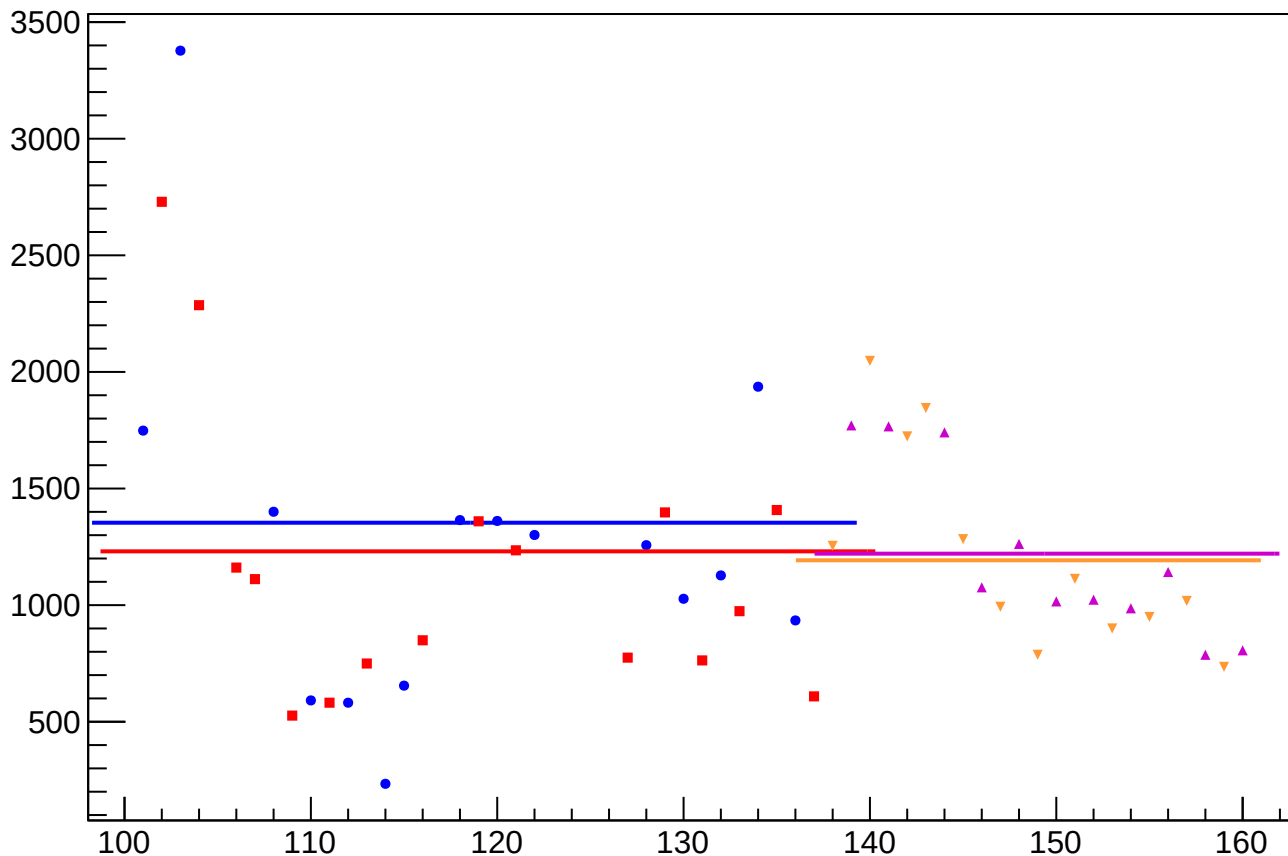
- sign 1089.748 $\pm$ 0.000  $\chi^2$ /NDF: 11039486982366

# dit\_sam4\_coil7\_mean vs Slug



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

dit\_sam4\_coil7\_err\_mean vs Slug



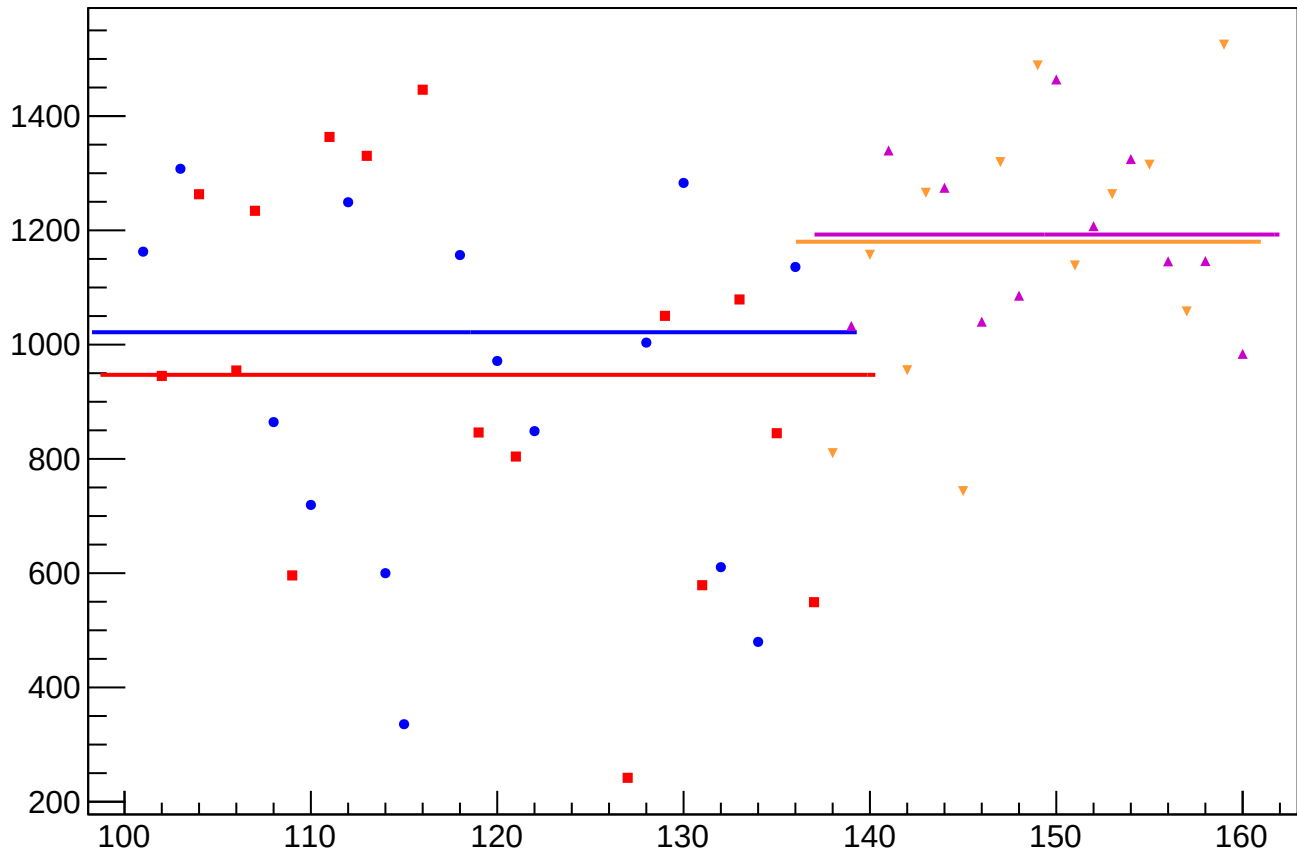
Right In: 1353.413+/-0.000  $\chi^2/\text{NDF}$ : 352887966702770713373861839880553758720.0/14

Left Out: 1192.275+/-0.000  $\chi^2/\text{NDF}$ : 150893742871936420702627399426239365120.0/11

Right Out: 1230.633+/-0.000  $\chi^2/\text{NDF}$ : 276989454129150005656872744539903754240.0/15

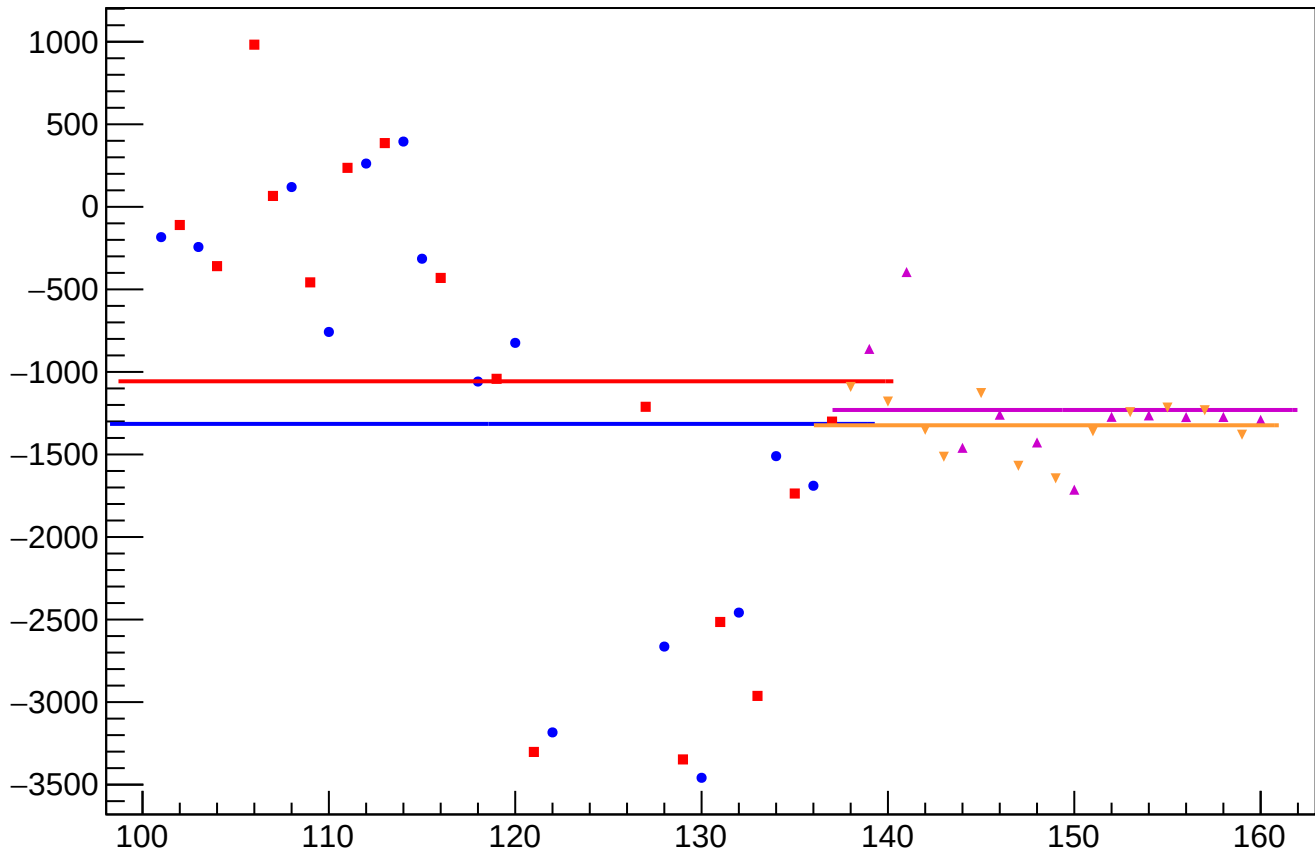
Left In: 1220.761+/-0.000  $\chi^2/\text{NDF}$ : 116296897250486719965341990830940880896.0/10

dit\_sam4\_coil7\_Ndata\_mean vs Slug



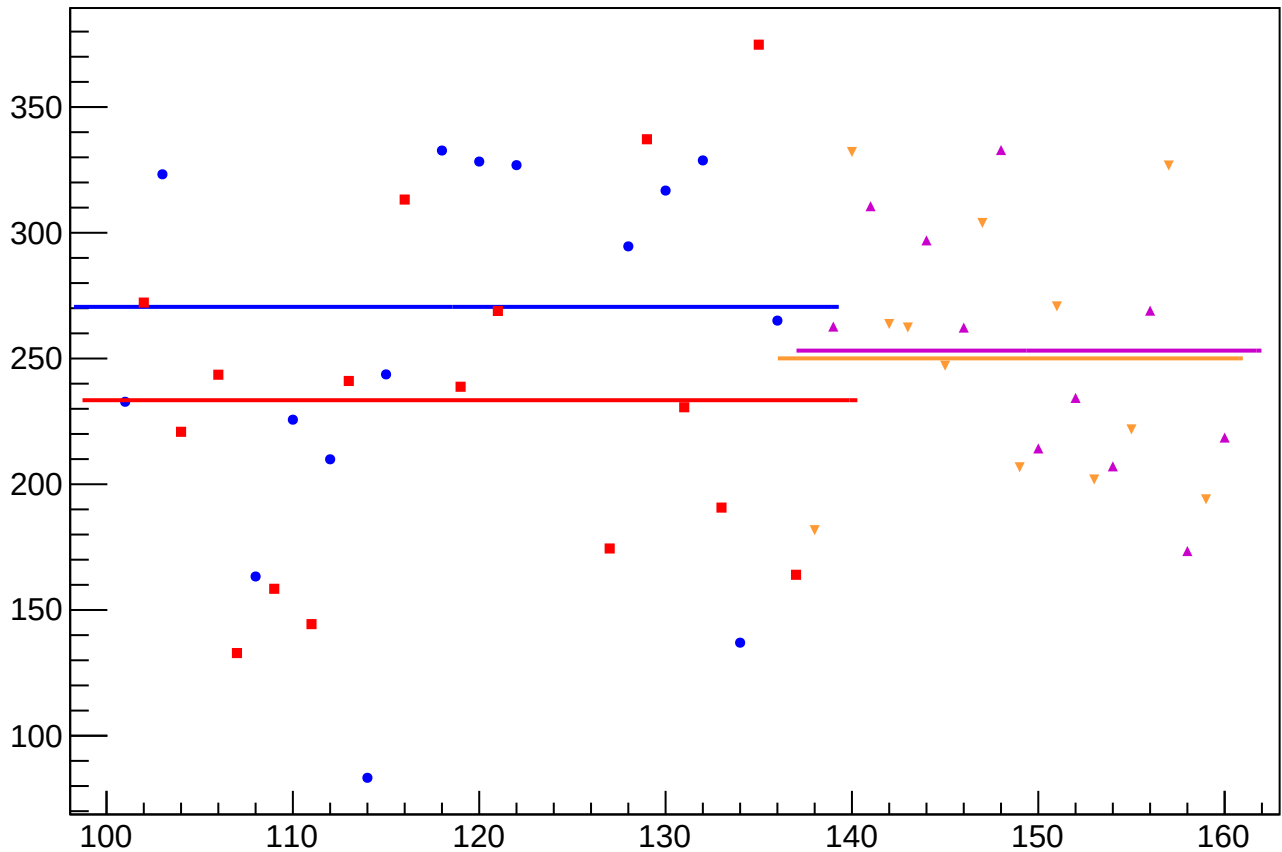
Right In: 1021.684 +/- 0.000  $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103 +/- 0.000  $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11  
 Right Out: 947.145 +/- 0.000  $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15  
 Left In: 1192.687 +/- 0.000  $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10  
 All: 1101.926 +/- 0.000  $\chi^2/\text{NDF}$ : 21167730452  
 + sign 1114.323 +/- 0.000  $\chi^2/\text{NDF}$ : 10080626753263  
 - sign 1089.748 +/- 0.000  $\chi^2/\text{NDF}$ : 11039486982366

# dit\_sam5\_coil7\_mean vs Slug



Right In:  $-1314.782 \pm 0.000$   $\chi^2/\text{NDF}$ : 966082368518203481544021644405645508608.0/14  
 Left Out:  $-1323.142 \pm 0.000$   $\chi^2/\text{NDF}$ : 27180584789293911694803613303409999872.0/11  
 Right Out:  $-1056.765 \pm 0.000$   $\chi^2/\text{NDF}$ : 1127141594187417021949832477353286041600.0/15  
 Left In:  $-1230.430 \pm 0.000$   $\chi^2/\text{NDF}$ : 100431691068850056086409132460520505344.0/10

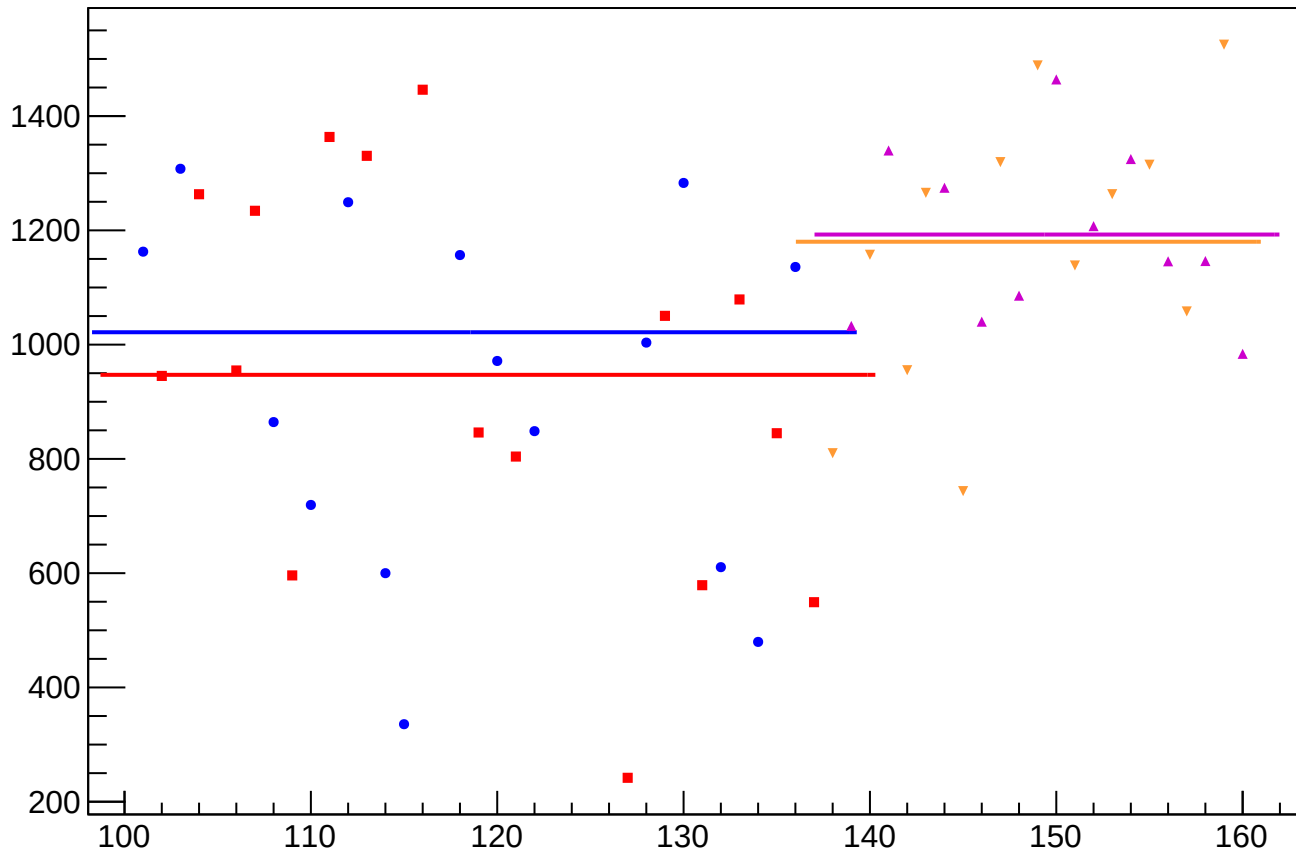
dit\_sam5\_coil7\_err\_mean vs Slug



|                            |                                                                  |
|----------------------------|------------------------------------------------------------------|
| Right In: 270.538+/-0.000  | $\chi^2/\text{NDF}$ : 2473839905347950323907848405170257920.0/14 |
| Left Out: 250.055+/-0.000  | $\chi^2/\text{NDF}$ : 2329396041694824766683600755668025344.0/11 |
| Right Out: 233.421+/-0.000 | $\chi^2/\text{NDF}$ : 3048529087317888615064010247743995904.0/15 |
| Left In: 253.145+/-0.000   | $\chi^2/\text{NDF}$ : 1980196841930298045035907903943344128.0/10 |

+ sign 258.560+/-0.000  $\chi^2/\text{NDF}$ : 496246110495273  
 All: 251.658+/-0.000  $\chi^2/\text{NDF}$ : 10289533435  
 - sign 244.876+/-0.000  $\chi^2/\text{NDF}$ : 517943608917736

dit\_sam5\_coil7\_Ndata\_mean vs Slug



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

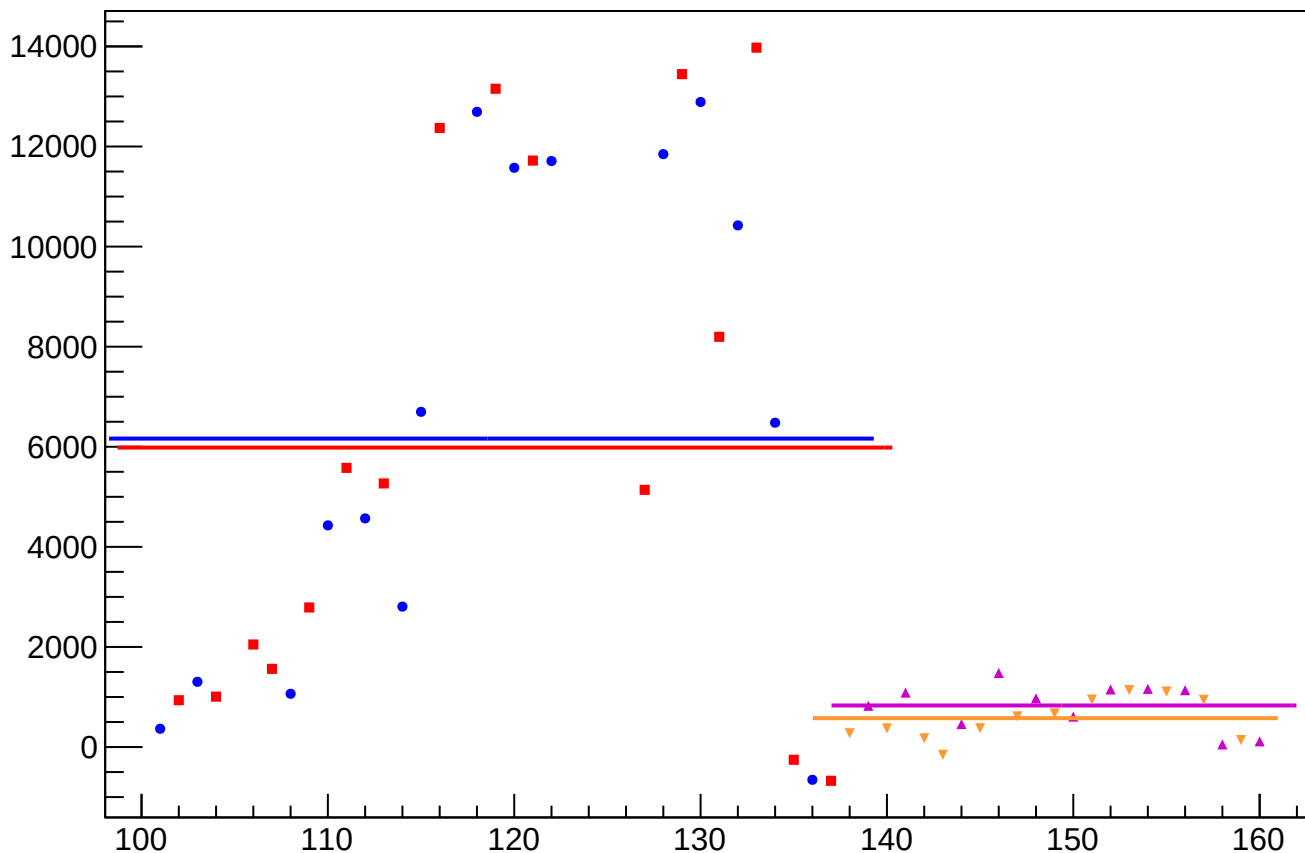
+ sign 1114.323 $\pm$ 0.000  $\chi^2$ /NDF: 10080626753263

All: 1101.926 $\pm$ 0.000  $\chi^2$ /NDF: 21167730452

- sign 1089.748 $\pm$ 0.000  $\chi^2$ /NDF: 11039486982366

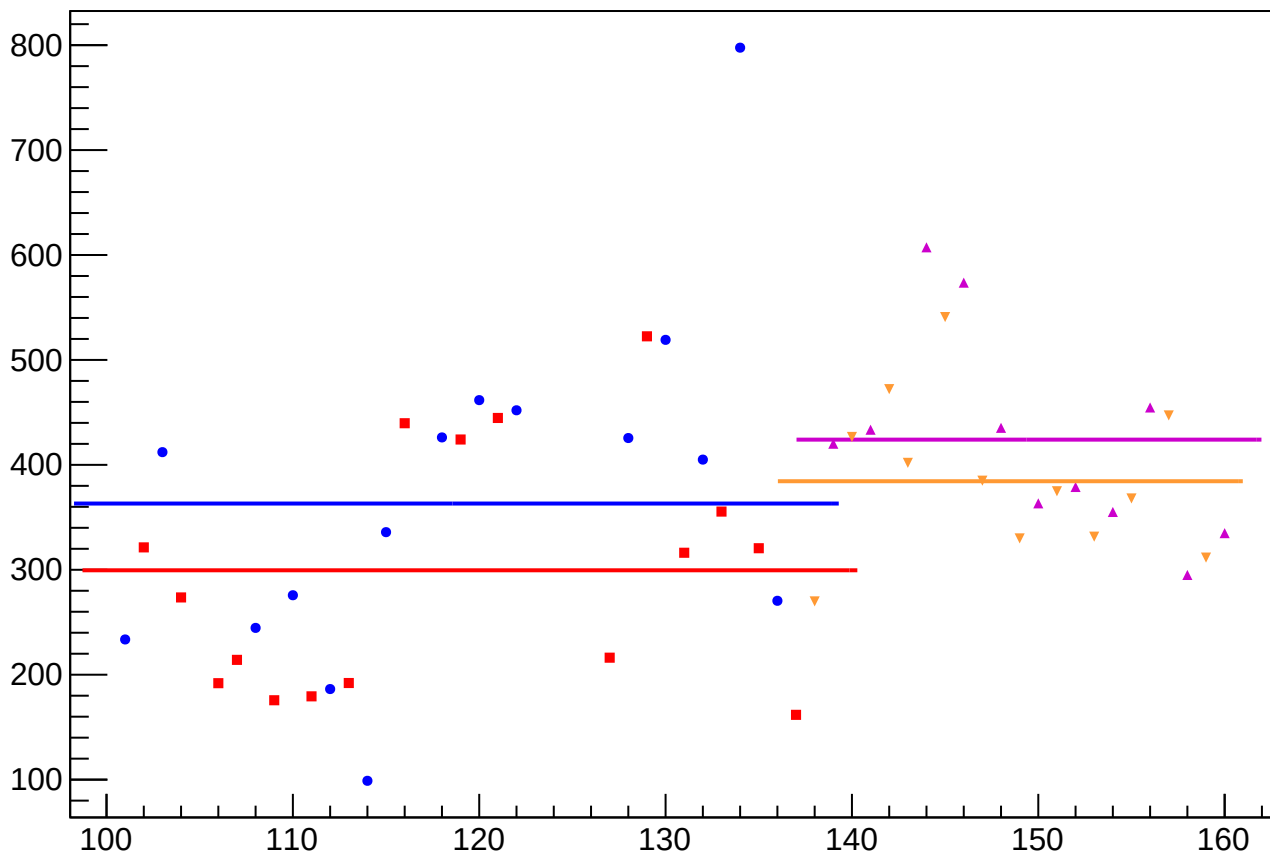


# dit\_sam6\_coil7\_mean vs Slug



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

dit\_sam6\_coil7\_err\_mean vs Slug



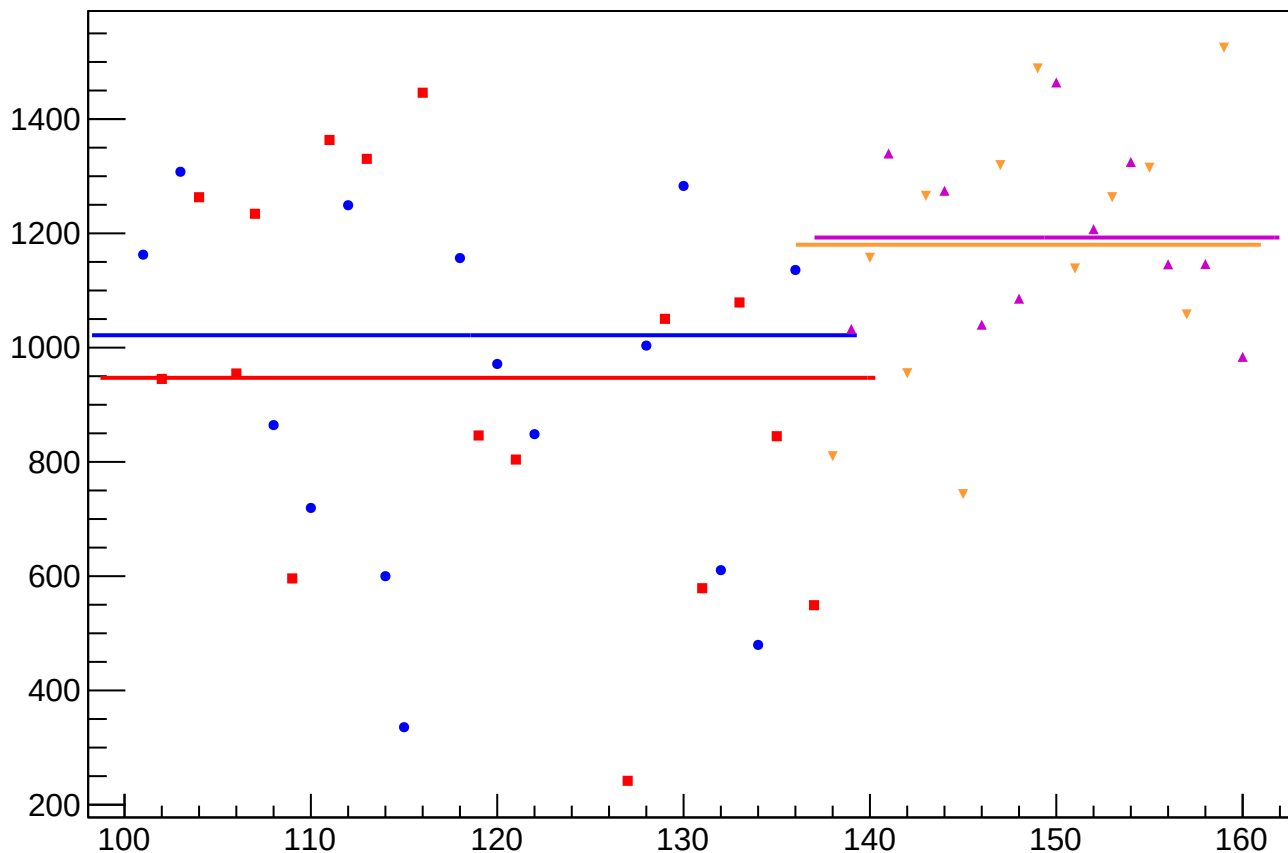
Right In: 363.133+/-0.000  $\chi^2/\text{NDF}$ : 11502791697076456426435998277995331584.0/14

Left Out: 384.397+/-0.000  $\chi^2/\text{NDF}$ : 4703352228141784942428920611126378496.0/11

Right Out: 299.514+/-0.000  $\chi^2/\text{NDF}$ : 7685497318744225218354652828984672256.0/15

Left In: 424.034+/-0.000  $\chi^2/\text{NDF}$ : 7812894231718086106241094868881375232.0/10

dit\_sam6\_coil7\_Ndata\_mean vs Slug



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

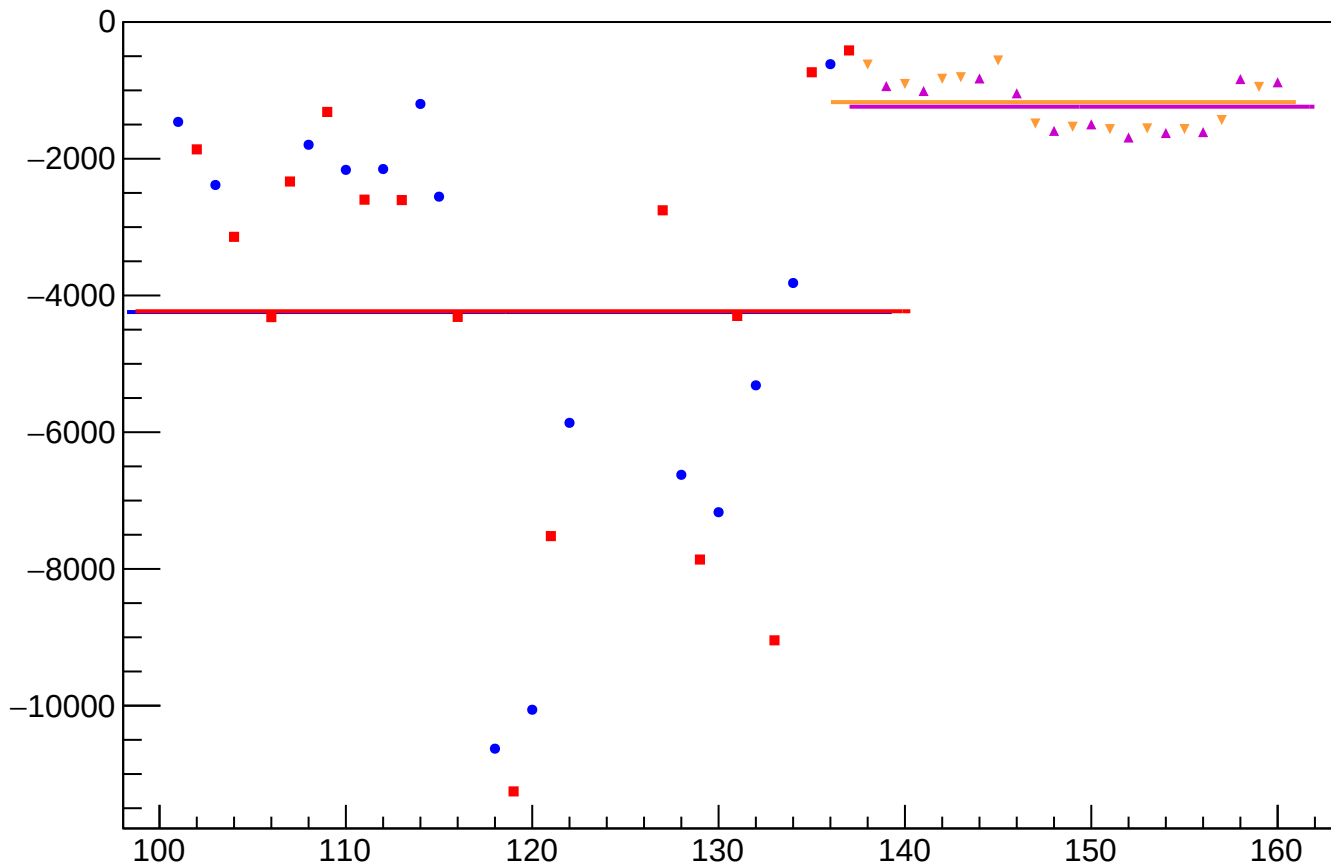
Left In: 1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10

+ sign 1114.323 $\pm$ 0.000  $\chi^2$ /NDF: 10080626753263

All: 1101.926 $\pm$ 0.000  $\chi^2$ /NDF: 21167730452

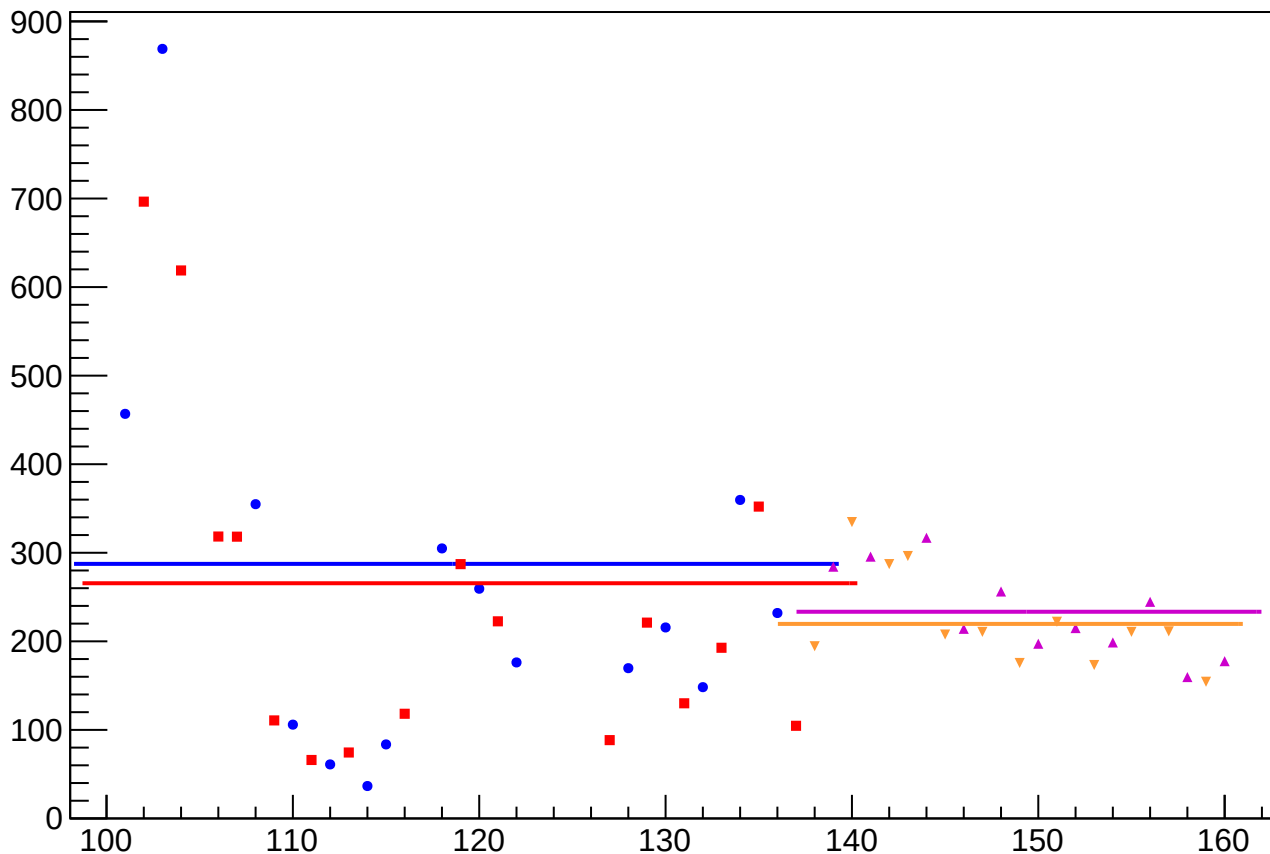
- sign 1089.748 $\pm$ 0.000  $\chi^2$ /NDF: 11039486982366

dit\_sam7\_coil7\_mean vs Slug



Right In: -4242.174+/-0.000  $\chi^2/\text{NDF}$ : 6783472272174151371145601081742110752768.0/14  
 Left Out: -1171.784+/-0.000  $\chi^2/\text{NDF}$ : 137401425112319786783295403719378599936.0/11  
 Right Out: -4230.978+/-0.000  $\chi^2/\text{NDF}$ : 6682409528103016752204343573740930465792.0/15  
 Left In: -1238.776+/-0.000  $\chi^2/\text{NDF}$ : 111339045659652616720712870833504124928.0/10

dit\_sam7\_coil7\_err\_mean vs Slug



Right In: 287.460+/-0.000  $\chi^2/\text{NDF}$ : 29517044144826155936619151581366976512.0/14

Left Out: 219.672+/-0.000  $\chi^2/\text{NDF}$ : 2455507522676926762328692419180101632.0/11

Right Out: 265.593+/-0.000  $\chi^2/\text{NDF}$ : 25843263106329059274985499259066908672.0/15

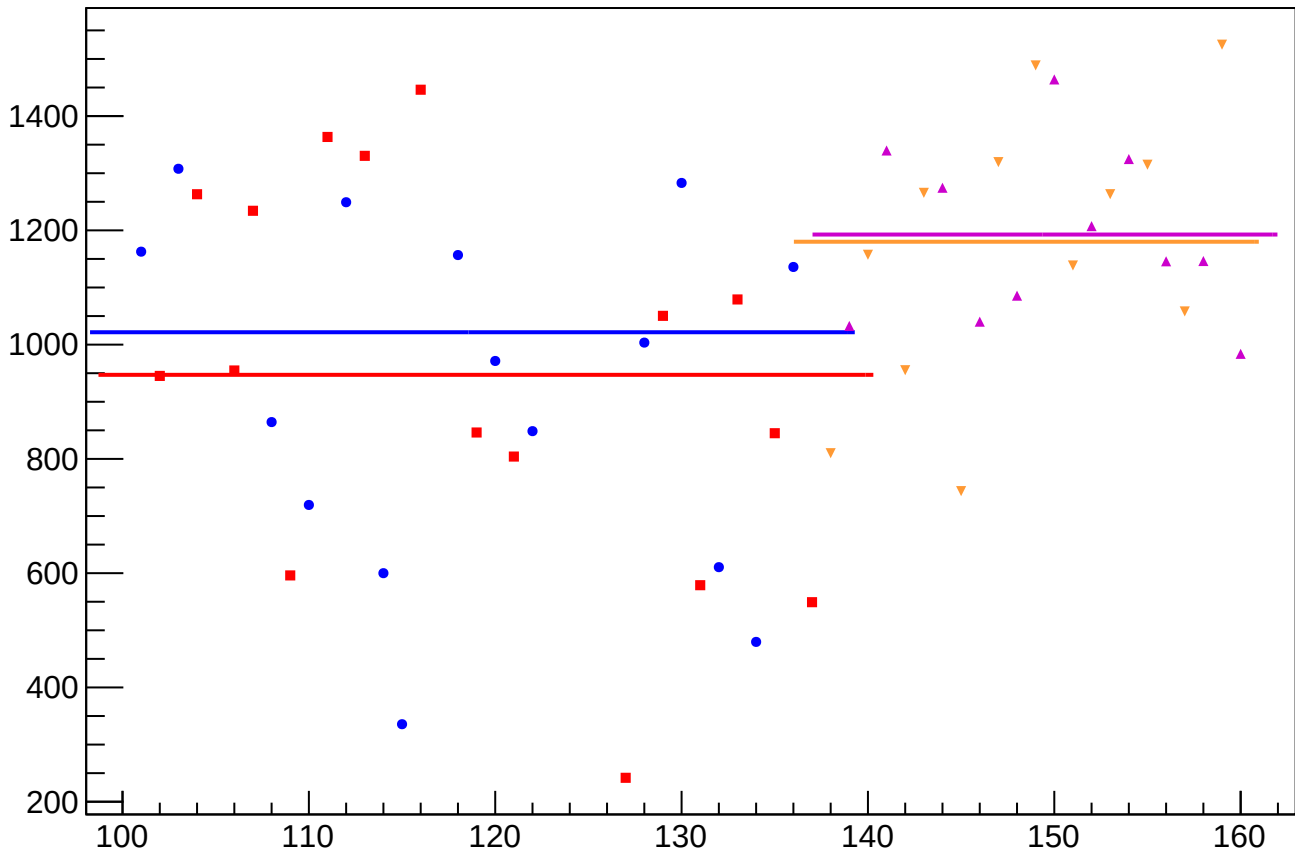
Left In: 233.397+/-0.000  $\chi^2/\text{NDF}$ : 2171341737989359237753599766499950592.0/10

+ sign 247.819+/-0.000  $\chi^2/\text{NDF}$ : 337165020245446

All: 247.353+/-0.000  $\chi^2/\text{NDF}$ : 621333161036

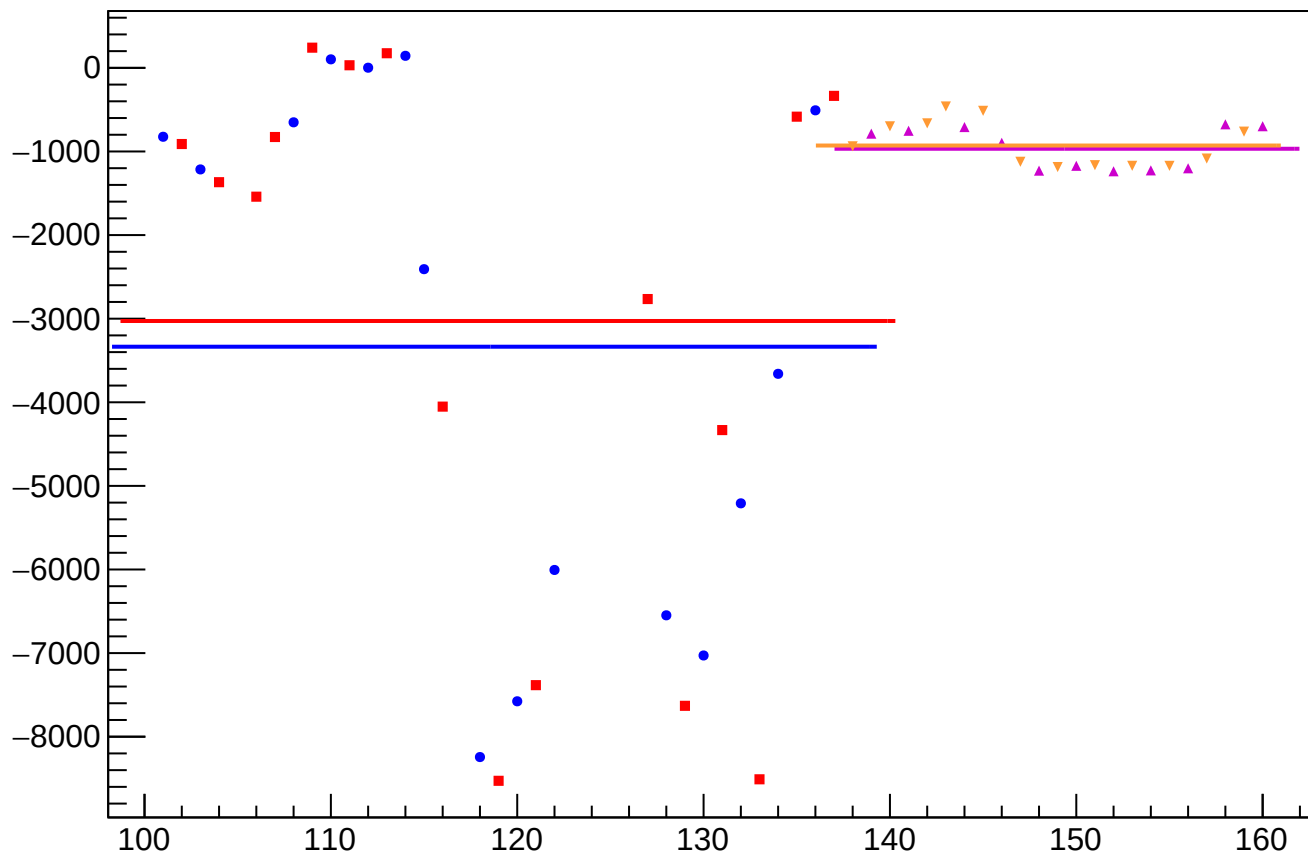
- sign 246.895+/-0.000  $\chi^2/\text{NDF}$ : 284161399961778

dit\_sam7\_coil7\_Ndata\_mean vs Slug



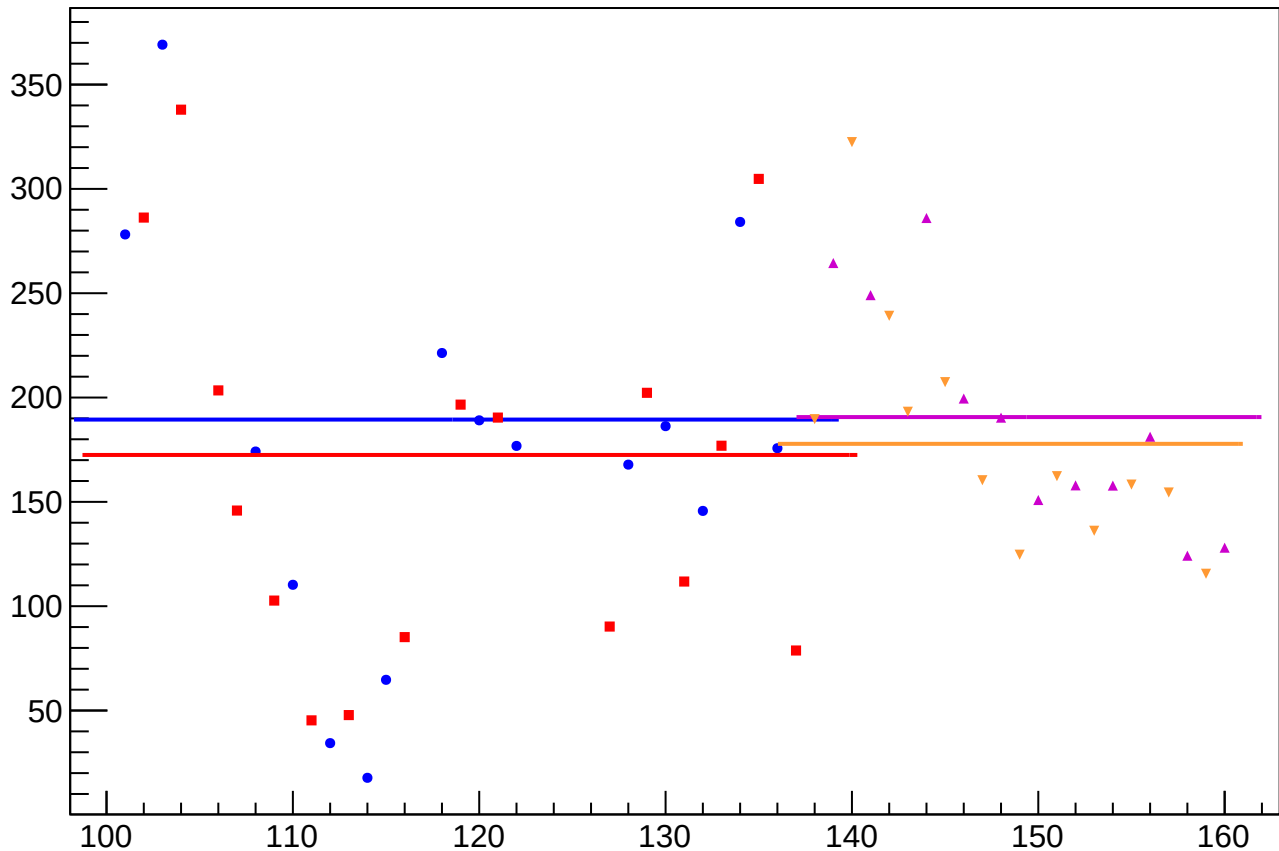
Right In: 1021.684 $\pm$ 0.000  $\chi^2$ /NDF: 40493101470870278397836276403592495104.0/14  
 Left Out: 1180.103 $\pm$ 0.000  $\chi^2$ /NDF: 50788606804690292724539730503787347968.0/11  
 Right Out: 947.145 $\pm$ 0.000  $\chi^2$ /NDF: 6778465601193652151169668028018196480.0/15  
 Left In: 1192.687 $\pm$ 0.000  $\chi^2$ /NDF: 19255287383728205662654022867381911552.0/10

dit\_sam8\_coil7\_mean vs Slug



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

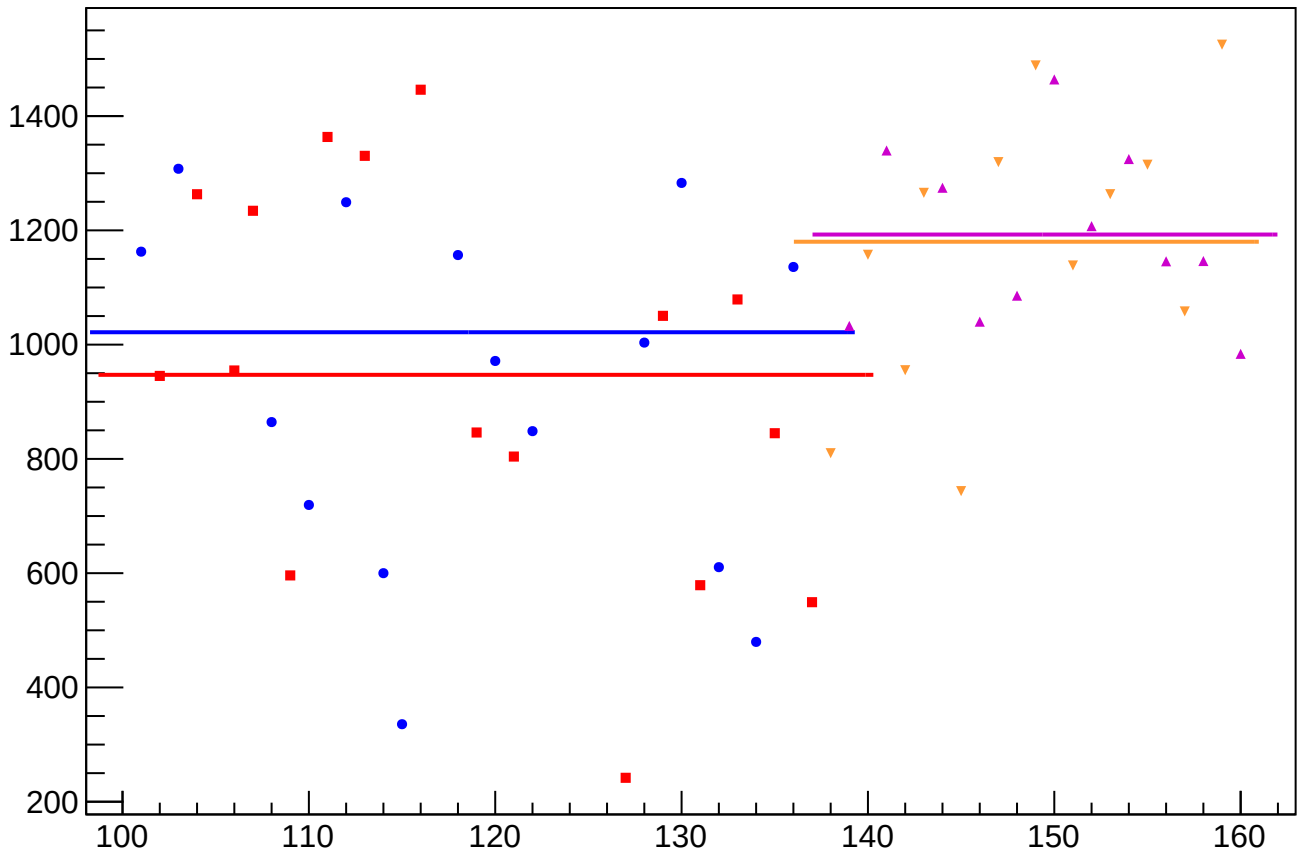
dit\_sam8\_coil7\_err\_mean vs Slug



|                                |                                                           |                            |                                |
|--------------------------------|-----------------------------------------------------------|----------------------------|--------------------------------|
| Right In: 189.442 $\pm$ 0.000  | $\chi^2$ /NDF: 4707234253929700721726064108794544128.0/14 | + sign 182.640 $\pm$ 0.000 | $\chi^2$ /NDF: 755196649084906 |
| Left Out: 177.811 $\pm$ 0.000  | $\chi^2$ /NDF: 2793392529927944860081581234505908224.0/11 | All: 182.836 $\pm$ 0.000   | $\chi^2$ /NDF: 15810669328     |
| Right Out: 172.485 $\pm$ 0.000 | $\chi^2$ /NDF: 5594813408996728261938711470404534272.0/15 | - sign 183.029 $\pm$ 0.000 | $\chi^2$ /NDF: 825858339211044 |
| Left In: 190.641 $\pm$ 0.000   | $\chi^2$ /NDF: 2536070386684067132001548898091925504.0/10 |                            |                                |

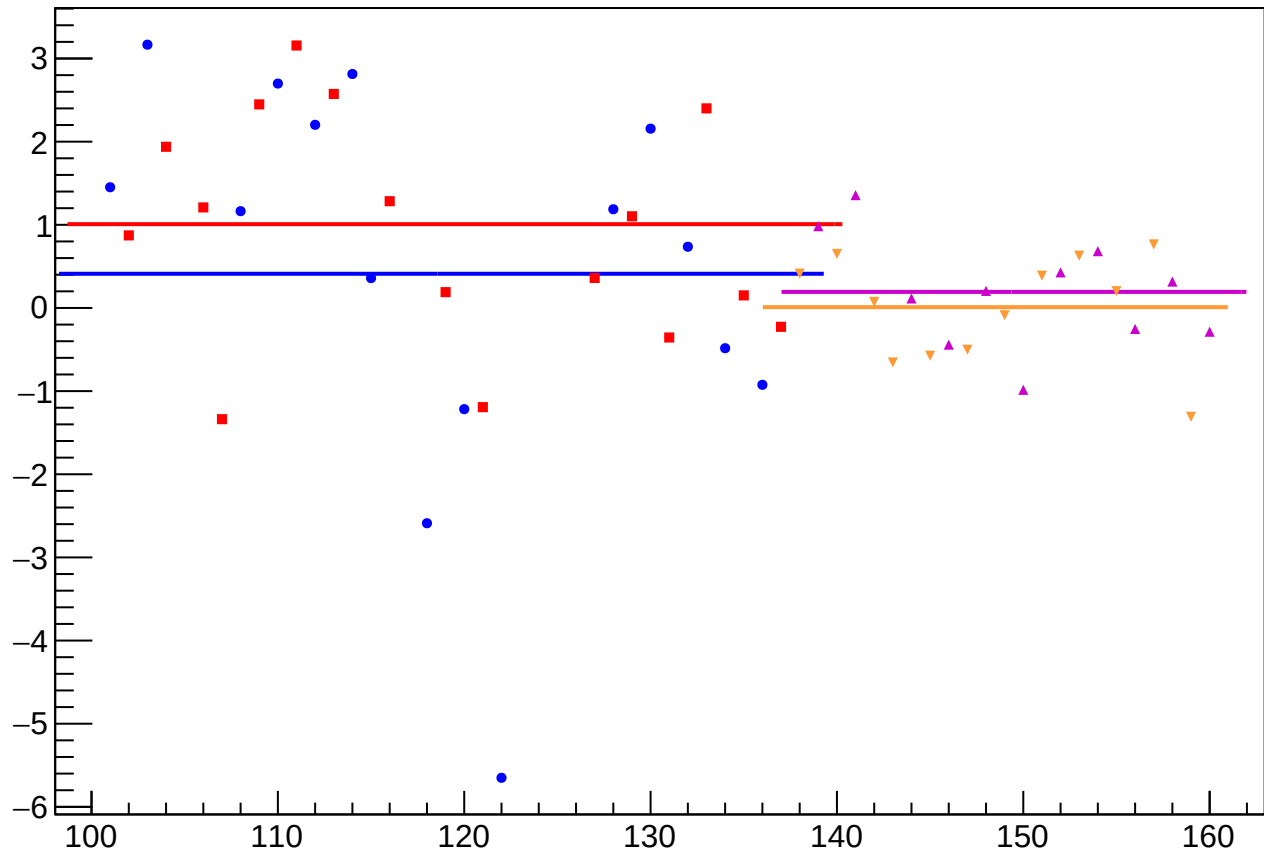


dit\_sam8\_coil7\_Ndata\_mean vs Slug



|                            |                                                                   |                         |                                      |
|----------------------------|-------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 1021.684+/-0.000 | $\chi^2/\text{NDF}$ : 40493101470870278397836276403592495104.0/14 | + sign 1114.323+/-0.000 | $\chi^2/\text{NDF}$ : 10080626753263 |
| Left Out: 1180.103+/-0.000 | $\chi^2/\text{NDF}$ : 50788606804690292724539730503787347968.0/11 | All: 1101.926+/-0.000   | $\chi^2/\text{NDF}$ : 21167730452    |
| Right Out: 947.145+/-0.000 | $\chi^2/\text{NDF}$ : 67784656011936521511169668028018196480.0/15 | - sign 1089.748+/-0.000 | $\chi^2/\text{NDF}$ : 11039486982366 |
| Left In: 1192.687+/-0.000  | $\chi^2/\text{NDF}$ : 19255287383728205662654022867381911552.0/10 |                         |                                      |

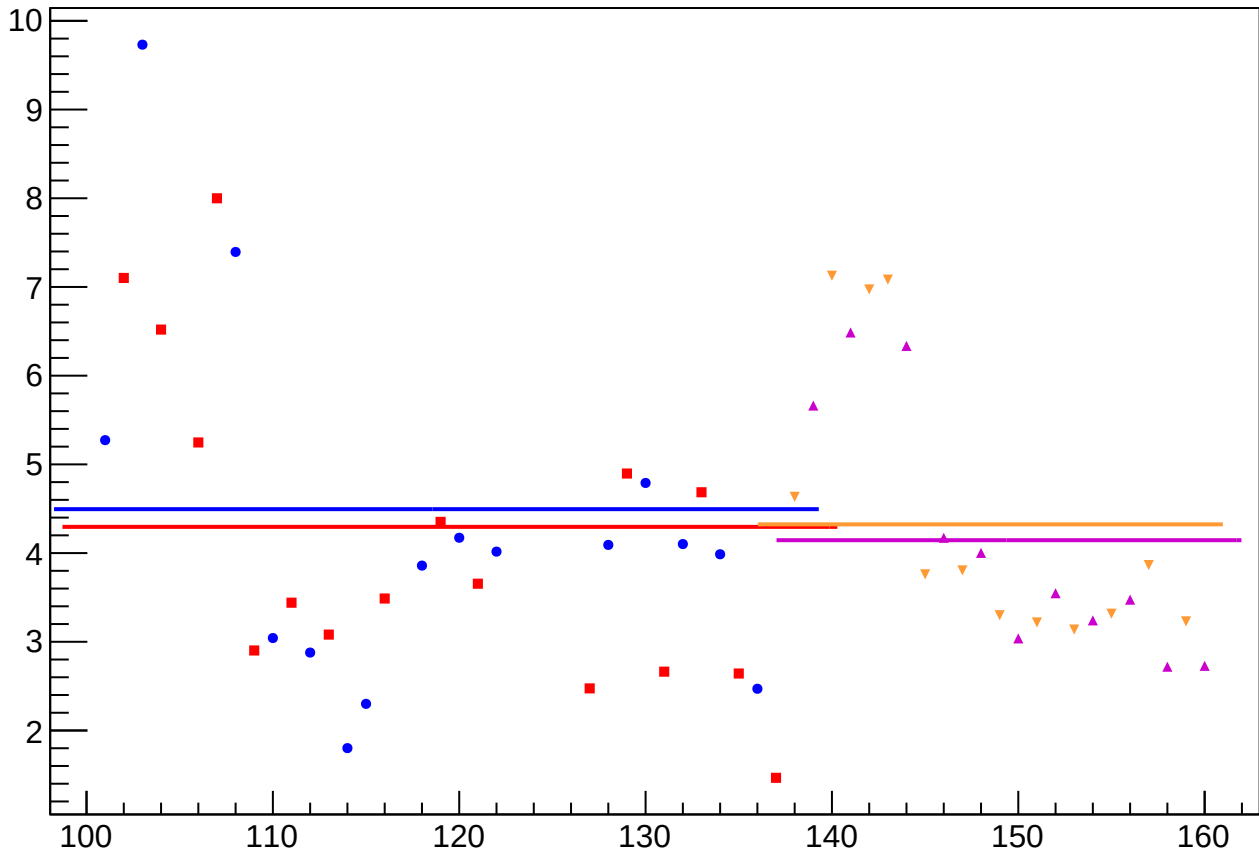
# dit\_4aX\_coil4\_mean vs Slug



|                          |                                                               |
|--------------------------|---------------------------------------------------------------|
| Right In: 0.411+/-0.000  | $\chi^2/\text{NDF}$ : 3385573506255563170053089820409856.0/14 |
| Left Out: 0.010+/-0.000  | $\chi^2/\text{NDF}$ : 354573516648160349272665694928896.0/11  |
| Right Out: 1.008+/-0.000 | $\chi^2/\text{NDF}$ : 1128402228144096394498047410700288.0/15 |
| Left In: 0.193+/-0.000   | $\chi^2/\text{NDF}$ : 386133523330033860307880234713088.0/10  |

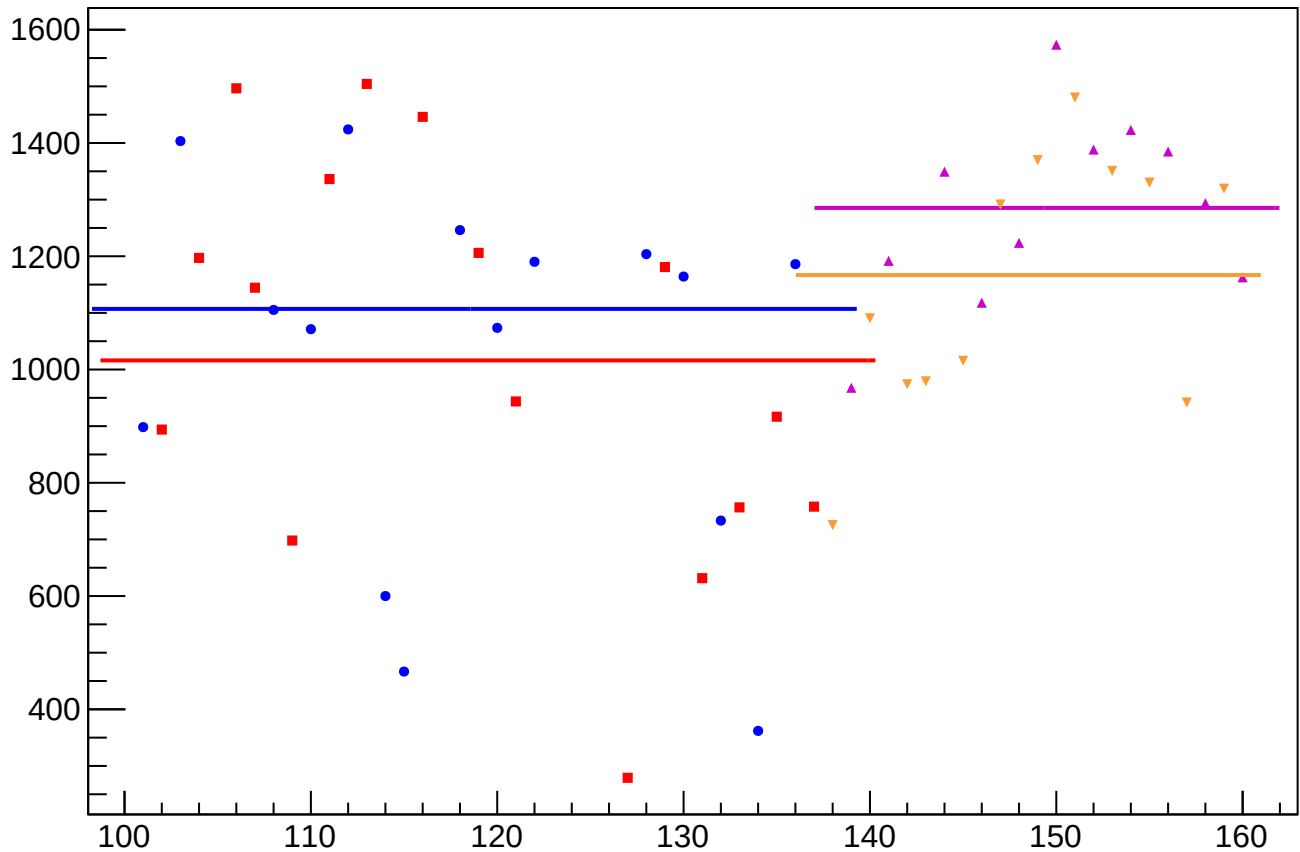
+ sign 0.176+/-0.000  $\chi^2/\text{NDF}$ : 38013535411119763  
 All: 0.357+/-0.000  $\chi^2/\text{NDF}$ : 56741679110622  
 - sign 0.535+/-0.000  $\chi^2/\text{NDF}$ : 17715106696706138

dit\_4aX\_coil4\_err\_mean vs Slug



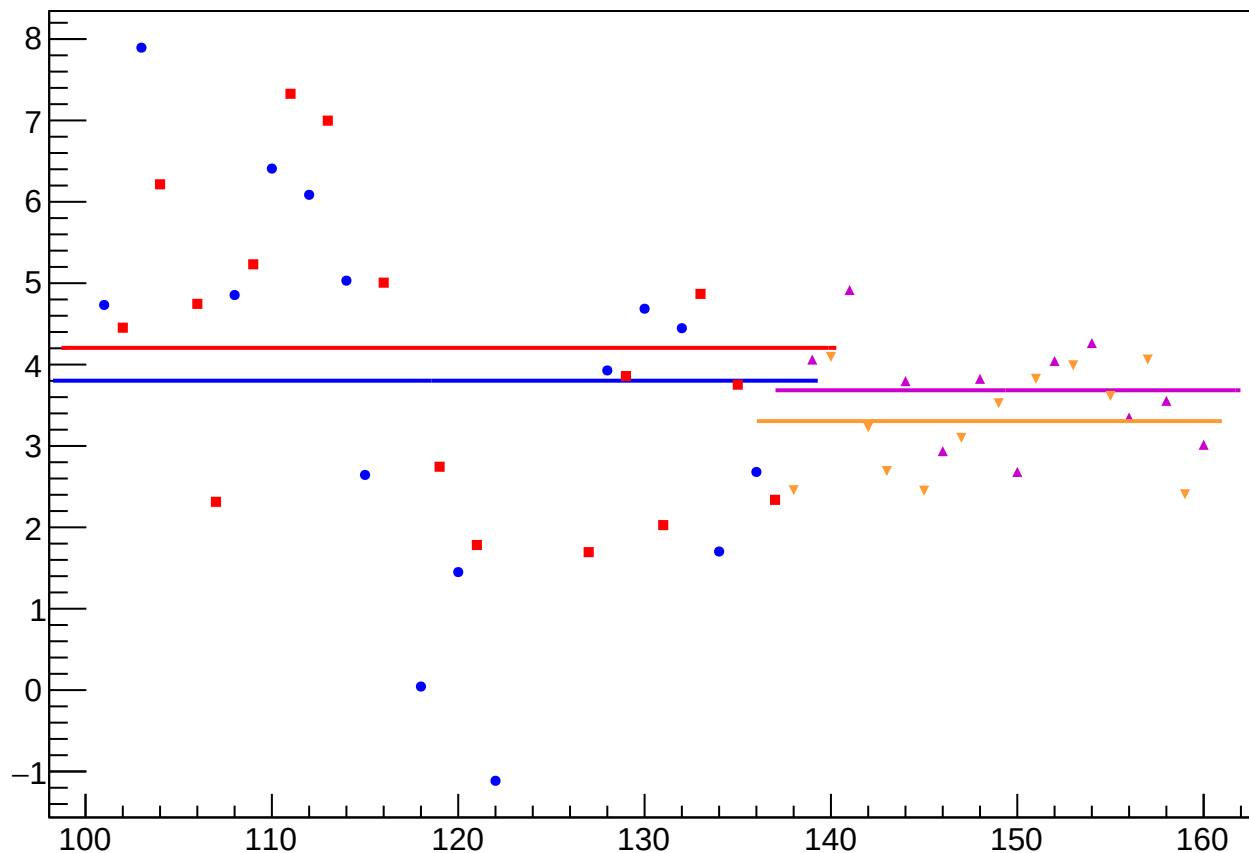
Right In:  $4.495 \pm 0.000$   $\chi^2/\text{NDF}$ : 2742240072441097531500728791597056.0/14  
 Left Out:  $4.324 \pm 0.000$   $\chi^2/\text{NDF}$ : 2025534969388950058407109119180800.0/11  
 Right Out:  $4.296 \pm 0.000$   $\chi^2/\text{NDF}$ : 2011925707062051890381007475441664.0/15  
 Left In:  $4.145 \pm 0.000$   $\chi^2/\text{NDF}$ : 1645942604303349608571849827942400.0/10

dit\_4aX\_coil4\_Ndata\_mean vs Slug



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: 1157.392 +/- 0.000  $\chi^2/\text{NDF}$ : 21202911442  
 + sign 1142.031 +/- 0.000  $\chi^2/\text{NDF}$ : 86643588377316  
 - sign 1172.482 +/- 0.000  $\chi^2/\text{NDF}$ : 12465444911625

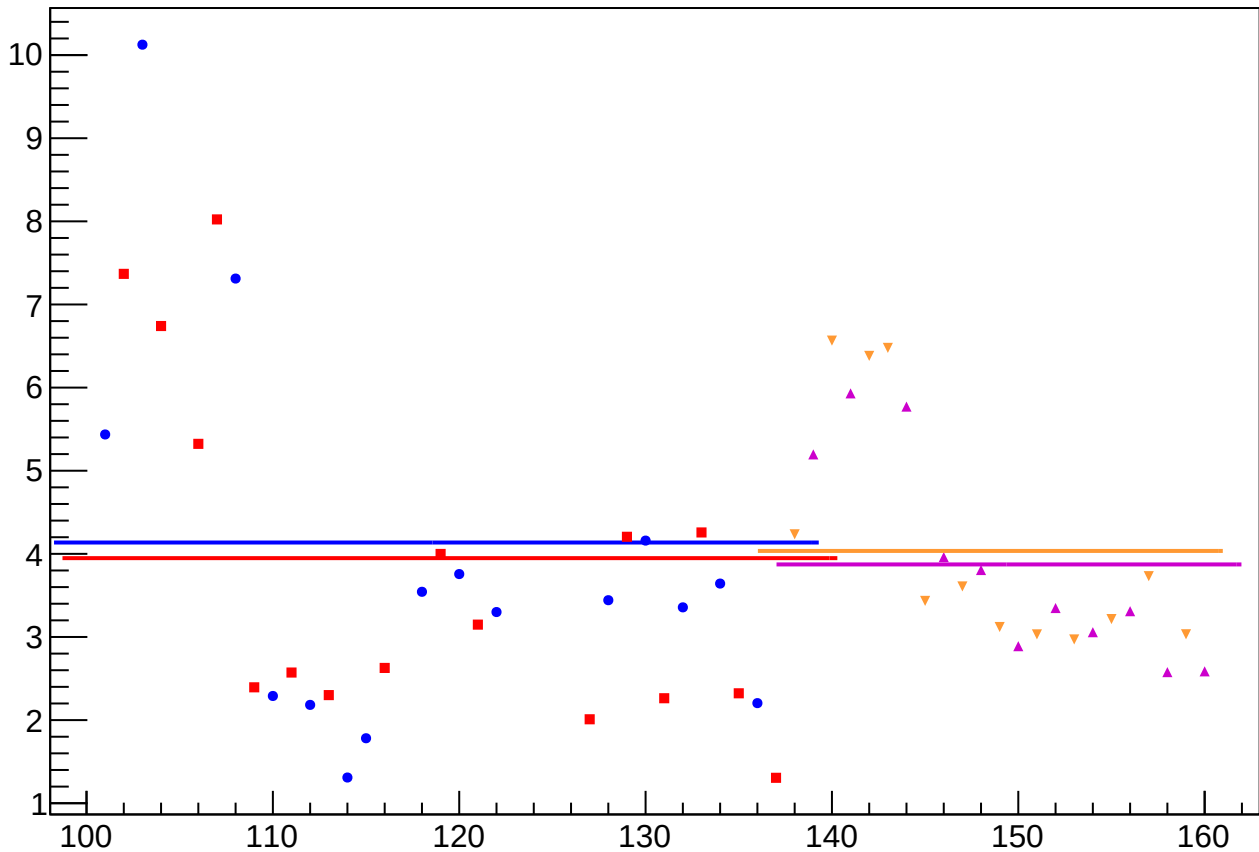
dit\_4eX\_coil4\_mean vs Slug



|                          |                                                               |
|--------------------------|---------------------------------------------------------------|
| Right In: 3.802+/-0.000  | $\chi^2/\text{NDF}$ : 3795476074398338930564700657680384.0/14 |
| Left Out: 3.305+/-0.000  | $\chi^2/\text{NDF}$ : 375514605339805624898679558111232.0/11  |
| Right Out: 4.206+/-0.000 | $\chi^2/\text{NDF}$ : 2096427813341454573332265183477760.0/15 |
| Left In: 3.684+/-0.000   | $\chi^2/\text{NDF}$ : 366001419656422310601850072596480.0/10  |

+ sign 3.512+/-0.000  $\chi^2/\text{NDF}$ : 42645411605619782  
 All: 3.709+/-0.000  $\chi^2/\text{NDF}$ : 6952977853900  
 - sign 3.903+/-0.000  $\chi^2/\text{NDF}$ : 25677839447530972

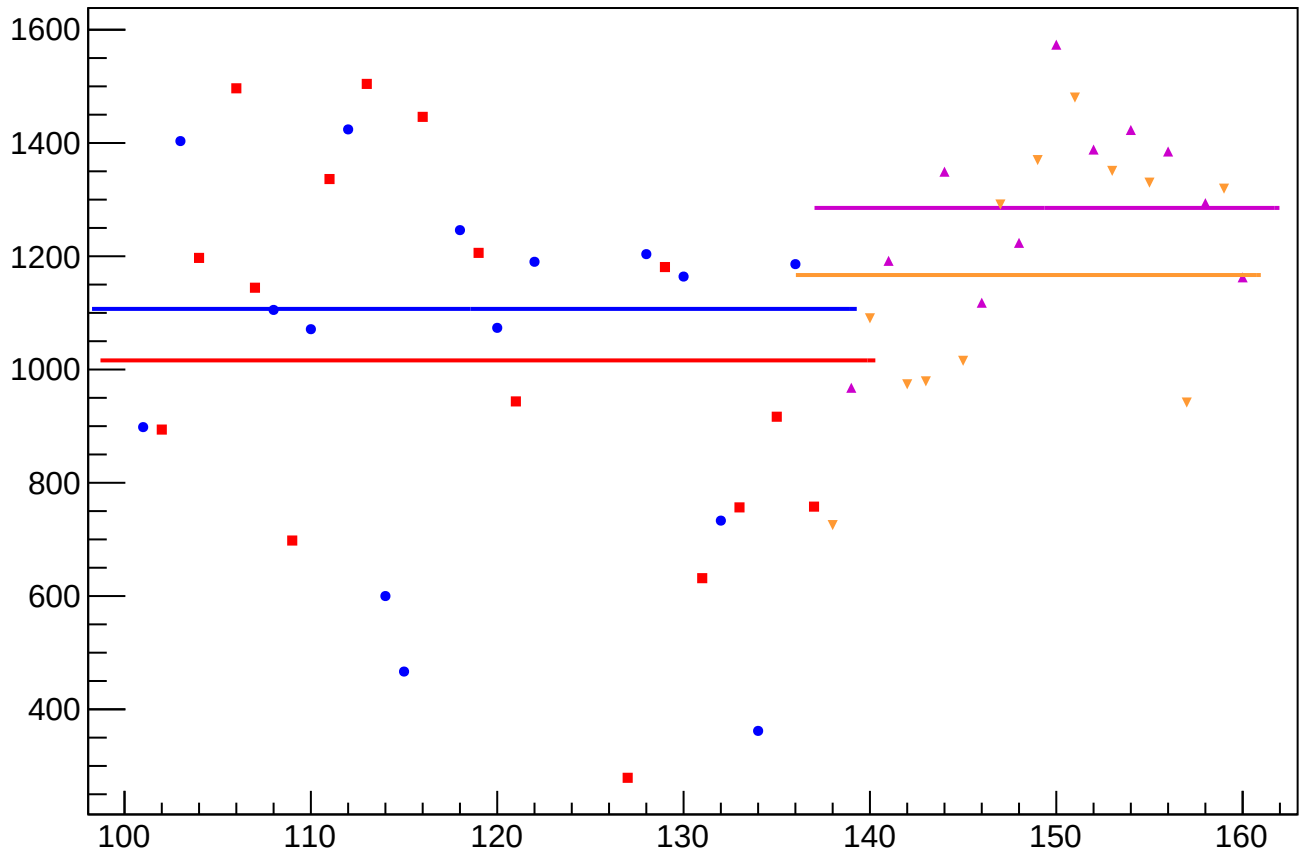
dit\_4eX\_coil4\_err\_mean vs Slug



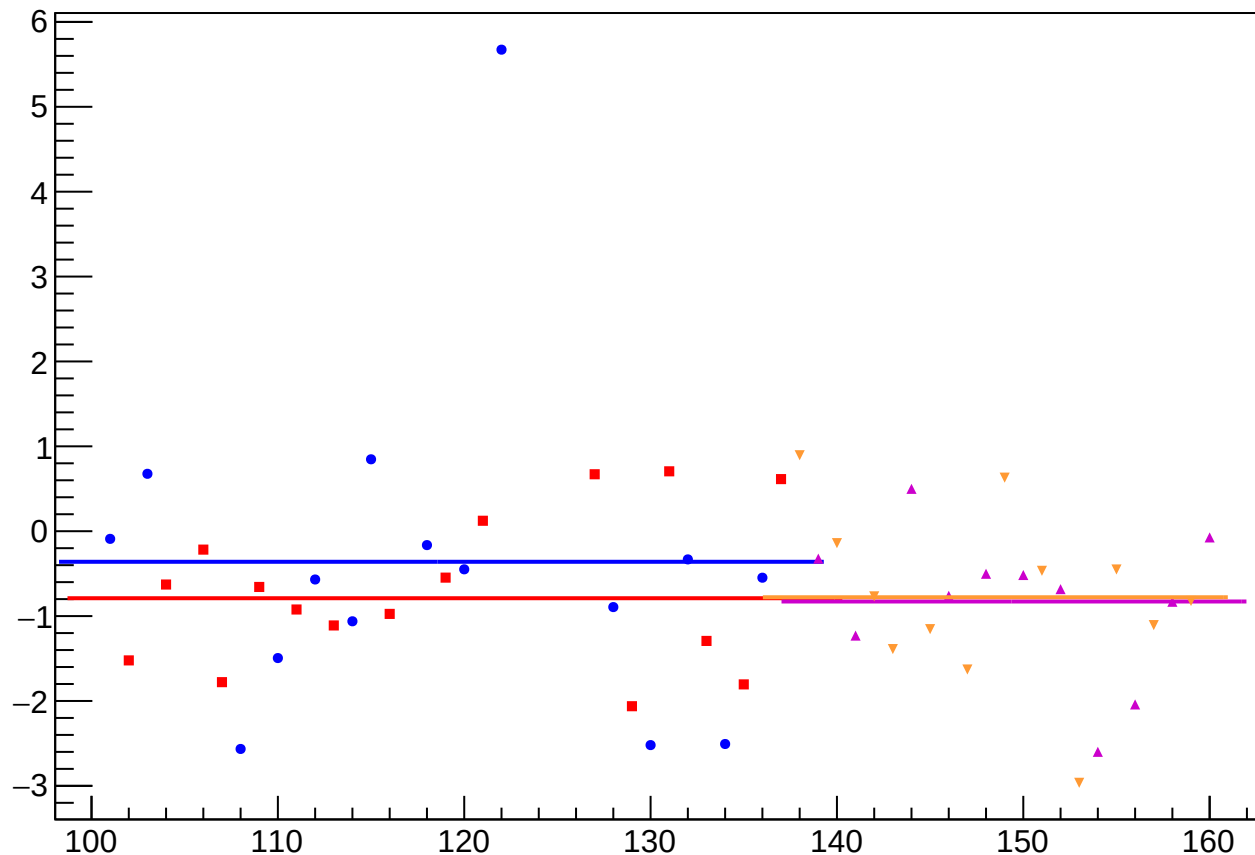
|                          |                                                               |
|--------------------------|---------------------------------------------------------------|
| Right In: 4.136+/-0.000  | $\chi^2/\text{NDF}$ : 3507600624388663919898505496231936.0/14 |
| Left Out: 4.035+/-0.000  | $\chi^2/\text{NDF}$ : 1609299061352578548486150138363904.0/11 |
| Right Out: 3.948+/-0.000 | $\chi^2/\text{NDF}$ : 2670176783942302028345551100051456.0/15 |
| Left In: 3.873+/-0.000   | $\chi^2/\text{NDF}$ : 1278598291391127694323835331411968.0/10 |

+ sign 4.077+/-0.000  $\chi^2/\text{NDF}$ : 51207911094856769  
 All: 3.990+/-0.000  $\chi^2/\text{NDF}$ : 90953049051642  
 - sign 3.904+/-0.000  $\chi^2/\text{NDF}$ : 39509925748286967

dit\_4eX\_coil4\_Ndata\_mean vs Slug



dit\_11X12X\_coil4\_mean vs Slug



Right In: -0.360+/-0.000  $\chi^2/\text{NDF}$ : 2180256348790896849346212178952192.0/14

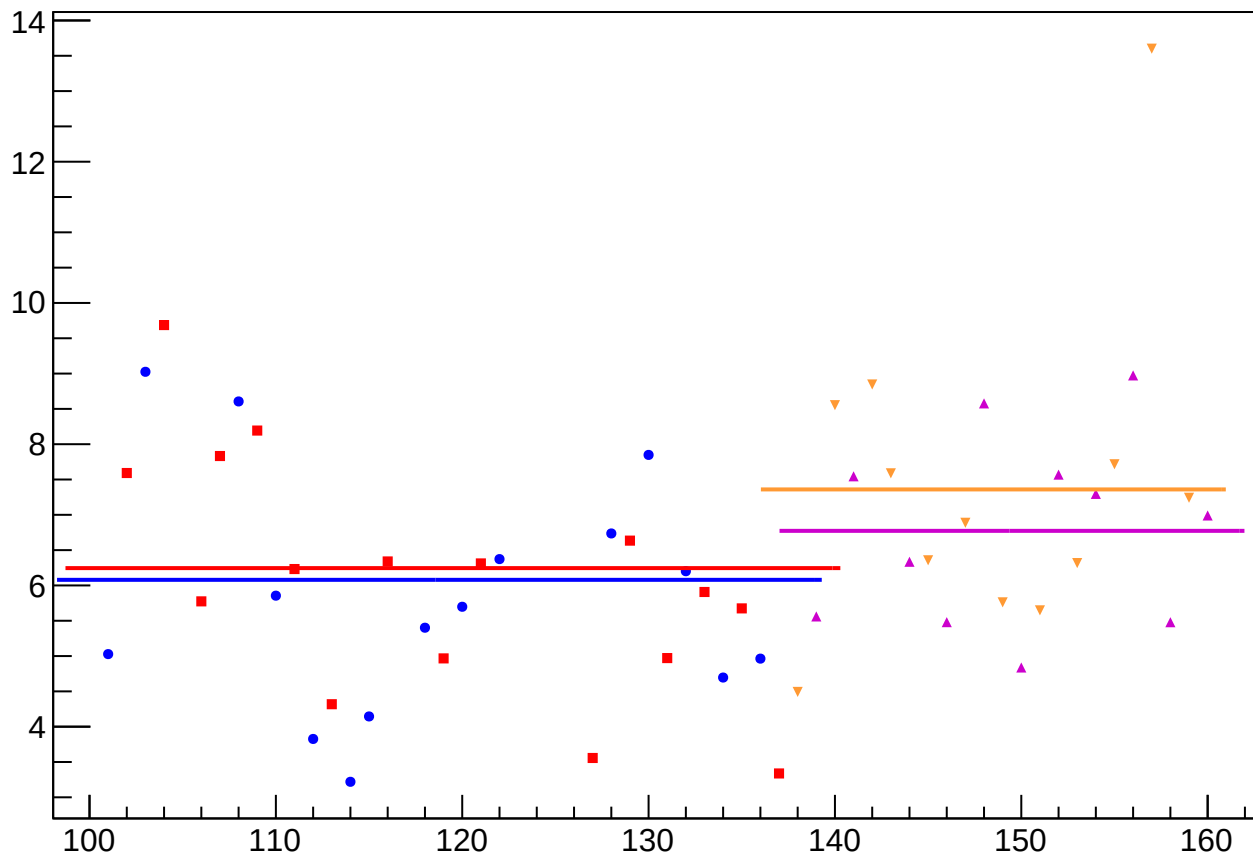
Left Out: -0.778+/-0.000  $\chi^2/\text{NDF}$ : 941792568376434225486843988672512.0/11

Right Out: -0.790+/-0.000  $\chi^2/\text{NDF}$ : 463078369073343959803422903894016.0/15

Left In: -0.828+/-0.000  $\chi^2/\text{NDF}$ : 650173977459122524537180454387712.0/10



dit\_11X12X\_coil4\_err\_mean vs Slug



Right In: 6.079+/-0.000  $\chi^2/\text{NDF}$ : 1590295171022705157509900448825344.0/14

Left Out: 7.360+/-0.000  $\chi^2/\text{NDF}$ : 4580380755239365503585140070154240.0/11

Right Out: 6.245+/-0.000  $\chi^2/\text{NDF}$ : 1816529163105006938510976985595904.0/15

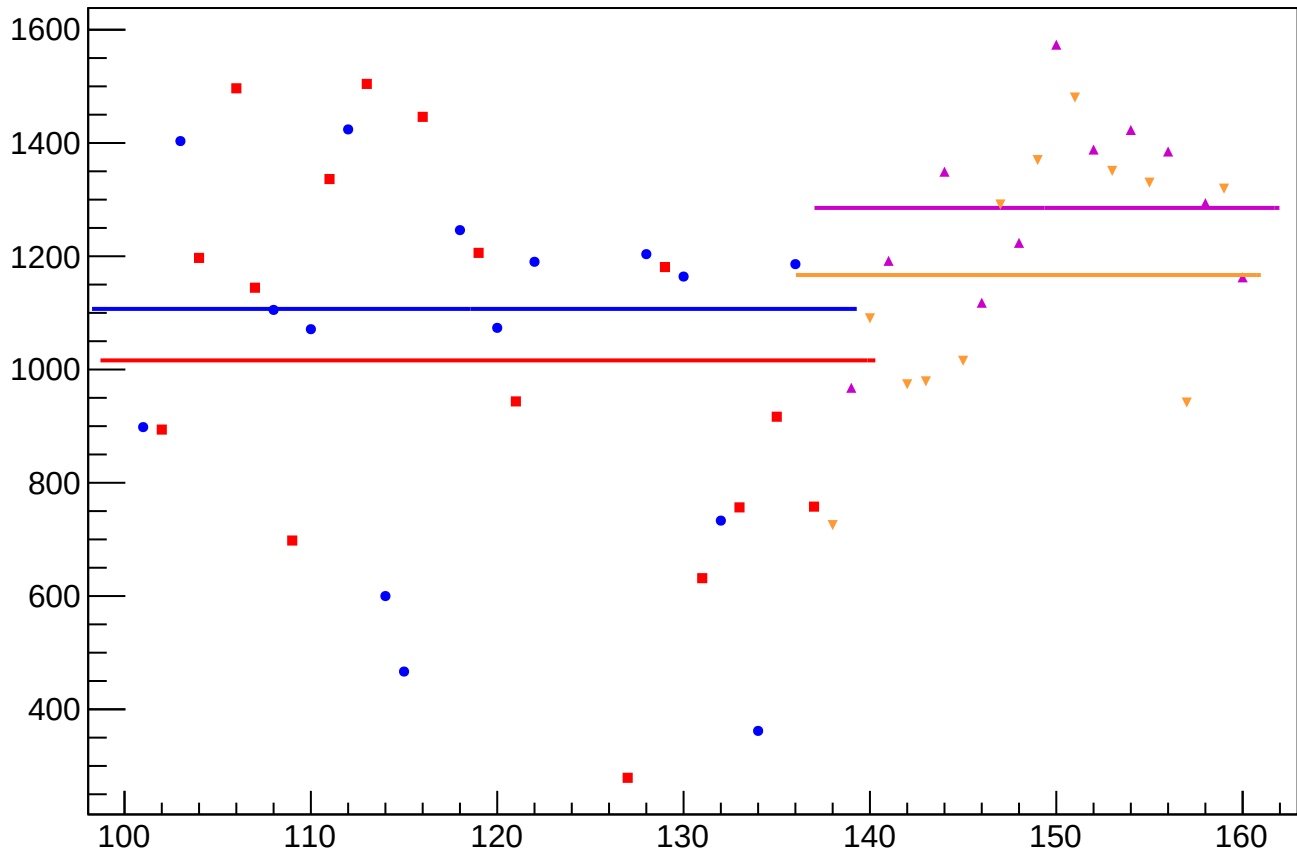
Left In: 6.773+/-0.000  $\chi^2/\text{NDF}$ : 1545880653062872635060205832372224.0/10

+ sign 6.828+/-0.000  $\chi^2/\text{NDF}$ : 67926388773700869

All: 6.689+/-0.000  $\chi^2/\text{NDF}$ : 1032305053905

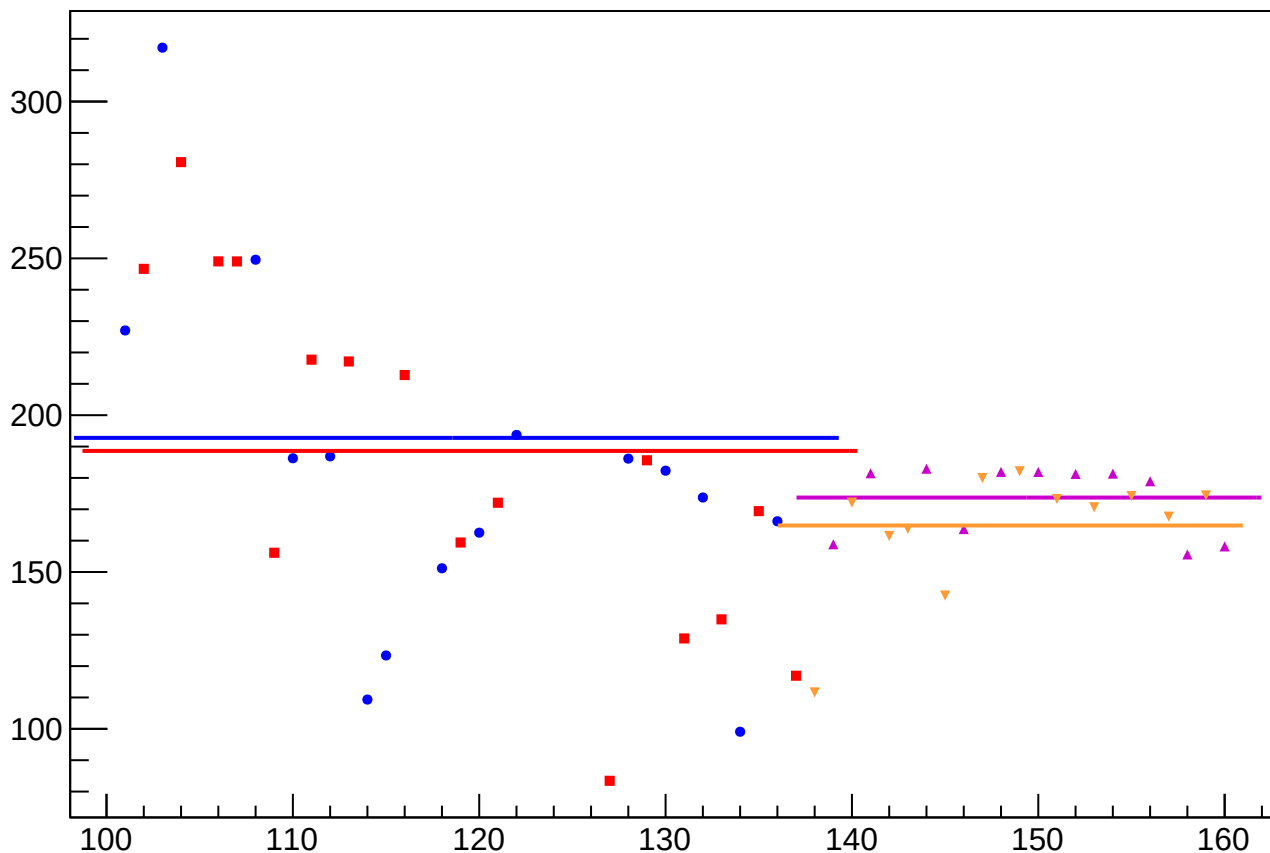
- sign 6.552+/-0.000  $\chi^2/\text{NDF}$ : 34702547921187787

dit\_11X12X\_coil4\_Ndata\_mean vs Slug



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: 72567664333509192712184310037150171136.0/15  
 Left In: 1285.364 $\pm$ 0.000  $\chi^2$ /NDF: 24002572803732345959736048095514853376.0/10

# dit\_4aY\_coil4\_mean vs Slug



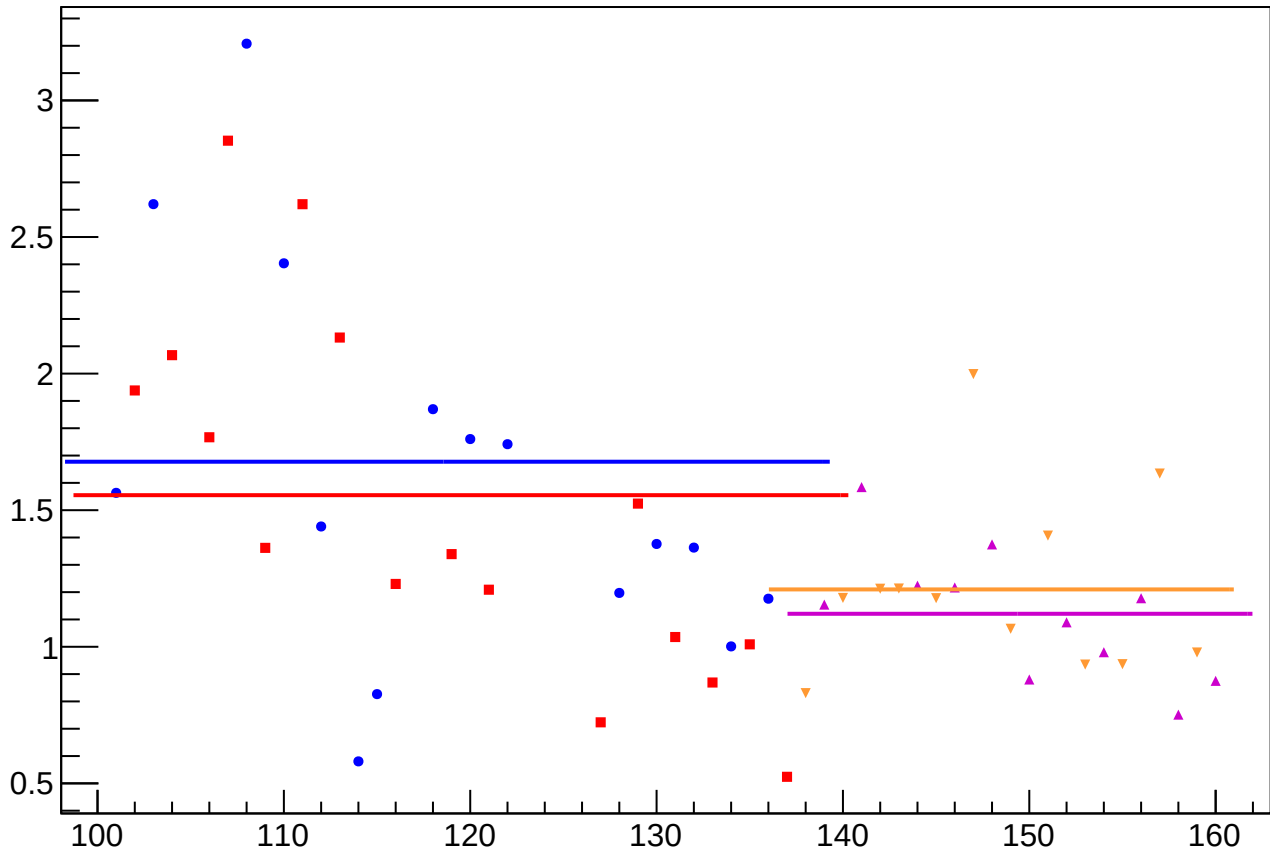
Right In: 192.771+/-0.000  $\chi^2/\text{NDF}$ : 1640576279746948433391816936236515328.0/14

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

dit\_4aY\_coil4\_err\_mean vs Slug



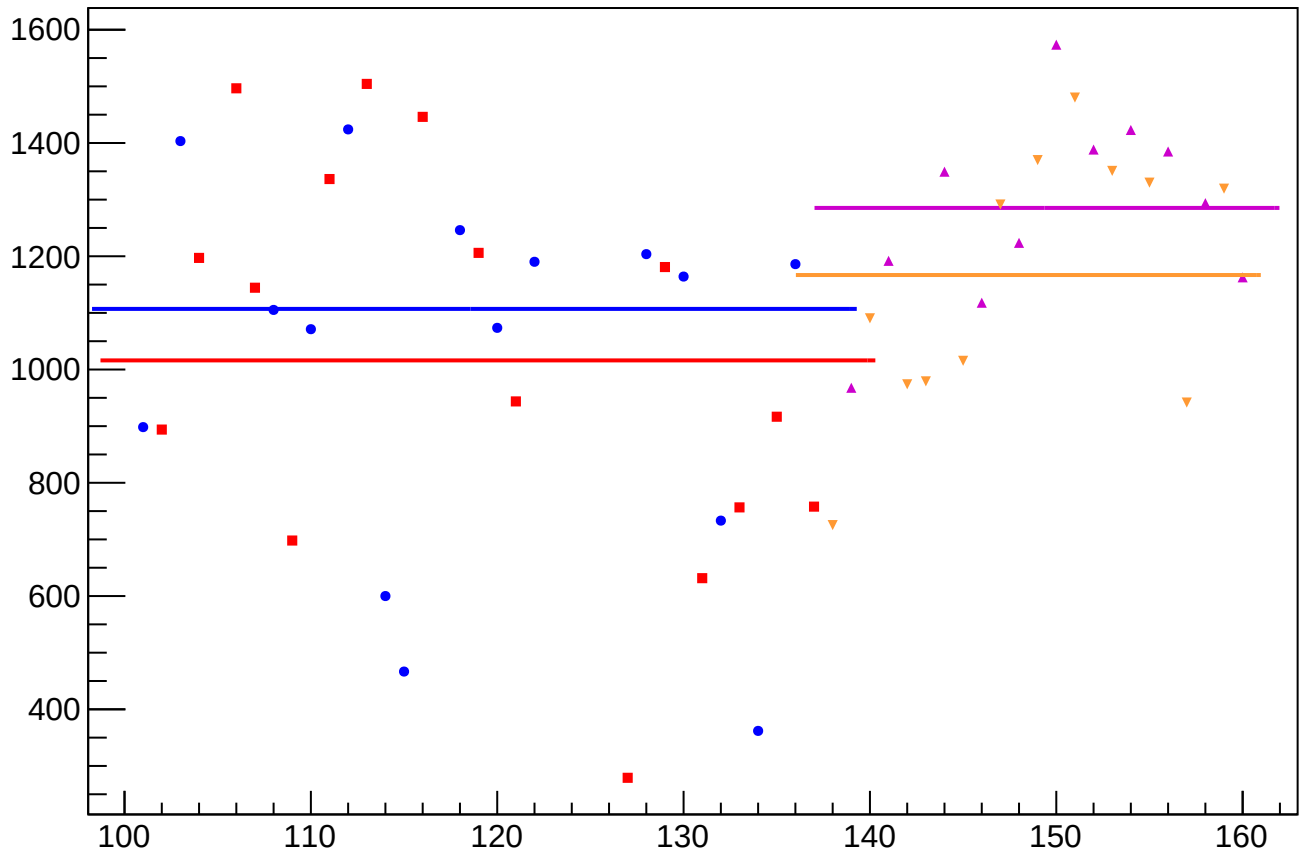
Right In: 1.677 $\pm$ 0.000  $\chi^2$ /NDF: 241879924044788593292791559225344.0/14

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

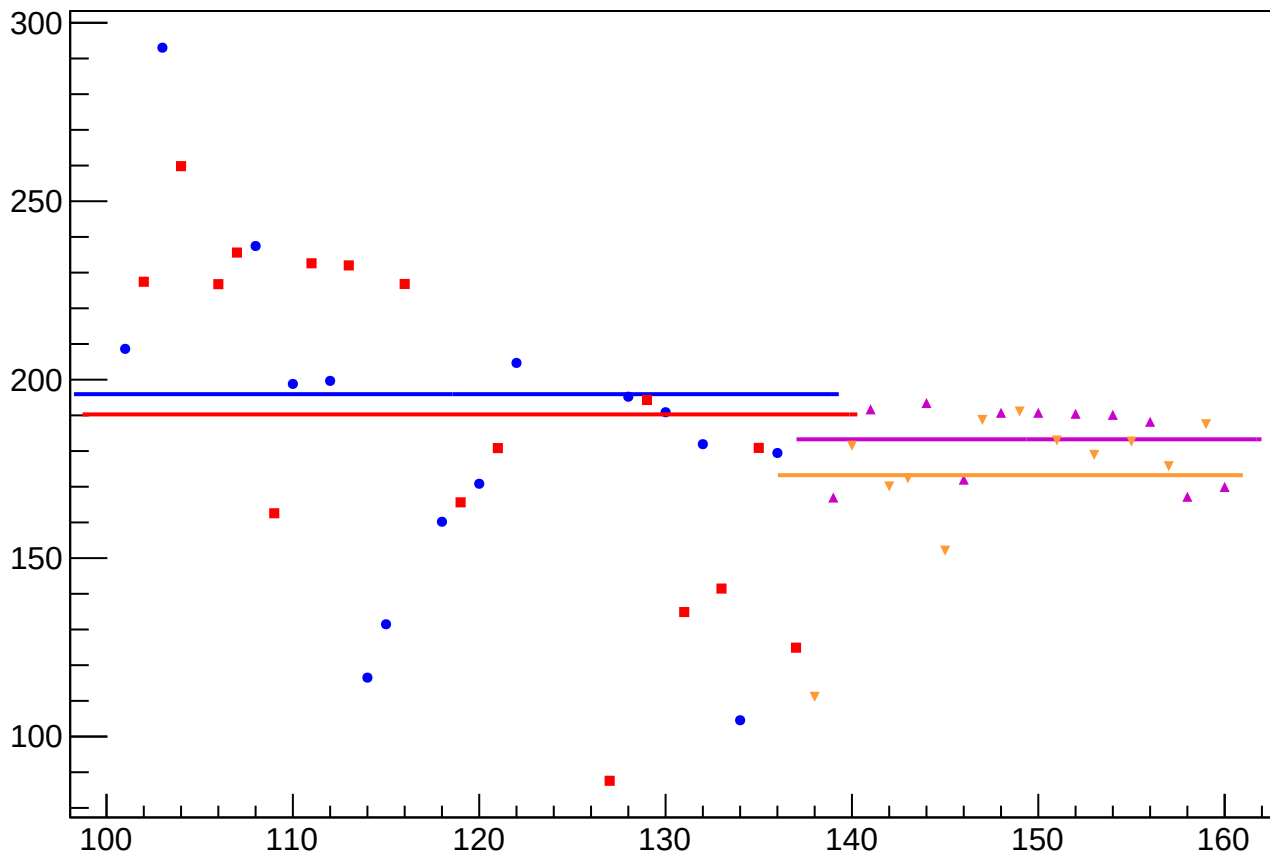
Left In: 1.121 $\pm$ 0.000  $\chi^2$ /NDF: 48374896563348957372285351624704.0/10

dit\_4aY\_coil4\_Ndata\_mean vs Slug



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: 72567664333509192712184310037150171136.0/15  
 Left In: 1285.364 $\pm$ 0.000  $\chi^2$ /NDF: 24002572803732345959736048095514853376.0/10

# dit\_4eY\_coil4\_mean vs Slug



Right In: 195.940+/-0.000  $\chi^2/\text{NDF}$ : 1057891079869089572370479093183938560.0/14

Left Out: 173.245+/-0.000  $\chi^2/\text{NDF}$ : 421189743022312956779621222954565632.0/11

Right Out: 190.268+/-0.000  $\chi^2/\text{NDF}$ : 1468473073667973330267084234323656704.0/15

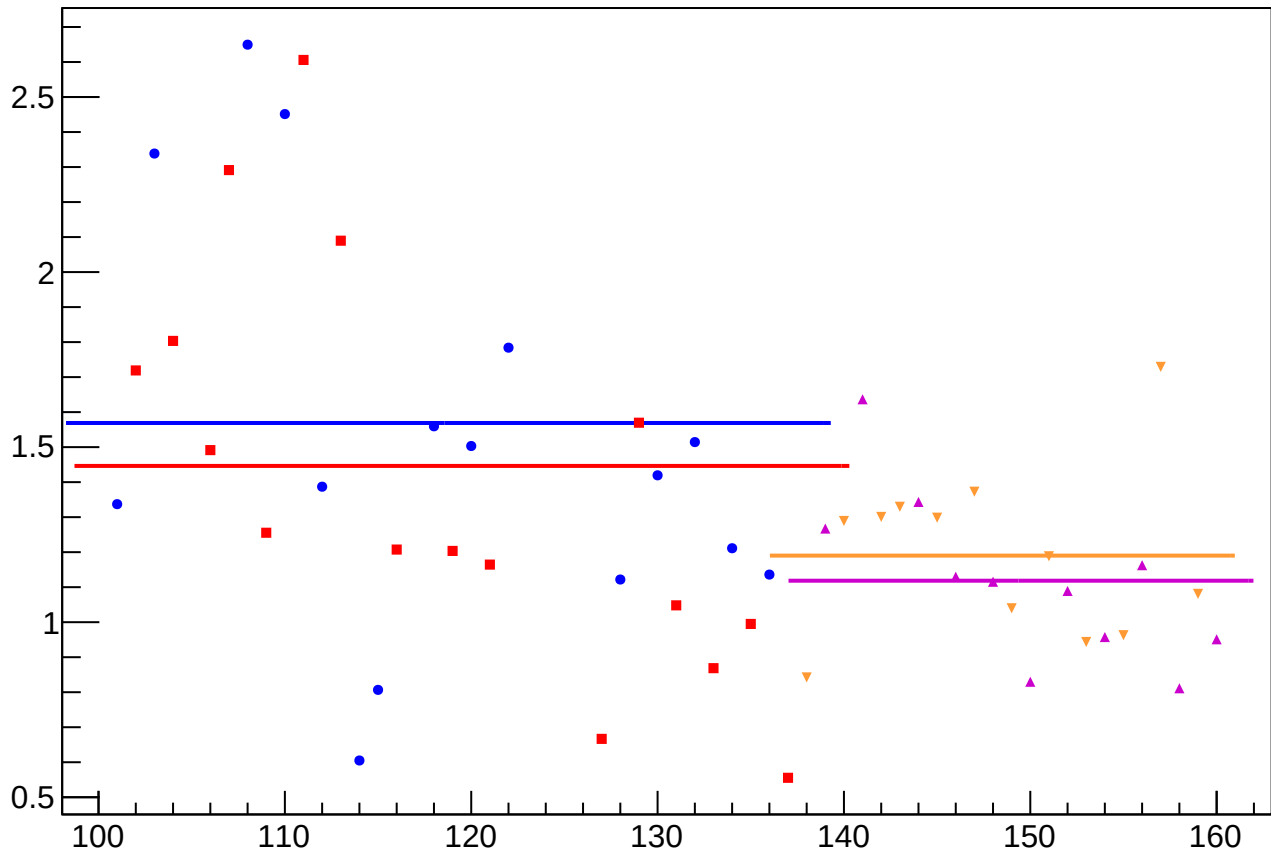
Left In: 183.290+/-0.000  $\chi^2/\text{NDF}$ : 101738841511111417821042611832487936.0/10

+ sign 182.669+/-0.000  $\chi^2/\text{NDF}$ : 167456742062075

All: 184.458+/-0.000  $\chi^2/\text{NDF}$ : 32735567790

- sign 186.216+/-0.000  $\chi^2/\text{NDF}$ : 158906987548328

dit\_4eY\_coil4\_err\_mean vs Slug



Right In: 1.569 $\pm$ 0.000  $\chi^2$ /NDF: 162849195668123380789610540957696.0/14

Left Out: 1.190 $\pm$ 0.000  $\chi^2$ /NDF: 50745822936032217336144814145536.0/11

Right Out: 1.446 $\pm$ 0.000  $\chi^2$ /NDF: 196296653917523352443271052787712.0/15

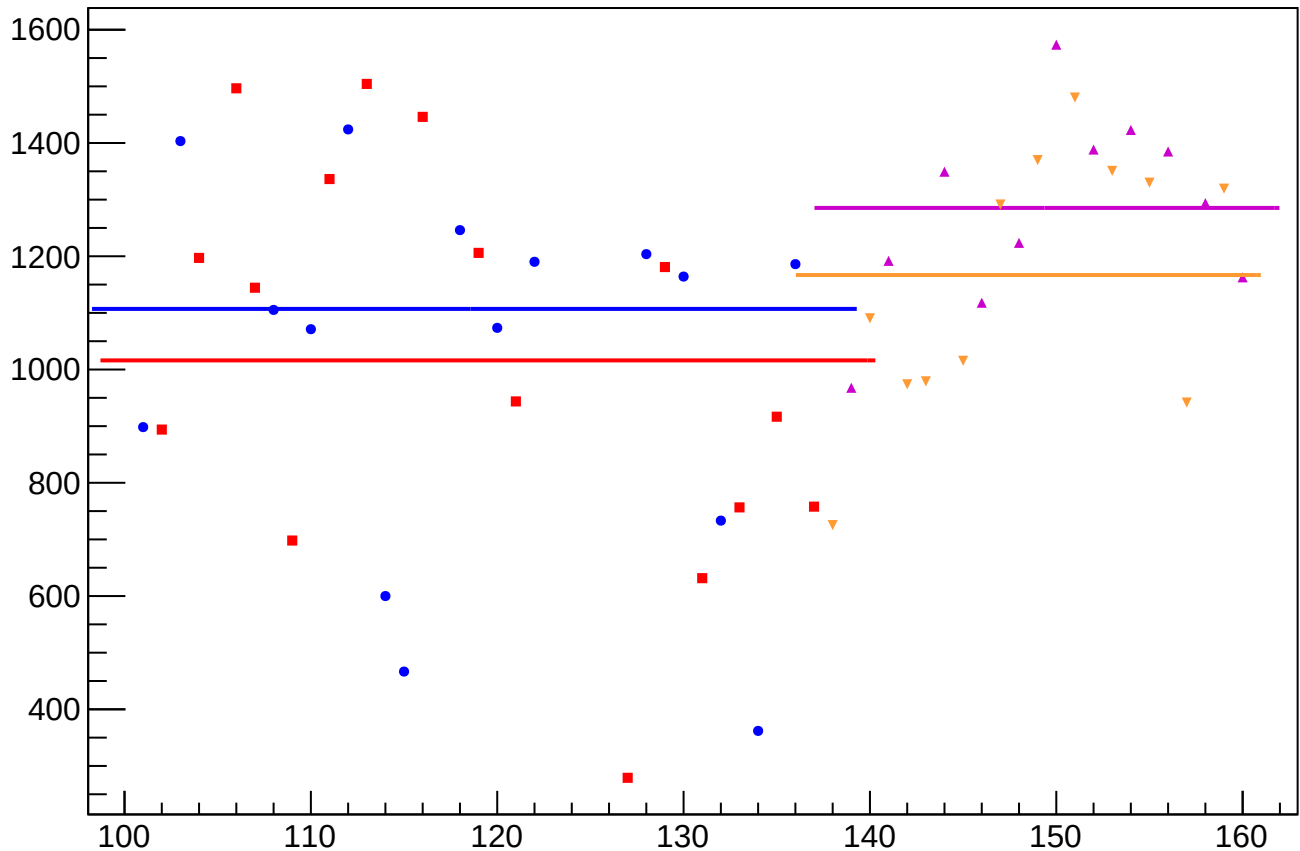
Left In: 1.118 $\pm$ 0.000  $\chi^2$ /NDF: 48973496995723480911801365823488.0/10

+ sign 1.347 $\pm$ 0.000  $\chi^2$ /NDF: 26805645085959175

All: 1.301 $\pm$ 0.000  $\chi^2$ /NDF: 56157588721998

- sign 1.256 $\pm$ 0.000  $\chi^2$ /NDF: 28690992559145743

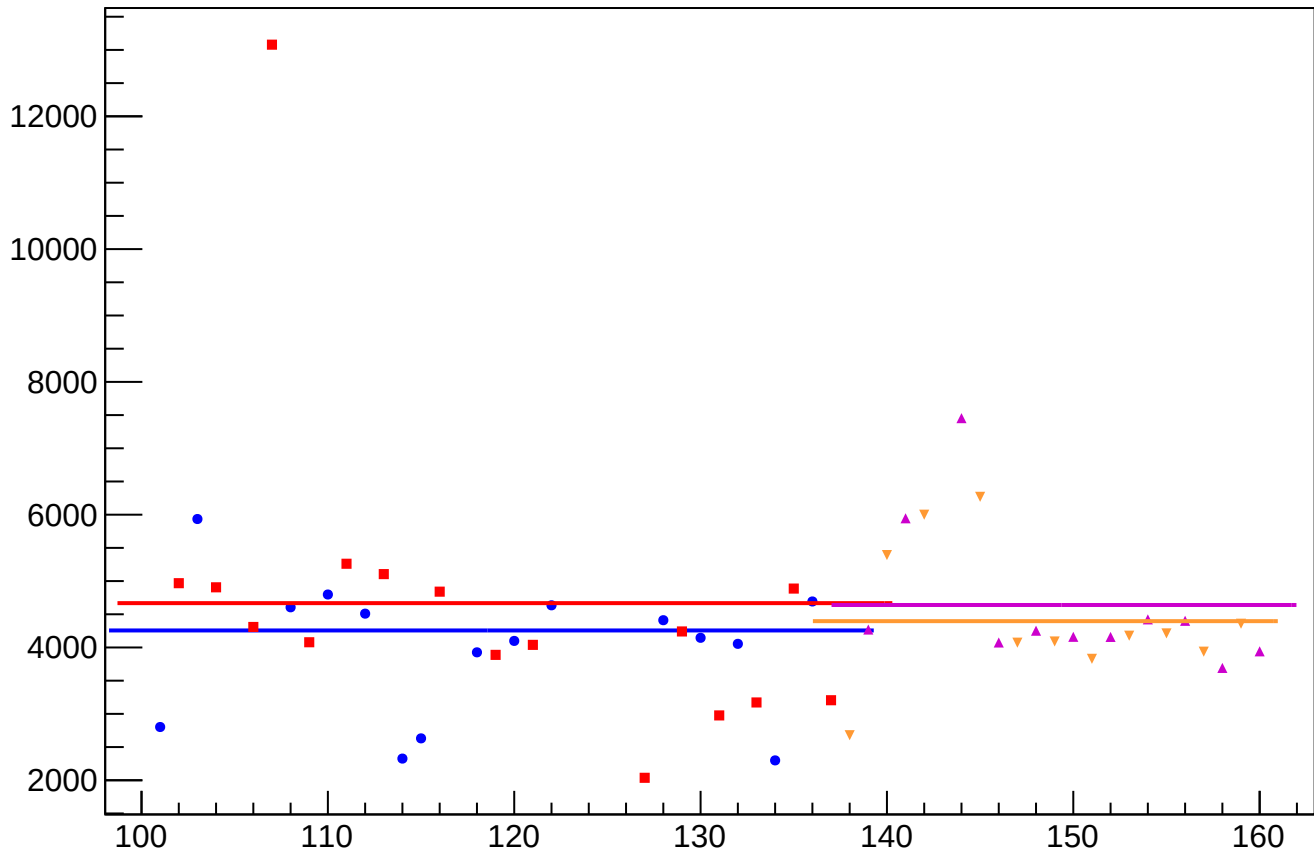
dit\_4eY\_coil4\_Ndata\_mean vs Slug



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: 1157.392 +/- 0.000  $\chi^2/\text{NDF}$ : 21202911442  
 + sign 1142.031 +/- 0.000  $\chi^2/\text{NDF}$ : 86643588377316  
 - sign 1172.482 +/- 0.000  $\chi^2/\text{NDF}$ : 12465444911625

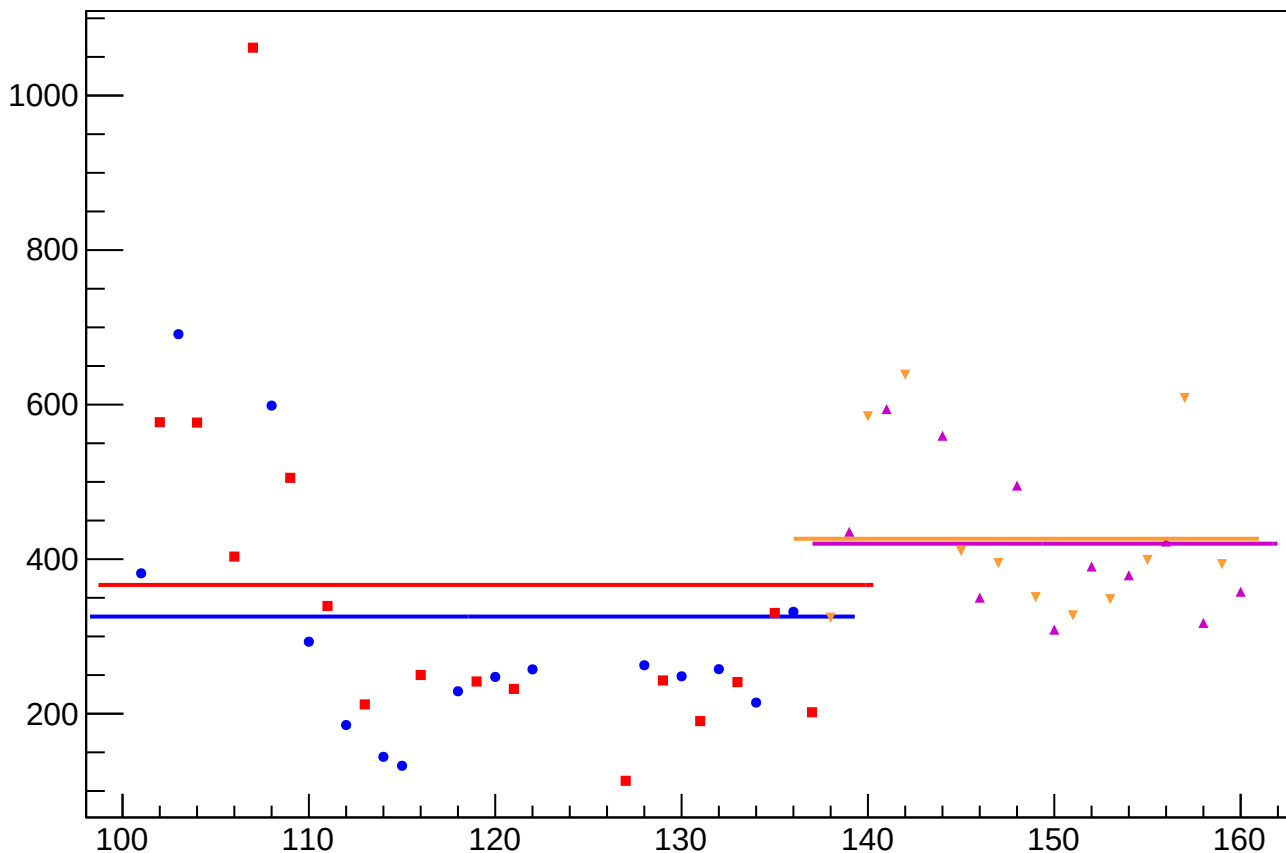


dit\_usl\_coil4\_mean vs Slug



|                             |                                                                     |                         |                                      |
|-----------------------------|---------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 4256.386+/-0.000  | $\chi^2/\text{NDF}$ : 498605412551624859672454954159576186880.0/14  | + sign 4335.661+/-0.000 | $\chi^2/\text{NDF}$ : 12734954654857 |
| Left Out: 4396.403+/-0.000  | $\chi^2/\text{NDF}$ : 767686308157486440179100240552638021632.0/10  | All: 4498.481+/-0.000   | $\chi^2/\text{NDF}$ : 56111214278    |
| Right Out: 4667.832+/-0.000 | $\chi^2/\text{NDF}$ : 3201925535782807450320951772159309512704.0/15 | - sign 4651.578+/-0.000 | $\chi^2/\text{NDF}$ : 42606752336216 |
| Left In: 4639.846+/-0.000   | $\chi^2/\text{NDF}$ : 1058446303743243170530981239939506634752.0/10 |                         |                                      |

dit\_usl\_coil4\_err\_mean vs Slug



Right In: 325.732+/-0.000  $\chi^2/\text{NDF}$ : 14633359567940244123897242769854300160.0/14

Left Out: 426.446+/-0.000  $\chi^2/\text{NDF}$ : 9564737566607591468000084323542761472.0/10

Right Out: 366.682+/-0.000  $\chi^2/\text{NDF}$ : 32097250699947956409117440115398934528.0/15

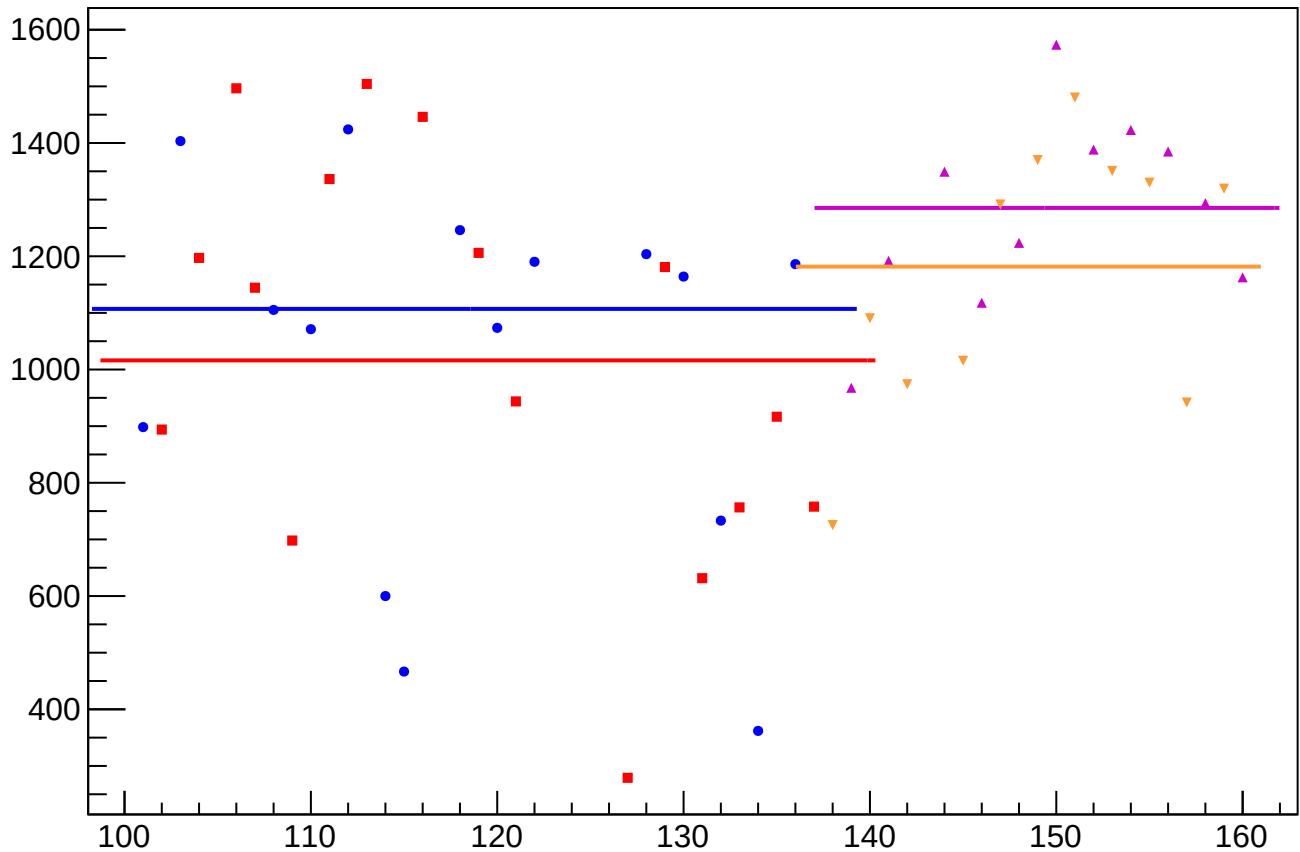
Left In: 420.062+/-0.000  $\chi^2/\text{NDF}$ : 7706514276709269263404419491802644480.0/10

+ sign 382.754+/-0.000  $\chi^2/\text{NDF}$ : 279252260301187

All: 390.448+/-0.000  $\chi^2/\text{NDF}$ : 690046326749

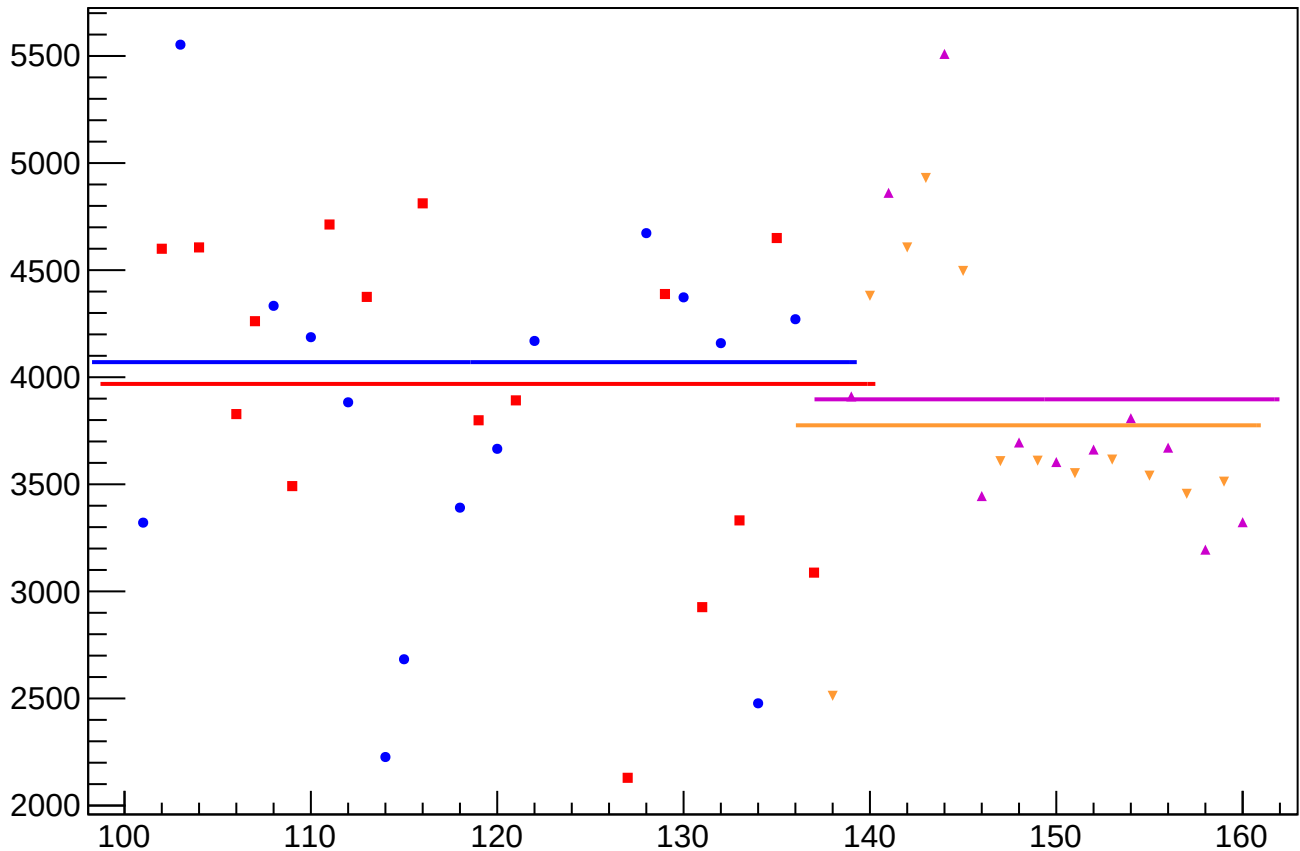
- sign 397.684+/-0.000  $\chi^2/\text{NDF}$ : 409075450012092

dit\_usl\_coil4\_Ndata\_mean vs Slug



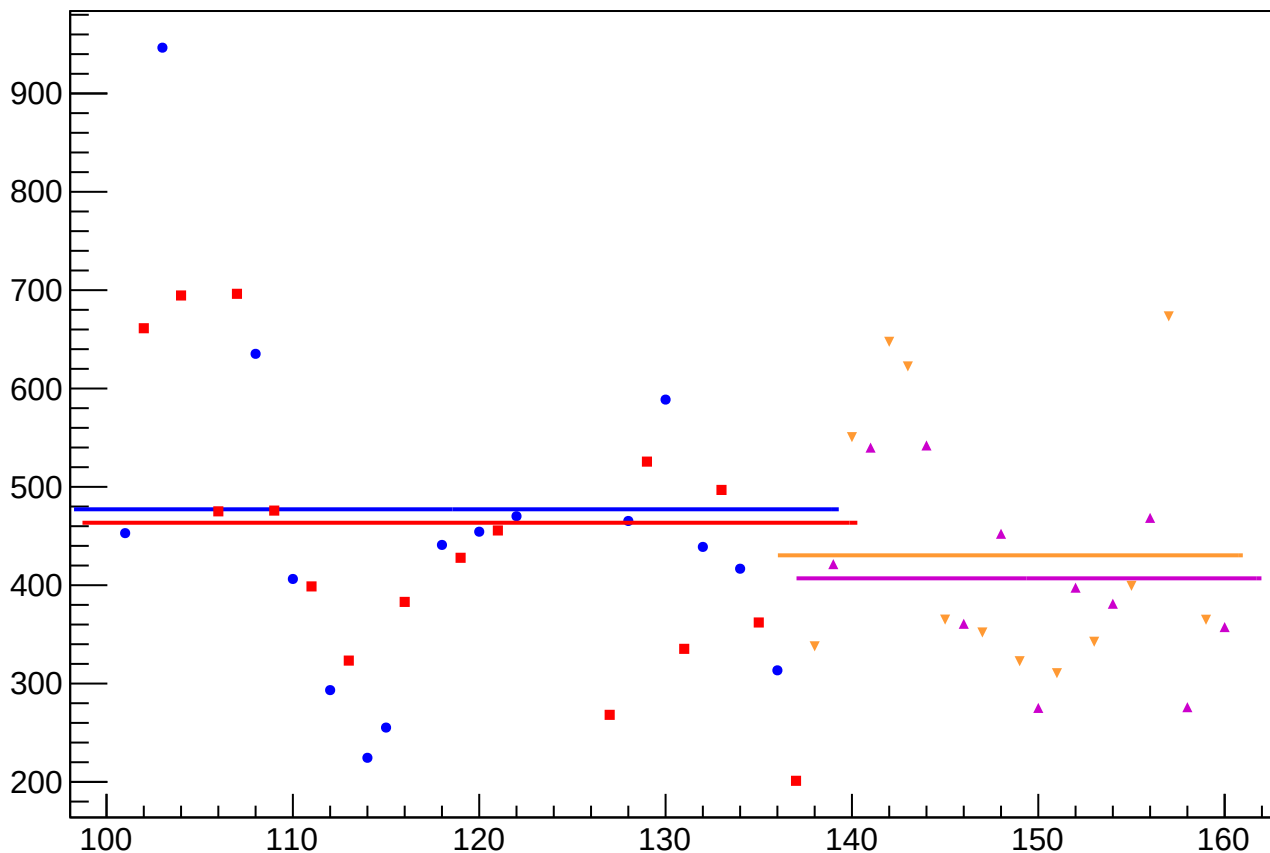
Right In: 1107.052 +/- 0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1181.721 +/- 0.000  $\chi^2/\text{NDF}$ : 42102883856321275256821029062509068288.0/10  
 Right Out: 1016.106 +/- 0.000  $\chi^2/\text{NDF}$ : 72567664333509192712184310037150171136.0/15  
 Left In: 1285.364 +/- 0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10

dit\_usr\_coil4\_mean vs Slug



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

dit\_usr\_coil4\_err\_mean vs Slug



Right In: 477.186+/-0.000  $\chi^2/\text{NDF}$ : 20455719931758379978892605184974782464.0/14

Left Out: 430.385+/-0.000  $\chi^2/\text{NDF}$ : 15124863187063515916775500602167787520.0/11

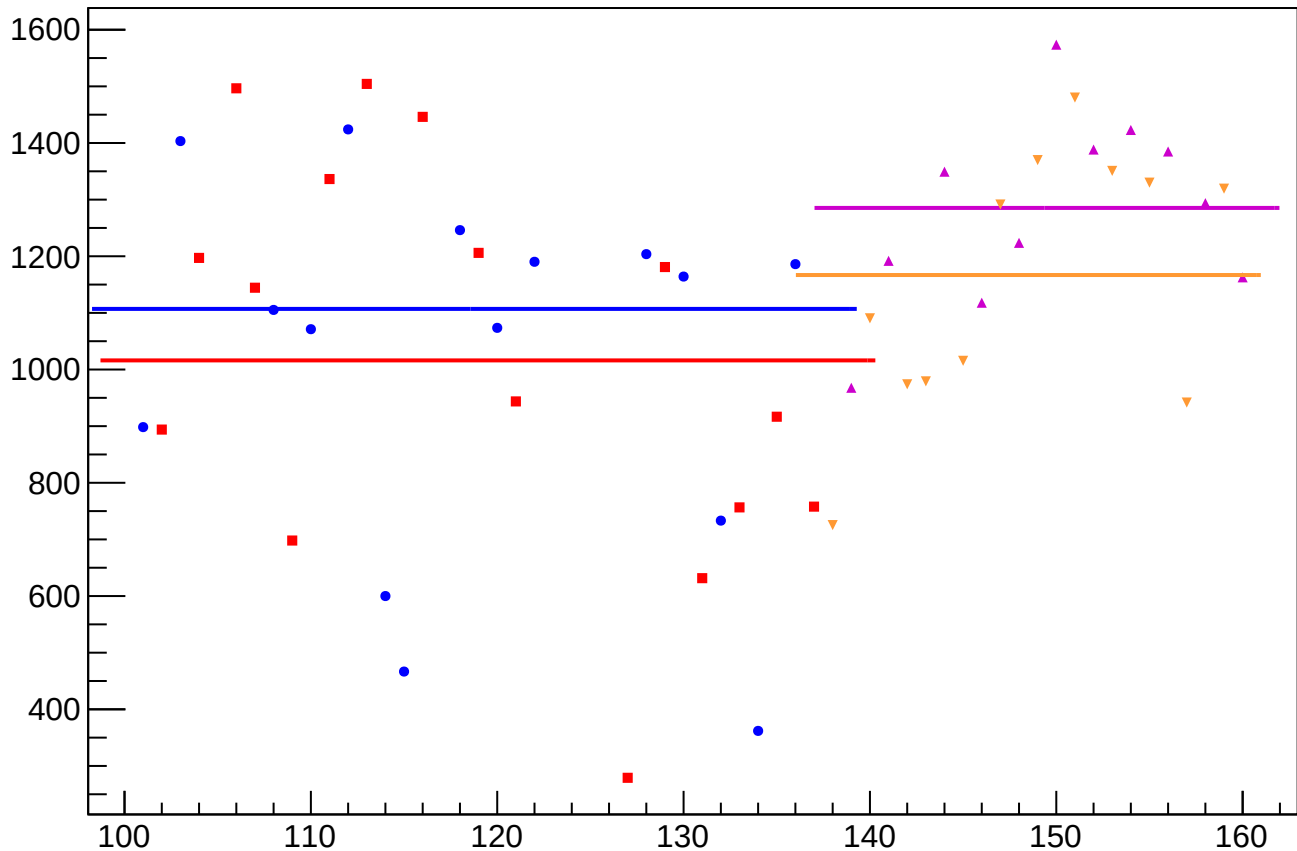
Right Out: 463.513+/-0.000  $\chi^2/\text{NDF}$ : 12556777931069903370031832388184571904.0/15

Left In: 406.990+/-0.000  $\chi^2/\text{NDF}$ : 7014219134688394471330081136711827456.0/10

All: 440.167+/-0.000  $\chi^2/\text{NDF}$ : 575090441202

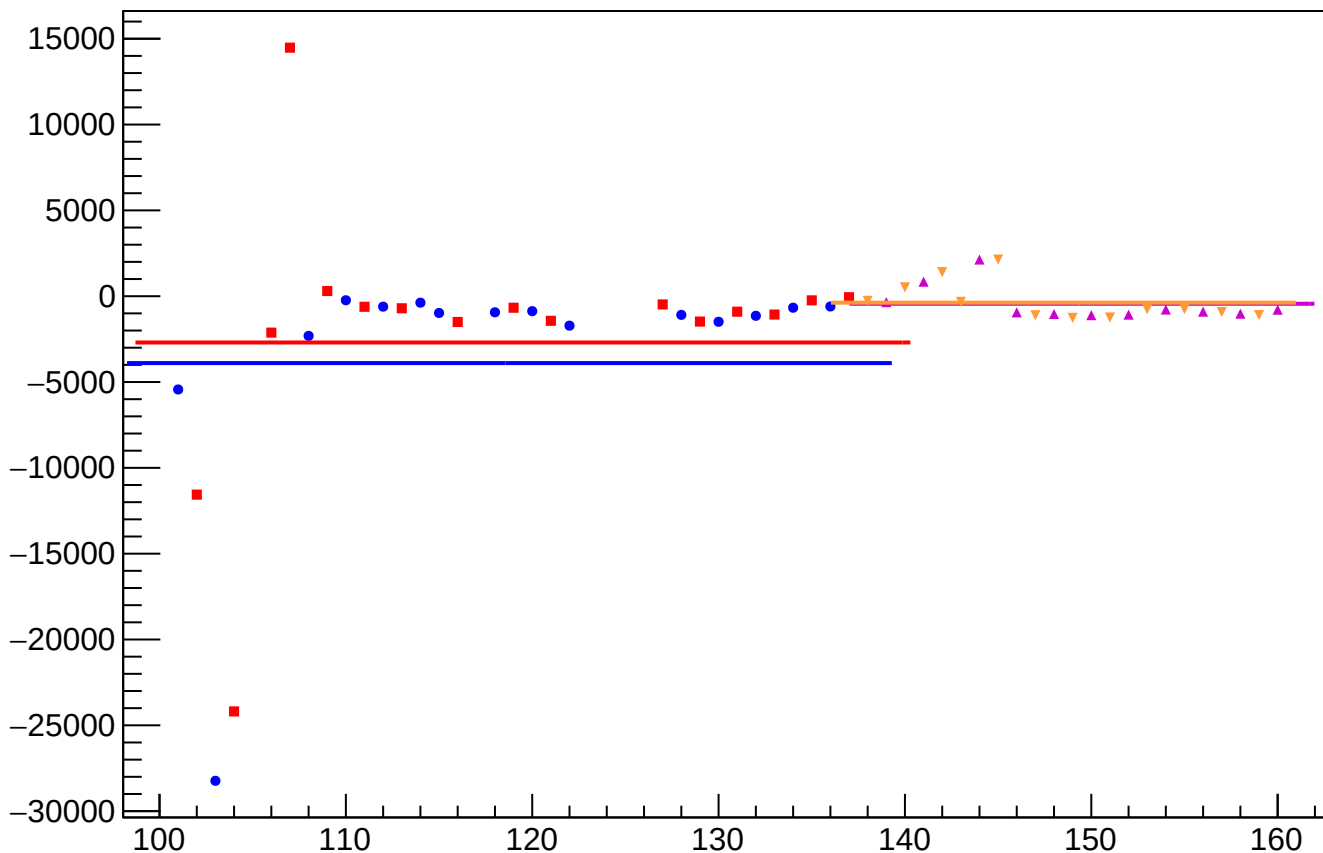
- sign 430.686+/-0.000  $\chi^2/\text{NDF}$ : 208085780635080

dit\_usr\_coil4\_Ndata\_mean vs Slug



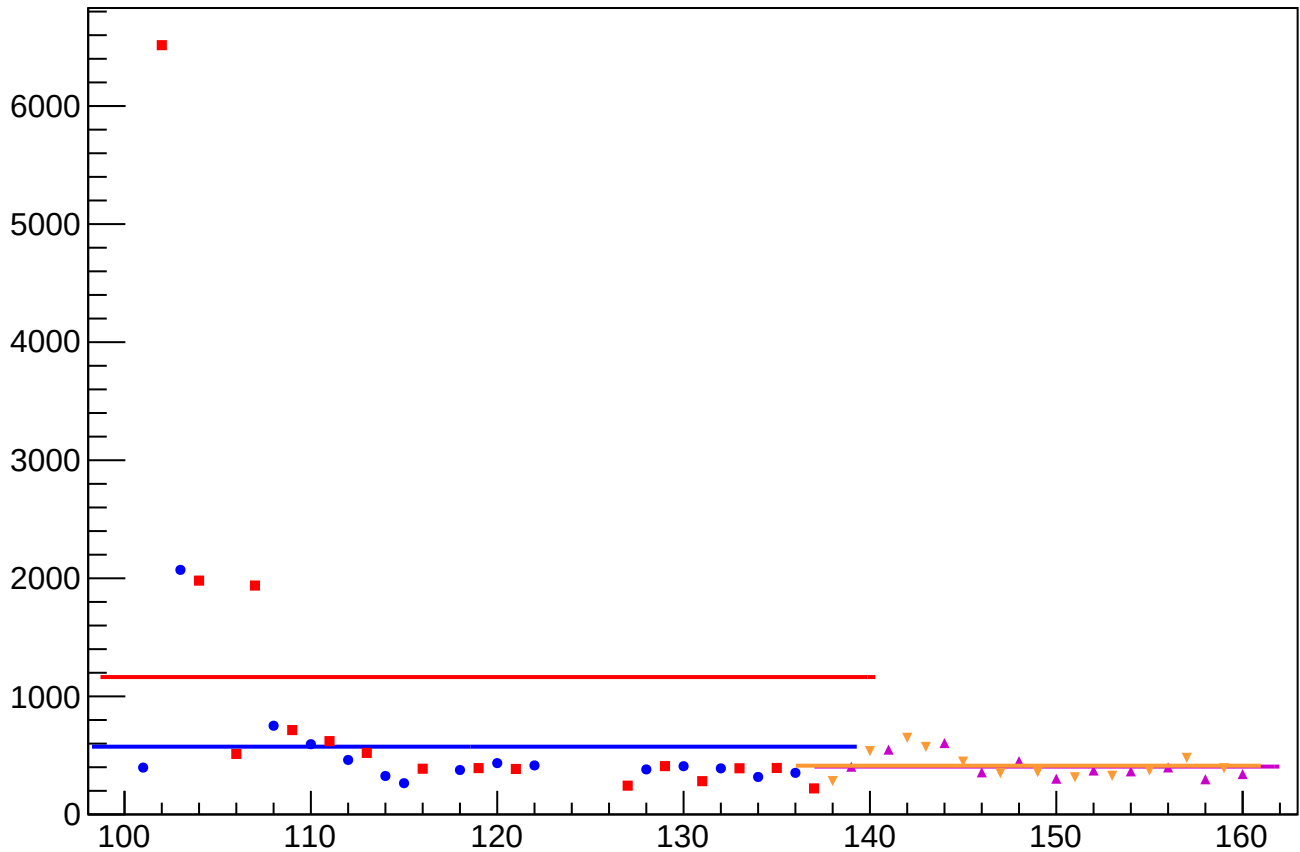
Right In: 1107.052 $\pm$ 0.000  $\chi^2$ /NDF: 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869 $\pm$ 0.000  $\chi^2$ /NDF: 44651845589529754769451964140544327680.0/11  
 Right Out: 1016.106 $\pm$ 0.000  $\chi^2$ /NDF: 72567664333509192712184310037150171136.0/15  
 Left In: 1285.364 $\pm$ 0.000  $\chi^2$ /NDF: 24002572803732345959736048095514853376.0/10

# dit\_atl1\_coil4\_mean vs Slug



Right In:  $-3896.522 \pm 0.000$   $\chi^2/\text{NDF}$ : 39618598516481020448248440670012984786944.0/14  
 Left Out:  $-375.430 \pm 0.000$   $\chi^2/\text{NDF}$ : 958630071854954411455962799285737619456.0/11  
 Right Out:  $-2695.992 \pm 0.000$   $\chi^2/\text{NDF}$ : 40822463071462352124212058386591729582080.0/15  
 Left In:  $-439.289 \pm 0.000$   $\chi^2/\text{NDF}$ : 921031566733723872829454078558930468864.0/10  
 + sign  $-1837.483 \pm 0.000$   $\chi^2/\text{NDF}$ : 4528252222957  
 All:  $-1609.422 \pm 0.000$   $\chi^2/\text{NDF}$ : 8915994509  
 - sign  $-1385.374 \pm 0.000$   $\chi^2/\text{NDF}$ : 43716264222774

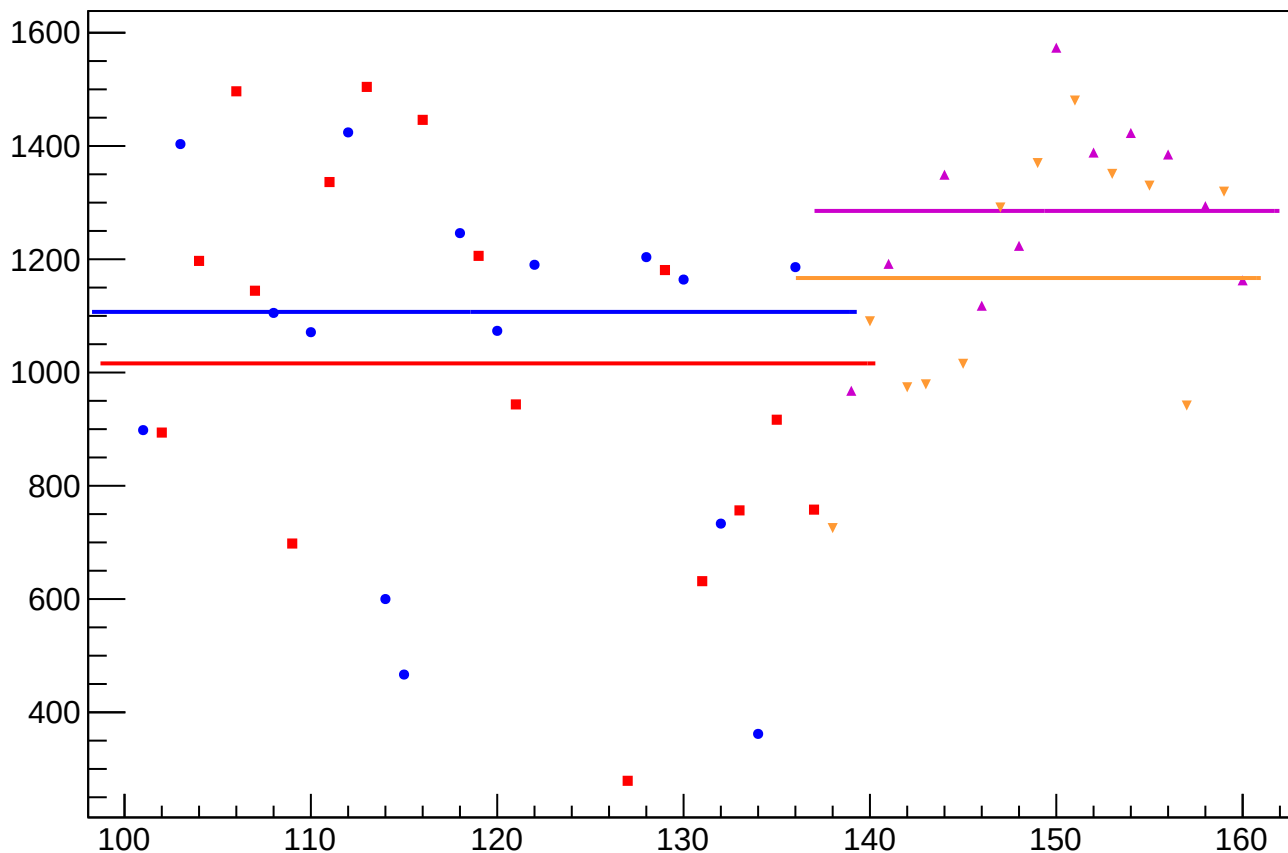
dit\_atl1\_coil4\_err\_mean vs Slug



Right In:  $574.055 \pm 0.000$   $\chi^2/\text{NDF}$ : 152105229889160423018493709582390525952.0/14  
 Left Out:  $413.017 \pm 0.000$   $\chi^2/\text{NDF}$ : 9379796802385704003508317238748774400.0/11  
 Right Out:  $1163.697 \pm 0.000$   $\chi^2/\text{NDF}$ : 2003194396475465337190154787515183136768.0/15  
 Left In:  $405.371 \pm 0.000$   $\chi^2/\text{NDF}$ : 8096374045117906535343483577494929408.0/10



dit\_atl1\_coil4\_Ndata\_mean vs Slug



Right In: 1107.052 $\pm$ 0.000  $\chi^2$ /NDF: 40633831787810179240542210398269472768.0/14

+ sign 1142.031 $\pm$ 0.000  $\chi^2$ /NDF: 86643588377316

Left Out: 1166.869 $\pm$ 0.000  $\chi^2$ /NDF: 44651845589529754769451964140544327680.0/11

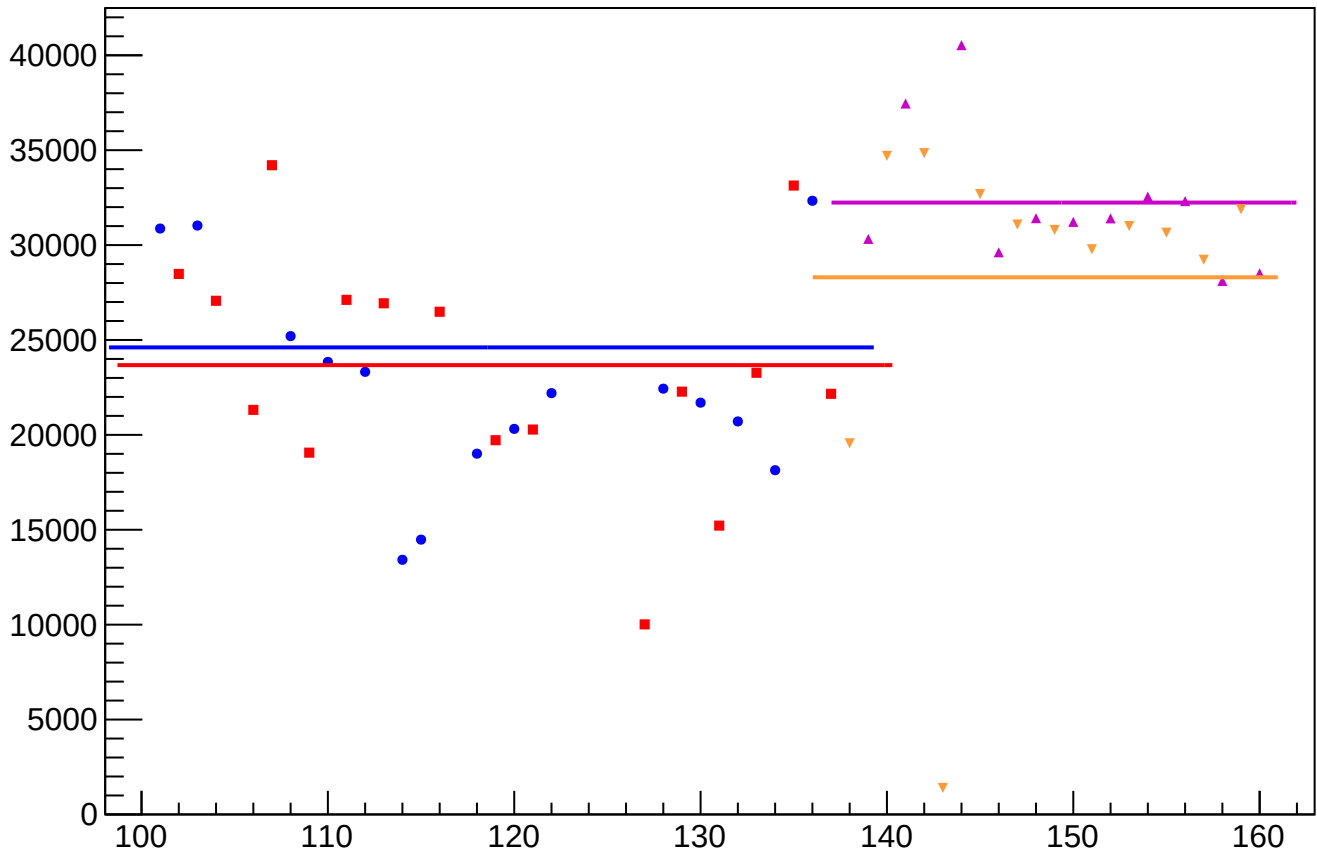
All: 1157.392 $\pm$ 0.000  $\chi^2$ /NDF: 21202911442

Right Out: 1016.106 $\pm$ 0.000  $\chi^2$ /NDF: 72567664333509192712184310037150171136.0/15

- sign 1172.482 $\pm$ 0.000  $\chi^2$ /NDF: 12465444911625

Left In: 1285.364 $\pm$ 0.000  $\chi^2$ /NDF: 24002572803732345959736048095514853376.0/10

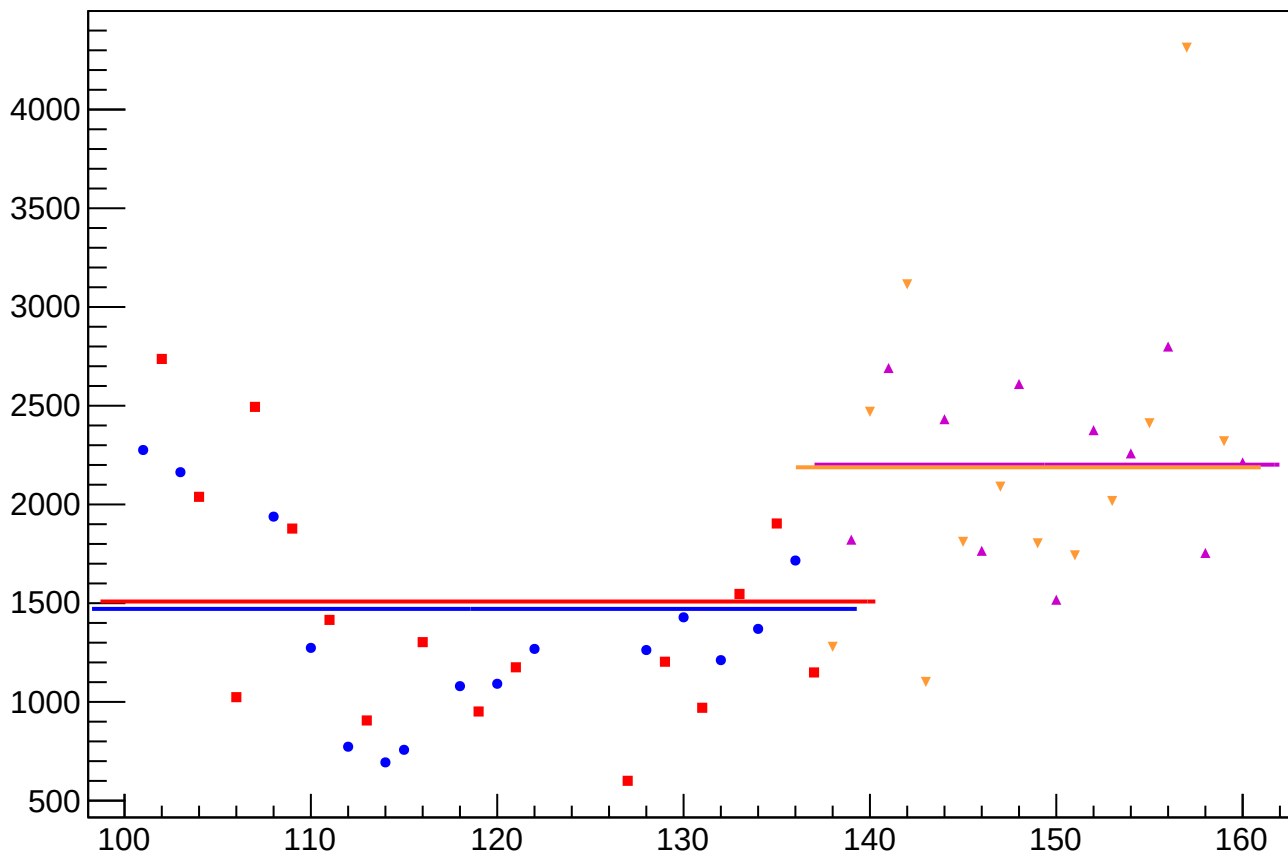
dit\_atl2\_coil4\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| 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 |

+ sign 26768.677+/-0.000  $\chi^2/\text{NDF}$ : 8747719496851  
 All: 27716.891+/-0.000  $\chi^2/\text{NDF}$ : 1554384105  
 - sign 28648.418+/-0.000  $\chi^2/\text{NDF}$ : 6517533016953

dit\_atl2\_coil4\_err\_mean vs Slug



Right In: 1471.095+/-0.000  $\chi^2/\text{NDF}$ : 139174979420467841073894167956452016128.0/14

Left Out: 2188.131+/-0.000  $\chi^2/\text{NDF}$ : 593858516090535186702207521640824176640.0/11

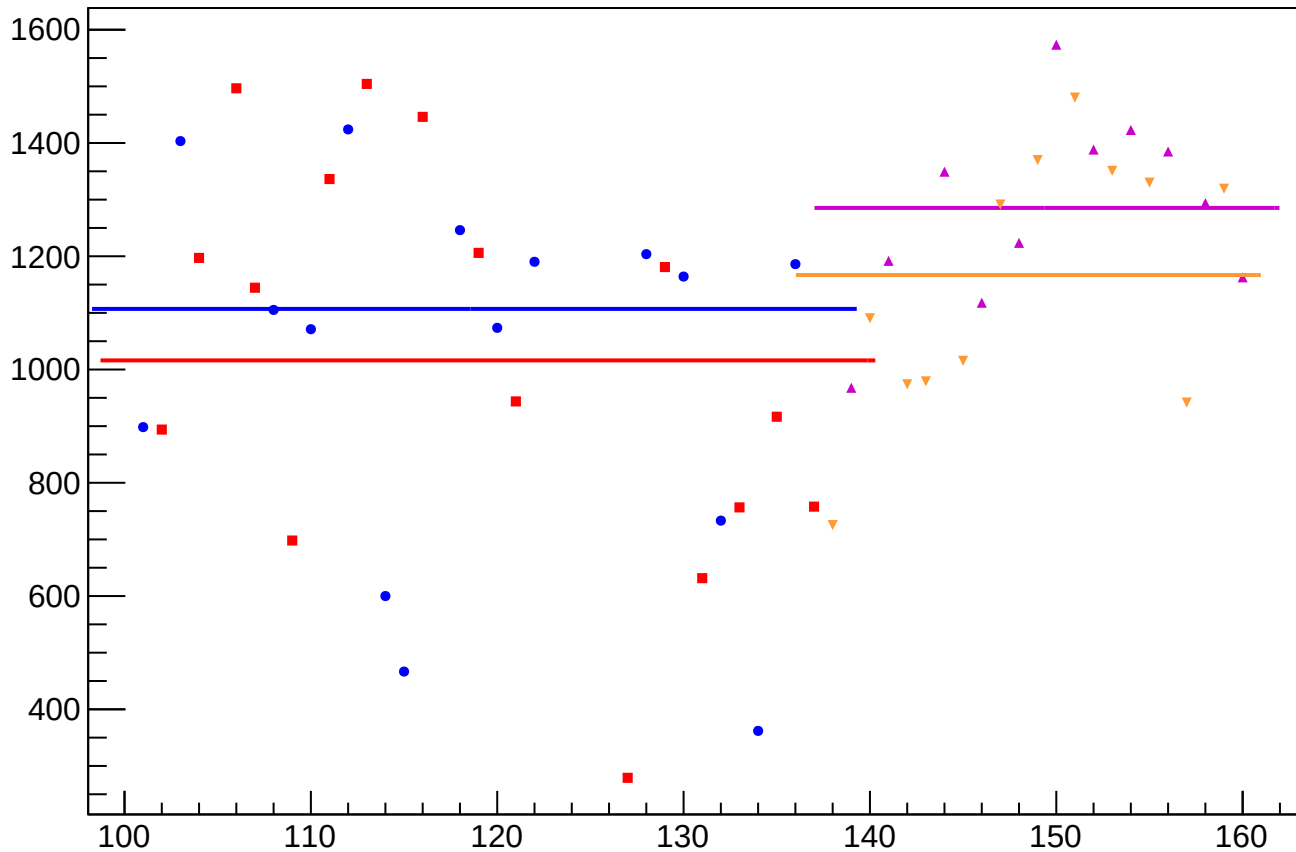
Right Out: 1508.451+/-0.000  $\chi^2/\text{NDF}$ : 250085163770425050605763446985715613696.0/15

Left In: 2201.571+/-0.000  $\chi^2/\text{NDF}$ : 156929124179690930619030229097962799104.0/10

All: 1900.786+/-0.000  $\chi^2/\text{NDF}$ : 15216070453

- sign 1910.992+/-0.000  $\chi^2/\text{NDF}$ : 59311371544144

dit\_atl2\_coil4\_Ndata\_mean vs Slug



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

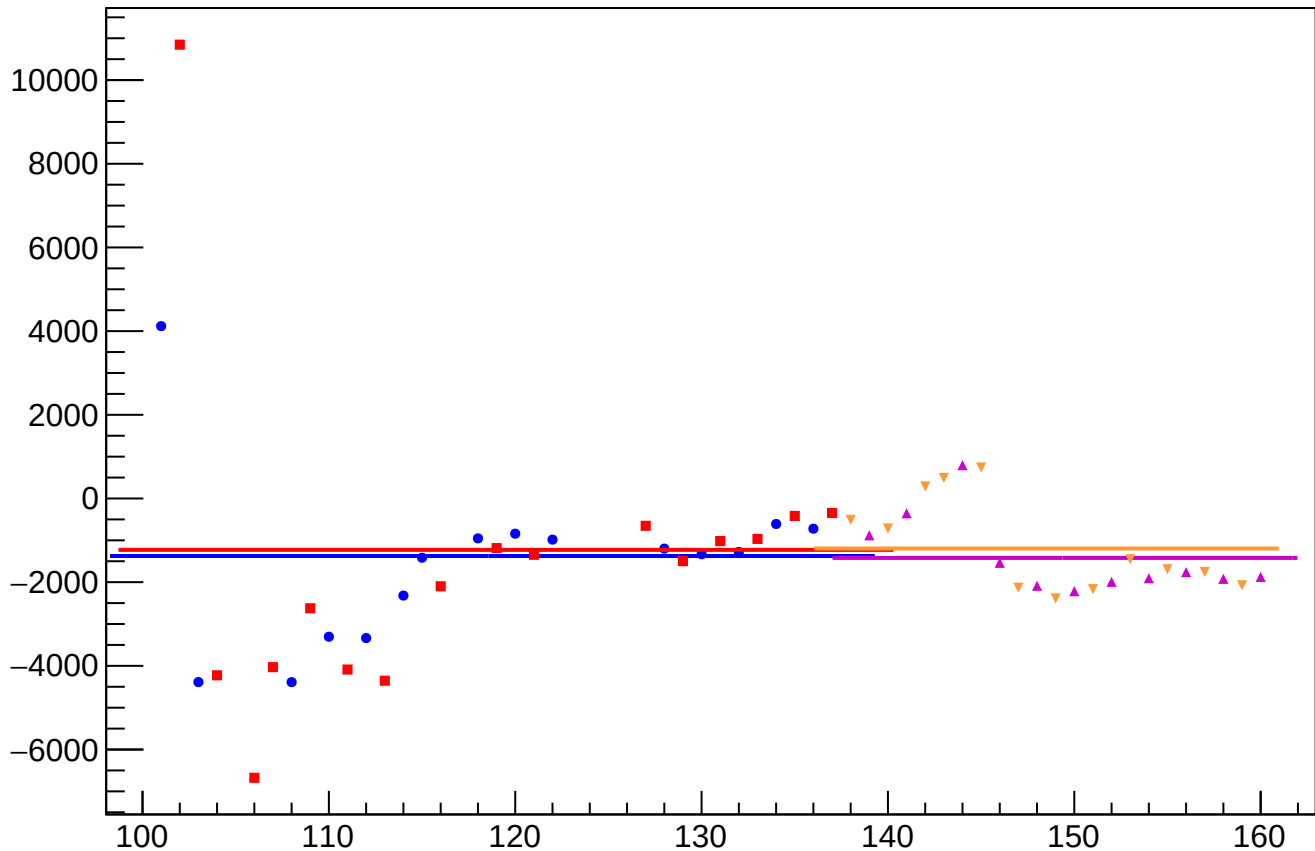
Left In: 1285.364+/-0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10

+ sign 1142.031+/-0.000  $\chi^2/\text{NDF}$ : 86643588377316

All: 1157.392+/-0.000  $\chi^2/\text{NDF}$ : 21202911442

- sign 1172.482+/-0.000  $\chi^2/\text{NDF}$ : 12465444911625

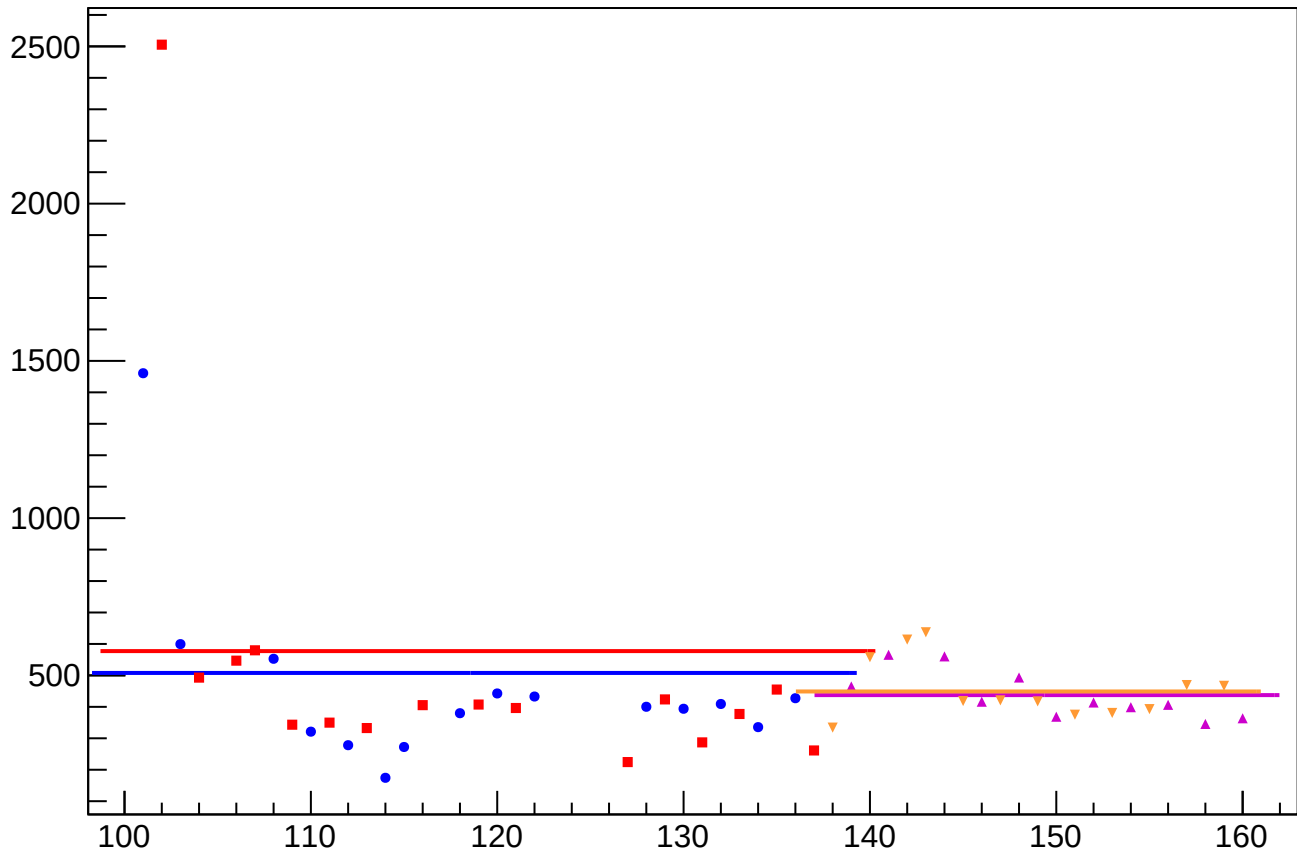
dit\_atr1\_coil4\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| Right In: -1374.510+/-0.000  | $\chi^2/\text{NDF}$ : 3072775774026573120755024580495322120192.0/14  |
| Left Out: -1194.978+/-0.000  | $\chi^2/\text{NDF}$ : 1012982164343735644721296583058593415168.0/11  |
| Right Out: -1227.879+/-0.000 | $\chi^2/\text{NDF}$ : 11115312999926623396466450218448622452736.0/15 |
| Left In: -1420.806+/-0.000   | $\chi^2/\text{NDF}$ : 747987085785920162637916932217361137664.0/10   |

+ sign -1269.525+/-0.000  $\chi^2/\text{NDF}$ : 4097990392534  
 All: -1305.037+/-0.000  $\chi^2/\text{NDF}$ : 1597961645  
 - sign -1339.925+/-0.000  $\chi^2/\text{NDF}$ : 11877718404583

dit\_atr1\_coil4\_err\_mean vs Slug



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

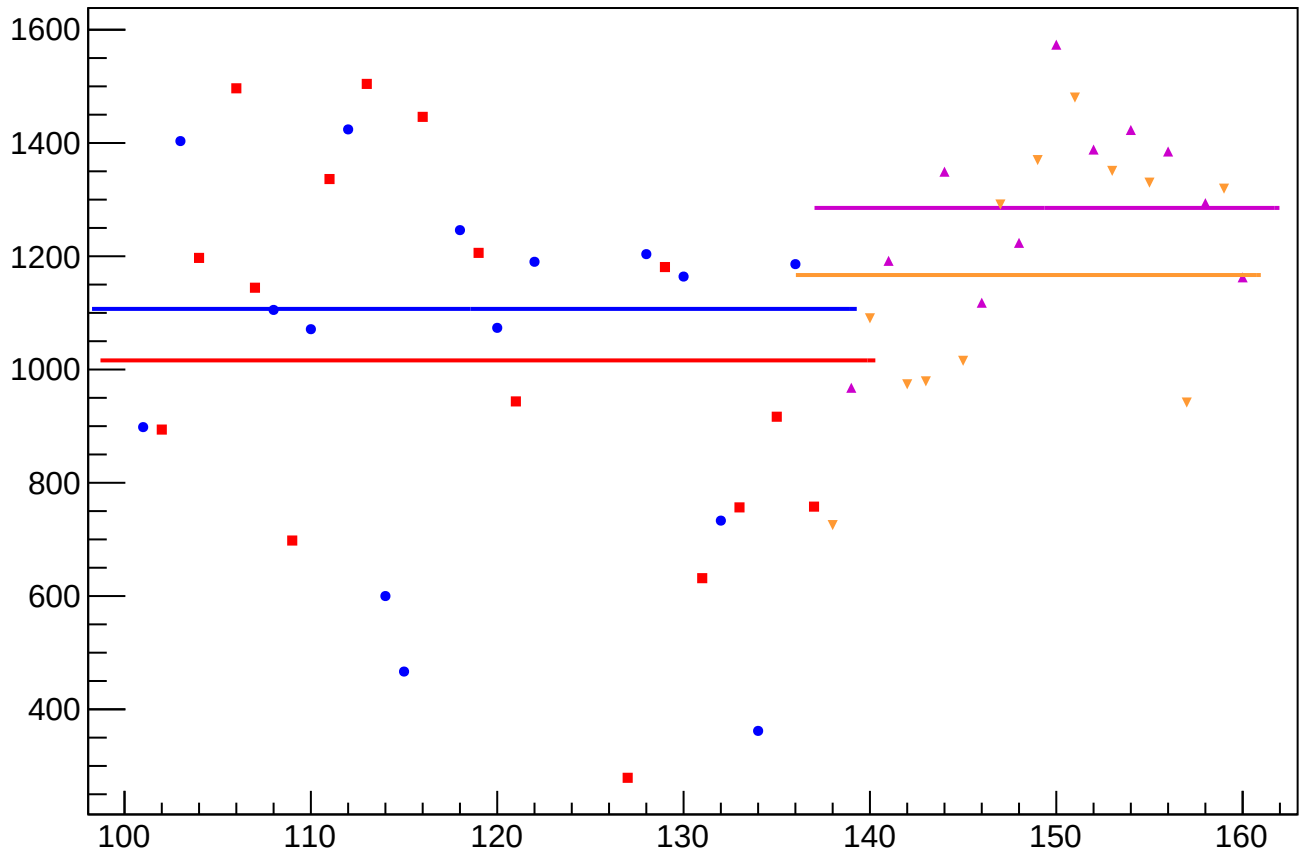
Left In: 437.315+/-0.000  $\chi^2/\text{NDF}$ : 4874677524968742275560761293986070528.0/10

+ sign 473.363+/-0.000  $\chi^2/\text{NDF}$ : 724292062329366

All: 484.772+/-0.000  $\chi^2/\text{NDF}$ : 326581423527

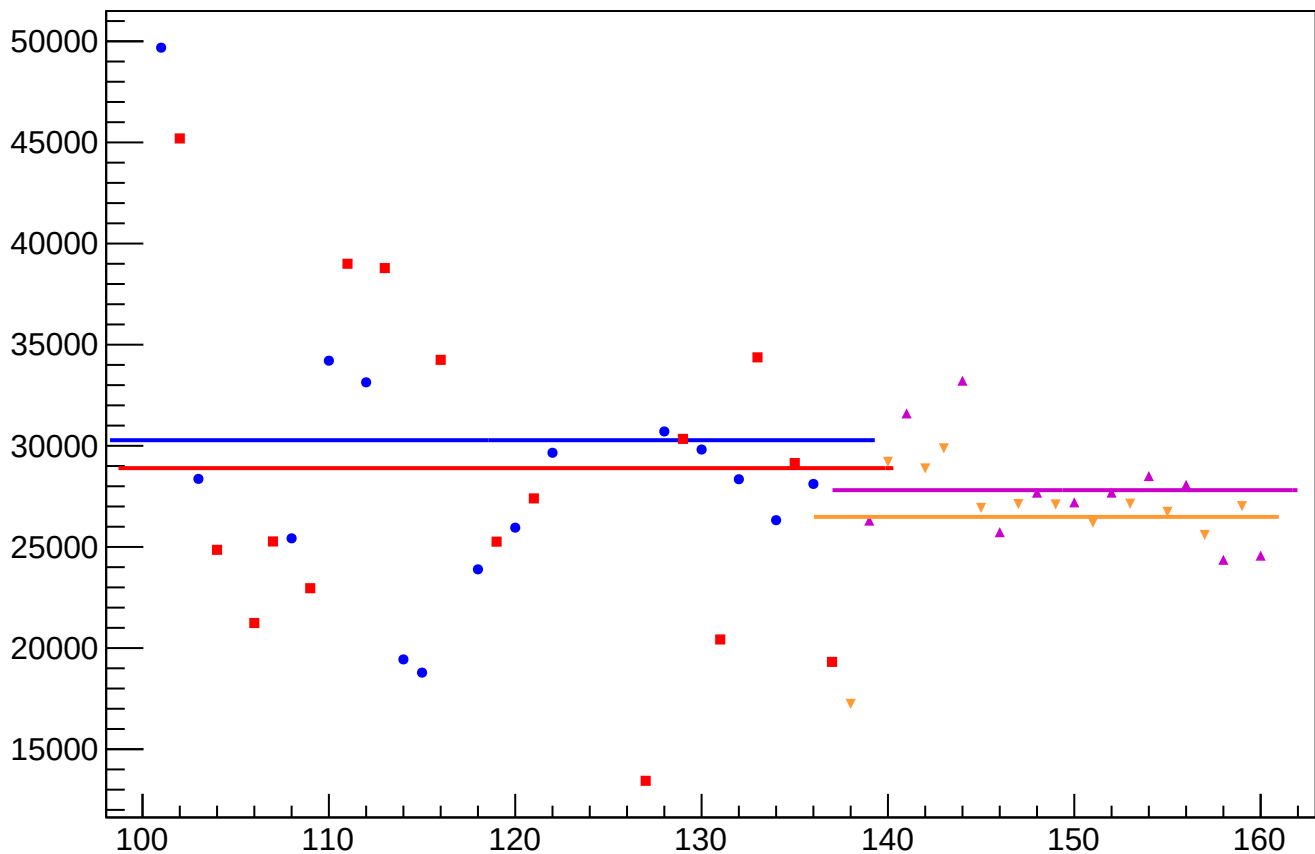
- sign 495.981+/-0.000  $\chi^2/\text{NDF}$ : 253748895345900

dit\_atr1\_coil4\_Ndata\_mean vs Slug



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

dit\_atr2\_coil4\_mean vs Slug

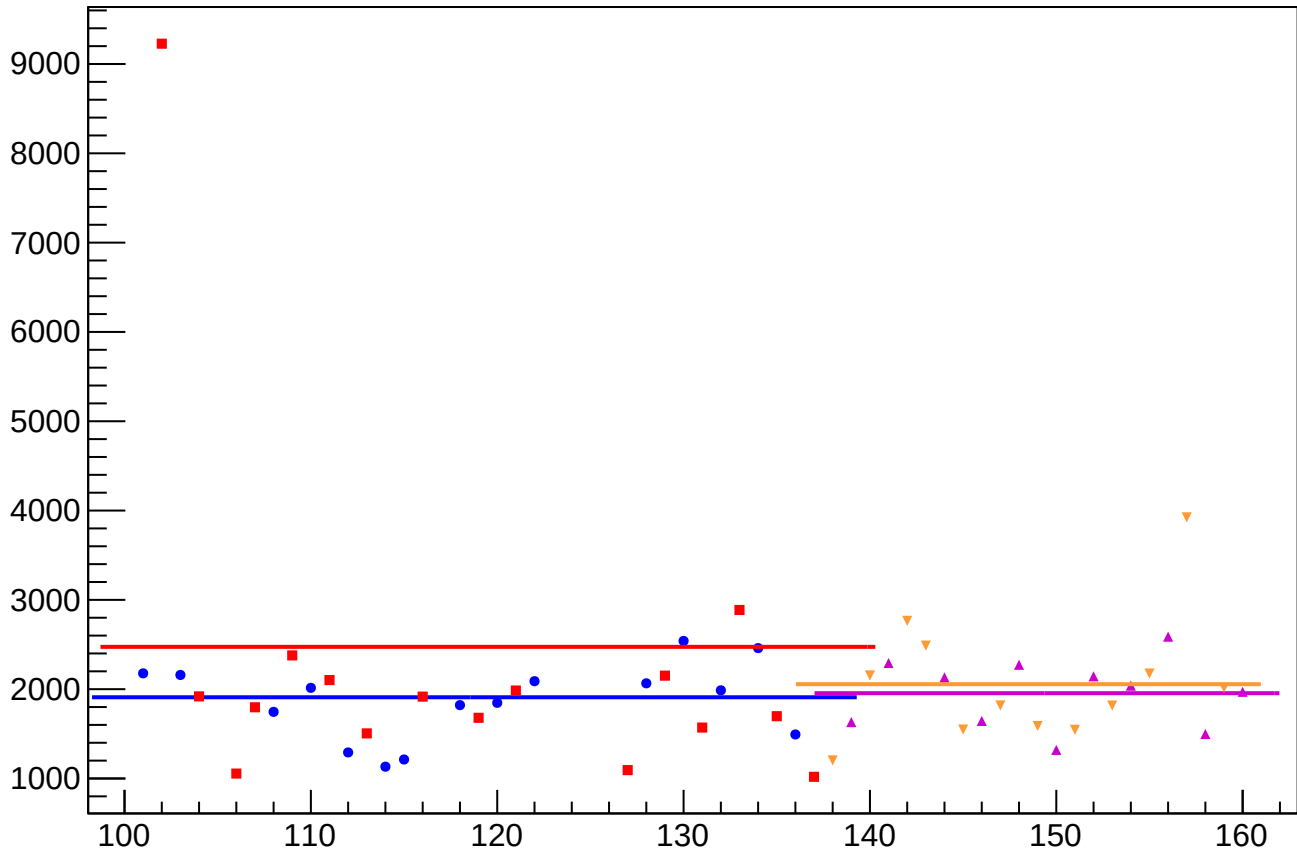


|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| Right In: 30277.649+/-0.000  | $\chi^2/\text{NDF}$ : 30975974641524142453090022540760519278592.0/14 |
| 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  |

+ sign 28060.820+/-0.000  $\chi^2/\text{NDF}$ : 4495105358177  
 All: 28163.219+/-0.000  $\chi^2/\text{NDF}$ : 986055664  
 - sign 28263.816+/-0.000  $\chi^2/\text{NDF}$ : 5362202344062



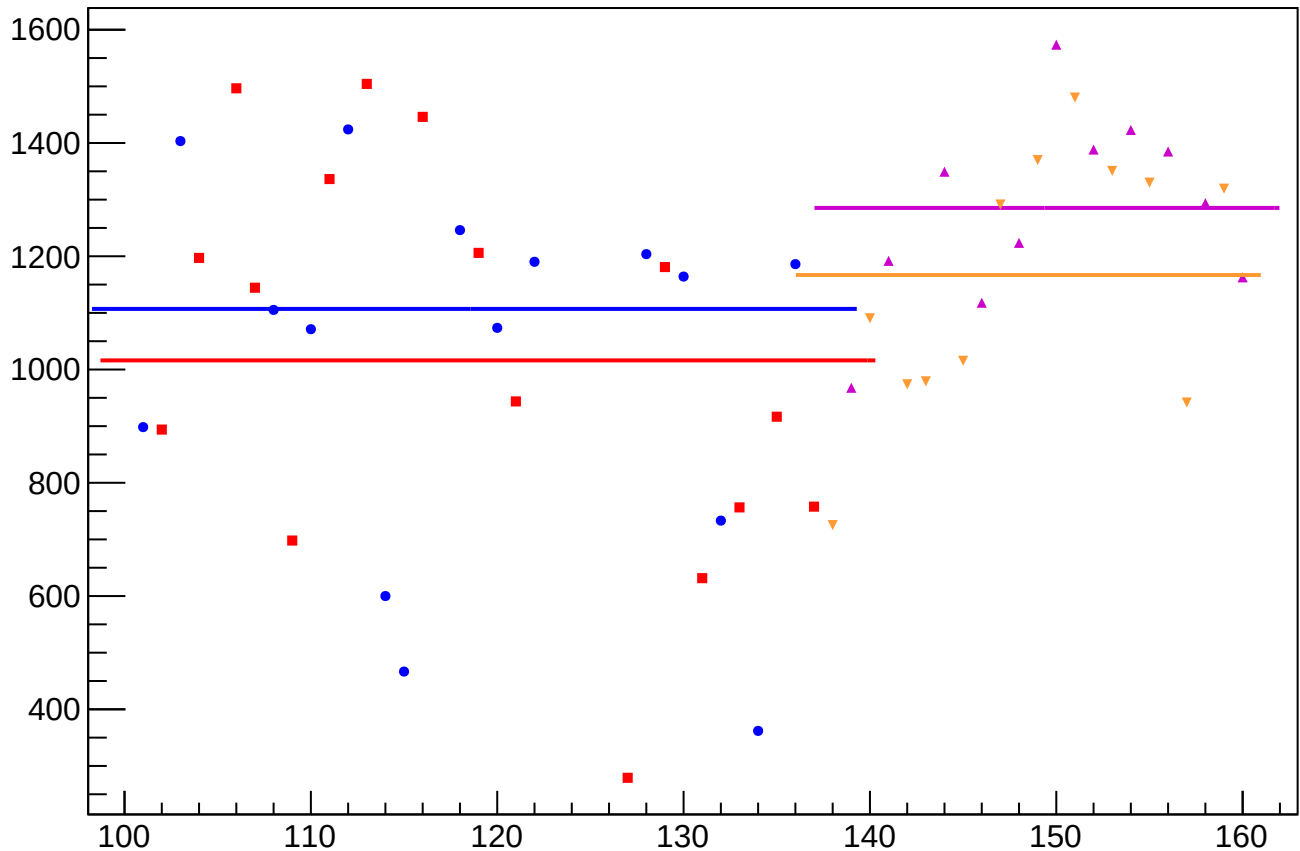
dit\_atr2\_coil4\_err\_mean vs Slug



|                             |                                                                     |
|-----------------------------|---------------------------------------------------------------------|
| 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  |

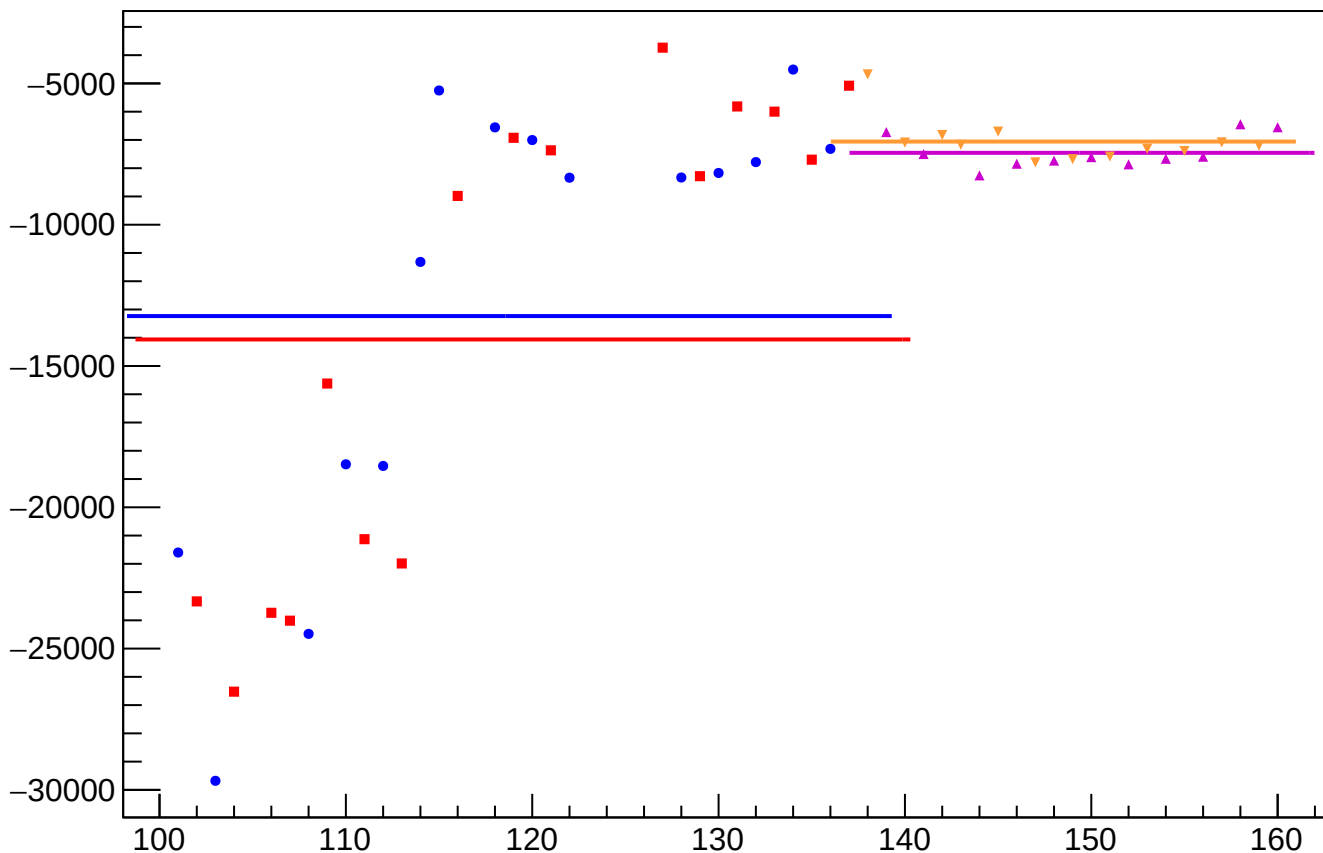
+ sign 1995.018+/-0.000  $\chi^2/\text{NDF}$ : 53377625694473  
 All: 2084.675+/-0.000  $\chi^2/\text{NDF}$ : 38237081973  
 - sign 2172.754+/-0.000  $\chi^2/\text{NDF}$ : 32650251724153

dit\_atr2\_coil4\_Ndata\_mean vs Slug



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: 72567664333509192712184310037150171136.0/15  
 Left In: 1285.364 $\pm$ 0.000  $\chi^2$ /NDF: 24002572803732345959736048095514853376.0/10

dit\_sam1\_coil4\_mean vs Slug



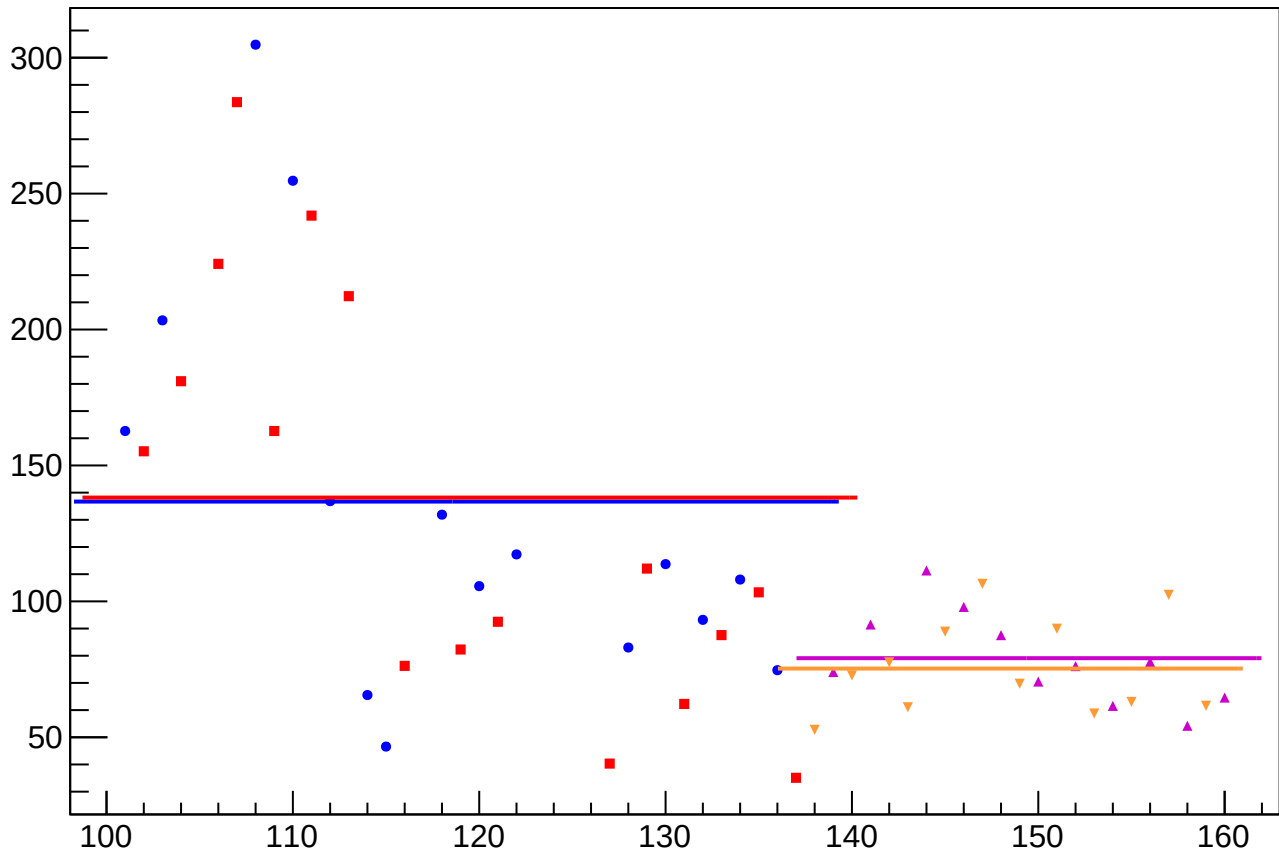
Right In: -13233.367+/-0.000  $\chi^2/\text{NDF}$ : 41257043836213043367596866559499640504320.0/14

Left Out: -7057.509+/-0.000  $\chi^2/\text{NDF}$ : 567022768290026836186795118569021505536.0/11

Right Out: -14060.103+/-0.000  $\chi^2/\text{NDF}$ : 44490594754280161766405556915711386845184.0/15

Left In: -7456.124+/-0.000  $\chi^2/\text{NDF}$ : 284554324589778558842129447316923351040.0/10

dit\_sam1\_coil4\_err\_mean vs Slug



Right In: 136.711 $\pm$ 0.000  $\chi^2$ /NDF: 2687065030885227126291764267456659456.0/14

Left Out: 75.280 $\pm$ 0.000  $\chi^2$ /NDF: 271565230291715258223184233837363200.0/11

Right Out: 138.179 $\pm$ 0.000  $\chi^2$ /NDF: 3230883352878636334641613561898467328.0/15

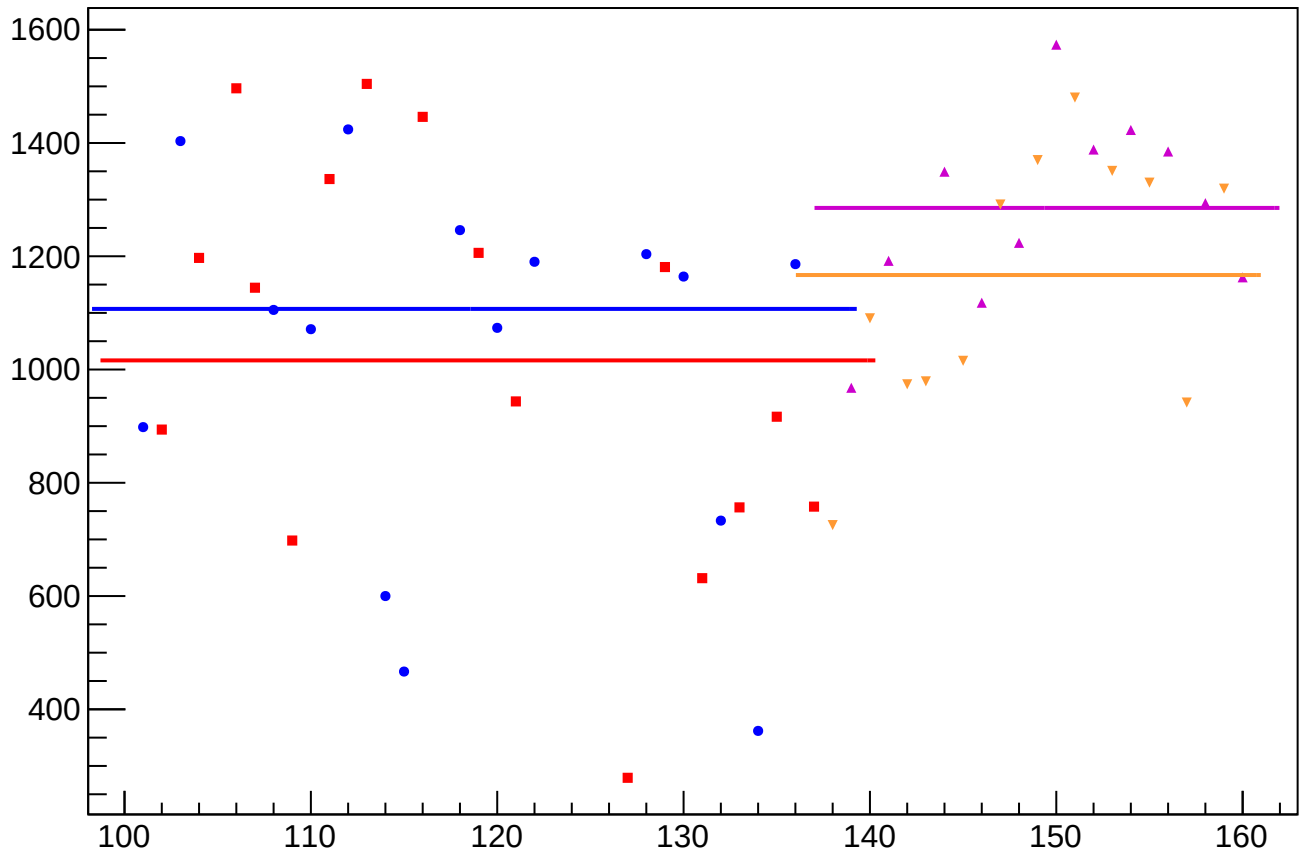
Left In: 79.096 $\pm$ 0.000  $\chi^2$ /NDF: 243975342218114768326270780809674752.0/10

+ sign 100.788 $\pm$ 0.000  $\chi^2$ /NDF: 439084065337808

All: 102.340 $\pm$ 0.000  $\chi^2$ /NDF: 92254045368

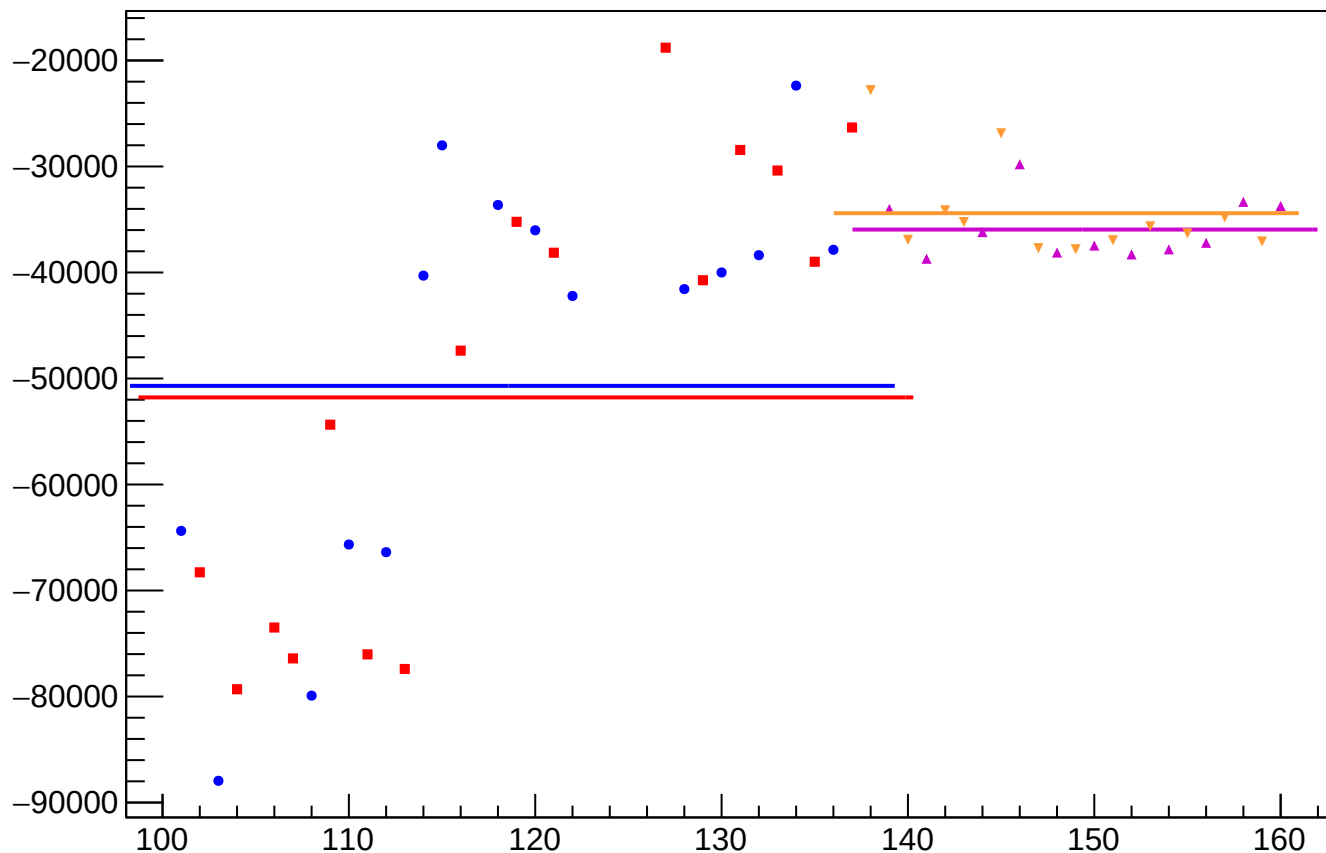
- sign 103.866 $\pm$ 0.000  $\chi^2$ /NDF: 482709269231347

dit\_sam1\_coil4\_Ndata\_mean vs Slug



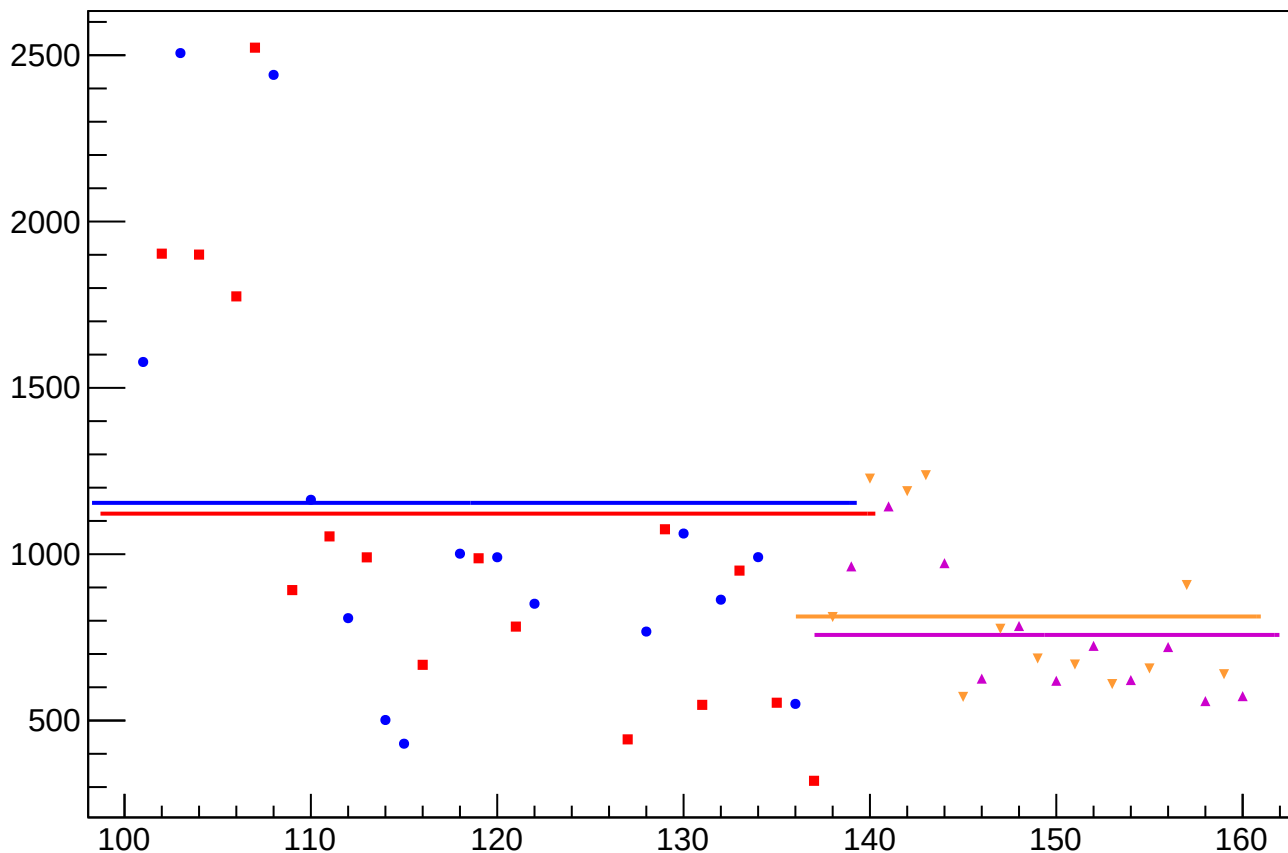
Right In: 1107.052 +/- 0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869 +/- 0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: 1016.106 +/- 0.000  $\chi^2/\text{NDF}$ : 72567664333509192712184310037150171136.0/15  
 Left In: 1285.364 +/- 0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10  
 All: 1157.392 +/- 0.000  $\chi^2/\text{NDF}$ : 21202911442  
 + sign 1142.031 +/- 0.000  $\chi^2/\text{NDF}$ : 86643588377316  
 - sign 1172.482 +/- 0.000  $\chi^2/\text{NDF}$ : 12465444911625

dit\_sam2\_coil4\_mean vs Slug



|                               |                                                                       |
|-------------------------------|-----------------------------------------------------------------------|
| Right In: -50695.424+/-0.000  | $\chi^2/\text{NDF}$ : 226613585253908576683077761132188355526656.0/14 |
| Left Out: -34404.656+/-0.000  | + sign -41169.025+/-0.000 $\chi^2/\text{NDF}$ : 346153436808          |
| Right Out: -51783.912+/-0.000 | $\chi^2/\text{NDF}$ : 18820007226442898256054839449855820038144.0/11  |
| Left In: -35949.660+/-0.000   | All: -41884.763+/-0.000 $\chi^2/\text{NDF}$ : 733189271               |
|                               | - sign -42587.904+/-0.000 $\chi^2/\text{NDF}$ : 3854485377902         |

dit\_sam2\_coil4\_err\_mean vs Slug



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

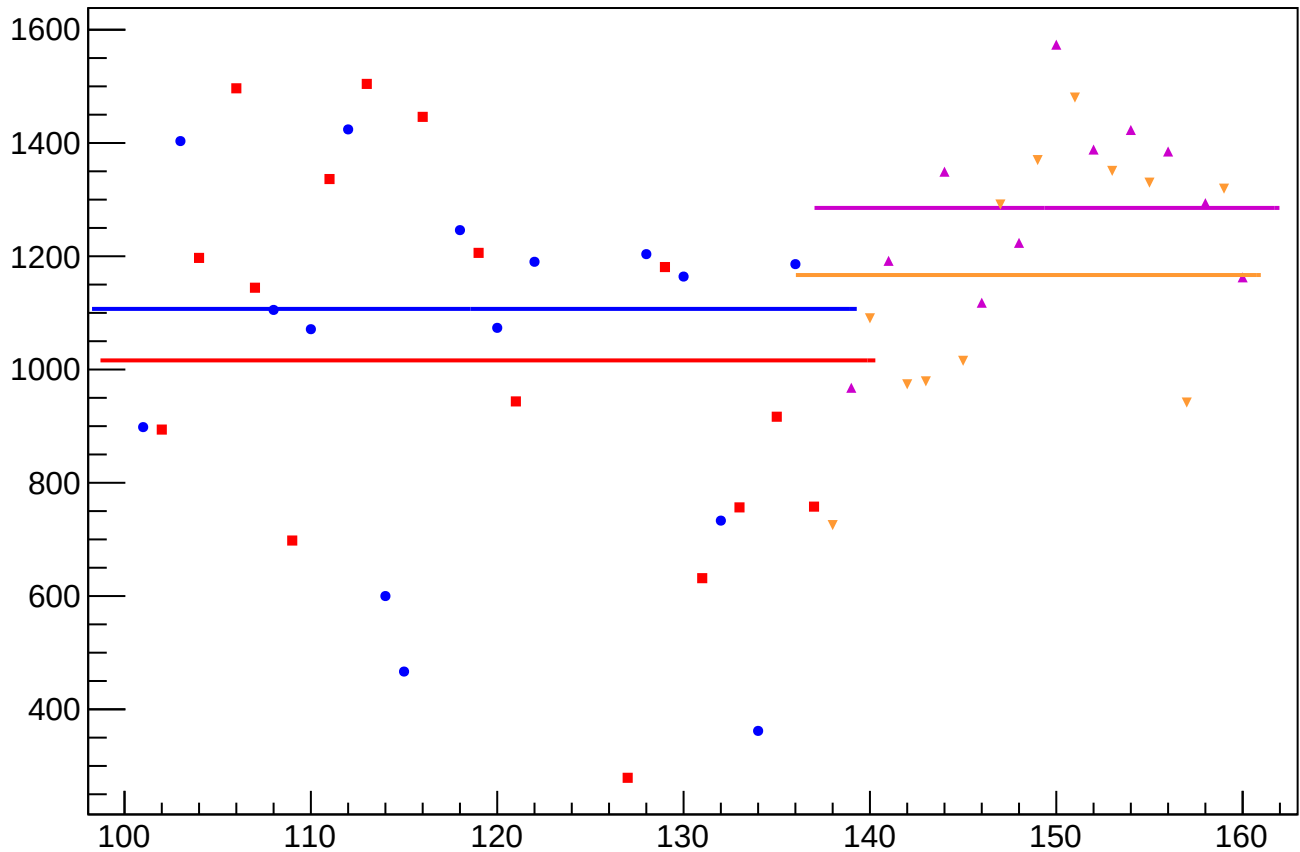
Left In: 757.349+/-0.000  $\chi^2/\text{NDF}$ : 31036557490853362173363612241828511744.0/10

+ sign 954.594+/-0.000  $\chi^2/\text{NDF}$ : 342415954696427

All: 932.198+/-0.000  $\chi^2/\text{NDF}$ : 65265633909

- sign 910.195+/-0.000  $\chi^2/\text{NDF}$ : 308686161162215

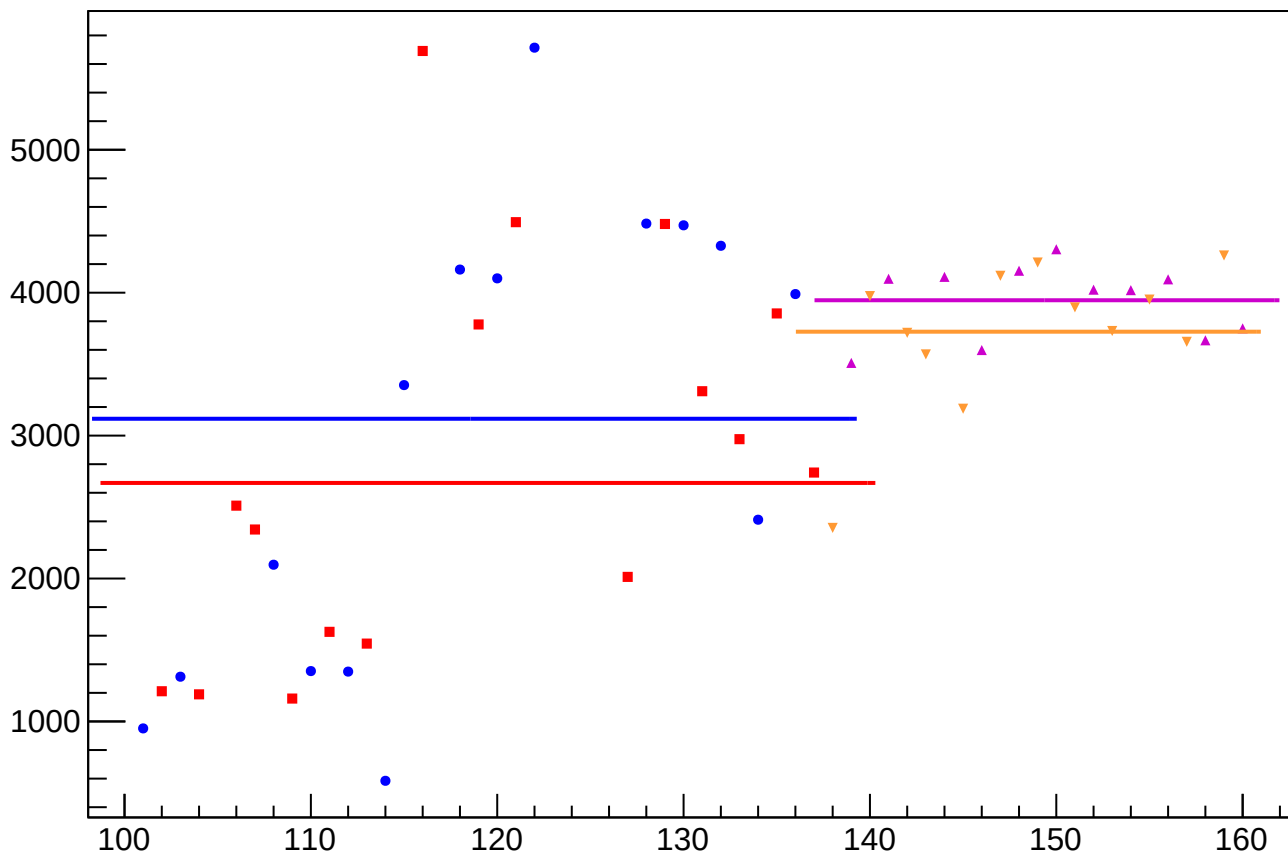
dit\_sam2\_coil4\_Ndata\_mean vs Slug



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: 1157.392 +/- 0.000  $\chi^2/\text{NDF}$ : 21202911442  
 + sign 1142.031 +/- 0.000  $\chi^2/\text{NDF}$ : 86643588377316  
 - sign 1172.482 +/- 0.000  $\chi^2/\text{NDF}$ : 12465444911625

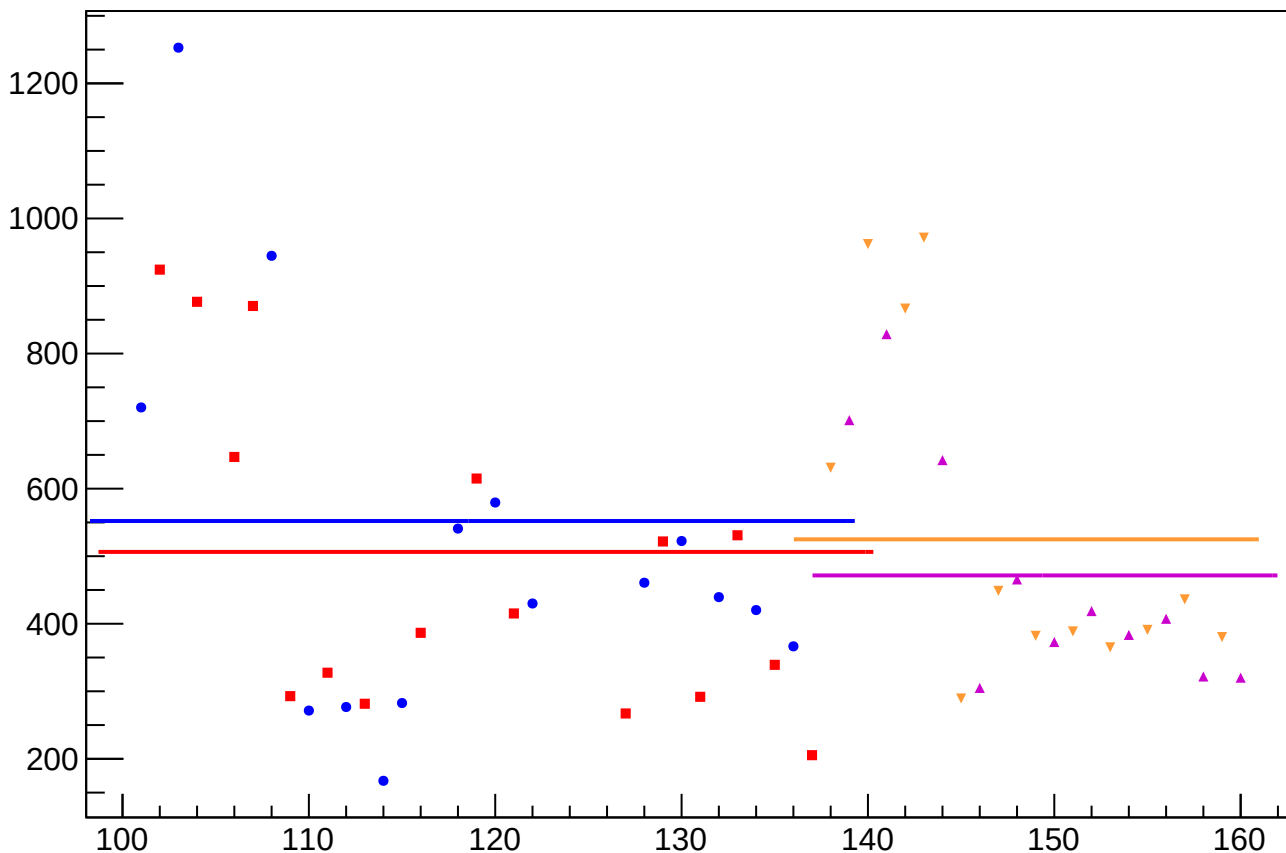


# dit\_sam3\_coil4\_mean vs Slug



Right In: 3117.914+/-0.000  $\chi^2/\text{NDF}$ : 1552738593335565674554918493159210090496.0/14  
 Left Out: 3727.095+/-0.000  $\chi^2/\text{NDF}$ : 237477678561542860292825834329185714176.0/11  
 Right Out: 2668.794+/-0.000  $\chi^2/\text{NDF}$ : 1136406286131098596000054422131257114624.0/15  
 Left In: 3947.046+/-0.000  $\chi^2/\text{NDF}$ : 56963661018859057070812095134472077312.0/10

dit\_sam3\_coil4\_err\_mean vs Slug



Right In: 552.108+/-0.000  $\chi^2/\text{NDF}$ : 50739041741159119848523988236001869824.0/14

+ sign 536.247+/-0.000  $\chi^2/\text{NDF}$ : 100138864573436

Left Out: 524.984+/-0.000  $\chi^2/\text{NDF}$ : 49120612413638370088062361036096798720.0/11

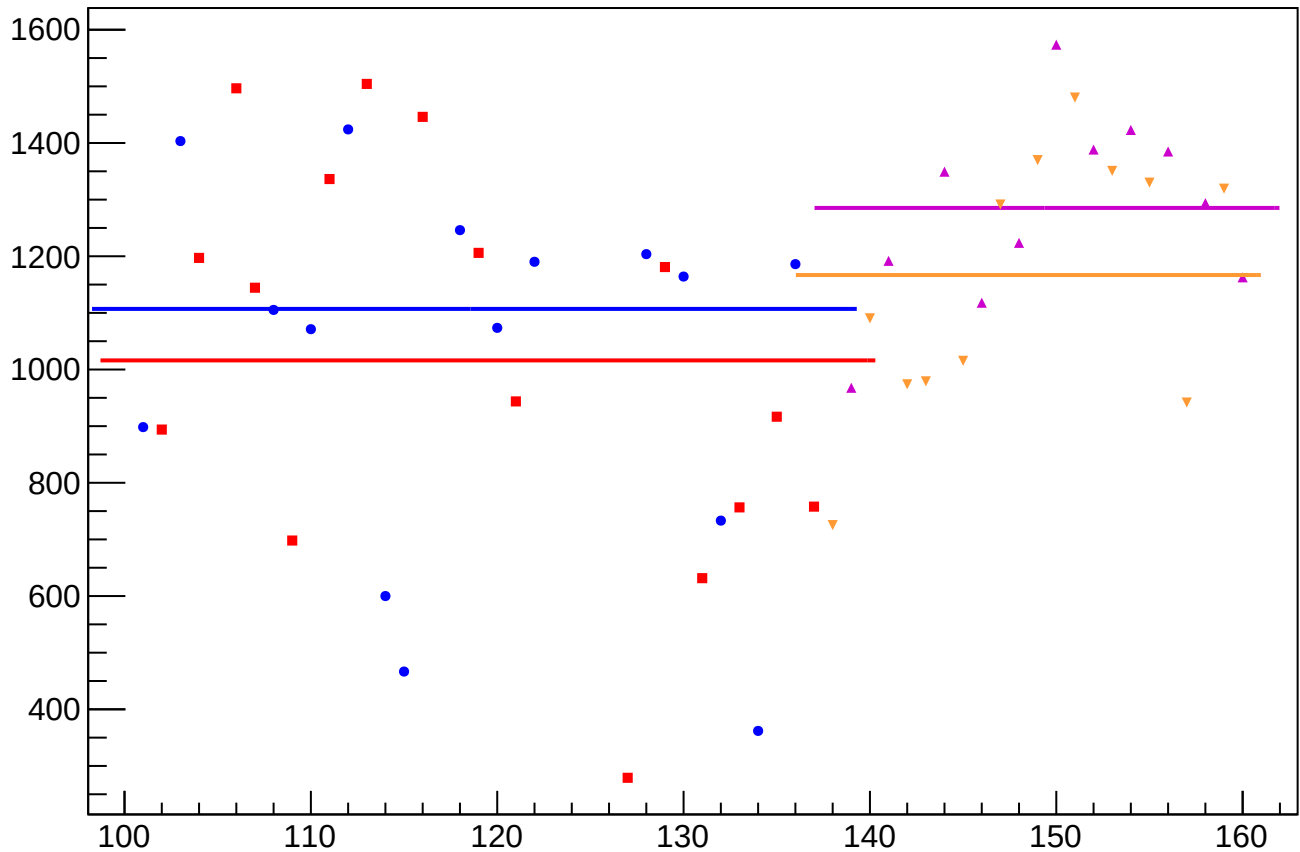
All: 510.967+/-0.000  $\chi^2/\text{NDF}$ : 165450893043

Right Out: 506.345+/-0.000  $\chi^2/\text{NDF}$ : 37181653297314883501659131806010572800.0/15

- sign 486.131+/-0.000  $\chi^2/\text{NDF}$ : 633318102977421

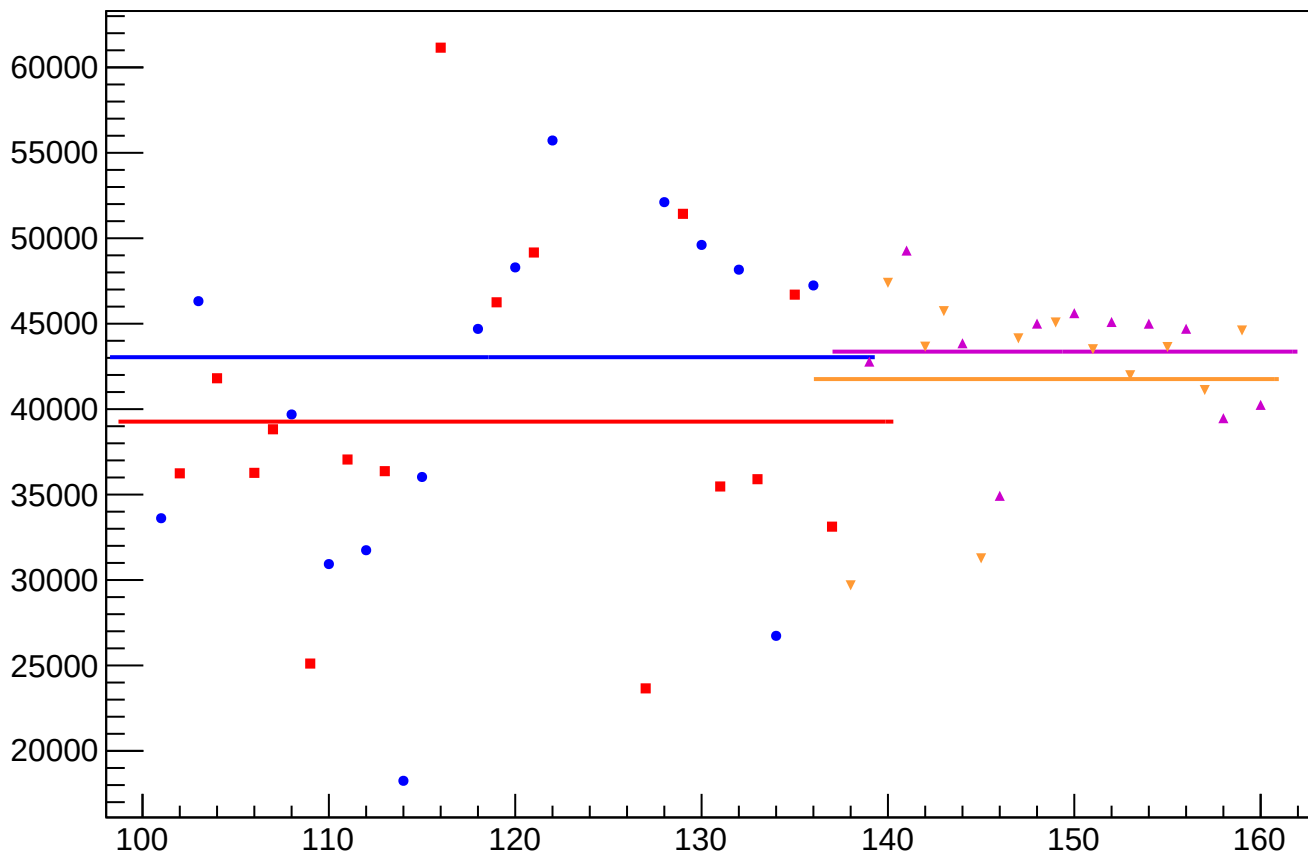
Left In: 471.540+/-0.000  $\chi^2/\text{NDF}$ : 25680884477827715914944205366363160576.0/10

dit\_sam3\_coil4\_Ndata\_mean vs Slug



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: 1157.392 +/- 0.000  $\chi^2/\text{NDF}$ : 21202911442  
 + sign 1142.031 +/- 0.000  $\chi^2/\text{NDF}$ : 86643588377316  
 - sign 1172.482 +/- 0.000  $\chi^2/\text{NDF}$ : 12465444911625

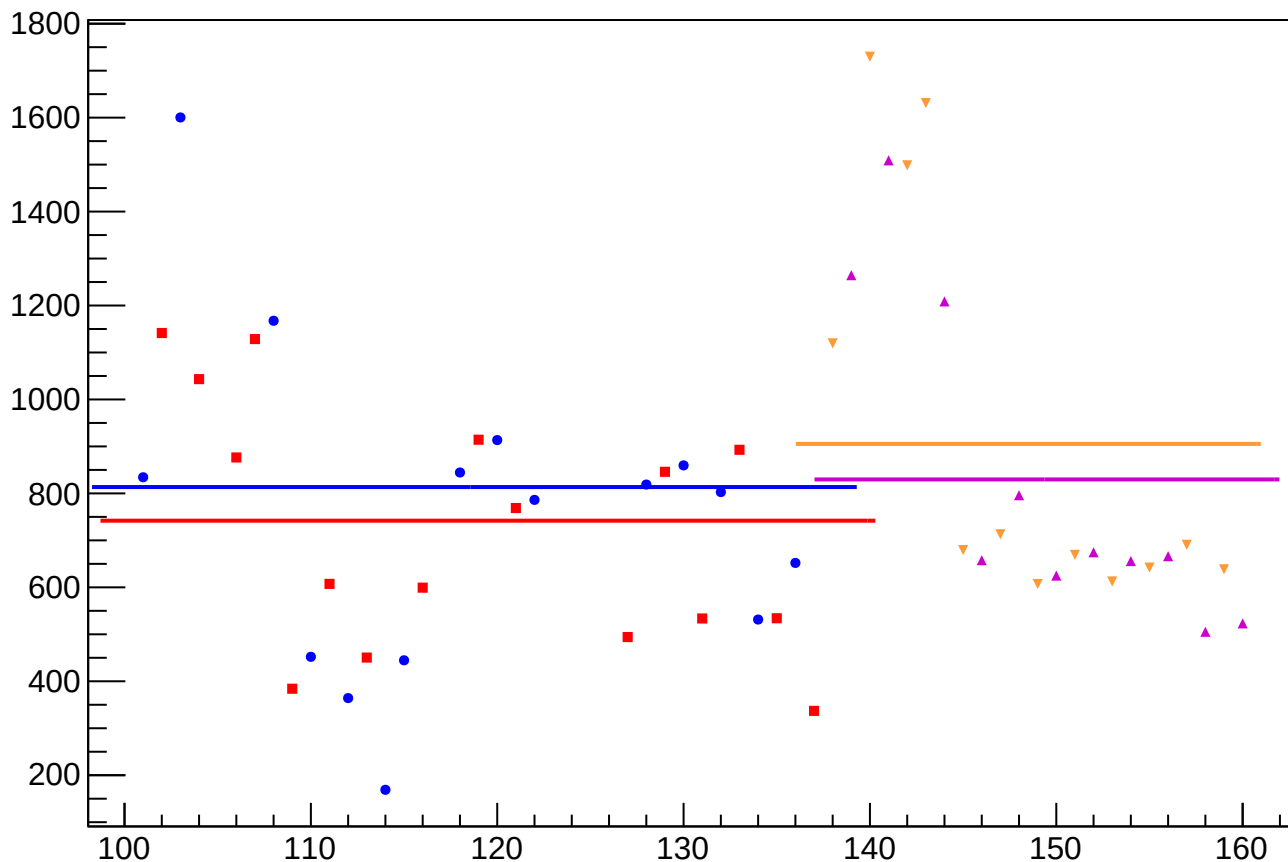
# dit\_sam4\_coil4\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| 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 |

+ sign 42291.015+/-0.000  $\chi^2/\text{NDF}$ : 7535805649529  
 All: 41966.664+/-0.000  $\chi^2/\text{NDF}$ : 146263445  
 - sign 41648.021+/-0.000  $\chi^2/\text{NDF}$ : 7057941602179

dit\_sam4\_coil4\_err\_mean vs Slug



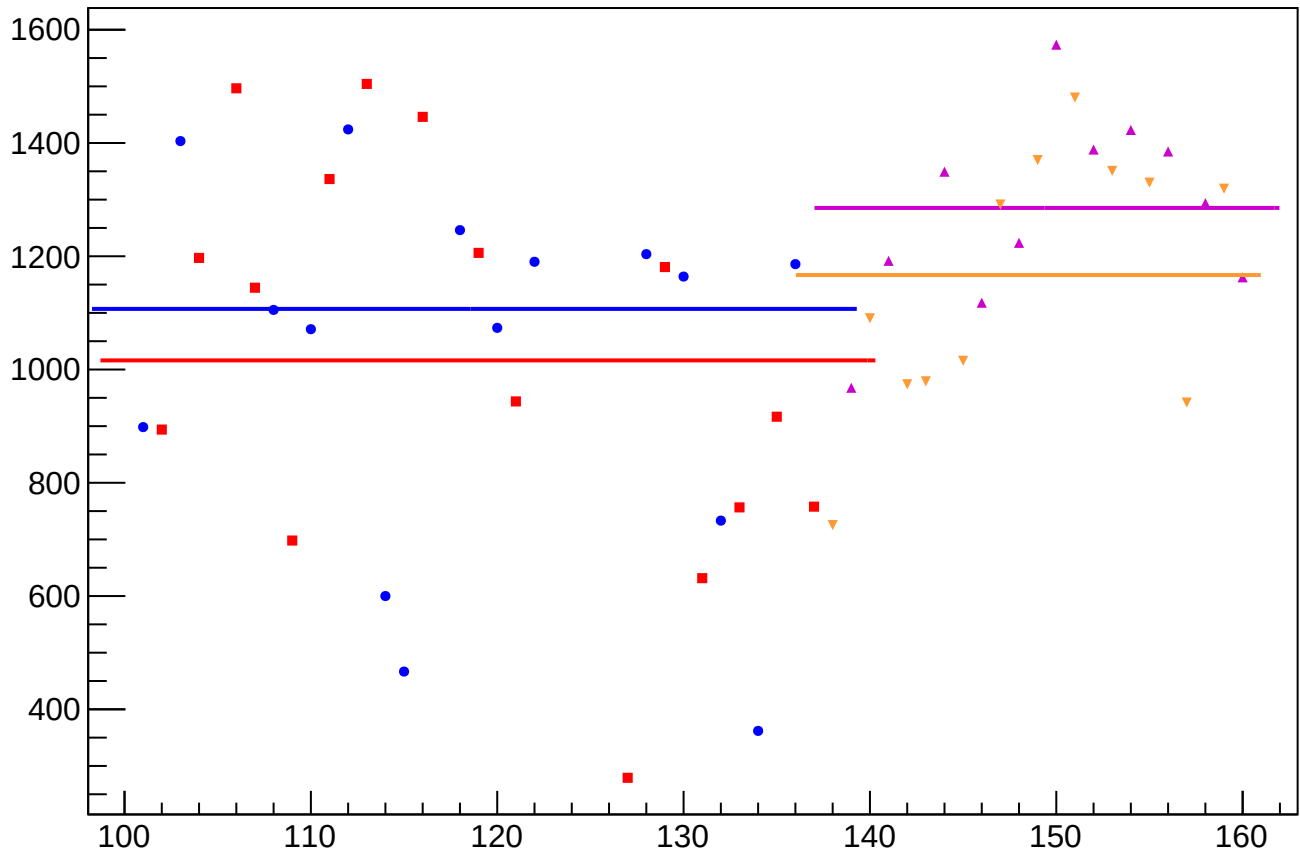
Right In: 813.500 $\pm$ 0.000  $\chi^2$ /NDF: 67120916816548237638948787518351343616.0/14

Left Out: 905.383 $\pm$ 0.000  $\chi^2$ /NDF: 151600119297269061553878773288042233856.0/11

Right Out: 741.911 $\pm$ 0.000  $\chi^2$ /NDF: 44074134397215409235604746432671645696.0/15

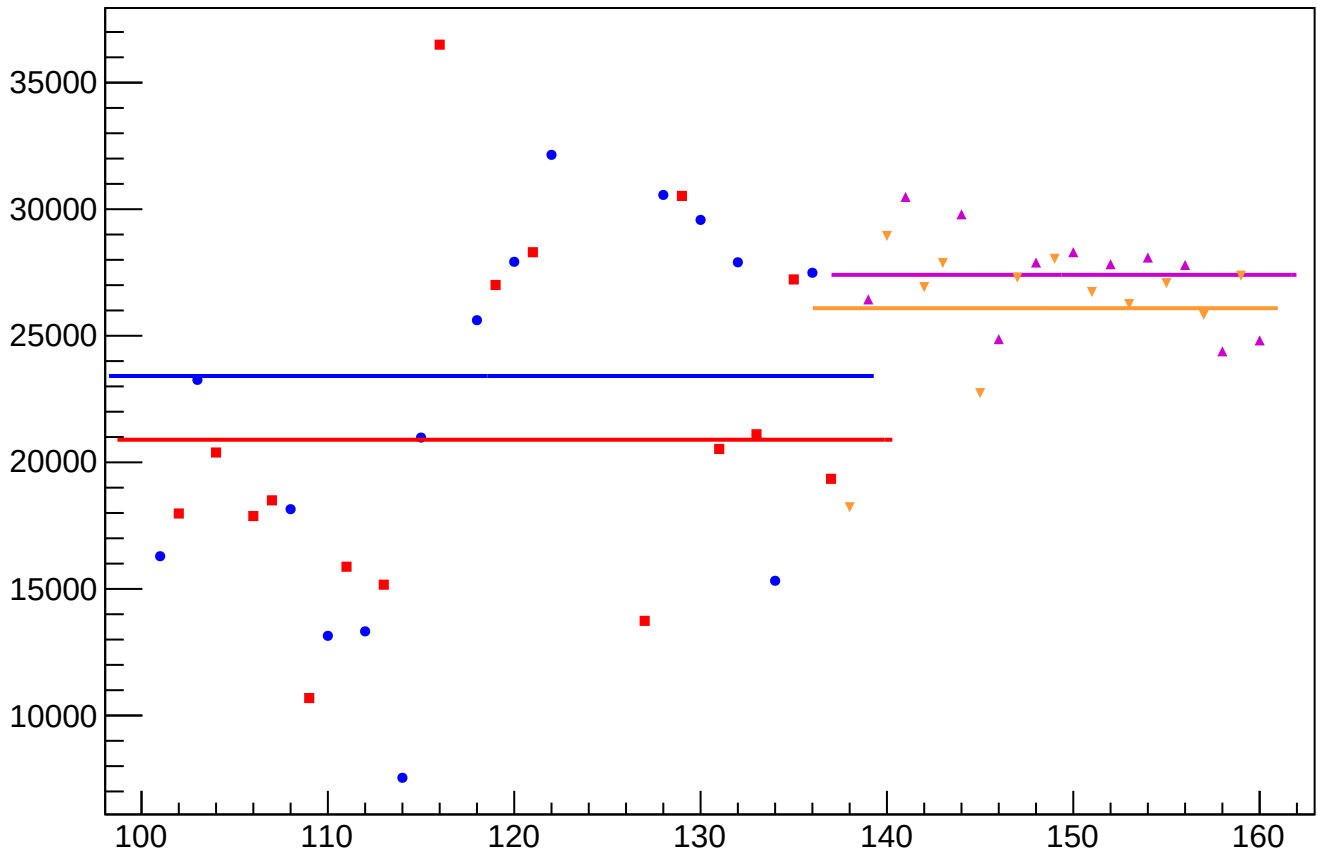
Left In: 829.715 $\pm$ 0.000  $\chi^2$ /NDF: 96077836071623048341749512260917657600.0/10

# dit\_sam4\_coil4\_Ndata\_mean vs Slug



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: 1157.392 +/- 0.000  $\chi^2/\text{NDF}$ : 21202911442

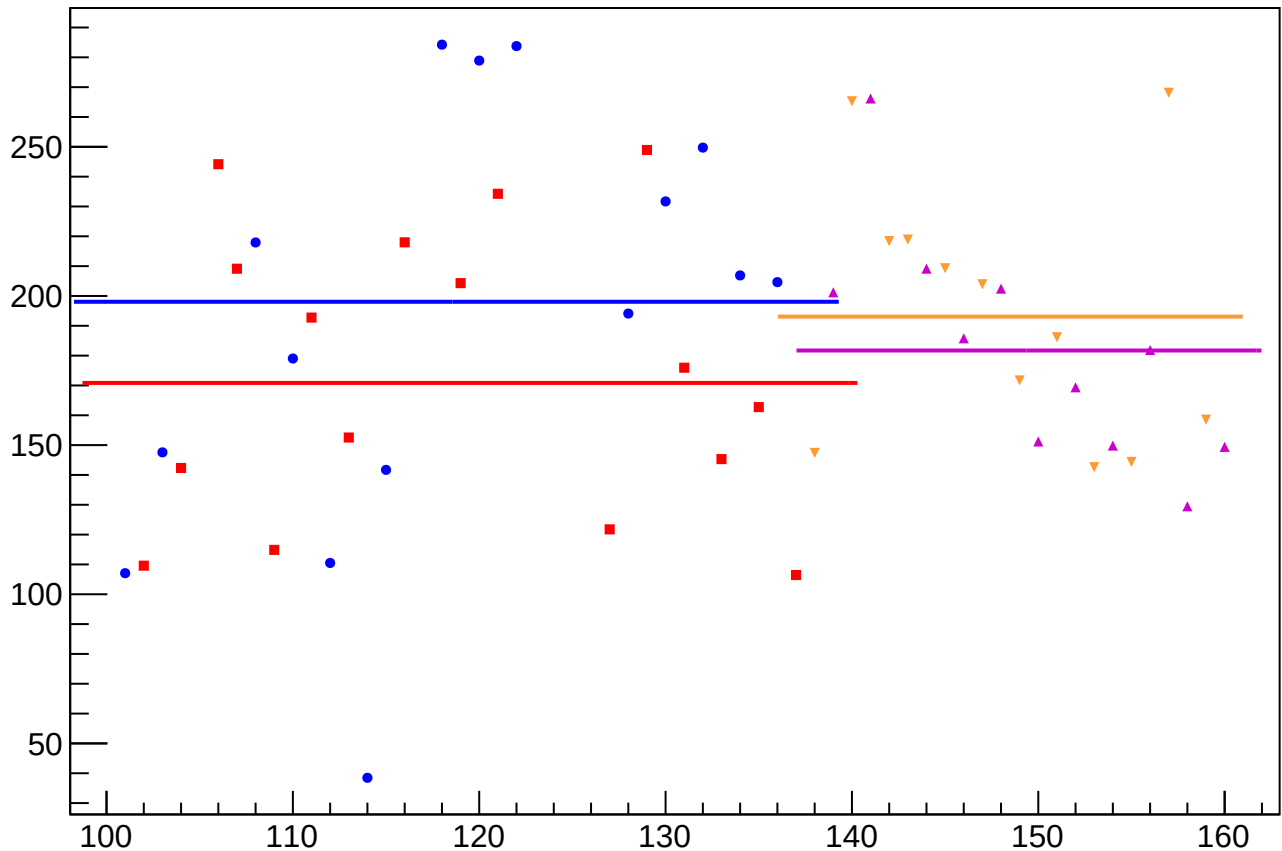
dit\_sam5\_coil4\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| 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  |

+ sign 24977.486+/-0.000  $\chi^2/\text{NDF}$ : 3844656677924  
 All: 24825.775+/-0.000  $\chi^2/\text{NDF}$ : 8568215489  
 - sign 24676.734+/-0.000  $\chi^2/\text{NDF}$ : 4716427212055

dit\_sam5\_coil4\_err\_mean vs Slug



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

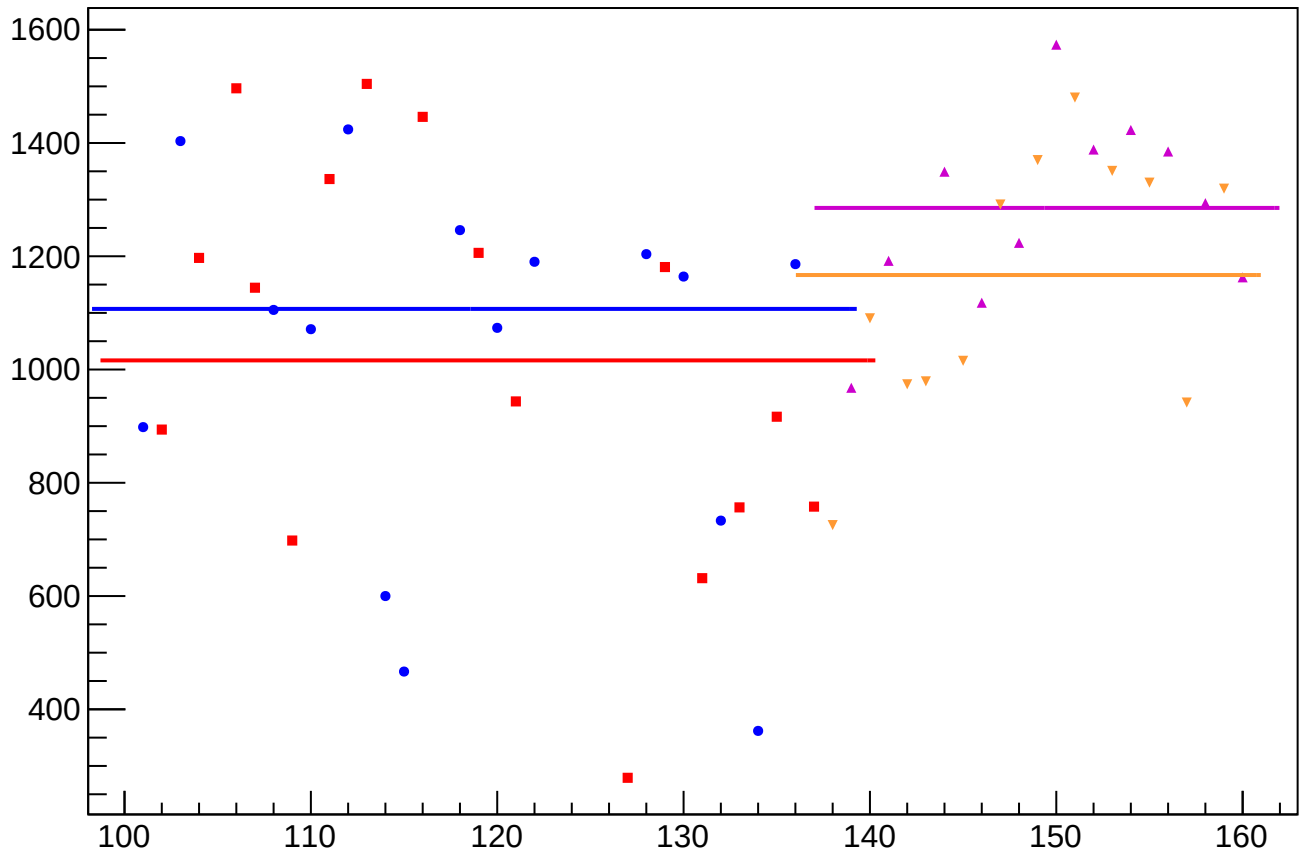
All: 186.074 +/- 0.000  $\chi^2/\text{NDF}$ : 712277108618

