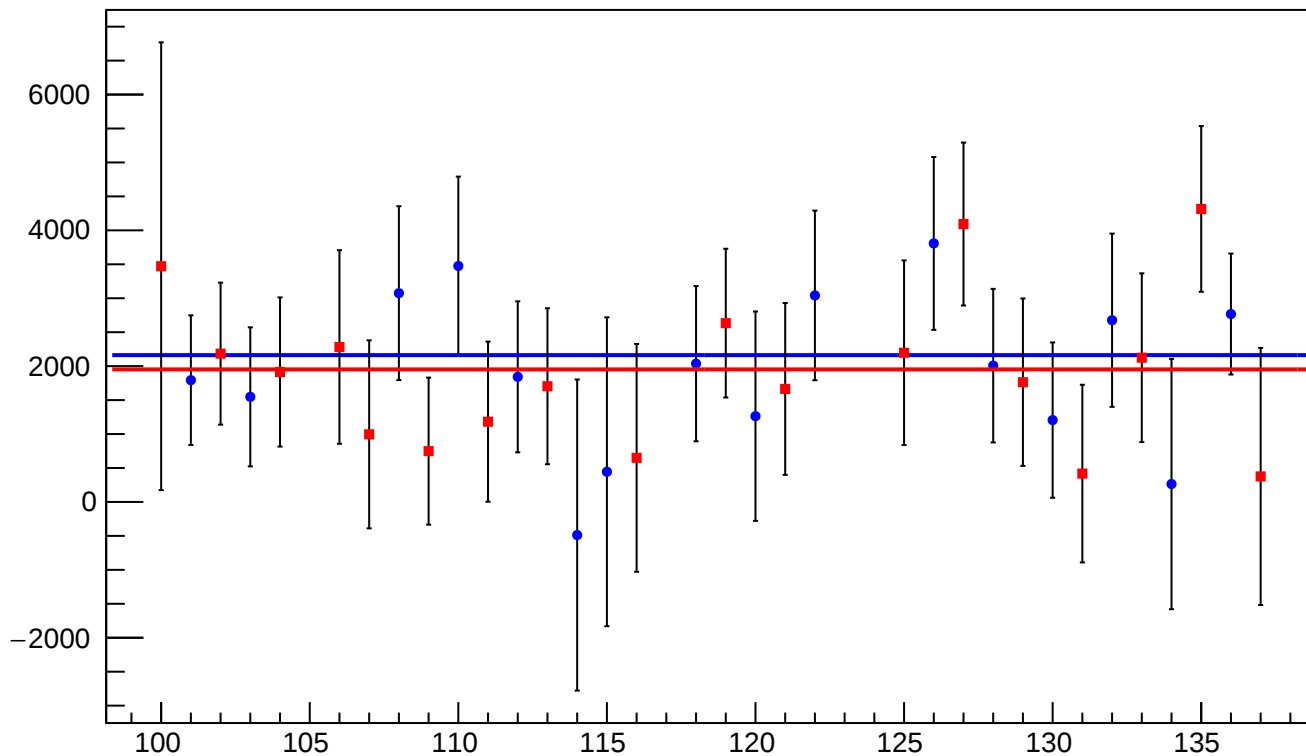


reg\_asym\_us\_avg\_mean vs Slug, Sign Corrected



Right In: 2162.311+/-307.312  $\chi^2/\text{NDF}$ : 8.9/15

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

Right Out: 1952.148+/-300.581  $\chi^2/\text{NDF}$ : 12.6/17

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

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

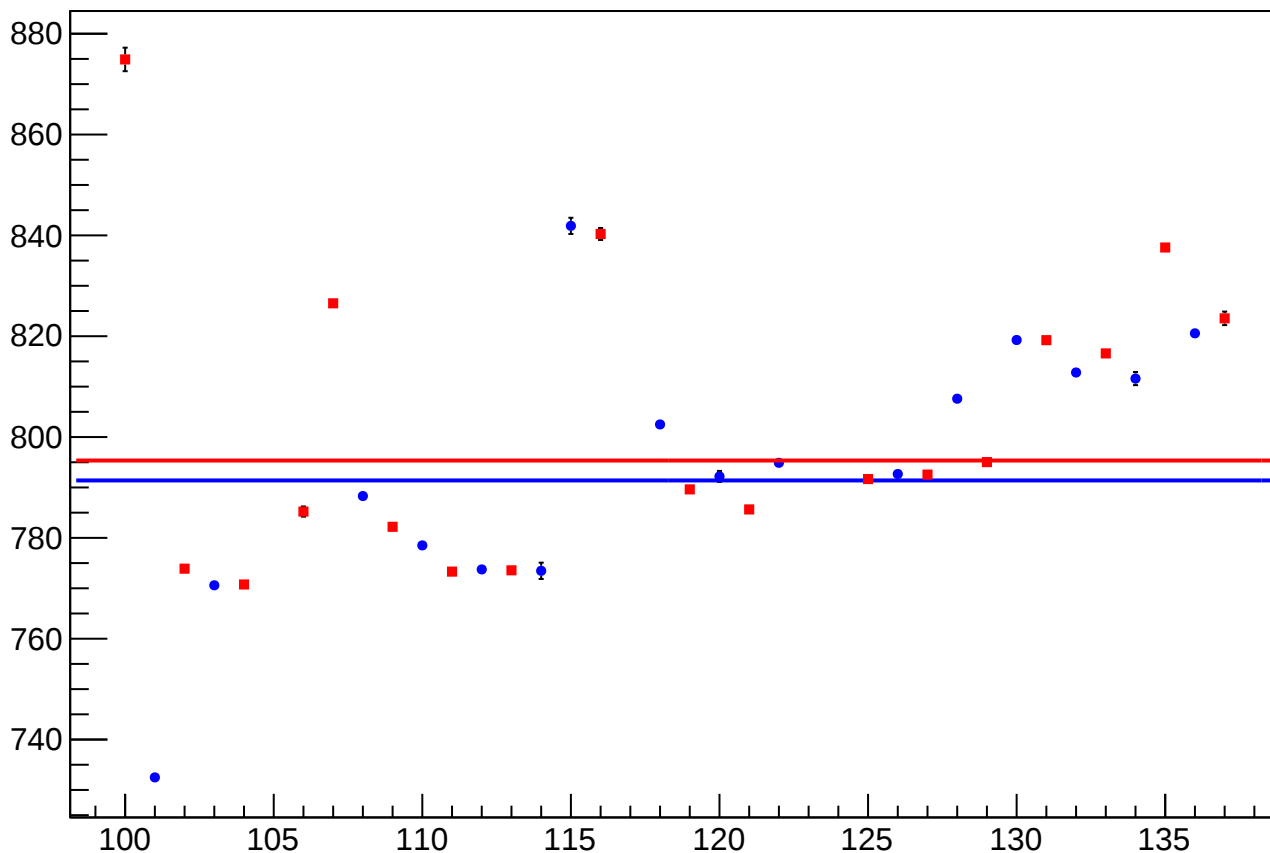
Right: 2054.903+/-214.883  $\chi^2/\text{NDF}$ : 21.8/33

In: 2162.311+/-307.312  $\chi^2/\text{NDF}$ : 8.9/15

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

All: 2054.903+/-214.883  $\chi^2/\text{NDF}$ : 21.8/33

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



Right In: 791.390+/-0.217  $\chi^2/\text{NDF}$ : 15008.3/15

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

Right Out: 795.345+/-0.213  $\chi^2/\text{NDF}$ : 11559.8/17

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

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

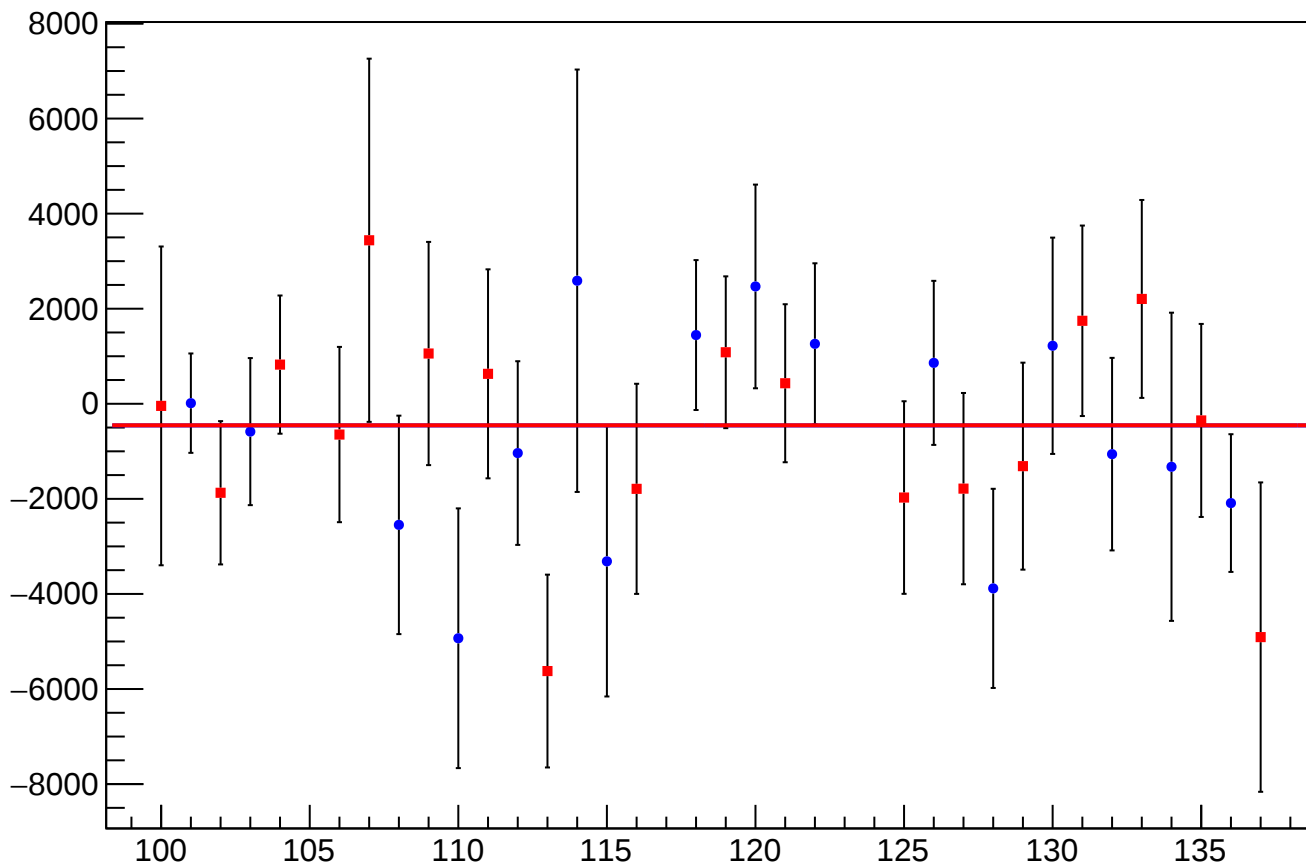
Right: 793.411+/-0.152  $\chi^2/\text{NDF}$ : 26737.3/33

In: 791.390+/-0.217  $\chi^2/\text{NDF}$ : 15008.3/15

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

All: 793.411+/-0.152  $\chi^2/\text{NDF}$ : 26737.3/33

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



Right In: -455.675+/-464.232  $\chi^2/\text{NDF}$ : 14.9/15

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

Right Out: -452.644+/-472.760  $\chi^2/\text{NDF}$ : 17.3/17

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

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

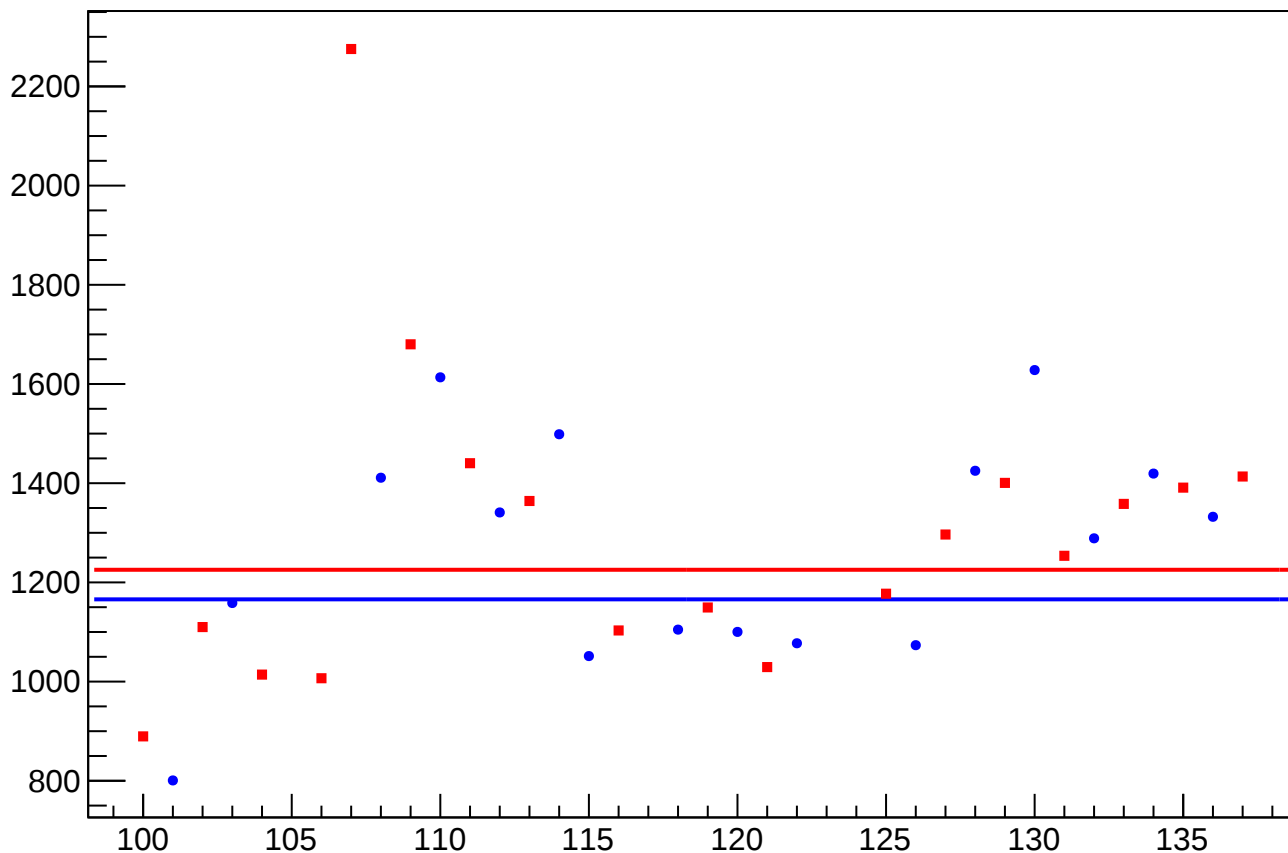
Right: -454.187+/-331.236  $\chi^2/\text{NDF}$ : 32.2/33

In: -455.675+/-464.232  $\chi^2/\text{NDF}$ : 14.9/15

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

All: -454.187+/-331.236  $\chi^2/\text{NDF}$ : 32.2/33

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



Right In: 1165.812+/-0.328  $\chi^2/\text{NDF}$ : 526801.3/15

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

Right Out: 1225.448+/-0.334  $\chi^2/\text{NDF}$ : 440420.8/17

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

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

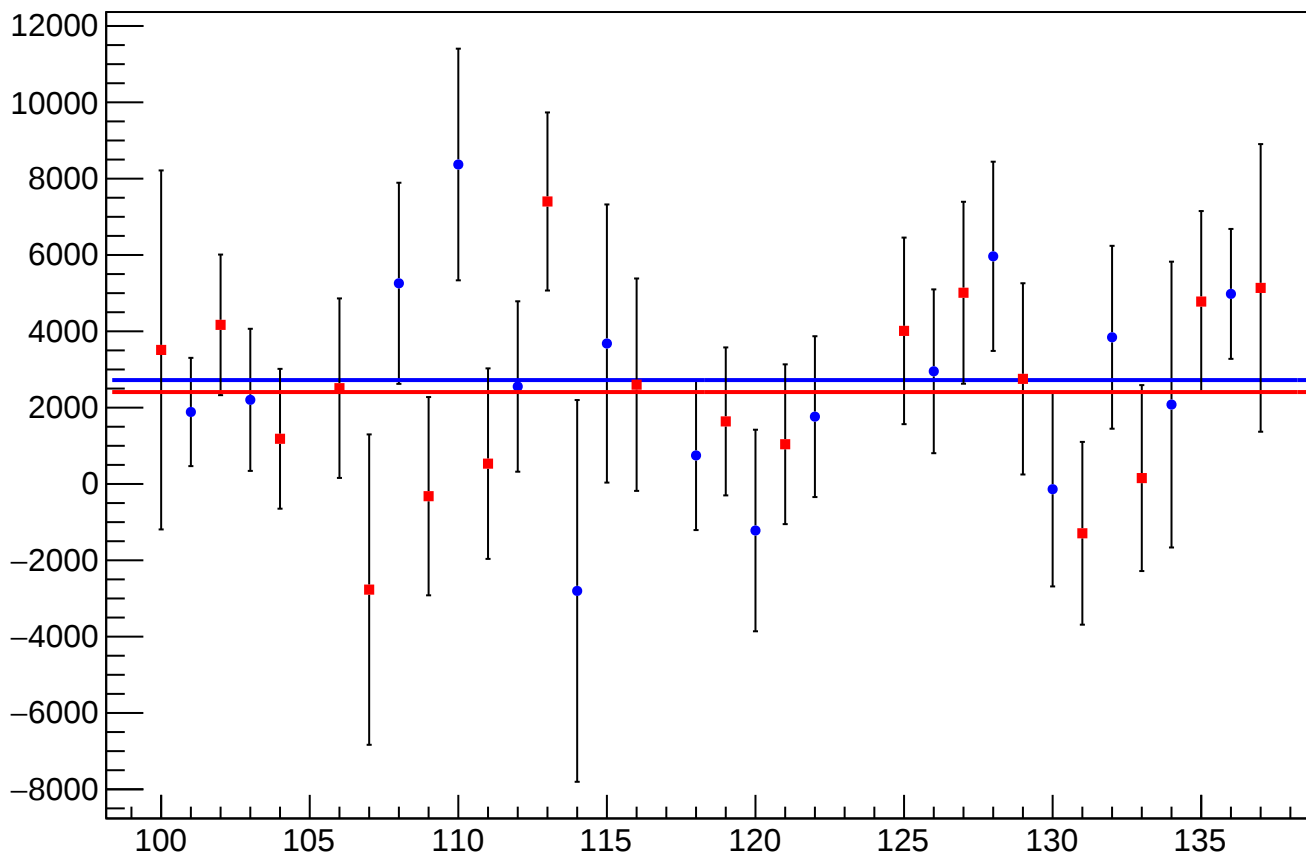
Right: 1195.087+/-0.234  $\chi^2/\text{NDF}$ : 983424.3/33

In: 1165.812+/-0.328  $\chi^2/\text{NDF}$ :526801.3/15

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

All: 1195.087+/-0.234  $\chi^2/\text{NDF}$ : 983424.3/33

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



Right In: 2722.309+/-567.154  $\chi^2/\text{NDF}$ : 14.6/15

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

Right Out: 2408.446+/-568.977  $\chi^2/\text{NDF}$ : 16.3/17

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

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

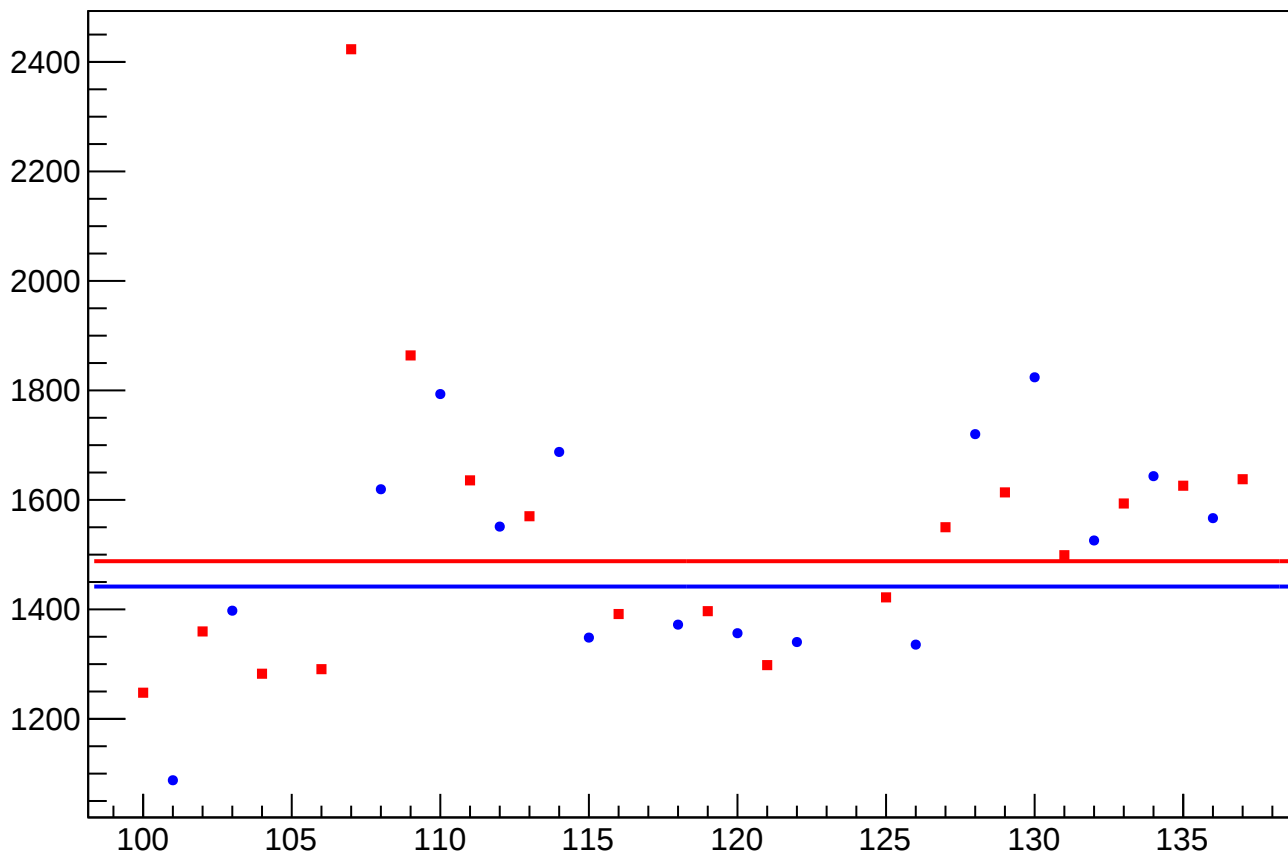
Right: 2565.881+/-401.681  $\chi^2/\text{NDF}$ : 31.0/33

In: 2722.309+/-567.154  $\chi^2/\text{NDF}$ : 14.6/15

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

All: 2565.881+/-401.681  $\chi^2/\text{NDF}$ : 31.0/33

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



Right In: 1441.720+/-0.401  $\chi^2/\text{NDF}$ : 275902.8/15

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

Right Out: 1488.026+/-0.402  $\chi^2/\text{NDF}$ : 256140.4/17

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

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

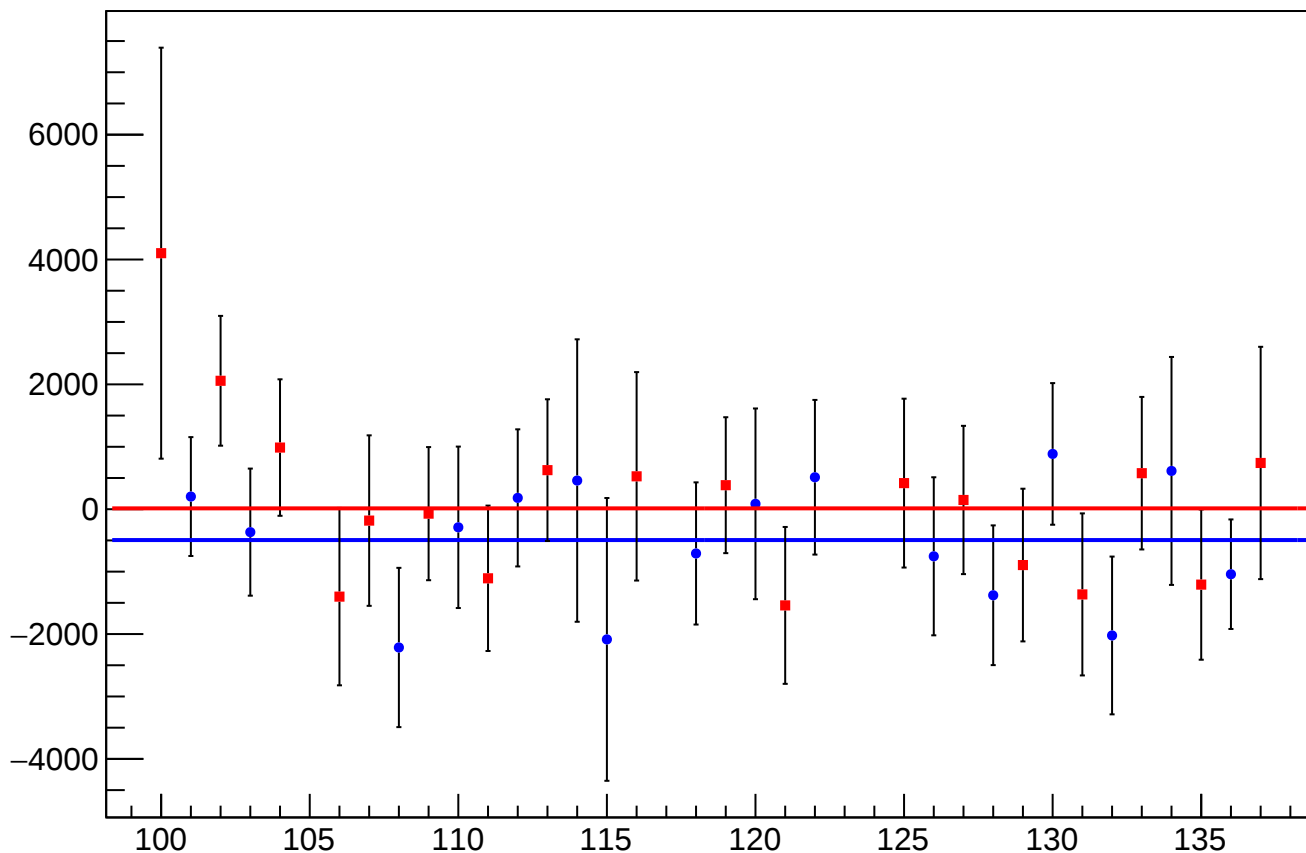
Right: 1464.799+/-0.284  $\chi^2/\text{NDF}$ : 538687.7/33

In: 1441.720+/-0.401  $\chi^2/\text{NDF}$ : 275902.8/15

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

All: 1464.799+/-0.284  $\chi^2/\text{NDF}$ : 538687.7/33

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



Right In: -494.223+/-304.644  $\chi^2/\text{NDF}$ : 8.7/15

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

Right Out: 13.512+/-297.736  $\chi^2/\text{NDF}$ : 13.4/17

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

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

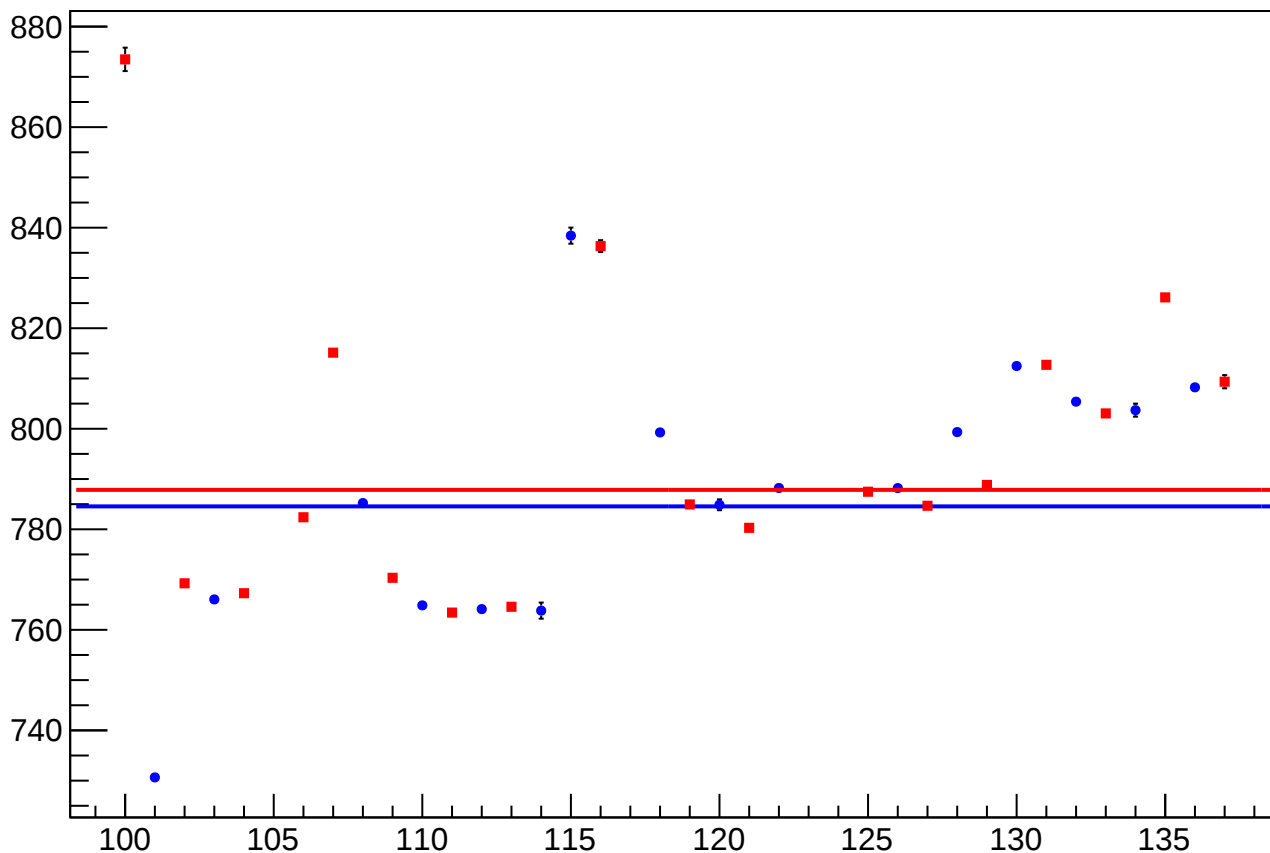
Right: -234.534+/-212.932  $\chi^2/\text{NDF}$ : 23.4/33

In: -494.223+/-304.644  $\chi^2/\text{NDF}$ : 8.7/15

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

All: -234.534+/-212.932  $\chi^2/\text{NDF}$ : 23.4/33

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



Right In: 784.558+/-0.215  $\chi^2/\text{NDF}$ : 13677.7/15

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

Right Out: 787.844+/-0.211  $\chi^2/\text{NDF}$ : 10909.0/17

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

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

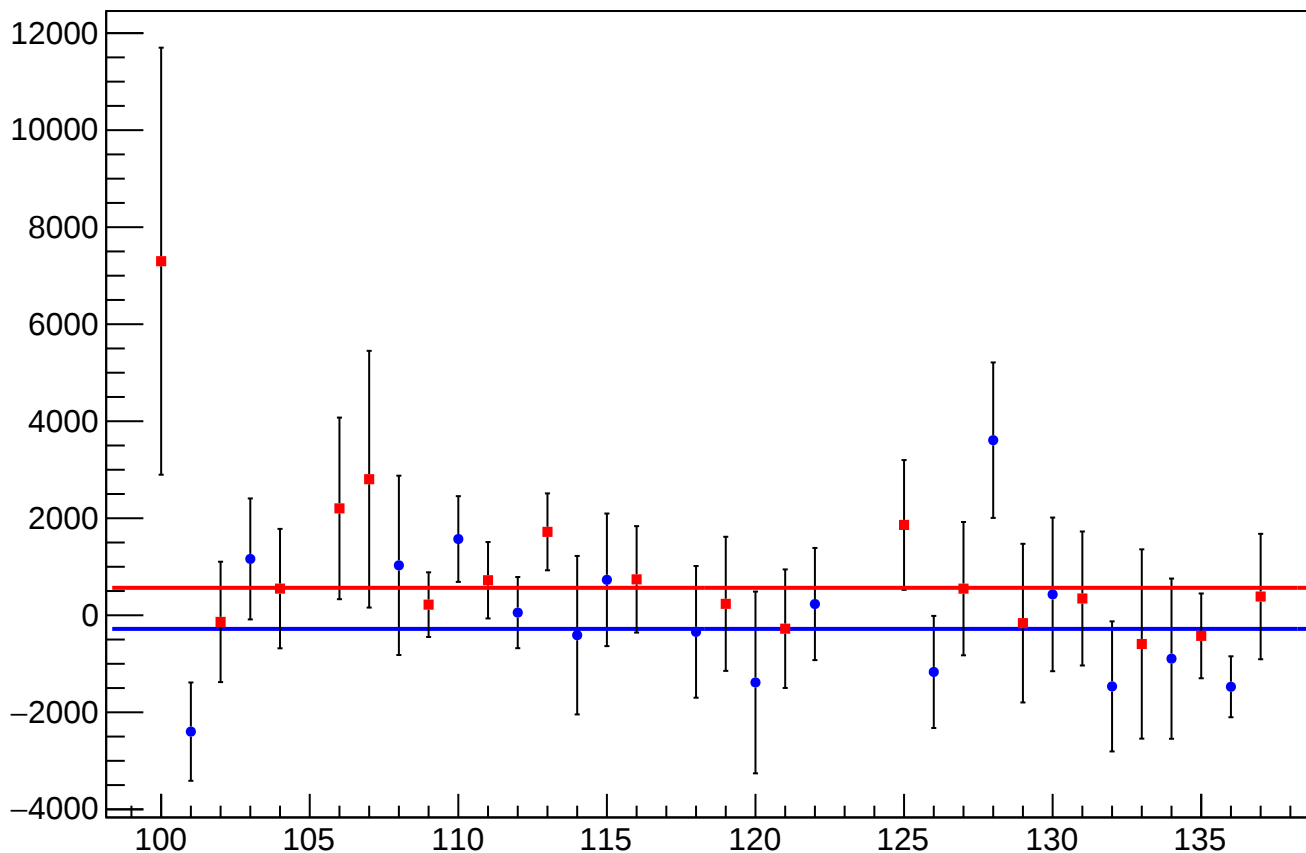
Right: 786.239+/-0.151  $\chi^2/\text{NDF}$ : 24705.7/33

In: 784.558+/-0.215  $\chi^2/\text{NDF}$ : 13677.7/15

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

All: 786.239+/-0.151  $\chi^2/\text{NDF}$ : 24705.7/33

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



Right In: -280.632 $\pm$ 282.501  $\chi^2$ /NDF: 23.1/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 566.224 $\pm$ 272.883  $\chi^2$ /NDF: 9.9/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

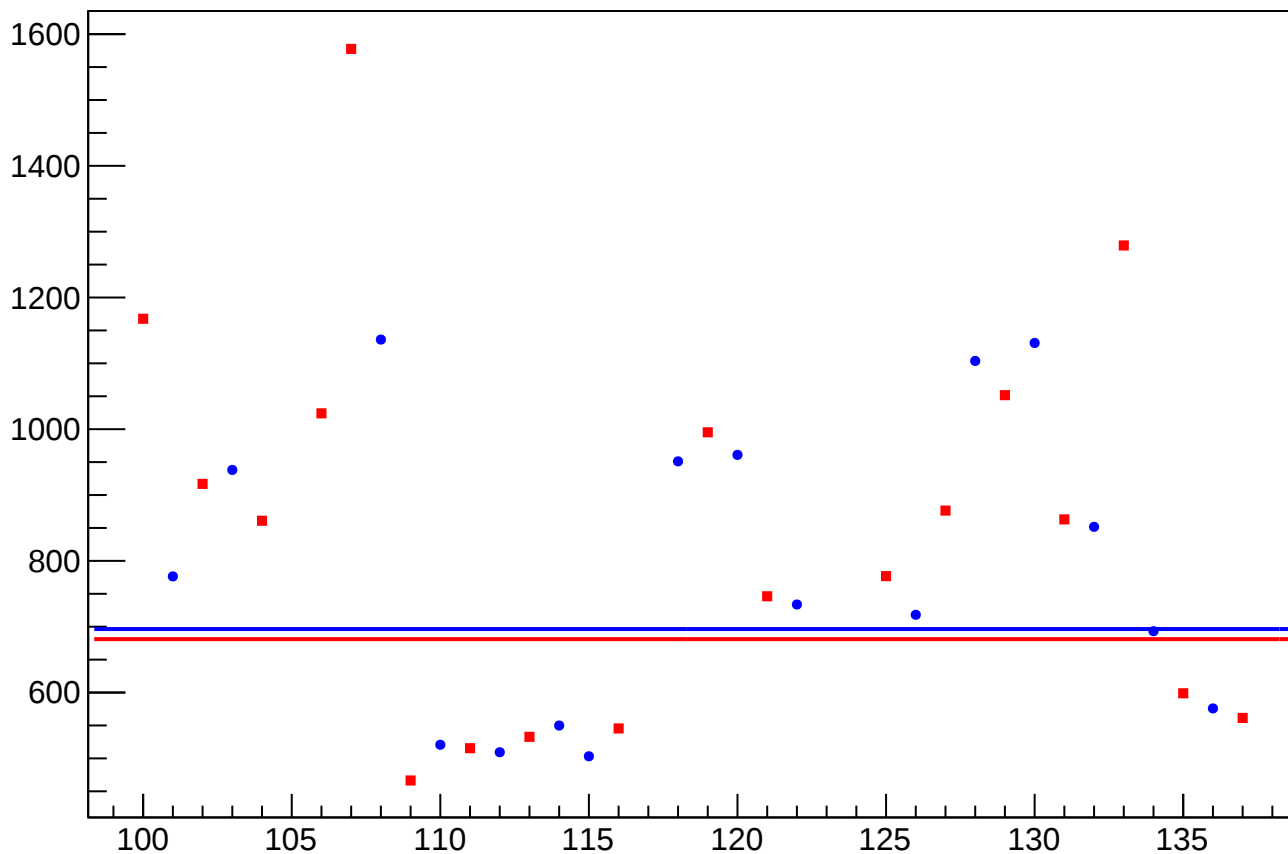
Right: 157.456 $\pm$ 196.270  $\chi^2$ /NDF: 37.7/33

In: -280.632 $\pm$ 282.501  $\chi^2$ /NDF:23.1/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 157.456 $\pm$ 196.270  $\chi^2$ /NDF: 37.7/33

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



Right In: 696.462 $\pm$ 0.200  $\chi^2$ /NDF: 959490.0/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 681.127 $\pm$ 0.193  $\chi^2$ /NDF: 1352555.6/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

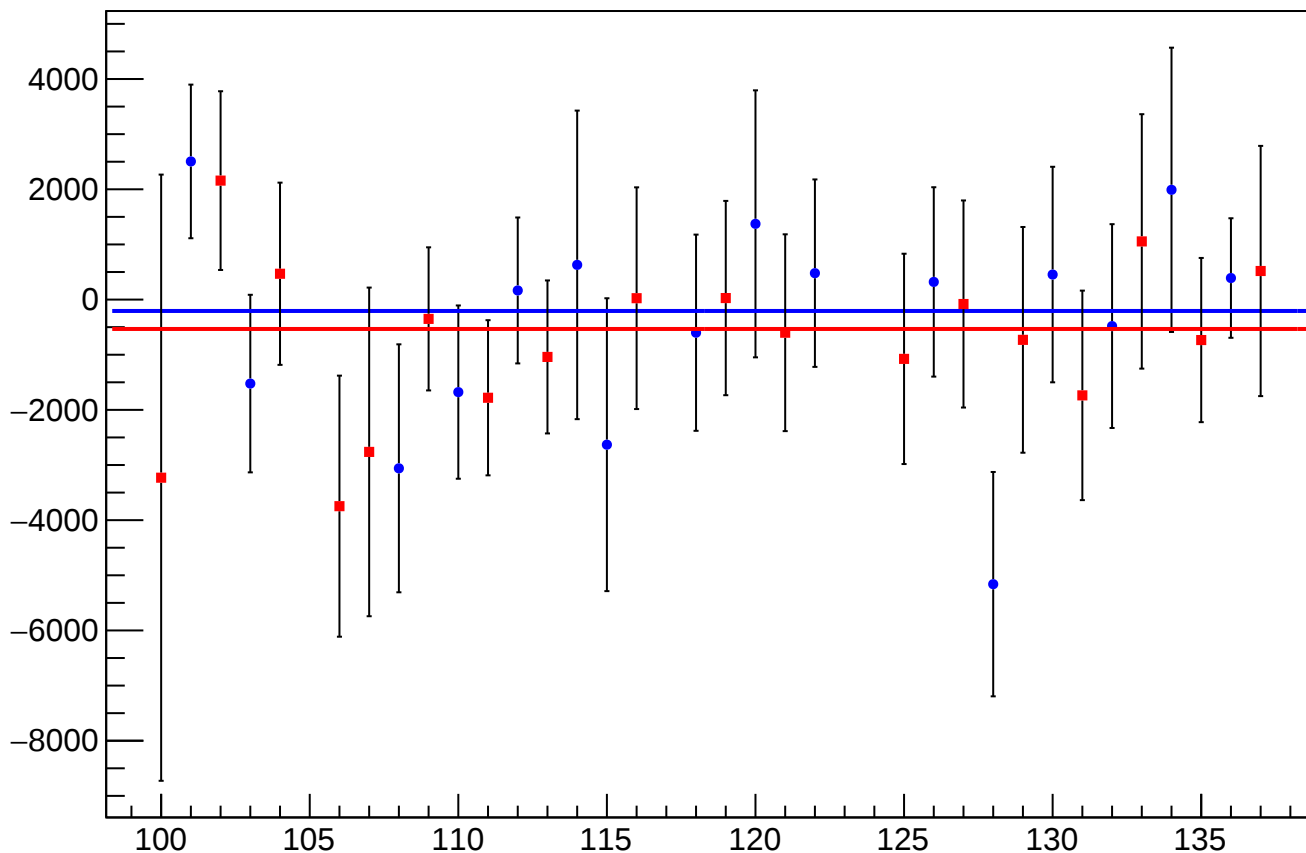
Right: 688.529 $\pm$ 0.139  $\chi^2$ /NDF: 2315094.2/33

In: 696.462 $\pm$ 0.200  $\chi^2$ /NDF:959490.0/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 688.529 $\pm$ 0.139  $\chi^2$ /NDF: 2315094.2/33

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



Right In: -206.385+/-433.774  $\chi^2/\text{NDF}$ : 15.8/15

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

Right Out: -532.837+/-427.128  $\chi^2/\text{NDF}$ : 8.1/17

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

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

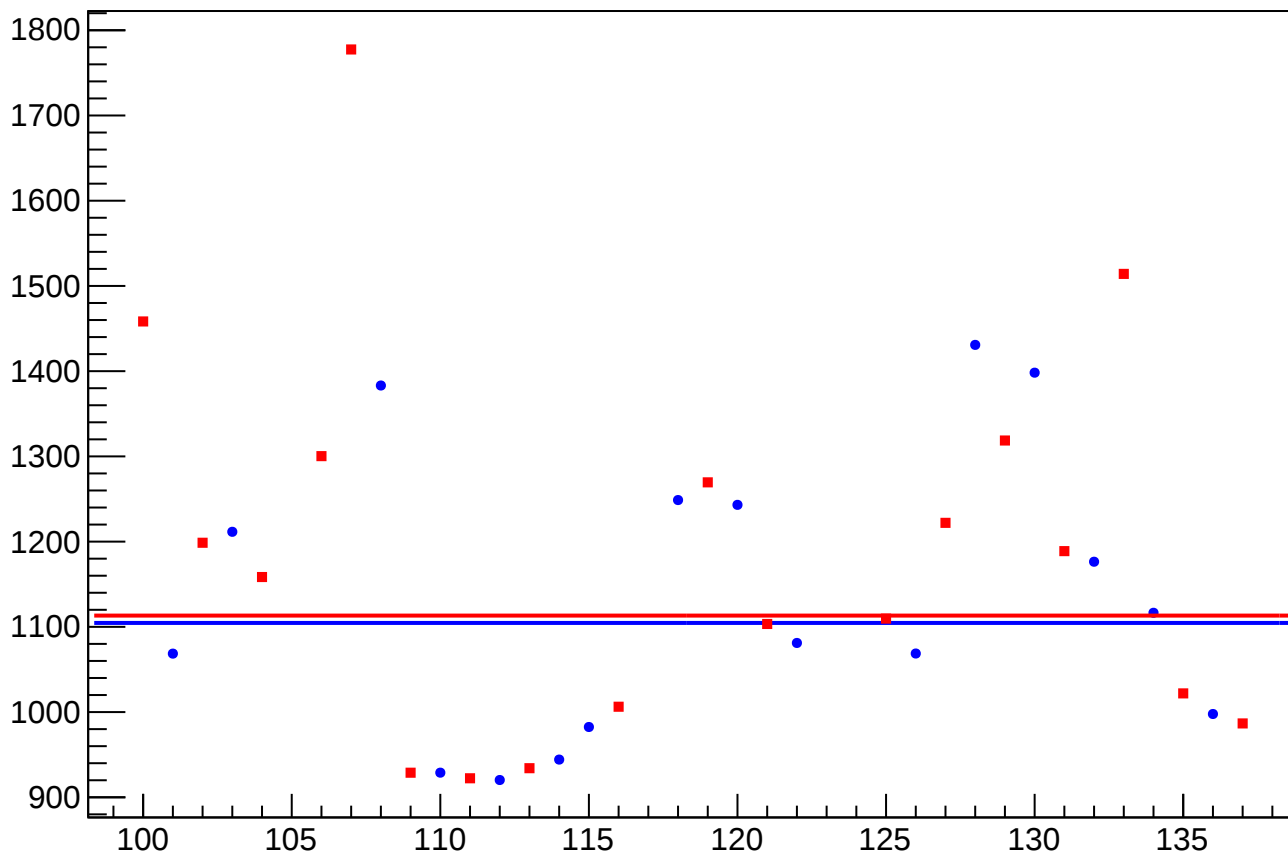
Right: -372.131+/-304.348  $\chi^2/\text{NDF}$ : 24.2/33

In: -206.385+/-433.774  $\chi^2/\text{NDF}$ : 15.8/15

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

All: -372.131+/-304.348  $\chi^2/\text{NDF}$ : 24.2/33

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



Right In: 1104.596+/-0.307  $\chi^2/\text{NDF}$ : 255488.3/15

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

Right Out: 1113.215+/-0.302  $\chi^2/\text{NDF}$ : 362982.2/17

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

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

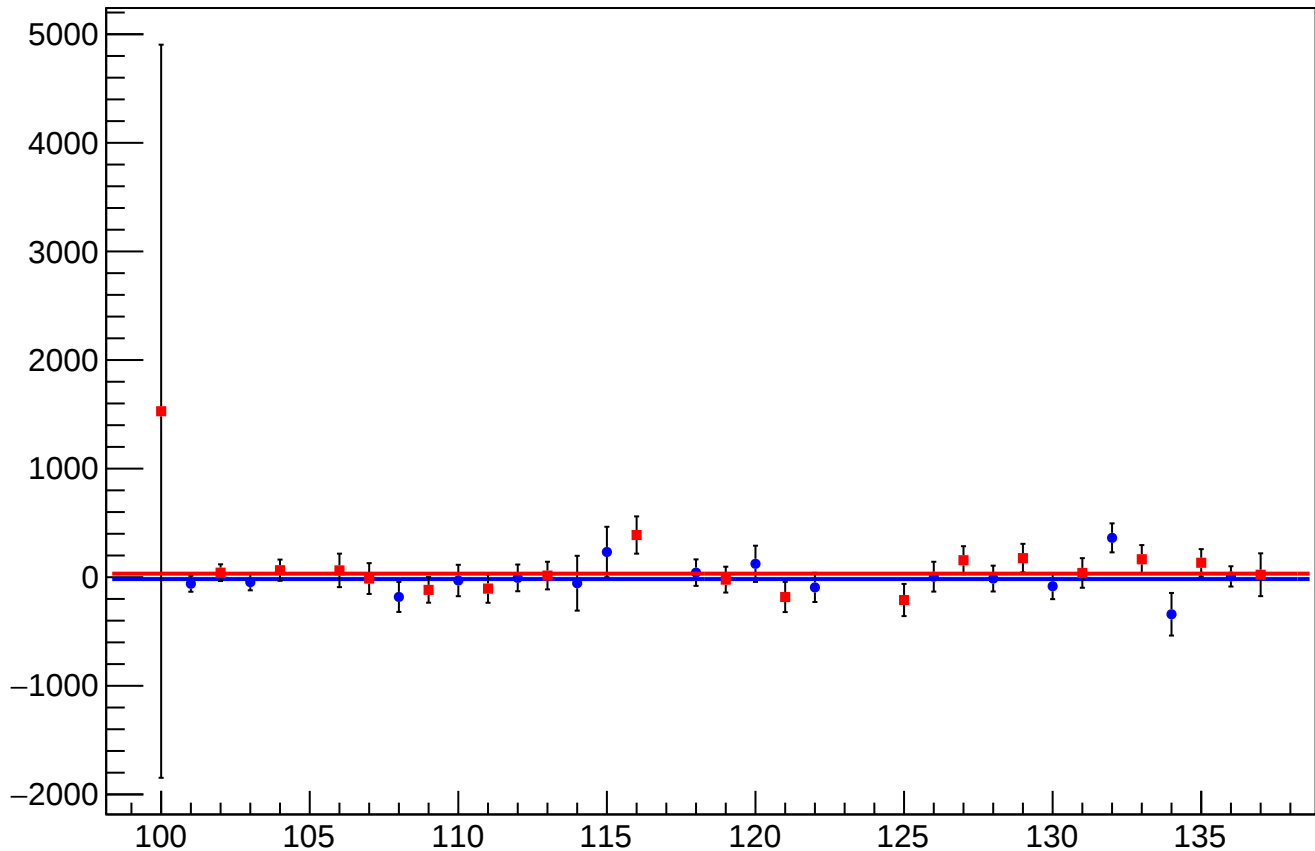
Right: 1108.972+/-0.215  $\chi^2/\text{NDF}$ : 618871.4/33

In: 1104.596+/-0.307  $\chi^2/\text{NDF}$ : 255488.3/15

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

All: 1108.972+/-0.215  $\chi^2/\text{NDF}$ : 618871.4/33

# reg\_asym\_ds\_avg\_mean vs Slug, Sign Corrected



Right In: -17.236 $\pm$ 29.988  $\chi^2$ /NDF: 15.6/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 32.892 $\pm$ 30.446  $\chi^2$ /NDF: 16.5/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

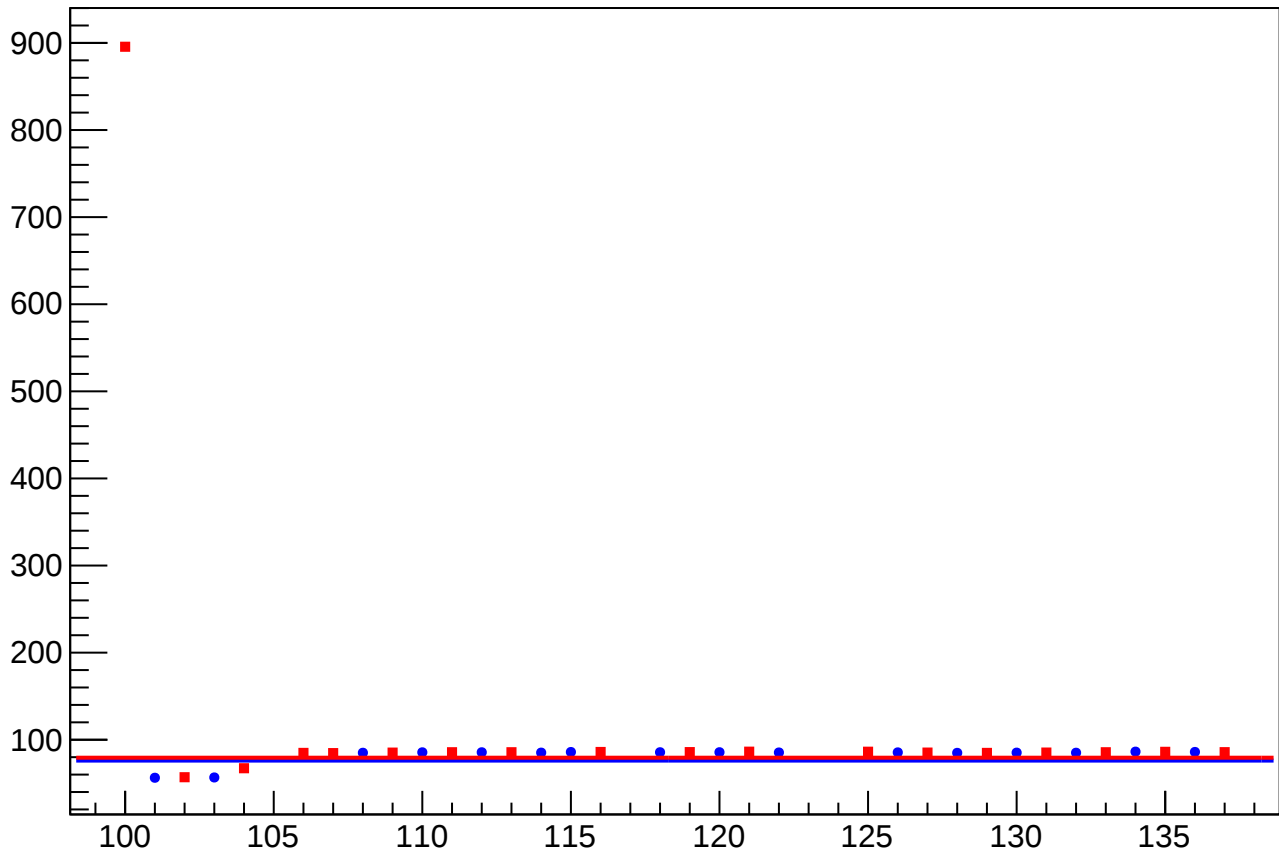
Right: 7.447 $\pm$ 21.365  $\chi^2$ /NDF: 33.5/33

In: -17.236 $\pm$ 29.988  $\chi^2$ /NDF: 15.6/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 7.447 $\pm$ 21.365  $\chi^2$ /NDF: 33.5/33

# reg\_asym\_ds\_avg\_rms vs Slug, Sign Corrected



Right In: 76.079+/-0.021  $\chi^2/\text{NDF}$ : 409170.8/15

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

Right Out: 79.390+/-0.022  $\chi^2/\text{NDF}$ : 378526.1/17

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

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

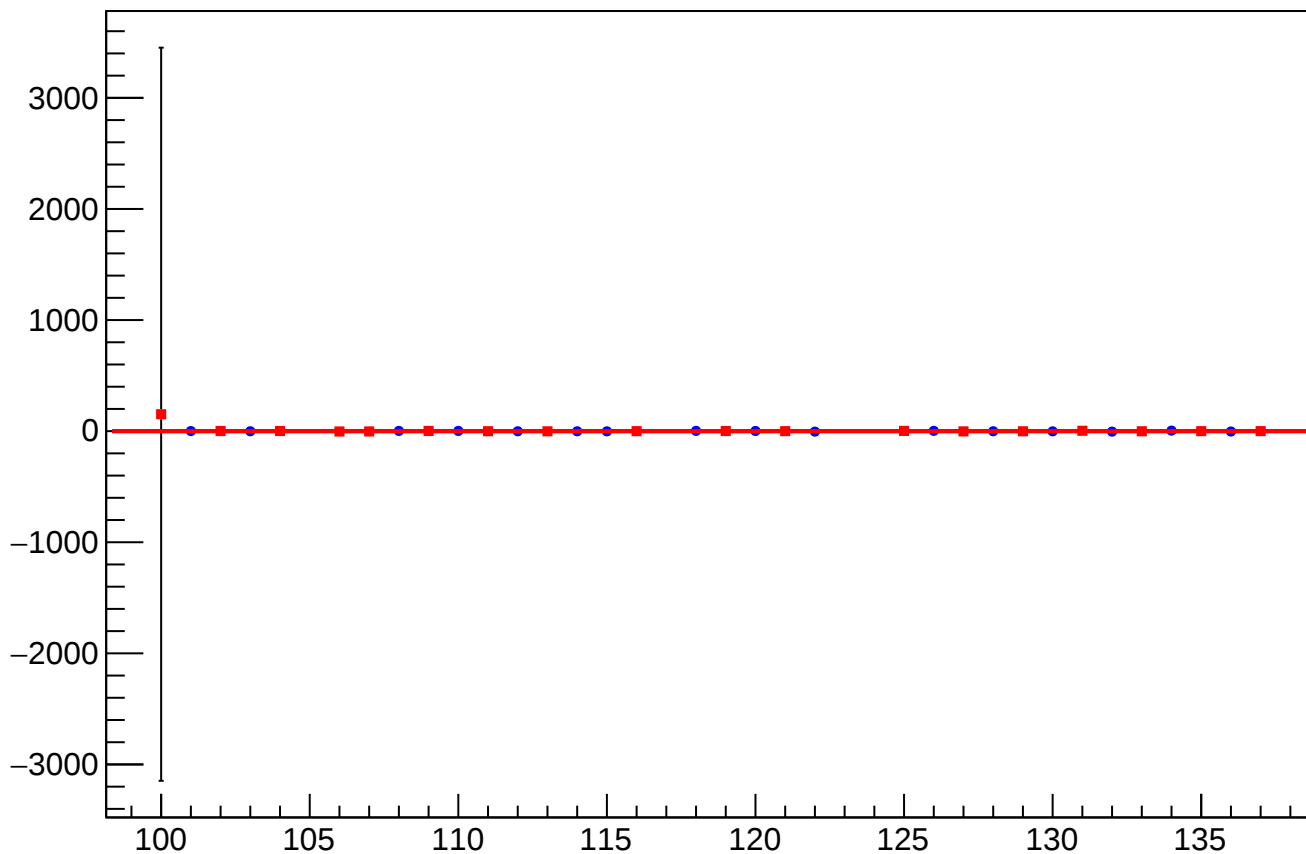
Right: 77.709+/-0.015  $\chi^2/\text{NDF}$ : 799700.2/33

In: 76.079+/-0.021  $\chi^2/\text{NDF}$ : 409170.8/15

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

All: 77.709+/-0.015  $\chi^2/\text{NDF}$ : 799700.2/33

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



Right In: -0.281 $\pm$ 0.501  $\chi^2$ /NDF: 21.2/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.078 $\pm$ 0.521  $\chi^2$ /NDF: 9.0/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

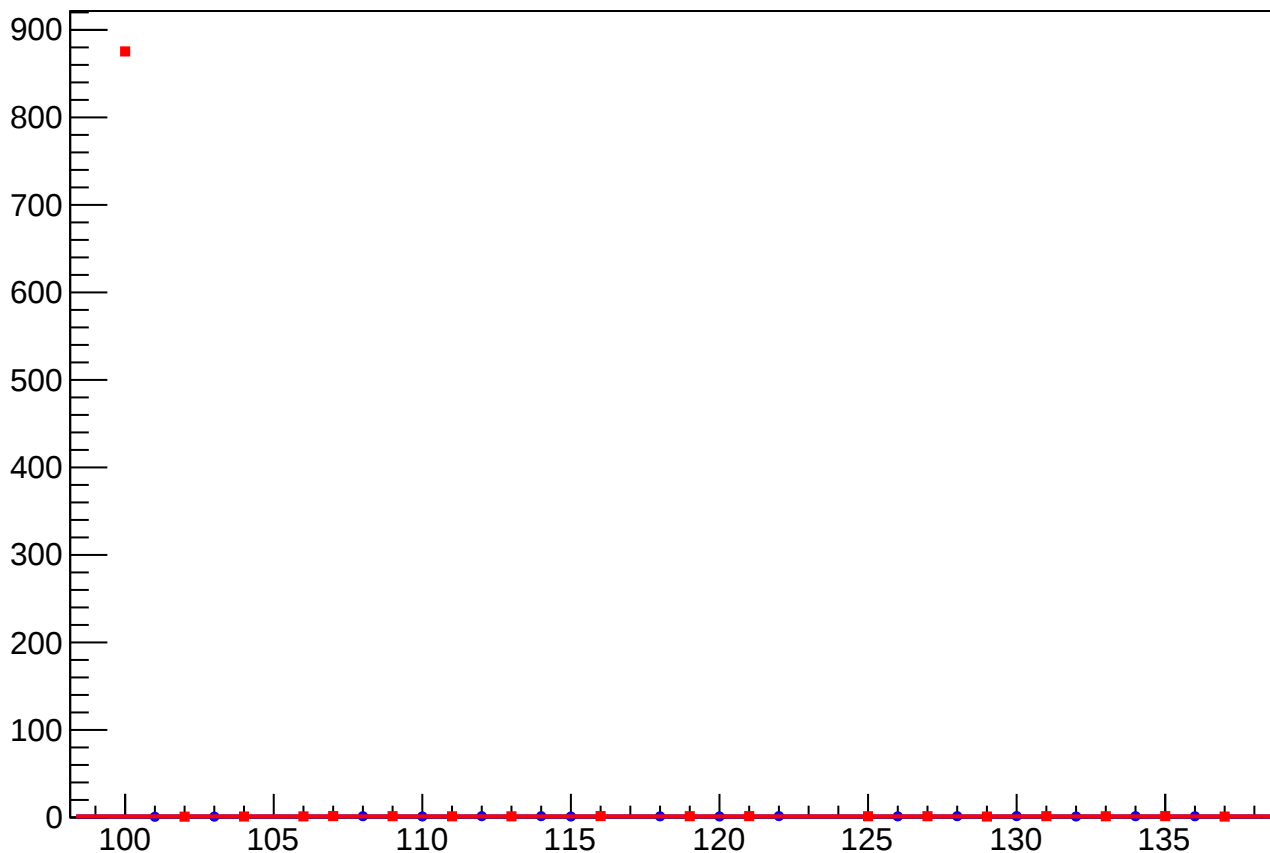
Right: -0.108 $\pm$ 0.361  $\chi^2$ /NDF: 30.4/33

In: -0.281 $\pm$ 0.501  $\chi^2$ /NDF:21.2/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -0.108 $\pm$ 0.361  $\chi^2$ /NDF: 30.4/33

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



Right In: 1.152+/-0.000  $\chi^2/\text{NDF}$ : 514348.9/15

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

Right Out: 1.247+/-0.000  $\chi^2/\text{NDF}$ : 517130.7/17

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

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

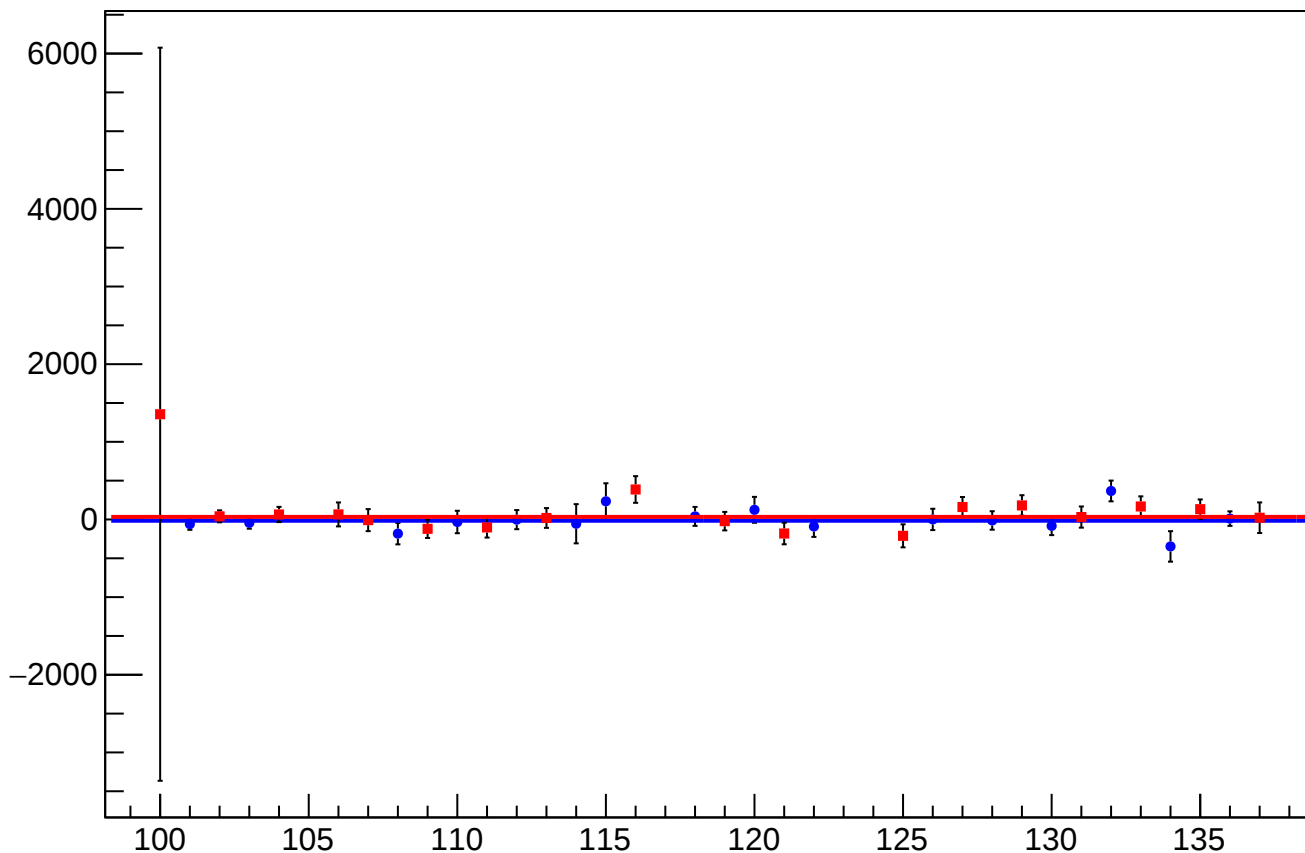
Right: 1.198+/-0.000  $\chi^2/\text{NDF}$ : 1065824.7/33

In: 1.152+/-0.000  $\chi^2/\text{NDF}$ : 514348.9/15

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

All: 1.198+/-0.000  $\chi^2/\text{NDF}$ : 1065824.7/33

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



Right In: -16.311+/-29.996  $\chi^2$ /NDF: 15.9/15

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

Right Out: 33.114+/-30.455  $\chi^2$ /NDF: 16.5/17

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

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

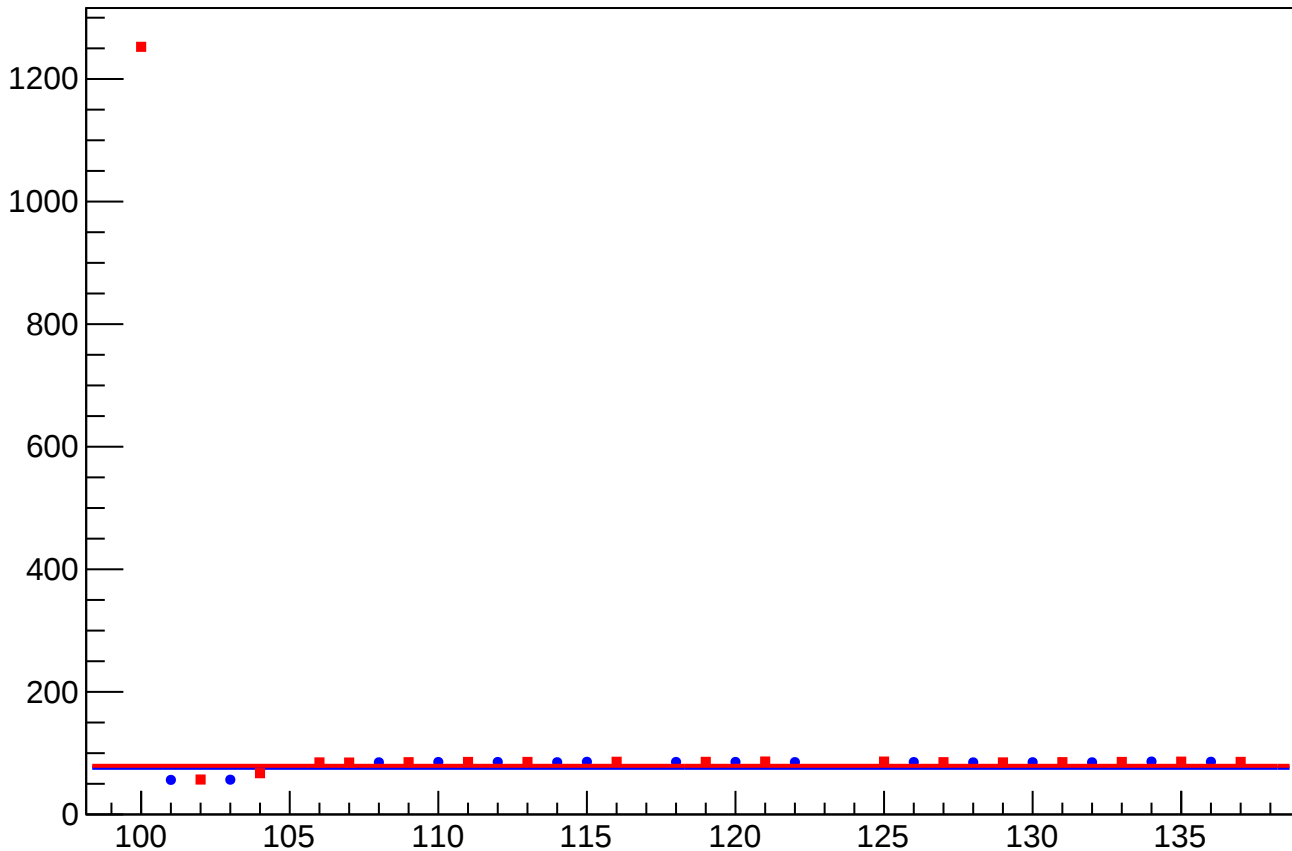
Right: 8.026+/-21.371  $\chi^2$ /NDF: 33.7/33

In: -16.311+/-29.996  $\chi^2$ /NDF:15.9/15

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

All: 8.026+/-21.371  $\chi^2$ /NDF: 33.7/33

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



Right In: 76.099+/-0.021  $\chi^2/\text{NDF}$ : 409200.9/15

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

Right Out: 79.393+/-0.022  $\chi^2/\text{NDF}$ : 385048.8/17

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

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

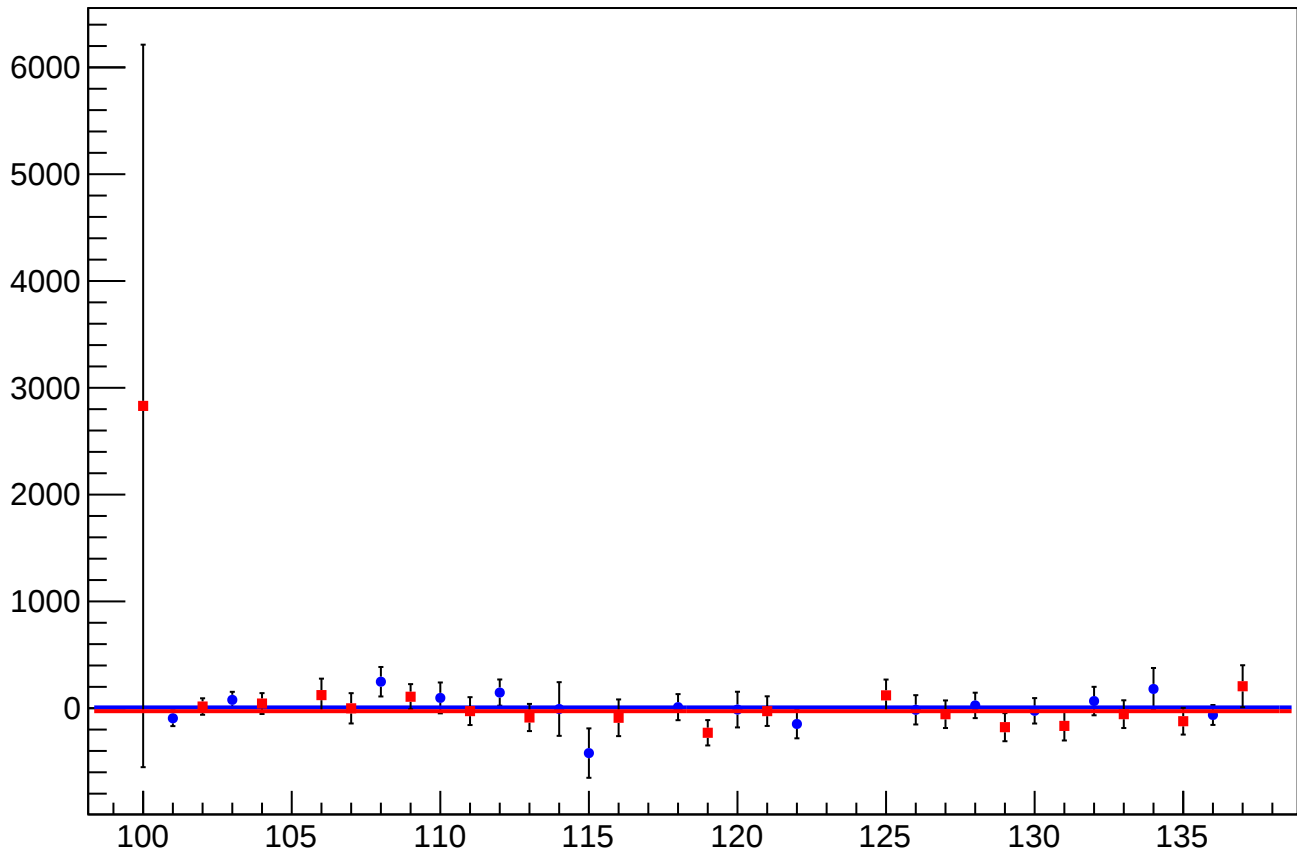
Right: 77.721+/-0.015  $\chi^2/\text{NDF}$ : 806127.4/33

In: 76.099+/-0.021  $\chi^2/\text{NDF}$ : 409200.9/15

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

All: 77.721+/-0.015  $\chi^2/\text{NDF}$ : 806127.4/33

# reg\_asym\_ds\_dd\_mean vs Slug, Sign Corrected



Right In: 7.460+/-29.969  $\chi^2/\text{NDF}$ : 13.9/15

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

Right Out: -27.920+/-30.428  $\chi^2/\text{NDF}$ : 12.5/17

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

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

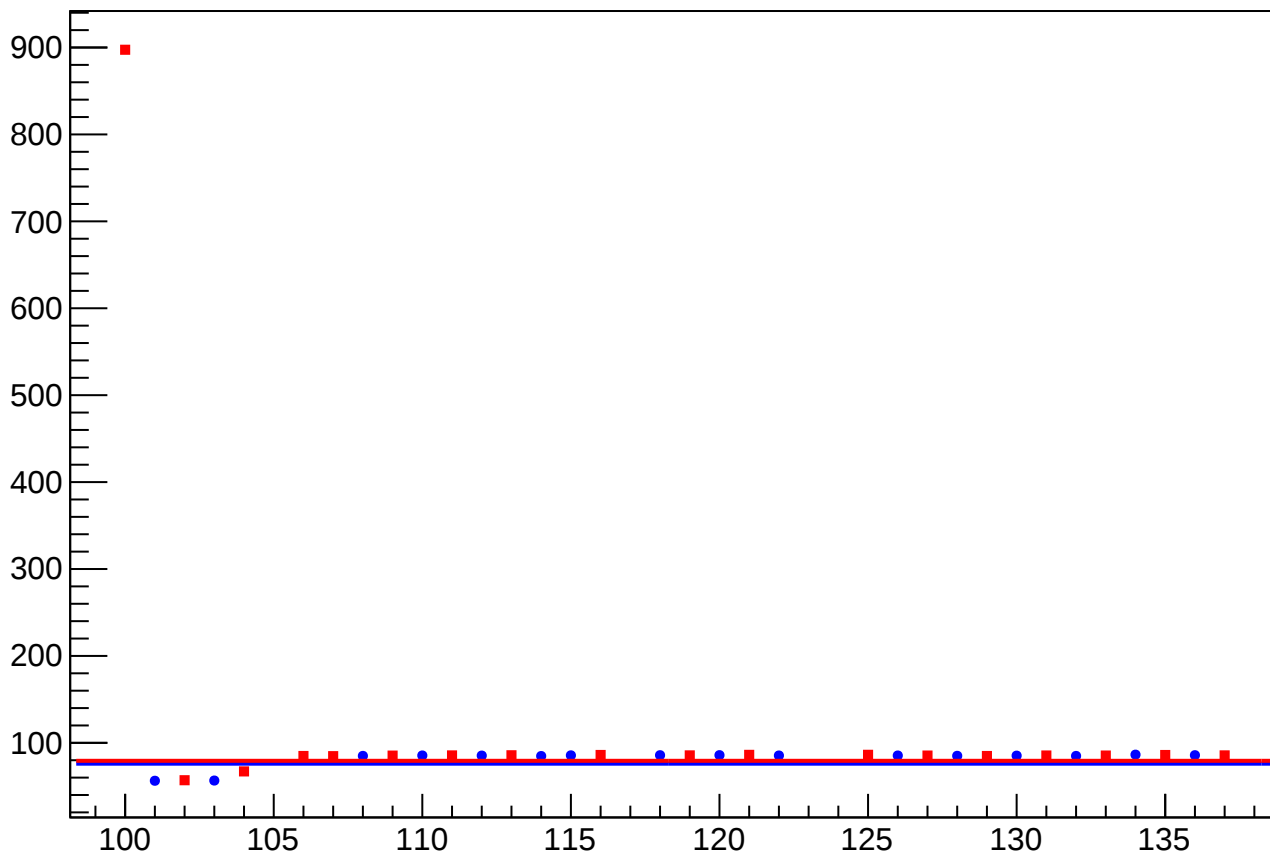
Right: -9.961+/-21.352  $\chi^2/\text{NDF}$ : 27.1/33

In: 7.460+/-29.969  $\chi^2/\text{NDF}$ : 13.9/15

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

All: -9.961+/-21.352  $\chi^2/\text{NDF}$ : 27.1/33

# reg\_asym\_ds\_dd\_rms vs Slug, Sign Corrected



Right In: 76.032 $\pm$ 0.021  $\chi^2$ /NDF: 408917.7/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 79.342 $\pm$ 0.022  $\chi^2$ /NDF: 378371.9/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

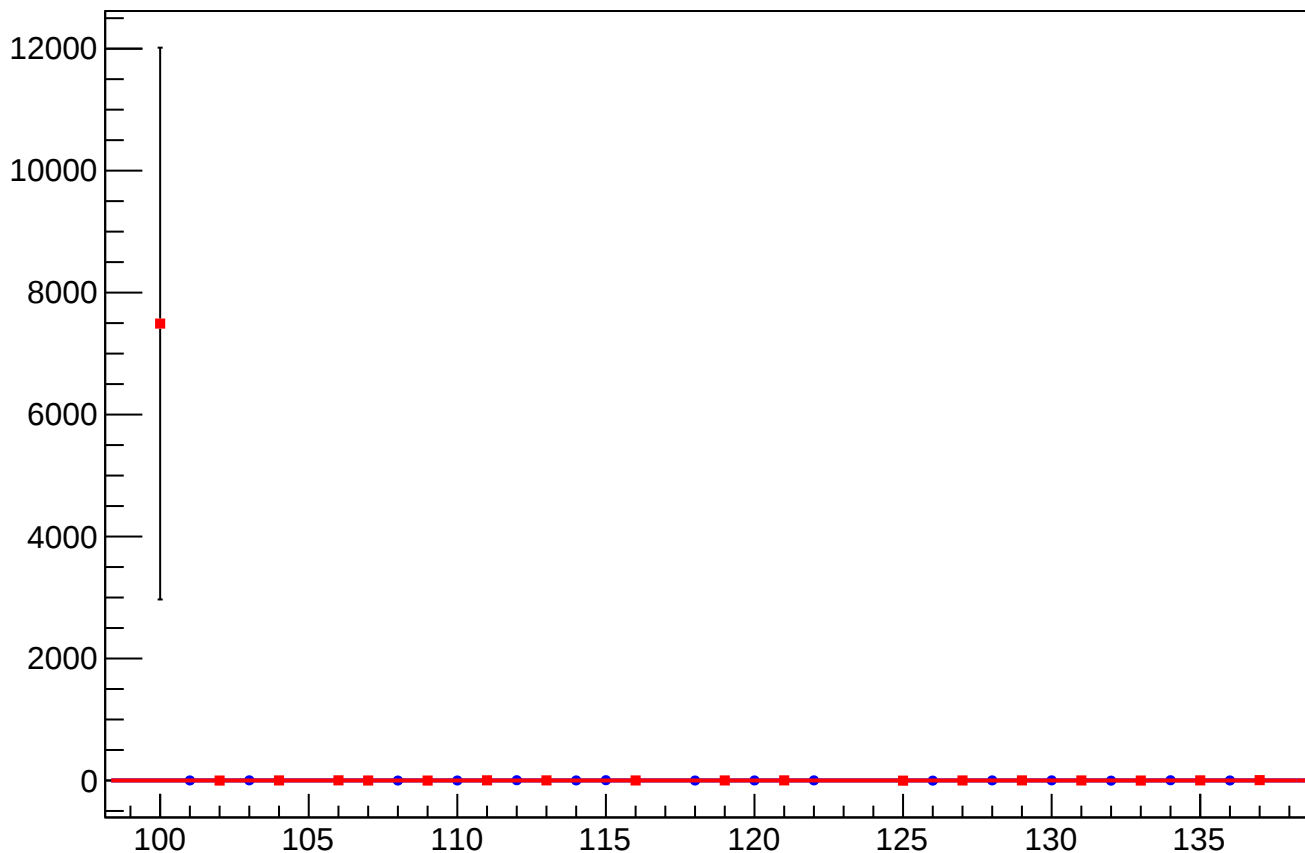
Right: 77.662 $\pm$ 0.015  $\chi^2$ /NDF: 799302.8/33

In: 76.032 $\pm$ 0.021  $\chi^2$ /NDF:408917.7/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 77.662 $\pm$ 0.015  $\chi^2$ /NDF: 799302.8/33

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



Right In: 0.911 $\pm$ 0.532  $\chi^2$ /NDF: 12.0/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.314 $\pm$ 0.548  $\chi^2$ /NDF: 12.6/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

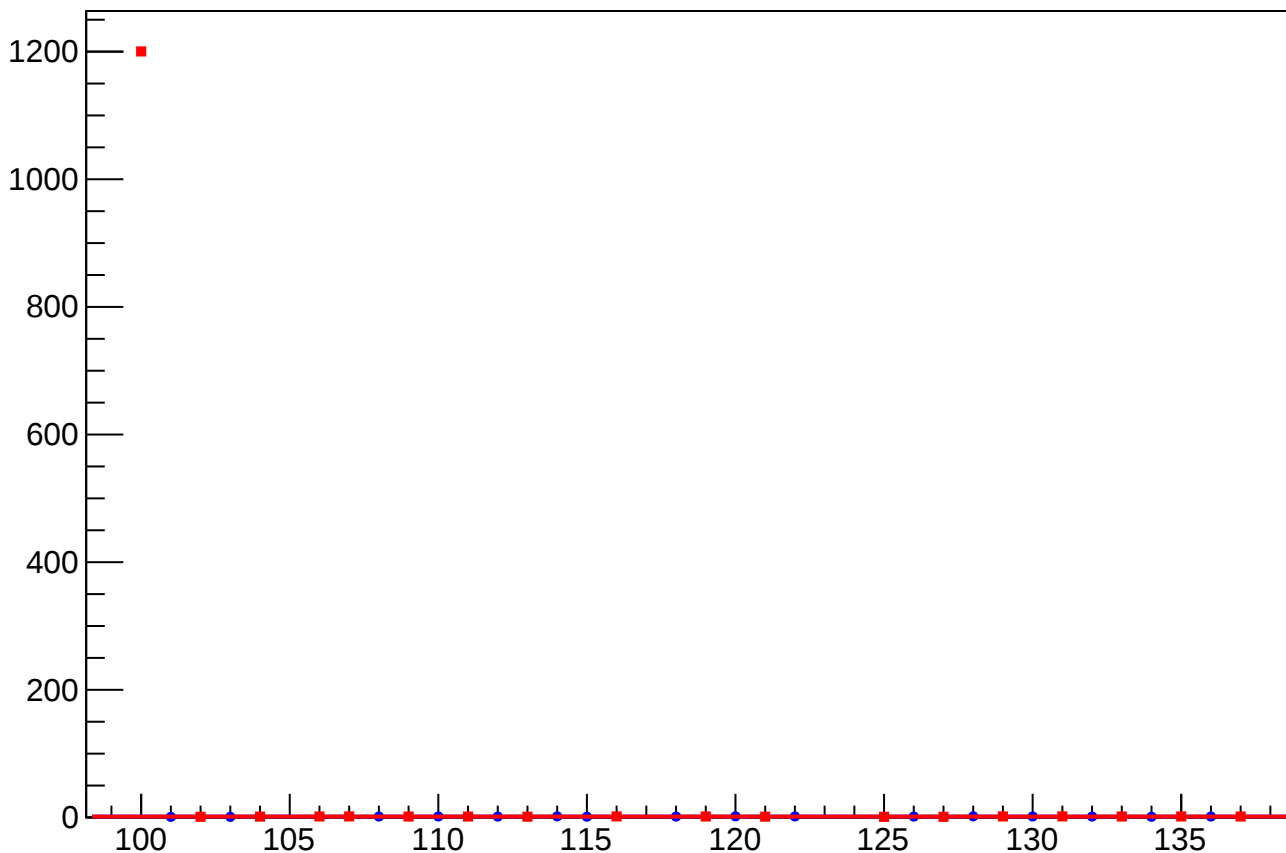
Right: 0.621 $\pm$ 0.382  $\chi^2$ /NDF: 25.2/33

In: 0.911 $\pm$ 0.532  $\chi^2$ /NDF:12.0/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.621 $\pm$ 0.382  $\chi^2$ /NDF: 25.2/33

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



Right In: 1.238+/-0.000  $\chi^2/\text{NDF}$ : 657848.9/15

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

Right Out: 1.317+/-0.000  $\chi^2/\text{NDF}$ : 521587.9/17

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

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

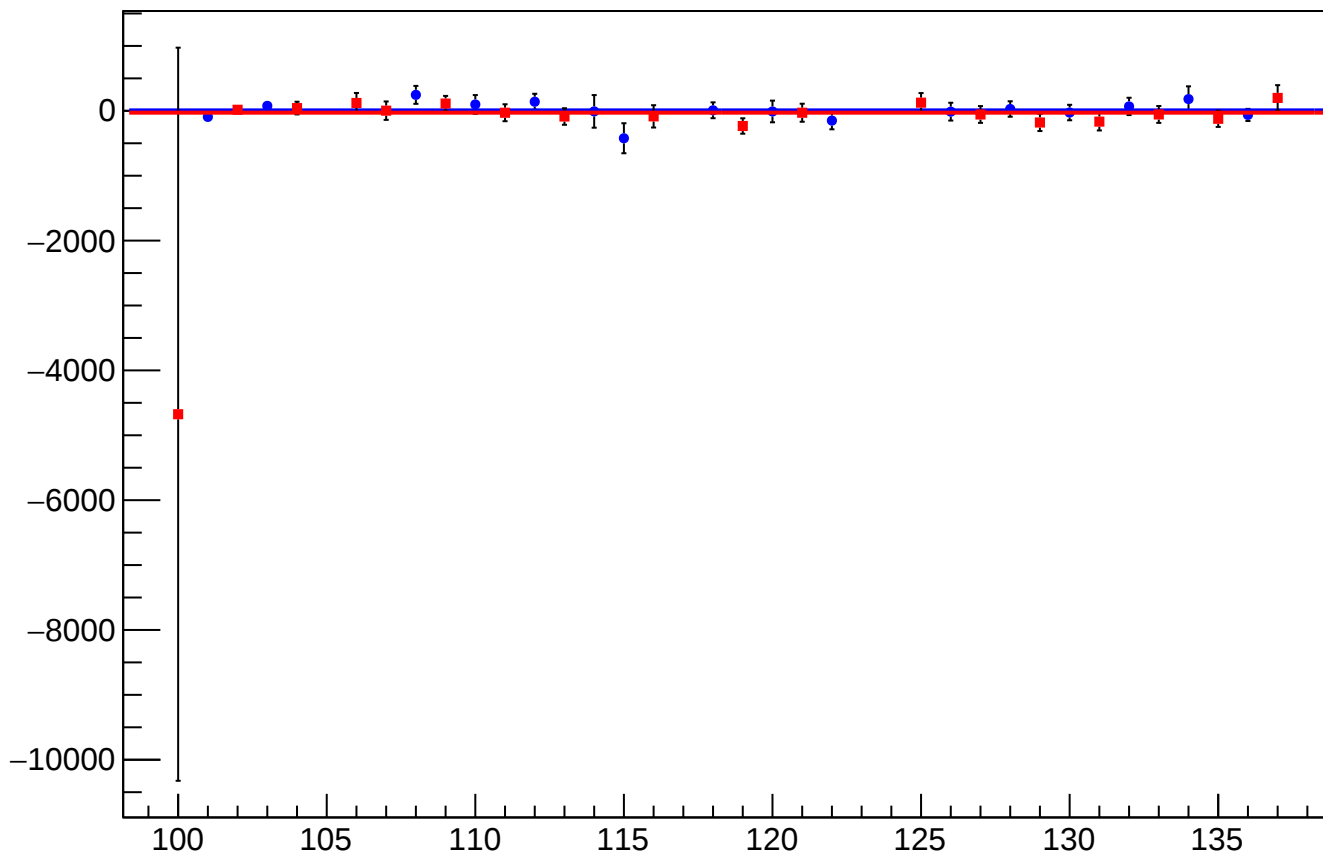
Right: 1.276+/-0.000  $\chi^2/\text{NDF}$ : 1201203.5/33

In: 1.238+/-0.000  $\chi^2/\text{NDF}$ : 657848.9/15

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

All: 1.276+/-0.000  $\chi^2/\text{NDF}$ : 1201203.5/33

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



Right In: 6.781+/-29.977  $\chi^2/\text{NDF}$ : 13.8/15

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

Right Out: -28.551+/-30.437  $\chi^2/\text{NDF}$ : 12.7/17

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

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

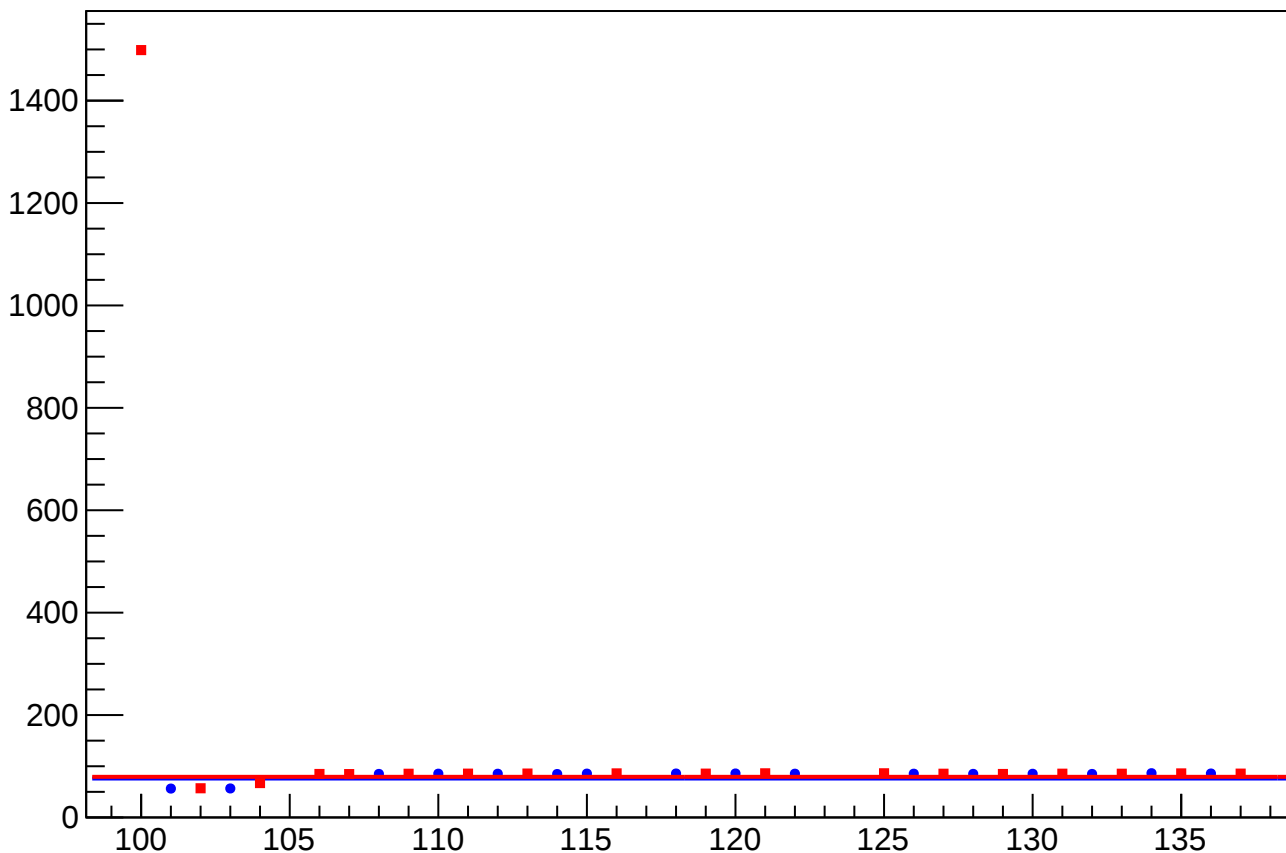
Right: -10.616+/-21.358  $\chi^2/\text{NDF}$ : 27.2/33

In: 6.781+/-29.977  $\chi^2/\text{NDF}$ : 13.8/15

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

All: -10.616+/-21.358  $\chi^2/\text{NDF}$ : 27.2/33

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



Right In: 76.052+/-0.021  $\chi^2/\text{NDF}$ : 408962.1/15

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

Right Out: 79.338+/-0.022  $\chi^2/\text{NDF}$ : 387631.3/17

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

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

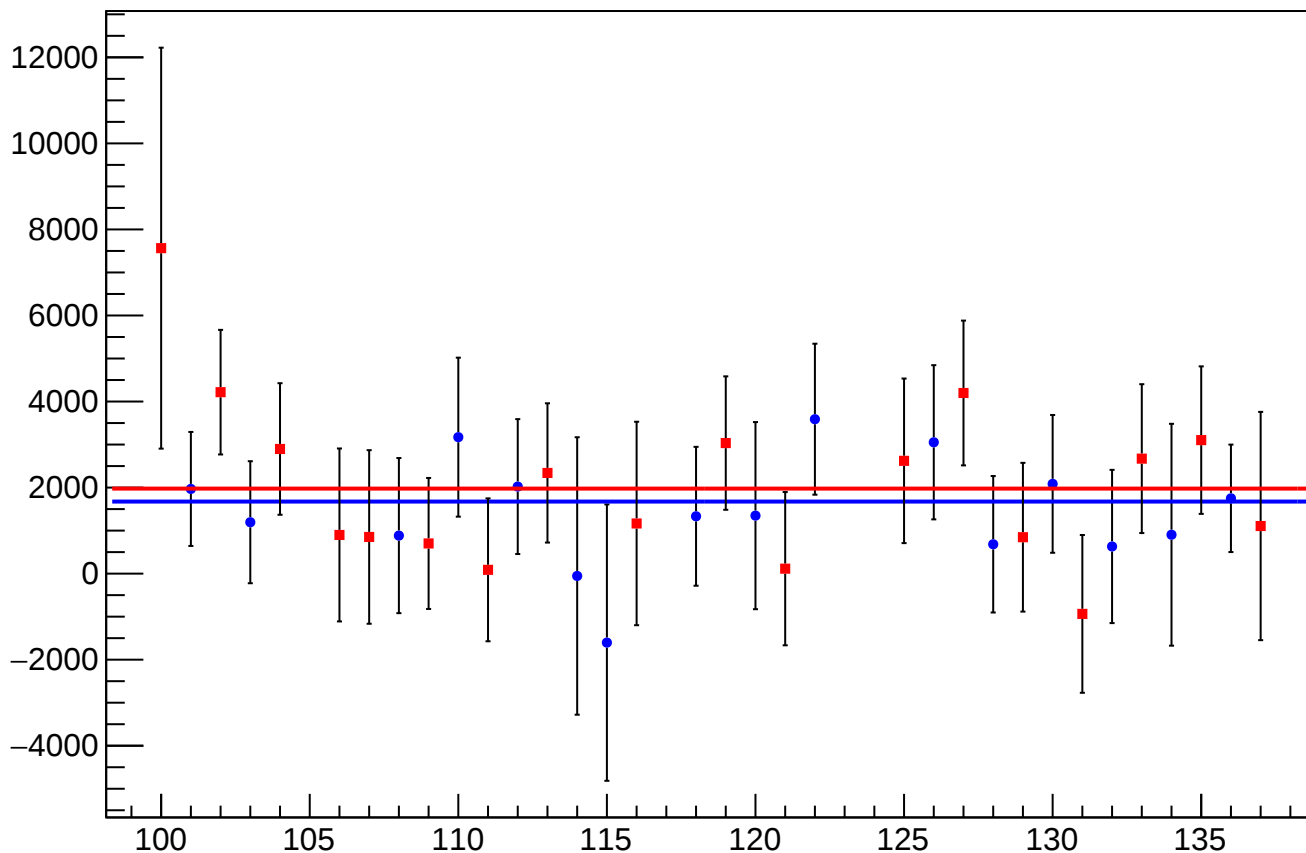
Right: 77.670+/-0.015  $\chi^2/\text{NDF}$ : 808427.1/33

In: 76.052+/-0.021  $\chi^2/\text{NDF}$ : 408962.1/15

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

All: 77.670+/-0.015  $\chi^2/\text{NDF}$ : 808427.1/33

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



Right In: 1674.993 $\pm$ 430.597  $\chi^2$ /NDF: 5.1/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 1976.296 $\pm$ 422.405  $\chi^2$ /NDF: 14.0/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

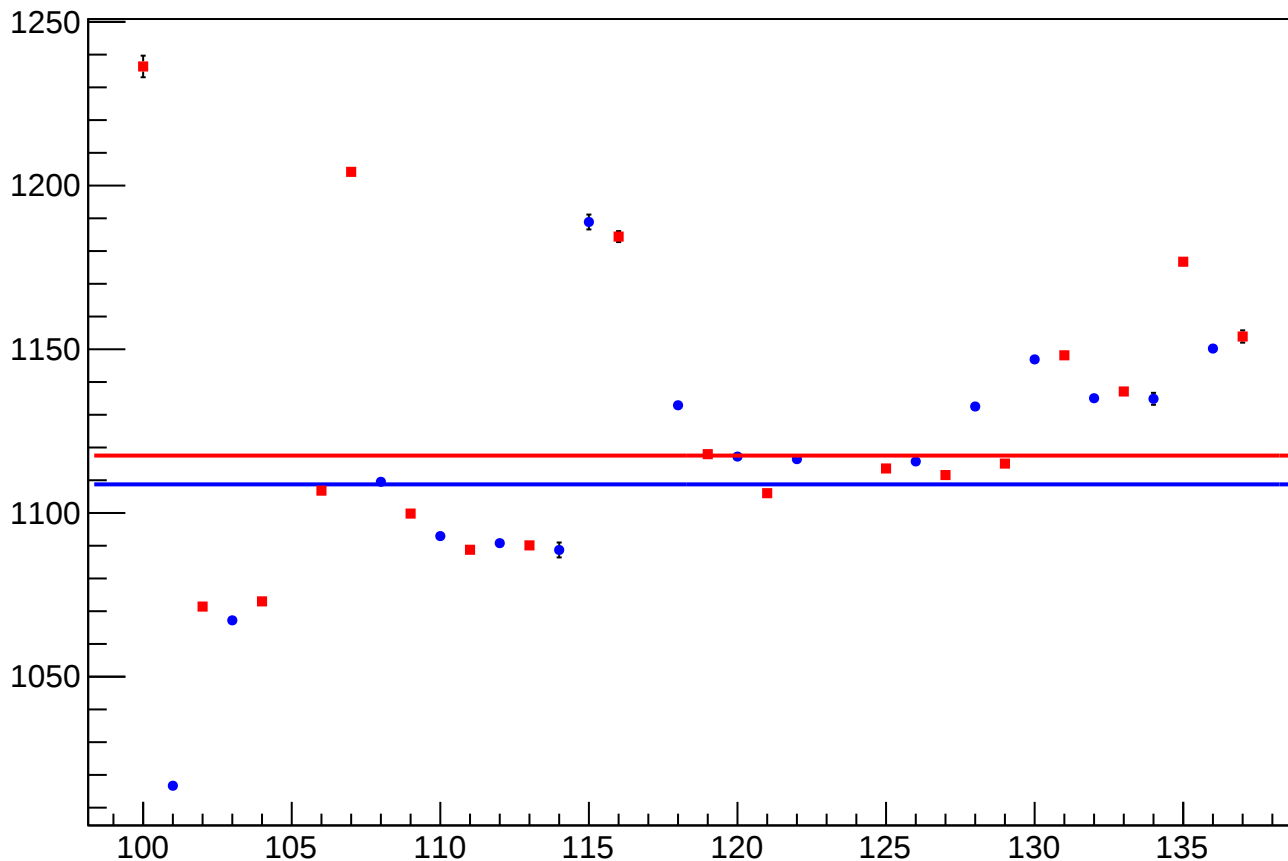
Right: 1828.538 $\pm$ 301.540  $\chi^2$ /NDF: 19.4/33

In: 1674.993 $\pm$ 430.597  $\chi^2$ /NDF: 5.1/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 1828.538 $\pm$ 301.540  $\chi^2$ /NDF: 19.4/33

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



Right In: 1108.739+/-0.304  $\chi^2/\text{NDF}$ : 18080.7/15

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

Right Out: 1117.539+/-0.299  $\chi^2/\text{NDF}$ : 15515.2/17

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

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

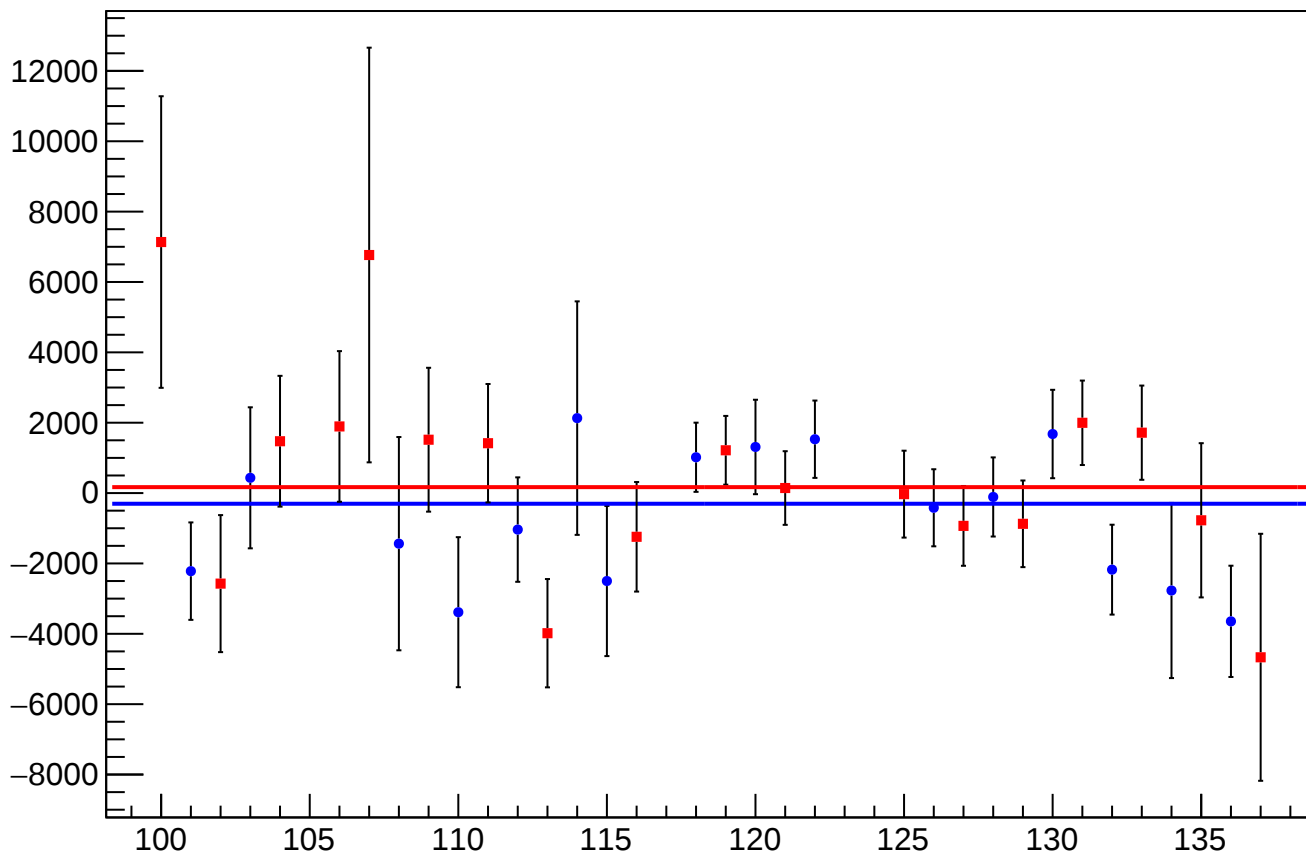
Right: 1113.224+/-0.213  $\chi^2/\text{NDF}$ : 34021.5/33

In: 1108.739+/-0.304  $\chi^2/\text{NDF}$ : 18080.7/15

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

All: 1113.224+/-0.213  $\chi^2/\text{NDF}$ : 34021.5/33

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



Right In: -303.335+/-360.068  $\chi^2/\text{NDF}$ : 22.3/15

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

Right Out: 168.849+/-356.237  $\chi^2/\text{NDF}$ : 24.9/17

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

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

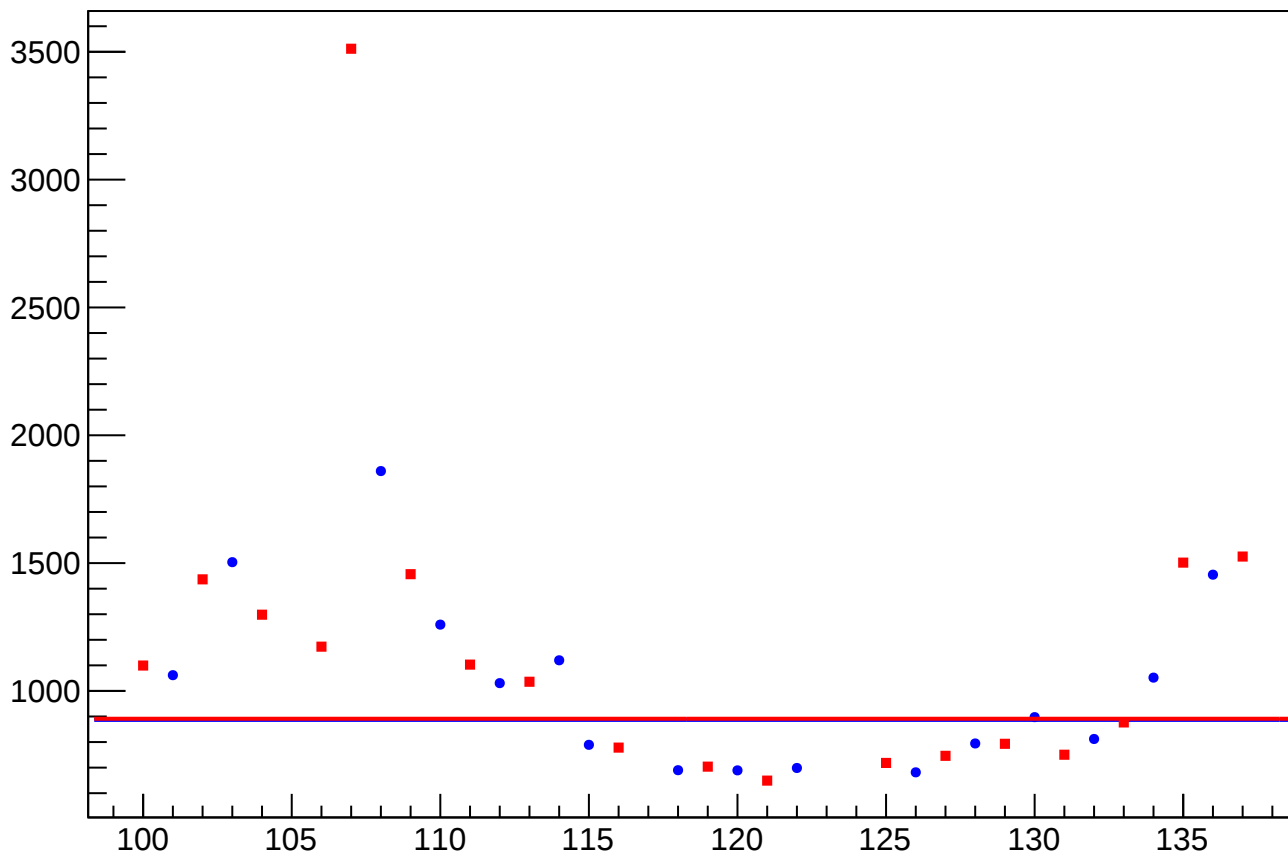
Right: -64.717+/-253.241  $\chi^2/\text{NDF}$ : 48.0/33

In: -303.335+/-360.068  $\chi^2/\text{NDF}$ : 22.3/15

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

All: -64.717+/-253.241  $\chi^2/\text{NDF}$ : 48.0/33

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



Right In: 886.691+/-0.255  $\chi^2/\text{NDF}$ : 1060864.2/15

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

Right Out: 891.197+/-0.252  $\chi^2/\text{NDF}$ : 1414187.9/17

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

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

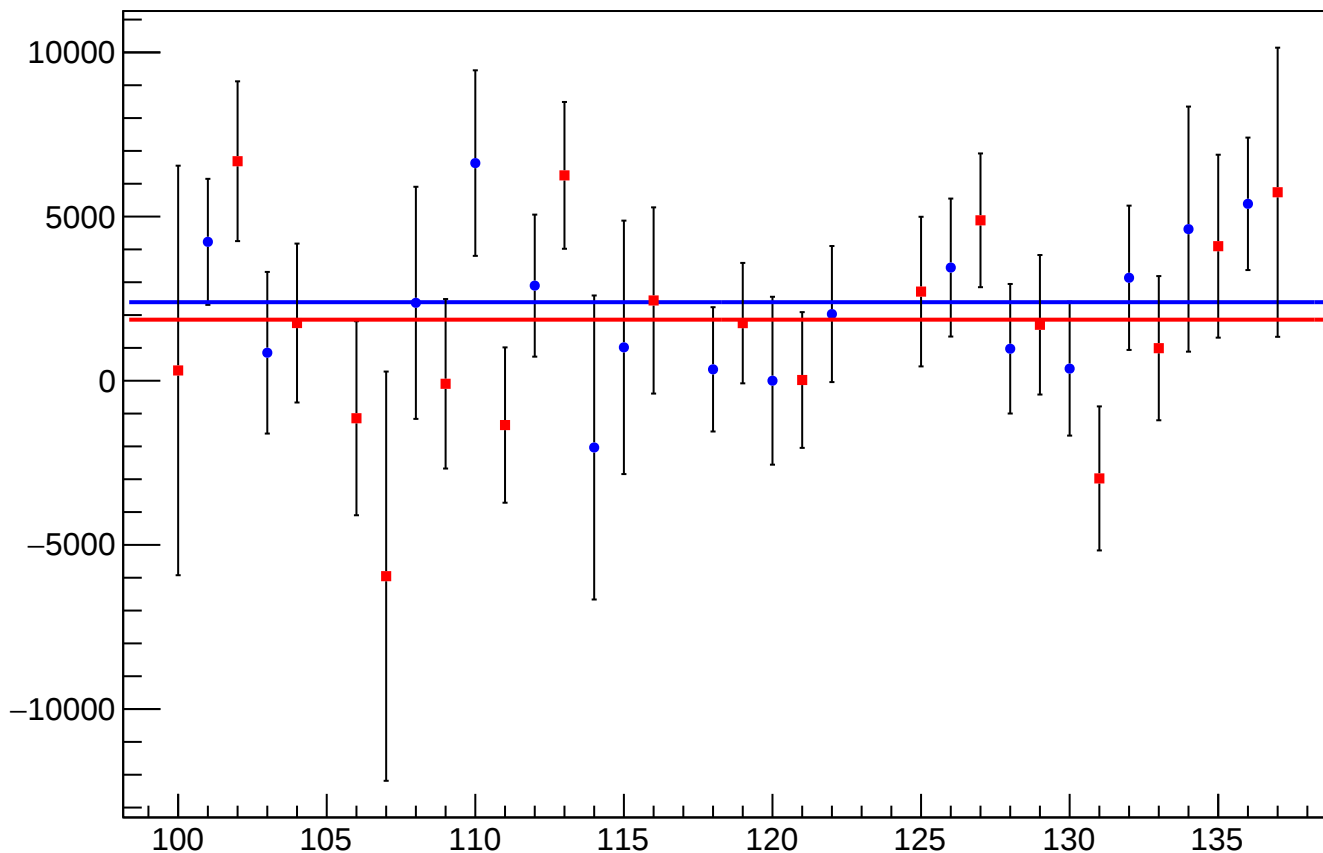
Right: 888.968+/-0.179  $\chi^2/\text{NDF}$ : 2475210.4/33

In: 886.691+/-0.255  $\chi^2/\text{NDF}$ : 1060864.2/15

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

All: 888.968+/-0.179  $\chi^2/\text{NDF}$ : 2475210.4/33

# asym\_usl\_mean vs Slug, Sign Corrected



Right In: 2392.385+/-588.991  $\chi^2/\text{NDF}$ : 11.2/15

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

Right Out: 1859.867+/-583.119  $\chi^2/\text{NDF}$ : 22.5/17

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

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

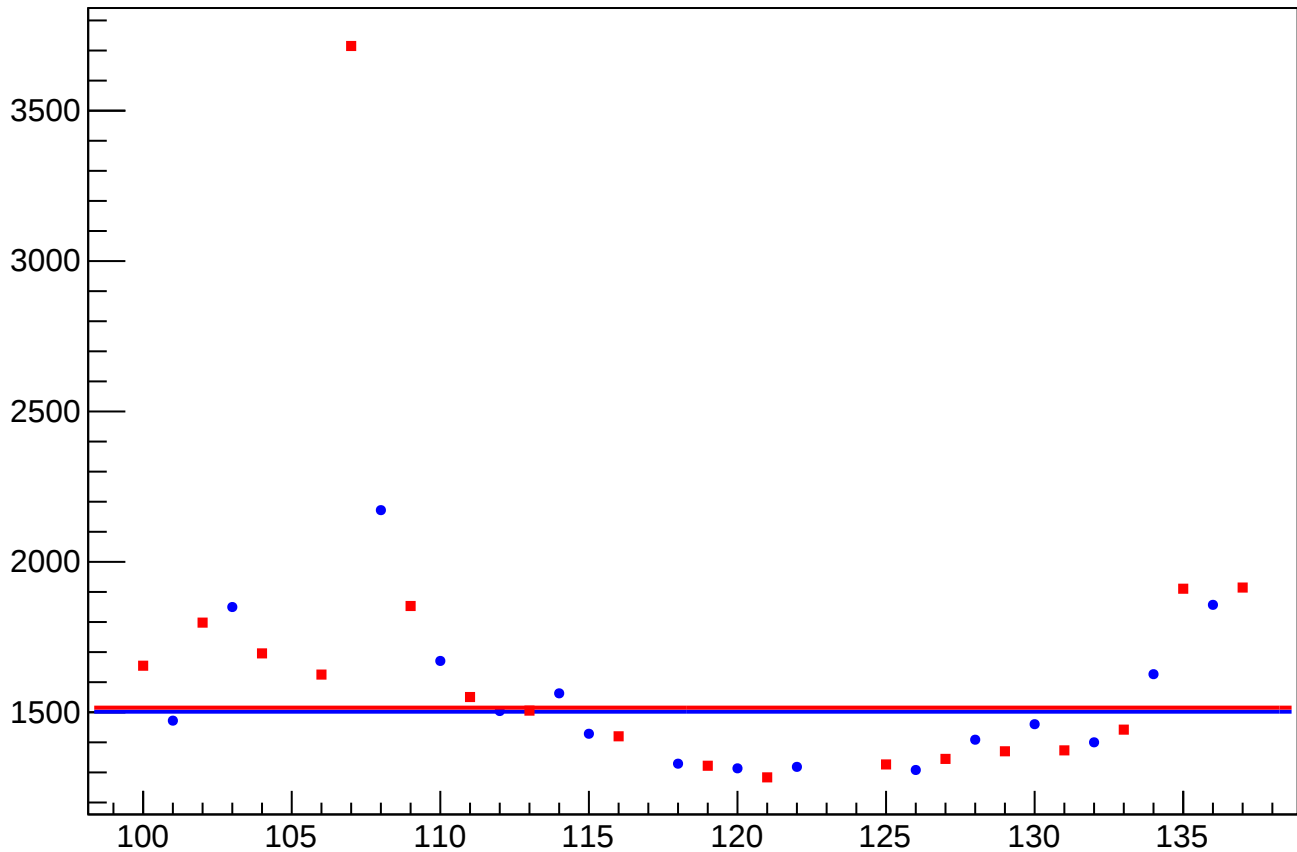
Right: 2123.458+/-414.388  $\chi^2/\text{NDF}$ : 34.1/33

In: 2392.385+/-588.991  $\chi^2/\text{NDF}$ : 11.2/15

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

All: 2123.458+/-414.388  $\chi^2/\text{NDF}$ : 34.1/33

# asym\_usl\_rms vs Slug, Sign Corrected



Right In: 1501.937+/-0.416  $\chi^2/\text{NDF}$ : 254549.7/15

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

Right Out: 1515.406+/-0.412  $\chi^2/\text{NDF}$ : 479759.9/17

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

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

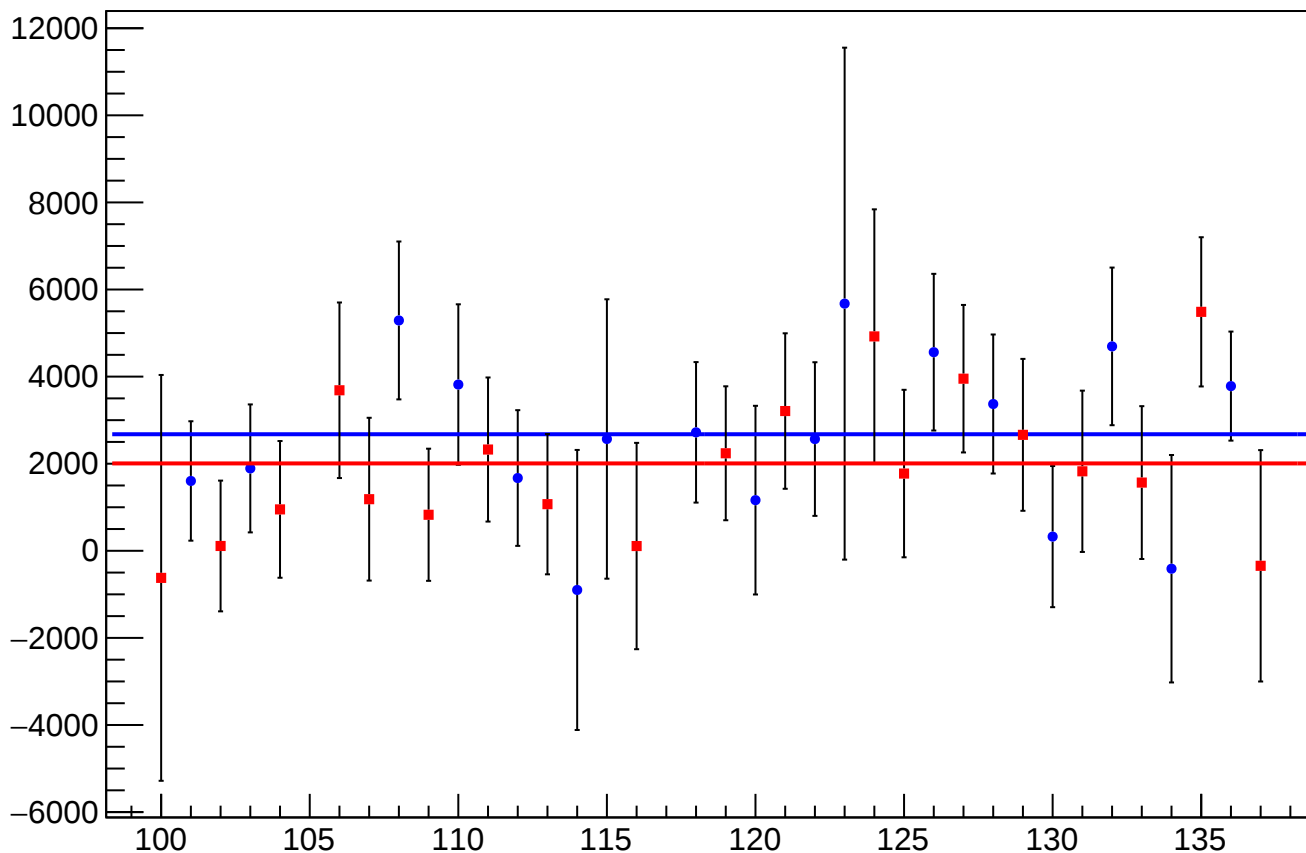
Right: 1508.739+/-0.293  $\chi^2/\text{NDF}$ : 734837.7/33

In: 1501.937+/-0.416  $\chi^2/\text{NDF}$ : 254549.7/15

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

All: 1508.739+/-0.293  $\chi^2/\text{NDF}$ : 734837.7/33

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



Right In: 2676.683+/-433.582  $\chi^2/\text{NDF}$ : 12.6/16

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

Right Out: 2006.577+/-419.165  $\chi^2/\text{NDF}$ : 12.8/18

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

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

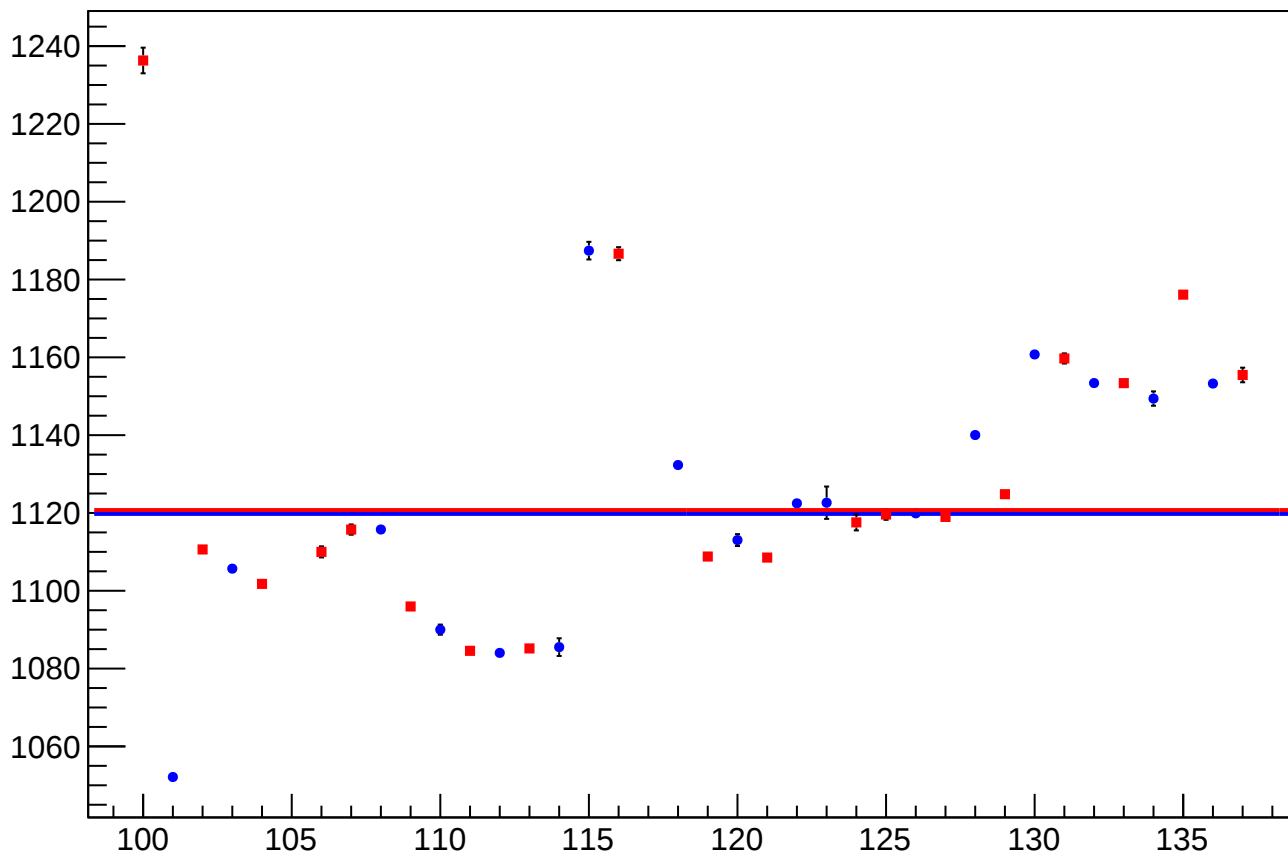
Right: 2330.304+/-301.362  $\chi^2/\text{NDF}$ : 26.6/35

In: 2676.683+/-433.582  $\chi^2/\text{NDF}$ : 12.6/16

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

All: 2330.304+/-301.362  $\chi^2/\text{NDF}$ : 26.6/35

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



Right In: 1119.762+/-0.307  $\chi^2/\text{NDF}$ : 11876.8/16

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

Right Out: 1120.746+/-0.296  $\chi^2/\text{NDF}$ : 9934.2/18

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

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

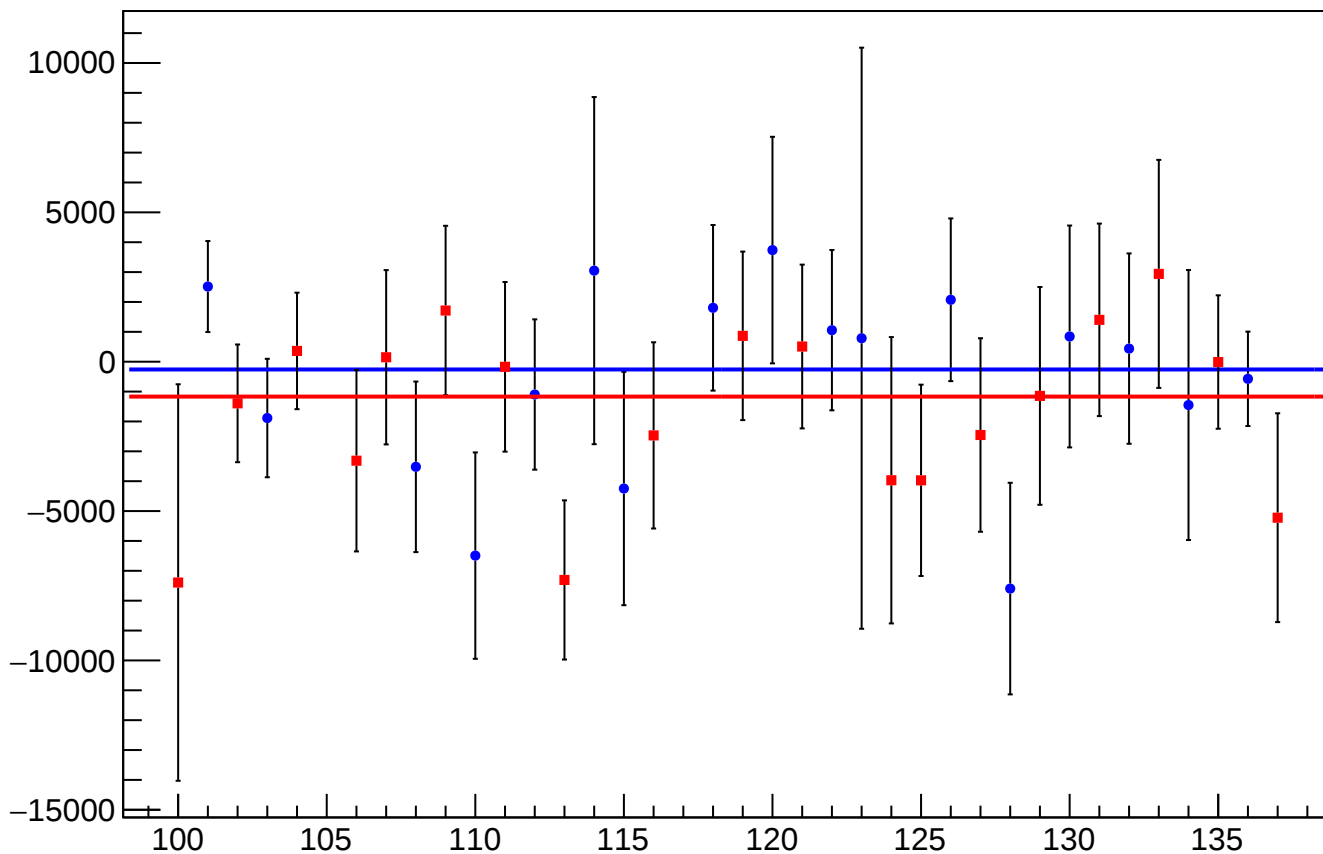
Right: 1120.271+/-0.213  $\chi^2/\text{NDF}$ : 21816.3/35

In: 1119.762+/-0.307  $\chi^2/\text{NDF}$ :11876.8/16

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

All: 1120.271+/-0.213  $\chi^2/\text{NDF}$ : 21816.3/35

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



Right In: -259.821+/-655.275  $\chi^2/\text{NDF}$ : 17.2/16

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

Right Out: -1167.598+/-662.428  $\chi^2/\text{NDF}$ : 14.4/18

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

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

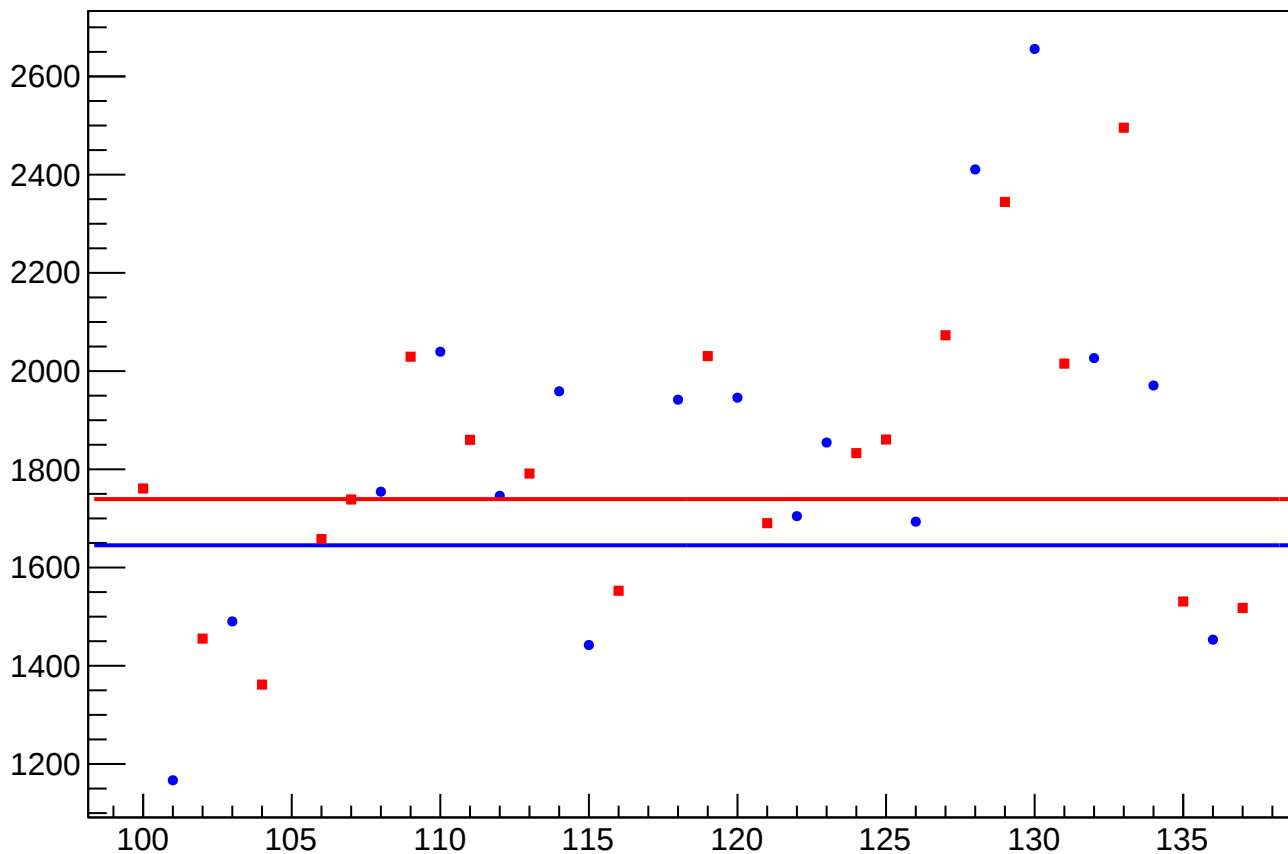
Right: -708.782+/-465.858  $\chi^2/\text{NDF}$ : 32.6/35

In: -259.821+/-655.275  $\chi^2/\text{NDF}$ : 17.2/16

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

All: -708.782+/-465.858  $\chi^2/\text{NDF}$ : 32.6/35

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



Right In: 1645.307+/-0.463  $\chi^2/\text{NDF}$ : 600915.2/16

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

Right Out: 1739.382+/-0.468  $\chi^2/\text{NDF}$ : 371012.9/18

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

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

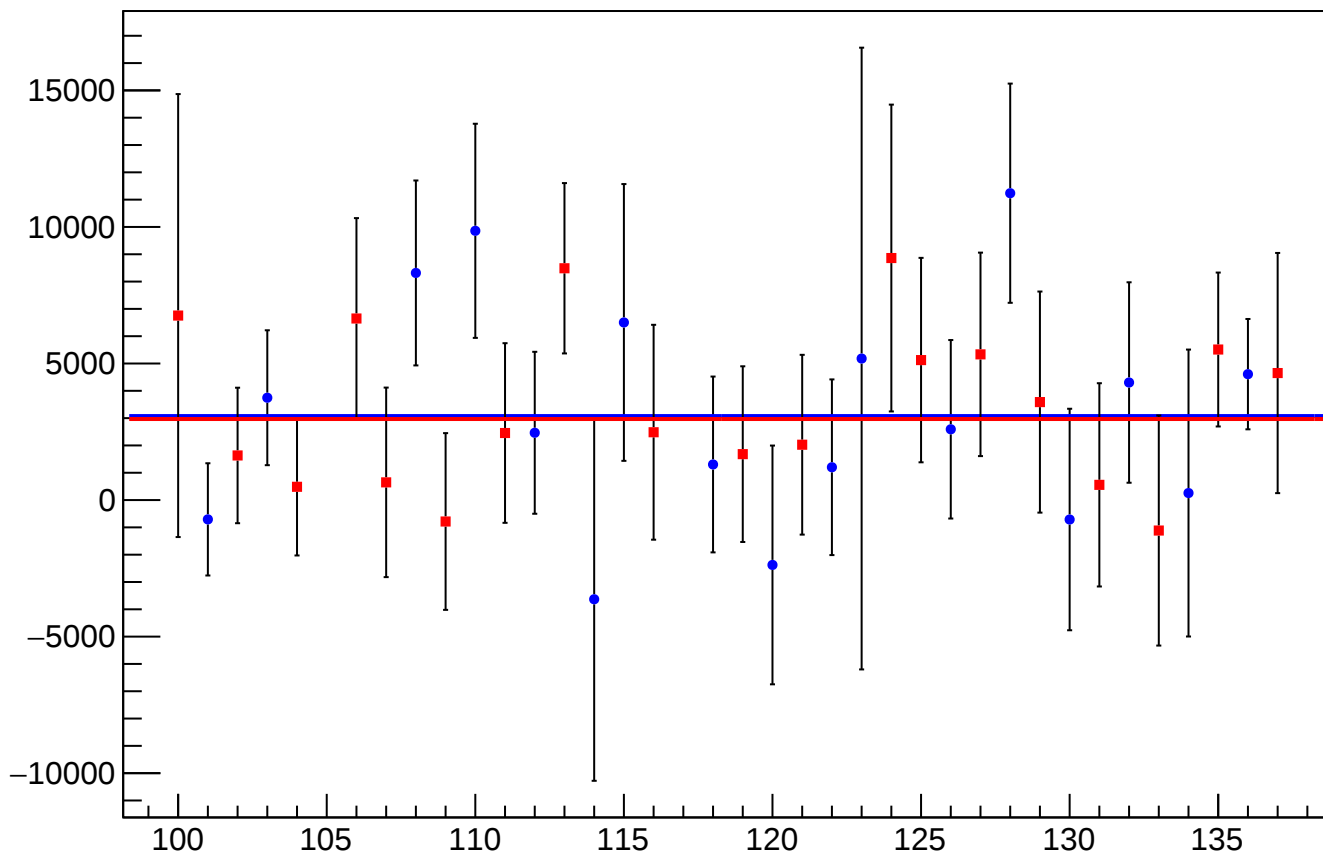
Right: 1691.833+/-0.329  $\chi^2/\text{NDF}$ : 992315.5/35

In: 1645.307+/-0.463  $\chi^2/\text{NDF}$ : 600915.2/16

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

All: 1691.833+/-0.329  $\chi^2/\text{NDF}$ : 992315.5/35

# asym\_usr\_mean vs Slug, Sign Corrected



Right In: 3075.401 $\pm$ 802.249  $\chi^2$ /NDF: 18.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 2967.536 $\pm$ 795.639  $\chi^2$ /NDF: 11.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

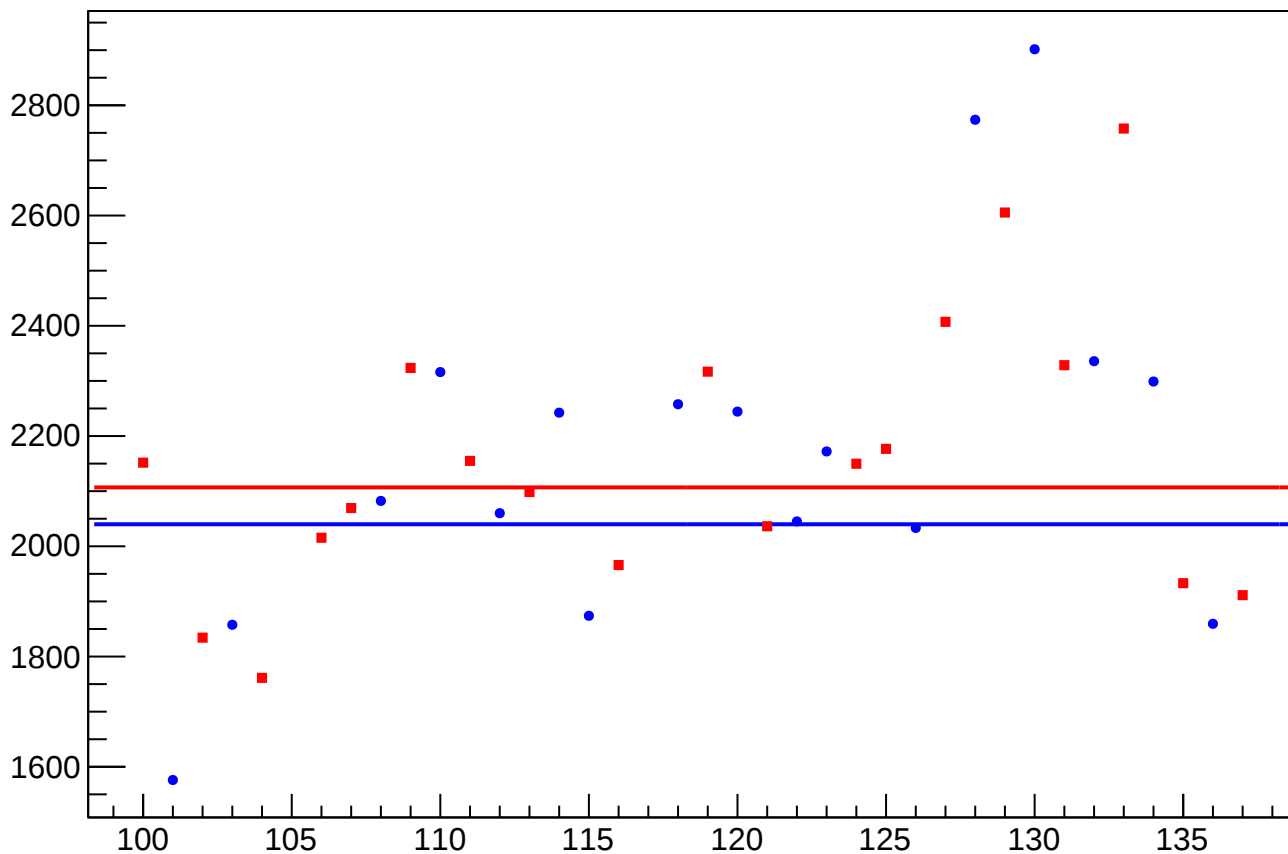
Right: 3021.022 $\pm$ 564.924  $\chi^2$ /NDF: 30.5/35

In: 3075.401 $\pm$ 802.249  $\chi^2$ /NDF:18.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 3021.022 $\pm$ 564.924  $\chi^2$ /NDF: 30.5/35

# asym\_usr\_rms vs Slug, Sign Corrected



Right In: 2039.942+/-0.567  $\chi^2/\text{NDF}$ : 331984.0/16

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

Right Out: 2106.832+/-0.563  $\chi^2/\text{NDF}$ : 195448.9/18

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

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

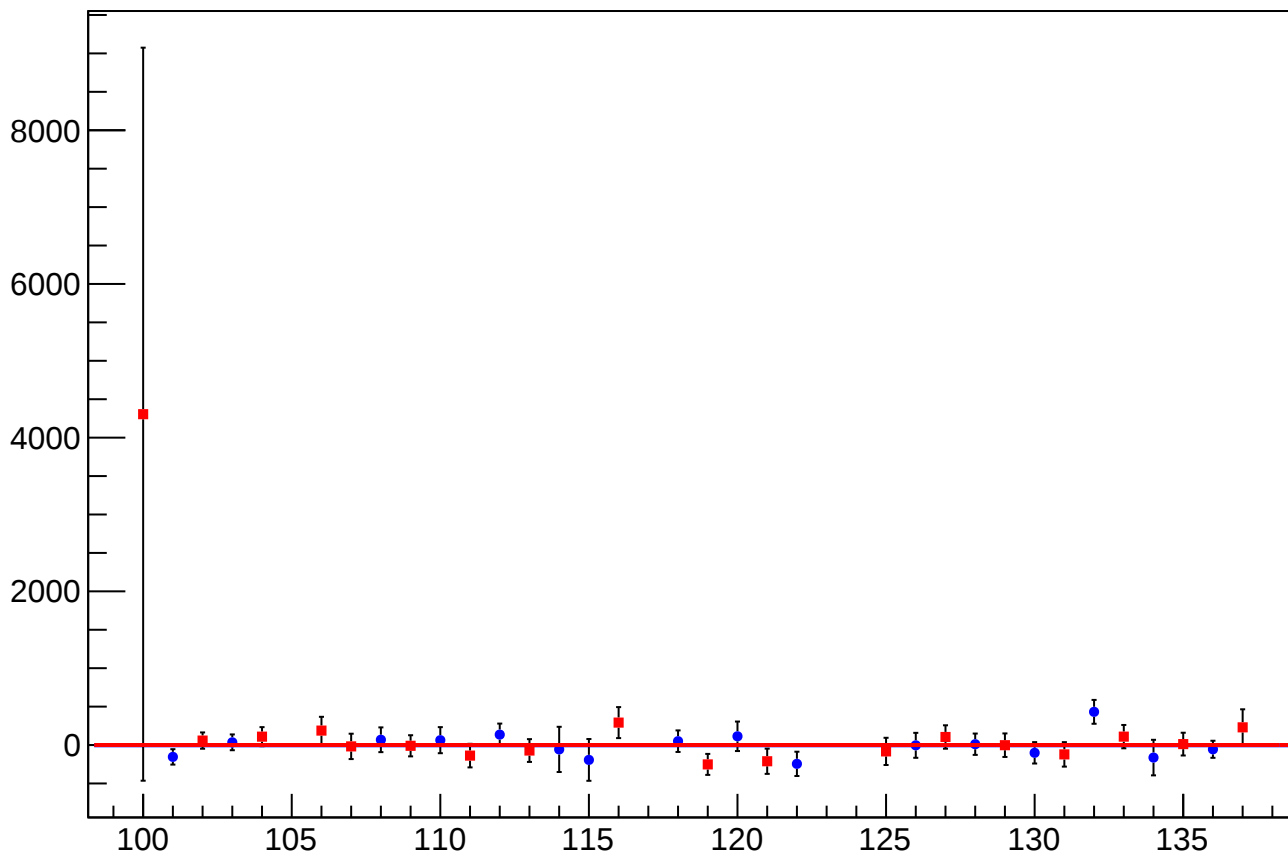
Right: 2073.664+/-0.399  $\chi^2/\text{NDF}$ : 534442.4/35

In: 2039.942+/-0.567  $\chi^2/\text{NDF}$ : 331984.0/16

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

All: 2073.664+/-0.399  $\chi^2/\text{NDF}$ : 534442.4/35

# reg\_asym\_dsl\_mean vs Slug, Sign Corrected



Right In: -3.283+/-36.714  $\chi^2/\text{NDF}$ : 16.1/15

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

Right Out: 0.487+/-36.699  $\chi^2/\text{NDF}$ : 14.0/17

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

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

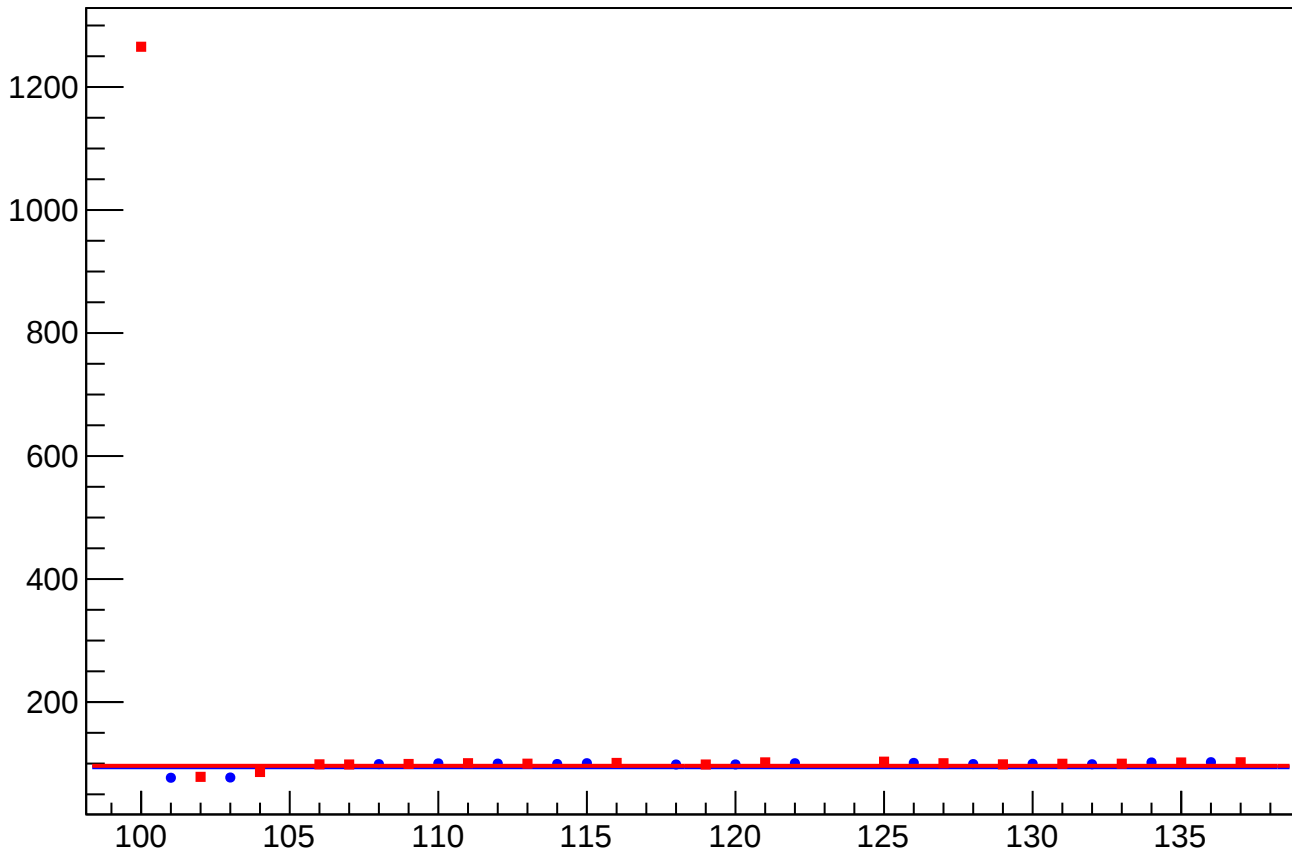
Right: -1.397+/-25.955  $\chi^2/\text{NDF}$ : 30.1/33

In: -3.283+/-36.714  $\chi^2/\text{NDF}$ : 16.1/15

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

All: -1.397+/-25.955  $\chi^2/\text{NDF}$ : 30.1/33

# reg\_asym\_dsl\_rms vs Slug, Sign Corrected



Right In: 94.068 $\pm$ 0.026  $\chi^2$ /NDF: 152285.6/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 96.372 $\pm$ 0.026  $\chi^2$ /NDF: 209228.5/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

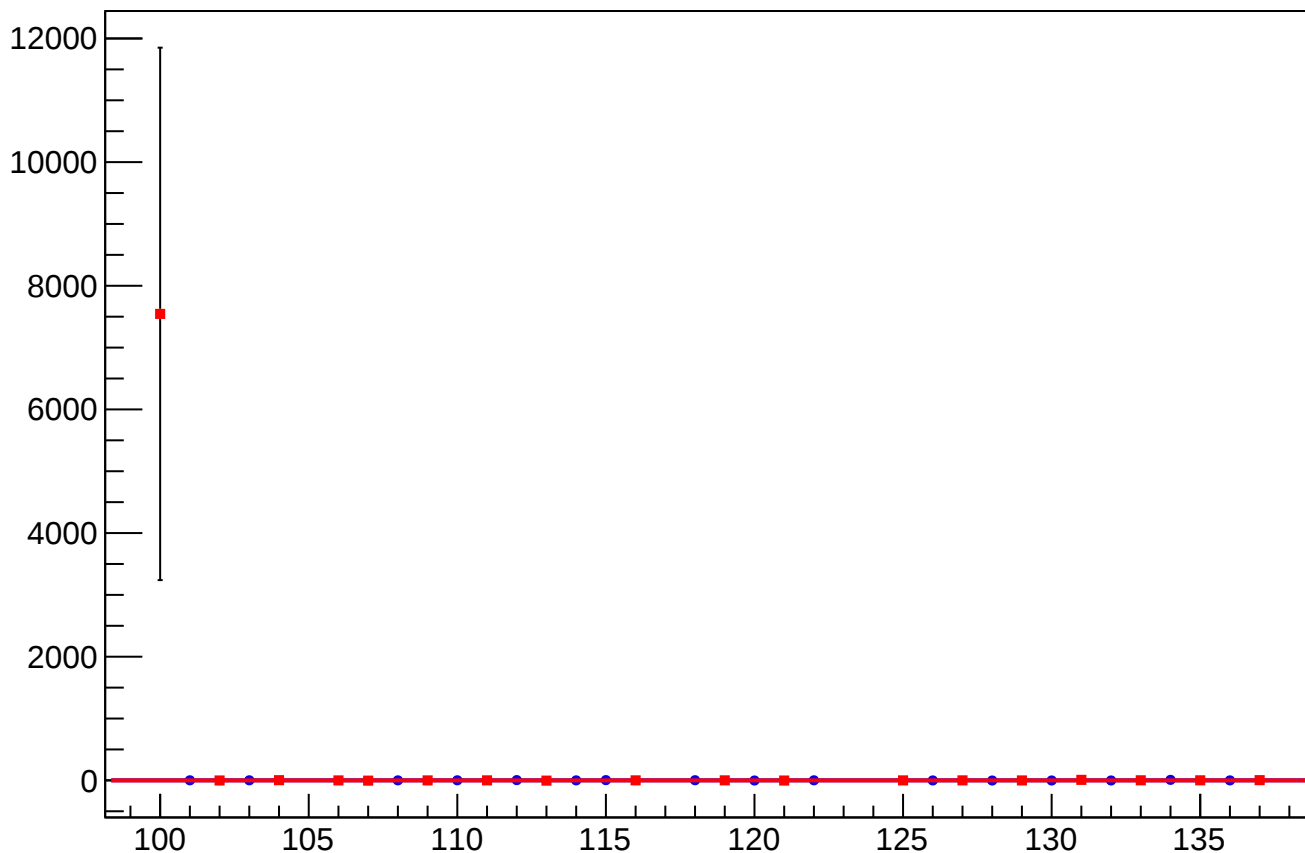
Right: 95.221 $\pm$ 0.018  $\chi^2$ /NDF: 365453.7/33

In: 94.068 $\pm$ 0.026  $\chi^2$ /NDF:152285.6/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 95.221 $\pm$ 0.018  $\chi^2$ /NDF: 365453.7/33

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



Right In: 0.426+/-0.616     $\chi^2/\text{NDF}$ : 9.7/15

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

Right Out: -0.313+/-0.643     $\chi^2/\text{NDF}$ : 22.8/17

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

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

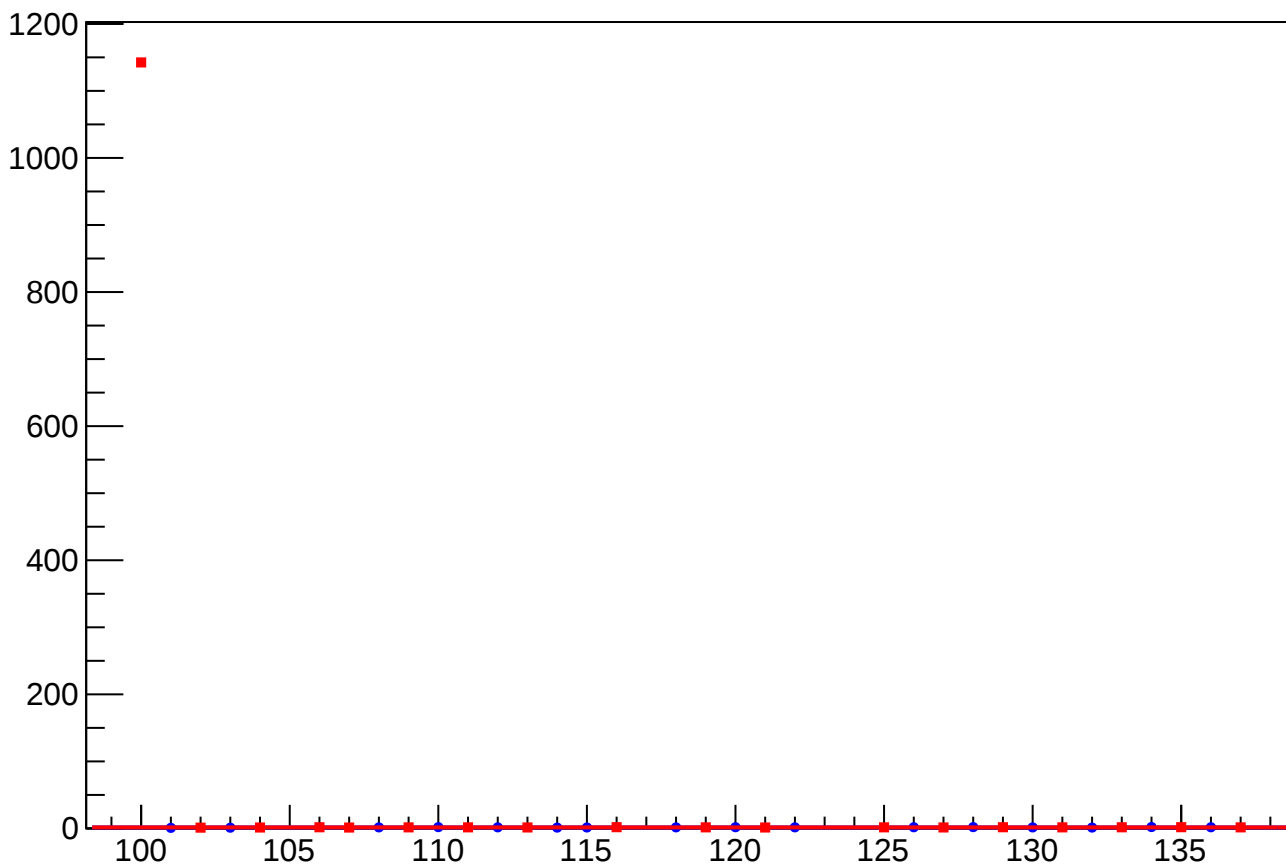
Right: 0.073+/-0.445     $\chi^2/\text{NDF}$ : 33.2/33

In: 0.426+/-0.616     $\chi^2/\text{NDF}$ : 9.7/15

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

All: 0.073+/-0.445     $\chi^2/\text{NDF}$ : 33.2/33

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



Right In: 1.420+/-0.000  $\chi^2/\text{NDF}$ : 730935.2/15

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

Right Out: 1.556+/-0.000  $\chi^2/\text{NDF}$ : 315908.9/17

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

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

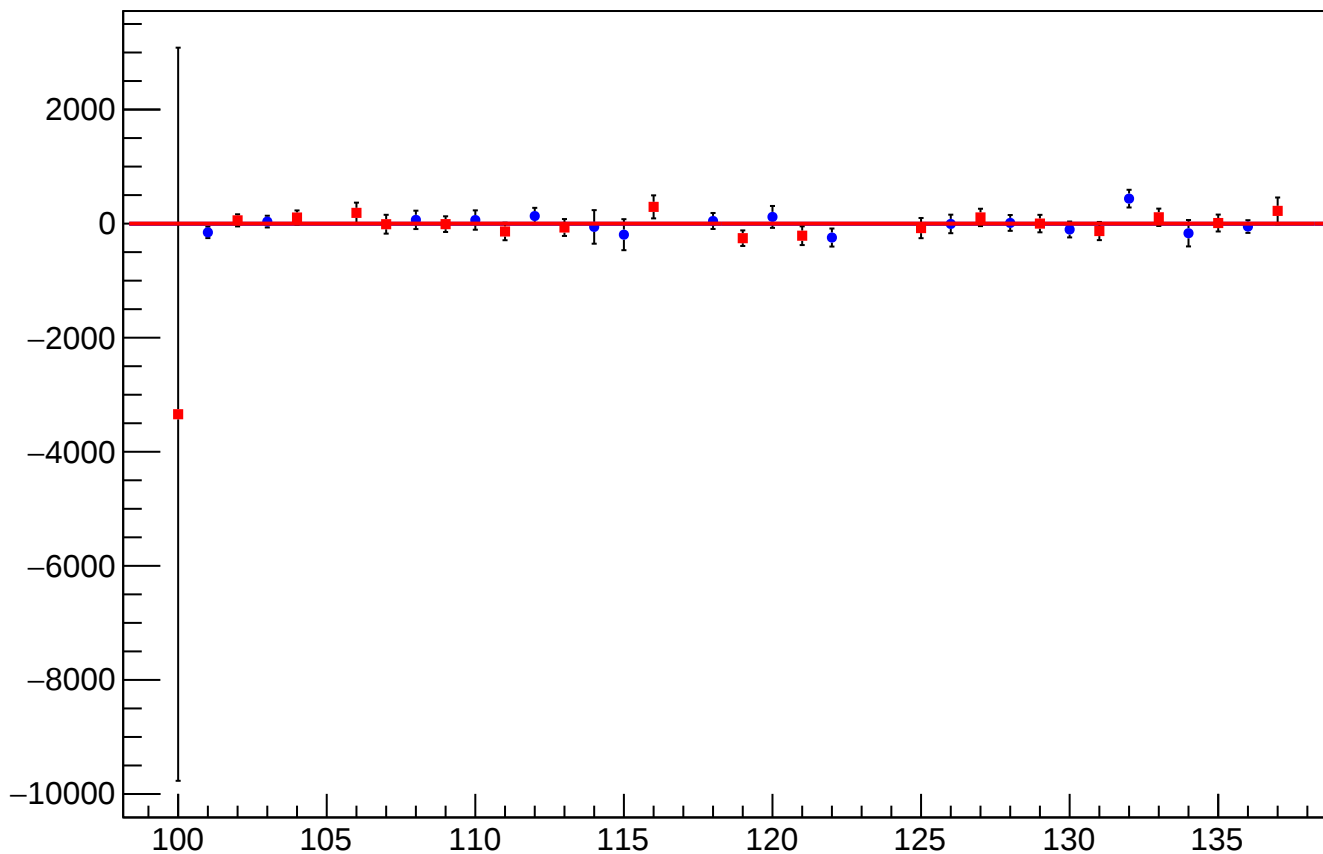
Right: 1.485+/-0.000  $\chi^2/\text{NDF}$ : 1093611.9/33

In: 1.420+/-0.000  $\chi^2/\text{NDF}$ : 730935.2/15

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

All: 1.485+/-0.000  $\chi^2/\text{NDF}$ : 1093611.9/33

# asym\_dsl\_mean vs Slug, Sign Corrected



Right In: -3.099+/-36.723  $\chi^2/\text{NDF}$ : 16.3/15

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

Right Out: 0.172+/-36.709  $\chi^2/\text{NDF}$ : 13.5/17

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

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

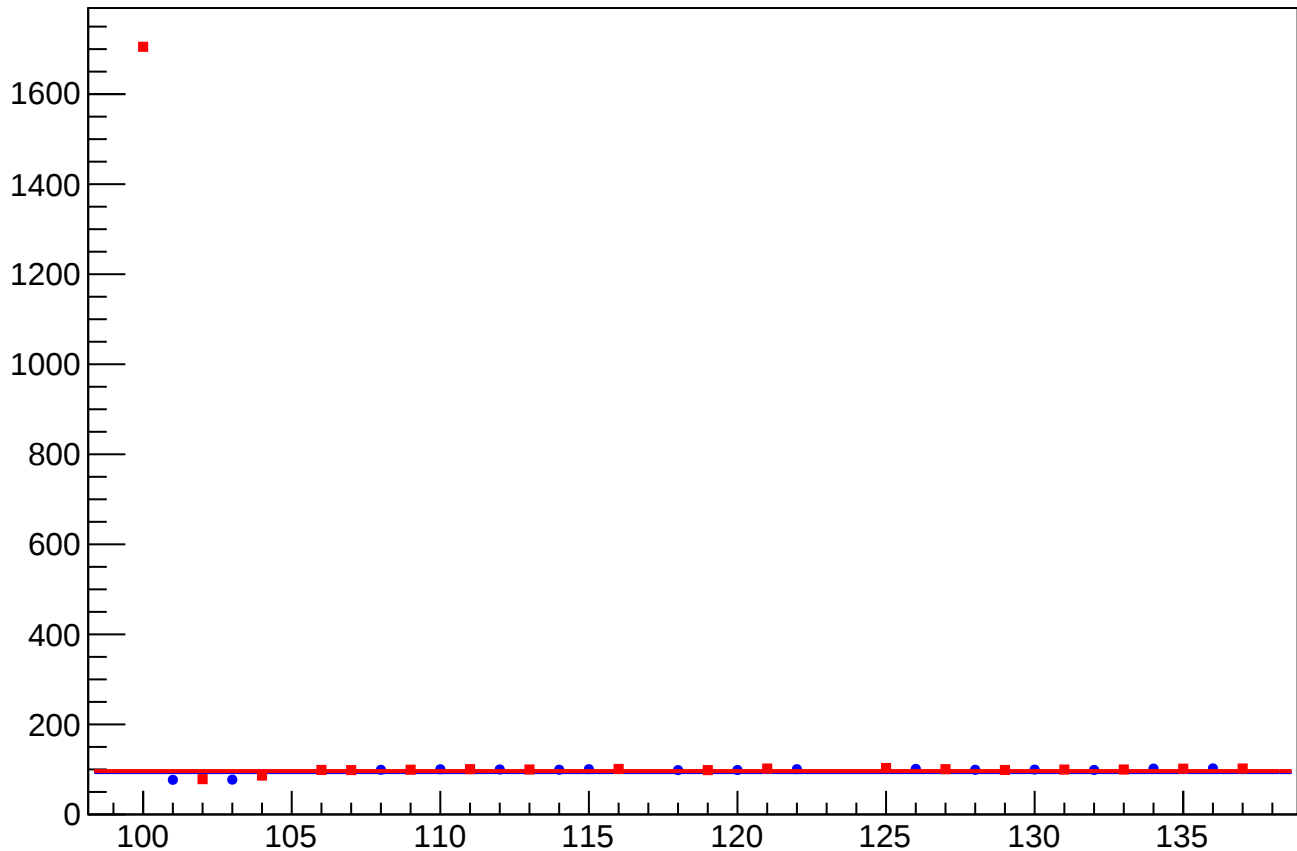
Right: -1.463+/-25.962  $\chi^2/\text{NDF}$ : 29.8/33

In: -3.099+/-36.723  $\chi^2/\text{NDF}$ : 16.3/15

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

All: -1.463+/-25.962  $\chi^2/\text{NDF}$ : 29.8/33

# asym\_dsl\_rms vs Slug, Sign Corrected



Right In: 94.093+/-0.026  $\chi^2/\text{NDF}$ : 152305.3/15

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

Right Out: 96.381+/-0.026  $\chi^2/\text{NDF}$ : 214362.3/17

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

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

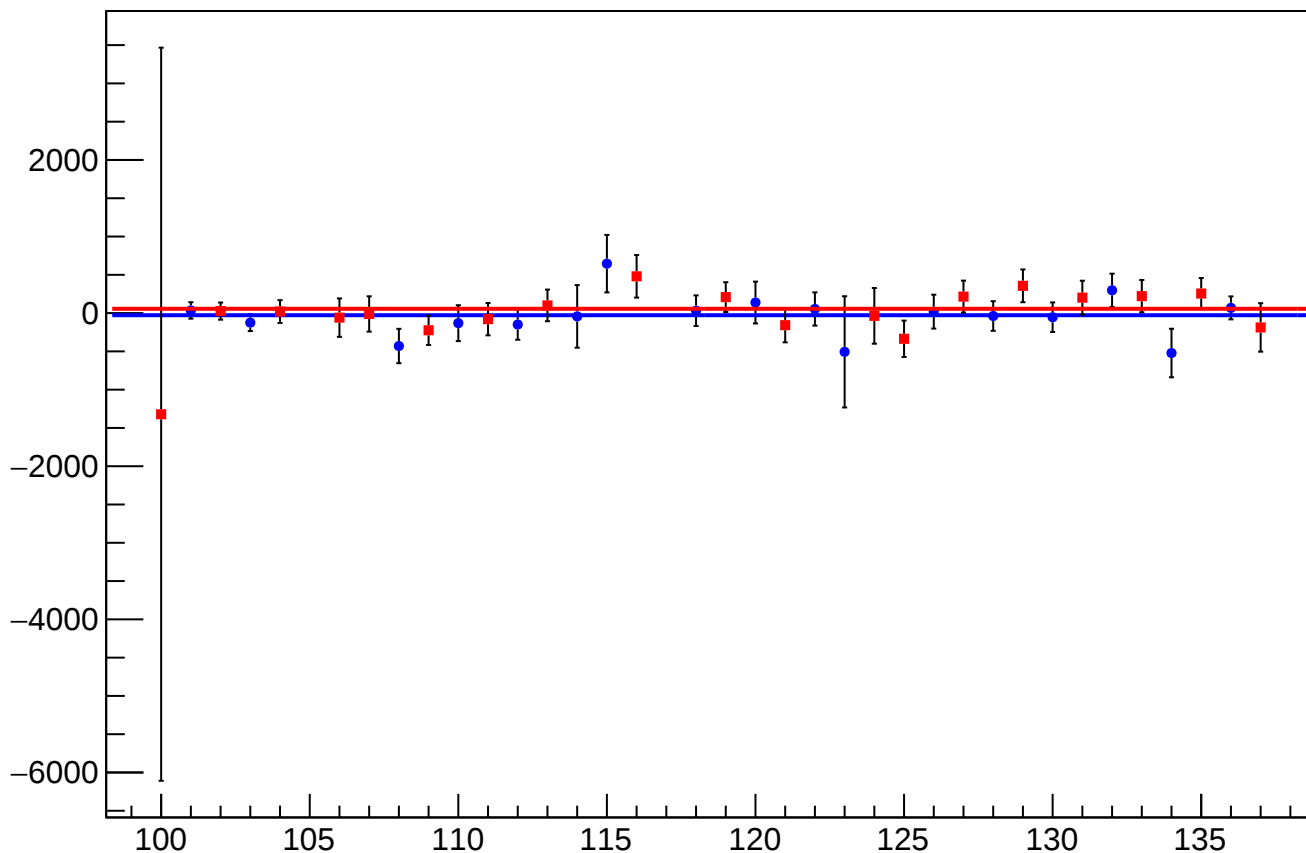
Right: 95.237+/-0.018  $\chi^2/\text{NDF}$ : 370551.8/33

In: 94.093+/-0.026  $\chi^2/\text{NDF}$ : 152305.3/15

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

All: 95.237+/-0.018  $\chi^2/\text{NDF}$ : 370551.8/33

# reg\_asym\_dsr\_mean vs Slug, Sign Corrected



Right In:  $-27.840 \pm 46.777$   $\chi^2/\text{NDF}$ : 14.3/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $56.398 \pm 47.708$   $\chi^2/\text{NDF}$ : 14.9/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

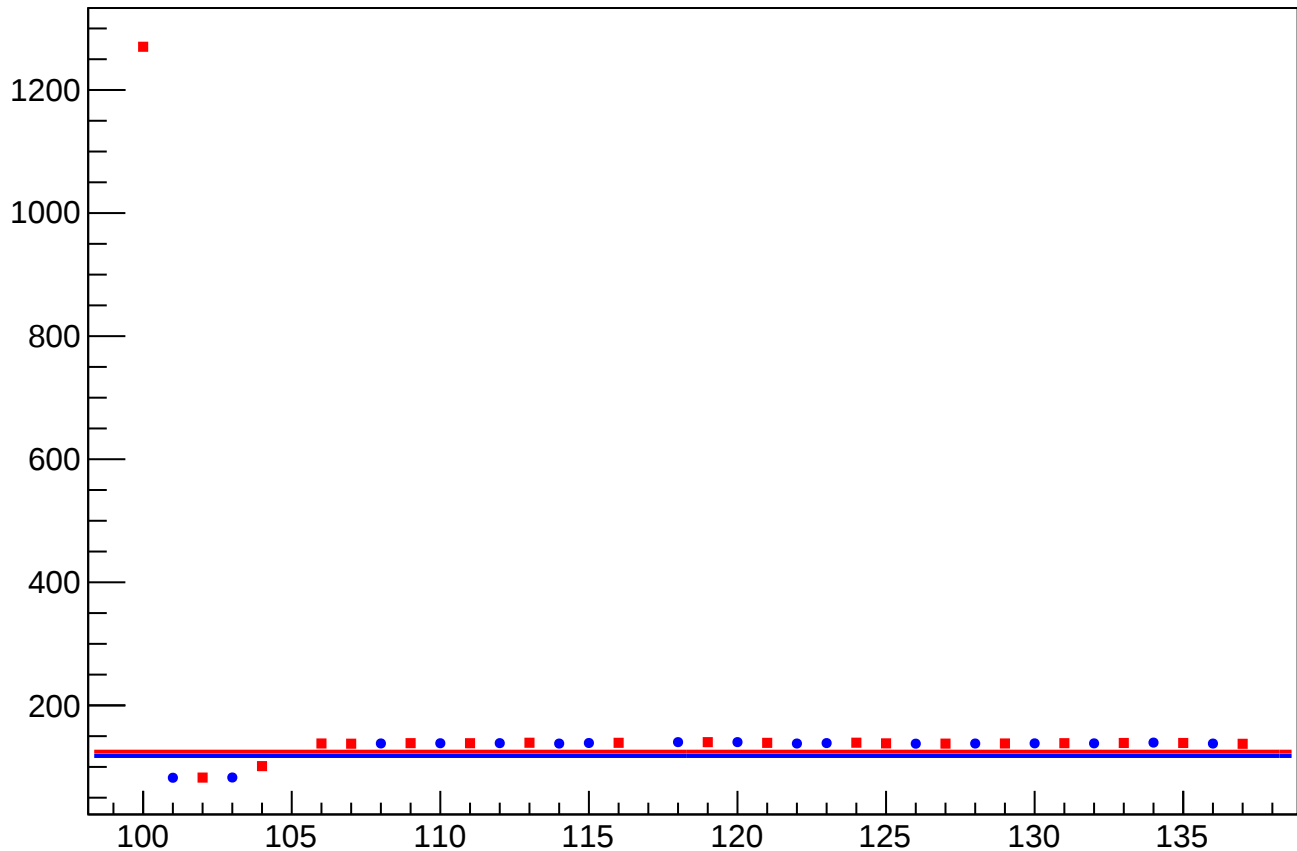
Right:  $13.449 \pm 33.401$   $\chi^2/\text{NDF}$ : 30.8/35