+ sign 195.148 +/- 0.000  $\chi^2/\text{NDF}$ : 417506015542371

- sign 177.159 +/- 0.000  $\chi^2/\text{NDF}$ : 269255092186089

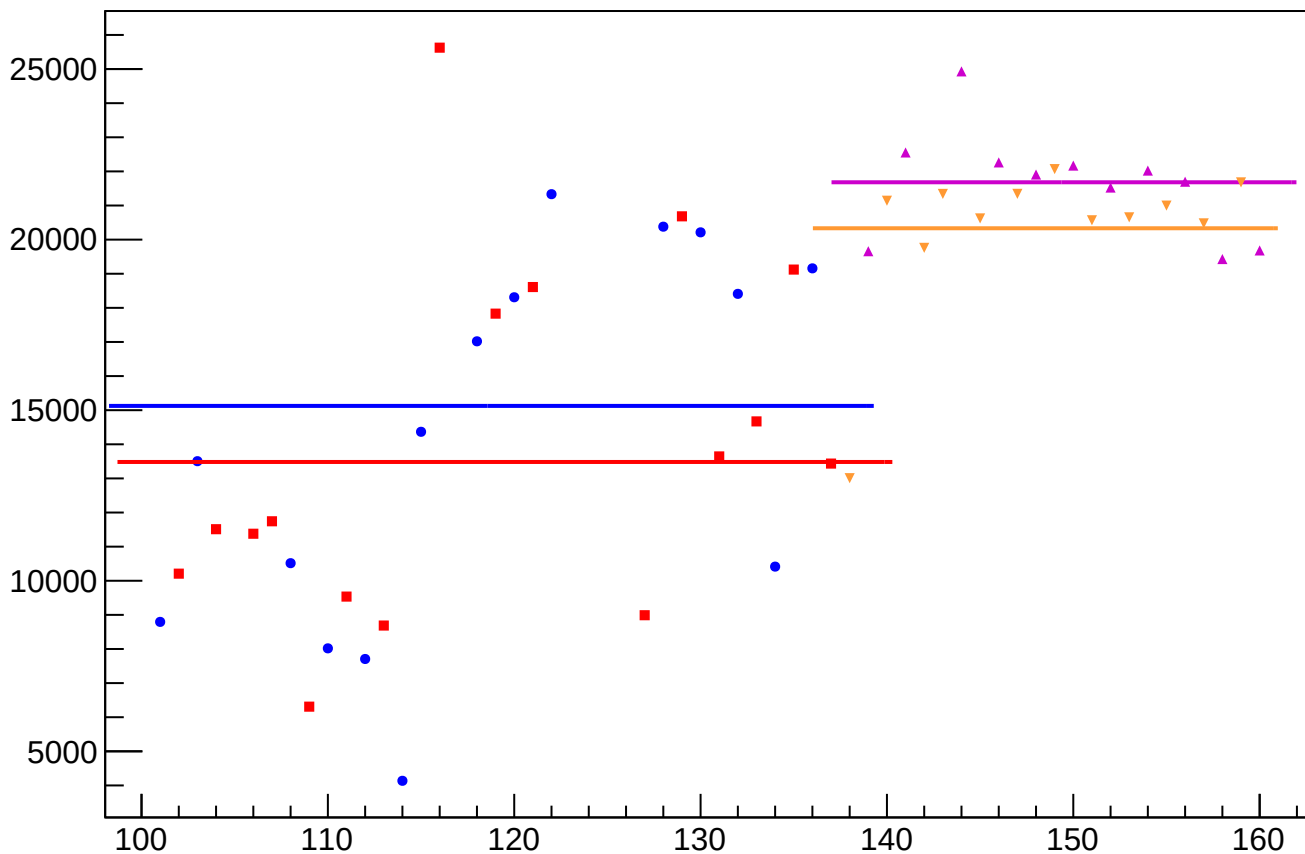


dit\_sam5\_coil4\_Ndata\_mean vs Slug



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: 1157.392 +/- 0.000  $\chi^2/\text{NDF}$ : 21202911442  
 + sign 1142.031 +/- 0.000  $\chi^2/\text{NDF}$ : 86643588377316  
 - sign 1172.482 +/- 0.000  $\chi^2/\text{NDF}$ : 12465444911625

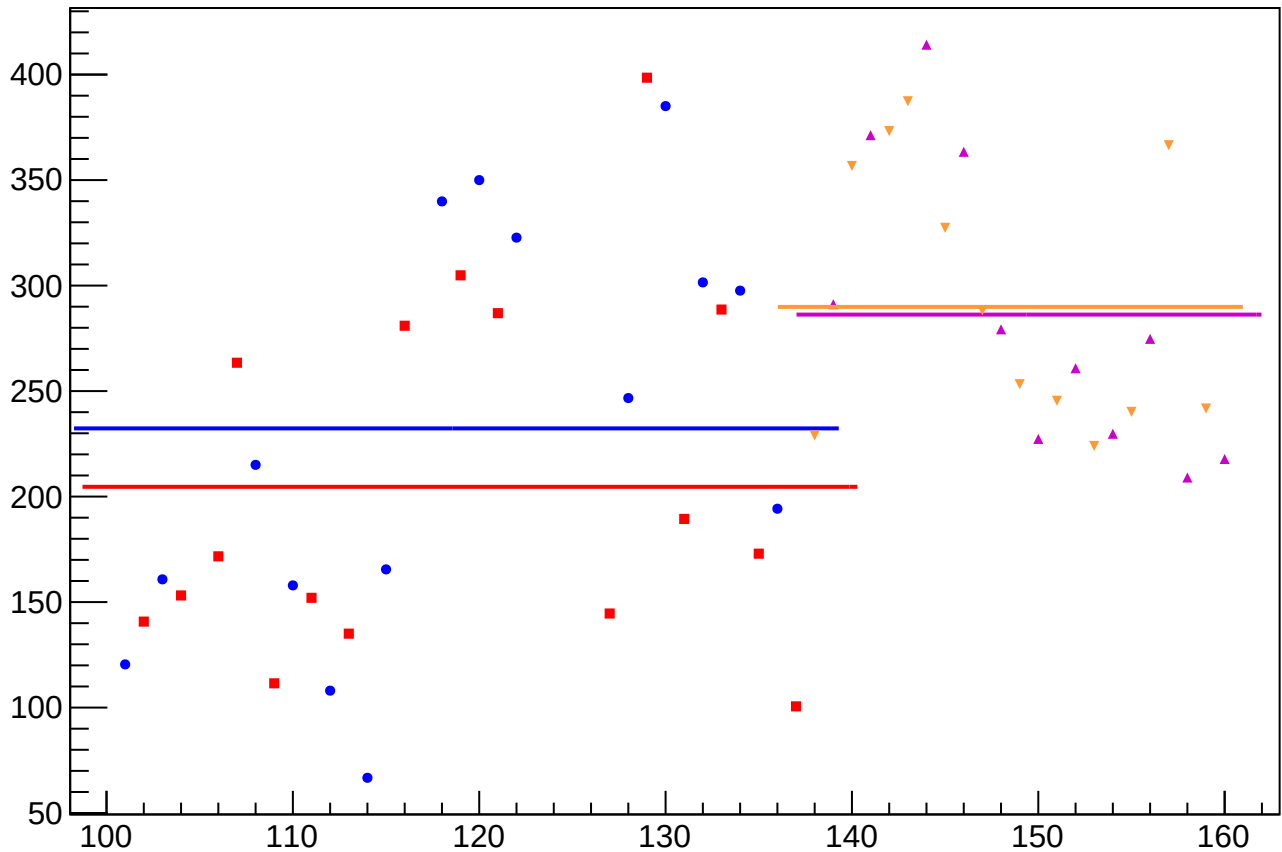
# dit\_sam6\_coil4\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| Right In: 15125.834+/-0.000  | $\chi^2/\text{NDF}$ : 16615438767664069151744668380763246297088.0/14 |
| Left Out: 20333.061+/-0.000  | $\chi^2/\text{NDF}$ : 4855949225776942763226853940369054236672.0/11  |
| Right Out: 13482.244+/-0.000 | $\chi^2/\text{NDF}$ : 159104264754078252502248749810022088704.0/15   |
| Left In: 21681.241+/-0.000   | $\chi^2/\text{NDF}$ : 2108874573649202621711530332866310307840.0/10  |

+ sign 18170.879+/-0.000  $\chi^2/\text{NDF}$ : 3176208714015  
 All: 18207.738+/-0.000  $\chi^2/\text{NDF}$ : 7582607940  
 - sign 18243.949+/-0.000  $\chi^2/\text{NDF}$ : 4405978256455

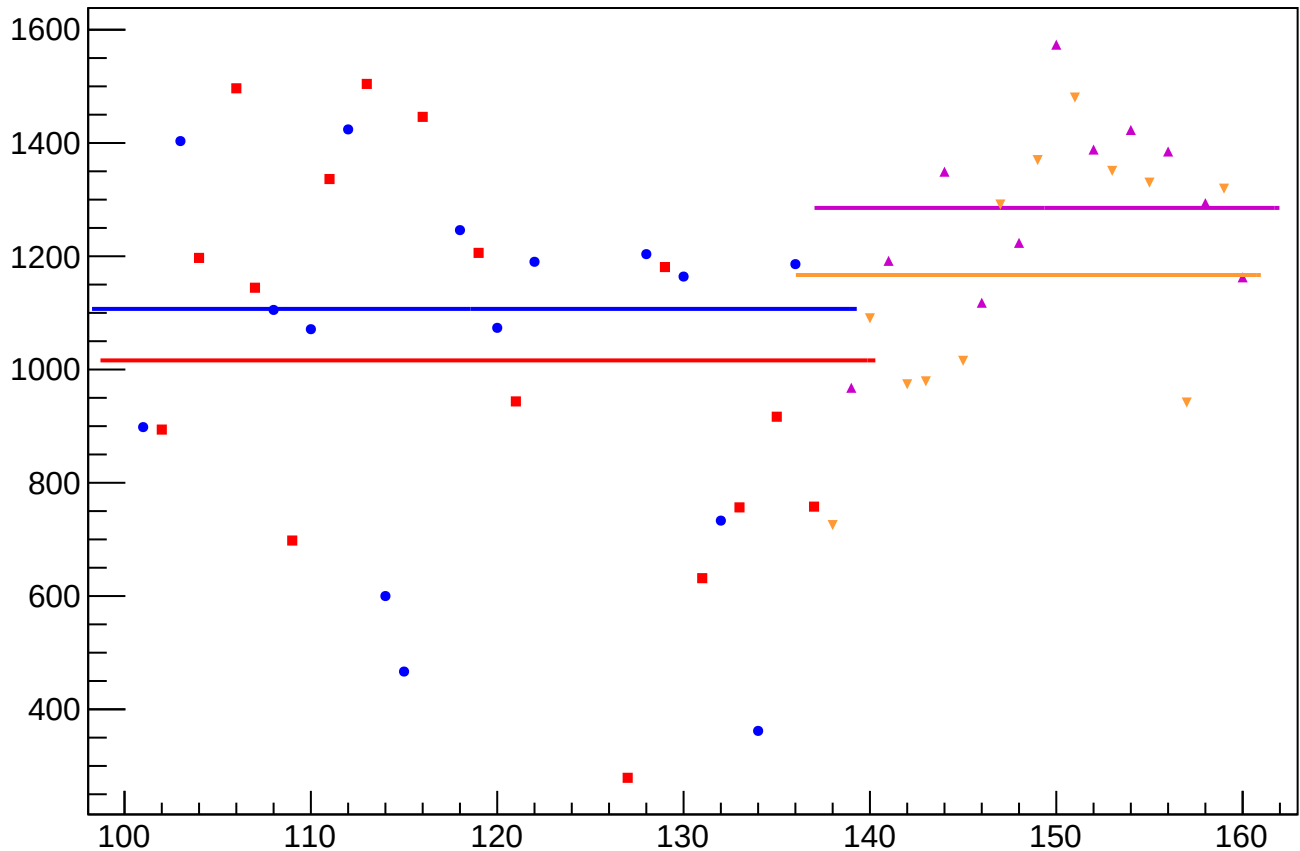
dit\_sam6\_coil4\_err\_mean vs Slug



|                            |                                                                  |
|----------------------------|------------------------------------------------------------------|
| 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 |

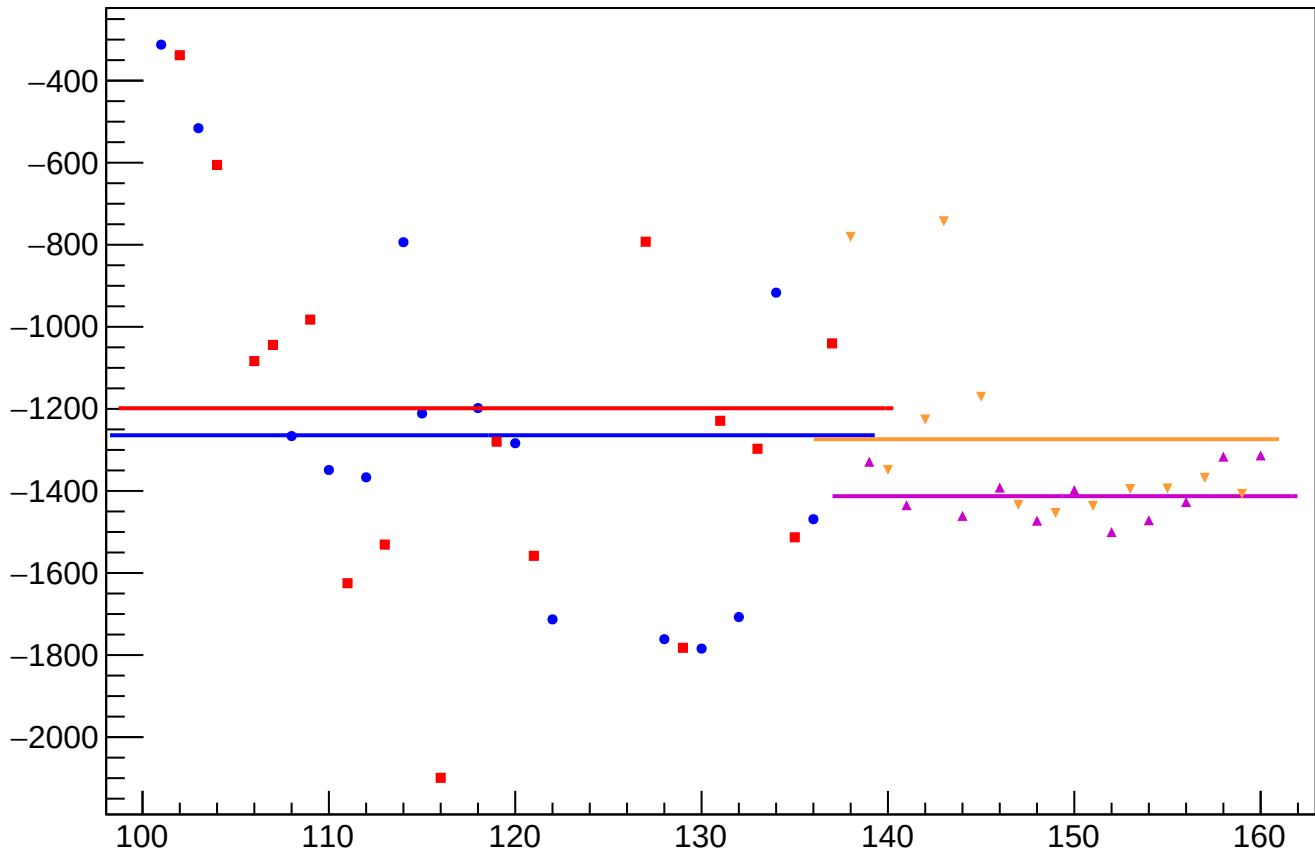
+ sign 265.986+/-0.000  $\chi^2/\text{NDF}$ : 993907240808893  
 All: 258.948+/-0.000  $\chi^2/\text{NDF}$ : 212946744199  
 - sign 252.033+/-0.000  $\chi^2/\text{NDF}$ : 112020972383493

dit\_sam6\_coil4\_Ndata\_mean vs Slug



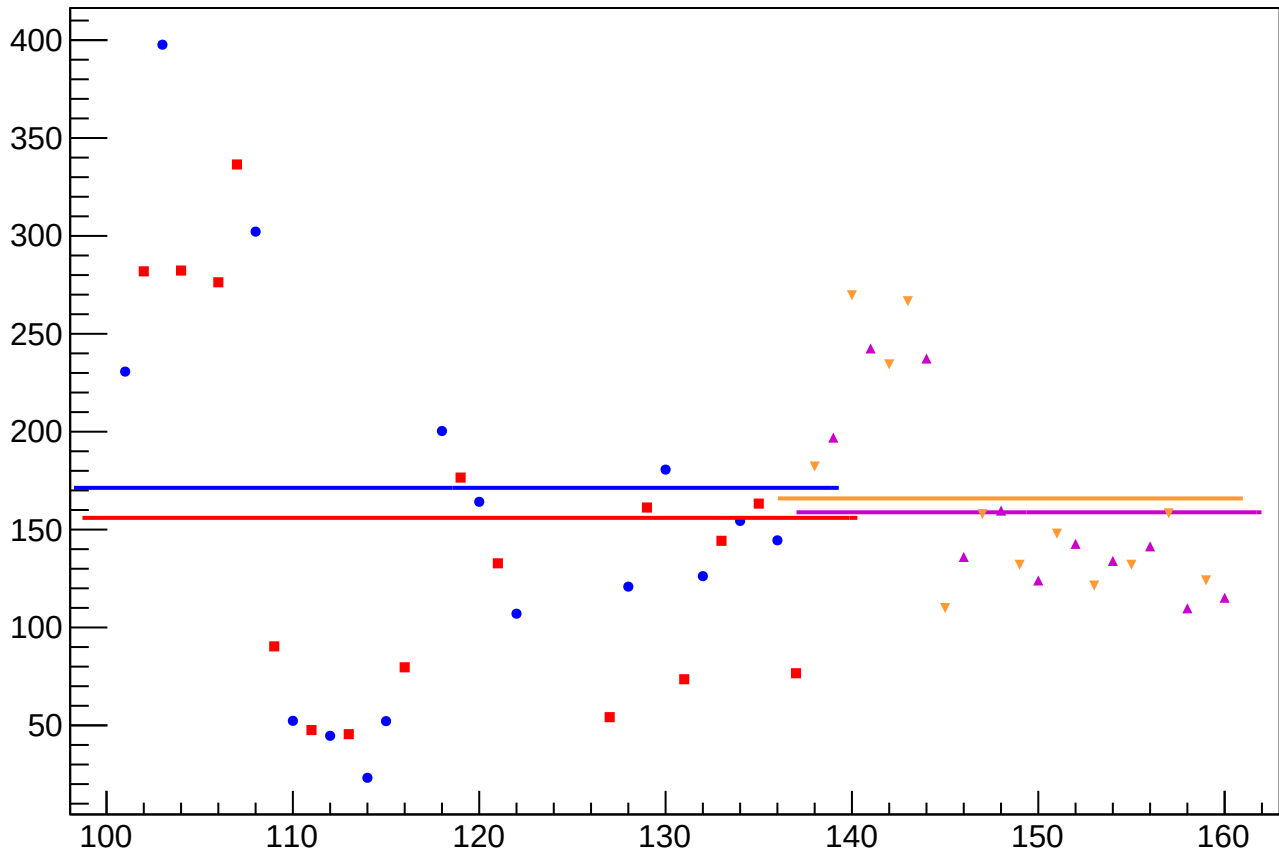
Right In: 1107.052+/-0.000  $\chi^2/\text{NDF}$ : 40633831787810179240542210398269472768.0/14  
 Left Out: 1166.869+/-0.000  $\chi^2/\text{NDF}$ : 44651845589529754769451964140544327680.0/11  
 Right Out: 1016.106+/-0.000  $\chi^2/\text{NDF}$ : 72567664333509192712184310037150171136.0/15  
 Left In: 1285.364+/-0.000  $\chi^2/\text{NDF}$ : 24002572803732345959736048095514853376.0/10

dit\_sam7\_coil4\_mean vs Slug



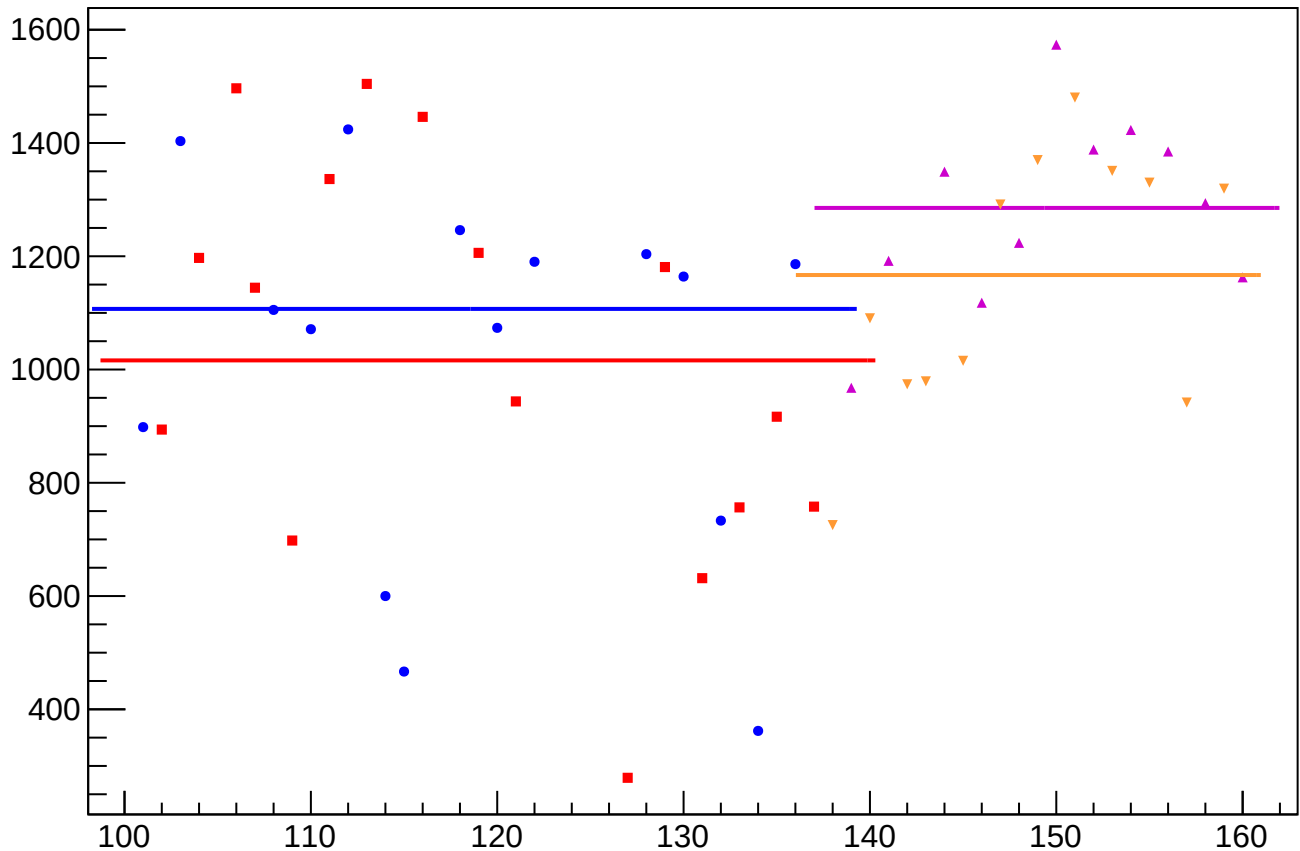
Right In:  $-1264.303 \pm 0.000$   $\chi^2/\text{NDF}$ : 140215251538502657549173994543931981824.0/14  
 Left Out:  $-1273.912 \pm 0.000$   $\chi^2/\text{NDF}$ : 50517219487332482659121972372719009792.0/11  
 Right Out:  $-1198.483 \pm 0.000$   $\chi^2/\text{NDF}$ : 131164763898016793515492217696167133184.0/15  
 Left In:  $-1412.771 \pm 0.000$   $\chi^2/\text{NDF}$ : 3642959557366432228461510163957809152.0/10

dit\_sam7\_coil4\_err\_mean vs Slug



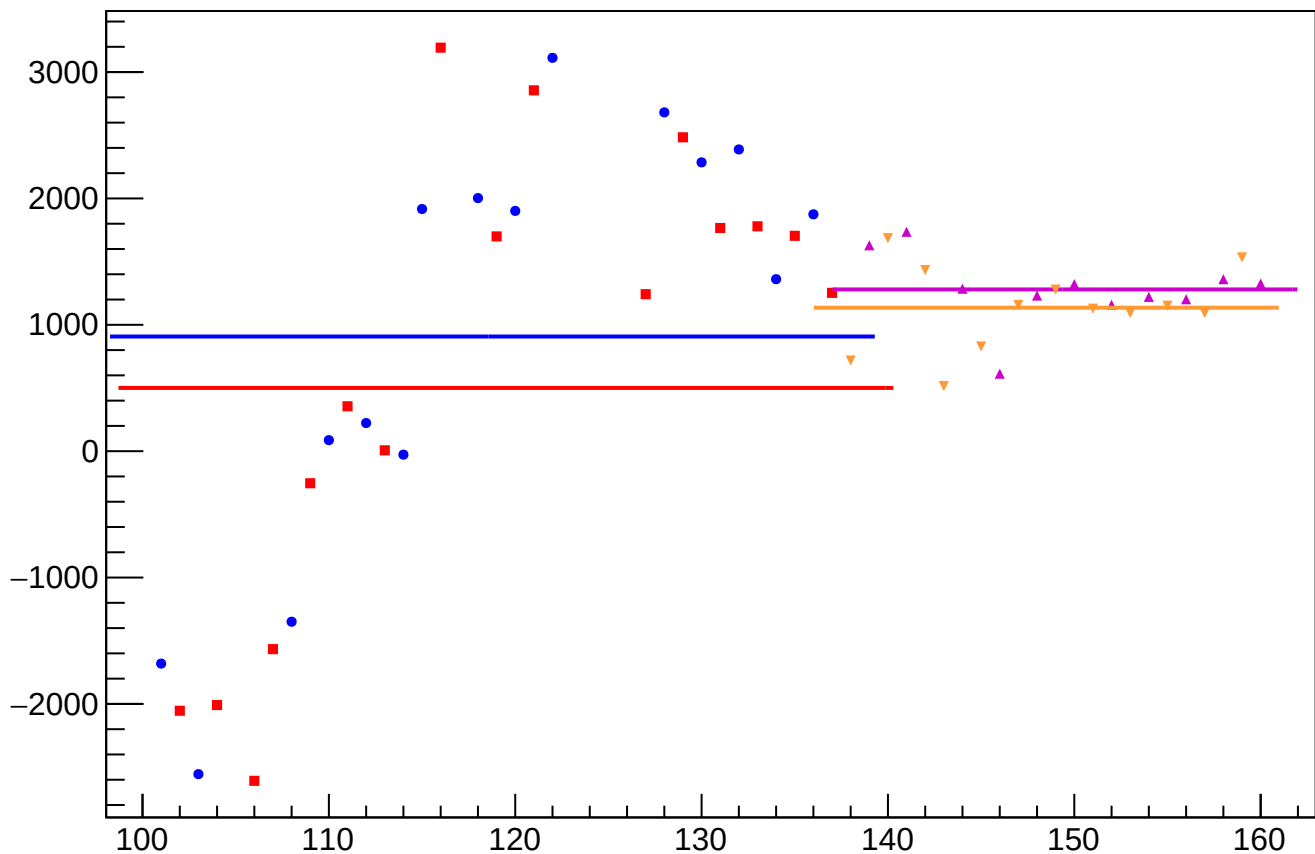
Right In: 171.323+/-0.000  $\chi^2/\text{NDF}$ : 6120975075187305509795143064993398784.0/14  
 Left Out: 165.917+/-0.000  $\chi^2/\text{NDF}$ : 2574923375517186479088669940447707136.0/11  
 Right Out: 155.993+/-0.000  $\chi^2/\text{NDF}$ : 5680659281504595852021524727244783616.0/15  
 Left In: 158.834+/-0.000  $\chi^2/\text{NDF}$ : 1853310895668256586520412981739651072.0/10

dit\_sam7\_coil4\_Ndata\_mean vs Slug



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

dit\_sam8\_coil4\_mean vs Slug



|                            |                                                                     |
|----------------------------|---------------------------------------------------------------------|
| 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   |

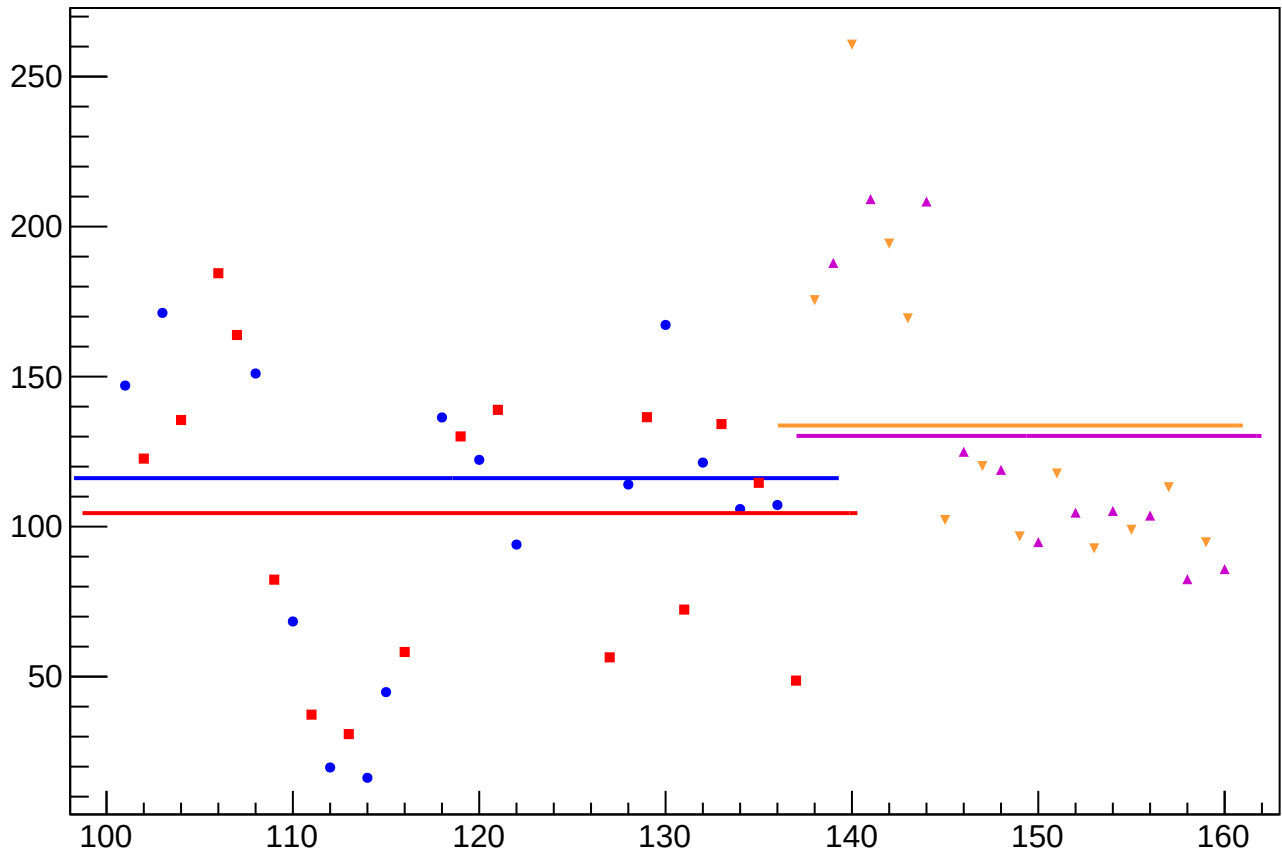
+ sign 1040.809+/-0.000  $\chi^2/\text{NDF}$ : 22174332894874

All: 996.658+/-0.000  $\chi^2/\text{NDF}$ : 460055616816

- sign 953.284+/-0.000  $\chi^2/\text{NDF}$ : 237708288217536



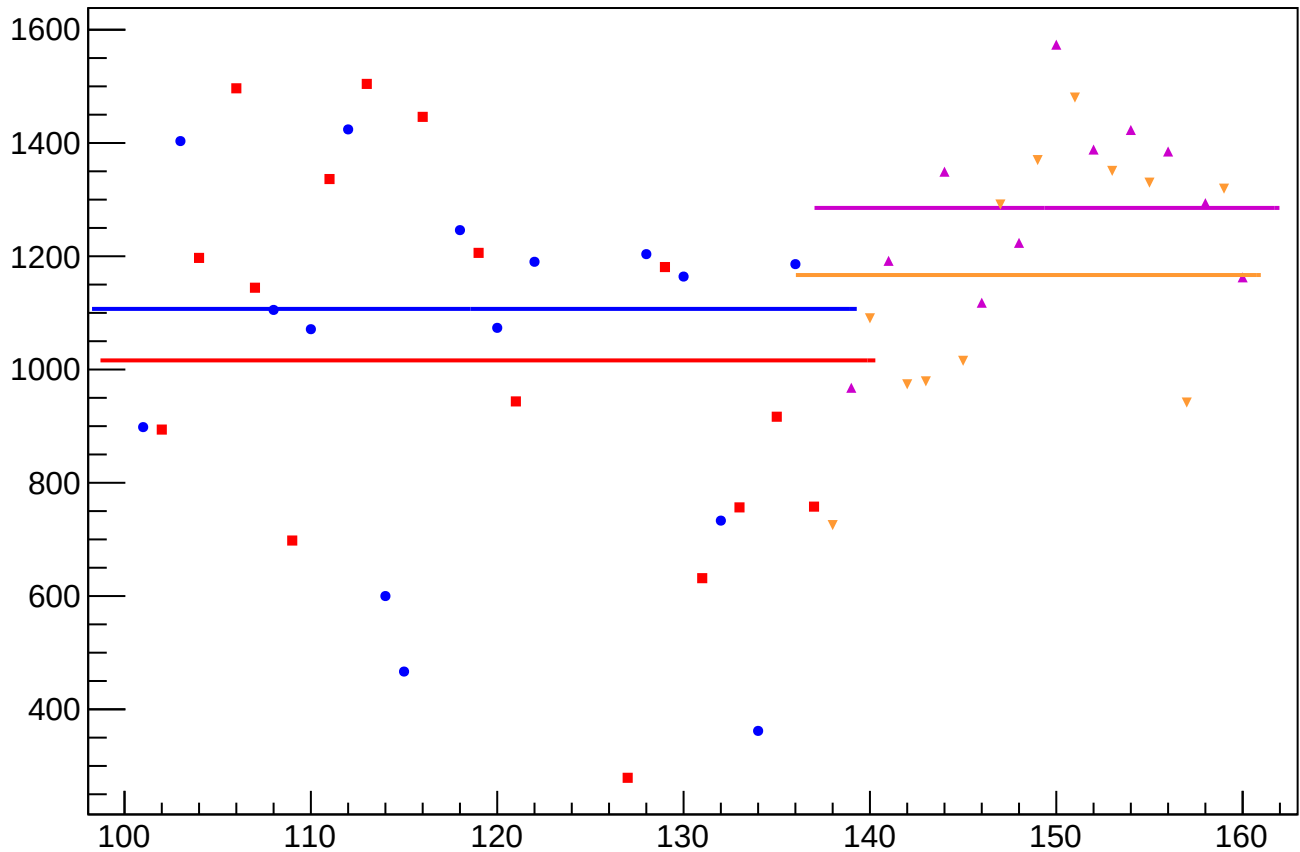
# dit\_sam8\_coil4\_err\_mean vs Slug



|                            |                                                                  |
|----------------------------|------------------------------------------------------------------|
| Right In: 116.159+/-0.000  | $\chi^2/\text{NDF}$ : 1198526427485199785396504127288115200.0/14 |
| Left Out: 133.695+/-0.000  | $\chi^2/\text{NDF}$ : 2332238004384262852879386446827356160.0/11 |
| Right Out: 104.501+/-0.000 | $\chi^2/\text{NDF}$ : 1285986383644058507445602420764180480.0/15 |
| Left In: 130.237+/-0.000   | $\chi^2/\text{NDF}$ : 1968814259217478663576054483231178752.0/10 |

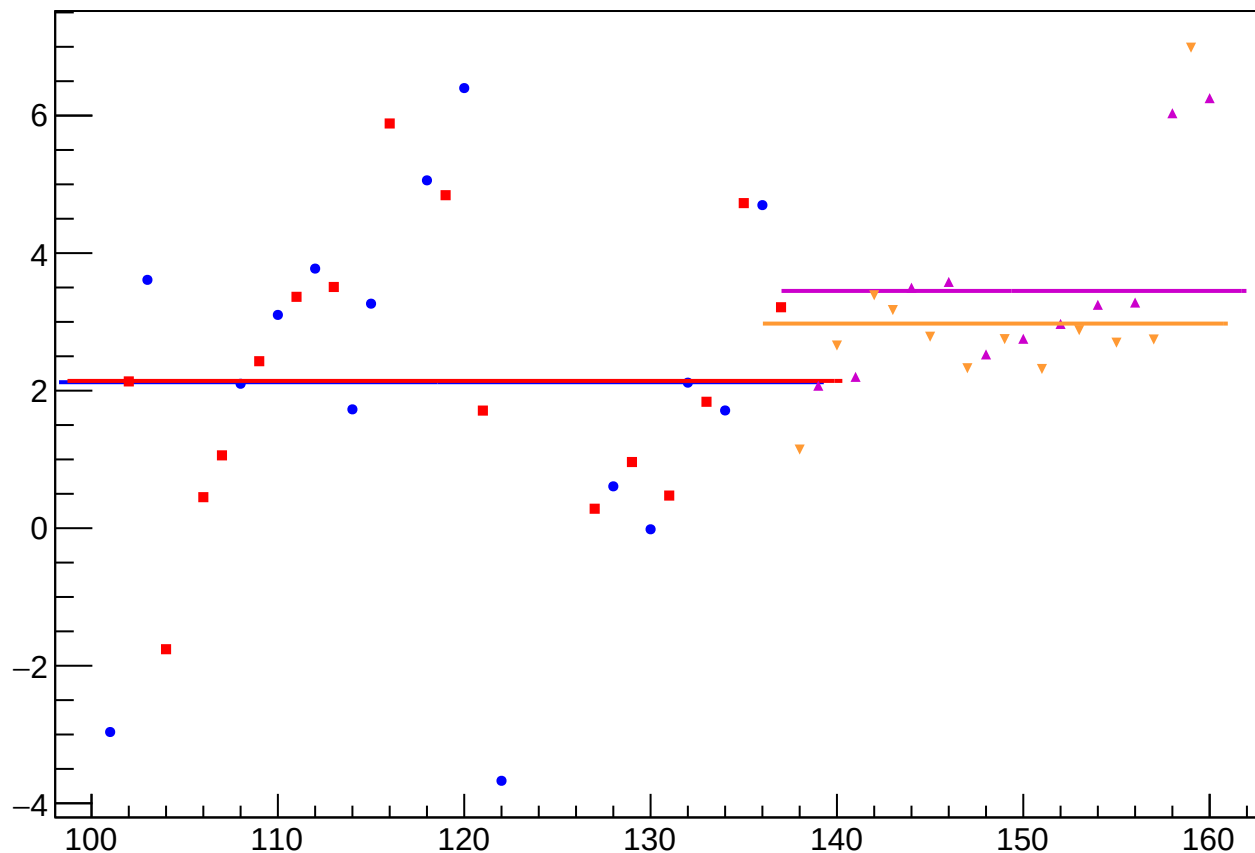
+ sign 126.414+/-0.000  $\chi^2/\text{NDF}$ : 364747445092715  
 All: 122.900+/-0.000  $\chi^2/\text{NDF}$ : 71971163823  
 - sign 119.447+/-0.000  $\chi^2/\text{NDF}$ : 351137486927292

dit\_sam8\_coil4\_Ndata\_mean vs Slug



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: 1157.392 +/- 0.000  $\chi^2/\text{NDF}$ : 21202911442  
 + sign 1142.031 +/- 0.000  $\chi^2/\text{NDF}$ : 86643588377316  
 - sign 1172.482 +/- 0.000  $\chi^2/\text{NDF}$ : 12465444911625

# dit\_4aX\_coil6\_mean vs Slug



Right In: 2.123+/-0.000

$\chi^2/\text{NDF}$ : 5263705922821075971022013849403392.0/14

Left Out: 2.975+/-0.000

$\chi^2/\text{NDF}$ : 1653073452461549310648226194391040.0/11

Right Out: 2.142+/-0.000

$\chi^2/\text{NDF}$ : 2472949940993672466161692257026048.0/15

Left In: 3.450+/-0.000

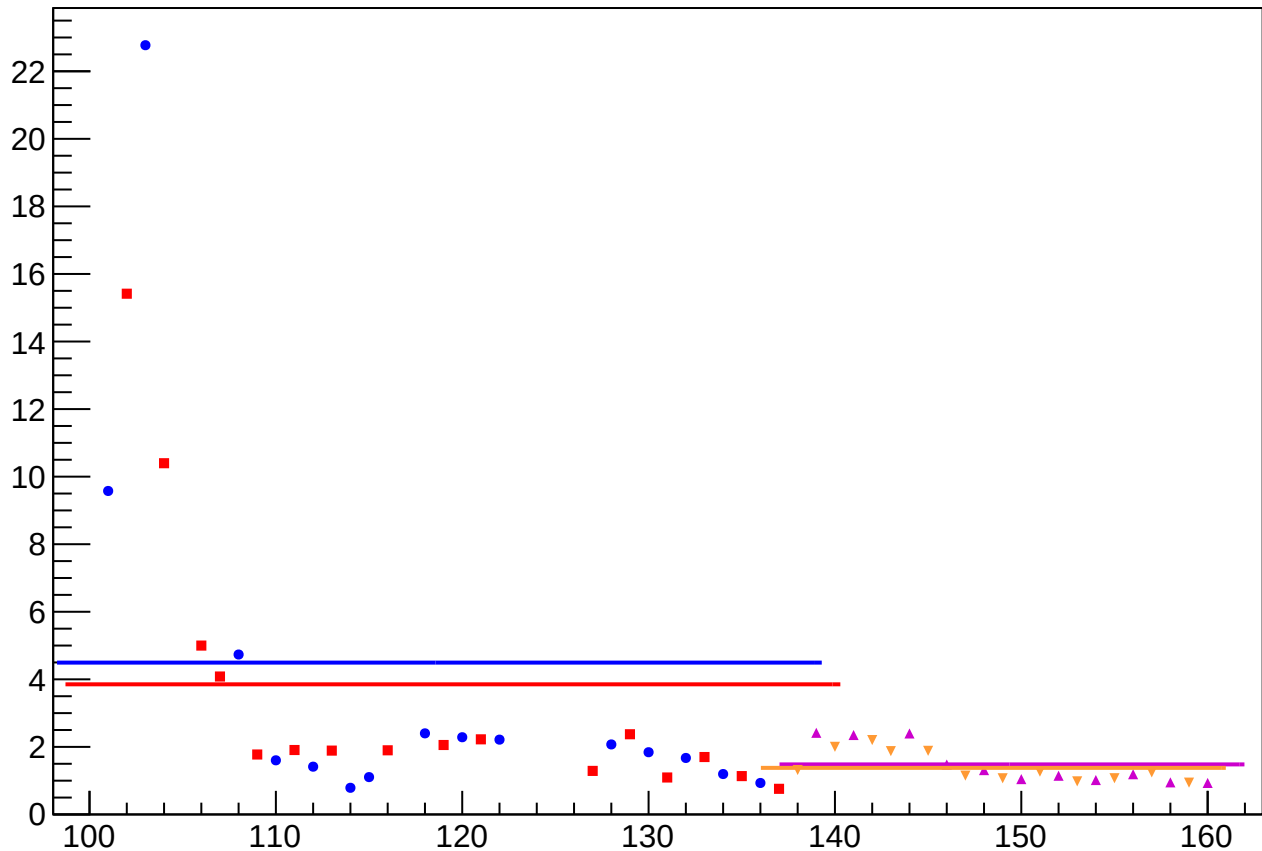
$\chi^2/\text{NDF}$ : 1551935058842125730993767819771904.0/10

+ sign 2.621+/-0.000  $\chi^2/\text{NDF}$ : 71926109698373780

All: 2.763+/-0.000  $\chi^2/\text{NDF}$ : 11942737584809

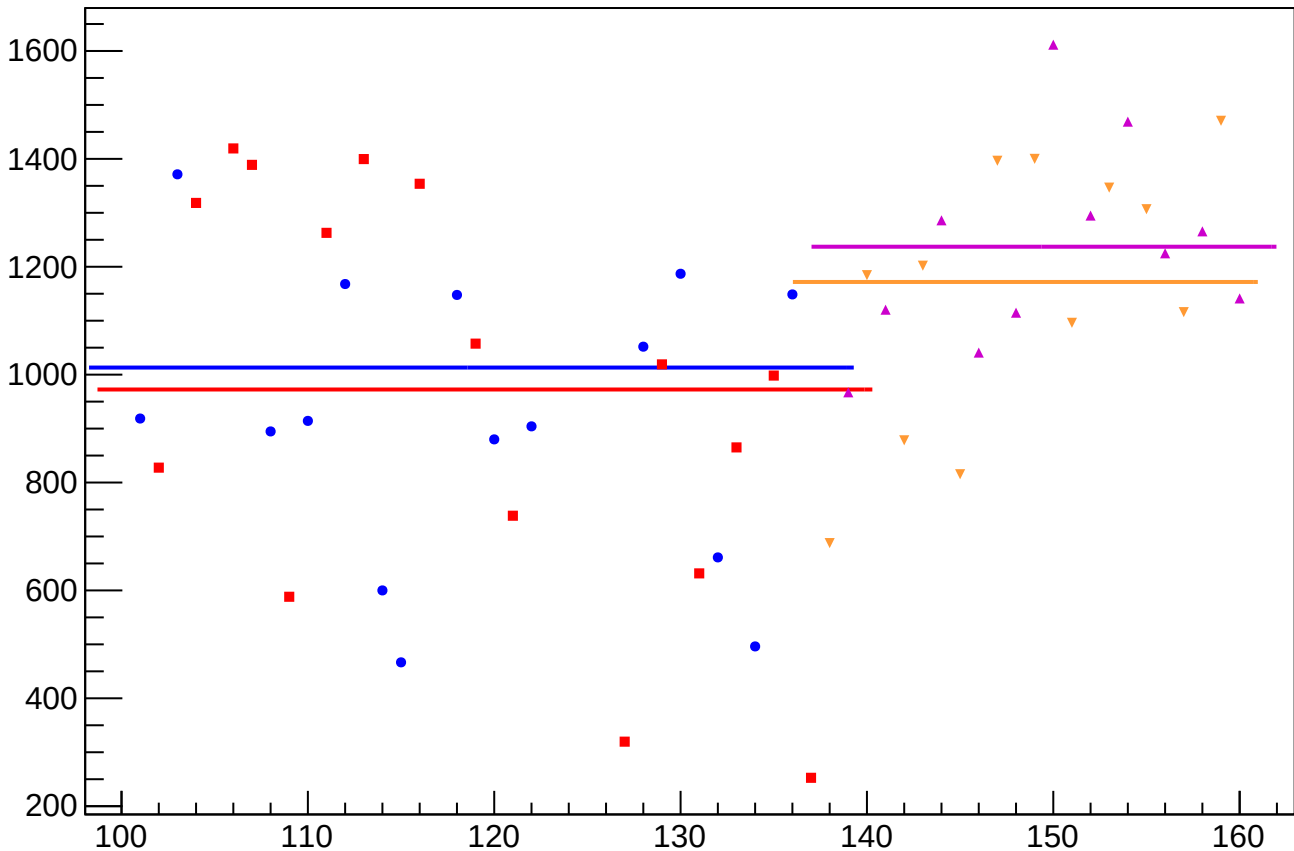
- sign 2.902+/-0.000  $\chi^2/\text{NDF}$ : 46881653143346508

dit\_4aX\_coil6\_err\_mean vs Slug



Right In: 4.495 $\pm$ 0.000  $\chi^2$ /NDF: 25270242219816061532329198634401792.0/14  
 Left Out: 1.379 $\pm$ 0.000  $\chi^2$ /NDF: 150384329501224226849656085151744.0/11  
 Right Out: 3.852 $\pm$ 0.000  $\chi^2$ /NDF: 12314971476556806550518847638601728.0/15  
 Left In: 1.482 $\pm$ 0.000  $\chi^2$ /NDF: 310337710475779495774509405831168.0/10  
 All: 2.573 $\pm$ 0.000  $\chi^2$ /NDF: 43938576112447.0/10  
 + sign 2.673 $\pm$ 0.000  $\chi^2$ /NDF: 29105436808146683.0/10  
 - sign 2.476 $\pm$ 0.000  $\chi^2$ /NDF: 14802405912641910.0/10

dit\_4aX\_coil6\_Ndata\_mean vs Slug



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

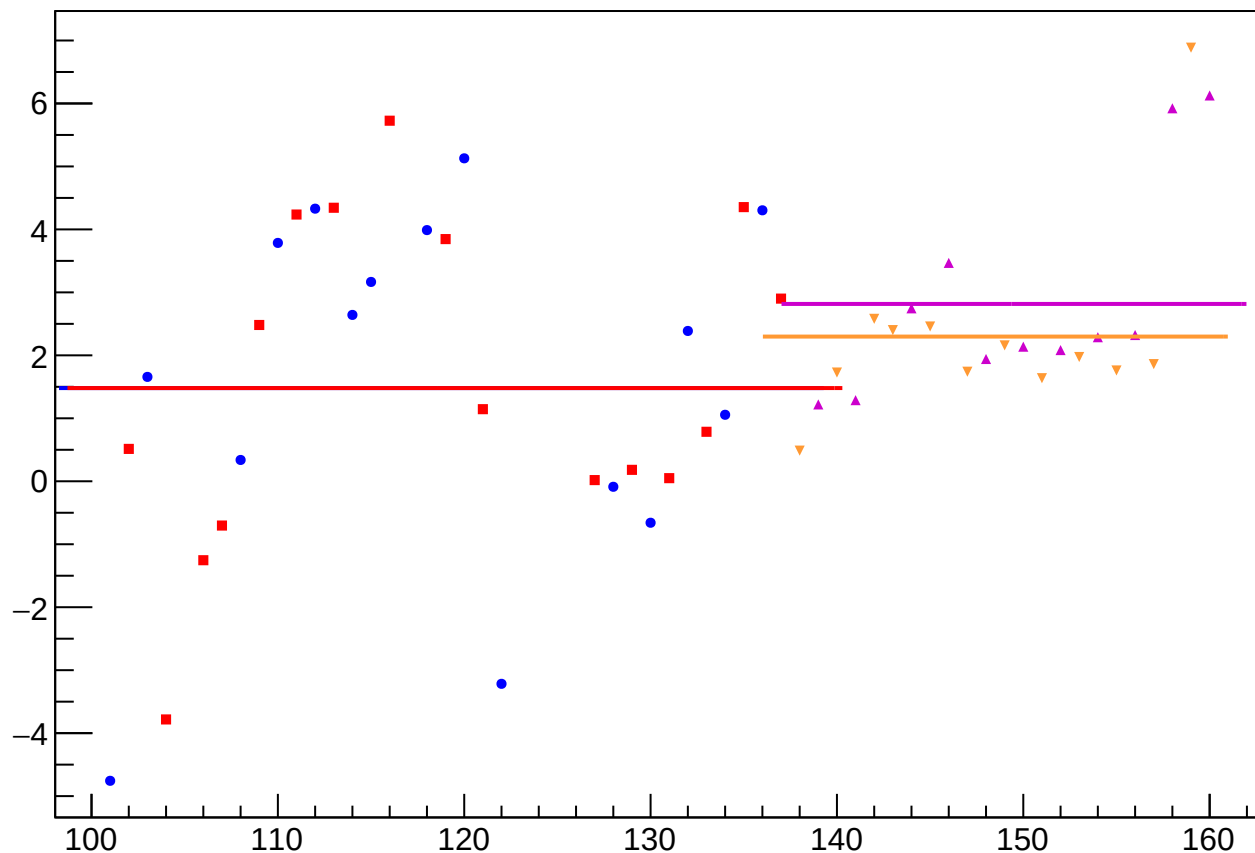
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

# dit\_4eX\_coil6\_mean vs Slug



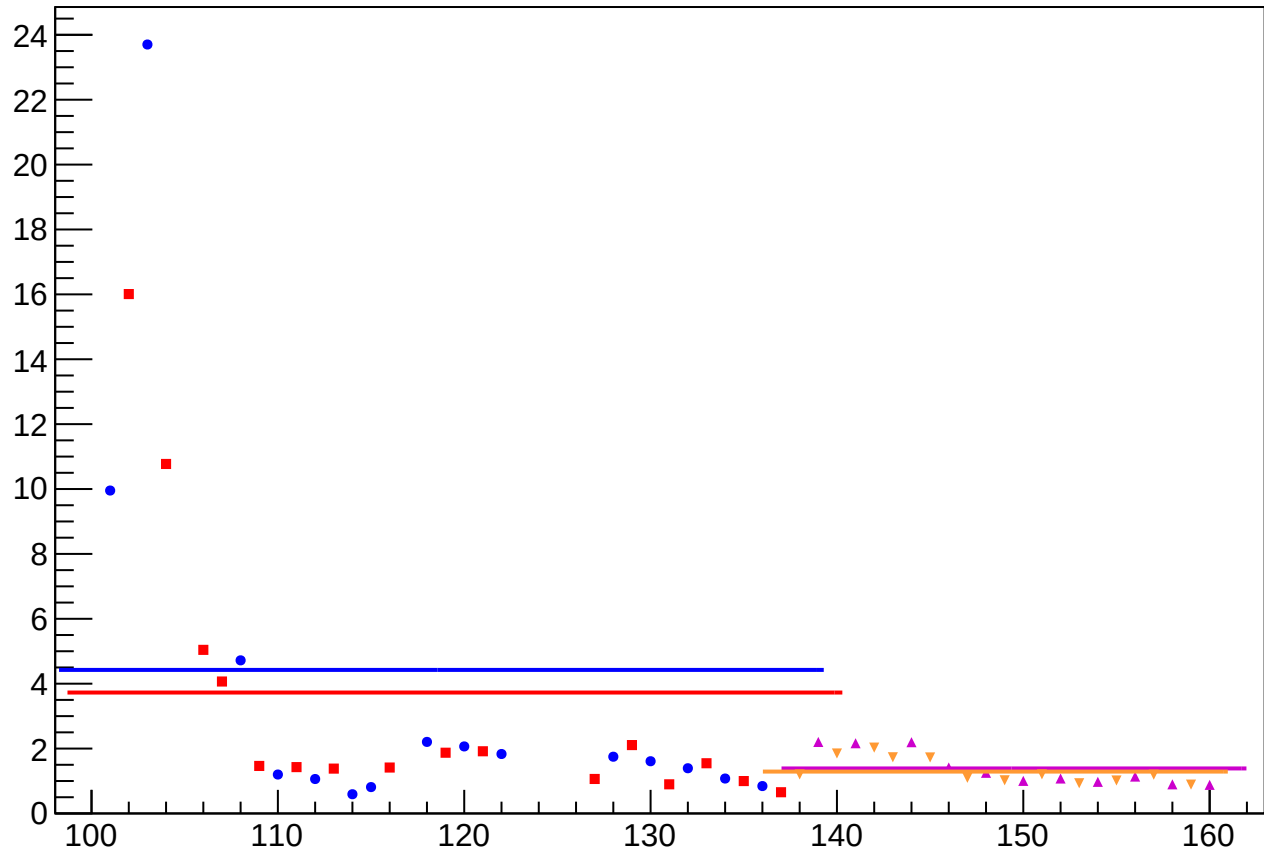
Right In: 1.480+/-0.000  $\chi^2/\text{NDF}$ : 5799670695902784459055767987683328.0/14

Left Out: 2.298+/-0.000  $\chi^2/\text{NDF}$ : 2079870991739780462593334803693568.0/11

Right Out: 1.480+/-0.000  $\chi^2/\text{NDF}$ : 4092645800613765572662987820367872.0/15

Left In: 2.816+/-0.000  $\chi^2/\text{NDF}$ : 2230790234579581781884760219451392.0/10

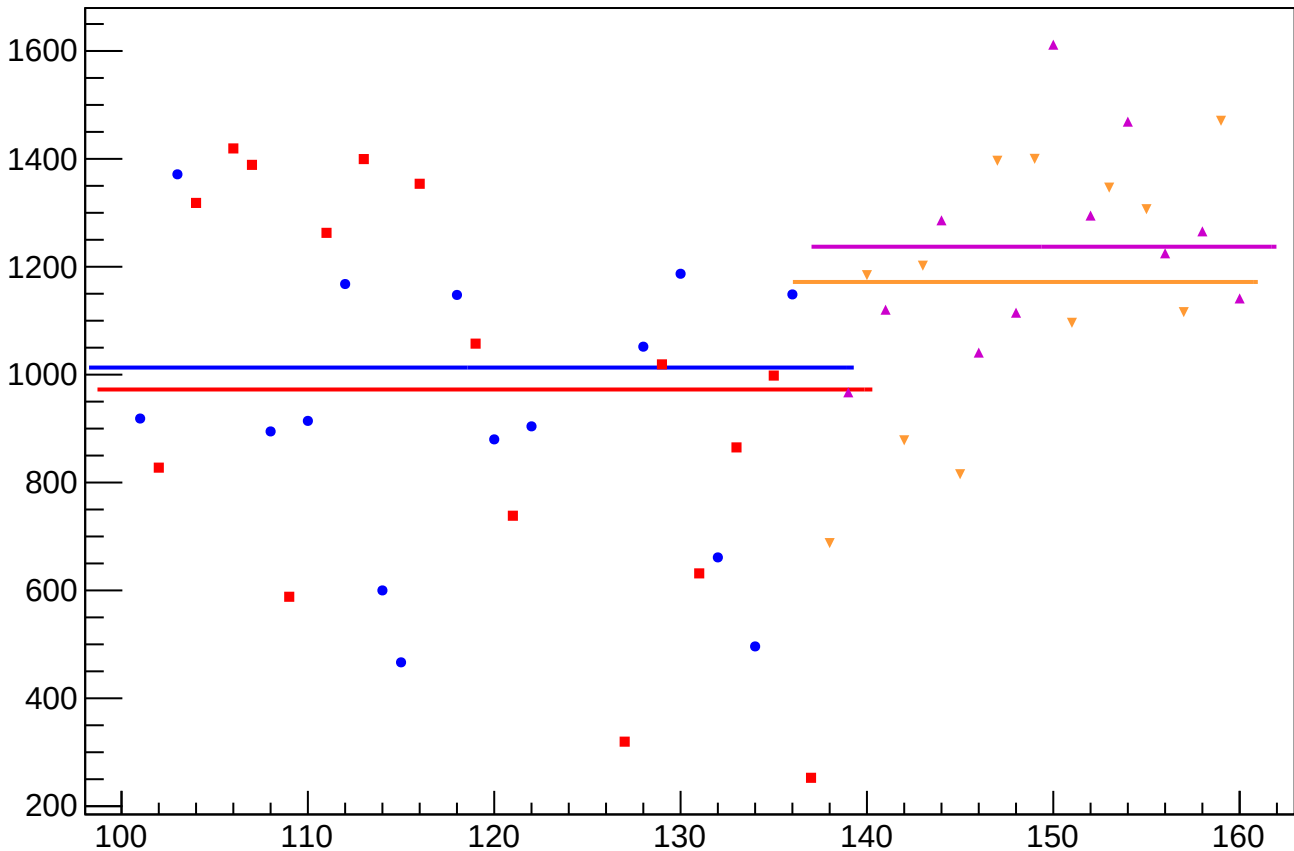
dit\_4eX\_coil6\_err\_mean vs Slug



|                          |                                                                |
|--------------------------|----------------------------------------------------------------|
| 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   |

+ sign 2.592+/-0.000  $\chi^2/\text{NDF}$ : 32103516119977359  
 All: 2.479+/-0.000  $\chi^2/\text{NDF}$ : 48501017381547  
 - sign 2.368+/-0.000  $\chi^2/\text{NDF}$ : 16358007863357496

# dit\_4eX\_coil6\_Ndata\_mean vs Slug



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

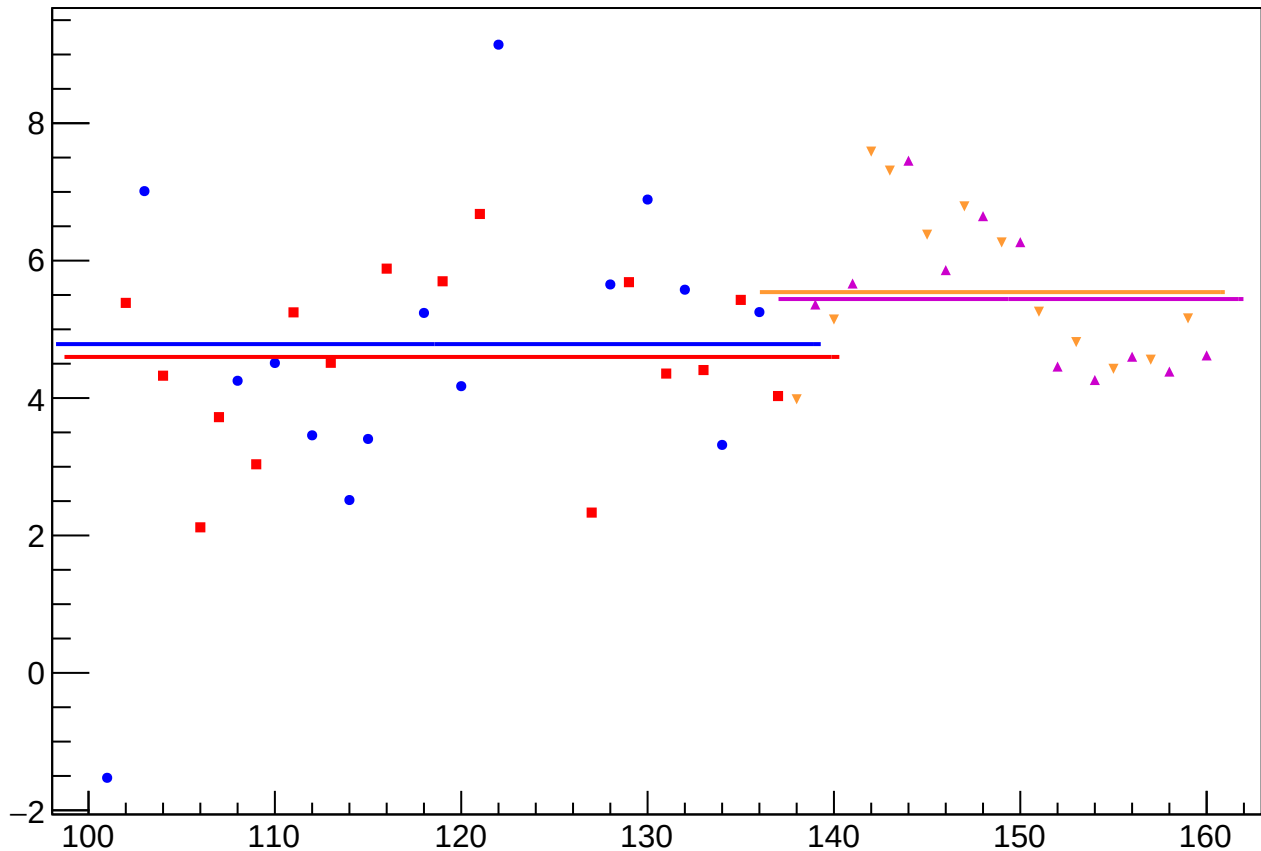
+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460



dit\_11X12X\_coil6\_mean vs Slug



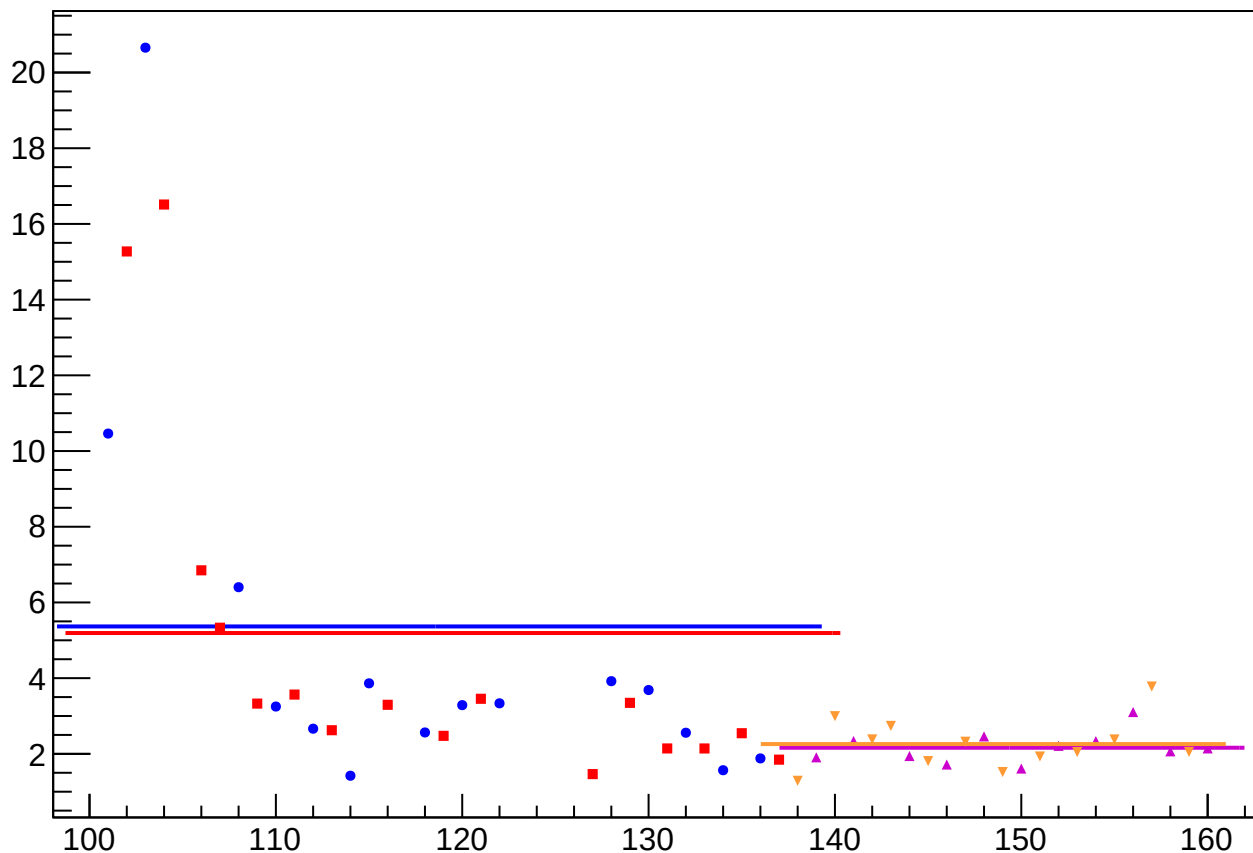
Right In: 4.785+/-0.000  $\chi^2/\text{NDF}$ : 3996556073154779711808159470321664.0/14

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

# dit\_11X12X\_coil6\_err\_mean vs Slug



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

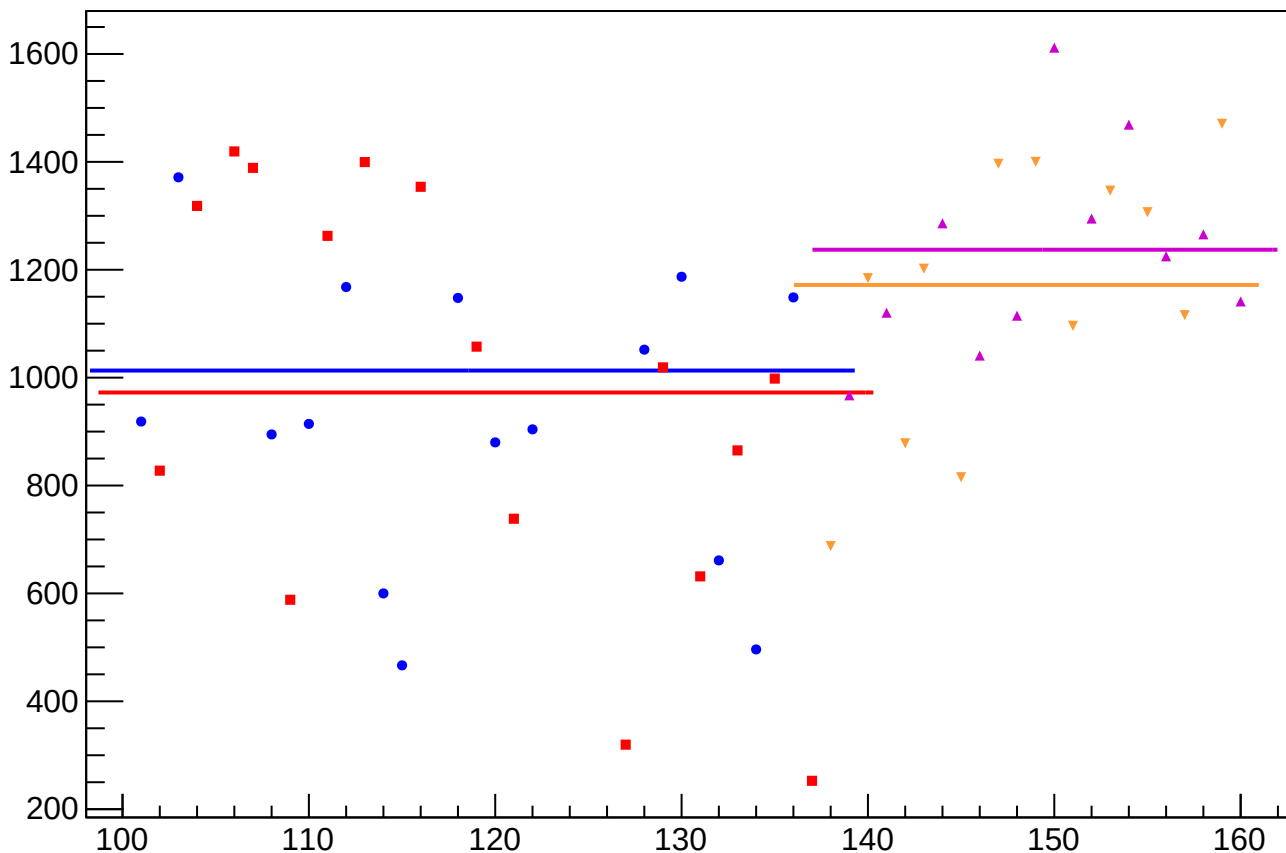
Left In: 2.162 $\pm$ 0.000  $\chi^2$ /NDF: 138367938839103248546751049629696.0/10

+ sign 3.549 $\pm$ 0.000  $\chi^2$ /NDF: 22840324830189286

All: 3.490 $\pm$ 0.000  $\chi^2$ /NDF: 42296939077680

- sign 3.432 $\pm$ 0.000  $\chi^2$ /NDF: 19445829920618957

dit\_11X12X\_coil6\_Ndata\_mean vs Slug



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

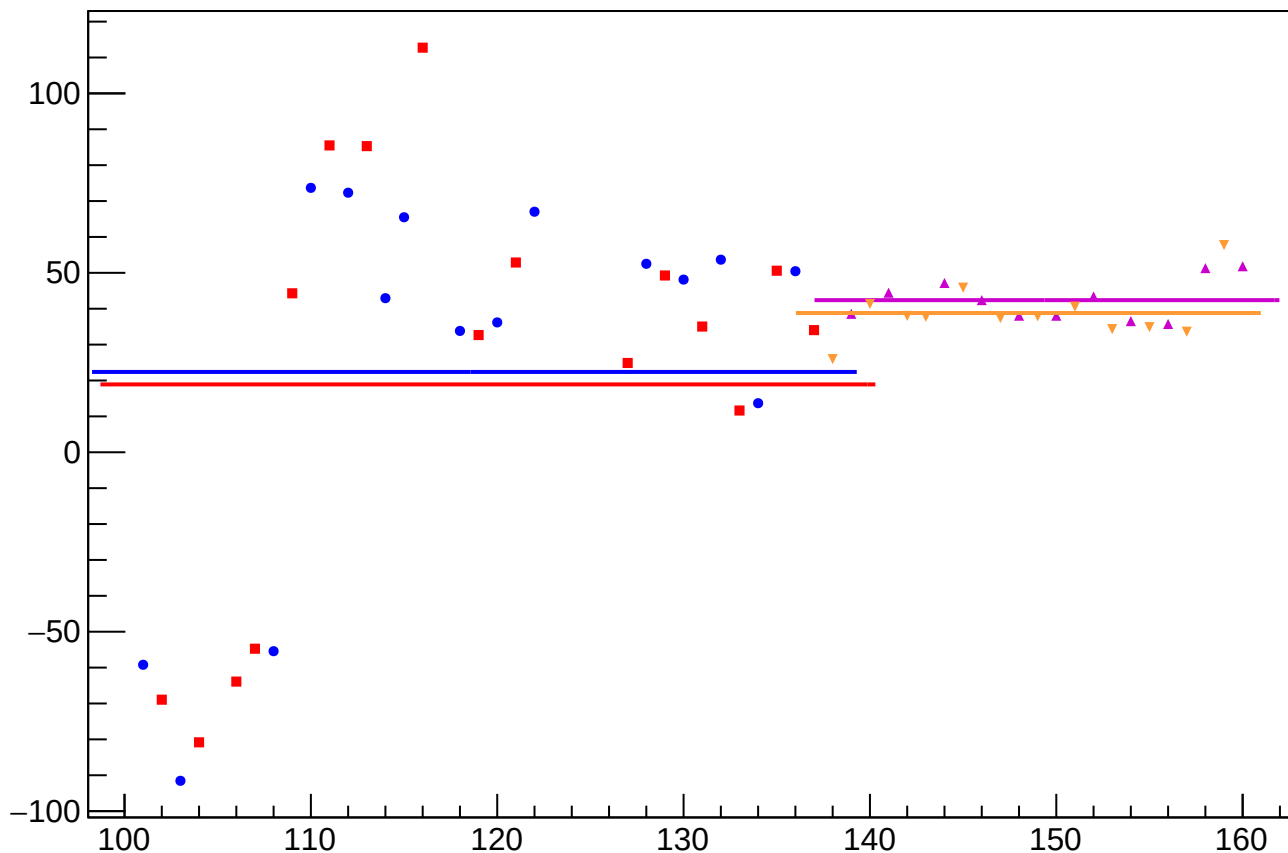
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

dit\_4aY\_coil6\_mean vs Slug



Right In: 22.385+/-0.000  $\chi^2/\text{NDF}$ : 1922260860023592637794094183323009024.0/14

Left Out: 38.806+/-0.000  $\chi^2/\text{NDF}$ : 51649905292188588204172531766132736.0/11

Right Out: 18.907+/-0.000  $\chi^2/\text{NDF}$ : 2182221808408156293593993992757837824.0/15

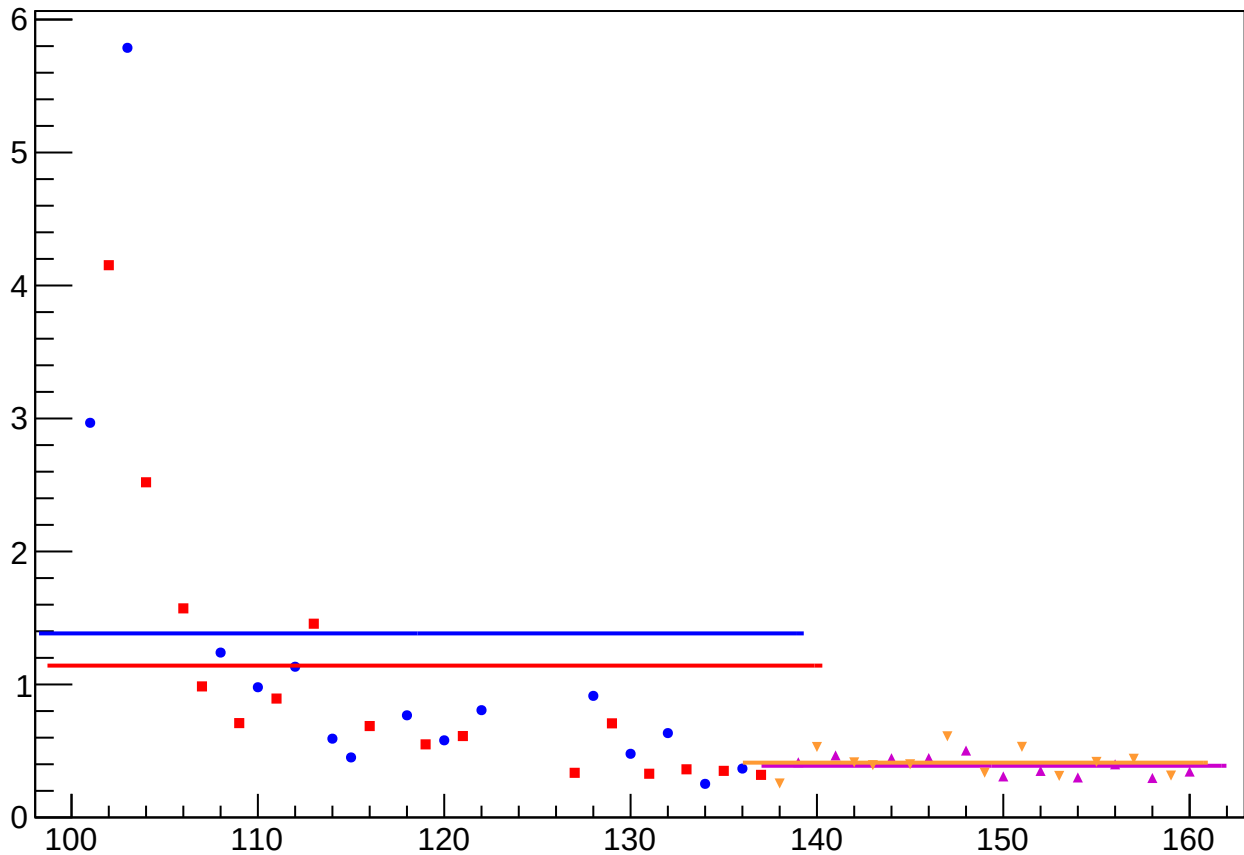
Left In: 42.386+/-0.000  $\chi^2/\text{NDF}$ : 26555660128562986553016927486214144.0/10

+ sign 31.987+/-0.000  $\chi^2/\text{NDF}$ : 2076251683338392

All: 32.268+/-0.000  $\chi^2/\text{NDF}$ : 4498818256205

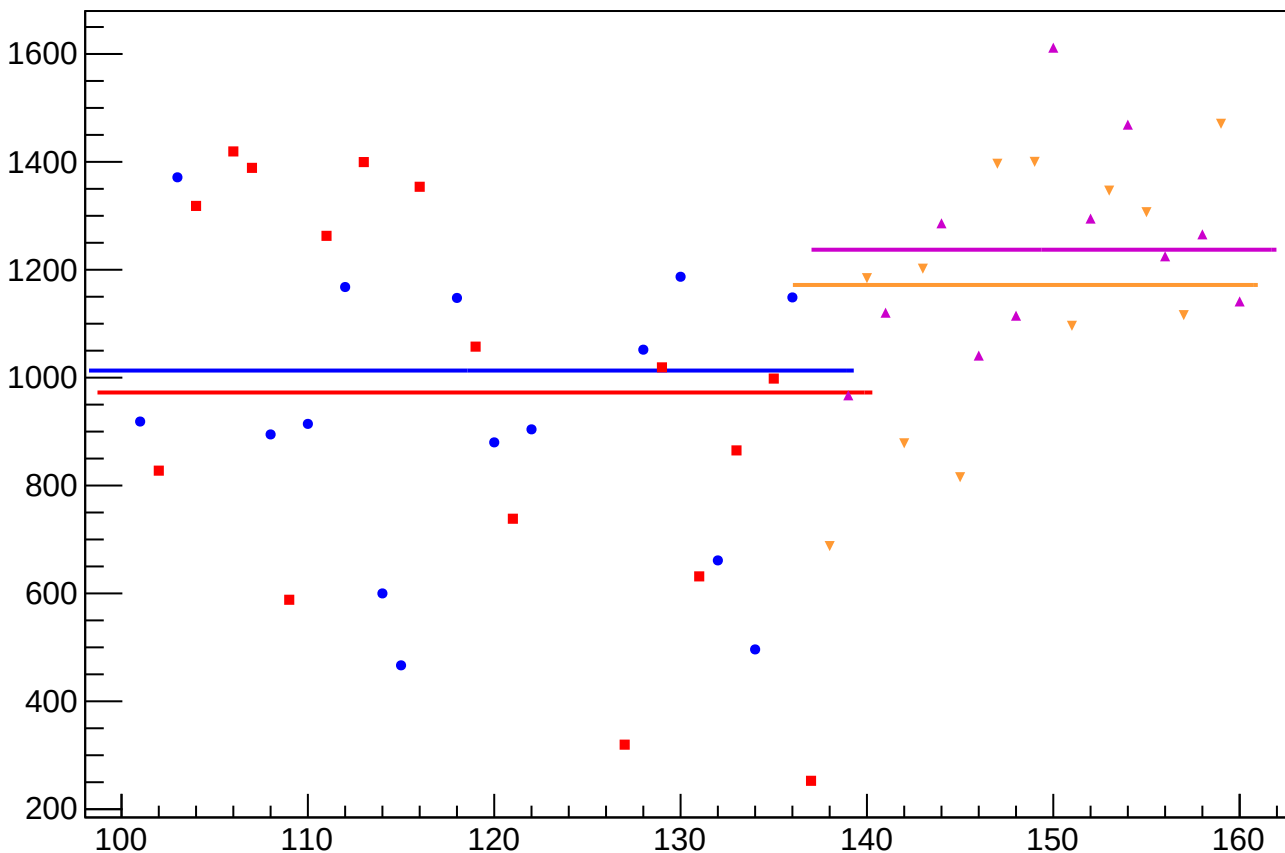
- sign 32.543+/-0.000  $\chi^2/\text{NDF}$ : 2422323075583124

dit\_4aY\_coil6\_err\_mean vs Slug



|                          |                                                               |                      |                                         |
|--------------------------|---------------------------------------------------------------|----------------------|-----------------------------------------|
| Right In: 1.384+/-0.000  | $\chi^2/\text{NDF}$ : 1571159324102064120487940936695808.0/14 | + sign 0.816+/-0.000 | $\chi^2/\text{NDF}$ : 19389895341035378 |
| Left Out: 0.412+/-0.000  | $\chi^2/\text{NDF}$ : 9382414275472018674983467220992.0/11    | All: 0.760+/-0.000   | $\chi^2/\text{NDF}$ : 2983619505756     |
| Right Out: 1.142+/-0.000 | $\chi^2/\text{NDF}$ : 810680738285448955223066212827136.0/15  | - sign 0.704+/-0.000 | $\chi^2/\text{NDF}$ : 10348725978885865 |
| Left In: 0.389+/-0.000   | $\chi^2/\text{NDF}$ : 4468112130112640641394154668032.0/10    |                      |                                         |

dit\_4aY\_coil6\_Ndata\_mean vs Slug



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

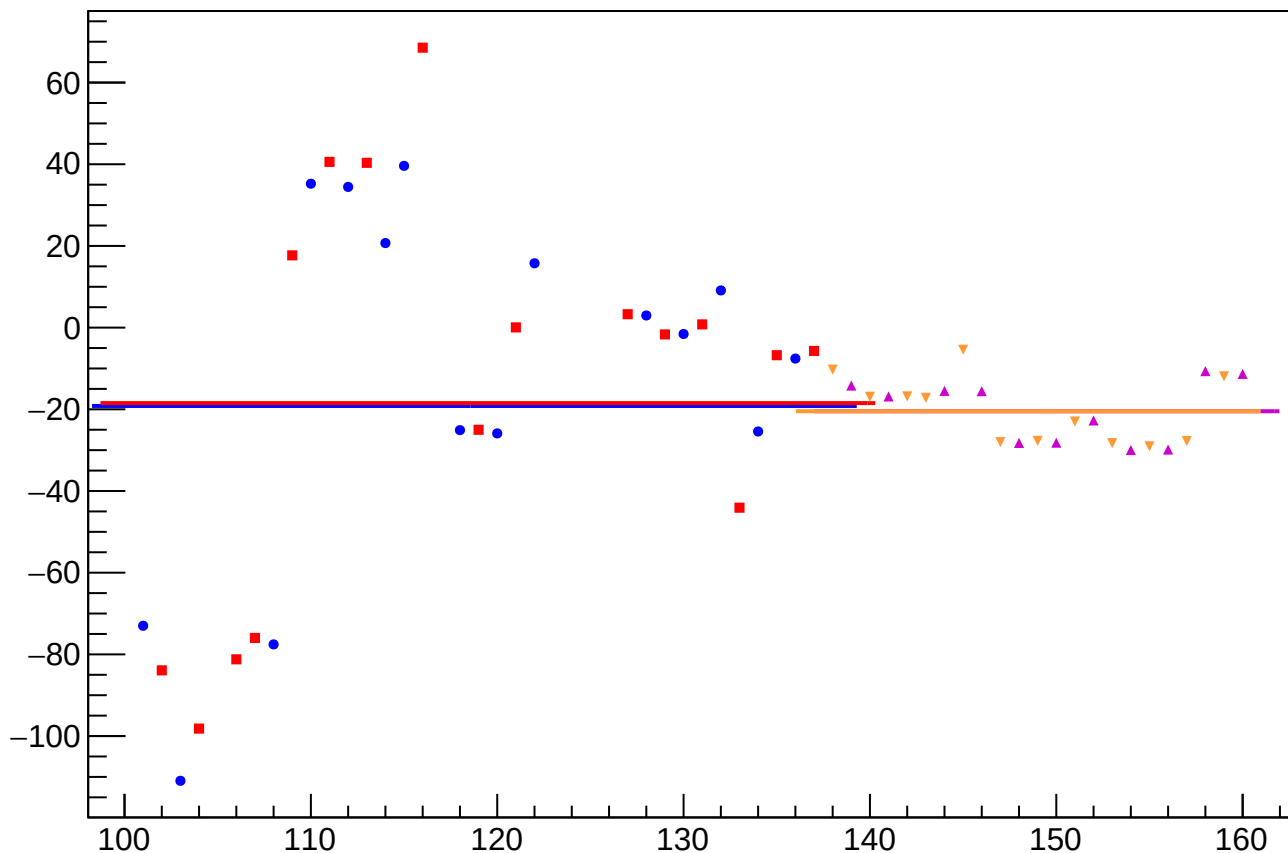
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

dit\_4eY\_coil6\_mean vs Slug



Right In:  $-19.175 \pm 0.000$   $\chi^2/\text{NDF}: 1246364705689764961102868160463241216.0/14$

Left Out:  $-20.466 \pm 0.000$   $\chi^2/\text{NDF}: 58628381923673457294433589512896512.0/11$

Right Out:  $-18.479 \pm 0.000$   $\chi^2/\text{NDF}: 1489398115046175180640331393369374720.0/15$

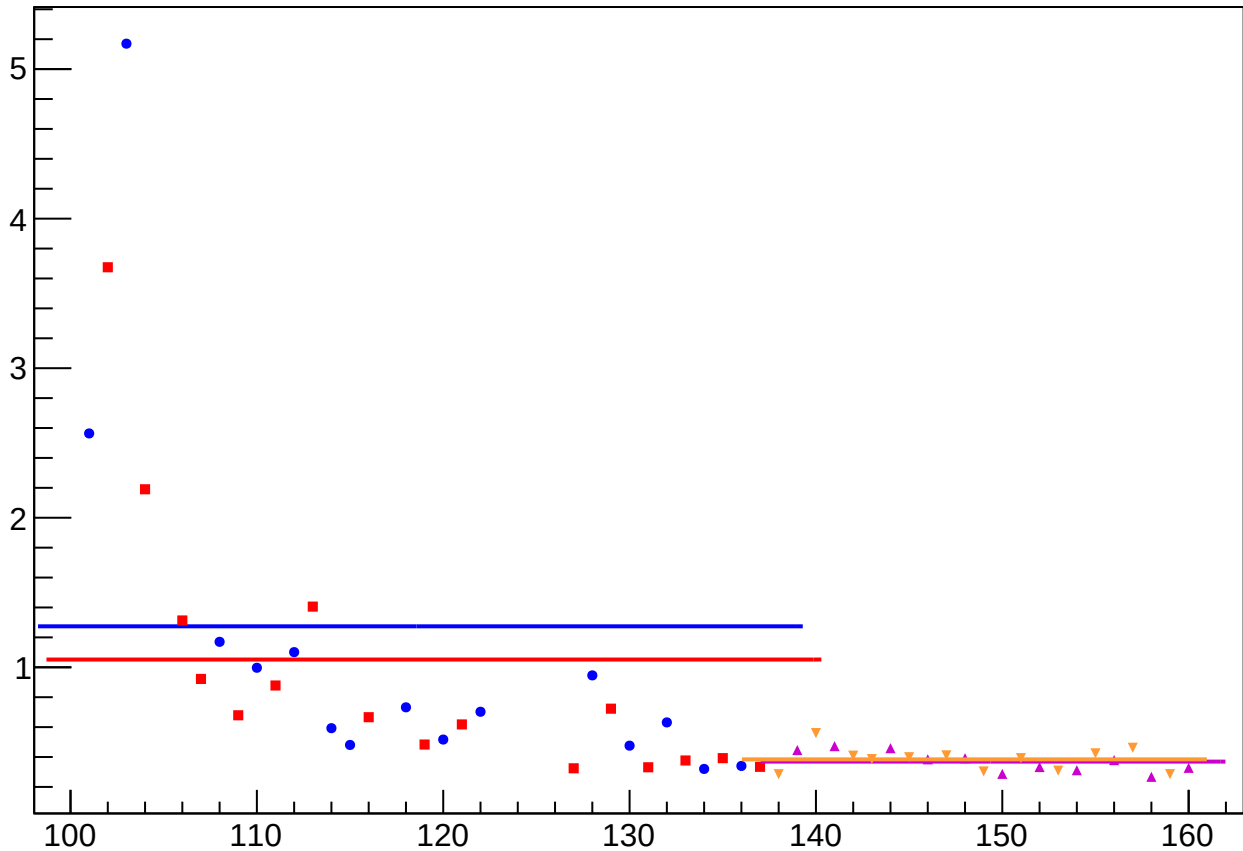
Left In:  $-20.473 \pm 0.000$   $\chi^2/\text{NDF}: 48484953363349820110348478937300992.0/10$

All:  $-19.782 \pm 0.000$   $\chi^2/\text{NDF}: 284511592850$

- sign  $-19.637 \pm 0.000$   $\chi^2/\text{NDF}: 1539423306551337$

+ sign  $-19.930 \pm 0.000$   $\chi^2/\text{NDF}: 130562508565939$

dit\_4eY\_coil6\_err\_mean vs Slug



Right In: 1.274 $\pm$ 0.000  $\chi^2$ /NDF: 1212041476631073599154045304438784.0/14

Left Out: 0.384 $\pm$ 0.000  $\chi^2$ /NDF: 5822322029078598268260129439744.0/11

Right Out: 1.052 $\pm$ 0.000  $\chi^2$ /NDF: 607316121057753919194559126962176.0/15

Left In: 0.369 $\pm$ 0.000  $\chi^2$ /NDF: 4166350638848138676707816112128.0/10

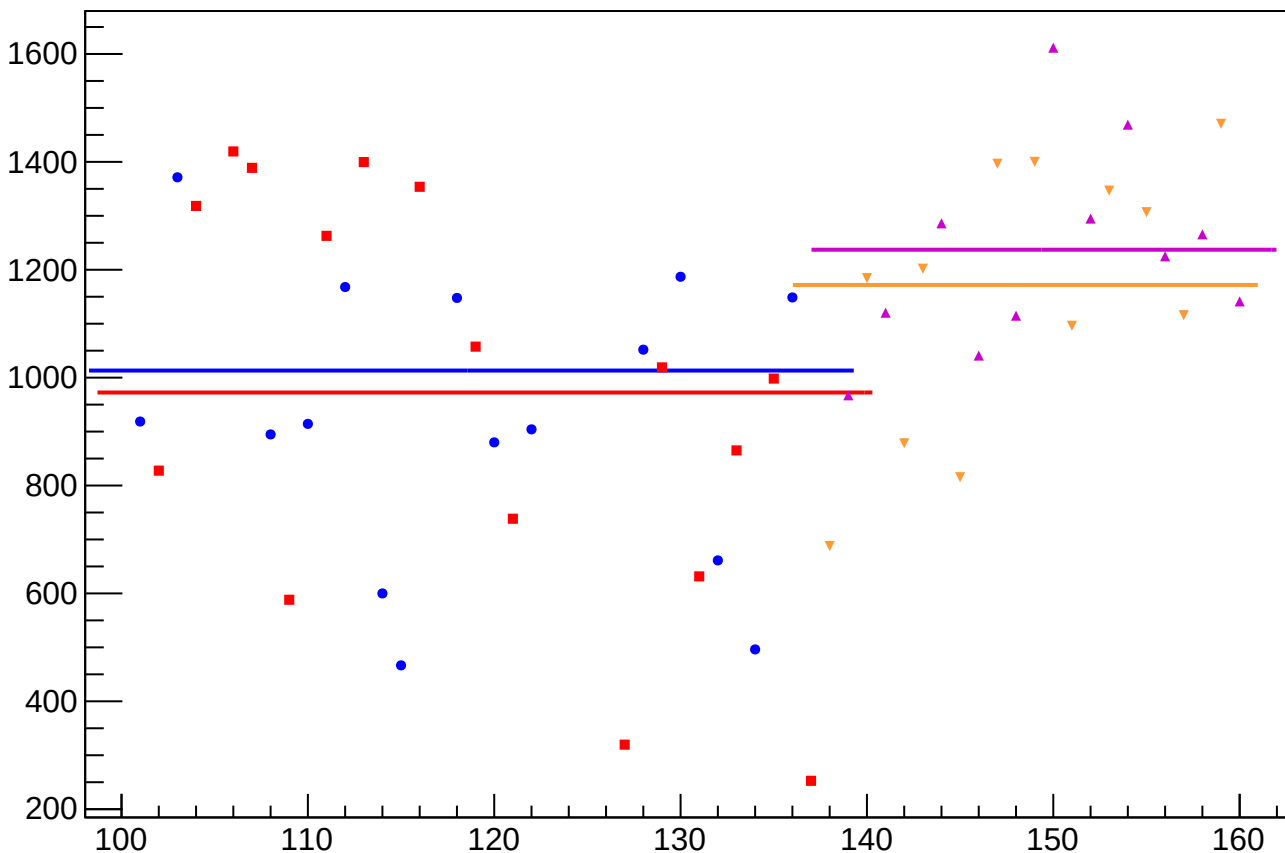
+ sign 0.754 $\pm$ 0.000  $\chi^2$ /NDF: 15182280868824468

All: 0.704 $\pm$ 0.000  $\chi^2$ /NDF: 23177863612263

- sign 0.655 $\pm$ 0.000  $\chi^2$ /NDF: 79193916268828881



dit\_4eY\_coil6\_Ndata\_mean vs Slug



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

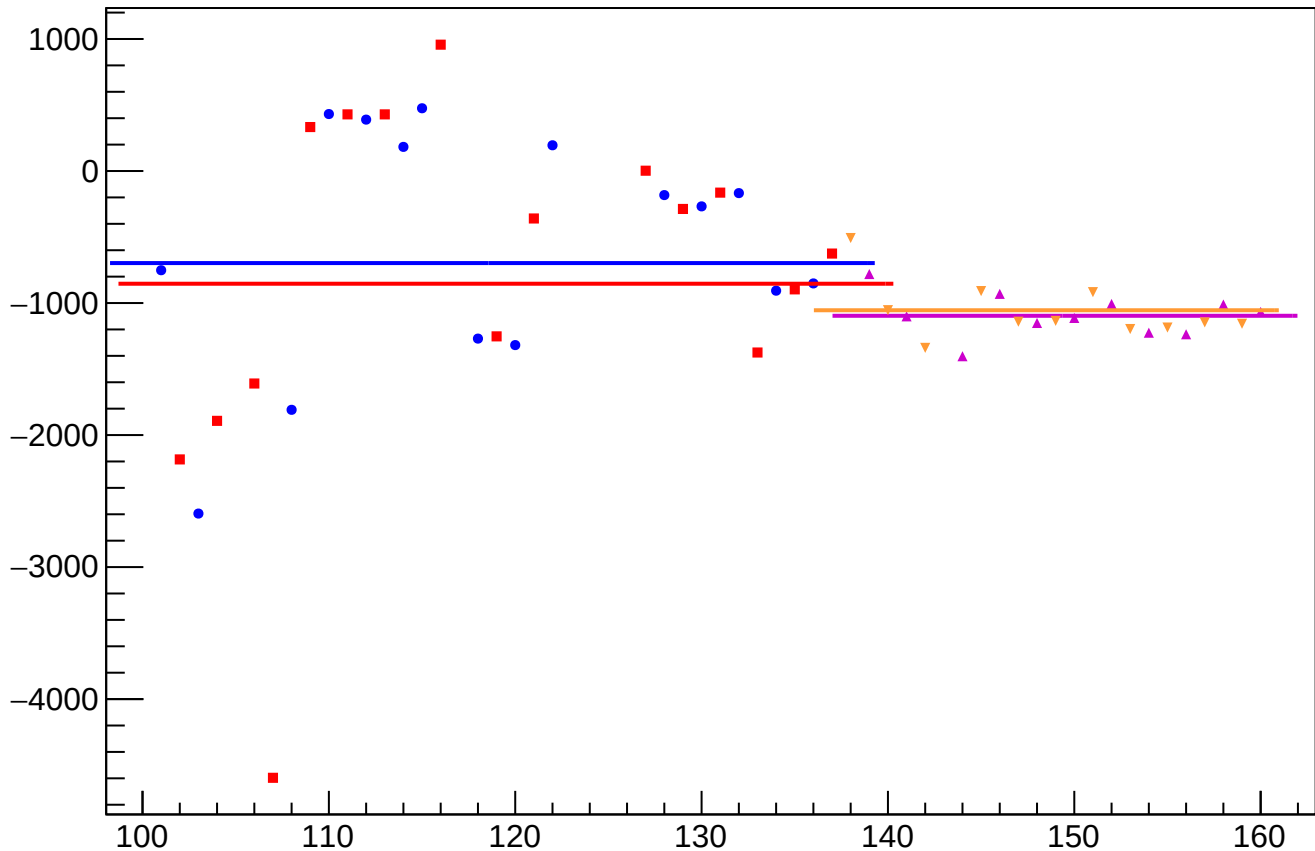
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

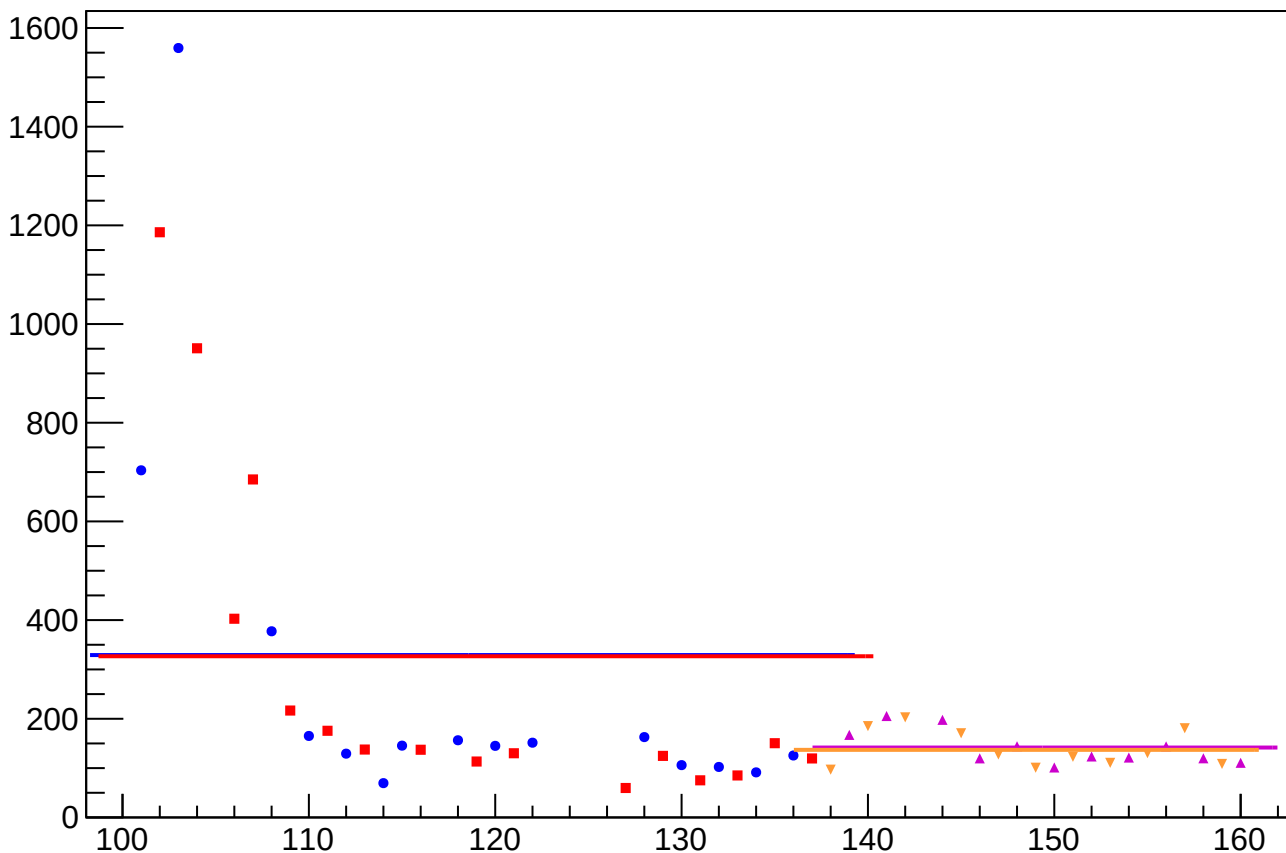
- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

dit\_usl\_coil6\_mean vs Slug



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

# dit\_usl\_coil6\_err\_mean vs Slug



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

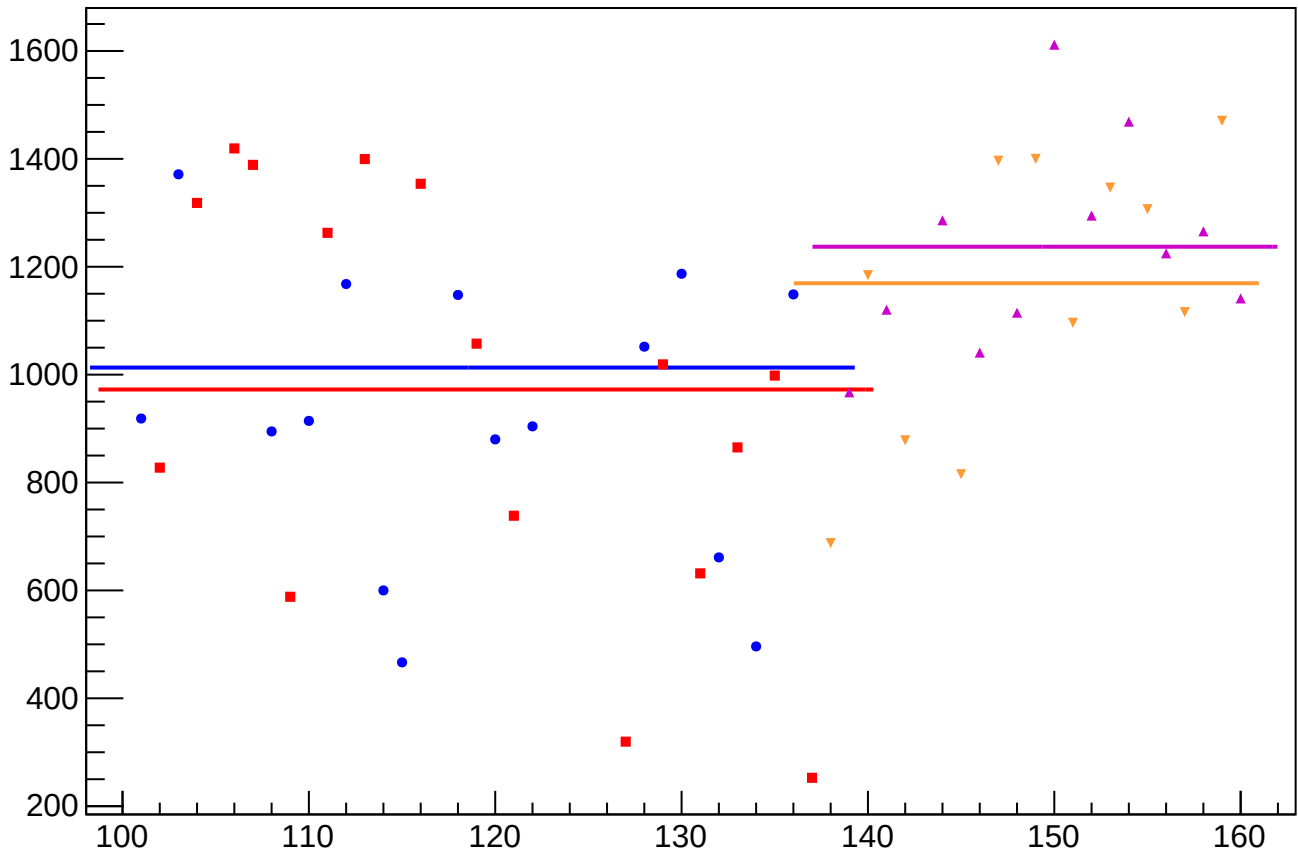
Left In: 141.688+/-0.000  $\chi^2/\text{NDF}$ : 1044882408057849194081424130600599552.0/10

+ sign 220.348+/-0.000  $\chi^2/\text{NDF}$ : 131437286987264

All: 219.782+/-0.000  $\chi^2/\text{NDF}$ : 233310972456

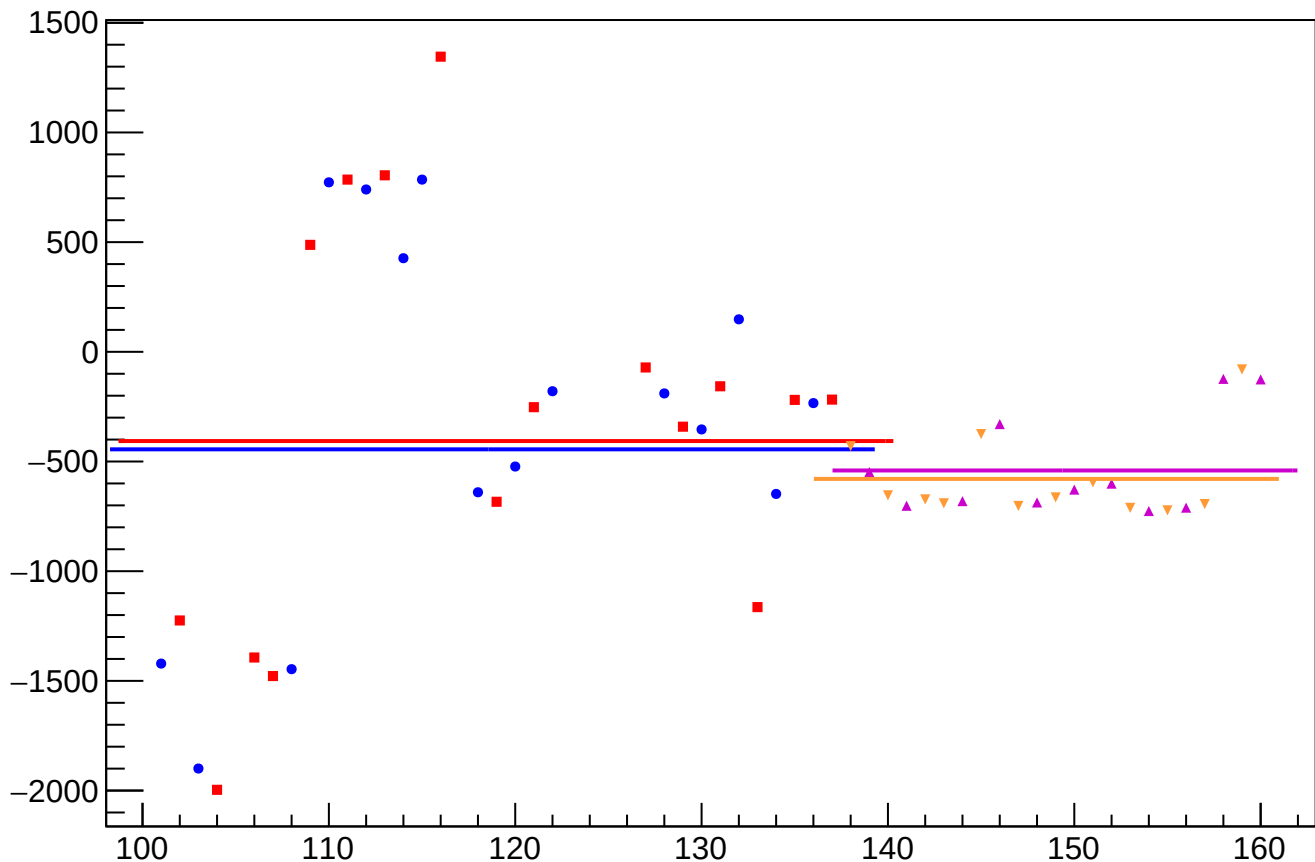
- sign 219.249+/-0.000  $\chi^2/\text{NDF}$ : 101872754009430

dit\_usl\_coil6\_Ndata\_mean vs Slug



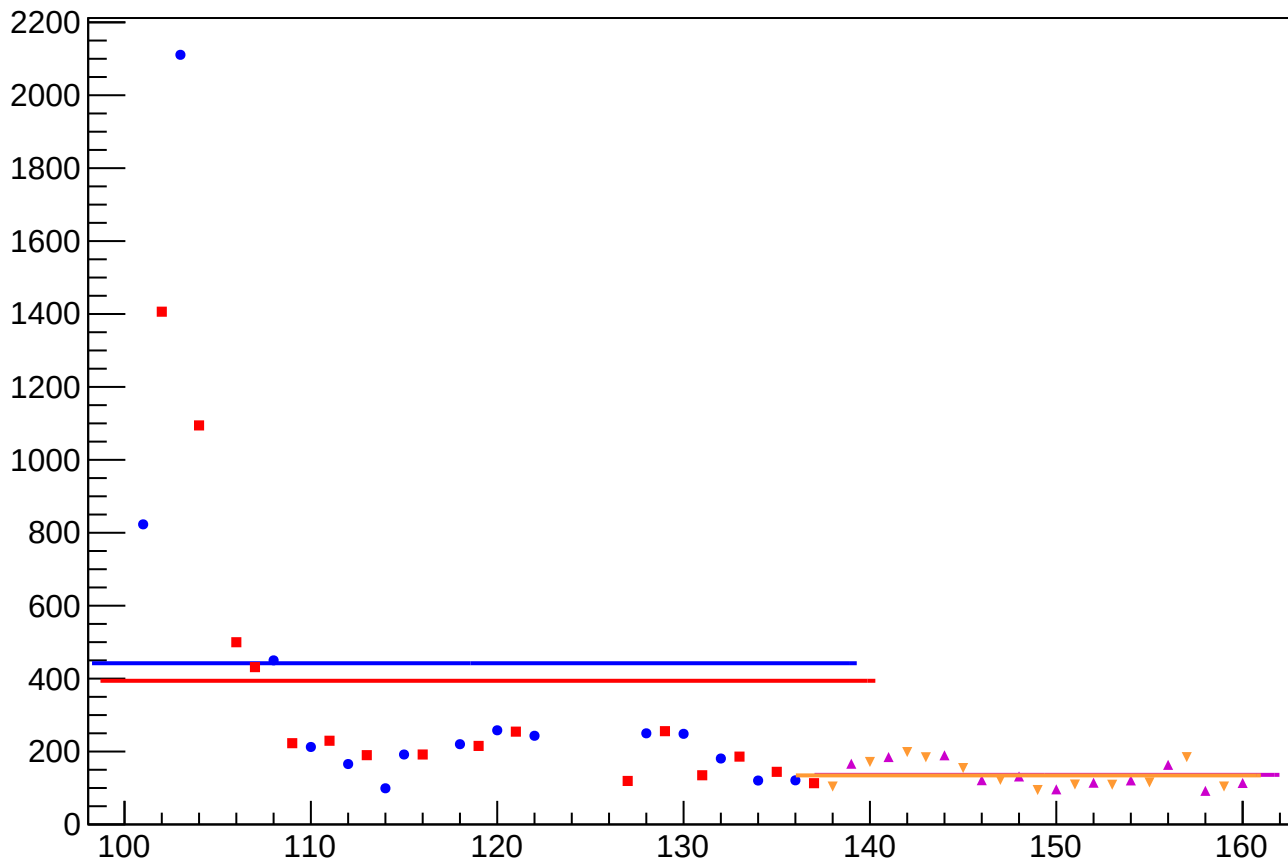
|                            |                                                                   |                         |                                      |
|----------------------------|-------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 1013.146+/-0.000 | $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14 | + sign 1101.625+/-0.000 | $\chi^2/\text{NDF}$ : 93053988598295 |
| Left Out: 1169.420+/-0.000 | $\chi^2/\text{NDF}$ : 52359058528484212152975817930553950208.0/10 | All: 1114.283+/-0.000   | $\chi^2/\text{NDF}$ : 22986564555    |
| Right Out: 972.465+/-0.000 | $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15 | - sign 1126.185+/-0.000 | $\chi^2/\text{NDF}$ : 13634656733460 |
| Left In: 1237.150+/-0.000  | $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10 |                         |                                      |

dit\_usr\_coil6\_mean vs Slug



|                             |                                                                    |
|-----------------------------|--------------------------------------------------------------------|
| Right In: -444.512+/-0.000  | $\chi^2/\text{NDF}$ : 396481903501593703066535851229953654784.0/14 |
| Left Out: -579.272+/-0.000  | + sign -523.316+/-0.000 $\chi^2/\text{NDF}$ : 43595864947593       |
| Right Out: -406.729+/-0.000 | $\chi^2/\text{NDF}$ : 32584581524528860941595597407042666496.0/11  |
| Left In: -540.842+/-0.000   | All: -503.795+/-0.000 $\chi^2/\text{NDF}$ : 10158993354            |
|                             | - sign -484.617+/-0.000 $\chi^2/\text{NDF}$ : 578759927131057      |

dit\_usr\_coil6\_err\_mean vs Slug



Right In: 442.162 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 204015999343694089140945697316947361792.0/14

Left Out: 134.562 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 1123122265403287497024317633834516480.0/11

Right Out: 394.033 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 105882611624182009489804426207740035072.0/15

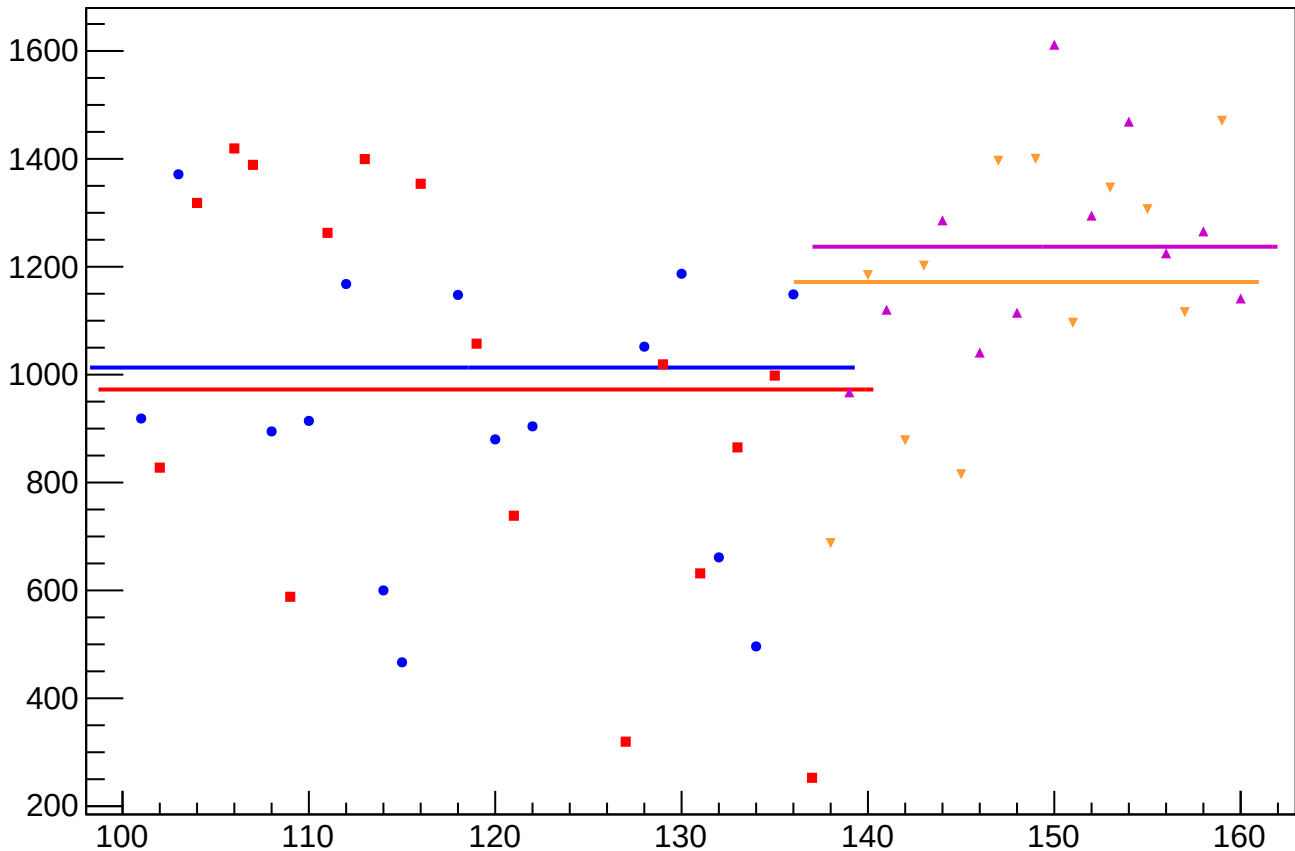
Left In: 136.040 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 1011093061479650527261127450495549440.0/10

+ sign 262.286 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 241048188566854

All: 253.162 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 37398353308

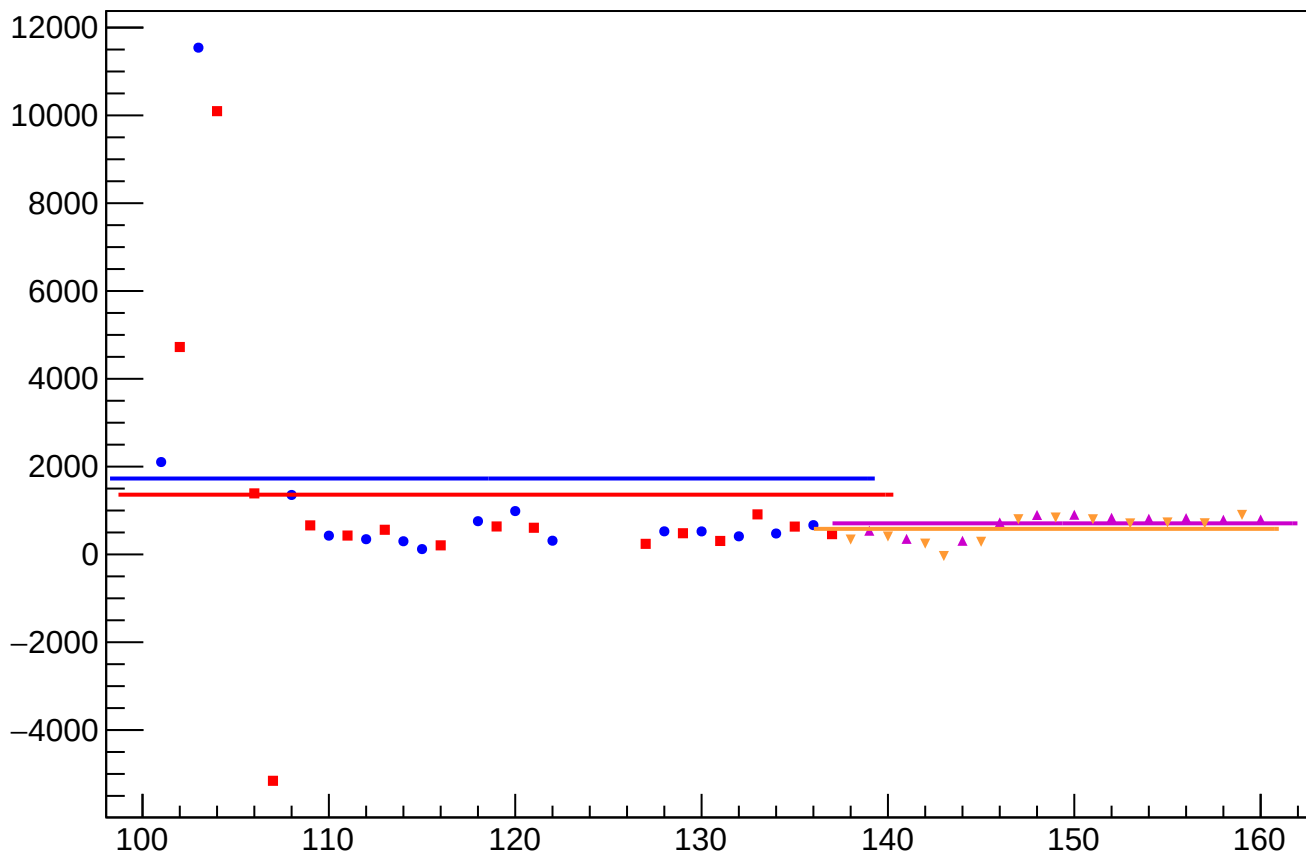
- sign 244.199 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 132677424429000

dit\_usr\_coil6\_Ndata\_mean vs Slug



|                            |                                                                   |                         |                                      |
|----------------------------|-------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 1013.146+/-0.000 | $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14 | + sign 1105.927+/-0.000 | $\chi^2/\text{NDF}$ : 93699894673441 |
| Left Out: 1171.807+/-0.000 | $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11 | All: 1116.146+/-0.000   | $\chi^2/\text{NDF}$ : 23037003763    |
| Right Out: 972.465+/-0.000 | $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15 | - sign 1126.185+/-0.000 | $\chi^2/\text{NDF}$ : 13634656733460 |
| Left In: 1237.150+/-0.000  | $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10 |                         |                                      |

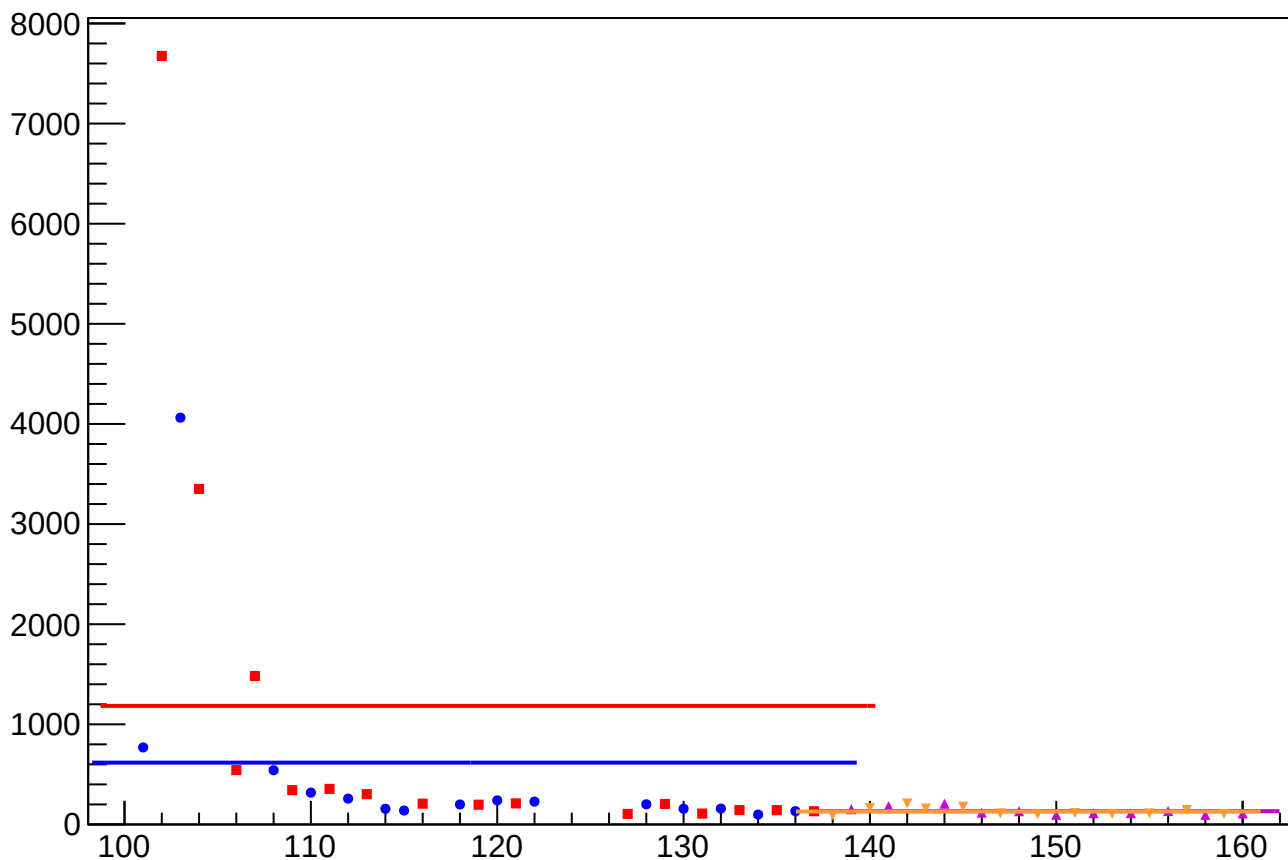
# dit\_atl1\_coil6\_mean vs Slug



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: 1019.669+/-0.000  $\chi^2/\text{NDF}$ : 13621932895  
 + sign 1058.360+/-0.000  $\chi^2/\text{NDF}$ : 69823808255157  
 - sign 981.659+/-0.000  $\chi^2/\text{NDF}$ : 663491357929352



dit\_atl1\_coil6\_err\_mean vs Slug



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

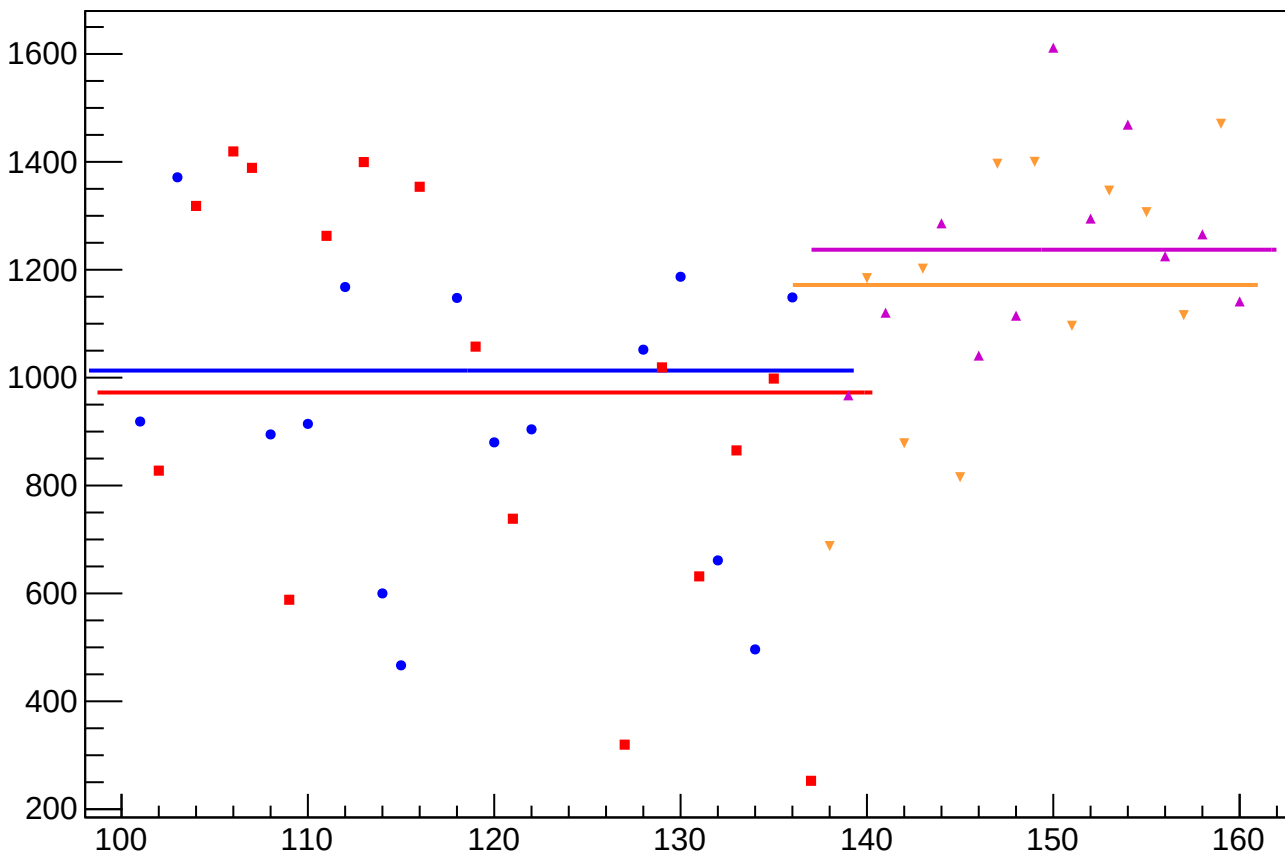
Left In: 132.869+/-0.000  $\chi^2/\text{NDF}$ : 1091839085664014112201463155711279104.0/10

+ sign 331.972+/-0.000  $\chi^2/\text{NDF}$ : 883734584018434

All: 453.895+/-0.000  $\chi^2/\text{NDF}$ : 452656903212

- sign 573.673+/-0.000  $\chi^2/\text{NDF}$ : 359677429953367

dit\_atl1\_coil6\_Ndata\_mean vs Slug



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

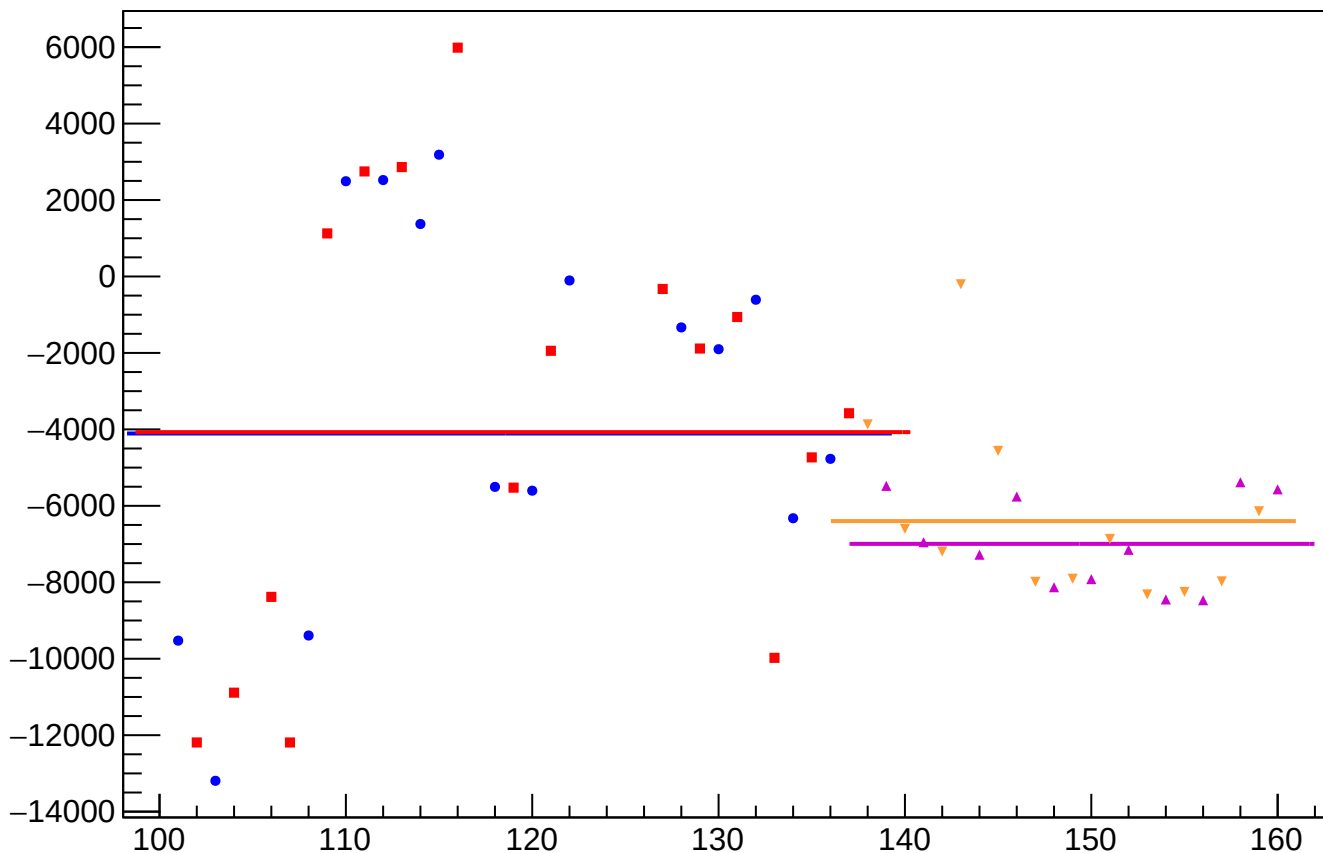
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

dit\_atl2\_coil6\_mean vs Slug



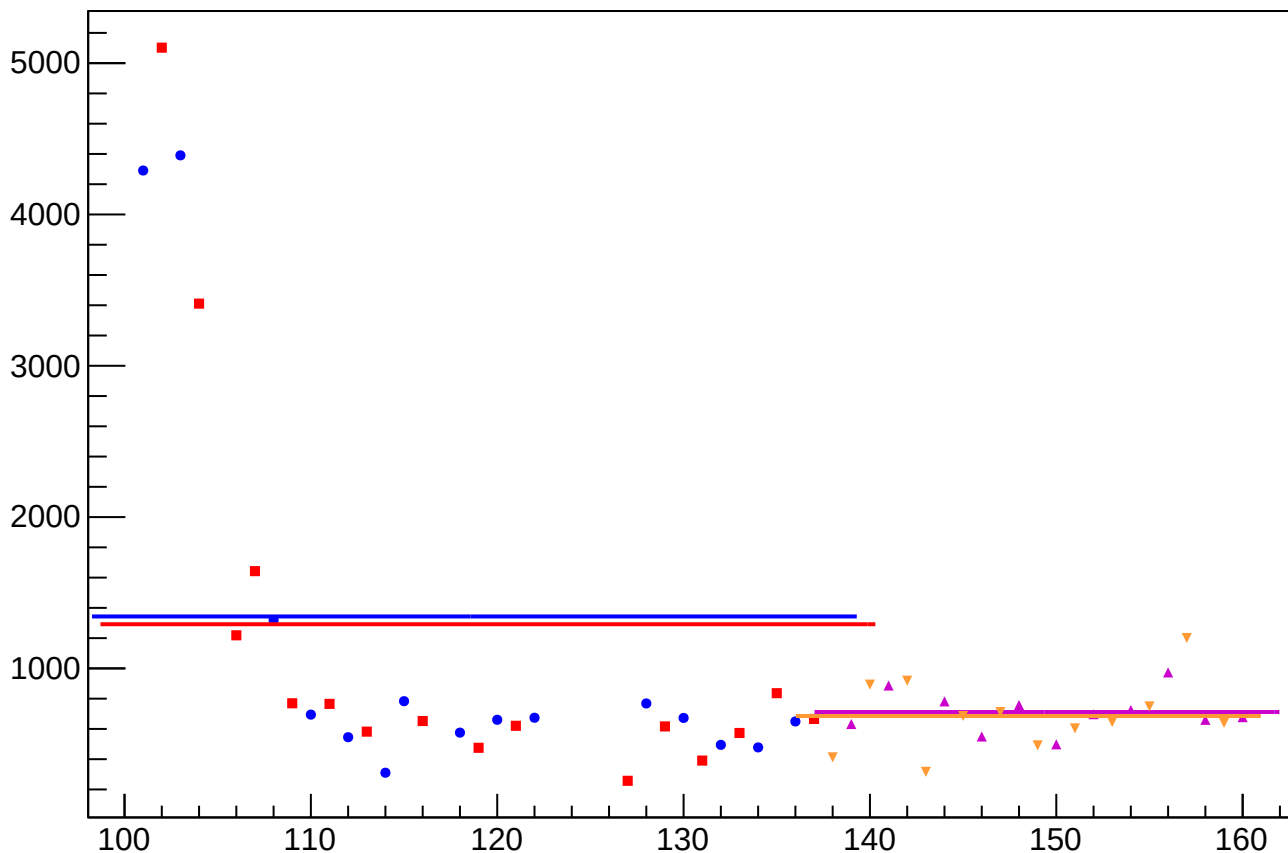
|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| Right In: -4107.443+/-0.000  | $\chi^2/\text{NDF}$ : 14527436324982031454277780831211819630592.0/14 |
| Left Out: -6398.906+/-0.000  | $\chi^2/\text{NDF}$ : 4560292812943761149136938286094472970240.0/11  |
| Right Out: -4072.120+/-0.000 | $\chi^2/\text{NDF}$ : 20367171423690168095778854678764929941504.0/15 |
| Left In: -6994.812+/-0.000   | $\chi^2/\text{NDF}$ : 1231738289385705389055875270097690951680.0/10  |

+ sign -5447.429+/-0.000  $\chi^2/\text{NDF}$ : 2108050211497

All: -5609.905+/-0.000  $\chi^2/\text{NDF}$ : 4607018672

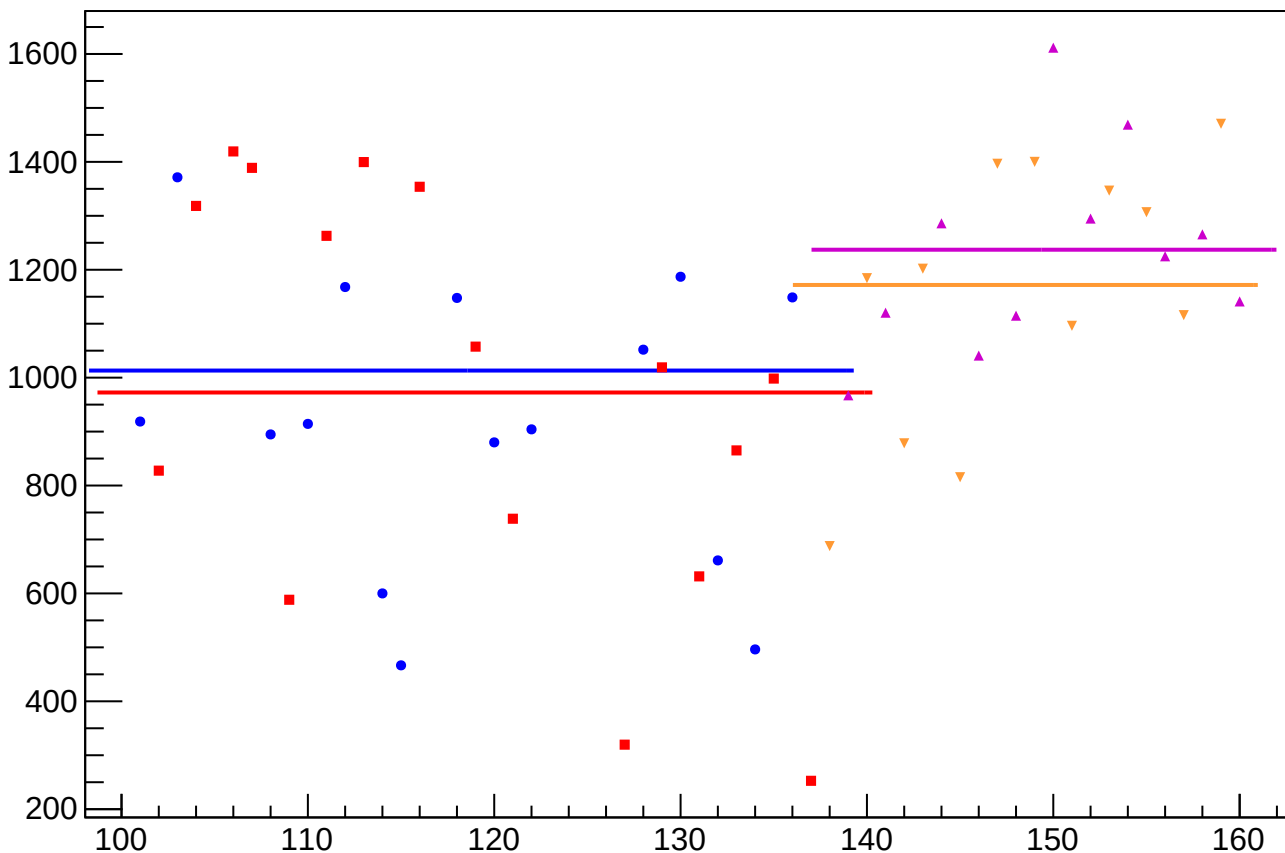
- sign -5769.523+/-0.000  $\chi^2/\text{NDF}$ : 24907888529528

# dit\_atl2\_coil6\_err\_mean vs Slug



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

dit\_atl2\_coil6\_Ndata\_mean vs Slug



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

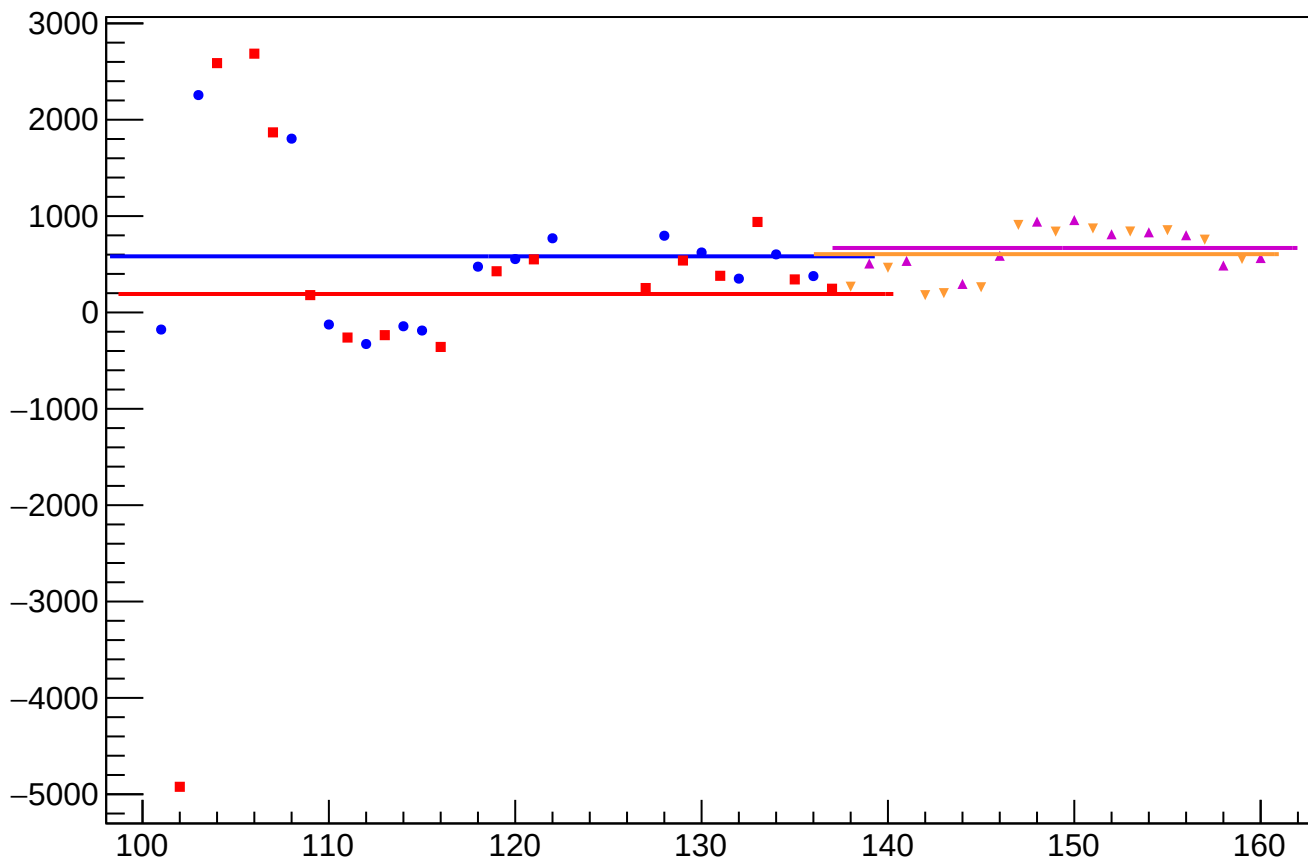
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

# dit\_atr1\_coil6\_mean vs Slug



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

+ sign 595.655+/-0.000  $\chi^2/\text{NDF}$ : 406904373797989

All: 531.737+/-0.000  $\chi^2/\text{NDF}$ : 271615503925

- sign 468.943+/-0.000  $\chi^2/\text{NDF}$ : 229659160910176

dit\_atr1\_coil6\_err\_mean vs Slug



Right In: 542.328+/-0.000  $\chi^2/\text{NDF}$ : 414378812003795549649034048462817067008.0/14

Left Out: 142.333+/-0.000  $\chi^2/\text{NDF}$ : 699754234994212847043453967042347008.0/11

Right Out: 853.203+/-0.000  $\chi^2/\text{NDF}$ : 2574076381441046787772449137133917044736.0/15

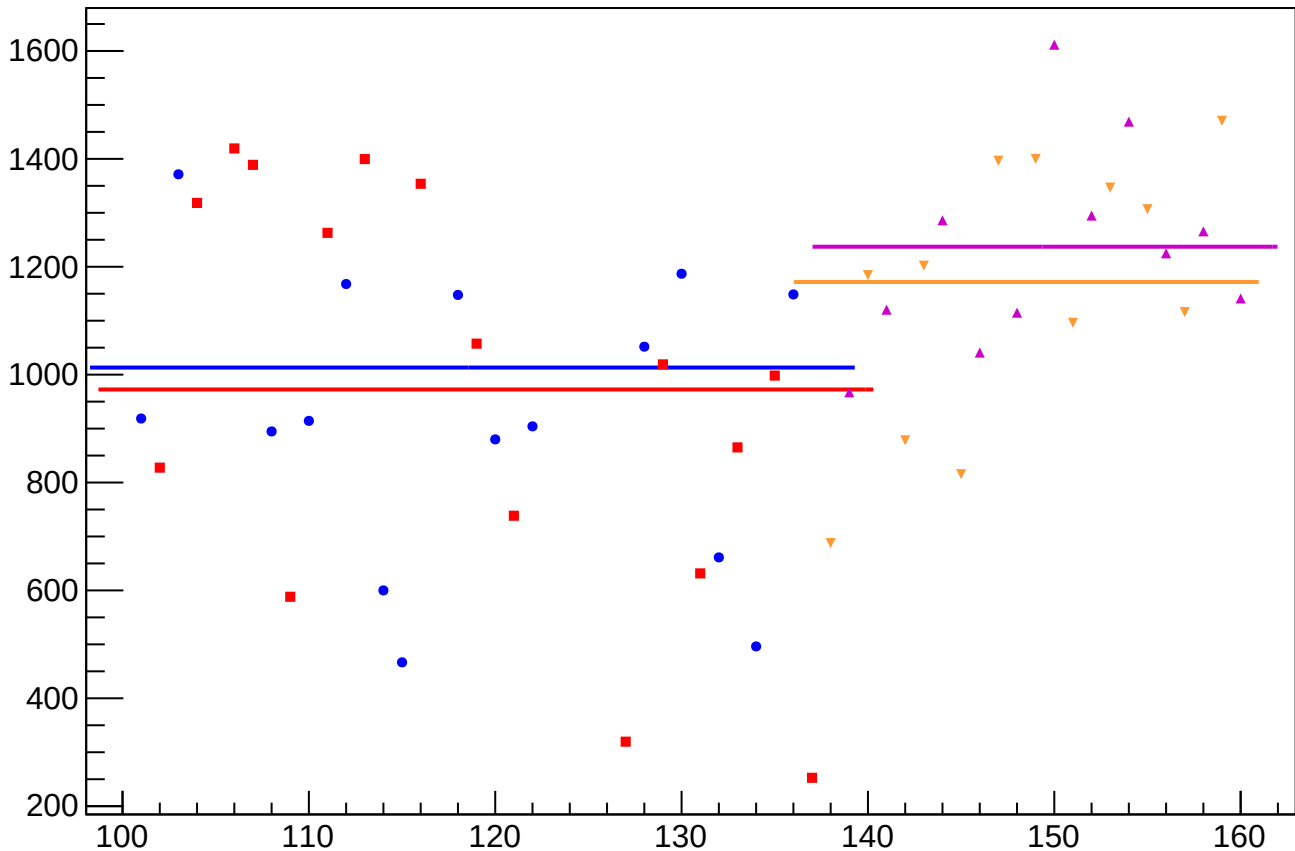
Left In: 145.502+/-0.000  $\chi^2/\text{NDF}$ : 782066035610550272928661281894825984.0/10

+ sign 308.422+/-0.000  $\chi^2/\text{NDF}$ : 475799684039922

All: 375.901+/-0.000  $\chi^2/\text{NDF}$ : 32587788805

- sign 442.194+/-0.000  $\chi^2/\text{NDF}$ : 276887014570090

dit\_atr1\_coil6\_Ndata\_mean vs Slug



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

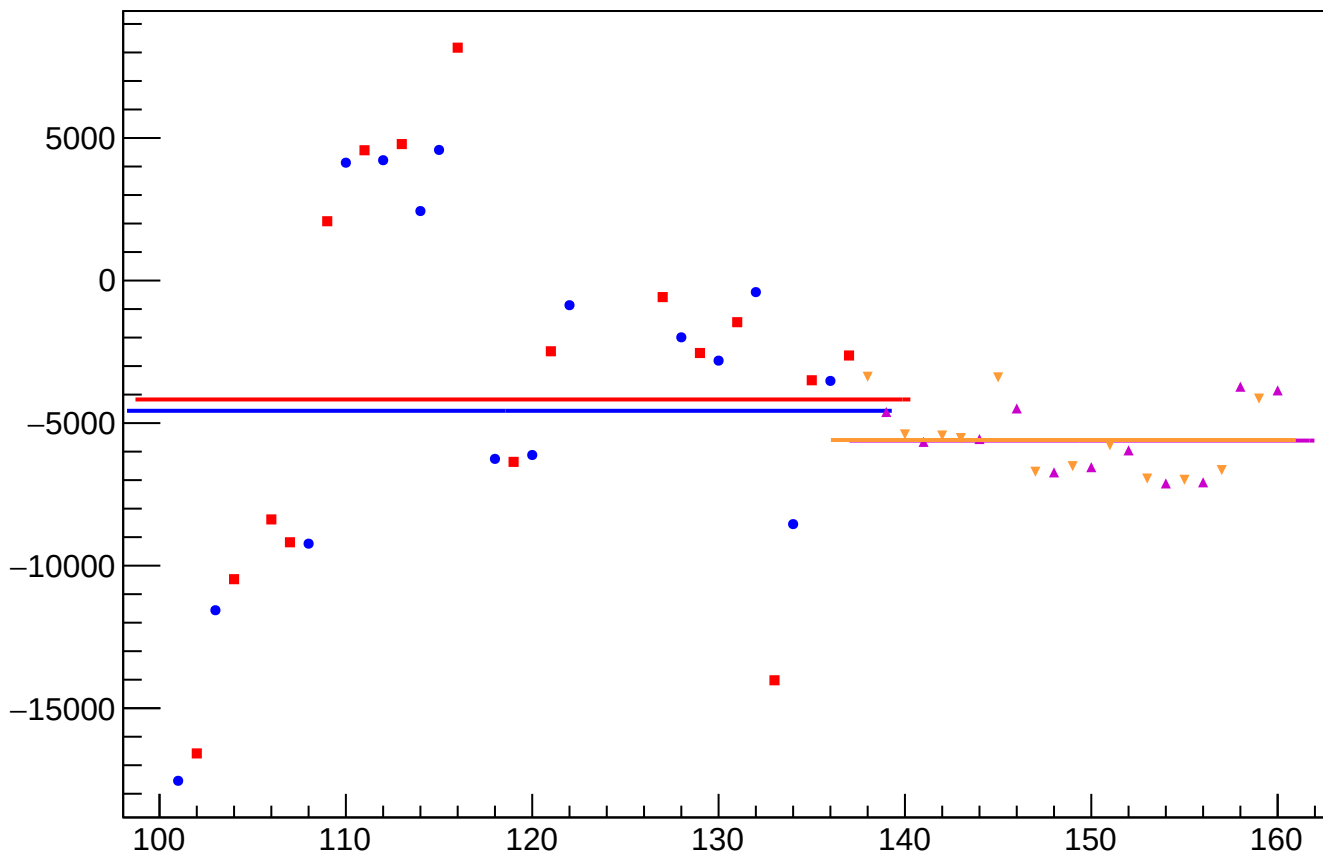
+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460



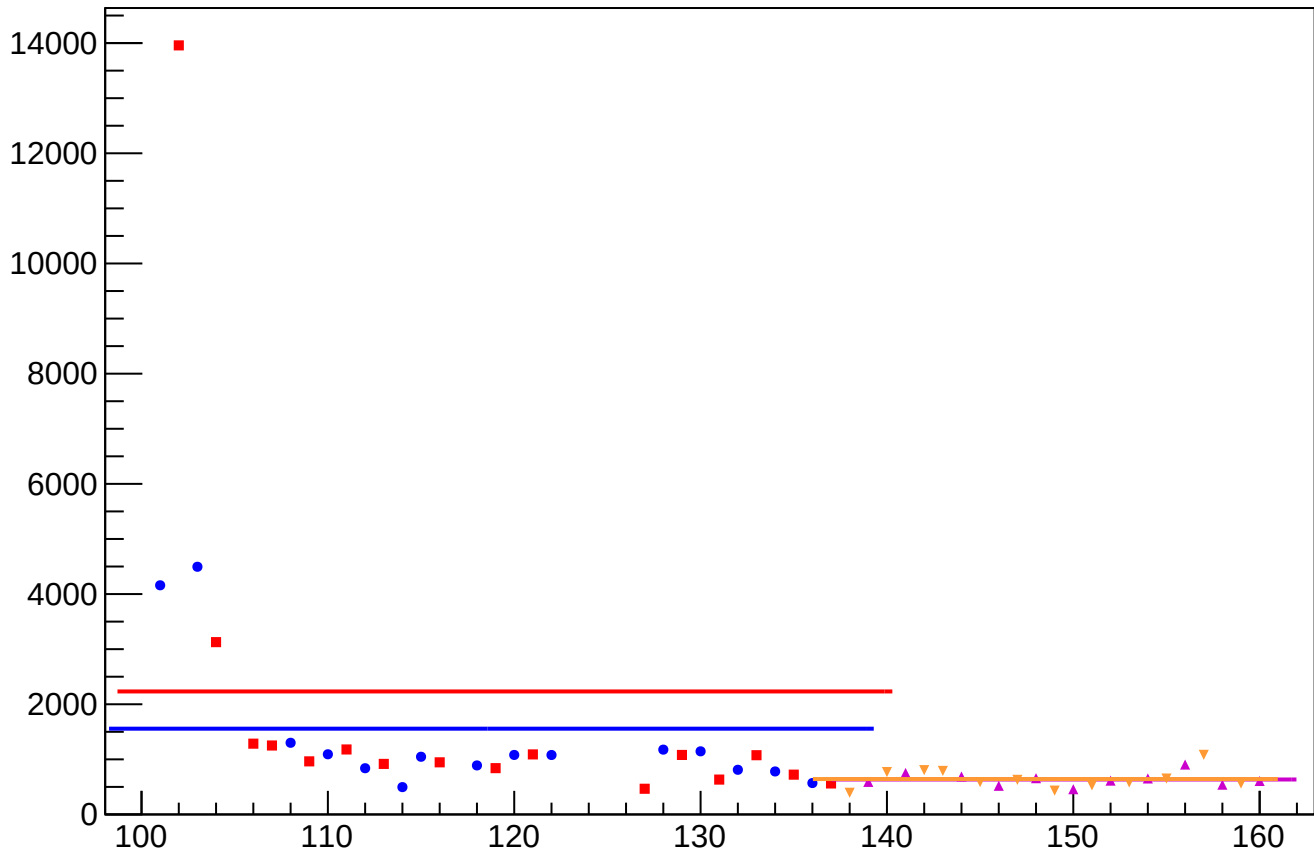
dit\_atr2\_coil6\_mean vs Slug



|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| Right In: -4568.297+/-0.000  | $\chi^2/\text{NDF}$ : 24195052148165719540713110921977756909568.0/14 |
| Left Out: -5592.357+/-0.000  | $\chi^2/\text{NDF}$ : 1502507998590915650067934753088681803776.0/11  |
| Right Out: -4170.773+/-0.000 | $\chi^2/\text{NDF}$ : 30967248832187912041113909559481103024128.0/15 |
| Left In: -5613.024+/-0.000   | $\chi^2/\text{NDF}$ : 1272210659936261957248133173503170969600.0/10  |

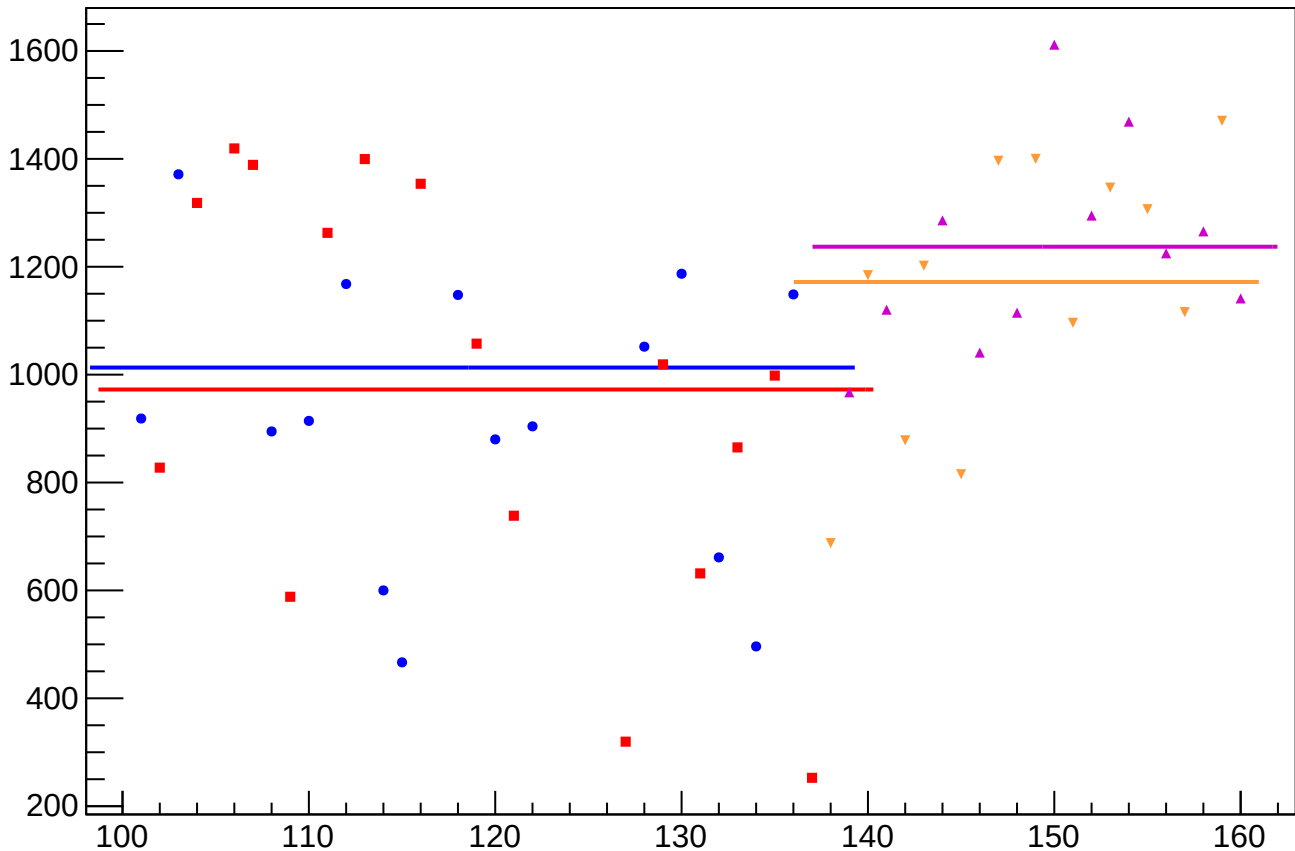
+ sign -5167.140+/-0.000  $\chi^2/\text{NDF}$ : 2609556026190  
 All: -5087.057+/-0.000  $\chi^2/\text{NDF}$ : 5916065819  
 - sign -5008.384+/-0.000  $\chi^2/\text{NDF}$ : 33045226744274

dit\_atr2\_coil6\_err\_mean vs Slug



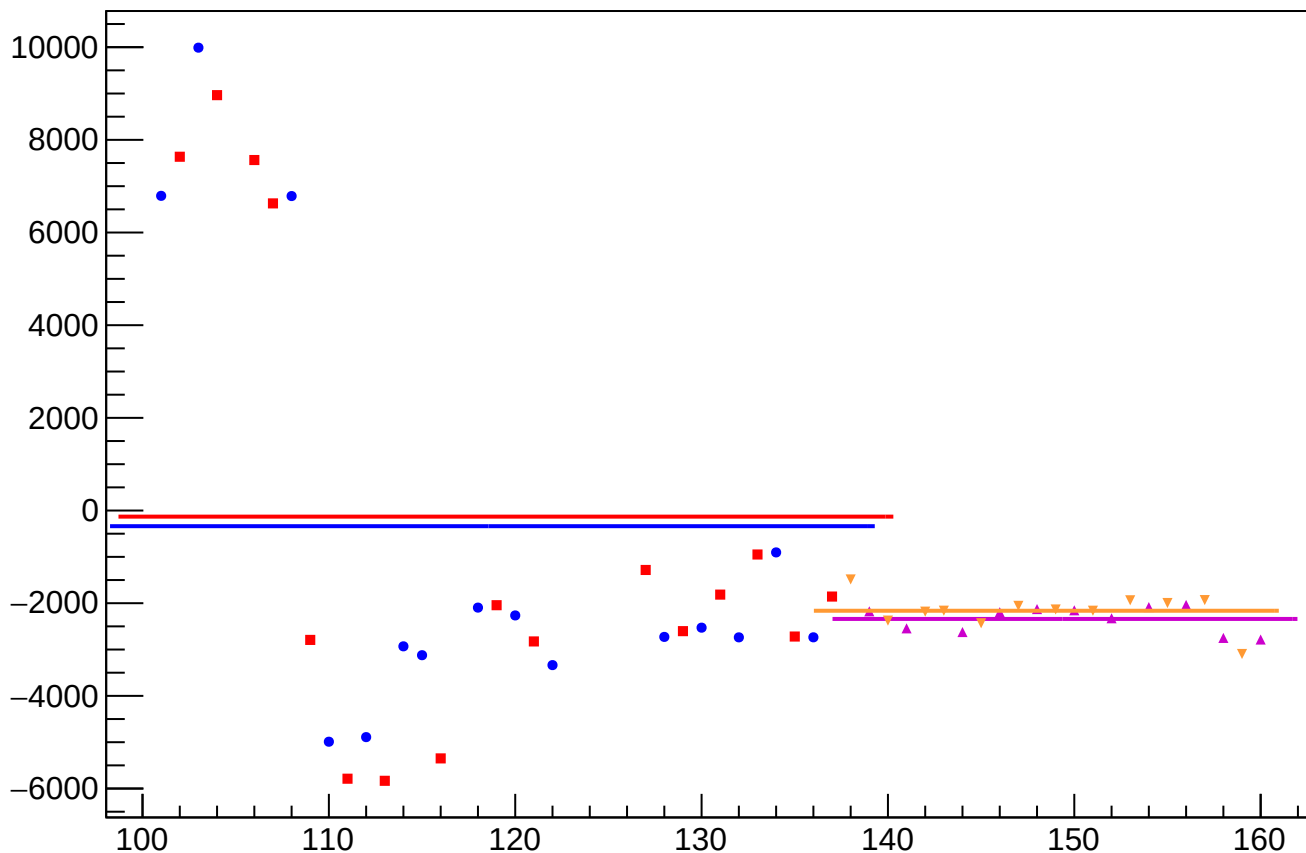
Right In: 1556.763+/-0.000  $\chi^2/\text{NDF}$ : 1139364239218600567191855131756930793472.0/14  
 Left Out: 642.639+/-0.000  $\chi^2/\text{NDF}$ : 29931346030134316080818937490076336128.0/11  
 Right Out: 2232.520+/-0.000  $\chi^2/\text{NDF}$ : 8990395725533930134878595569706942332928.0/15  
 Left In: 634.562+/-0.000  $\chi^2/\text{NDF}$ : 12308442809403031190669556314642841600.0/10  
 All: 1164.597+/-0.000  $\chi^2/\text{NDF}$ : 11541094593  
 + sign 1022.208+/-0.000  $\chi^2/\text{NDF}$ : 14864291079277  
 - sign 1304.479+/-0.000  $\chi^2/\text{NDF}$ : 99918451960380

dit\_atr2\_coil6\_Ndata\_mean vs Slug



|                            |                                                                   |                         |                                      |
|----------------------------|-------------------------------------------------------------------|-------------------------|--------------------------------------|
| Right In: 1013.146+/-0.000 | $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14 | + sign 1105.927+/-0.000 | $\chi^2/\text{NDF}$ : 93699894673441 |
| Left Out: 1171.807+/-0.000 | $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11 | All: 1116.146+/-0.000   | $\chi^2/\text{NDF}$ : 23037003763    |
| Right Out: 972.465+/-0.000 | $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15 | - sign 1126.185+/-0.000 | $\chi^2/\text{NDF}$ : 13634656733460 |
| Left In: 1237.150+/-0.000  | $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10 |                         |                                      |

# dit\_sam1\_coil6\_mean vs Slug



Right In:  $-337.865 \pm 0.000$   $\chi^2/\text{NDF}: 15152515933007079891661097940762081886208.0/14$

Left Out:  $-2162.857 \pm 0.000$   $\chi^2/\text{NDF}: 126332275232930257638482620391759020032.0/11$

Right Out:  $-131.545 \pm 0.000$   $\chi^2/\text{NDF}: 16473217651078877976377424419956902068224.0/15$

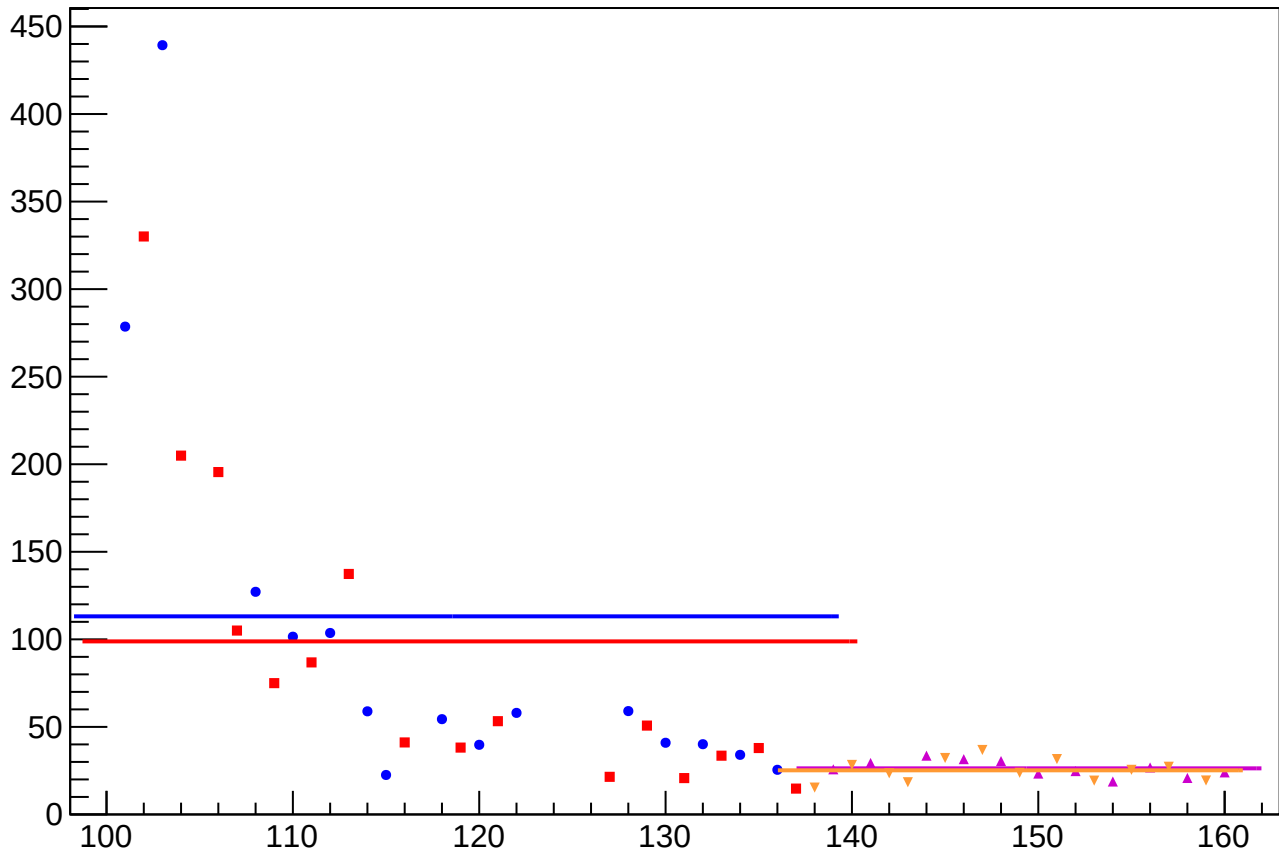
Left In:  $-2339.639 \pm 0.000$   $\chi^2/\text{NDF}: 62860144247456957543810906284181422080.0/10$

+ sign  $-1405.071 \pm 0.000$   $\chi^2/\text{NDF}: 1654286779746$

All:  $-1409.541 \pm 0.000$   $\chi^2/\text{NDF}: 3496770485$

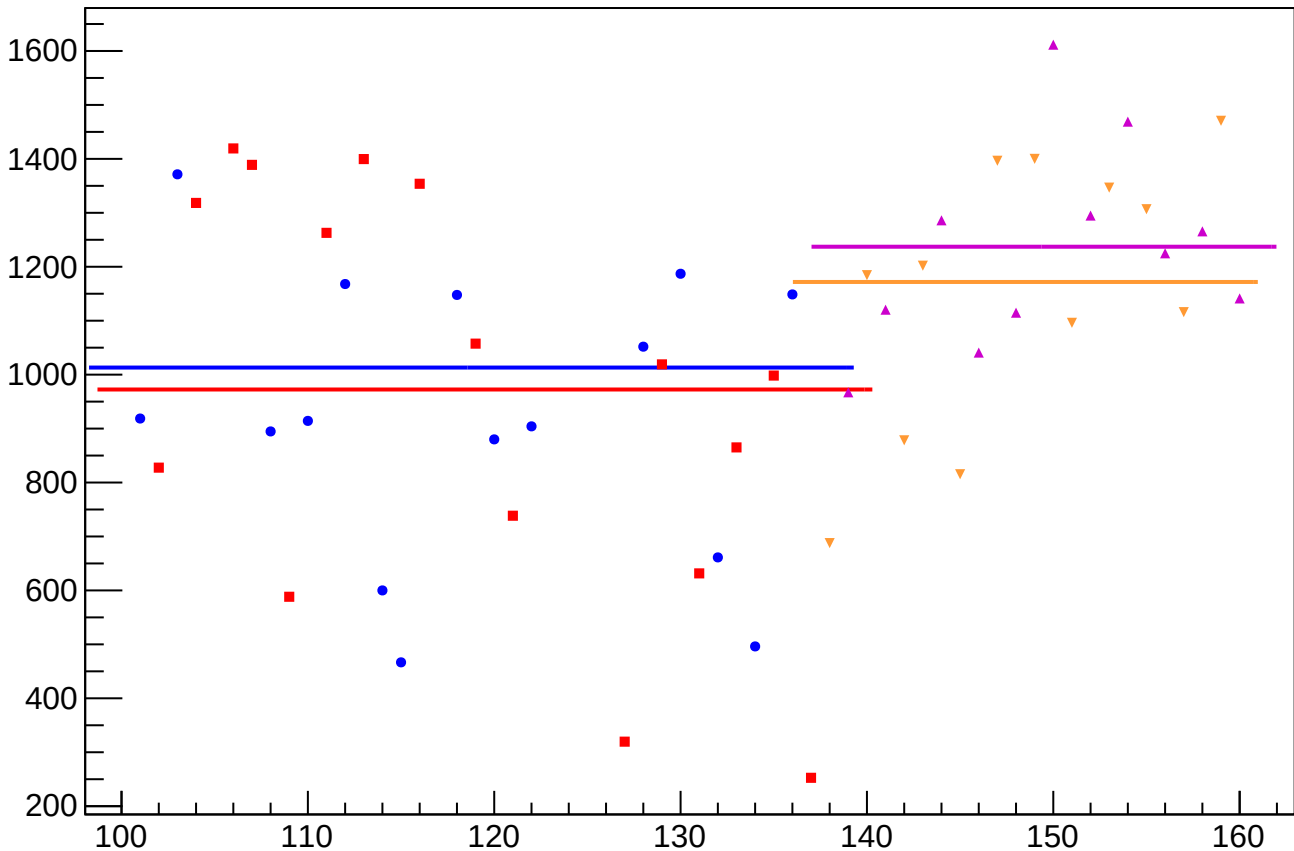
- sign  $-1413.933 \pm 0.000$   $\chi^2/\text{NDF}: 18424775138160$

dit\_sam1\_coil6\_err\_mean vs Slug



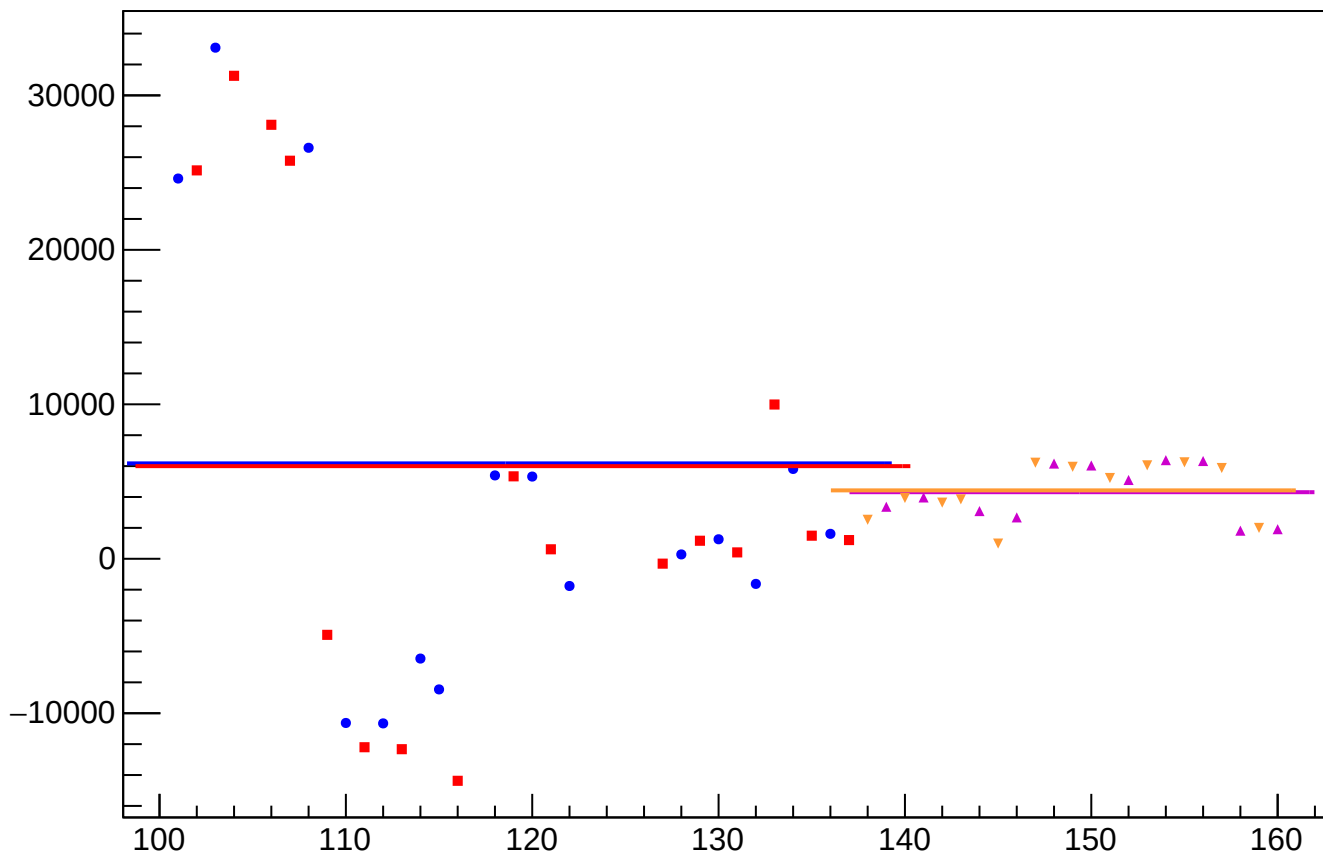
Right In: 113.134 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 9989638354332004017458192433874468864.0/14  
 Left Out: 25.204 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 35340998729966912863138320392126464.0/11  
 Right Out: 98.833 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 5510365308590426333953610701260980224.0/15  
 Left In: 26.331 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 18142873408814573481950758043648000.0/10  
 All: 59.198 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 2054365518369  
 + sign 61.715 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 1295926094815427  
 - sign 56.726 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 7564771732797838

# dit\_sam1\_coil6\_Ndata\_mean vs Slug



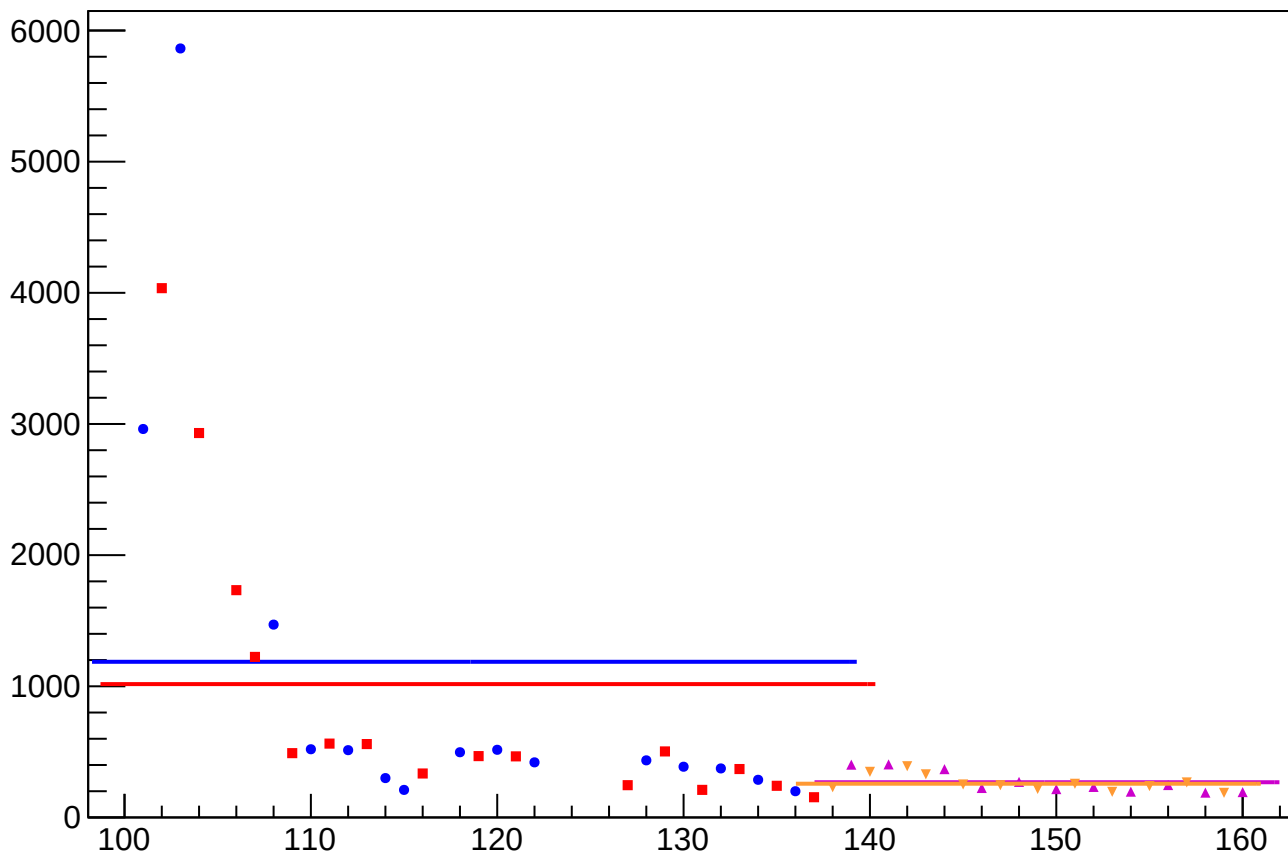
Right In: 1013.146+/-0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807+/-0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: 972.465+/-0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

dit\_sam2\_coil6\_mean vs Slug



|                                                                                                                                                                                         |                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| 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   |
| + sign 5153.665+/-0.000 $\chi^2/\text{NDF}$ : 12131982747999<br>All: 5084.951+/-0.000 $\chi^2/\text{NDF}$ : 26218080052<br>- sign 5017.446+/-0.000 $\chi^2/\text{NDF}$ : 14084634301440 |                                                                       |

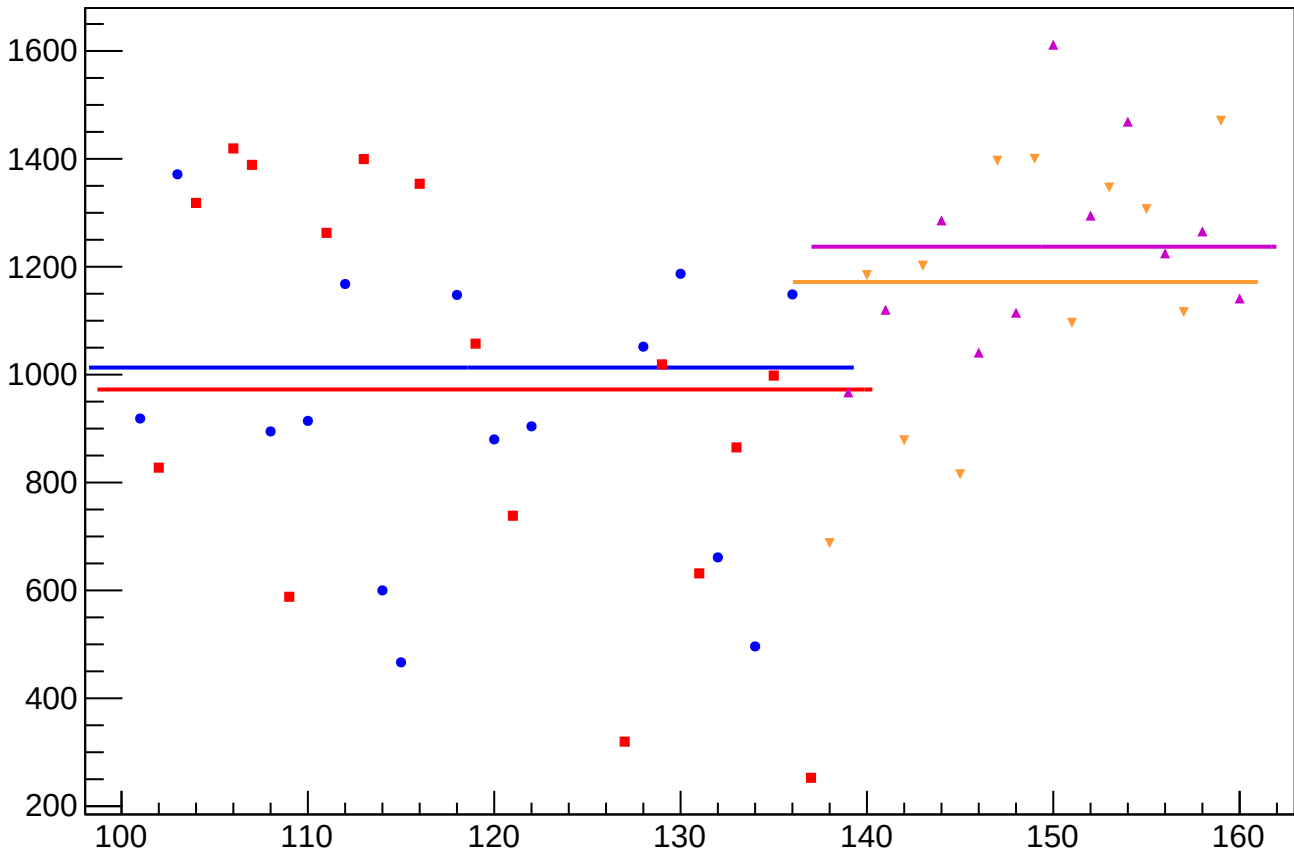
dit\_sam2\_coil6\_err\_mean vs Slug



Right In: 1186.846 $\pm$ 0.000  $\chi^2$ /NDF: 1796463312802023303623210264680353234944.0/14  
 Left Out: 257.255 $\pm$ 0.000  $\chi^2$ /NDF: 2781253601465669157863687249484316672.0/11  
 Right Out: 1016.732 $\pm$ 0.000  $\chi^2$ /NDF: 927646003466094249558391691024825057280.0/15  
 Left In: 268.493 $\pm$ 0.000  $\chi^2$ /NDF: 5855734975706547823556607966386847744.0/10  
 All: 612.442 $\pm$ 0.000  $\chi^2$ /NDF: 328051716192  
 + sign 643.246 $\pm$ 0.000  $\chi^2$ /NDF: 212720083388662  
 - sign 582.179 $\pm$ 0.000  $\chi^2$ /NDF: 115037612749111

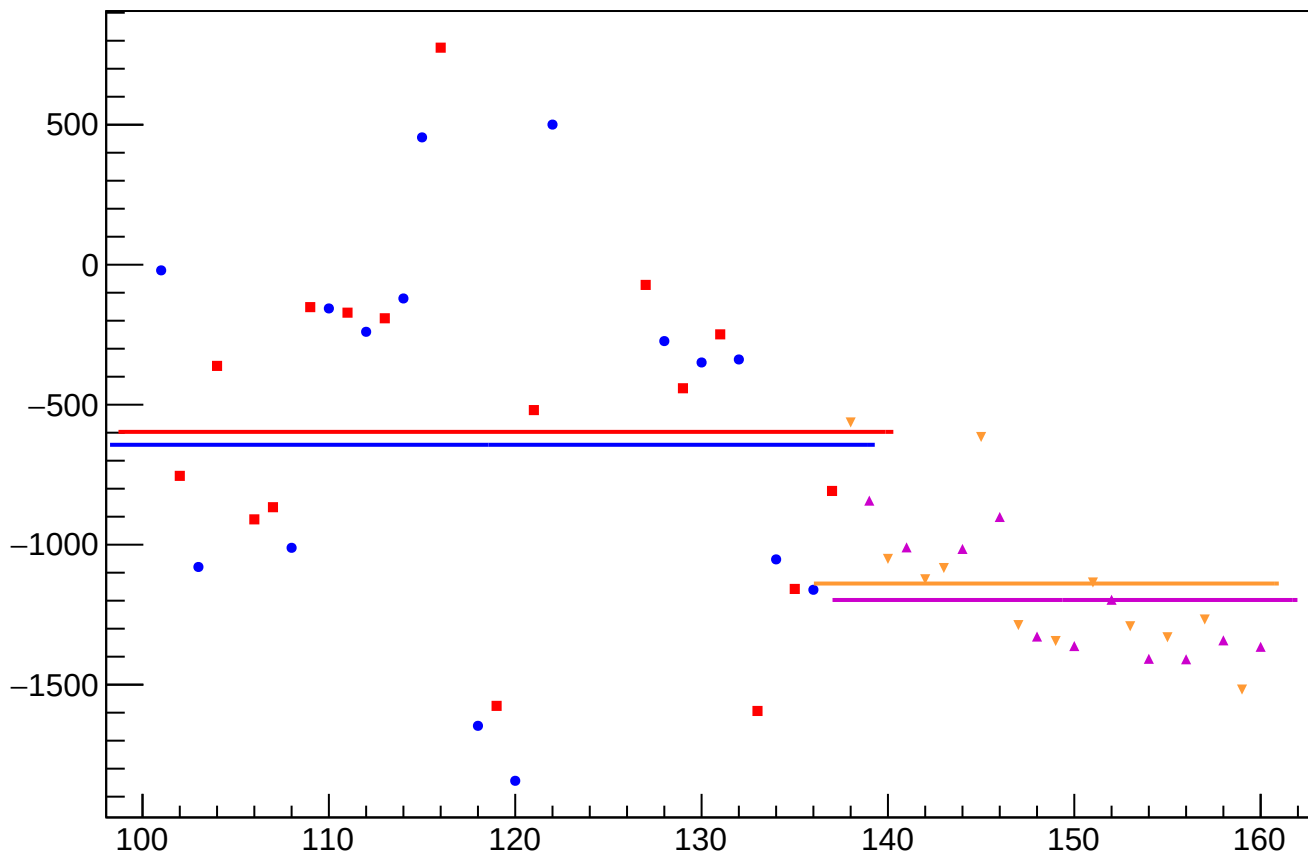


# dit\_sam2\_coil6\_Ndata\_mean vs Slug



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

dit\_sam3\_coil6\_mean vs Slug



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

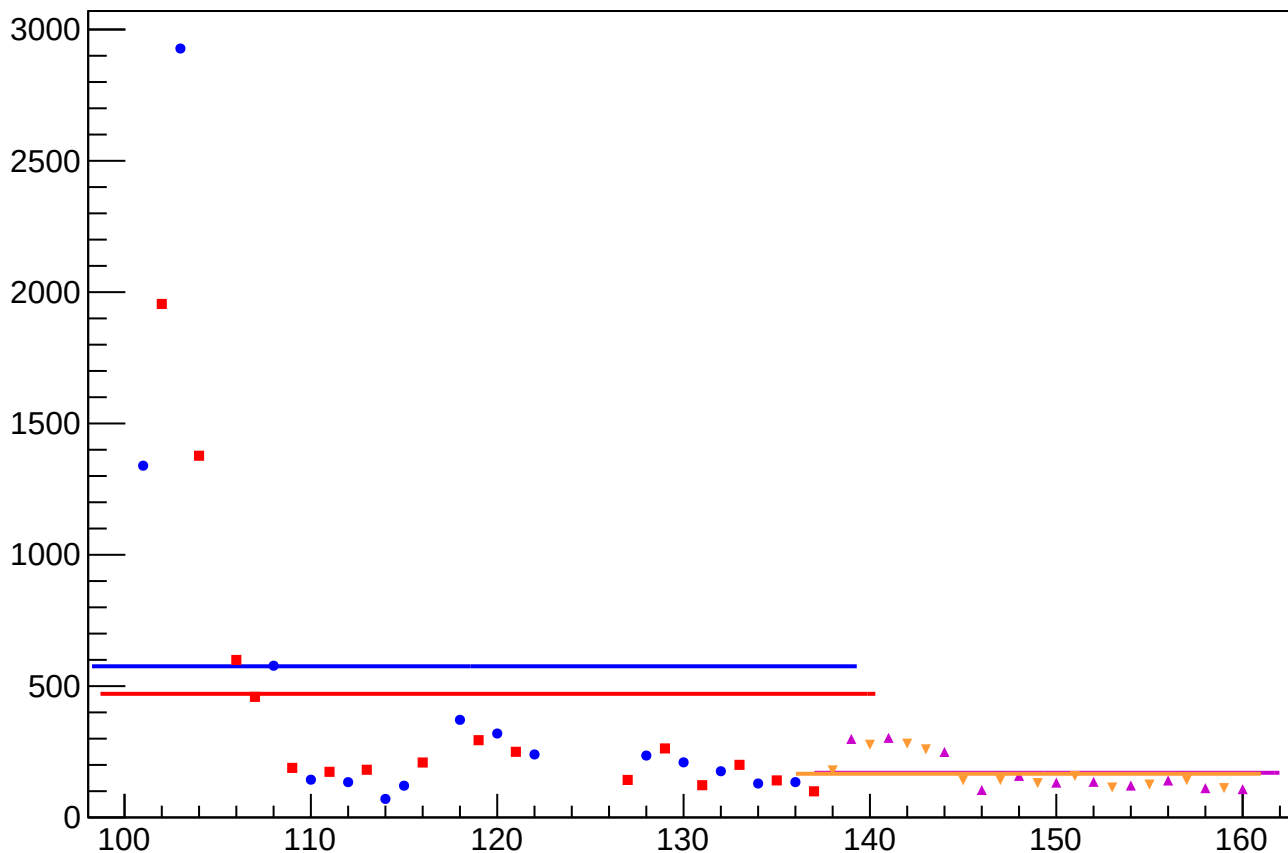
Left In: -1197.503+/-0.000  $\chi^2/\text{NDF}$ : 38624722141560961102710570239066636288.0/10

+ sign -932.996+/-0.000  $\chi^2/\text{NDF}$ : 43692805722802

All: -939.440+/-0.000  $\chi^2/\text{NDF}$ : 82608252499

- sign -945.770+/-0.000  $\chi^2/\text{NDF}$ : 389025821558760

dit\_sam3\_coil6\_err\_mean vs Slug



Right In: 575.526+/-0.000  $\chi^2/\text{NDF}$ : 432680039285849719493276471277131923456.0/14

+ sign 336.257+/-0.000  $\chi^2/\text{NDF}$ : 499270475269907

Left Out: 166.360+/-0.000  $\chi^2/\text{NDF}$ : 3052716209295405049807129095543193600.0/11

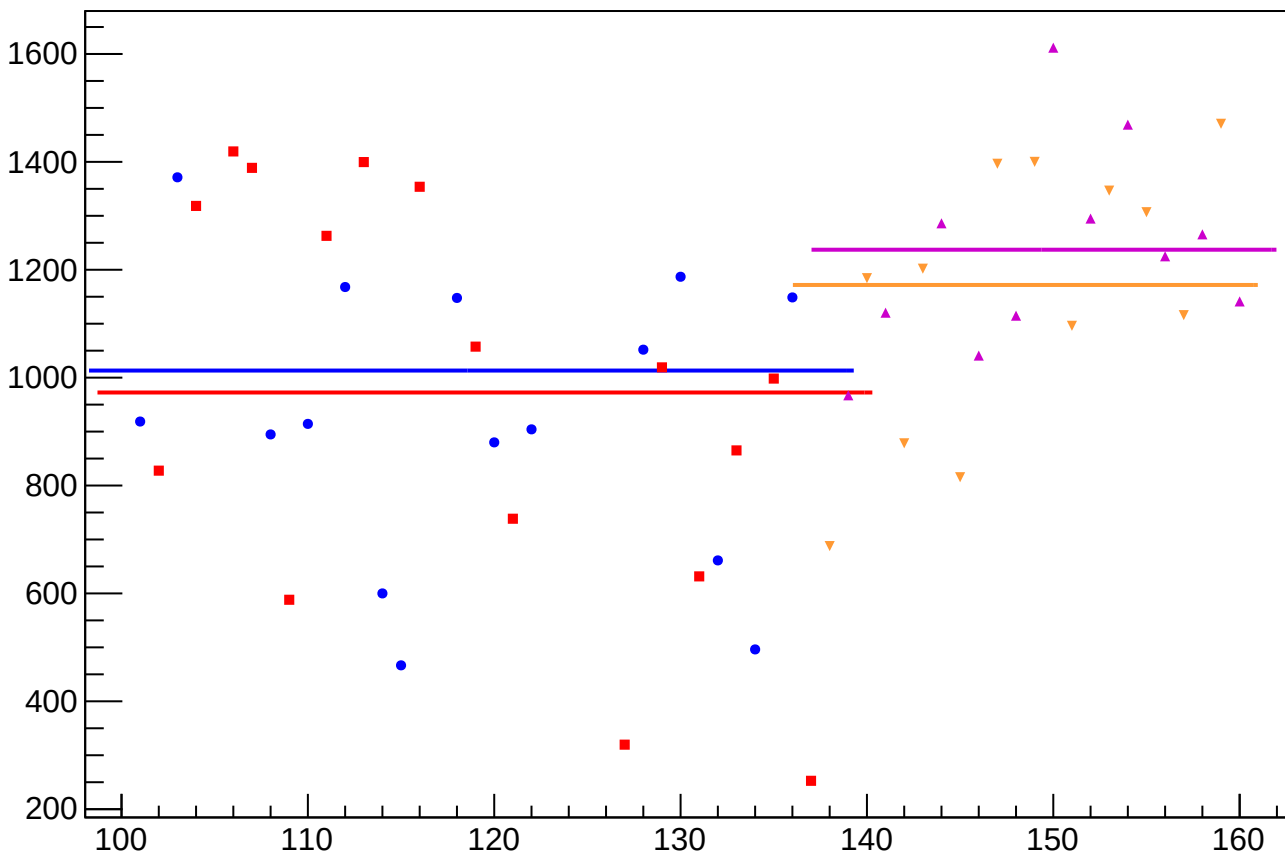
All: 316.009+/-0.000  $\chi^2/\text{NDF}$ : 749713374727

Right Out: 470.716+/-0.000  $\chi^2/\text{NDF}$ : 209310604291868219806073768764512403456.0/15

- sign 296.118+/-0.000  $\chi^2/\text{NDF}$ : 249172631287531

Left In: 170.082+/-0.000  $\chi^2/\text{NDF}$ : 4851165358478650186983079637734653952.0/10

# dit\_sam3\_coil6\_Ndata\_mean vs Slug



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

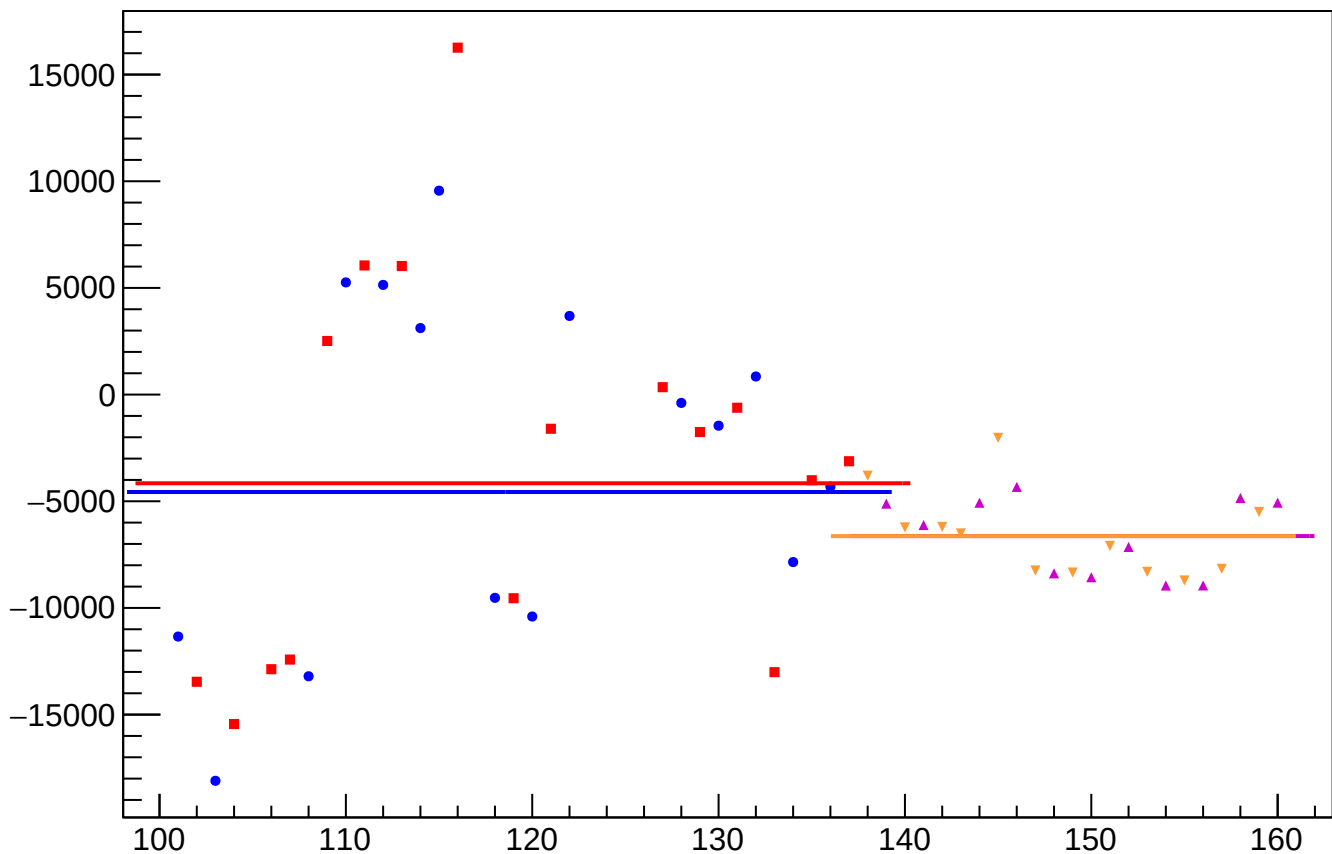
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

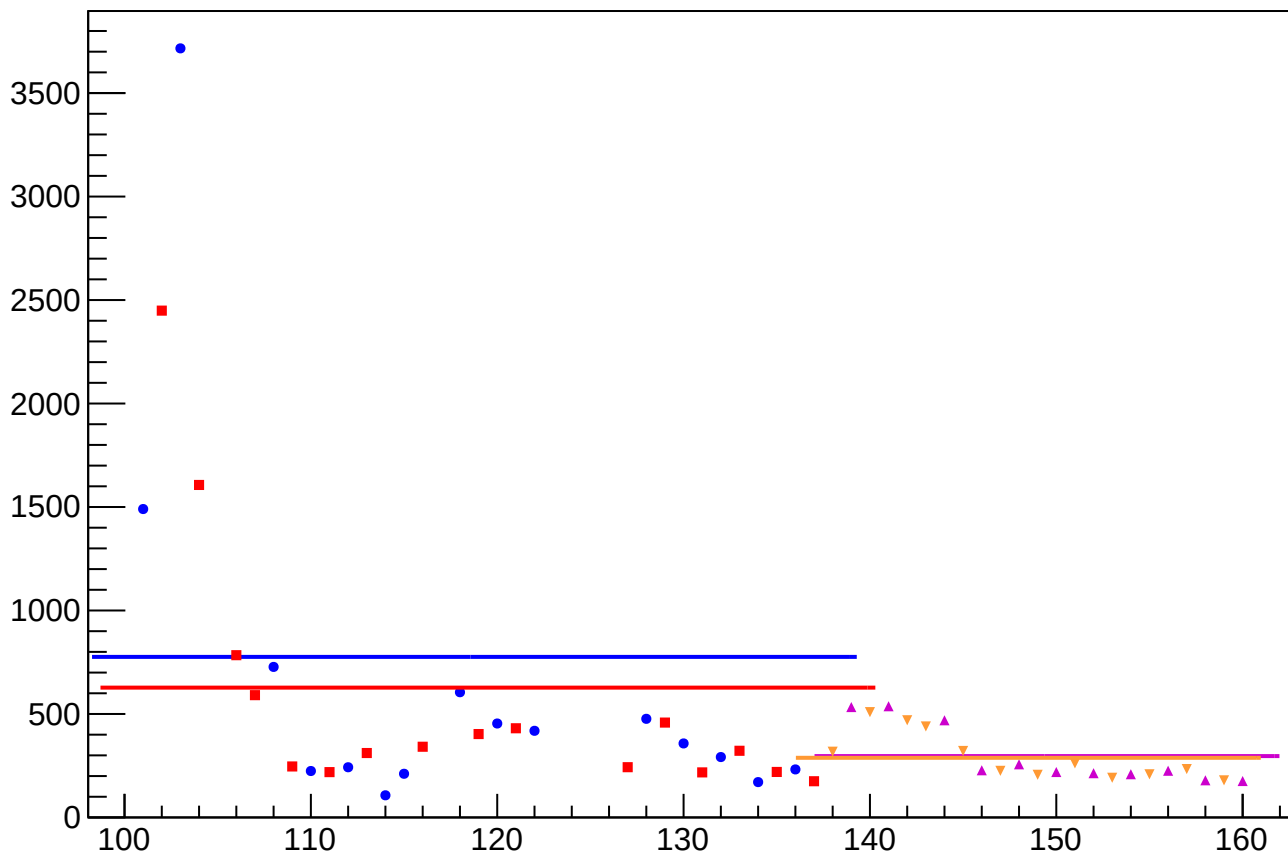
- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

dit\_sam4\_coil6\_mean vs Slug



Right In:  $-4565.412 \pm 0.000$   $\chi^2/\text{NDF}$ : 35667768247432289984899042725155487875072.0/14  
 Left Out:  $-6634.457 \pm 0.000$   $\chi^2/\text{NDF}$ : 3640150880403299784339543756995645407232.0/11  
 Right Out:  $-4156.859 \pm 0.000$   $\chi^2/\text{NDF}$ : 45539455441659927157708443099930682195968.0/15  
 Left In:  $-6631.377 \pm 0.000$   $\chi^2/\text{NDF}$ : 2831140540306304869921468245145345327104.0/10  
 All:  $-5683.850 \pm 0.000$   $\chi^2/\text{NDF}$ : 9170111031  
 + sign  $-5775.333 \pm 0.000$   $\chi^2/\text{NDF}$ : 4093261338391  
 - sign  $-5593.977 \pm 0.000$   $\chi^2/\text{NDF}$ : 50742565096238

# dit\_sam4\_coil6\_err\_mean vs Slug



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

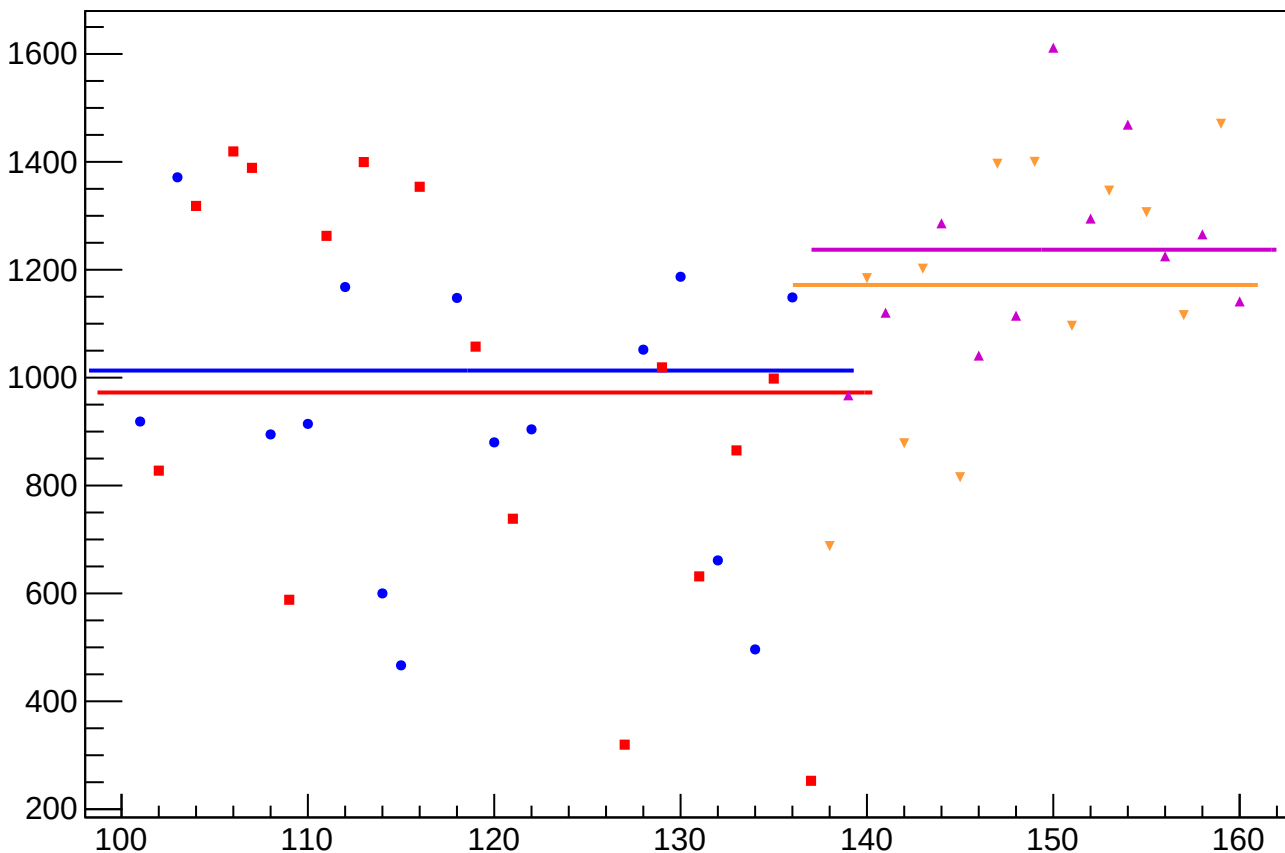
Left In: 296.514+/-0.000  $\chi^2/\text{NDF}$ : 17061879022016484064295210228444561408.0/10

+ sign 490.690+/-0.000  $\chi^2/\text{NDF}$ : 742695334945121

All: 462.697+/-0.000  $\chi^2/\text{NDF}$ : 11020925146

- sign 435.197+/-0.000  $\chi^2/\text{NDF}$ : 356969187717050

# dit\_sam4\_coil6\_Ndata\_mean vs Slug



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

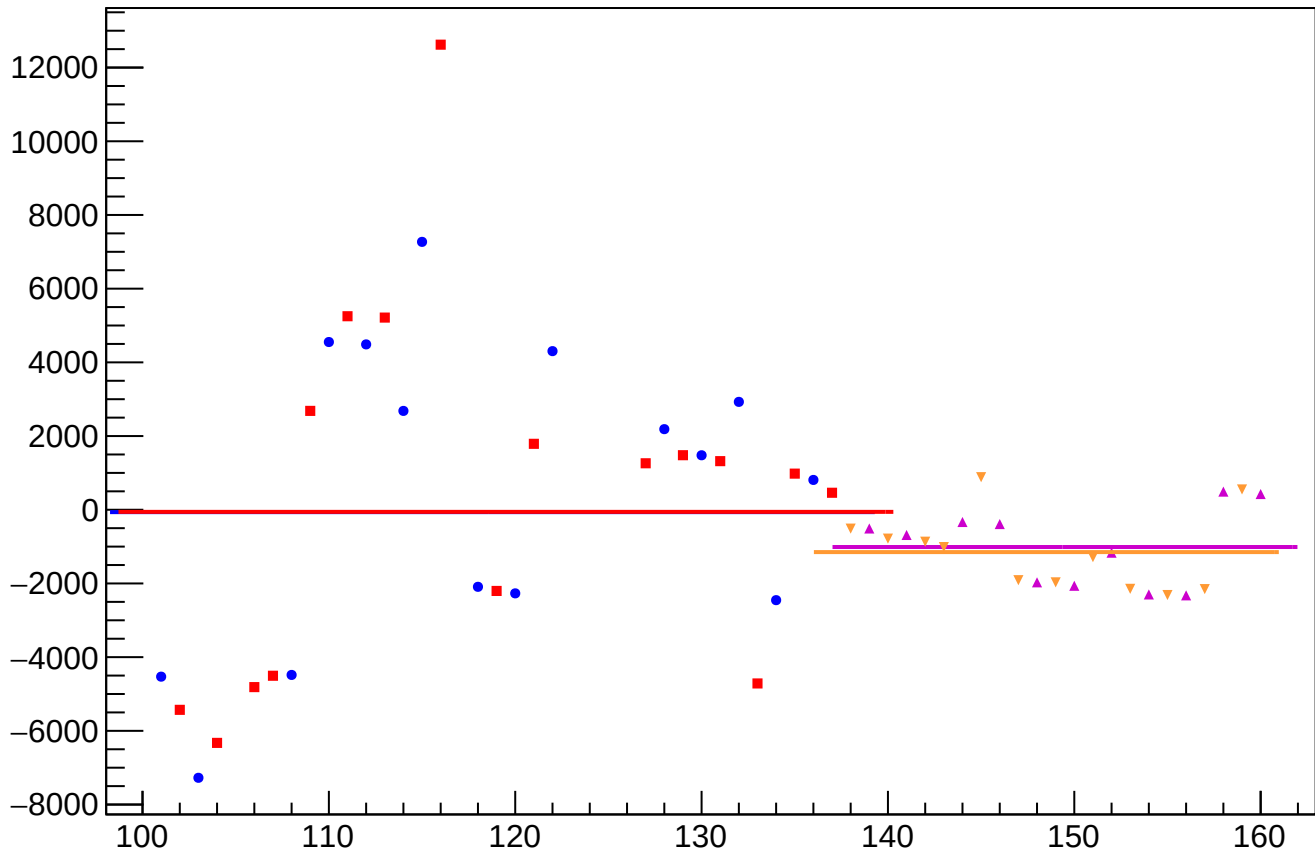
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

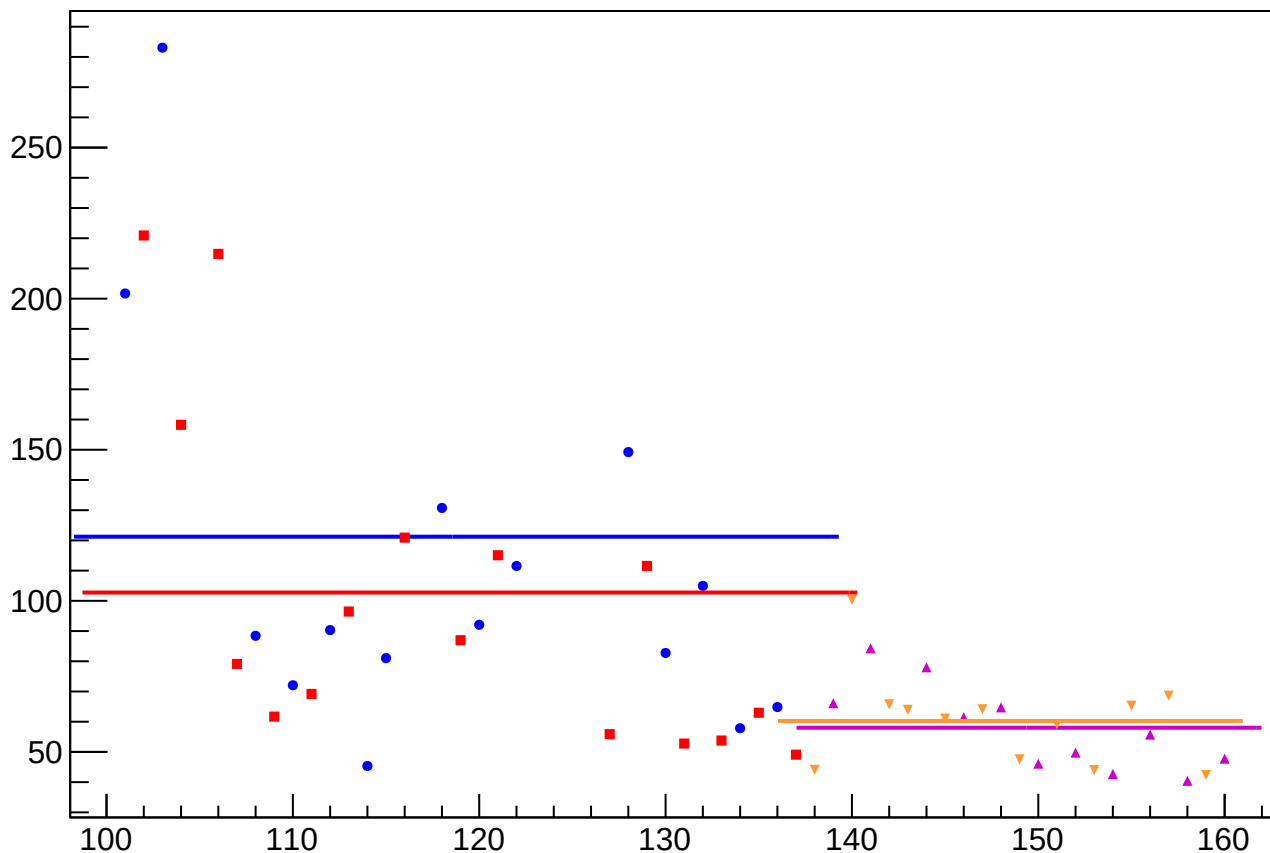
# dit\_sam5\_coil6\_mean vs Slug



Right In:  $-64.751 \pm 0.000$   $\chi^2/\text{NDF}: 9614223448851814191683817349989558910976.0/14$   
 Left Out:  $-1149.036 \pm 0.000$   $\chi^2/\text{NDF}: 977384281251527862797157265716912586752.0/11$   
 Right Out:  $-57.229 \pm 0.000$   $\chi^2/\text{NDF}: 13780958977008702301942505454387177979904.0/15$   
 Left In:  $-1011.284 \pm 0.000$   $\chi^2/\text{NDF}: 903909408421874171739001543159795679232.0/10$



dit\_sam5\_coil6\_err\_mean vs Slug



Right In: 121.228+/-0.000  $\chi^2/\text{NDF}$ : 2723170857684362574800637594861305856.0/14

Left Out: 60.239+/-0.000  $\chi^2/\text{NDF}$ : 225102554491032869548797845500329984.0/11

Right Out: 102.749+/-0.000  $\chi^2/\text{NDF}$ : 1967668024846010333654427670555918336.0/15

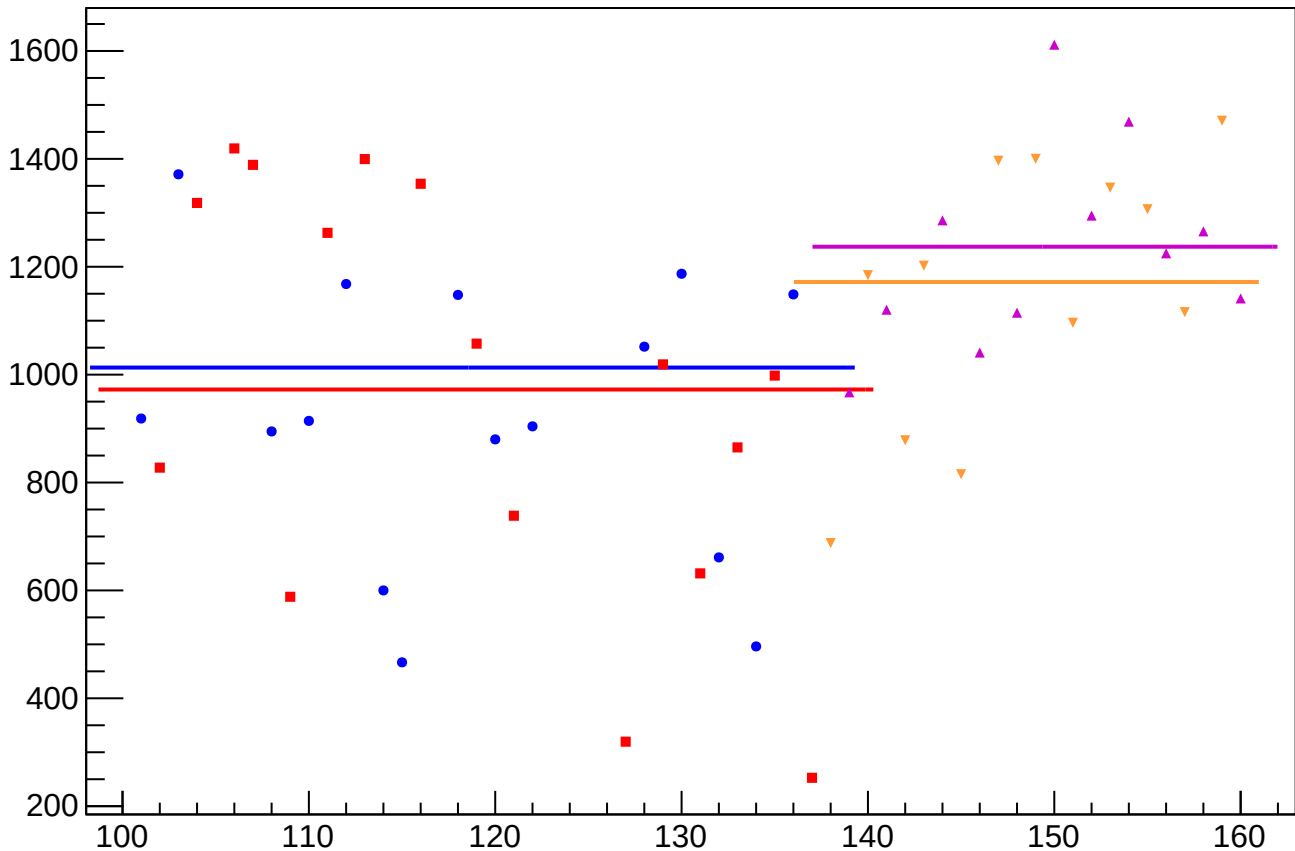
Left In: 58.011+/-0.000  $\chi^2/\text{NDF}$ : 177427701786540438757655027214450688.0/10

+ sign 85.563+/-0.000  $\chi^2/\text{NDF}$ : 4359921672162242

All: 81.126+/-0.000  $\chi^2/\text{NDF}$ : 7341366605629

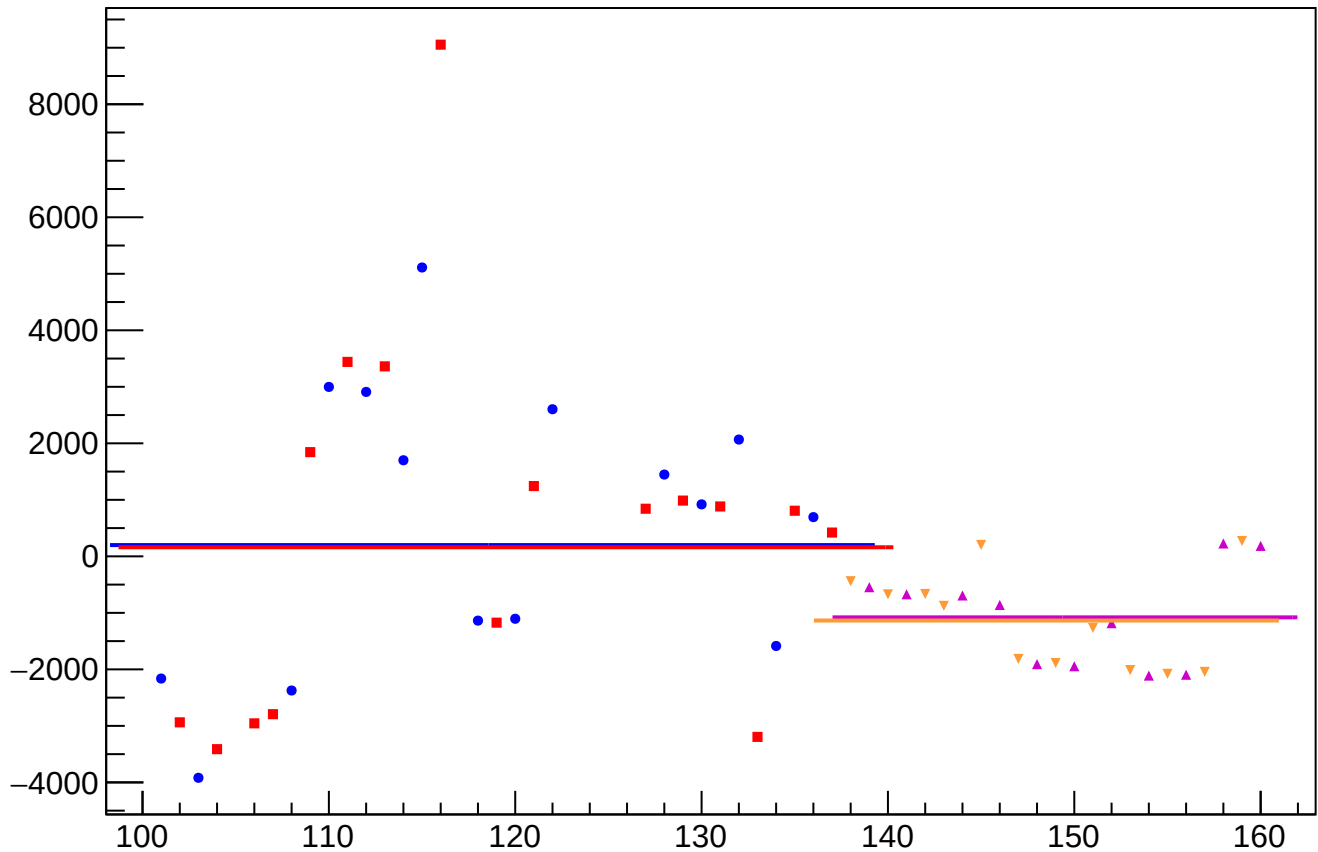
- sign 76.766+/-0.000  $\chi^2/\text{NDF}$ : 2920429745013475

# dit\_sam5\_coil6\_Ndata\_mean vs Slug



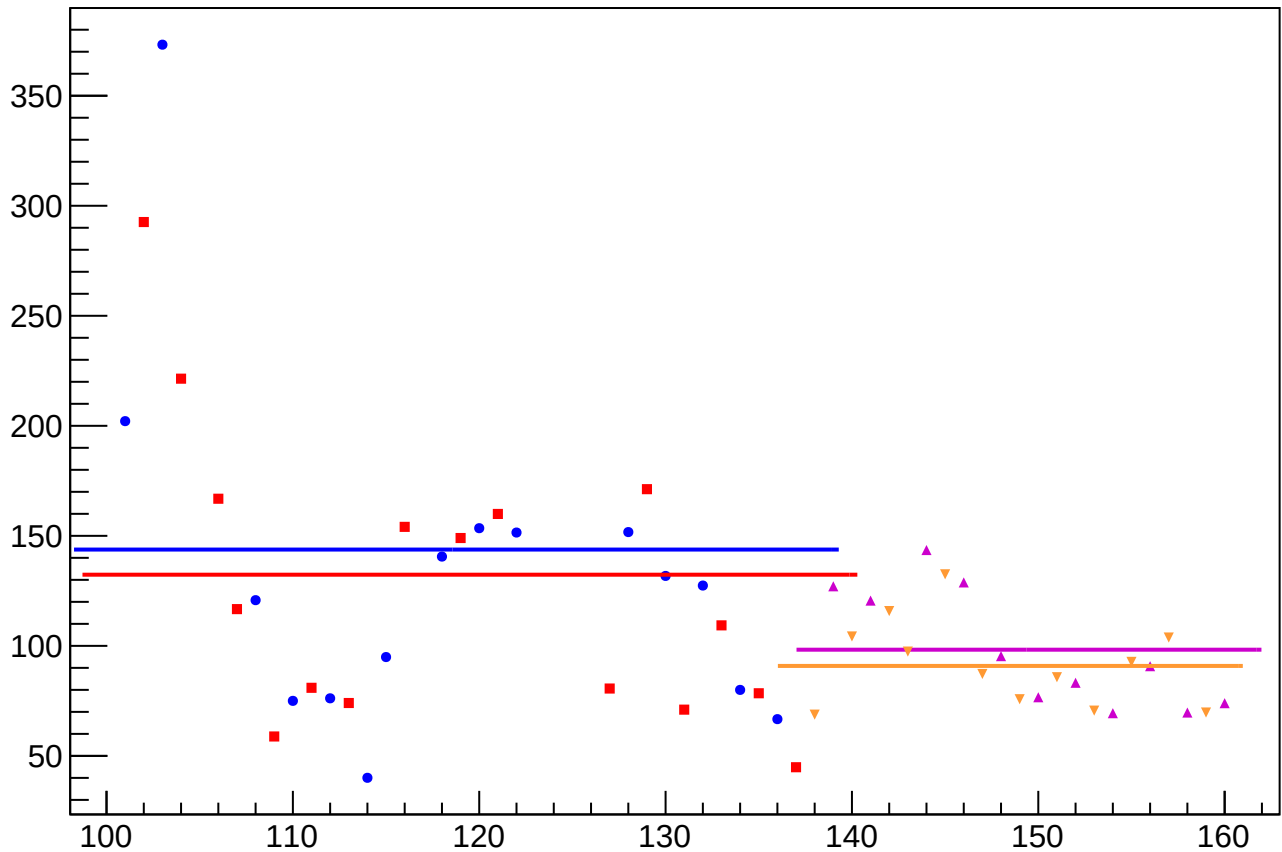
Right In: 1013.146+/-0.000  $\chi^2/\text{NDF}$ : 31721270909522099205936100724856324096.0/14  
 Left Out: 1171.807+/-0.000  $\chi^2/\text{NDF}$ : 52424901282098583856312492577037221888.0/11  
 Right Out: 972.465+/-0.000  $\chi^2/\text{NDF}$ : 78884457200782655962756069915468234752.0/15  
 Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

# dit\_sam6\_coil6\_mean vs Slug



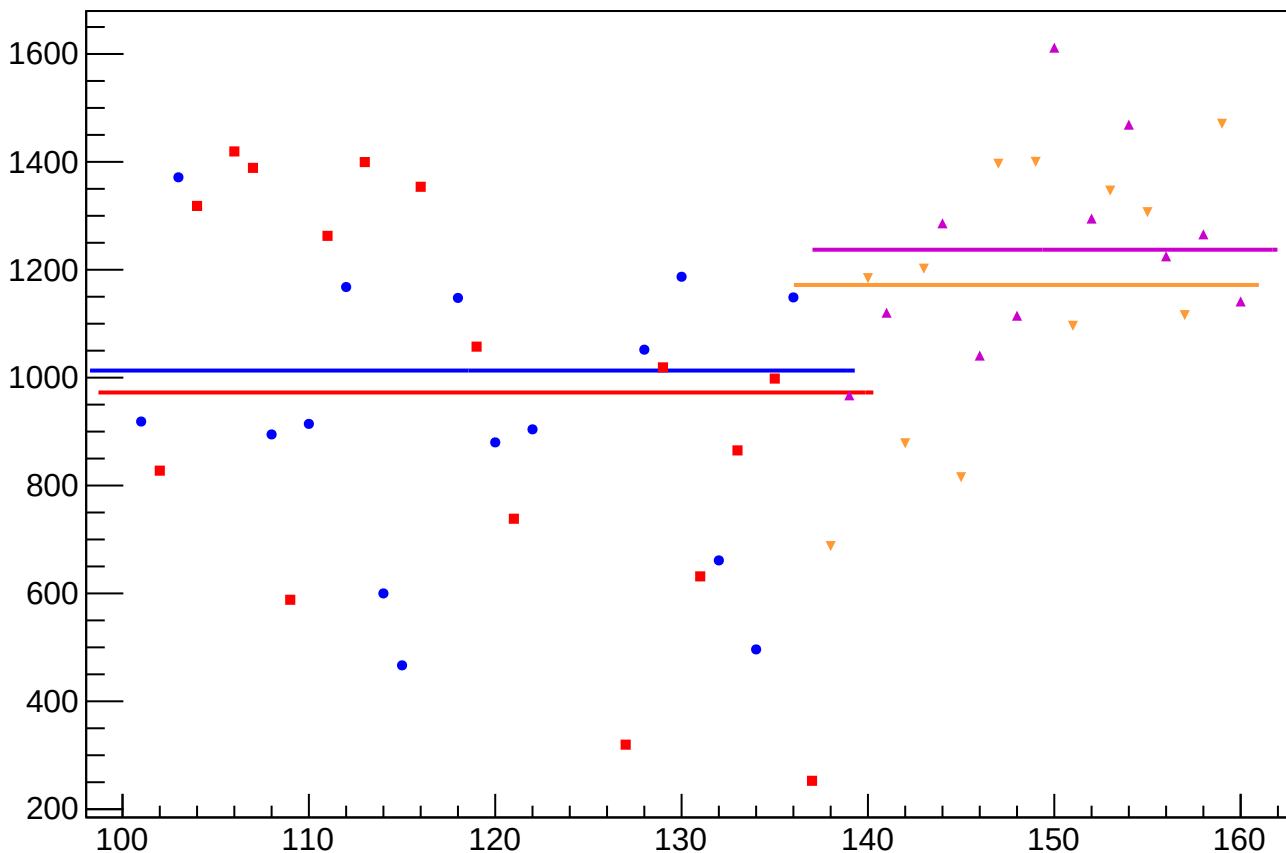
Right In: 199.503+/-0.000  $\chi^2/\text{NDF}$ : 3268159745923533825045181664876849790976.0/14  
 Left Out: -1135.455+/-0.000  $\chi^2/\text{NDF}$ : 654697592596579349133010058178925166592.0/11  
 Right Out: 160.512+/-0.000  $\chi^2/\text{NDF}$ : 5680576709461197901526729703706251493376.0/15  
 Left In: -1079.555+/-0.000  $\chi^2/\text{NDF}$ : 614734398575877452858032752710912049152.0/10

# dit\_sam6\_coil6\_err\_mean vs Slug



Right In: 143.764 $\pm$ 0.000  $\chi^2$ /NDF: 4514785869565777849900508591821946880.0/14  
 Left Out: 90.882 $\pm$ 0.000  $\chi^2$ /NDF: 326242734851411629220497356388040704.0/11  
 Right Out: 132.341 $\pm$ 0.000  $\chi^2$ /NDF: 3174087908796245287682359914282352640.0/15  
 Left In: 98.257 $\pm$ 0.000  $\chi^2$ /NDF: 6209937767730933933033369428470792192.0/10  
 All: 112.691 $\pm$ 0.000  $\chi^2$ /NDF: 101475107783  
 + sign 112.840 $\pm$ 0.000  $\chi^2$ /NDF: 590235067464096  
 - sign 112.546 $\pm$ 0.000  $\chi^2$ /NDF: 424509210993955

# dit\_sam6\_coil6\_Ndata\_mean vs Slug



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

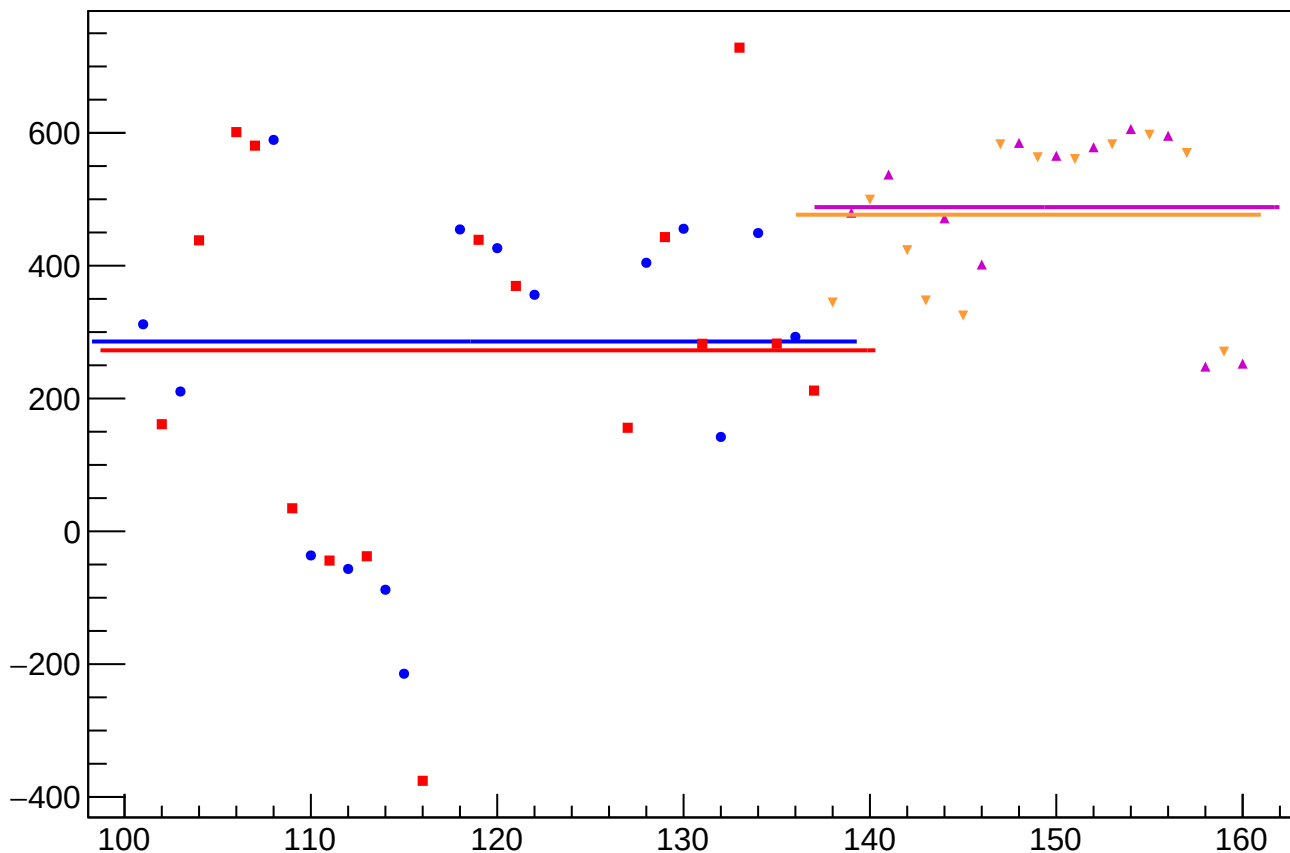
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

# dit\_sam7\_coil6\_mean vs Slug



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

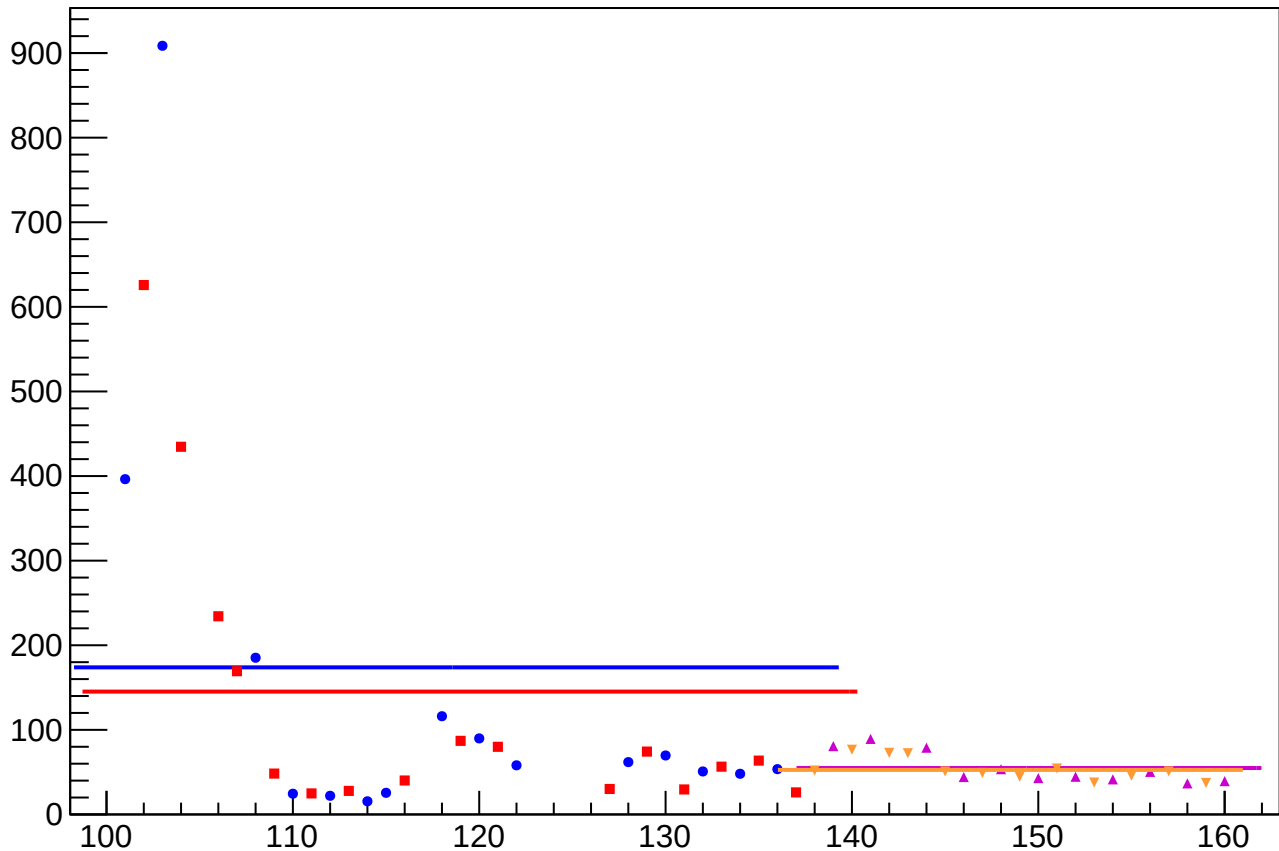
Left In: 488.203+/-0.000  $\chi^2/\text{NDF}$ : 13828831980358883653289432391973076992.0/10

+ sign 397.512+/-0.000  $\chi^2/\text{NDF}$ : 506405806110630

All: 397.652+/-0.000  $\chi^2/\text{NDF}$ : 126636598673

- sign 397.790+/-0.000  $\chi^2/\text{NDF}$ : 759959573910775

dit\_sam7\_coil6\_err\_mean vs Slug



Right In: 173.871+/-0.000  $\chi^2/\text{NDF}$ : 41705473404466232613073704554990665728.0/14

+ sign 102.988+/-0.000  $\chi^2/\text{NDF}$ : 474219136417657

Left Out: 52.656+/-0.000  $\chi^2/\text{NDF}$ : 140159423385887976692066167541465088.0/11

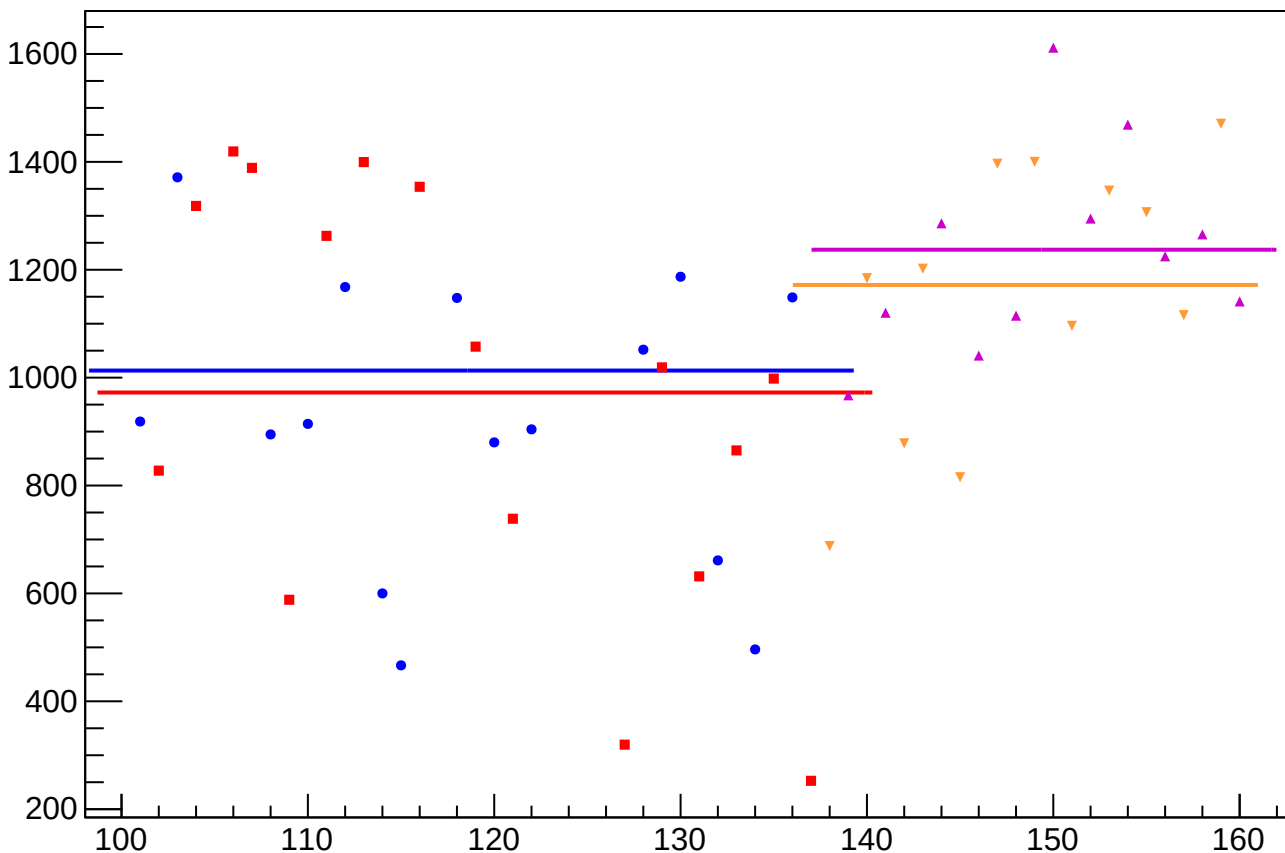
All: 97.830+/-0.000  $\chi^2/\text{NDF}$ : 7349556913199

Right Out: 145.228+/-0.000  $\chi^2/\text{NDF}$ : 22529615719408594720785265744437837824.0/15

- sign 92.763+/-0.000  $\chi^2/\text{NDF}$ : 2599123168114386

Left In: 54.891+/-0.000  $\chi^2/\text{NDF}$ : 300358274506113612486338175884591104.0/10

# dit\_sam7\_coil6\_Ndata\_mean vs Slug



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

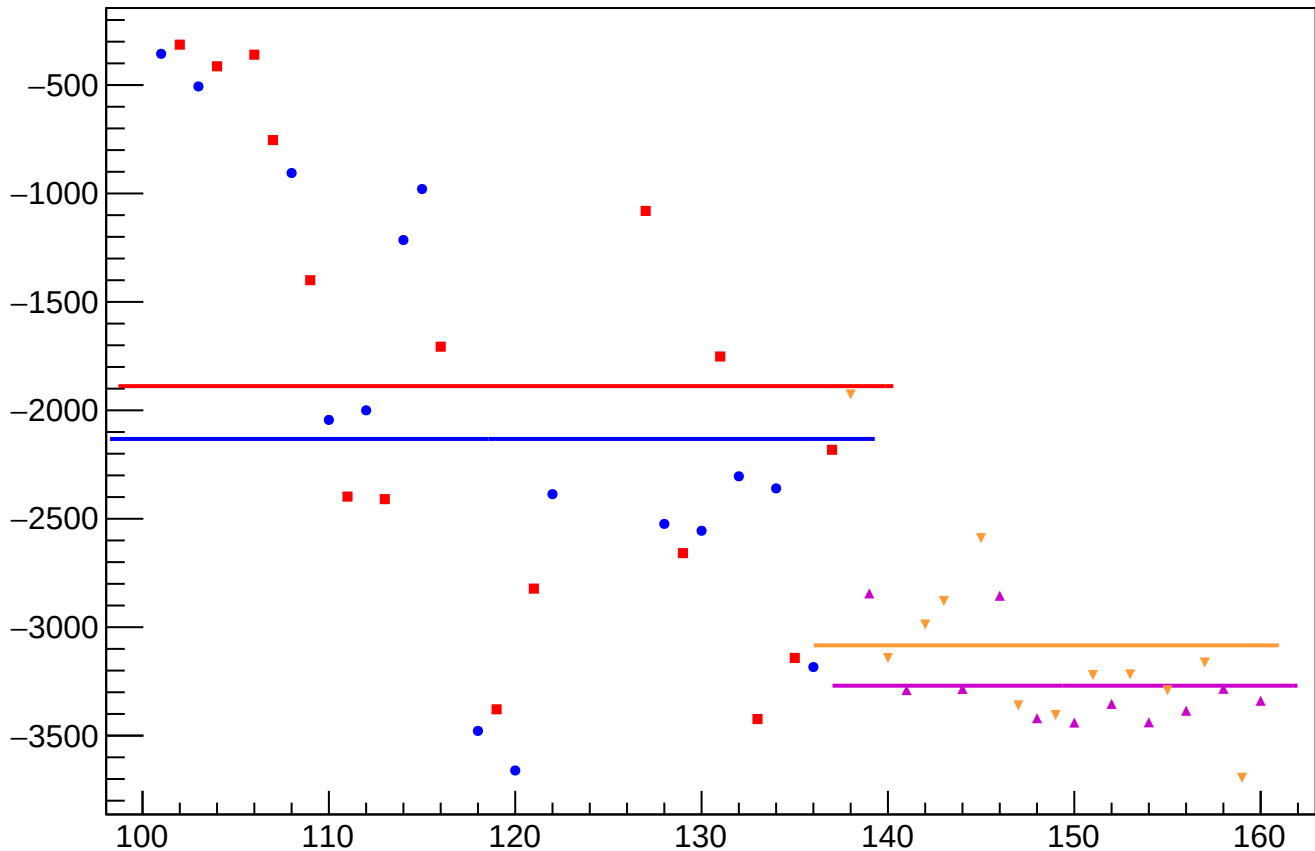
+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

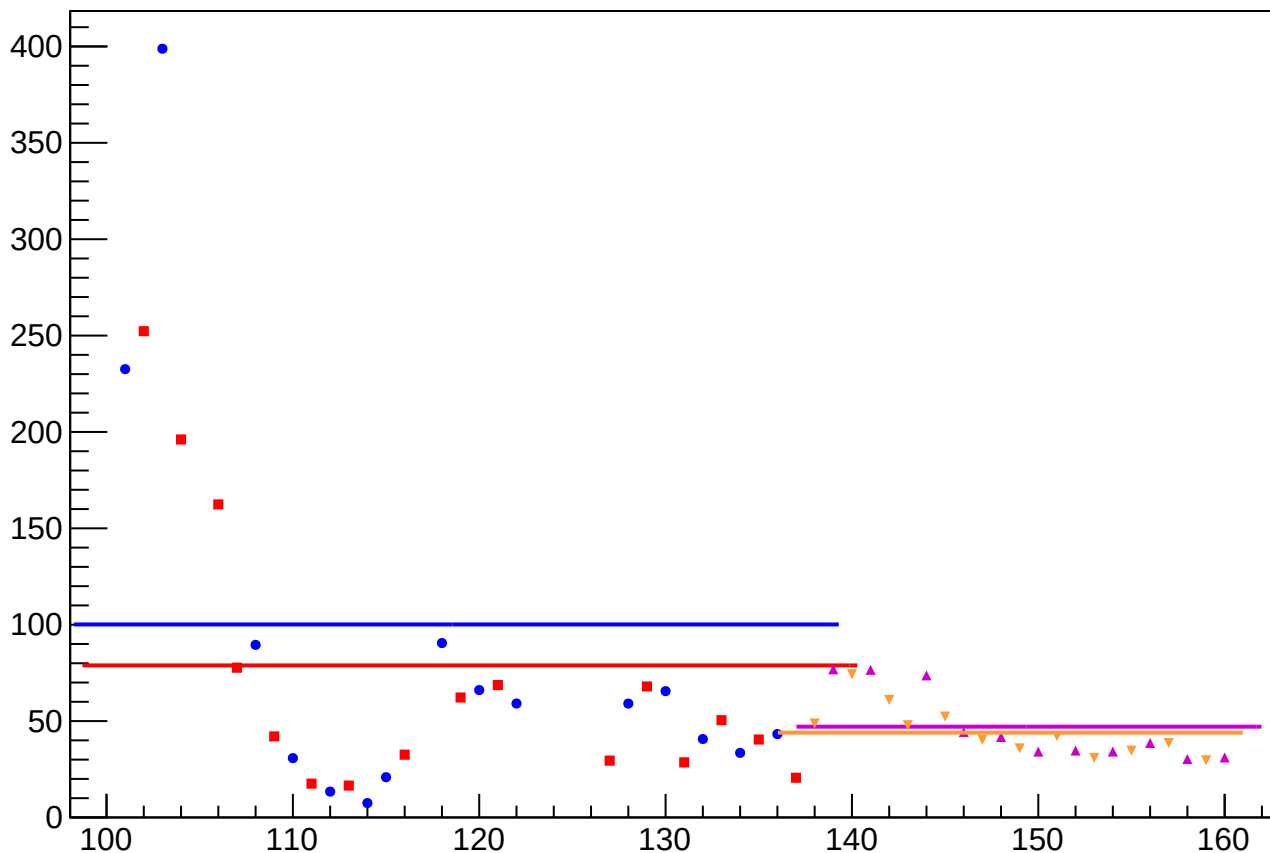


# dit\_sam8\_coil6\_mean vs Slug



Right In:  $-2131.905 \pm 0.000$   $\chi^2/\text{NDF}: 722433384570495071131450661983670501376.0/14$   
 Left Out:  $-3083.729 \pm 0.000$   $\chi^2/\text{NDF}: 178322677856663824149309206068860026880.0/11$   
 Right Out:  $-1888.448 \pm 0.000$   $\chi^2/\text{NDF}: 791986665551980691032719862611769819136.0/15$   
 Left In:  $-3269.755 \pm 0.000$   $\chi^2/\text{NDF}: 38098096180391062431092176239781216256.0/10$

# dit\_sam8\_coil6\_err\_mean vs Slug



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

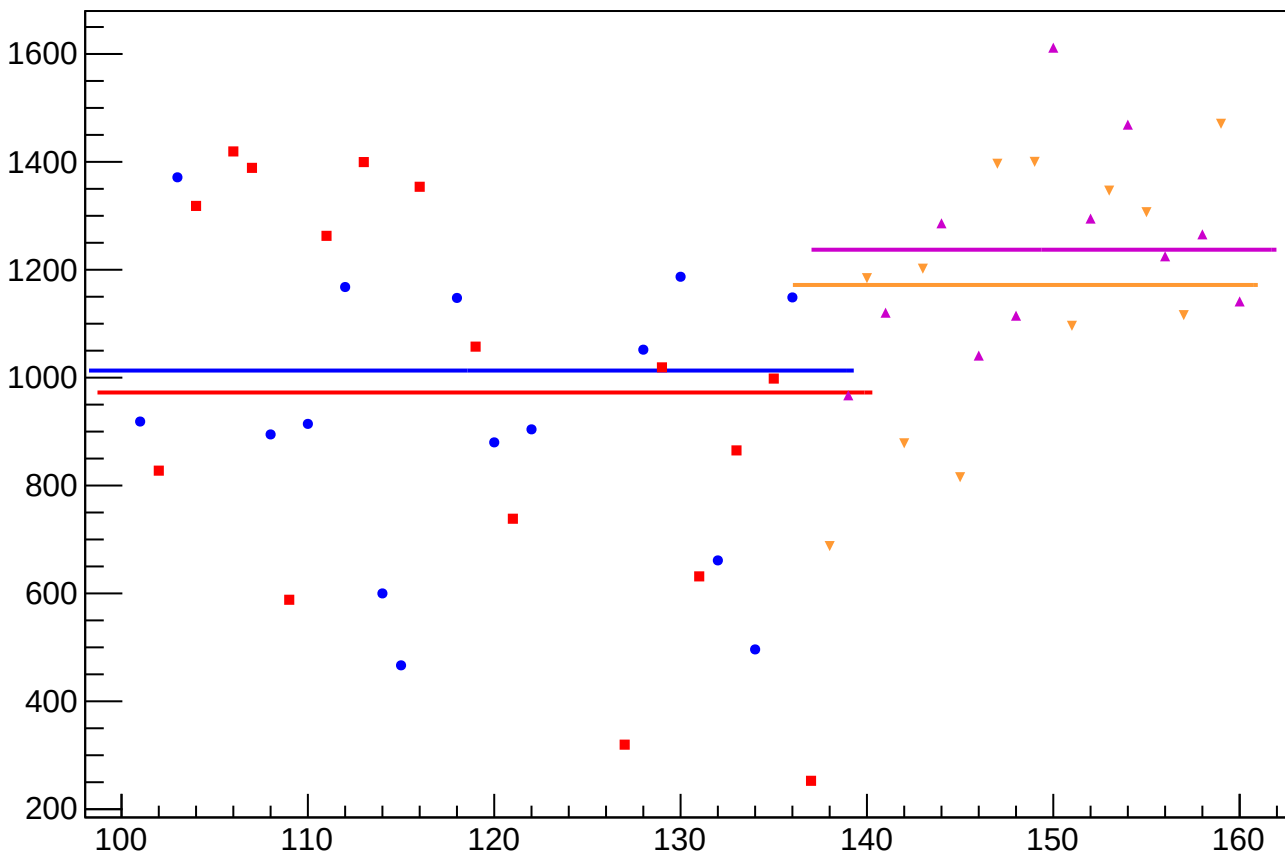
Left In: 47.092+/-0.000  $\chi^2/\text{NDF}$ : 302550156086866534805447117402800128.0/10

+ sign 67.306+/-0.000  $\chi^2/\text{NDF}$ : 9154119203552440

All: 63.832+/-0.000  $\chi^2/\text{NDF}$ : 1341063315555

- sign 60.419+/-0.000  $\chi^2/\text{NDF}$ : 4219125097072467

dit\_sam8\_coil6\_Ndata\_mean vs Slug



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

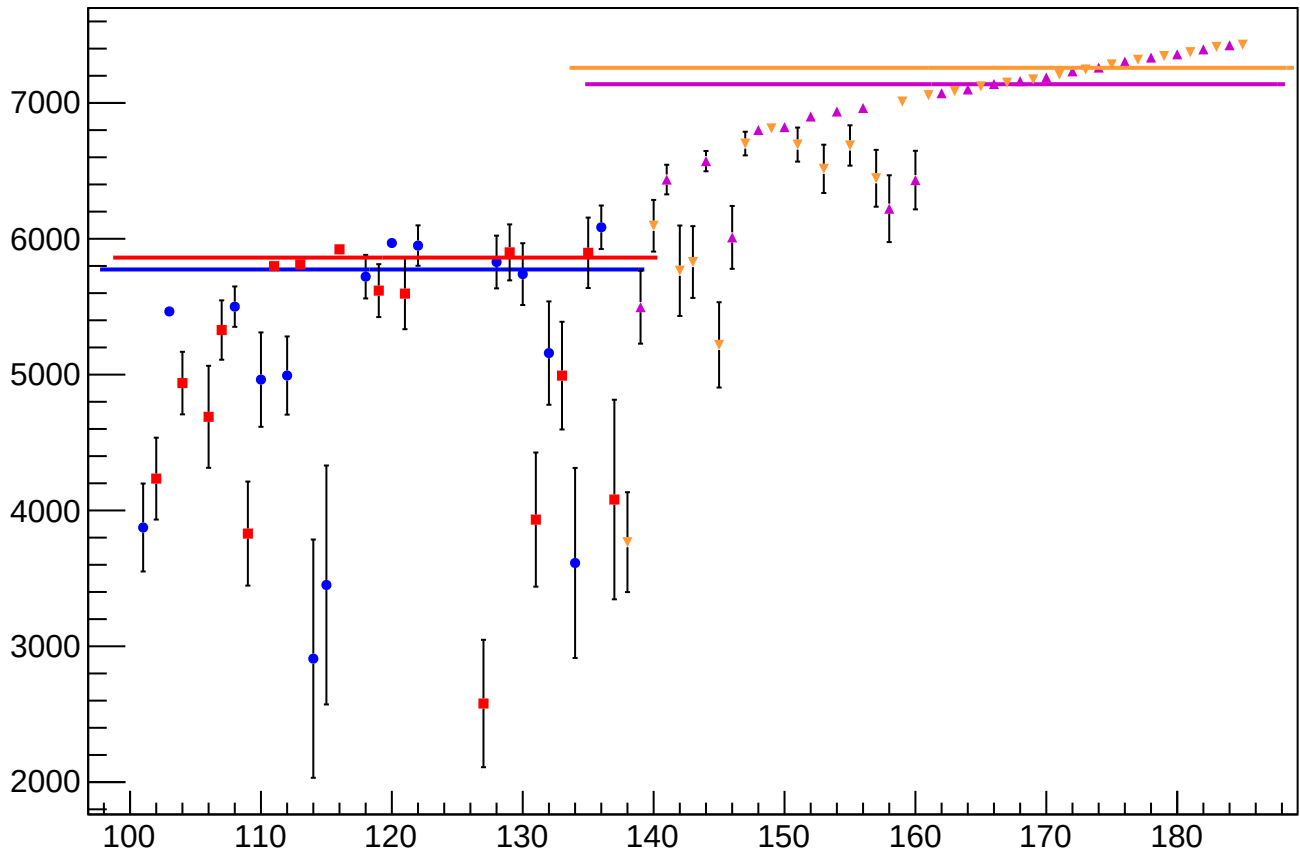
Left In: 1237.150+/-0.000  $\chi^2/\text{NDF}$ : 30323445843993737164691986740223672320.0/10

+ sign 1105.927+/-0.000  $\chi^2/\text{NDF}$ : 93699894673441

All: 1116.146+/-0.000  $\chi^2/\text{NDF}$ : 23037003763

- sign 1126.185+/-0.000  $\chi^2/\text{NDF}$ : 13634656733460

# dit\_run\_mean vs Slug



Right In: 5774.117 $\pm$ 0.181  $\chi^2/\text{NDF}$ : 1828526.5/14

Left Out: 7258.636 $\pm$ 0.092  $\chi^2/\text{NDF}$ : 4237941.4/24

Right Out: 5861.461 $\pm$ 0.140  $\chi^2/\text{NDF}$ : 180020.4/15

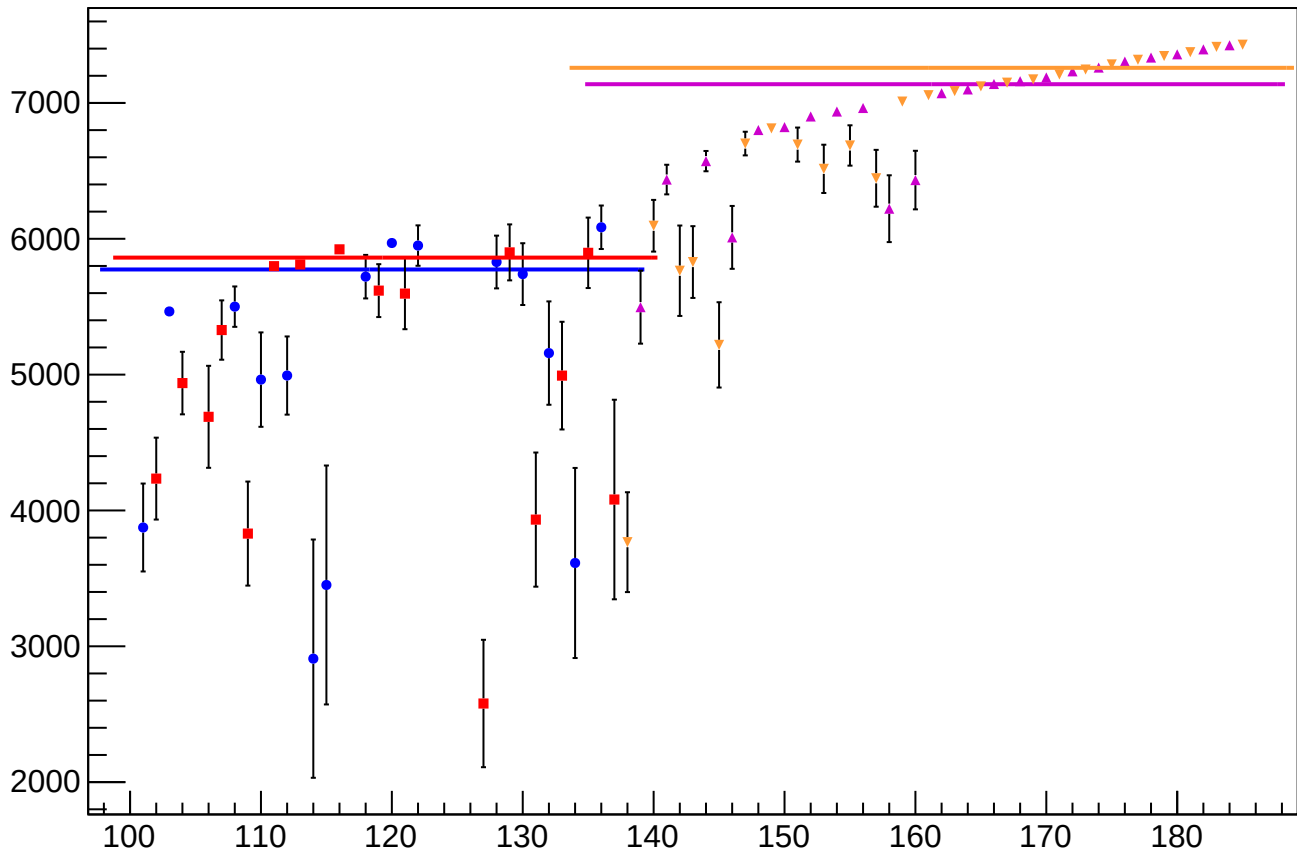
Left In: 7137.987 $\pm$ 0.098  $\chi^2/\text{NDF}$ : 4549121.8/22

+ sign 6955.870 $\pm$ 0.082  $\chi^2/\text{NDF}$ : 59347357.6/39

All: 6833.085 $\pm$ 0.057  $\chi^2/\text{NDF}$ : 124412873.1

- sign 6715.075 $\pm$ 0.080  $\chi^2/\text{NDF}$ : 60662698.5/38

# dit\_run\_rms vs Slug



Right In: 5774.117+/-0.181  $\chi^2$ /NDF: 1828526.5/14

Left Out: 7258.636+/-0.092  $\chi^2$ /NDF: 4237941.4/24

Right Out: 5861.461+/-0.140  $\chi^2$ /NDF: 180020.4/15

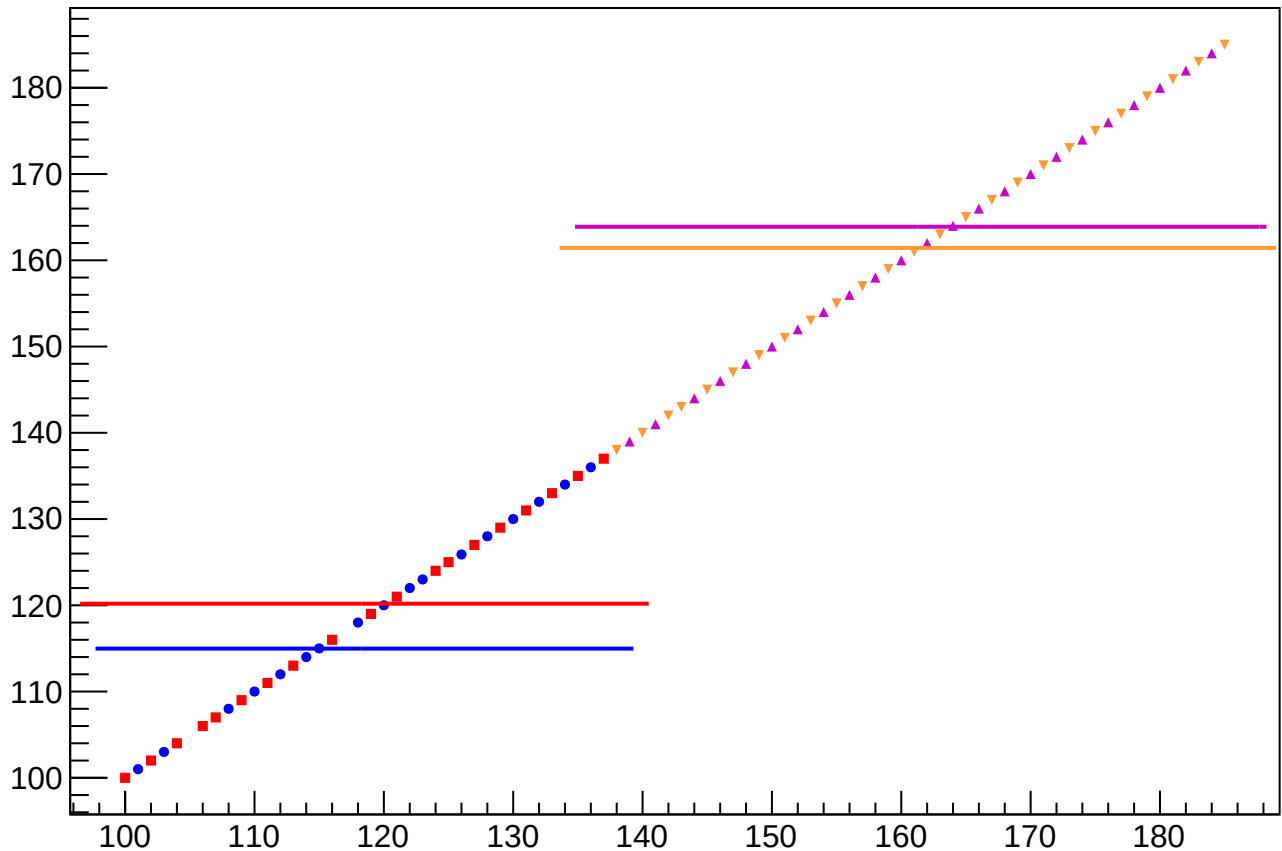
Left In: 7137.987+/-0.098  $\chi^2$ /NDF: 4549121.8/22

+ sign 6955.870+/-0.082  $\chi^2$ /NDF: 59347357.6/39

All: 6833.085+/-0.057  $\chi^2$ /NDF: 124412873.1

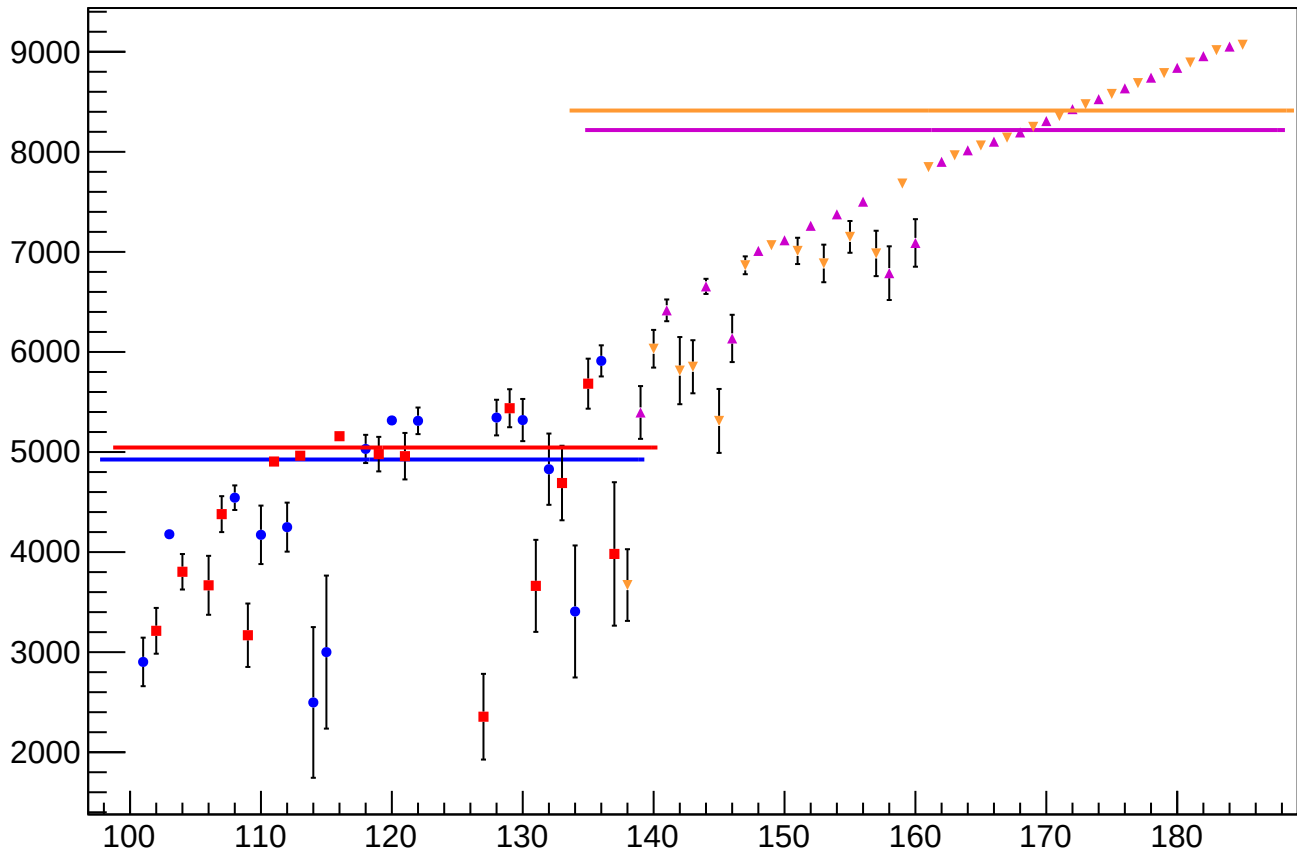
- sign 6715.075+/-0.080  $\chi^2$ /NDF: 60662698.5/38

# dit\_slug\_slope vs Slug



Right In: 114.980+/-0.000  $\chi^2/\text{NDF}$ : 112344936246012934714934440230912.0/16  
 Left Out: 161.437+/-0.000  $\chi^2/\text{NDF}$ : 144351415086772086919986205949952.0/24  
 Right Out: 120.186+/-0.000  $\chi^2/\text{NDF}$ : 52233253644261695528198041763840.0/18  
 Left In: 163.890+/-0.000  $\chi^2/\text{NDF}$ : 206308926090069183709360387260416.0/22  
 All: 139.110+/-0.000  $\chi^2/\text{NDF}$ : 303874307424  
 + sign 133.483+/-0.000  $\chi^2/\text{NDF}$ : 152516030568371  
 - sign 145.011+/-0.000  $\chi^2/\text{NDF}$ : 135450294643886

# dit\_cyclenum\_mean vs Slug



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

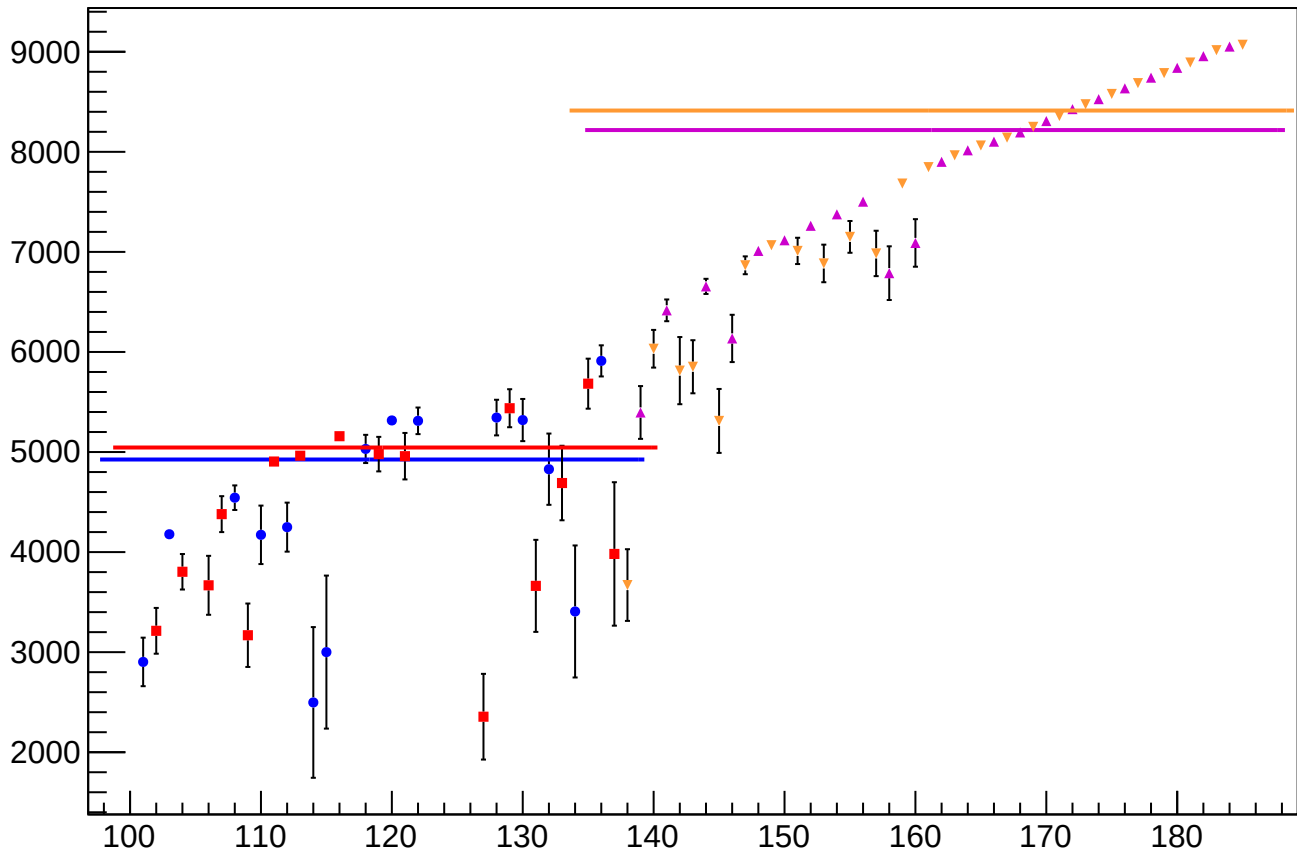
Left In:  $8217.639 \pm 0.381$   $\chi^2/\text{NDF}$ : 2974101.4/22

+ sign  $7886.489 \pm 0.365$   $\chi^2/\text{NDF}$ : 14157267.1/39

All:  $7641.112 \pm 0.245$   $\chi^2/\text{NDF}$ : 35014772.5/7

- sign  $7439.138 \pm 0.331$   $\chi^2/\text{NDF}$ : 20031979.1/38

# dit\_cyclenum\_rms vs Slug



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

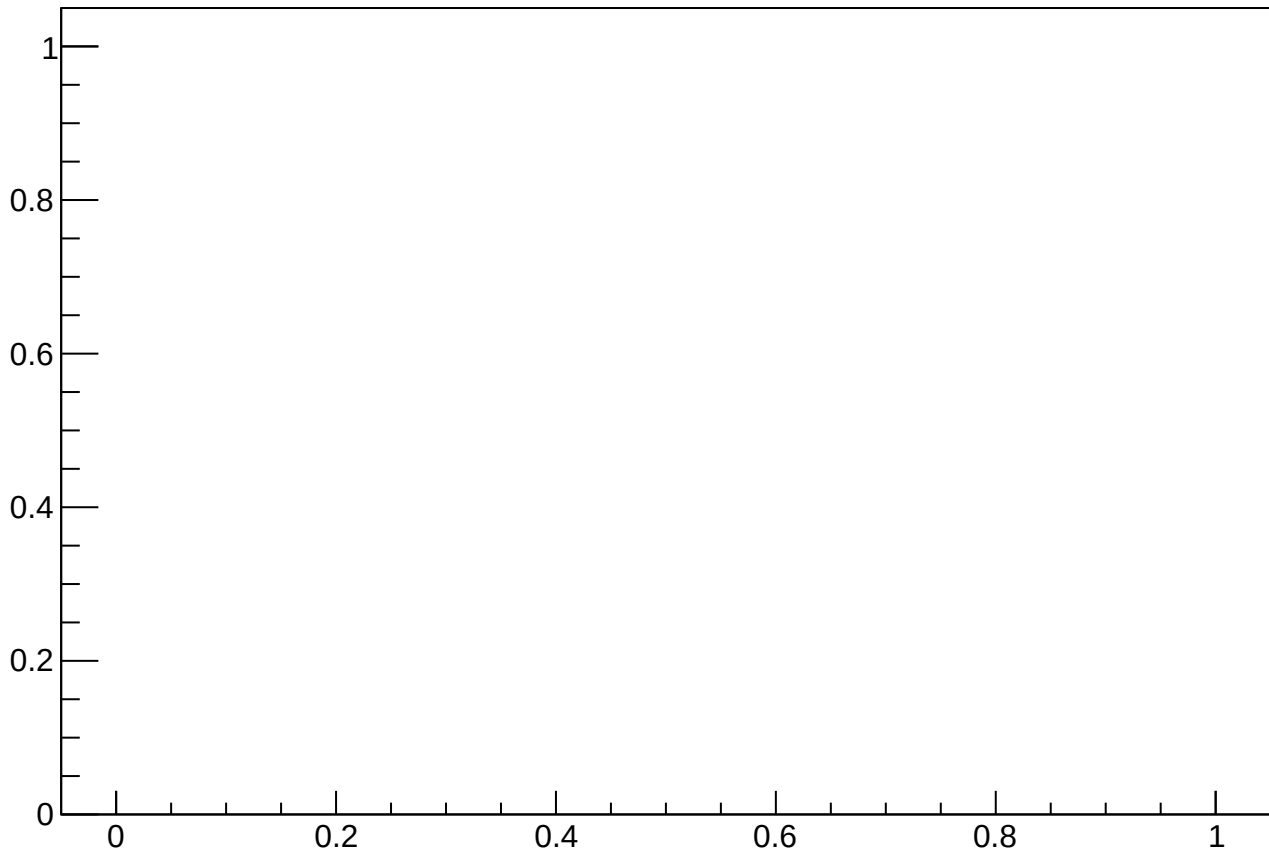
+ sign  $7886.489 \pm 0.365$   $\chi^2/\text{NDF}$ : 14157267.1/39

All:  $7641.112 \pm 0.245$   $\chi^2/\text{NDF}$ : 35014772.5/7

- sign  $7439.138 \pm 0.331$   $\chi^2/\text{NDF}$ : 20031979.1/38



dit\_scandata1\_mean vs Slug



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

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

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

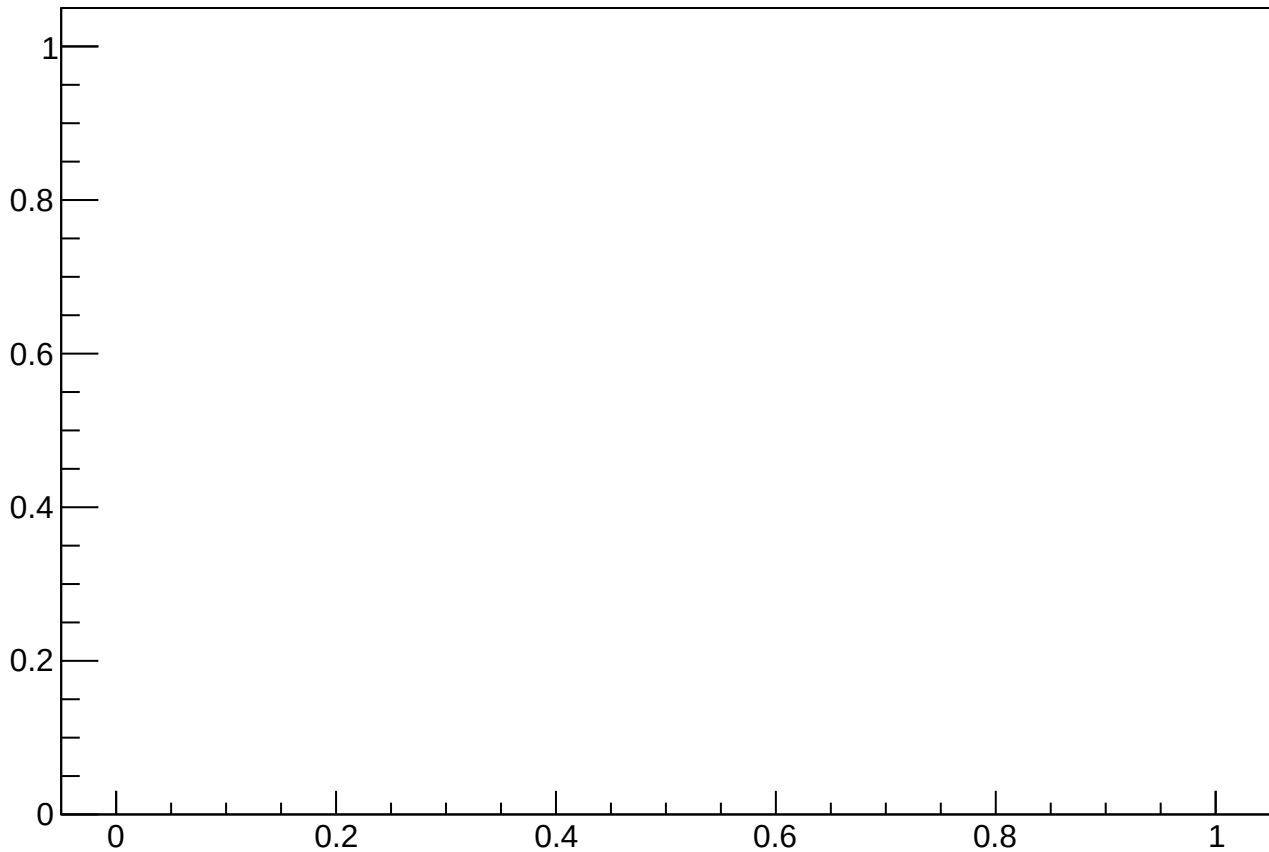
Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

+ sign 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

- sign 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

# dit\_scandata1\_rms vs Slug



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

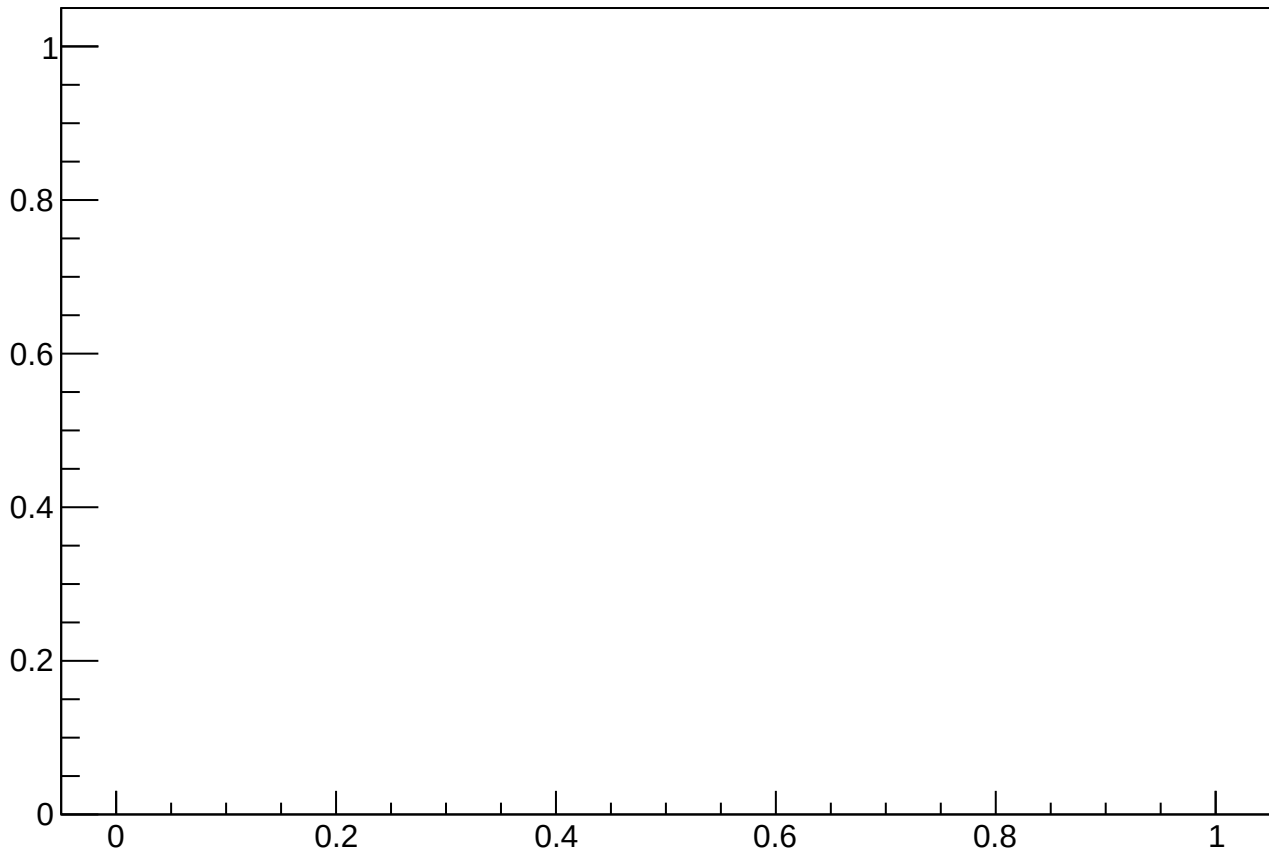
Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# dit\_scandata2\_mean vs Slug



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

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

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

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

+ sign 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

- sign 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

# dit\_scandata2\_rms vs Slug



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

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

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

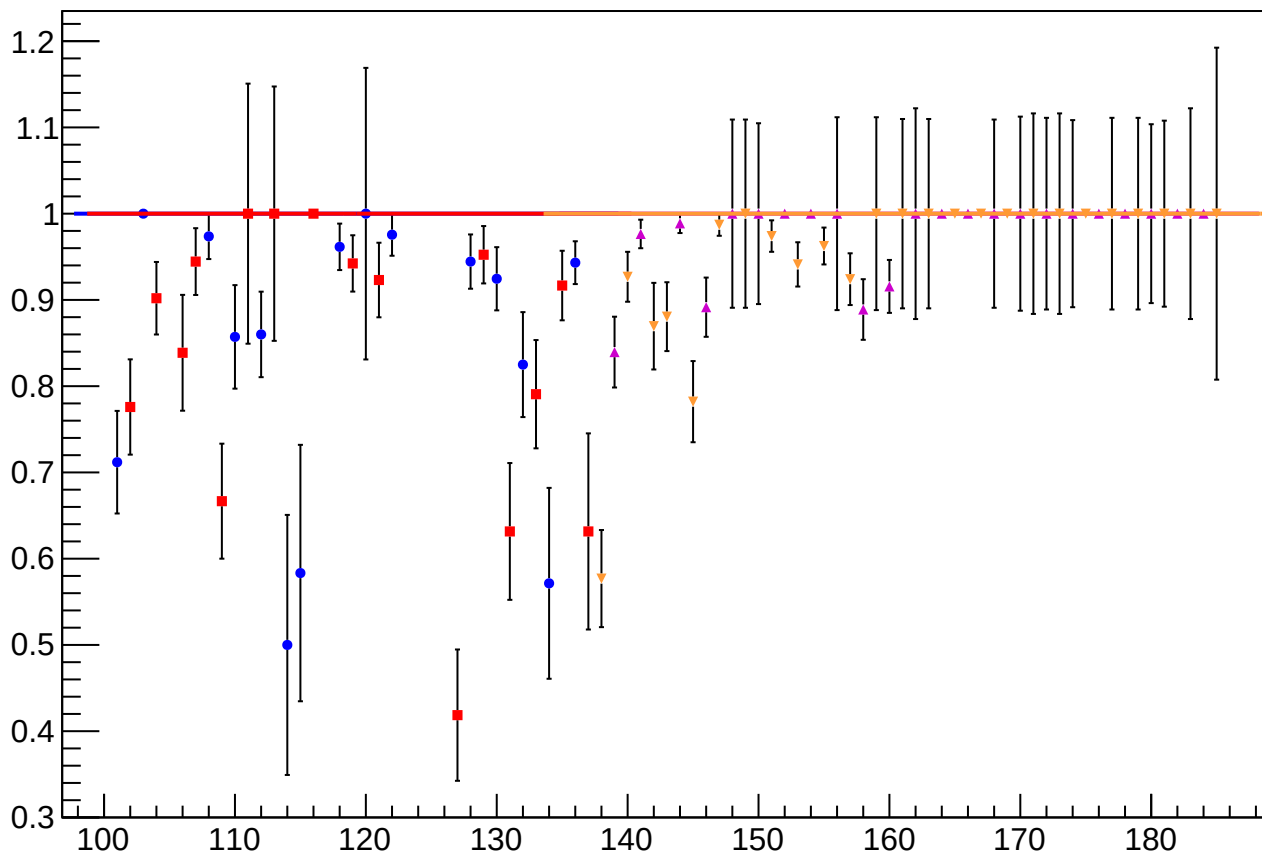
Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

+ sign 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

- sign 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

# dit\_flag\_mean vs Slug



Right In: 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 95.9/14

Left Out: 1.000 $\pm$ 0.000  $\chi^2$ /NDF:1596.8/24

Right Out: 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 168.9/15

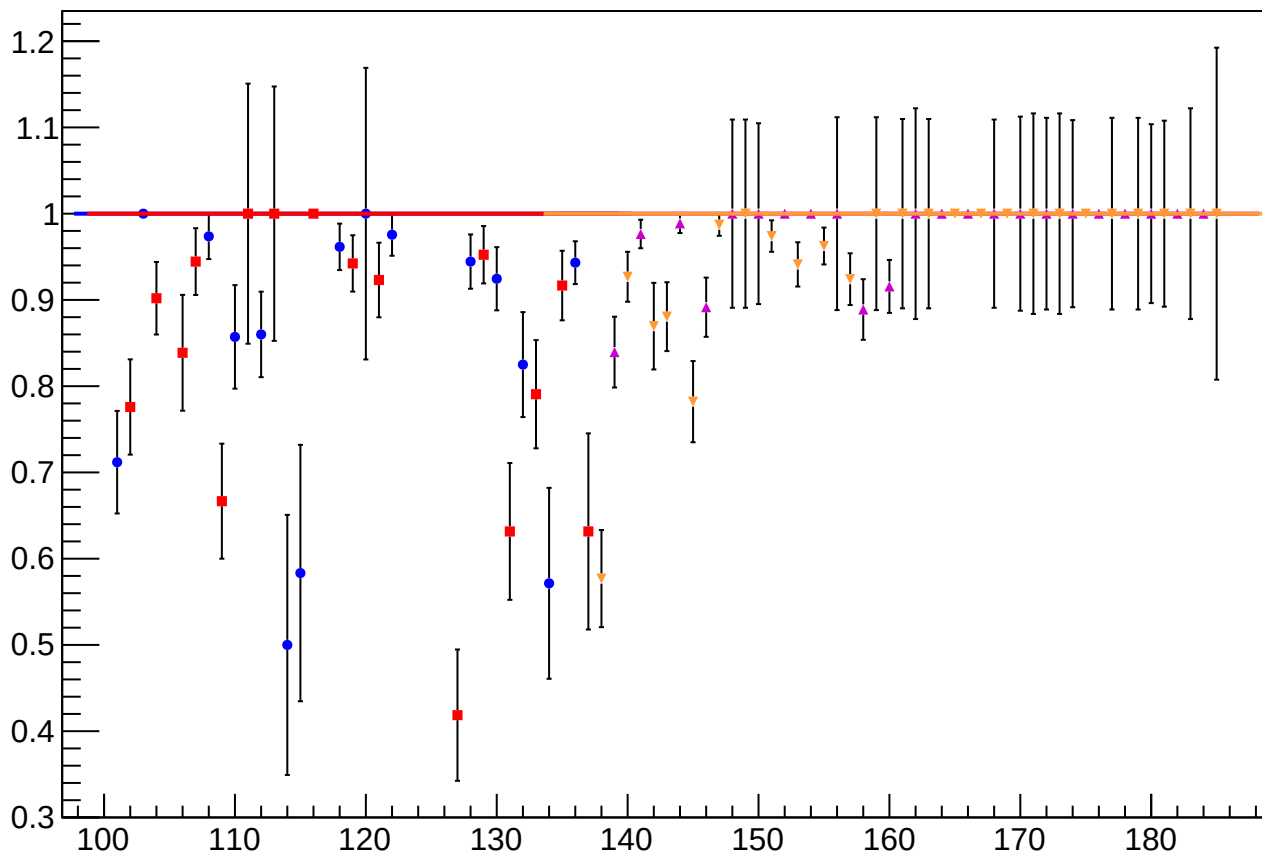
Left In: 1.000 $\pm$ 0.000  $\chi^2$ /NDF:385.6/22

+ sign 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 567.7/39

All: 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 1354.4/78

- sign 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 610.7/38

# dit\_flag\_rms vs Slug



Right In: 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 95.9/14

Left Out: 1.000 $\pm$ 0.000  $\chi^2$ /NDF:1596.8/24

Right Out: 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 168.9/15

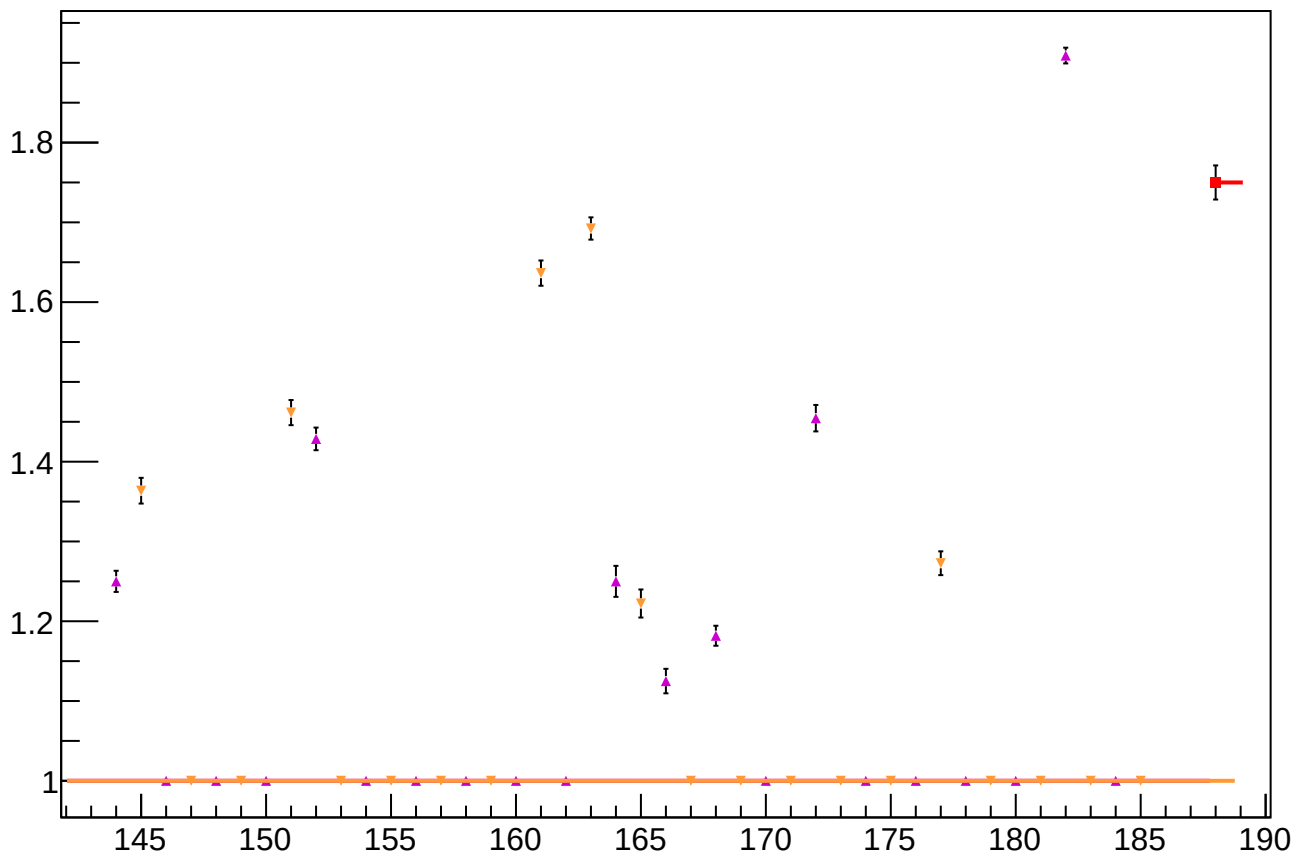
Left In: 1.000 $\pm$ 0.000  $\chi^2$ /NDF:385.6/22

+ sign 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 567.7/39

All: 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 1354.4/78

- sign 1.000 $\pm$ 0.000  $\chi^2$ /NDF: 610.7/38

# dit\_segment\_slope vs Slug



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

Left Out: 1.000+/-0.000  $\chi^2/\text{NDF}$ :18616.2/20

Right Out: 1.750+/-0.021  $\chi^2/\text{NDF}$ : 0.0/0

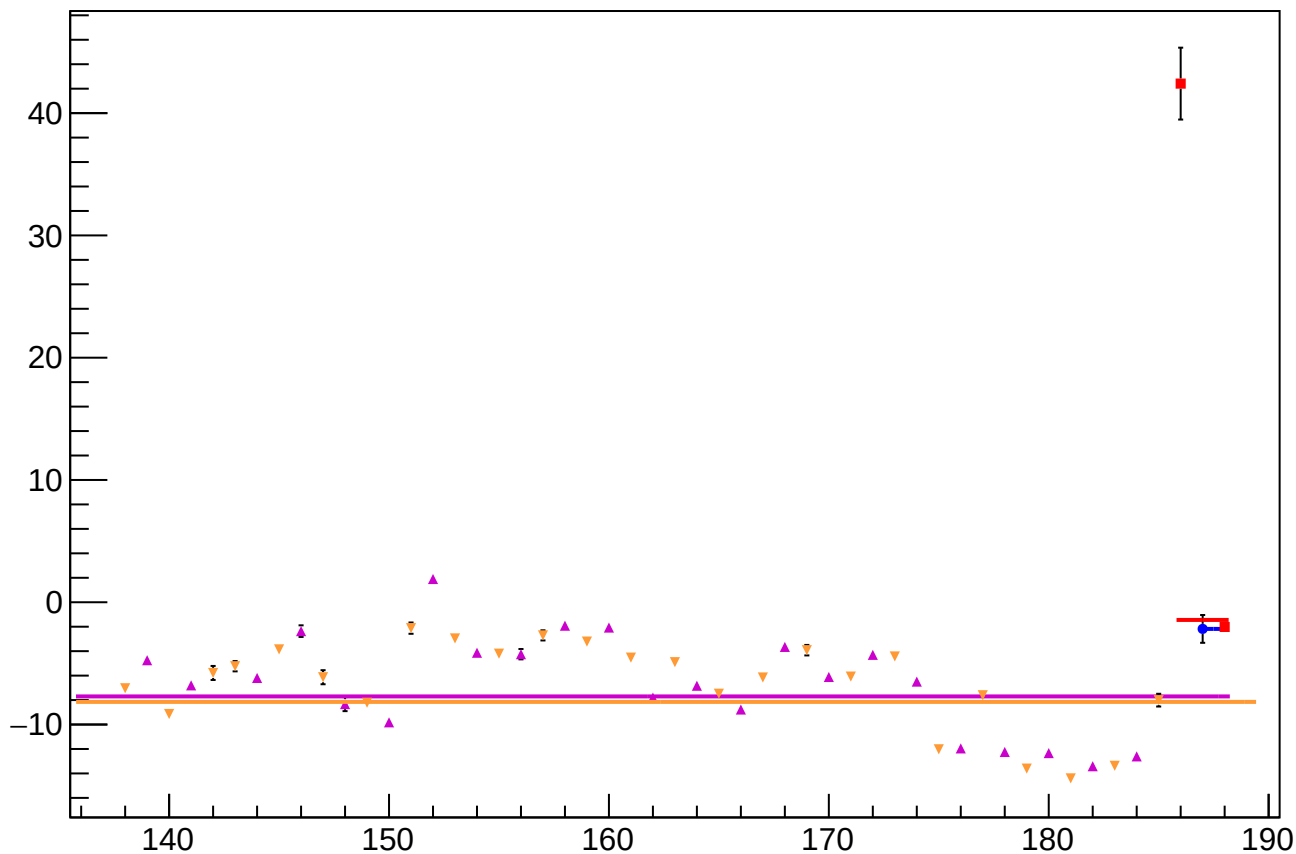
Left In: 1.000+/-0.000  $\chi^2/\text{NDF}$ :12089.0/20

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

All: 1.000+/-0.000  $\chi^2/\text{NDF}$ : 20344.2/42

- sign 1.000+/-0.000  $\chi^2/\text{NDF}$ : 13319.6/21

# reg\_asym\_sam1\_diff\_bpm1X\_slope vs Slug

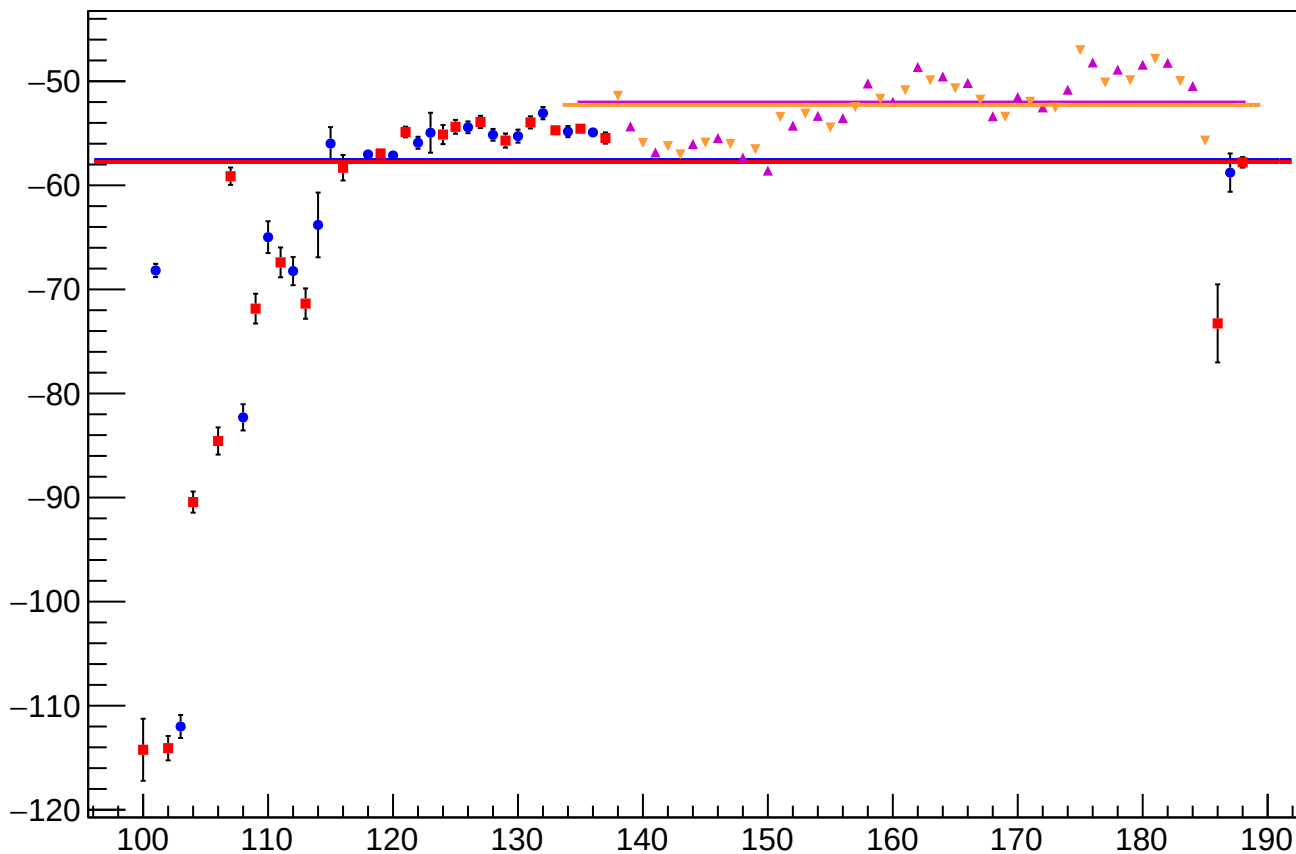


Right In:  $-2.180 \pm 1.137$   $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out:  $-8.149 \pm 0.068$   $\chi^2/\text{NDF}$ : 3613.1/24  
 Right Out:  $-1.447 \pm 0.334$   $\chi^2/\text{NDF}$ : 225.6/1  
 Left In:  $-7.701 \pm 0.068$   $\chi^2/\text{NDF}$ : 3737.2/22

+ sign  $-8.128 \pm 0.067$   $\chi^2/\text{NDF}$ : 3640.5/25  
 All:  $-7.787 \pm 0.048$   $\chi^2/\text{NDF}$ : 7991.2/50  
 - sign  $-7.449 \pm 0.067$   $\chi^2/\text{NDF}$ : 4299.7/24



# reg\_asym\_sam1\_diff\_bpm4aY\_slope vs Slug



Right In:  $-57.570 \pm 0.141$   $\chi^2/\text{NDF}$ : 3456.4/17

Left Out:  $-52.271 \pm 0.055$   $\chi^2/\text{NDF}$ : 2609.6/24

Right Out:  $-57.761 \pm 0.137$   $\chi^2/\text{NDF}$ : 4715.6/20

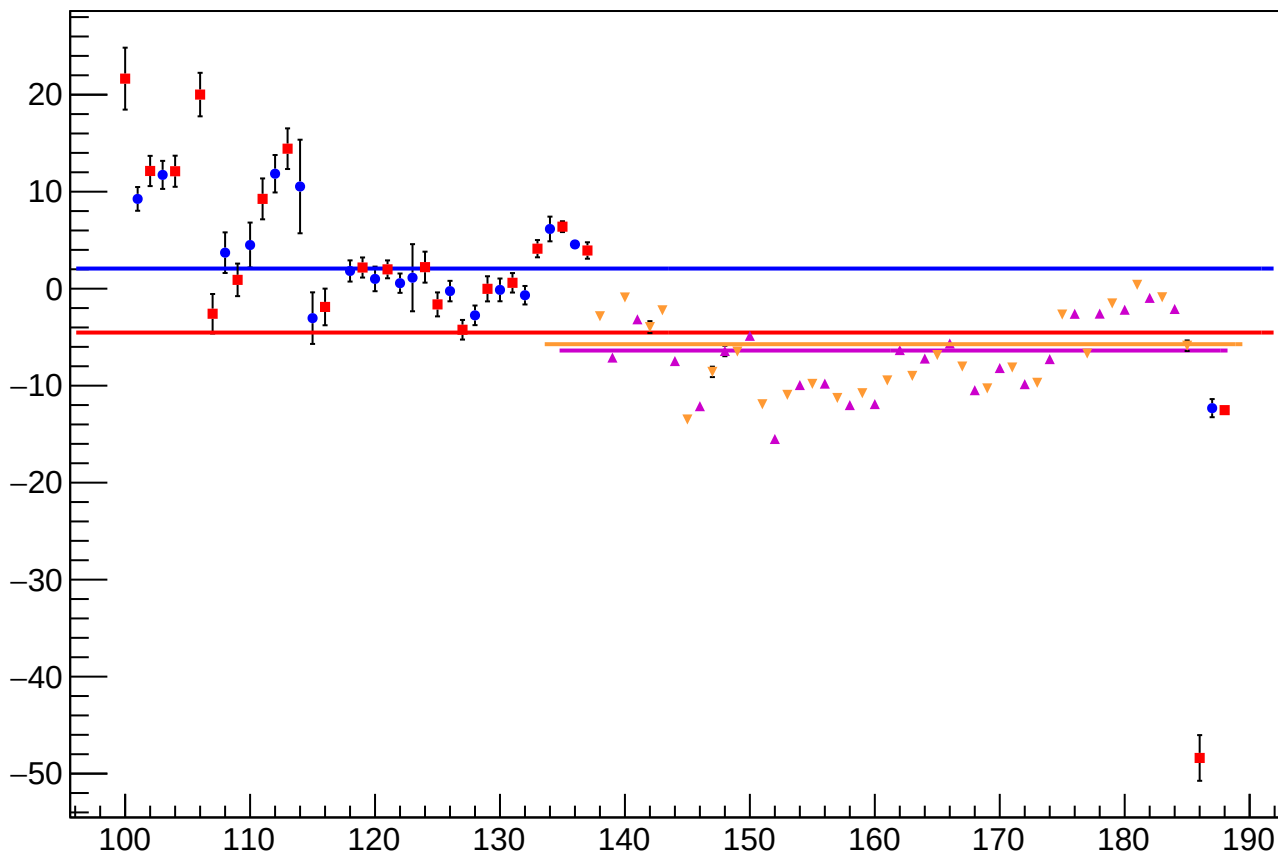
Left In:  $-52.050 \pm 0.057$   $\chi^2/\text{NDF}$ : 3197.5/22

+ sign  $-52.975 \pm 0.051$   $\chi^2/\text{NDF}$ : 7290.0/42

All:  $-52.932 \pm 0.037$   $\chi^2/\text{NDF}$ : 16677.0/86

- sign  $-52.887 \pm 0.053$   $\chi^2/\text{NDF}$ : 9385.6/43

# reg\_asym\_sam1\_diff\_bpm4eX\_slope vs Slug



Right In:  $2.075 \pm 0.248$   $\chi^2/\text{NDF}$ : 441.2/17

Left Out:  $-5.725 \pm 0.068$   $\chi^2/\text{NDF}$ : 3989.1/24

Right Out:  $-4.525 \pm 0.190$   $\chi^2/\text{NDF}$ : 2486.0/20

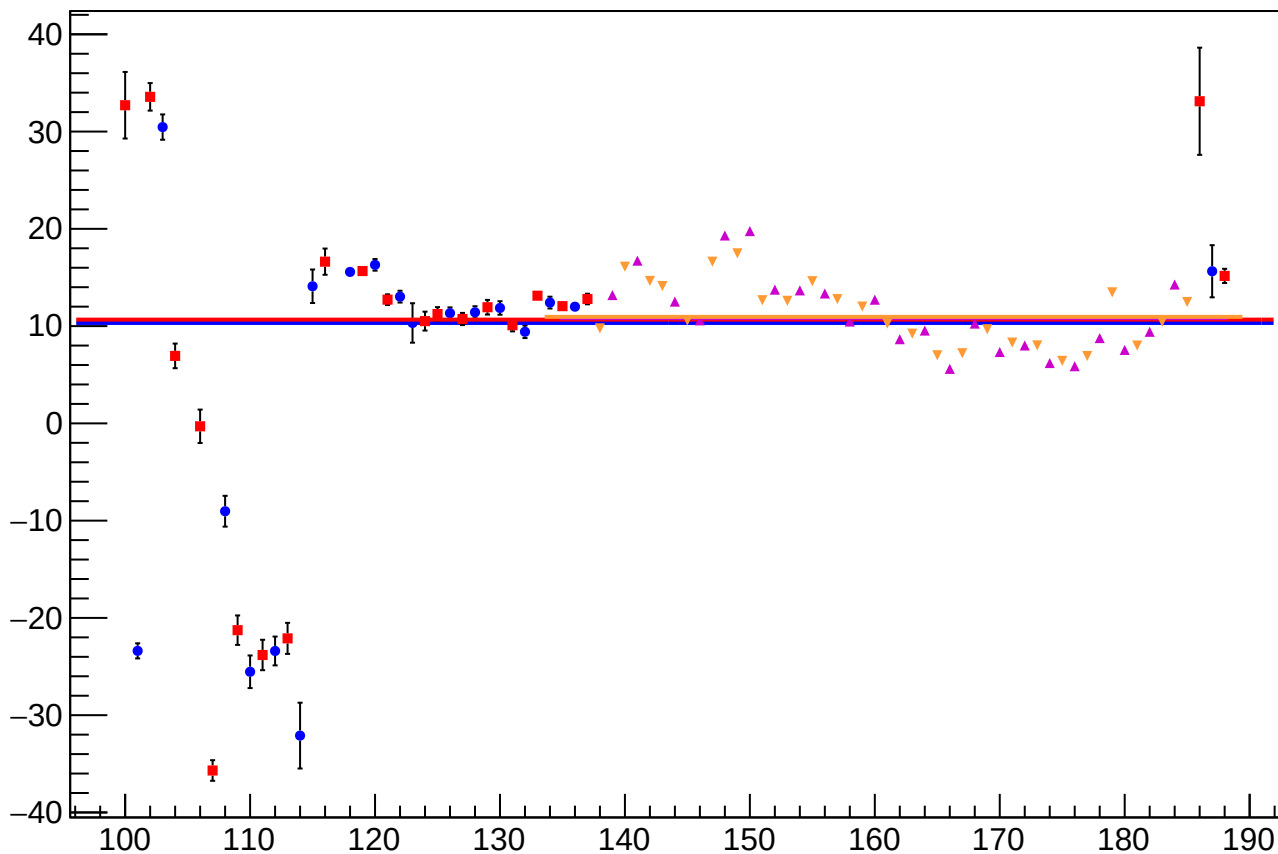
Left In:  $-6.379 \pm 0.068$   $\chi^2/\text{NDF}$ : 3395.7/22

+ sign  $-5.186 \pm 0.065$   $\chi^2/\text{NDF}$ : 5347.4/42

All:  $-5.684 \pm 0.046$   $\chi^2/\text{NDF}$ : 11428.1/86

- sign  $-6.167 \pm 0.064$   $\chi^2/\text{NDF}$ : 5966.0/43

# reg\_asym\_sam1\_diff\_bpm4eY\_slope vs Slug



Right In: 10.324 $\pm$ 0.157  $\chi^2$ /NDF: 3716.2/17

Left Out: 10.950 $\pm$ 0.062  $\chi^2$ /NDF: 2620.4/24

Right Out: 10.667 $\pm$ 0.156  $\chi^2$ /NDF: 3885.2/20

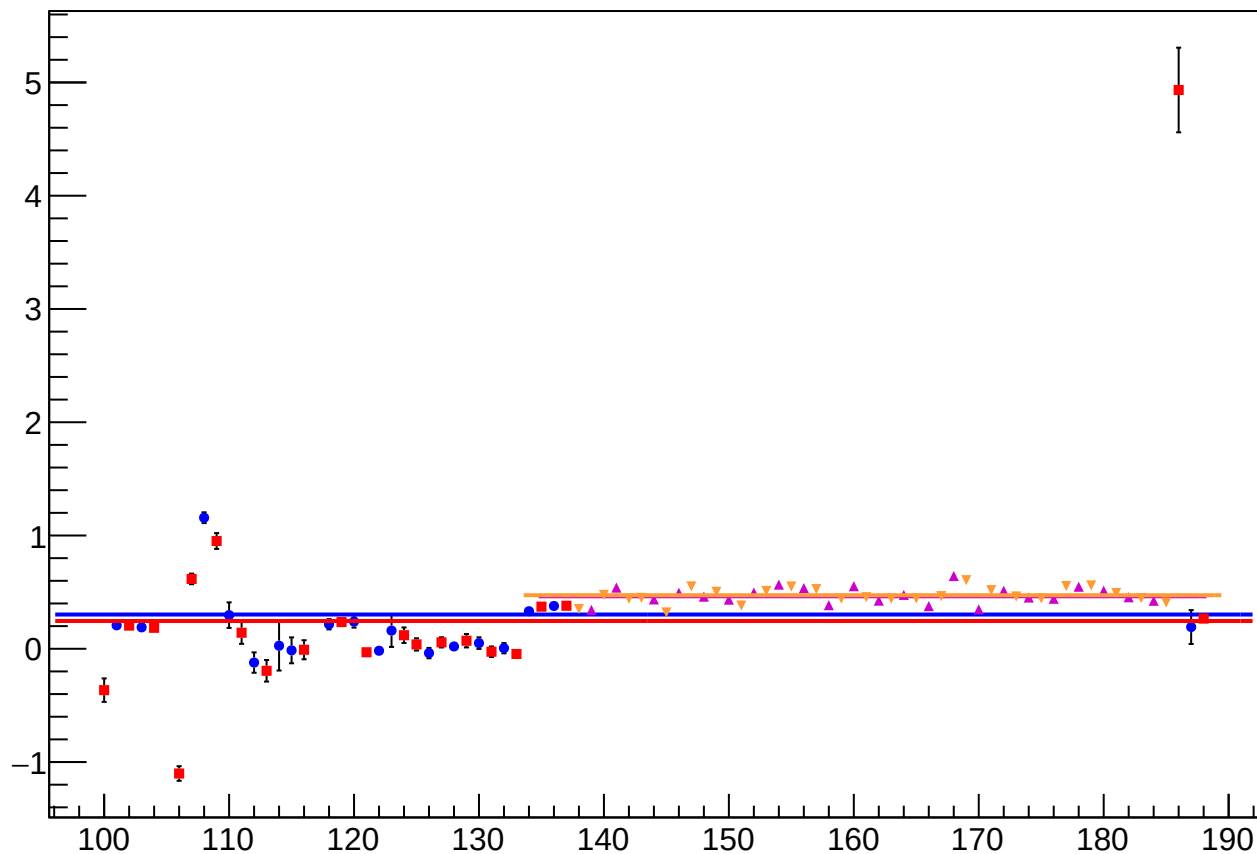
Left In: 10.818 $\pm$ 0.063  $\chi^2$ /NDF: 3577.7/22

+ sign 10.866 $\pm$ 0.057  $\chi^2$ /NDF: 6350.5/42

All: 10.832 $\pm$ 0.041  $\chi^2$ /NDF: 13814.8/86

- sign 10.797 $\pm$ 0.058  $\chi^2$ /NDF: 7463.6/43

# reg\_asym\_sam1\_diff\_bpm12X\_slope vs Slug



Right In:  $0.302 \pm 0.008$   $\chi^2/\text{NDF}$ : 647.1/17

Left Out:  $0.473 \pm 0.003$   $\chi^2/\text{NDF}$ : 515.0/24

Right Out:  $0.245 \pm 0.008$   $\chi^2/\text{NDF}$ : 1144.7/20

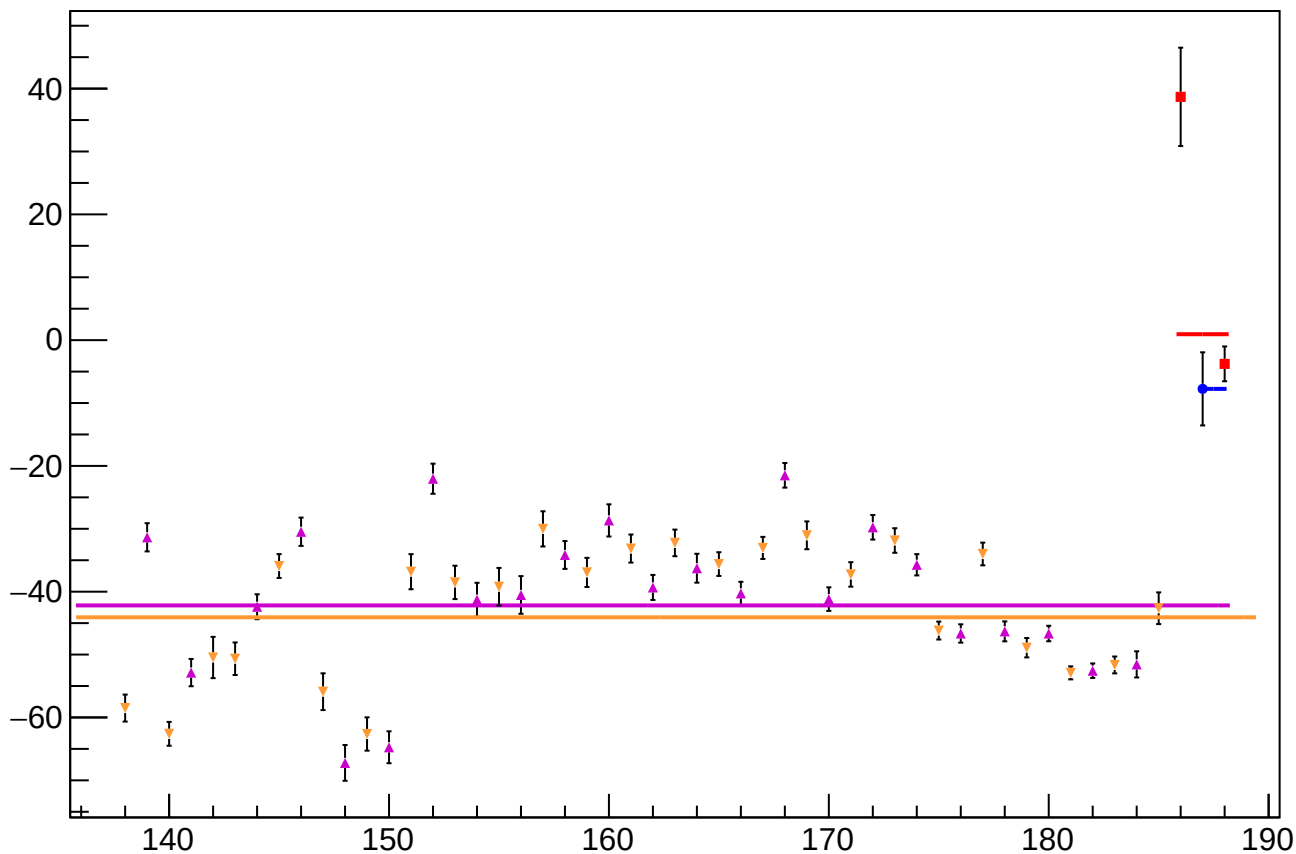
Left In:  $0.463 \pm 0.003$   $\chi^2/\text{NDF}$ : 749.9/22

+ sign  $0.455 \pm 0.003$   $\chi^2/\text{NDF}$ : 1551.4/42

All:  $0.448 \pm 0.002$   $\chi^2/\text{NDF}$ : 4094.4/86

- sign  $0.441 \pm 0.003$   $\chi^2/\text{NDF}$ : 2528.4/43

# reg\_asym\_sam2\_diff\_bpm1X\_slope vs Slug



Right In:  $-7.749 \pm 5.815$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-44.074 \pm 0.389$   $\chi^2/\text{NDF}$ : 632.8/24

Right Out:  $0.945 \pm 2.607$   $\chi^2/\text{NDF}$ : 26.2/1

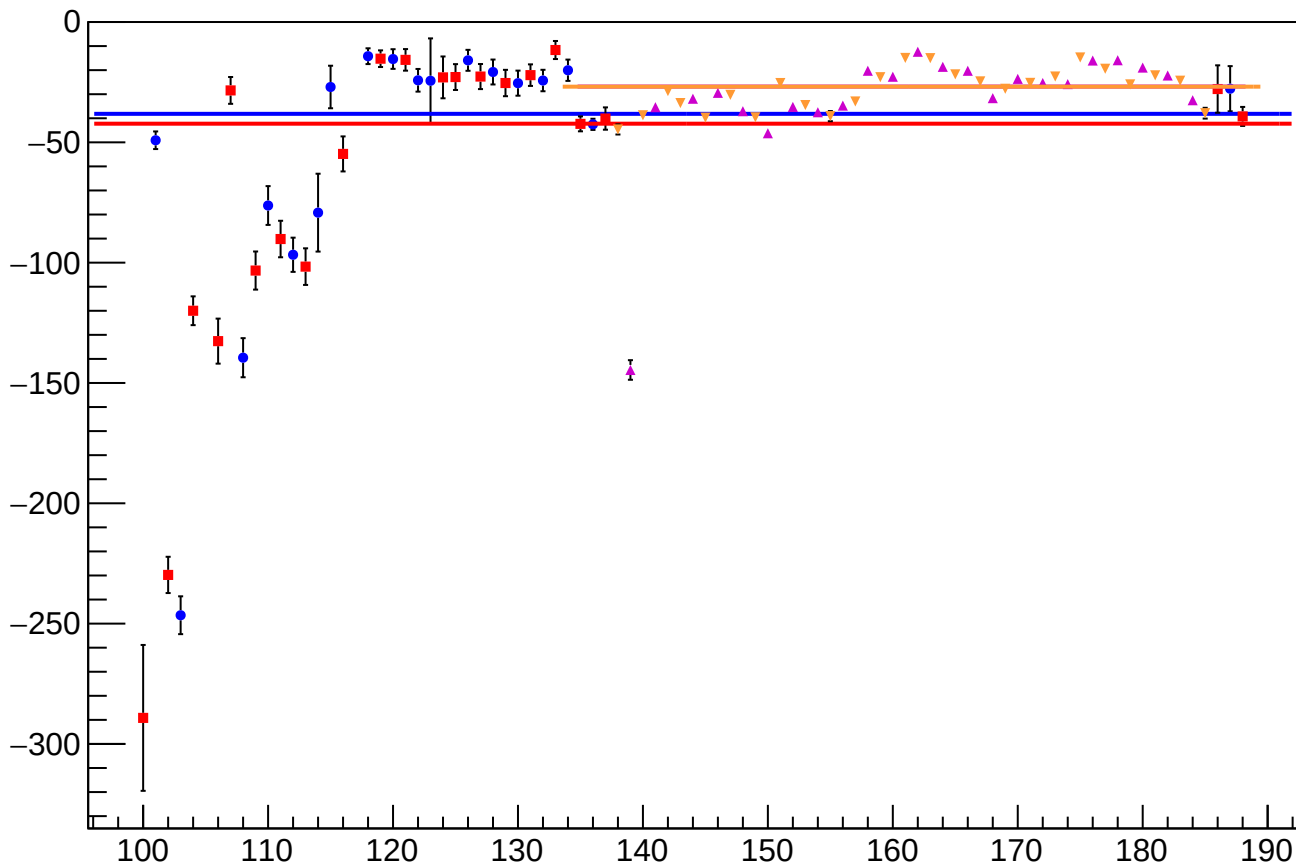
Left In:  $-42.185 \pm 0.398$   $\chi^2/\text{NDF}$ : 651.0/22

+ sign  $-43.912 \pm 0.388$   $\chi^2/\text{NDF}$ : 671.7/25

All:  $-42.574 \pm 0.276$   $\chi^2/\text{NDF}$ : 1640.3/50

- sign  $-41.206 \pm 0.393$   $\chi^2/\text{NDF}$ : 944.7/24

# reg\_asym\_sam2\_diff\_bpm4aY\_slope vs Slug



Right In:  $-38.156 \pm 1.129$   $\chi^2/\text{NDF}: 1133.9/17$

Left Out:  $-26.867 \pm 0.317$   $\chi^2/\text{NDF}: 629.1/24$

Right Out:  $-42.253 \pm 1.149$   $\chi^2/\text{NDF}: 1344.5/20$

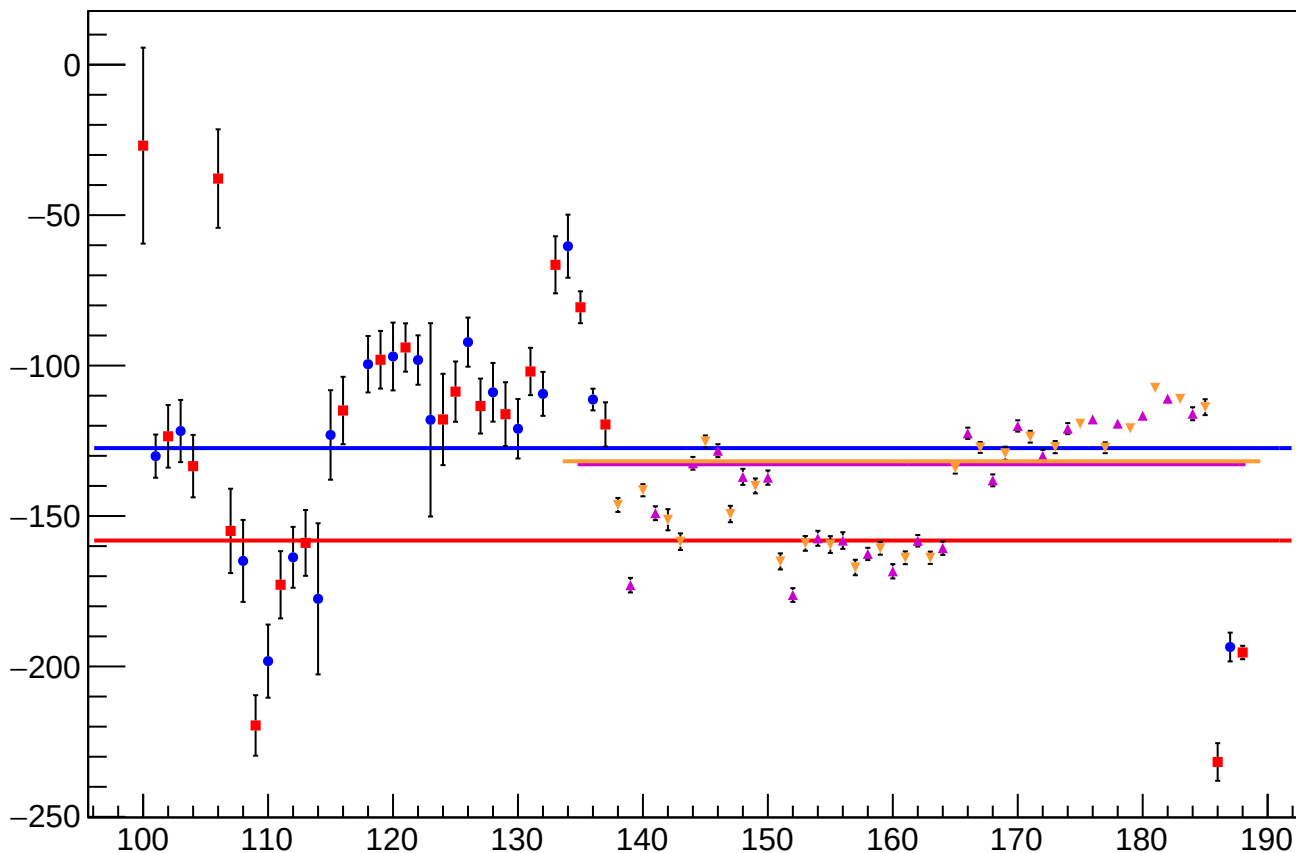
Left In:  $-26.825 \pm 0.325$   $\chi^2/\text{NDF}: 1481.6/22$

+ sign  $-27.692 \pm 0.305$   $\chi^2/\text{NDF}: 1855.8/42$

All:  $-27.828 \pm 0.219$   $\chi^2/\text{NDF}: 4849.0/86$

- sign  $-27.970 \pm 0.313$   $\chi^2/\text{NDF}: 2992.9/43$

# reg\_asym\_sam2\_diff\_bpm4eX\_slope vs Slug



Right In:  $-127.426 \pm 1.901$   $\chi^2/\text{NDF}$ : 369.1/17

Left Out:  $-131.805 \pm 0.392$   $\chi^2/\text{NDF}$ : 2417.0/24

Right Out:  $-158.148 \pm 1.521$   $\chi^2/\text{NDF}$ : 1118.2/20

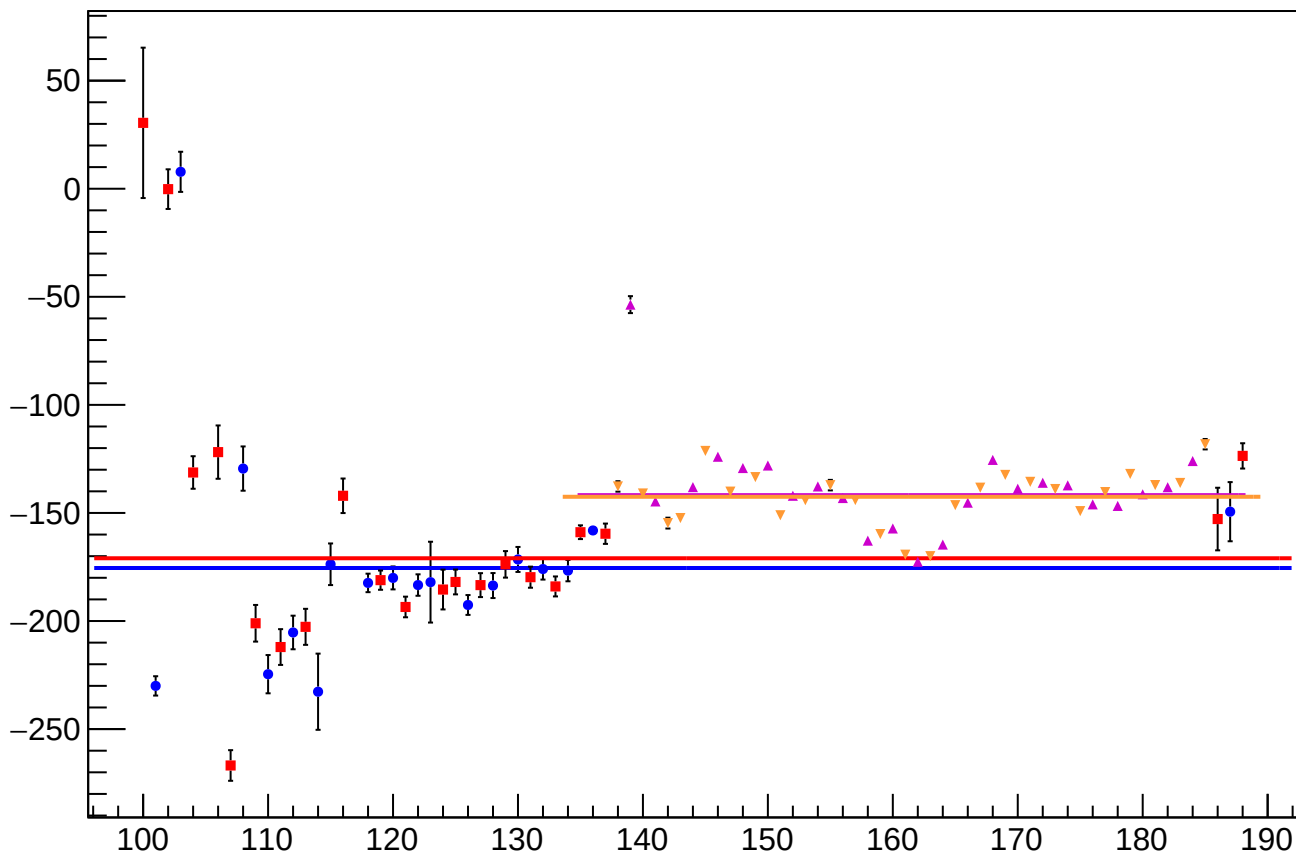
Left In:  $-132.799 \pm 0.398$   $\chi^2/\text{NDF}$ : 2515.9/22

+ sign  $-131.626 \pm 0.384$   $\chi^2/\text{NDF}$ : 2791.2/42

All:  $-133.021 \pm 0.272$   $\chi^2/\text{NDF}$ : 6711.6/86

- sign  $-134.423 \pm 0.385$   $\chi^2/\text{NDF}$ : 3894.0/43

# reg\_asym\_sam2\_diff\_bpm4eY\_slope vs Slug



Right In:  $-175.472 \pm 1.262$   $\chi^2/\text{NDF}: 696.6/17$

Left Out:  $-142.517 \pm 0.355$   $\chi^2/\text{NDF}: 1144.2/24$

Right Out:  $-170.965 \pm 1.315$   $\chi^2/\text{NDF}: 808.7/20$

Left In:  $-141.769 \pm 0.363$   $\chi^2/\text{NDF}: 1604.4/22$

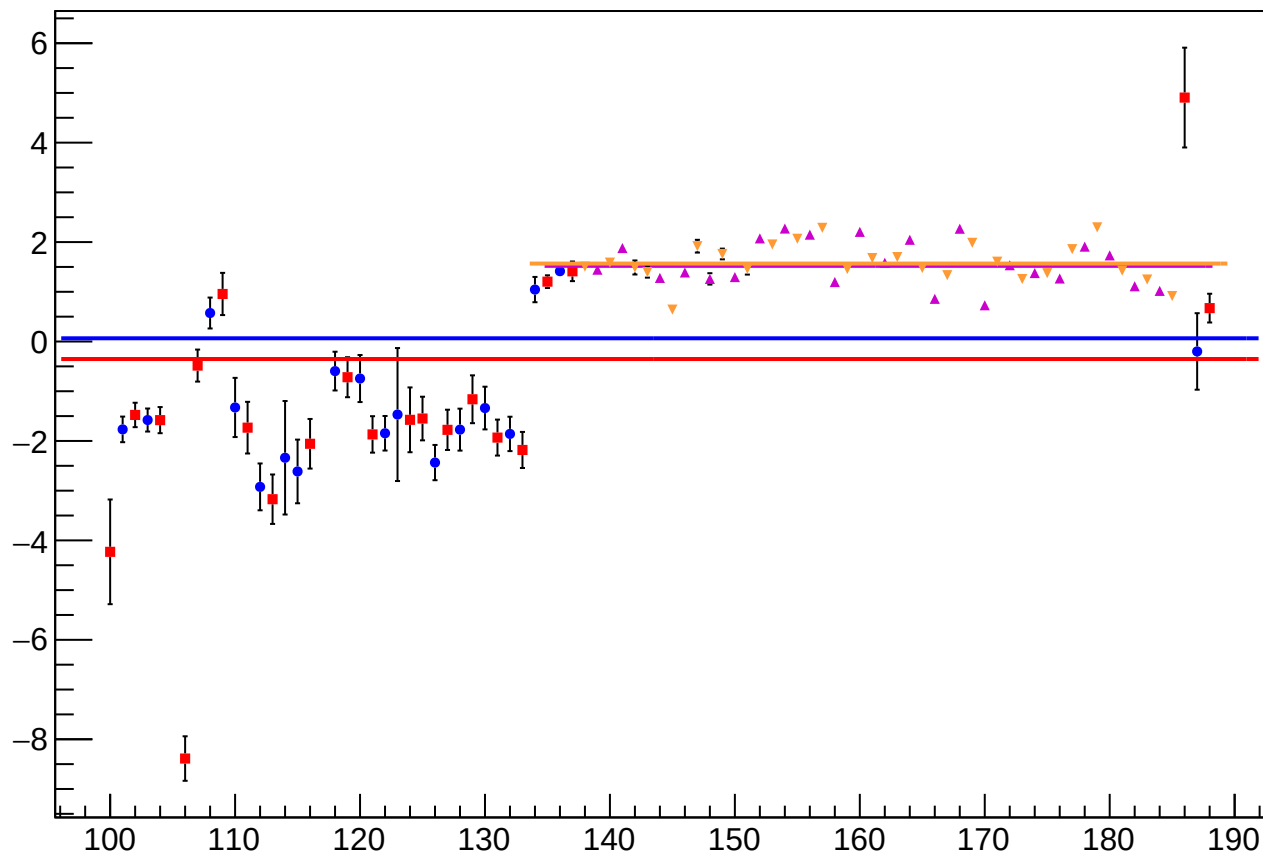
+ sign  $-144.930 \pm 0.342$   $\chi^2/\text{NDF}: 2472.6/42$

All:  $-144.394 \pm 0.244$   $\chi^2/\text{NDF}: 5348.6/86$

- sign  $-143.832 \pm 0.350$   $\chi^2/\text{NDF}: 2870.9/43$



# reg\_asym\_sam2\_diff\_bpm12X\_slope vs Slug



Right In: 0.065 $\pm$ 0.067  $\chi^2$ /NDF: 526.3/17

Left Out: 1.568 $\pm$ 0.016  $\chi^2$ /NDF: 541.0/24

Right Out: -0.352 $\pm$ 0.069  $\chi^2$ /NDF: 796.4/20

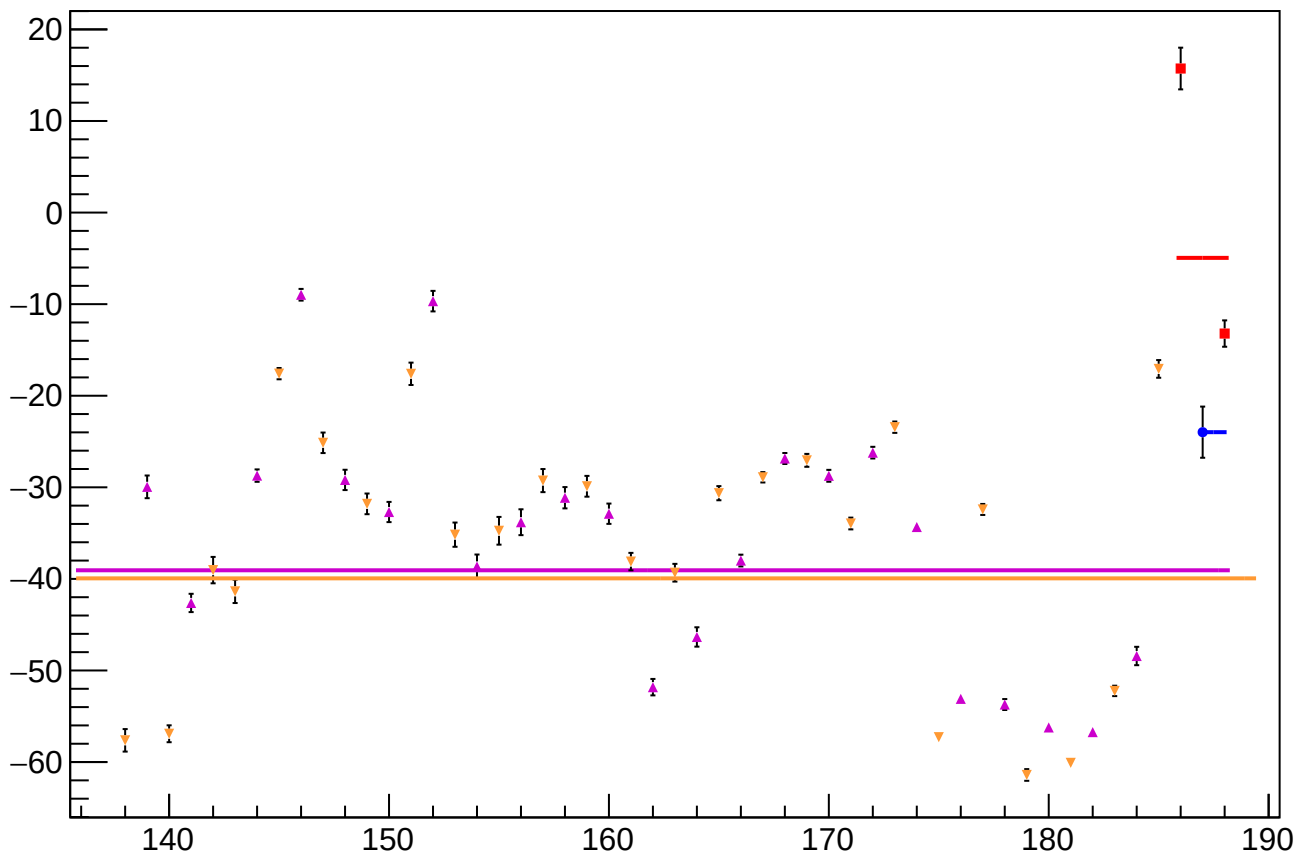
Left In: 1.522 $\pm$ 0.016  $\chi^2$ /NDF: 739.1/22

+ sign 1.484 $\pm$ 0.016  $\chi^2$ /NDF: 1546.5/42

All: 1.453 $\pm$ 0.011  $\chi^2$ /NDF: 3790.0/86

- sign 1.421 $\pm$ 0.016  $\chi^2$ /NDF: 2235.7/43

# reg\_asym\_sam3\_diff\_bpm1X\_slope vs Slug



Right In:  $-23.980 \pm 2.794$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-39.942 \pm 0.153$   $\chi^2/\text{NDF}: 9806.2/24$

Right Out:  $-4.946 \pm 1.217$   $\chi^2/\text{NDF}: 115.4/1$

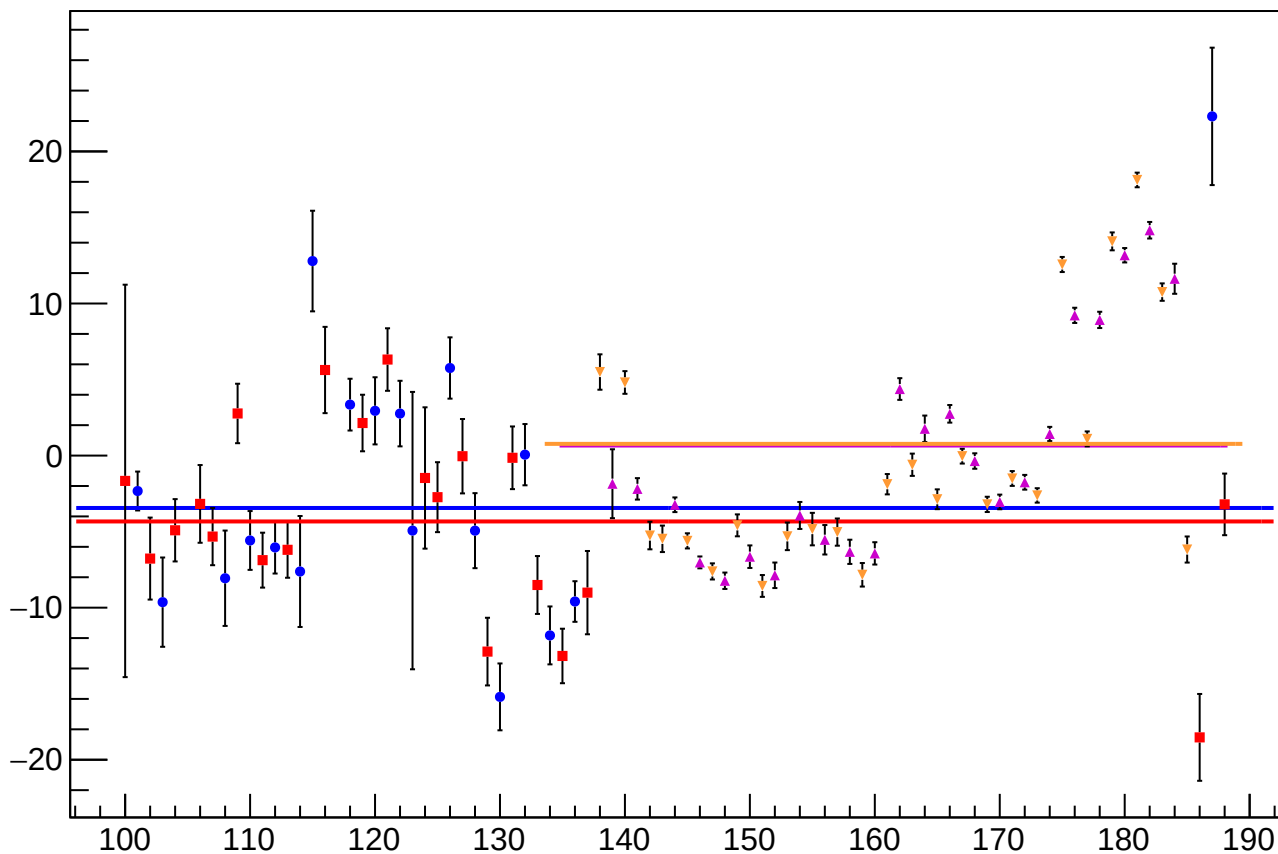
Left In:  $-39.060 \pm 0.154$   $\chi^2/\text{NDF}: 8577.0/22$

+ sign  $-39.894 \pm 0.153$   $\chi^2/\text{NDF}: 9838.7/25$

All:  $-39.207 \pm 0.108$   $\chi^2/\text{NDF}: 19344.8/50$

- sign  $-38.523 \pm 0.153$   $\chi^2/\text{NDF}: 9465.8/24$

# reg\_asym\_sam3\_diff\_bpm4aY\_slope vs Slug



Right In:  $-3.445 \pm 0.492$   $\chi^2/\text{NDF}: 198.2/17$

Left Out:  $0.770 \pm 0.124$   $\chi^2/\text{NDF}: 3952.9/24$

Right Out:  $-4.331 \pm 0.485$   $\chi^2/\text{NDF}: 148.9/20$

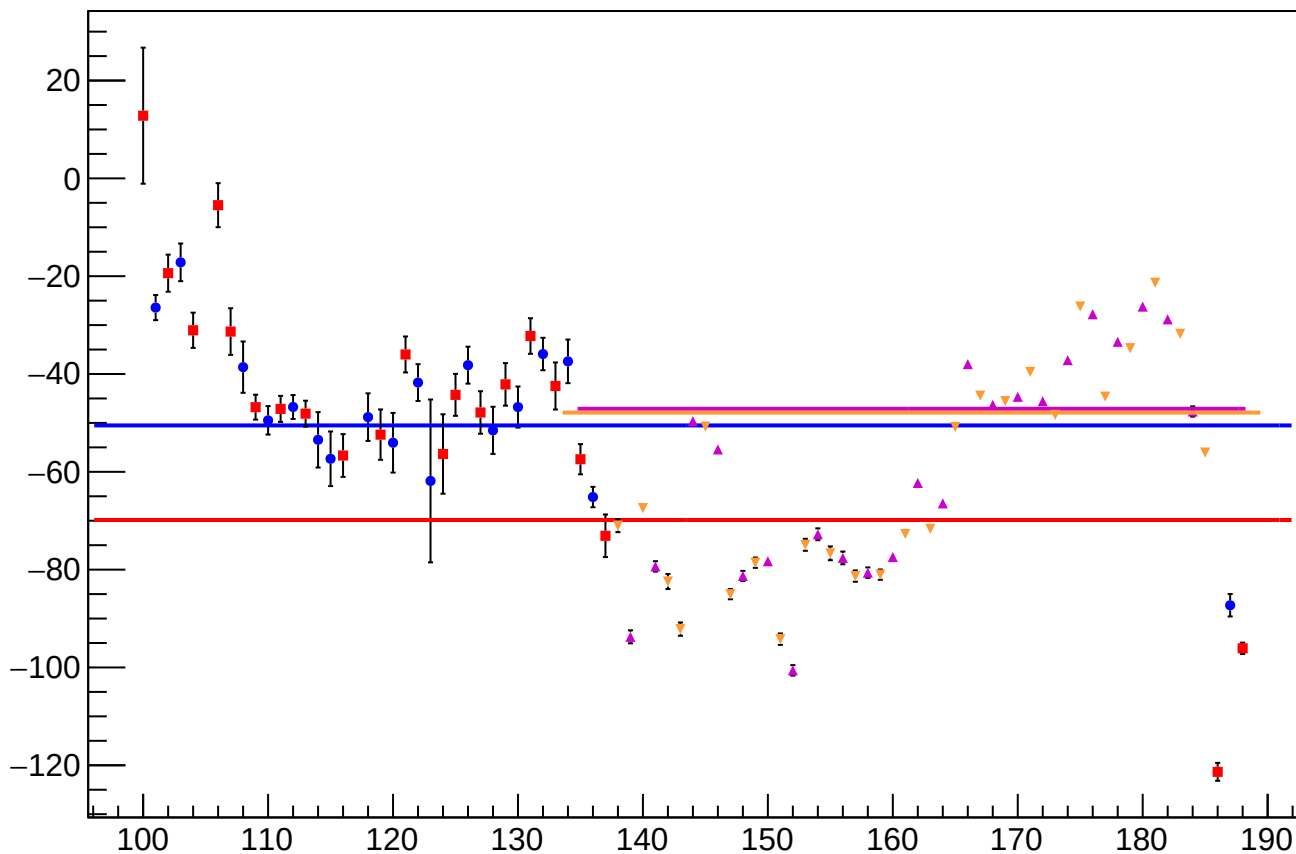
Left In:  $0.662 \pm 0.124$   $\chi^2/\text{NDF}: 3340.9/22$

+ sign  $0.517 \pm 0.121$   $\chi^2/\text{NDF}: 4220.1/42$

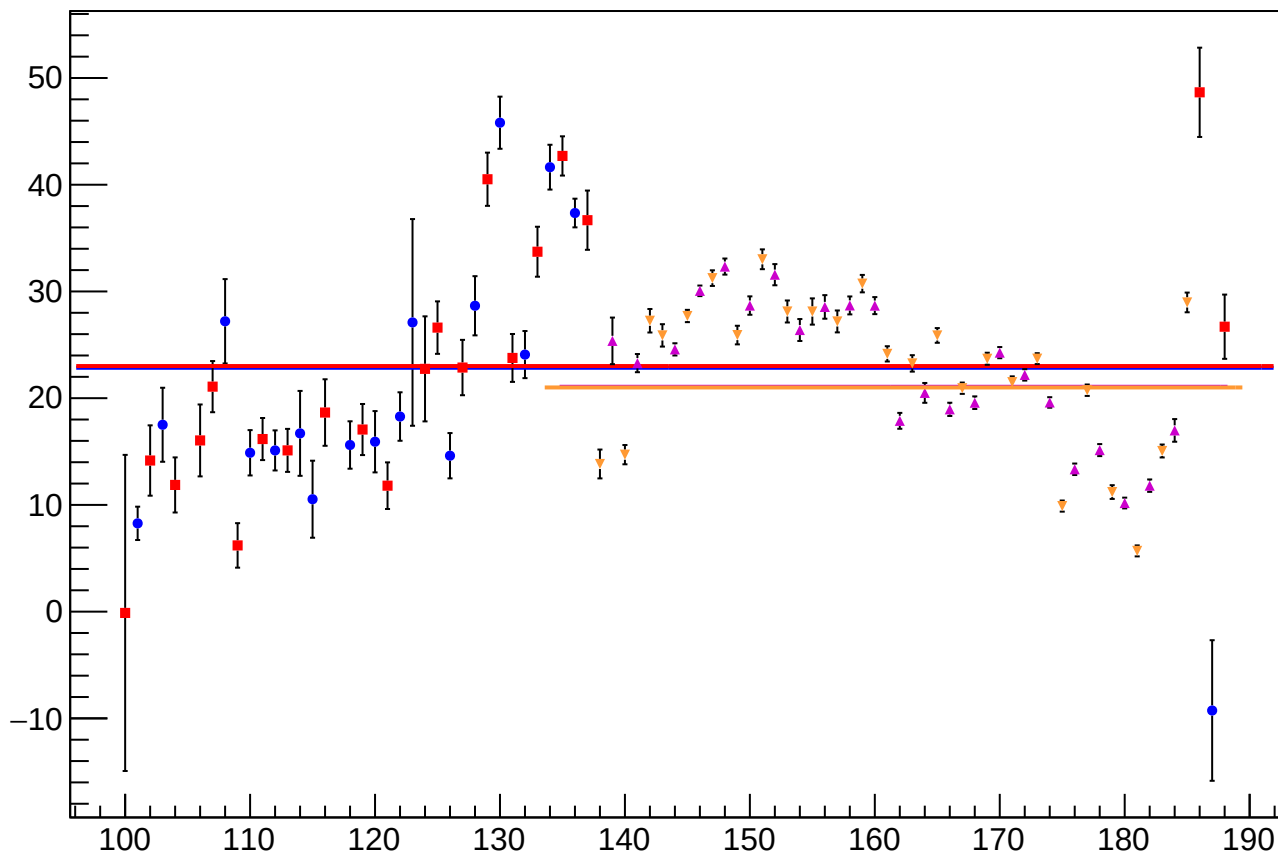
All:  $0.436 \pm 0.085$   $\chi^2/\text{NDF}: 7810.5/86$

- sign  $0.355 \pm 0.120$   $\chi^2/\text{NDF}: 3589.5/43$

# reg\_asym\_sam3\_diff\_bpm4eX\_slope vs Slug



# reg\_asym\_sam3\_diff\_bpm4eY\_slope vs Slug



Right In: 22.850 $\pm$ 0.554  $\chi^2$ /NDF: 485.1/17

Left Out: 21.005 $\pm$ 0.139  $\chi^2$ /NDF: 2789.5/24

Right Out: 23.011 $\pm$ 0.557  $\chi^2$ /NDF: 410.5/20

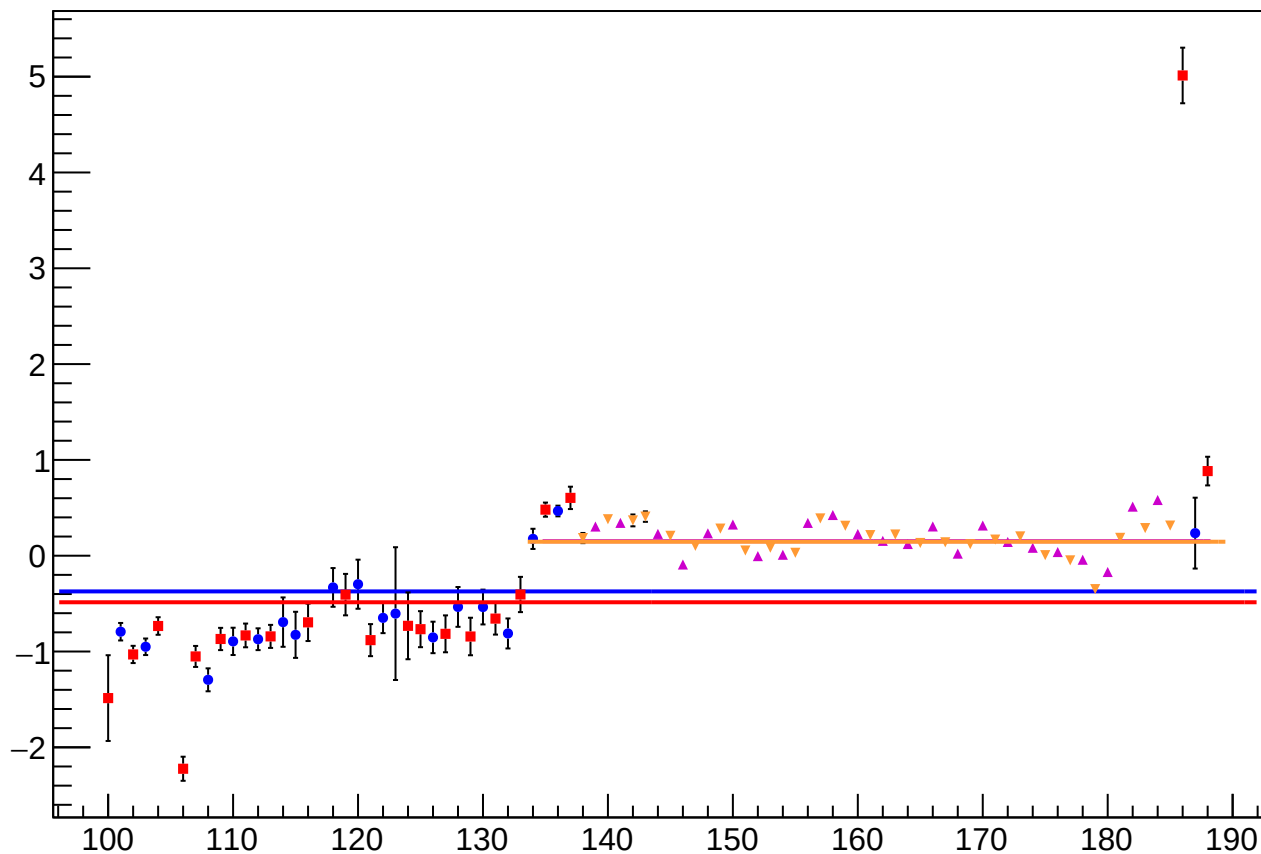
Left In: 21.069 $\pm$ 0.139  $\chi^2$ /NDF: 2176.7/22

+ sign 21.114 $\pm$ 0.135  $\chi^2$ /NDF: 3285.1/42

All: 21.148 $\pm$ 0.095  $\chi^2$ /NDF: 5883.9/86

- sign 21.183 $\pm$ 0.135  $\chi^2$ /NDF: 2598.7/43

# reg\_asym\_sam3\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.373 \pm 0.030$   $\chi^2/\text{NDF}: 439.9/17$

Left Out:  $0.146 \pm 0.006$   $\chi^2/\text{NDF}: 609.8/24$

Right Out:  $-0.486 \pm 0.029$   $\chi^2/\text{NDF}: 1013.1/20$

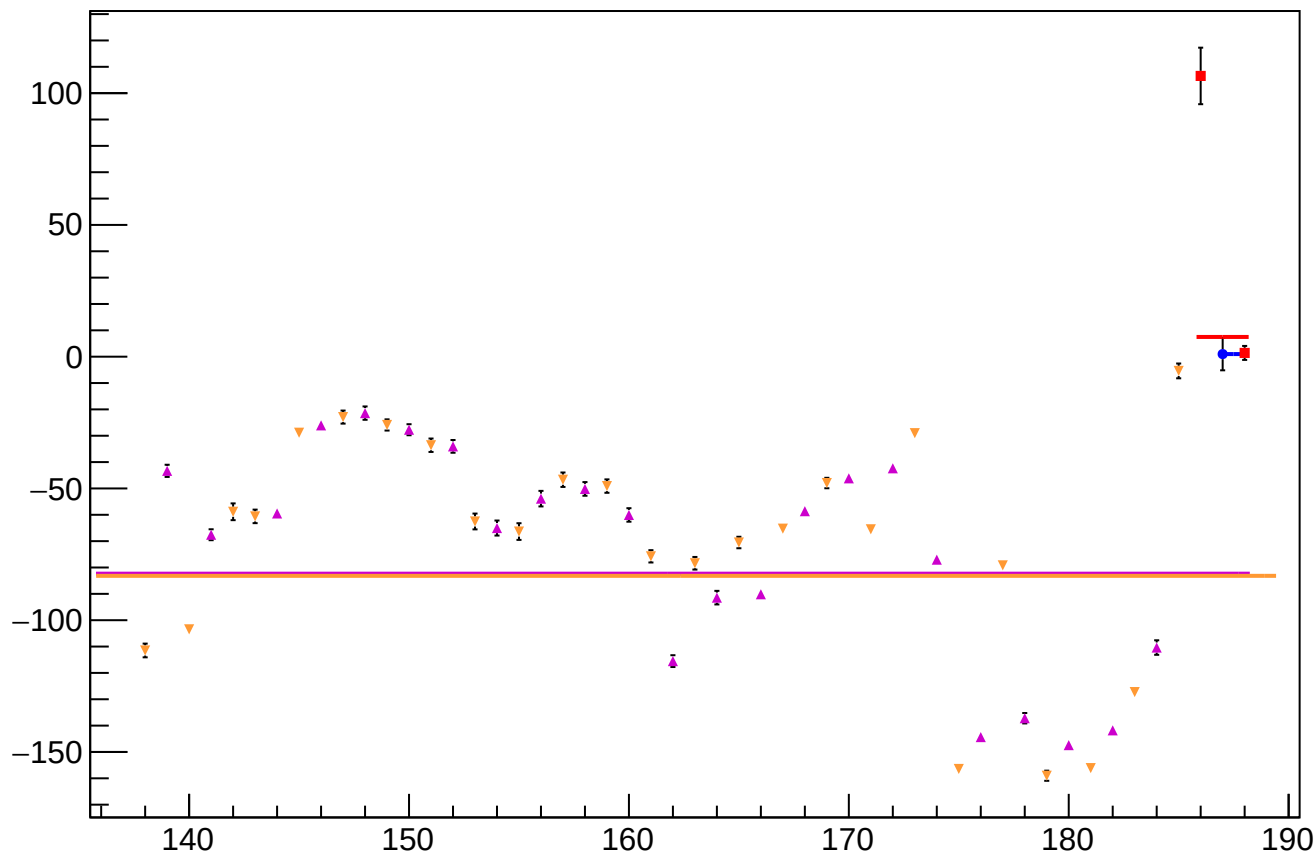
Left In:  $0.151 \pm 0.006$   $\chi^2/\text{NDF}: 873.9/22$

+ sign  $0.124 \pm 0.006$   $\chi^2/\text{NDF}: 1336.2/42$

All:  $0.123 \pm 0.004$   $\chi^2/\text{NDF}: 3671.4/86$

- sign  $0.123 \pm 0.006$   $\chi^2/\text{NDF}: 2335.2/43$

# reg\_asym\_sam4\_diff\_bpm1X\_slope vs Slug



Right In:  $0.990 \pm 6.163$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-83.163 \pm 0.407$   $\chi^2/\text{NDF}$ : 13794.3/24

Right Out:  $7.488 \pm 2.575$   $\chi^2/\text{NDF}$ : 90.5/1

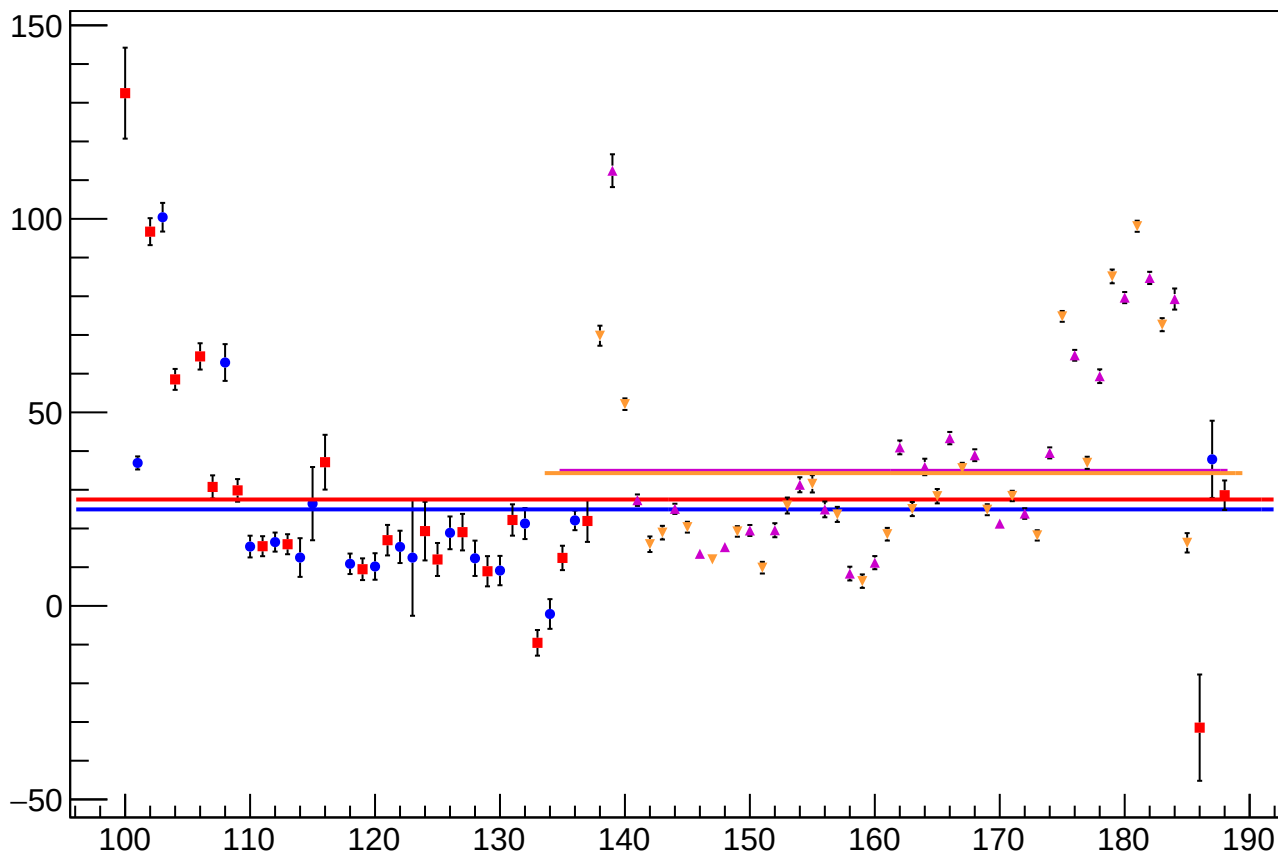
Left In:  $-82.342 \pm 0.413$   $\chi^2/\text{NDF}$ : 10954.9/22

+ sign  $-82.797 \pm 0.406$   $\chi^2/\text{NDF}$ : 13979.9/25

All:  $-81.449 \pm 0.288$   $\chi^2/\text{NDF}$ : 26233.7/50

- sign  $-80.090 \pm 0.408$   $\chi^2/\text{NDF}$ : 12231.7/24

# reg\_asym\_sam4\_diff\_bpm4aY\_slope vs Slug

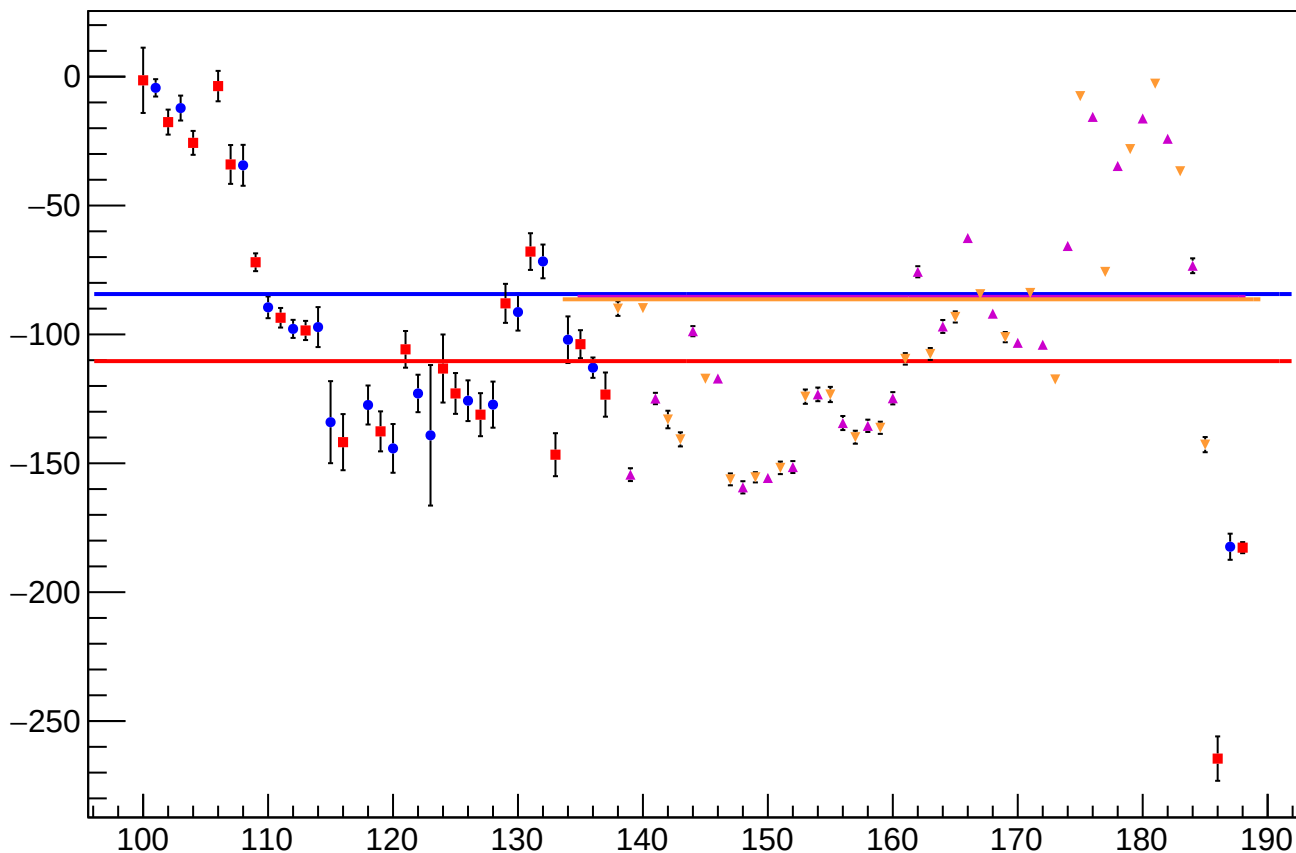


Right In:  $24.931 \pm 0.798$   $\chi^2/\text{NDF}$ : 692.5/17  
 Left Out:  $34.306 \pm 0.321$   $\chi^2/\text{NDF}$ : 6163.7/24  
 Right Out:  $27.492 \pm 0.791$   $\chi^2/\text{NDF}$ : 1027.7/20  
 Left In:  $34.893 \pm 0.328$   $\chi^2/\text{NDF}$ : 4754.6/22

+ sign  $33.001 \pm 0.298$   $\chi^2/\text{NDF}$ : 6975.0/42  
 All:  $33.397 \pm 0.212$   $\chi^2/\text{NDF}$ : 12835.5/86  
 - sign  $33.807 \pm 0.303$   $\chi^2/\text{NDF}$ : 5856.9/43



# reg\_asym\_sam4\_diff\_bpm4eX\_slope vs Slug



Right In:  $-84.341 \pm 1.360$   $\chi^2/\text{NDF}$ : 1445.3/17

Left Out:  $-86.377 \pm 0.409$   $\chi^2/\text{NDF}$ : 14435.1/24

Right Out:  $-110.359 \pm 1.134$   $\chi^2/\text{NDF}$ : 2912.2/20

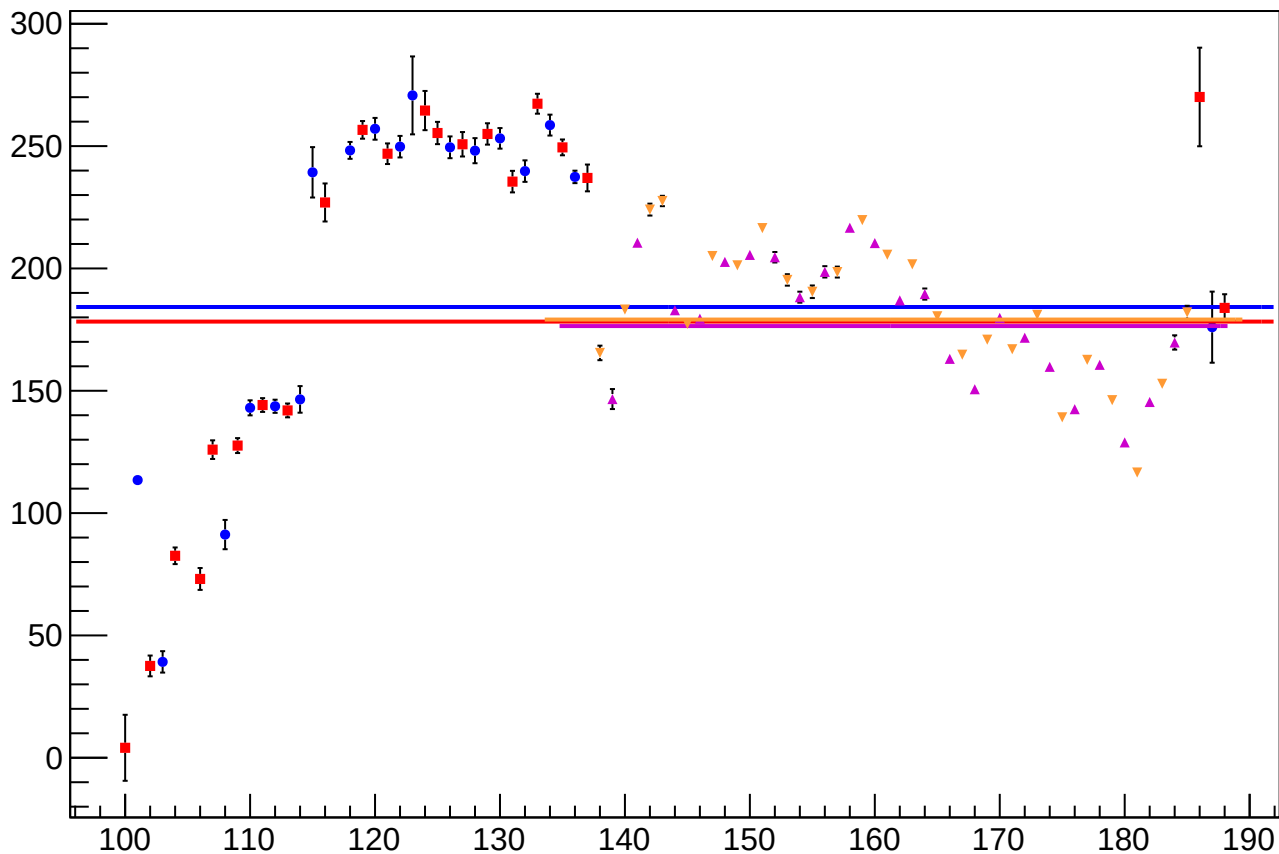
Left In:  $-85.441 \pm 0.413$   $\chi^2/\text{NDF}$ : 12998.9/22

+ sign  $-86.208 \pm 0.392$   $\chi^2/\text{NDF}$ : 15882.5/42

All:  $-87.295 \pm 0.276$   $\chi^2/\text{NDF}$ : 32235.2/86

- sign  $-88.361 \pm 0.388$   $\chi^2/\text{NDF}$ : 16337.5/43

# reg\_asym\_sam4\_diff\_bpm4eY\_slope vs Slug



Right In: 184.239 $\pm$ 0.912  $\chi^2$ /NDF: 5401.3/17

Left Out: 179.109 $\pm$ 0.363  $\chi^2$ /NDF: 5877.5/24

Right Out: 178.276 $\pm$ 0.911  $\chi^2$ /NDF: 6352.8/20

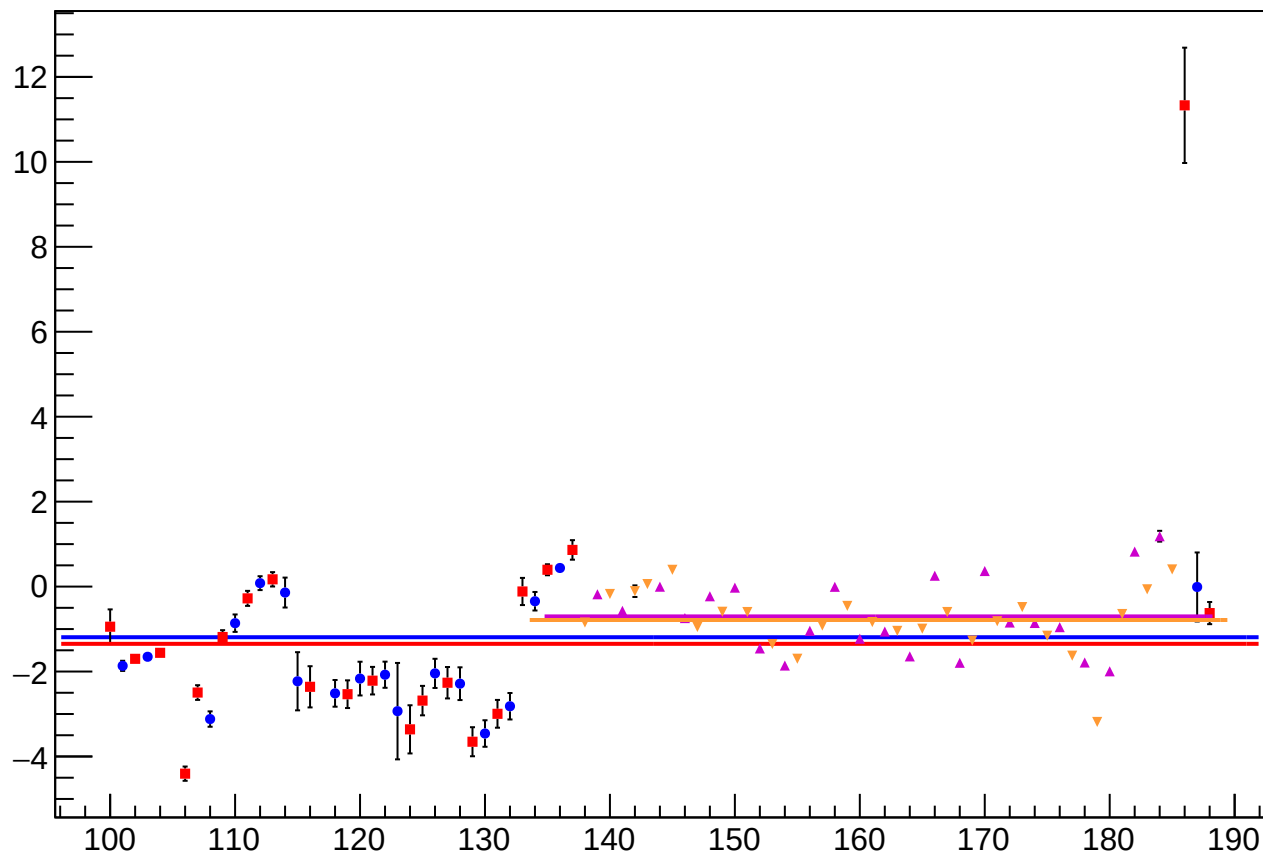
Left In: 176.449 $\pm$ 0.370  $\chi^2$ /NDF: 4442.1/22

+ sign 179.809 $\pm$ 0.337  $\chi^2$ /NDF: 11306.1/42

All: 178.284 $\pm$ 0.240  $\chi^2$ /NDF: 22146.2/86

- sign 176.707 $\pm$ 0.342  $\chi^2$ /NDF: 10798.4/43

# reg\_asym\_sam4\_diff\_bpm12X\_slope vs Slug



Right In:  $-1.192 \pm 0.048$   $\chi^2/\text{NDF}$ : 625.2/17

Left Out:  $-0.787 \pm 0.017$   $\chi^2/\text{NDF}$ : 1760.7/24

Right Out:  $-1.348 \pm 0.045$   $\chi^2/\text{NDF}$ : 1020.0/20

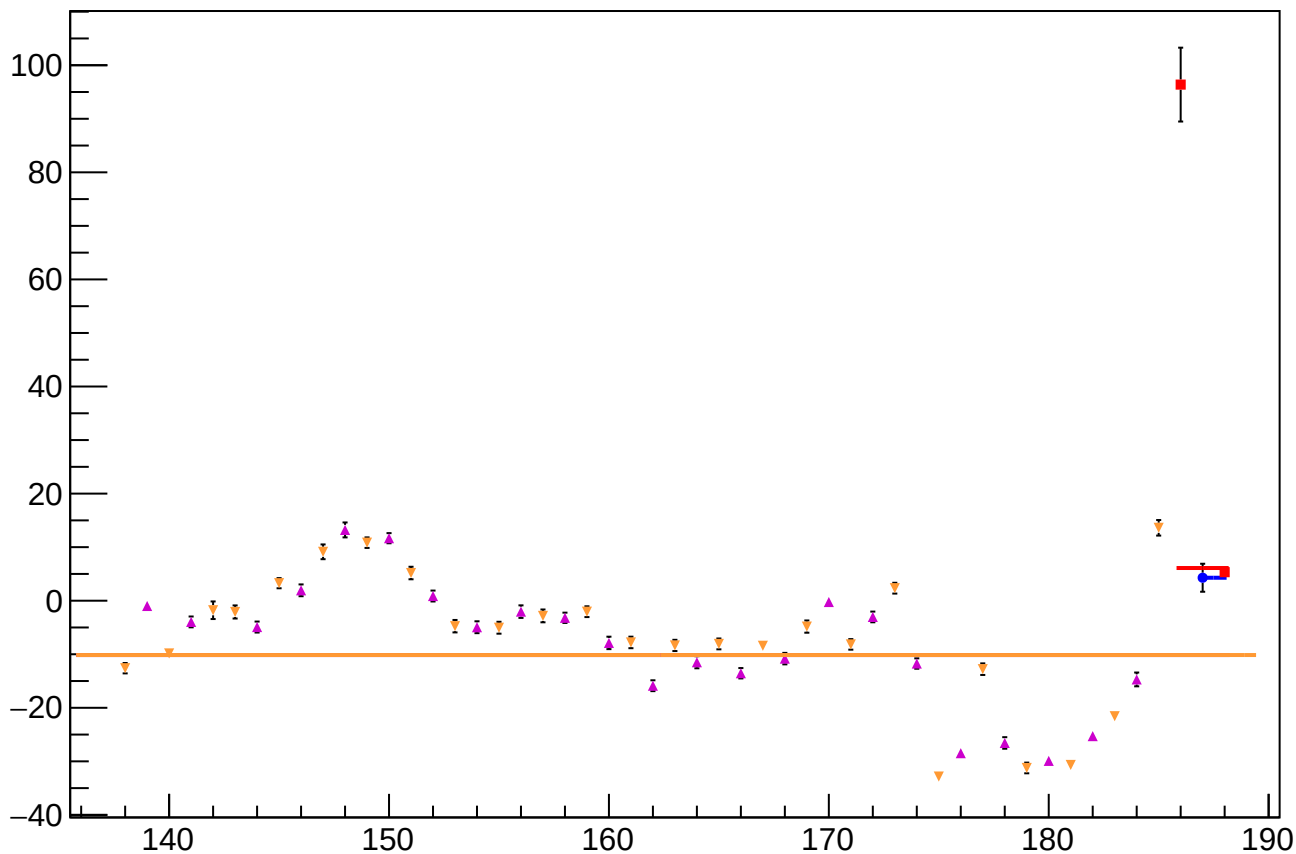
Left In:  $-0.702 \pm 0.017$   $\chi^2/\text{NDF}$ : 2421.3/22

+ sign  $-0.830 \pm 0.016$   $\chi^2/\text{NDF}$ : 2449.6/42

All:  $-0.806 \pm 0.011$   $\chi^2/\text{NDF}$ : 6076.1/86

- sign  $-0.781 \pm 0.016$   $\chi^2/\text{NDF}$ : 3621.6/43

# reg\_asym\_sam5\_diff\_bpm1X\_slope vs Slug



Right In: 4.287+/-2.614  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -10.147+/-0.202  $\chi^2/\text{NDF}$ : 4128.5/24

Right Out: 6.104+/-0.637  $\chi^2/\text{NDF}$ : 172.8/1

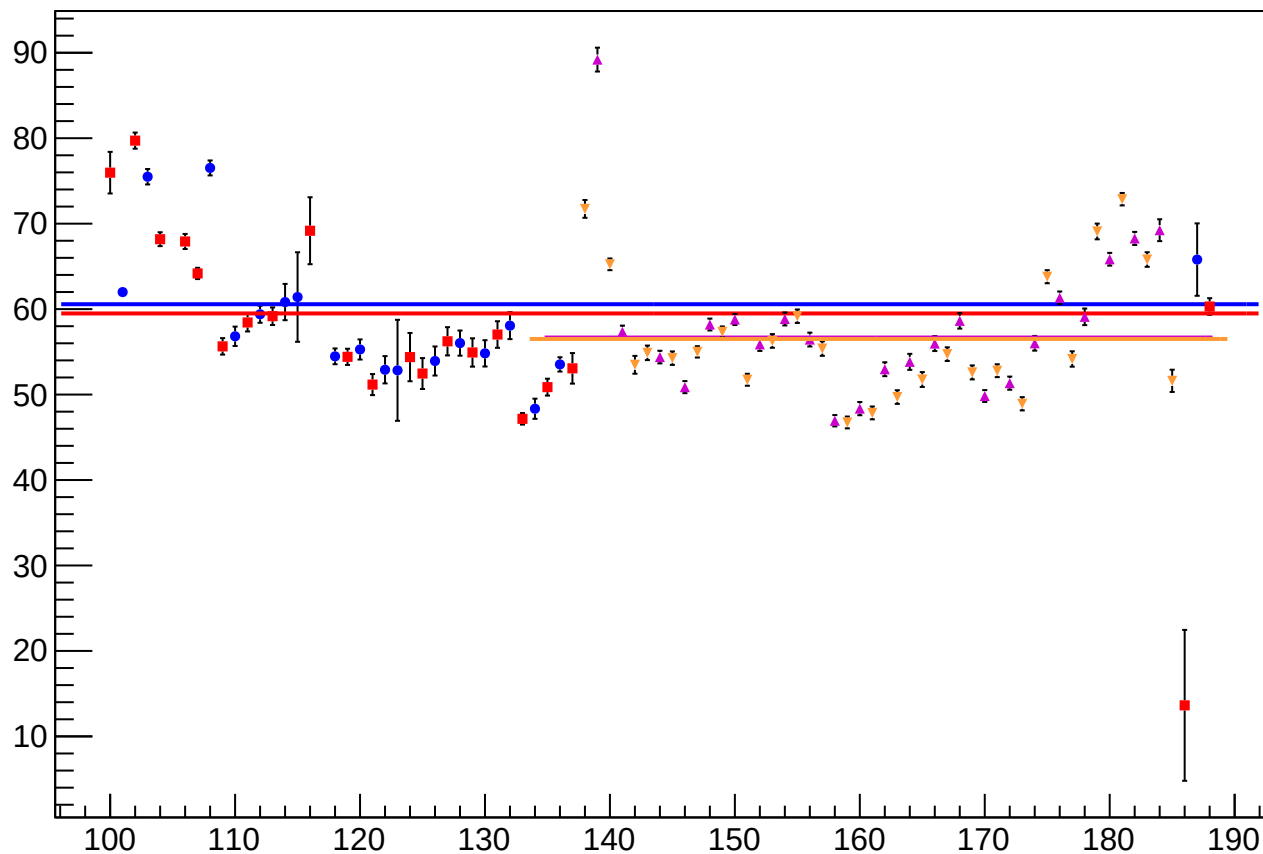
Left In: -10.149+/-0.204  $\chi^2/\text{NDF}$ : 3491.7/22

+ sign -10.062+/-0.201  $\chi^2/\text{NDF}$ : 4158.8/25

All: -9.325+/-0.140  $\chi^2/\text{NDF}$ : 8439.6/50

- sign -8.639+/-0.194  $\chi^2/\text{NDF}$ : 4254.9/24

# reg\_asym\_sam5\_diff\_bpm4aY\_slope vs Slug



Right In: 60.574 $\pm$ 0.261  $\chi^2$ /NDF: 932.3/17

Left Out: 56.508 $\pm$ 0.159  $\chi^2$ /NDF:1962.3/24

Right Out: 59.494 $\pm$ 0.240  $\chi^2$ /NDF: 1344.7/20

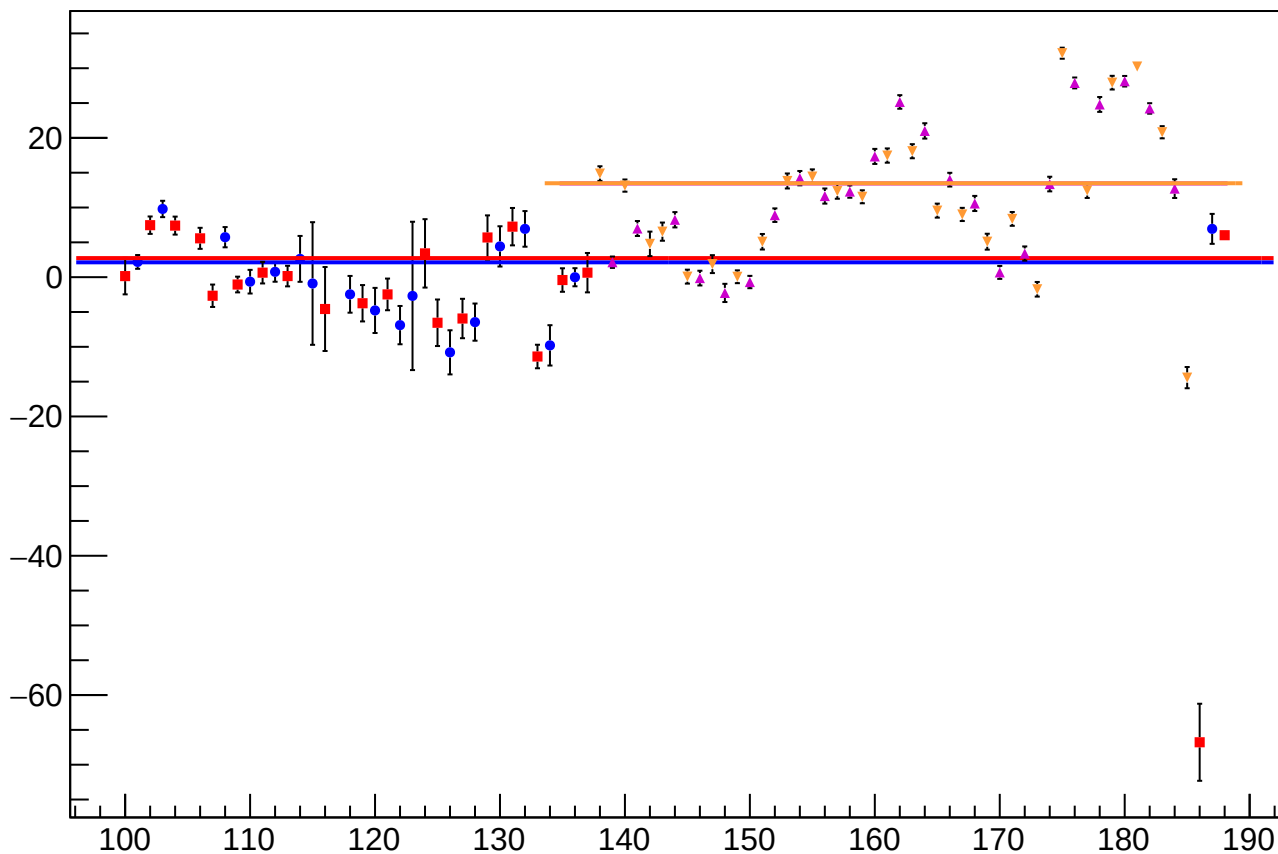
Left In: 56.674 $\pm$ 0.165  $\chi^2$ /NDF:1679.8/22

+ sign 57.611 $\pm$ 0.136  $\chi^2$ /NDF: 3071.4/42

All: 57.593 $\pm$ 0.096  $\chi^2$ /NDF: 6189.6/86

- sign 57.576 $\pm$ 0.136  $\chi^2$ /NDF: 3118.2/43

# reg\_asym\_sam5\_diff\_bpm4eX\_slope vs Slug



Right In:  $2.132 \pm 0.448$   $\chi^2/\text{NDF}$ : 126.8/17

Left Out:  $13.485 \pm 0.202$   $\chi^2/\text{NDF}$ : 2731.0/24

Right Out:  $2.739 \pm 0.328$   $\chi^2/\text{NDF}$ : 364.9/20

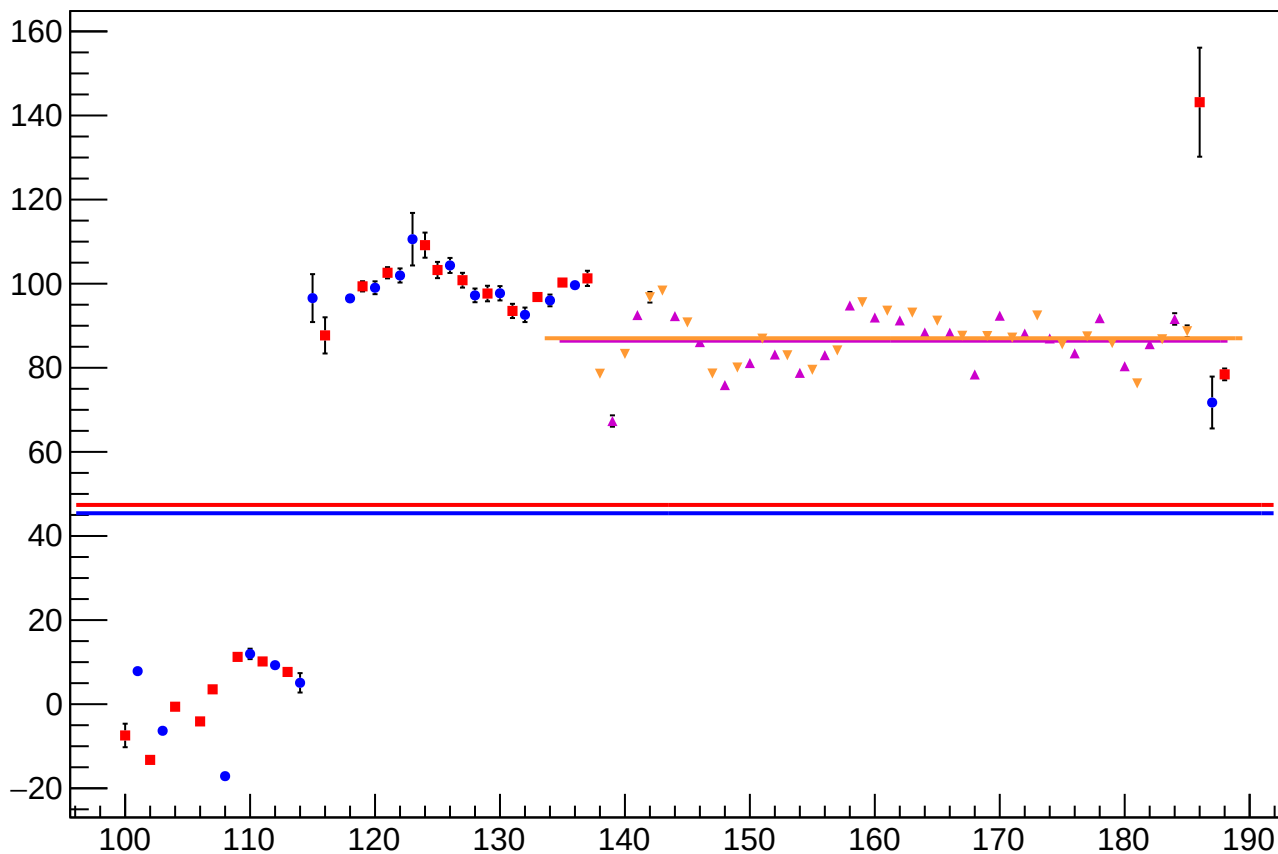
Left In:  $13.456 \pm 0.203$   $\chi^2/\text{NDF}$ : 2371.9/22

+ sign  $11.567 \pm 0.184$   $\chi^2/\text{NDF}$ : 3392.2/42

All:  $10.993 \pm 0.126$   $\chi^2/\text{NDF}$ : 6918.8/86

- sign  $10.488 \pm 0.173$   $\chi^2/\text{NDF}$ : 3508.3/43

# reg\_asym\_sam5\_diff\_bpm4eY\_slope vs Slug



Right In: 45.407 $\pm$ 0.303  $\chi^2$ /NDF: 25089.3/17

Left Out: 87.023 $\pm$ 0.179  $\chi^2$ /NDF:1057.2/24

Right Out: 47.385 $\pm$ 0.283  $\chi^2$ /NDF: 28790.2/20

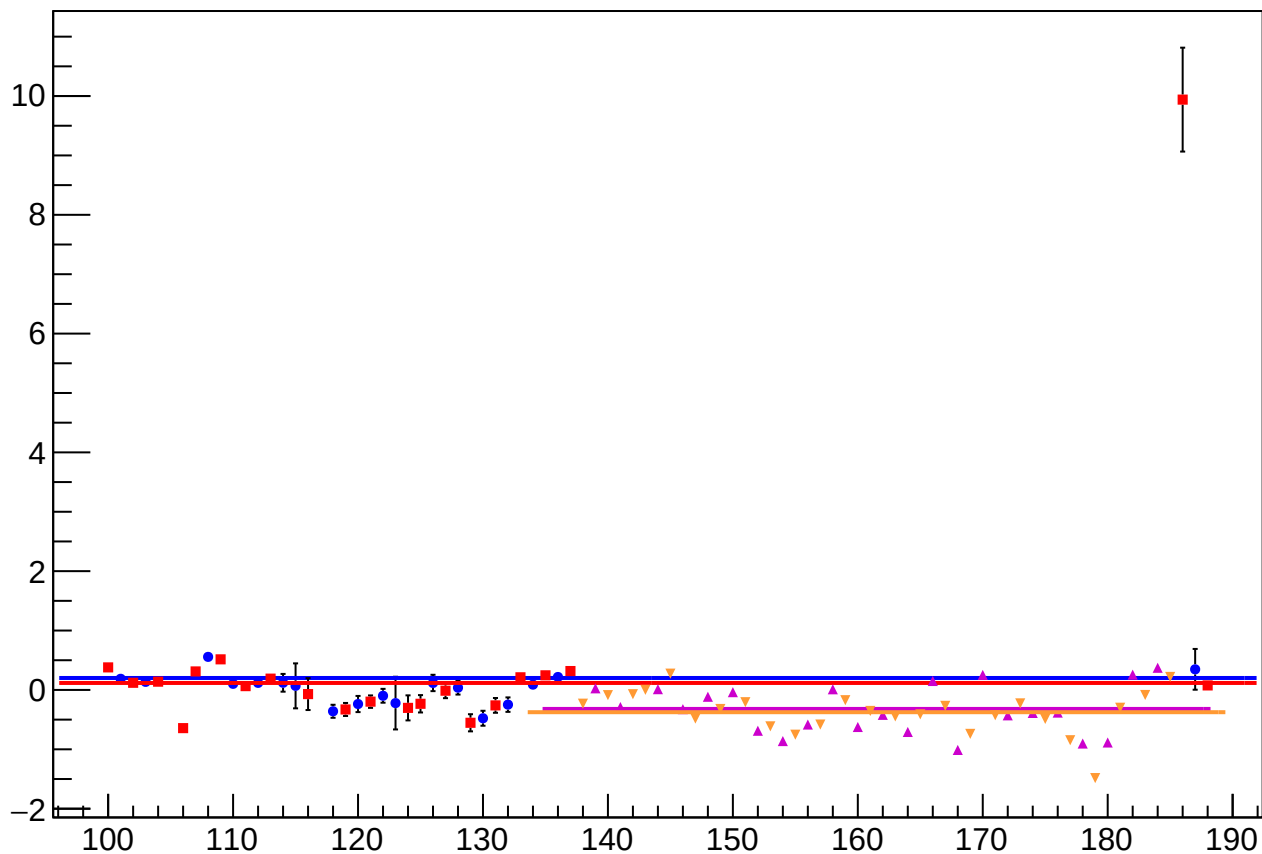
Left In: 86.443 $\pm$ 0.184  $\chi^2$ /NDF:1038.6/22

+ sign 76.207 $\pm$ 0.154  $\chi^2$ /NDF: 40119.2/42

All: 75.534 $\pm$ 0.109  $\chi^2$ /NDF: 83348.7/86

- sign 74.861 $\pm$ 0.154  $\chi^2$ /NDF: 43191.5/43

# reg\_asym\_sam5\_diff\_bpm12X\_slope vs Slug



Right In:  $0.201 \pm 0.014$   $\chi^2/\text{NDF}$ : 218.0/17

Left Out:  $-0.375 \pm 0.008$   $\chi^2/\text{NDF}$ : 1657.5/24

Right Out:  $0.117 \pm 0.013$   $\chi^2/\text{NDF}$ : 626.7/20

Left In:  $-0.320 \pm 0.008$   $\chi^2/\text{NDF}$ : 2325.0/22

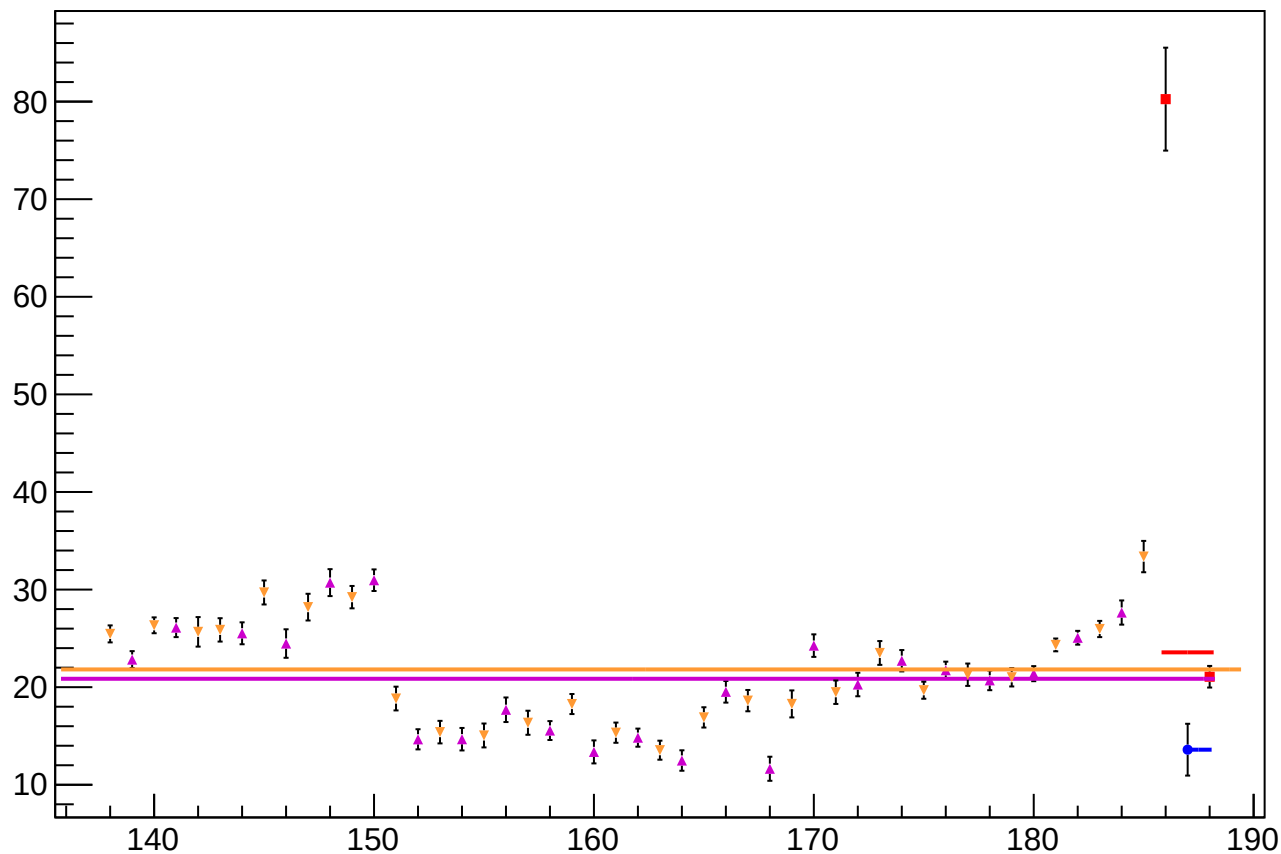
+ sign  $-0.230 \pm 0.007$   $\chi^2/\text{NDF}$ : 3138.3/42

All:  $-0.211 \pm 0.005$   $\chi^2/\text{NDF}$ : 6942.8/86

- sign  $-0.193 \pm 0.007$   $\chi^2/\text{NDF}$ : 3790.4/43



# reg\_asym\_sam6\_diff\_bpm1X\_slope vs Slug



Right In: 13.595 $\pm$ 2.654  $\chi^2$ /NDF: 0.0/0

Left Out: 21.818 $\pm$ 0.210  $\chi^2$ /NDF: 522.7/24

Right Out: 23.568 $\pm$ 1.083  $\chi^2$ /NDF: 120.6/1

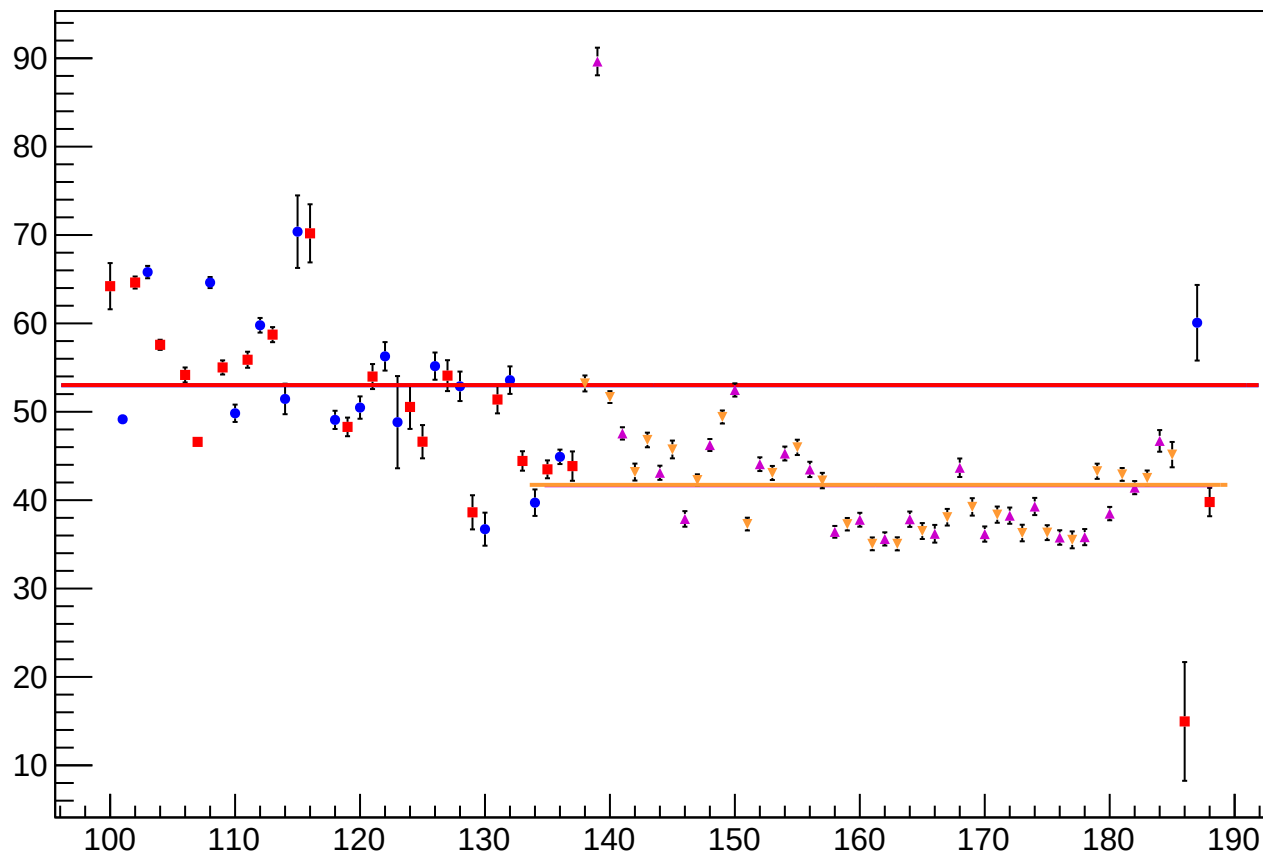
Left In: 20.860 $\pm$ 0.216  $\chi^2$ /NDF: 575.5/22

+ sign 21.767 $\pm$ 0.210  $\chi^2$ /NDF: 532.2/25

All: 21.369 $\pm$ 0.149  $\chi^2$ /NDF: 1241.7/50

- sign 20.963 $\pm$ 0.211  $\chi^2$ /NDF: 702.2/24

# reg\_asym\_sam6\_diff\_bpm4aY\_slope vs Slug



Right In: 52.998 $\pm$ 0.210  $\chi^2$ /NDF: 1200.5/17

Left Out: 41.732 $\pm$ 0.166  $\chi^2$ /NDF:1014.0/24

Right Out: 53.021 $\pm$ 0.224  $\chi^2$ /NDF: 974.4/20

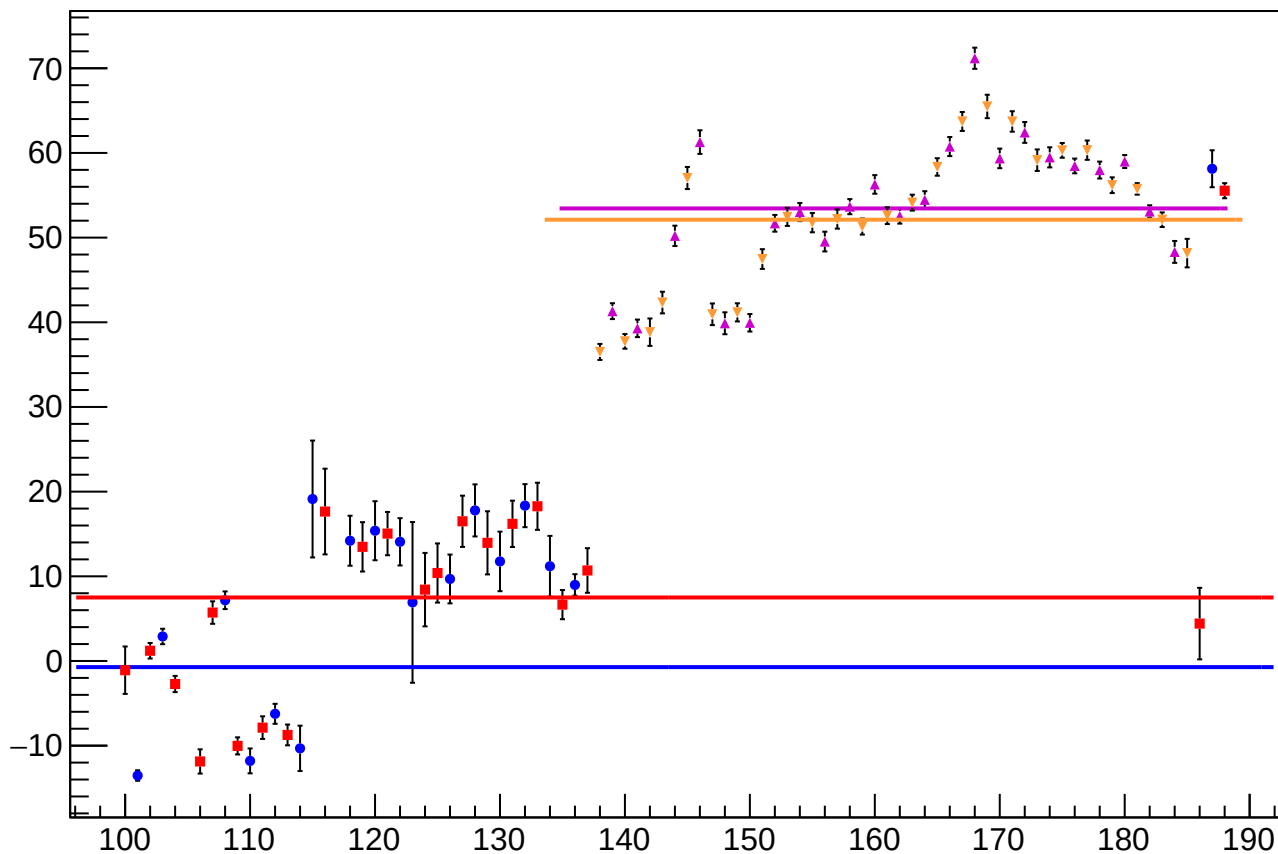
Left In: 41.682 $\pm$ 0.173  $\chi^2$ /NDF:1715.9/22

+ sign 46.063 $\pm$ 0.130  $\chi^2$ /NDF: 3987.8/42

All: 45.997 $\pm$ 0.094  $\chi^2$ /NDF: 8277.7/86

- sign 45.923 $\pm$ 0.137  $\chi^2$ /NDF: 4289.4/43

# reg\_asym\_sam6\_diff\_bpm4eX\_slope vs Slug



Right In:  $-0.724 \pm 0.359$   $\chi^2/\text{NDF}$ : 1588.9/17

Left Out:  $52.116 \pm 0.210$   $\chi^2/\text{NDF}$ : 1445.4/24

Right Out:  $7.501 \pm 0.346$   $\chi^2/\text{NDF}$ : 3916.0/20

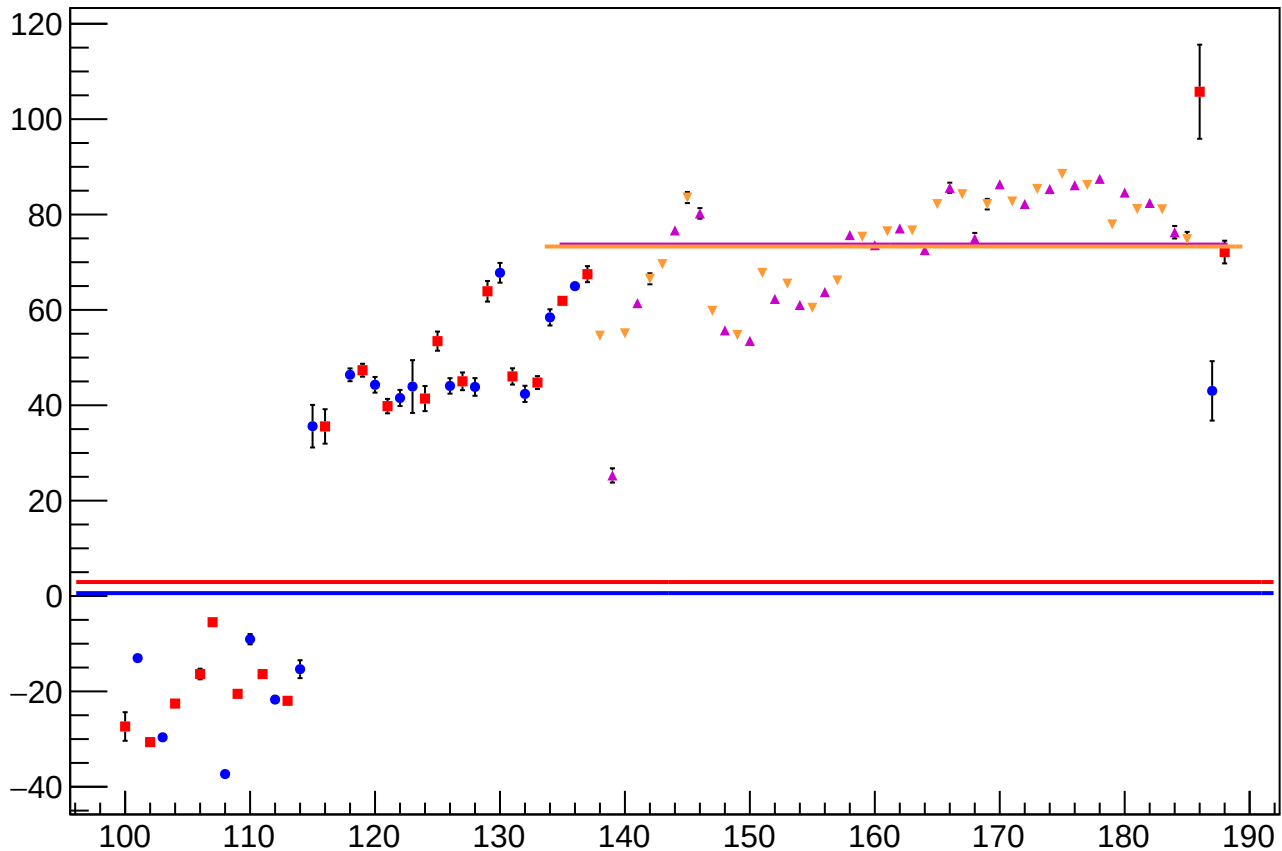
Left In:  $53.447 \pm 0.214$   $\chi^2/\text{NDF}$ : 1167.6/22

+ sign  $38.595 \pm 0.182$   $\chi^2/\text{NDF}$ : 19167.3/42

All:  $39.644 \pm 0.129$   $\chi^2/\text{NDF}$ : 37054.7/86

- sign  $40.702 \pm 0.182$   $\chi^2/\text{NDF}$ : 17820.4/43

# reg\_asym\_sam6\_diff\_bpm4eY\_slope vs Slug



Right In:  $0.608 \pm 0.247$   $\chi^2/\text{NDF}$ : 18470.2/17

Left Out:  $73.294 \pm 0.187$   $\chi^2/\text{NDF}$ : 3148.2/24

Right Out:  $2.930 \pm 0.265$   $\chi^2/\text{NDF}$ : 16441.4/20

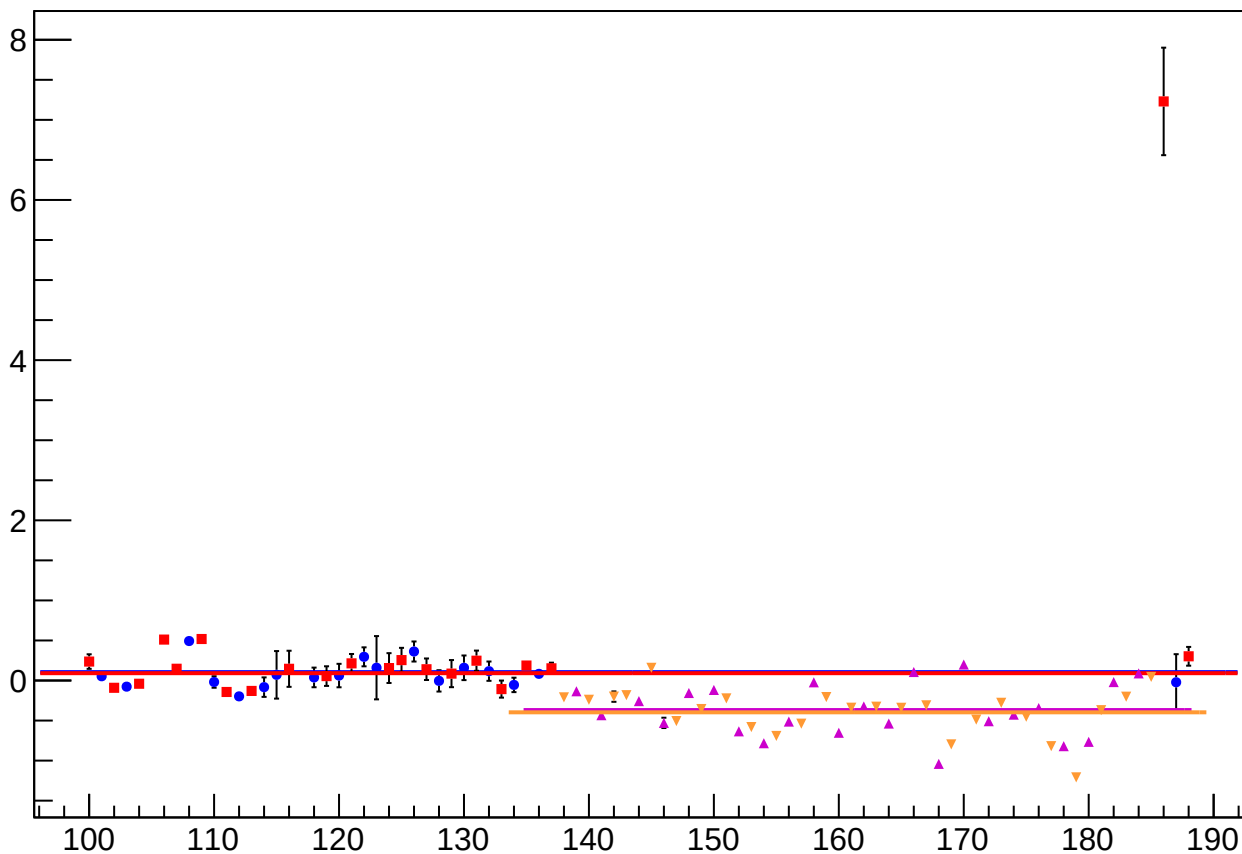
Left In:  $73.699 \pm 0.194$   $\chi^2/\text{NDF}$ : 3901.1/22

+ sign  $46.682 \pm 0.149$   $\chi^2/\text{NDF}$ : 76729.5/42

All:  $47.787 \pm 0.108$   $\chi^2/\text{NDF}$ : 143694.4/86

- sign  $49.002 \pm 0.156$   $\chi^2/\text{NDF}$ : 66849.8/43

# reg\_asym\_sam6\_diff\_bpm12X\_slope vs Slug



Right In:  $0.105 \pm 0.011$   $\chi^2/\text{NDF}$ : 400.9/17

Left Out:  $-0.397 \pm 0.009$   $\chi^2/\text{NDF}$ : 943.5/24

Right Out:  $0.092 \pm 0.011$   $\chi^2/\text{NDF}$ : 507.4/20

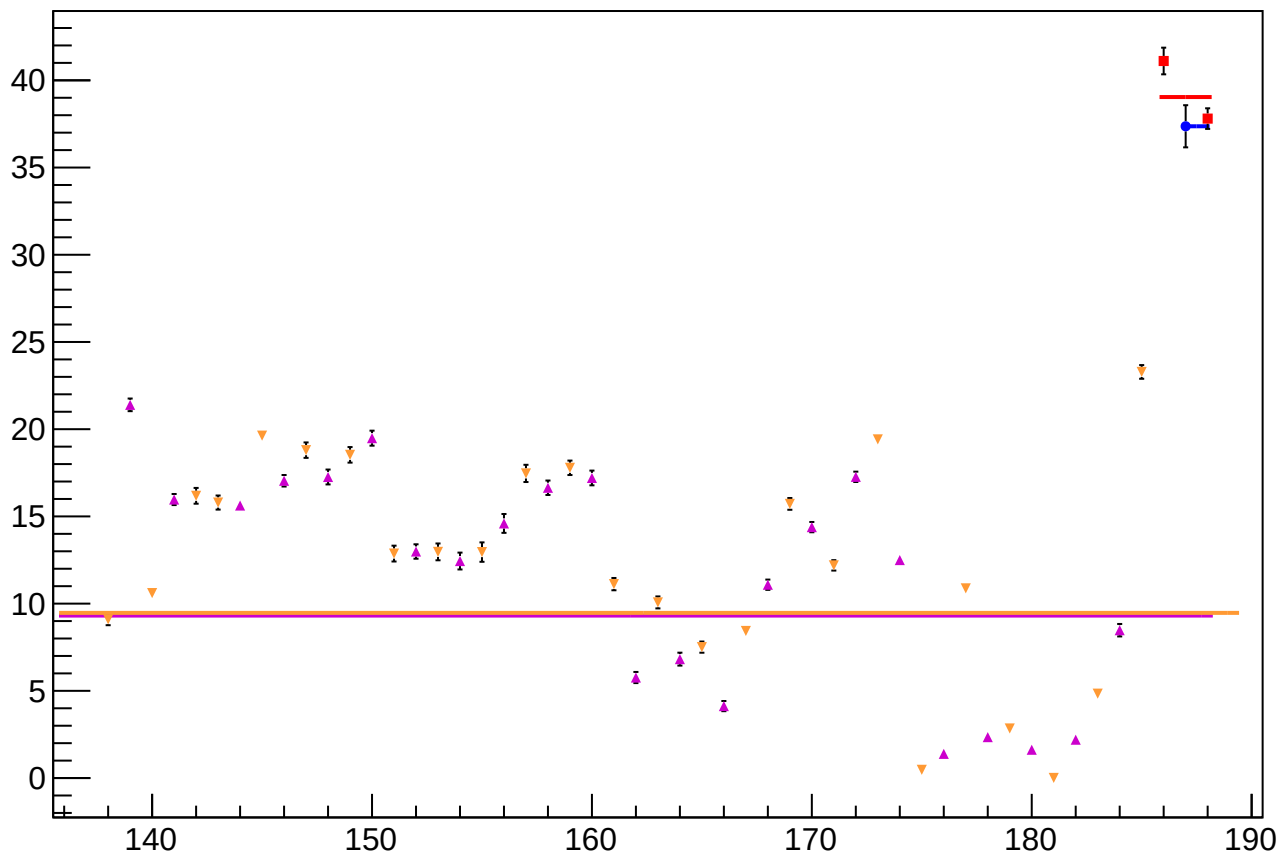
Left In:  $-0.369 \pm 0.009$   $\chi^2/\text{NDF}$ : 1322.7/22

+ sign  $-0.208 \pm 0.007$   $\chi^2/\text{NDF}$ : 2636.2/42

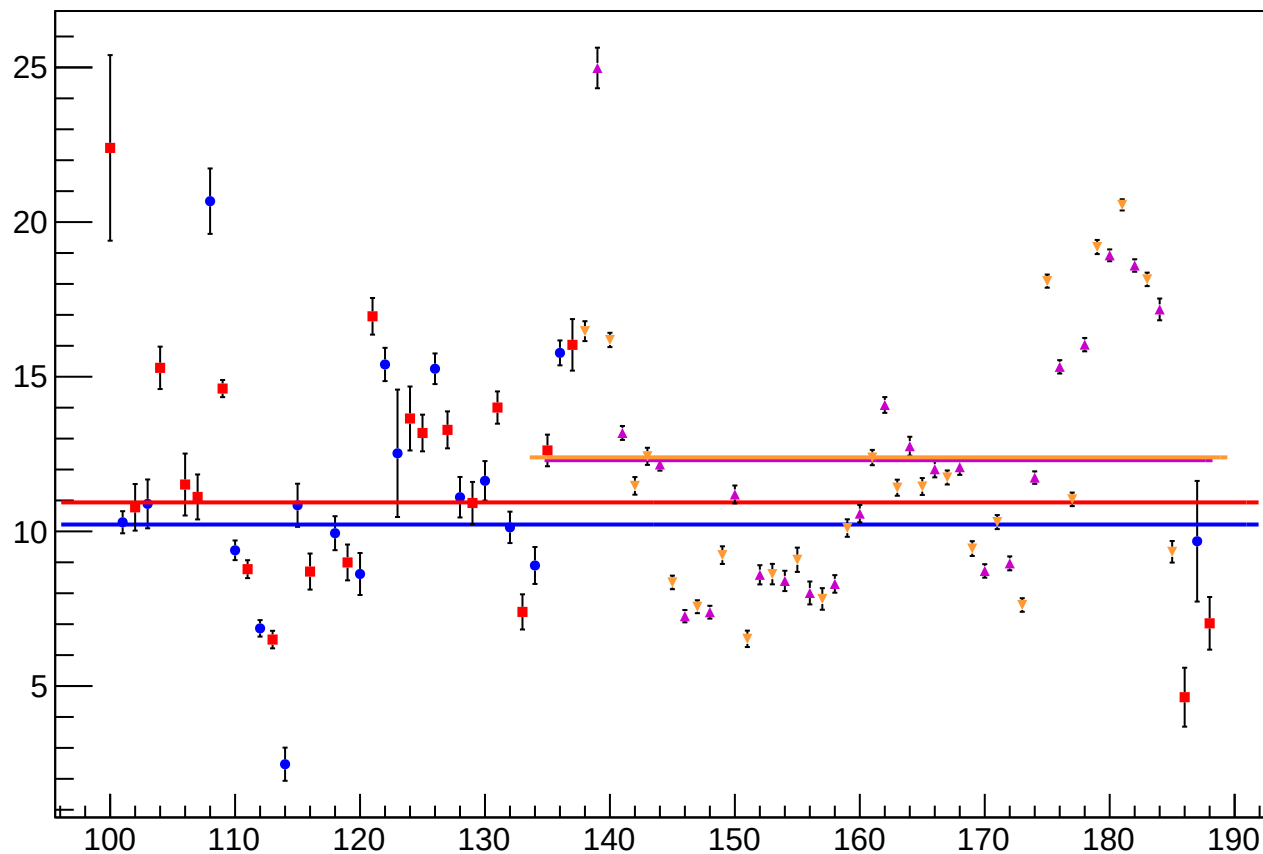
All:  $-0.200 \pm 0.005$   $\chi^2/\text{NDF}$ : 5557.0/86

- sign  $-0.192 \pm 0.007$   $\chi^2/\text{NDF}$ : 2917.8/43

# reg\_asym\_sam7\_diff\_bpm1X\_slope vs Slug



# reg\_asym\_sam7\_diff\_bpm4aY\_slope vs Slug



Right In:  $10.222 \pm 0.119$   $\chi^2/\text{NDF}$ : 877.7/17

Left Out:  $12.393 \pm 0.050$   $\chi^2/\text{NDF}$ : 7525.9/24

Right Out:  $10.937 \pm 0.114$   $\chi^2/\text{NDF}$ : 884.0/20

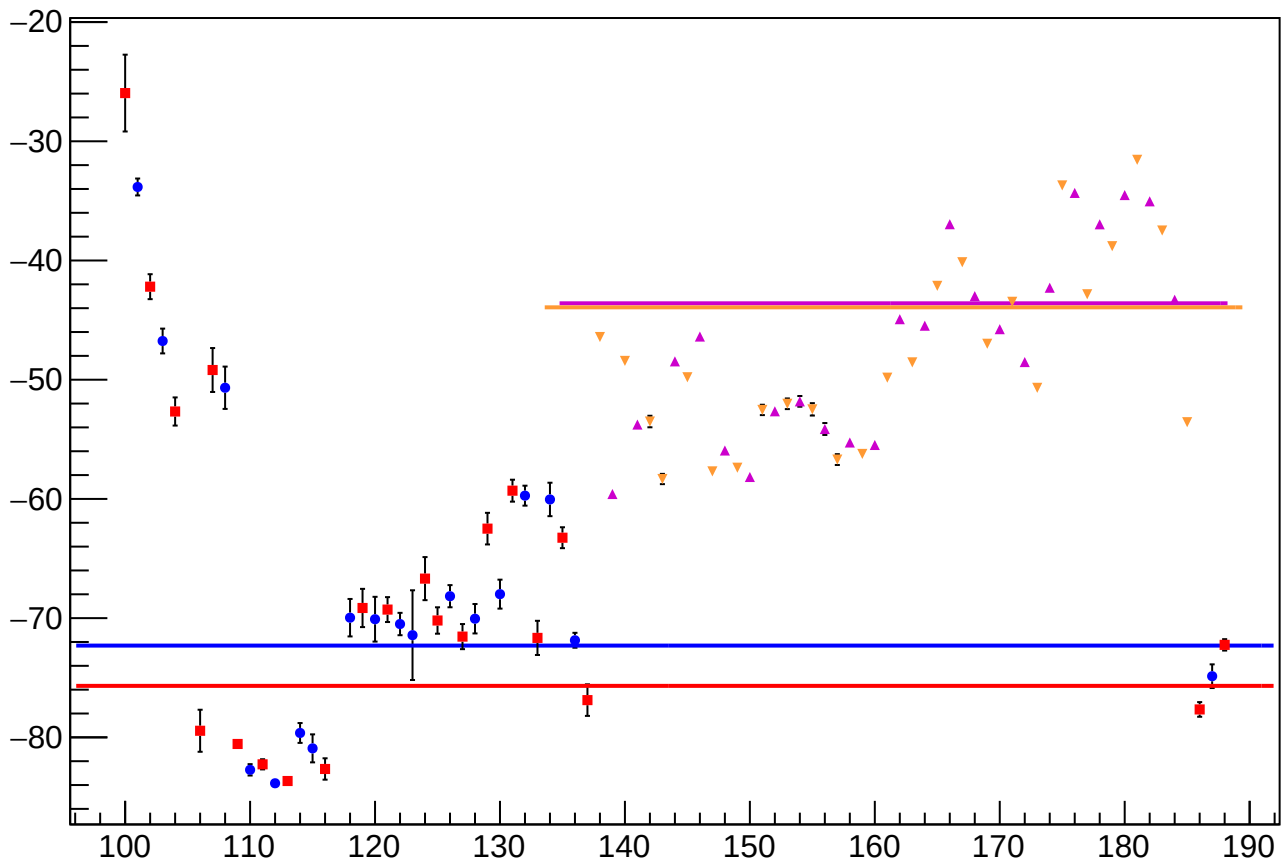
Left In:  $12.302 \pm 0.051$   $\chi^2/\text{NDF}$ : 5661.3/22

+ sign  $12.068 \pm 0.046$   $\chi^2/\text{NDF}$ : 8688.0/42

All:  $12.072 \pm 0.033$   $\chi^2/\text{NDF}$ : 15351.9/86

- sign  $12.076 \pm 0.047$   $\chi^2/\text{NDF}$ : 6663.8/43

# reg\_asym\_sam7\_diff\_bpm4eX\_slope vs Slug



Right In:  $-72.303 \pm 0.194$   $\chi^2/\text{NDF}: 5573.9/17$

Left Out:  $-43.930 \pm 0.062$   $\chi^2/\text{NDF}: 17576.0/24$

Right Out:  $-75.681 \pm 0.163$   $\chi^2/\text{NDF}: 3530.7/20$

Left In:  $-43.591 \pm 0.063$   $\chi^2/\text{NDF}: 15574.9/22$

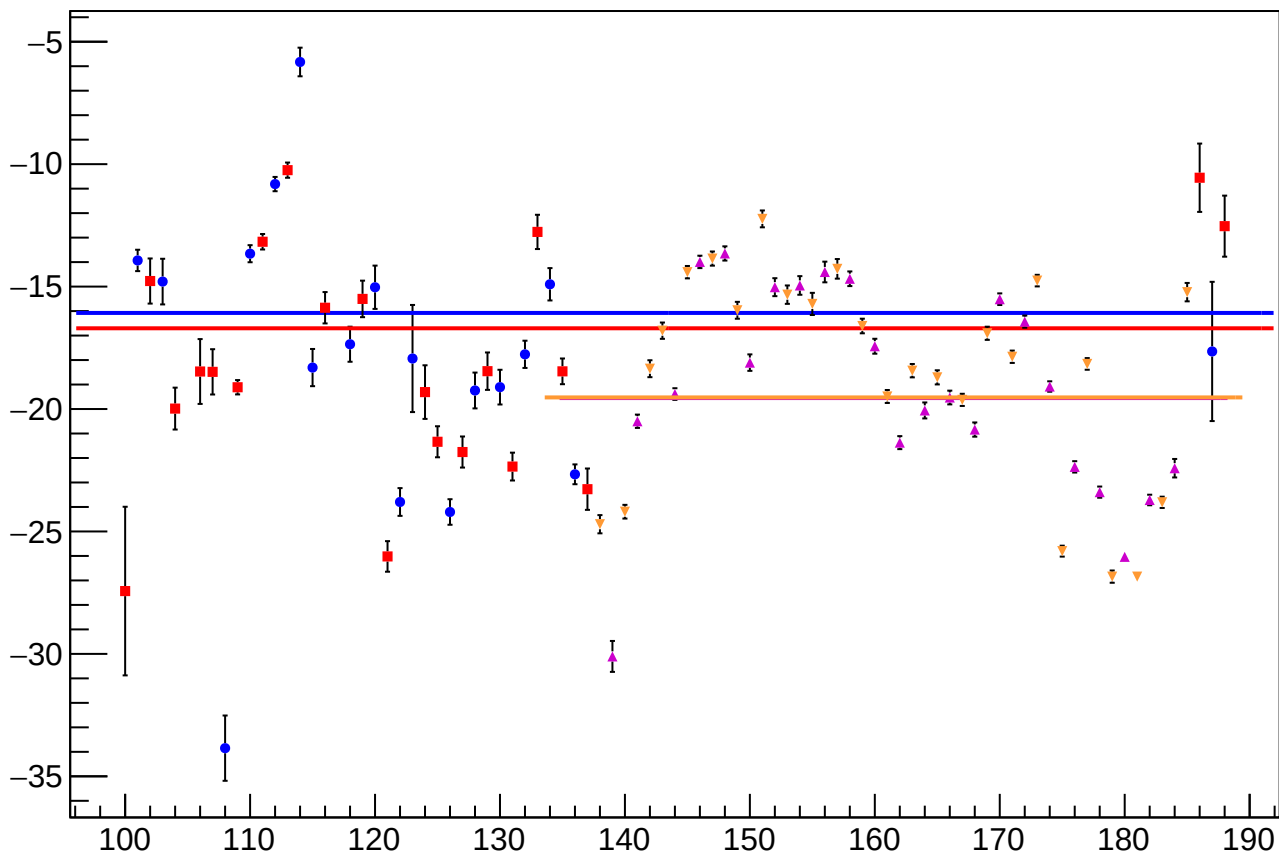
+ sign  $-46.564 \pm 0.059$   $\chi^2/\text{NDF}: 42576.5/42$

All:  $-47.166 \pm 0.042$   $\chi^2/\text{NDF}: 95549.5/86$

- sign  $-47.764 \pm 0.059$   $\chi^2/\text{NDF}: 52765.8/43$



# reg\_asym\_sam7\_diff\_bpm4eY\_slope vs Slug



Right In:  $-16.076 \pm 0.132$   $\chi^2/\text{NDF}$ : 1641.2/17

Left Out:  $-19.526 \pm 0.056$   $\chi^2/\text{NDF}$ : 6493.0/24

Right Out:  $-16.703 \pm 0.127$   $\chi^2/\text{NDF}$ : 1246.9/20

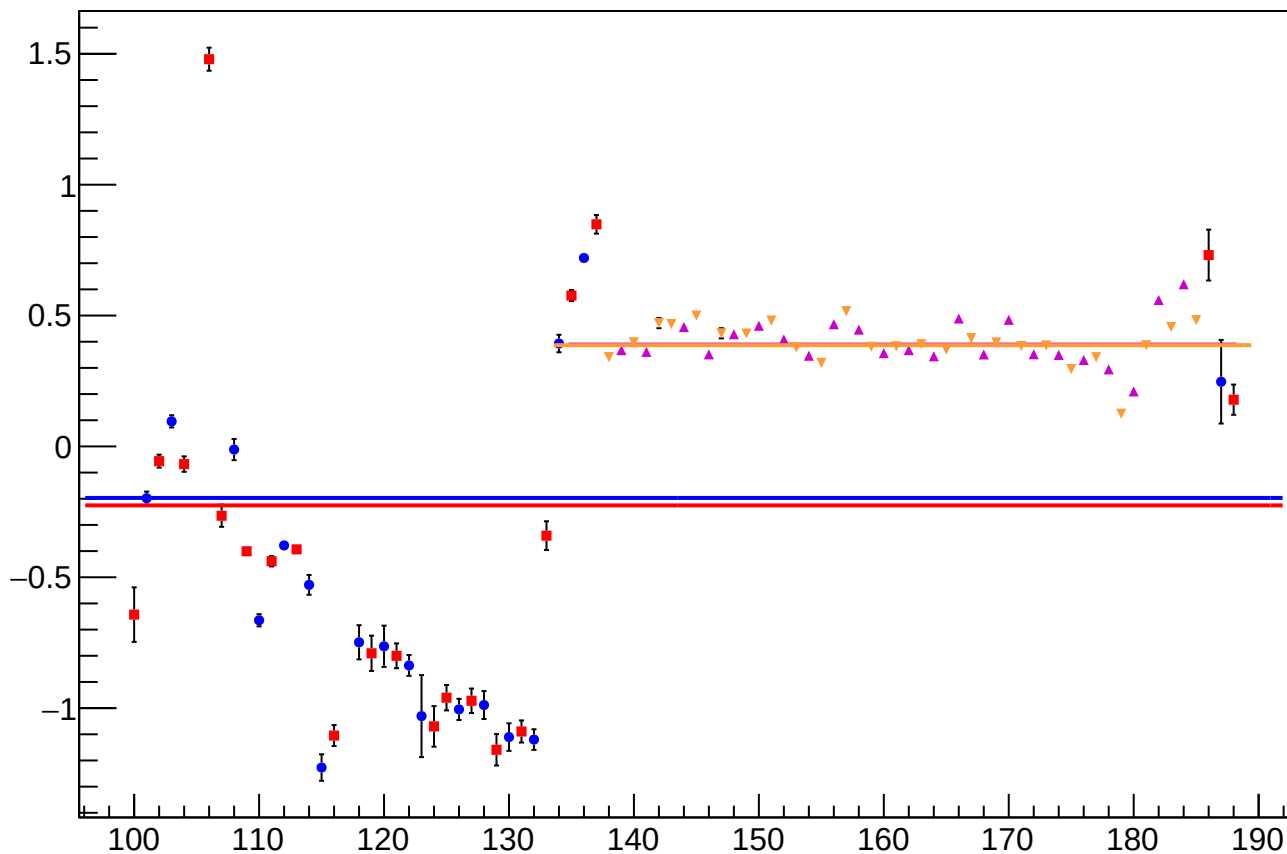
Left In:  $-19.552 \pm 0.057$   $\chi^2/\text{NDF}$ : 4359.1/22

+ sign  $-19.001 \pm 0.051$   $\chi^2/\text{NDF}$ : 8713.9/42

All:  $-19.036 \pm 0.037$   $\chi^2/\text{NDF}$ : 14739.6/86

- sign  $-19.072 \pm 0.052$   $\chi^2/\text{NDF}$ : 6024.8/43

# reg\_asym\_sam7\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.197 \pm 0.008$   $\chi^2/\text{NDF}$ : 6346.5/17

Left Out:  $0.387 \pm 0.003$   $\chi^2/\text{NDF}$ : 989.2/24

Right Out:  $-0.225 \pm 0.007$   $\chi^2/\text{NDF}$ : 6370.0/20

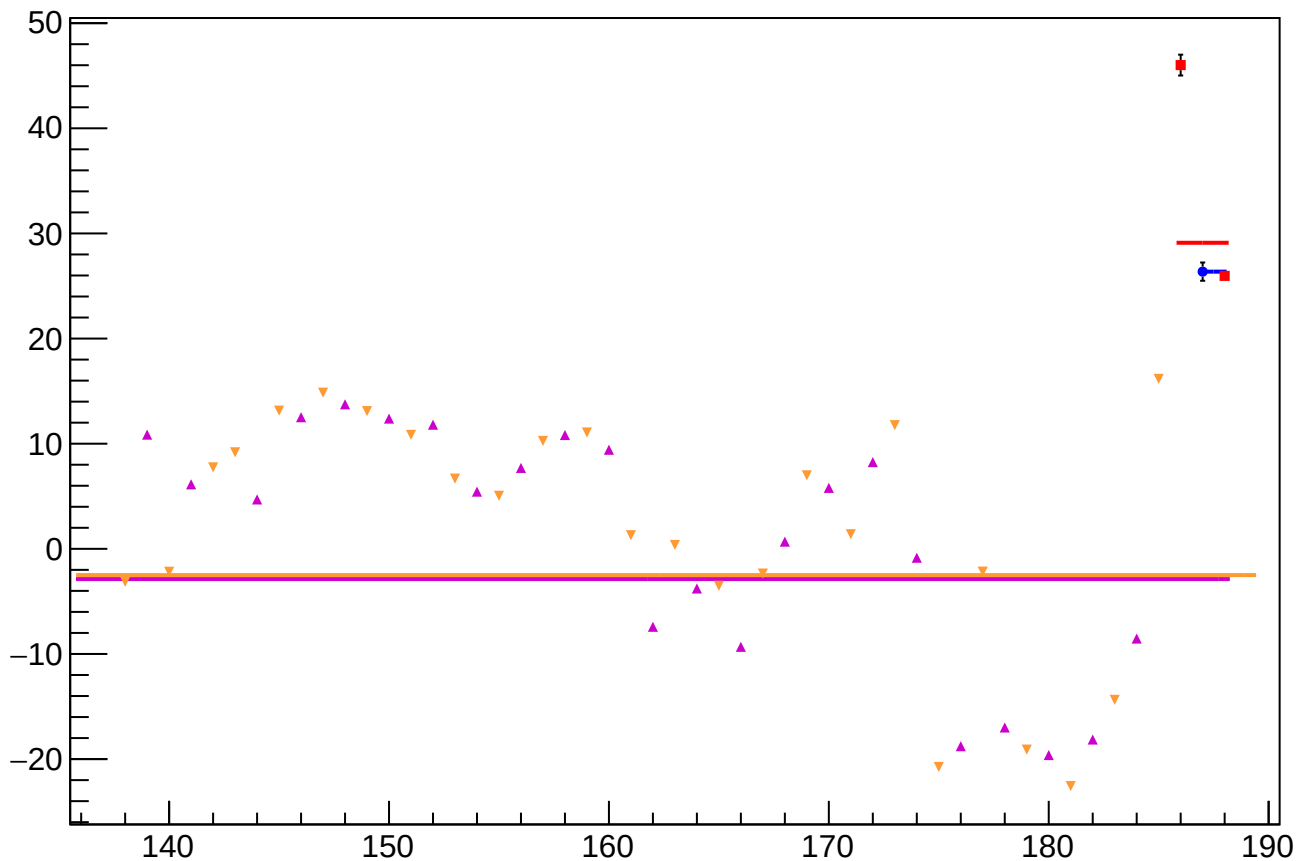
Left In:  $0.389 \pm 0.003$   $\chi^2/\text{NDF}$ : 1257.1/22

+ sign  $0.326 \pm 0.002$   $\chi^2/\text{NDF}$ : 12723.1/42

All:  $0.321 \pm 0.002$   $\chi^2/\text{NDF}$ : 26961.4/86

- sign  $0.316 \pm 0.002$   $\chi^2/\text{NDF}$ : 14229.7/43

reg\_asym\_sam8\_diff\_bpm1X\_slope vs Slug



Right In: 26.366 $\pm$ 0.868  $\chi^2$ /NDF: 0.0/0

Left Out: -2.499 $\pm$ 0.053  $\chi^2$ /NDF: 55930.9/24

Right Out: 29.112 $\pm$ 0.393  $\chi^2$ /NDF: 345.0/1

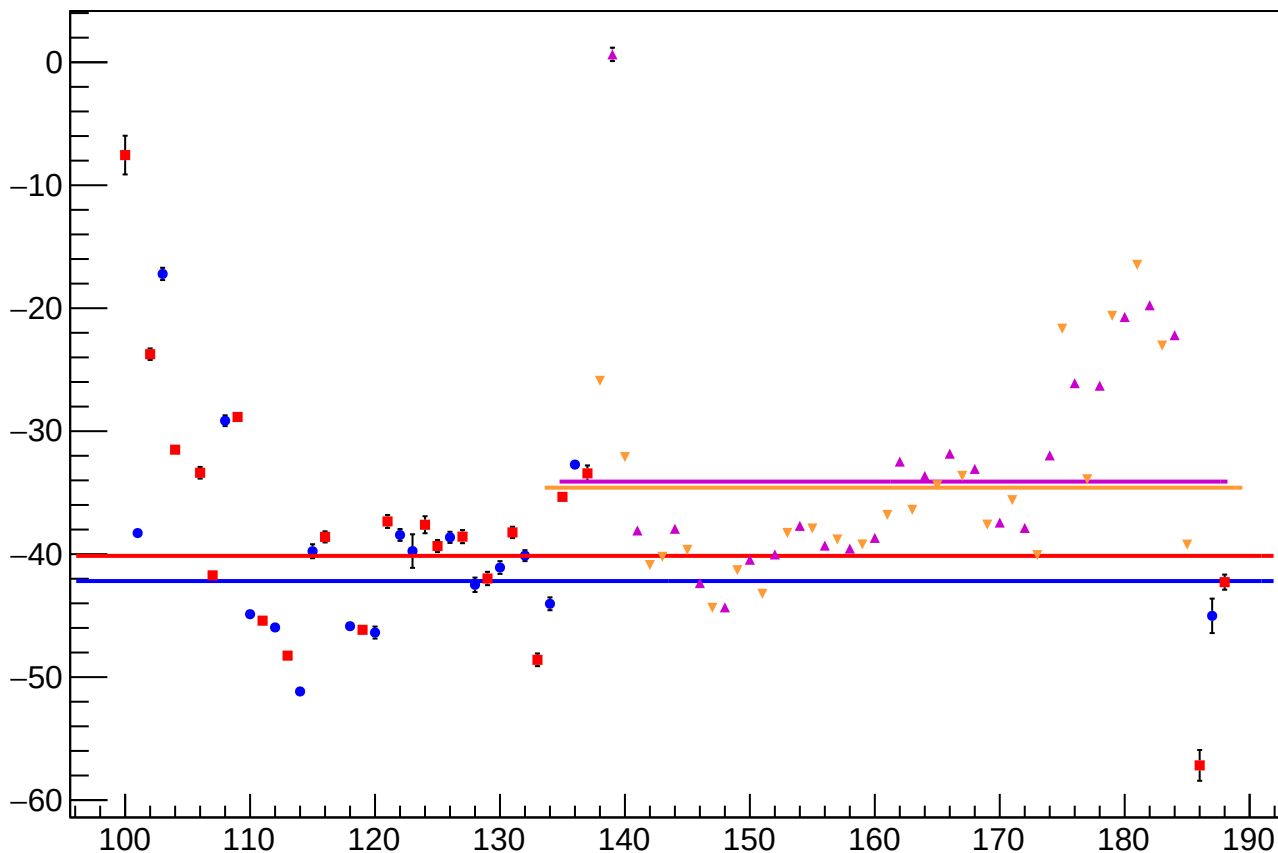
Left In: -2.876 $\pm$ 0.055  $\chi^2$ /NDF: 46380.9/22

+ sign -2.392 $\pm$ 0.053  $\chi^2$ /NDF: 57032.8/25

All: -2.332 $\pm$ 0.038  $\chi^2$ /NDF: 110270.6/50

- sign -2.269 $\pm$ 0.054  $\chi^2$ /NDF: 53235.1/24

# reg\_asym\_sam8\_diff\_bpm4aY\_slope vs Slug



Right In:  $-42.187 \pm 0.078$   $\chi^2/\text{NDF}$ : 6577.8/17

Left Out:  $-34.594 \pm 0.042$   $\chi^2/\text{NDF}$ : 34404.6/24

Right Out:  $-40.140 \pm 0.072$   $\chi^2/\text{NDF}$ : 11512.0/20

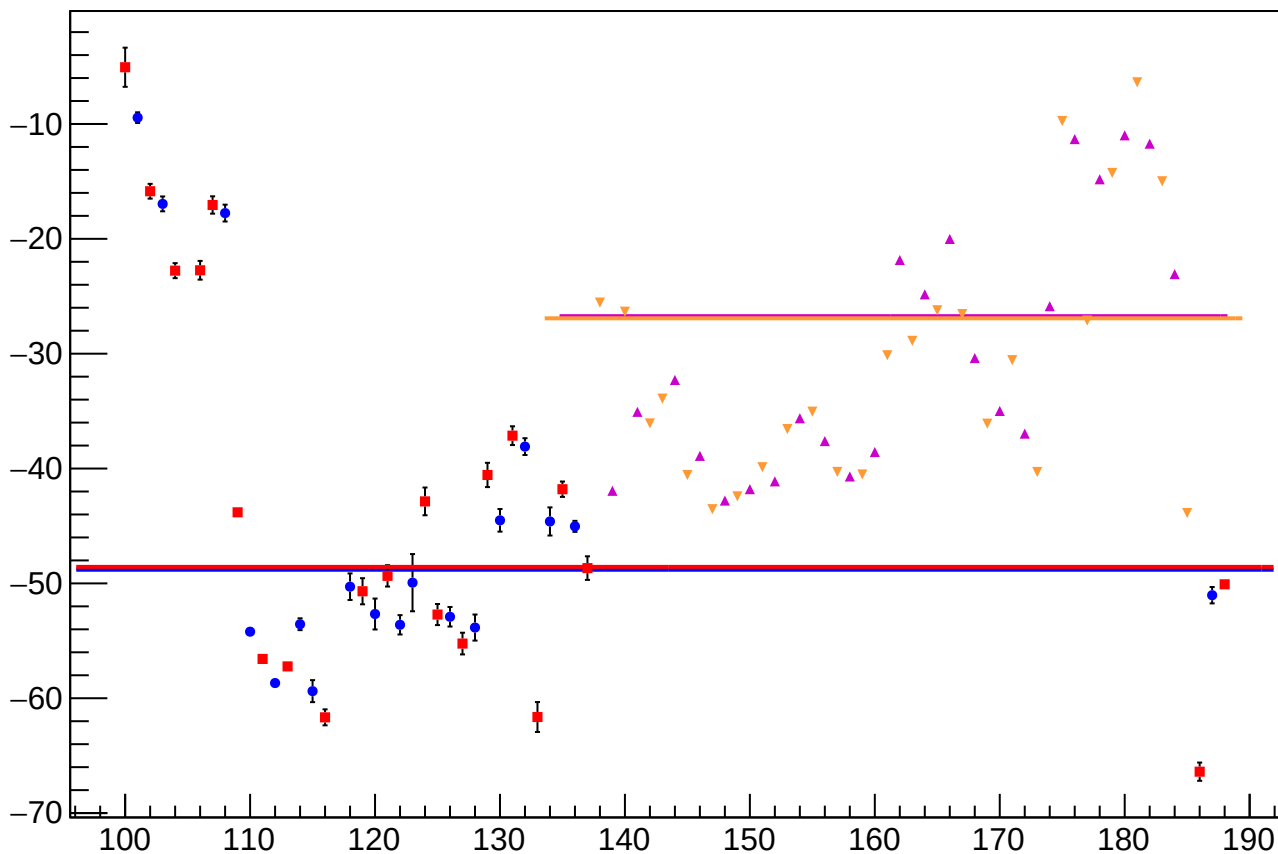
Left In:  $-34.099 \pm 0.044$   $\chi^2/\text{NDF}$ : 29370.6/22

+ sign  $-36.310 \pm 0.037$   $\chi^2/\text{NDF}$ : 48384.9/42

All:  $-36.023 \pm 0.026$   $\chi^2/\text{NDF}$ : 94507.0/86

- sign  $-35.728 \pm 0.037$   $\chi^2/\text{NDF}$ : 45999.5/43

# reg\_asym\_sam8\_diff\_bpm4eX\_slope vs Slug



Right In:  $-48.810 \pm 0.123$   $\chi^2/\text{NDF}: 14668.5/17$

Left Out:  $-26.920 \pm 0.053$   $\chi^2/\text{NDF}: 49198.9/24$

Right Out:  $-48.562 \pm 0.102$   $\chi^2/\text{NDF}: 12274.5/20$

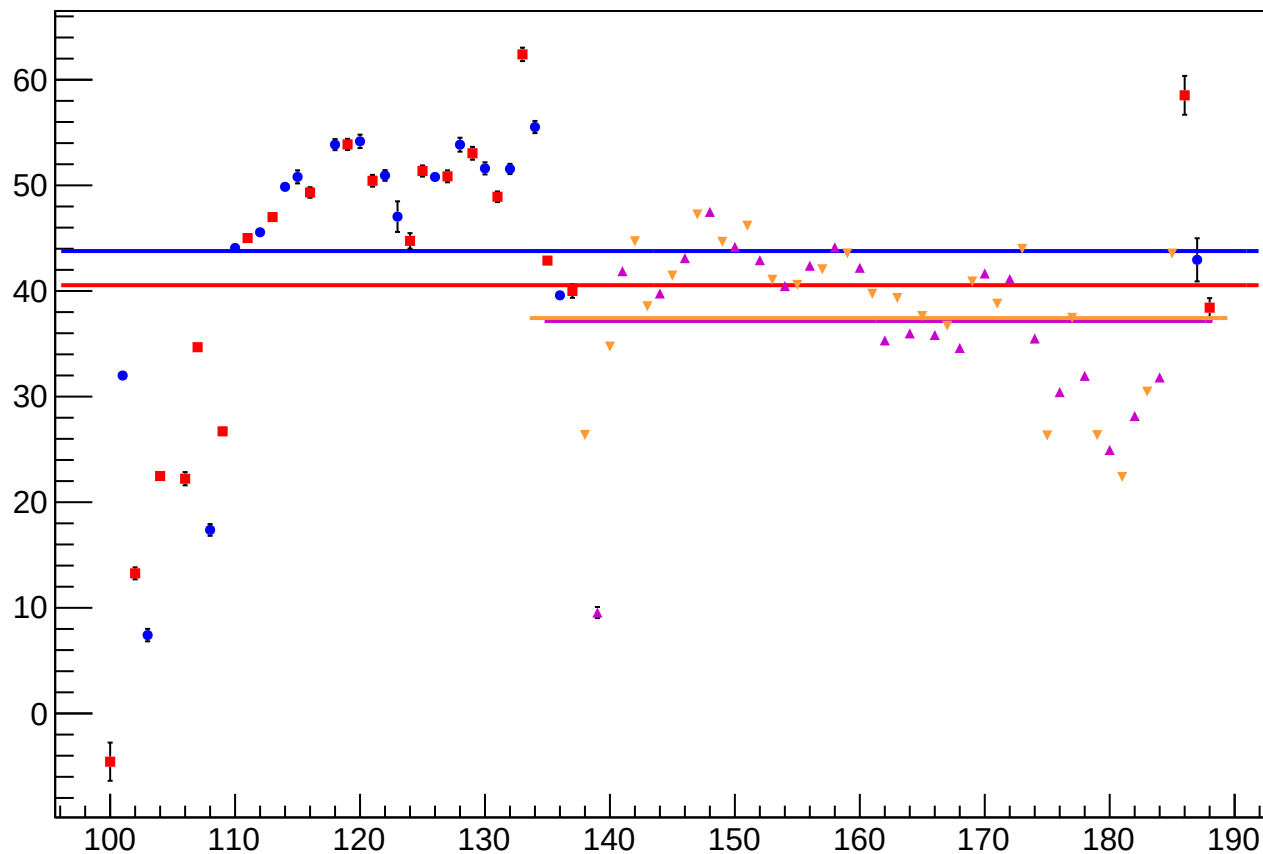
Left In:  $-26.733 \pm 0.055$   $\chi^2/\text{NDF}: 42643.0/22$

+ sign  $-30.404 \pm 0.049$   $\chi^2/\text{NDF}: 90683.8/42$

All:  $-31.034 \pm 0.034$   $\chi^2/\text{NDF}: 181726.0/86$

- sign  $-31.644 \pm 0.048$   $\chi^2/\text{NDF}: 90716.0/43$

# reg\_asym\_sam8\_diff\_bpm4eY\_slope vs Slug



Right In: 43.781 $\pm$ 0.087  $\chi^2$ /NDF: 10638.9/17

Left Out: 37.435 $\pm$ 0.047  $\chi^2$ /NDF:21517.4/24

Right Out: 40.548 $\pm$ 0.080  $\chi^2$ /NDF: 17681.8/20

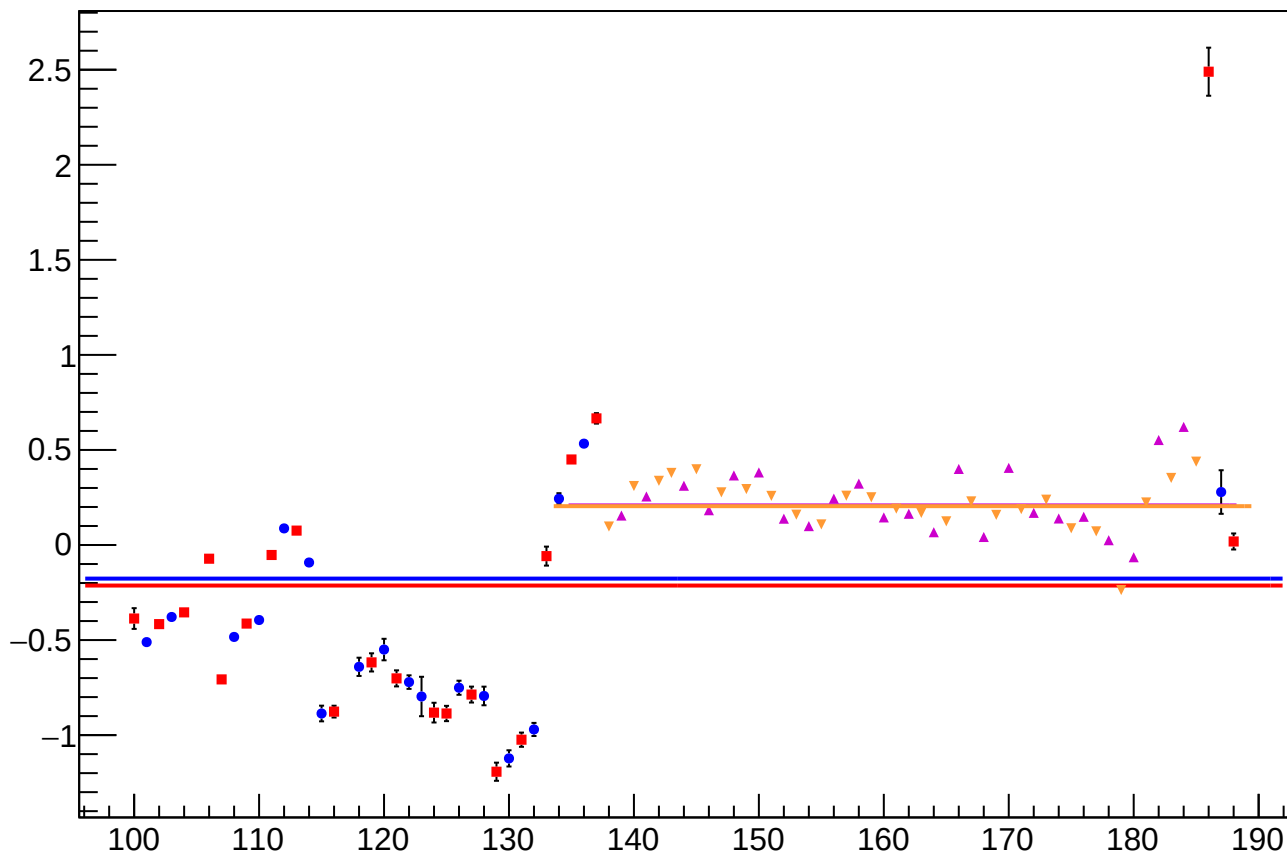
Left In: 37.164 $\pm$ 0.049  $\chi^2$ /NDF:17427.3/22

+ sign 38.896 $\pm$ 0.042  $\chi^2$ /NDF: 36294.4/42

All: 38.498 $\pm$ 0.029  $\chi^2$ /NDF: 72892.7/86

- sign 38.094 $\pm$ 0.042  $\chi^2$ /NDF: 36413.3/43

# reg\_asym\_sam8\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.177 \pm 0.005$   $\chi^2/\text{NDF}$ : 7391.7/17

Left Out:  $0.204 \pm 0.002$   $\chi^2/\text{NDF}$ : 3801.8/24

Right Out:  $-0.213 \pm 0.004$   $\chi^2/\text{NDF}$ : 7958.9/20

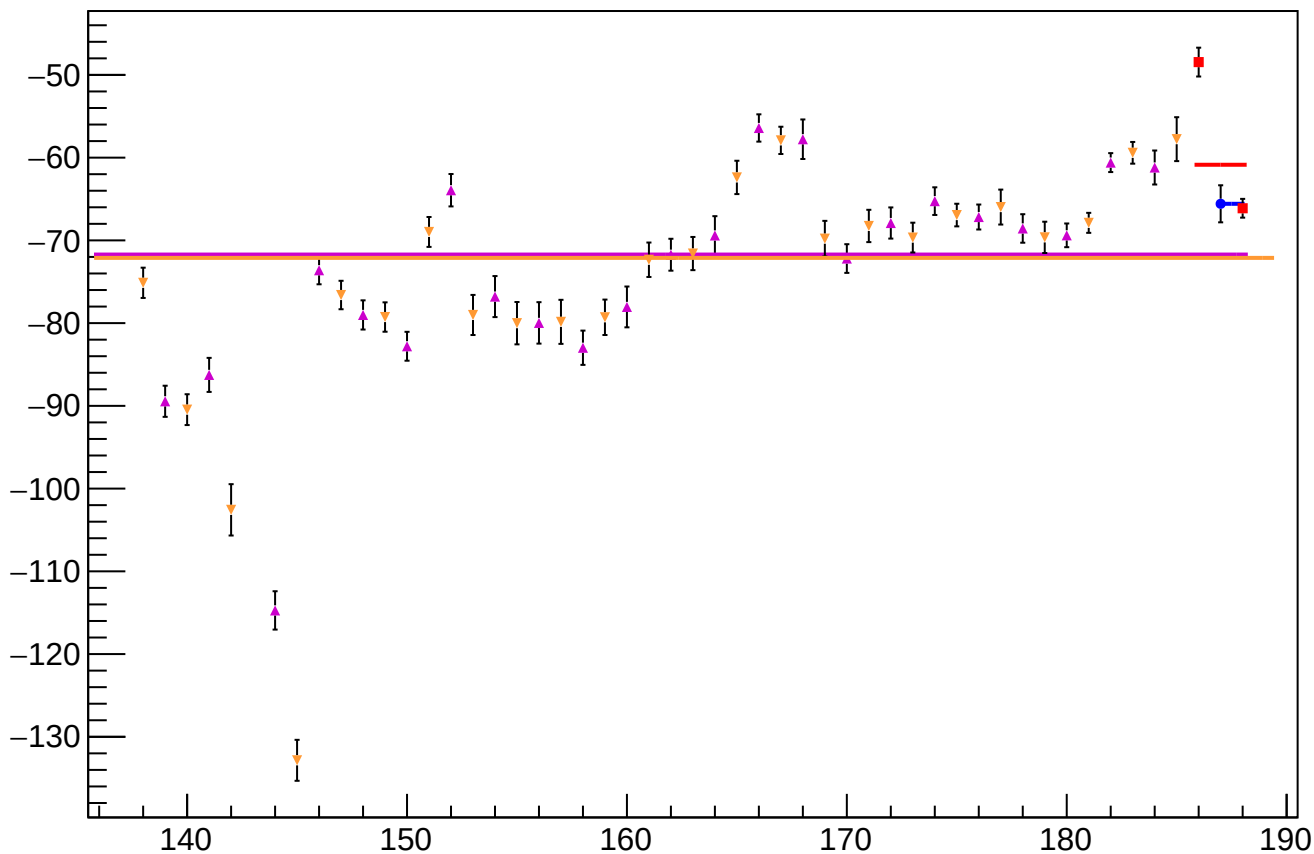
Left In:  $0.208 \pm 0.002$   $\chi^2/\text{NDF}$ : 5095.2/22

+ sign  $0.140 \pm 0.002$   $\chi^2/\text{NDF}$ : 16360.6/42

All:  $0.129 \pm 0.001$   $\chi^2/\text{NDF}$ : 37108.1/86

- sign  $0.118 \pm 0.002$   $\chi^2/\text{NDF}$ : 20685.6/43

# reg\_asym\_usl\_diff\_bpm1X\_slope vs Slug



Right In:  $-65.579 \pm 2.239$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-72.115 \pm 0.383$   $\chi^2/\text{NDF}$ : 1125.2/23

Right Out:  $-60.860 \pm 0.951$   $\chi^2/\text{NDF}$ : 72.1/1

Left In:  $-71.713 \pm 0.380$   $\chi^2/\text{NDF}$ : 884.6/22

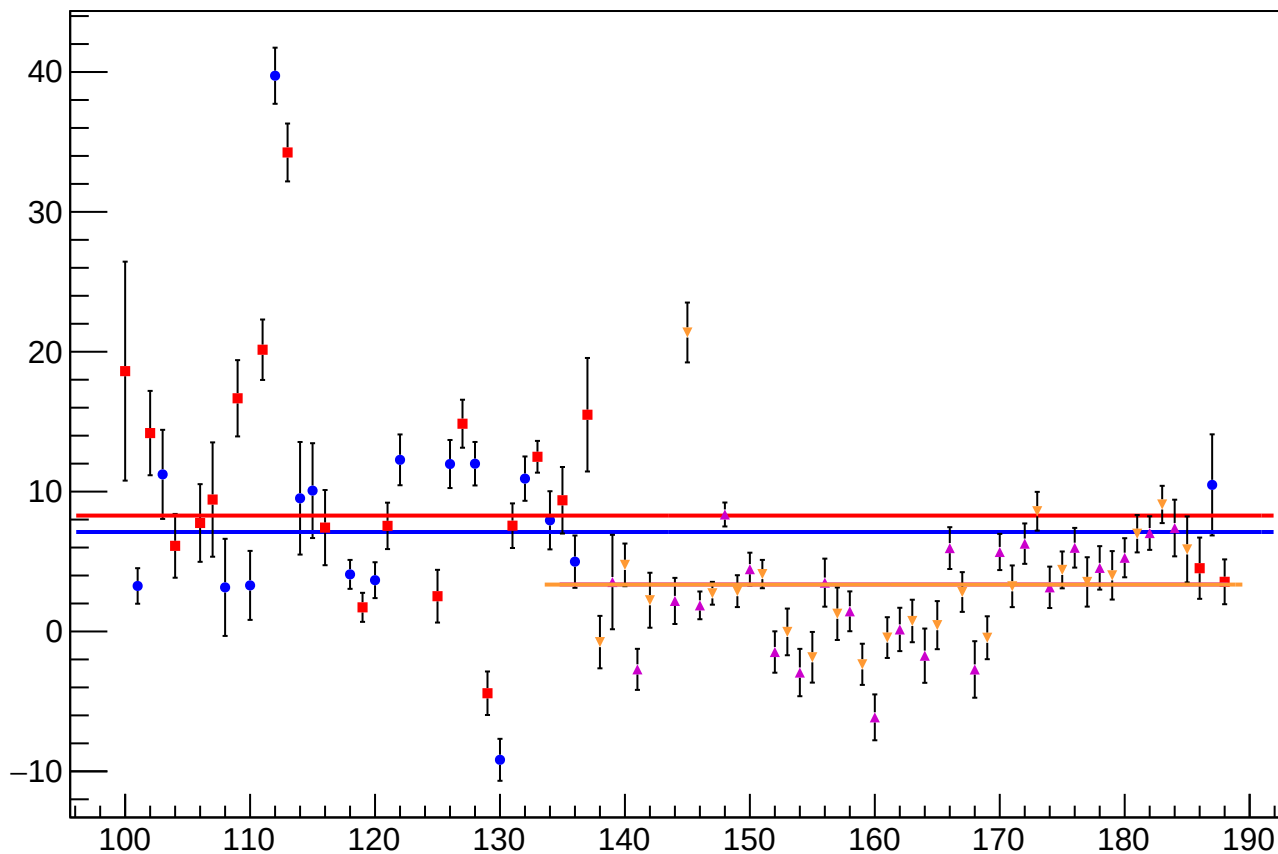
+ sign  $-71.930 \pm 0.377$   $\chi^2/\text{NDF}$ : 1133.4/24

All:  $-71.016 \pm 0.258$   $\chi^2/\text{NDF}$ : 2213.5/49

- sign  $-70.217 \pm 0.353$   $\chi^2/\text{NDF}$ : 1069.0/24



# reg\_asym\_usl\_diff\_bpm4aY\_slope vs Slug



Right In:  $7.112 \pm 0.430$   $\chi^2/\text{NDF}: 447.7/16$

Left Out:  $3.353 \pm 0.295$   $\chi^2/\text{NDF}: 167.8/23$

Right Out:  $8.286 \pm 0.424$   $\chi^2/\text{NDF}: 363.4/19$

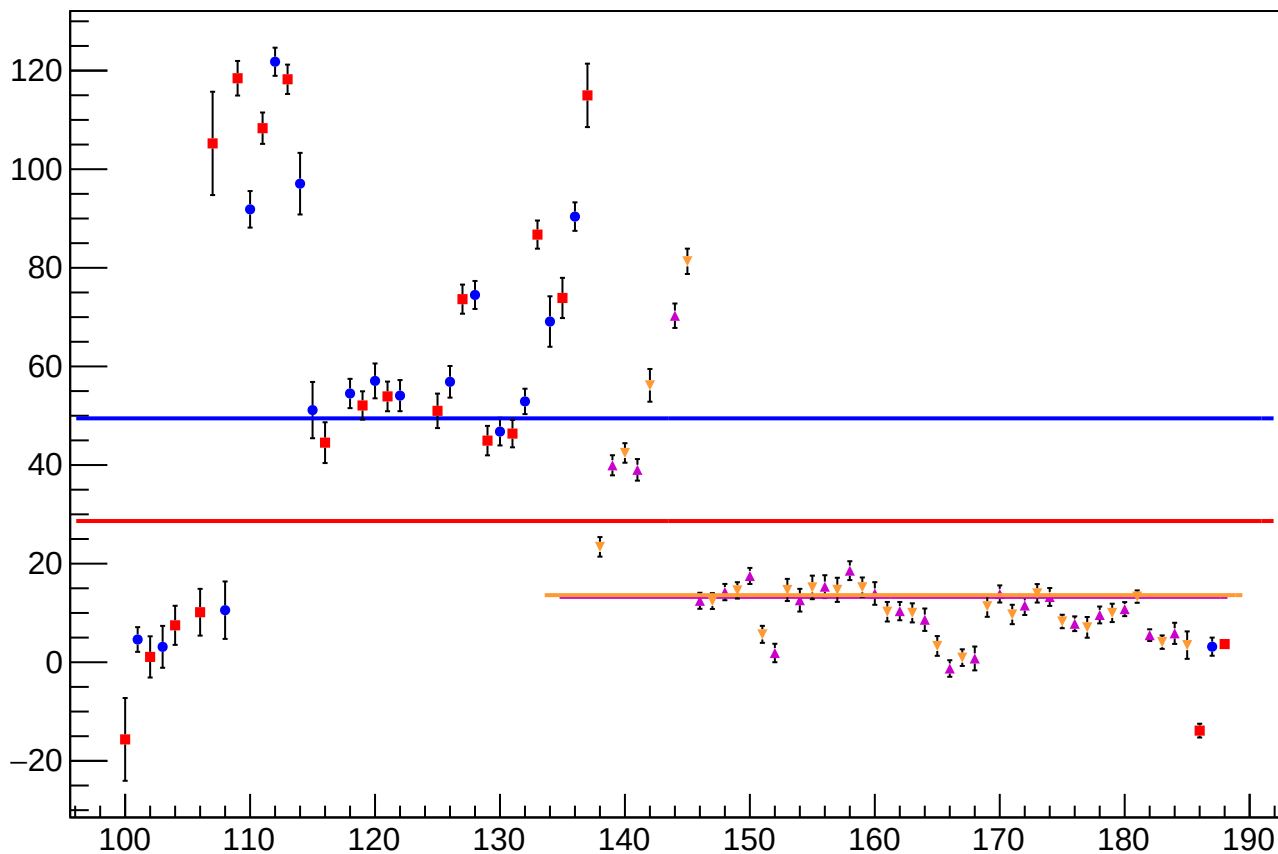
Left In:  $3.360 \pm 0.298$   $\chi^2/\text{NDF}: 164.5/22$

+ sign  $4.552 \pm 0.243$   $\chi^2/\text{NDF}: 667.5/40$

All:  $4.768 \pm 0.172$   $\chi^2/\text{NDF}: 1287.4/83$

- sign  $4.985 \pm 0.244$   $\chi^2/\text{NDF}: 618.4/42$

# reg\_asym\_usl\_diff\_bpm4eX\_slope vs Slug



Right In: 49.467 $\pm$ 0.758  $\chi^2$ /NDF: 2258.6/16

Left Out: 13.610 $\pm$ 0.382  $\chi^2$ /NDF:1303.3/23

Right Out: 28.644 $\pm$ 0.567  $\chi^2$ /NDF: 5229.2/19

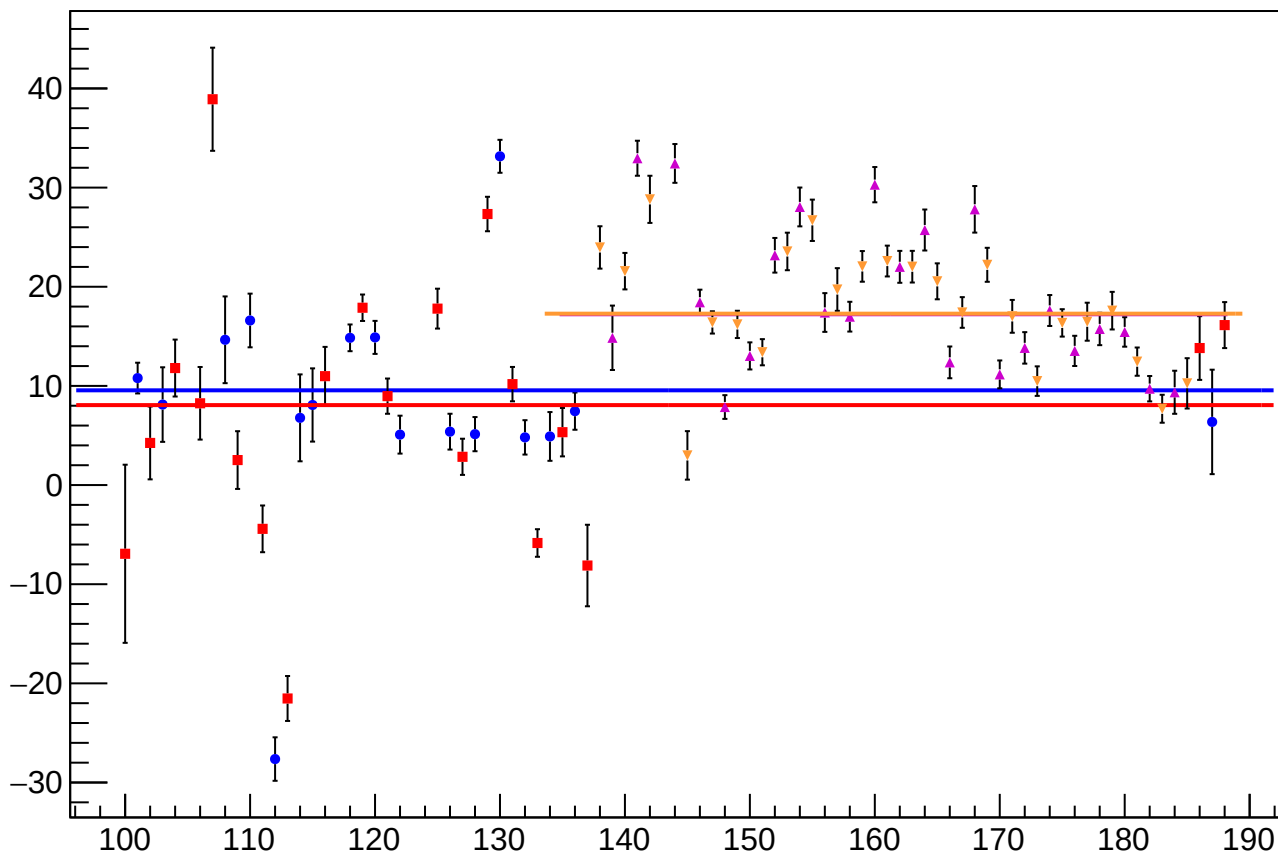
Left In: 13.262 $\pm$ 0.379  $\chi^2$ /NDF:1077.0/22

+ sign 20.868 $\pm$ 0.341  $\chi^2$ /NDF: 5348.1/40

All: 19.322 $\pm$ 0.231  $\chi^2$ /NDF: 12201.3/83

- sign 18.003 $\pm$ 0.315  $\chi^2$ /NDF: 6815.1/42

# reg\_asym\_usl\_diff\_bpm4eY\_slope vs Slug



Right In:  $9.554 \pm 0.499$   $\chi^2/\text{NDF}: 554.8/16$

Left Out:  $17.285 \pm 0.337$   $\chi^2/\text{NDF}: 244.0/23$

Right Out:  $8.063 \pm 0.497$   $\chi^2/\text{NDF}: 586.2/19$

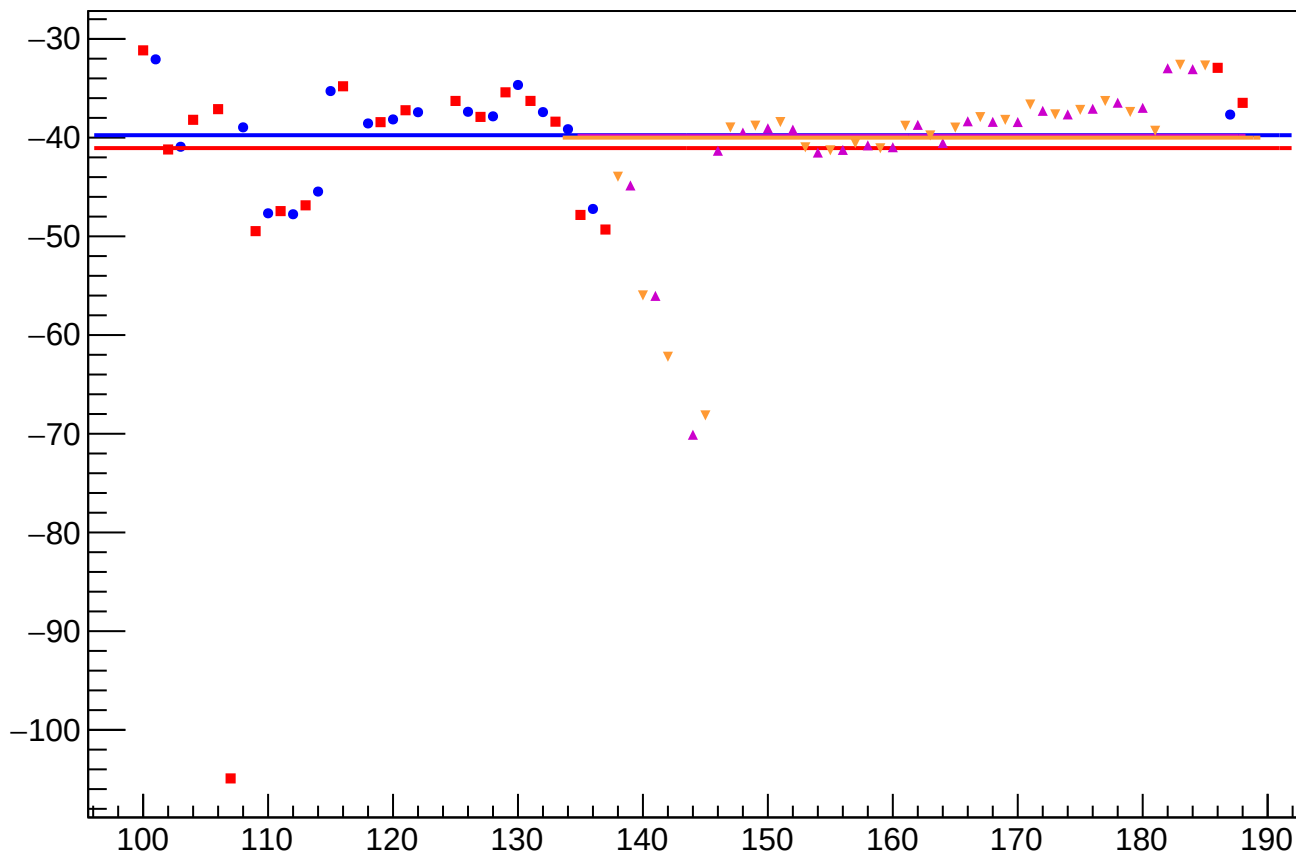
Left In:  $17.224 \pm 0.339$   $\chi^2/\text{NDF}: 442.2/22$

+ sign  $14.863 \pm 0.279$   $\chi^2/\text{NDF}: 963.7/40$

All:  $14.594 \pm 0.198$   $\chi^2/\text{NDF}: 2225.9/83$

- sign  $14.324 \pm 0.280$   $\chi^2/\text{NDF}: 1260.4/42$

# reg\_asym\_usl\_diff\_bpm12X\_slope vs Slug



Right In:  $-39.754 \pm 0.031$   $\chi^2/\text{NDF}$ : 26208.5/16

Left Out:  $-40.002 \pm 0.016$   $\chi^2/\text{NDF}$ : 172150.1/23

Right Out:  $-41.061 \pm 0.030$   $\chi^2/\text{NDF}$ : 98183.0/19

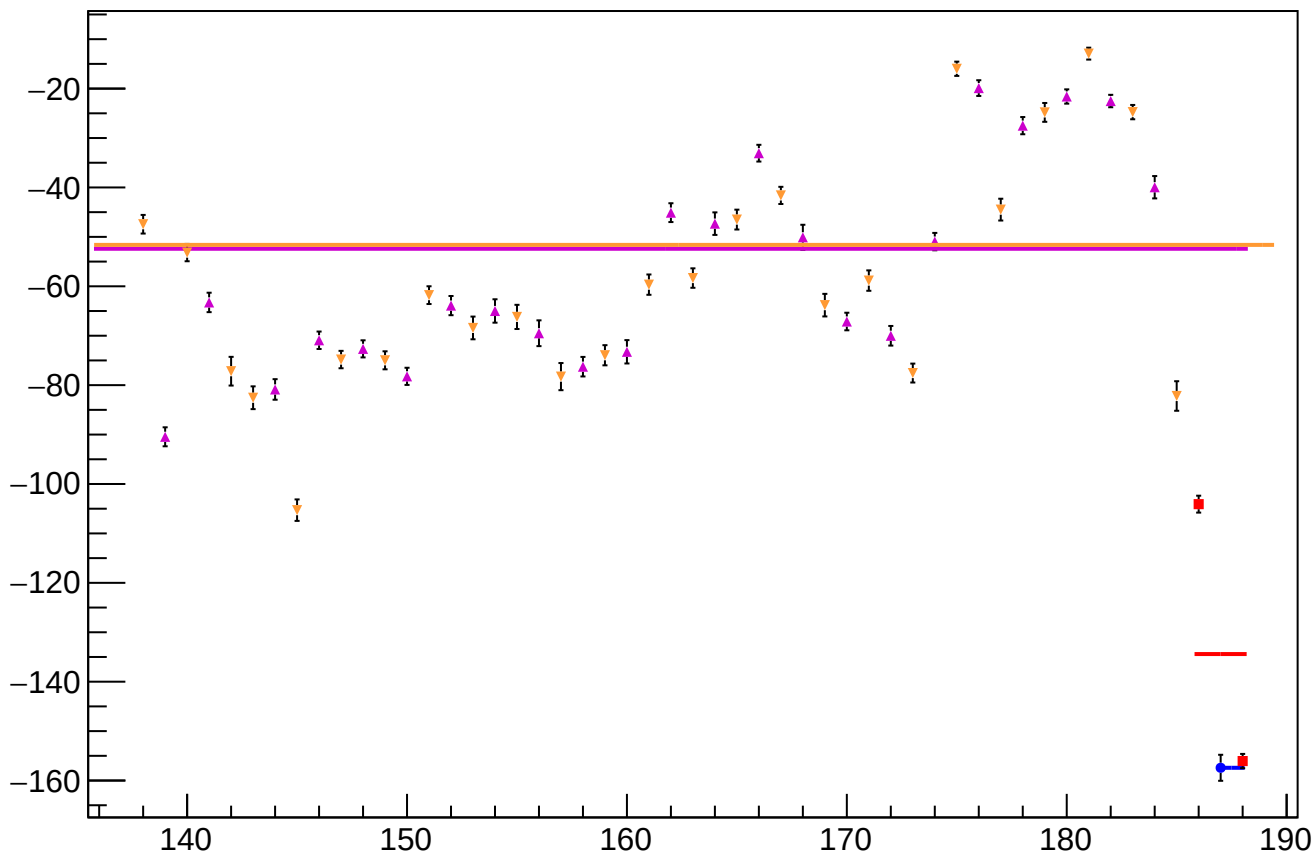
Left In:  $-39.813 \pm 0.016$   $\chi^2/\text{NDF}$ : 145790.5/22

+ sign  $-39.951 \pm 0.014$   $\chi^2/\text{NDF}$ : 198409.7/40

All:  $-40.019 \pm 0.010$   $\chi^2/\text{NDF}$ : 443823.5/83

- sign  $-40.084 \pm 0.014$   $\chi^2/\text{NDF}$ : 245367.4/42

# reg\_asym\_usr\_diff\_bpm1X\_slope vs Slug



Right In:  $-157.422 \pm 2.632$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-51.622 \pm 0.383$   $\chi^2/\text{NDF}$ : 4133.0/24

Right Out:  $-134.408 \pm 1.104$   $\chi^2/\text{NDF}$ : 538.5/1

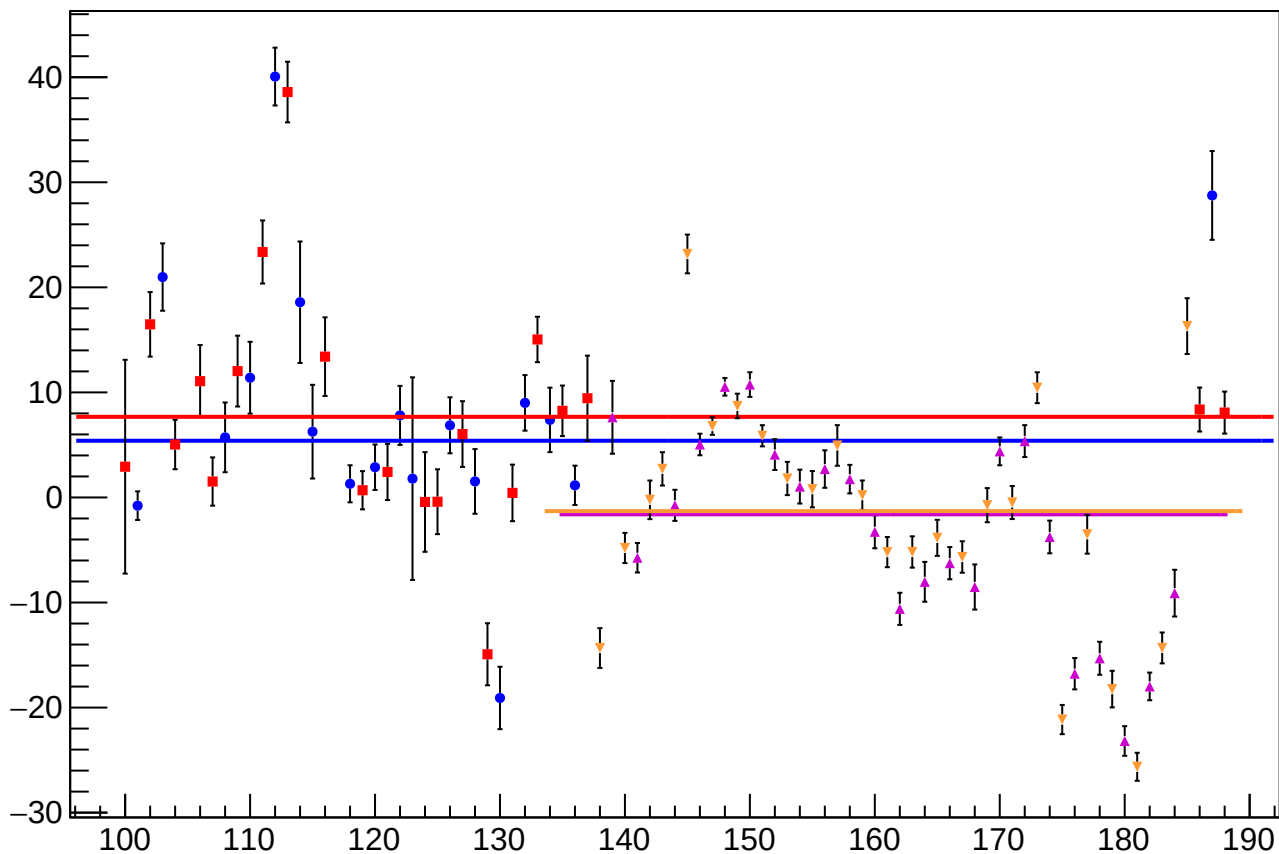
Left In:  $-52.409 \pm 0.387$   $\chi^2/\text{NDF}$ : 3378.7/22

+ sign  $-53.821 \pm 0.379$   $\chi^2/\text{NDF}$ : 5715.7/25

All:  $-57.747 \pm 0.263$   $\chi^2/\text{NDF}$ : 14749.4/50

- sign  $-61.386 \pm 0.365$   $\chi^2/\text{NDF}$ : 8827.6/24

# reg\_asym\_usr\_diff\_bpm4aY\_slope vs Slug



Right In:  $5.397 \pm 0.615$   $\chi^2/\text{NDF}: 326.5/17$

Left Out:  $-1.300 \pm 0.293$   $\chi^2/\text{NDF}: 1315.7/24$

Right Out:  $7.675 \pm 0.594$   $\chi^2/\text{NDF}: 270.4/20$

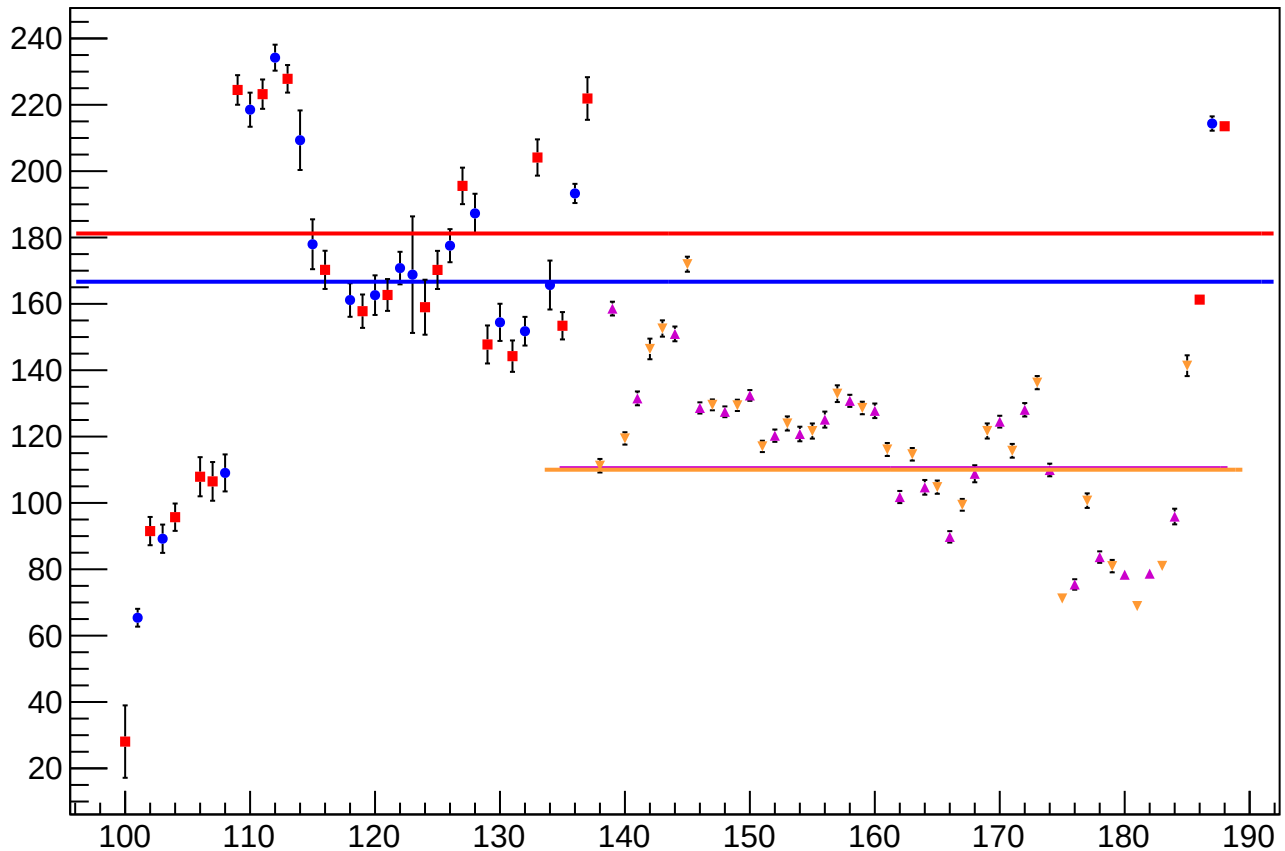
Left In:  $-1.608 \pm 0.299$   $\chi^2/\text{NDF}: 1097.4/22$