In:  $-27.840 \pm 46.777$   $\chi^2/\text{NDF}$ : 14.3/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $13.449 \pm 33.401$   $\chi^2/\text{NDF}$ : 30.8/35

# reg\_asym\_dsr\_rms vs Slug, Sign Corrected



Right In: 117.815 $\pm$ 0.033  $\chi^2/\text{NDF}$ : 666581.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 124.763 $\pm$ 0.034  $\chi^2/\text{NDF}$ : 569771.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

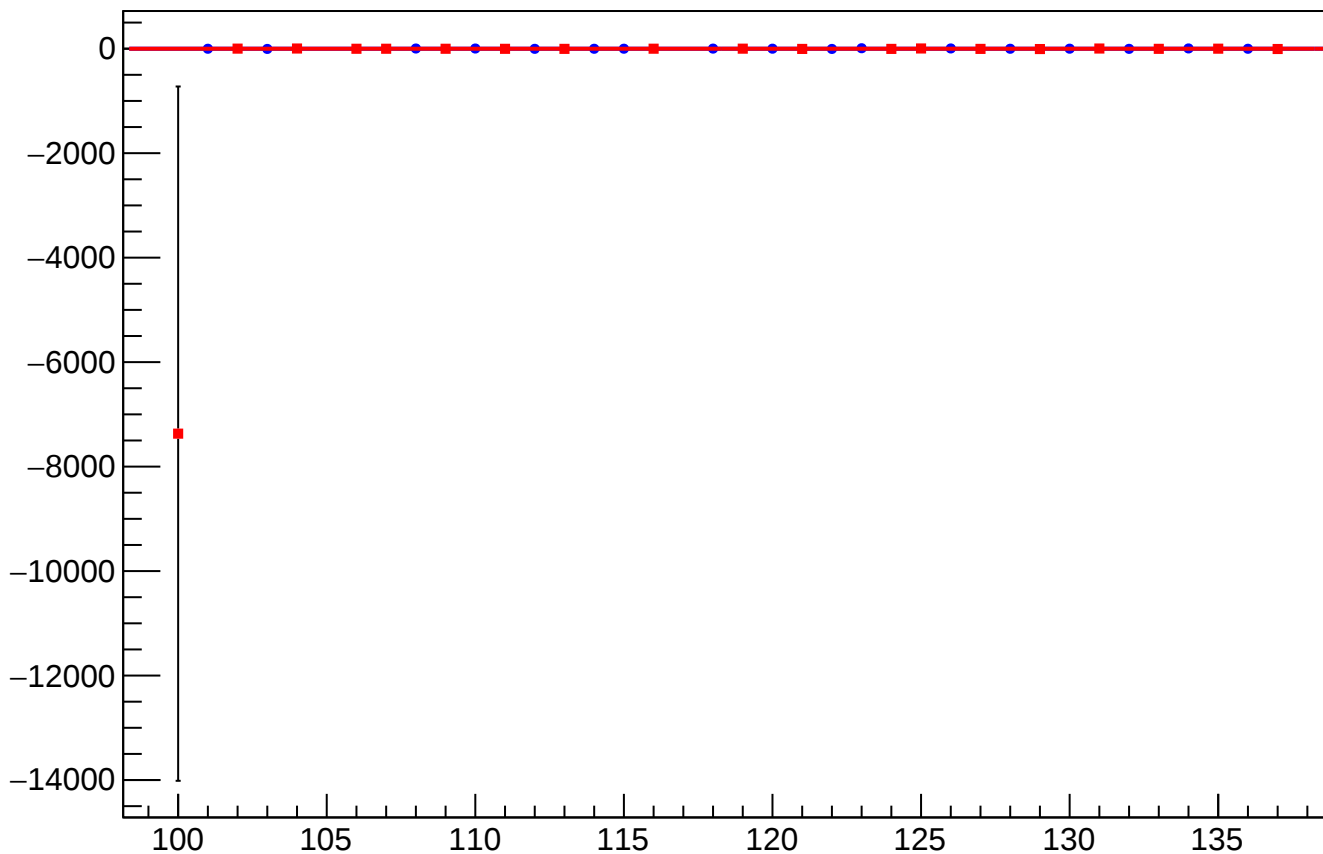
Right: 121.221 $\pm$ 0.024  $\chi^2/\text{NDF}$ : 1257984.7/35

In: 117.815 $\pm$ 0.033  $\chi^2/\text{NDF}$ : 666581.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 121.221 $\pm$ 0.024  $\chi^2/\text{NDF}$ : 1257984.7/35

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



Right In: -0.695+/-0.810  $\chi^2/\text{NDF}$ : 12.7/16

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

Right Out: -0.649+/-0.851  $\chi^2/\text{NDF}$ : 13.7/18

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

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

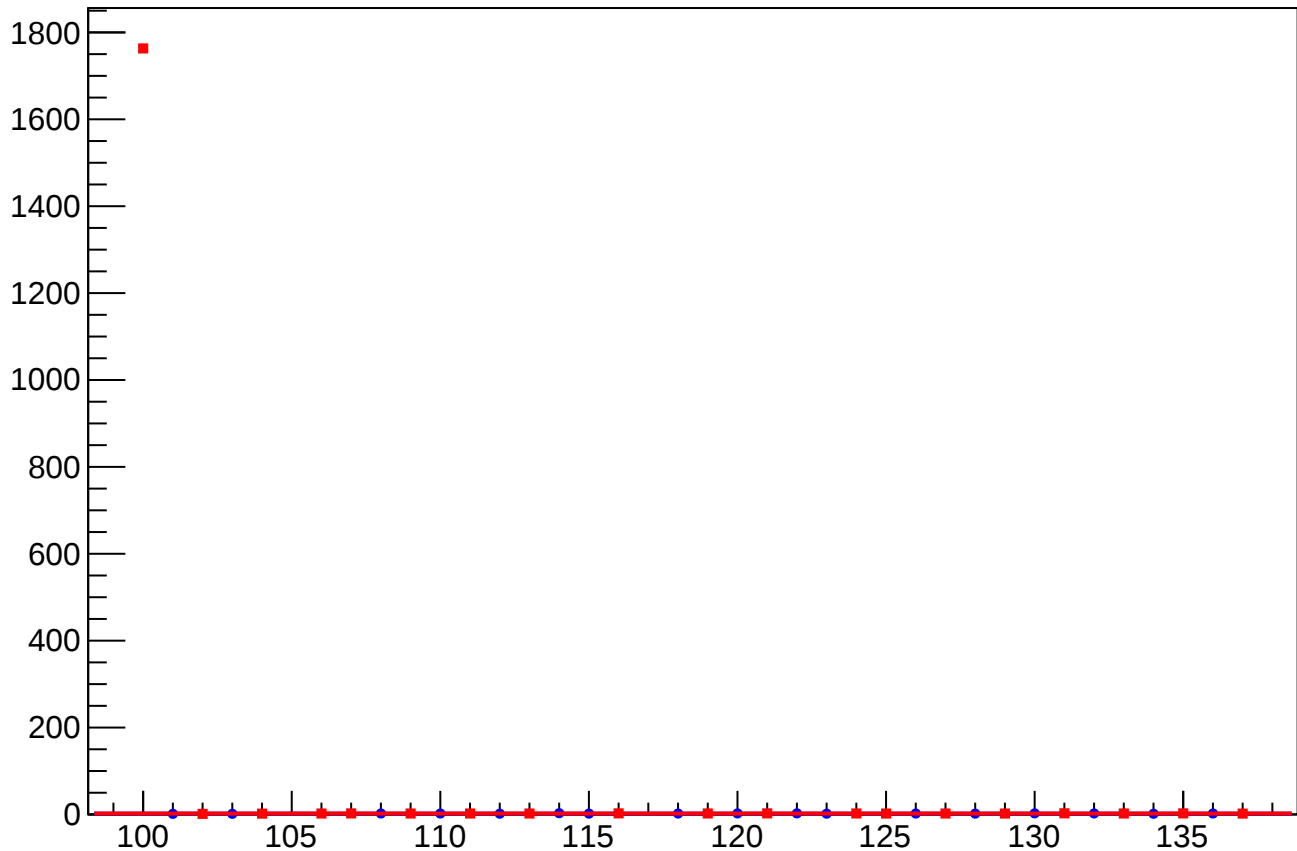
Right: -0.673+/-0.587  $\chi^2/\text{NDF}$ : 26.3/35

In: -0.695+/-0.810  $\chi^2/\text{NDF}$ : 12.7/16

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

All: -0.673+/-0.587  $\chi^2/\text{NDF}$ : 26.3/35

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



Right In: 1.869+/-0.001  $\chi^2/\text{NDF}$ : 493173.6/16

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

Right Out: 2.065+/-0.001  $\chi^2/\text{NDF}$ : 525497.0/18

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

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

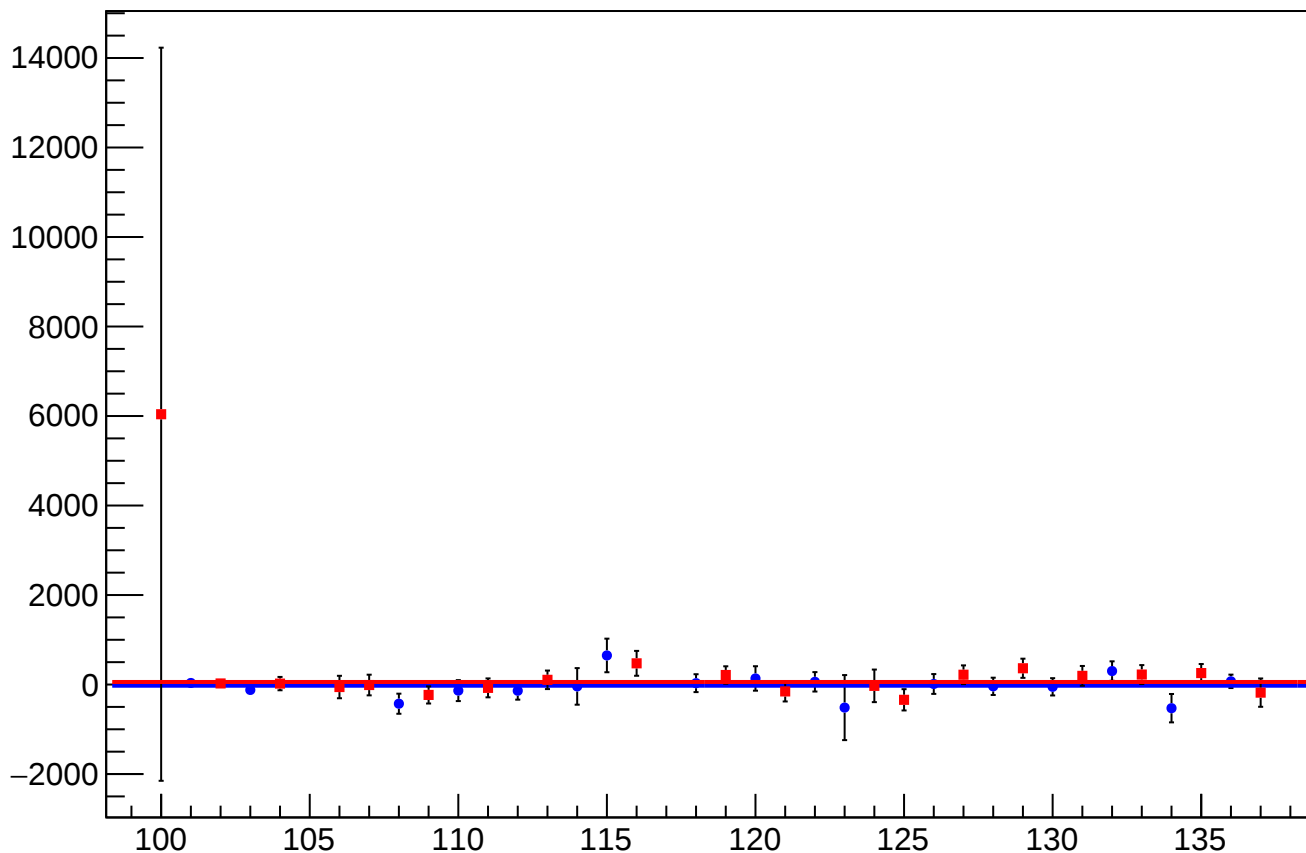
Right: 1.962+/-0.000  $\chi^2/\text{NDF}$ : 1074296.8/35

In: 1.869+/-0.001  $\chi^2/\text{NDF}$ : 493173.6/16

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

All: 1.962+/-0.000  $\chi^2/\text{NDF}$ : 1074296.8/35

# asym\_dsr\_mean vs Slug, Sign Corrected



Right In: -26.258+/-46.789  $\chi^2/\text{NDF}$ : 14.4/16

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

Right Out: 57.268+/-47.722  $\chi^2/\text{NDF}$ : 15.5/18

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

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

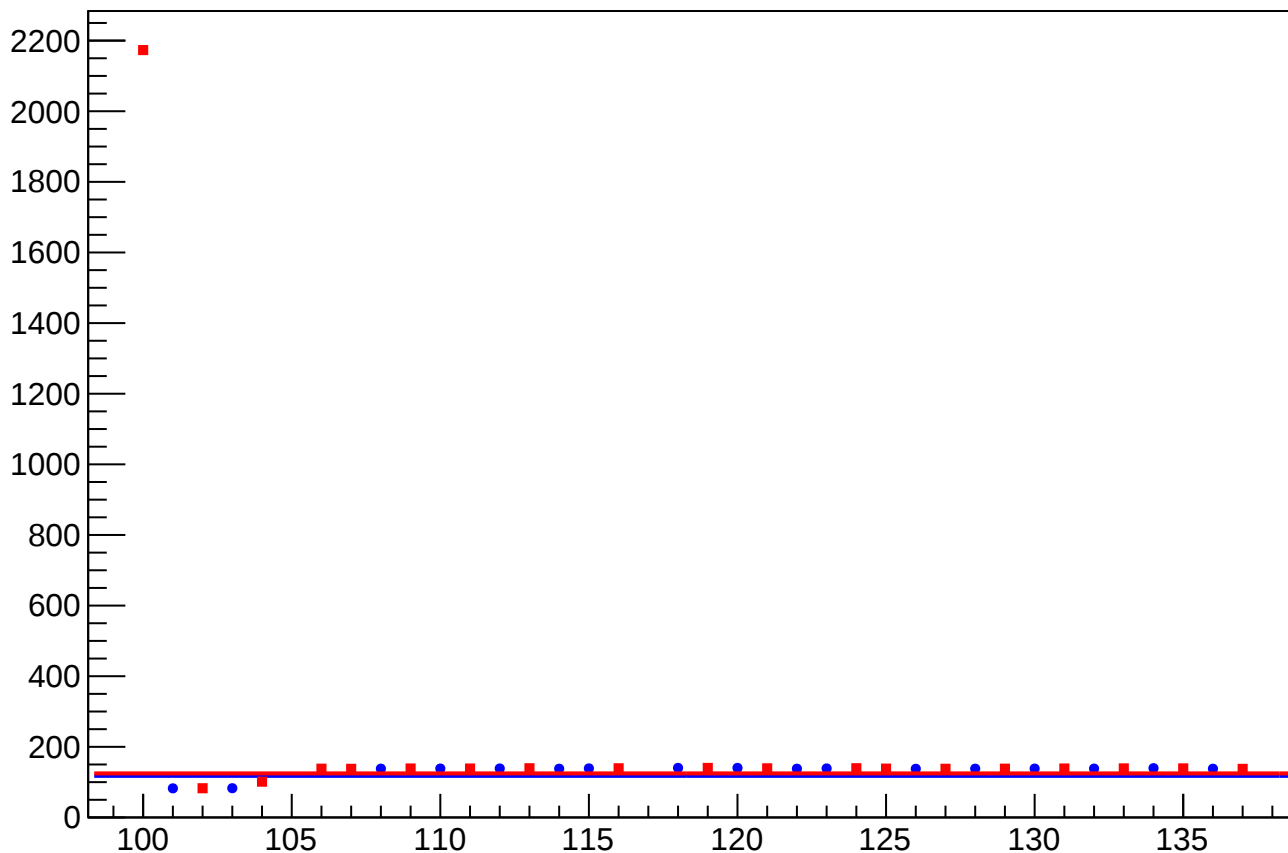
Right: 14.681+/-33.410  $\chi^2/\text{NDF}$ : 31.4/35

In: -26.258+/-46.789  $\chi^2/\text{NDF}$ : 14.4/16

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

All: 14.681+/-33.410  $\chi^2/\text{NDF}$ : 31.4/35

# asym\_dsr\_rms vs Slug, Sign Corrected



Right In: 117.847 $\pm$ 0.033  $\chi^2$ /NDF: 666622.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 124.752 $\pm$ 0.034  $\chi^2$ /NDF: 580350.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

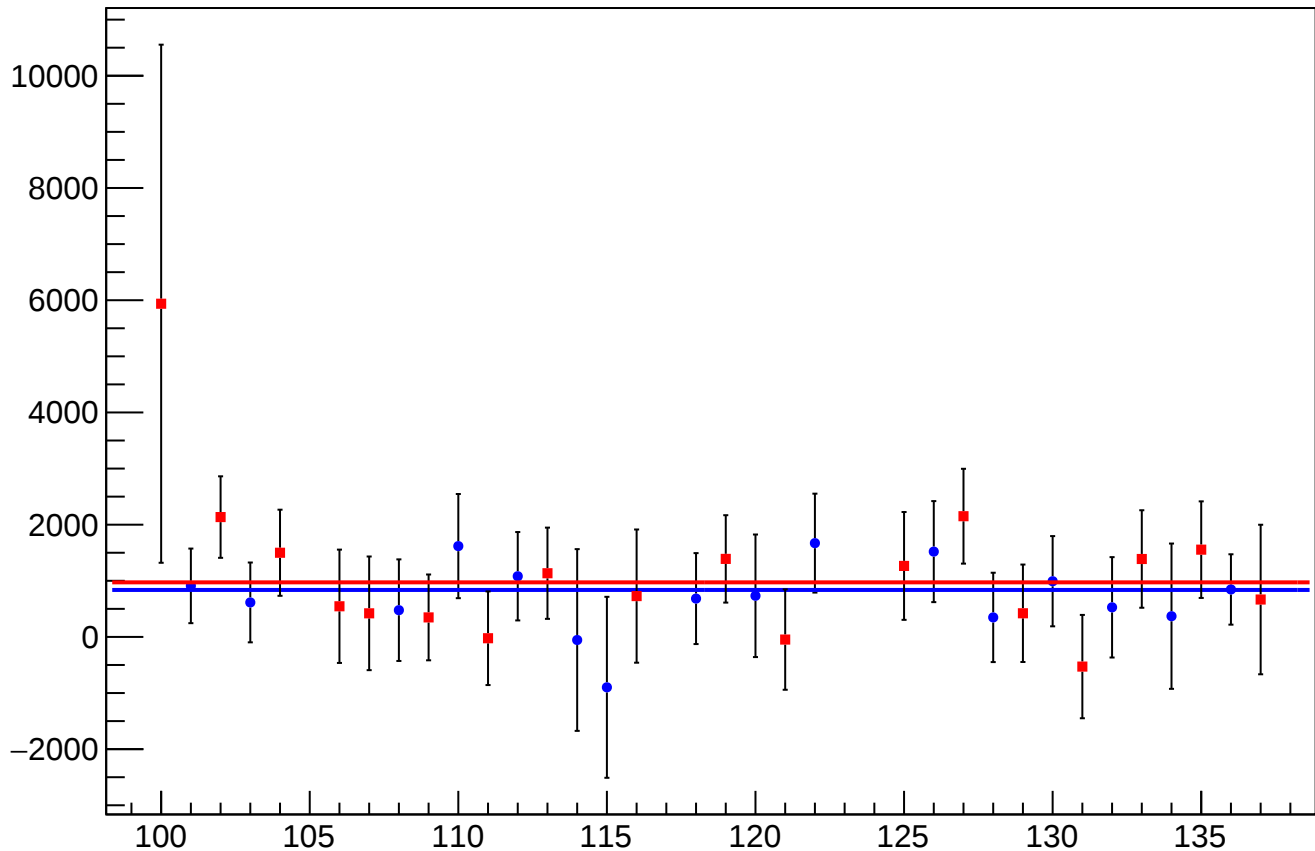
Right: 121.231 $\pm$ 0.024  $\chi^2$ /NDF: 1268326.7/35

In: 117.847 $\pm$ 0.033  $\chi^2$ /NDF:666622.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 121.231 $\pm$ 0.024  $\chi^2$ /NDF: 1268326.7/35

# reg\_asym\_left\_avg\_mean vs Slug, Sign Corrected



Right In: 837.048+/-216.181  $\chi^2/\text{NDF}$ : 4.7/15

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

Right Out: 972.425+/-212.746  $\chi^2/\text{NDF}$ : 14.3/17

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

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

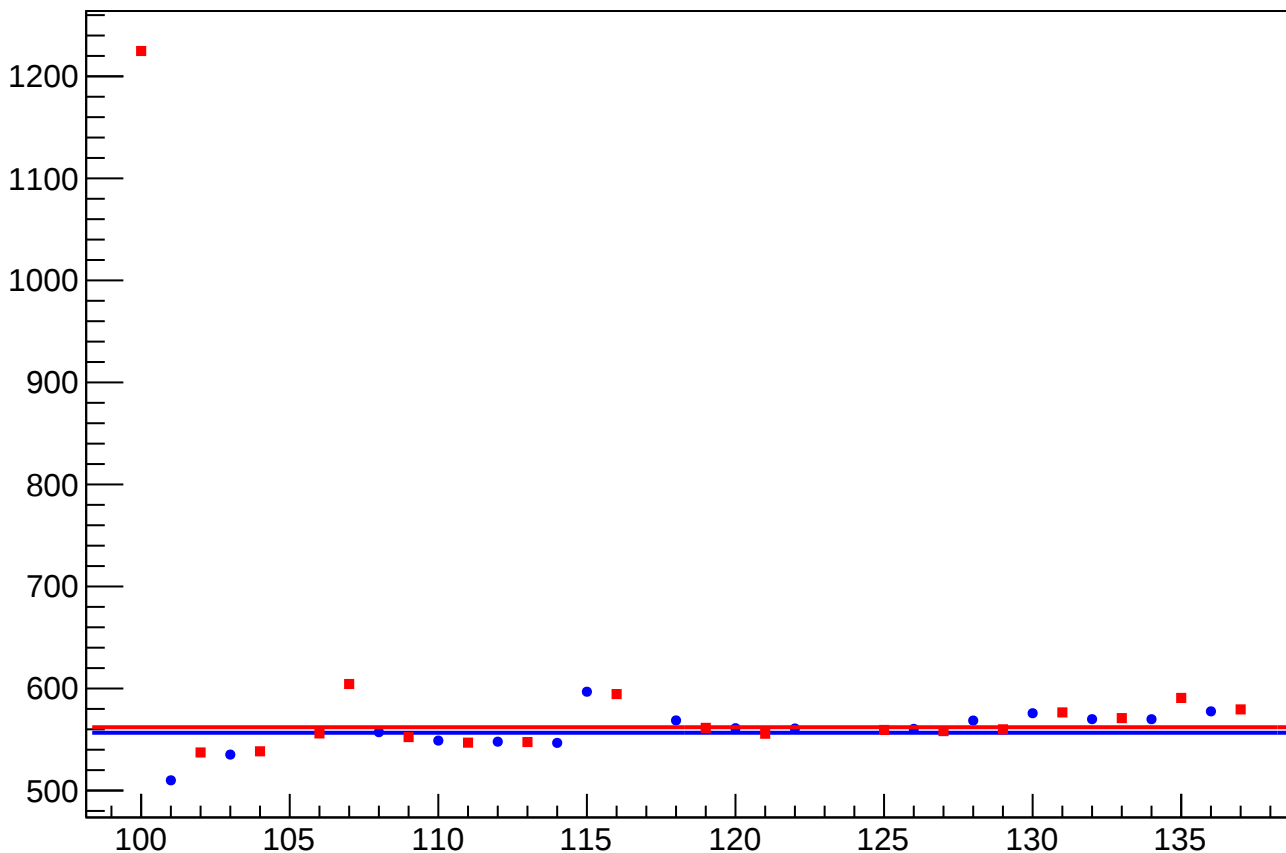
Right: 905.821+/-151.634  $\chi^2/\text{NDF}$ : 19.2/33

In: 837.048+/-216.181  $\chi^2/\text{NDF}$ : 4.7/15

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

All: 905.821+/-151.634  $\chi^2/\text{NDF}$ : 19.2/33

# reg\_asym\_left\_avg\_rms vs Slug, Sign Corrected



Right In: 556.637+/-0.153  $\chi^2/\text{NDF}$ : 18391.7/15

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

Right Out: 562.048+/-0.150  $\chi^2/\text{NDF}$ : 55575.3/17

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

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

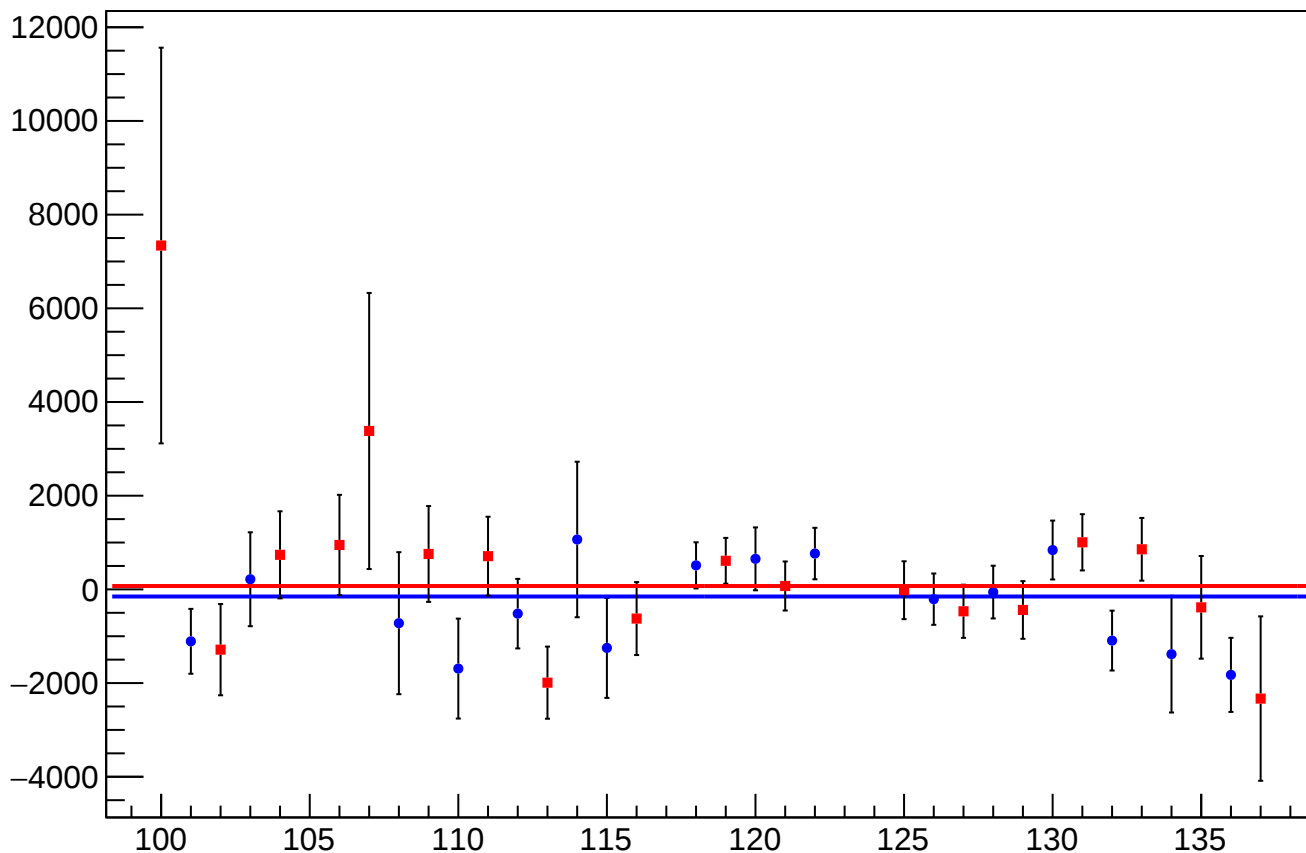
Right: 559.386+/-0.107  $\chi^2/\text{NDF}$ : 74603.5/33

In: 556.637+/-0.153  $\chi^2/\text{NDF}$ : 18391.7/15

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

All: 559.386+/-0.107  $\chi^2/\text{NDF}$ : 74603.5/33

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



Right In: -151.876+/-180.078  $\chi^2/\text{NDF}$ : 22.3/15

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

Right Out: 71.760+/-178.665  $\chi^2/\text{NDF}$ : 25.0/17

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

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

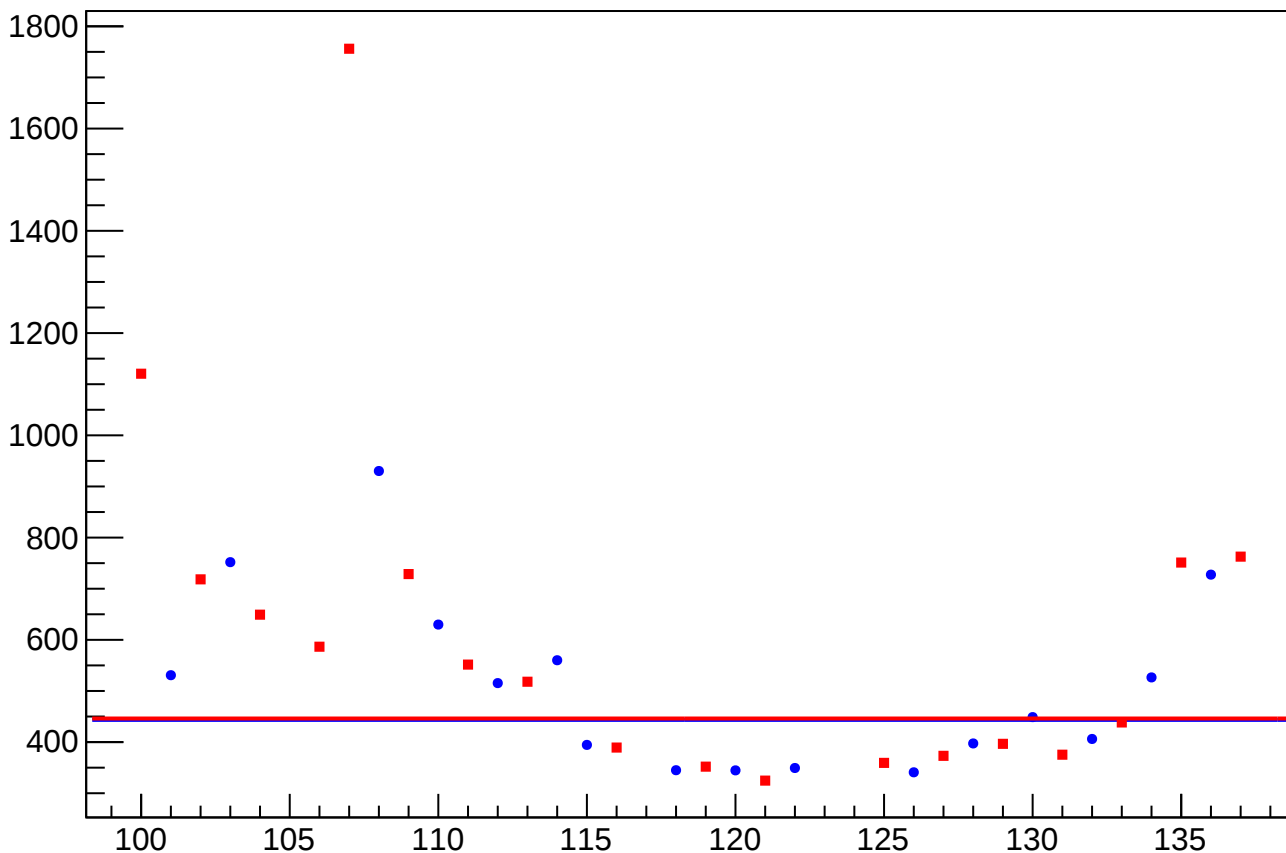
Right: -39.177+/-126.832  $\chi^2/\text{NDF}$ : 48.1/33

In: -151.876+/-180.078  $\chi^2/\text{NDF}$ : 22.3/15

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

All: -39.177+/-126.832  $\chi^2/\text{NDF}$ : 48.1/33

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



Right In: 443.451+/-0.127  $\chi^2/\text{NDF}$ : 1060940.9/15

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

Right Out: 446.147+/-0.126  $\chi^2/\text{NDF}$ : 1459986.4/17

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

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

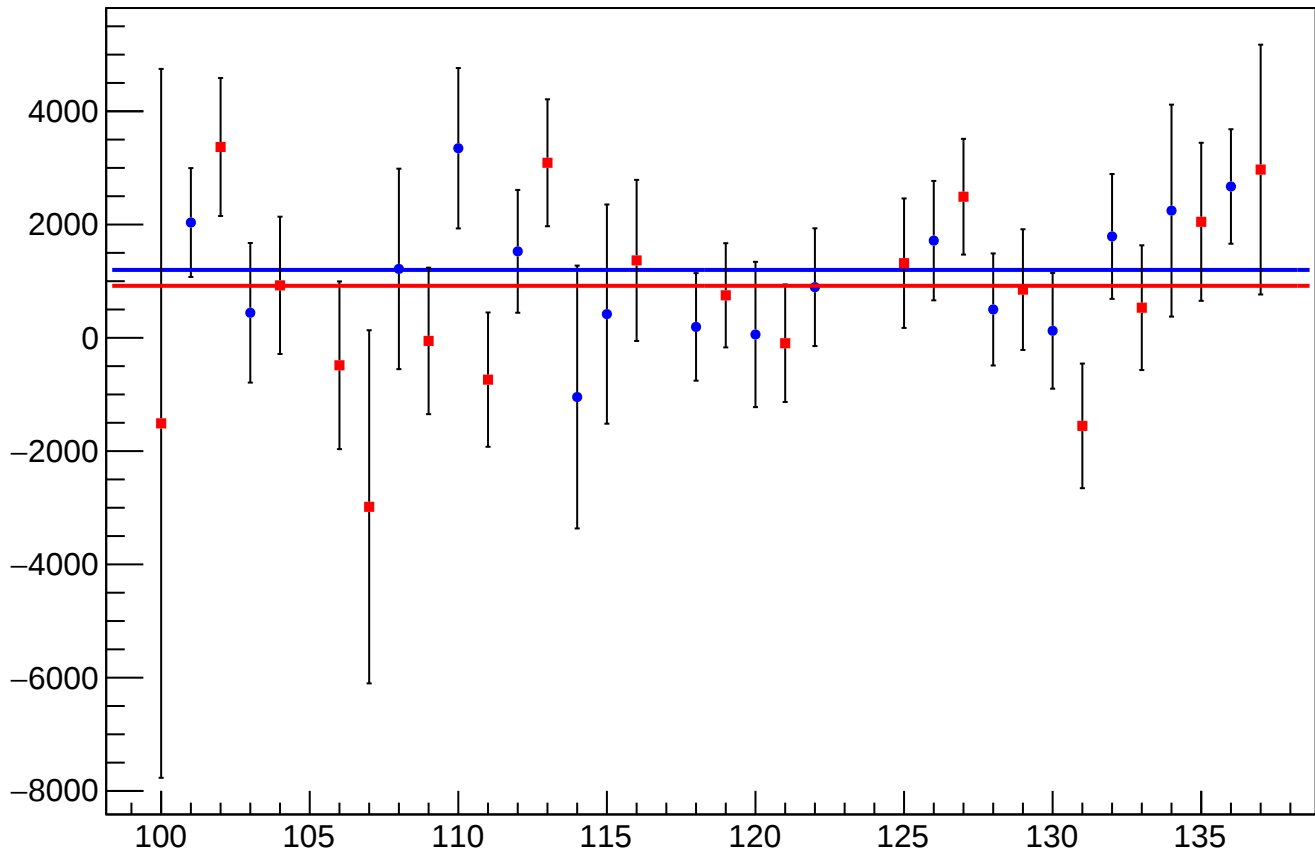
Right: 444.809+/-0.090  $\chi^2/\text{NDF}$ : 2521153.2/33

In: 443.451+/-0.127  $\chi^2/\text{NDF}$ : 1060940.9/15

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

All: 444.809+/-0.090  $\chi^2/\text{NDF}$ : 2521153.2/33

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



Right In: 1198.972 $\pm$ 295.243  $\chi^2$ /NDF: 11.2/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 918.412 $\pm$ 293.294  $\chi^2$ /NDF: 23.2/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

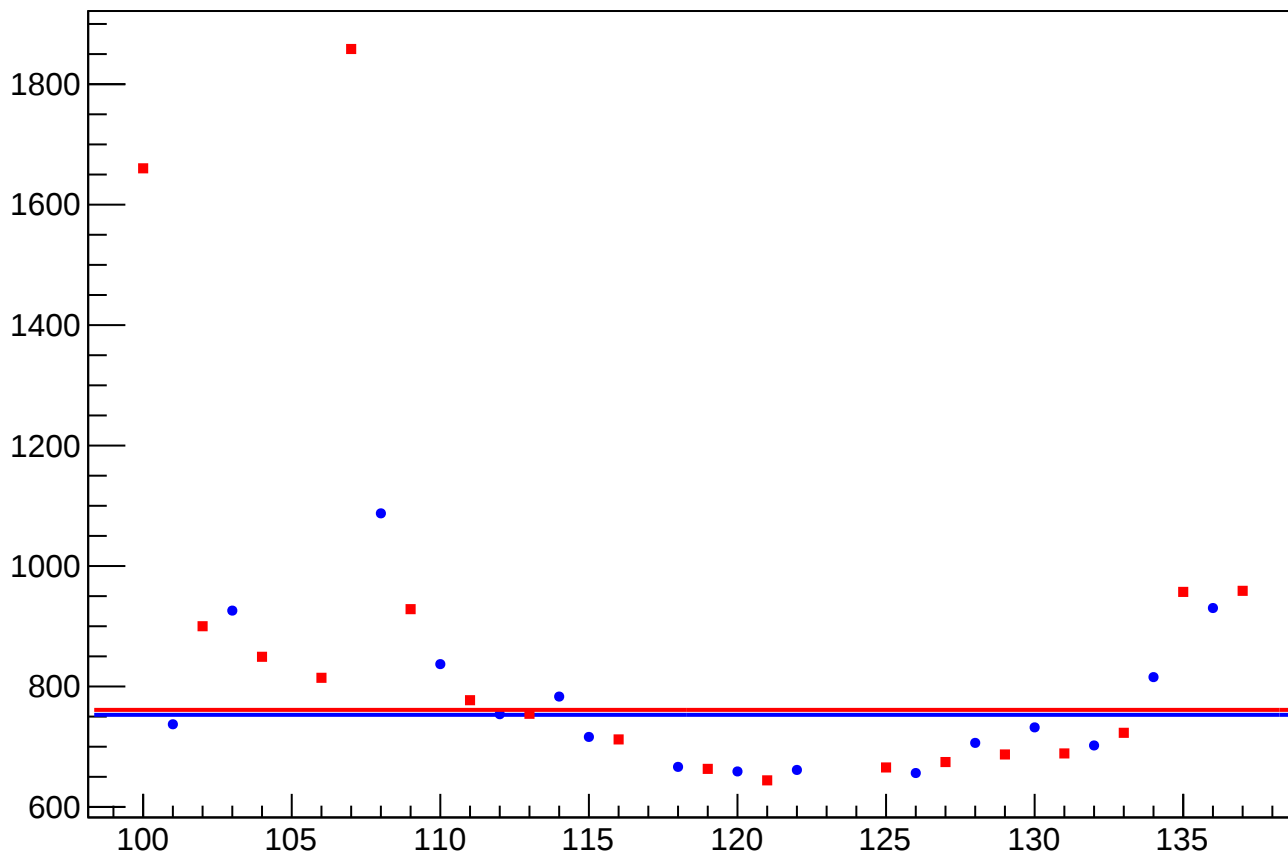
Right: 1057.763 $\pm$ 208.076  $\chi^2$ /NDF: 34.9/33

In: 1198.972 $\pm$ 295.243  $\chi^2$ /NDF:11.2/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1057.763 $\pm$ 208.076  $\chi^2$ /NDF: 34.9/33

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



Right In: 752.937+/-0.209  $\chi^2/\text{NDF}$ : 252526.4/15

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

Right Out: 761.160+/-0.207  $\chi^2/\text{NDF}$ : 517136.7/17

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

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

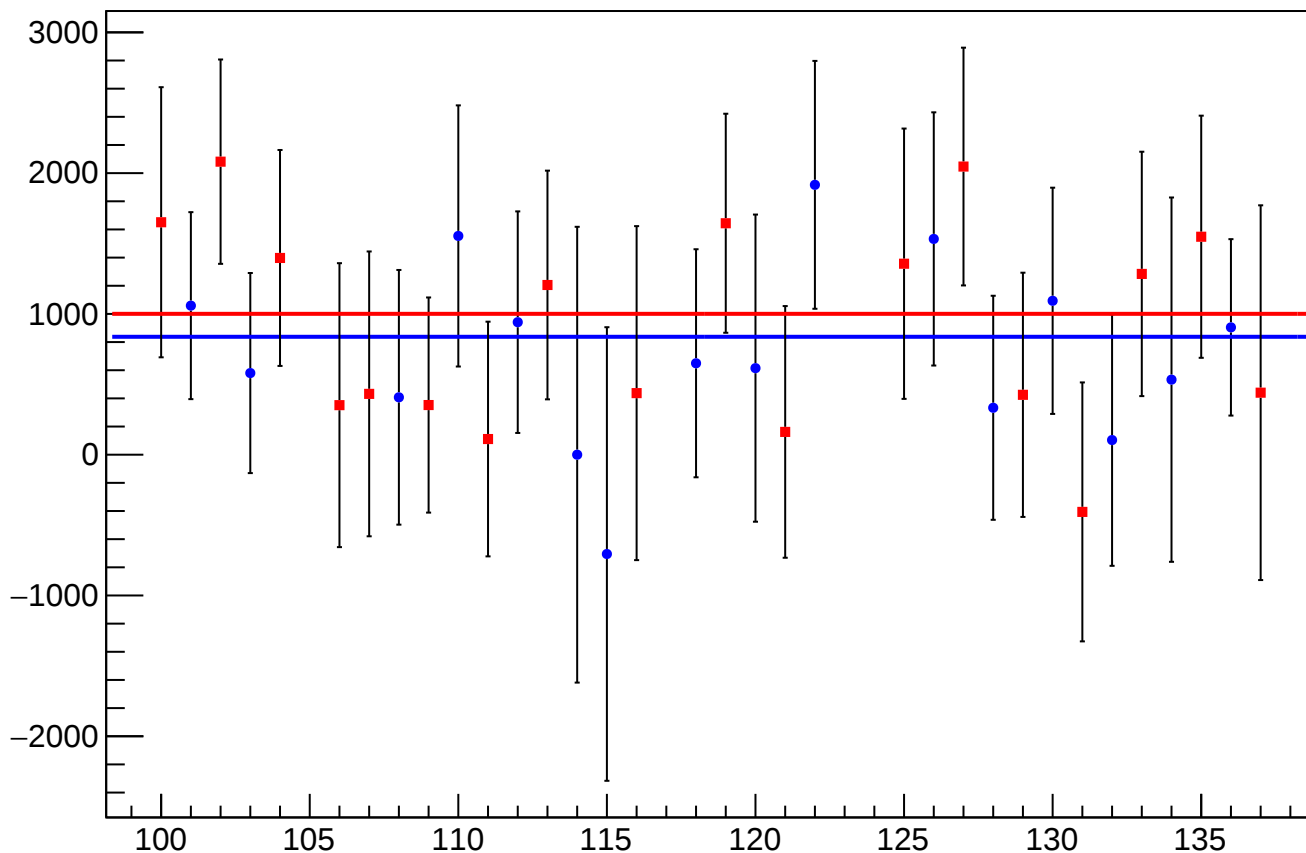
Right: 757.076+/-0.147  $\chi^2/\text{NDF}$ : 770443.9/33

In: 752.937+/-0.209  $\chi^2/\text{NDF}$ : 252526.4/15

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

All: 757.076+/-0.147  $\chi^2/\text{NDF}$ : 770443.9/33

# reg\_asym\_left\_dd\_mean vs Slug, Sign Corrected



Right In: 837.557 $\pm$ 216.015  $\chi^2$ /NDF: 5.7/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1000.617 $\pm$ 207.748  $\chi^2$ /NDF: 12.5/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

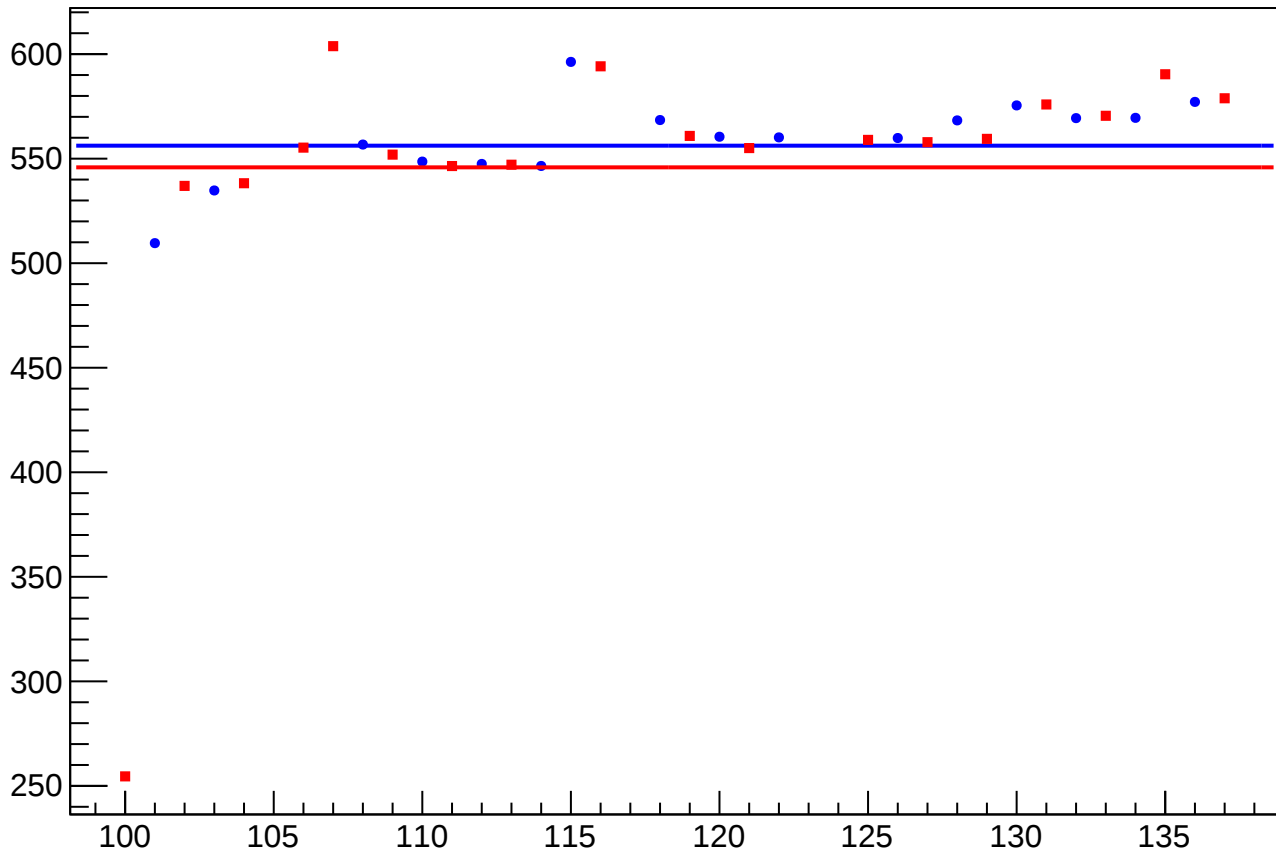
Right: 922.267 $\pm$ 149.737  $\chi^2$ /NDF: 18.5/33

In: 837.557 $\pm$ 216.015  $\chi^2$ /NDF:5.7/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 922.267 $\pm$ 149.737  $\chi^2$ /NDF: 18.5/33

# reg\_asym\_left\_dd\_rms vs Slug, Sign Corrected



Right In: 556.210+/-0.153  $\chi^2/\text{NDF}$ : 18417.4/15

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

Right Out: 545.844+/-0.147  $\chi^2/\text{NDF}$ : 207640.3/17

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

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

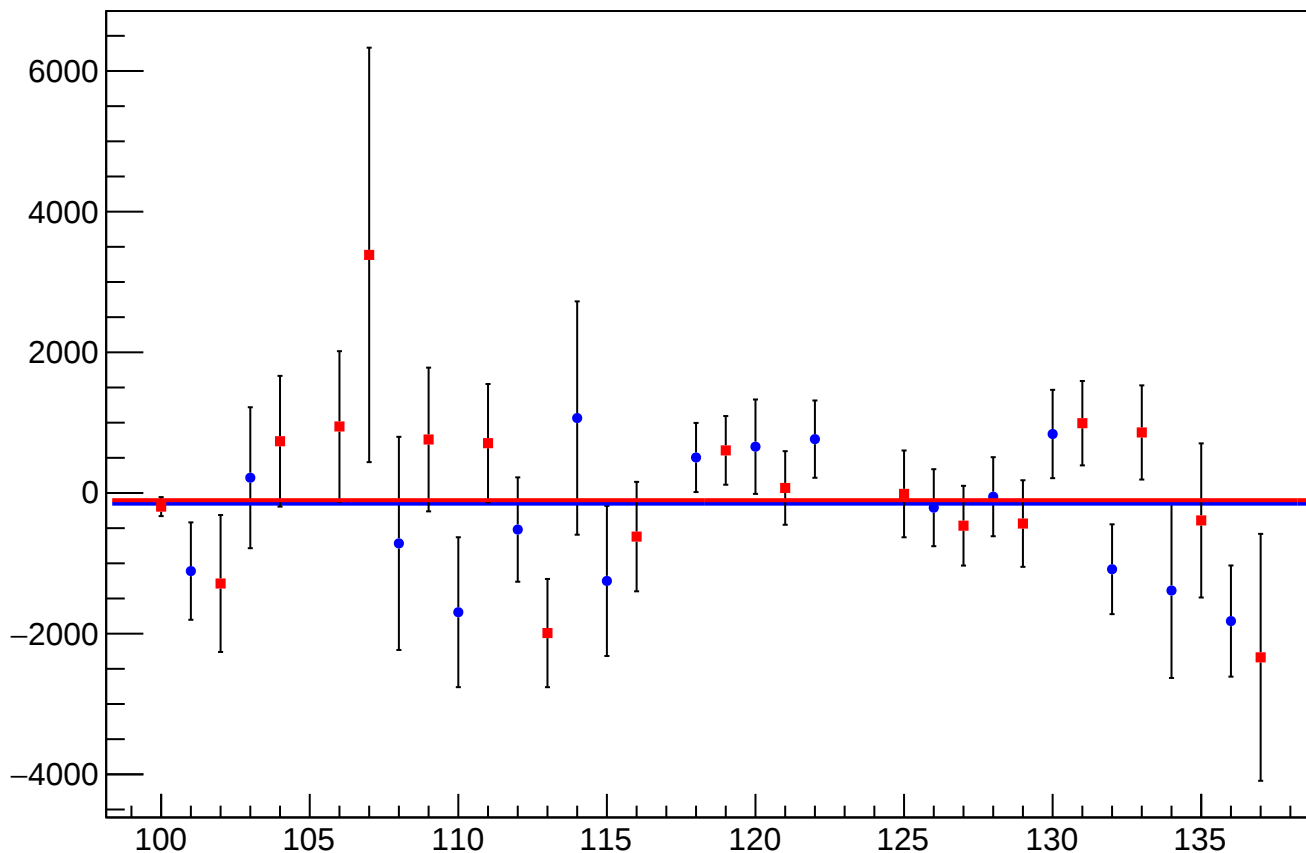
Right: 550.825+/-0.106  $\chi^2/\text{NDF}$ : 228450.1/33

In: 556.210+/-0.153  $\chi^2/\text{NDF}$ : 18417.4/15

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

All: 550.825+/-0.106  $\chi^2/\text{NDF}$ : 228450.1/33

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



Right In: -151.459+/-179.991  $\chi^2/\text{NDF}$ : 22.3/15

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

Right Out: -102.079+/-107.707  $\chi^2/\text{NDF}$ : 23.2/17

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

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

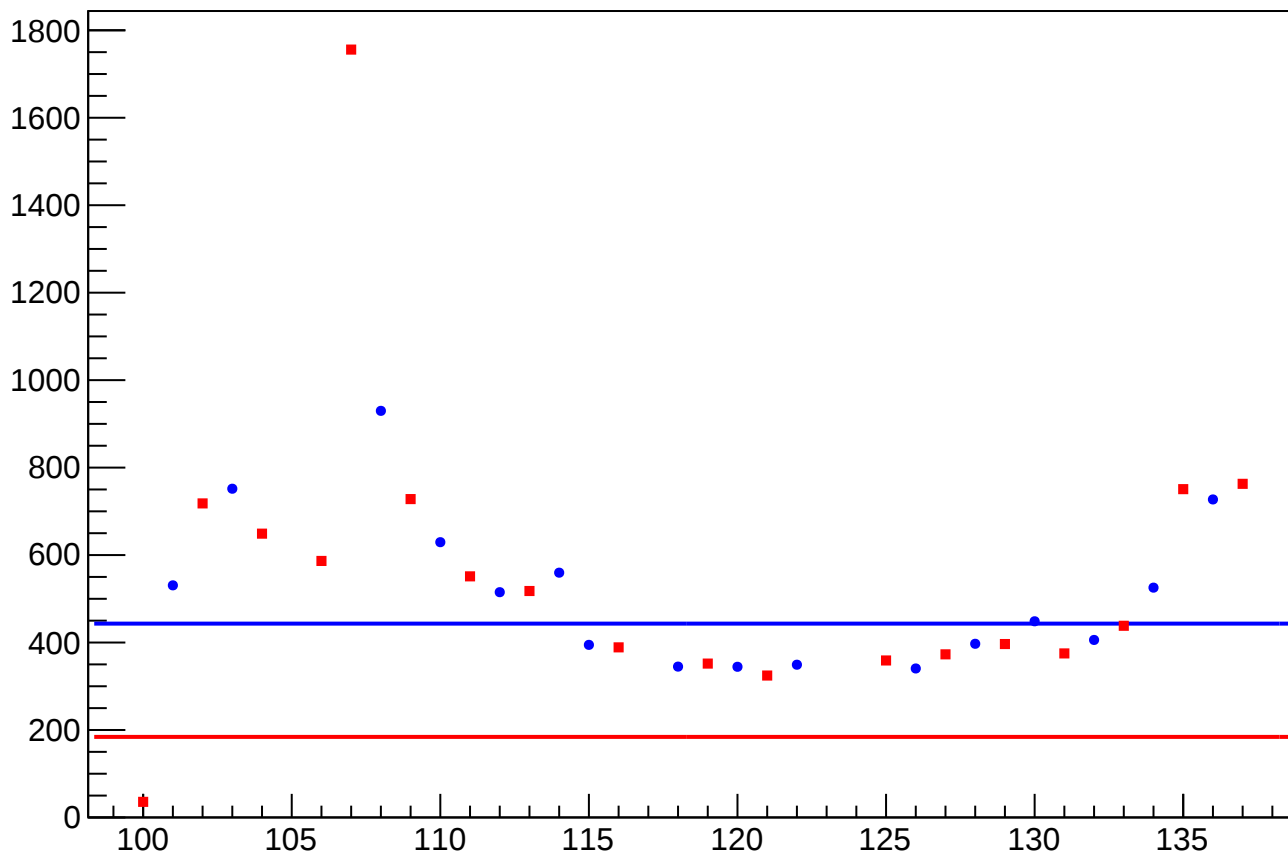
Right: -115.099+/-92.423  $\chi^2/\text{NDF}$ : 45.6/33

In: -151.459+/-179.991  $\chi^2/\text{NDF}$ : 22.3/15

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

All: -115.099+/-92.423  $\chi^2/\text{NDF}$ : 45.6/33

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



Right In: 443.240+/-0.127  $\chi^2/\text{NDF}$ : 1060784.8/15

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

Right Out: 184.215+/-0.076  $\chi^2/\text{NDF}$ : 8079776.8/17

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

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

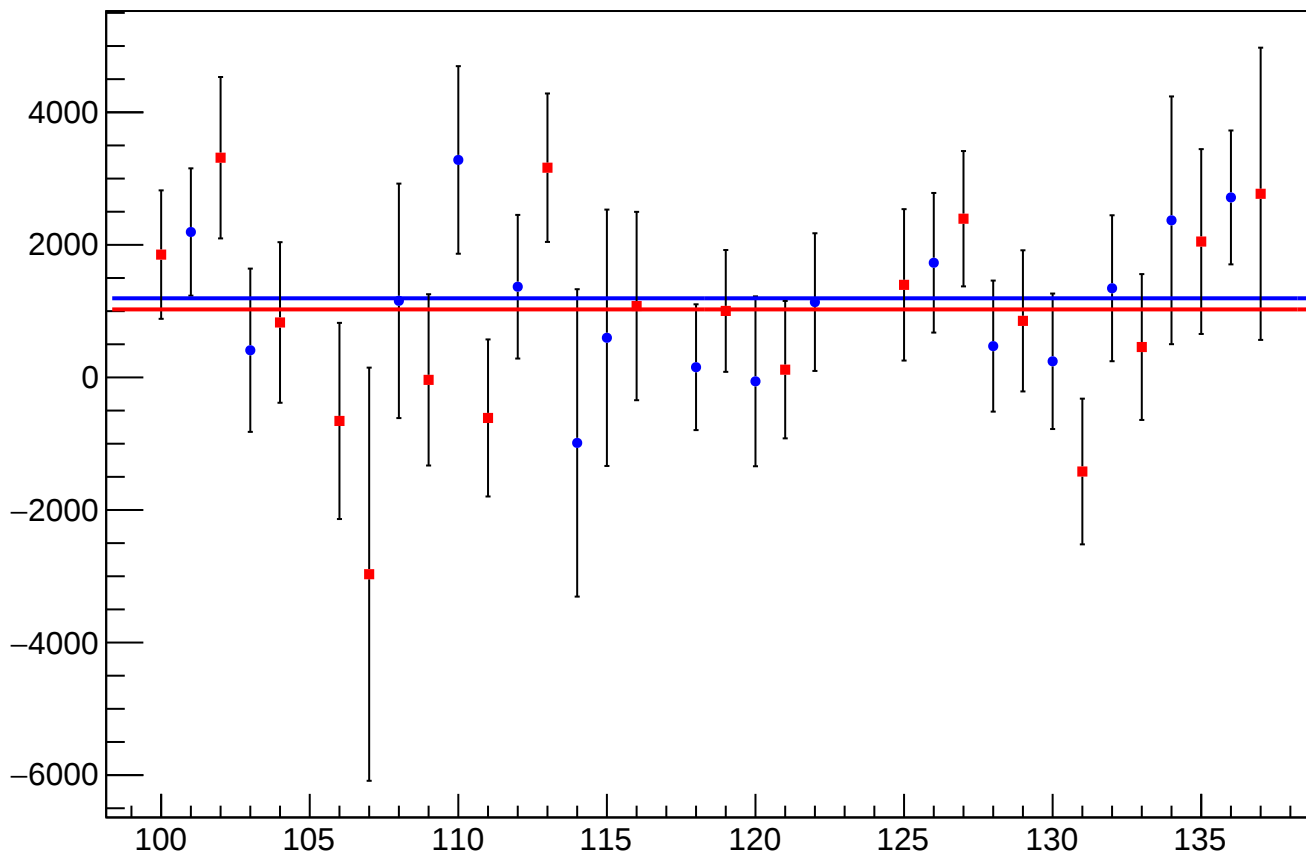
Right: 252.512+/-0.065  $\chi^2/\text{NDF}$ : 12190461.3/33

In: 443.240+/-0.127  $\chi^2/\text{NDF}$ : 1060784.8/15

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

All: 252.512+/-0.065  $\chi^2/\text{NDF}$ : 12190461.3/33

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



Right In: 1193.849 $\pm$ 295.046  $\chi^2$ /NDF: 11.2/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1026.130 $\pm$ 280.822  $\chi^2$ /NDF: 22.5/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

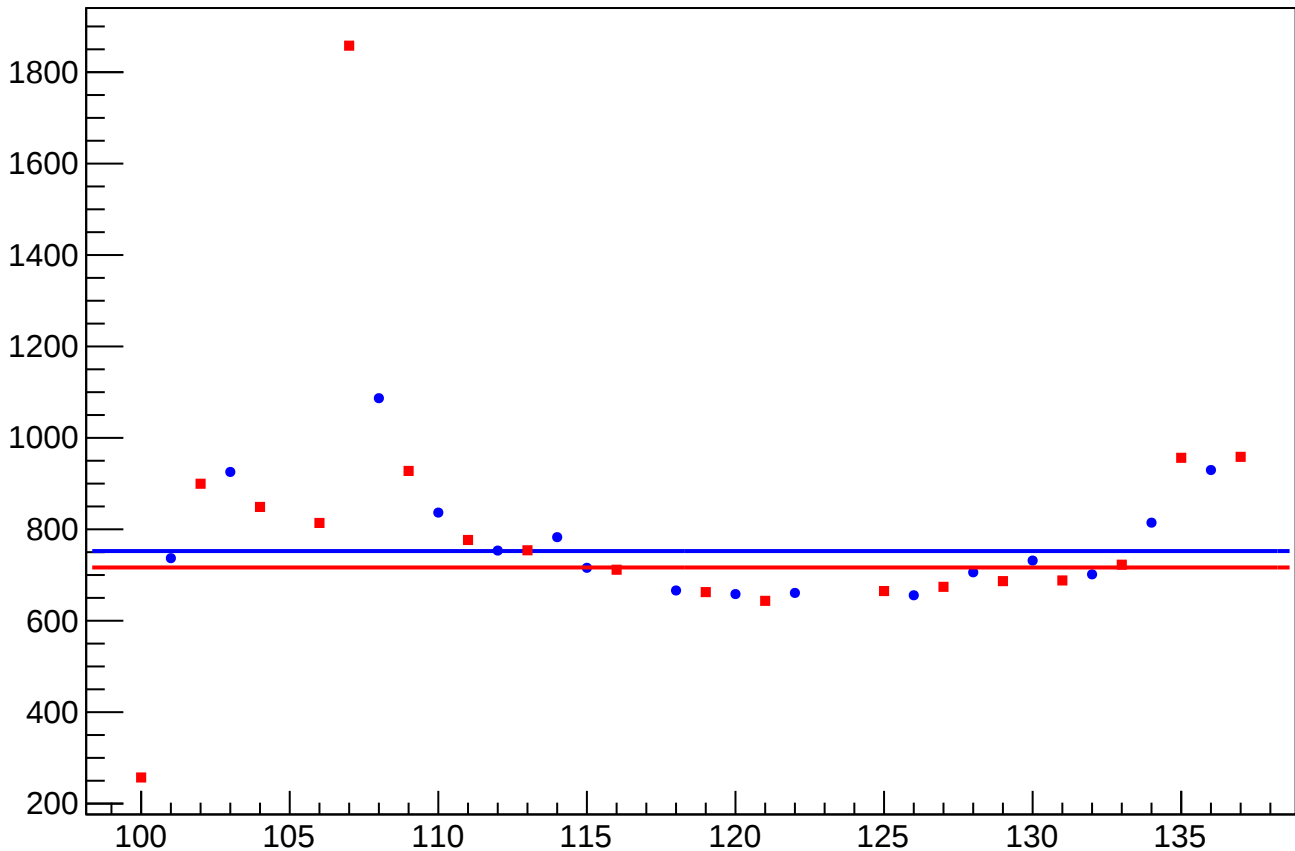
Right: 1105.849 $\pm$ 203.414  $\chi^2$ /NDF: 33.9/33

In: 1193.849 $\pm$ 295.046  $\chi^2$ /NDF:11.2/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1105.849 $\pm$ 203.414  $\chi^2$ /NDF: 33.9/33

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



Right In: 752.429+/-0.209  $\chi^2/\text{NDF}$ : 252705.1/15

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

Right Out: 716.522+/-0.199  $\chi^2/\text{NDF}$ : 966934.7/17

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

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

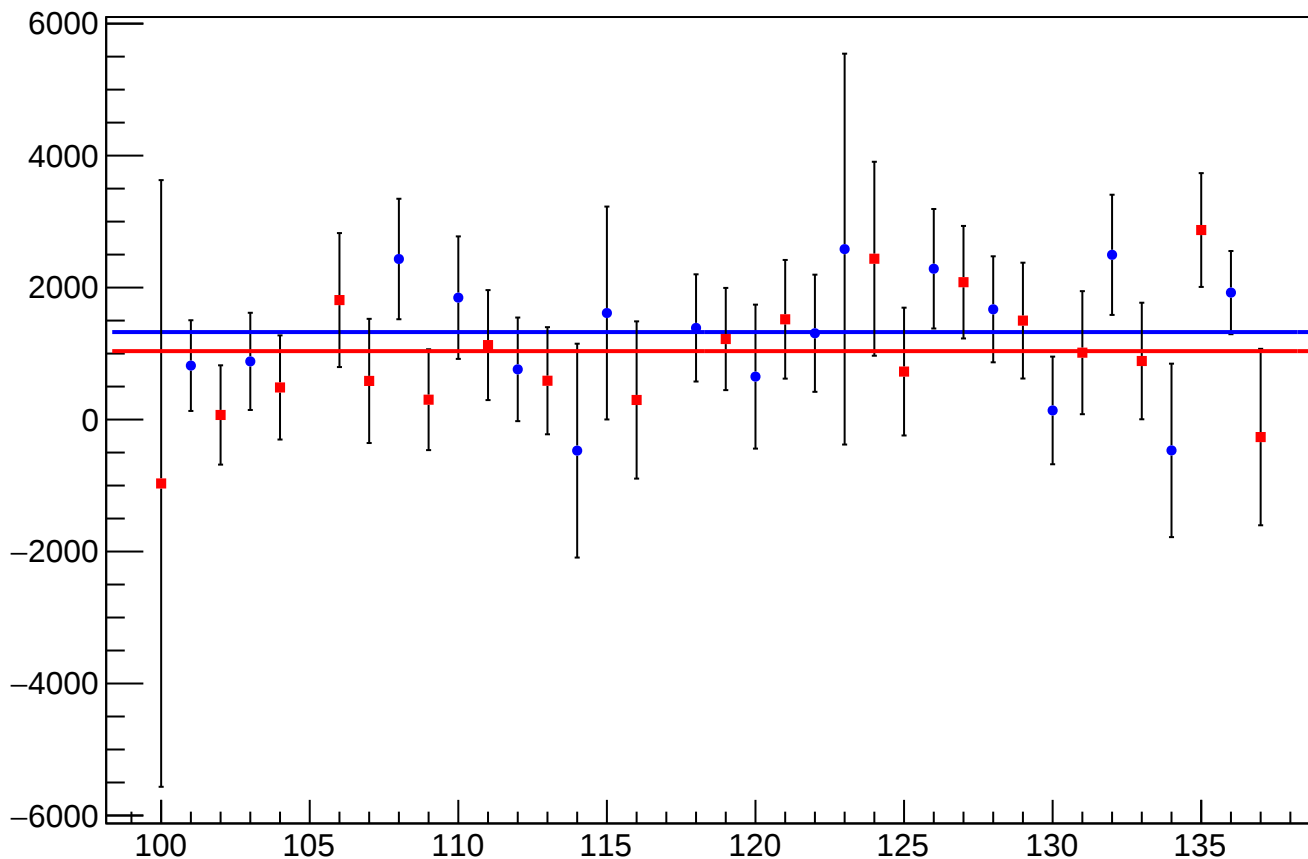
Right: 733.589+/-0.144  $\chi^2/\text{NDF}$ : 1235181.4/33

In: 752.429+/-0.209  $\chi^2/\text{NDF}$ : 252705.1/15

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

All: 733.589+/-0.144  $\chi^2/\text{NDF}$ : 1235181.4/33

# reg\_asym\_right\_avg\_mean vs Slug, Sign Corrected



Right In: 1325.776 $\pm$ 218.106  $\chi^2$ /NDF: 12.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1037.028 $\pm$ 211.583  $\chi^2$ /NDF: 13.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

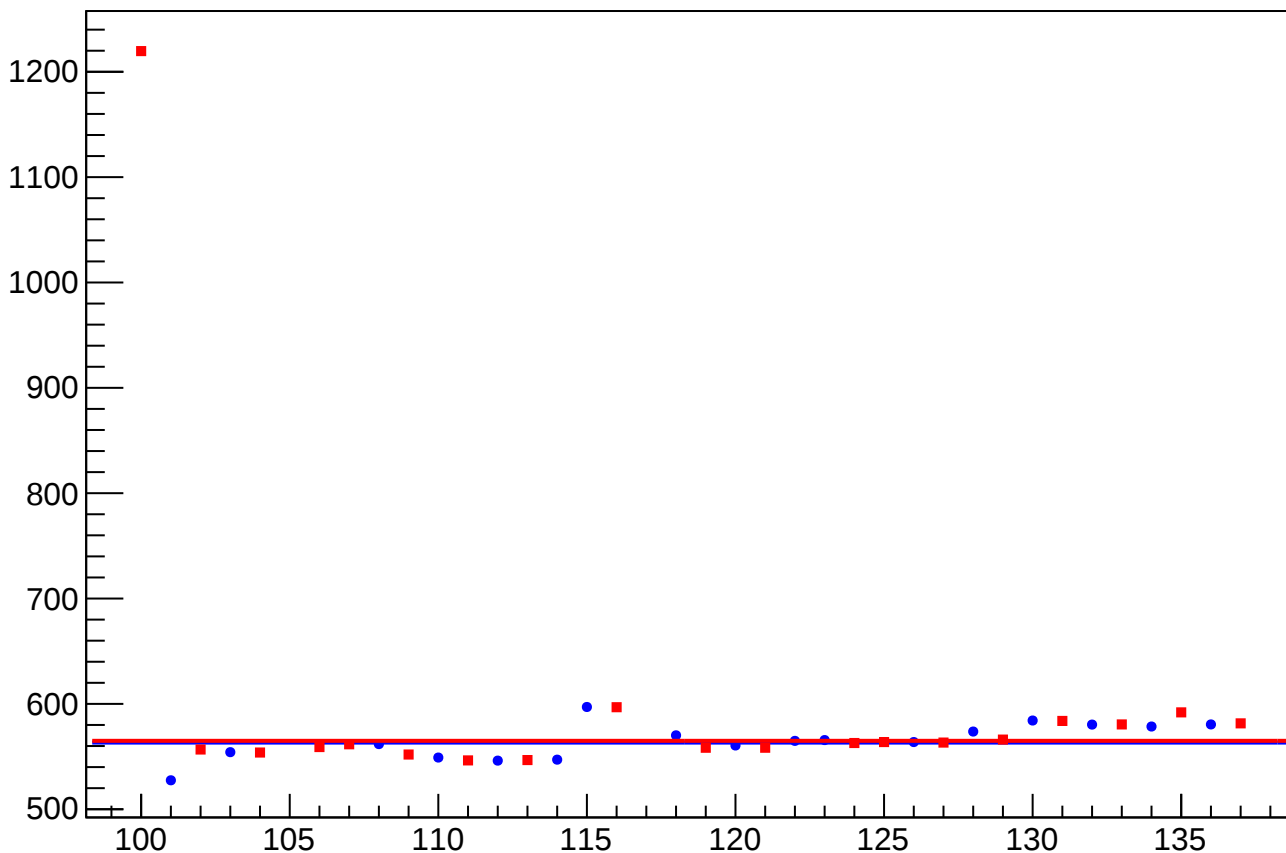
Right: 1177.020 $\pm$ 151.865  $\chi^2$ /NDF: 27.2/35

In: 1325.776 $\pm$ 218.106  $\chi^2$ /NDF:12.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1177.020 $\pm$ 151.865  $\chi^2$ /NDF: 27.2/35

# reg\_asym\_right\_avg\_rms vs Slug, Sign Corrected



Right In: 563.266+/-0.154  $\chi^2/\text{NDF}$ : 12520.3/16

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

Right Out: 564.944+/-0.150  $\chi^2/\text{NDF}$ : 49295.9/18

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

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

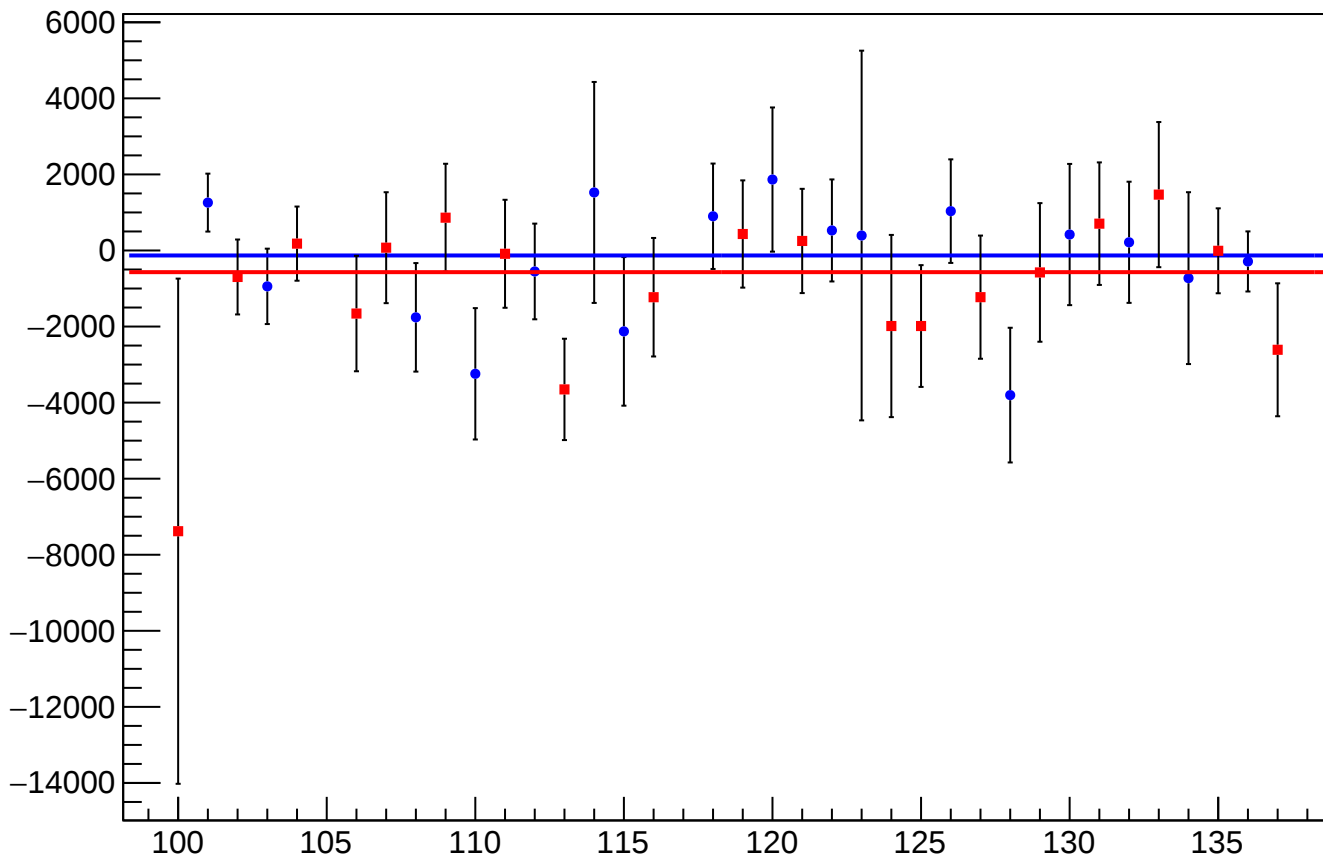
Right: 564.130+/-0.107  $\chi^2/\text{NDF}$ : 61877.2/35

In: 563.266+/-0.154  $\chi^2/\text{NDF}$ : 12520.3/16

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

All: 564.130+/-0.107  $\chi^2/\text{NDF}$ : 61877.2/35

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



Right In: -131.097+/-327.588  $\chi^2/\text{NDF}$ : 17.2/16

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

Right Out: -569.844+/-332.404  $\chi^2/\text{NDF}$ : 14.6/18

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

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

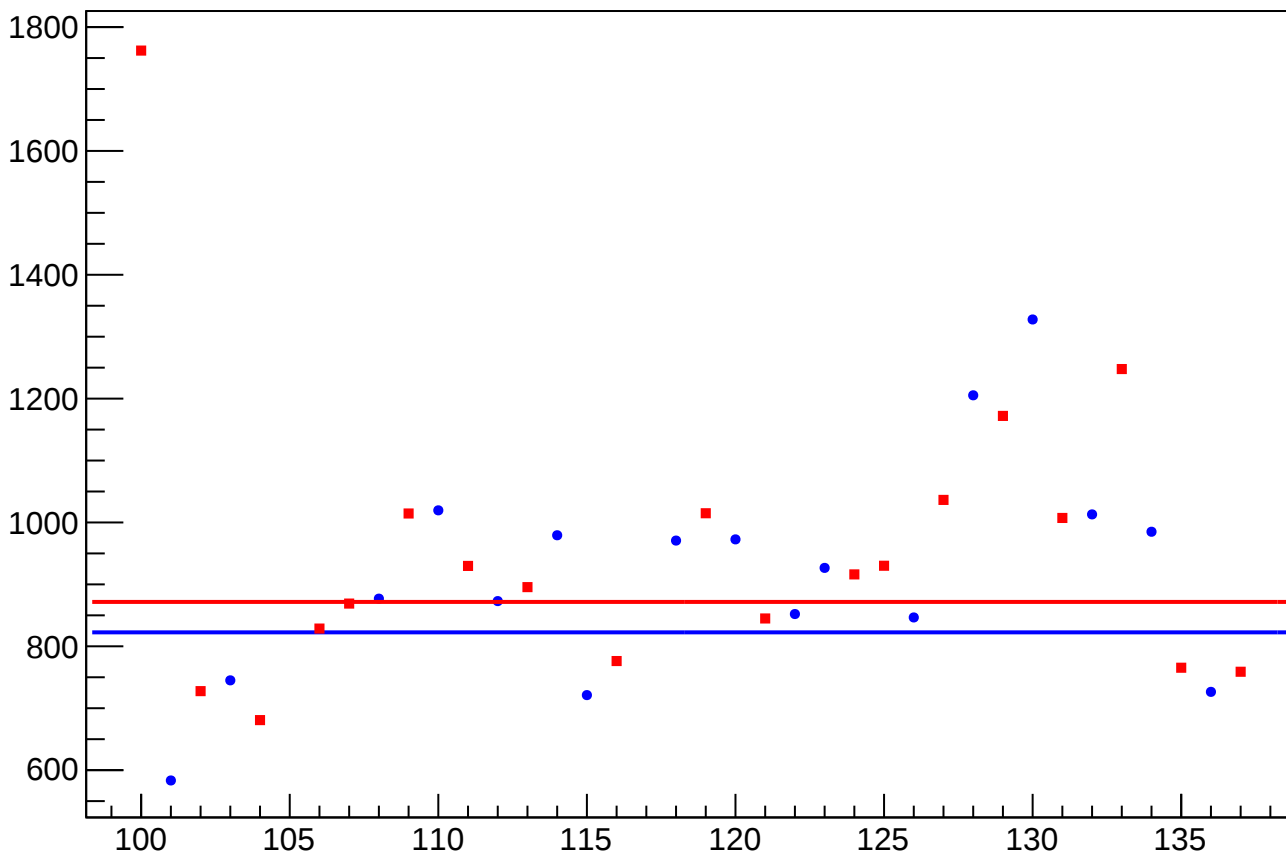
Right: -347.269+/-233.324  $\chi^2/\text{NDF}$ : 32.7/35

In: -131.097+/-327.588  $\chi^2/\text{NDF}$ : 17.2/16

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

All: -347.269+/-233.324  $\chi^2/\text{NDF}$ : 32.7/35

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



Right In: 822.527+/-0.232  $\chi^2/\text{NDF}$ : 600956.1/16

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

Right Out: 871.679+/-0.235  $\chi^2/\text{NDF}$ : 406857.8/18

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

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

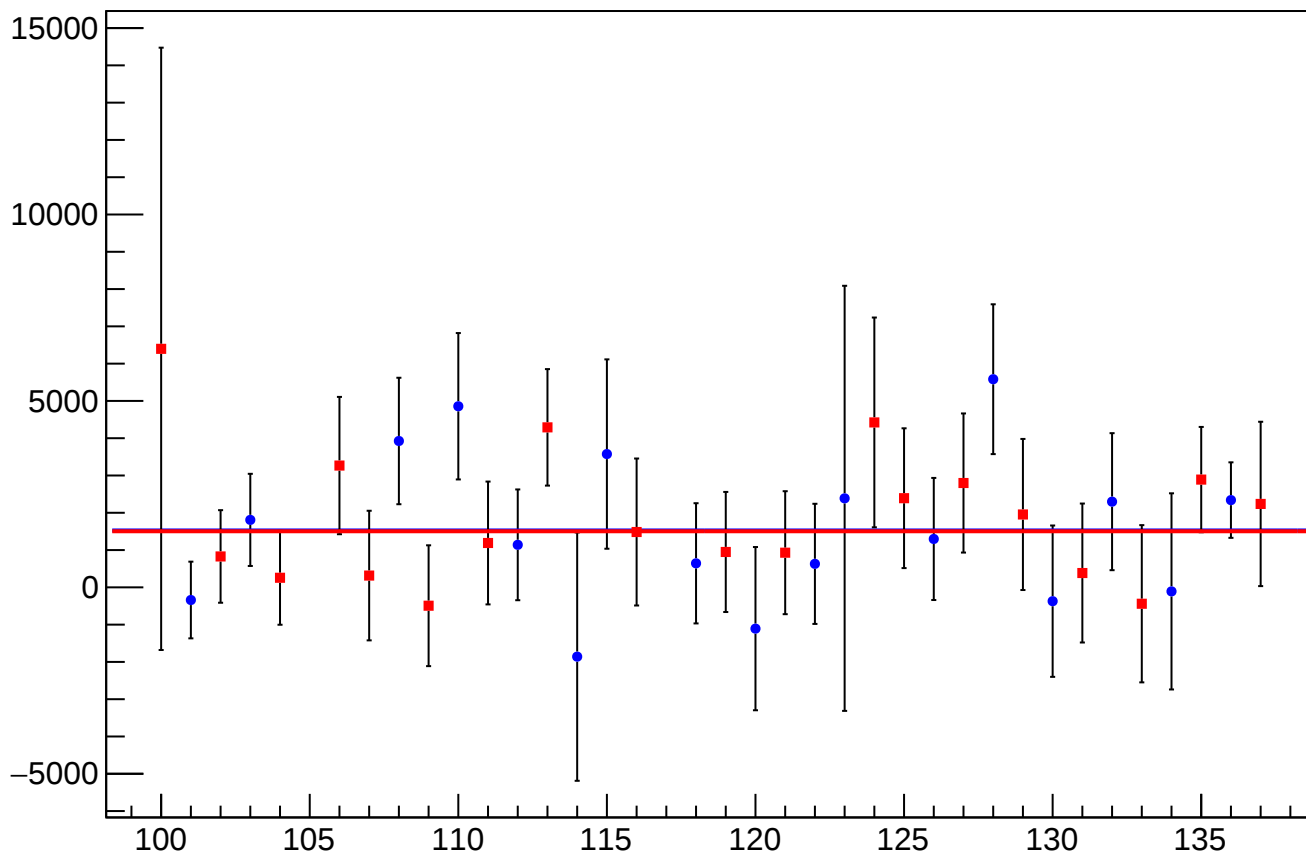
Right: 846.744+/-0.165  $\chi^2/\text{NDF}$ : 1029998.2/35

In: 822.527+/-0.232  $\chi^2/\text{NDF}$ : 600956.1/16

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

All: 846.744+/-0.165  $\chi^2/\text{NDF}$ : 1029998.2/35

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



Right In: 1525.470+/-401.784  $\chi^2/\text{NDF}$ : 18.2/16

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

Right Out: 1504.406+/-399.953  $\chi^2/\text{NDF}$ : 12.1/18

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

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

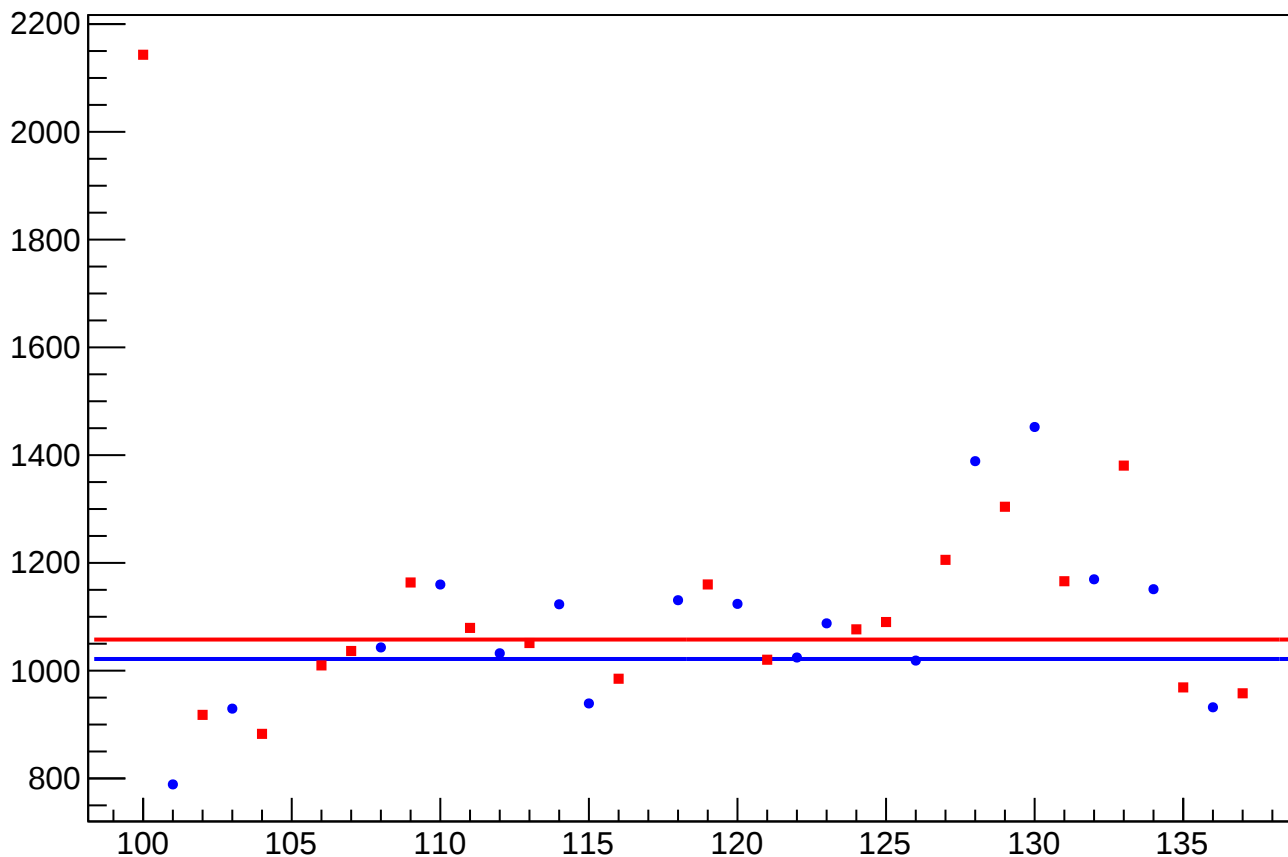
Right: 1514.890+/-283.454  $\chi^2/\text{NDF}$ : 30.4/35

In: 1525.470+/-401.784  $\chi^2/\text{NDF}$ : 18.2/16

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

All: 1514.890+/-283.454  $\chi^2/\text{NDF}$ : 30.4/35

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



Right In: 1021.665+/-0.284  $\chi^2/\text{NDF}$ : 331949.3/16

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

Right Out: 1057.748+/-0.283  $\chi^2/\text{NDF}$ : 230944.1/18

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

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

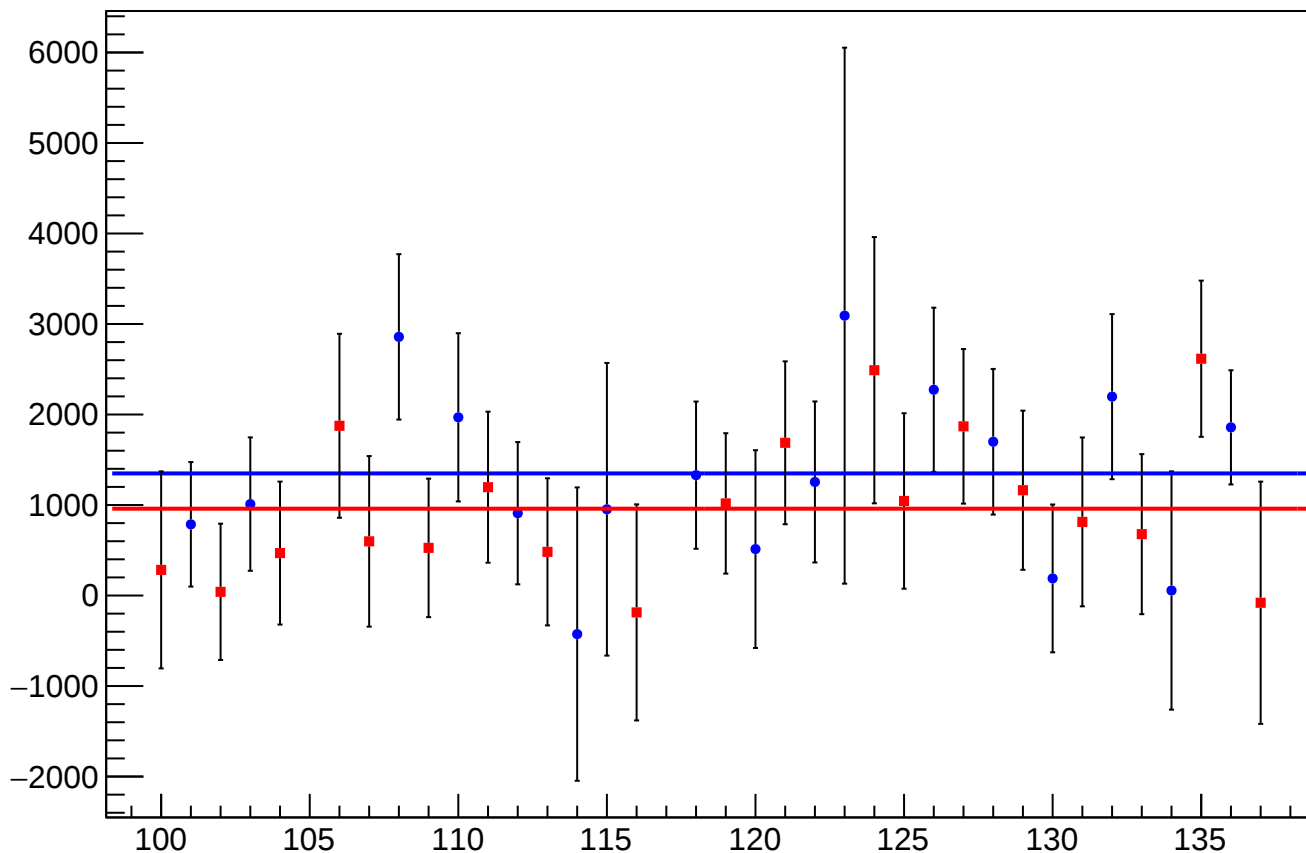
Right: 1039.788+/-0.200  $\chi^2/\text{NDF}$ : 570995.5/35

In: 1021.665+/-0.284  $\chi^2/\text{NDF}$ : 331949.3/16

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

All: 1039.788+/-0.200  $\chi^2/\text{NDF}$ : 570995.5/35

# reg\_asym\_right\_dd\_mean vs Slug, Sign Corrected



Right In: 1349.156+/-218.361  $\chi^2/\text{NDF}$ : 12.3/16

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

Right Out: 959.496+/-208.143  $\chi^2/\text{NDF}$ : 12.2/18

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

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

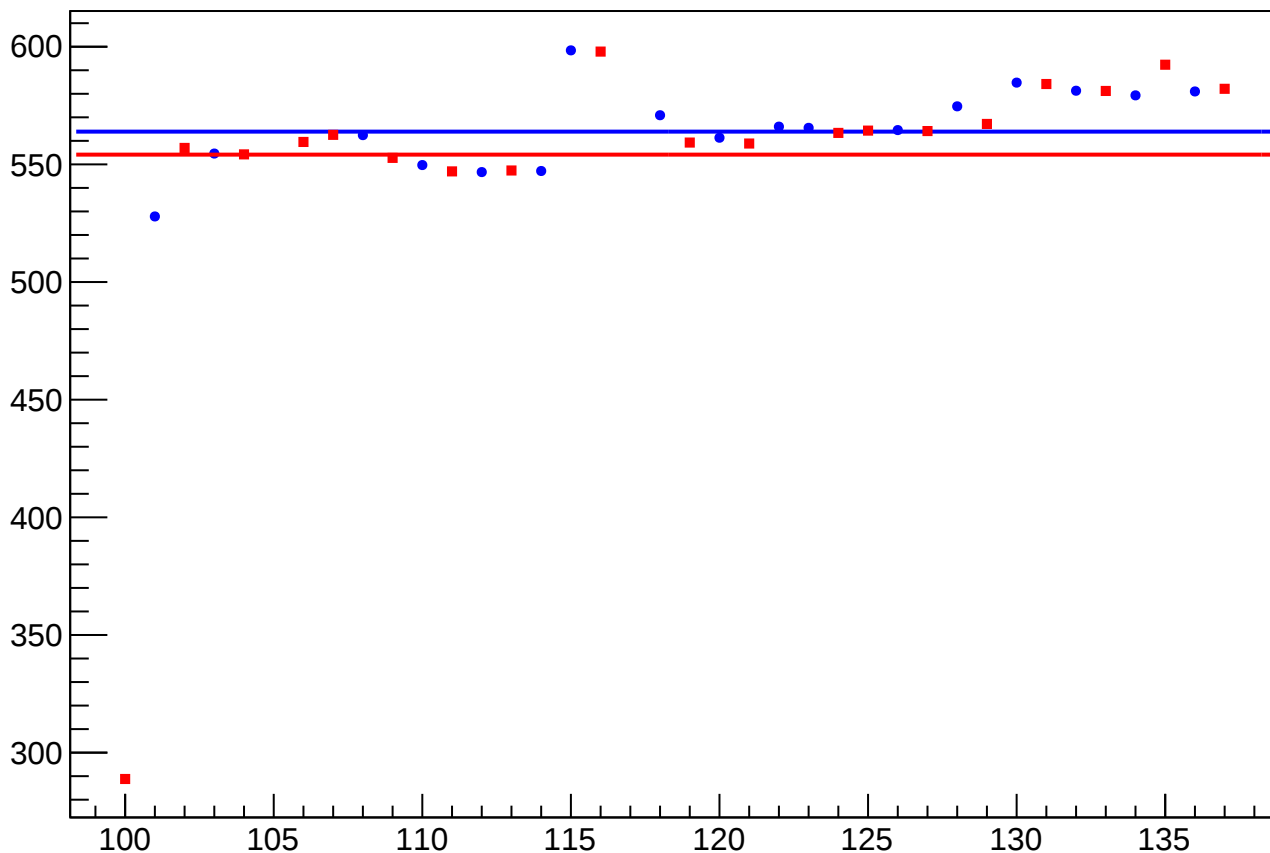
Right: 1144.995+/-150.662  $\chi^2/\text{NDF}$ : 26.2/35

In: 1349.156+/-218.361  $\chi^2/\text{NDF}$ : 12.3/16

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

All: 1144.995+/-150.662  $\chi^2/\text{NDF}$ : 26.2/35

# reg\_asym\_right\_dd\_rms vs Slug, Sign Corrected



Right In: 563.922+/-0.154  $\chi^2/\text{NDF}$ : 12663.1/16

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

Right Out: 554.145+/-0.147  $\chi^2/\text{NDF}$ : 131965.1/18

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

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

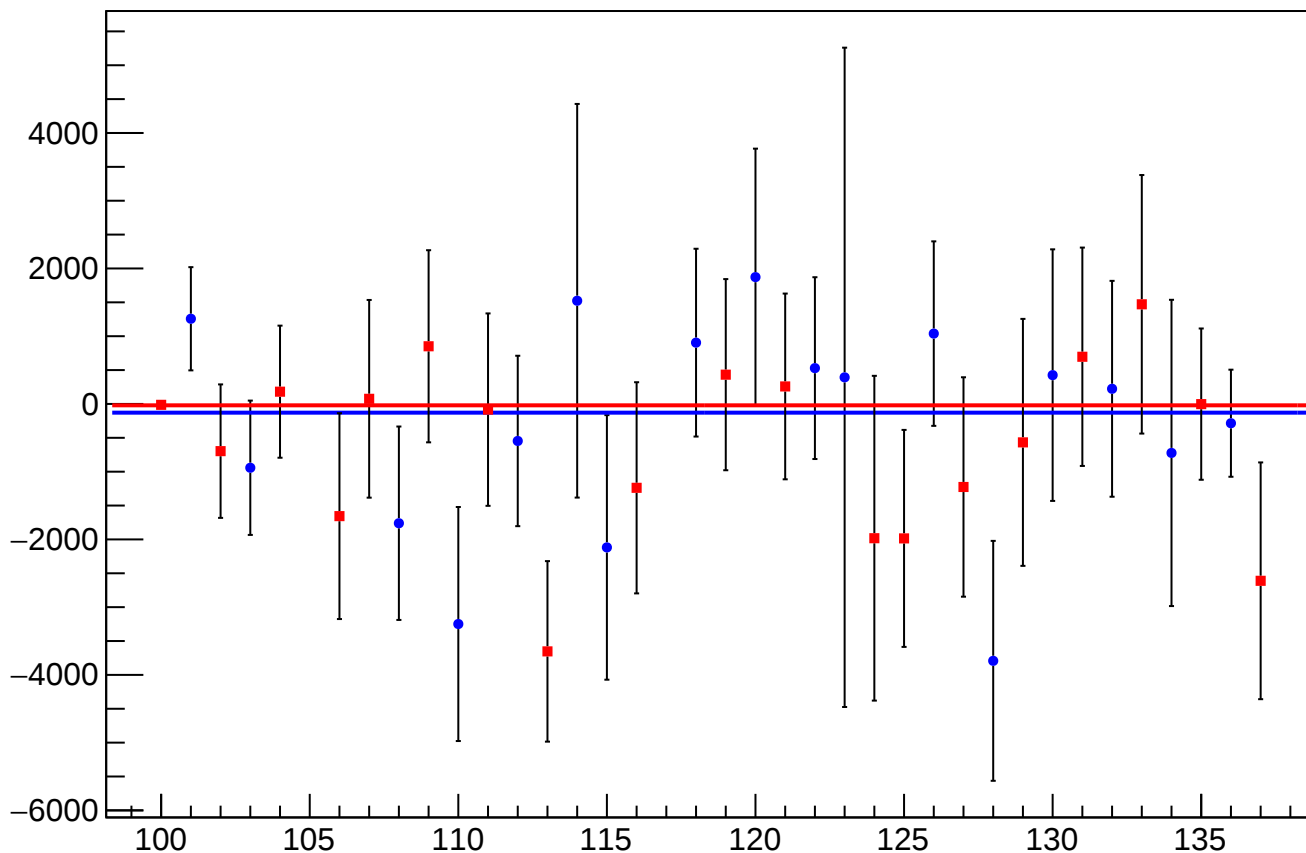
Right: 558.799+/-0.107  $\chi^2/\text{NDF}$ : 146729.2/35

In: 563.922+/-0.154  $\chi^2/\text{NDF}$ : 12663.1/16

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

All: 558.799+/-0.107  $\chi^2/\text{NDF}$ : 146729.2/35

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



Right In: -128.725+/-327.688  $\chi^2/\text{NDF}$ : 17.2/16

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

Right Out: -20.384+/-38.954  $\chi^2/\text{NDF}$ : 16.1/18

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

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

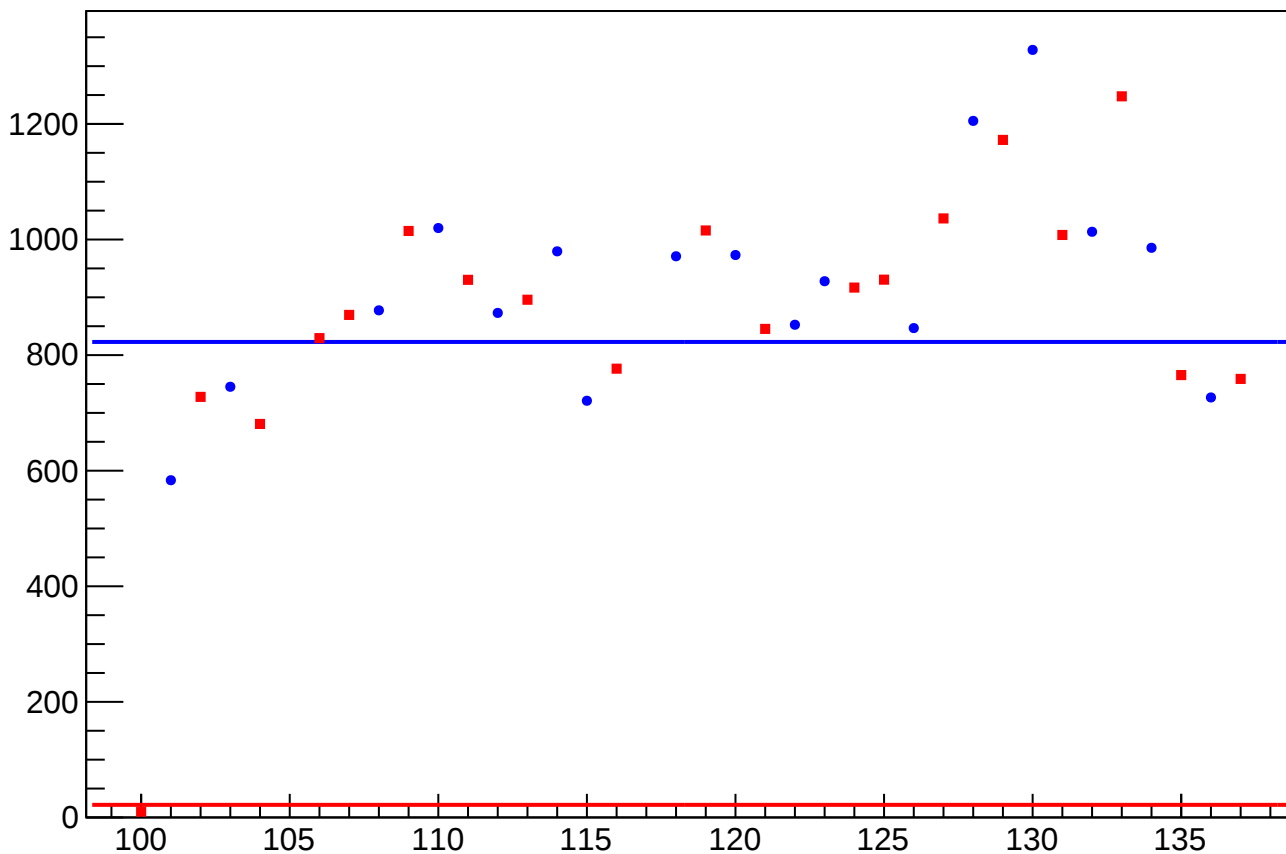
Right: -21.894+/-38.682  $\chi^2/\text{NDF}$ : 33.4/35

In: -128.725+/-327.688  $\chi^2/\text{NDF}$ : 17.2/16

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

All: -21.894+/-38.682  $\chi^2/\text{NDF}$ : 33.4/35

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



Right In: 822.780 $\pm$ 0.232  $\chi^2$ /NDF: 600873.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 21.812 $\pm$ 0.028  $\chi^2$ /NDF: 13523611.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

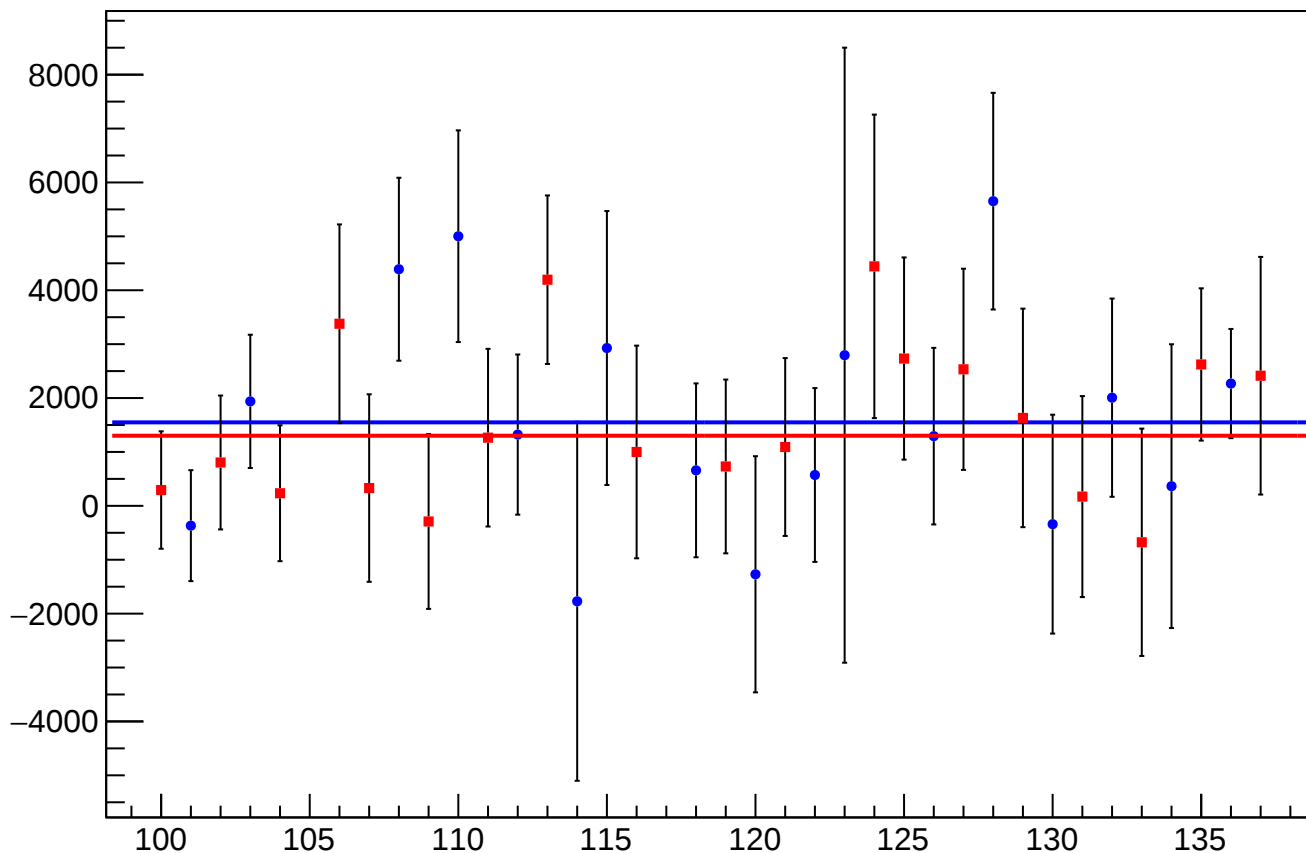
Right: 32.973 $\pm$ 0.027  $\chi^2$ /NDF: 25907183.1/35

In: 822.780 $\pm$ 0.232  $\chi^2$ /NDF:600873.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 32.973 $\pm$ 0.027  $\chi^2$ /NDF: 25907183.1/35

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



Right In: 1548.873 $\pm$ 402.008  $\chi^2$ /NDF: 19.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1300.945 $\pm$ 376.043  $\chi^2$ /NDF: 12.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

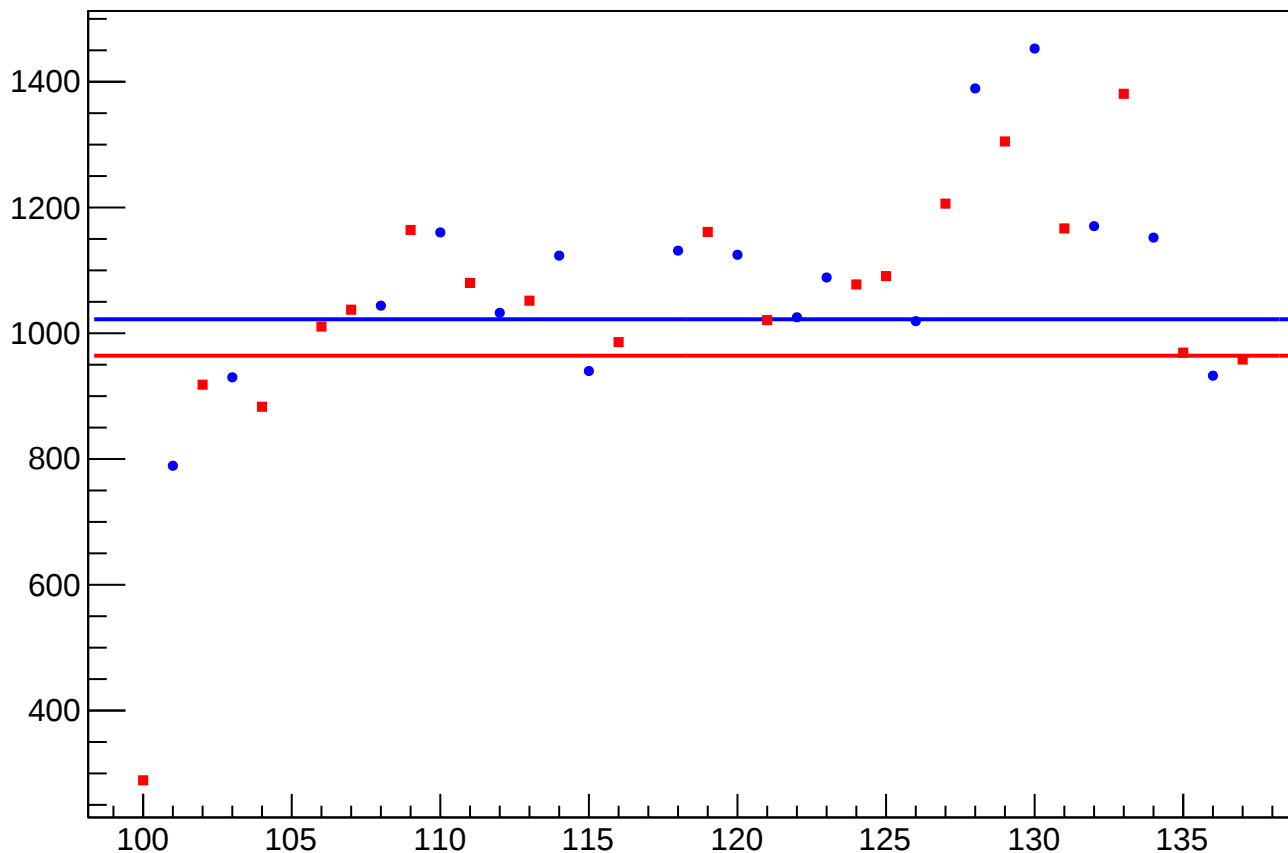
Right: 1416.645 $\pm$ 274.624  $\chi^2$ /NDF: 31.7/35

In: 1548.873 $\pm$ 402.008  $\chi^2$ /NDF:19.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1416.645 $\pm$ 274.624  $\chi^2$ /NDF: 31.7/35

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



Right In: 1022.241+/-0.284  $\chi^2/\text{NDF}$ : 331865.9/16

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

Right Out: 964.330+/-0.266  $\chi^2/\text{NDF}$ : 1067281.2/18

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

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

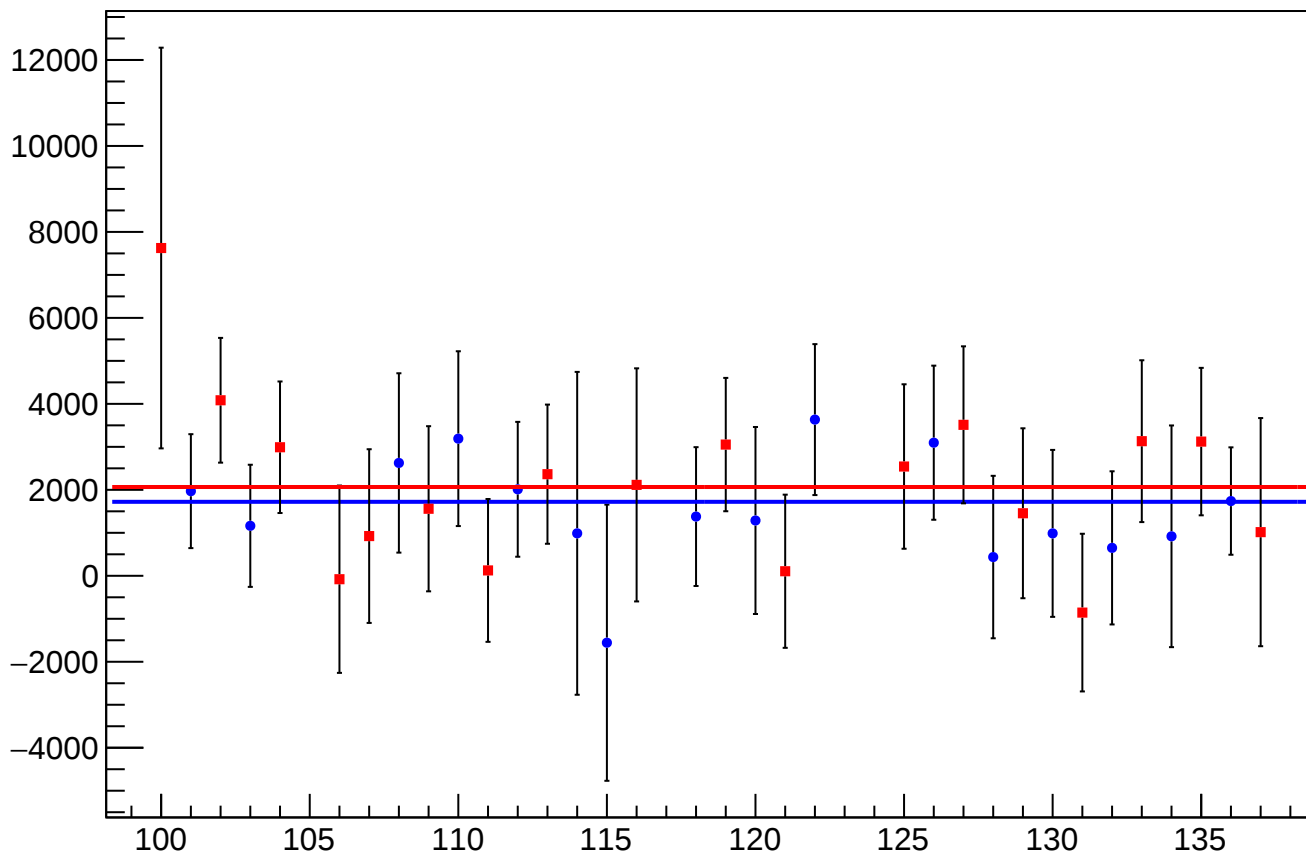
Right: 991.355+/-0.194  $\chi^2/\text{NDF}$ : 1421282.7/35

In: 1022.241+/-0.284  $\chi^2/\text{NDF}$ : 331865.9/16

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

All: 991.355+/-0.194  $\chi^2/\text{NDF}$ : 1421282.7/35

# cor\_usl\_mean vs Slug, Sign Corrected



Right In: 1721.159+/-447.545  $\chi^2/\text{NDF}$ : 4.9/15

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

Right Out: 2065.873+/-439.563  $\chi^2/\text{NDF}$ : 12.3/17

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

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

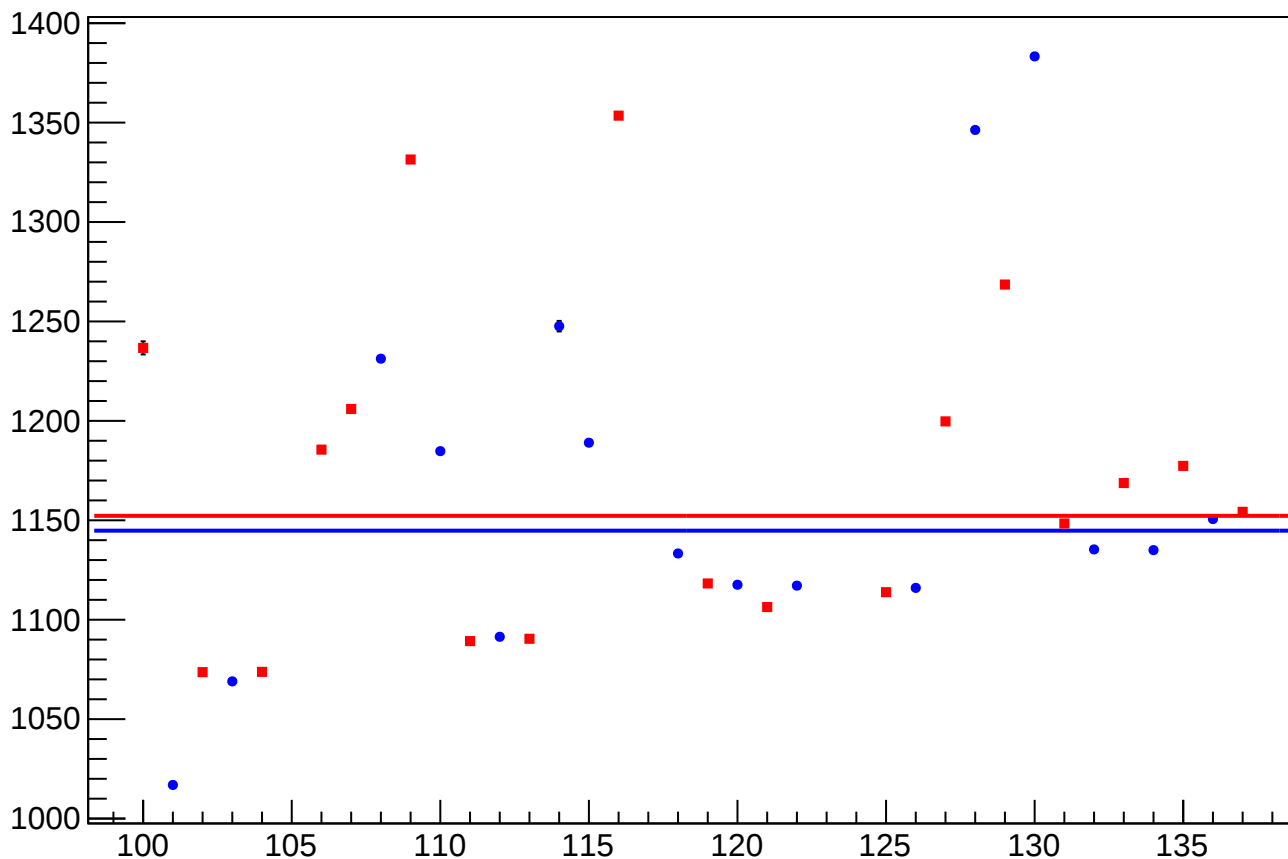
Right: 1896.618+/-313.602  $\chi^2/\text{NDF}$ : 17.5/33

In: 1721.159+/-447.545  $\chi^2/\text{NDF}$ : 4.9/15

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

All: 1896.618+/-313.602  $\chi^2/\text{NDF}$ : 17.5/33

# cor\_usl\_rms vs Slug, Sign Corrected



Right In: 1144.785+/-0.316  $\chi^2/\text{NDF}$ : 87182.5/15

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

Right Out: 1152.247+/-0.311  $\chi^2/\text{NDF}$ : 59841.1/17

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

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

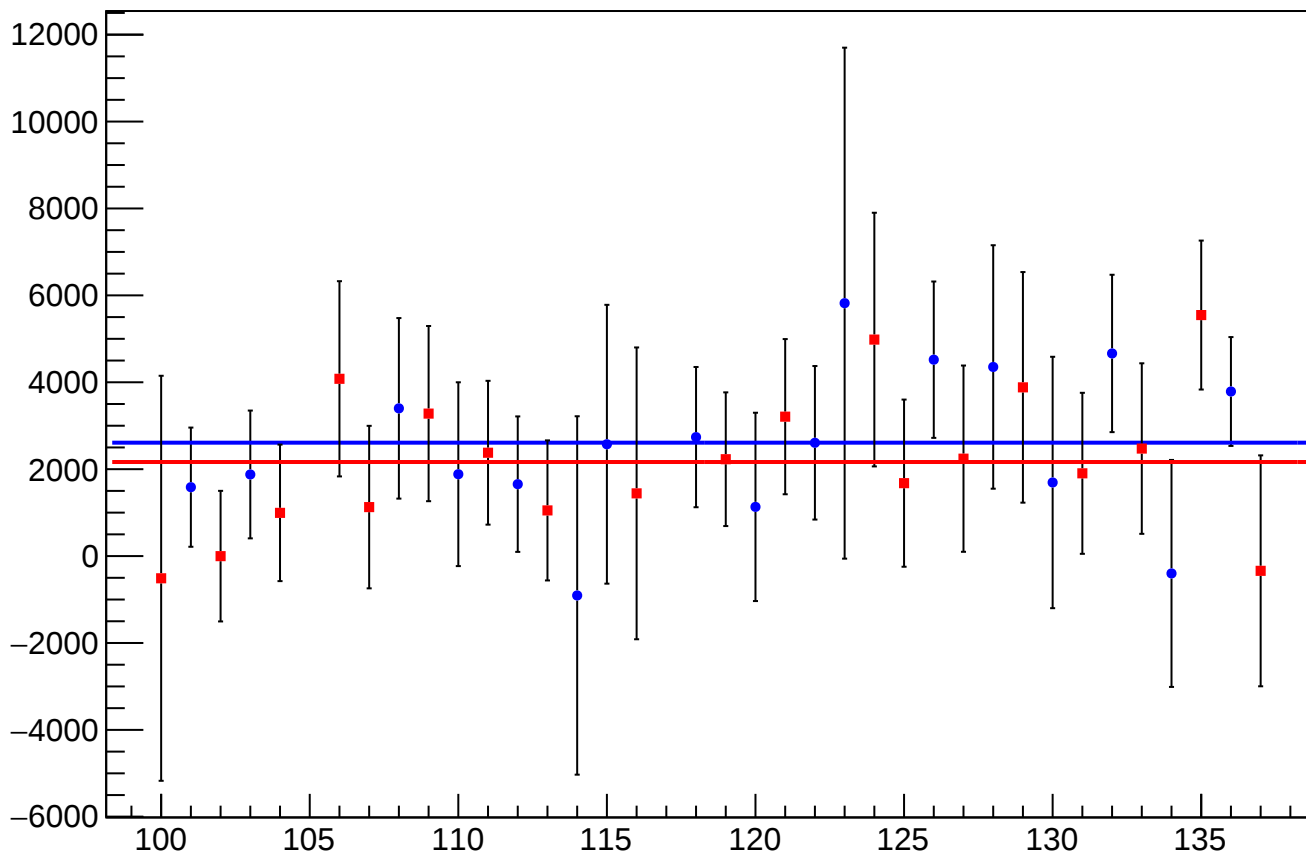
Right: 1148.583+/-0.222  $\chi^2/\text{NDF}$ : 147306.6/33

In: 1144.785+/-0.316  $\chi^2/\text{NDF}$ : 87182.5/15

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

All: 1148.583+/-0.222  $\chi^2/\text{NDF}$ : 147306.6/33

# cor\_usr\_mean vs Slug, Sign Corrected



Right In: 2609.909 $\pm$ 465.873  $\chi^2$ /NDF: 8.1/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 2164.996 $\pm$ 448.127  $\chi^2$ /NDF: 11.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

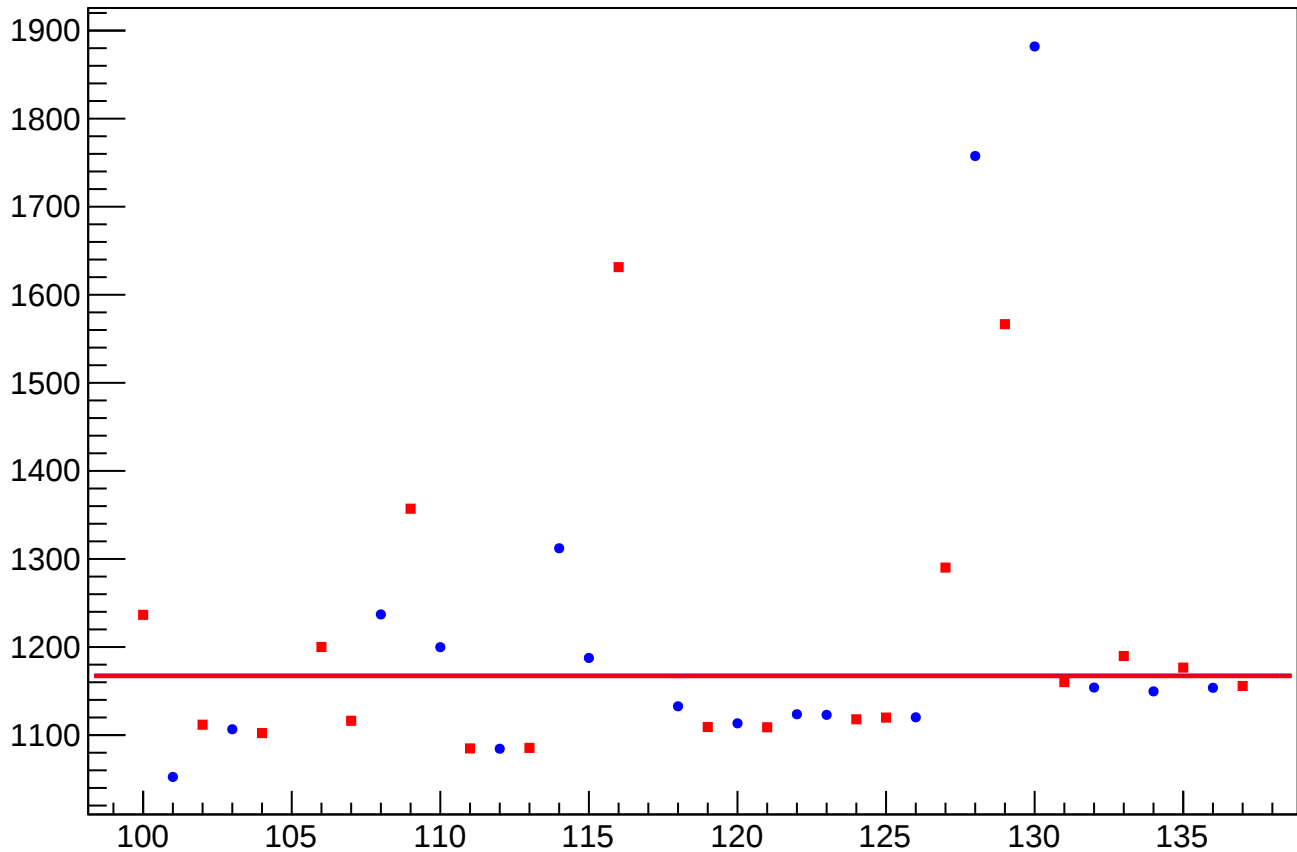
Right: 2378.817 $\pm$ 322.965  $\chi^2$ /NDF: 20.0/35

In: 2609.909 $\pm$ 465.873  $\chi^2$ /NDF: 8.1/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 2378.817 $\pm$ 322.965  $\chi^2$ /NDF: 20.0/35

# cor\_usr\_rms vs Slug, Sign Corrected



Right In: 1167.625+/-0.329  $\chi^2/\text{NDF}$ : 244461.7/16

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

Right Out: 1166.839+/-0.317  $\chi^2/\text{NDF}$ : 133600.3/18

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

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

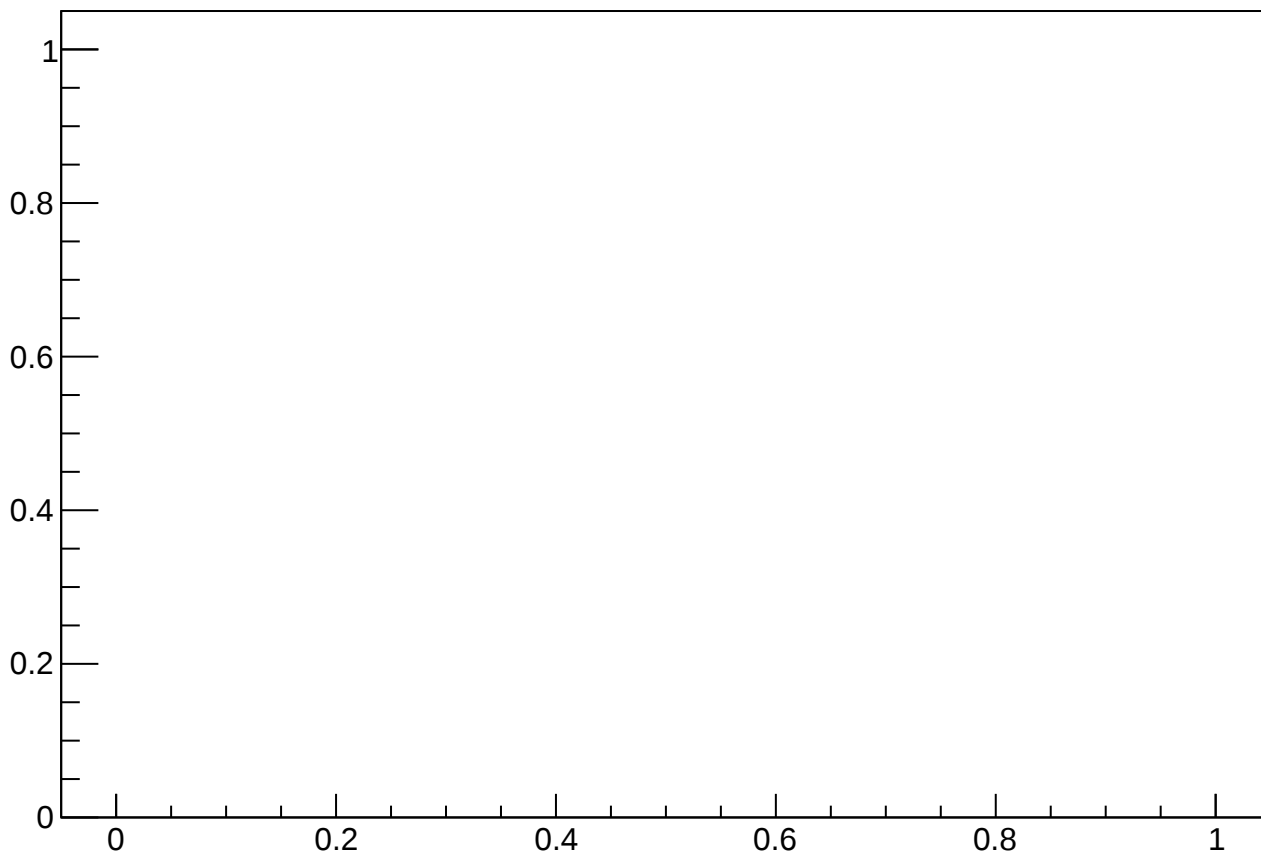
Right: 1167.216+/-0.228  $\chi^2/\text{NDF}$ : 378065.0/35

In: 1167.625+/-0.329  $\chi^2/\text{NDF}$ : 244461.7/16

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

All: 1167.216+/-0.228  $\chi^2/\text{NDF}$ : 378065.0/35

# cor\_dsl\_mean vs Slug, Sign Corrected



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

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

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

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

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

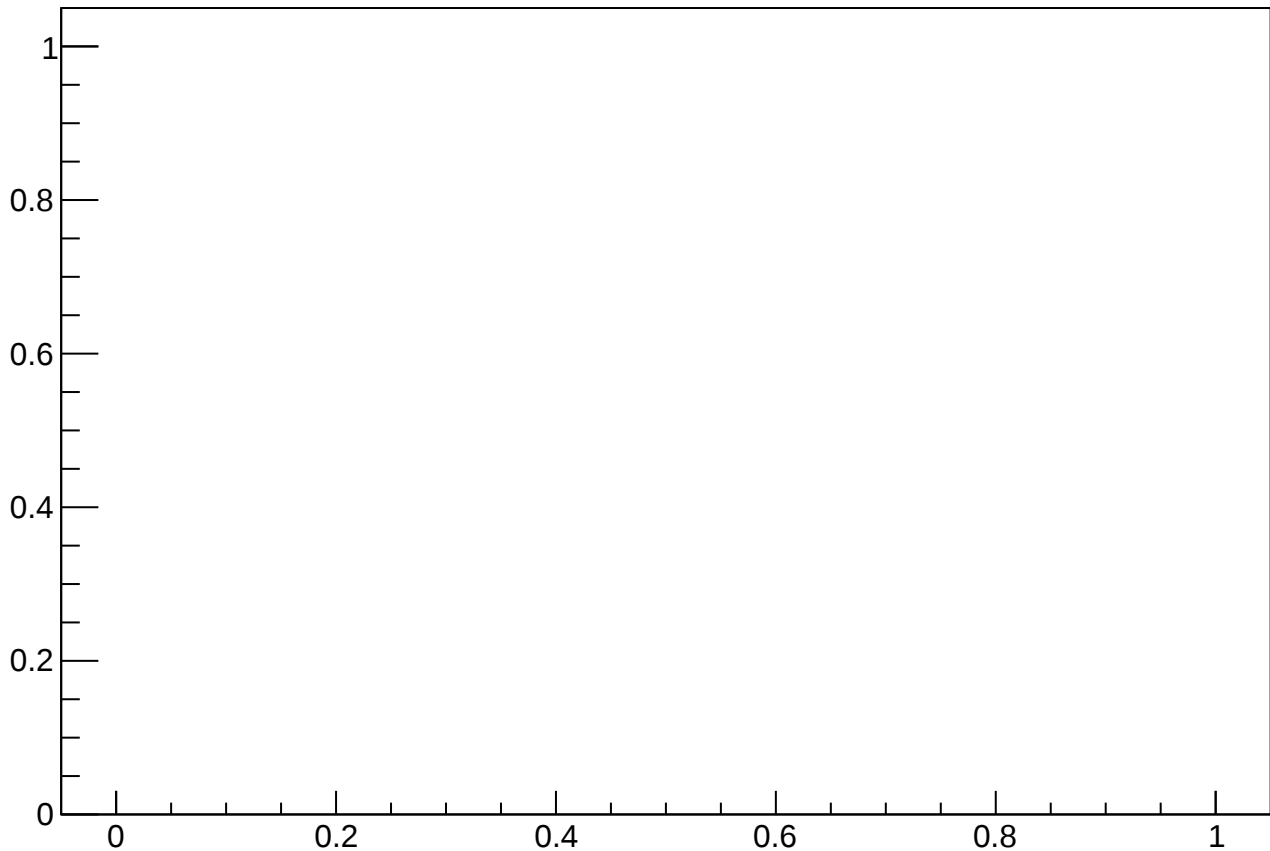
Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_dsl\_rms vs Slug, Sign Corrected



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

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

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

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

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

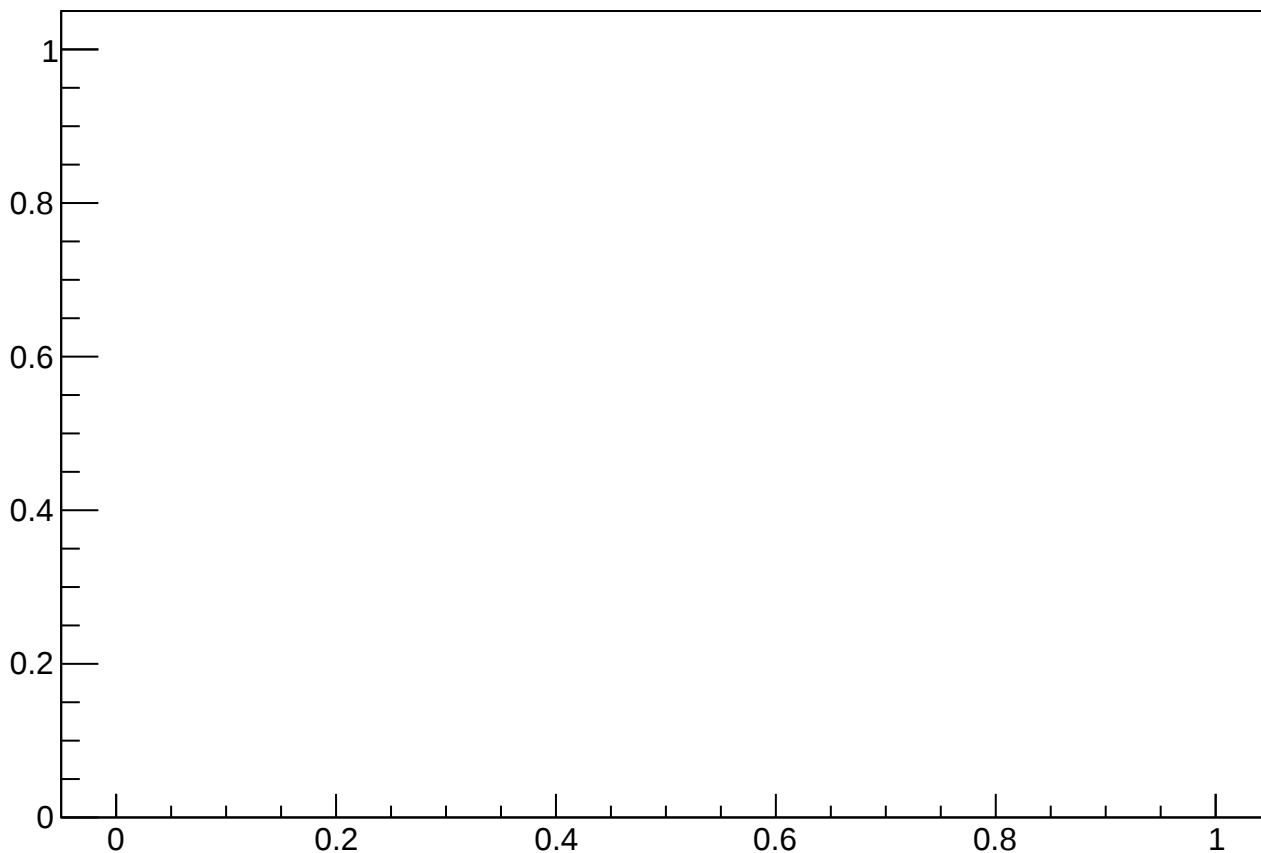
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_dsr\_mean vs Slug, Sign Corrected



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

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

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

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

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

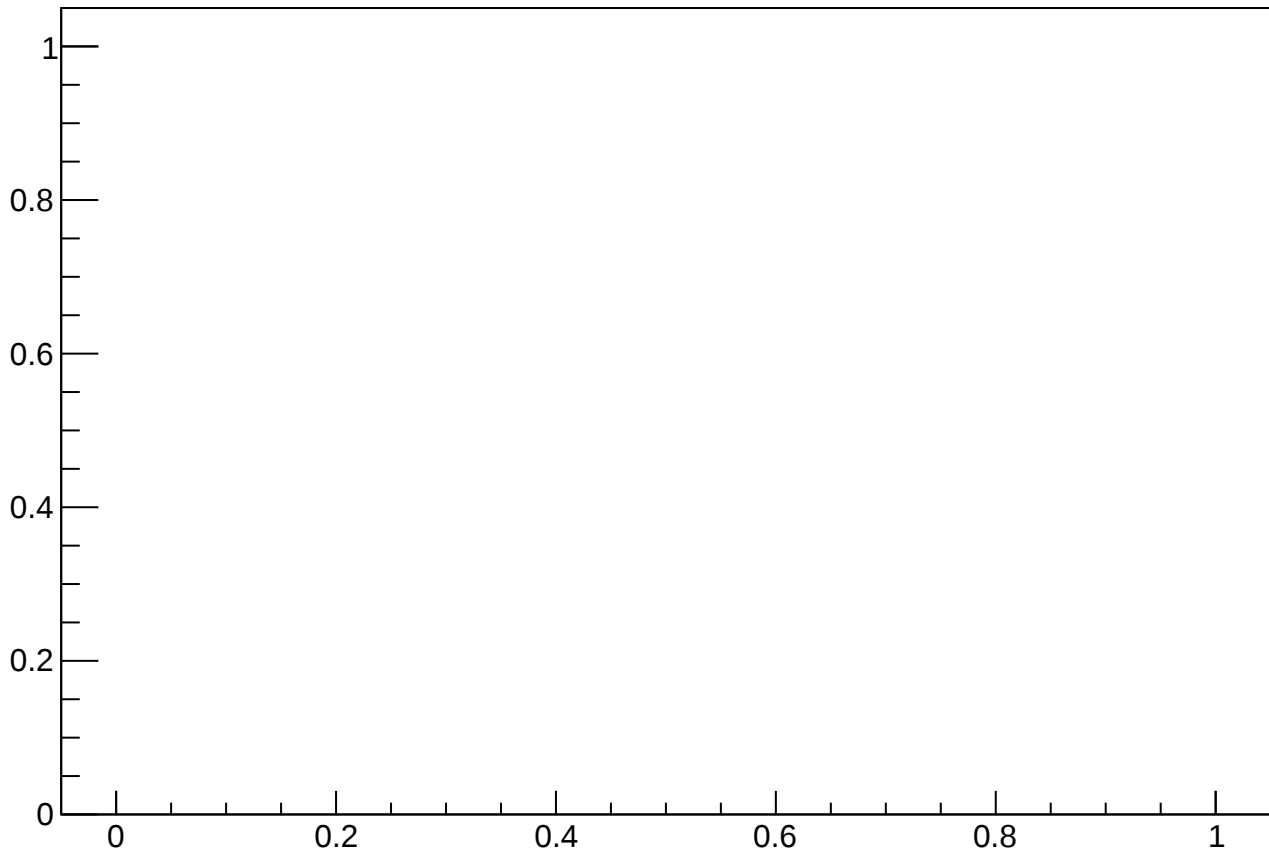
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_dsr\_rms vs Slug, Sign Corrected



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

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

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

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

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

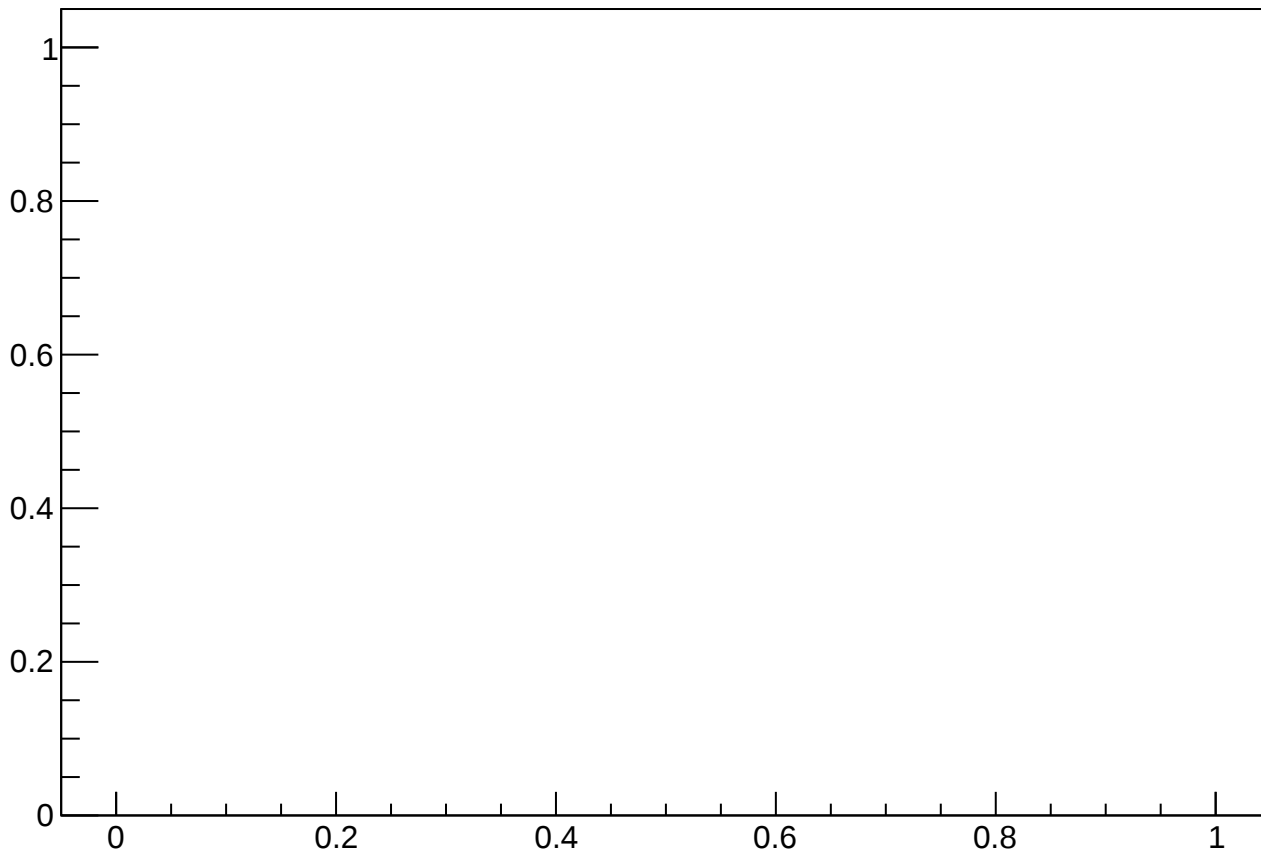
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

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



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

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

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

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

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

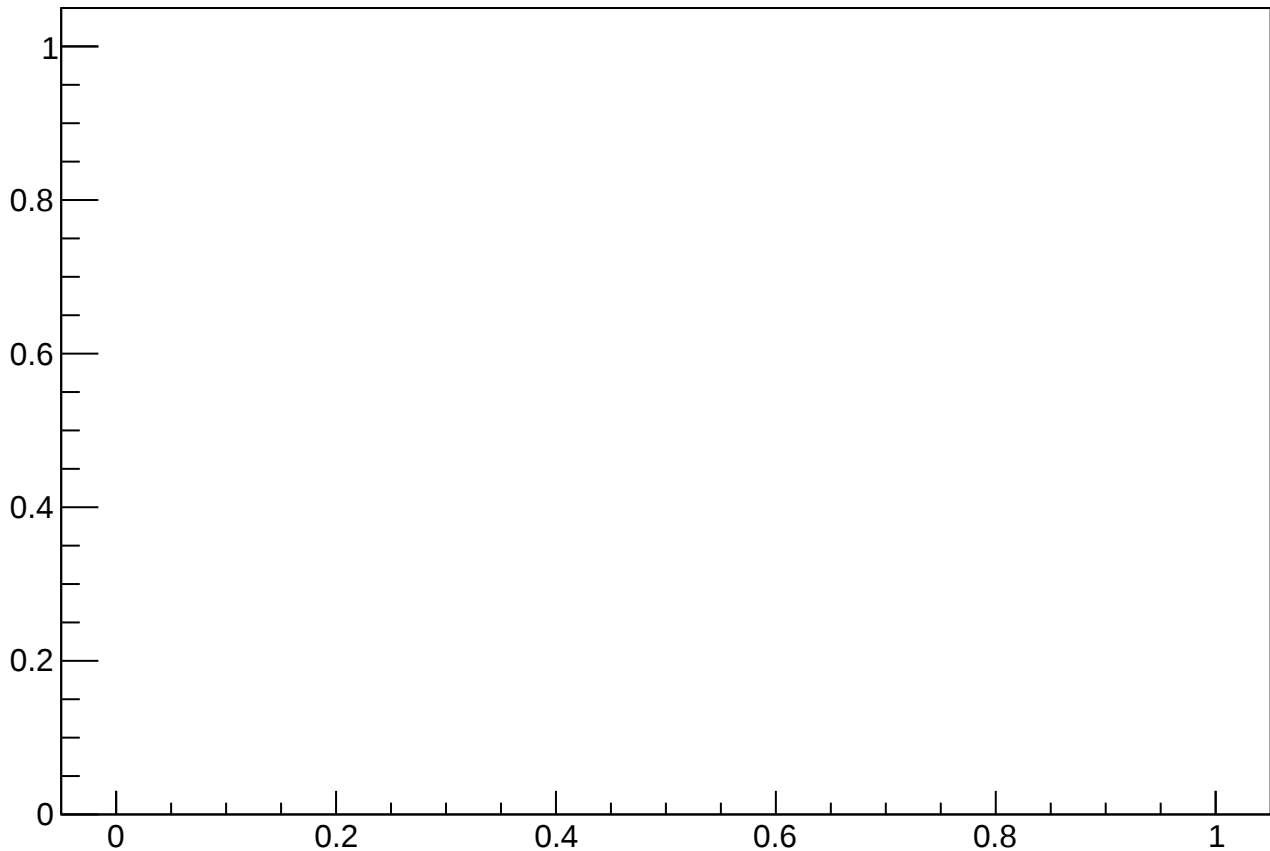
Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

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



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

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

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

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

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

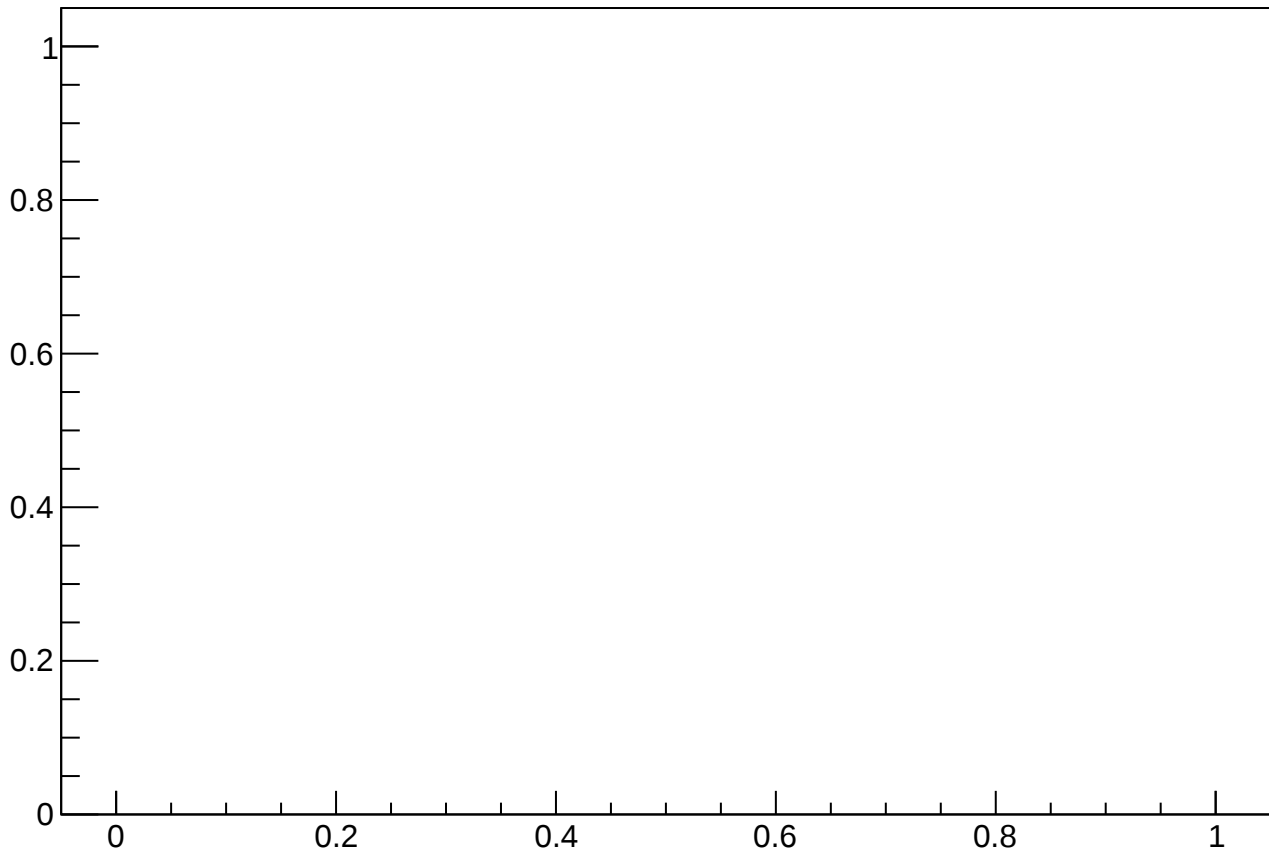
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

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



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

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

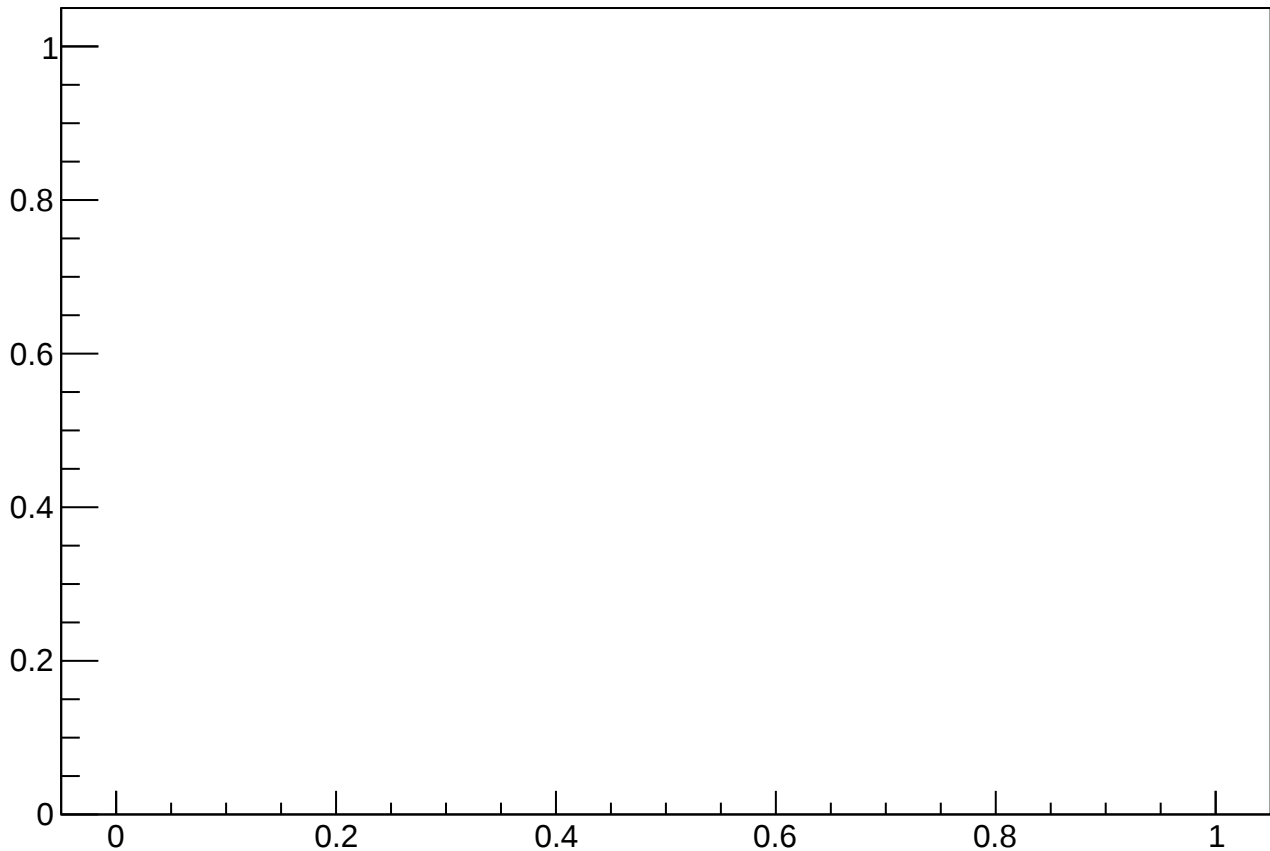
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

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



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

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

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

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

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

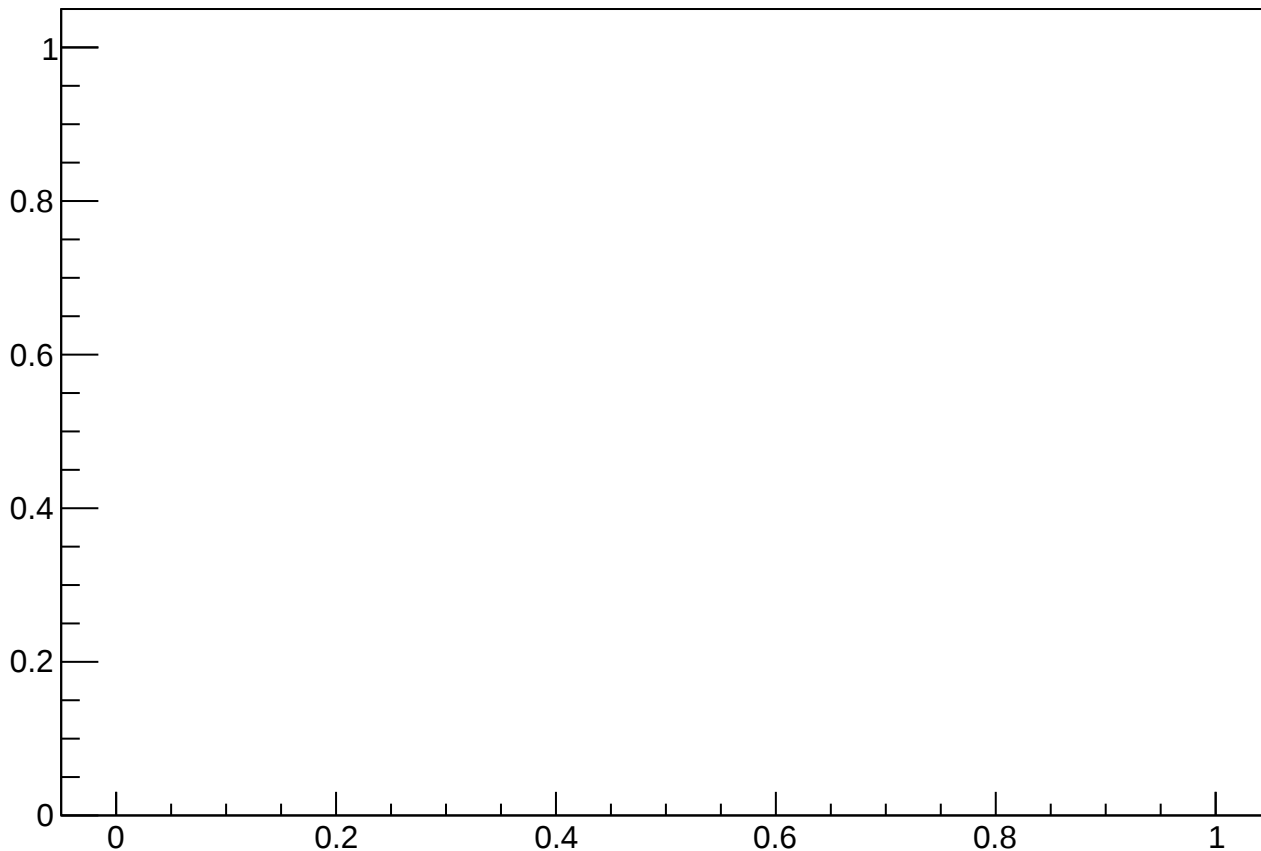
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_ds\_avg\_mean vs Slug, Sign Corrected



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

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

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

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

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

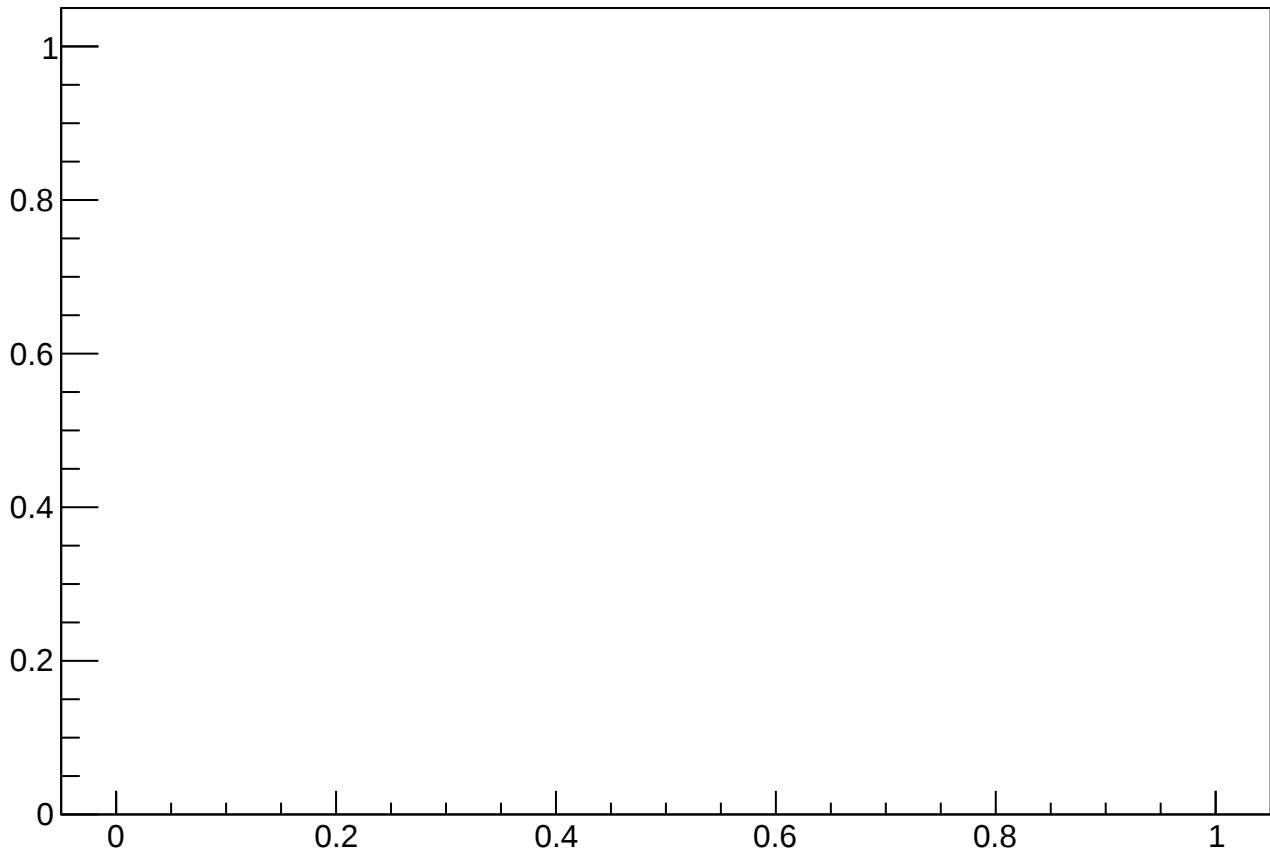
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_ds\_avg\_rms vs Slug, Sign Corrected



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

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

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

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

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

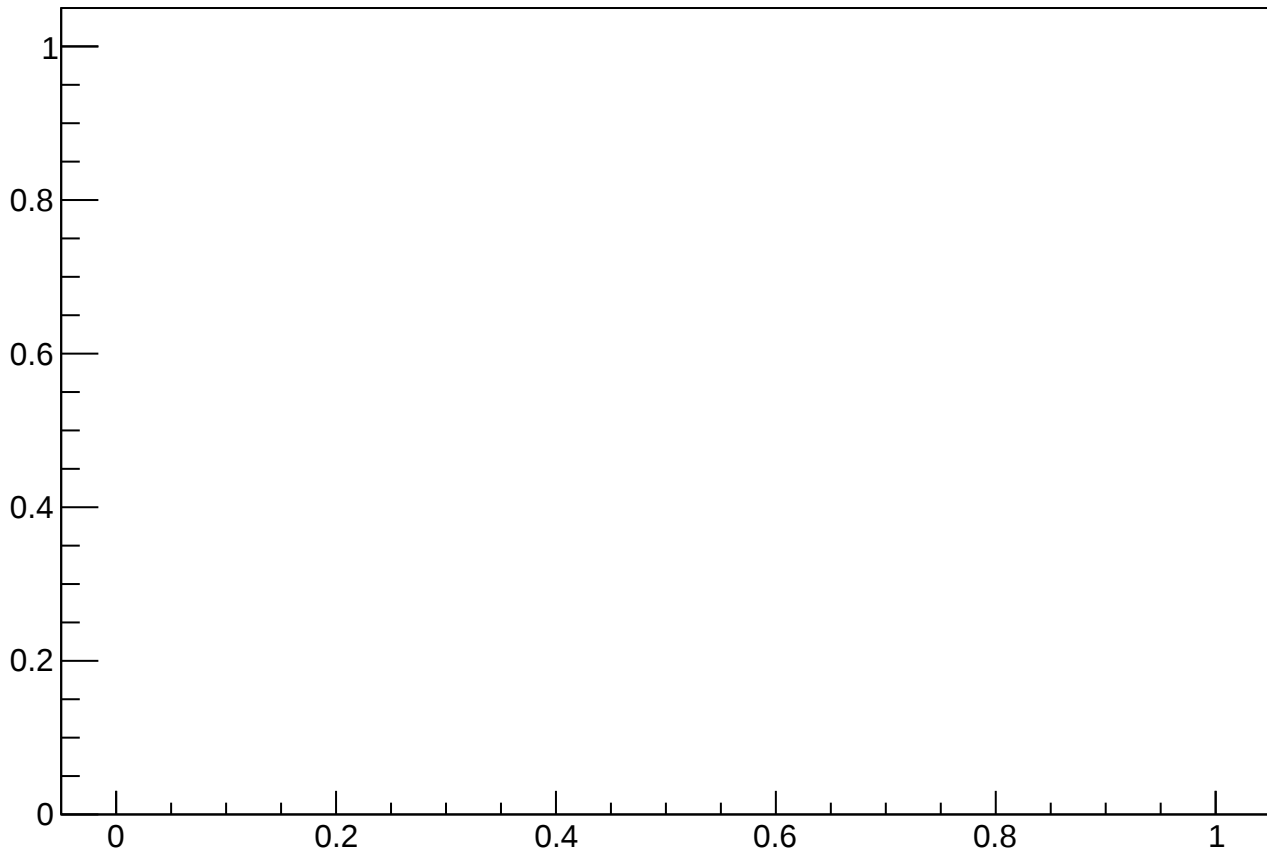
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_ds\_dd\_mean vs Slug, Sign Corrected



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

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

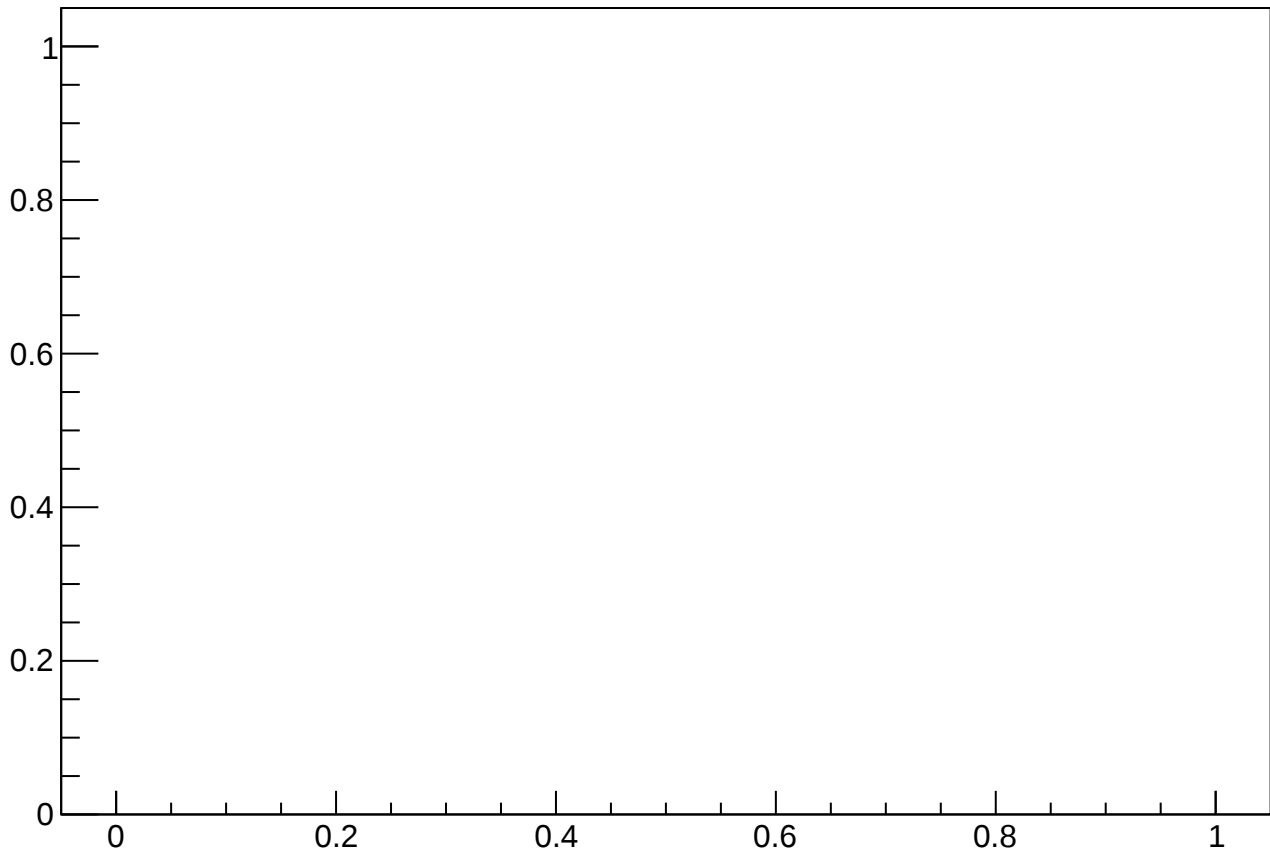
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

# cor\_ds\_dd\_rms vs Slug, Sign Corrected



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

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

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

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

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

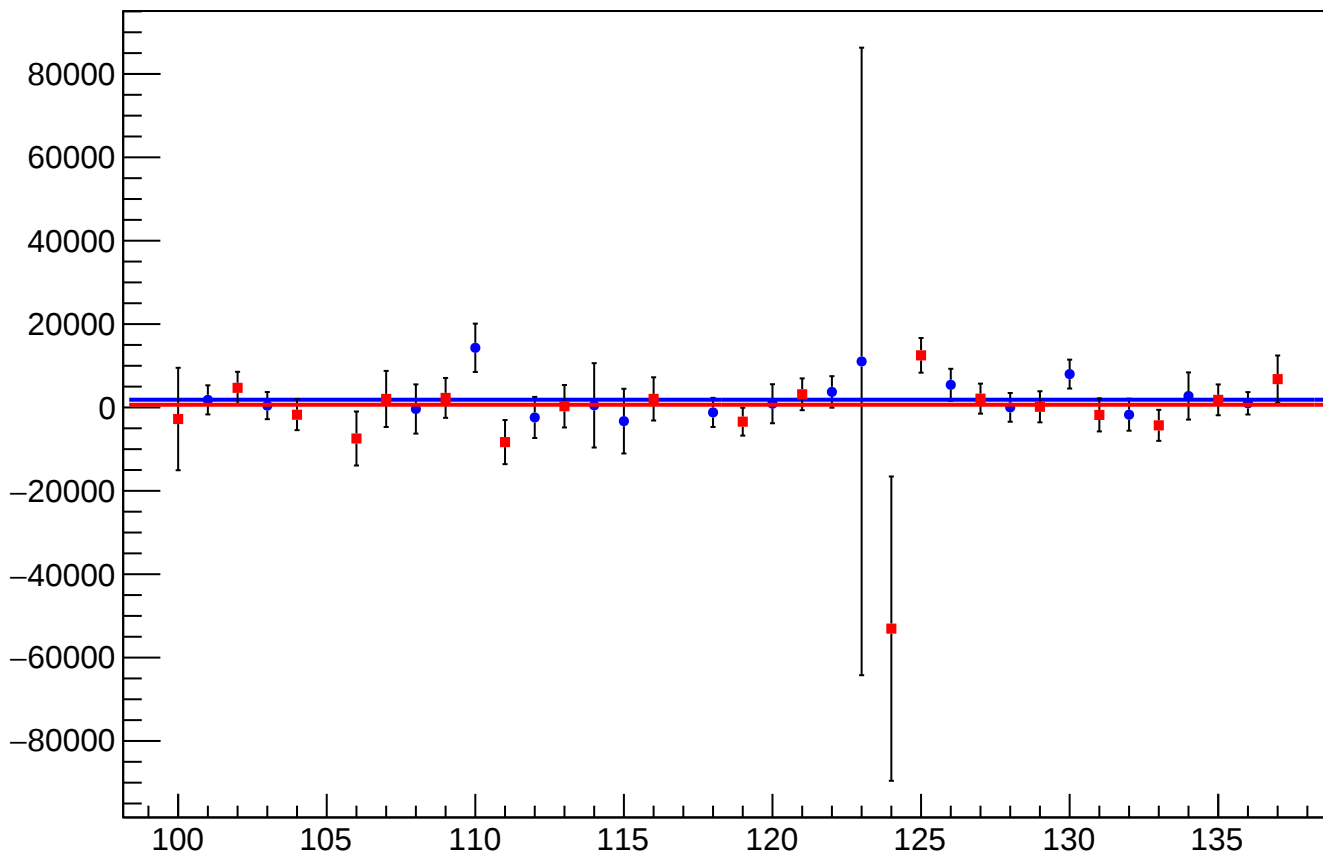
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# reg\_asym\_atl1\_mean vs Slug, Sign Corrected



Right In: 1859.767+/-1013.438  $\chi^2/\text{NDF}$ : 12.5/16

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

Right Out: 654.213+/-1023.772  $\chi^2/\text{NDF}$ : 22.1/18

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

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

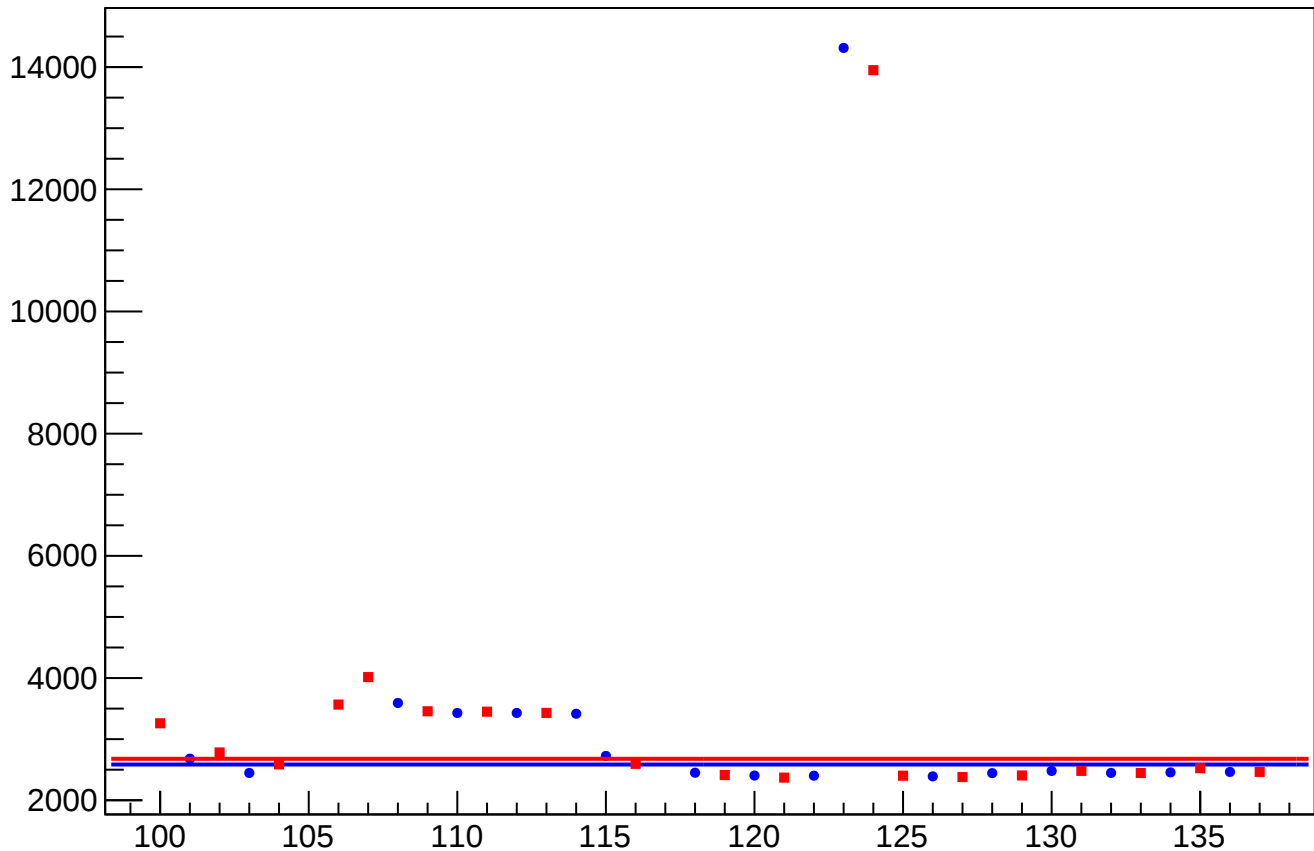
Right: 1263.106+/-720.235  $\chi^2/\text{NDF}$ : 35.3/35

In: 1859.767+/-1013.438  $\chi^2/\text{NDF}$ : 12.5/16

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

All: 1263.106+/-720.235  $\chi^2/\text{NDF}$ : 35.3/35

# reg\_asym\_atl1\_rms vs Slug, Sign Corrected



Right In: 2584.819+/-0.717  $\chi^2/\text{NDF}$ : 255710.5/16

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

Right Out: 2678.229+/-0.724  $\chi^2/\text{NDF}$ : 532096.9/18

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

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

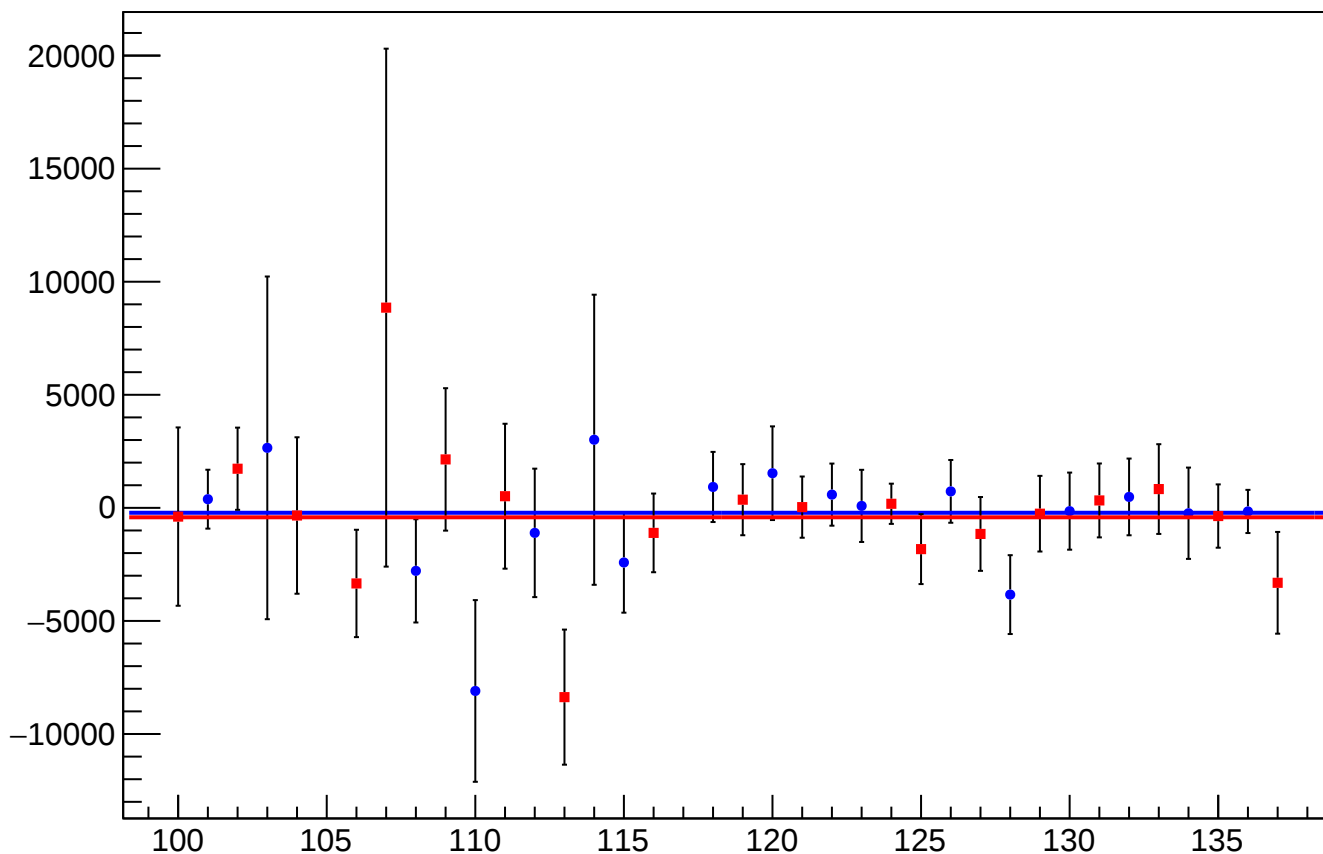
Right: 2631.050+/-0.509  $\chi^2/\text{NDF}$ : 796216.7/35

In: 2584.819+/-0.717  $\chi^2/\text{NDF}$ : 255710.5/16

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

All: 2631.050+/-0.509  $\chi^2/\text{NDF}$ : 796216.7/35

asym\_atl1\_correction\_mean vs Slug, Sign Corrected



Right In:  $-217.017 \pm 420.077$   $\chi^2/\text{NDF}$ : 13.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-417.202 \pm 408.976$   $\chi^2/\text{NDF}$ : 15.7/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

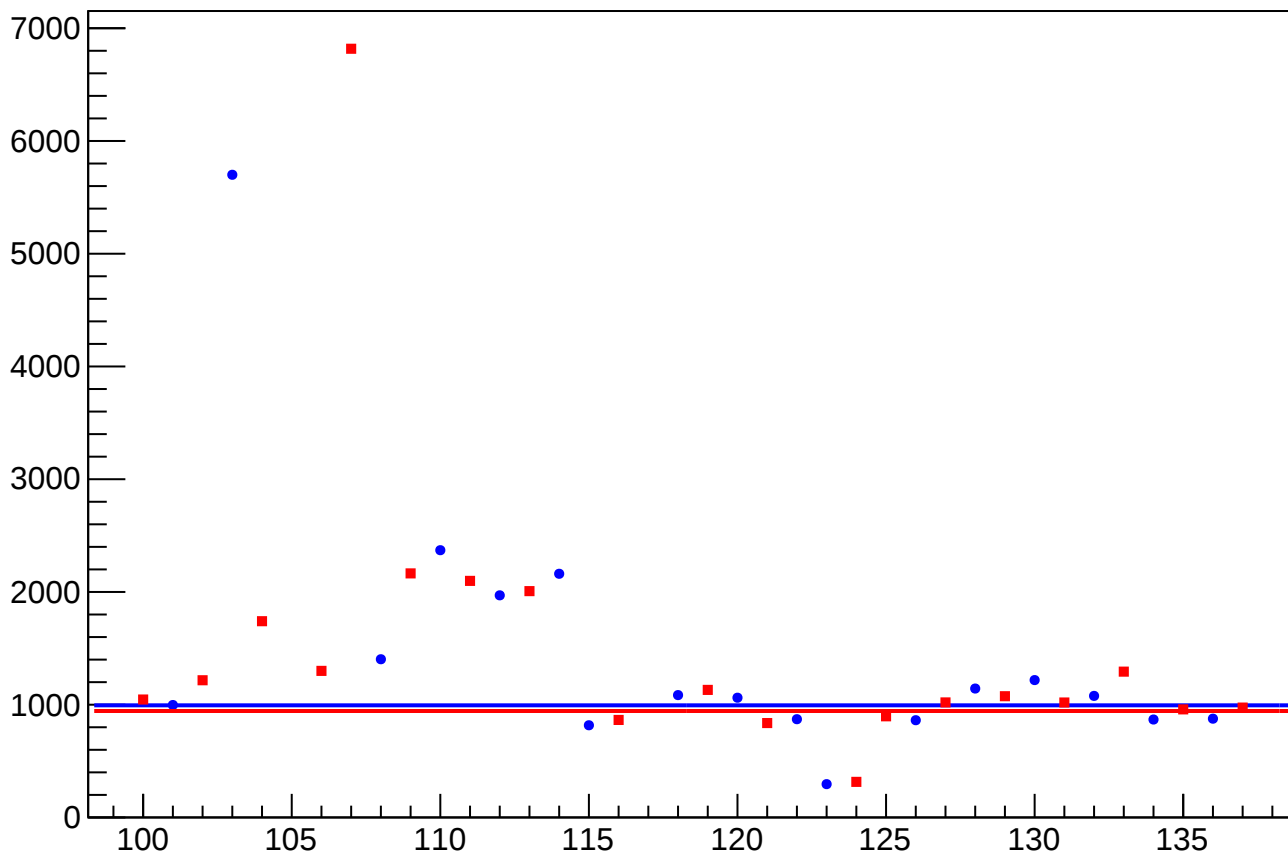
Right:  $-319.789 \pm 293.036$   $\chi^2/\text{NDF}$ : 29.2/35

In:  $-217.017 \pm 420.077$   $\chi^2/\text{NDF}$ : 13.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-319.789 \pm 293.036$   $\chi^2/\text{NDF}$ : 29.2/35

# asym\_atl1\_correction\_rms vs Slug, Sign Corrected



Right In: 994.541+/-0.297  $\chi^2/\text{NDF}$ : 1904549.2/16

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

Right Out: 944.286+/-0.289  $\chi^2/\text{NDF}$ : 2666007.0/18

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

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

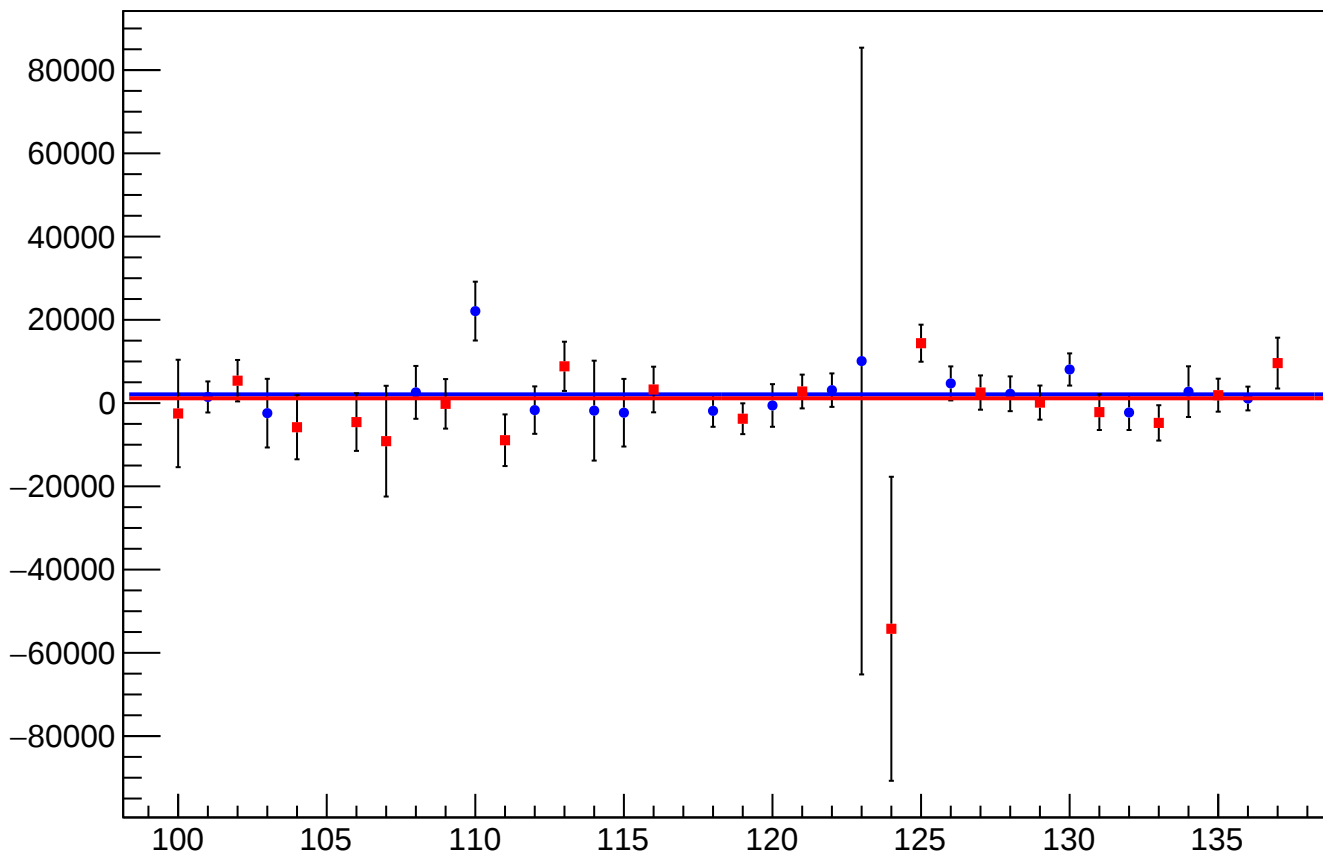
Right: 968.741+/-0.207  $\chi^2/\text{NDF}$ : 4585251.1/35

In: 994.541+/-0.297  $\chi^2/\text{NDF}$ : 1904549.2/16

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

All: 968.741+/-0.207  $\chi^2/\text{NDF}$ : 4585251.1/35

# asym\_atl1\_mean vs Slug, Sign Corrected



Right In: 2094.050+/-1160.426  $\chi^2/\text{NDF}$ : 14.6/16

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

Right Out: 1147.788+/-1187.007  $\chi^2/\text{NDF}$ : 25.1/18

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

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

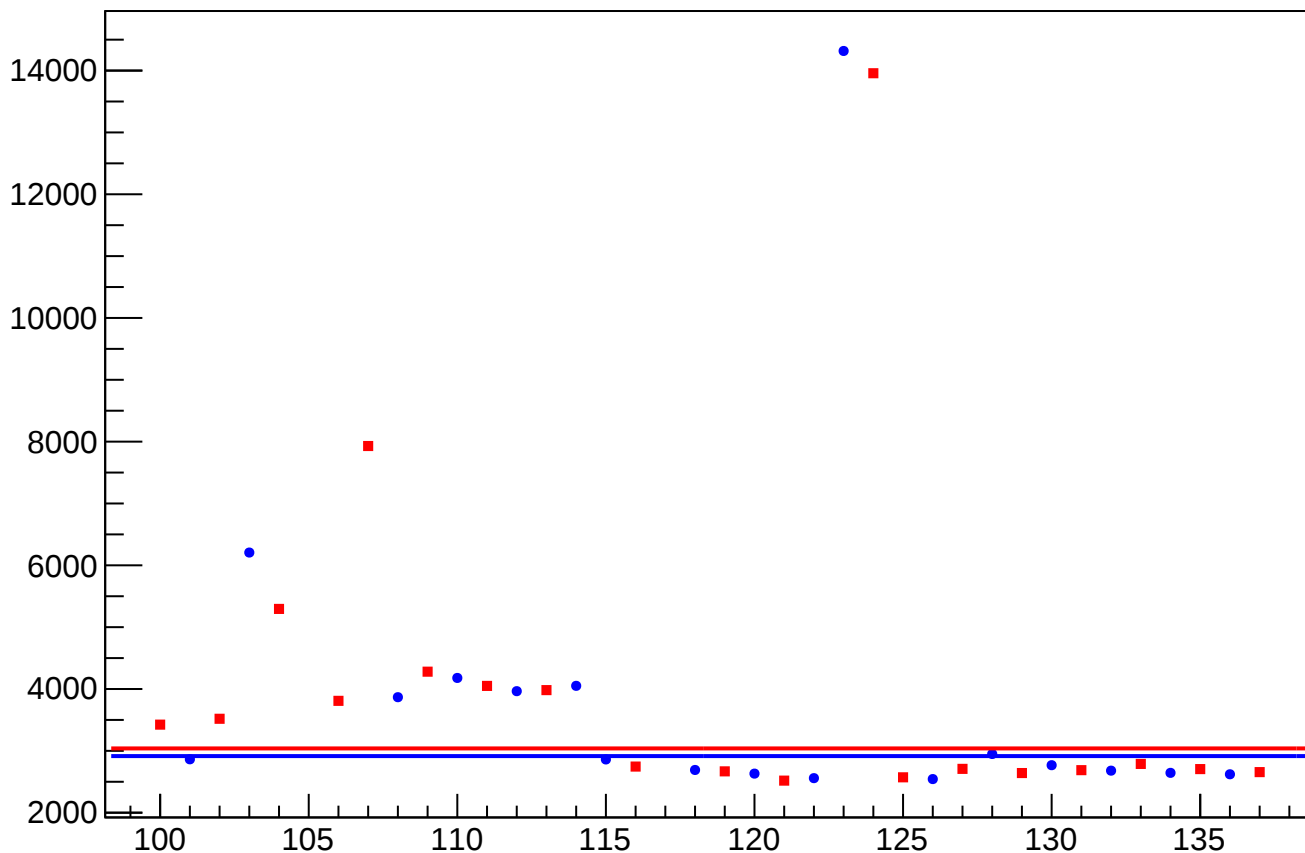
Right: 1631.633+/-829.783  $\chi^2/\text{NDF}$ : 40.1/35

In: 2094.050+/-1160.426  $\chi^2/\text{NDF}$ : 14.6/16

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

All: 1631.633+/-829.783  $\chi^2/\text{NDF}$ : 40.1/35

# asym\_atl1\_rms vs Slug, Sign Corrected



Right In: 2915.201+/-0.821  $\chi^2/\text{NDF}$ : 639136.4/16

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

Right Out: 3039.139+/-0.839  $\chi^2/\text{NDF}$ : 1011383.0/18

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

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

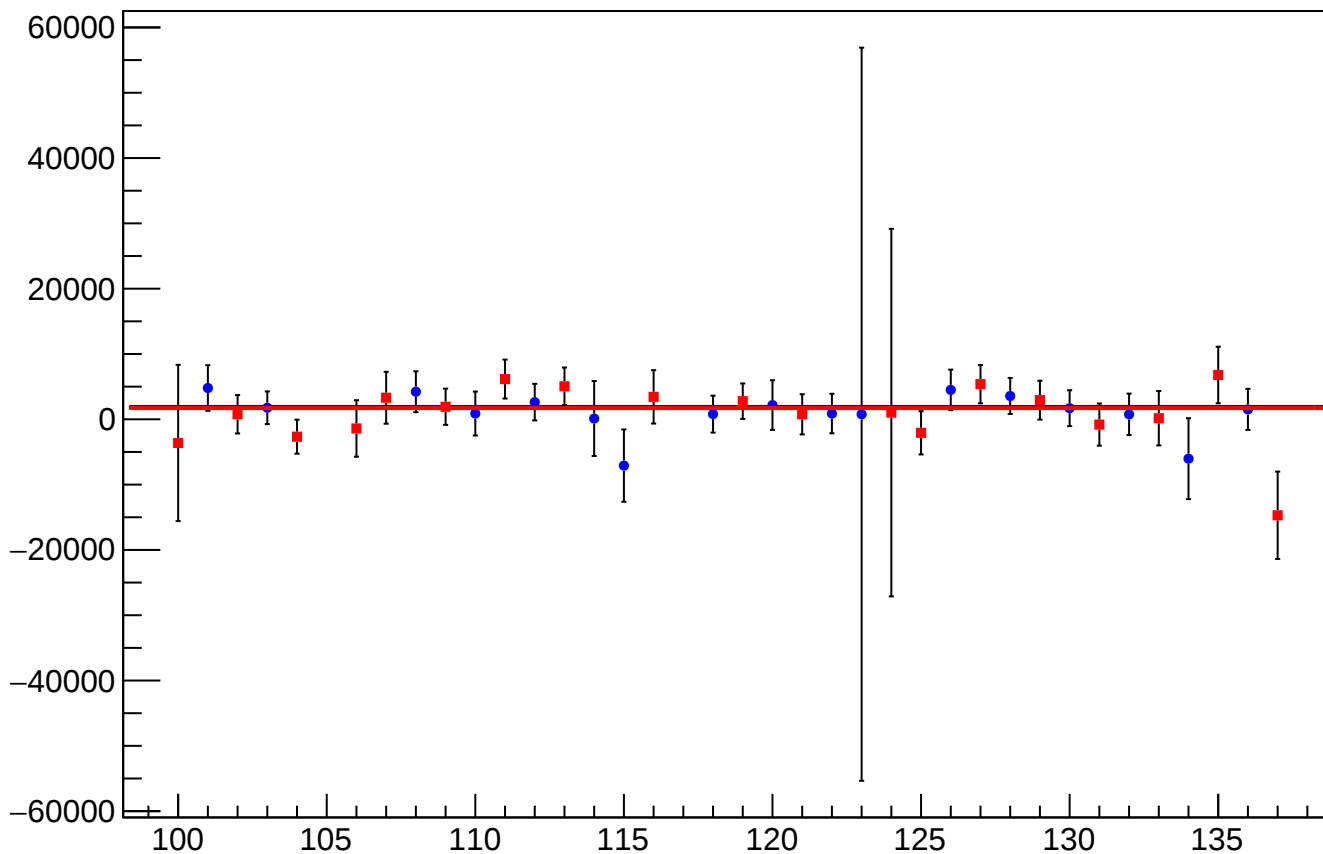
Right: 2975.767+/-0.587  $\chi^2/\text{NDF}$ : 1661668.2/35

In: 2915.201+/-0.821  $\chi^2/\text{NDF}$ : 639136.4/16

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

All: 2975.767+/-0.587  $\chi^2/\text{NDF}$ : 1661668.2/35

# reg\_asym\_atl2\_mean vs Slug, Sign Corrected



Right In: 1889.943+/-811.431  $\chi^2/\text{NDF}$ : 7.3/16

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

Right Out: 1719.130+/-790.110  $\chi^2/\text{NDF}$ : 19.0/18

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

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

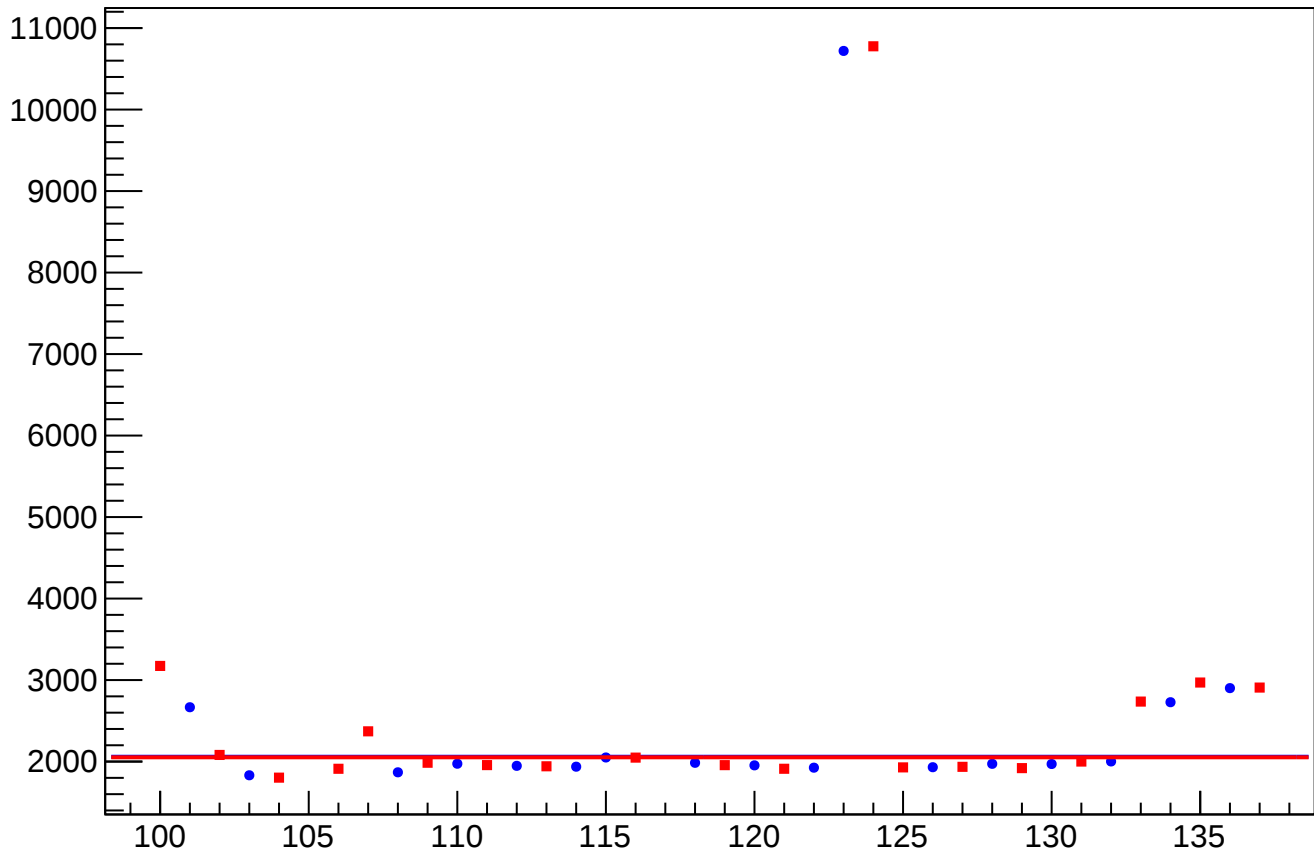
Right: 1802.263+/-566.080  $\chi^2/\text{NDF}$ : 26.2/35

In: 1889.943+/-811.431  $\chi^2/\text{NDF}$ : 7.3/16

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

All: 1802.263+/-566.080  $\chi^2/\text{NDF}$ : 26.2/35

# reg\_asym\_atl2\_rms vs Slug, Sign Corrected



Right In: 2058.963+/-0.574  $\chi^2/\text{NDF}$ : 318561.5/16

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

Right Out: 2052.260+/-0.559  $\chi^2/\text{NDF}$ : 443321.6/18

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

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

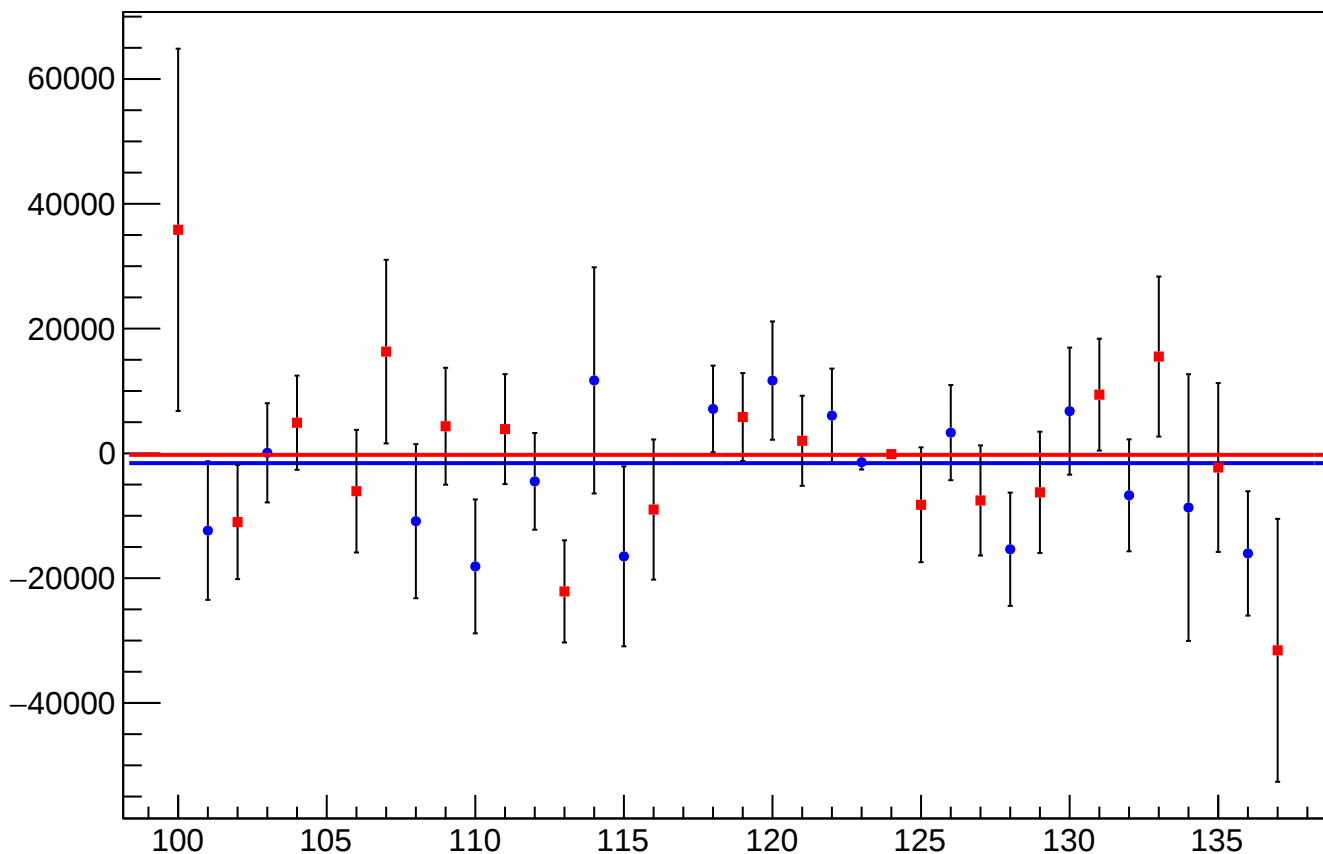
Right: 2055.522+/-0.400  $\chi^2/\text{NDF}$ : 761953.2/35

In: 2058.963+/-0.574  $\chi^2/\text{NDF}$ : 318561.5/16

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

All: 2055.522+/-0.400  $\chi^2/\text{NDF}$ : 761953.2/35

asym\_atl2\_correction\_mean vs Slug, Sign Corrected



Right In: -1563.218+/-1053.946  $\chi^2/\text{NDF}$ : 16.2/16

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

Right Out: -236.197+/-695.167  $\chi^2/\text{NDF}$ : 20.8/18

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

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

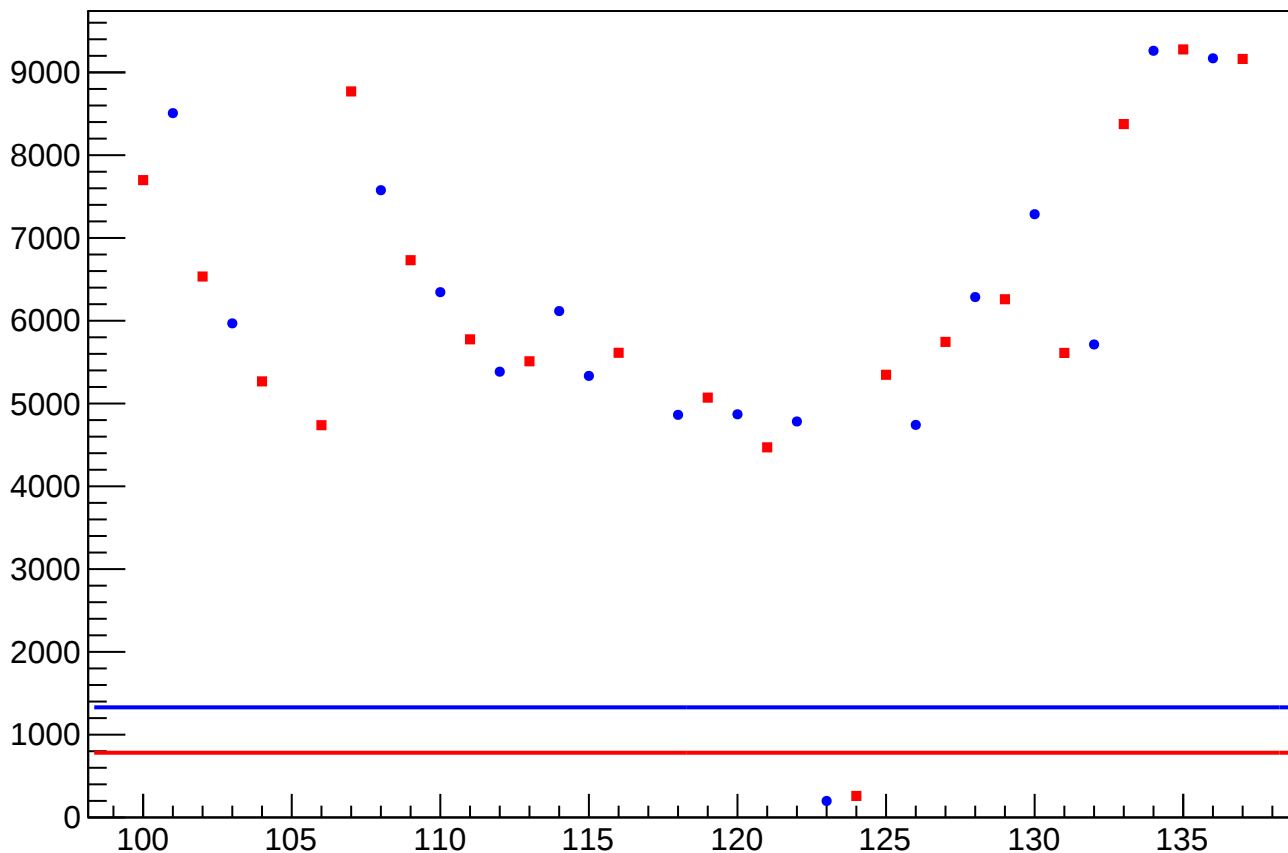
Right: -638.499+/-580.304  $\chi^2/\text{NDF}$ : 38.1/35

In: -1563.218+/-1053.946  $\chi^2/\text{NDF}$ : 16.2/16

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

All: -638.499+/-580.304  $\chi^2/\text{NDF}$ : 38.1/35

# asym\_atl2\_correction\_rms vs Slug, Sign Corrected



Right In: 1330.250+/-0.745  $\chi^2/\text{NDF}$ : 10046828.9/16

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

Right Out: 781.848+/-0.492  $\chi^2/\text{NDF}$ : 11439893.7/18

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

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

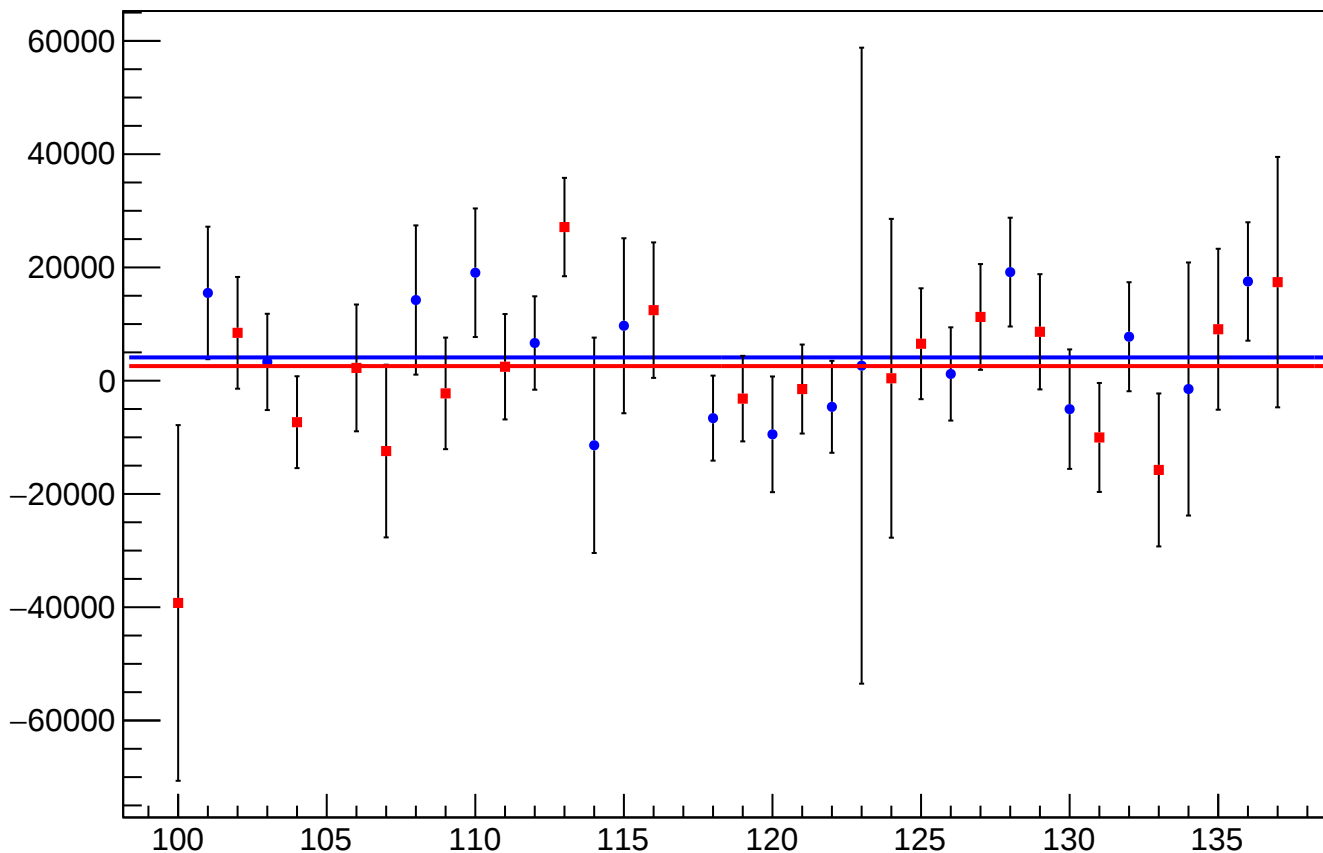
Right: 948.102+/-0.410  $\chi^2/\text{NDF}$ : 21864055.1/35

In: 1330.250+/-0.745  $\chi^2/\text{NDF}$ : 10046828.9/16

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

All: 948.102+/-0.410  $\chi^2/\text{NDF}$ : 21864055.1/35

# asym\_atl2\_mean vs Slug, Sign Corrected



Right In: 4111.784+/-2534.444  $\chi^2/\text{NDF}$ : 14.3/16

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

Right Out: 2577.719+/-2420.480  $\chi^2/\text{NDF}$ : 20.0/18

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

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

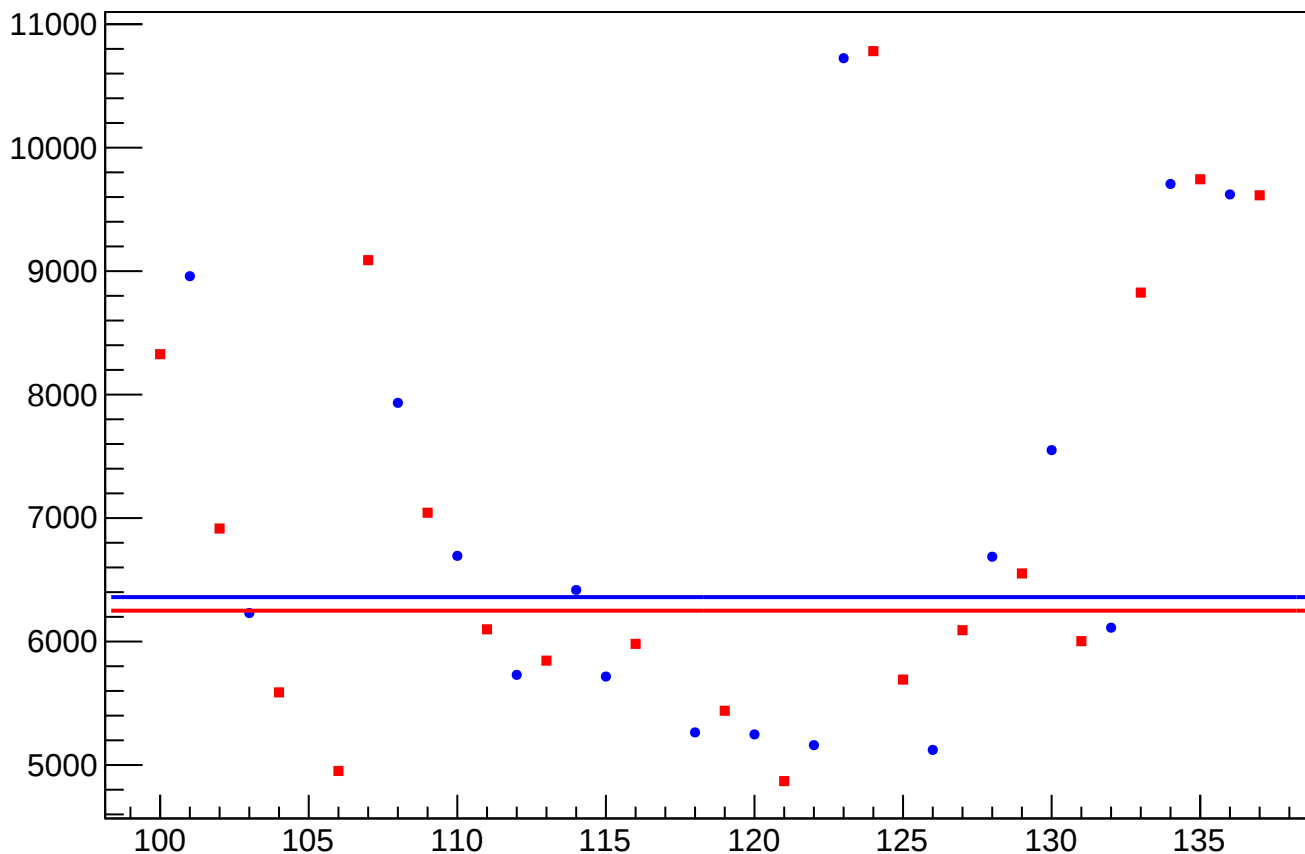
Right: 3309.487+/-1750.441  $\chi^2/\text{NDF}$ : 34.5/35

In: 4111.784+/-2534.444  $\chi^2/\text{NDF}$ : 14.3/16

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

All: 3309.487+/-1750.441  $\chi^2/\text{NDF}$ : 34.5/35

# asym\_atl2\_rms vs Slug, Sign Corrected



Right In: 6359.928+/-1.792  $\chi^2/\text{NDF}$ : 580471.0/16

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

Right Out: 6250.049+/-1.711  $\chi^2/\text{NDF}$ : 532966.2/18

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

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

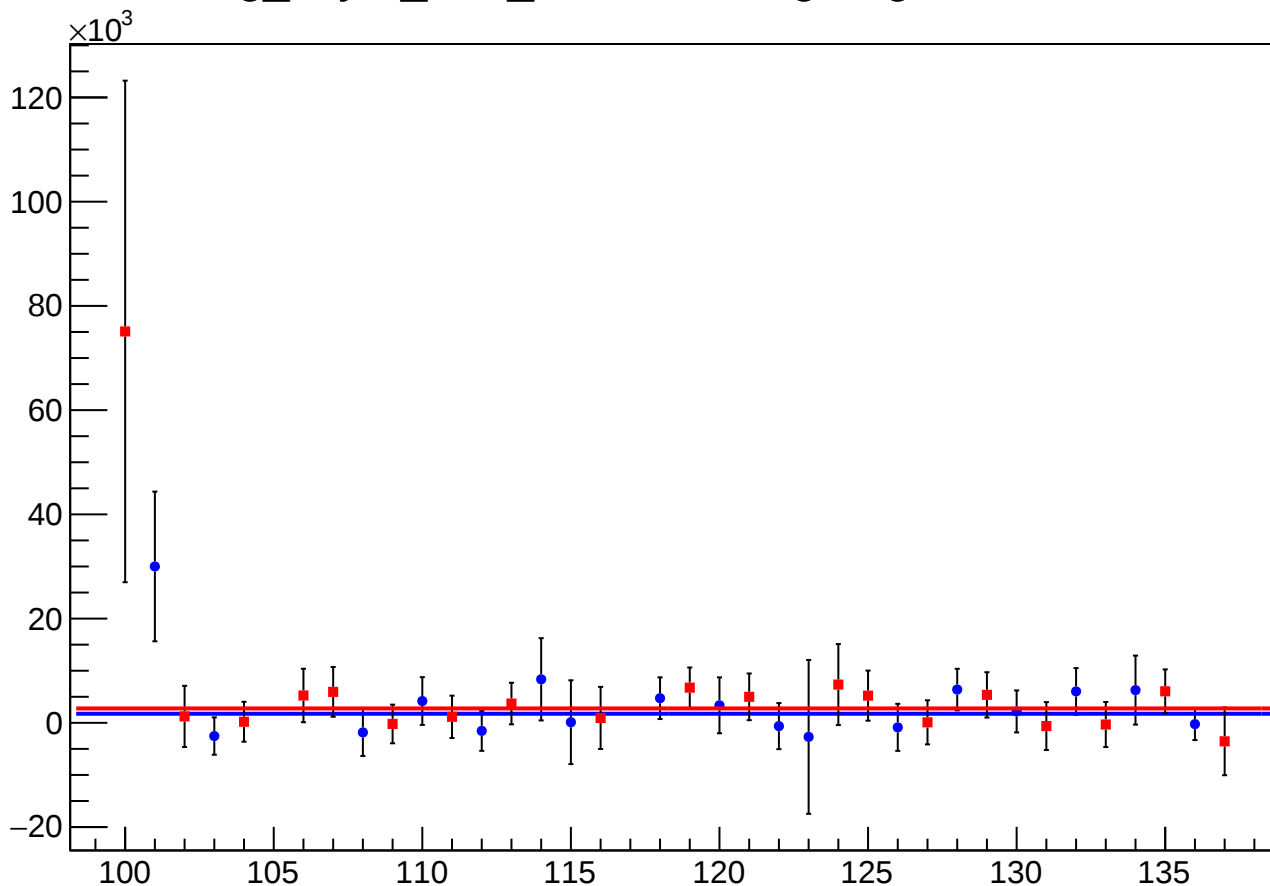
Right: 6302.460+/-1.238  $\chi^2/\text{NDF}$ : 1115403.3/35

In: 6359.928+/-1.792  $\chi^2/\text{NDF}$ :580471.0/16

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

All: 6302.460+/-1.238  $\chi^2/\text{NDF}$ : 1115403.3/35

# reg\_asym\_atr1\_mean vs Slug, Sign Corrected



Right In: 1746.001 $\pm$ 1128.522  $\chi^2$ /NDF: 12.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 2763.863 $\pm$ 1071.947  $\chi^2$ /NDF: 9.7/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

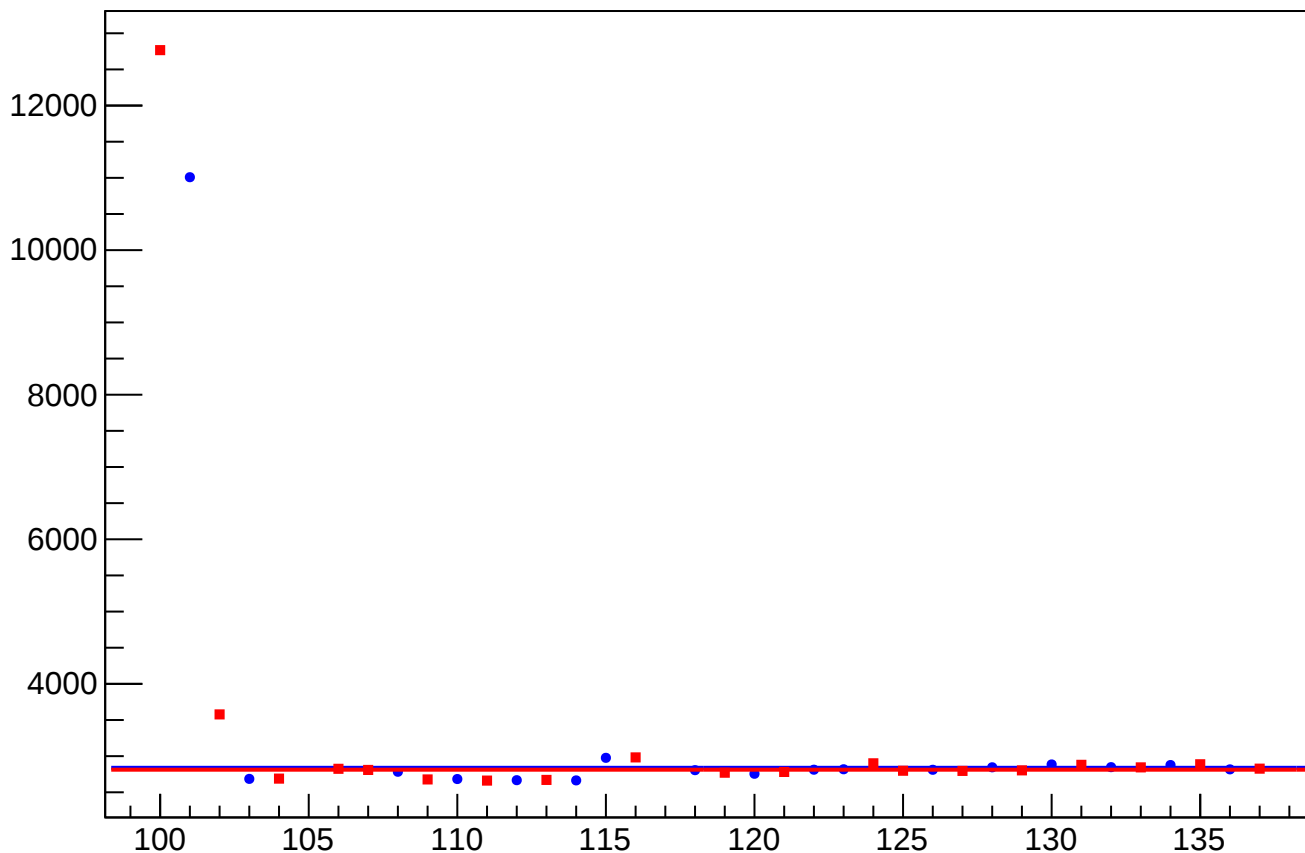
Right: 2281.084 $\pm$ 777.212  $\chi^2$ /NDF: 22.3/35

In: 1746.001 $\pm$ 1128.522  $\chi^2$ /NDF: 12.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 2281.084 $\pm$ 777.212  $\chi^2$ /NDF: 22.3/35

# reg\_asym\_atr1\_rms vs Slug, Sign Corrected



Right In: 2838.737+/-0.798  $\chi^2/\text{NDF}$ : 660209.3/16

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

Right Out: 2812.627+/-0.758  $\chi^2/\text{NDF}$ : 133064.0/18

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

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

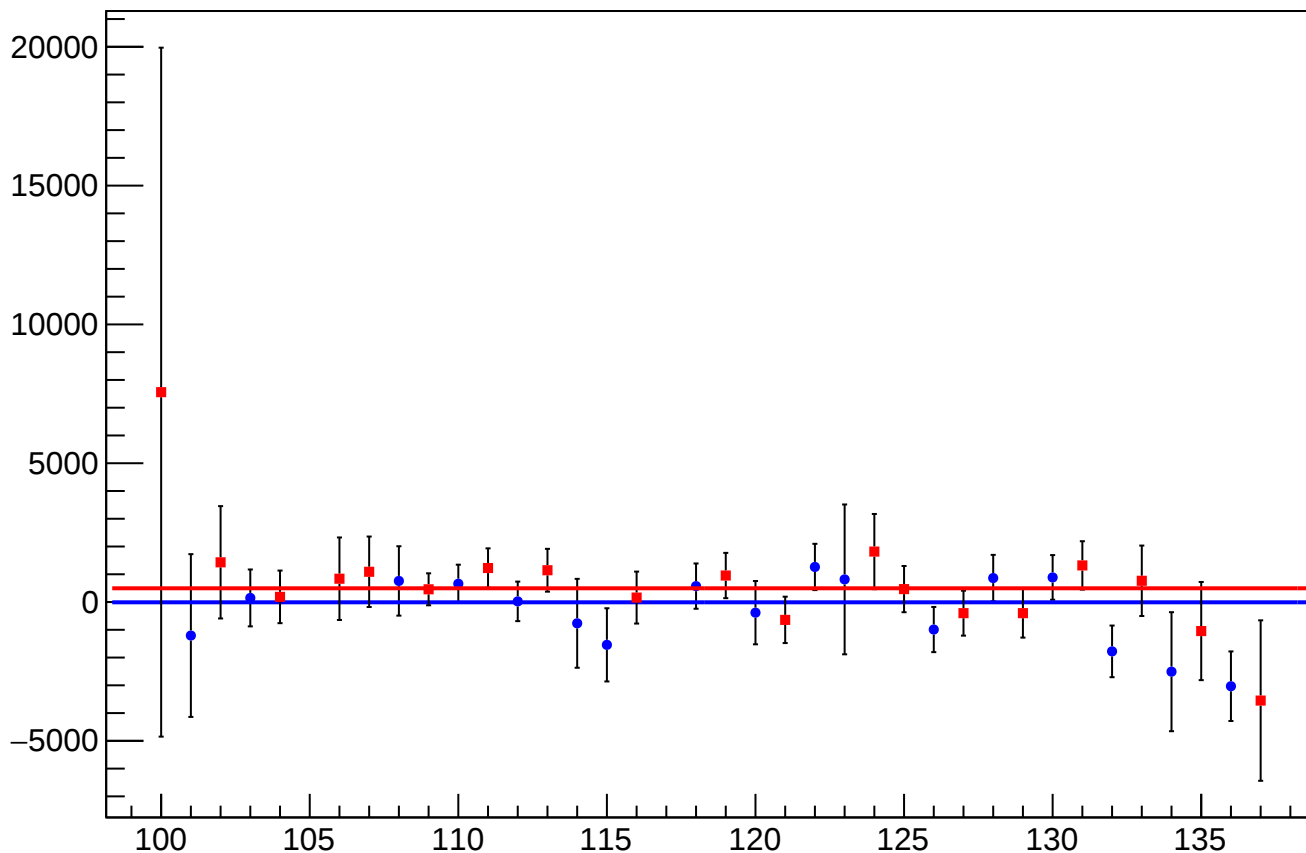
Right: 2825.011+/-0.550  $\chi^2/\text{NDF}$ : 793836.1/35

In: 2838.737+/-0.798  $\chi^2/\text{NDF}$ : 660209.3/16

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

All: 2825.011+/-0.550  $\chi^2/\text{NDF}$ : 793836.1/35

# asym\_atr1\_correction\_mean vs Slug, Sign Corrected



Right In:  $-9.845 \pm 241.678$   $\chi^2/\text{NDF}$ : 20.7/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $495.250 \pm 221.487$   $\chi^2/\text{NDF}$ : 11.9/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

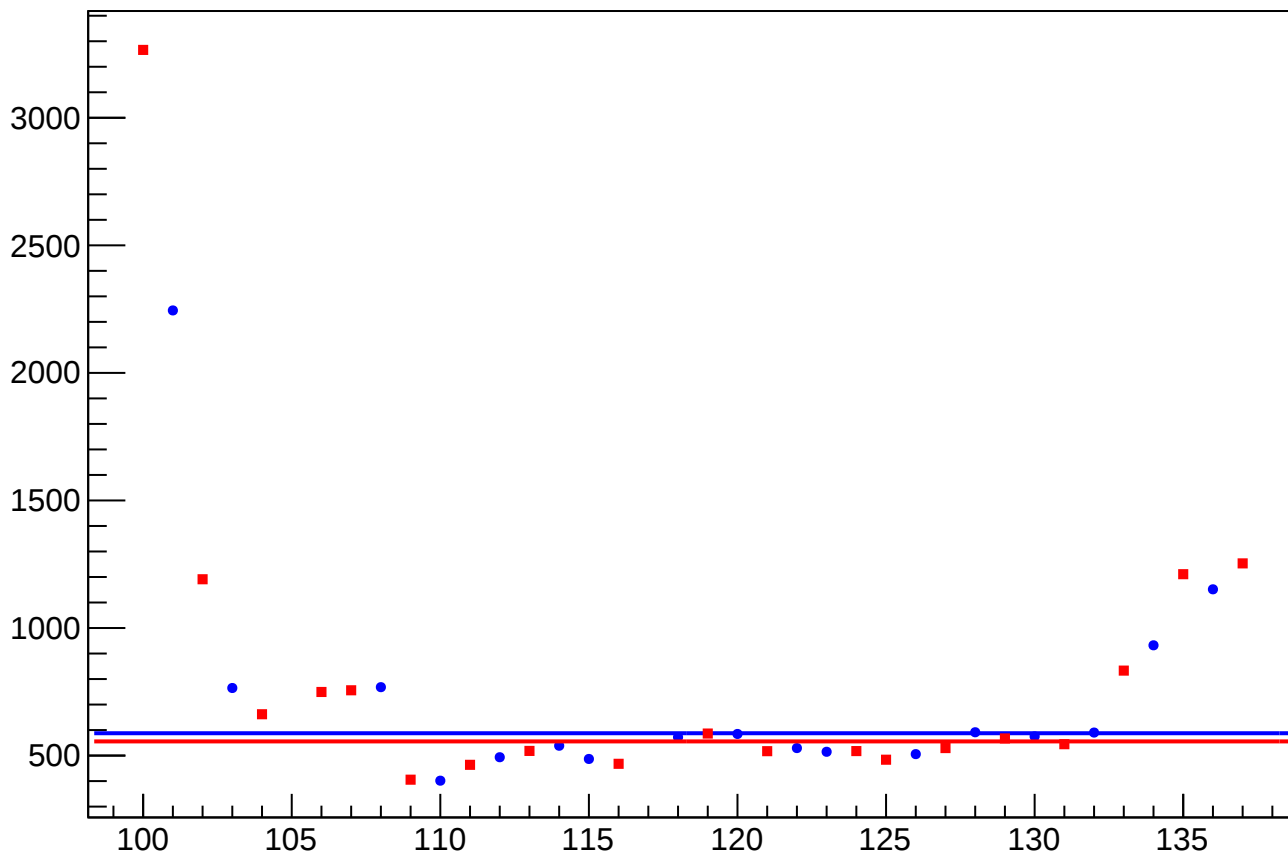
Right:  $264.680 \pm 163.287$   $\chi^2/\text{NDF}$ : 35.0/35

In:  $-9.845 \pm 241.678$   $\chi^2/\text{NDF}$ : 20.7/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $264.680 \pm 163.287$   $\chi^2/\text{NDF}$ : 35.0/35

# asym\_atr1\_correction\_rms vs Slug, Sign Corrected



Right In: 587.596+/-0.171  $\chi^2/\text{NDF}$ : 1425769.6/16

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

Right Out: 555.534+/-0.157  $\chi^2/\text{NDF}$ : 1106760.5/18

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

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

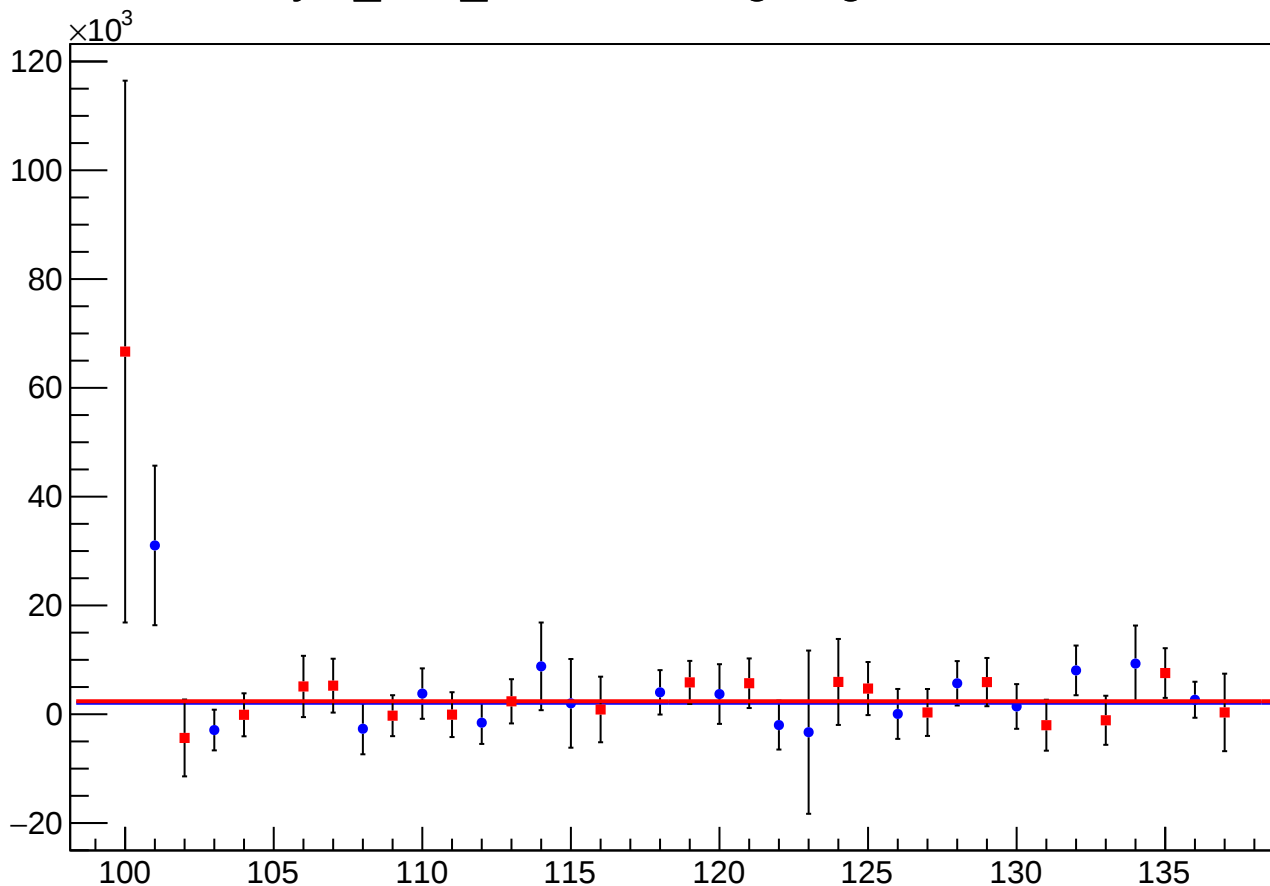
Right: 570.170+/-0.115  $\chi^2/\text{NDF}$ : 2551661.9/35

In: 587.596+/-0.171  $\chi^2/\text{NDF}$ : 1425769.6/16

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

All: 570.170+/-0.115  $\chi^2/\text{NDF}$ : 2551661.9/35

# asym\_atr1\_mean vs Slug, Sign Corrected



Right In: 2108.498 $\pm$ 1164.336  $\chi^2/\text{NDF}$ : 13.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2385.851 $\pm$ 1110.248  $\chi^2/\text{NDF}$ : 9.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

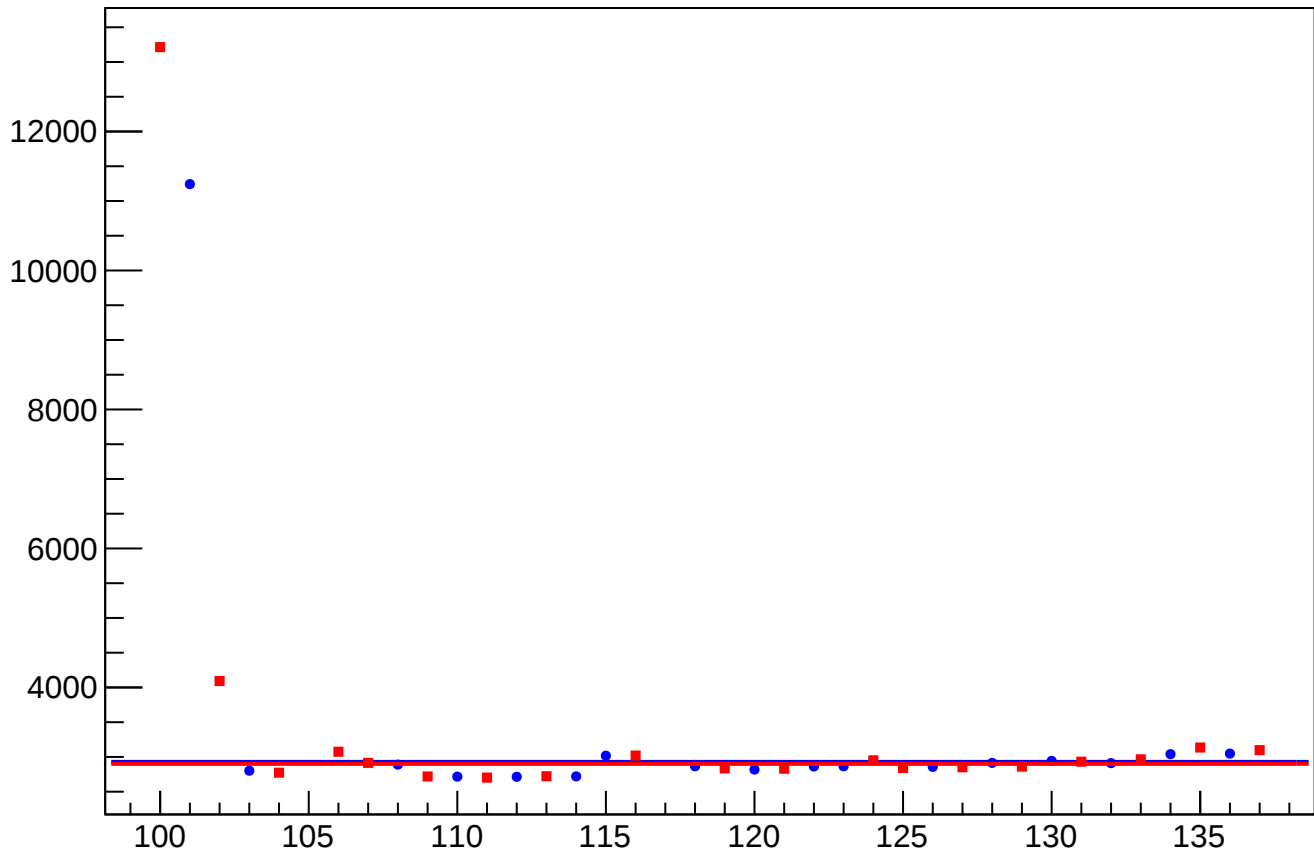
Right: 2253.766 $\pm$ 803.505  $\chi^2/\text{NDF}$ : 23.4/35

In: 2108.498 $\pm$ 1164.336  $\chi^2/\text{NDF}$ : 13.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2253.766 $\pm$ 803.505  $\chi^2/\text{NDF}$ : 23.4/35

# asym\_atr1\_rms vs Slug, Sign Corrected



Right In: 2928.700+/-0.823  $\chi^2/\text{NDF}$ : 662362.9/16

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

Right Out: 2900.472+/-0.785  $\chi^2/\text{NDF}$ : 169720.6/18

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

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

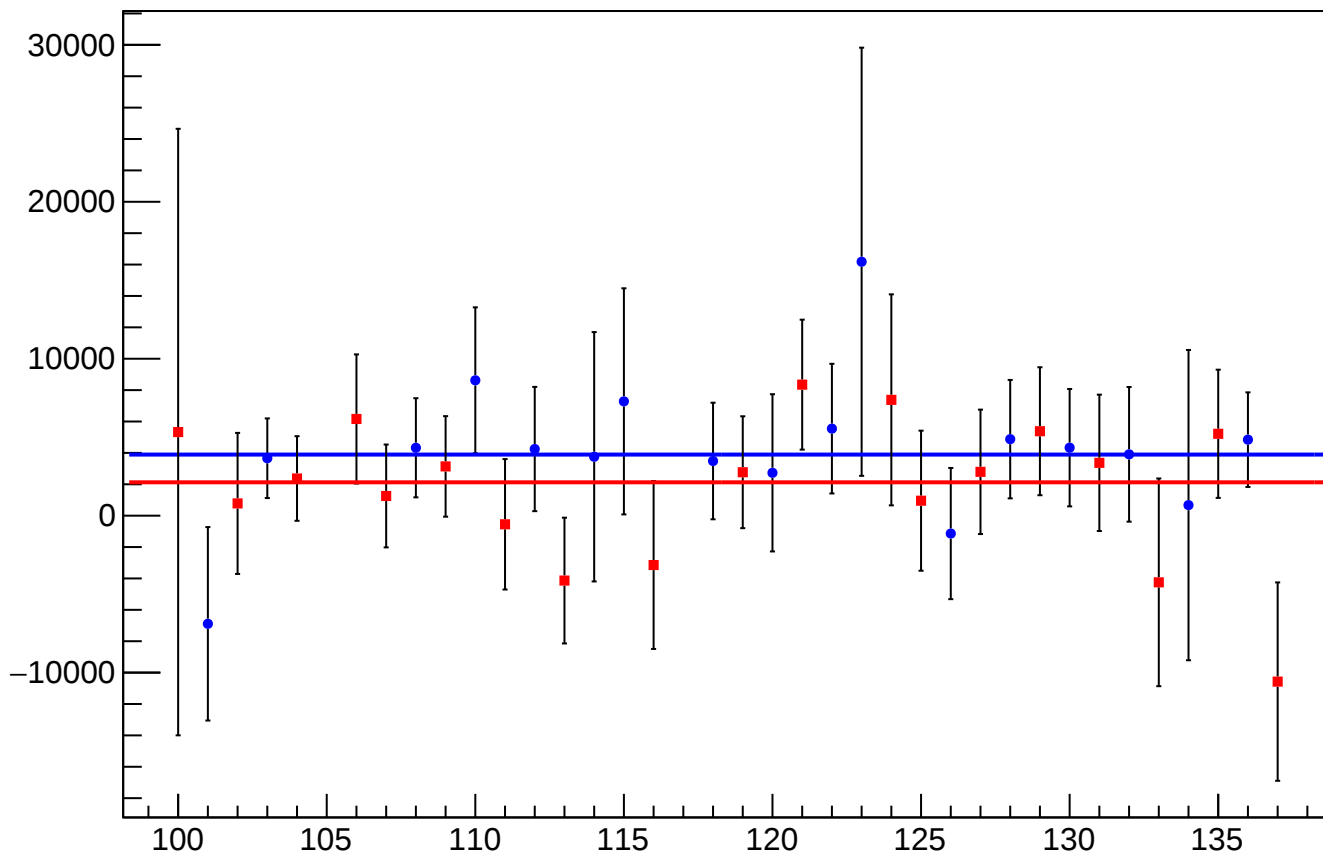
Right: 2913.915+/-0.568  $\chi^2/\text{NDF}$ : 832699.2/35

In: 2928.700+/-0.823  $\chi^2/\text{NDF}$ : 662362.9/16

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

All: 2913.915+/-0.568  $\chi^2/\text{NDF}$ : 832699.2/35

# reg\_asym\_atr2\_mean vs Slug, Sign Corrected



Right In: 3892.504+/-1011.718  $\chi^2/\text{NDF}$ : 7.1/16

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

Right Out: 2124.700+/-958.418  $\chi^2/\text{NDF}$ : 14.3/18

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

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

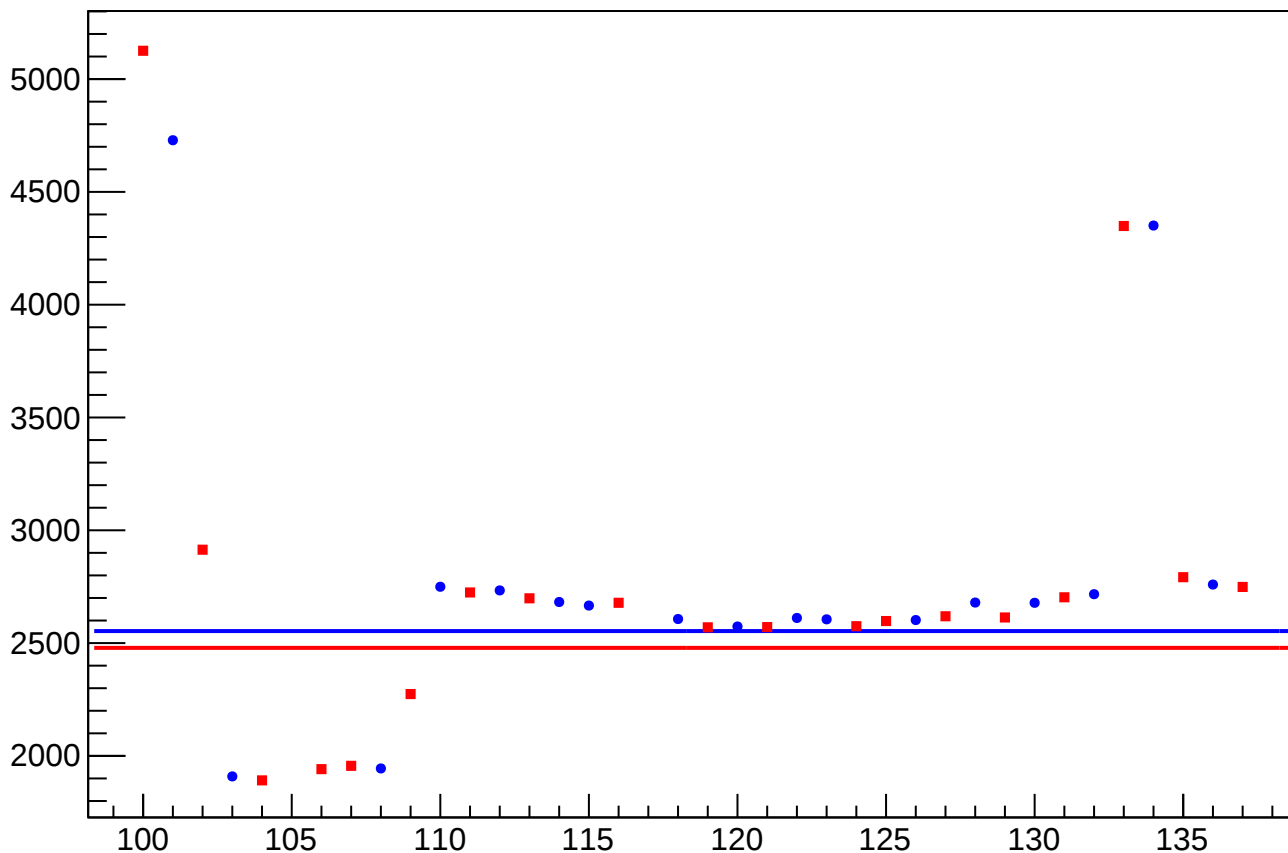
Right: 2960.811+/-695.784  $\chi^2/\text{NDF}$ : 23.1/35

In: 3892.504+/-1011.718  $\chi^2/\text{NDF}$ : 7.1/16

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

All: 2960.811+/-695.784  $\chi^2/\text{NDF}$ : 23.1/35

# reg\_asym\_atr2\_rms vs Slug, Sign Corrected



Right In: 2553.280+/-0.715  $\chi^2/\text{NDF}$ : 545226.9/16

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

Right Out: 2478.860+/-0.678  $\chi^2/\text{NDF}$ : 449502.6/18

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

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

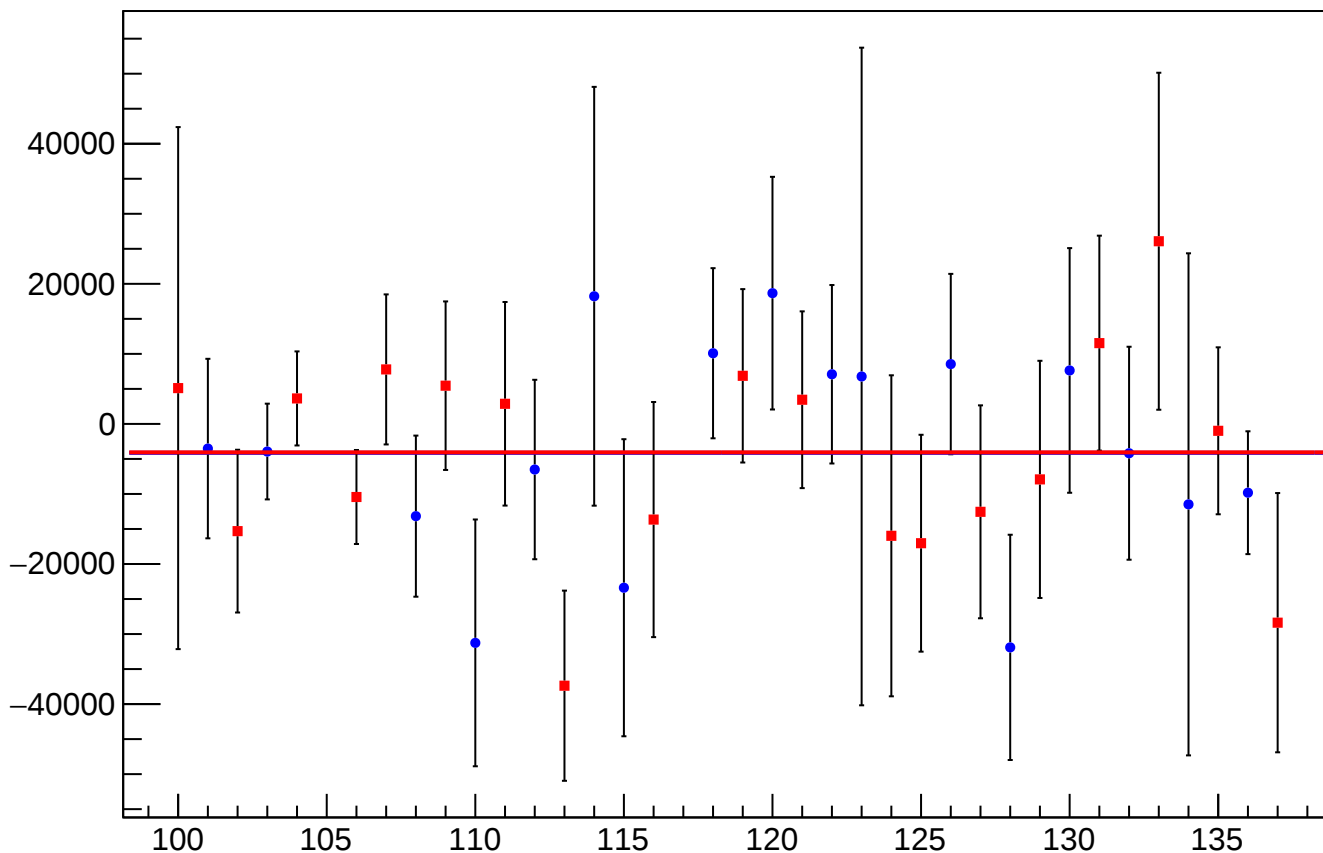
Right: 2514.058+/-0.492  $\chi^2/\text{NDF}$ : 1000433.0/35

In: 2553.280+/-0.715  $\chi^2/\text{NDF}$ : 545226.9/16

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

All: 2514.058+/-0.492  $\chi^2/\text{NDF}$ : 1000433.0/35

asym\_atr2\_correction\_mean vs Slug, Sign Corrected



Right In:  $-4126.319 \pm 3227.044$   $\chi^2/\text{NDF}$ : 13.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-4060.328 \pm 2834.326$   $\chi^2/\text{NDF}$ : 18.5/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

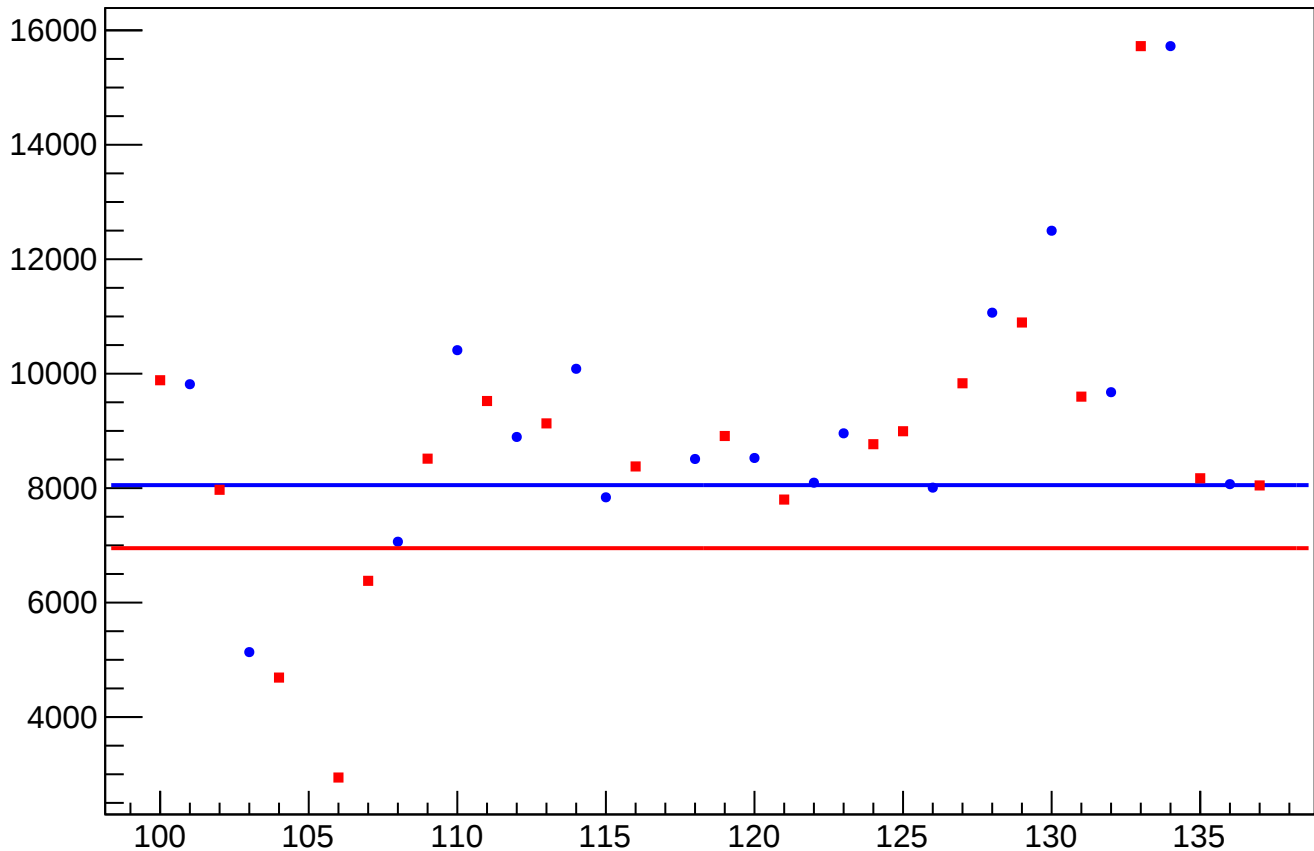
Right:  $-4089.066 \pm 2129.557$   $\chi^2/\text{NDF}$ : 31.9/35

In:  $-4126.319 \pm 3227.044$   $\chi^2/\text{NDF}$ : 13.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-4089.066 \pm 2129.557$   $\chi^2/\text{NDF}$ : 31.9/35

# asym\_atr2\_correction\_rms vs Slug, Sign Corrected



Right In: 8052.552+/-2.282  $\chi^2/\text{NDF}$ : 790724.2/16

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

Right Out: 6950.943+/-2.004  $\chi^2/\text{NDF}$ : 1776578.9/18

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

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

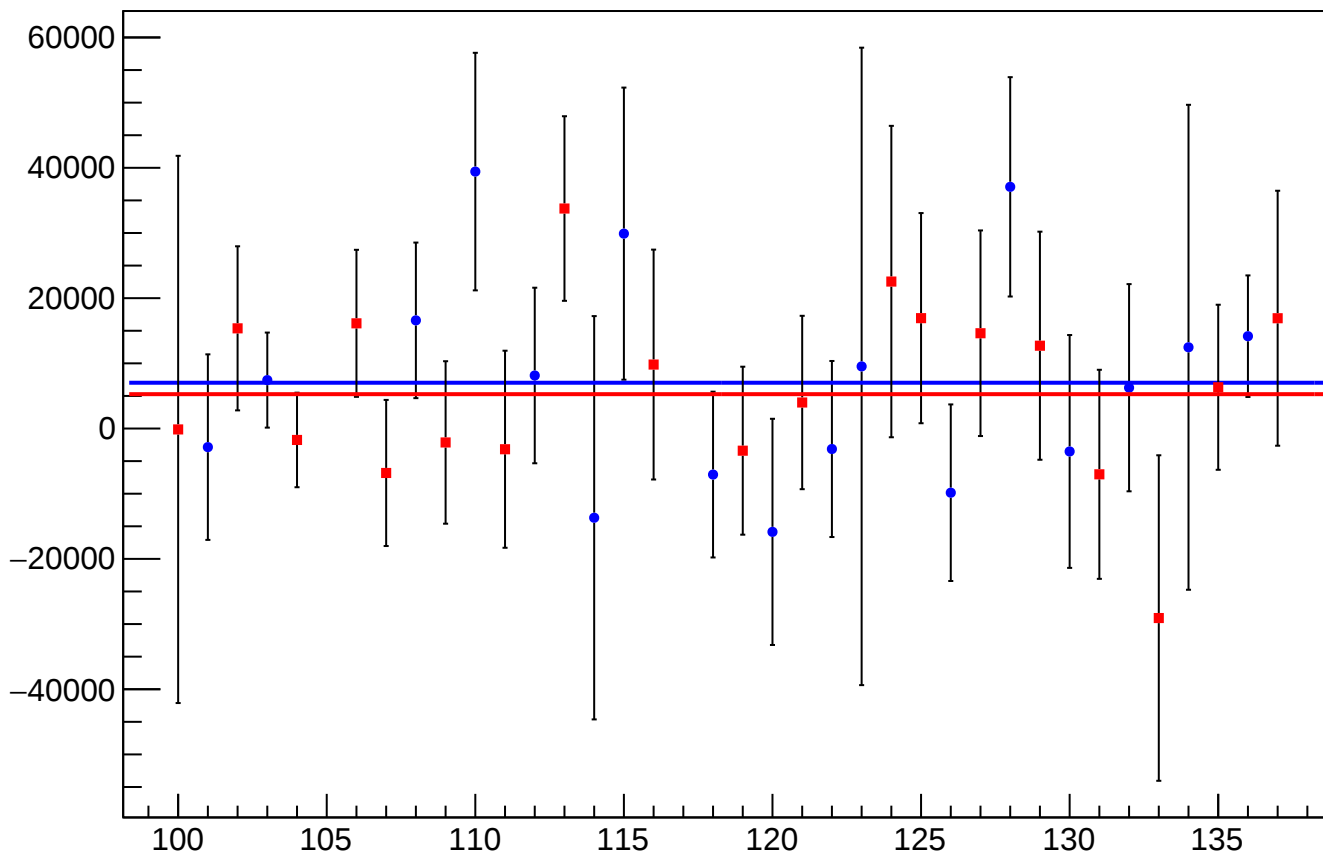
Right: 7430.673+/-1.506  $\chi^2/\text{NDF}$ : 2698872.2/35

In: 8052.552+/-2.282  $\chi^2/\text{NDF}$ : 790724.2/16

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

All: 7430.673+/-1.506  $\chi^2/\text{NDF}$ : 2698872.2/35

# asym\_atr2\_mean vs Slug, Sign Corrected



Right In: 7025.400+/-3409.490  $\chi^2/\text{NDF}$ : 15.0/16

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

Right Out: 5271.793+/-3168.195  $\chi^2/\text{NDF}$ : 13.4/18

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

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

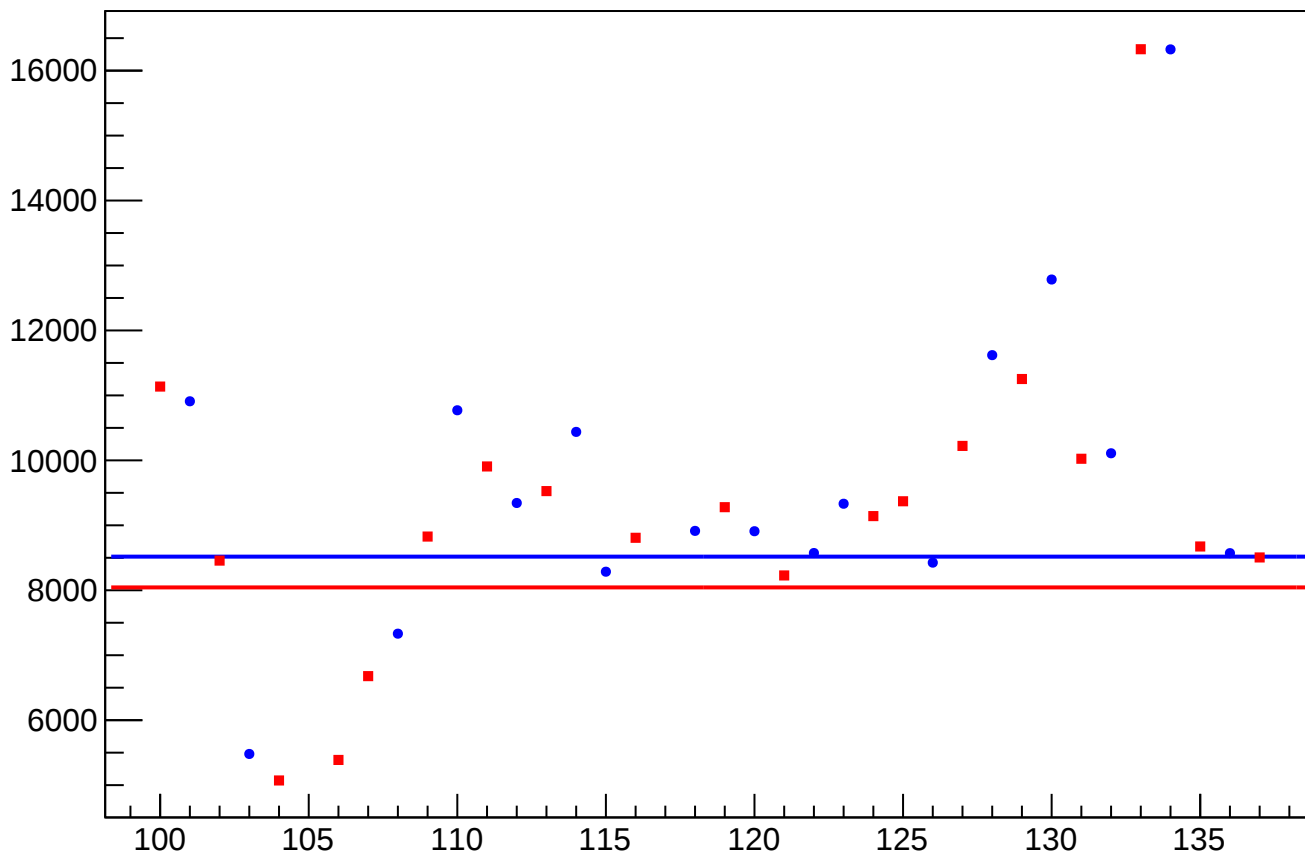
Right: 6084.354+/-2320.872  $\chi^2/\text{NDF}$ : 28.5/35

In: 7025.400+/-3409.490  $\chi^2/\text{NDF}$ : 15.0/16

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

All: 6084.354+/-2320.872  $\chi^2/\text{NDF}$ : 28.5/35

# asym\_atr2\_rms vs Slug, Sign Corrected



Right In: 8517.886+/-2.411  $\chi^2/\text{NDF}$ : 763281.4/16

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

Right Out: 8043.998+/-2.240  $\chi^2/\text{NDF}$ : 952125.8/18

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

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

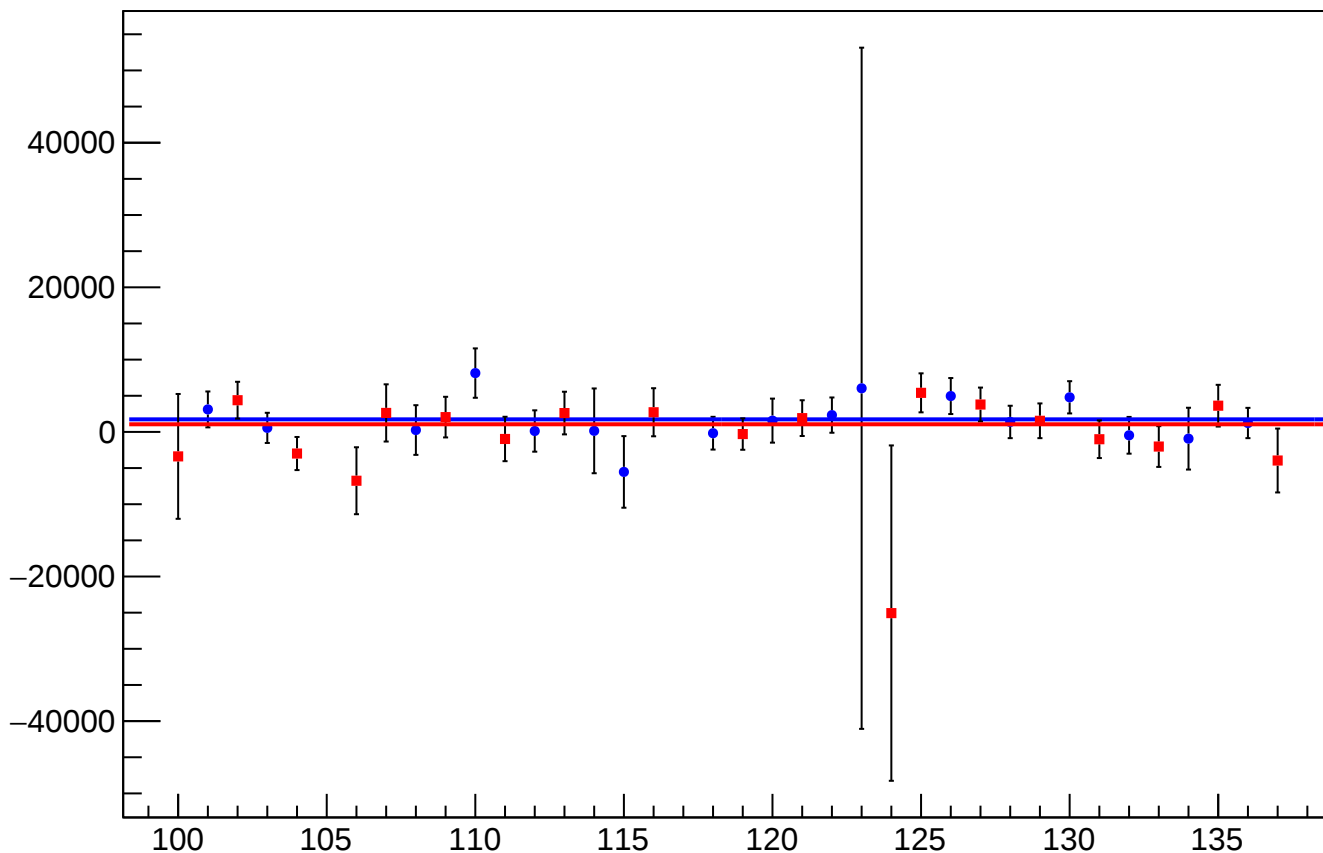
Right: 8263.573+/-1.641  $\chi^2/\text{NDF}$ : 1736141.9/35

In: 8517.886+/-2.411  $\chi^2/\text{NDF}$ : 763281.4/16

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

All: 8263.573+/-1.641  $\chi^2/\text{NDF}$ : 1736141.9/35

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



Right In: 1739.640+/-670.395  $\chi^2/\text{NDF}$ : 12.4/16

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

Right Out: 1055.584+/-670.984  $\chi^2/\text{NDF}$ : 18.9/18

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

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

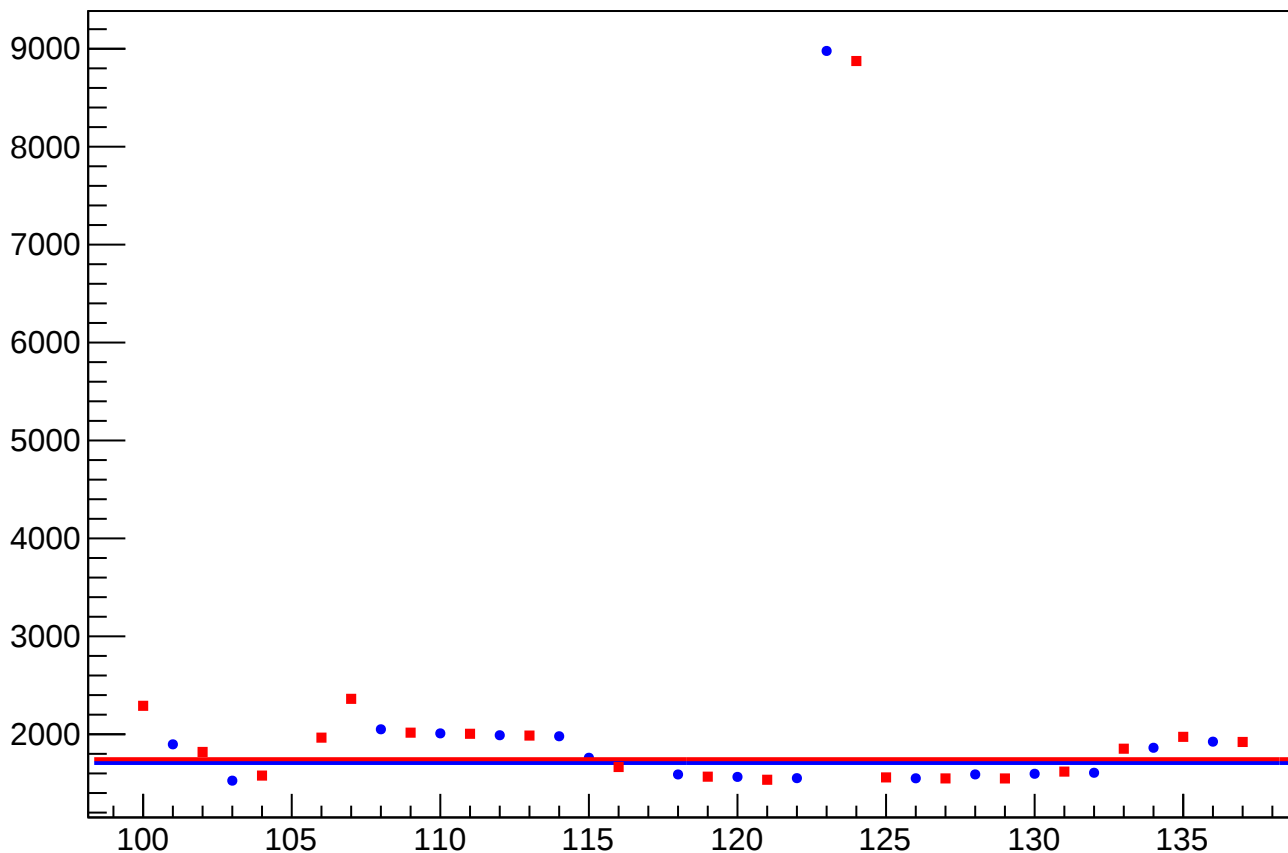
Right: 1397.913+/-474.249  $\chi^2/\text{NDF}$ : 31.8/35

In: 1739.640+/-670.395  $\chi^2/\text{NDF}$ : 12.4/16

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

All: 1397.913+/-474.249  $\chi^2/\text{NDF}$ : 31.8/35

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



Right In: 1706.867+/-0.474  $\chi^2/\text{NDF}$ : 197555.1/16

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

Right Out: 1745.434+/-0.472  $\chi^2/\text{NDF}$ : 399811.9/18

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

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

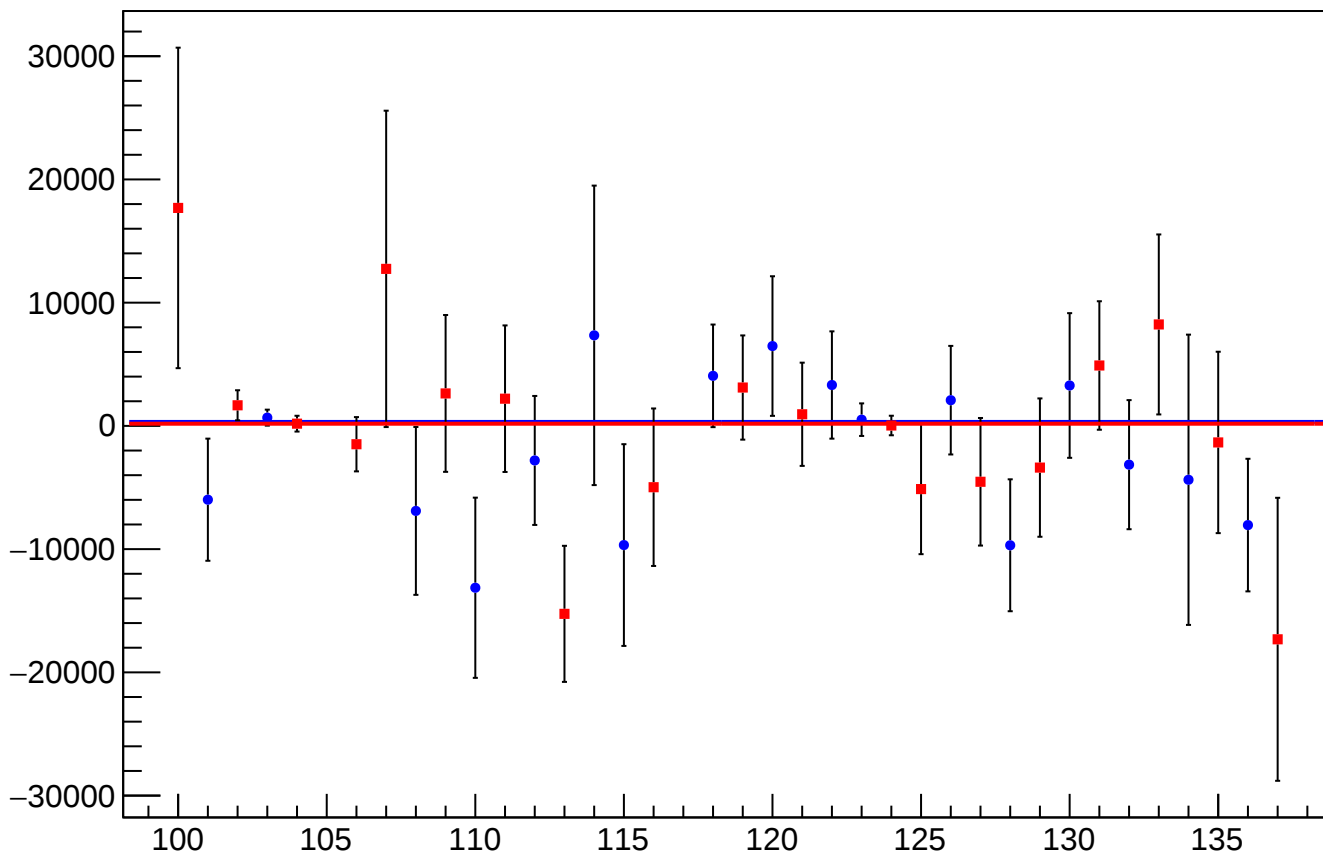
Right: 1726.220+/-0.335  $\chi^2/\text{NDF}$ : 600688.4/35

In: 1706.867+/-0.474  $\chi^2/\text{NDF}$ : 197555.1/16

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

All: 1726.220+/-0.335  $\chi^2/\text{NDF}$ : 600688.4/35

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



Right In: 320.899+/-540.384  $\chi^2/\text{NDF}$ : 18.0/16

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

Right Out: 176.640+/-433.552  $\chi^2/\text{NDF}$ : 20.8/18

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

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

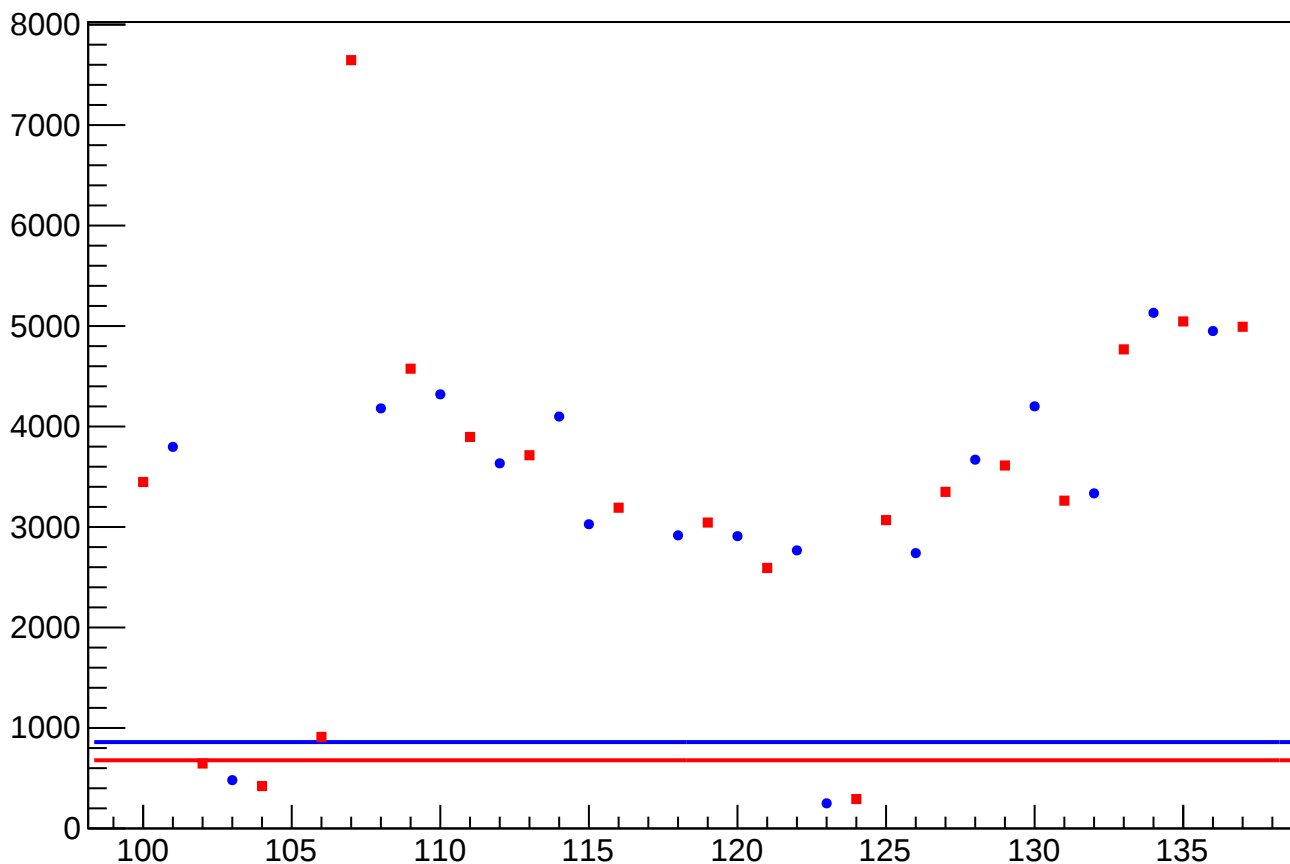
Right: 233.134+/-338.167  $\chi^2/\text{NDF}$ : 38.8/35

In: 320.899+/-540.384  $\chi^2/\text{NDF}$ : 18.0/16

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

All: 233.134+/-338.167  $\chi^2/\text{NDF}$ : 38.8/35

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



Right In: 859.557+/-0.382  $\chi^2/\text{NDF}$ : 8143264.5/16

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

Right Out: 678.603+/-0.307  $\chi^2/\text{NDF}$ : 8384814.2/18

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

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

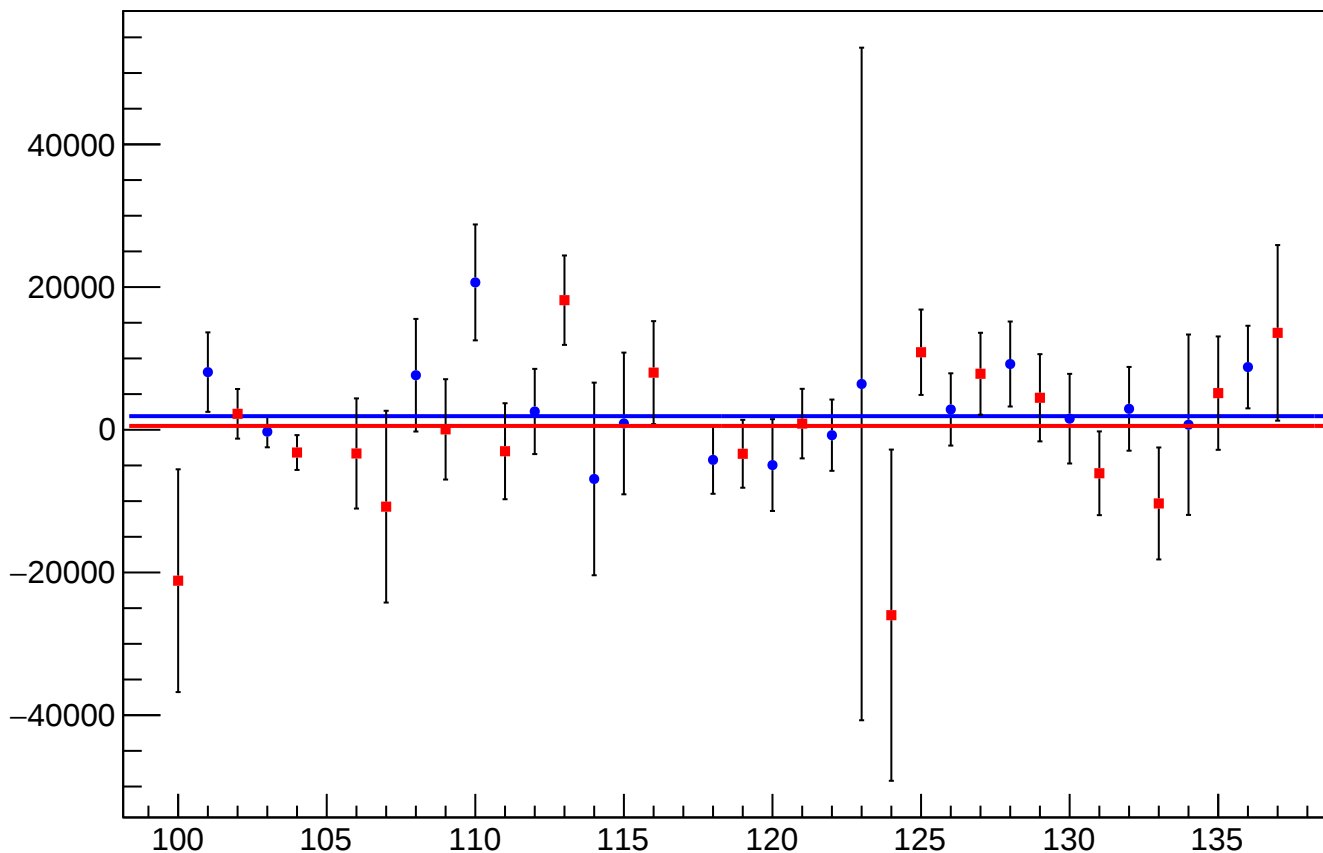
Right: 749.467+/-0.239  $\chi^2/\text{NDF}$ : 16664518.8/35

In: 859.557+/-0.382  $\chi^2/\text{NDF}$ : 8143264.5/16

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

All: 749.467+/-0.239  $\chi^2/\text{NDF}$ : 16664518.8/35

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



Right In: 1909.348+/-1310.219  $\chi^2/\text{NDF}$ : 14.6/16

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

Right Out: 539.549+/-1285.817  $\chi^2/\text{NDF}$ : 26.4/18

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

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

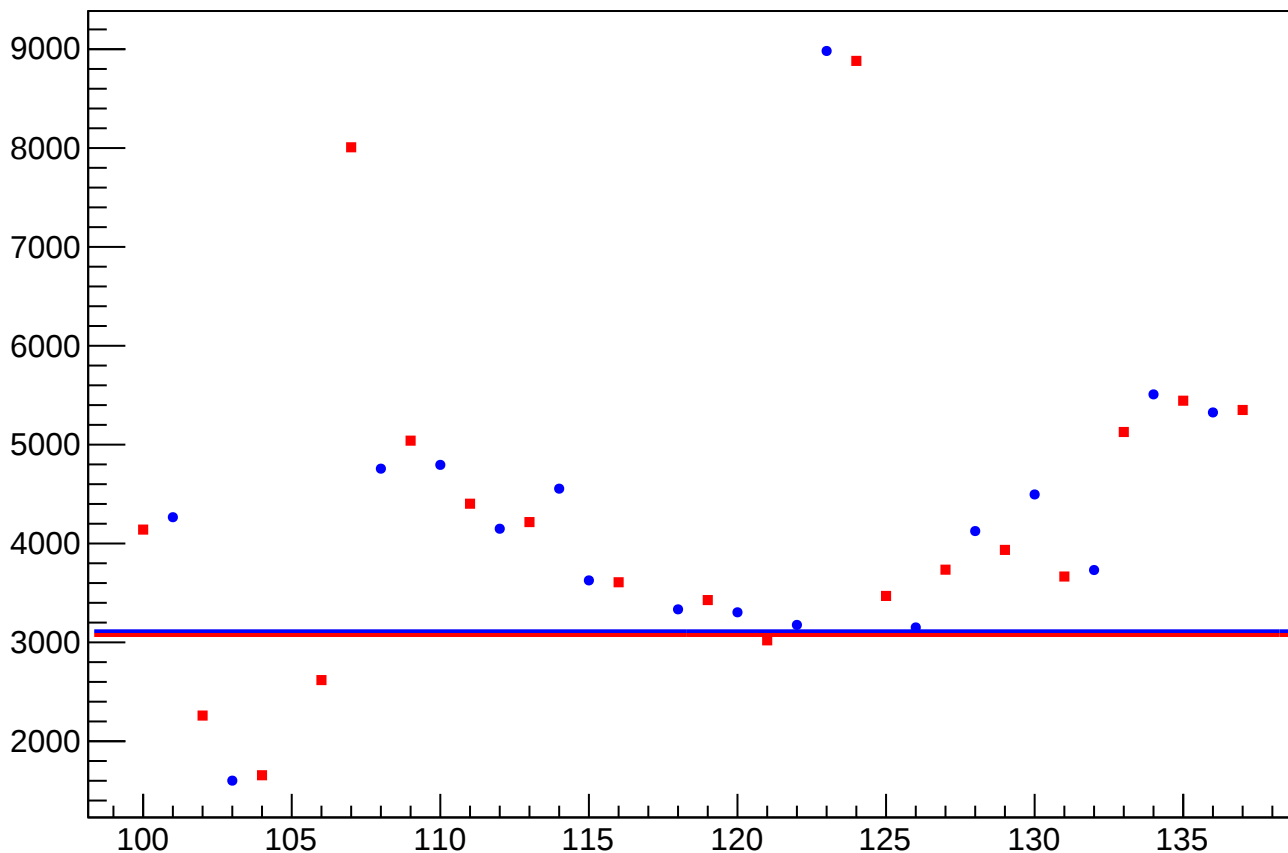
Right: 1211.574+/-917.716  $\chi^2/\text{NDF}$ : 41.6/35

In: 1909.348+/-1310.219  $\chi^2/\text{NDF}$ : 14.6/16

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

All: 1211.574+/-917.716  $\chi^2/\text{NDF}$ : 41.6/35

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



Right In: 3111.825+/-0.926  $\chi^2/\text{NDF}$ : 1879558.6/16

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

Right Out: 3074.771+/-0.896  $\chi^2/\text{NDF}$ : 2005627.6/18

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

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

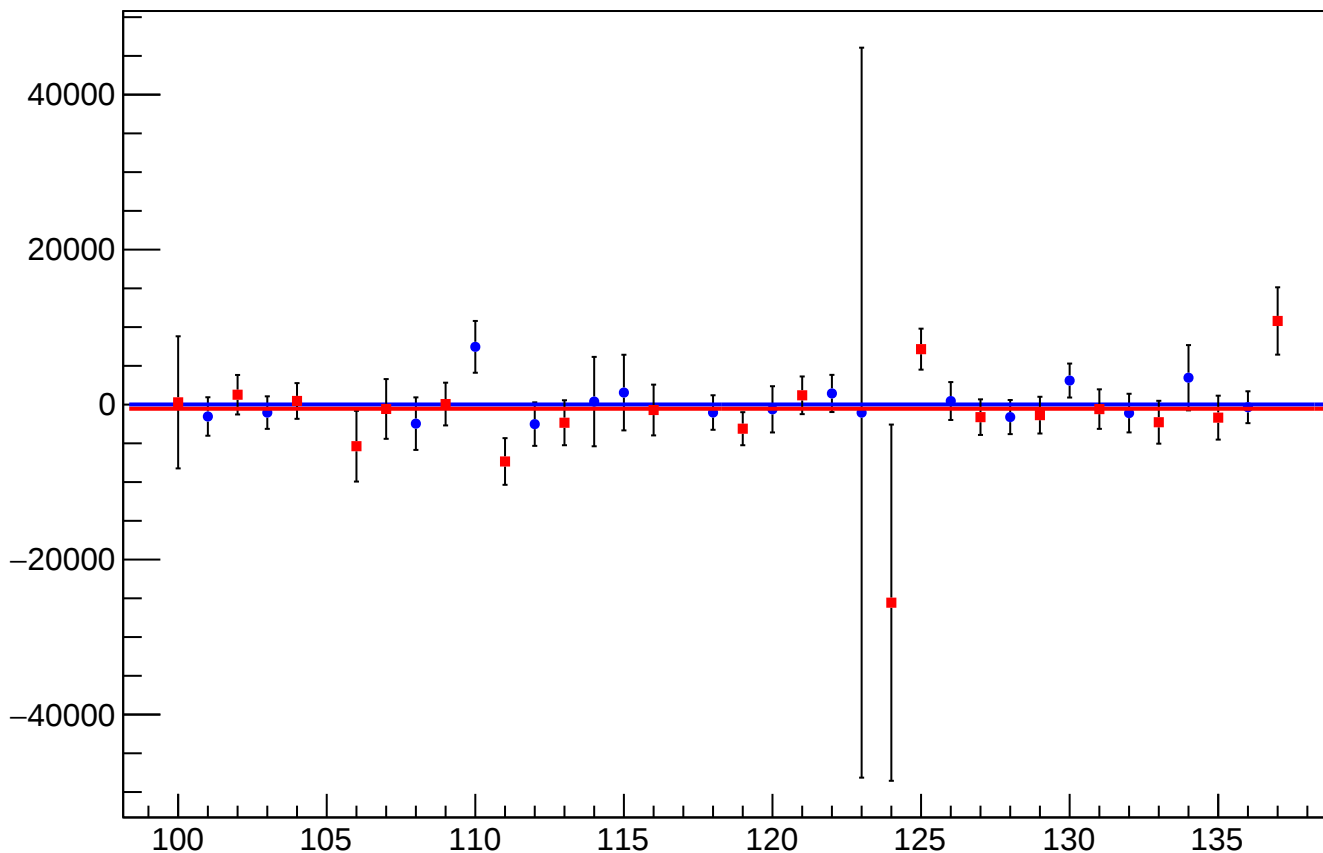
Right: 3092.680+/-0.644  $\chi^2/\text{NDF}$ : 3886012.7/35

In: 3111.825+/-0.926  $\chi^2/\text{NDF}$ : 1879558.6/16

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

All: 3092.680+/-0.644  $\chi^2/\text{NDF}$ : 3886012.7/35

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



Right In: 14.118+/-661.101  $\chi^2$ /NDF: 11.1/16

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

Right Out: -537.476+/-661.143  $\chi^2$ /NDF: 26.7/18

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

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

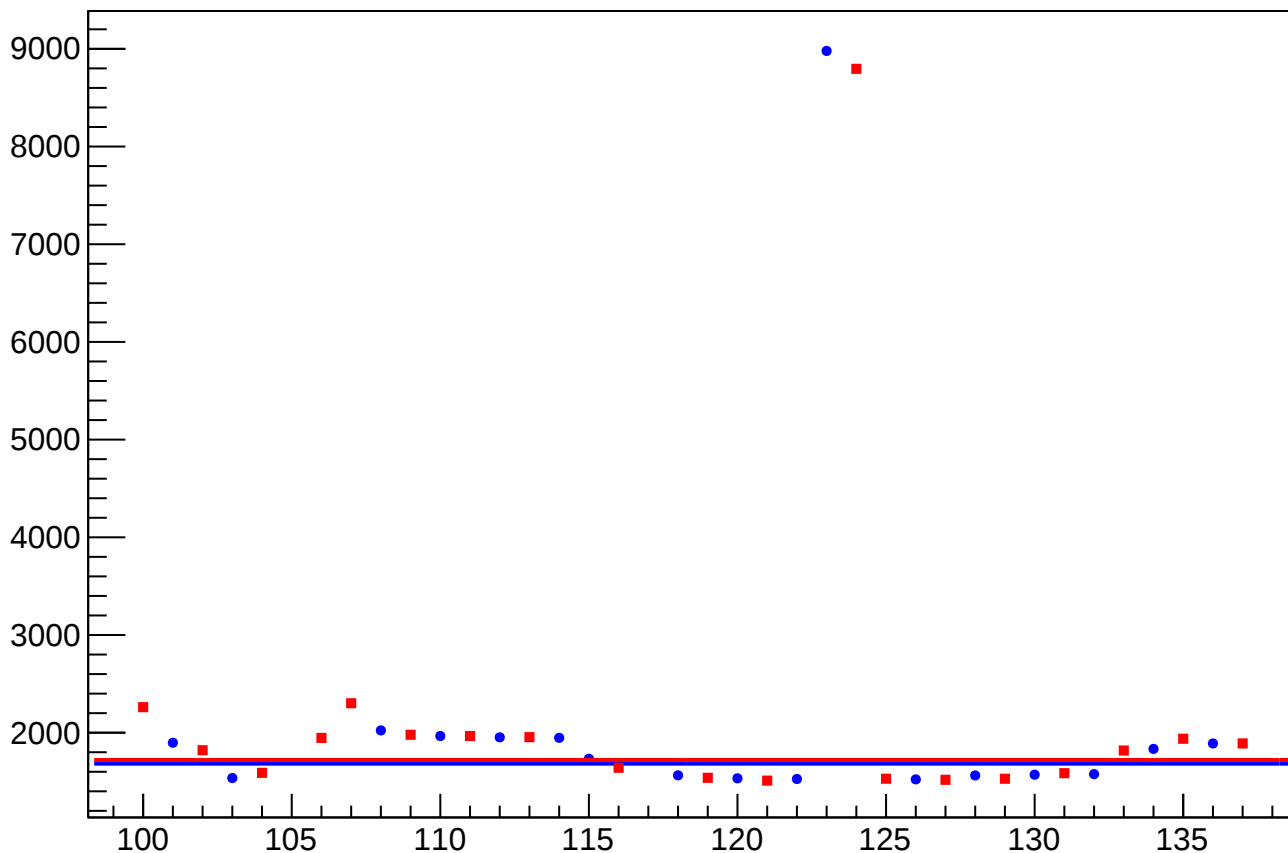
Right: -261.662+/-467.484  $\chi^2$ /NDF: 38.1/35

In: 14.118+/-661.101  $\chi^2$ /NDF:11.1/16

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

All: -261.662+/-467.484  $\chi^2$ /NDF: 38.1/35

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



Right In: 1683.259+/-0.467  $\chi^2/\text{NDF}$ : 195893.7/16

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

Right Out: 1720.379+/-0.465  $\chi^2/\text{NDF}$ : 396099.9/18

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

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

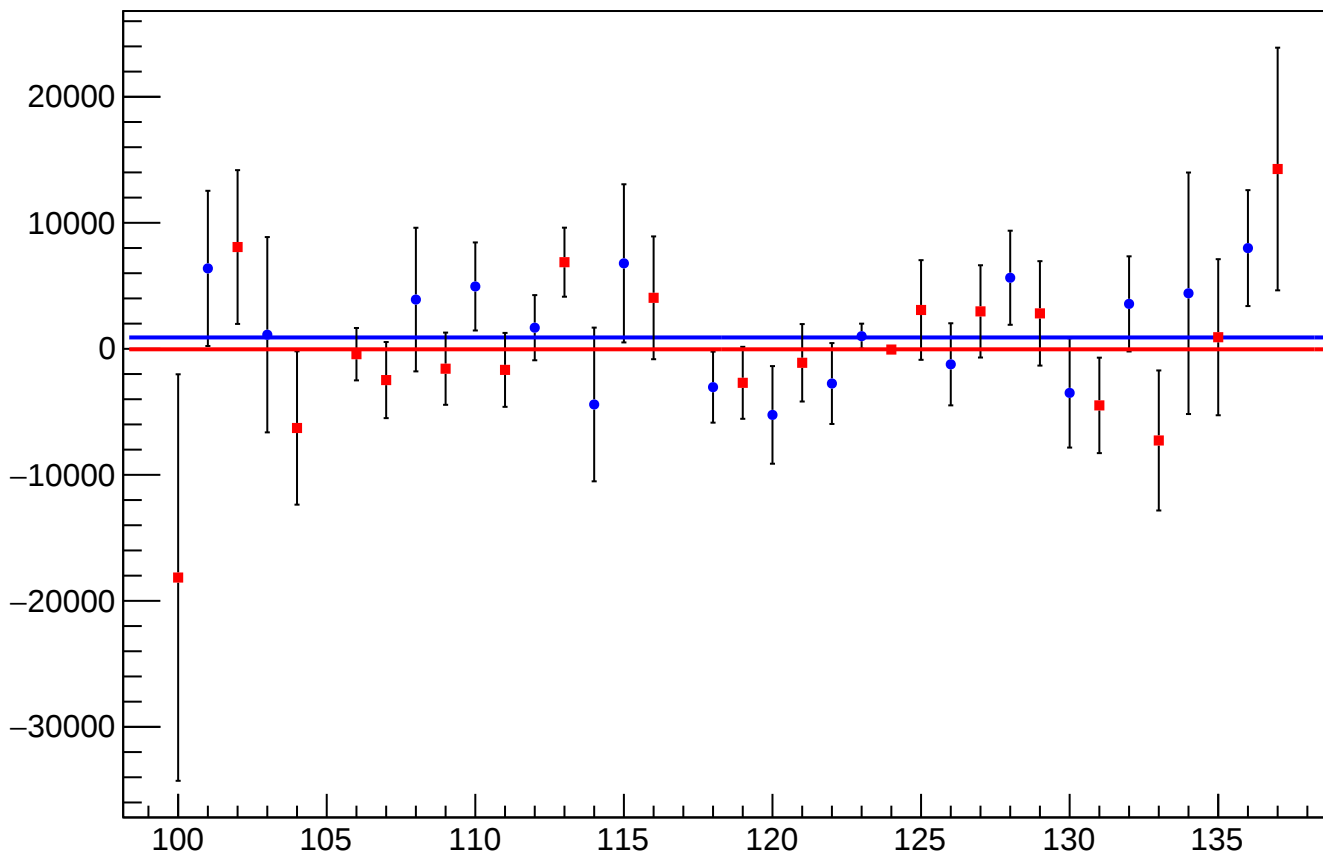
Right: 1701.898+/-0.330  $\chi^2/\text{NDF}$ : 595159.7/35

In: 1683.259+/-0.467  $\chi^2/\text{NDF}$ : 195893.7/16

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

All: 1701.898+/-0.330  $\chi^2/\text{NDF}$ : 595159.7/35

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



Right In: 903.344+/-705.564  $\chi^2/\text{NDF}$ : 16.0/16

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

Right Out: -38.143+/-357.176  $\chi^2/\text{NDF}$ : 20.5/18

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

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

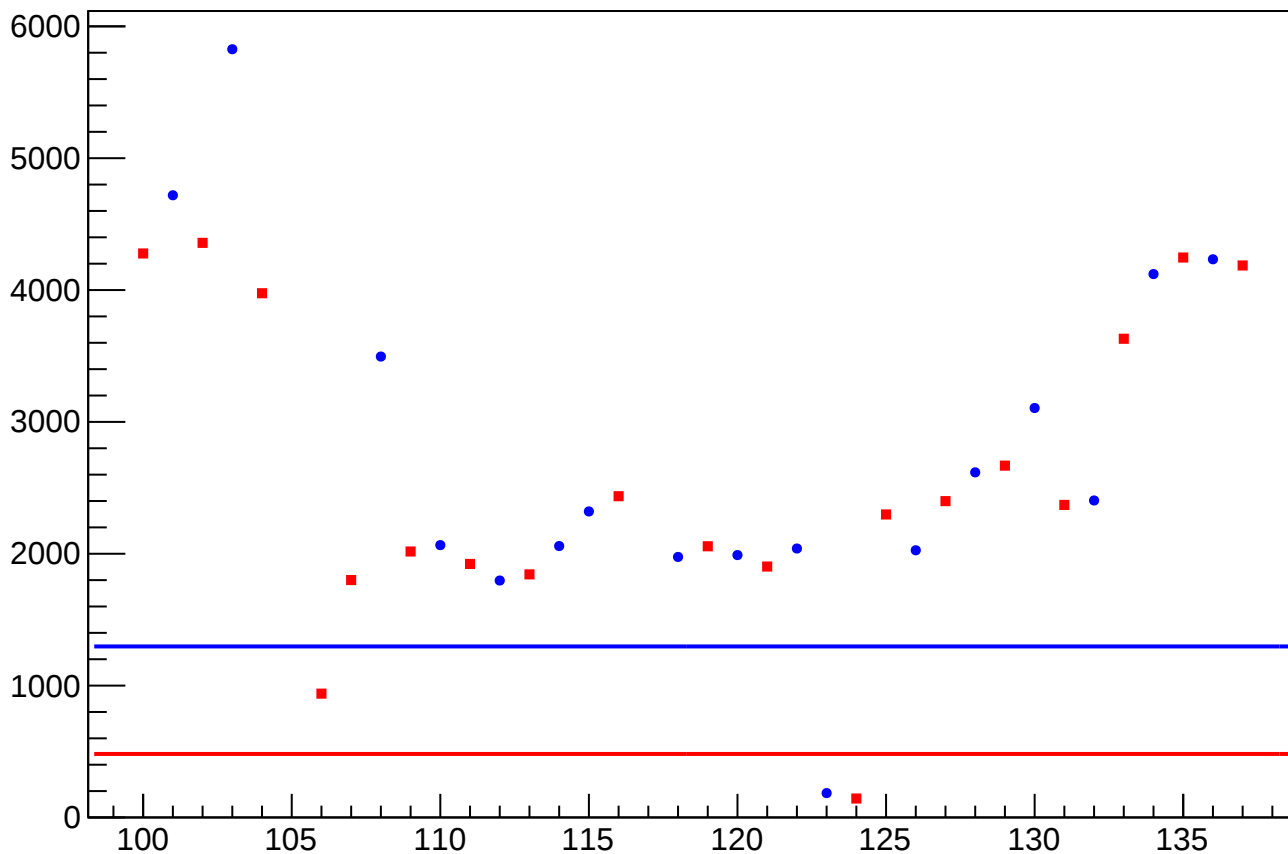
Right: 153.912+/-318.670  $\chi^2/\text{NDF}$ : 37.9/35

In: 903.344+/-705.564  $\chi^2/\text{NDF}$ : 16.0/16

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

All: 153.912+/-318.670  $\chi^2/\text{NDF}$ : 37.9/35

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



Right In: 1297.005+/-0.499  $\chi^2/\text{NDF}$ : 6509608.5/16

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

Right Out: 481.577+/-0.253  $\chi^2/\text{NDF}$ : 10144170.1/18

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

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

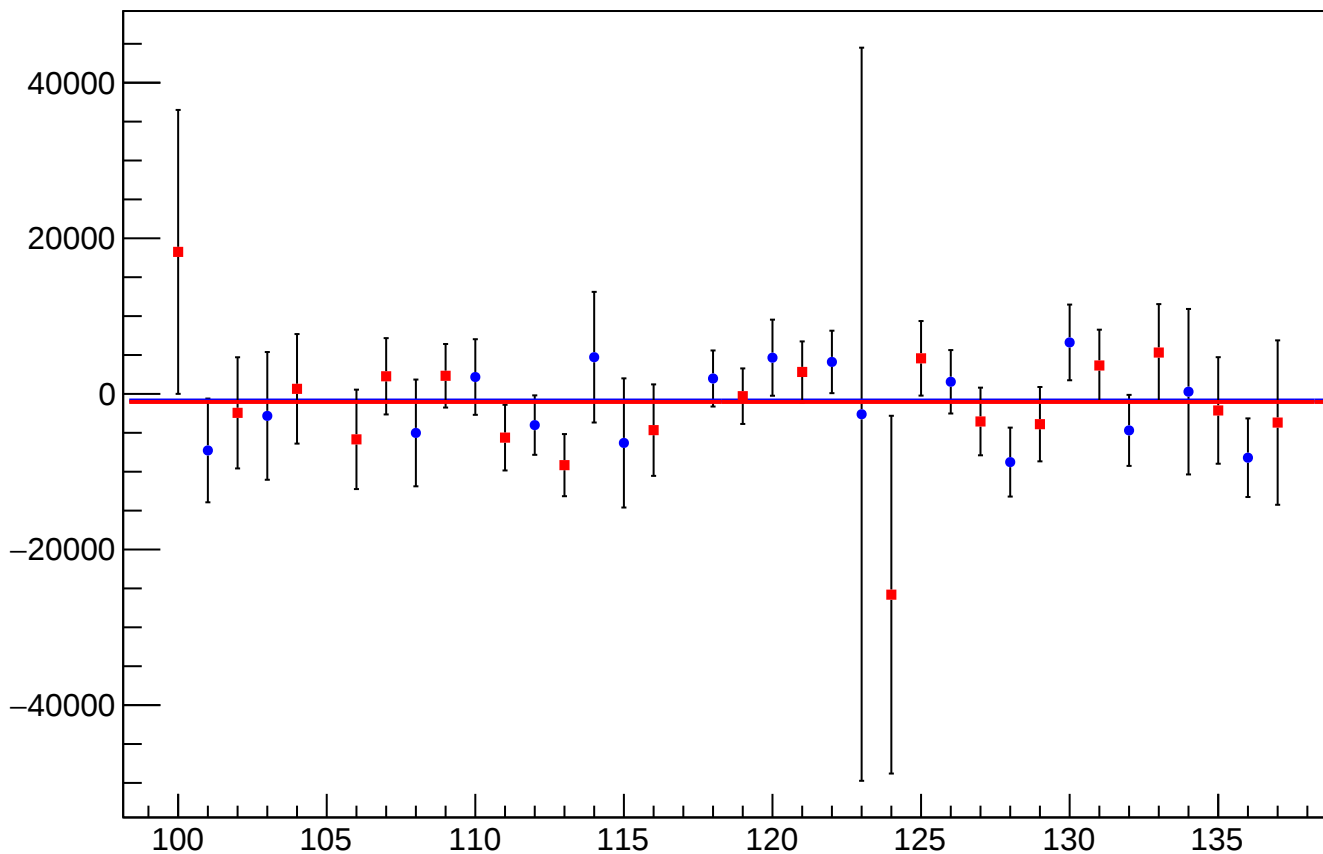
Right: 647.917+/-0.225  $\chi^2/\text{NDF}$ : 18780181.6/35

In: 1297.005+/-0.499  $\chi^2/\text{NDF}$ : 6509608.5/16

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

All: 647.917+/-0.225  $\chi^2/\text{NDF}$ : 18780181.6/35

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



Right In:  $-849.372 \pm 1261.026$   $\chi^2/\text{NDF}$ : 15.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-1033.205 \pm 1190.714$   $\chi^2/\text{NDF}$ : 15.0/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

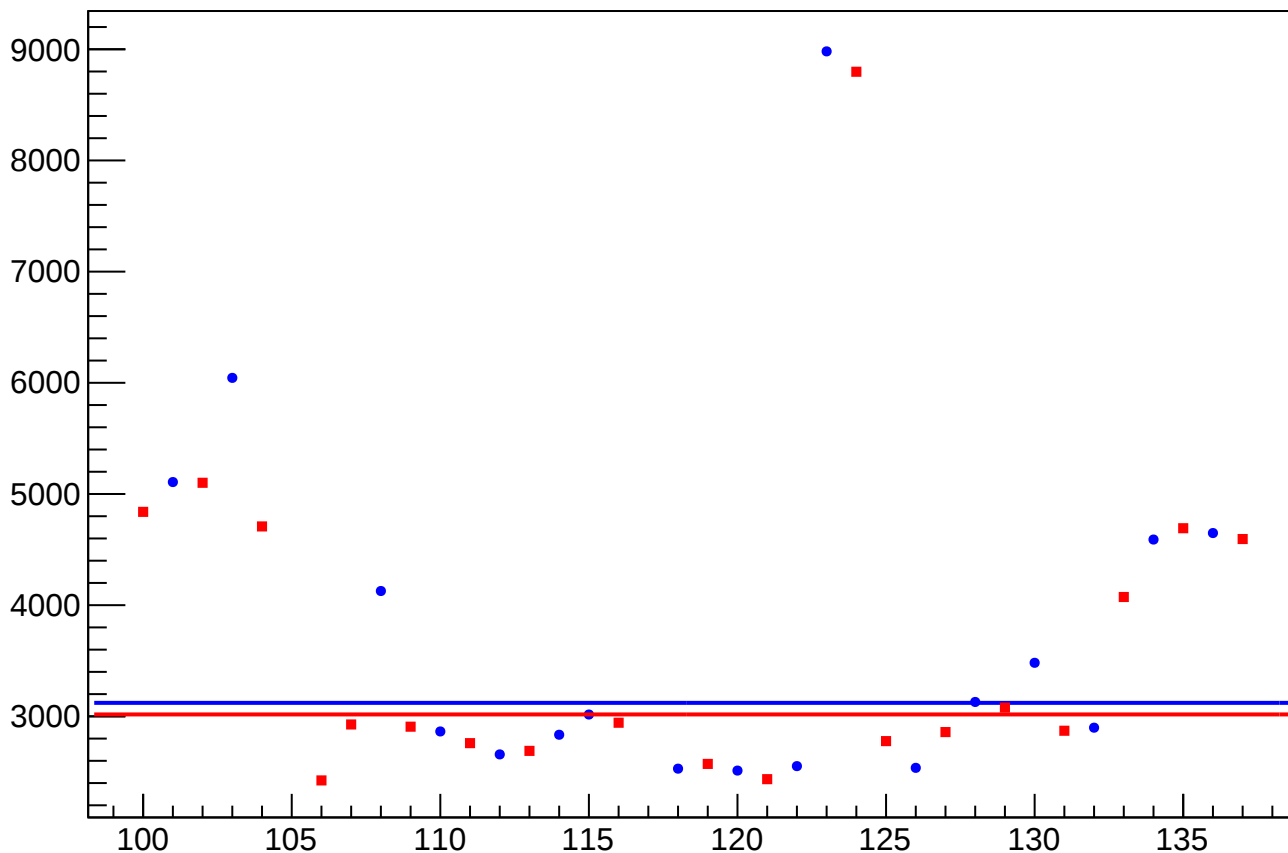
Right:  $-946.556 \pm 865.752$   $\chi^2/\text{NDF}$ : 30.4/35

In:  $-849.372 \pm 1261.026$   $\chi^2/\text{NDF}$ : 15.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-946.556 \pm 865.752$   $\chi^2/\text{NDF}$ : 30.4/35

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



Right In: 3121.417+/-0.892  $\chi^2/\text{NDF}$ : 945708.1/16

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

Right Out: 3017.215+/-0.831  $\chi^2/\text{NDF}$ : 791997.9/18

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

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

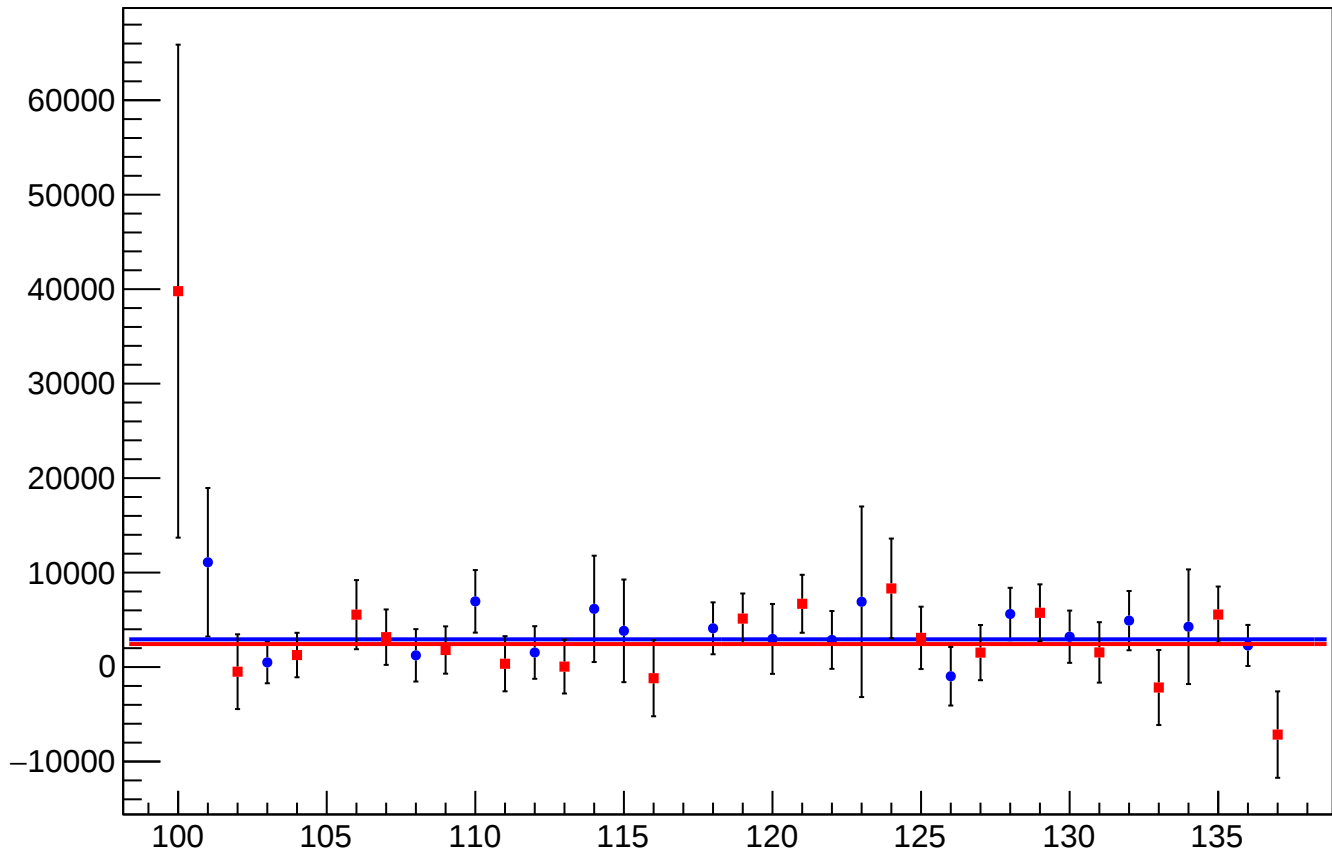
Right: 3065.680+/-0.608  $\chi^2/\text{NDF}$ : 1745010.6/35

In: 3121.417+/-0.892  $\chi^2/\text{NDF}$ : 945708.1/16

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

All: 3065.680+/-0.608  $\chi^2/\text{NDF}$ : 1745010.6/35

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



Right In: 2935.827+/-775.365  $\chi^2/\text{NDF}$ : 8.2/16

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

Right Out: 2432.756+/-740.416  $\chi^2/\text{NDF}$ : 18.2/18

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

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

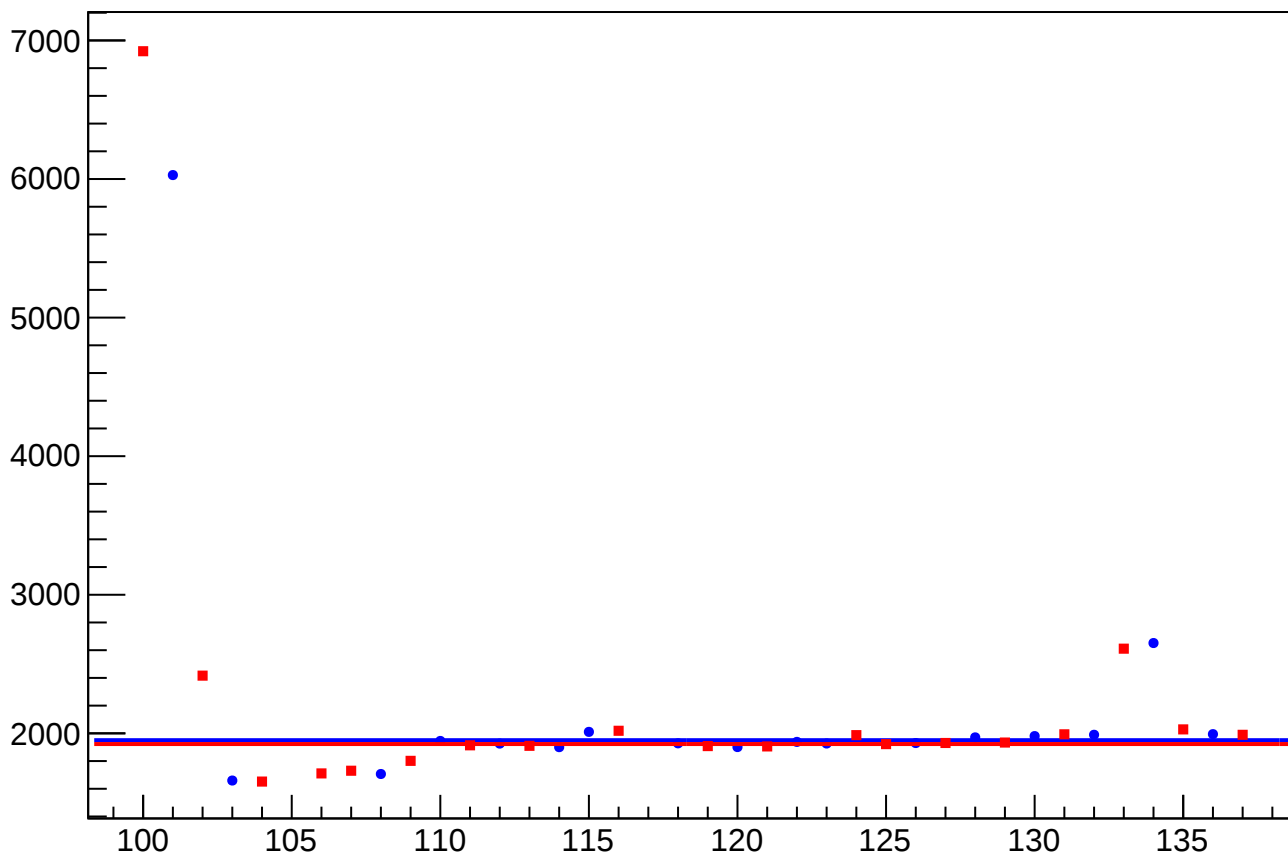
Right: 2672.699+/-535.482  $\chi^2/\text{NDF}$ : 26.5/35

In: 2935.827+/-775.365  $\chi^2/\text{NDF}$ : 8.2/16

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

All: 2672.699+/-535.482  $\chi^2/\text{NDF}$ : 26.5/35

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



Right In: 1950.615+/-0.548  $\chi^2/\text{NDF}$ : 617332.2/16

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

Right Out: 1922.752+/-0.522  $\chi^2/\text{NDF}$ : 217400.0/18

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

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

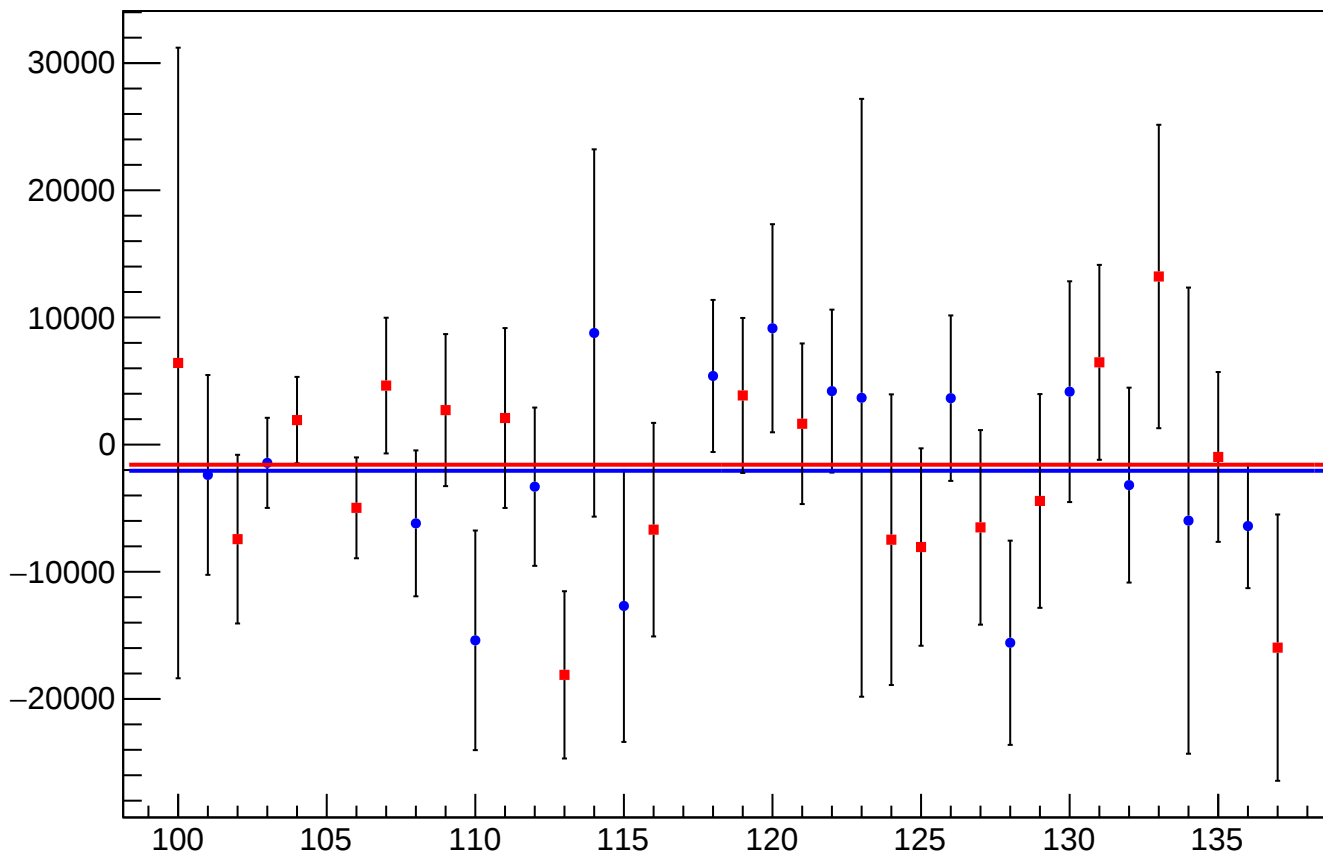
Right: 1936.009+/-0.378  $\chi^2/\text{NDF}$ : 836086.0/35

In: 1950.615+/-0.548  $\chi^2/\text{NDF}$ : 617332.2/16

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

All: 1936.009+/-0.378  $\chi^2/\text{NDF}$ : 836086.0/35

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



Right In: -2056.876 $\pm$ 1661.079  $\chi^2$ /NDF: 14.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: -1580.717 $\pm$ 1477.405  $\chi^2$ /NDF: 18.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

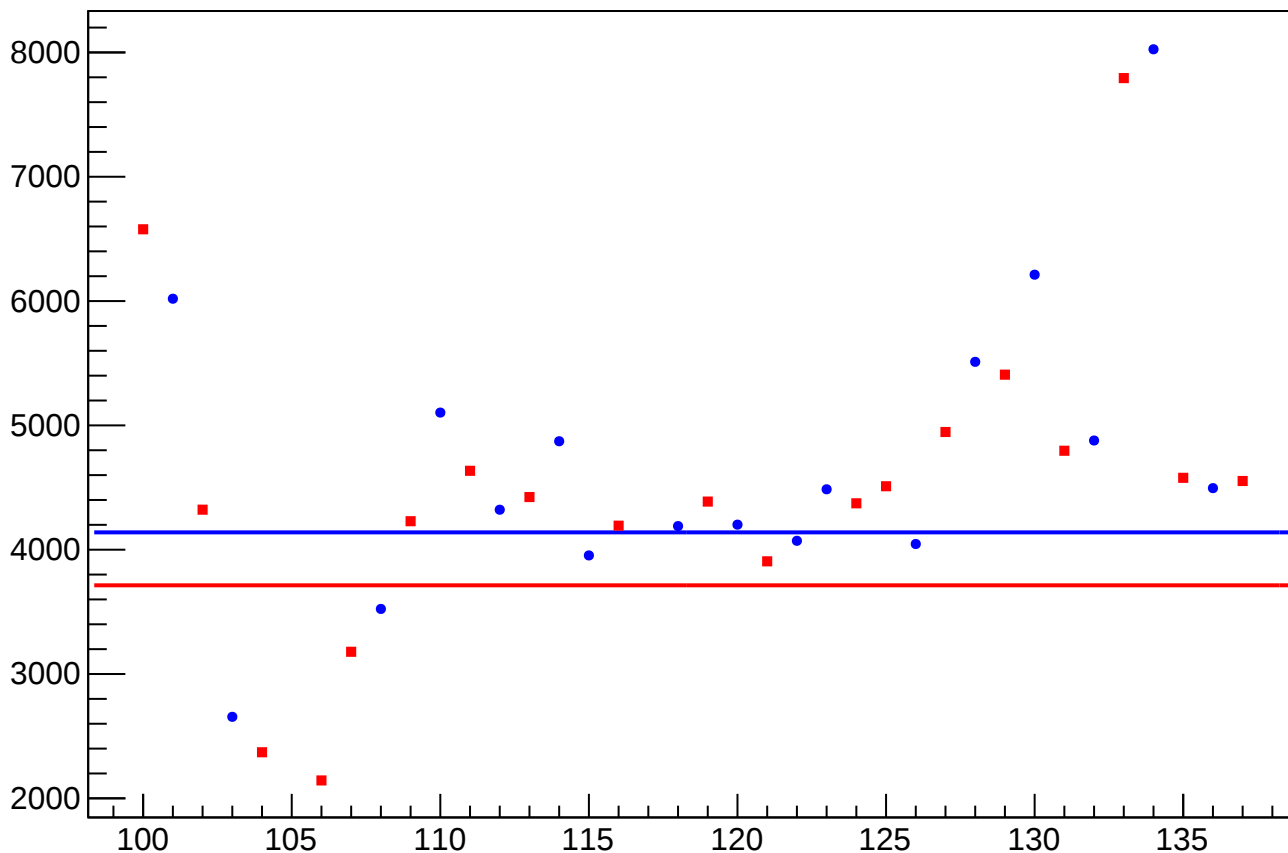
Right: -1791.026 $\pm$ 1103.932  $\chi^2$ /NDF: 32.6/35

In: -2056.876 $\pm$ 1661.079  $\chi^2$ /NDF: 14.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: -1791.026 $\pm$ 1103.932  $\chi^2$ /NDF: 32.6/35

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



Right In: 4139.394+/-1.175  $\chi^2/\text{NDF}$ : 813550.8/16

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

Right Out: 3713.526+/-1.045  $\chi^2/\text{NDF}$ : 1275828.5/18

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

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

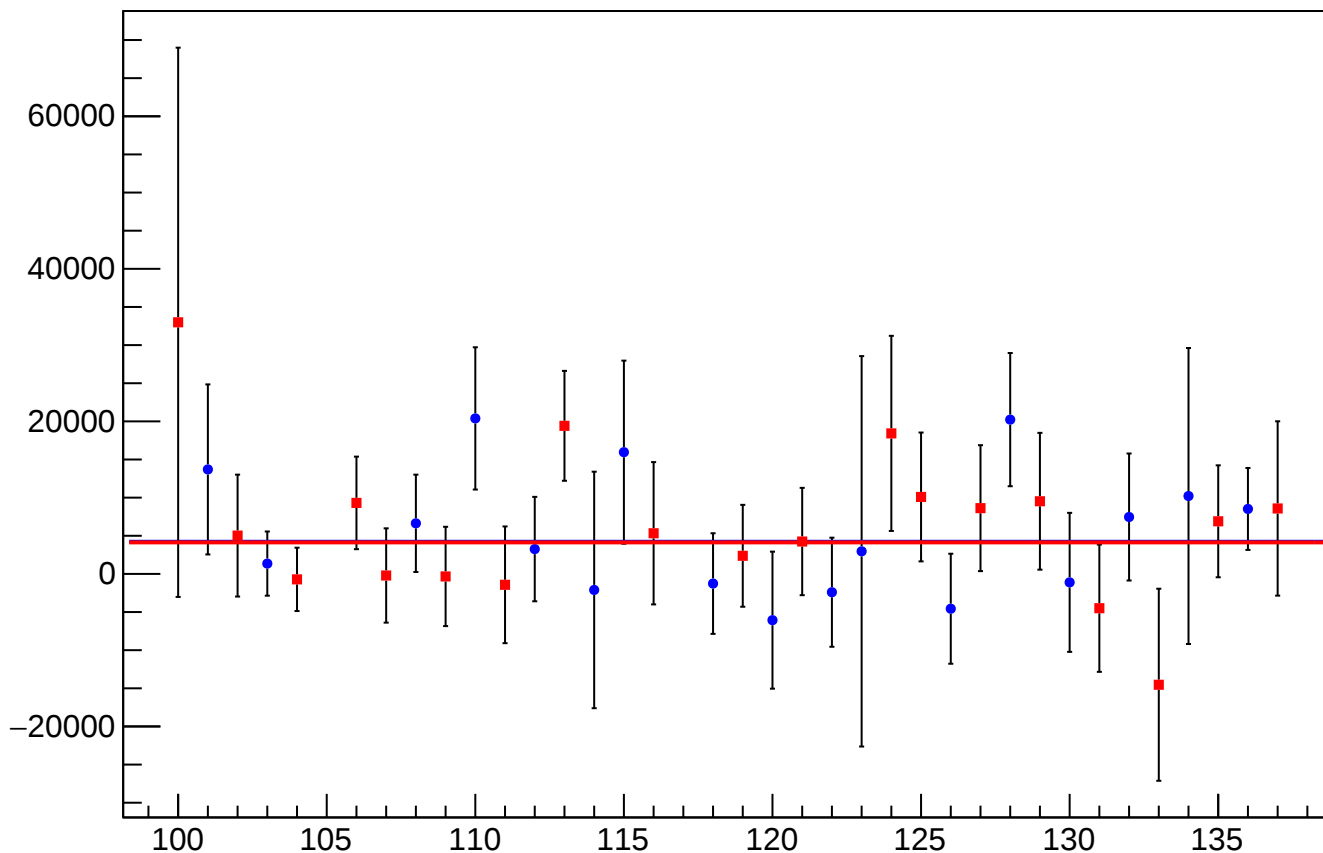
Right: 3901.622+/-0.781  $\chi^2/\text{NDF}$ : 2162777.5/35

In: 4139.394+/-1.175  $\chi^2/\text{NDF}$ : 813550.8/16

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

All: 3901.622+/-0.781  $\chi^2/\text{NDF}$ : 2162777.5/35

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



Right In: 4211.844+/-1871.304  $\chi^2/\text{NDF}$ : 14.4/16

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

Right Out: 4133.660+/-1725.341  $\chi^2/\text{NDF}$ : 14.8/18

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

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

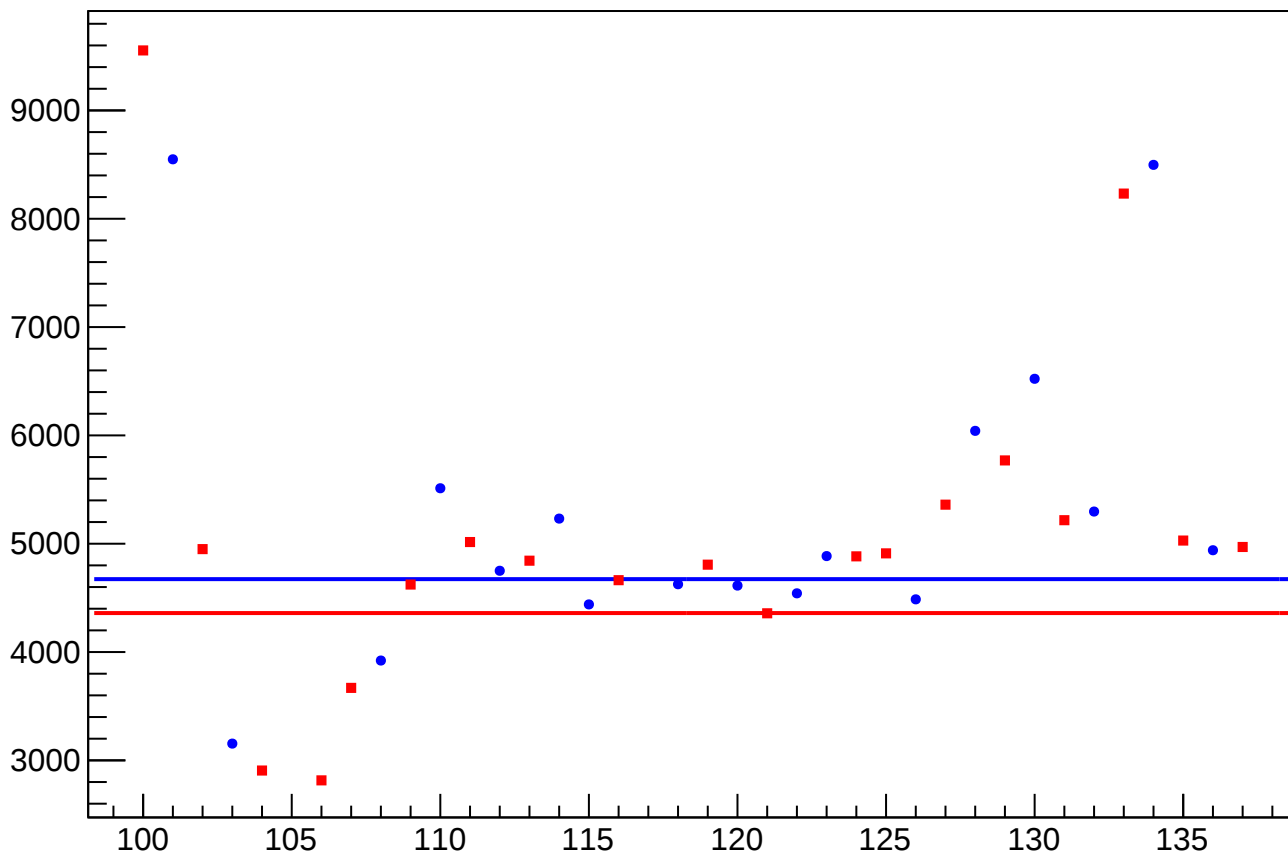
Right: 4169.584+/-1268.468  $\chi^2/\text{NDF}$ : 29.2/35

In: 4211.844+/-1871.304  $\chi^2/\text{NDF}$ :14.4/16

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

All: 4169.584+/-1268.468  $\chi^2/\text{NDF}$ : 29.2/35

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



Right In: 4673.046+/-1.323  $\chi^2/\text{NDF}$ : 777321.1/16

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

Right Out: 4359.833+/-1.213  $\chi^2/\text{NDF}$ : 832191.0/18

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

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

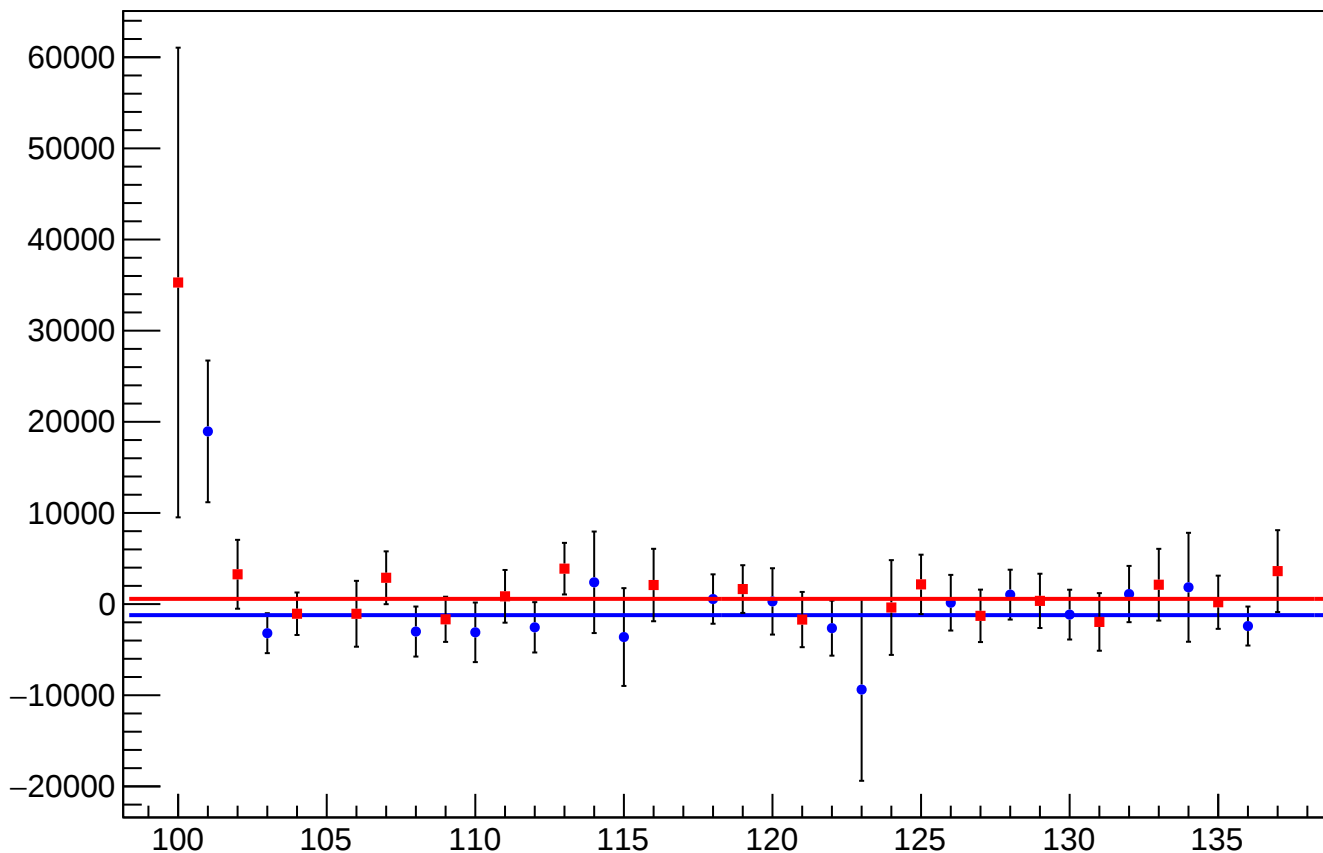
Right: 4502.849+/-0.894  $\chi^2/\text{NDF}$ : 1639958.3/35