+ sign  $-0.063 \pm 0.264$   $\chi^2/\text{NDF}: 1739.1/42$

All:  $0.103 \pm 0.188$   $\chi^2/\text{NDF}: 3302.3/86$

- sign  $0.273 \pm 0.267$   $\chi^2/\text{NDF}: 1562.4/43$

# reg\_asym\_usr\_diff\_bpm4eX\_slope vs Slug



Right In:  $166.675 \pm 1.012$   $\chi^2/\text{NDF}: 2890.1/17$

Left Out:  $110.012 \pm 0.383$   $\chi^2/\text{NDF}: 4537.0/24$

Right Out:  $181.212 \pm 0.707$   $\chi^2/\text{NDF}: 2943.0/20$

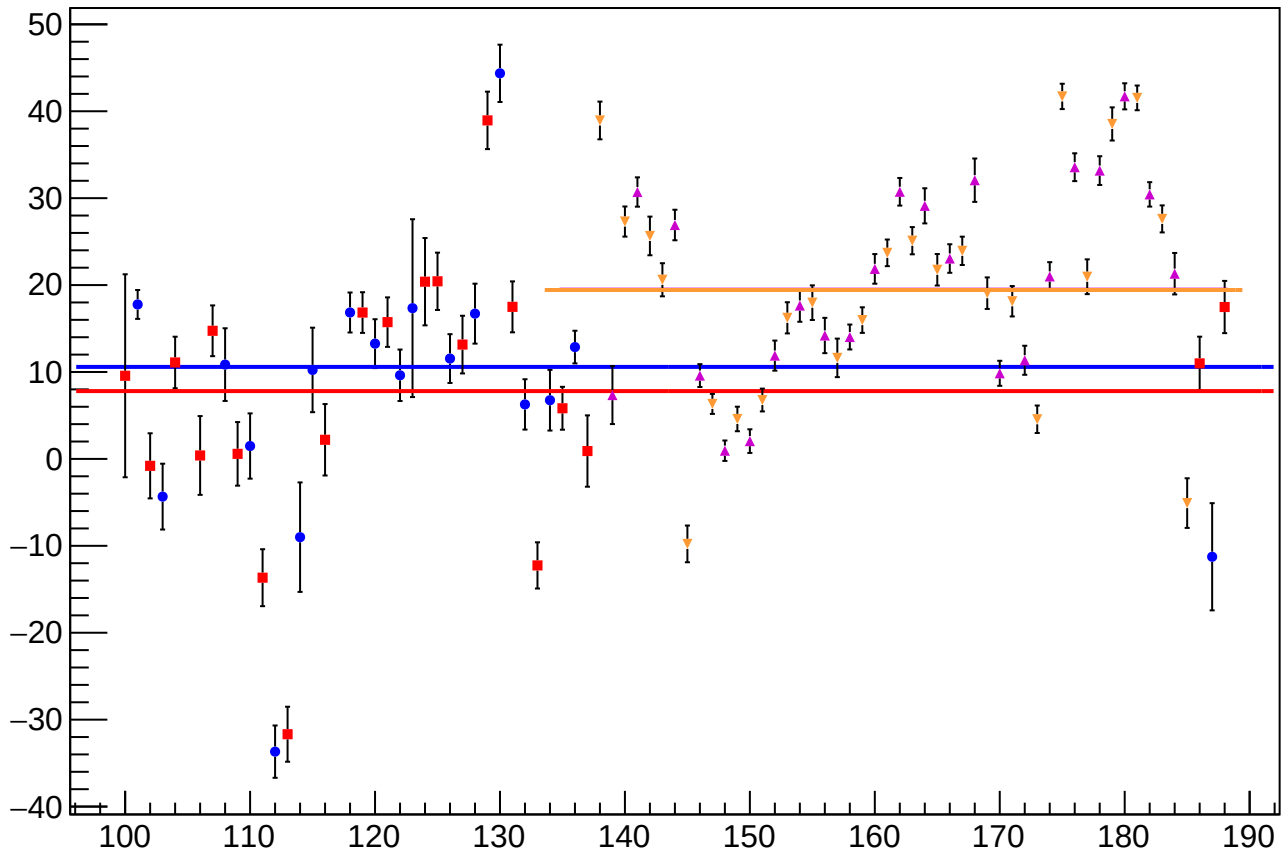
Left In:  $110.482 \pm 0.385$   $\chi^2/\text{NDF}: 3824.9/22$

+ sign  $117.109 \pm 0.358$   $\chi^2/\text{NDF}: 10171.8/42$

All:  $122.143 \pm 0.246$   $\chi^2/\text{NDF}: 25031.2/86$

- sign  $126.630 \pm 0.338$   $\chi^2/\text{NDF}: 14485.4/43$

# reg\_asym\_usr\_diff\_bpm4eY\_slope vs Slug



Right In: 10.586 $\pm$ 0.709  $\chi^2/\text{NDF}$ : 400.8/17

Left Out: 19.434 $\pm$ 0.336  $\chi^2/\text{NDF}$ : 1452.3/24

Right Out: 7.802 $\pm$ 0.707  $\chi^2/\text{NDF}$ : 437.1/20

Left In: 19.472 $\pm$ 0.342  $\chi^2/\text{NDF}$ : 1188.2/22

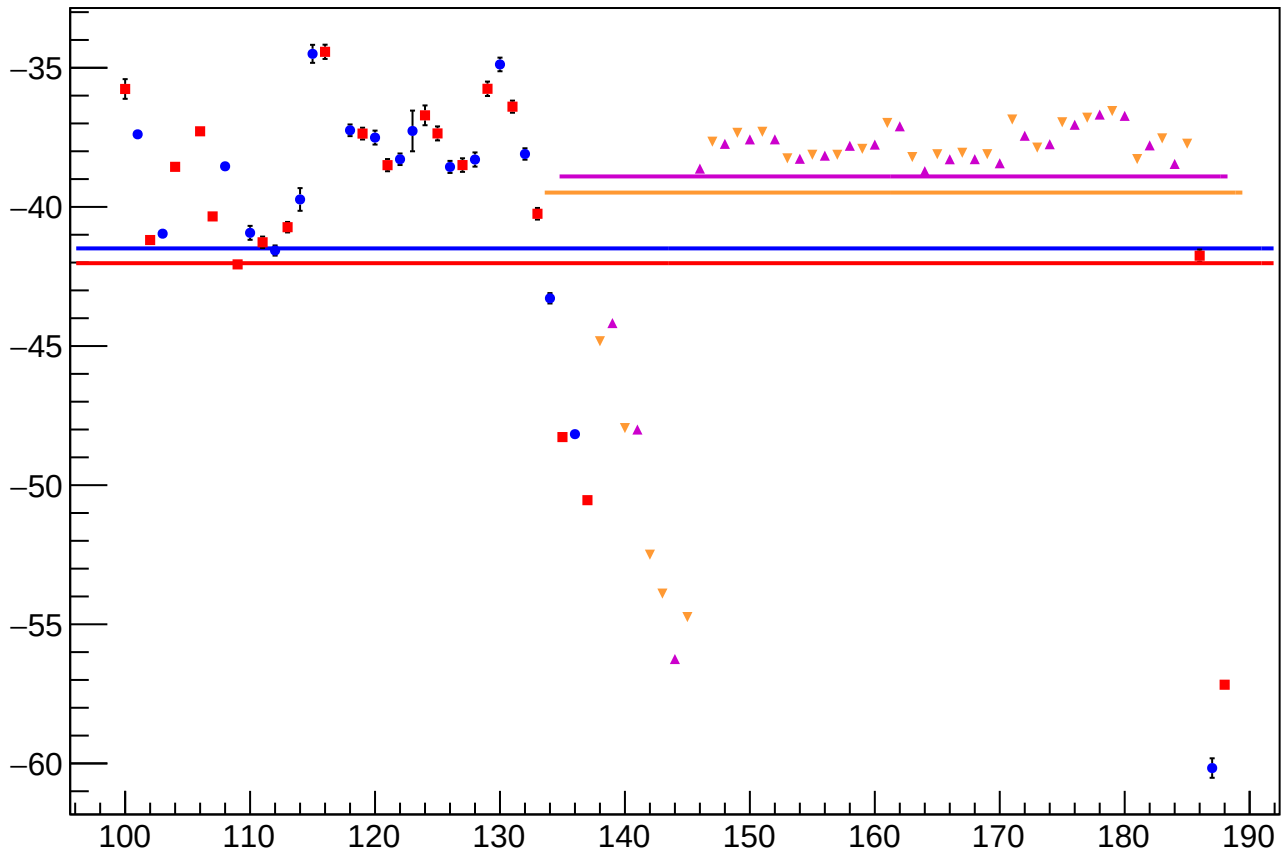
+ sign 17.814 $\pm$ 0.303  $\chi^2/\text{NDF}$ : 1980.5/42

All: 17.541 $\pm$ 0.216  $\chi^2/\text{NDF}$ : 3828.5/86

- sign 17.261 $\pm$ 0.308  $\chi^2/\text{NDF}$ : 1846.4/43



# reg\_asym\_usr\_diff\_bpm12X\_slope vs Slug



Right In:  $-41.491 \pm 0.038$   $\chi^2/\text{NDF}$ : 15448.2/17

Left Out:  $-39.484 \pm 0.016$   $\chi^2/\text{NDF}$ : 88877.3/24

Right Out:  $-42.022 \pm 0.037$   $\chi^2/\text{NDF}$ : 21746.3/20

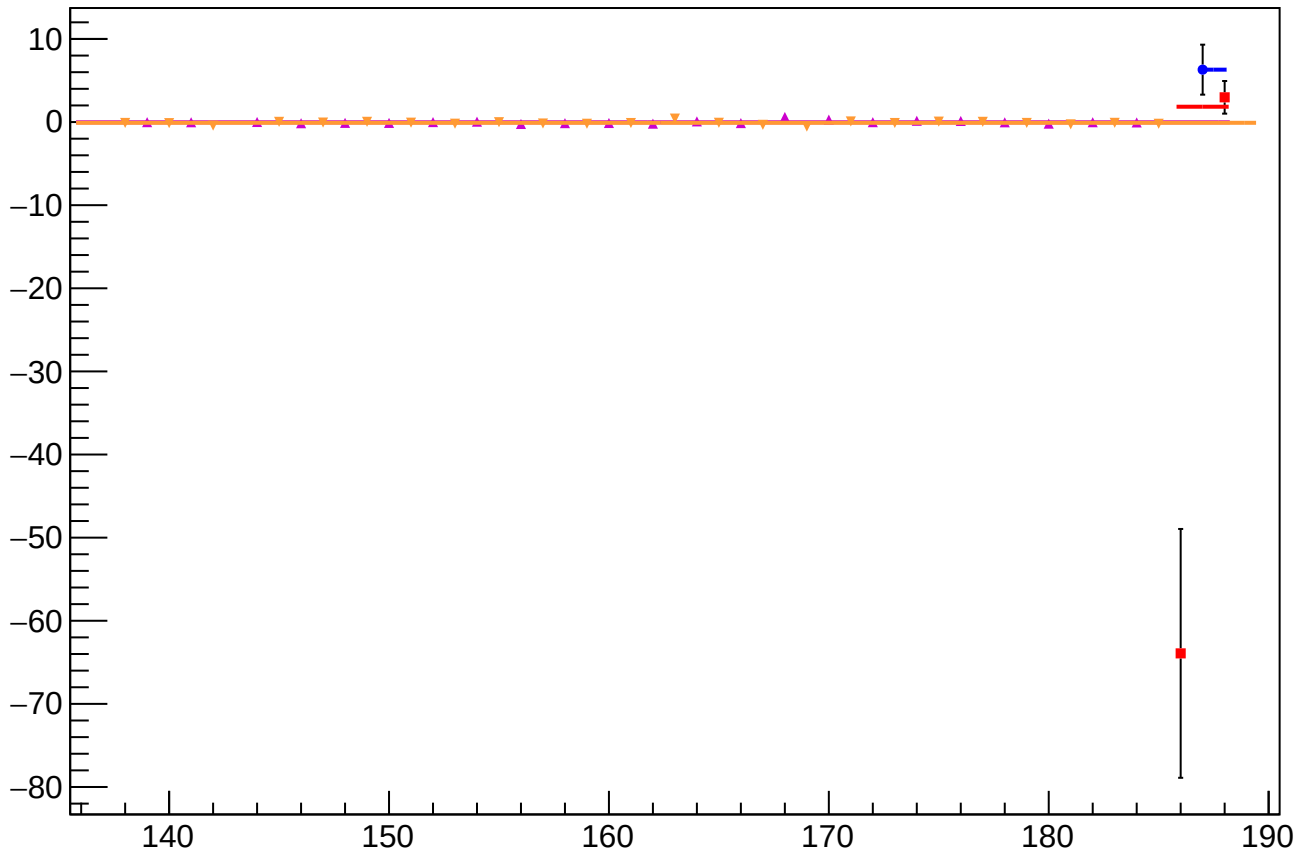
Left In:  $-38.905 \pm 0.016$   $\chi^2/\text{NDF}$ : 54282.7/22

+ sign  $-39.776 \pm 0.015$   $\chi^2/\text{NDF}$ : 106676.4/42

All:  $-39.580 \pm 0.010$   $\chi^2/\text{NDF}$ : 189067.3/86

- sign  $-39.385 \pm 0.015$   $\chi^2/\text{NDF}$ : 82031.5/43

# reg\_asym\_dsl\_diff\_bpm1X\_slope vs Slug



Right In: 6.304 $\pm$ 3.007  $\chi^2$ /NDF: 0.0/0

Left Out: -0.089 $\pm$ 0.022  $\chi^2$ /NDF: 40.0/23

Right Out: 1.846 $\pm$ 1.946  $\chi^2$ /NDF: 19.6/1

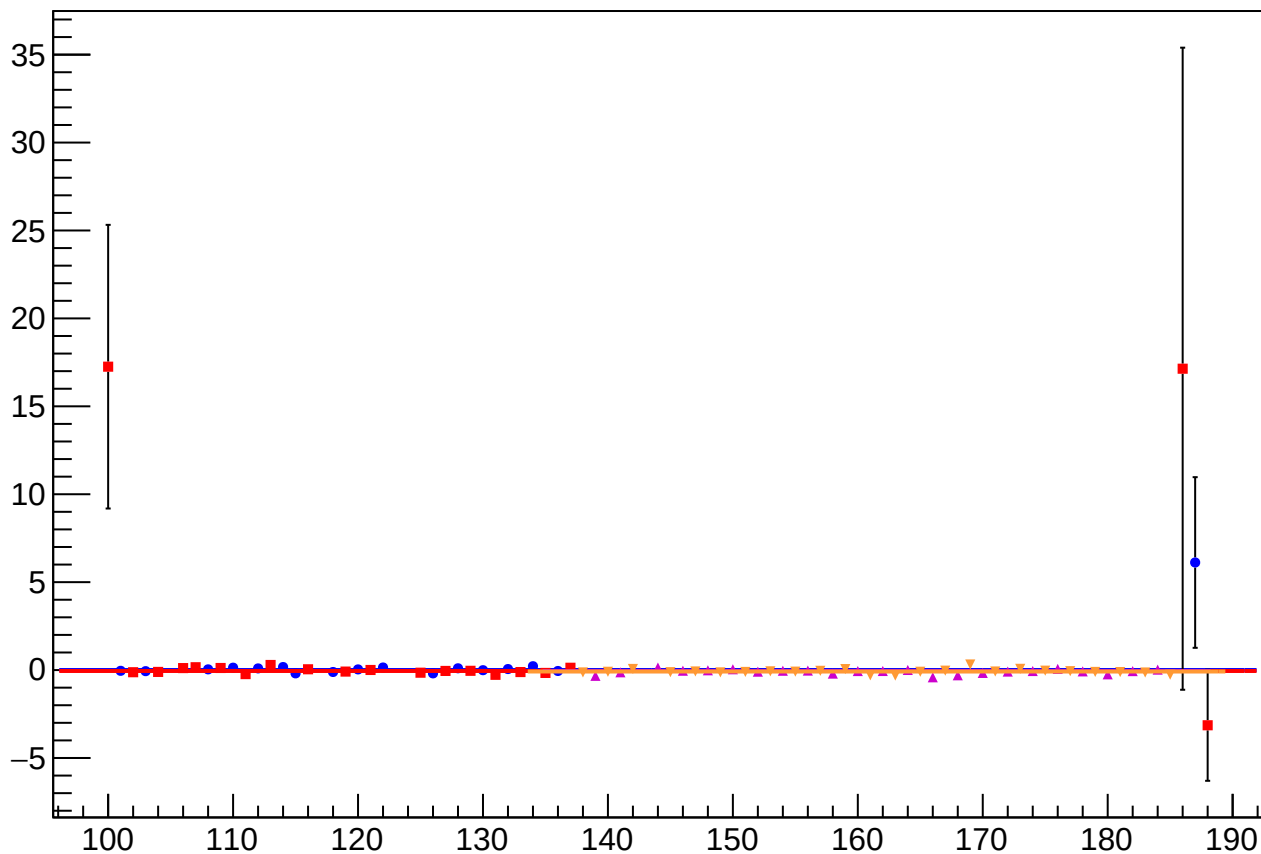
Left In: -0.026 $\pm$ 0.022  $\chi^2$ /NDF: 32.3/22

+ sign -0.089 $\pm$ 0.022  $\chi^2$ /NDF: 44.6/24

All: -0.057 $\pm$ 0.016  $\chi^2$ /NDF: 101.5/49

- sign -0.025 $\pm$ 0.022  $\chi^2$ /NDF: 52.8/24

# reg\_asym\_dsl\_diff\_bpm4aY\_slope vs Slug



Right In:  $0.002 \pm 0.028$   $\chi^2/\text{NDF}$ : 14.1/16

Left Out:  $-0.081 \pm 0.017$   $\chi^2/\text{NDF}$ : 25.8/23

Right Out:  $-0.051 \pm 0.029$   $\chi^2/\text{NDF}$ : 27.6/19

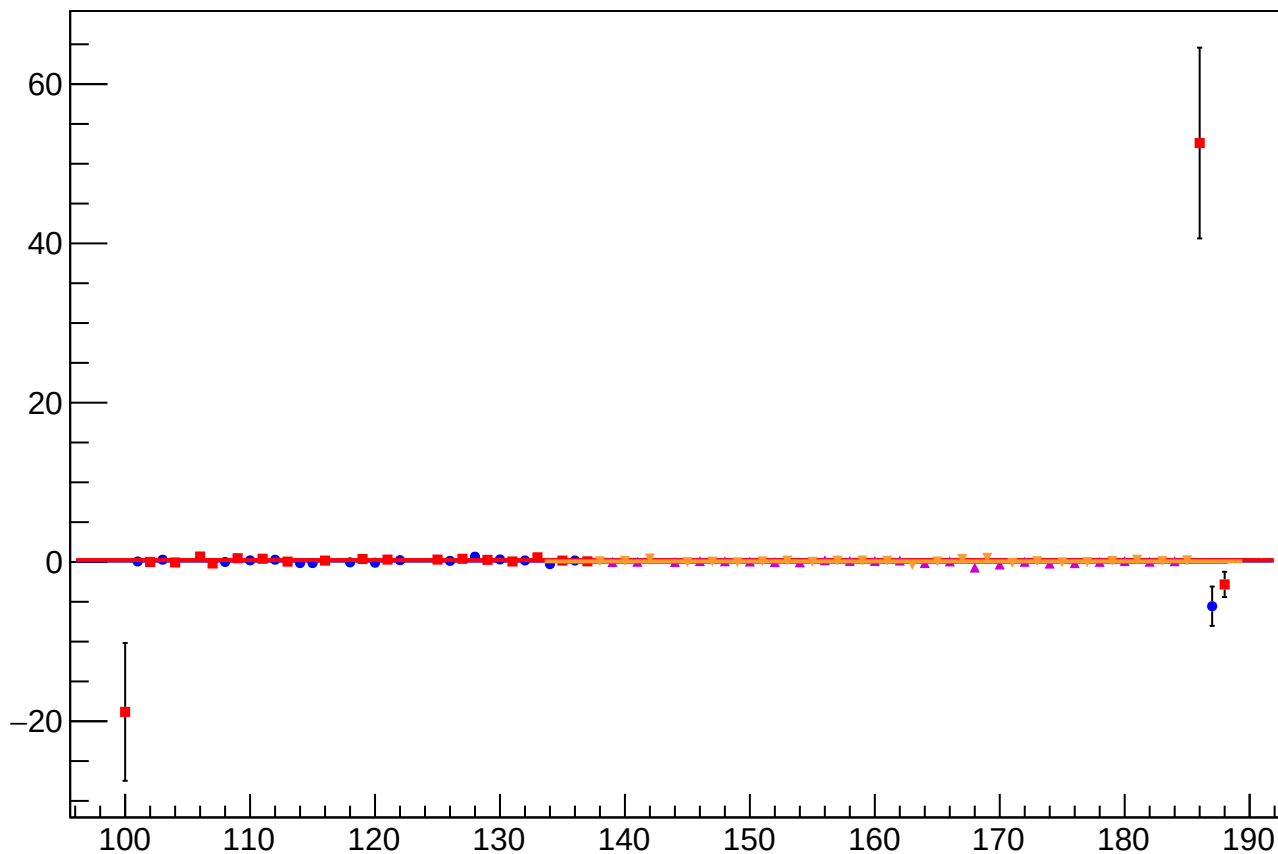
Left In:  $-0.055 \pm 0.018$   $\chi^2/\text{NDF}$ : 32.2/22

+ sign  $-0.058 \pm 0.015$   $\chi^2/\text{NDF}$ : 46.2/40

All:  $-0.056 \pm 0.011$   $\chi^2/\text{NDF}$ : 106.0/83

- sign  $-0.054 \pm 0.015$   $\chi^2/\text{NDF}$ : 59.8/42

# reg\_asym\_dsl\_diff\_bpm4eX\_slope vs Slug



Right In:  $0.168 \pm 0.052$   $\chi^2/\text{NDF}$ : 19.0/16

Left Out:  $0.082 \pm 0.022$   $\chi^2/\text{NDF}$ : 38.7/23

Right Out:  $0.236 \pm 0.054$   $\chi^2/\text{NDF}$ : 44.6/19

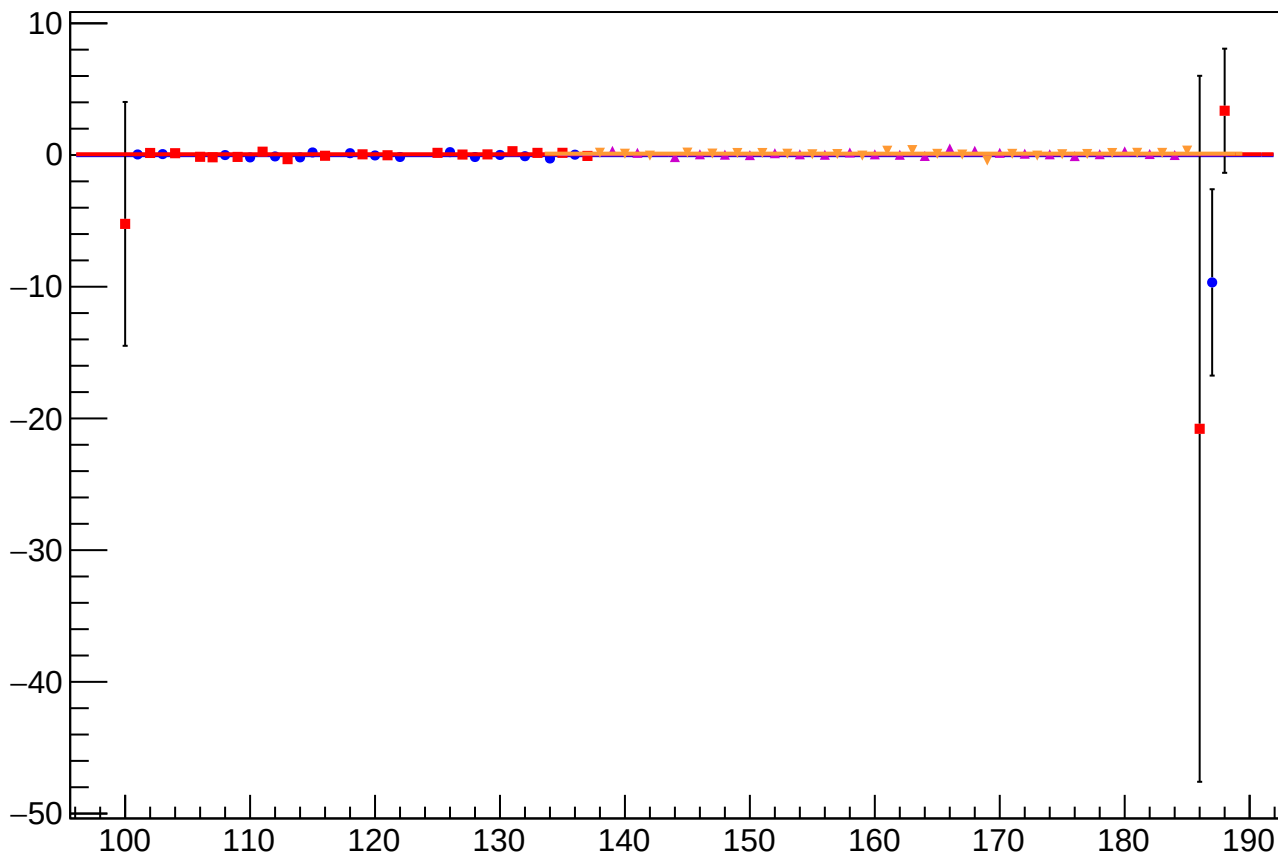
Left In:  $0.020 \pm 0.022$   $\chi^2/\text{NDF}$ : 34.5/22

+ sign  $0.095 \pm 0.020$   $\chi^2/\text{NDF}$ : 60.1/40

All:  $0.073 \pm 0.014$   $\chi^2/\text{NDF}$ : 155.3/83

- sign  $0.051 \pm 0.020$   $\chi^2/\text{NDF}$ : 93.0/42

# reg\_asym\_dsl\_diff\_bpm4eY\_slope vs Slug



Right In:  $-0.011 \pm 0.033$   $\chi^2/\text{NDF}$ : 15.6/16

Left Out:  $0.105 \pm 0.020$   $\chi^2/\text{NDF}$ : 29.5/23

Right Out:  $0.059 \pm 0.034$   $\chi^2/\text{NDF}$ : 21.7/19

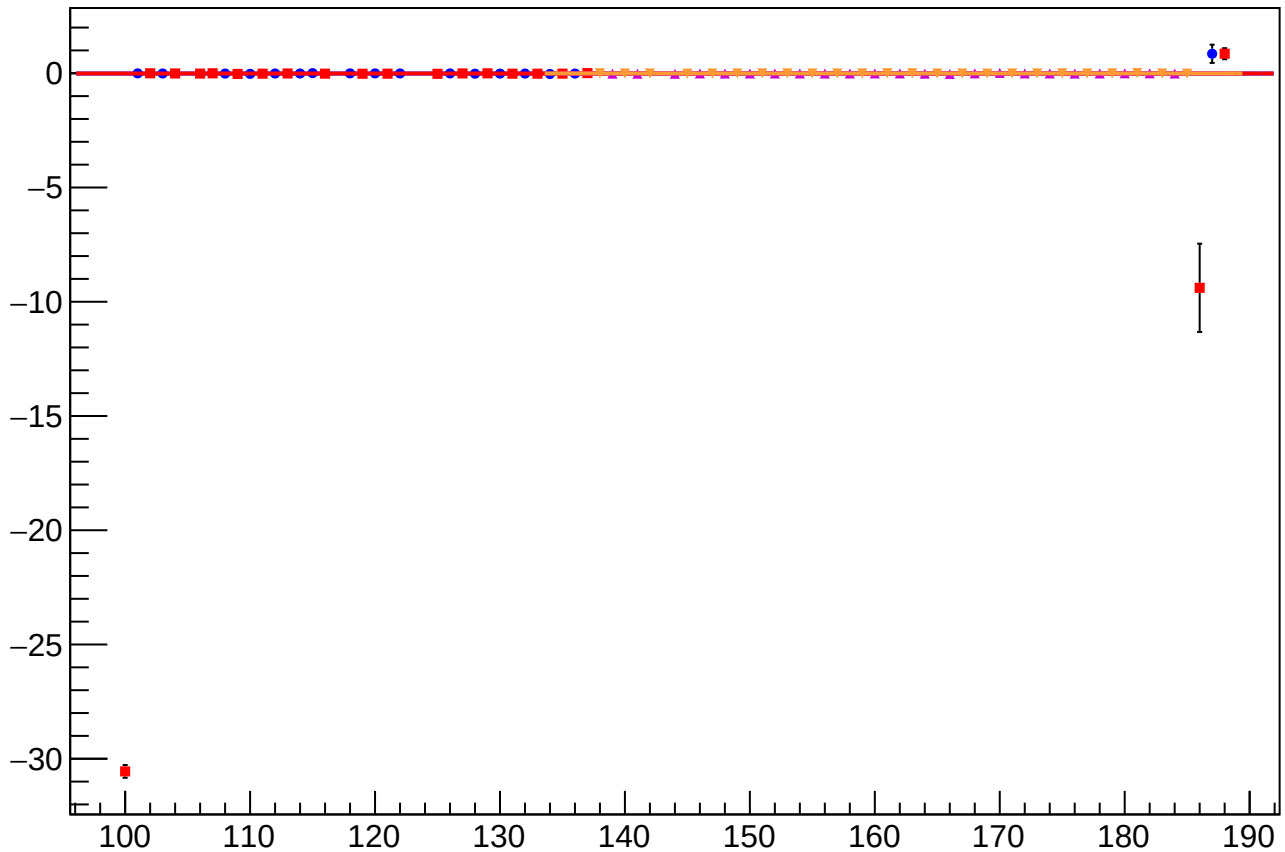
Left In:  $0.072 \pm 0.020$   $\chi^2/\text{NDF}$ : 31.7/22

+ sign  $0.074 \pm 0.017$   $\chi^2/\text{NDF}$ : 54.4/40

All:  $0.071 \pm 0.012$   $\chi^2/\text{NDF}$ : 108.0/83

- sign  $0.069 \pm 0.017$   $\chi^2/\text{NDF}$ : 53.5/42

# reg\_asym\_dsl\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.012 \pm 0.002$   $\chi^2/\text{NDF}$ : 17.6/16

Left Out:  $-0.008 \pm 0.001$   $\chi^2/\text{NDF}$ : 30.7/23

Right Out:  $-0.012 \pm 0.002$   $\chi^2/\text{NDF}$ : 11928.0/19

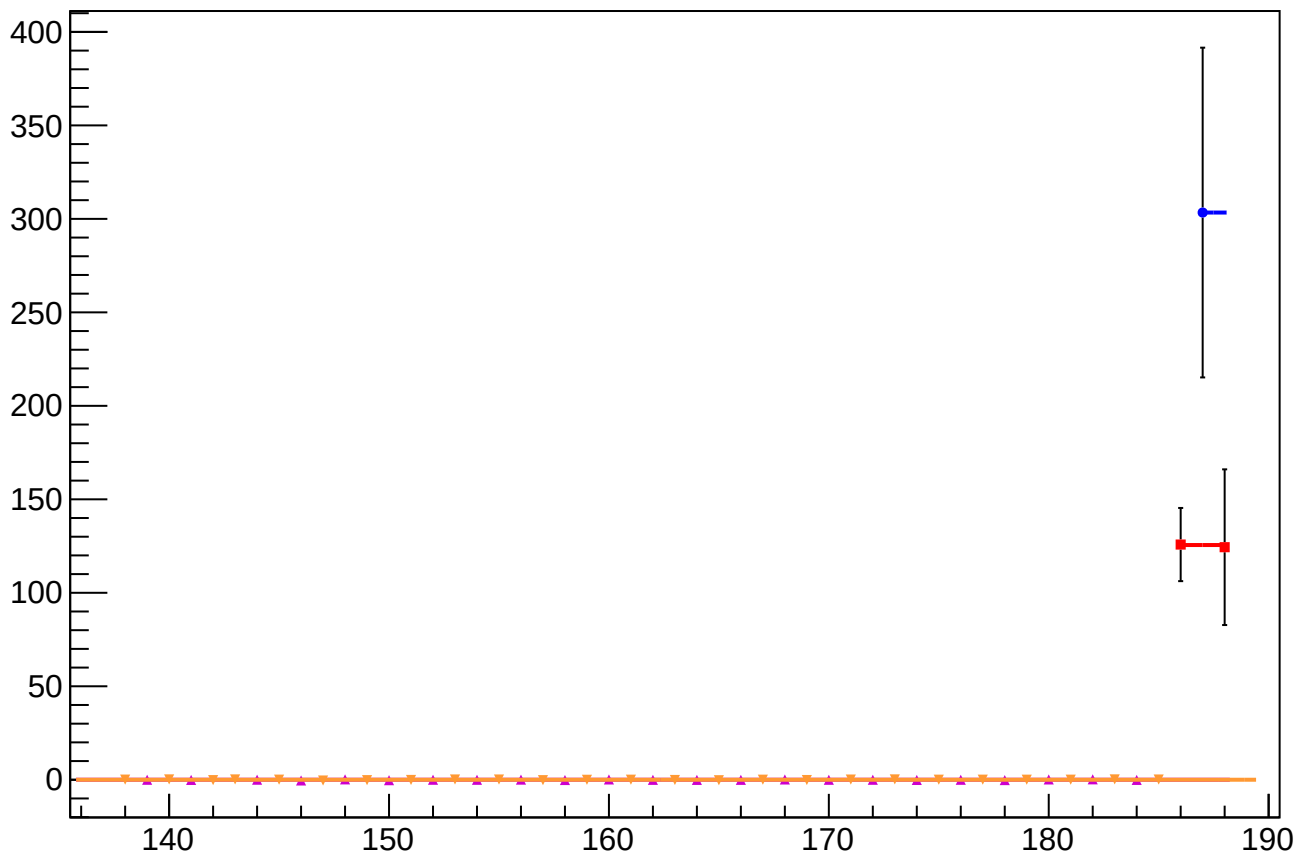
Left In:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 42.1/22

+ sign  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 51.9/40

All:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 12024.9/83

- sign  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 11972.7/42

# reg\_asym\_dsr\_diff\_bpm1X\_slope vs Slug



Right In: 303.382 $\pm$ 88.188  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.013 $\pm$ 0.027  $\chi^2/\text{NDF}$ : 29.2/24

Right Out: 125.551 $\pm$ 17.712  $\chi^2/\text{NDF}$ : 0.0/1

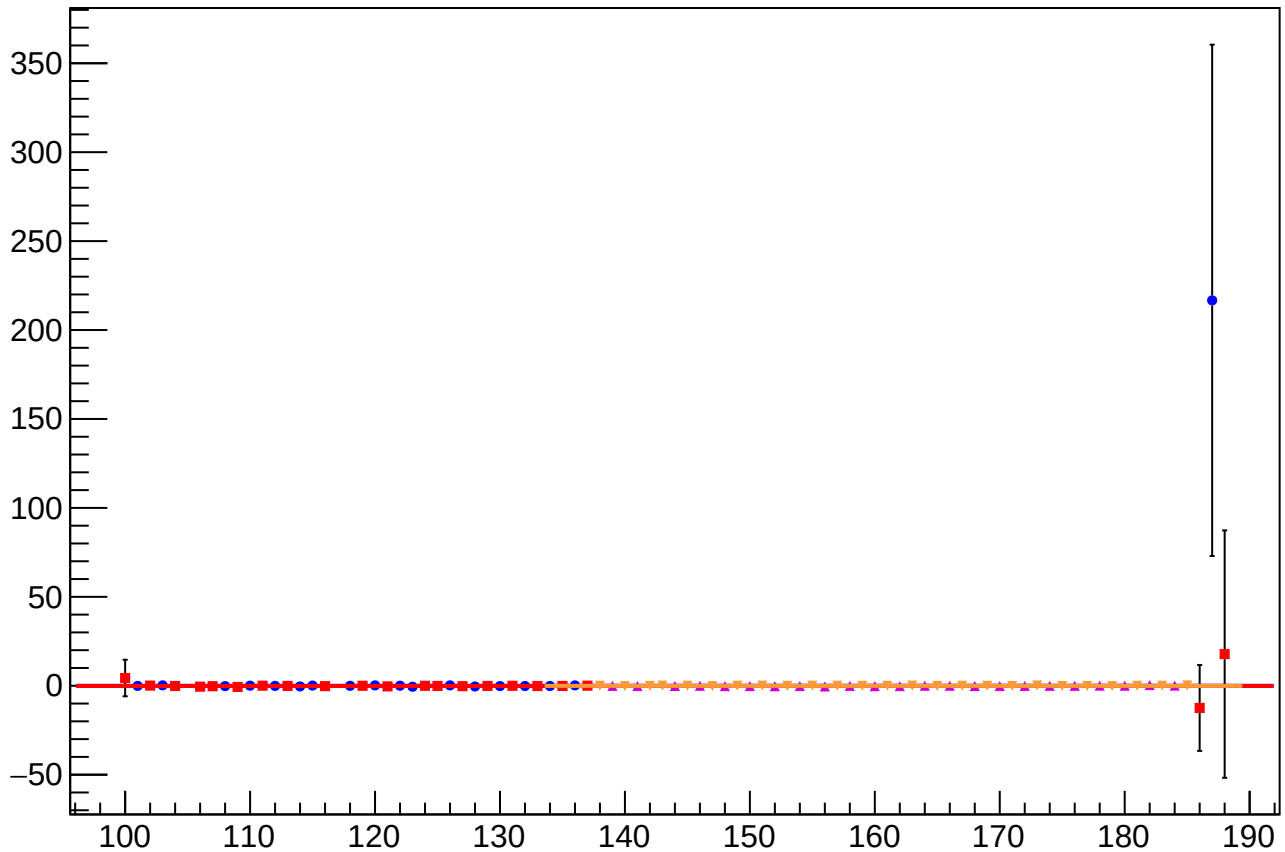
Left In: 0.004 $\pm$ 0.028  $\chi^2/\text{NDF}$ : 28.2/22

+ sign 0.013 $\pm$ 0.027  $\chi^2/\text{NDF}$ : 41.0/25

All: 0.009 $\pm$ 0.019  $\chi^2/\text{NDF}$ : 119.5/50

- sign 0.005 $\pm$ 0.028  $\chi^2/\text{NDF}$ : 78.4/24

# reg\_asym\_dsr\_diff\_bpm4aY\_slope vs Slug



Right In:  $-0.024 \pm 0.037$   $\chi^2/\text{NDF}$ : 25.6/17

Left Out:  $-0.058 \pm 0.021$   $\chi^2/\text{NDF}$ : 25.4/24

Right Out:  $-0.128 \pm 0.039$   $\chi^2/\text{NDF}$ : 17.9/20

Left In:  $-0.072 \pm 0.022$   $\chi^2/\text{NDF}$ : 48.7/22

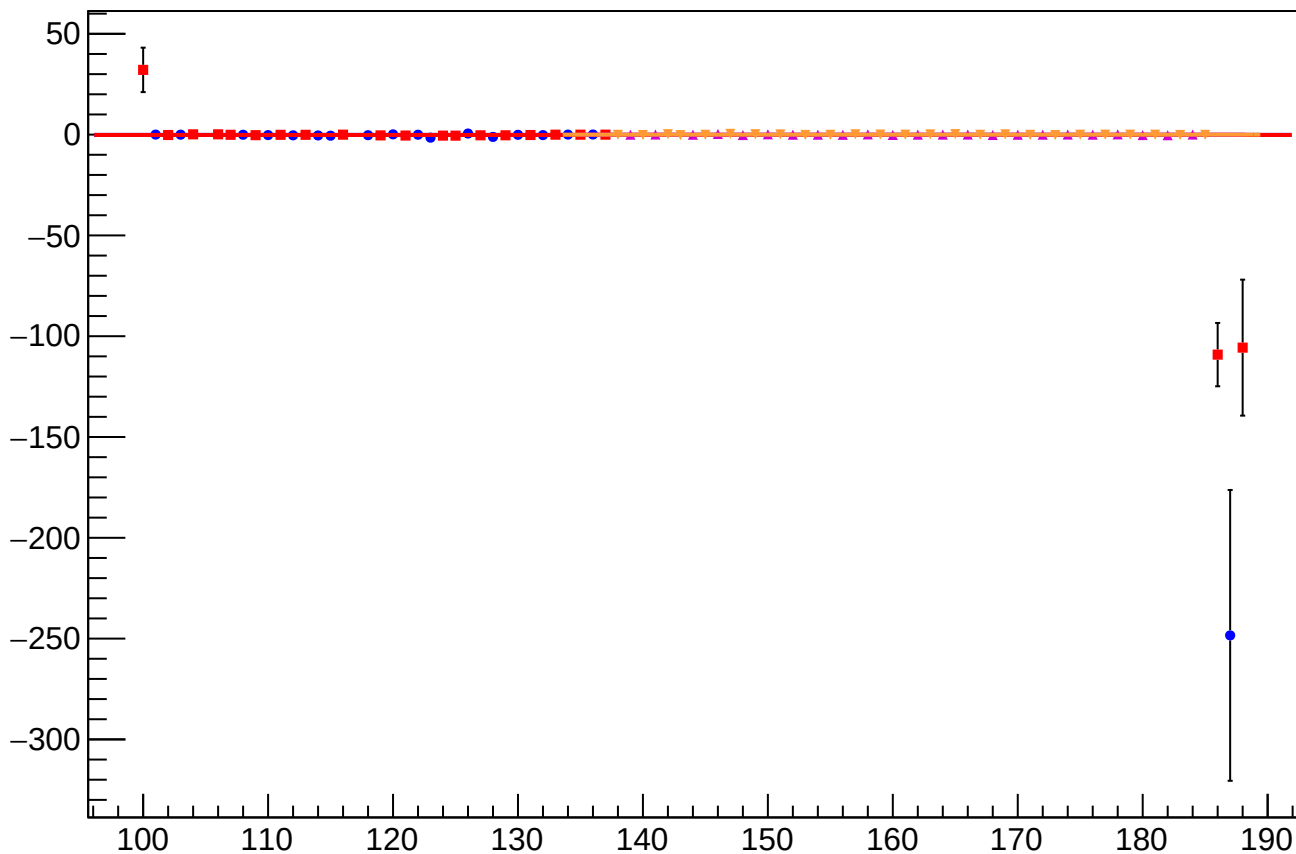
+ sign  $-0.049 \pm 0.018$   $\chi^2/\text{NDF}$ : 51.7/42

All:  $-0.066 \pm 0.013$   $\chi^2/\text{NDF}$ : 121.7/86

- sign  $-0.085 \pm 0.019$   $\chi^2/\text{NDF}$ : 68.3/43



# reg\_asym\_dsr\_diff\_bpm4eX\_slope vs Slug



Right In:  $-0.130 \pm 0.067$   $\chi^2/\text{NDF}$ : 35.6/17

Left Out:  $-0.015 \pm 0.027$   $\chi^2/\text{NDF}$ : 27.0/24

Right Out:  $-0.174 \pm 0.071$   $\chi^2/\text{NDF}$ : 72.9/20

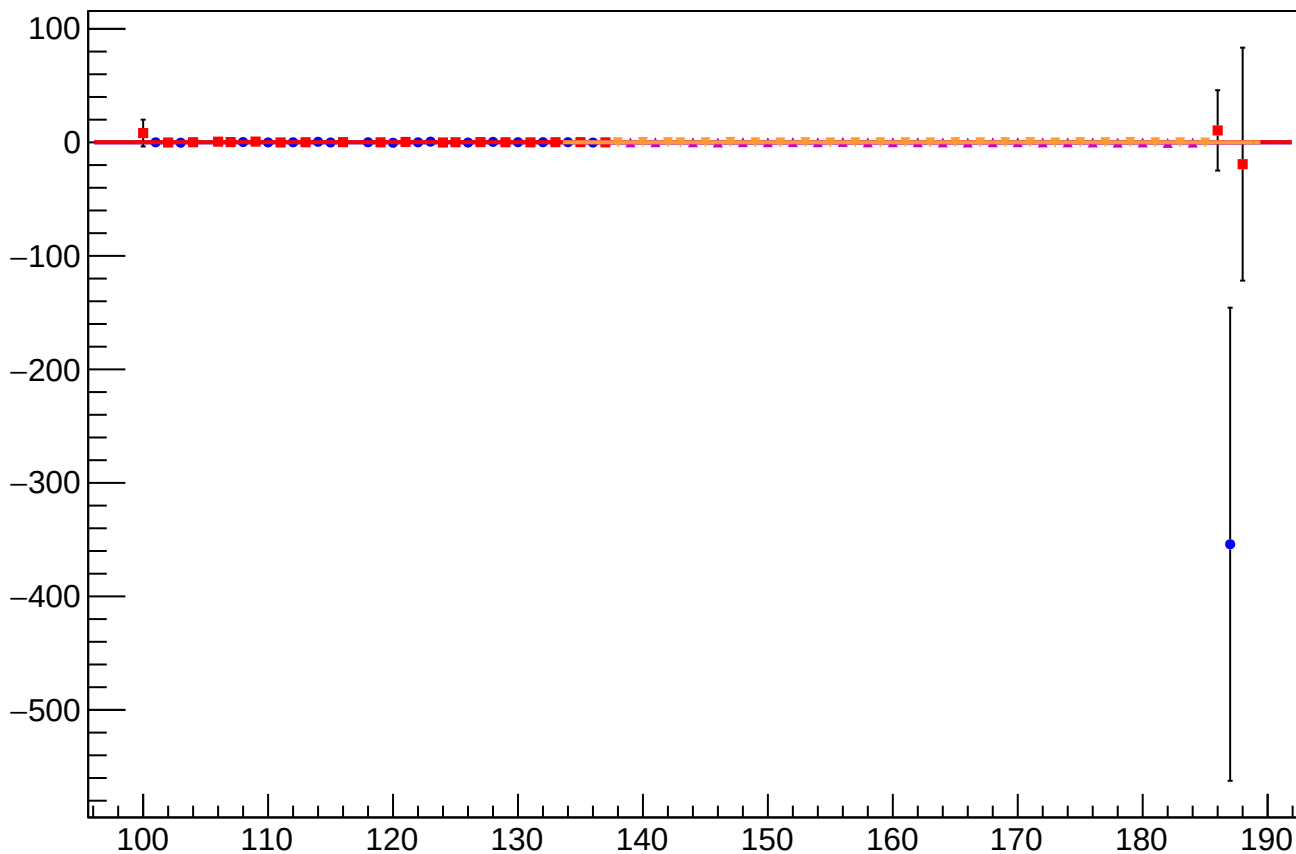
Left In:  $-0.035 \pm 0.027$   $\chi^2/\text{NDF}$ : 27.7/22

+ sign  $-0.031 \pm 0.025$   $\chi^2/\text{NDF}$ : 65.1/42

All:  $-0.042 \pm 0.018$   $\chi^2/\text{NDF}$ : 169.5/86

- sign  $-0.053 \pm 0.026$   $\chi^2/\text{NDF}$ : 104.0/43

# reg\_asym\_dsr\_diff\_bpm4eY\_slope vs Slug



Right In: 0.021 $\pm$ 0.042  $\chi^2/\text{NDF}$ : 25.4/17

Left Out: 0.062 $\pm$ 0.024  $\chi^2/\text{NDF}$ : 25.0/24

Right Out: 0.152 $\pm$ 0.045  $\chi^2/\text{NDF}$ : 16.4/20

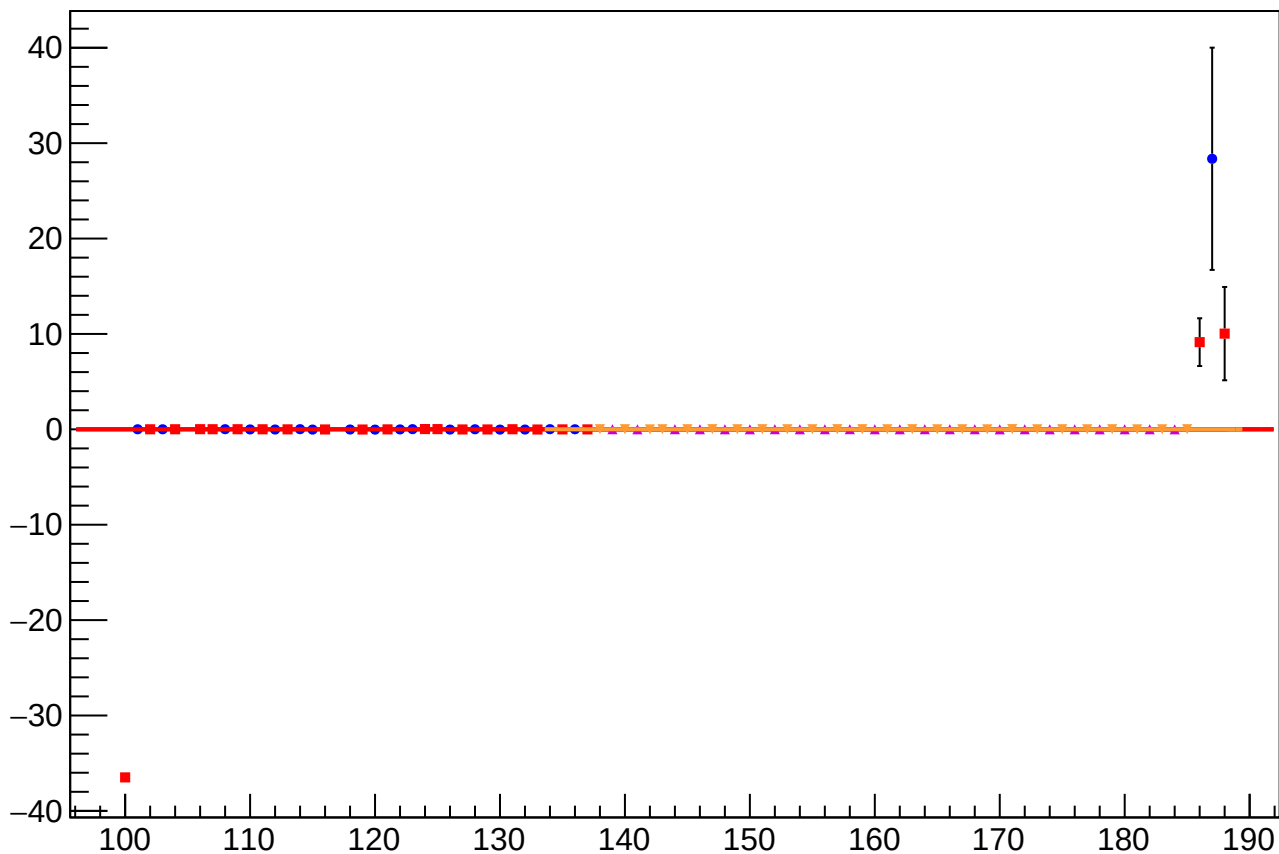
Left In: 0.069 $\pm$ 0.025  $\chi^2/\text{NDF}$ : 51.4/22

+ sign 0.052 $\pm$ 0.021  $\chi^2/\text{NDF}$ : 51.1/42

All: 0.069 $\pm$ 0.015  $\chi^2/\text{NDF}$ : 123.0/86

- sign 0.088 $\pm$ 0.022  $\chi^2/\text{NDF}$ : 70.4/43

# reg\_asym\_dsr\_diff\_bpm12X\_slope vs Slug



Right In: 0.001 $\pm$ 0.002  $\chi^2$ /NDF: 38.3/17

Left Out: 0.008 $\pm$ 0.001  $\chi^2$ /NDF: 25.9/24

Right Out: 0.001 $\pm$ 0.002  $\chi^2$ /NDF: 10466.6/20

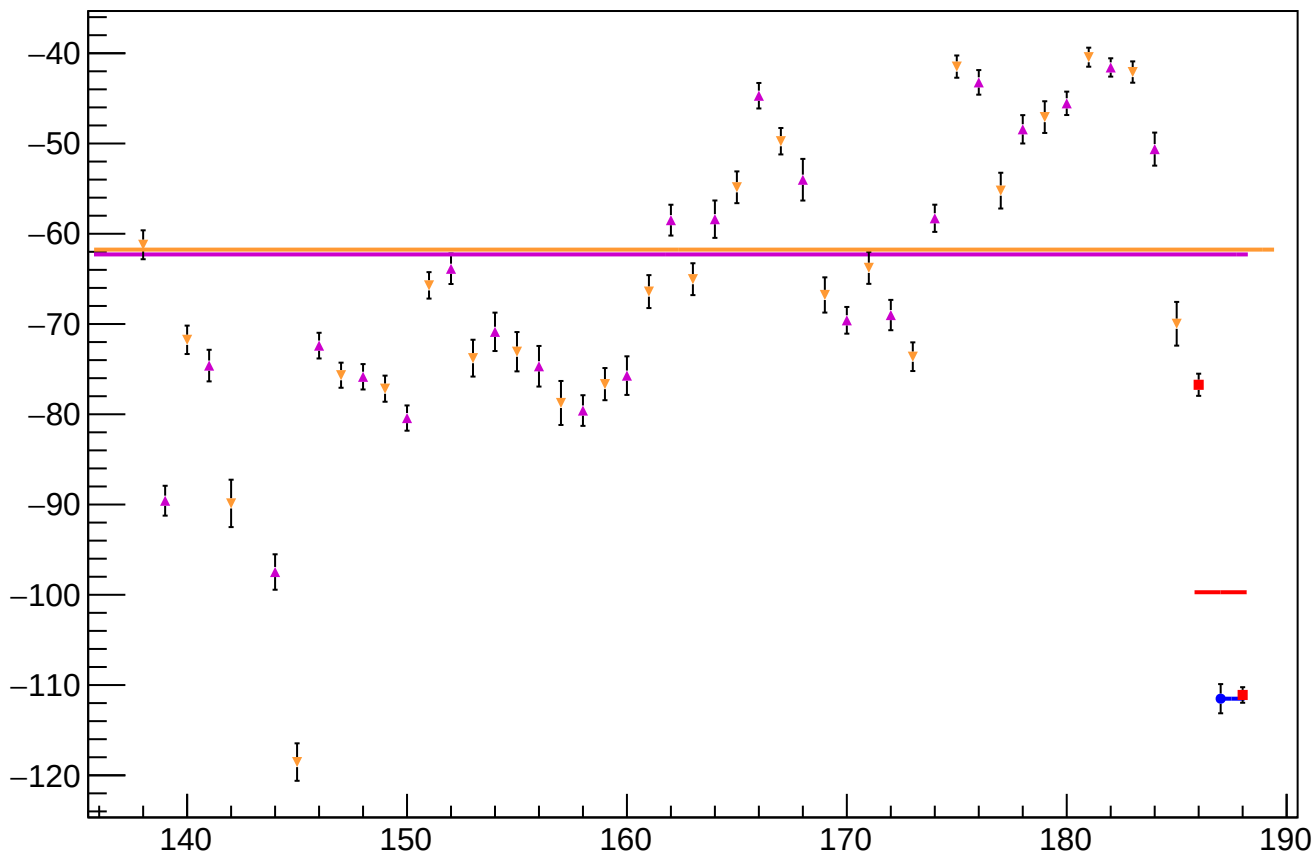
Left In: 0.009 $\pm$ 0.001  $\chi^2$ /NDF: 15.8/22

+ sign 0.007 $\pm$ 0.001  $\chi^2$ /NDF: 72.4/42

All: 0.007 $\pm$ 0.001  $\chi^2$ /NDF: 10565.3/86

- sign 0.008 $\pm$ 0.001  $\chi^2$ /NDF: 10492.7/43

# reg\_asym\_us\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $-111.512 \pm 1.617$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-61.756 \pm 0.334$   $\chi^2/\text{NDF}$ : 2509.2/23

Right Out:  $-99.717 \pm 0.707$   $\chi^2/\text{NDF}$ : 524.0/1

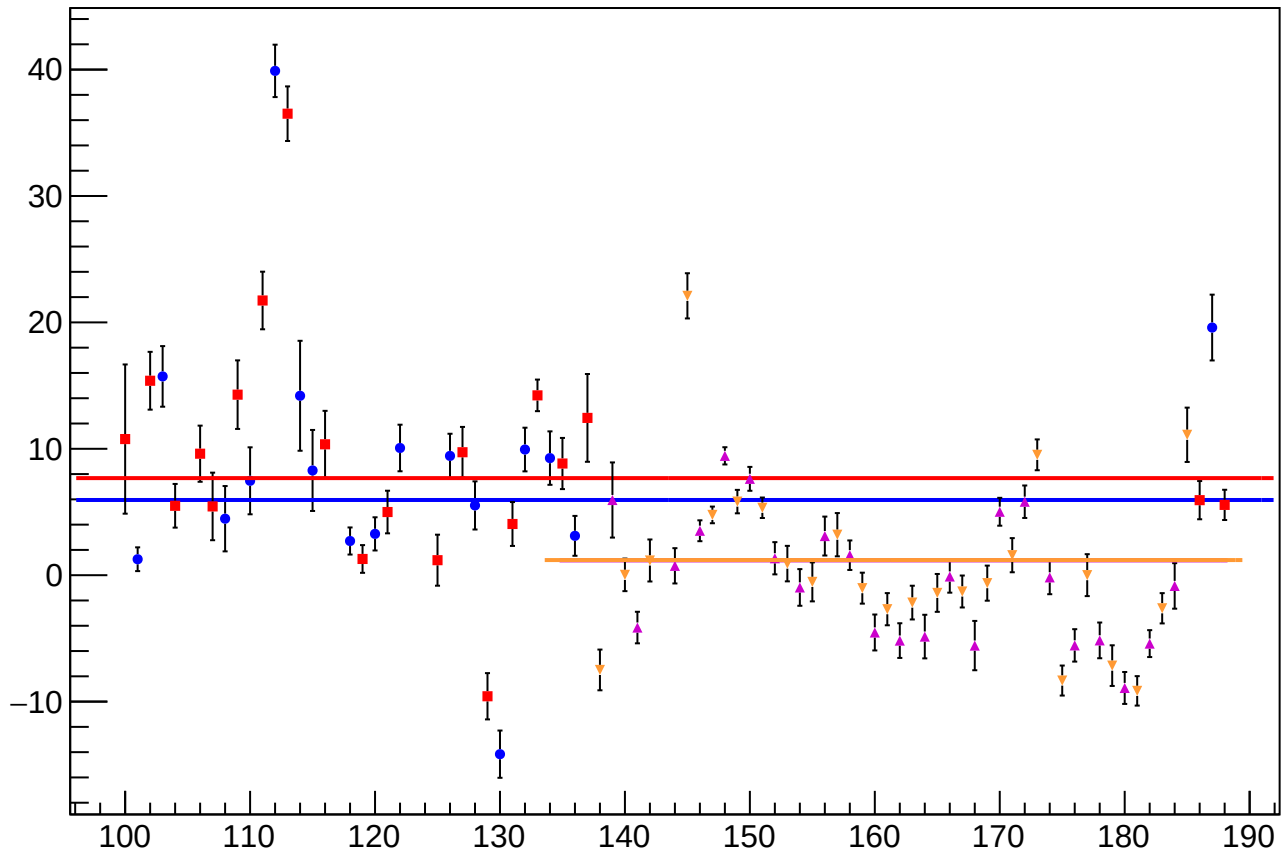
Left In:  $-62.290 \pm 0.331$   $\chi^2/\text{NDF}$ : 2265.0/22

+ sign  $-63.788 \pm 0.327$   $\chi^2/\text{NDF}$ : 3416.8/24

All:  $-66.636 \pm 0.221$   $\chi^2/\text{NDF}$ : 8646.0/49

- sign  $-69.031 \pm 0.300$   $\chi^2/\text{NDF}$ : 5089.5/24

# reg\_asym\_us\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $5.950 \pm 0.418$   $\chi^2/\text{NDF}$ : 491.0/16

Left Out:  $1.197 \pm 0.252$   $\chi^2/\text{NDF}$ : 526.1/23

Right Out:  $7.681 \pm 0.408$   $\chi^2/\text{NDF}$ : 413.2/19

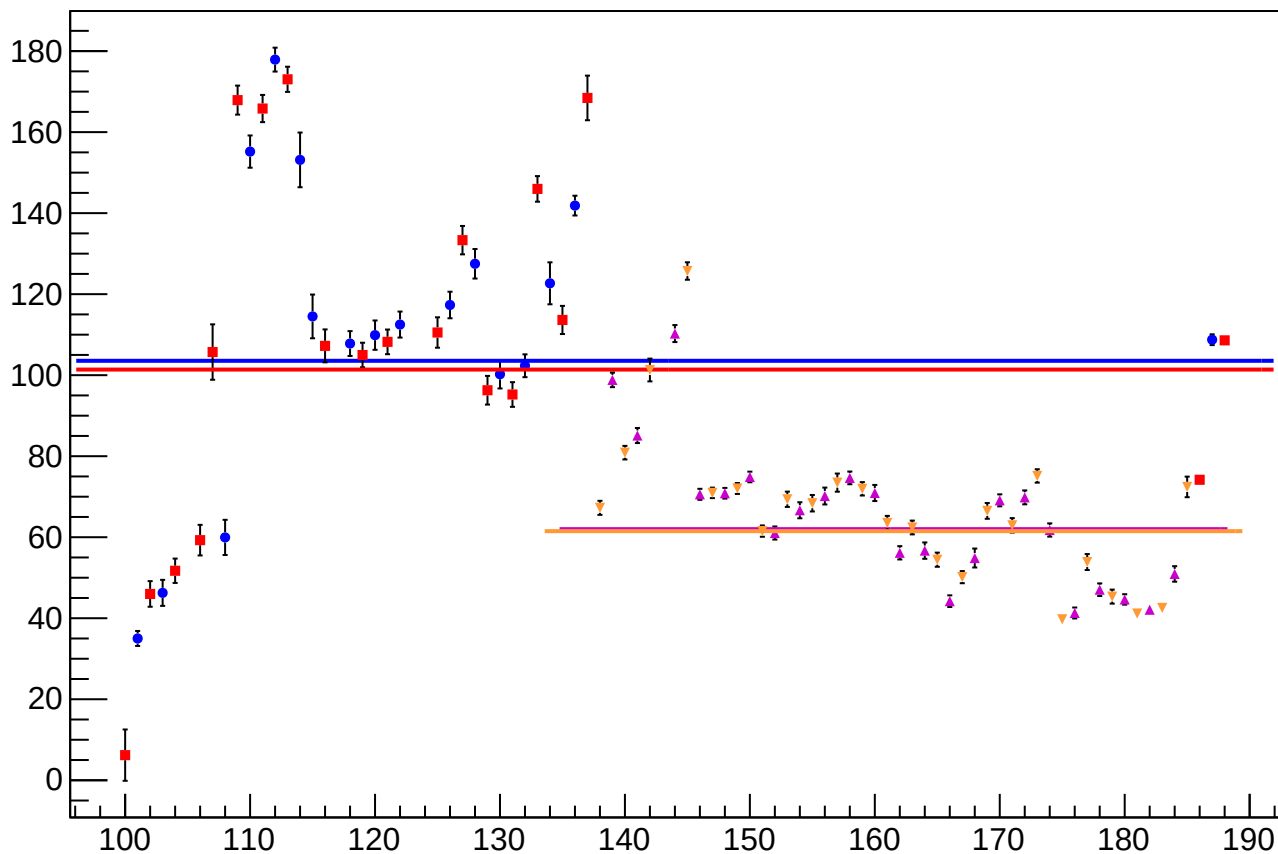
Left In:  $1.171 \pm 0.255$   $\chi^2/\text{NDF}$ : 466.2/22

+ sign  $2.467 \pm 0.216$   $\chi^2/\text{NDF}$ : 1111.8/40

All:  $2.731 \pm 0.153$   $\chi^2/\text{NDF}$ : 2177.1/83

- sign  $-2.994 \pm 0.216$   $\chi^2/\text{NDF}$ : 1062.4/42

# reg\_asym\_us\_avg\_diff\_bpm4eX\_slope vs Slug



Right In: 103.552 $\pm$ 0.690  $\chi^2$ /NDF: 2999.9/16

Left Out: 61.496 $\pm$ 0.332  $\chi^2$ /NDF:2610.2/23

Right Out: 101.386 $\pm$ 0.469  $\chi^2$ /NDF: 3517.7/19

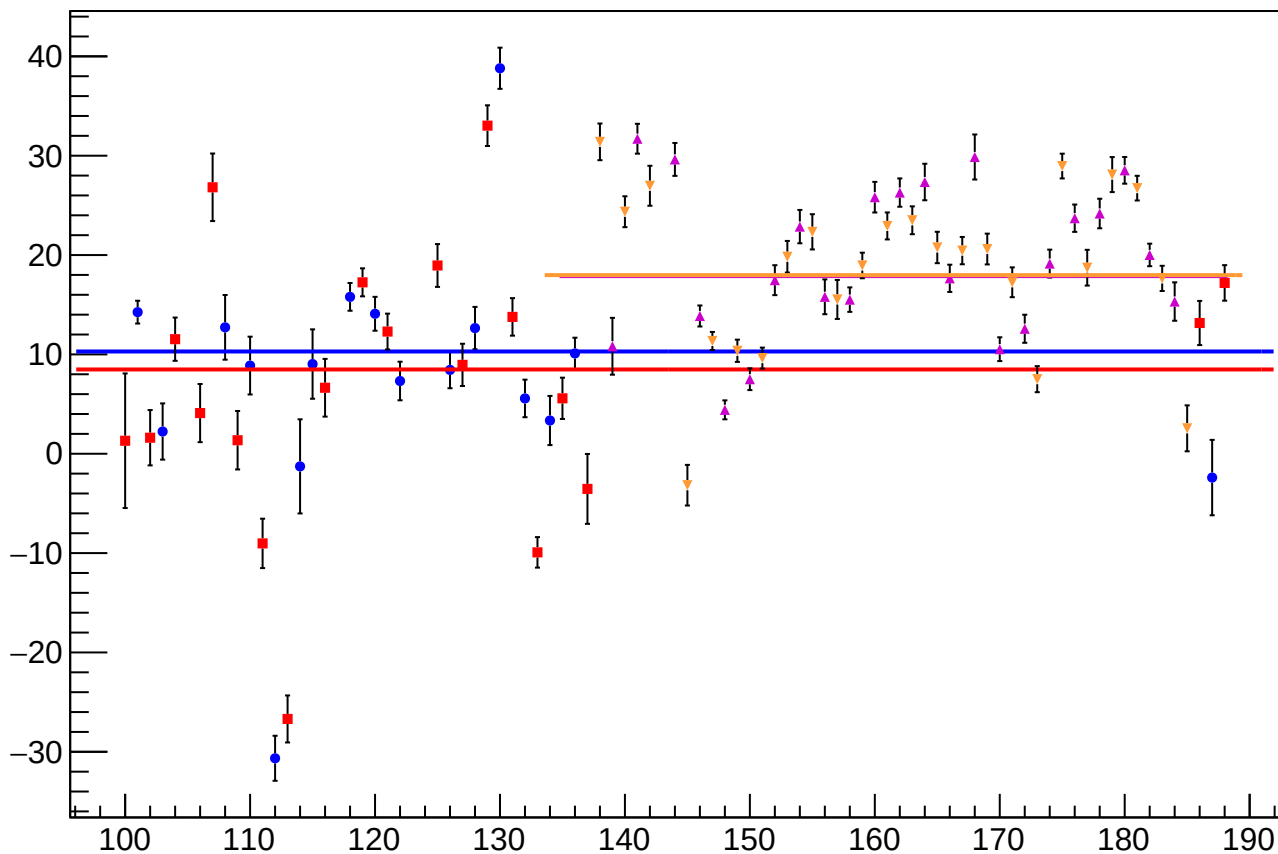
Left In: 61.995 $\pm$ 0.329  $\chi^2$ /NDF:2517.6/22

+ sign 69.418 $\pm$ 0.299  $\chi^2$ /NDF: 8627.7/40

All: 72.492 $\pm$ 0.200  $\chi^2$ /NDF: 19581.4/83

- sign 74.981 $\pm$ 0.269  $\chi^2$ /NDF: 10762.8/42

# reg\_asym\_us\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 10.295 $\pm$ 0.488  $\chi^2/\text{NDF}$ : 592.9/16

Left Out: 17.979 $\pm$ 0.291  $\chi^2/\text{NDF}$ : 674.8/23

Right Out: 8.485 $\pm$ 0.490  $\chi^2/\text{NDF}$ : 721.2/19

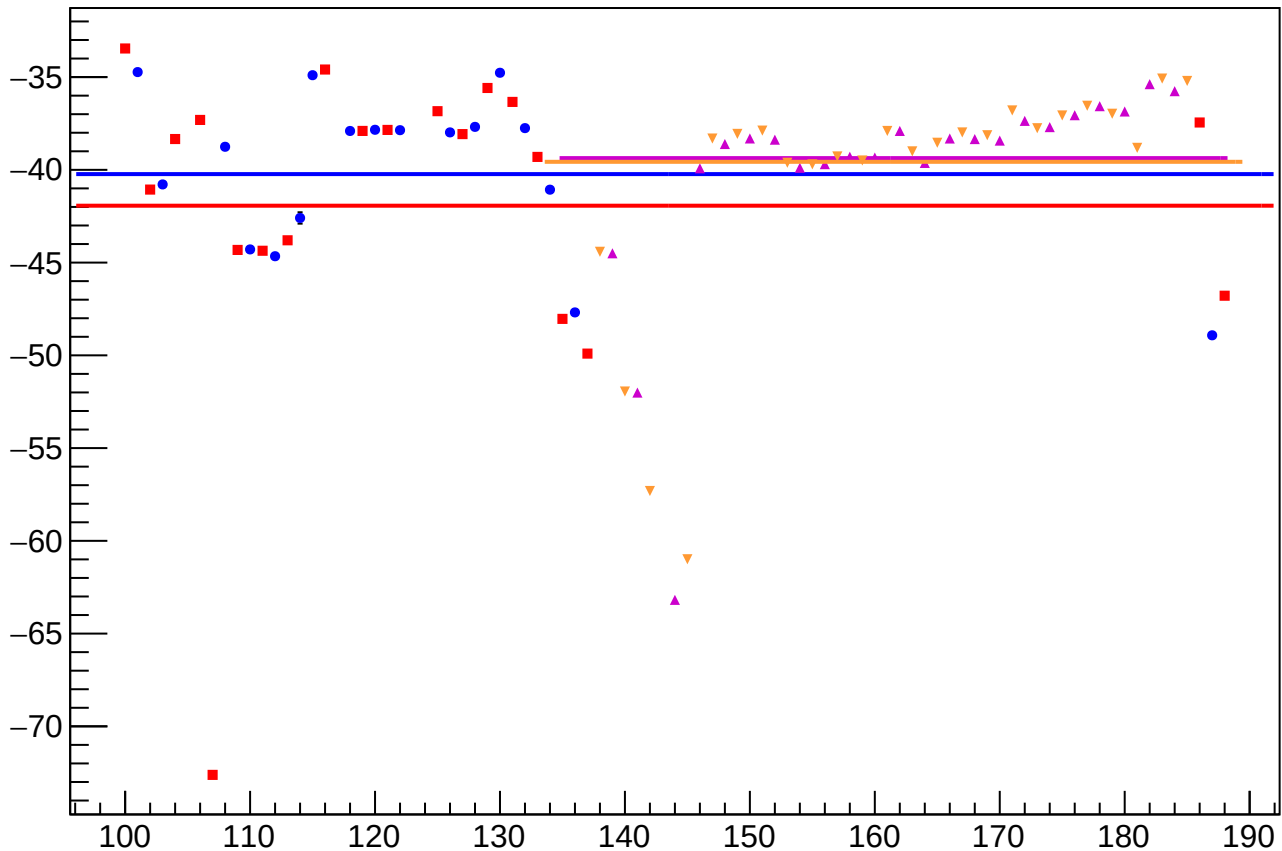
Left In: 17.881 $\pm$ 0.292  $\chi^2/\text{NDF}$ : 730.9/22

+ sign 15.965 $\pm$ 0.250  $\chi^2/\text{NDF}$ : 1450.7/40

All: 15.697 $\pm$ 0.177  $\chi^2/\text{NDF}$ : 3176.3/83

- sign 15.427 $\pm$ 0.251  $\chi^2/\text{NDF}$ : 1723.2/42

# reg\_asym\_us\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-40.230 \pm 0.028$   $\chi^2/\text{NDF}$ : 26790.7/16

Left Out:  $-39.567 \pm 0.014$   $\chi^2/\text{NDF}$ : 141152.0/23

Right Out:  $-41.933 \pm 0.027$   $\chi^2/\text{NDF}$ : 65491.8/19

Left In:  $-39.368 \pm 0.014$   $\chi^2/\text{NDF}$ : 117958.1/22

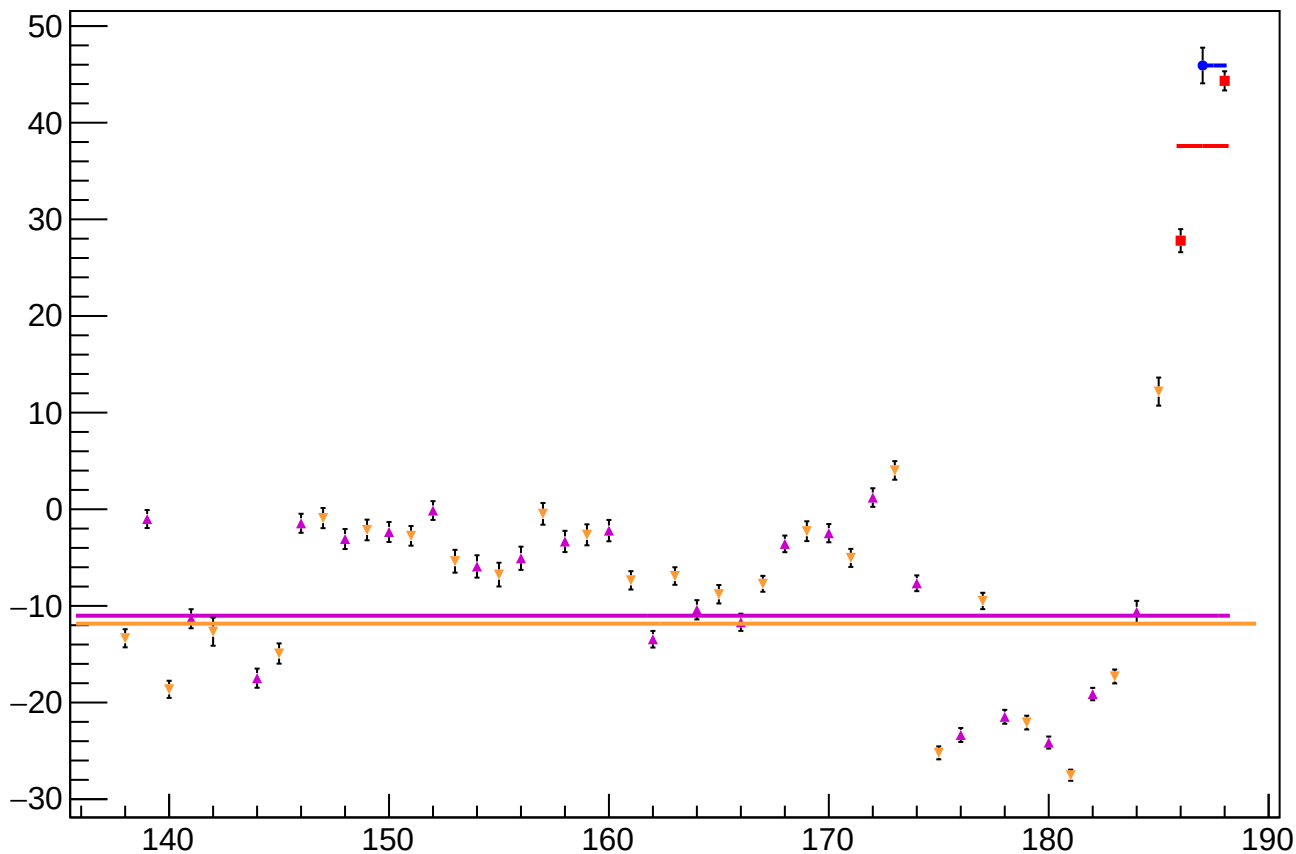
+ sign  $-39.696 \pm 0.012$   $\chi^2/\text{NDF}$ : 168395.2/40

All:  $-39.793 \pm 0.009$   $\chi^2/\text{NDF}$ : 359223.2/83

- sign  $-39.887 \pm 0.012$   $\chi^2/\text{NDF}$ : 190705.6/42



# reg\_asym\_us\_dd\_diff\_bpm1X\_slope vs Slug



Right In: 45.919 $\pm$ 1.845  $\chi^2$ /NDF: 0.0/0

Left Out: -11.837 $\pm$ 0.187  $\chi^2$ /NDF: 2742.4/23

Right Out: 37.587 $\pm$ 0.762  $\chi^2$ /NDF: 113.8/1

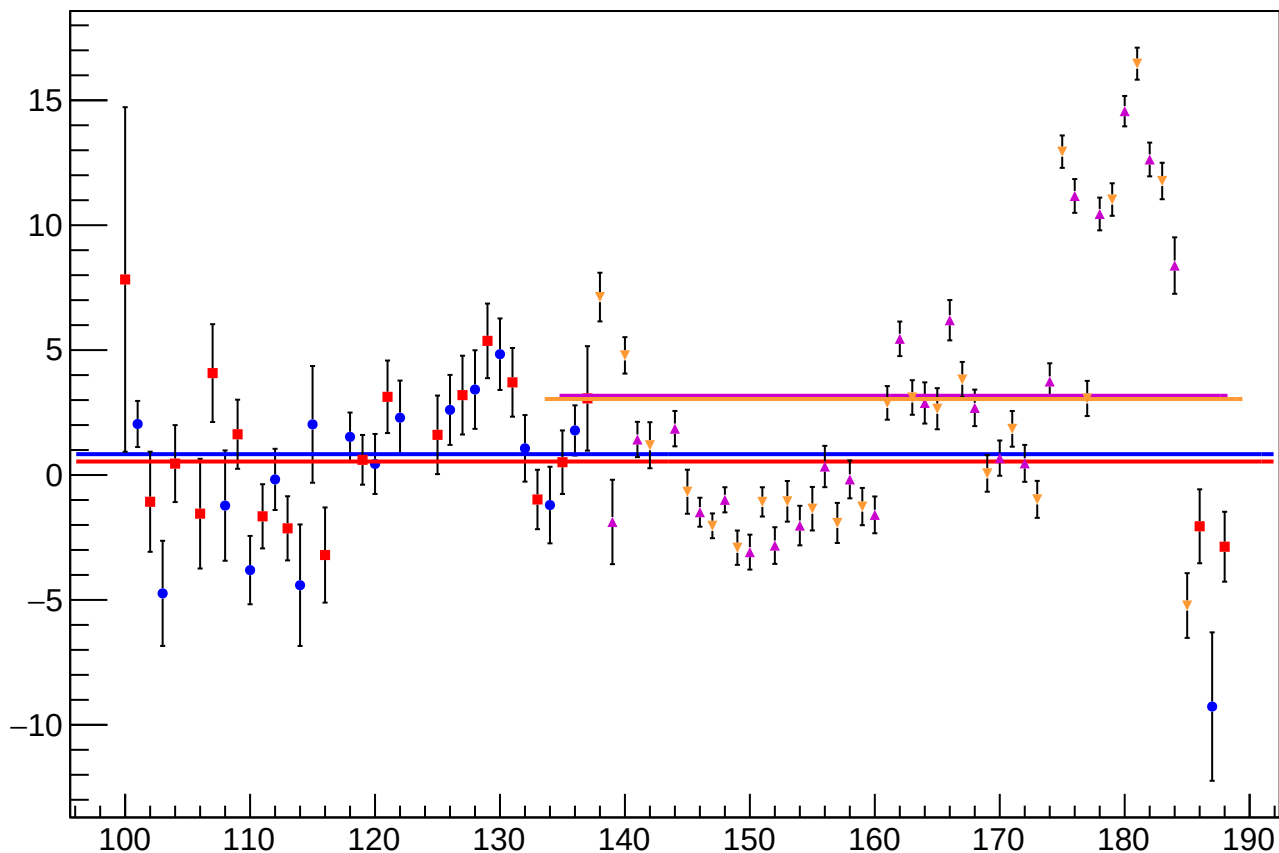
Left In: -11.014 $\pm$ 0.187  $\chi^2$ /NDF: 2116.6/22

+ sign -11.251 $\pm$ 0.186  $\chi^2$ /NDF: 3712.5/24

All: -9.716 $\pm$ 0.130  $\chi^2$ /NDF: 9913.2/49

- sign -8.249 $\pm$ 0.182  $\chi^2$ /NDF: 6067.3/24

# reg\_asym\_us\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $0.835 \pm 0.336$   $\chi^2/\text{NDF}$ : 54.7/16

Left Out:  $3.042 \pm 0.148$   $\chi^2/\text{NDF}$ : 1452.6/23

Right Out:  $0.540 \pm 0.334$   $\chi^2/\text{NDF}$ : 52.0/19

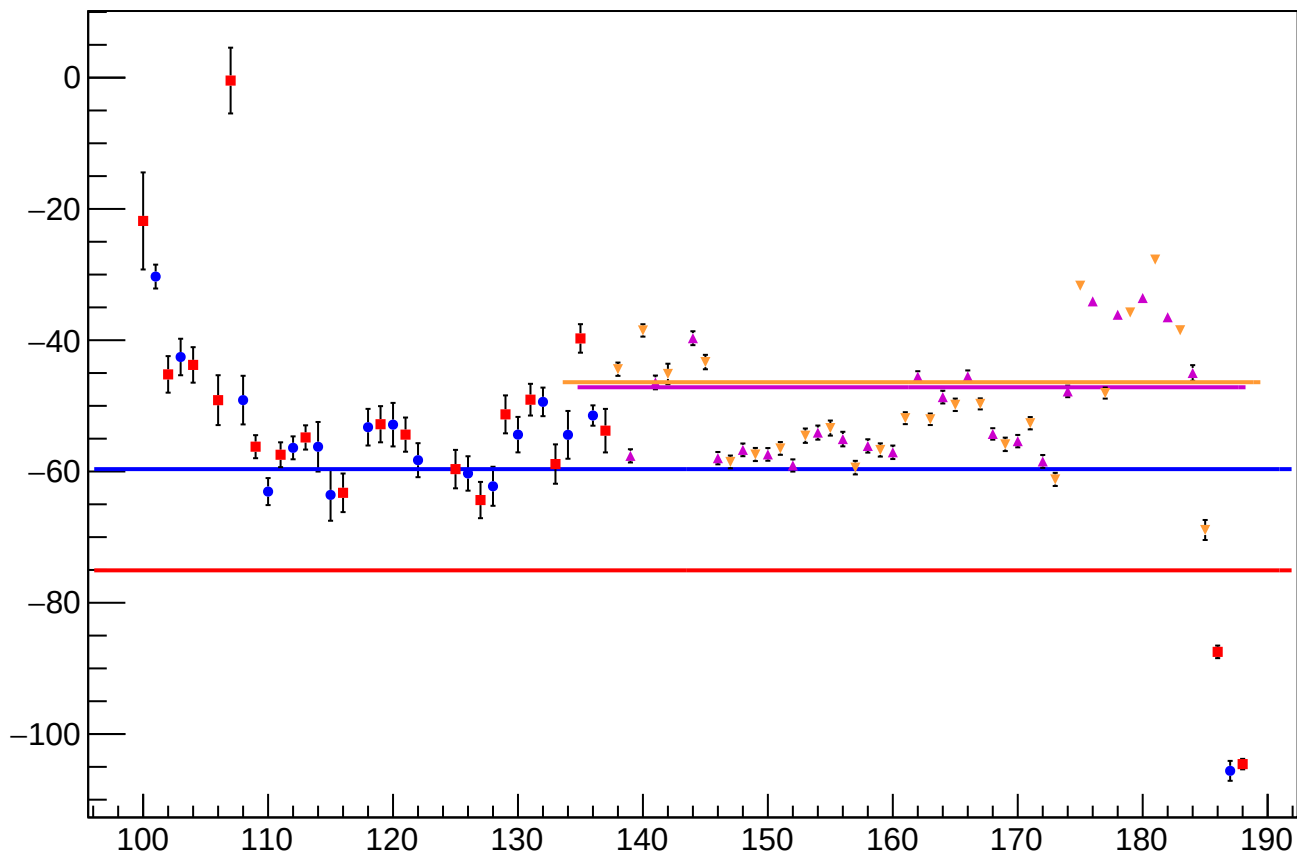
Left In:  $3.172 \pm 0.150$   $\chi^2/\text{NDF}$ : 1297.9/22

+ sign  $2.684 \pm 0.135$   $\chi^2/\text{NDF}$ : 1543.4/40

All:  $2.708 \pm 0.096$   $\chi^2/\text{NDF}$ : 2945.1/83

- sign  $2.733 \pm 0.136$   $\chi^2/\text{NDF}$ : 1401.7/42

# reg\_asym\_us\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $-59.640 \pm 0.567$   $\chi^2/\text{NDF}$ : 1299.8/16

Left Out:  $-46.398 \pm 0.187$   $\chi^2/\text{NDF}$ : 3289.4/23

Right Out:  $-75.061 \pm 0.434$   $\chi^2/\text{NDF}$ : 3133.5/19

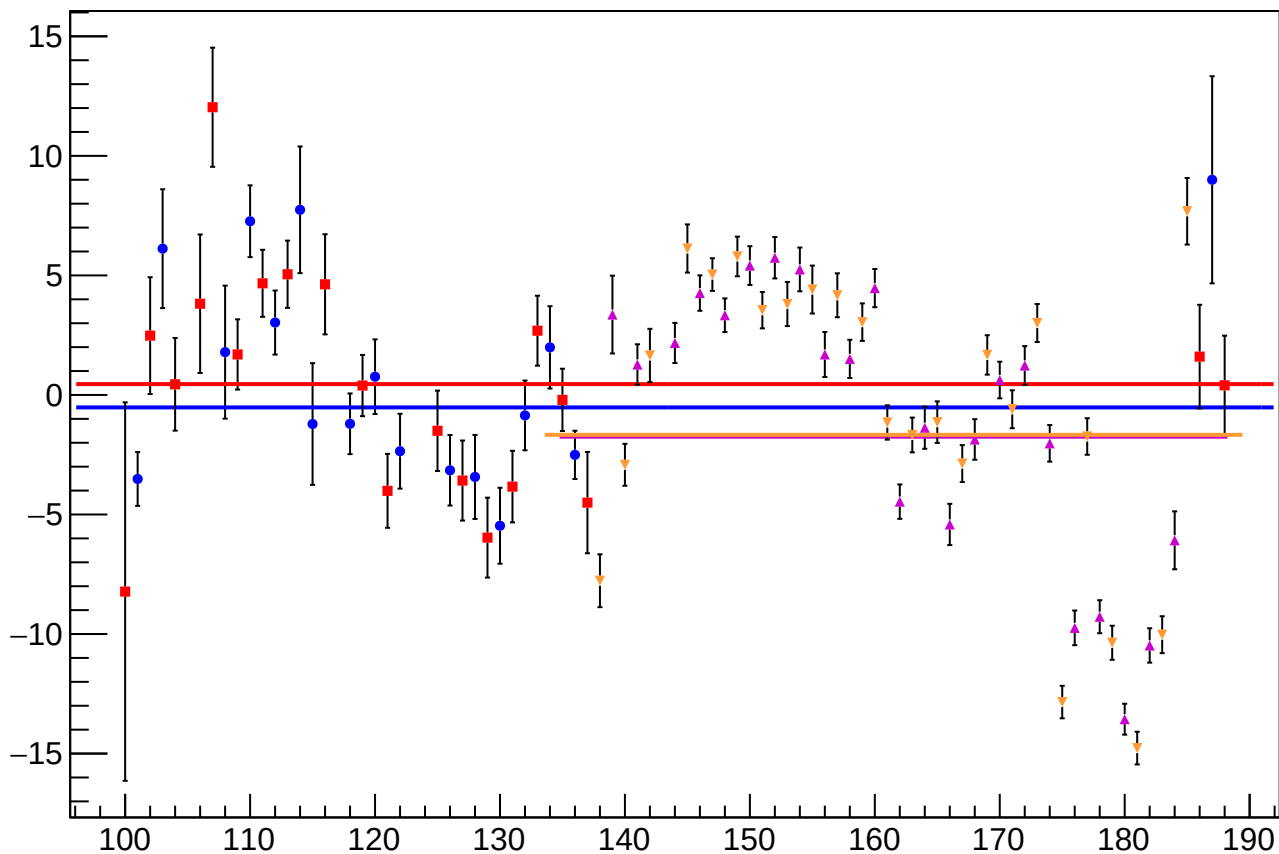
Left In:  $-47.170 \pm 0.186$   $\chi^2/\text{NDF}$ : 2526.3/22

+ sign  $-47.689 \pm 0.177$   $\chi^2/\text{NDF}$ : 5080.8/40

All:  $-49.663 \pm 0.123$   $\chi^2/\text{NDF}$ : 14460.7/83

- sign  $-51.509 \pm 0.171$   $\chi^2/\text{NDF}$ : 9139.9/42

# reg\_asym\_us\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-0.521 \pm 0.382$   $\chi^2/\text{NDF}$ : 87.5/16

Left Out:  $-1.668 \pm 0.167$   $\chi^2/\text{NDF}$ : 1479.3/23

Right Out:  $0.453 \pm 0.386$   $\chi^2/\text{NDF}$ : 96.1/19

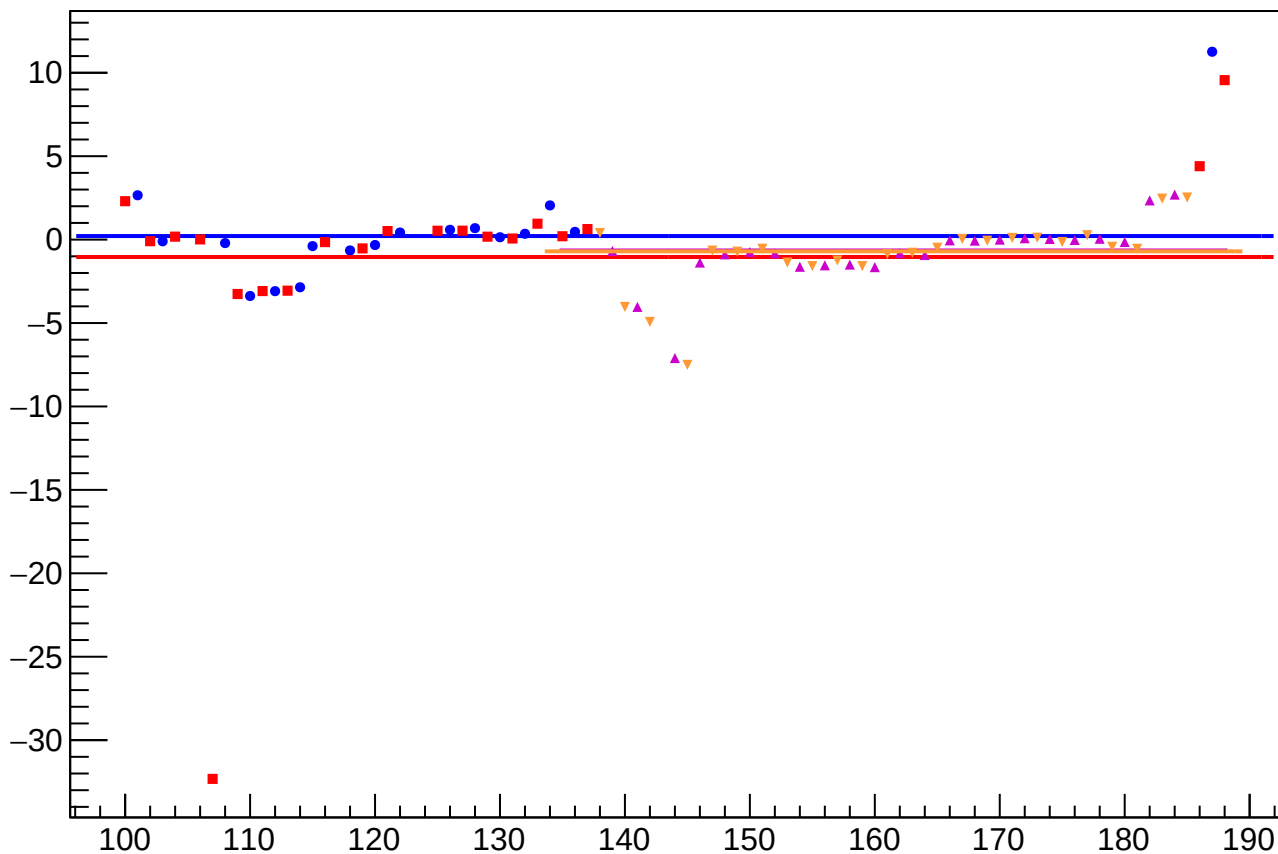
Left In:  $-1.746 \pm 0.168$   $\chi^2/\text{NDF}$ : 1254.1/22

+ sign  $-1.485 \pm 0.153$   $\chi^2/\text{NDF}$ : 1574.3/40

All:  $-1.440 \pm 0.109$   $\chi^2/\text{NDF}$ : 2951.9/83

- sign  $-1.395 \pm 0.154$   $\chi^2/\text{NDF}$ : 1377.4/42

# reg\_asym\_us\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $0.213 \pm 0.021$   $\chi^2/\text{NDF}$ : 7308.5/16

Left Out:  $-0.703 \pm 0.008$   $\chi^2/\text{NDF}$ : 53770.3/23

Right Out:  $-1.042 \pm 0.021$   $\chi^2/\text{NDF}$ : 90542.7/19

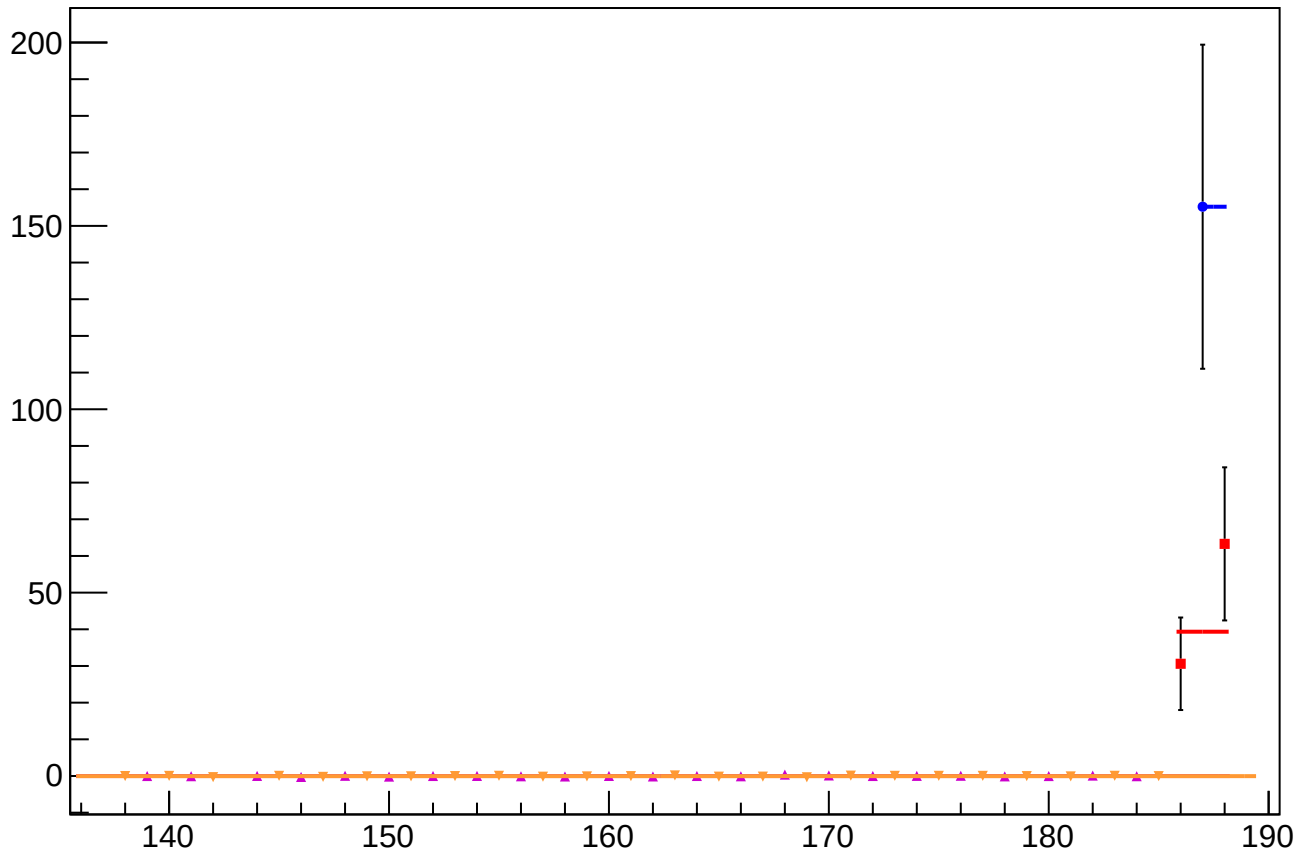
Left In:  $-0.651 \pm 0.008$   $\chi^2/\text{NDF}$ : 44167.1/22

+ sign  $-0.599 \pm 0.007$   $\chi^2/\text{NDF}$ : 62701.7/40

All:  $-0.648 \pm 0.005$   $\chi^2/\text{NDF}$ : 197806.1/83

- sign  $-0.697 \pm 0.007$   $\chi^2/\text{NDF}$ : 135012.4/42

# reg\_asym\_ds\_avg\_diff\_bpm1X\_slope vs Slug



Right In: 155.225 $\pm$ 44.188  $\chi^2$ /NDF: 0.0/0

Left Out: -0.038 $\pm$ 0.018  $\chi^2$ /NDF: 35.6/23

Right Out: 39.344 $\pm$ 10.795  $\chi^2$ /NDF: 1.8/1

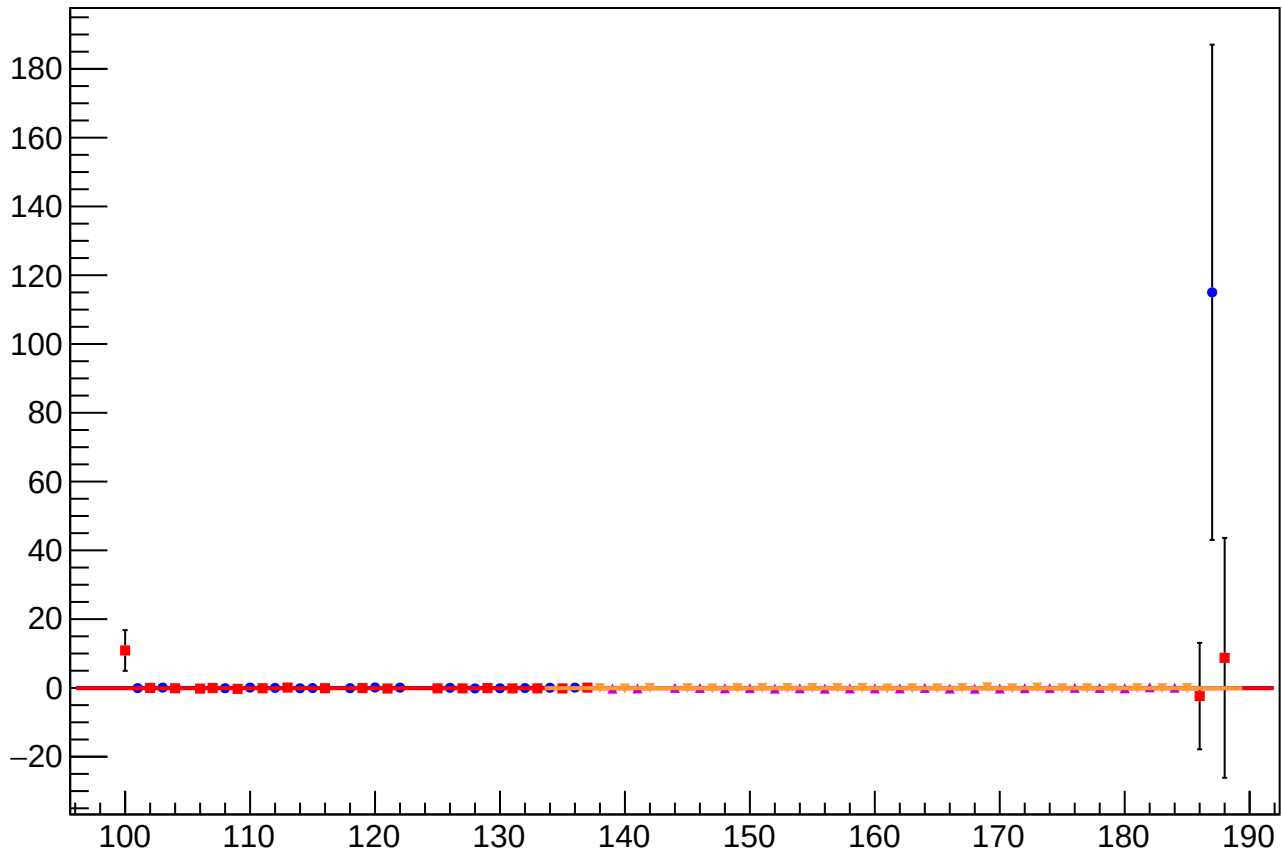
Left In: -0.009 $\pm$ 0.018  $\chi^2$ /NDF: 35.3/22

+ sign -0.038 $\pm$ 0.018  $\chi^2$ /NDF: 47.9/24

All: -0.024 $\pm$ 0.013  $\chi^2$ /NDF: 99.6/49

- sign -0.009 $\pm$ 0.018  $\chi^2$ /NDF: 50.4/24

# reg\_asym\_ds\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $-0.013 \pm 0.023$   $\chi^2/\text{NDF}$ : 14.8/16

Left Out:  $-0.073 \pm 0.014$   $\chi^2/\text{NDF}$ : 27.8/23

Right Out:  $-0.092 \pm 0.025$   $\chi^2/\text{NDF}$ : 12.8/19

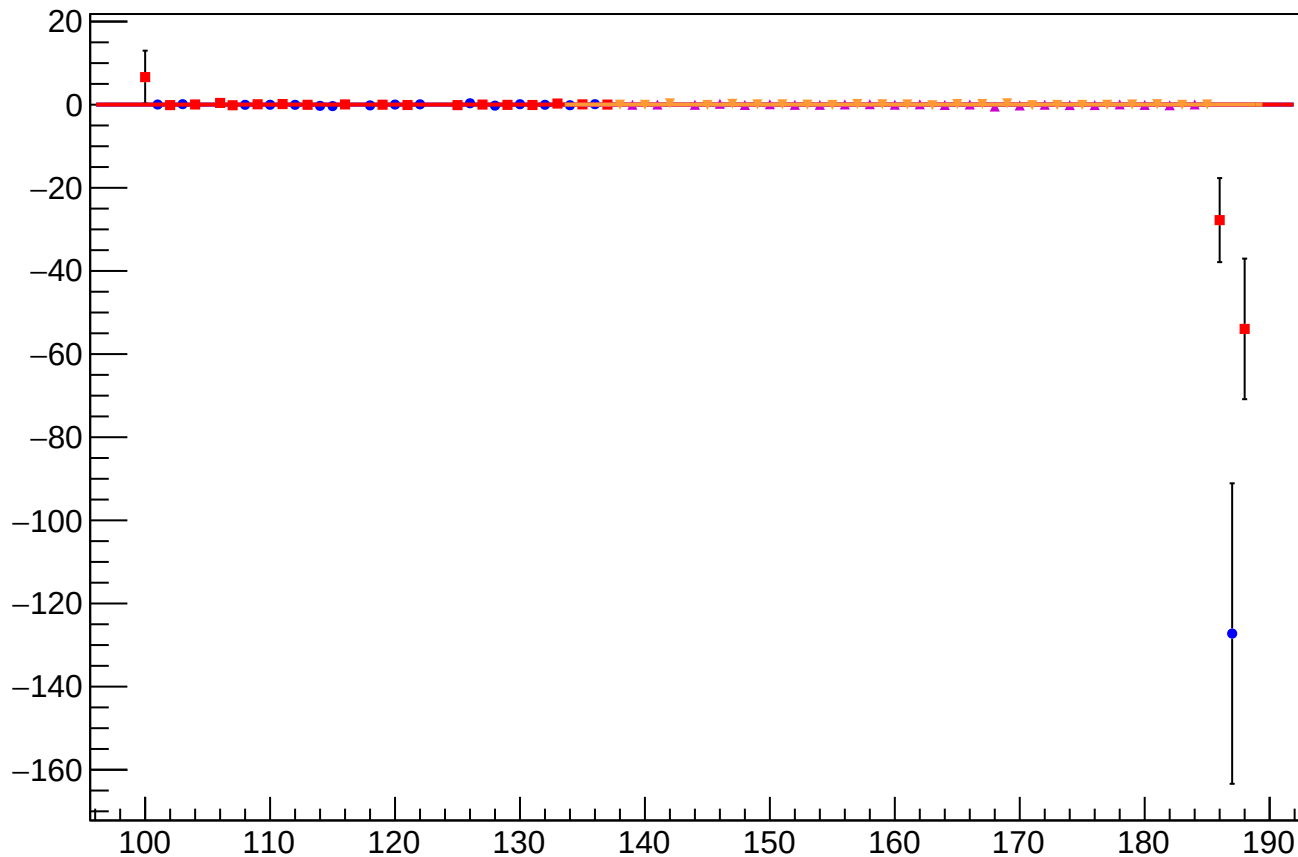
Left In:  $-0.065 \pm 0.014$   $\chi^2/\text{NDF}$ : 40.4/22

+ sign  $-0.057 \pm 0.012$   $\chi^2/\text{NDF}$ : 47.5/40

All:  $-0.064 \pm 0.009$   $\chi^2/\text{NDF}$ : 102.2/83

- sign  $-0.072 \pm 0.012$   $\chi^2/\text{NDF}$ : 54.0/42

# reg\_asym\_ds\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $0.017 \pm 0.043$   $\chi^2/\text{NDF}$ : 22.0/16

Left Out:  $0.036 \pm 0.018$   $\chi^2/\text{NDF}$ : 32.4/23

Right Out:  $0.029 \pm 0.045$   $\chi^2/\text{NDF}$ : 27.0/19

Left In:  $-0.010 \pm 0.018$   $\chi^2/\text{NDF}$ : 37.1/22

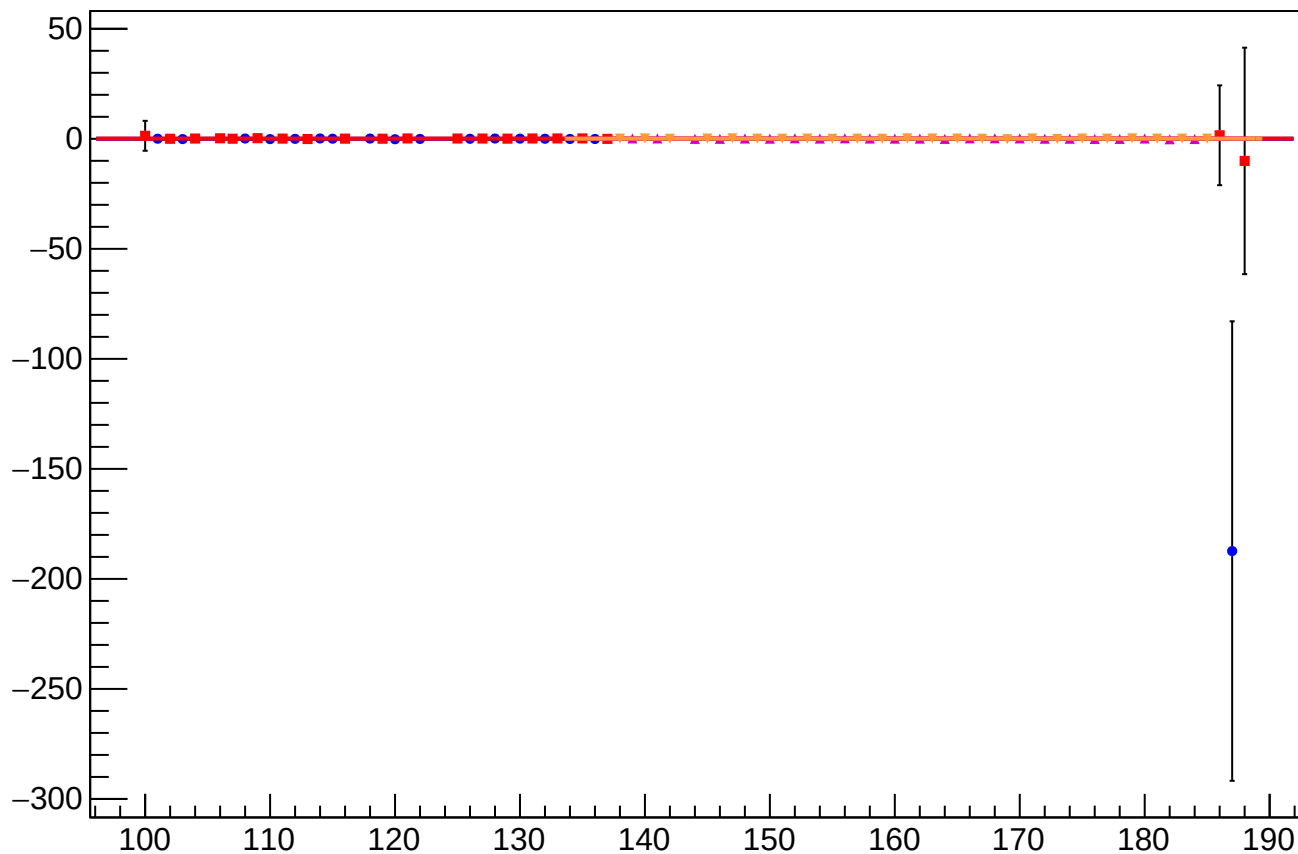
+ sign  $0.033 \pm 0.017$   $\chi^2/\text{NDF}$ : 54.6/40

All:  $0.014 \pm 0.012$   $\chi^2/\text{NDF}$ : 121.9/83

- sign  $-0.005 \pm 0.017$   $\chi^2/\text{NDF}$ : 64.7/42



# reg\_asym\_ds\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $0.007 \pm 0.027$   $\chi^2/\text{NDF}$ : 15.3/16

Left Out:  $0.086 \pm 0.016$   $\chi^2/\text{NDF}$ : 27.8/23

Right Out:  $0.110 \pm 0.029$   $\chi^2/\text{NDF}$ : 8.0/19

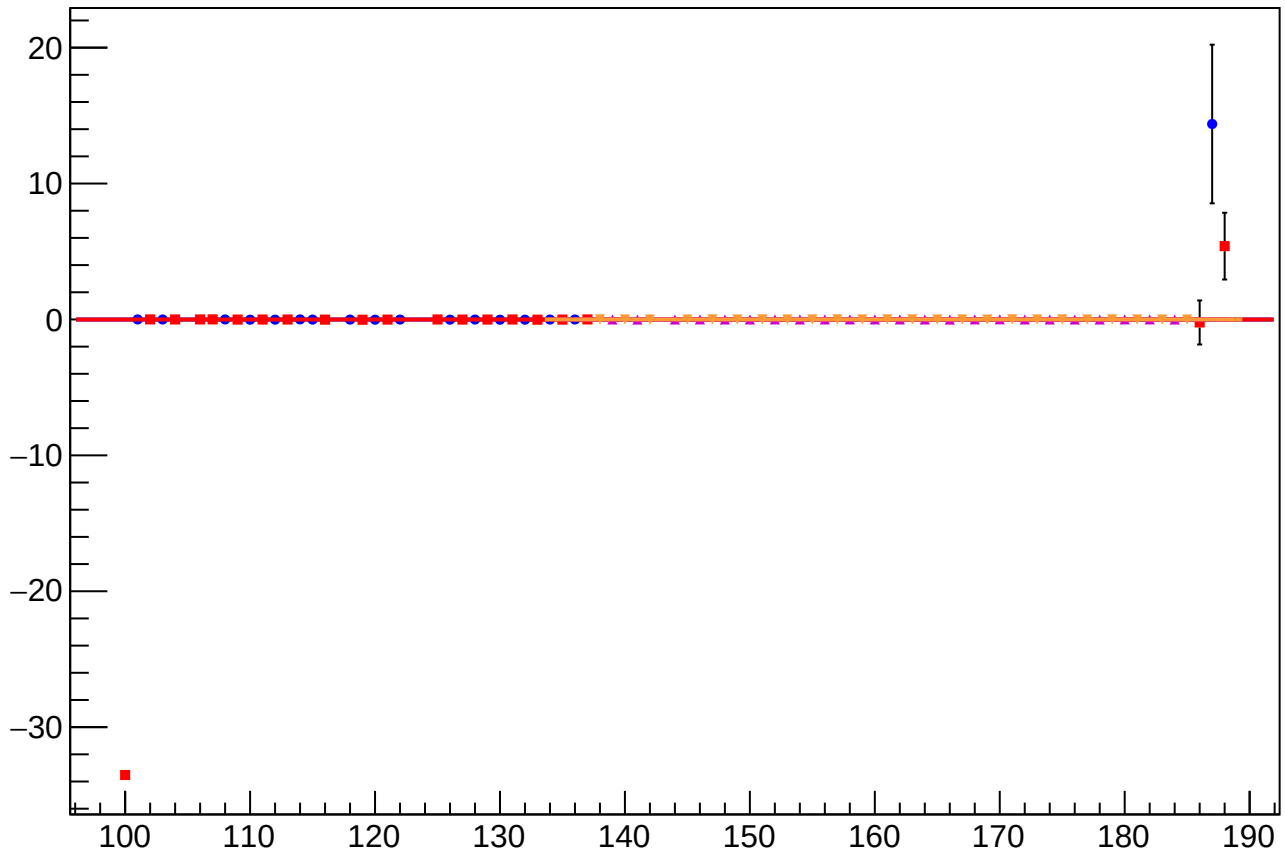
Left In:  $0.071 \pm 0.016$   $\chi^2/\text{NDF}$ : 44.0/22

+ sign  $0.065 \pm 0.014$   $\chi^2/\text{NDF}$ : 49.5/40

All:  $0.073 \pm 0.010$   $\chi^2/\text{NDF}$ : 103.4/83

- sign  $0.081 \pm 0.014$   $\chi^2/\text{NDF}$ : 53.3/42

# reg\_asym\_ds\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.005 \pm 0.001$   $\chi^2/\text{NDF}$ : 28.7/16

Left Out:  $0.000 \pm 0.001$   $\chi^2/\text{NDF}$ : 23.9/23

Right Out:  $-0.006 \pm 0.001$   $\chi^2/\text{NDF}$ : 26513.8/19

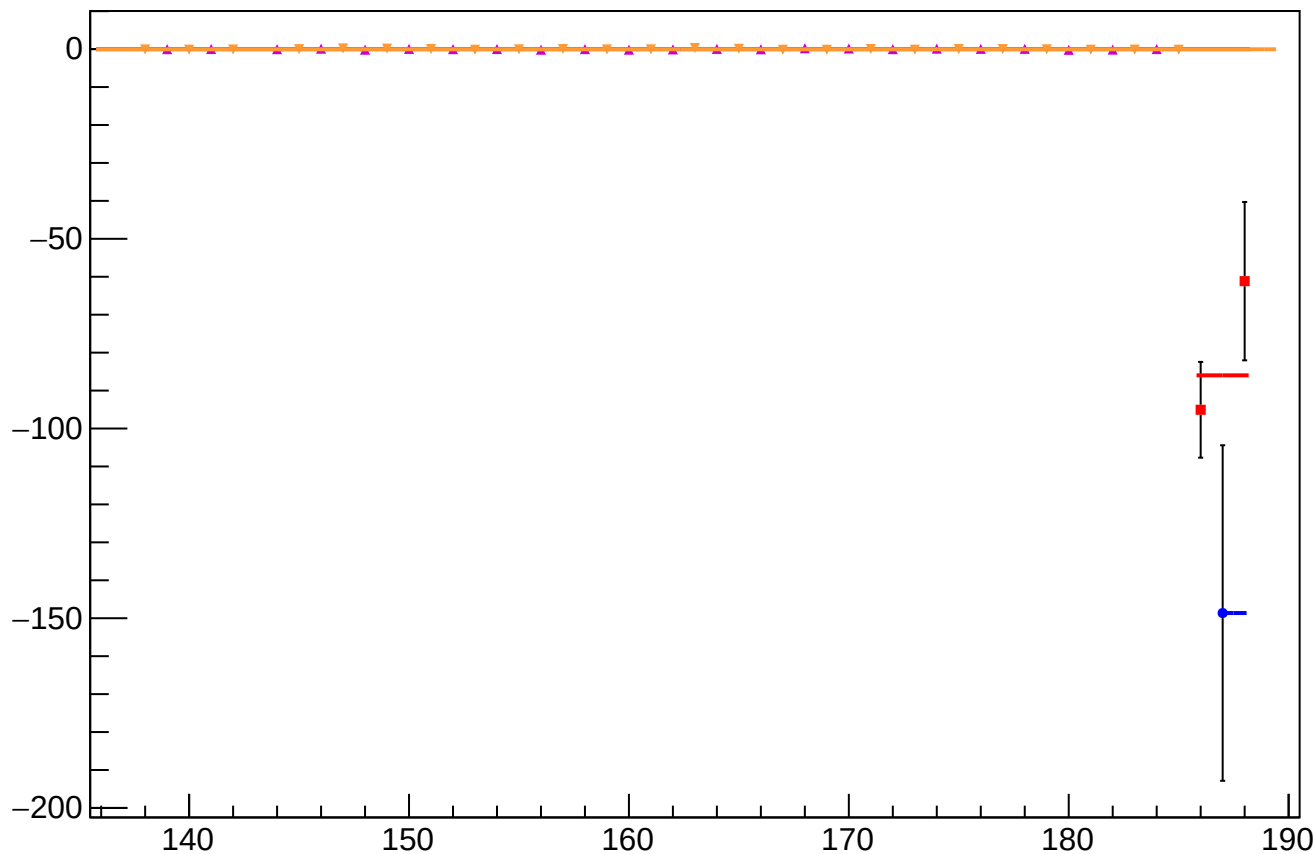
Left In:  $0.000 \pm 0.001$   $\chi^2/\text{NDF}$ : 22.4/22

+ sign  $-0.001 \pm 0.001$   $\chi^2/\text{NDF}$ : 65.6/40

All:  $-0.001 \pm 0.000$   $\chi^2/\text{NDF}$ : 26615.7/83

- sign  $-0.001 \pm 0.001$   $\chi^2/\text{NDF}$ : 26550.0/42

# reg\_asym\_ds\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-148.630 \pm 44.216$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-0.052 \pm 0.018$   $\chi^2/\text{NDF}$ : 37.3/23

Right Out:  $-85.982 \pm 10.799$   $\chi^2/\text{NDF}$ : 1.9/1

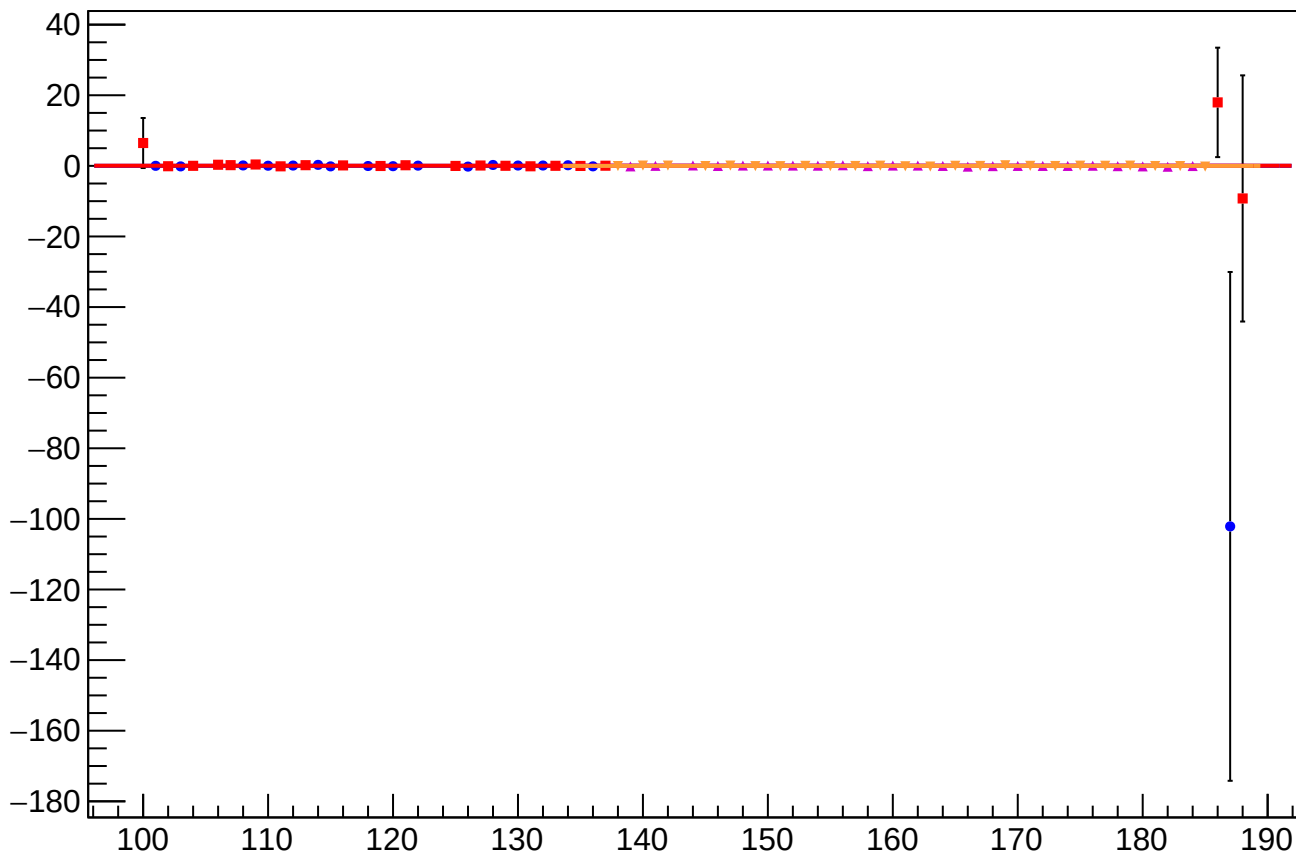
Left In:  $-0.010 \pm 0.018$   $\chi^2/\text{NDF}$ : 33.3/22

+ sign  $-0.052 \pm 0.018$   $\chi^2/\text{NDF}$ : 48.6/24

All:  $-0.031 \pm 0.013$   $\chi^2/\text{NDF}$ : 149.9/49

- sign  $-0.010 \pm 0.018$   $\chi^2/\text{NDF}$ : 98.6/24

# reg\_asym\_ds\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $0.010 \pm 0.023$   $\chi^2/\text{NDF}$ : 27.4/16

Left Out:  $-0.010 \pm 0.014$   $\chi^2/\text{NDF}$ : 29.5/23

Right Out:  $0.040 \pm 0.025$   $\chi^2/\text{NDF}$ : 29.3/19

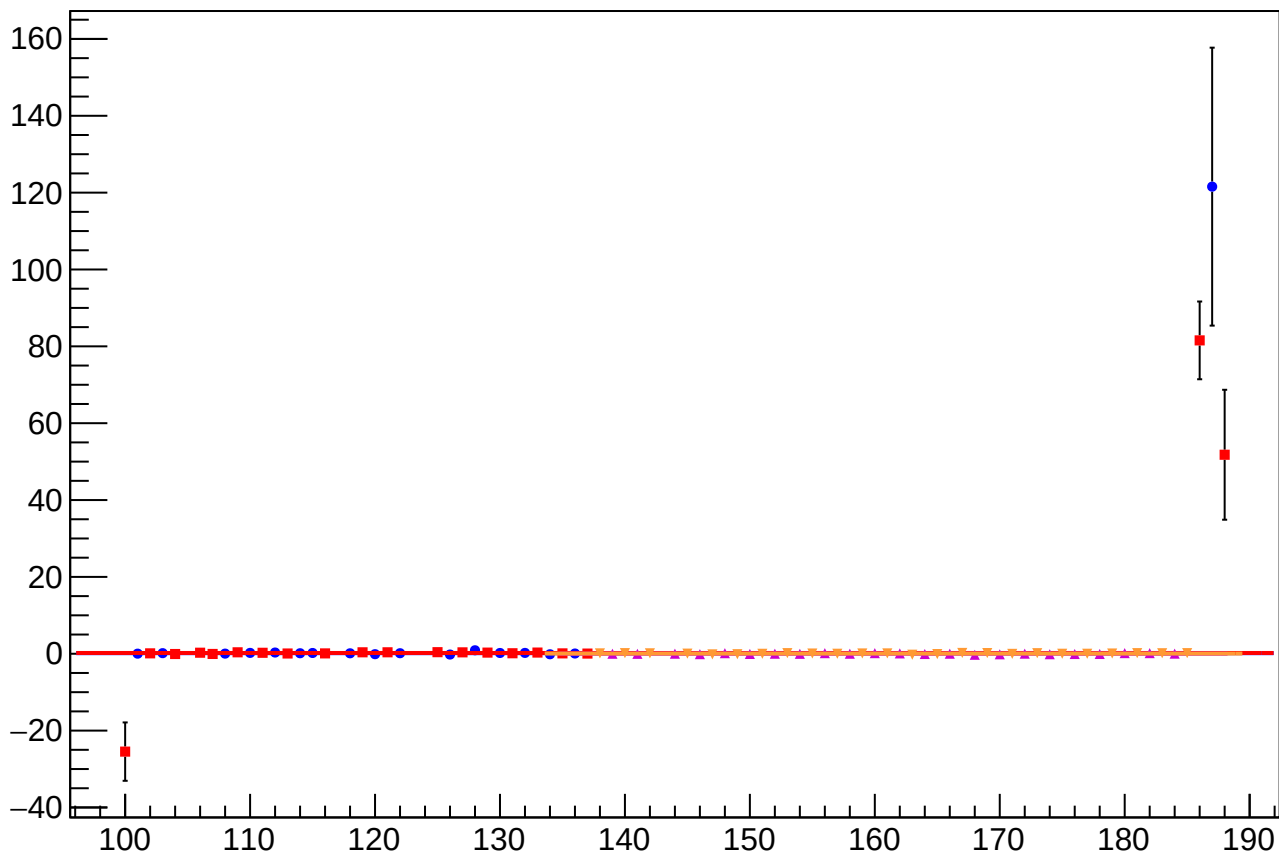
Left In:  $0.004 \pm 0.014$   $\chi^2/\text{NDF}$ : 50.3/22

+ sign  $-0.005 \pm 0.012$   $\chi^2/\text{NDF}$ : 57.5/40

All:  $0.004 \pm 0.009$   $\chi^2/\text{NDF}$ : 139.8/83

- sign  $0.013 \pm 0.012$   $\chi^2/\text{NDF}$ : 81.3/42

# reg\_asym\_ds\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: 0.152 $\pm$ 0.043  $\chi^2$ /NDF: 40.0/16

Left Out: 0.048 $\pm$ 0.018  $\chi^2$ /NDF: 35.4/23

Right Out: 0.202 $\pm$ 0.045  $\chi^2$ /NDF: 96.8/19

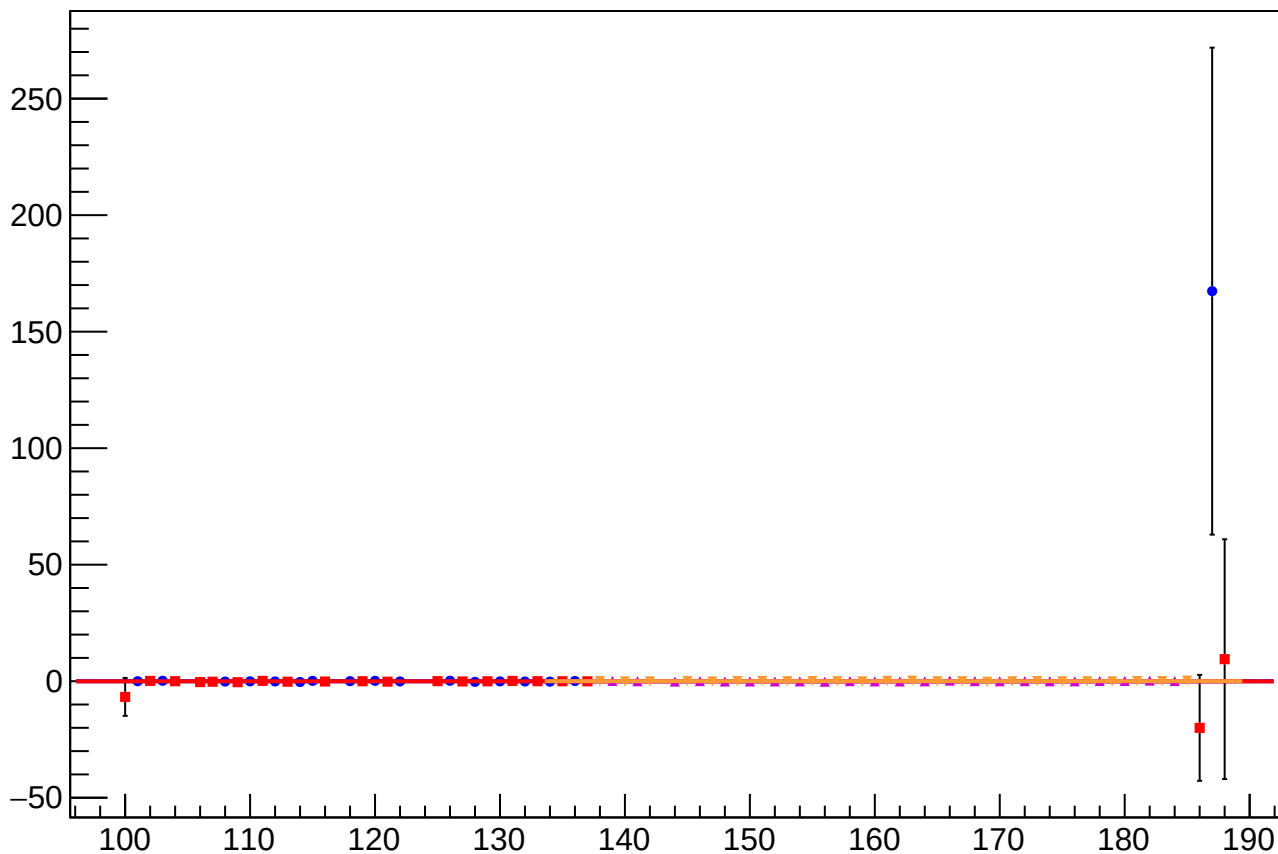
Left In: 0.021 $\pm$ 0.018  $\chi^2$ /NDF: 34.0/22

+ sign 0.063 $\pm$ 0.017  $\chi^2$ /NDF: 80.4/40

All: 0.055 $\pm$ 0.012  $\chi^2$ /NDF: 225.8/83

- sign 0.046 $\pm$ 0.017  $\chi^2$ /NDF: 144.8/42

# reg\_asym\_ds\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-0.014 \pm 0.027$   $\chi^2/\text{NDF}$ : 27.7/16

Left Out:  $0.021 \pm 0.016$   $\chi^2/\text{NDF}$ : 33.2/23

Right Out:  $-0.050 \pm 0.029$   $\chi^2/\text{NDF}$ : 26.6/19

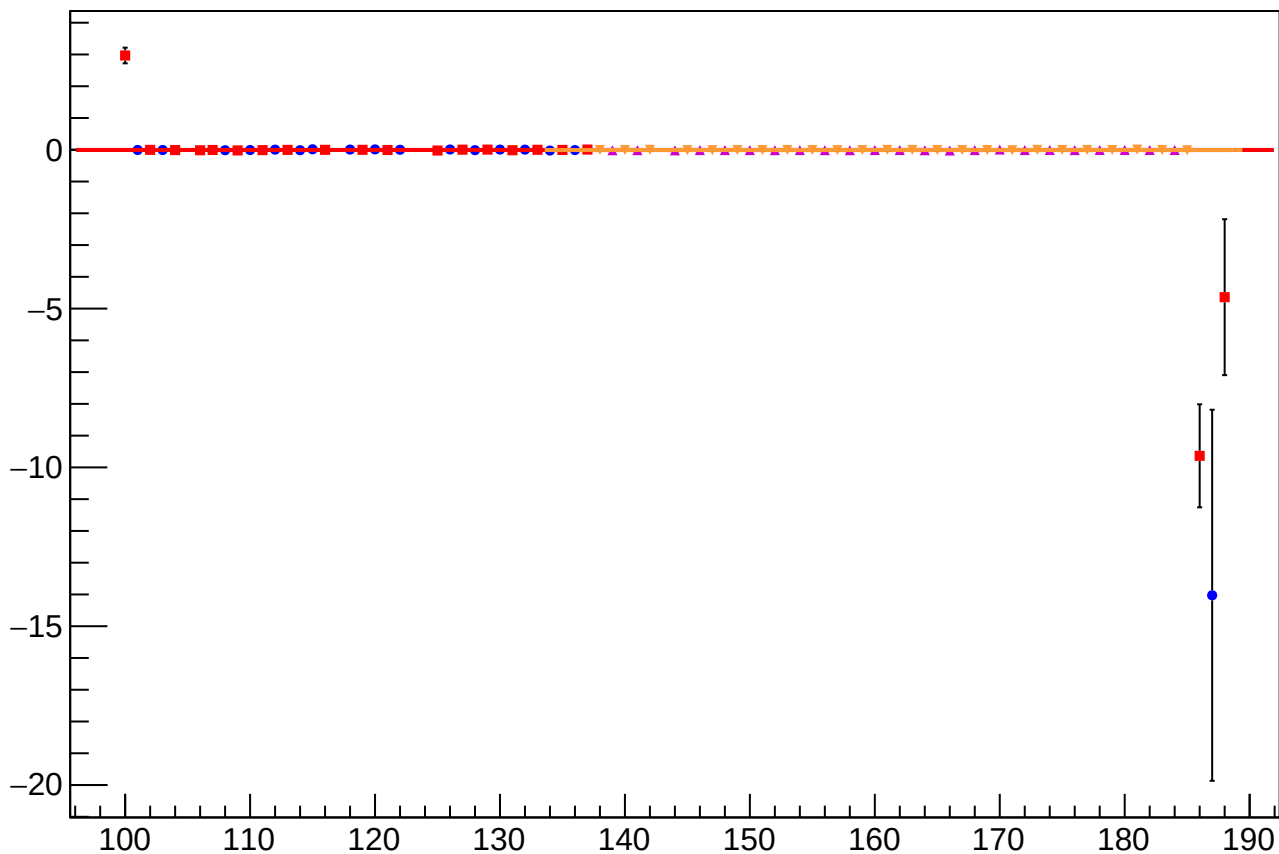
Left In:  $0.007 \pm 0.016$   $\chi^2/\text{NDF}$ : 50.7/22

+ sign  $0.012 \pm 0.014$   $\chi^2/\text{NDF}$ : 62.1/40

All:  $0.003 \pm 0.010$   $\chi^2/\text{NDF}$ : 143.2/83

- sign  $-0.007 \pm 0.014$   $\chi^2/\text{NDF}$ : 80.2/42

# reg\_asym\_ds\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.006 \pm 0.001$   $\chi^2/\text{NDF}$ : 34.8/16

Left Out:  $-0.008 \pm 0.001$   $\chi^2/\text{NDF}$ : 31.9/23

Right Out:  $-0.006 \pm 0.001$   $\chi^2/\text{NDF}$ : 204.7/19

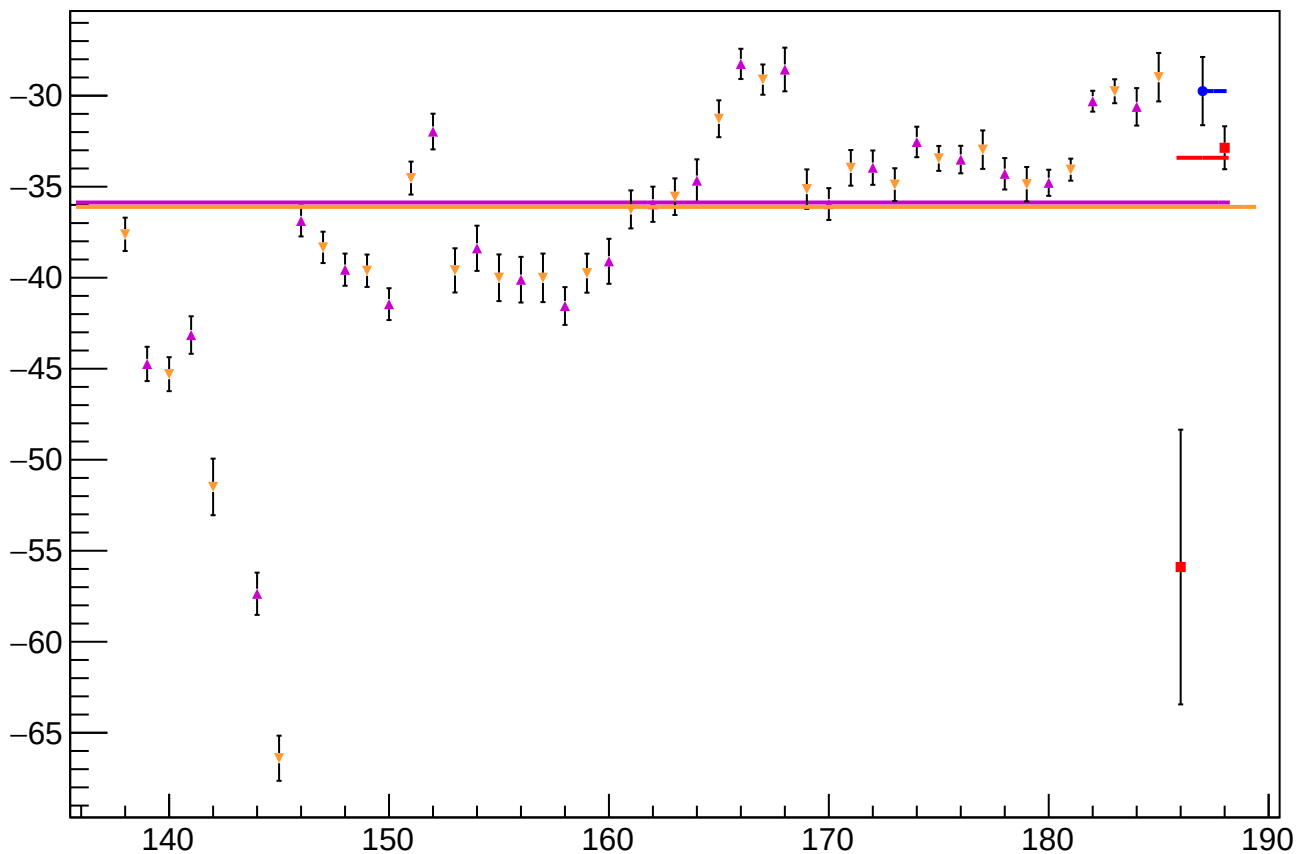
Left In:  $-0.009 \pm 0.001$   $\chi^2/\text{NDF}$ : 39.2/22

+ sign  $-0.008 \pm 0.001$   $\chi^2/\text{NDF}$ : 68.5/40

All:  $-0.008 \pm 0.000$   $\chi^2/\text{NDF}$ : 315.5/83

- sign  $-0.008 \pm 0.001$   $\chi^2/\text{NDF}$ : 246.7/42

# reg\_asym\_left\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $-29.748 \pm 1.875$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-36.110 \pm 0.192$   $\chi^2/\text{NDF}$ : 1118.4/23

Right Out:  $-33.411 \pm 1.166$   $\chi^2/\text{NDF}$ : 9.1/1

Left In:  $-35.869 \pm 0.191$   $\chi^2/\text{NDF}$ : 887.1/22

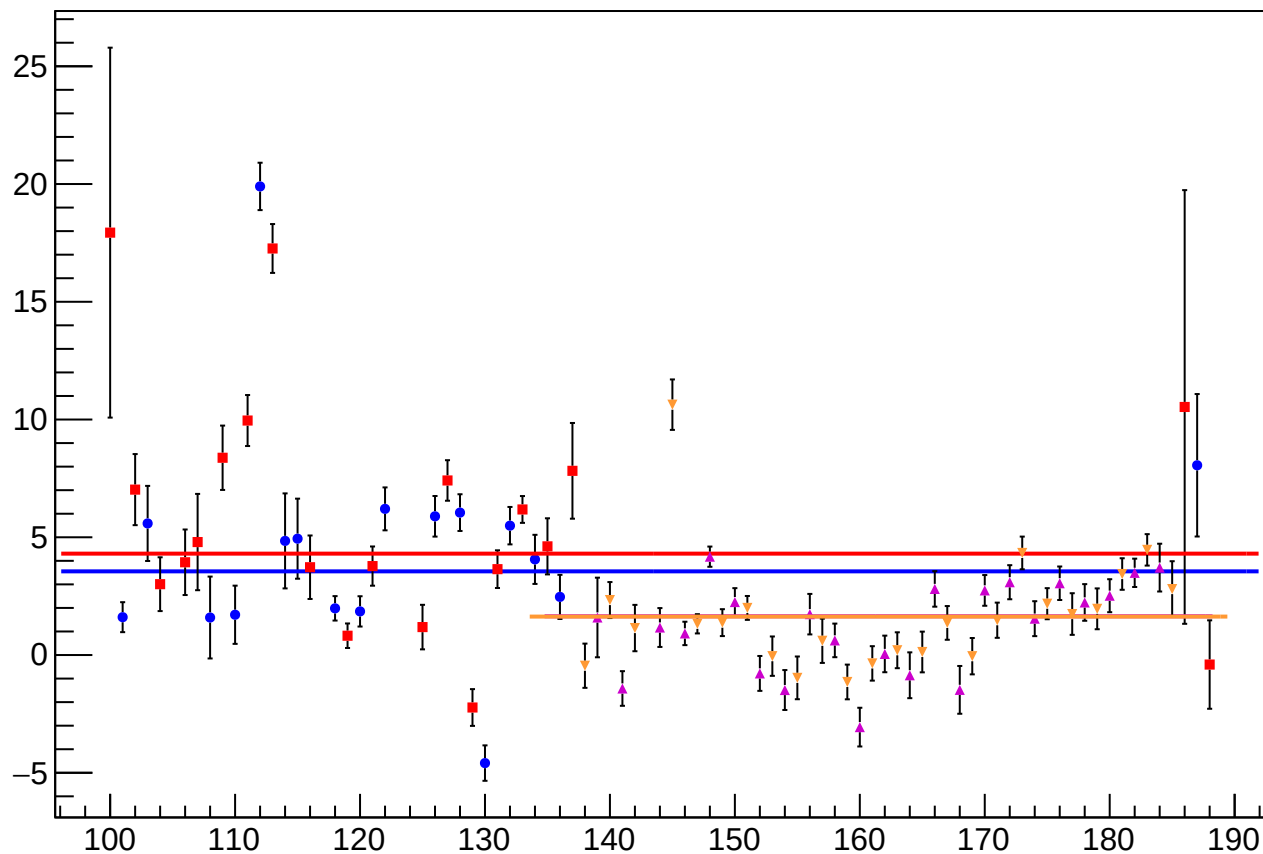
+ sign  $-36.044 \pm 0.191$   $\chi^2/\text{NDF}$ : 1129.8/24

All:  $-35.923 \pm 0.134$   $\chi^2/\text{NDF}$ : 2031.1/49

- sign  $-35.805 \pm 0.188$   $\chi^2/\text{NDF}$ : 900.5/24



# reg\_asym\_left\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $3.553 \pm 0.217$   $\chi^2/\text{NDF}$ : 448.8/16

Left Out:  $1.632 \pm 0.148$   $\chi^2/\text{NDF}$ : 166.7/23

Right Out:  $4.305 \pm 0.224$   $\chi^2/\text{NDF}$ : 360.7/19

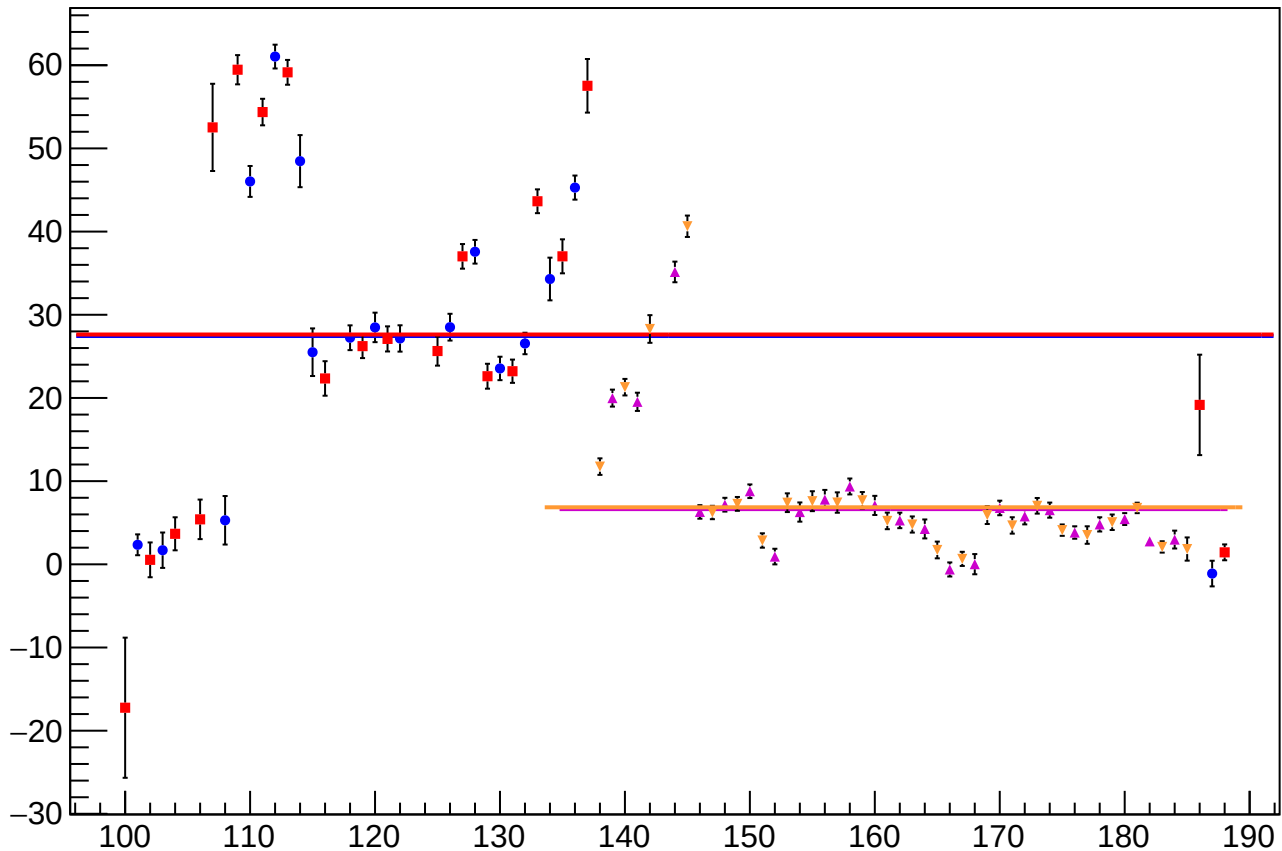
Left In:  $1.646 \pm 0.149$   $\chi^2/\text{NDF}$ : 164.1/22

+ sign  $2.241 \pm 0.122$   $\chi^2/\text{NDF}$ : 669.1/40

All:  $2.351 \pm 0.087$   $\chi^2/\text{NDF}$ : 1293.3/83

- sign  $2.464 \pm 0.124$   $\chi^2/\text{NDF}$ : 622.6/42

# reg\_asym\_left\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $27.446 \pm 0.402$   $\chi^2/\text{NDF}$ : 1863.5/16

Left Out:  $6.855 \pm 0.191$   $\chi^2/\text{NDF}$ : 1298.7/23

Right Out:  $27.627 \pm 0.386$   $\chi^2/\text{NDF}$ : 2565.8/19

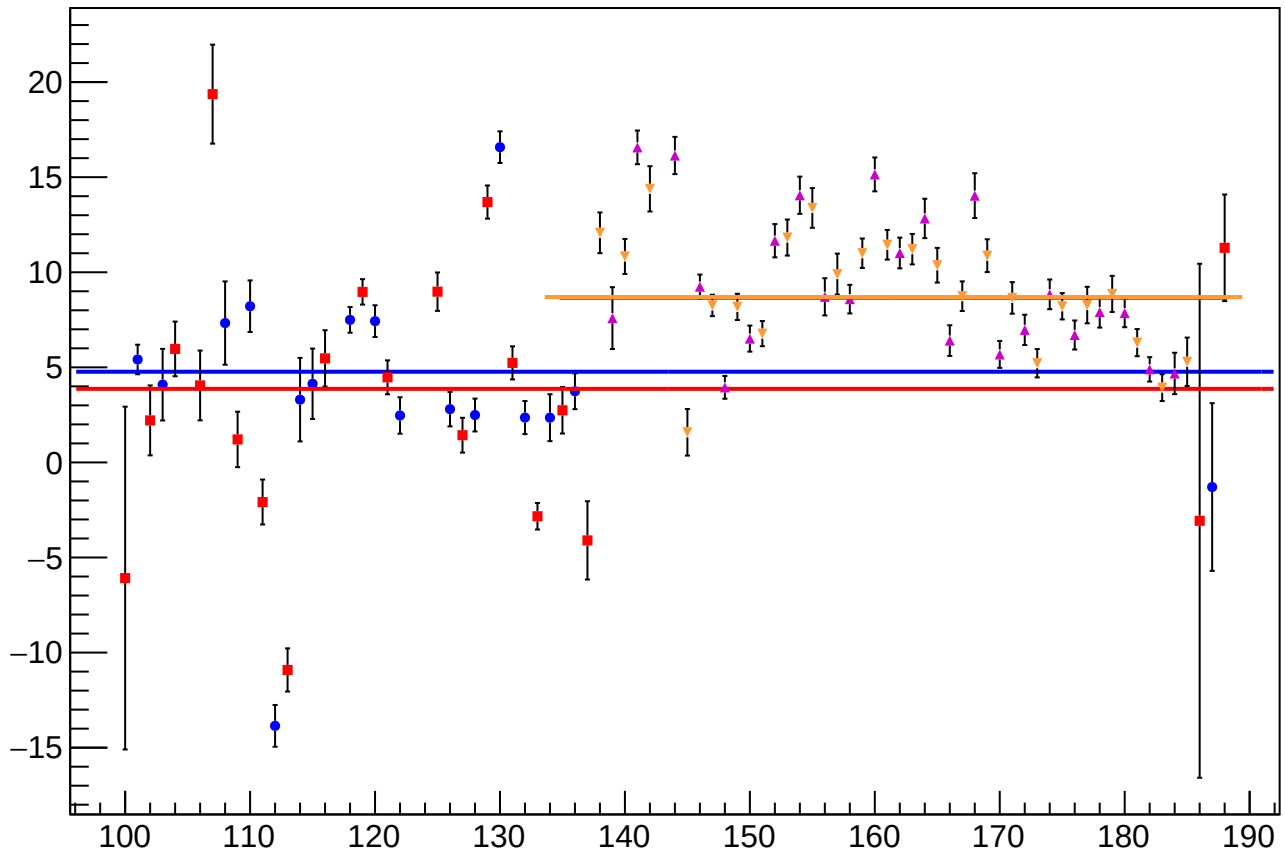
Left In:  $6.639 \pm 0.190$   $\chi^2/\text{NDF}$ : 1077.2/22

+ sign  $10.654 \pm 0.173$   $\chi^2/\text{NDF}$ : 5298.4/40

All:  $10.692 \pm 0.121$   $\chi^2/\text{NDF}$ : 11324.7/83

- sign  $10.728 \pm 0.170$   $\chi^2/\text{NDF}$ : 6026.2/42

# reg\_asym\_left\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $4.769 \pm 0.251$   $\chi^2/\text{NDF}$ : 555.8/16

Left Out:  $8.697 \pm 0.169$   $\chi^2/\text{NDF}$ : 241.1/23

Right Out:  $3.869 \pm 0.258$   $\chi^2/\text{NDF}$ : 574.9/19

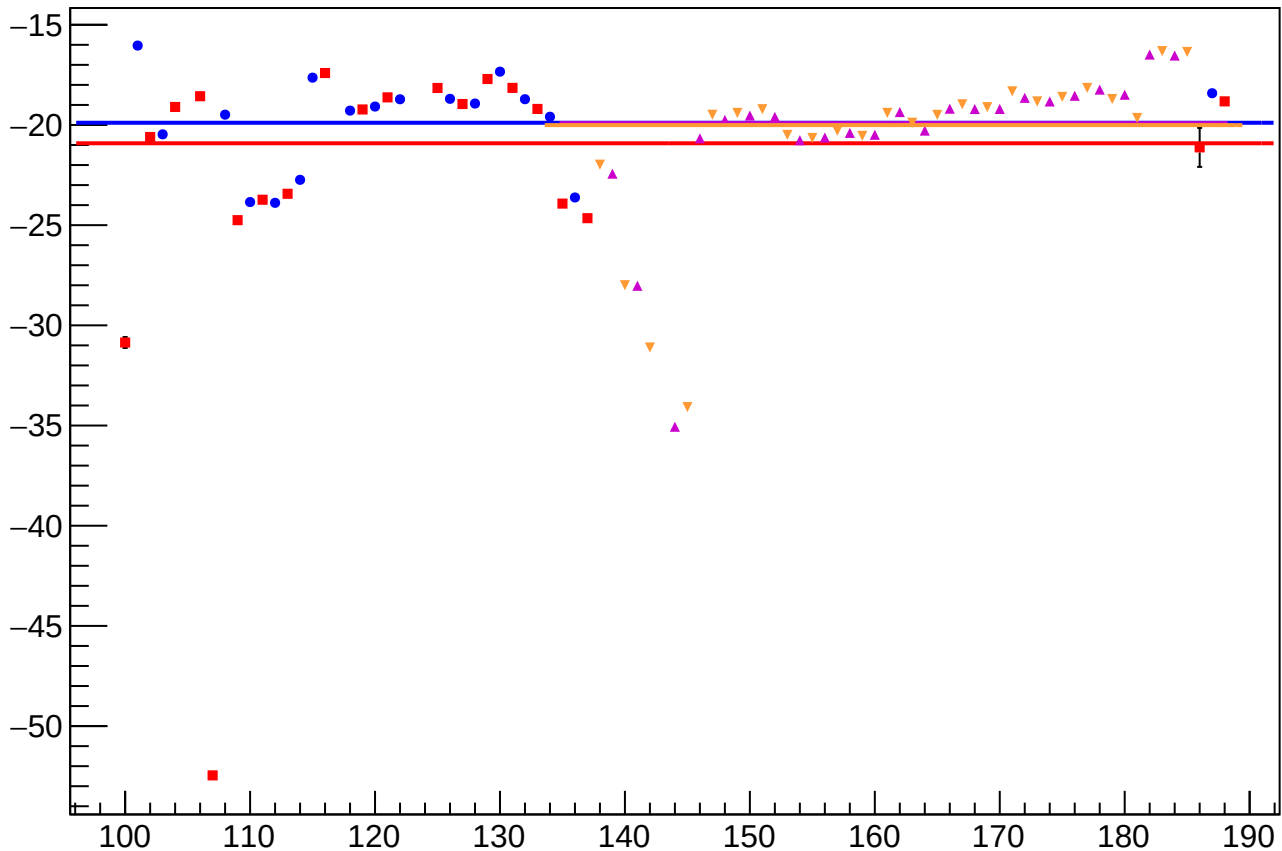
Left In:  $8.659 \pm 0.170$   $\chi^2/\text{NDF}$ : 438.0/22

+ sign  $7.471 \pm 0.140$   $\chi^2/\text{NDF}$ : 965.6/40

All:  $7.342 \pm 0.100$   $\chi^2/\text{NDF}$ : 2221.2/83

- sign  $7.210 \pm 0.142$   $\chi^2/\text{NDF}$ : 1253.8/42

# reg\_asym\_left\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-19.889 \pm 0.016$   $\chi^2/\text{NDF}$ : 26109.0/16

Left Out:  $-20.007 \pm 0.008$   $\chi^2/\text{NDF}$ : 171647.2/23

Right Out:  $-20.914 \pm 0.016$   $\chi^2/\text{NDF}$ : 94279.5/19

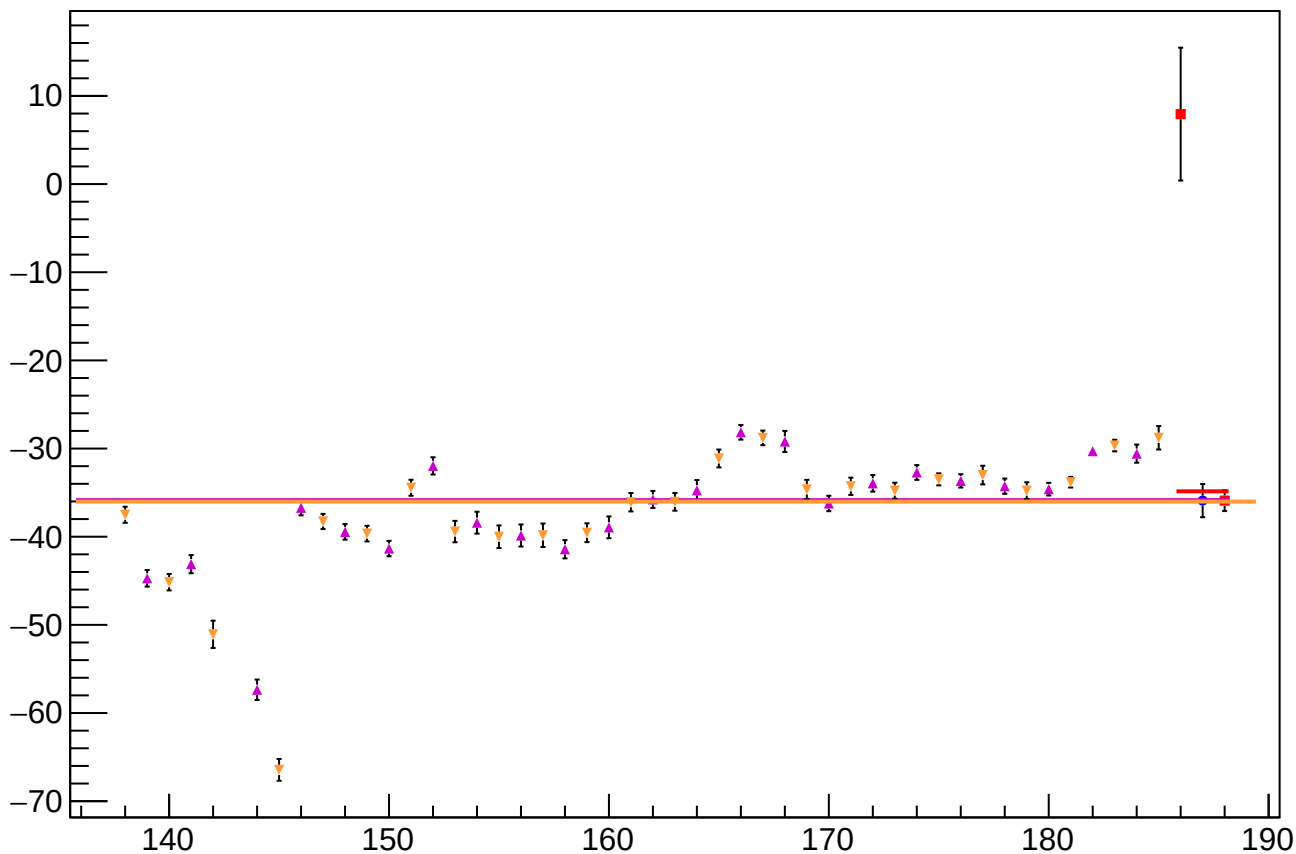
Left In:  $-19.912 \pm 0.008$   $\chi^2/\text{NDF}$ : 145487.3/22

+ sign  $-19.983 \pm 0.007$   $\chi^2/\text{NDF}$ : 197801.6/40

All:  $-20.048 \pm 0.005$   $\chi^2/\text{NDF}$ : 441029.4/83

- sign  $-20.113 \pm 0.007$   $\chi^2/\text{NDF}$ : 243056.1/42

# reg\_asym\_left\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-35.906 \pm 1.881$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-36.019 \pm 0.192$   $\chi^2/\text{NDF}: 1125.4/23$

Right Out:  $-34.852 \pm 1.169$   $\chi^2/\text{NDF}: 33.0/1$

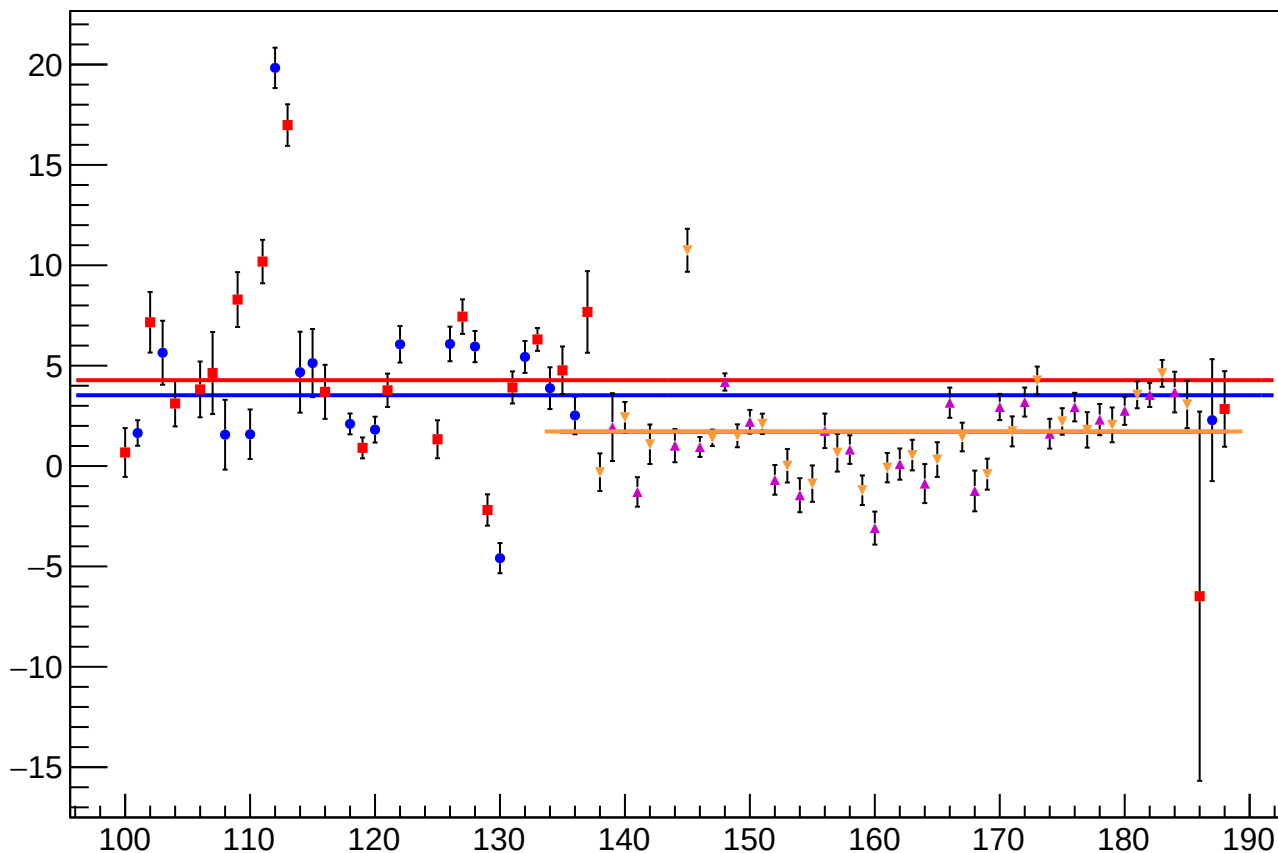
Left In:  $-35.856 \pm 0.191$   $\chi^2/\text{NDF}: 875.9/22$

+ sign  $-36.018 \pm 0.191$   $\chi^2/\text{NDF}: 1125.4/24$

All:  $-35.922 \pm 0.134$   $\chi^2/\text{NDF}: 2035.5/49$

- sign  $-35.830 \pm 0.188$   $\chi^2/\text{NDF}: 909.6/24$

# reg\_asym\_left\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $3.526 \pm 0.217$   $\chi^2/\text{NDF}: 443.4/16$

Left Out:  $1.721 \pm 0.148$   $\chi^2/\text{NDF}: 168.3/23$

Right Out:  $4.277 \pm 0.220$   $\chi^2/\text{NDF}: 354.8/19$

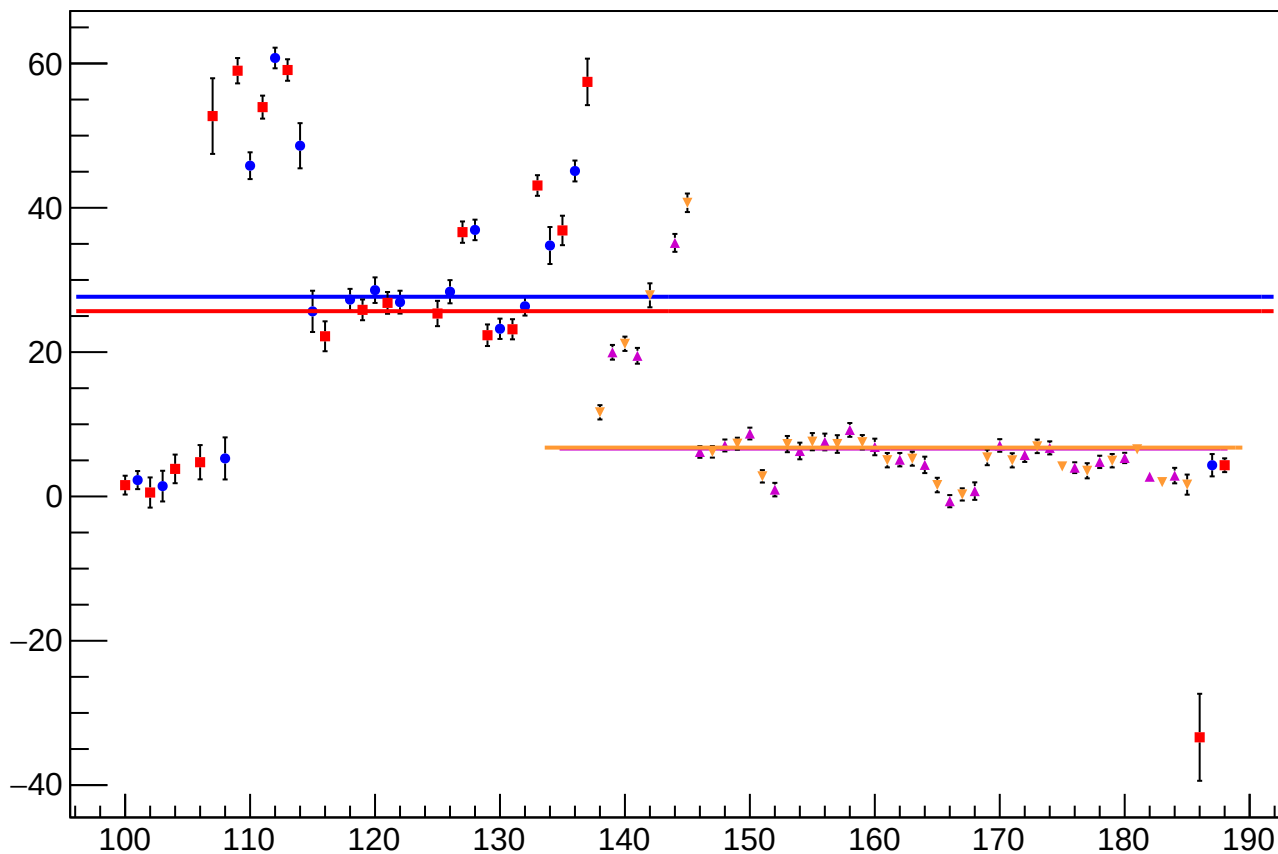
Left In:  $1.712 \pm 0.149$   $\chi^2/\text{NDF}: 164.1/22$

+ sign  $2.293 \pm 0.122$   $\chi^2/\text{NDF}: 659.1/40$

All:  $2.405 \pm 0.087$   $\chi^2/\text{NDF}: 1272.8/83$

- sign  $2.519 \pm 0.123$   $\chi^2/\text{NDF}: 612.0/42$

# reg\_asym\_left\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $27.673 \pm 0.402$   $\chi^2/\text{NDF}$ : 1733.2/16

Left Out:  $6.767 \pm 0.191$   $\chi^2/\text{NDF}$ : 1301.2/23

Right Out:  $25.675 \pm 0.370$   $\chi^2/\text{NDF}$ : 2824.7/19

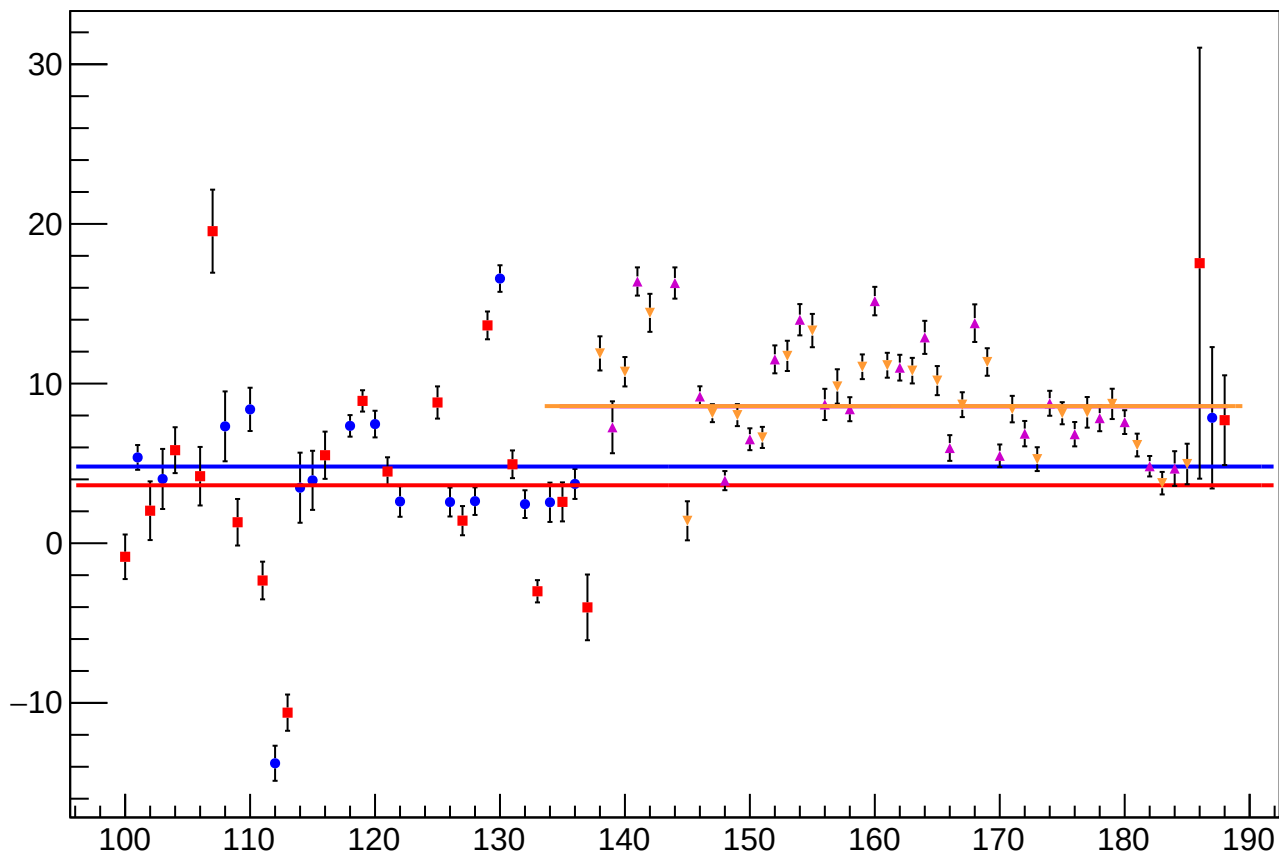
Left In:  $6.635 \pm 0.190$   $\chi^2/\text{NDF}$ : 1070.4/22

+ sign  $10.623 \pm 0.173$   $\chi^2/\text{NDF}$ : 5238.5/40

All:  $10.607 \pm 0.121$   $\chi^2/\text{NDF}$ : 11228.6/83

- sign  $10.592 \pm 0.169$   $\chi^2/\text{NDF}$ : 5990.1/42

# reg\_asym\_left\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $4.804 \pm 0.251$   $\chi^2/\text{NDF}$ : 550.4/16

Left Out:  $8.588 \pm 0.169$   $\chi^2/\text{NDF}$ : 245.6/23

Right Out:  $3.630 \pm 0.253$   $\chi^2/\text{NDF}$ : 576.5/19

Left In:  $8.573 \pm 0.170$   $\chi^2/\text{NDF}$ : 443.4/22

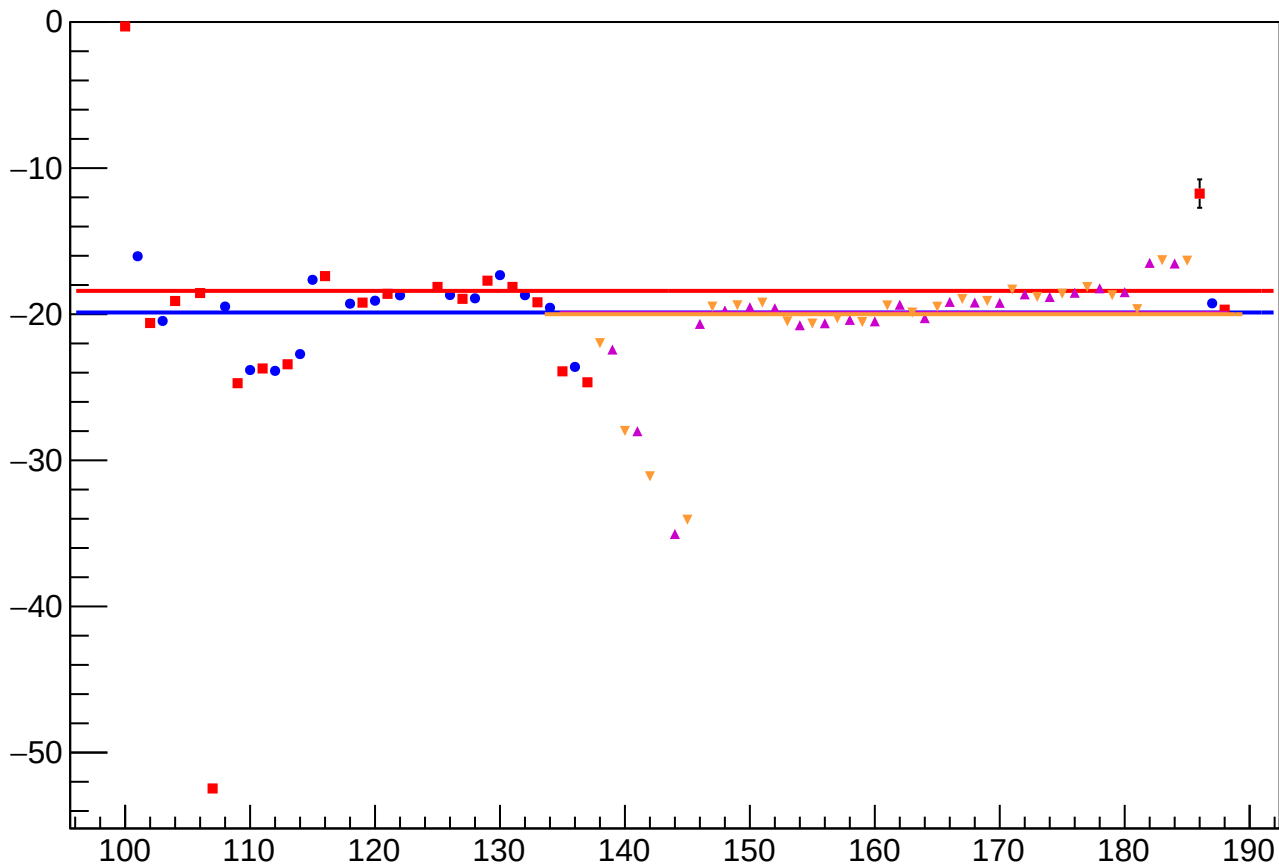
+ sign  $7.407 \pm 0.140$   $\chi^2/\text{NDF}$ : 952.9/40

All:  $7.226 \pm 0.099$   $\chi^2/\text{NDF}$ : 2239.0/83

- sign  $7.043 \pm 0.141$   $\chi^2/\text{NDF}$ : 1282.8/42



# reg\_asym\_left\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $-19.881 \pm 0.016$   $\chi^2/\text{NDF}$ : 26069.8/16

Left Out:  $-19.999 \pm 0.008$   $\chi^2/\text{NDF}$ : 171834.0/23

Right Out:  $-18.402 \pm 0.015$   $\chi^2/\text{NDF}$ : 301374.8/19

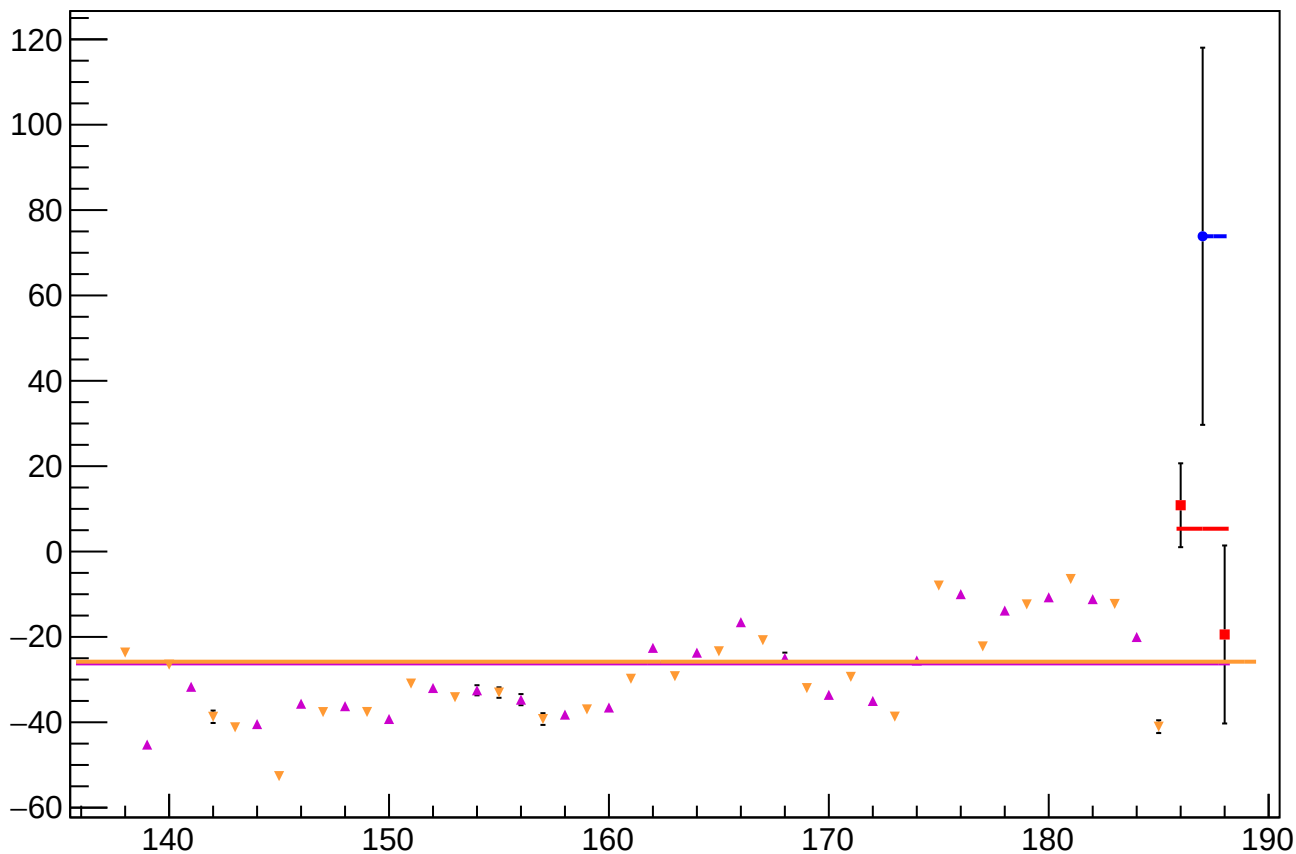
Left In:  $-19.905 \pm 0.008$   $\chi^2/\text{NDF}$ : 145346.7/22

+ sign  $-19.975 \pm 0.007$   $\chi^2/\text{NDF}$ : 197950.0/40

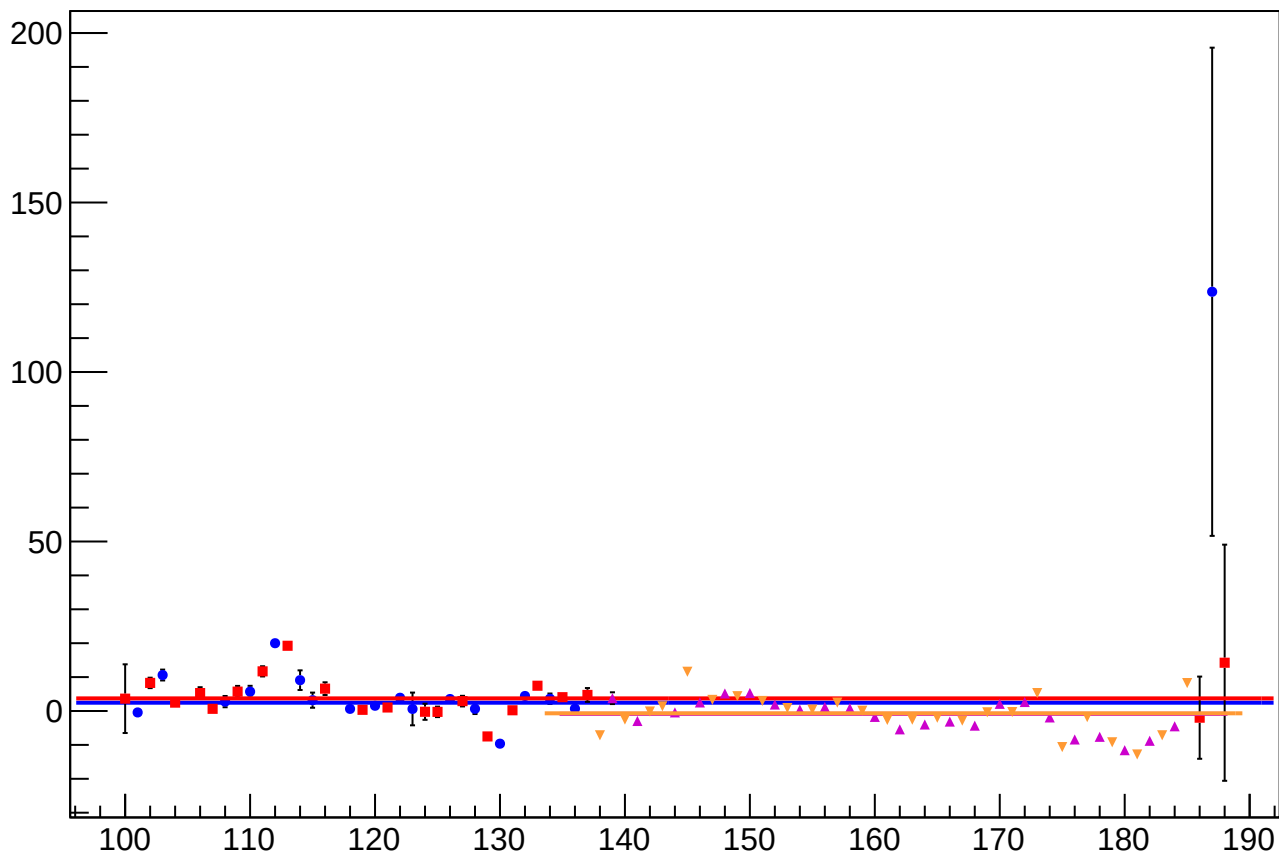
All:  $-19.770 \pm 0.005$   $\chi^2/\text{NDF}$ : 654528.8/83

- sign  $-19.572 \pm 0.007$   $\chi^2/\text{NDF}$ : 454908.8/42

# reg\_asym\_right\_avg\_diff\_bpm1X\_slope vs Slug



# reg\_asym\_right\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $2.446 \pm 0.311$   $\chi^2/\text{NDF}$ : 298.1/17

Left Out:  $-0.681 \pm 0.147$   $\chi^2/\text{NDF}$ : 1314.3/24

Right Out:  $3.722 \pm 0.327$   $\chi^2/\text{NDF}$ : 269.4/20

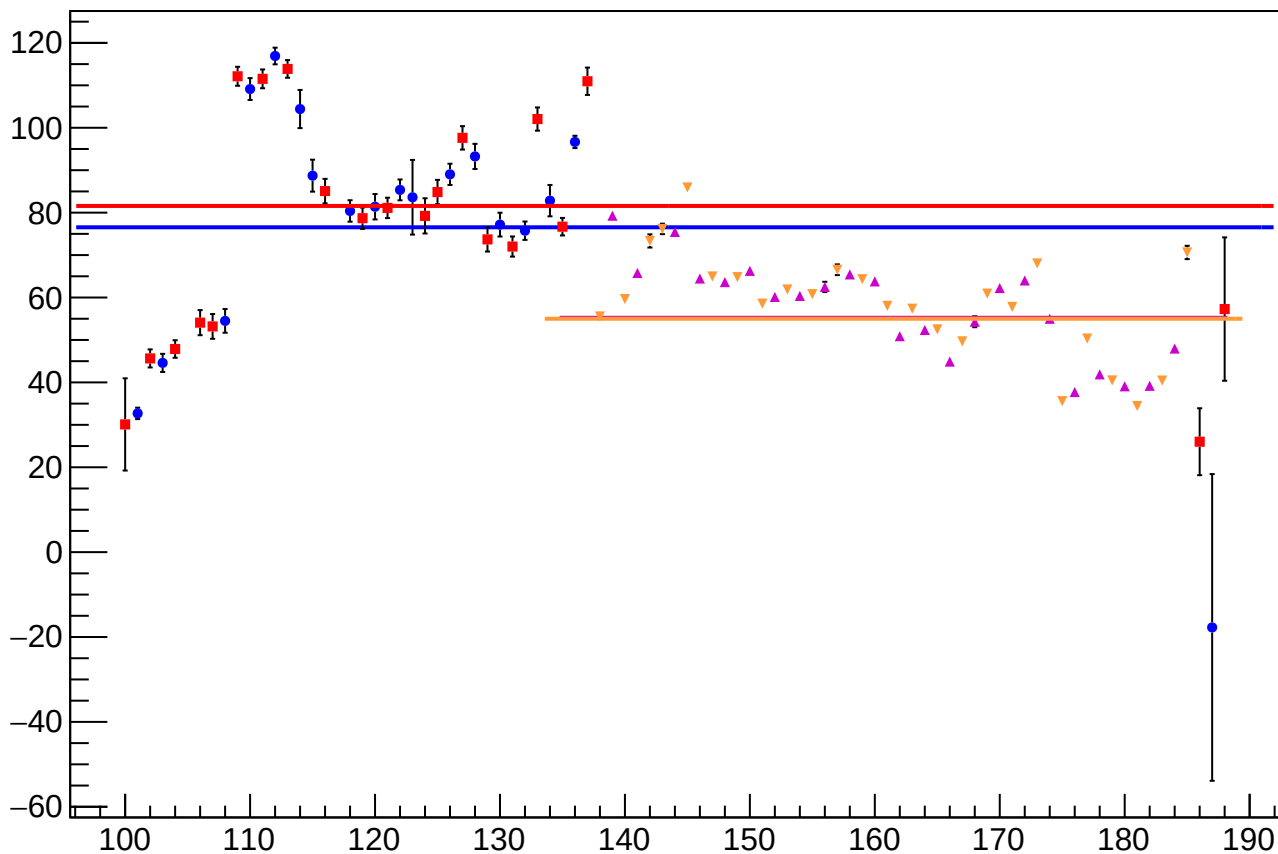
Left In:  $-0.842 \pm 0.150$   $\chi^2/\text{NDF}$ : 1071.6/22

+ sign  $-0.112 \pm 0.133$   $\chi^2/\text{NDF}$ : 1695.1/42

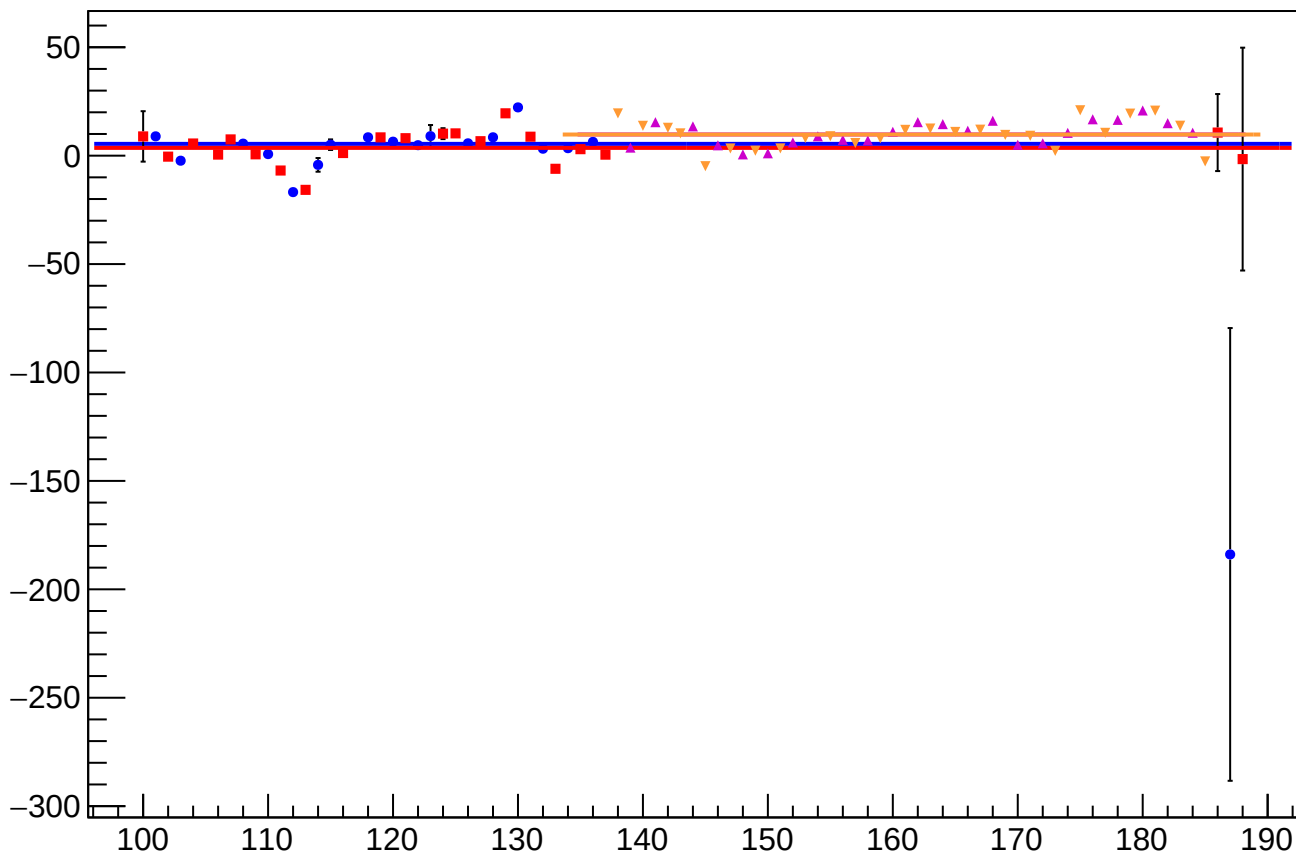
All:  $-0.080 \pm 0.095$   $\chi^2/\text{NDF}$ : 3197.5/86

- sign  $-0.047 \pm 0.136$   $\chi^2/\text{NDF}$ : 1502.3/43

# reg\_asym\_right\_avg\_diff\_bpm4eX\_slope vs Slug



# reg\_asym\_right\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $5.440 \pm 0.357$   $\chi^2/\text{NDF}$ : 390.7/17

Left Out:  $9.750 \pm 0.168$   $\chi^2/\text{NDF}$ : 1449.2/24

Right Out:  $3.588 \pm 0.375$   $\chi^2/\text{NDF}$ : 423.4/20

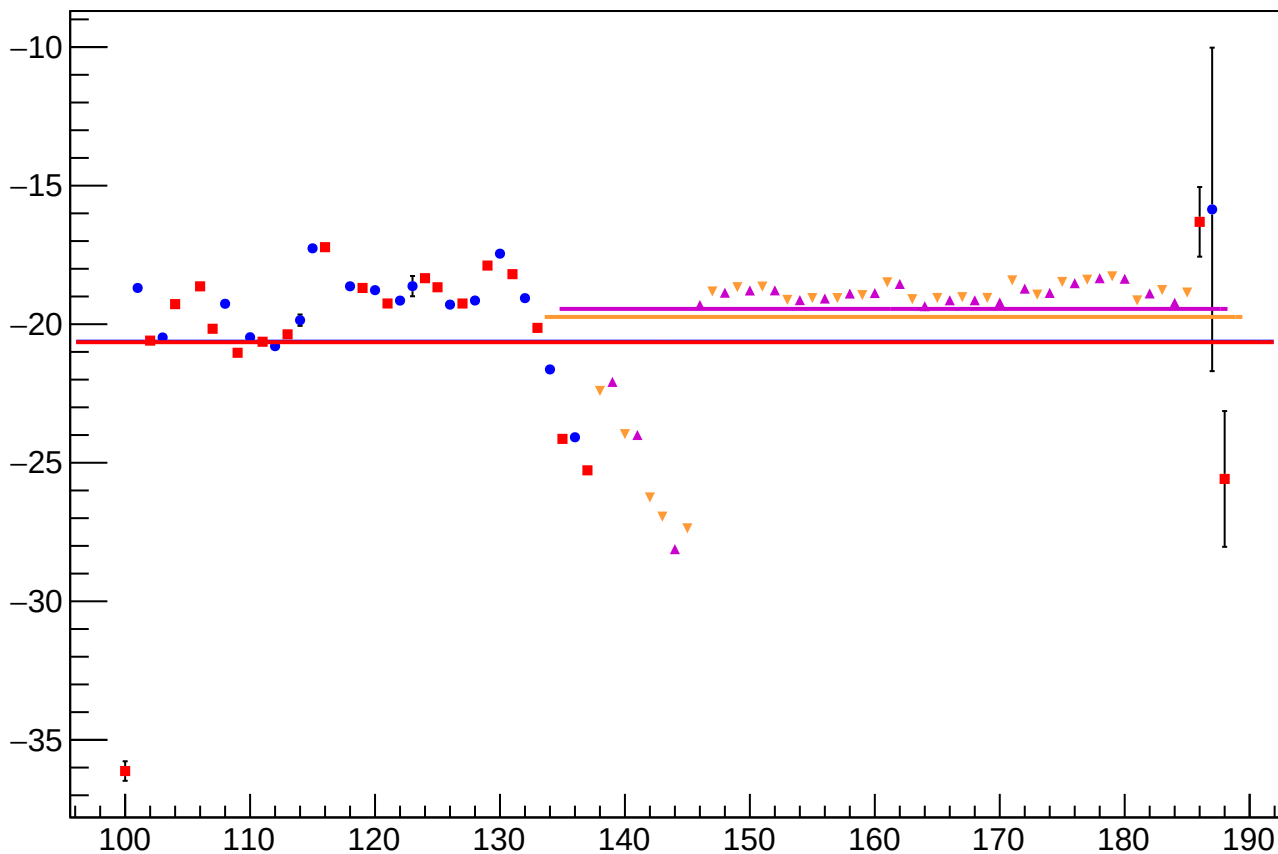
Left In:  $9.775 \pm 0.171$   $\chi^2/\text{NDF}$ : 1165.6/22

+ sign  $8.968 \pm 0.152$   $\chi^2/\text{NDF}$ : 1959.1/42

All:  $8.841 \pm 0.109$   $\chi^2/\text{NDF}$ : 3774.5/86

- sign  $8.708 \pm 0.156$   $\chi^2/\text{NDF}$ : 1814.0/43

# reg\_asym\_right\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-20.630 \pm 0.019$   $\chi^2/\text{NDF}: 12491.2/17$

Left Out:  $-19.738 \pm 0.008$   $\chi^2/\text{NDF}: 88495.2/24$

Right Out:  $-20.649 \pm 0.019$   $\chi^2/\text{NDF}: 13901.7/20$

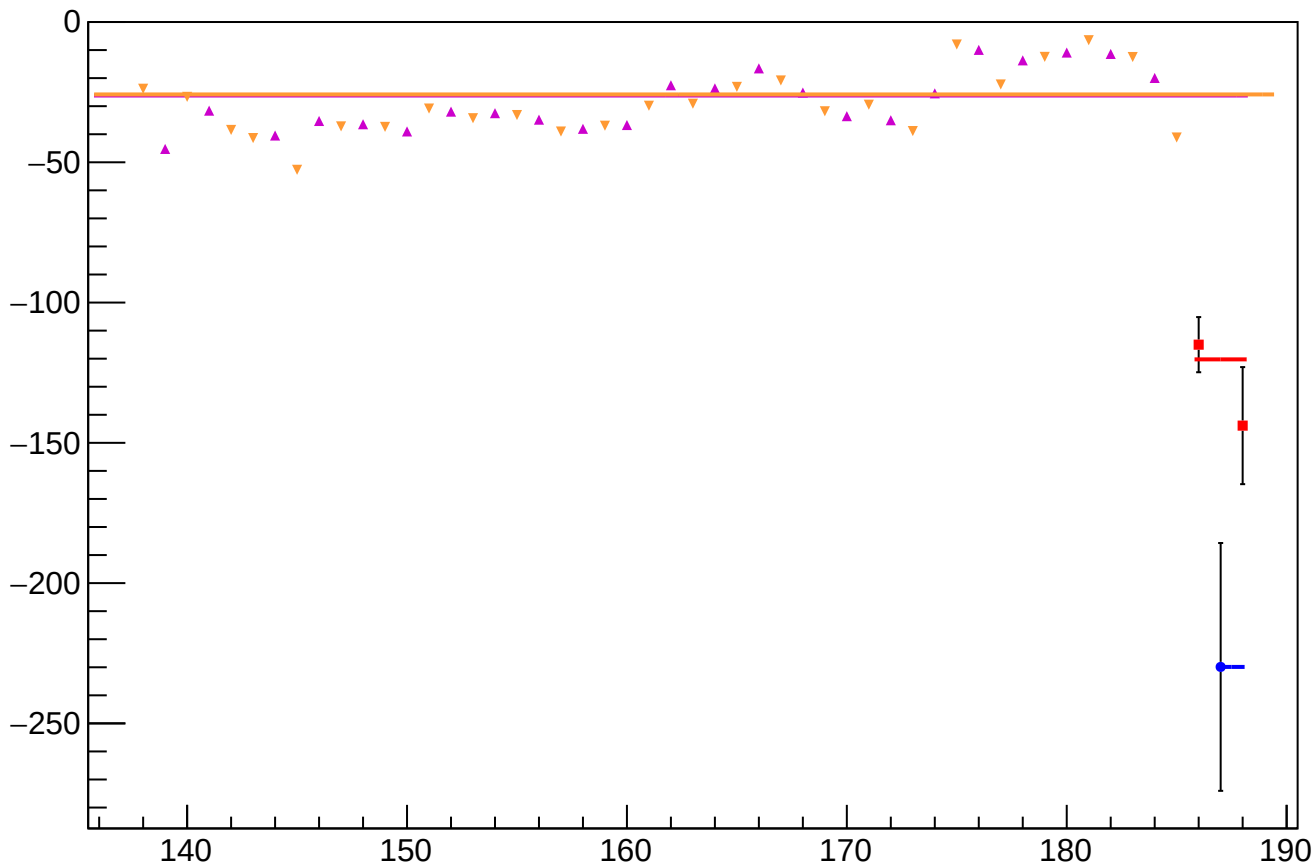
Left In:  $-19.448 \pm 0.008$   $\chi^2/\text{NDF}: 54039.2/22$

+ sign  $-19.867 \pm 0.007$   $\chi^2/\text{NDF}: 102819.7/42$

All:  $-19.743 \pm 0.005$   $\chi^2/\text{NDF}: 174609.9/86$

- sign  $-19.619 \pm 0.007$   $\chi^2/\text{NDF}: 71218.4/43$

# reg\_asym\_right\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-229.874 \pm 44.169$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-25.814 \pm 0.192$   $\chi^2/\text{NDF}$ : 4094.6/24

Right Out:  $-120.250 \pm 8.893$   $\chi^2/\text{NDF}$ : 1.6/1

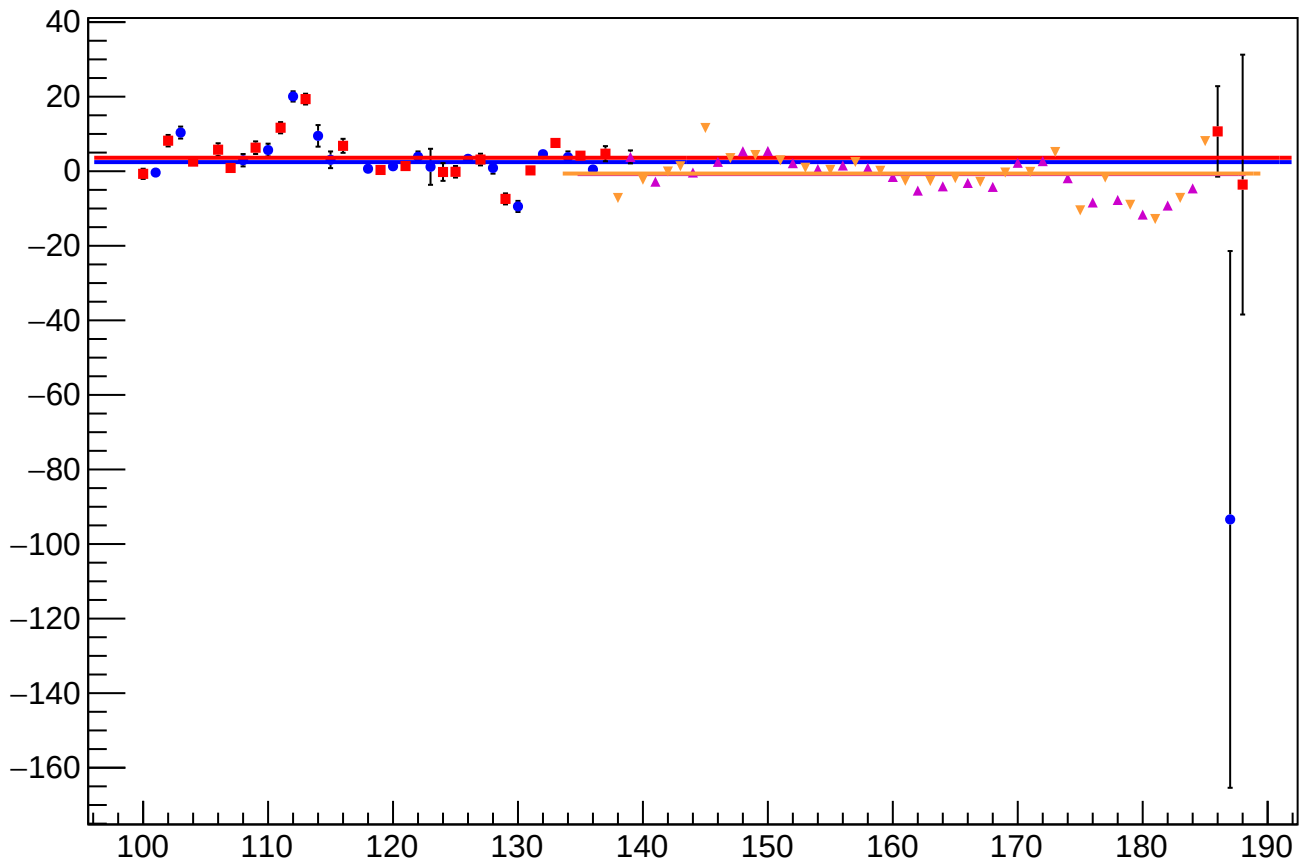
Left In:  $-26.200 \pm 0.194$   $\chi^2/\text{NDF}$ : 3344.6/22

+ sign  $-25.818 \pm 0.192$   $\chi^2/\text{NDF}$ : 4115.9/25

All:  $-26.029 \pm 0.137$   $\chi^2/\text{NDF}$ : 7576.4/50

- sign  $-26.245 \pm 0.194$   $\chi^2/\text{NDF}$ : 3458.0/24

# reg\_asym\_right\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $2.446 \pm 0.311$   $\chi^2/\text{NDF}$ : 295.2/17

Left Out:  $-0.625 \pm 0.147$   $\chi^2/\text{NDF}$ : 1303.5/24

Right Out:  $3.615 \pm 0.318$   $\chi^2/\text{NDF}$ : 279.8/20

Left In:  $-0.773 \pm 0.150$   $\chi^2/\text{NDF}$ : 1111.4/22

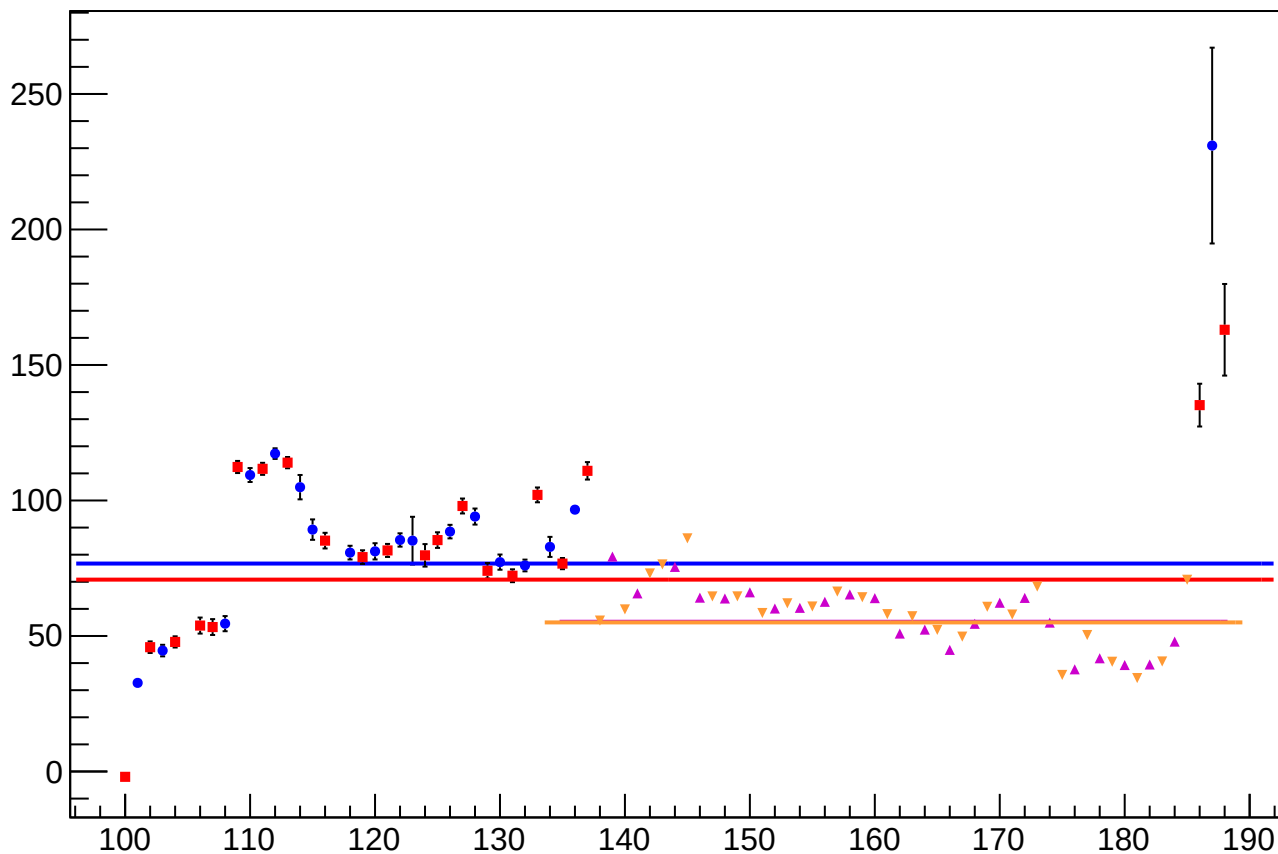
+ sign  $-0.067 \pm 0.133$   $\chi^2/\text{NDF}$ : 1678.3/42

All:  $-0.021 \pm 0.095$   $\chi^2/\text{NDF}$ : 3225.4/86

- sign  $0.027 \pm 0.136$   $\chi^2/\text{NDF}$ : 1546.8/43



# reg\_asym\_right\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: 76.726 $\pm$ 0.574  $\chi^2$ /NDF: 2283.3/17

Left Out: 55.008 $\pm$ 0.192  $\chi^2$ /NDF: 4502.1/24

Right Out: 70.796 $\pm$ 0.548  $\chi^2$ /NDF: 4488.0/20

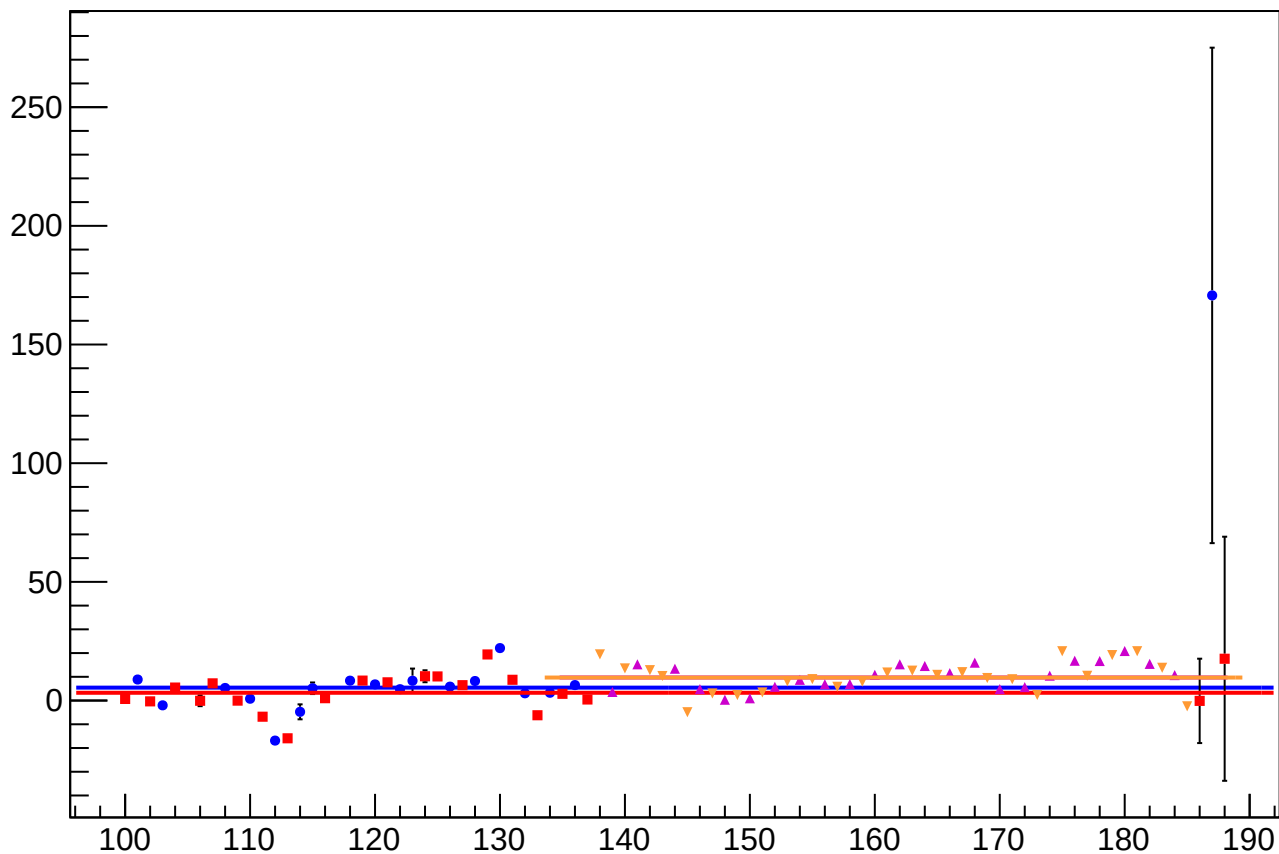
Left In: 55.252 $\pm$ 0.193  $\chi^2$ /NDF: 3786.2/22

+ sign 57.196 $\pm$ 0.182  $\chi^2$ /NDF: 8074.8/42

All: 57.080 $\pm$ 0.129  $\chi^2$ /NDF: 17065.3/86

- sign 56.965 $\pm$ 0.182  $\chi^2$ /NDF: 8989.8/43

# reg\_asym\_right\_dd\_diff\_bpm4eY\_slope vs Slug



Right In: 5.441 $\pm$ 0.357  $\chi^2$ /NDF: 388.4/17

Left Out: 9.691 $\pm$ 0.168  $\chi^2$ /NDF:1440.3/24

Right Out: 3.274 $\pm$ 0.365  $\chi^2$ /NDF: 425.9/20

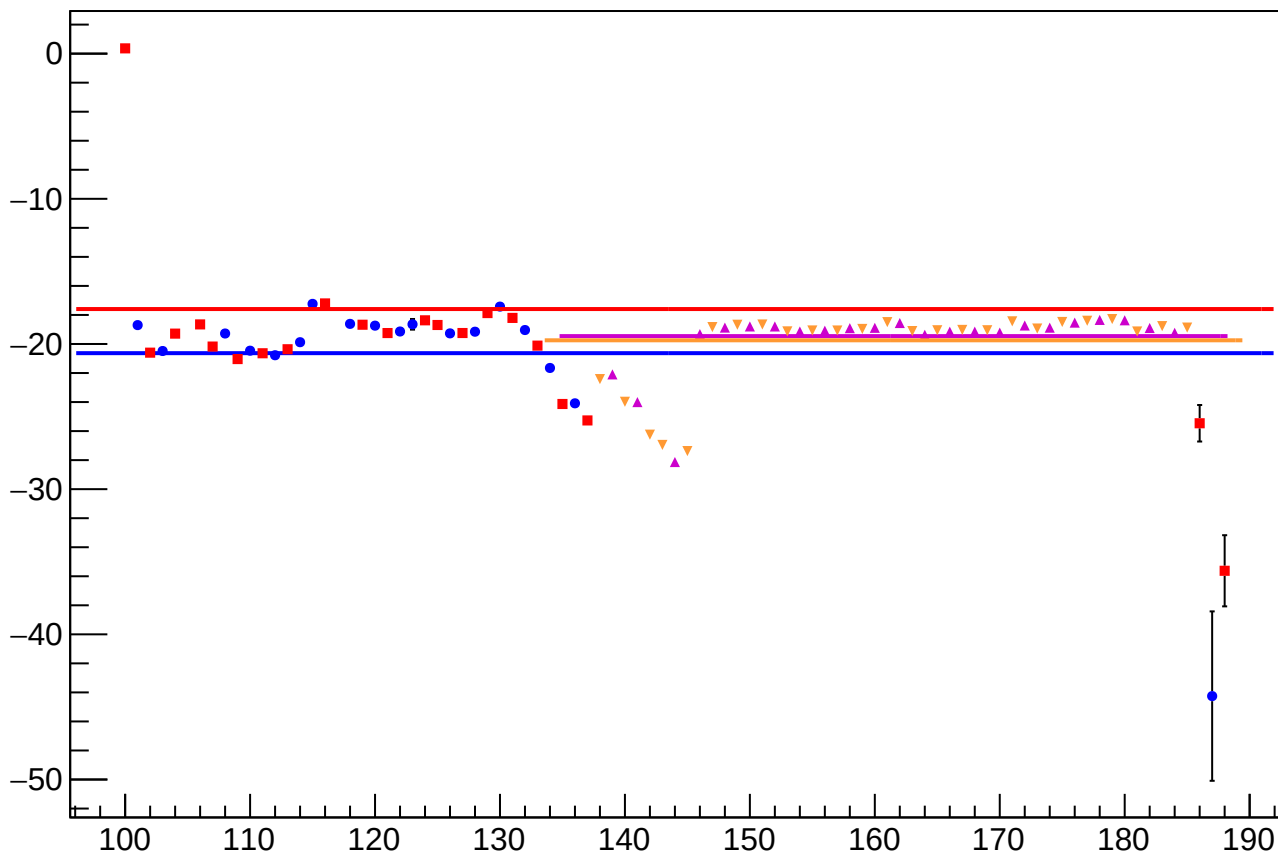
Left In: 9.708 $\pm$ 0.171  $\chi^2$ /NDF:1198.0/22

+ sign 8.920 $\pm$ 0.152  $\chi^2$ /NDF: 1944.4/42

All: 8.737 $\pm$ 0.109  $\chi^2$ /NDF: 3825.5/86

- sign 8.548 $\pm$ 0.155  $\chi^2$ /NDF: 1878.2/43

# reg\_asym\_right\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $-20.632 \pm 0.019$   $\chi^2/\text{NDF}$ : 12547.2/17

Left Out:  $-19.746 \pm 0.008$   $\chi^2/\text{NDF}$ : 88374.4/24

Right Out:  $-17.593 \pm 0.018$   $\chi^2/\text{NDF}$ : 178774.0/20

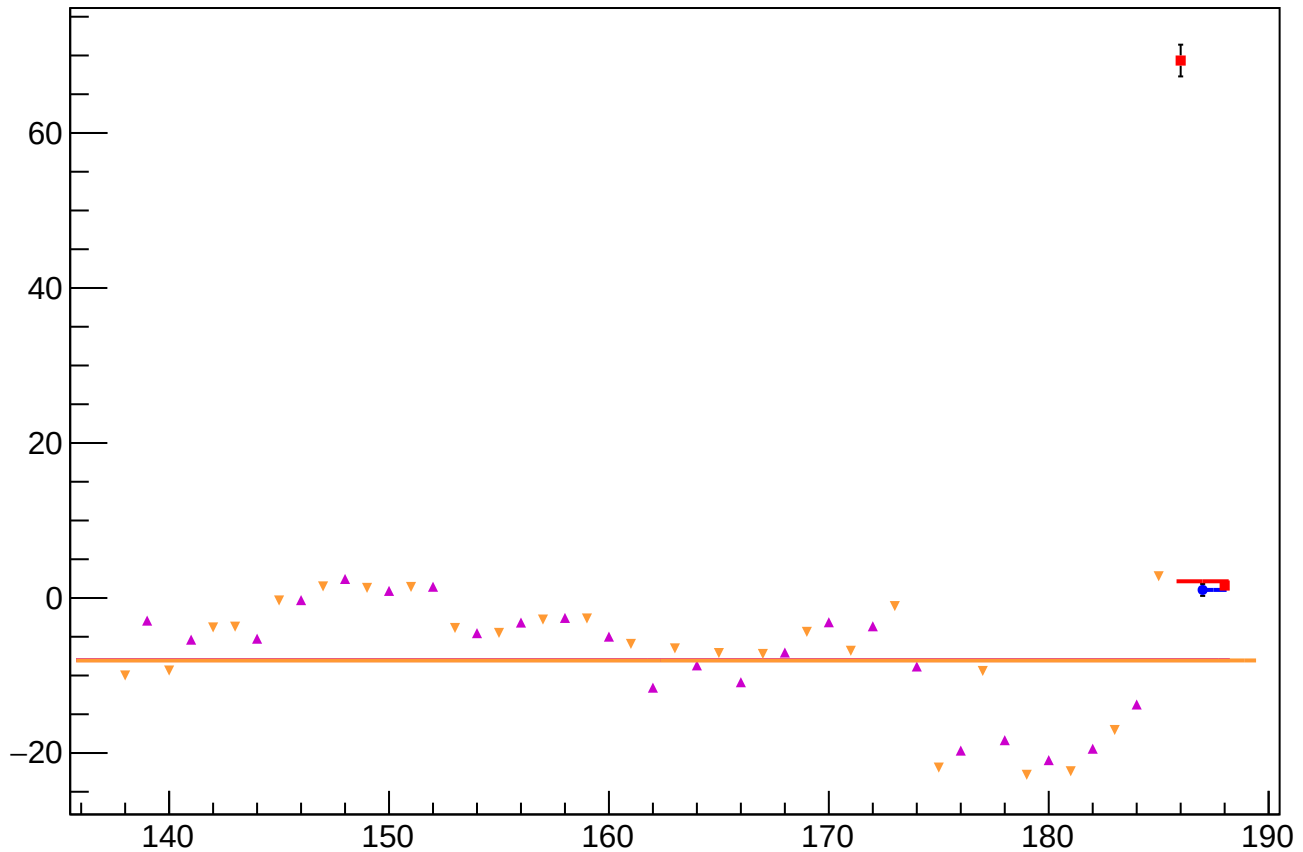
Left In:  $-19.457 \pm 0.008$   $\chi^2/\text{NDF}$ : 53995.4/22

+ sign  $-19.874 \pm 0.007$   $\chi^2/\text{NDF}$ : 102726.6/42

All:  $-19.511 \pm 0.005$   $\chi^2/\text{NDF}$ : 349334.4/86

- sign  $-19.155 \pm 0.007$   $\chi^2/\text{NDF}$ : 241741.7/43

reg\_asym\_sam\_15\_avg\_diff\_bpm1X\_slope vs Slug



Right In: 1.044+/-0.771  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -8.058+/-0.070  $\chi^2/\text{NDF}$ : 12532.2/24

Right Out: 2.157+/-0.185  $\chi^2/\text{NDF}$ : 1085.0/1

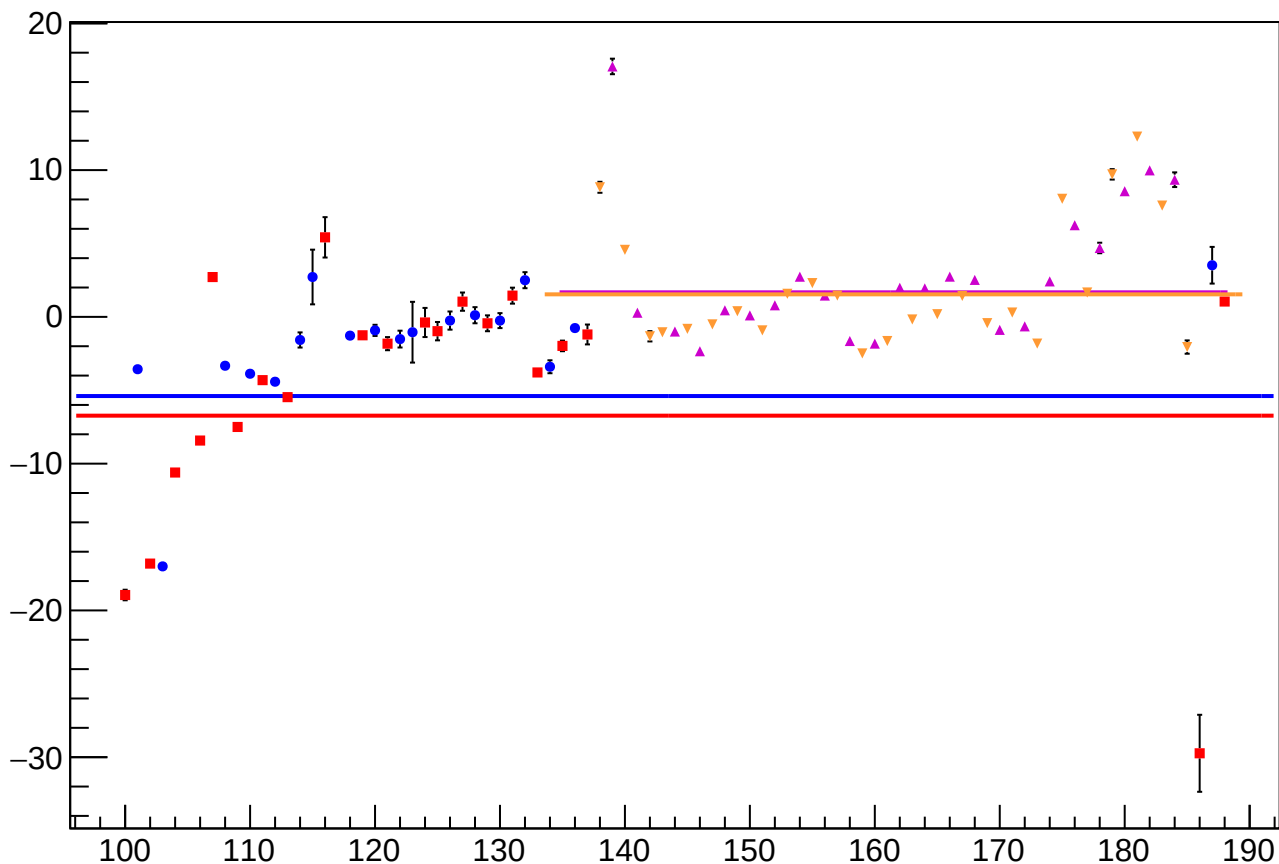
Left In: -8.010+/-0.071  $\chi^2/\text{NDF}$ : 10631.2/22

+ sign -7.983+/-0.070  $\chi^2/\text{NDF}$ : 12670.4/25

All: -7.301+/-0.048  $\chi^2/\text{NDF}$ : 27203.9/50

- sign -6.687+/-0.067  $\chi^2/\text{NDF}$ : 14354.0/24

reg\_asym\_sam\_15\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $-5.394 \pm 0.055$   $\chi^2/\text{NDF}$ : 9312.1/17

Left Out:  $1.535 \pm 0.055$   $\chi^2/\text{NDF}$ : 4816.7/24

Right Out:  $-6.731 \pm 0.058$   $\chi^2/\text{NDF}$ : 13198.5/20

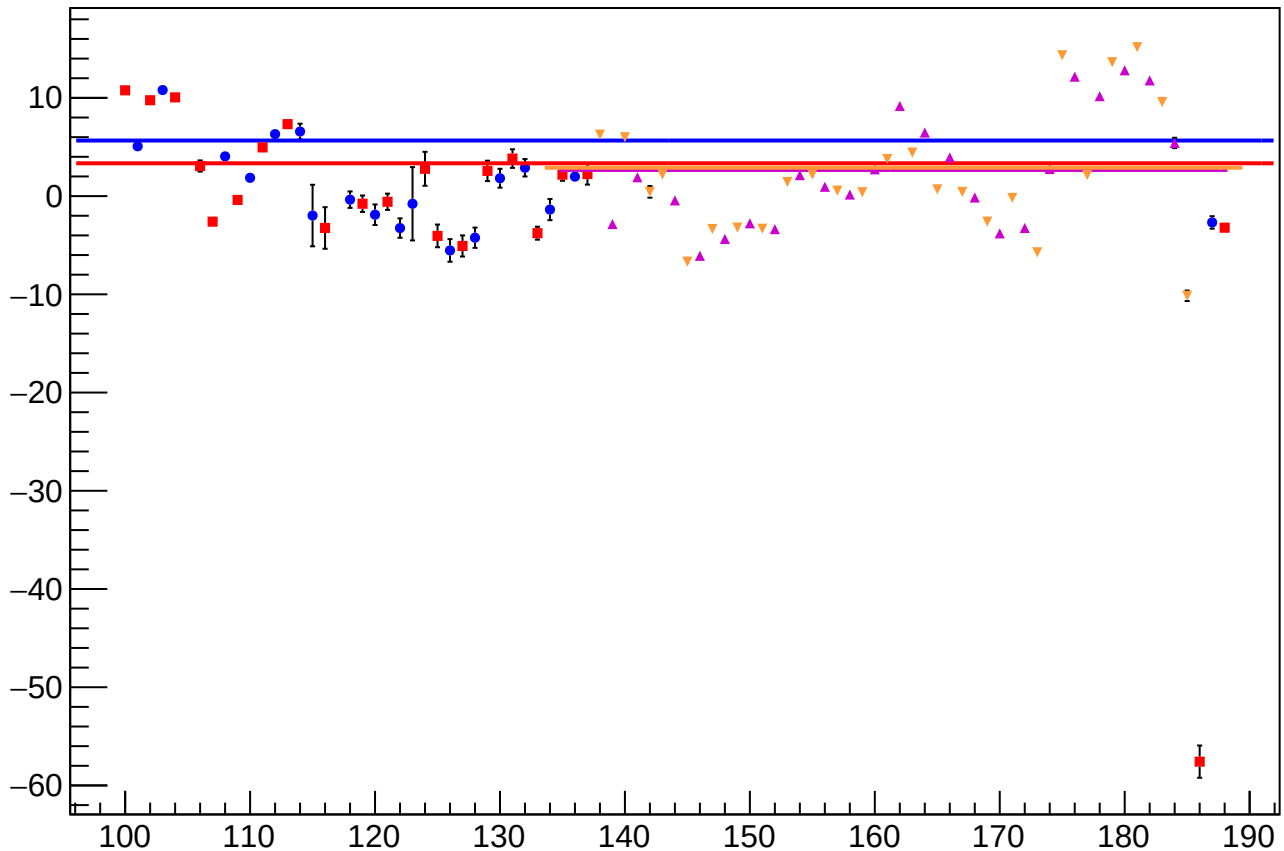
Left In:  $1.673 \pm 0.056$   $\chi^2/\text{NDF}$ : 4106.3/22

+ sign  $-1.918 \pm 0.039$   $\chi^2/\text{NDF}$ : 22183.9/42

All:  $-2.162 \pm 0.028$   $\chi^2/\text{NDF}$ : 50404.7/86

- sign  $-2.429 \pm 0.040$   $\chi^2/\text{NDF}$ : 28137.1/43

reg\_asym\_sam\_15\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $5.657 \pm 0.089$   $\chi^2/\text{NDF}: 1628.9/17$

Left Out:  $2.891 \pm 0.070$   $\chi^2/\text{NDF}: 8889.4/24$

Right Out:  $3.342 \pm 0.079$   $\chi^2/\text{NDF}: 6784.7/20$

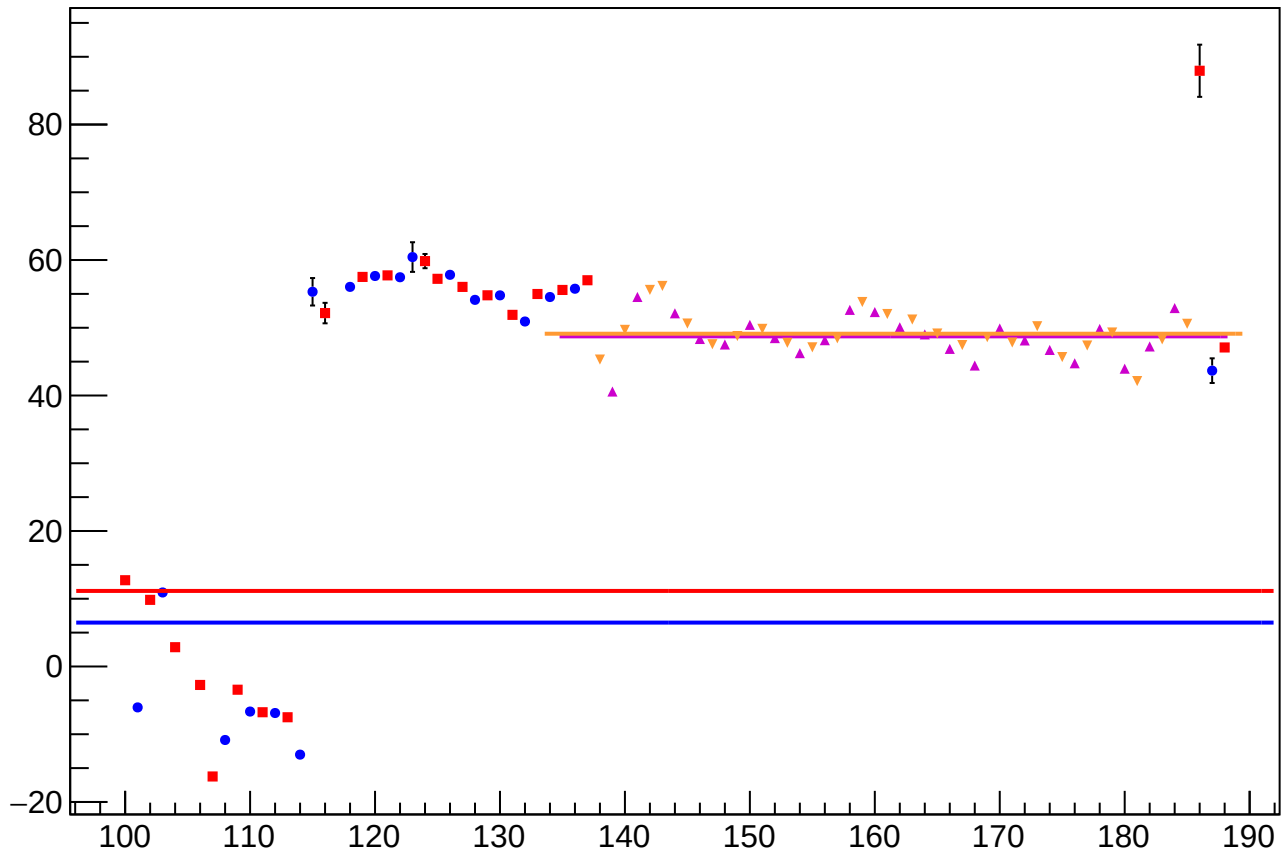
Left In:  $2.663 \pm 0.071$   $\chi^2/\text{NDF}: 7308.8/22$

+ sign  $3.960 \pm 0.055$   $\chi^2/\text{NDF}: 11115.1/42$

All:  $3.442 \pm 0.038$   $\chi^2/\text{NDF}: 25418.6/86$

- sign  $2.966 \pm 0.053$   $\chi^2/\text{NDF}: 14134.2/43$

reg\_asym\_sam\_15\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $6.479 \pm 0.065$   $\chi^2/\text{NDF}$ : 123904.5/17

Left Out:  $49.121 \pm 0.062$   $\chi^2/\text{NDF}$ : 2165.4/24

Right Out:  $11.153 \pm 0.069$   $\chi^2/\text{NDF}$ : 130345.9/20

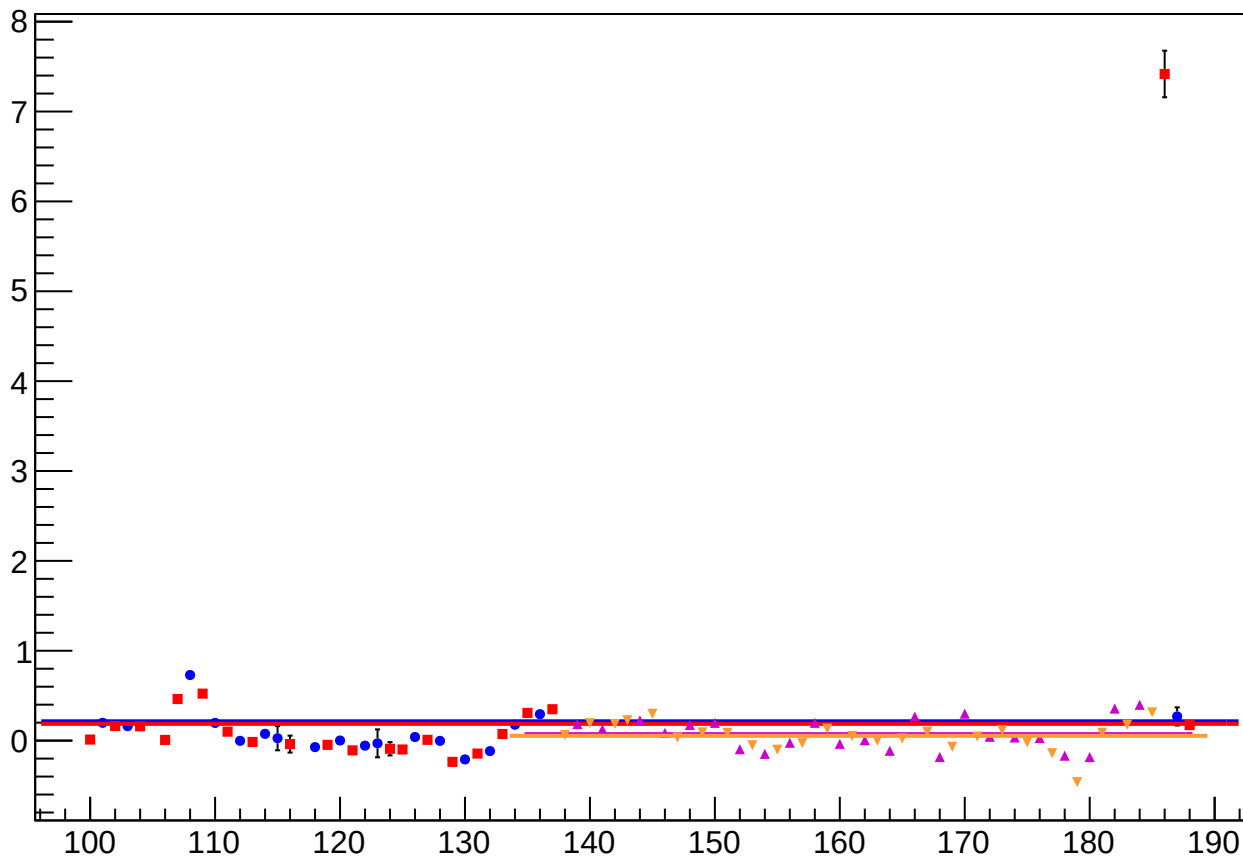
Left In:  $48.731 \pm 0.064$   $\chi^2/\text{NDF}$ : 2117.7/22

+ sign  $28.736 \pm 0.045$   $\chi^2/\text{NDF}$ : 353075.7/42

All:  $30.013 \pm 0.032$   $\chi^2/\text{NDF}$ : 648418.8/86

- sign  $31.405 \pm 0.047$   $\chi^2/\text{NDF}$ : 293636.0/43

reg\_asym\_sam\_15\_avg\_diff\_bpm12X\_slope vs Slug



Right In: 0.215 $\pm$ 0.003  $\chi^2$ /NDF: 3930.4/17

Left Out: 0.053 $\pm$ 0.003  $\chi^2$ /NDF:2369.3/24

Right Out: 0.186 $\pm$ 0.003  $\chi^2$ /NDF: 3497.4/20

Left In: 0.072 $\pm$ 0.003  $\chi^2$ /NDF:3272.0/22

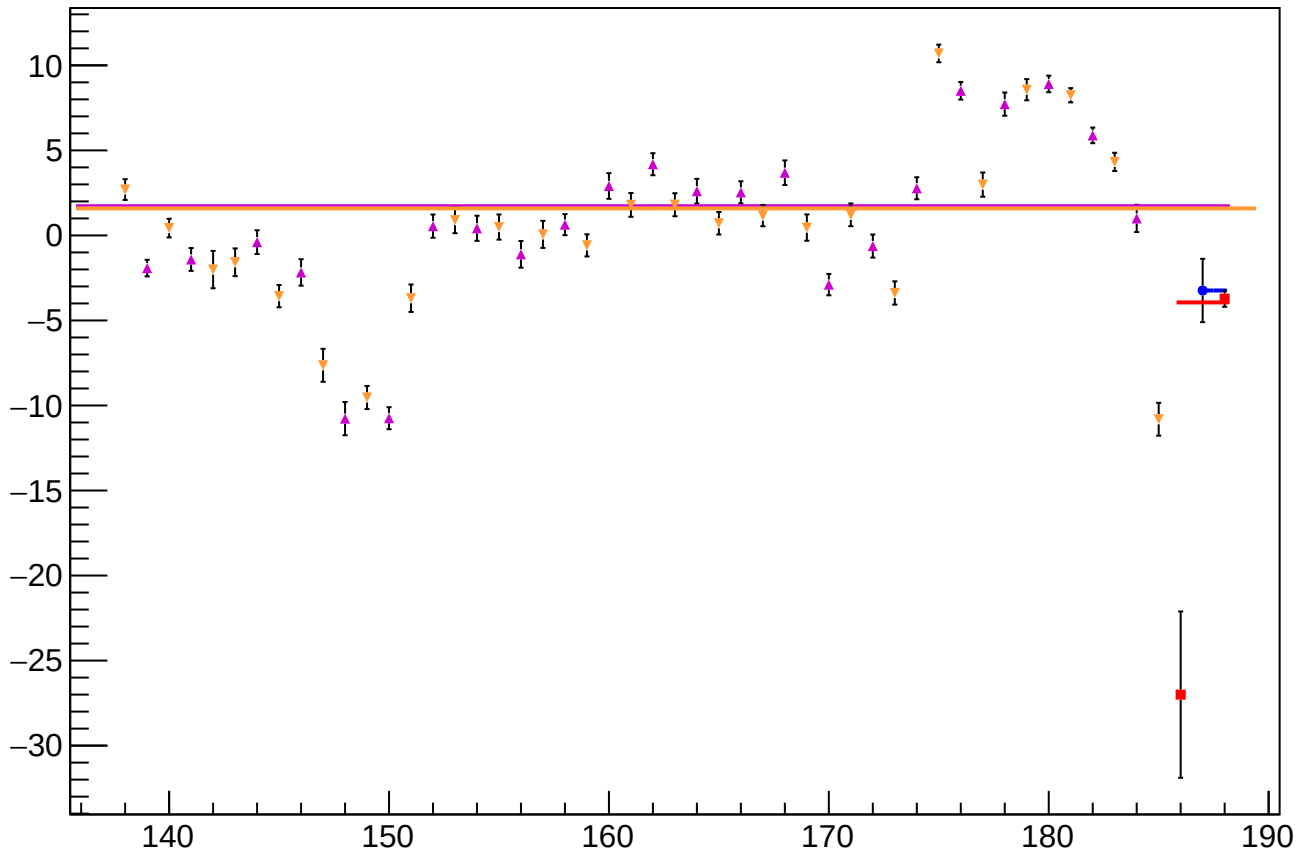
+ sign 0.136 $\pm$ 0.002  $\chi^2$ /NDF: 7967.5/42

All: 0.135 $\pm$ 0.001  $\chi^2$ /NDF: 15603.8/86

- sign 0.133 $\pm$ 0.002  $\chi^2$ /NDF: 7635.2/43



# reg\_asym\_sam\_15\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-3.238 \pm 1.863$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $1.590 \pm 0.133$   $\chi^2/\text{NDF}$ : 1457.4/24

Right Out:  $-3.940 \pm 0.475$   $\chi^2/\text{NDF}$ : 22.5/1

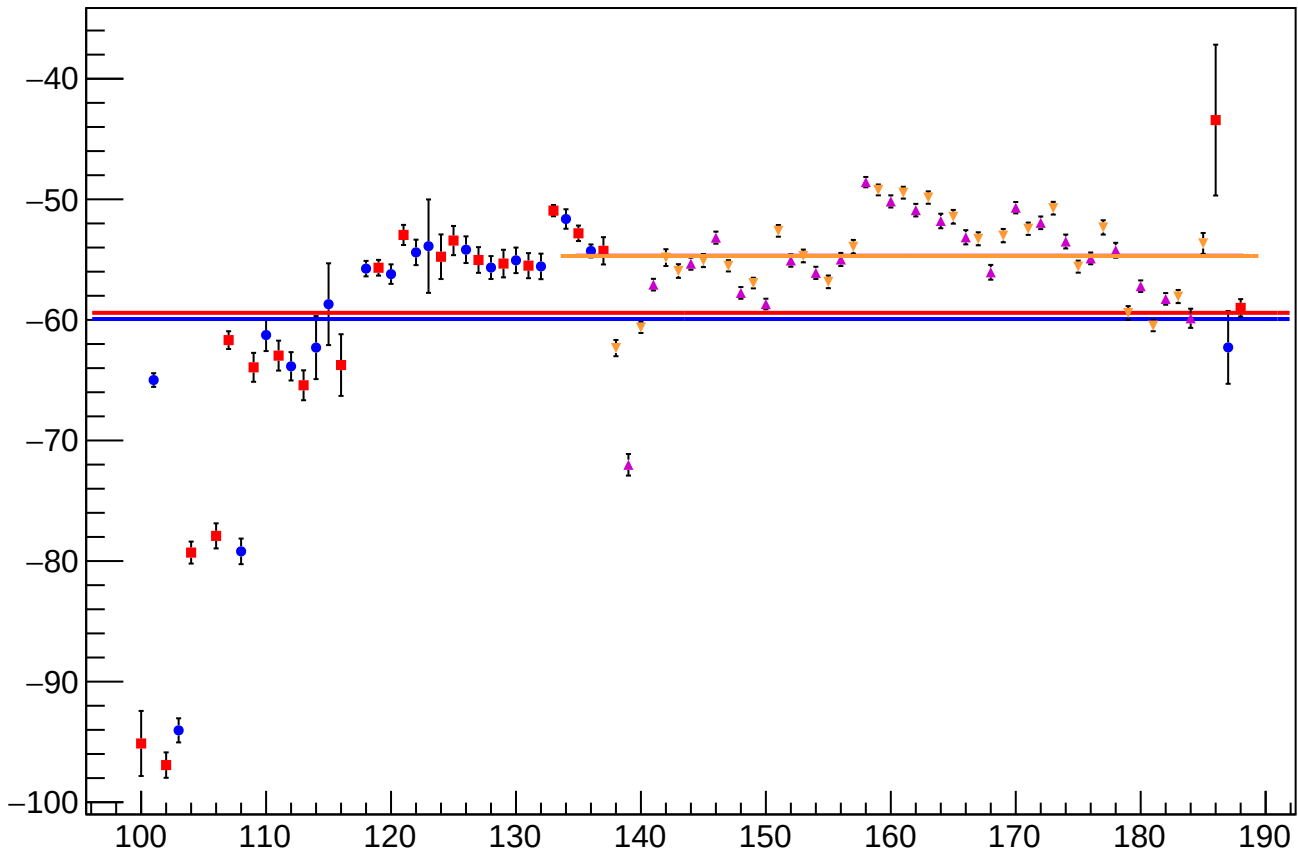
Left In:  $1.715 \pm 0.134$   $\chi^2/\text{NDF}$ : 1313.5/22

+ sign  $1.565 \pm 0.133$   $\chi^2/\text{NDF}$ : 1464.1/25

All:  $1.428 \pm 0.093$   $\chi^2/\text{NDF}$ : 2933.5/50

- sign  $1.297 \pm 0.129$   $\chi^2/\text{NDF}$ : 1467.3/24

# reg\_asym\_sam\_15\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-59.927 \pm 0.222$   $\chi^2/\text{NDF}: 1980.1/17$