In: 4673.046+/-1.323  $\chi^2/\text{NDF}$ : 777321.1/16

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

All: 4502.849+/-0.894  $\chi^2/\text{NDF}$ : 1639958.3/35

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



Right In: -1211.176+/-765.294  $\chi^2/\text{NDF}$ : 12.7/16

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

Right Out: 573.457+/-730.668  $\chi^2/\text{NDF}$ : 8.7/18

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

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

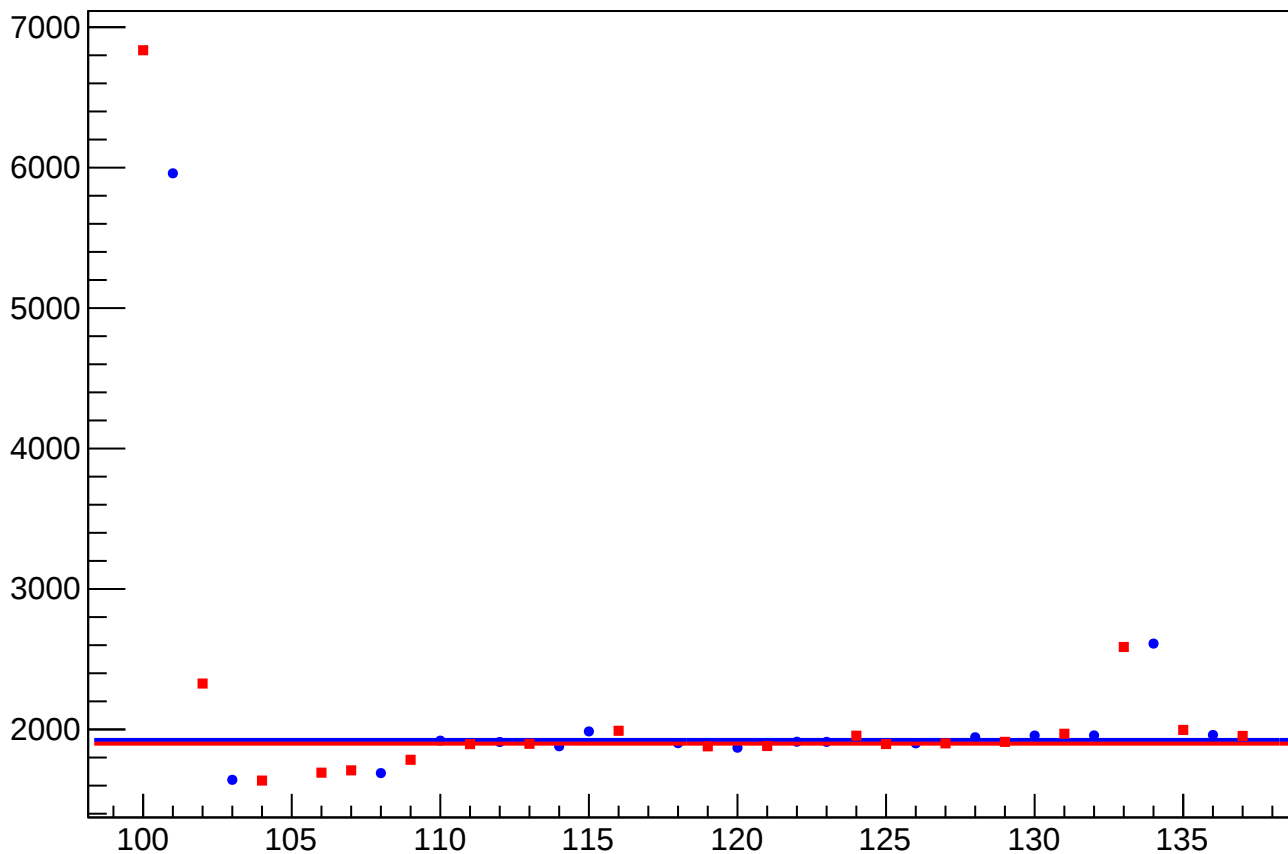
Right: -277.573+/-528.478  $\chi^2/\text{NDF}$ : 24.2/35

In: -1211.176+/-765.294  $\chi^2/\text{NDF}$ : 12.7/16

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

All: -277.573+/-528.478  $\chi^2/\text{NDF}$ : 24.2/35

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



Right In: 1925.320+/-0.541  $\chi^2$ /NDF: 615863.6/16

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

Right Out: 1898.854+/-0.515  $\chi^2$ /NDF: 210875.1/18

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

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

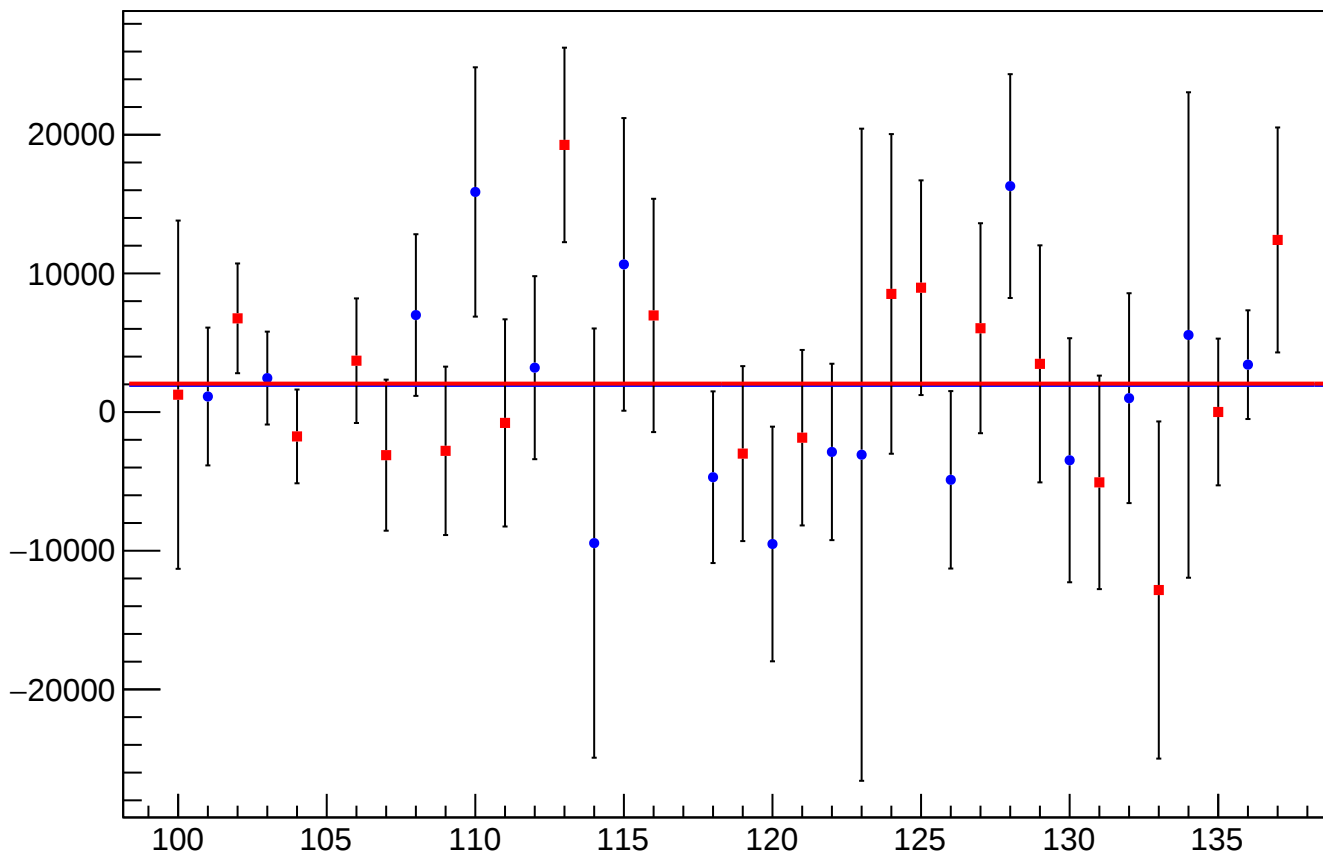
Right: 1911.445+/-0.373  $\chi^2$ /NDF: 827992.7/35

In: 1925.320+/-0.541  $\chi^2$ /NDF:615863.6/16

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

All: 1911.445+/-0.373  $\chi^2$ /NDF: 827992.7/35

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



Right In: 1959.060+/-1556.840  $\chi^2/\text{NDF}$ : 12.9/16

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

Right Out: 2052.842+/-1413.641  $\chi^2/\text{NDF}$ : 17.4/18

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

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

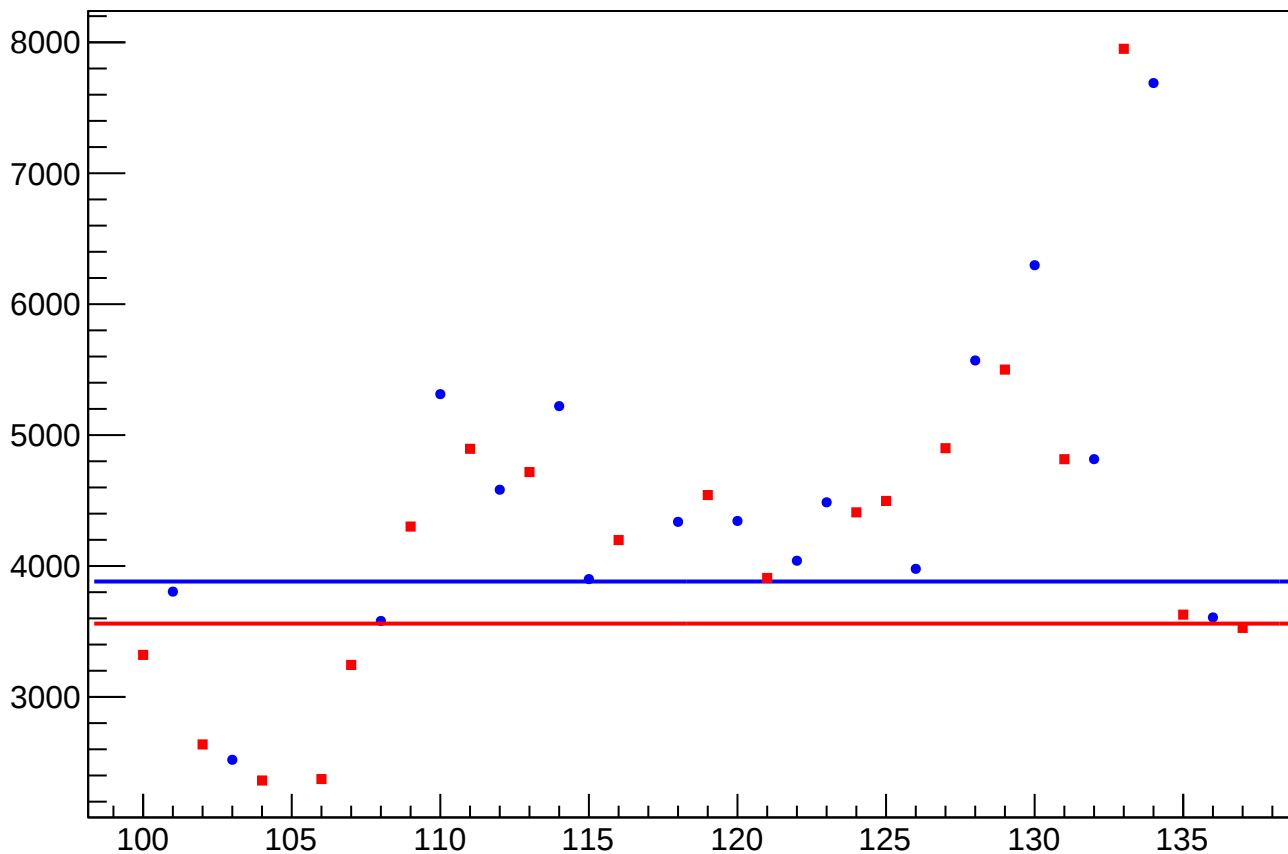
Right: 2010.461+/-1046.568  $\chi^2/\text{NDF}$ : 30.4/35

In: 1959.060+/-1556.840  $\chi^2/\text{NDF}$ : 12.9/16

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

All: 2010.461+/-1046.568  $\chi^2/\text{NDF}$ : 30.4/35

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



Right In: 3881.577+/-1.101  $\chi^2/\text{NDF}$ : 817466.6/16

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

Right Out: 3560.054+/-1.000  $\chi^2/\text{NDF}$ : 1241523.0/18

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

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

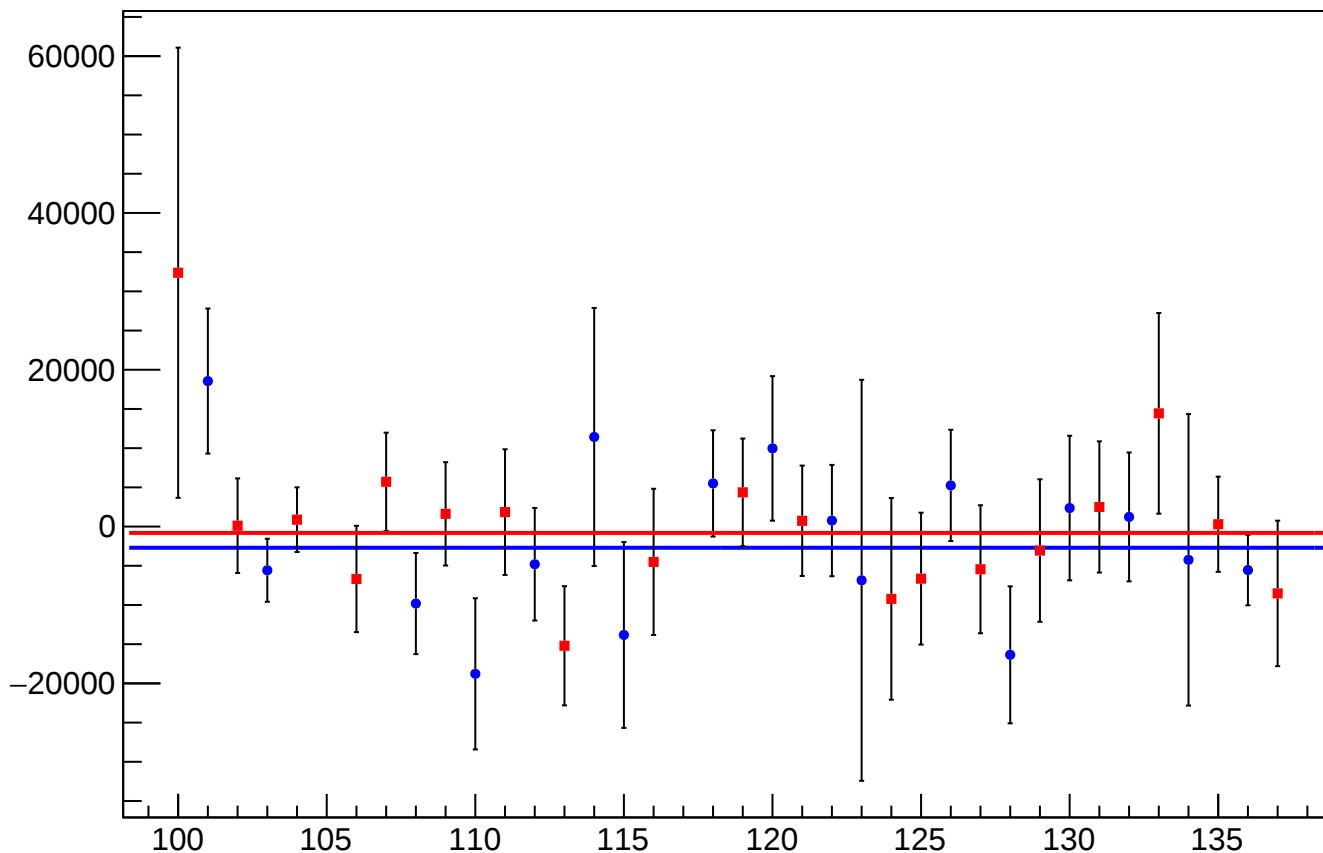
Right: 3705.352+/-0.740  $\chi^2/\text{NDF}$ : 2105744.2/35

In: 3881.577+/-1.101  $\chi^2/\text{NDF}$ : 817466.6/16

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

All: 3705.352+/-0.740  $\chi^2/\text{NDF}$ : 2105744.2/35

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



Right In: -2700.702+/-1809.055  $\chi^2/\text{NDF}$ : 19.8/16

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

Right Out: -805.951+/-1690.353  $\chi^2/\text{NDF}$ : 11.6/18

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

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

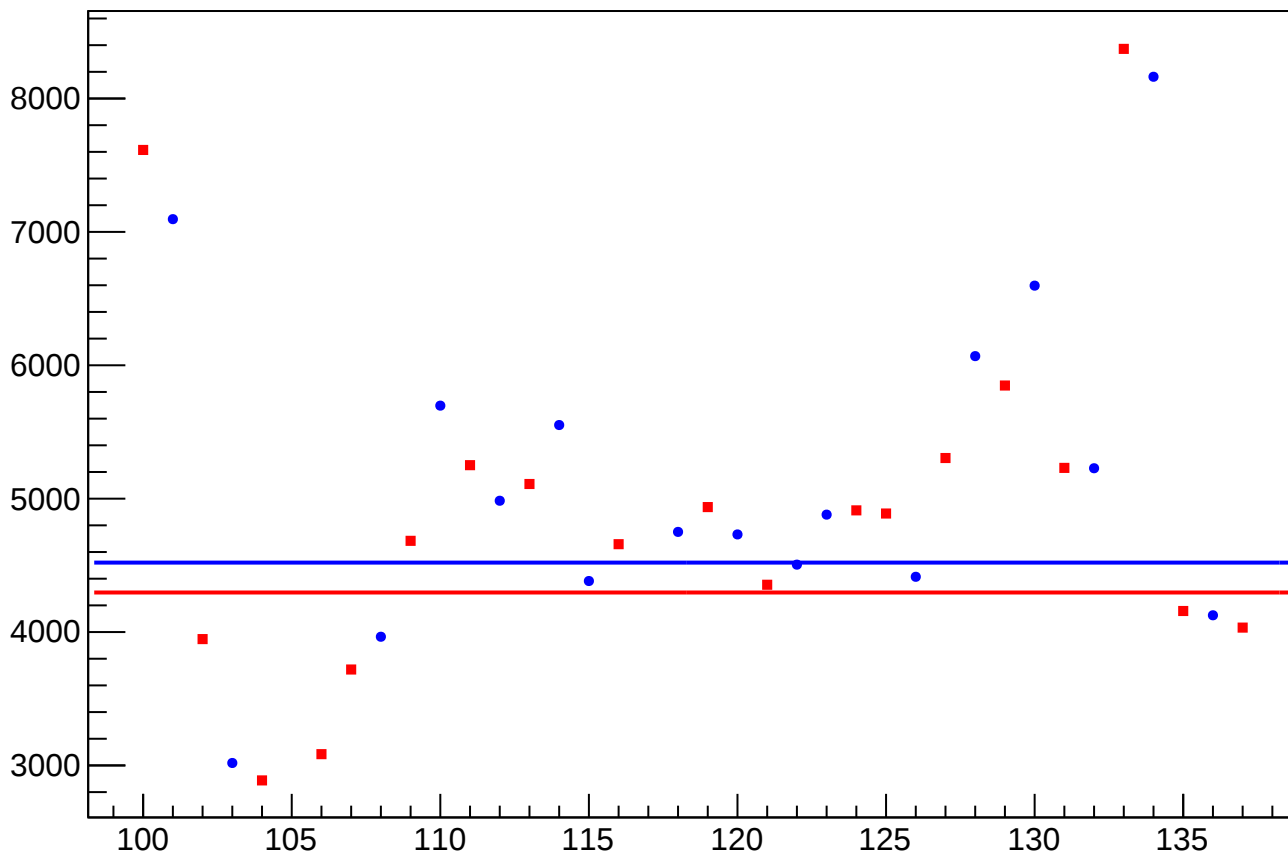
Right: -1689.130+/-1235.094  $\chi^2/\text{NDF}$ : 31.9/35

In: -2700.702+/-1809.055  $\chi^2/\text{NDF}$ : 19.8/16

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

All: -1689.130+/-1235.094  $\chi^2/\text{NDF}$ : 31.9/35

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



Right In: 4520.685+/-1.279  $\chi^2/\text{NDF}$ : 770887.4/16

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

Right Out: 4296.527+/-1.189  $\chi^2/\text{NDF}$ : 771785.2/18

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

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

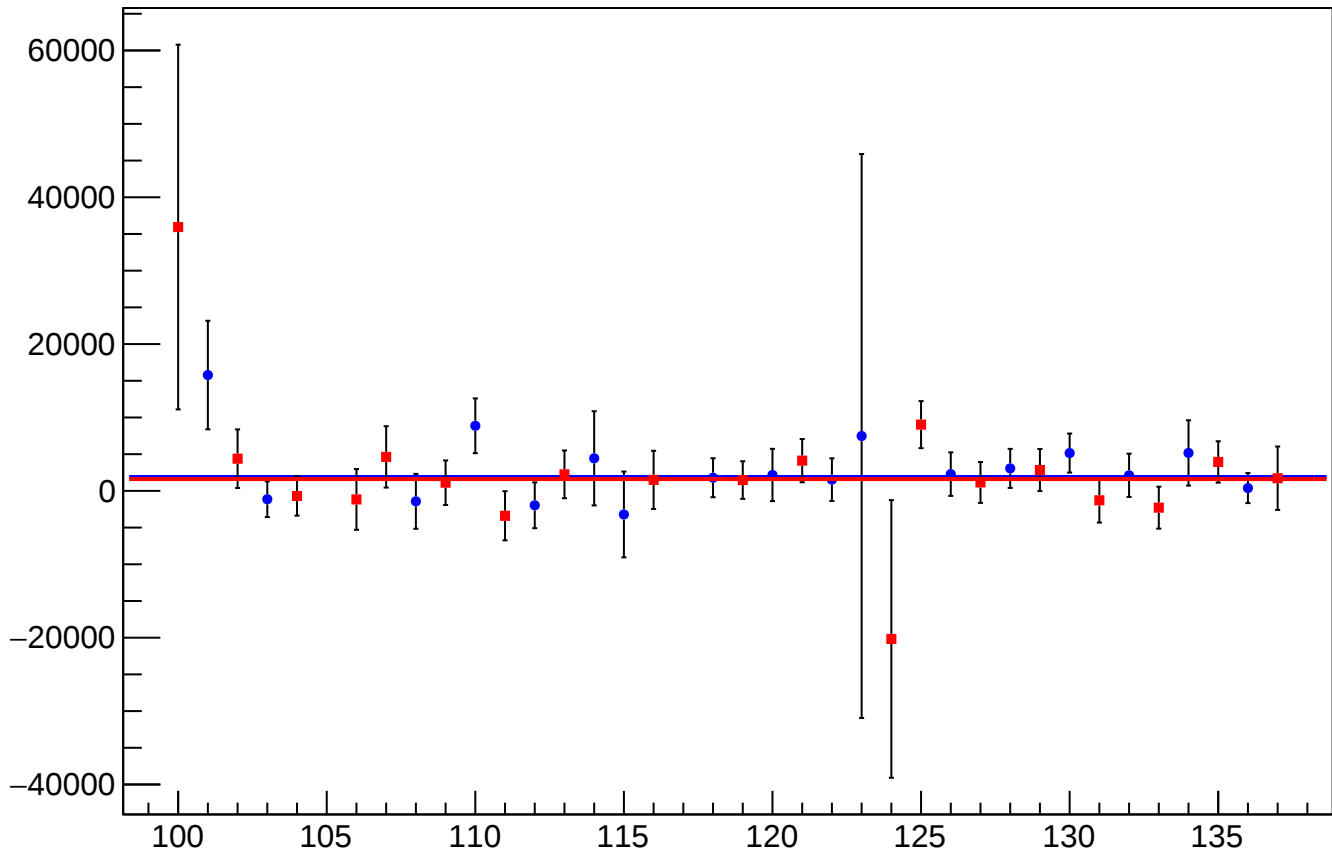
Right: 4400.391+/-0.871  $\chi^2/\text{NDF}$ : 1559151.4/35

In: 4520.685+/-1.279  $\chi^2/\text{NDF}$ : 770887.4/16

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

All: 4400.391+/-0.871  $\chi^2/\text{NDF}$ : 1559151.4/35

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



Right In: 1887.915+/-783.827  $\chi^2/\text{NDF}$ : 14.7/16

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

Right Out: 1610.310+/-765.843  $\chi^2/\text{NDF}$ : 17.5/18

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

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

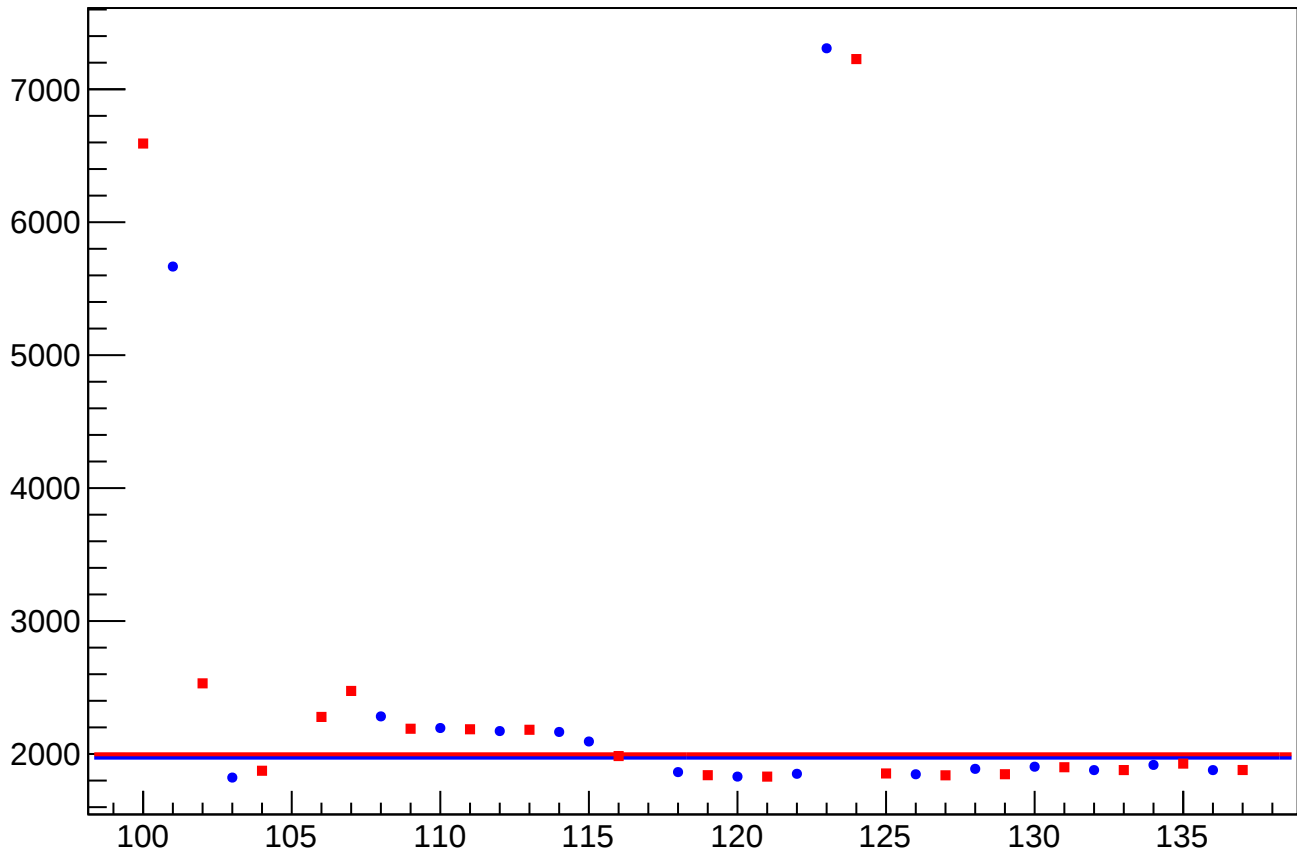
Right: 1745.891+/-547.780  $\chi^2/\text{NDF}$ : 32.2/35

In: 1887.915+/-783.827  $\chi^2/\text{NDF}$ : 14.7/16

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

All: 1745.891+/-547.780  $\chi^2/\text{NDF}$ : 32.2/35

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



Right In: 1972.484+/-0.554  $\chi^2/\text{NDF}$ : 600869.6/16

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

Right Out: 1997.647+/-0.542  $\chi^2/\text{NDF}$ : 355572.5/18

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

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

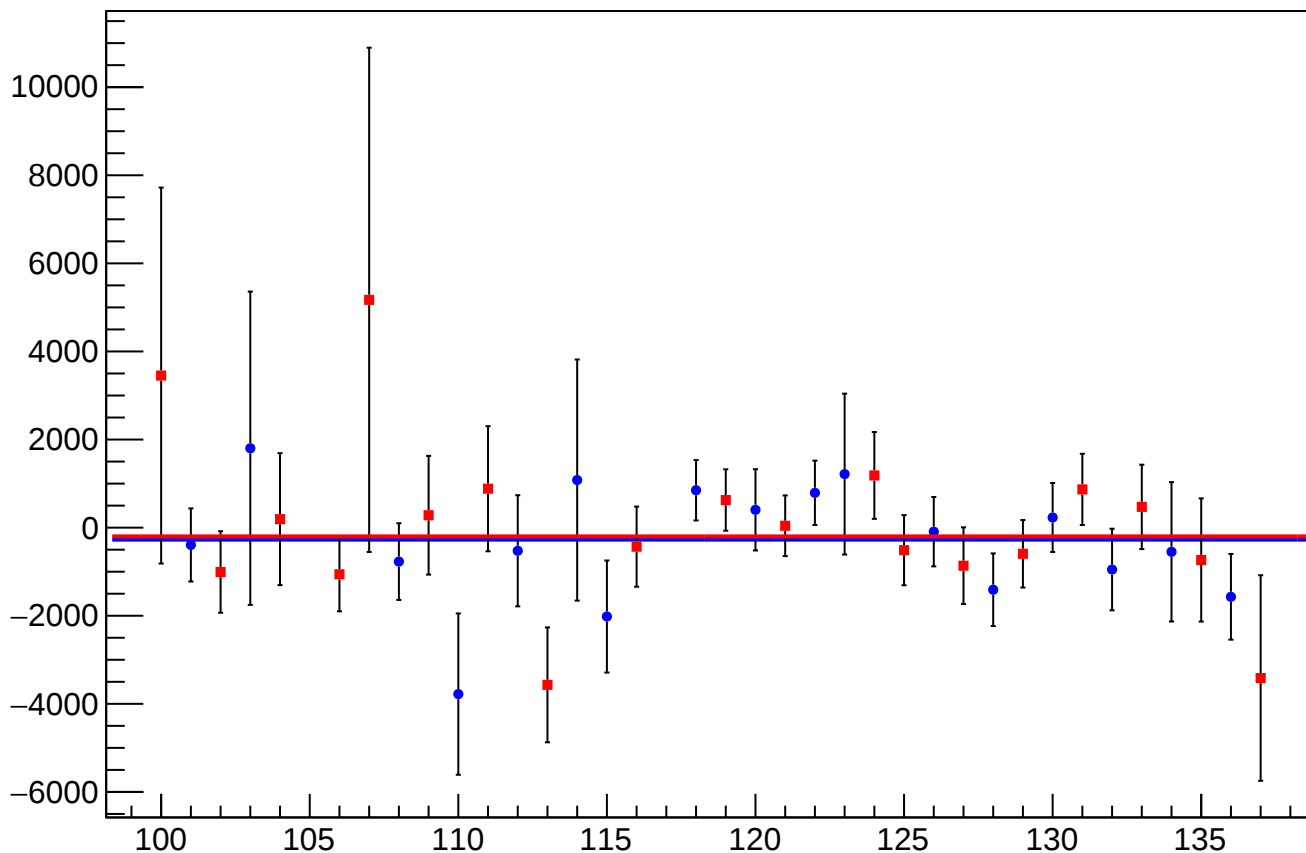
Right: 1985.358+/-0.387  $\chi^2/\text{NDF}$ : 957496.6/35

In: 1972.484+/-0.554  $\chi^2/\text{NDF}$ : 600869.6/16

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

All: 1985.358+/-0.387  $\chi^2/\text{NDF}$ : 957496.6/35

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



Right In: -271.773+/-240.214  $\chi^2$ /NDF: 17.2/16

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

Right Out: -198.424+/-229.035  $\chi^2$ /NDF: 19.7/18

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

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

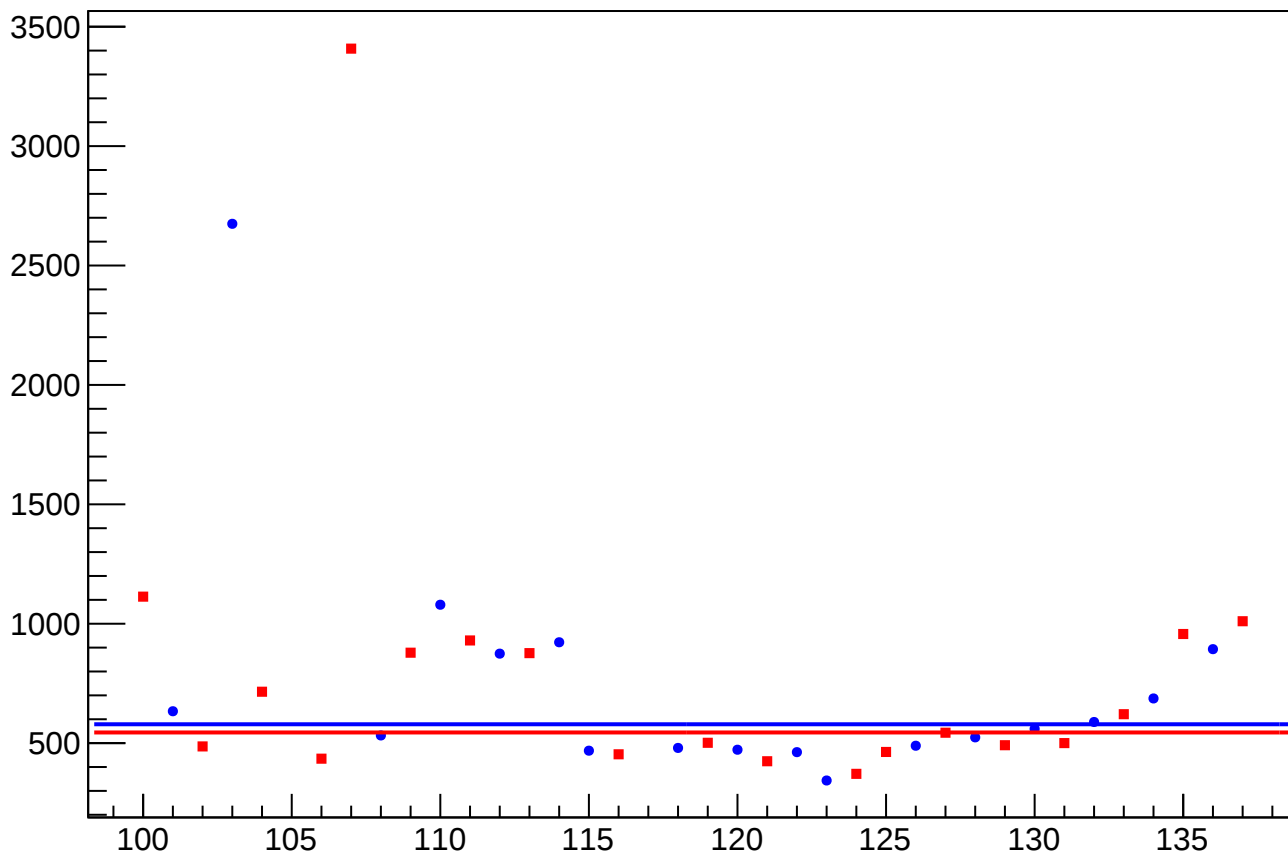
Right: -233.352+/-165.764  $\chi^2$ /NDF: 37.0/35

In: -271.773+/-240.214  $\chi^2$ /NDF:17.2/16

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

All: -233.352+/-165.764  $\chi^2$ /NDF: 37.0/35

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



Right In: 579.010 $\pm$ 0.170  $\chi^2$ /NDF: 1422148.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 544.674 $\pm$ 0.162  $\chi^2$ /NDF: 1457799.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

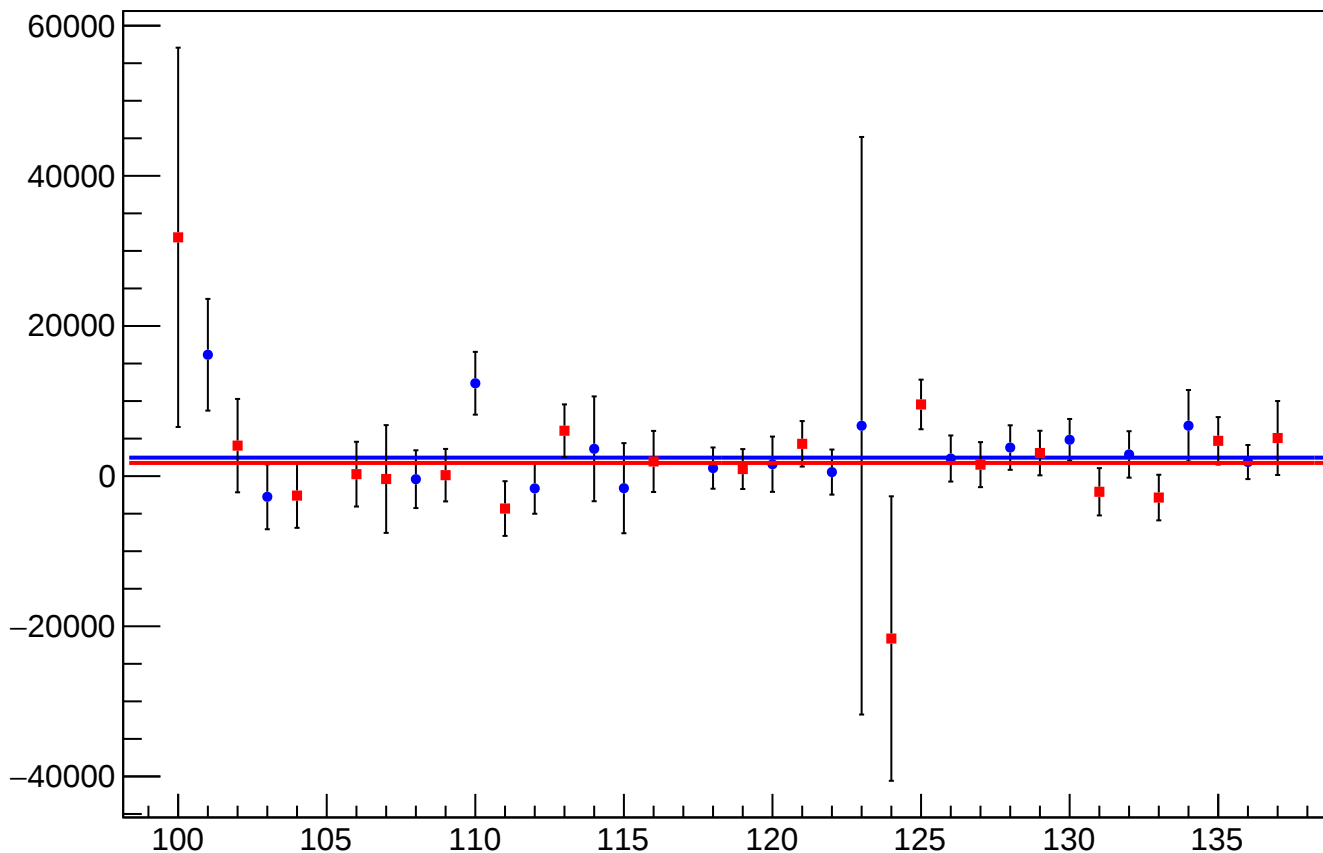
Right: 561.024 $\pm$ 0.117  $\chi^2$ /NDF: 2901353.8/35

In: 579.010 $\pm$ 0.170  $\chi^2$ /NDF:1422148.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 561.024 $\pm$ 0.117  $\chi^2$ /NDF: 2901353.8/35

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



Right In: 2464.076+/-863.197  $\chi^2/\text{NDF}$ : 15.5/16

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

Right Out: 1756.788+/-853.292  $\chi^2/\text{NDF}$ : 20.5/18

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

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

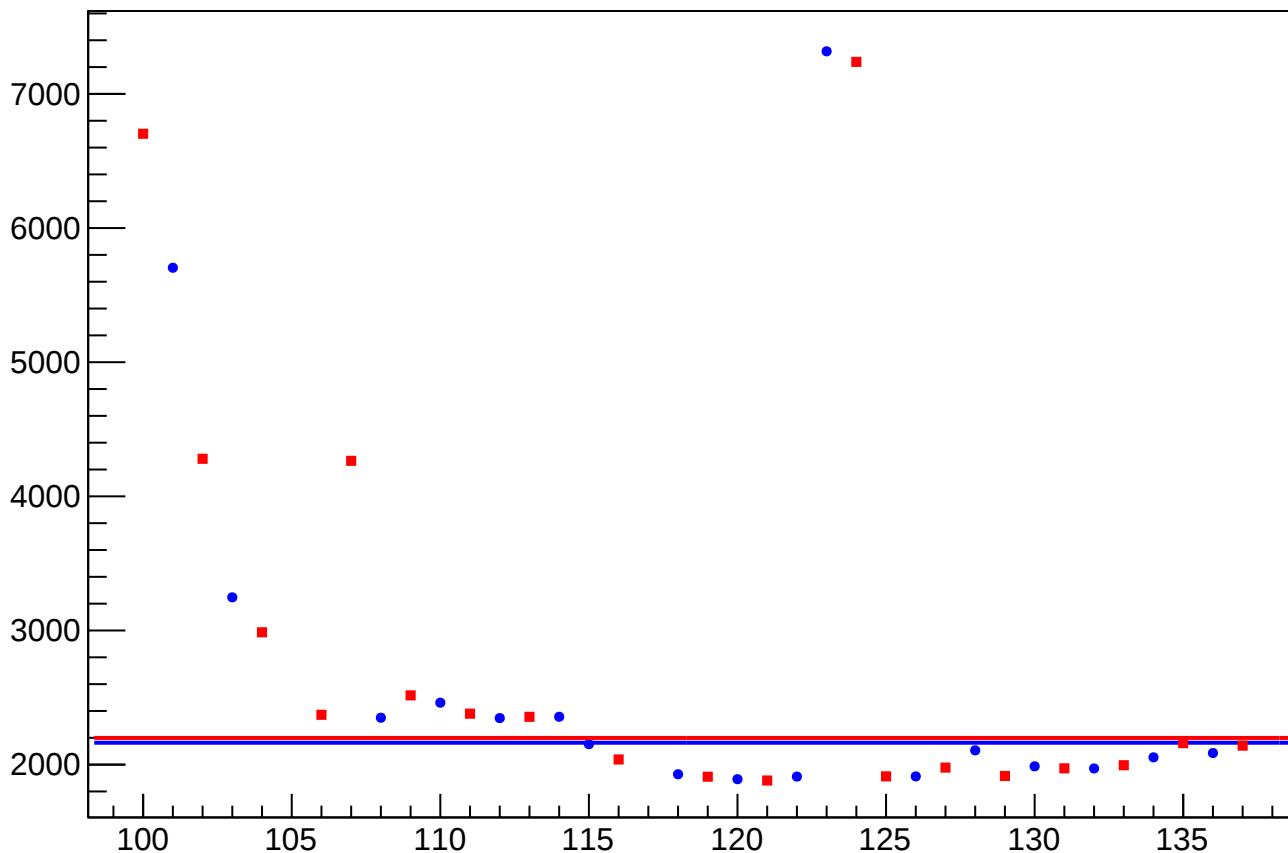
Right: 2106.351+/-606.840  $\chi^2/\text{NDF}$ : 36.4/35

In: 2464.076+/-863.197  $\chi^2/\text{NDF}$ : 15.5/16

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

All: 2106.351+/-606.840  $\chi^2/\text{NDF}$ : 36.4/35

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



Right In: 2163.303+/-0.610  $\chi^2/\text{NDF}$ : 709584.4/16

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

Right Out: 2199.003+/-0.603  $\chi^2/\text{NDF}$ : 803297.2/18

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

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

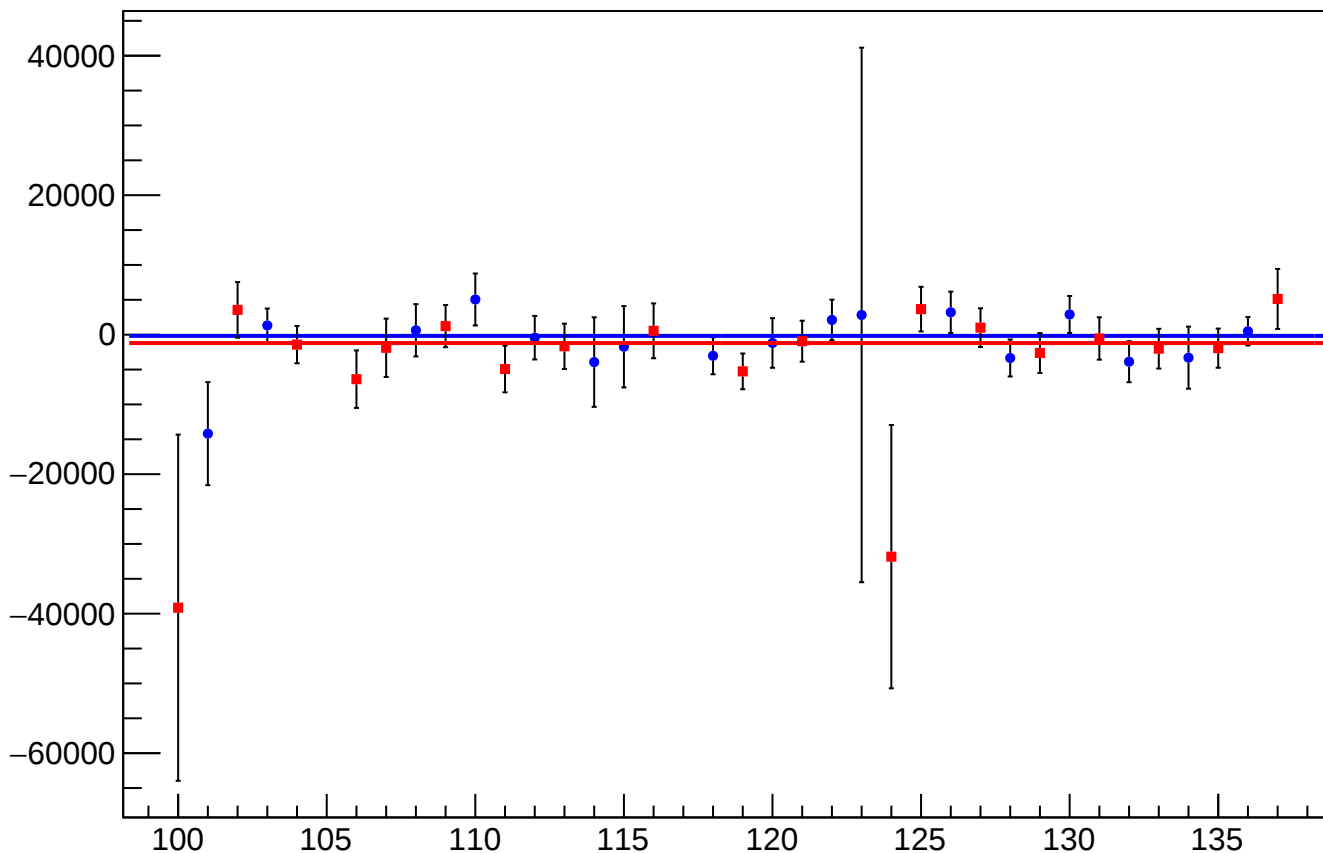
Right: 2181.359+/-0.429  $\chi^2/\text{NDF}$ : 1514611.9/35

In: 2163.303+/-0.610  $\chi^2/\text{NDF}$ : 709584.4/16

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

All: 2181.359+/-0.429  $\chi^2/\text{NDF}$ : 1514611.9/35

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



Right In: -170.351+/-782.384  $\chi^2/\text{NDF}$ : 14.5/16

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

Right Out: -1197.543+/-764.254  $\chi^2/\text{NDF}$ : 18.2/18

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

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

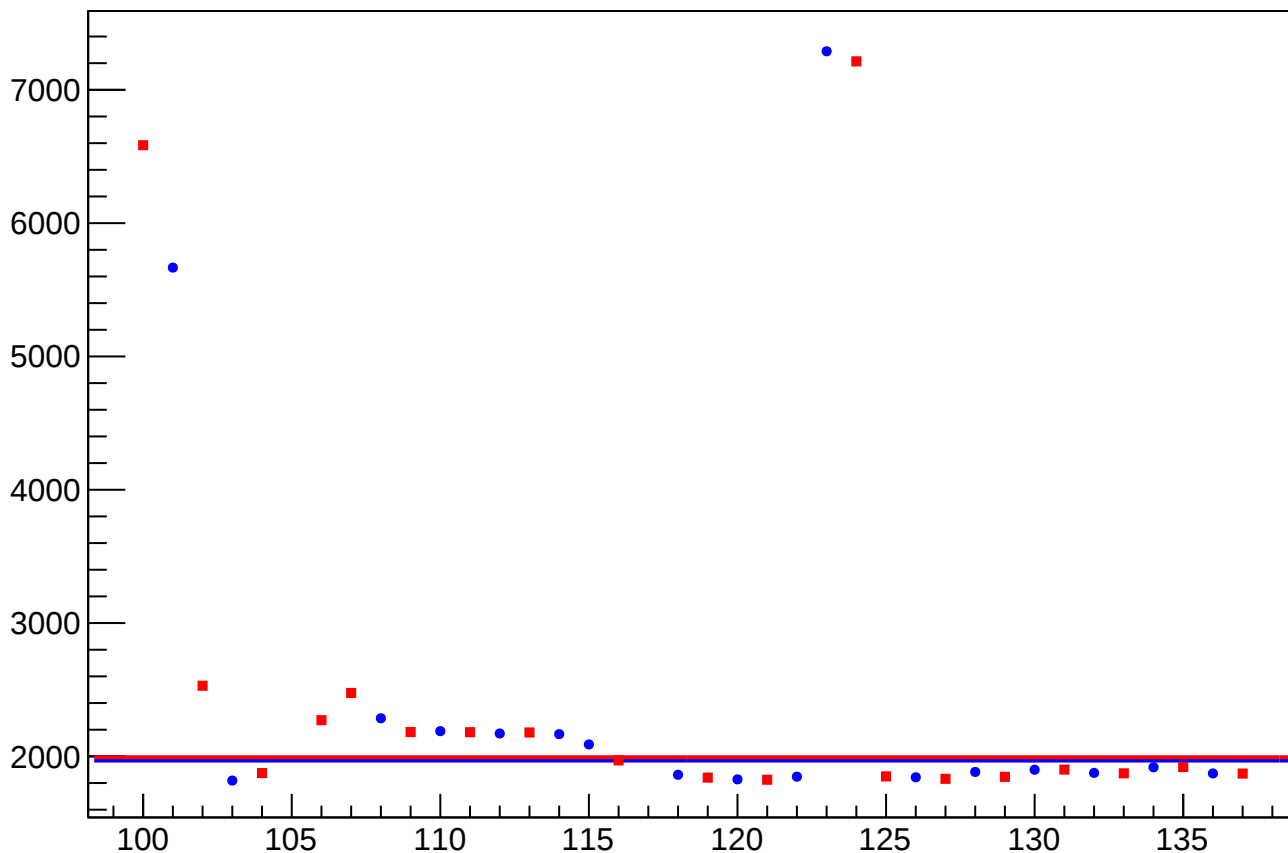
Right: -695.987+/-546.706  $\chi^2/\text{NDF}$ : 33.6/35

In: -170.351+/-782.384  $\chi^2/\text{NDF}$ : 14.5/16

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

All: -695.987+/-546.706  $\chi^2/\text{NDF}$ : 33.6/35

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



Right In: 1968.632+/-0.553  $\chi^2/\text{NDF}$ : 602972.8/16

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

Right Out: 1993.422+/-0.540  $\chi^2/\text{NDF}$ : 356172.4/18

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

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

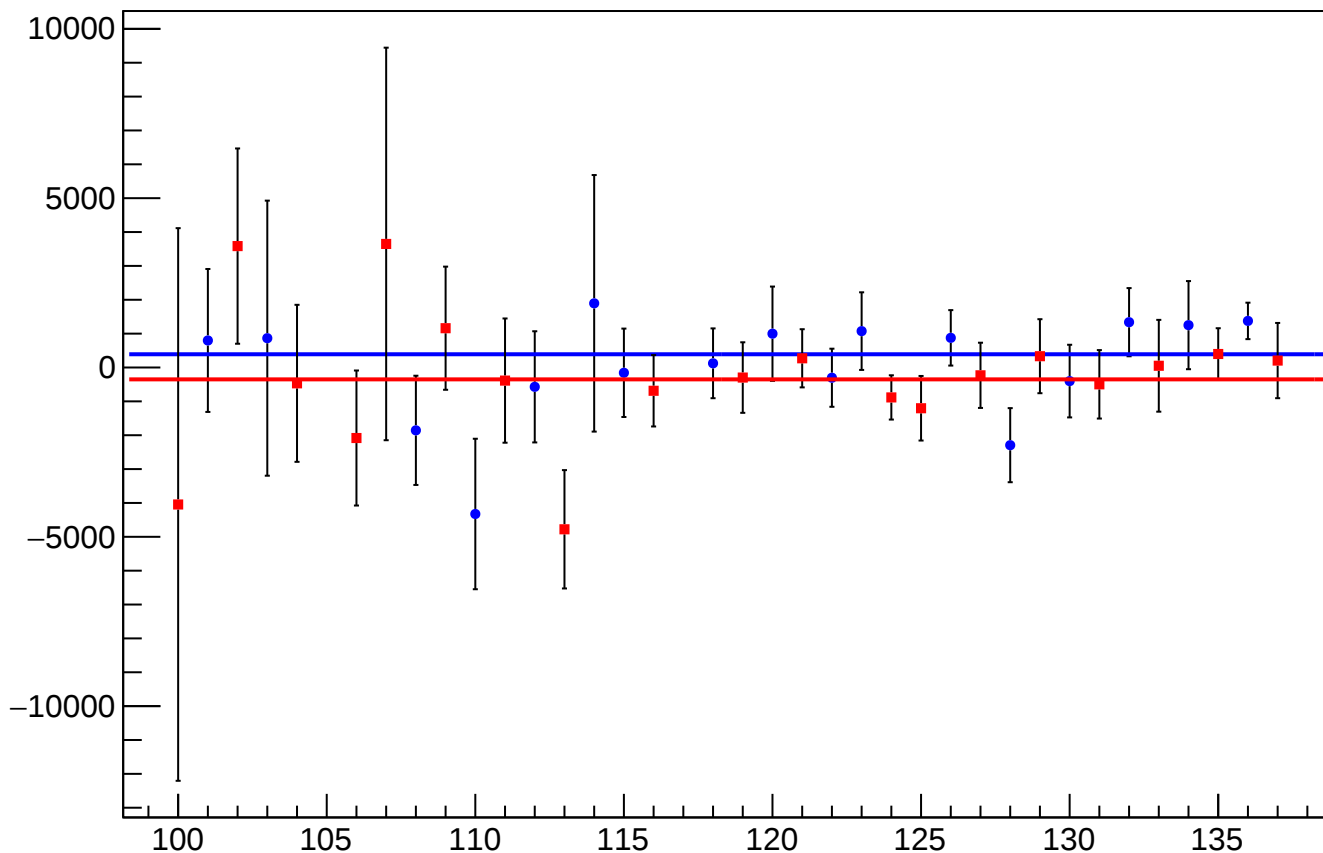
Right: 1981.318+/-0.387  $\chi^2/\text{NDF}$ : 960172.6/35

In: 1968.632+/-0.553  $\chi^2/\text{NDF}$ : 602972.8/16

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

All: 1981.318+/-0.387  $\chi^2/\text{NDF}$ : 960172.6/35

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



Right In: 390.923+/-270.128  $\chi^2/\text{NDF}$ : 20.0/16

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

Right Out: -350.642+/-266.097  $\chi^2/\text{NDF}$ : 14.2/18

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

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

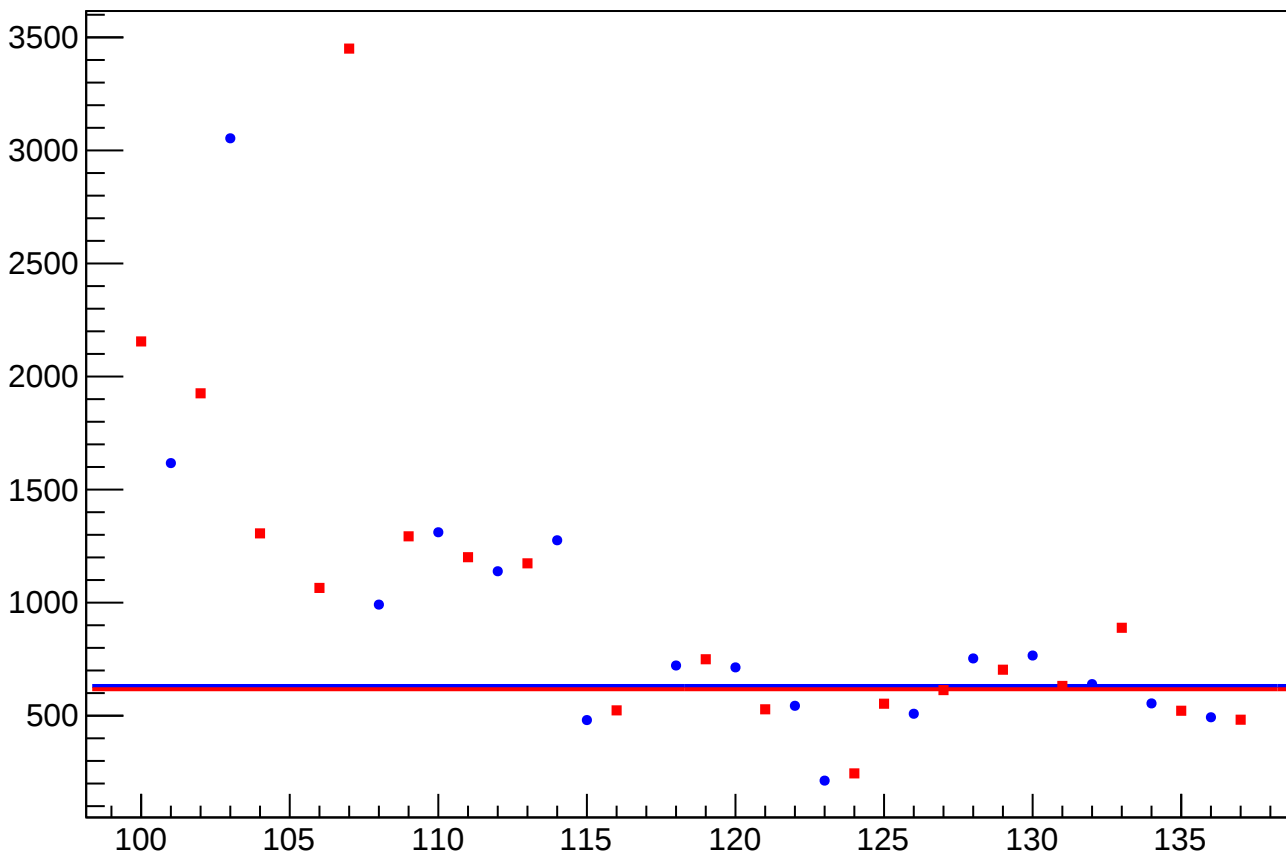
Right: 14.566+/-189.568  $\chi^2/\text{NDF}$ : 38.1/35

In: 390.923+/-270.128  $\chi^2/\text{NDF}$ :20.0/16

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

All: 14.566+/-189.568  $\chi^2/\text{NDF}$ : 38.1/35

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



Right In: 631.430+/-0.191  $\chi^2/\text{NDF}$ : 2260692.7/16

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

Right Out: 617.035+/-0.188  $\chi^2/\text{NDF}$ : 2802149.9/18

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

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

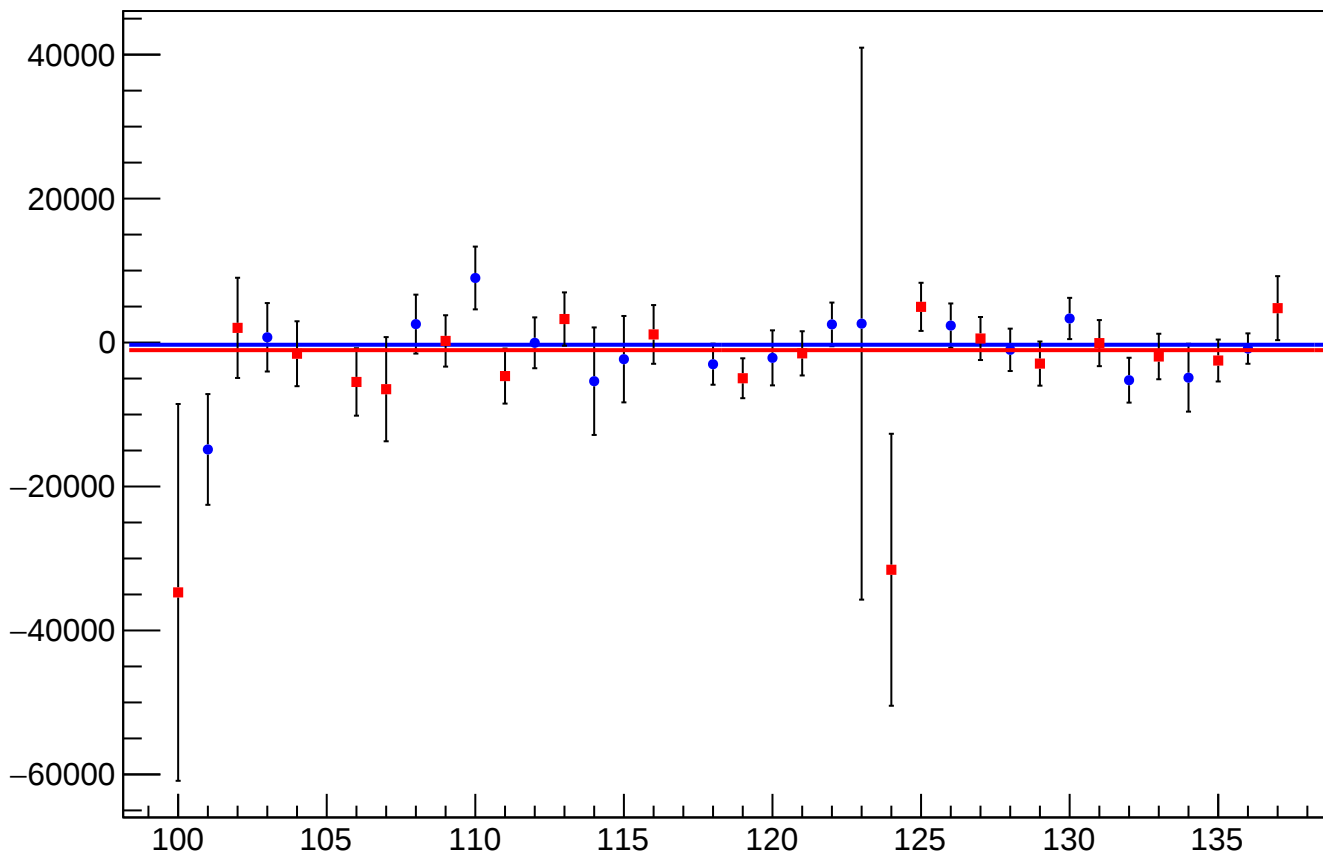
Right: 624.124+/-0.134  $\chi^2/\text{NDF}$ : 5065724.7/35

In: 631.430+/-0.191  $\chi^2/\text{NDF}$ : 2260692.7/16

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

All: 624.124+/-0.134  $\chi^2/\text{NDF}$ : 5065724.7/35

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



Right In:  $-305.713 \pm 871.922$   $\chi^2/\text{NDF}$ : 17.2/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-1056.856 \pm 867.445$   $\chi^2/\text{NDF}$ : 16.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

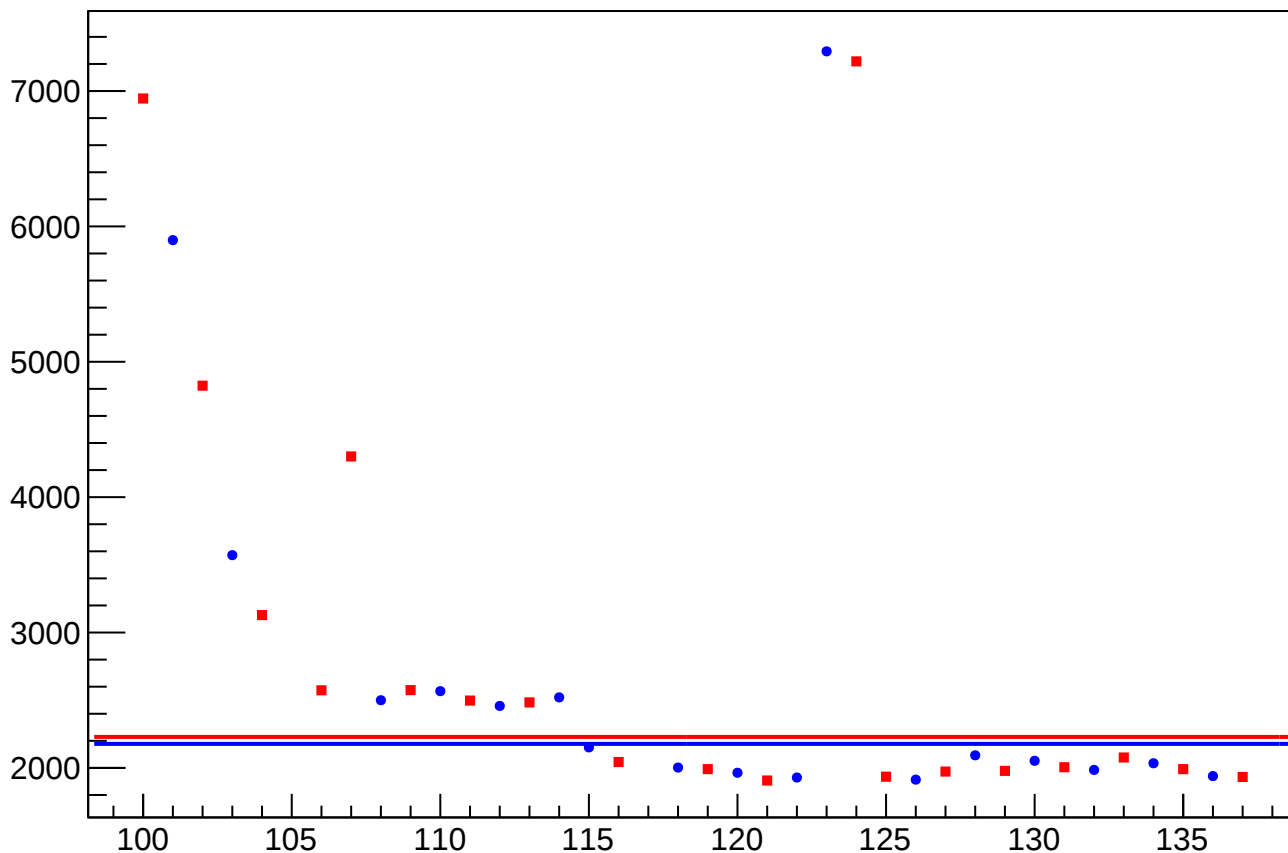
Right:  $-683.218 \pm 614.953$   $\chi^2/\text{NDF}$ : 34.2/35

In:  $-305.713 \pm 871.922$   $\chi^2/\text{NDF}$ : 17.2/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-683.218 \pm 614.953$   $\chi^2/\text{NDF}$ : 34.2/35

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



Right In: 2177.446+/-0.617  $\chi^2/\text{NDF}$ : 802836.7/16

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

Right Out: 2229.014+/-0.613  $\chi^2/\text{NDF}$ : 895809.1/18

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

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

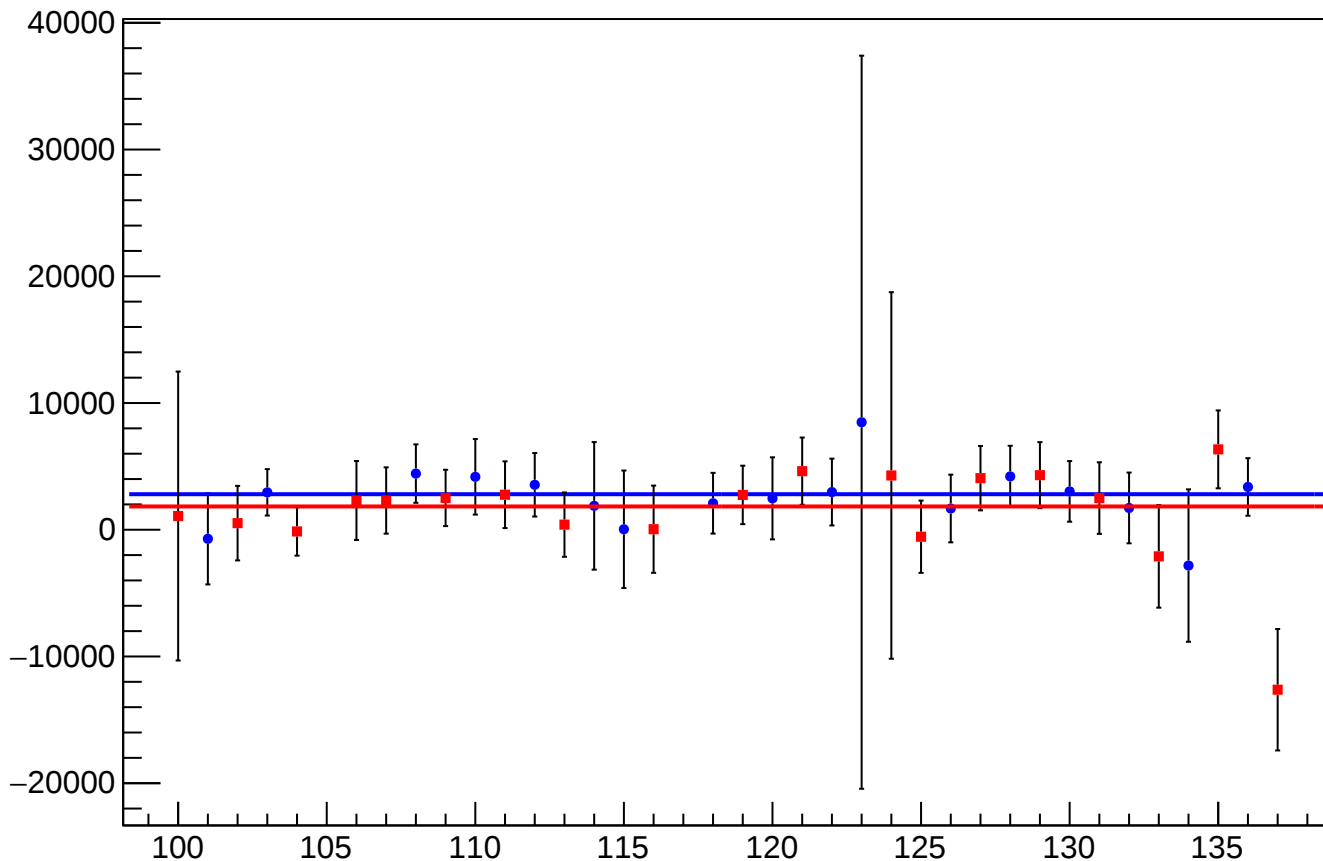
Right: 2203.363+/-0.435  $\chi^2/\text{NDF}$ : 1702161.6/35

In: 2177.446+/-0.617  $\chi^2/\text{NDF}$ :802836.7/16

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

All: 2203.363+/-0.435  $\chi^2/\text{NDF}$ : 1702161.6/35

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



Right In: 2803.917 $\pm$ 678.548  $\chi^2$ /NDF: 3.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1837.168 $\pm$ 655.307  $\chi^2$ /NDF: 18.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

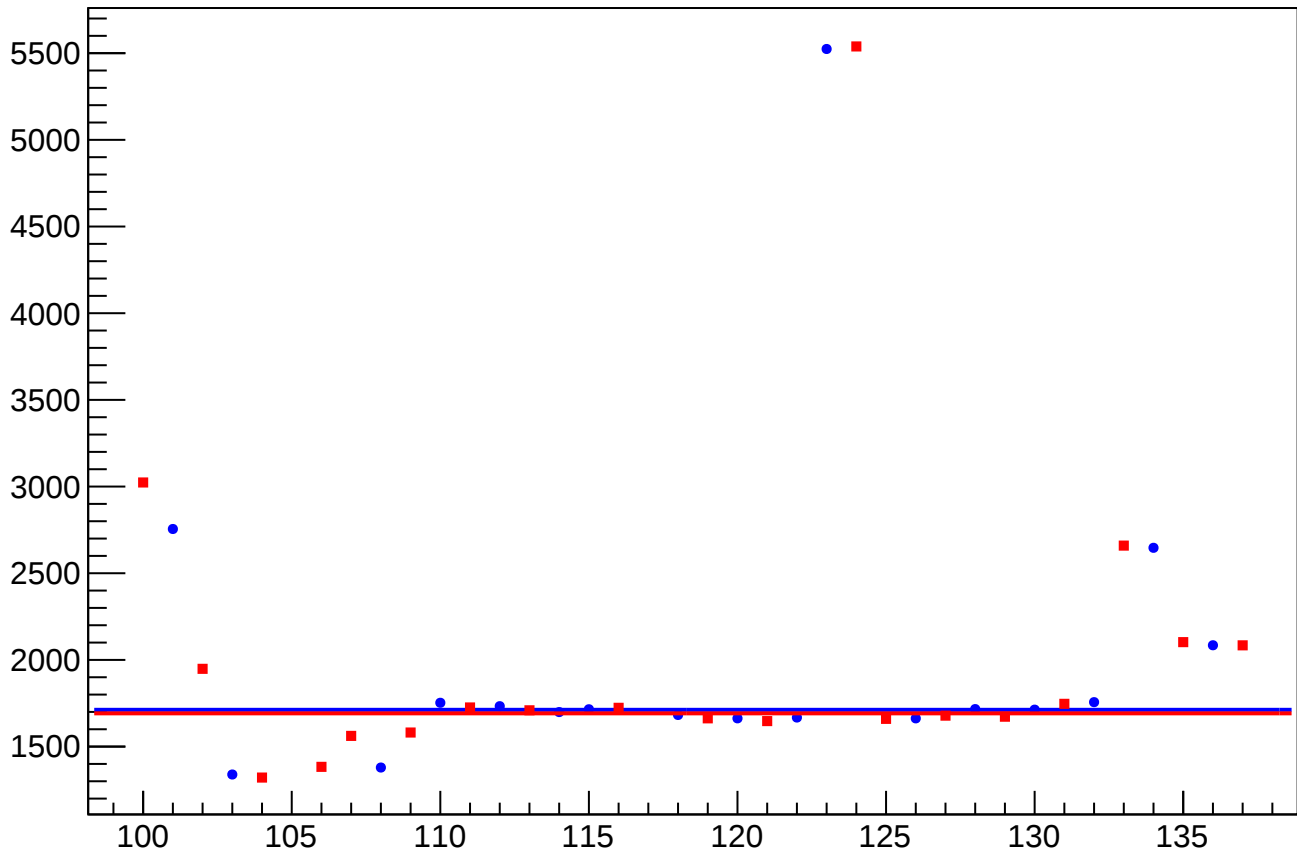
Right: 2303.702 $\pm$ 471.374  $\chi^2$ /NDF: 23.0/35

In: 2803.917 $\pm$ 678.548  $\chi^2$ /NDF:3.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 2303.702 $\pm$ 471.374  $\chi^2$ /NDF: 23.0/35

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



Right In: 1712.154+/-0.480  $\chi^2/\text{NDF}$ : 432478.4/16

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

Right Out: 1691.747+/-0.463  $\chi^2/\text{NDF}$ : 454922.1/18

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

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

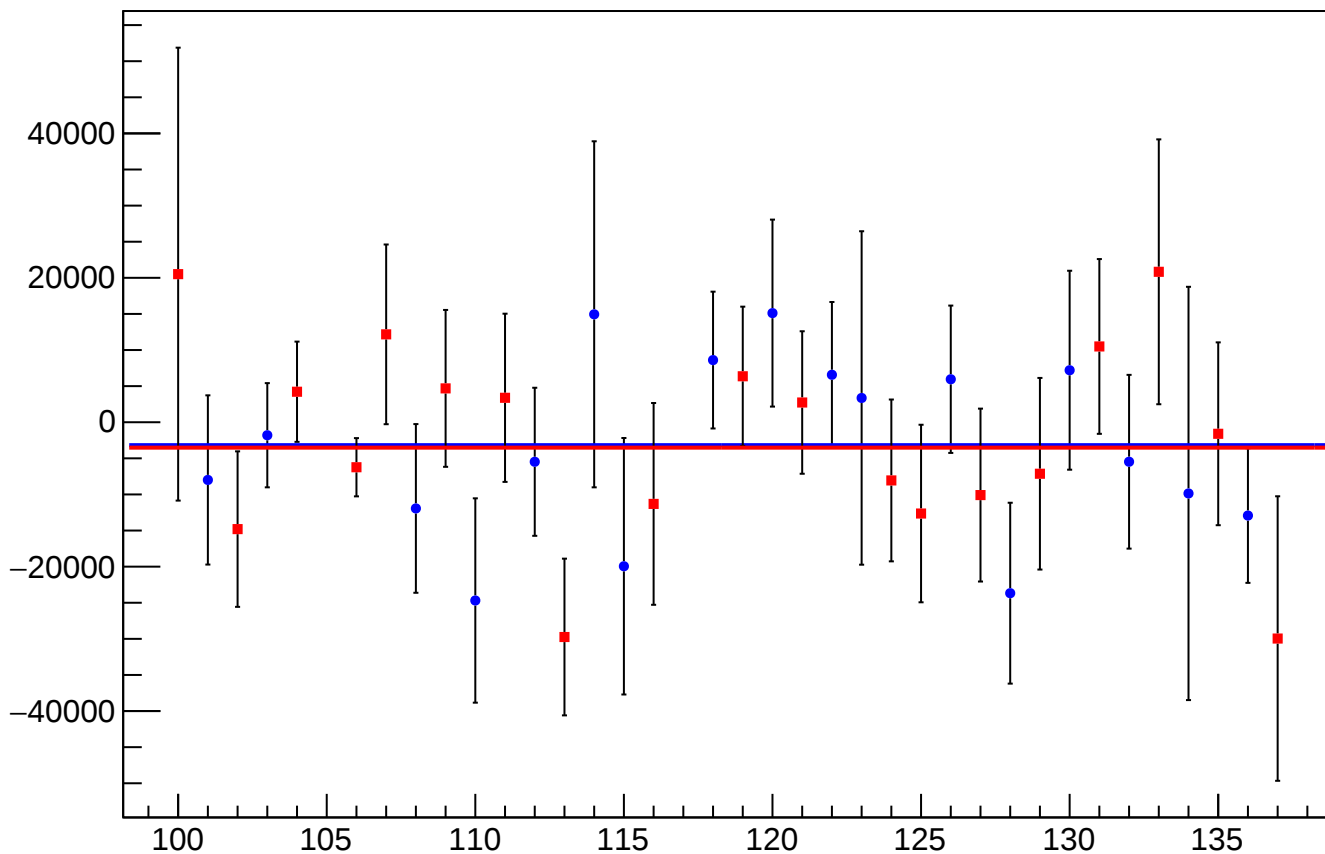
Right: 1701.595+/-0.333  $\chi^2/\text{NDF}$ : 888336.5/35

In: 1712.154+/-0.480  $\chi^2/\text{NDF}$ : 432478.4/16

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

All: 1701.595+/-0.333  $\chi^2/\text{NDF}$ : 888336.5/35

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



Right In: -3173.245+/-2851.982  $\chi^2/\text{NDF}$ : 14.4/16

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

Right Out: -3520.105+/-2266.532  $\chi^2/\text{NDF}$ : 19.5/18

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

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

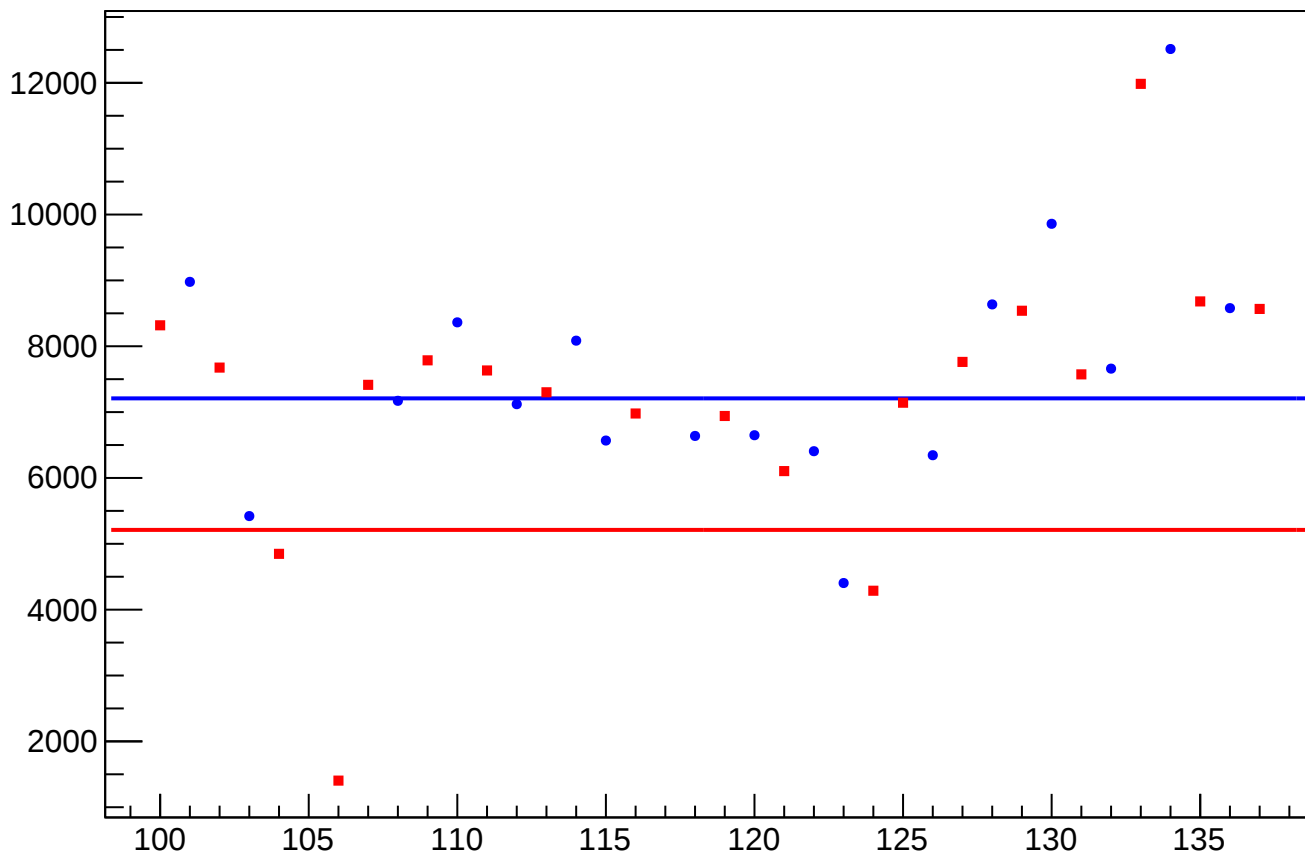
Right: -3385.836+/-1774.424  $\chi^2/\text{NDF}$ : 33.9/35

In: -3173.245+/-2851.982  $\chi^2/\text{NDF}$ : 14.4/16

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

All: -3385.836+/-1774.424  $\chi^2/\text{NDF}$ : 33.9/35

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



Right In: 7208.567+/-2.017  $\chi^2/\text{NDF}$ : 469302.0/16

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

Right Out: 5211.187+/-1.603  $\chi^2/\text{NDF}$ : 3196870.2/18

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

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

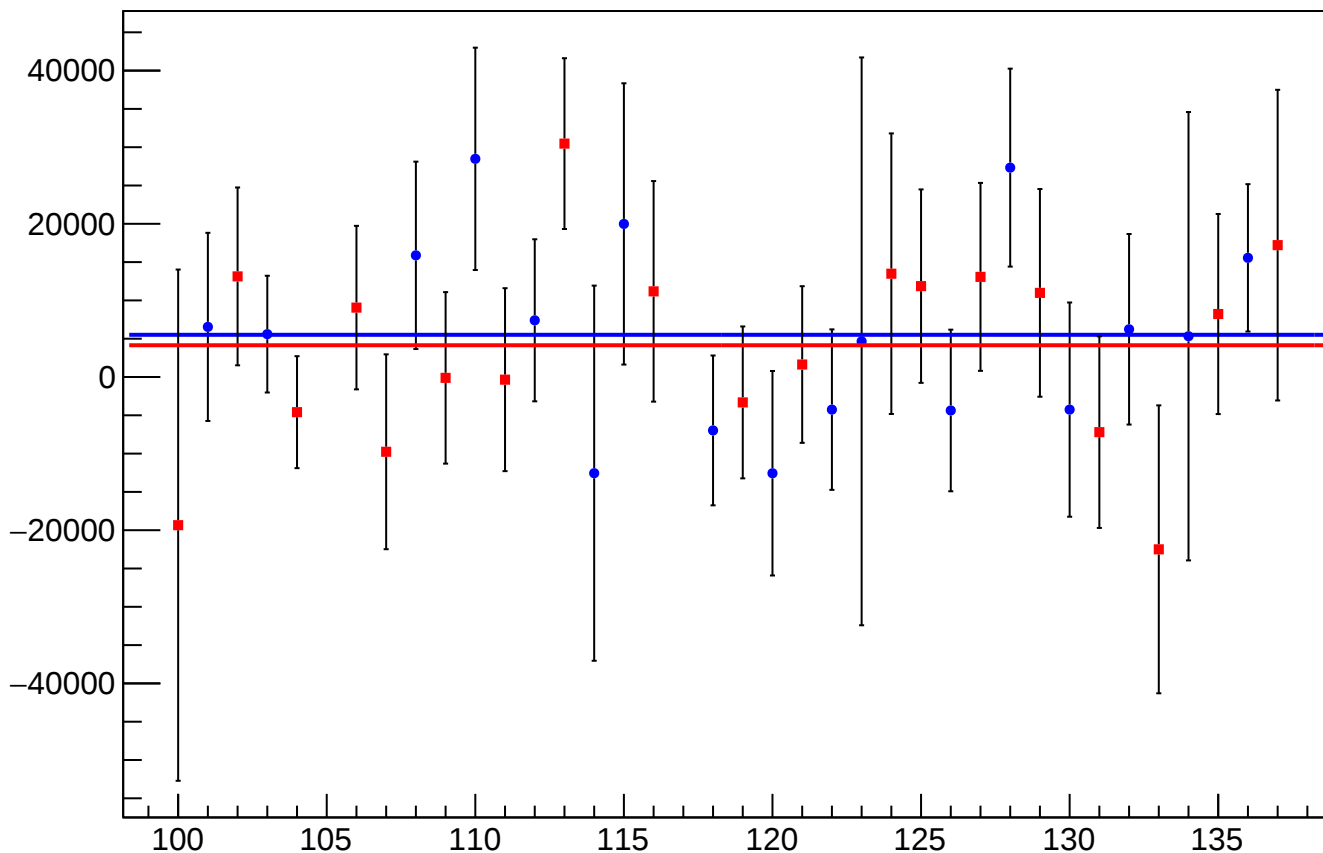
Right: 5984.369+/-1.255  $\chi^2/\text{NDF}$ : 4267414.1/35

In: 7208.567+/-2.017  $\chi^2/\text{NDF}$ : 469302.0/16

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

All: 5984.369+/-1.255  $\chi^2/\text{NDF}$ : 4267414.1/35

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



Right In: 5509.395+/-2971.033  $\chi^2/\text{NDF}$ : 14.1/16

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

Right Out: 4146.067+/-2790.212  $\chi^2/\text{NDF}$ : 15.4/18

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

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

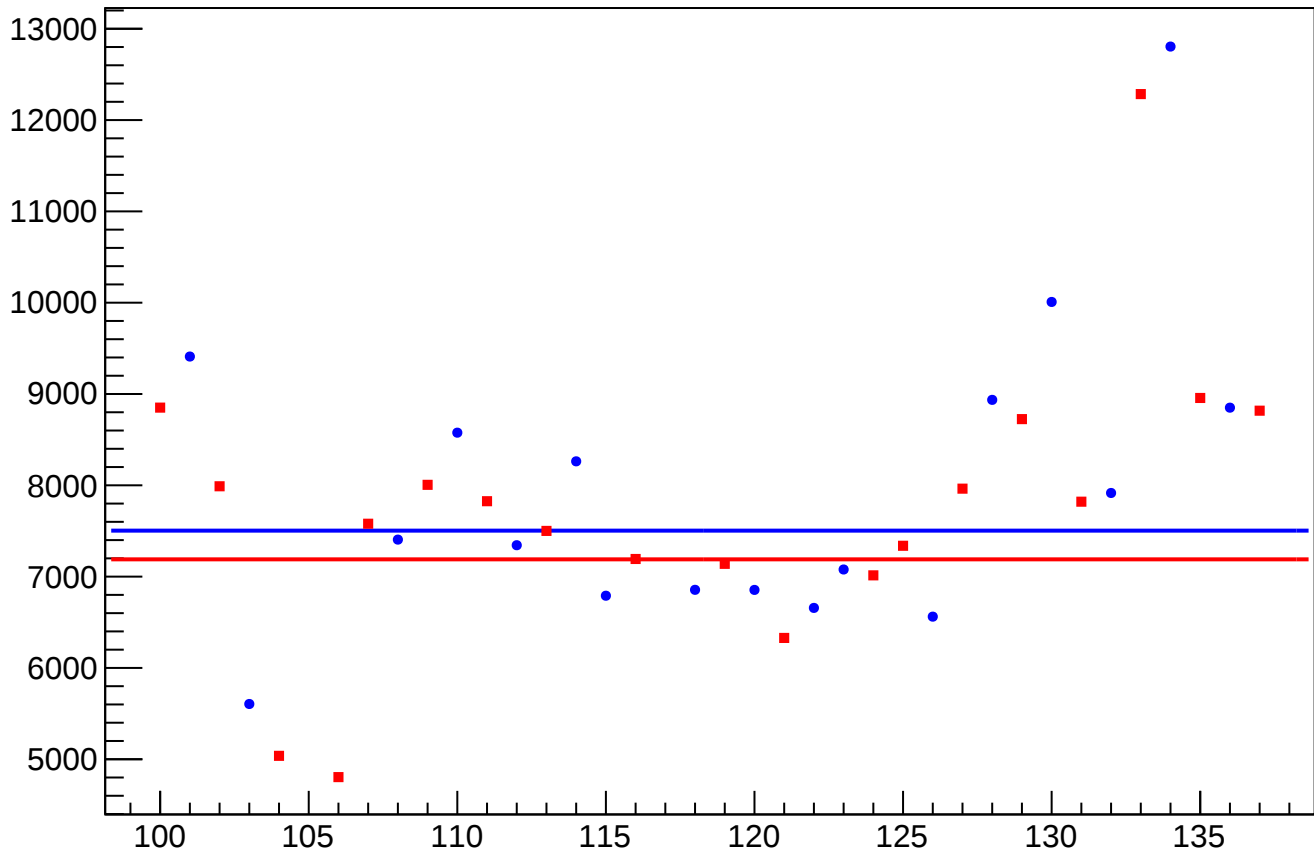
Right: 4784.984+/-2033.900  $\chi^2/\text{NDF}$ : 29.6/35

In: 5509.395+/-2971.033  $\chi^2/\text{NDF}$ : 14.1/16

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

All: 4784.984+/-2033.900  $\chi^2/\text{NDF}$ : 29.6/35

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



Right In: 7503.667+/-2.101  $\chi^2/\text{NDF}$ : 427313.5/16

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

Right Out: 7189.231+/-1.973  $\chi^2/\text{NDF}$ : 557703.4/18

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

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

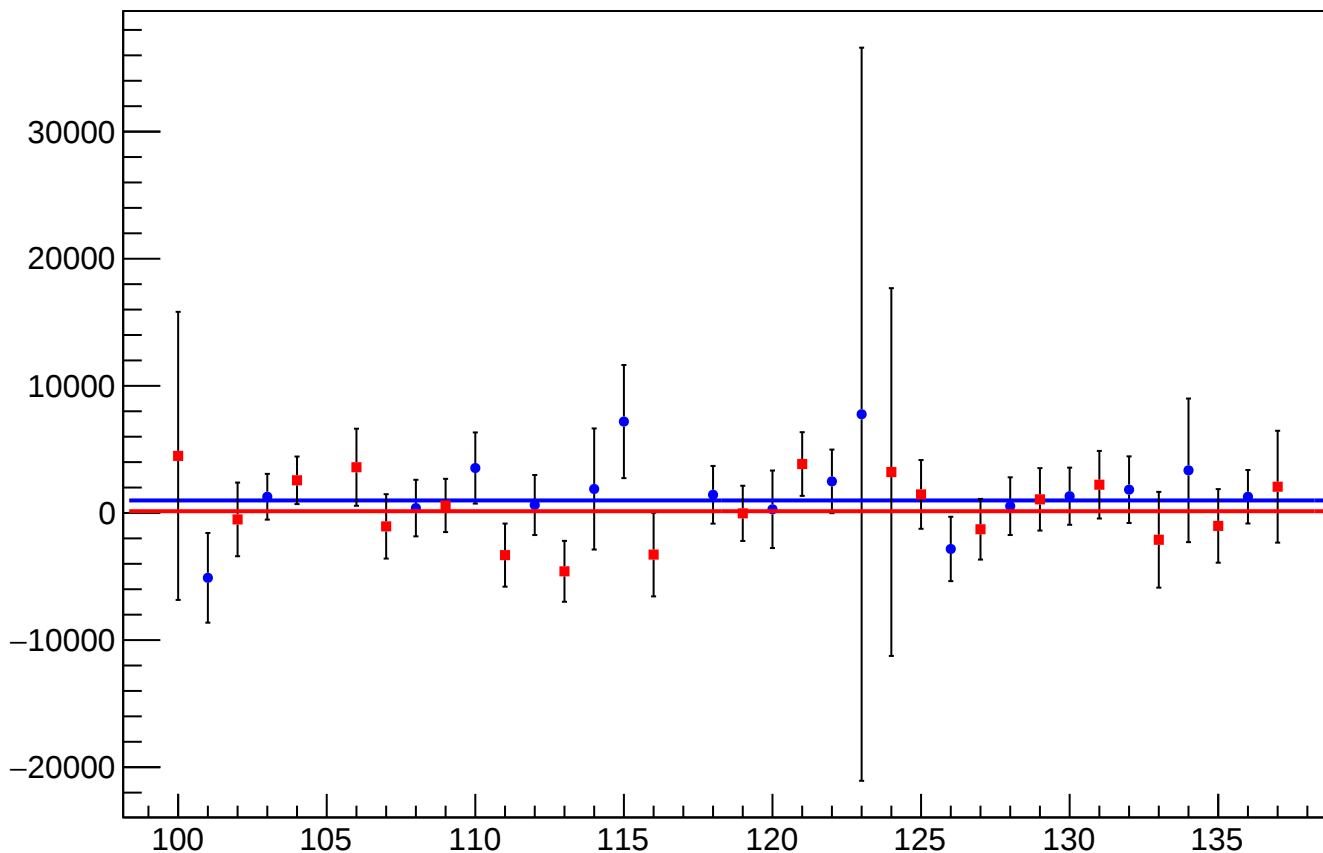
Right: 7336.574+/-1.438  $\chi^2/\text{NDF}$ : 996921.9/35

In: 7503.667+/-2.101  $\chi^2/\text{NDF}$ : 427313.5/16

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

All: 7336.574+/-1.438  $\chi^2/\text{NDF}$ : 996921.9/35

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



Right In: 985.452+/-644.630  $\chi^2/\text{NDF}$ : 9.1/16

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

Right Out: 138.627+/-623.555  $\chi^2/\text{NDF}$ : 14.7/18

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

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

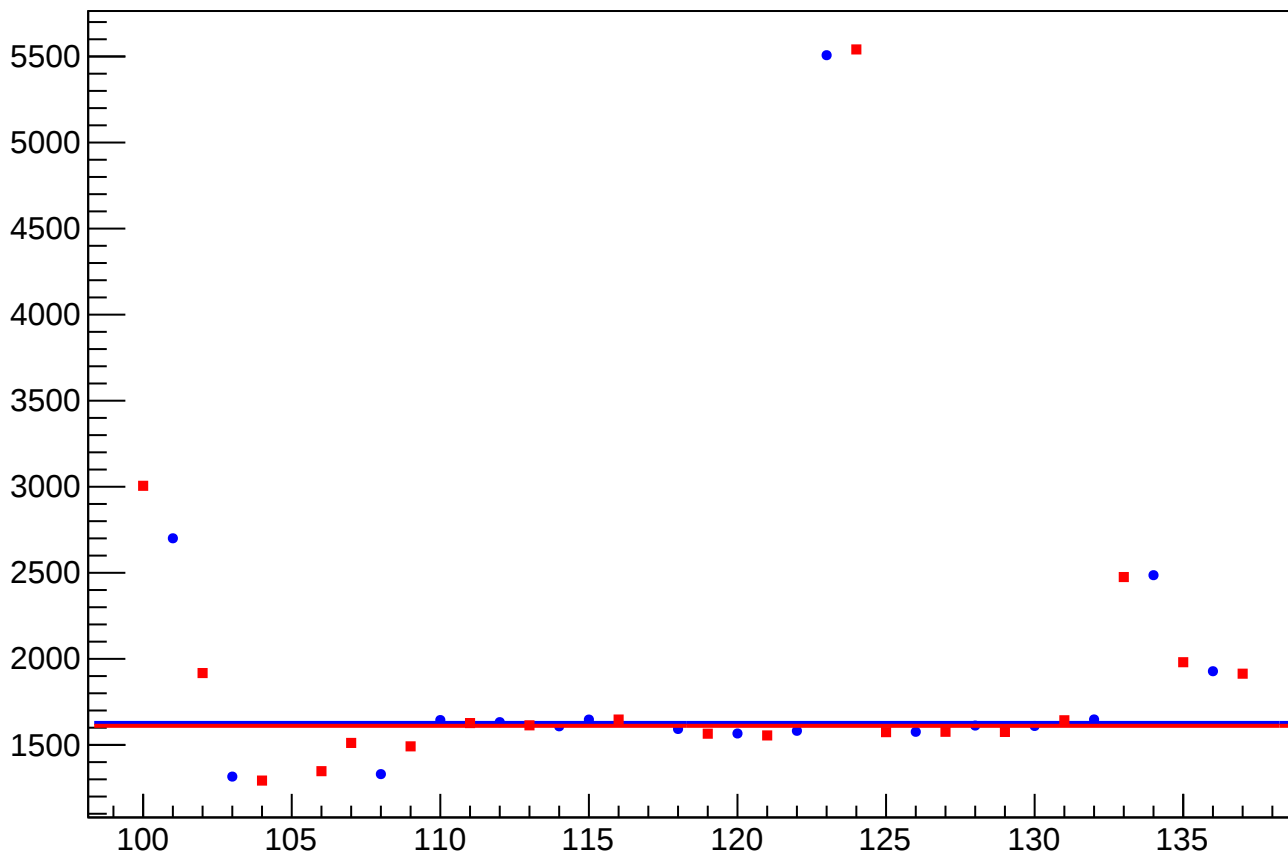
Right: 547.971+/-448.185  $\chi^2/\text{NDF}$ : 24.6/35

In: 985.452+/-644.630  $\chi^2/\text{NDF}$ : 9.1/16

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

All: 547.971+/-448.185  $\chi^2/\text{NDF}$ : 24.6/35

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



Right In: 1627.836+/-0.456  $\chi^2/\text{NDF}$ : 407106.6/16

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

Right Out: 1610.948+/-0.441  $\chi^2/\text{NDF}$ : 433960.8/18

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

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

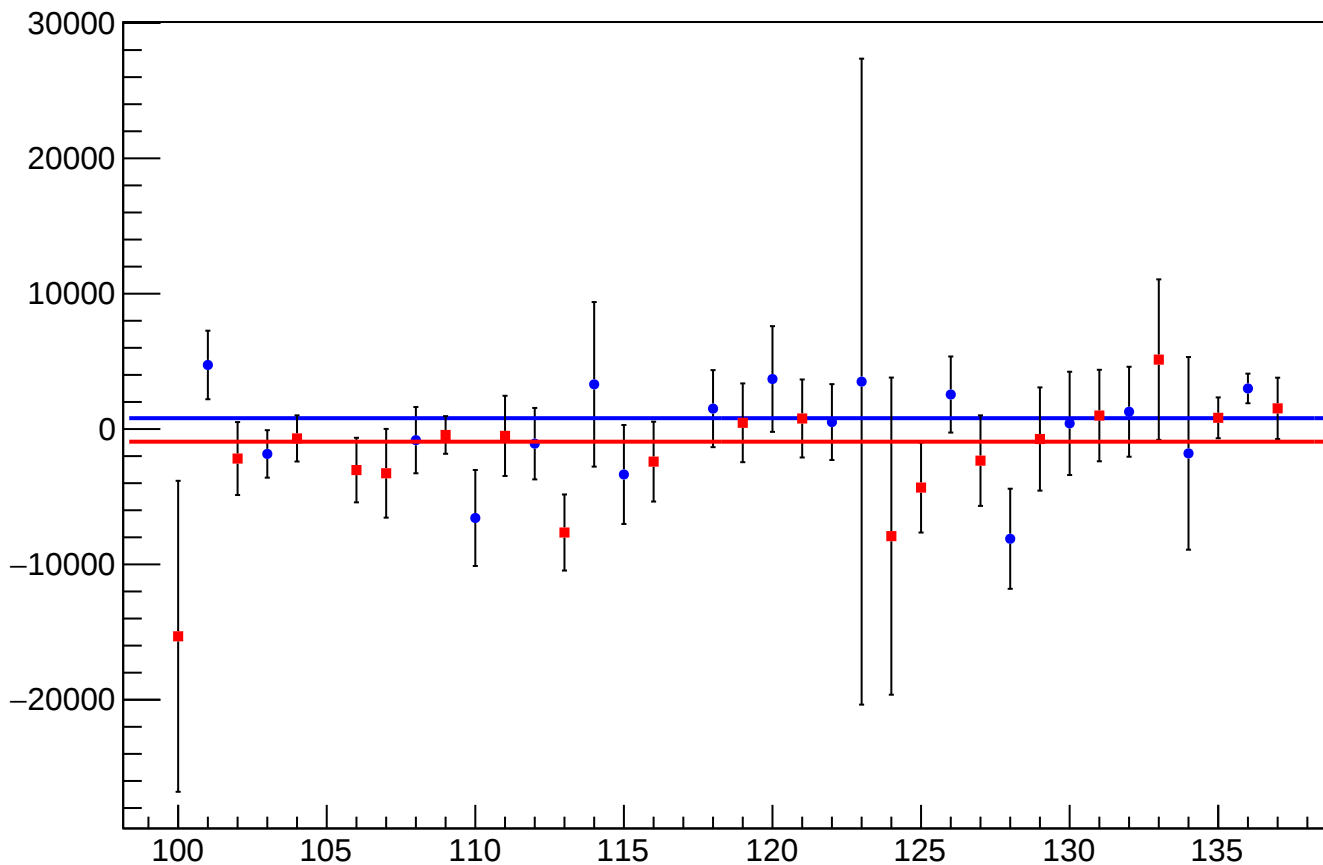
Right: 1619.112+/-0.317  $\chi^2/\text{NDF}$ : 841776.5/35

In: 1627.836+/-0.456  $\chi^2/\text{NDF}$ : 407106.6/16

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

All: 1619.112+/-0.317  $\chi^2/\text{NDF}$ : 841776.5/35

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



Right In: 803.048+/-631.676  $\chi^2/\text{NDF}$ : 22.4/16

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

Right Out: -933.645+/-589.727  $\chi^2/\text{NDF}$ : 15.3/18

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

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

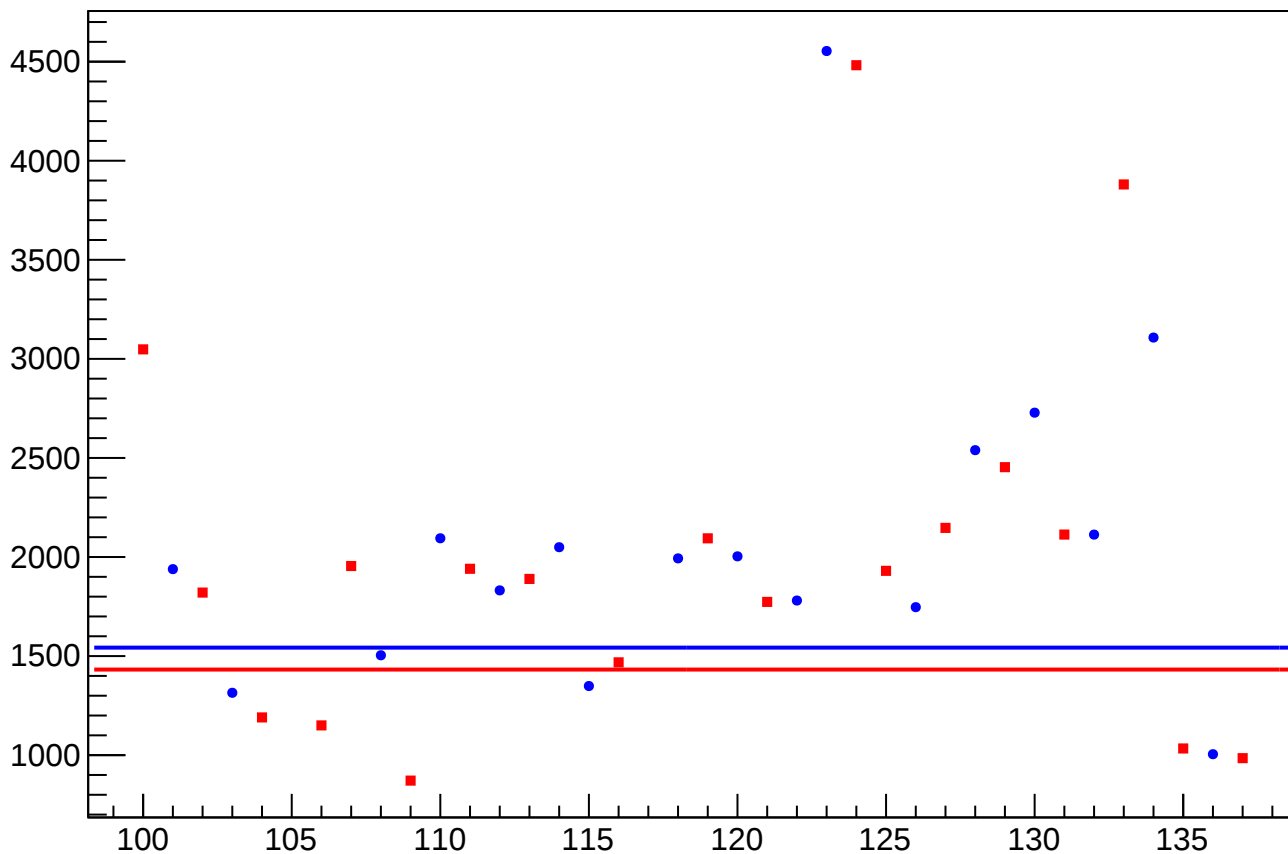
Right: -124.875+/-431.067  $\chi^2/\text{NDF}$ : 41.7/35

In: 803.048+/-631.676  $\chi^2/\text{NDF}$ : 22.4/16

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

All: -124.875+/-431.067  $\chi^2/\text{NDF}$ : 41.7/35

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



Right In: 1542.705+/-0.447  $\chi^2/\text{NDF}$ : 1287946.3/16

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

Right Out: 1432.013+/-0.417  $\chi^2/\text{NDF}$ : 1823809.4/18

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

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

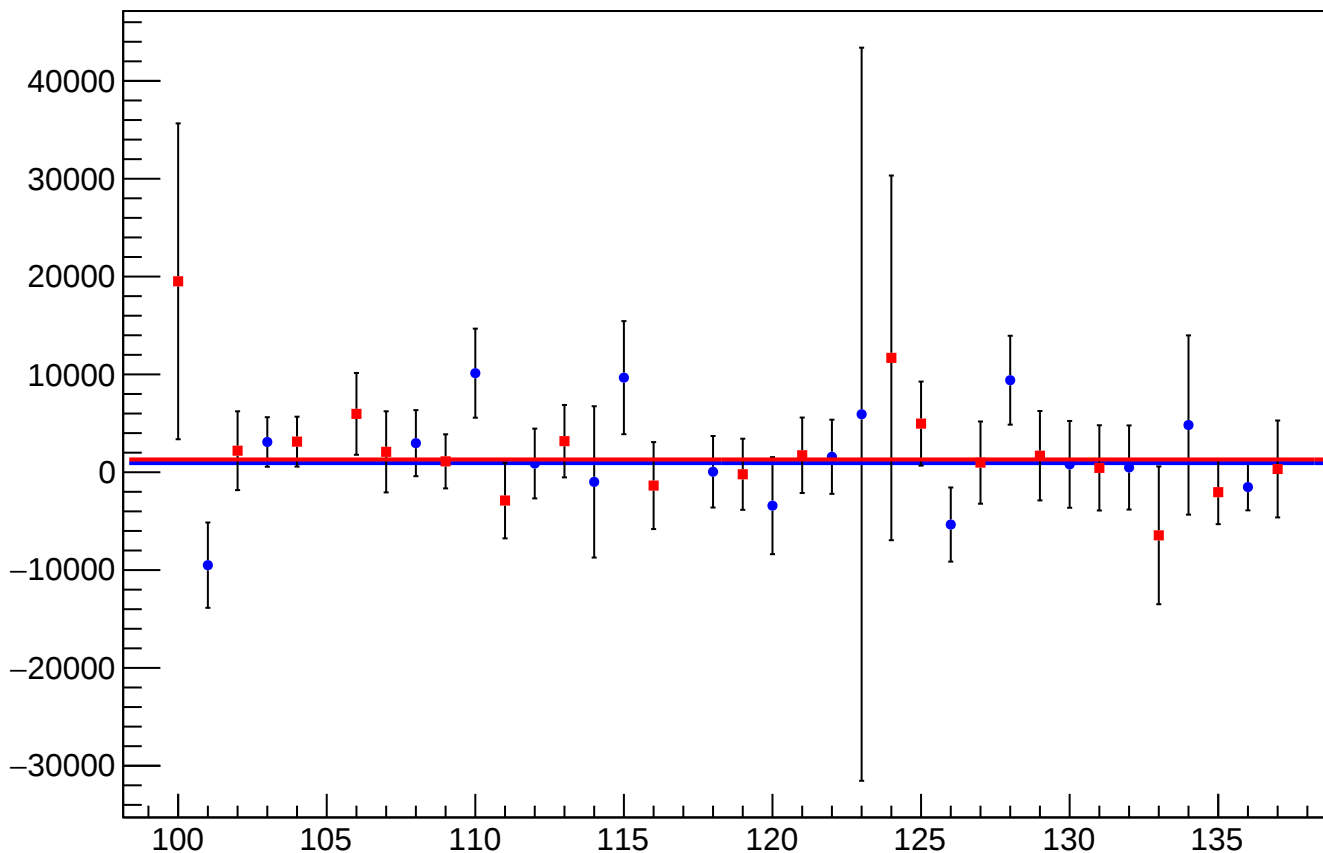
Right: 1483.562+/-0.305  $\chi^2/\text{NDF}$ : 3144570.0/35

In: 1542.705+/-0.447  $\chi^2/\text{NDF}$ : 1287946.3/16

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

All: 1483.562+/-0.305  $\chi^2/\text{NDF}$ : 3144570.0/35

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



Right In: 932.818+/-967.941  $\chi^2/\text{NDF}$ : 21.6/16

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

Right Out: 1307.802+/-925.415  $\chi^2/\text{NDF}$ : 8.5/18

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

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

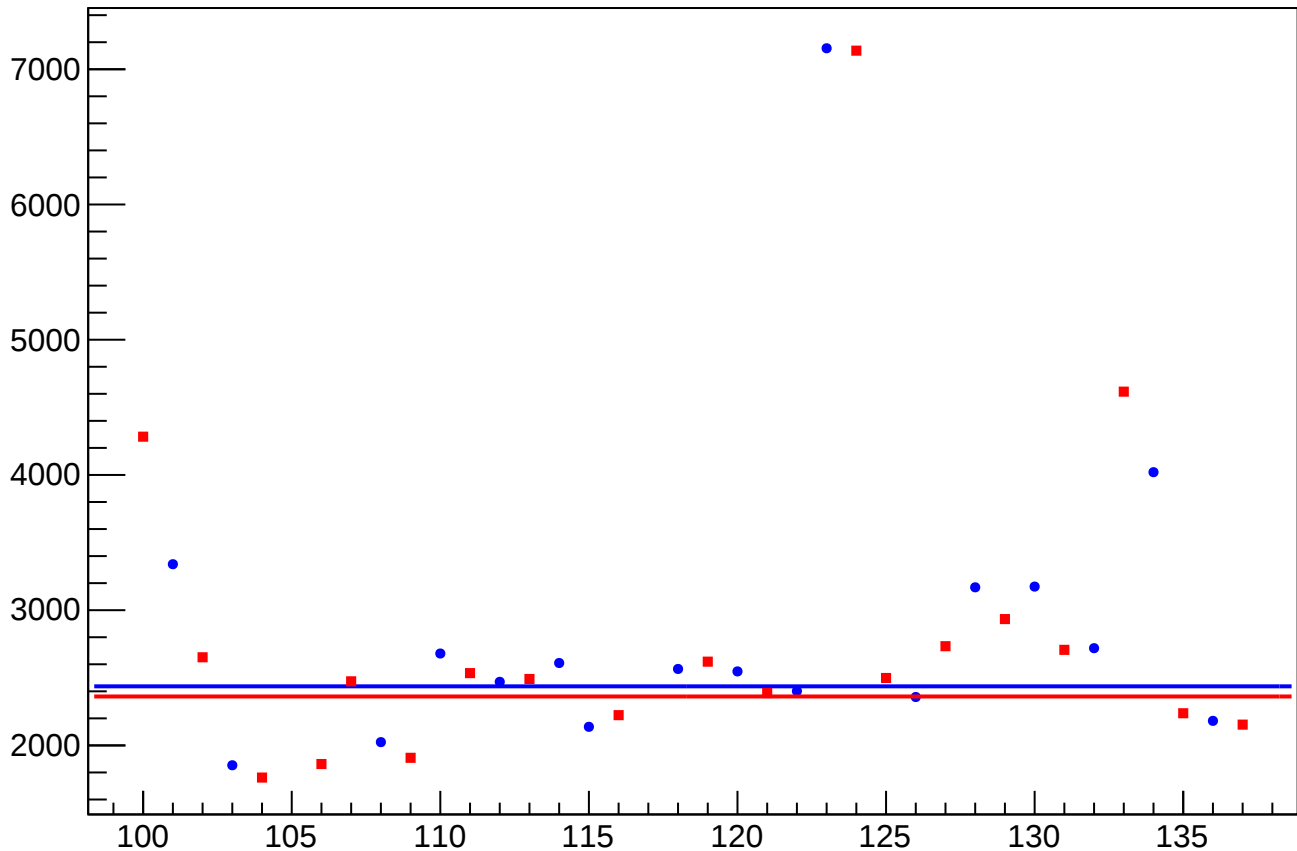
Right: 1128.728+/-668.896  $\chi^2/\text{NDF}$ : 30.2/35

In: 932.818+/-967.941  $\chi^2/\text{NDF}$ : 21.6/16

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

All: 1128.728+/-668.896  $\chi^2/\text{NDF}$ : 30.2/35

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



Right In: 2436.855+/-0.684  $\chi^2/\text{NDF}$ : 469030.2/16

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

Right Out: 2361.880+/-0.654  $\chi^2/\text{NDF}$ : 655847.5/18

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

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

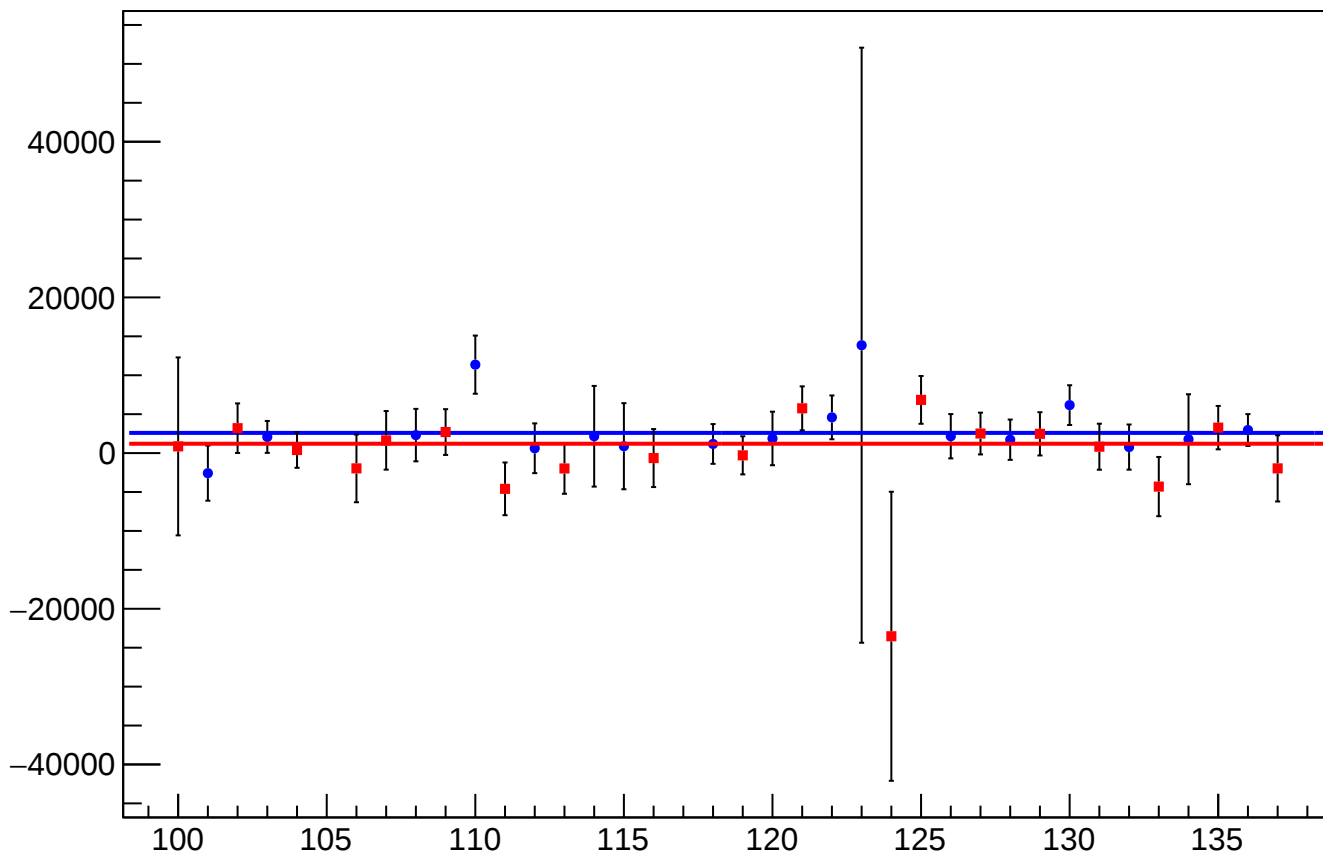
Right: 2397.684+/-0.473  $\chi^2/\text{NDF}$ : 1131146.9/35

In: 2436.855+/-0.684  $\chi^2/\text{NDF}$ : 469030.2/16

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

All: 2397.684+/-0.473  $\chi^2/\text{NDF}$ : 1131146.9/35

reg\_asym\_atl1r2\_avg\_mean vs Slug, Sign Corrected



Right In: 2594.684 $\pm$ 743.000  $\chi^2$ /NDF: 11.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1202.548 $\pm$ 739.618  $\chi^2$ /NDF: 17.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

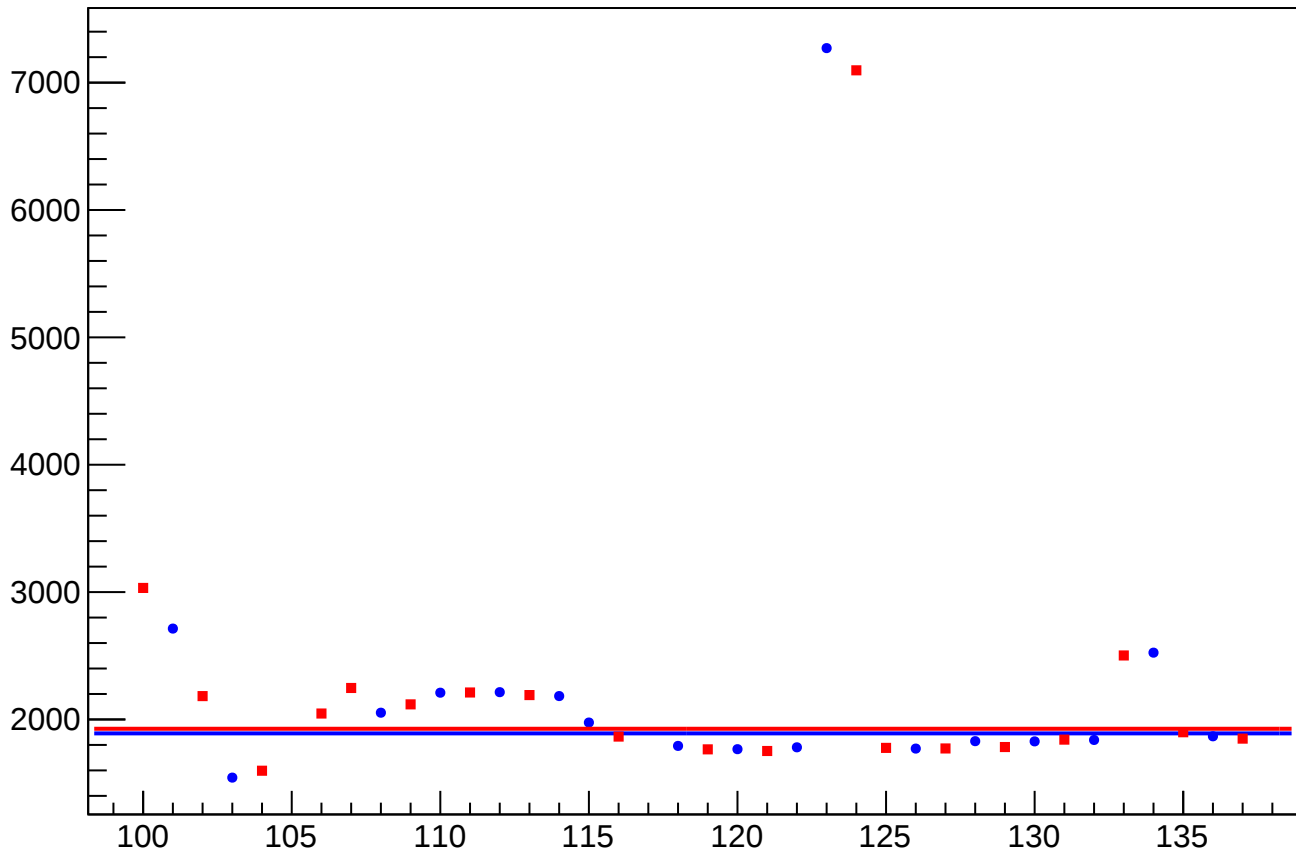
Right: 1895.439 $\pm$ 524.180  $\chi^2$ /NDF: 30.7/35

In: 2594.684 $\pm$ 743.000  $\chi^2$ /NDF:11.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1895.439 $\pm$ 524.180  $\chi^2$ /NDF: 30.7/35

# reg\_asym\_atl1r2\_avg\_rms vs Slug, Sign Corrected



Right In: 1890.721+/-0.525  $\chi^2/\text{NDF}$ : 288944.9/16

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

Right Out: 1926.949+/-0.522  $\chi^2/\text{NDF}$ : 362254.5/18

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

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

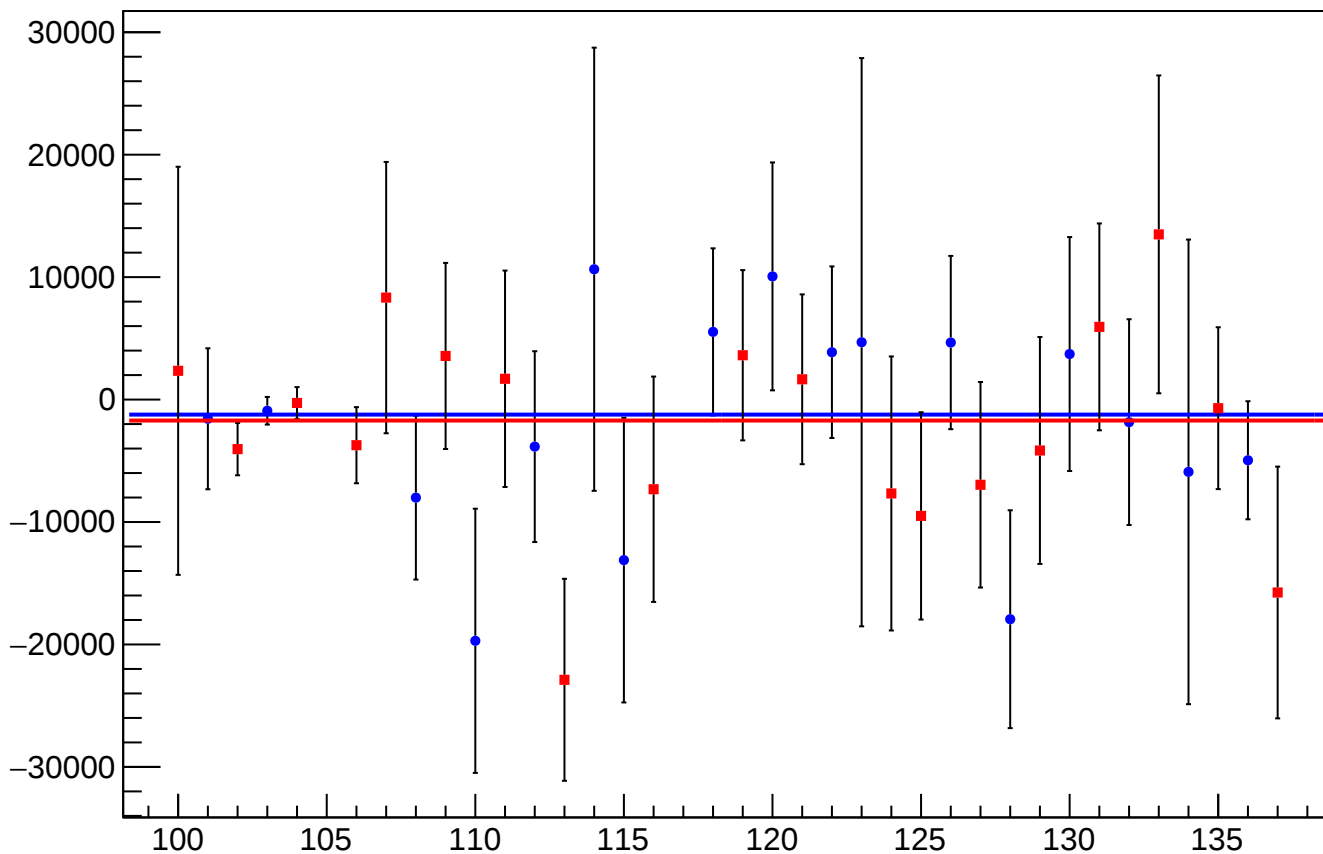
Right: 1908.946+/-0.370  $\chi^2/\text{NDF}$ : 653591.4/35

In: 1890.721+/-0.525  $\chi^2/\text{NDF}$ : 288944.9/16

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

All: 1908.946+/-0.370  $\chi^2/\text{NDF}$ : 653591.4/35

asym\_atl1r2\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -1226.915+/-984.603  $\chi^2/\text{NDF}$ : 13.8/16

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

Right Out: -1711.747+/-941.580  $\chi^2/\text{NDF}$ : 17.8/18

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

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

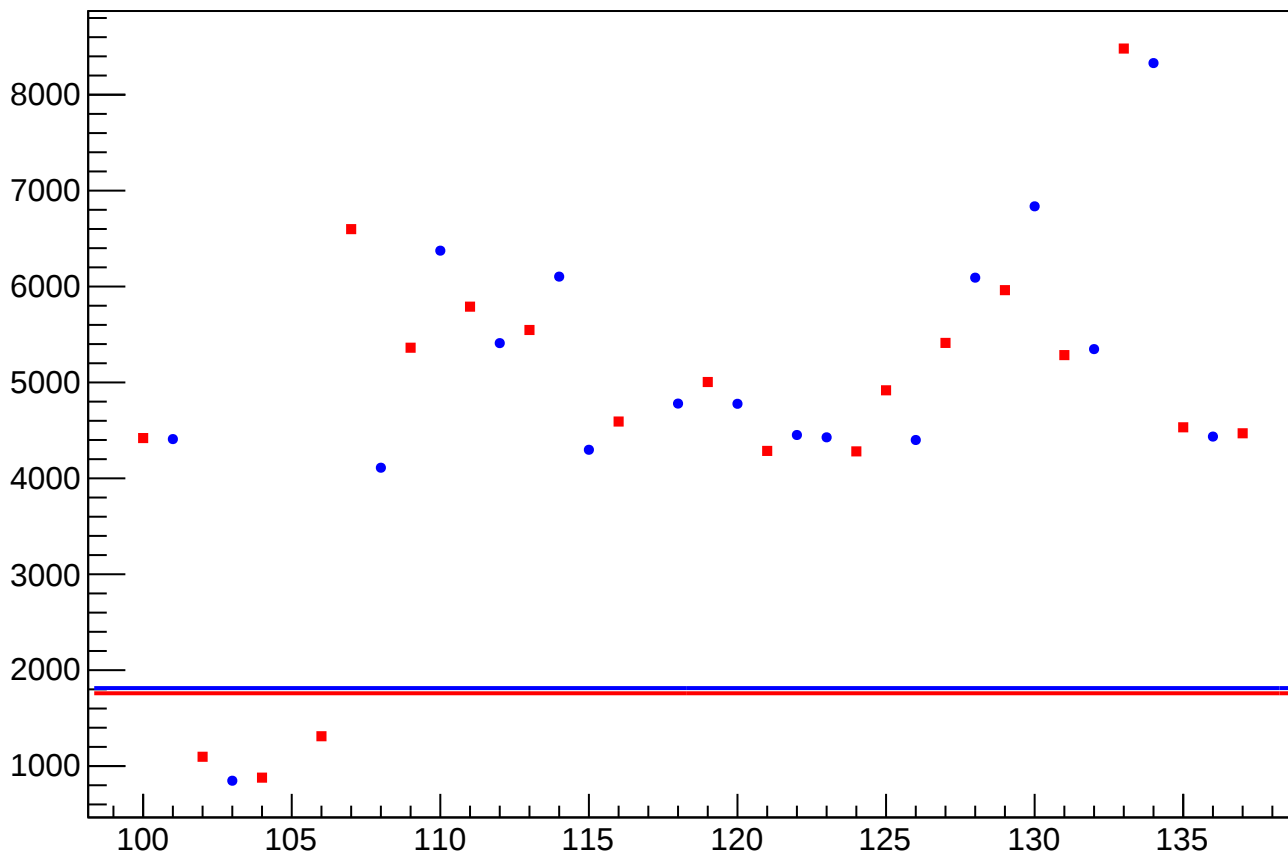
Right: -1480.155+/-680.499  $\chi^2/\text{NDF}$ : 31.8/35

In: -1226.915+/-984.603  $\chi^2/\text{NDF}$ : 13.8/16

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

All: -1480.155+/-680.499  $\chi^2/\text{NDF}$ : 31.8/35

asym\_atl1r2\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 1813.195+/-0.696  $\chi^2/\text{NDF}$ : 6449038.4/16

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

Right Out: 1759.135+/-0.666  $\chi^2/\text{NDF}$ : 6313068.7/18

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

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

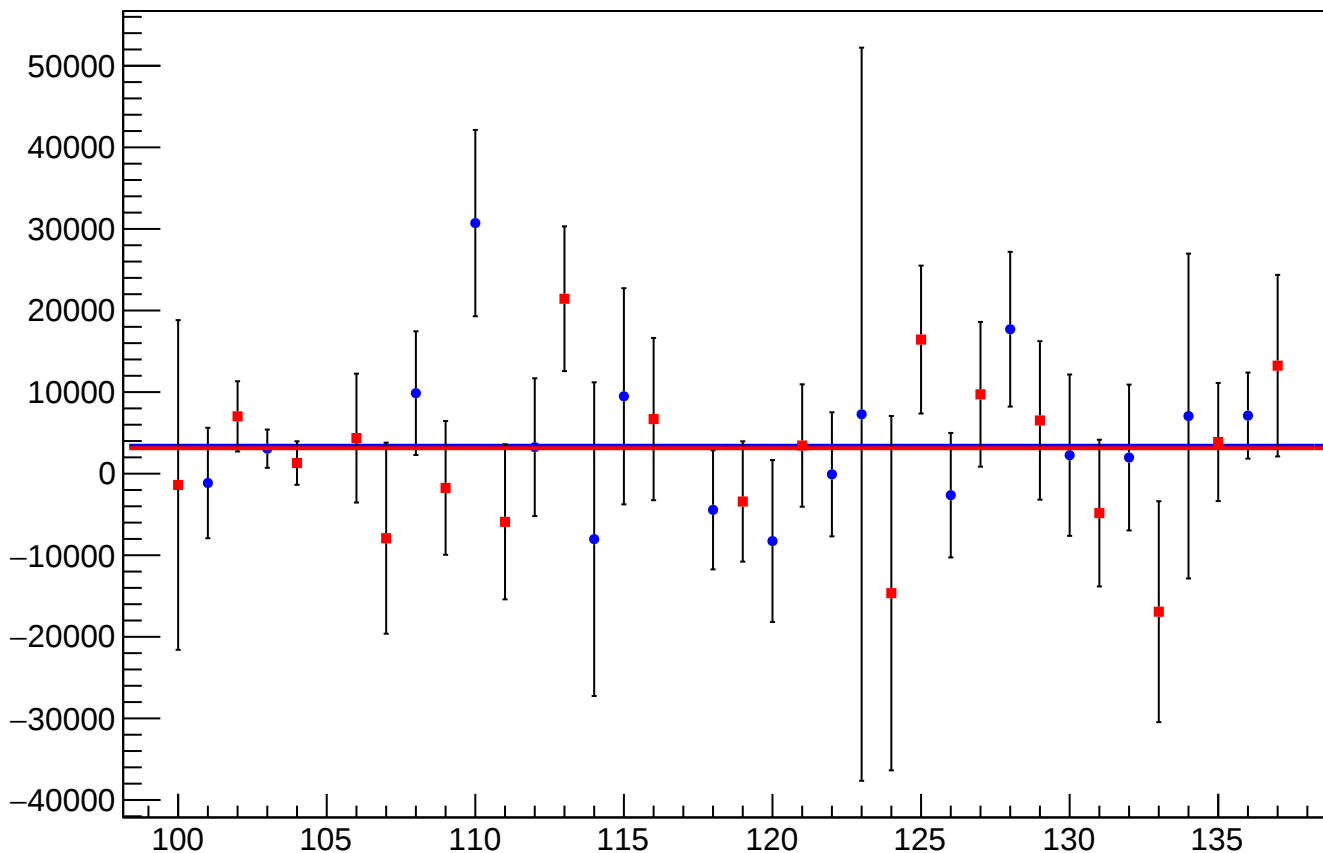
Right: 1784.958+/-0.481  $\chi^2/\text{NDF}$ : 12765256.3/35

In: 1813.195+/-0.696  $\chi^2/\text{NDF}$ :6449038.4/16

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

All: 1784.958+/-0.481  $\chi^2/\text{NDF}$ : 12765256.3/35

# asym\_atl1r2\_avg\_mean vs Slug, Sign Corrected



Right In: 3421.264+/-1606.678  $\chi^2/\text{NDF}$ : 13.7/16

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

Right Out: 3117.857+/-1605.930  $\chi^2/\text{NDF}$ : 16.0/18

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

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

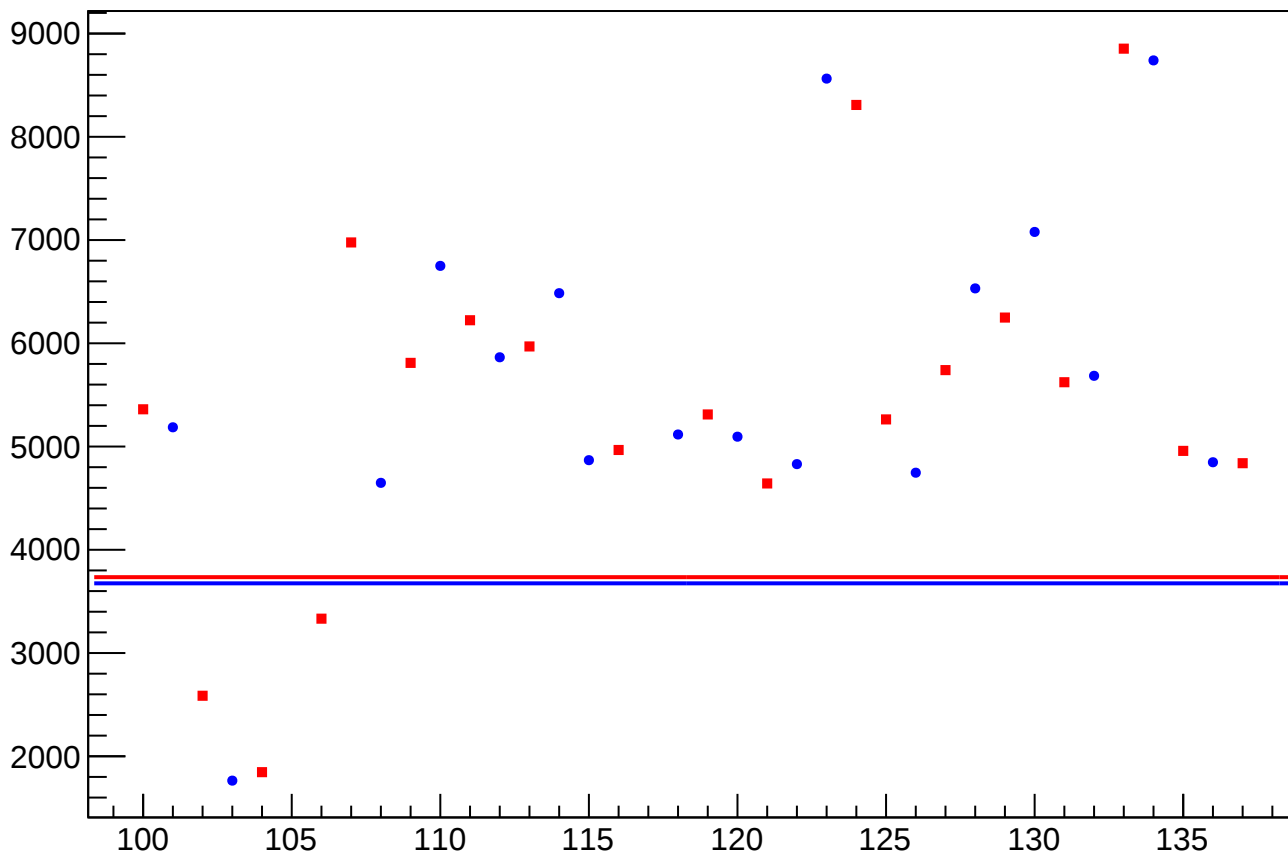
Right: 3269.490+/-1135.828  $\chi^2/\text{NDF}$ : 29.7/35

In: 3421.264+/-1606.678  $\chi^2/\text{NDF}$ : 13.7/16

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

All: 3269.490+/-1135.828  $\chi^2/\text{NDF}$ : 29.7/35

# asym\_atl1r2\_avg\_rms vs Slug, Sign Corrected



Right In: 3675.003+/-1.136  $\chi^2/\text{NDF}$ : 2775085.7/16

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

Right Out: 3734.796+/-1.128  $\chi^2/\text{NDF}$ : 2693929.0/18

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

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

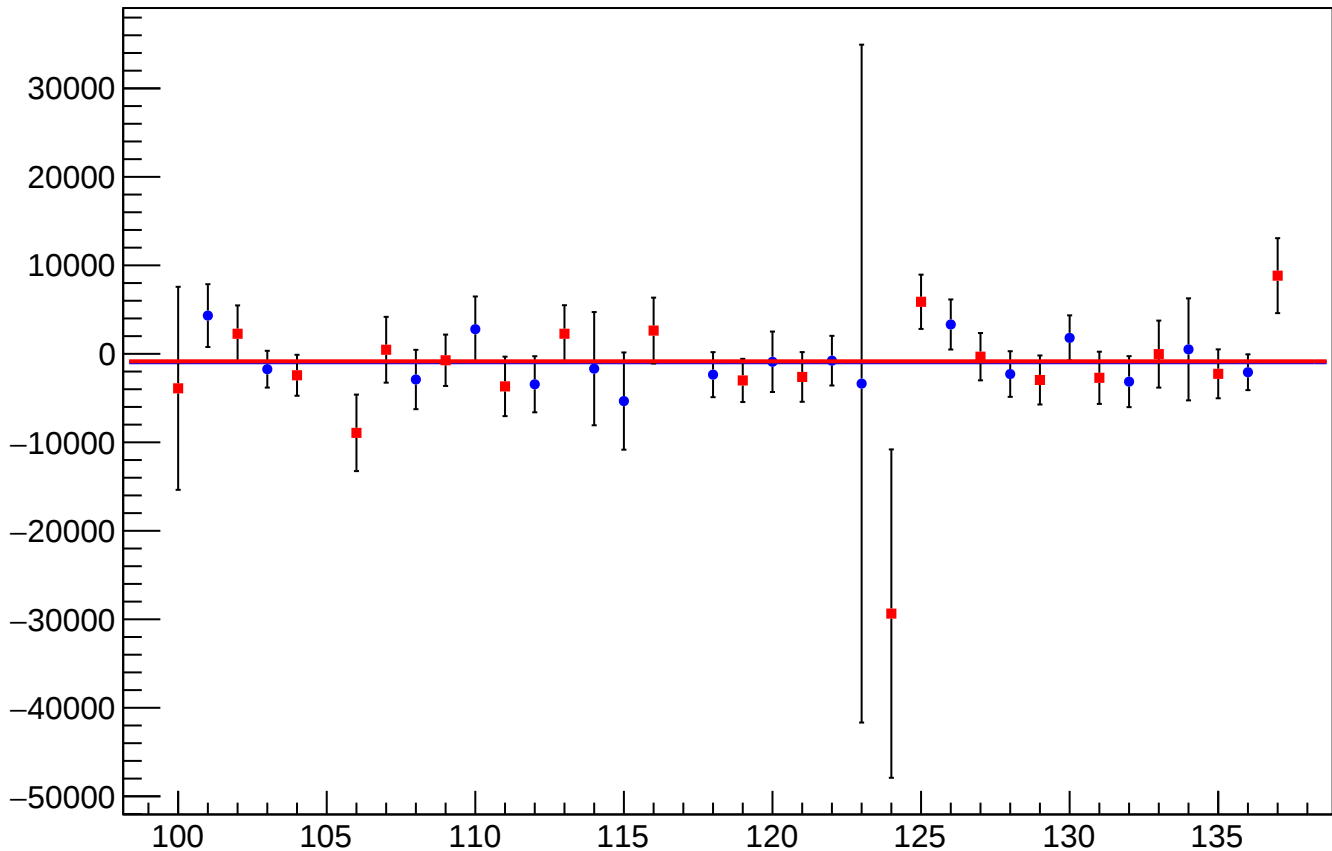
Right: 3705.112+/-0.800  $\chi^2/\text{NDF}$ : 5470409.5/35

In: 3675.003+/-1.136  $\chi^2/\text{NDF}$ : 2775085.7/16

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

All: 3705.112+/-0.800  $\chi^2/\text{NDF}$ : 5470409.5/35

# reg\_asym\_atl1r2\_dd\_mean vs Slug, Sign Corrected



Right In:  $-951.377 \pm 740.668$   $\chi^2/\text{NDF}: 10.0/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-843.515 \pm 737.527$   $\chi^2/\text{NDF}: 22.5/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

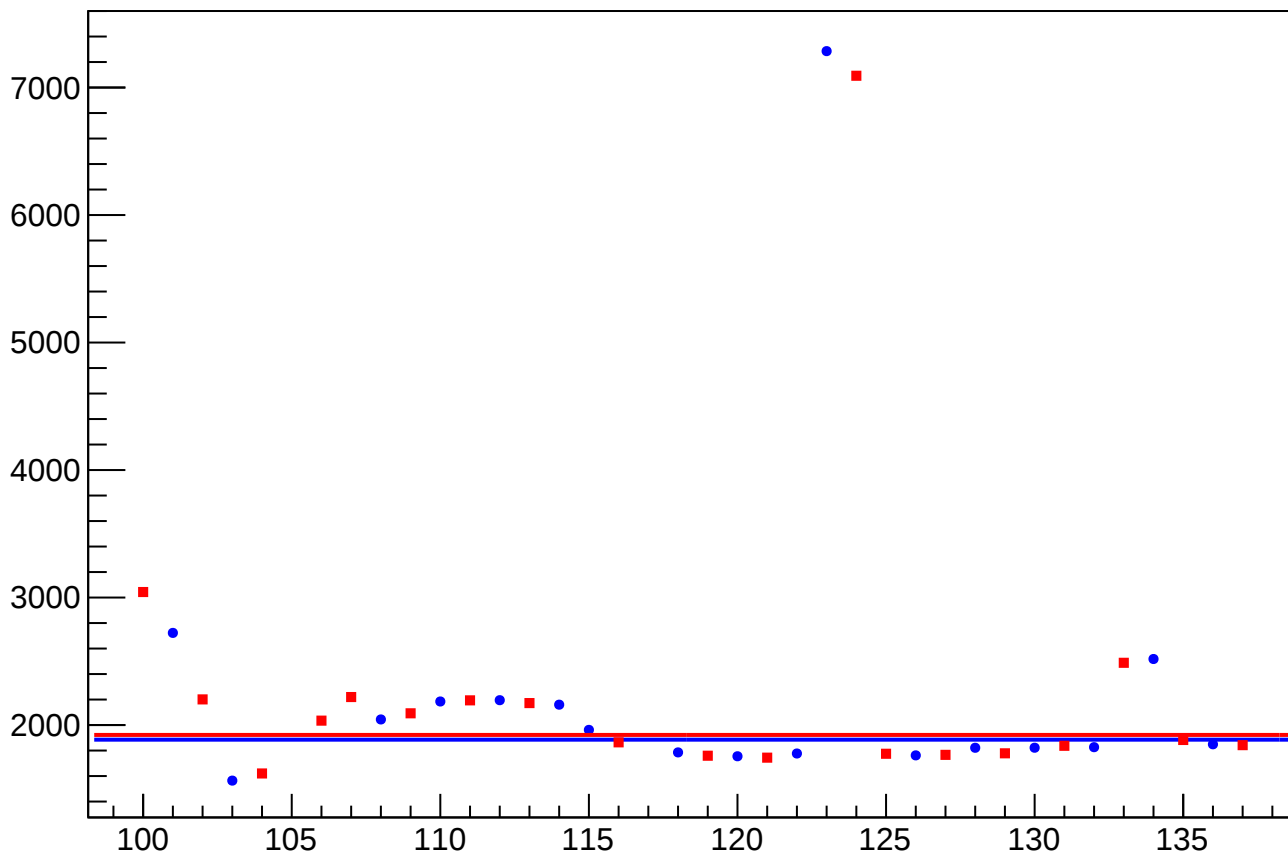
Right:  $-897.217 \pm 522.617$   $\chi^2/\text{NDF}: 32.5/35$

In:  $-951.377 \pm 740.668$   $\chi^2/\text{NDF}: 10.0/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-897.217 \pm 522.617$   $\chi^2/\text{NDF}: 32.5/35$

# reg\_asym\_atl1r2\_dd\_rms vs Slug, Sign Corrected



Right In: 1885.360+/-0.524  $\chi^2/\text{NDF}$ : 280429.0/16

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

Right Out: 1922.538+/-0.521  $\chi^2/\text{NDF}$ : 351512.1/18

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

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

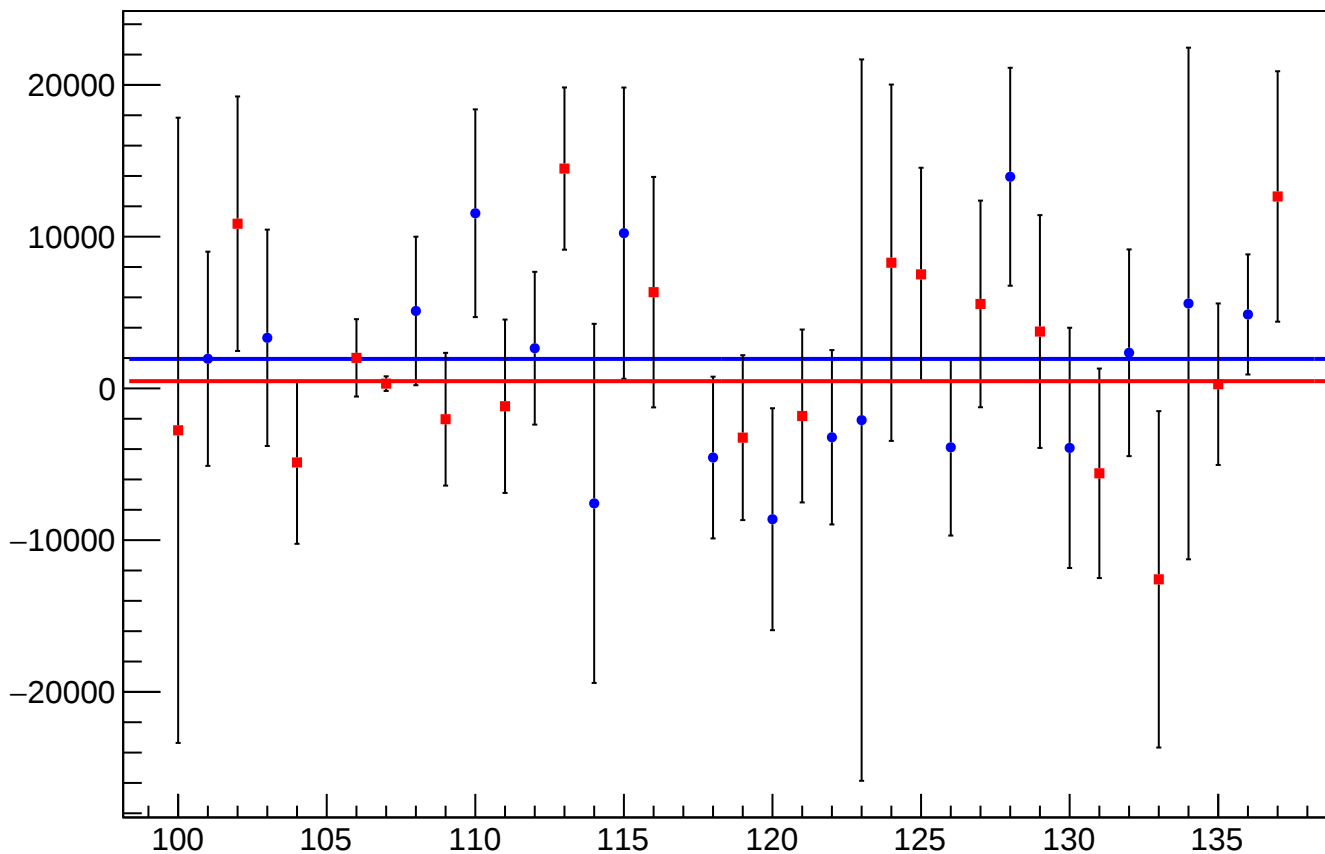
Right: 1904.057+/-0.369  $\chi^2/\text{NDF}$ : 634475.3/35

In: 1885.360+/-0.524  $\chi^2/\text{NDF}$ : 280429.0/16

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

All: 1904.057+/-0.369  $\chi^2/\text{NDF}$ : 634475.3/35

asym\_atl1r2\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 1943.178+/-1581.060  $\chi^2/\text{NDF}$ : 13.2/16

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

Right Out: 478.828+/-453.684  $\chi^2/\text{NDF}$ : 18.1/18

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

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

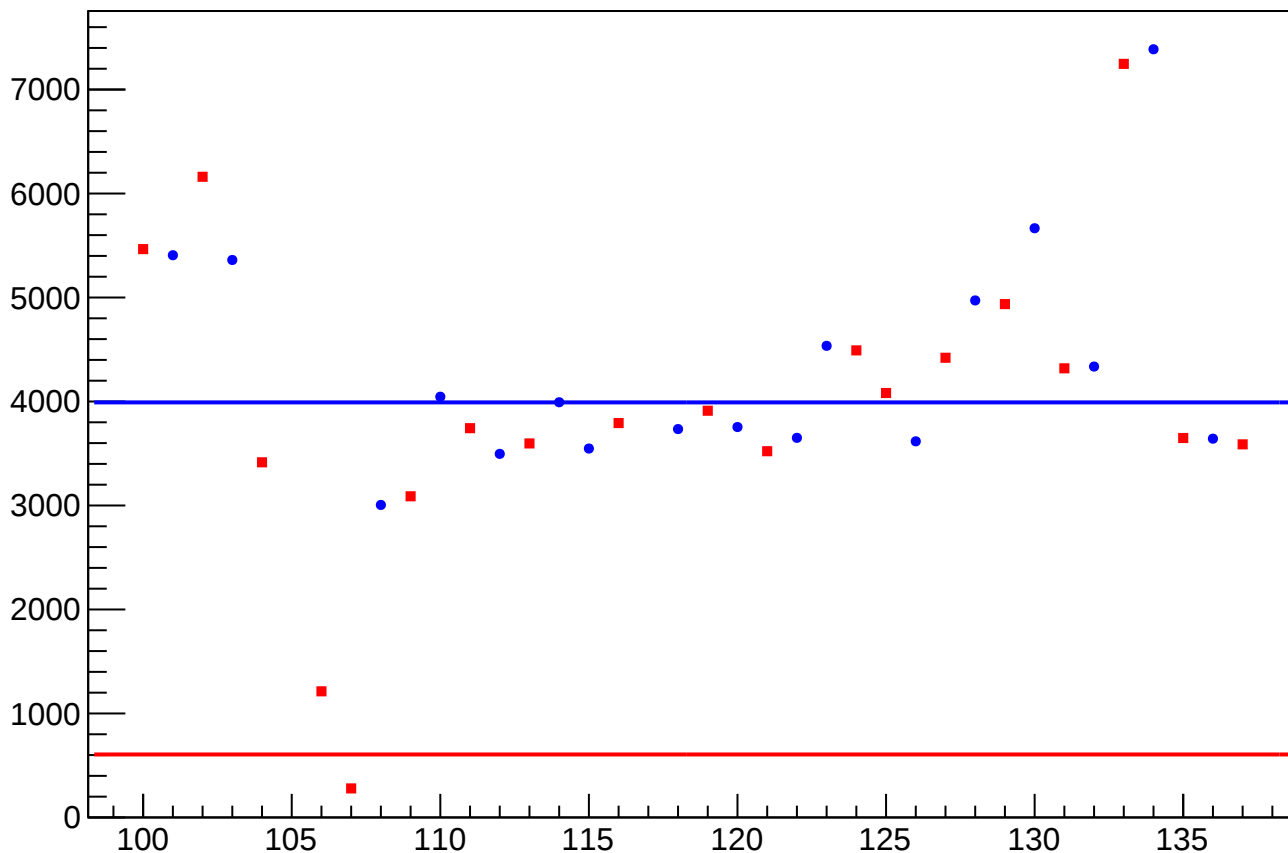
Right: 590.230+/-436.086  $\chi^2/\text{NDF}$ : 32.0/35

In: 1943.178+/-1581.060  $\chi^2/\text{NDF}$ : 13.2/16

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

All: 590.230+/-436.086  $\chi^2/\text{NDF}$ : 32.0/35

asym\_atl1r2\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 3991.416+/-1.118  $\chi^2/\text{NDF}$ : 510782.7/16

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

Right Out: 605.731+/-0.321  $\chi^2/\text{NDF}$ : 10246585.0/18

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

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

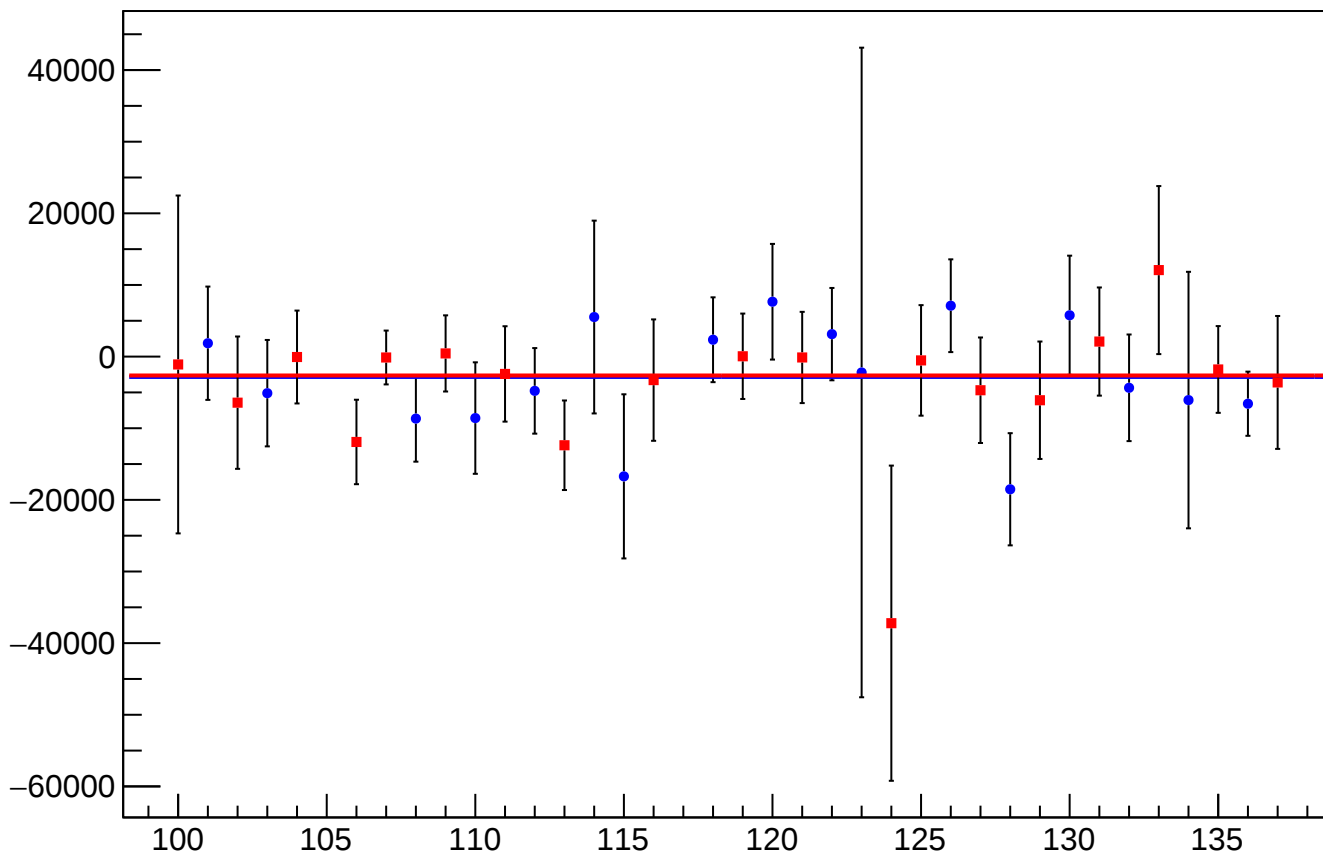
Right: 863.300+/-0.308  $\chi^2/\text{NDF}$ : 19230863.1/35

In: 3991.416+/-1.118  $\chi^2/\text{NDF}$ : 510782.7/16

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

All: 863.300+/-0.308  $\chi^2/\text{NDF}$ : 19230863.1/35

# asym\_atl1r2\_dd\_mean vs Slug, Sign Corrected



Right In:  $-2839.599 \pm 1786.019$   $\chi^2/\text{NDF}: 15.4/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-2637.071 \pm 1575.105$   $\chi^2/\text{NDF}: 11.2/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

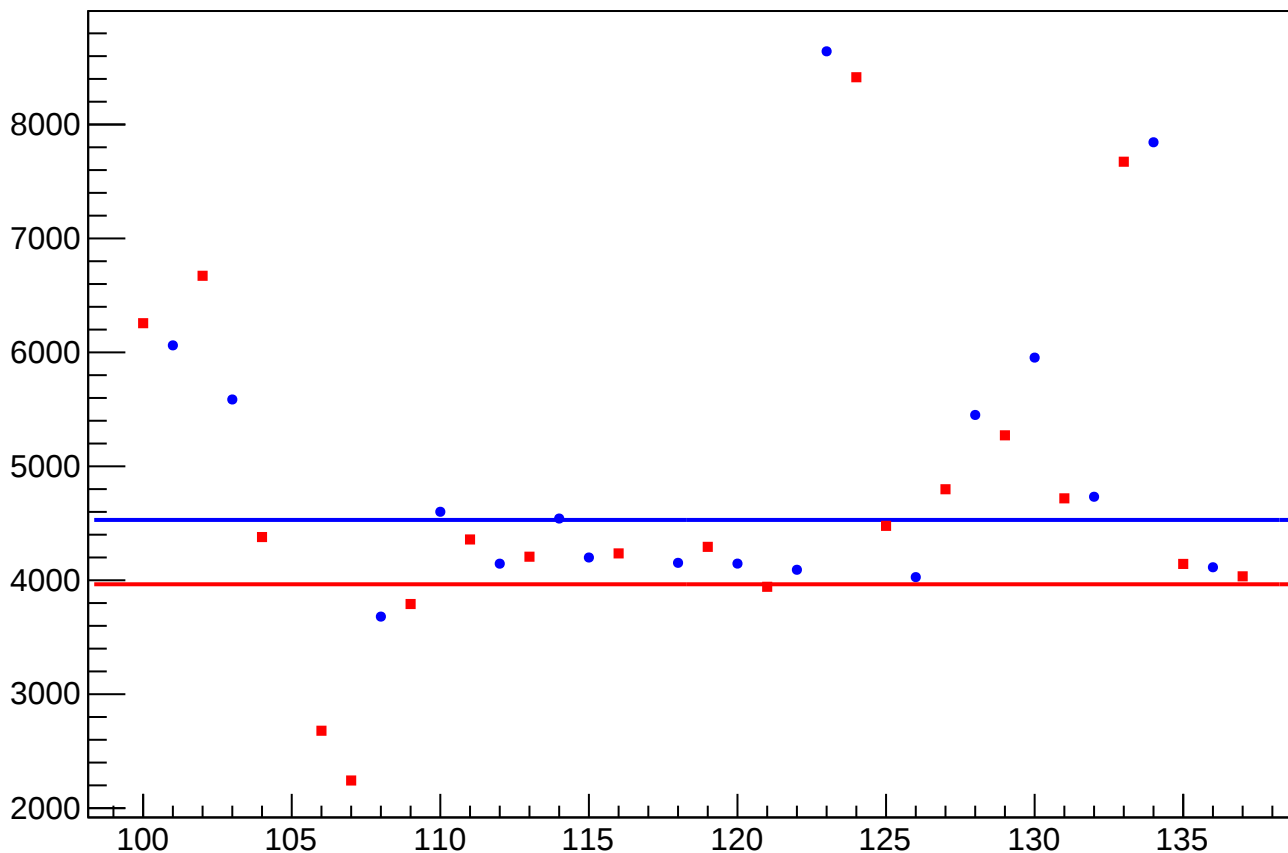
Right:  $-2725.676 \pm 1181.334$   $\chi^2/\text{NDF}: 26.6/35$

In:  $-2839.599 \pm 1786.019$   $\chi^2/\text{NDF}: 15.4/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-2725.676 \pm 1181.334$   $\chi^2/\text{NDF}: 26.6/35$

# asym\_atl1r2\_dd\_rms vs Slug, Sign Corrected



Right In: 4529.462+/-1.263  $\chi^2/\text{NDF}$ : 389326.2/16

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

Right Out: 3964.829+/-1.107  $\chi^2/\text{NDF}$ : 1140409.6/18

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

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

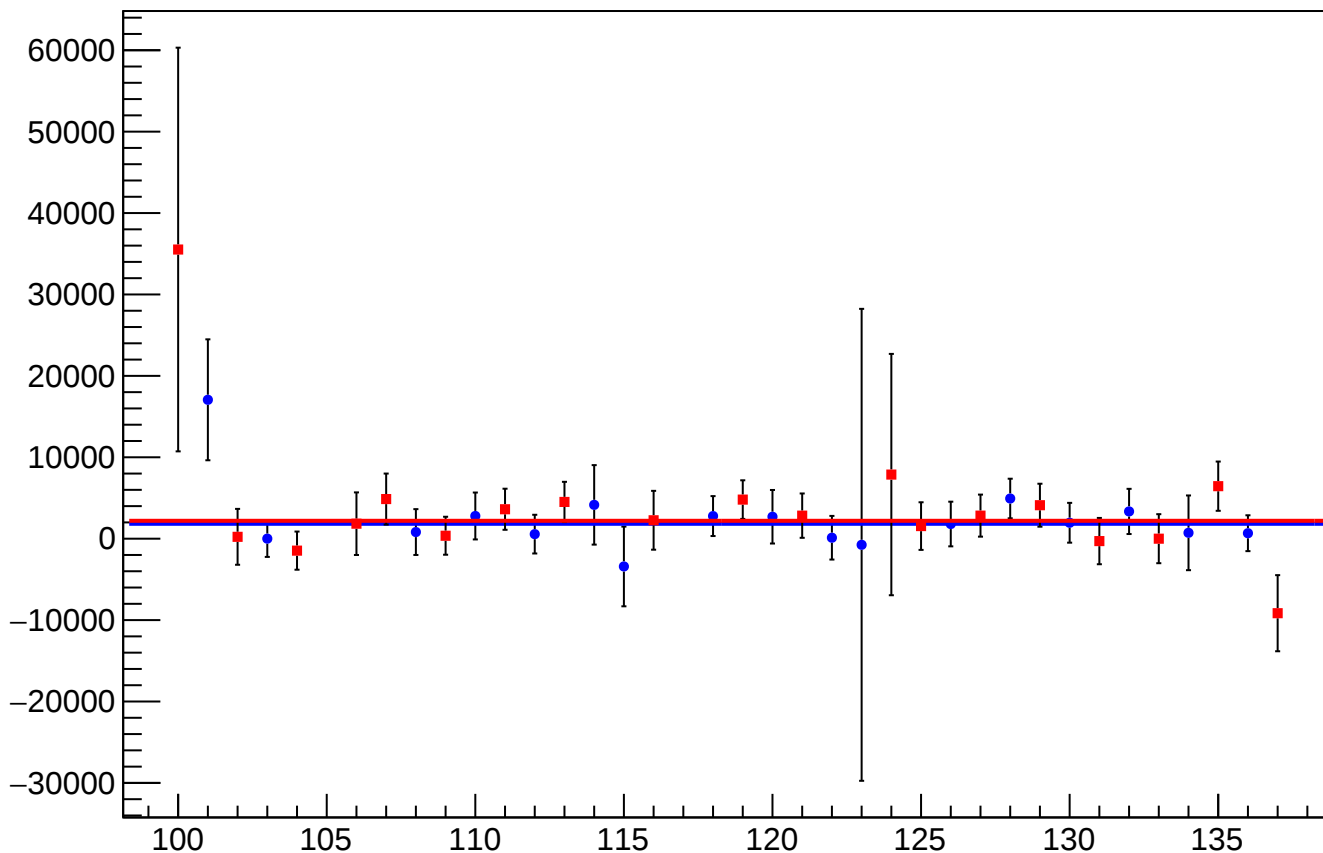
Right: 4210.073+/-0.832  $\chi^2/\text{NDF}$ : 1642804.6/35

In: 4529.462+/-1.263  $\chi^2/\text{NDF}$ :389326.2/16

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

All: 4210.073+/-0.832  $\chi^2/\text{NDF}$ : 1642804.6/35

# reg\_asym\_atr1l2\_avg\_mean vs Slug, Sign Corrected



Right In: 1830.102+/-711.335  $\chi^2/\text{NDF}$ : 9.7/16

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

Right Out: 2198.063+/-684.205  $\chi^2/\text{NDF}$ : 18.3/18

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

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

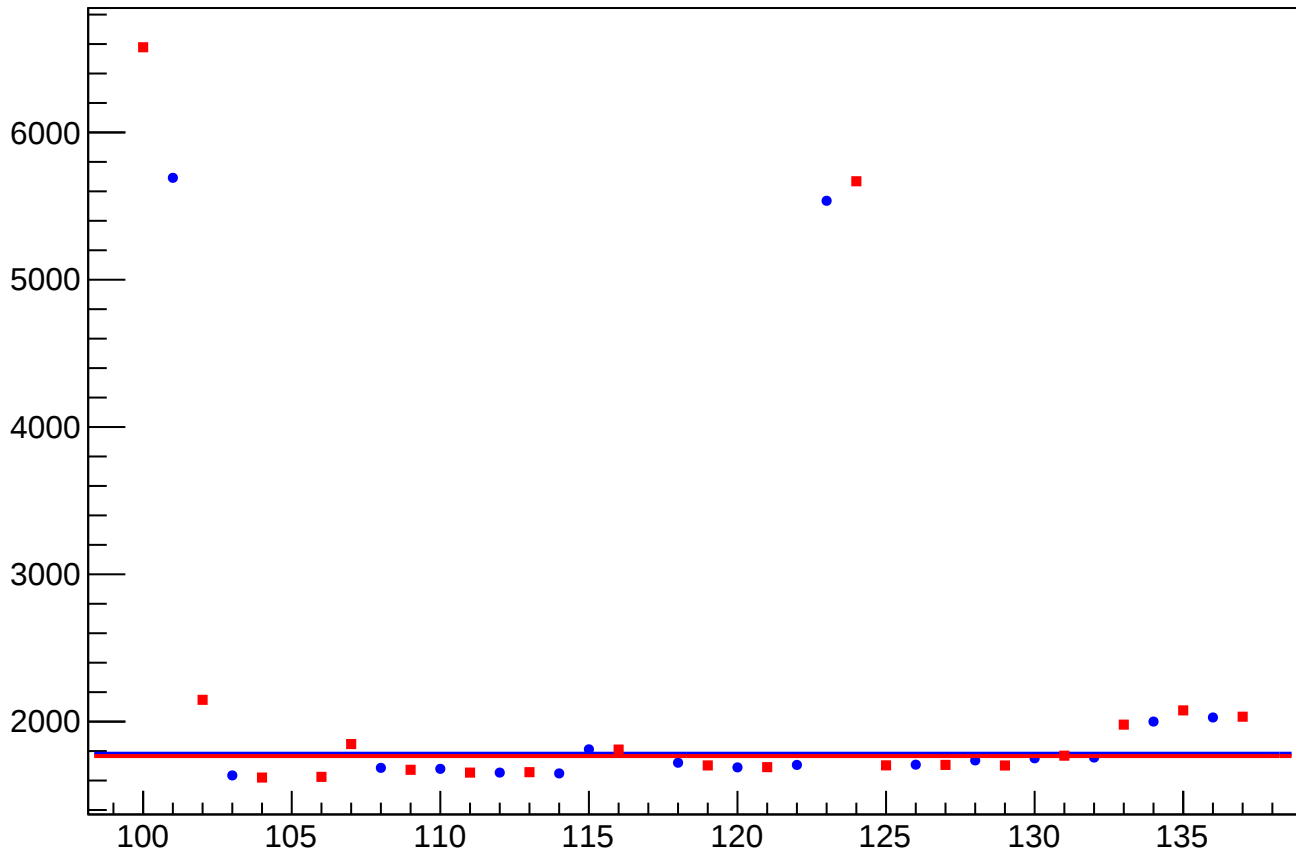
Right: 2021.233+/-493.118  $\chi^2/\text{NDF}$ : 28.2/35