Left Out:  $-54.701 \pm 0.106$   $\chi^2/\text{NDF}: 1124.5/24$

Right Out:  $-59.414 \pm 0.203$   $\chi^2/\text{NDF}: 2919.6/20$

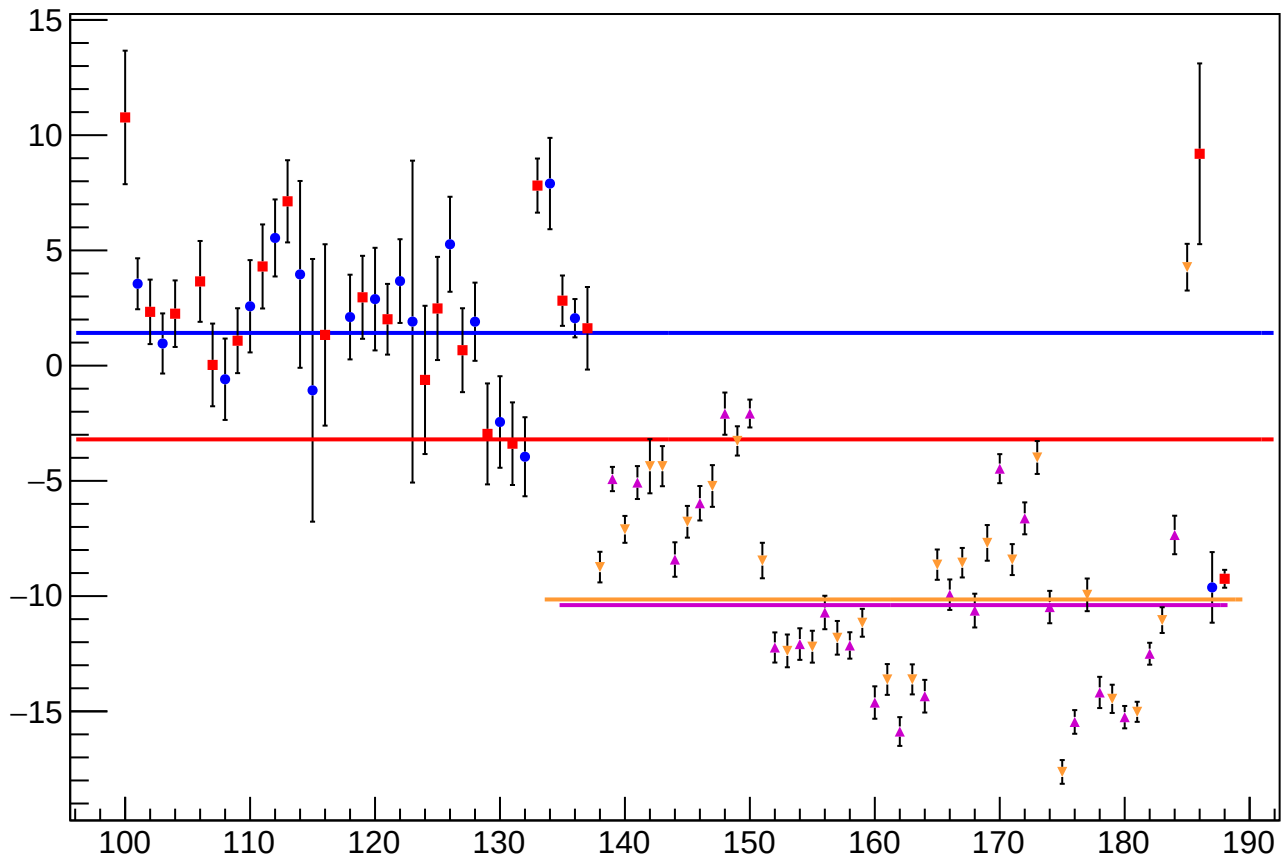
Left In:  $-54.677 \pm 0.109$   $\chi^2/\text{NDF}: 1140.6/22$

+ sign  $-55.668 \pm 0.096$   $\chi^2/\text{NDF}: 3554.6/42$

All:  $-55.704 \pm 0.068$   $\chi^2/\text{NDF}: 8035.7/86$

- sign  $-55.741 \pm 0.096$   $\chi^2/\text{NDF}: 4480.8/43$

# reg\_asym\_sam\_15\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $1.420 \pm 0.391$   $\chi^2/\text{NDF}$ : 94.7/17

Left Out:  $-10.146 \pm 0.133$   $\chi^2/\text{NDF}$ : 1051.2/24

Right Out:  $-3.200 \pm 0.273$   $\chi^2/\text{NDF}$ : 546.9/20

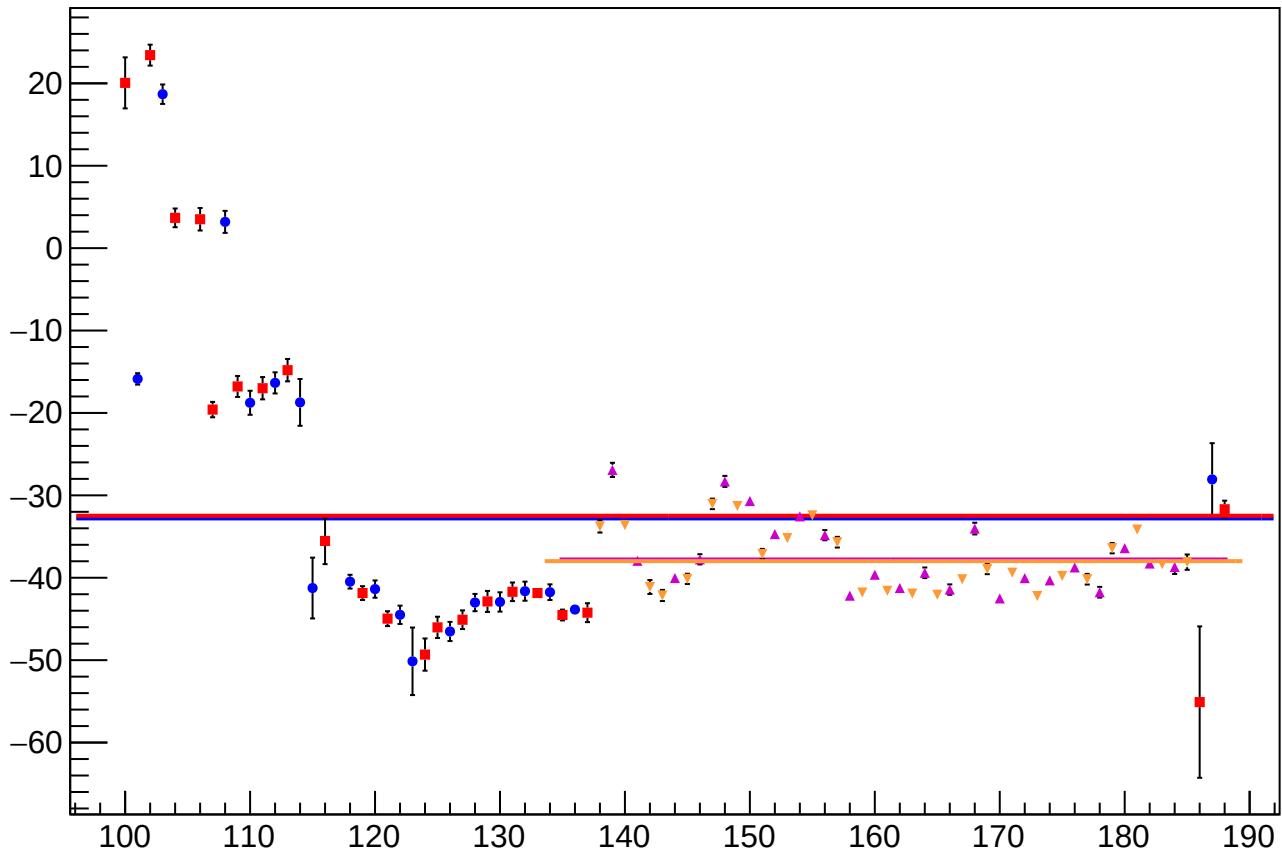
Left In:  $-10.391 \pm 0.134$   $\chi^2/\text{NDF}$ : 1024.8/22

+ sign  $-8.944 \pm 0.126$   $\chi^2/\text{NDF}$ : 1930.9/42

All:  $-8.974 \pm 0.087$   $\chi^2/\text{NDF}$ : 4061.0/86

- sign  $-9.002 \pm 0.120$   $\chi^2/\text{NDF}$ : 2129.9/43

# reg\_asym\_sam\_15\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-32.801 \pm 0.254$   $\chi^2/\text{NDF}$ : 4667.7/17

Left Out:  $-37.983 \pm 0.119$   $\chi^2/\text{NDF}$ : 936.9/24

Right Out:  $-32.474 \pm 0.237$   $\chi^2/\text{NDF}$ : 6044.5/20

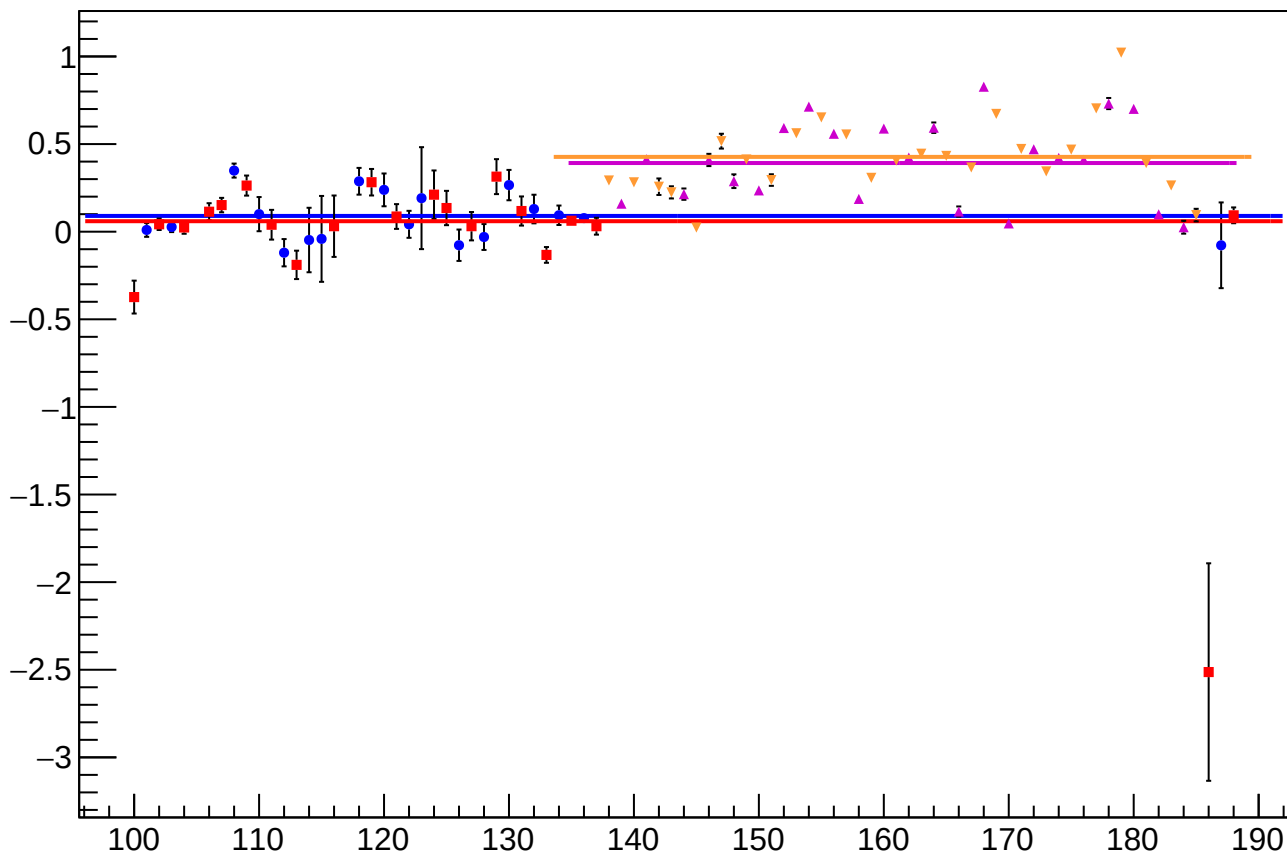
Left In:  $-37.784 \pm 0.122$   $\chi^2/\text{NDF}$ : 1079.7/22

+ sign  $-37.048 \pm 0.108$   $\chi^2/\text{NDF}$ : 5947.0/42

All:  $-36.863 \pm 0.076$   $\chi^2/\text{NDF}$ : 13472.9/86

- sign  $-36.676 \pm 0.108$   $\chi^2/\text{NDF}$ : 7520.0/43

# reg\_asym\_sam\_15\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $0.090 \pm 0.013$   $\chi^2/\text{NDF}$ : 79.7/17

Left Out:  $0.427 \pm 0.005$   $\chi^2/\text{NDF}$ : 1293.3/24

Right Out:  $0.060 \pm 0.012$   $\chi^2/\text{NDF}$ : 105.1/20

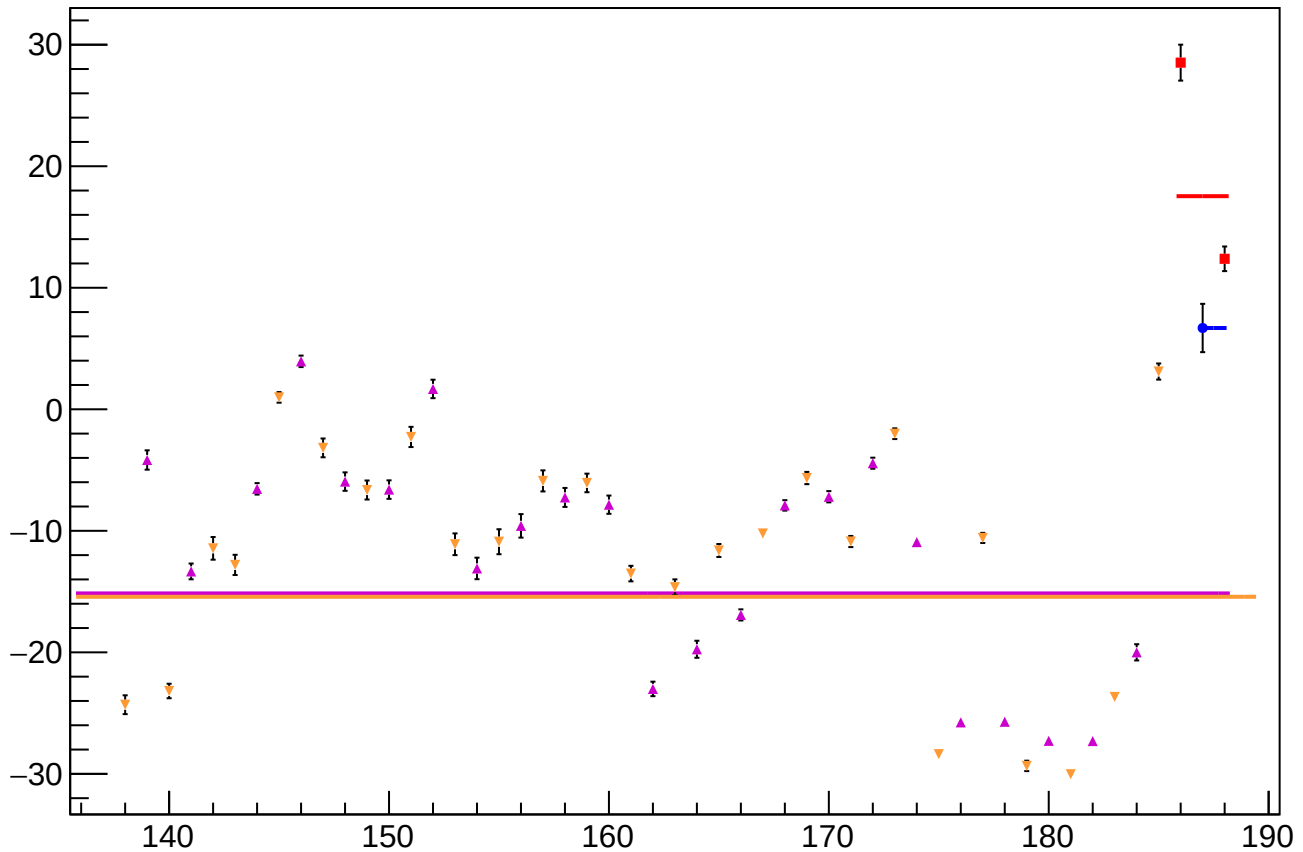
Left In:  $0.392 \pm 0.005$   $\chi^2/\text{NDF}$ : 1835.6/22

+ sign  $0.376 \pm 0.005$   $\chi^2/\text{NDF}$ : 1969.4/42

All:  $0.355 \pm 0.003$   $\chi^2/\text{NDF}$ : 4608.3/86

- sign  $0.334 \pm 0.005$   $\chi^2/\text{NDF}$ : 2603.5/43

reg\_asym\_sam\_37\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $6.689 \pm 1.987$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-15.427 \pm 0.105$   $\chi^2/\text{NDF}: 10499.6/24$

Right Out:  $17.537 \pm 0.836$   $\chi^2/\text{NDF}: 81.1/1$

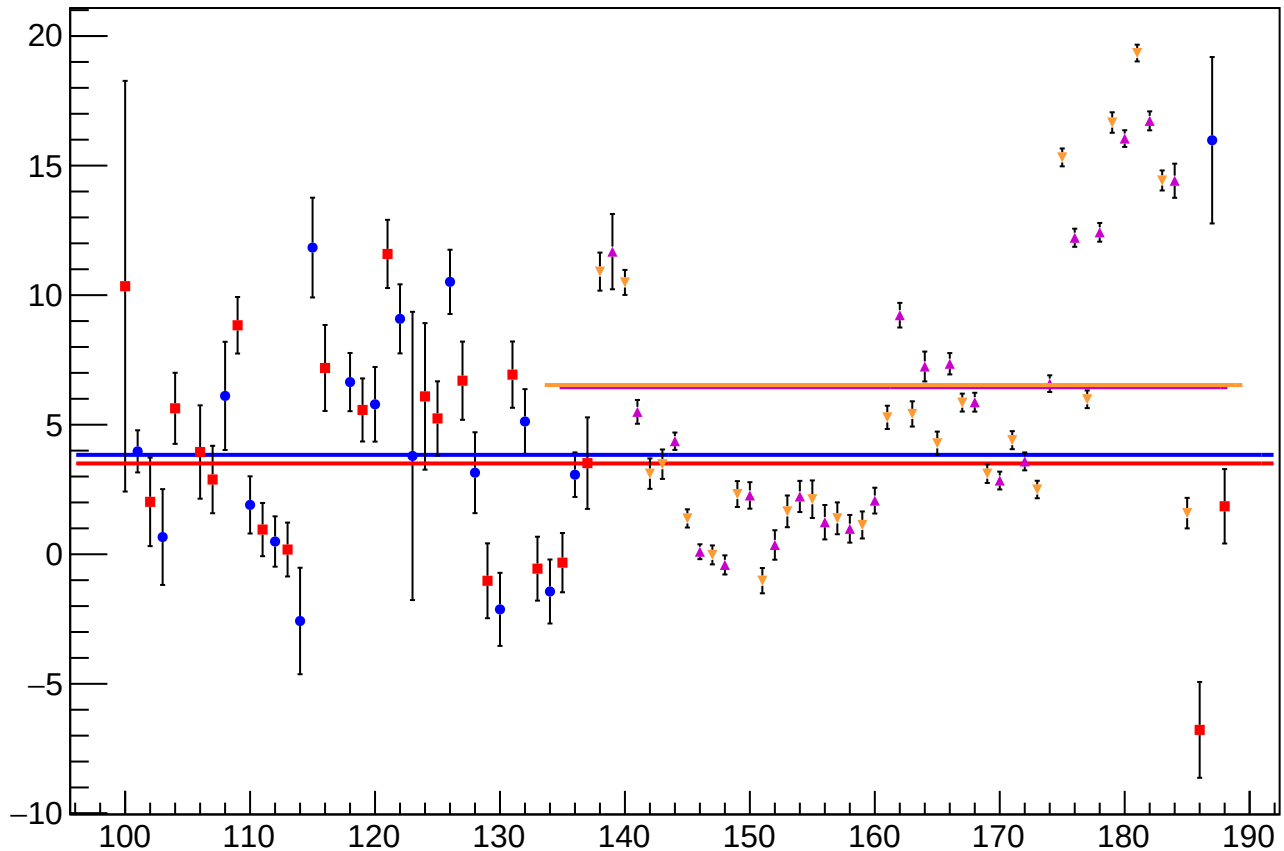
Left In:  $-15.151 \pm 0.106$   $\chi^2/\text{NDF}: 8744.3/22$

+ sign  $-15.365 \pm 0.105$   $\chi^2/\text{NDF}: 10623.2/25$

All:  $-14.999 \pm 0.074$   $\chi^2/\text{NDF}: 20978.5/50$

- sign  $-14.631 \pm 0.105$   $\chi^2/\text{NDF}: 10331.0/24$

reg\_asym\_sam\_37\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $3.837 \pm 0.307$   $\chi^2/\text{NDF}$ : 151.2/17

Left Out:  $6.531 \pm 0.086$   $\chi^2/\text{NDF}$ : 4969.5/24

Right Out:  $3.504 \pm 0.305$   $\chi^2/\text{NDF}$ : 168.0/20

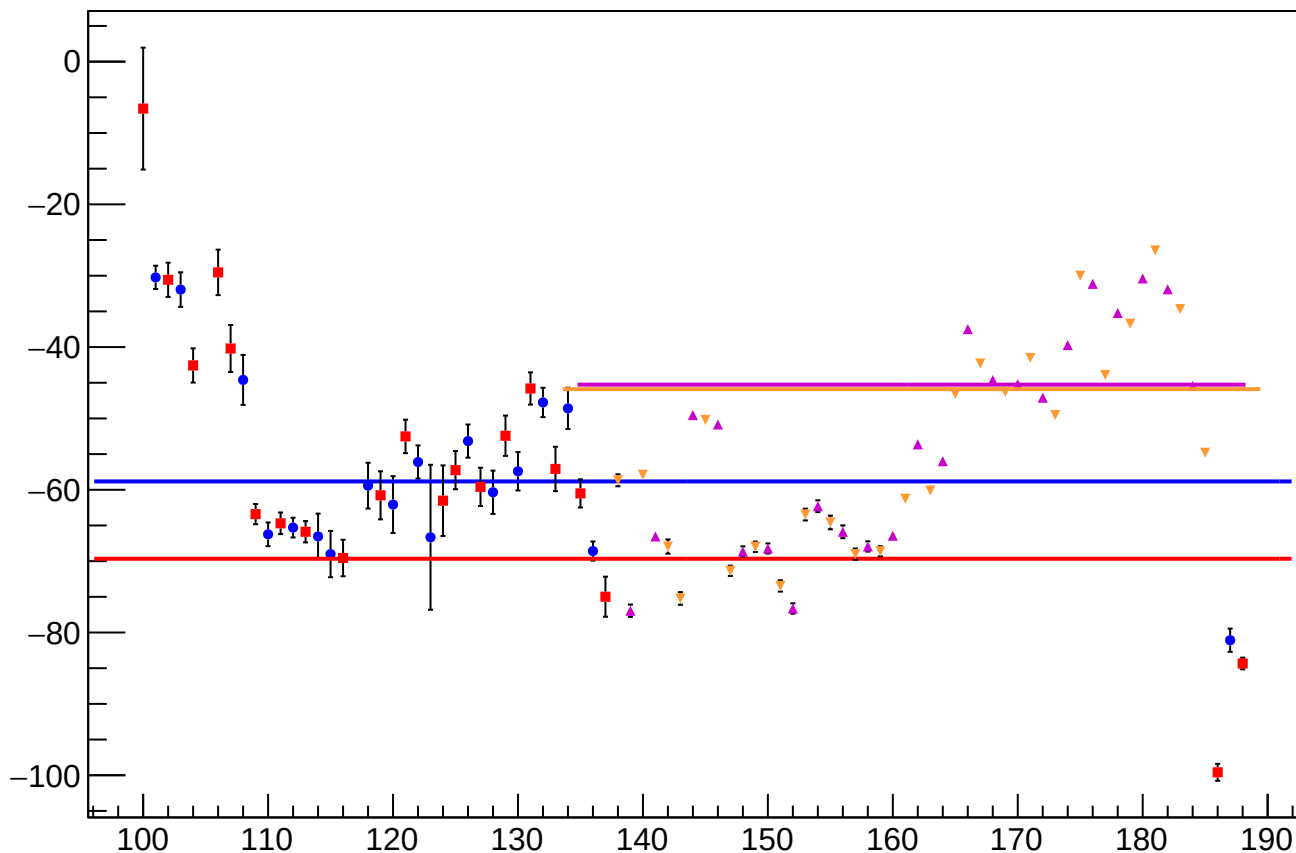
Left In:  $6.448 \pm 0.086$   $\chi^2/\text{NDF}$ : 3955.6/22

+ sign  $6.337 \pm 0.082$   $\chi^2/\text{NDF}$ : 5192.1/42

All:  $6.284 \pm 0.058$   $\chi^2/\text{NDF}$ : 9403.1/86

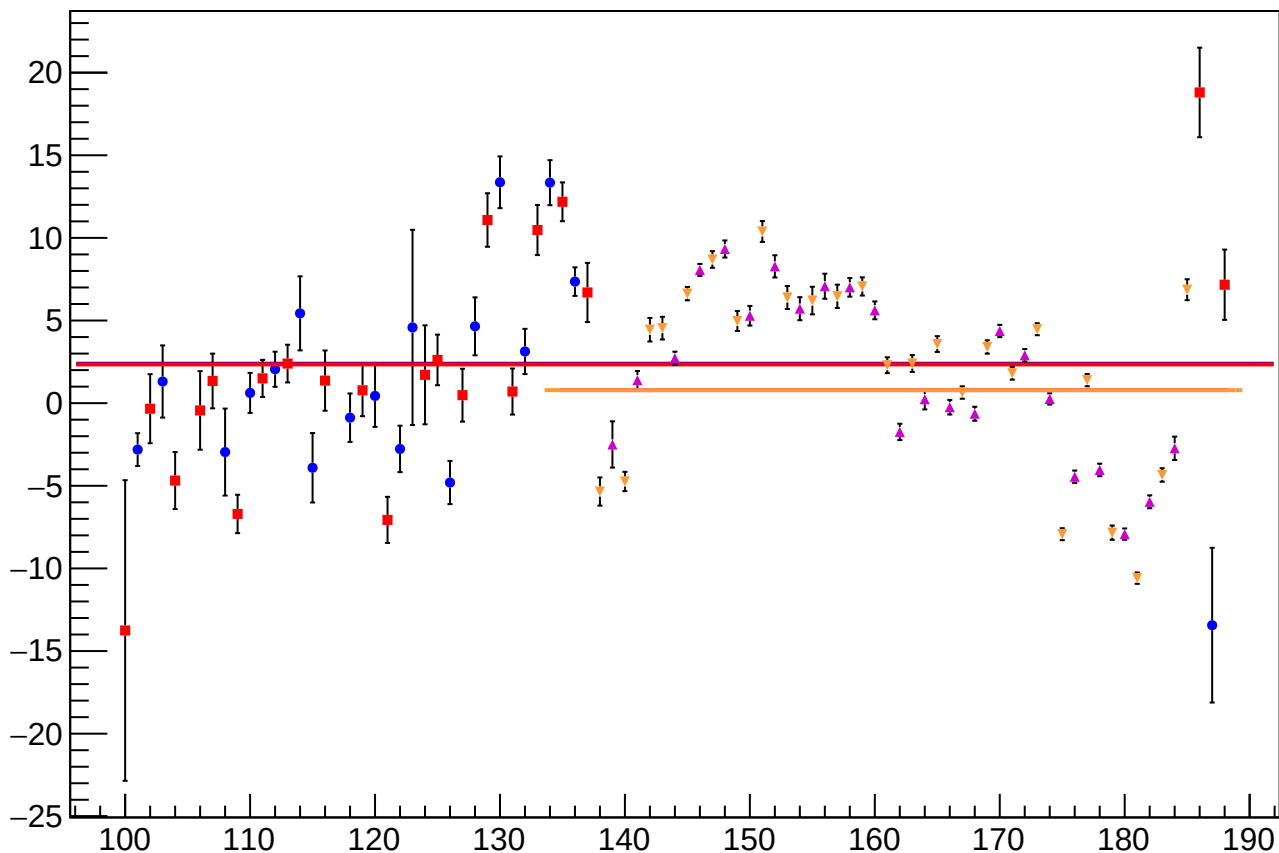
- sign  $6.232 \pm 0.083$   $\chi^2/\text{NDF}$ : 4210.2/43

reg\_asym\_sam\_37\_avg\_diff\_bpm4eX\_slope vs Slug





reg\_asym\_sam\_37\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 2.386 $\pm$ 0.345  $\chi^2$ /NDF: 255.1/17

Left Out: 0.787 $\pm$ 0.096  $\chi^2$ /NDF: 3746.7/24

Right Out: 2.345 $\pm$ 0.347  $\chi^2$ /NDF: 310.1/20

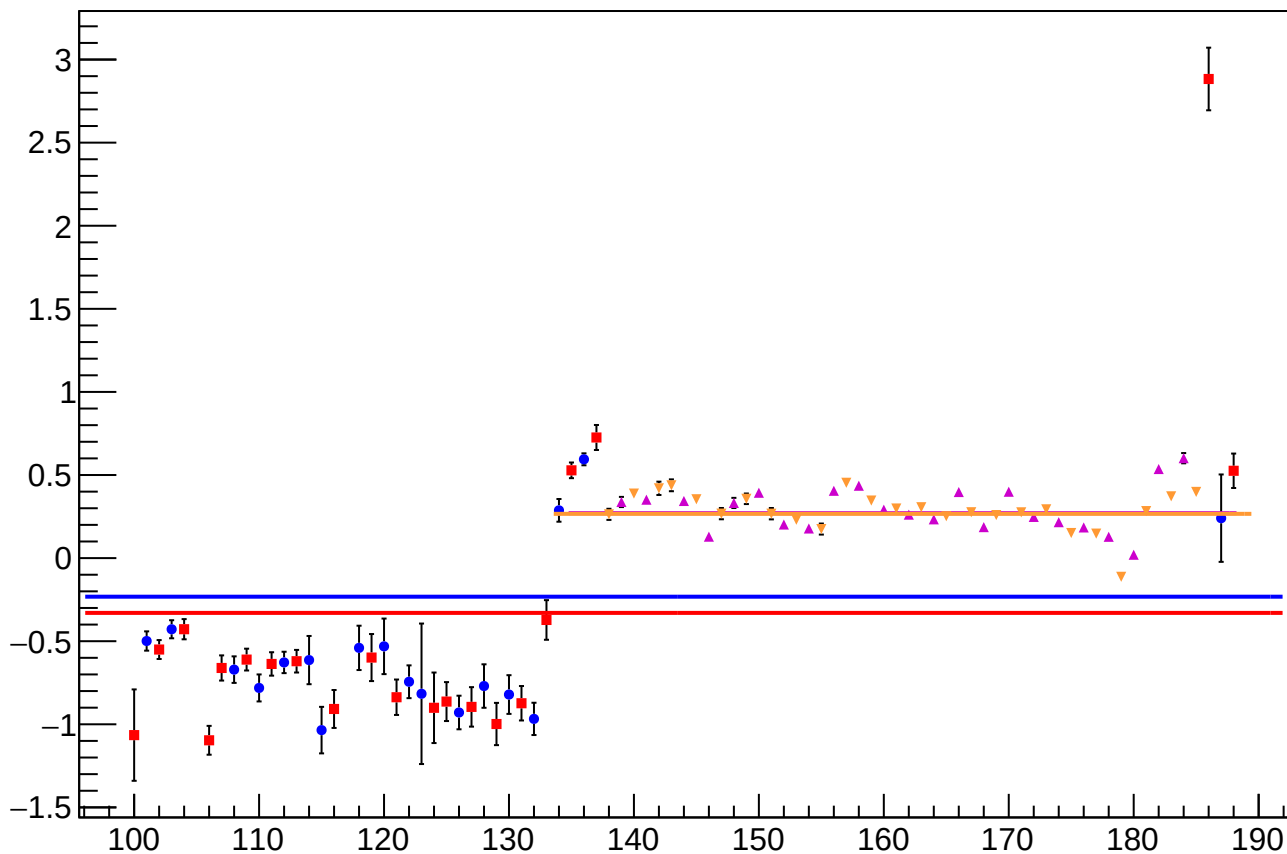
Left In: 0.791 $\pm$ 0.096  $\chi^2$ /NDF: 2697.7/22

+ sign 0.901 $\pm$ 0.092  $\chi^2$ /NDF: 4021.8/42

All: 0.901 $\pm$ 0.065  $\chi^2$ /NDF: 7048.1/86

- sign 0.902 $\pm$ 0.093  $\chi^2$ /NDF: 3026.4/43

reg\_asym\_sam\_37\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.232 \pm 0.019$   $\chi^2/\text{NDF}$ : 961.7/17

Left Out:  $0.266 \pm 0.004$   $\chi^2/\text{NDF}$ : 698.1/24

Right Out:  $-0.330 \pm 0.019$   $\chi^2/\text{NDF}$ : 1222.5/20

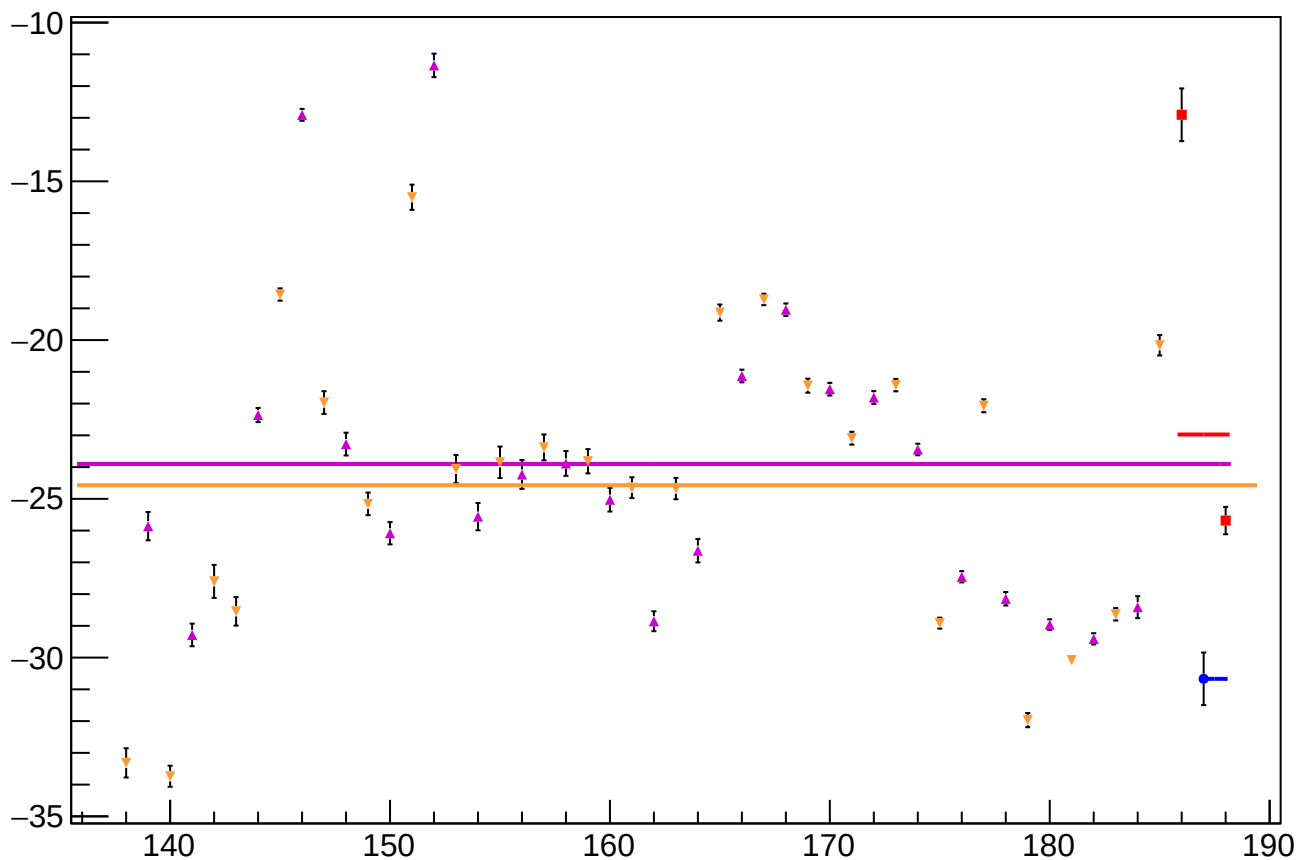
Left In:  $0.270 \pm 0.004$   $\chi^2/\text{NDF}$ : 973.5/22

+ sign  $0.241 \pm 0.004$   $\chi^2/\text{NDF}$ : 2325.4/42

All:  $0.240 \pm 0.003$   $\chi^2/\text{NDF}$ : 5511.6/86

- sign  $0.238 \pm 0.004$   $\chi^2/\text{NDF}$ : 3186.0/43

# reg\_asym\_sam\_37\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-30.669 \pm 0.828$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-24.571 \pm 0.051$   $\chi^2/\text{NDF}$ : 8610.0/24

Right Out:  $-22.974 \pm 0.382$   $\chi^2/\text{NDF}$ : 186.6/1

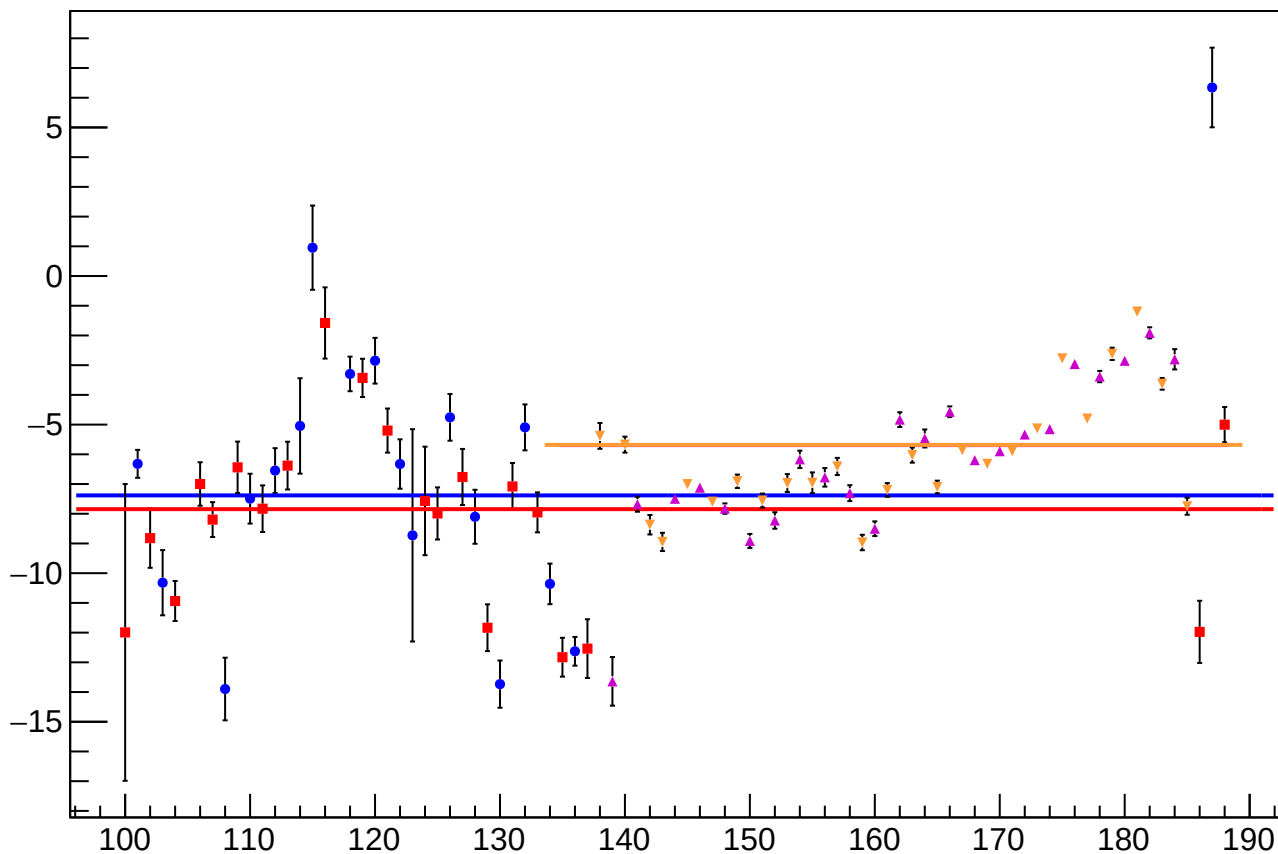
Left In:  $-23.902 \pm 0.051$   $\chi^2/\text{NDF}$ : 9158.9/22

+ sign  $-24.594 \pm 0.051$   $\chi^2/\text{NDF}$ : 8664.1/25

All:  $-24.237 \pm 0.036$   $\chi^2/\text{NDF}$ : 18113.1/50

- sign  $-23.886 \pm 0.050$   $\chi^2/\text{NDF}$ : 9351.4/24

reg\_asym\_sam\_37\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-7.383 \pm 0.184$   $\chi^2/\text{NDF}$ : 500.6/17

Left Out:  $-5.683 \pm 0.041$   $\chi^2/\text{NDF}$ : 2231.0/24

Right Out:  $-7.845 \pm 0.175$   $\chi^2/\text{NDF}$ : 264.5/20

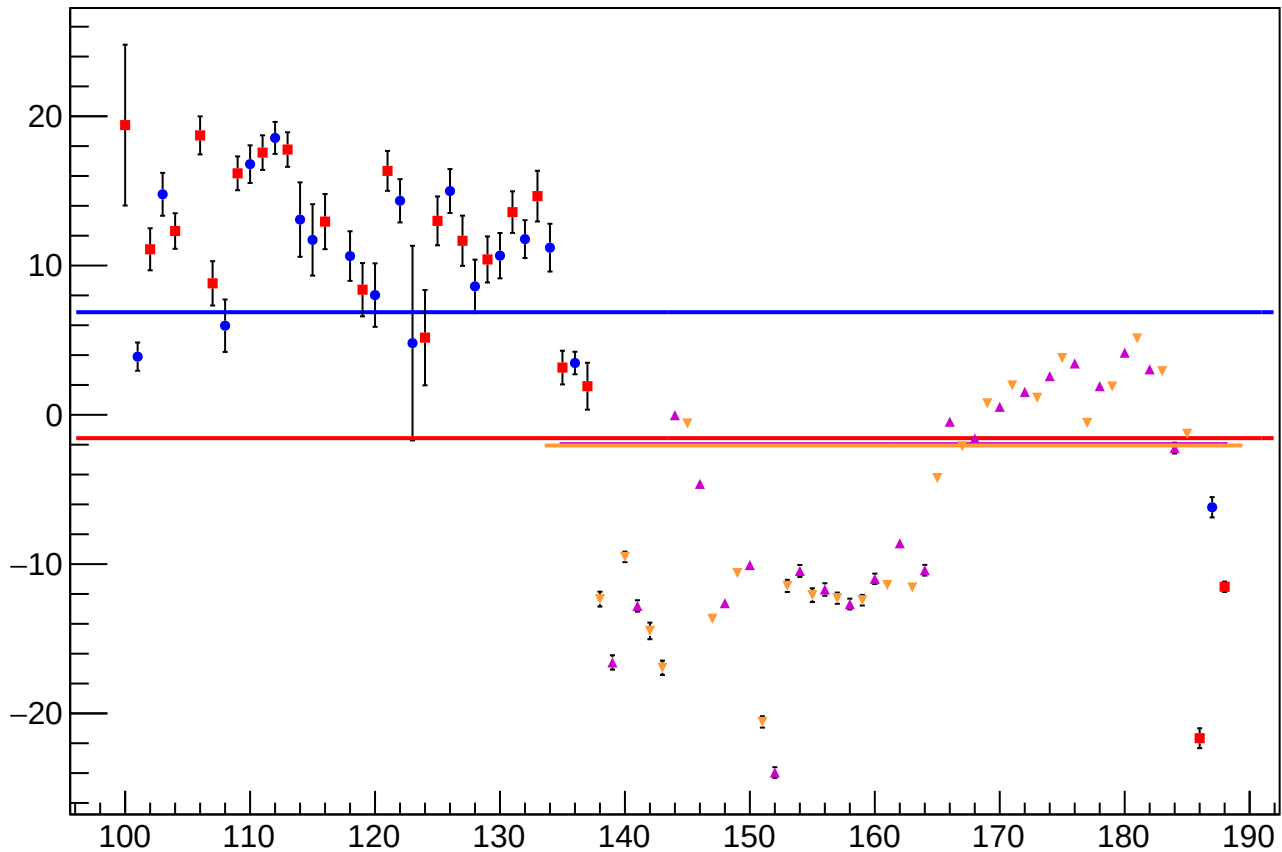
Left In:  $-5.690 \pm 0.041$   $\chi^2/\text{NDF}$ : 2328.2/22

+ sign  $-5.764 \pm 0.040$   $\chi^2/\text{NDF}$ : 2812.9/42

All:  $-5.782 \pm 0.028$   $\chi^2/\text{NDF}$ : 5550.2/86

- sign  $-5.800 \pm 0.040$   $\chi^2/\text{NDF}$ : 2736.9/43

# reg\_asym\_sam\_37\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $6.874 \pm 0.302$   $\chi^2/\text{NDF}: 712.3/17$

Left Out:  $-2.055 \pm 0.051$   $\chi^2/\text{NDF}: 16042.5/24$

Right Out:  $-1.563 \pm 0.226$   $\chi^2/\text{NDF}: 3776.6/20$

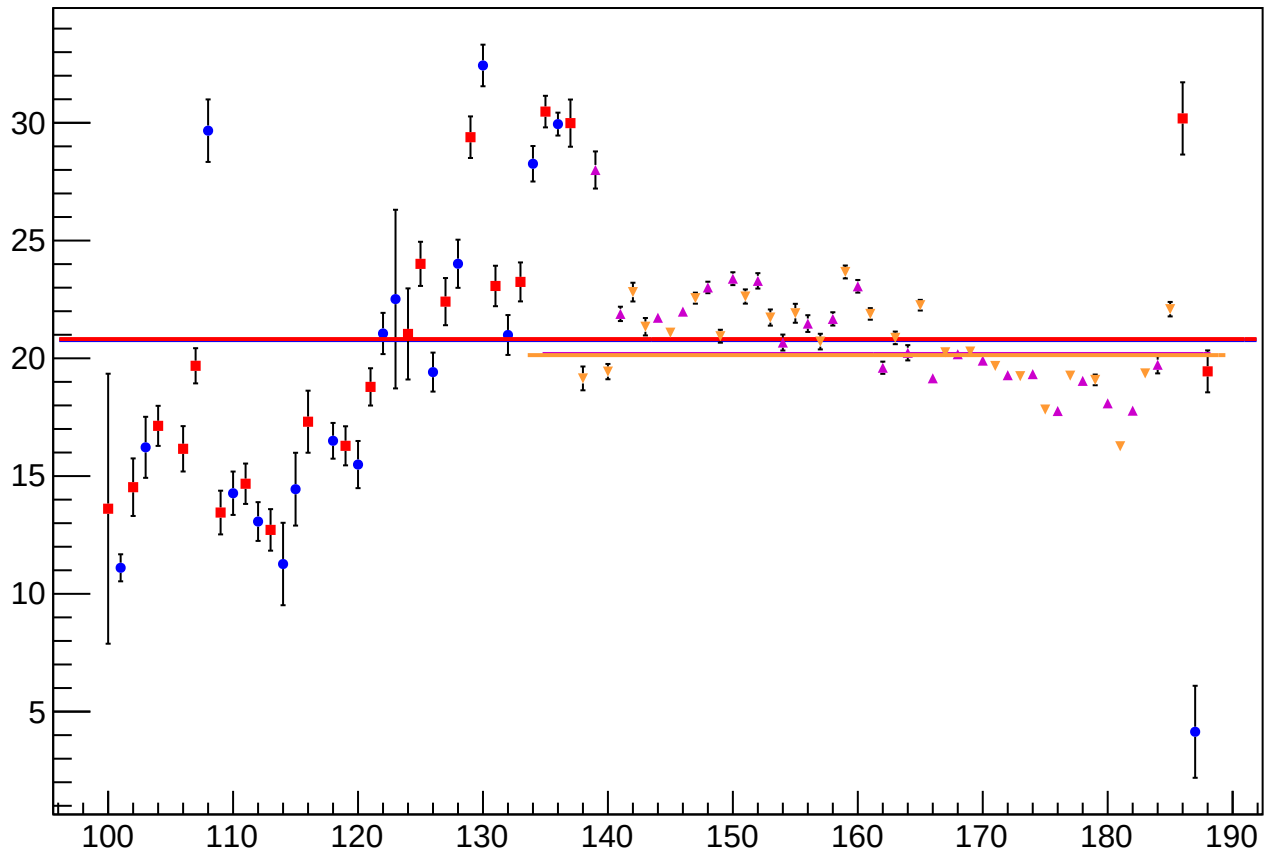
Left In:  $-1.963 \pm 0.051$   $\chi^2/\text{NDF}: 15492.9/22$

+ sign  $-1.803 \pm 0.051$   $\chi^2/\text{NDF}: 17605.4/42$

All:  $-1.875 \pm 0.036$   $\chi^2/\text{NDF}: 36881.8/86$

- sign  $-1.943 \pm 0.050$   $\chi^2/\text{NDF}: 19272.5/43$

# reg\_asym\_sam\_37\_dd\_diff\_bpm4eY\_slope vs Slug



Right In: 20.774 $\pm$ 0.208  $\chi^2$ /NDF: 1298.8/17

Left Out: 20.136 $\pm$ 0.046  $\chi^2$ /NDF: 1414.2/24

Right Out: 20.817 $\pm$ 0.205  $\chi^2$ /NDF: 769.8/20

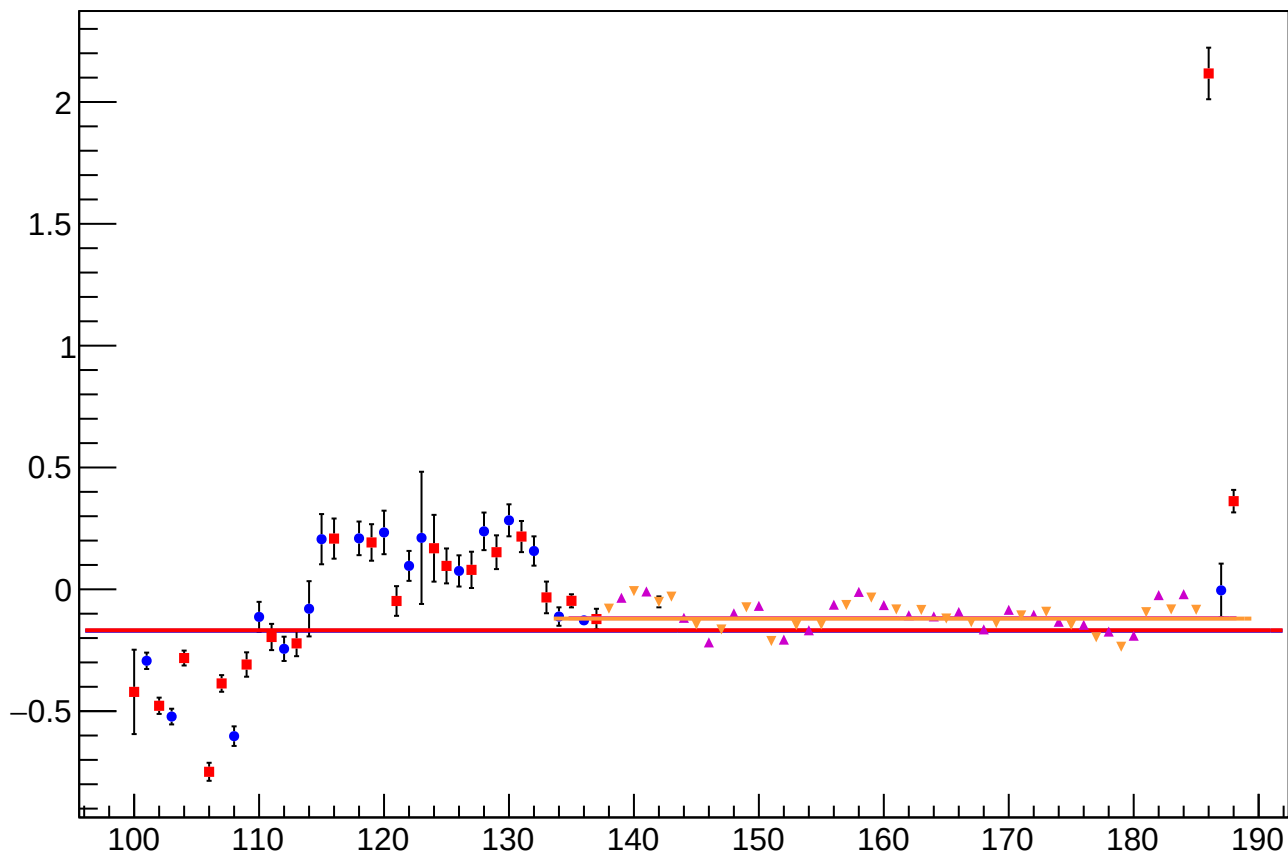
Left In: 20.184 $\pm$ 0.046  $\chi^2$ /NDF: 1470.7/22

+ sign 20.166 $\pm$ 0.045  $\chi^2$ /NDF: 2722.0/42

All: 20.190 $\pm$ 0.032  $\chi^2$ /NDF: 4972.1/86

- sign 20.214 $\pm$ 0.045  $\chi^2$ /NDF: 2249.5/43

# reg\_asym\_sam\_37\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.170 \pm 0.011$   $\chi^2/\text{NDF}$ : 466.5/17

Left Out:  $-0.120 \pm 0.002$   $\chi^2/\text{NDF}$ : 532.4/24

Right Out:  $-0.168 \pm 0.011$   $\chi^2/\text{NDF}$ : 1158.8/20

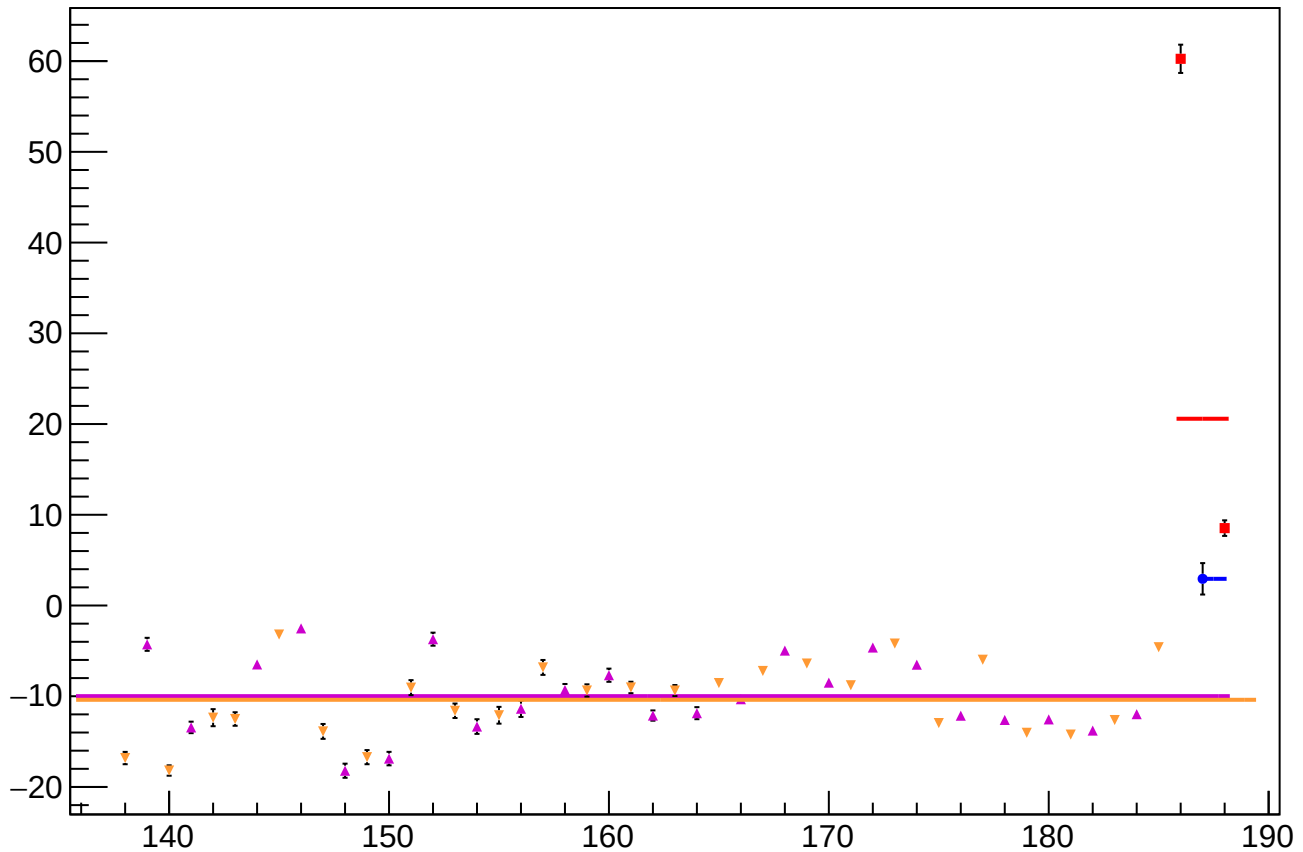
Left In:  $-0.118 \pm 0.002$   $\chi^2/\text{NDF}$ : 727.5/22

+ sign  $-0.122 \pm 0.002$   $\chi^2/\text{NDF}$ : 1018.3/42

All:  $-0.121 \pm 0.001$   $\chi^2/\text{NDF}$ : 2925.9/86

- sign  $-0.120 \pm 0.002$   $\chi^2/\text{NDF}$ : 1907.3/43

reg\_asym\_sam\_26\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $2.941 \pm 1.732$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-10.392 \pm 0.088$   $\chi^2/\text{NDF}$ : 2112.5/24

Right Out:  $20.584 \pm 0.752$   $\chi^2/\text{NDF}$ : 844.9/1

Left In:  $-9.990 \pm 0.089$   $\chi^2/\text{NDF}$ : 1794.2/22

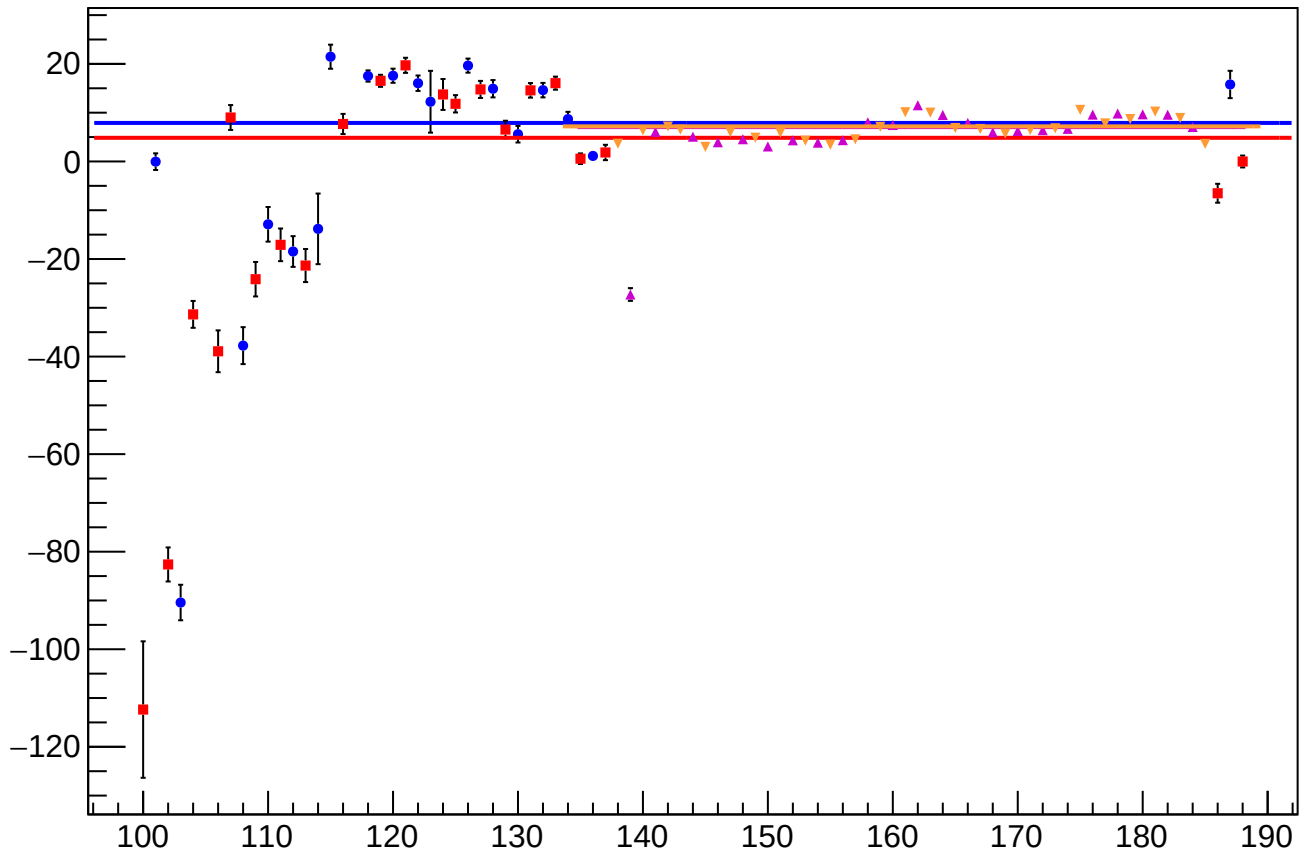
+ sign  $-10.358 \pm 0.088$   $\chi^2/\text{NDF}$ : 2171.5/25

All:  $-9.965 \pm 0.062$   $\chi^2/\text{NDF}$ : 6479.6/50

- sign  $-9.566 \pm 0.089$   $\chi^2/\text{NDF}$ : 4267.8/24



reg\_asym\_sam\_26\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $7.899 \pm 0.399$   $\chi^2/\text{NDF}$ : 1366.5/17

Left Out:  $7.187 \pm 0.074$   $\chi^2/\text{NDF}$ : 916.3/24

Right Out:  $4.849 \pm 0.400$   $\chi^2/\text{NDF}$ : 1570.1/20

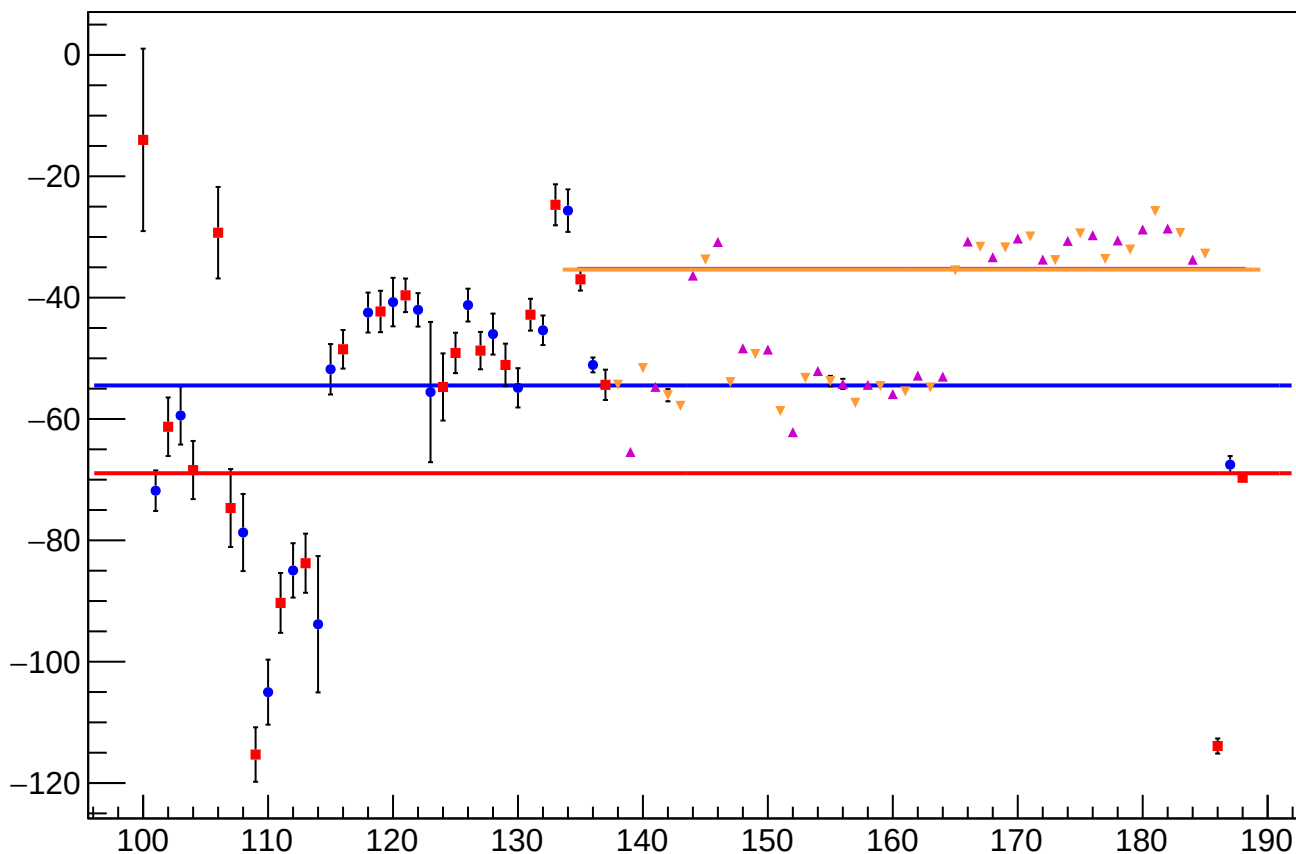
Left In:  $7.043 \pm 0.074$   $\chi^2/\text{NDF}$ : 1604.6/22

+ sign  $7.211 \pm 0.072$   $\chi^2/\text{NDF}$ : 2285.9/42

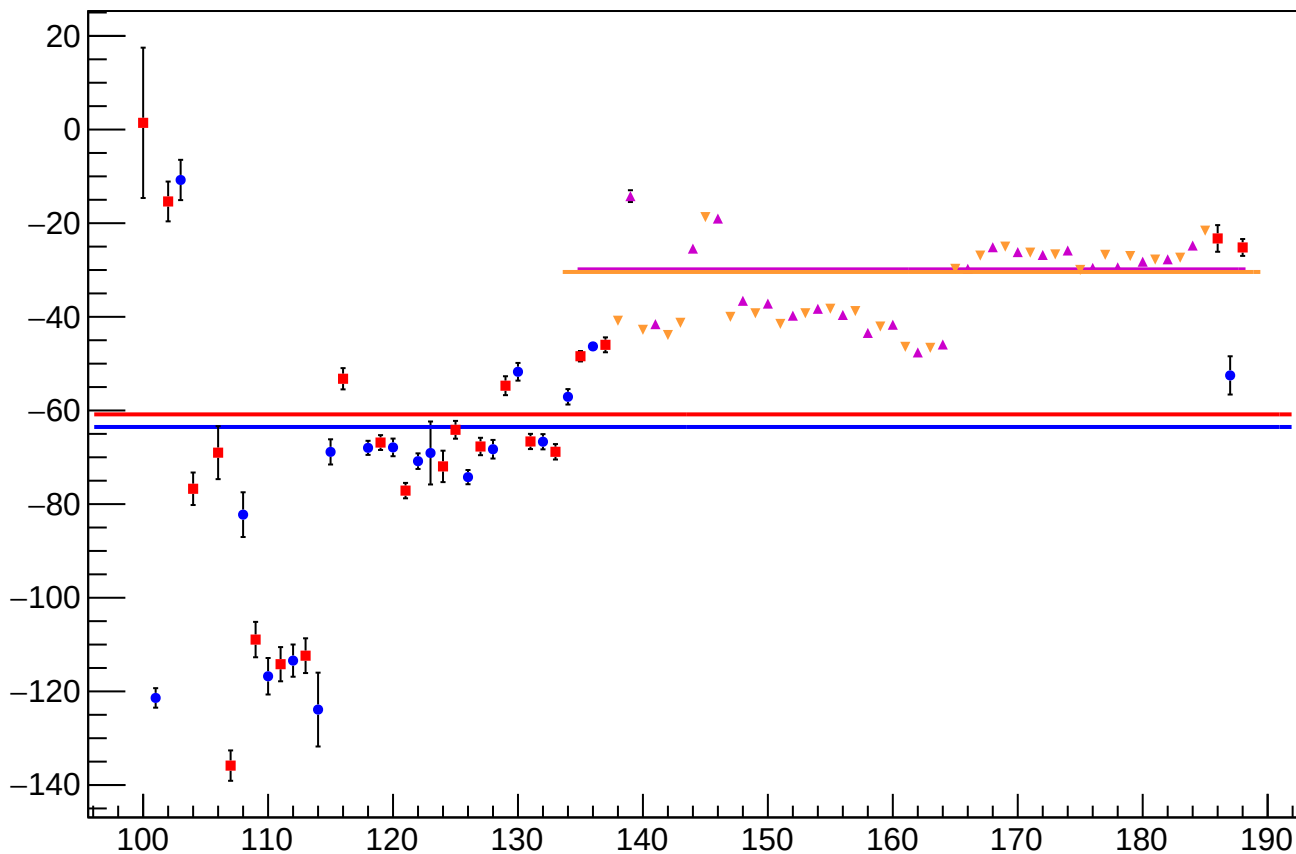
All:  $7.091 \pm 0.051$   $\chi^2/\text{NDF}$ : 5495.0/86

- sign  $6.971 \pm 0.073$   $\chi^2/\text{NDF}$ : 3203.7/43

reg\_asym\_sam\_26\_avg\_diff\_bpm4eX\_slope vs Slug



reg\_asym\_sam\_26\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $-63.525 \pm 0.443$   $\chi^2/\text{NDF}$ : 2022.1/17

Left Out:  $-30.415 \pm 0.082$   $\chi^2/\text{NDF}$ : 8132.2/24

Right Out:  $-60.835 \pm 0.460$   $\chi^2/\text{NDF}$ : 2229.2/20

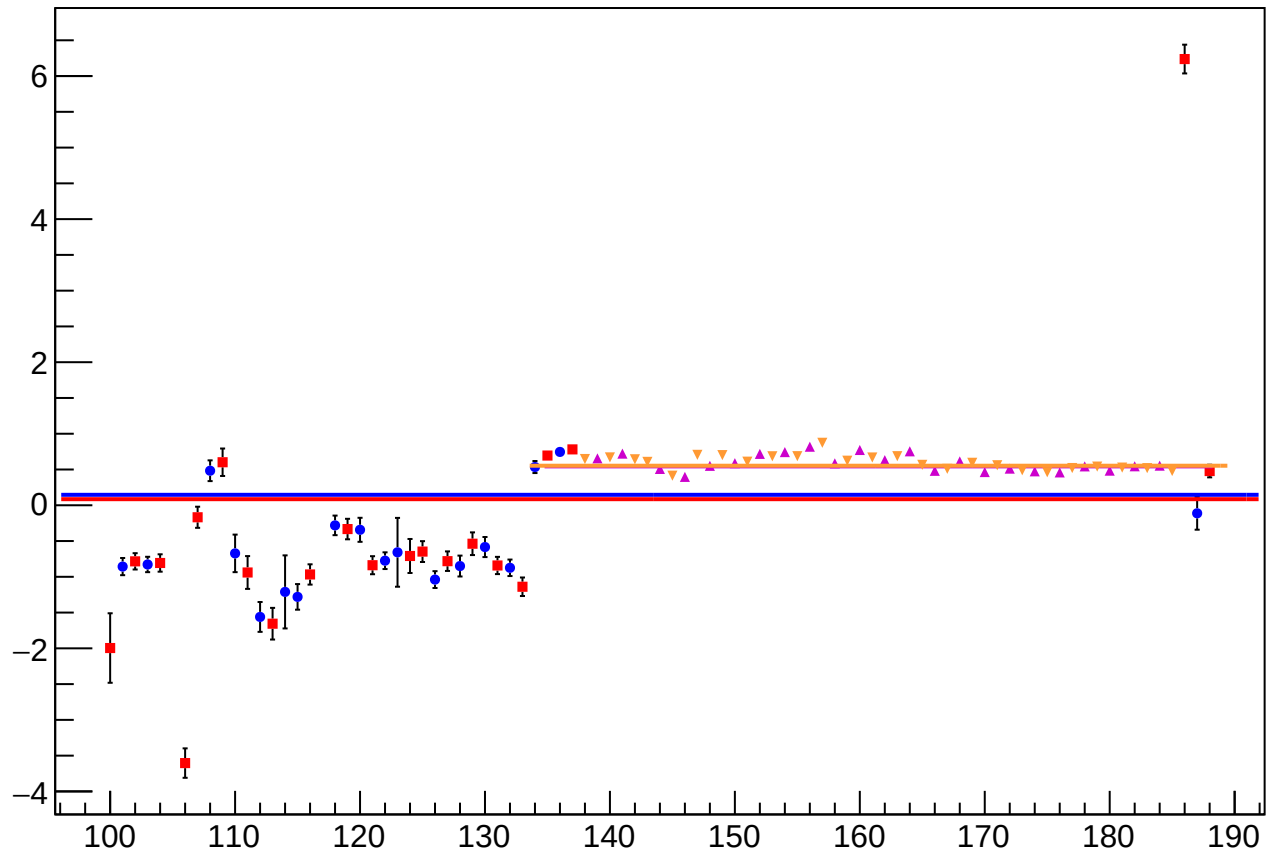
Left In:  $-29.863 \pm 0.082$   $\chi^2/\text{NDF}$ : 7145.9/22

+ sign  $-31.503 \pm 0.080$   $\chi^2/\text{NDF}$ : 15563.2/42

All:  $-31.166 \pm 0.057$   $\chi^2/\text{NDF}$ : 29367.5/86

- sign  $-30.823 \pm 0.081$   $\chi^2/\text{NDF}$ : 13768.7/43

reg\_asym\_sam\_26\_avg\_diff\_bpm12X\_slope vs Slug



Right In: 0.146 $\pm$ 0.024  $\chi^2$ /NDF: 991.2/17

Left Out: 0.553 $\pm$ 0.004  $\chi^2$ /NDF: 542.9/24

Right Out: 0.085 $\pm$ 0.025  $\chi^2$ /NDF: 2152.7/20

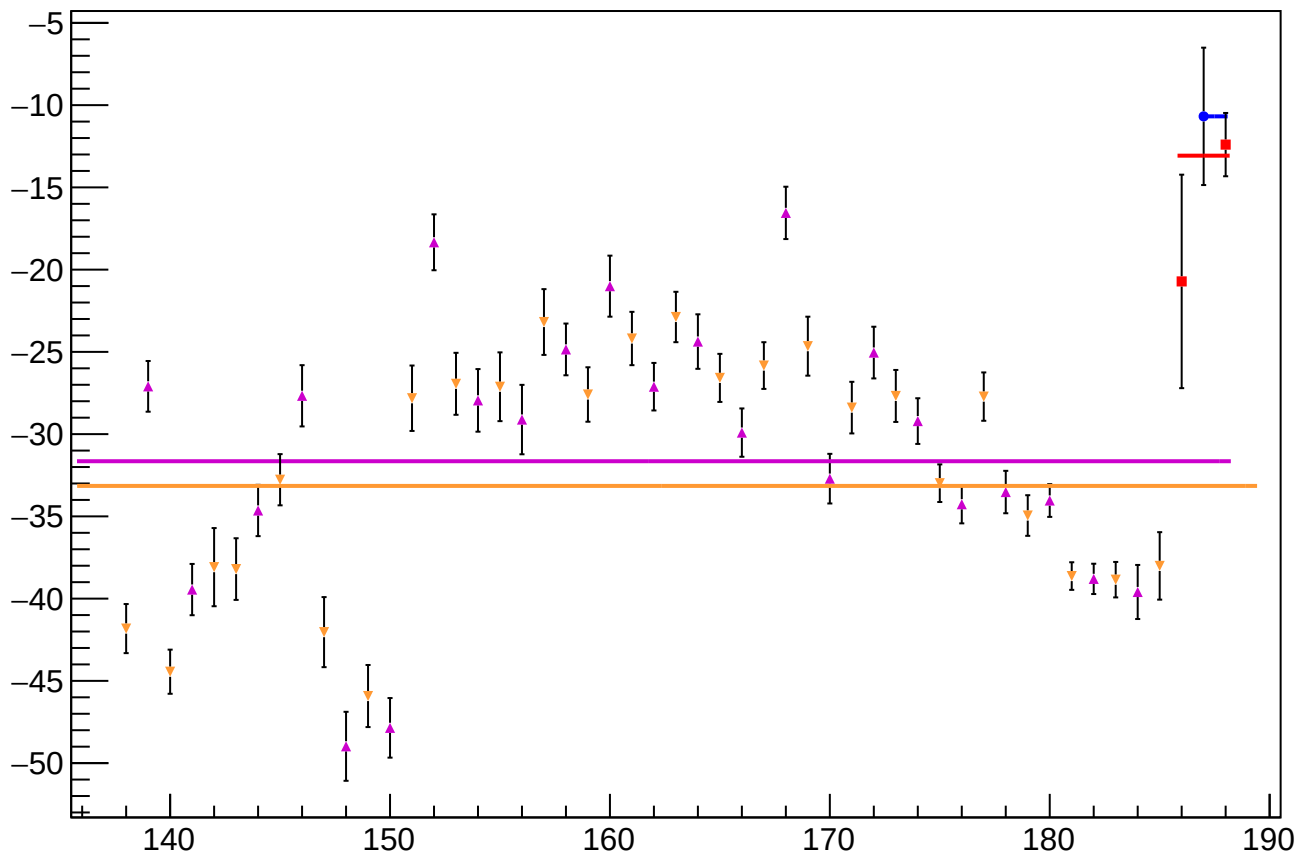
Left In: 0.544 $\pm$ 0.004  $\chi^2$ /NDF: 659.2/22

+ sign 0.543 $\pm$ 0.004  $\chi^2$ /NDF: 1818.3/42

All: 0.538 $\pm$ 0.003  $\chi^2$ /NDF: 4964.6/86

- sign 0.533 $\pm$ 0.004  $\chi^2$ /NDF: 3142.7/43

# reg\_asym\_sam\_26\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-10.682 \pm 4.176$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-33.148 \pm 0.301$   $\chi^2/\text{NDF}$ : 500.0/24

Right Out:  $-13.072 \pm 1.845$   $\chi^2/\text{NDF}$ : 1.5/1

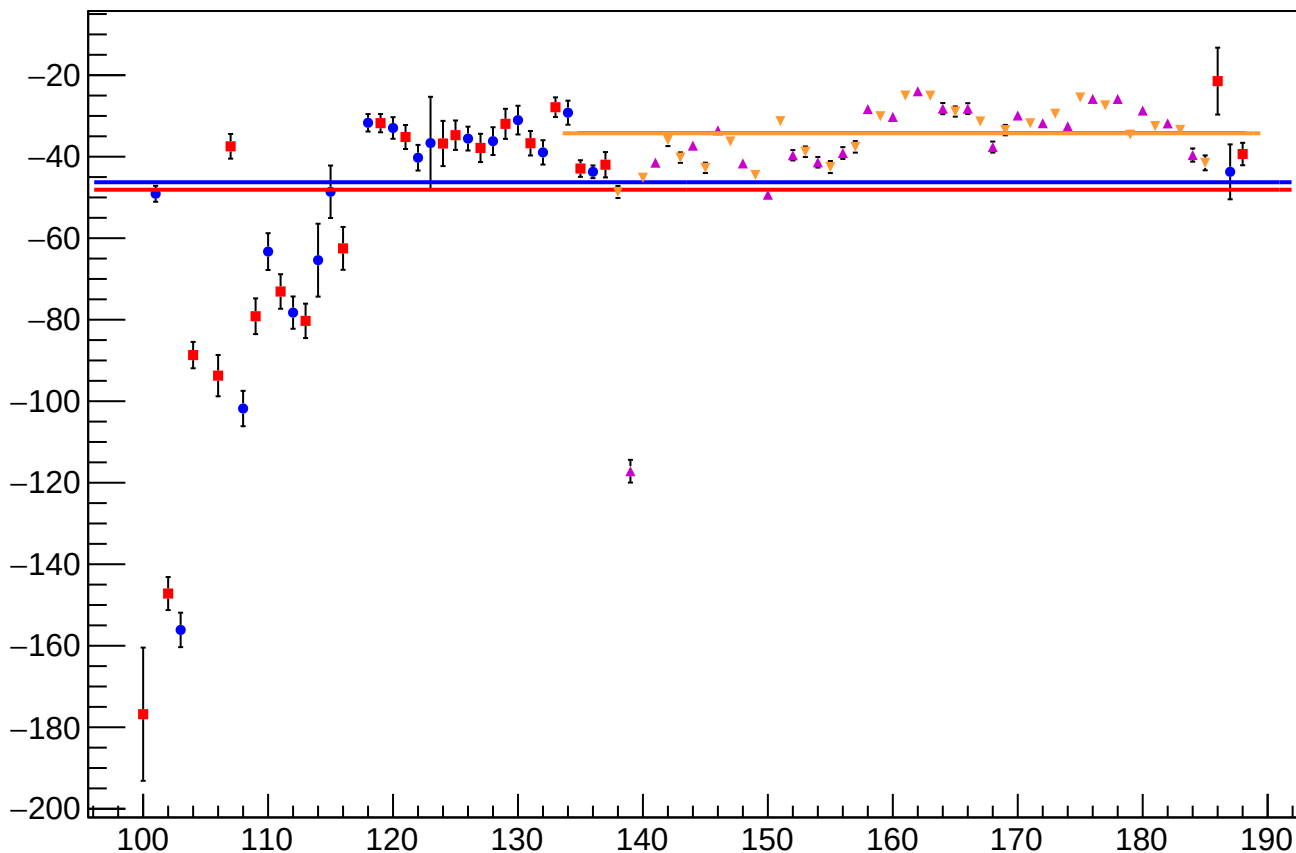
Left In:  $-31.647 \pm 0.308$   $\chi^2/\text{NDF}$ : 546.9/22

+ sign  $-33.032 \pm 0.300$   $\chi^2/\text{NDF}$ : 528.8/25

All:  $-32.099 \pm 0.213$   $\chi^2/\text{NDF}$ : 1195.4/50

- sign  $-31.145 \pm 0.303$   $\chi^2/\text{NDF}$ : 647.1/24

reg\_asym\_sam\_26\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-46.271 \pm 0.719$   $\chi^2/\text{NDF}: 1084.2/17$

Left Out:  $-34.256 \pm 0.242$   $\chi^2/\text{NDF}: 693.3/24$

Right Out:  $-48.105 \pm 0.733$   $\chi^2/\text{NDF}: 1293.7/20$

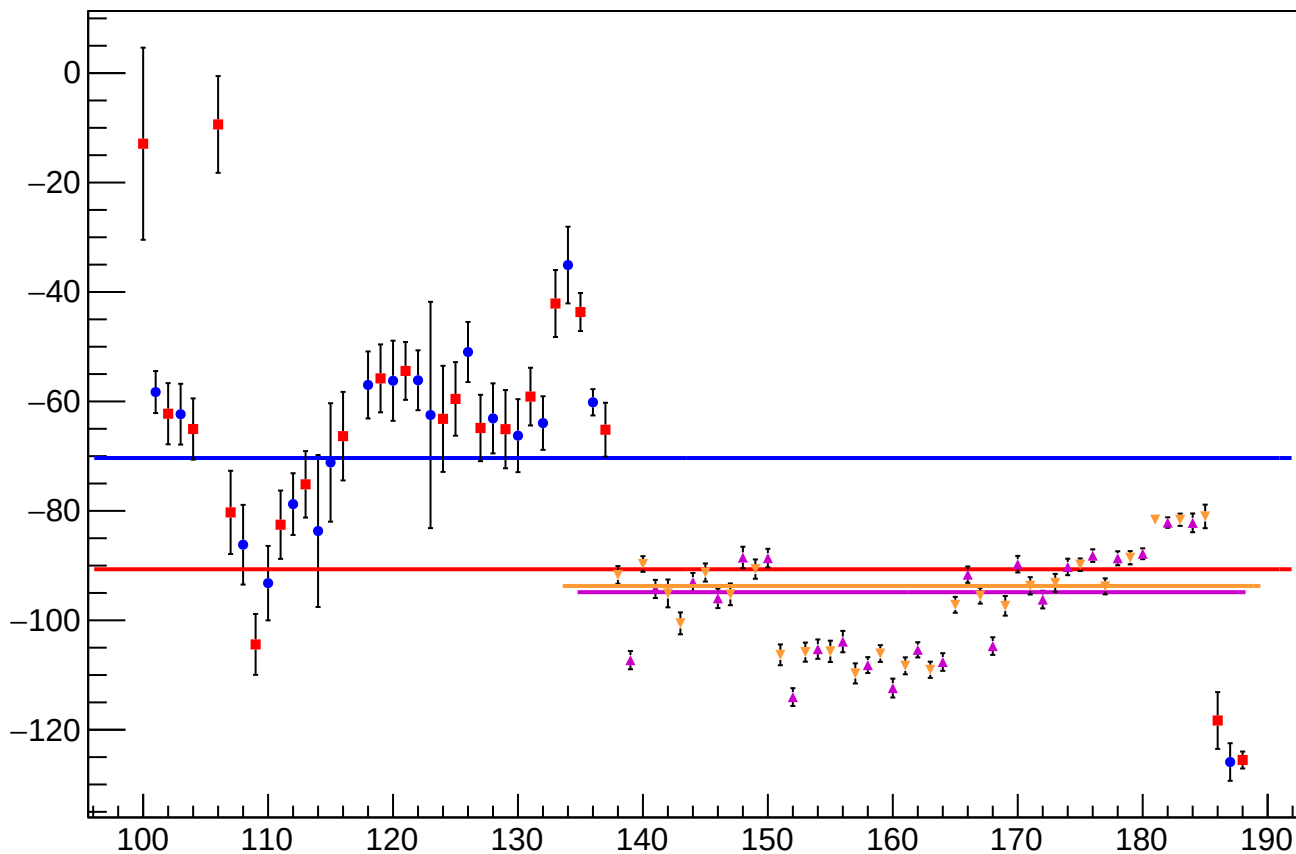
Left In:  $-34.189 \pm 0.250$   $\chi^2/\text{NDF}: 1546.1/22$

+ sign  $-35.481 \pm 0.229$   $\chi^2/\text{NDF}: 2028.5/42$

All:  $-35.558 \pm 0.165$   $\chi^2/\text{NDF}: 5191.4/86$

- sign  $-35.641 \pm 0.237$   $\chi^2/\text{NDF}: 3162.6/43$

# reg\_asym\_sam\_26\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $-70.340 \pm 1.224$   $\chi^2/\text{NDF}: 367.7/17$

Left Out:  $-93.719 \pm 0.302$   $\chi^2/\text{NDF}: 878.2/24$

Right Out:  $-90.670 \pm 1.011$   $\chi^2/\text{NDF}: 1157.3/20$

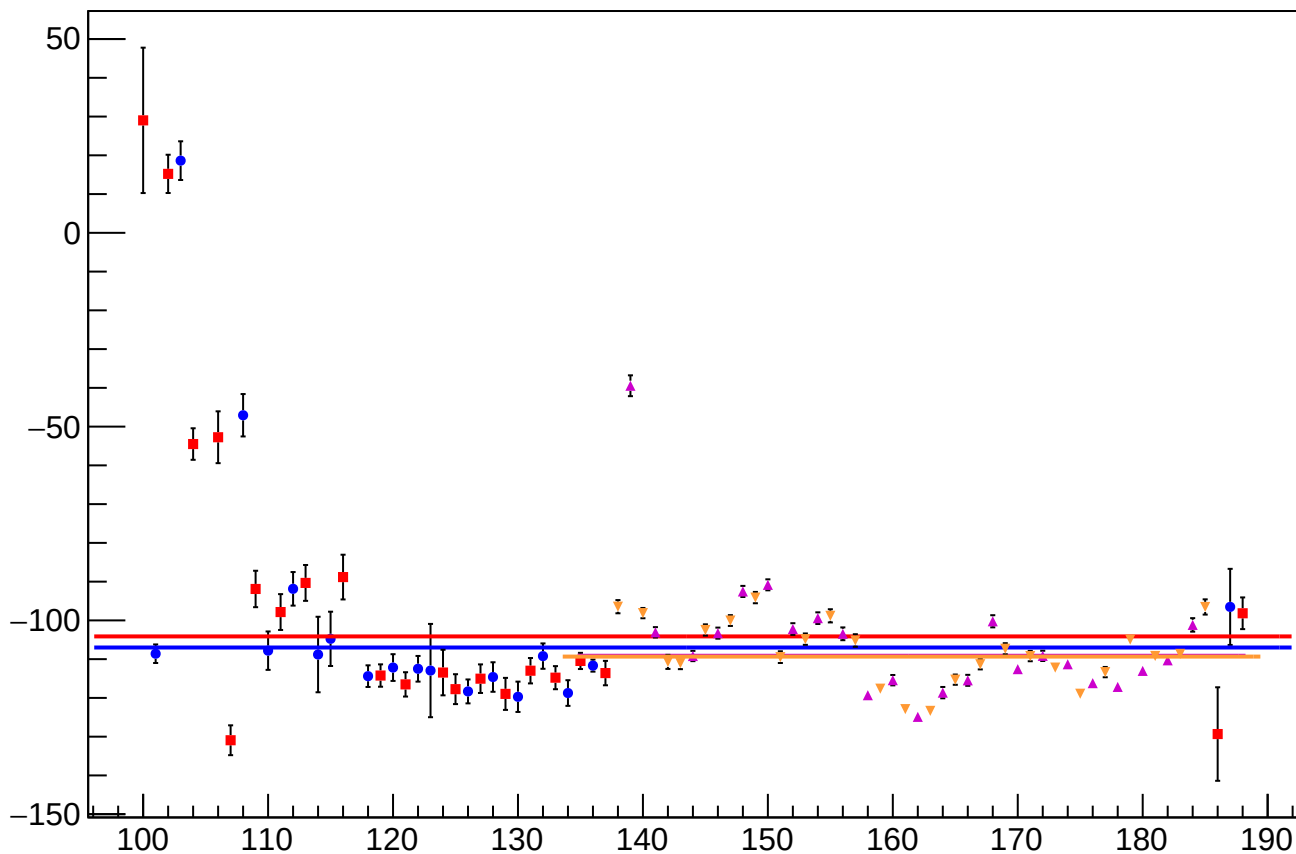
Left In:  $-94.861 \pm 0.307$   $\chi^2/\text{NDF}: 985.5/22$

+ sign  $-92.375 \pm 0.293$   $\chi^2/\text{NDF}: 1589.8/42$

All:  $-93.439 \pm 0.208$   $\chi^2/\text{NDF}: 3774.6/86$

- sign  $-94.506 \pm 0.294$   $\chi^2/\text{NDF}: 2158.6/43$

# reg\_asym\_sam\_26\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-106.995 \pm 0.809$   $\chi^2/\text{NDF}: 829.5/17$

Left Out:  $-109.338 \pm 0.272$   $\chi^2/\text{NDF}: 826.2/24$

Right Out:  $-104.133 \pm 0.840$   $\chi^2/\text{NDF}: 1025.2/20$

Left In:  $-109.126 \pm 0.279$   $\chi^2/\text{NDF}: 1578.7/22$

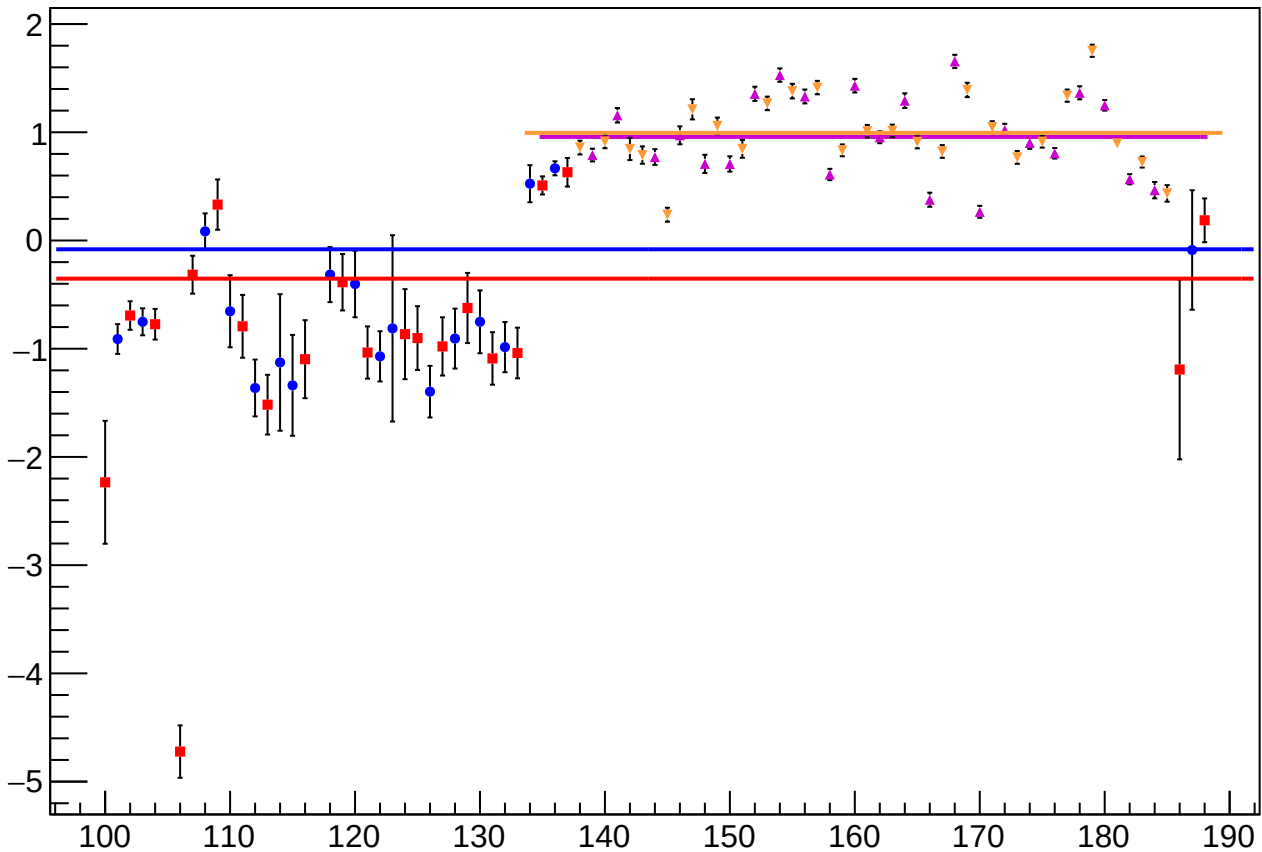
+ sign  $-109.100 \pm 0.258$   $\chi^2/\text{NDF}: 1663.2/42$

All:  $-108.872 \pm 0.185$   $\chi^2/\text{NDF}: 4300.5/86$

- sign  $-108.630 \pm 0.265$   $\chi^2/\text{NDF}: 2635.7/43$



# reg\_asym\_sam\_26\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.081 \pm 0.042$   $\chi^2/\text{NDF}$ : 329.0/17

Left Out:  $0.995 \pm 0.012$   $\chi^2/\text{NDF}$ : 635.3/24

Right Out:  $-0.353 \pm 0.043$   $\chi^2/\text{NDF}$ : 591.4/20

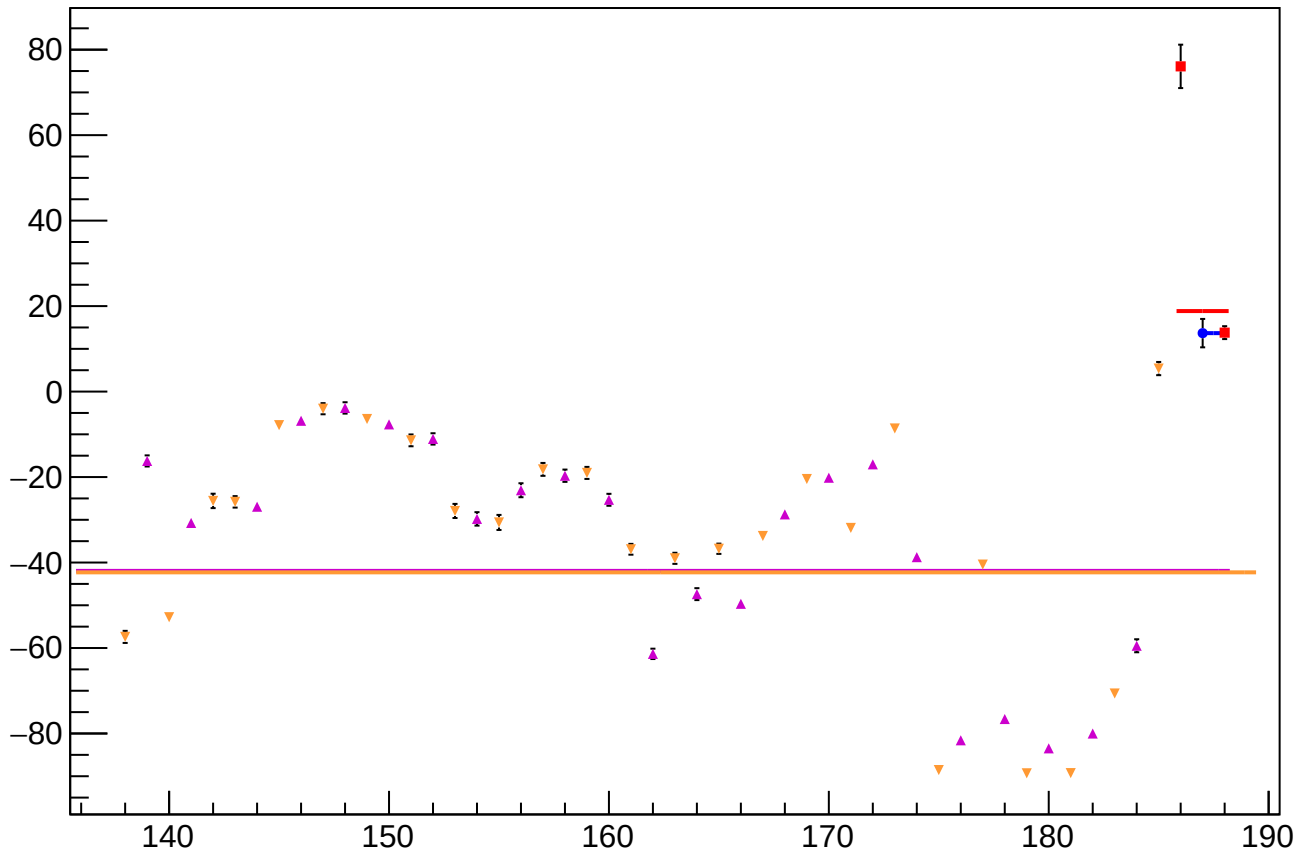
Left In:  $0.957 \pm 0.013$   $\chi^2/\text{NDF}$ : 896.5/22

+ sign  $0.908 \pm 0.012$   $\chi^2/\text{NDF}$ : 1566.5/42

All:  $0.881 \pm 0.008$   $\chi^2/\text{NDF}$ : 3925.3/86

- sign  $0.853 \pm 0.012$   $\chi^2/\text{NDF}$ : 2348.1/43

# reg\_asym\_sam\_48\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $13.675 \pm 3.323$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-42.295 \pm 0.222$   $\chi^2/\text{NDF}: 18267.5/24$

Right Out:  $18.838 \pm 1.445$   $\chi^2/\text{NDF}: 138.3/1$

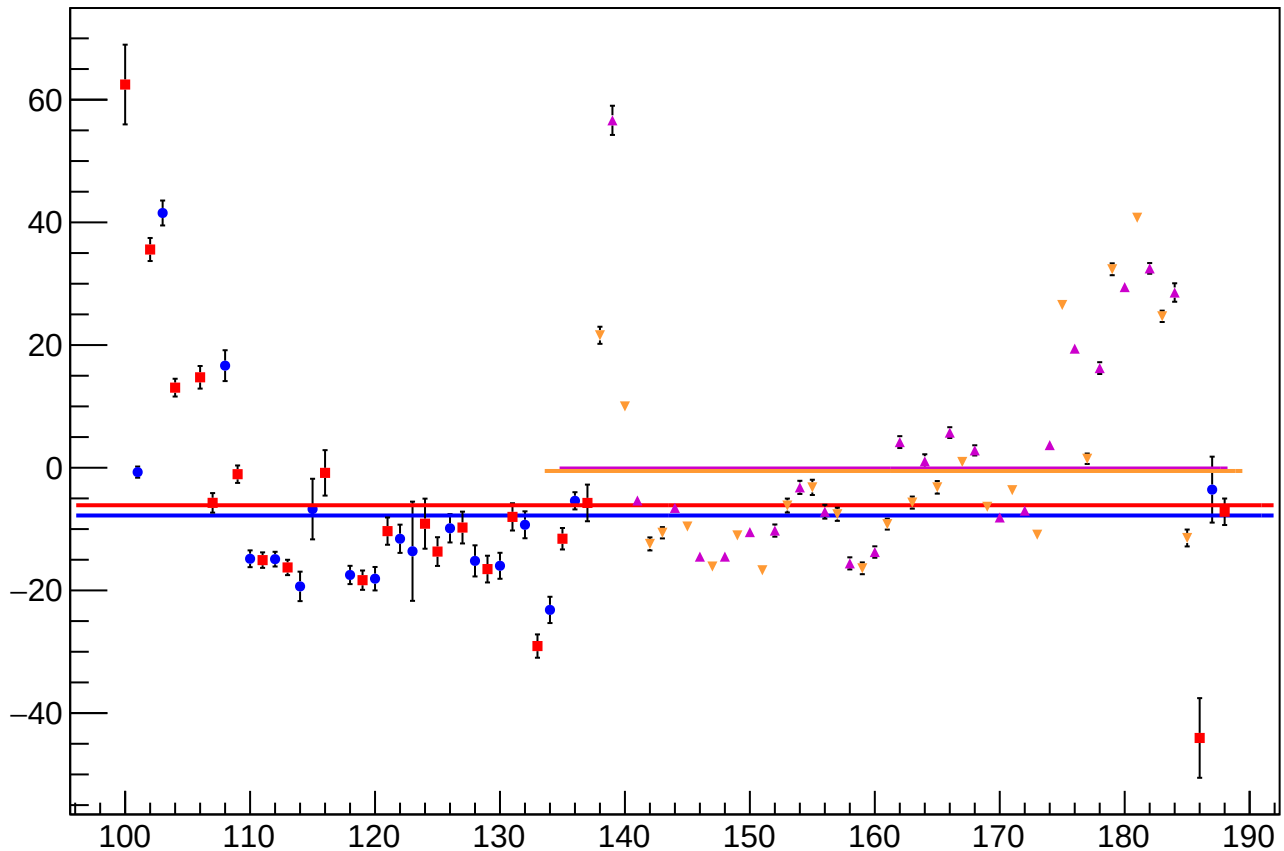
Left In:  $-41.955 \pm 0.226$   $\chi^2/\text{NDF}: 14723.4/22$

+ sign  $-42.045 \pm 0.222$   $\chi^2/\text{NDF}: 18549.9/25$

All:  $-41.280 \pm 0.157$   $\chi^2/\text{NDF}: 35162.6/50$

- sign  $-40.505 \pm 0.223$   $\chi^2/\text{NDF}: 16588.7/24$

reg\_asym\_sam\_48\_avg\_diff\_bpm4aY\_slope vs Slug



Right In: -7.785+/-0.426  $\chi^2/\text{NDF}$ : 983.4/17

Left Out: -0.527+/-0.175  $\chi^2/\text{NDF}$ : 8707.9/24

Right Out: -6.116+/-0.420  $\chi^2/\text{NDF}$ : 1327.7/20

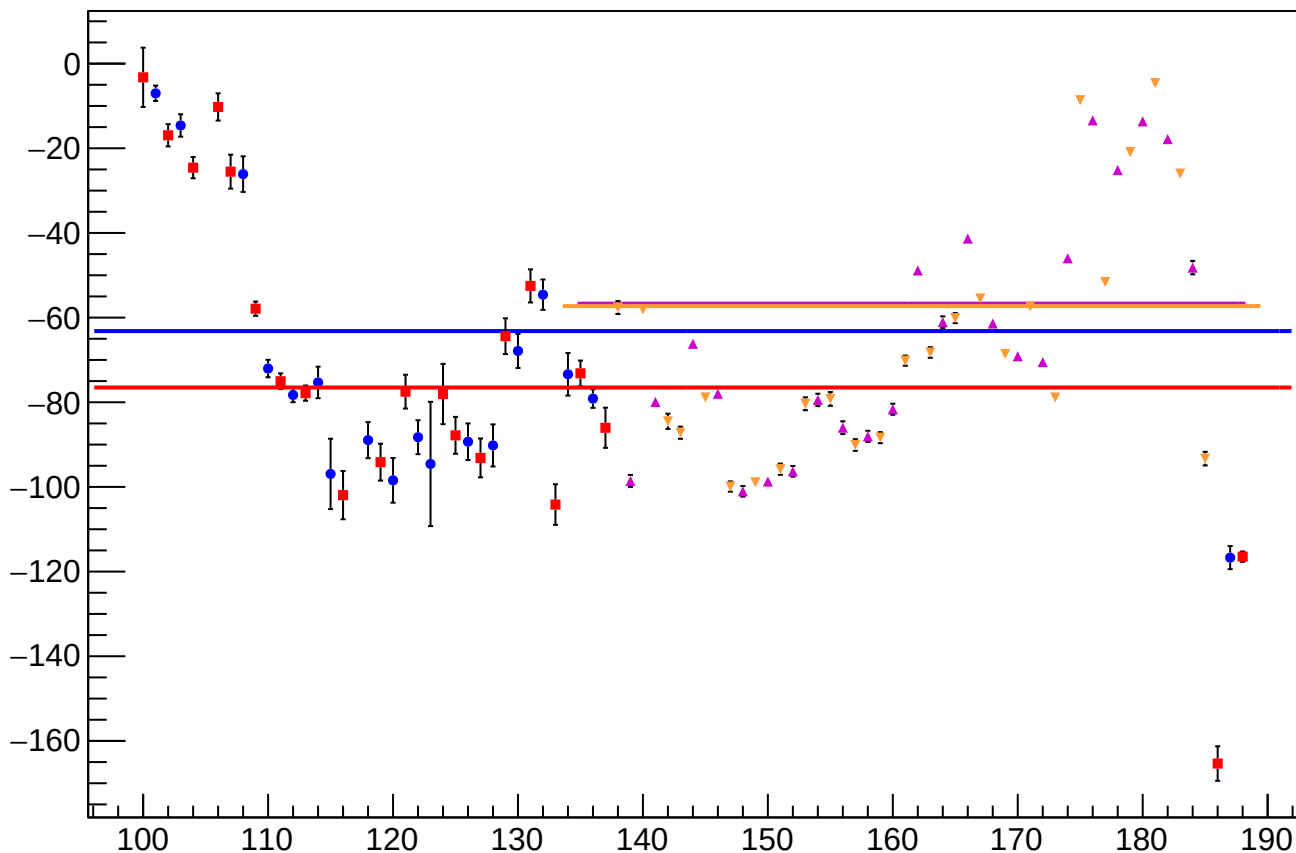
Left In: -0.125+/-0.179  $\chi^2/\text{NDF}$ : 6925.0/22

+ sign -1.572+/-0.162  $\chi^2/\text{NDF}$ : 9939.8/42

All: -1.312+/-0.115  $\chi^2/\text{NDF}$ : 18370.1/86

- sign -1.042+/-0.164  $\chi^2/\text{NDF}$ : 8425.0/43

reg\_asym\_sam\_48\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $-63.180 \pm 0.718$   $\chi^2/\text{NDF}: 2132.6/17$

Left Out:  $-57.276 \pm 0.224$   $\chi^2/\text{NDF}: 18511.1/24$

Right Out:  $-76.513 \pm 0.603$   $\chi^2/\text{NDF}: 3450.4/20$

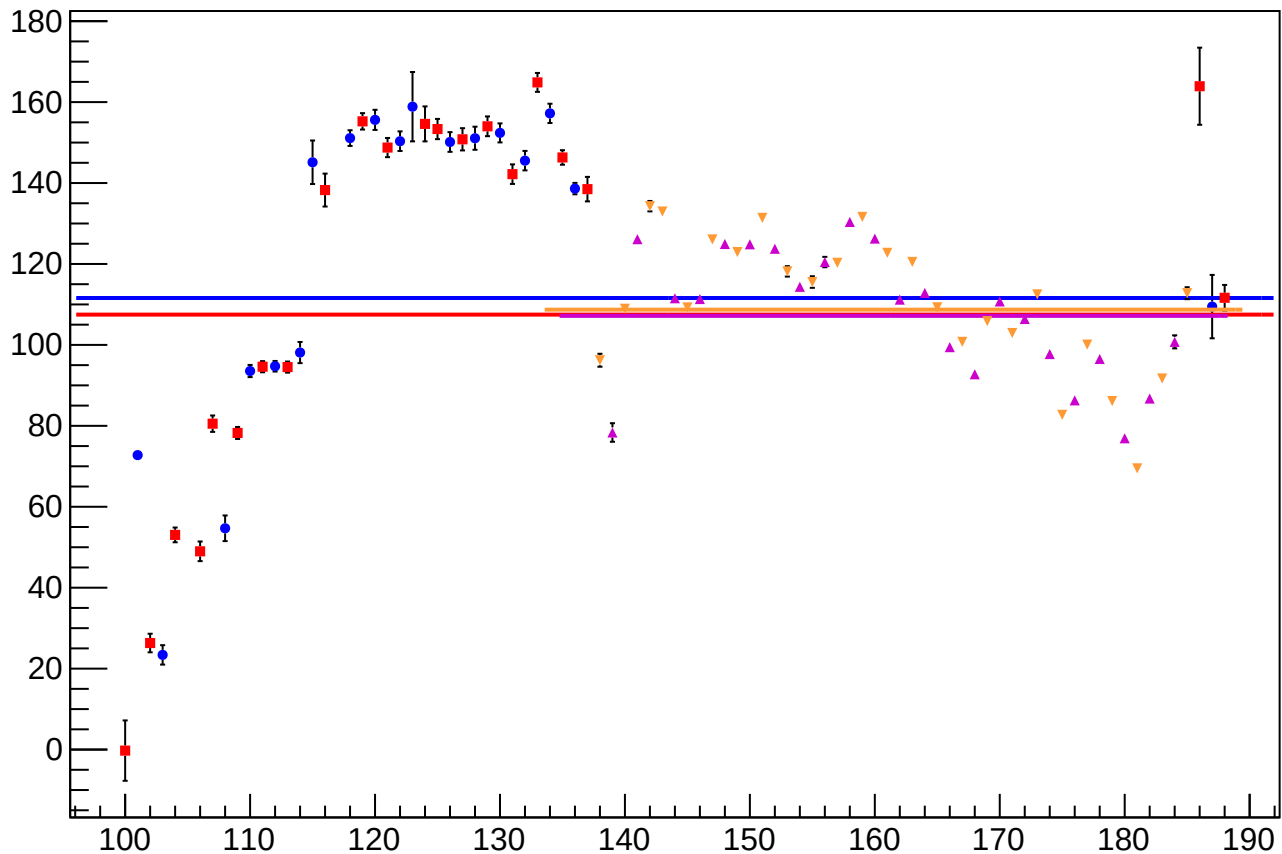
Left In:  $-56.705 \pm 0.226$   $\chi^2/\text{NDF}: 16547.5/22$

+ sign  $-57.798 \pm 0.213$   $\chi^2/\text{NDF}: 20705.4/42$

All:  $-58.478 \pm 0.150$   $\chi^2/\text{NDF}: 41669.8/86$

- sign  $-59.146 \pm 0.212$   $\chi^2/\text{NDF}: 20944.3/43$

reg\_asym\_sam\_48\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 111.590 $\pm$ 0.486  $\chi^2$ /NDF: 5959.6/17

Left Out: 108.709 $\pm$ 0.198  $\chi^2$ /NDF: 7297.0/24

Right Out: 107.484 $\pm$ 0.481  $\chi^2$ /NDF: 7074.5/20

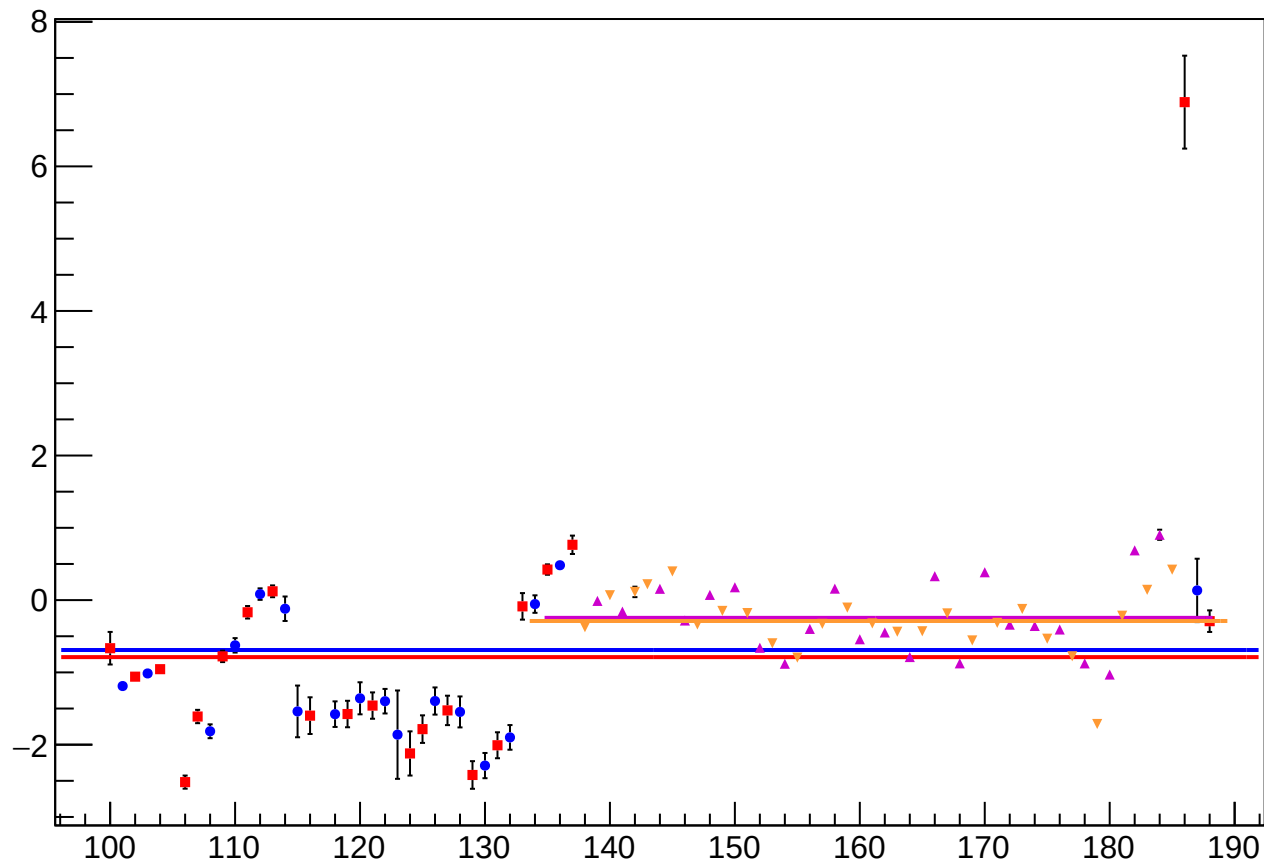
Left In: 107.180 $\pm$ 0.202  $\chi^2$ /NDF: 5592.3/22

+ sign 109.118 $\pm$ 0.183  $\chi^2$ /NDF: 13286.7/42

All: 108.187 $\pm$ 0.130  $\chi^2$ /NDF: 26006.5/86

- sign 107.225 $\pm$ 0.186  $\chi^2$ /NDF: 12667.1/43

reg\_asym\_sam\_48\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.690 \pm 0.026$   $\chi^2/\text{NDF}$ : 996.6/17

Left Out:  $-0.289 \pm 0.009$   $\chi^2/\text{NDF}$ : 2039.6/24

Right Out:  $-0.789 \pm 0.024$   $\chi^2/\text{NDF}$ : 1465.4/20

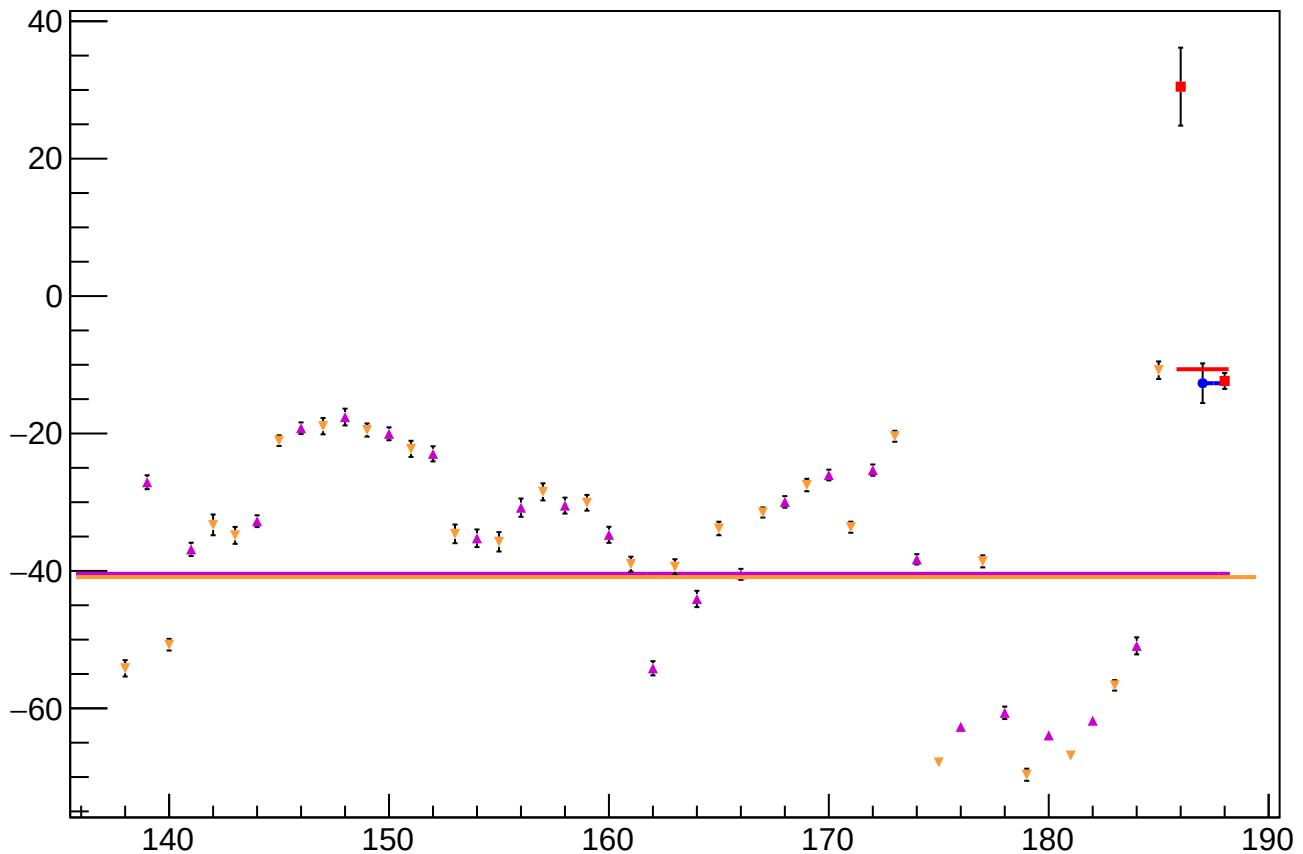
Left In:  $-0.246 \pm 0.009$   $\chi^2/\text{NDF}$ : 2804.3/22

+ sign  $-0.333 \pm 0.009$   $\chi^2/\text{NDF}$ : 3252.7/42

All:  $-0.324 \pm 0.006$   $\chi^2/\text{NDF}$ : 7970.7/86

- sign  $-0.315 \pm 0.009$   $\chi^2/\text{NDF}$ : 4715.8/43

# reg\_asym\_sam\_48\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-12.681 \pm 2.883$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-40.897 \pm 0.186$   $\chi^2/\text{NDF}$ : 9114.7/24

Right Out:  $-10.648 \pm 1.132$   $\chi^2/\text{NDF}$ : 54.7/1

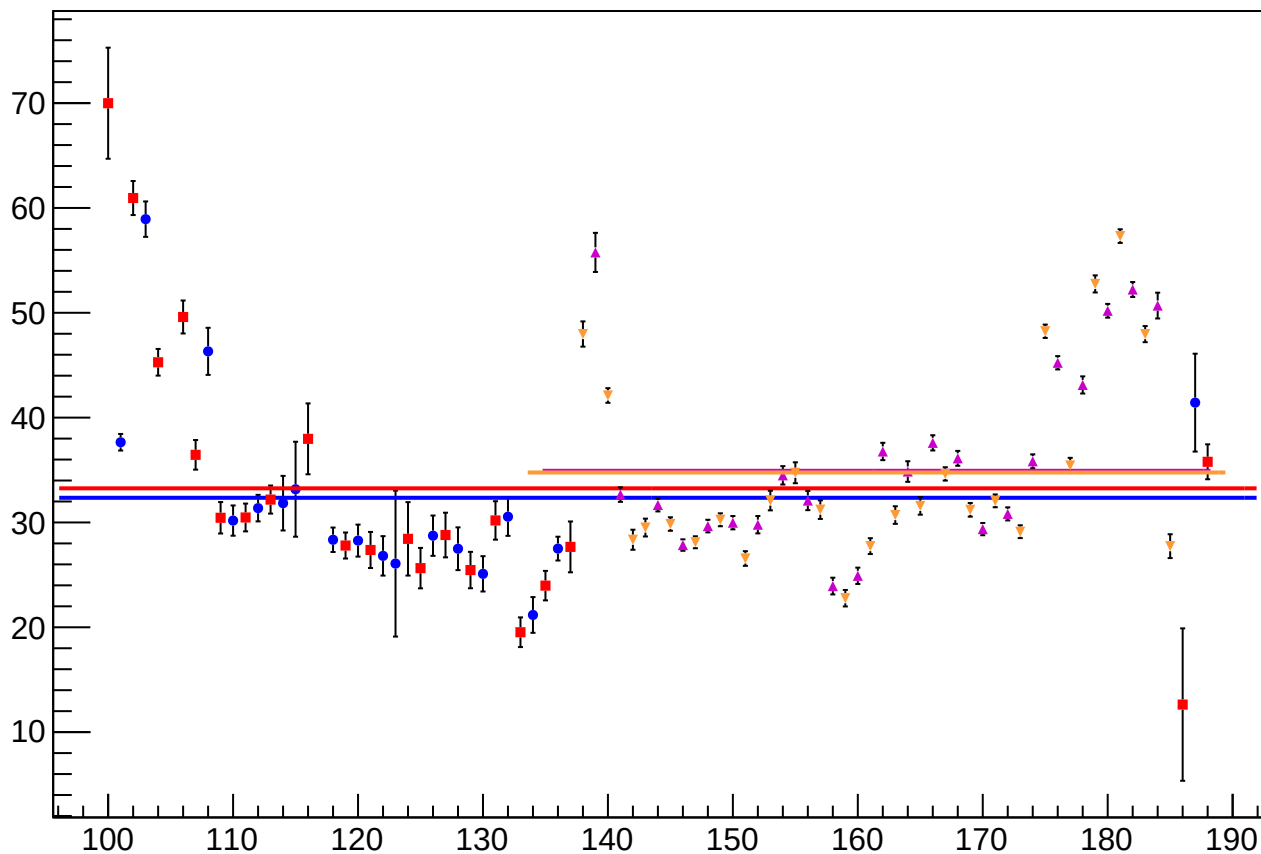
Left In:  $-40.422 \pm 0.189$   $\chi^2/\text{NDF}$ : 7030.2/22

+ sign  $-40.779 \pm 0.186$   $\chi^2/\text{NDF}$ : 9210.1/25

All:  $-40.198 \pm 0.132$   $\chi^2/\text{NDF}$ : 16987.8/50

- sign  $-39.615 \pm 0.186$   $\chi^2/\text{NDF}$ : 7758.2/24

# reg\_asym\_sam\_48\_dd\_diff\_bpm4aY\_slope vs Slug



Right In: 32.353 $\pm$ 0.371  $\chi^2$ /NDF: 456.0/17

Left Out: 34.768 $\pm$ 0.148  $\chi^2$ /NDF: 3677.3/24

Right Out: 33.254 $\pm$ 0.369  $\chi^2$ /NDF: 780.7/20

Left In: 34.928 $\pm$ 0.151  $\chi^2$ /NDF: 2688.4/22

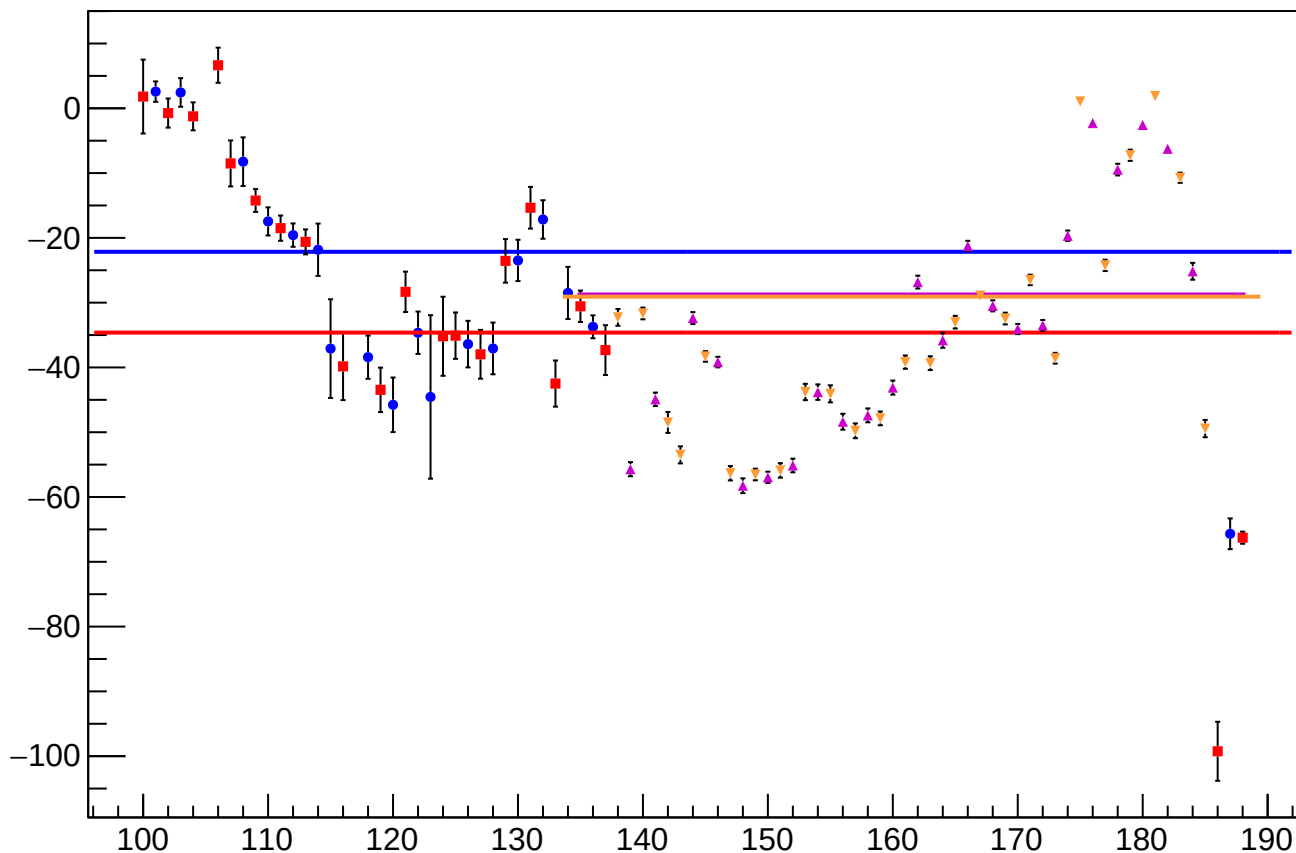
+ sign 34.438 $\pm$ 0.137  $\chi^2$ /NDF: 4169.9/42

All: 34.561 $\pm$ 0.098  $\chi^2$ /NDF: 7658.2/86

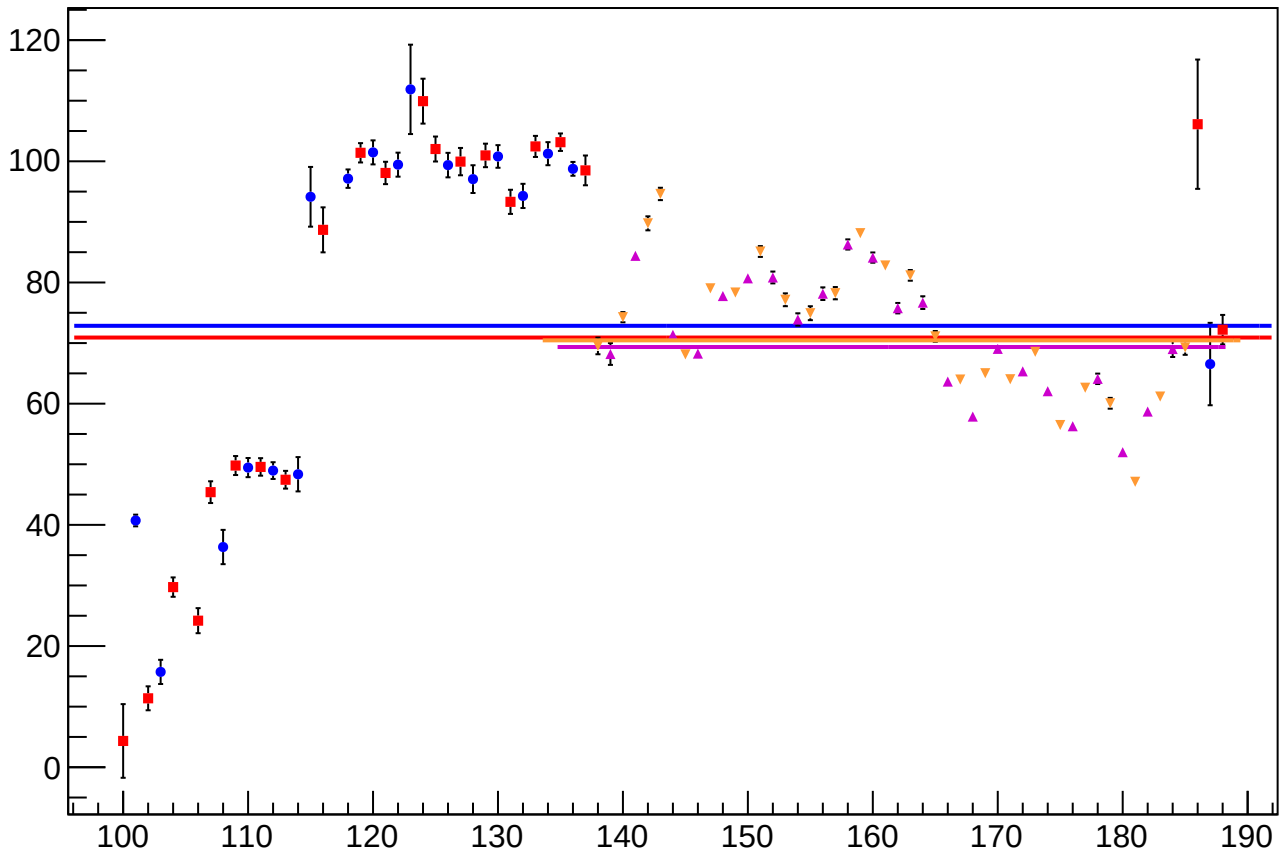
- sign 34.688 $\pm$ 0.140  $\chi^2$ /NDF: 3486.7/43



# reg\_asym\_sam\_48\_dd\_diff\_bpm4eX\_slope vs Slug



# reg\_asym\_sam\_48\_dd\_diff\_bpm4eY\_slope vs Slug



Right In: 72.850 $\pm$ 0.425  $\chi^2$ /NDF: 4738.8/17

Left Out: 70.450 $\pm$ 0.167  $\chi^2$ /NDF:4484.7/24

Right Out: 70.914 $\pm$ 0.426  $\chi^2$ /NDF: 5500.5/20

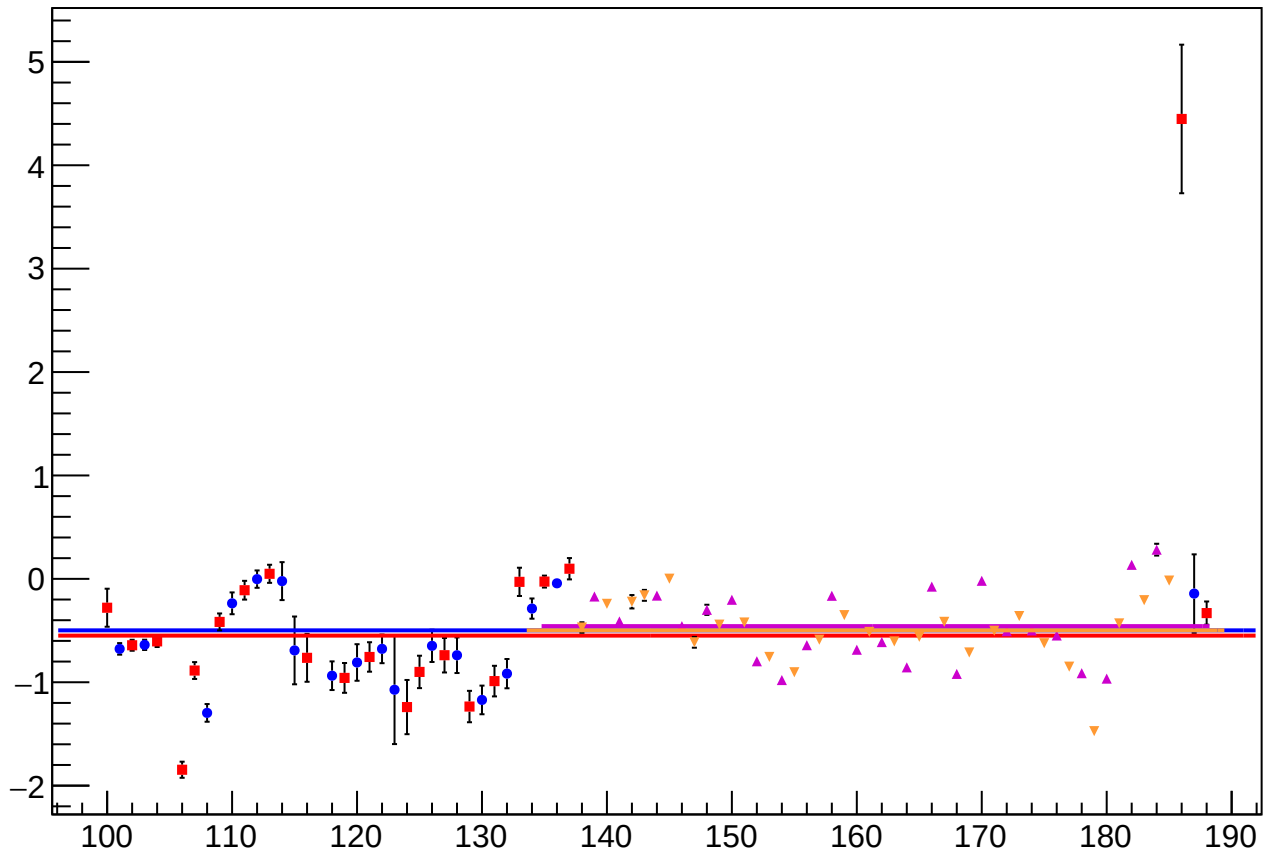
Left In: 69.350 $\pm$ 0.170  $\chi^2$ /NDF:3330.7/22

+ sign 70.769 $\pm$ 0.155  $\chi^2$ /NDF: 9251.1/42

All: 70.177 $\pm$ 0.111  $\chi^2$ /NDF: 18123.7/86

- sign 69.564 $\pm$ 0.158  $\chi^2$ /NDF: 8842.9/43

# reg\_asym\_sam\_48\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.498 \pm 0.022$   $\chi^2/\text{NDF}$ : 304.4/17

Left Out:  $-0.498 \pm 0.008$   $\chi^2/\text{NDF}$ : 1440.7/24

Right Out:  $-0.549 \pm 0.021$   $\chi^2/\text{NDF}$ : 614.8/20

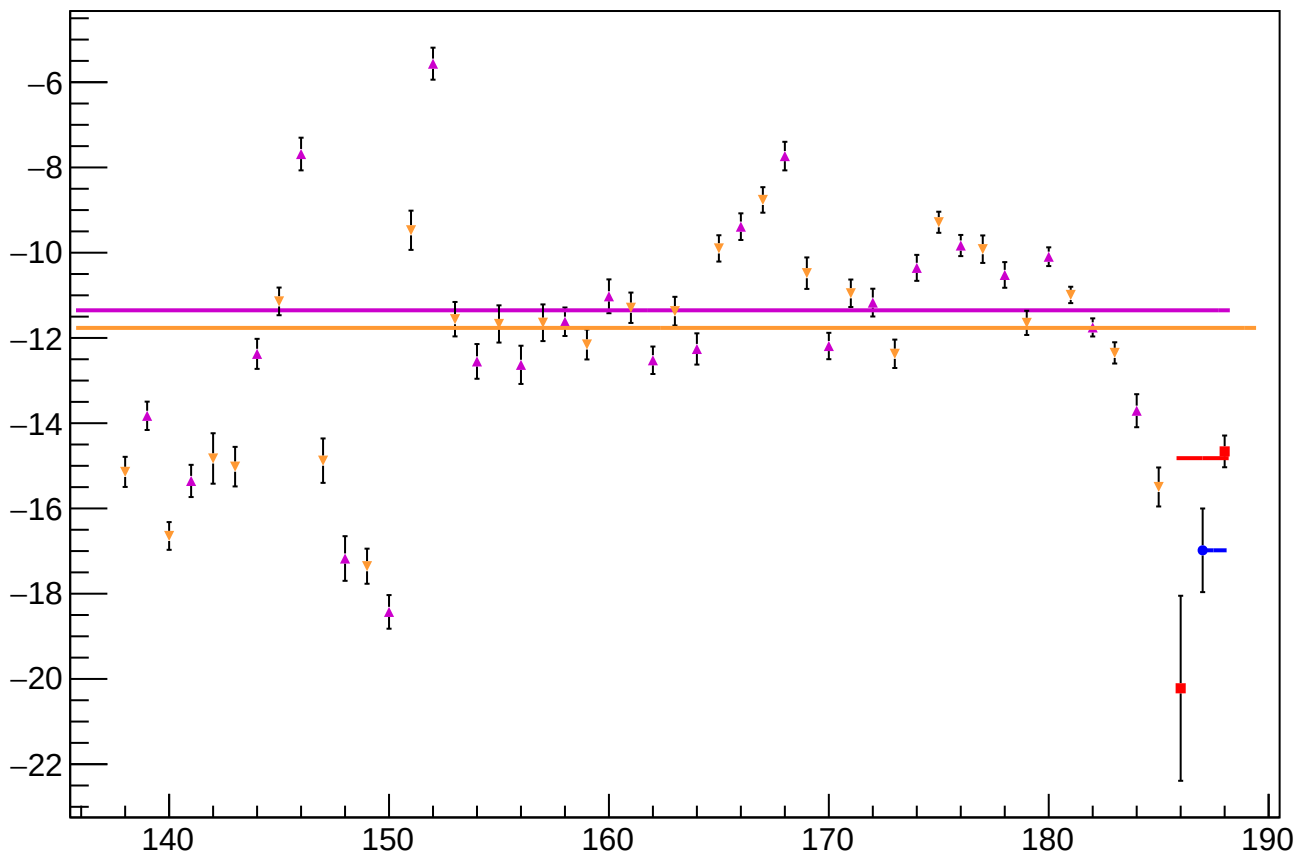
Left In:  $-0.457 \pm 0.008$   $\chi^2/\text{NDF}$ : 1975.2/22

+ sign  $-0.498 \pm 0.007$   $\chi^2/\text{NDF}$ : 1745.1/42

All:  $-0.483 \pm 0.005$   $\chi^2/\text{NDF}$ : 4360.7/86

- sign  $-0.468 \pm 0.007$   $\chi^2/\text{NDF}$ : 2606.9/43

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-16.982 \pm 0.981$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-11.764 \pm 0.067$   $\chi^2/\text{NDF}$ : 1025.9/24

Right Out:  $-14.820 \pm 0.367$   $\chi^2/\text{NDF}$ : 6.4/1

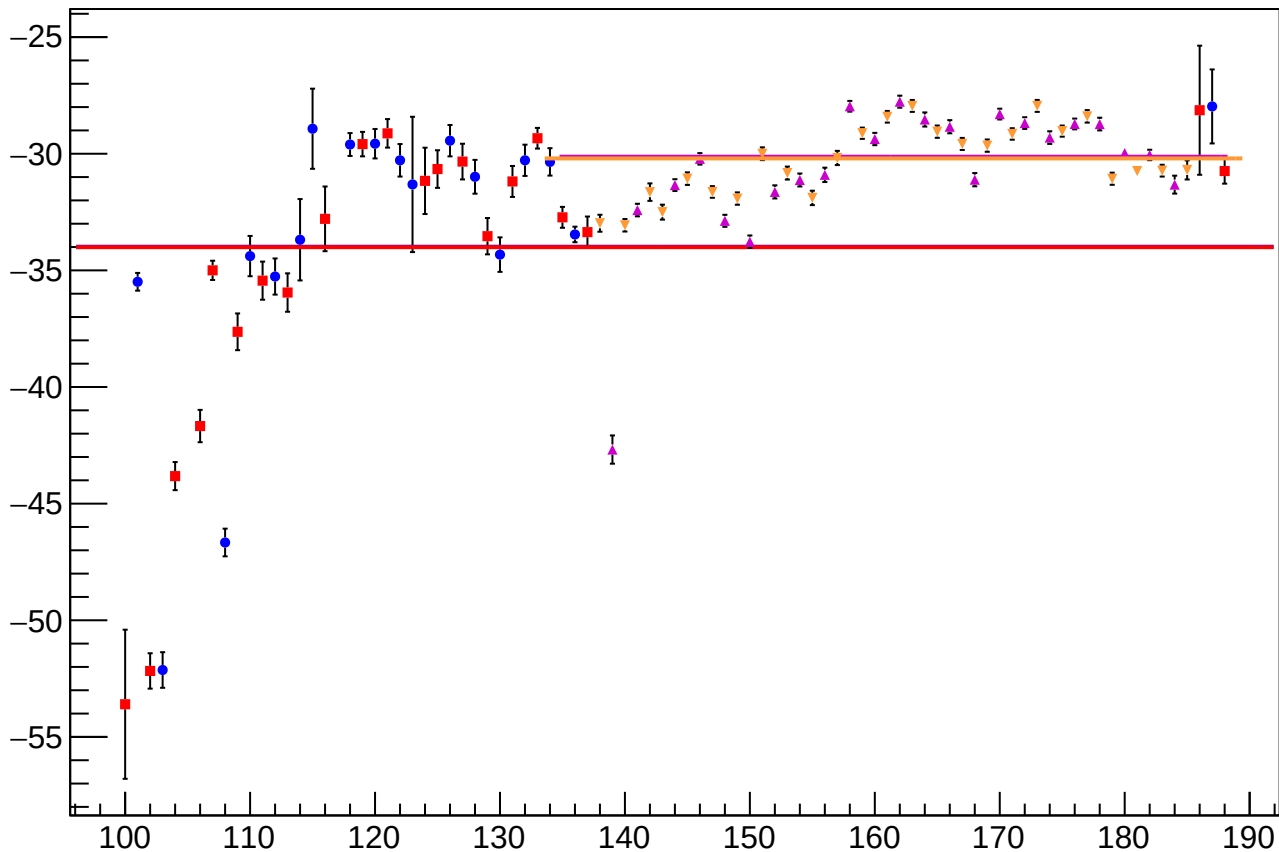
Left In:  $-11.352 \pm 0.068$   $\chi^2/\text{NDF}$ : 1280.6/22

+ sign  $-11.788 \pm 0.067$   $\chi^2/\text{NDF}$ : 1054.0/25

All:  $-11.627 \pm 0.047$   $\chi^2/\text{NDF}$ : 2439.2/50

- sign  $-11.466 \pm 0.067$   $\chi^2/\text{NDF}$ : 1373.5/24

# reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-33.987 \pm 0.150$   $\chi^2/\text{NDF}$ : 1355.3/17

Left Out:  $-30.201 \pm 0.054$   $\chi^2/\text{NDF}$ : 725.7/24

Right Out:  $-34.005 \pm 0.145$   $\chi^2/\text{NDF}$ : 1393.7/20

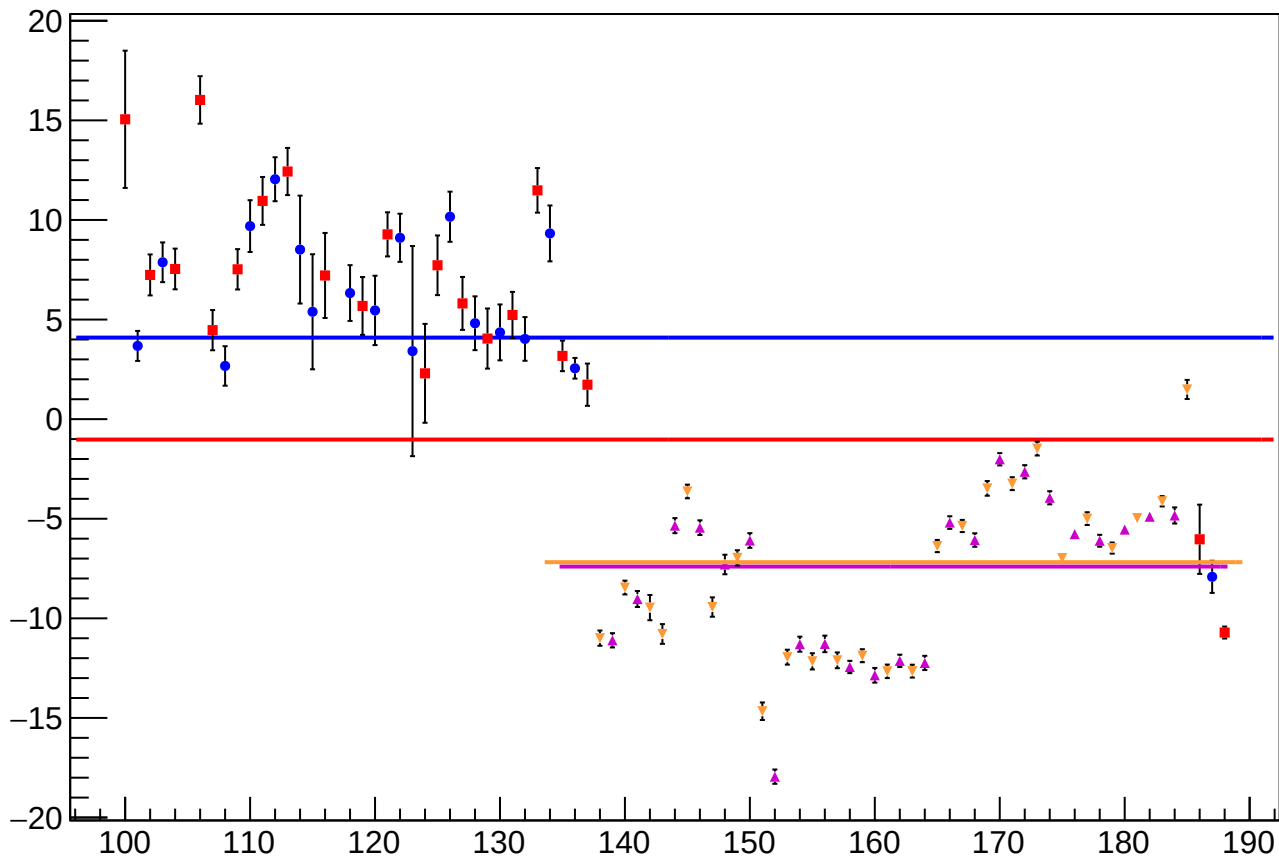
Left In:  $-30.128 \pm 0.055$   $\chi^2/\text{NDF}$ : 1290.4/22

+ sign  $-30.635 \pm 0.051$   $\chi^2/\text{NDF}$ : 2645.0/42

All:  $-30.628 \pm 0.036$   $\chi^2/\text{NDF}$ : 5952.7/86

- sign  $-30.621 \pm 0.052$   $\chi^2/\text{NDF}$ : 3307.6/43

# reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: 4.094 $\pm$ 0.256  $\chi^2$ /NDF: 378.4/17

Left Out: -7.180 $\pm$ 0.067  $\chi^2$ /NDF:3015.8/24

Right Out: -1.025 $\pm$ 0.201  $\chi^2$ /NDF: 2127.1/20

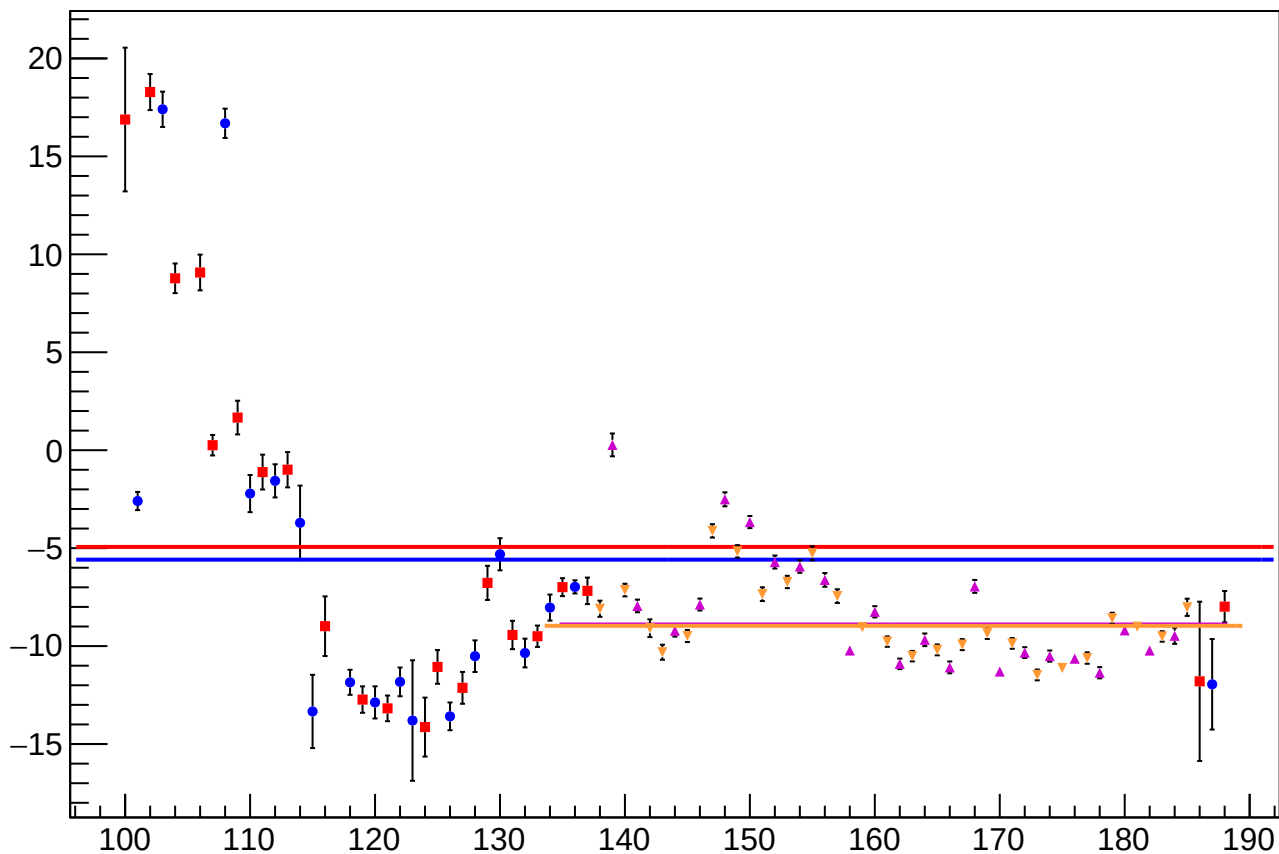
Left In: -7.400 $\pm$ 0.068  $\chi^2$ /NDF:3134.9/22

+ sign -6.456 $\pm$ 0.065  $\chi^2$ /NDF: 5213.8/42

All: -6.607 $\pm$ 0.046  $\chi^2$ /NDF: 11389.4/86

- sign -6.753 $\pm$ 0.064  $\chi^2$ /NDF: 6164.9/43

# reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-5.588 \pm 0.169$   $\chi^2/\text{NDF}$ : 2132.9/17

Left Out:  $-8.965 \pm 0.060$   $\chi^2/\text{NDF}$ : 876.6/24

Right Out:  $-4.937 \pm 0.169$   $\chi^2/\text{NDF}$ : 2058.6/20

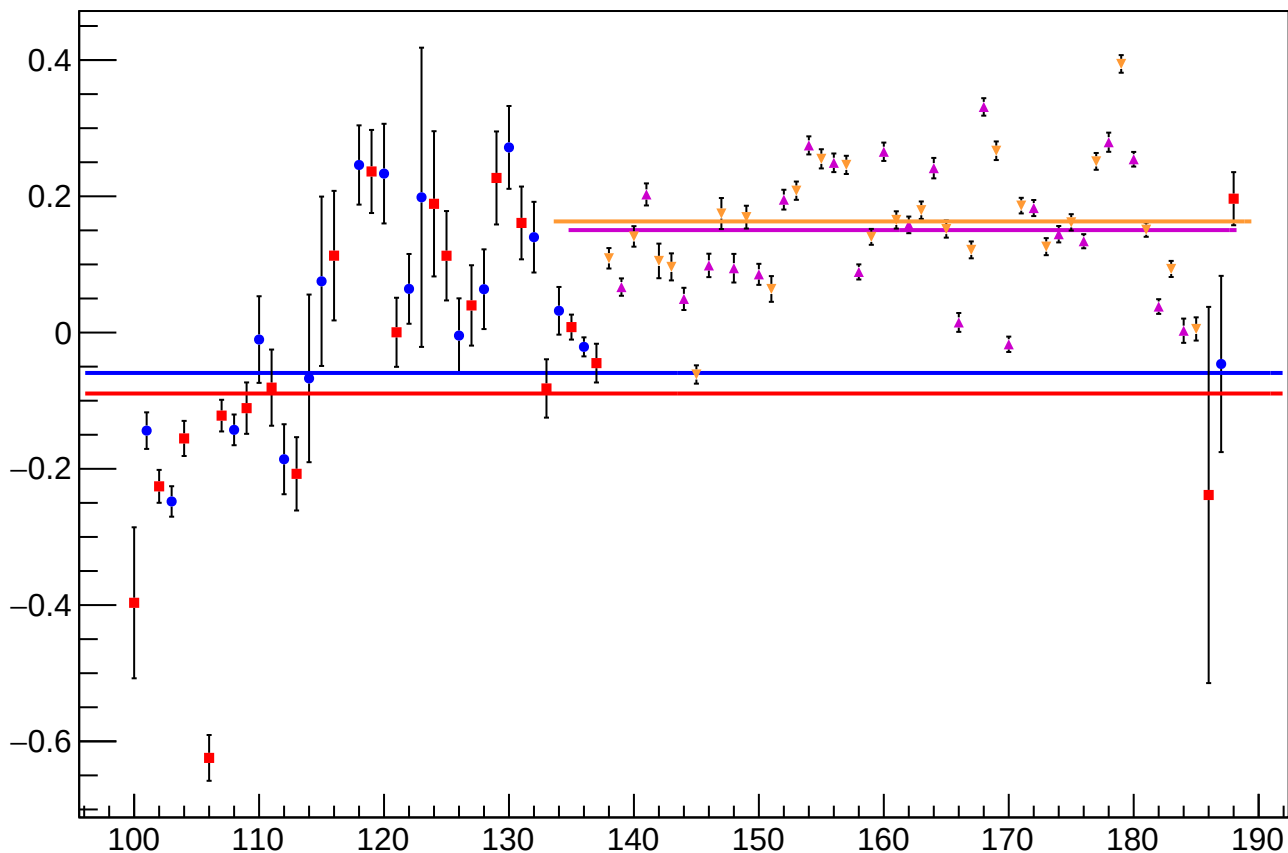
Left In:  $-8.898 \pm 0.061$   $\chi^2/\text{NDF}$ : 1584.0/22

+ sign  $-8.586 \pm 0.057$   $\chi^2/\text{NDF}$ : 3362.3/42

All:  $-8.511 \pm 0.040$   $\chi^2/\text{NDF}$ : 7494.6/86

- sign  $-8.433 \pm 0.058$   $\chi^2/\text{NDF}$ : 4128.8/43

# reg\_asym\_sam\_13\_57\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.059 \pm 0.008$   $\chi^2/\text{NDF}$ : 217.6/17

Left Out:  $0.163 \pm 0.003$   $\chi^2/\text{NDF}$ : 1011.4/24

Right Out:  $-0.089 \pm 0.008$   $\chi^2/\text{NDF}$ : 492.1/20

Left In:  $0.150 \pm 0.003$   $\chi^2/\text{NDF}$ : 1296.5/22

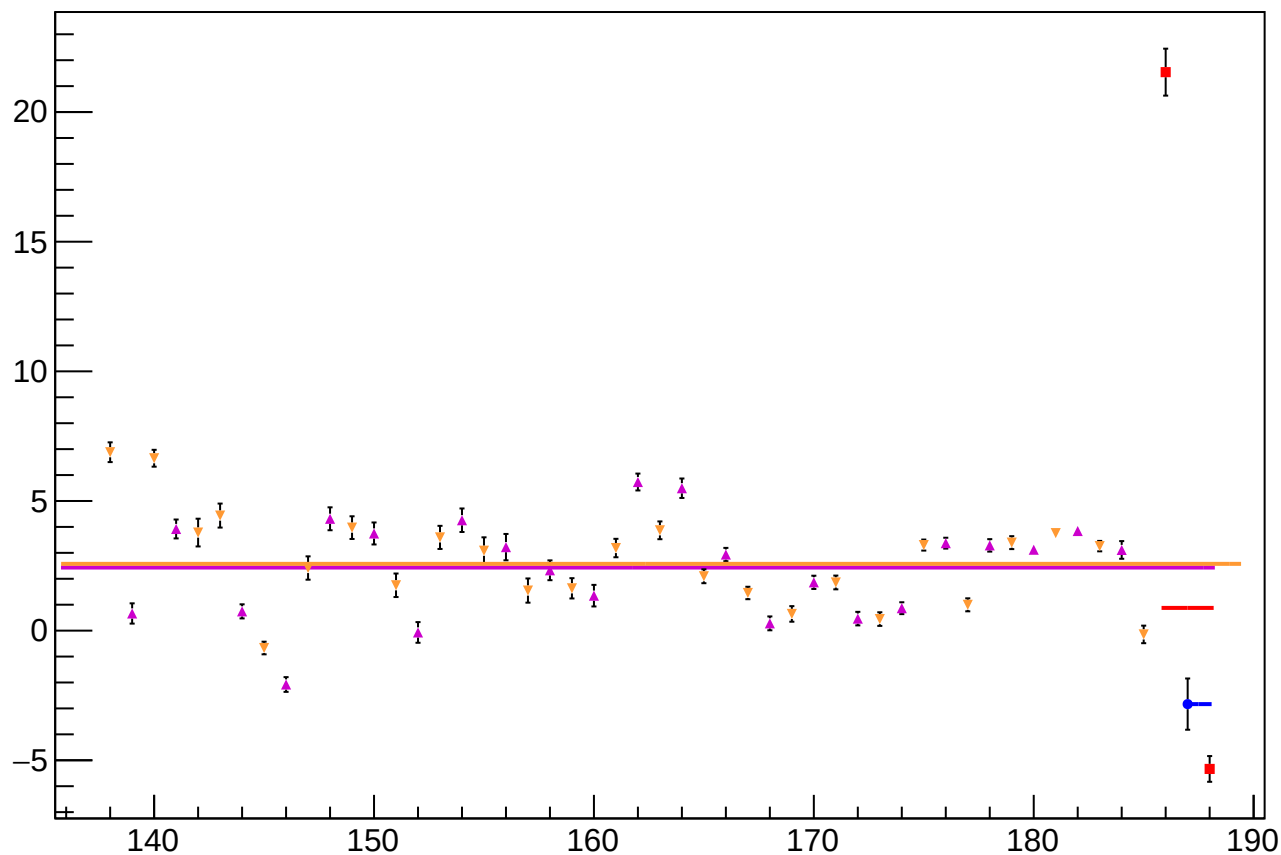
+ sign  $0.142 \pm 0.003$   $\chi^2/\text{NDF}$ : 1866.9/42

All:  $0.134 \pm 0.002$   $\chi^2/\text{NDF}$ : 4437.9/86

- sign  $0.126 \pm 0.003$   $\chi^2/\text{NDF}$ : 2553.3/43



reg\_asym\_sam\_15\_37\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-2.834 \pm 0.988$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $2.575 \pm 0.058$   $\chi^2/\text{NDF}$ : 868.1/24

Right Out:  $0.876 \pm 0.435$   $\chi^2/\text{NDF}$ : 677.5/1

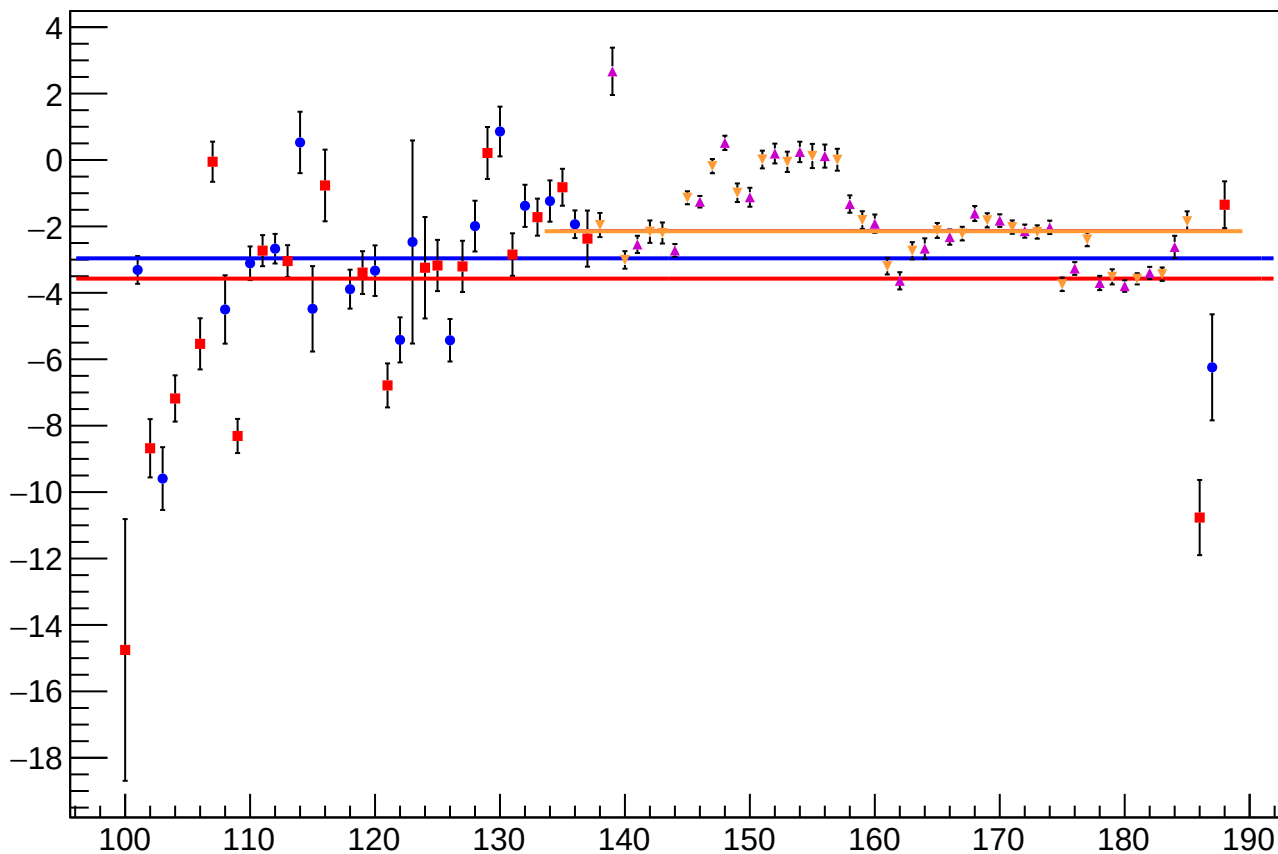
Left In:  $2.433 \pm 0.059$   $\chi^2/\text{NDF}$ : 882.9/22

+ sign  $2.557 \pm 0.058$   $\chi^2/\text{NDF}$ : 897.9/25

All:  $2.481 \pm 0.041$   $\chi^2/\text{NDF}$ : 2474.3/50

- sign  $2.405 \pm 0.059$   $\chi^2/\text{NDF}$ : 1573.0/24

# reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-2.961 \pm 0.153$   $\chi^2/\text{NDF}$ : 150.8/17

Left Out:  $-2.145 \pm 0.048$   $\chi^2/\text{NDF}$ : 572.6/24

Right Out:  $-3.572 \pm 0.150$   $\chi^2/\text{NDF}$ : 342.0/20

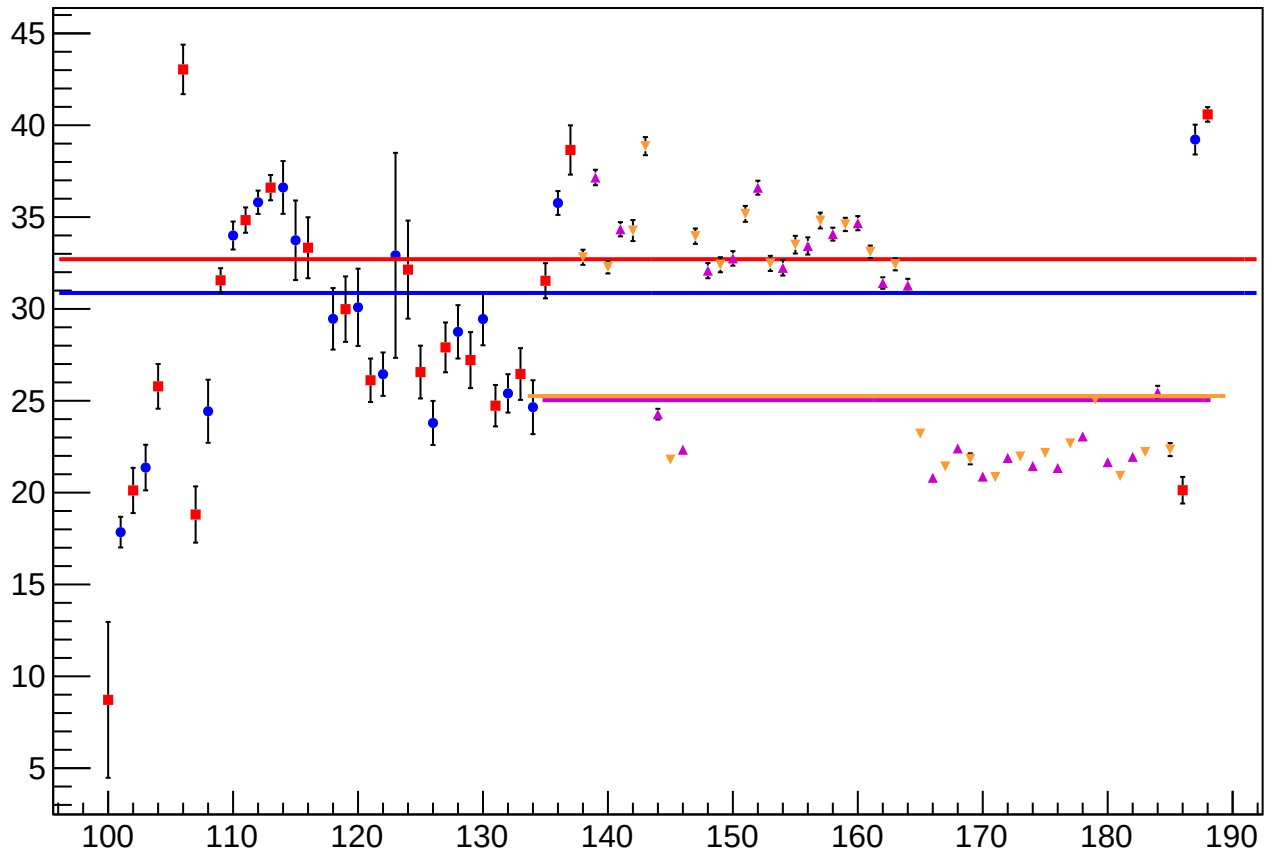
Left In:  $-2.137 \pm 0.048$   $\chi^2/\text{NDF}$ : 693.6/22

+ sign  $-2.217 \pm 0.046$   $\chi^2/\text{NDF}$ : 749.2/42

All:  $-2.244 \pm 0.032$   $\chi^2/\text{NDF}$ : 1868.8/86

- sign  $-2.272 \pm 0.046$   $\chi^2/\text{NDF}$ : 1118.8/43

# reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: 30.869 $\pm$ 0.253  $\chi^2$ /NDF: 671.4/17

Left Out: 25.258 $\pm$ 0.059  $\chi^2$ /NDF: 8135.5/24

Right Out: 32.708 $\pm$ 0.209  $\chi^2$ /NDF: 1212.3/20

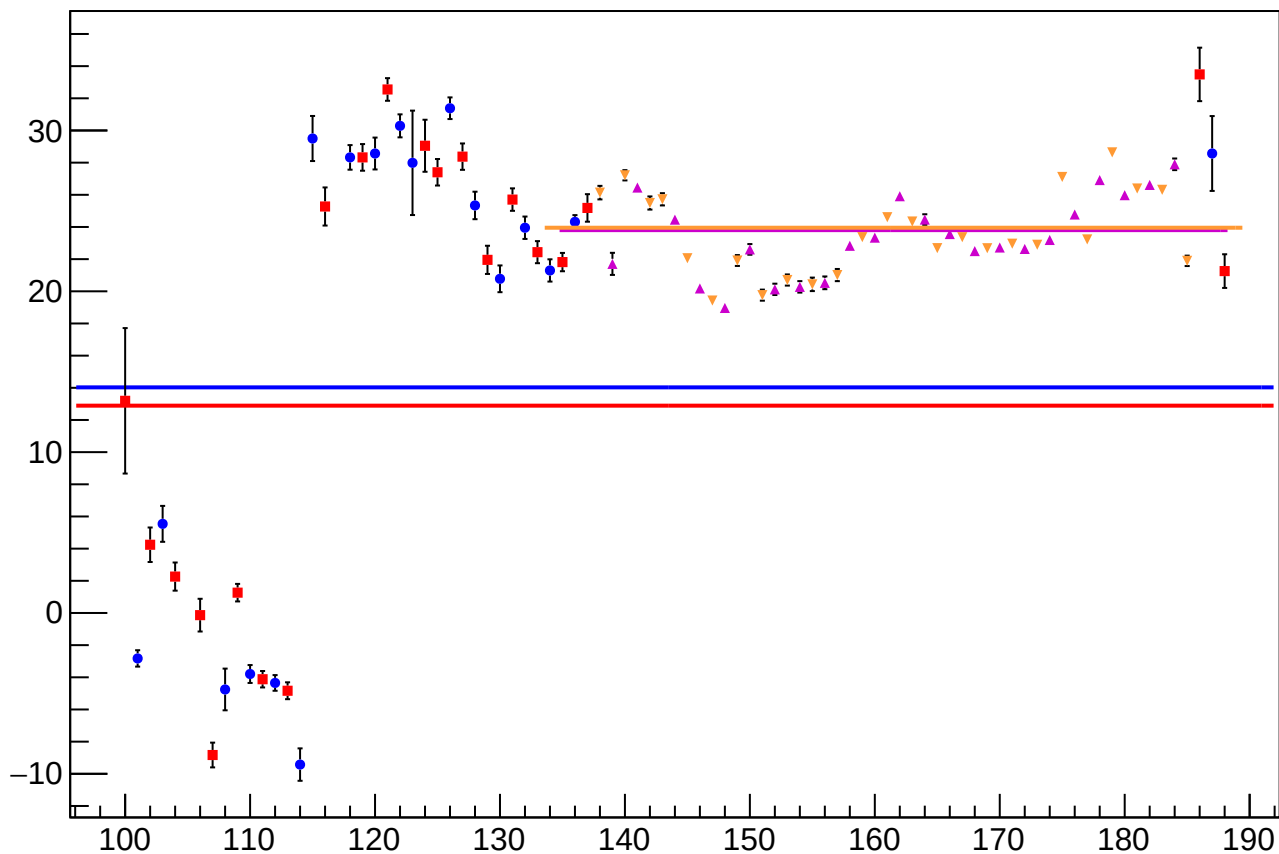
Left In: 25.034 $\pm$ 0.059  $\chi^2$ /NDF: 7690.0/22

+ sign 25.546 $\pm$ 0.057  $\chi^2$ /NDF: 9272.1/42

All: 25.577 $\pm$ 0.040  $\chi^2$ /NDF: 19425.4/86

- sign 25.608 $\pm$ 0.057  $\chi^2$ /NDF: 10152.7/43

# reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4eY\_slope vs Slug



Right In: 14.028 $\pm$ 0.171  $\chi^2$ /NDF: 7431.1/17

Left Out: 23.953 $\pm$ 0.053  $\chi^2$ /NDF:1915.9/24

Right Out: 12.890 $\pm$ 0.170  $\chi^2$ /NDF: 7187.1/20

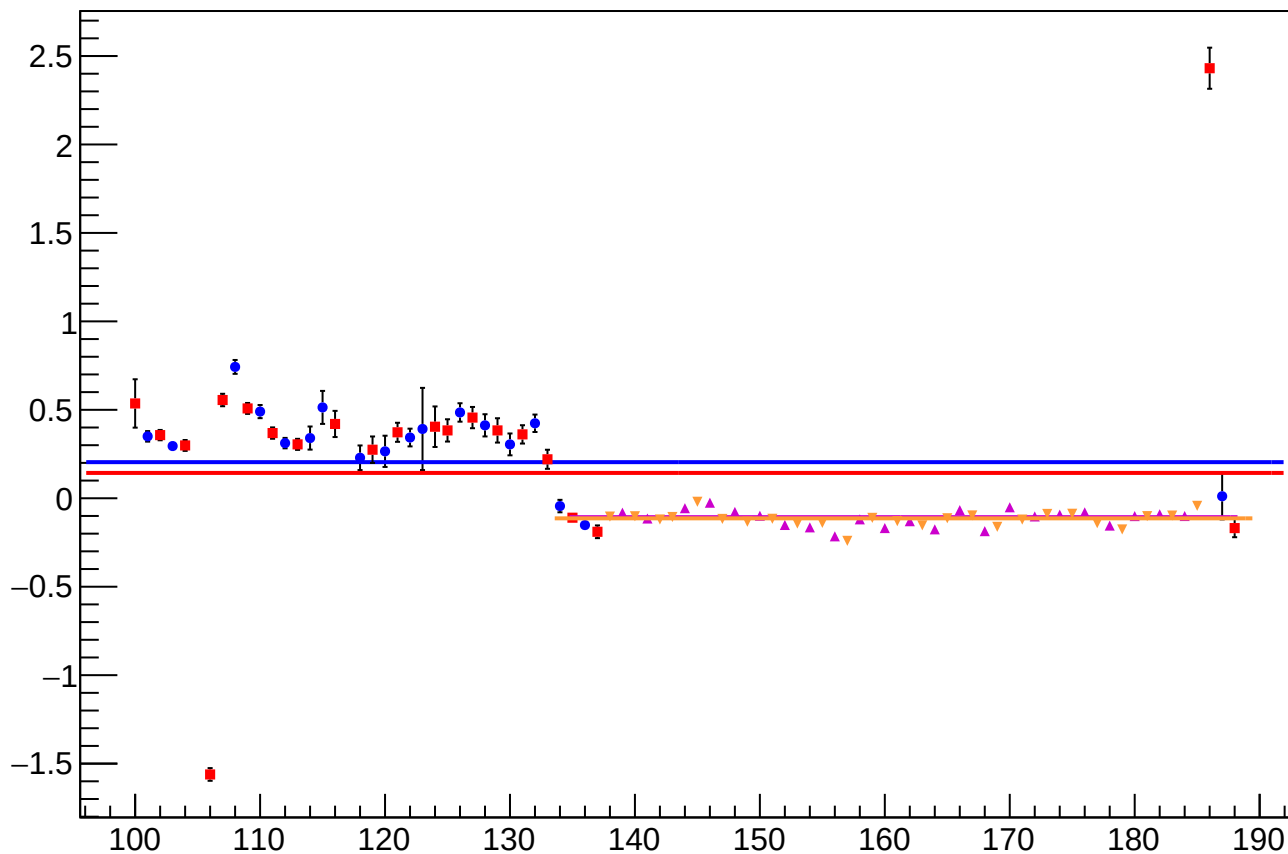
Left In: 23.804 $\pm$ 0.054  $\chi^2$ /NDF:1760.4/22

+ sign 23.082 $\pm$ 0.051  $\chi^2$ /NDF: 12402.8/42

All: 22.948 $\pm$ 0.036  $\chi^2$ /NDF: 25092.5/86

- sign 22.813 $\pm$ 0.051  $\chi^2$ /NDF: 12675.8/43

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $0.204 \pm 0.009$   $\chi^2/\text{NDF}$ : 848.3/17

Left Out:  $-0.114 \pm 0.002$   $\chi^2/\text{NDF}$ : 290.8/24

Right Out:  $0.143 \pm 0.009$   $\chi^2/\text{NDF}$ : 3441.2/20

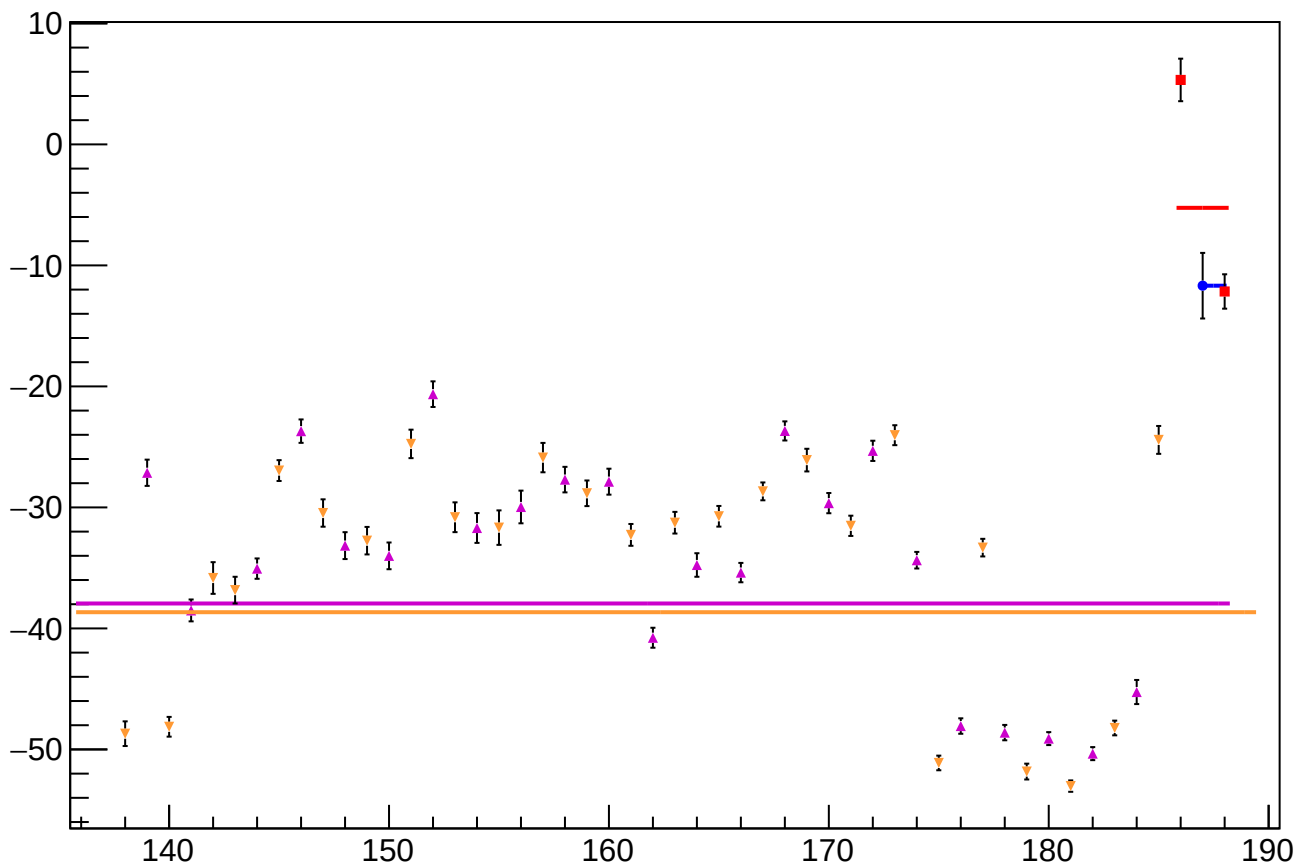
Left In:  $-0.107 \pm 0.002$   $\chi^2/\text{NDF}$ : 322.0/22

+ sign  $-0.093 \pm 0.002$   $\chi^2/\text{NDF}$ : 2223.7/42

All:  $-0.091 \pm 0.002$   $\chi^2/\text{NDF}$ : 6702.4/86

- sign  $-0.089 \pm 0.002$   $\chi^2/\text{NDF}$ : 4477.2/43

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-11.678 \pm 2.711$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-38.660 \pm 0.169$   $\chi^2/\text{NDF}: 4073.8/24$

Right Out:  $-5.243 \pm 1.105$   $\chi^2/\text{NDF}: 59.8/1$

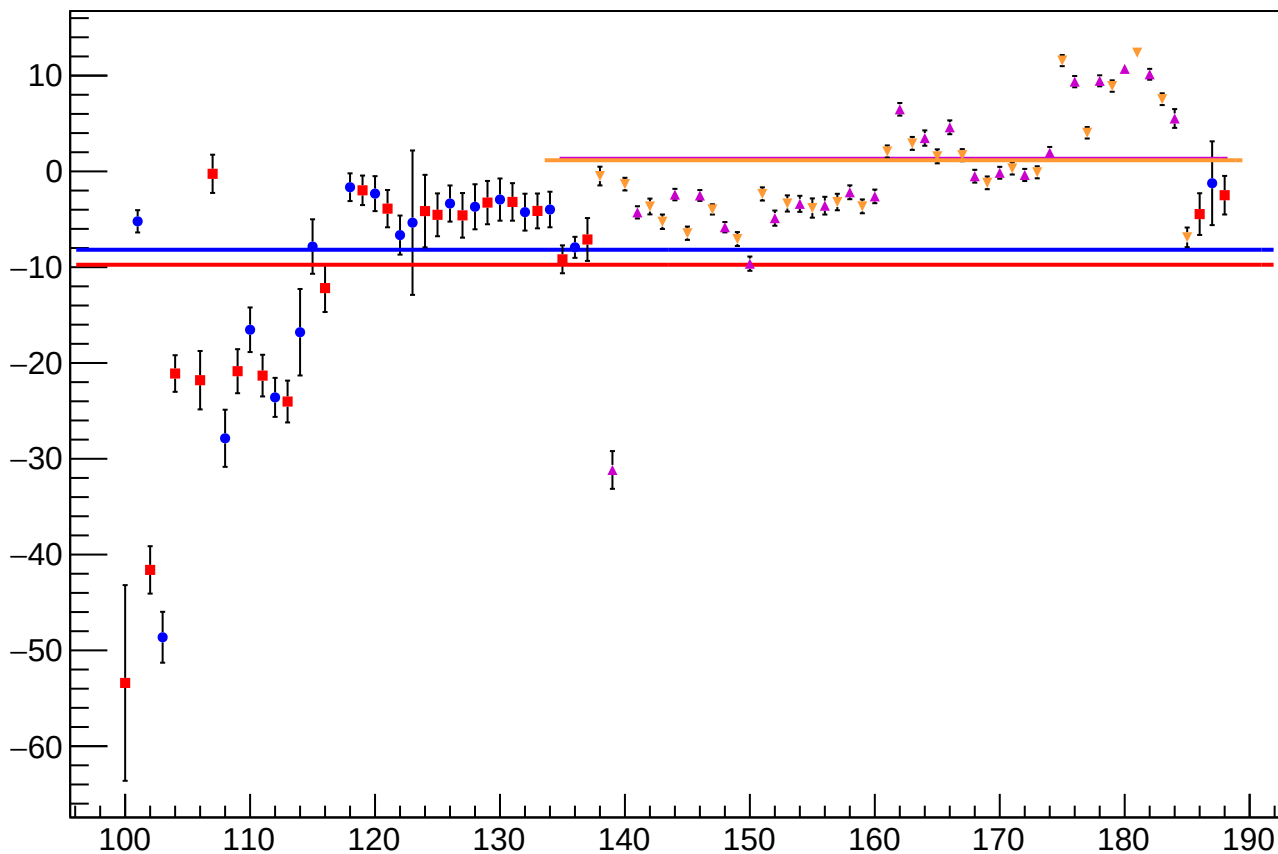
Left In:  $-37.939 \pm 0.173$   $\chi^2/\text{NDF}: 3133.2/22$

+ sign  $-38.555 \pm 0.169$   $\chi^2/\text{NDF}: 4172.5/25$

All:  $-37.864 \pm 0.120$   $\chi^2/\text{NDF}: 8253.9/50$

- sign  $-37.161 \pm 0.170$   $\chi^2/\text{NDF}: 4047.7/24$

# reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-8.179 \pm 0.460$   $\chi^2/\text{NDF}$ : 414.7/17

Left Out:  $1.163 \pm 0.136$   $\chi^2/\text{NDF}$ : 1786.1/24

Right Out:  $-9.745 \pm 0.466$   $\chi^2/\text{NDF}$ : 449.4/20

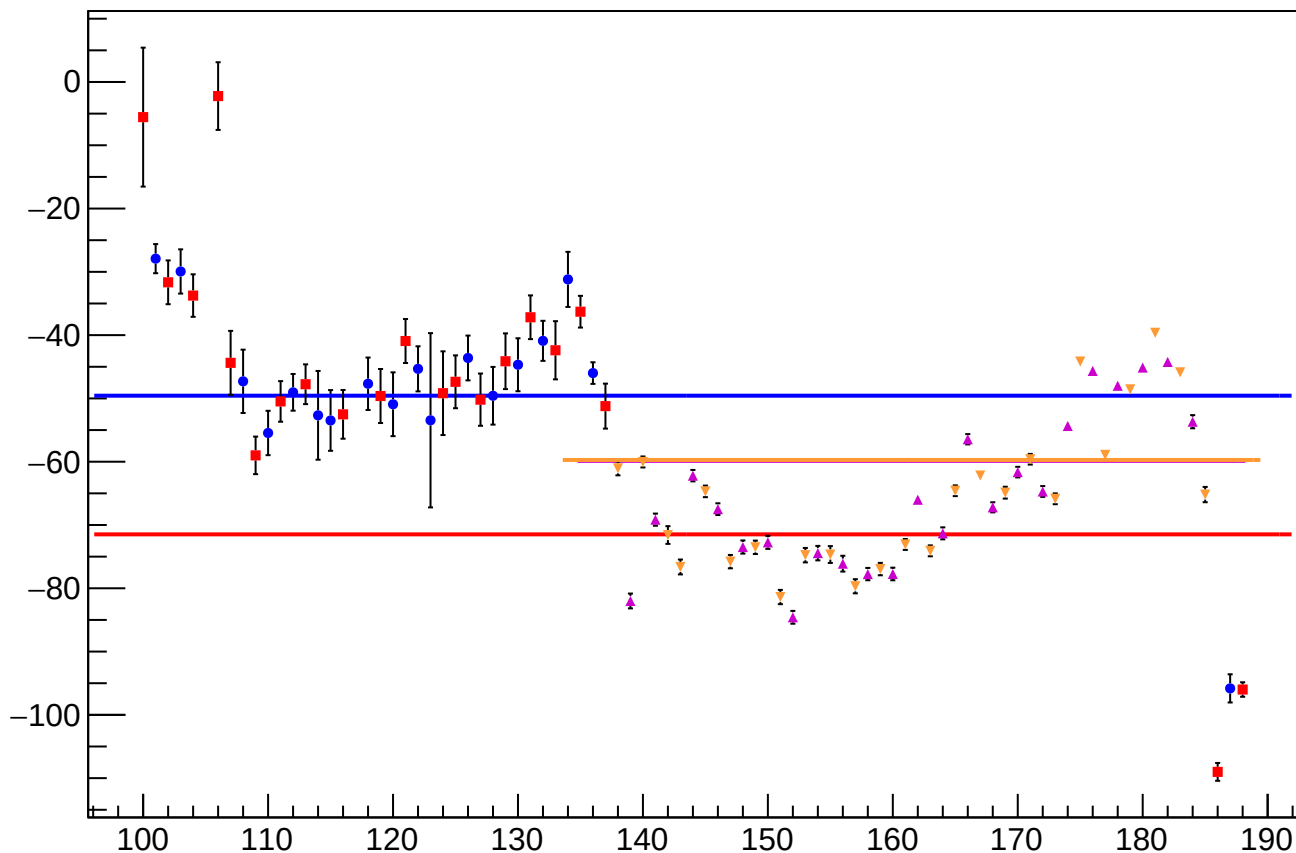
Left In:  $1.319 \pm 0.139$   $\chi^2/\text{NDF}$ : 2080.7/22

+ sign  $0.407 \pm 0.131$   $\chi^2/\text{NDF}$ : 2580.6/42

All:  $0.409 \pm 0.093$   $\chi^2/\text{NDF}$ : 5627.6/86

- sign  $0.410 \pm 0.134$   $\chi^2/\text{NDF}$ : 3047.0/43

# reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $-49.569 \pm 0.781$   $\chi^2/\text{NDF}: 590.7/17$

Left Out:  $-59.724 \pm 0.170$   $\chi^2/\text{NDF}: 5789.8/24$

Right Out:  $-71.480 \pm 0.620$   $\chi^2/\text{NDF}: 2382.2/20$

Left In:  $-59.864 \pm 0.173$   $\chi^2/\text{NDF}: 5275.1/22$

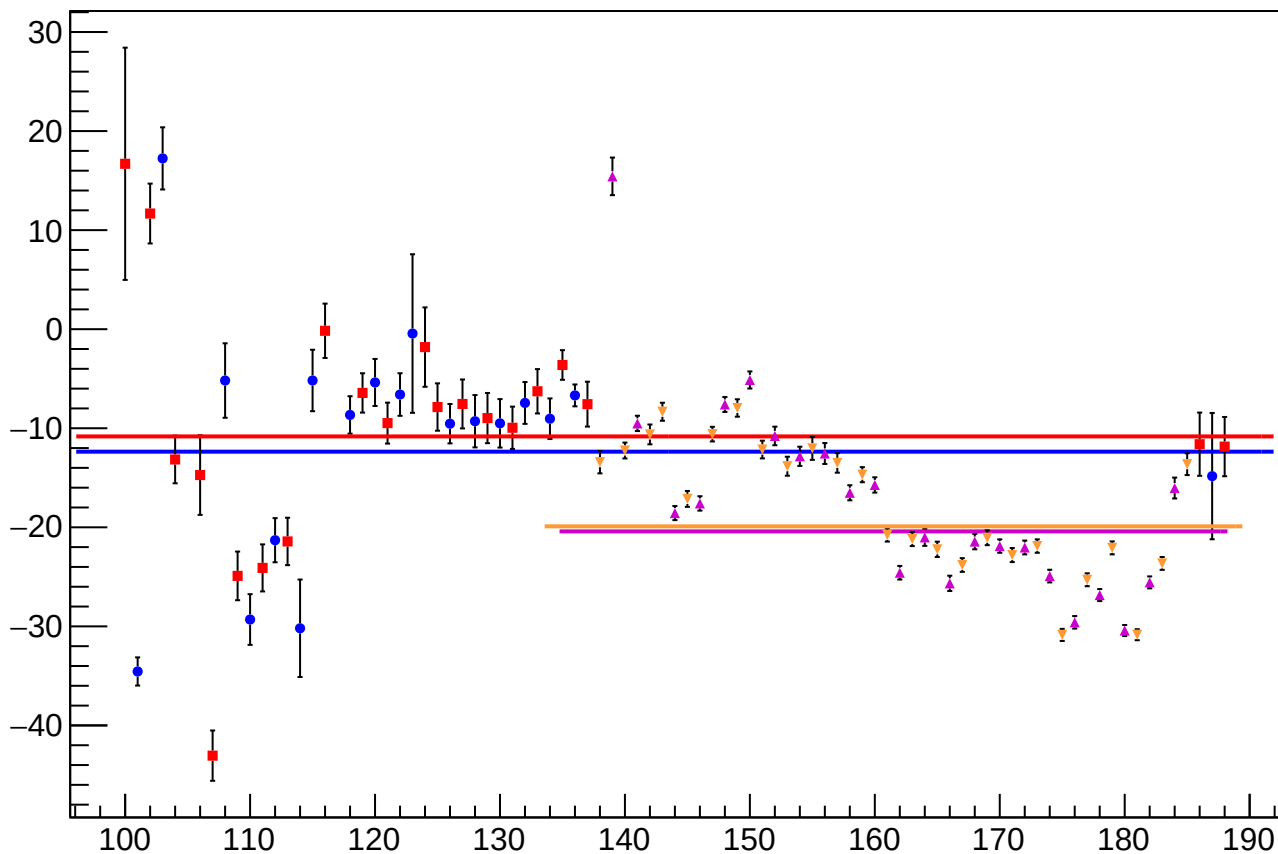
+ sign  $-59.263 \pm 0.166$   $\chi^2/\text{NDF}: 6541.8/42$

All:  $-59.982 \pm 0.118$   $\chi^2/\text{NDF}: 14561.5/86$

- sign  $-60.699 \pm 0.166$   $\chi^2/\text{NDF}: 7982.5/43$



# reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-12.364 \pm 0.518$   $\chi^2/\text{NDF}$ : 476.1/17

Left Out:  $-19.902 \pm 0.153$   $\chi^2/\text{NDF}$ : 1904.7/24

Right Out:  $-10.824 \pm 0.537$   $\chi^2/\text{NDF}$ : 366.8/20

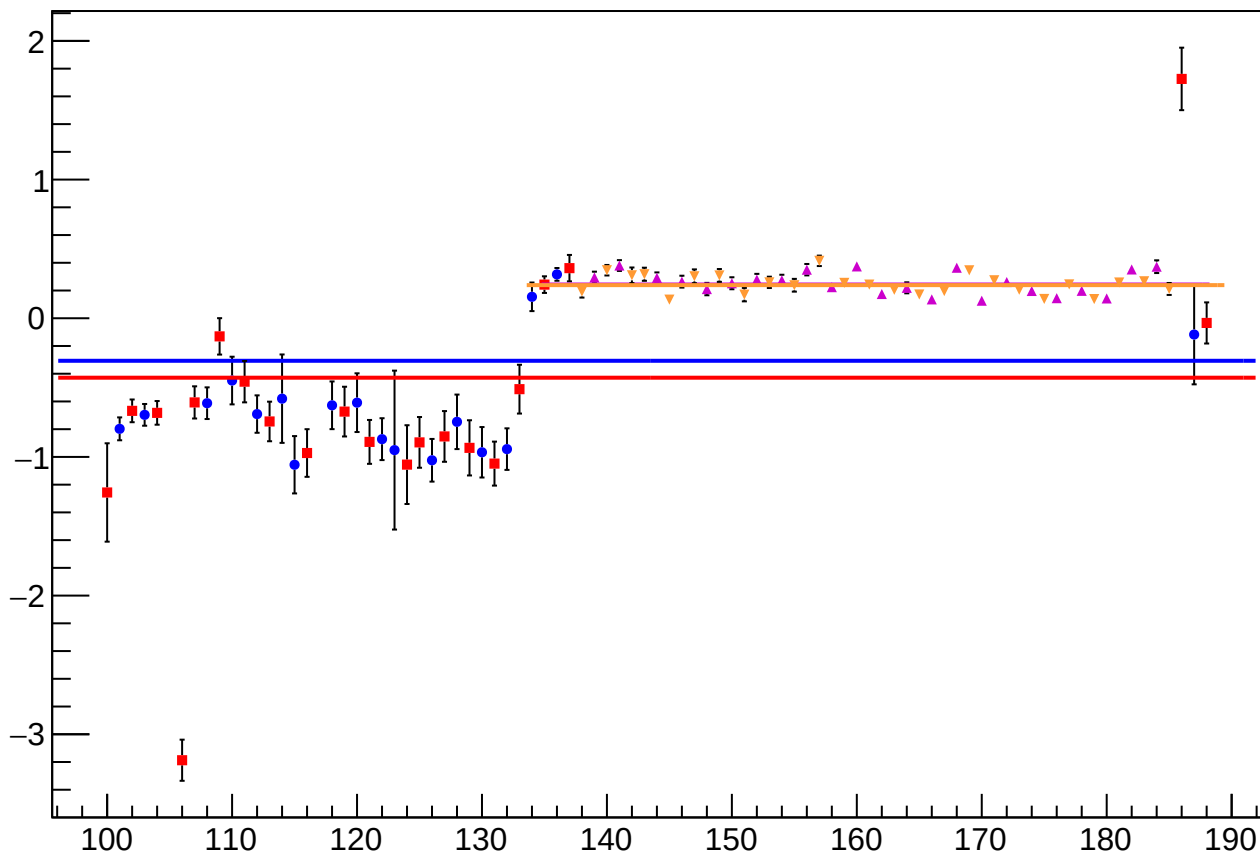
Left In:  $-20.412 \pm 0.156$   $\chi^2/\text{NDF}$ : 2345.4/22

+ sign  $-19.296 \pm 0.147$   $\chi^2/\text{NDF}$ : 2575.5/42

All:  $-19.476 \pm 0.105$   $\chi^2/\text{NDF}$ : 5585.1/86

- sign  $-19.663 \pm 0.150$   $\chi^2/\text{NDF}$ : 3006.6/43

# reg\_asym\_sam\_24\_68\_dd\_diff\_bpm12X\_slope vs Slug



Right In: -0.307±/0.027  $\chi^2/\text{NDF}$ : 372.7/17

Left Out: 0.239±/0.007  $\chi^2/\text{NDF}$ : 93.5/24

Right Out: -0.429±/0.028  $\chi^2/\text{NDF}$ : 732.8/20

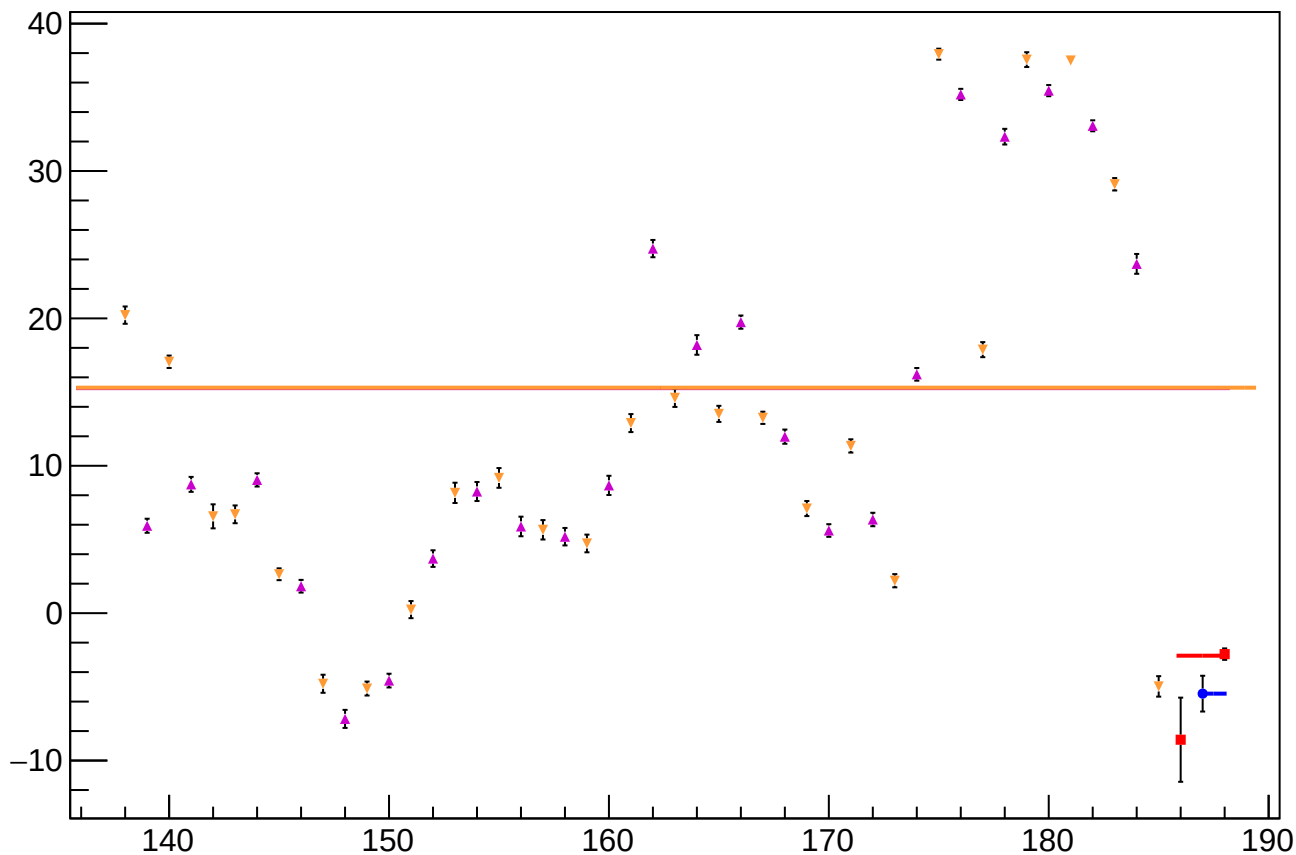
Left In: 0.243±/0.007  $\chi^2/\text{NDF}$ : 139.2/22

+ sign 0.205±/0.007  $\chi^2/\text{NDF}$ : 837.3/42

All: 0.203±/0.005  $\chi^2/\text{NDF}$ : 2257.5/86

- sign 0.202±/0.007  $\chi^2/\text{NDF}$ : 1420.0/43

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm1X\_slope vs Slug



Right In: -5.461 $\pm$ 1.214  $\chi^2$ /NDF: 0.0/0

Left Out: 15.298 $\pm$ 0.101  $\chi^2$ /NDF:19135.0/24

Right Out: -2.886 $\pm$ 0.385  $\chi^2$ /NDF: 4.1/1

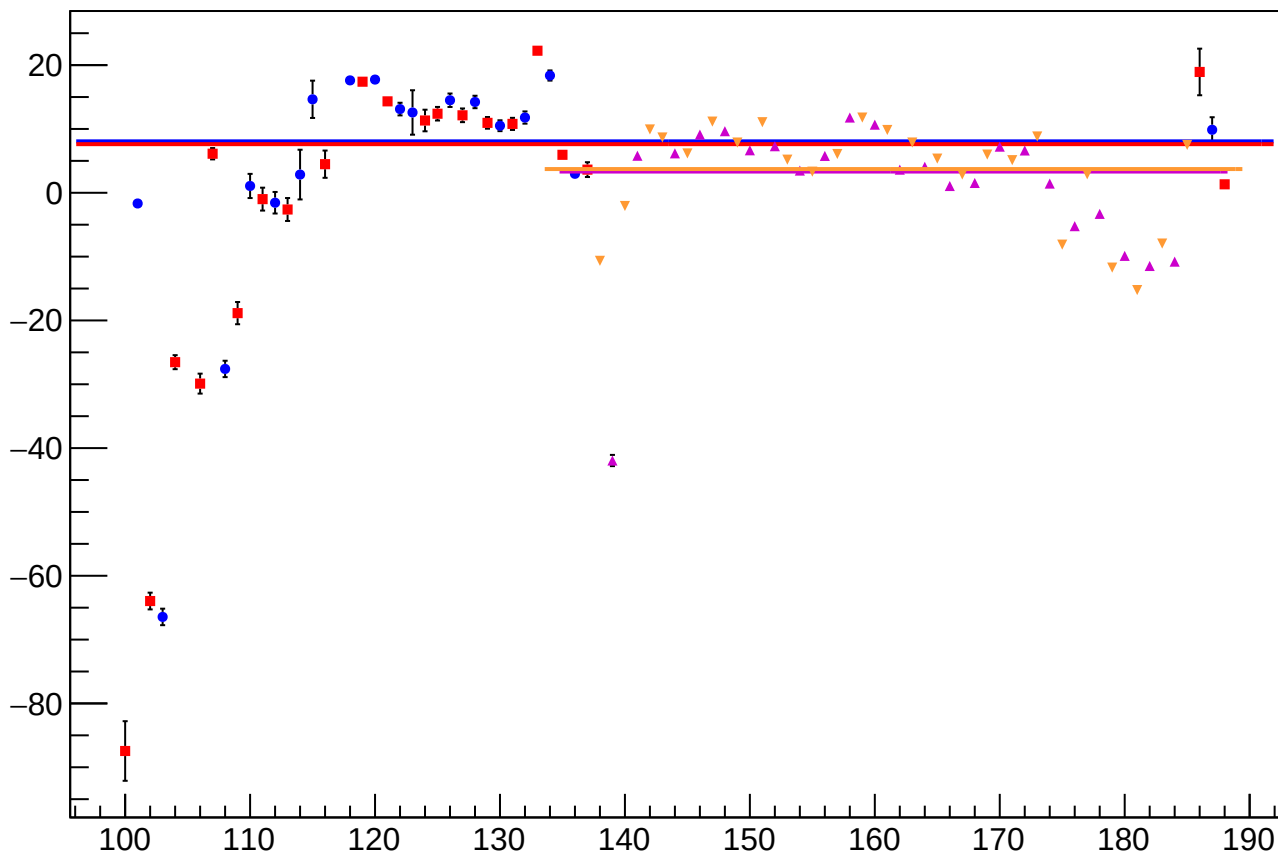
Left In: 15.268 $\pm$ 0.102  $\chi^2$ /NDF:16406.3/22

+ sign 15.157 $\pm$ 0.100  $\chi^2$ /NDF: 19425.6/25

All: 14.608 $\pm$ 0.070  $\chi^2$ /NDF: 37968.4/50

- sign 14.077 $\pm$ 0.099  $\chi^2$ /NDF: 18484.0/24

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $8.057 \pm 0.214$   $\chi^2/\text{NDF}: 5370.3/17$

Left Out:  $3.717 \pm 0.079$   $\chi^2/\text{NDF}: 9201.0/24$

Right Out:  $7.617 \pm 0.200$   $\chi^2/\text{NDF}: 6850.4/20$

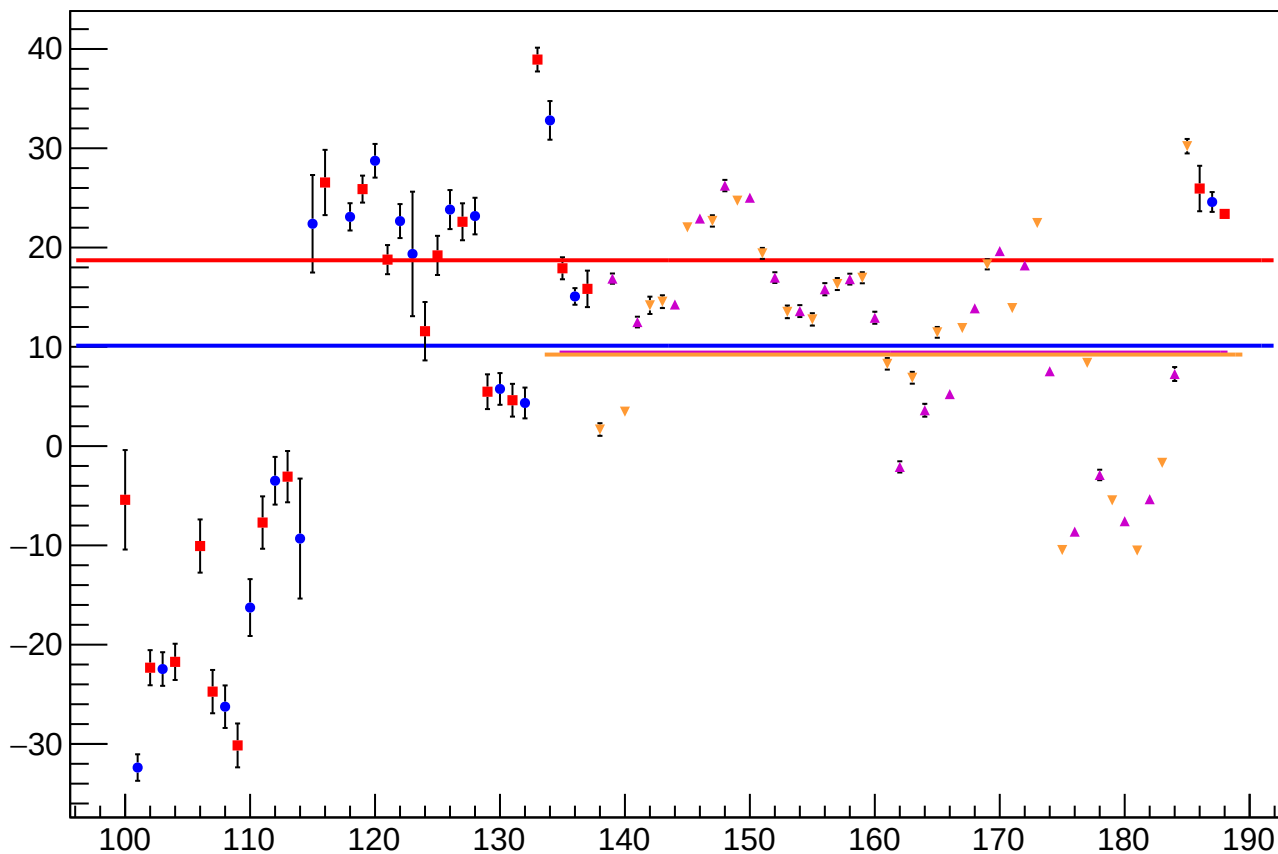
Left In:  $3.327 \pm 0.081$   $\chi^2/\text{NDF}: 8830.5/22$

+ sign  $4.238 \pm 0.074$   $\chi^2/\text{NDF}: 14933.7/42$

All:  $4.088 \pm 0.053$   $\chi^2/\text{NDF}: 31019.7/86$

- sign  $3.933 \pm 0.075$   $\chi^2/\text{NDF}: 16077.6/43$

# reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: 10.114 $\pm$ 0.384  $\chi^2$ /NDF: 2571.6/17

Left Out: 9.220 $\pm$ 0.101  $\chi^2$ /NDF:13617.0/24

Right Out: 18.717 $\pm$ 0.250  $\chi^2$ /NDF: 2915.9/20

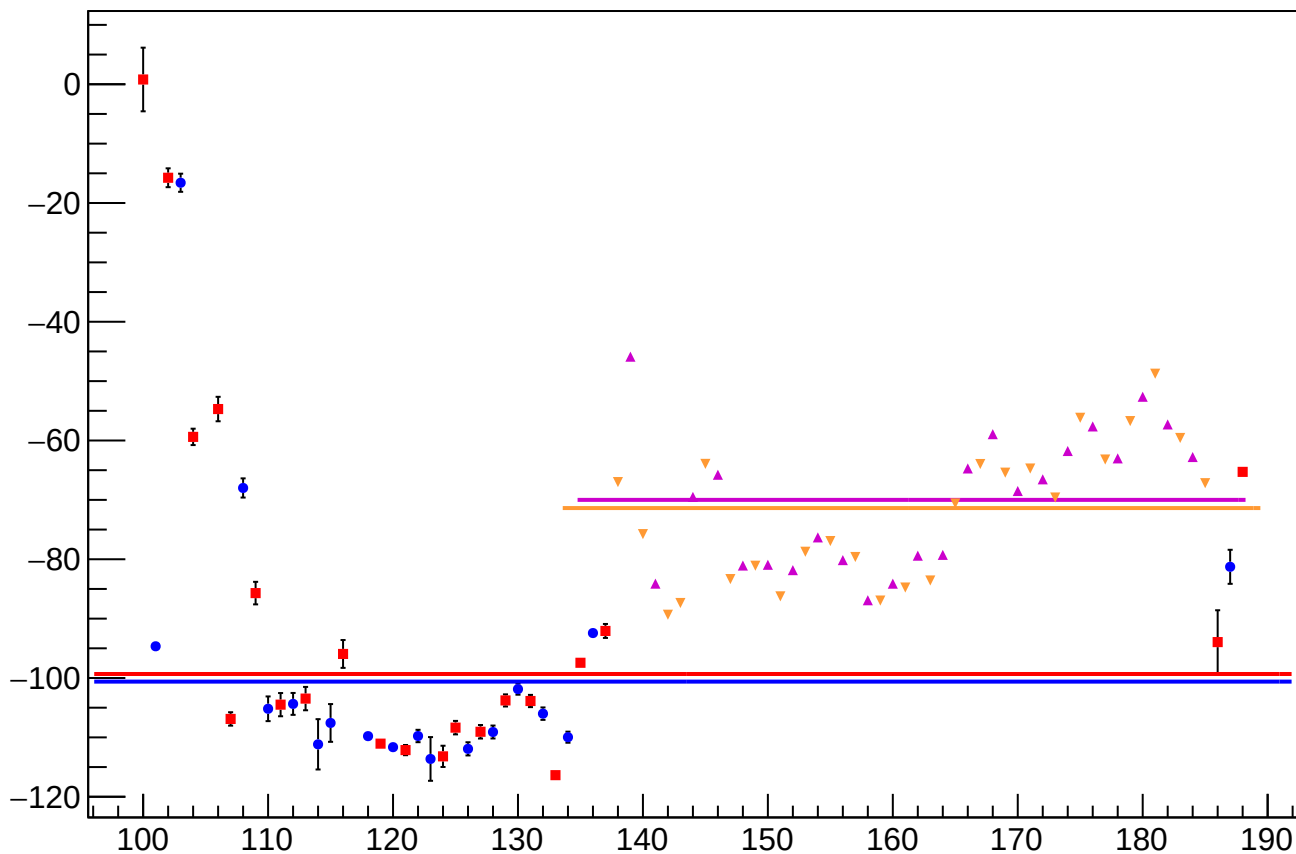
Left In: 9.420 $\pm$ 0.102  $\chi^2$ /NDF:12078.1/22

+ sign 9.278 $\pm$ 0.098  $\chi^2$ /NDF: 16193.7/42

All: 10.038 $\pm$ 0.068  $\chi^2$ /NDF: 32490.8/86

- sign 10.747 $\pm$ 0.094  $\chi^2$ /NDF: 16180.2/43

# reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-100.608 \pm 0.247$   $\chi^2/\text{NDF}: 4568.5/17$

Left Out:  $-71.379 \pm 0.089$   $\chi^2/\text{NDF}: 16226.2/24$

Right Out:  $-99.324 \pm 0.236$   $\chi^2/\text{NDF}: 7925.9/20$

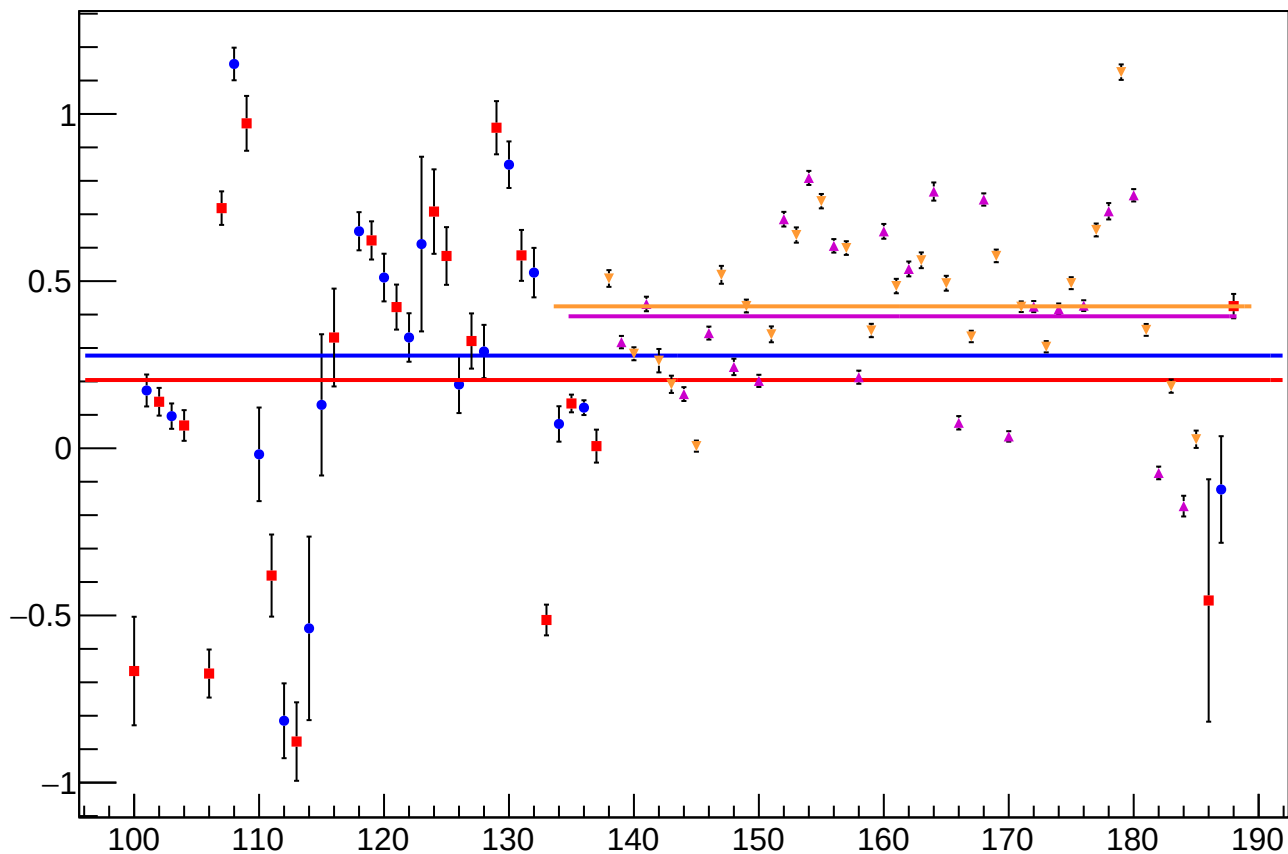
Left In:  $-69.999 \pm 0.091$   $\chi^2/\text{NDF}: 13188.0/22$

+ sign  $-74.768 \pm 0.084$   $\chi^2/\text{NDF}: 33166.0/42$

All:  $-74.306 \pm 0.060$   $\chi^2/\text{NDF}: 67791.8/86$

- sign  $-73.831 \pm 0.085$   $\chi^2/\text{NDF}: 34564.6/43$

# reg\_asym\_sam\_26\_48\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $0.277 \pm 0.013$   $\chi^2/\text{NDF}$ : 662.3/17

Left Out:  $0.425 \pm 0.004$   $\chi^2/\text{NDF}$ : 2866.9/24

Right Out:  $0.204 \pm 0.013$   $\chi^2/\text{NDF}$ : 1011.5/20

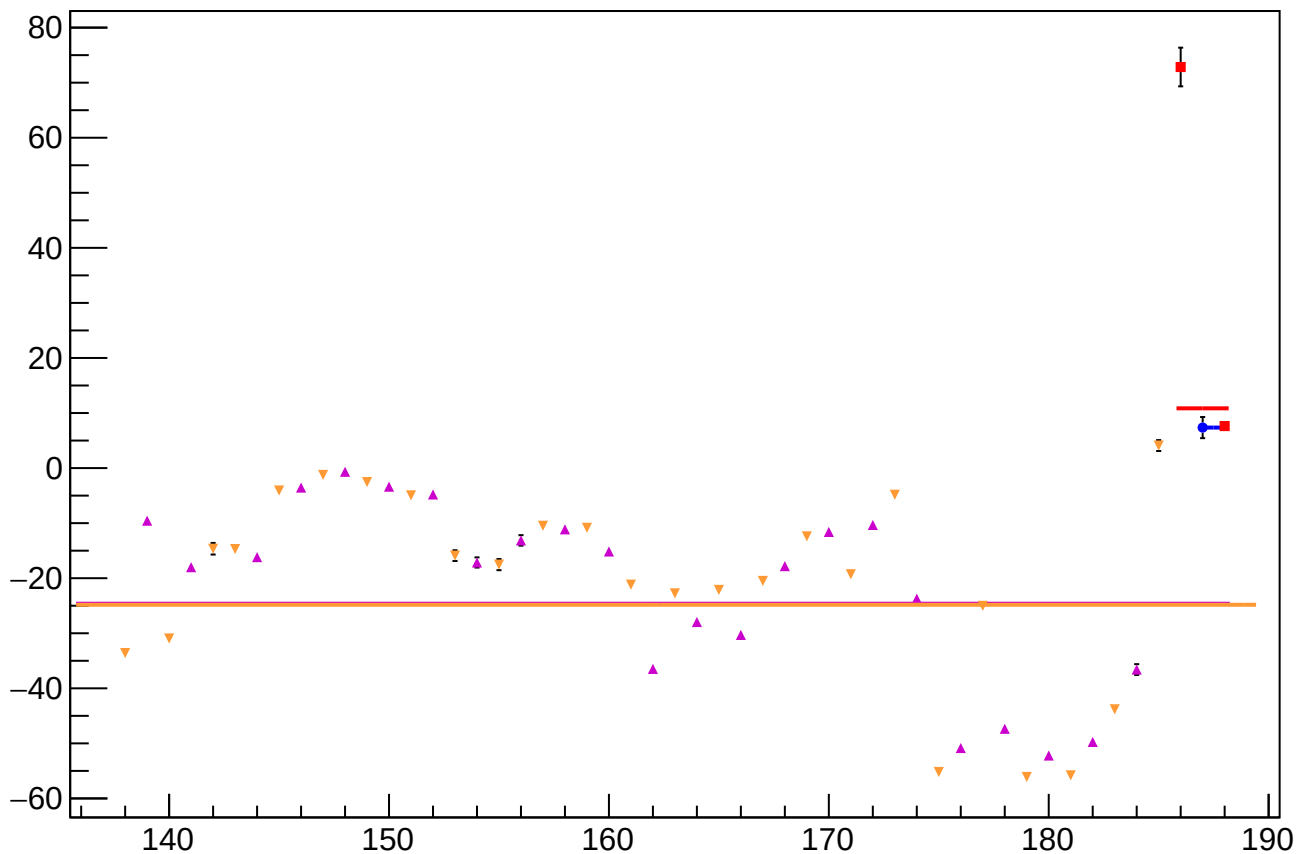
Left In:  $0.395 \pm 0.004$   $\chi^2/\text{NDF}$ : 4063.1/22

+ sign  $0.412 \pm 0.004$   $\chi^2/\text{NDF}$ : 3639.4/42

All:  $0.394 \pm 0.003$   $\chi^2/\text{NDF}$ : 8962.0/86

- sign  $0.376 \pm 0.004$   $\chi^2/\text{NDF}$ : 5281.1/43

reg\_asym\_sam\_1548\_avg\_diff\_bpm1X\_slope vs Slug



Right In: 7.358 $\pm$ 1.920  $\chi^2$ /NDF: 0.0/0

Left Out: -24.824 $\pm$ 0.140  $\chi^2$ /NDF:18274.6/24

Right Out: 10.853 $\pm$ 0.781  $\chi^2$ /NDF: 327.7/1

Left In: -24.635 $\pm$ 0.142  $\chi^2$ /NDF:14947.9/22

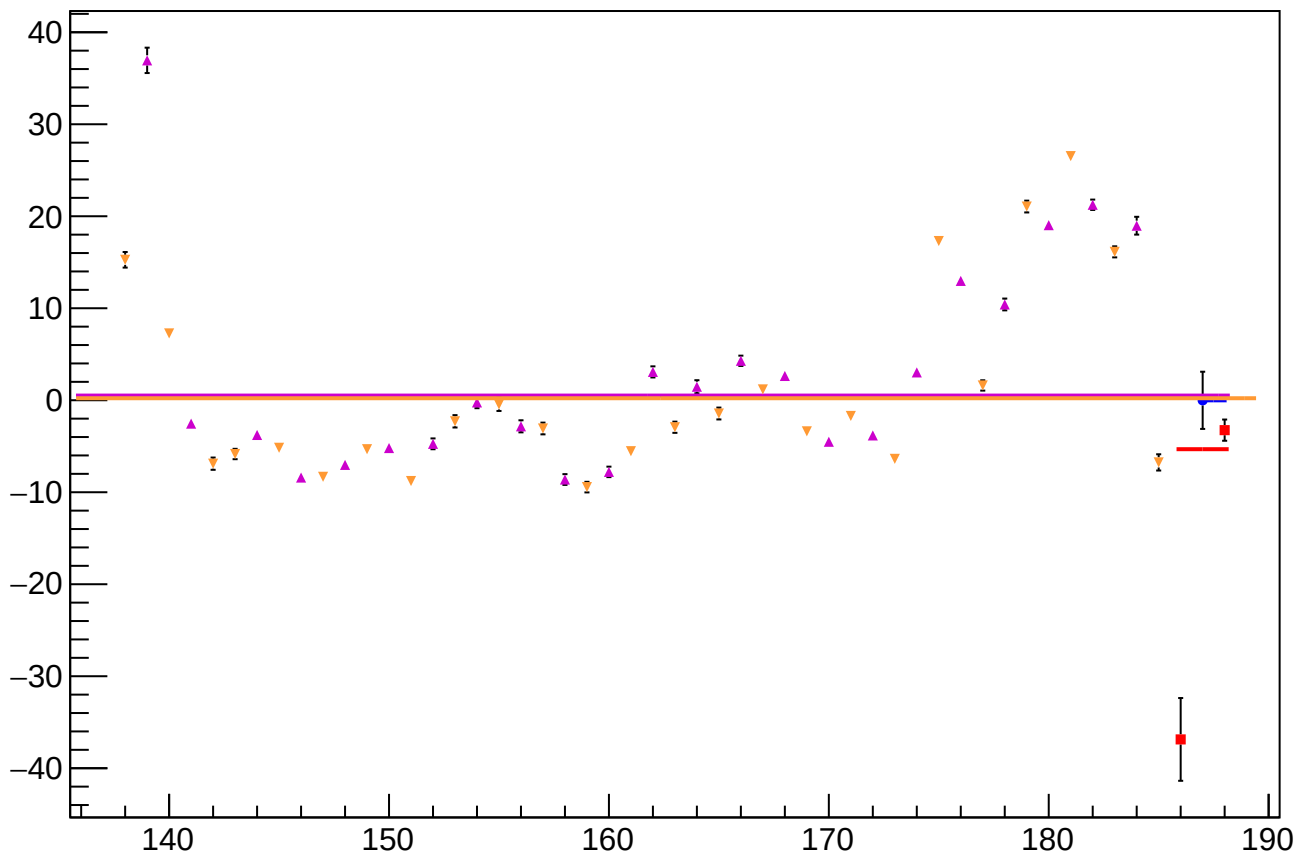
+ sign -24.654 $\pm$ 0.139  $\chi^2$ /NDF: 18554.0/25

All: -24.078 $\pm$ 0.099  $\chi^2$ /NDF: 35864.3/50

- sign -23.498 $\pm$ 0.140  $\chi^2$ /NDF: 17275.9/24



# reg\_asym\_sam\_1548\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $-0.009 \pm 3.109$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $0.218 \pm 0.109$   $\chi^2/\text{NDF}$ : 8252.6/24

Right Out:  $-5.321 \pm 1.116$   $\chi^2/\text{NDF}$ : 52.4/1

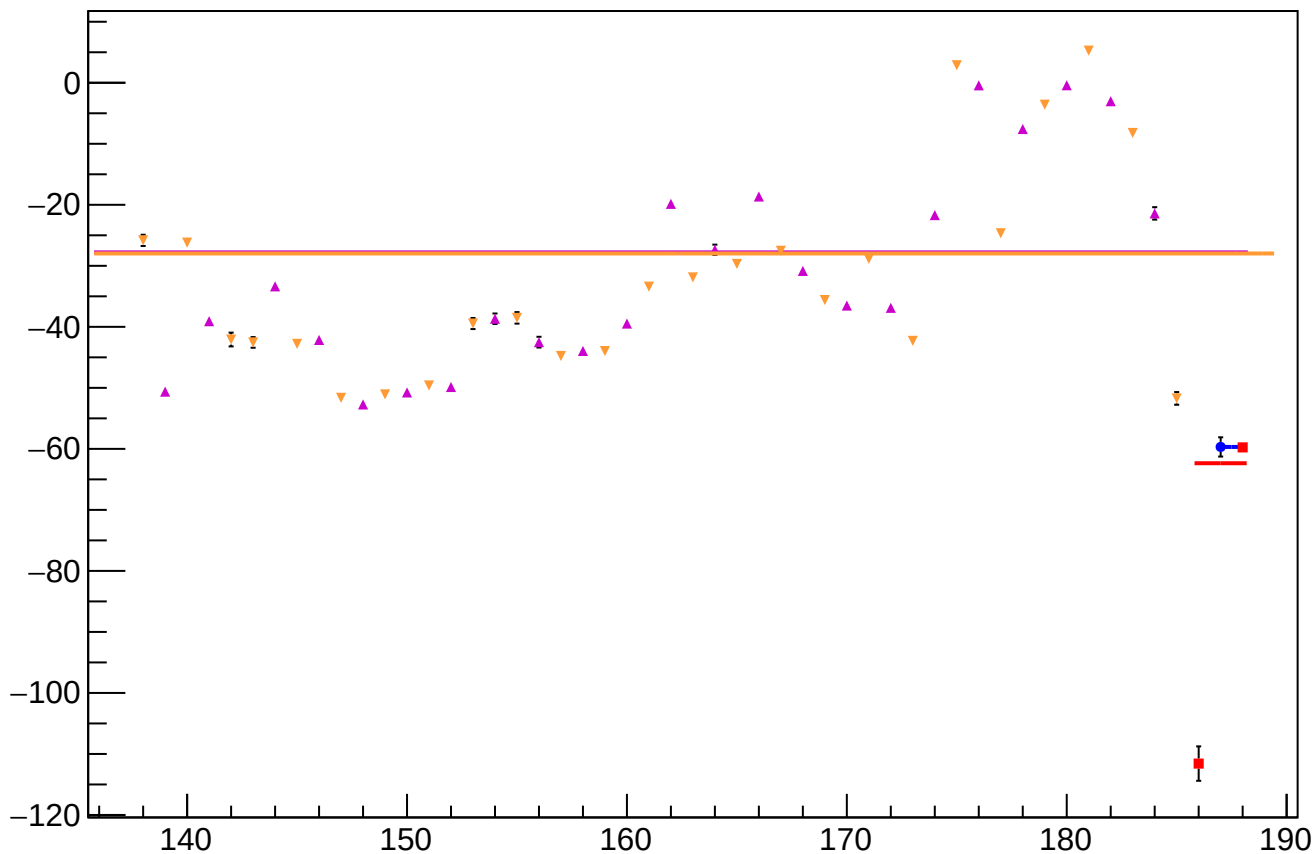
Left In:  $0.507 \pm 0.112$   $\chi^2/\text{NDF}$ : 6626.9/22

+ sign  $0.217 \pm 0.109$   $\chi^2/\text{NDF}$ : 8252.6/25

All:  $0.331 \pm 0.078$   $\chi^2/\text{NDF}$ : 14961.1/50

- sign  $0.449 \pm 0.111$   $\chi^2/\text{NDF}$ : 6706.3/24

reg\_asym\_sam\_1548\_avg\_diff\_bpm4eX\_slope vs Slug



Right In: -59.683 $\pm$ 1.579  $\chi^2$ /NDF: 0.0/0

Left Out: -27.977 $\pm$ 0.140  $\chi^2$ /NDF:17079.0/24

Right Out: -62.354 $\pm$ 0.631  $\chi^2$ /NDF: 320.7/1

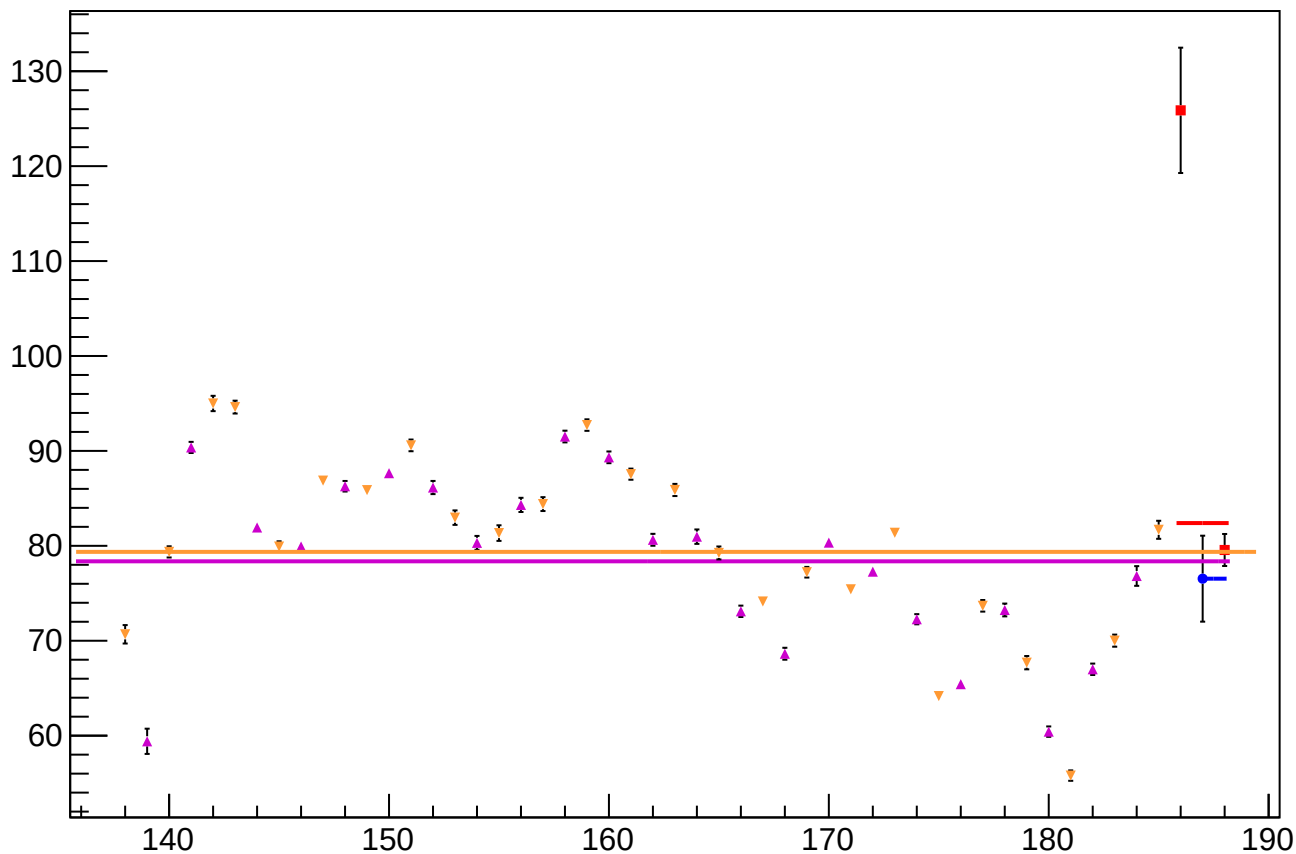
Left In: -27.796 $\pm$ 0.142  $\chi^2$ /NDF:15193.3/22

+ sign -28.225 $\pm$ 0.140  $\chi^2$ /NDF: 17479.1/25

All: -28.846 $\pm$ 0.098  $\chi^2$ /NDF: 35886.9/50

- sign -29.457 $\pm$ 0.138  $\chi^2$ /NDF: 18368.5/24

reg\_asym\_sam\_1548\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 76.539 $\pm$ 4.529  $\chi^2$ /NDF: 0.0/0

Left Out: 79.364 $\pm$ 0.123  $\chi^2$ /NDF: 5966.3/24

Right Out: 82.397 $\pm$ 1.634  $\chi^2$ /NDF: 46.2/1

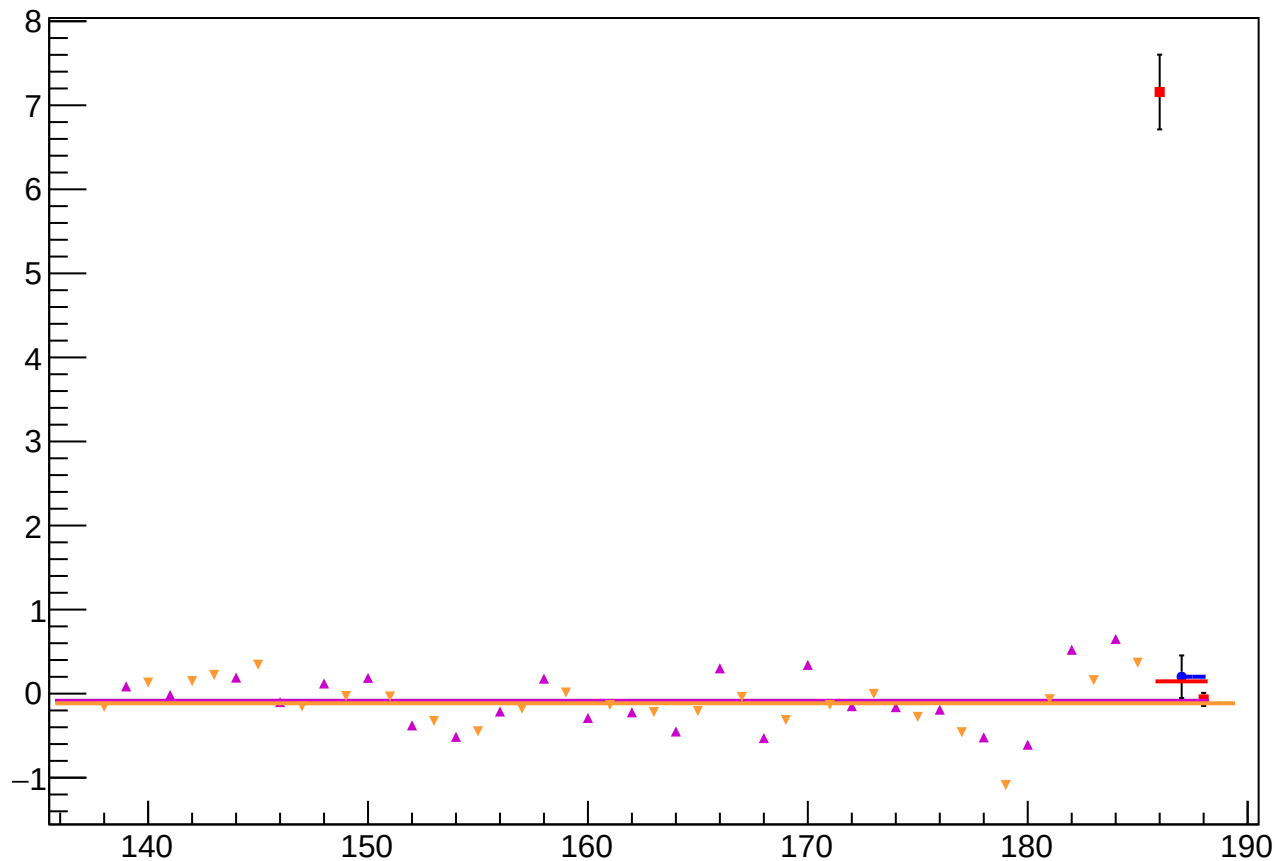
Left In: 78.367 $\pm$ 0.126  $\chi^2$ /NDF: 4735.5/22

+ sign 79.362 $\pm$ 0.123  $\chi^2$ /NDF: 5966.7/25

All: 78.886 $\pm$ 0.088  $\chi^2$ /NDF: 10784.7/50

- sign 78.391 $\pm$ 0.126  $\chi^2$ /NDF: 4787.7/24

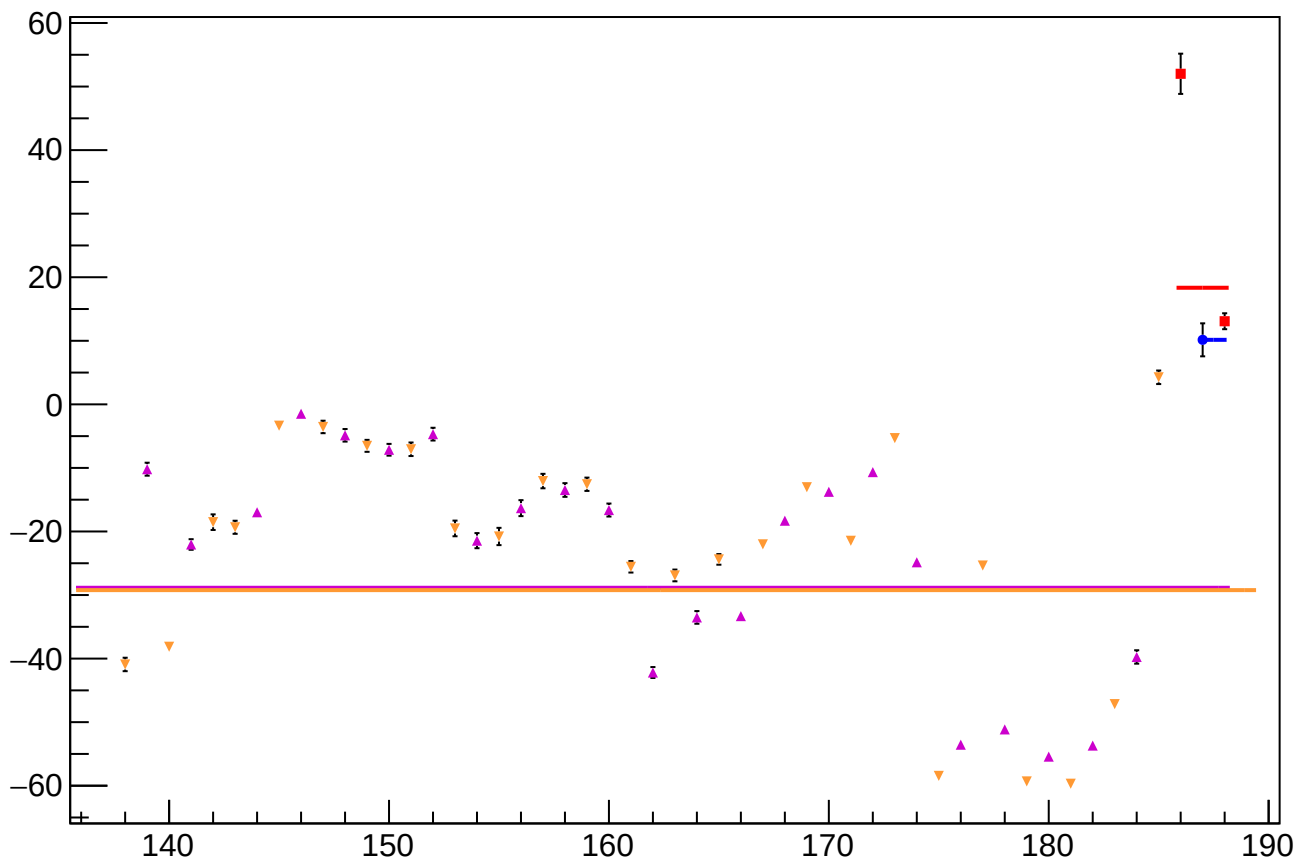
reg\_asym\_sam\_1548\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $0.201 \pm 0.253$   $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out:  $-0.115 \pm 0.006$   $\chi^2/\text{NDF}$ : 2288.7/24  
 Right Out:  $0.146 \pm 0.077$   $\chi^2/\text{NDF}$ : 256.4/1  
 Left In:  $-0.085 \pm 0.006$   $\chi^2/\text{NDF}$ : 3148.4/22

+ sign  $-0.115 \pm 0.006$   $\chi^2/\text{NDF}$ : 2290.3/25  
 All:  $-0.099 \pm 0.004$   $\chi^2/\text{NDF}$ : 5718.7/50  
 - sign  $-0.084 \pm 0.006$   $\chi^2/\text{NDF}$ : 3413.9/24

# reg\_asym\_sam\_3748\_avg\_diff\_bpm1X\_slope vs Slug



Right In: 10.151 $\pm$ 2.596  $\chi^2$ /NDF: 0.0/0

Left Out: -29.227 $\pm$ 0.157  $\chi^2$ /NDF:16880.0/24

Right Out: 18.346 $\pm$ 1.164  $\chi^2$ /NDF: 130.8/1

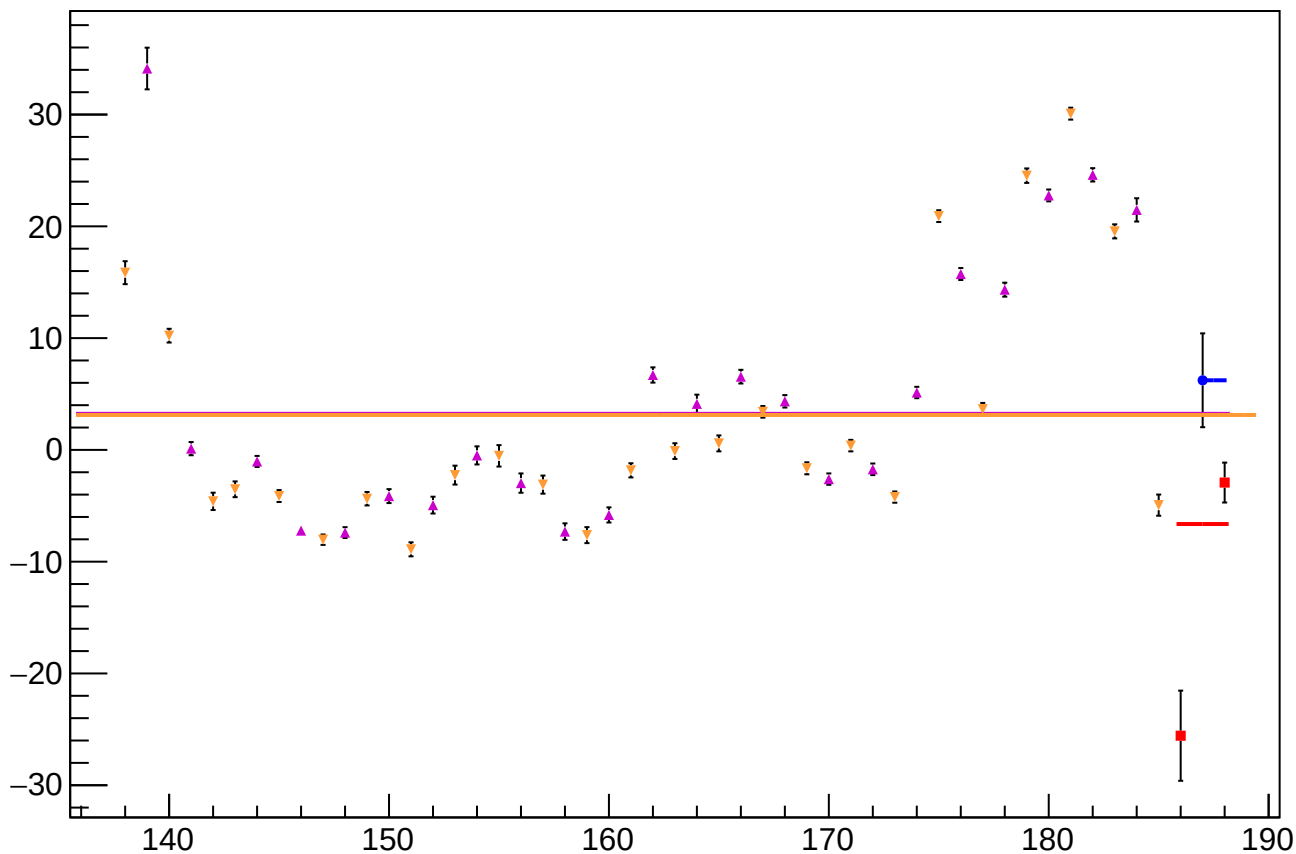
Left In: -28.857 $\pm$ 0.159  $\chi^2$ /NDF:13553.6/22

+ sign -29.084 $\pm$ 0.157  $\chi^2$ /NDF: 17109.2/25

All: -28.541 $\pm$ 0.111  $\chi^2$ /NDF: 32431.1/50

- sign -27.992 $\pm$ 0.158  $\chi^2$ /NDF: 15297.7/24

# reg\_asym\_sam\_3748\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $6.227 \pm 4.197$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $3.126 \pm 0.125$   $\chi^2/\text{NDF}: 8049.0/24$