In: 1830.102+/-711.335  $\chi^2/\text{NDF}$ : 9.7/16

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

All: 2021.233+/-493.118  $\chi^2/\text{NDF}$ : 28.2/35

# reg\_asym\_atr1l2\_avg\_rms vs Slug, Sign Corrected



Right In: 1782.137+/-0.503  $\chi^2/\text{NDF}$ : 645188.8/16

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

Right Out: 1765.967+/-0.480  $\chi^2/\text{NDF}$ : 306798.2/18

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

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

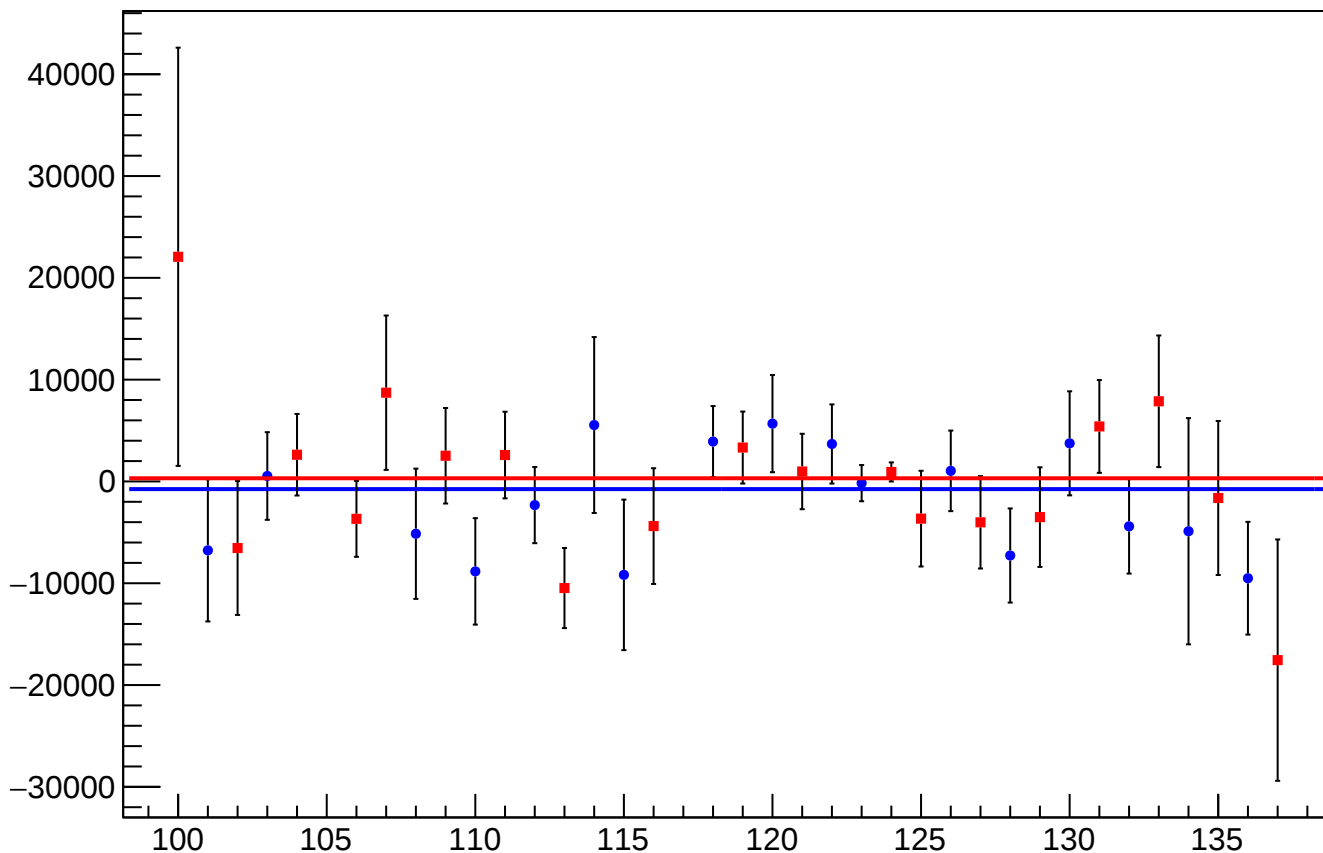
Right: 1773.682+/-0.347  $\chi^2/\text{NDF}$ : 952527.4/35

In: 1782.137+/-0.503  $\chi^2/\text{NDF}$ : 645188.8/16

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

All: 1773.682+/-0.347  $\chi^2/\text{NDF}$ : 952527.4/35

asym\_atr1l2\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -753.428+/-1008.523  $\chi^2/\text{NDF}$ : 16.9/16

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

Right Out: 311.405+/-725.132  $\chi^2/\text{NDF}$ : 22.0/18

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

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

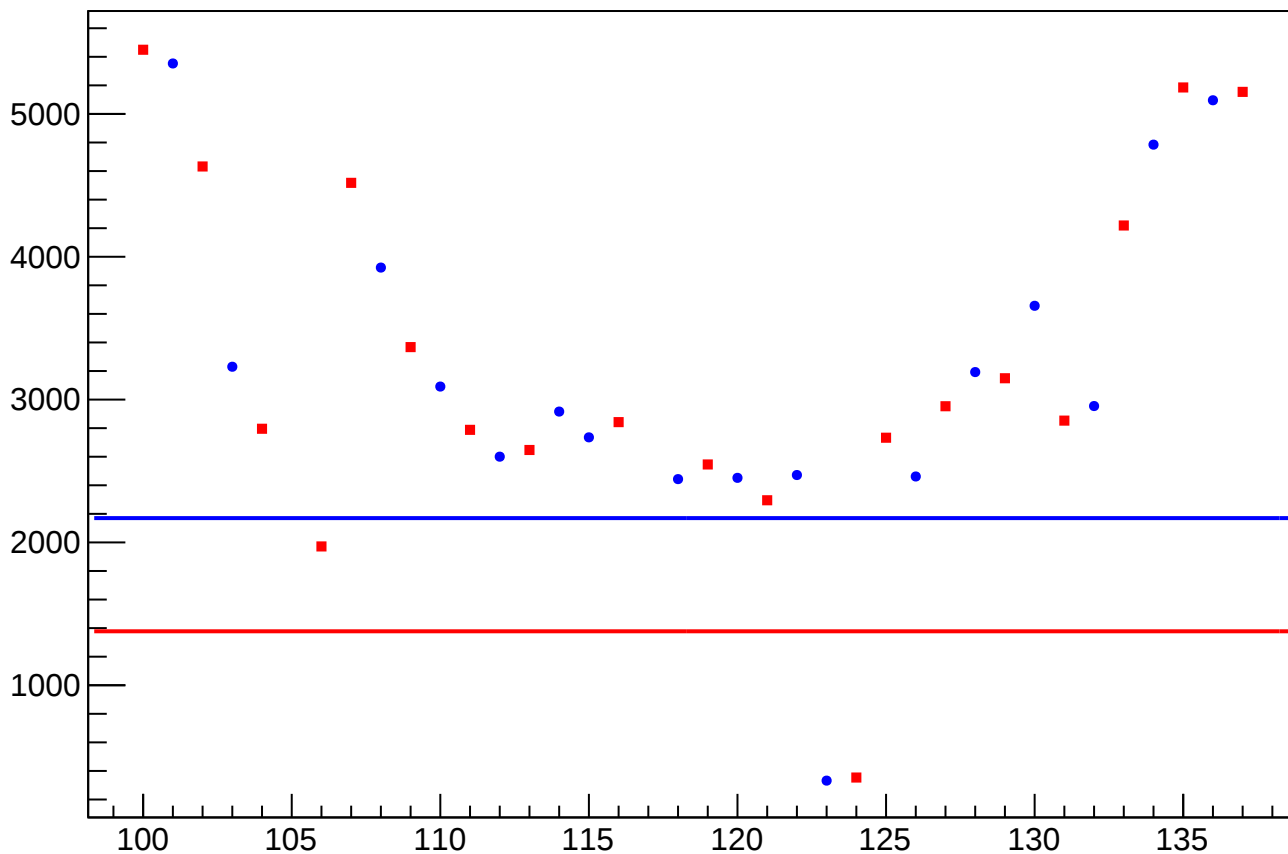
Right: -51.479+/-588.747  $\chi^2/\text{NDF}$ : 39.7/35

In: -753.428+/-1008.523  $\chi^2/\text{NDF}$ : 16.9/16

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

All: -51.479+/-588.747  $\chi^2/\text{NDF}$ : 39.7/35

asym\_atr1l2\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 2170.242+/-0.713  $\chi^2/\text{NDF}$ : 3973725.5/16

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

Right Out: 1377.716+/-0.513  $\chi^2/\text{NDF}$ : 6847297.6/18

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

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

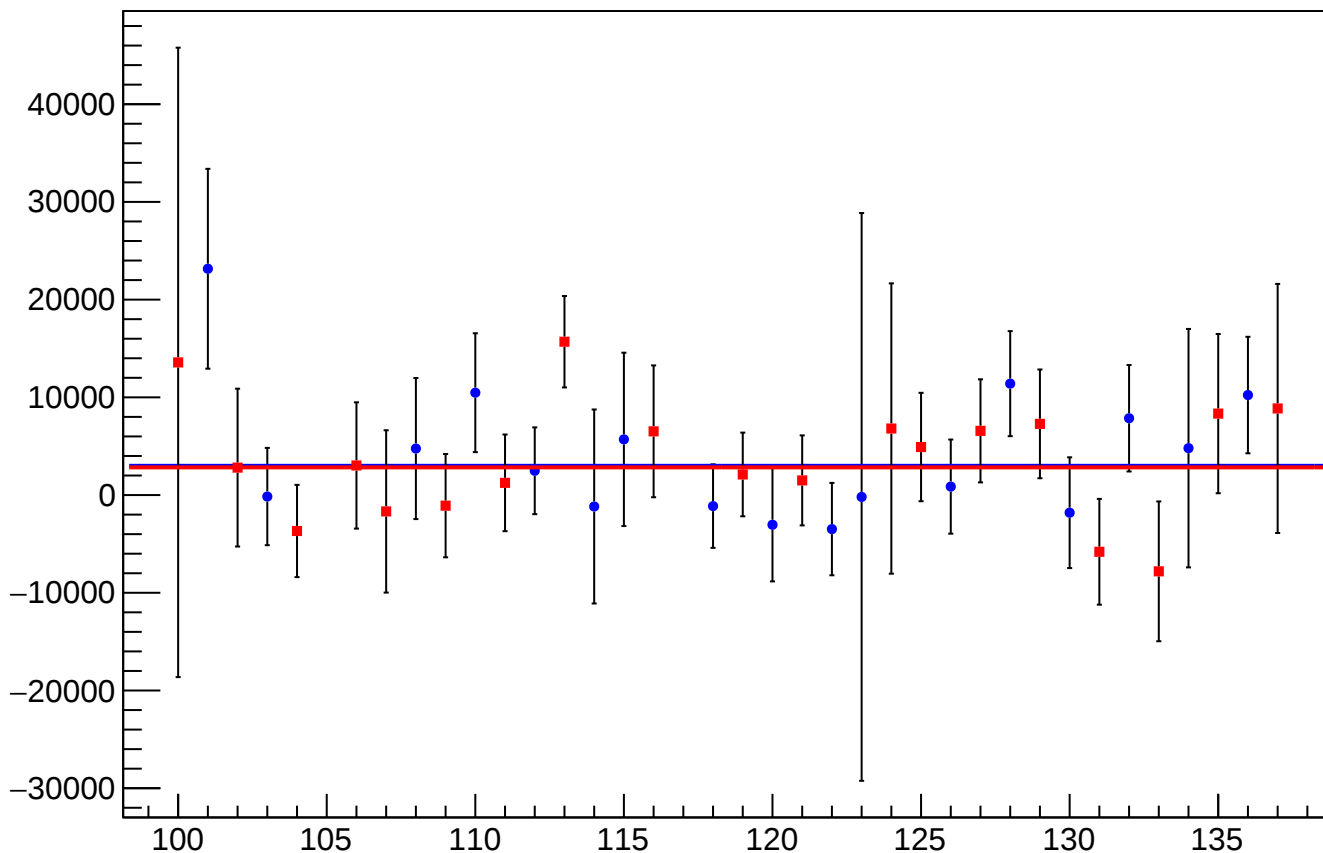
Right: 1647.801+/-0.416  $\chi^2/\text{NDF}$ : 11635181.2/35

In: 2170.242+/-0.713  $\chi^2/\text{NDF}$ : 3973725.5/16

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

All: 1647.801+/-0.416  $\chi^2/\text{NDF}$ : 11635181.2/35

# asym\_atr1l2\_avg\_mean vs Slug, Sign Corrected



Right In: 2992.806+/-1447.211  $\chi^2/\text{NDF}$ : 15.7/16

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

Right Out: 2833.408+/-1379.110  $\chi^2/\text{NDF}$ : 17.7/18

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

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

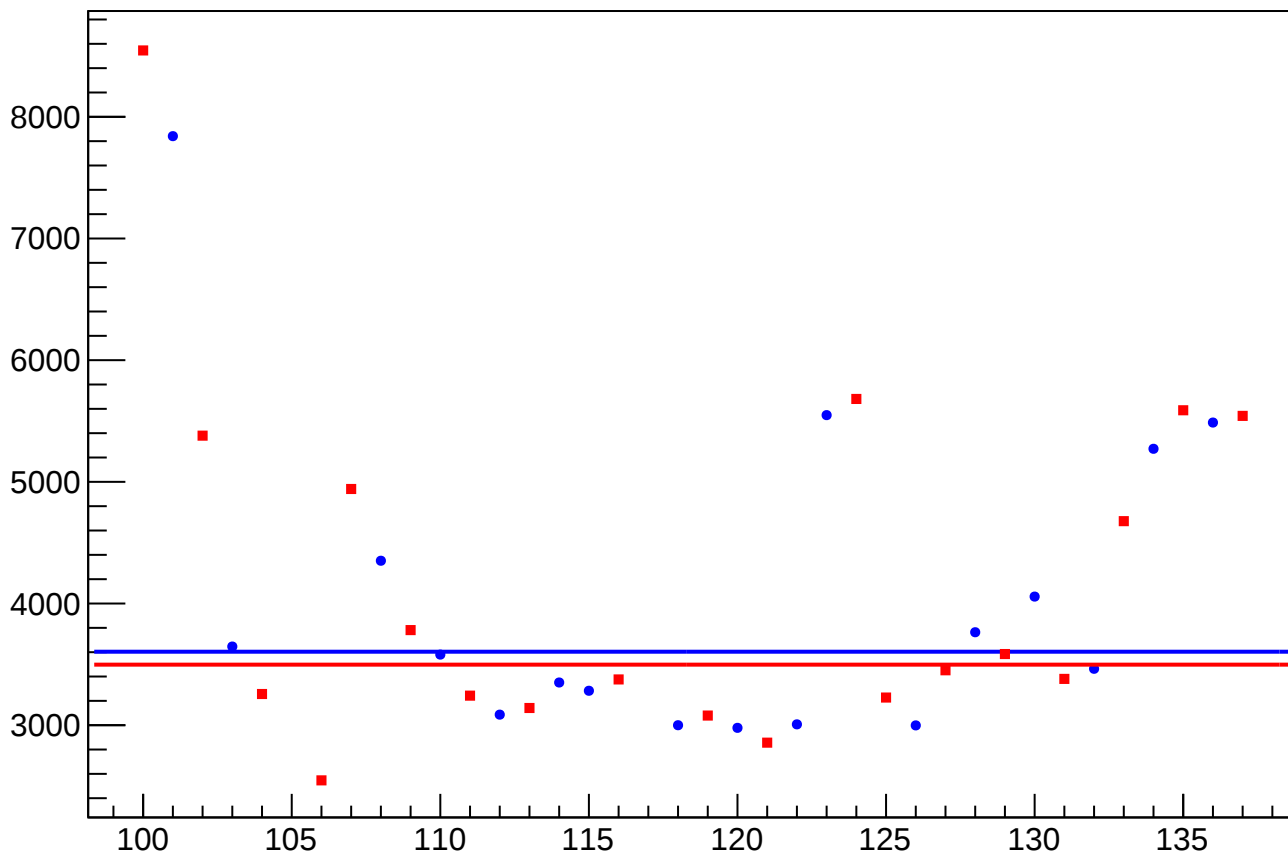
Right: 2909.269+/-998.385  $\chi^2/\text{NDF}$ : 33.4/35

In: 2992.806+/-1447.211  $\chi^2/\text{NDF}$ : 15.7/16

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

All: 2909.269+/-998.385  $\chi^2/\text{NDF}$ : 33.4/35

# asym\_atr1l2\_avg\_rms vs Slug, Sign Corrected



Right In: 3603.930+/-1.023  $\chi^2/\text{NDF}$ : 784674.5/16

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

Right Out: 3497.586+/-0.962  $\chi^2/\text{NDF}$ : 661898.6/18

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

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

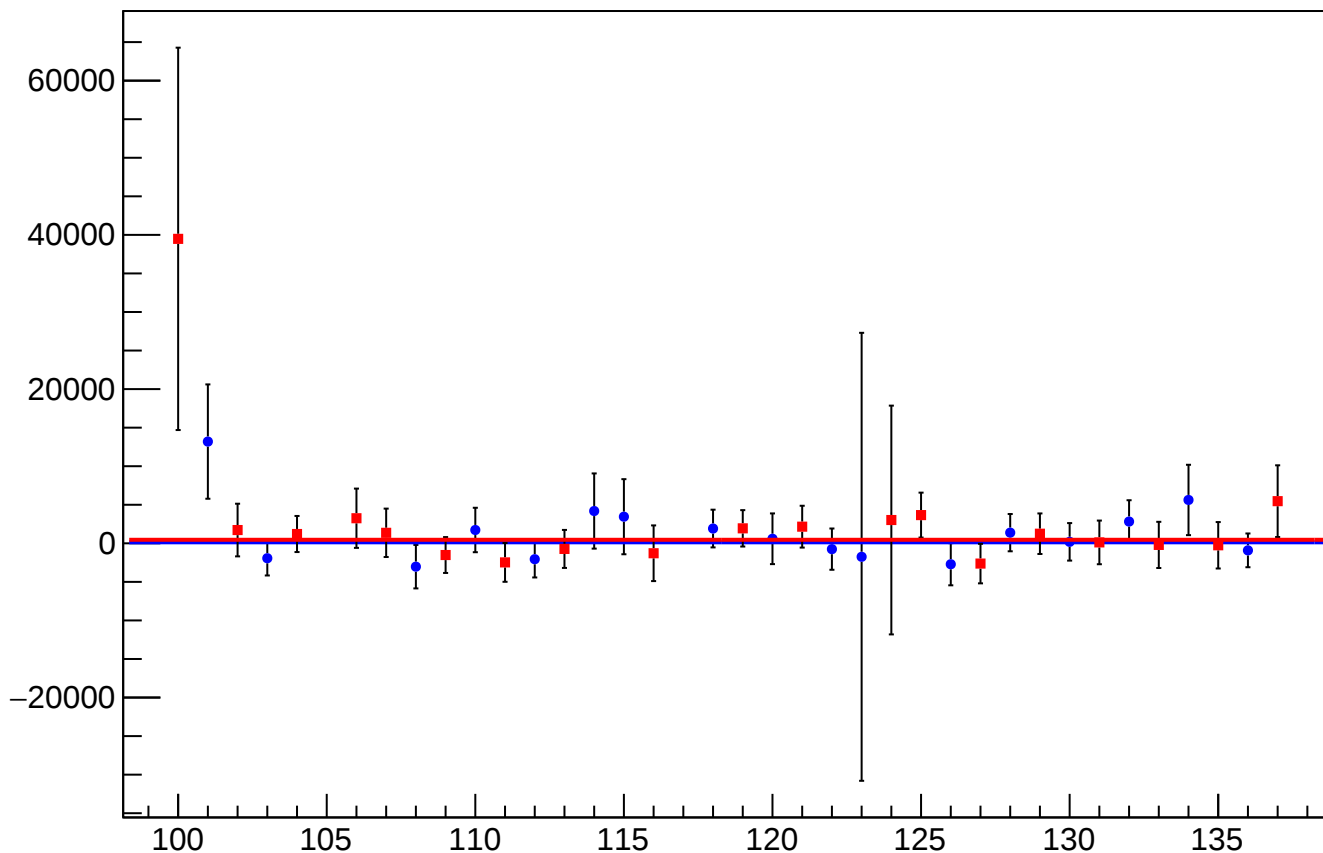
Right: 3547.455+/-0.701  $\chi^2/\text{NDF}$ : 1452308.2/35

In: 3603.930+/-1.023  $\chi^2/\text{NDF}$ : 784674.5/16

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

All: 3547.455+/-0.701  $\chi^2/\text{NDF}$ : 1452308.2/35

# reg\_asym\_atr1l2\_dd\_mean vs Slug, Sign Corrected



Right In: 130.913+/-709.207  $\chi^2/\text{NDF}$ : 12.2/16

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

Right Out: 459.034+/-681.841  $\chi^2/\text{NDF}$ : 10.7/18

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

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

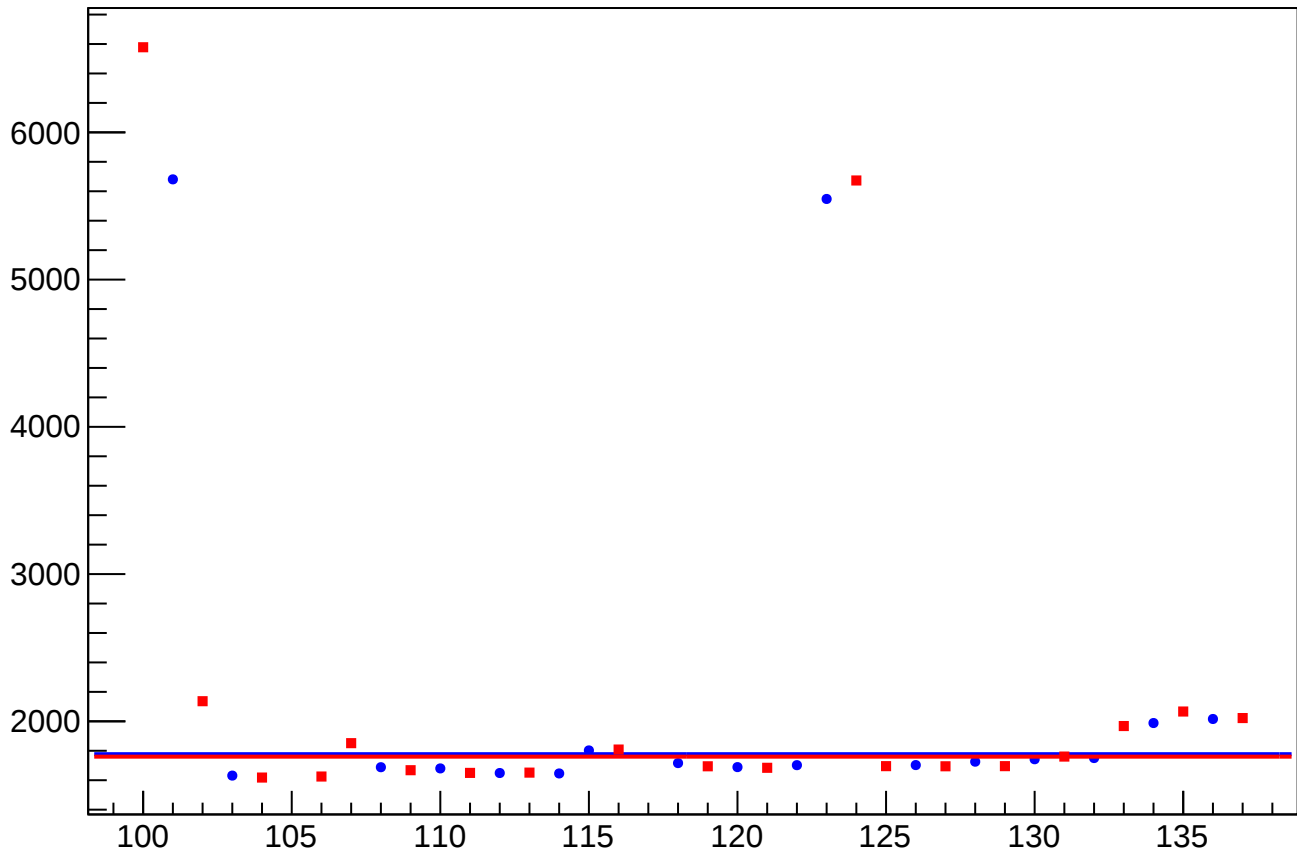
Right: 301.426+/-491.524  $\chi^2/\text{NDF}$ : 23.0/35

In: 130.913+/-709.207  $\chi^2/\text{NDF}$ : 12.2/16

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

All: 301.426+/-491.524  $\chi^2/\text{NDF}$ : 23.0/35

# reg\_asym\_atr1l2\_dd\_rms vs Slug, Sign Corrected



Right In: 1776.879+/-0.501  $\chi^2/\text{NDF}$ : 643576.8/16

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

Right Out: 1759.990+/-0.479  $\chi^2/\text{NDF}$ : 306154.6/18

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

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

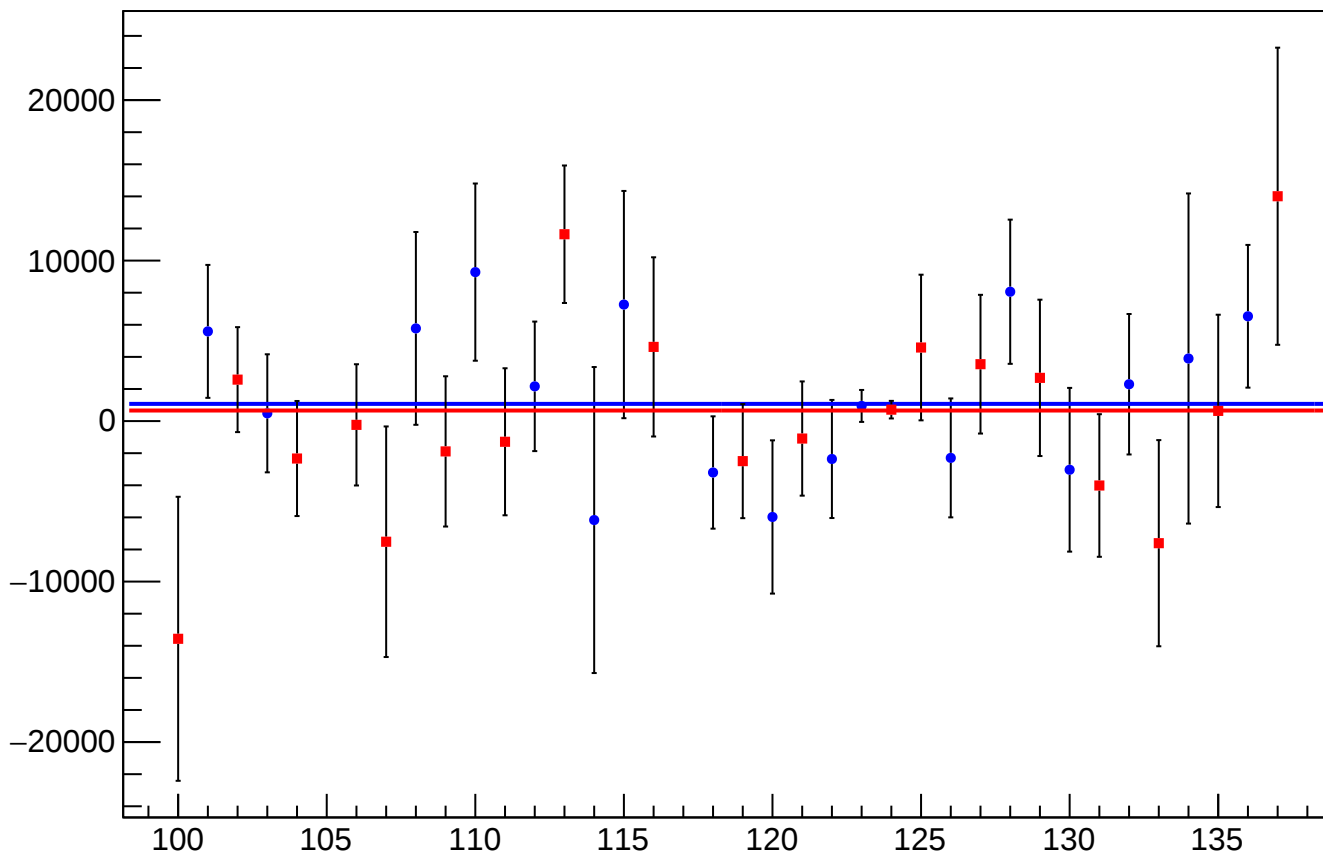
Right: 1768.045+/-0.346  $\chi^2/\text{NDF}$ : 950324.7/35

In: 1776.879+/-0.501  $\chi^2/\text{NDF}$ : 643576.8/16

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

All: 1768.045+/-0.346  $\chi^2/\text{NDF}$ : 950324.7/35

asym\_atr1l2\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 1072.194+/-752.280  $\chi^2/\text{NDF}$ : 15.6/16

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

Right Out: 658.759+/-488.034  $\chi^2/\text{NDF}$ : 19.8/18

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

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

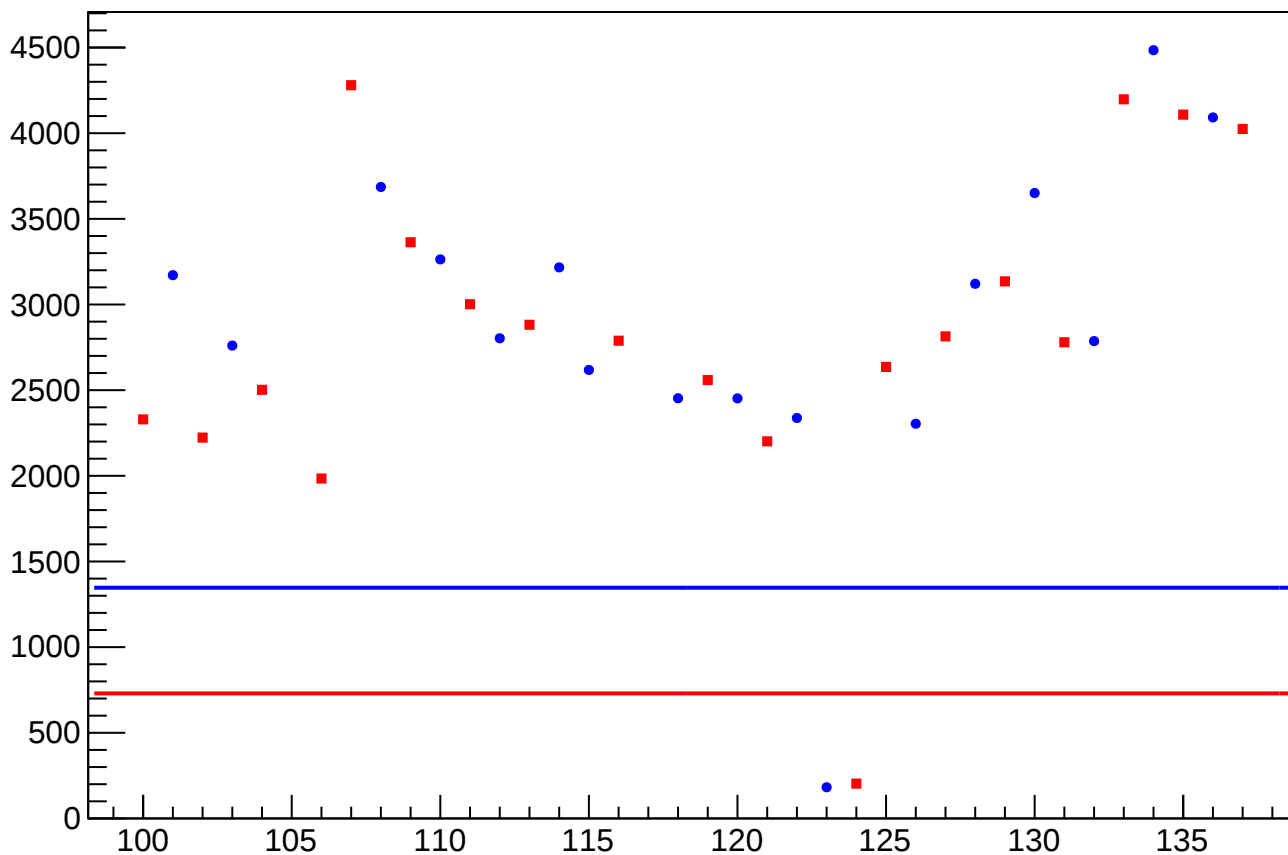
Right: 781.219+/-409.424  $\chi^2/\text{NDF}$ : 35.6/35

In: 1072.194+/-752.280  $\chi^2/\text{NDF}$ : 15.6/16

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

All: 781.219+/-409.424  $\chi^2/\text{NDF}$ : 35.6/35

asym\_atr1l2\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 1346.836+/-0.532  $\chi^2/\text{NDF}$ : 6839112.6/16

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

Right Out: 730.119+/-0.345  $\chi^2/\text{NDF}$ : 9503127.2/18

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

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

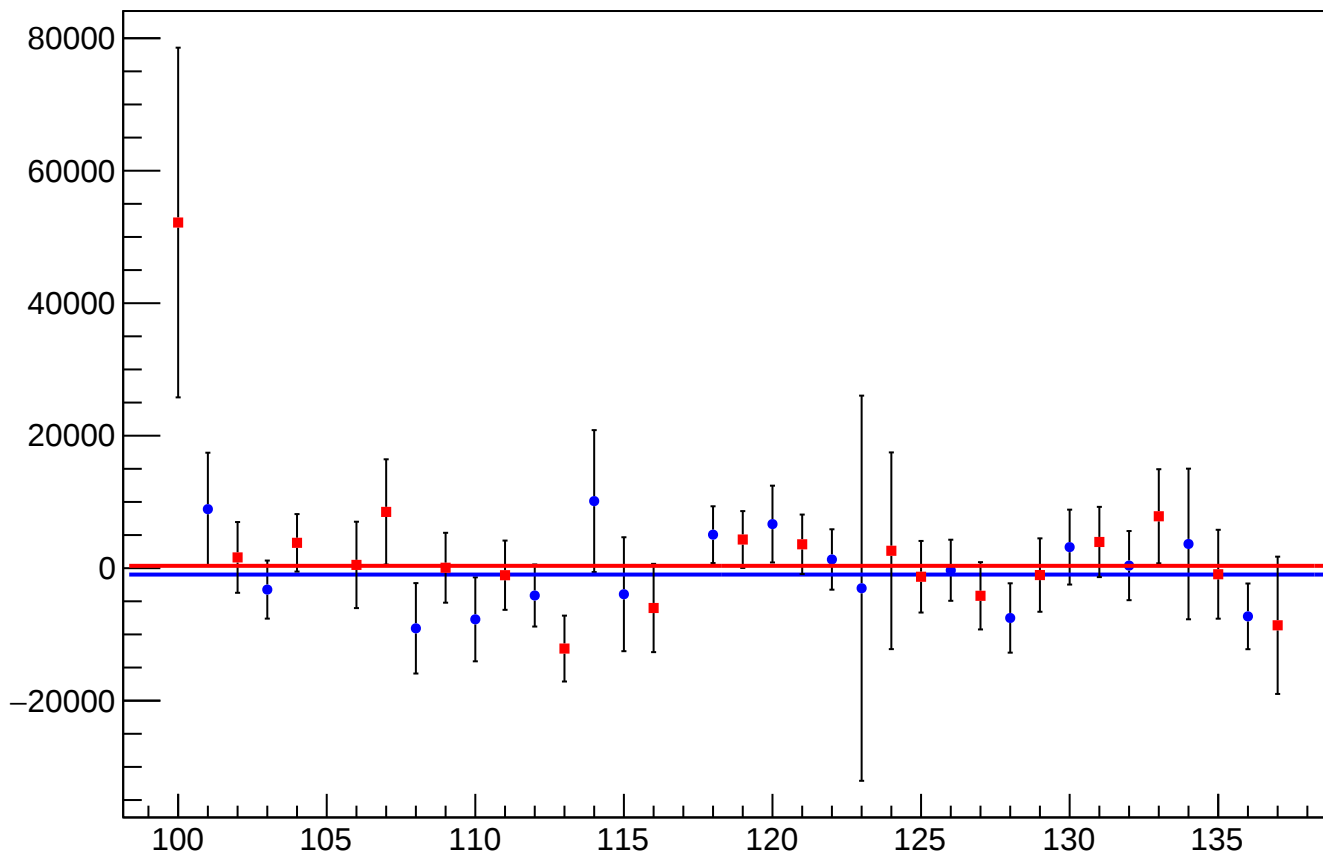
Right: 912.792+/-0.290  $\chi^2/\text{NDF}$ : 17288237.9/35

In: 1346.836+/-0.532  $\chi^2/\text{NDF}$ : 6839112.6/16

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

All: 912.792+/-0.290  $\chi^2/\text{NDF}$ : 17288237.9/35

# asym\_atr1l2\_dd\_mean vs Slug, Sign Corrected



Right In: -964.151+/-1395.626  $\chi^2/\text{NDF}$ : 13.7/16

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

Right Out: 354.646+/-1329.760  $\chi^2/\text{NDF}$ : 17.6/18

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

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

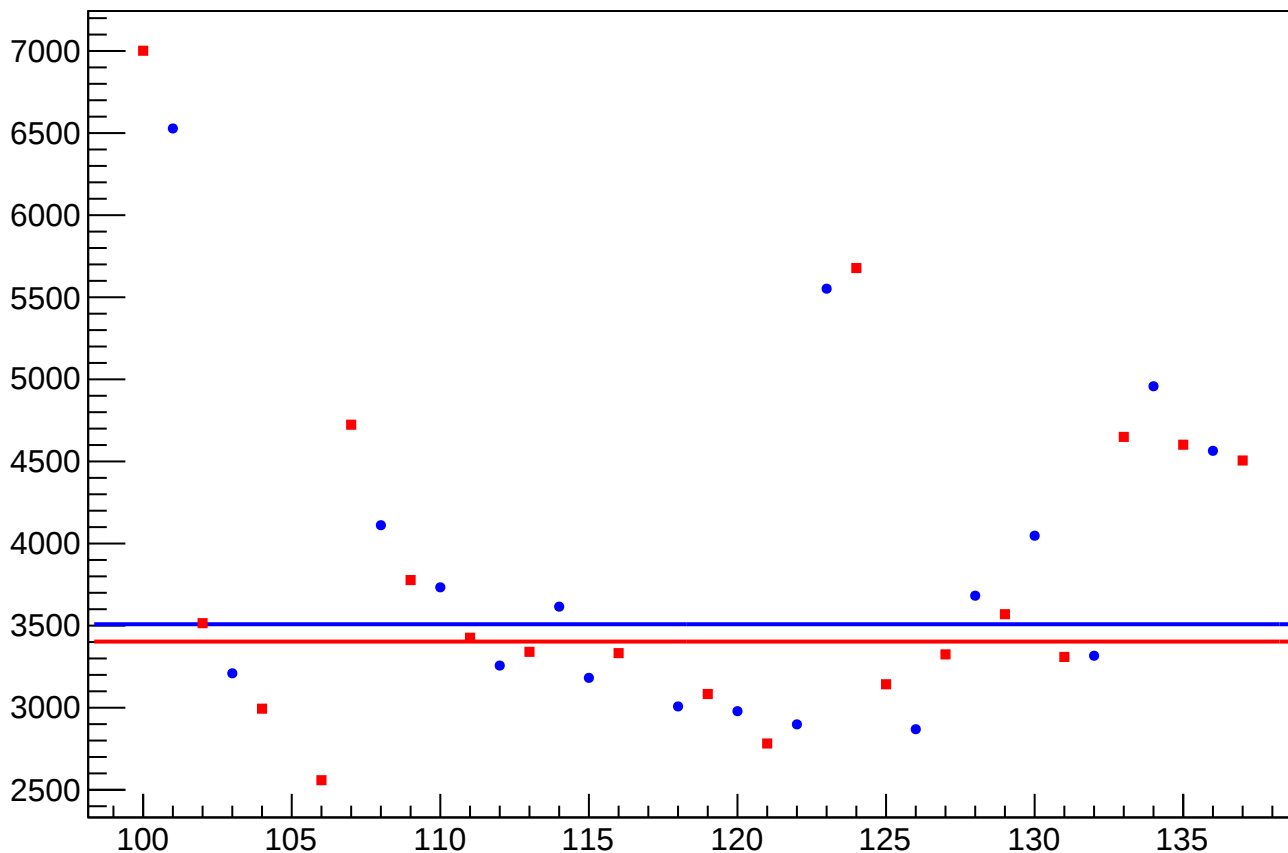
Right: -272.899+/-962.726  $\chi^2/\text{NDF}$ : 31.8/35

In: -964.151+/-1395.626  $\chi^2/\text{NDF}$ : 13.7/16

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

All: -272.899+/-962.726  $\chi^2/\text{NDF}$ : 31.8/35

# asym\_atr1l2\_dd\_rms vs Slug, Sign Corrected



Right In: 3508.483+/-0.987  $\chi^2/\text{NDF}$ : 562197.7/16

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

Right Out: 3402.883+/-0.928  $\chi^2/\text{NDF}$ : 428556.1/18

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

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

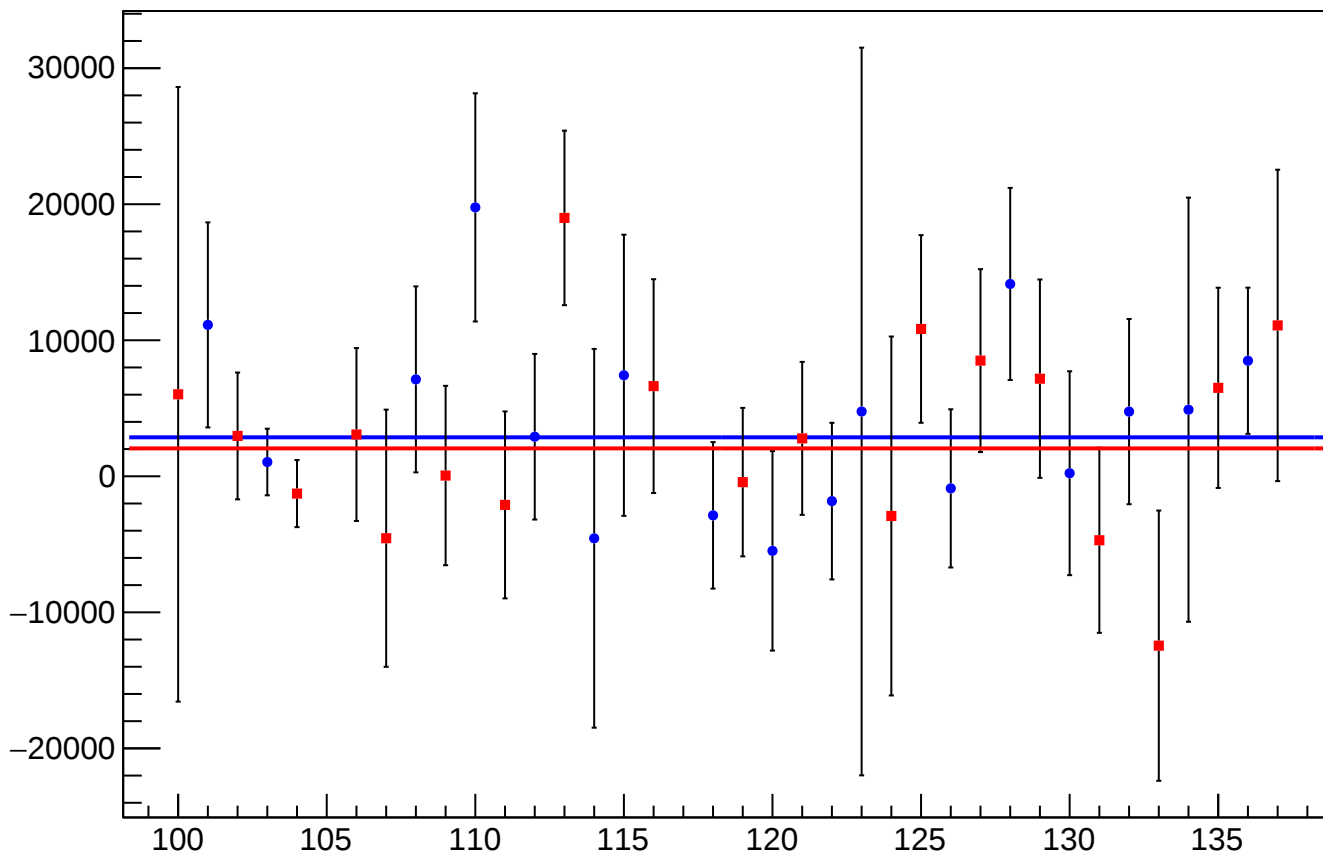
Right: 3452.447+/-0.676  $\chi^2/\text{NDF}$ : 996829.8/35

In: 3508.483+/-0.987  $\chi^2/\text{NDF}$ : 562197.7/16

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

All: 3452.447+/-0.676  $\chi^2/\text{NDF}$ : 996829.8/35

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



Right In: 2864.770+/-1452.658  $\chi^2/\text{NDF}$ : 14.1/16

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

Right Out: 2051.211+/-1381.577  $\chi^2/\text{NDF}$ : 17.7/18

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

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

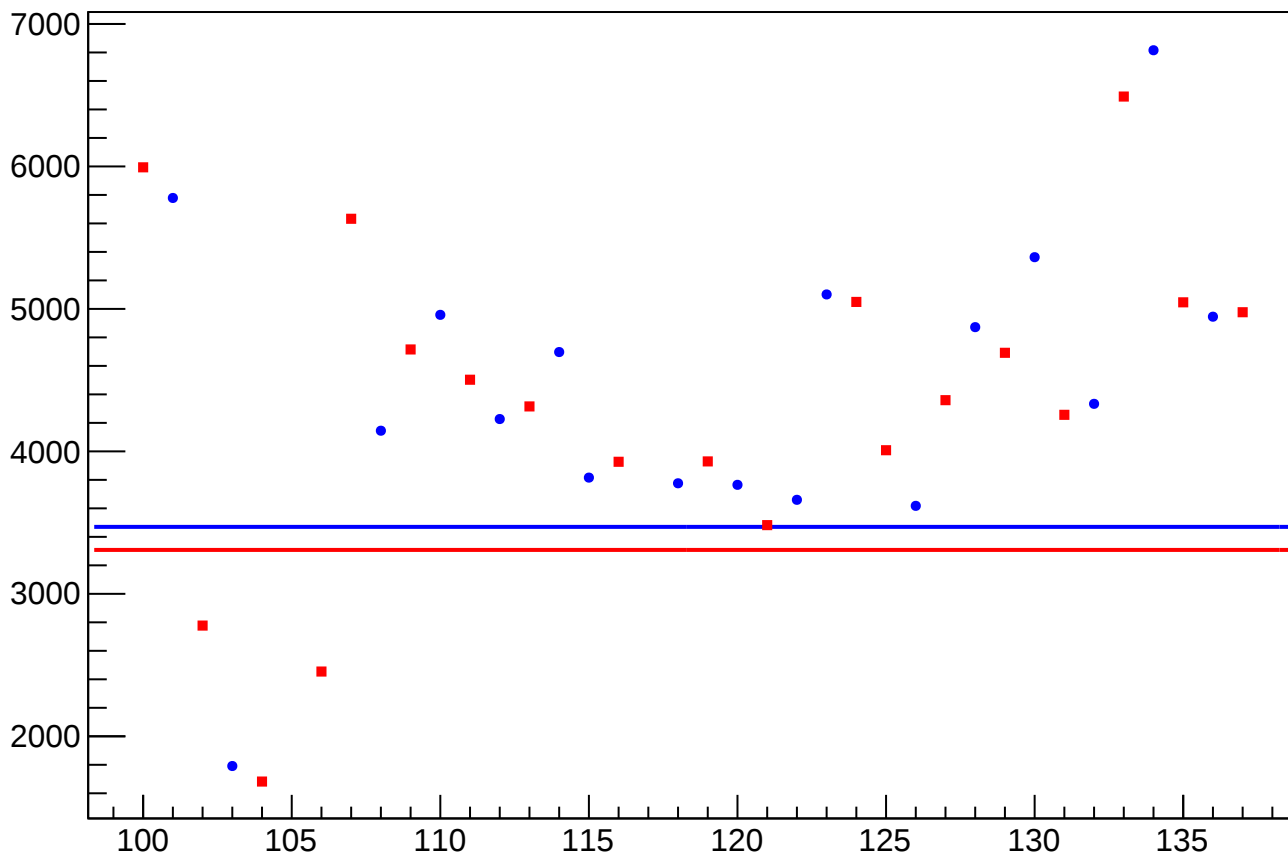
Right: 2437.600+/-1001.108  $\chi^2/\text{NDF}$ : 31.9/35

In: 2864.770+/-1452.658  $\chi^2/\text{NDF}$ : 14.1/16

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

All: 2437.600+/-1001.108  $\chi^2/\text{NDF}$ : 31.9/35

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



Right In: 3470.042+/-1.027  $\chi^2/\text{NDF}$ : 1760860.6/16

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

Right Out: 3308.243+/-0.968  $\chi^2/\text{NDF}$ : 1910782.0/18

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

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

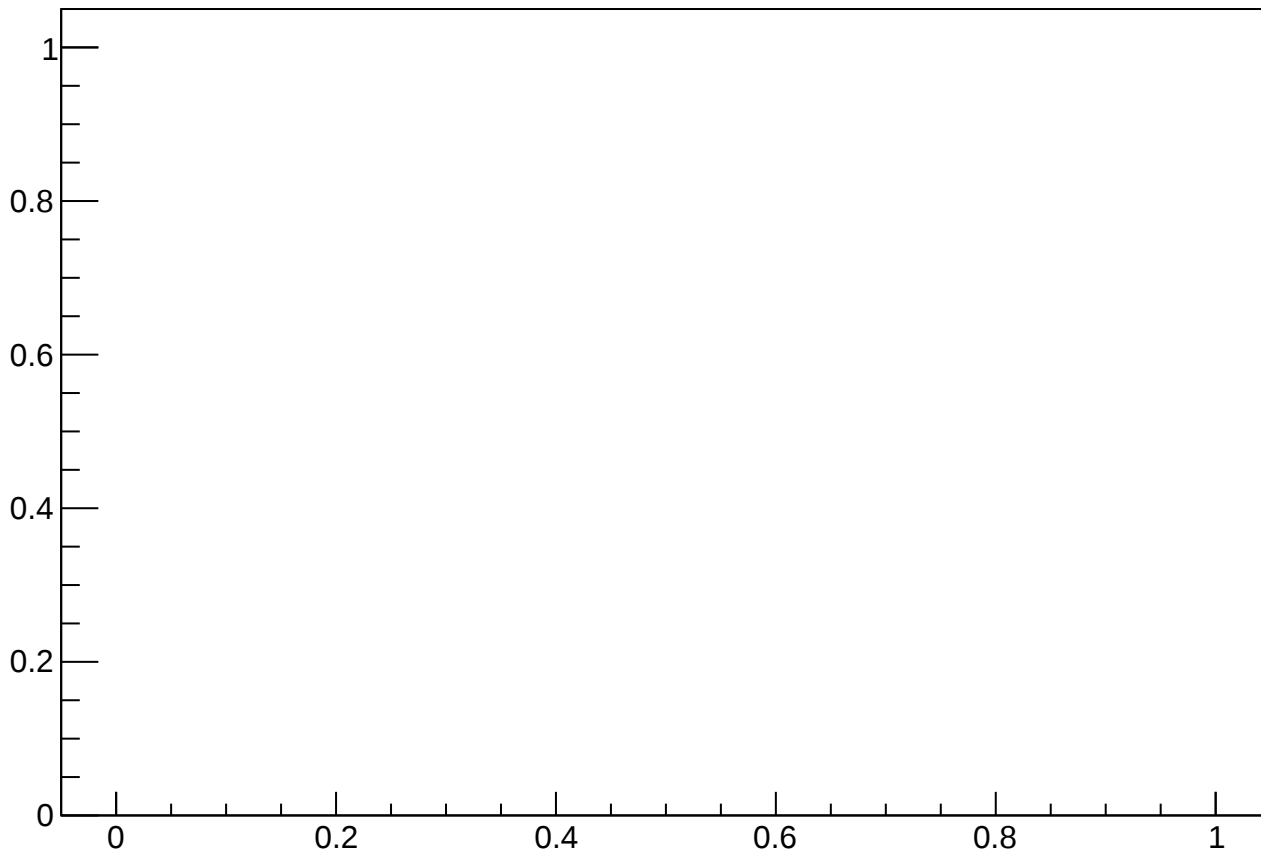
Right: 3384.349+/-0.704  $\chi^2/\text{NDF}$ : 3684784.1/35

In: 3470.042+/-1.027  $\chi^2/\text{NDF}$ : 1760860.6/16

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

All: 3384.349+/-0.704  $\chi^2/\text{NDF}$ : 3684784.1/35

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



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

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

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

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

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

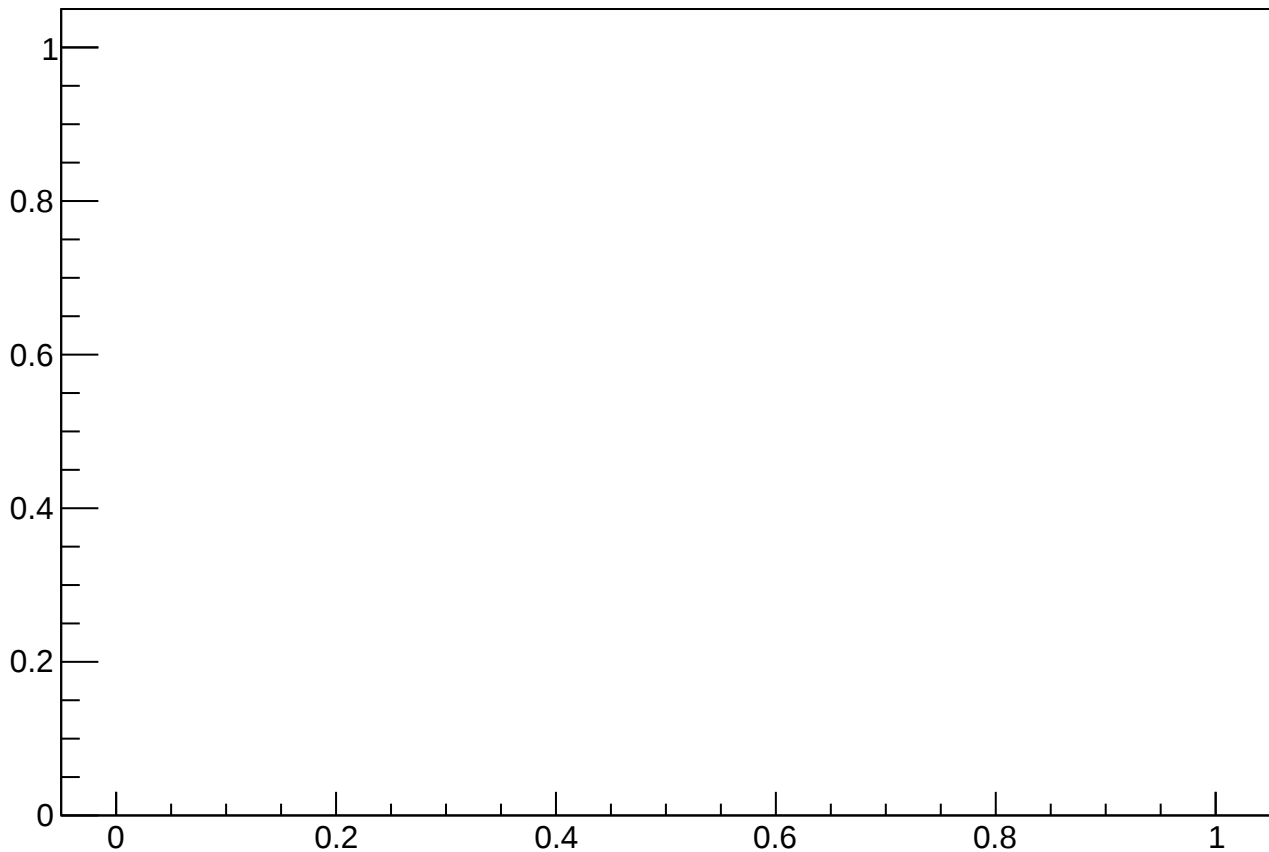
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

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



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

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

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

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

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

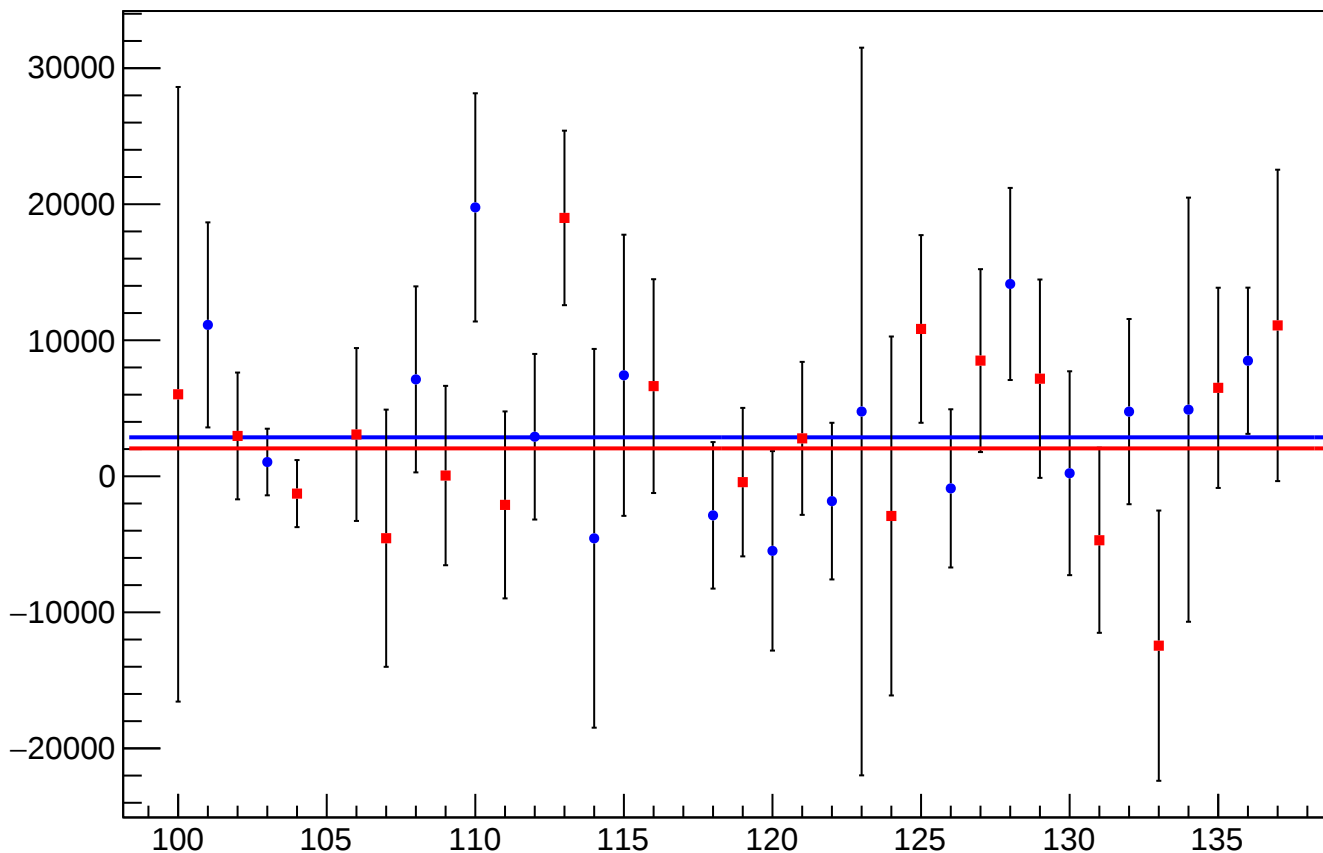
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

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



Right In: 2864.770+/-1452.658  $\chi^2/\text{NDF}$ : 14.1/16

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

Right Out: 2051.211+/-1381.577  $\chi^2/\text{NDF}$ : 17.7/18

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

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

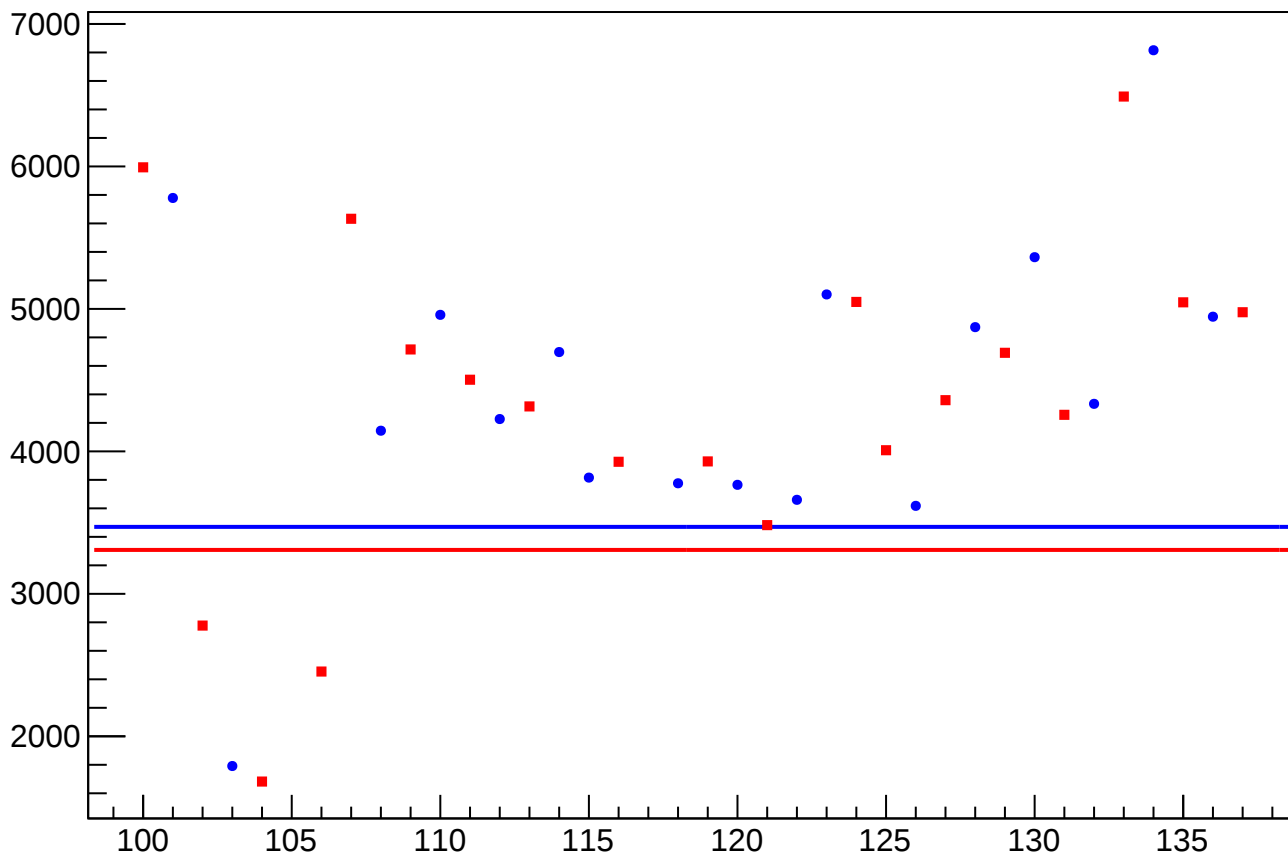
Right: 2437.600+/-1001.108  $\chi^2/\text{NDF}$ : 31.9/35

In: 2864.770+/-1452.658  $\chi^2/\text{NDF}$ : 14.1/16

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

All: 2437.600+/-1001.108  $\chi^2/\text{NDF}$ : 31.9/35

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



Right In: 3470.042 $\pm$ 1.027  $\chi^2$ /NDF: 1760860.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 3308.243 $\pm$ 0.968  $\chi^2$ /NDF: 1910782.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

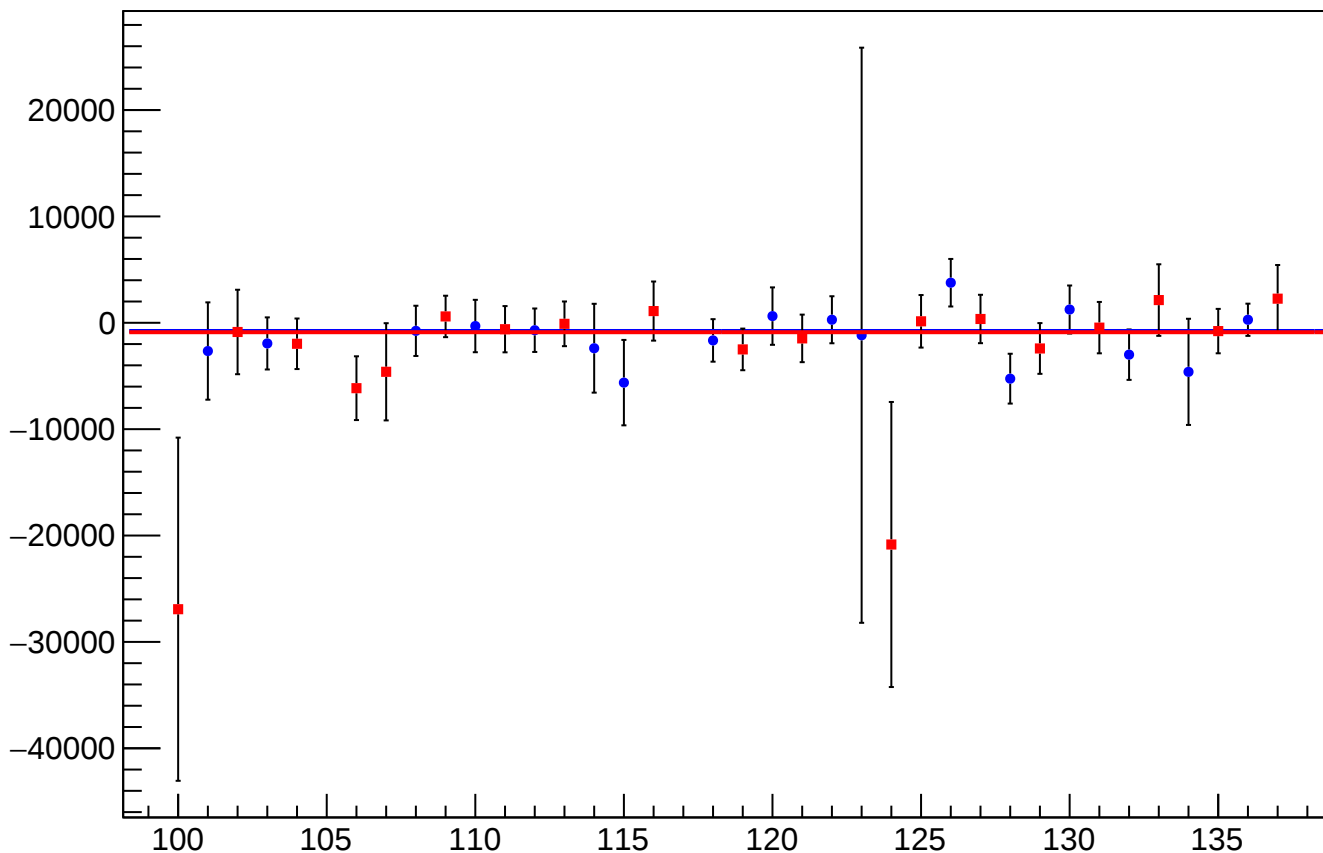
Right: 3384.349 $\pm$ 0.704  $\chi^2$ /NDF: 3684784.1/35

In: 3470.042 $\pm$ 1.027  $\chi^2$ /NDF:1760860.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 3384.349 $\pm$ 0.704  $\chi^2$ /NDF: 3684784.1/35

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



Right In: -771.153+/-603.689  $\chi^2/\text{NDF}$ : 13.3/16

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

Right Out: -885.145+/-595.053  $\chi^2/\text{NDF}$ : 13.5/18

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

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

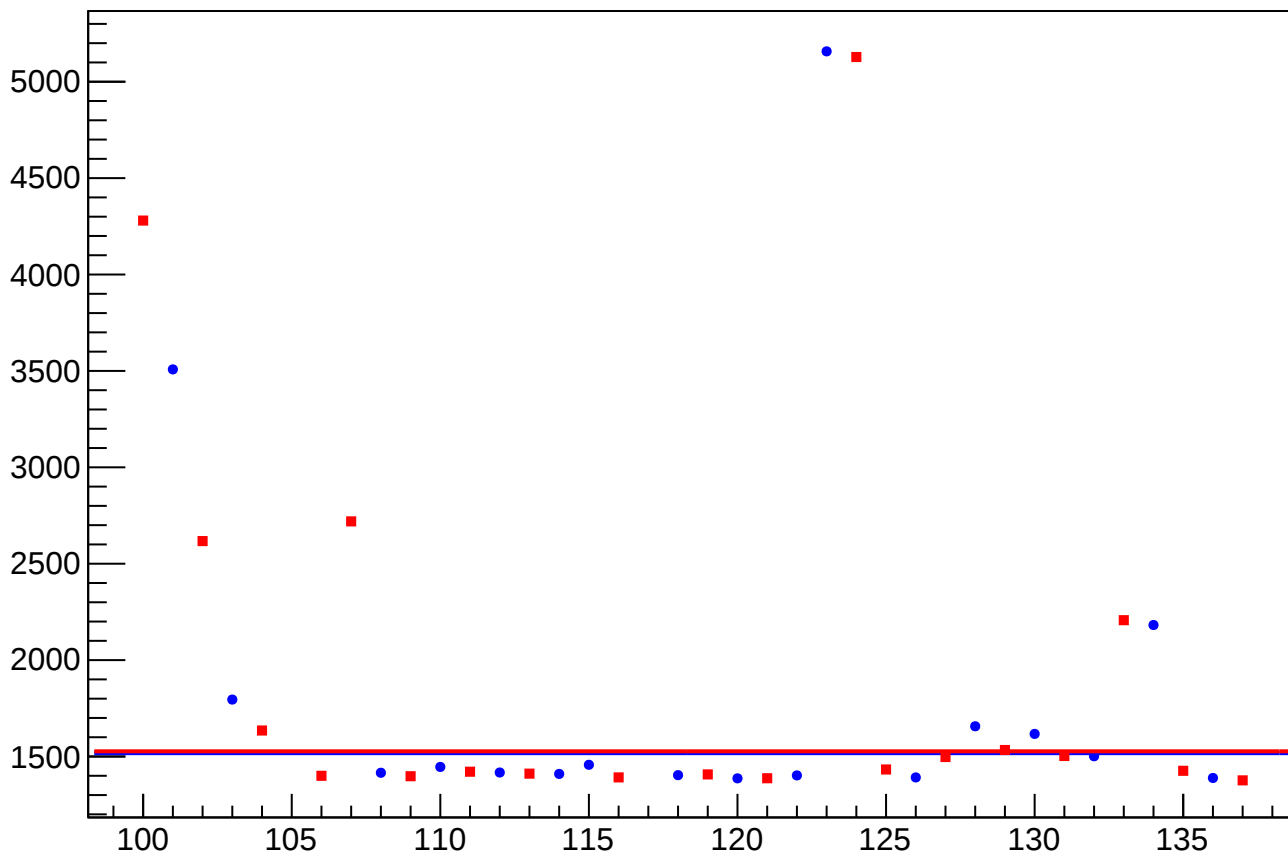
Right: -828.970+/-423.787  $\chi^2/\text{NDF}$ : 26.8/35

In: -771.153+/-603.689  $\chi^2/\text{NDF}$ :13.3/16

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

All: -828.970+/-423.787  $\chi^2/\text{NDF}$ : 26.8/35

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



Right In: 1517.334+/-0.427  $\chi^2/\text{NDF}$ : 536662.7/16

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

Right Out: 1527.005+/-0.421  $\chi^2/\text{NDF}$ : 631684.2/18

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

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

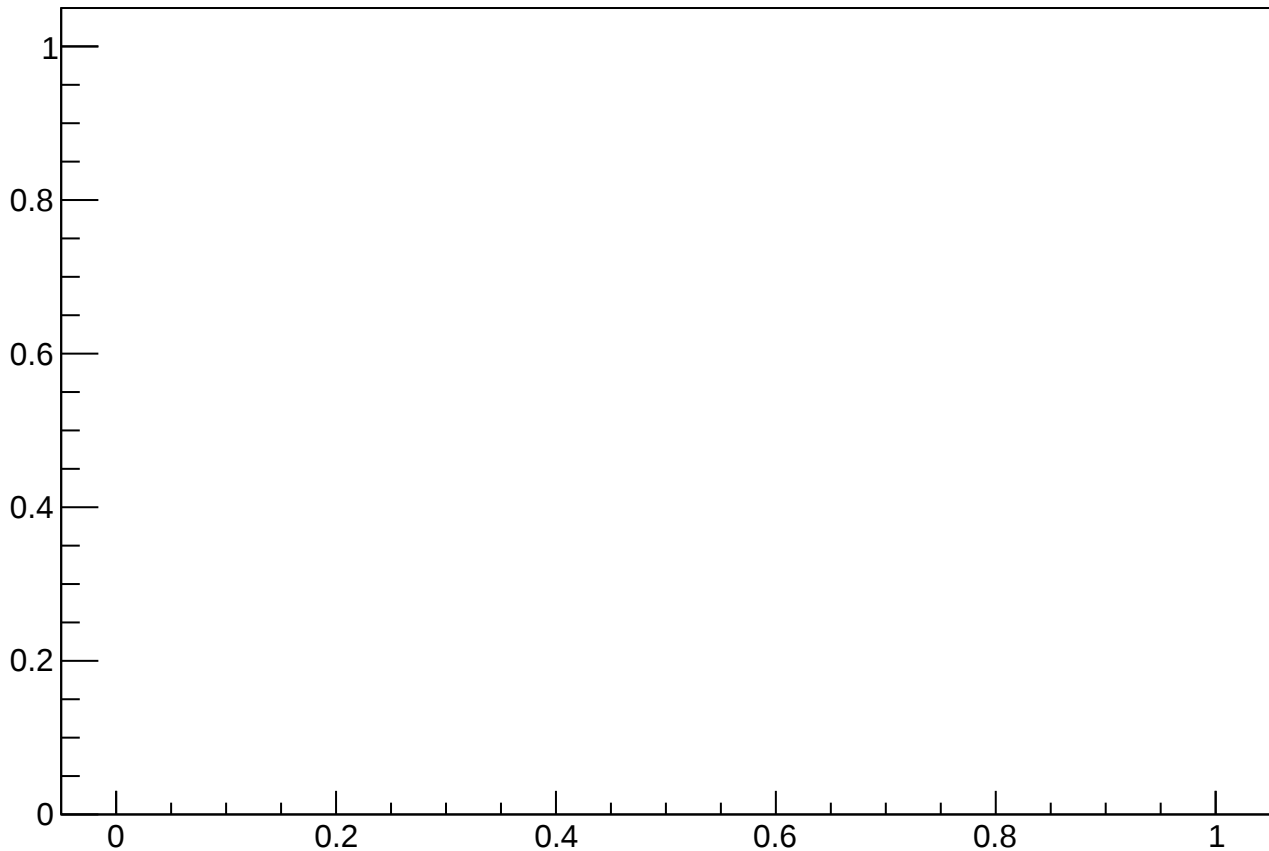
Right: 1522.239+/-0.300  $\chi^2/\text{NDF}$ : 1168607.3/35

In: 1517.334+/-0.427  $\chi^2/\text{NDF}$ : 536662.7/16

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

All: 1522.239+/-0.300  $\chi^2/\text{NDF}$ : 1168607.3/35

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



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

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

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

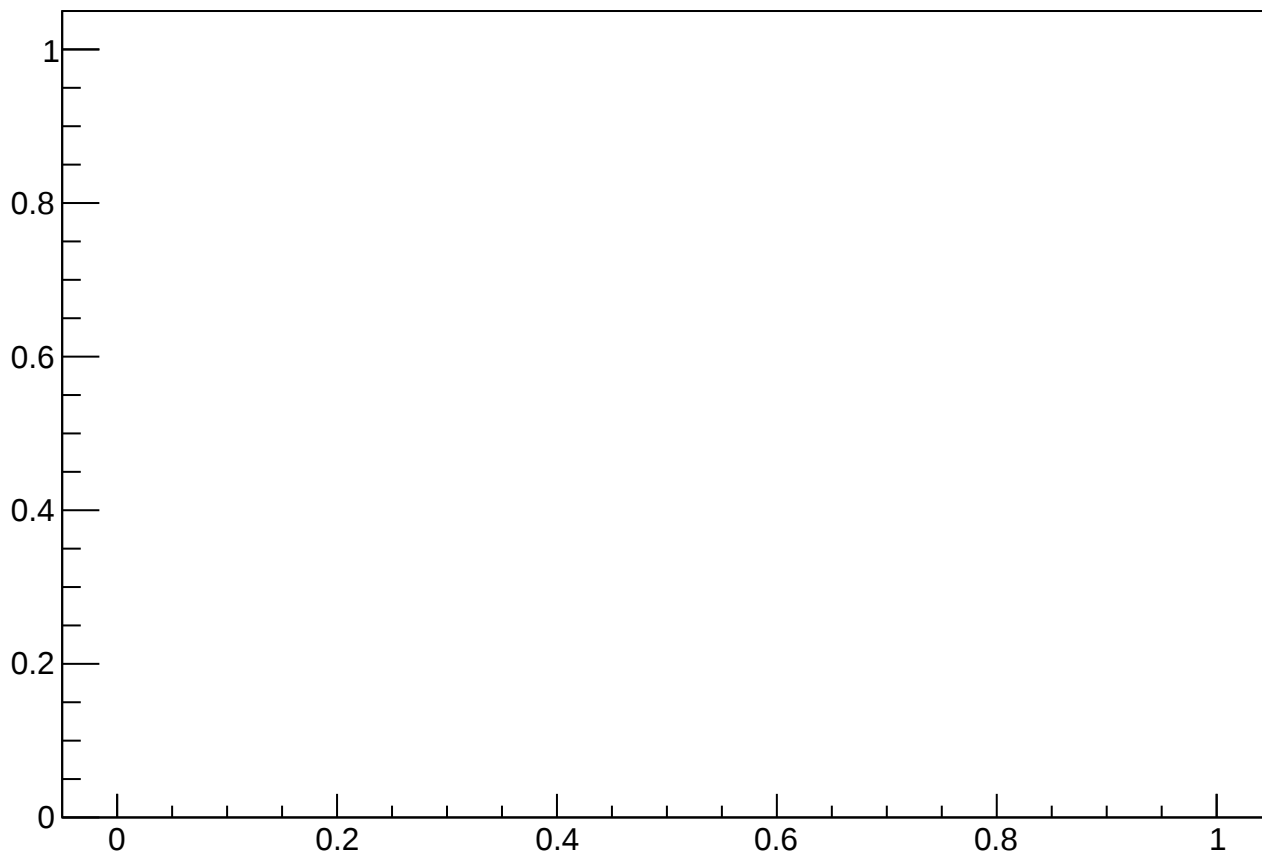
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_atl\_avg\_atr\_avg\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

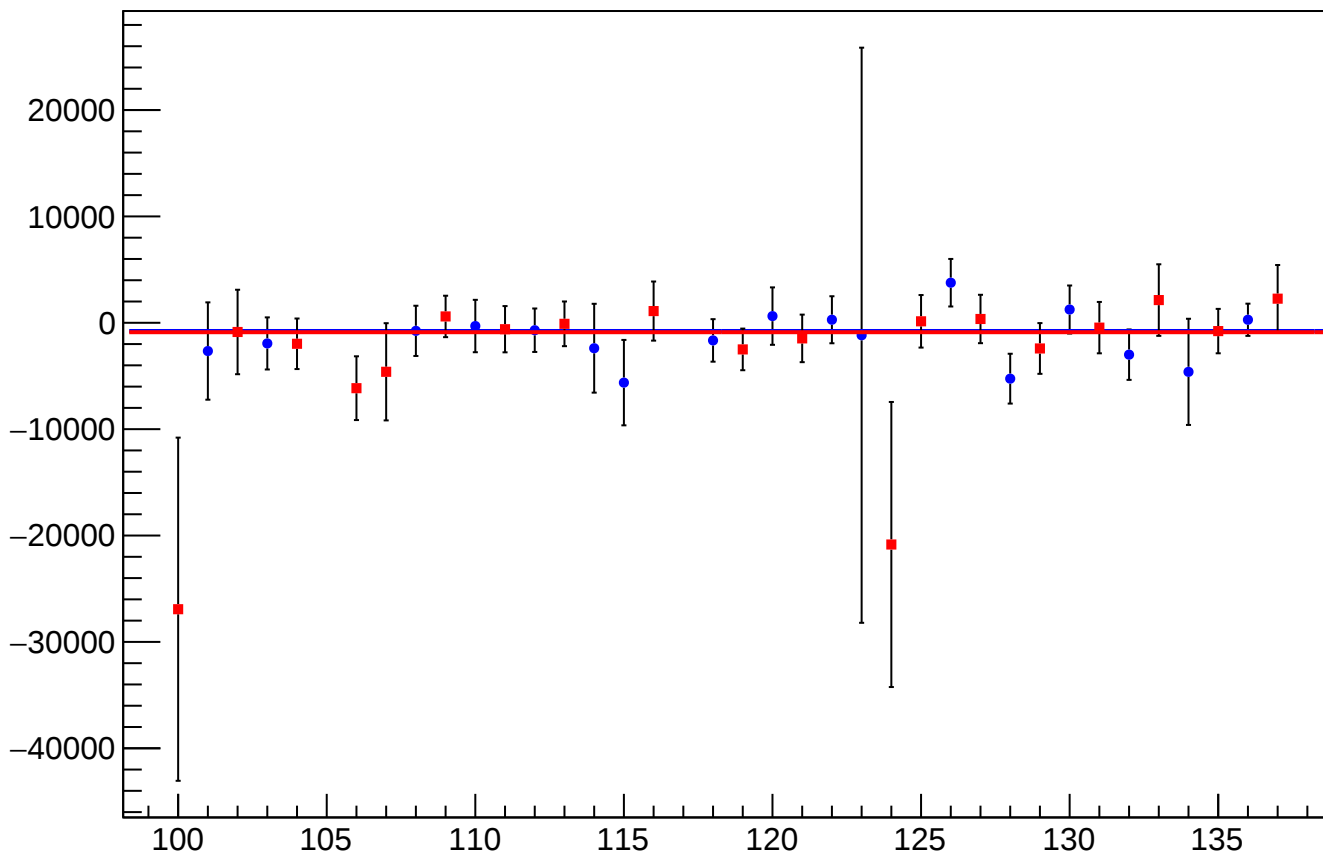
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_atl\_avg\_atr\_avg\_dd\_mean vs Slug, Sign Corrected



Right In: -771.153+/-603.689  $\chi^2/\text{NDF}$ : 13.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -885.145+/-595.053  $\chi^2/\text{NDF}$ : 13.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

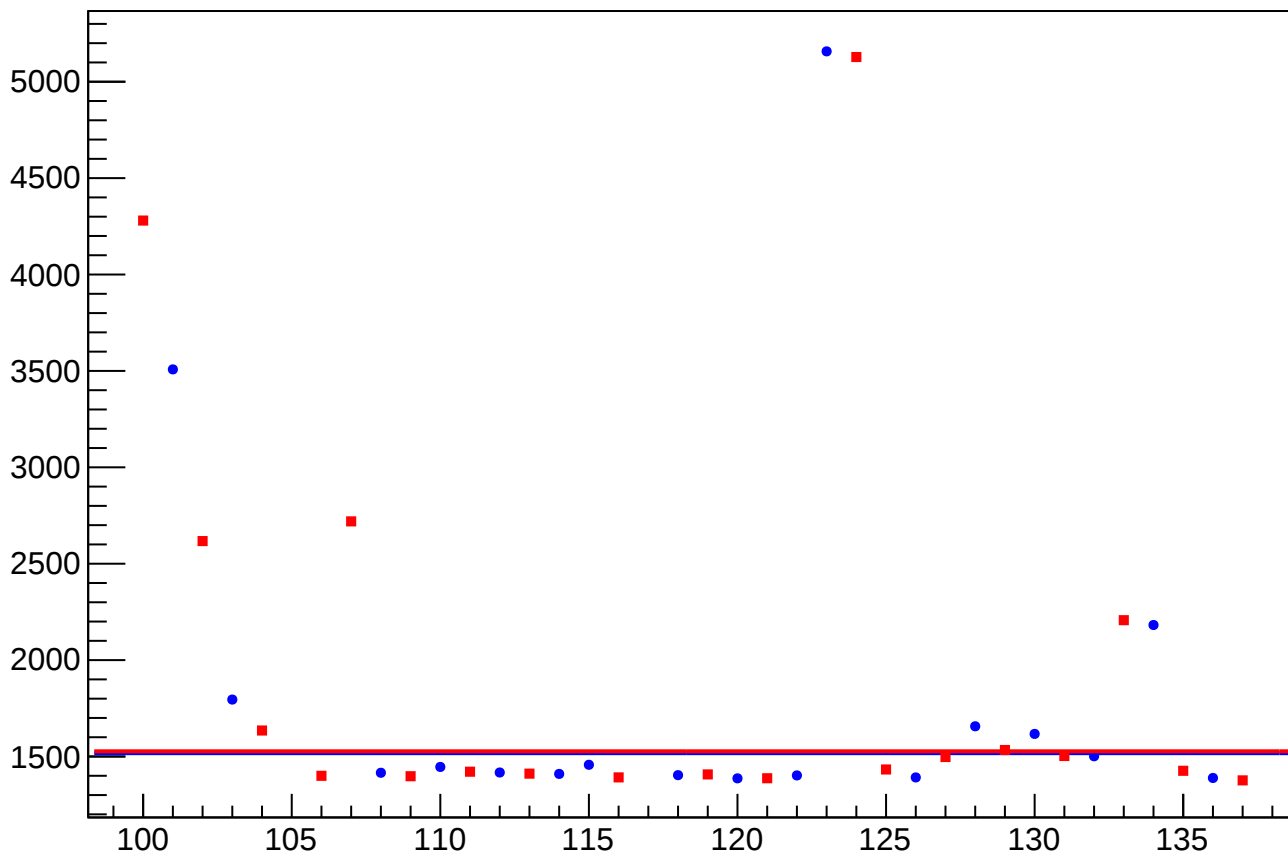
Right: -828.970+/-423.787  $\chi^2/\text{NDF}$ : 26.8/35

In: -771.153+/-603.689  $\chi^2/\text{NDF}$ : 13.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -828.970+/-423.787  $\chi^2/\text{NDF}$ : 26.8/35

asym\_atl\_avg\_atr\_avg\_dd\_rms vs Slug, Sign Corrected



Right In: 1517.334+/-0.427  $\chi^2/\text{NDF}$ : 536662.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1527.005+/-0.421  $\chi^2/\text{NDF}$ : 631684.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

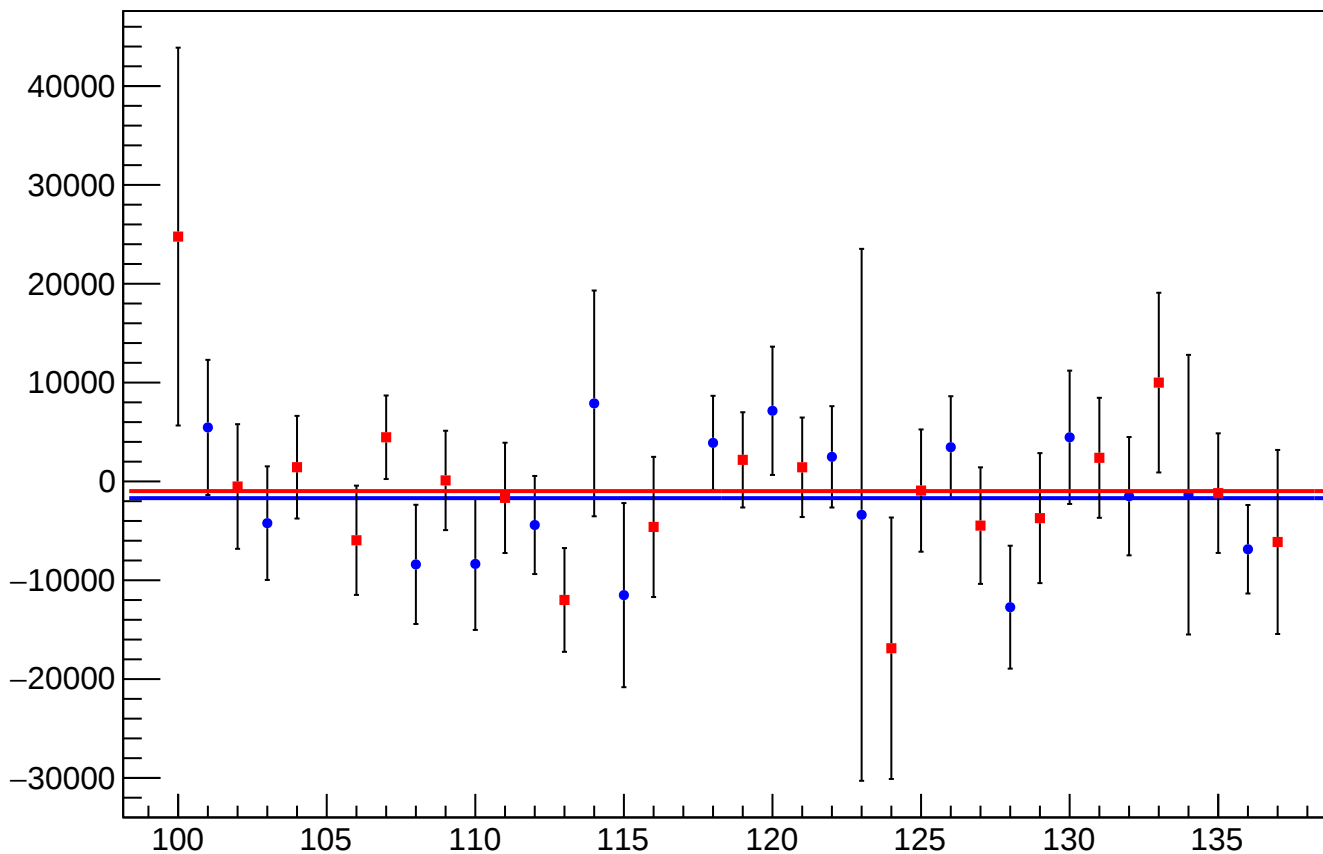
Right: 1522.239+/-0.300  $\chi^2/\text{NDF}$ : 1168607.3/35

In: 1517.334+/-0.427  $\chi^2/\text{NDF}$ : 536662.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1522.239+/-0.300  $\chi^2/\text{NDF}$ : 1168607.3/35

reg\_asym\_atl\_dd\_atr\_dd\_avg\_mean vs Slug, Sign Corrected



Right In:  $-1692.604 \pm 1512.935$   $\chi^2/\text{NDF}$ : 15.8/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-977.899 \pm 1378.874$   $\chi^2/\text{NDF}$ : 13.9/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

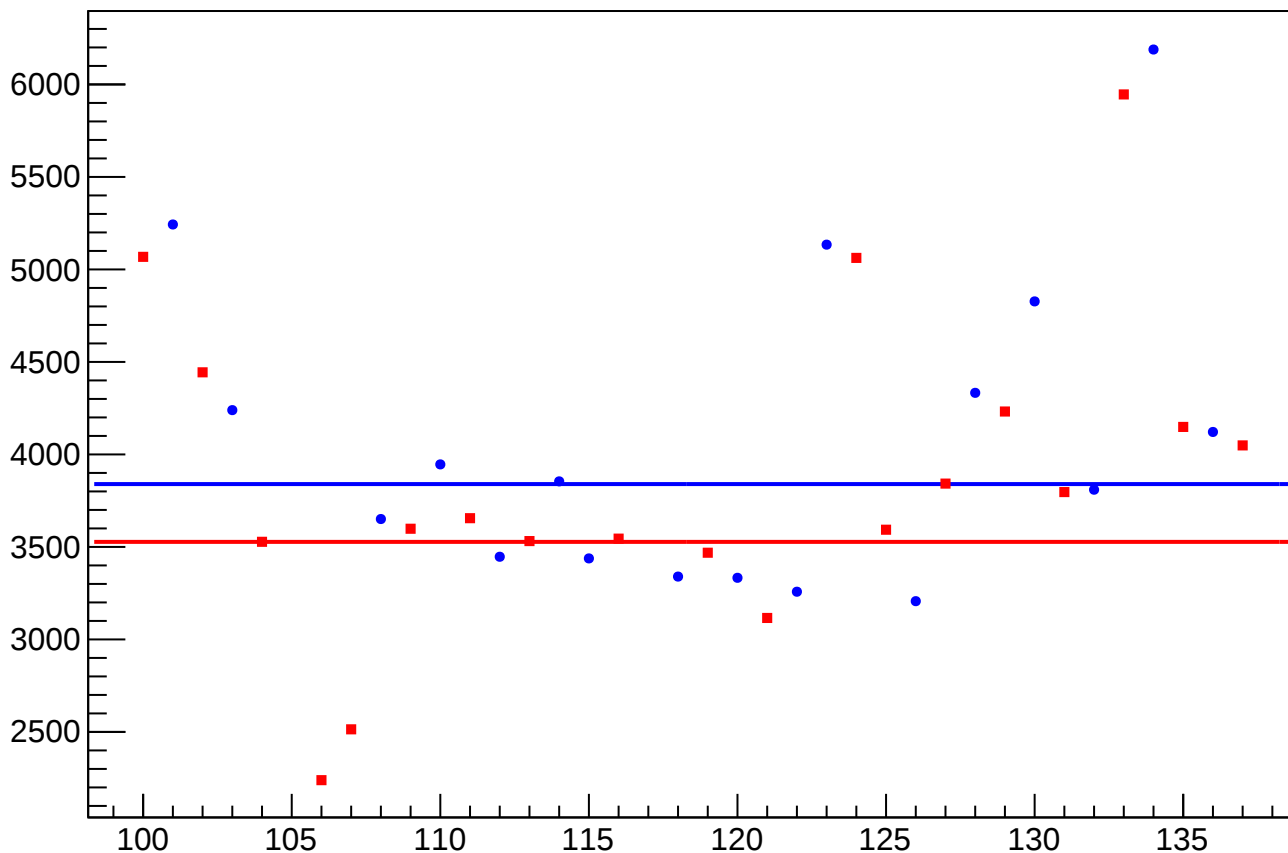
Right:  $-1302.190 \pm 1019.117$   $\chi^2/\text{NDF}$ : 29.9/35

In:  $-1692.604 \pm 1512.935$   $\chi^2/\text{NDF}$ : 15.8/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-1302.190 \pm 1019.117$   $\chi^2/\text{NDF}$ : 29.9/35

reg\_asym\_atl\_dd\_atr\_dd\_avg\_rms vs Slug, Sign Corrected



Right In: 3839.751+/-1.070  $\chi^2/\text{NDF}$ : 325959.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3527.320+/-0.966  $\chi^2/\text{NDF}$ : 554785.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

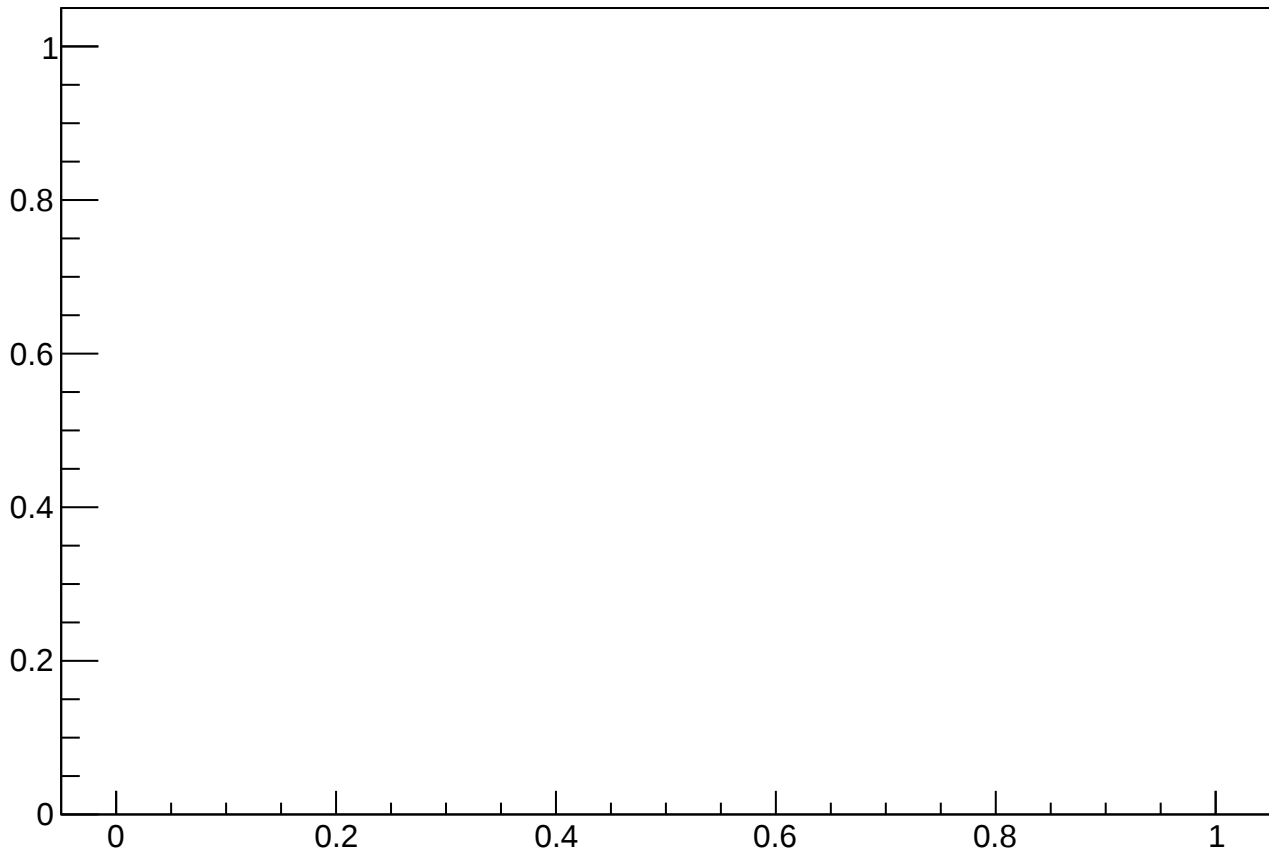
Right: 3667.674+/-0.717  $\chi^2/\text{NDF}$ : 927722.2/35

In: 3839.751+/-1.070  $\chi^2/\text{NDF}$ : 325959.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3667.674+/-0.717  $\chi^2/\text{NDF}$ : 927722.2/35

asym\_atl\_dd\_atr\_dd\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

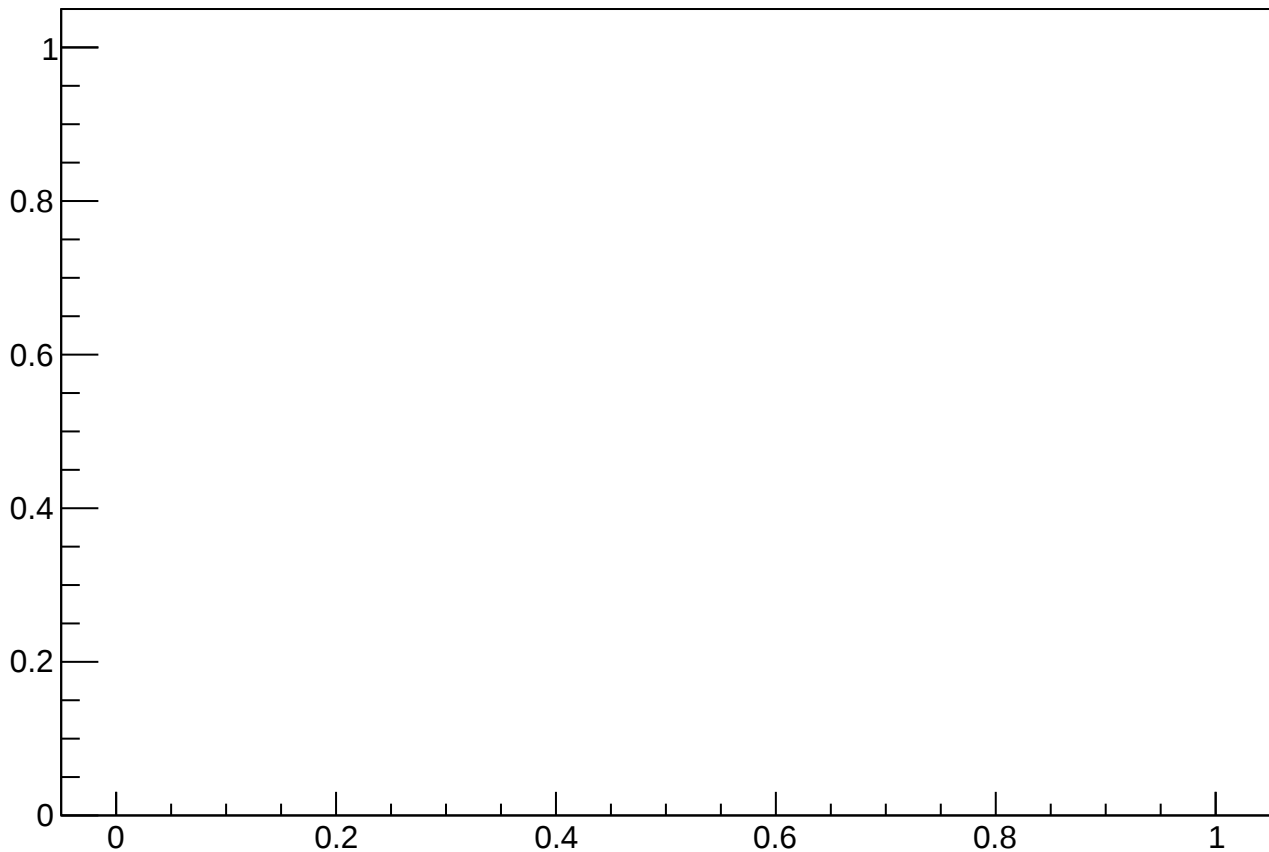
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_atl\_dd\_atr\_dd\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

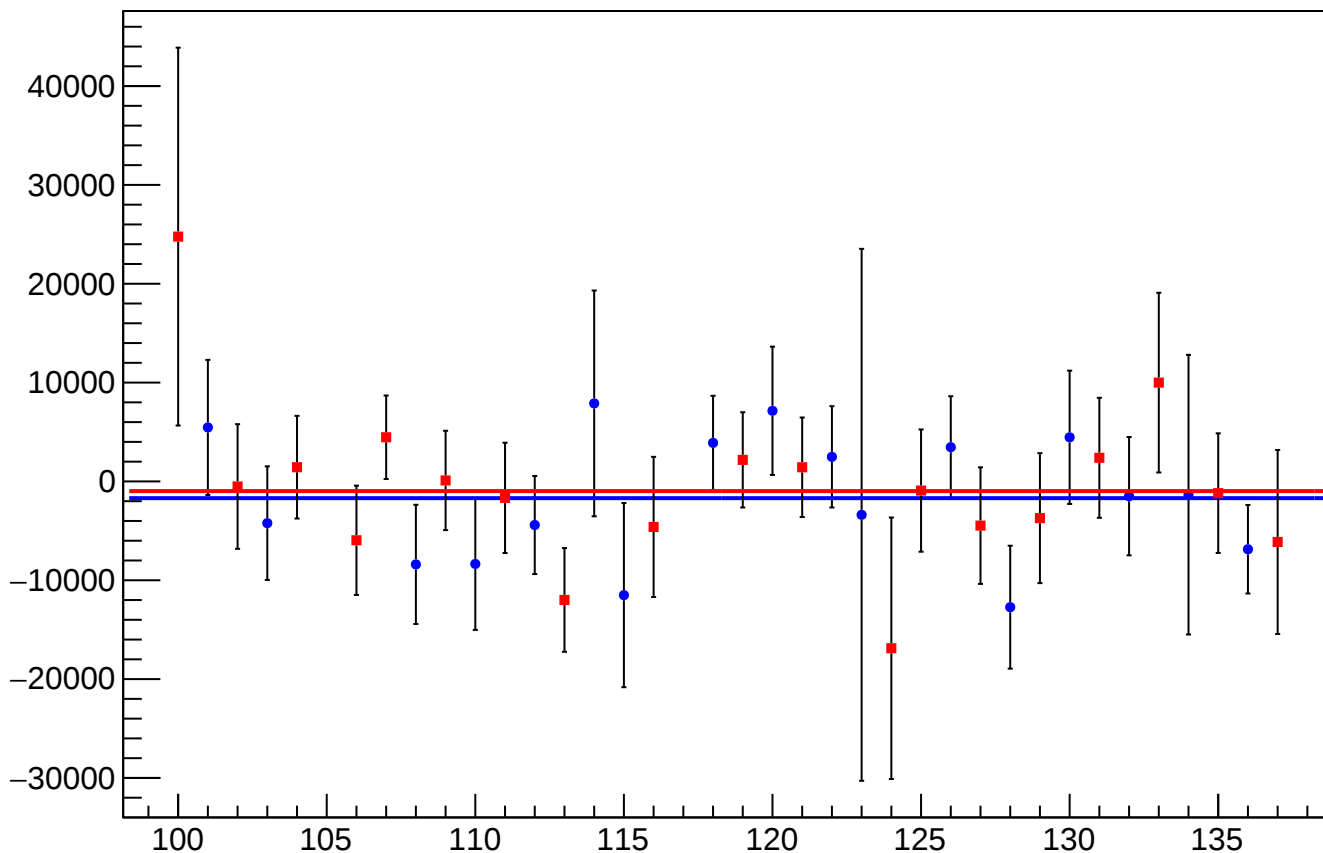
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_atl\_dd\_atr\_dd\_avg\_mean vs Slug, Sign Corrected



Right In: -1692.604 $\pm$ 1512.935  $\chi^2$ /NDF: 15.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: -977.899 $\pm$ 1378.874  $\chi^2$ /NDF: 13.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

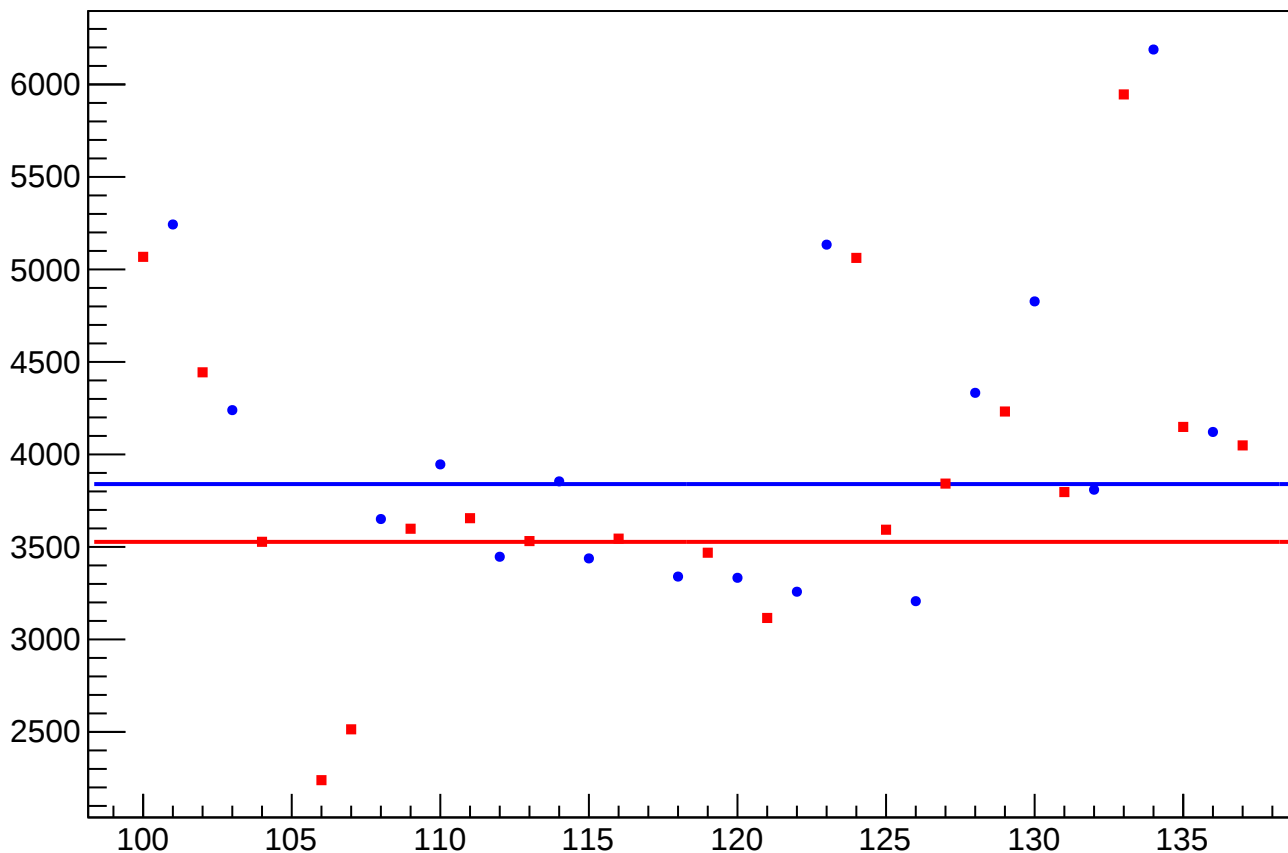
Right: -1302.190 $\pm$ 1019.117  $\chi^2$ /NDF: 29.9/35

In: -1692.604 $\pm$ 1512.935  $\chi^2$ /NDF: 15.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: -1302.190 $\pm$ 1019.117  $\chi^2$ /NDF: 29.9/35

asym\_atl\_dd\_atr\_dd\_avg\_rms vs Slug, Sign Corrected



Right In: 3839.751+/-1.070  $\chi^2/\text{NDF}$ : 325959.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3527.320+/-0.966  $\chi^2/\text{NDF}$ : 554785.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

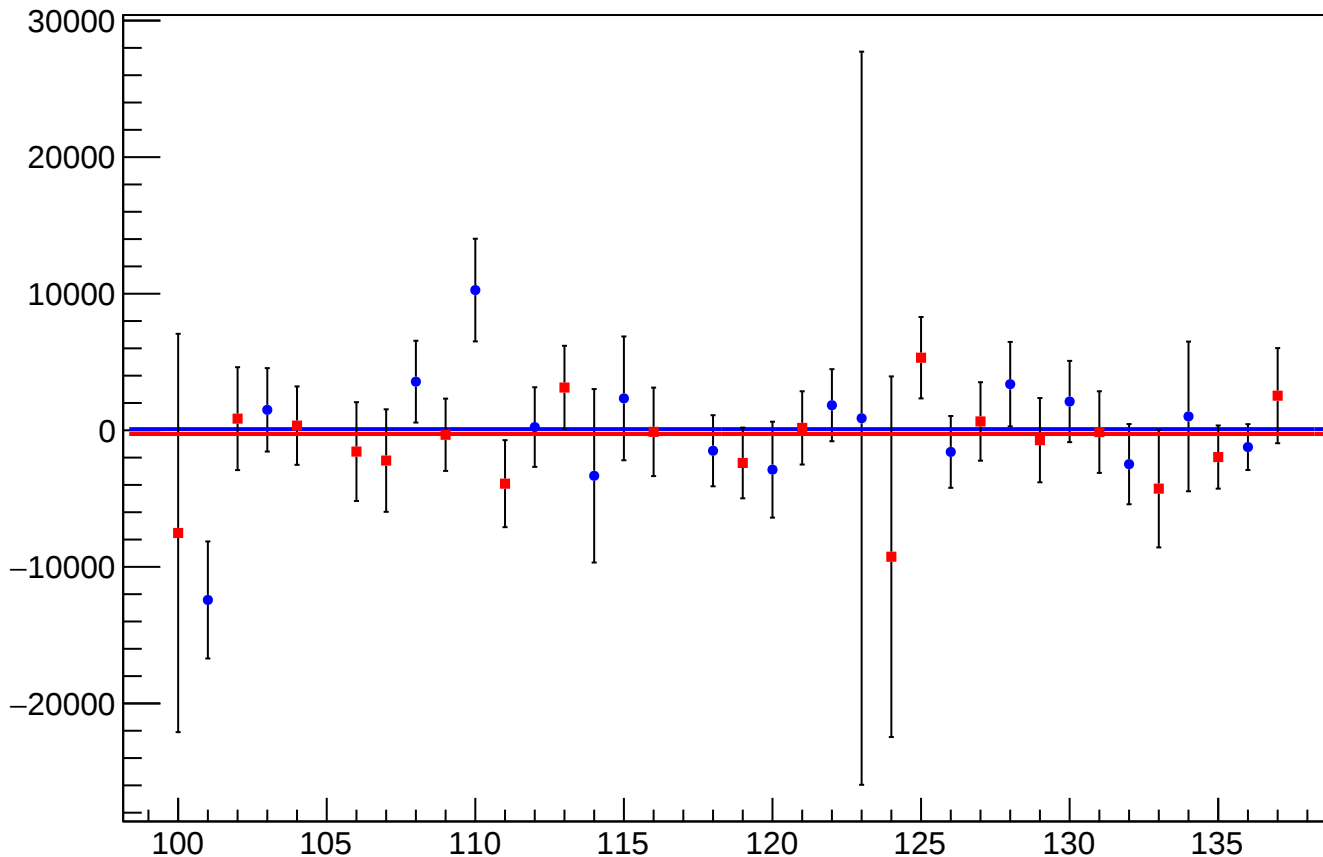
Right: 3667.674+/-0.717  $\chi^2/\text{NDF}$ : 927722.2/35

In: 3839.751+/-1.070  $\chi^2/\text{NDF}$ : 325959.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3667.674+/-0.717  $\chi^2/\text{NDF}$ : 927722.2/35

reg\_asym\_atl\_dd\_atr\_dd\_dd\_mean vs Slug, Sign Corrected



Right In: 83.860+/-750.549  $\chi^2/\text{NDF}$ : 22.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -272.707+/-734.115  $\chi^2/\text{NDF}$ : 10.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

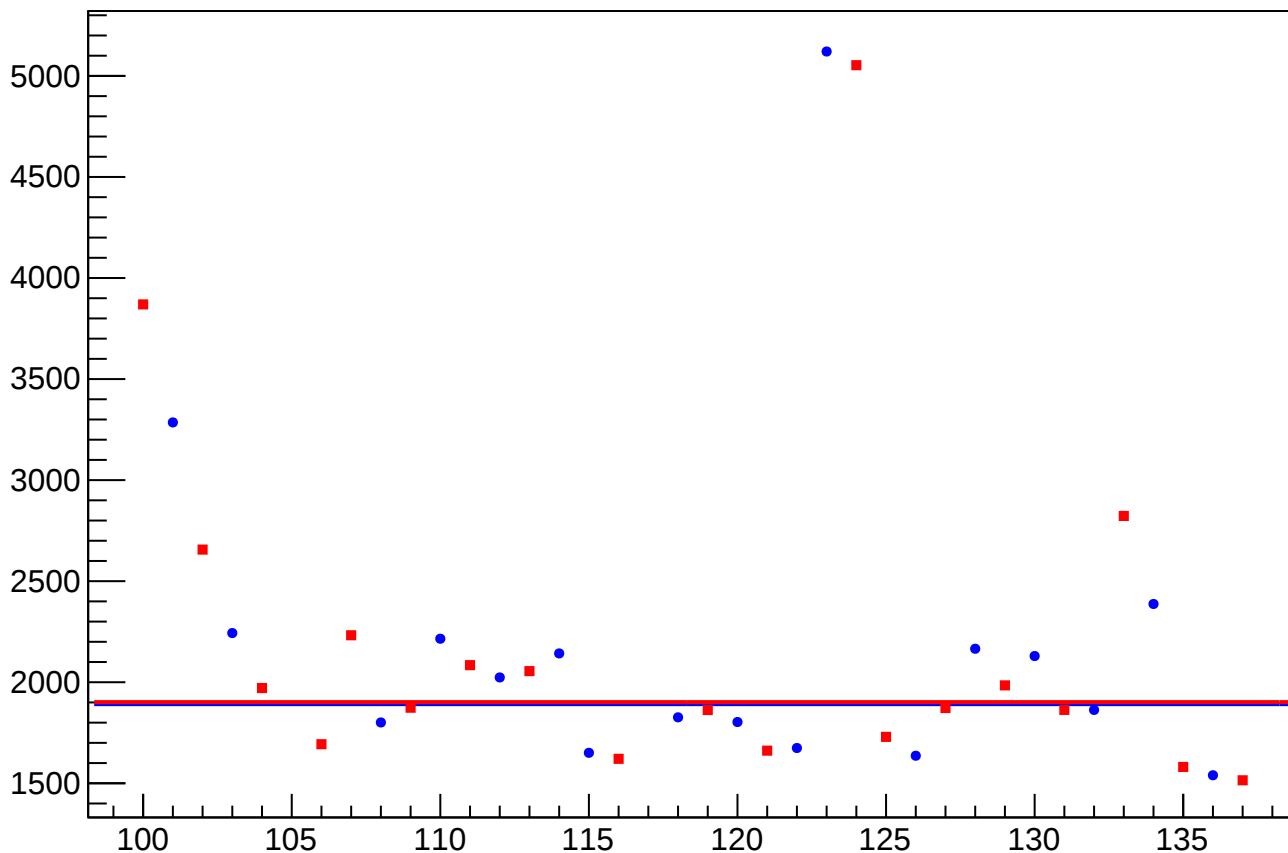
Right: -98.370+/-524.811  $\chi^2/\text{NDF}$ : 33.2/35

In: 83.860+/-750.549  $\chi^2/\text{NDF}$ : 22.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -98.370+/-524.811  $\chi^2/\text{NDF}$ : 33.2/35

reg\_asym\_atl\_dd\_atr\_dd\_dd\_rms vs Slug, Sign Corrected



Right In: 1891.492+/-0.531  $\chi^2$ /NDF: 464497.5/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 1901.797+/-0.519  $\chi^2$ /NDF: 460687.3/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

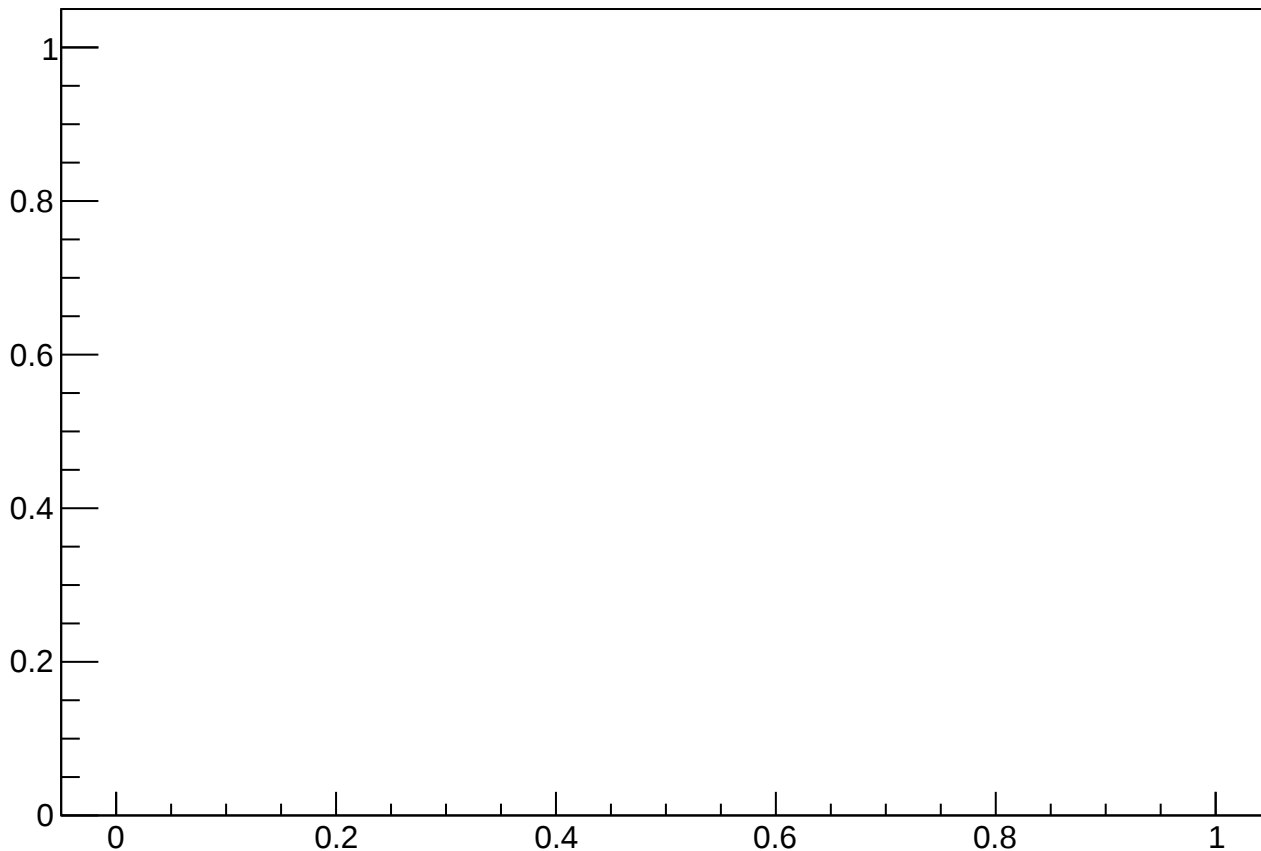
Right: 1896.759+/-0.371  $\chi^2$ /NDF: 925377.5/35

In: 1891.492+/-0.531  $\chi^2$ /NDF: 464497.5/16

Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

All: 1896.759+/-0.371  $\chi^2$ /NDF: 925377.5/35

asym\_atl\_dd\_atr\_dd\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

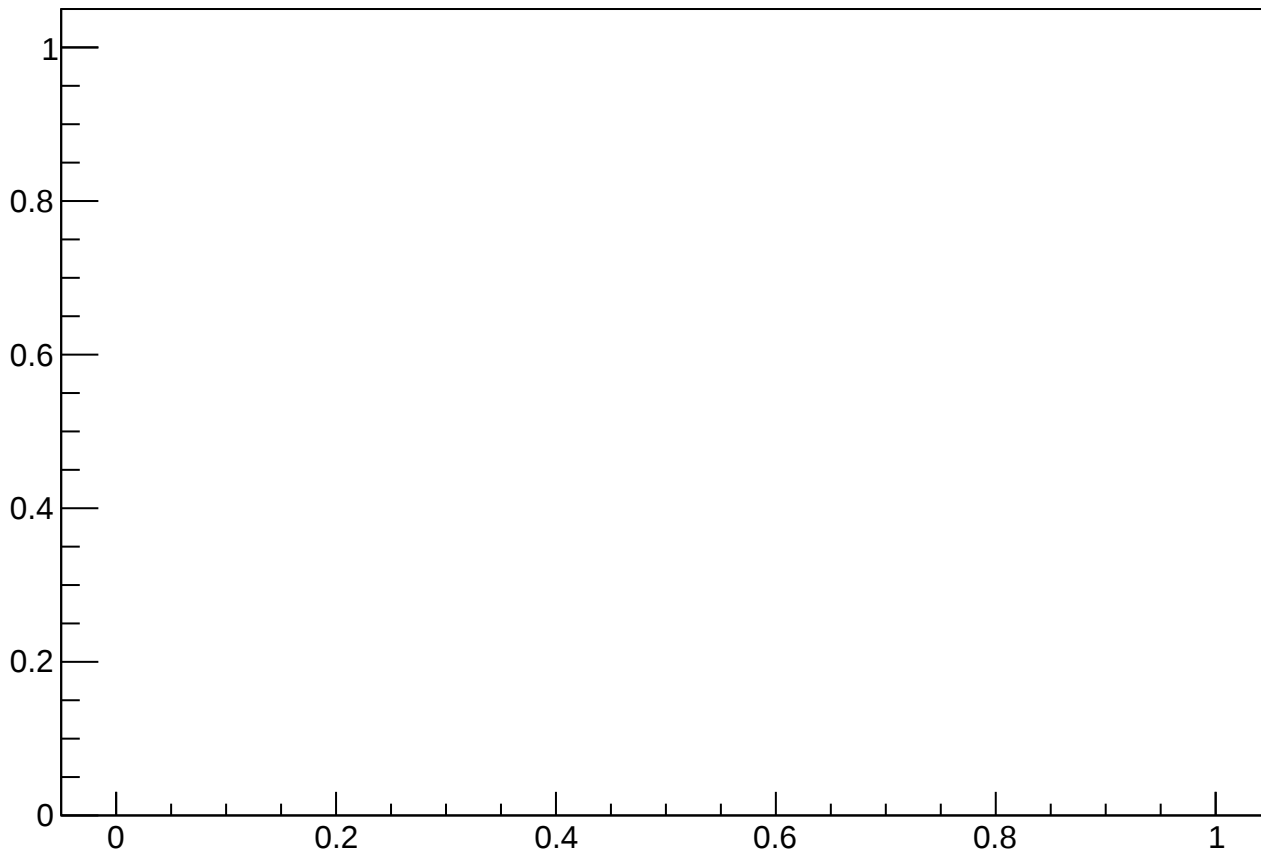
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_atl\_dd\_atr\_dd\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

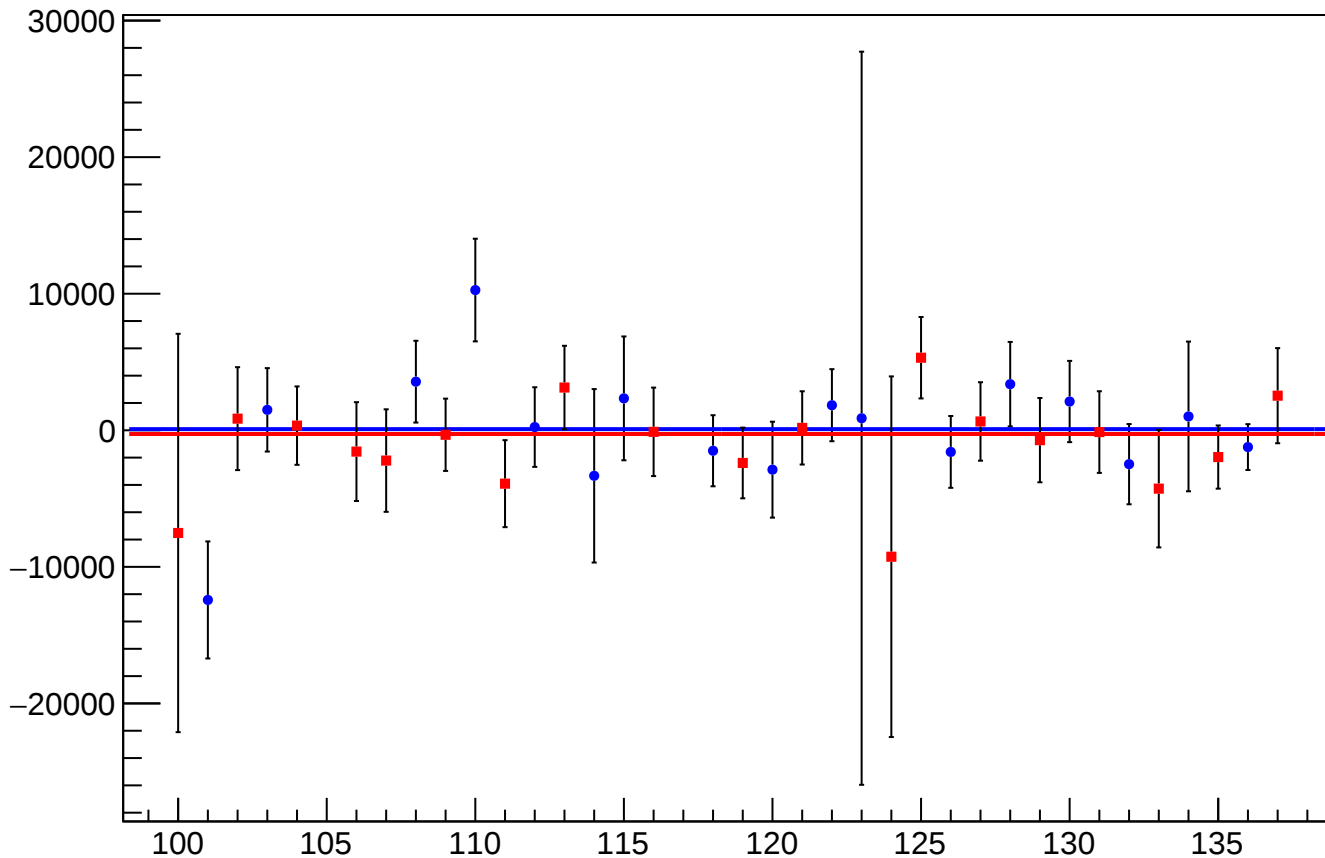
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_atl\_dd\_atr\_dd\_dd\_mean vs Slug, Sign Corrected



Right In: 83.860+/-750.549  $\chi^2/\text{NDF}$ : 22.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -272.707+/-734.115  $\chi^2/\text{NDF}$ : 10.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

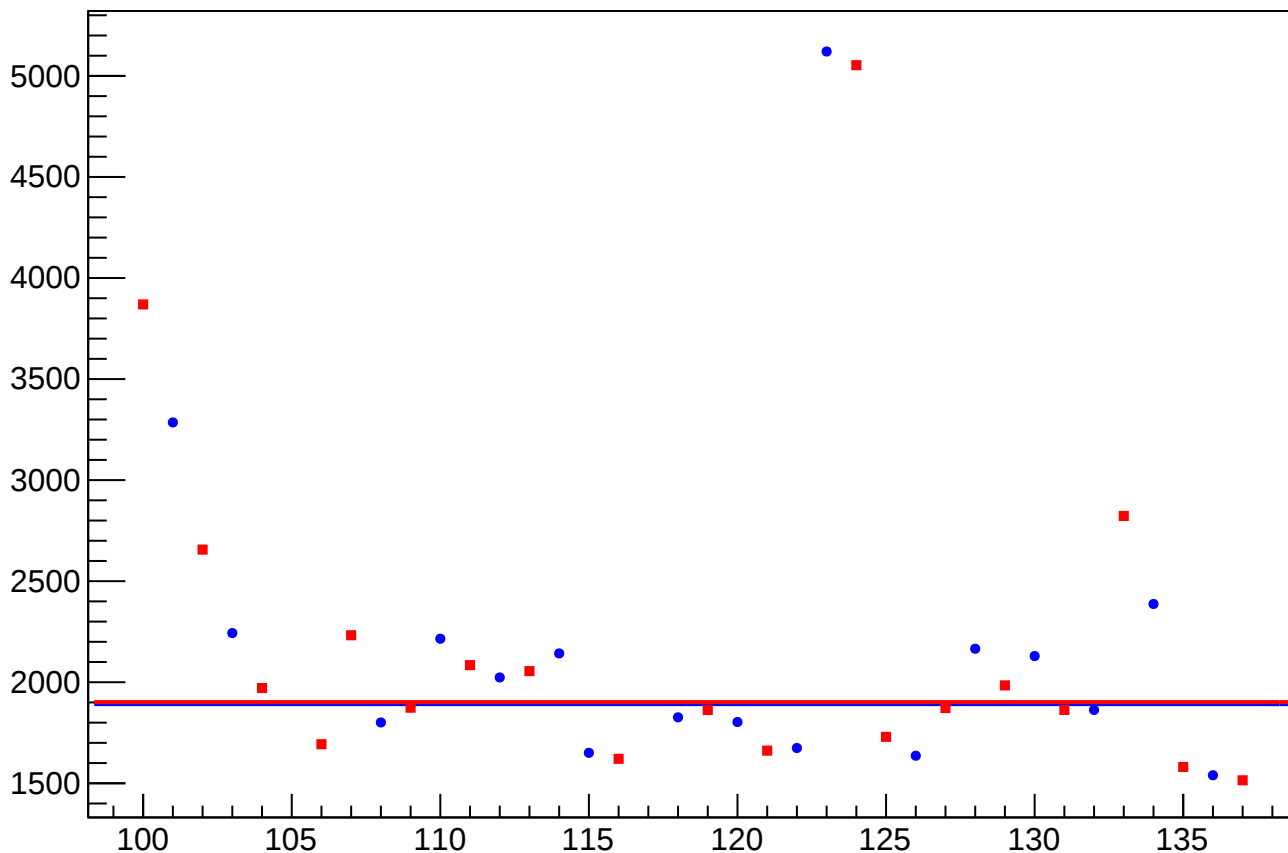
Right: -98.370+/-524.811  $\chi^2/\text{NDF}$ : 33.2/35

In: 83.860+/-750.549  $\chi^2/\text{NDF}$ : 22.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -98.370+/-524.811  $\chi^2/\text{NDF}$ : 33.2/35

asym\_atl\_dd\_atr\_dd\_dd\_rms vs Slug, Sign Corrected



Right In: 1891.492+/-0.531  $\chi^2$ /NDF: 464497.5/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1901.797+/-0.519  $\chi^2$ /NDF: 460687.3/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

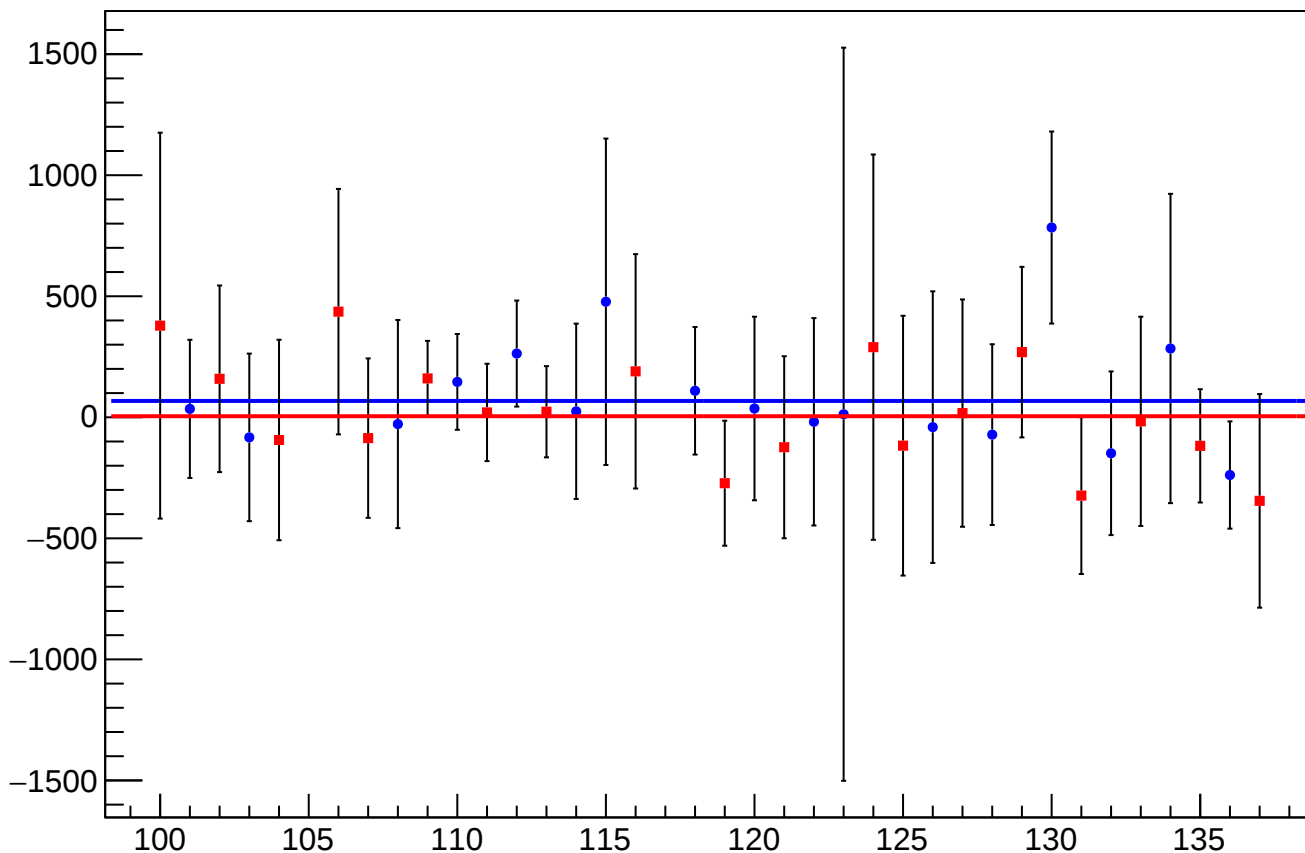
Right: 1896.759+/-0.371  $\chi^2$ /NDF: 925377.5/35

In: 1891.492+/-0.531  $\chi^2$ /NDF:464497.5/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 1896.759+/-0.371  $\chi^2$ /NDF: 925377.5/35

asym\_bcm\_an\_us\_bcm\_an\_ds\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 67.542+/-79.608  $\chi^2/\text{NDF}$ : 7.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 4.423+/-70.009  $\chi^2/\text{NDF}$ : 6.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

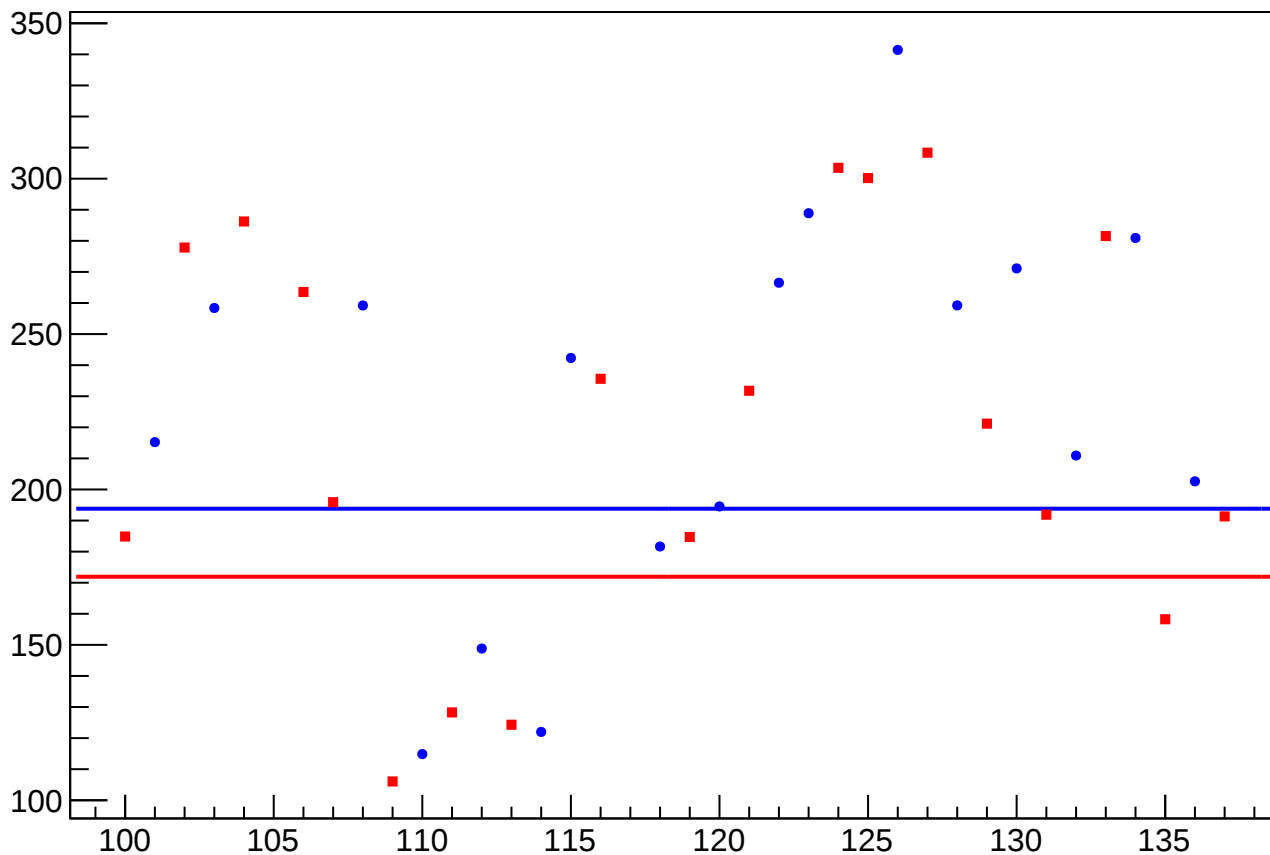
Right: 31.949+/-52.572  $\chi^2/\text{NDF}$ : 14.2/35

In: 67.542+/-79.608  $\chi^2/\text{NDF}$ : 7.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 31.949+/-52.572  $\chi^2/\text{NDF}$ : 14.2/35

asym\_bcm\_an\_us\_bcm\_an\_ds\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 193.815+/-0.056  $\chi^2/\text{NDF}$ : 1010325.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 171.920+/-0.050  $\chi^2/\text{NDF}$ : 1577076.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

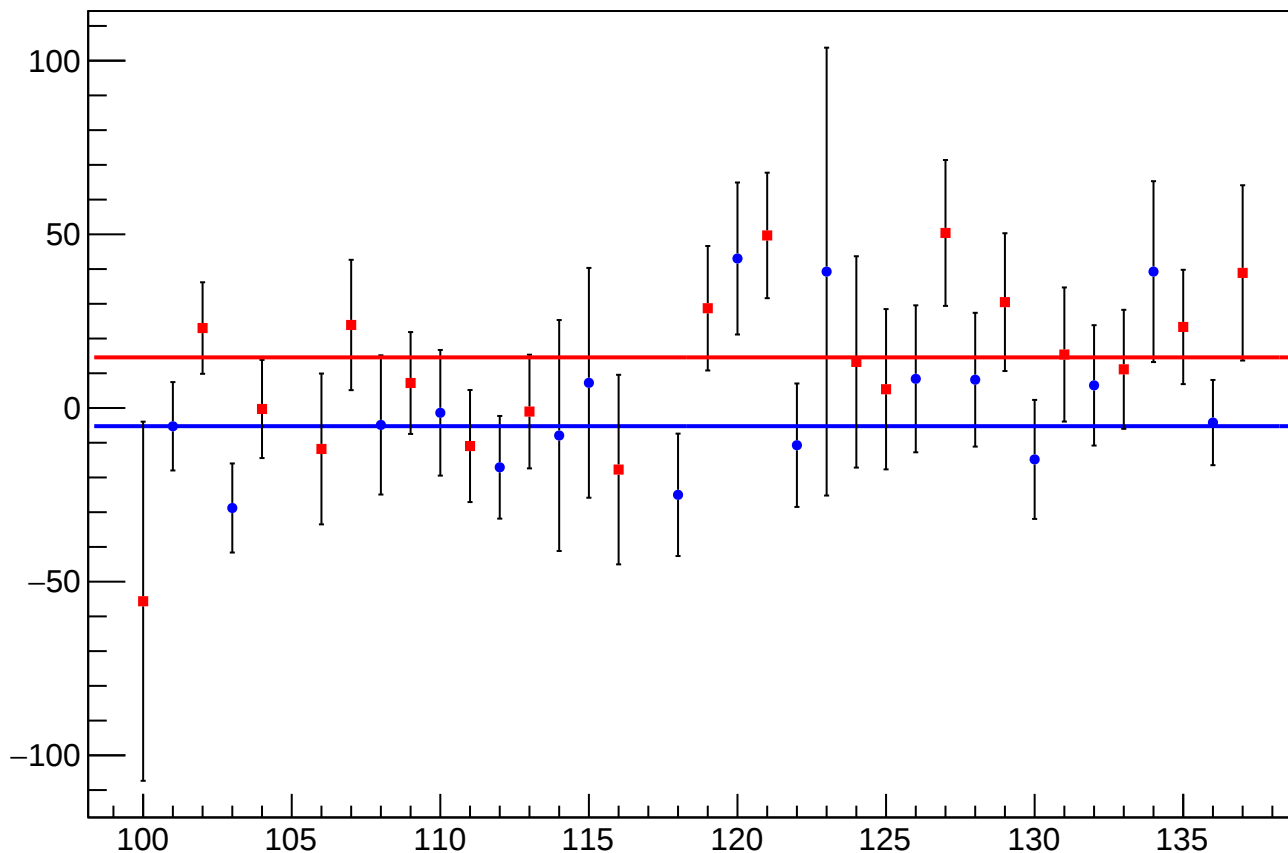
Right: 181.469+/-0.037  $\chi^2/\text{NDF}$ : 2672713.5/35

In: 193.815+/-0.056  $\chi^2/\text{NDF}$ : 1010325.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 181.469+/-0.037  $\chi^2/\text{NDF}$ : 2672713.5/35

asym\_bcm\_an\_us\_bcm\_an\_ds\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: -5.231+/-4.356  $\chi^2/\text{NDF}$ : 15.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 14.579+/-4.265  $\chi^2/\text{NDF}$ : 19.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

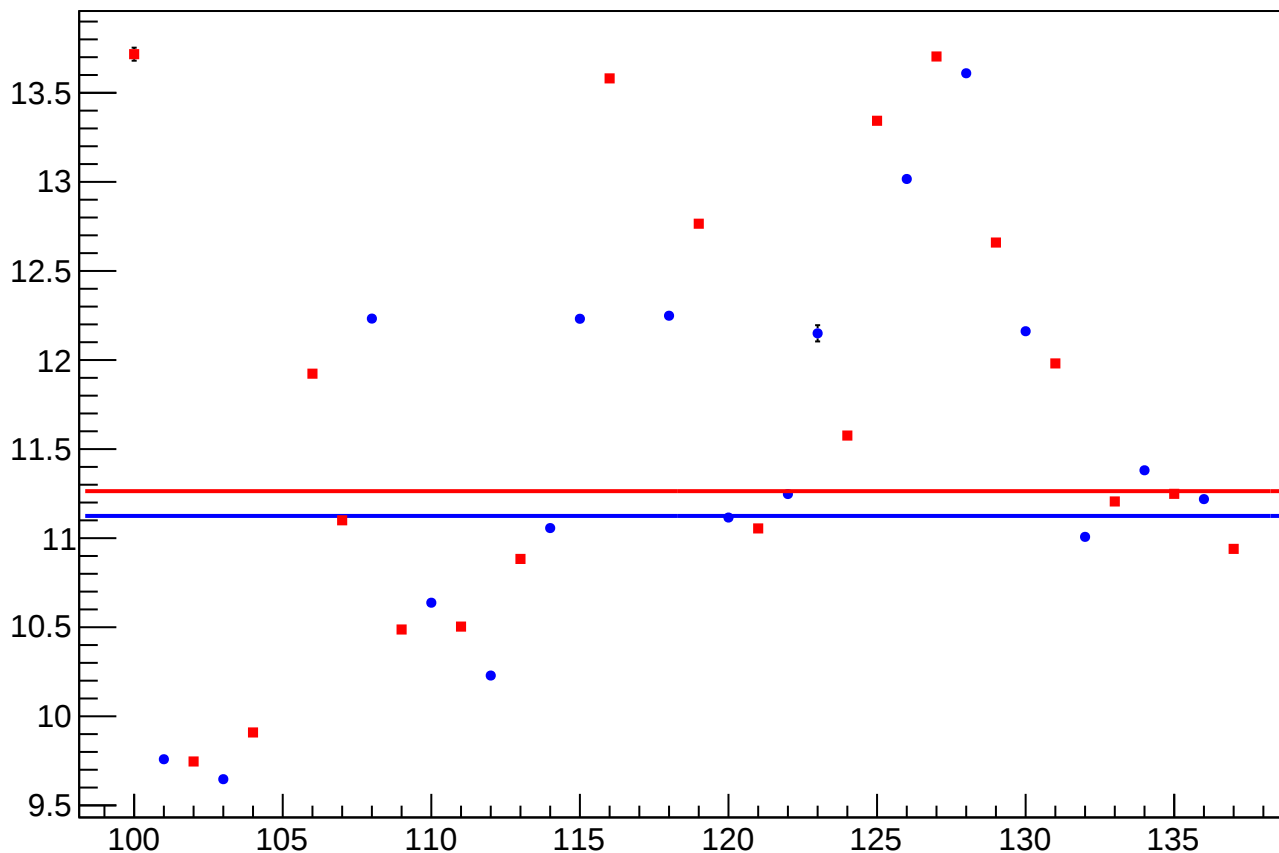
Right: 4.883+/-3.047  $\chi^2/\text{NDF}$ : 45.6/35

In: -5.231+/-4.356  $\chi^2/\text{NDF}$ : 15.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 4.883+/-3.047  $\chi^2/\text{NDF}$ : 45.6/35

asym\_bcm\_an\_us\_bcm\_an\_ds\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 11.125+/-0.003  $\chi^2/\text{NDF}$ : 132520.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 11.264+/-0.003  $\chi^2/\text{NDF}$ : 147733.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

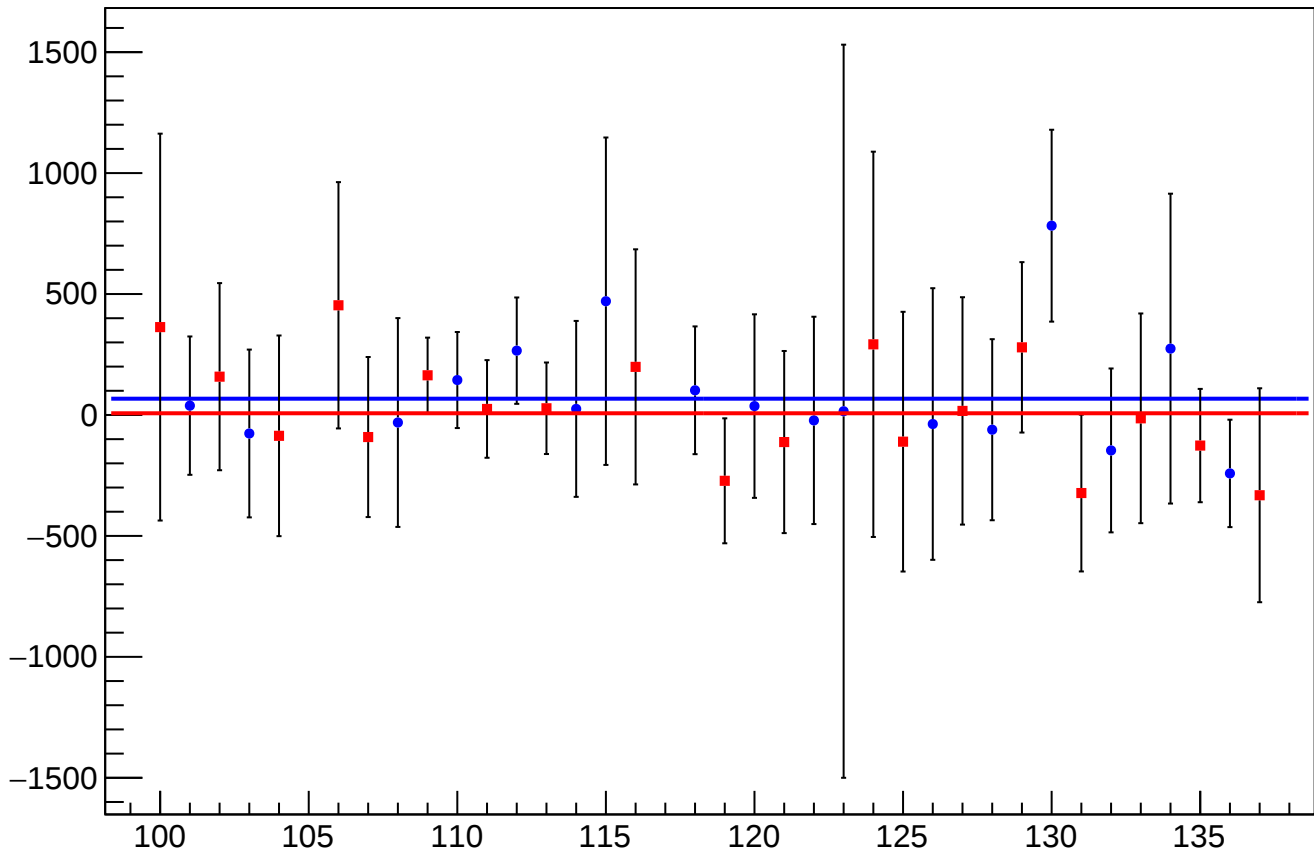
Right: 11.196+/-0.002  $\chi^2/\text{NDF}$ : 281295.0/35

In: 11.125+/-0.003  $\chi^2/\text{NDF}$ : 132520.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 11.196+/-0.002  $\chi^2/\text{NDF}$ : 281295.0/35

asym\_bcm\_an\_us\_bcm\_an\_ds3\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 67.305+/-79.817  $\chi^2/\text{NDF}$ : 7.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 7.039+/-70.212  $\chi^2/\text{NDF}$ : 6.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

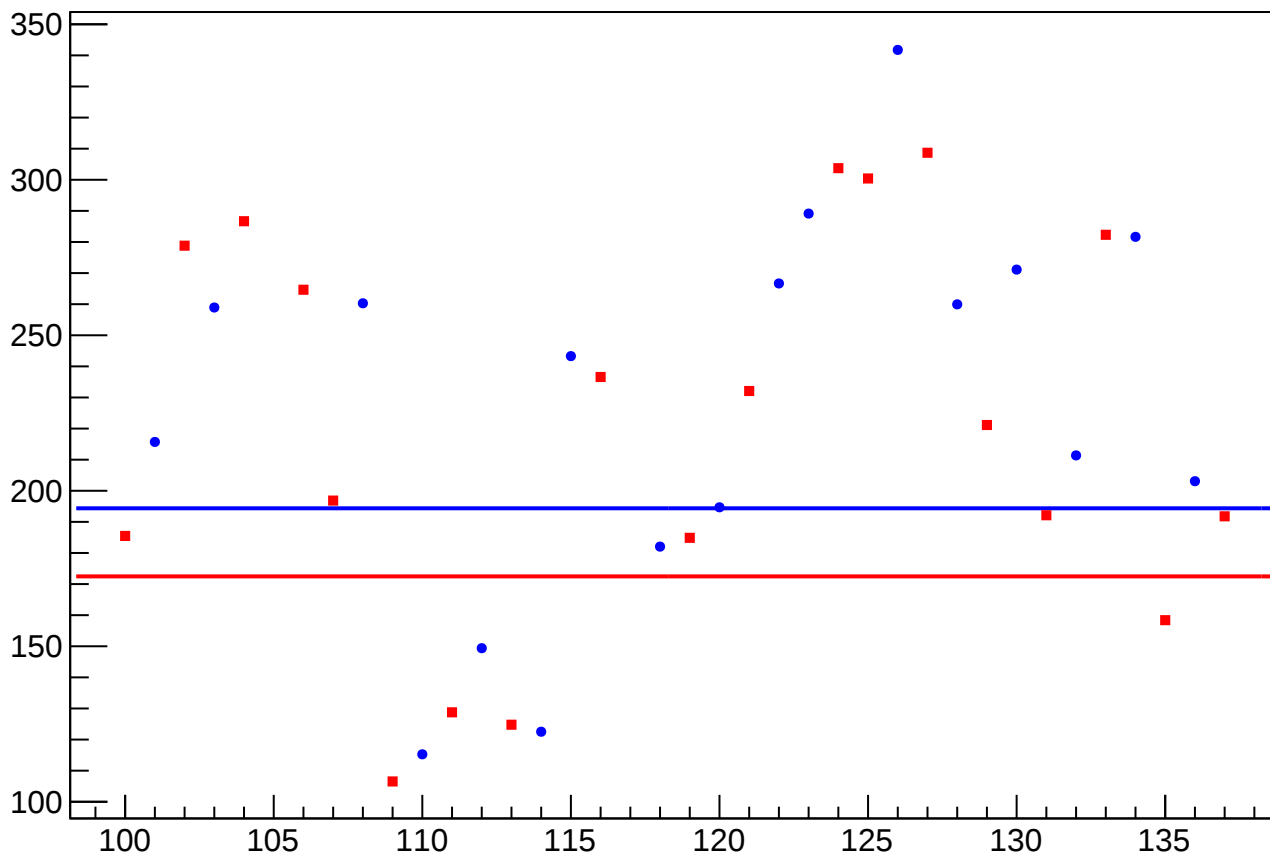
Right: 33.329+/-52.718  $\chi^2/\text{NDF}$ : 14.2/35

In: 67.305+/-79.817  $\chi^2/\text{NDF}$ : 7.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 33.329+/-52.718  $\chi^2/\text{NDF}$ : 14.2/35

asym\_bcm\_an\_us\_bcm\_an\_ds3\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 194.365+/-0.056  $\chi^2/\text{NDF}$ : 1005234.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 172.471+/-0.050  $\chi^2/\text{NDF}$ : 1569648.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

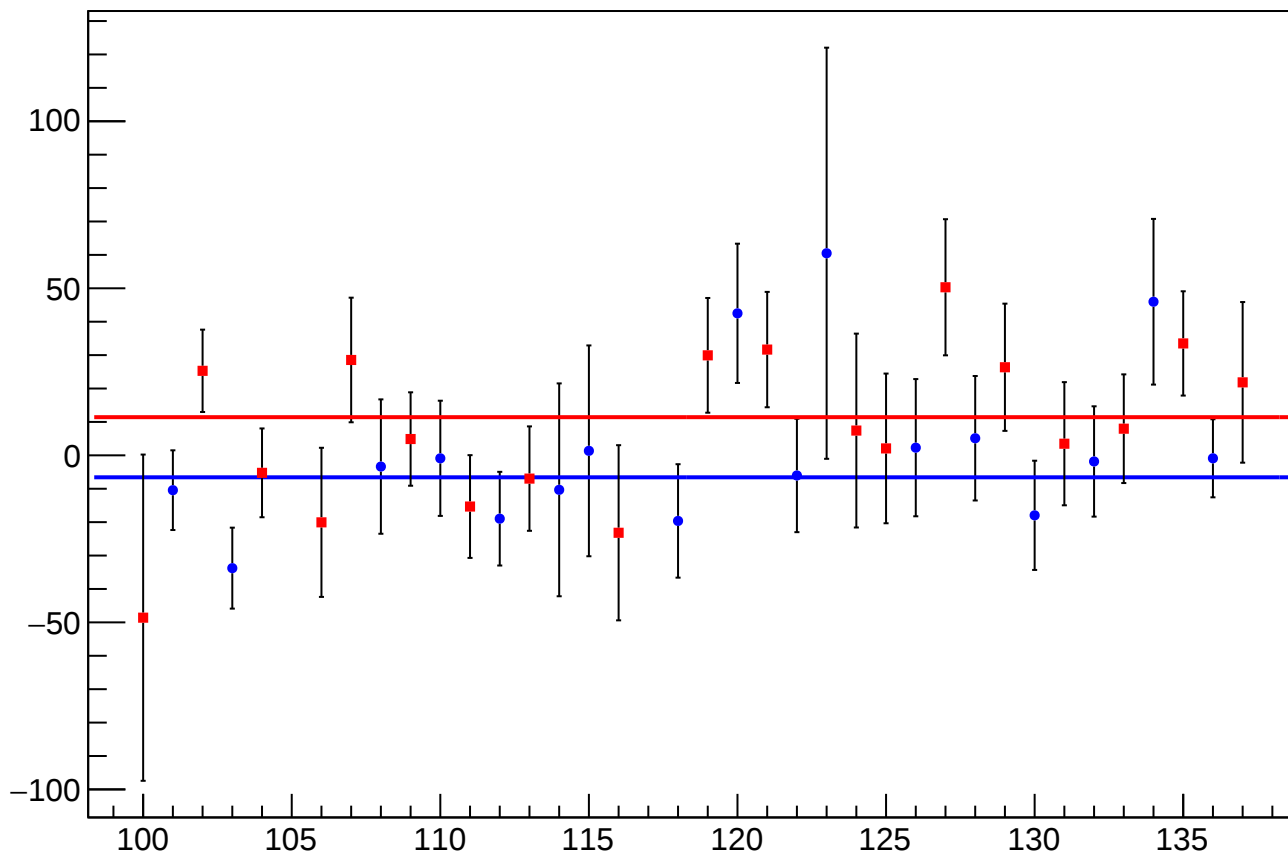
Right: 182.022+/-0.037  $\chi^2/\text{NDF}$ : 2659717.0/35

In: 194.365+/-0.056  $\chi^2/\text{NDF}$ : 1005234.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 182.022+/-0.037  $\chi^2/\text{NDF}$ : 2659717.0/35

asym\_bcm\_an\_us\_bcm\_an\_ds3\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: -6.575+/-4.157  $\chi^2/\text{NDF}$ : 19.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 11.423+/-4.080  $\chi^2/\text{NDF}$ : 23.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

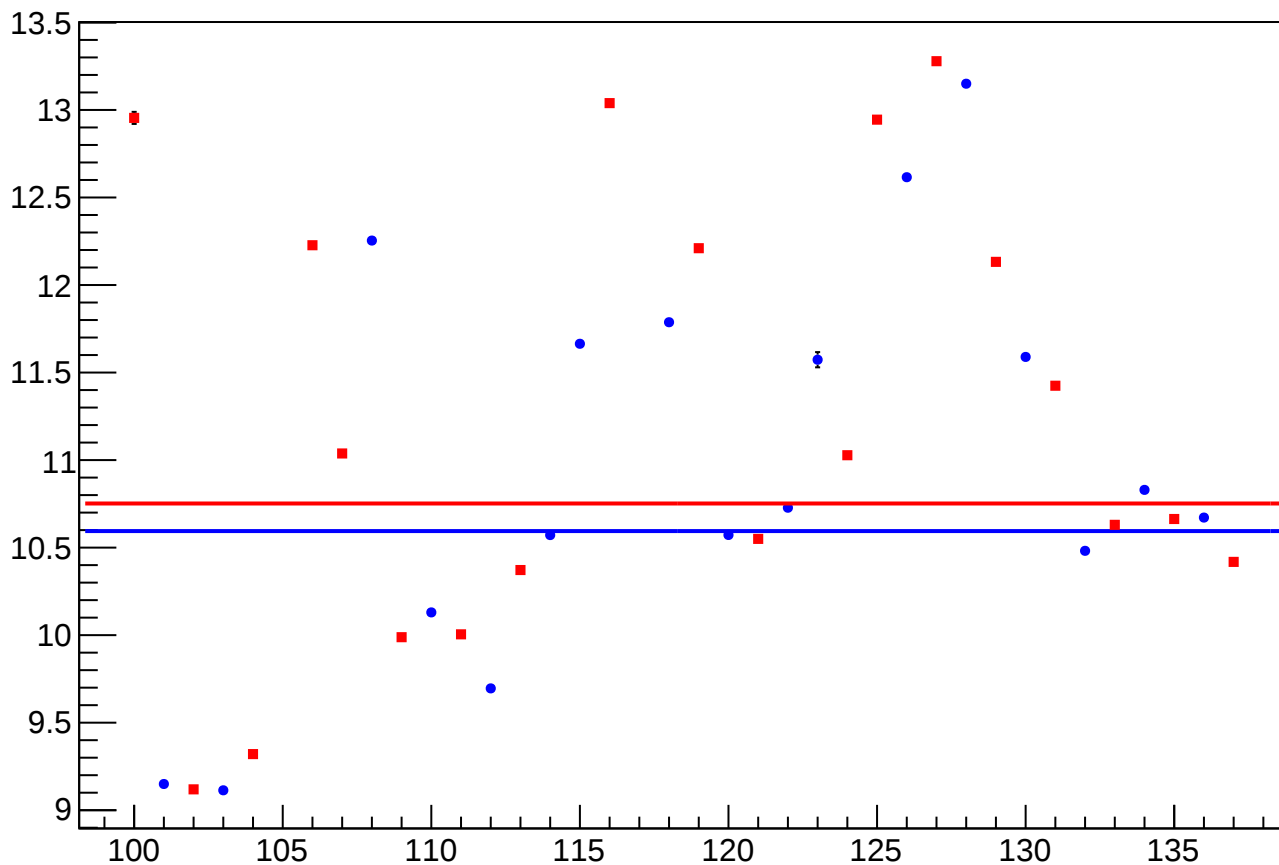
Right: 2.593+/-2.912  $\chi^2/\text{NDF}$ : 51.8/35

In: -6.575+/-4.157  $\chi^2/\text{NDF}$ : 19.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.593+/-2.912  $\chi^2/\text{NDF}$ : 51.8/35

asym\_bcm\_an\_us\_bcm\_an\_ds3\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 10.594 $\pm$ 0.003  $\chi^2$ /NDF: 160059.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 10.752 $\pm$ 0.003  $\chi^2$ /NDF: 177173.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

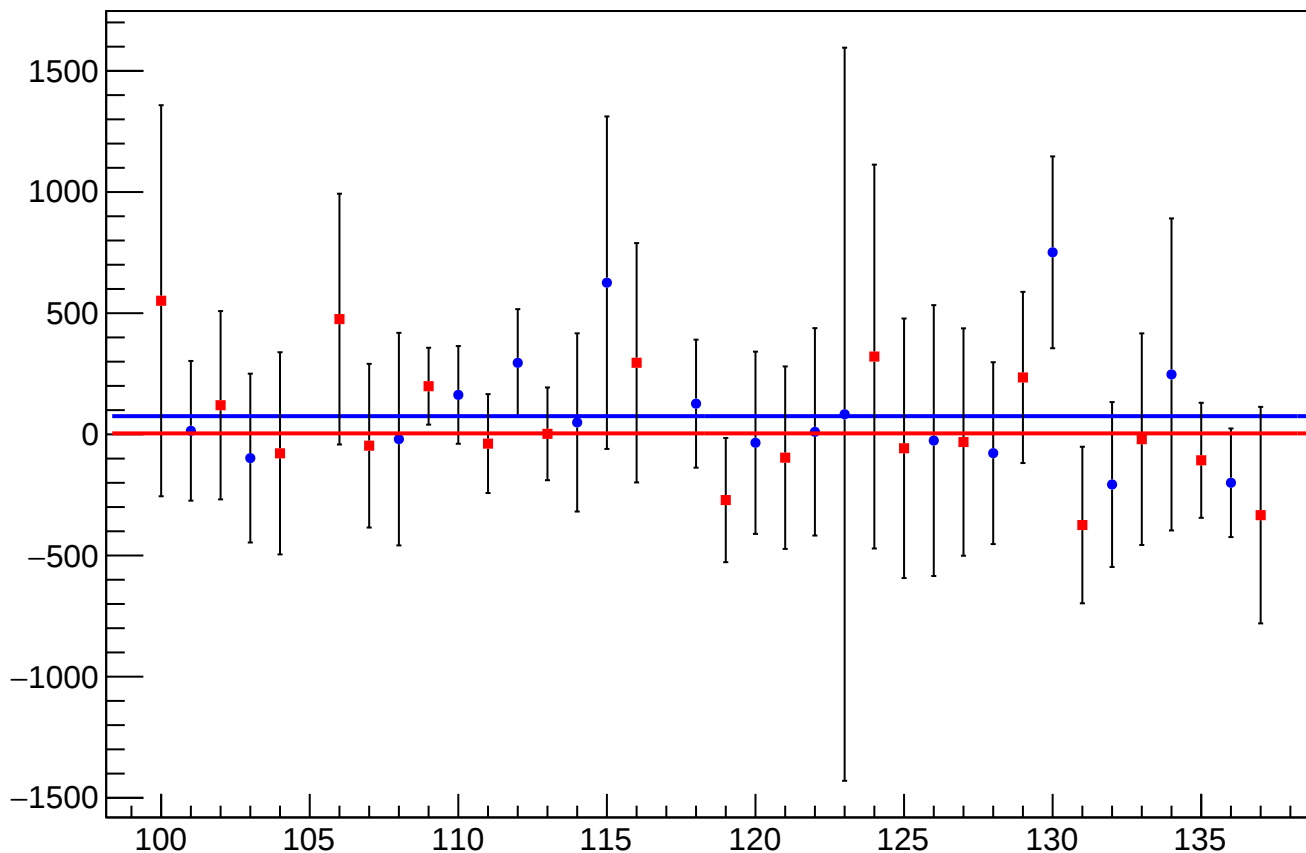
Right: 10.675 $\pm$ 0.002  $\chi^2$ /NDF: 338695.4/35

In: 10.594 $\pm$ 0.003  $\chi^2$ /NDF:160059.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 10.675 $\pm$ 0.002  $\chi^2$ /NDF: 338695.4/35

asym\_bcm\_dg\_us\_bcm\_an\_ds\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 75.086+/-80.352  $\chi^2/\text{NDF}$ : 7.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3.999+/-70.883  $\chi^2/\text{NDF}$ : 7.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

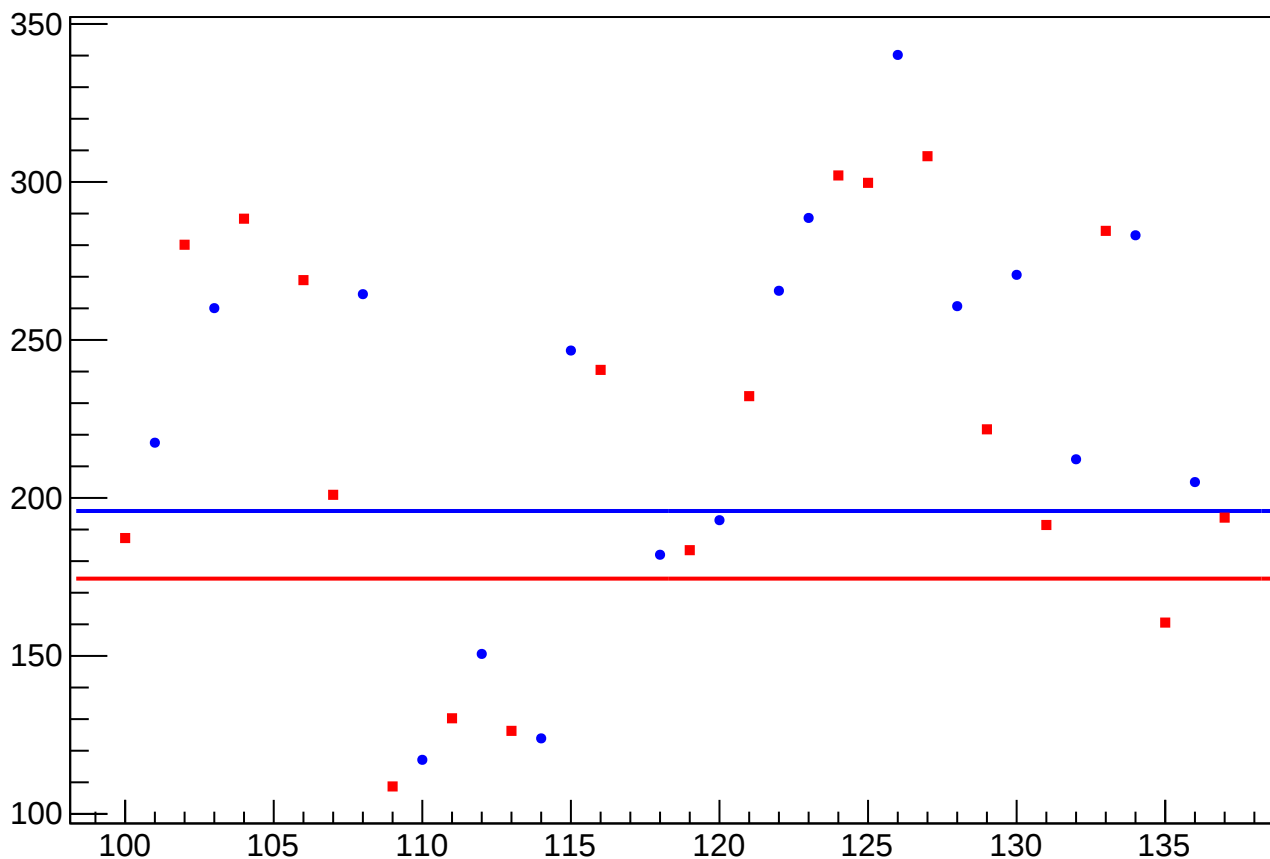
Right: 35.109+/-53.156  $\chi^2/\text{NDF}$ : 15.5/35

In: 75.086+/-80.352  $\chi^2/\text{NDF}$ : 7.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 35.109+/-53.156  $\chi^2/\text{NDF}$ : 15.5/35

asym\_bcm\_dg\_us\_bcm\_an\_ds\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 195.869+/-0.057  $\chi^2/\text{NDF}$ : 979247.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 174.465+/-0.050  $\chi^2/\text{NDF}$ : 1528778.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

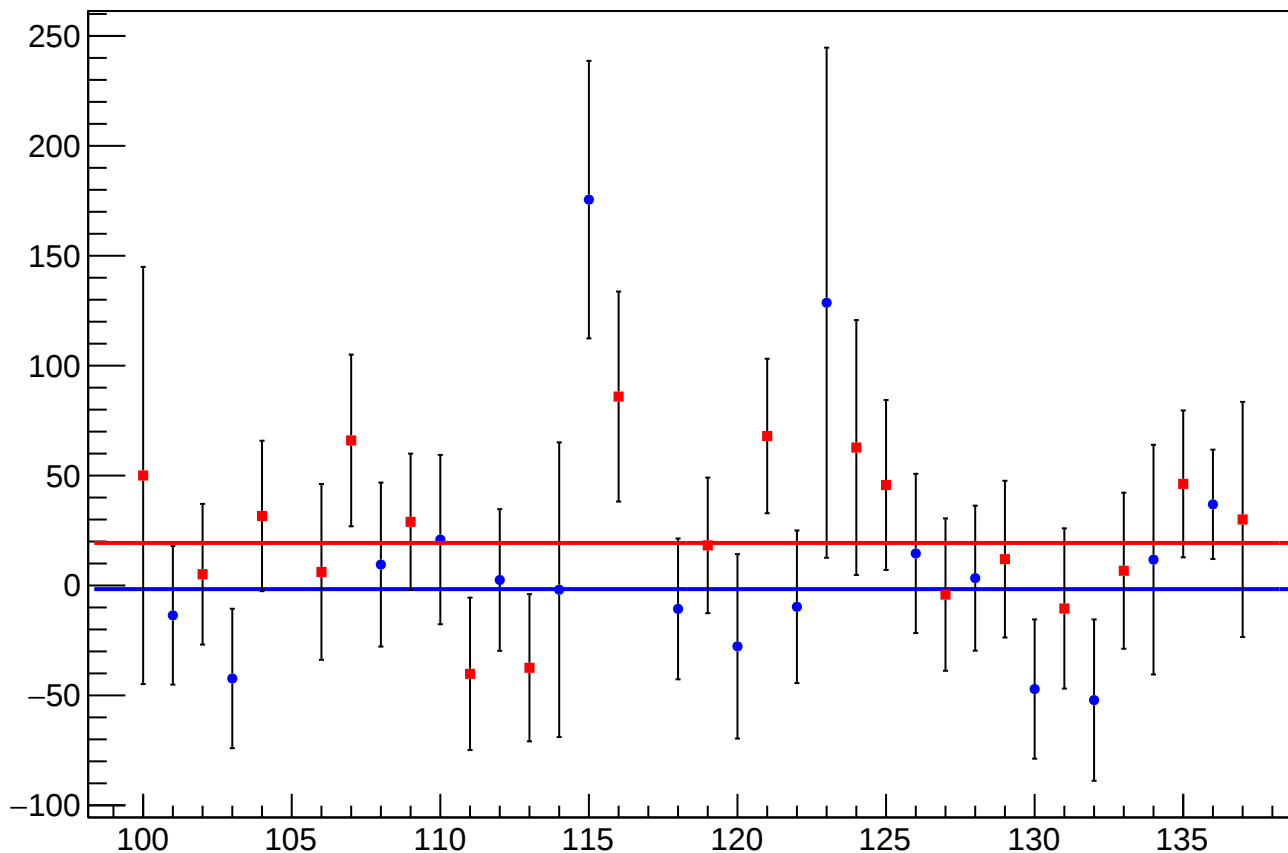
Right: 183.832+/-0.038  $\chi^2/\text{NDF}$ : 2587830.9/35