Right Out:  $-6.632 \pm 1.632$   $\chi^2/\text{NDF}: 26.4/1$

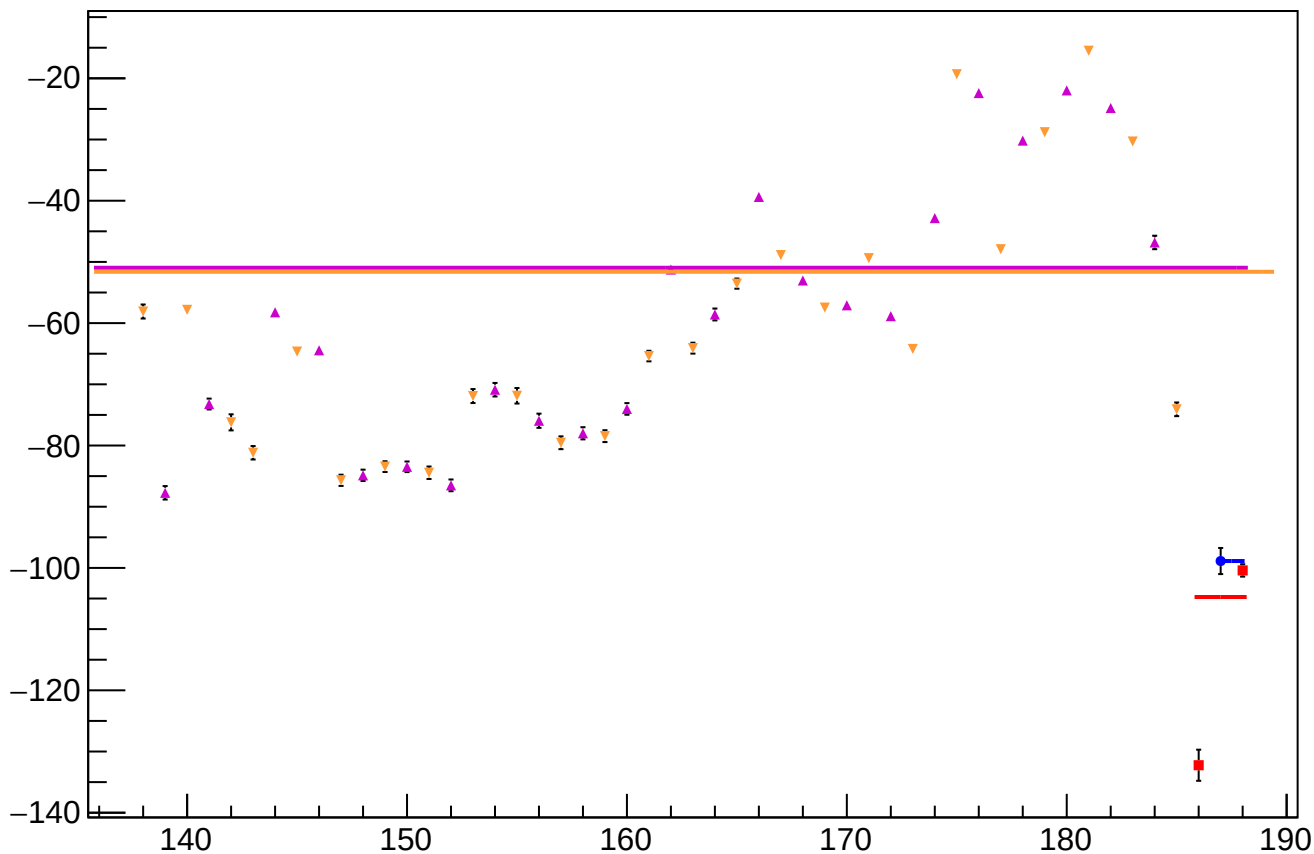
Left In:  $3.224 \pm 0.127$   $\chi^2/\text{NDF}: 6274.0/22$

+ sign  $3.128 \pm 0.125$   $\chi^2/\text{NDF}: 8049.6/25$

All:  $3.146 \pm 0.089$   $\chi^2/\text{NDF}: 14386.2/50$

- sign  $3.165 \pm 0.126$   $\chi^2/\text{NDF}: 6336.6/24$

reg\_asym\_sam\_3748\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $-98.874 \pm 2.134$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-51.610 \pm 0.158$   $\chi^2/\text{NDF}$ : 19384.9/24

Right Out:  $-104.751 \pm 0.939$   $\chi^2/\text{NDF}$ : 135.3/1

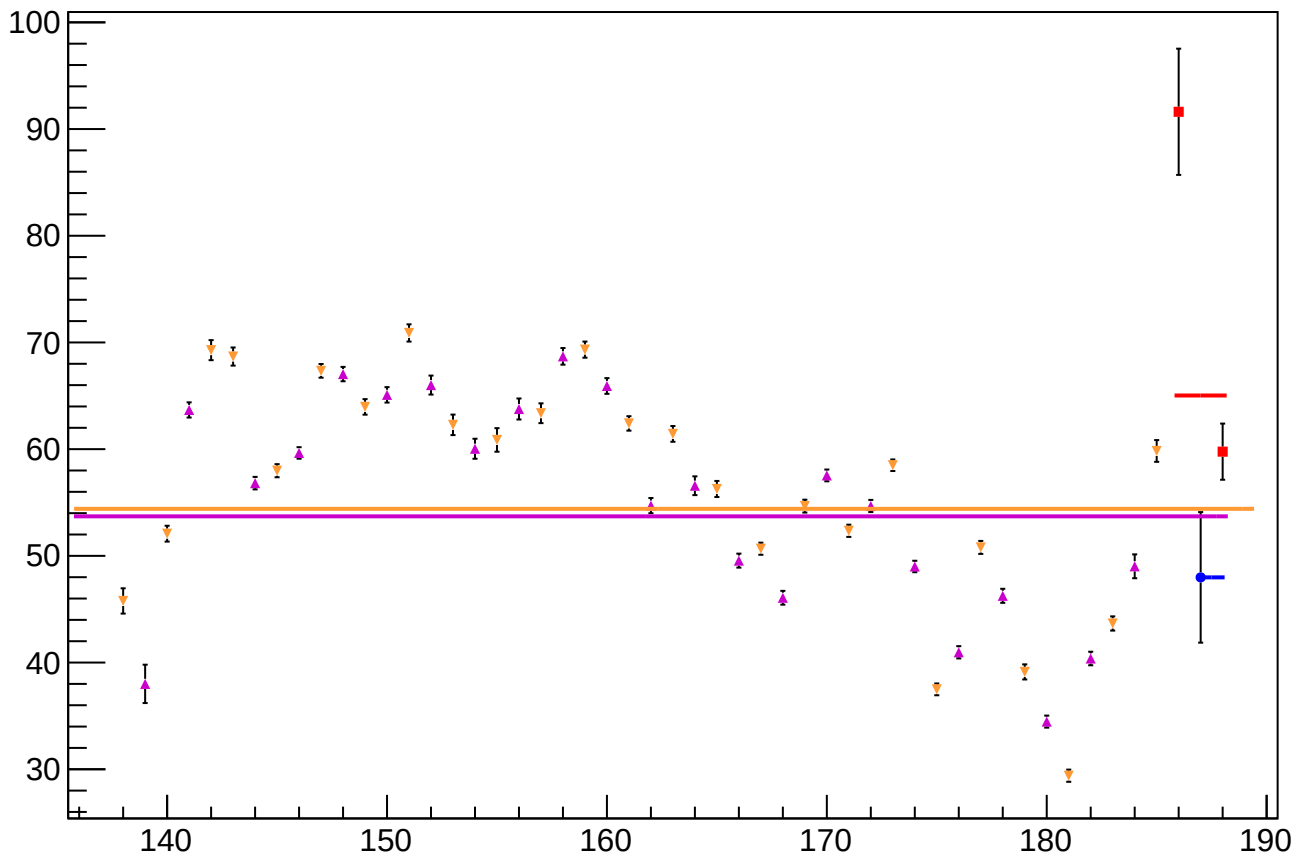
Left In:  $-50.954 \pm 0.159$   $\chi^2/\text{NDF}$ : 17472.2/22

+ sign  $-51.868 \pm 0.158$   $\chi^2/\text{NDF}$ : 19872.8/25

All:  $-52.165 \pm 0.111$   $\chi^2/\text{NDF}$ : 40675.7/50

- sign  $-52.461 \pm 0.157$   $\chi^2/\text{NDF}$ : 20795.8/24

reg\_asym\_sam\_3748\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 47.983+/-6.117  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 54.407+/-0.141  $\chi^2/\text{NDF}$ : 6200.4/24

Right Out: 65.028+/-2.404  $\chi^2/\text{NDF}$ : 24.2/1

Left In: 53.704+/-0.143  $\chi^2/\text{NDF}$ : 4603.5/22

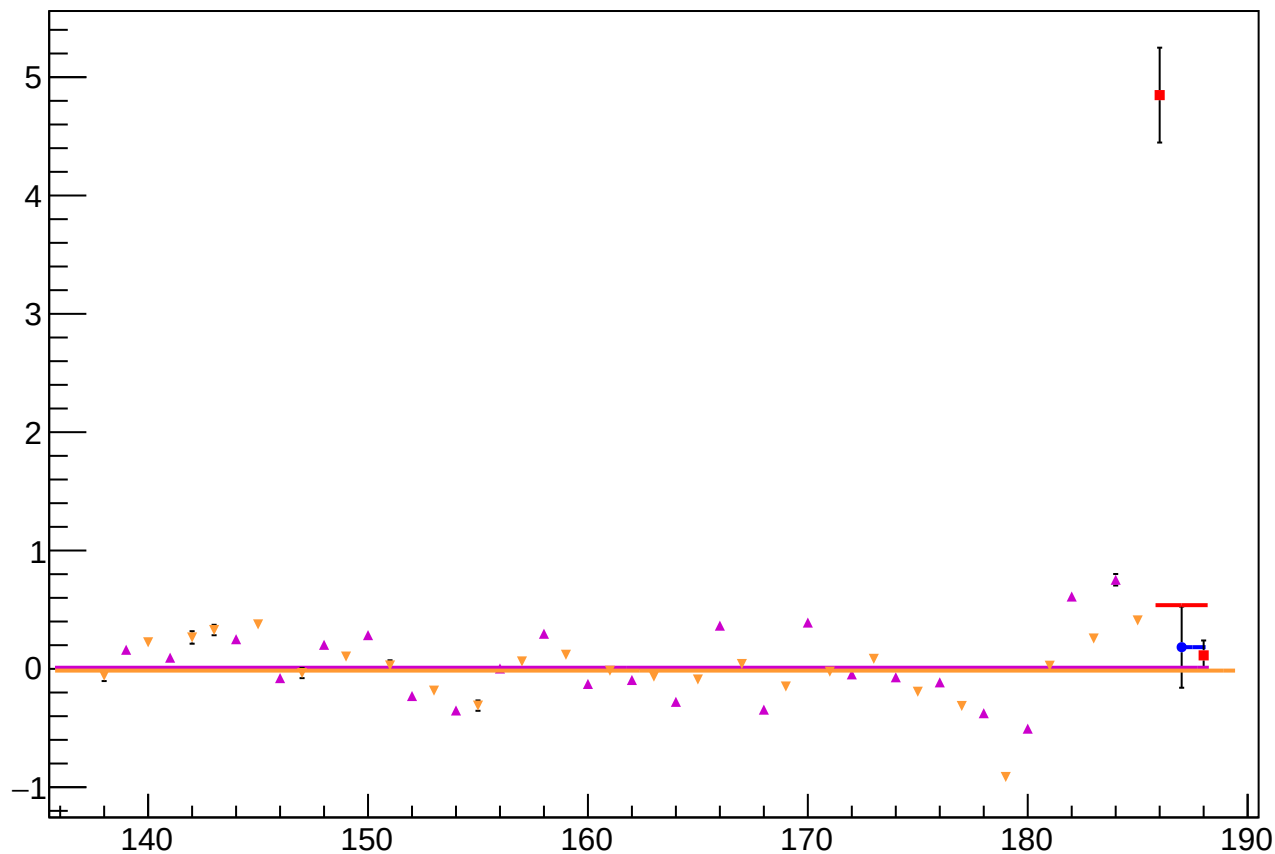
+ sign 54.403+/-0.140  $\chi^2/\text{NDF}$ : 6201.5/25

All: 54.078+/-0.100  $\chi^2/\text{NDF}$ : 10862.2/50

- sign 53.743+/-0.142  $\chi^2/\text{NDF}$ : 4649.8/24



reg\_asym\_sam\_3748\_avg\_diff\_bpm12X\_slope vs Slug



Right In: 0.183+/-0.343  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -0.015+/-0.006  $\chi^2/\text{NDF}$ : 1645.9/24

Right Out: 0.538+/-0.120  $\chi^2/\text{NDF}$ : 127.0/1

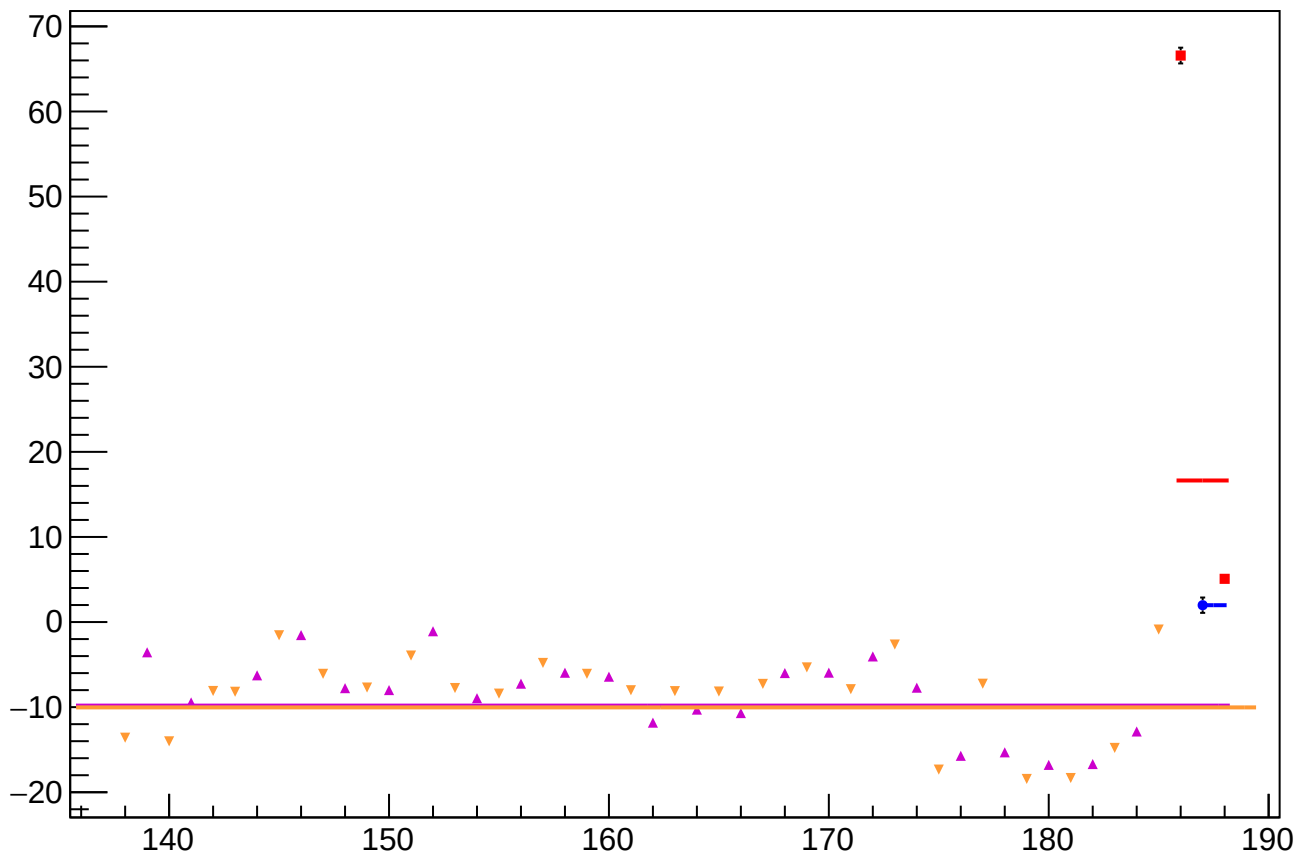
Left In: 0.009+/-0.007  $\chi^2/\text{NDF}$ : 2228.9/22

+ sign -0.015+/-0.006  $\chi^2/\text{NDF}$ : 1646.2/25

All: -0.002+/-0.005  $\chi^2/\text{NDF}$ : 4029.3/50

- sign 0.011+/-0.007  $\chi^2/\text{NDF}$ : 2375.3/24

reg\_asym\_sam\_1526\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $1.981 \pm 0.902$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-10.030 \pm 0.051$   $\chi^2/\text{NDF}$ : 12530.2/24

Right Out:  $16.637 \pm 0.402$   $\chi^2/\text{NDF}$ : 3579.0/1

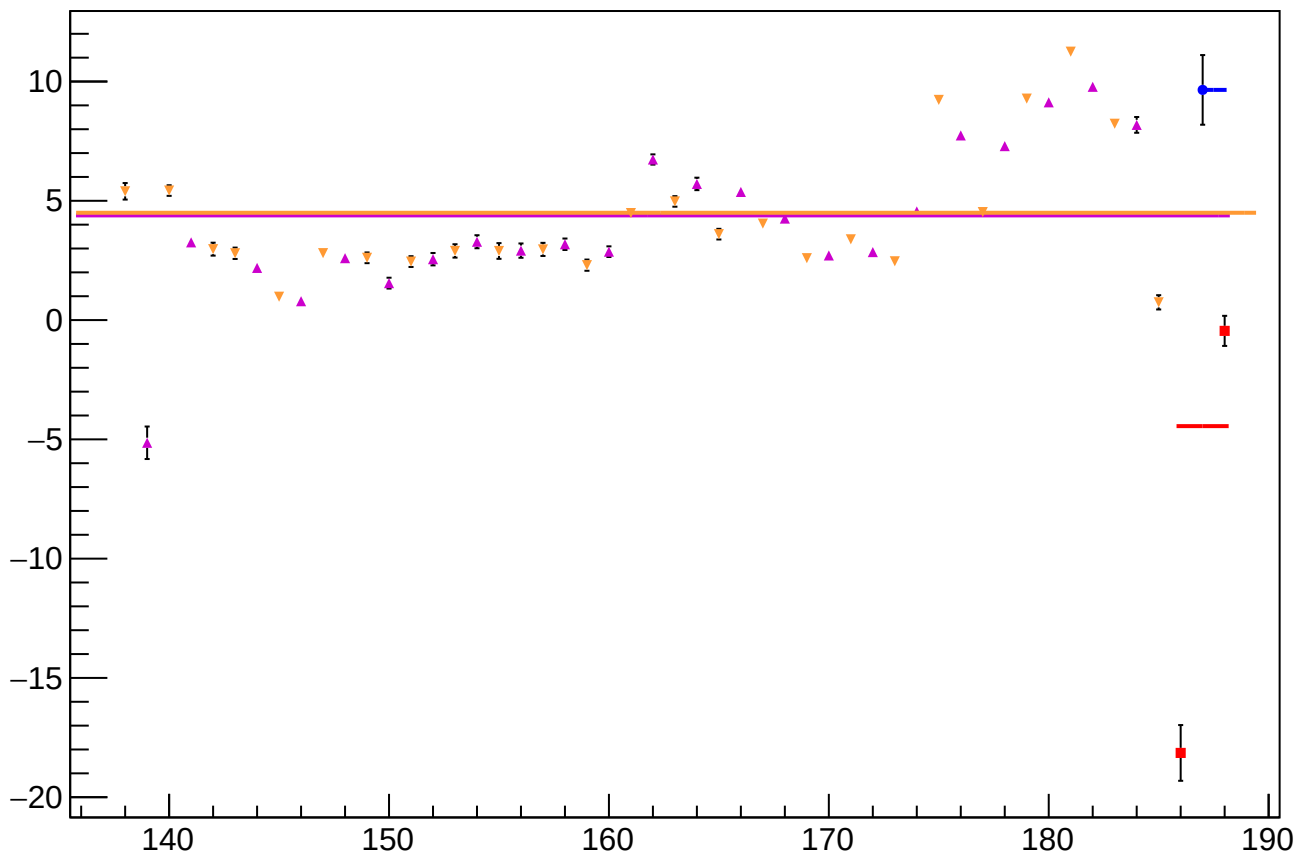
Left In:  $-9.820 \pm 0.051$   $\chi^2/\text{NDF}$ : 9468.8/22

+ sign  $-9.992 \pm 0.051$   $\chi^2/\text{NDF}$ : 12706.9/25

All:  $-9.695 \pm 0.036$   $\chi^2/\text{NDF}$ : 30094.9/50

- sign  $-9.397 \pm 0.051$   $\chi^2/\text{NDF}$ : 17319.2/24

# reg\_asym\_sam\_1526\_avg\_diff\_bpm4aY\_slope vs Slug



Right In: 9.649 $\pm$ 1.460  $\chi^2$ /NDF: 0.0/0

Left Out: 4.499 $\pm$ 0.041  $\chi^2$ /NDF: 4809.3/24

Right Out: -4.445 $\pm$ 0.555  $\chi^2$ /NDF: 177.5/1

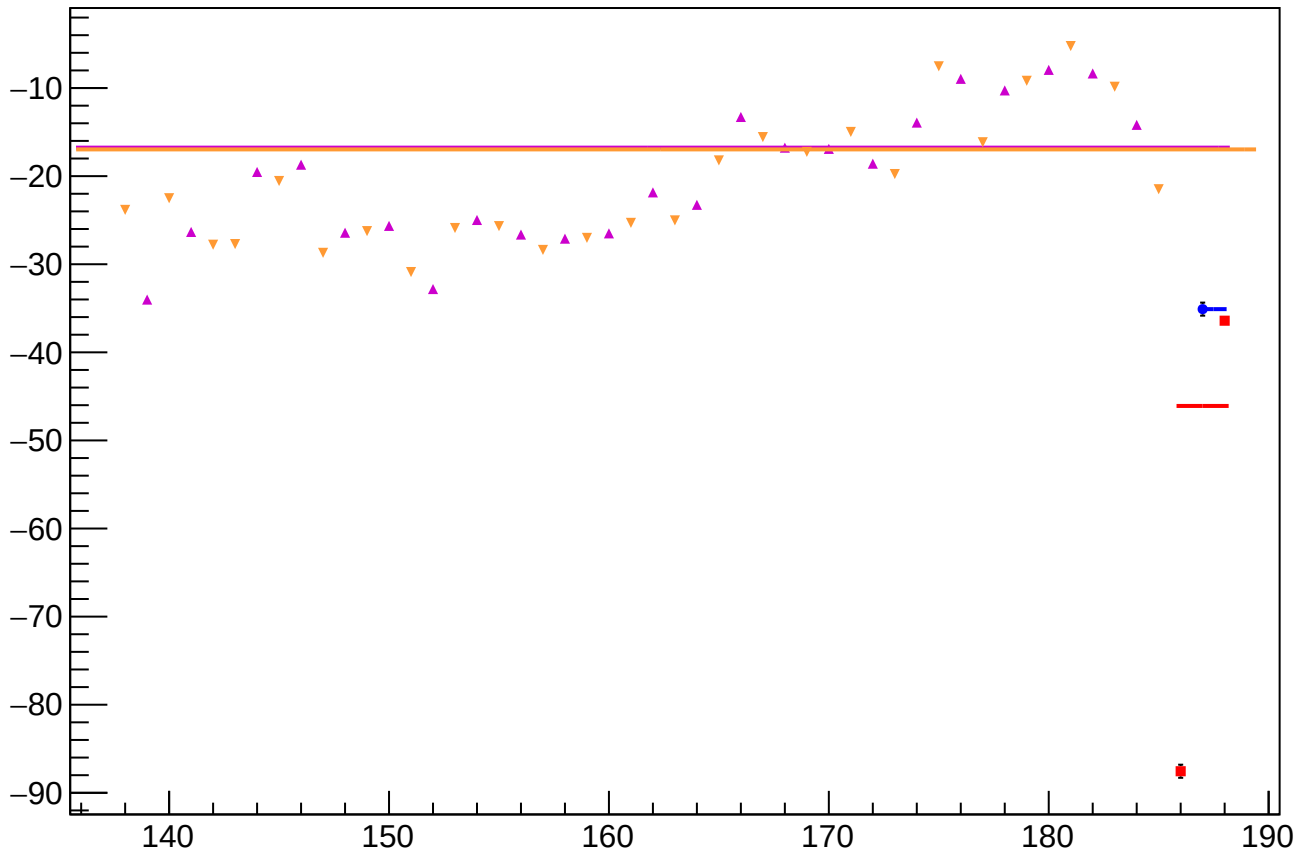
Left In: 4.388 $\pm$ 0.041  $\chi^2$ /NDF: 4266.4/22

+ sign 4.503 $\pm$ 0.041  $\chi^2$ /NDF: 4821.7/25

All: 4.422 $\pm$ 0.029  $\chi^2$ /NDF: 9525.5/50

- sign 4.340 $\pm$ 0.041  $\chi^2$ /NDF: 4695.9/24

reg\_asym\_sam\_1526\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $-35.096 \pm 0.741$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-16.965 \pm 0.051$   $\chi^2/\text{NDF}$ : 21902.1/24

Right Out:  $-46.086 \pm 0.324$   $\chi^2/\text{NDF}$ : 3829.1/1

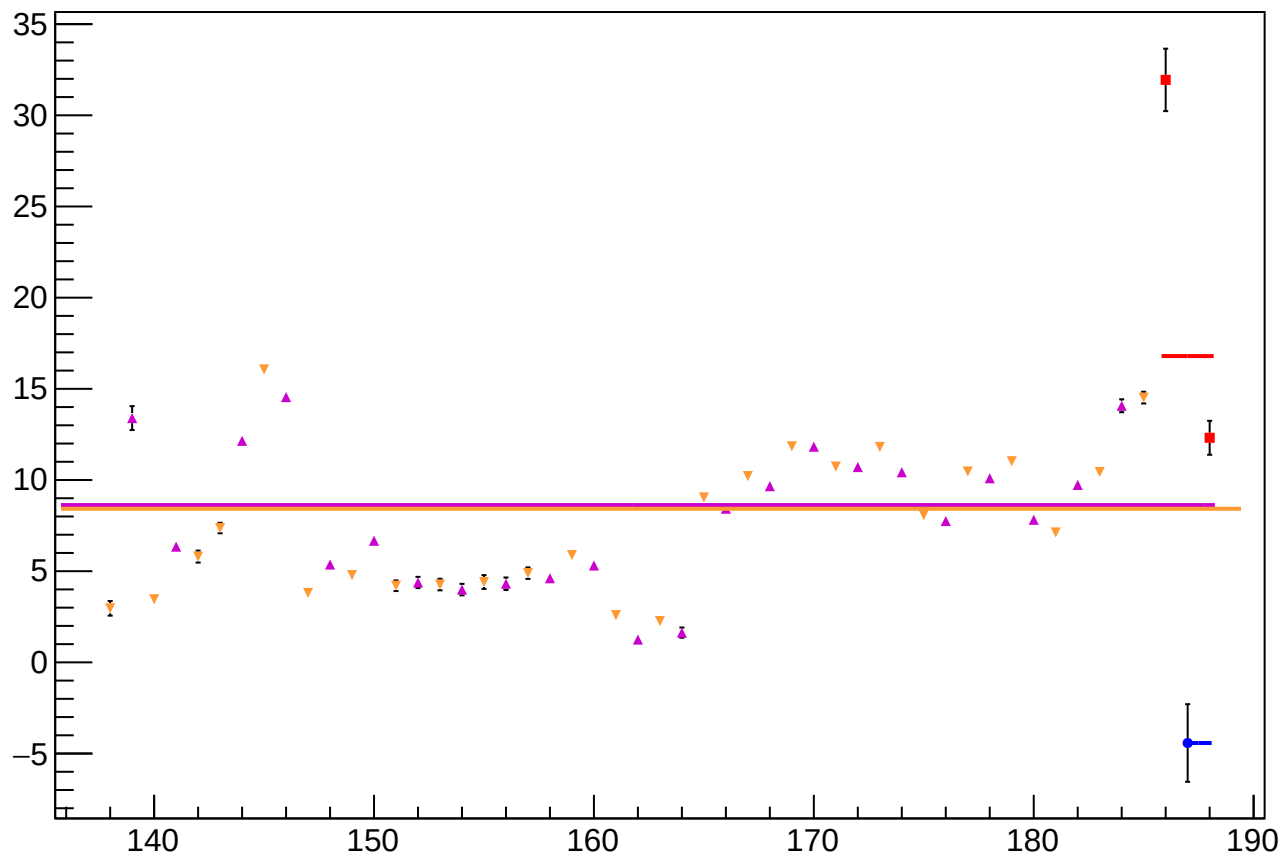
Left In:  $-16.764 \pm 0.051$   $\chi^2/\text{NDF}$ : 19037.7/22

+ sign  $-17.051 \pm 0.051$   $\chi^2/\text{NDF}$ : 22497.3/25

All:  $-17.269 \pm 0.036$   $\chi^2/\text{NDF}$ : 53403.8/50

- sign  $-17.483 \pm 0.051$   $\chi^2/\text{NDF}$ : 30870.3/24

reg\_asym\_sam\_1526\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $-4.422 \pm 2.128$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $8.424 \pm 0.046$   $\chi^2/\text{NDF}$ : 6478.6/24

Right Out:  $16.797 \pm 0.818$   $\chi^2/\text{NDF}$ : 101.4/1

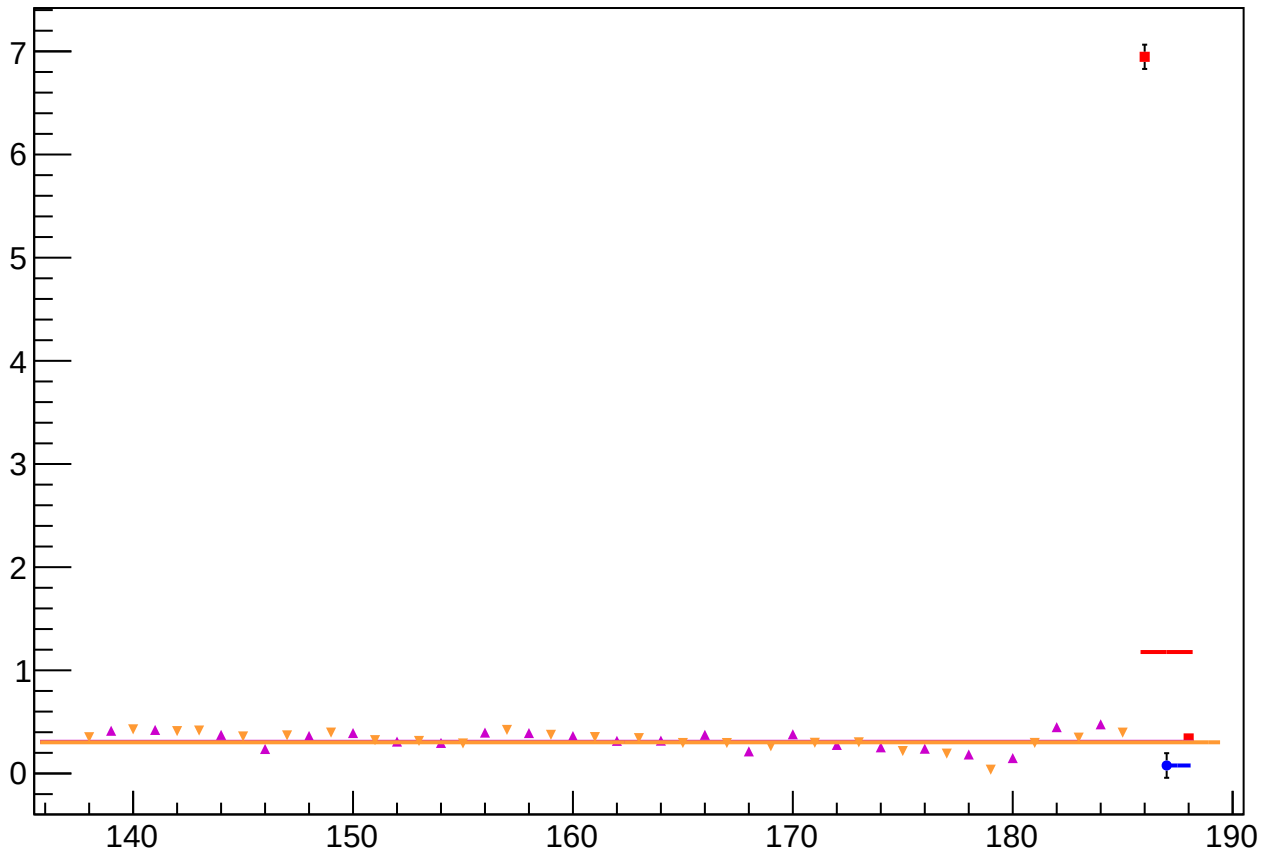
Left In:  $8.626 \pm 0.046$   $\chi^2/\text{NDF}$ : 5531.9/22

+ sign  $8.418 \pm 0.046$   $\chi^2/\text{NDF}$ : 6515.0/25

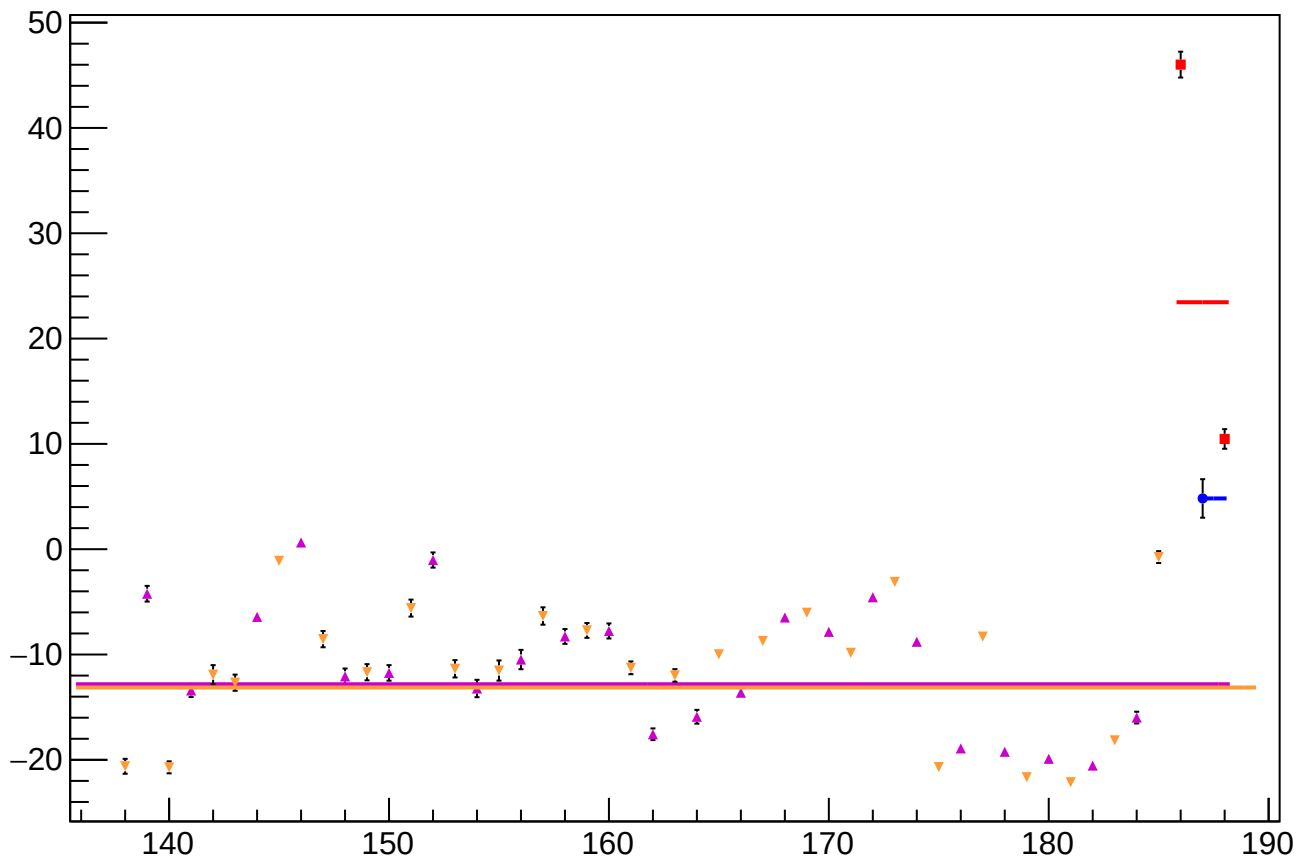
All:  $8.534 \pm 0.032$   $\chi^2/\text{NDF}$ : 12260.6/50

- sign  $8.652 \pm 0.046$   $\chi^2/\text{NDF}$ : 5732.6/24

reg\_asym\_sam\_1526\_avg\_diff\_bpm12X\_slope vs Slug



reg\_asym\_sam\_3726\_avg\_diff\_bpm1X\_slope vs Slug



Right In: 4.820+/-1.829     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -13.133+/-0.094      $\chi^2/\text{NDF}$ :5974.5/24

Right Out:  $23.451 \pm 0.743$      $\chi^2/\text{NDF}$ : 531.0/1

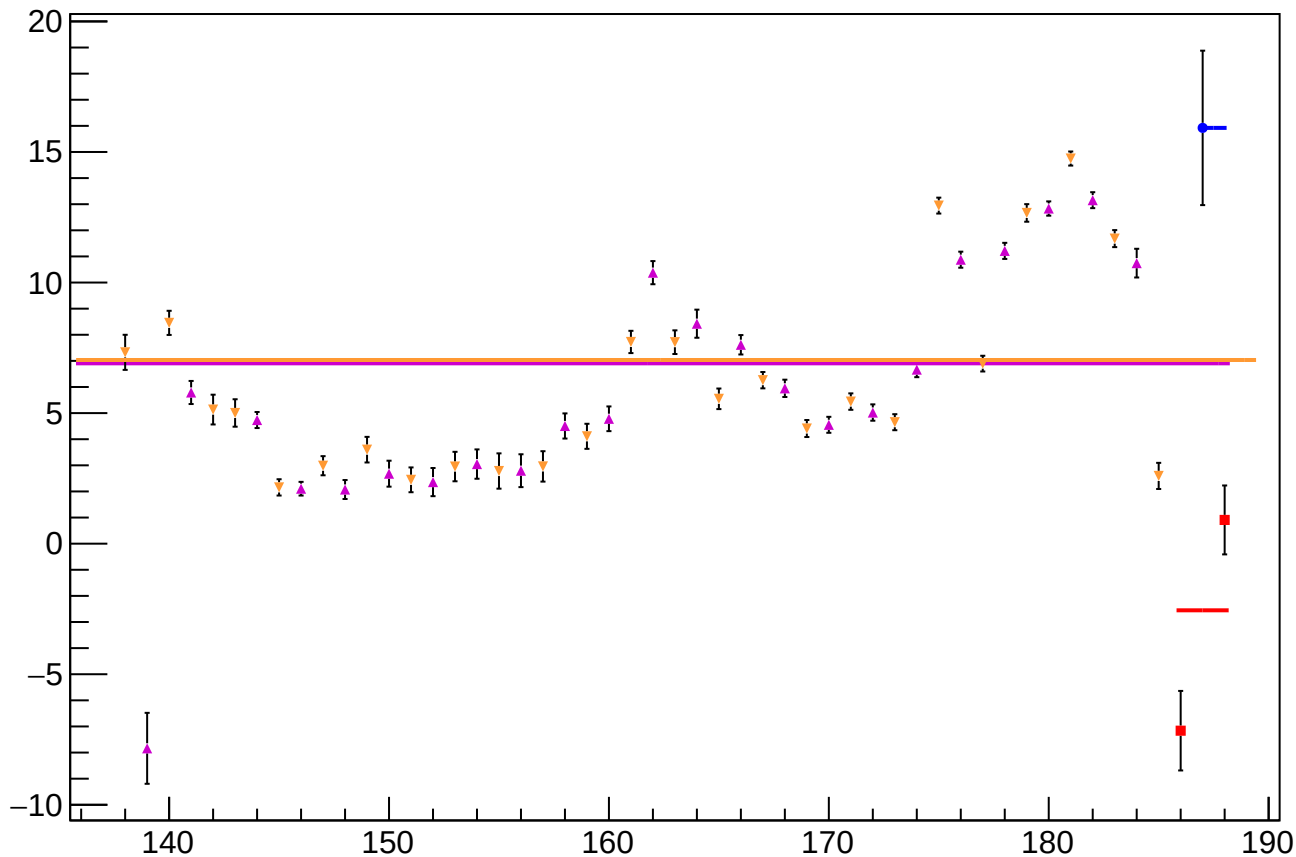
Left In: -12.823+/-0.095     $\chi^2/\text{NDF}$ :4841.5/22

+ sign -13.086 $\pm$ 0.094      $\chi^2$ /NDF: 6070.6/25

All:  $-12.666 \pm 0.066$      $\chi^2/\text{NDF}$ : 13830.8/50

- sign -12.243+/-0.094     $\chi^2/\text{NDF}$ : 7719.8/24

# reg\_asym\_sam\_3726\_avg\_diff\_bpm4aY\_slope vs Slug



Right In: 15.923+/-2.957  $\chi^2$ /NDF: 0.0/0

Left Out: 7.034+/-0.077  $\chi^2$ /NDF:2657.5/24

Right Out: -2.552+/-0.997  $\chi^2$ /NDF: 16.0/1

Left In: 6.906+/-0.077  $\chi^2$ /NDF:2442.8/22

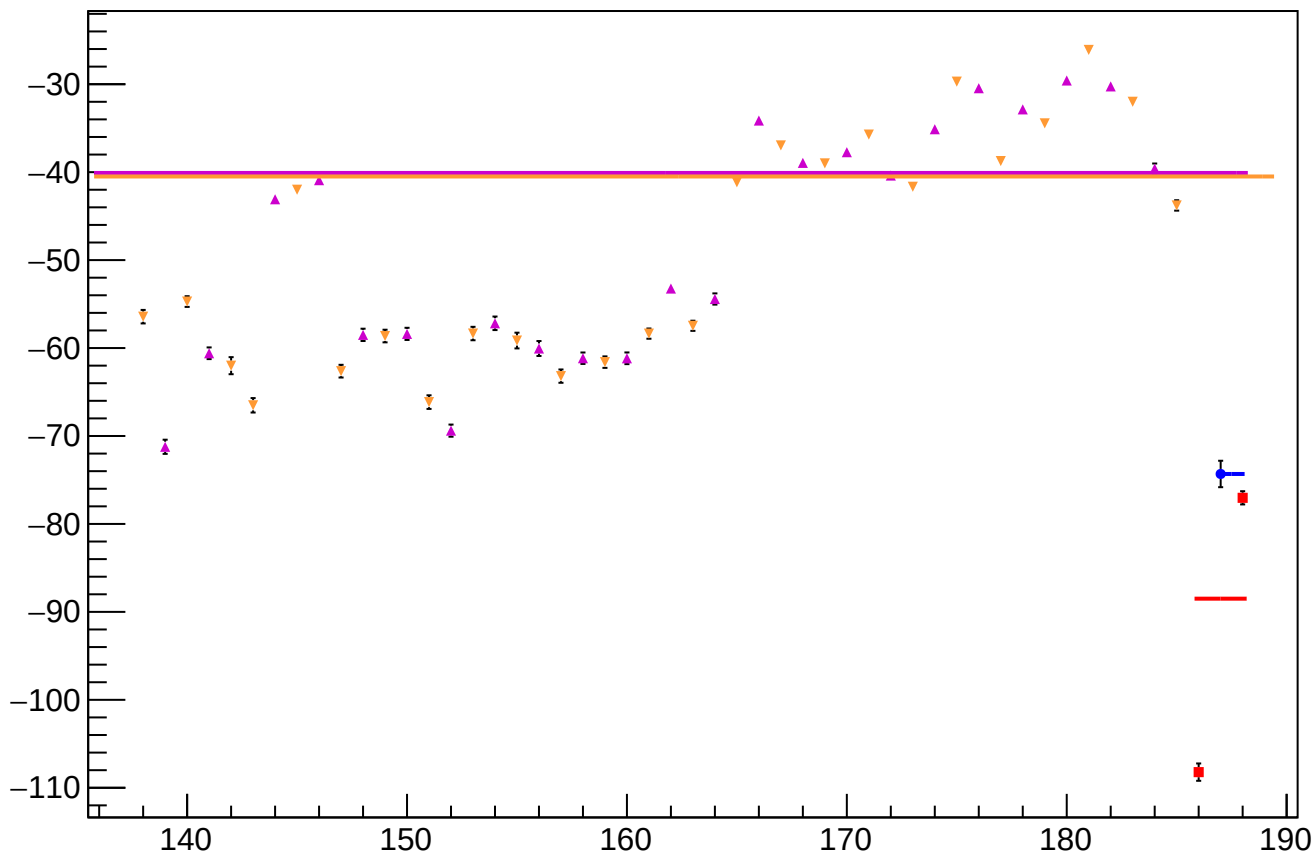
+ sign 7.040+/-0.077  $\chi^2$ /NDF: 2666.5/25

All: 6.945+/-0.055  $\chi^2$ /NDF: 5217.9/50

- sign 6.849+/-0.077  $\chi^2$ /NDF: 2548.3/24



reg\_asym\_sam\_3726\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $-74.319 \pm 1.503$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-40.492 \pm 0.095$   $\chi^2/\text{NDF}$ : 15435.0/24

Right Out:  $-88.497 \pm 0.598$   $\chi^2/\text{NDF}$ : 633.2/1

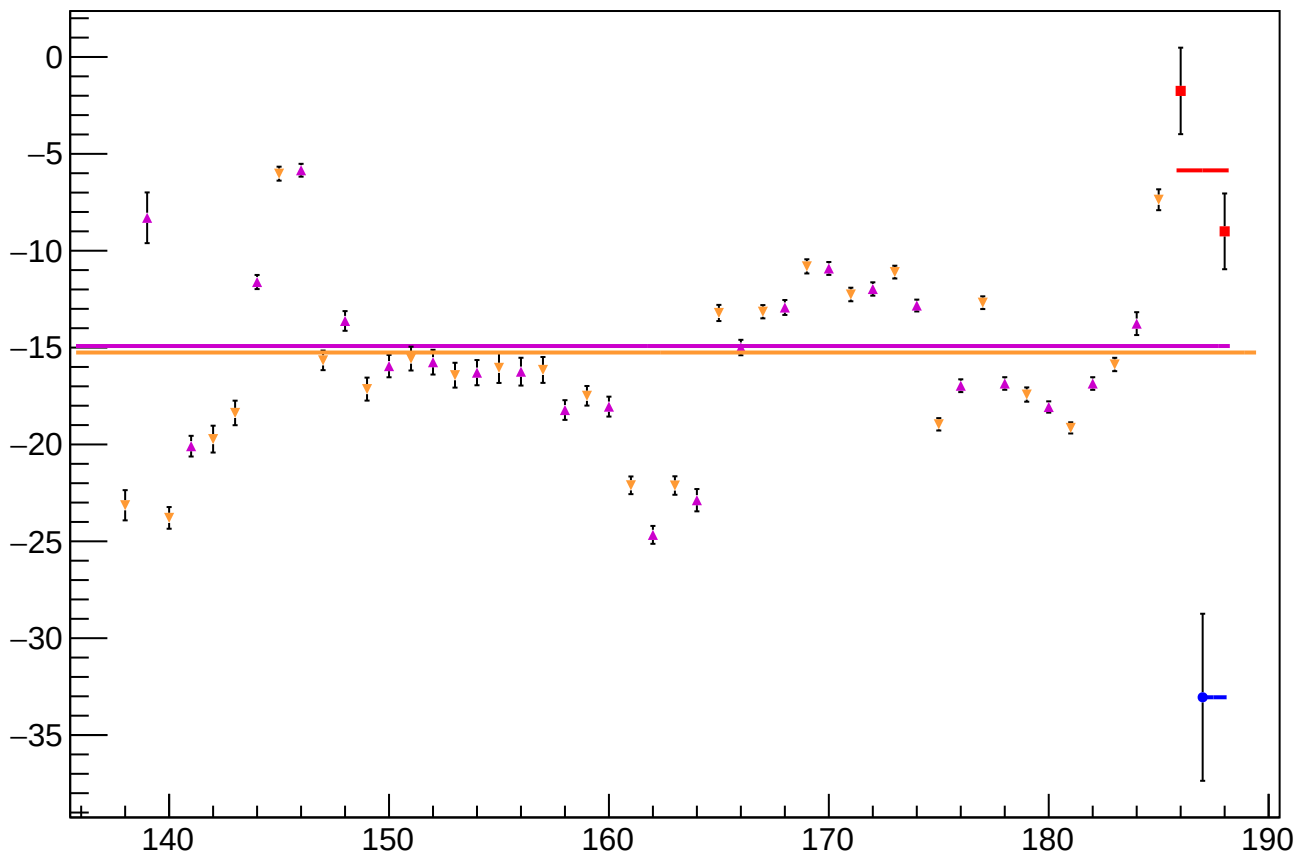
Left In:  $-40.091 \pm 0.095$   $\chi^2/\text{NDF}$ : 14103.5/22

+ sign  $-40.627 \pm 0.095$   $\chi^2/\text{NDF}$ : 15939.4/25

All:  $-40.960 \pm 0.067$   $\chi^2/\text{NDF}$ : 37098.8/50

- sign  $-41.290 \pm 0.094$   $\chi^2/\text{NDF}$ : 21134.6/24

# reg\_asym\_sam\_3726\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: -33.050 $\pm$ 4.311  $\chi^2$ /NDF: 0.0/0

Left Out: -15.254 $\pm$ 0.086  $\chi^2$ /NDF:2594.4/24

Right Out: -5.853 $\pm$ 1.471  $\chi^2$ /NDF: 6.0/1

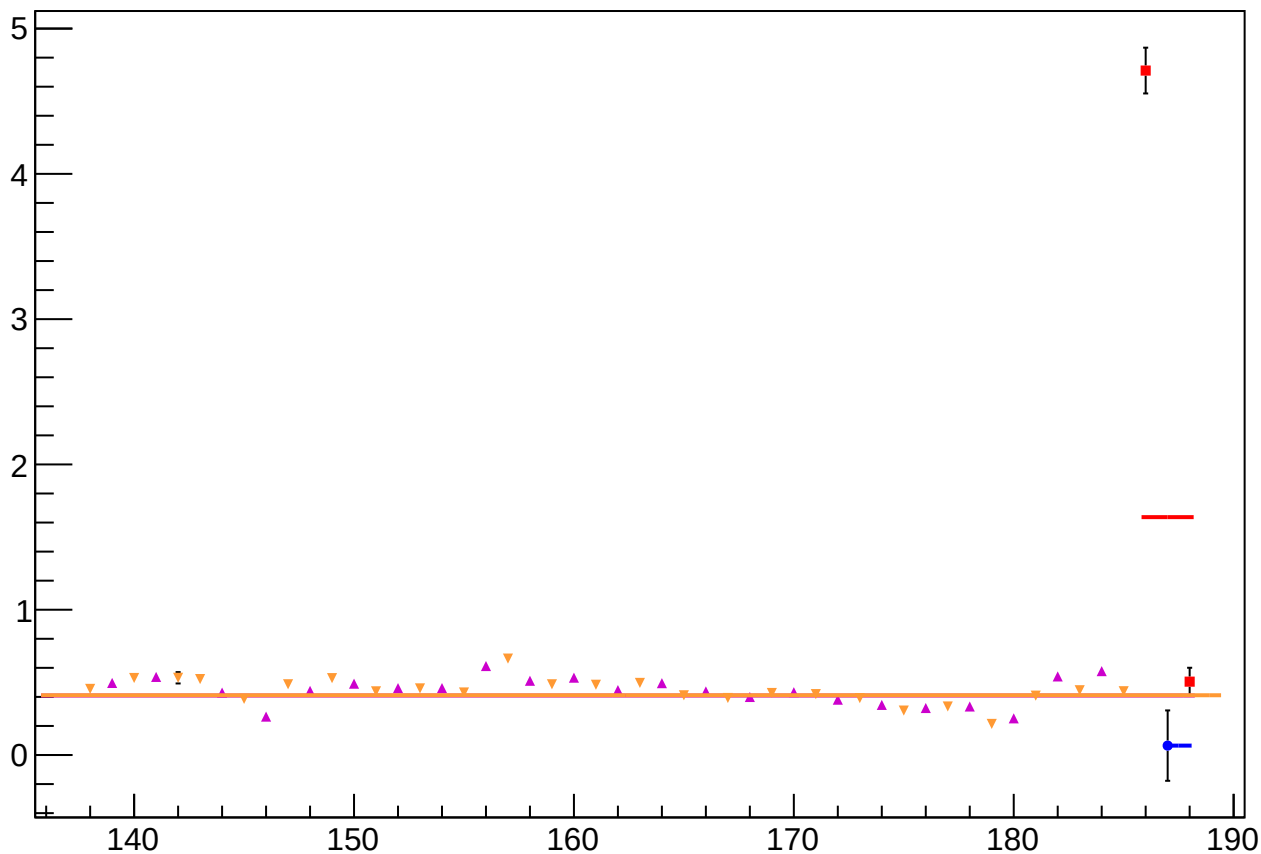
Left In: -14.919 $\pm$ 0.087  $\chi^2$ /NDF:2207.7/22

+ sign -15.261 $\pm$ 0.086  $\chi^2$ /NDF: 2611.4/25

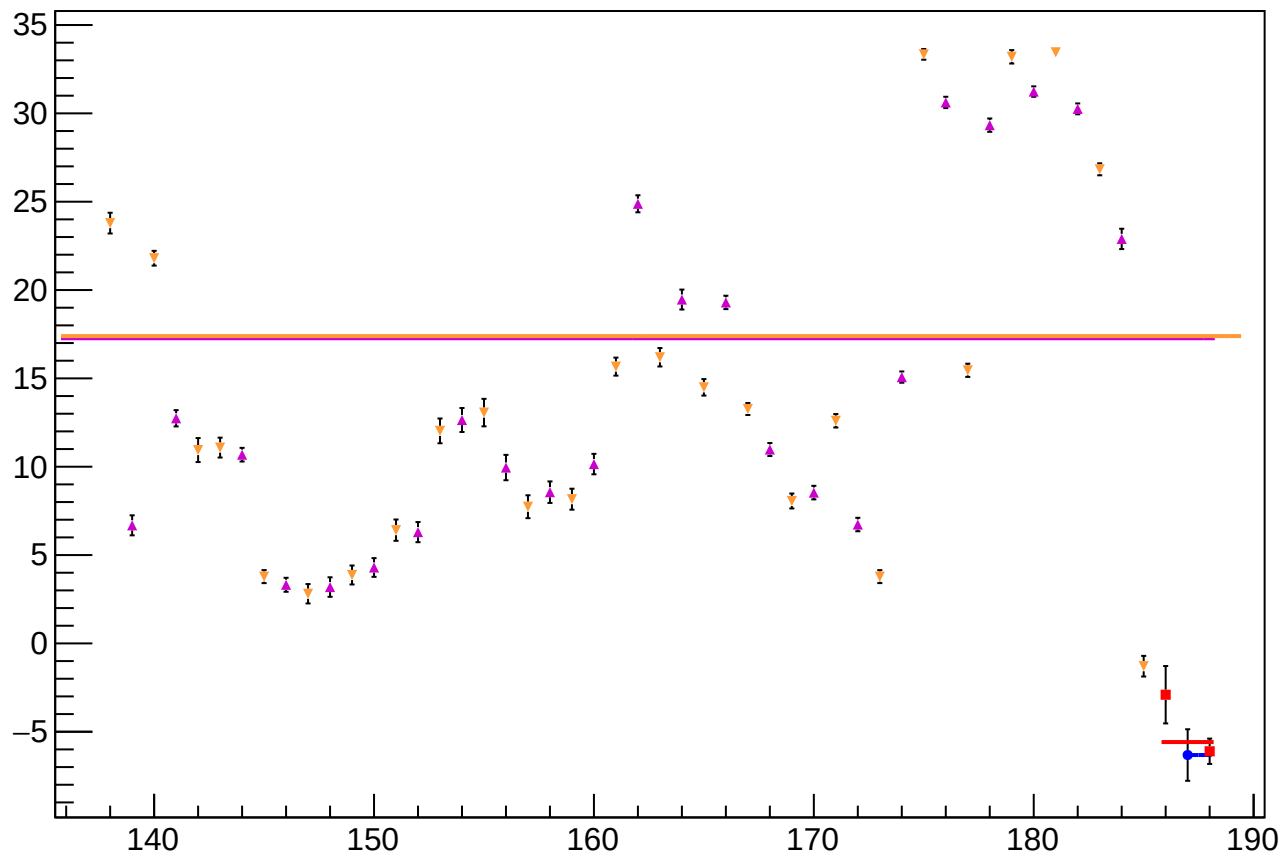
All: -15.075 $\pm$ 0.061  $\chi^2$ /NDF: 4872.4/50

- sign -14.888 $\pm$ 0.086  $\chi^2$ /NDF: 2251.6/24

reg\_asym\_sam\_3726\_avg\_diff\_bpm12X\_slope vs Slug



# reg\_asym\_sam\_15\_48\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-6.318 \pm 1.459$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $17.393 \pm 0.087$   $\chi^2/\text{NDF}$ : 16305.7/24

Right Out:  $-5.584 \pm 0.656$   $\chi^2/\text{NDF}$ : 3.3/1

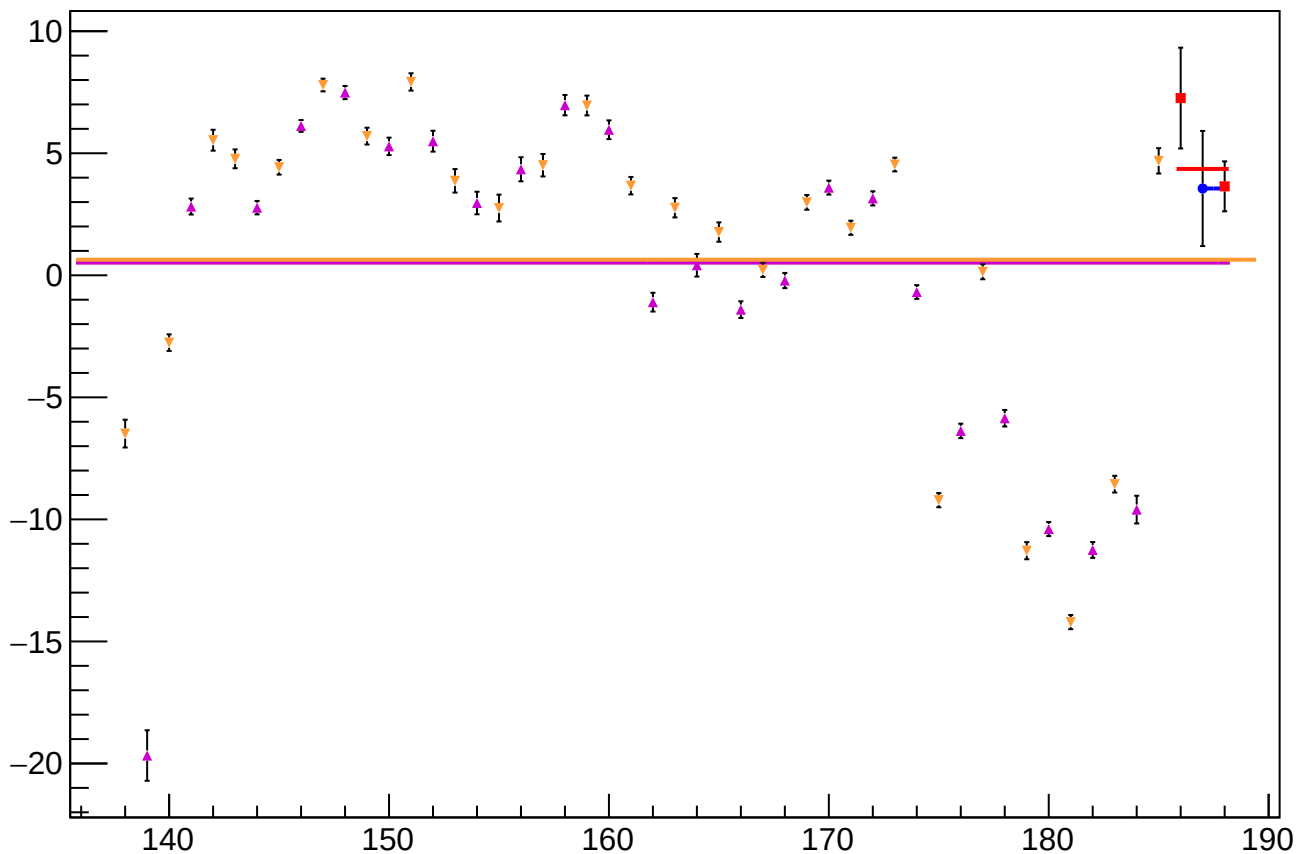
Left In:  $17.271 \pm 0.088$   $\chi^2/\text{NDF}$ : 12892.2/22

+ sign  $17.309 \pm 0.087$   $\chi^2/\text{NDF}$ : 16569.0/25

All:  $17.087 \pm 0.062$   $\chi^2/\text{NDF}$ : 30670.5/50

- sign  $16.862 \pm 0.088$   $\chi^2/\text{NDF}$ : 14088.4/24

reg\_asym\_sam\_15\_48\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $3.556 \pm 2.357$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $0.639 \pm 0.070$   $\chi^2/\text{NDF}$ : 8514.9/24

Right Out:  $4.357 \pm 0.917$   $\chi^2/\text{NDF}$ : 2.5/1

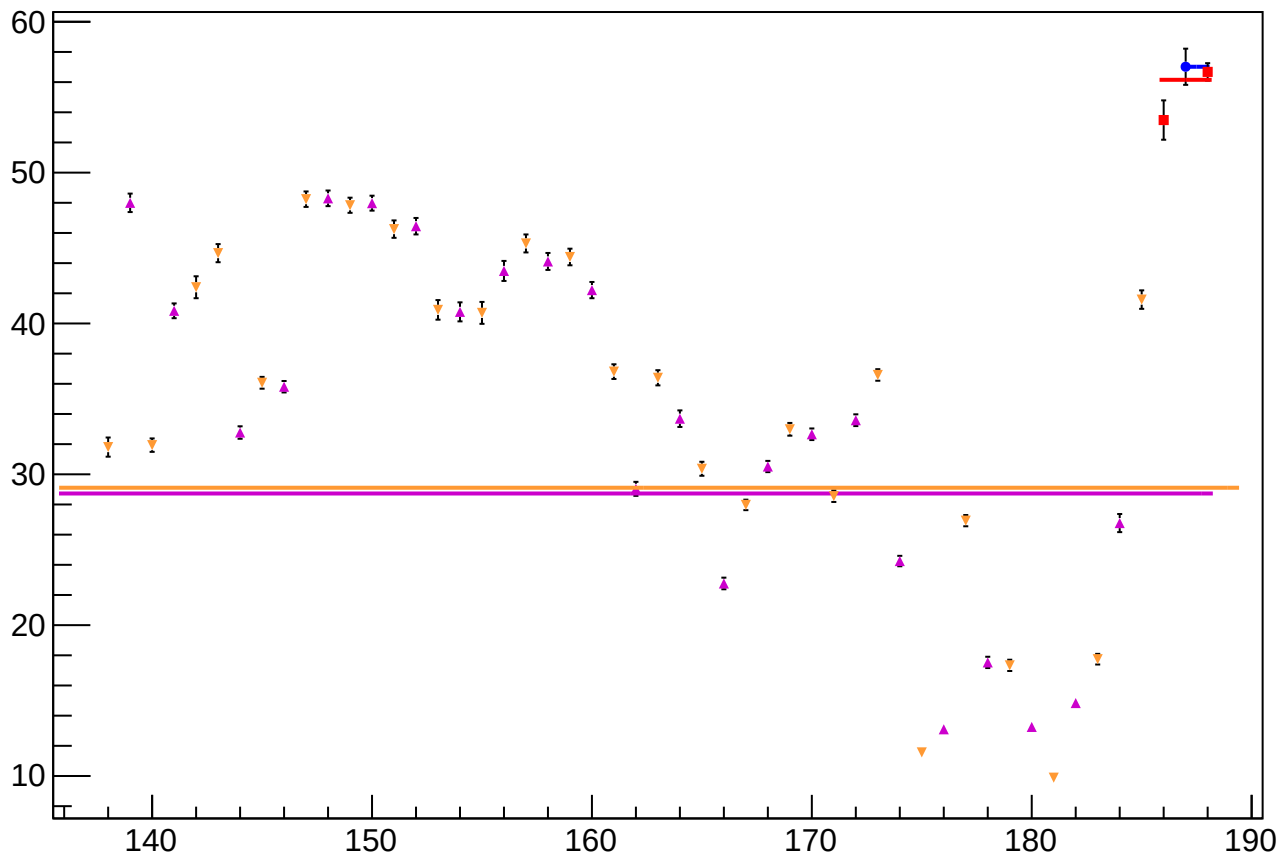
Left In:  $0.519 \pm 0.071$   $\chi^2/\text{NDF}$ : 6776.8/22

+ sign  $0.642 \pm 0.069$   $\chi^2/\text{NDF}$ : 8516.4/25

All:  $0.592 \pm 0.049$   $\chi^2/\text{NDF}$ : 15314.1/50

- sign  $0.542 \pm 0.070$   $\chi^2/\text{NDF}$ : 6796.7/24

# reg\_asym\_sam\_15\_48\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: 57.019 $\pm$ 1.199  $\chi^2$ /NDF: 0.0/0

Left Out: 29.110 $\pm$ 0.088  $\chi^2$ /NDF:18845.8/24

Right Out: 56.153 $\pm$ 0.529  $\chi^2$ /NDF: 5.0/1

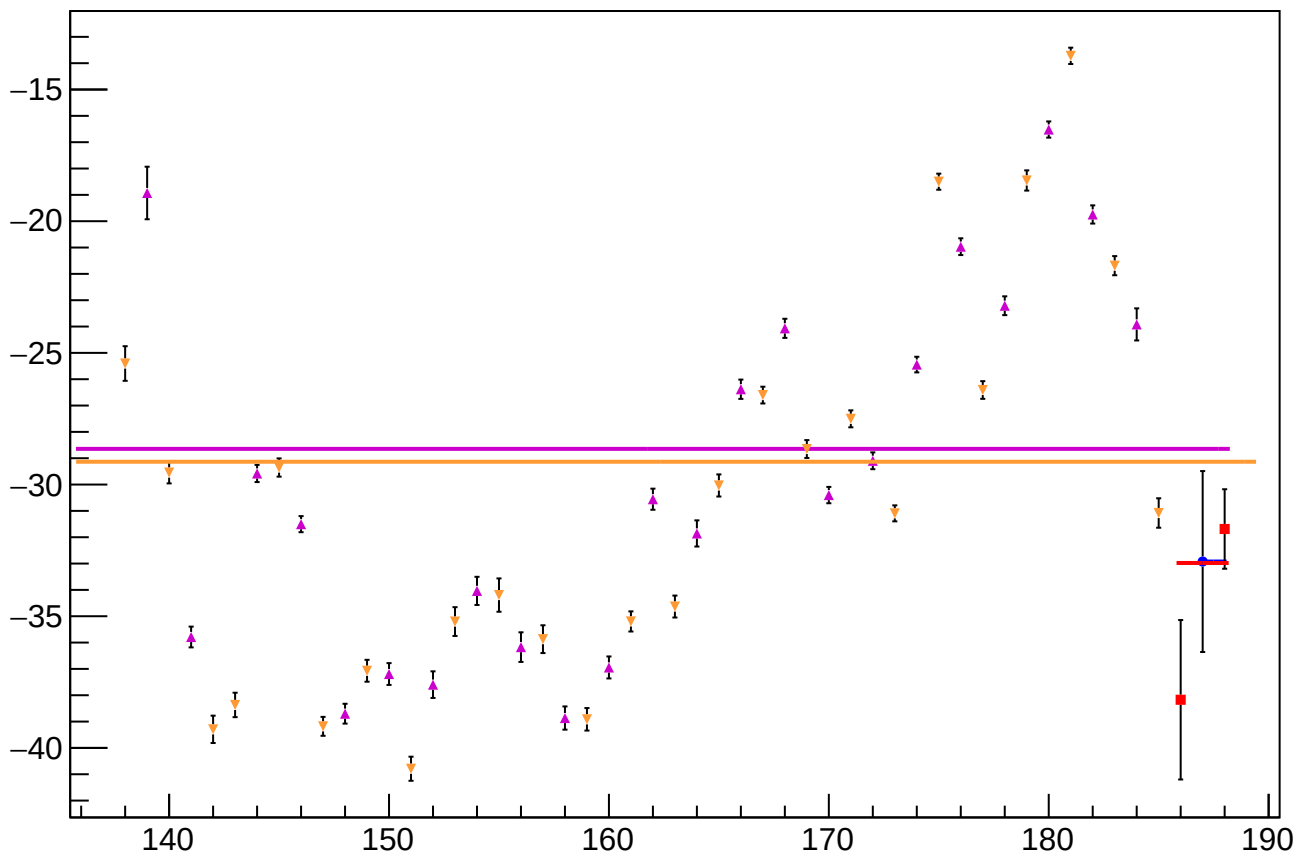
Left In: 28.728 $\pm$ 0.089  $\chi^2$ /NDF:17037.4/22

+ sign 29.259 $\pm$ 0.088  $\chi^2$ /NDF: 19384.7/25

All: 29.370 $\pm$ 0.062  $\chi^2$ /NDF: 39045.7/50

- sign 29.479 $\pm$ 0.088  $\chi^2$ /NDF: 19657.8/24

reg\_asym\_sam\_15\_48\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-32.923 \pm 3.435$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-29.134 \pm 0.078$   $\chi^2/\text{NDF}$ : 8998.0/24

Right Out:  $-32.978 \pm 1.351$   $\chi^2/\text{NDF}$ : 3.7/1

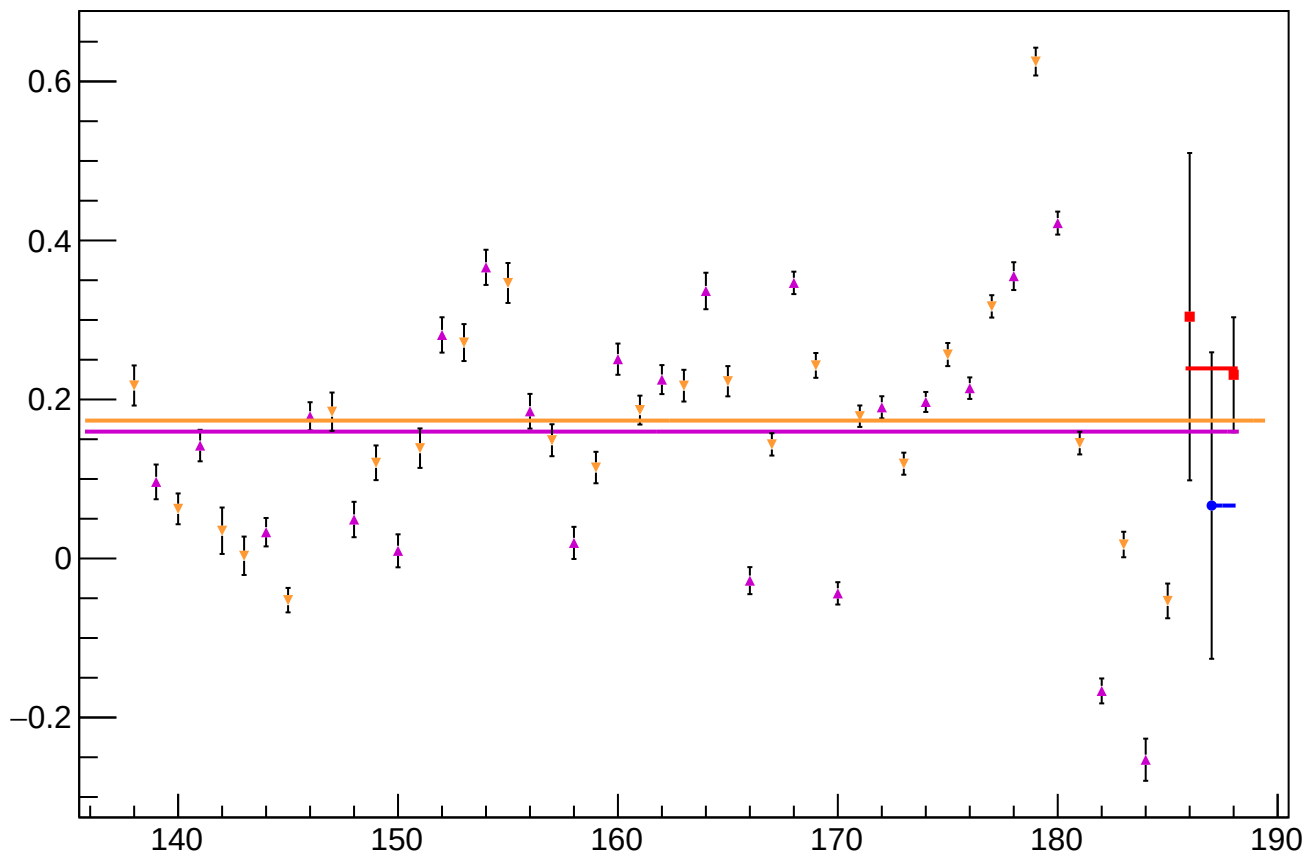
Left In:  $-28.645 \pm 0.080$   $\chi^2/\text{NDF}$ : 6693.5/22

+ sign  $-29.136 \pm 0.078$   $\chi^2/\text{NDF}$ : 8999.2/25

All:  $-28.901 \pm 0.056$   $\chi^2/\text{NDF}$ : 15724.9/50

- sign  $-28.660 \pm 0.079$   $\chi^2/\text{NDF}$ : 6707.4/24

reg\_asym\_sam\_15\_48\_dd\_diff\_bpm12X\_slope vs Slug



Right In: 0.067 $\pm$ 0.193  $\chi^2$ /NDF: 0.0/0

Left Out: 0.173 $\pm$ 0.004  $\chi^2$ /NDF:1468.8/24

Right Out: 0.239 $\pm$ 0.068  $\chi^2$ /NDF: 0.1/1

Left In: 0.160 $\pm$ 0.004  $\chi^2$ /NDF:2063.7/22

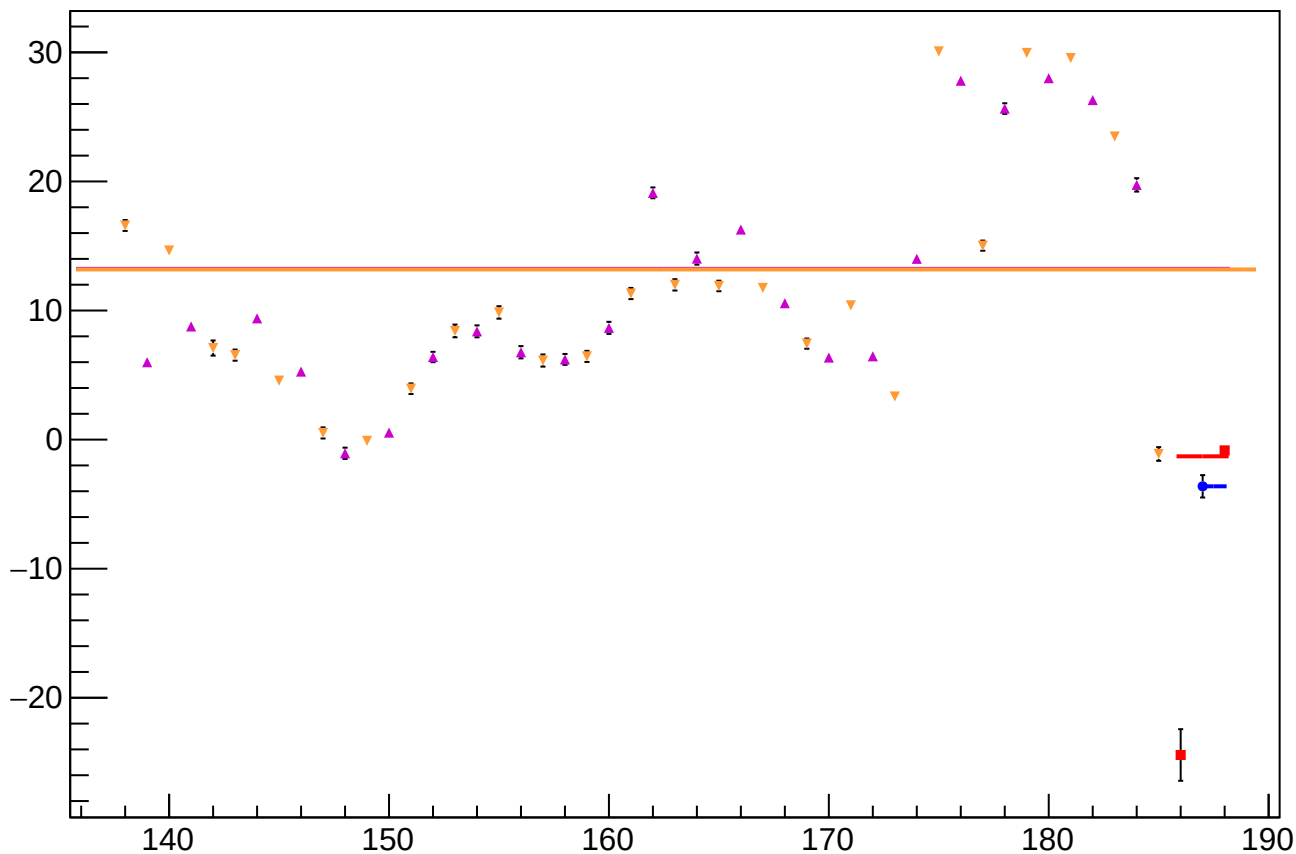
+ sign 0.173 $\pm$ 0.004  $\chi^2$ /NDF: 1469.1/25

All: 0.167 $\pm$ 0.003  $\chi^2$ /NDF: 3541.5/50

- sign 0.160 $\pm$ 0.004  $\chi^2$ /NDF: 2065.2/24



reg\_asym\_sam\_37\_48\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-3.618 \pm 0.867$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $13.181 \pm 0.075$   $\chi^2/\text{NDF}$ : 17039.3/24

Right Out:  $-1.295 \pm 0.279$   $\chi^2/\text{NDF}$ : 136.6/1

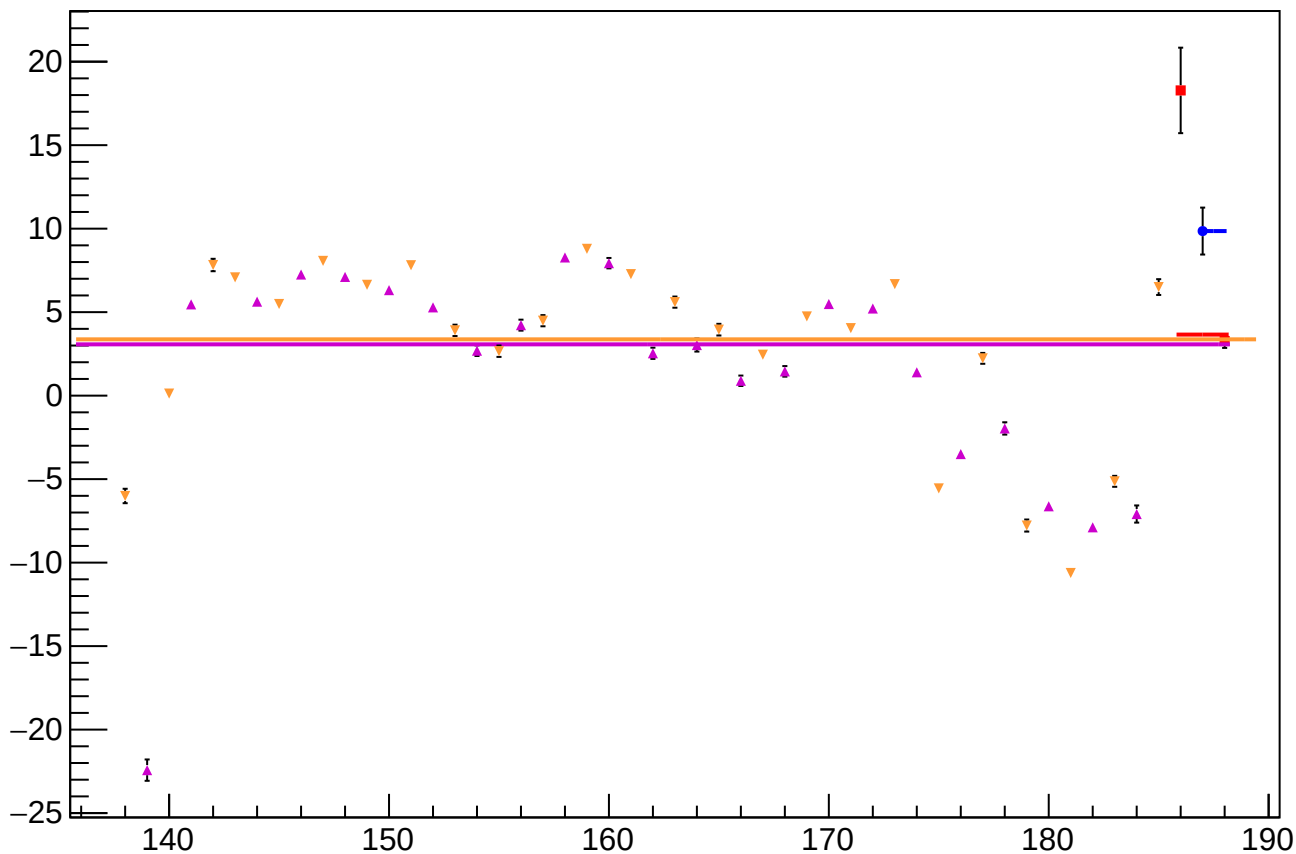
Left In:  $13.228 \pm 0.077$   $\chi^2/\text{NDF}$ : 14126.1/22

+ sign  $13.055 \pm 0.075$   $\chi^2/\text{NDF}$ : 17411.7/25

All:  $12.626 \pm 0.053$   $\chi^2/\text{NDF}$ : 34255.5/50

- sign  $12.210 \pm 0.074$   $\chi^2/\text{NDF}$ : 16779.5/24

reg\_asym\_sam\_37\_48\_dd\_diff\_bpm4aY\_slope vs Slug



Right In: 9.855 $\pm$ 1.405  $\chi^2$ /NDF: 0.0/0

Left Out: 3.372 $\pm$ 0.059  $\chi^2$ /NDF:8053.7/24

Right Out: 3.656 $\pm$ 0.409  $\chi^2$ /NDF: 33.5/1

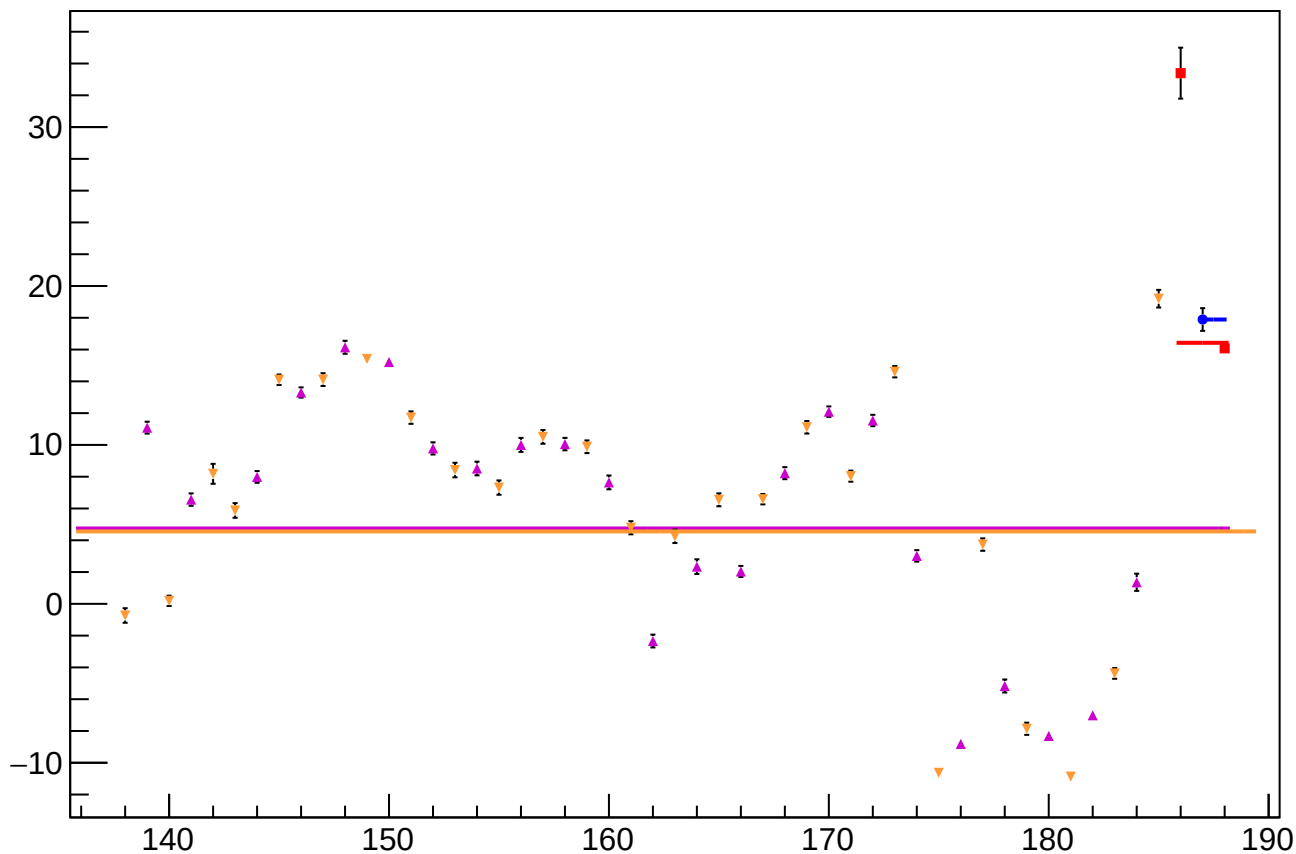
Left In: 3.071 $\pm$ 0.060  $\chi^2$ /NDF:7269.0/22

+ sign 3.383 $\pm$ 0.058  $\chi^2$ /NDF: 8074.9/25

All: 3.237 $\pm$ 0.042  $\chi^2$ /NDF: 15392.3/50

- sign 3.084 $\pm$ 0.060  $\chi^2$ /NDF: 7304.5/24

reg\_asym\_sam\_37\_48\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: 17.892 $\pm$ 0.713  $\chi^2$ /NDF: 0.0/0

Left Out: 4.557 $\pm$ 0.076  $\chi^2$ /NDF:13588.4/24

Right Out: 16.425 $\pm$ 0.226  $\chi^2$ /NDF: 114.2/1

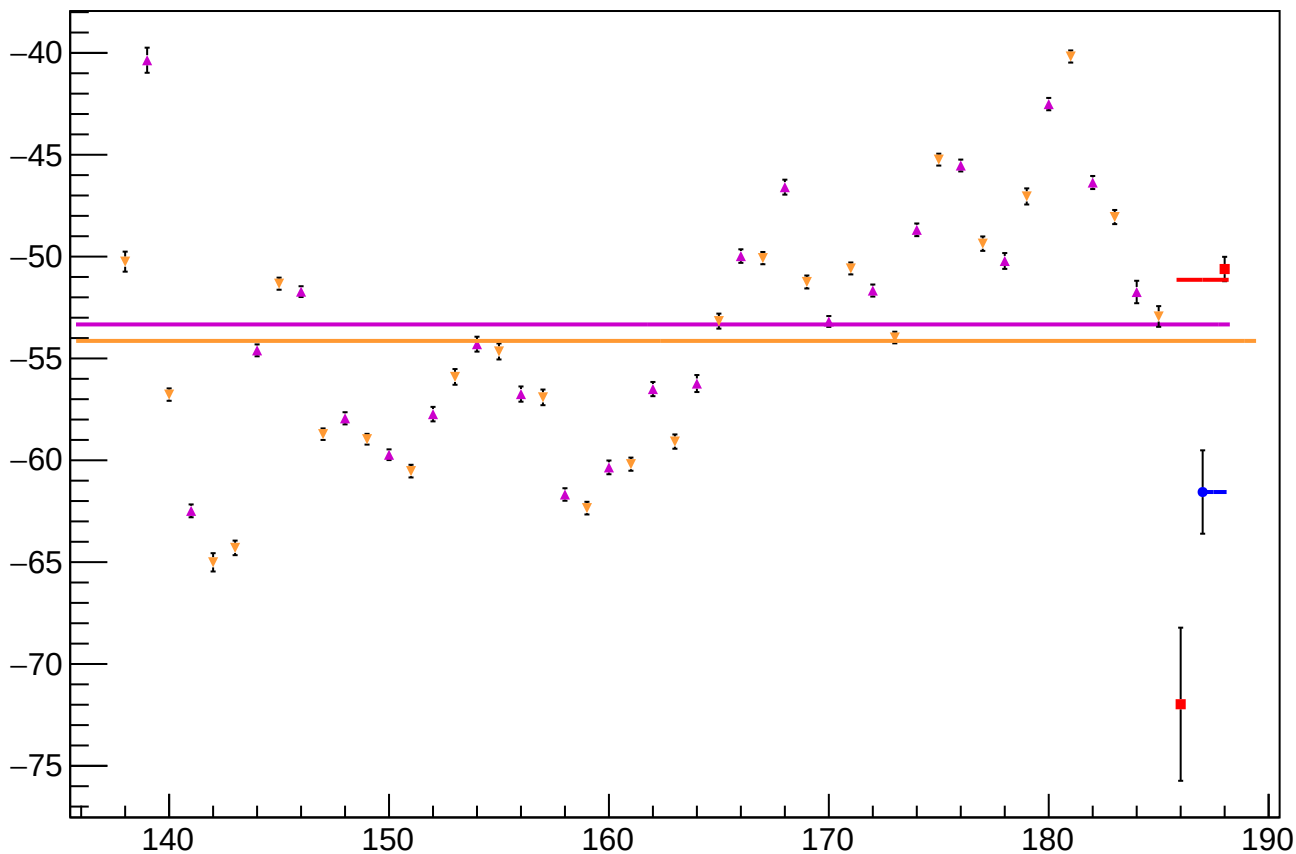
Left In: 4.741 $\pm$ 0.076  $\chi^2$ /NDF:11418.2/22

+ sign 4.705 $\pm$ 0.075  $\chi^2$ /NDF: 13933.9/25

All: 5.343 $\pm$ 0.052  $\chi^2$ /NDF: 27996.6/50

- sign 5.936 $\pm$ 0.072  $\chi^2$ /NDF: 13923.4/24

# reg\_asym\_sam\_37\_48\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-61.557 \pm 2.047$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-54.139 \pm 0.067$   $\chi^2/\text{NDF}$ : 8301.1/24

Right Out:  $-51.139 \pm 0.592$   $\chi^2/\text{NDF}$ : 31.5/1

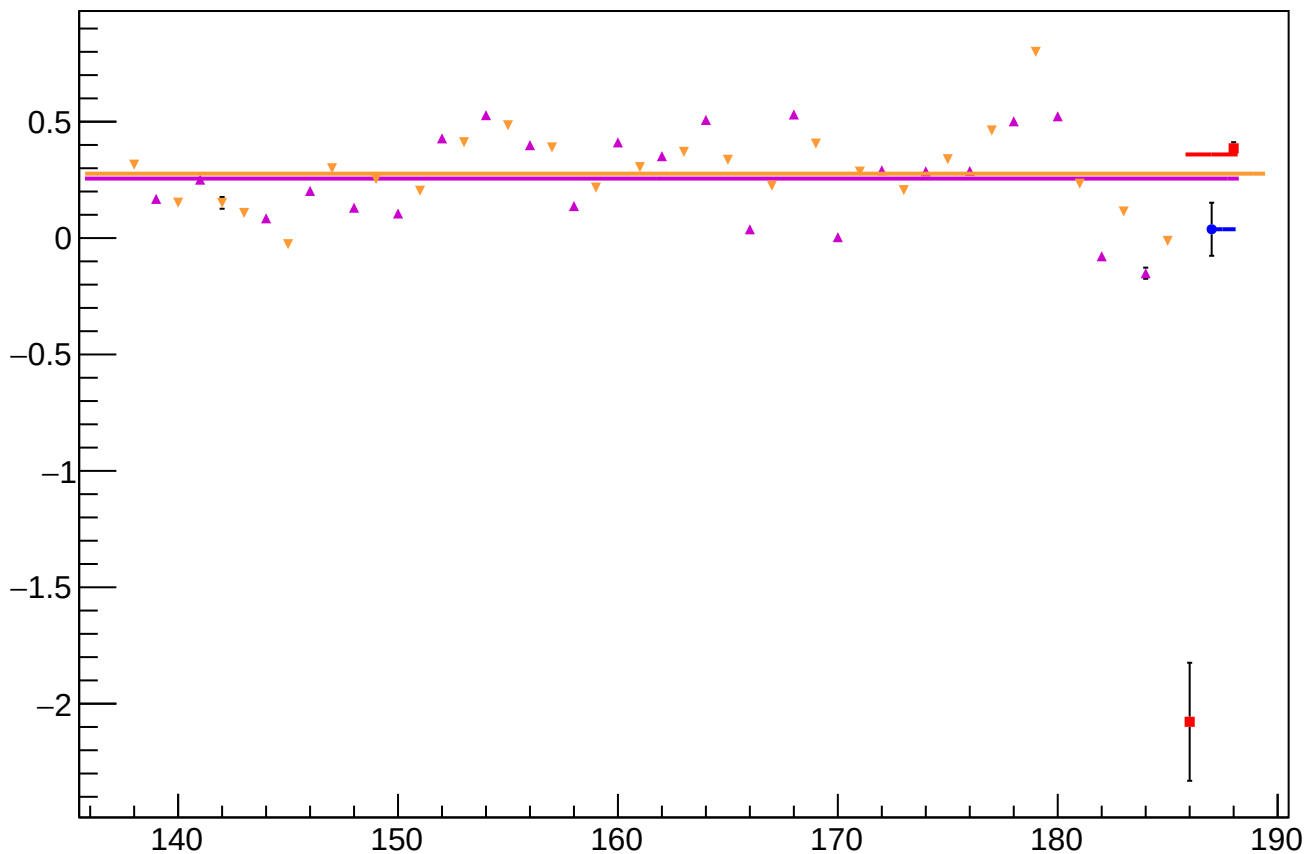
Left In:  $-53.330 \pm 0.068$   $\chi^2/\text{NDF}$ : 6940.2/22

+ sign  $-54.147 \pm 0.067$   $\chi^2/\text{NDF}$ : 8314.3/25

All:  $-53.732 \pm 0.047$   $\chi^2/\text{NDF}$ : 15378.6/50

- sign  $-53.302 \pm 0.068$   $\chi^2/\text{NDF}$ : 6985.2/24

reg\_asym\_sam\_37\_48\_dd\_diff\_bpm12X\_slope vs Slug



Right In: 0.038 $\pm$ 0.114  $\chi^2$ /NDF: 0.0/0

Left Out: 0.277 $\pm$ 0.003  $\chi^2$ /NDF:2606.0/24

Right Out: 0.359 $\pm$ 0.026  $\chi^2$ /NDF: 93.4/1

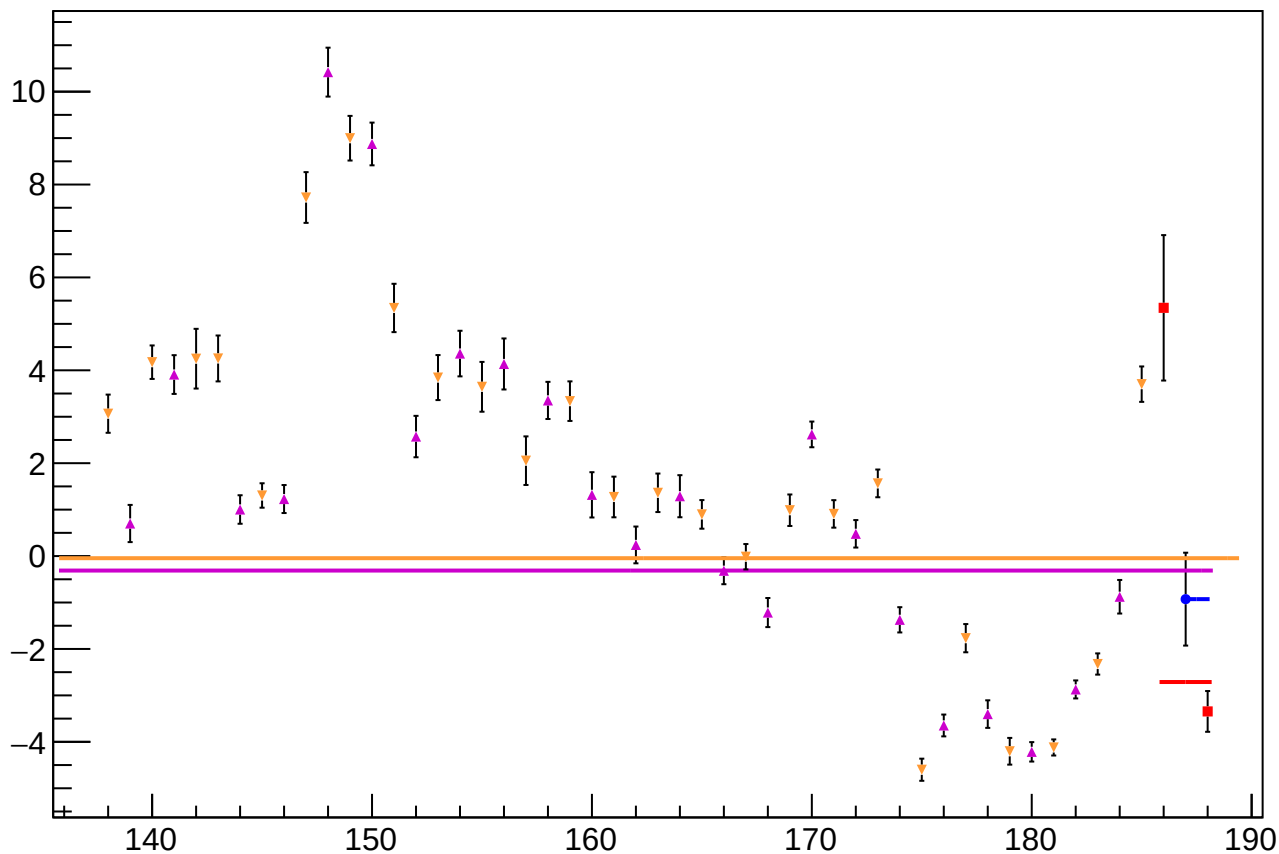
Left In: 0.256 $\pm$ 0.003  $\chi^2$ /NDF:3644.0/22

+ sign 0.277 $\pm$ 0.003  $\chi^2$ /NDF: 2610.4/25

All: 0.267 $\pm$ 0.002  $\chi^2$ /NDF: 6383.5/50

- sign 0.257 $\pm$ 0.003  $\chi^2$ /NDF: 3752.8/24

reg\_asym\_sam\_15\_26\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-0.927 \pm 1.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-0.046 \pm 0.066$   $\chi^2/\text{NDF}$ : 2628.9/24

Right Out:  $-2.712 \pm 0.423$   $\chi^2/\text{NDF}$ : 28.6/1

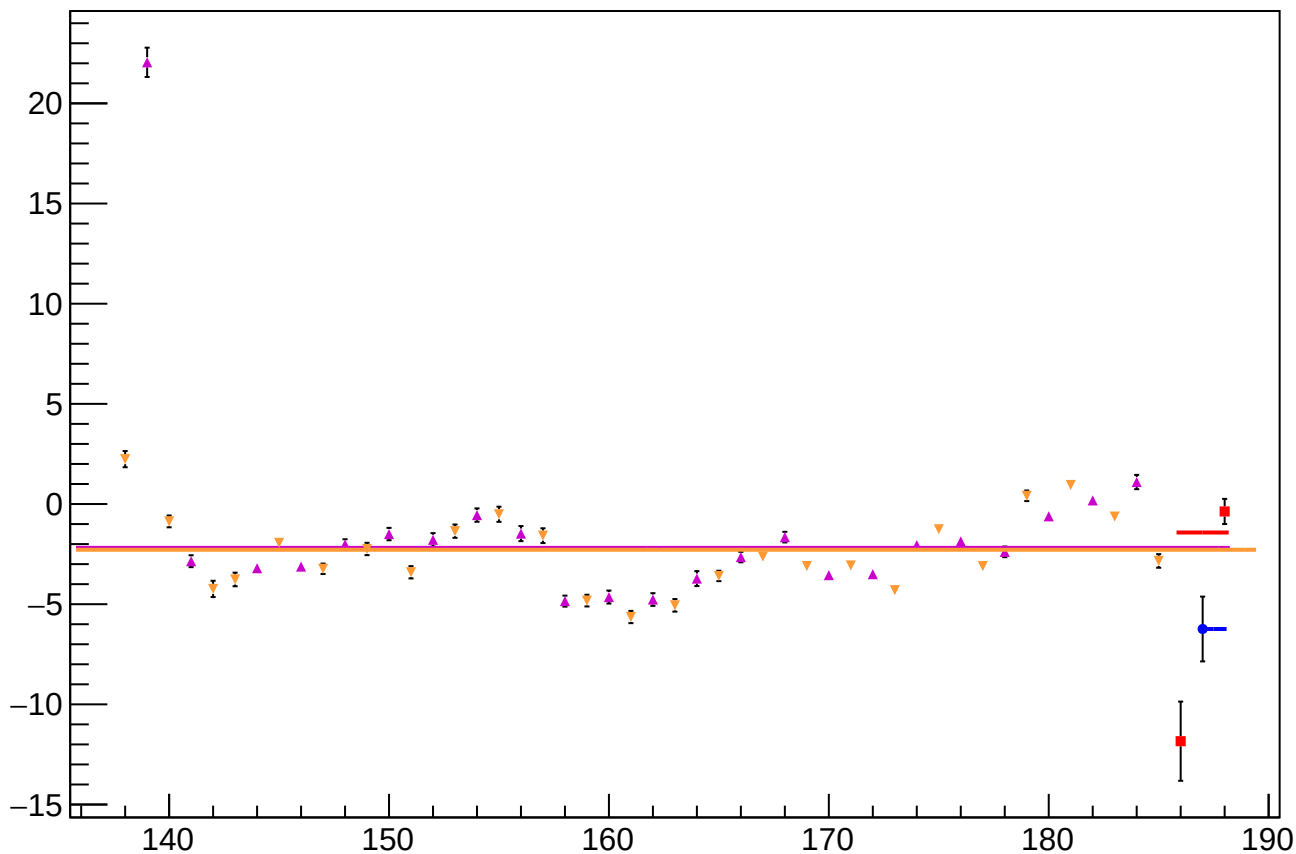
Left In:  $-0.312 \pm 0.067$   $\chi^2/\text{NDF}$ : 2252.6/22

+ sign  $-0.050 \pm 0.066$   $\chi^2/\text{NDF}$ : 2629.7/25

All:  $-0.210 \pm 0.047$   $\chi^2/\text{NDF}$ : 4954.1/50

- sign  $-0.371 \pm 0.066$   $\chi^2/\text{NDF}$ : 2312.7/24

reg\_asym\_sam\_15\_26\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-6.238 \pm 1.618$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-2.283 \pm 0.054$   $\chi^2/\text{NDF}$ : 1132.1/24

Right Out:  $-1.421 \pm 0.598$   $\chi^2/\text{NDF}$ : 30.6/1

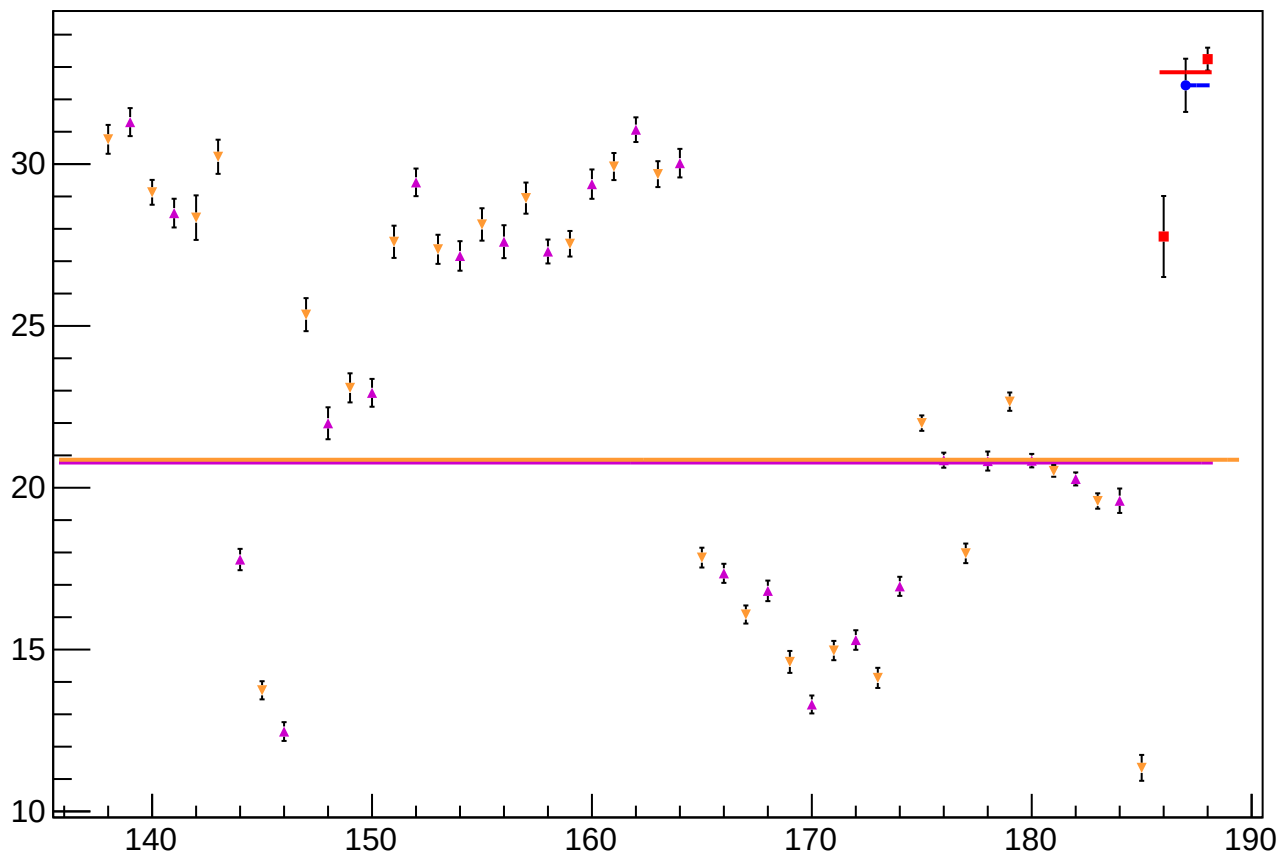
Left In:  $-2.190 \pm 0.055$   $\chi^2/\text{NDF}$ : 1785.1/22

+ sign  $-2.287 \pm 0.054$   $\chi^2/\text{NDF}$ : 1138.1/25

All:  $-2.236 \pm 0.038$   $\chi^2/\text{NDF}$ : 2957.2/50

- sign  $-2.183 \pm 0.055$   $\chi^2/\text{NDF}$ : 1817.3/24

# reg\_asym\_sam\_15\_26\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: 32.434 $\pm$ 0.822  $\chi^2$ /NDF: 0.0/0

Left Out: 20.865 $\pm$ 0.067  $\chi^2$ /NDF:6608.4/24

Right Out: 32.838 $\pm$ 0.341  $\chi^2$ /NDF: 17.7/1

Left In: 20.780 $\pm$ 0.067  $\chi^2$ /NDF:5988.0/22

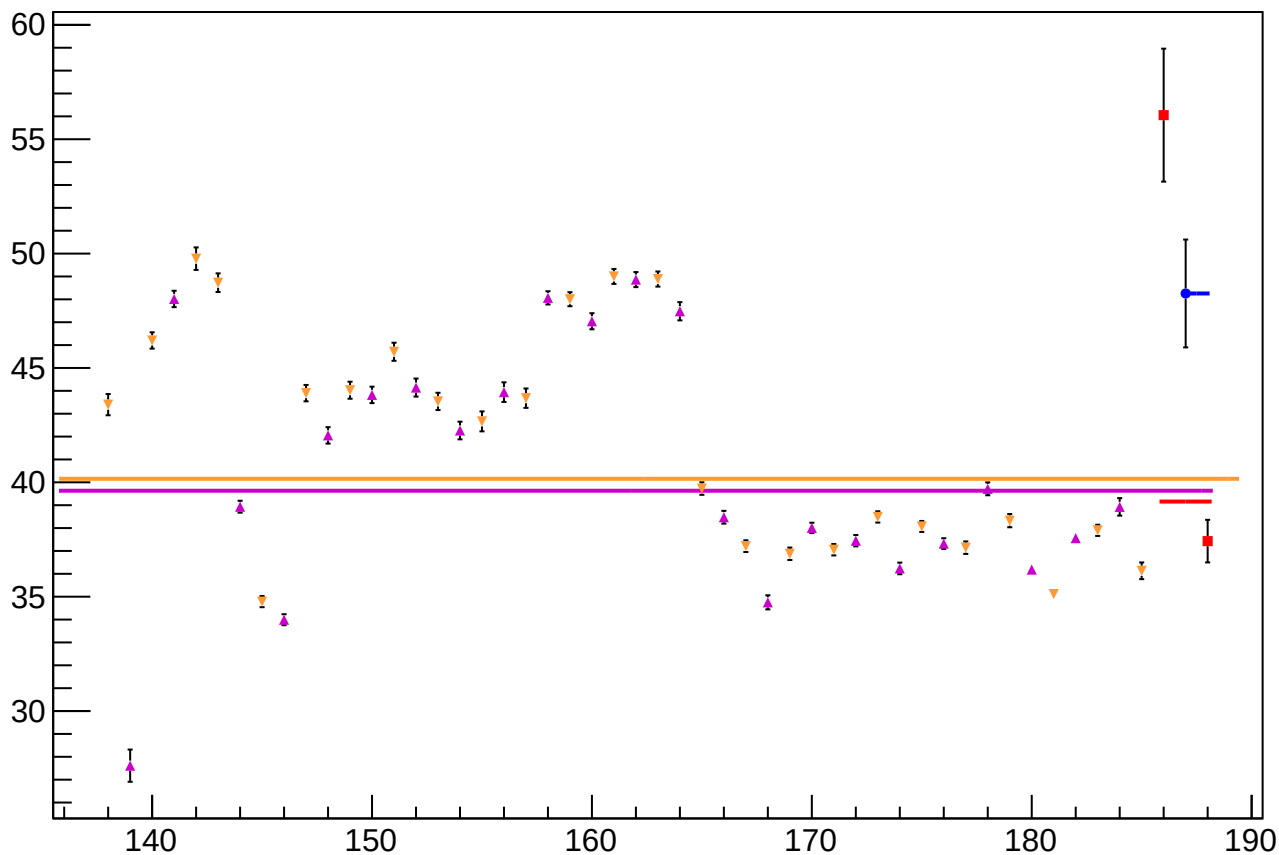
+ sign 20.941 $\pm$ 0.067  $\chi^2$ /NDF: 6805.1/25

All: 21.088 $\pm$ 0.047  $\chi^2$ /NDF: 14026.8/50

- sign 21.232 $\pm$ 0.066  $\chi^2$ /NDF: 7212.1/24



# reg\_asym\_sam\_15\_26\_dd\_diff\_bpm4eY\_slope vs Slug



Right In: 48.257 $\pm$ 2.358  $\chi^2$ /NDF: 0.0/0

Left Out: 40.154 $\pm$ 0.060  $\chi^2$ /NDF: 5861.6/24

Right Out: 39.159 $\pm$ 0.886  $\chi^2$ /NDF: 37.3/1

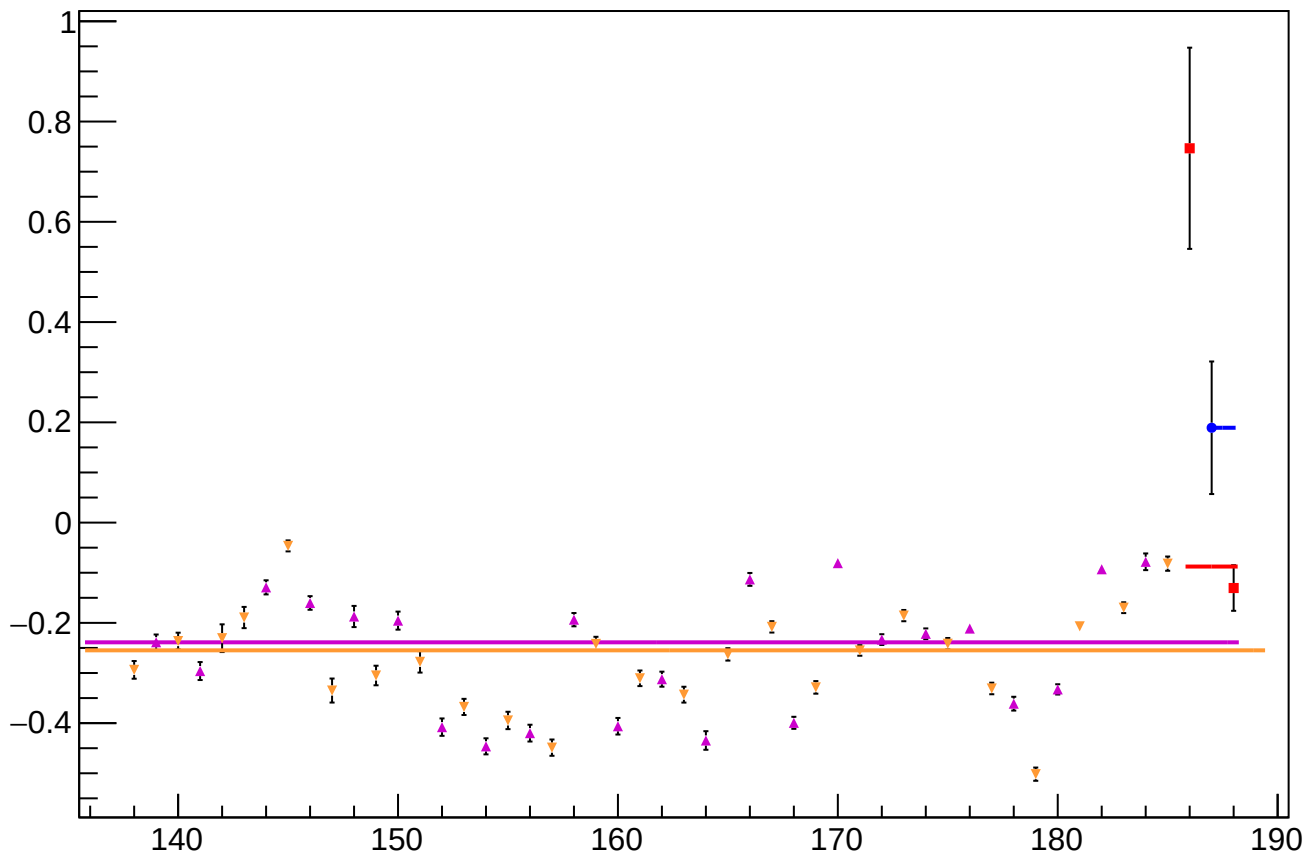
Left In: 39.632 $\pm$ 0.061  $\chi^2$ /NDF: 5343.3/22

+ sign 40.159 $\pm$ 0.060  $\chi^2$ /NDF: 5873.4/25

All: 39.897 $\pm$ 0.043  $\chi^2$ /NDF: 11292.1/50

- sign 39.630 $\pm$ 0.061  $\chi^2$ /NDF: 5380.8/24

reg\_asym\_sam\_15\_26\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $0.189 \pm 0.132$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-0.255 \pm 0.003$   $\chi^2/\text{NDF}$ : 1417.7/24

Right Out:  $-0.088 \pm 0.044$   $\chi^2/\text{NDF}$ : 18.2/1

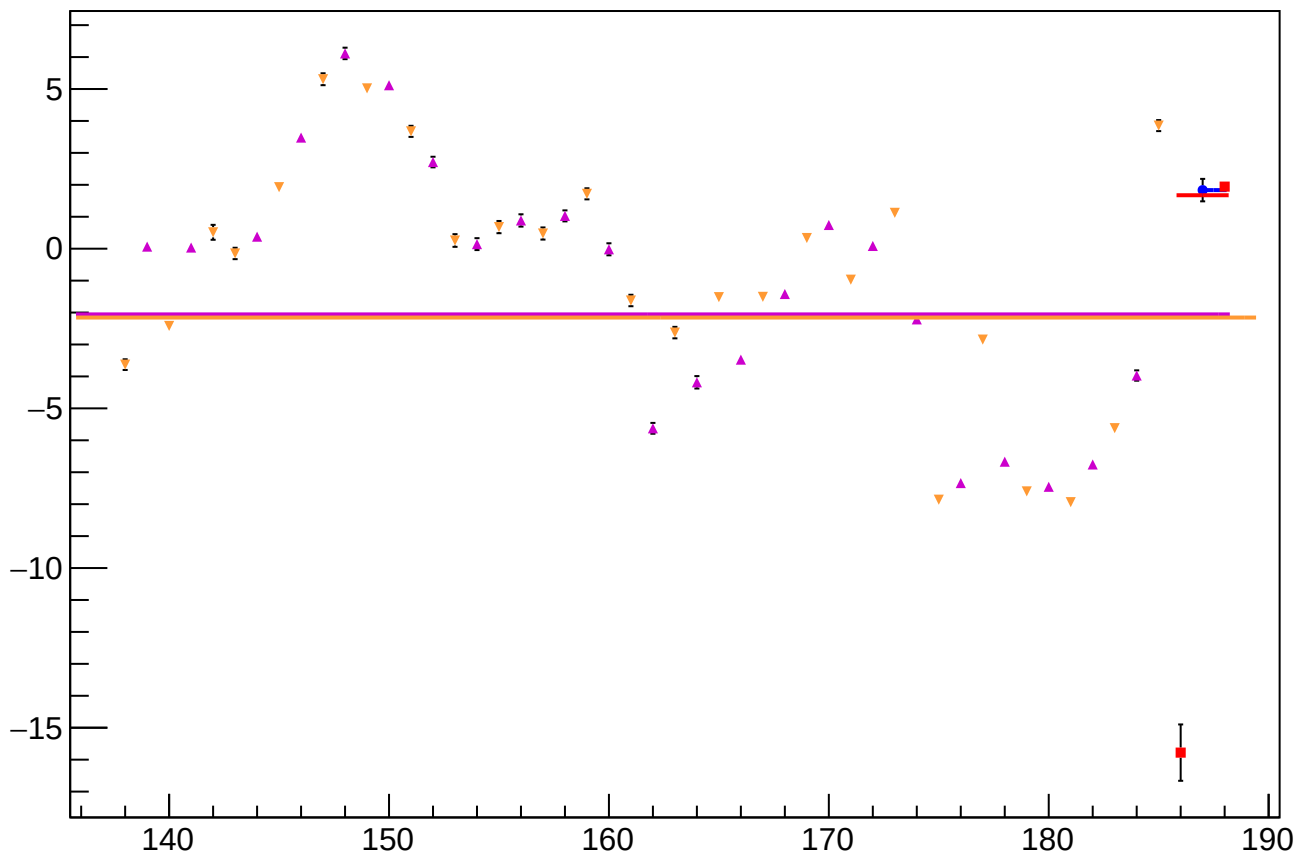
Left In:  $-0.239 \pm 0.003$   $\chi^2/\text{NDF}$ : 1750.0/22

+ sign  $-0.255 \pm 0.003$   $\chi^2/\text{NDF}$ : 1428.9/25

All:  $-0.246 \pm 0.002$   $\chi^2/\text{NDF}$ : 3226.4/50

- sign  $-0.238 \pm 0.003$   $\chi^2/\text{NDF}$ : 1779.8/24

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm1X\_slope vs Slug



Right In: 1.834 $\pm$ 0.352  $\chi^2$ /NDF: 0.0/0

Left Out: -2.156 $\pm$ 0.026  $\chi^2$ /NDF: 24501.3/24

Right Out: 1.674 $\pm$ 0.109  $\chi^2$ /NDF: 397.3/1

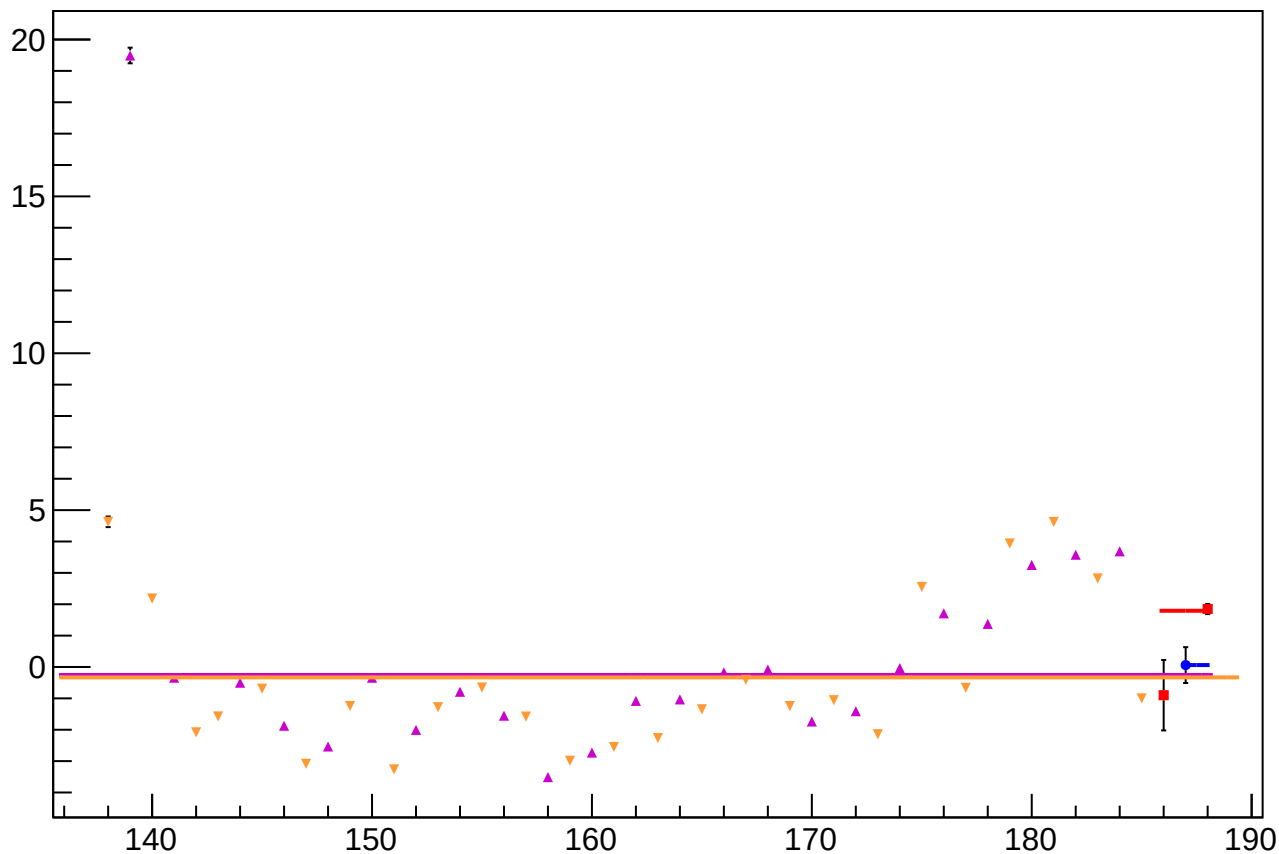
Left In: -2.058 $\pm$ 0.026  $\chi^2$ /NDF: 23343.8/22

+ sign -2.135 $\pm$ 0.026  $\chi^2$ /NDF: 24629.4/25

All: -1.994 $\pm$ 0.018  $\chi^2$ /NDF: 49542.5/50

- sign -1.857 $\pm$ 0.025  $\chi^2$ /NDF: 24853.4/24

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm4aY\_slope vs Slug



Right In: 0.061+/-0.571  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -0.331+/-0.021  $\chi^2/\text{NDF}$ :12552.3/24

Right Out: 1.792+/-0.160  $\chi^2/\text{NDF}$ : 5.9/1

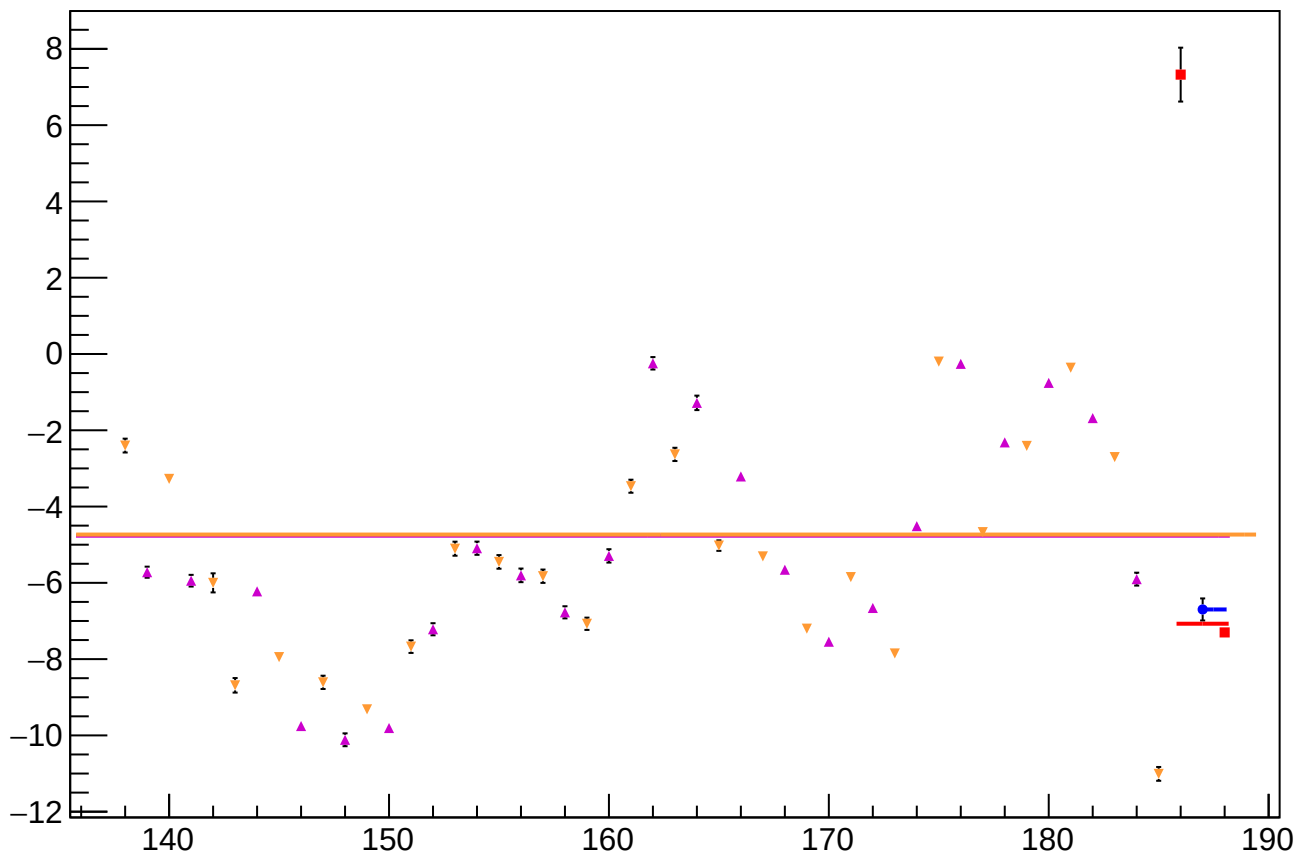
Left In: -0.255+/-0.021  $\chi^2/\text{NDF}$ :14162.0/22

+ sign -0.330+/-0.021  $\chi^2/\text{NDF}$ : 12552.8/25

All: -0.276+/-0.015  $\chi^2/\text{NDF}$ : 26896.2/50

- sign -0.220+/-0.021  $\chi^2/\text{NDF}$ : 14329.3/24

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $-6.698 \pm 0.289$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-4.734 \pm 0.026$   $\chi^2/\text{NDF}$ : 13188.7/24

Right Out:  $-7.072 \pm 0.088$   $\chi^2/\text{NDF}$ : 421.6/1

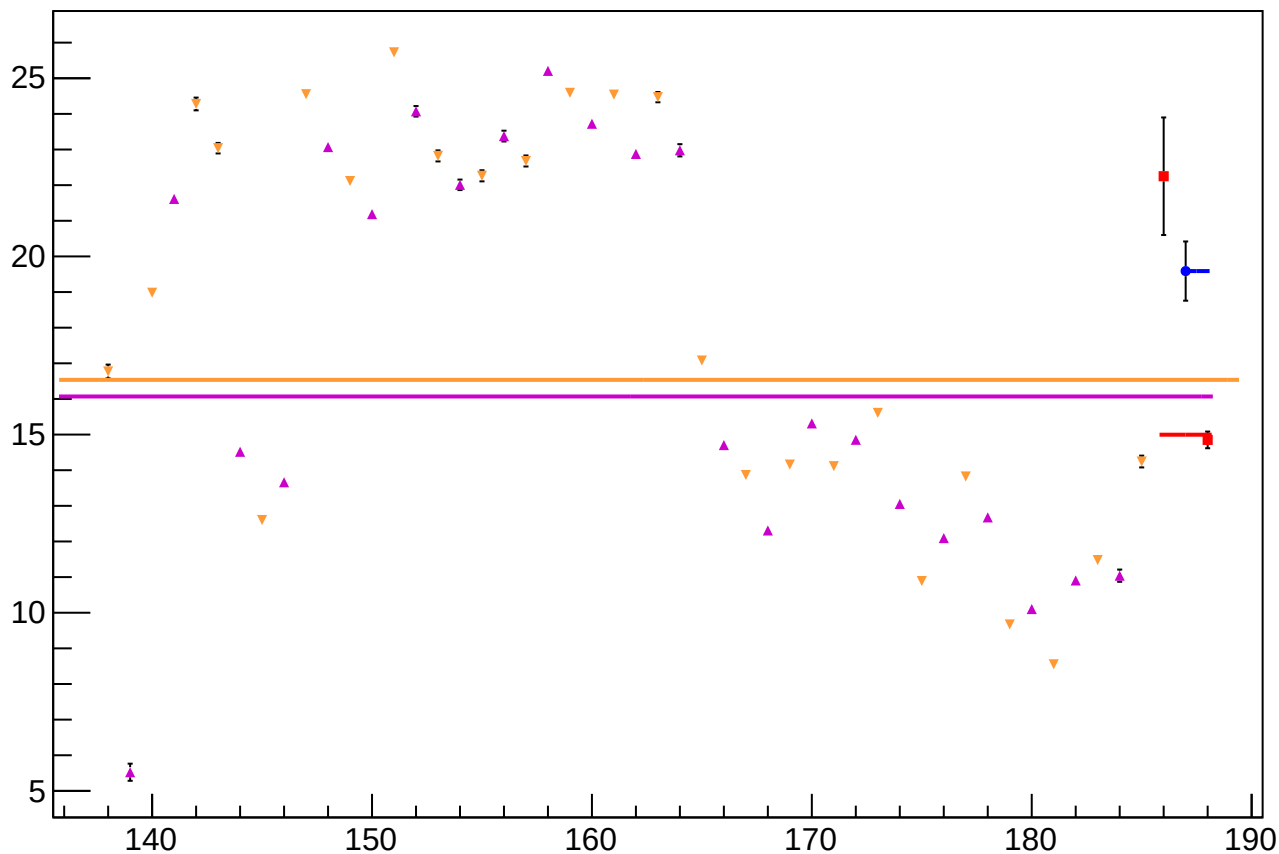
Left In:  $-4.764 \pm 0.026$   $\chi^2/\text{NDF}$ : 14163.2/22

+ sign  $-4.750 \pm 0.026$   $\chi^2/\text{NDF}$ : 13234.4/25

All:  $-4.852 \pm 0.018$   $\chi^2/\text{NDF}$ : 28479.8/50

- sign  $-4.949 \pm 0.025$   $\chi^2/\text{NDF}$ : 15214.5/24

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm4eY\_slope vs Slug



Right In: 19.589 $\pm$ 0.831  $\chi^2$ /NDF: 0.0/0

Left Out: 16.536 $\pm$ 0.023  $\chi^2$ /NDF:53546.9/24

Right Out: 14.996 $\pm$ 0.232  $\chi^2$ /NDF: 19.7/1

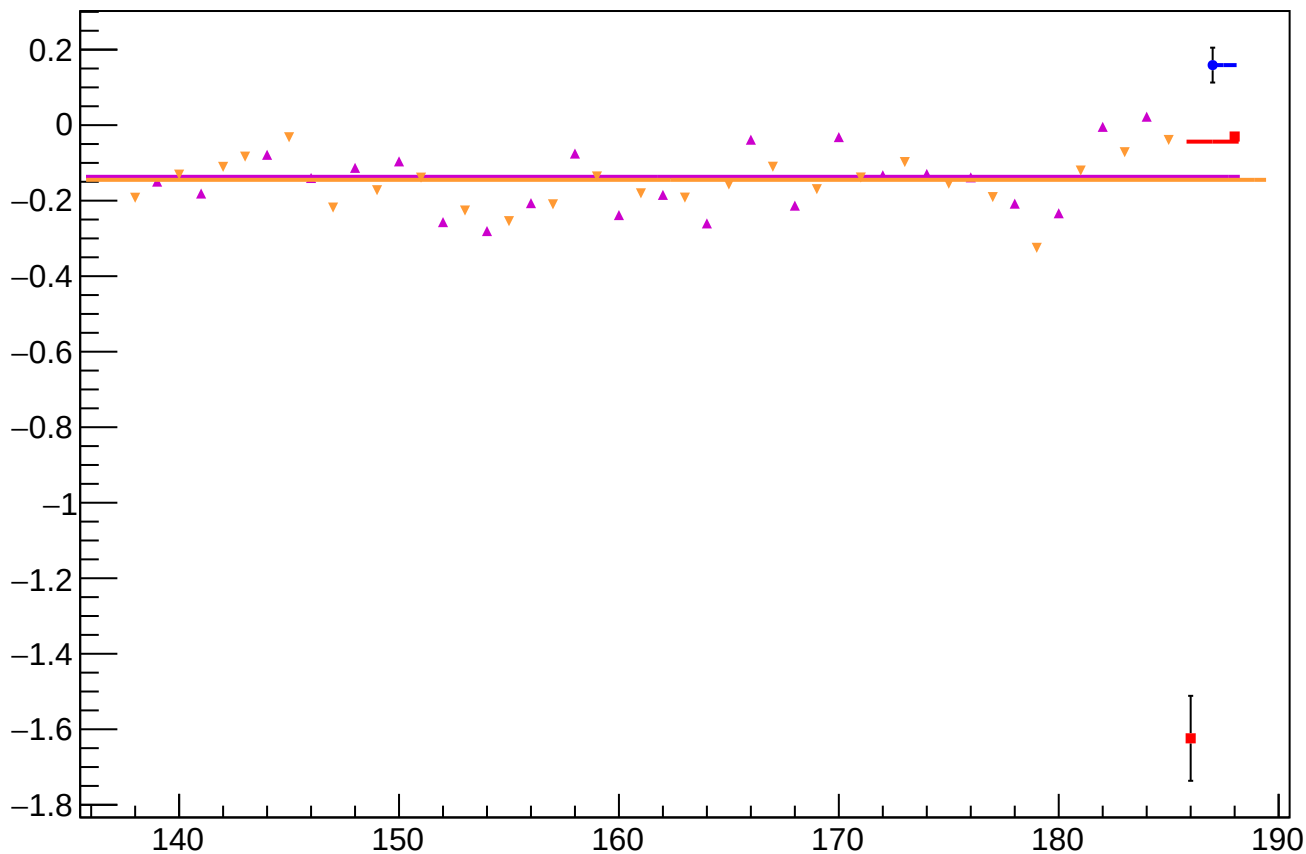
Left In: 16.069 $\pm$ 0.023  $\chi^2$ /NDF:42736.3/22

+ sign 16.539 $\pm$ 0.023  $\chi^2$ /NDF: 53560.4/25

All: 16.300 $\pm$ 0.016  $\chi^2$ /NDF: 96550.7/50

- sign 16.058 $\pm$ 0.023  $\chi^2$ /NDF: 42777.3/24

reg\_asym\_sam\_37\_26\_dd\_diff\_bpm12X\_slope vs Slug



Right In: 0.159 $\pm$ 0.046  $\chi^2$ /NDF: 0.0/0

Left Out: -0.145 $\pm$ 0.001  $\chi^2$ /NDF: 3755.1/24

Right Out: -0.044 $\pm$ 0.010  $\chi^2$ /NDF: 199.0/1

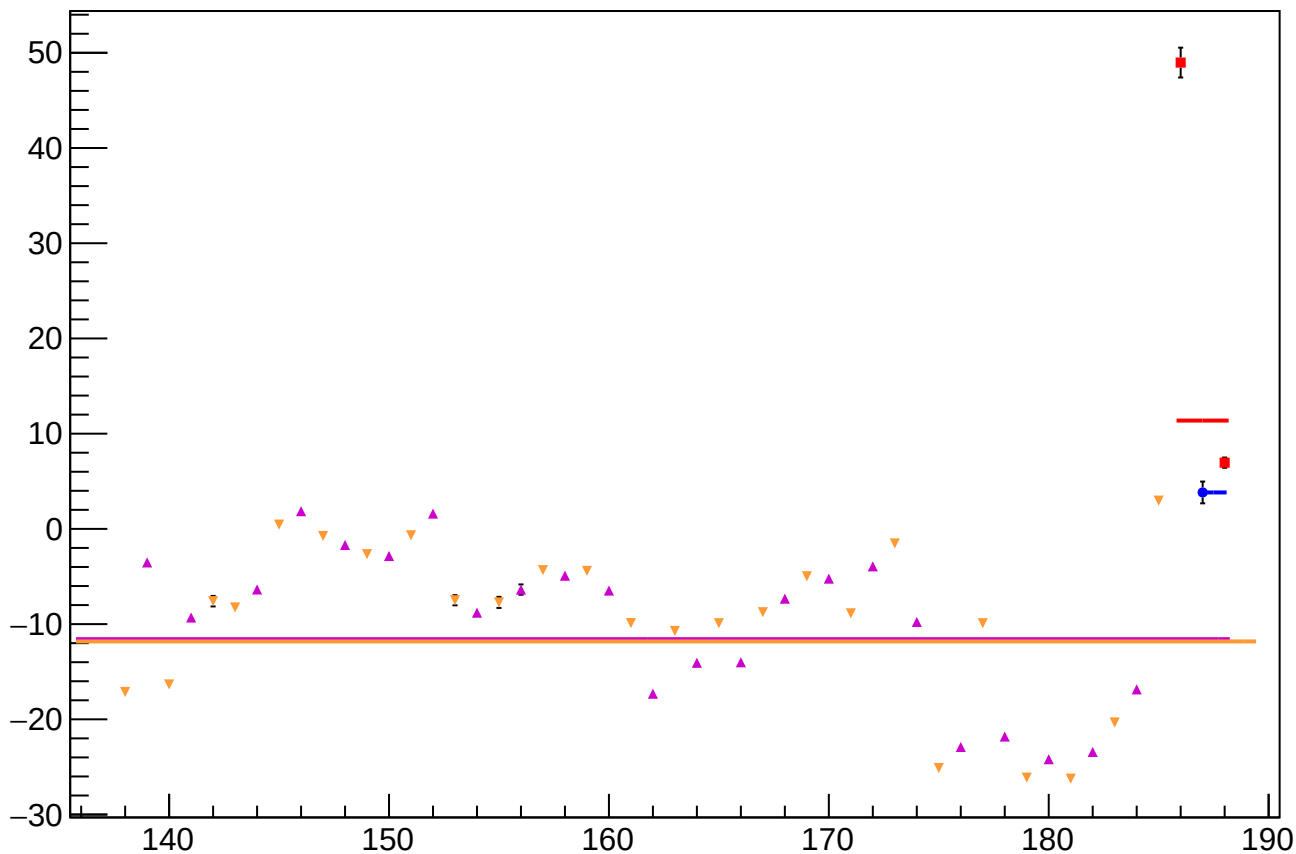
Left In: -0.137 $\pm$ 0.001  $\chi^2$ /NDF: 5383.4/22

+ sign -0.145 $\pm$ 0.001  $\chi^2$ /NDF: 3798.4/25

All: -0.140 $\pm$ 0.001  $\chi^2$ /NDF: 9495.5/50

- sign -0.136 $\pm$ 0.001  $\chi^2$ /NDF: 5662.2/24

reg\_asym\_sam\_1357\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $3.828 \pm 1.143$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-11.823 \pm 0.070$   $\chi^2/\text{NDF}$ : 17277.3/24

Right Out:  $11.376 \pm 0.508$   $\chi^2/\text{NDF}$ : 644.3/1

Left In:  $-11.580 \pm 0.071$   $\chi^2/\text{NDF}$ : 14243.6/22

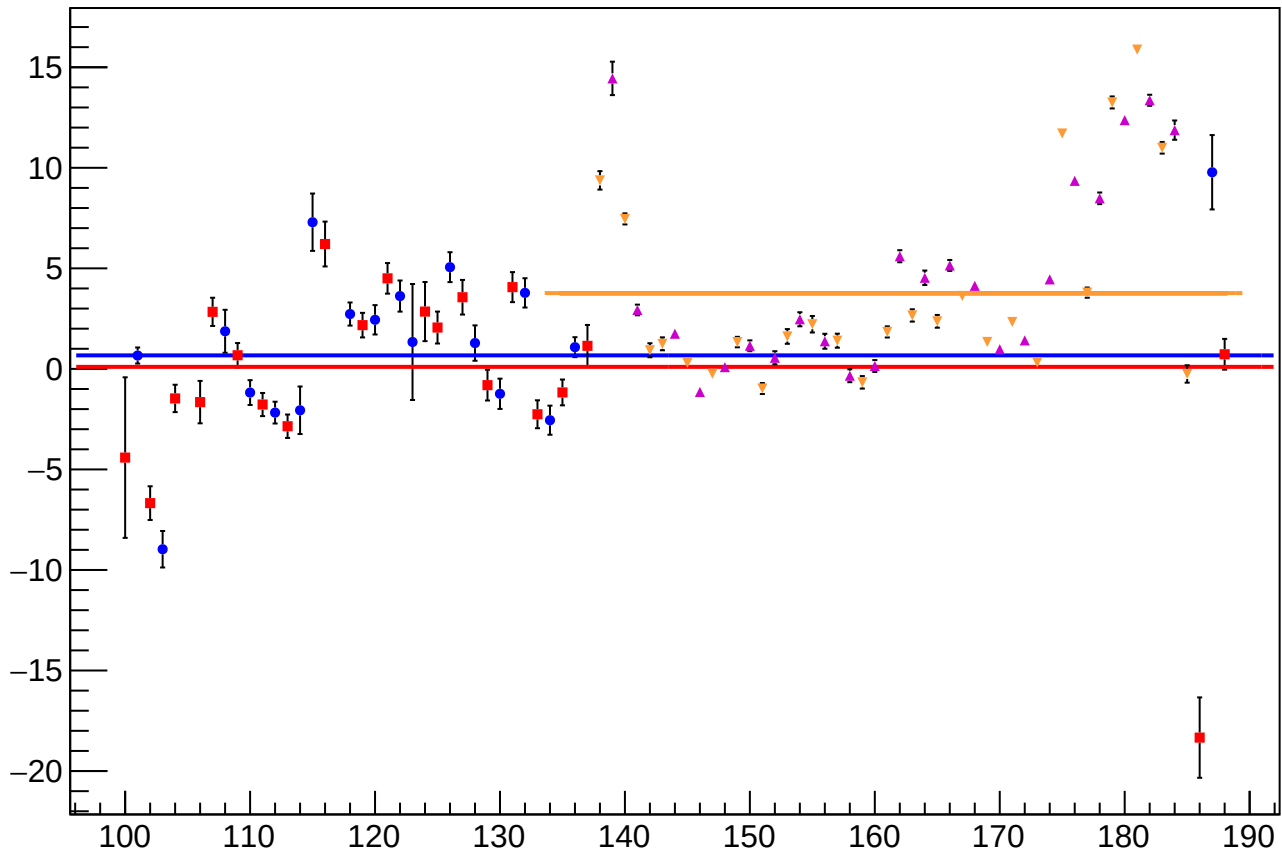
+ sign  $-11.763 \pm 0.070$   $\chi^2/\text{NDF}$ : 17464.1/25

All:  $-11.452 \pm 0.050$   $\chi^2/\text{NDF}$ : 34395.4/50

- sign  $-11.138 \pm 0.071$   $\chi^2/\text{NDF}$ : 16891.8/24



reg\_asym\_sam\_1357\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $0.672 \pm 0.168$   $\chi^2/\text{NDF}$ : 315.6/17

Left Out:  $3.770 \pm 0.056$   $\chi^2/\text{NDF}$ : 7420.4/24

Right Out:  $0.101 \pm 0.170$   $\chi^2/\text{NDF}$ : 359.6/20

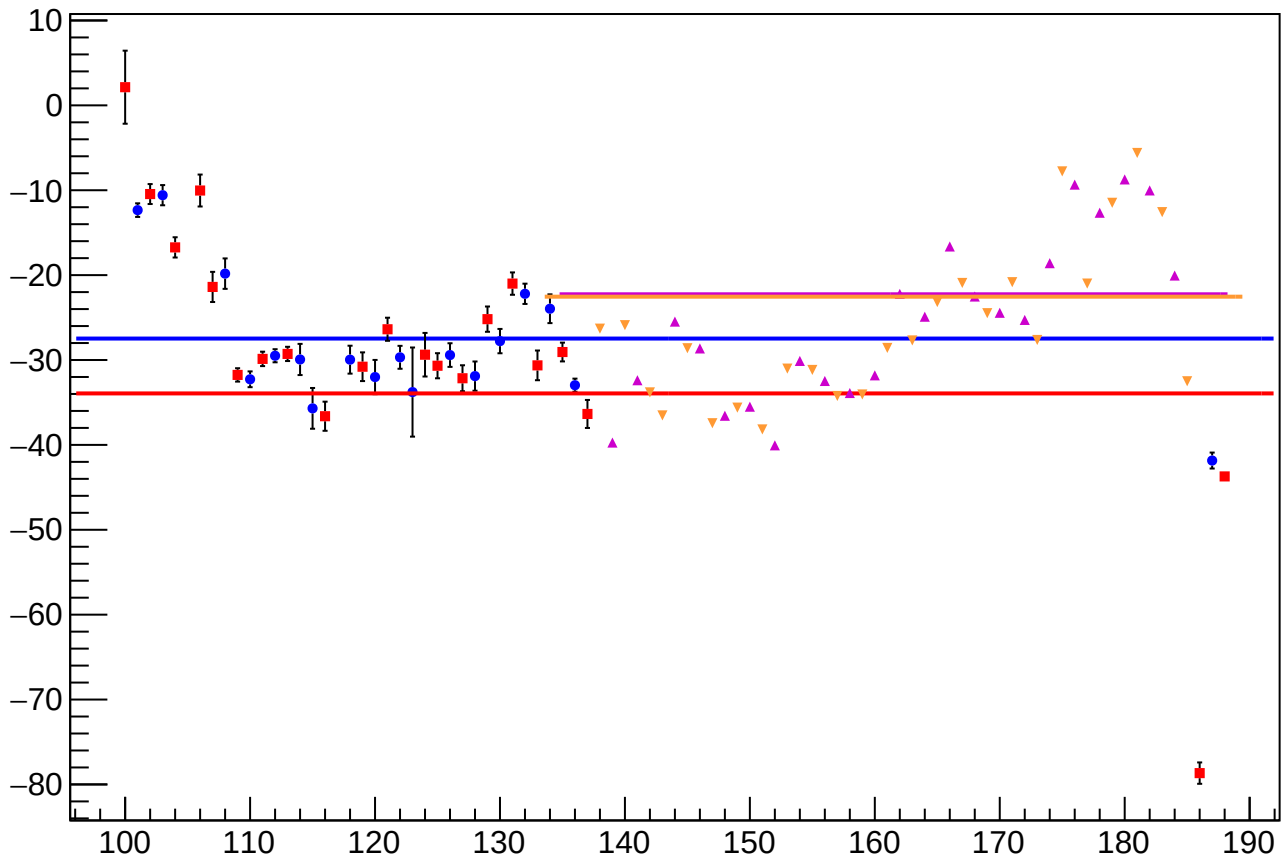
Left In:  $3.755 \pm 0.056$   $\chi^2/\text{NDF}$ : 5655.2/22

+ sign  $3.465 \pm 0.053$   $\chi^2/\text{NDF}$ : 8041.6/42

All:  $3.429 \pm 0.038$   $\chi^2/\text{NDF}$ : 14475.0/86

- sign  $3.391 \pm 0.054$   $\chi^2/\text{NDF}$ : 6432.5/43

# reg\_asym\_sam\_1357\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $-27.473 \pm 0.285$   $\chi^2/\text{NDF}$ : 950.7/17

Left Out:  $-22.540 \pm 0.071$   $\chi^2/\text{NDF}$ : 19751.6/24

Right Out:  $-33.936 \pm 0.241$   $\chi^2/\text{NDF}$ : 2925.1/20

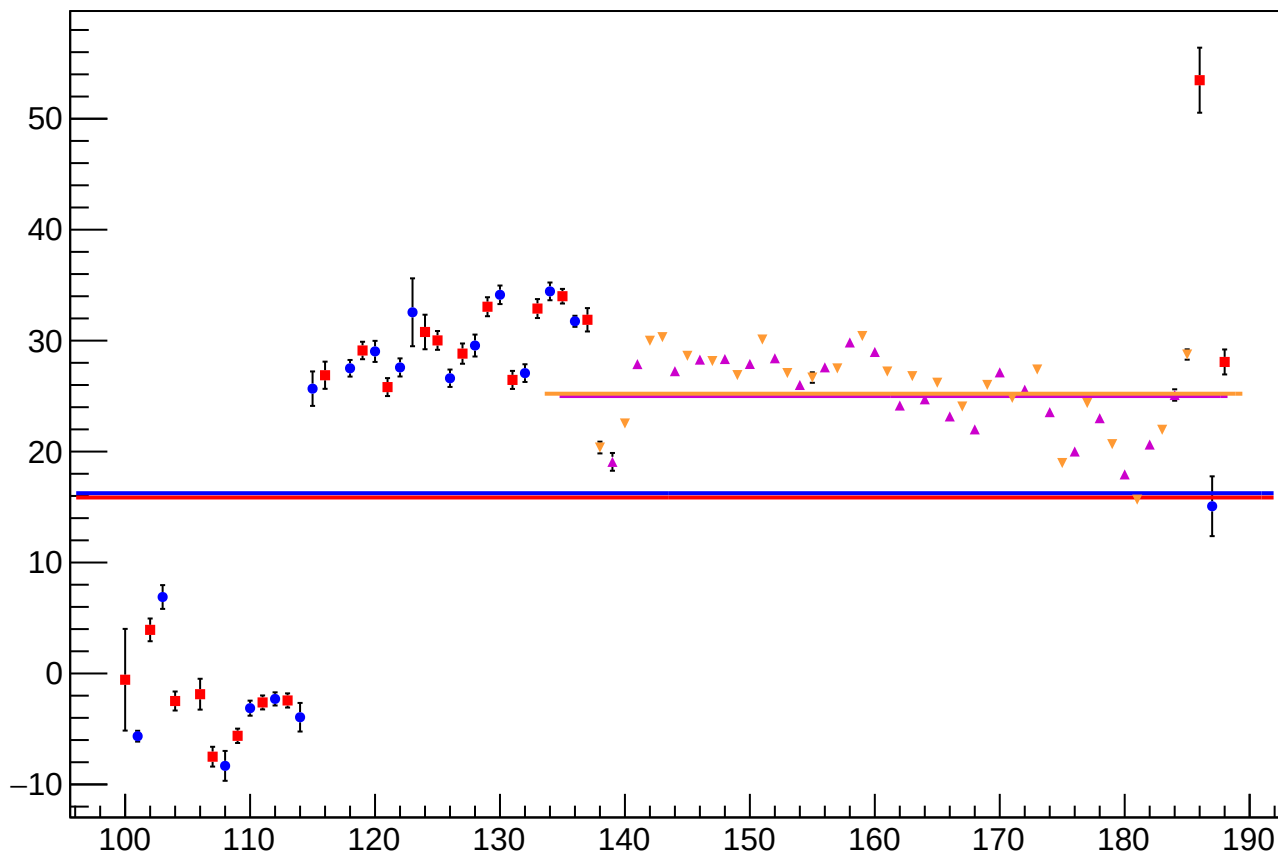
Left In:  $-22.258 \pm 0.071$   $\chi^2/\text{NDF}$ : 17838.4/22

+ sign  $-22.826 \pm 0.069$   $\chi^2/\text{NDF}$ : 20983.7/42

All:  $-23.014 \pm 0.048$   $\chi^2/\text{NDF}$ : 43925.4/86

- sign  $-23.200 \pm 0.068$   $\chi^2/\text{NDF}$ : 22926.8/43

# reg\_asym\_sam\_1357\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 16.247 $\pm$ 0.191  $\chi^2$ /NDF: 7611.5/17

Left Out: 25.216 $\pm$ 0.063  $\chi^2$ /NDF: 3738.3/24

Right Out: 15.862 $\pm$ 0.194  $\chi^2$ /NDF: 7570.0/20

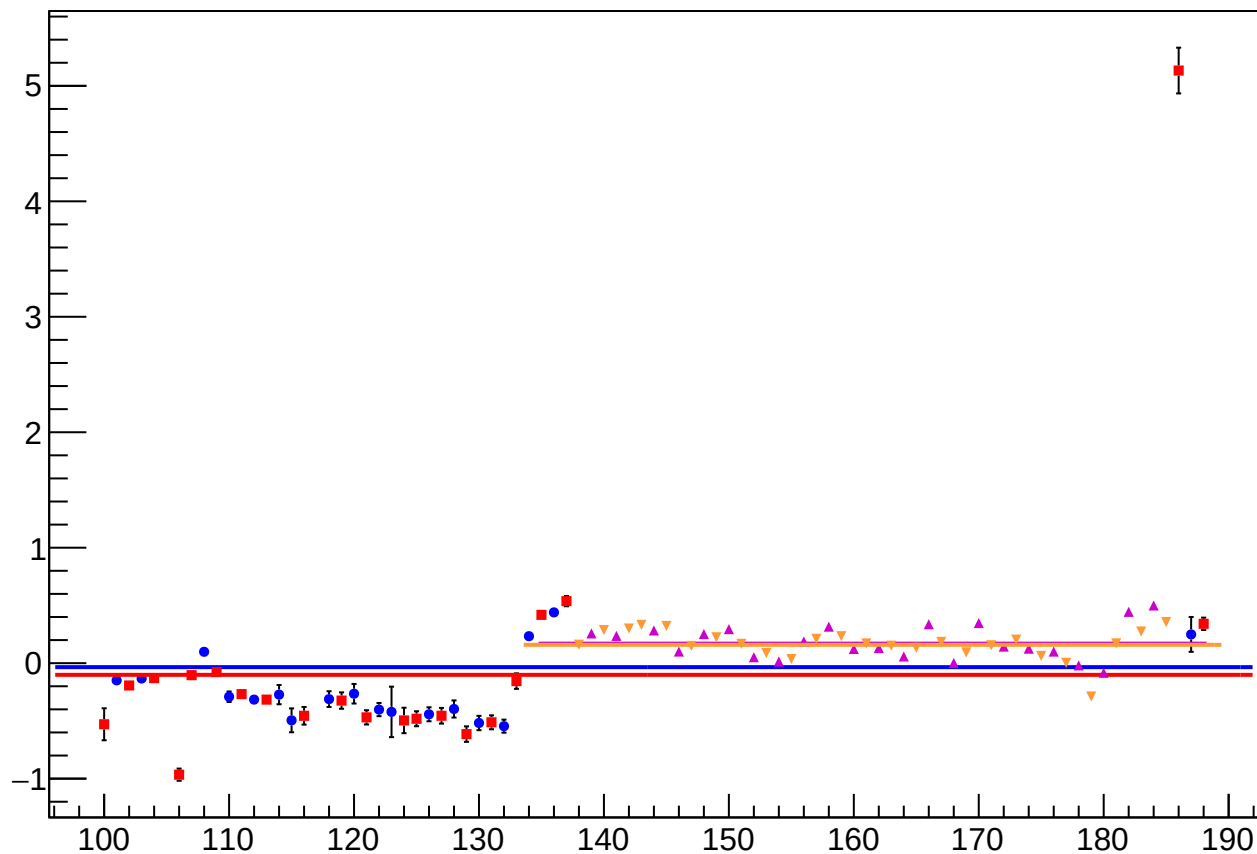
Left In: 25.005 $\pm$ 0.064  $\chi^2$ /NDF: 2733.7/22

+ sign 24.339 $\pm$ 0.060  $\chi^2$ /NDF: 13348.5/42

All: 24.228 $\pm$ 0.042  $\chi^2$ /NDF: 25671.9/86

- sign 24.114 $\pm$ 0.060  $\chi^2$ /NDF: 12316.4/43

reg\_asym\_sam\_1357\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.034 \pm 0.010$   $\chi^2/\text{NDF}$ : 1018.0/17

Left Out:  $0.159 \pm 0.003$   $\chi^2/\text{NDF}$ : 1856.8/24

Right Out:  $-0.101 \pm 0.010$   $\chi^2/\text{NDF}$ : 1945.9/20

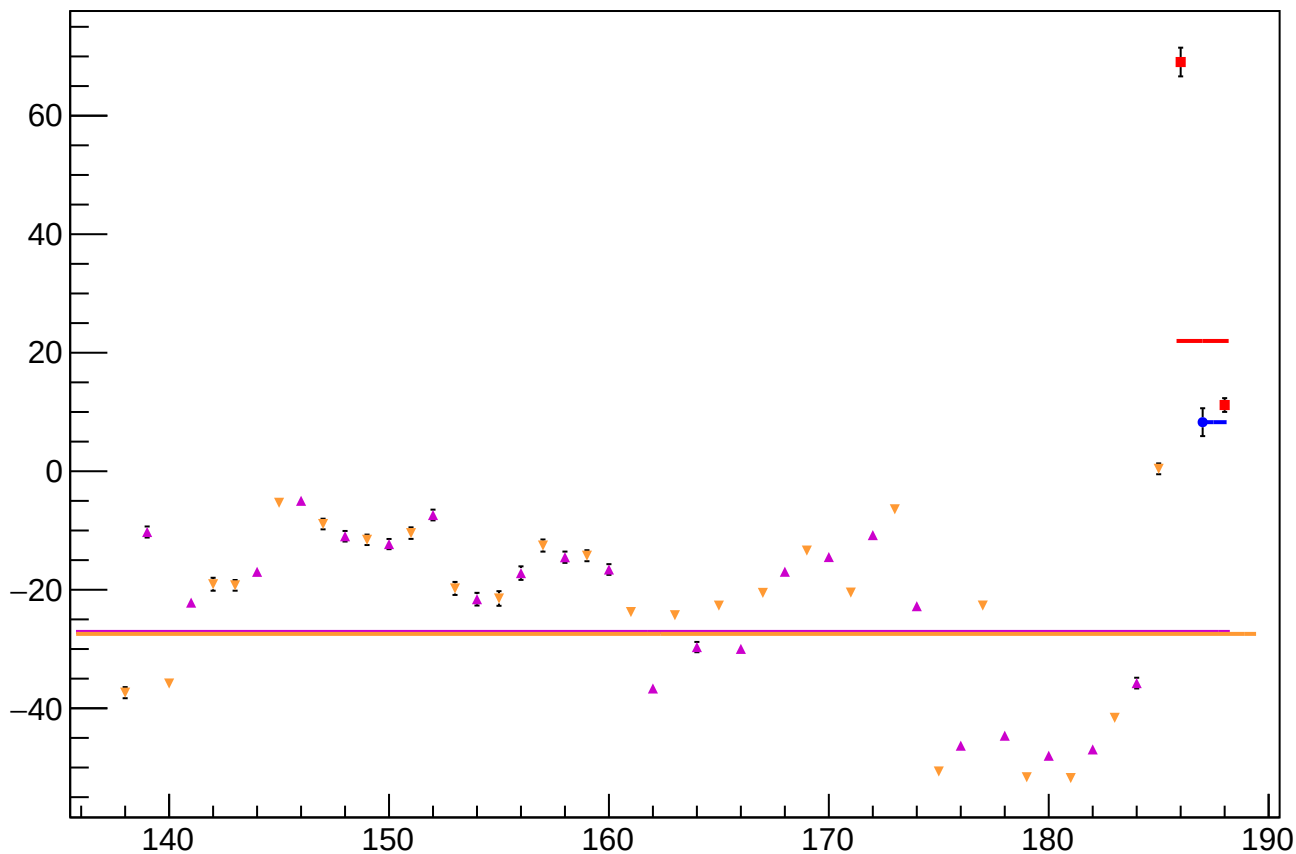
Left In:  $0.169 \pm 0.003$   $\chi^2/\text{NDF}$ : 2430.7/22

+ sign  $0.145 \pm 0.003$   $\chi^2/\text{NDF}$ : 3202.4/42

All:  $0.147 \pm 0.002$   $\chi^2/\text{NDF}$ : 8234.6/86

- sign  $0.149 \pm 0.003$   $\chi^2/\text{NDF}$ : 5031.2/43

reg\_asym\_sam\_2468\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $8.281 \pm 2.351$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-27.447 \pm 0.137$   $\chi^2/\text{NDF}$ : 14820.6/24

Right Out:  $21.987 \pm 1.047$   $\chi^2/\text{NDF}$ : 464.3/1

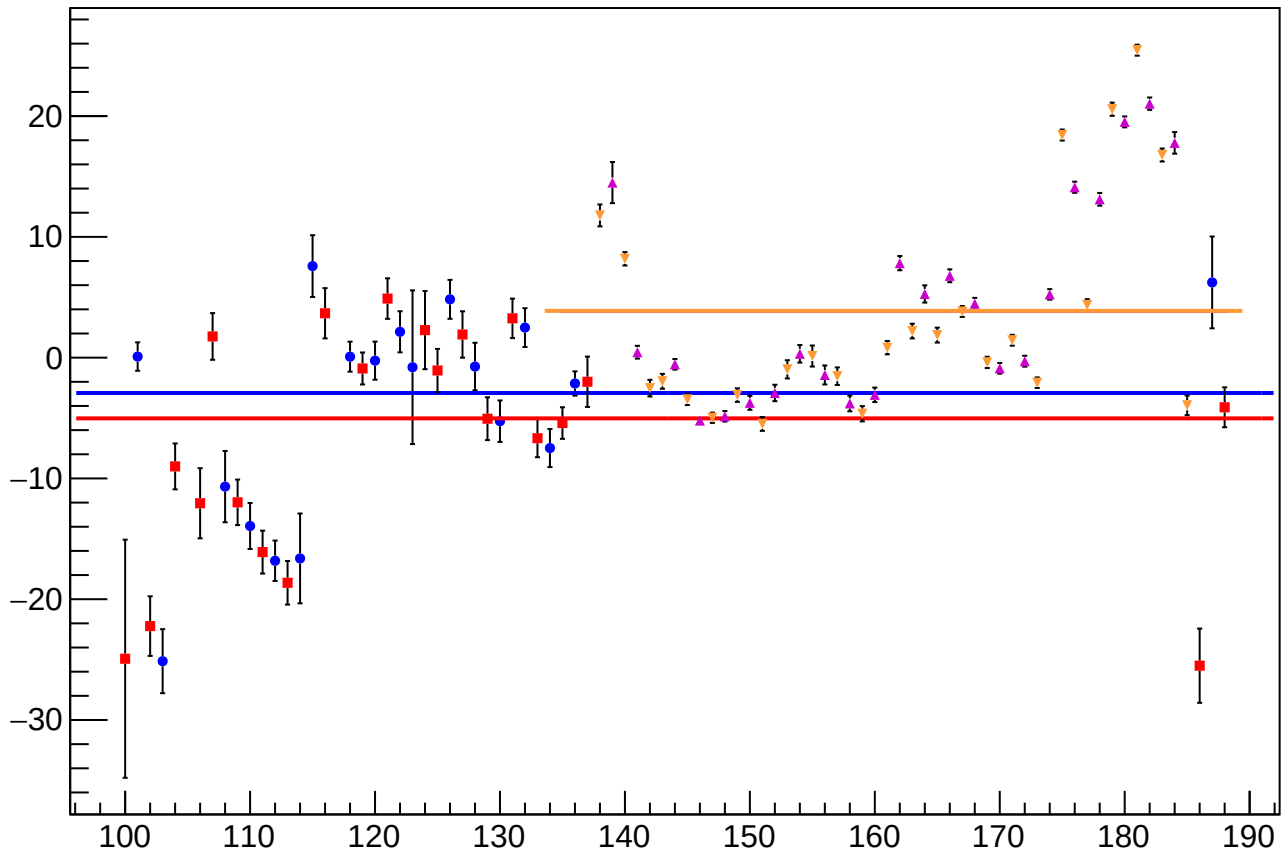
Left In:  $-27.114 \pm 0.139$   $\chi^2/\text{NDF}$ : 11443.8/22

+ sign  $-27.326 \pm 0.137$   $\chi^2/\text{NDF}$ : 15050.9/25

All:  $-26.799 \pm 0.097$   $\chi^2/\text{NDF}$ : 29150.2/50

- sign  $-26.267 \pm 0.138$   $\chi^2/\text{NDF}$ : 14069.5/24

# reg\_asym\_sam\_2468\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $-2.925 \pm 0.405$   $\chi^2/\text{NDF}: 286.7/17$

Left Out:  $3.873 \pm 0.109$   $\chi^2/\text{NDF}: 6906.0/24$

Right Out:  $-5.027 \pm 0.409$   $\chi^2/\text{NDF}: 343.6/20$

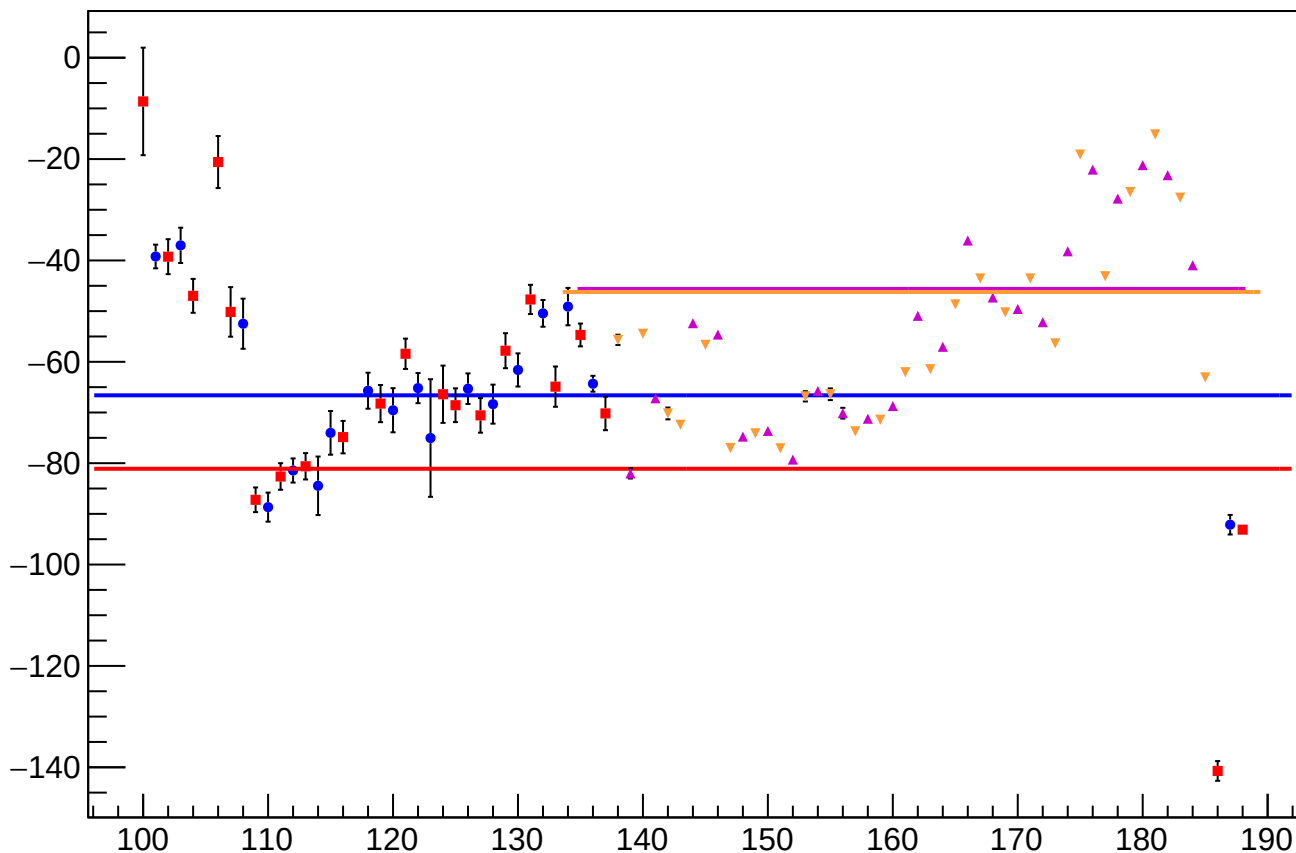
Left In:  $3.861 \pm 0.111$   $\chi^2/\text{NDF}: 5438.4/22$

+ sign  $3.410 \pm 0.106$   $\chi^2/\text{NDF}: 7455.0/42$

All:  $3.333 \pm 0.075$   $\chi^2/\text{NDF}: 13677.2/86$

- sign  $3.254 \pm 0.107$   $\chi^2/\text{NDF}: 6221.1/43$

reg\_asym\_sam\_2468\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $-66.610 \pm 0.689$   $\chi^2/\text{NDF}$ : 568.8/17

Left Out:  $-46.213 \pm 0.138$   $\chi^2/\text{NDF}$ : 19981.0/24

Right Out:  $-81.101 \pm 0.561$   $\chi^2/\text{NDF}$ : 2034.4/20

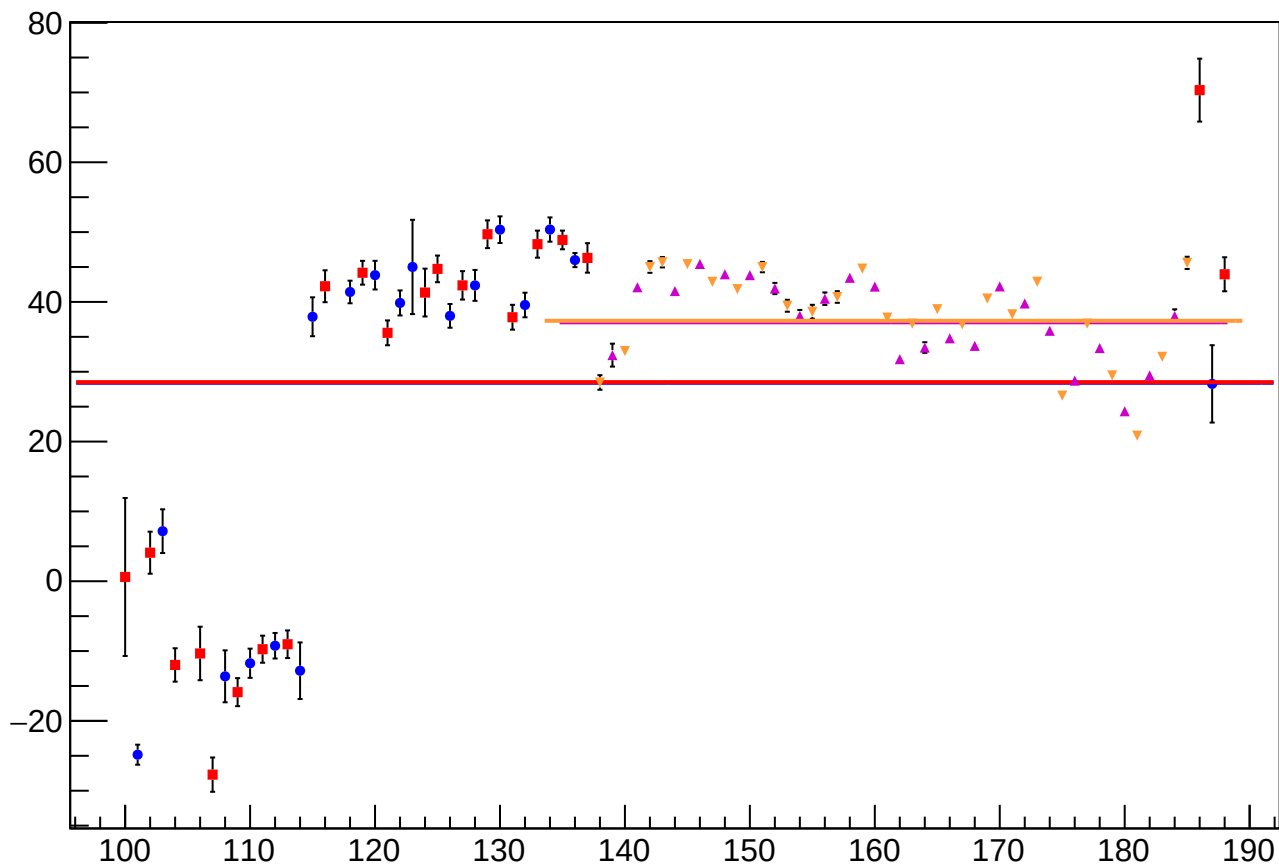
Left In:  $-45.616 \pm 0.139$   $\chi^2/\text{NDF}$ : 17743.8/22

+ sign  $-47.001 \pm 0.135$   $\chi^2/\text{NDF}$ : 21391.4/42

All:  $-47.337 \pm 0.096$   $\chi^2/\text{NDF}$ : 44948.2/86

- sign  $-47.671 \pm 0.135$   $\chi^2/\text{NDF}$ : 23544.5/43

reg\_asym\_sam\_2468\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 28.424 $\pm$ 0.456  $\chi^2$ /NDF: 3330.3/17

Left Out: 37.298 $\pm$ 0.123  $\chi^2$ /NDF: 3113.0/24

Right Out: 28.509 $\pm$ 0.467  $\chi^2$ /NDF: 3164.3/20

Left In: 37.079 $\pm$ 0.125  $\chi^2$ /NDF: 2405.4/22

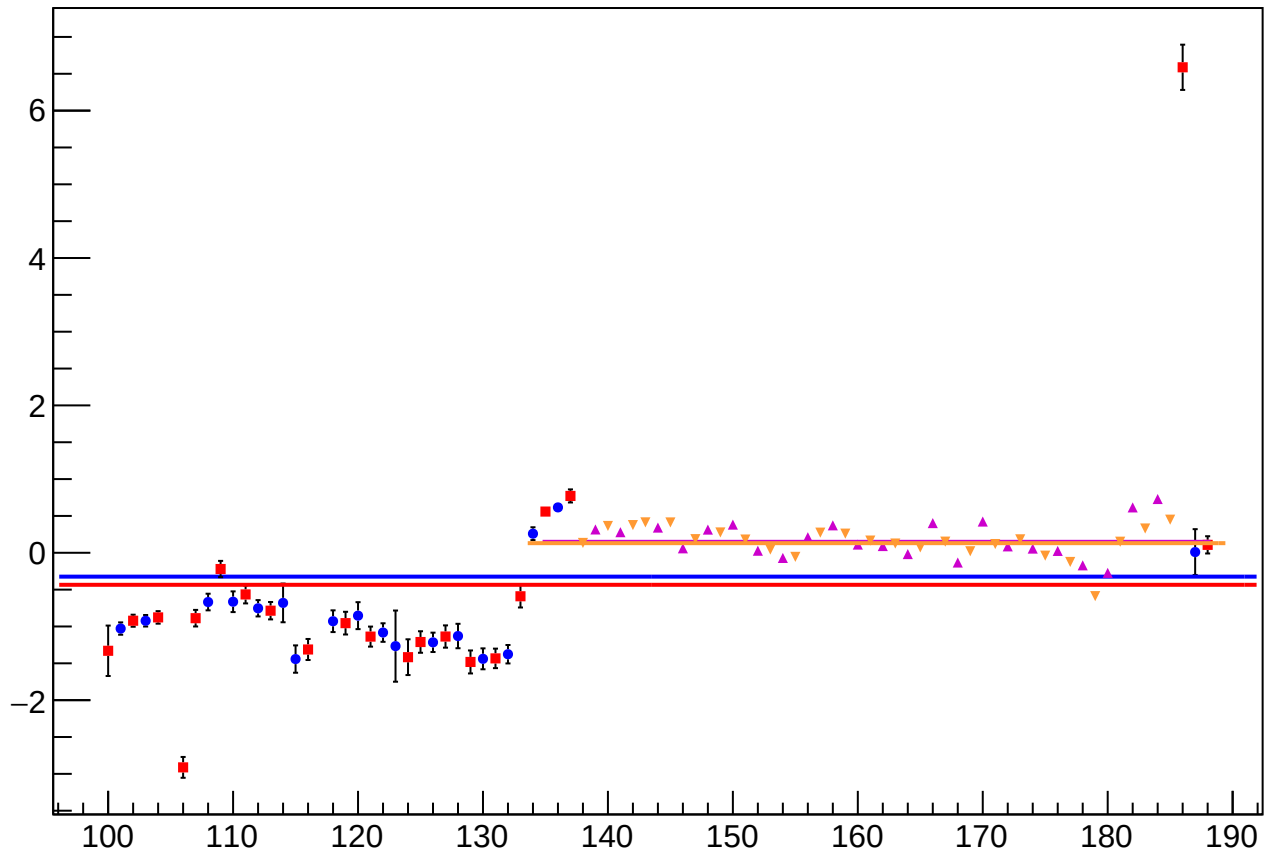
+ sign 36.694 $\pm$ 0.119  $\chi^2$ /NDF: 6797.0/42

All: 36.603 $\pm$ 0.085  $\chi^2$ /NDF: 12682.0/86

- sign 36.509 $\pm$ 0.120  $\chi^2$ /NDF: 5883.9/43



reg\_asym\_sam\_2468\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.324 \pm 0.025$   $\chi^2/\text{NDF}$ : 1014.2/17

Left Out:  $0.130 \pm 0.006$   $\chi^2/\text{NDF}$ : 1419.7/24

Right Out:  $-0.435 \pm 0.025$   $\chi^2/\text{NDF}$ : 1722.6/20

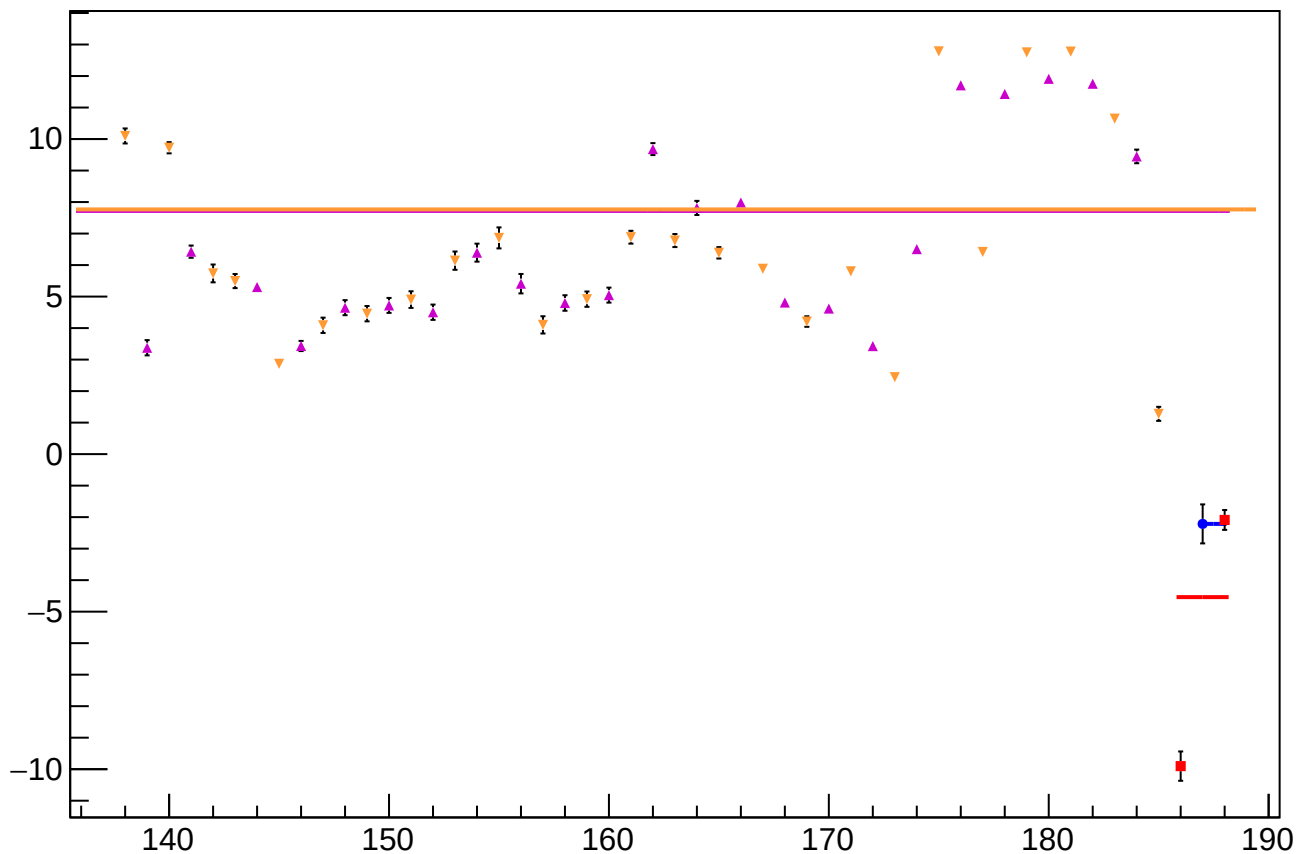
Left In:  $0.149 \pm 0.006$   $\chi^2/\text{NDF}$ : 1813.7/22

+ sign  $0.108 \pm 0.005$   $\chi^2/\text{NDF}$ : 2752.3/42

All:  $0.114 \pm 0.004$   $\chi^2/\text{NDF}$ : 6807.6/86

- sign  $0.120 \pm 0.006$   $\chi^2/\text{NDF}$ : 4053.0/43

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm1X\_slope vs Slug



Right In: -2.215 $\pm$ 0.619  $\chi^2$ /NDF: 0.0/0

Left Out: 7.766 $\pm$ 0.034  $\chi^2$ /NDF:11703.8/24

Right Out: -4.539 $\pm$ 0.261  $\chi^2$ /NDF: 193.4/1

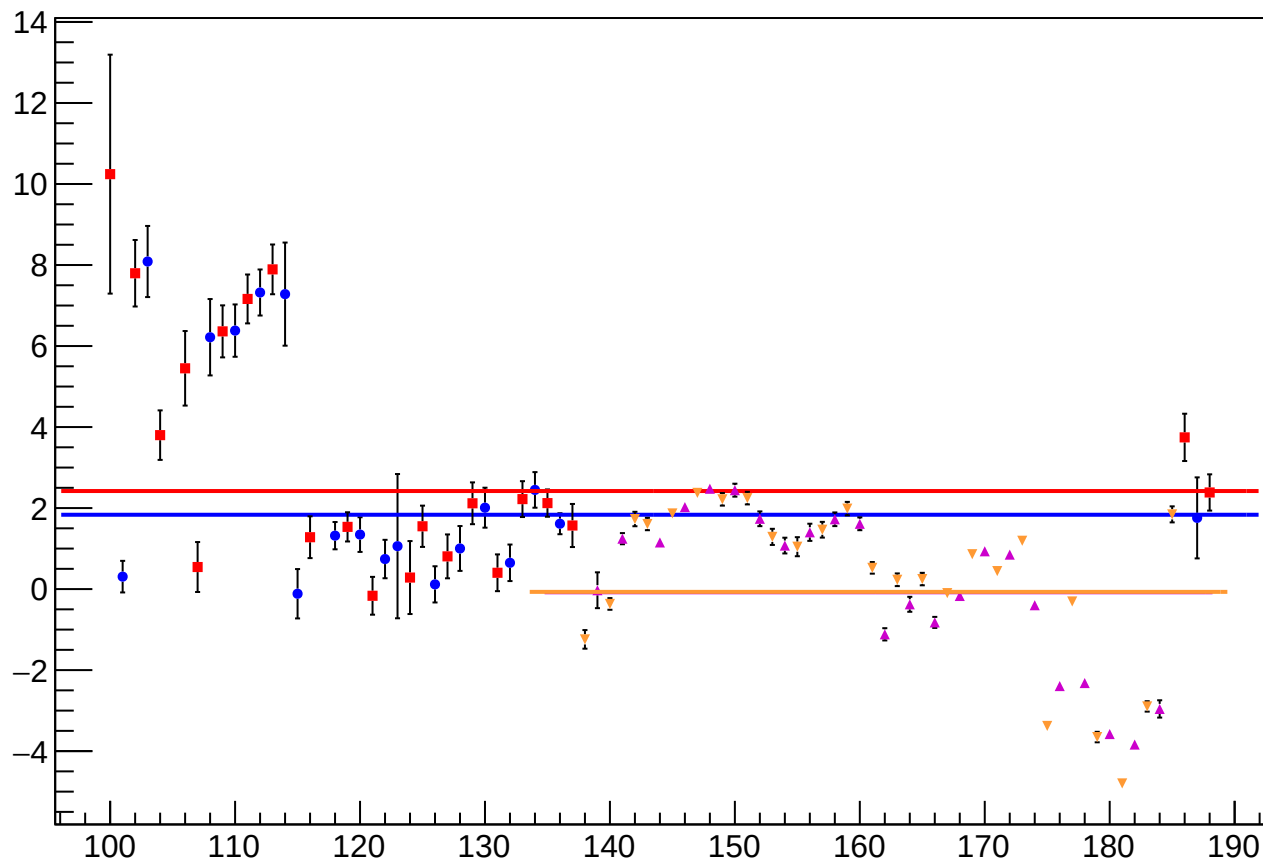
Left In: 7.719 $\pm$ 0.035  $\chi^2$ /NDF:8490.5/22

+ sign 7.735 $\pm$ 0.034  $\chi^2$ /NDF: 11963.0/25

All: 7.620 $\pm$ 0.024  $\chi^2$ /NDF: 22841.8/50

- sign 7.504 $\pm$ 0.035  $\chi^2$ /NDF: 10856.2/24

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $1.835 \pm 0.115$   $\chi^2/\text{NDF}$ : 294.9/17

Left Out:  $-0.069 \pm 0.028$   $\chi^2/\text{NDF}$ : 6033.5/24

Right Out:  $2.421 \pm 0.116$   $\chi^2/\text{NDF}$ : 341.8/20

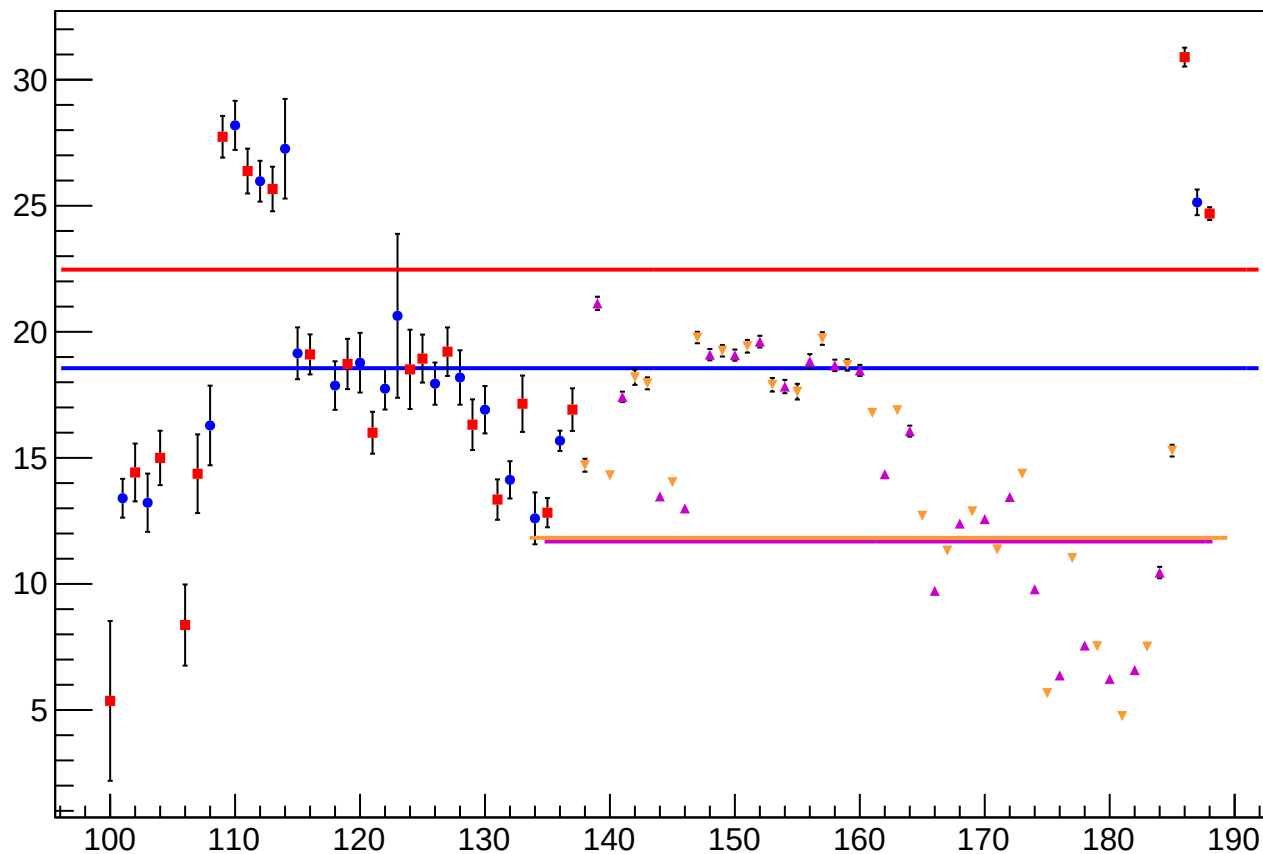
Left In:  $-0.079 \pm 0.028$   $\chi^2/\text{NDF}$ : 4989.1/22

+ sign  $0.036 \pm 0.027$   $\chi^2/\text{NDF}$ : 6586.1/42

All:  $0.048 \pm 0.019$   $\chi^2/\text{NDF}$ : 12356.4/86

- sign  $0.060 \pm 0.027$   $\chi^2/\text{NDF}$ : 5769.9/43

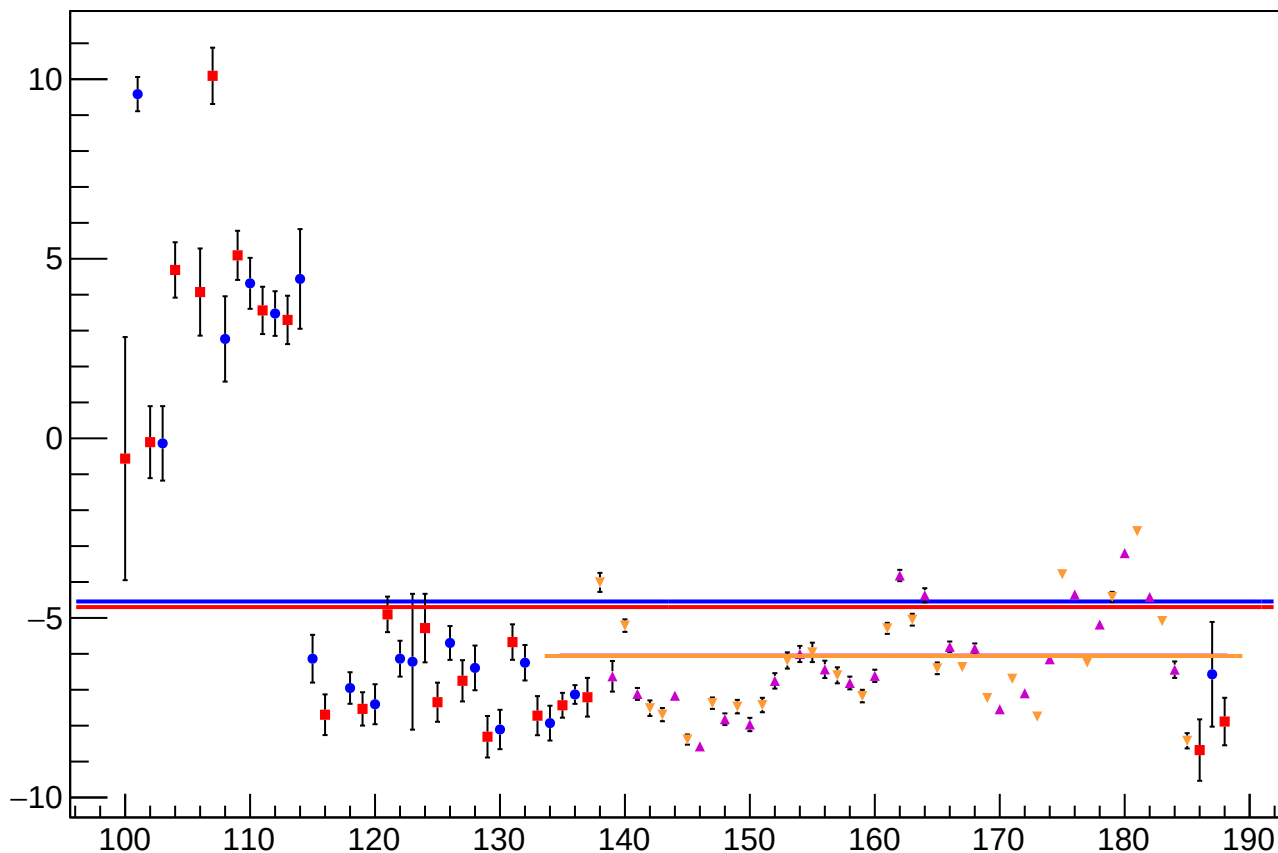
reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $18.558 \pm 0.195$   $\chi^2/\text{NDF}: 563.0/17$   
 Left Out:  $11.830 \pm 0.035$   $\chi^2/\text{NDF}: 19032.5/24$   
 Right Out:  $22.467 \pm 0.152$   $\chi^2/\text{NDF}: 1520.3/20$   
 Left In:  $11.683 \pm 0.035$   $\chi^2/\text{NDF}: 16927.3/22$

+ sign  $12.036 \pm 0.034$   $\chi^2/\text{NDF}: 20744.1/42$   
 All:  $12.133 \pm 0.024$   $\chi^2/\text{NDF}: 44013.5/86$   
 - sign  $12.231 \pm 0.034$   $\chi^2/\text{NDF}: 23253.1/43$

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-4.542 \pm 0.129$   $\chi^2/\text{NDF}$ : 1592.1/17

Left Out:  $-6.061 \pm 0.031$   $\chi^2/\text{NDF}$ : 2649.3/24

Right Out:  $-4.698 \pm 0.132$   $\chi^2/\text{NDF}$ : 1386.8/20

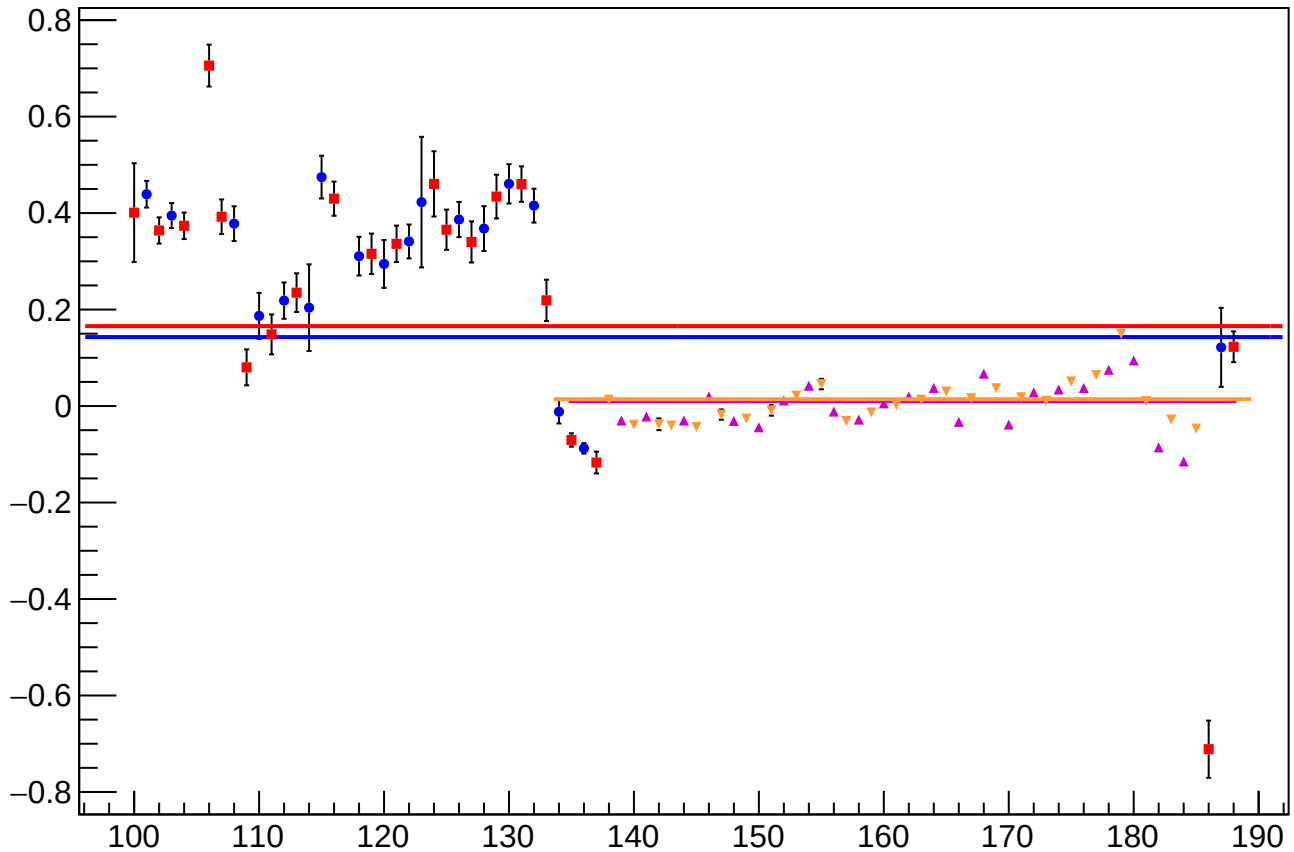
Left In:  $-6.050 \pm 0.032$   $\chi^2/\text{NDF}$ : 2303.3/22

+ sign  $-5.977 \pm 0.030$   $\chi^2/\text{NDF}$ : 4372.3/42

All:  $-5.977 \pm 0.022$   $\chi^2/\text{NDF}$ : 8161.0/86

- sign  $-5.977 \pm 0.031$   $\chi^2/\text{NDF}$ : 3788.6/43

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm12X\_slope vs Slug



Right In: 0.143 $\pm$ 0.007  $\chi^2$ /NDF: 1060.4/17

Left Out: 0.014 $\pm$ 0.001  $\chi^2$ /NDF: 950.9/24

Right Out: 0.166 $\pm$ 0.007  $\chi^2$ /NDF: 1233.4/20

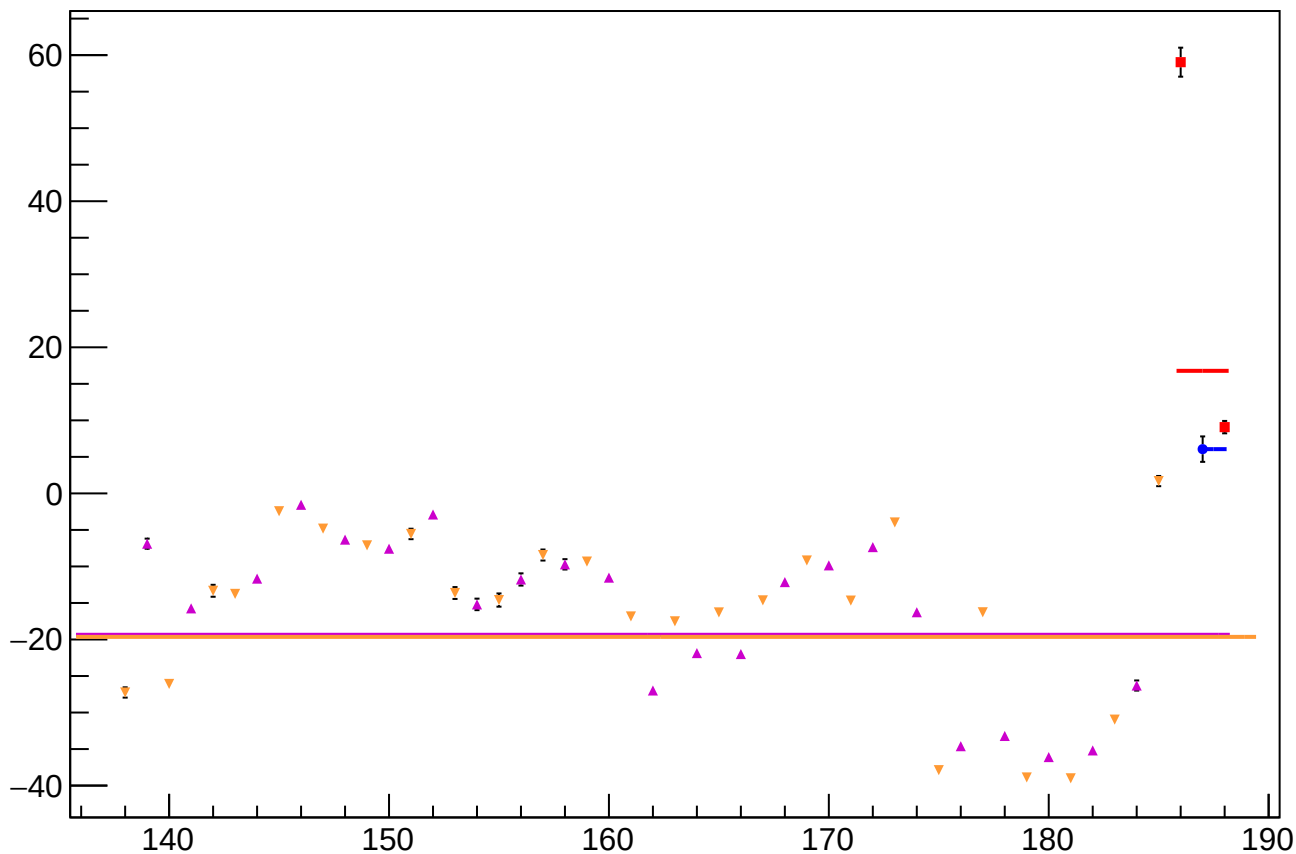
Left In: 0.010 $\pm$ 0.001  $\chi^2$ /NDF: 1224.5/22

+ sign 0.019 $\pm$ 0.001  $\chi^2$ /NDF: 2333.7/42

All: 0.018 $\pm$ 0.001  $\chi^2$ /NDF: 5249.4/86

- sign 0.016 $\pm$ 0.001  $\chi^2$ /NDF: 2913.3/43

reg\_asym\_sam\_12345678\_avg\_diff\_bpm1X\_slope vs Slug



Right In: 6.059+/-1.741  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -19.642+/-0.103  $\chi^2/\text{NDF}$ :15730.6/24

Right Out: 16.780+/-0.780  $\chi^2/\text{NDF}$ : 535.4/1

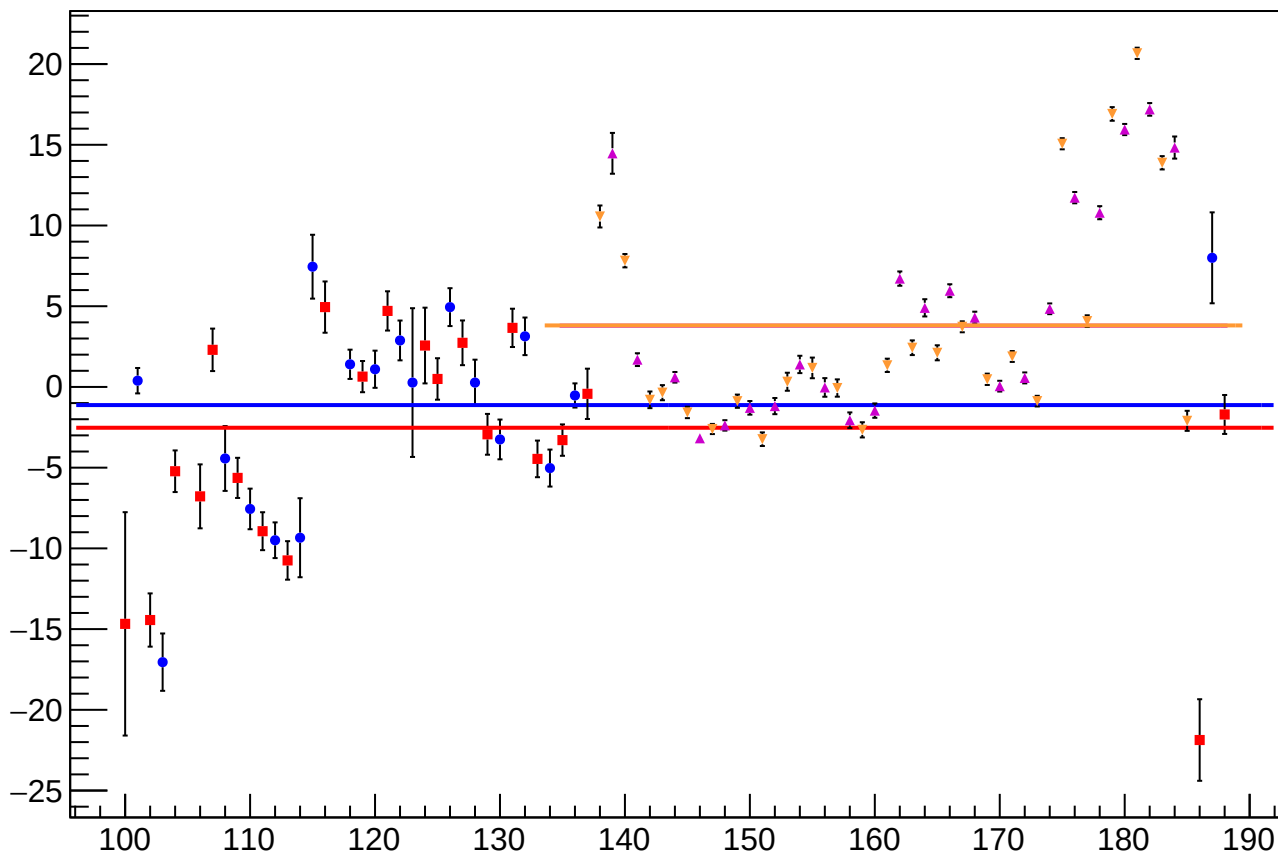
Left In: -19.355+/-0.105  $\chi^2/\text{NDF}$ :12417.1/22

+ sign -19.552+/-0.103  $\chi^2/\text{NDF}$ : 15947.7/25

All: -19.136+/-0.073  $\chi^2/\text{NDF}$ : 31041.7/50

- sign -18.717+/-0.104  $\chi^2/\text{NDF}$ : 15061.4/24

reg\_asym\_sam\_12345678\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $-1.123 \pm 0.288$   $\chi^2/\text{NDF}: 289.2/17$

Left Out:  $3.811 \pm 0.082$   $\chi^2/\text{NDF}: 7118.3/24$

Right Out:  $-2.528 \pm 0.291$   $\chi^2/\text{NDF}: 345.9/20$

Left In:  $3.795 \pm 0.083$   $\chi^2/\text{NDF}: 5534.4/22$

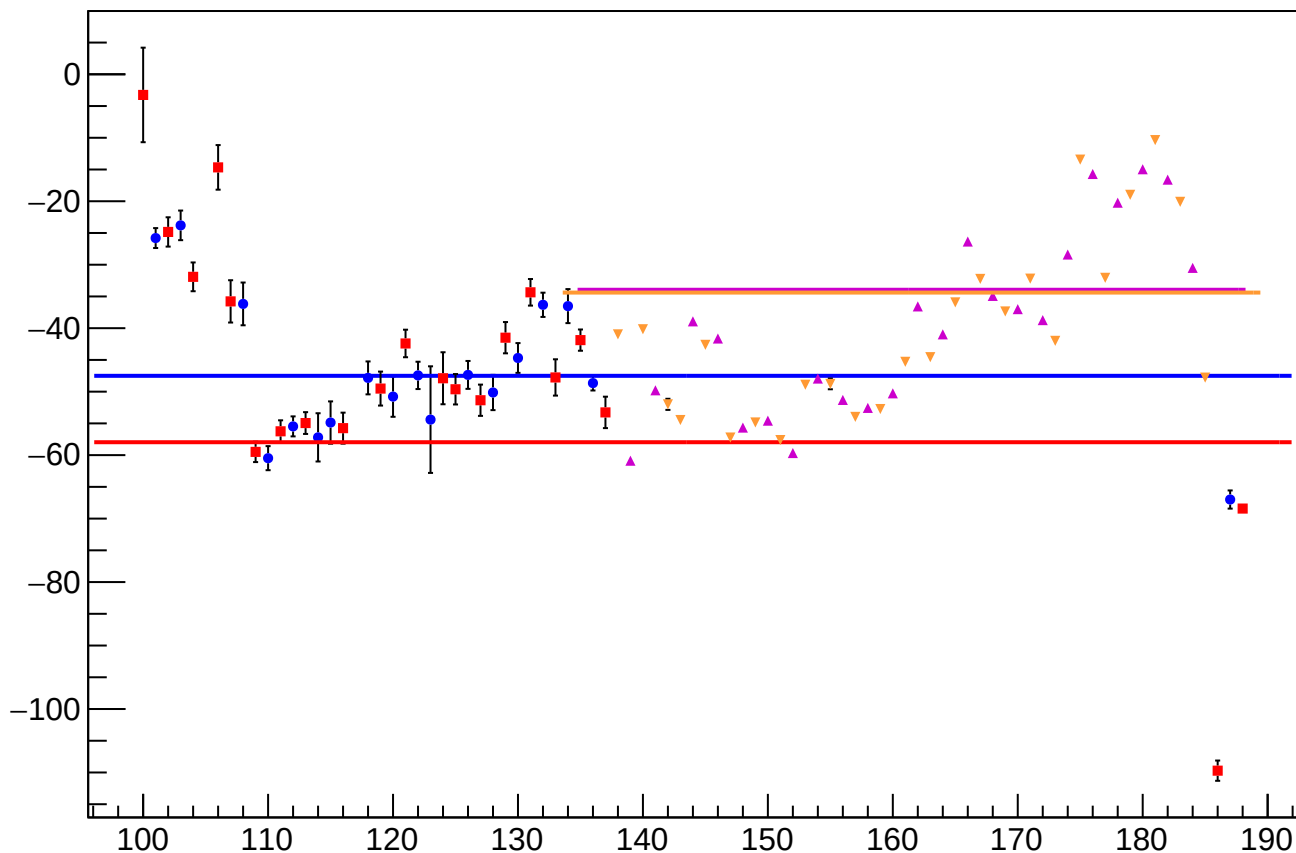
+ sign  $3.440 \pm 0.079$   $\chi^2/\text{NDF}: 7678.0/42$

All:  $3.379 \pm 0.056$   $\chi^2/\text{NDF}: 13994.7/86$

- sign  $3.317 \pm 0.080$   $\chi^2/\text{NDF}: 6315.5/43$



reg\_asym\_sam\_12345678\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $-47.505 \pm 0.491$   $\chi^2/\text{NDF}$ : 631.3/17

Left Out:  $-34.389 \pm 0.104$   $\chi^2/\text{NDF}$ : 20032.2/24

Right Out:  $-57.967 \pm 0.405$   $\chi^2/\text{NDF}$ : 2245.7/20

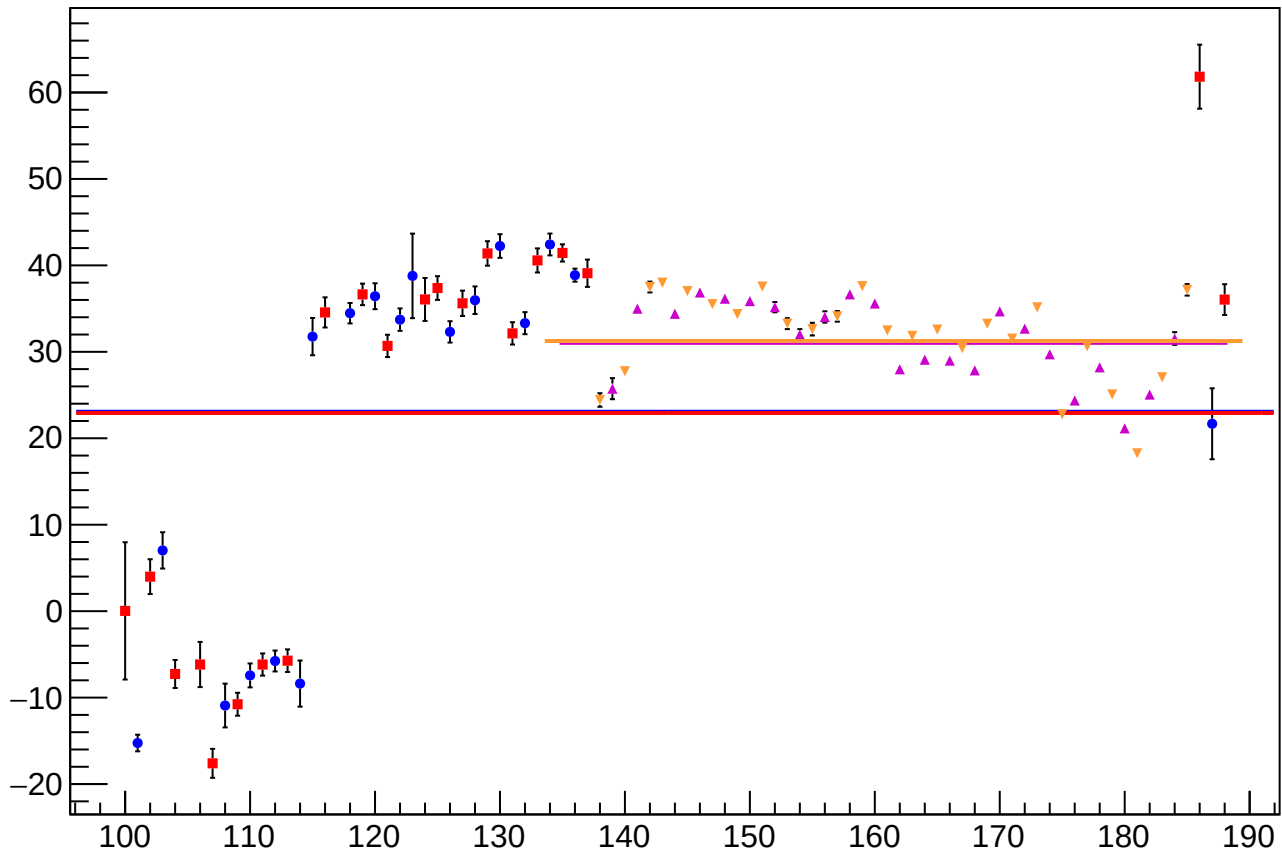
Left In:  $-33.946 \pm 0.105$   $\chi^2/\text{NDF}$ : 17855.4/22

+ sign  $-34.954 \pm 0.102$   $\chi^2/\text{NDF}$ : 21346.7/42

All:  $-35.207 \pm 0.072$   $\chi^2/\text{NDF}$ : 44764.3/86

- sign  $-35.458 \pm 0.101$   $\chi^2/\text{NDF}$ : 23405.3/43

reg\_asym\_sam\_12345678\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 23.064 $\pm$ 0.325  $\chi^2$ /NDF: 4346.1/17

Left Out: 31.252 $\pm$ 0.093  $\chi^2$ /NDF: 3305.3/24

Right Out: 22.928 $\pm$ 0.332  $\chi^2$ /NDF: 4204.6/20

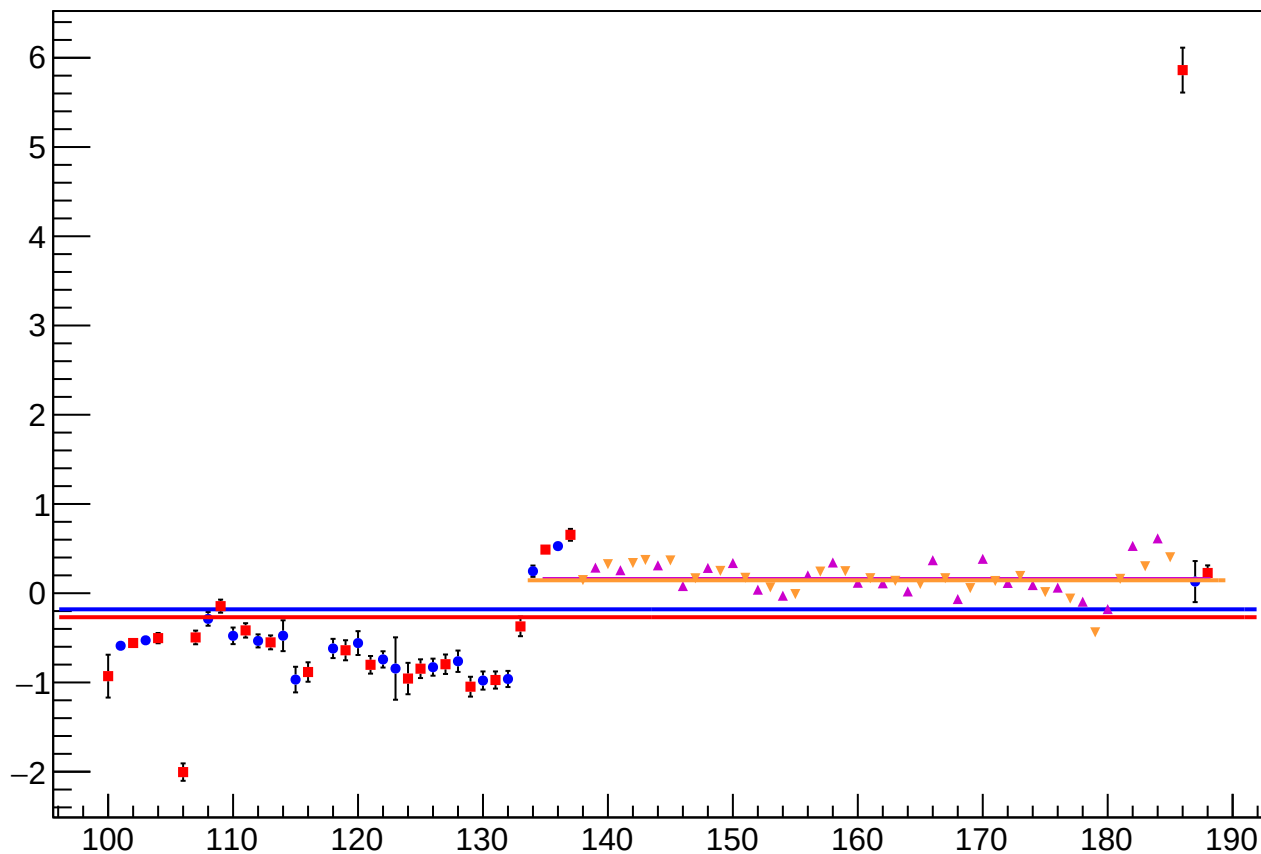
Left In: 31.040 $\pm$ 0.094  $\chi^2$ /NDF: 2488.6/22

+ sign 30.638 $\pm$ 0.089  $\chi^2$ /NDF: 8238.5/42

All: 30.541 $\pm$ 0.063  $\chi^2$ /NDF: 15485.5/86

- sign 30.441 $\pm$ 0.090  $\chi^2$ /NDF: 7244.5/43

reg\_asym\_sam\_12345678\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-0.180 \pm 0.018$   $\chi^2/\text{NDF}$ : 999.9/17

Left Out:  $0.145 \pm 0.004$   $\chi^2/\text{NDF}$ : 1572.6/24

Right Out:  $-0.269 \pm 0.018$   $\chi^2/\text{NDF}$ : 1821.6/20

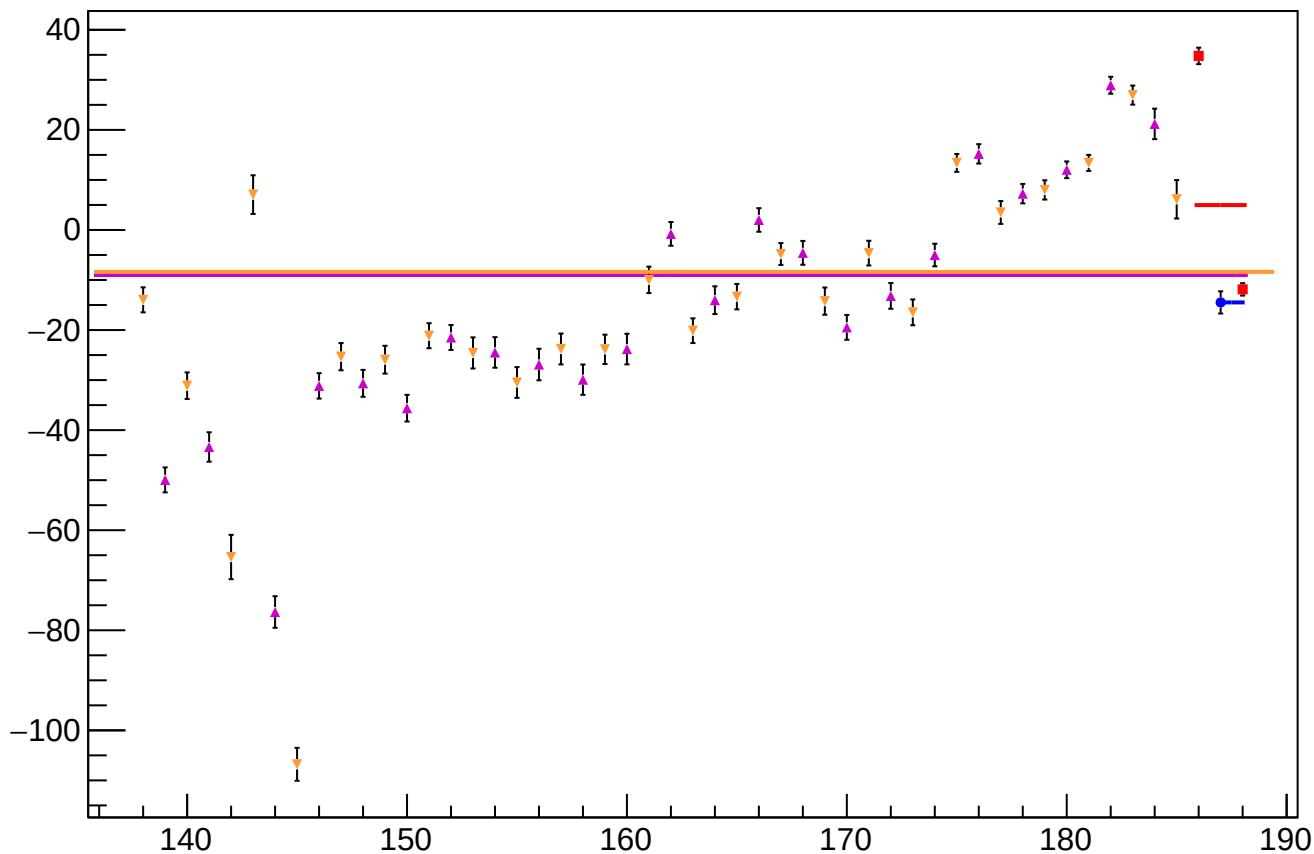
Left In:  $0.159 \pm 0.004$   $\chi^2/\text{NDF}$ : 2020.5/22

+ sign  $0.127 \pm 0.004$   $\chi^2/\text{NDF}$ : 2892.7/42

All:  $0.131 \pm 0.003$   $\chi^2/\text{NDF}$ : 7287.5/86

- sign  $0.135 \pm 0.004$   $\chi^2/\text{NDF}$ : 4392.8/43

# reg\_asym\_atl1\_diff\_bpm1X\_slope vs Slug



Right In: -14.478 +/- 2.220  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -8.375 +/- 0.500  $\chi^2/\text{NDF}$ : 2224.0/24

Right Out: 4.974 +/- 0.990  $\chi^2/\text{NDF}$ : 512.2/1

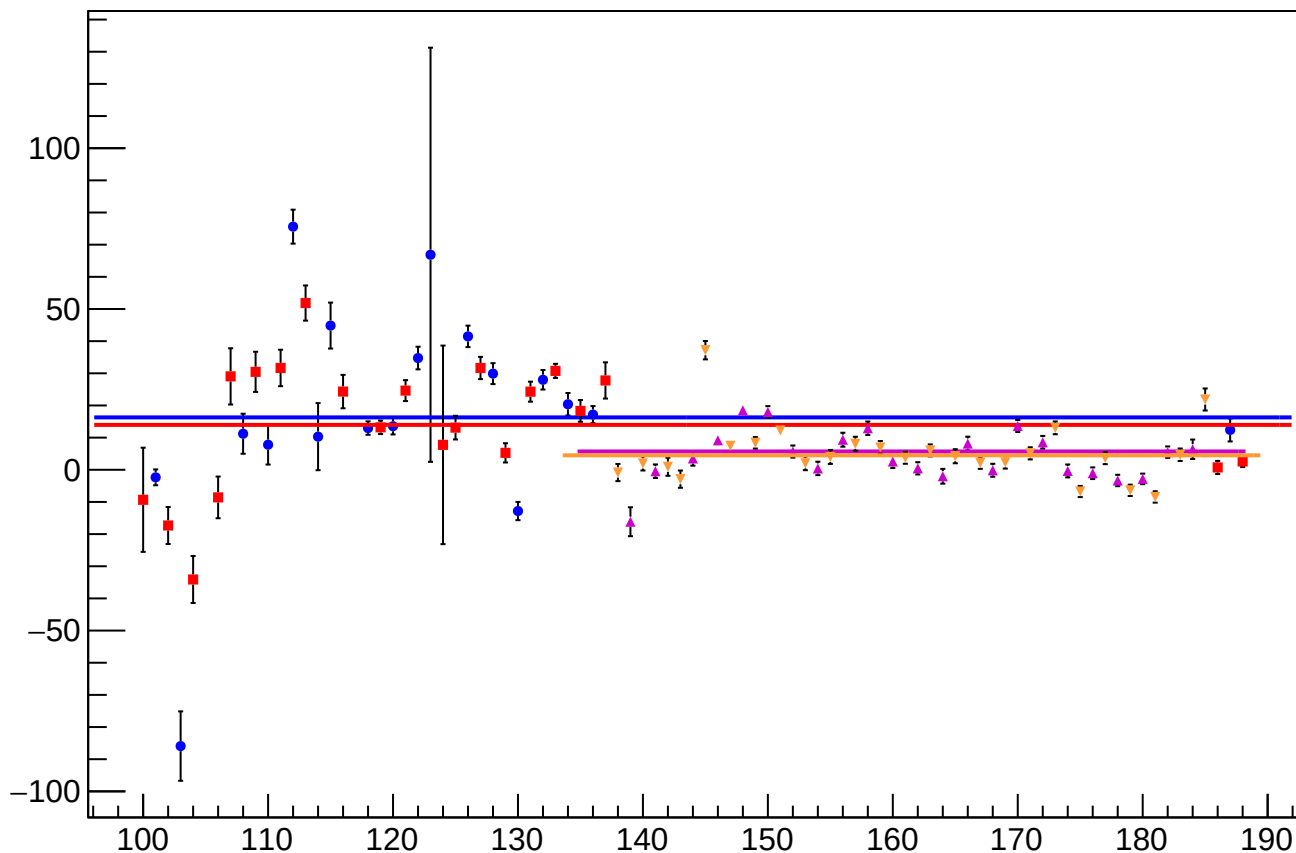
Left In: -8.995 +/- 0.505  $\chi^2/\text{NDF}$ : 2308.2/22

+ sign -8.670 +/- 0.488  $\chi^2/\text{NDF}$ : 2231.2/25

All: -7.287 +/- 0.331  $\chi^2/\text{NDF}$ : 5224.5/50

- sign -6.110 +/- 0.450  $\chi^2/\text{NDF}$ : 2978.4/24

# reg\_asym\_atl1\_diff\_bpm4aY\_slope vs Slug



Right In: 16.293 $\pm$ 0.825  $\chi^2/\text{NDF}$ : 520.9/17

Left Out: 4.494 $\pm$ 0.393  $\chi^2/\text{NDF}$ : 372.1/24

Right Out: 13.961 $\pm$ 0.742  $\chi^2/\text{NDF}$ : 366.9/20

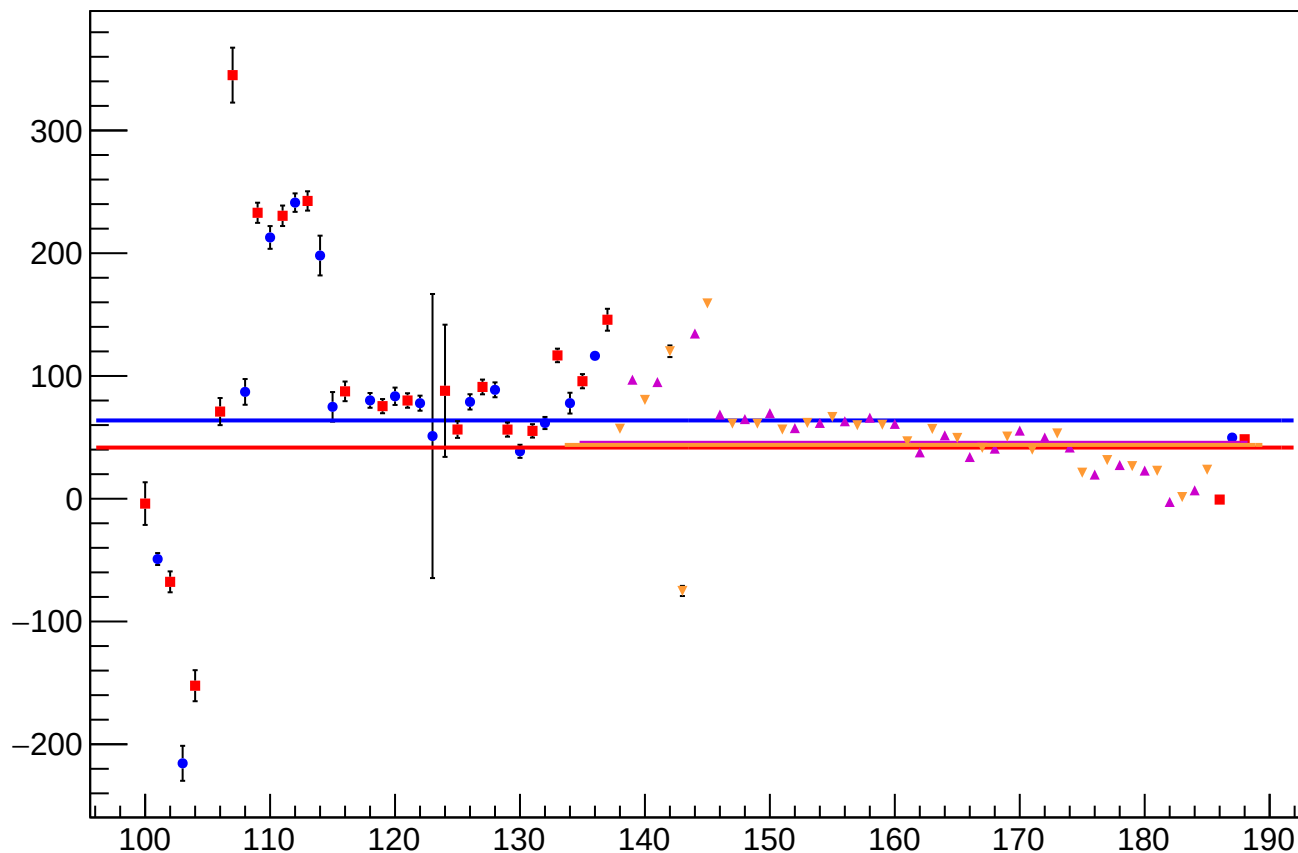
Left In: 5.699 $\pm$ 0.403  $\chi^2/\text{NDF}$ : 329.1/22

+ sign 6.676 $\pm$ 0.355  $\chi^2/\text{NDF}$ : 1059.9/42

All: 7.129 $\pm$ 0.251  $\chi^2/\text{NDF}$ : 1854.8/86

- sign 7.581 $\pm$ 0.354  $\chi^2/\text{NDF}$ : 791.7/43

# reg\_asym\_atl1\_diff\_bpm4eX\_slope vs Slug



Right In:  $63.772 \pm 1.218$   $\chi^2/\text{NDF}$ : 2105.1/17

Left Out:  $43.840 \pm 0.499$   $\chi^2/\text{NDF}$ : 3680.9/24

Right Out:  $41.676 \pm 0.721$   $\chi^2/\text{NDF}$ : 3986.4/20

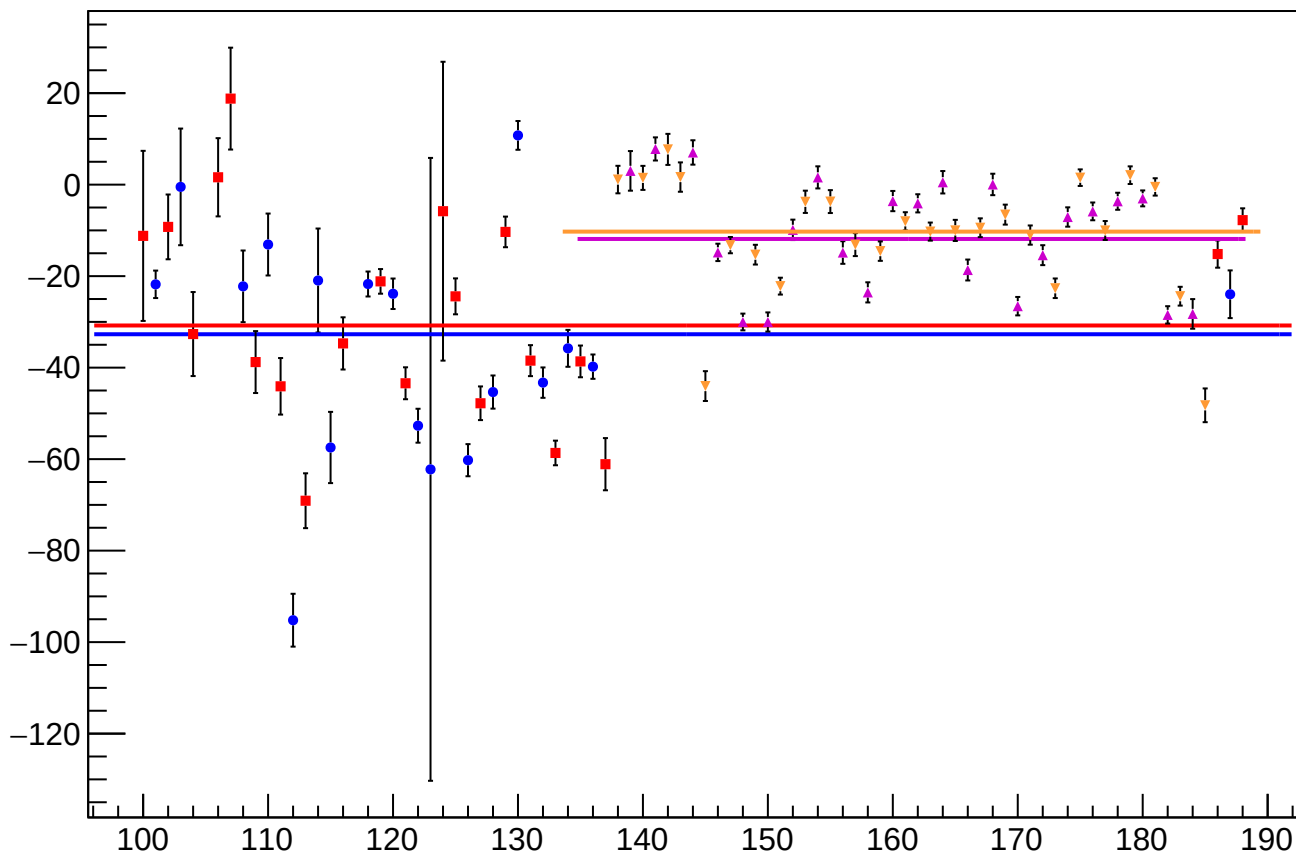
Left In:  $45.559 \pm 0.502$   $\chi^2/\text{NDF}$ : 3152.4/22

+ sign  $46.706 \pm 0.462$   $\chi^2/\text{NDF}$ : 6015.4/42

All:  $45.361 \pm 0.308$   $\chi^2/\text{NDF}$ : 13189.0/86

- sign  $44.289 \pm 0.412$   $\chi^2/\text{NDF}$ : 7158.3/43

# reg\_asym\_atl1\_diff\_bpm4eY\_slope vs Slug



Right In:  $-32.701 \pm 0.955$   $\chi^2/\text{NDF}$ : 496.0/17

Left Out:  $-10.267 \pm 0.445$   $\chi^2/\text{NDF}$ : 553.7/24

Right Out:  $-30.787 \pm 0.908$   $\chi^2/\text{NDF}$ : 432.5/20

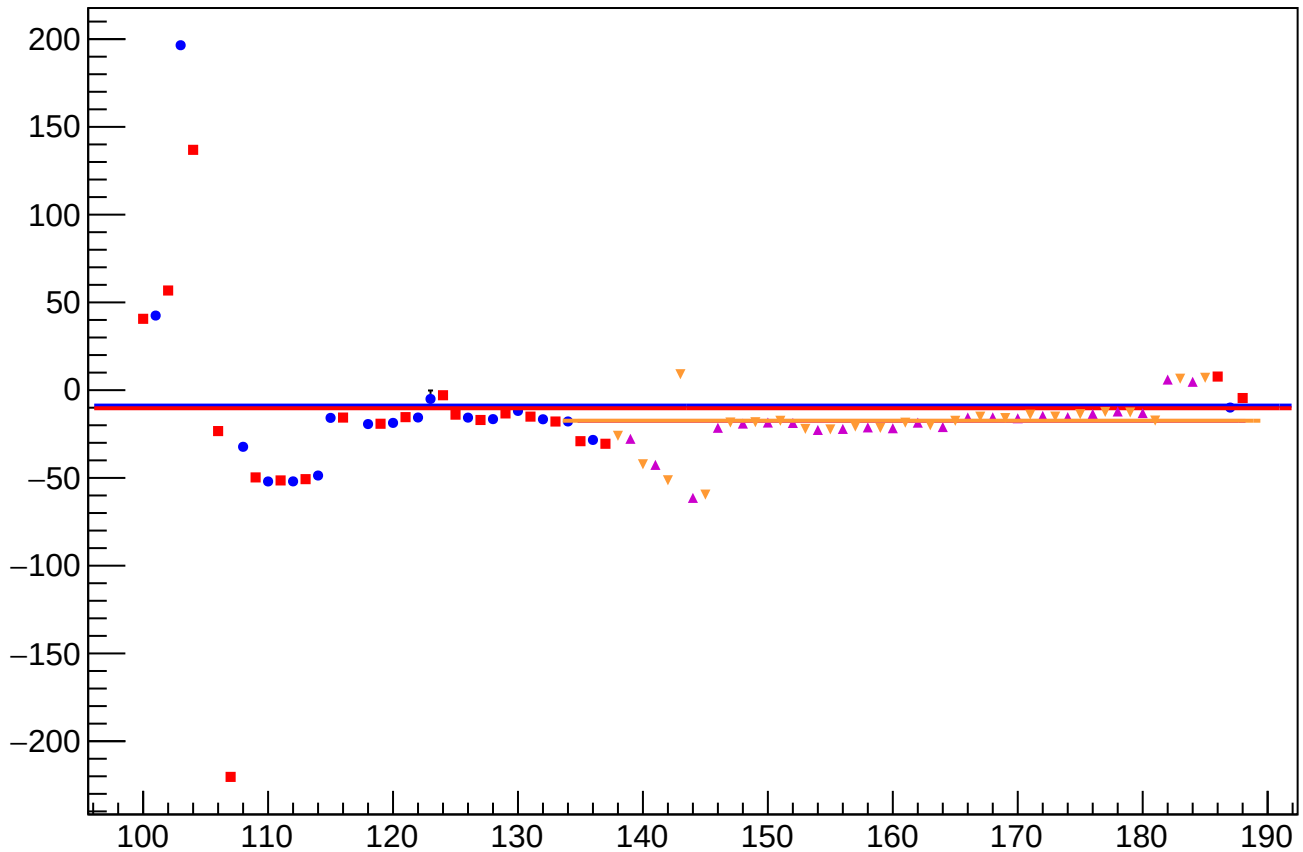
Left In:  $-11.875 \pm 0.455$   $\chi^2/\text{NDF}$ : 668.4/22

+ sign  $-14.266 \pm 0.403$   $\chi^2/\text{NDF}$ : 1502.9/42

All:  $-14.962 \pm 0.286$   $\chi^2/\text{NDF}$ : 2956.7/86

- sign  $-15.669 \pm 0.407$   $\chi^2/\text{NDF}$ : 1447.8/43

# reg\_asym\_atl1\_diff\_bpm12X\_slope vs Slug



Right In:  $-8.795 \pm 0.058$   $\chi^2/\text{NDF}$ : 576027.5/17

Left Out:  $-17.411 \pm 0.020$   $\chi^2/\text{NDF}$ : 320231.3/24

Right Out:  $-10.310 \pm 0.054$   $\chi^2/\text{NDF}$ : 569959.0/20

Left In:  $-17.552 \pm 0.021$   $\chi^2/\text{NDF}$ : 261900.3/22

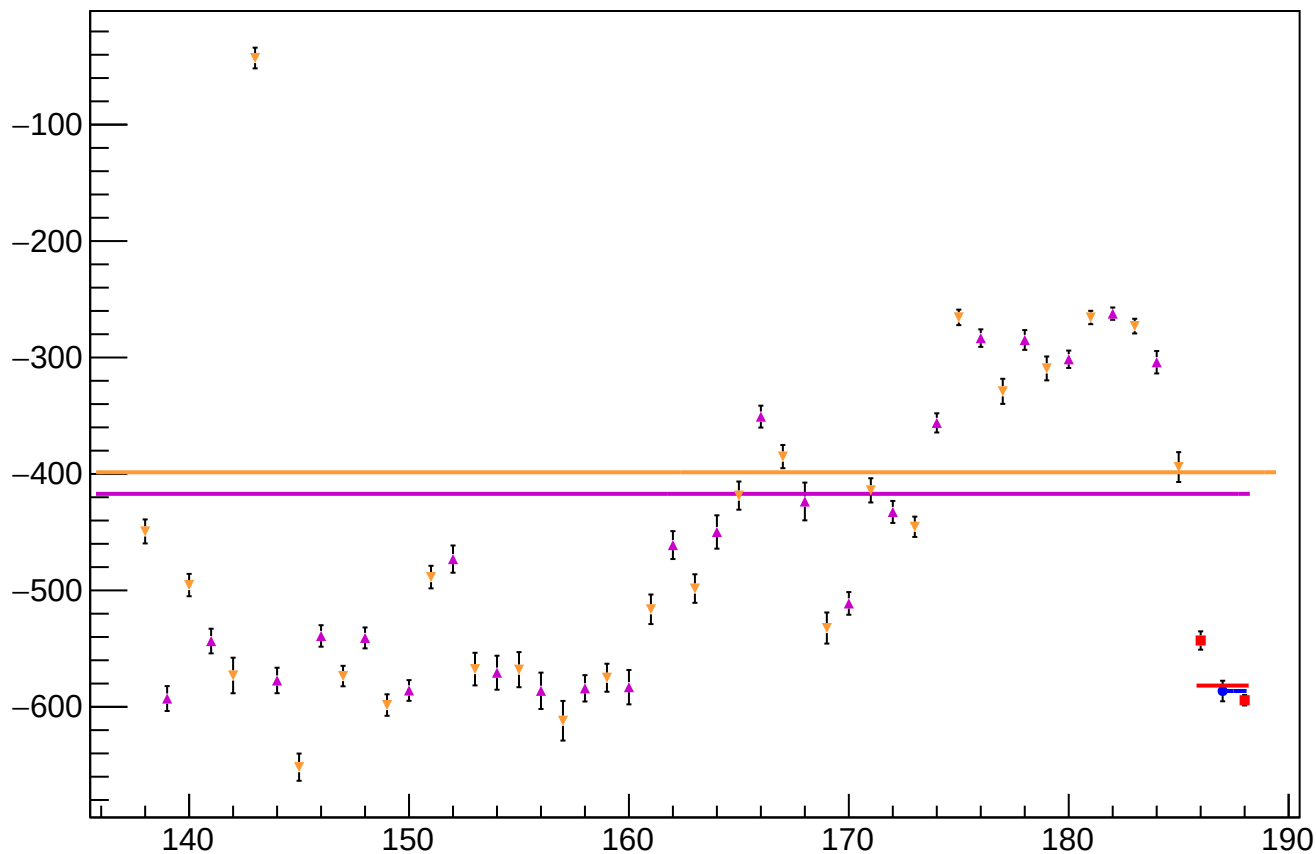
+ sign  $-16.450 \pm 0.019$   $\chi^2/\text{NDF}$ : 916090.3/42

All:  $-16.541 \pm 0.014$   $\chi^2/\text{NDF}$ : 1763717.8/86

- sign  $-16.631 \pm 0.019$   $\chi^2/\text{NDF}$ : 847583.2/43



# reg\_asym\_atl2\_diff\_bpm1X\_slope vs Slug



Right In: -586.400+/-8.817  $\chi^2$ /NDF: 0.0/0

Left Out: -398.556+/-1.962  $\chi^2$ /NDF:5659.5/24

Right Out: -581.729+/-3.896  $\chi^2$ /NDF: 32.1/1

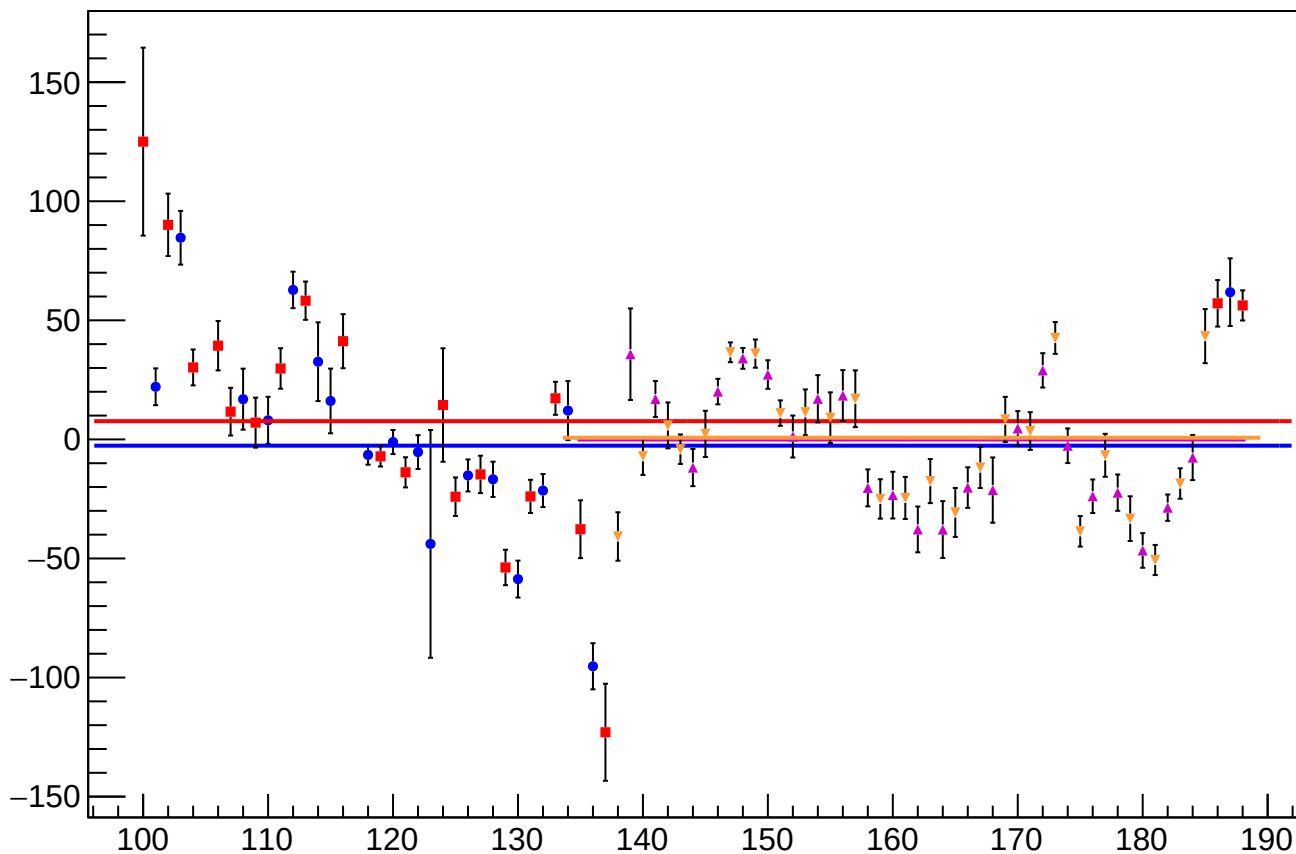
Left In: -417.080+/-1.997  $\chi^2$ /NDF:3958.5/22