In: 195.869+/-0.057  $\chi^2/\text{NDF}$ :979247.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 183.832+/-0.038  $\chi^2/\text{NDF}$ : 2587830.9/35

asym\_bcm\_dg\_us\_bcm\_an\_ds\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: -1.654+/-8.881  $\chi^2/\text{NDF}$ : 18.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 19.357+/-8.556  $\chi^2/\text{NDF}$ : 14.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

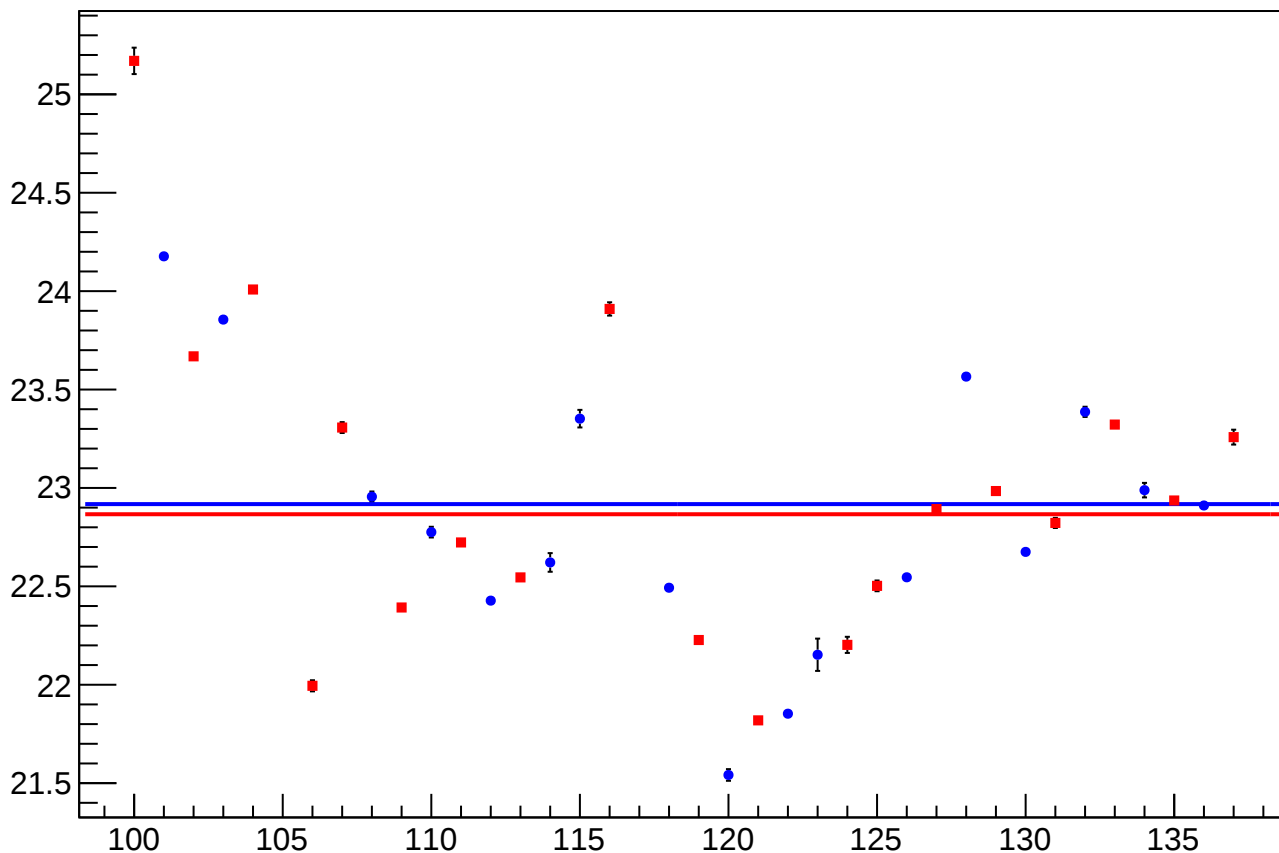
Right: 9.244+/-6.162  $\chi^2/\text{NDF}$ : 36.2/35

In: -1.654+/-8.881  $\chi^2/\text{NDF}$ : 18.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 9.244+/-6.162  $\chi^2/\text{NDF}$ : 36.2/35

asym\_bcm\_dg\_us\_bcm\_an\_ds\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 22.918+/-0.006  $\chi^2/\text{NDF}$ : 11472.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 22.866+/-0.006  $\chi^2/\text{NDF}$ : 11052.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

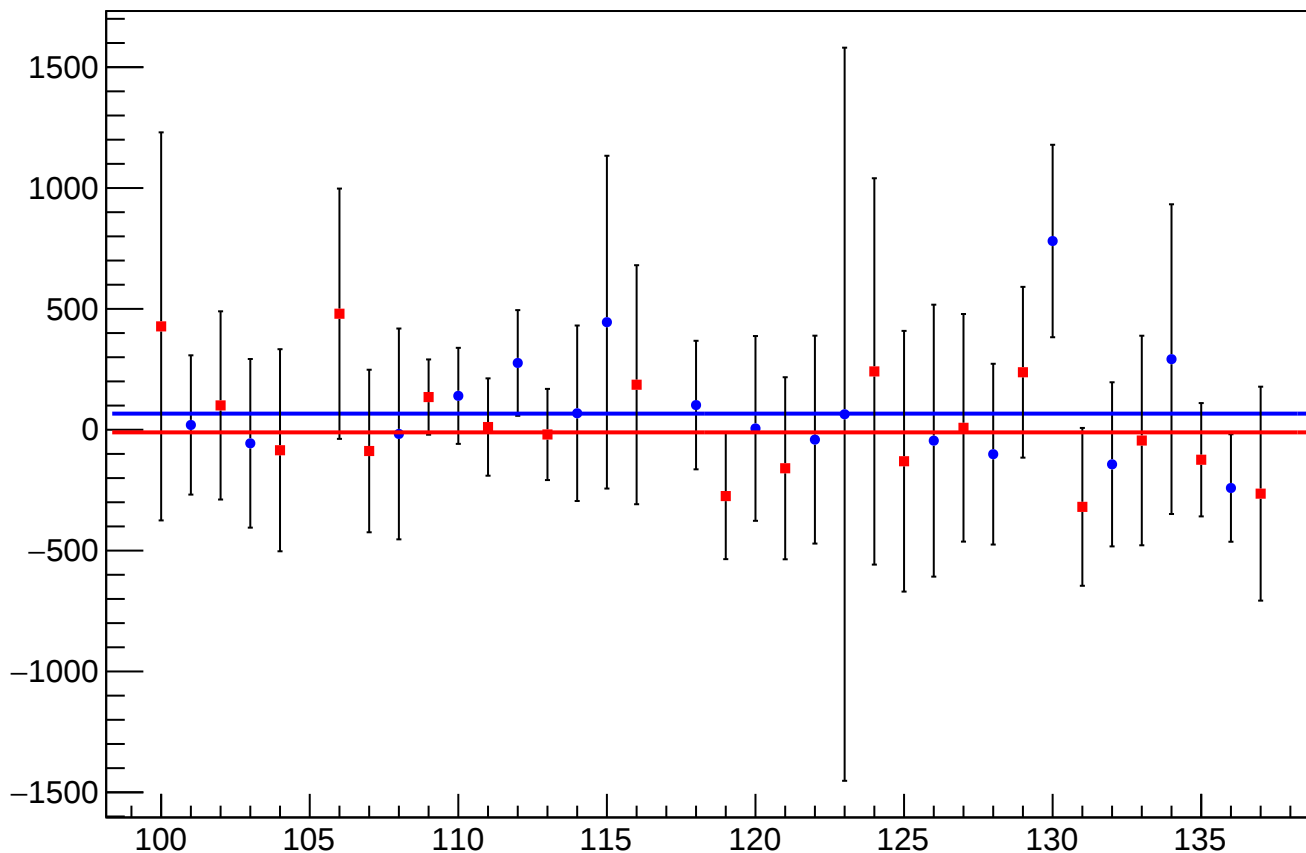
Right: 22.891+/-0.004  $\chi^2/\text{NDF}$ : 22559.6/35

In: 22.918+/-0.006  $\chi^2/\text{NDF}$ : 11472.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 22.891+/-0.004  $\chi^2/\text{NDF}$ : 22559.6/35

asym\_bcm\_dg\_ds\_bcm\_an\_ds\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 66.701+/-79.995  $\chi^2/\text{NDF}$ : 7.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -10.870+/-70.386  $\chi^2/\text{NDF}$ : 5.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

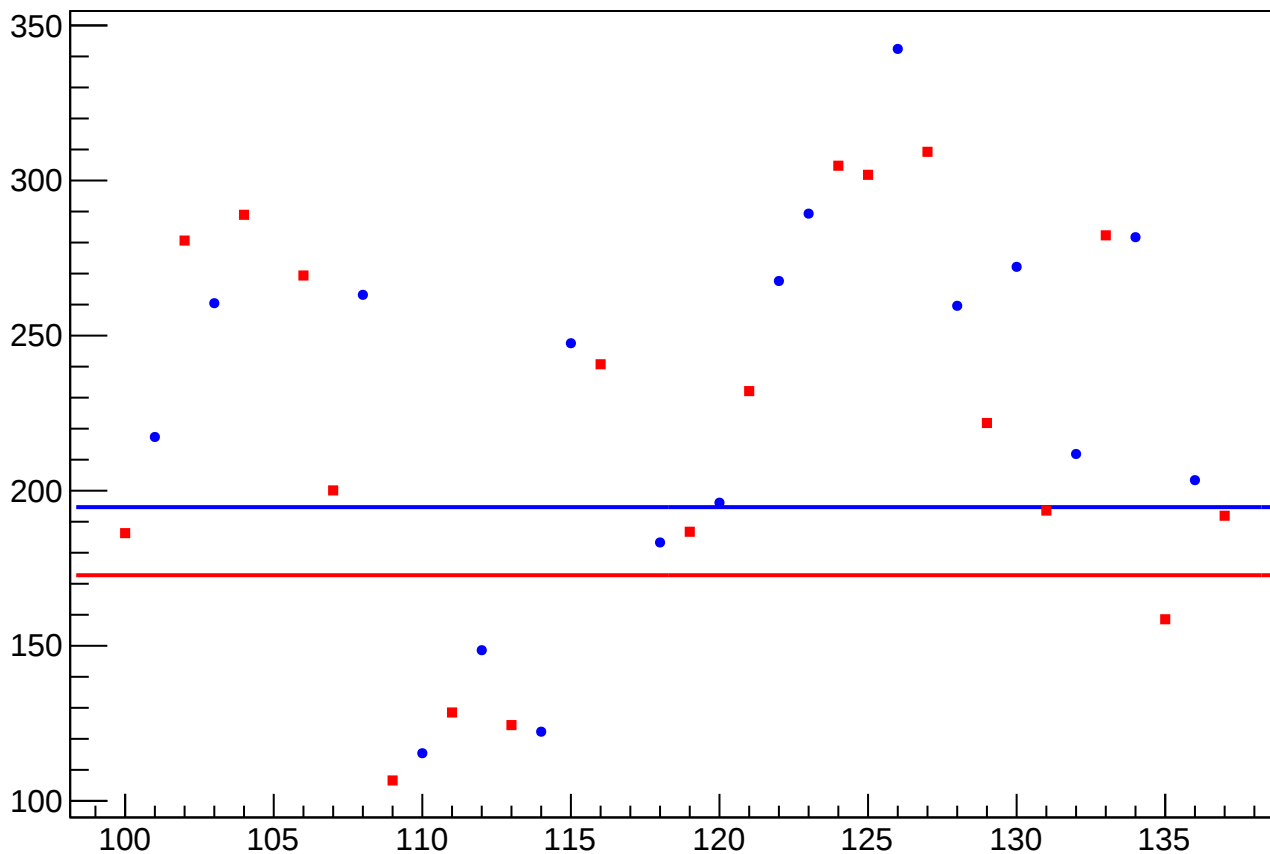
Right: 22.979+/-52.843  $\chi^2/\text{NDF}$ : 13.8/35

In: 66.701+/-79.995  $\chi^2/\text{NDF}$ : 7.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 22.979+/-52.843  $\chi^2/\text{NDF}$ : 13.8/35

asym\_bcm\_dg\_ds\_bcm\_an\_ds\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 194.703+/-0.057  $\chi^2/\text{NDF}$ : 1019872.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 172.753+/-0.050  $\chi^2/\text{NDF}$ : 1596944.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

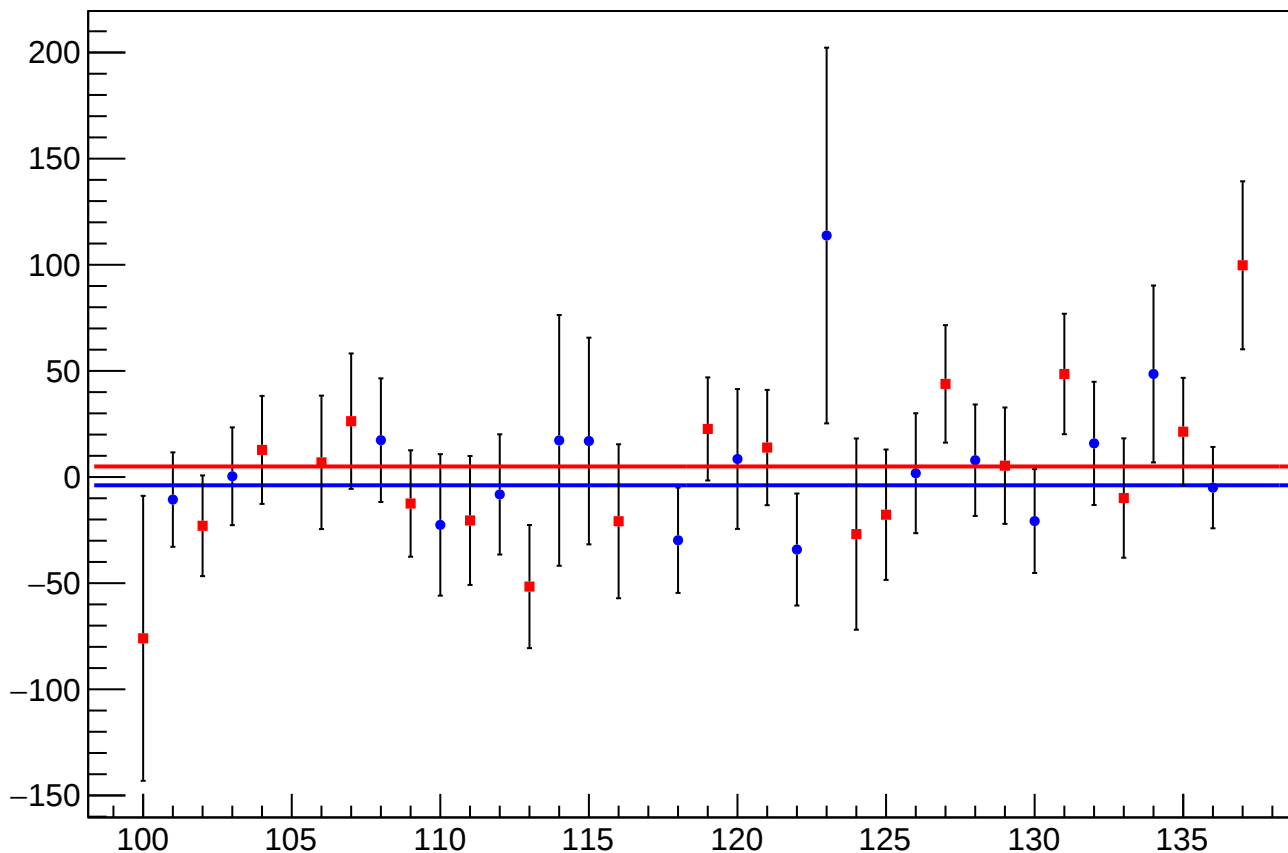
Right: 182.331+/-0.037  $\chi^2/\text{NDF}$ : 2701685.9/35

In: 194.703+/-0.057  $\chi^2/\text{NDF}$ : 1019872.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 182.331+/-0.037  $\chi^2/\text{NDF}$ : 2701685.9/35

asym\_bcm\_dg\_ds\_bcm\_an\_ds\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: -3.894+/-6.915  $\chi^2/\text{NDF}$ : 8.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 4.985+/-6.727  $\chi^2/\text{NDF}$ : 21.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

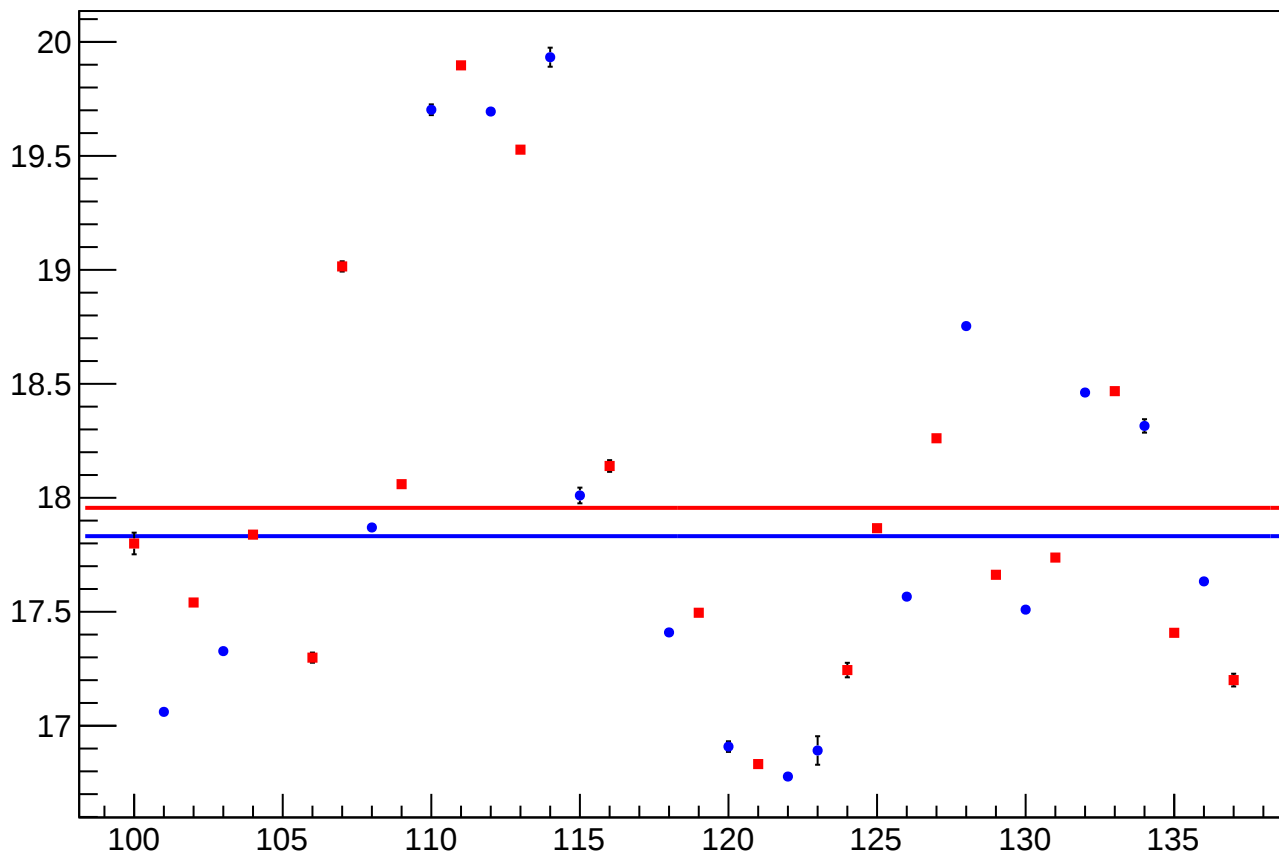
Right: 0.668+/-4.822  $\chi^2/\text{NDF}$ : 30.6/35

In: -3.894+/-6.915  $\chi^2/\text{NDF}$ : 8.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.668+/-4.822  $\chi^2/\text{NDF}$ : 30.6/35

asym\_bcm\_dg\_ds\_bcm\_an\_ds\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 17.832+/-0.005  $\chi^2$ /NDF: 30863.4/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 17.956+/-0.005  $\chi^2$ /NDF: 25448.9/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

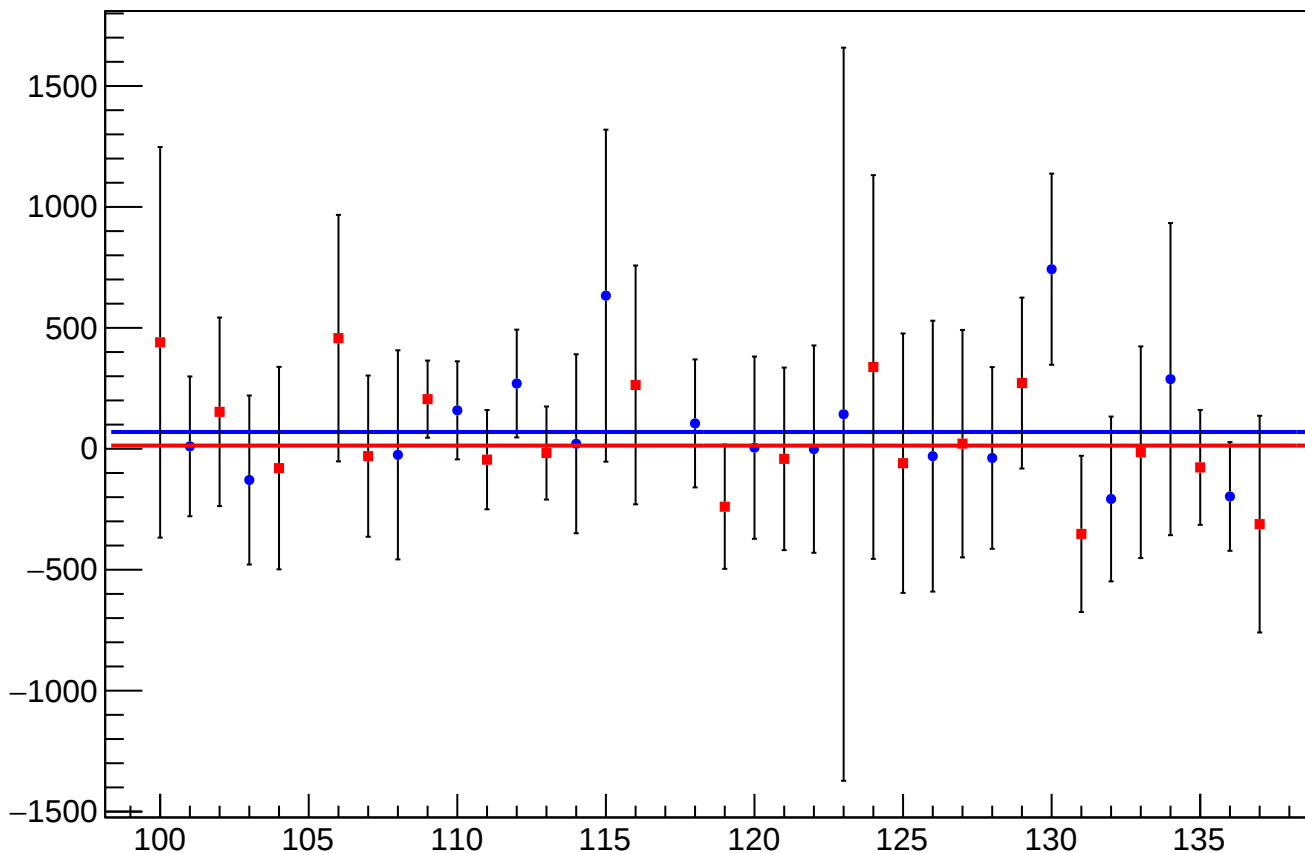
Right: 17.896+/-0.003  $\chi^2$ /NDF: 56643.8/35

In: 17.832+/-0.005  $\chi^2$ /NDF:30863.4/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 17.896+/-0.003  $\chi^2$ /NDF: 56643.8/35

asym\_bcm\_dg\_us\_bcm\_an\_us\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 69.511+/-80.550  $\chi^2/\text{NDF}$ : 7.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 13.410+/-71.041  $\chi^2/\text{NDF}$ : 6.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

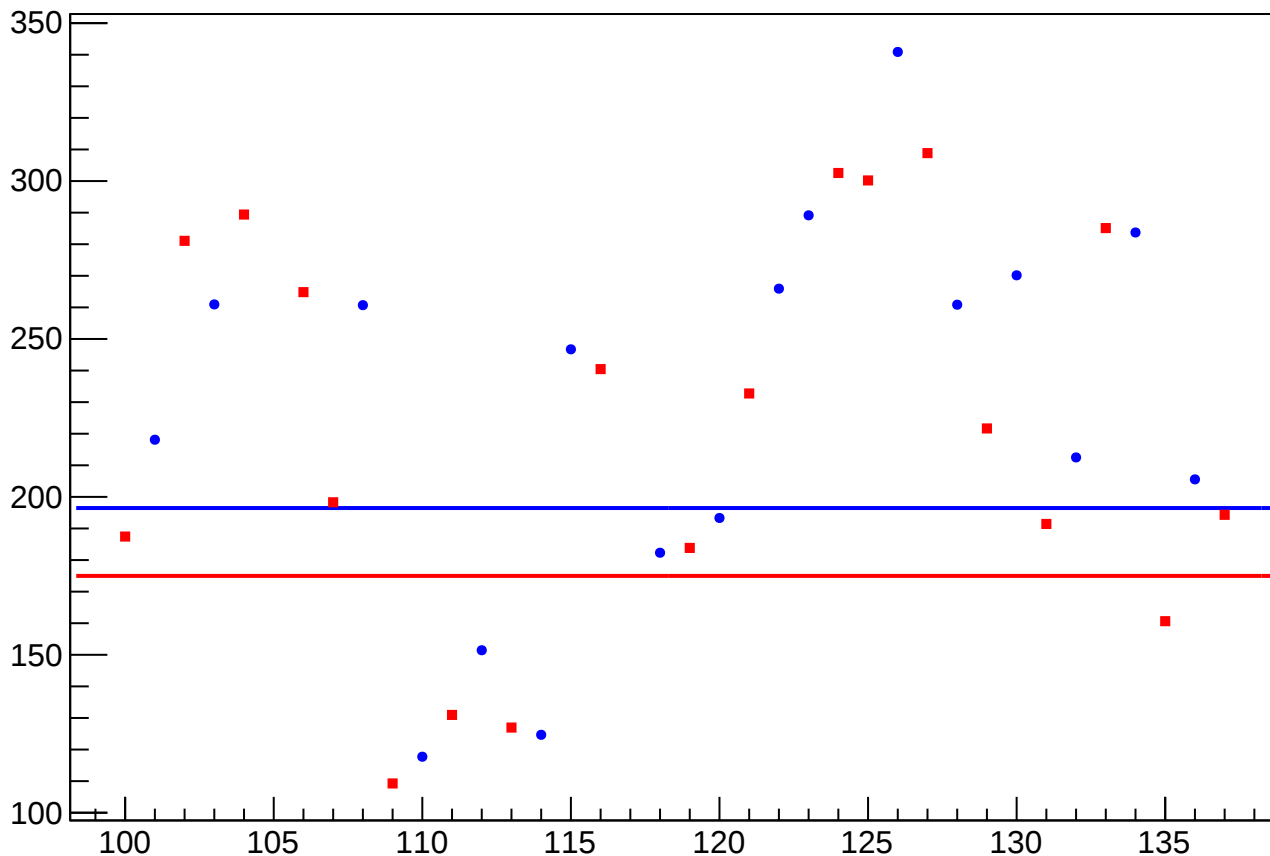
Right: 37.955+/-53.280  $\chi^2/\text{NDF}$ : 14.4/35

In: 69.511+/-80.550  $\chi^2/\text{NDF}$ : 7.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 37.955+/-53.280  $\chi^2/\text{NDF}$ : 14.4/35

asym\_bcm\_dg\_us\_bcm\_an\_us\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 196.470+/-0.057  $\chi^2/\text{NDF}$ : 964281.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 174.981+/-0.050  $\chi^2/\text{NDF}$ : 1511102.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

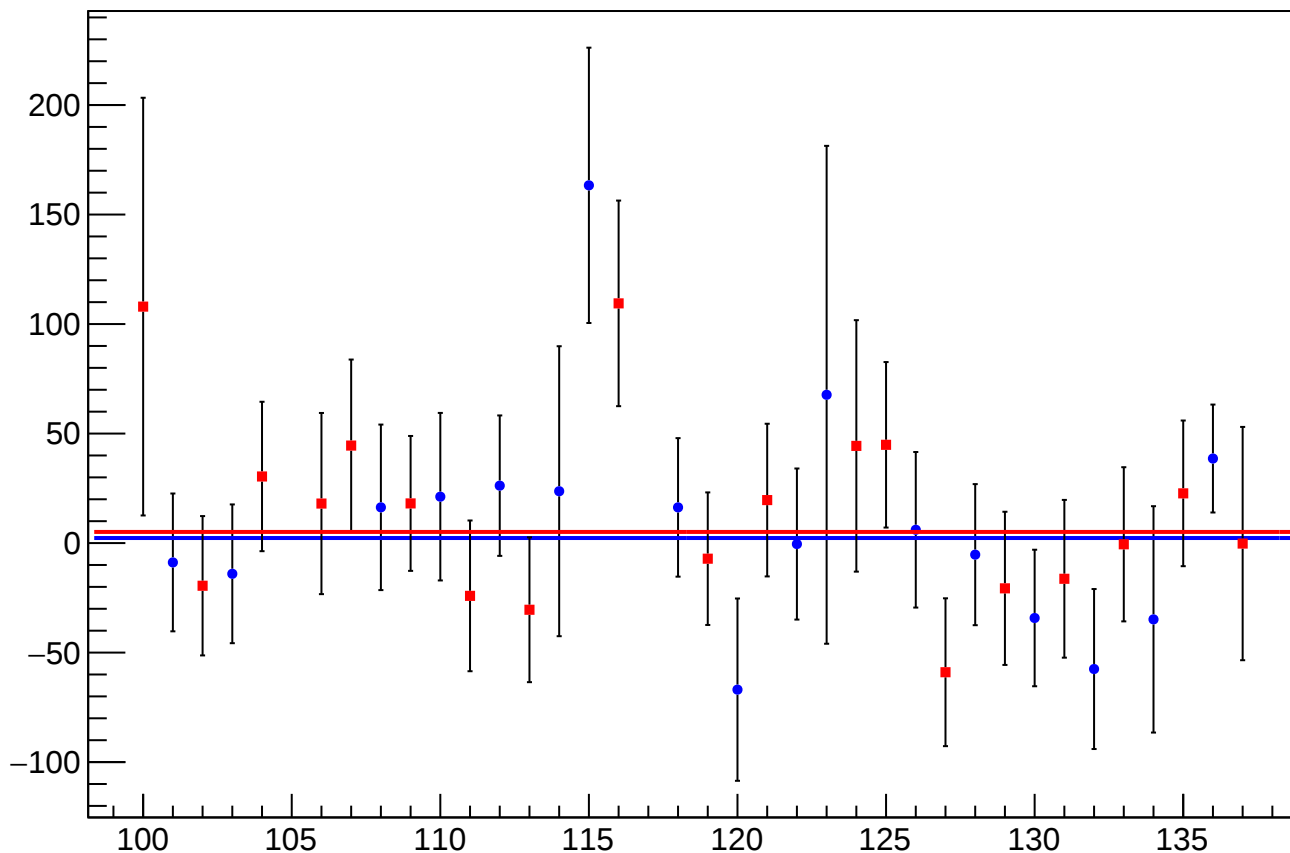
Right: 184.383+/-0.038  $\chi^2/\text{NDF}$ : 2555448.8/35

In: 196.470+/-0.057  $\chi^2/\text{NDF}$ :964281.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 184.383+/-0.038  $\chi^2/\text{NDF}$ : 2555448.8/35

asym\_bcm\_dg\_us\_bcm\_an\_us\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: 2.307+/-8.805  $\chi^2/\text{NDF}$ : 18.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 5.089+/-8.479  $\chi^2/\text{NDF}$ : 17.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

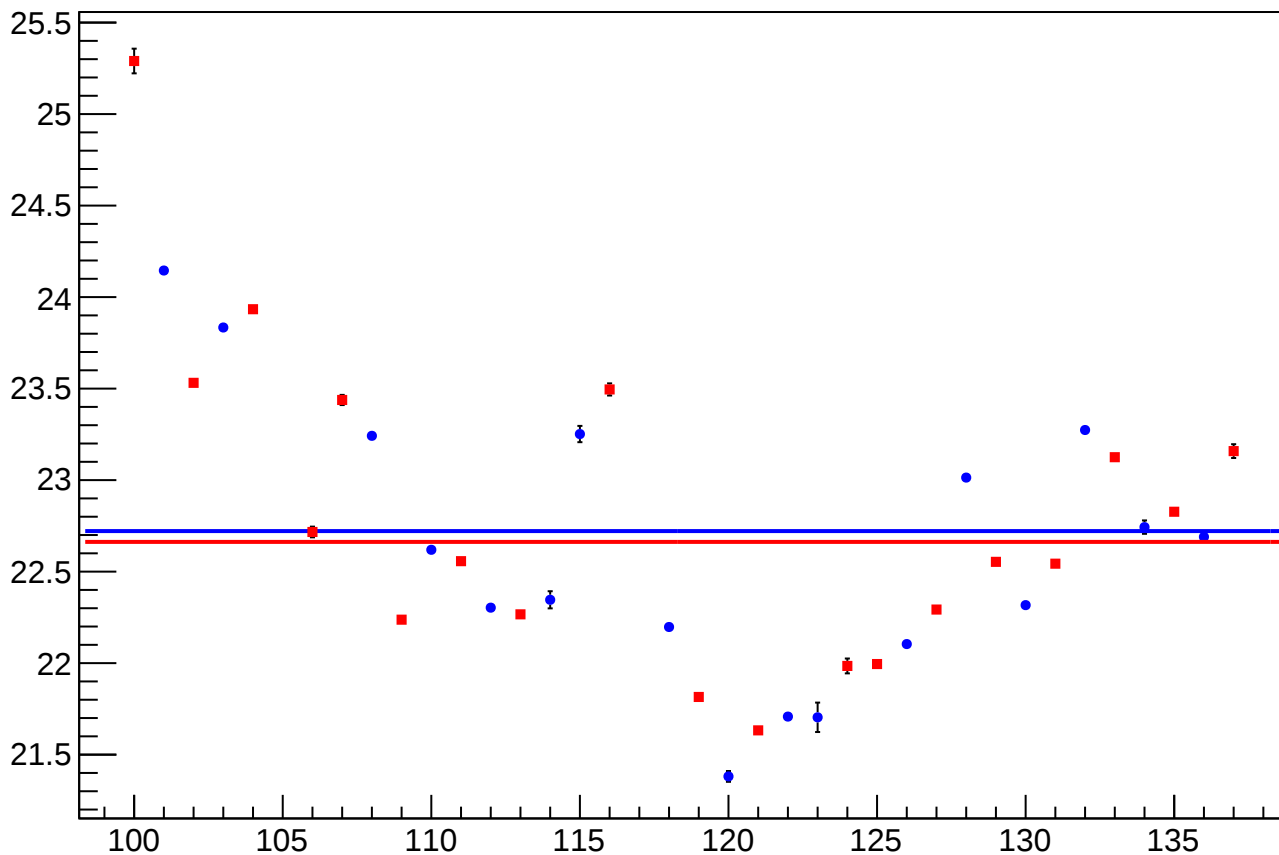
Right: 3.750+/-6.108  $\chi^2/\text{NDF}$ : 35.3/35

In: 2.307+/-8.805  $\chi^2/\text{NDF}$ : 18.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.750+/-6.108  $\chi^2/\text{NDF}$ : 35.3/35

asym\_bcm\_dg\_us\_bcm\_an\_us\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 22.722 $\pm$ 0.006  $\chi^2$ /NDF: 13580.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 22.662 $\pm$ 0.006  $\chi^2$ /NDF: 12955.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

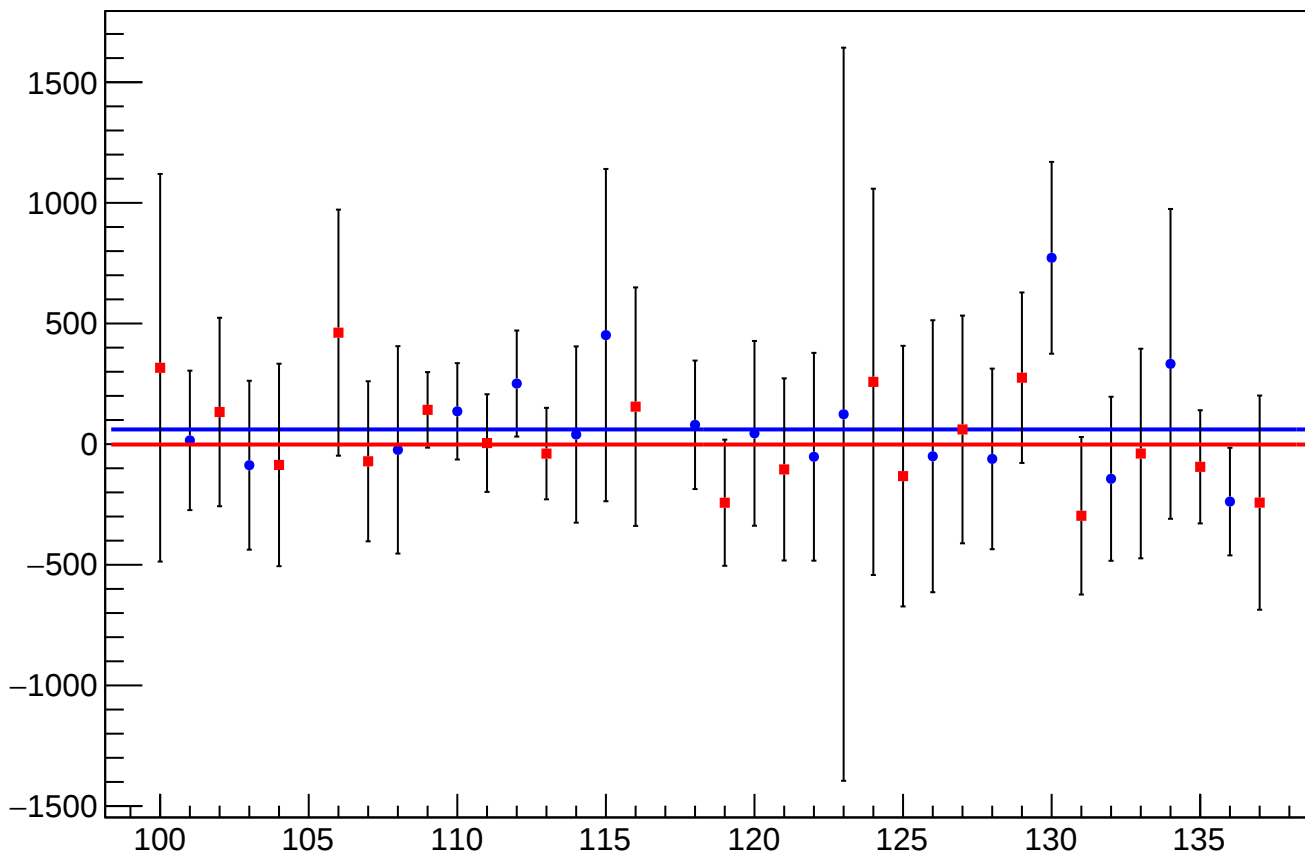
Right: 22.691 $\pm$ 0.004  $\chi^2$ /NDF: 26582.8/35

In: 22.722 $\pm$ 0.006  $\chi^2$ /NDF:13580.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 22.691 $\pm$ 0.004  $\chi^2$ /NDF: 26582.8/35

asym\_bcm\_dg\_ds\_bcm\_an\_us\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 60.960+/-80.197  $\chi^2/\text{NDF}$ : 7.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1.647+/-70.549  $\chi^2/\text{NDF}$ : 5.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

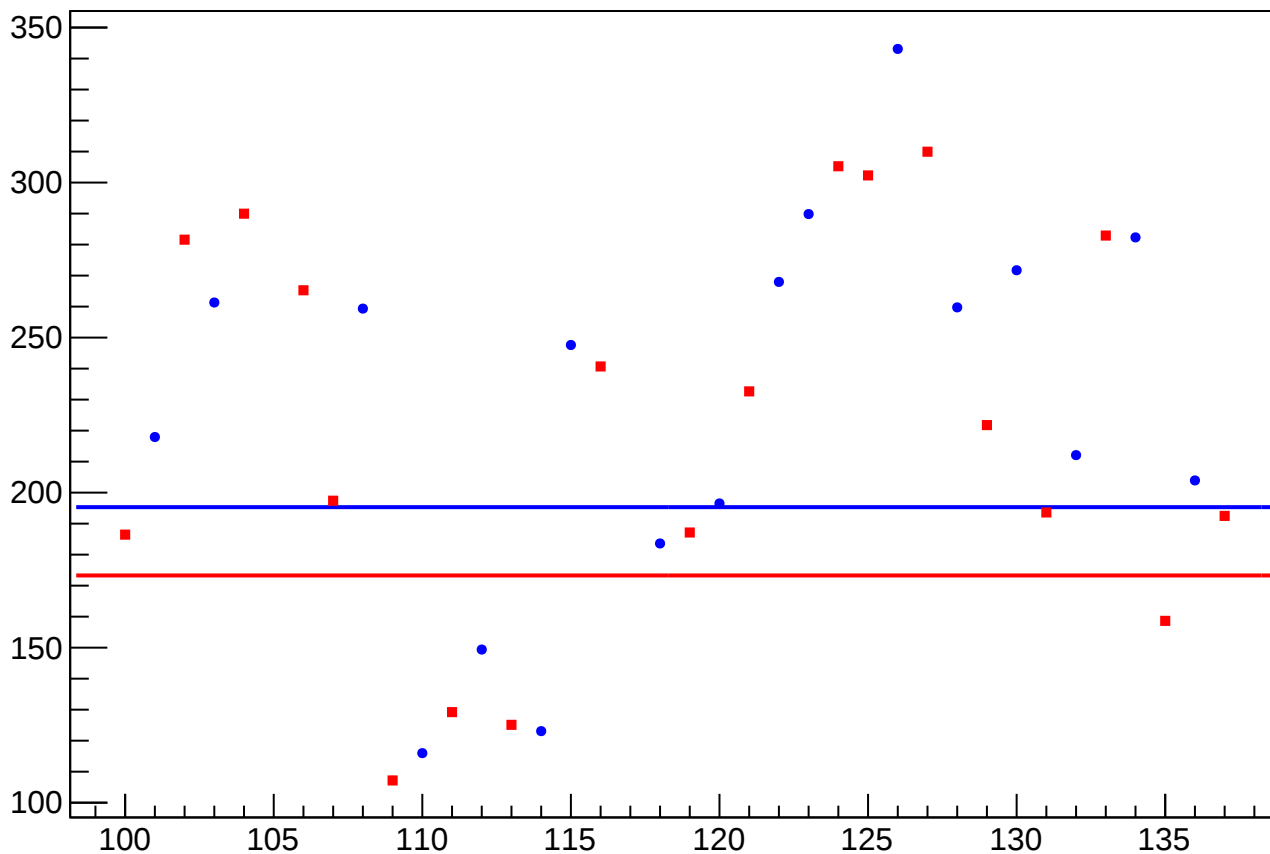
Right: 25.666+/-52.970  $\chi^2/\text{NDF}$ : 12.7/35

In: 60.960+/-80.197  $\chi^2/\text{NDF}$ : 7.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 25.666+/-52.970  $\chi^2/\text{NDF}$ : 12.7/35

asym\_bcm\_dg\_ds\_bcm\_an\_us\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 195.316+/-0.057  $\chi^2/\text{NDF}$ : 1004211.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 173.285+/-0.050  $\chi^2/\text{NDF}$ : 1578382.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

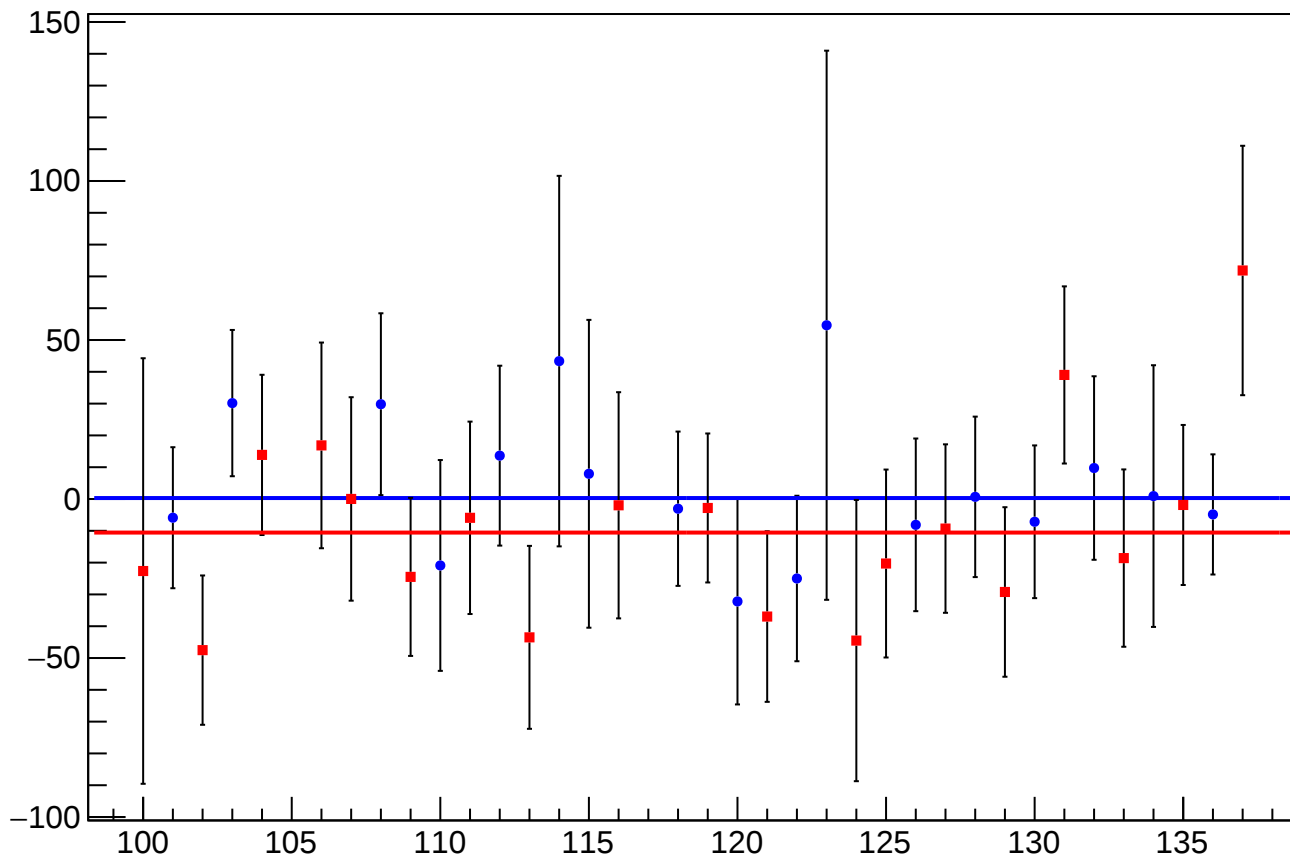
Right: 182.896+/-0.037  $\chi^2/\text{NDF}$ : 2667678.3/35

In: 195.316+/-0.057  $\chi^2/\text{NDF}$ : 1004211.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 182.896+/-0.037  $\chi^2/\text{NDF}$ : 2667678.3/35

asym\_bcm\_dg\_ds\_bcm\_an\_us\_agg\_dd\_mean vs Slug, Sign Corrected



Right In:  $0.305 \pm 6.812$   $\chi^2/\text{NDF}$ : 6.8/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-10.553 \pm 6.628$   $\chi^2/\text{NDF}$ : 16.0/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

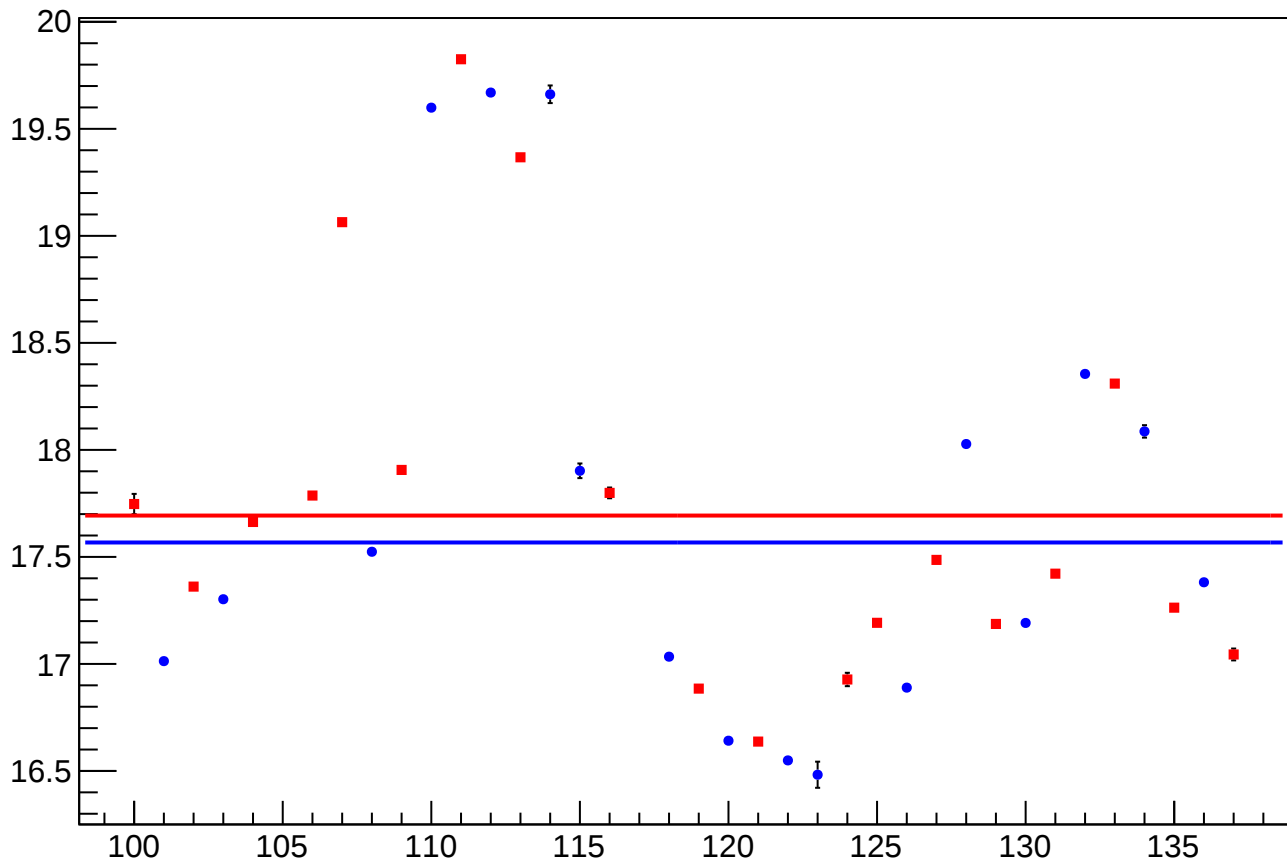
Right:  $-5.273 \pm 4.751$   $\chi^2/\text{NDF}$ : 24.1/35

In:  $0.305 \pm 6.812$   $\chi^2/\text{NDF}$ : 6.8/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-5.273 \pm 4.751$   $\chi^2/\text{NDF}$ : 24.1/35

asym\_bcm\_dg\_ds\_bcm\_an\_us\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 17.567 $\pm$ 0.005  $\chi^2$ /NDF: 33145.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 17.693 $\pm$ 0.005  $\chi^2$ /NDF: 30767.1/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

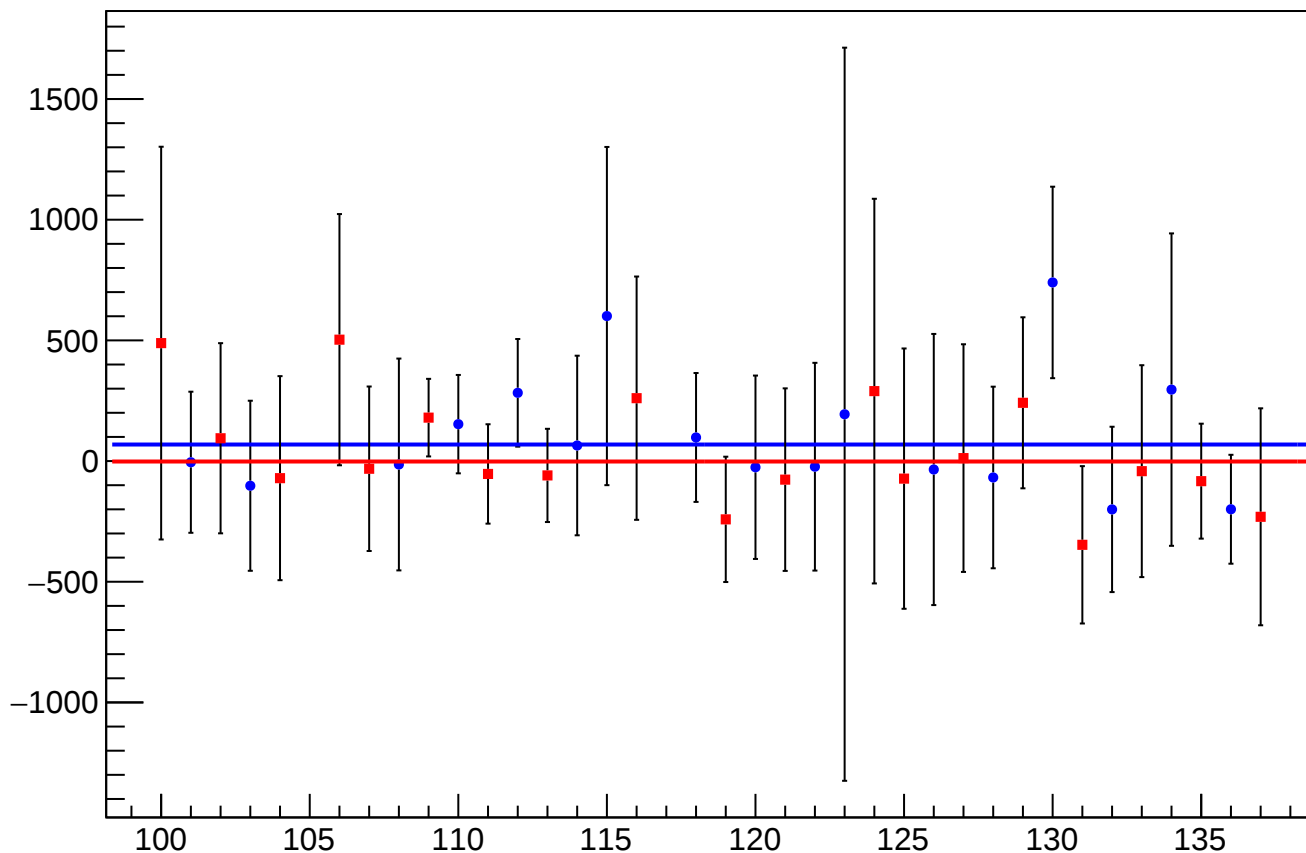
Right: 17.632 $\pm$ 0.003  $\chi^2$ /NDF: 64262.5/35

In: 17.567 $\pm$ 0.005  $\chi^2$ /NDF:33145.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 17.632 $\pm$ 0.003  $\chi^2$ /NDF: 64262.5/35

asym\_bcm\_dg\_us\_bcm\_dg\_ds\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 68.553+/-81.018  $\chi^2/\text{NDF}$ : 7.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1.831+/-71.538  $\chi^2/\text{NDF}$ : 6.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

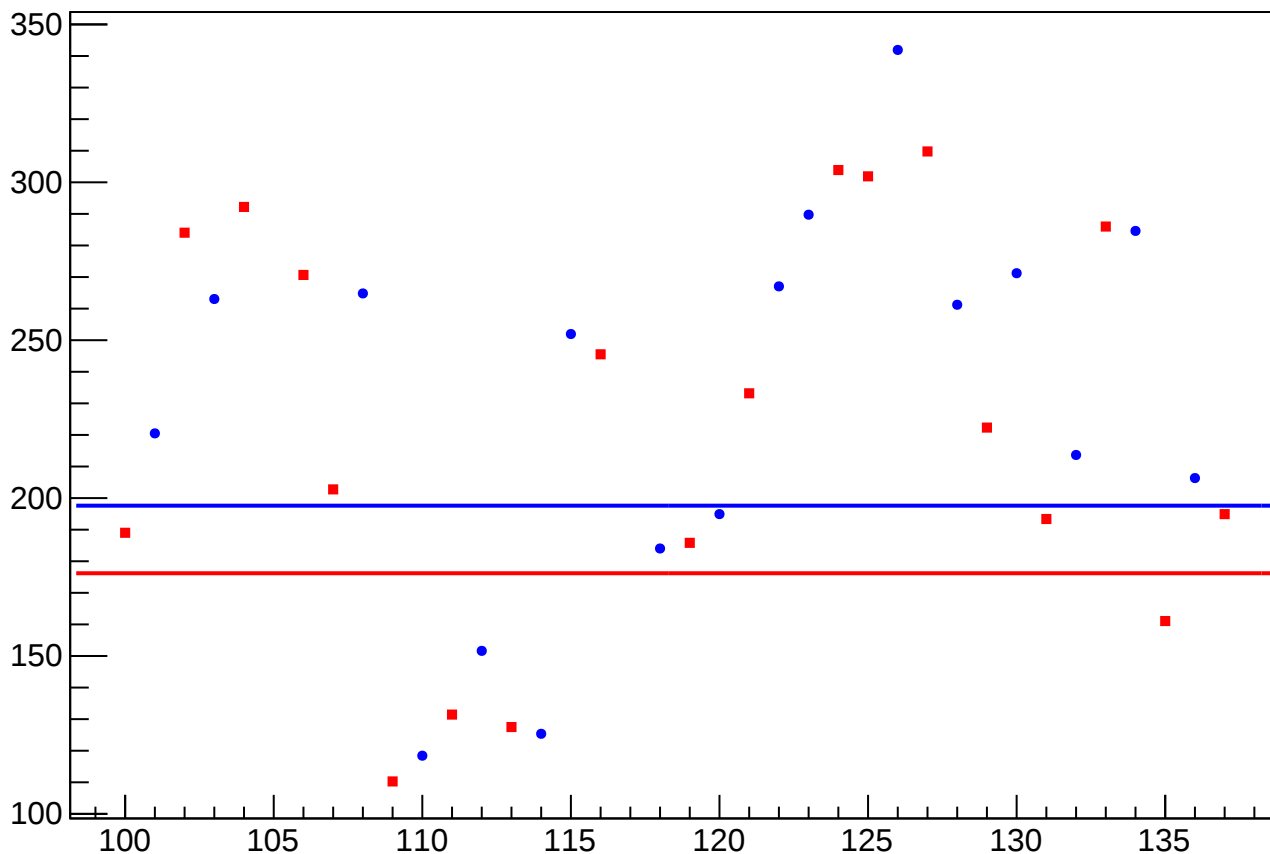
Right: 29.004+/-53.625  $\chi^2/\text{NDF}$ : 13.9/35

In: 68.553+/-81.018  $\chi^2/\text{NDF}$ : 7.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 29.004+/-53.625  $\chi^2/\text{NDF}$ : 13.9/35

asym\_bcm\_dg\_us\_bcm\_dg\_ds\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 197.603+/-0.057  $\chi^2/\text{NDF}$ : 968827.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 176.201+/-0.051  $\chi^2/\text{NDF}$ : 1519832.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

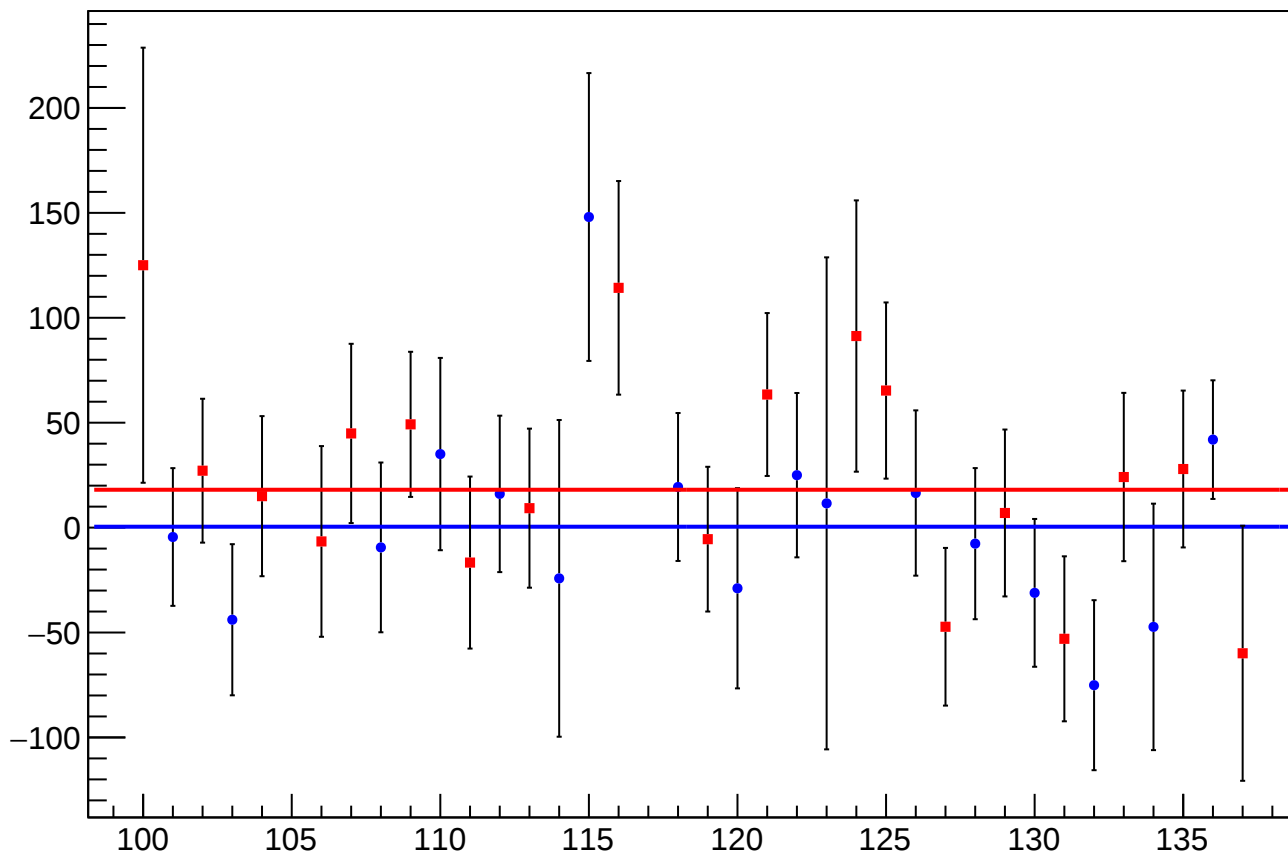
Right: 185.577+/-0.038  $\chi^2/\text{NDF}$ : 2567082.7/35

In: 197.603+/-0.057  $\chi^2/\text{NDF}$ :968827.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 185.577+/-0.038  $\chi^2/\text{NDF}$ : 2567082.7/35

asym\_bcm\_dg\_us\_bcm\_dg\_ds\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: 0.427+/-9.884  $\chi^2/\text{NDF}$ : 15.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 18.044+/-9.499  $\chi^2/\text{NDF}$ : 19.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

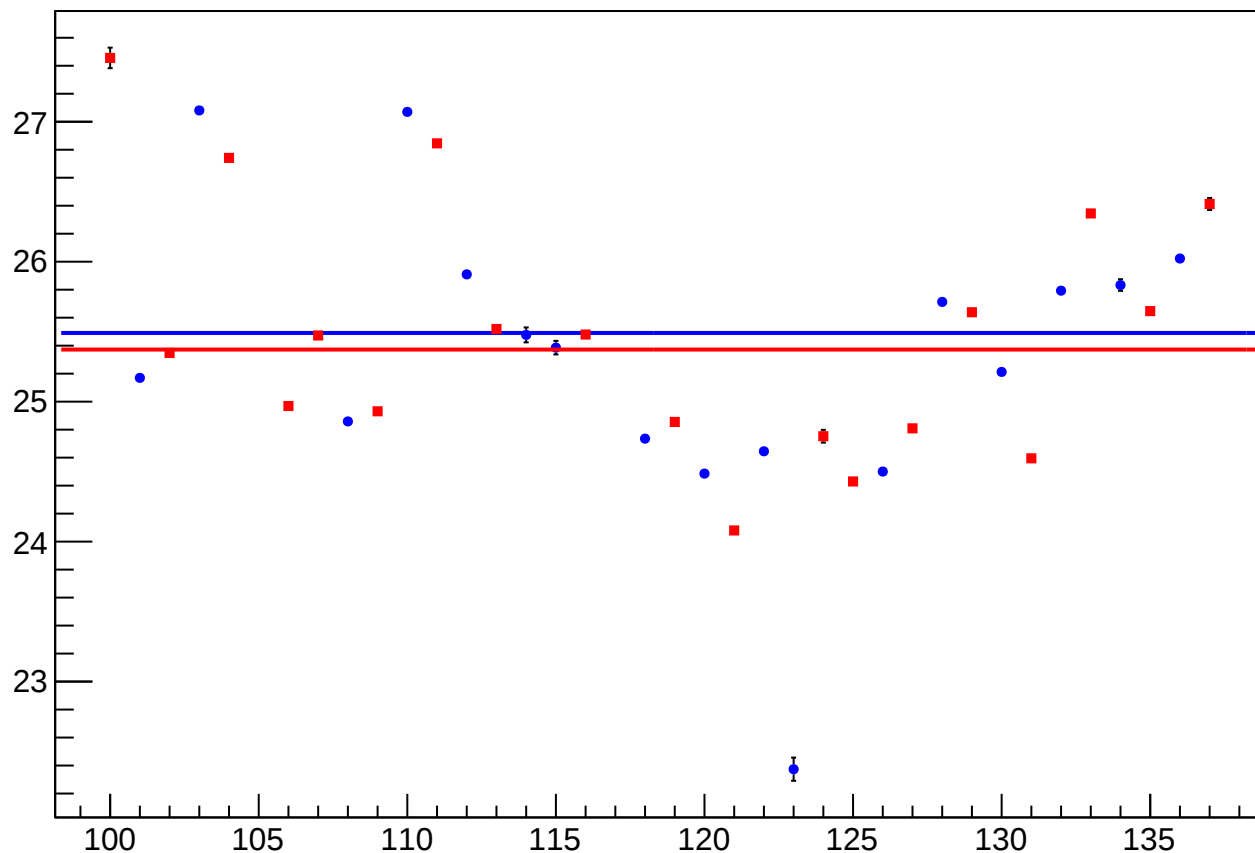
Right: 9.585+/-6.849  $\chi^2/\text{NDF}$ : 36.6/35

In: 0.427+/-9.884  $\chi^2/\text{NDF}$ : 15.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 9.585+/-6.849  $\chi^2/\text{NDF}$ : 36.6/35

asym\_bcm\_dg\_us\_bcm\_dg\_ds\_agg\_dd\_rms vs Slug, Sign Corrected



Right In:  $25.491 \pm 0.007$   $\chi^2/\text{NDF}: 13713.0/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $25.372 \pm 0.007$   $\chi^2/\text{NDF}: 13550.5/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

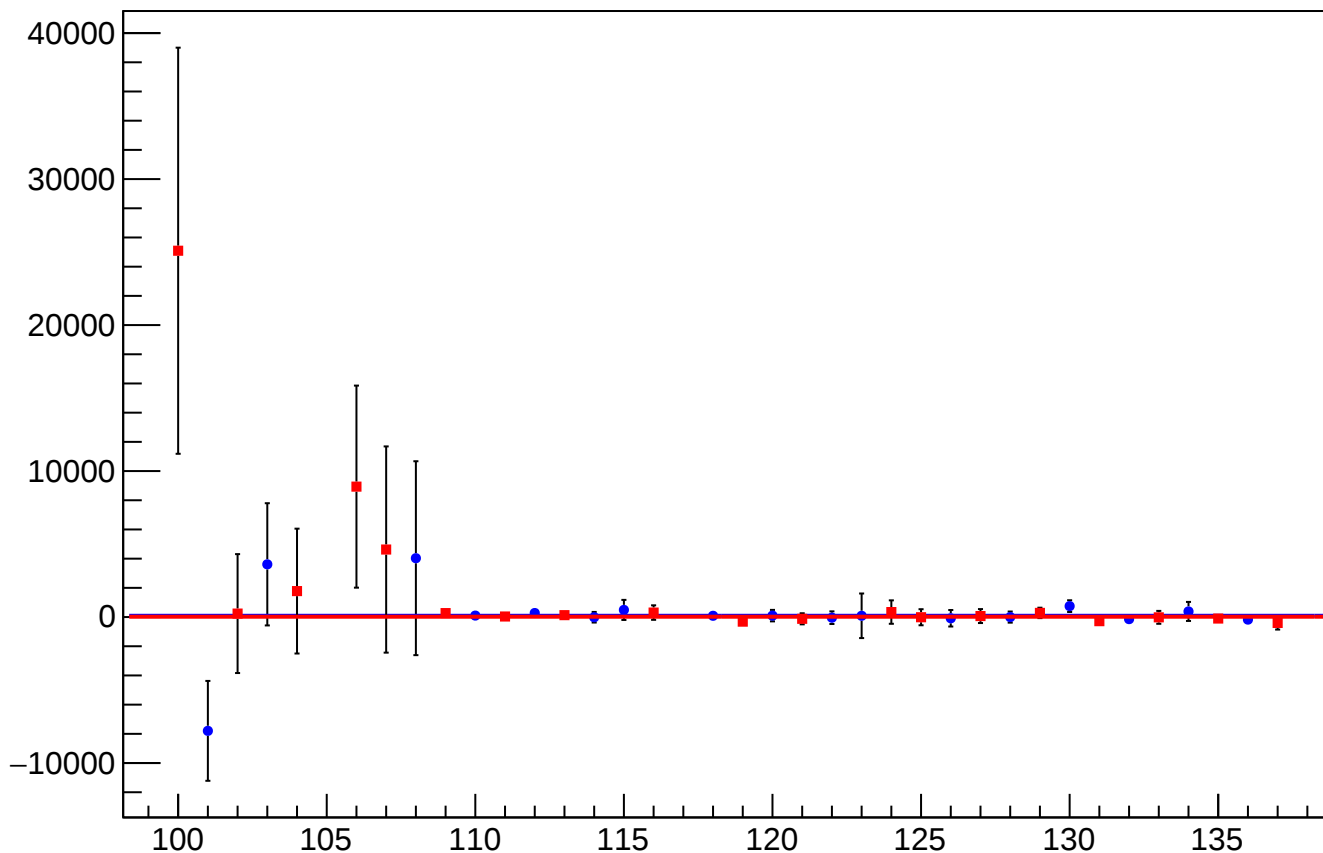
Right:  $25.429 \pm 0.005$   $\chi^2/\text{NDF}: 27413.4/35$

In:  $25.491 \pm 0.007$   $\chi^2/\text{NDF}: 13713.0/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $25.429 \pm 0.005$   $\chi^2/\text{NDF}: 27413.4/35$

asym\_bcm\_cav4cQ\_bcm\_an\_us\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 86.558+/-88.423  $\chi^2/\text{NDF}$ : 12.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 23.352+/-80.948  $\chi^2/\text{NDF}$ : 11.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

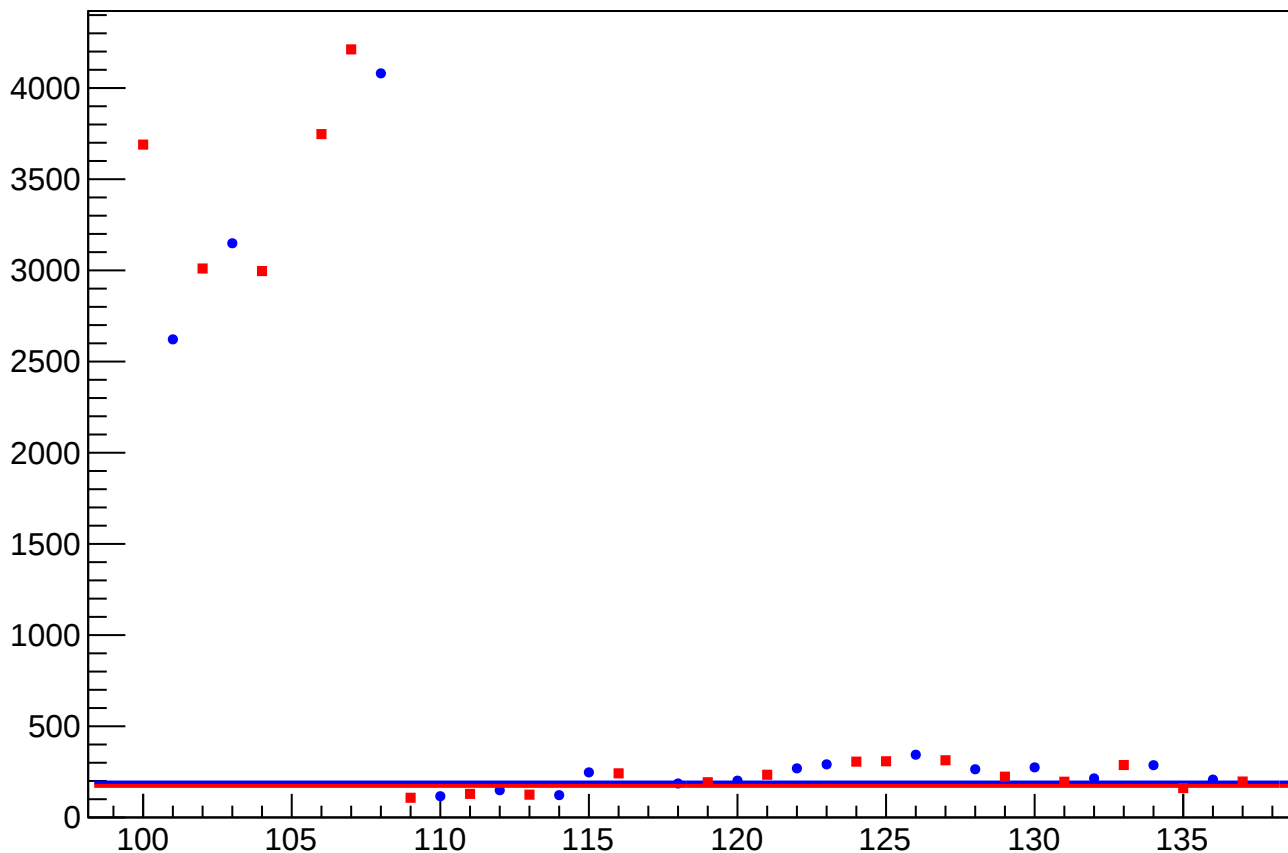
Right: 52.171+/-59.707  $\chi^2/\text{NDF}$ : 24.7/35

In: 86.558+/-88.423  $\chi^2/\text{NDF}$ : 12.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 52.171+/-59.707  $\chi^2/\text{NDF}$ : 24.7/35

asym\_bcm\_cav4cQ\_bcm\_an\_us\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 191.478+/-0.063  $\chi^2/\text{NDF}$ : 3573154.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 173.297+/-0.057  $\chi^2/\text{NDF}$ : 4207424.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

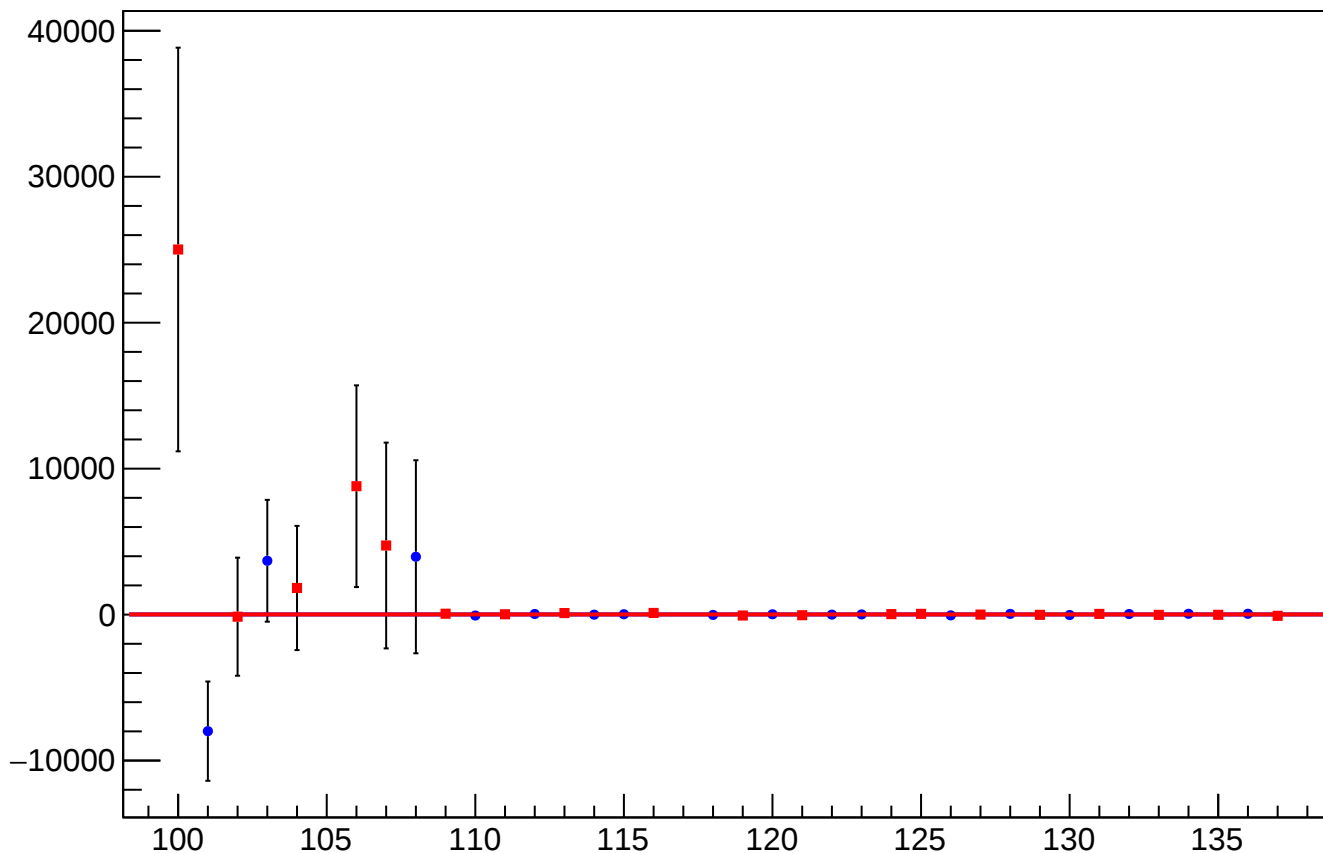
Right: 181.587+/-0.042  $\chi^2/\text{NDF}$ : 7826577.3/35

In: 191.478+/-0.063  $\chi^2/\text{NDF}$ : 3573154.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 181.587+/-0.042  $\chi^2/\text{NDF}$ : 7826577.3/35

asym\_bcm\_cav4cQ\_bcm\_an\_us\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: 10.286+/-12.282  $\chi^2/\text{NDF}$ : 18.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 12.668+/-12.232  $\chi^2/\text{NDF}$ : 24.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

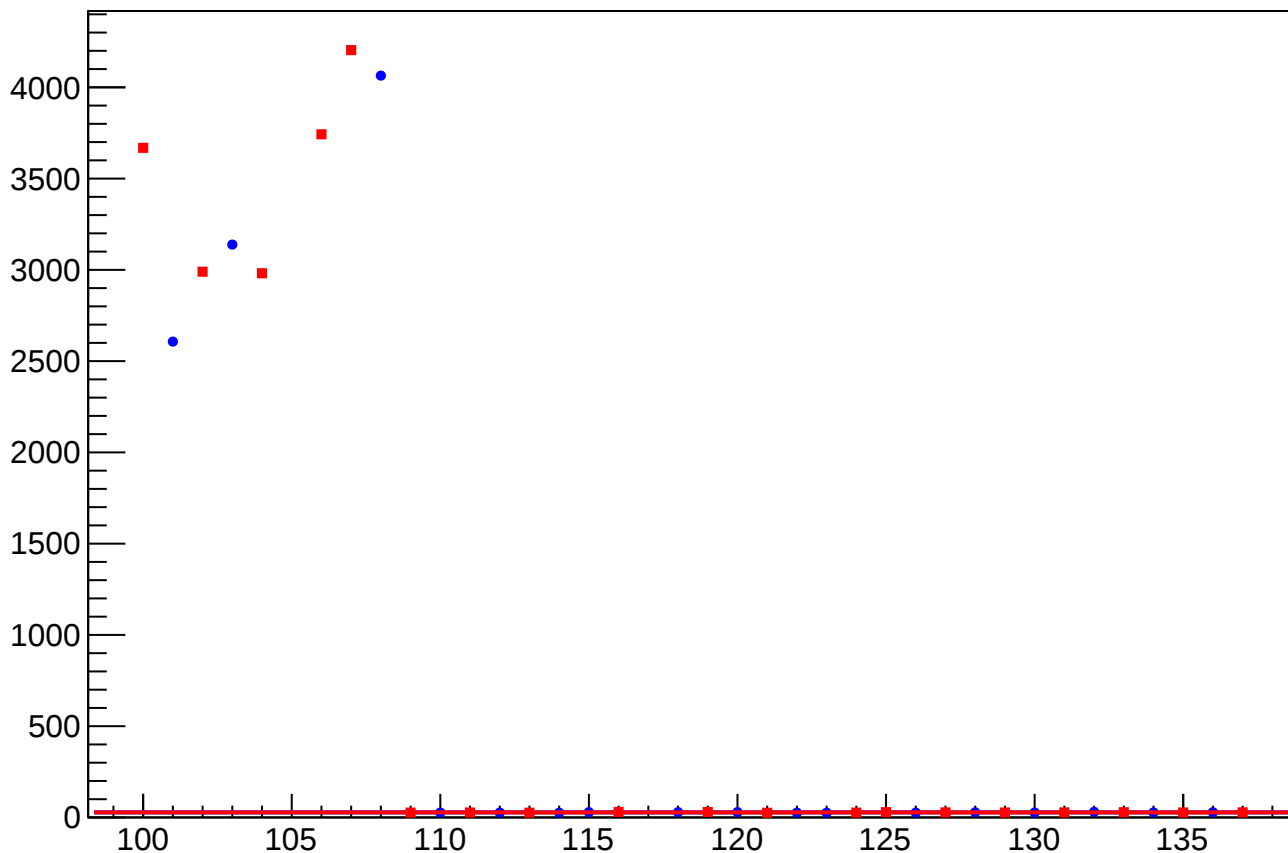
Right: 11.482+/-8.667  $\chi^2/\text{NDF}$ : 43.2/35

In: 10.286+/-12.282  $\chi^2/\text{NDF}$ : 18.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 11.482+/-8.667  $\chi^2/\text{NDF}$ : 43.2/35

asym\_bcm\_cav4cQ\_bcm\_an\_us\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 27.855+/-0.009  $\chi^2/\text{NDF}$ : 3027666.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 27.695+/-0.009  $\chi^2/\text{NDF}$ : 3476852.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

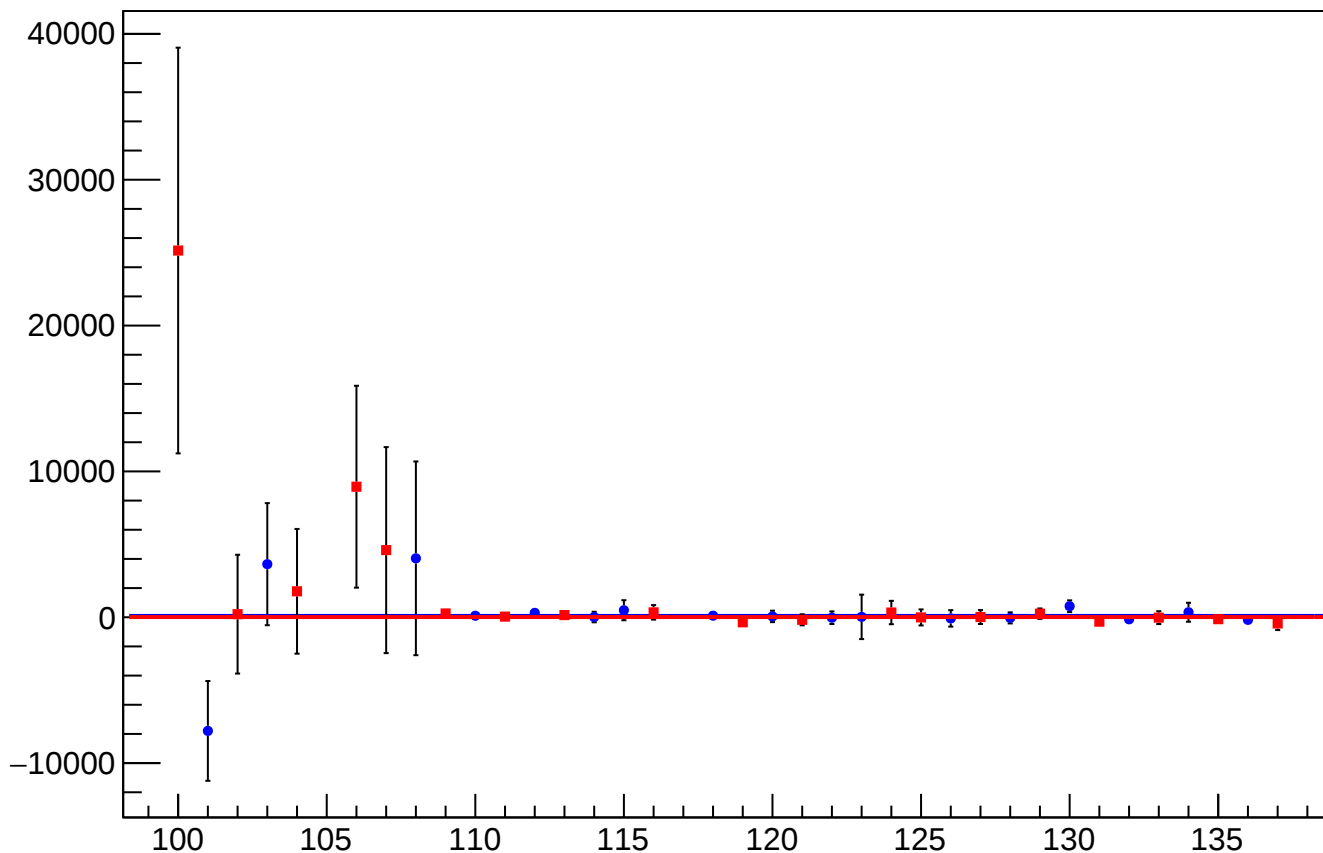
Right: 27.774+/-0.006  $\chi^2/\text{NDF}$ : 6504689.9/35

In: 27.855+/-0.009  $\chi^2/\text{NDF}$ : 3027666.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 27.774+/-0.006  $\chi^2/\text{NDF}$ : 6504689.9/35

asym\_bcm\_cav4cQ\_bcm\_an\_ds\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 90.773+/-88.149  $\chi^2/\text{NDF}$ : 12.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 13.341+/-80.686  $\chi^2/\text{NDF}$ : 12.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

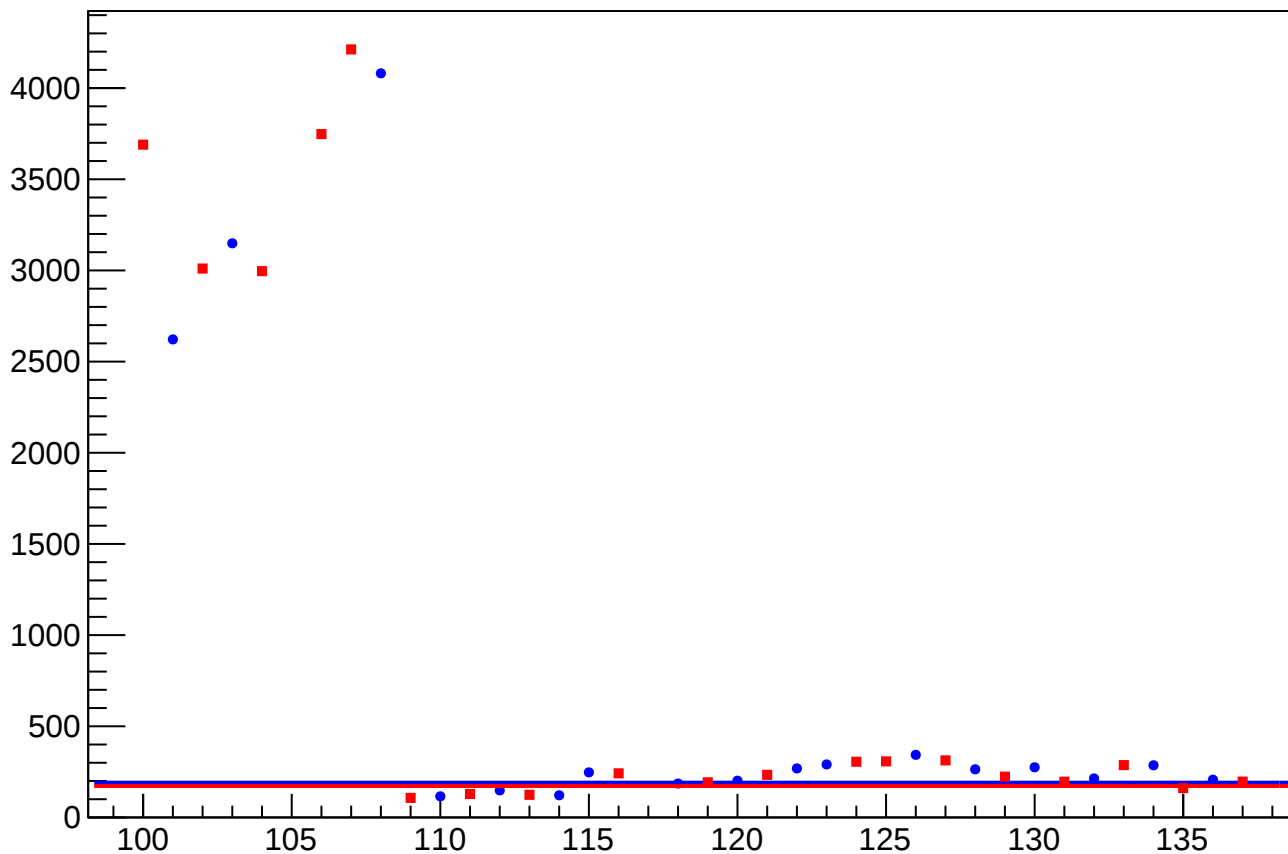
Right: 48.642+/-59.518  $\chi^2/\text{NDF}$ : 25.9/35

In: 90.773+/-88.149  $\chi^2/\text{NDF}$ : 12.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 48.642+/-59.518  $\chi^2/\text{NDF}$ : 25.9/35

asym\_bcm\_cav4cQ\_bcm\_an\_ds\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 190.770+/-0.062  $\chi^2/\text{NDF}$ : 3585034.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 172.629+/-0.057  $\chi^2/\text{NDF}$ : 4218625.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

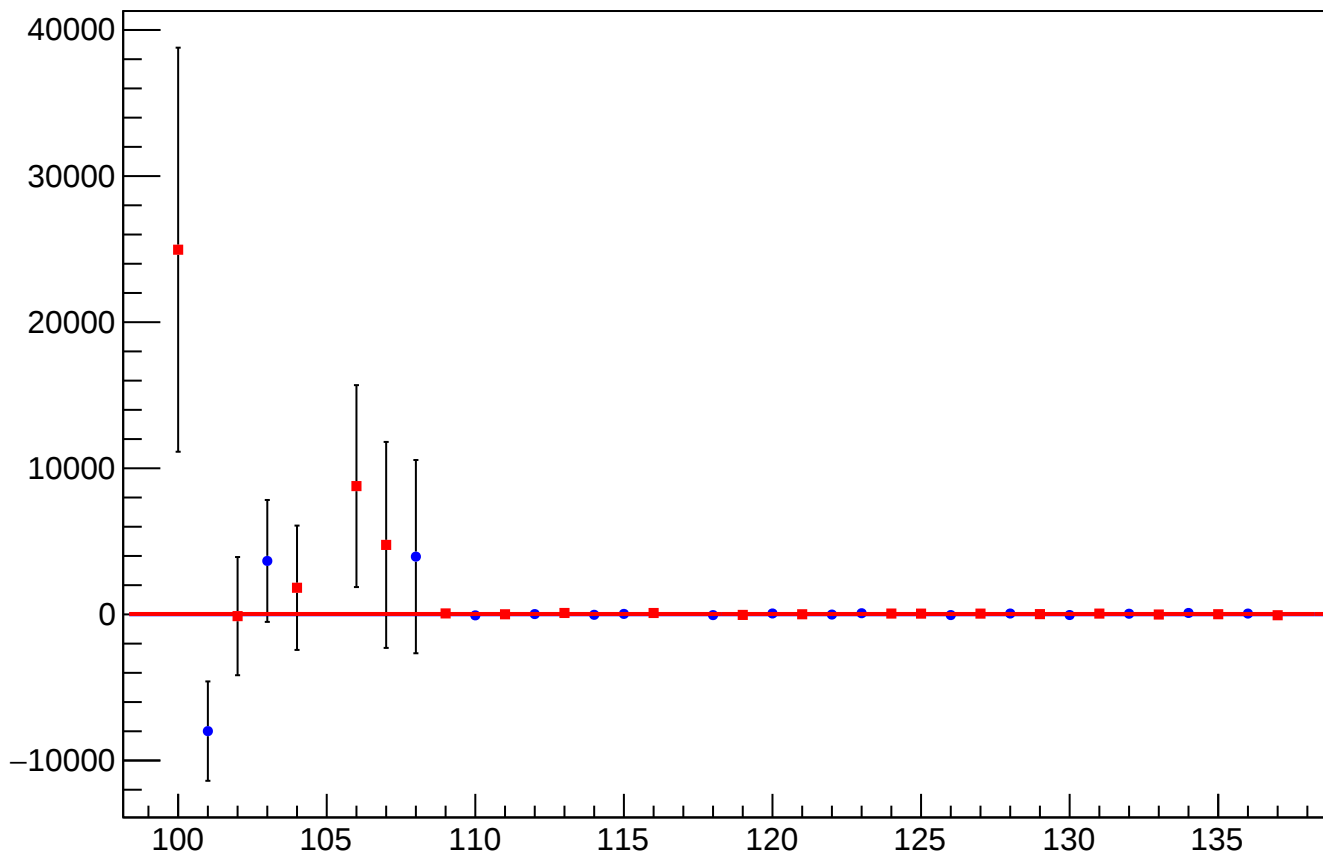
Right: 180.899+/-0.042  $\chi^2/\text{NDF}$ : 7849745.6/35

In: 190.770+/-0.062  $\chi^2/\text{NDF}$ : 3585034.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 180.899+/-0.042  $\chi^2/\text{NDF}$ : 7849745.6/35

asym\_bcm\_cav4cQ\_bcm\_an\_ds\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: 8.600+/-12.368  $\chi^2/\text{NDF}$ : 23.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 29.397+/-12.333  $\chi^2/\text{NDF}$ : 16.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

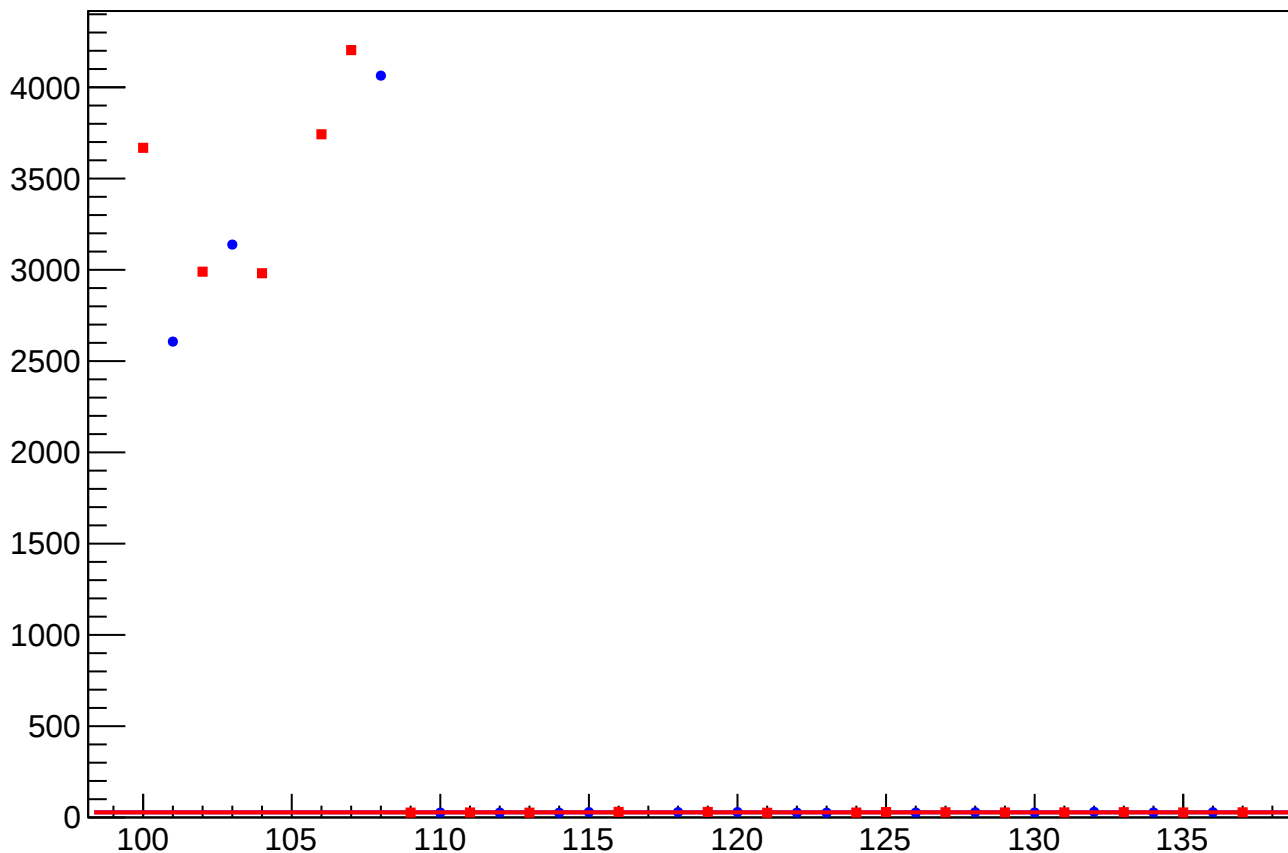
Right: 19.027+/-8.733  $\chi^2/\text{NDF}$ : 41.4/35

In: 8.600+/-12.368  $\chi^2/\text{NDF}$ : 23.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 19.027+/-8.733  $\chi^2/\text{NDF}$ : 41.4/35

asym\_bcm\_cav4cQ\_bcm\_an\_ds\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 28.044+/-0.009  $\chi^2/\text{NDF}$ : 3027898.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 27.918+/-0.009  $\chi^2/\text{NDF}$ : 3479690.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

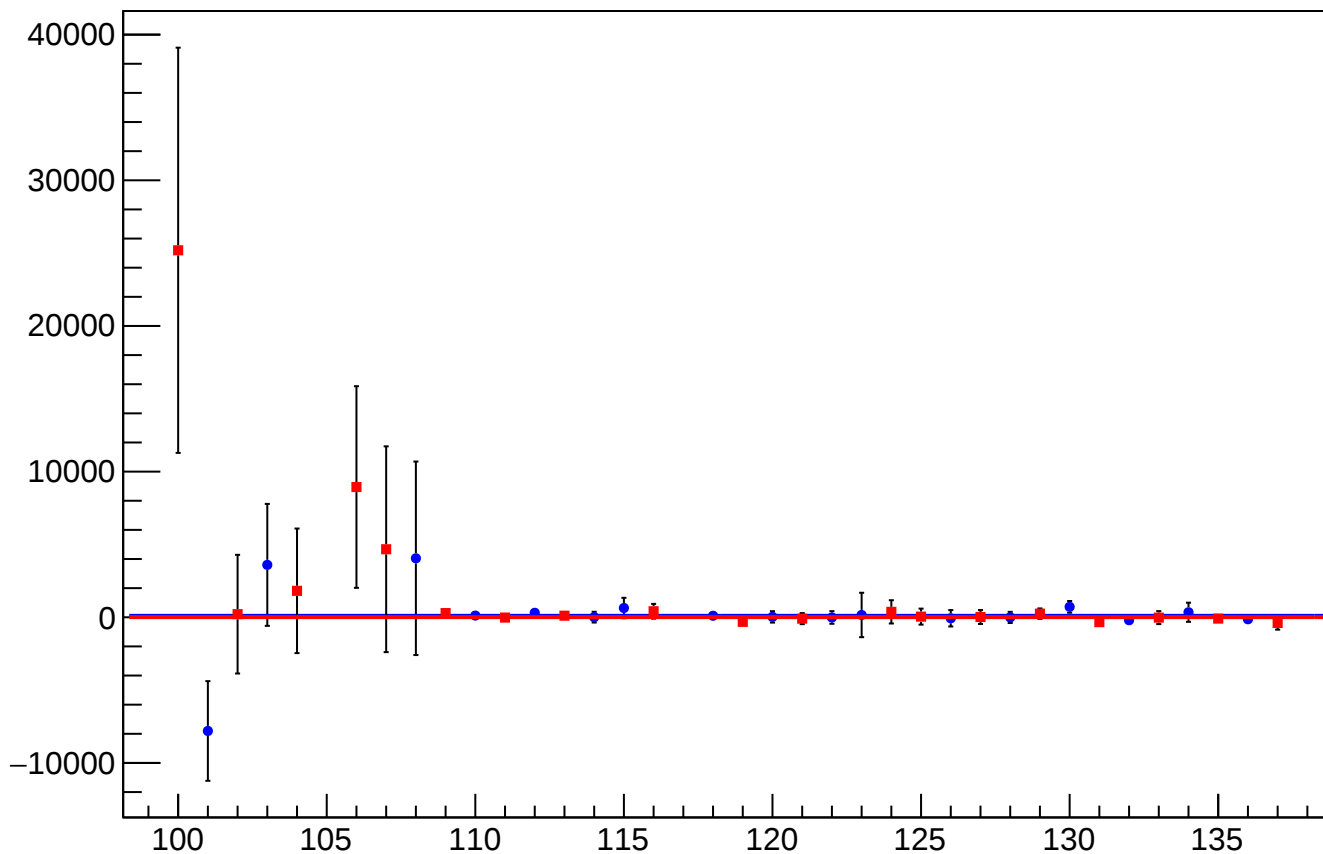
Right: 27.981+/-0.006  $\chi^2/\text{NDF}$ : 6507693.6/35

In: 28.044+/-0.009  $\chi^2/\text{NDF}$ : 3027898.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 27.981+/-0.006  $\chi^2/\text{NDF}$ : 6507693.6/35

asym\_bcm\_cav4cQ\_bcm\_dg\_us\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 98.142+/-89.203  $\chi^2/\text{NDF}$ : 12.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 11.728+/-81.772  $\chi^2/\text{NDF}$ : 12.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

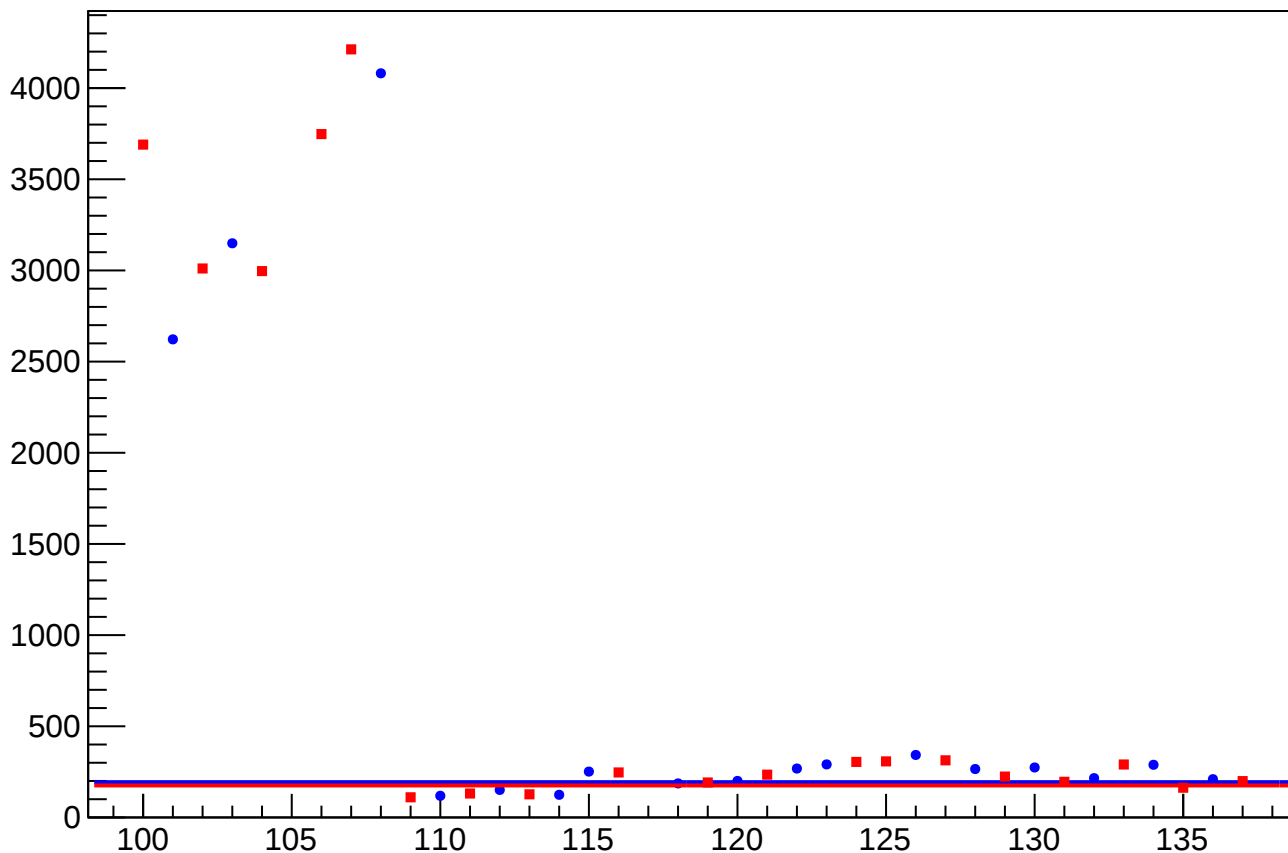
Right: 51.186+/-60.278  $\chi^2/\text{NDF}$ : 25.3/35

In: 98.142+/-89.203  $\chi^2/\text{NDF}$ : 12.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 51.186+/-60.278  $\chi^2/\text{NDF}$ : 25.3/35

asym\_bcm\_cav4cQ\_bcm\_dg\_us\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 193.516+/-0.063  $\chi^2/\text{NDF}$ : 3536947.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 175.509+/-0.058  $\chi^2/\text{NDF}$ : 4165575.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

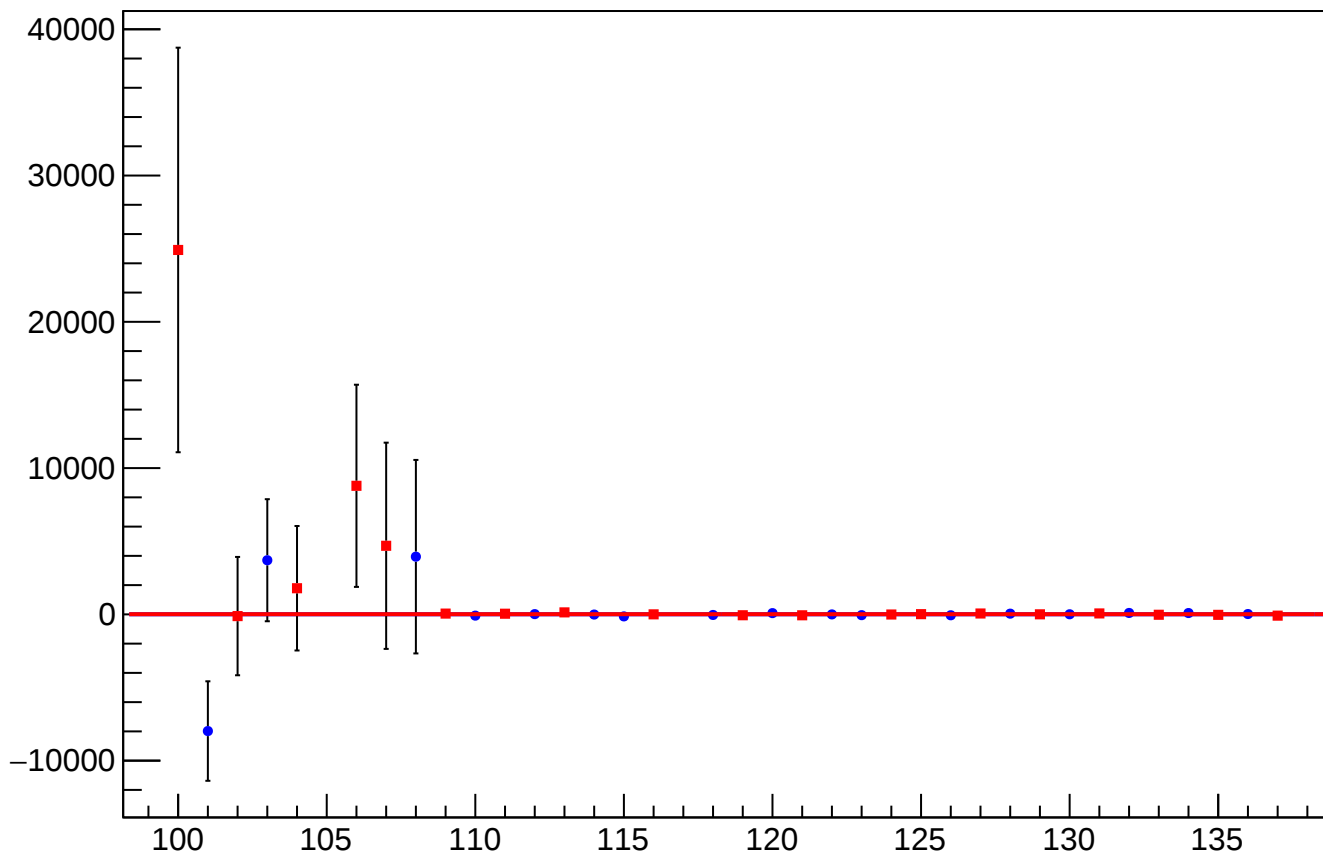
Right: 183.732+/-0.043  $\chi^2/\text{NDF}$ : 7746808.4/35

In: 193.516+/-0.063  $\chi^2/\text{NDF}$ : 3536947.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 183.732+/-0.043  $\chi^2/\text{NDF}$ : 7746808.4/35

asym\_bcm\_cav4cQ\_bcm\_dg\_us\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: 5.565 $\pm$ 15.052  $\chi^2$ /NDF: 20.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 12.158 $\pm$ 14.952  $\chi^2$ /NDF: 21.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

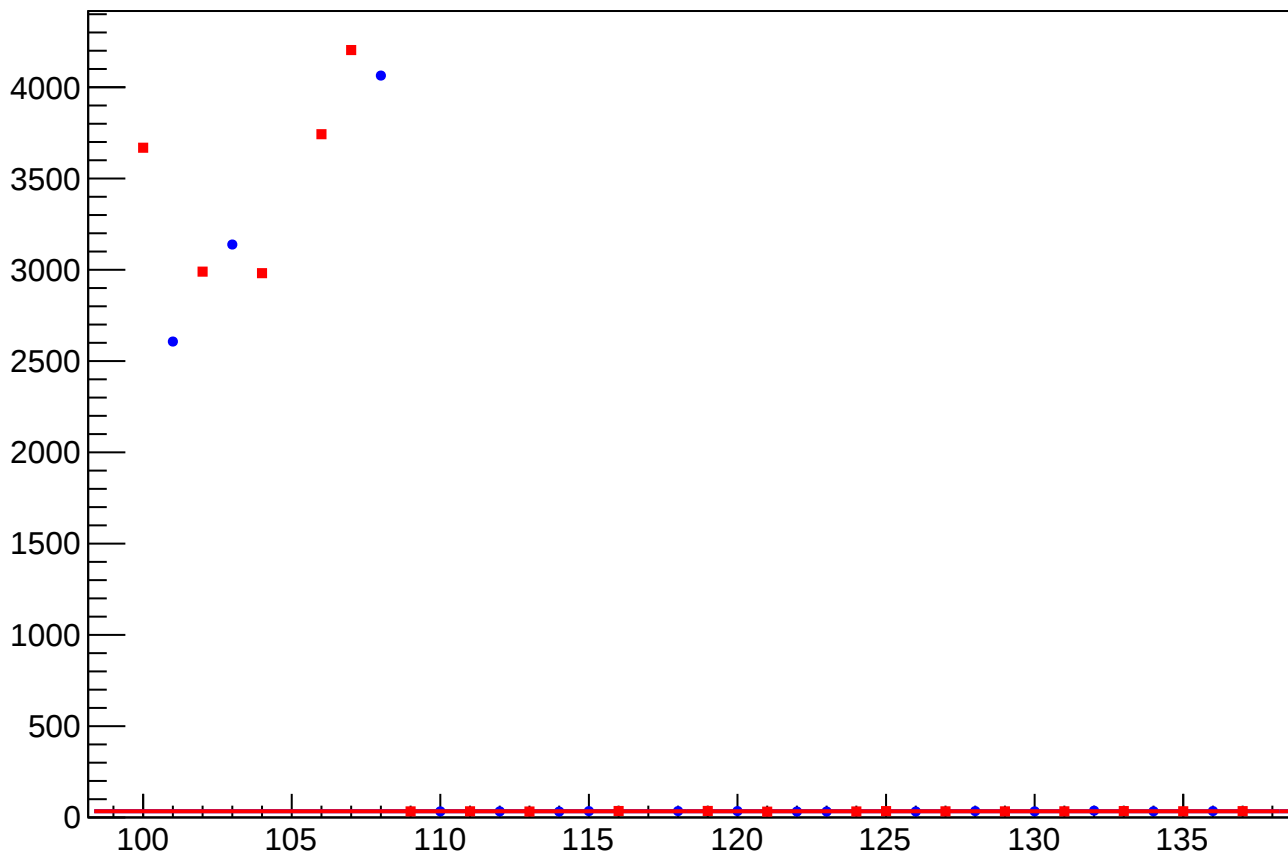
Right: 8.883 $\pm$ 10.608  $\chi^2$ /NDF: 42.5/35

In: 5.565 $\pm$ 15.052  $\chi^2$ /NDF:20.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 8.883 $\pm$ 10.608  $\chi^2$ /NDF: 42.5/35

asym\_bcm\_cav4cQ\_bcm\_dg\_us\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 34.168+/-0.011  $\chi^2/\text{NDF}$ : 3006512.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 33.913+/-0.011  $\chi^2/\text{NDF}$ : 3451912.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

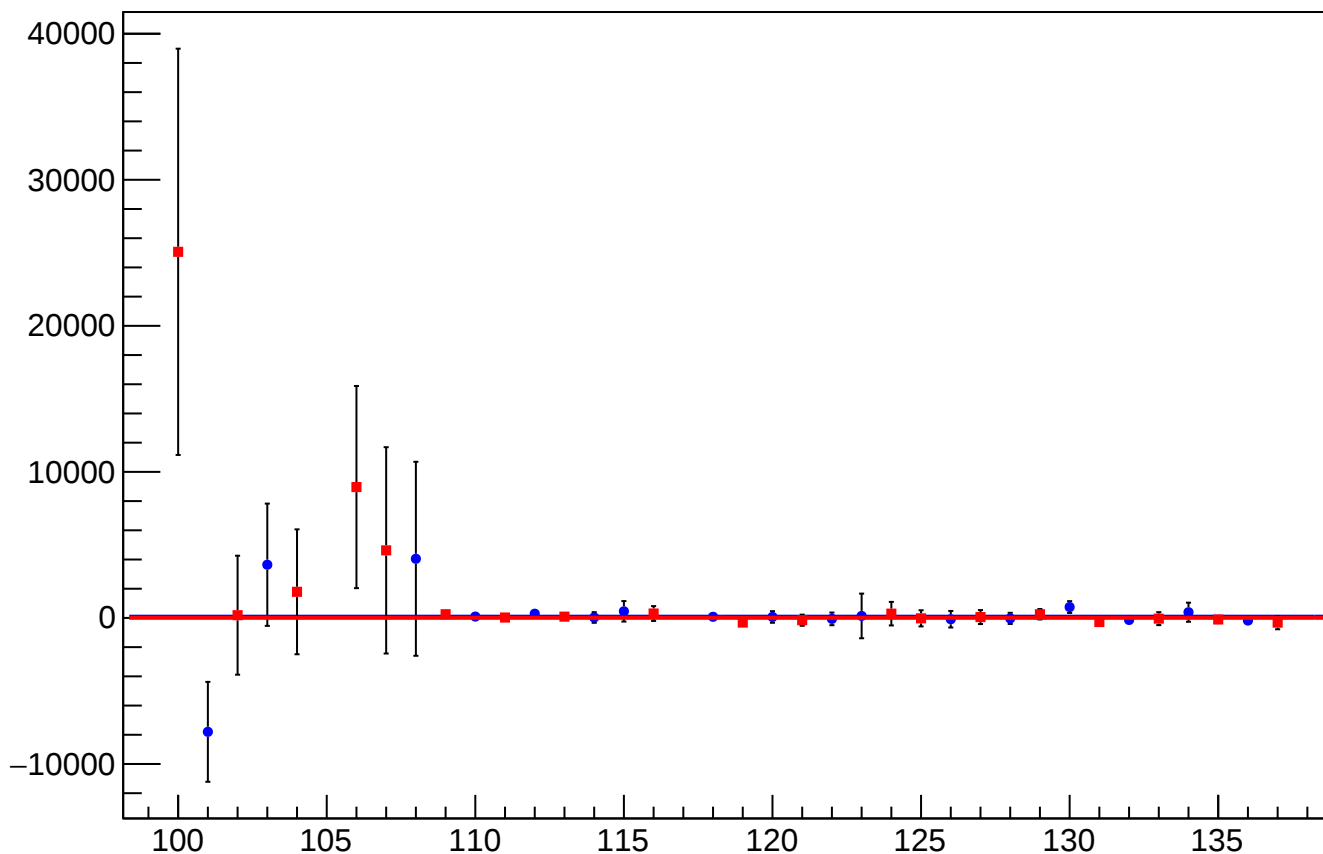
Right: 34.039+/-0.008  $\chi^2/\text{NDF}$ : 6458714.0/35

In: 34.168+/-0.011  $\chi^2/\text{NDF}$ :3006512.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 34.039+/-0.008  $\chi^2/\text{NDF}$ : 6458714.0/35

asym\_bcm\_cav4cQ\_bcm\_dg\_ds\_agg\_avg\_mean vs Slug, Sign Corrected



Right In: 84.504+/-88.746  $\chi^2/\text{NDF}$ : 12.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 8.565+/-81.257  $\chi^2/\text{NDF}$ : 11.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

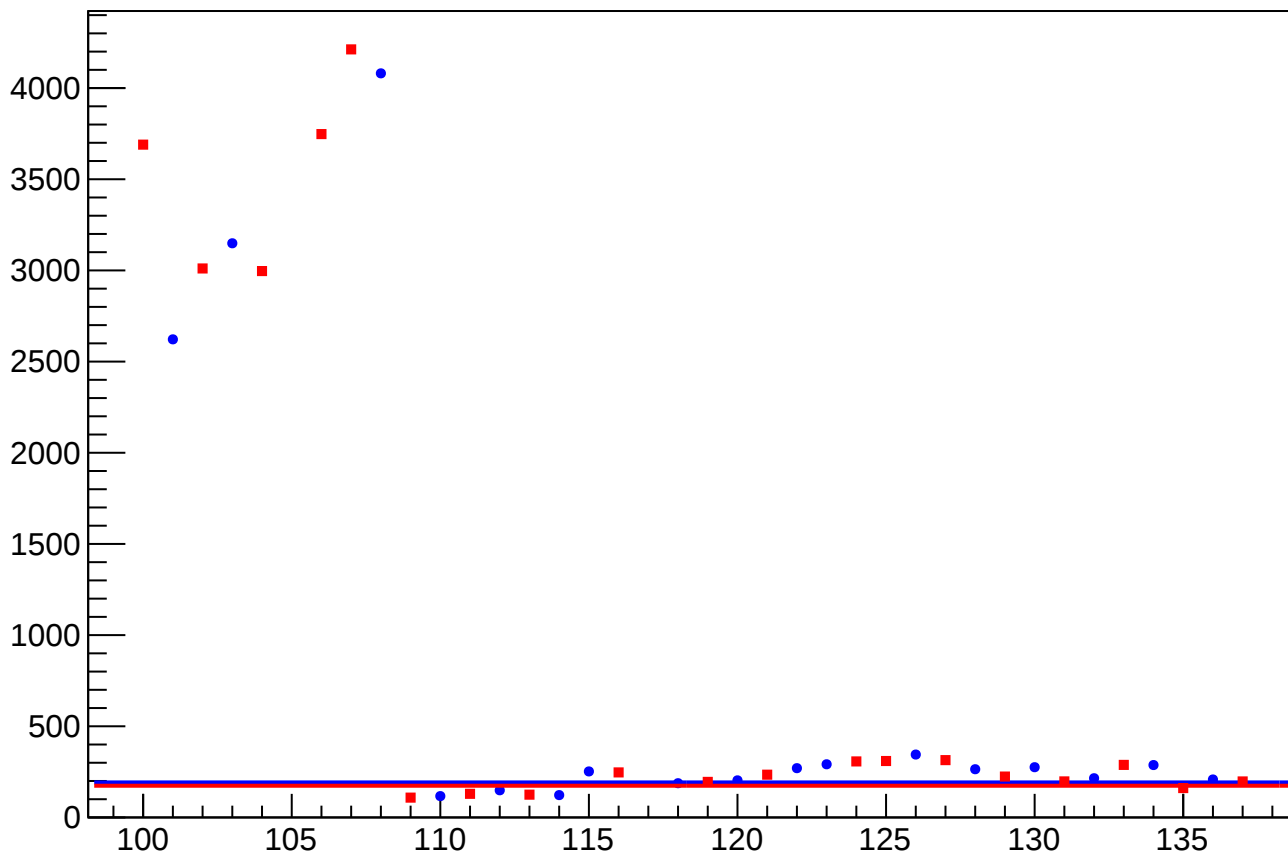
Right: 43.196+/-59.931  $\chi^2/\text{NDF}$ : 24.0/35

In: 84.504+/-88.746  $\chi^2/\text{NDF}$ : 12.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 43.196+/-59.931  $\chi^2/\text{NDF}$ : 24.0/35

asym\_bcm\_cav4cQ\_bcm\_dg\_ds\_agg\_avg\_rms vs Slug, Sign Corrected



Right In: 192.177+/-0.063  $\chi^2/\text{NDF}$ : 3574617.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 173.961+/-0.057  $\chi^2/\text{NDF}$ : 4211616.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

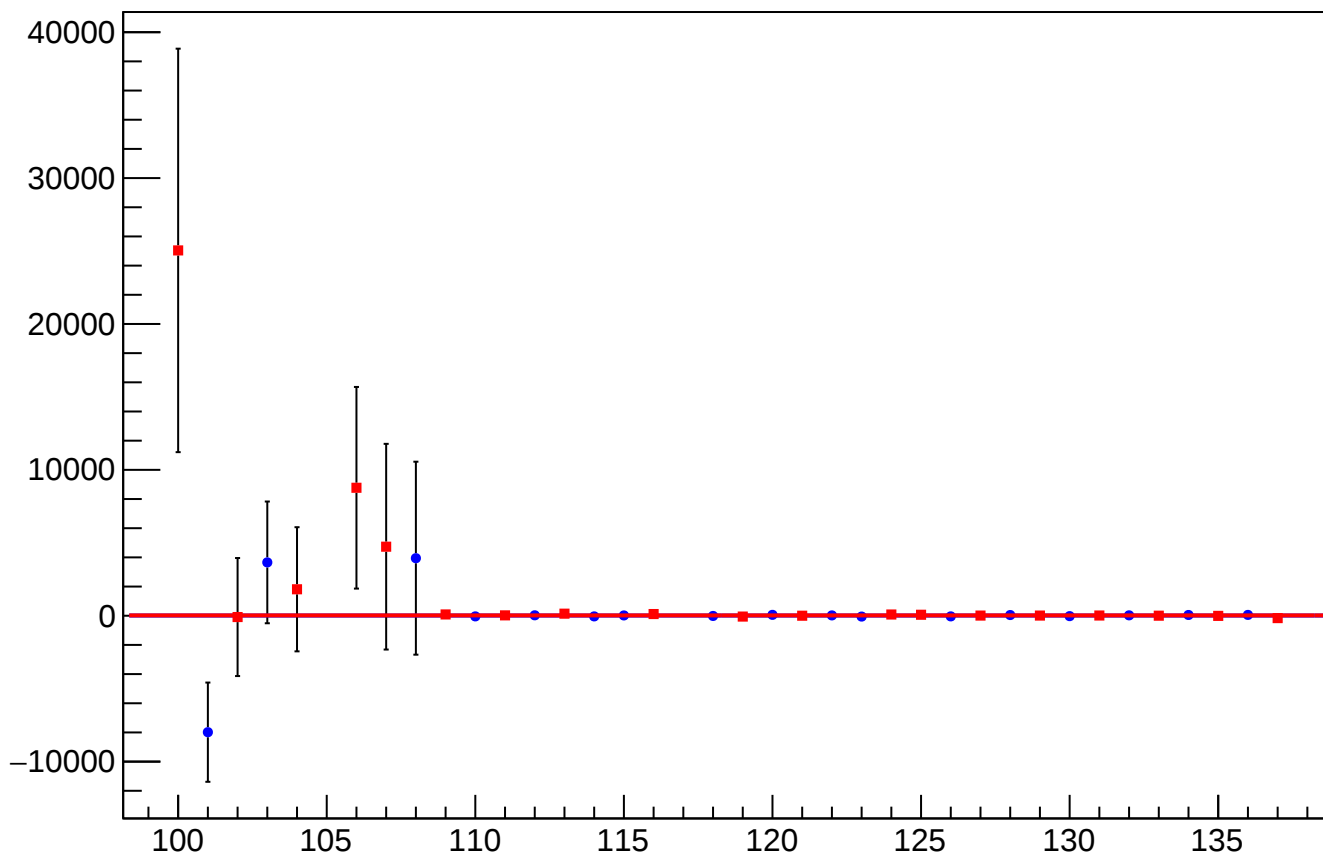
Right: 182.268+/-0.042  $\chi^2/\text{NDF}$ : 7832071.5/35

In: 192.177+/-0.063  $\chi^2/\text{NDF}$ : 3574617.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 182.268+/-0.042  $\chi^2/\text{NDF}$ : 7832071.5/35

asym\_bcm\_cav4cQ\_bcm\_dg\_ds\_agg\_dd\_mean vs Slug, Sign Corrected



Right In: 12.751+/-13.723  $\chi^2/\text{NDF}$ : 14.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 22.618+/-13.660  $\chi^2/\text{NDF}$ : 28.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

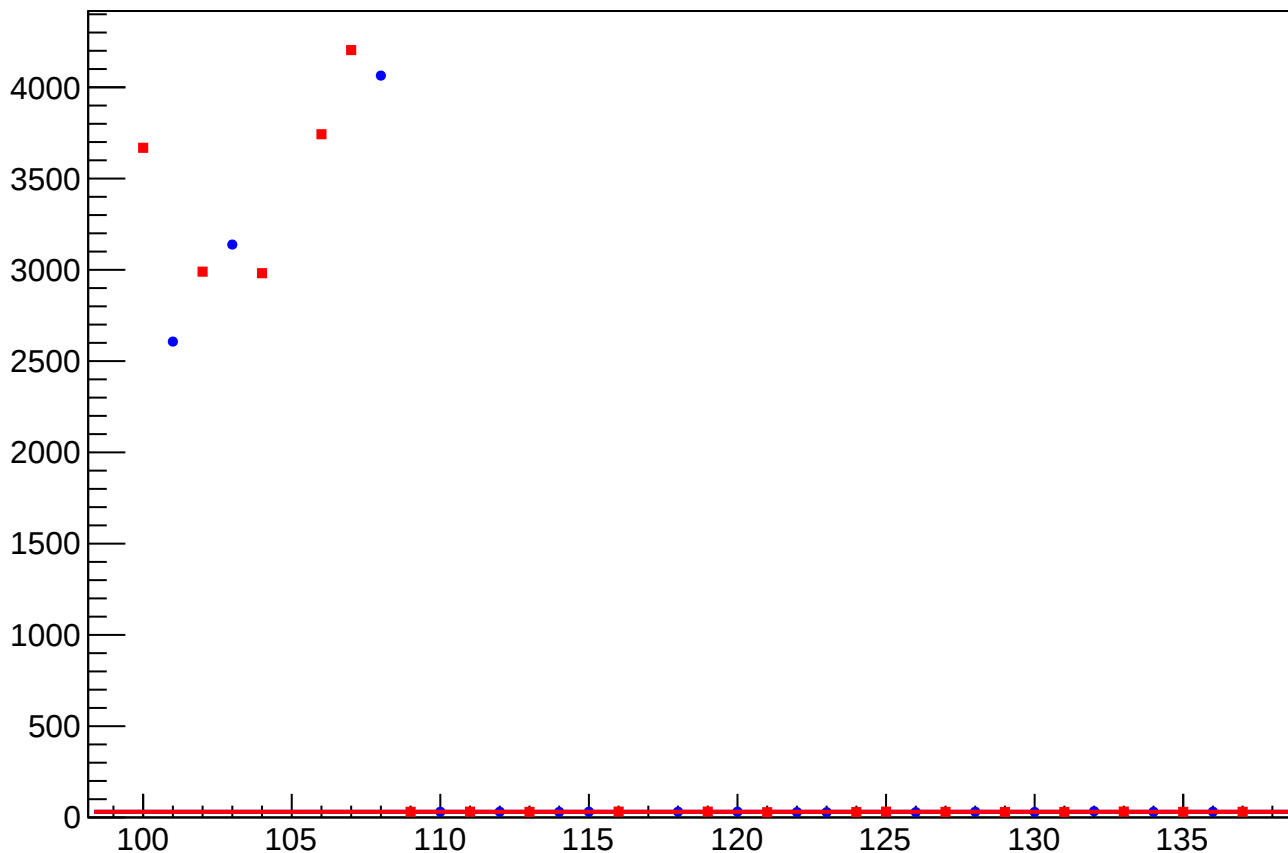
Right: 17.707+/-9.681  $\chi^2/\text{NDF}$ : 42.9/35

In: 12.751+/-13.723  $\chi^2/\text{NDF}$ : 14.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 17.707+/-9.681  $\chi^2/\text{NDF}$ : 42.9/35

asym\_bcm\_cav4cQ\_bcm\_dg\_ds\_agg\_dd\_rms vs Slug, Sign Corrected



Right In: 31.153+/-0.010  $\chi^2/\text{NDF}$ : 3014515.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 30.963+/-0.010  $\chi^2/\text{NDF}$ : 3458924.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

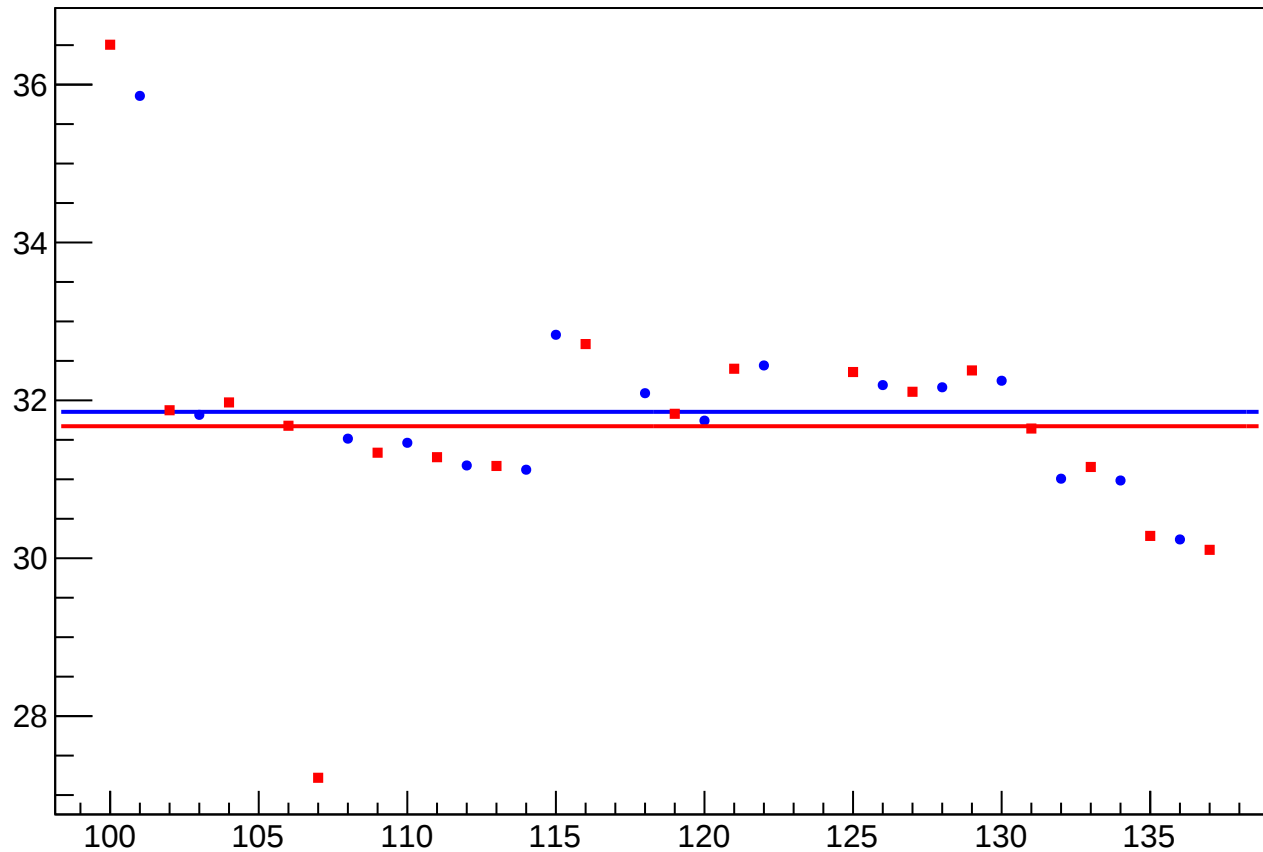
Right: 31.057+/-0.007  $\chi^2/\text{NDF}$ : 6473633.0/35

In: 31.153+/-0.010  $\chi^2/\text{NDF}$ : 3014515.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 31.057+/-0.007  $\chi^2/\text{NDF}$ : 6473633.0/35

# yield\_usl\_mean vs Slug, Sign Corrected



Right In:  $31.855 \pm 0.000$   $\chi^2/\text{NDF}: 1570522165.5/15$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $31.672 \pm 0.000$   $\chi^2/\text{NDF}: 917899841.8/17$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

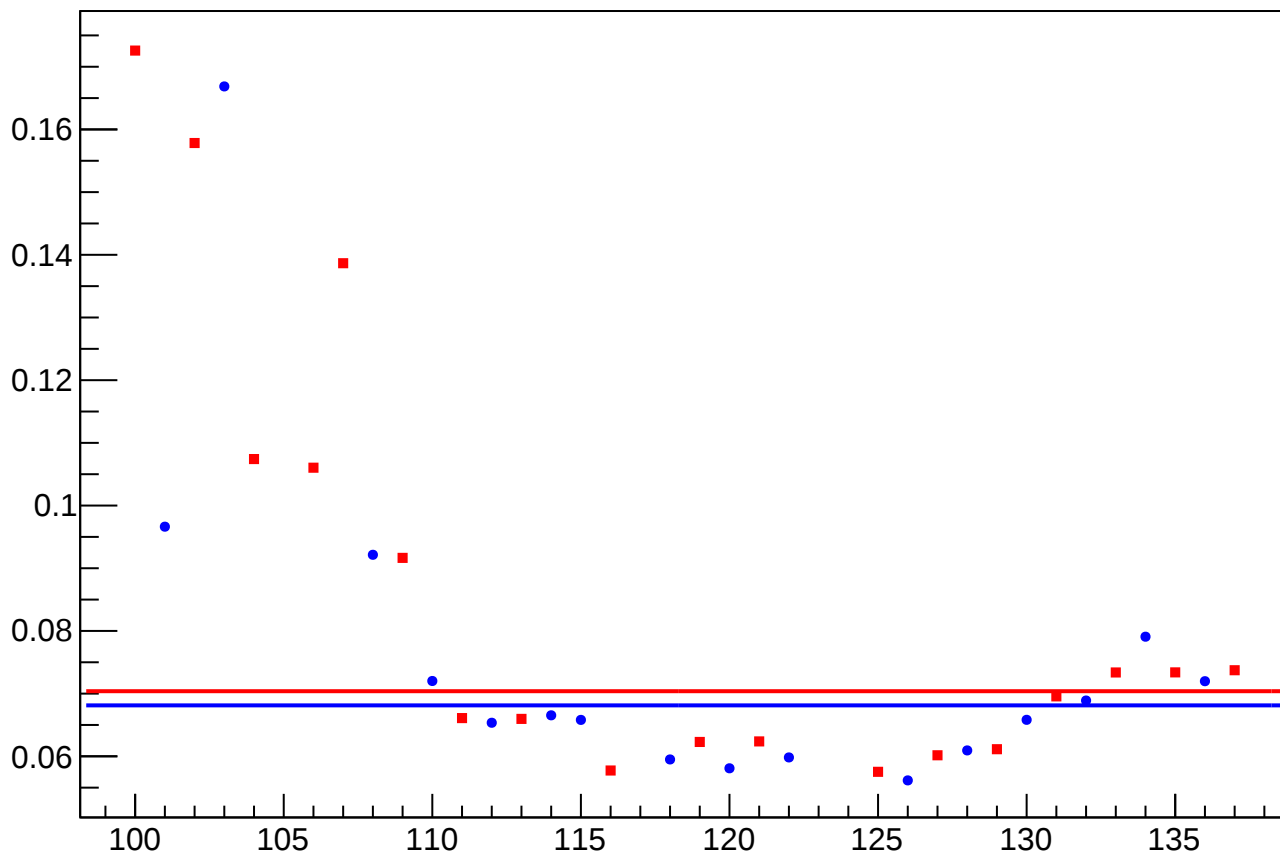
Right:  $31.765 \pm 0.000$   $\chi^2/\text{NDF}: 2508641774.0/33$

In:  $31.855 \pm 0.000$   $\chi^2/\text{NDF}: 1570522165.5/15$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $31.765 \pm 0.000$   $\chi^2/\text{NDF}: 2508641774.0/33$

# yield\_usl\_rms vs Slug, Sign Corrected



Right In: 0.068+/-0.000  $\chi^2/\text{NDF}$ : 629767.4/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.070+/-0.000  $\chi^2/\text{NDF}$ : 841320.1/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

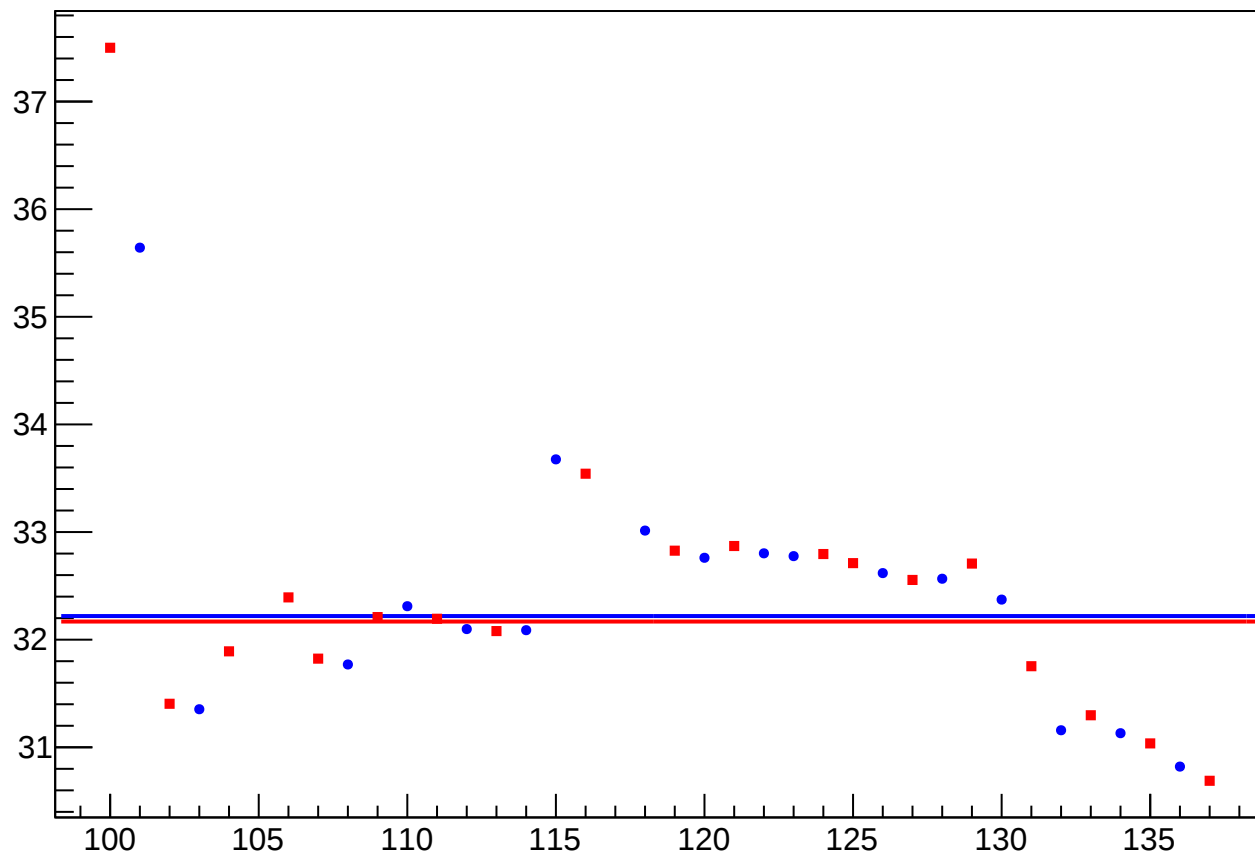
Right: 0.069+/-0.000  $\chi^2/\text{NDF}$ : 1477315.9/33

In: 0.068+/-0.000  $\chi^2/\text{NDF}$ : 629767.4/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.069+/-0.000  $\chi^2/\text{NDF}$ : 1477315.9/33

# yield\_usr\_mean vs Slug, Sign Corrected



Right In: 32.220+/-0.000  $\chi^2/\text{NDF}$ : 1013864543.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 32.168+/-0.000  $\chi^2/\text{NDF}$ : 442298310.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

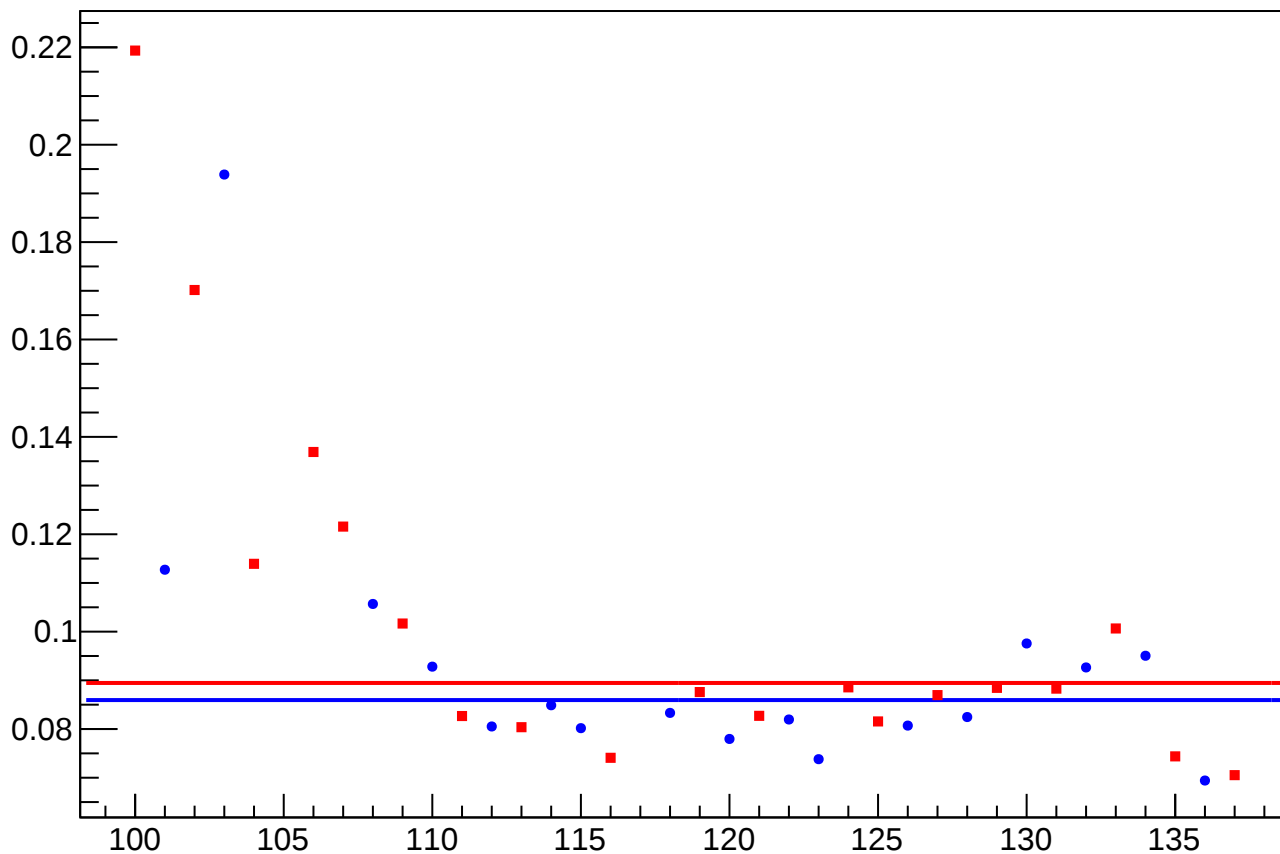
Right: 32.194+/-0.000  $\chi^2/\text{NDF}$ : 1457173552.7/35

In: 32.220+/-0.000  $\chi^2/\text{NDF}$ : 1013864543.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 32.194+/-0.000  $\chi^2/\text{NDF}$ : 1457173552.7/35

# yield\_usr\_rms vs Slug, Sign Corrected



Right In: 0.086+/-0.000  $\chi^2/\text{NDF}$ : 553280.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.089+/-0.000  $\chi^2/\text{NDF}$ : 539869.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

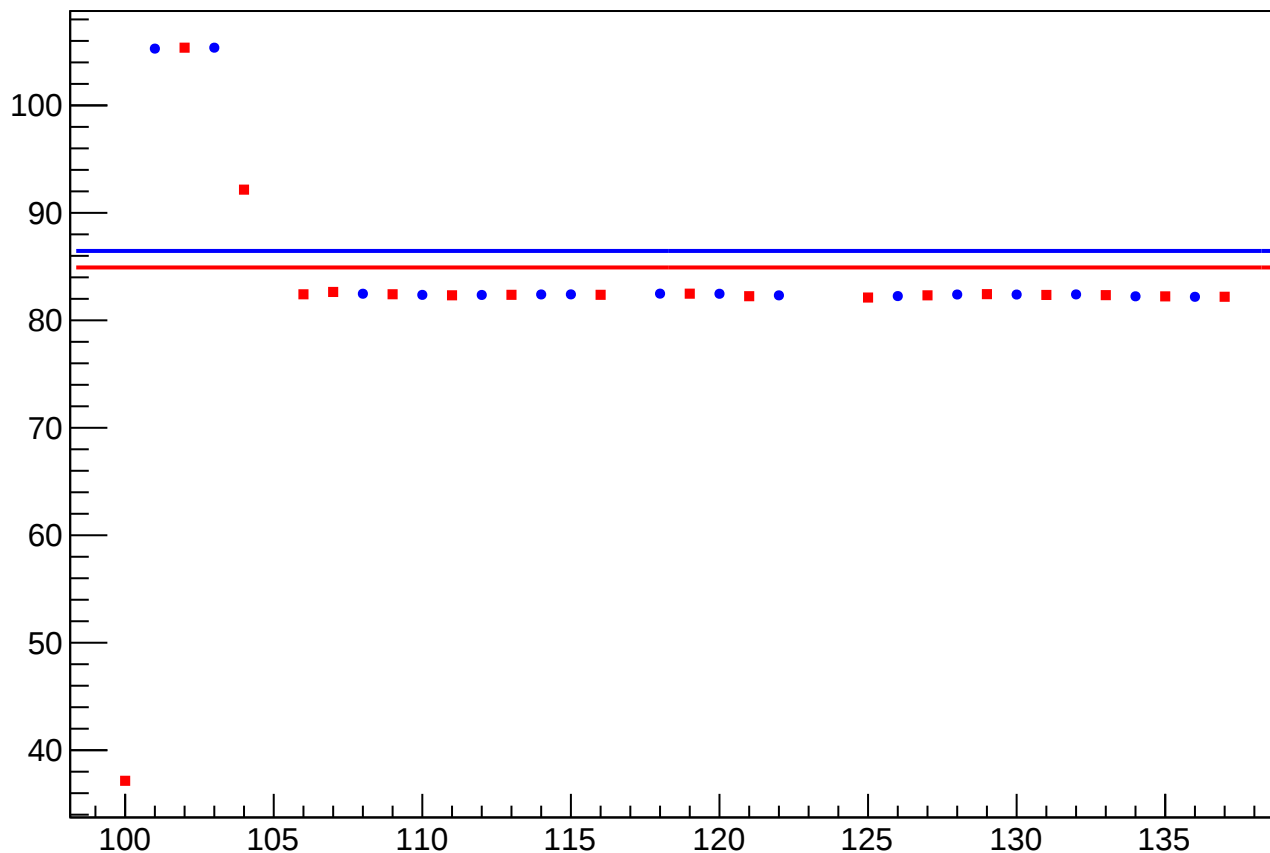
Right: 0.088+/-0.000  $\chi^2/\text{NDF}$ : 1102728.3/35

In: 0.086+/-0.000  $\chi^2/\text{NDF}$ : 553280.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

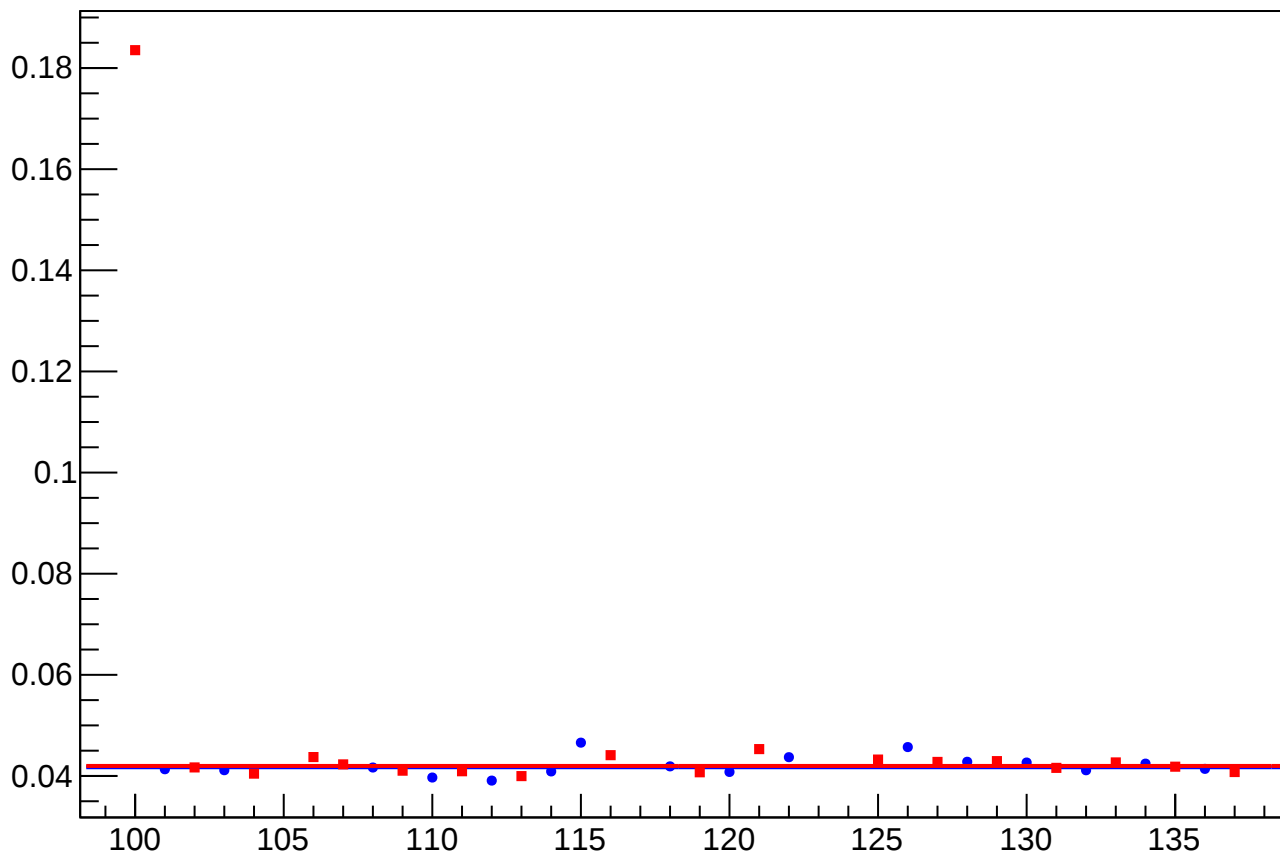
All: 0.088+/-0.000  $\chi^2/\text{NDF}$ : 1102728.3/35

# yield\_dsl\_mean vs Slug, Sign Corrected



Right In: 86.457+/-0.000  $\chi^2/\text{NDF}$ : 291421048436.2/15  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: 84.920+/-0.000  $\chi^2/\text{NDF}$ : 172195187677.7/17  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 85.675+/-0.000  $\chi^2/\text{NDF}$ : 468146833571.9/33

# yield\_dsl\_rms vs Slug, Sign Corrected



Right In: 0.042+/-0.000  $\chi^2/\text{NDF}$ : 18887.0/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.042+/-0.000  $\chi^2/\text{NDF}$ : 96869.3/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

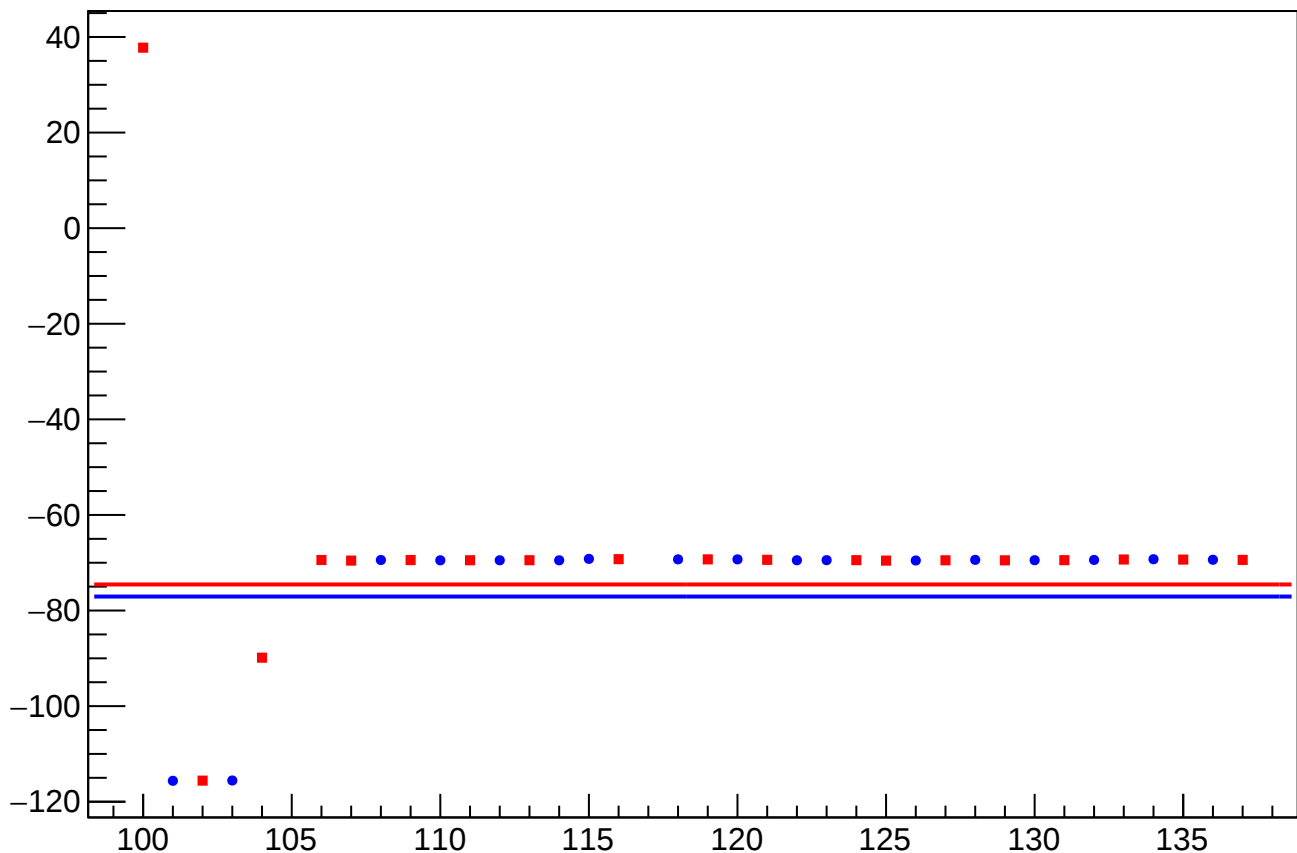
Right: 0.042+/-0.000  $\chi^2/\text{NDF}$ : 116001.6/33

In: 0.042+/-0.000  $\chi^2/\text{NDF}$ : 18887.0/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.042+/-0.000  $\chi^2/\text{NDF}$ : 116001.6/33

# yield\_dsr\_mean vs Slug, Sign Corrected



Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Right In: -77.074+/-0.000  $\chi^2$ /NDF: 565391865606.1/16

Right: -75.769+/-0.000  $\chi^2$ /NDF: 943595296169.5/3

Left Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Right Out: -74.547+/-0.000  $\chi^2$ /NDF: 371890102737.4/18

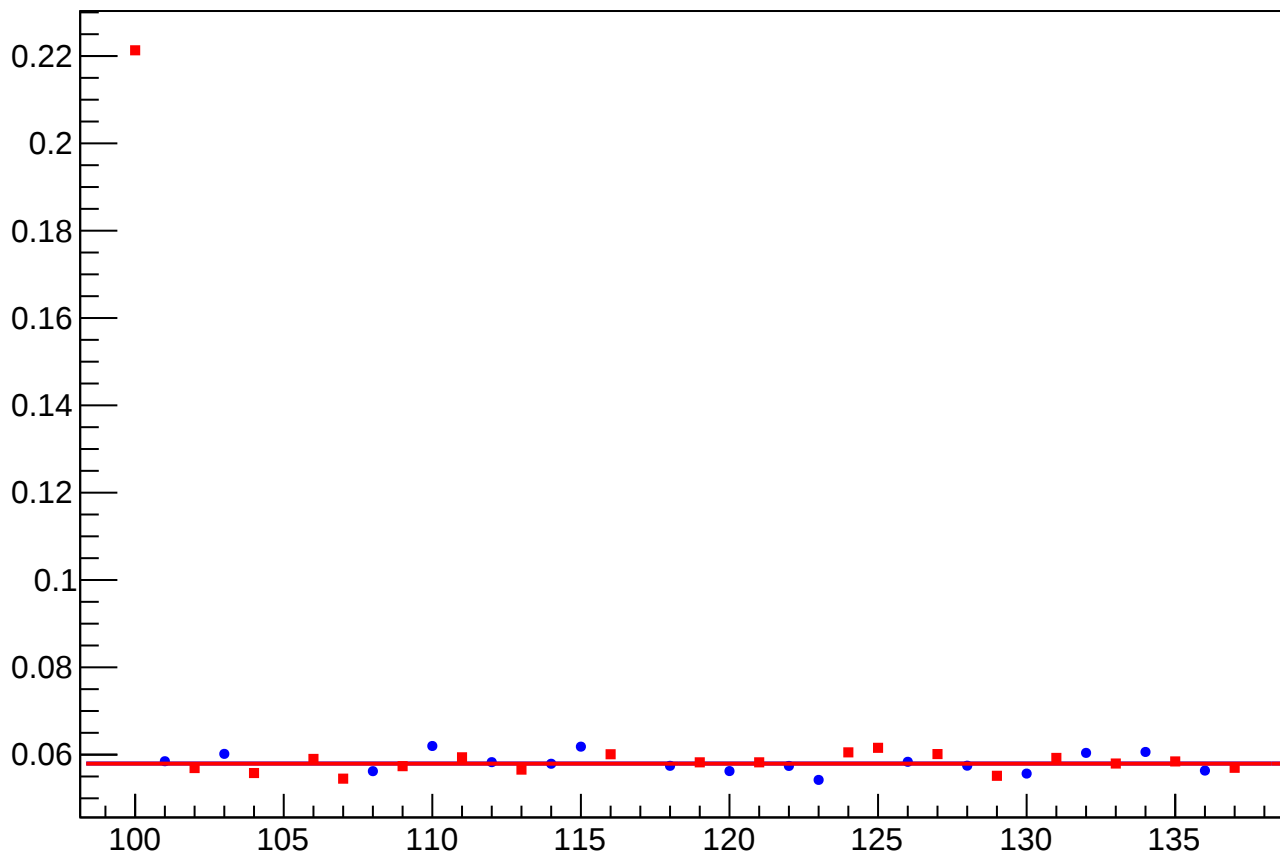
In: -77.074+/-0.000  $\chi^2$ /NDF: 565391865606.1/16

Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left In: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

All: -75.769+/-0.000  $\chi^2$ /NDF: 943595296169.5/3

# yield\_dsr\_rms vs Slug, Sign Corrected



Right In: 0.058+/-0.000  $\chi^2/\text{NDF}$ : 12275.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.058+/-0.000  $\chi^2/\text{NDF}$ : 86466.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

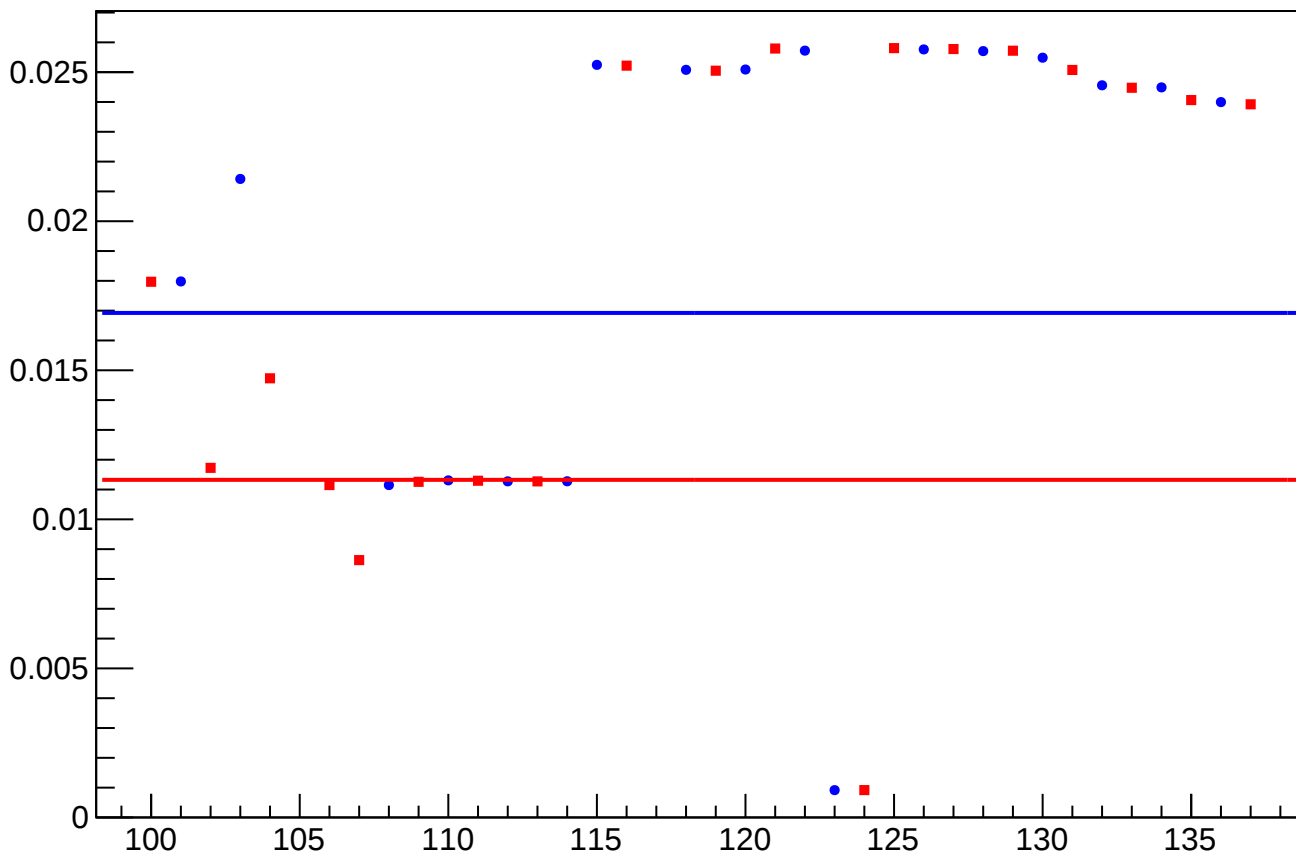
Right: 0.058+/-0.000  $\chi^2/\text{NDF}$ : 98743.9/35

In: 0.058+/-0.000  $\chi^2/\text{NDF}$ : 12275.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.058+/-0.000  $\chi^2/\text{NDF}$ : 98743.9/35

# yield\_atl1\_mean vs Slug, Sign Corrected



Right In: 0.017+/-0.000

$\chi^2/\text{NDF}$ : 126447785006.7/16

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 392122680736.2/35

Left Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

In: 0.017+/-0.000  $\chi^2/\text{NDF}$ : 126447785006.7/16

Right Out: 0.011+/-0.000  $\chi^2/\text{NDF}$ : 234754769754.2/18

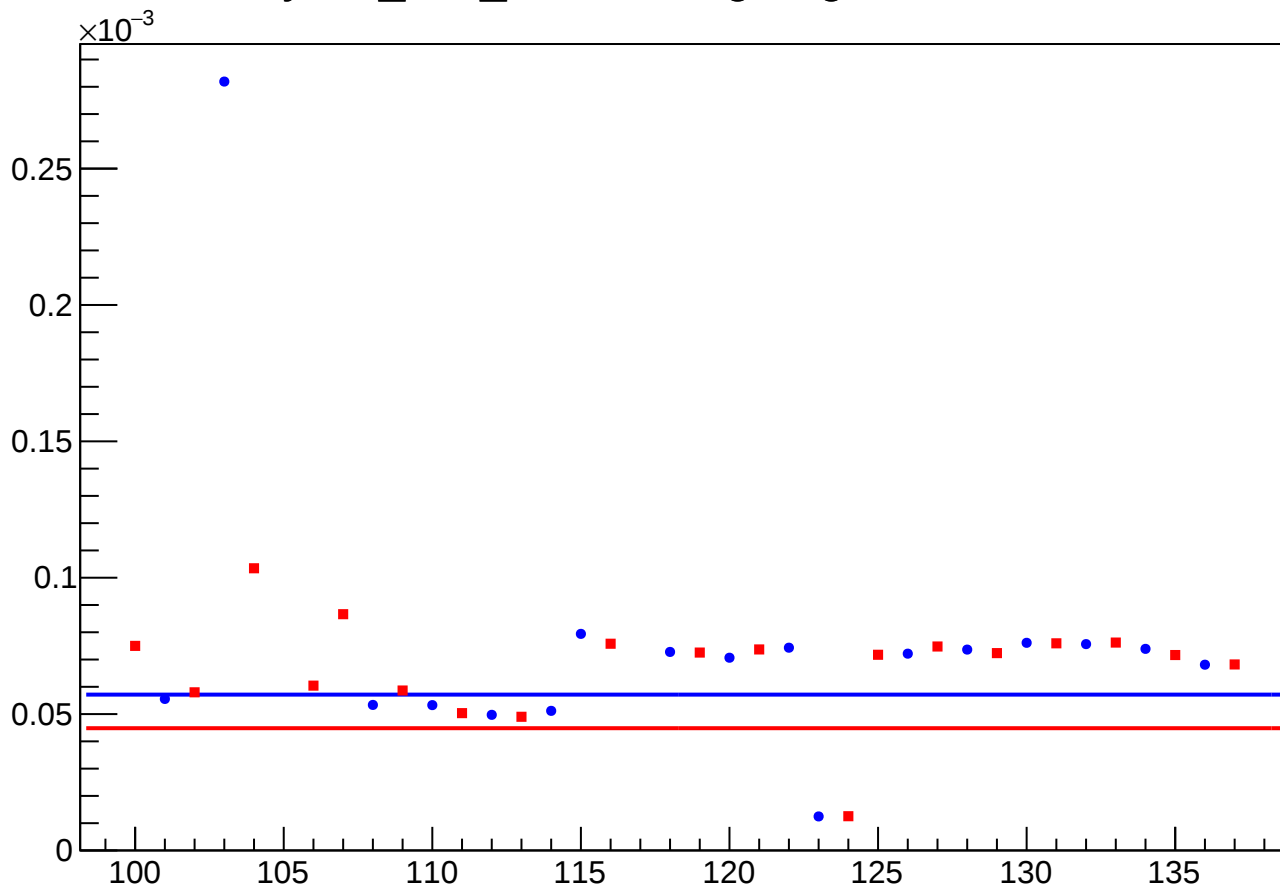
Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

All: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 392122680736.2

# yield\_atl1\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 2000446.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 3592224.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

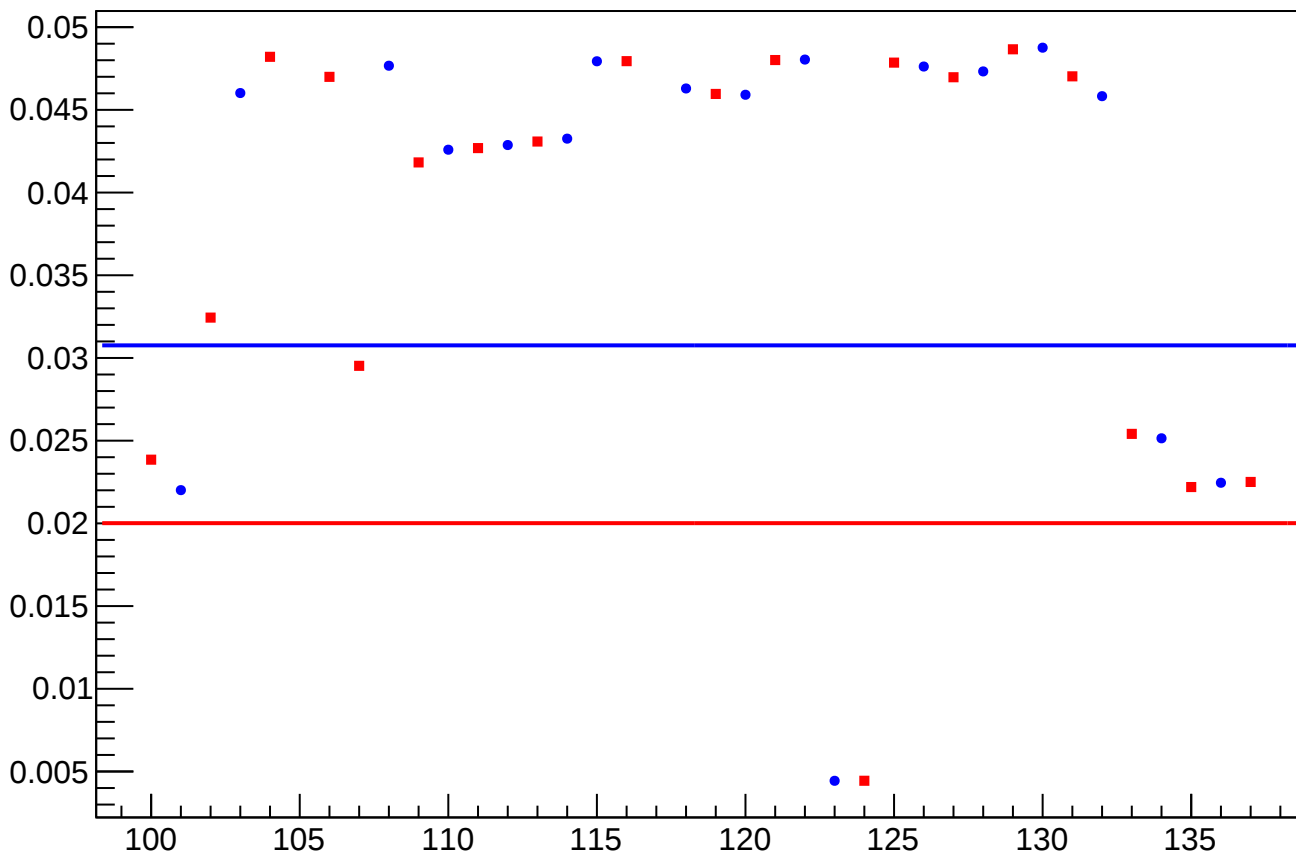
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 5891779.4/35

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 2000446.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 5891779.4/35

# yield\_atl2\_mean vs Slug, Sign Corrected



Right In: 0.031+/-0.000

$\chi^2/\text{NDF}$ : 21174738549.0/16

Left: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right: 0.024+/-0.000

$\chi^2/\text{NDF}$ : 66286425044.9/35

Left Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

In: 0.031+/-0.000

$\chi^2/\text{NDF}$ : 21174738549.0/16

Right Out: 0.020+/-0.000

$\chi^2/\text{NDF}$ : 40011334157.0/18

Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

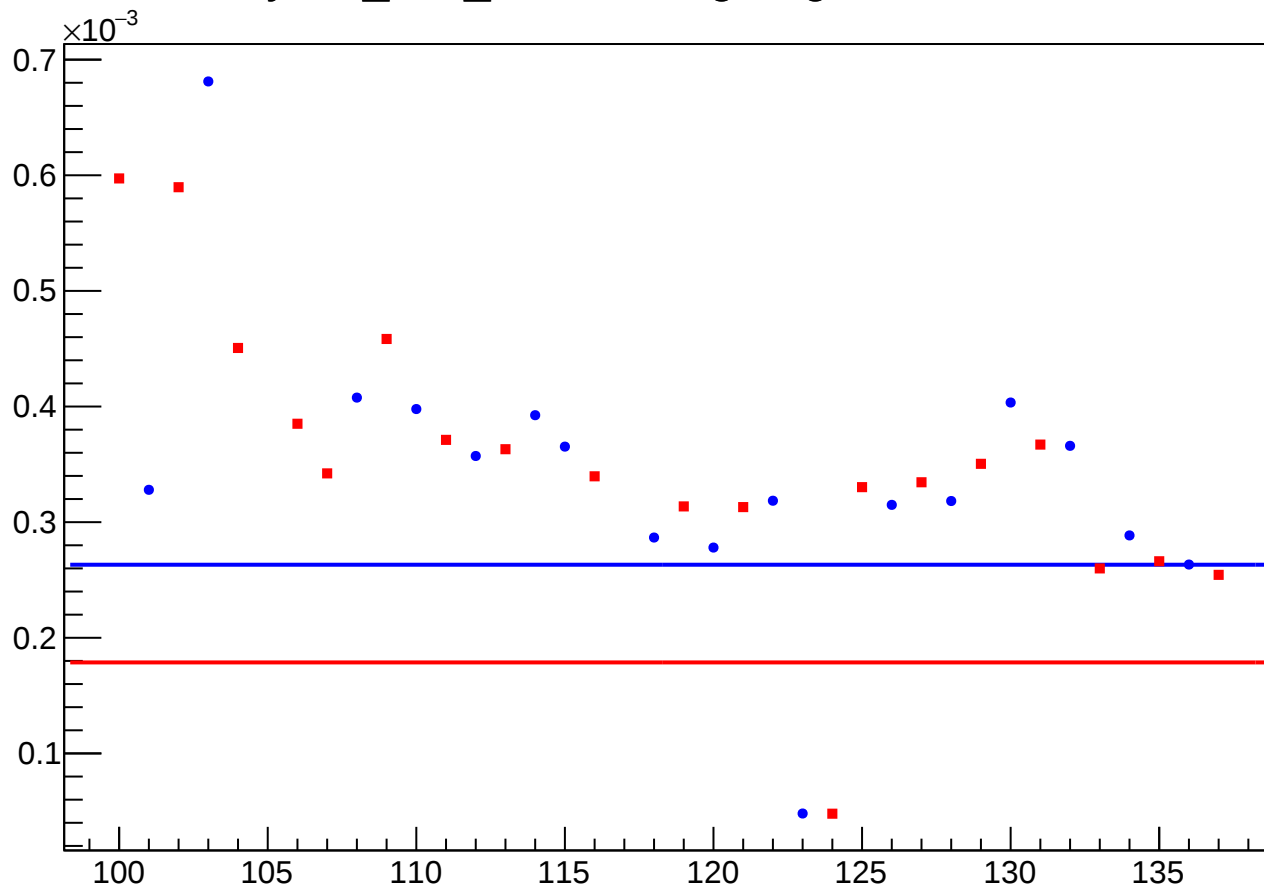
Left In: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

All: 0.024+/-0.000

$\chi^2/\text{NDF}$ : 66286425044.9/35

# yield\_atl2\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 2401048.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 5341022.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

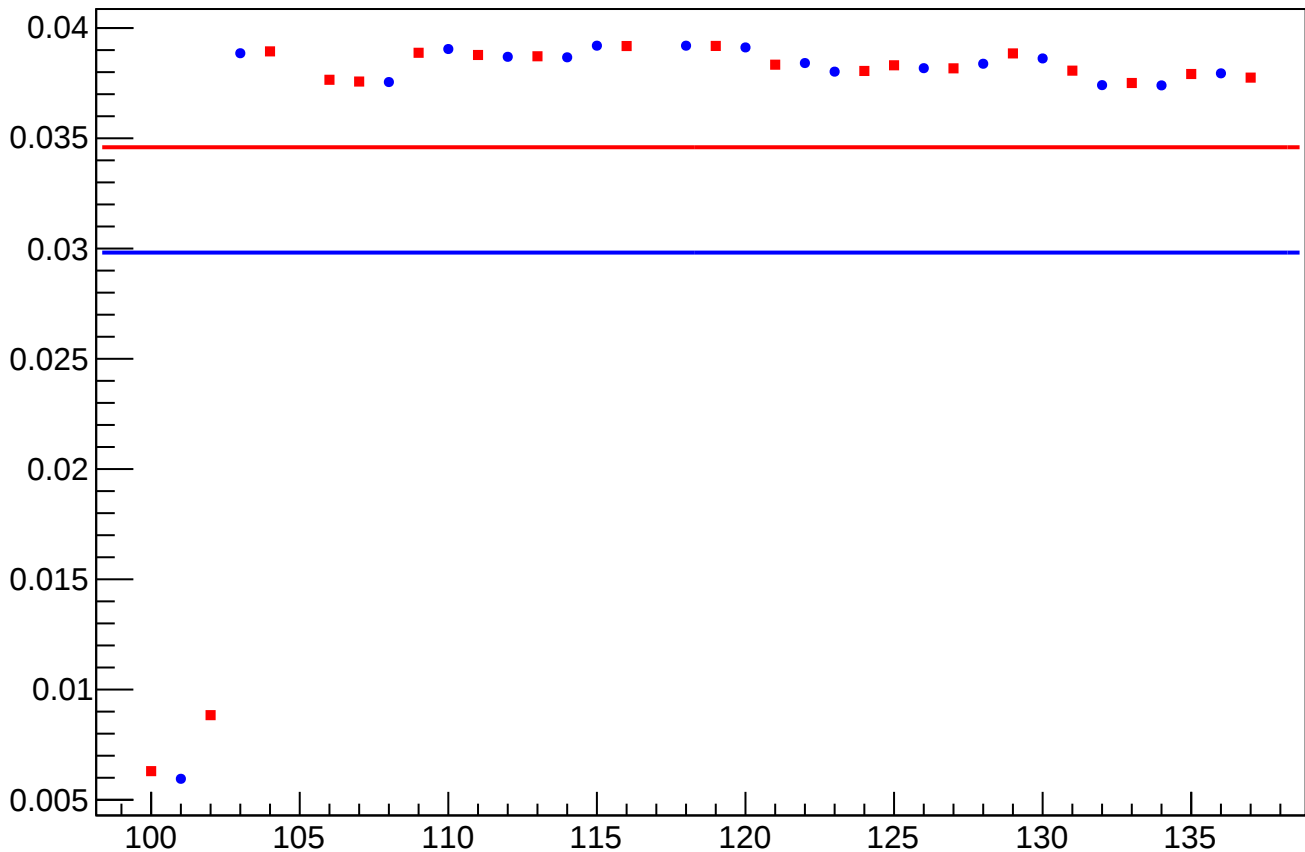
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 8372315.9/35

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 2401048.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 8372315.9/35

# yield\_atr1\_mean vs Slug, Sign Corrected



Right In: 0.030+/-0.000

$\chi^2/\text{NDF}$ : 97152184939.3/16

Left: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right: 0.032+/-0.000

$\chi^2/\text{NDF}$ : 145974720907.4/35

Left Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

In: 0.030+/-0.000

$\chi^2/\text{NDF}$ : 97152184939.3/16

Right Out: 0.035+/-0.000

$\chi^2/\text{NDF}$ : 43669374279.3/18

Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

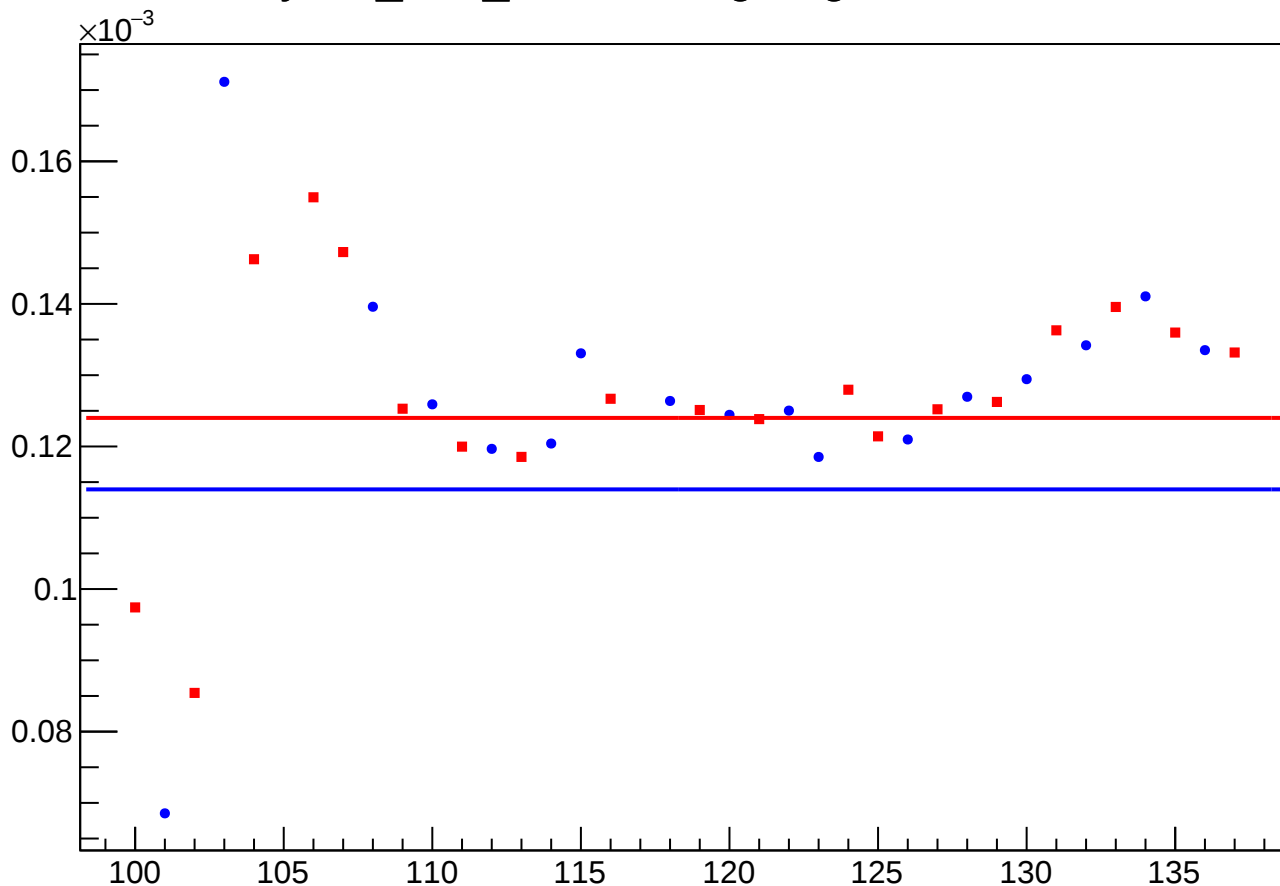
Left In: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

All: 0.032+/-0.000

$\chi^2/\text{NDF}$ : 145974720907.4

# yield\_atr1\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 794542.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 245154.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

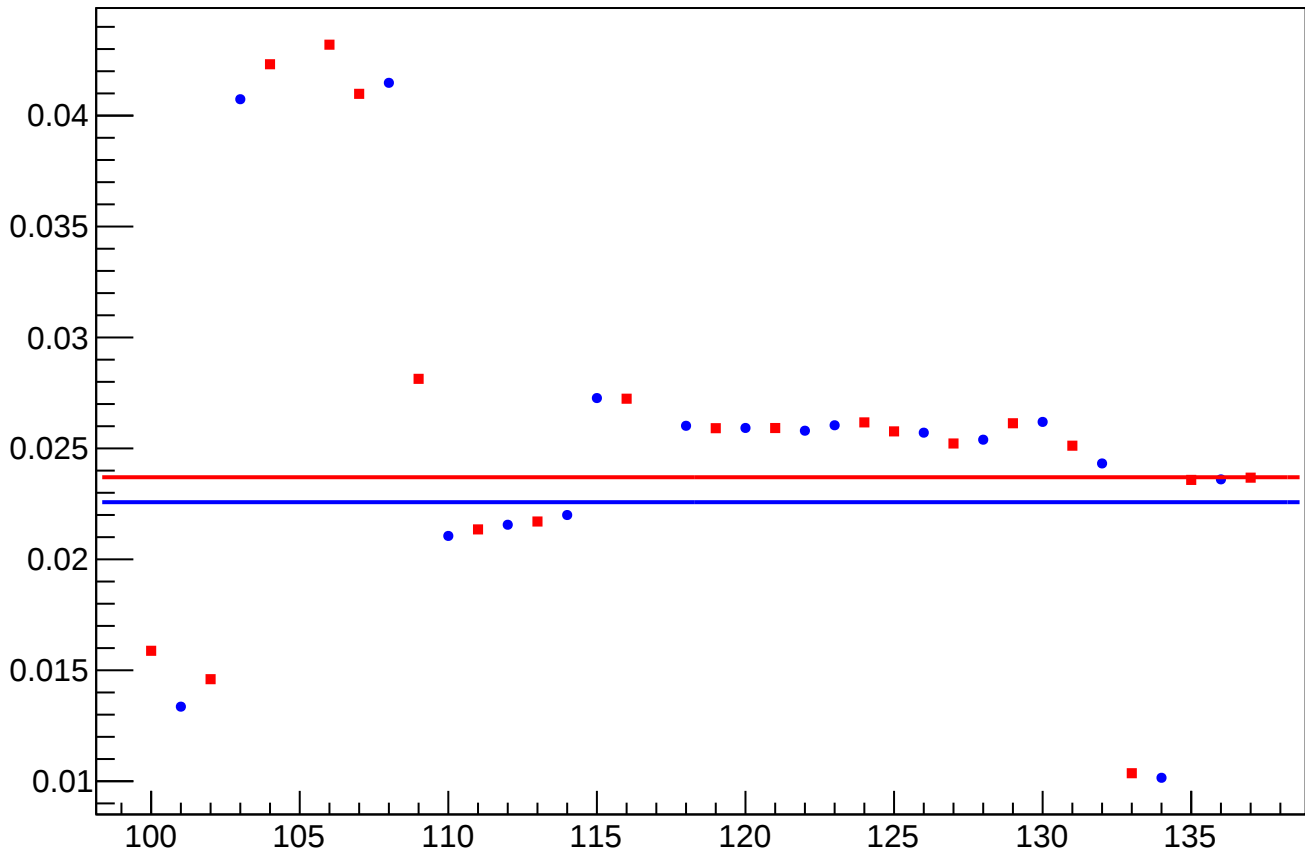
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 1085105.2/35

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 794542.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 1085105.2/35

# yield\_atr2\_mean vs Slug, Sign Corrected



Right In: 0.023+/-0.000

$\chi^2/\text{NDF}$ : 4247774712.9/16

Left Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.024+/-0.000

$\chi^2/\text{NDF}$ : 5651397656.1/18

Left In: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right: 0.023+/-0.000

$\chi^2/\text{NDF}$ : 9954563356.3/35

In: 0.023+/-0.000

$\chi^2/\text{NDF}$ : 4247774712.9/16

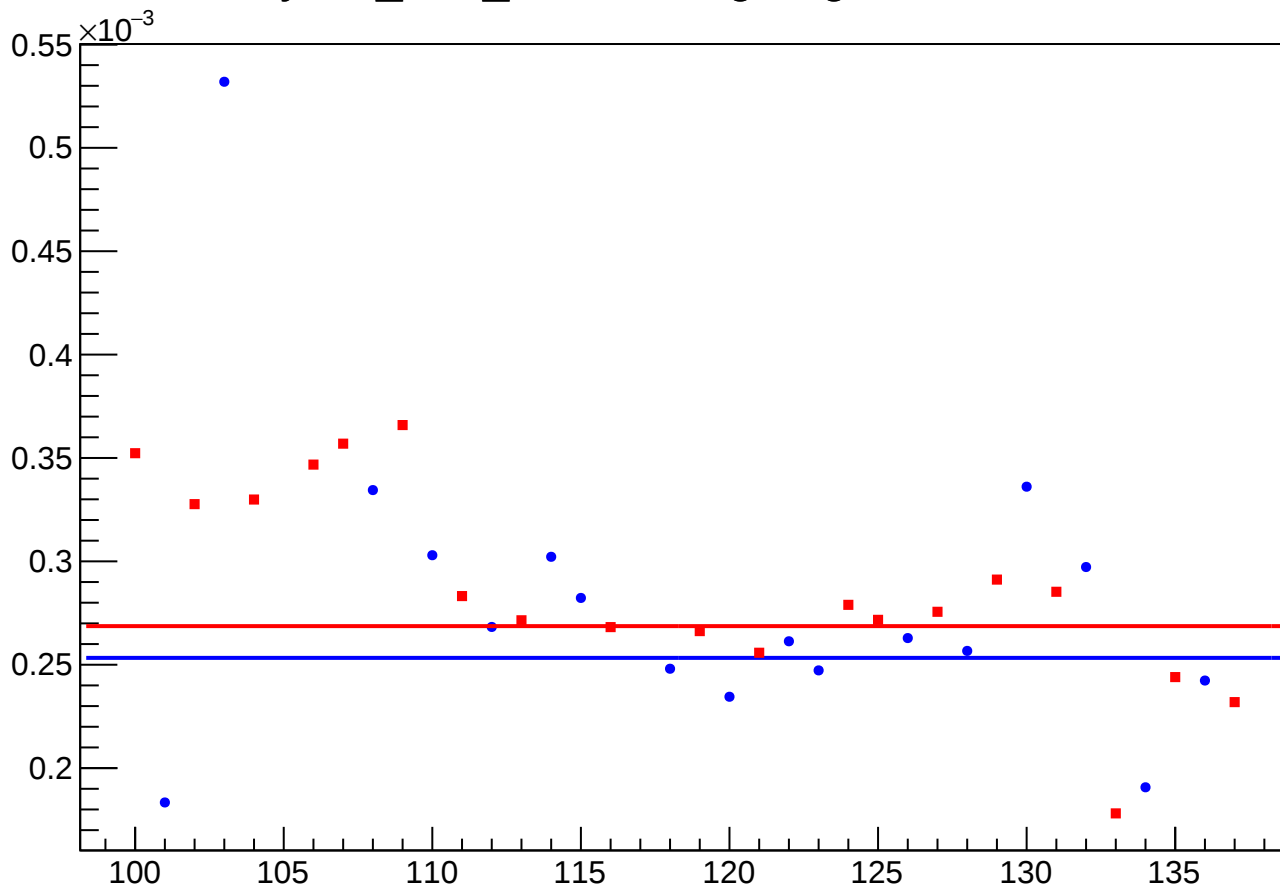
Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

All: 0.023+/-0.000

$\chi^2/\text{NDF}$ : 9954563356.3/35

# yield\_atr2\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 629159.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 428329.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

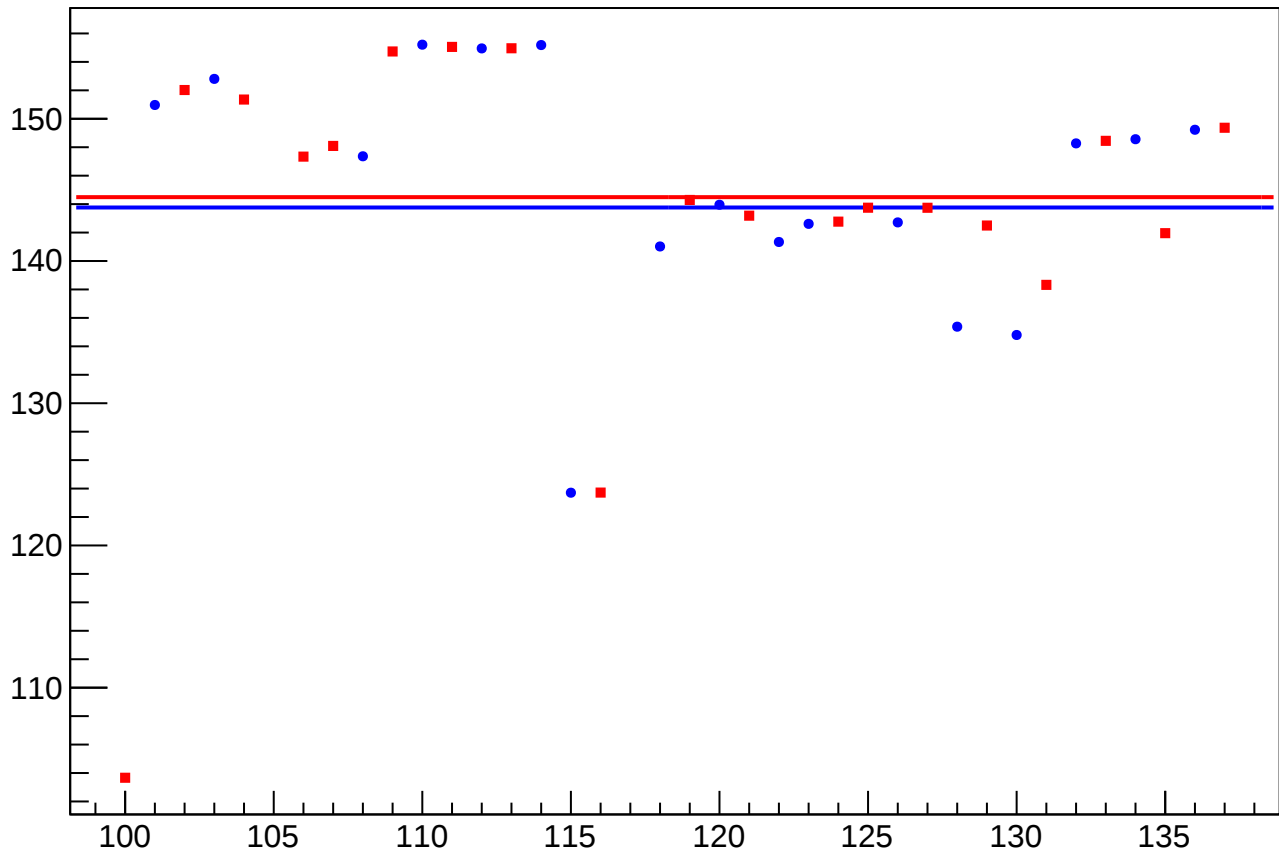
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 1078147.4/35

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 629159.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 1078147.4/35

# yield\_bcm\_an\_ds\_mean vs Slug, Sign Corrected



Right In:  $143.763 \pm 0.000$   $\chi^2/\text{NDF}: 3534699505.1/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $144.490 \pm 0.000$   $\chi^2/\text{NDF}: 4182548232.5/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

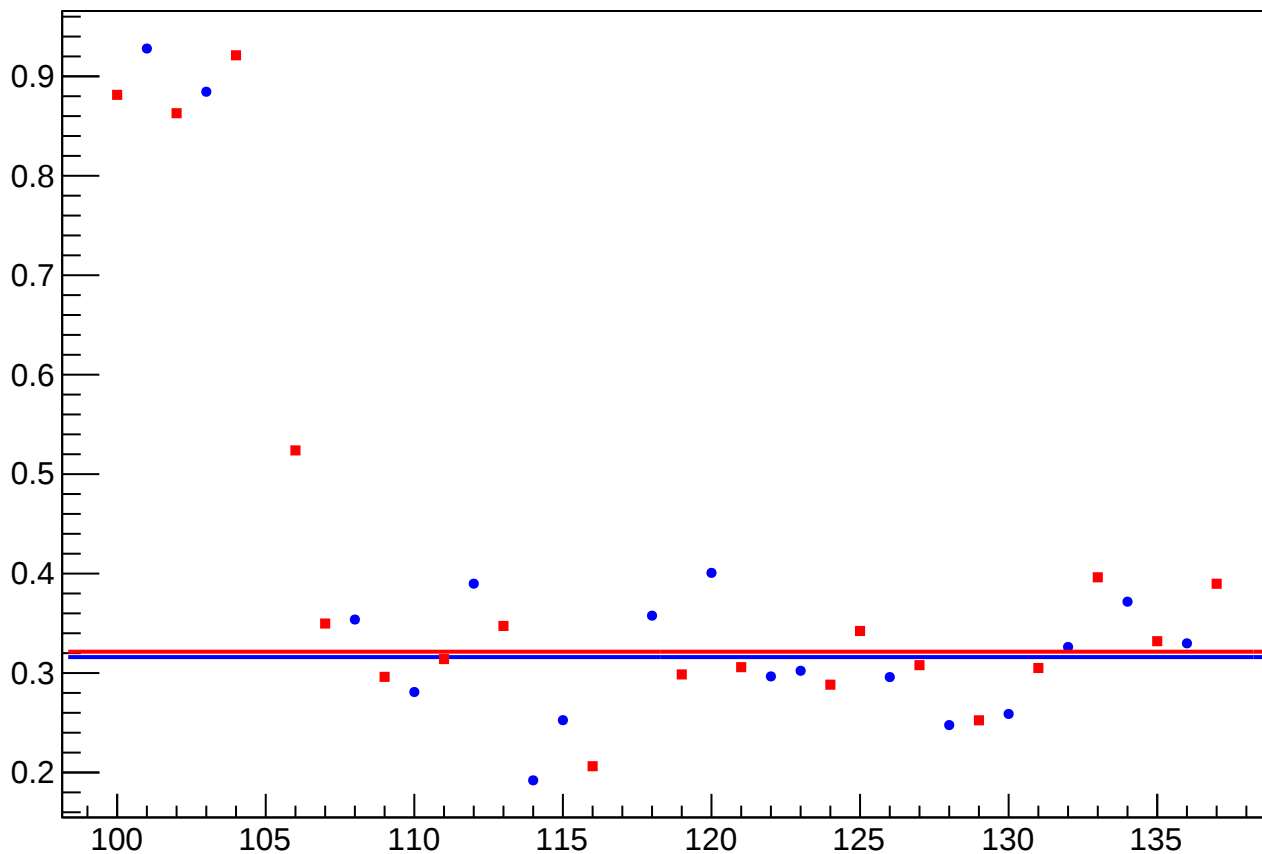
Right:  $144.130 \pm 0.000$   $\chi^2/\text{NDF}: 7732099987.4/35$

In:  $143.763 \pm 0.000$   $\chi^2/\text{NDF}: 3534699505.1/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $144.130 \pm 0.000$   $\chi^2/\text{NDF}: 7732099987.4$

# yield\_bcm\_an\_ds\_rms vs Slug, Sign Corrected



Right In: 0.316+/-0.000  $\chi^2/\text{NDF}$ : 1265921.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.321+/-0.000  $\chi^2/\text{NDF}$ : 1219073.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

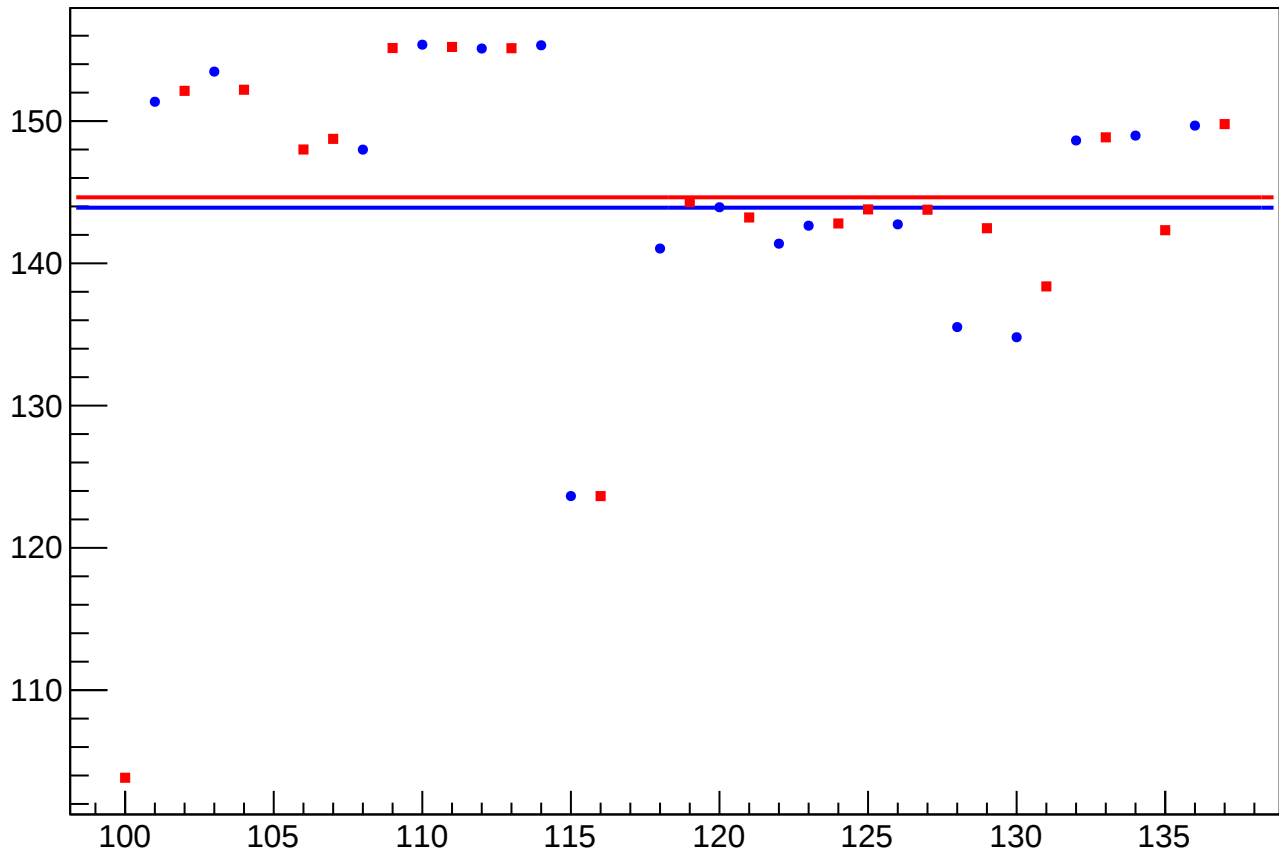
Right: 0.319+/-0.000  $\chi^2/\text{NDF}$ : 2486648.0/35

In: 0.316+/-0.000  $\chi^2/\text{NDF}$ : 1265921.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.319+/-0.000  $\chi^2/\text{NDF}$ : 2486648.0/35

# yield\_bcm\_an\_ds3\_mean vs Slug, Sign Corrected



Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Right In: 143.912+/-0.000  $\chi^2$ /NDF: 3587769790.2/16

Right: 144.280+/-0.000  $\chi^2$ /NDF: 7812104995.9/35

Left Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 144.640+/-0.000  $\chi^2$ /NDF: 4209610240.4/18

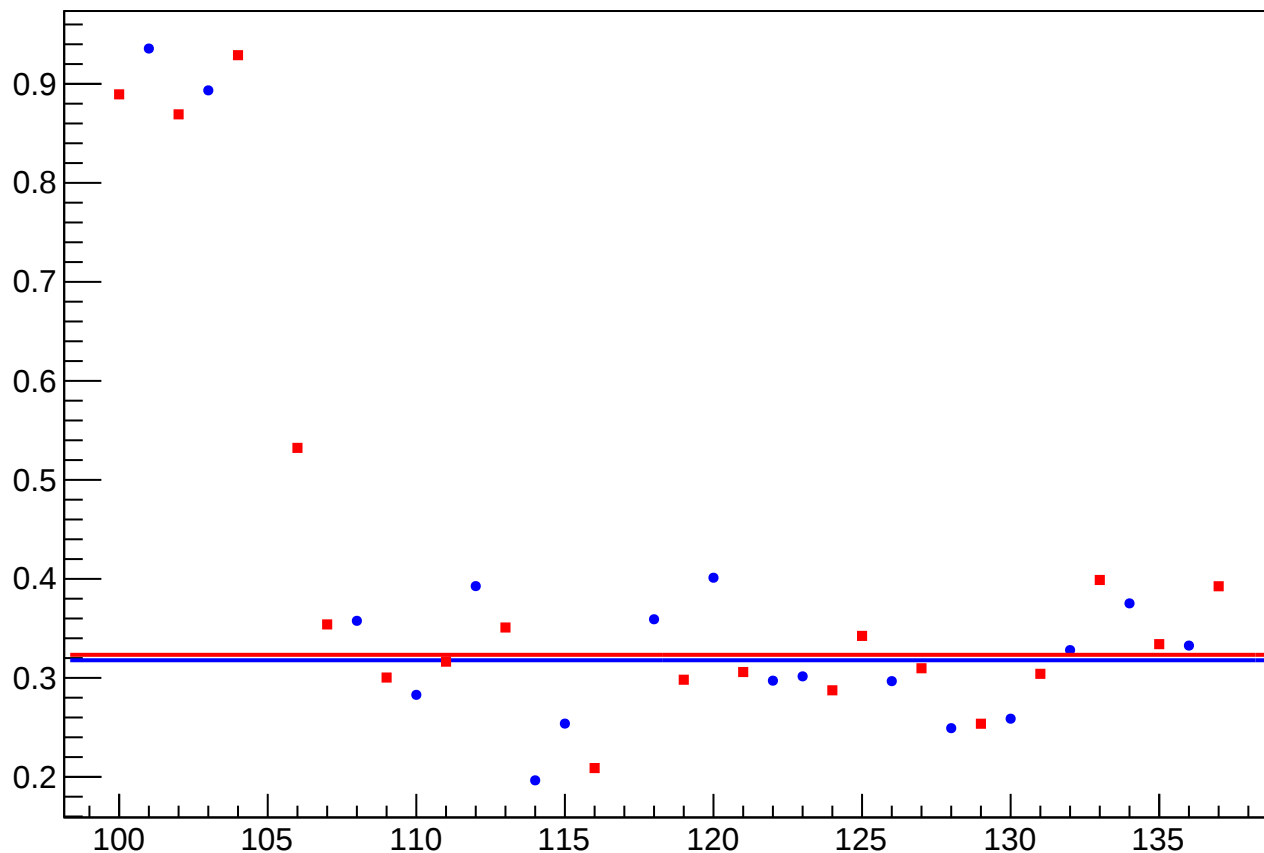
In: 143.912+/-0.000  $\chi^2$ /NDF: 3587769790.2/16

Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left In: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

All: 144.280+/-0.000  $\chi^2$ /NDF: 7812104995.9

# yield\_bcm\_an\_ds3\_rms vs Slug, Sign Corrected



Right In: 0.318+/-0.000  $\chi^2/\text{NDF}$ : 1268257.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.323+/-0.000  $\chi^2/\text{NDF}$ : 1222241.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

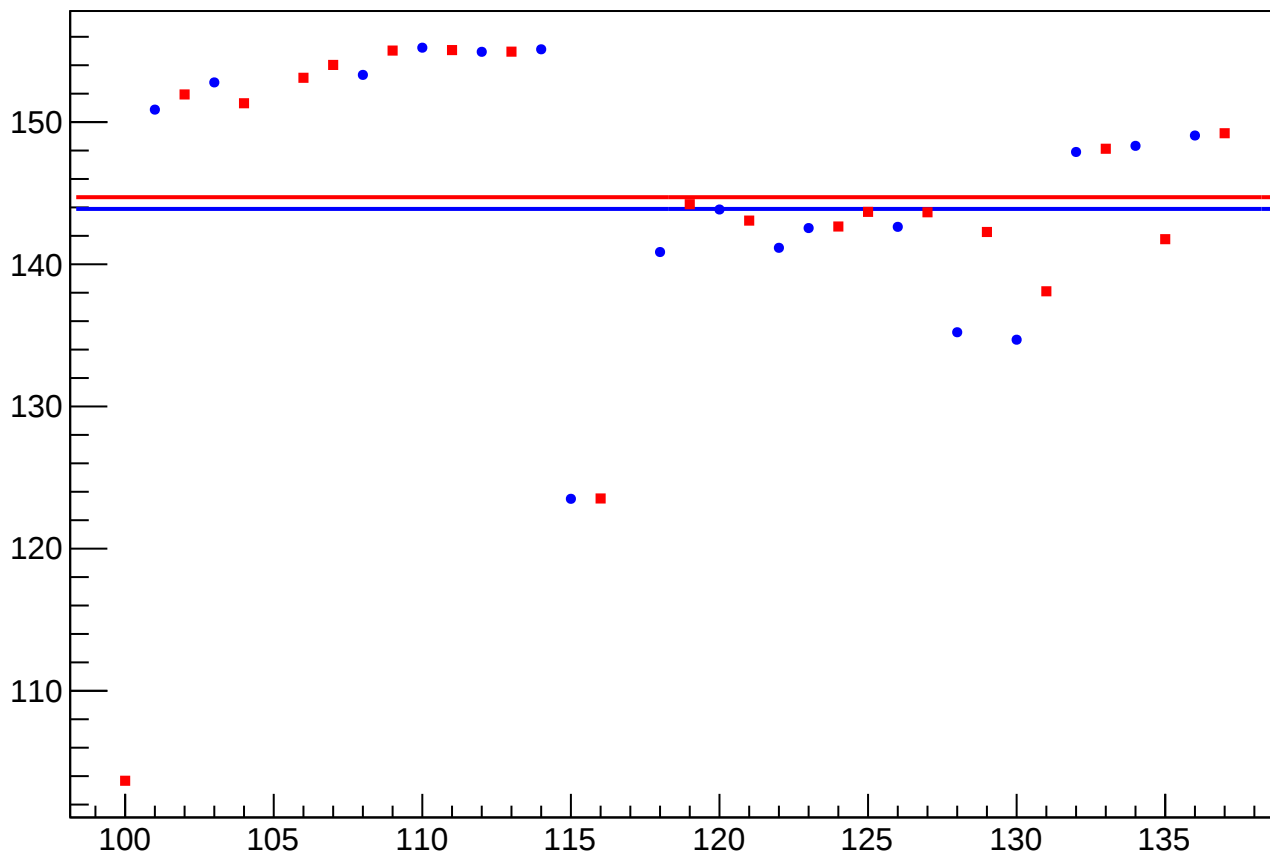
Right: 0.321+/-0.000  $\chi^2/\text{NDF}$ : 2492180.0/35

In: 0.318+/-0.000  $\chi^2/\text{NDF}$ : 1268257.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.321+/-0.000  $\chi^2/\text{NDF}$ : 2492180.0/35

# yield\_bcm\_an\_us\_mean vs Slug, Sign Corrected



Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Right In: 143.893+/-0.000  $\chi^2$ /NDF: 3752655677.2/16

Right: 144.309+/-0.000  $\chi^2$ /NDF: 8244852440.8/35

Left Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

In: 143.893+/-0.000  $\chi^2$ /NDF: 3752655677.2/16

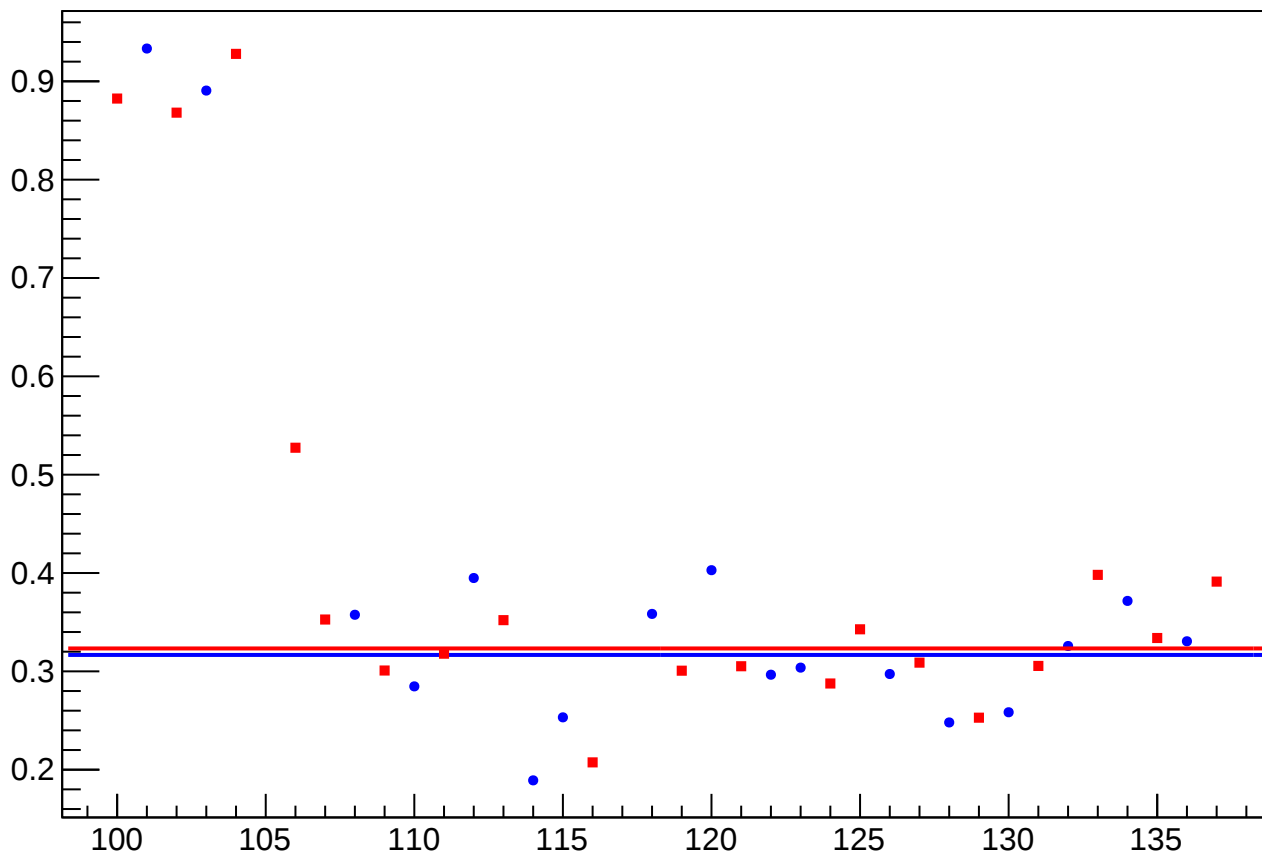
Right Out: 144.719+/-0.000  $\chi^2$ /NDF: 4473225884.5/18

Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left In: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

All: 144.309+/-0.000  $\chi^2$ /NDF: 8244852440.8

# yield\_bcm\_an\_us\_rms vs Slug, Sign Corrected



Right In: 0.317+/-0.000  $\chi^2/\text{NDF}$ : 1280358.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.323+/-0.000  $\chi^2/\text{NDF}$ : 1222784.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

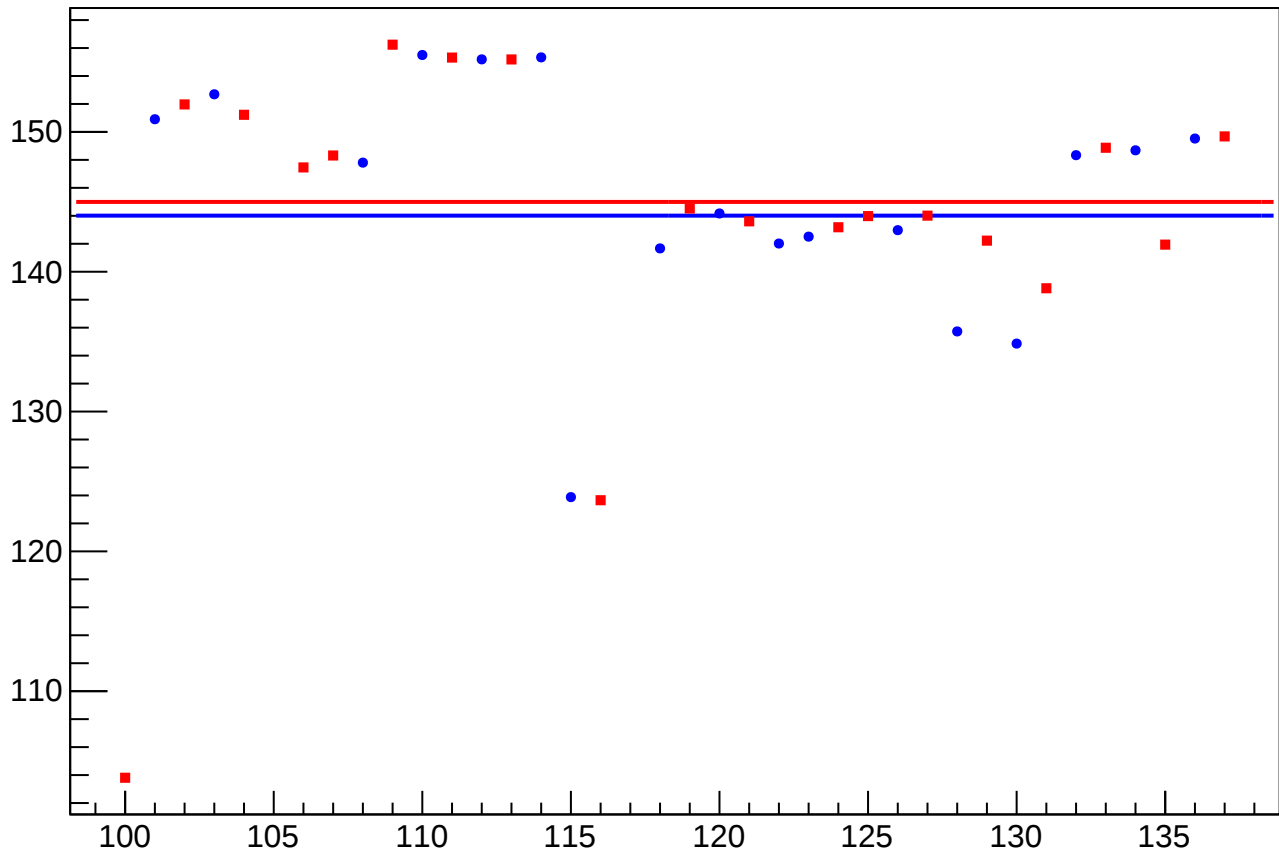
Right: 0.320+/-0.000  $\chi^2/\text{NDF}$ : 2505560.8/35

In: 0.317+/-0.000  $\chi^2/\text{NDF}$ : 1280358.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.320+/-0.000  $\chi^2/\text{NDF}$ : 2505560.8/35

# yield\_bcm\_dg\_us\_mean vs Slug, Sign Corrected



Right In: 144.012+/-0.000  $\chi^2/\text{NDF}$ : 3241696920.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 144.994+/-0.000  $\chi^2/\text{NDF}$ : 3852381452.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

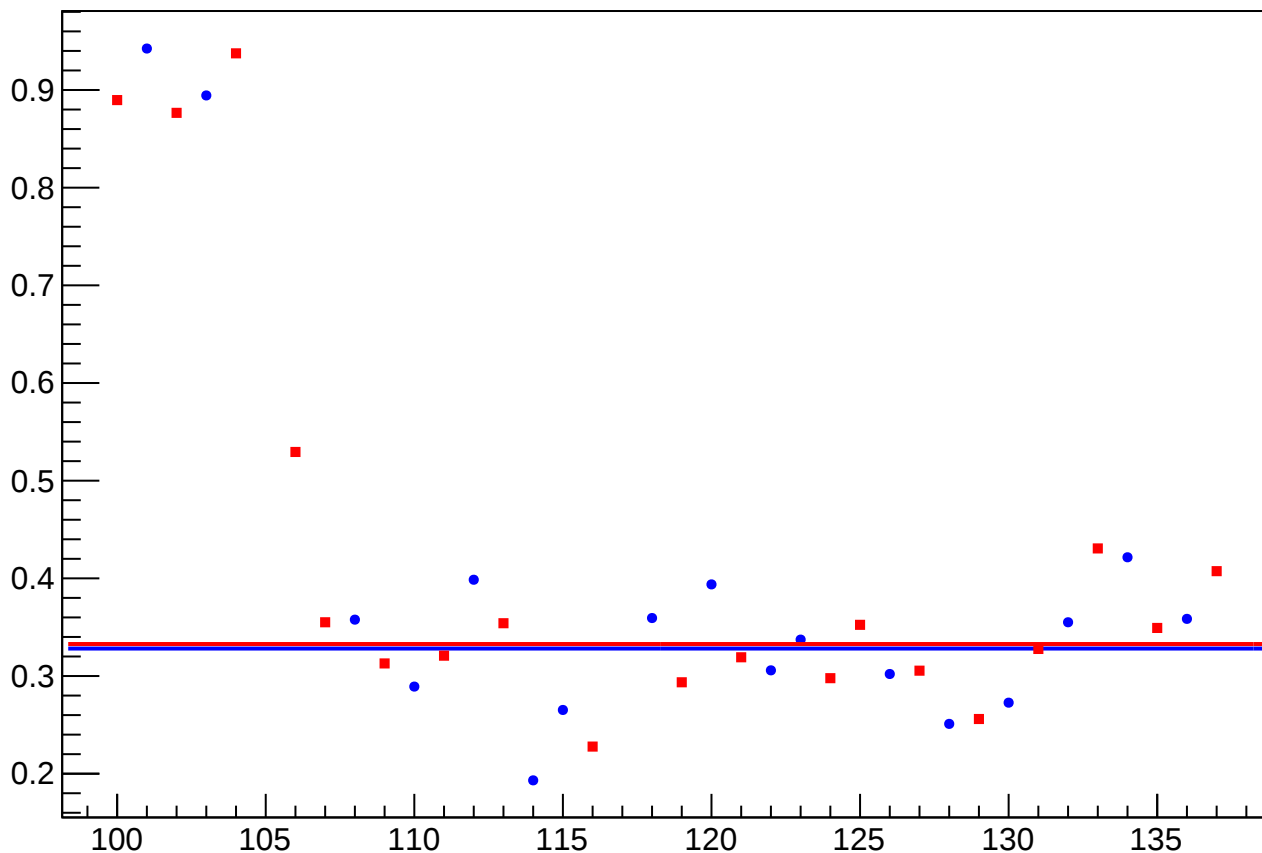
Right: 144.510+/-0.000  $\chi^2/\text{NDF}$ : 7119138597.7/35

In: 144.012+/-0.000  $\chi^2/\text{NDF}$ : 3241696920.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 144.510+/-0.000  $\chi^2/\text{NDF}$ : 7119138597.7

# yield\_bcm\_dg\_us\_rms vs Slug, Sign Corrected



Right In: 0.328+/-0.000  $\chi^2/\text{NDF}$ : 1265892.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.333+/-0.000  $\chi^2/\text{NDF}$ : 1185129.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

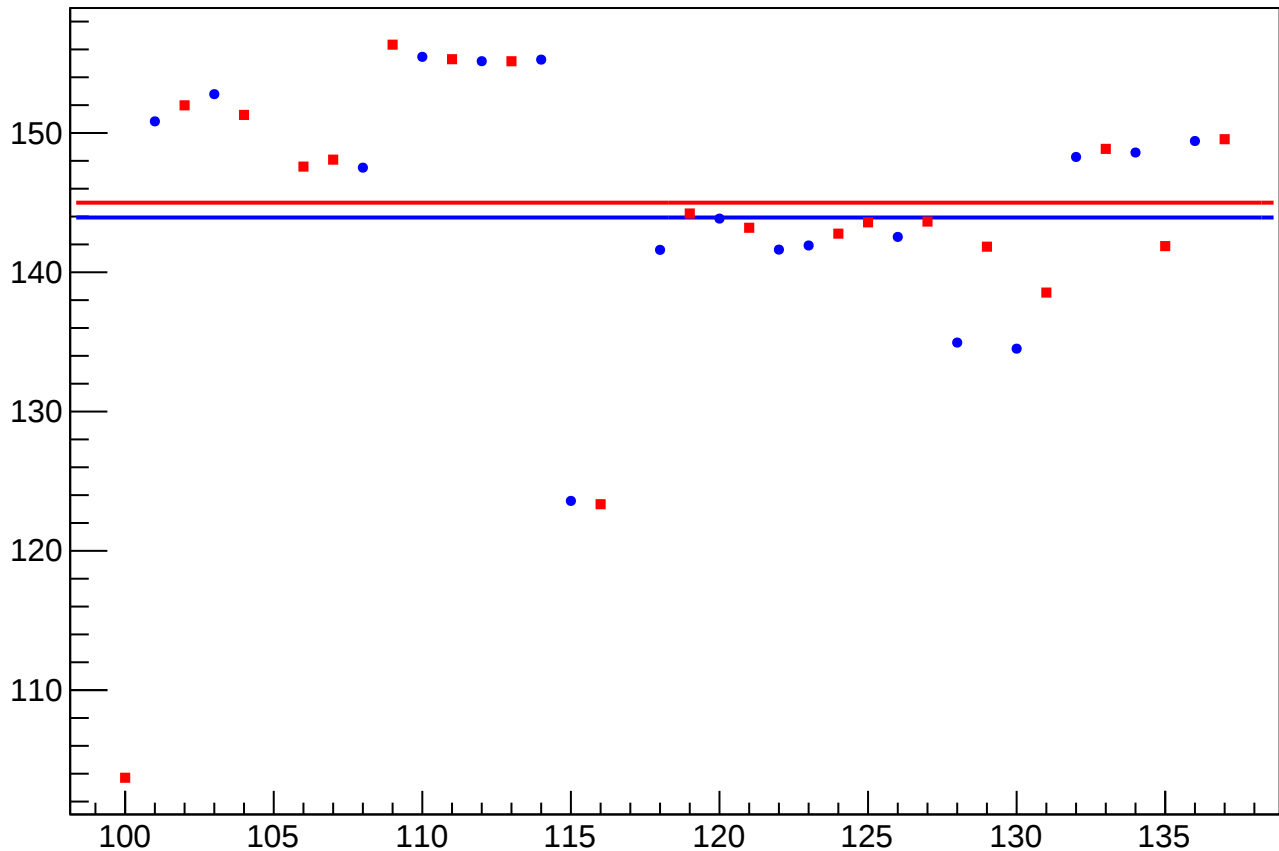
Right: 0.330+/-0.000  $\chi^2/\text{NDF}$ : 2452140.8/35

In: 0.328+/-0.000  $\chi^2/\text{NDF}$ : 1265892.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.330+/-0.000  $\chi^2/\text{NDF}$ : 2452140.8/35

# yield\_bcm\_dg\_ds\_mean vs Slug, Sign Corrected



Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 144.474+/-0.000  $\chi^2/\text{NDF}$ : 7345100324.4/35

In: 143.932+/-0.000  $\chi^2/\text{NDF}$ : 3383012861.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 144.474+/-0.000  $\chi^2/\text{NDF}$ : 7345100324.4

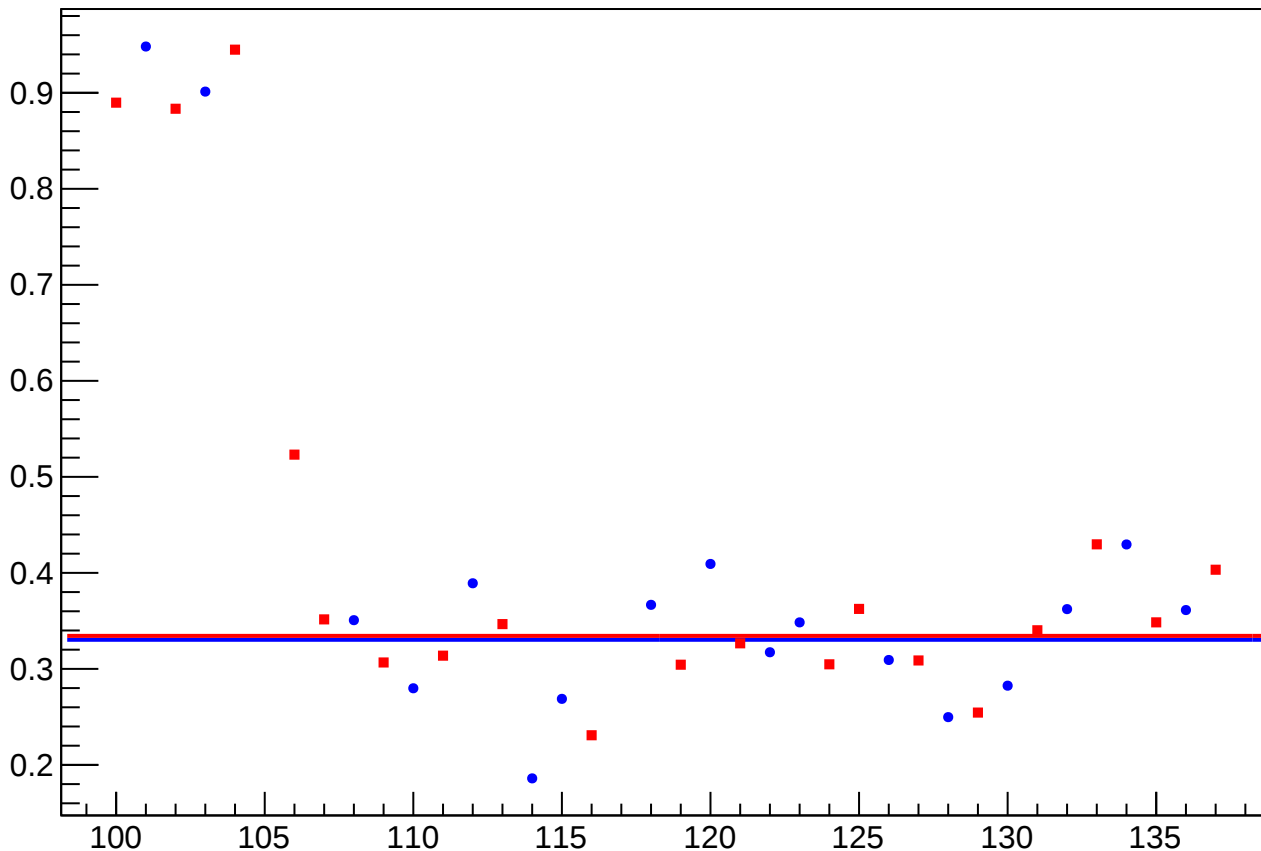
Right In: 143.932+/-0.000  $\chi^2/\text{NDF}$ : 3383012861.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 144.998+/-0.000  $\chi^2/\text{NDF}$ : 3932958476.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# yield\_bcm\_dg\_ds\_rms vs Slug, Sign Corrected



Right In: 0.330+/-0.000  $\chi^2/\text{NDF}$ : 1283955.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.334+/-0.000  $\chi^2/\text{NDF}$ : 1174012.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

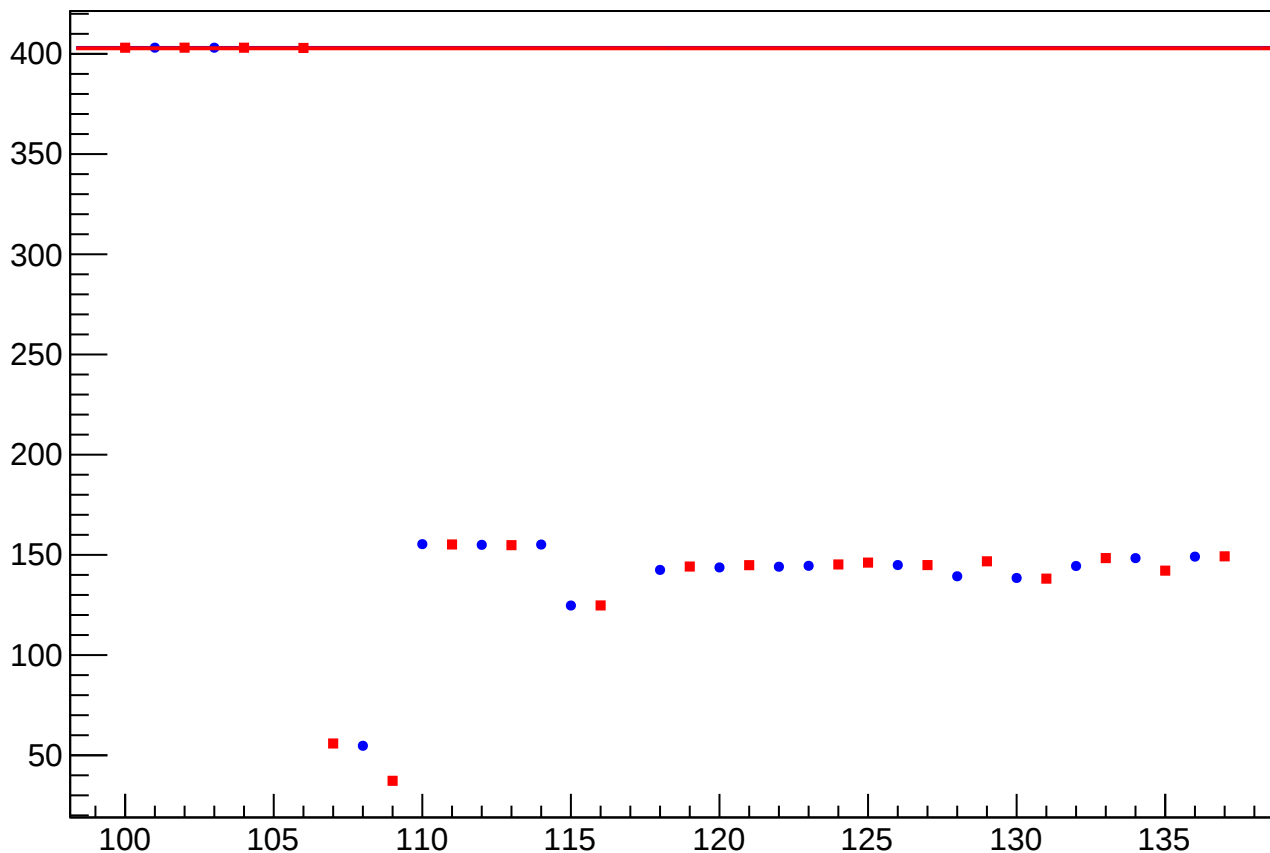
Right: 0.332+/-0.000  $\chi^2/\text{NDF}$ : 2458819.5/35

In: 0.330+/-0.000  $\chi^2/\text{NDF}$ :1283955.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

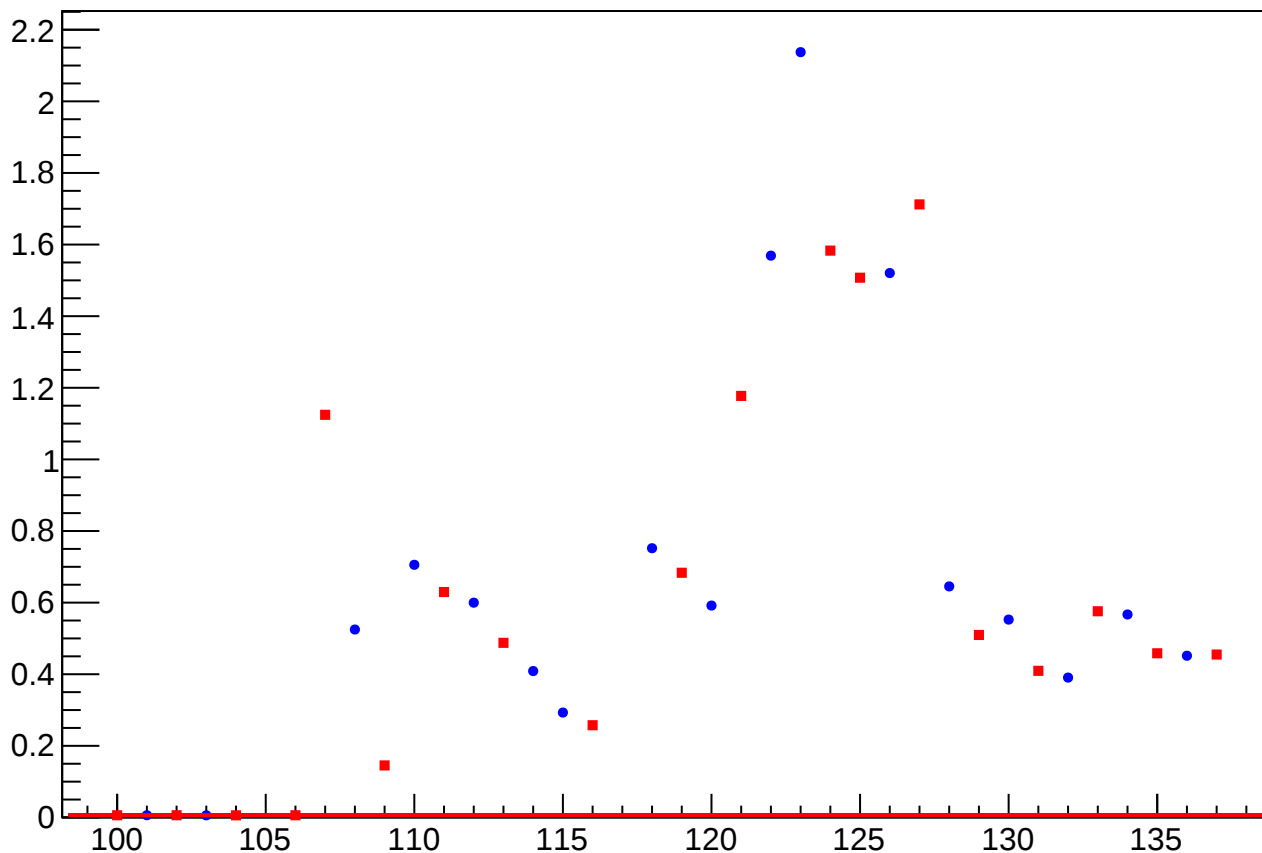
All: 0.332+/-0.000  $\chi^2/\text{NDF}$ : 2458819.5/35

# yield\_cav4bQ\_mean vs Slug, Sign Corrected



Right In: 402.958+/-0.000  $\chi^2/\text{NDF}$ : 1094364588383.4/16  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: 402.799+/-0.000  $\chi^2/\text{NDF}$ : 3102036567767.5/18  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 402.873+/-0.000  $\chi^2/\text{NDF}$ : 4196818264482.1

# yield\_cav4bQ\_rms vs Slug, Sign Corrected



Right In: 0.006+/-0.000

$\chi^2/\text{NDF}$ : 9079322.7/16

Left Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.006+/-0.000

$\chi^2/\text{NDF}$ : 9193355.5/18

Left In: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right: 0.006+/-0.000

$\chi^2/\text{NDF}$ : 18272681.8/35

In: 0.006+/-0.000

$\chi^2/\text{NDF}$ : 9079322.7/16

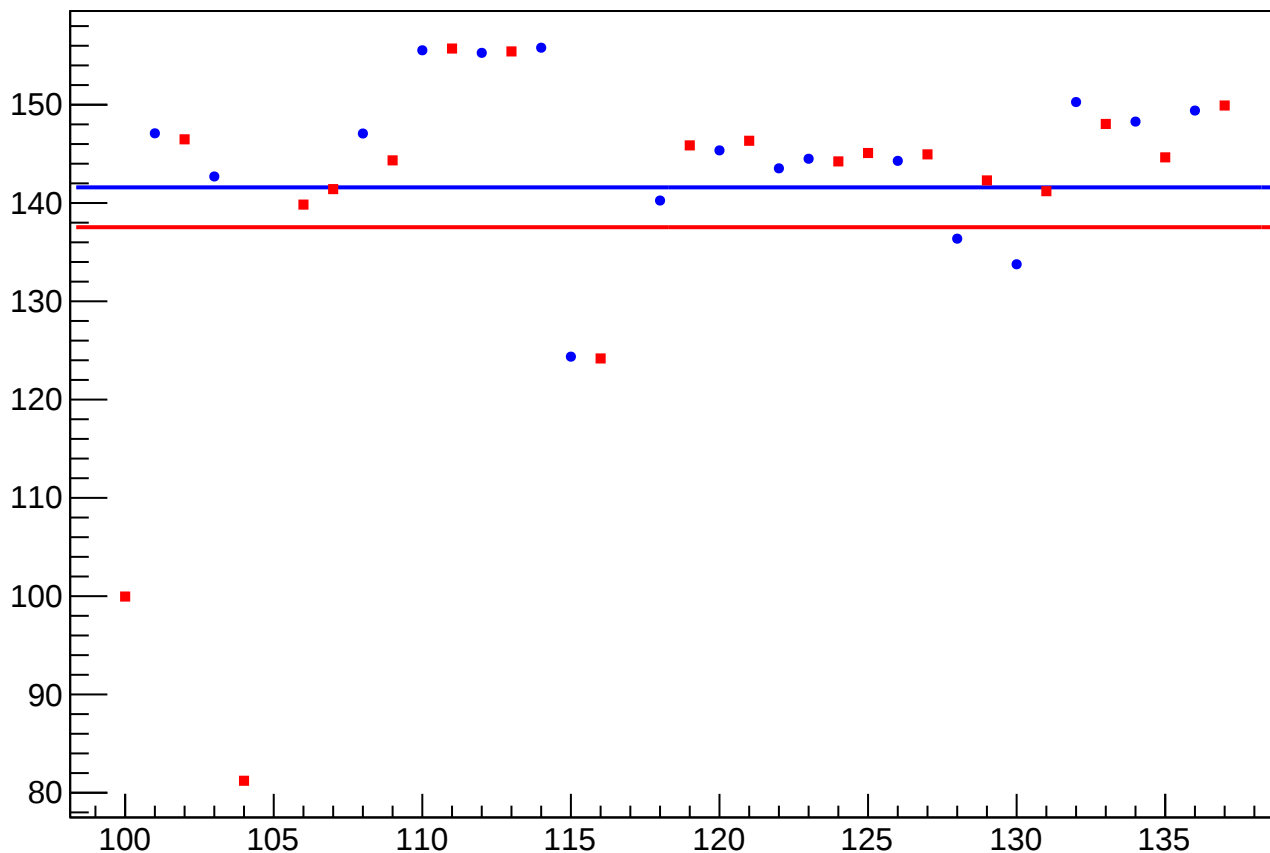
Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

All: 0.006+/-0.000

$\chi^2/\text{NDF}$ : 18272681.8/35

# yield\_cav4cQ\_mean vs Slug, Sign Corrected



Right In: 141.593+/-0.000  $\chi^2/\text{NDF}$ : 980101868.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 137.539+/-0.000  $\chi^2/\text{NDF}$ : 1316096307.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

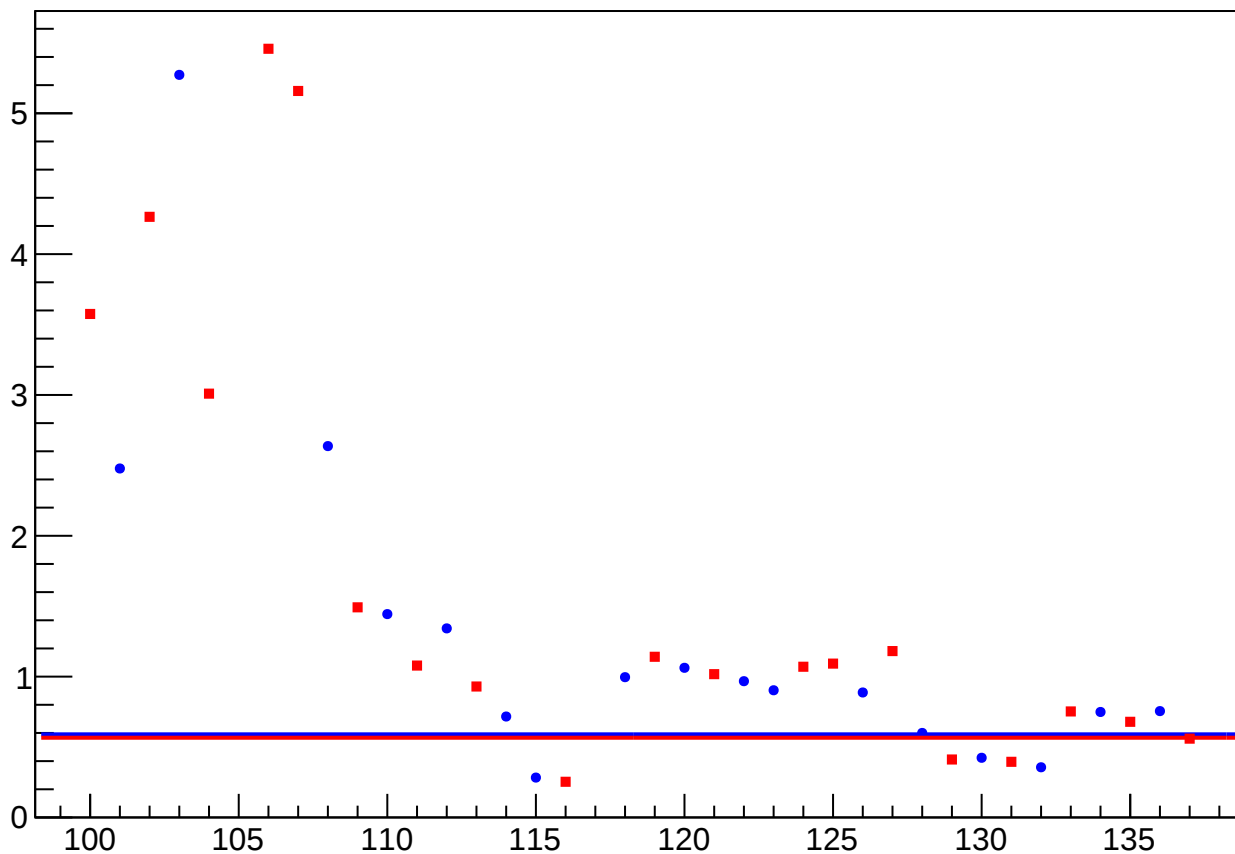
Right: 139.514+/-0.000  $\chi^2/\text{NDF}$ : 2381261600.7/35

In: 141.593+/-0.000  $\chi^2/\text{NDF}$ : 980101868.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 139.514+/-0.000  $\chi^2/\text{NDF}$ : 2381261600.7

# yield\_cav4cQ\_rms vs Slug, Sign Corrected



Right In: 0.590+/-0.000  $\chi^2/\text{NDF}$ : 3491995.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.566+/-0.000  $\chi^2/\text{NDF}$ : 4683596.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

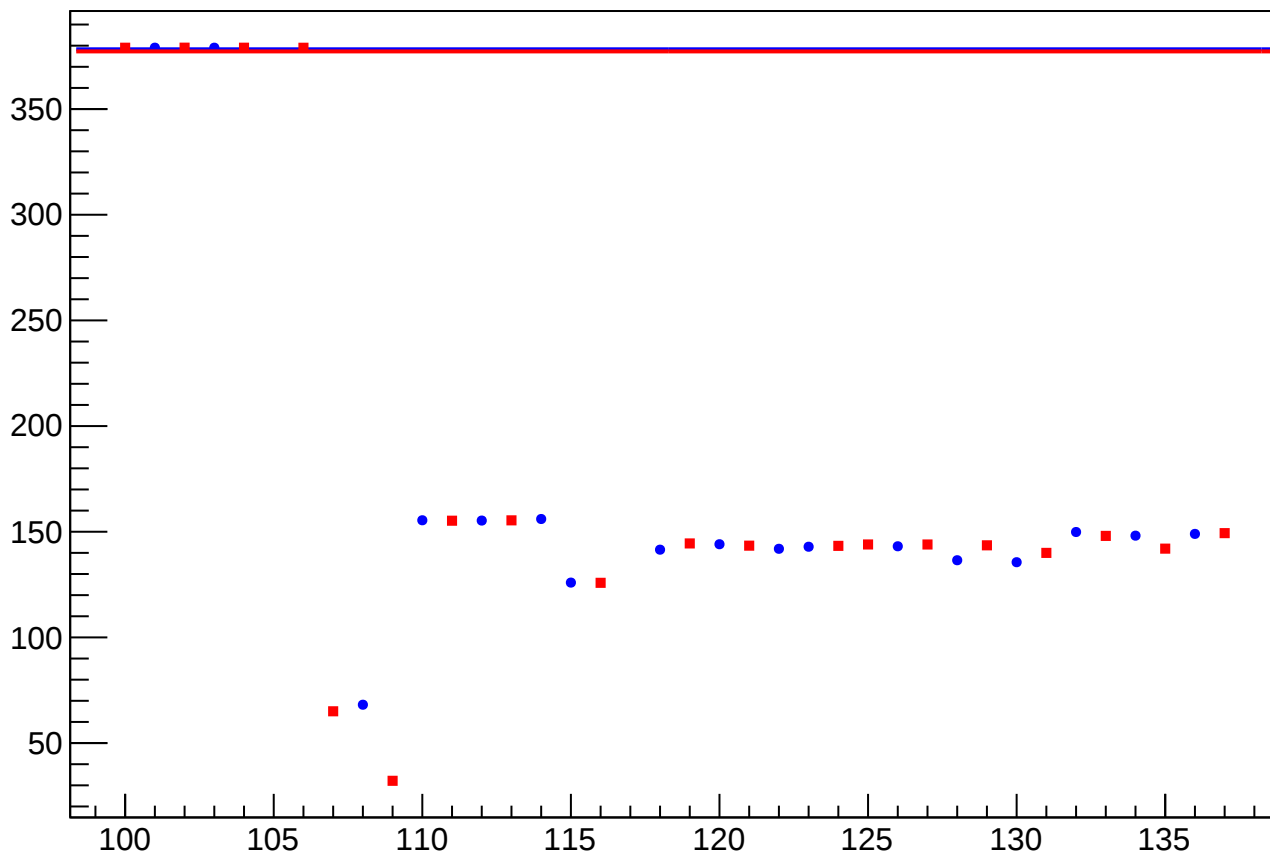
Right: 0.578+/-0.000  $\chi^2/\text{NDF}$ : 8181648.0/35

In: 0.590+/-0.000  $\chi^2/\text{NDF}$ : 3491995.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

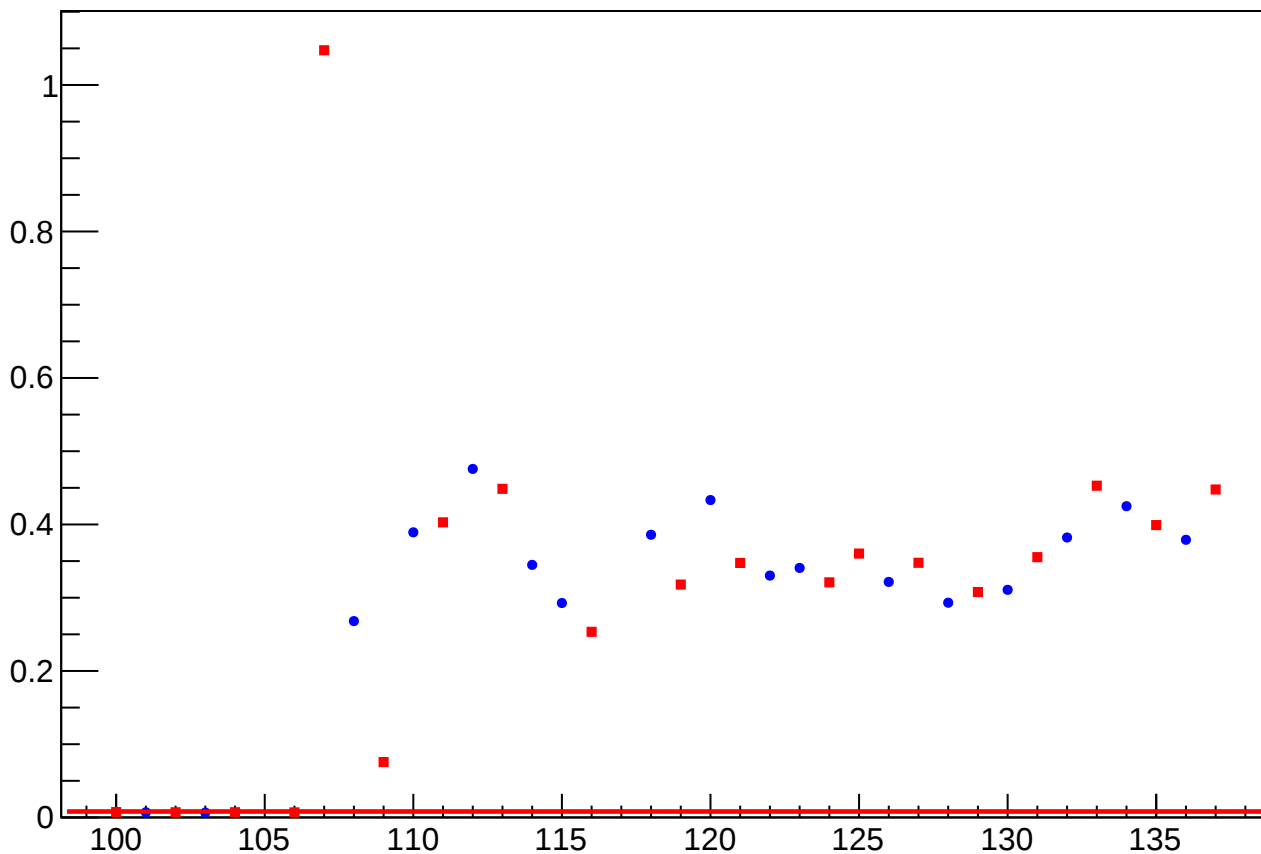
All: 0.578+/-0.000  $\chi^2/\text{NDF}$ : 8181648.0/35

# yield\_cav4dQ\_mean vs Slug, Sign Corrected



Right In: 378.283 $\pm$ 0.000  $\chi^2$ /NDF: 2508313421453.8/16  
 Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0  
 Right Out: 377.287 $\pm$ 0.000  $\chi^2$ /NDF: 8286303106836.4/18  
 Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0  
 All: 377.752 $\pm$ 0.000  $\chi^2$ /NDF: 10801647529340.0

# yield\_cav4dQ\_rms vs Slug, Sign Corrected



Right In: 0.008+/-0.000  $\chi^2/\text{NDF}$ : 9806719.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.008+/-0.000  $\chi^2/\text{NDF}$ : 9522827.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

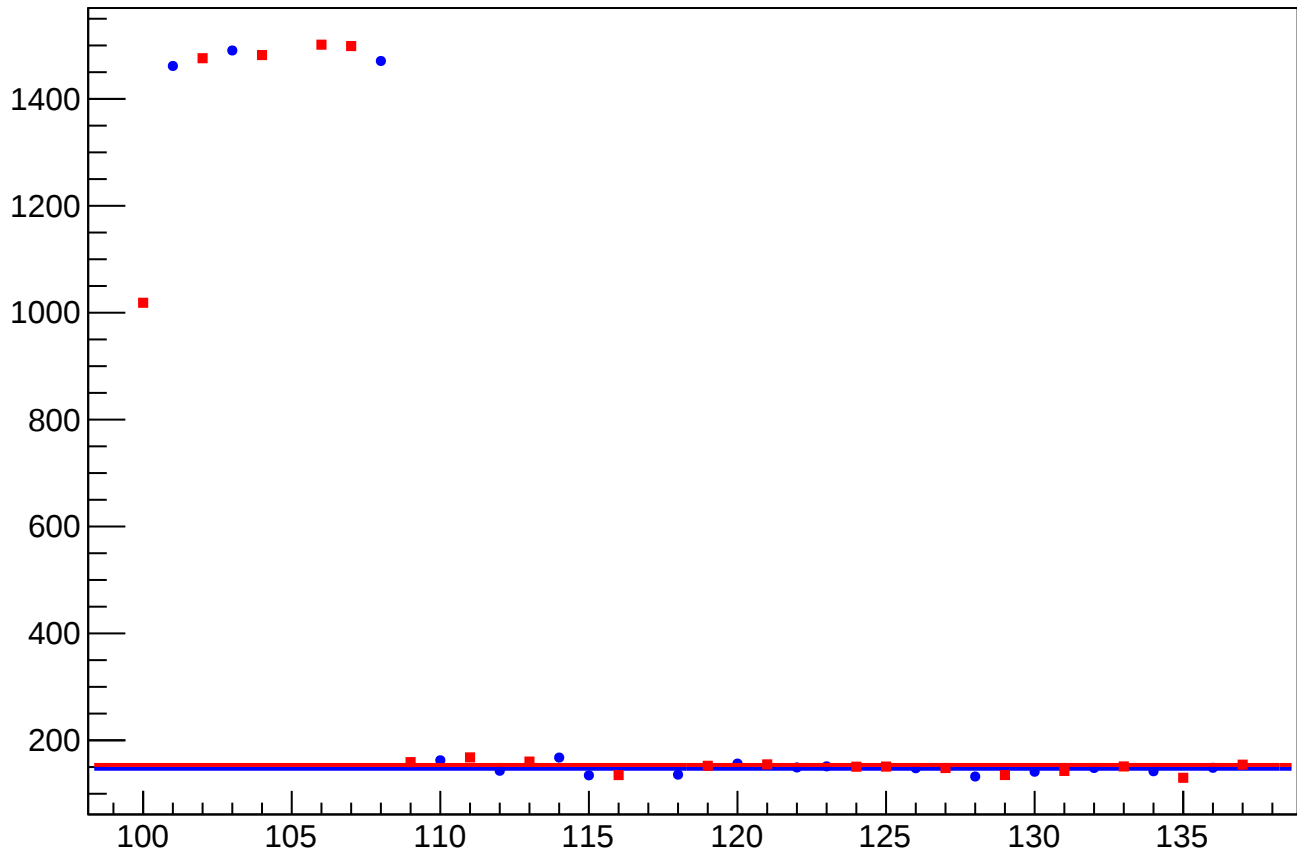
Right: 0.008+/-0.000  $\chi^2/\text{NDF}$ : 19329555.6/35

In: 0.008+/-0.000  $\chi^2/\text{NDF}$ :9806719.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

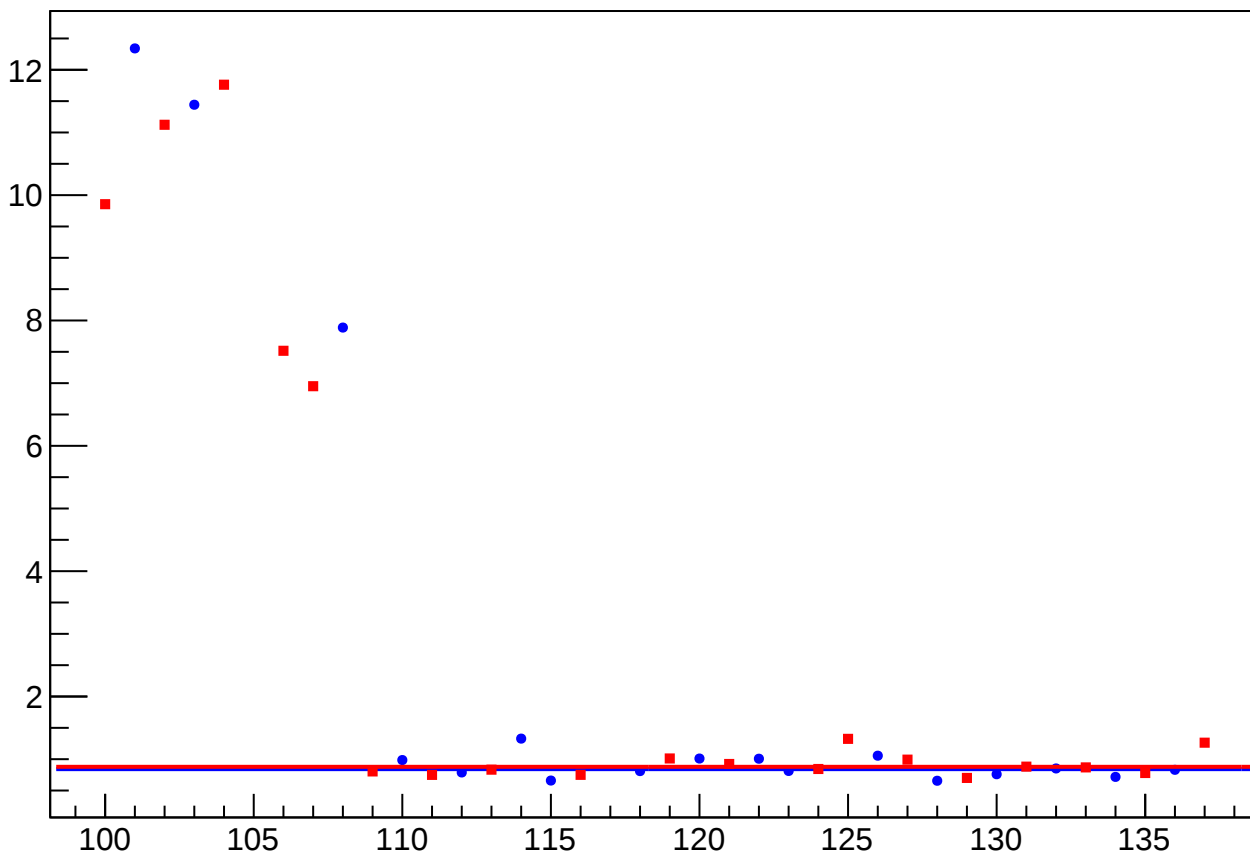
All: 0.008+/-0.000  $\chi^2/\text{NDF}$ : 19329555.6/35

# yield\_bcm0l02\_mean vs Slug, Sign Corrected



Right In: 146.819+/-0.000  $\chi^2/\text{NDF}$ : 24360774977.7/16  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: 153.901+/-0.000  $\chi^2/\text{NDF}$ : 33737565970.8/18  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 150.348+/-0.000  $\chi^2/\text{NDF}$ : 58231390734.2/35

# yield\_bcm0l02\_rms vs Slug, Sign Corrected



Right In: 0.841+/-0.000  $\chi^2/\text{NDF}$ : 2662395.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.878+/-0.000  $\chi^2/\text{NDF}$ : 2814626.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

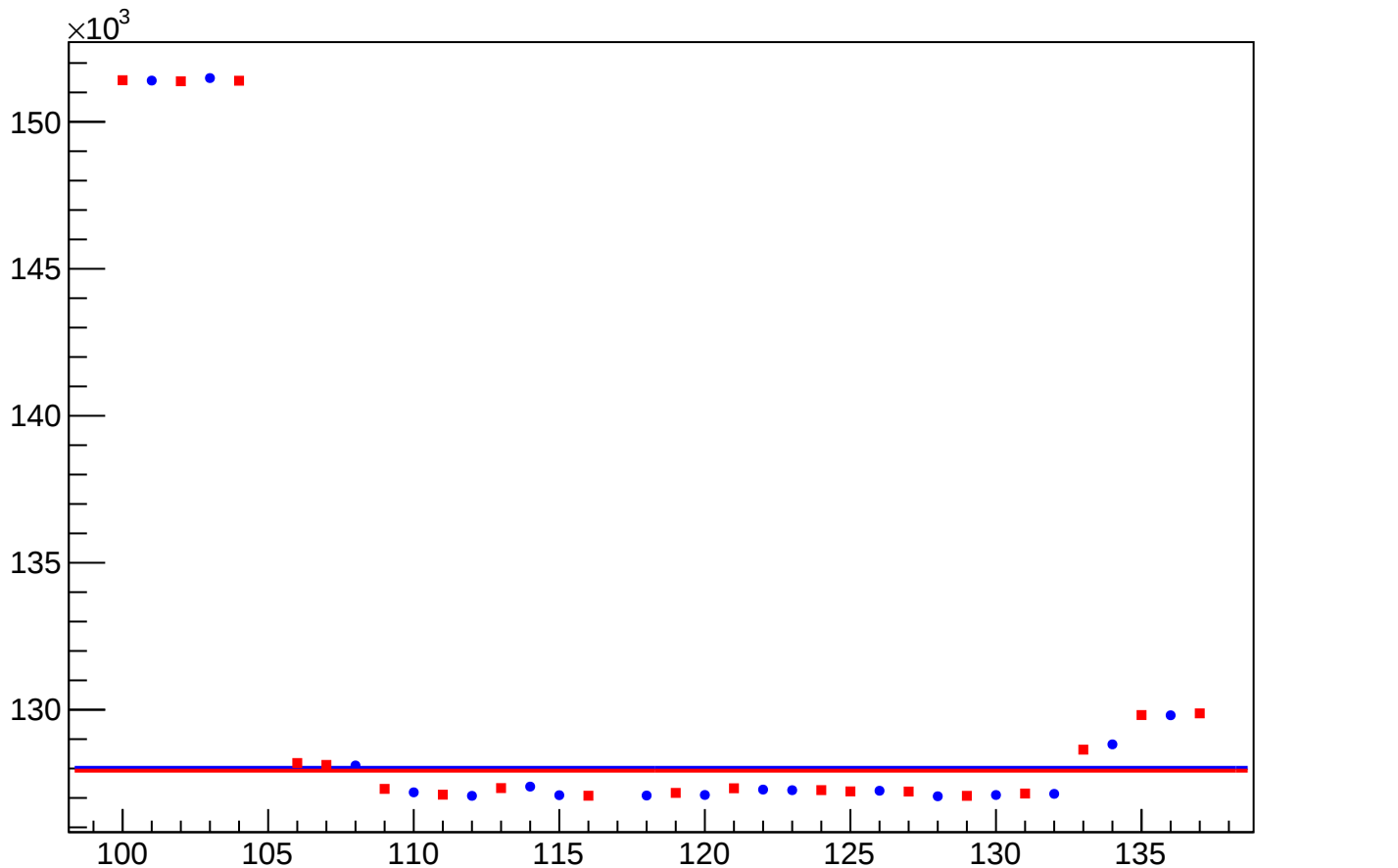
Right: 0.860+/-0.000  $\chi^2/\text{NDF}$ : 5484331.4/35

In: 0.841+/-0.000  $\chi^2/\text{NDF}$ : 2662395.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

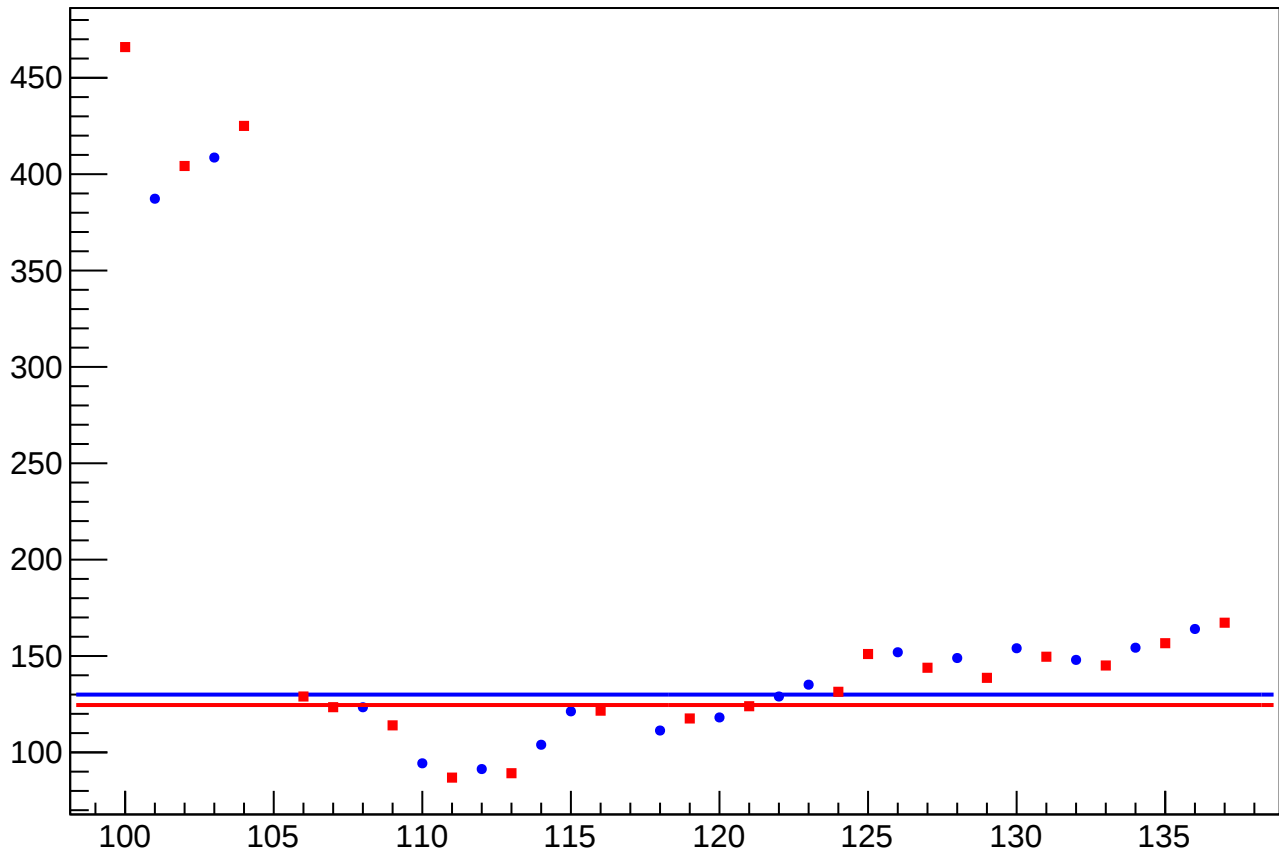
All: 0.860+/-0.000  $\chi^2/\text{NDF}$ : 5484331.4/35

# yield\_bpm2i01WS\_mean vs Slug, Sign Corrected



Right In: 128023.527 $\pm$ 0.055  $\chi^2$ /NDF: 4316540586.9/16  
 Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0  
 Right Out: 127927.471 $\pm$ 0.050  $\chi^2$ /NDF: 3767047216.9/18  
 Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0  
 Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0  
 Right: 127971.691 $\pm$ 0.037  $\chi^2$ /NDF: 8085261759.1  
 In: 128023.527 $\pm$ 0.055  $\chi^2$ /NDF:4316540586.9/16  
 Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0  
 All: 127971.691 $\pm$ 0.037  $\chi^2$ /NDF: 808526175

# yield\_bpm2i01WS\_rms vs Slug, Sign Corrected



Right In: 129.980+/-0.039  $\chi^2/\text{NDF}$ : 1485519.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 124.566+/-0.036  $\chi^2/\text{NDF}$ : 1531273.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

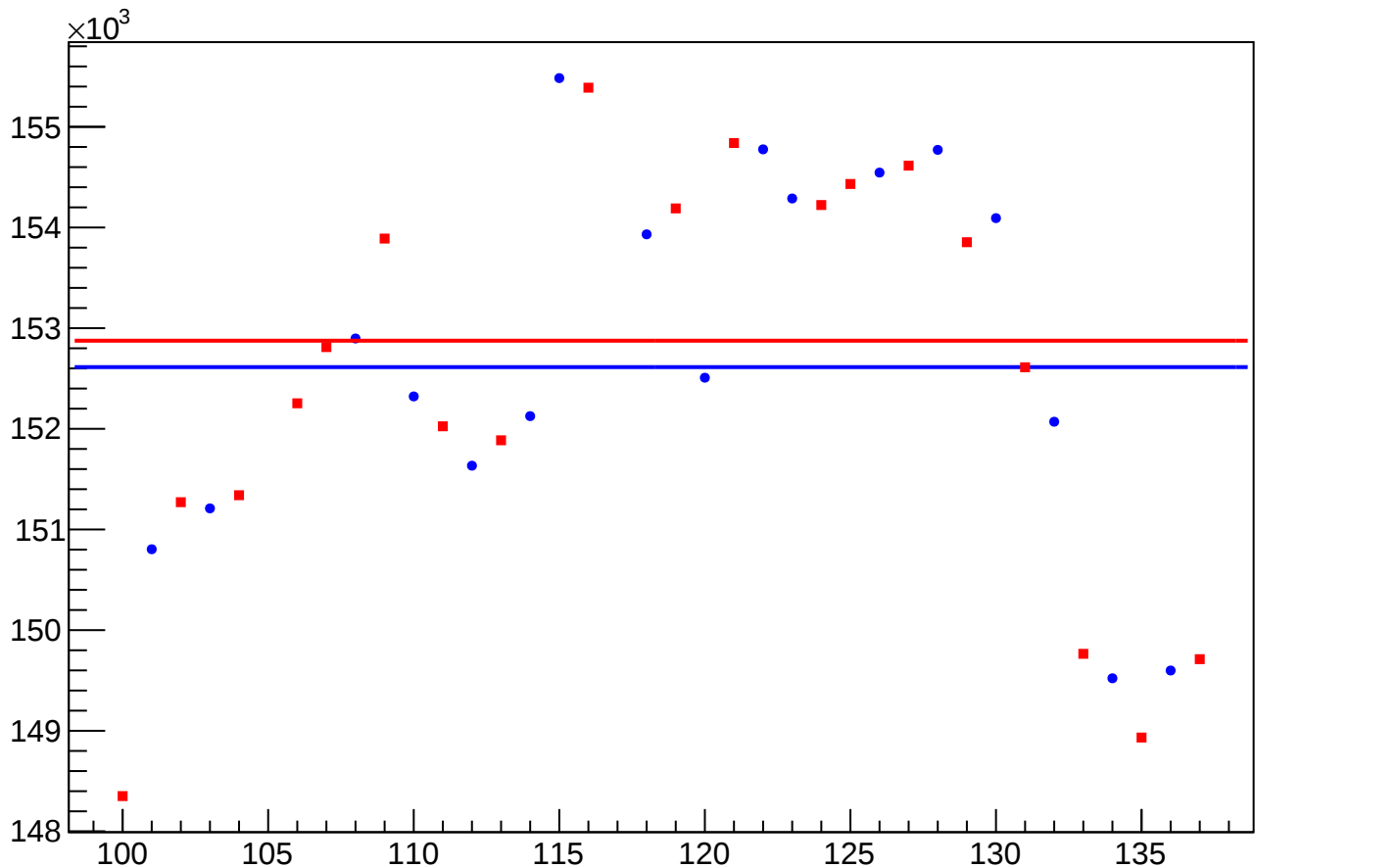
Right: 127.058+/-0.026  $\chi^2/\text{NDF}$ : 3027426.7/35

In: 129.980+/-0.039  $\chi^2/\text{NDF}$ : 1485519.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 127.058+/-0.026  $\chi^2/\text{NDF}$ : 3027426.7/35

yield\_bpm0i07WS\_mean vs Slug, Sign Corrected



Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Right In: 152613.122+/-0.072  $\chi^2$ /NDF: 623356098.4/16

Right: 152755.689+/-0.049  $\chi^2$ /NDF: 1346872378.3

Left Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

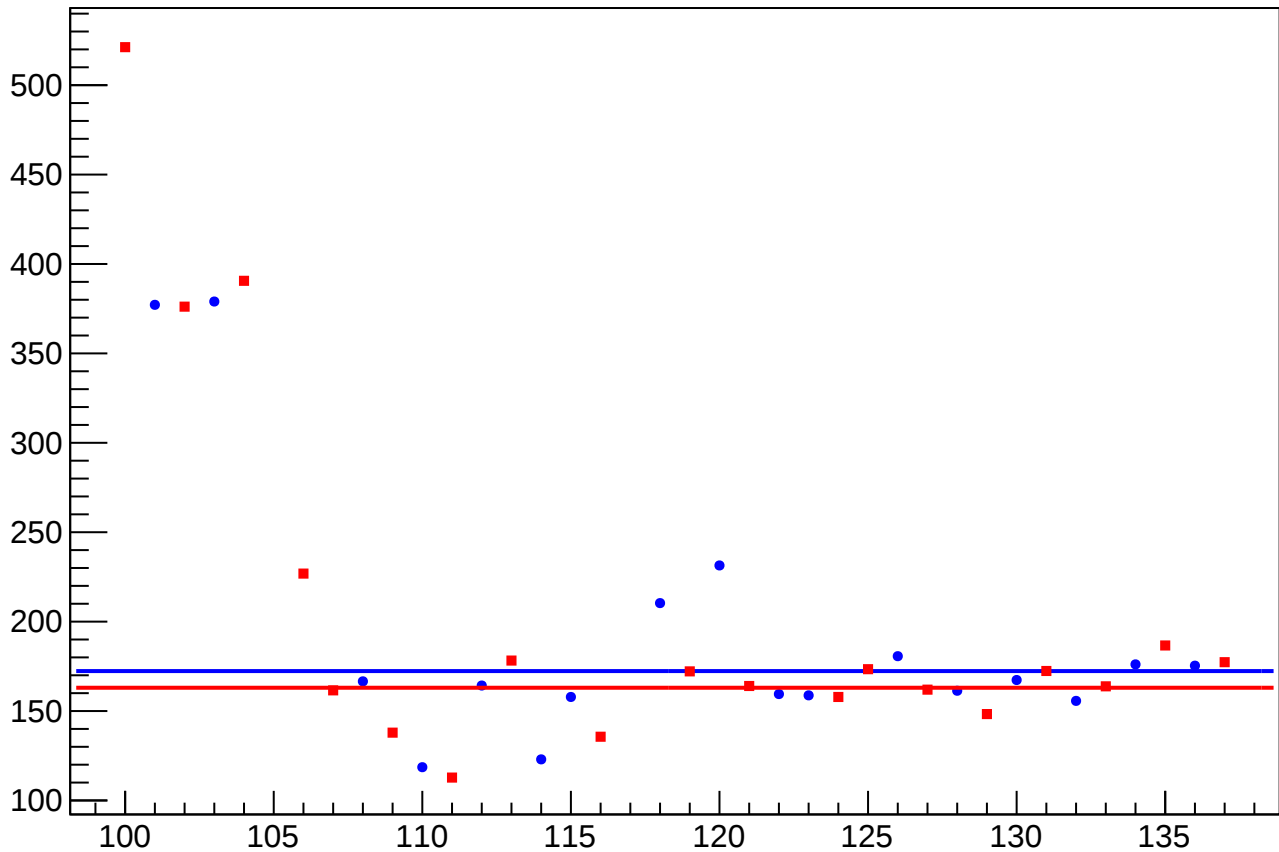
Right Out: 152875.313+/-0.066  $\chi^2$ /NDF: 716358700.9/18

Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left In: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

All: 152755.689+/-0.049  $\chi^2$ /NDF: 1346872378.3

# yield\_bpm0i07WS\_rms vs Slug, Sign Corrected



Right In: 172.351+/-0.051  $\chi^2/\text{NDF}$ : 921911.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 163.029+/-0.047  $\chi^2/\text{NDF}$ : 1032736.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

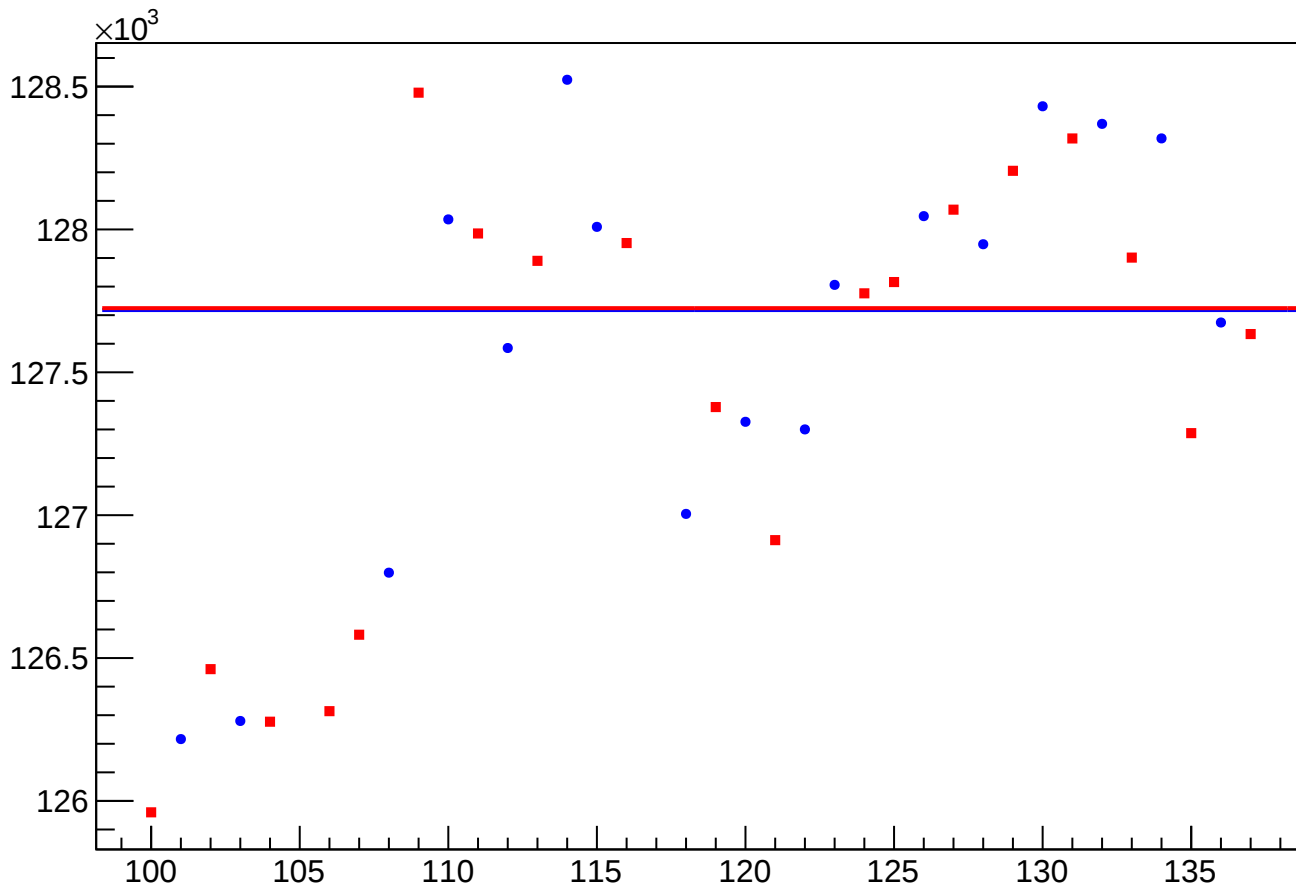
Right: 167.282+/-0.035  $\chi^2/\text{NDF}$ : 1972741.3/35

In: 172.351+/-0.051  $\chi^2/\text{NDF}$ : 921911.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 167.282+/-0.035  $\chi^2/\text{NDF}$ : 1972741.3/35

yield\_bpm0l01WS\_mean vs Slug, Sign Corrected



Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Right In: 127717.888+/-0.058  $\chi^2$ /NDF: 95177660.2/16

Right: 127721.424+/-0.040  $\chi^2$ /NDF: 207735167.4/3

Left Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 127724.519+/-0.055  $\chi^2$ /NDF: 112550604.4/18

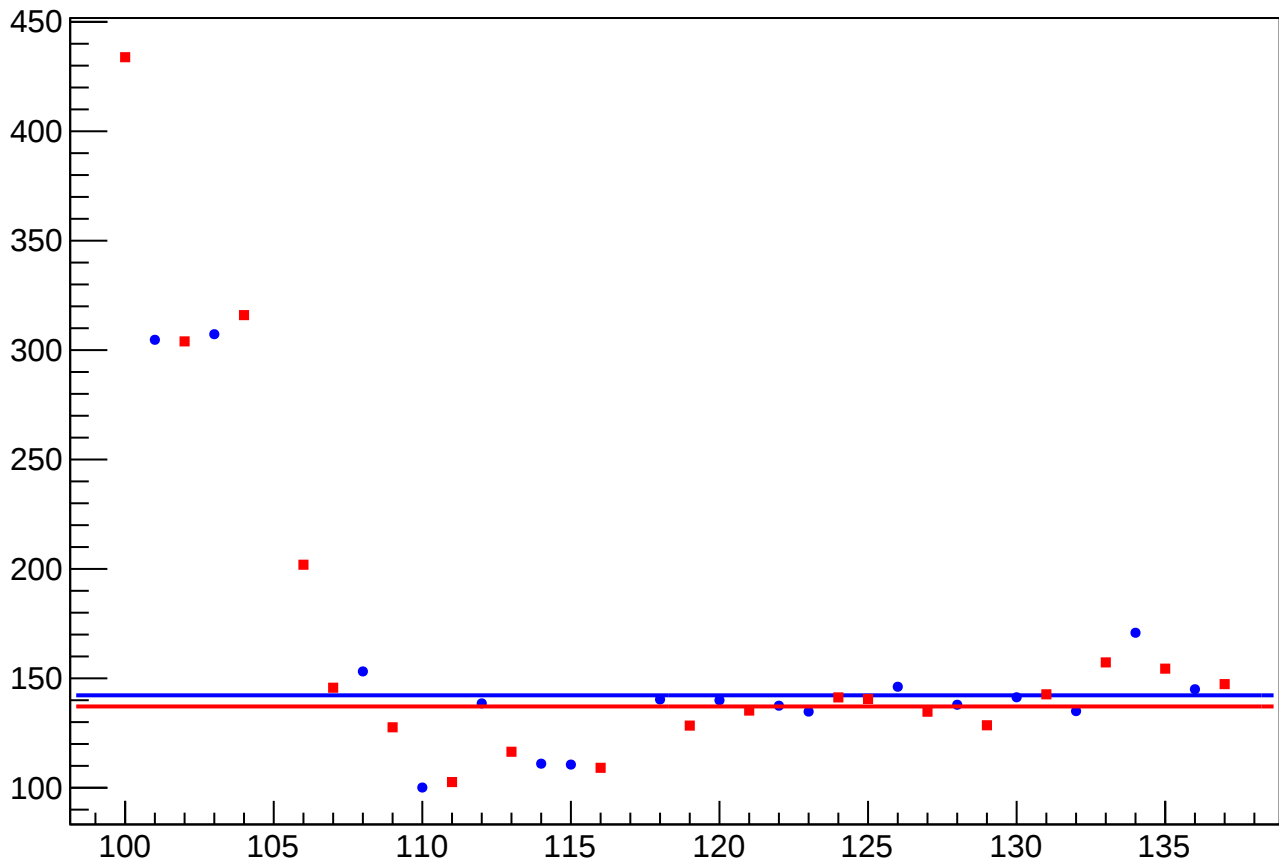
In: 127717.888+/-0.058  $\chi^2$ /NDF: 95177660.2/16

Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

Left In: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

All: 127721.424+/-0.040  $\chi^2$ /NDF: 207735167.4/3

# yield\_bpm0l01WS\_rms vs Slug, Sign Corrected



Right In: 142.240+/-0.041  $\chi^2/\text{NDF}$ : 836415.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 137.151+/-0.039  $\chi^2/\text{NDF}$ : 957730.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

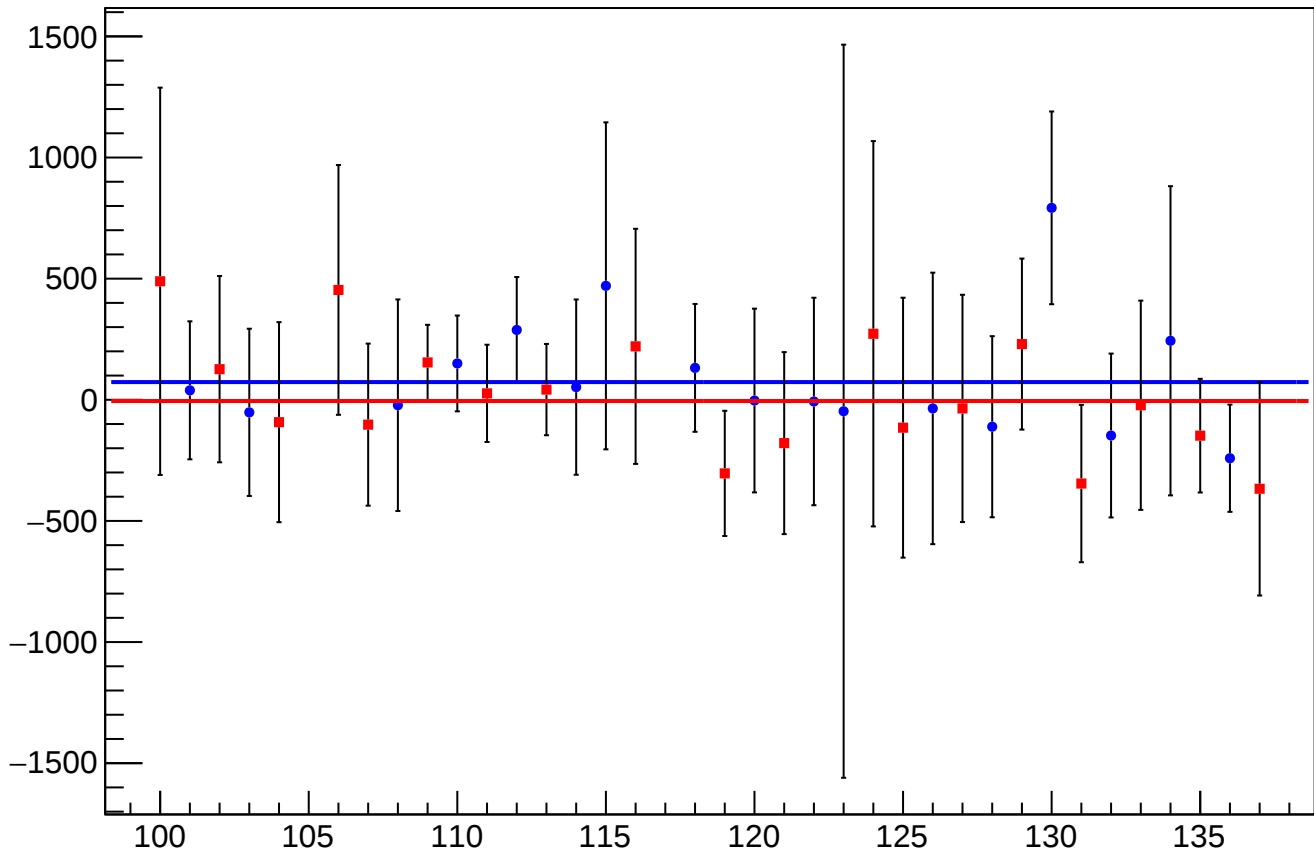
Right: 139.526+/-0.028  $\chi^2/\text{NDF}$ : 1802277.5/35

In: 142.240+/-0.041  $\chi^2/\text{NDF}$ : 836415.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 139.526+/-0.028  $\chi^2/\text{NDF}$ : 1802277.5/35

# asym\_bcm\_an\_ds\_mean vs Slug, Sign Corrected



Right In: 73.109+/-79.604  $\chi^2/\text{NDF}$ : 7.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -5.021+/-70.098  $\chi^2/\text{NDF}$ : 7.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

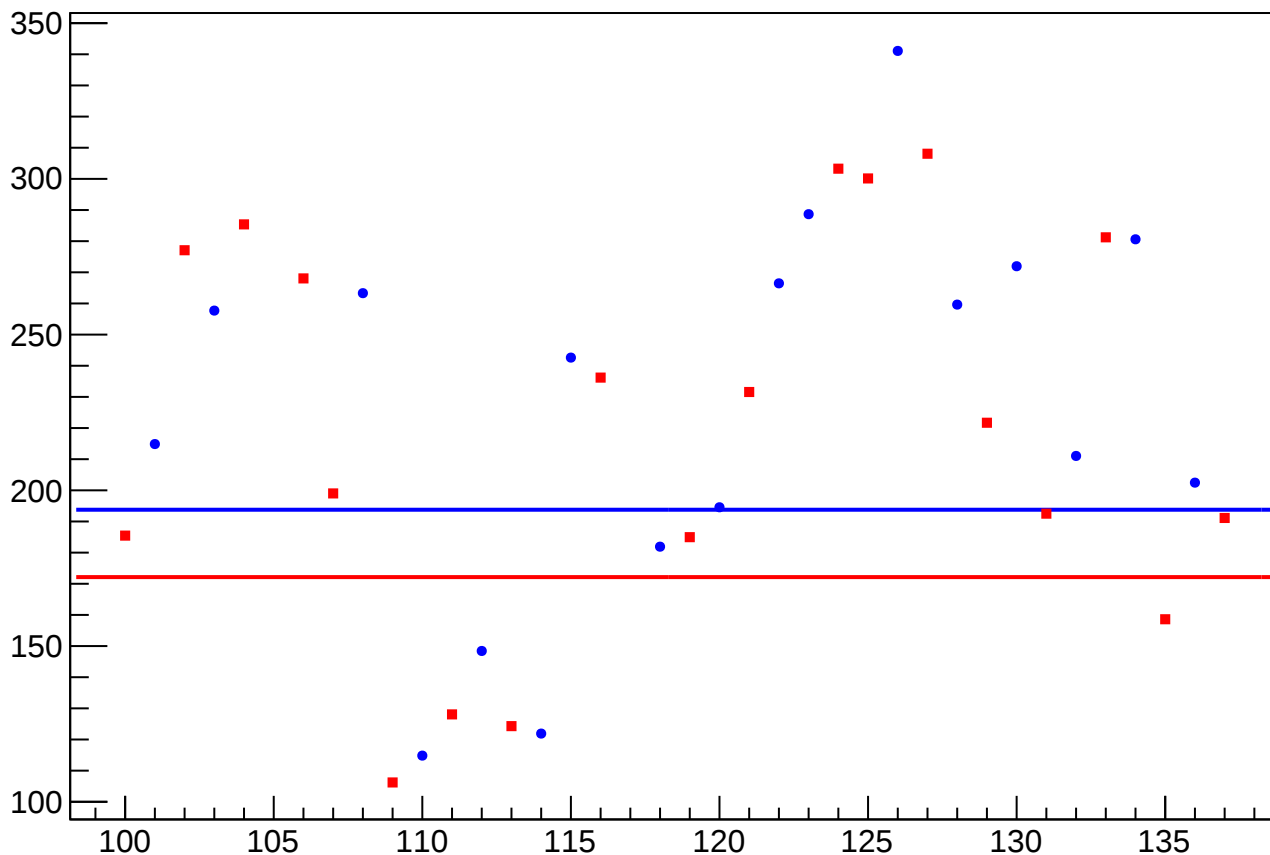
Right: 29.103+/-52.608  $\chi^2/\text{NDF}$ : 15.5/35

In: 73.109+/-79.604  $\chi^2/\text{NDF}$ : 7.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 29.103+/-52.608  $\chi^2/\text{NDF}$ : 15.5/35

# asym\_bcm\_an\_ds\_rms vs Slug, Sign Corrected



Right In: 193.773+/-0.056  $\chi^2/\text{NDF}$ : 1017081.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 172.142+/-0.050  $\chi^2/\text{NDF}$ : 1580035.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

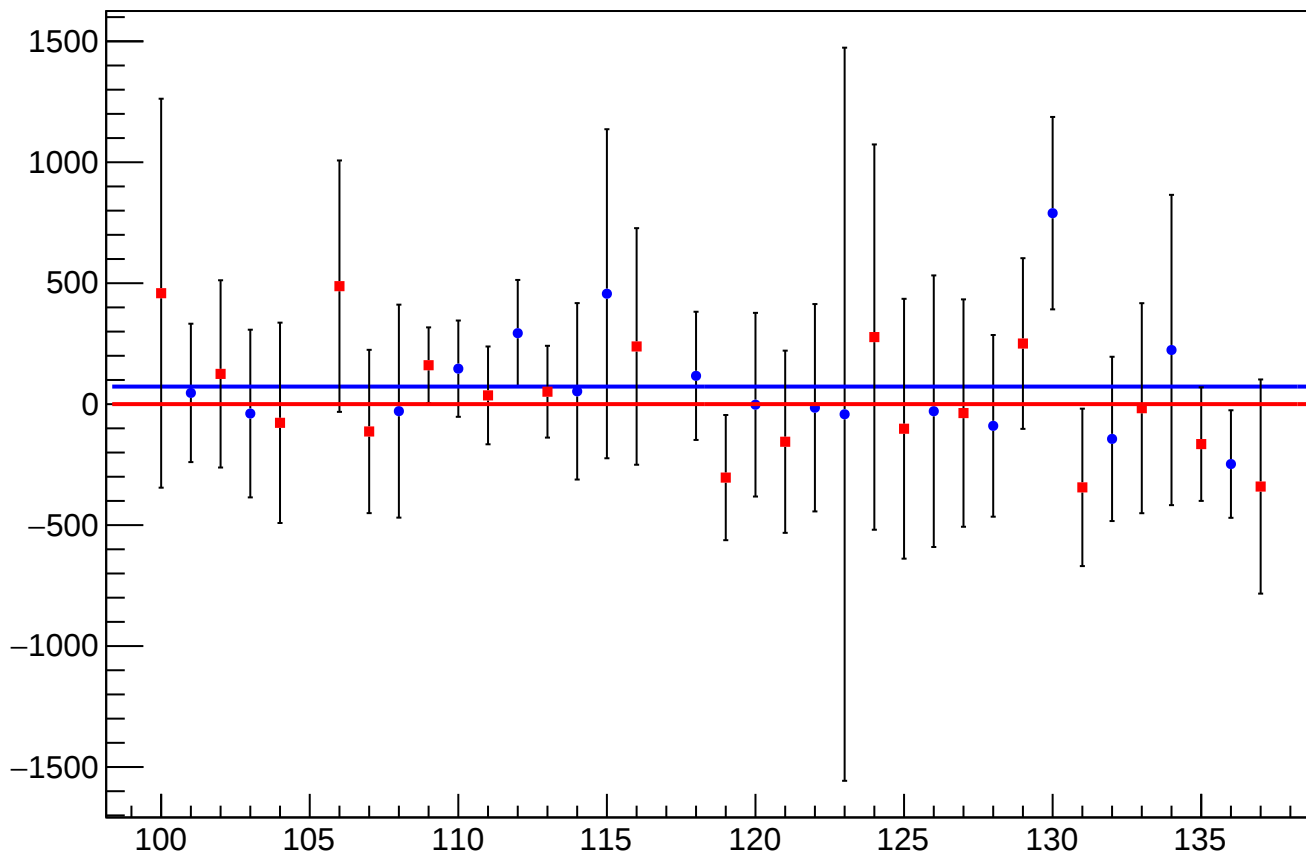
Right: 181.589+/-0.037  $\chi^2/\text{NDF}$ : 2680292.0/35

In: 193.773+/-0.056  $\chi^2/\text{NDF}$ : 1017081.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 181.589+/-0.037  $\chi^2/\text{NDF}$ : 2680292.0/35

# asym\_bcm\_an\_ds3\_mean vs Slug, Sign Corrected



Right In: 72.675+/-79.992  $\chi^2/\text{NDF}$ : 7.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.181+/-70.467  $\chi^2/\text{NDF}$ : 7.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

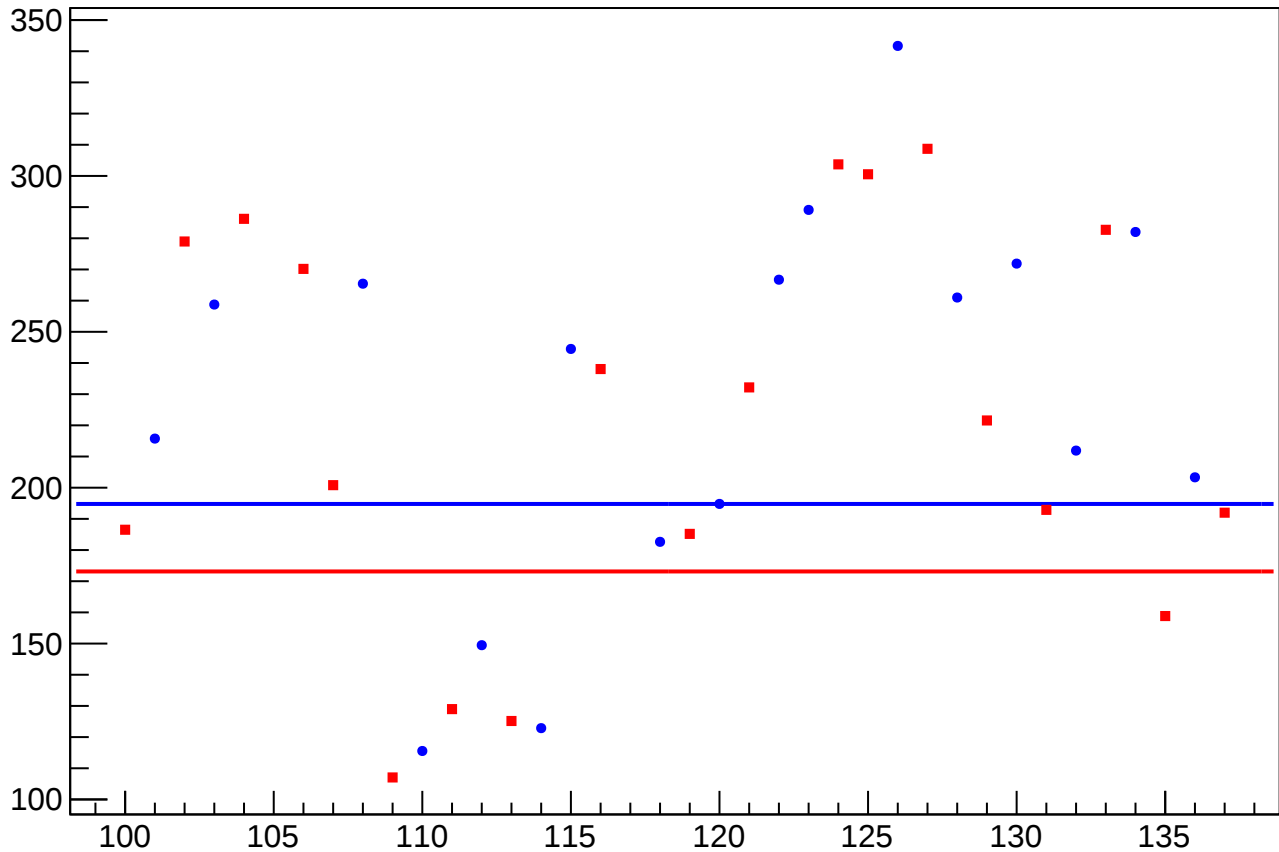
Right: 31.857+/-52.876  $\chi^2/\text{NDF}$ : 15.5/35

In: 72.675+/-79.992  $\chi^2/\text{NDF}$ : 7.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 31.857+/-52.876  $\chi^2/\text{NDF}$ : 15.5/35

# asym\_bcm\_an\_ds3\_rms vs Slug, Sign Corrected



Right In: 194.782 $\pm$ 0.057  $\chi^2$ /NDF: 1008292.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 173.131 $\pm$ 0.050  $\chi^2$ /NDF: 1567556.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

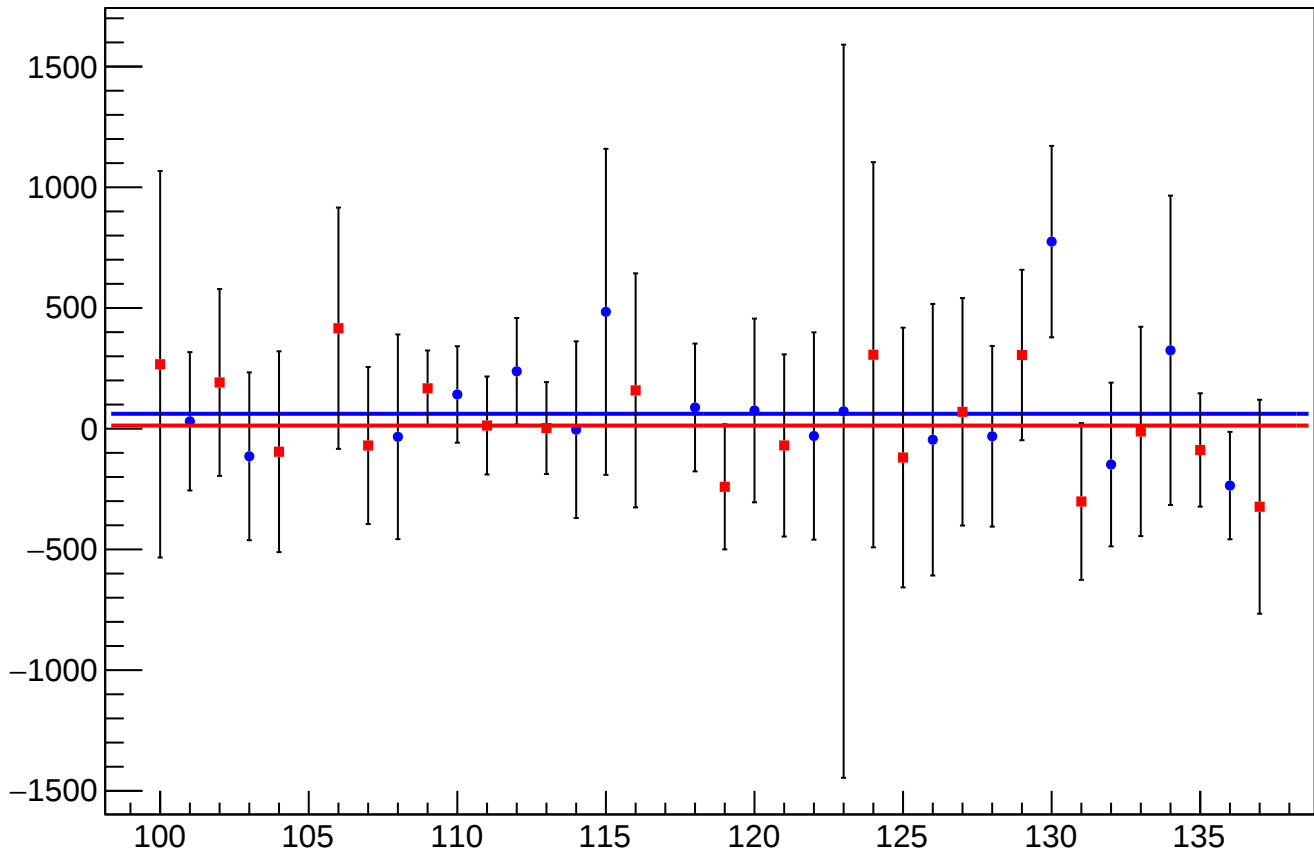
Right: 182.592 $\pm$ 0.037  $\chi^2$ /NDF: 2658346.9/35

In: 194.782 $\pm$ 0.057  $\chi^2$ /NDF:1008292.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 182.592 $\pm$ 0.037  $\chi^2$ /NDF: 2658346.9/35

# asym\_bcm\_an\_us\_mean vs Slug, Sign Corrected



Right In: 61.814 $\pm$ 79.986  $\chi^2$ /NDF: 7.3/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 13.101 $\pm$ 70.391  $\chi^2$ /NDF: 5.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

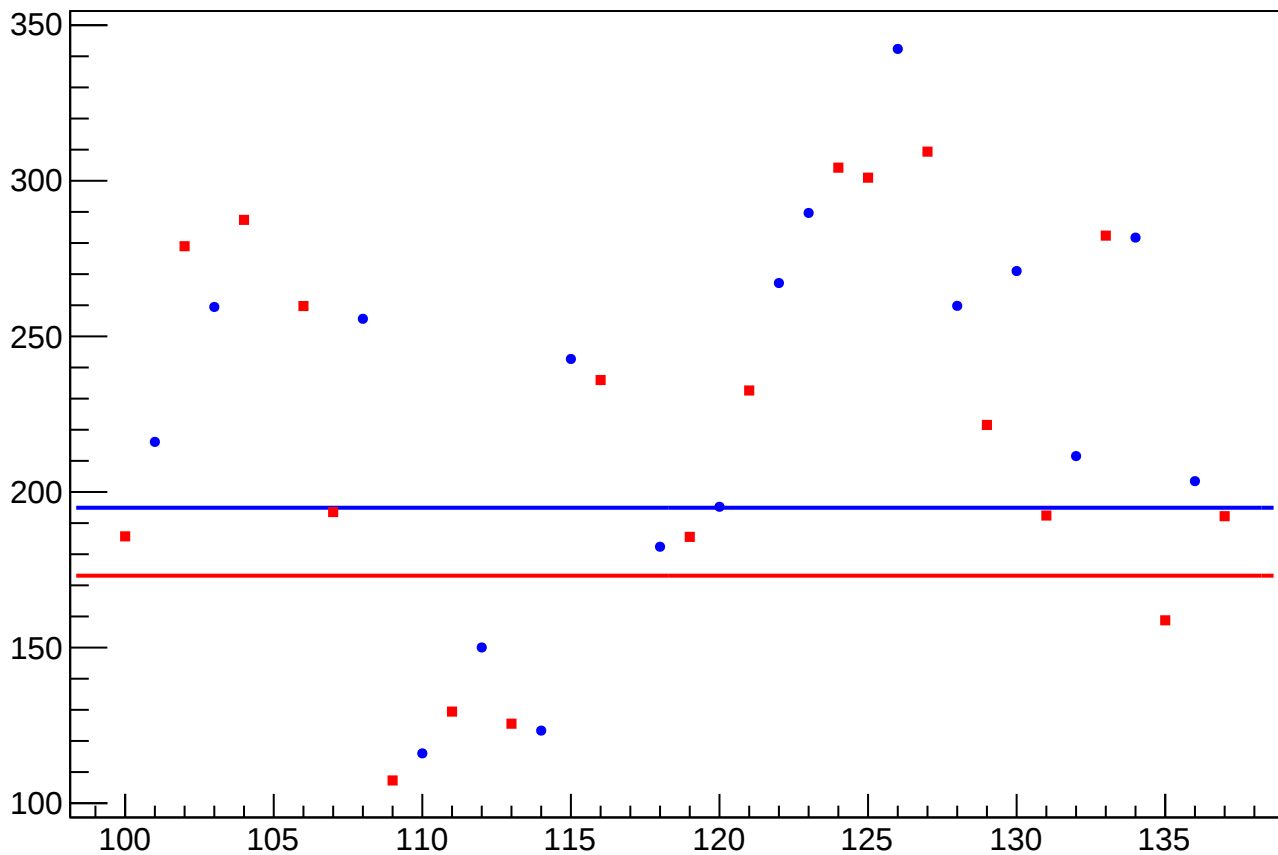
Right: 34.362 $\pm$ 52.842  $\chi^2$ /NDF: 13.2/35

In: 61.814 $\pm$ 79.986  $\chi^2$ /NDF:7.3/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 34.362 $\pm$ 52.842  $\chi^2$ /NDF: 13.2/35

# asym\_bcm\_an\_us\_rms vs Slug, Sign Corrected



Right In: 194.939 $\pm$ 0.057  $\chi^2$ /NDF: 986629.1/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 173.109 $\pm$ 0.050  $\chi^2$ /NDF: 1544723.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

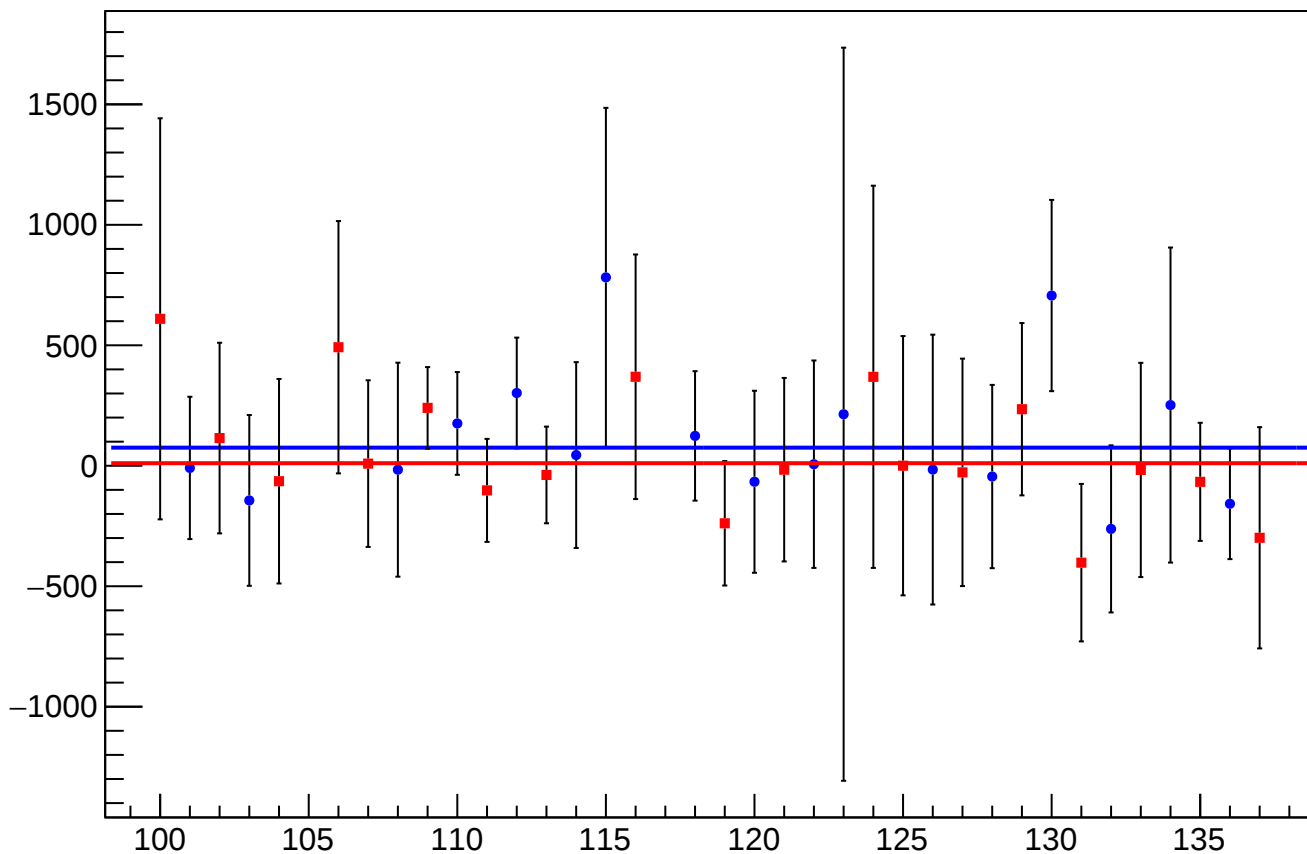
Right: 182.637 $\pm$ 0.037  $\chi^2$ /NDF: 2615306.2/35

In: 194.939 $\pm$ 0.057  $\chi^2$ /NDF:986629.1/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 182.637 $\pm$ 0.037  $\chi^2$ /NDF: 2615306.2/35

# asym\_bcm\_dg\_us\_mean vs Slug, Sign Corrected



Right In: 75.207+/-82.504  $\chi^2/\text{NDF}$ : 7.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 10.674+/-73.338  $\chi^2/\text{NDF}$ : 7.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

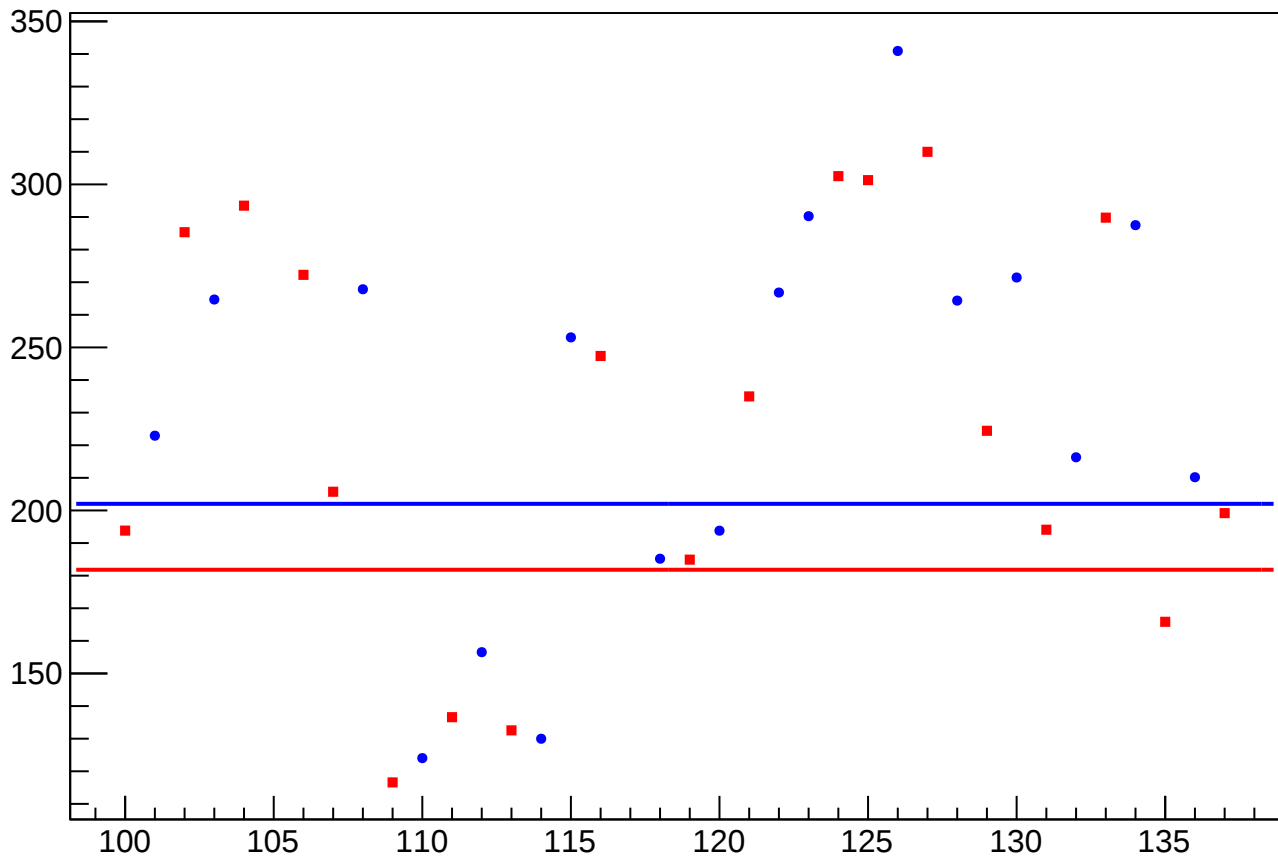
Right: 39.157+/-54.813  $\chi^2/\text{NDF}$ : 15.8/35

In: 75.207+/-82.504  $\chi^2/\text{NDF}$ : 7.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 39.157+/-54.813  $\chi^2/\text{NDF}$ : 15.8/35

# asym\_bcm\_dg\_us\_rms vs Slug, Sign Corrected



Right In: 202.029+/-0.058  $\chi^2/\text{NDF}$ : 881608.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 181.811+/-0.052  $\chi^2/\text{NDF}$ : 1377537.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

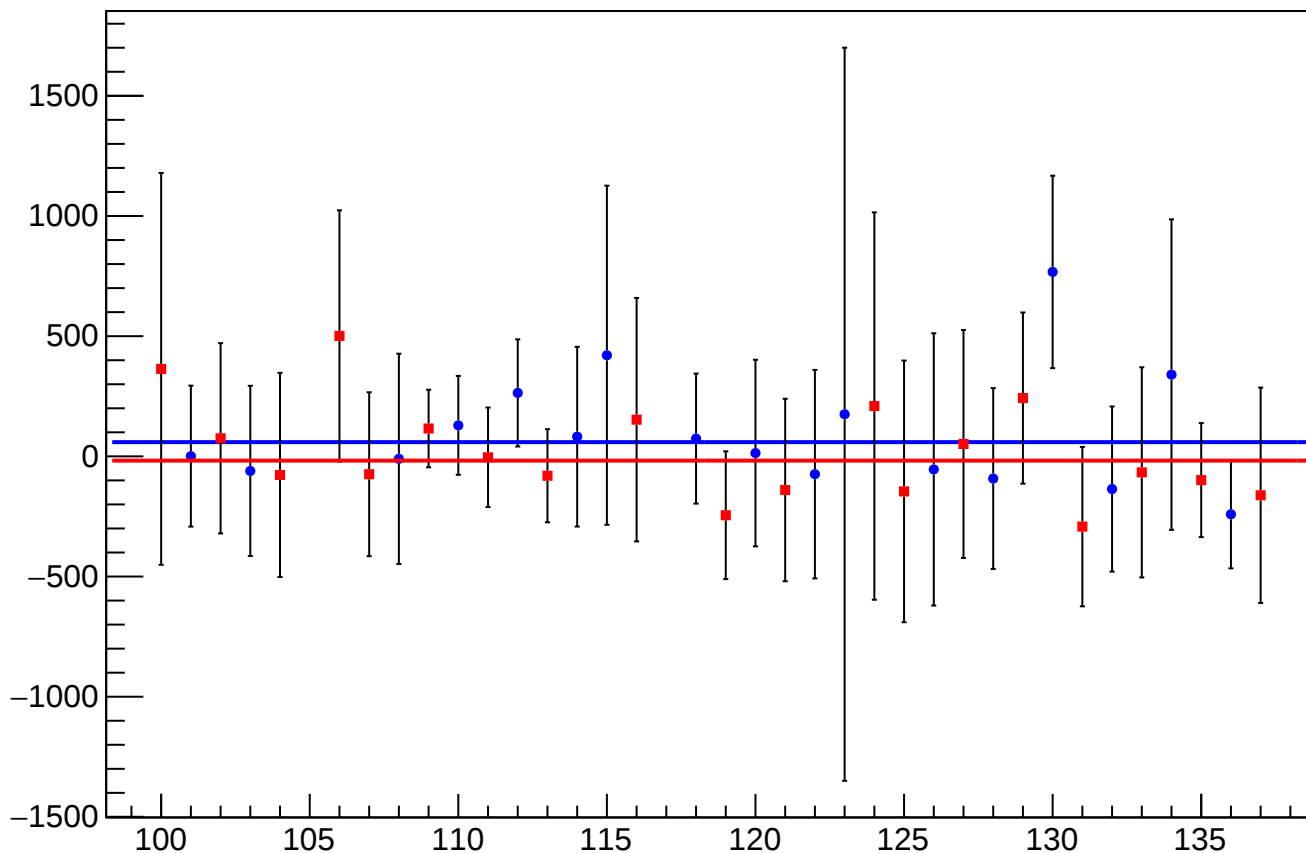
Right: 190.735+/-0.039  $\chi^2/\text{NDF}$ : 2326235.8/35

In: 202.029+/-0.058  $\chi^2/\text{NDF}$ :881608.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 190.735+/-0.039  $\chi^2/\text{NDF}$ : 2326235.8/35

# asym\_bcm\_dg\_ds\_mean vs Slug, Sign Corrected



Right In: 59.175+/-81.417  $\chi^2/\text{NDF}$ : 7.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -17.727+/-71.900  $\chi^2/\text{NDF}$ : 4.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

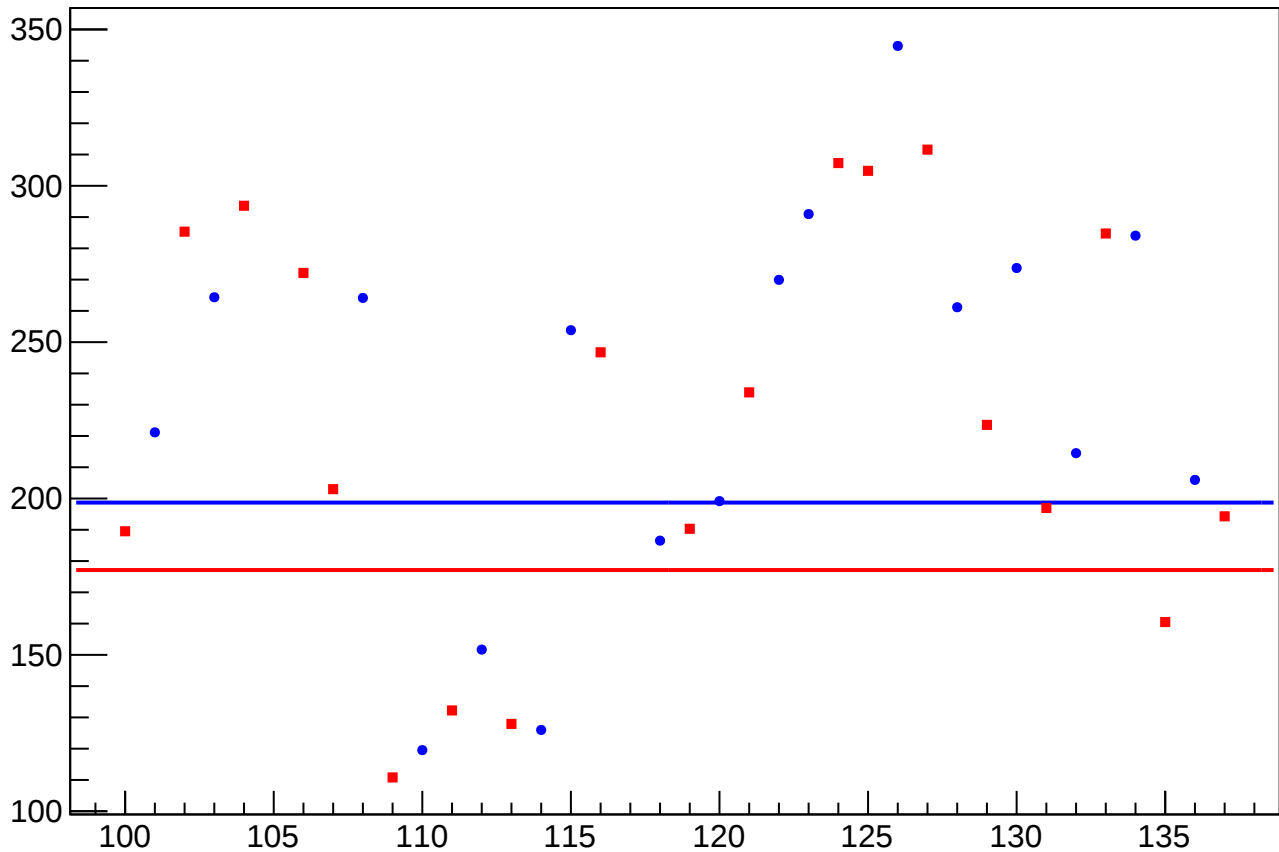
Right: 15.968+/-53.893  $\chi^2/\text{NDF}$ : 12.3/35

In: 59.175+/-81.417  $\chi^2/\text{NDF}$ : 7.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 15.968+/-53.893  $\chi^2/\text{NDF}$ : 12.3/35

# asym\_bcm\_dg\_ds\_rms vs Slug, Sign Corrected



Right In: 198.704+/-0.058  $\chi^2/\text{NDF}$ : 963394.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 177.125+/-0.051  $\chi^2/\text{NDF}$ : 1524889.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

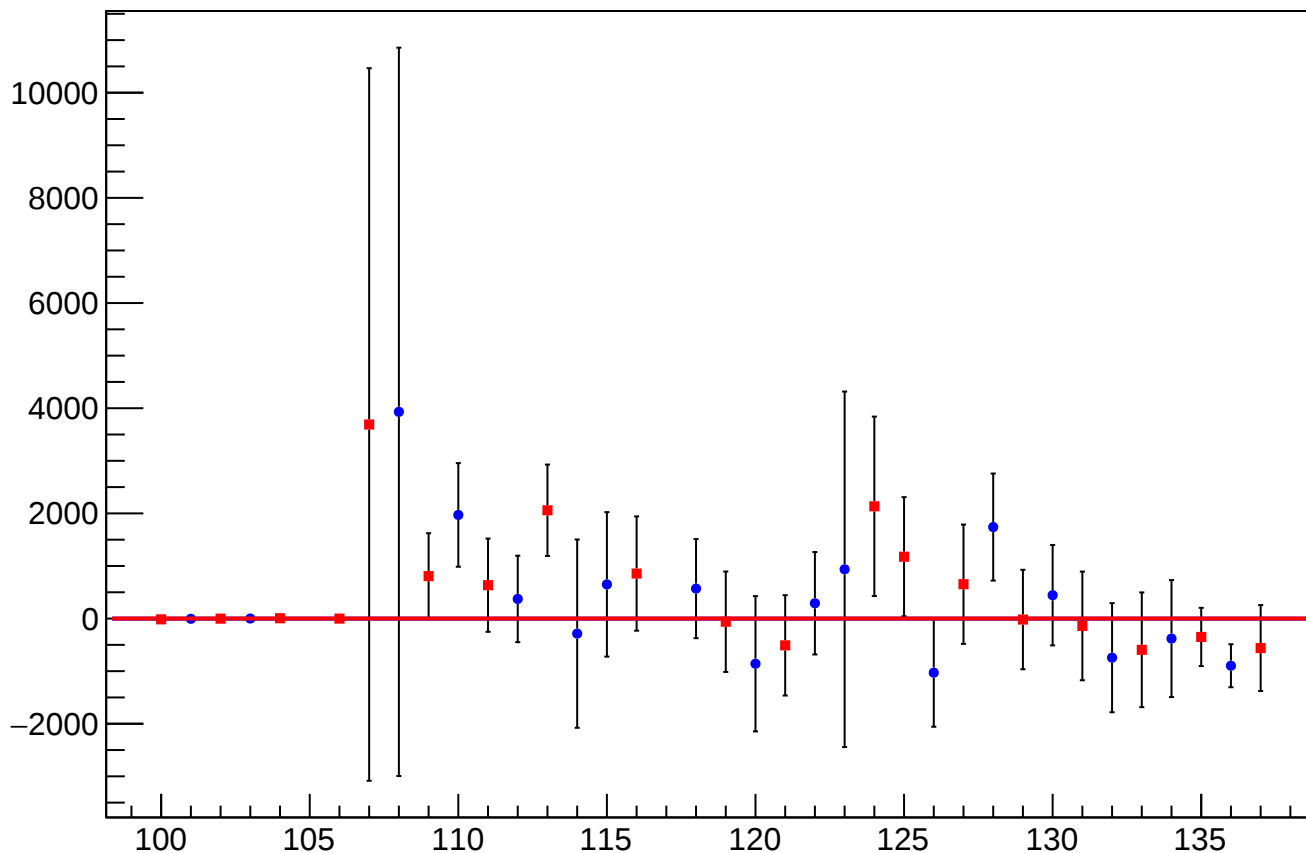
Right: 186.580+/-0.038  $\chi^2/\text{NDF}$ : 2567217.8/35

In: 198.704+/-0.058  $\chi^2/\text{NDF}$ : 963394.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 186.580+/-0.038  $\chi^2/\text{NDF}$ : 2567217.8/35

# asym\_cav4bQ\_mean vs Slug, Sign Corrected



Right In: -1.529+/-2.251  $\chi^2/\text{NDF}$ : 16.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.731+/-2.111  $\chi^2/\text{NDF}$ : 18.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

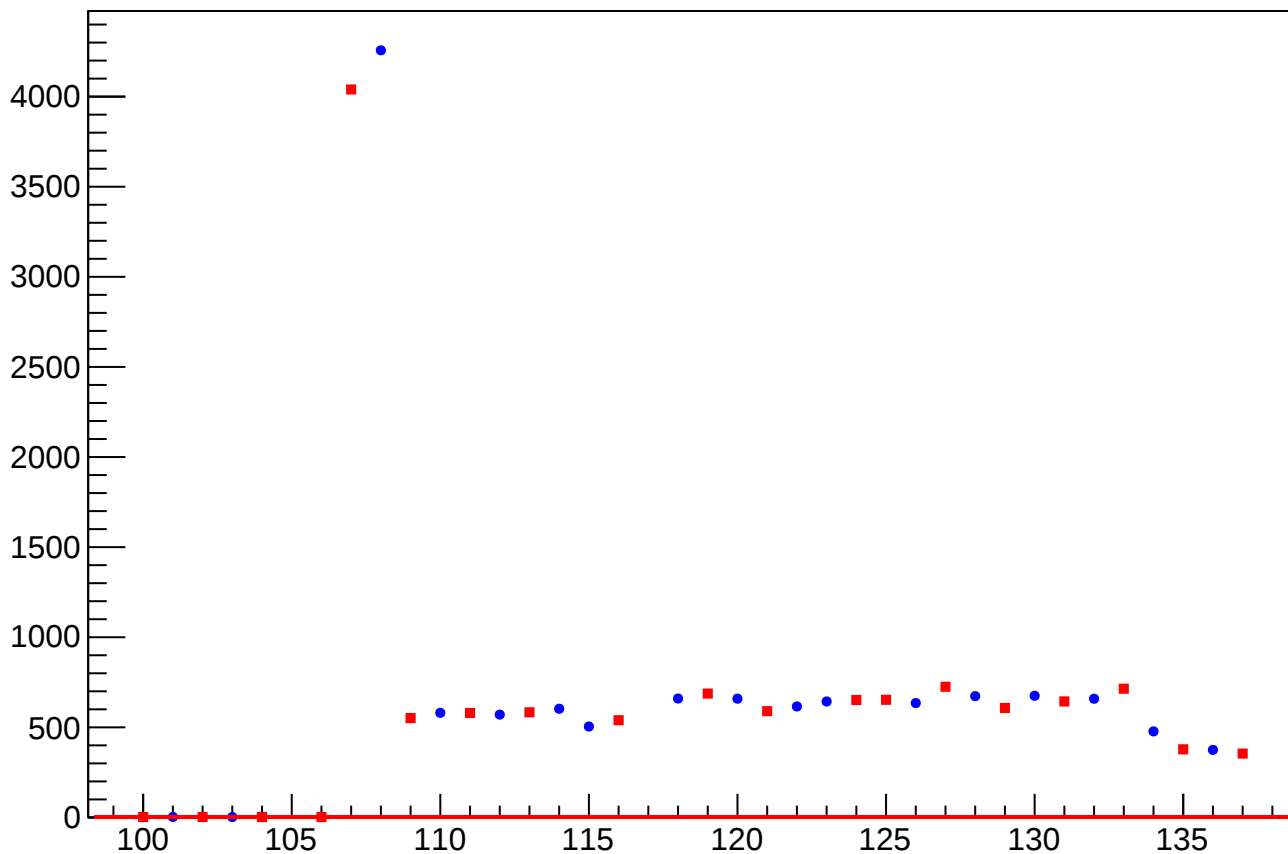
Right: -0.326+/-1.540  $\chi^2/\text{NDF}$ : 35.6/35

In: -1.529+/-2.251  $\chi^2/\text{NDF}$ : 16.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.326+/-1.540  $\chi^2/\text{NDF}$ : 35.6/35

# asym\_cav4bQ\_rms vs Slug, Sign Corrected



Right In: 2.456+/-0.002     $\chi^2/\text{NDF}$ : 10706347.4/16

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.437+/-0.001     $\chi^2/\text{NDF}$ : 11140185.1/18

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

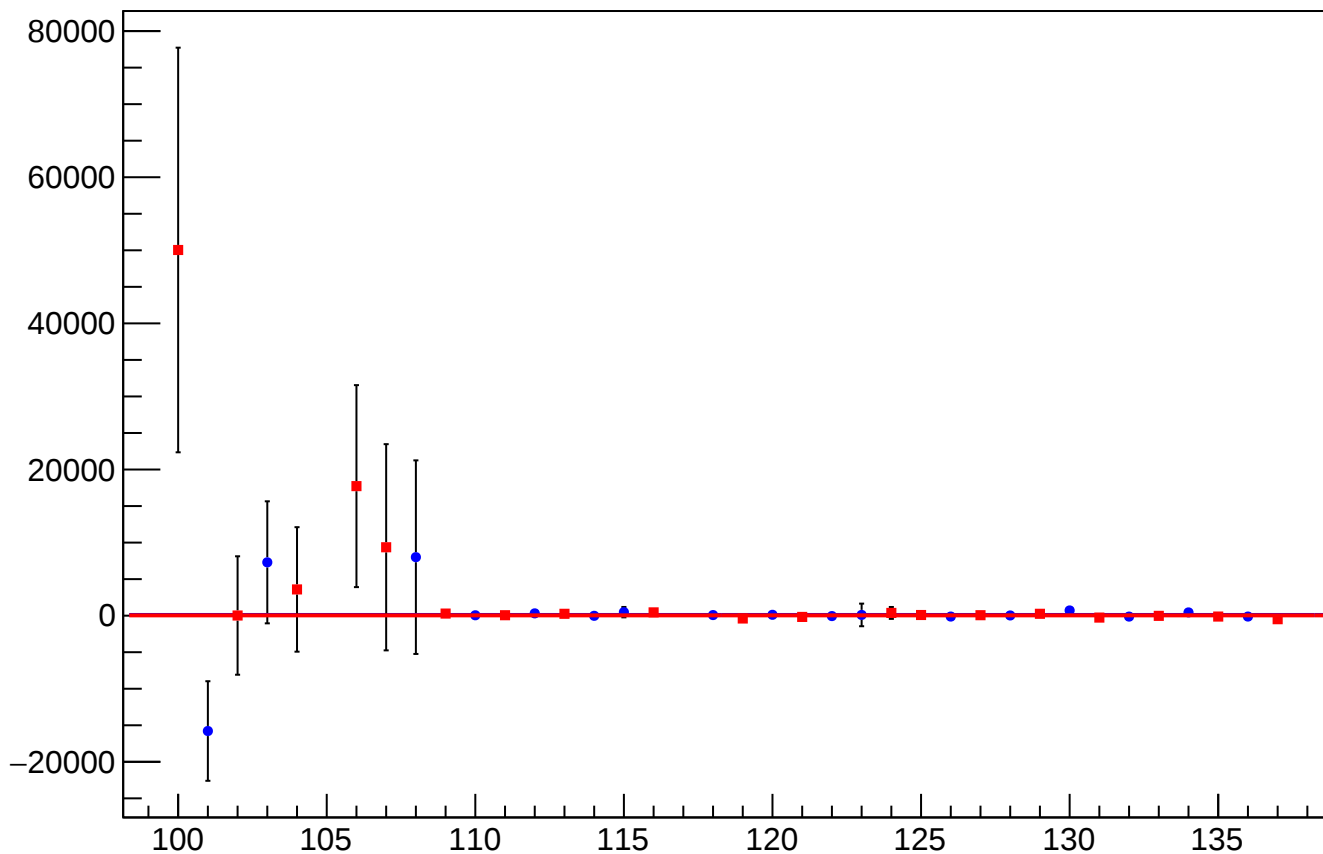
Right: 2.446+/-0.001     $\chi^2/\text{NDF}$ : 21846612.0/35

In: 2.456+/-0.002     $\chi^2/\text{NDF}$ : 10706347.4/16

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 2.446+/-0.001     $\chi^2/\text{NDF}$ : 21846612.0/35

# asym\_cav4cQ\_mean vs Slug, Sign Corrected



Right In: 95.353+/-91.708  $\chi^2/\text{NDF}$ : 12.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 42.617+/-84.547  $\chi^2/\text{NDF}$ : 14.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

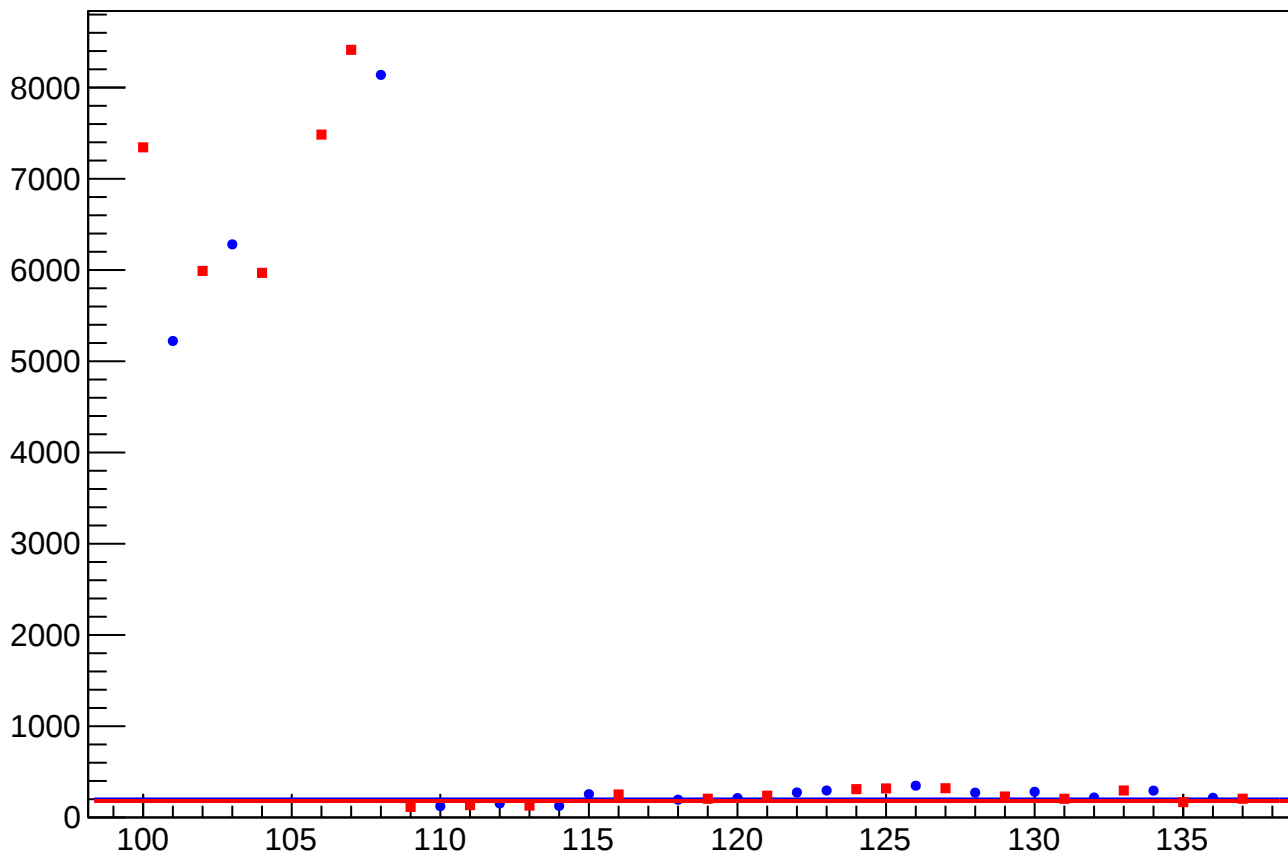
Right: 66.846+/-62.161  $\chi^2/\text{NDF}$ : 26.2/35