+ sign -407.416+/-1.915  $\chi^2$ /NDF: 6092.1/25

All: -431.010+/-1.303  $\chi^2$ /NDF: 11779.7/50

- sign -451.333+/-1.777  $\chi^2$ /NDF: 5405.0/24

# reg\_asym\_atl2\_diff\_bpm4aY\_slope vs Slug



Right In:  $-2.635 \pm 1.872$   $\chi^2/\text{NDF}$ : 335.3/17

Left Out:  $0.697 \pm 1.510$   $\chi^2/\text{NDF}$ : 349.9/24

Right Out:  $7.656 \pm 1.806$   $\chi^2/\text{NDF}$ : 399.5/20

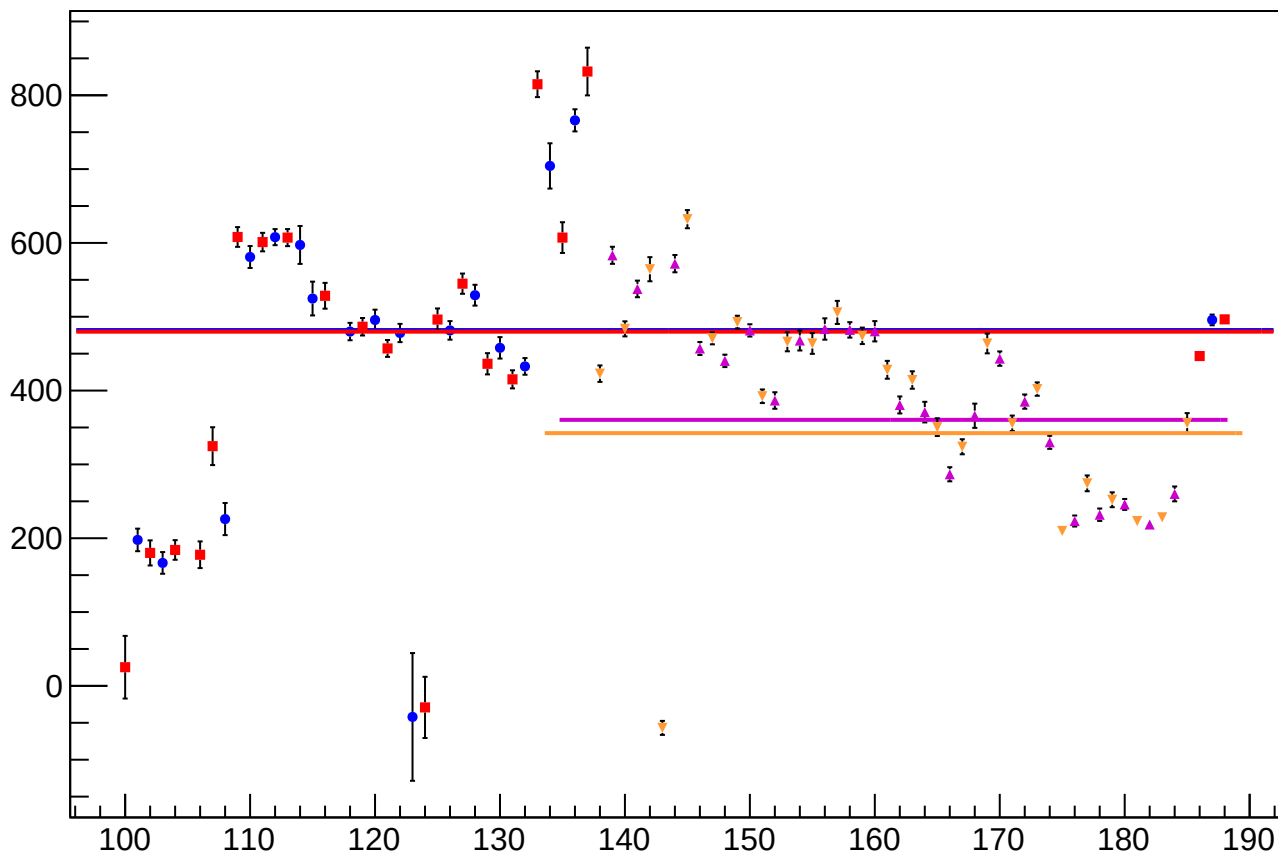
Left In:  $-0.052 \pm 1.571$   $\chi^2/\text{NDF}$ : 264.1/22

+ sign  $-0.617 \pm 1.175$   $\chi^2/\text{NDF}$ : 687.1/42

All:  $1.310 \pm 0.835$   $\chi^2/\text{NDF}$ : 1366.5/86

- sign  $3.269 \pm 1.185$   $\chi^2/\text{NDF}$ : 674.0/43

# reg\_asym\_atl2\_diff\_bpm4eX\_slope vs Slug



Right In: 481.970 $\pm$ 3.245  $\chi^2$ /NDF: 1633.5/17

Left Out: 342.368 $\pm$ 1.970  $\chi^2$ /NDF: 5181.7/24

Right Out: 479.822 $\pm$ 2.343  $\chi^2$ /NDF: 2338.5/20

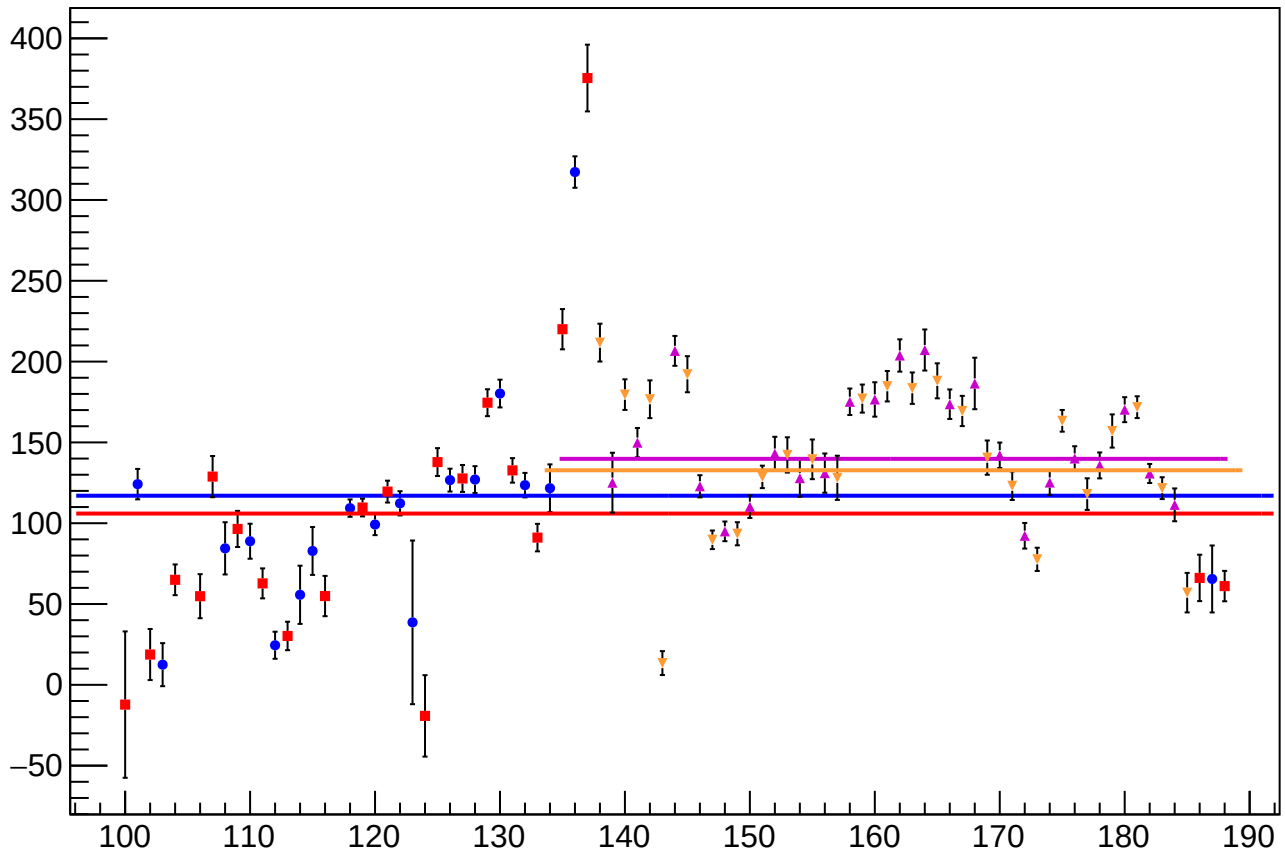
Left In: 360.355 $\pm$ 1.996  $\chi^2$ /NDF: 3449.9/22

+ sign 379.950 $\pm$ 1.684  $\chi^2$ /NDF: 8167.4/42

All: 396.829 $\pm$ 1.128  $\chi^2$ /NDF: 15644.5/86

- sign 410.570 $\pm$ 1.519  $\chi^2$ /NDF: 7294.8/43

# reg\_asym\_atl2\_diff\_bpm4eY\_slope vs Slug



Right In: 117.008 $\pm$ 2.181  $\chi^2/\text{NDF}$ : 713.1/17

Left Out: 132.762 $\pm$ 1.736  $\chi^2/\text{NDF}$ : 749.6/24

Right Out: 105.979 $\pm$ 2.127  $\chi^2/\text{NDF}$ : 604.0/20

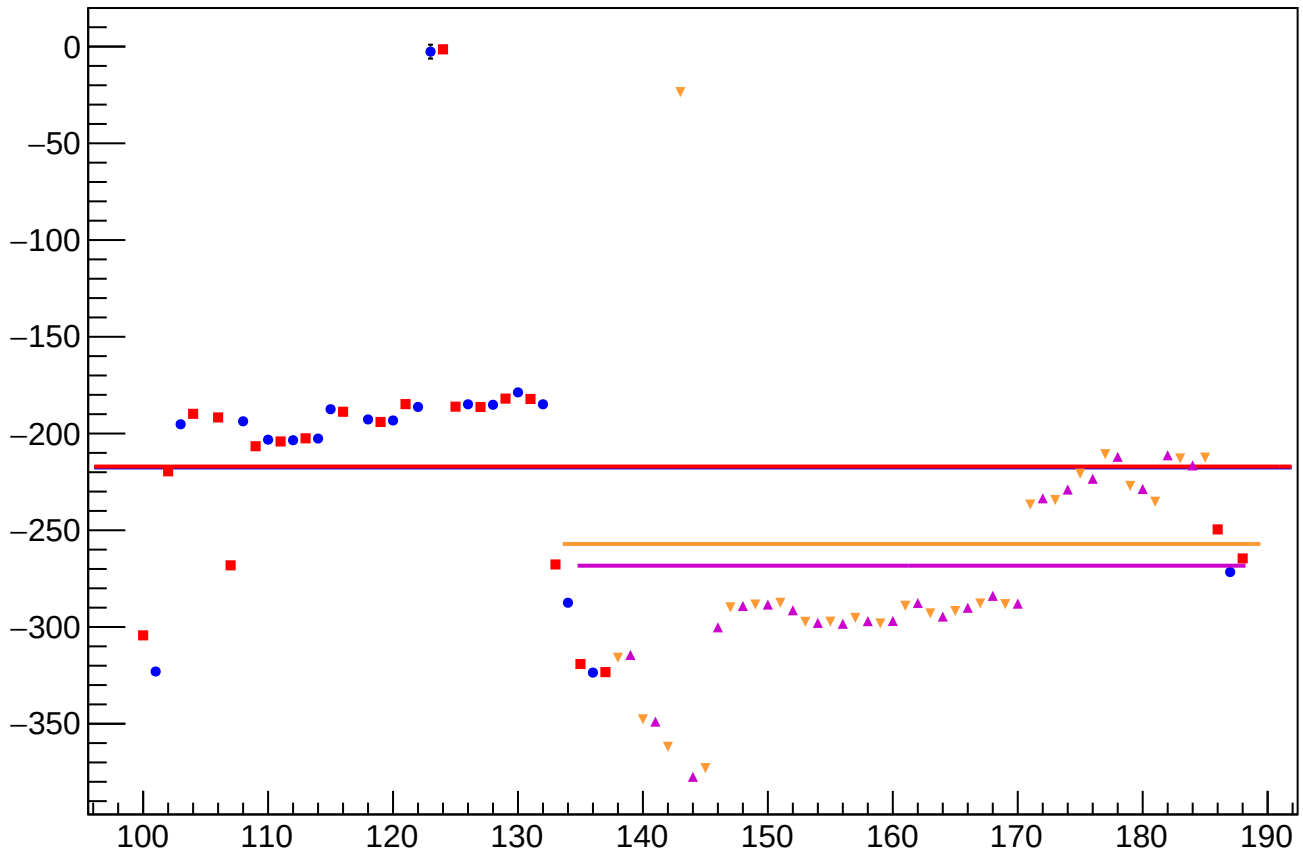
Left In: 139.828 $\pm$ 1.790  $\chi^2/\text{NDF}$ : 321.7/22

+ sign 126.652 $\pm$ 1.358  $\chi^2/\text{NDF}$ : 1494.7/42

All: 126.230 $\pm$ 0.964  $\chi^2/\text{NDF}$ : 2568.8/86

- sign 125.801 $\pm$ 1.370  $\chi^2/\text{NDF}$ : 1074.0/43

# reg\_asym\_atl2\_diff\_bpm12X\_slope vs Slug



Right In:  $-217.525 \pm 0.135$   $\chi^2/\text{NDF}$ : 149149.0/17

Left Out:  $-257.067 \pm 0.082$   $\chi^2/\text{NDF}$ : 665762.3/24

Right Out:  $-217.067 \pm 0.124$   $\chi^2/\text{NDF}$ : 128727.8/20

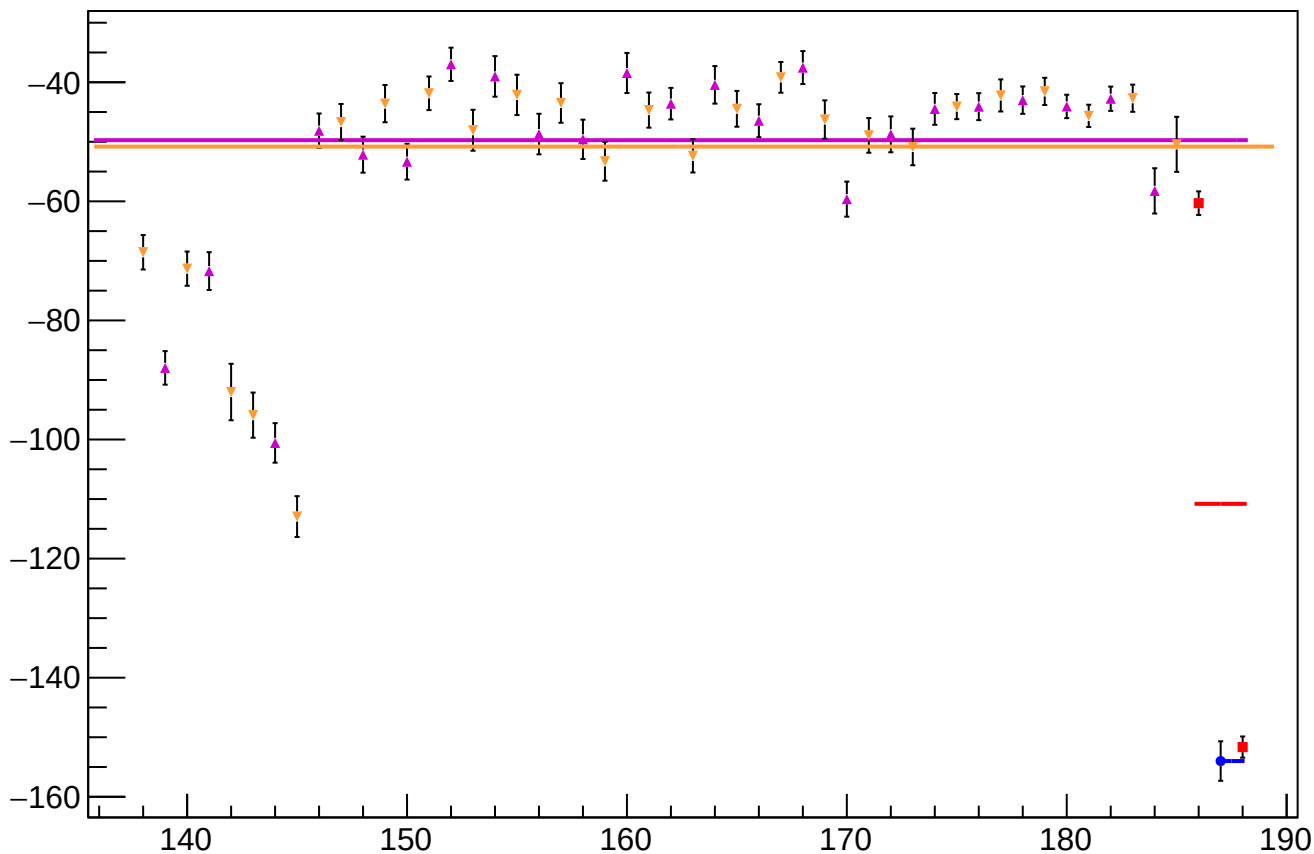
Left In:  $-268.305 \pm 0.083$   $\chi^2/\text{NDF}$ : 264853.3/22

+ sign  $-246.328 \pm 0.070$   $\chi^2/\text{NDF}$ : 877639.1/42

All:  $-249.439 \pm 0.049$   $\chi^2/\text{NDF}$ : 1392174.1/86

- sign  $-252.462 \pm 0.069$   $\chi^2/\text{NDF}$ : 510664.7/43

# reg\_asym\_atr1\_diff\_bpm1X\_slope vs Slug



Right In:  $-153.998 \pm 3.318$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-50.802 \pm 0.574$   $\chi^2/\text{NDF}$ : 752.7/24

Right Out:  $-110.802 \pm 1.324$   $\chi^2/\text{NDF}$ : 1177.5/1

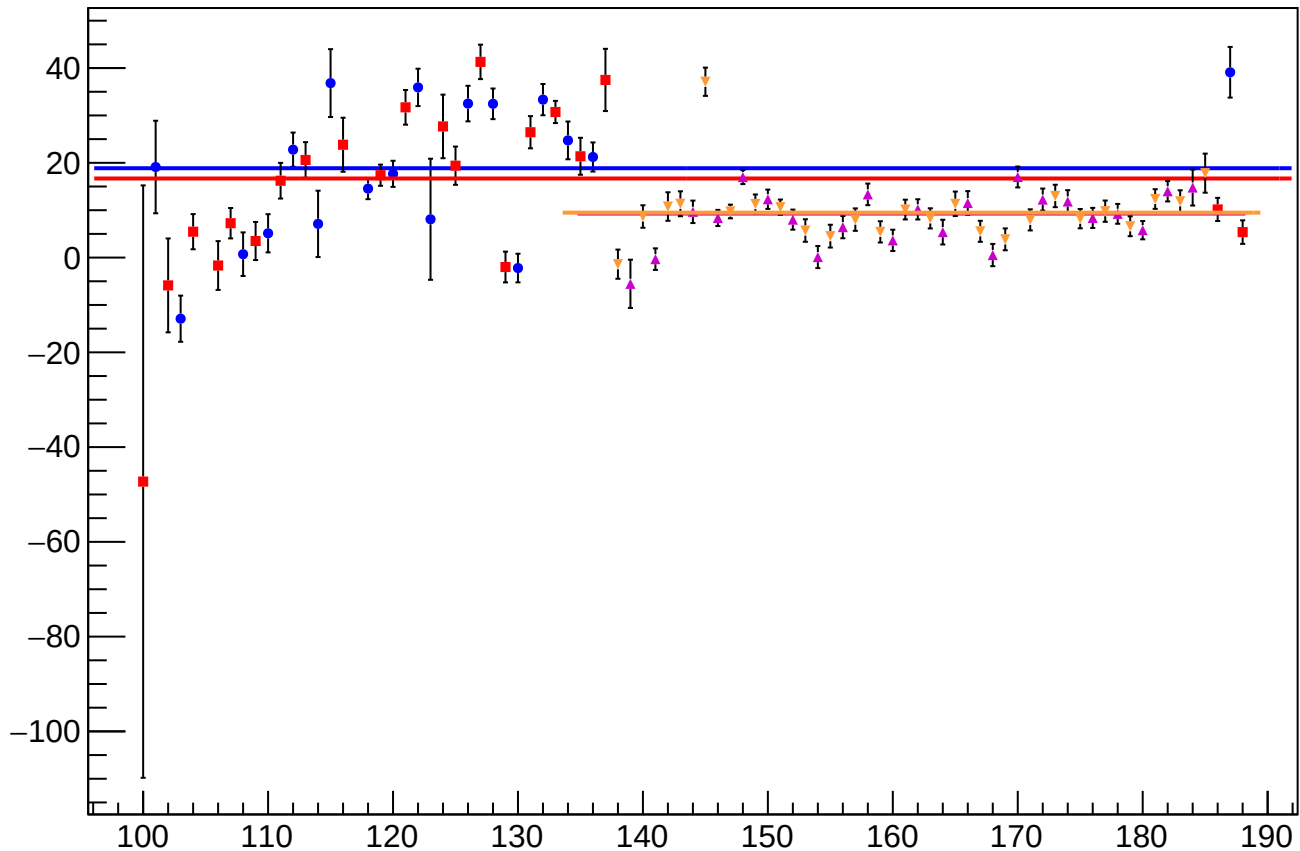
Left In:  $-49.728 \pm 0.581$   $\chi^2/\text{NDF}$ : 601.0/22

+ sign  $-53.799 \pm 0.565$   $\chi^2/\text{NDF}$ : 1691.9/25

All:  $-56.878 \pm 0.388$   $\chi^2/\text{NDF}$ : 5310.9/50

- sign  $-59.608 \pm 0.532$   $\chi^2/\text{NDF}$ : 3563.1/24

# reg\_asym\_atr1\_diff\_bpm4aY\_slope vs Slug



Right In:  $18.860 \pm 0.893$   $\chi^2/\text{NDF}$ : 219.3/17

Left Out:  $9.483 \pm 0.447$   $\chi^2/\text{NDF}$ : 133.0/24

Right Out:  $16.694 \pm 0.774$   $\chi^2/\text{NDF}$ : 232.7/20

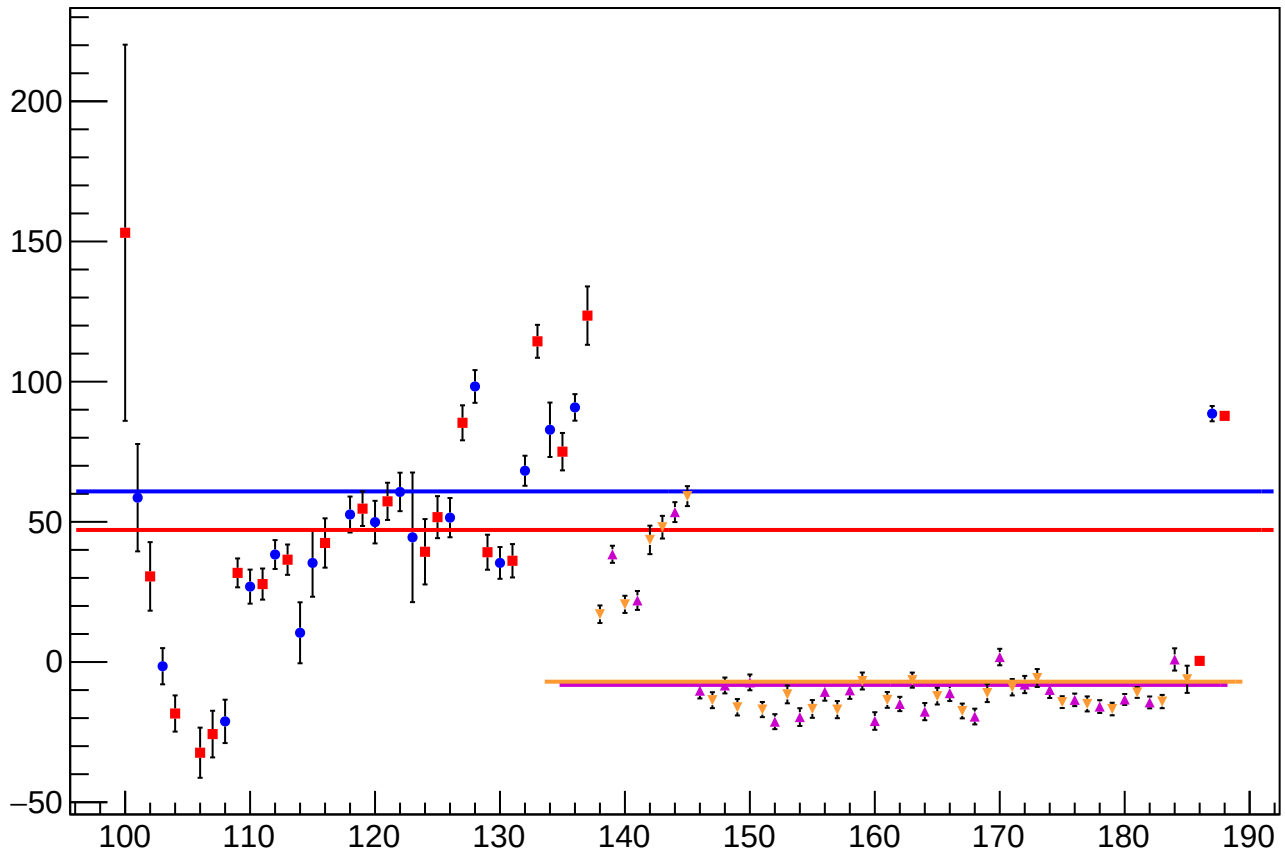
Left In:  $9.289 \pm 0.461$   $\chi^2/\text{NDF}$ : 125.6/22

+ sign  $11.361 \pm 0.400$   $\chi^2/\text{NDF}$ : 440.6/42

All:  $11.292 \pm 0.281$   $\chi^2/\text{NDF}$ : 866.6/86

- sign  $11.224 \pm 0.396$   $\chi^2/\text{NDF}$ : 425.9/43

# reg\_asym\_atr1\_diff\_bpm4eX\_slope vs Slug



Right In: 60.860 $\pm$ 1.423  $\chi^2$ /NDF: 500.1/17

Left Out: -7.007 $\pm$ 0.572  $\chi^2$ /NDF: 899.2/24

Right Out: 47.108 $\pm$ 0.886  $\chi^2$ /NDF: 2208.9/20

Left In: -8.158 $\pm$ 0.578  $\chi^2$ /NDF: 753.9/22

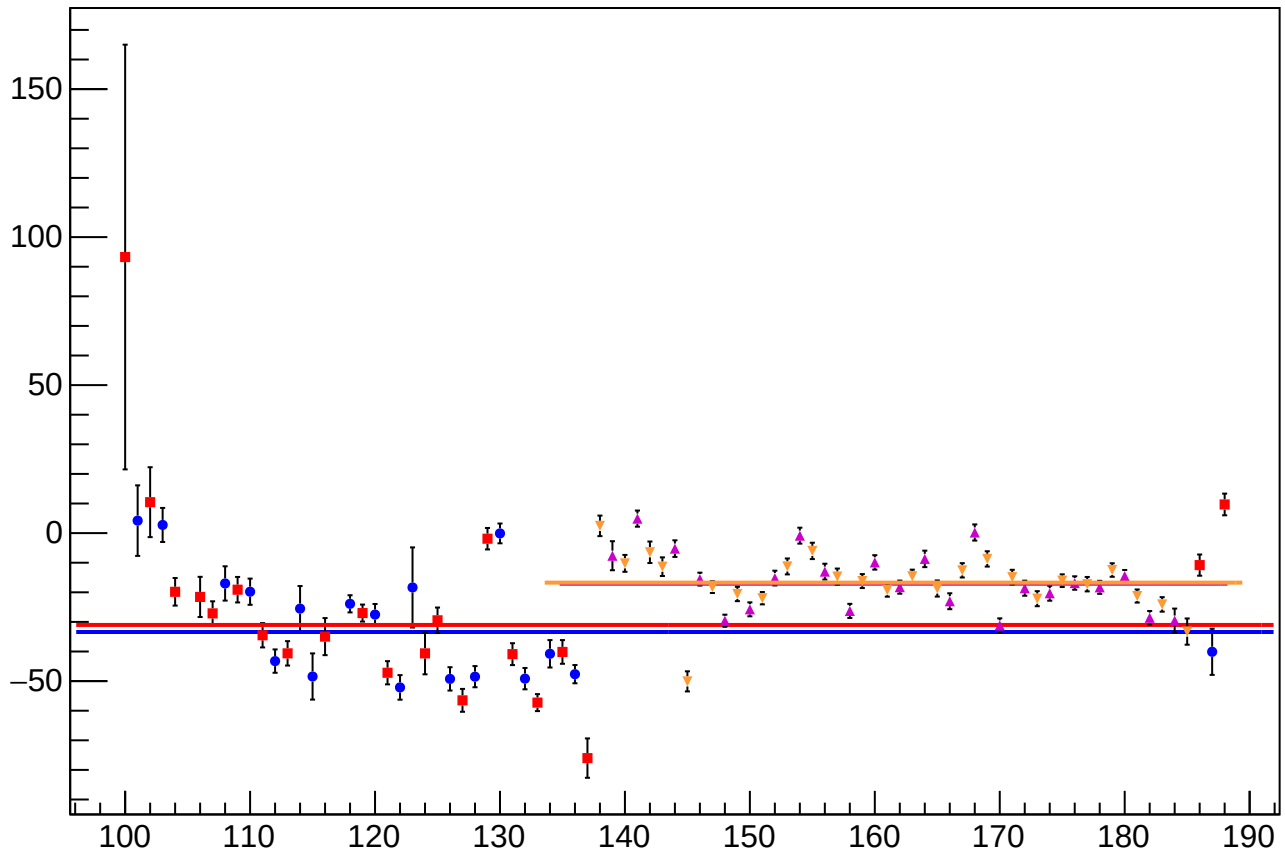
+ sign 2.433 $\pm$ 0.531  $\chi^2$ /NDF: 3358.1/42

All: 5.645 $\pm$ 0.358  $\chi^2$ /NDF: 9116.3/86

- sign 8.316 $\pm$ 0.484  $\chi^2$ /NDF: 5691.1/43



# reg\_asym\_atr1\_diff\_bpm4eY\_slope vs Slug



Right In:  $-33.409 \pm 1.024$   $\chi^2/\text{NDF}$ : 289.9/17

Left Out:  $-16.727 \pm 0.508$   $\chi^2/\text{NDF}$ : 223.3/24

Right Out:  $-31.025 \pm 0.925$   $\chi^2/\text{NDF}$ : 463.9/20

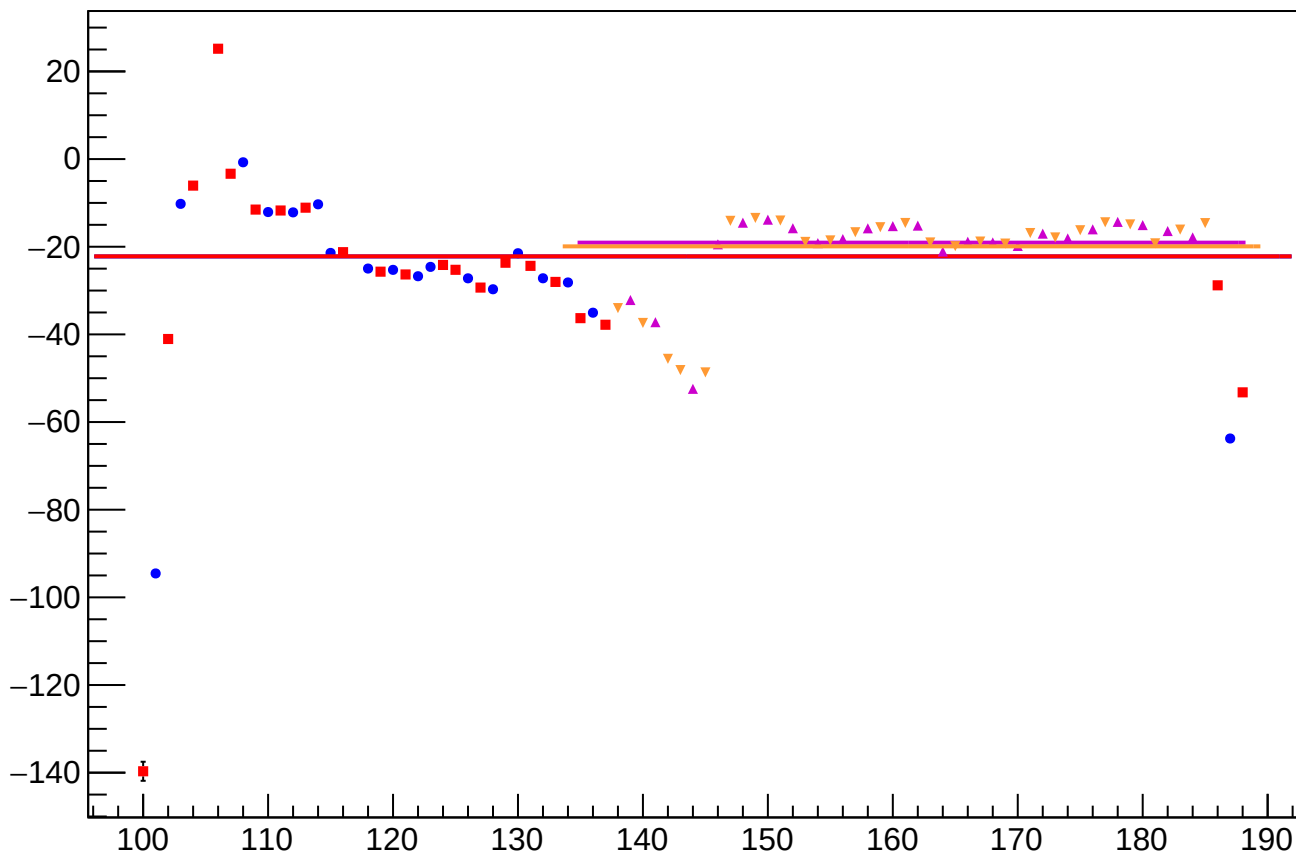
Left In:  $-17.100 \pm 0.520$   $\chi^2/\text{NDF}$ : 328.1/22

+ sign  $-20.019 \pm 0.455$   $\chi^2/\text{NDF}$ : 726.2/42

All:  $-20.233 \pm 0.321$   $\chi^2/\text{NDF}$ : 1690.6/86

- sign  $-20.446 \pm 0.454$   $\chi^2/\text{NDF}$ : 964.0/43

# reg\_asym\_atr1\_diff\_bpm12X\_slope vs Slug



Right In:  $-22.218 \pm 0.058$   $\chi^2/\text{NDF}$ : 58118.8/17

Left Out:  $-19.915 \pm 0.023$   $\chi^2/\text{NDF}$ : 141090.6/24

Right Out:  $-22.192 \pm 0.053$   $\chi^2/\text{NDF}$ : 117154.2/20

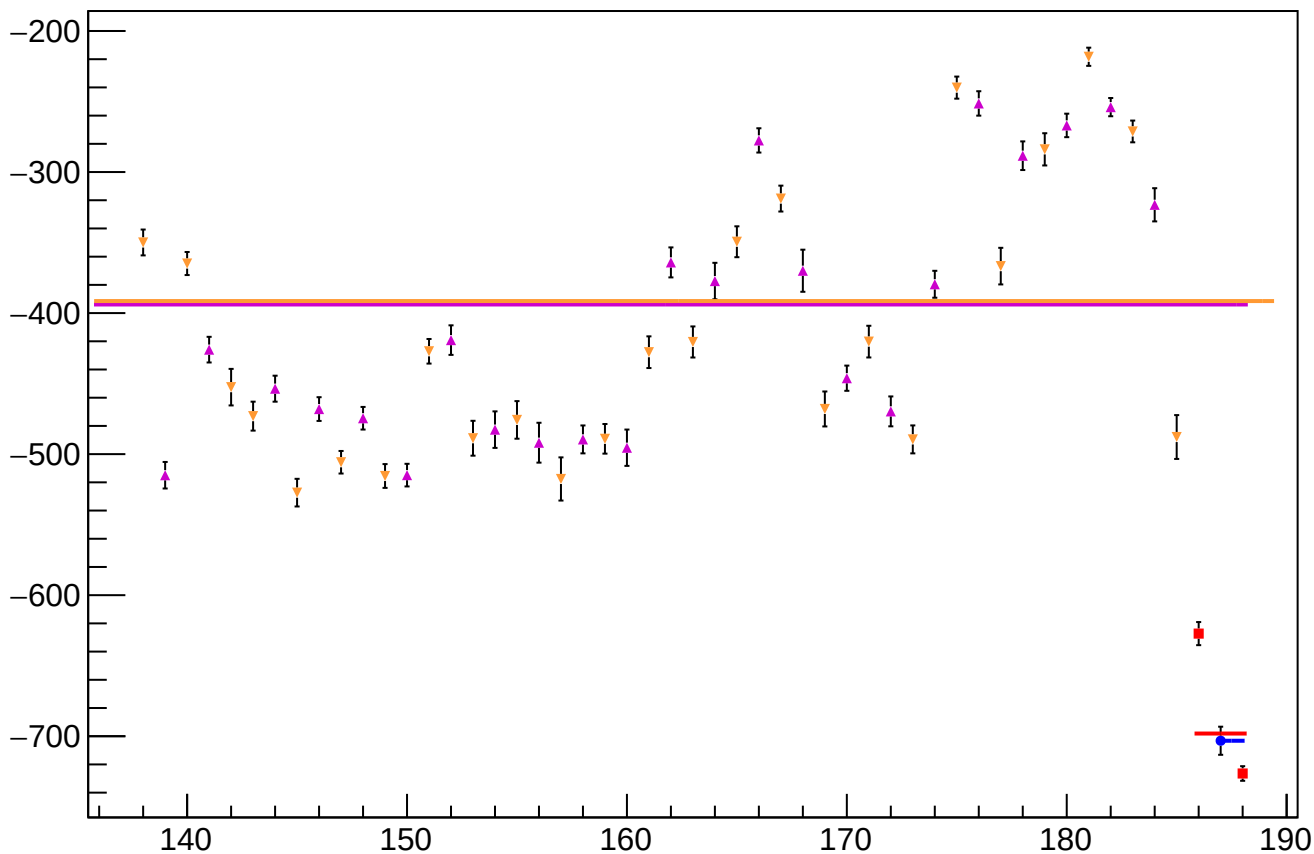
Left In:  $-19.068 \pm 0.024$   $\chi^2/\text{NDF}$ : 92702.3/22

+ sign  $-20.234 \pm 0.022$   $\chi^2/\text{NDF}$ : 200560.0/42

All:  $-19.905 \pm 0.015$   $\chi^2/\text{NDF}$ : 413750.3/86

- sign  $-19.580 \pm 0.022$   $\chi^2/\text{NDF}$ : 212731.4/43

# reg\_asym\_atr2\_diff\_bpm1X\_slope vs Slug



Right In: -703.210+/-9.965  $\chi^2$ /NDF: 0.0/0

Left Out: -391.476+/-1.973  $\chi^2$ /NDF:2708.6/24

Right Out: -698.098+/-4.377  $\chi^2$ /NDF: 104.8/1

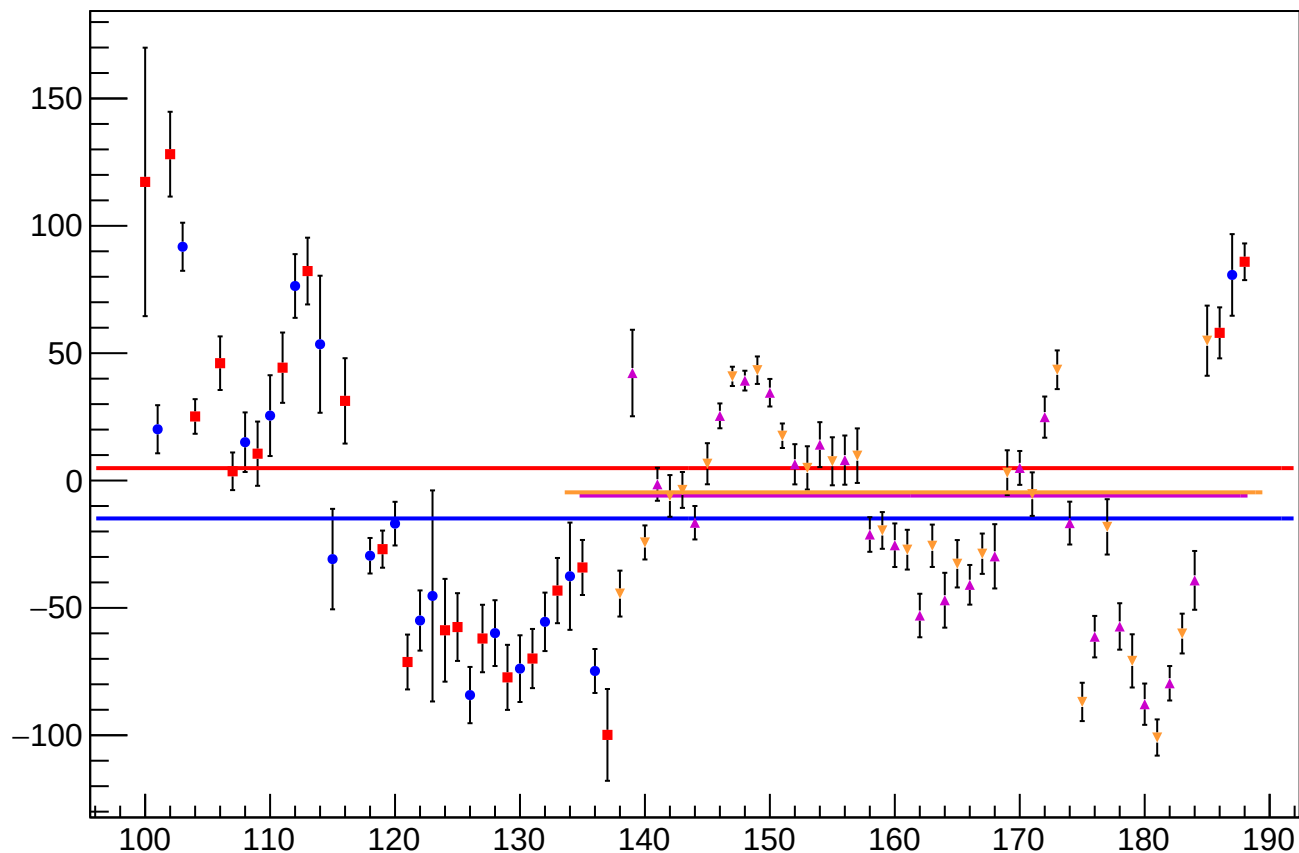
Left In: -393.904+/-1.998  $\chi^2$ /NDF:2280.8/22

+ sign -403.231+/-1.935  $\chi^2$ /NDF: 3650.4/25

All: -426.143+/-1.325  $\chi^2$ /NDF: 10297.5/50

- sign -446.356+/-1.817  $\chi^2$ /NDF: 6383.2/24

# reg\_asym\_atr2\_diff\_bpm4aY\_slope vs Slug



Right In:  $-14.884 \pm 2.740$   $\chi^2/\text{NDF}: 400.5/17$

Left Out:  $-4.635 \pm 1.467$   $\chi^2/\text{NDF}: 771.4/24$

Right Out:  $4.869 \pm 2.386$   $\chi^2/\text{NDF}: 554.2/20$

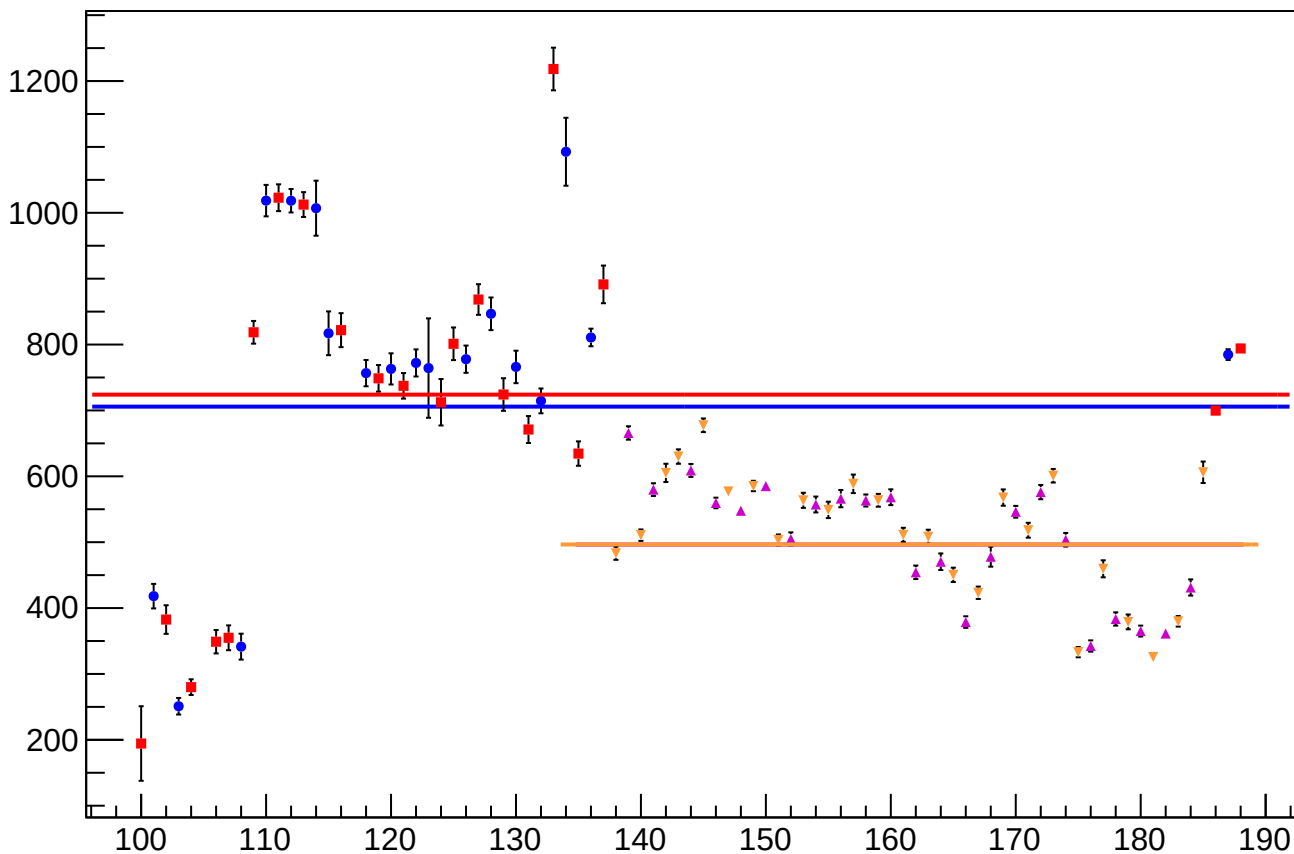
Left In:  $-5.906 \pm 1.513$   $\chi^2/\text{NDF}: 657.5/22$

+ sign  $-6.919 \pm 1.294$   $\chi^2/\text{NDF}: 1182.8/42$

All:  $-4.842 \pm 0.909$   $\chi^2/\text{NDF}: 2414.2/86$

- sign  $-2.815 \pm 1.278$   $\chi^2/\text{NDF}: 1226.3/43$

# reg\_asym\_atr2\_diff\_bpm4eX\_slope vs Slug



Right In: 705.782 $\pm$ 4.290  $\chi^2/\text{NDF}$ : 2714.7/17

Left Out: 496.535 $\pm$ 1.971  $\chi^2/\text{NDF}$ : 2589.1/24

Right Out: 723.997 $\pm$ 2.823  $\chi^2/\text{NDF}$ : 3696.4/20

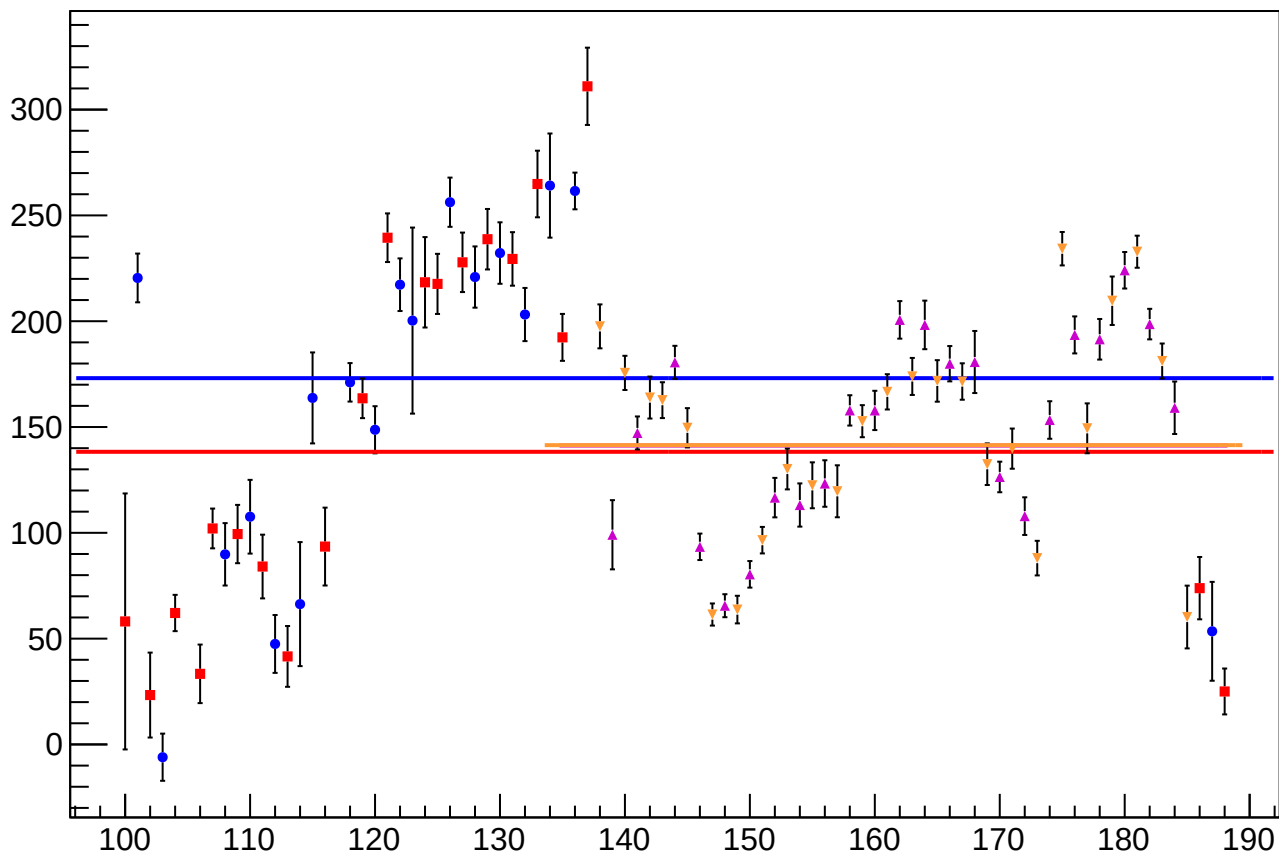
Left In: 496.393 $\pm$ 1.985  $\chi^2/\text{NDF}$ : 2295.8/22

+ sign 533.014 $\pm$ 1.791  $\chi^2/\text{NDF}$ : 7268.4/42

All: 554.254 $\pm$ 1.203  $\chi^2/\text{NDF}$ : 17865.8/86

- sign 571.716 $\pm$ 1.624  $\chi^2/\text{NDF}$ : 10341.1/43

# reg\_asym\_atr2\_diff\_bpm4eY\_slope vs Slug



Right In: 173.093 $\pm$ 3.173  $\chi^2$ /NDF: 665.2/17

Left Out: 141.430 $\pm$ 1.704  $\chi^2$ /NDF: 957.7/24

Right Out: 138.287 $\pm$ 2.875  $\chi^2$ /NDF: 836.0/20

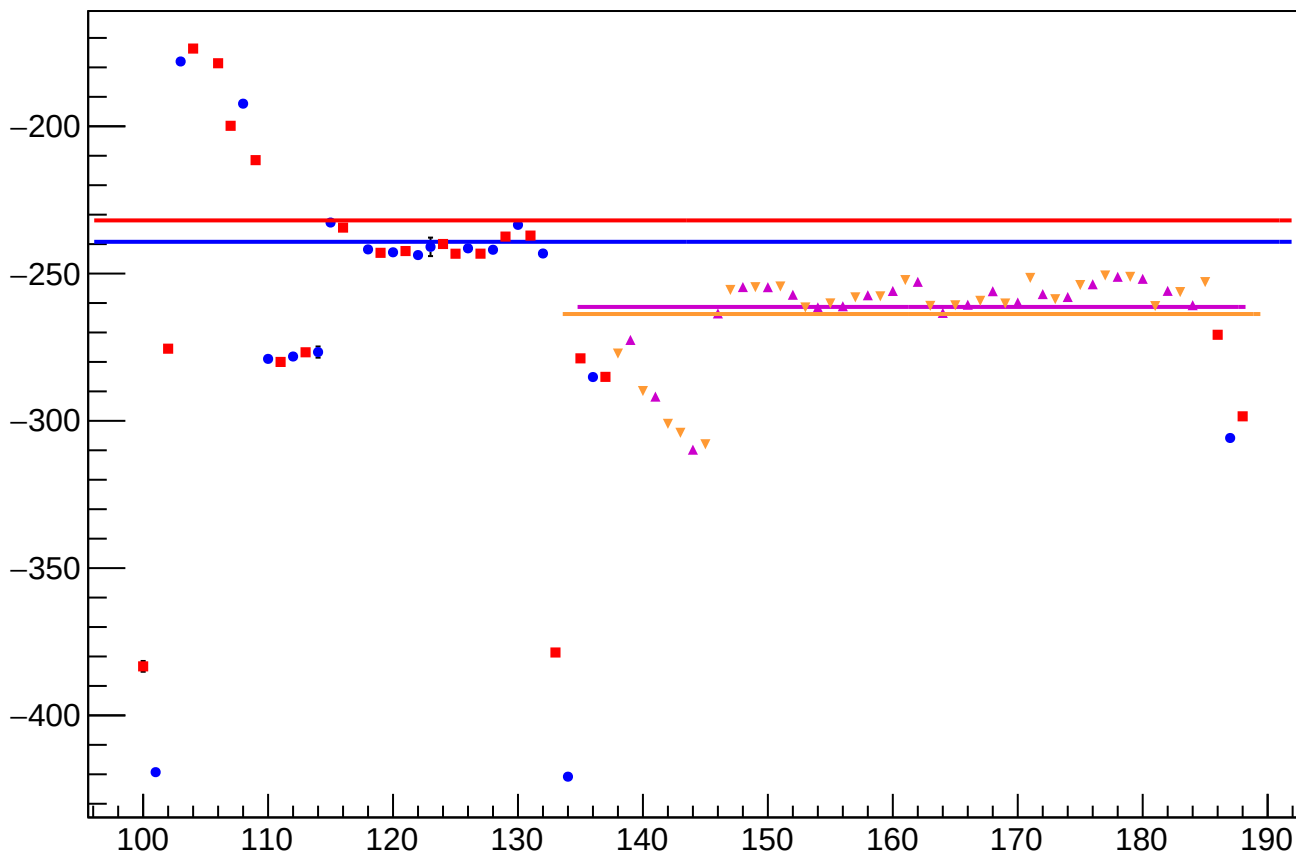
Left In: 141.248 $\pm$ 1.744  $\chi^2$ /NDF: 744.2/22

+ sign 148.518 $\pm$ 1.501  $\chi^2$ /NDF: 1700.2/42

All: 144.457 $\pm$ 1.058  $\chi^2$ /NDF: 3295.7/86

- sign 140.452 $\pm$ 1.491  $\chi^2$ /NDF: 1581.0/43

# reg\_asym\_atr2\_diff\_bpm12X\_slope vs Slug



Right In: -239.218 $\pm$ 0.159  $\chi^2$ /NDF: 169688.3/17

Left Out: -263.734 $\pm$ 0.081  $\chi^2$ /NDF: 37922.0/24

Right Out: -231.952 $\pm$ 0.145  $\chi^2$ /NDF: 118375.0/20

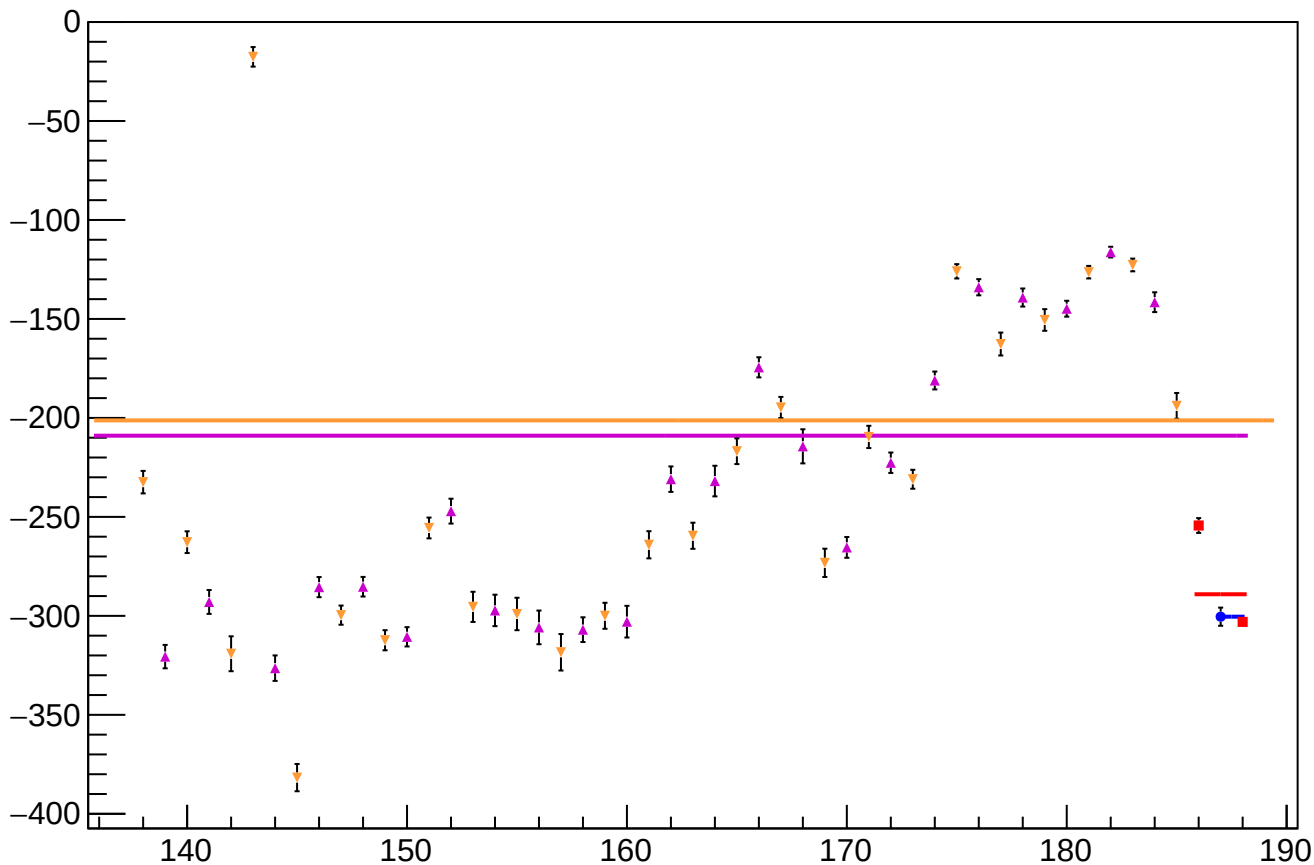
Left In: -261.325 $\pm$ 0.082  $\chi^2$ /NDF: 23449.2/22

+ sign -258.625 $\pm$ 0.072  $\chi^2$ /NDF: 226484.7/42

All: -256.395 $\pm$ 0.051  $\chi^2$ /NDF: 401352.7/86

- sign -254.247 $\pm$ 0.071  $\chi^2$ /NDF: 173010.4/43

# reg\_asym\_atl\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $-300.418 \pm 4.592$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-201.261 \pm 1.065$   $\chi^2/\text{NDF}$ : 6110.1/24

Right Out:  $-289.081 \pm 2.002$   $\chi^2/\text{NDF}$ : 121.0/1

Left In:  $-208.981 \pm 1.078$   $\chi^2/\text{NDF}$ : 4865.2/22

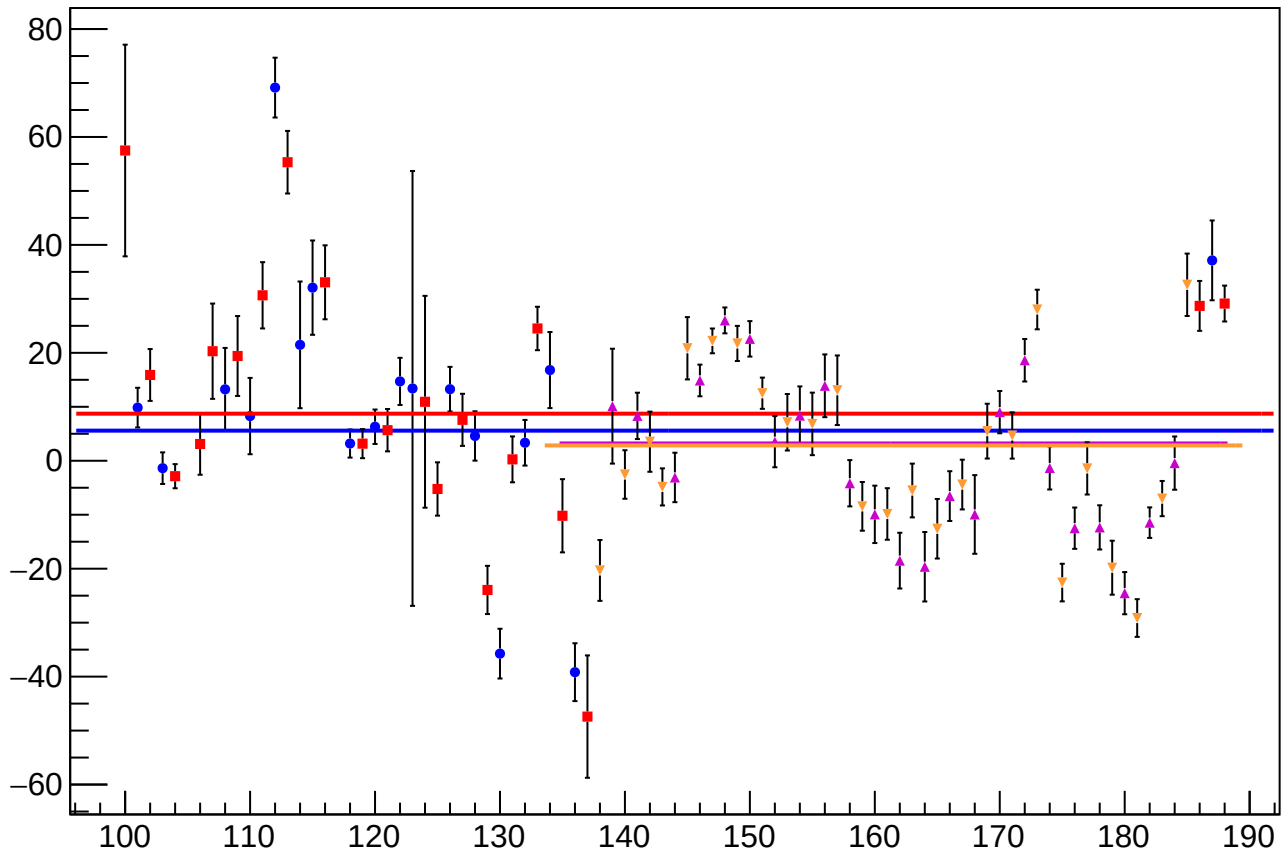
+ sign  $-206.327 \pm 1.038$   $\chi^2/\text{NDF}$ : 6552.6/25

All:  $-217.578 \pm 0.700$   $\chi^2/\text{NDF}$ : 12995.6/50

- sign  $-226.991 \pm 0.949$   $\chi^2/\text{NDF}$ : 6227.2/24



# reg\_asym\_atl\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $5.580 \pm 1.077$   $\chi^2/\text{NDF}: 330.5/17$

Left Out:  $2.841 \pm 0.824$   $\chi^2/\text{NDF}: 420.6/24$

Right Out:  $8.727 \pm 0.996$   $\chi^2/\text{NDF}: 304.4/20$

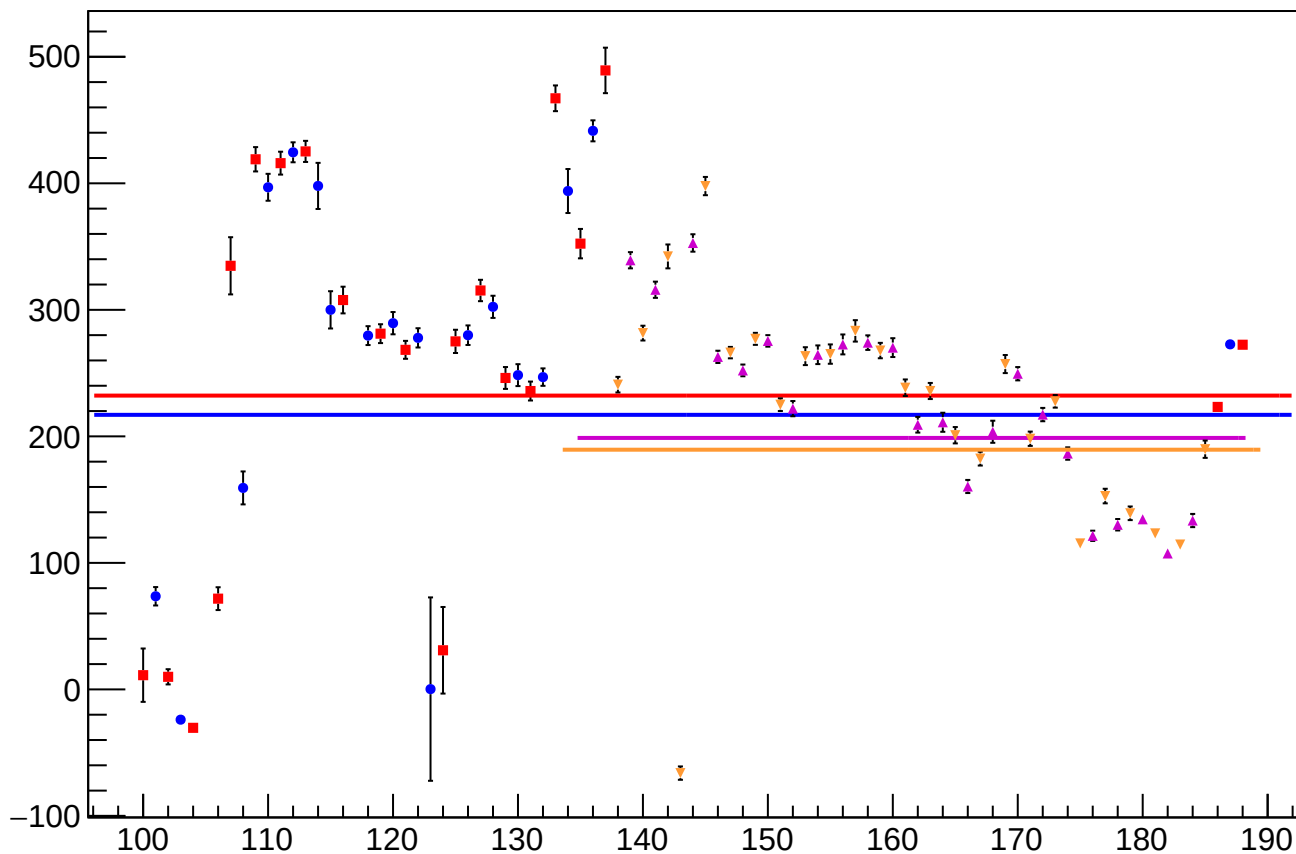
Left In:  $3.208 \pm 0.854$   $\chi^2/\text{NDF}: 323.8/22$

+ sign  $3.852 \pm 0.655$   $\chi^2/\text{NDF}: 755.2/42$

All:  $4.708 \pm 0.461$   $\chi^2/\text{NDF}: 1404.5/86$

- sign  $5.548 \pm 0.648$   $\chi^2/\text{NDF}: 645.9/43$

# reg\_asym\_atl\_avg\_diff\_bpm4eX\_slope vs Slug



Right In: 217.009 $\pm$ 1.747  $\chi^2$ /NDF: 7031.9/17

Left Out: 189.453 $\pm$ 1.070  $\chi^2$ /NDF: 6649.7/24

Right Out: 232.219 $\pm$ 1.234  $\chi^2$ /NDF: 9082.9/20

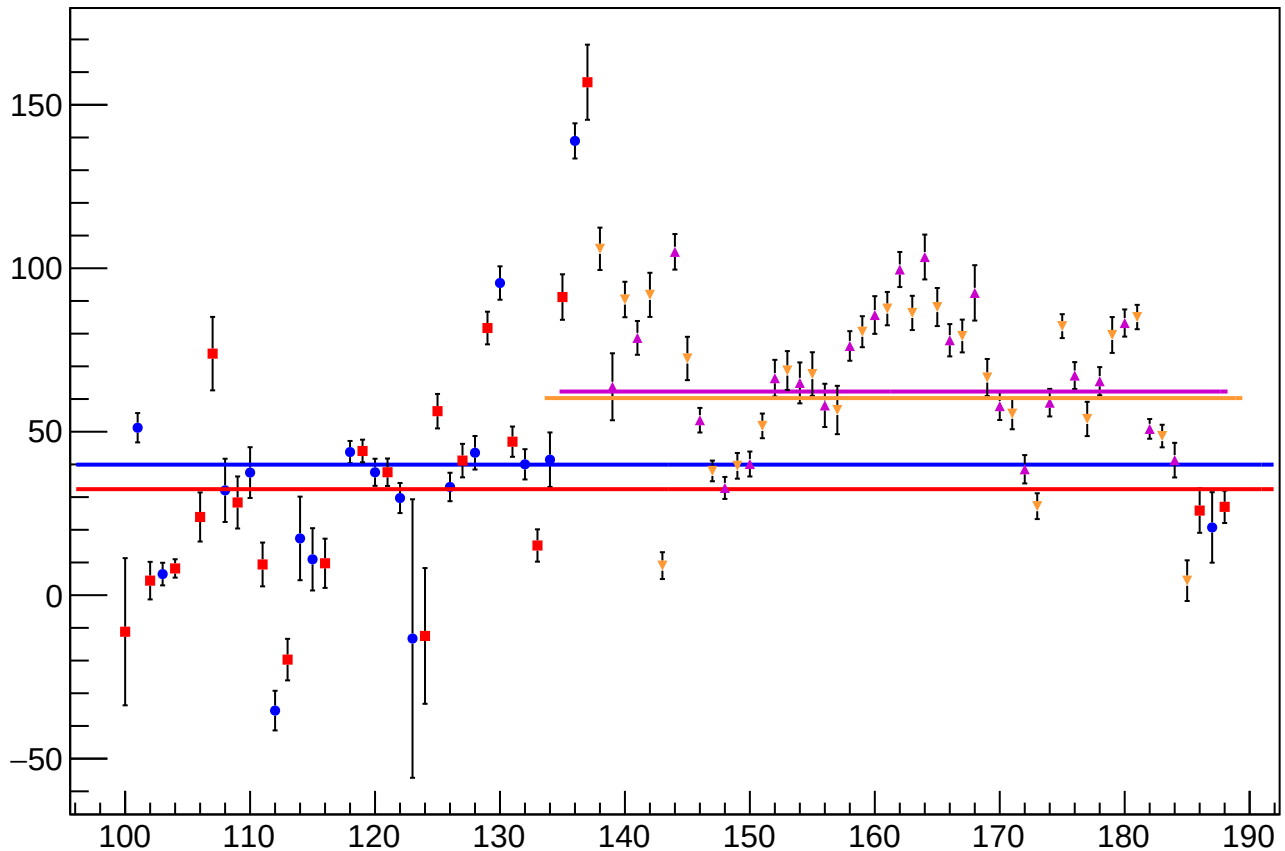
Left In: 198.762 $\pm$ 1.078  $\chi^2$ /NDF: 4590.0/22

+ sign 196.970 $\pm$ 0.912  $\chi^2$ /NDF: 13862.6/42

All: 206.052 $\pm$ 0.606  $\chi^2$ /NDF: 28130.2/86

- sign 213.244 $\pm$ 0.812  $\chi^2$ /NDF: 14090.0/43

# reg\_asym\_atl\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $39.931 \pm 1.259$   $\chi^2/\text{NDF}: 738.2/17$

Left Out:  $60.287 \pm 0.945$   $\chi^2/\text{NDF}: 714.8/24$

Right Out:  $32.430 \pm 1.195$   $\chi^2/\text{NDF}: 556.4/20$

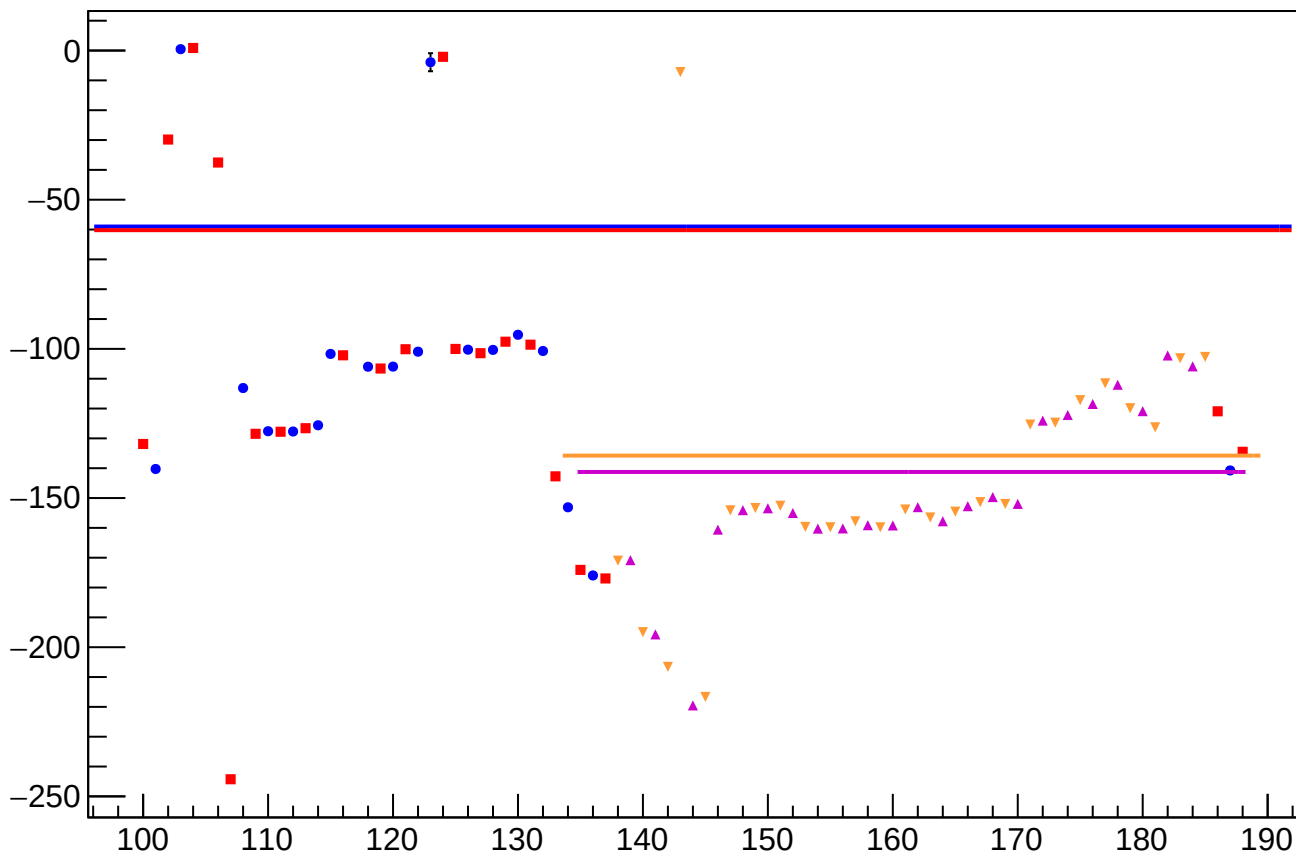
Left In:  $62.290 \pm 0.971$   $\chi^2/\text{NDF}: 411.6/22$

+ sign  $52.950 \pm 0.756$   $\chi^2/\text{NDF}: 1620.2/42$

All:  $51.679 \pm 0.534$   $\chi^2/\text{NDF}: 2969.8/86$

- sign  $50.416 \pm 0.754$   $\chi^2/\text{NDF}: 1343.9/43$

# reg\_asym\_atl\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-58.992 \pm 0.061$   $\chi^2/\text{NDF}: 1123735.9/17$

Left Out:  $-135.775 \pm 0.045$   $\chi^2/\text{NDF}: 742021.1/24$

Right Out:  $-60.210 \pm 0.058$   $\chi^2/\text{NDF}: 1116576.7/20$

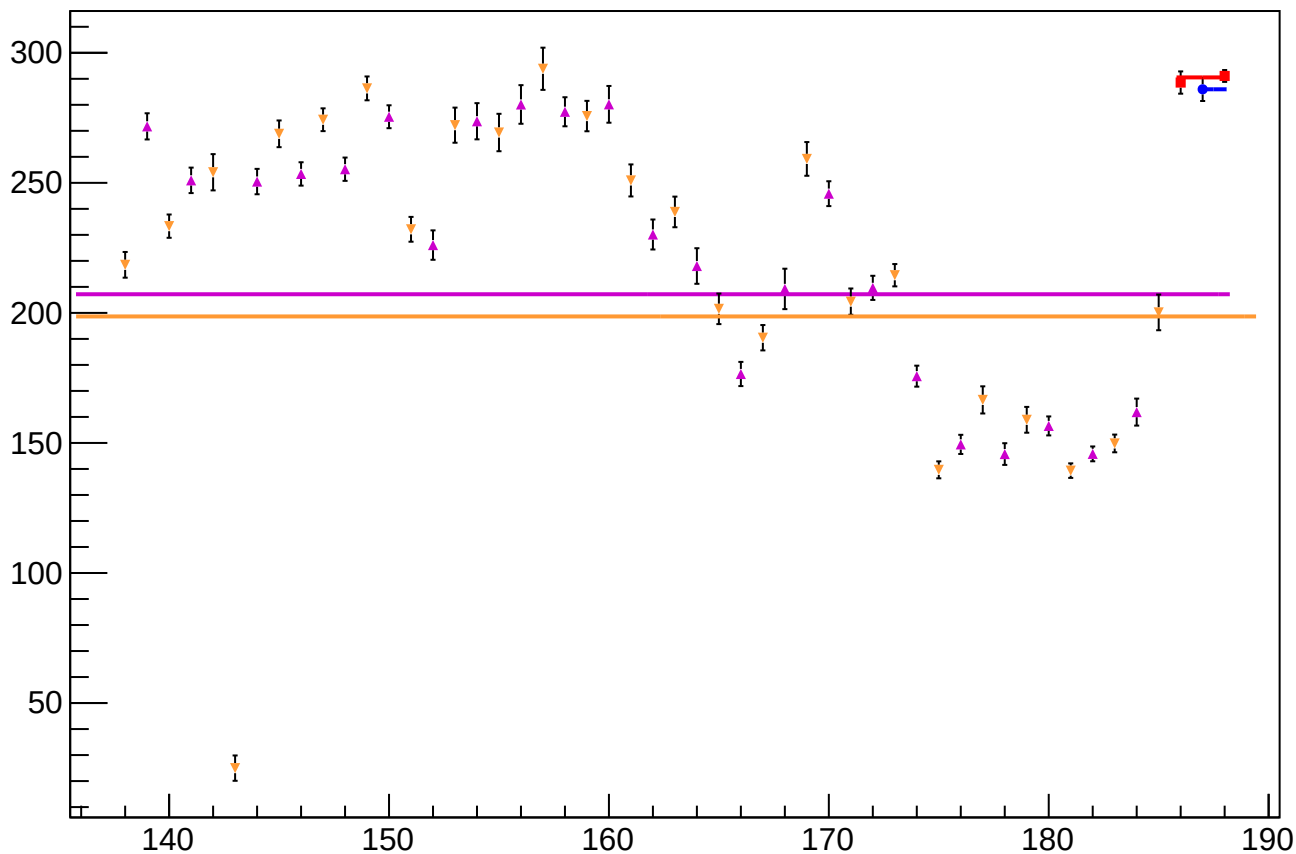
Left In:  $-141.259 \pm 0.045$   $\chi^2/\text{NDF}: 350045.9/22$

+ sign  $-109.120 \pm 0.036$   $\chi^2/\text{NDF}: 2891360.6/42$

All:  $-109.962 \pm 0.025$   $\chi^2/\text{NDF}: 5573092.5/86$

- sign  $-110.783 \pm 0.036$   $\chi^2/\text{NDF}: 2680656.5/43$

# reg\_asym\_atl\_dd\_diff\_bpm1X\_slope vs Slug



Right In: 285.970 $\pm$ 4.498  $\chi^2$ /NDF: 0.0/0

Left Out: 198.637 $\pm$ 0.966  $\chi^2$ /NDF: 4146.6/24

Right Out: 290.538 $\pm$ 2.012  $\chi^2$ /NDF: 0.3/1

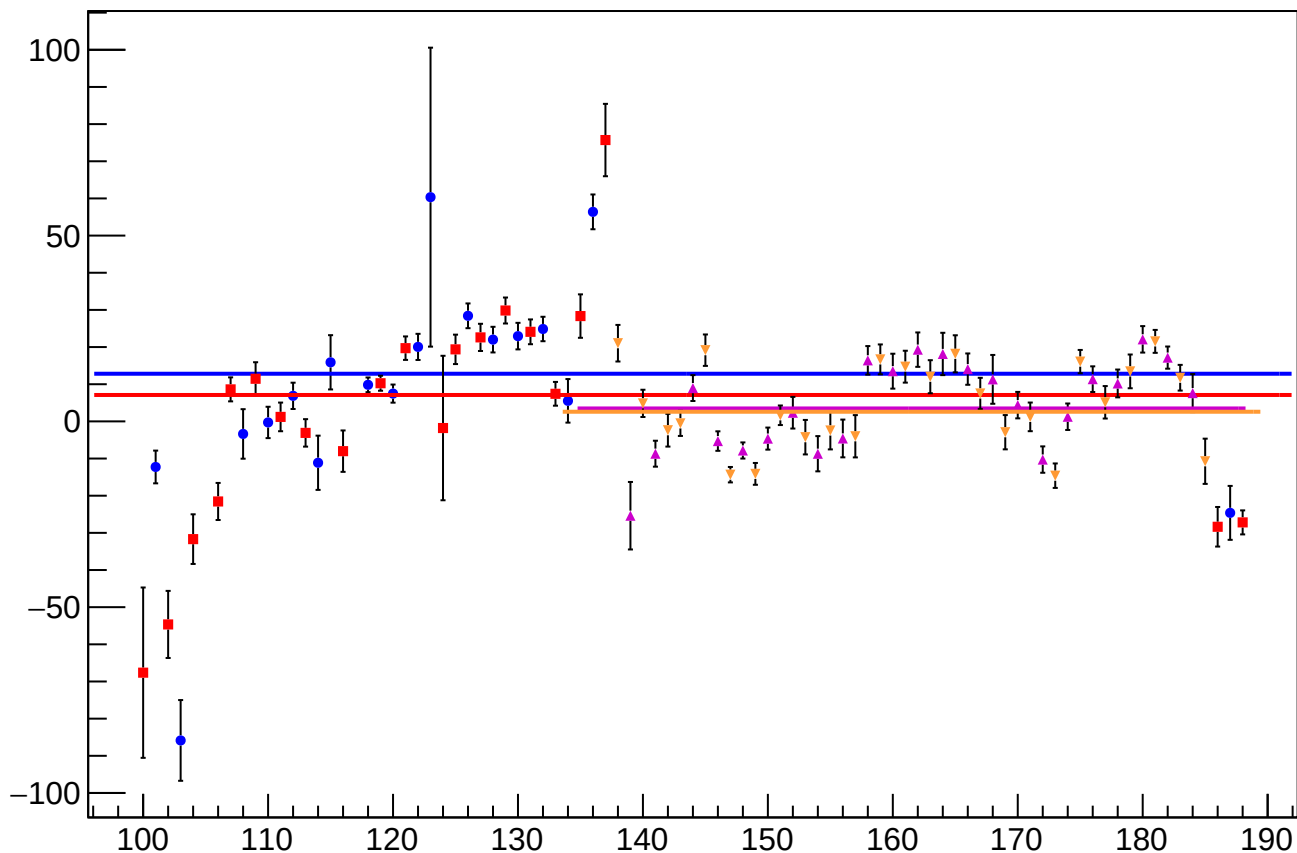
Left In: 207.171 $\pm$ 0.986  $\chi^2$ /NDF: 2631.6/22

+ sign 202.488 $\pm$ 0.945  $\chi^2$ /NDF: 4506.9/25

All: 213.576 $\pm$ 0.646  $\chi^2$ /NDF: 8782.1/50

- sign 223.317 $\pm$ 0.885  $\chi^2$ /NDF: 4016.4/24

# reg\_asym\_atl\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $12.821 \pm 0.912$   $\chi^2/\text{NDF}: 322.3/17$

Left Out:  $2.595 \pm 0.744$   $\chi^2/\text{NDF}: 274.3/24$

Right Out:  $7.106 \pm 0.870$   $\chi^2/\text{NDF}: 476.6/20$

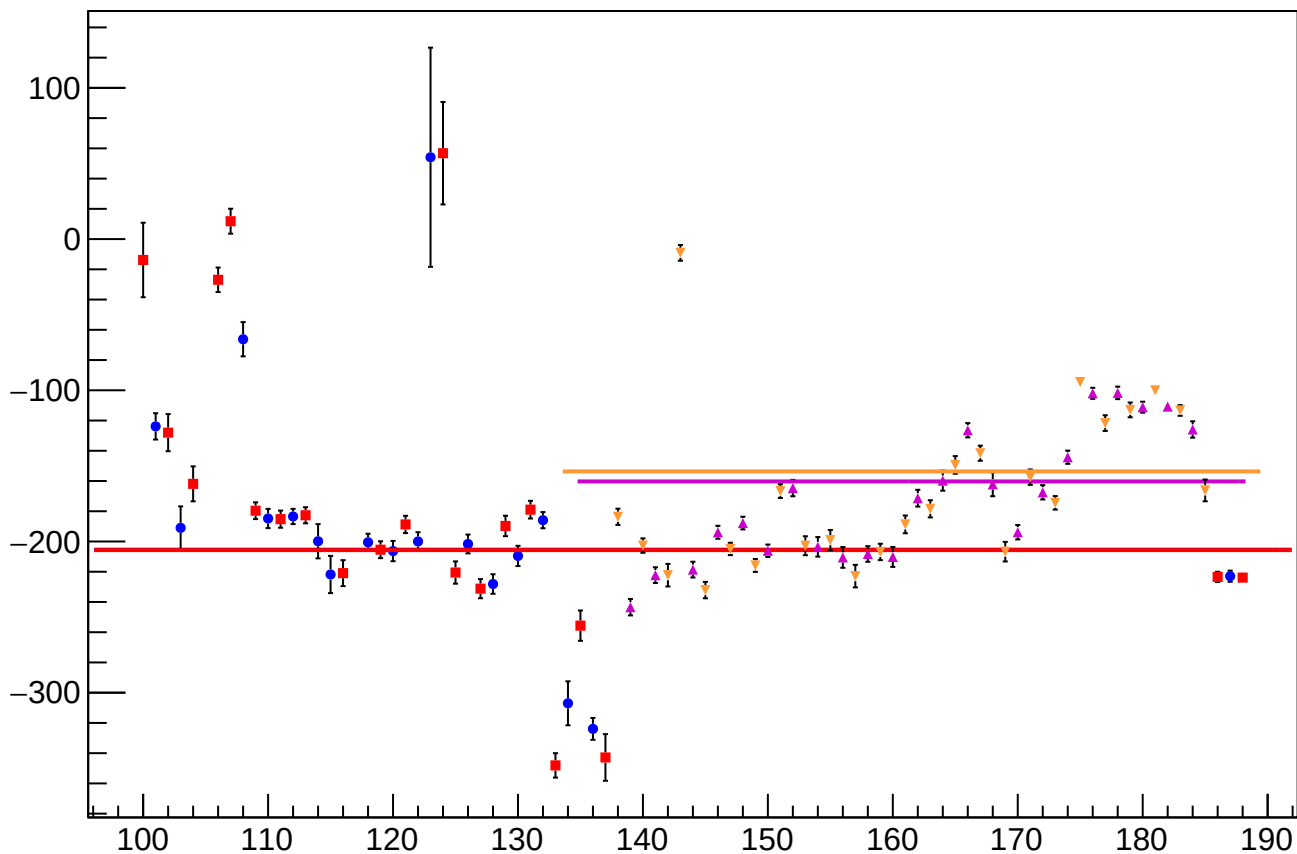
Left In:  $3.478 \pm 0.772$   $\chi^2/\text{NDF}: 194.7/22$

+ sign  $6.680 \pm 0.577$   $\chi^2/\text{NDF}: 672.1/42$

All:  $5.879 \pm 0.408$   $\chi^2/\text{NDF}: 1357.0/86$

- sign  $5.077 \pm 0.577$   $\chi^2/\text{NDF}: 681.0/43$

# reg\_asym\_atl\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $-205.442 \pm 1.603$   $\chi^2/\text{NDF}$ : 651.1/17

Left Out:  $-153.649 \pm 0.970$   $\chi^2/\text{NDF}$ : 2930.9/24

Right Out:  $-205.699 \pm 1.172$   $\chi^2/\text{NDF}$ : 2012.1/20

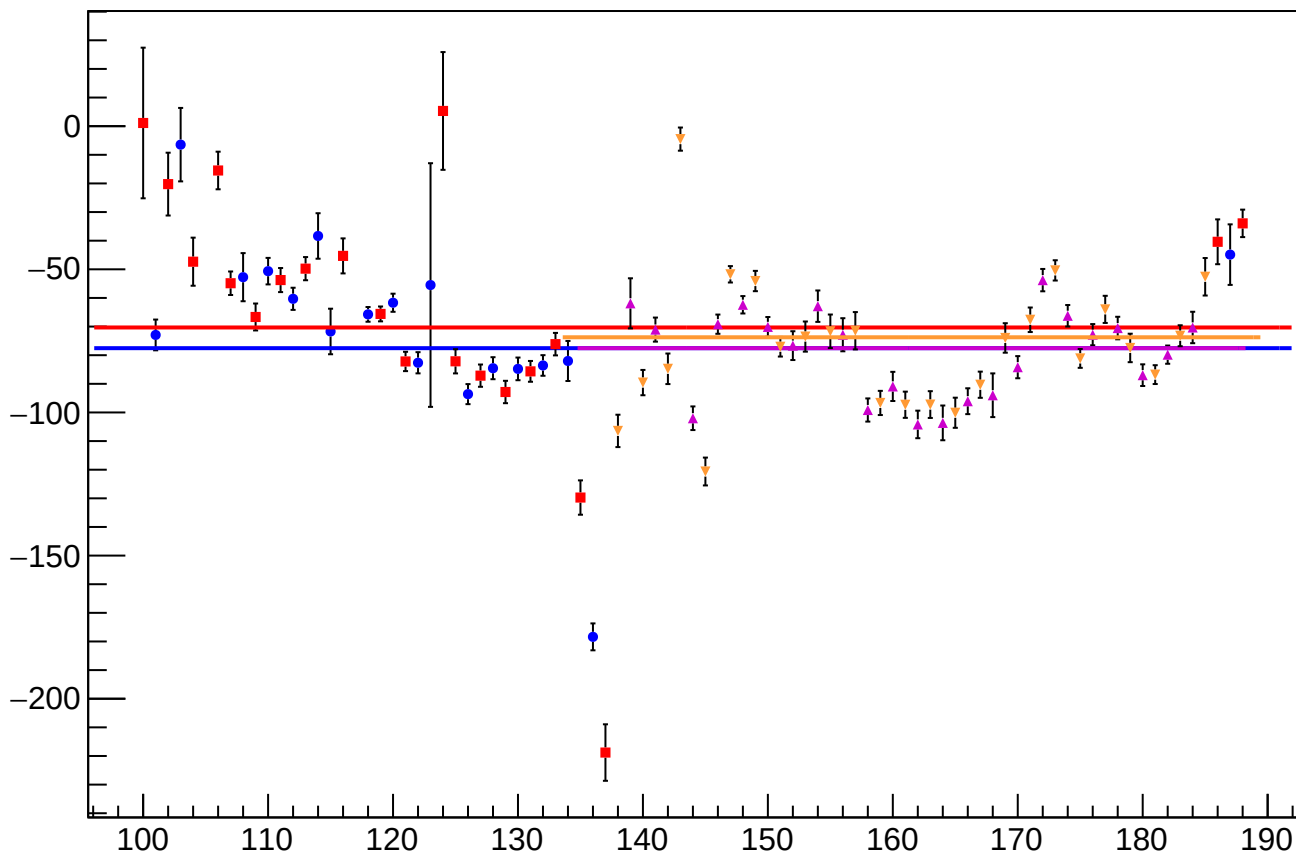
Left In:  $-160.279 \pm 0.985$   $\chi^2/\text{NDF}$ : 2049.4/22

+ sign  $-167.523 \pm 0.830$   $\chi^2/\text{NDF}$ : 4345.9/42

All:  $-173.851 \pm 0.558$   $\chi^2/\text{NDF}$ : 9393.7/86

- sign  $-179.076 \pm 0.754$   $\chi^2/\text{NDF}$ : 4941.6/43

# reg\_asym\_atl\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-77.545 \pm 1.060$   $\chi^2/\text{NDF}$ : 667.8/17

Left Out:  $-73.741 \pm 0.855$   $\chi^2/\text{NDF}$ : 728.3/24

Right Out:  $-70.316 \pm 1.021$   $\chi^2/\text{NDF}$ : 683.7/20

Left In:  $-77.545 \pm 0.880$   $\chi^2/\text{NDF}$ : 252.7/22

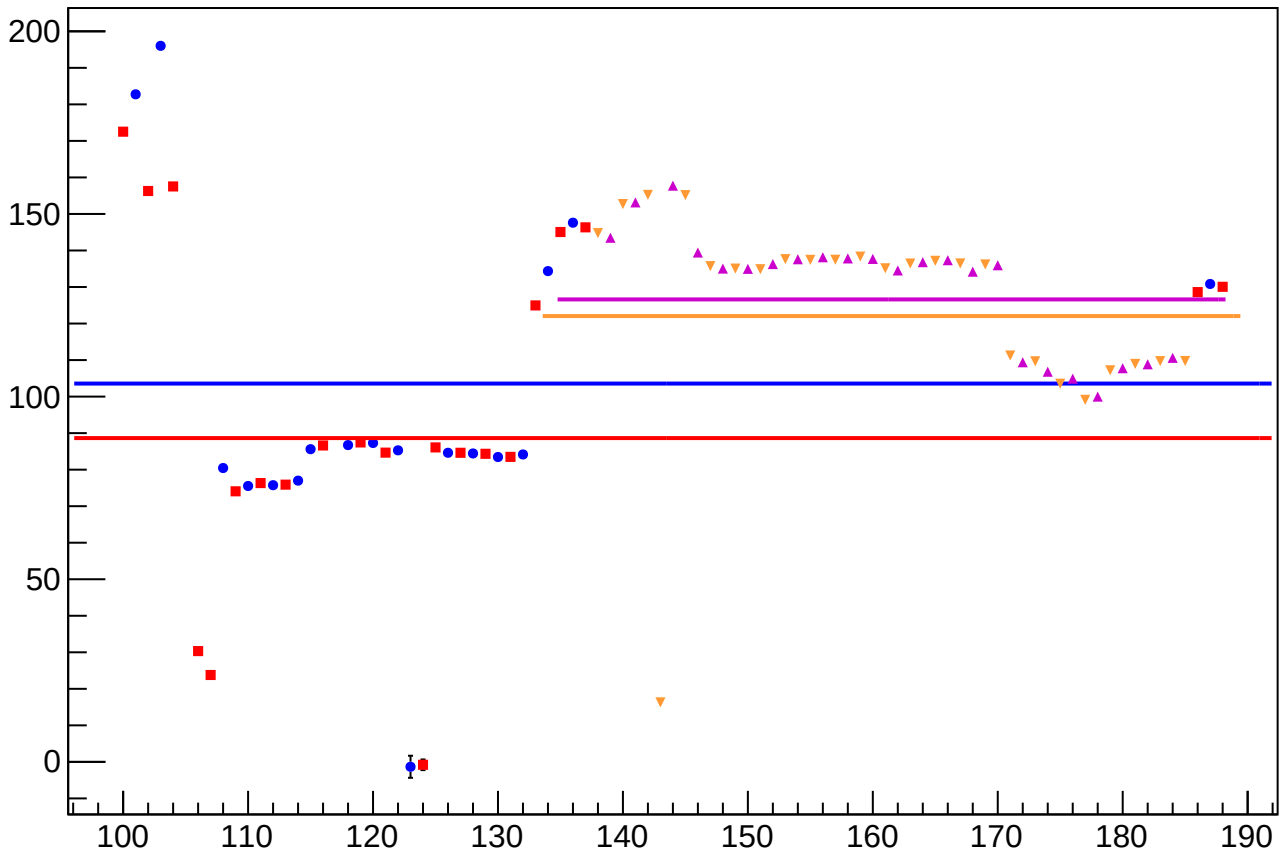
+ sign  $-75.239 \pm 0.665$   $\chi^2/\text{NDF}$ : 1403.9/42

All:  $-74.851 \pm 0.471$   $\chi^2/\text{NDF}$ : 2369.8/86

- sign  $-74.462 \pm 0.666$   $\chi^2/\text{NDF}$ : 965.2/43



# reg\_asym\_atl\_dd\_diff\_bpm12X\_slope vs Slug



Right In: 103.569 $\pm$ 0.070  $\chi^2$ /NDF: 275715.4/17

Left Out: 122.046 $\pm$ 0.040  $\chi^2$ /NDF: 437985.3/24

Right Out: 88.643 $\pm$ 0.061  $\chi^2$ /NDF: 462300.2/20

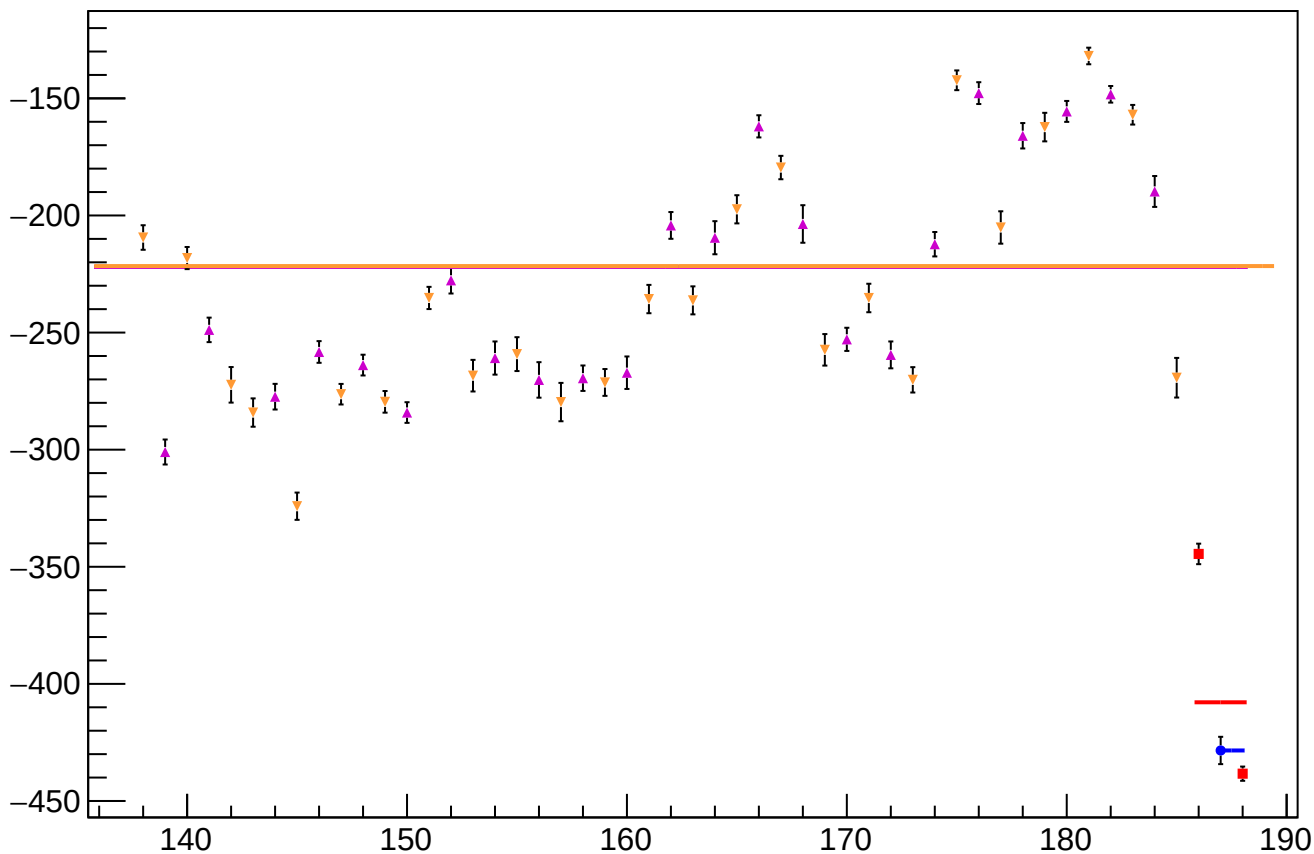
Left In: 126.605 $\pm$ 0.041  $\chi^2$ /NDF: 164757.9/22

+ sign 117.409 $\pm$ 0.035  $\chi^2$ /NDF: 766117.2/42

All: 116.107 $\pm$ 0.024  $\chi^2$ /NDF: 1662093.5/86

- sign 114.879 $\pm$ 0.034  $\chi^2$ /NDF: 893287.4/43

# reg\_asym\_atr\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $-428.433 \pm 5.832$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-221.606 \pm 1.087$   $\chi^2/\text{NDF}$ : 2565.8/24

Right Out:  $-407.864 \pm 2.496$   $\chi^2/\text{NDF}$ : 310.0/1

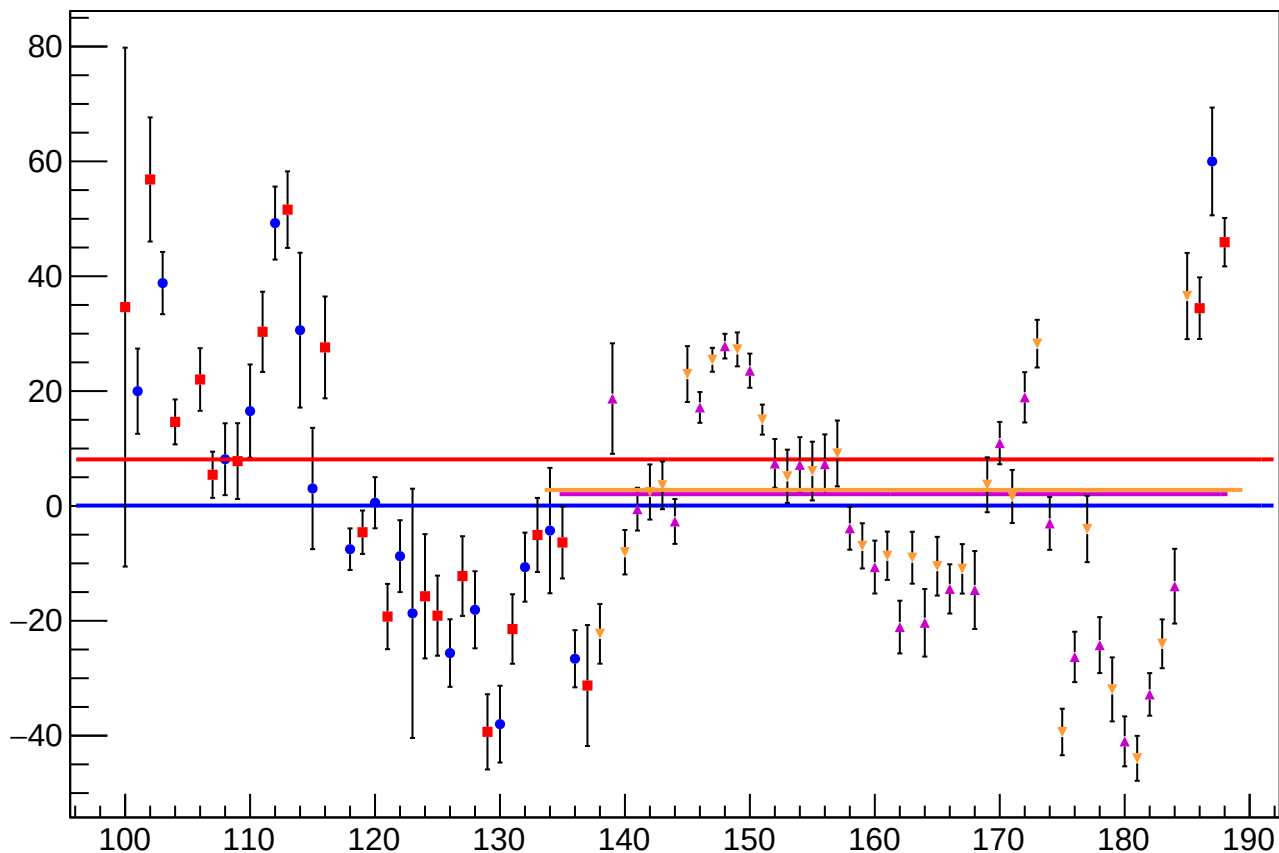
Left In:  $-221.980 \pm 1.098$   $\chi^2/\text{NDF}$ : 2190.6/22

+ sign  $-228.554 \pm 1.069$   $\chi^2/\text{NDF}$ : 3781.3/25

All:  $-241.064 \pm 0.732$   $\chi^2/\text{NDF}$ : 11187.4/50

- sign  $-252.128 \pm 1.005$   $\chi^2/\text{NDF}$ : 7147.9/24

# reg\_asym\_atr\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $0.067 \pm 1.494$   $\chi^2/\text{NDF}$ : 267.9/17

Left Out:  $2.800 \pm 0.810$   $\chi^2/\text{NDF}$ : 685.5/24

Right Out:  $8.107 \pm 1.292$   $\chi^2/\text{NDF}$ : 355.3/20

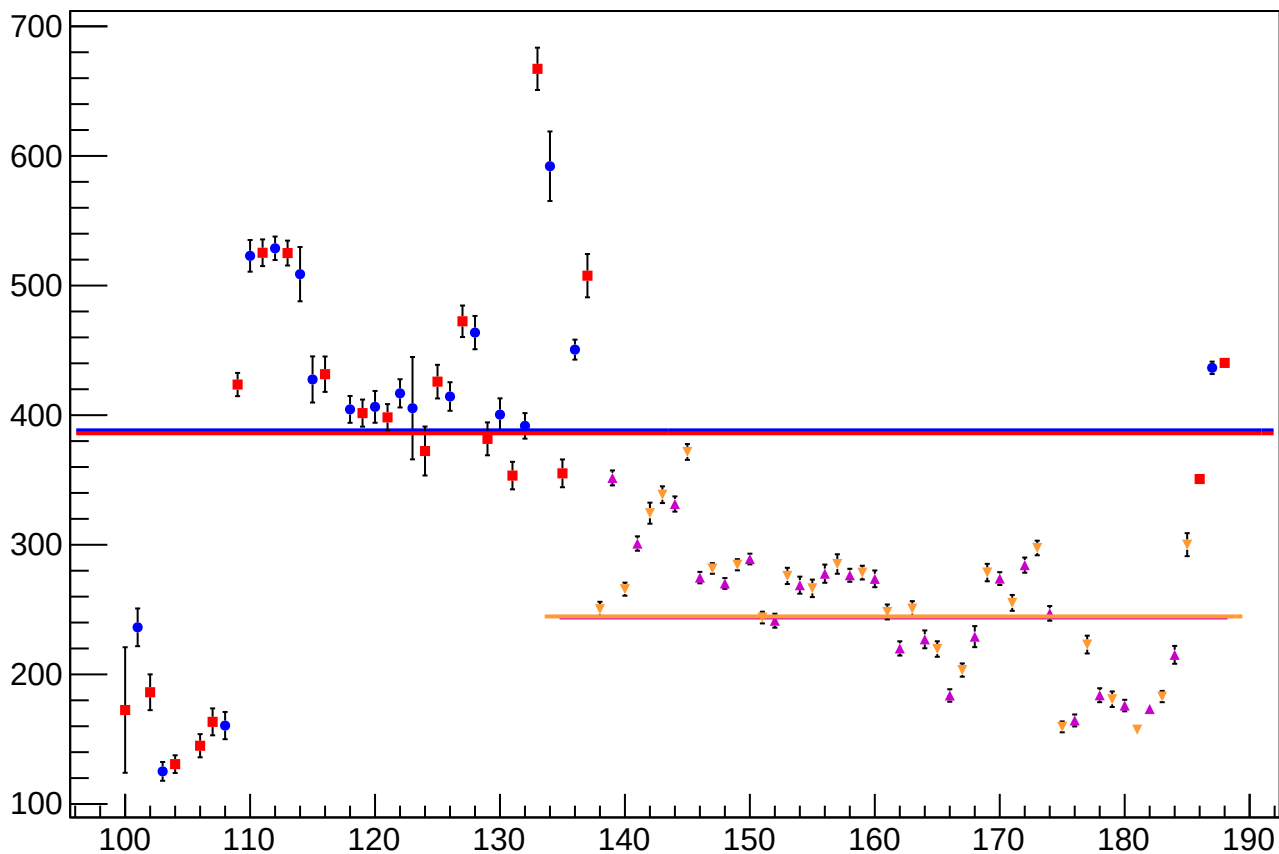
Left In:  $2.050 \pm 0.833$   $\chi^2/\text{NDF}$ : 592.6/22

+ sign  $2.179 \pm 0.712$   $\chi^2/\text{NDF}$ : 956.1/42

All:  $3.018 \pm 0.499$   $\chi^2/\text{NDF}$ : 1922.2/86

- sign  $3.829 \pm 0.700$   $\chi^2/\text{NDF}$ : 963.5/43

# reg\_asym\_atr\_avg\_diff\_bpm4eX\_slope vs Slug



Right In: 388.273 $\pm$ 2.391  $\chi^2$ /NDF: 2568.2/17

Left Out: 244.716 $\pm$ 1.085  $\chi^2$ /NDF: 2565.7/24

Right Out: 386.009 $\pm$ 1.577  $\chi^2$ /NDF: 4268.6/20

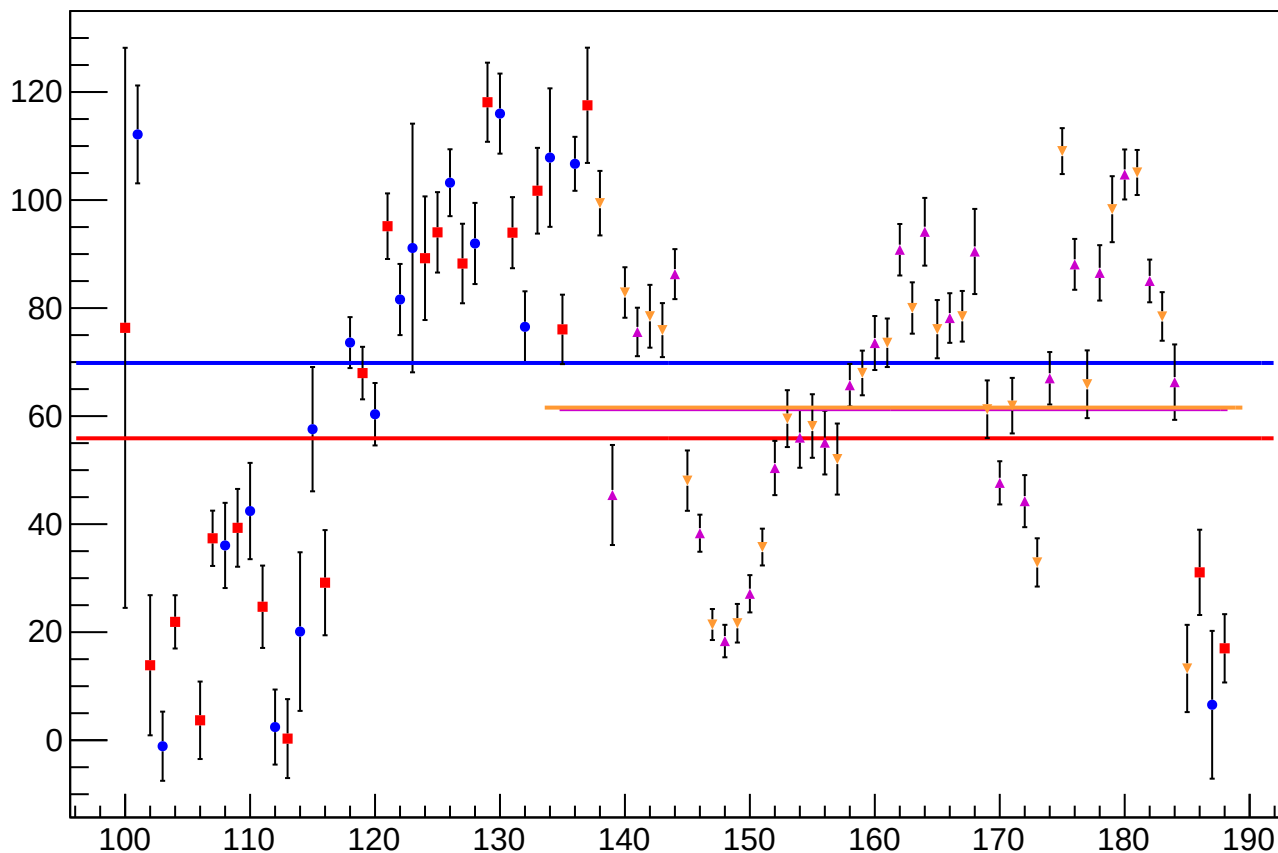
Left In: 243.933 $\pm$ 1.090  $\chi^2$ /NDF: 2294.8/22

+ sign 269.210 $\pm$ 0.988  $\chi^2$ /NDF: 8123.4/42

All: 280.543 $\pm$ 0.664  $\chi^2$ /NDF: 20421.2/86

- sign 289.883 $\pm$ 0.897  $\chi^2$ /NDF: 12057.5/43

# reg\_asym\_atr\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 69.840 $\pm$ 1.729  $\chi^2$ /NDF: 448.7/17

Left Out: 61.575 $\pm$ 0.939  $\chi^2$ /NDF: 870.3/24

Right Out: 55.891 $\pm$ 1.550  $\chi^2$ /NDF: 543.6/20

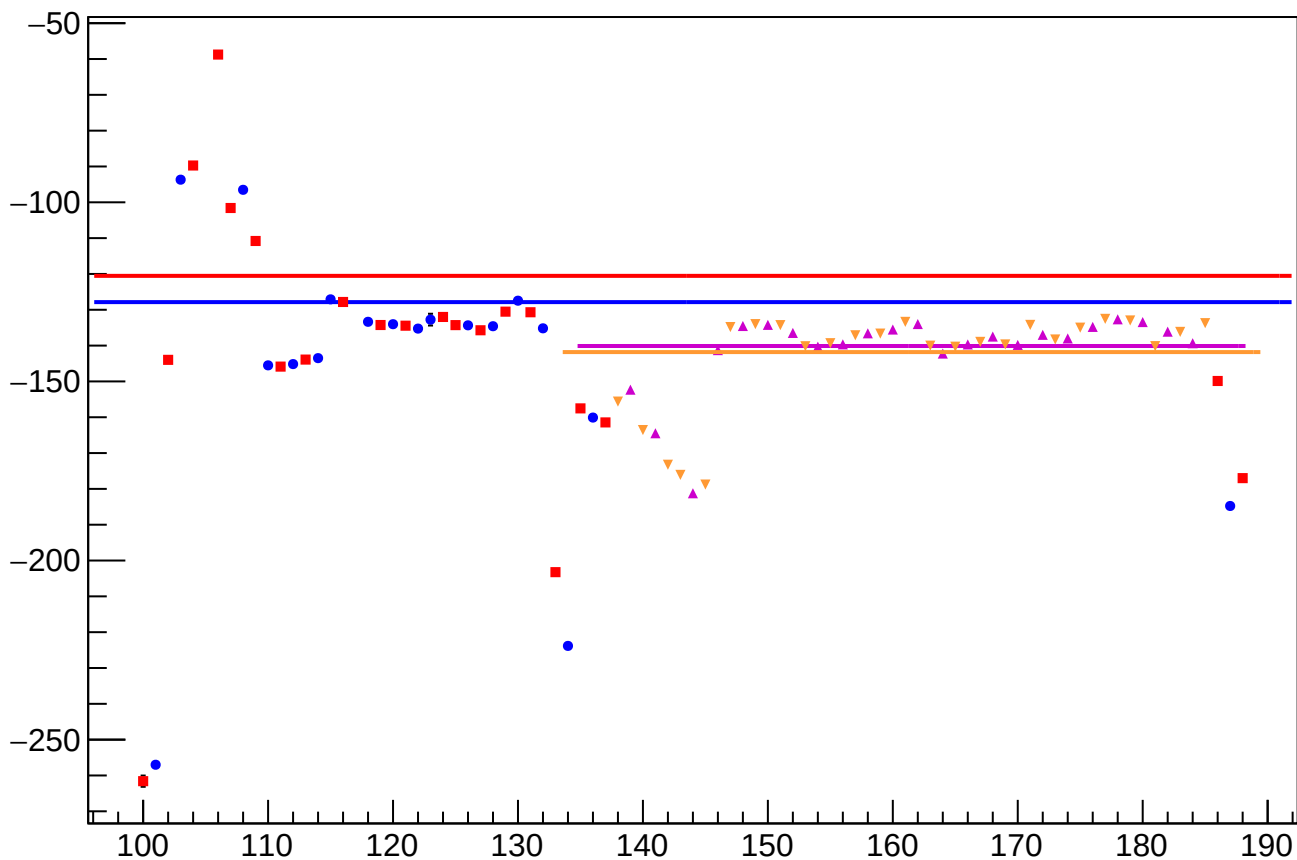
Left In: 61.286 $\pm$ 0.959  $\chi^2$ /NDF: 702.8/22

+ sign 63.457 $\pm$ 0.825  $\chi^2$ /NDF: 1336.6/42

All: 61.604 $\pm$ 0.580  $\chi^2$ /NDF: 2601.7/86

- sign 59.794 $\pm$ 0.815  $\chi^2$ /NDF: 1255.1/43

# reg\_asym\_atr\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-127.863 \pm 0.089$   $\chi^2/\text{NDF}: 172531.2/17$

Left Out:  $-141.811 \pm 0.045$   $\chi^2/\text{NDF}: 77727.6/24$

Right Out:  $-120.532 \pm 0.080$   $\chi^2/\text{NDF}: 201838.8/20$

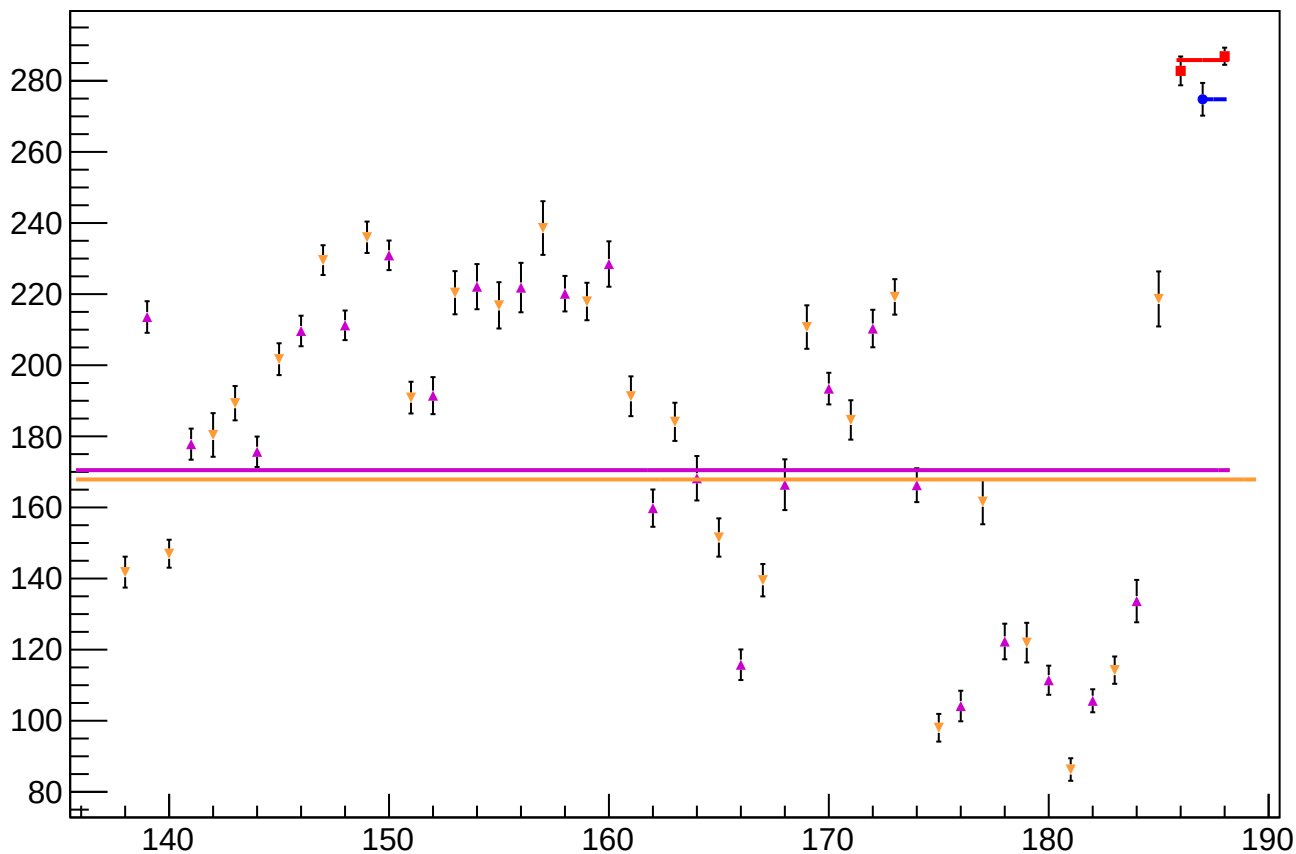
Left In:  $-140.112 \pm 0.045$   $\chi^2/\text{NDF}: 48400.6/22$

+ sign  $-138.982 \pm 0.040$   $\chi^2/\text{NDF}: 269908.1/42$

All:  $-137.149 \pm 0.028$   $\chi^2/\text{NDF}: 570144.5/86$

- sign  $-135.401 \pm 0.039$   $\chi^2/\text{NDF}: 296134.6/43$

# reg\_asym\_atr\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $274.804 \pm 4.602$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $167.868 \pm 0.973$   $\chi^2/\text{NDF}$ : 2465.4/24

Right Out:  $285.833 \pm 2.072$   $\chi^2/\text{NDF}$ : 0.8/1

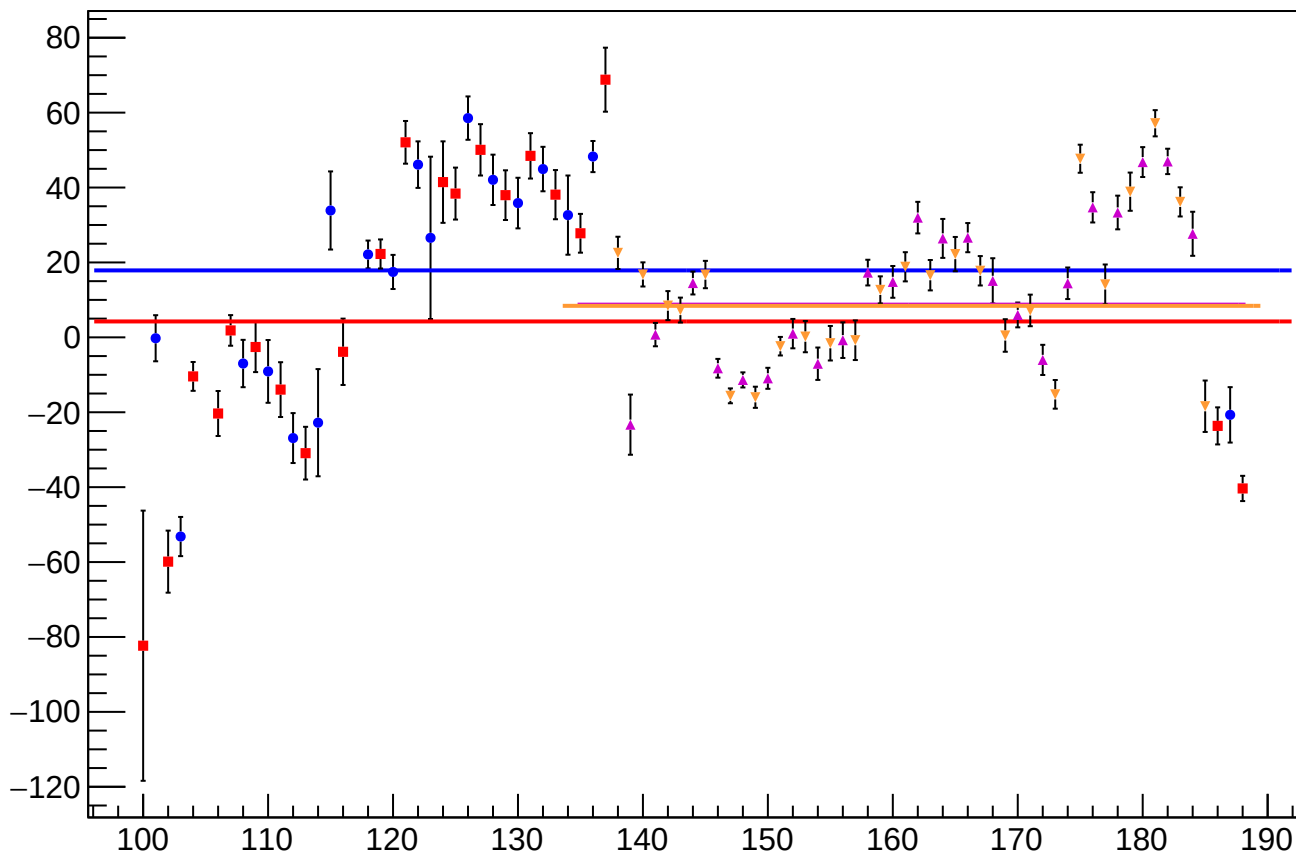
Left In:  $170.487 \pm 0.991$   $\chi^2/\text{NDF}$ : 2036.5/22

+ sign  $172.448 \pm 0.952$   $\chi^2/\text{NDF}$ : 2982.3/25

All:  $182.827 \pm 0.652$   $\chi^2/\text{NDF}$ : 7765.8/50

- sign  $191.975 \pm 0.894$   $\chi^2/\text{NDF}$ : 4560.1/24

# reg\_asym\_atr\_dd\_diff\_bpm4aY\_slope vs Slug



Right In: 17.874 $\pm$ 1.451  $\chi^2$ /NDF: 469.3/17

Left Out: 8.415 $\pm$ 0.731  $\chi^2$ /NDF: 750.6/24

Right Out: 4.245 $\pm$ 1.245  $\chi^2$ /NDF: 692.9/20

Left In: 8.730 $\pm$ 0.757  $\chi^2$ /NDF: 630.1/22

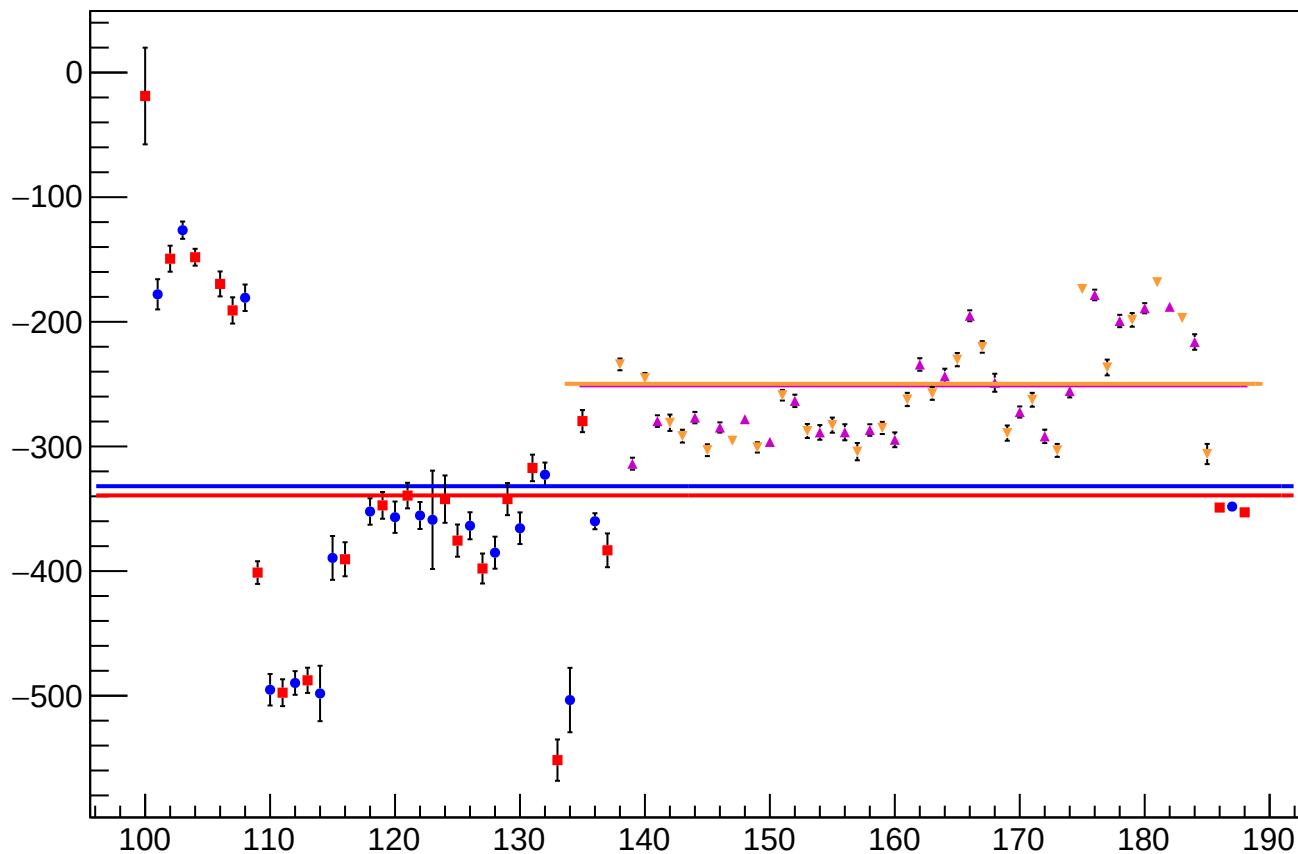
+ sign 10.330 $\pm$ 0.653  $\chi^2$ /NDF: 1253.8/42

All: 8.912 $\pm$ 0.459  $\chi^2$ /NDF: 2595.7/86

- sign 7.520 $\pm$ 0.647  $\chi^2$ /NDF: 1332.5/43



# reg\_asym\_atr\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $-331.876 \pm 2.180$   $\chi^2/\text{NDF}: 1878.8/17$

Left Out:  $-249.759 \pm 0.975$   $\chi^2/\text{NDF}: 2232.5/24$

Right Out:  $-339.283 \pm 1.386$   $\chi^2/\text{NDF}: 2491.1/20$

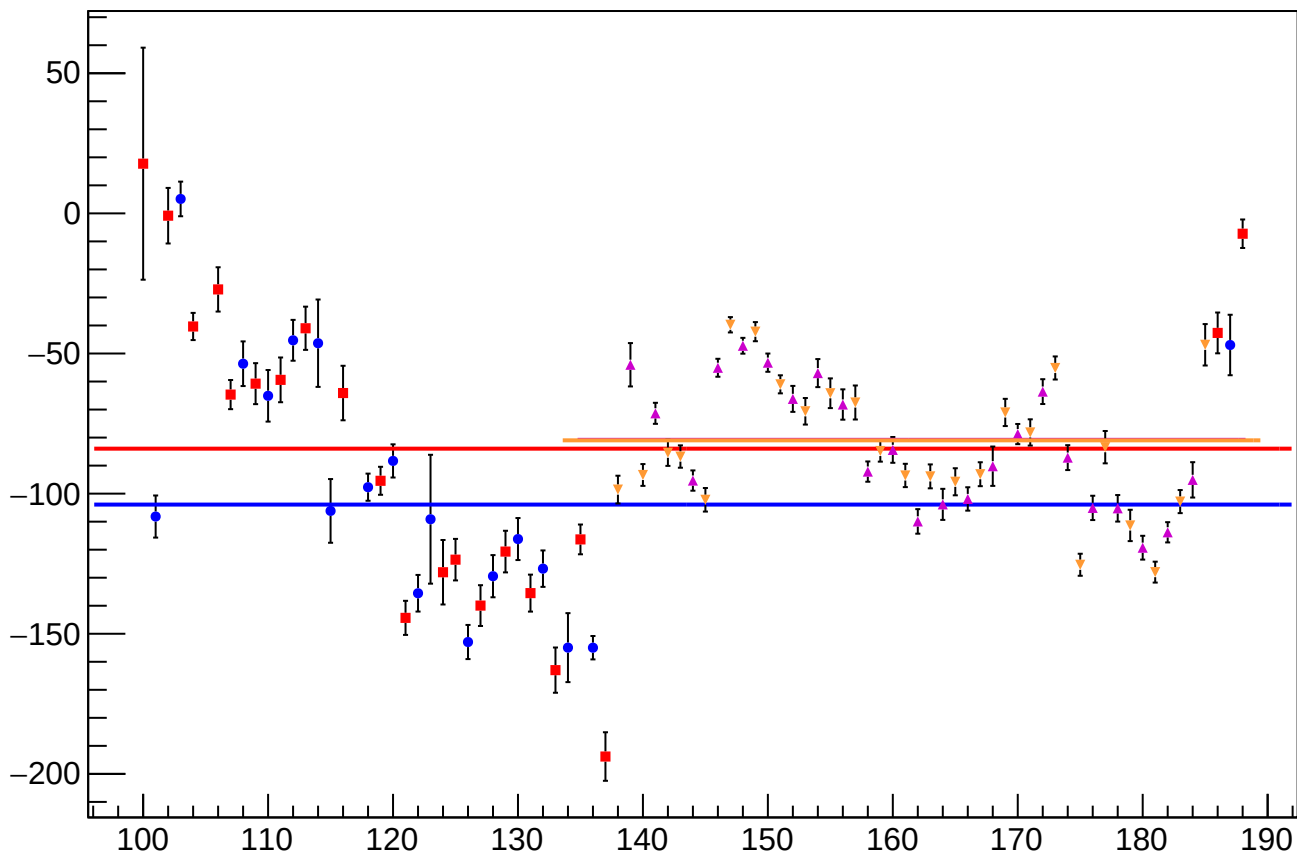
Left In:  $-251.002 \pm 0.987$   $\chi^2/\text{NDF}: 1958.3/22$

+ sign  $-263.454 \pm 0.890$   $\chi^2/\text{NDF}: 5294.0/42$

All:  $-272.943 \pm 0.597$   $\chi^2/\text{NDF}: 12640.9/86$

- sign  $-280.682 \pm 0.804$   $\chi^2/\text{NDF}: 7140.5/43$

# reg\_asym\_atr\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-103.906 \pm 1.673$   $\chi^2/\text{NDF}$ : 766.0/17

Left Out:  $-80.981 \pm 0.846$   $\chi^2/\text{NDF}$ : 911.2/24

Right Out:  $-83.954 \pm 1.503$   $\chi^2/\text{NDF}$ : 1122.6/20

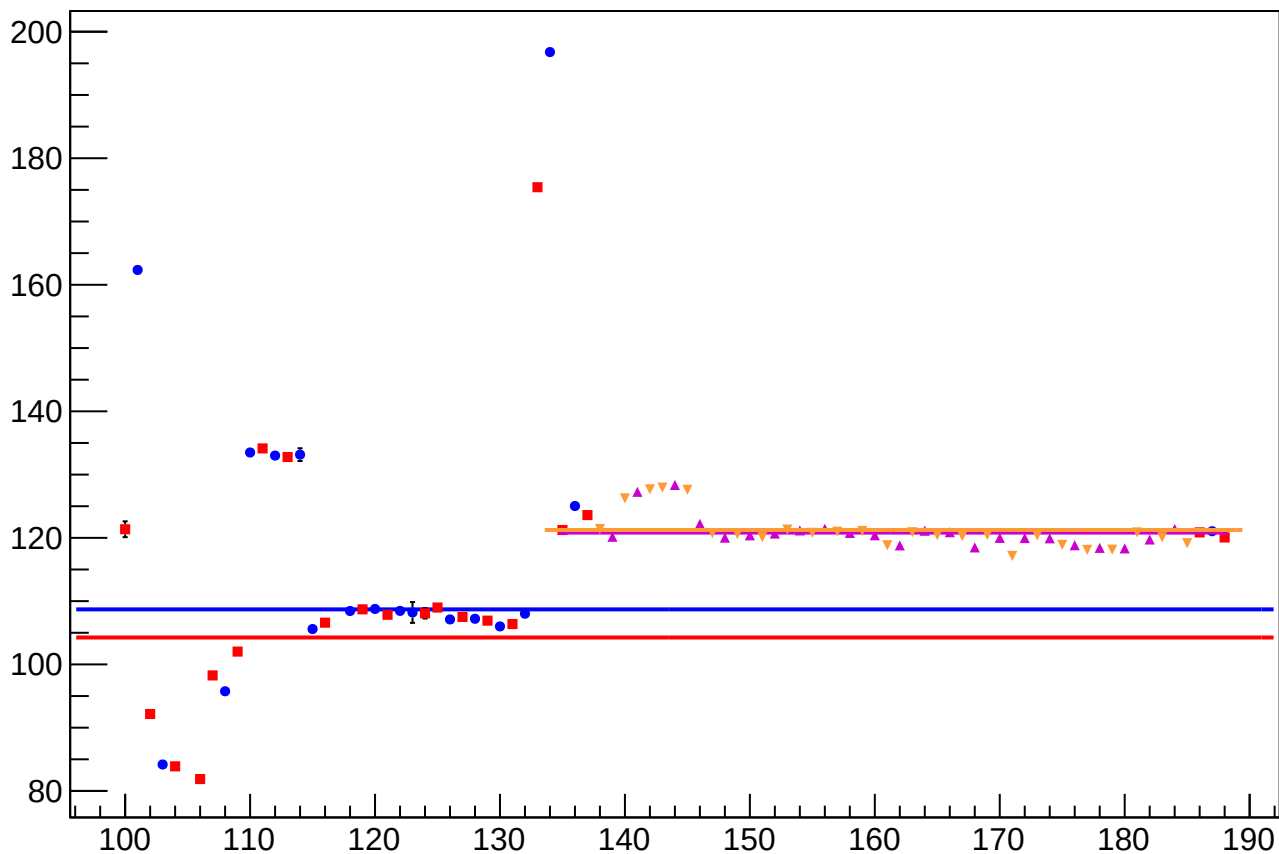
Left In:  $-80.803 \pm 0.870$   $\chi^2/\text{NDF}$ : 695.4/22

+ sign  $-85.651 \pm 0.755$   $\chi^2/\text{NDF}$ : 1826.8/42

All:  $-83.616 \pm 0.533$   $\chi^2/\text{NDF}$ : 3662.5/86

- sign  $-81.593 \pm 0.753$   $\chi^2/\text{NDF}$ : 1821.3/43

# reg\_asym\_atr\_dd\_diff\_bpm12X\_slope vs Slug



Right In: 108.697 $\pm$ 0.084  $\chi^2$ /NDF: 73717.0/17

Left Out: 121.248 $\pm$ 0.040  $\chi^2$ /NDF: 4820.1/24

Right Out: 104.254 $\pm$ 0.076  $\chi^2$ /NDF: 57857.5/20

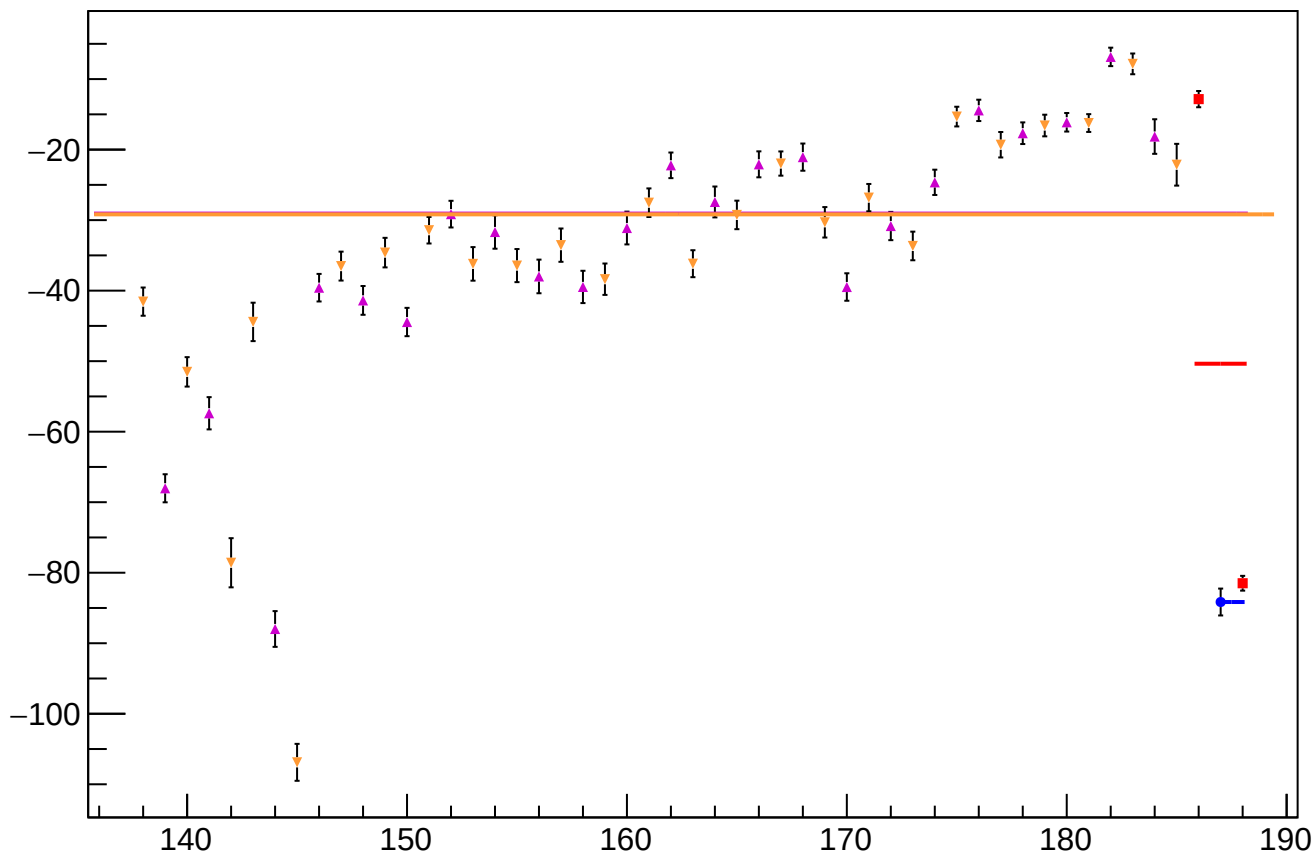
Left In: 120.834 $\pm$ 0.041  $\chi^2$ /NDF: 3372.4/22

+ sign 118.904 $\pm$ 0.036  $\chi^2$ /NDF: 96727.4/42

All: 118.005 $\pm$ 0.025  $\chi^2$ /NDF: 196552.0/86

- sign 117.133 $\pm$ 0.036  $\chi^2$ /NDF: 98614.4/43

# reg\_asym\_at1\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $-84.155 \pm 1.906$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-29.182 \pm 0.389$   $\chi^2/\text{NDF}$ : 1880.4/24

Right Out:  $-50.364 \pm 0.776$   $\chi^2/\text{NDF}$ : 1941.0/1

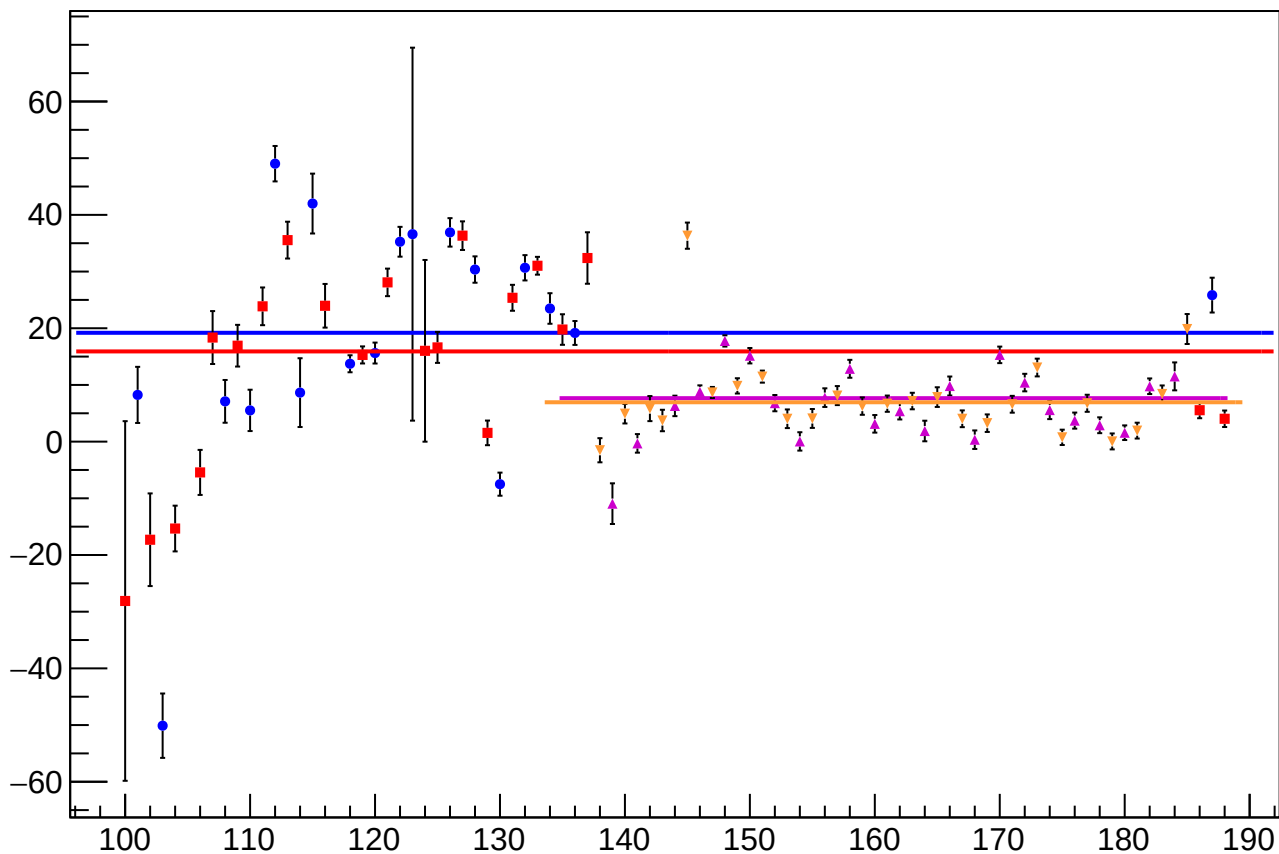
Left In:  $-29.073 \pm 0.394$   $\chi^2/\text{NDF}$ : 1872.4/22

+ sign  $-31.383 \pm 0.381$   $\chi^2/\text{NDF}$ : 2679.1/25

All:  $-32.494 \pm 0.258$   $\chi^2/\text{NDF}$ : 7107.1/50

- sign  $-33.436 \pm 0.351$   $\chi^2/\text{NDF}$ : 4412.3/24

# reg\_asym\_at1\_avg\_diff\_bpm4aY\_slope vs Slug



Right In: 19.198 $\pm$ 0.630  $\chi^2$ /NDF: 623.8/17

Left Out: 6.943 $\pm$ 0.304  $\chi^2$ /NDF: 322.6/24

Right Out: 15.912 $\pm$ 0.543  $\chi^2$ /NDF: 534.2/20

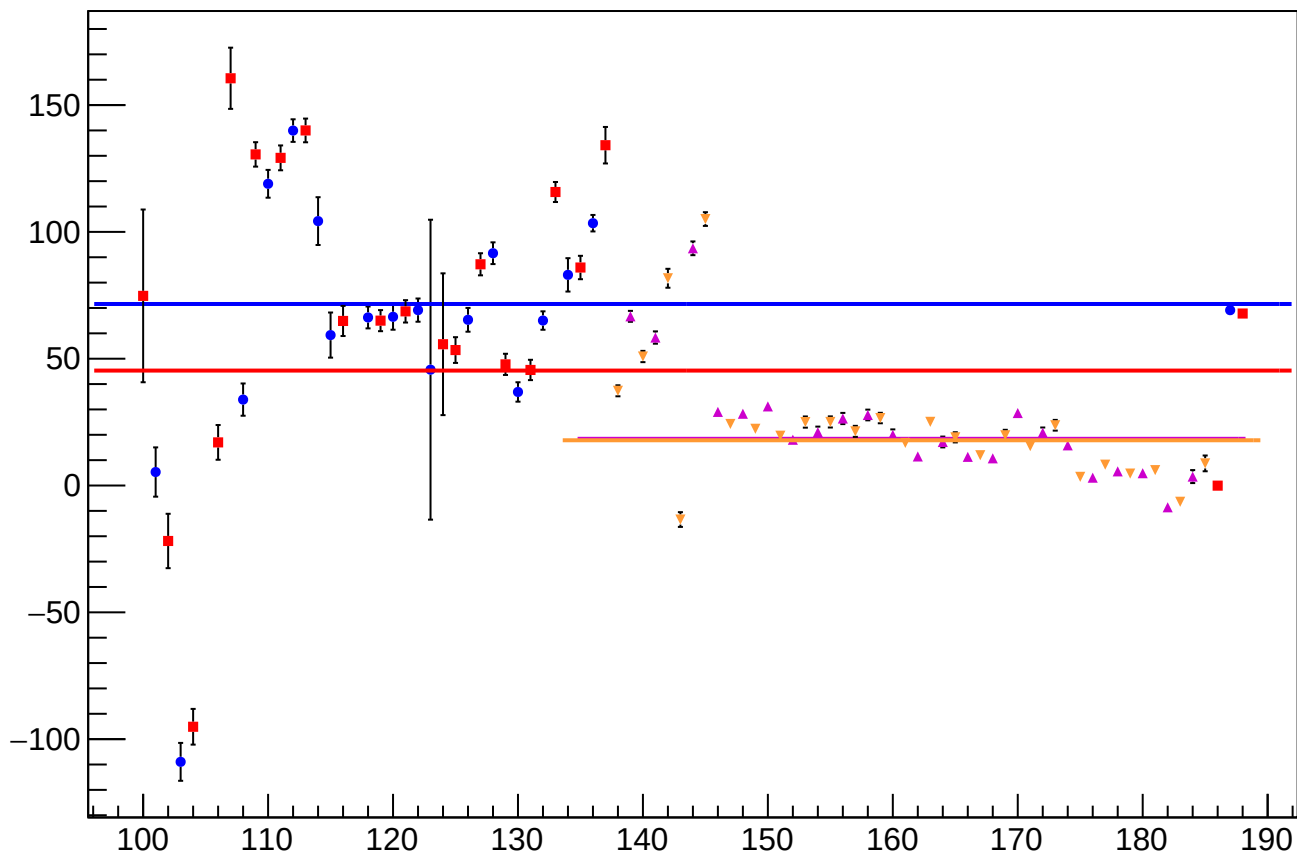
Left In: 7.666 $\pm$ 0.313  $\chi^2$ /NDF: 341.1/22

+ sign 9.254 $\pm$ 0.274  $\chi^2$ /NDF: 1253.7/42

All: 9.488 $\pm$ 0.193  $\chi^2$ /NDF: 2303.3/86

- sign 9.717 $\pm$ 0.271  $\chi^2$ /NDF: 1048.2/43

# reg\_asym\_at1\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $71.571 \pm 0.966$   $\chi^2/\text{NDF}$ : 1203.9/17

Left Out:  $17.841 \pm 0.388$   $\chi^2/\text{NDF}$ : 2399.7/24

Right Out:  $45.321 \pm 0.555$   $\chi^2/\text{NDF}$ : 5404.1/20

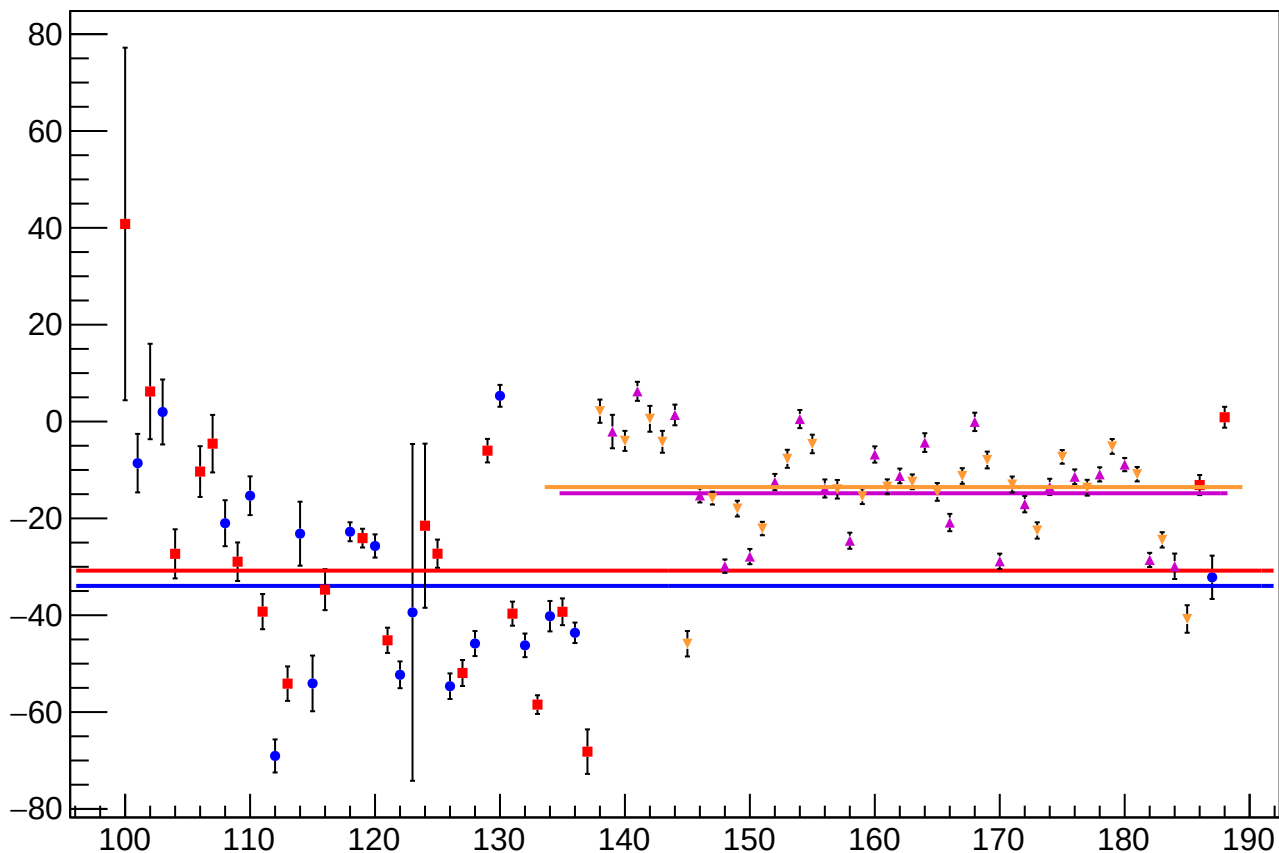
Left In:  $18.416 \pm 0.391$   $\chi^2/\text{NDF}$ : 2468.4/22

+ sign  $25.297 \pm 0.360$   $\chi^2/\text{NDF}$ : 6267.0/42

All:  $26.445 \pm 0.239$   $\chi^2/\text{NDF}$ : 15728.3/86

- sign  $27.351 \pm 0.320$   $\chi^2/\text{NDF}$ : 9443.0/43

# reg\_asym\_at1\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $-33.943 \pm 0.727$   $\chi^2/\text{NDF}$ : 720.0/17

Left Out:  $-13.535 \pm 0.345$   $\chi^2/\text{NDF}$ : 574.6/24

Right Out:  $-30.793 \pm 0.661$   $\chi^2/\text{NDF}$ : 896.0/20

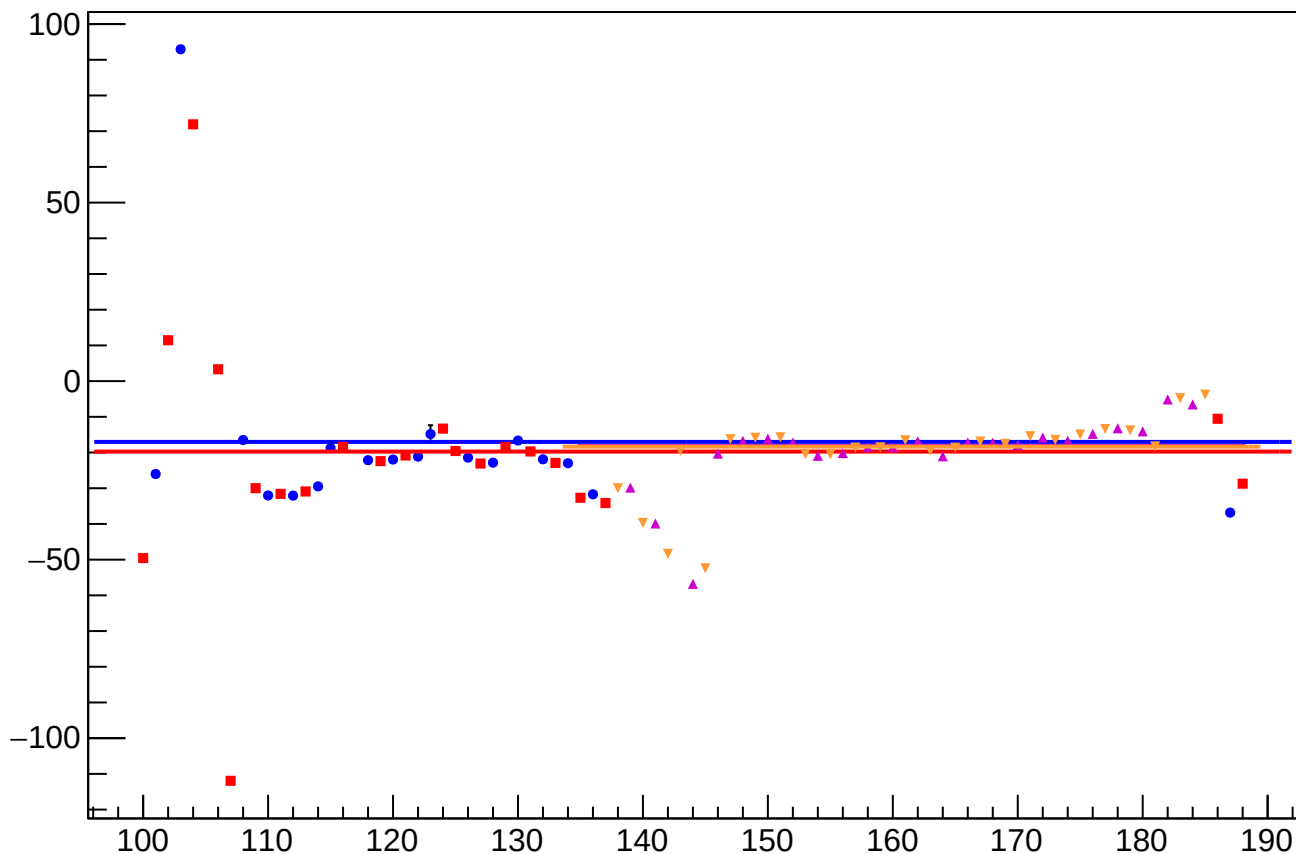
Left In:  $-14.815 \pm 0.353$   $\chi^2/\text{NDF}$ : 838.2/22

+ sign  $-17.285 \pm 0.311$   $\chi^2/\text{NDF}$ : 1938.6/42

All:  $-17.824 \pm 0.220$   $\chi^2/\text{NDF}$ : 4133.5/86

- sign  $-18.363 \pm 0.311$   $\chi^2/\text{NDF}$ : 2188.9/43

# reg\_asym\_at1\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-17.021 \pm 0.044$   $\chi^2/\text{NDF}: 480706.9/17$

Left Out:  $-18.337 \pm 0.016$   $\chi^2/\text{NDF}: 283793.3/24$

Right Out:  $-19.732 \pm 0.040$   $\chi^2/\text{NDF}: 445495.0/20$

Left In:  $-18.135 \pm 0.016$   $\chi^2/\text{NDF}: 245650.3/22$

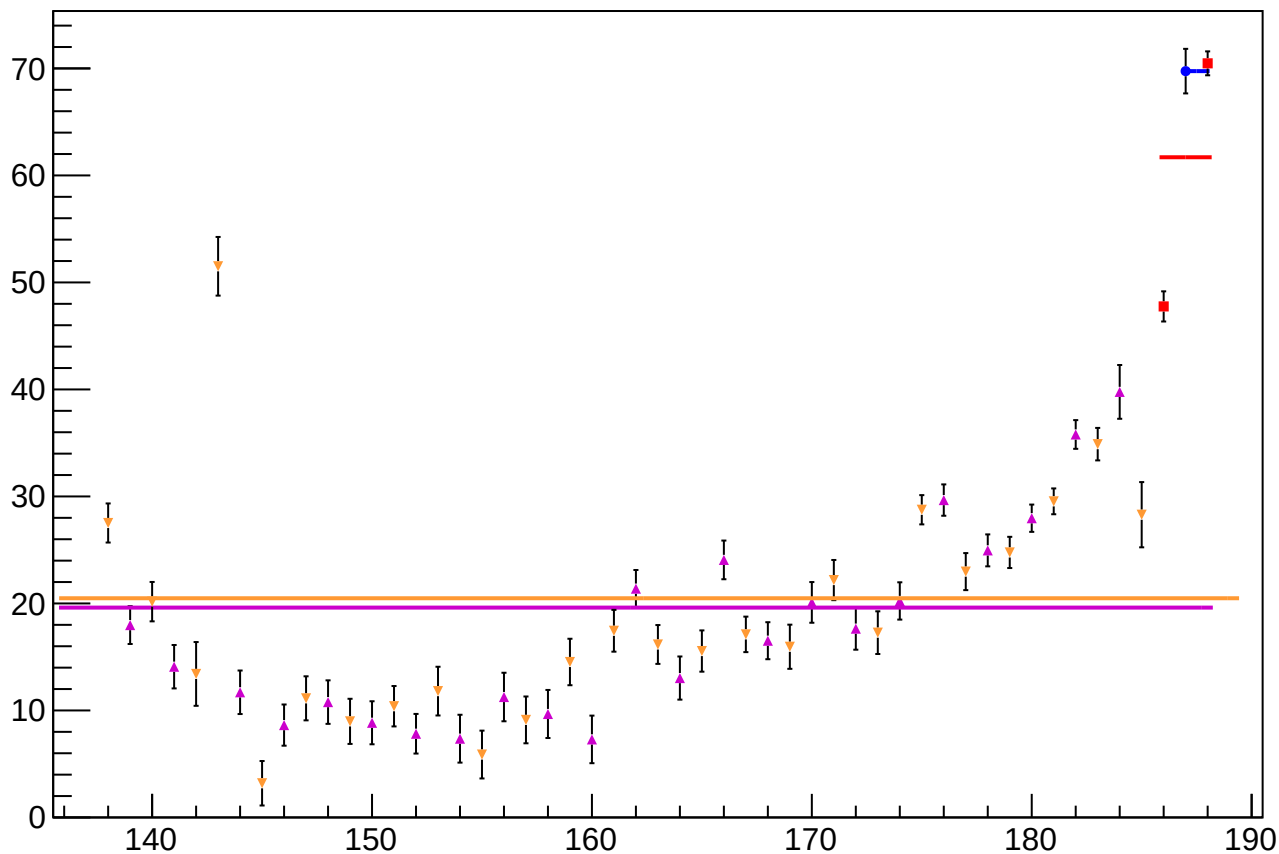
+ sign  $-18.184 \pm 0.015$   $\chi^2/\text{NDF}: 765300.7/42$

All:  $-18.270 \pm 0.011$   $\chi^2/\text{NDF}: 1457881.6/86$

- sign  $-18.355 \pm 0.015$   $\chi^2/\text{NDF}: 692515.4/43$



# reg\_asym\_at1\_dd\_diff\_bpm1X\_slope vs Slug



Right In: 69.747 $\pm$ 2.082  $\chi^2$ /NDF: 0.0/0

Left Out: 20.485 $\pm$ 0.374  $\chi^2$ /NDF:615.7/24

Right Out: 61.697 $\pm$ 0.876  $\chi^2$ /NDF: 159.5/1

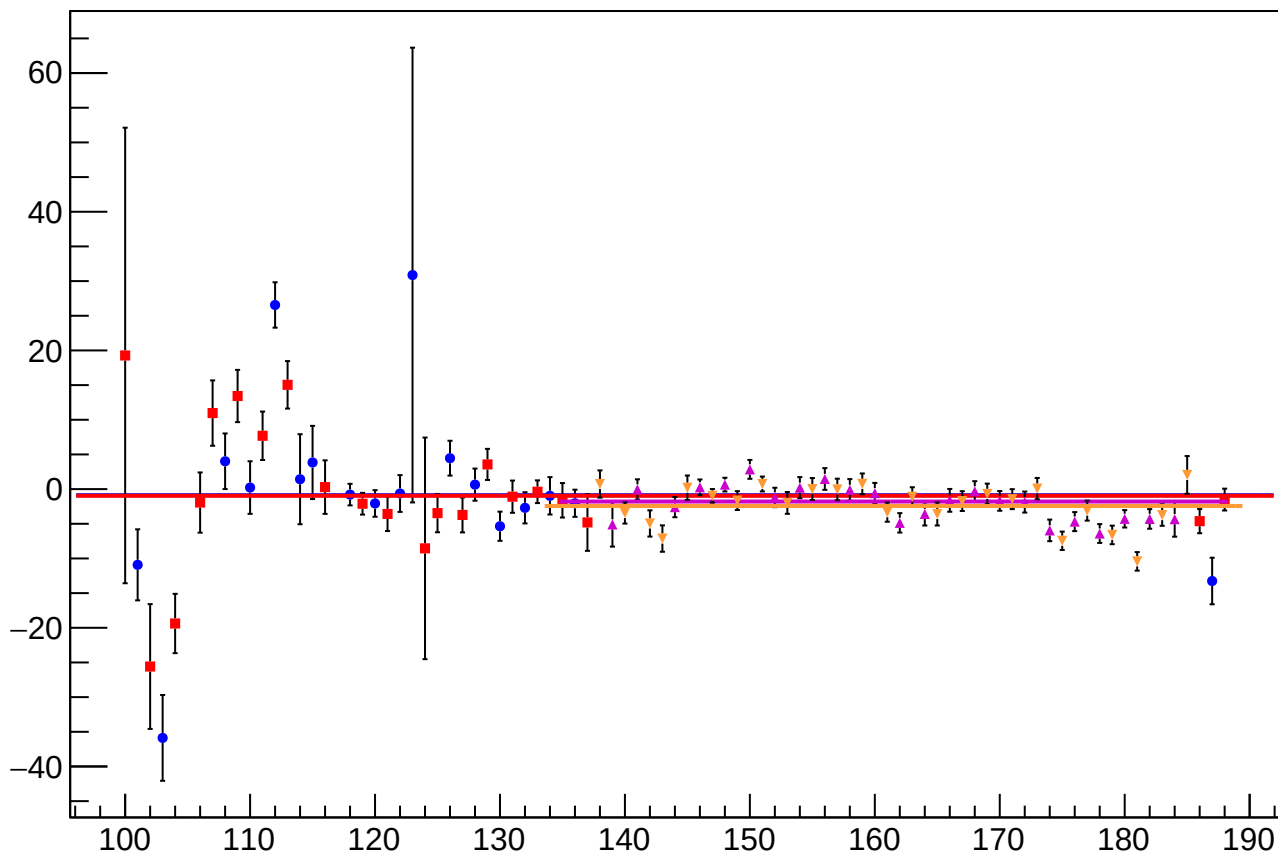
Left In: 19.612 $\pm$ 0.379  $\chi^2$ /NDF:572.7/22

+ sign 22.022 $\pm$ 0.368  $\chi^2$ /NDF: 1157.9/25

All: 24.248 $\pm$ 0.253  $\chi^2$ /NDF: 3904.2/50

- sign 26.237 $\pm$ 0.348  $\chi^2$ /NDF: 2676.9/24

# reg\_asym\_at1\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-0.882 \pm 0.641$   $\chi^2/\text{NDF}$ : 134.0/17

Left Out:  $-2.429 \pm 0.293$   $\chi^2/\text{NDF}$ : 103.7/24

Right Out:  $-0.959 \pm 0.573$   $\chi^2/\text{NDF}$ : 89.1/20

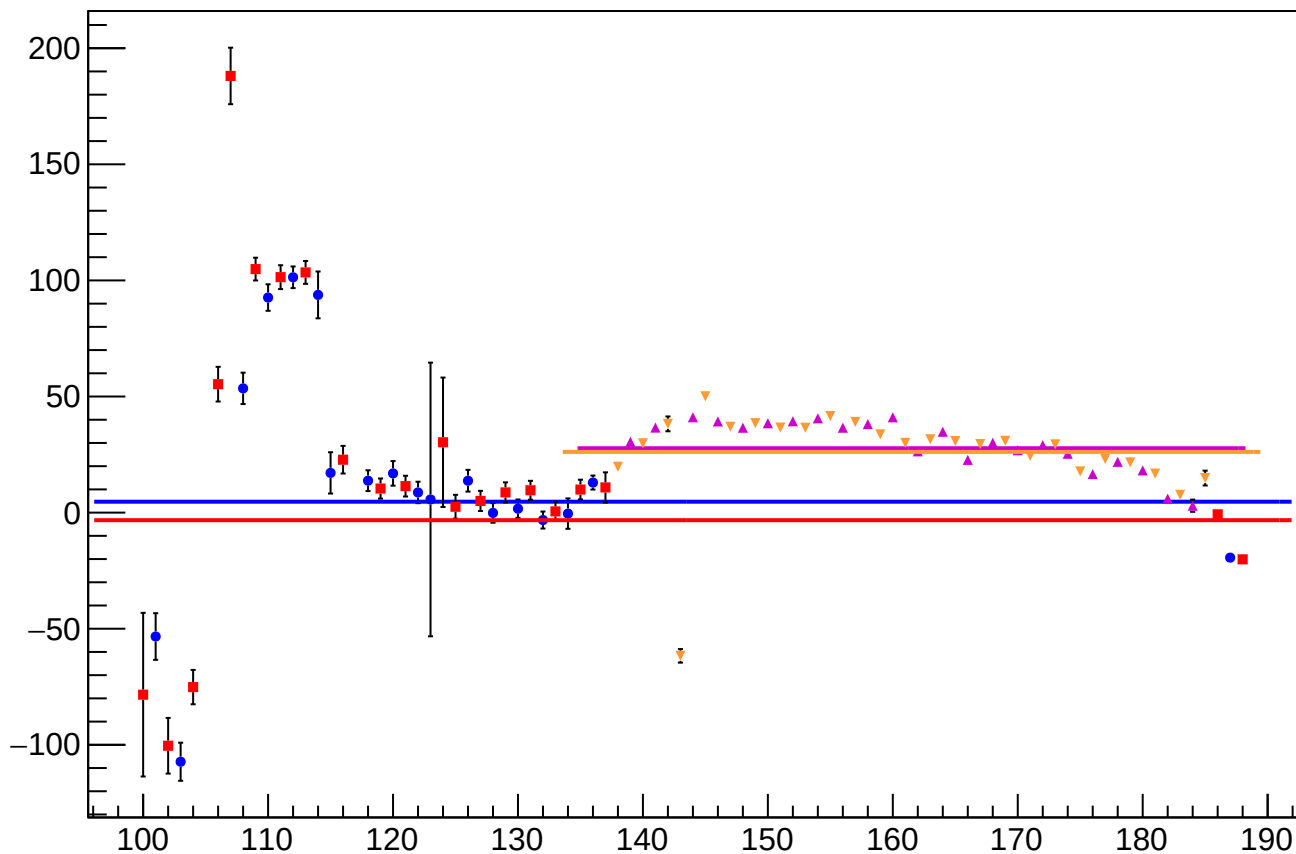
Left In:  $-1.791 \pm 0.301$   $\chi^2/\text{NDF}$ : 70.1/22

+ sign  $-2.162 \pm 0.266$   $\chi^2/\text{NDF}$ : 242.6/42

All:  $-1.887 \pm 0.188$   $\chi^2/\text{NDF}$ : 405.6/86

- sign  $-1.611 \pm 0.267$   $\chi^2/\text{NDF}$ : 160.8/43

# reg\_asym\_at1\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $4.703 \pm 1.003$   $\chi^2/\text{NDF}$ : 1245.3/17

Left Out:  $26.164 \pm 0.373$   $\chi^2/\text{NDF}$ : 1577.6/24

Right Out:  $-3.258 \pm 0.613$   $\chi^2/\text{NDF}$ : 2276.6/20

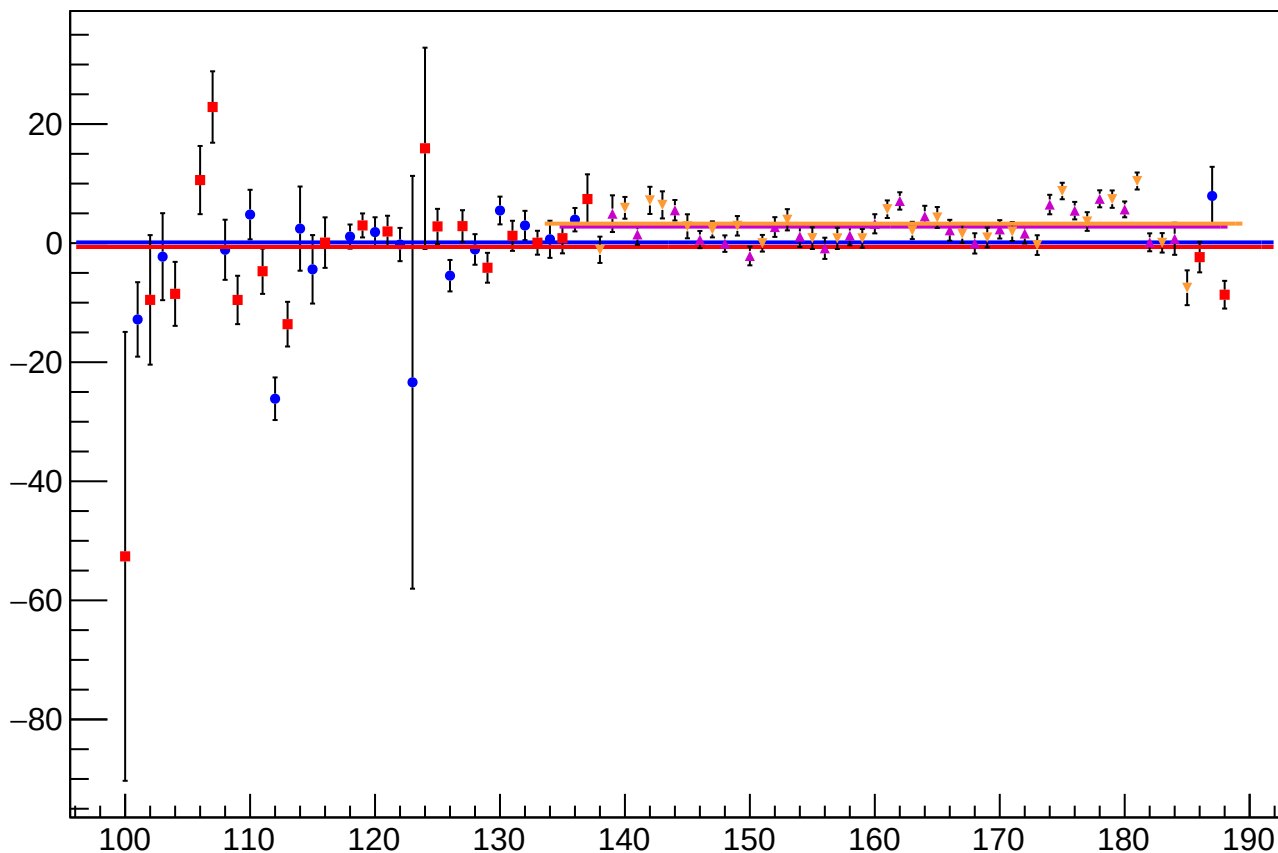
Left In:  $27.725 \pm 0.377$   $\chi^2/\text{NDF}$ : 805.1/22

+ sign  $23.560 \pm 0.349$   $\chi^2/\text{NDF}$ : 3224.8/42

All:  $21.211 \pm 0.236$   $\chi^2/\text{NDF}$ : 8244.8/86

- sign  $19.230 \pm 0.321$   $\chi^2/\text{NDF}$ : 4936.7/43

# reg\_asym\_at1\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $0.121 \pm 0.735$   $\chi^2/\text{NDF}$ : 79.1/17

Left Out:  $3.275 \pm 0.332$   $\chi^2/\text{NDF}$ : 101.8/24

Right Out:  $-0.650 \pm 0.687$   $\chi^2/\text{NDF}$ : 69.1/20

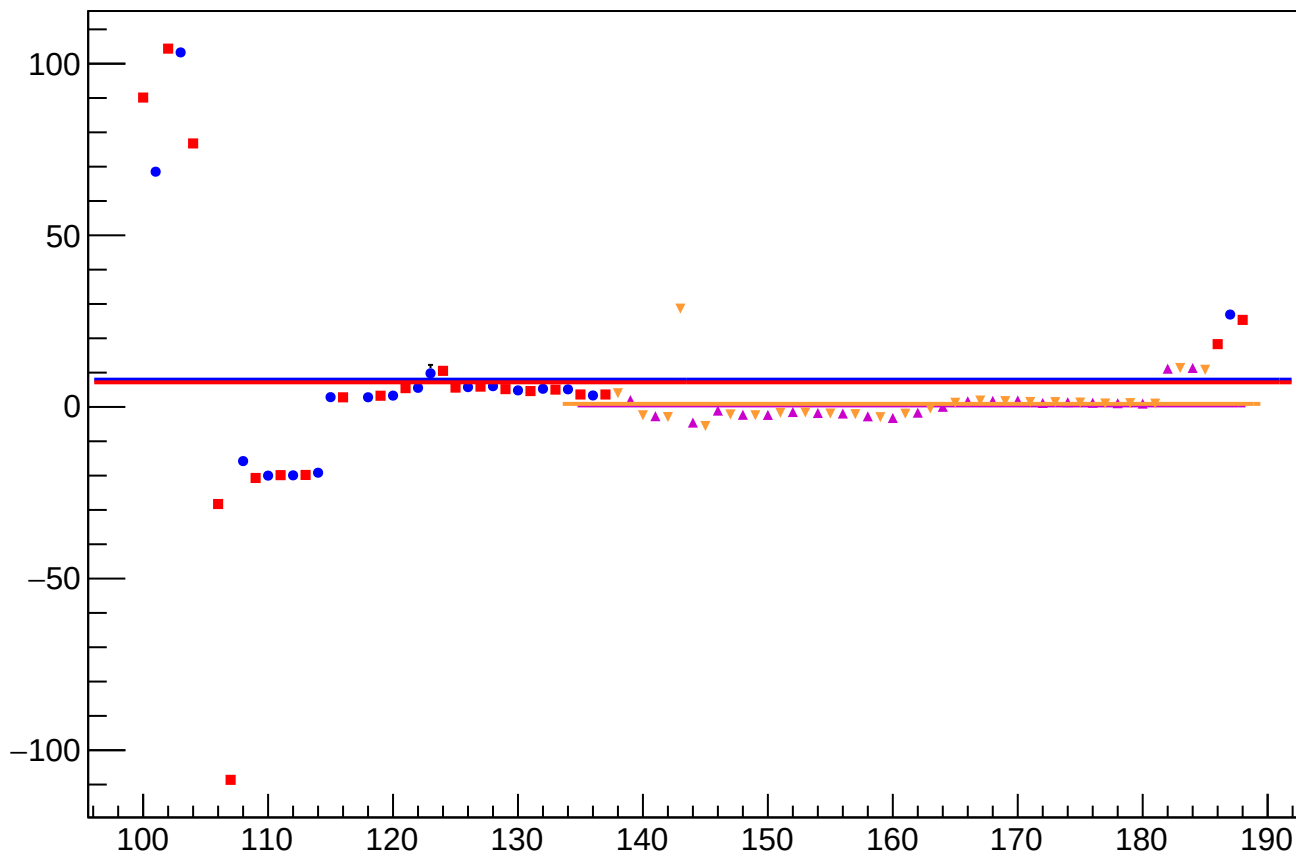
Left In:  $2.777 \pm 0.340$   $\chi^2/\text{NDF}$ : 66.5/22

+ sign  $2.741 \pm 0.303$   $\chi^2/\text{NDF}$ : 196.2/42

All:  $2.424 \pm 0.215$   $\chi^2/\text{NDF}$ : 354.0/86

- sign  $2.102 \pm 0.305$   $\chi^2/\text{NDF}$ : 155.6/43

# reg\_asym\_at1\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $7.948 \pm 0.044$   $\chi^2/\text{NDF}: 360917.9/17$

Left Out:  $0.898 \pm 0.015$   $\chi^2/\text{NDF}: 108195.0/24$

Right Out:  $7.178 \pm 0.041$   $\chi^2/\text{NDF}: 546917.2/20$

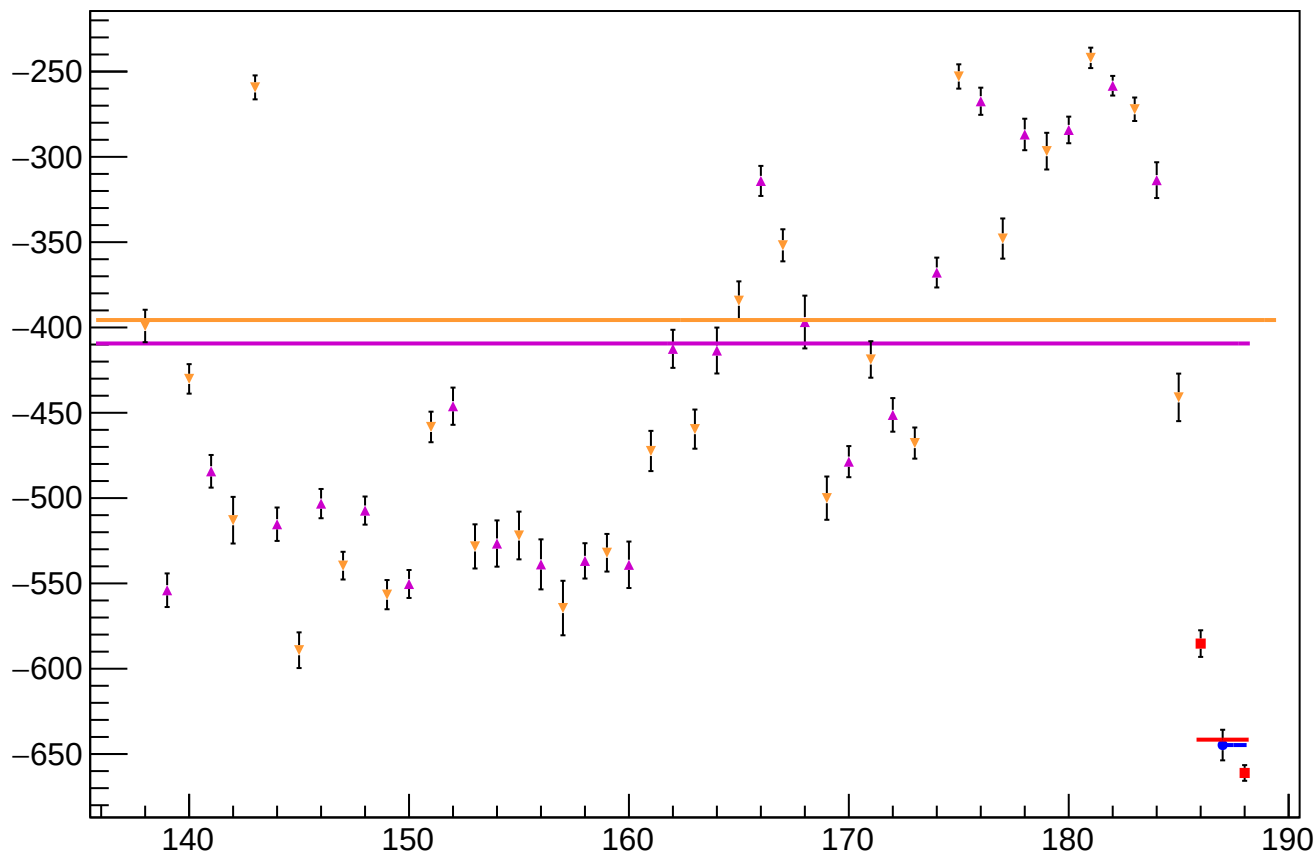
Left In:  $0.448 \pm 0.015$   $\chi^2/\text{NDF}: 50533.6/22$

+ sign  $1.655 \pm 0.014$   $\chi^2/\text{NDF}: 492176.7/42$

All:  $1.464 \pm 0.010$   $\chi^2/\text{NDF}: 1113488.5/86$

- sign  $1.272 \pm 0.014$   $\chi^2/\text{NDF}: 620956.6/43$

# reg\_asym\_at2\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $-644.742 \pm 8.964$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-395.638 \pm 1.909$   $\chi^2/\text{NDF}$ : 3704.0/24

Right Out:  $-641.577 \pm 3.959$   $\chi^2/\text{NDF}$ : 70.1/1

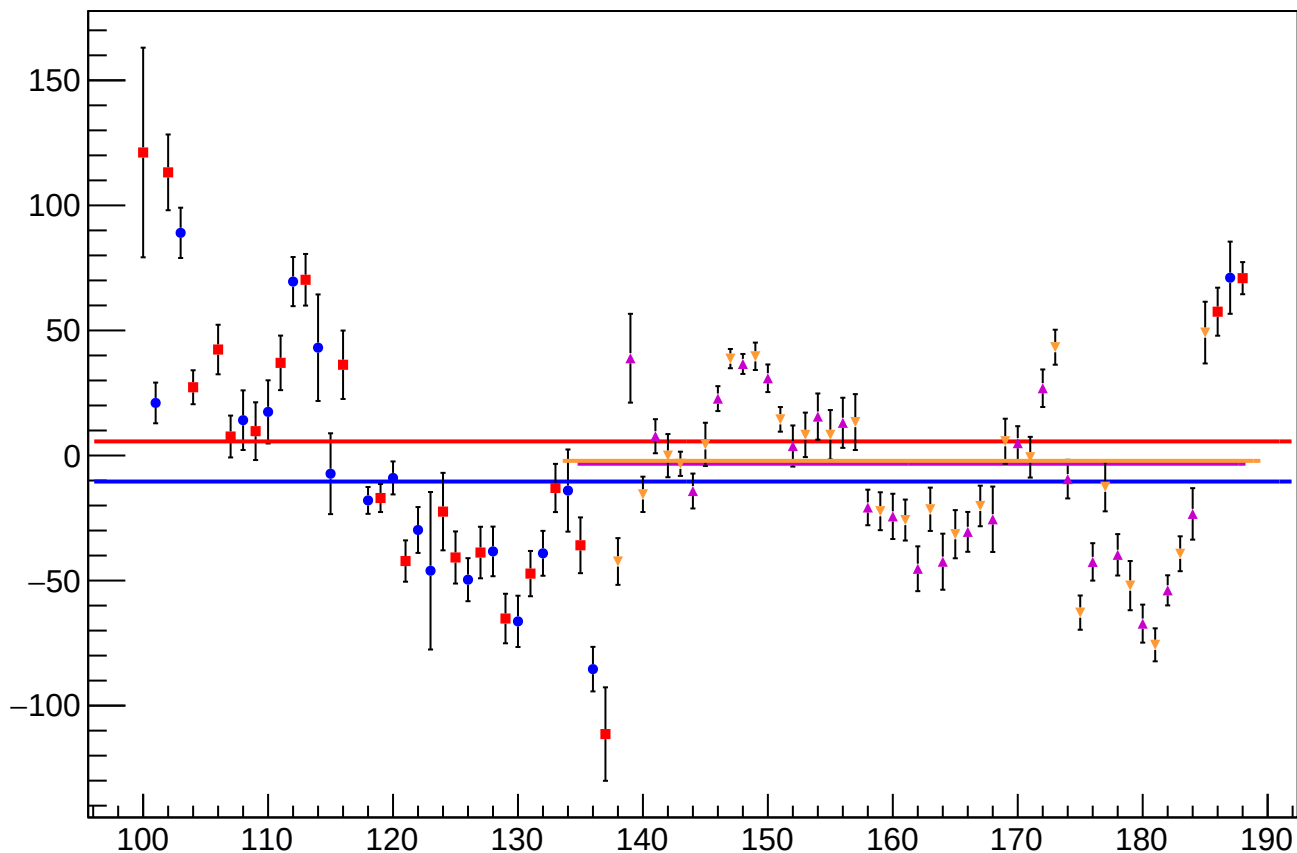
Left In:  $-409.377 \pm 1.971$   $\chi^2/\text{NDF}$ : 3096.1/22

+ sign  $-406.445 \pm 1.867$   $\chi^2/\text{NDF}$ : 4442.7/25

All:  $-432.363 \pm 1.282$   $\chi^2/\text{NDF}$ : 10730.5/50

- sign  $-455.515 \pm 1.765$   $\chi^2/\text{NDF}$ : 5923.0/24

# reg\_asym\_at2\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $-10.410 \pm 2.282$   $\chi^2/\text{NDF}$ : 373.8/17

Left Out:  $-2.133 \pm 1.435$   $\chi^2/\text{NDF}$ : 562.8/24

Right Out:  $5.635 \pm 2.084$   $\chi^2/\text{NDF}$ : 500.6/20

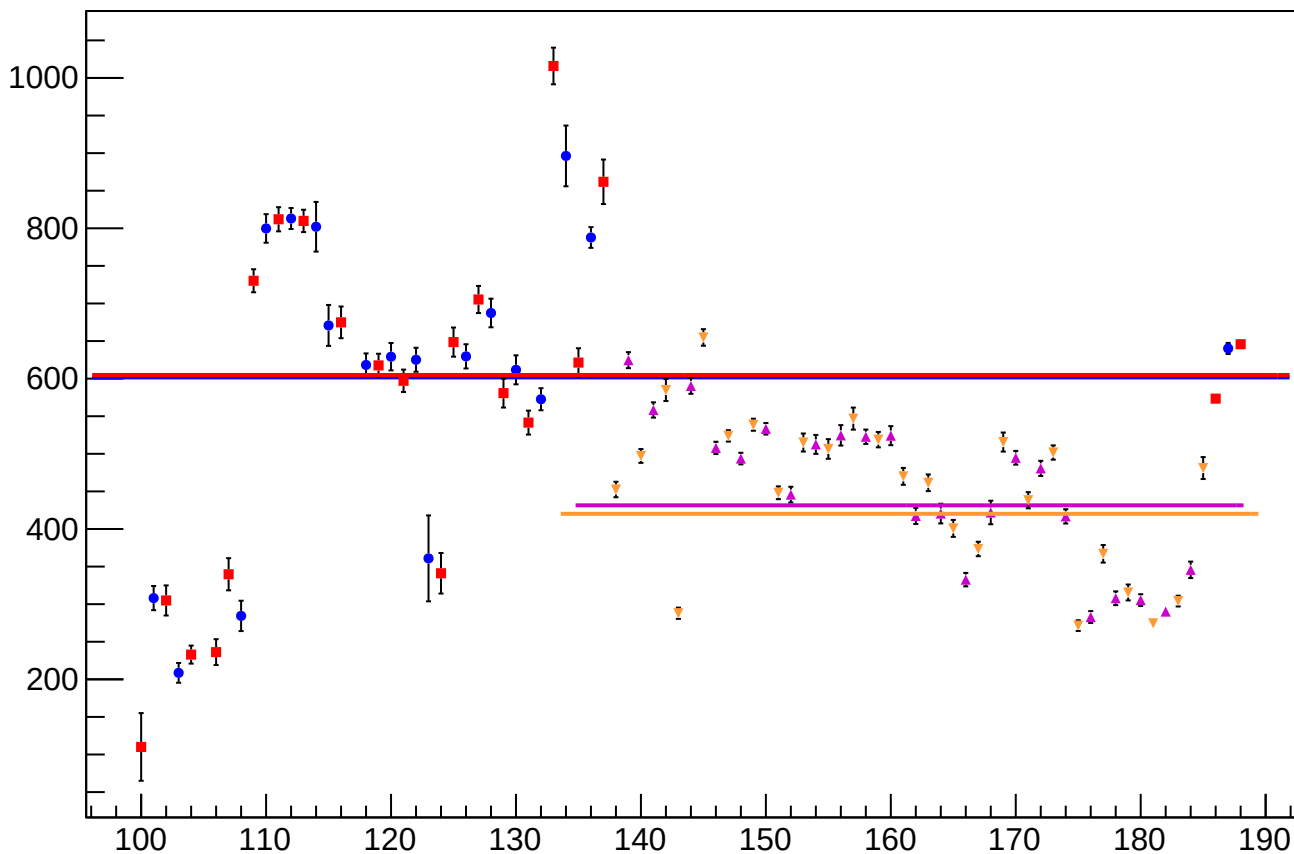
Left In:  $-3.290 \pm 1.517$   $\chi^2/\text{NDF}$ : 454.5/22

+ sign  $-4.479 \pm 1.215$   $\chi^2/\text{NDF}$ : 946.0/42

All:  $-2.360 \pm 0.863$   $\chi^2/\text{NDF}$ : 1919.3/86

- sign  $-0.201 \pm 1.226$   $\chi^2/\text{NDF}$ : 967.1/43

# reg\_asym\_at2\_avg\_diff\_bpm4eX\_slope vs Slug



Right In: 601.670 $\pm$ 3.726  $\chi^2/\text{NDF}$ : 2166.9/17

Left Out: 420.181 $\pm$ 1.916  $\chi^2/\text{NDF}$ : 3241.0/24

Right Out: 604.875 $\pm$ 2.519  $\chi^2/\text{NDF}$ : 3015.0/20

Left In: 431.487 $\pm$ 1.964  $\chi^2/\text{NDF}$ : 2897.1/22

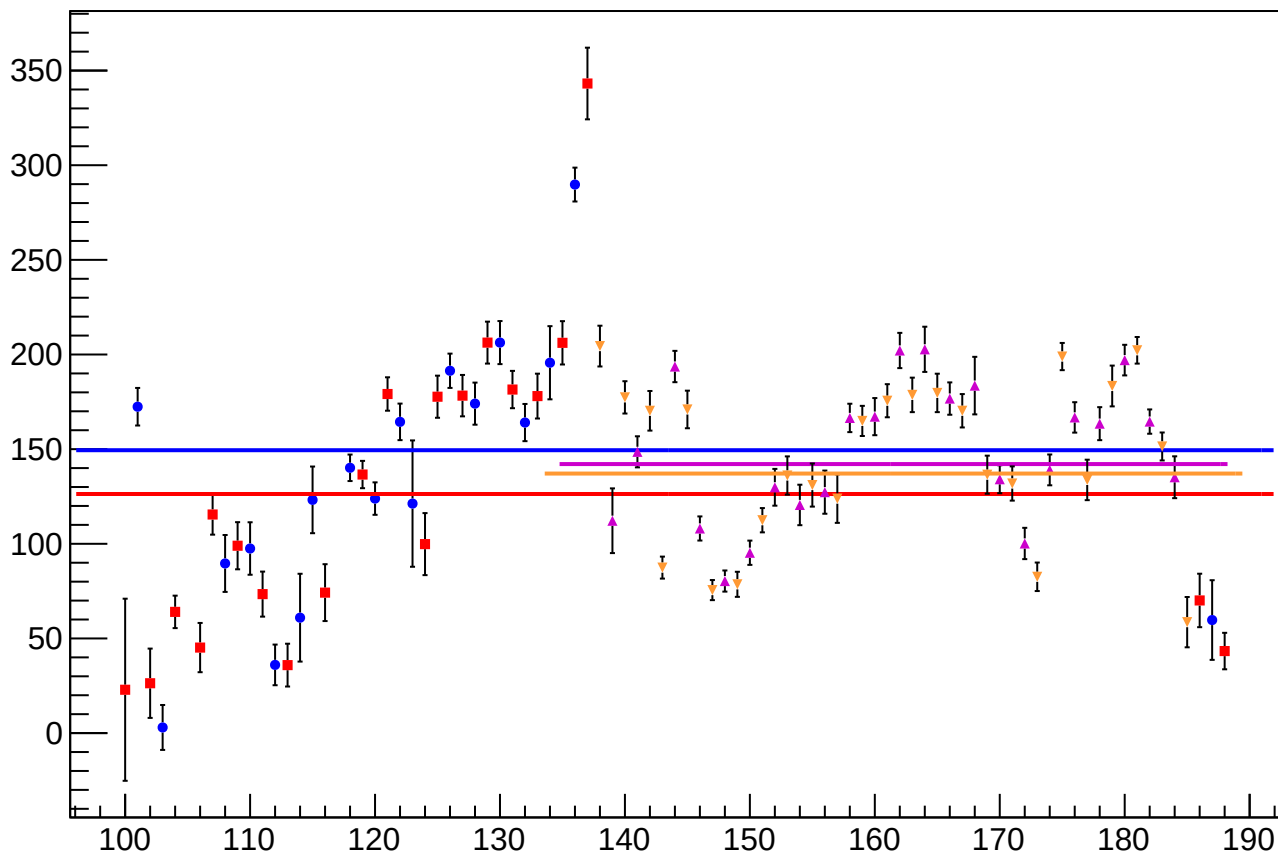
+ sign 458.116 $\pm$ 1.704  $\chi^2/\text{NDF}$ : 7284.1/42

All: 479.435 $\pm$ 1.146  $\chi^2/\text{NDF}$ : 16429.4/86

- sign 497.052 $\pm$ 1.549  $\chi^2/\text{NDF}$ : 8859.3/43



# reg\_asym\_at2\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 149.442 $\pm$ 2.653     $\chi^2/\text{NDF}$ : 653.3/17

Left Out: 137.107 $\pm$ 1.663     $\chi^2/\text{NDF}$ : 738.9/24

Right Out: 126.312 $\pm$ 2.488     $\chi^2/\text{NDF}$ : 684.4/20

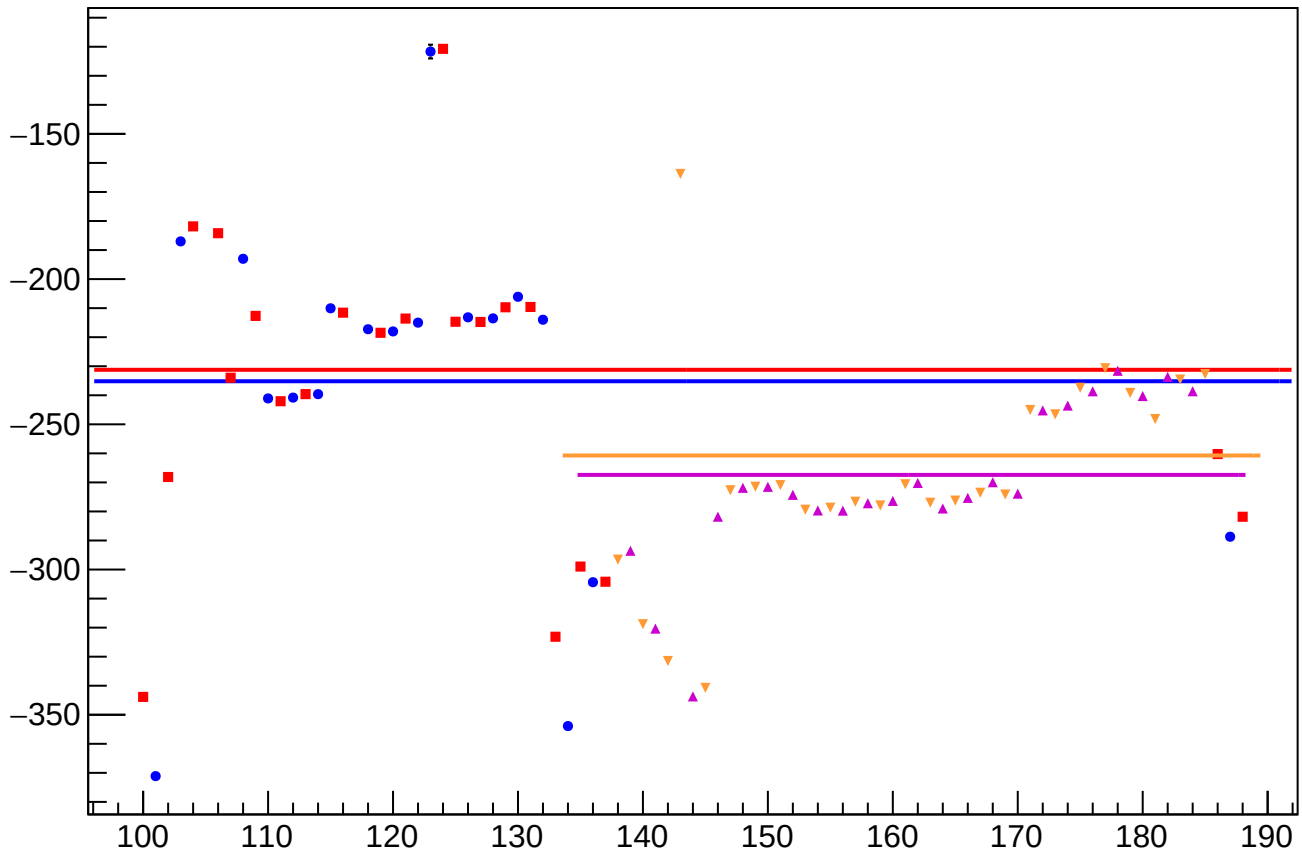
Left In: 142.123 $\pm$ 1.740     $\chi^2/\text{NDF}$ : 463.8/22

+ sign 140.586 $\pm$ 1.409     $\chi^2/\text{NDF}$ : 1407.7/42

All: 138.780 $\pm$ 1.002     $\chi^2/\text{NDF}$ : 2586.3/86

- sign 136.930 $\pm$ 1.426     $\chi^2/\text{NDF}$ : 1175.3/43

# reg\_asym\_at2\_avg\_diff\_bpm12X\_slope vs Slug



Right In: -235.172+/-0.147  $\chi^2/\text{NDF}$ : 147218.9/17

Left Out: -260.729+/-0.080  $\chi^2/\text{NDF}$ : 220125.6/24

Right Out: -231.225+/-0.135  $\chi^2/\text{NDF}$ : 111272.3/20

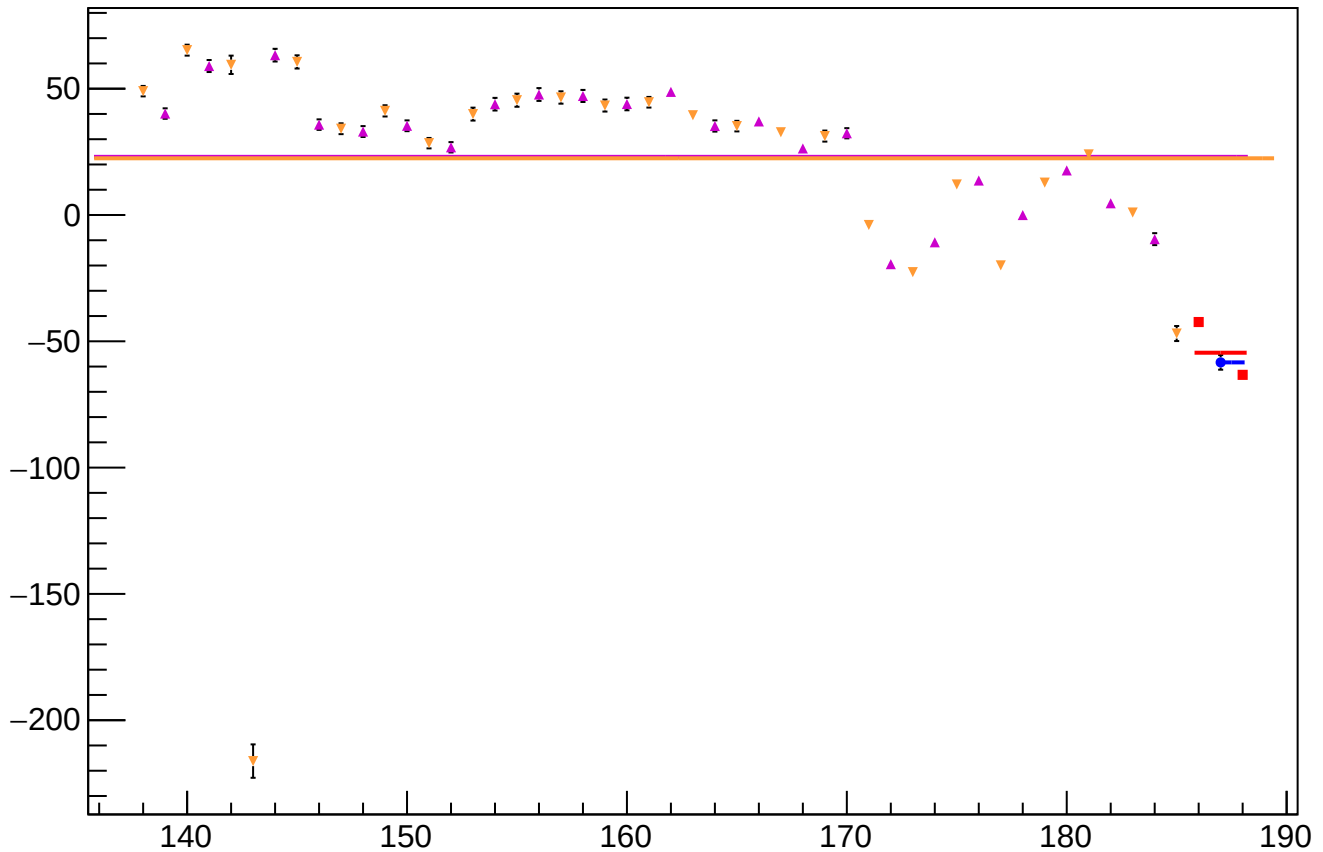
Left In: -267.416+/-0.081  $\chi^2/\text{NDF}$ : 98892.0/22

+ sign -254.951+/-0.070  $\chi^2/\text{NDF}$ : 390683.7/42

All: -256.365+/-0.049  $\chi^2/\text{NDF}$ : 654438.9/86

- sign -257.767+/-0.070  $\chi^2/\text{NDF}$ : 262941.8/43

# reg\_asym\_at2\_dd\_diff\_bpm1X\_slope vs Slug



Right In:  $-58.350 \pm 2.889$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $22.446 \pm 0.399$   $\chi^2/\text{NDF}$ : 4935.8/24

Right Out:  $-54.521 \pm 1.189$   $\chi^2/\text{NDF}$ : 75.3/1

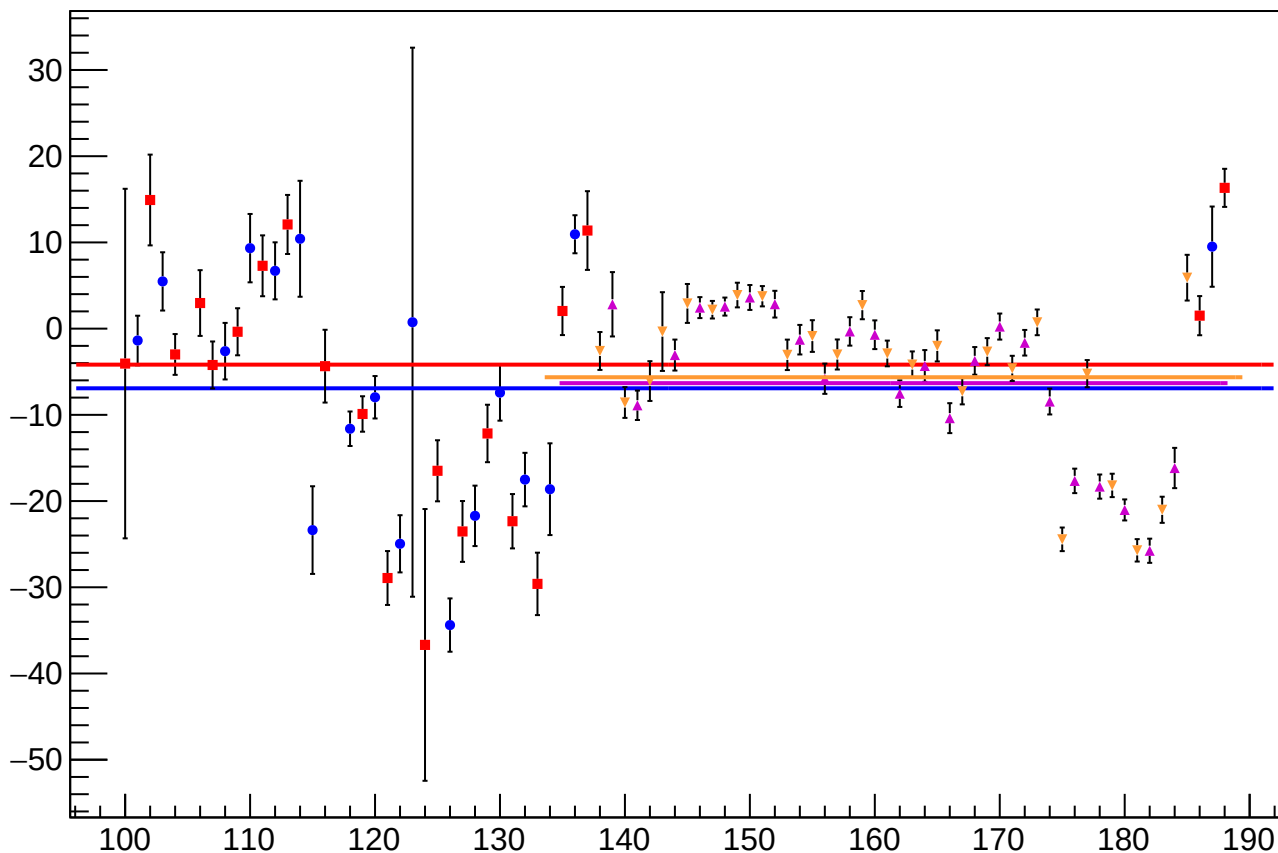
Left In:  $23.019 \pm 0.400$   $\chi^2/\text{NDF}$ : 2819.9/22

+ sign  $20.935 \pm 0.395$   $\chi^2/\text{NDF}$ : 5703.4/25

All:  $17.921 \pm 0.273$   $\chi^2/\text{NDF}$ : 12528.8/50

- sign  $15.149 \pm 0.379$   $\chi^2/\text{NDF}$ : 6713.8/24

# reg\_asym\_at2\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-6.921 \pm 0.768$   $\chi^2/\text{NDF}$ : 296.4/17

Left Out:  $-5.639 \pm 0.316$   $\chi^2/\text{NDF}$ : 891.5/24

Right Out:  $-4.176 \pm 0.687$   $\chi^2/\text{NDF}$ : 366.1/20

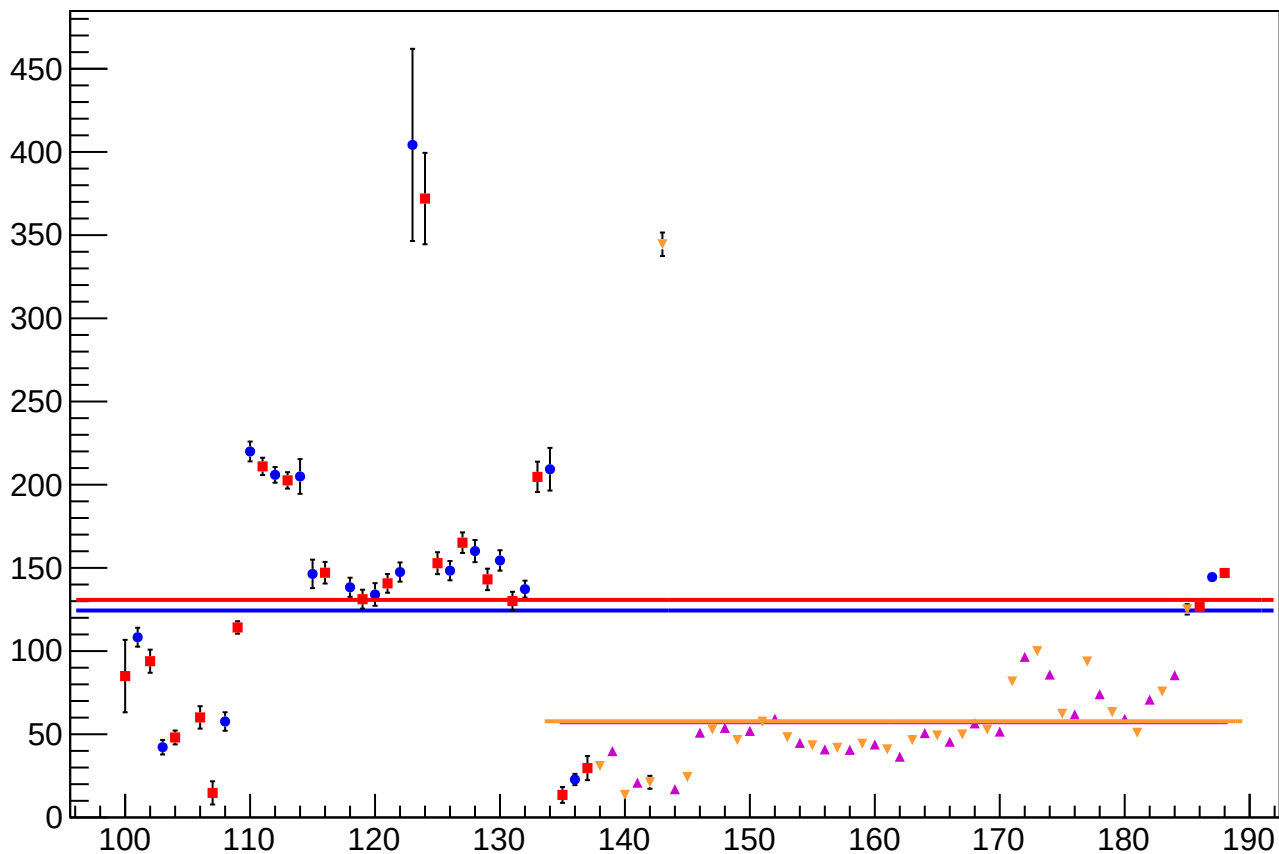
Left In:  $-6.323 \pm 0.320$   $\chi^2/\text{NDF}$ : 784.4/22

+ sign  $-5.824 \pm 0.292$   $\chi^2/\text{NDF}$ : 1190.3/42

All:  $-5.882 \pm 0.206$   $\chi^2/\text{NDF}$ : 2348.9/86

- sign  $-5.940 \pm 0.290$   $\chi^2/\text{NDF}$ : 1158.5/43

# reg\_asym\_at2\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $124.382 \pm 1.211$   $\chi^2/\text{NDF}$ : 2258.2/17

Left Out:  $57.816 \pm 0.398$   $\chi^2/\text{NDF}$ : 4331.5/24

Right Out:  $130.763 \pm 0.783$   $\chi^2/\text{NDF}$ : 2451.8/20

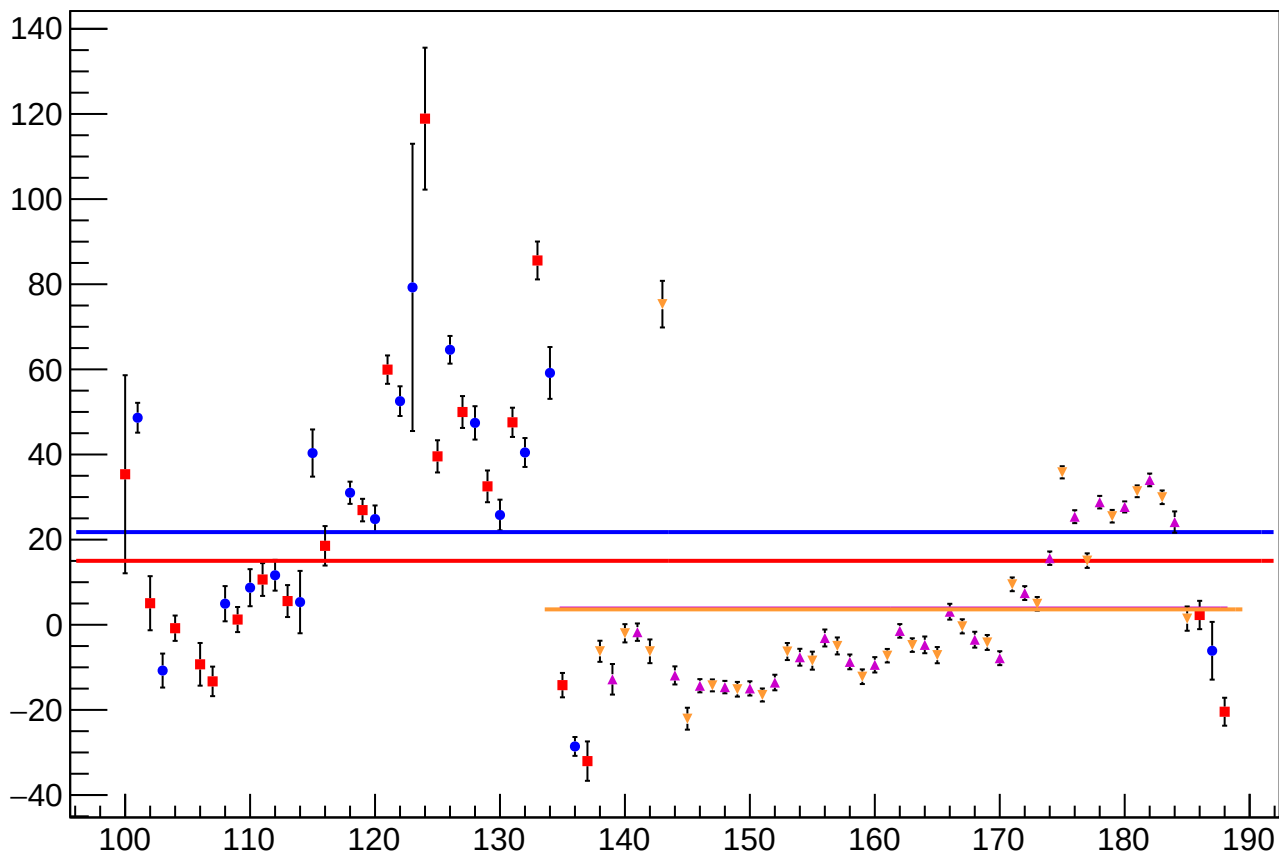
Left In:  $57.226 \pm 0.398$   $\chi^2/\text{NDF}$ : 1860.6/22

+ sign  $64.303 \pm 0.378$   $\chi^2/\text{NDF}$ : 9315.5/42

All:  $68.579 \pm 0.259$   $\chi^2/\text{NDF}$ : 20884.1/86

- sign  $72.344 \pm 0.355$   $\chi^2/\text{NDF}$ : 11328.2/43

# reg\_asym\_at2\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $21.771 \pm 0.882$   $\chi^2/\text{NDF}: 1088.6/17$

Left Out:  $3.615 \pm 0.357$   $\chi^2/\text{NDF}: 2501.2/24$

Right Out:  $15.020 \pm 0.817$   $\chi^2/\text{NDF}: 1223.4/20$

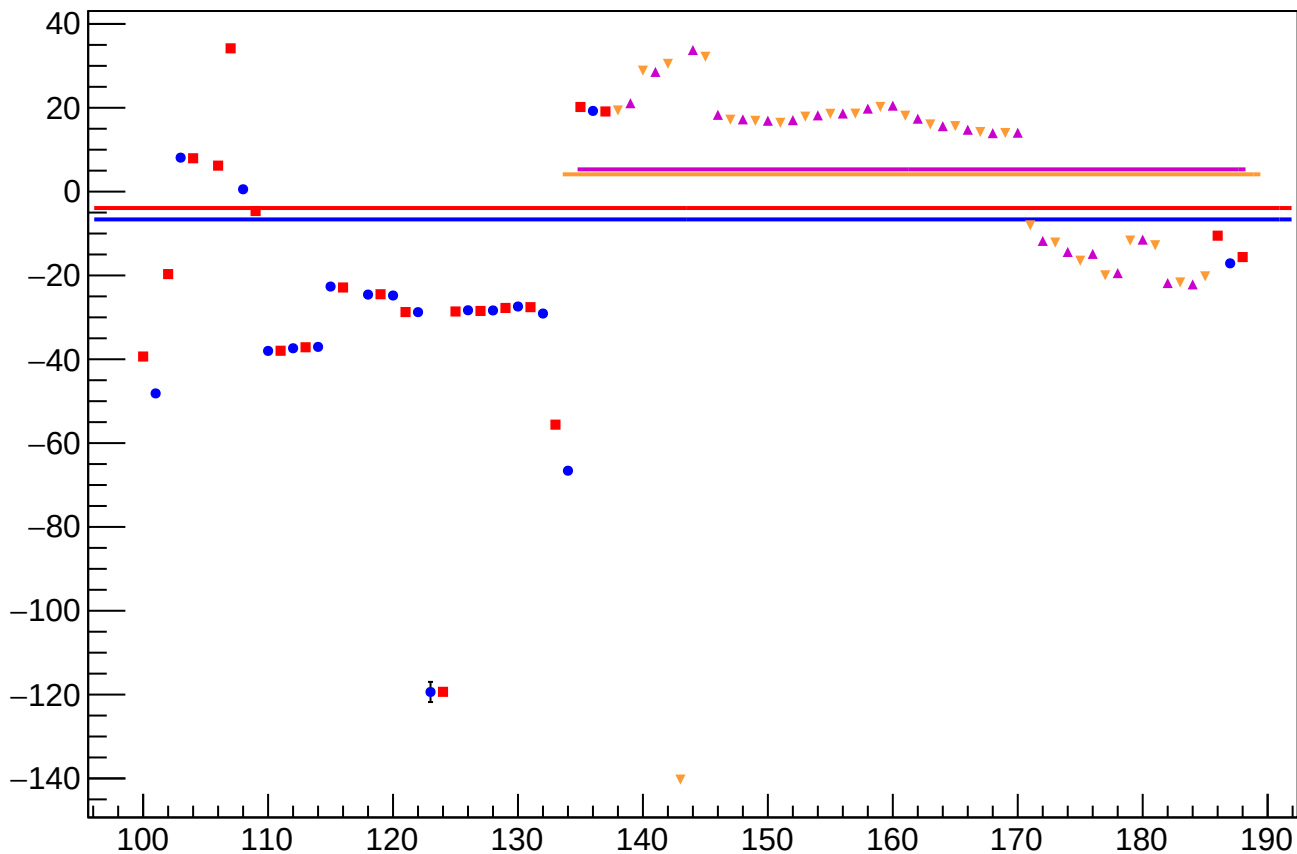
Left In:  $3.812 \pm 0.361$   $\chi^2/\text{NDF}: 2203.5/22$

+ sign  $6.169 \pm 0.331$   $\chi^2/\text{NDF}: 3954.3/42$

All:  $5.905 \pm 0.234$   $\chi^2/\text{NDF}: 7540.0/86$

- sign  $5.641 \pm 0.330$   $\chi^2/\text{NDF}: 3584.4/43$

# reg\_asym\_at2\_dd\_diff\_bpm12X\_slope vs Slug



Right In: -6.634 $\pm$ 0.046  $\chi^2$ /NDF: 266563.8/17

Left Out: 4.121 $\pm$ 0.016  $\chi^2$ /NDF:1340176.5/24

Right Out: -3.918 $\pm$ 0.043  $\chi^2$ /NDF: 272879.2/20

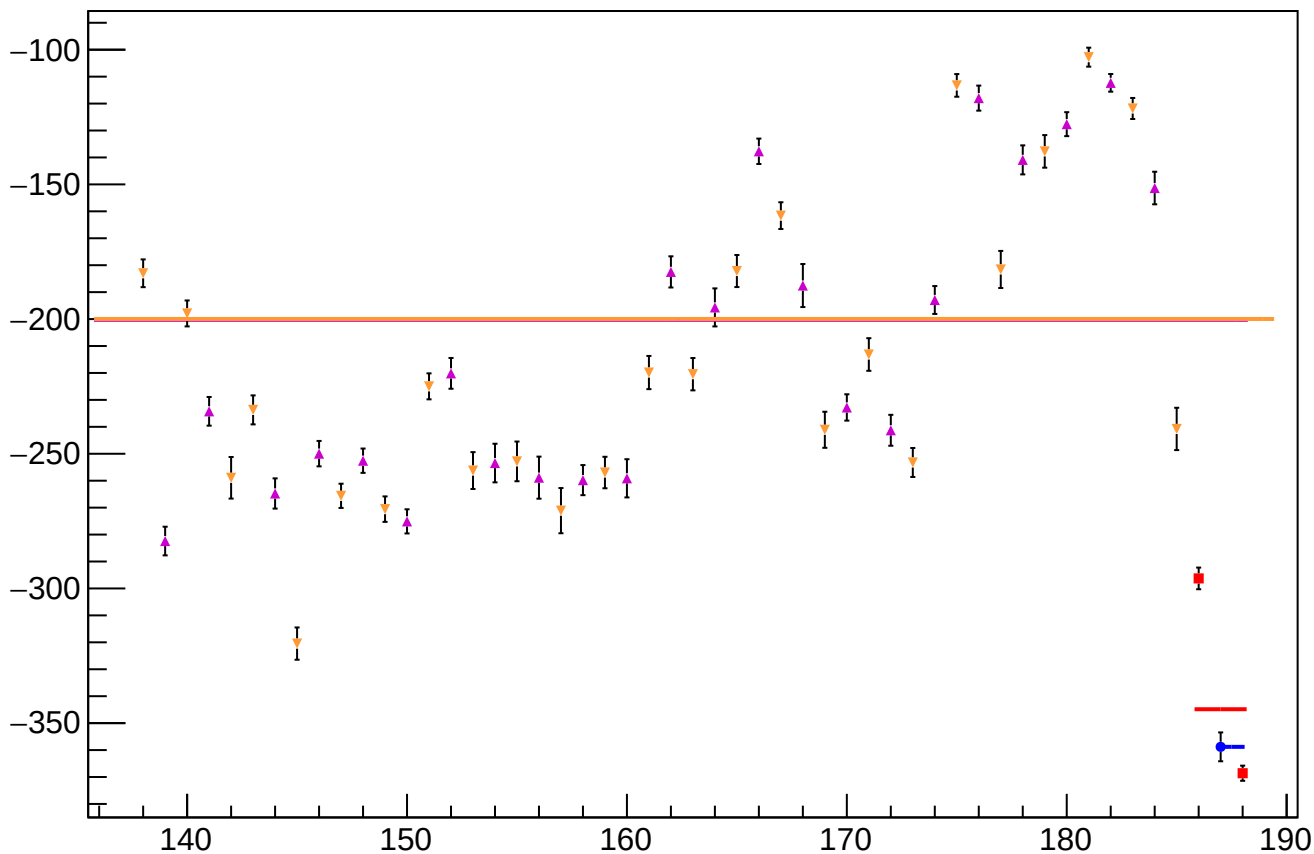
Left In: 5.305 $\pm$ 0.016  $\chi^2$ /NDF:1089610.2/22

+ sign 2.904 $\pm$ 0.015  $\chi^2$ /NDF: 1655579.2/42

All: 3.533 $\pm$ 0.011  $\chi^2$ /NDF: 3061171.7/86

- sign 4.151 $\pm$ 0.015  $\chi^2$ /NDF: 1402296.1/43

# reg\_asym\_atl1r2\_avg\_diff\_bpm1X\_slope vs Slug

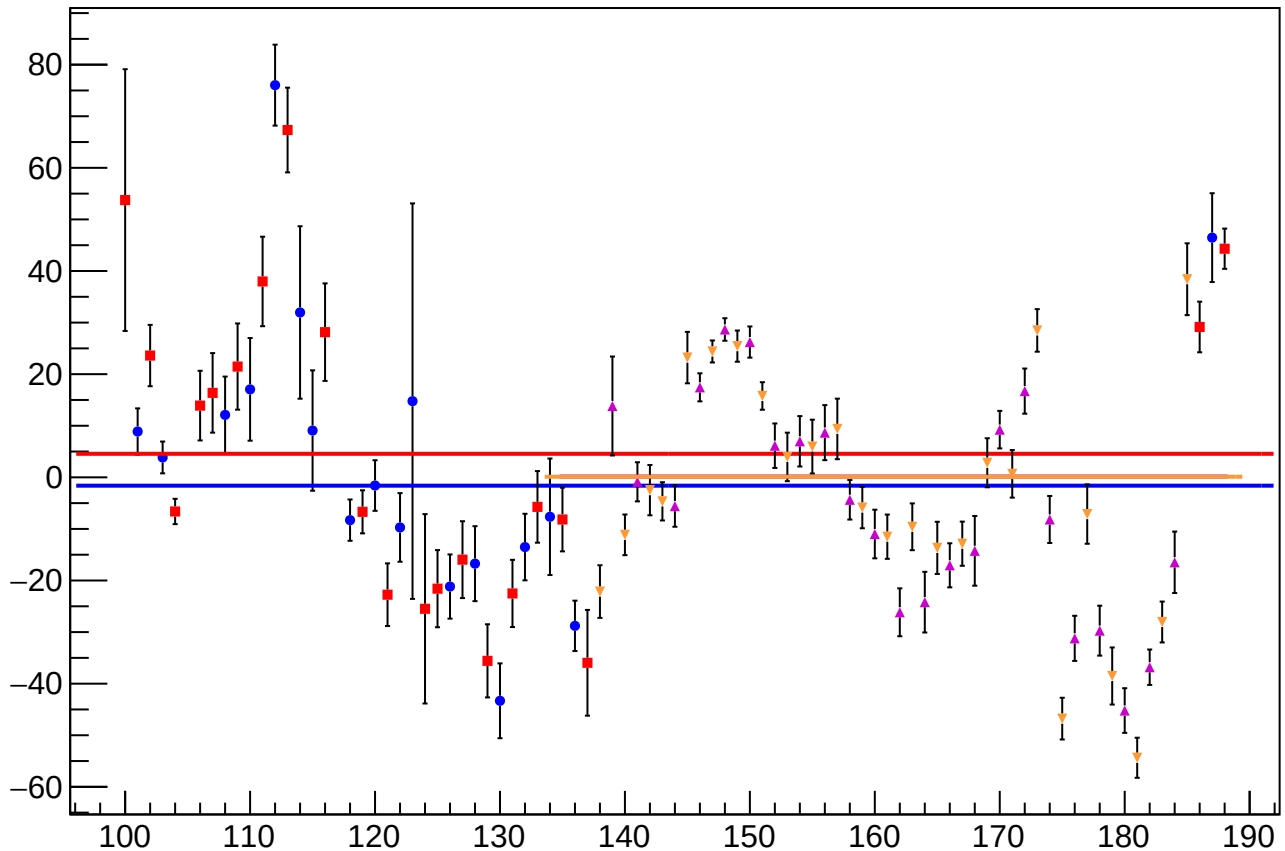


Right In:  $-358.804 \pm 5.356$   $\chi^2/\text{NDF}$ : 0.0/0  
 Left Out:  $-199.957 \pm 1.082$   $\chi^2/\text{NDF}$ : 3220.5/24  
 Right Out:  $-344.835 \pm 2.304$   $\chi^2/\text{NDF}$ : 217.3/1  
 Left In:  $-200.276 \pm 1.093$   $\chi^2/\text{NDF}$ : 3013.8/22

+ sign  $-206.181 \pm 1.060$   $\chi^2/\text{NDF}$ : 4065.7/25  
 All:  $-217.239 \pm 0.723$   $\chi^2/\text{NDF}$ : 10712.1/50  
 - sign  $-226.839 \pm 0.988$   $\chi^2/\text{NDF}$ : 6443.2/24



# reg\_asym\_atl1r2\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $-1.616 \pm 1.430$   $\chi^2/\text{NDF}: 236.0/17$

Left Out:  $0.116 \pm 0.810$   $\chi^2/\text{NDF}: 830.1/24$

Right Out:  $4.563 \pm 1.272$   $\chi^2/\text{NDF}: 373.0/20$

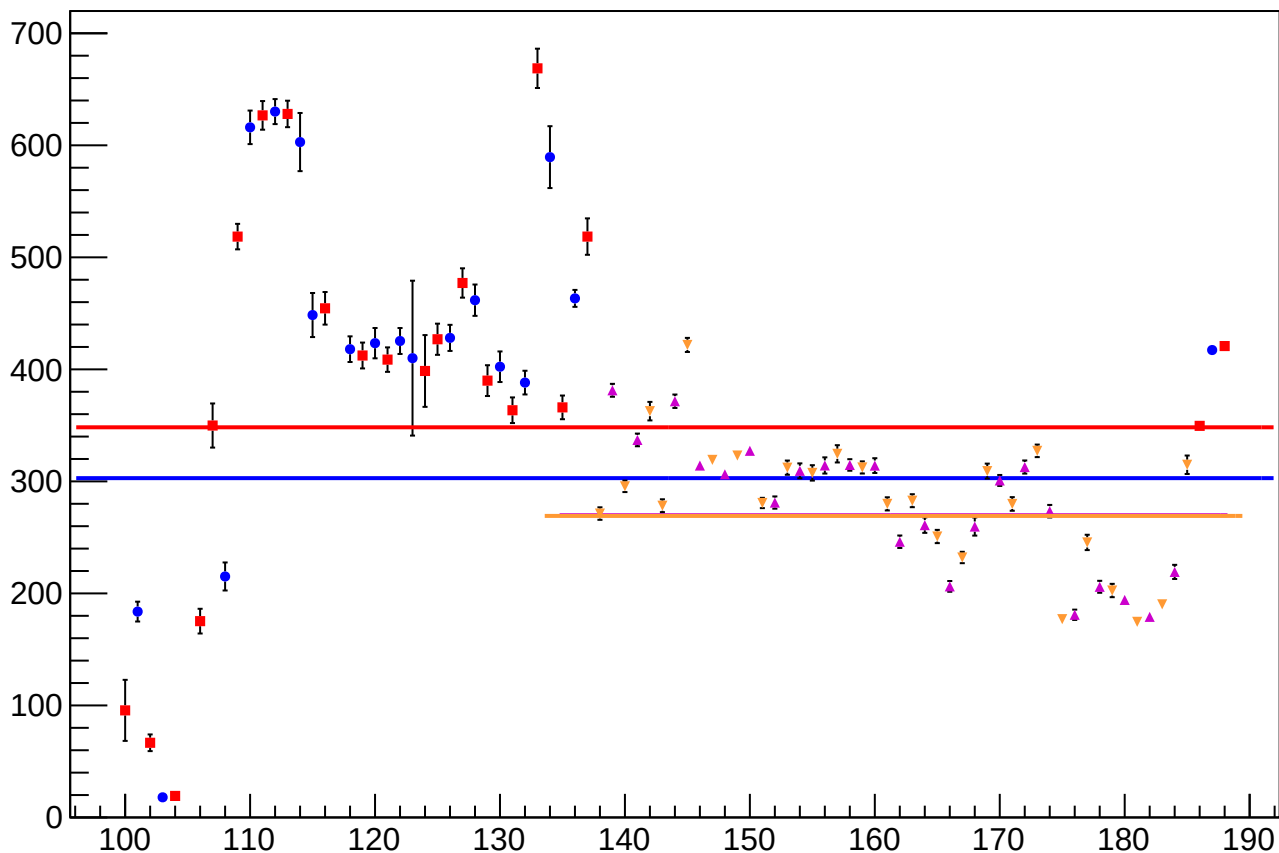
Left In:  $0.153 \pm 0.836$   $\chi^2/\text{NDF}: 719.6/22$

+ sign  $-0.305 \pm 0.705$   $\chi^2/\text{NDF}: 1067.2/42$

All:  $0.598 \pm 0.496$   $\chi^2/\text{NDF}: 2171.5/86$

- sign  $1.485 \pm 0.699$   $\chi^2/\text{NDF}: 1101.0/43$

# reg\_asym\_atl1r2\_avg\_diff\_bpm4eX\_slope vs Slug



Right In: 302.893 $\pm$ 2.158  $\chi^2$ /NDF: 8553.0/17

Left Out: 269.181 $\pm$ 1.081  $\chi^2$ /NDF: 3148.5/24

Right Out: 348.275 $\pm$ 1.476  $\chi^2$ /NDF: 10485.7/20

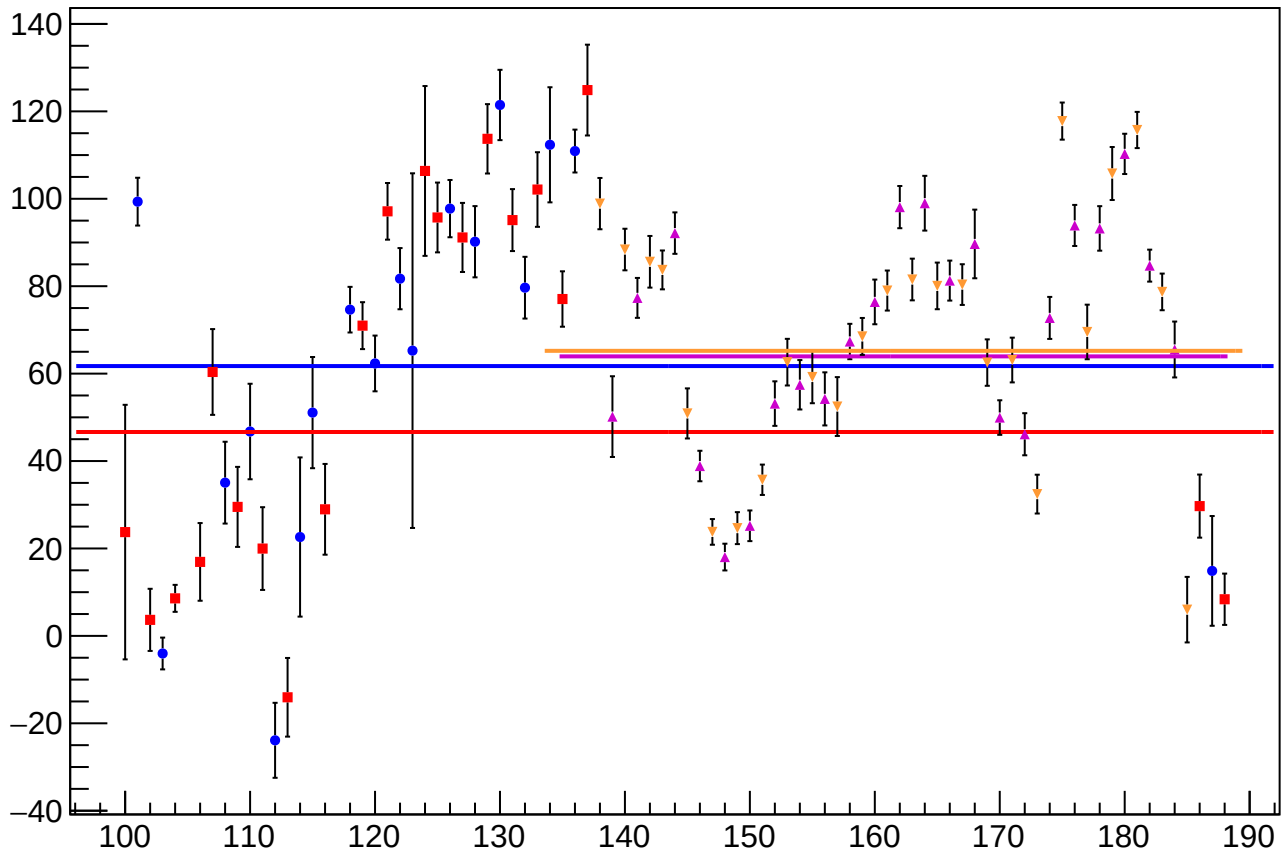
Left In: 269.798 $\pm$ 1.087  $\chi^2$ /NDF: 3234.9/22

+ sign 275.940 $\pm$ 0.966  $\chi^2$ /NDF: 11896.5/42

All: 287.730 $\pm$ 0.649  $\chi^2$ /NDF: 27721.2/86

- sign 297.400 $\pm$ 0.875  $\chi^2$ /NDF: 15553.8/43

# reg\_asym\_atl1r2\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $61.729 \pm 1.663$   $\chi^2/\text{NDF}: 736.6/17$

Left Out:  $65.214 \pm 0.938$   $\chi^2/\text{NDF}: 1005.7/24$

Right Out:  $46.647 \pm 1.546$   $\chi^2/\text{NDF}: 710.6/20$

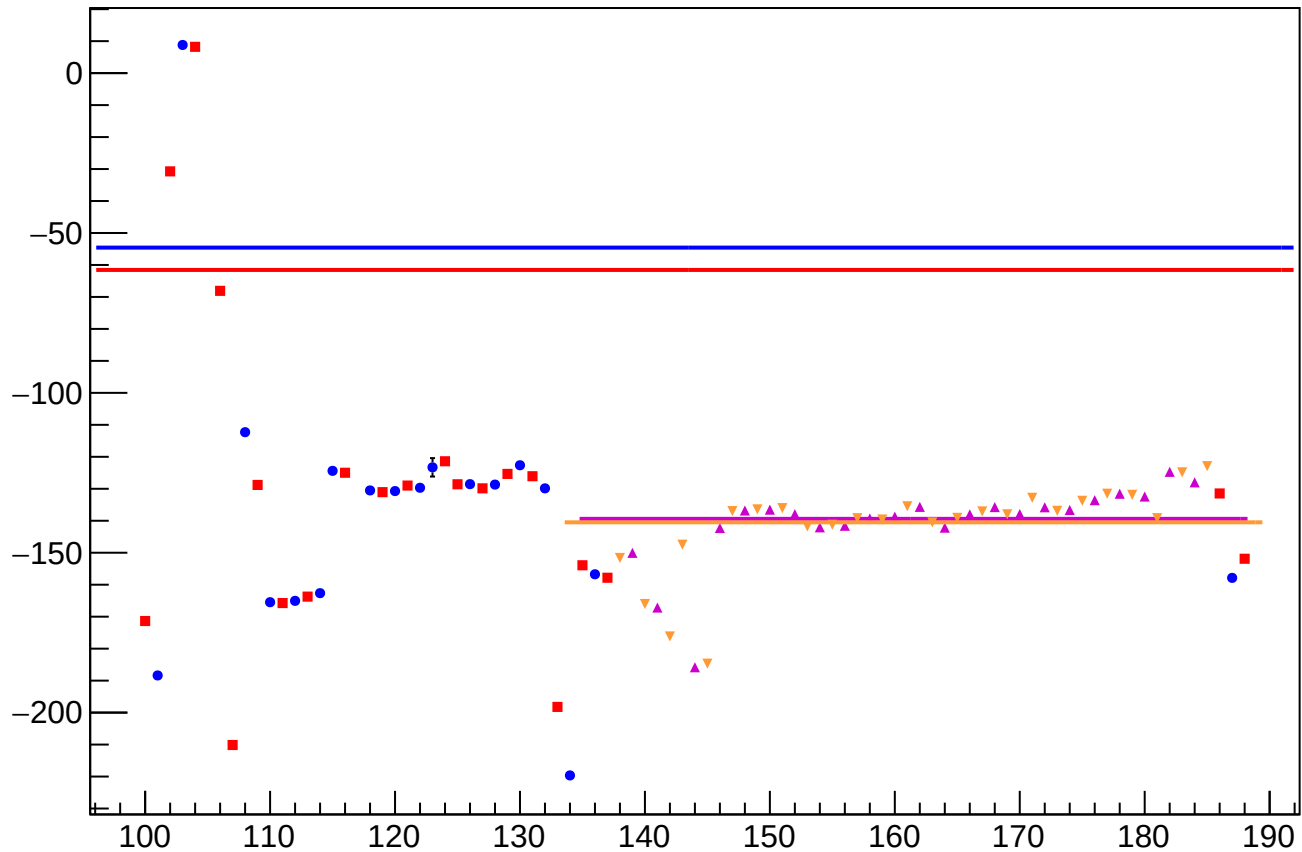
Left In:  $63.944 \pm 0.961$   $\chi^2/\text{NDF}: 803.4/22$

+ sign  $64.373 \pm 0.817$   $\chi^2/\text{NDF}: 1745.6/42$

All:  $61.745 \pm 0.577$   $\chi^2/\text{NDF}: 3370.5/86$

- sign  $59.125 \pm 0.816$   $\chi^2/\text{NDF}: 1604.3/43$

reg\_asym\_atl1r2\_avg\_diff\_bpm12X\_slope vs Slug



Right In: -54.572 $\pm$ 0.070  $\chi^2$ /NDF: 1251454.5/17

Left Out: -140.489 $\pm$ 0.045  $\chi^2$ /NDF: 77350.7/24

Right Out: -61.554 $\pm$ 0.069  $\chi^2$ /NDF: 1077234.6/20

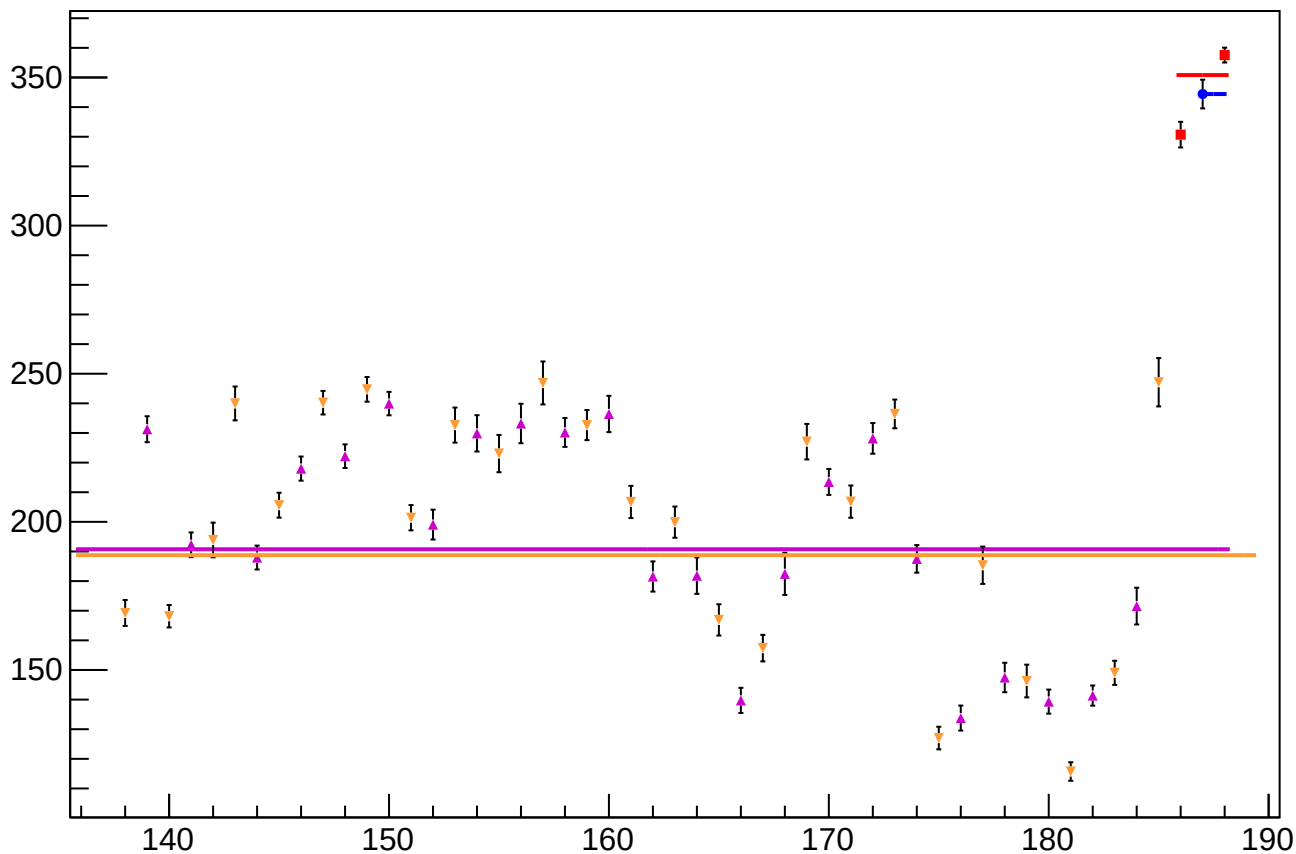
Left In: -139.406 $\pm$ 0.045  $\chi^2$ /NDF: 62878.4/22

+ sign -115.576 $\pm$ 0.038  $\chi^2$ /NDF: 2400459.4/42

All: -116.045 $\pm$ 0.027  $\chi^2$ /NDF: 4427373.8/86

- sign -116.514 $\pm$ 0.038  $\chi^2$ /NDF: 2026604.1/43

# reg\_asym\_atl1r2\_dd\_diff\_bpm1X\_slope vs Slug



Right In: 344.410 $\pm$ 4.840  $\chi^2$ /NDF: 0.0/0

Left Out: 188.749 $\pm$ 0.958  $\chi^2$ /NDF:1968.6/24

Right Out: 350.817 $\pm$ 2.168  $\chi^2$ /NDF: 28.9/1

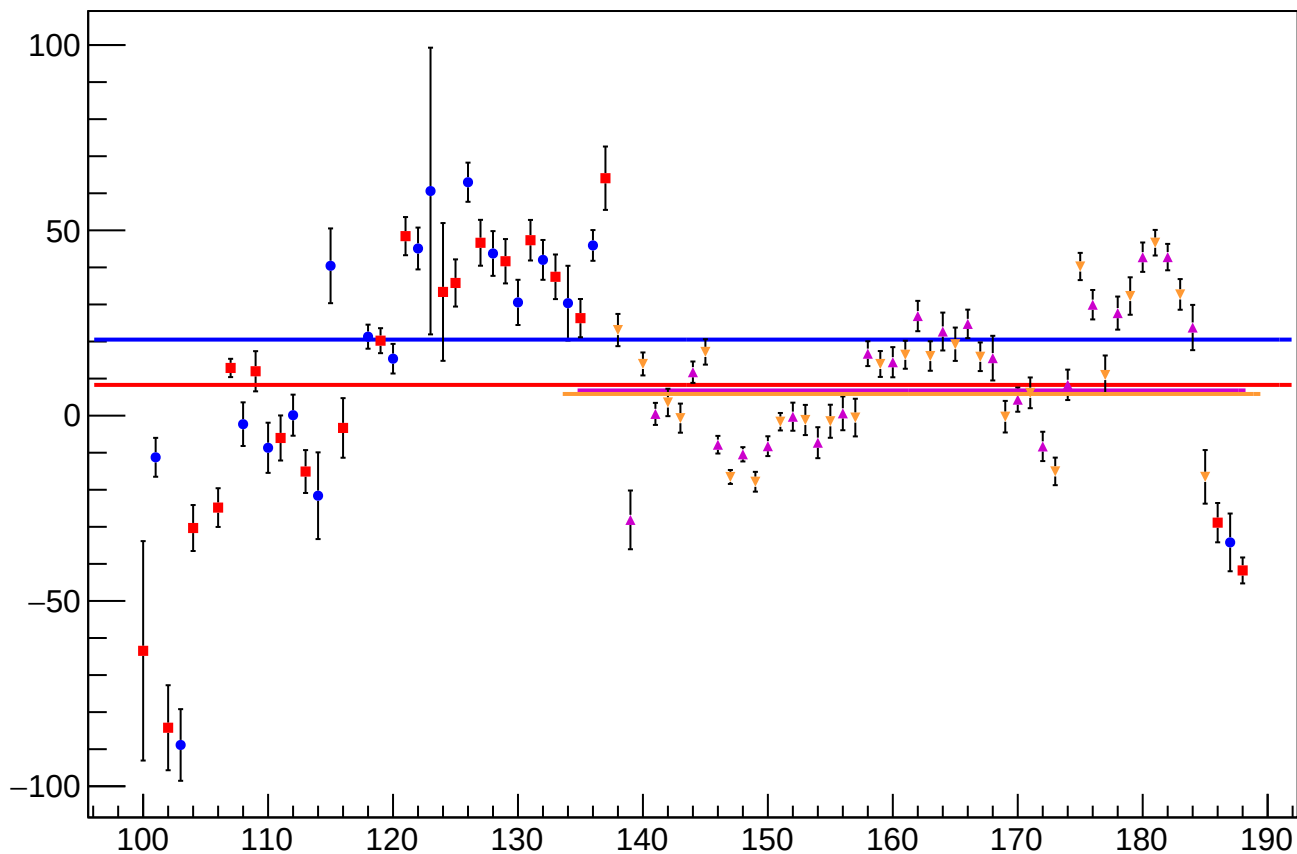
Left In: 190.753 $\pm$ 0.971  $\chi^2$ /NDF:1421.8/22

+ sign 194.618 $\pm$ 0.940  $\chi^2$ /NDF: 2963.8/25

All: 206.728 $\pm$ 0.645  $\chi^2$ /NDF: 9268.3/50

- sign 217.495 $\pm$ 0.886  $\chi^2$ /NDF: 5990.8/24

# reg\_asym\_atl1r2\_dd\_diff\_bpm4aY\_slope vs Slug



Right In: 20.519 $\pm$ 1.353  $\chi^2$ /NDF: 436.5/17

Left Out: 5.851 $\pm$ 0.714  $\chi^2$ /NDF: 650.6/24

Right Out: 8.295 $\pm$ 1.133  $\chi^2$ /NDF: 723.6/20

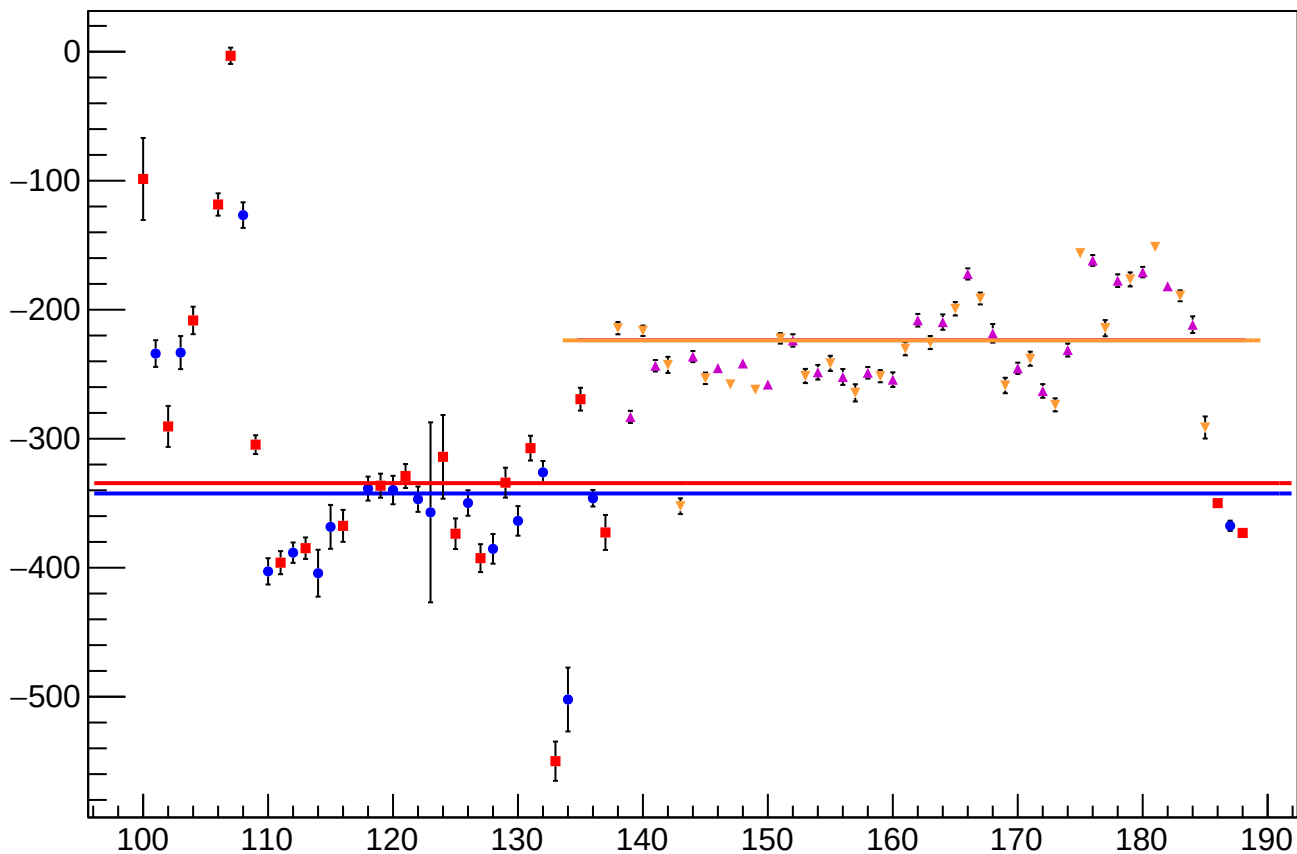
Left In: 6.797 $\pm$ 0.735  $\chi^2$ /NDF: 525.8/22

+ sign 9.049 $\pm$ 0.632  $\chi^2$ /NDF: 1179.0/42

All: 8.123 $\pm$ 0.441  $\chi^2$ /NDF: 2433.9/86

- sign 7.240 $\pm$ 0.616  $\chi^2$ /NDF: 1250.7/43

# reg\_asym\_atl1r2\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: -342.441 $\pm$ 2.154  $\chi^2$ /NDF: 841.1/17

Left Out: -223.752 $\pm$ 0.958  $\chi^2$ /NDF: 2021.5/24

Right Out: -334.433 $\pm$ 1.392  $\chi^2$ /NDF: 4386.4/20

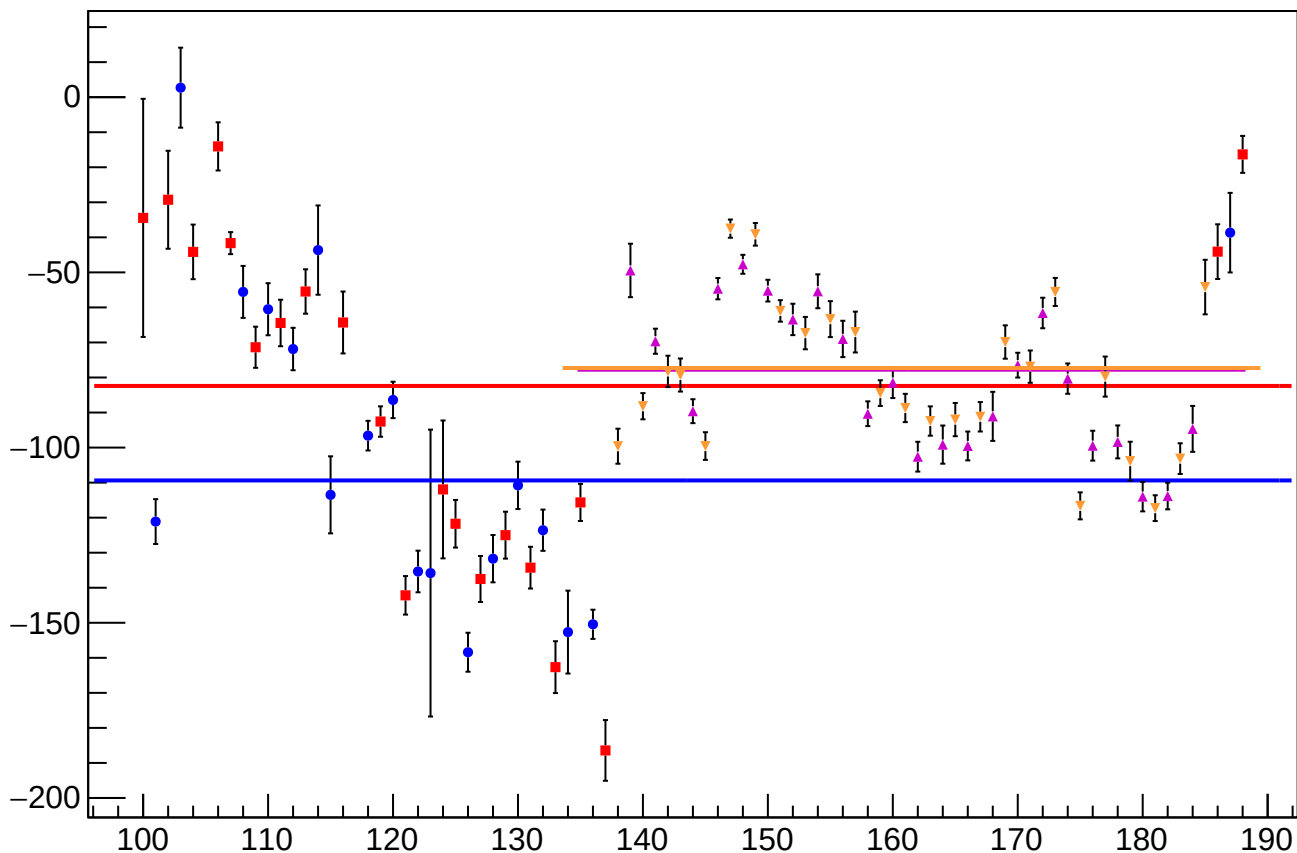
Left In: -223.554 $\pm$ 0.966  $\chi^2$ /NDF: 1286.5/22

+ sign -243.358 $\pm$ 0.875  $\chi^2$ /NDF: 5398.4/42

All: -252.267 $\pm$ 0.588  $\chi^2$ /NDF: 15545.1/86

- sign -259.587 $\pm$ 0.793  $\chi^2$ /NDF: 9958.0/43

# reg\_asym\_atl1r2\_dd\_diff\_bpm4eY\_slope vs Slug



Right In: -109.380 $\pm$ 1.563  $\chi^2/\text{NDF}$ : 552.9/17

Left Out: -77.296 $\pm$ 0.829  $\chi^2/\text{NDF}$ : 844.6/24

Right Out: -82.410 $\pm$ 1.363  $\chi^2/\text{NDF}$ : 1169.6/20

Left In: -77.777 $\pm$ 0.847  $\chi^2/\text{NDF}$ : 624.5/22

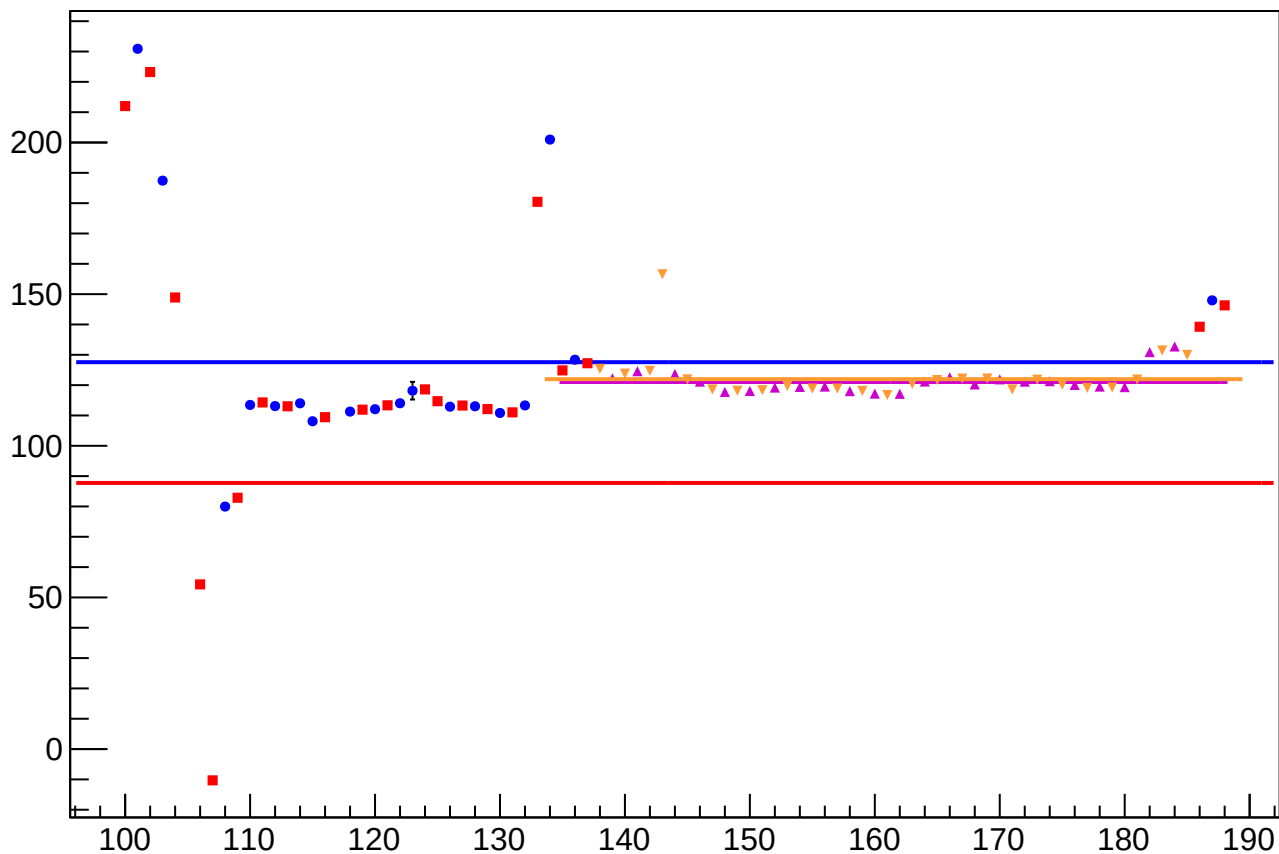
+ sign -84.339 $\pm$ 0.732  $\chi^2/\text{NDF}$ : 1726.6/42

All: -81.656 $\pm$ 0.513  $\chi^2/\text{NDF}$ : 3555.4/86

- sign -79.067 $\pm$ 0.719  $\chi^2/\text{NDF}$ : 1802.4/43



# reg\_asym\_atl1r2\_dd\_diff\_bpm12X\_slope vs Slug



Right In: 127.569 $\pm$ 0.088  $\chi^2$ /NDF: 189074.2/17

Left Out: 121.972 $\pm$ 0.039  $\chi^2$ /NDF: 27431.1/24

Right Out: 87.752 $\pm$ 0.072  $\chi^2$ /NDF: 821439.4/20

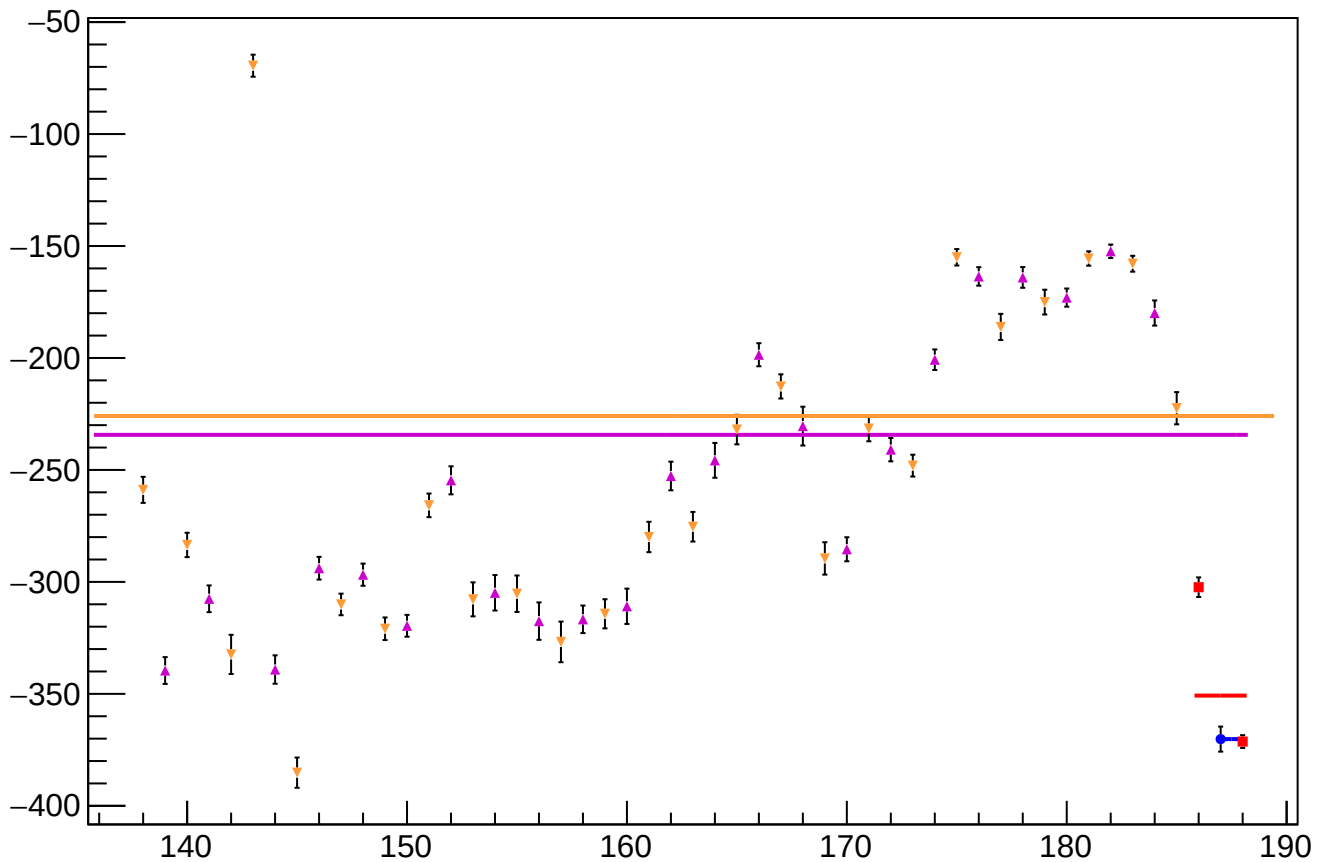
Left In: 121.045 $\pm$ 0.040  $\chi^2$ /NDF: 7903.5/22

+ sign 122.908 $\pm$ 0.036  $\chi^2$ /NDF: 219860.9/42

All: 117.947 $\pm$ 0.025  $\chi^2$ /NDF: 1249337.9/86

- sign 113.352 $\pm$ 0.035  $\chi^2$ /NDF: 992991.2/43

# reg\_asym\_atr1l2\_avg\_diff\_bpm1X\_slope vs Slug



Right In: -370.205+/-5.584  $\chi^2$ /NDF: 0.0/0

Left Out: -225.905+/-1.083  $\chi^2$ /NDF:4669.2/24

Right Out: -350.782+/-2.390  $\chi^2$ /NDF: 173.9/1

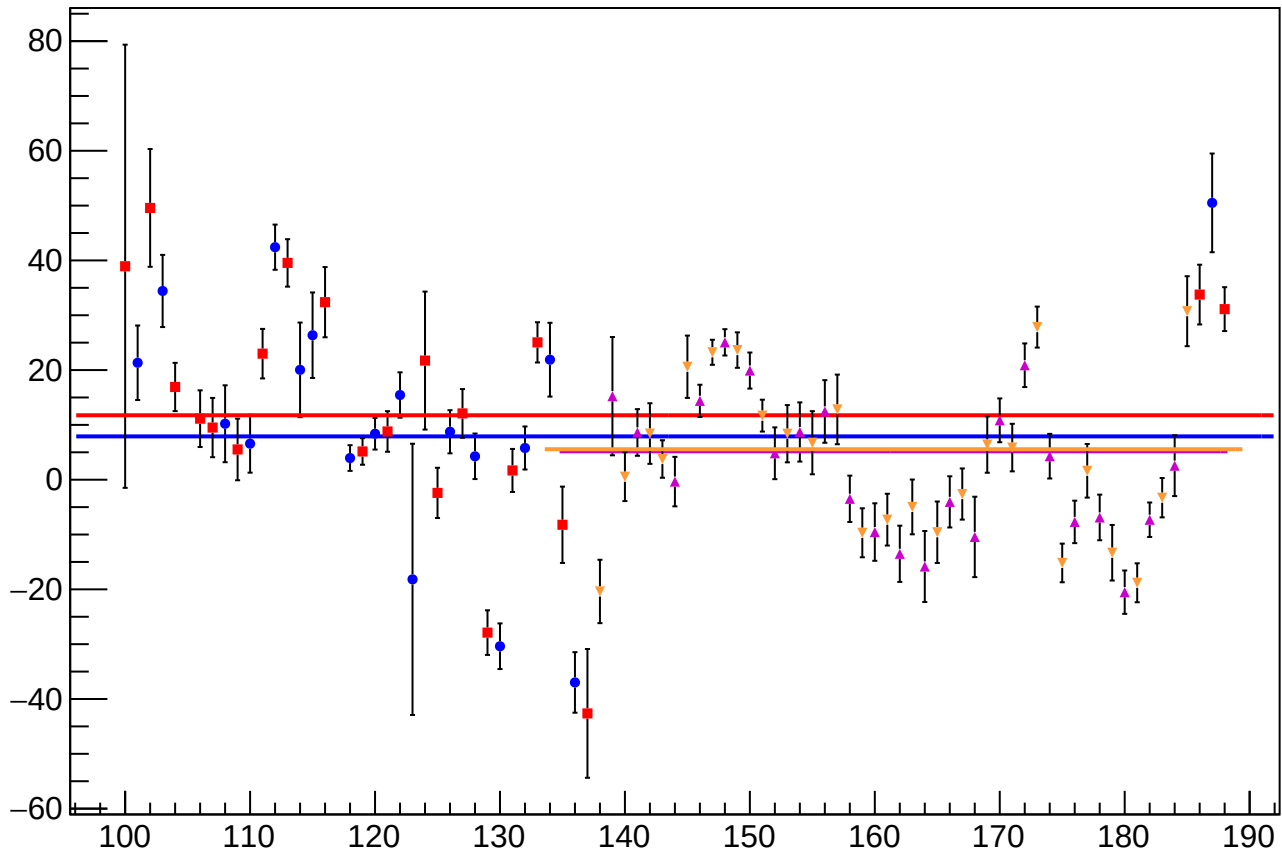
Left In: -234.328+/-1.104  $\chi^2$ /NDF:3591.9/22

+ sign -231.140+/-1.064  $\chi^2$ /NDF: 5312.8/25

All: -243.675+/-0.730  $\chi^2$ /NDF: 11296.8/50

- sign -254.809+/-1.002  $\chi^2$ /NDF: 5721.8/24

# reg\_asym\_atr1l2\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $7.901 \pm 1.076$   $\chi^2/\text{NDF}$ : 283.7/17

Left Out:  $5.558 \pm 0.832$   $\chi^2/\text{NDF}$ : 313.4/24

Right Out:  $11.755 \pm 1.019$   $\chi^2/\text{NDF}$ : 275.6/20

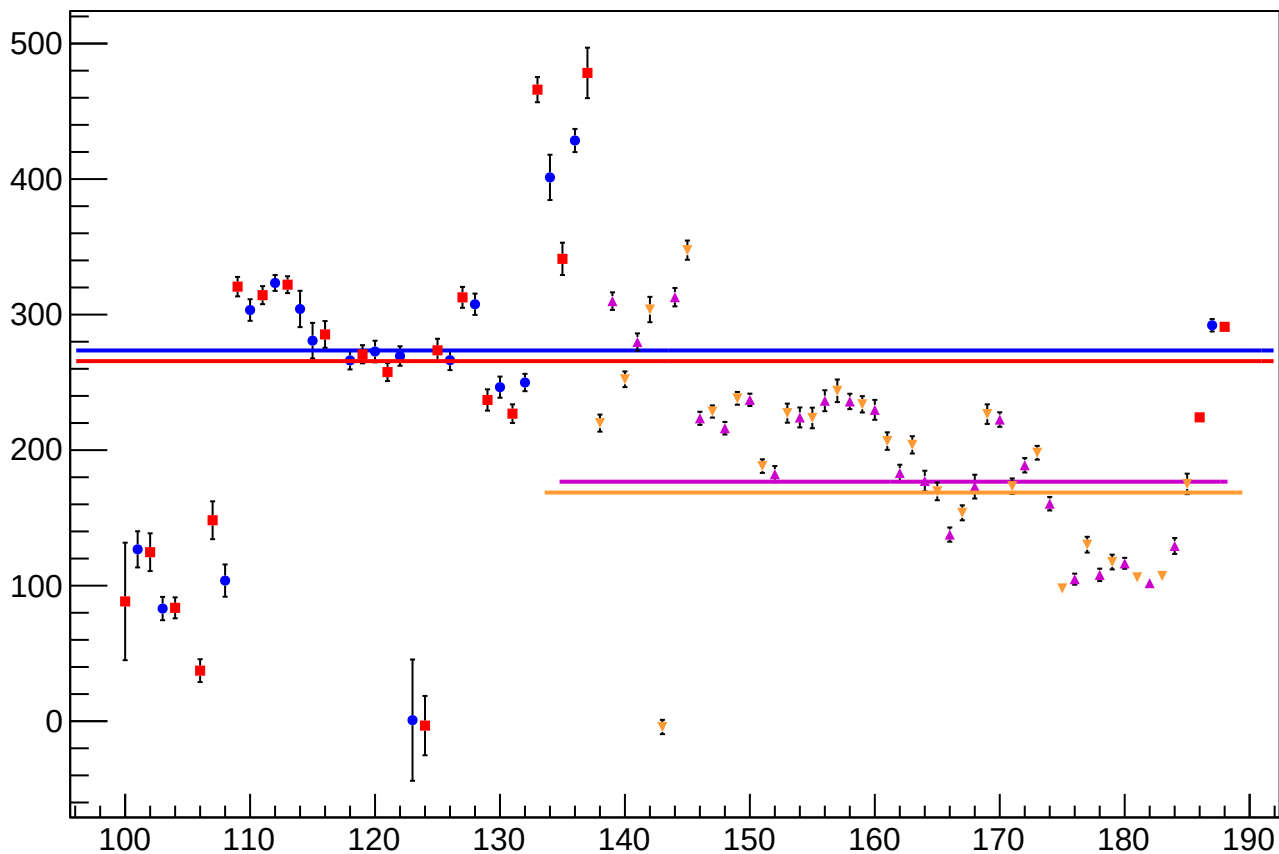
Left In:  $5.186 \pm 0.867$   $\chi^2/\text{NDF}$ : 243.2/22

+ sign  $6.435 \pm 0.658$   $\chi^2/\text{NDF}$ : 600.2/42

All:  $7.186 \pm 0.466$   $\chi^2/\text{NDF}$ : 1145.7/86

- sign  $7.942 \pm 0.660$   $\chi^2/\text{NDF}$ : 542.9/43

# reg\_asym\_atr1l2\_avg\_diff\_bpm4eX\_slope vs Slug



Right In: 273.539 $\pm$ 1.888  $\chi^2$ /NDF: 1393.8/17

Left Out: 168.699 $\pm$ 1.086  $\chi^2$ /NDF: 4238.2/24

Right Out: 265.674 $\pm$ 1.379  $\chi^2$ /NDF: 2810.3/20

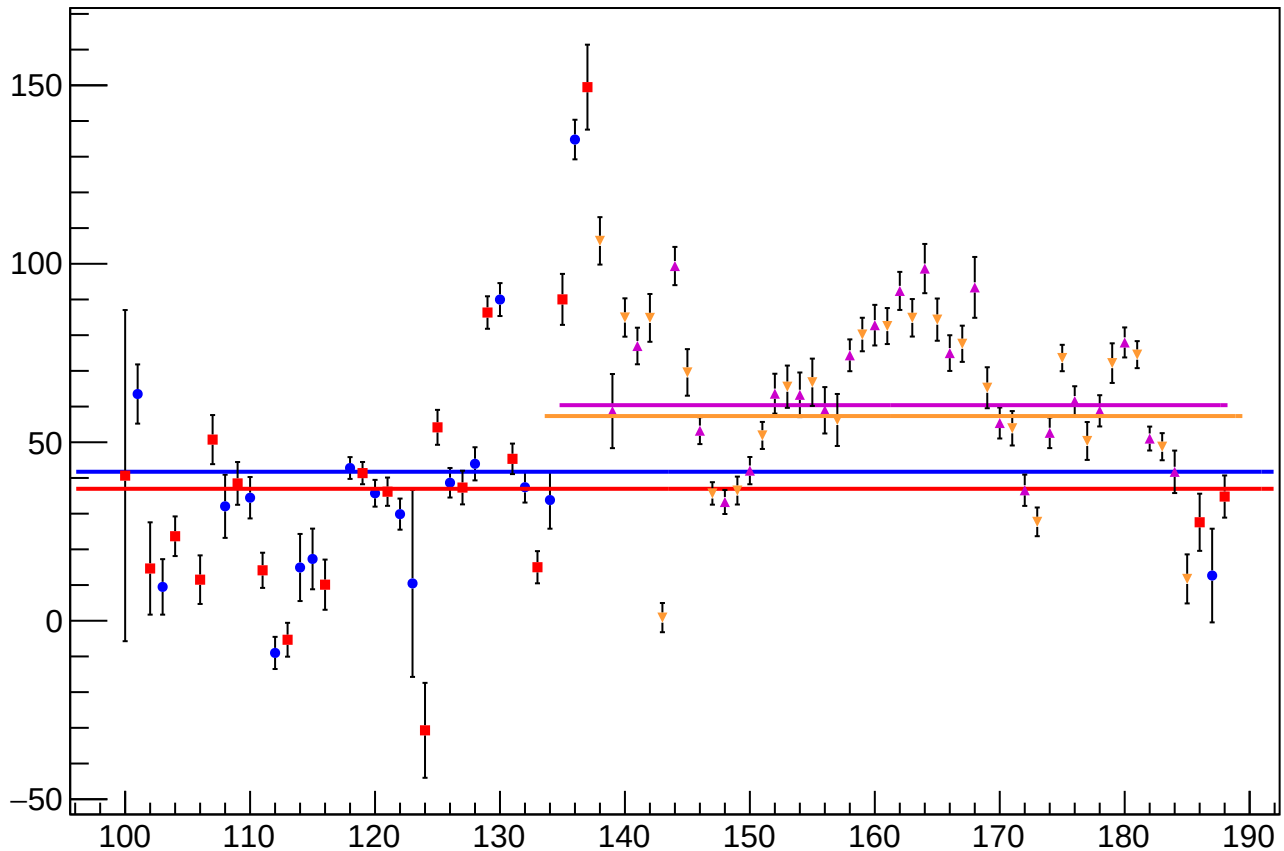
Left In: 176.711 $\pm$ 1.102  $\chi^2$ /NDF: 3234.3/22

+ sign 194.781 $\pm$ 0.942  $\chi^2$ /NDF: 7948.7/42

All: 203.826 $\pm$ 0.635  $\chi^2$ /NDF: 16703.4/86

- sign 211.385 $\pm$ 0.861  $\chi^2$ /NDF: 8585.4/43

# reg\_asym\_atr1l2\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $41.740 \pm 1.250$   $\chi^2/\text{NDF}: 580.5/17$

Left Out:  $57.343 \pm 0.956$   $\chi^2/\text{NDF}: 641.5/24$

Right Out:  $36.965 \pm 1.197$   $\chi^2/\text{NDF}: 474.2/20$

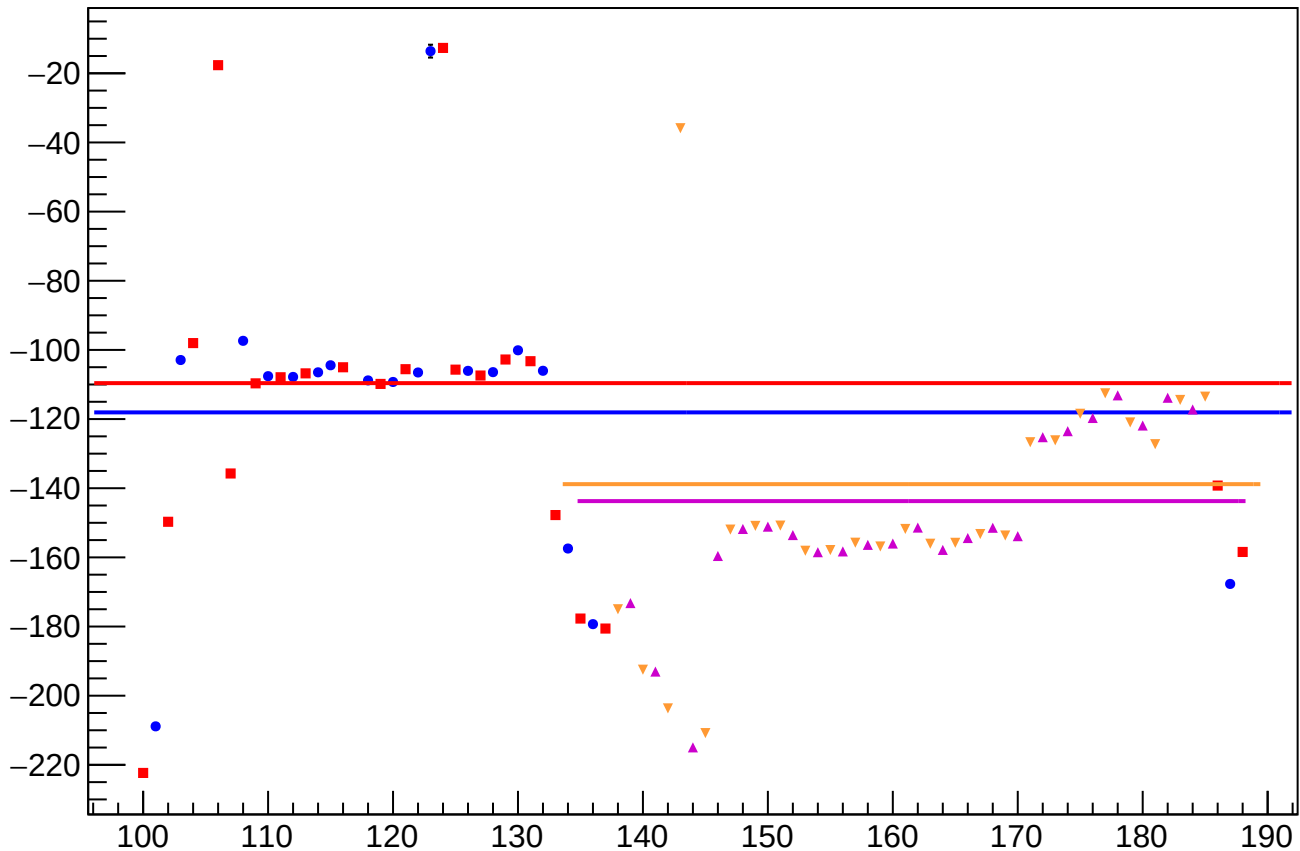
Left In:  $60.392 \pm 0.987$   $\chi^2/\text{NDF}: 341.2/22$

+ sign  $51.582 \pm 0.759$   $\chi^2/\text{NDF}: 1320.3/42$

All:  $51.247 \pm 0.538$   $\chi^2/\text{NDF}: 2364.0/86$

- sign  $50.911 \pm 0.762$   $\chi^2/\text{NDF}: 1043.4/43$

# reg\_asym\_atr1l2\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-118.068 \pm 0.078$   $\chi^2/\text{NDF}: 146572.9/17$

Left Out:  $-138.821 \pm 0.045$   $\chi^2/\text{NDF}: 525537.6/24$

Right Out:  $-109.606 \pm 0.070$   $\chi^2/\text{NDF}: 359329.2/20$

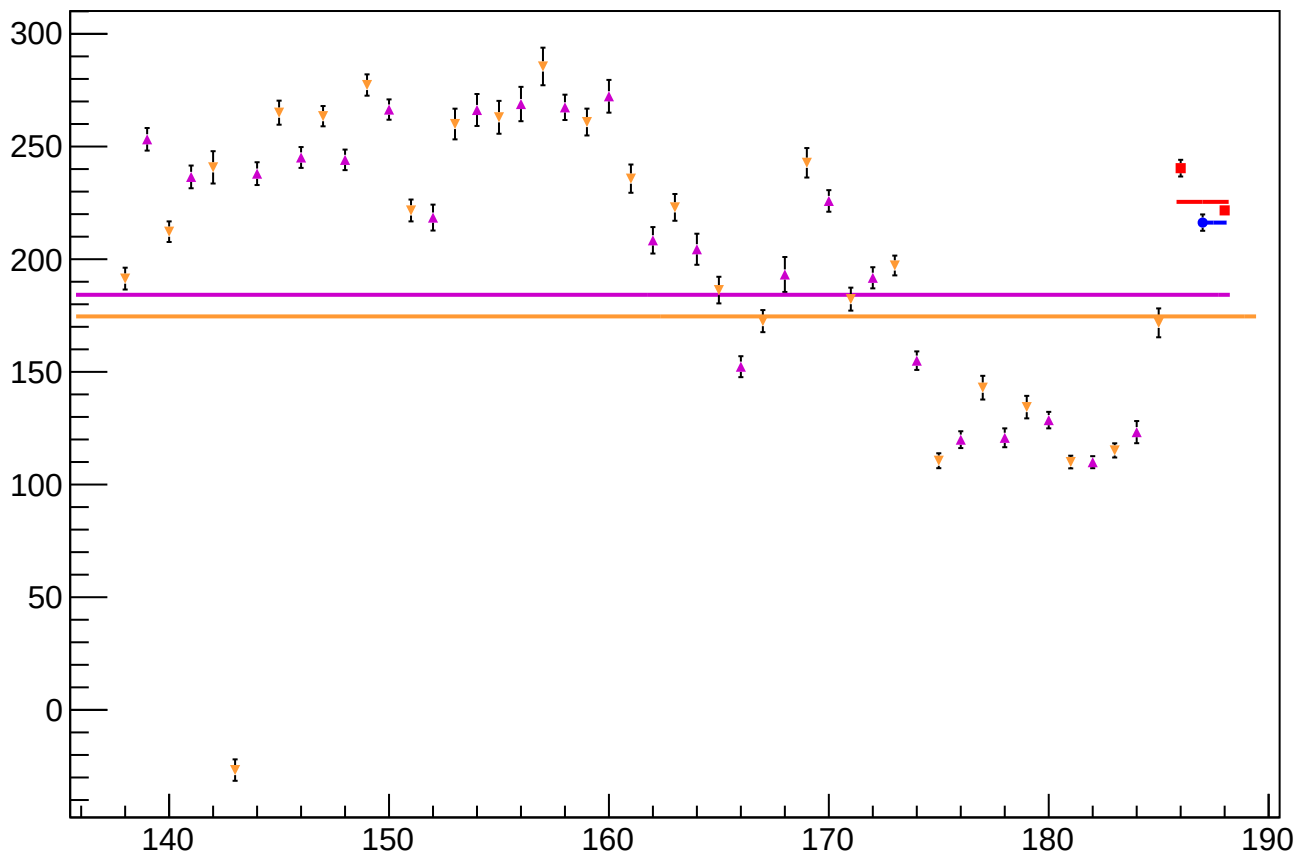
Left In:  $-143.726 \pm 0.046$   $\chi^2/\text{NDF}: 260994.5/22$

+ sign  $-133.543 \pm 0.039$   $\chi^2/\text{NDF}: 725478.5/42$

All:  $-133.499 \pm 0.027$   $\chi^2/\text{NDF}: 1512049.1/86$

- sign  $-133.458 \pm 0.038$   $\chi^2/\text{NDF}: 786568.1/43$

# reg\_asym\_atr1l2\_dd\_diff\_bpm1X\_slope vs Slug



Right In: 216.242 $\pm$ 3.631  $\chi^2$ /NDF: 0.0/0

Left Out: 174.613 $\pm$ 0.969  $\chi^2$ /NDF:5551.3/24

Right Out: 225.449 $\pm$ 1.665  $\chi^2$ /NDF: 20.4/1

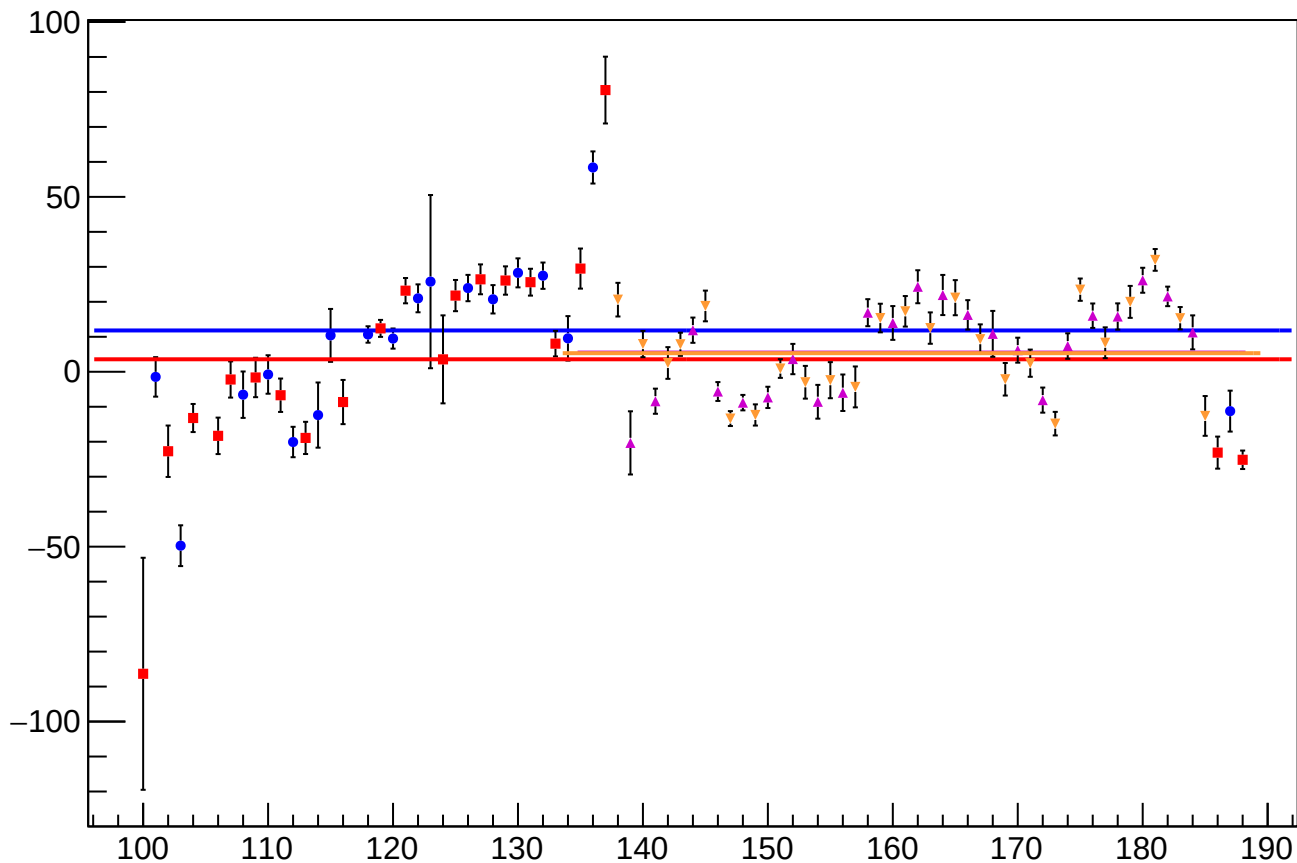
Left In: 184.205 $\pm$ 0.987  $\chi^2$ /NDF:3637.1/22

+ sign 177.381 $\pm$ 0.936  $\chi^2$ /NDF: 5674.0/25

All: 187.010 $\pm$ 0.629  $\chi^2$ /NDF: 9978.4/50

- sign 194.927 $\pm$ 0.849  $\chi^2$ /NDF: 4111.6/24

# reg\_asym\_atr1l2\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $11.811 \pm 1.039$   $\chi^2/\text{NDF}: 363.8/17$

Left Out:  $5.314 \pm 0.750$   $\chi^2/\text{NDF}: 345.1/24$

Right Out:  $3.568 \pm 0.955$   $\chi^2/\text{NDF}: 480.7/20$

Left In:  $5.483 \pm 0.779$   $\chi^2/\text{NDF}: 259.1/22$

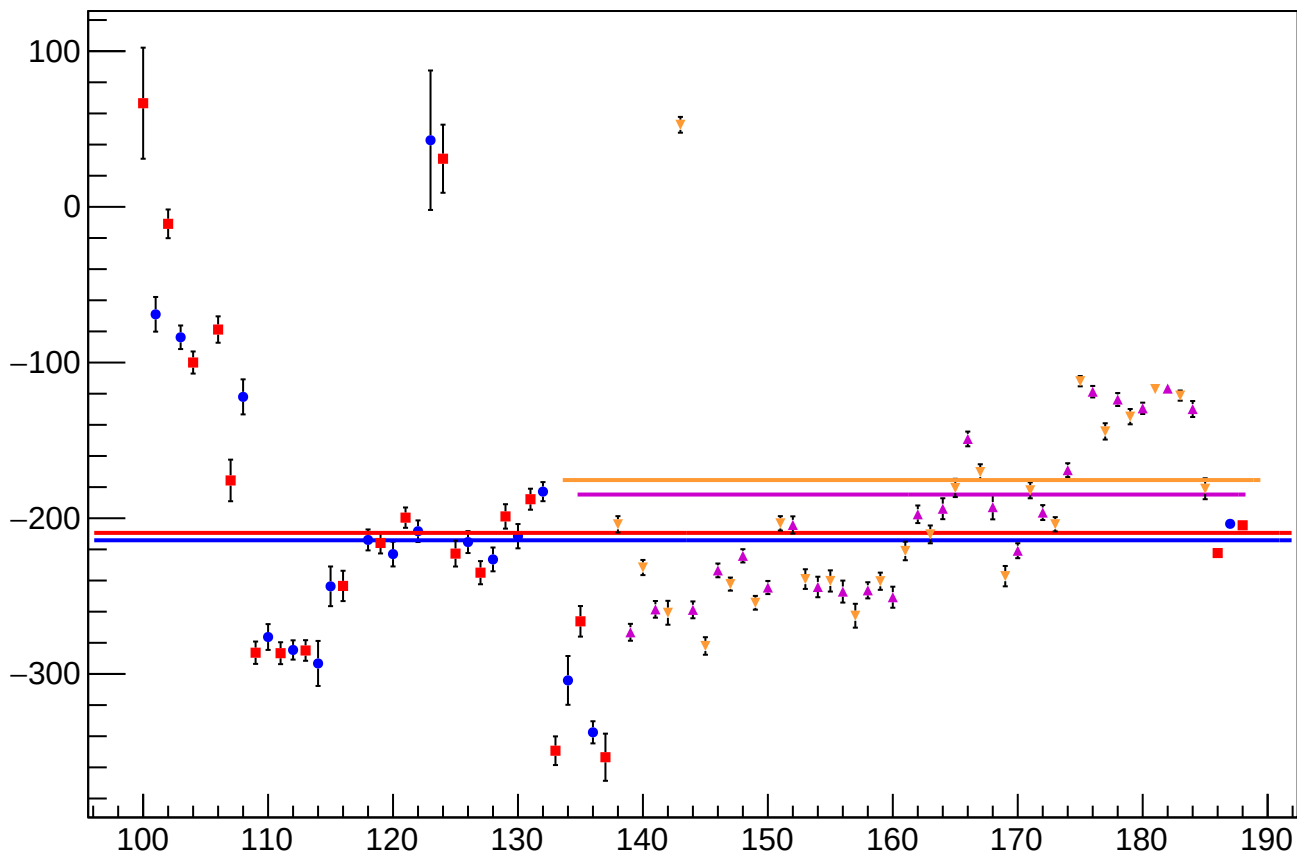
+ sign  $7.542 \pm 0.608$   $\chi^2/\text{NDF}: 734.6/42$

All:  $6.119 \pm 0.428$   $\chi^2/\text{NDF}: 1487.6/86$

- sign  $4.718 \pm 0.604$   $\chi^2/\text{NDF}: 742.2/43$



# reg\_asym\_atr1l2\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: -214.147 $\pm$ 1.665  $\chi^2$ /NDF: 1164.8/17

Left Out: -175.470 $\pm$ 0.974  $\chi^2$ /NDF: 5103.8/24

Right Out: -209.401 $\pm$ 1.098  $\chi^2$ /NDF: 1917.8/20

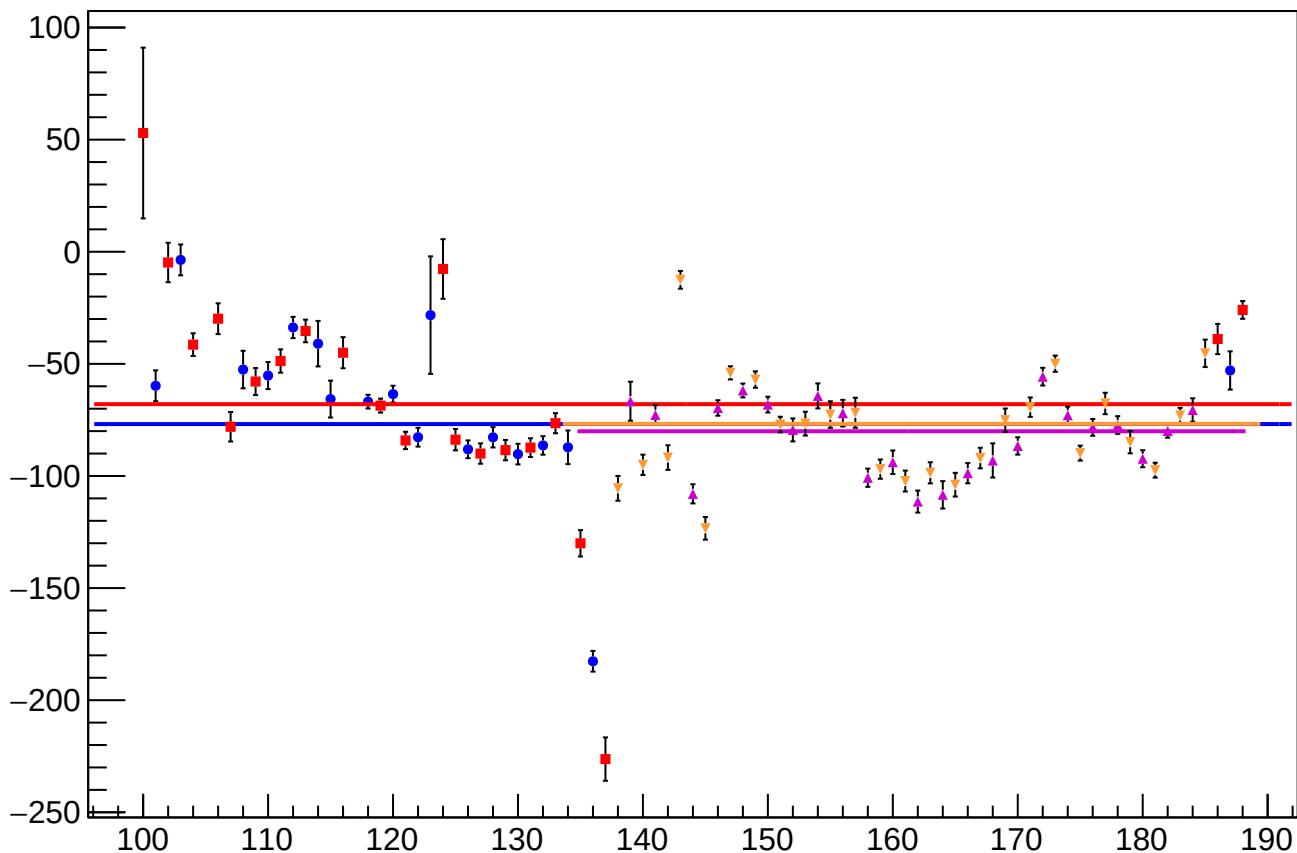
Left In: -184.774 $\pm$ 0.987  $\chi^2$ /NDF: 3082.4/22

+ sign -185.332 $\pm$ 0.841  $\chi^2$ /NDF: 6670.8/42

All: -191.259 $\pm$ 0.553  $\chi^2$ /NDF: 12036.9/86

- sign -195.778 $\pm$ 0.734  $\chi^2$ /NDF: 5278.4/43

# reg\_asym\_atr1l2\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-76.853 \pm 1.207$   $\chi^2/\text{NDF}$ : 825.3/17

Left Out:  $-76.747 \pm 0.861$   $\chi^2/\text{NDF}$ : 746.8/24

Right Out:  $-67.977 \pm 1.139$   $\chi^2/\text{NDF}$ : 820.6/20

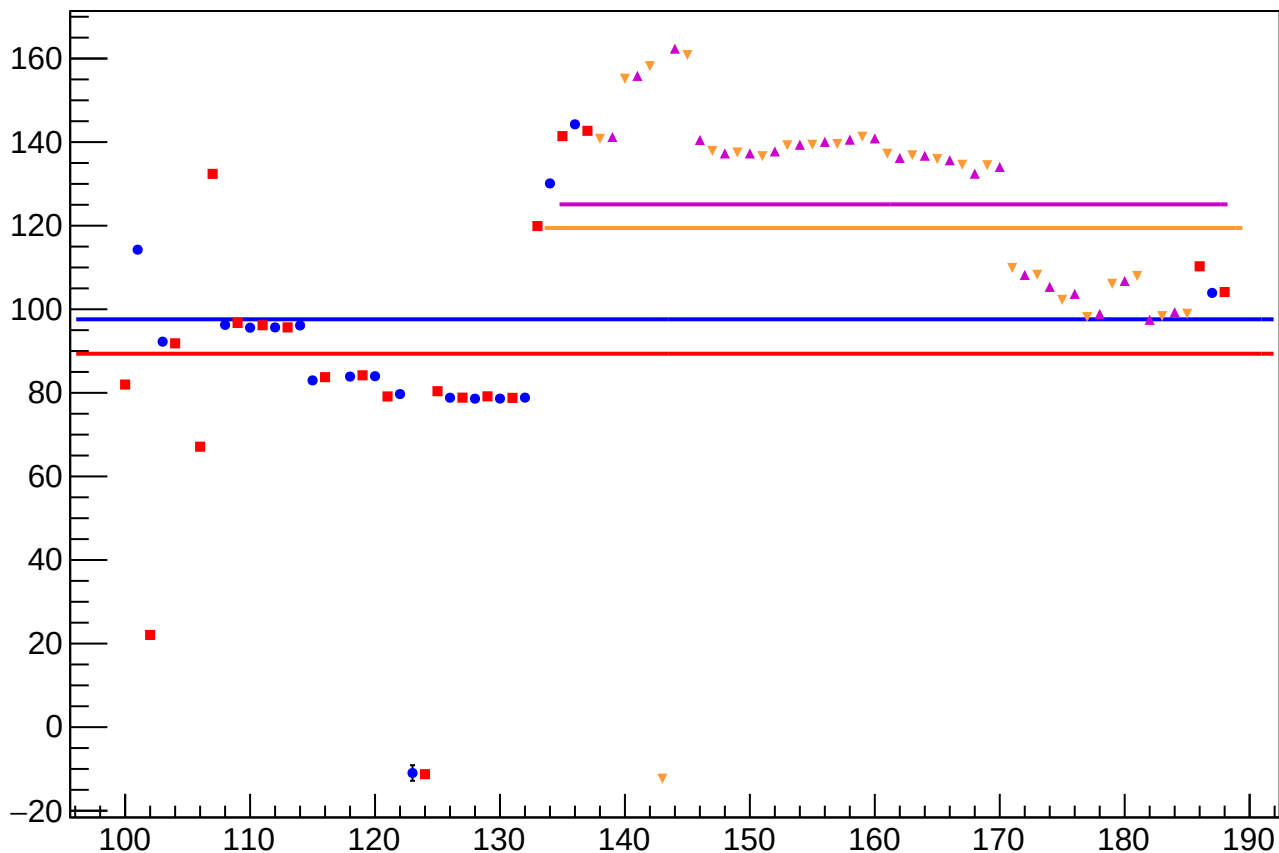
Left In:  $-80.068 \pm 0.886$   $\chi^2/\text{NDF}$ : 286.8/22

+ sign  $-76.783 \pm 0.701$   $\chi^2/\text{NDF}$ : 1572.1/42

All:  $-76.145 \pm 0.495$   $\chi^2/\text{NDF}$ : 2751.3/86

- sign  $-75.509 \pm 0.700$   $\chi^2/\text{NDF}$ : 1177.6/43

# reg\_asym\_atr1l2\_dd\_diff\_bpm12X\_slope vs Slug



Right In: 97.598 $\pm$ 0.072  $\chi^2$ /NDF: 94652.6/17

Left Out: 119.448 $\pm$ 0.041  $\chi^2$ /NDF: 660075.8/24

Right Out: 89.363 $\pm$ 0.064  $\chi^2$ /NDF: 229787.9/20

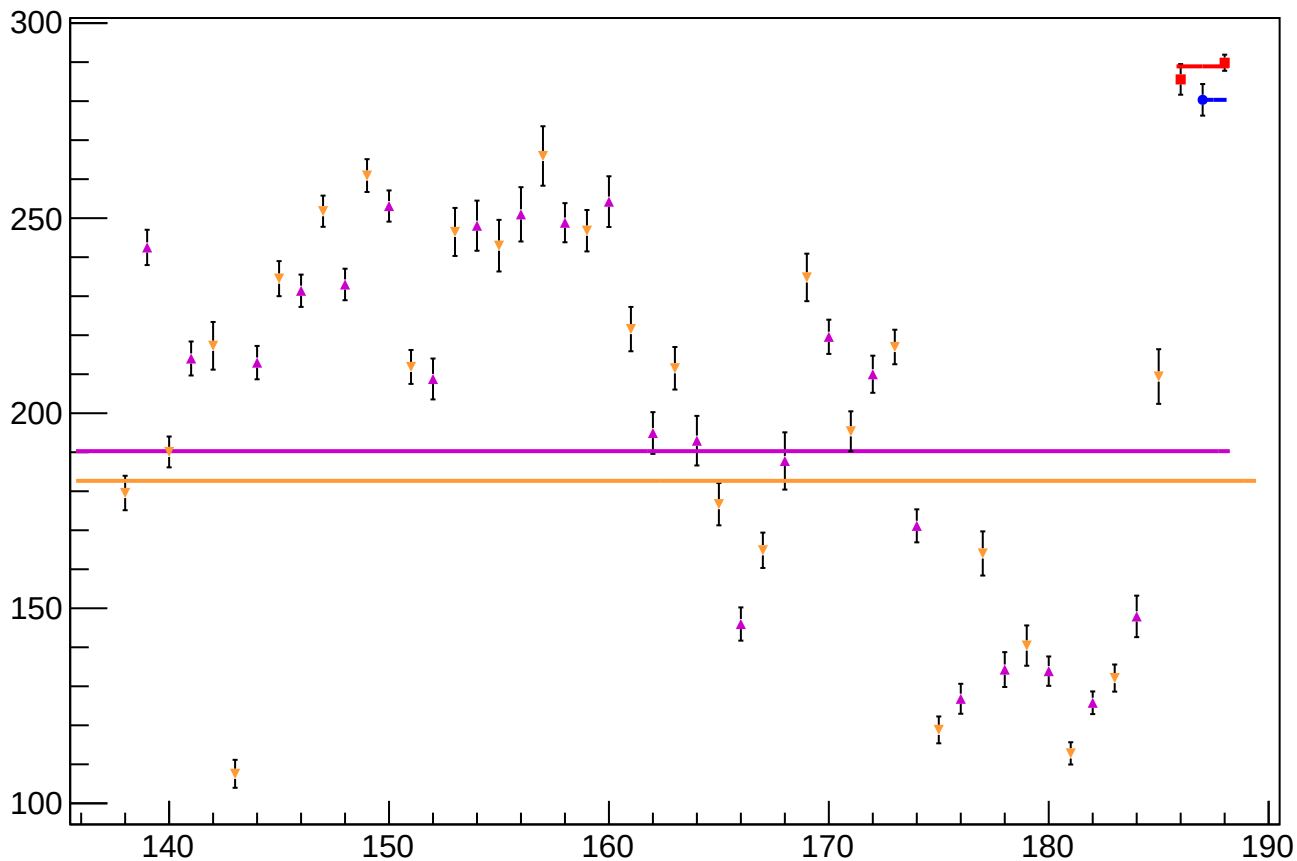
Left In: 125.101 $\pm$ 0.041  $\chi^2$ /NDF: 222793.3/22

+ sign 114.219 $\pm$ 0.035  $\chi^2$ /NDF: 823949.9/42

All: 114.470 $\pm$ 0.025  $\chi^2$ /NDF: 1496503.6/86

- sign 114.710 $\pm$ 0.035  $\chi^2$ /NDF: 672455.4/43

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm1X\_slope vs Slug



Right In: 280.334 $\pm$ 4.047  $\chi^2$ /NDF: 0.0/0

Left Out: 182.672 $\pm$ 0.919  $\chi^2$ /NDF:3230.7/24

Right Out: 288.913 $\pm$ 1.829  $\chi^2$ /NDF: 0.9/1

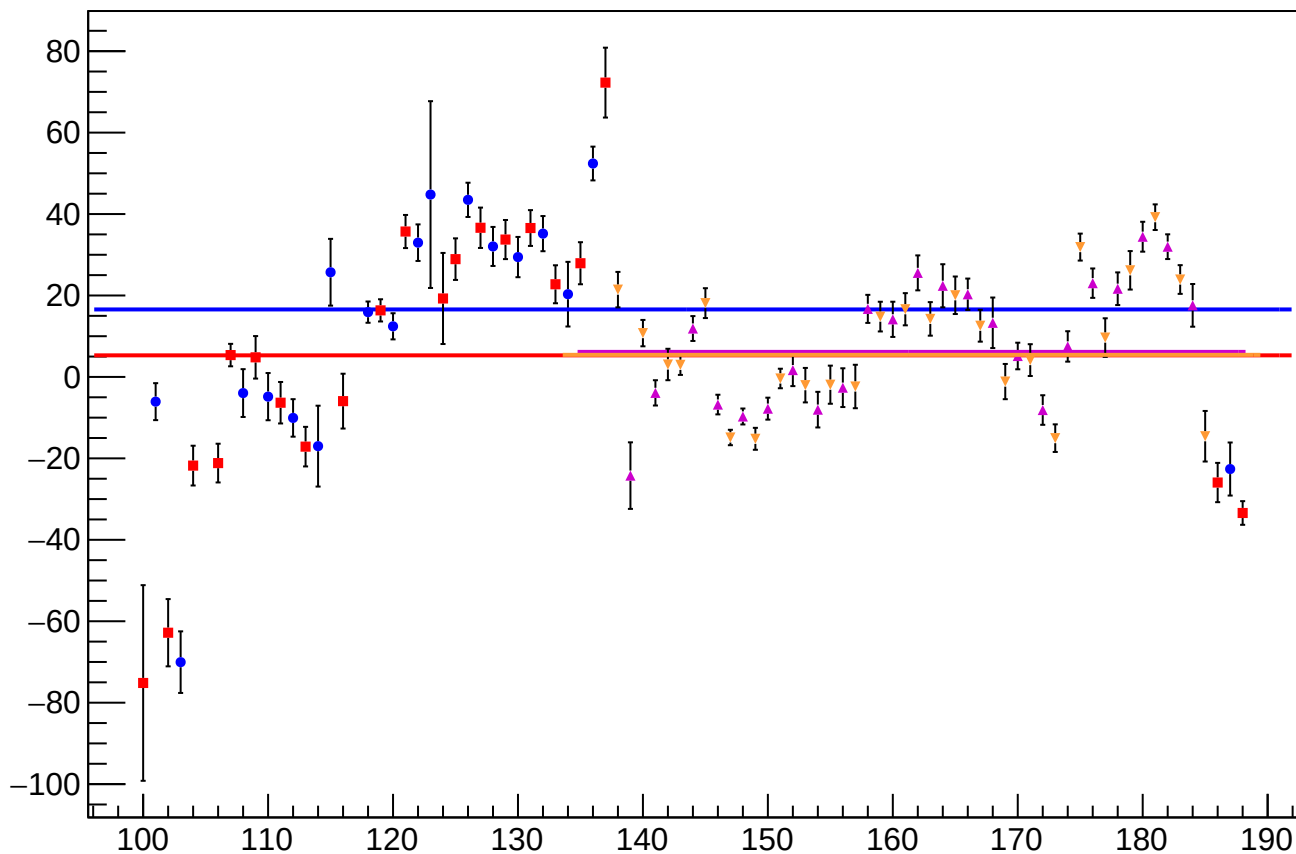
Left In: 190.279 $\pm$ 0.949  $\chi^2$ /NDF:2452.9/22

+ sign 187.457 $\pm$ 0.896  $\chi^2$ /NDF: 3784.5/25

All: 200.056 $\pm$ 0.614  $\chi^2$ /NDF: 8902.5/50

- sign 211.197 $\pm$ 0.842  $\chi^2$ /NDF: 4745.1/24

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4aY\_slope vs Slug



Right In: 16.573+/-1.129  $\chi^2/\text{NDF}$ : 432.4/17

Left Out: 5.425+/-0.693  $\chi^2/\text{NDF}$ : 525.2/24

Right Out: 5.301+/-0.995  $\chi^2/\text{NDF}$ : 704.7/20

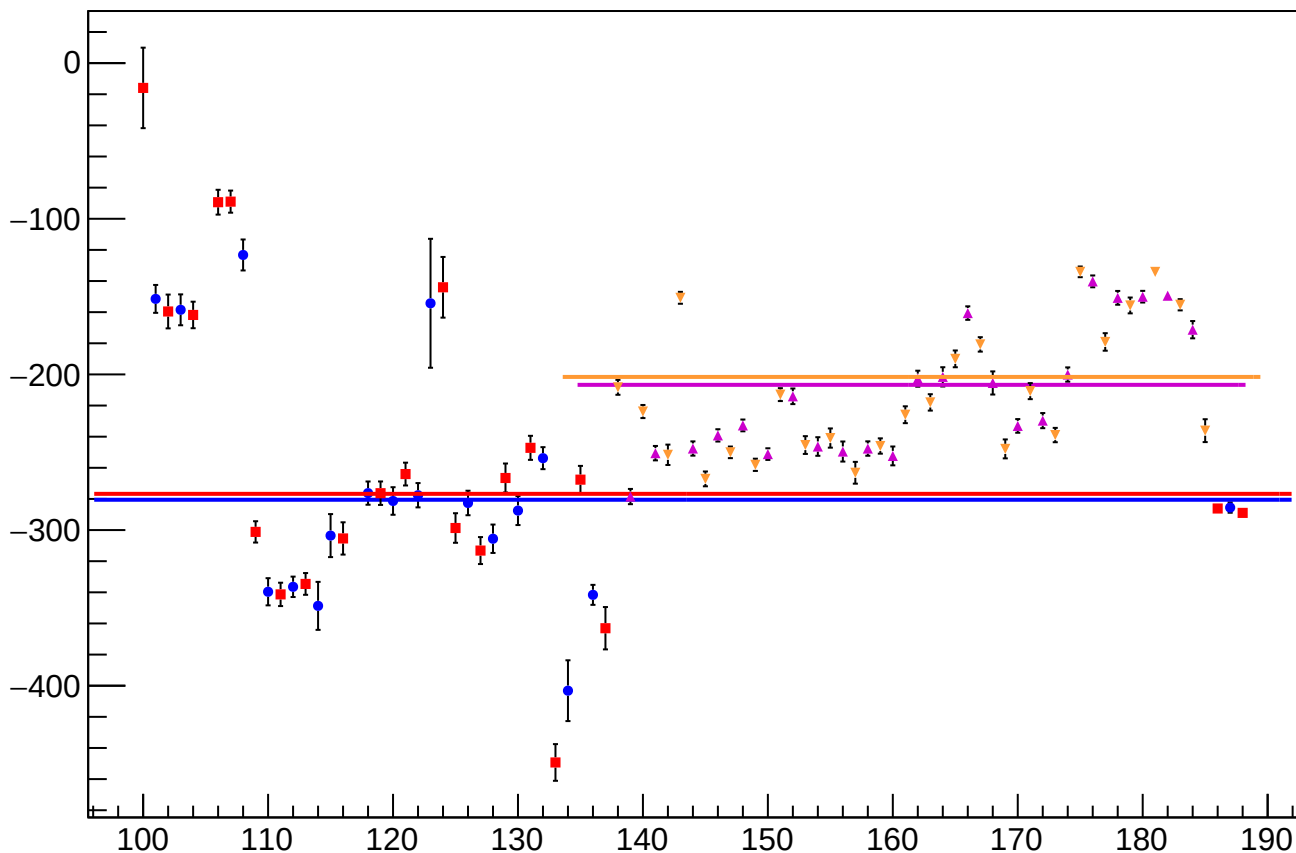
Left In: 6.151+/-0.730  $\chi^2/\text{NDF}$ : 410.6/22

+ sign 8.474+/-0.590  $\chi^2/\text{NDF}$ : 1028.4/42

All: 7.159+/-0.417  $\chi^2/\text{NDF}$ : 2154.1/86

- sign 5.853+/-0.589  $\chi^2/\text{NDF}$ : 1115.8/43

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eX\_slope vs Slug



Right In:  $-280.527 \pm 1.816$   $\chi^2/\text{NDF}$ : 913.8/17

Left Out:  $-201.610 \pm 0.922$   $\chi^2/\text{NDF}$ : 2462.4/24

Right Out:  $-276.729 \pm 1.187$   $\chi^2/\text{NDF}$ : 2220.7/20

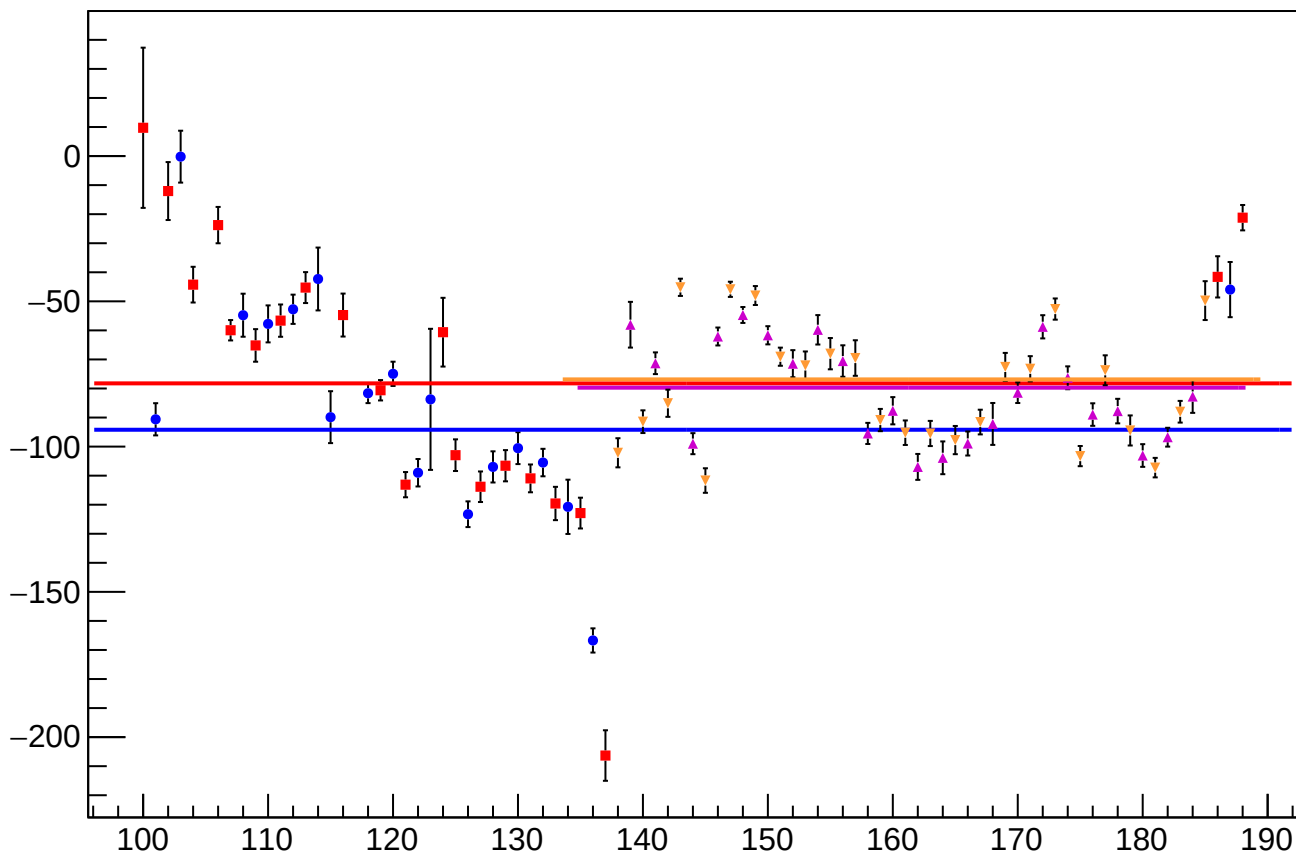
Left In:  $-206.700 \pm 0.946$   $\chi^2/\text{NDF}$ : 2134.9/22

+ sign  $-217.800 \pm 0.822$   $\chi^2/\text{NDF}$ : 4877.7/42

All:  $-226.702 \pm 0.550$   $\chi^2/\text{NDF}$ : 11573.8/86

- sign  $-233.907 \pm 0.740$   $\chi^2/\text{NDF}$ : 6484.1/43

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eY\_slope vs Slug



Right In:  $-94.200 \pm 1.310$   $\chi^2/\text{NDF}$ : 701.2/17

Left Out:  $-76.870 \pm 0.802$   $\chi^2/\text{NDF}$ : 758.7/24

Right Out:  $-78.236 \pm 1.192$   $\chi^2/\text{NDF}$ : 1001.9/20

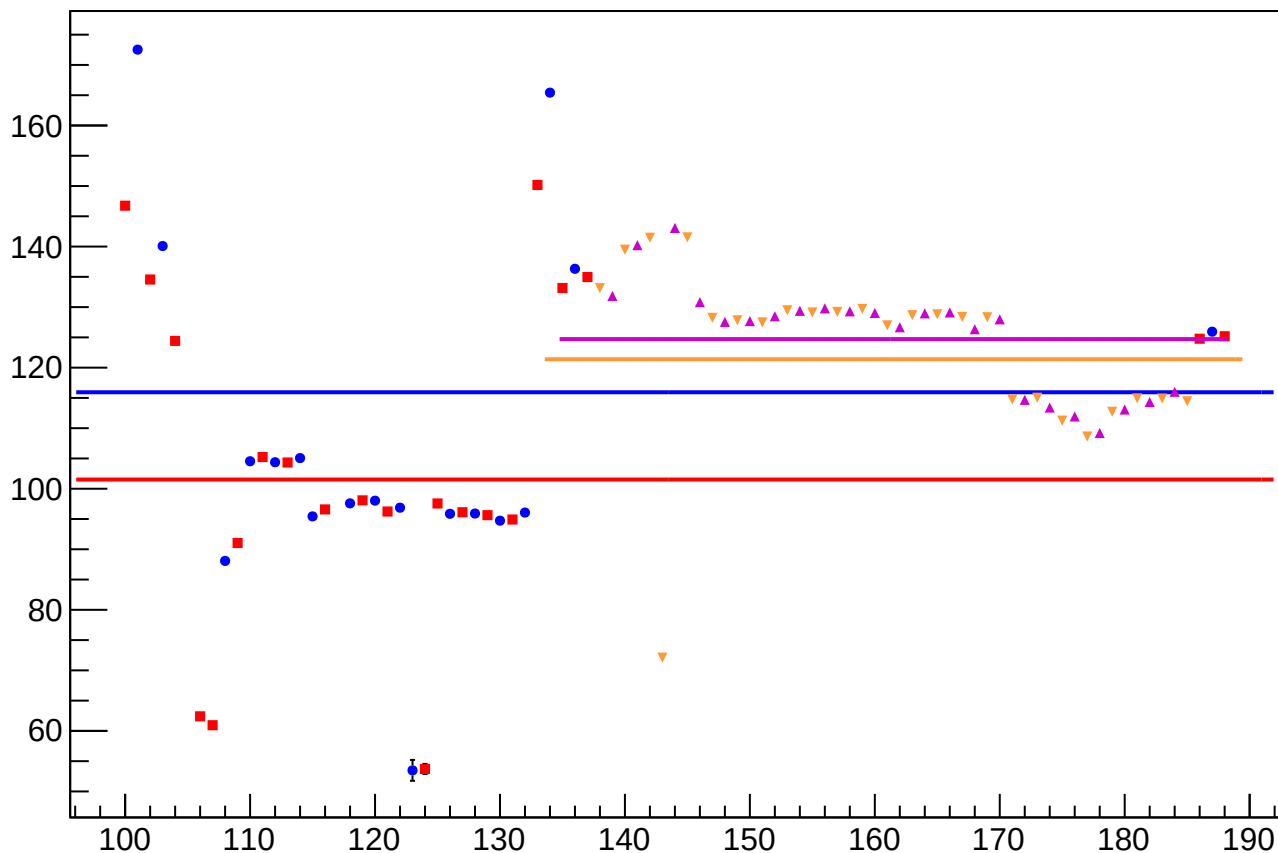
Left In:  $-79.719 \pm 0.837$   $\chi^2/\text{NDF}$ : 415.2/22

+ sign  $-81.593 \pm 0.684$   $\chi^2/\text{NDF}$ : 1587.3/42

All:  $-80.413 \pm 0.484$   $\chi^2/\text{NDF}$ : 3011.4/86

- sign  $-79.229 \pm 0.685$   $\chi^2/\text{NDF}$ : 1418.1/43

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm12X\_slope vs Slug



Right In: 115.934 $\pm$ 0.077  $\chi^2$ /NDF: 106741.9/17

Left Out: 121.385 $\pm$ 0.038  $\chi^2$ /NDF:164871.1/24

Right Out: 101.519 $\pm$ 0.065  $\chi^2$ /NDF: 187184.7/20

Left In: 124.714 $\pm$ 0.039  $\chi^2$ /NDF:51750.7/22

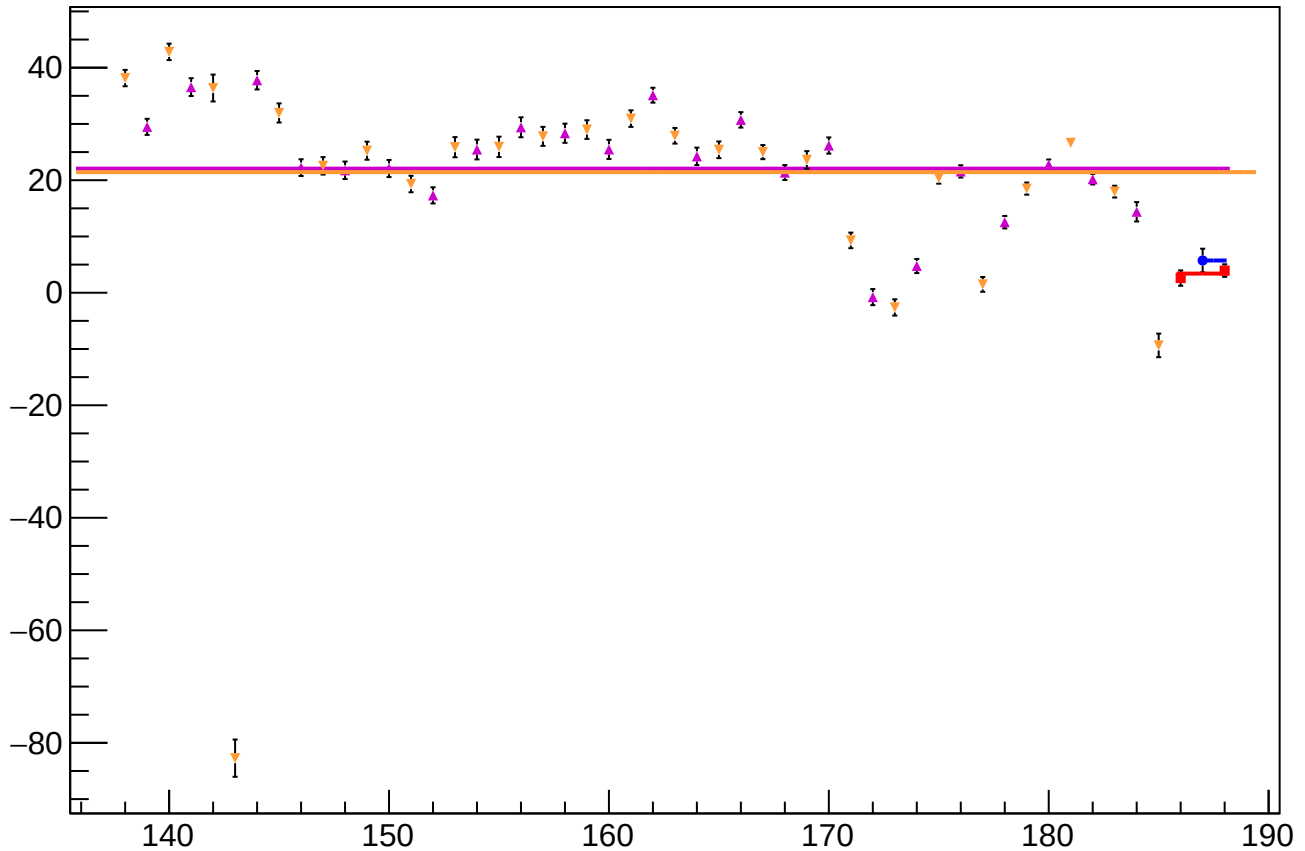
+ sign 120.310 $\pm$ 0.034  $\chi^2$ /NDF: 275617.7/42

All: 119.426 $\pm$ 0.024  $\chi^2$ /NDF: 609010.3/86

- sign 118.581 $\pm$ 0.034  $\chi^2$ /NDF: 332091.5/43



reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm1X\_slope vs Slug



Right In: 5.730 $\pm$ 2.097  $\chi^2$ /NDF: 0.0/0

Left Out: 21.435 $\pm$ 0.283  $\chi^2$ /NDF:2406.2/24

Right Out: 3.405 $\pm$ 0.862  $\chi^2$ /NDF: 0.6/1

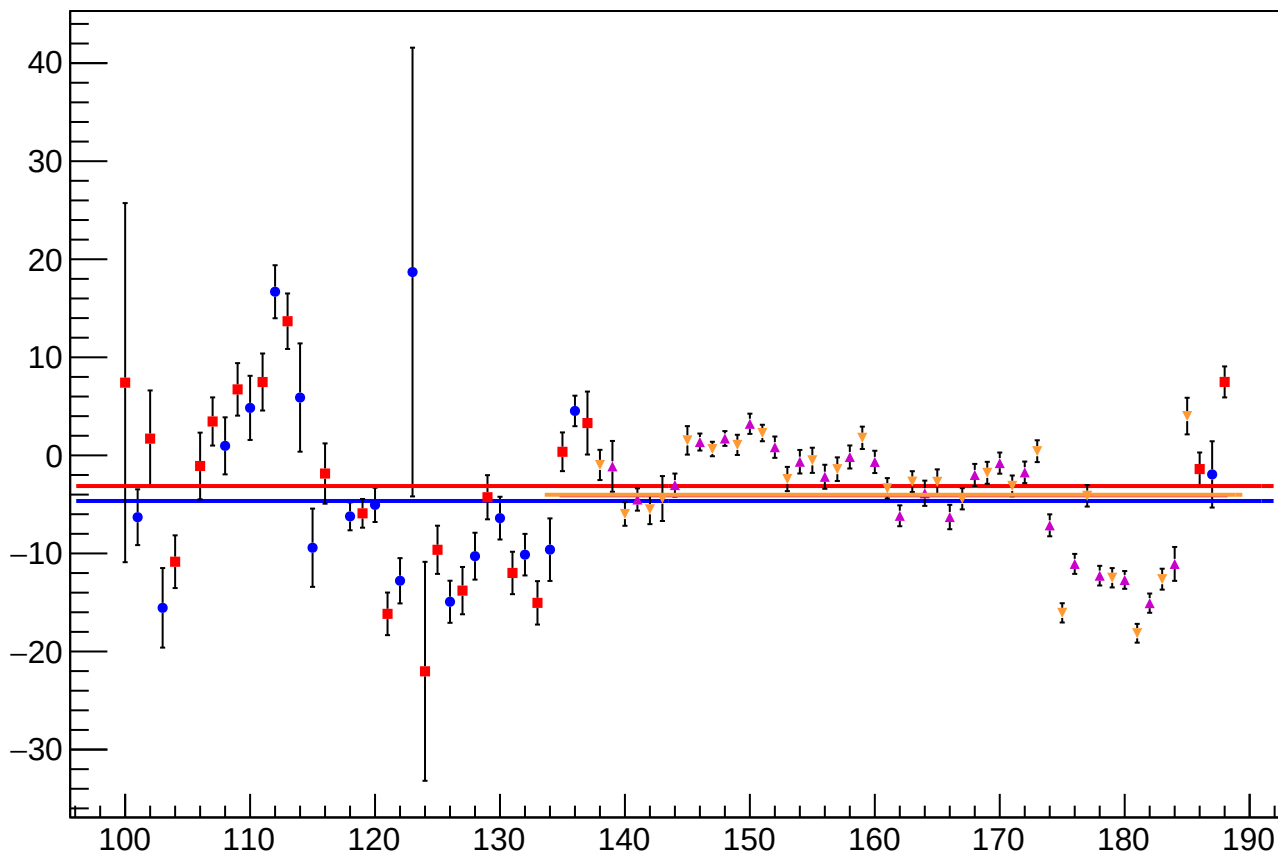
Left In: 22.055 $\pm$ 0.284  $\chi^2$ /NDF:941.3/22

+ sign 21.155 $\pm$ 0.280  $\chi^2$ /NDF: 2461.3/25

All: 20.673 $\pm$ 0.194  $\chi^2$ /NDF: 3831.1/50

- sign 20.226 $\pm$ 0.270  $\chi^2$ /NDF: 1364.1/24

# reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $-4.650 \pm 0.571$   $\chi^2/\text{NDF}$ : 175.5/17

Left Out:  $-4.015 \pm 0.223$   $\chi^2/\text{NDF}$ : 731.7/24

Right Out:  $-3.127 \pm 0.522$   $\chi^2/\text{NDF}$ : 247.7/20

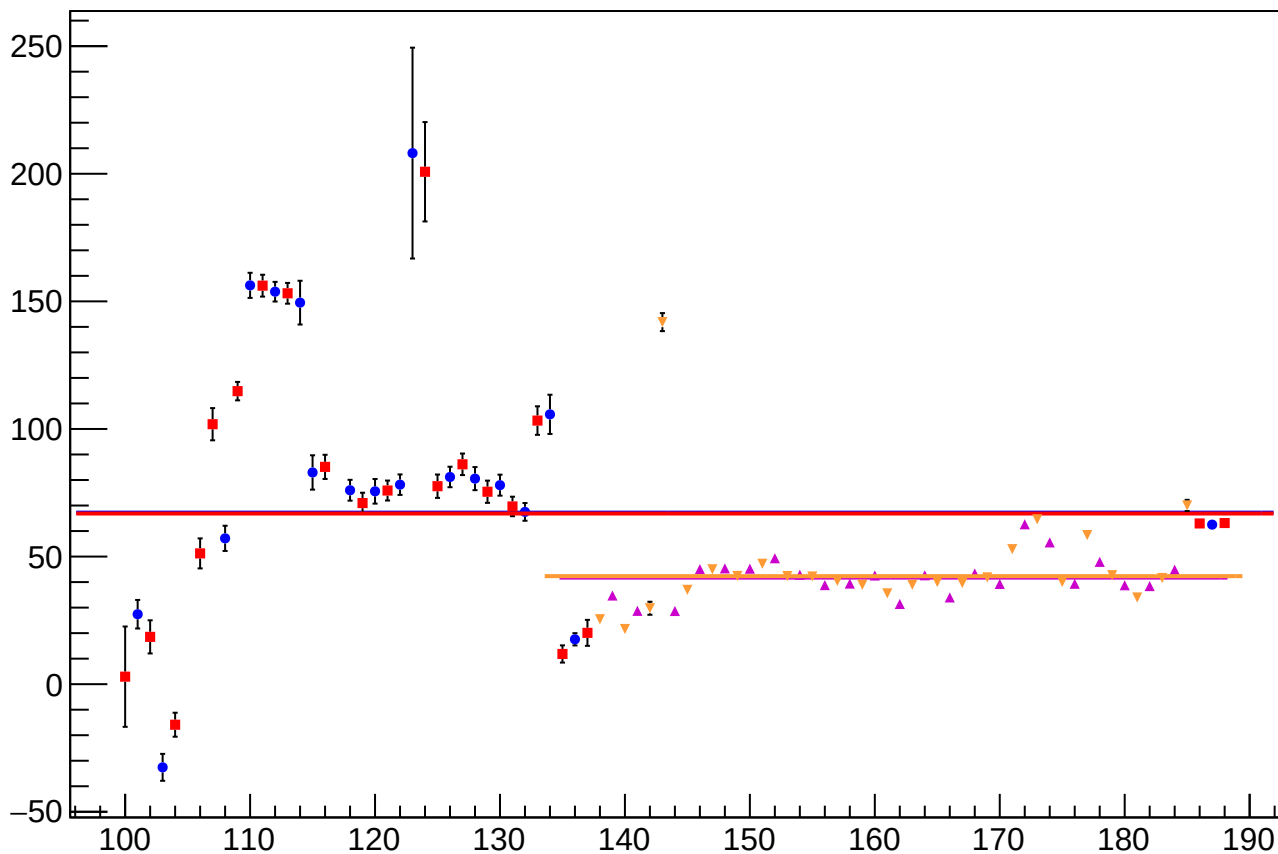
Left In:  $-4.069 \pm 0.227$   $\chi^2/\text{NDF}$ : 580.1/22

+ sign  $-4.099 \pm 0.208$   $\chi^2/\text{NDF}$ : 908.2/42

All:  $-4.009 \pm 0.147$   $\chi^2/\text{NDF}$ : 1739.1/86

- sign  $-3.919 \pm 0.209$   $\chi^2/\text{NDF}$ : 830.5/43

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm4eX\_slope vs Slug



Right In: 67.214 $\pm$ 0.913  $\chi^2/\text{NDF}$ : 1858.2/17

Left Out: 42.322 $\pm$ 0.282  $\chi^2/\text{NDF}$ :1855.5/24

Right Out: 66.872 $\pm$ 0.582  $\chi^2/\text{NDF}$ : 1995.8/20

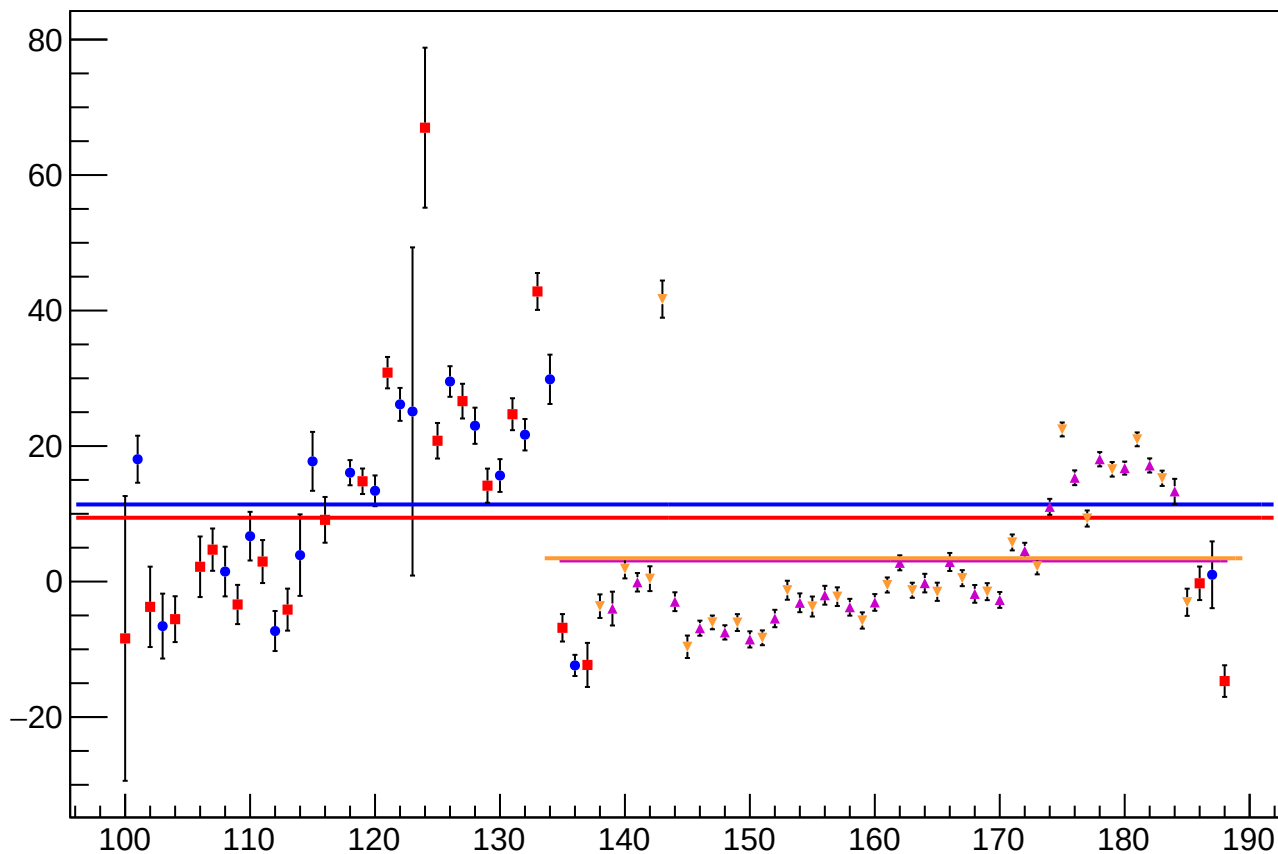
Left In: 41.755 $\pm$ 0.283  $\chi^2/\text{NDF}$ :659.6/22

+ sign 44.491 $\pm$ 0.270  $\chi^2/\text{NDF}$ : 4392.1/42

All: 45.582 $\pm$ 0.185  $\chi^2/\text{NDF}$ : 8584.1/86

- sign 46.556 $\pm$ 0.255  $\chi^2/\text{NDF}$ : 4160.9/43

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm4eY\_slope vs Slug



Right In: 11.380 $\pm$ 0.652  $\chi^2$ /NDF: 482.7/17

Left Out: 3.439 $\pm$ 0.252  $\chi^2$ /NDF: 1647.7/24

Right Out: 9.420 $\pm$ 0.619  $\chi^2$ /NDF: 681.2/20

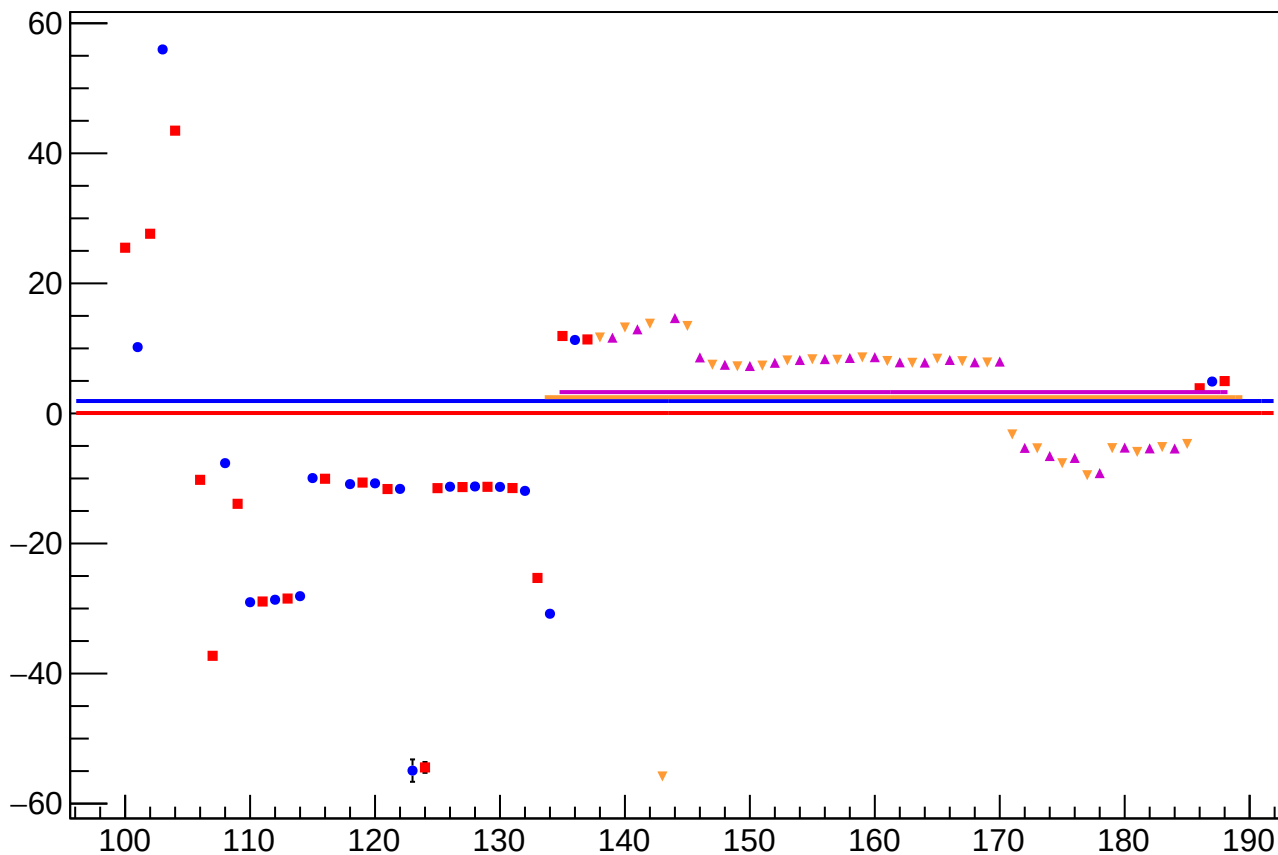
Left In: 3.114 $\pm$ 0.256  $\chi^2$ /NDF: 1273.1/22

+ sign 4.473 $\pm$ 0.235  $\chi^2$ /NDF: 2259.2/42

All: 4.257 $\pm$ 0.167  $\chi^2$ /NDF: 4303.8/86

- sign 4.037 $\pm$ 0.237  $\chi^2$ /NDF: 2042.9/43

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm12X\_slope vs Slug



Right In:  $1.909 \pm 0.037$   $\chi^2/\text{NDF}$ : 359532.7/17

Left Out:  $2.497 \pm 0.012$   $\chi^2/\text{NDF}$ : 588138.5/24

Right Out:  $0.064 \pm 0.034$   $\chi^2/\text{NDF}$ : 364386.1/20

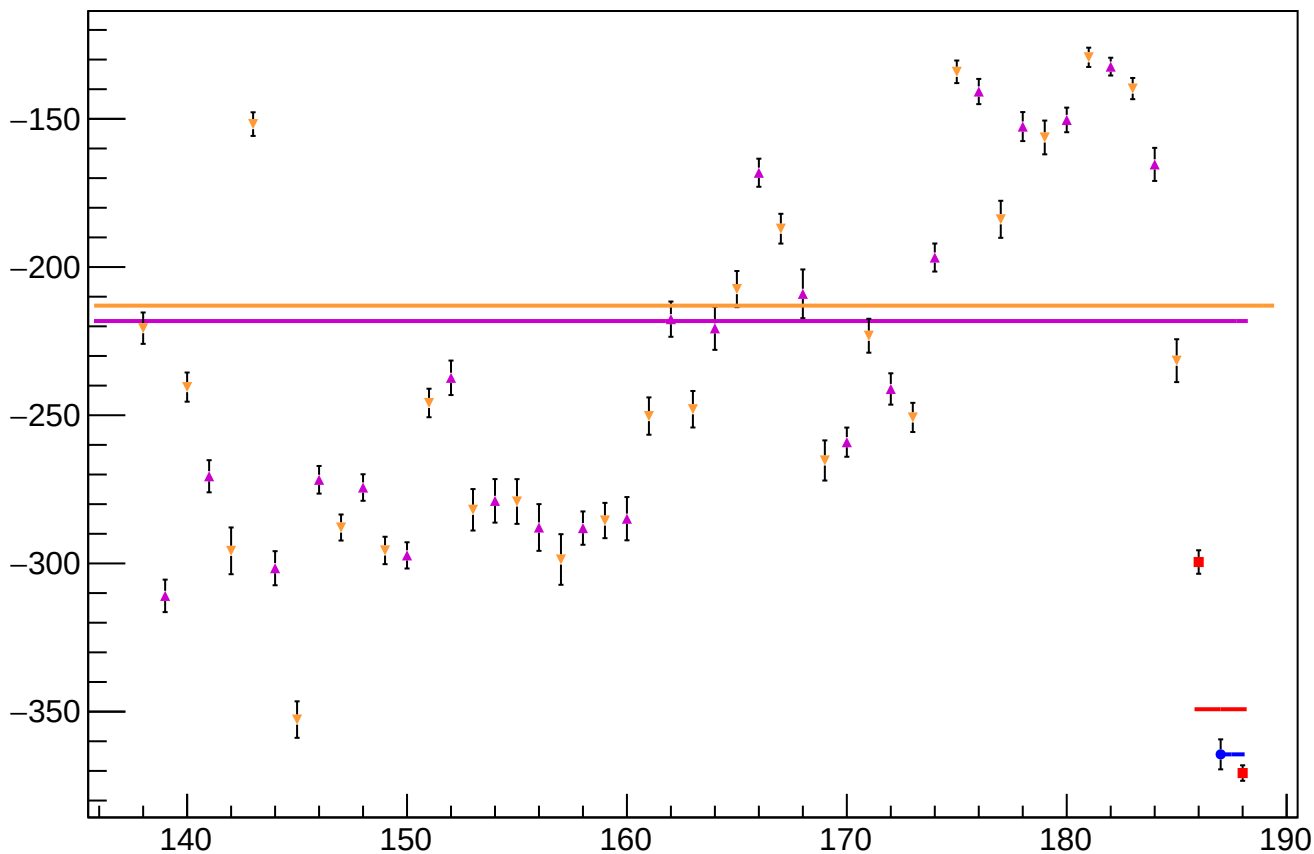
Left In:  $3.281 \pm 0.012$   $\chi^2/\text{NDF}$ : 409605.3/22

+ sign  $2.443 \pm 0.011$   $\chi^2/\text{NDF}$ : 947905.0/42

All:  $2.699 \pm 0.008$   $\chi^2/\text{NDF}$ : 1730787.0/86

- sign  $2.954 \pm 0.011$   $\chi^2/\text{NDF}$ : 781808.4/43

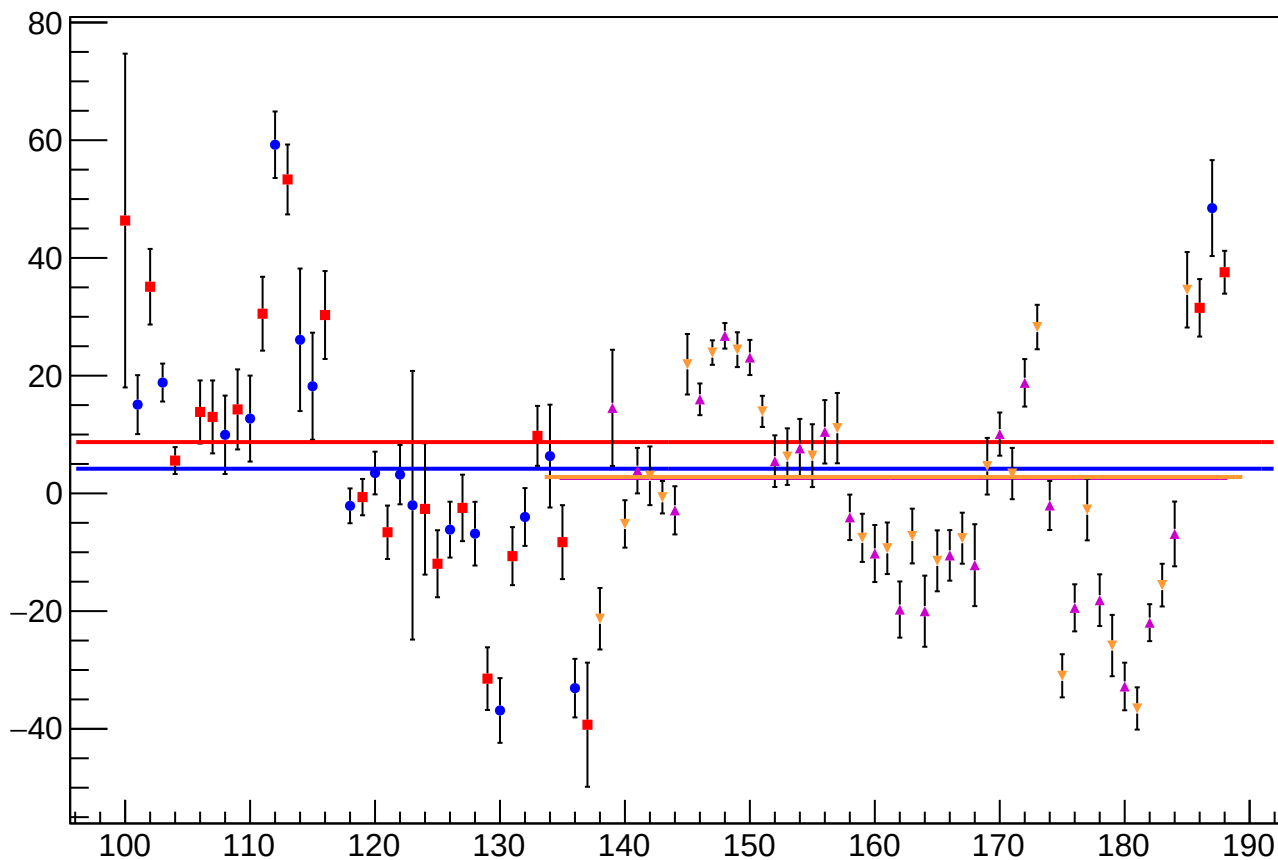
reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm1X\_slope vs Slug



Right In:  $-364.416 \pm 5.062$   $\chi^2/\text{NDF}: 0.0/0$   
 Left Out:  $-213.020 \pm 1.035$   $\chi^2/\text{NDF}: 3826.2/24$   
 Right Out:  $-349.188 \pm 2.182$   $\chi^2/\text{NDF}: 224.7/1$   
 Left In:  $-218.216 \pm 1.063$   $\chi^2/\text{NDF}: 3499.0/22$

+ sign  $-219.100 \pm 1.014$   $\chi^2/\text{NDF}: 4684.9/25$   
 All:  $-231.943 \pm 0.696$   $\chi^2/\text{NDF}: 11623.6/50$   
 - sign  $-243.337 \pm 0.955$   $\chi^2/\text{NDF}: 6636.2/24$

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4aY\_slope vs Slug



Right In:  $4.189 \pm 1.212$   $\chi^2/\text{NDF}$ : 285.8/17

Left Out:  $2.786 \pm 0.780$   $\chi^2/\text{NDF}$ : 582.0/24

Right Out:  $8.716 \pm 1.078$   $\chi^2/\text{NDF}$ : 323.4/20

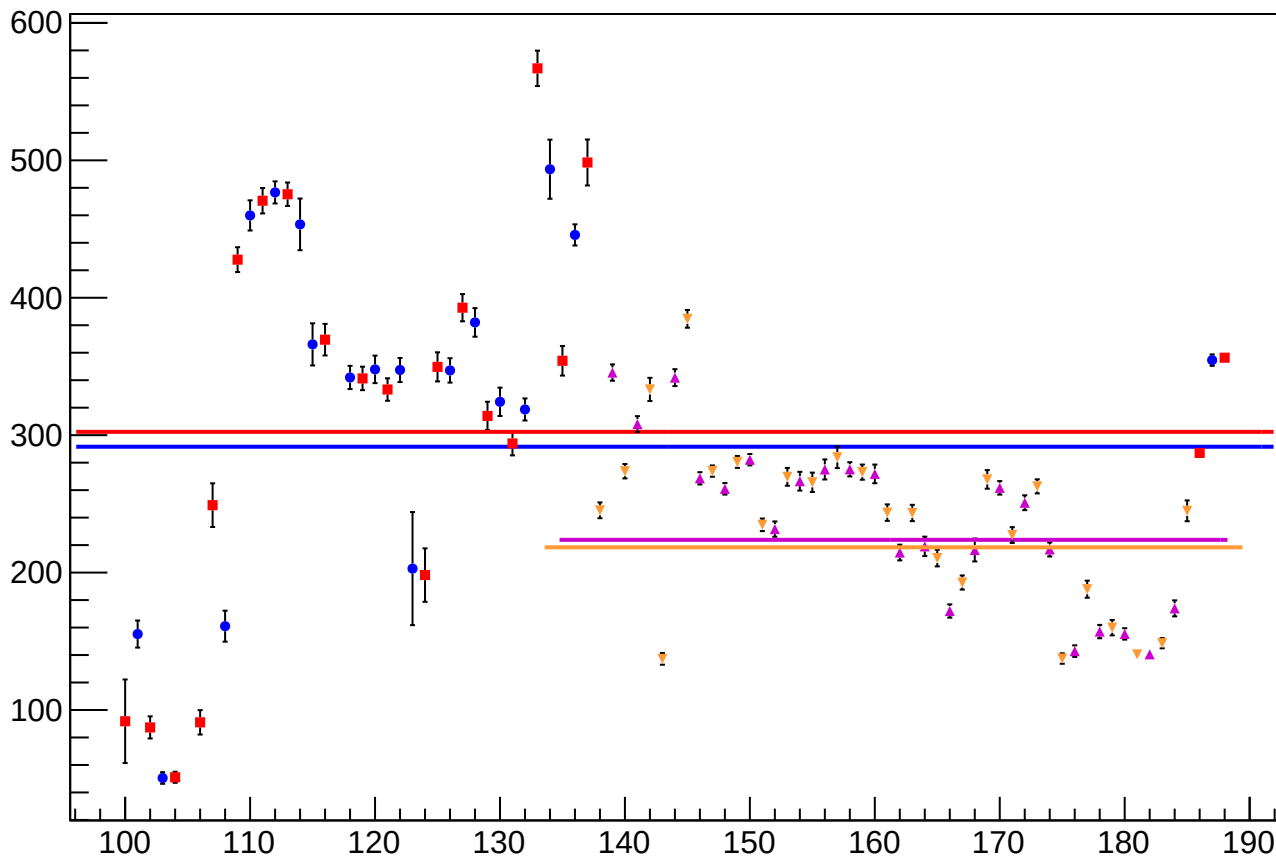
Left In:  $2.619 \pm 0.821$   $\chi^2/\text{NDF}$ : 477.6/22

+ sign  $3.197 \pm 0.656$   $\chi^2/\text{NDF}$ : 868.8/42

All:  $4.031 \pm 0.463$   $\chi^2/\text{NDF}$ : 1693.3/86

- sign  $4.857 \pm 0.653$   $\chi^2/\text{NDF}$ : 821.3/43

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4eX\_slope vs Slug



Right In: 291.580 $\pm$ 1.938  $\chi^2$ /NDF: 5405.6/17

Left Out: 218.389 $\pm$ 1.038  $\chi^2$ /NDF: 3696.7/24

Right Out: 302.420 $\pm$ 1.339  $\chi^2$ /NDF: 7623.4/20

Left In: 223.827 $\pm$ 1.058  $\chi^2$ /NDF: 3444.7/22

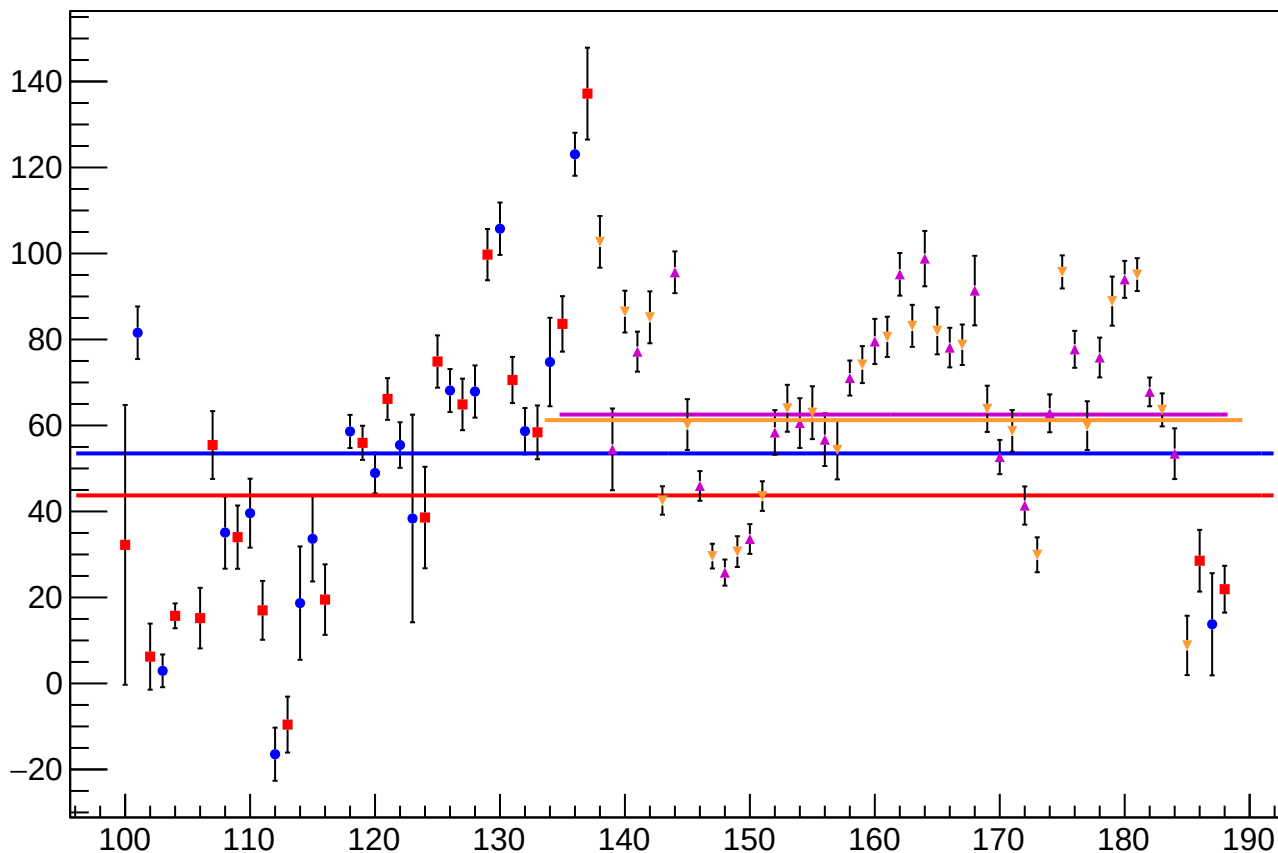
+ sign 234.694 $\pm$ 0.915  $\chi^2$ /NDF: 10210.5/42

All: 245.306 $\pm$ 0.615  $\chi^2$ /NDF: 23644.2/86

- sign 254.048 $\pm$ 0.830  $\chi^2$ /NDF: 13188.3/43



reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4eY\_slope vs Slug



Right In: 53.497 $\pm$ 1.410  $\chi^2$ /NDF: 645.7/17

Left Out: 61.240 $\pm$ 0.903  $\chi^2$ /NDF: 718.8/24

Right Out: 43.732 $\pm$ 1.297  $\chi^2$ /NDF: 553.3/20

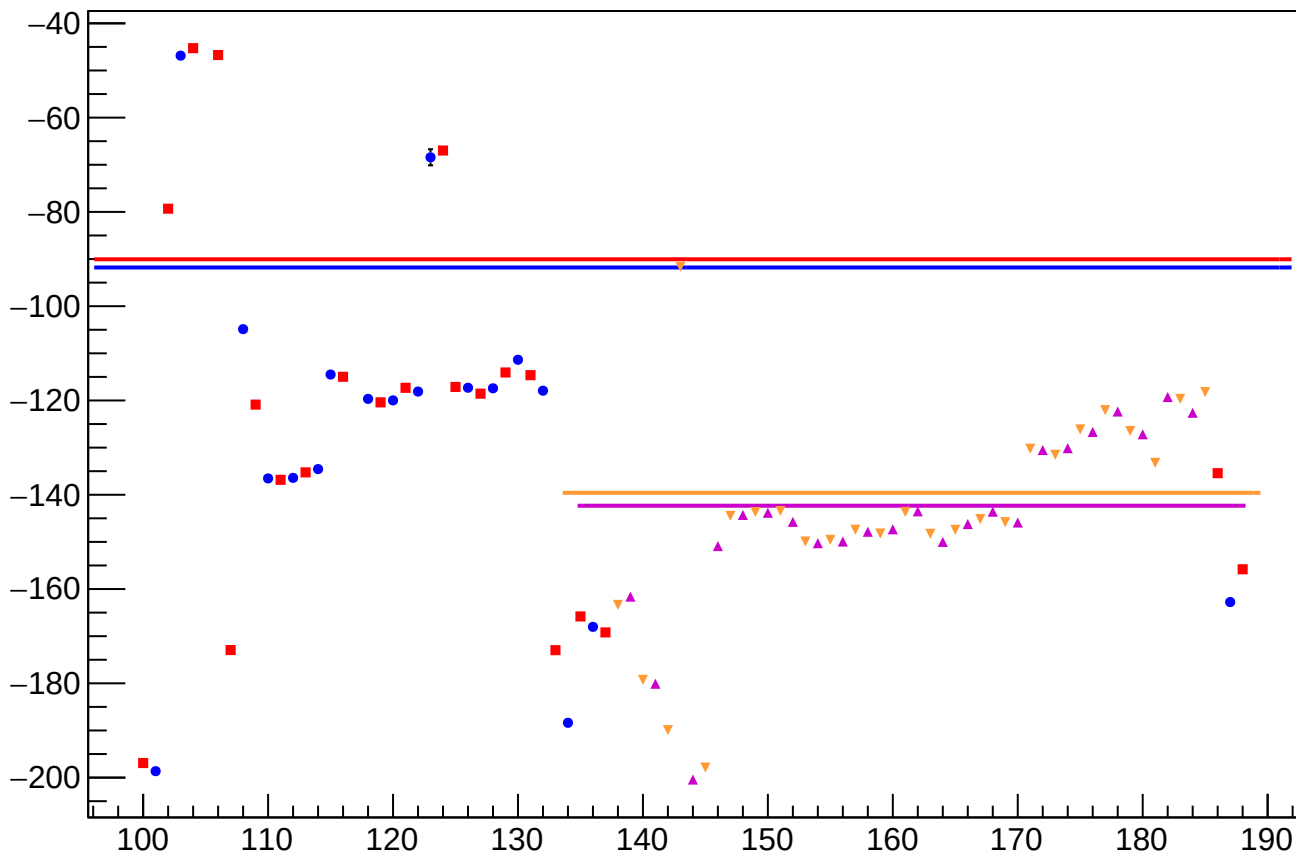
Left In: 62.538 $\pm$ 0.940  $\chi^2$ /NDF: 520.0/22

+ sign 58.990 $\pm$ 0.760  $\chi^2$ /NDF: 1386.0/42

All: 57.526 $\pm$ 0.538  $\chi^2$ /NDF: 2604.5/86

- sign 56.059 $\pm$ 0.761  $\chi^2$ /NDF: 1211.1/43

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm12X\_slope vs Slug



Right In:  $-91.790 \pm 0.067$   $\chi^2/\text{NDF}$ : 545916.8/17

Left Out:  $-139.585 \pm 0.043$   $\chi^2/\text{NDF}$ : 243895.1/24

Right Out:  $-90.046 \pm 0.063$   $\chi^2/\text{NDF}$ : 562618.3/20

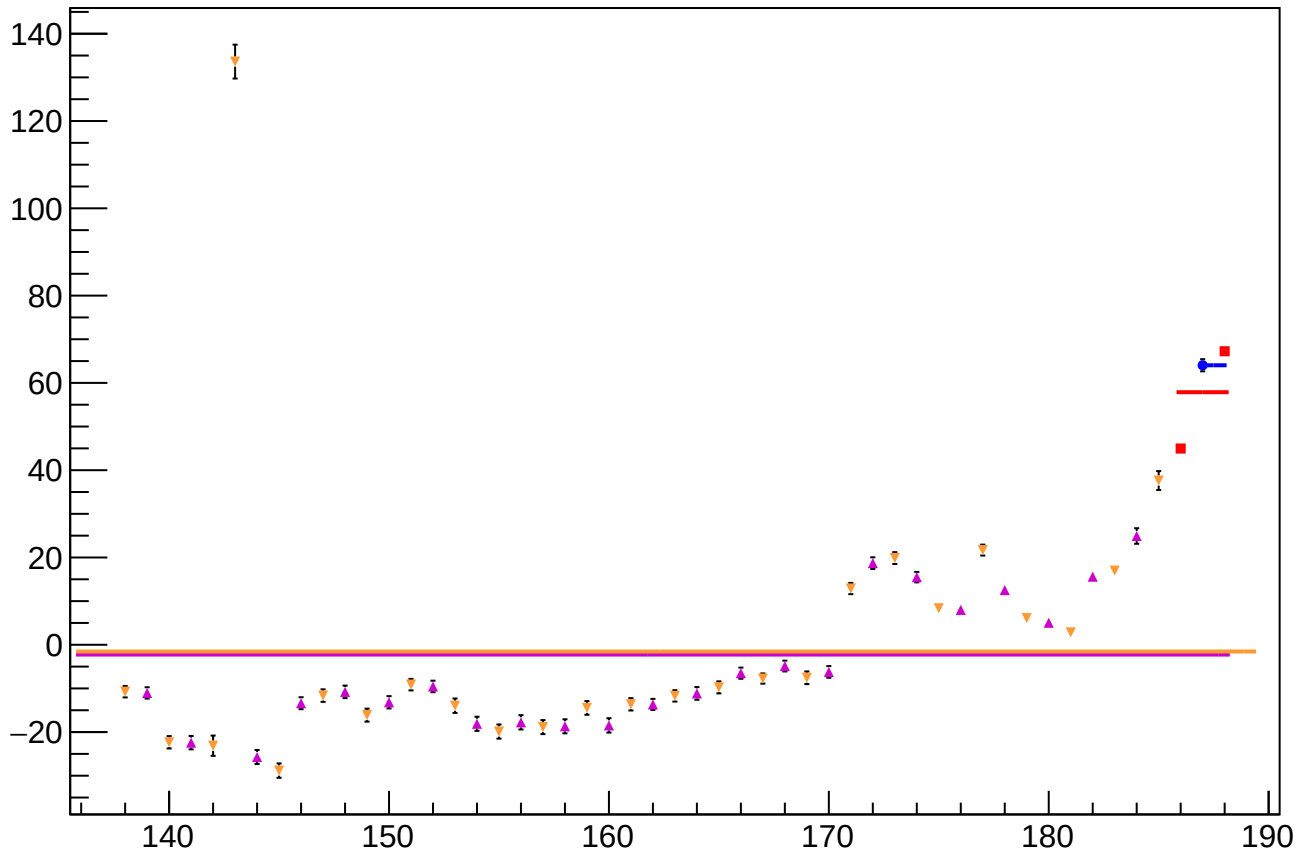
Left In:  $-142.326 \pm 0.044$   $\chi^2/\text{NDF}$ : 144642.3/22

+ sign  $-125.652 \pm 0.036$   $\chi^2/\text{NDF}$ : 1148290.8/42

All:  $-125.422 \pm 0.026$   $\chi^2/\text{NDF}$ : 2320189.8/86

- sign  $-125.195 \pm 0.036$   $\chi^2/\text{NDF}$ : 1171819.1/43

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm1X\_slope vs Slug



Right In: 64.039+/-1.393  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1.540+/-0.268  $\chi^2/\text{NDF}$ : 4129.1/24

Right Out: 57.869+/-0.589  $\chi^2/\text{NDF}$ : 348.4/1

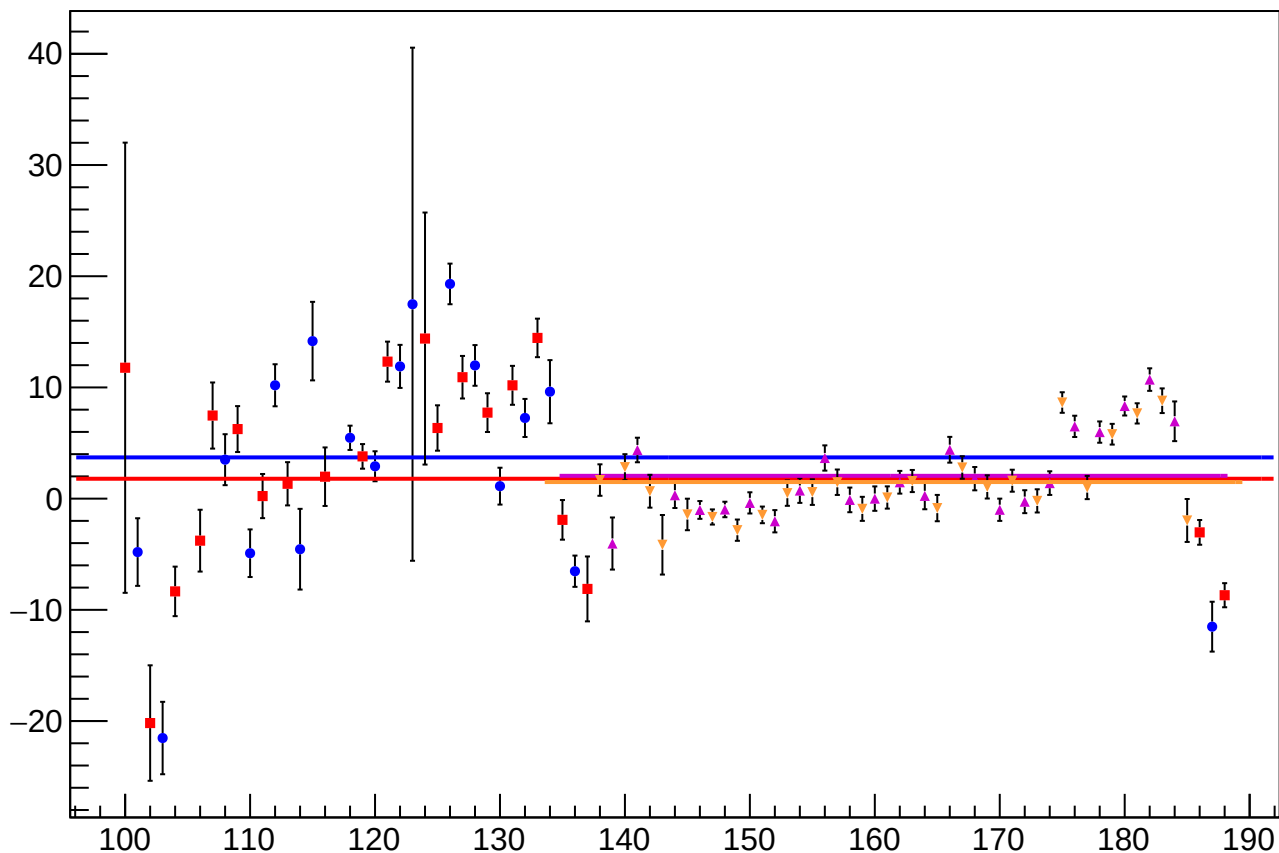
Left In: -2.244+/-0.270  $\chi^2/\text{NDF}$ : 2561.6/22

+ sign 0.796+/-0.263  $\chi^2/\text{NDF}$ : 6267.1/25

All: 4.732+/-0.179  $\chi^2/\text{NDF}$ : 18199.1/50

- sign 8.153+/-0.245  $\chi^2/\text{NDF}$ : 11513.1/24

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4aY\_slope vs Slug



Right In:  $3.708 \pm 0.455$   $\chi^2/\text{NDF}: 334.6/17$

Left Out:  $1.492 \pm 0.210$   $\chi^2/\text{NDF}: 258.3/24$

Right Out:  $1.788 \pm 0.405$   $\chi^2/\text{NDF}: 334.5/20$

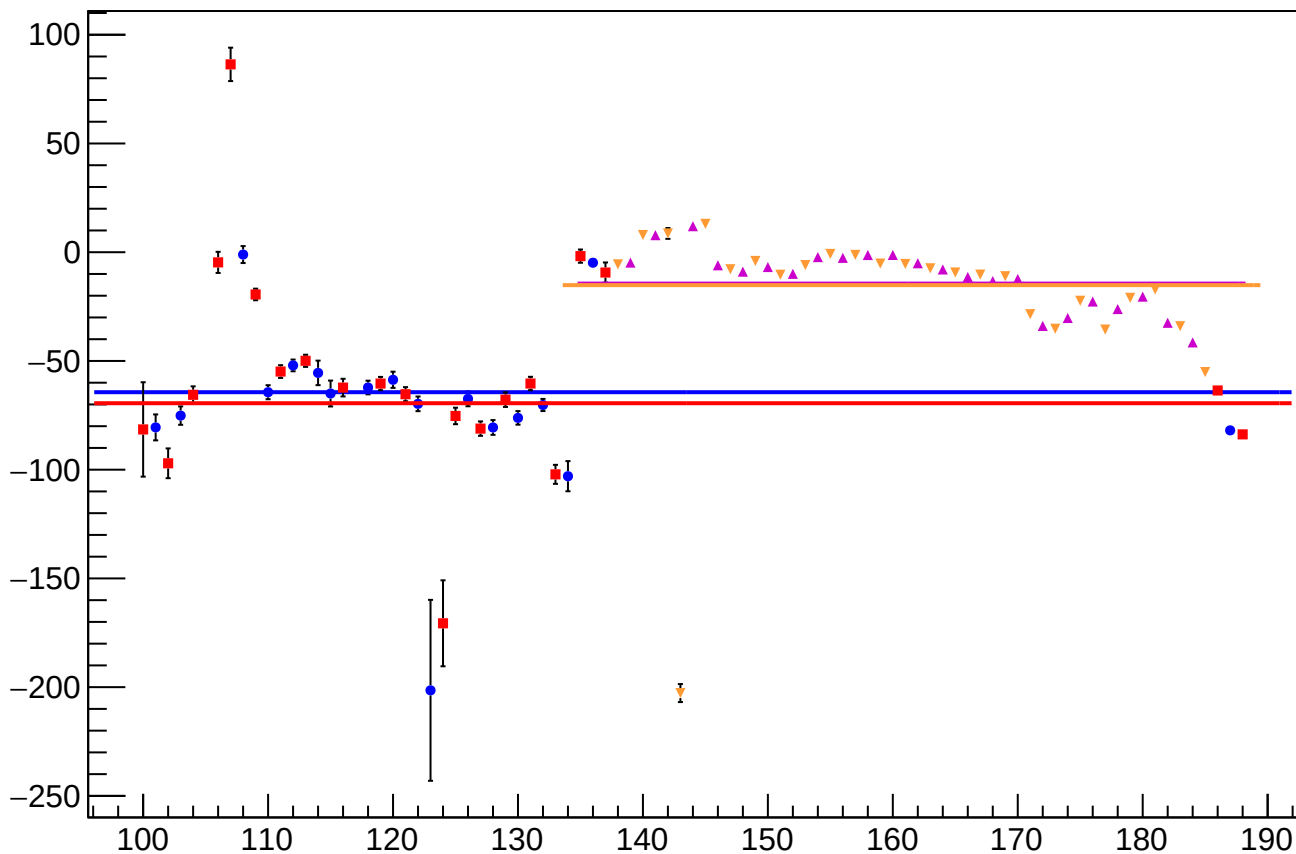
Left In:  $2.051 \pm 0.215$   $\chi^2/\text{NDF}: 275.4/22$

+ sign  $1.883 \pm 0.191$   $\chi^2/\text{NDF}: 612.5/42$

All:  $1.938 \pm 0.135$   $\chi^2/\text{NDF}: 1222.9/86$

- sign  $1.993 \pm 0.190$   $\chi^2/\text{NDF}: 610.2/43$

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4eX\_slope vs Slug



Right In:  $-64.370 \pm 0.689$   $\chi^2/\text{NDF}$ : 1382.6/17

Left Out:  $-15.140 \pm 0.267$   $\chi^2/\text{NDF}$ : 4451.9/24

Right Out:  $-69.435 \pm 0.414$   $\chi^2/\text{NDF}$ : 2409.7/20

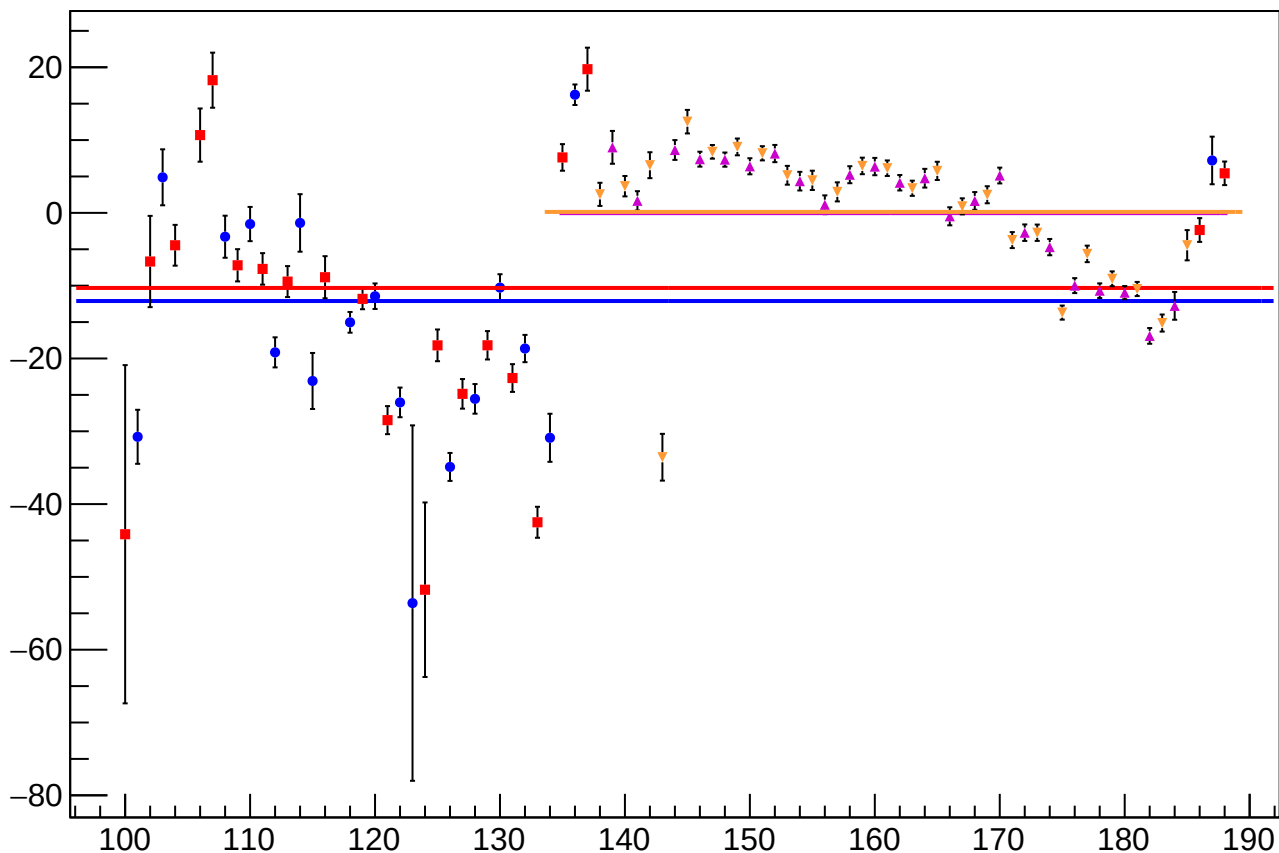
Left In:  $-14.415 \pm 0.268$   $\chi^2/\text{NDF}$ : 2065.7/22

+ sign  $-21.566 \pm 0.249$   $\chi^2/\text{NDF}$ : 10277.1/42

All:  $-26.572 \pm 0.167$   $\chi^2/\text{NDF}$ : 27930.4/86

- sign  $-30.665 \pm 0.225$   $\chi^2/\text{NDF}$ : 16917.8/43

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4eY\_slope vs Slug



Right In:  $-12.108 \pm 0.523$   $\chi^2/\text{NDF}$ : 824.0/17

Left Out:  $0.133 \pm 0.238$   $\chi^2/\text{NDF}$ : 1146.9/24

Right Out:  $-10.311 \pm 0.487$   $\chi^2/\text{NDF}$ : 871.8/20

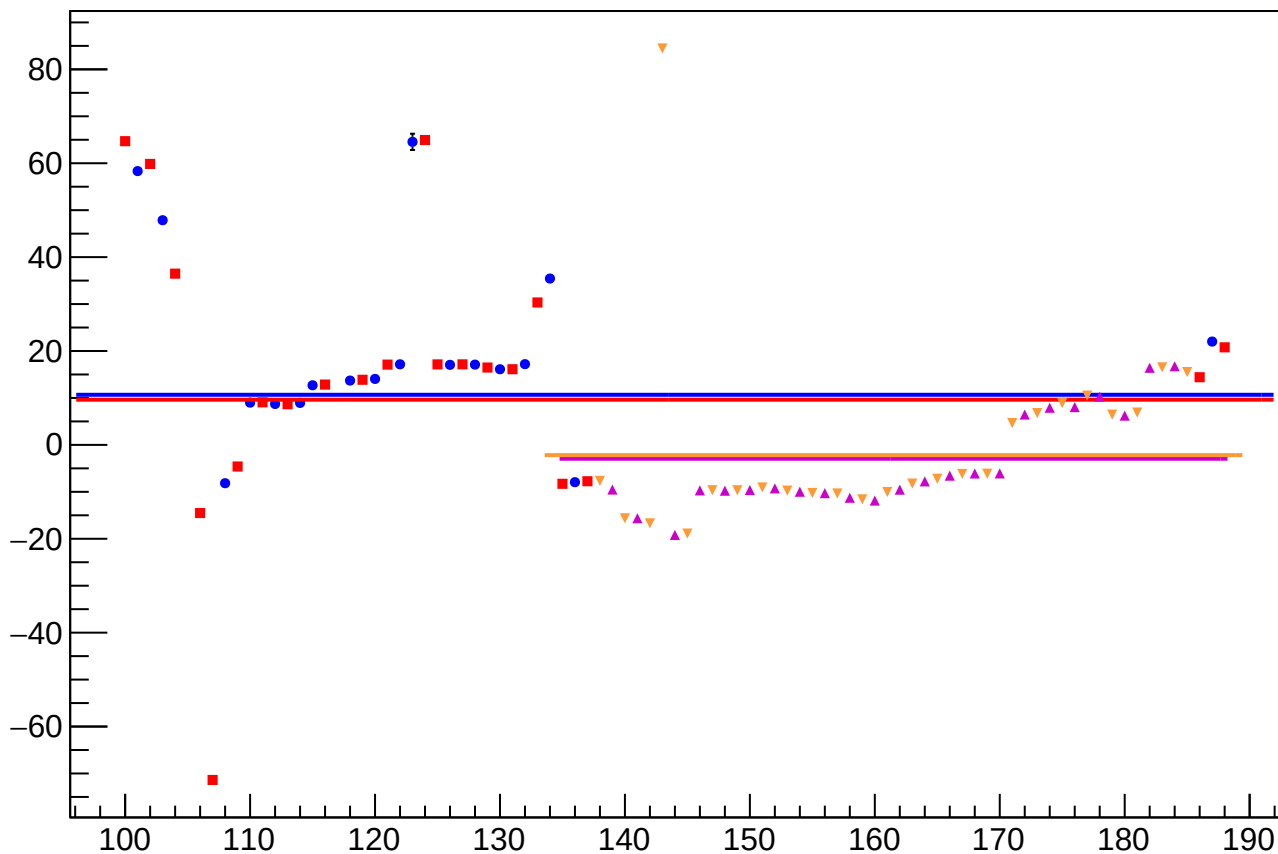
Left In:  $-0.036 \pm 0.242$   $\chi^2/\text{NDF}$ : 1027.6/22

+ sign  $-1.970 \pm 0.217$   $\chi^2/\text{NDF}$ : 2424.0/42

All:  $-2.021 \pm 0.153$   $\chi^2/\text{NDF}$ : 4679.7/86

- sign  $-2.073 \pm 0.217$   $\chi^2/\text{NDF}$ : 2255.6/43

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm12X\_slope vs Slug



Right In: 10.675+/-0.030  $\chi^2/\text{NDF}$ : 384864.4/17

Left Out: -2.176+/-0.011  $\chi^2/\text{NDF}$ : 1047394.9/24

Right Out: 9.628+/-0.028  $\chi^2/\text{NDF}$ : 568404.0/20

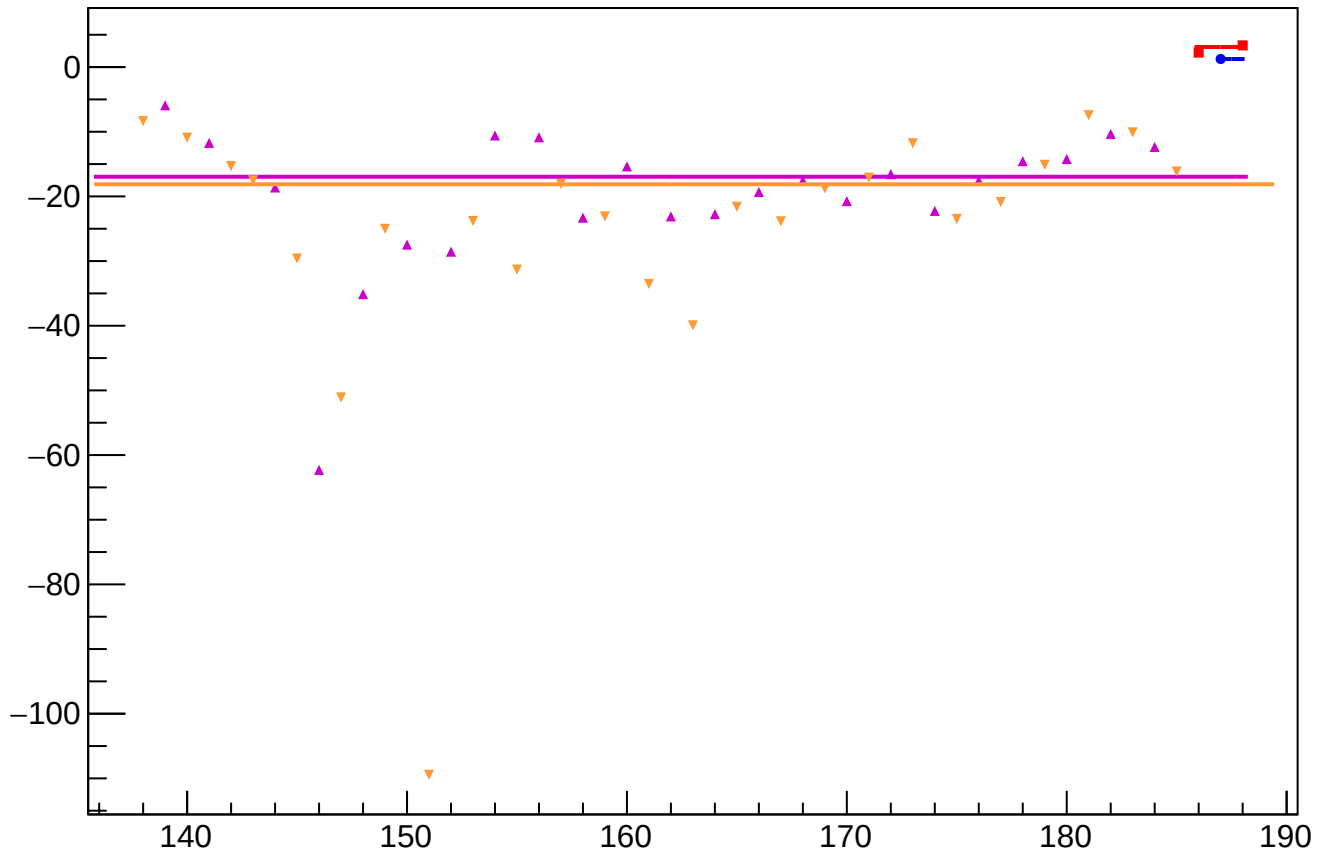
Left In: -2.949+/-0.011  $\chi^2/\text{NDF}$ : 770702.4/22

+ sign -0.683+/-0.010  $\chi^2/\text{NDF}$ : 1593055.0/42

All: -1.003+/-0.007  $\chi^2/\text{NDF}$ : 3104875.2/86

- sign -1.321+/-0.010  $\chi^2/\text{NDF}$ : 1509882.0/43

# reg\_asym\_bcm\_an\_ds3\_diff\_bpm1X\_slope vs Slug



Right In:  $1.248 \pm 0.282$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-18.127 \pm 0.039$   $\chi^2/\text{NDF}$ : 88514.4/24

Right Out:  $3.104 \pm 0.097$   $\chi^2/\text{NDF}$ : 23.0/1

Left In:  $-16.958 \pm 0.038$   $\chi^2/\text{NDF}$ : 44759.9/22

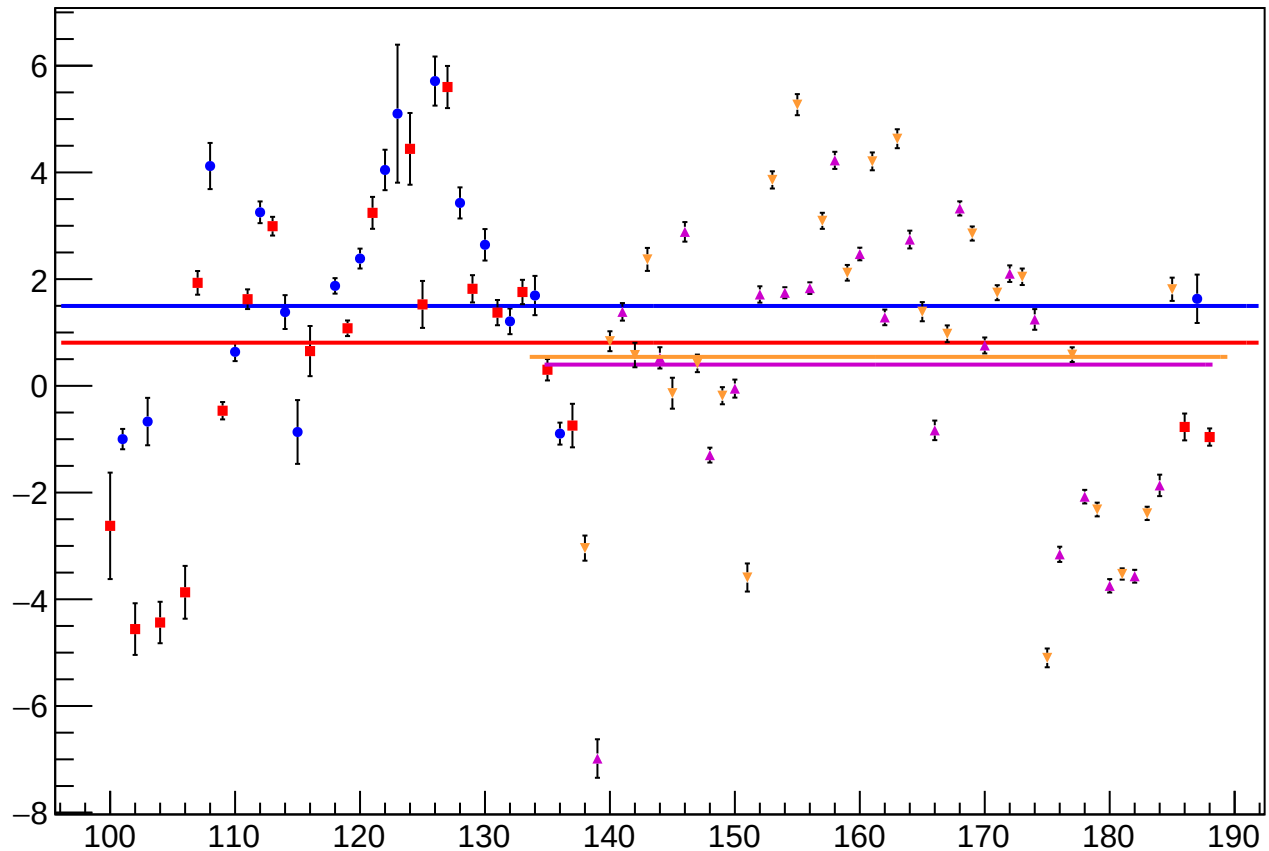
+ sign  $-17.763 \pm 0.039$   $\chi^2/\text{NDF}$ : 93158.1/25

All:  $-15.877 \pm 0.026$   $\chi^2/\text{NDF}$ : 179398.6/50

- sign  $-14.290 \pm 0.035$   $\chi^2/\text{NDF}$ : 81840.4/24



reg\_asym\_bcm\_an\_ds3\_diff\_bpm4aY\_slope vs Slug



Right In:  $1.497 \pm 0.061$   $\chi^2/\text{NDF}$ : 708.9/17

Left Out:  $0.543 \pm 0.032$   $\chi^2/\text{NDF}$ : 7067.6/24

Right Out:  $0.809 \pm 0.054$   $\chi^2/\text{NDF}$ : 1134.6/20

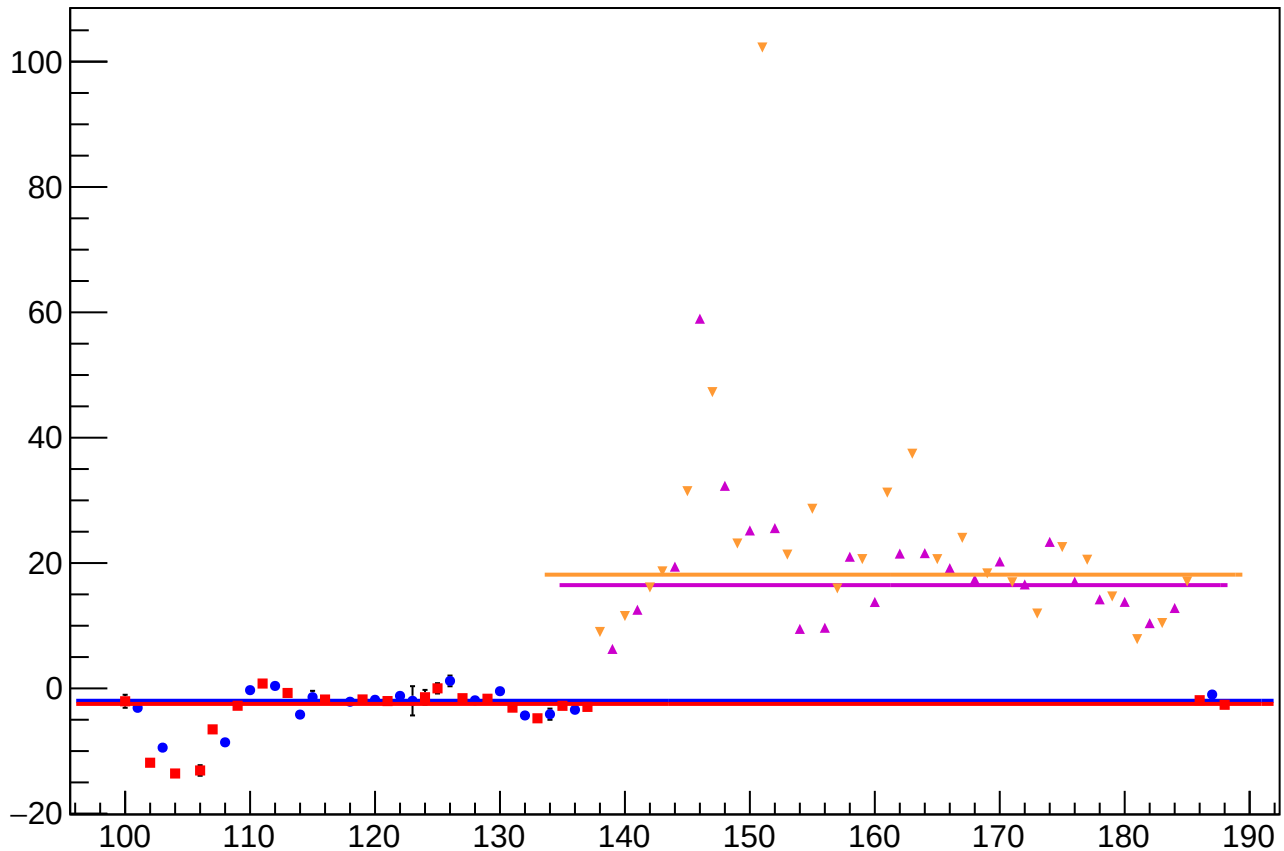
Left In:  $0.398 \pm 0.031$   $\chi^2/\text{NDF}$ : 6286.3/22

+ sign  $0.756 \pm 0.029$   $\chi^2/\text{NDF}$ : 7969.8/42

All:  $0.619 \pm 0.019$   $\chi^2/\text{NDF}$ : 15478.1/86

- sign  $0.500 \pm 0.027$   $\chi^2/\text{NDF}$ : 7465.3/43

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eX\_slope vs Slug



Right In:  $-1.973 \pm 0.100$   $\chi^2/\text{NDF}: 483.6/17$

Left Out:  $18.147 \pm 0.039$   $\chi^2/\text{NDF}: 77805.7/24$

Right Out:  $-2.474 \pm 0.061$   $\chi^2/\text{NDF}: 918.9/20$

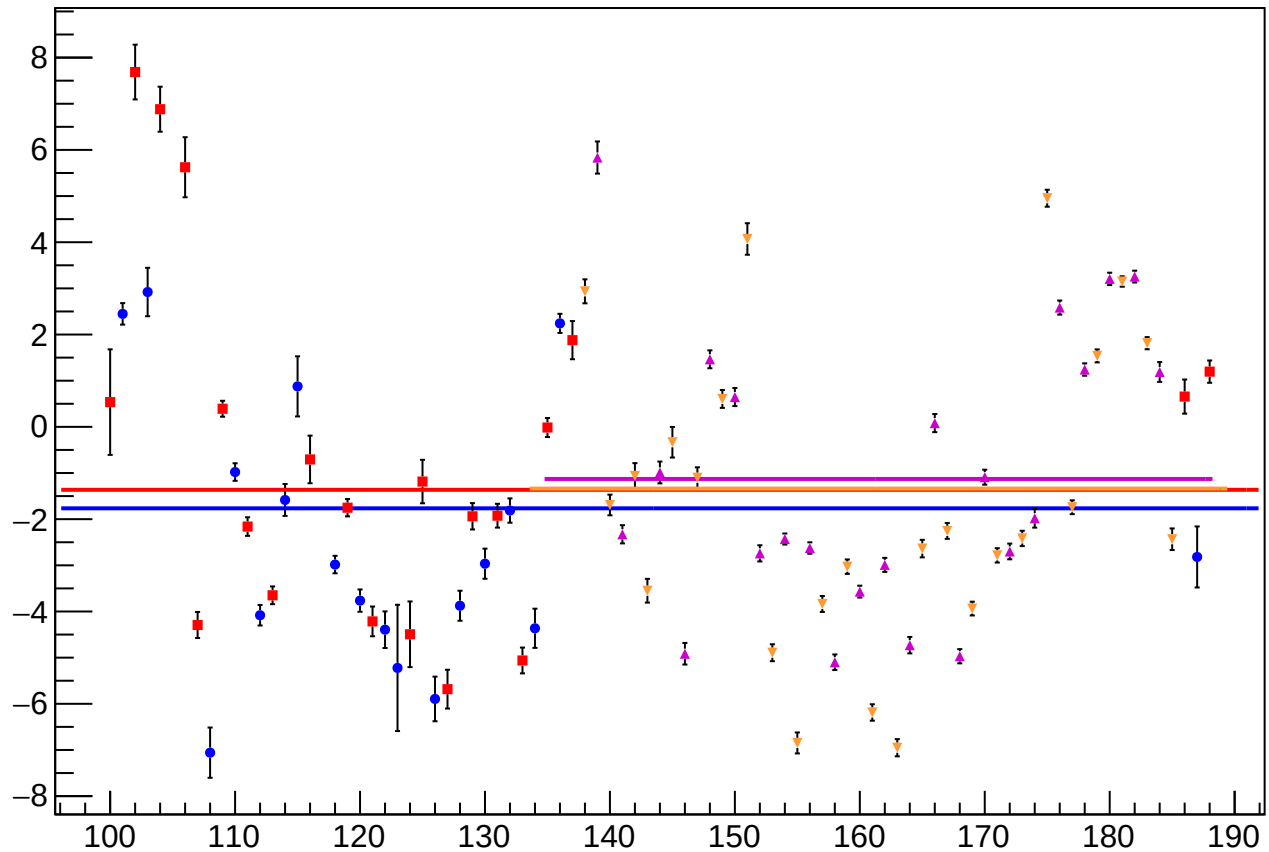
Left In:  $16.477 \pm 0.038$   $\chi^2/\text{NDF}: 41326.5/22$

+ sign  $15.464 \pm 0.036$   $\chi^2/\text{NDF}: 113531.4/42$

All:  $13.112 \pm 0.024$   $\chi^2/\text{NDF}: 232604.6/86$

- sign  $11.291 \pm 0.032$   $\chi^2/\text{NDF}: 111677.1/43$

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eY\_slope vs Slug



Right In:  $-1.765 \pm 0.070$   $\chi^2/\text{NDF}: 1347.6/17$

Left Out:  $-1.338 \pm 0.036$   $\chi^2/\text{NDF}: 7920.8/24$

Right Out:  $-1.364 \pm 0.063$   $\chi^2/\text{NDF}: 1644.7/20$

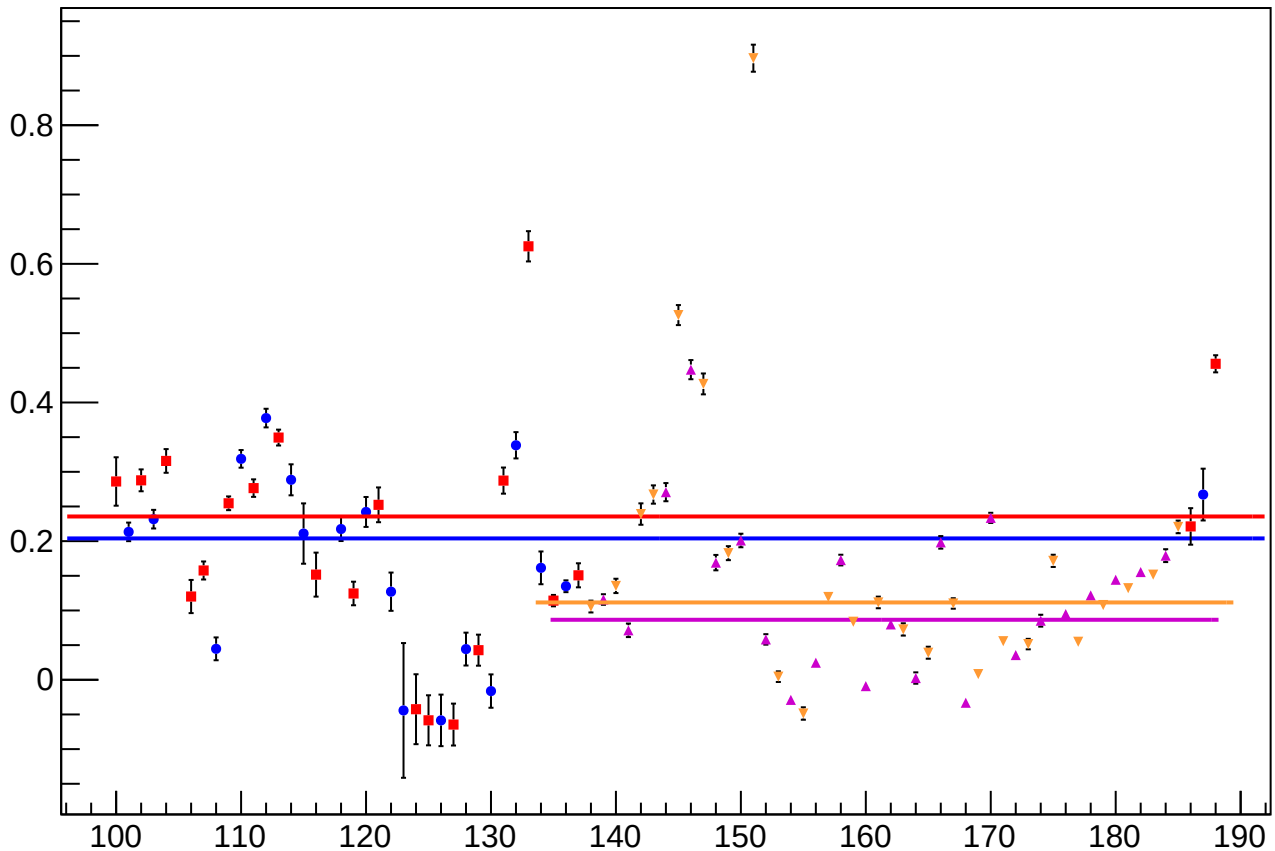
Left In:  $-1.129 \pm 0.034$   $\chi^2/\text{NDF}: 6778.7/22$

+ sign  $-1.427 \pm 0.032$   $\chi^2/\text{NDF}: 9297.9/42$

All:  $-1.297 \pm 0.022$   $\chi^2/\text{NDF}: 17763.5/86$

- sign  $-1.182 \pm 0.030$   $\chi^2/\text{NDF}: 8434.3/43$

reg\_asym\_bcm\_an\_ds3\_diff\_bpm12X\_slope vs Slug



Right In:  $0.204 \pm 0.004$   $\chi^2/\text{NDF}: 680.1/17$

Left Out:  $0.112 \pm 0.002$   $\chi^2/\text{NDF}: 4459.9/24$

Right Out:  $0.236 \pm 0.004$   $\chi^2/\text{NDF}: 1412.6/20$

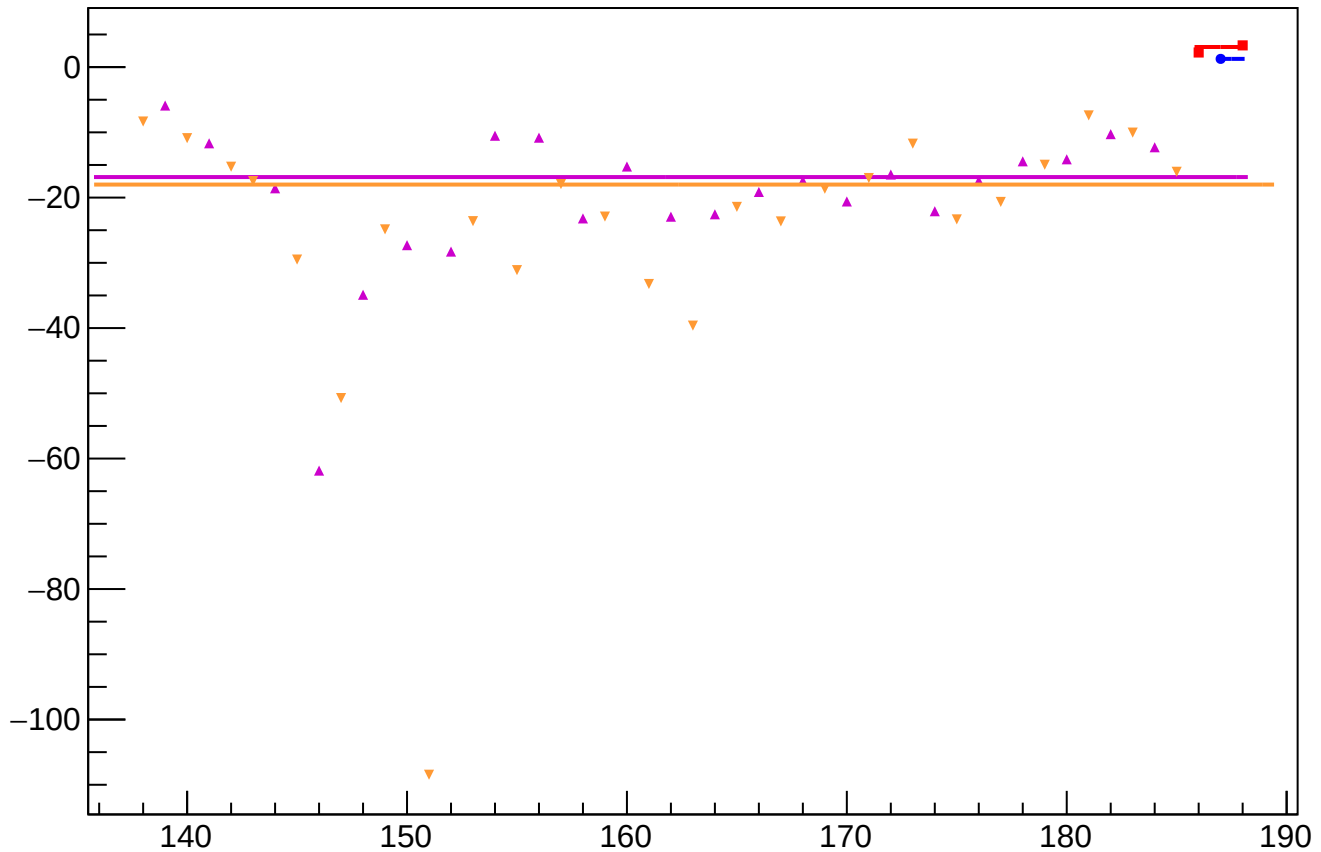
Left In:  $0.087 \pm 0.001$   $\chi^2/\text{NDF}: 3661.4/22$

+ sign  $0.124 \pm 0.001$   $\chi^2/\text{NDF}: 5578.5/42$

All:  $0.116 \pm 0.001$   $\chi^2/\text{NDF}: 12229.5/86$

- sign  $0.110 \pm 0.001$   $\chi^2/\text{NDF}: 6601.6/43$

# reg\_asym\_bcm\_an\_ds\_diff\_bpm1X\_slope vs Slug



Right In:  $1.261 \pm 0.281$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-18.004 \pm 0.039$   $\chi^2/\text{NDF}$ : 88352.2/24

Right Out:  $3.082 \pm 0.096$   $\chi^2/\text{NDF}$ : 22.7/1

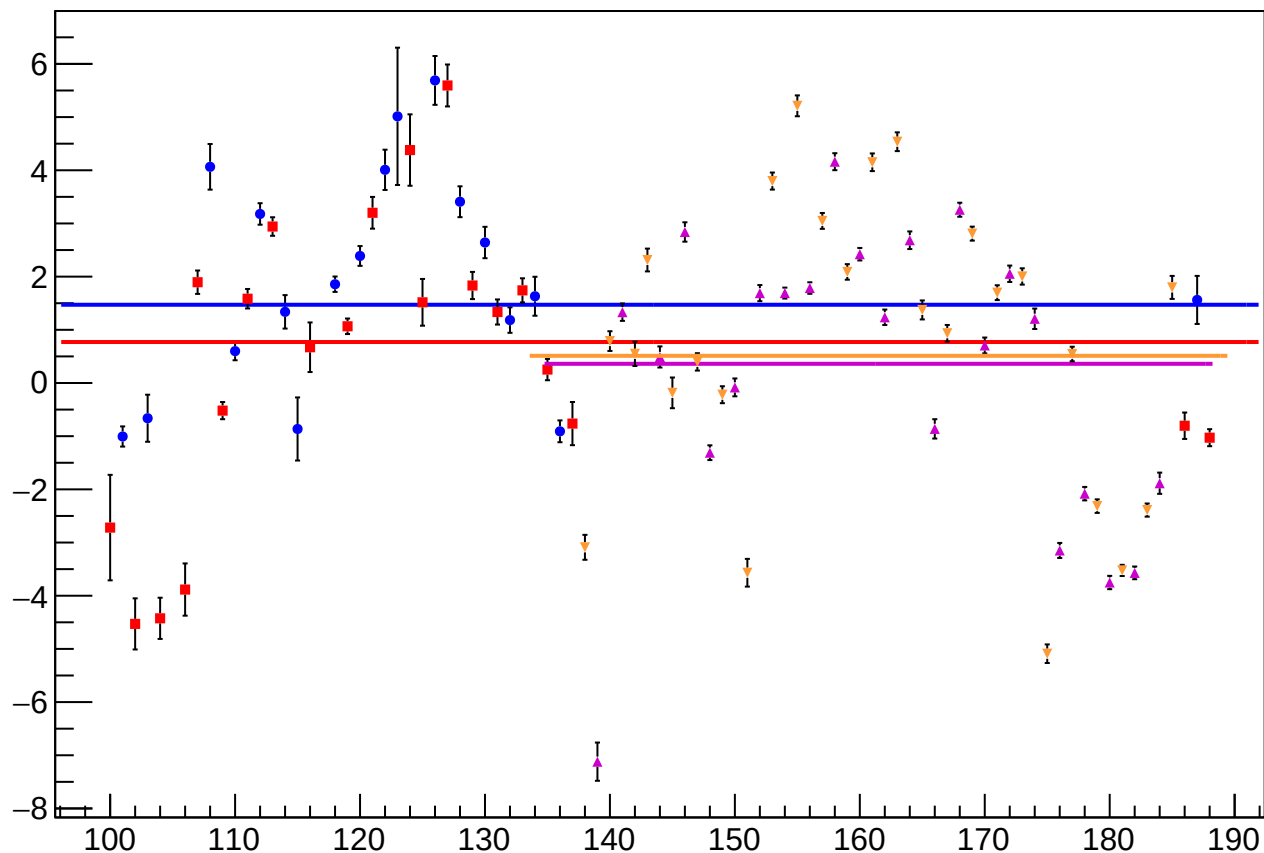
Left In:  $-16.854 \pm 0.038$   $\chi^2/\text{NDF}$ : 44680.7/22

+ sign  $-17.645 \pm 0.038$   $\chi^2/\text{NDF}$ : 92974.5/25

All:  $-15.761 \pm 0.026$   $\chi^2/\text{NDF}$ : 179553.4/50

- sign  $-14.179 \pm 0.035$   $\chi^2/\text{NDF}$ : 82132.4/24

reg\_asym\_bcm\_an\_ds\_diff\_bpm4aY\_slope vs Slug



Right In:  $1.471 \pm 0.060$   $\chi^2/\text{NDF}$ : 707.9/17

Left Out:  $0.511 \pm 0.032$   $\chi^2/\text{NDF}$ : 7053.0/24

Right Out:  $0.771 \pm 0.053$   $\chi^2/\text{NDF}$ : 1149.3/20

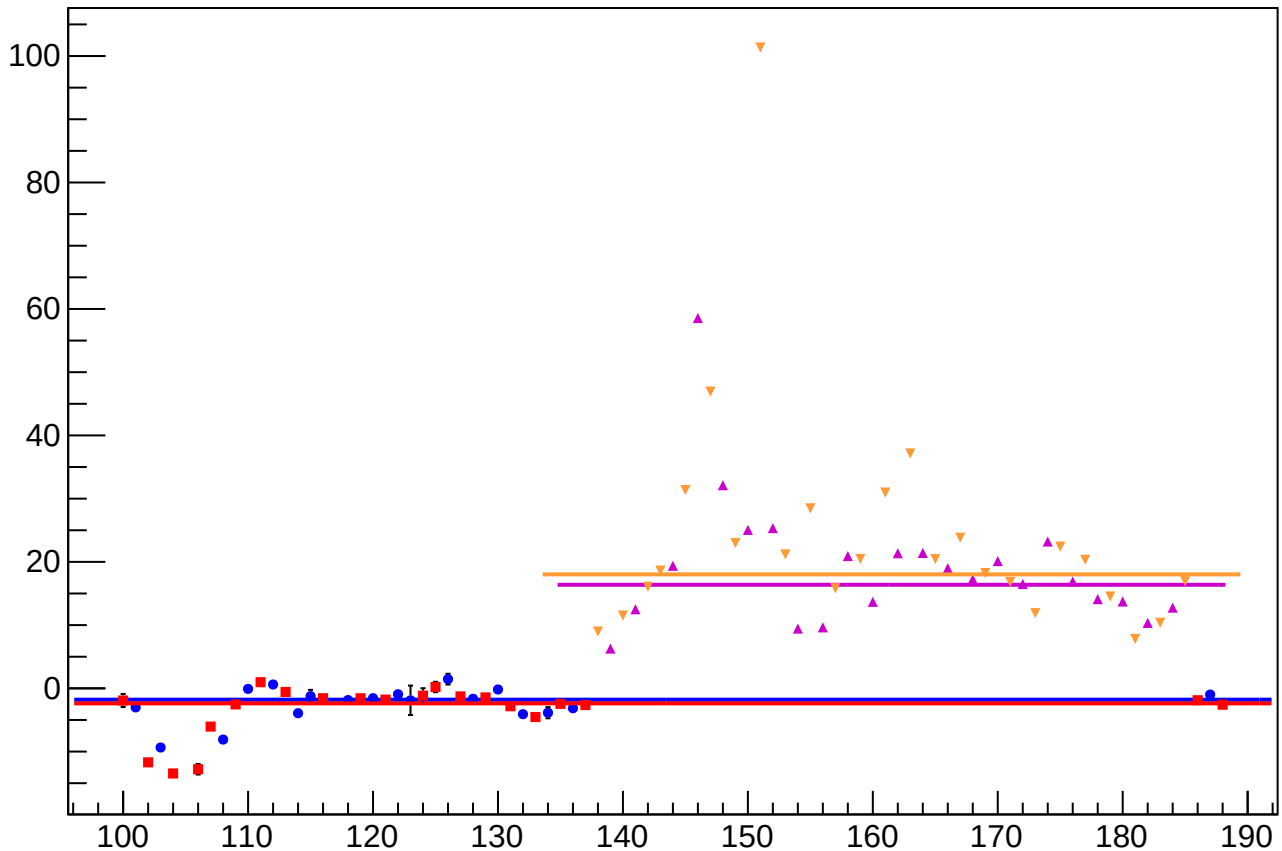
Left In:  $0.361 \pm 0.030$   $\chi^2/\text{NDF}$ : 6273.5/22

+ sign  $0.724 \pm 0.028$   $\chi^2/\text{NDF}$ : 7958.4/42

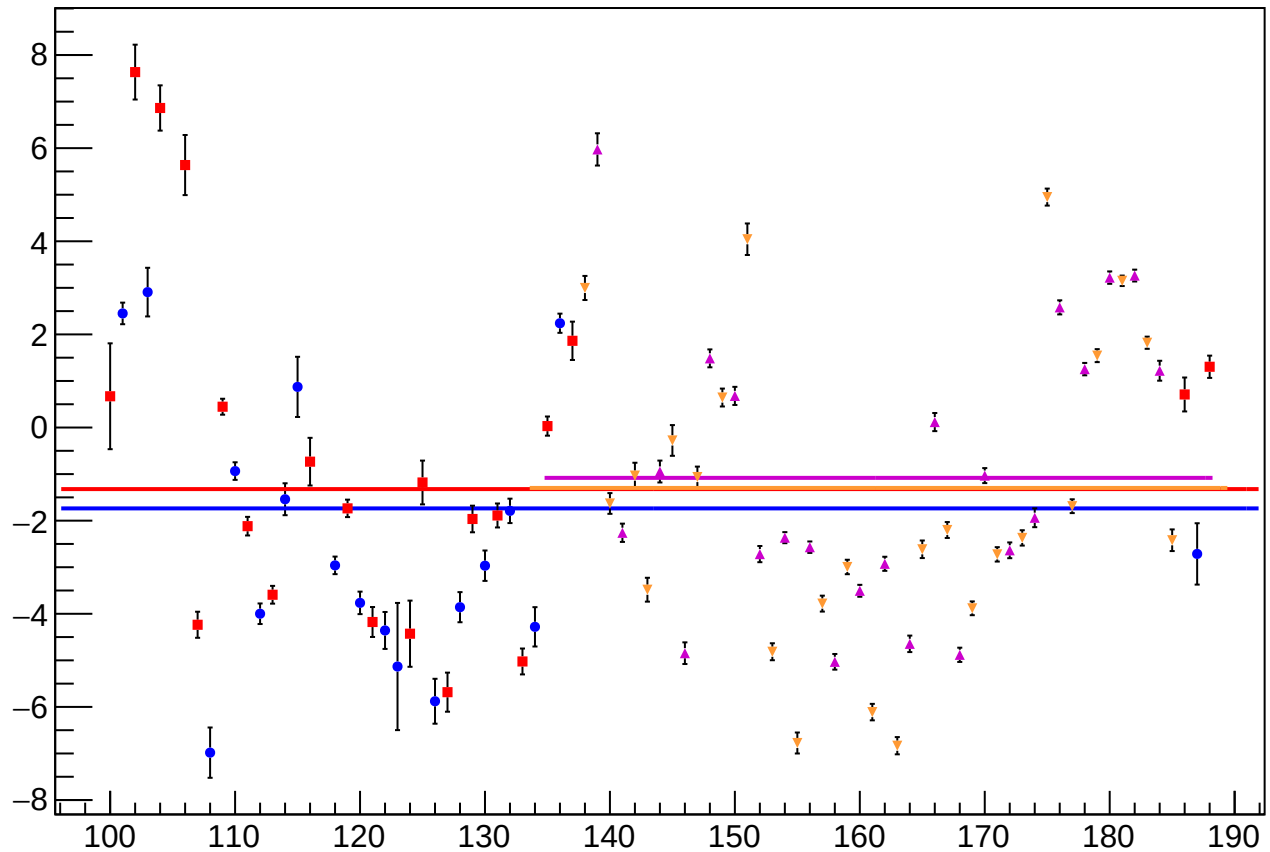
All:  $0.584 \pm 0.019$   $\chi^2/\text{NDF}$ : 15471.7/86

- sign  $0.462 \pm 0.026$   $\chi^2/\text{NDF}$ : 7467.4/43

reg\_asym\_bcm\_an\_ds\_diff\_bpm4eX\_slope vs Slug



# reg\_asym\_bcm\_an\_ds\_diff\_bpm4eY\_slope vs Slug



Right In:  $-1.737 \pm 0.070$   $\chi^2/\text{NDF}: 1343.7/17$

Left Out:  $-1.297 \pm 0.036$   $\chi^2/\text{NDF}: 7903.2/24$

Right Out:  $-1.322 \pm 0.062$   $\chi^2/\text{NDF}: 1660.7/20$

Left In:  $-1.081 \pm 0.034$   $\chi^2/\text{NDF}: 6764.0/22$

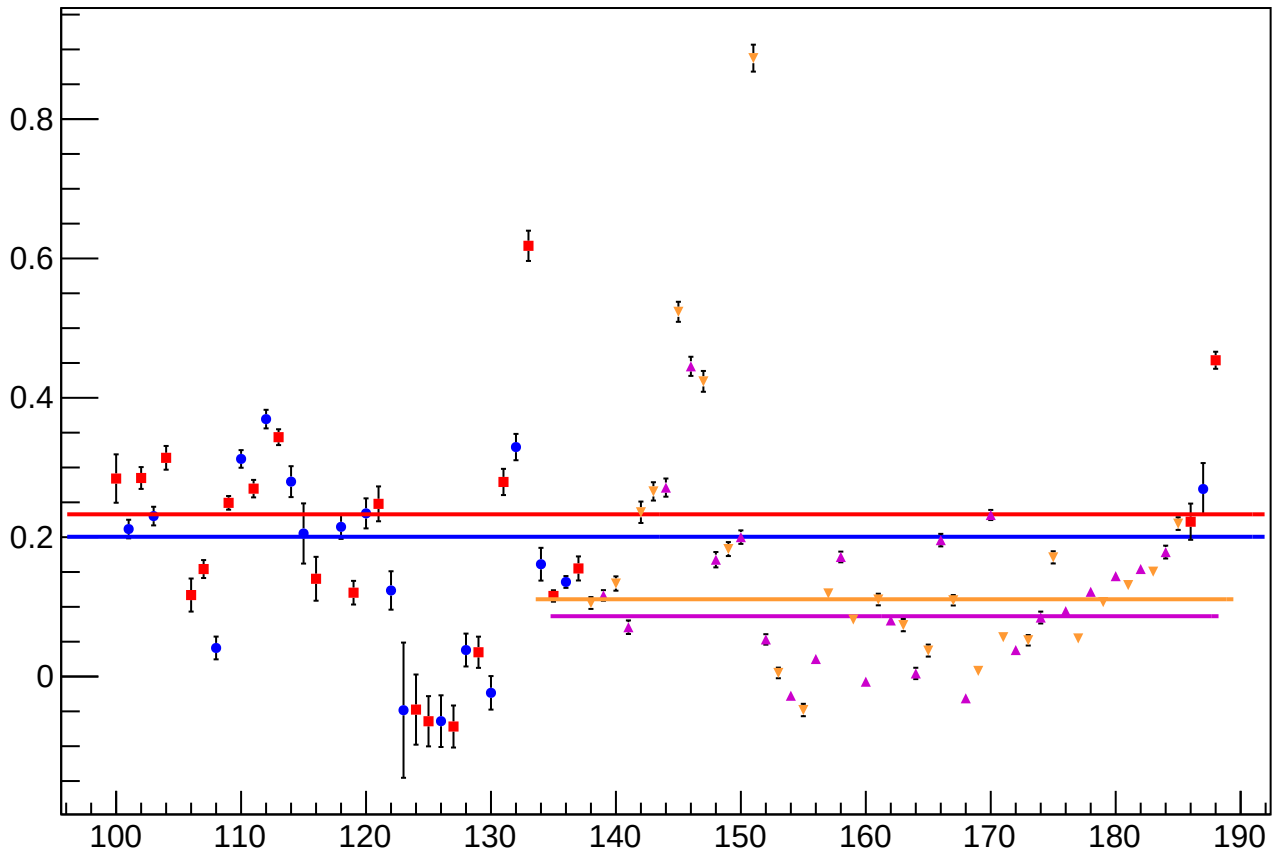
+ sign  $-1.389 \pm 0.032$   $\chi^2/\text{NDF}: 9278.5/42$

All:  $-1.254 \pm 0.022$   $\chi^2/\text{NDF}: 17748.7/86$

- sign  $-1.136 \pm 0.030$   $\chi^2/\text{NDF}: 8436.4/43$



# reg\_asym\_bcm\_an\_ds\_diff\_bpm12X\_slope vs Slug



Right In:  $0.201 \pm 0.004$   $\chi^2/\text{NDF}$ : 665.9/17

Left Out:  $0.111 \pm 0.002$   $\chi^2/\text{NDF}$ : 4452.0/24

Right Out:  $0.233 \pm 0.003$   $\chi^2/\text{NDF}$ : 1406.3/20

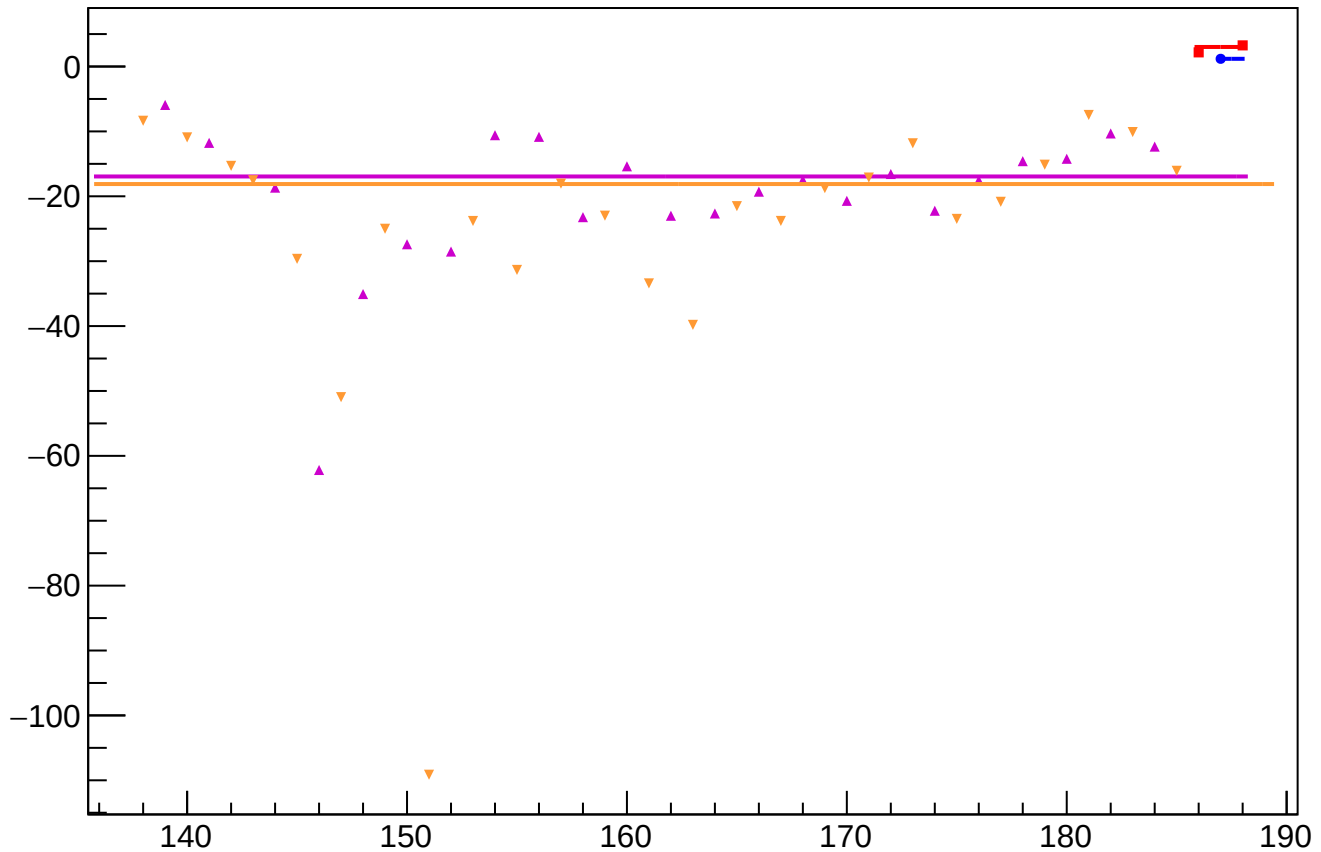
Left In:  $0.087 \pm 0.001$   $\chi^2/\text{NDF}$ : 3631.4/22

+ sign  $0.123 \pm 0.001$   $\chi^2/\text{NDF}$ : 5535.9/42

All:  $0.115 \pm 0.001$   $\chi^2/\text{NDF}$ : 12107.5/86

- sign  $0.109 \pm 0.001$   $\chi^2/\text{NDF}$ : 6525.7/43

# reg\_asym\_bcm\_an\_us\_diff\_bpm1X\_slope vs Slug



Right In:  $1.187 \pm 0.282$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-18.112 \pm 0.039$   $\chi^2/\text{NDF}$ : 88488.2/24

Right Out:  $3.013 \pm 0.096$   $\chi^2/\text{NDF}$ : 22.2/1

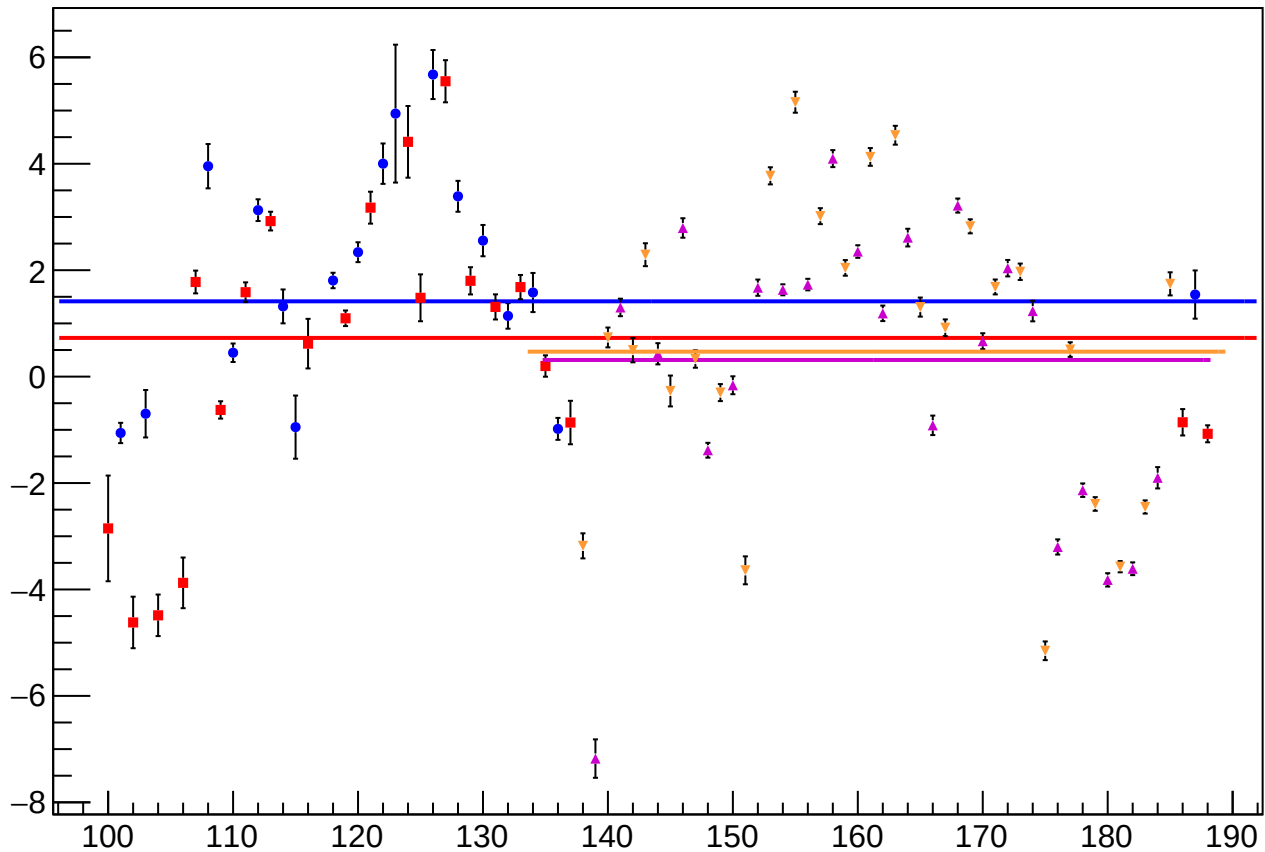
Left In:  $-16.945 \pm 0.038$   $\chi^2/\text{NDF}$ : 44756.2/22

+ sign  $-17.752 \pm 0.038$   $\chi^2/\text{NDF}$ : 93100.8/25

All:  $-15.841 \pm 0.026$   $\chi^2/\text{NDF}$ : 179995.3/50

- sign  $-14.240 \pm 0.035$   $\chi^2/\text{NDF}$ : 82365.2/24

# reg\_asym\_bcm\_an\_us\_diff\_bpm4aY\_slope vs Slug



Right In:  $1.415 \pm 0.061$   $\chi^2/\text{NDF}: 714.0/17$

Left Out:  $0.469 \pm 0.032$   $\chi^2/\text{NDF}: 7076.8/24$

Right Out:  $0.727 \pm 0.053$   $\chi^2/\text{NDF}: 1162.3/20$

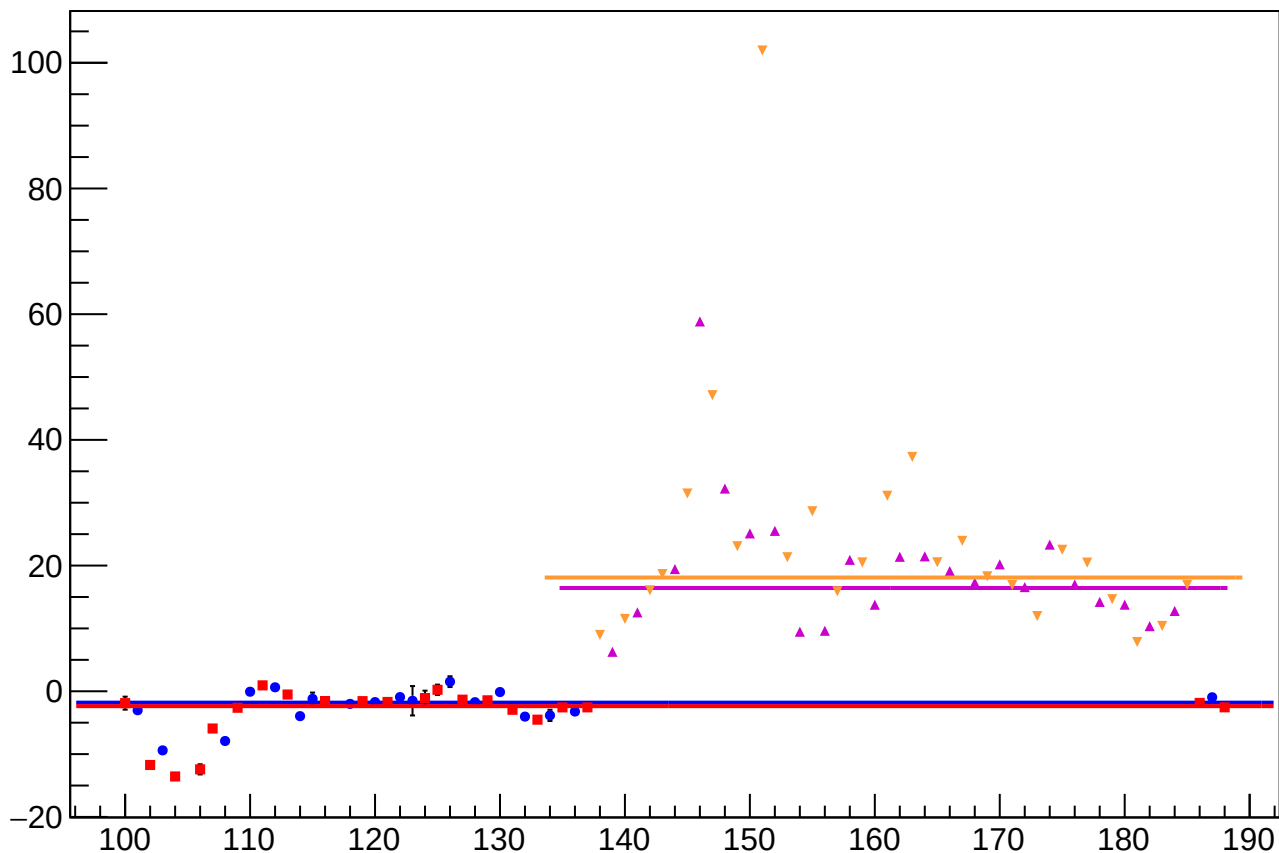
Left In:  $0.313 \pm 0.031$   $\chi^2/\text{NDF}: 6235.0/22$

+ sign  $0.679 \pm 0.029$   $\chi^2/\text{NDF}: 7980.9/42$

All:  $0.537 \pm 0.019$   $\chi^2/\text{NDF}: 15469.6/86$

- sign  $0.415 \pm 0.027$   $\chi^2/\text{NDF}: 7442.9/43$

reg\_asym\_bcm\_an\_us\_diff\_bpm4eX\_slope vs Slug



Right In:  $-1.811 \pm 0.100$   $\chi^2/\text{NDF}$ : 480.1/17

Left Out:  $18.098 \pm 0.039$   $\chi^2/\text{NDF}$ : 77793.7/24

Right Out:  $-2.372 \pm 0.061$   $\chi^2/\text{NDF}$ : 916.0/20

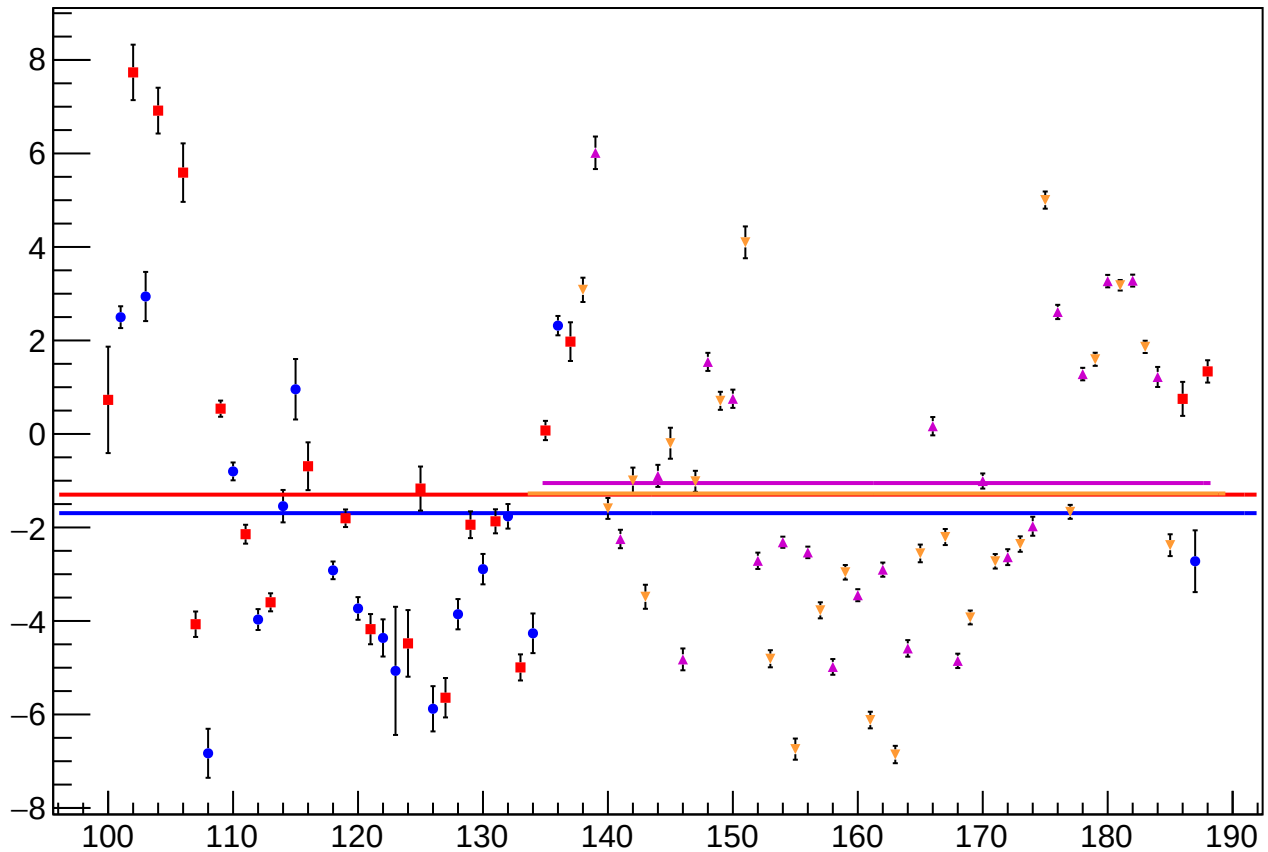
Left In:  $16.431 \pm 0.038$   $\chi^2/\text{NDF}$ : 41337.1/22

+ sign  $15.457 \pm 0.036$   $\chi^2/\text{NDF}$ : 112793.0/42

All:  $13.077 \pm 0.024$   $\chi^2/\text{NDF}$ : 231964.6/86

- sign  $11.241 \pm 0.032$   $\chi^2/\text{NDF}$ : 111576.8/43

# reg\_asym\_bcm\_an\_us\_diff\_bpm4eY\_slope vs Slug



Right In: -1.694 $\pm$ 0.070  $\chi^2/\text{NDF}$ : 1350.3/17

Left Out: -1.273 $\pm$ 0.036  $\chi^2/\text{NDF}$ : 7931.0/24

Right Out: -1.298 $\pm$ 0.062  $\chi^2/\text{NDF}$ : 1674.5/20

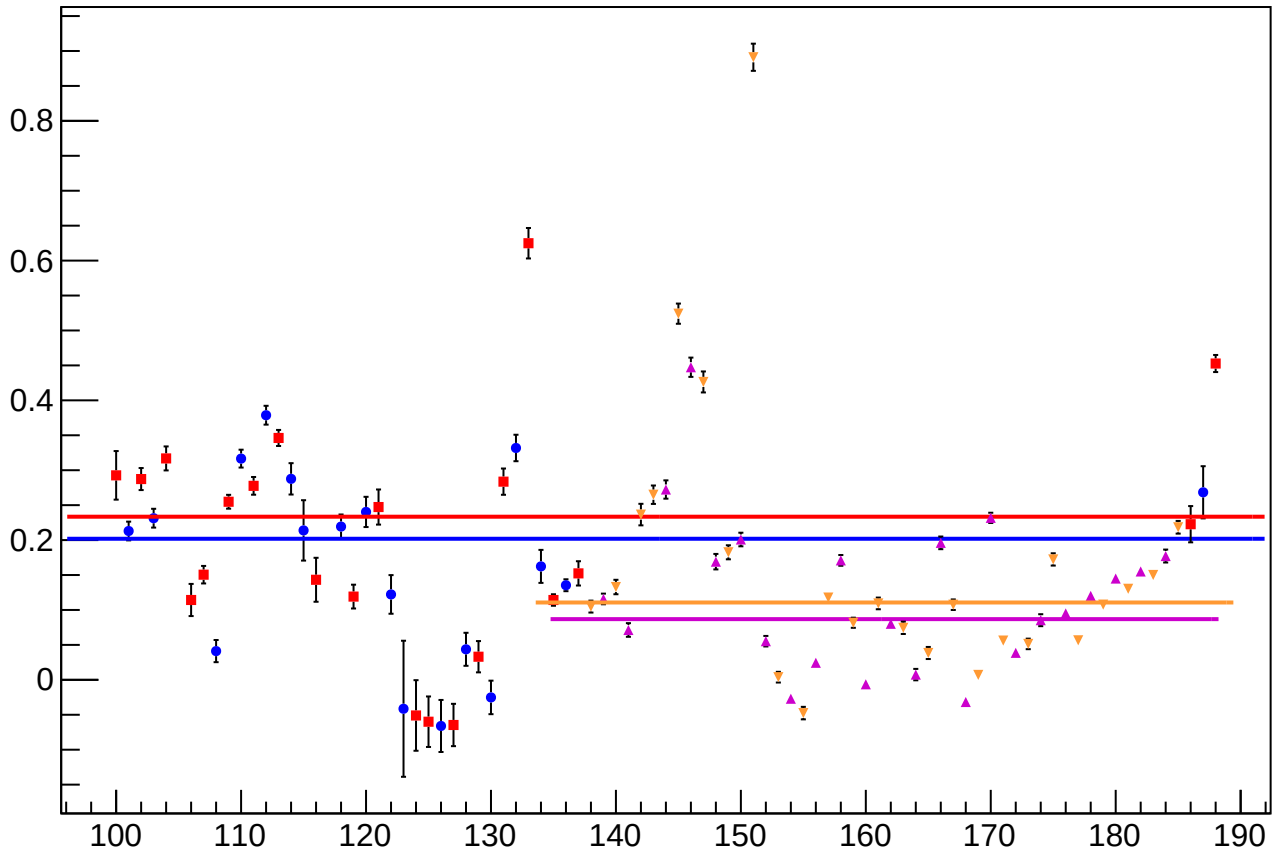
Left In: -1.050 $\pm$ 0.034  $\chi^2/\text{NDF}$ : 6713.0/22

+ sign -1.361 $\pm$ 0.032  $\chi^2/\text{NDF}$ : 9310.0/42

All: -1.225 $\pm$ 0.022  $\chi^2/\text{NDF}$ : 17743.4/86

- sign -1.107 $\pm$ 0.030  $\chi^2/\text{NDF}$ : 8399.7/43

# reg\_asym\_bcm\_an\_us\_diff\_bpm12X\_slope vs Slug



Right In: 0.202 $\pm$ 0.004  $\chi^2/\text{NDF}$ : 694.5/17

Left Out: 0.111 $\pm$ 0.002  $\chi^2/\text{NDF}$ : 4430.3/24

Right Out: 0.233 $\pm$ 0.003  $\chi^2/\text{NDF}$ : 1433.2/20

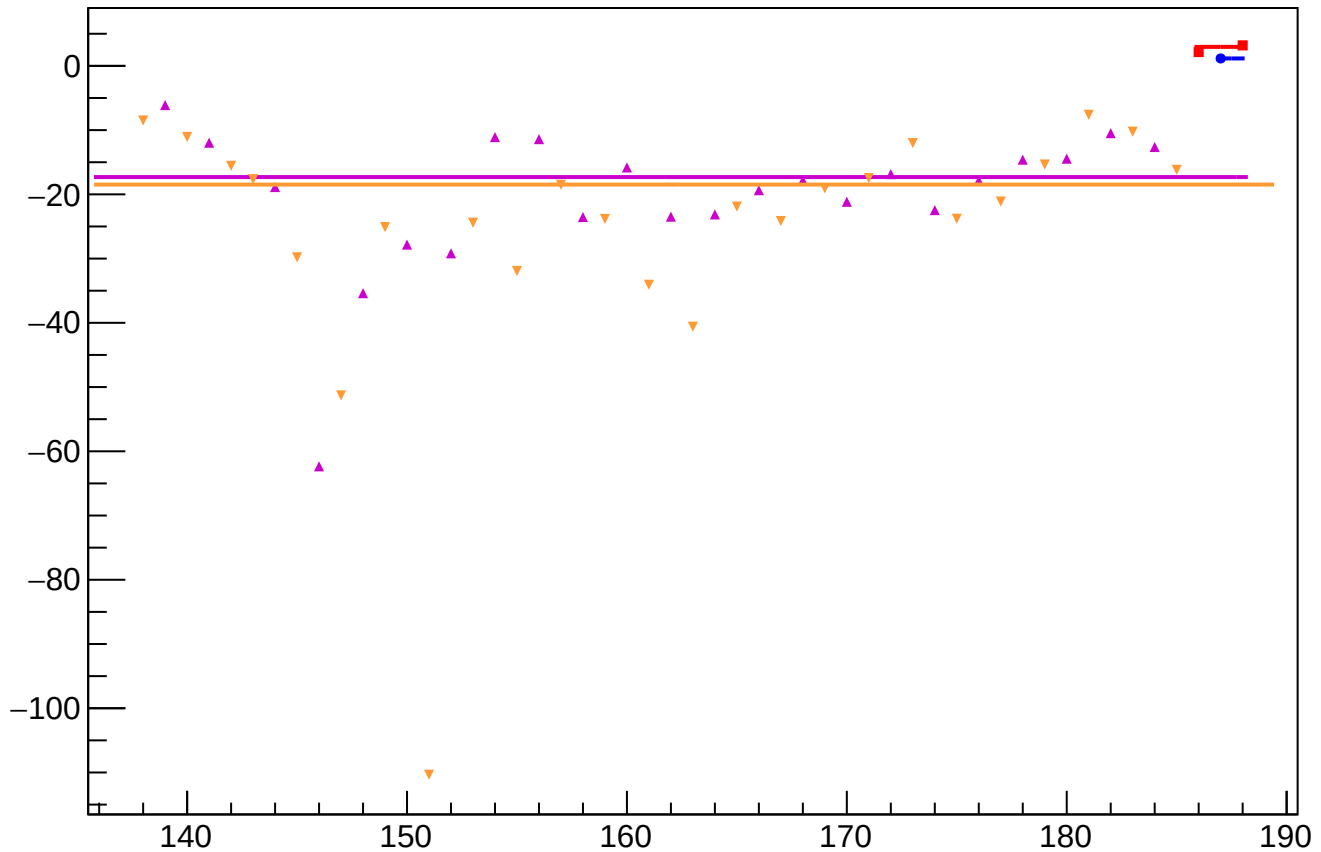
Left In: 0.087 $\pm$ 0.001  $\chi^2/\text{NDF}$ : 3604.3/22

+ sign 0.123 $\pm$ 0.001  $\chi^2/\text{NDF}$ : 5553.9/42

All: 0.116 $\pm$ 0.001  $\chi^2/\text{NDF}$ : 12123.8/86

- sign 0.109 $\pm$ 0.001  $\chi^2/\text{NDF}$ : 6527.2/43

# reg\_asym\_bcm\_dg\_ds\_diff\_bpm1X\_slope vs Slug



Right In:  $1.157 \pm 0.283$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-18.478 \pm 0.040$   $\chi^2/\text{NDF}$ : 87856.5/24

Right Out:  $2.958 \pm 0.096$   $\chi^2/\text{NDF}$ : 20.4/1

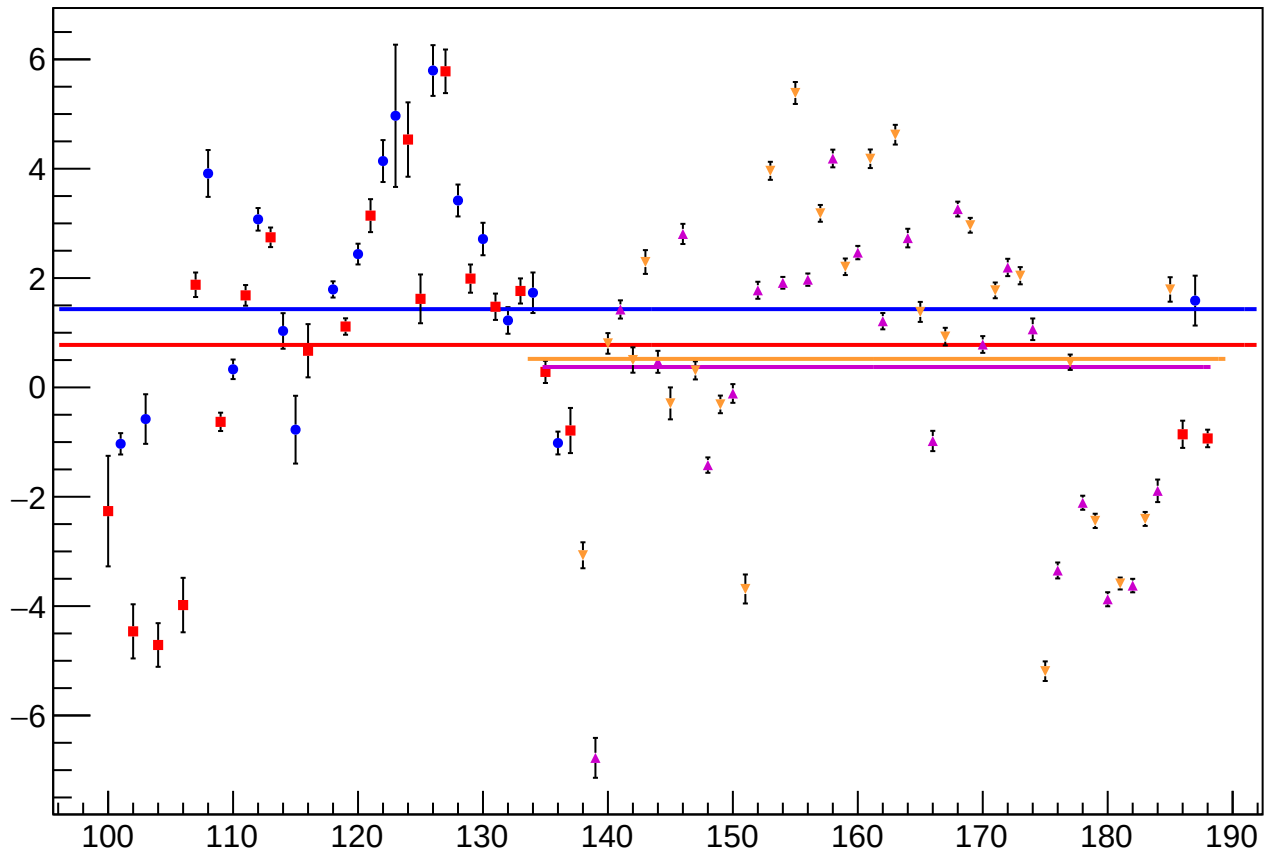
Left In:  $-17.309 \pm 0.039$   $\chi^2/\text{NDF}$ : 43807.0/22

+ sign  $-18.099 \pm 0.039$   $\chi^2/\text{NDF}$ : 92566.5/25

All:  $-16.119 \pm 0.027$   $\chi^2/\text{NDF}$ : 179334.7/50

- sign  $-14.465 \pm 0.036$   $\chi^2/\text{NDF}$ : 82123.3/24

# reg\_asym\_bcm\_dg\_ds\_diff\_bpm4aY\_slope vs Slug



Right In:  $1.432 \pm 0.062$   $\chi^2/\text{NDF}: 711.6/17$

Left Out:  $0.522 \pm 0.033$   $\chi^2/\text{NDF}: 7038.3/24$

Right Out:  $0.777 \pm 0.054$   $\chi^2/\text{NDF}: 1123.6/20$

Left In:  $0.373 \pm 0.031$   $\chi^2/\text{NDF}: 6263.9/22$

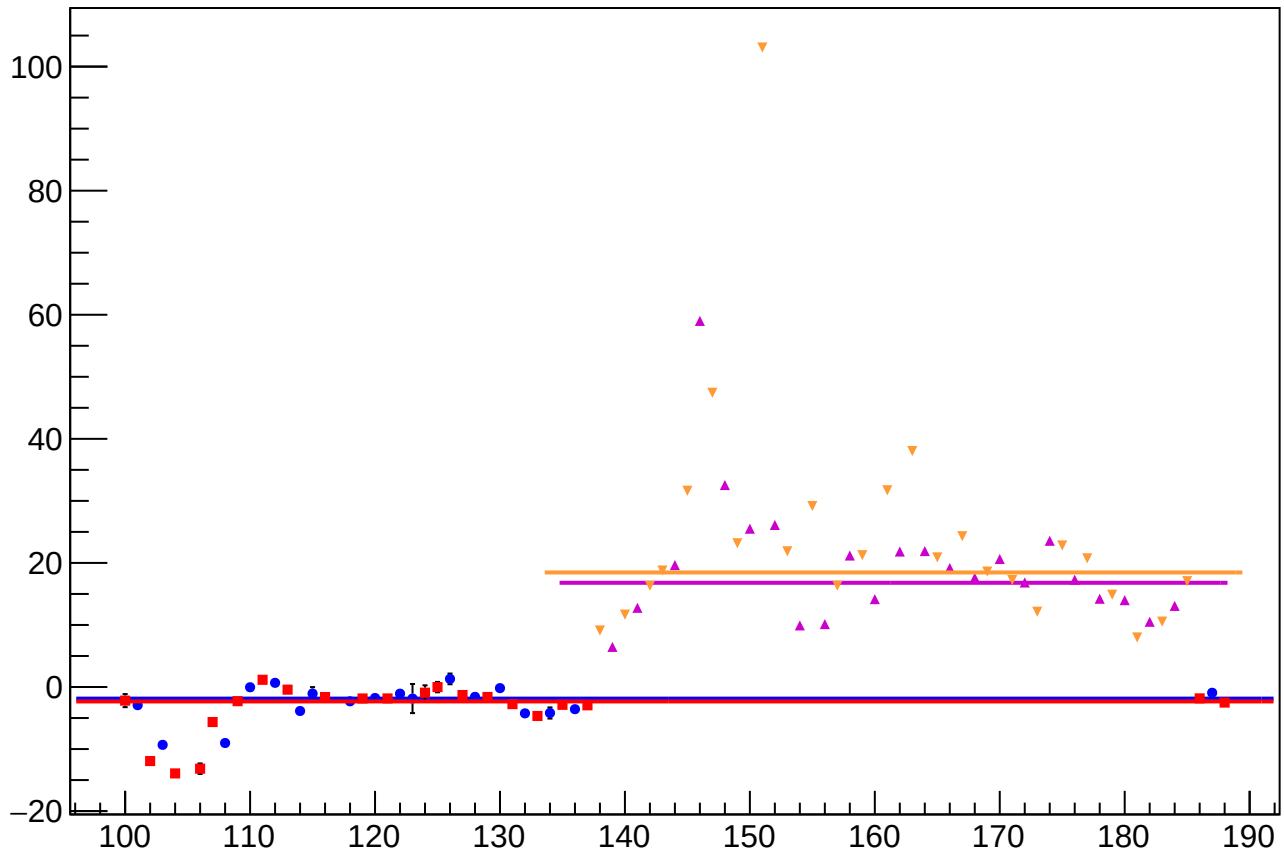
+ sign  $0.725 \pm 0.029$   $\chi^2/\text{NDF}: 7919.3/42$

All:  $0.591 \pm 0.020$   $\chi^2/\text{NDF}: 15388.2/86$

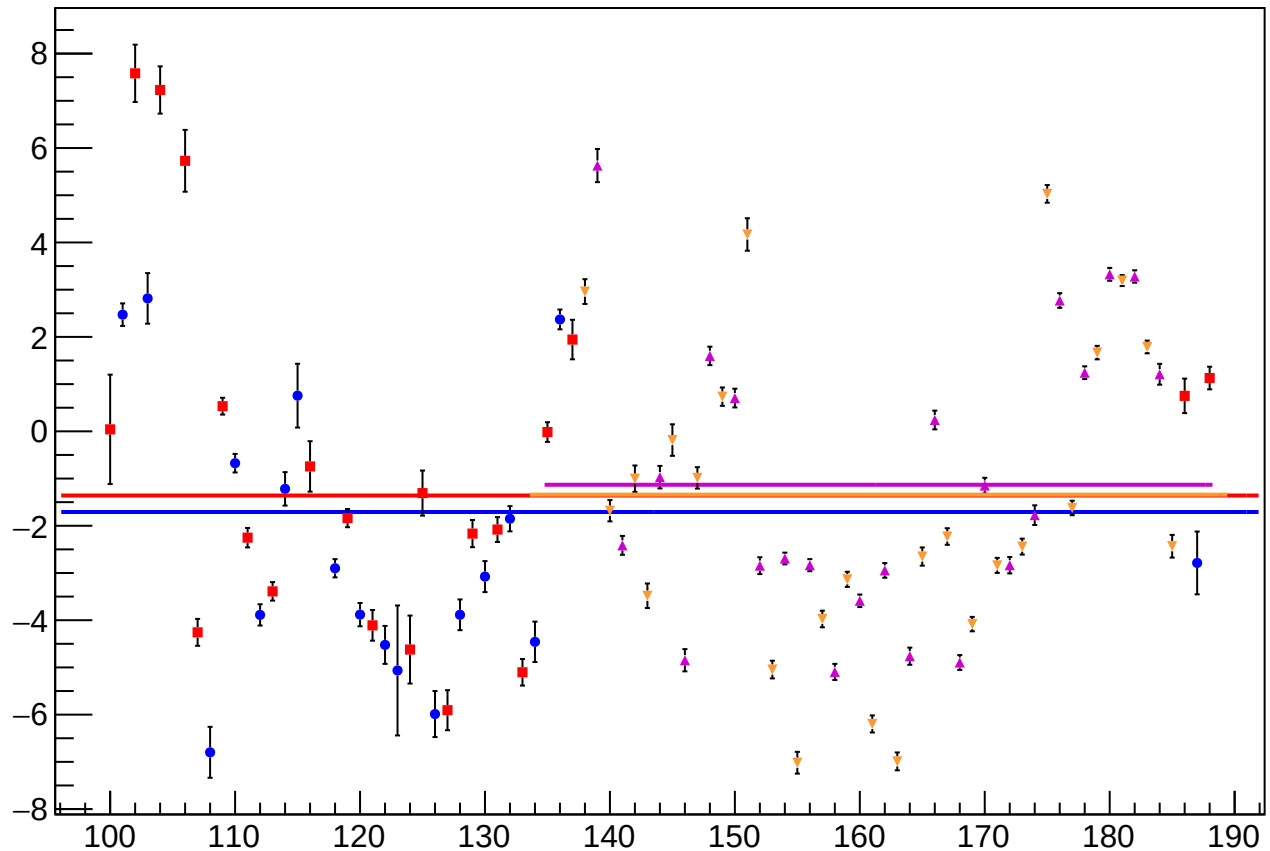
- sign  $0.474 \pm 0.027$   $\chi^2/\text{NDF}: 7429.0/43$



reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eX\_slope vs Slug



# reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eY\_slope vs Slug



Right In:  $-1.708 \pm 0.071$   $\chi^2/\text{NDF}: 1336.0/17$

Left Out:  $-1.341 \pm 0.037$   $\chi^2/\text{NDF}: 7886.0/24$

Right Out:  $-1.359 \pm 0.064$   $\chi^2/\text{NDF}: 1624.2/20$

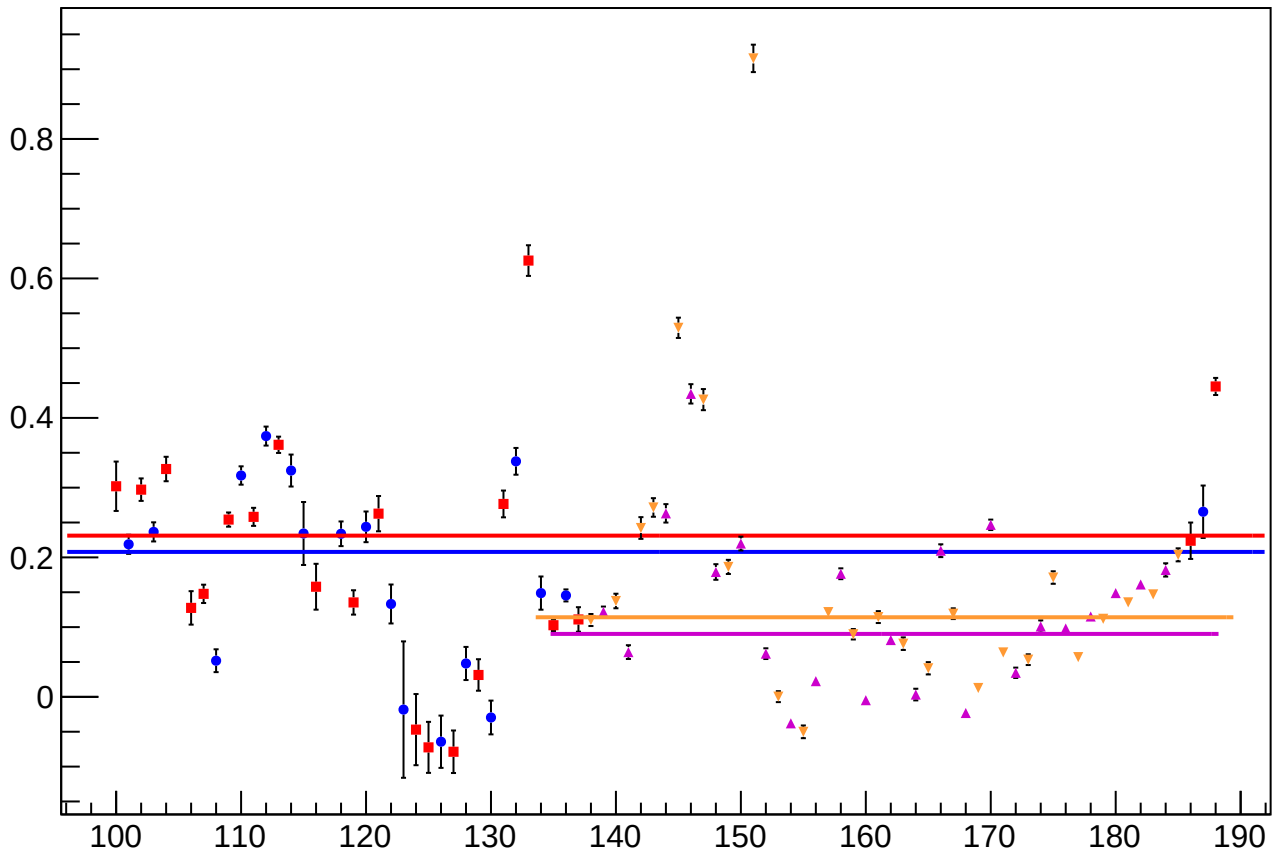
Left In:  $-1.132 \pm 0.035$   $\chi^2/\text{NDF}: 6743.4/22$

+ sign  $-1.418 \pm 0.033$   $\chi^2/\text{NDF}: 9243.0/42$

All:  $-1.293 \pm 0.022$   $\chi^2/\text{NDF}: 17647.9/86$

- sign  $-1.184 \pm 0.031$   $\chi^2/\text{NDF}: 8377.4/43$

# reg\_asym\_bcm\_dg\_ds\_diff\_bpm12X\_slope vs Slug



Right In:  $0.208 \pm 0.004$   $\chi^2/\text{NDF}$ : 658.7/17

Left Out:  $0.114 \pm 0.002$   $\chi^2/\text{NDF}$ : 4382.5/24

Right Out:  $0.231 \pm 0.004$   $\chi^2/\text{NDF}$ : 1478.4/20

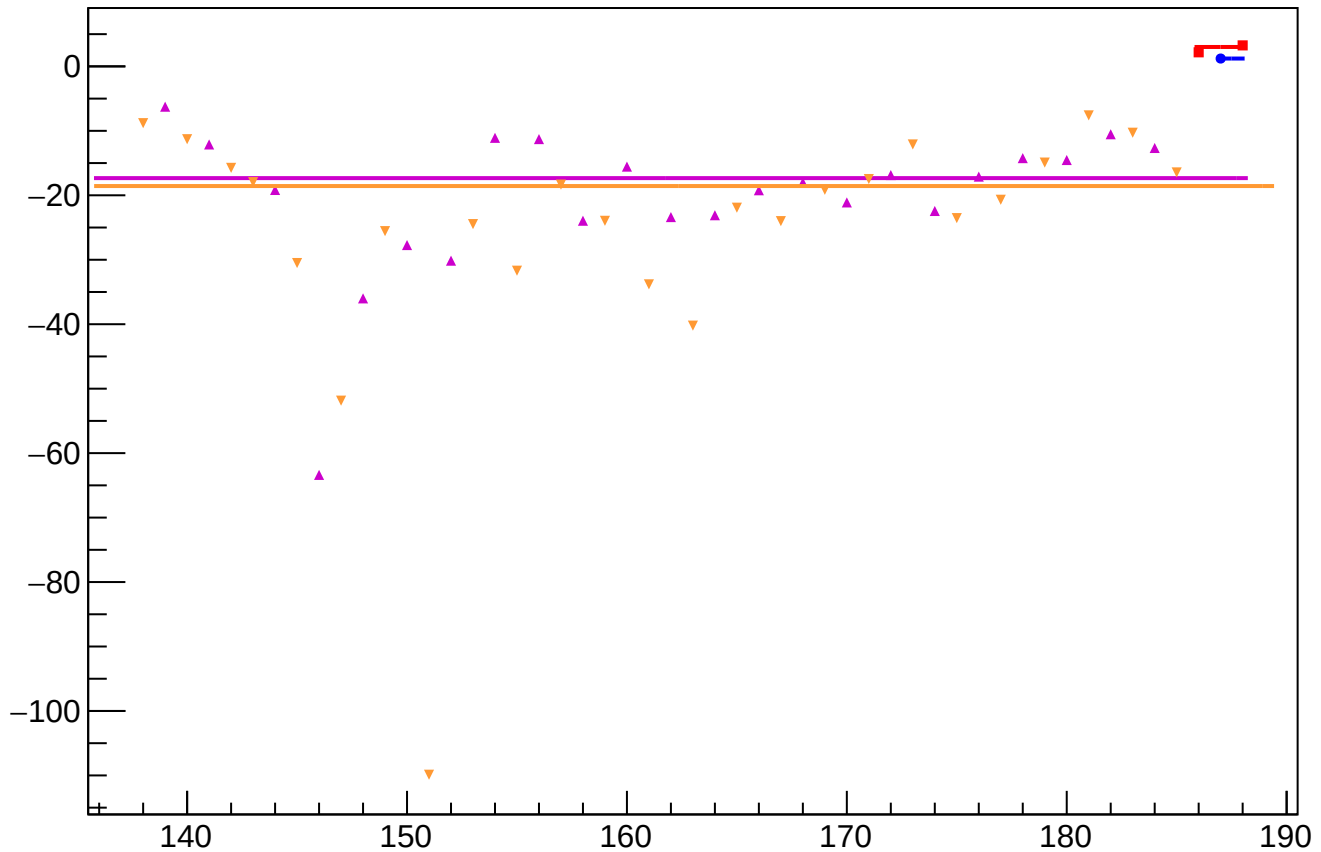
Left In:  $0.090 \pm 0.002$   $\chi^2/\text{NDF}$ : 3679.2/22

+ sign  $0.127 \pm 0.002$   $\chi^2/\text{NDF}$ : 5478.2/42

All:  $0.119 \pm 0.001$   $\chi^2/\text{NDF}$ : 12007.6/86

- sign  $0.112 \pm 0.001$   $\chi^2/\text{NDF}$ : 6481.3/43

# reg\_asym\_bcm\_dg\_us\_diff\_bpm1X\_slope vs Slug



Right In:  $1.216 \pm 0.284$   $\chi^2/\text{NDF}$ : 0.0/0

Left Out:  $-18.565 \pm 0.040$   $\chi^2/\text{NDF}$ : 86349.5/24

Right Out:  $3.010 \pm 0.097$   $\chi^2/\text{NDF}$ : 21.7/1

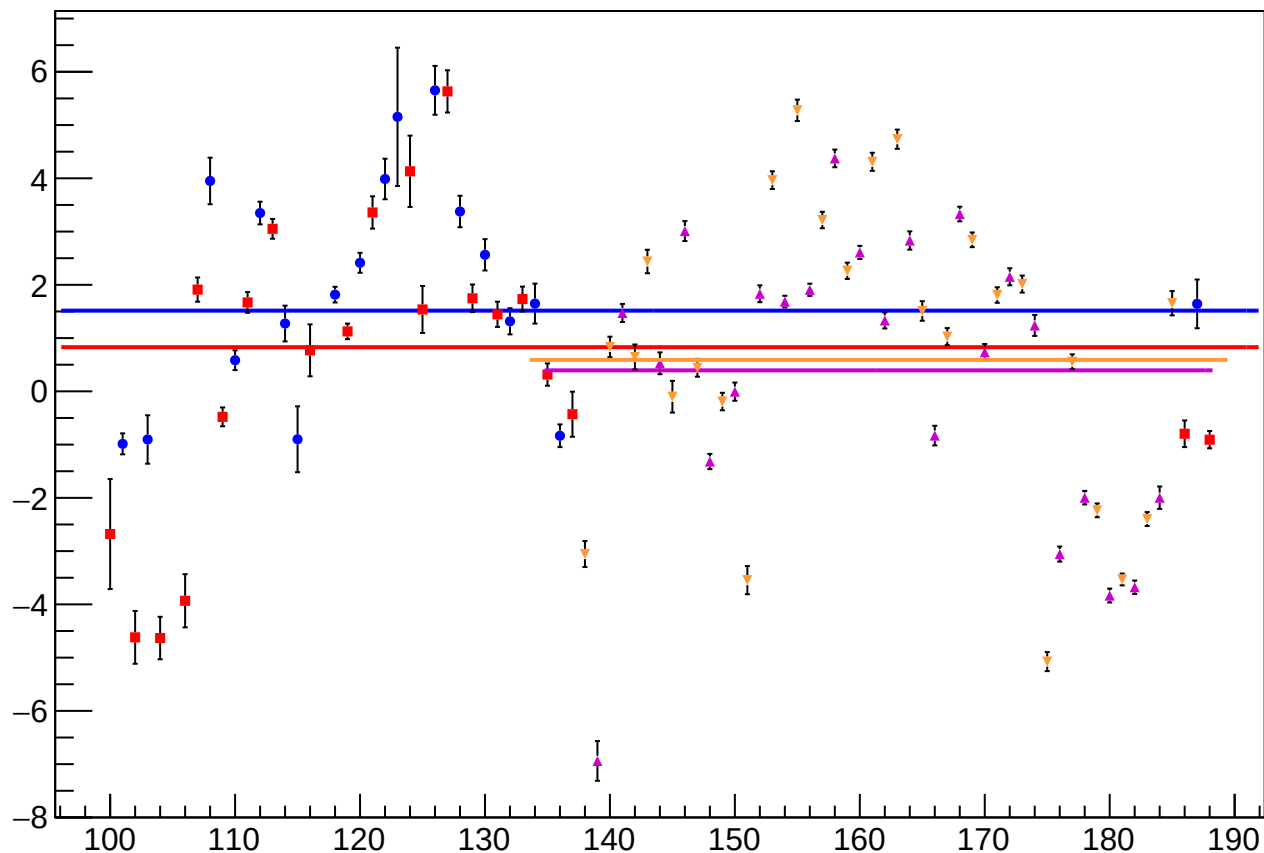
Left In:  $-17.335 \pm 0.039$   $\chi^2/\text{NDF}$ : 44078.7/22

+ sign  $-18.178 \pm 0.040$   $\chi^2/\text{NDF}$ : 91102.1/25

All:  $-16.170 \pm 0.027$   $\chi^2/\text{NDF}$ : 177601.9/50

- sign  $-14.494 \pm 0.036$   $\chi^2/\text{NDF}$ : 81817.0/24

# reg\_asym\_bcm\_dg\_us\_diff\_bpm4aY\_slope vs Slug



Right In: 1.515 $\pm$ 0.062  $\chi^2/\text{NDF}$ : 669.8/17

Left Out: 0.590 $\pm$ 0.033  $\chi^2/\text{NDF}$ : 6780.3/24

Right Out: 0.829 $\pm$ 0.055  $\chi^2/\text{NDF}$ : 1103.9/20

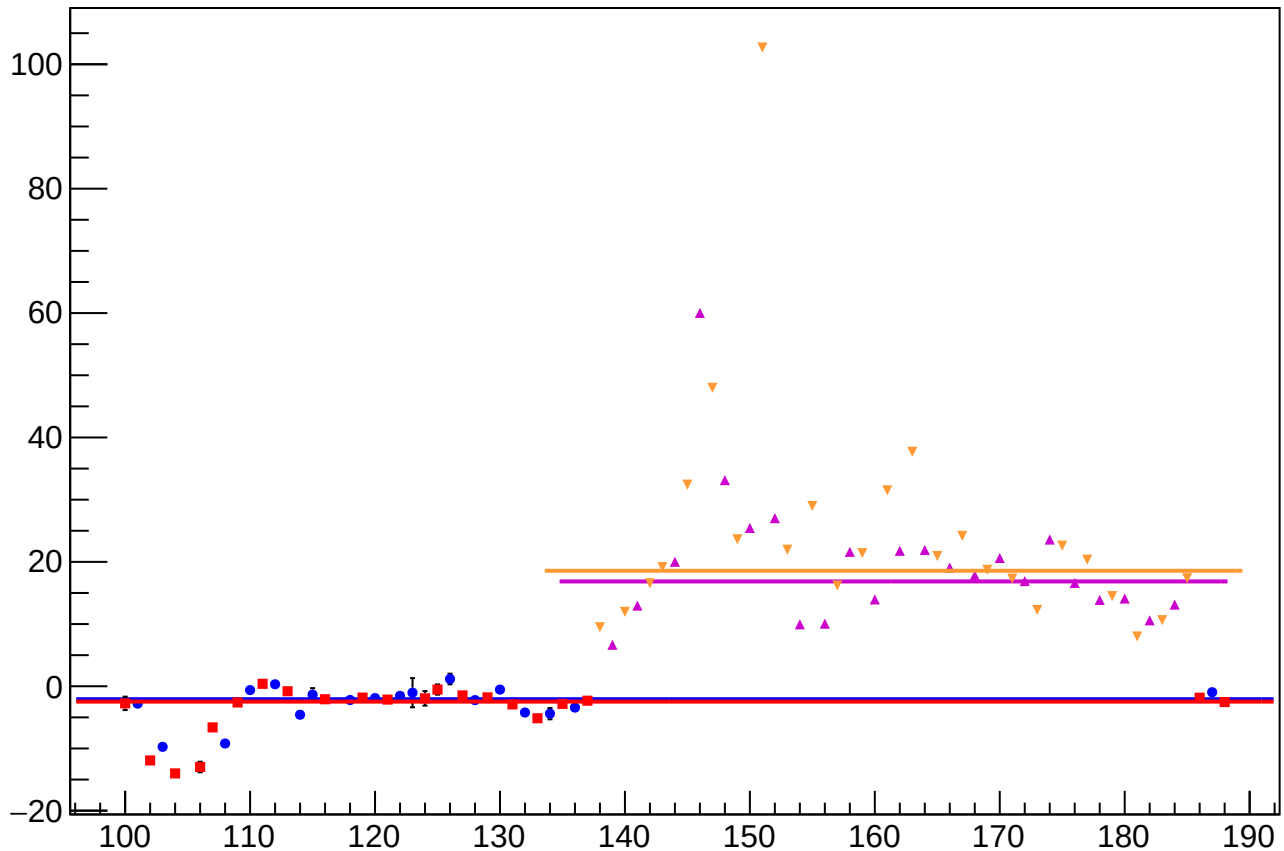
Left In: 0.394 $\pm$ 0.032  $\chi^2/\text{NDF}$ : 6112.7/22

+ sign 0.797 $\pm$ 0.029  $\chi^2/\text{NDF}$ : 7622.2/42

All: 0.640 $\pm$ 0.020  $\chi^2/\text{NDF}$ : 14939.7/86

- sign 0.502 $\pm$ 0.027  $\chi^2/\text{NDF}$ : 7263.6/43

reg\_asym\_bcm\_dg\_us\_diff\_bpm4eX\_slope vs Slug



Right In:  $-2.080 \pm 0.103$   $\chi^2/\text{NDF}: 468.4/17$

Left Out:  $18.569 \pm 0.040$   $\chi^2/\text{NDF}: 75983.2/24$

Right Out:  $-2.465 \pm 0.062$   $\chi^2/\text{NDF}: 858.3/20$

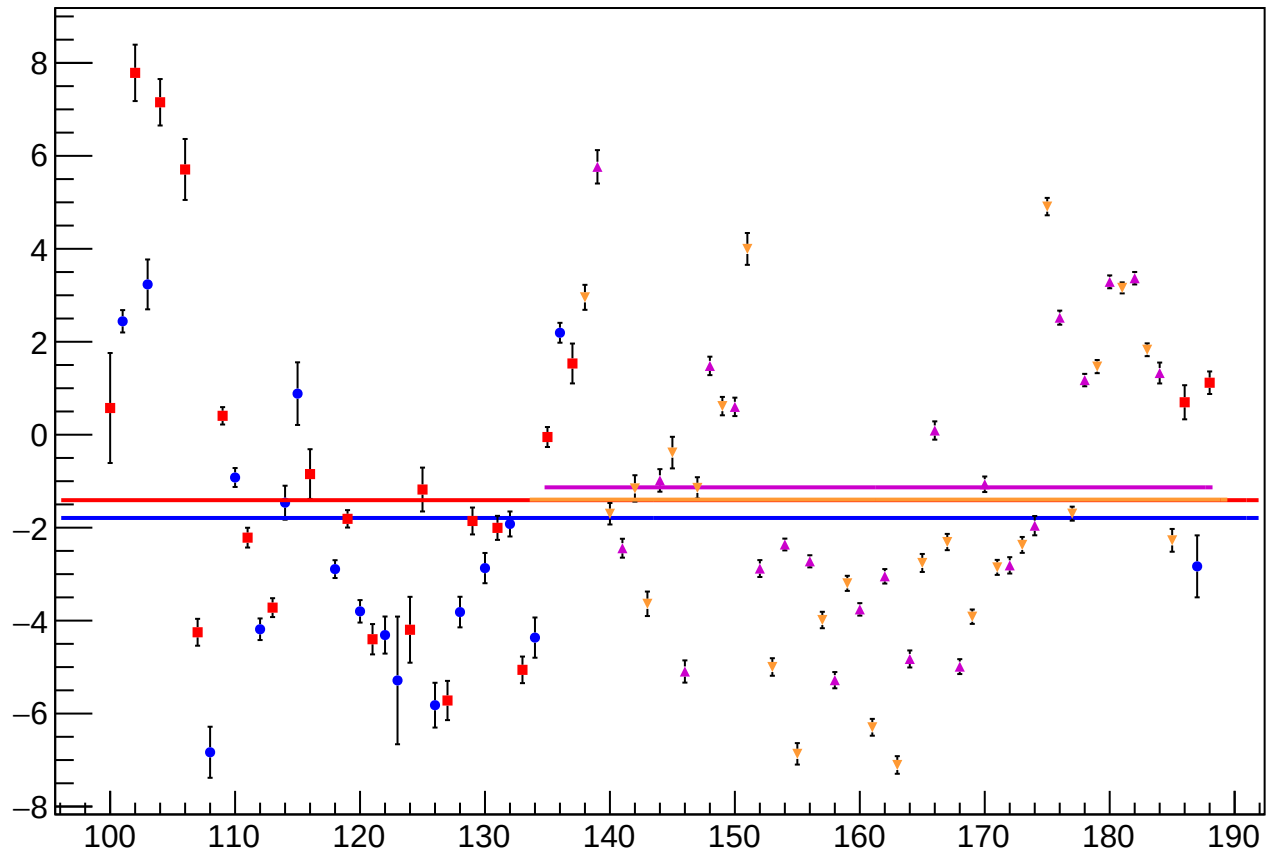
Left In:  $16.854 \pm 0.039$   $\chi^2/\text{NDF}: 40590.0/22$

+ sign  $15.812 \pm 0.038$   $\chi^2/\text{NDF}: 111513.8/42$

All:  $13.356 \pm 0.025$   $\chi^2/\text{NDF}: 229828.9/86$

- sign  $11.464 \pm 0.033$   $\chi^2/\text{NDF}: 110726.2/43$

# reg\_asym\_bcm\_dg\_us\_diff\_bpm4eY\_slope vs Slug



Right In:  $-1.791 \pm 0.072$   $\chi^2/\text{NDF}$ : 1274.5/17

Left Out:  $-1.397 \pm 0.037$   $\chi^2/\text{NDF}$ : 7631.3/24

Right Out:  $-1.408 \pm 0.064$   $\chi^2/\text{NDF}$ : 1586.8/20

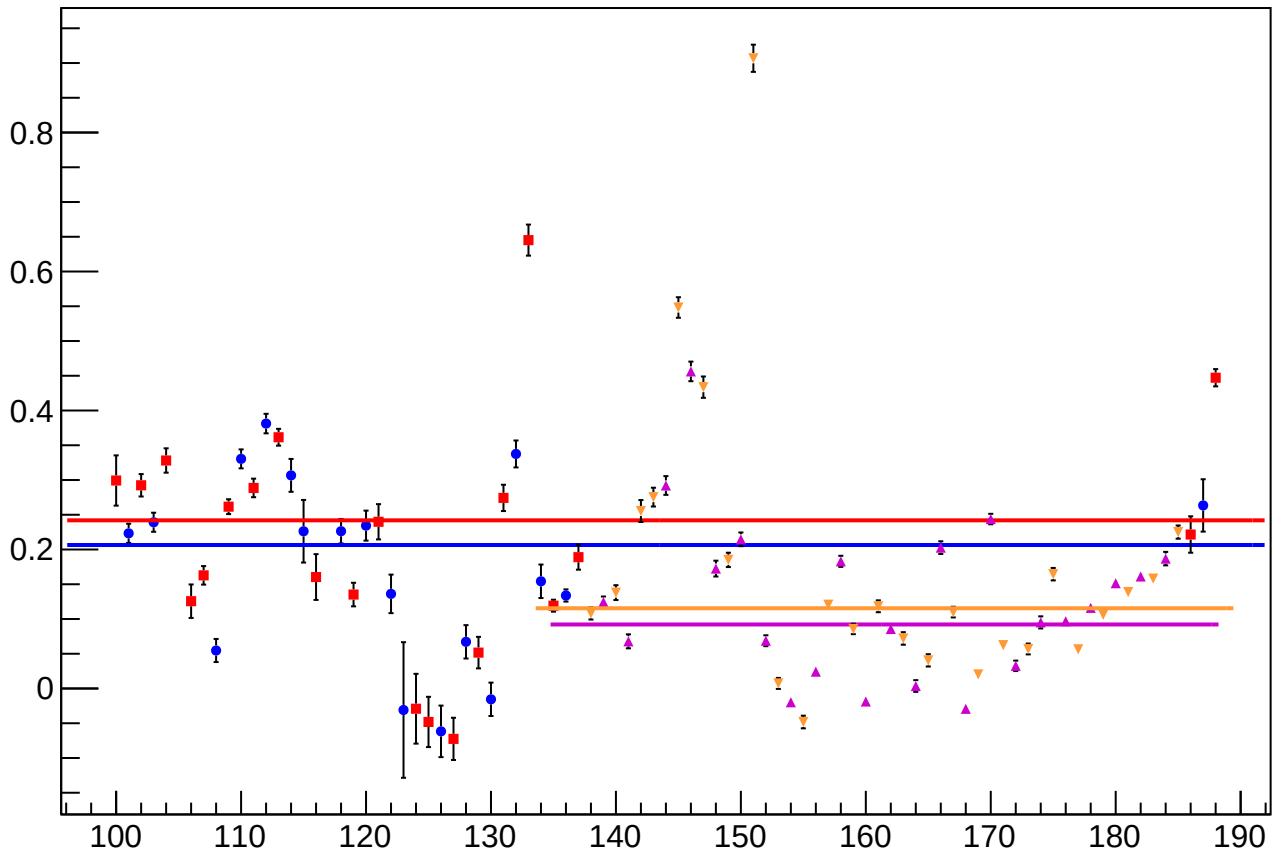
Left In:  $-1.132 \pm 0.035$   $\chi^2/\text{NDF}$ : 6638.3/22

+ sign  $-1.479 \pm 0.033$   $\chi^2/\text{NDF}$ : 8929.7/42

All:  $-1.328 \pm 0.022$   $\chi^2/\text{NDF}$ : 17208.6/86

- sign  $-1.196 \pm 0.031$   $\chi^2/\text{NDF}$ : 8239.2/43

# reg\_asym\_bcm\_dg\_us\_diff\_bpm12X\_slope vs Slug



Right In:  $0.206 \pm 0.004$   $\chi^2/\text{NDF}$ : 654.1/17

Left Out:  $0.115 \pm 0.002$   $\chi^2/\text{NDF}$ : 4423.4/24

Right Out:  $0.242 \pm 0.004$   $\chi^2/\text{NDF}$ : 1340.9/20

Left In:  $0.092 \pm 0.002$   $\chi^2/\text{NDF}$ : 3632.6/22

+ sign  $0.128 \pm 0.002$   $\chi^2/\text{NDF}$ : 5479.4/42

All:  $0.121 \pm 0.001$   $\chi^2/\text{NDF}$ : 11931.5/86

- sign  $0.115 \pm 0.001$   $\chi^2/\text{NDF}$ : 6417.2/43