In: 95.353+/-91.708  $\chi^2/\text{NDF}$ : 12.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 66.846+/-62.161  $\chi^2/\text{NDF}$ : 26.2/35

# asym\_cav4cQ\_rms vs Slug, Sign Corrected



Right In: 197.422+/-0.065  $\chi^2/\text{NDF}$ : 3695848.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 179.983+/-0.060  $\chi^2/\text{NDF}$ : 4321404.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

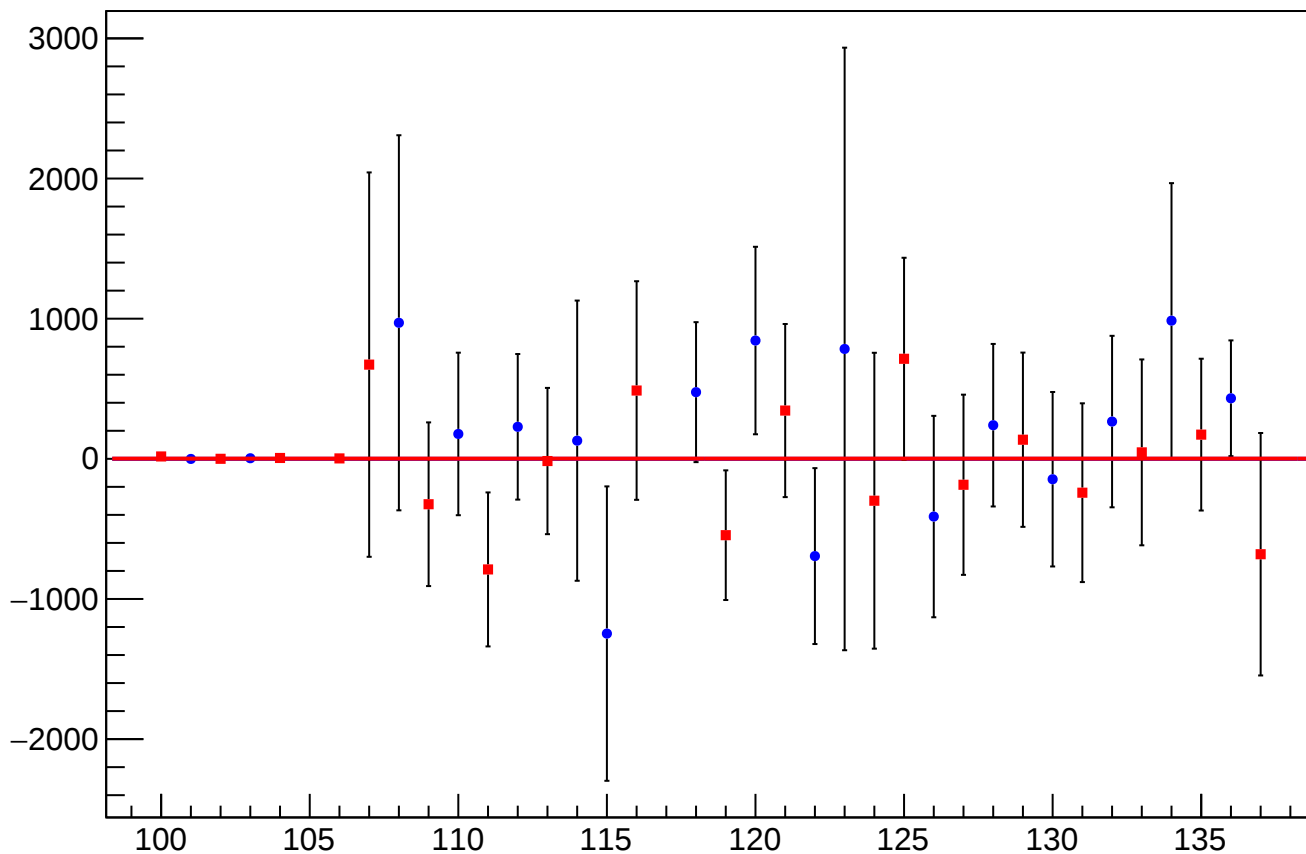
Right: 187.995+/-0.044  $\chi^2/\text{NDF}$ : 8056346.9/35

In: 197.422+/-0.065  $\chi^2/\text{NDF}$ : 3695848.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 187.995+/-0.044  $\chi^2/\text{NDF}$ : 8056346.9/35

# asym\_cav4dQ\_mean vs Slug, Sign Corrected



Right In:  $-0.139 \pm 1.737$   $\chi^2/\text{NDF}$ : 9.8/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $1.324 \pm 1.623$   $\chi^2/\text{NDF}$ : 9.5/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

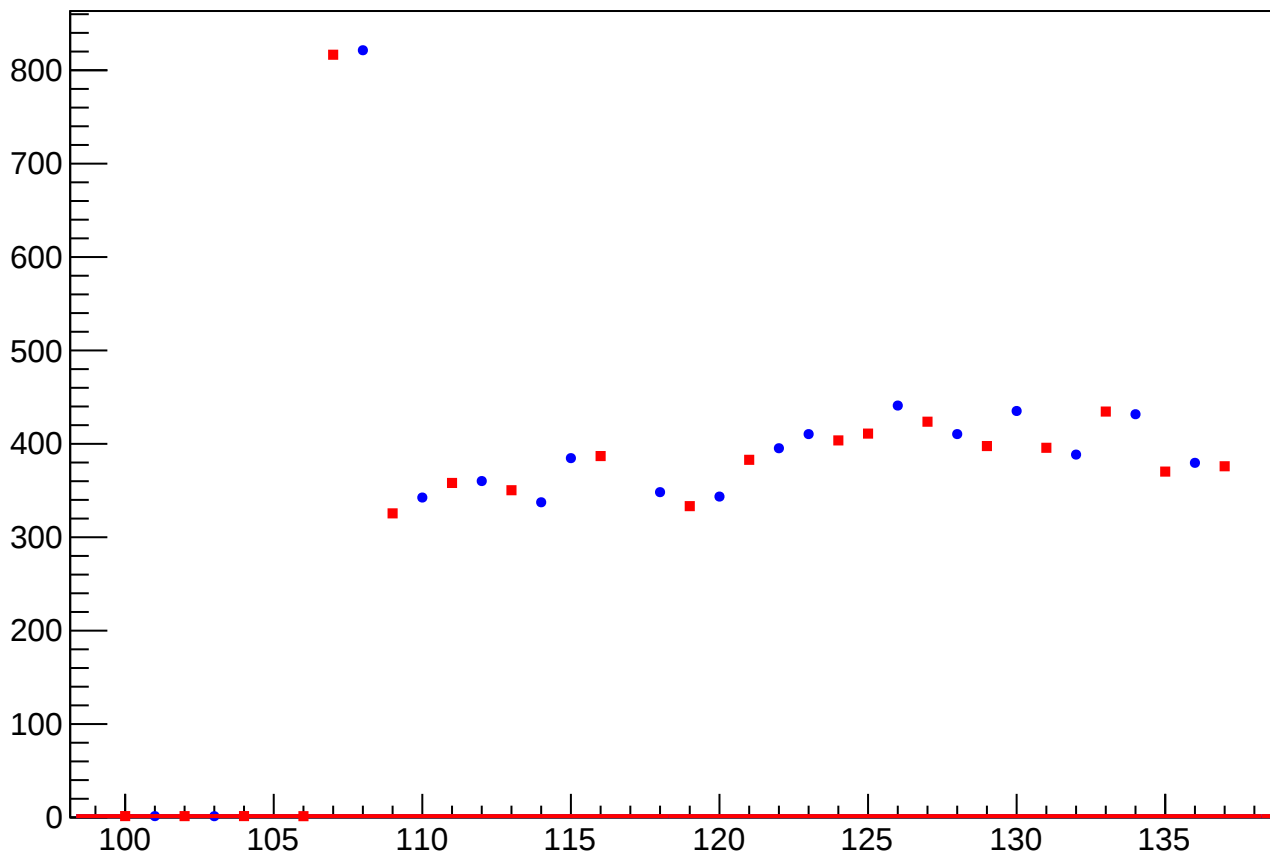
Right:  $0.642 \pm 1.186$   $\chi^2/\text{NDF}$ : 19.7/35

In:  $-0.139 \pm 1.737$   $\chi^2/\text{NDF}$ : 9.8/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $0.642 \pm 1.186$   $\chi^2/\text{NDF}$ : 19.7/35

# asym\_cav4dQ\_rms vs Slug, Sign Corrected



Right In: 1.452 $\pm$ 0.001  $\chi^2$ /NDF: 10815892.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1.451 $\pm$ 0.001  $\chi^2$ /NDF: 10873552.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

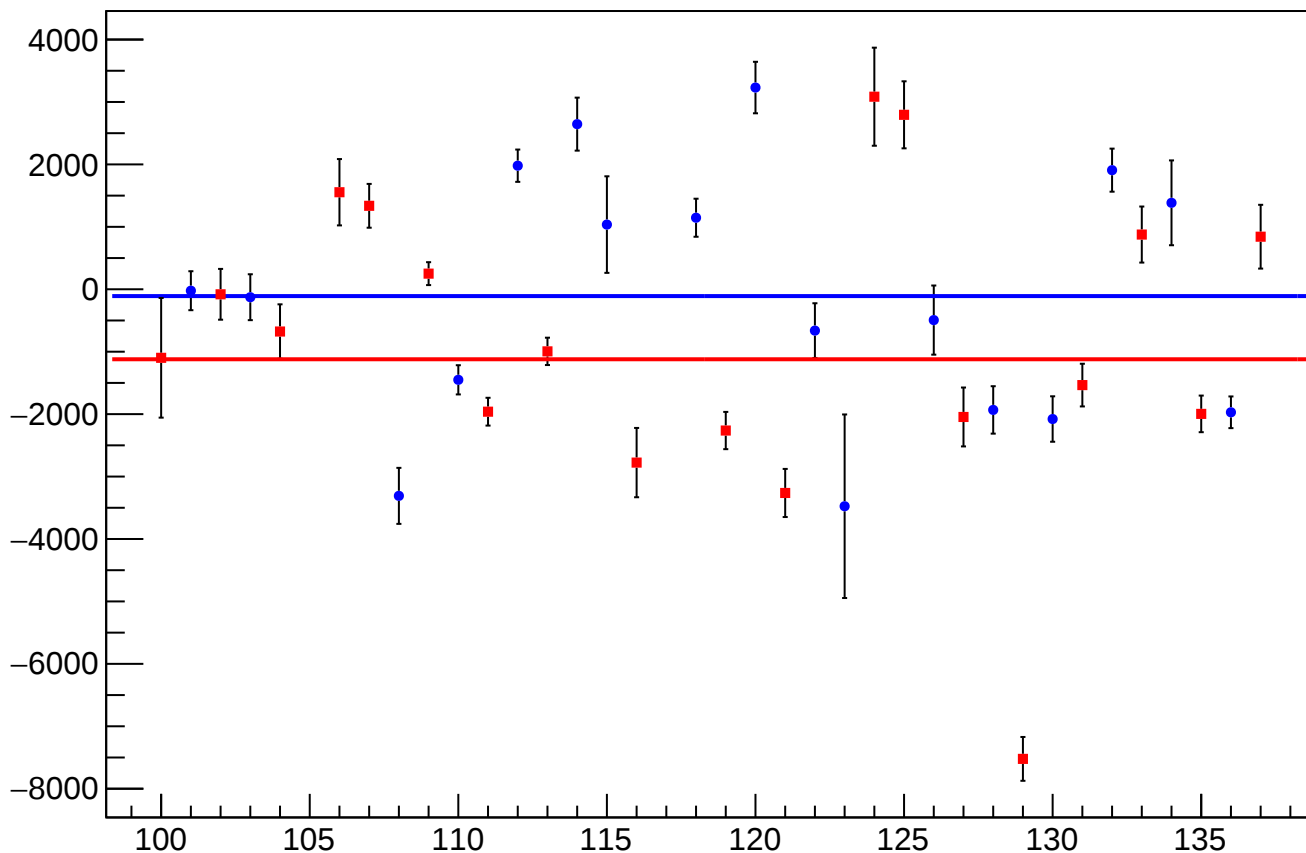
Right: 1.452 $\pm$ 0.001  $\chi^2$ /NDF: 21689445.7/35

In: 1.452 $\pm$ 0.001  $\chi^2$ /NDF:10815892.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1.452 $\pm$ 0.001  $\chi^2$ /NDF: 21689445.7/35

# asym\_bcm0l02\_mean vs Slug, Sign Corrected



Right In: -109.225+/-87.961  $\chi^2/\text{NDF}$ : 428.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1121.203+/-78.396  $\chi^2/\text{NDF}$ : 670.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

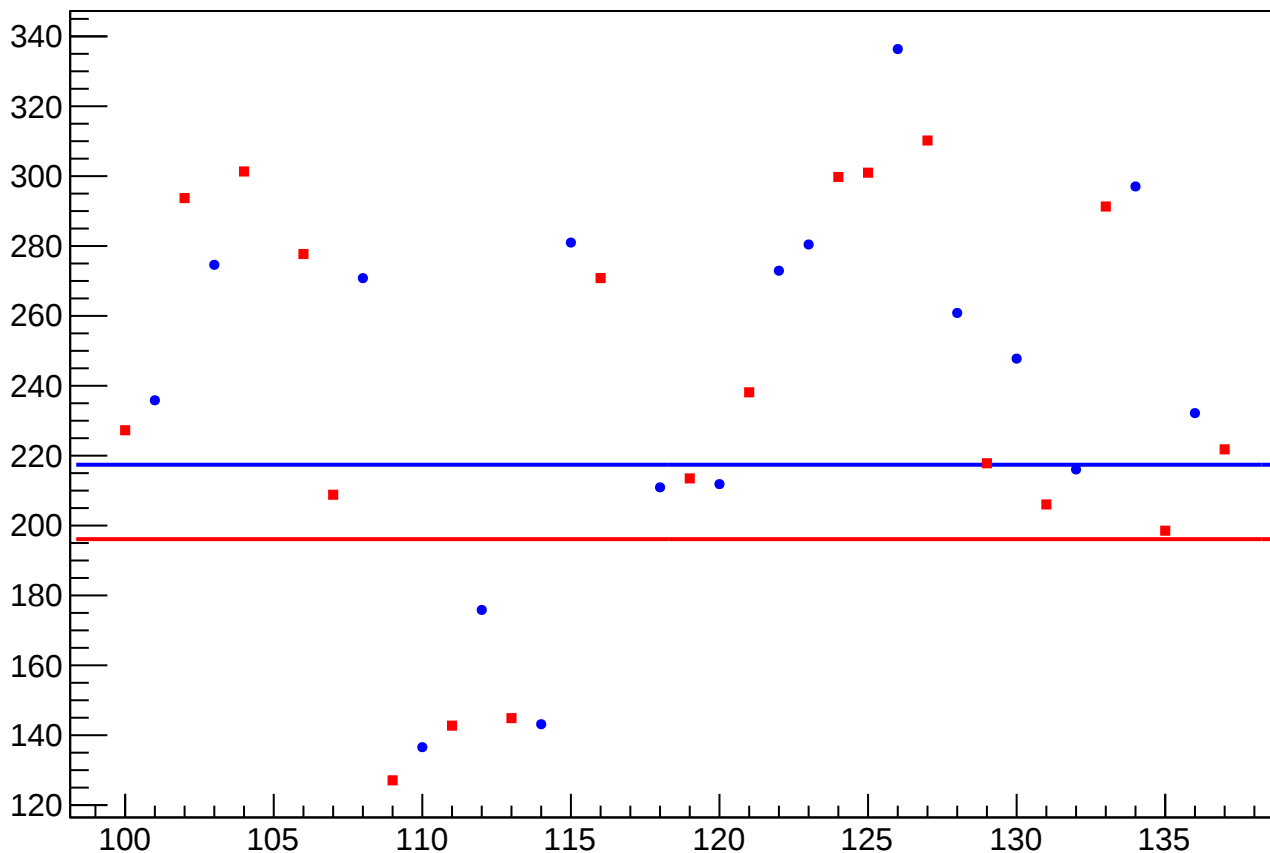
Right: -673.210+/-58.525  $\chi^2/\text{NDF}$ : 1172.2/35

In: -109.225+/-87.961  $\chi^2/\text{NDF}$ : 428.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -673.210+/-58.525  $\chi^2/\text{NDF}$ : 1172.2/35

# asym\_bcm0l02\_rms vs Slug, Sign Corrected



Right In: 217.403 $\pm$ 0.062  $\chi^2$ /NDF: 652632.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 196.112 $\pm$ 0.055  $\chi^2$ /NDF: 1190862.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

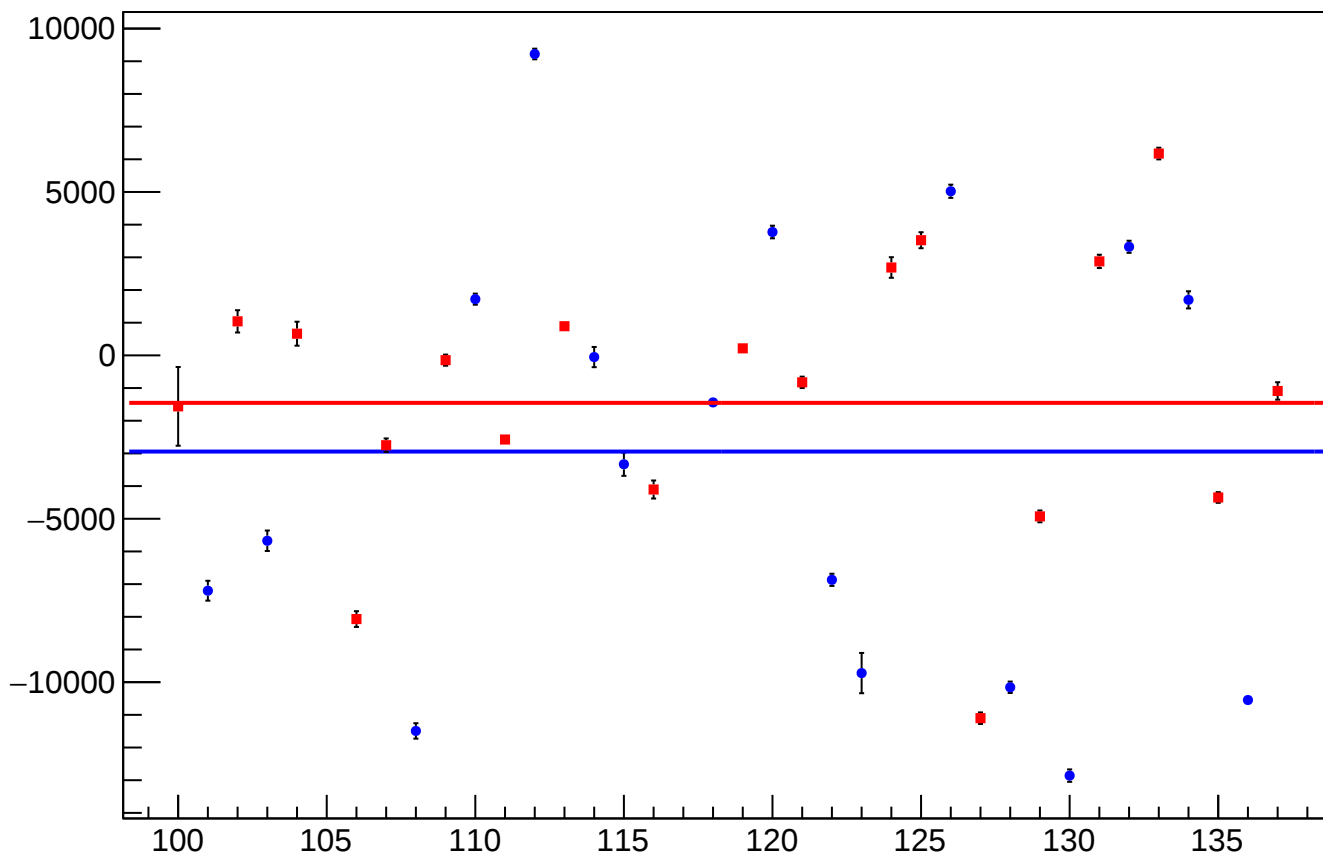
Right: 205.537 $\pm$ 0.041  $\chi^2$ /NDF: 1908796.2/35

In: 217.403 $\pm$ 0.062  $\chi^2$ /NDF:652632.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 205.537 $\pm$ 0.041  $\chi^2$ /NDF: 1908796.2/35

# asym\_bpm2i01WS\_mean vs Slug, Sign Corrected



Right In: -2943.123+/-48.612  $\chi^2/\text{NDF}$ : 20909.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1453.116+/-46.404  $\chi^2/\text{NDF}$ : 7996.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

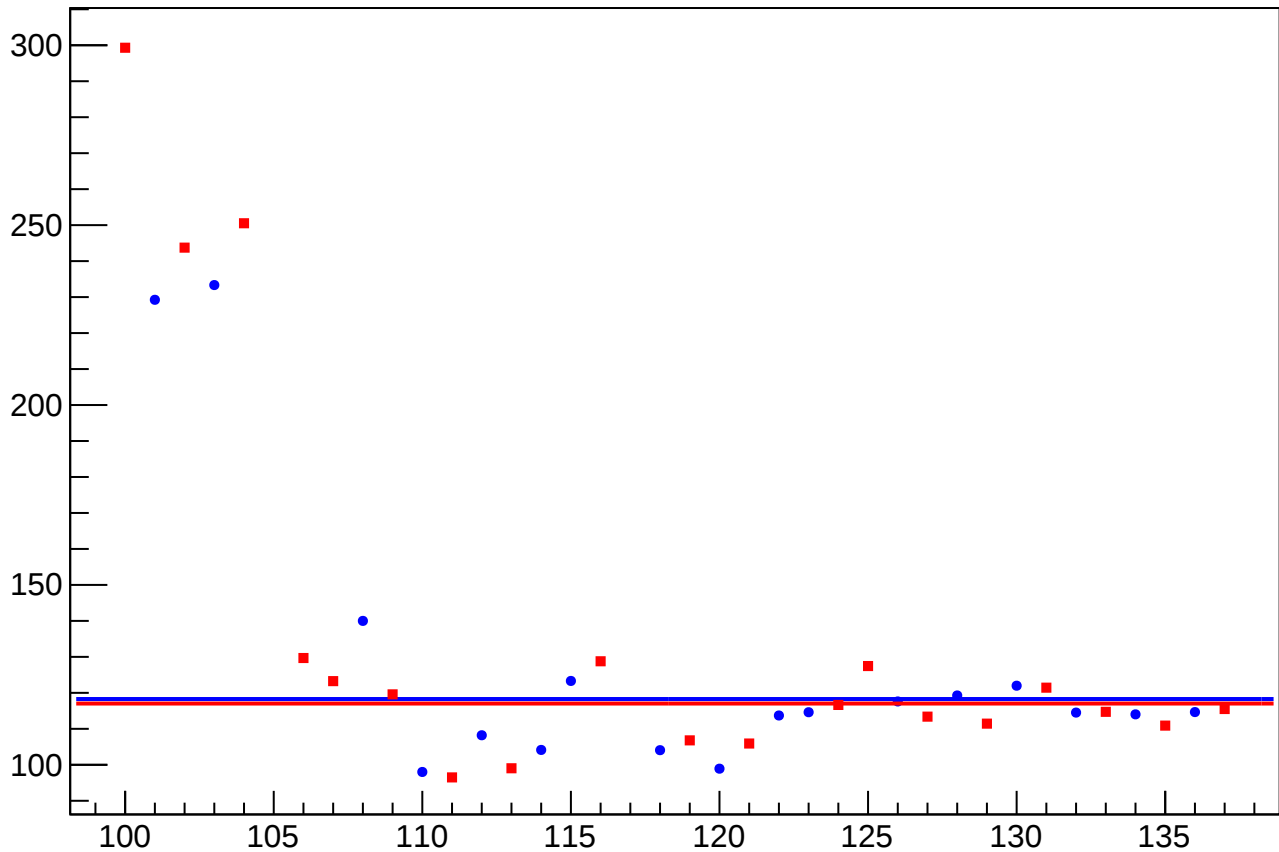
Right: -2163.502+/-33.566  $\chi^2/\text{NDF}$ : 29397.3/35

In: -2943.123+/-48.612  $\chi^2/\text{NDF}$ : 20909.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -2163.502+/-33.566  $\chi^2/\text{NDF}$ : 29397.3/35

# asym\_bpm2i01WS\_rms vs Slug, Sign Corrected



Right In: 118.286+/-0.034  $\chi^2/\text{NDF}$ : 636918.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 117.031+/-0.033  $\chi^2/\text{NDF}$ : 690861.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

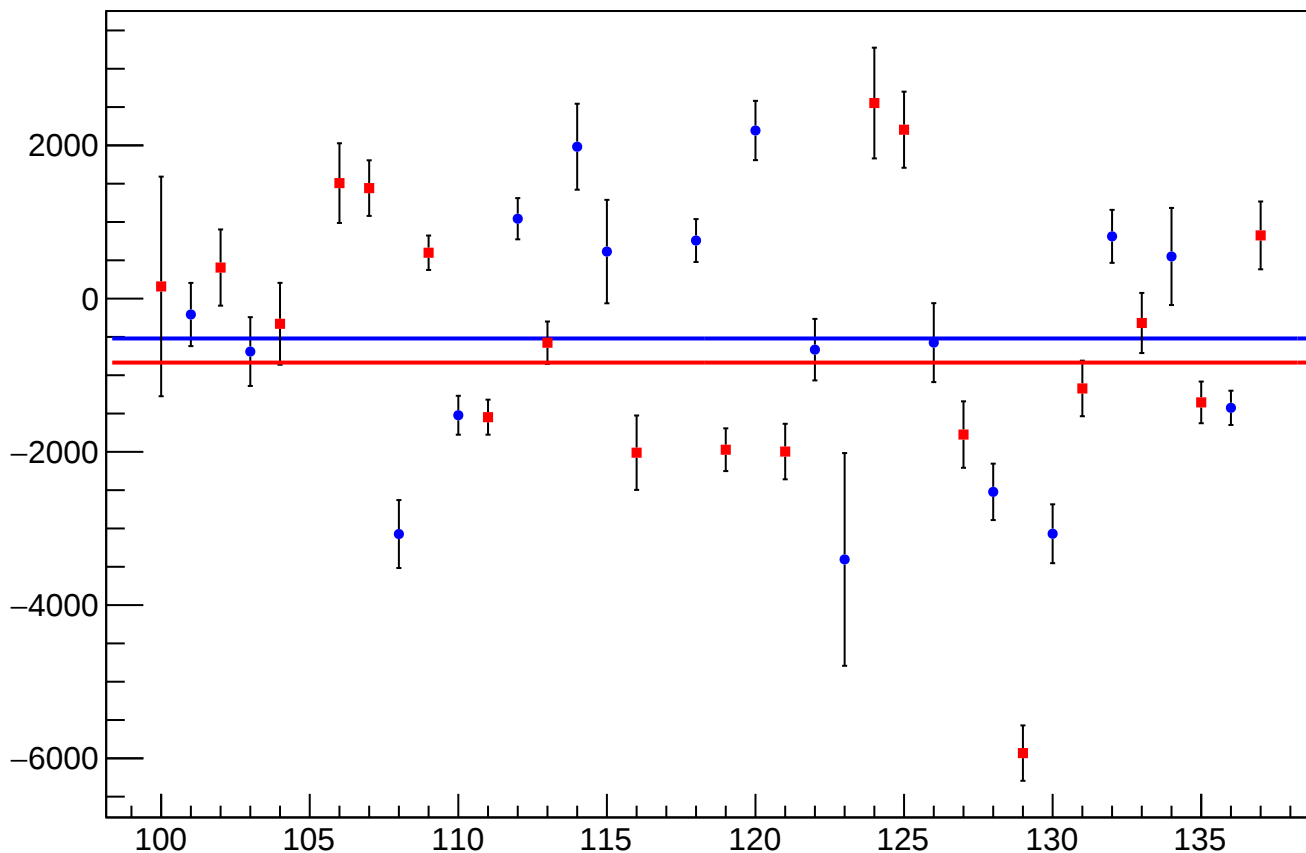
Right: 117.629+/-0.024  $\chi^2/\text{NDF}$ : 1328476.0/35

In: 118.286+/-0.034  $\chi^2/\text{NDF}$ : 636918.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 117.629+/-0.024  $\chi^2/\text{NDF}$ : 1328476.0/35

# asym\_bpm0i07WS\_mean vs Slug, Sign Corrected



Right In:  $-520.267 \pm 89.241$   $\chi^2/\text{NDF}$ : 288.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-834.834 \pm 82.273$   $\chi^2/\text{NDF}$ : 434.7/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

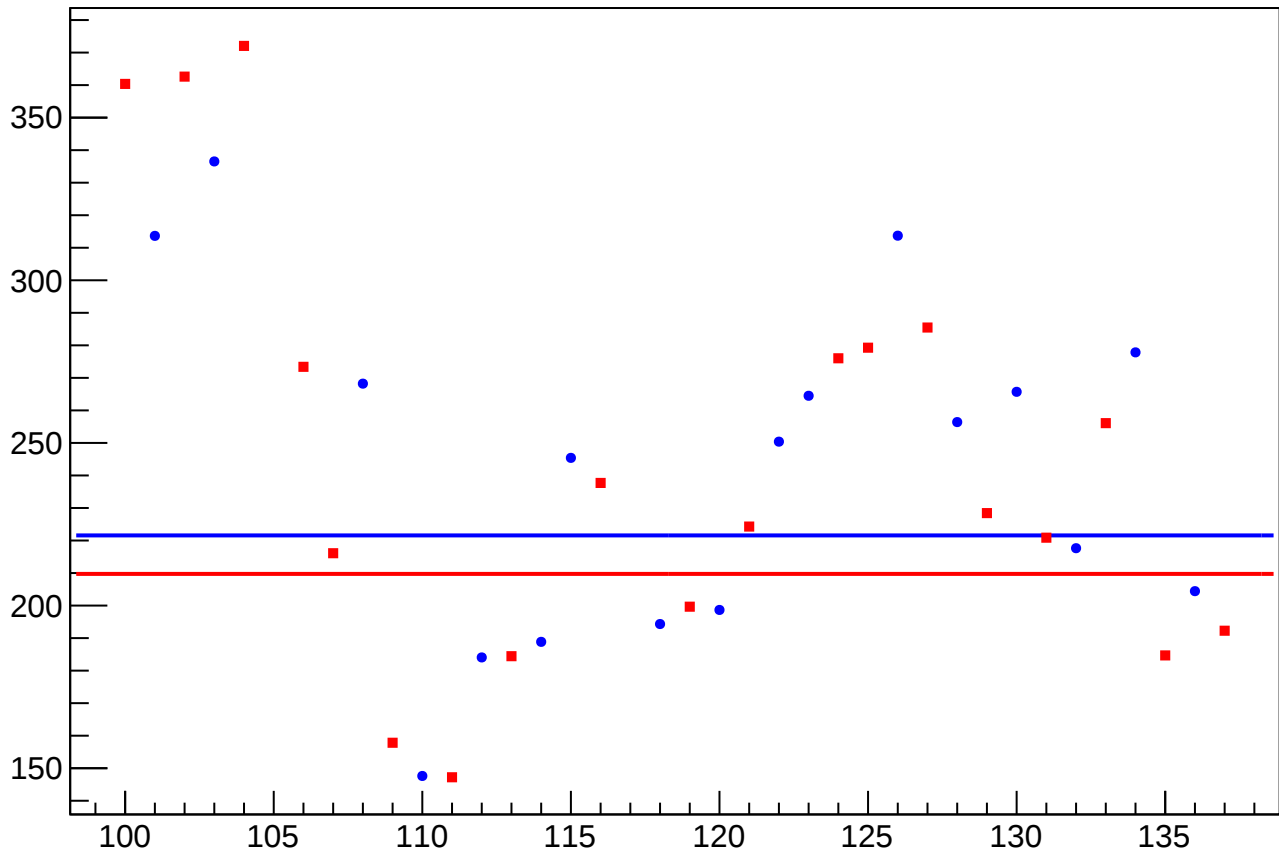
Right:  $-690.308 \pm 60.489$   $\chi^2/\text{NDF}$ : 729.5/35

In:  $-520.267 \pm 89.241$   $\chi^2/\text{NDF}$ : 288.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-690.308 \pm 60.489$   $\chi^2/\text{NDF}$ : 729.5/35

# asym\_bpm0i07WS\_rms vs Slug, Sign Corrected



Right In:  $221.570 \pm 0.063$   $\chi^2/\text{NDF}$ : 644941.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $209.736 \pm 0.058$   $\chi^2/\text{NDF}$ : 883922.1/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

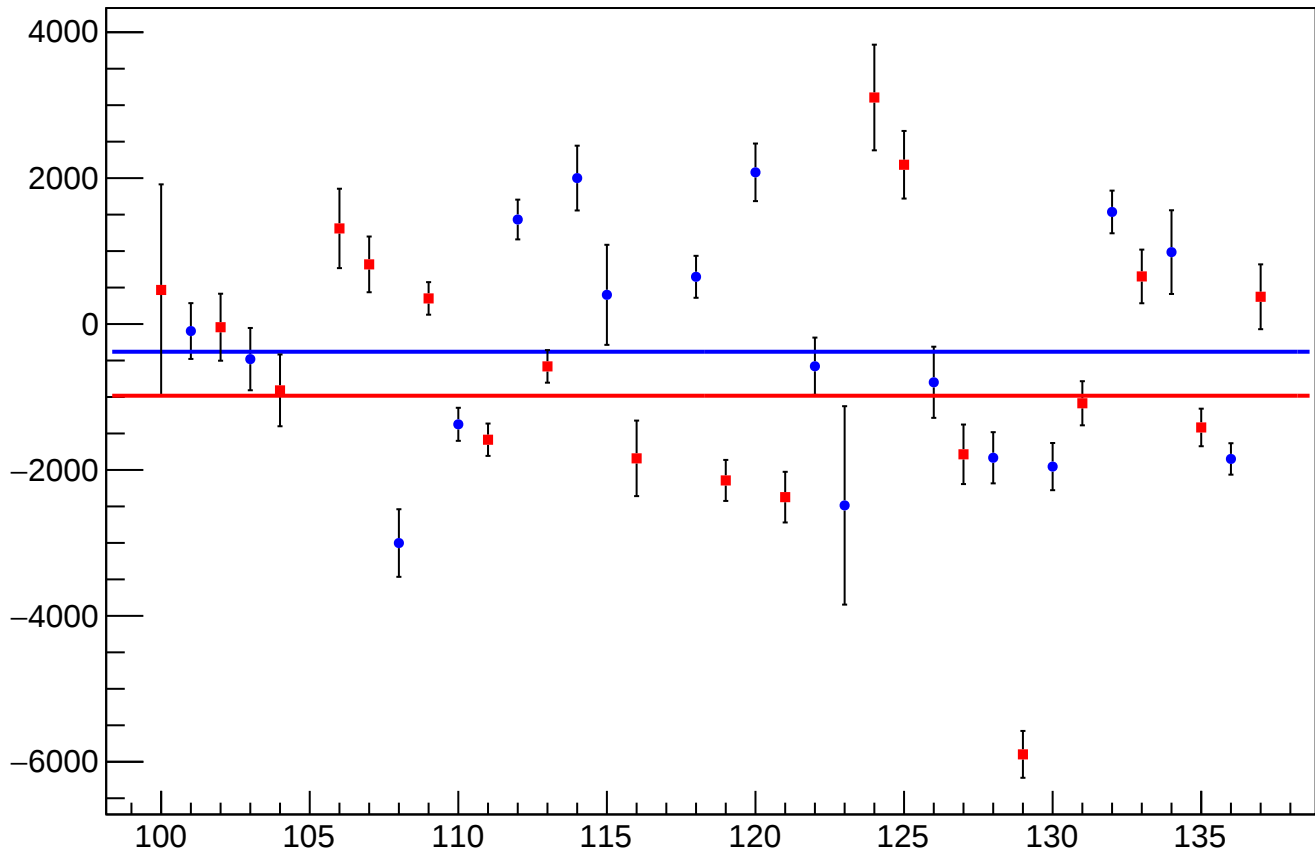
Right:  $215.173 \pm 0.043$   $\chi^2/\text{NDF}$ : 1547873.9/35

In:  $221.570 \pm 0.063$   $\chi^2/\text{NDF}$ : 644941.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $215.173 \pm 0.043$   $\chi^2/\text{NDF}$ : 1547873.9/35

# asym\_bpm0l01WS\_mean vs Slug, Sign Corrected



Right In:  $-379.647 \pm 84.260$   $\chi^2/\text{NDF}$ : 317.2/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-982.539 \pm 77.724$   $\chi^2/\text{NDF}$ : 476.3/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

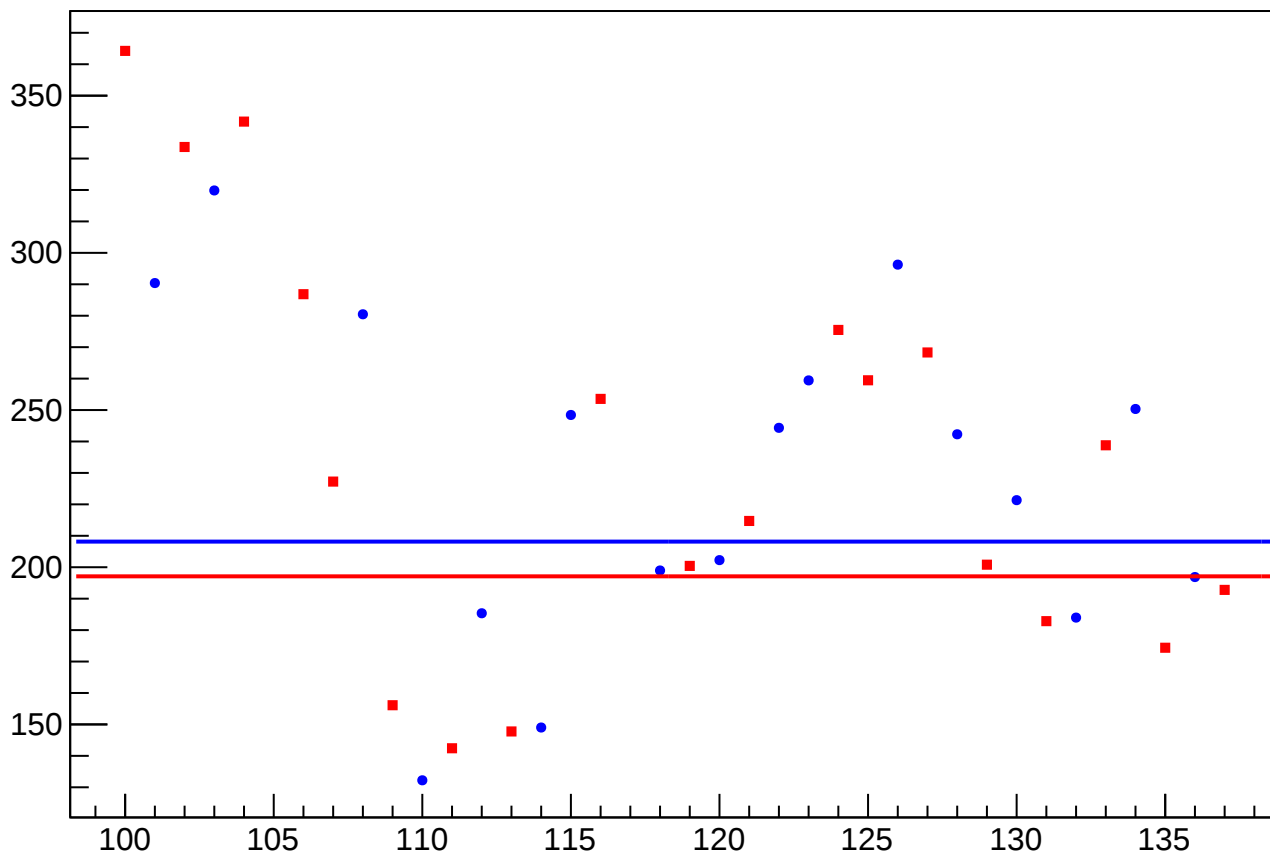
Right:  $-705.376 \pm 57.130$   $\chi^2/\text{NDF}$ : 821.1/35

In:  $-379.647 \pm 84.260$   $\chi^2/\text{NDF}$ : 317.2/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-705.376 \pm 57.130$   $\chi^2/\text{NDF}$ : 821.1/35

# asym\_bpm0l01WS\_rms vs Slug, Sign Corrected



Right In: 208.151+/-0.060  $\chi^2/\text{NDF}$ : 699084.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 197.103+/-0.055  $\chi^2/\text{NDF}$ : 926467.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

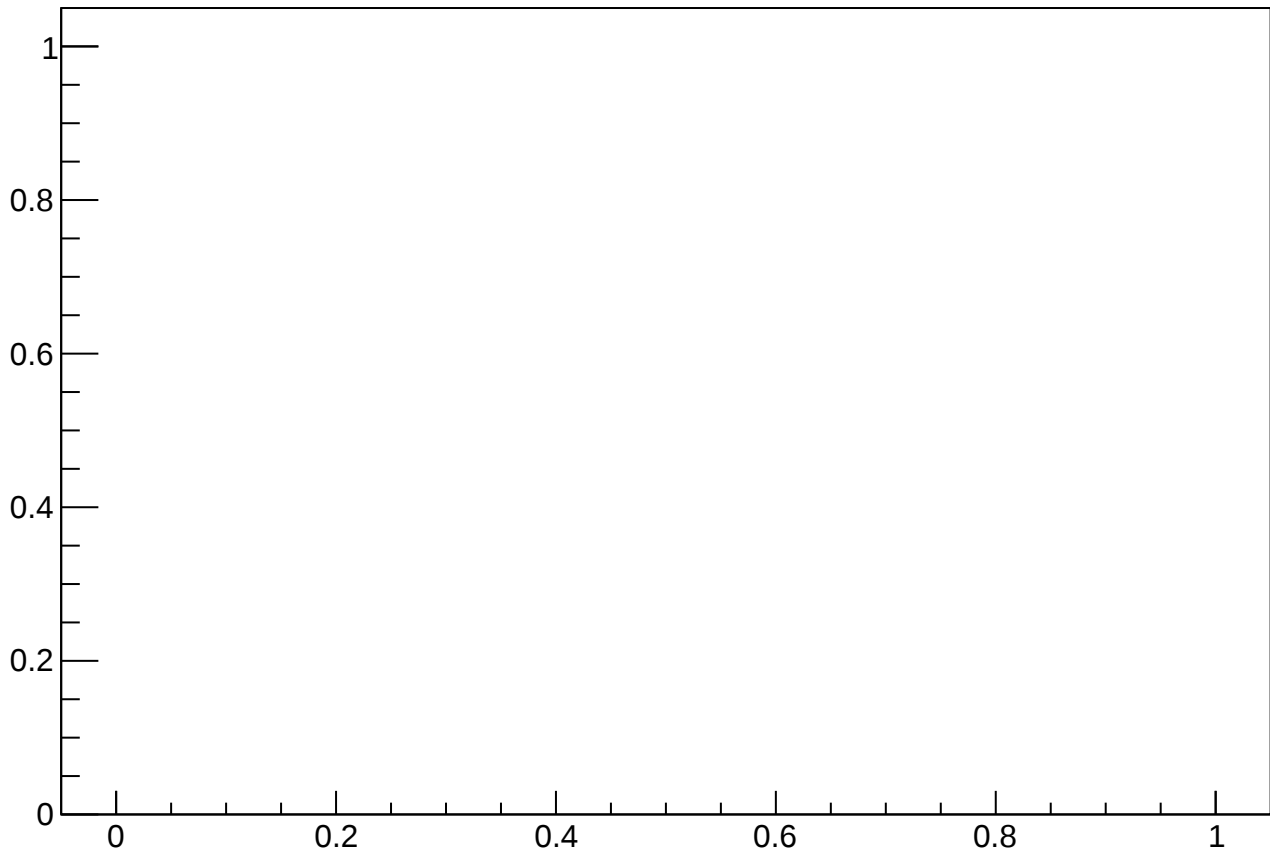
Right: 202.182+/-0.040  $\chi^2/\text{NDF}$ : 1644129.7/35

In: 208.151+/-0.060  $\chi^2/\text{NDF}$ : 699084.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 202.182+/-0.040  $\chi^2/\text{NDF}$ : 1644129.7/35

# bcm\_an\_us\_ds\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

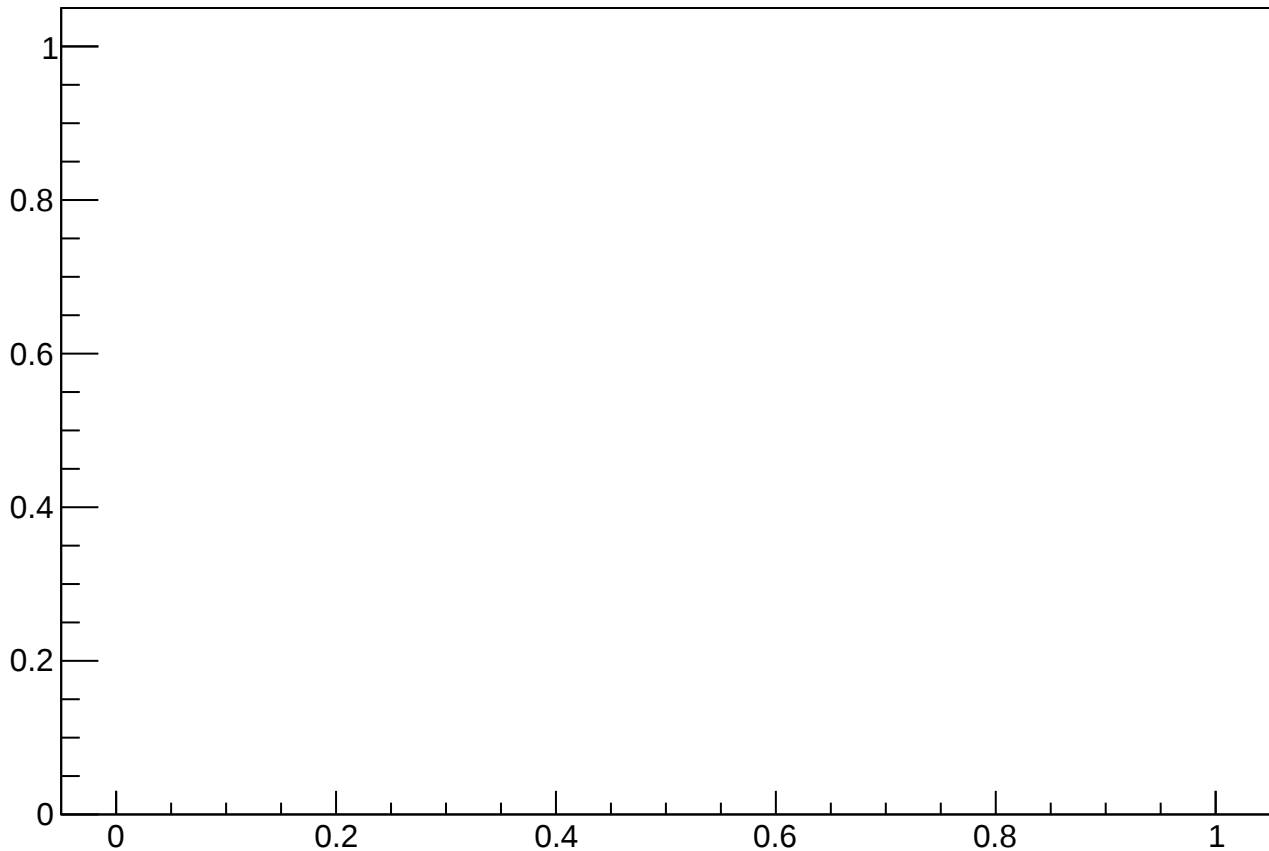
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# bcm\_an\_us\_ds\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

bcm\_dg\_us\_dg\_ds\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

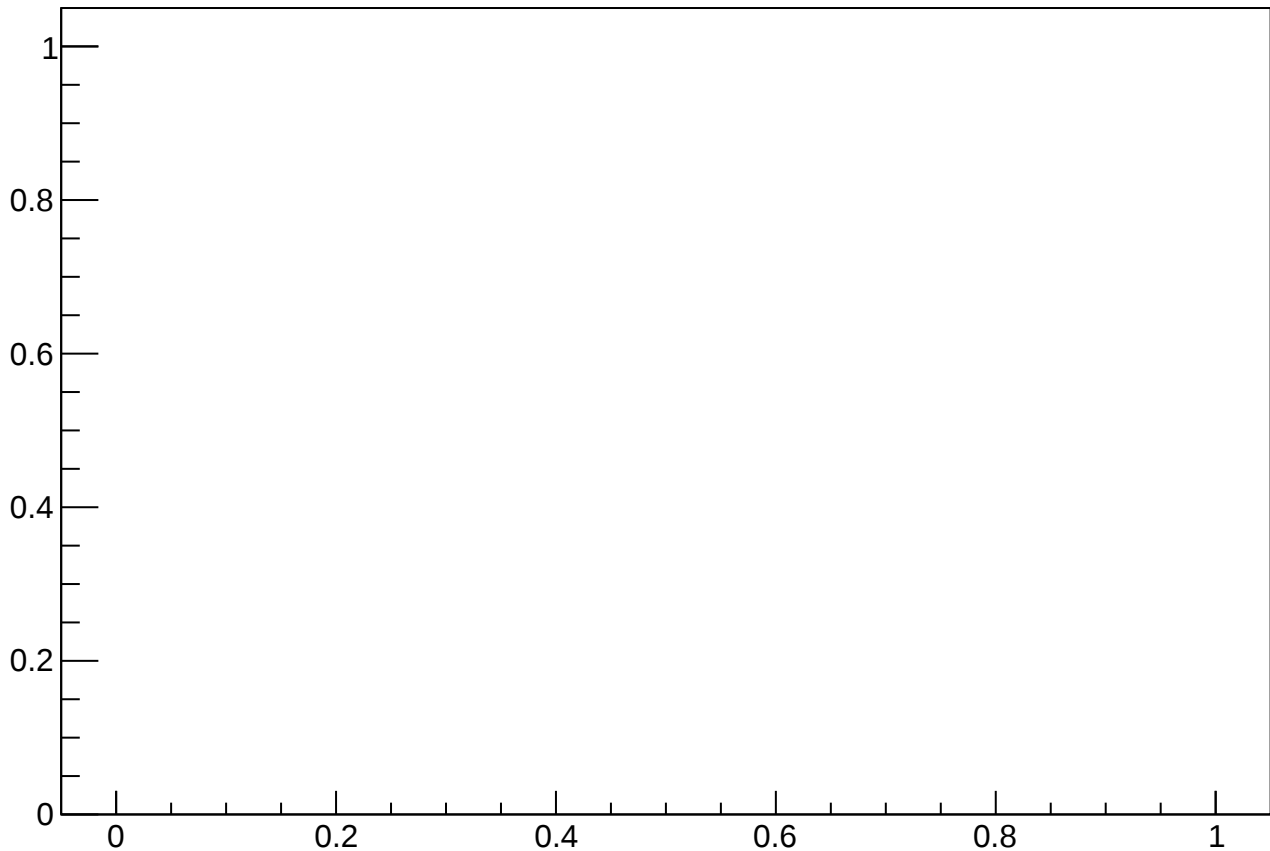
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

bcm\_dg\_us\_dg\_ds\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

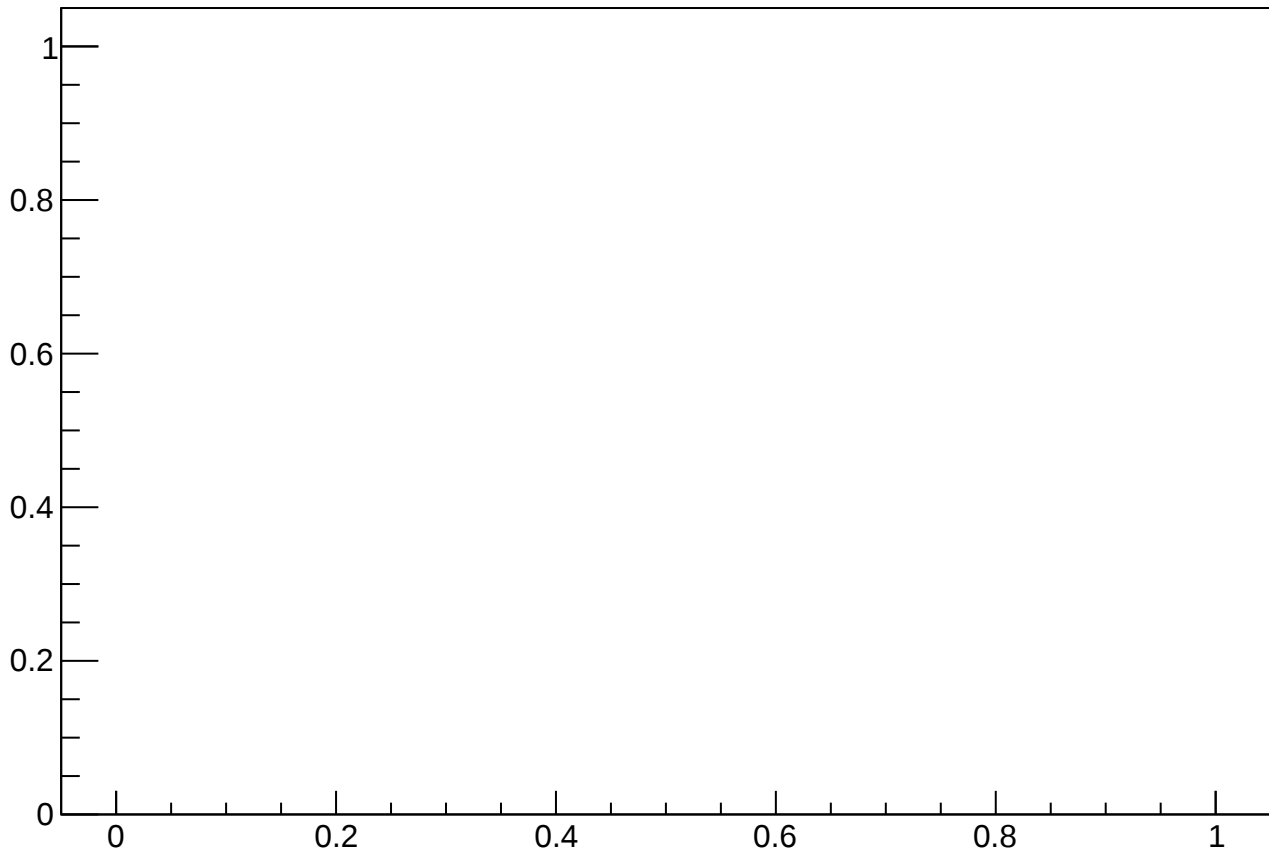
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# bcm\_dg\_us\_ds\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

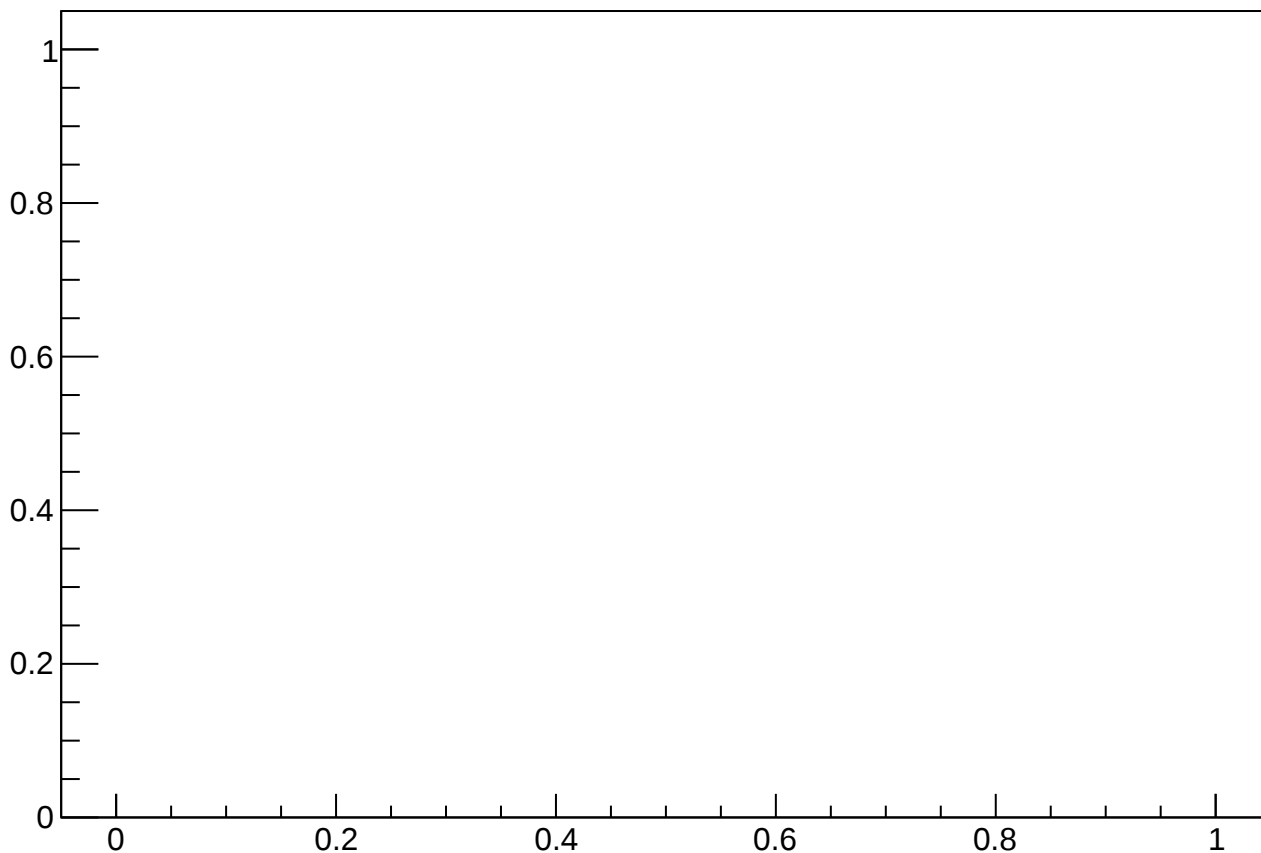
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# bcm\_dg\_us\_ds\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

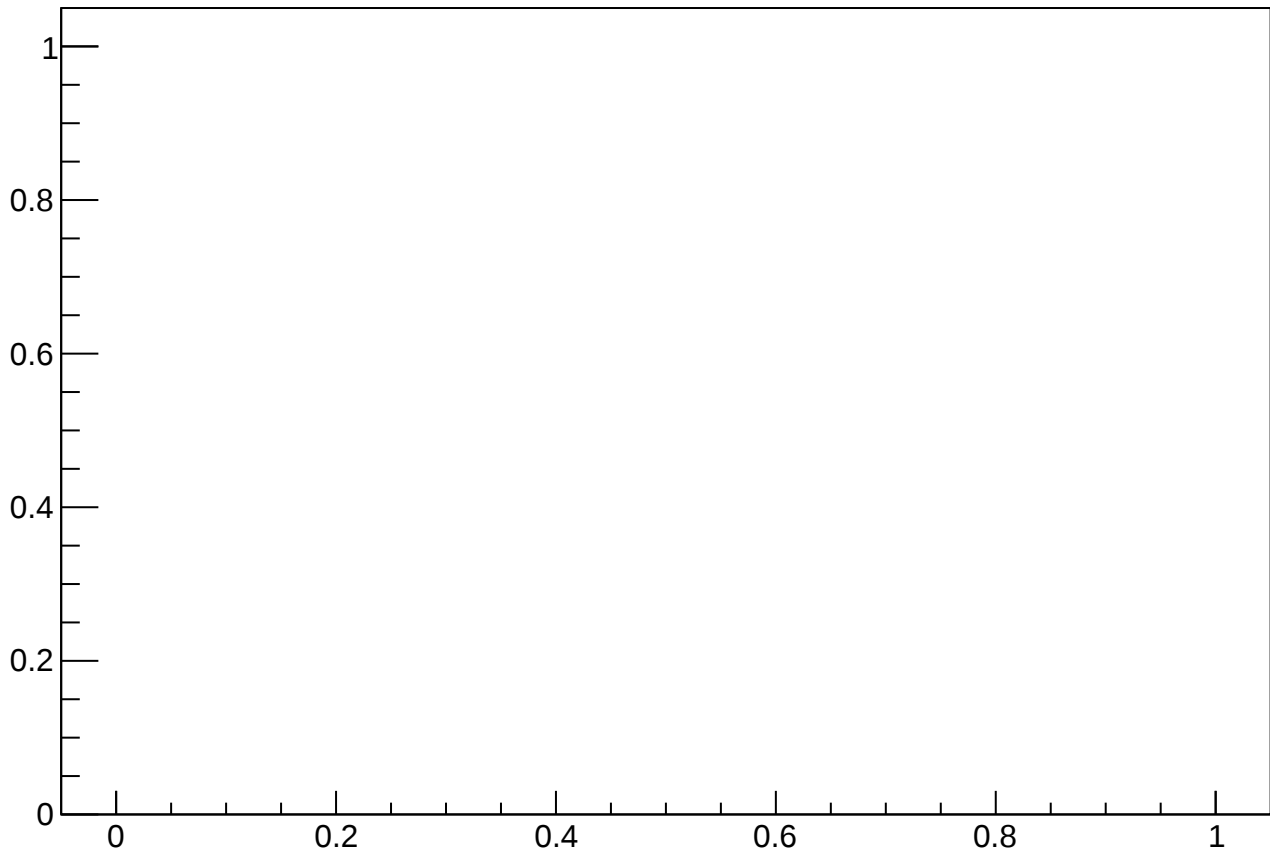
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

bcm\_dg\_ds\_ds\_dd\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

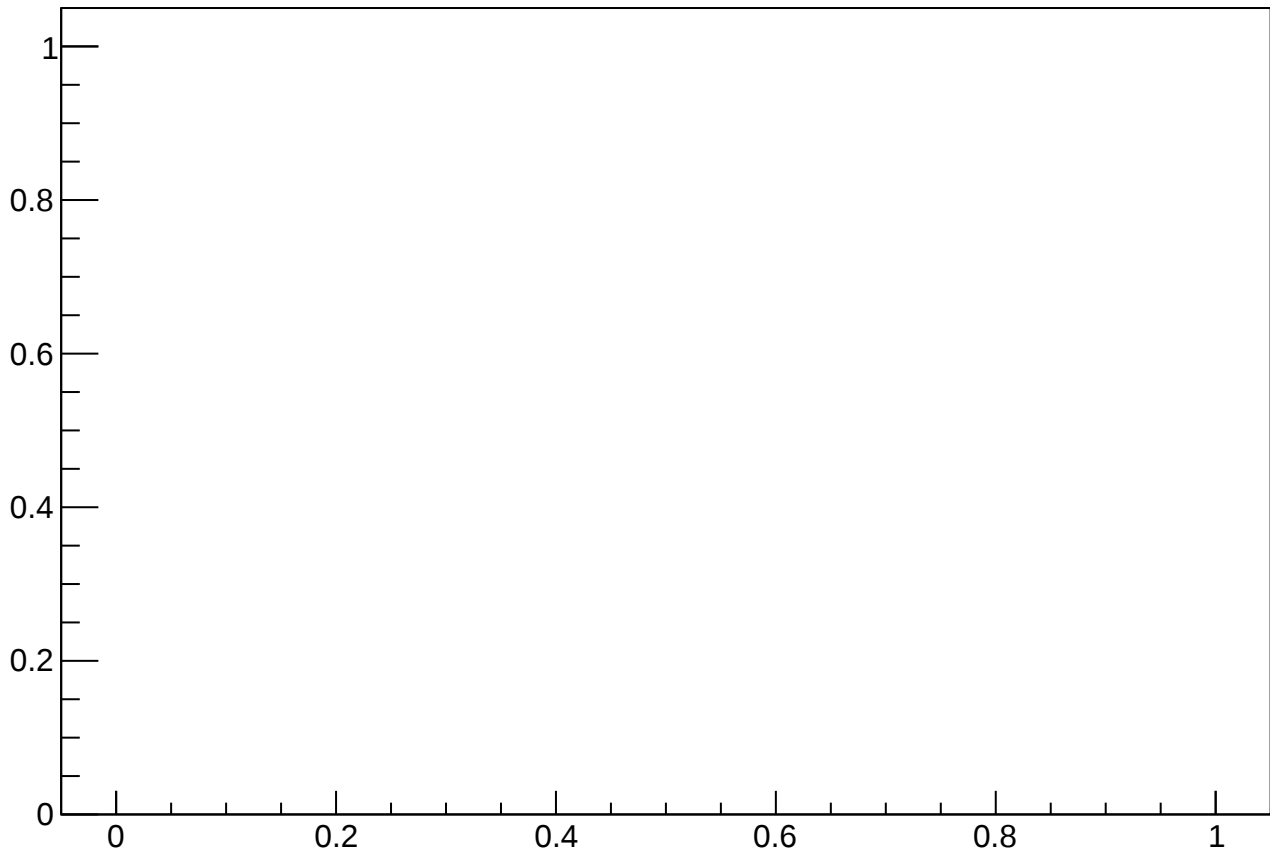
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# bcm\_dg\_ds\_ds\_dd\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

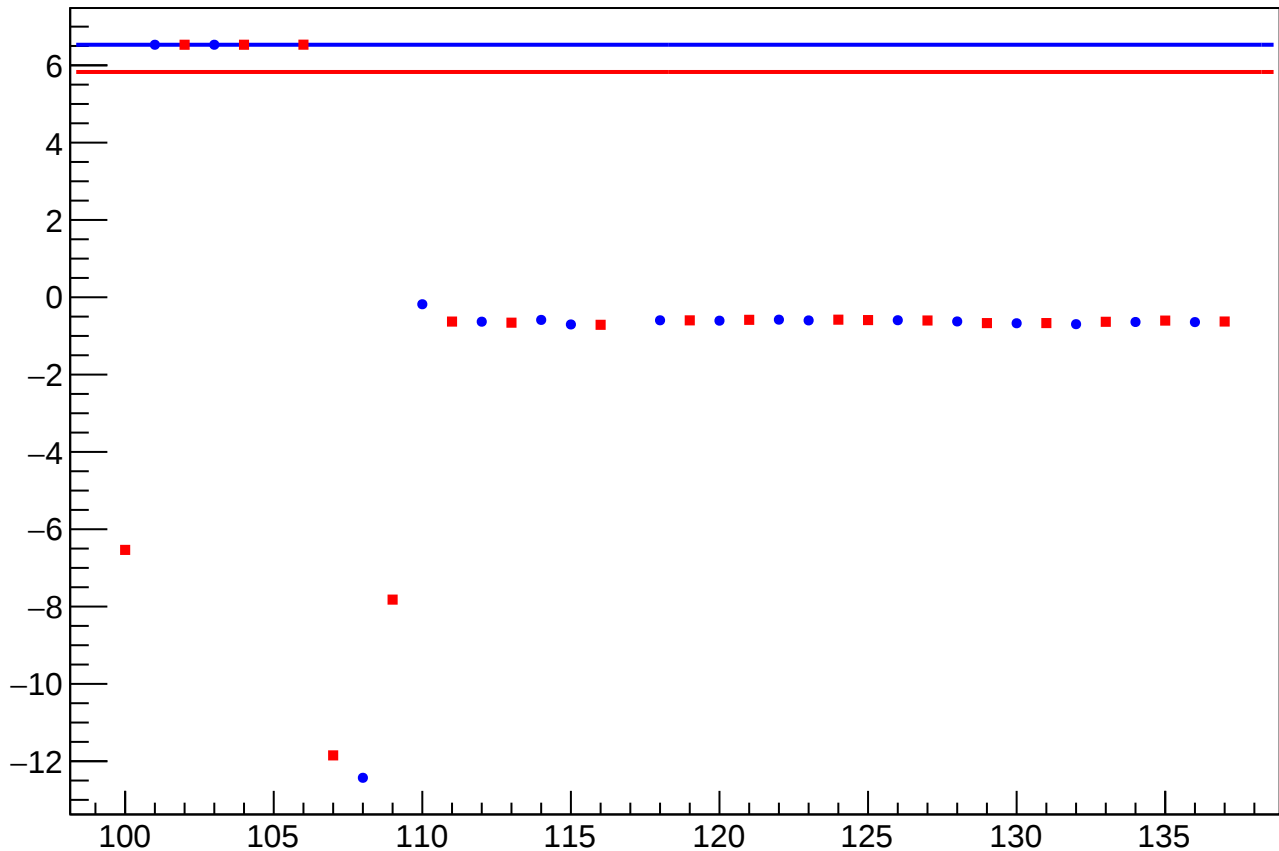
Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# yield\_cav4bX\_mean vs Slug, Sign Corrected



Right In: 6.532+/-0.000  $\chi^2/\text{NDF}$ : 127219747629.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 5.827+/-0.000  $\chi^2/\text{NDF}$ : 755963218053643.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

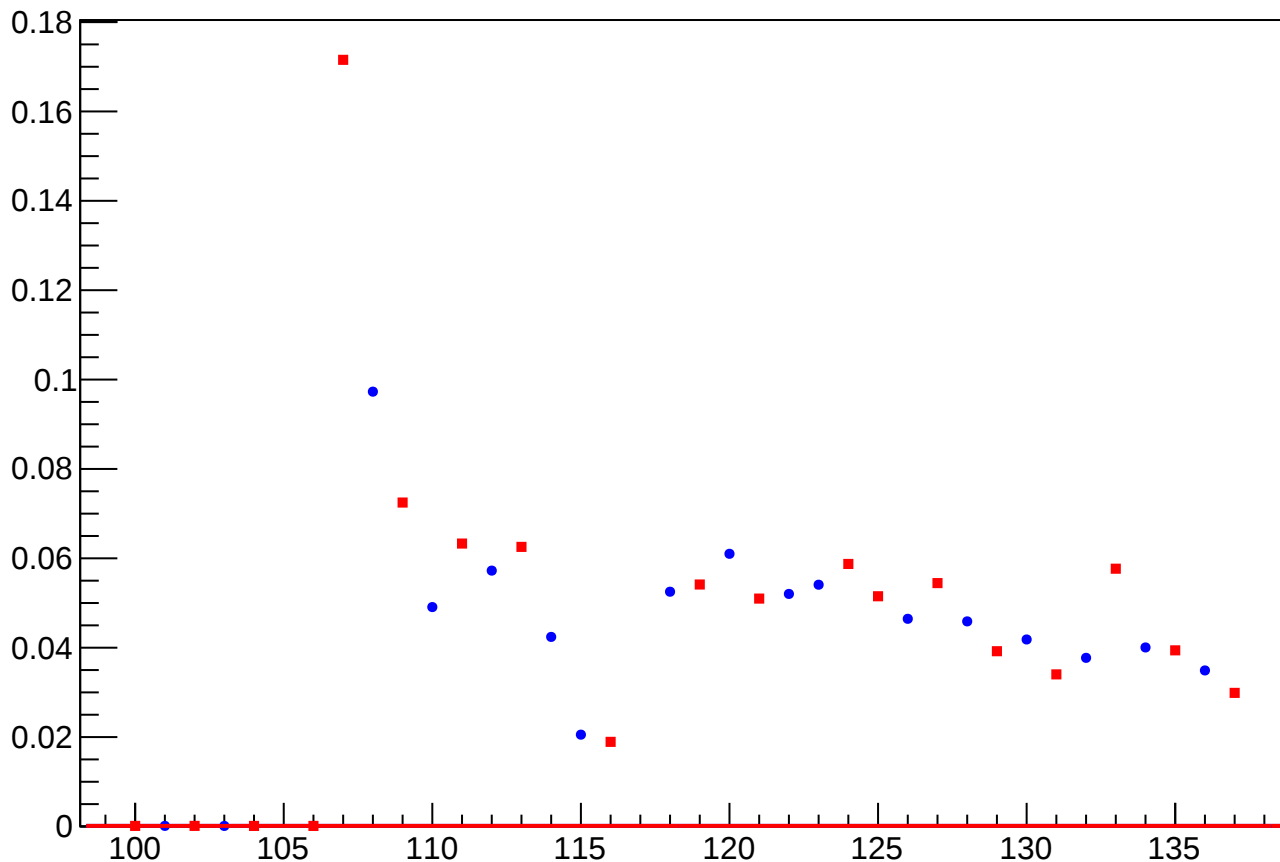
Right: 6.155+/-0.000  $\chi^2/\text{NDF}$ : 776094576922584.5

In: 6.532+/-0.000  $\chi^2/\text{NDF}$ : 127219747629.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 6.155+/-0.000  $\chi^2/\text{NDF}$ : 776094576922584.5

# yield\_cav4bX\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 8888070.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 9349631.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

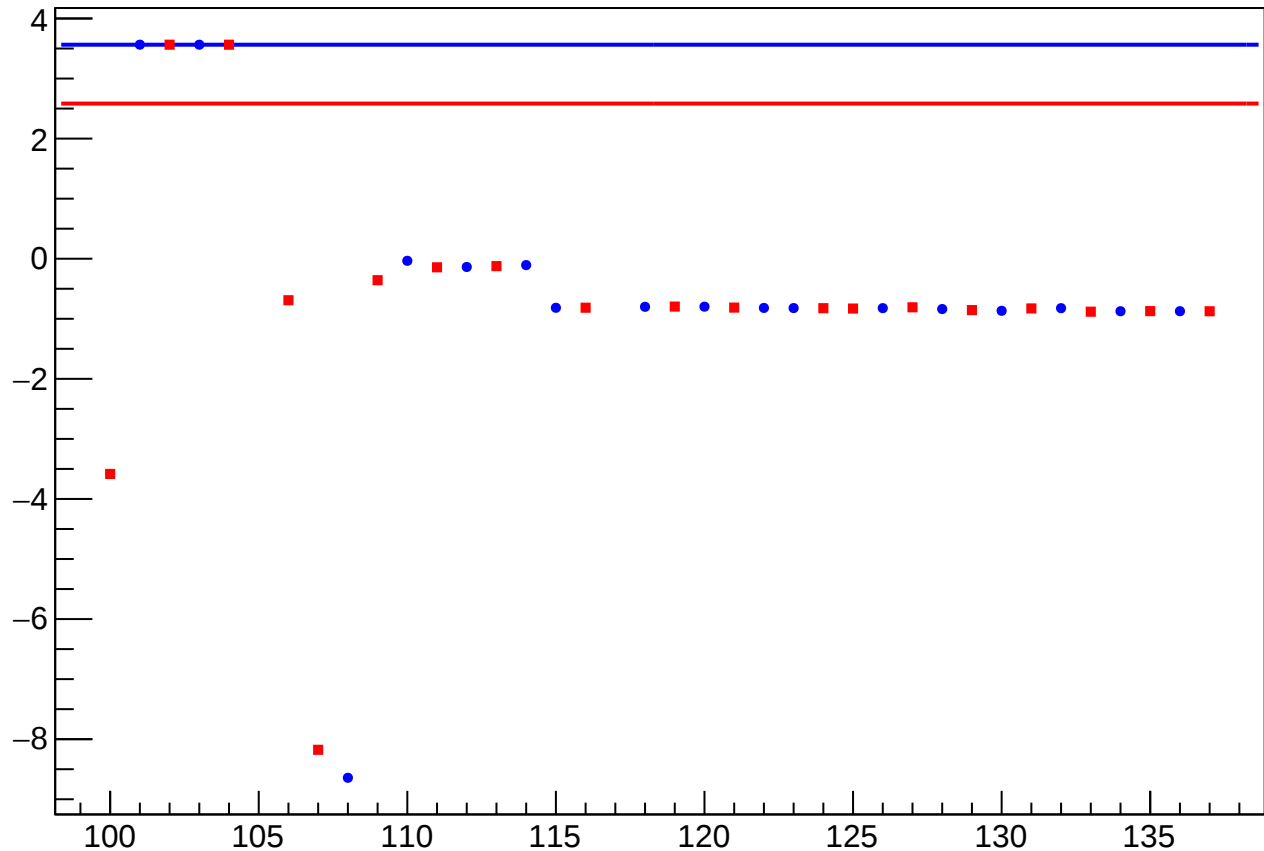
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 18237948.0/35

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 8888070.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 18237948.0/35

# yield\_cav4bY\_mean vs Slug, Sign Corrected



Right In: 3.563+/-0.000  $\chi^2/\text{NDF}$ : 481634392464.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.583+/-0.000  $\chi^2/\text{NDF}$ : 1253502070019187.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

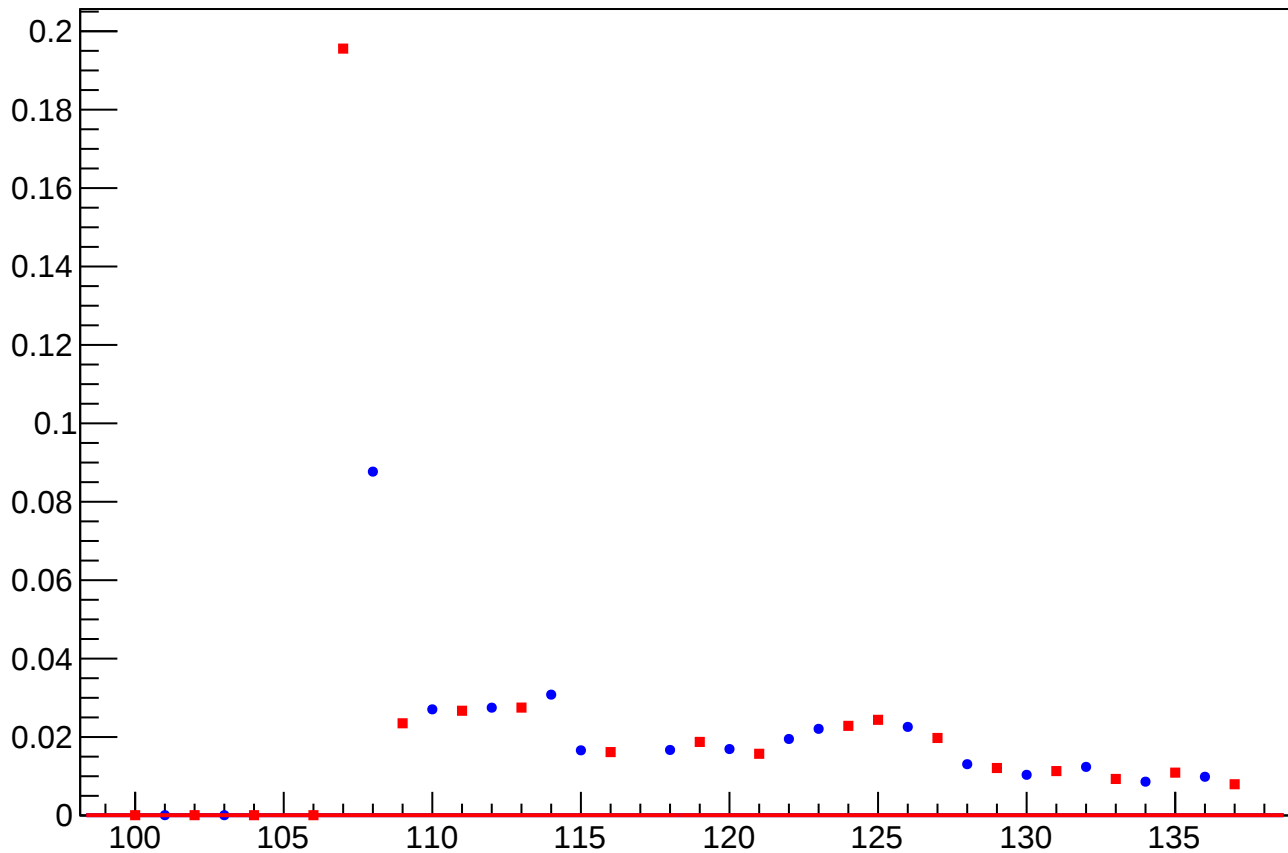
Right: 3.040+/-0.000  $\chi^2/\text{NDF}$ : 1382254685120485.0/16

In: 3.563+/-0.000  $\chi^2/\text{NDF}$ : 481634392464.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.040+/-0.000  $\chi^2/\text{NDF}$ : 1382254685120485.0/16

# yield\_cav4bY\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 9724059.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 9861757.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

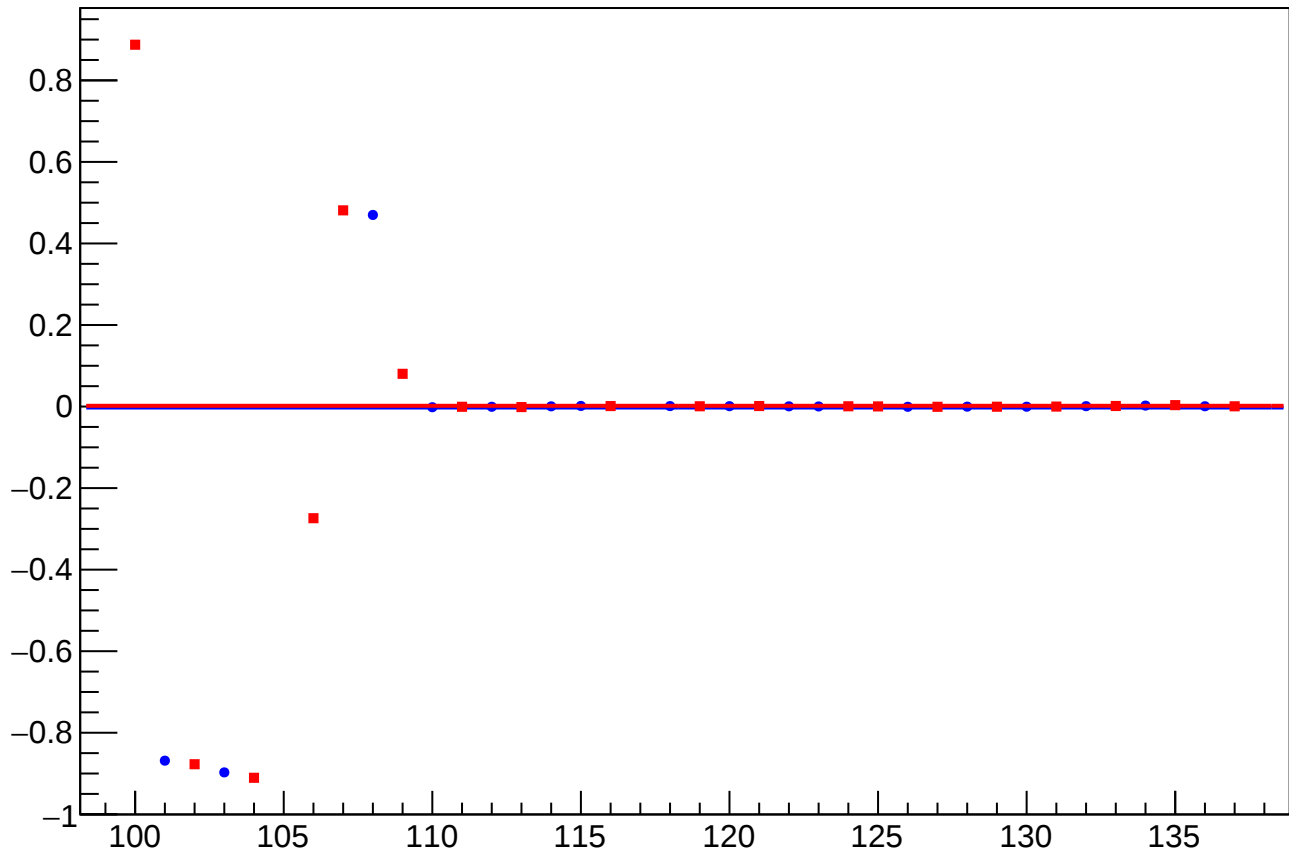
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 19586090.4/35

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 9724059.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 19586090.4/35

# yield\_cav4cX\_mean vs Slug, Sign Corrected



Right In: -0.002+/-0.000  $\chi^2/\text{NDF}$ : 9794863405.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 3041319824.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

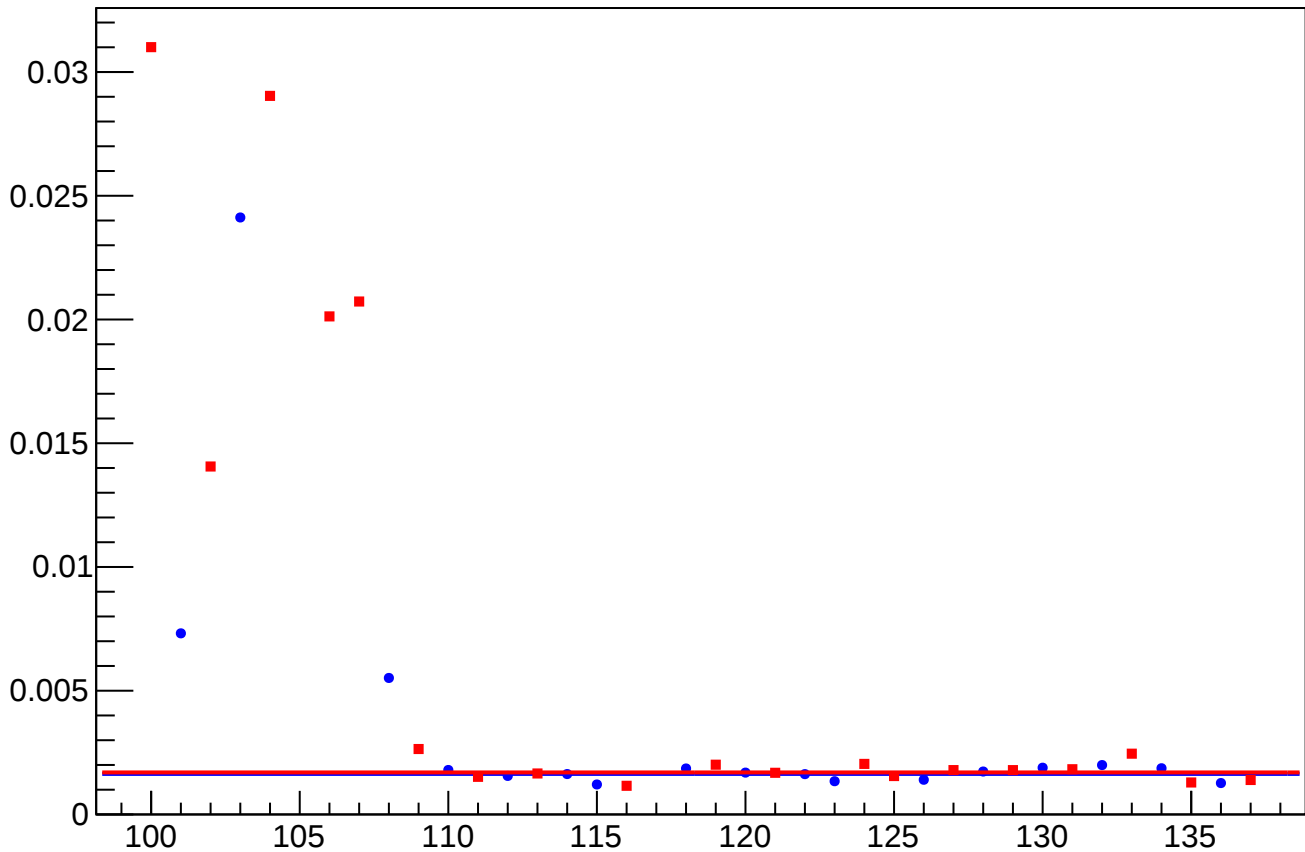
Right: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 12850350896.6/35

In: -0.002+/-0.000  $\chi^2/\text{NDF}$ :9794863405.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 12850350896.6/35

# yield\_cav4cX\_rms vs Slug, Sign Corrected



Right In: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 1916349.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 3023899.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

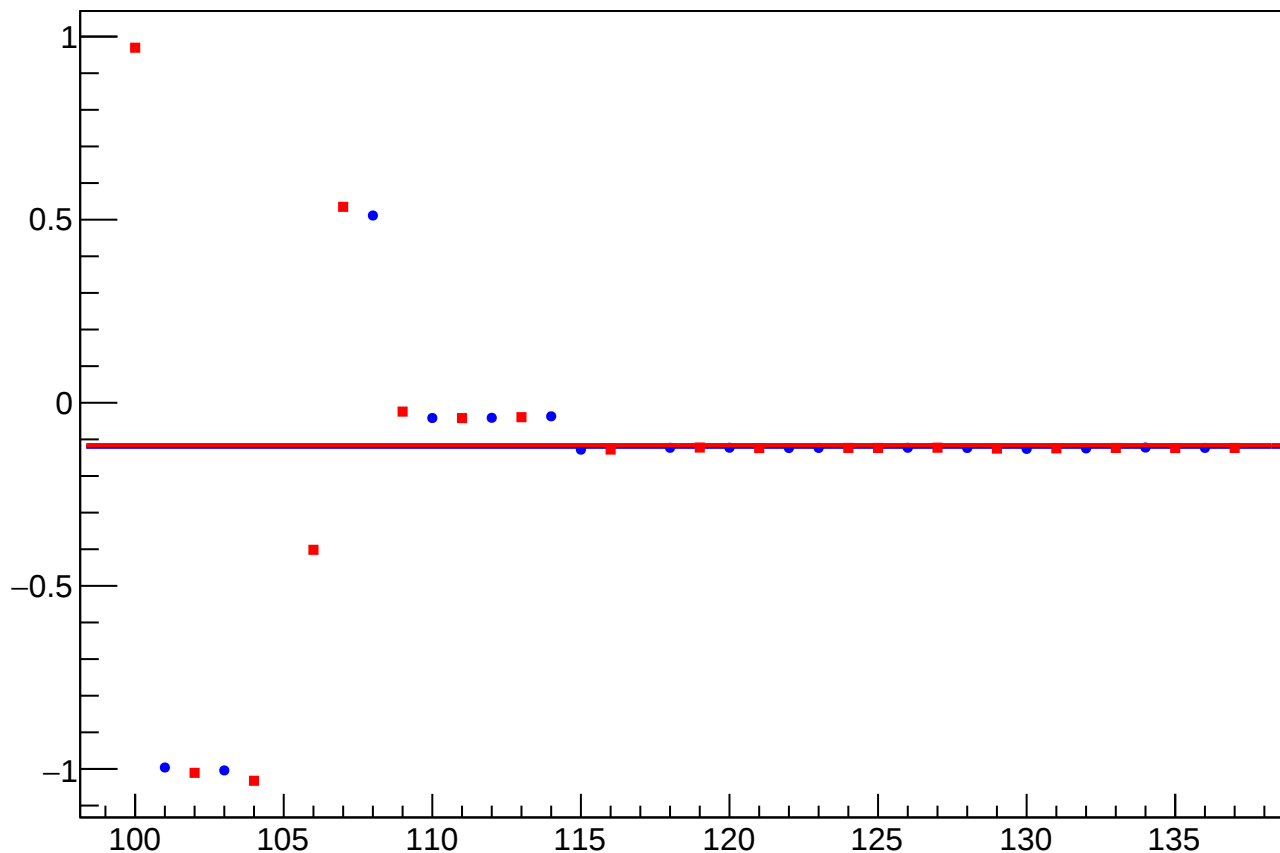
Right: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 4945998.5/35

In: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 1916349.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 4945998.5/35

# yield\_cav4cY\_mean vs Slug, Sign Corrected



Right In: -0.120+/-0.000  $\chi^2/\text{NDF}$ : 3932144335.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -0.115+/-0.000  $\chi^2/\text{NDF}$ : 2456843337.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

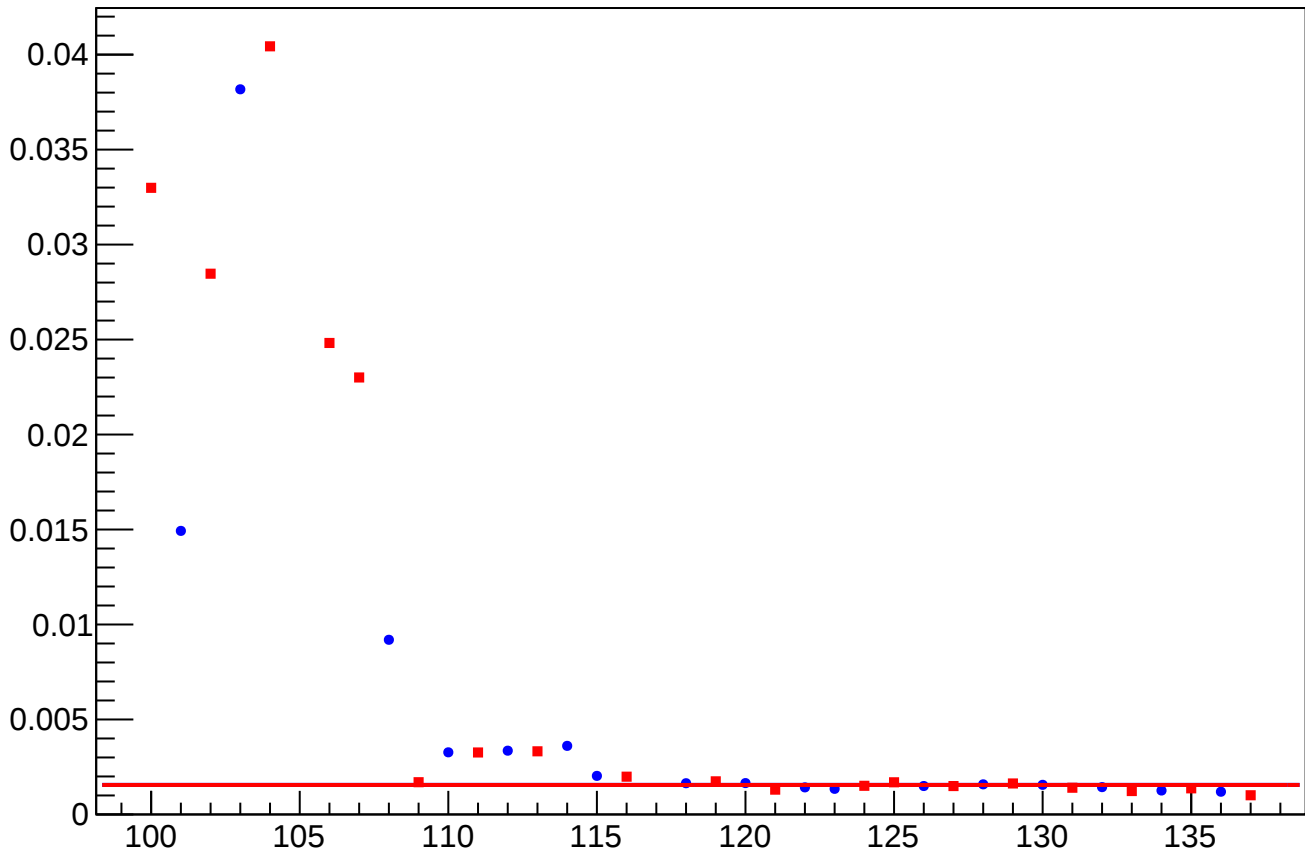
Right: -0.118+/-0.000  $\chi^2/\text{NDF}$ : 6411653427.4/35

In: -0.120+/-0.000  $\chi^2/\text{NDF}$ :3932144335.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -0.118+/-0.000  $\chi^2/\text{NDF}$ : 6411653427.4/35

# yield\_cav4cY\_rms vs Slug, Sign Corrected



Right In: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 2901093.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 3539455.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

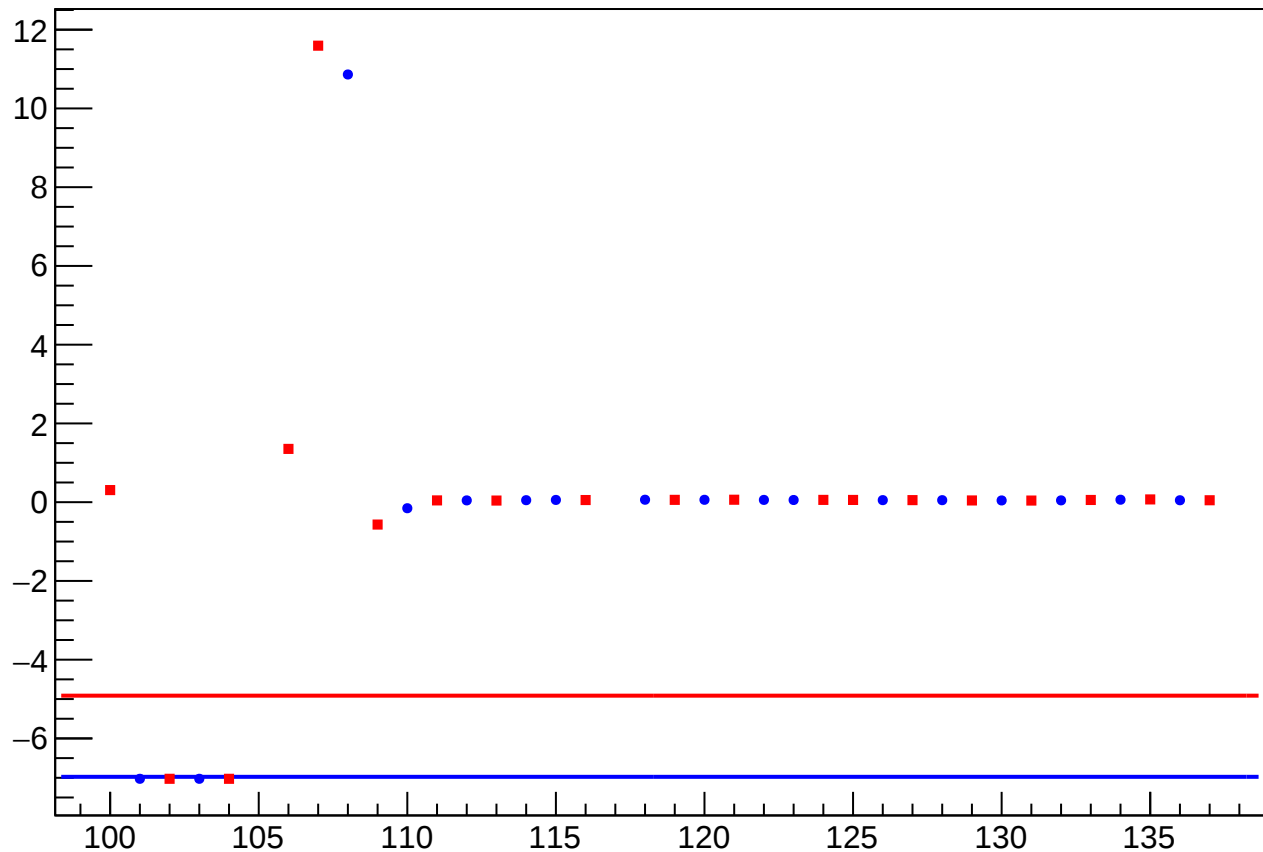
Right: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 6440590.7/35

In: 0.002+/-0.000  $\chi^2/\text{NDF}$ :2901093.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

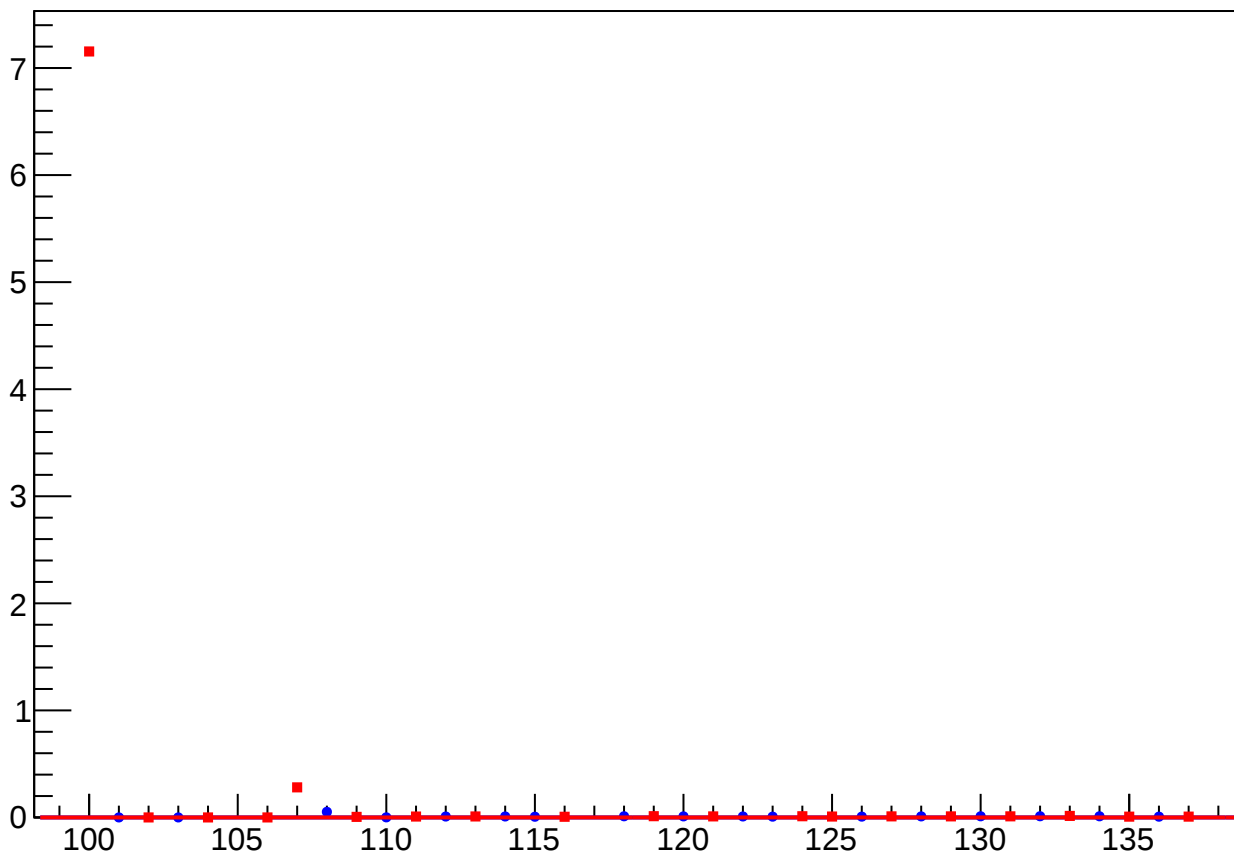
All: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 6440590.7/35

# yield\_cav4dX\_mean vs Slug, Sign Corrected



Right In: -6.975+/-0.000  $\chi^2/\text{NDF}$ : 8749579700722.8/16  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -4.914+/-0.000  $\chi^2/\text{NDF}$ : 365358092730279.9/18  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: -5.900+/-0.000  $\chi^2/\text{NDF}$ : 430307691650468.6  
 Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right: -5.900+/-0.000  $\chi^2/\text{NDF}$ : 430307691650468.6  
 In: -6.975+/-0.000  $\chi^2/\text{NDF}$ : 8749579700722.8/16  
 Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# yield\_cav4dX\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 8242728.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 8775982.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

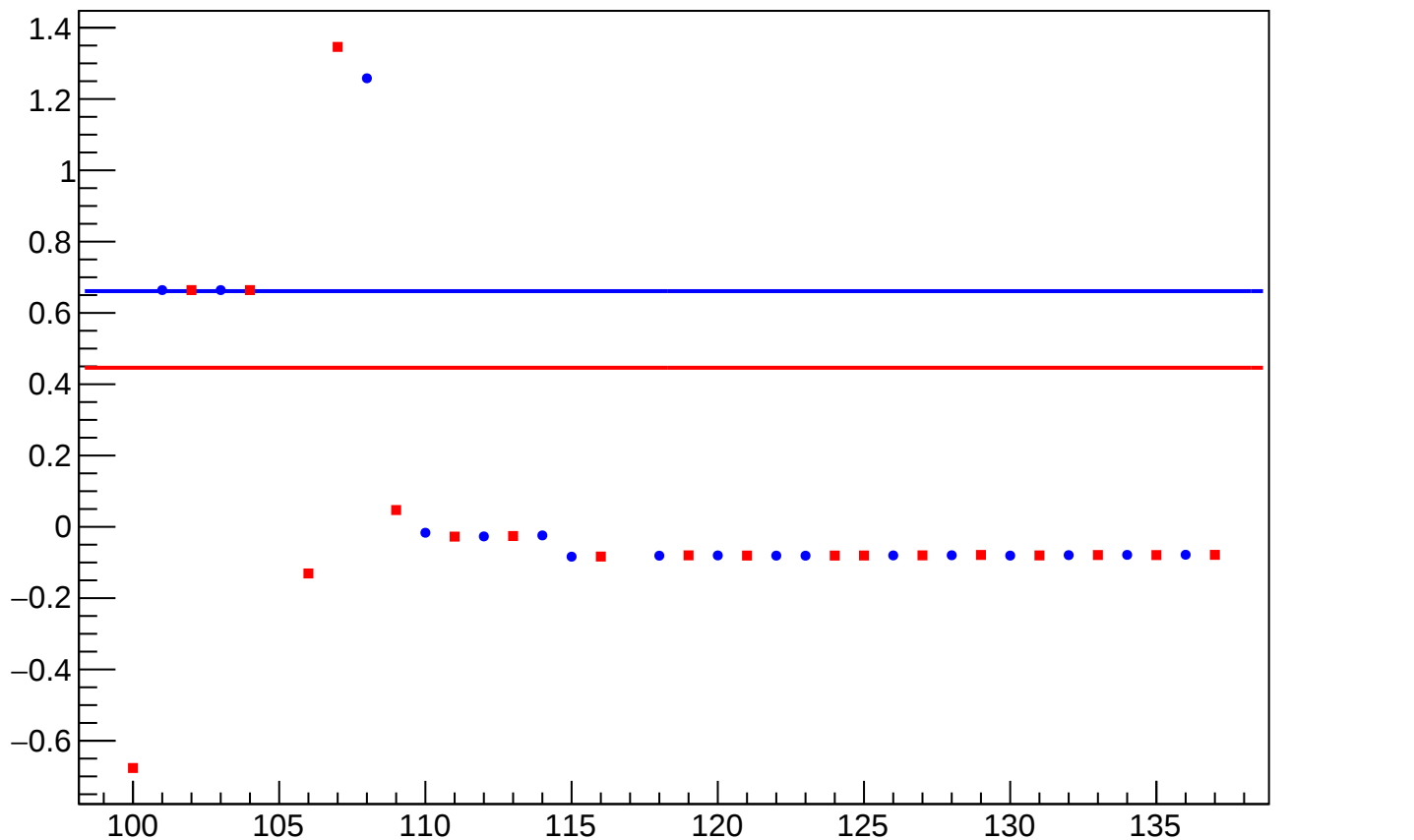
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 17018999.2/35

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 8242728.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 17018999.2/35

# yield\_cav4dY\_mean vs Slug, Sign Corrected



Right In: 0.661+/-0.000

$\chi^2/\text{NDF}$ : 5607525081216.0/16

Left: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right: 0.549+/-0.000

$\chi^2/\text{NDF}$ : 473947475230218.3

Left Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.446+/-0.000

$\chi^2/\text{NDF}$ : 405416924315199.0/18

In: 0.661+/-0.000

$\chi^2/\text{NDF}$ : 5607525081216.0/16

Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

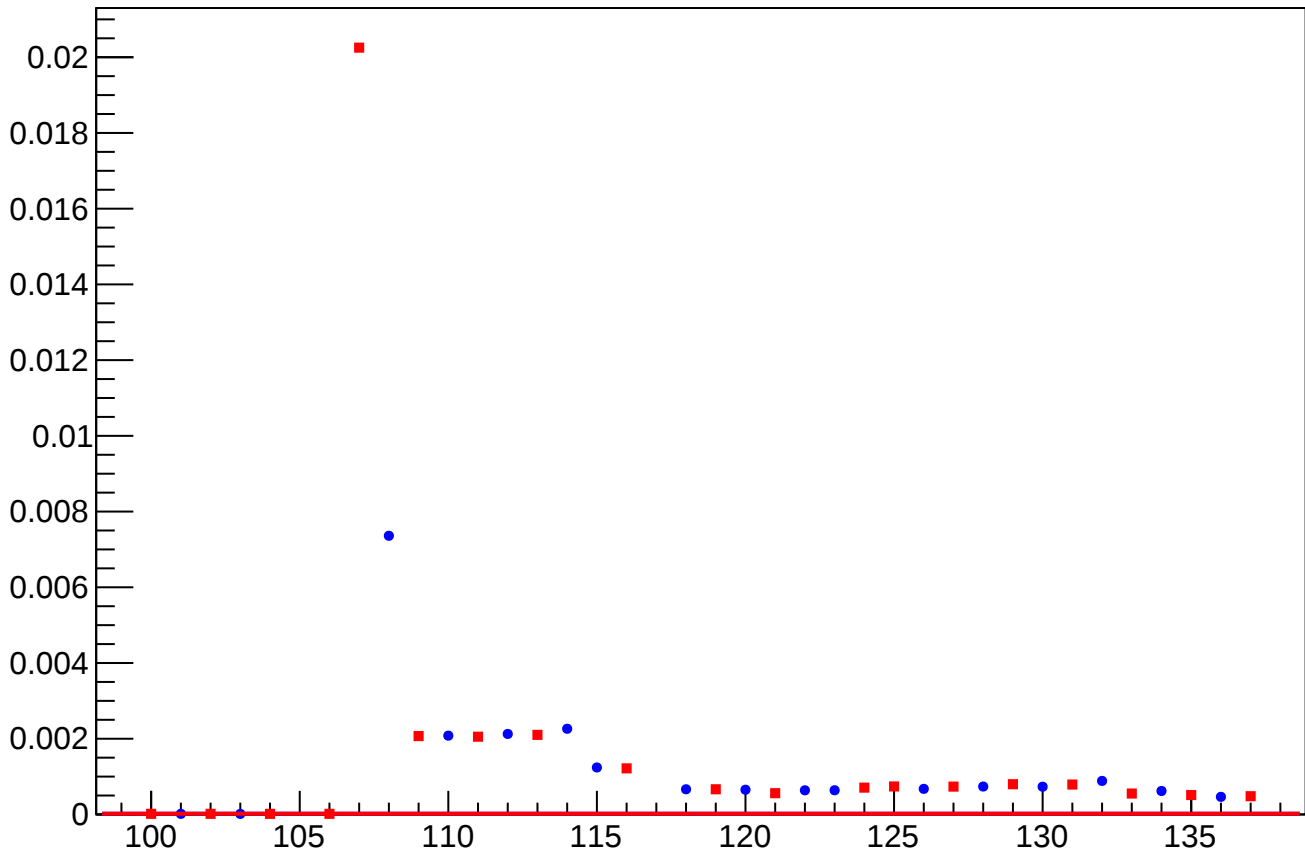
Left In: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

All: 0.549+/-0.000

$\chi^2/\text{NDF}$ : 473947475230218.3

# yield\_cav4dY\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 9874012.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 9480848.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

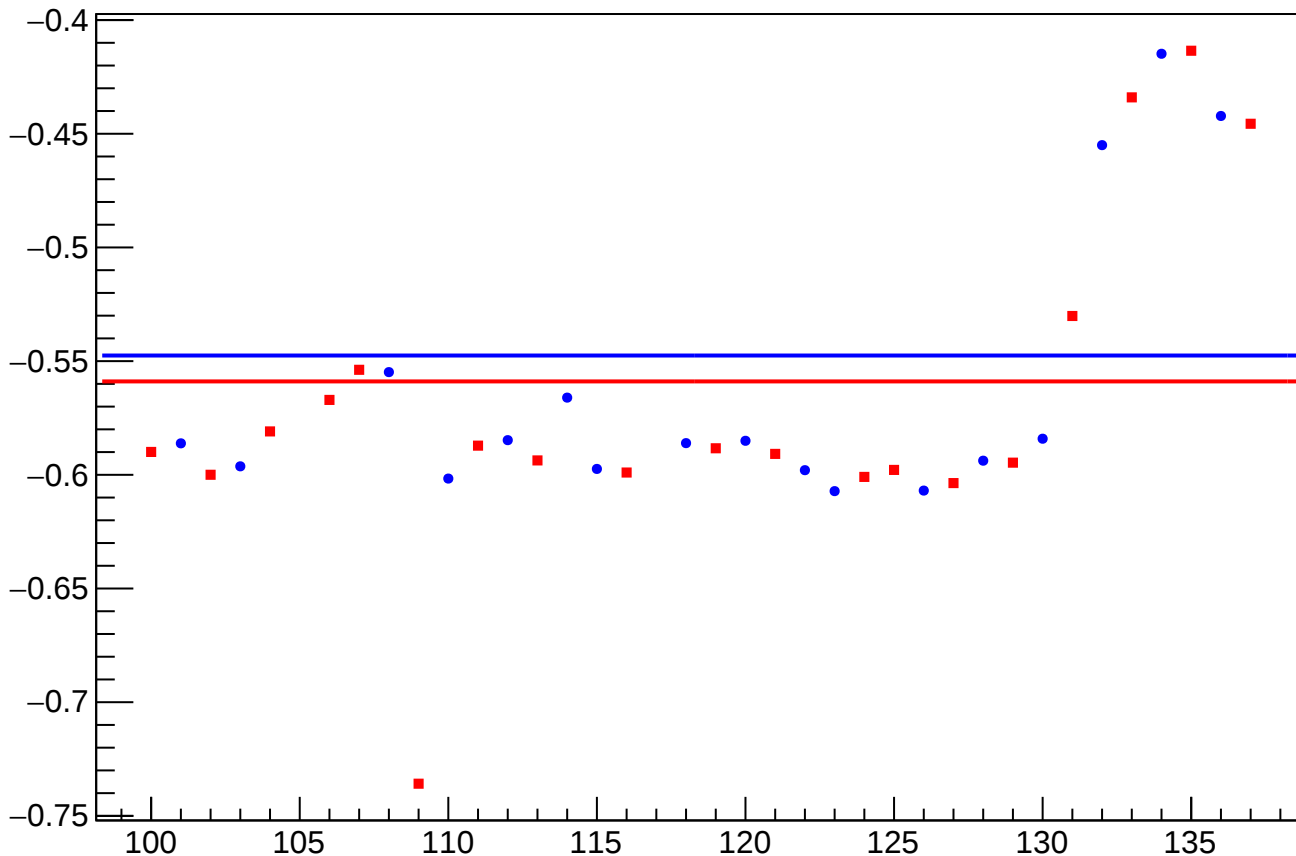
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 19354868.6/35

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 9874012.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 19354868.6/35

# yield\_bpm4aX\_mean vs Slug, Sign Corrected



Right In: -0.548+/-0.000  $\chi^2/\text{NDF}$ : 48545285.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.559+/-0.000  $\chi^2/\text{NDF}$ : 65330923.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

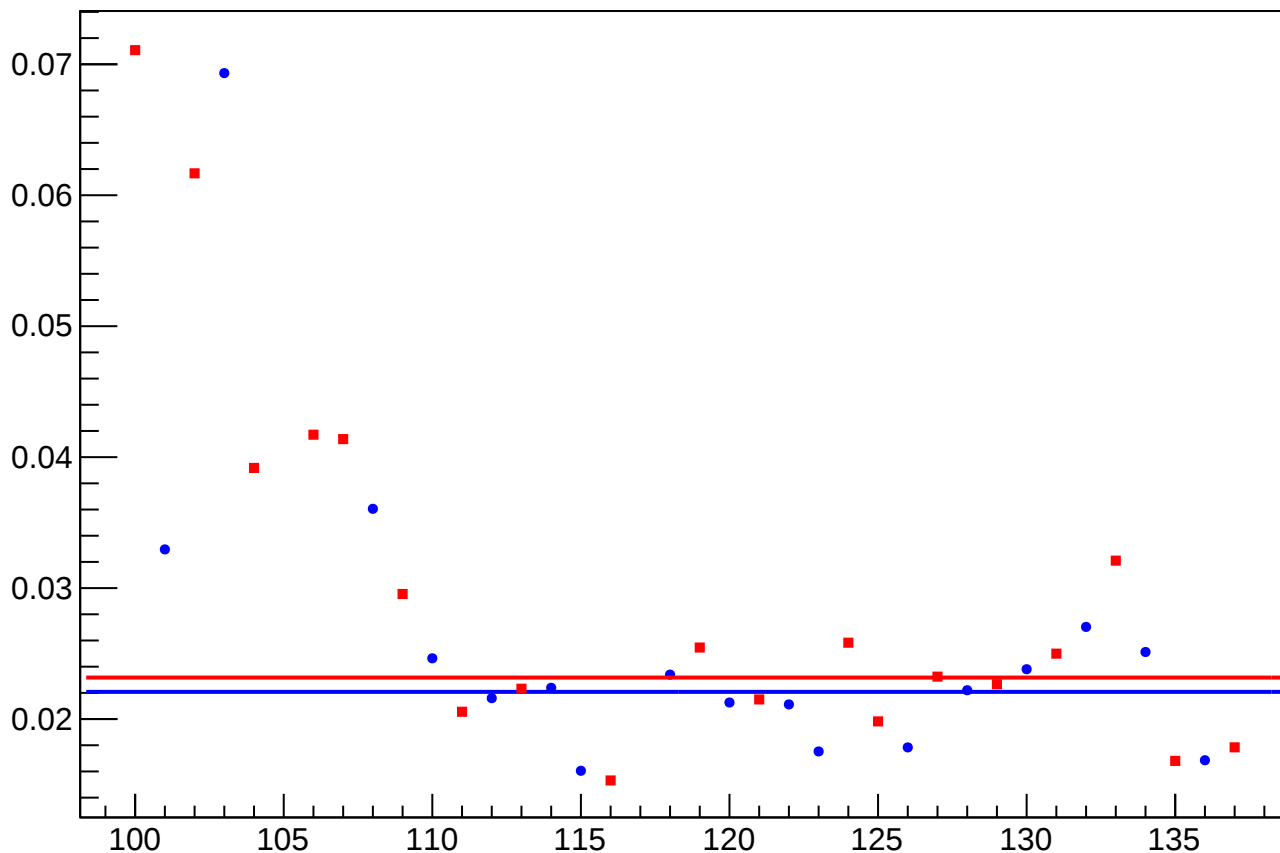
Right: -0.553+/-0.000  $\chi^2/\text{NDF}$ : 114532950.1/35

In: -0.548+/-0.000  $\chi^2/\text{NDF}$ : 48545285.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.553+/-0.000  $\chi^2/\text{NDF}$ : 114532950.1/35

# yield\_bpm4aX\_rms vs Slug, Sign Corrected



Right In: 0.022+/-0.000  $\chi^2/\text{NDF}$ : 954779.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.023+/-0.000  $\chi^2/\text{NDF}$ : 1156758.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

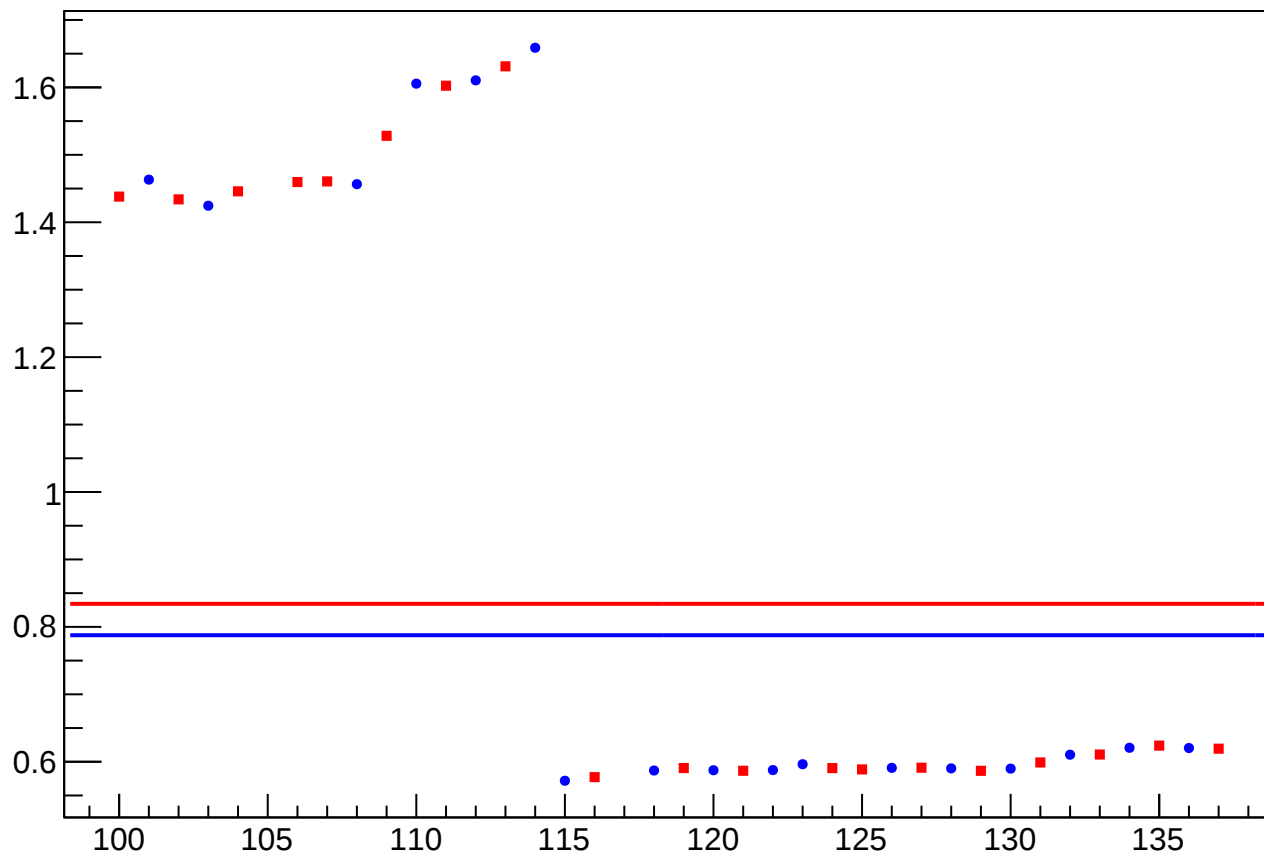
Right: 0.023+/-0.000  $\chi^2/\text{NDF}$ : 2123609.7/35

In: 0.022+/-0.000  $\chi^2/\text{NDF}$ : 954779.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.023+/-0.000  $\chi^2/\text{NDF}$ : 2123609.7/35

# yield\_bpm4aY\_mean vs Slug, Sign Corrected



Right In: 0.788+/-0.000  $\chi^2/\text{NDF}$ : 3581400502.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.834+/-0.000  $\chi^2/\text{NDF}$ : 4152115639.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

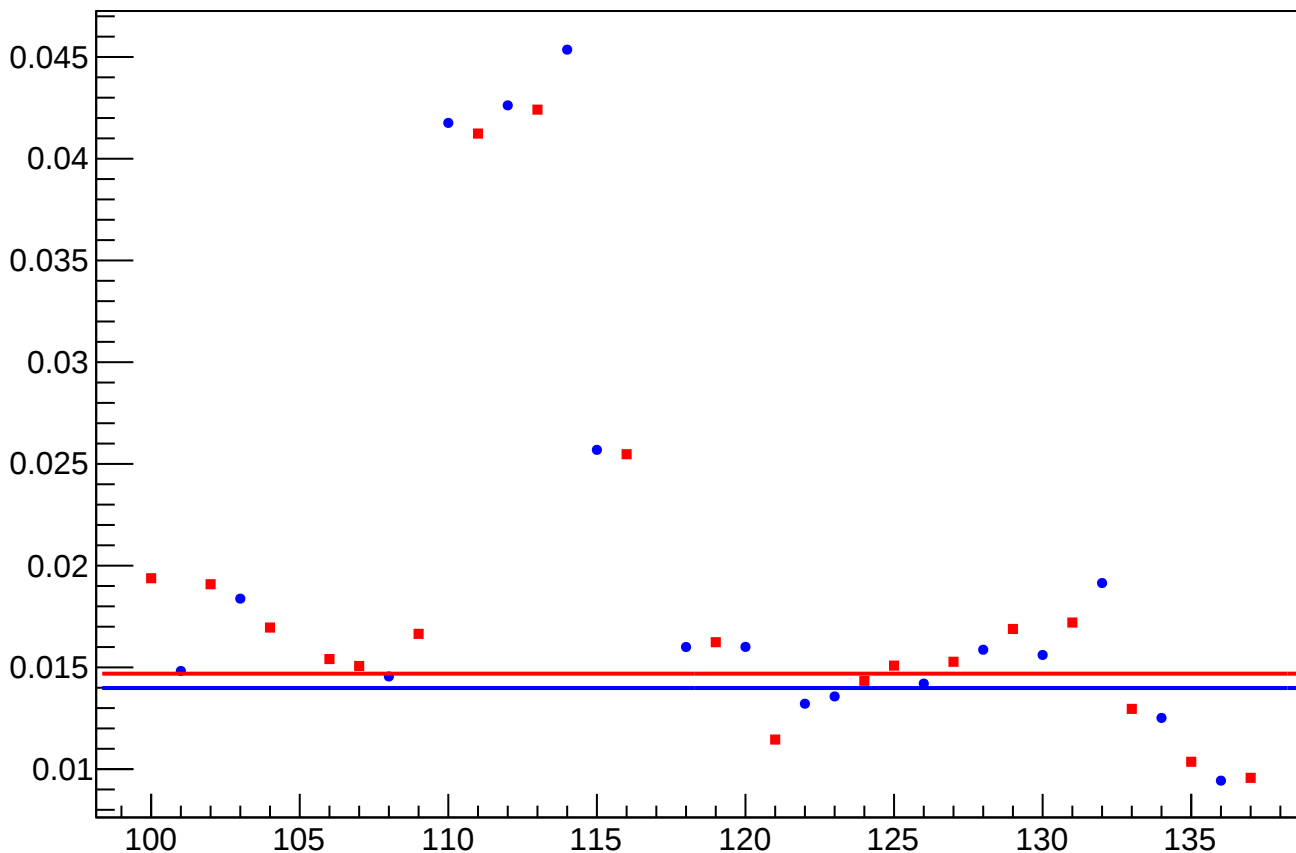
Right: 0.811+/-0.000  $\chi^2/\text{NDF}$ : 7764167044.9/35

In: 0.788+/-0.000  $\chi^2/\text{NDF}$ : 3581400502.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.811+/-0.000  $\chi^2/\text{NDF}$ : 7764167044.9/35

# yield\_bpm4aY\_rms vs Slug, Sign Corrected



Right In: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 1398505.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.015+/-0.000  $\chi^2/\text{NDF}$ : 1258511.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

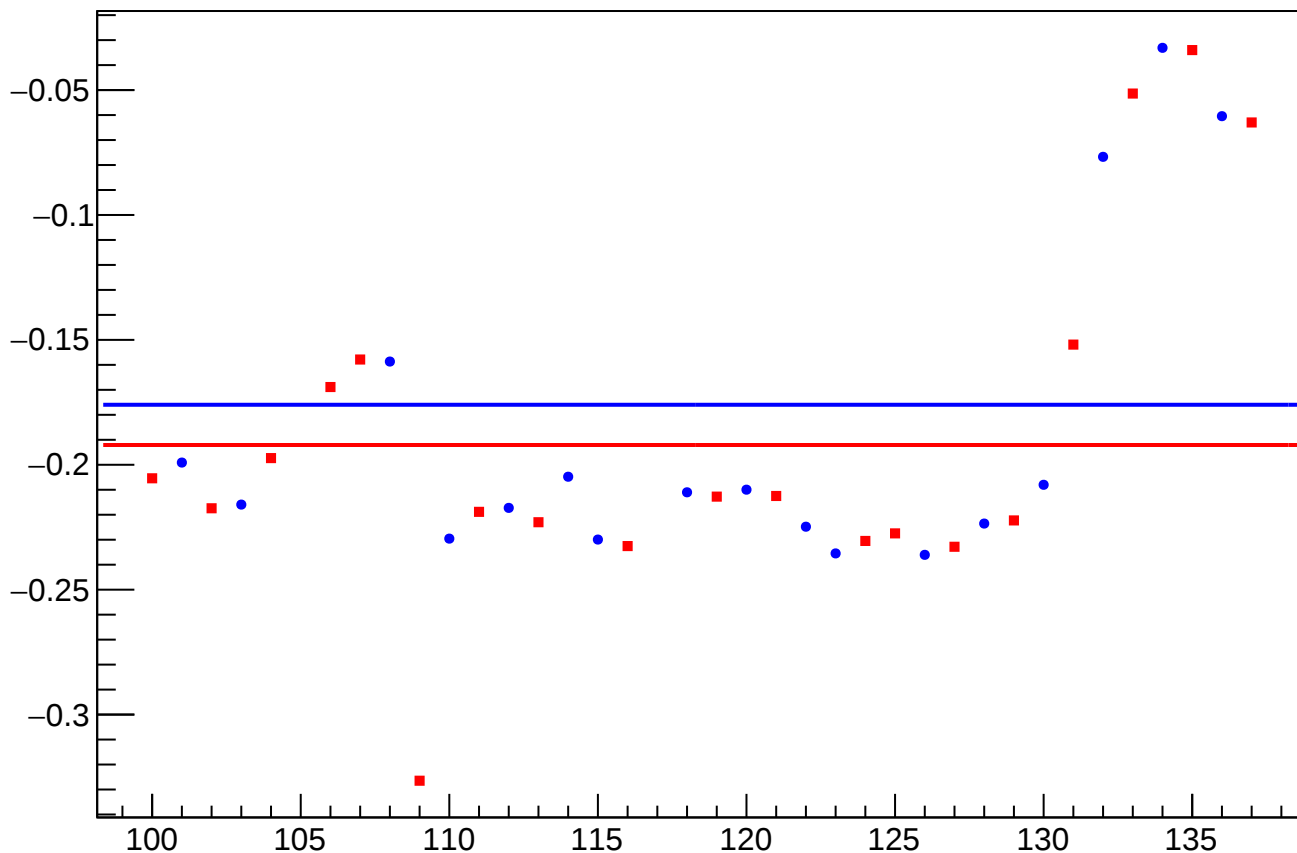
Right: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 2671110.0/35

In: 0.014+/-0.000  $\chi^2/\text{NDF}$ :1398505.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 2671110.0/35

# yield\_bpm4eX\_mean vs Slug, Sign Corrected



Right In: -0.176+/-0.000  $\chi^2/\text{NDF}$ : 70121069.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.192+/-0.000  $\chi^2/\text{NDF}$ : 83253954.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

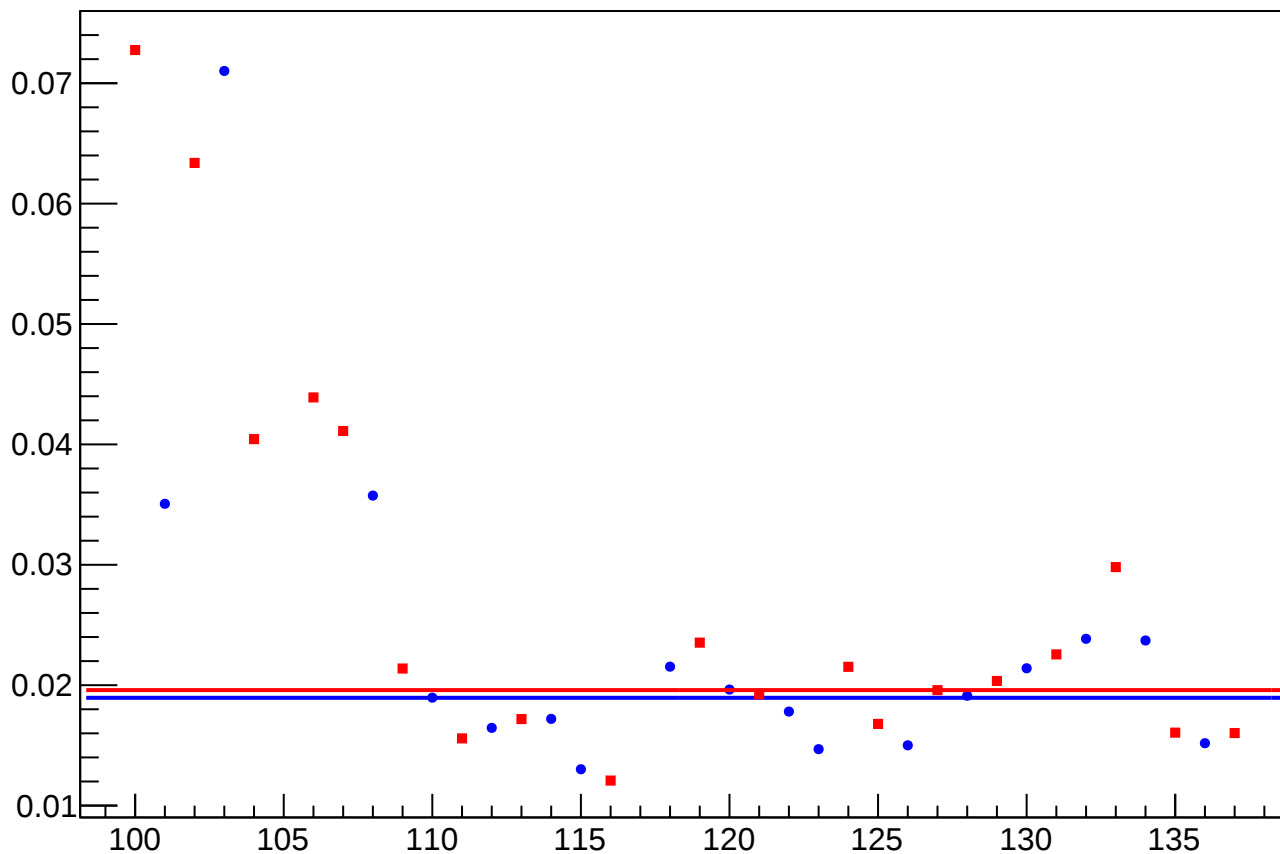
Right: -0.184+/-0.000  $\chi^2/\text{NDF}$ : 155143425.4/35

In: -0.176+/-0.000  $\chi^2/\text{NDF}$ : 70121069.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.184+/-0.000  $\chi^2/\text{NDF}$ : 155143425.4/35

# yield\_bpm4eX\_rms vs Slug, Sign Corrected



Right In: 0.019+/-0.000  $\chi^2/\text{NDF}$ : 1203275.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 1455327.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

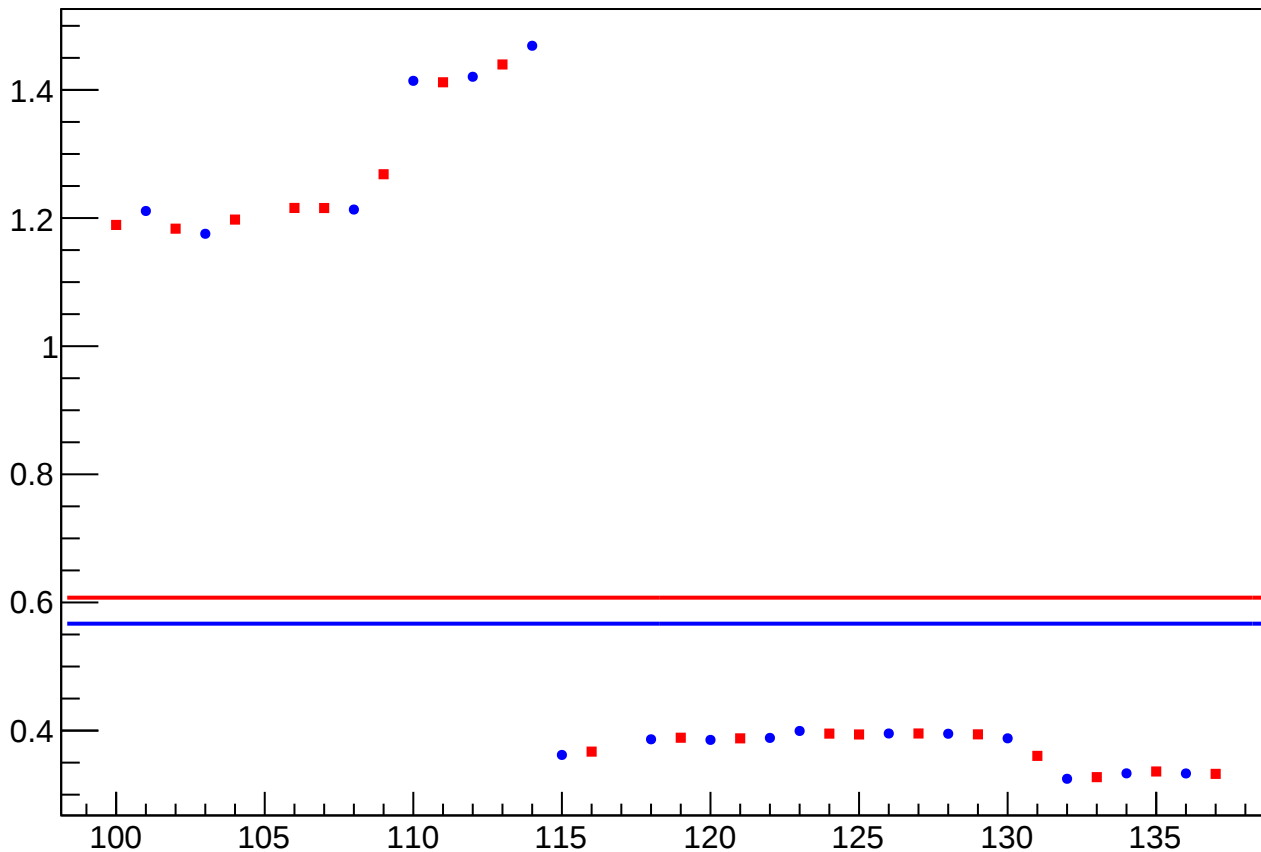
Right: 0.019+/-0.000  $\chi^2/\text{NDF}$ : 2664188.0/35

In: 0.019+/-0.000  $\chi^2/\text{NDF}$ : 1203275.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.019+/-0.000  $\chi^2/\text{NDF}$ : 2664188.0/35

# yield\_bpm4eY\_mean vs Slug, Sign Corrected



Right In: 0.567+/-0.000  $\chi^2/\text{NDF}$ : 5016913731.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.607+/-0.000  $\chi^2/\text{NDF}$ : 5505226431.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

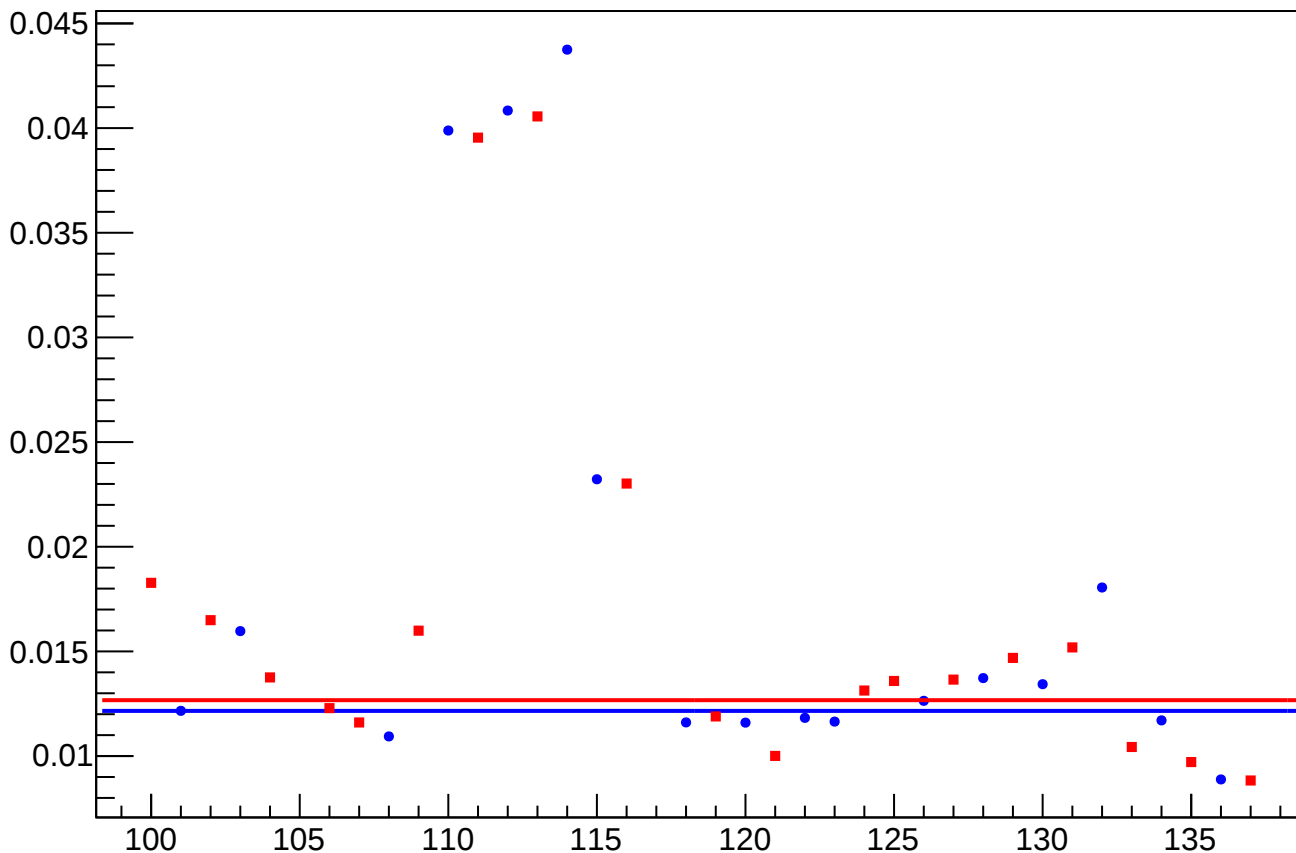
Right: 0.587+/-0.000  $\chi^2/\text{NDF}$ : 10552855690.4/35

In: 0.567+/-0.000  $\chi^2/\text{NDF}$ :5016913731.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.587+/-0.000  $\chi^2/\text{NDF}$ : 10552855690.4/35

# yield\_bpm4eY\_rms vs Slug, Sign Corrected



Right In: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 1307948.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.013+/-0.000  $\chi^2/\text{NDF}$ : 1267219.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

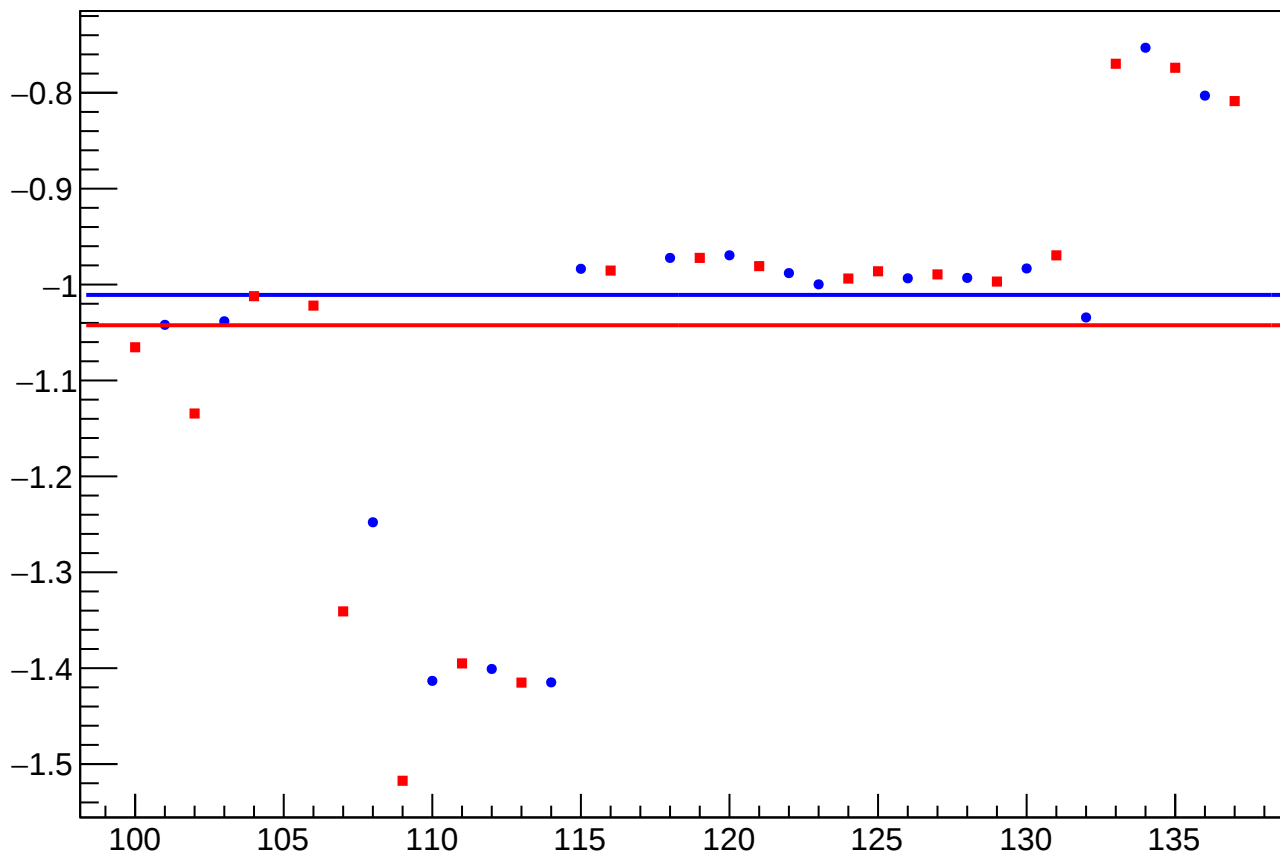
Right: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 2584926.4/35

In: 0.012+/-0.000  $\chi^2/\text{NDF}$ :1307948.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 2584926.4/35

# yield\_bpm4acX\_mean vs Slug, Sign Corrected



Right In: -1.011+/-0.000  $\chi^2/\text{NDF}$ : 387140230.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -1.042+/-0.000  $\chi^2/\text{NDF}$ : 528958824.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

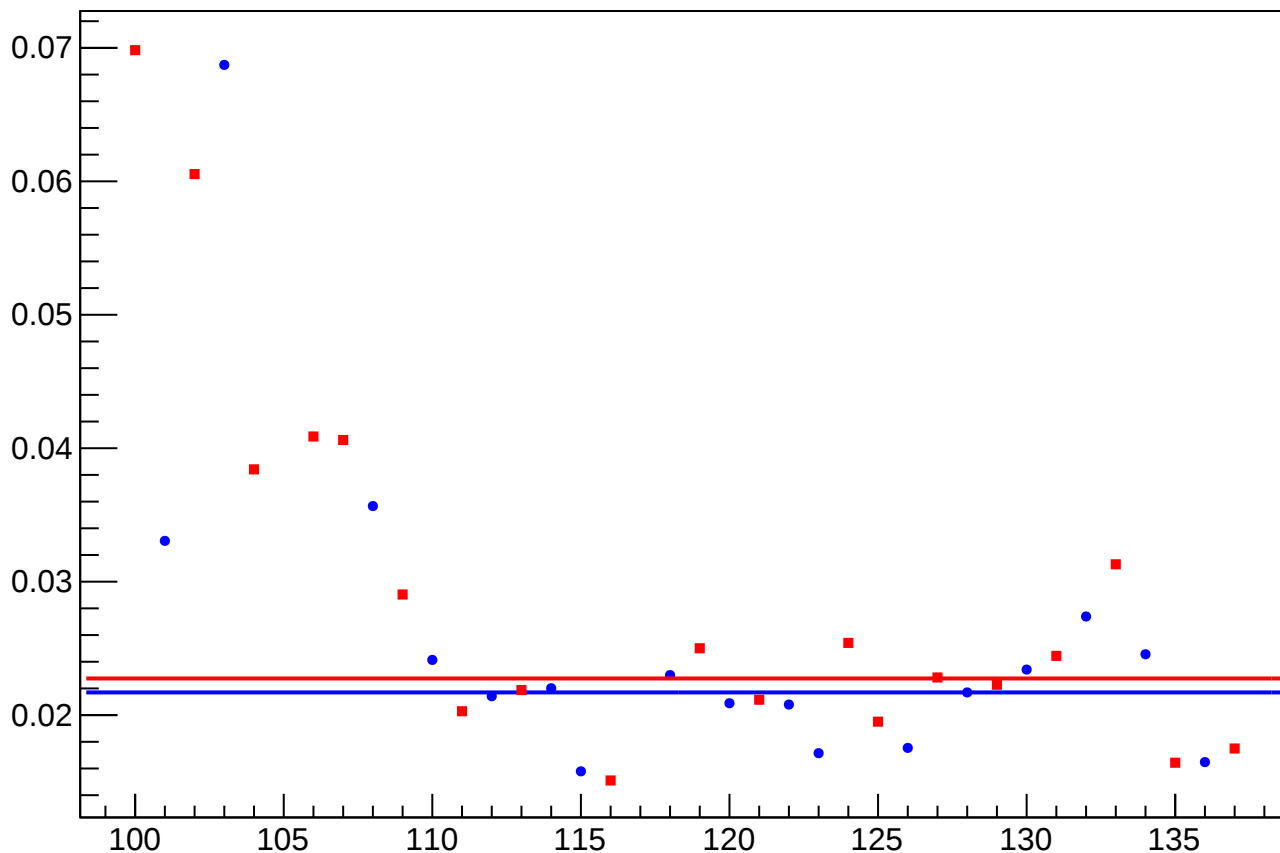
Right: -1.026+/-0.000  $\chi^2/\text{NDF}$ : 921337924.7/35

In: -1.011+/-0.000  $\chi^2/\text{NDF}$ :387140230.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -1.026+/-0.000  $\chi^2/\text{NDF}$ : 921337924.7/35

# yield\_bpm4acX\_rms vs Slug, Sign Corrected



Right In: 0.022+/-0.000  $\chi^2/\text{NDF}$ : 979293.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.023+/-0.000  $\chi^2/\text{NDF}$ : 1152332.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

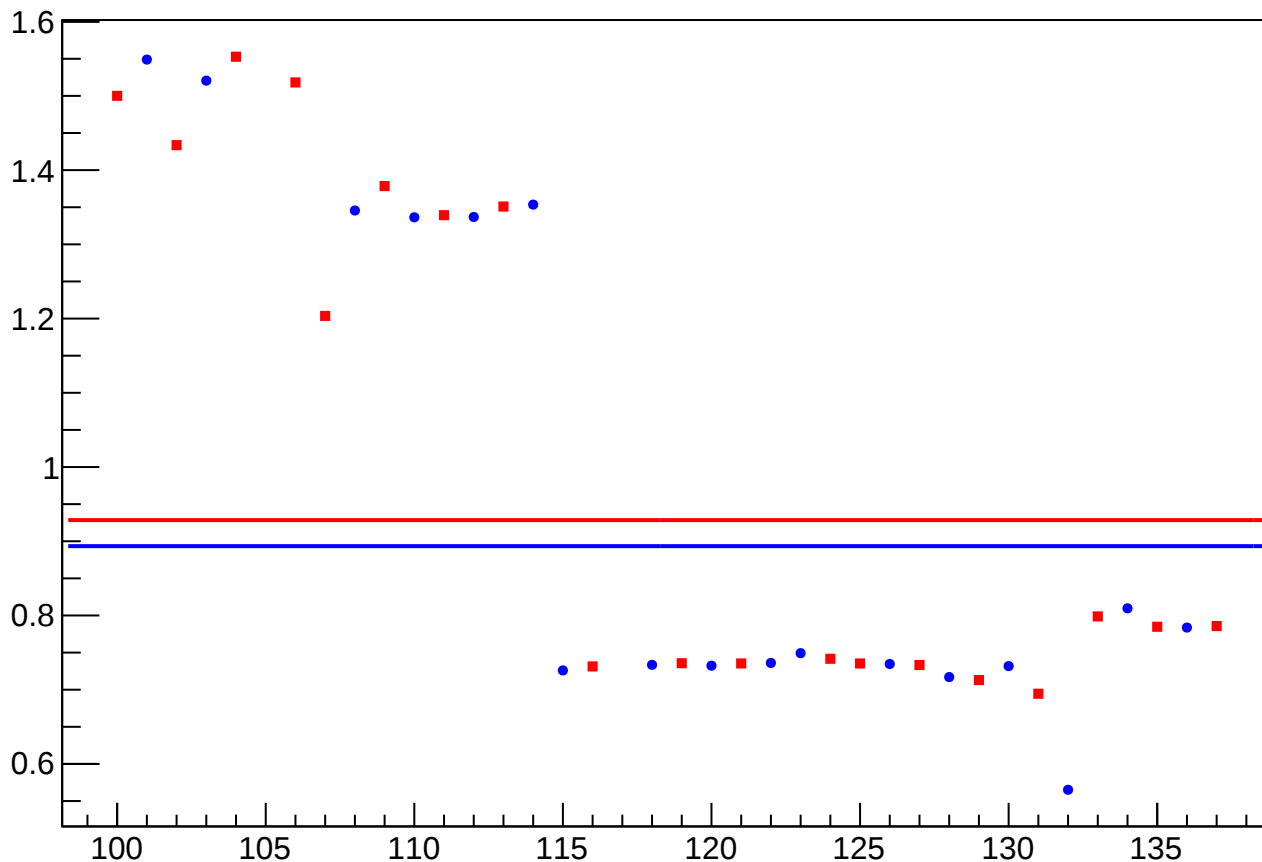
Right: 0.022+/-0.000  $\chi^2/\text{NDF}$ : 2143091.8/35

In: 0.022+/-0.000  $\chi^2/\text{NDF}$ : 979293.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.022+/-0.000  $\chi^2/\text{NDF}$ : 2143091.8/35

# yield\_bpm4acY\_mean vs Slug, Sign Corrected



Right In: 0.893+/-0.000  $\chi^2/\text{NDF}$ : 2408017556.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.928+/-0.000  $\chi^2/\text{NDF}$ : 2435640156.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

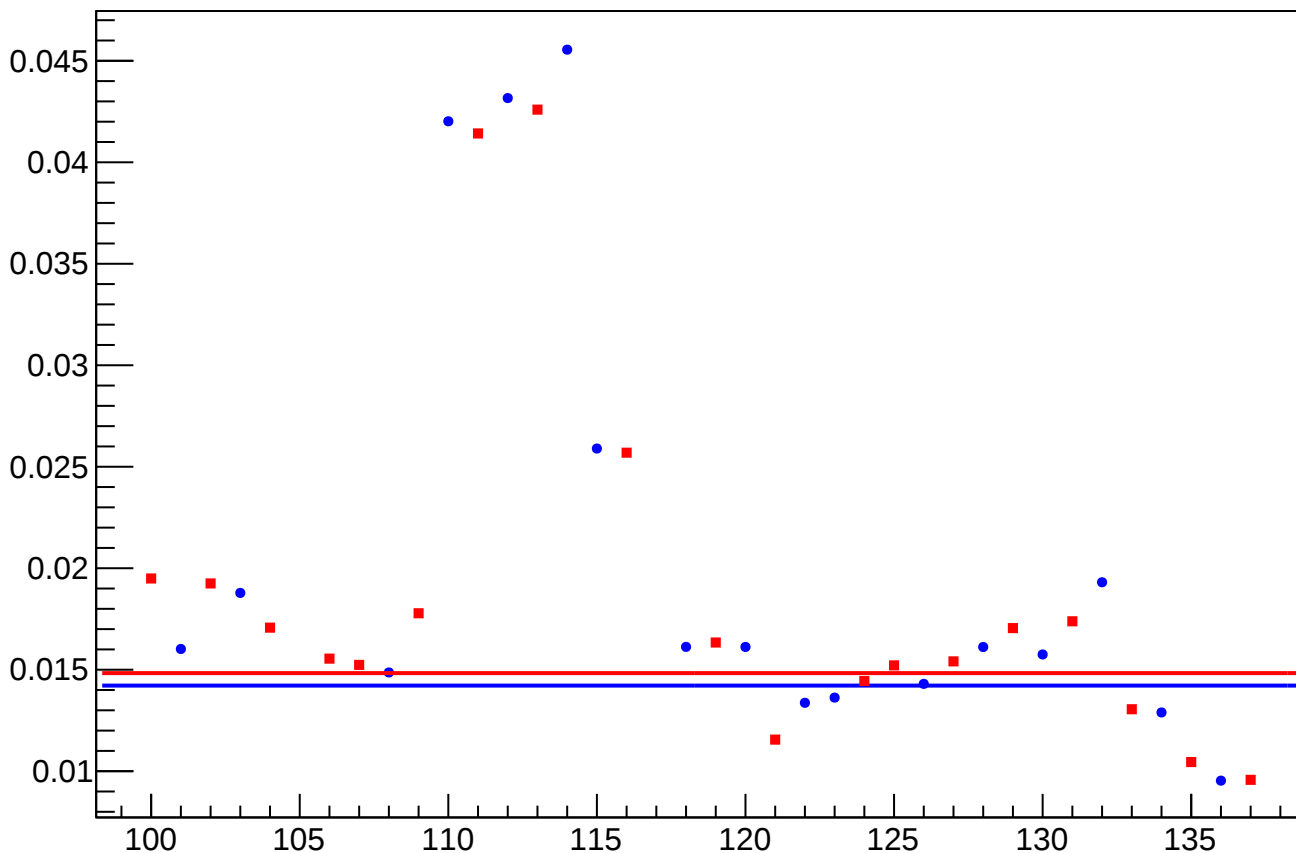
Right: 0.911+/-0.000  $\chi^2/\text{NDF}$ : 4860512064.2/35

In: 0.893+/-0.000  $\chi^2/\text{NDF}$ :2408017556.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.911+/-0.000  $\chi^2/\text{NDF}$ : 4860512064.2/35

# yield\_bpm4acY\_rms vs Slug, Sign Corrected



Right In: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 1409594.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.015+/-0.000  $\chi^2/\text{NDF}$ : 1269559.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

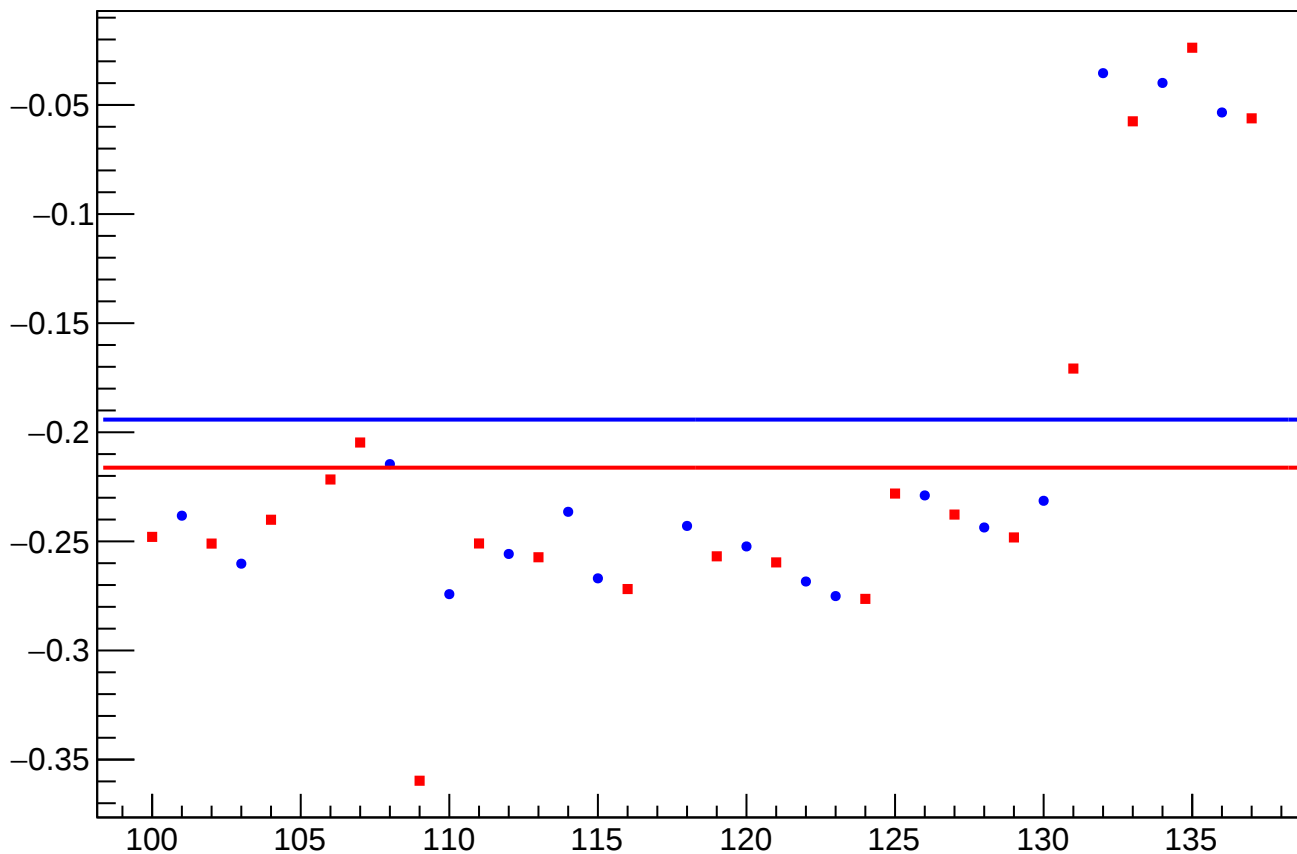
Right: 0.015+/-0.000  $\chi^2/\text{NDF}$ : 2689500.8/35

In: 0.014+/-0.000  $\chi^2/\text{NDF}$ :1409594.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.015+/-0.000  $\chi^2/\text{NDF}$ : 2689500.8/35

# yield\_bpm4ecX\_mean vs Slug, Sign Corrected



Right In: -0.194+/-0.000  $\chi^2/\text{NDF}$ : 108425823.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -0.216+/-0.000  $\chi^2/\text{NDF}$ : 111036295.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

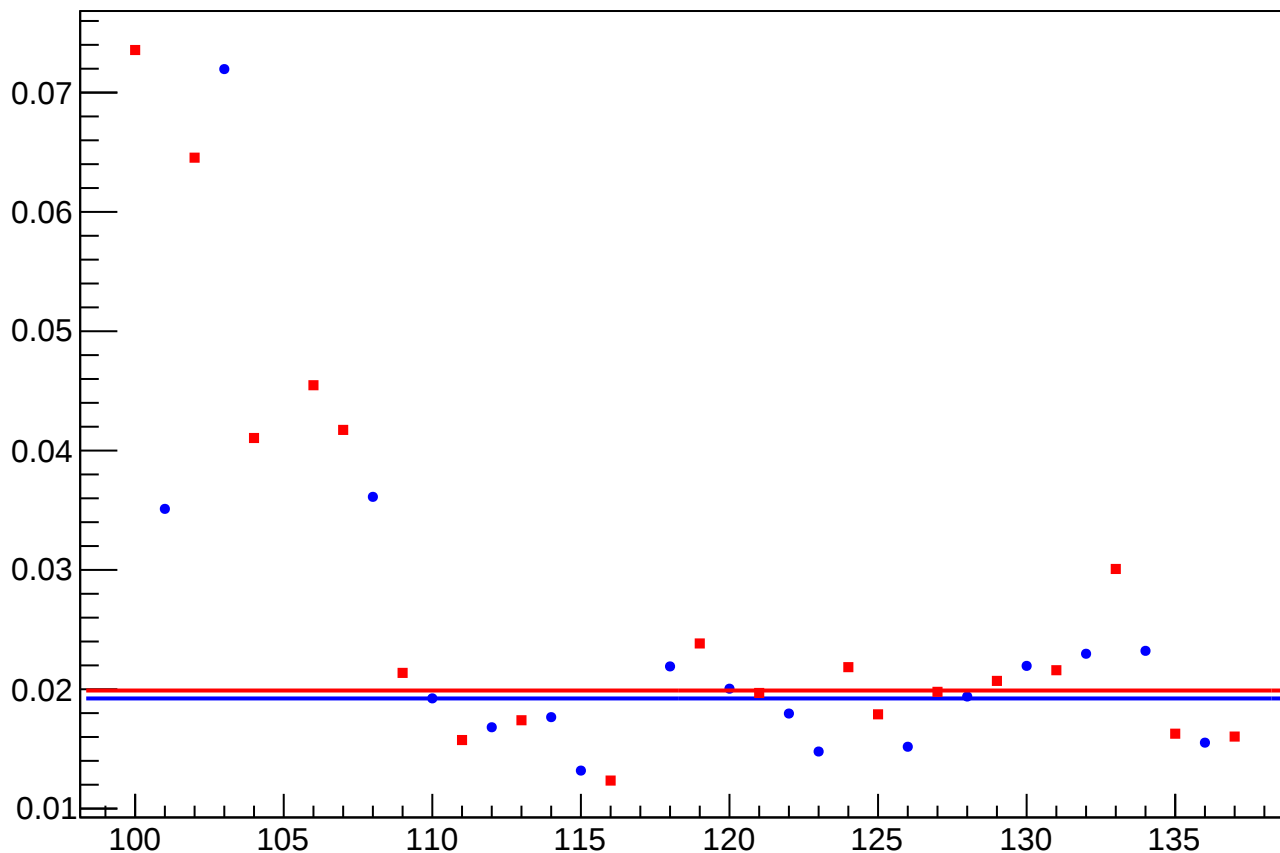
Right: -0.205+/-0.000  $\chi^2/\text{NDF}$ : 222671892.3/35

In: -0.194+/-0.000  $\chi^2/\text{NDF}$ :108425823.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -0.205+/-0.000  $\chi^2/\text{NDF}$ : 222671892.3/35

# yield\_bpm4ecX\_rms vs Slug, Sign Corrected



Right In: 0.019+/-0.000  $\chi^2/\text{NDF}$ : 1174577.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 1444442.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

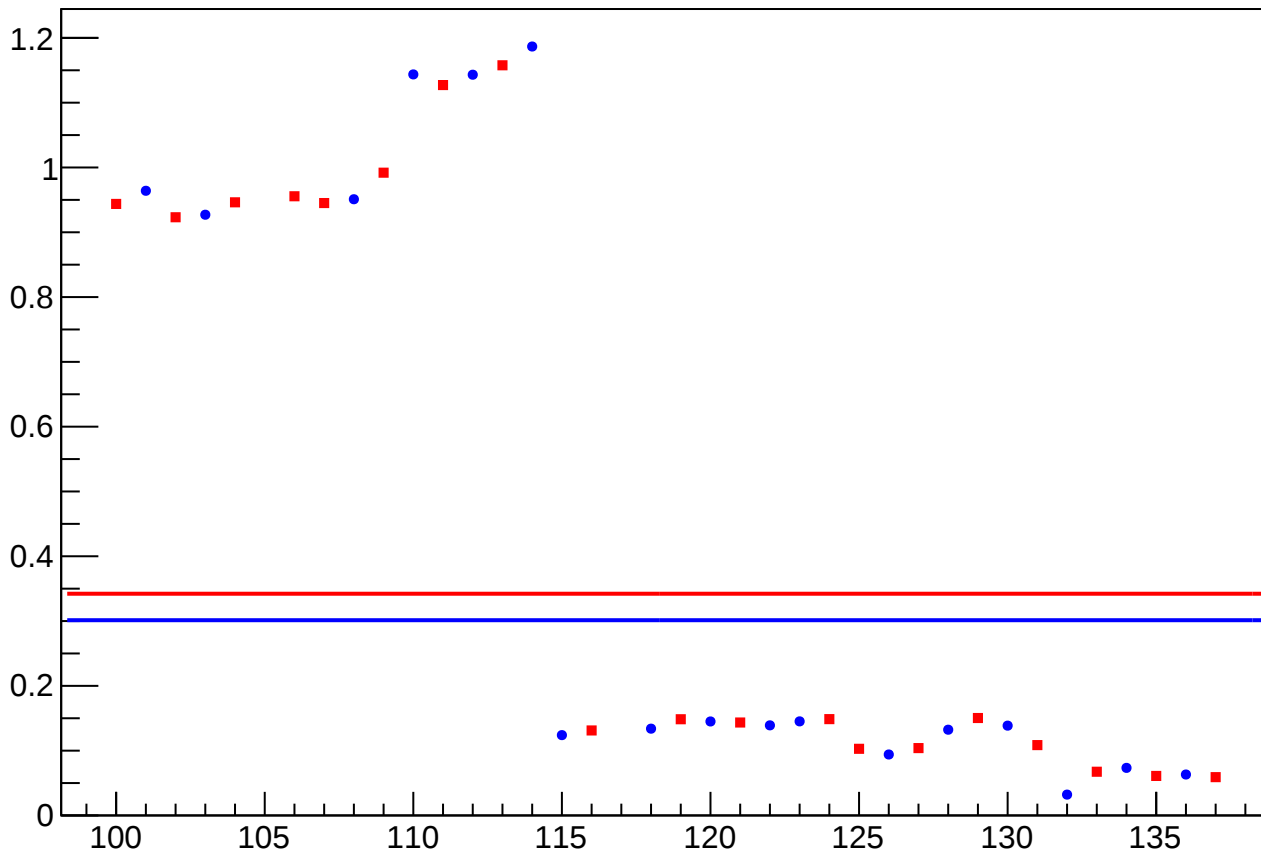
Right: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 2624881.7/35

In: 0.019+/-0.000  $\chi^2/\text{NDF}$ :1174577.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 2624881.7/35

# yield\_bpm4ecY\_mean vs Slug, Sign Corrected



Right In: 0.301+/-0.000  $\chi^2/\text{NDF}$ : 5154791073.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.342+/-0.000  $\chi^2/\text{NDF}$ : 5442717599.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

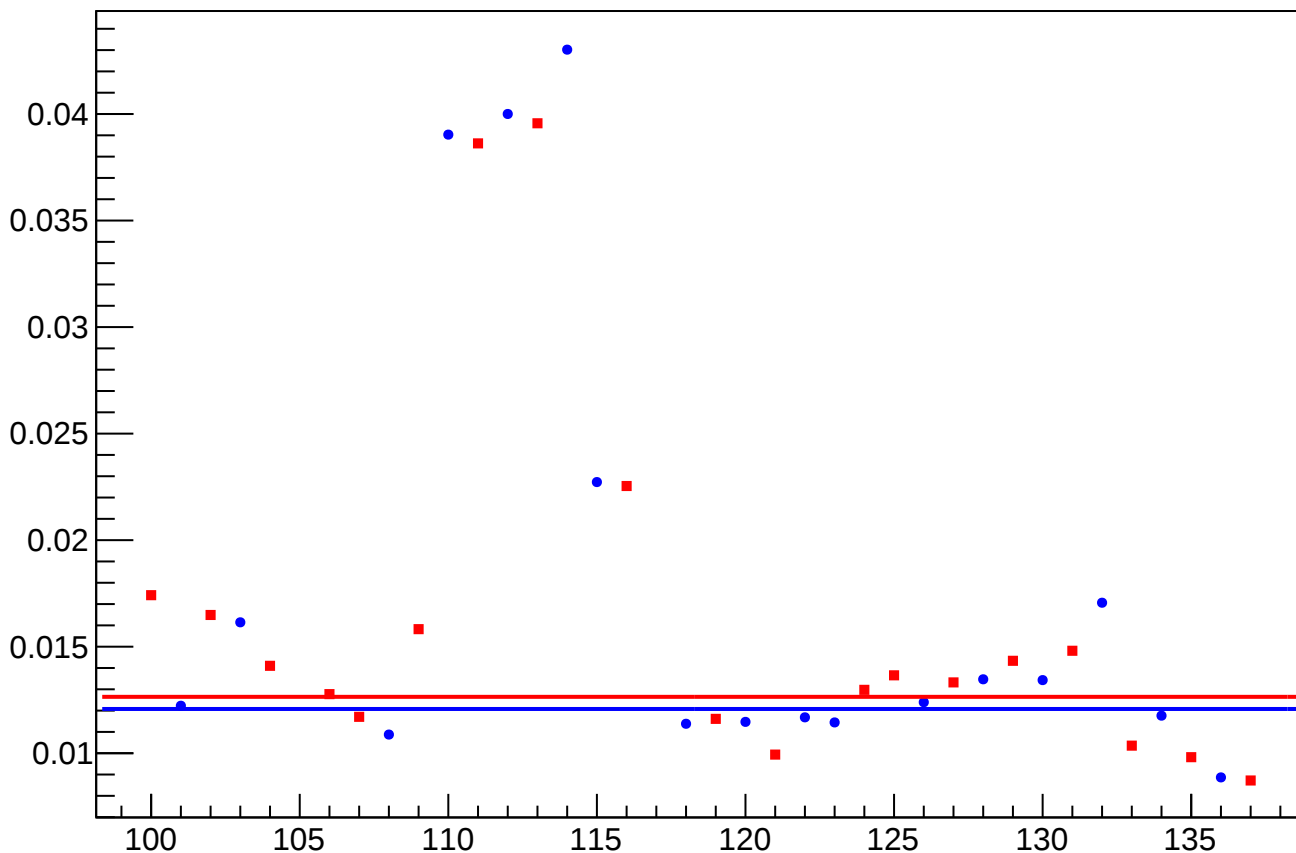
Right: 0.321+/-0.000  $\chi^2/\text{NDF}$ : 10628899850.1/35

In: 0.301+/-0.000  $\chi^2/\text{NDF}$ : 5154791073.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.321+/-0.000  $\chi^2/\text{NDF}$ : 10628899850.1/35

# yield\_bpm4ecY\_rms vs Slug, Sign Corrected



Right In: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 1280342.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.013+/-0.000  $\chi^2/\text{NDF}$ : 1236084.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

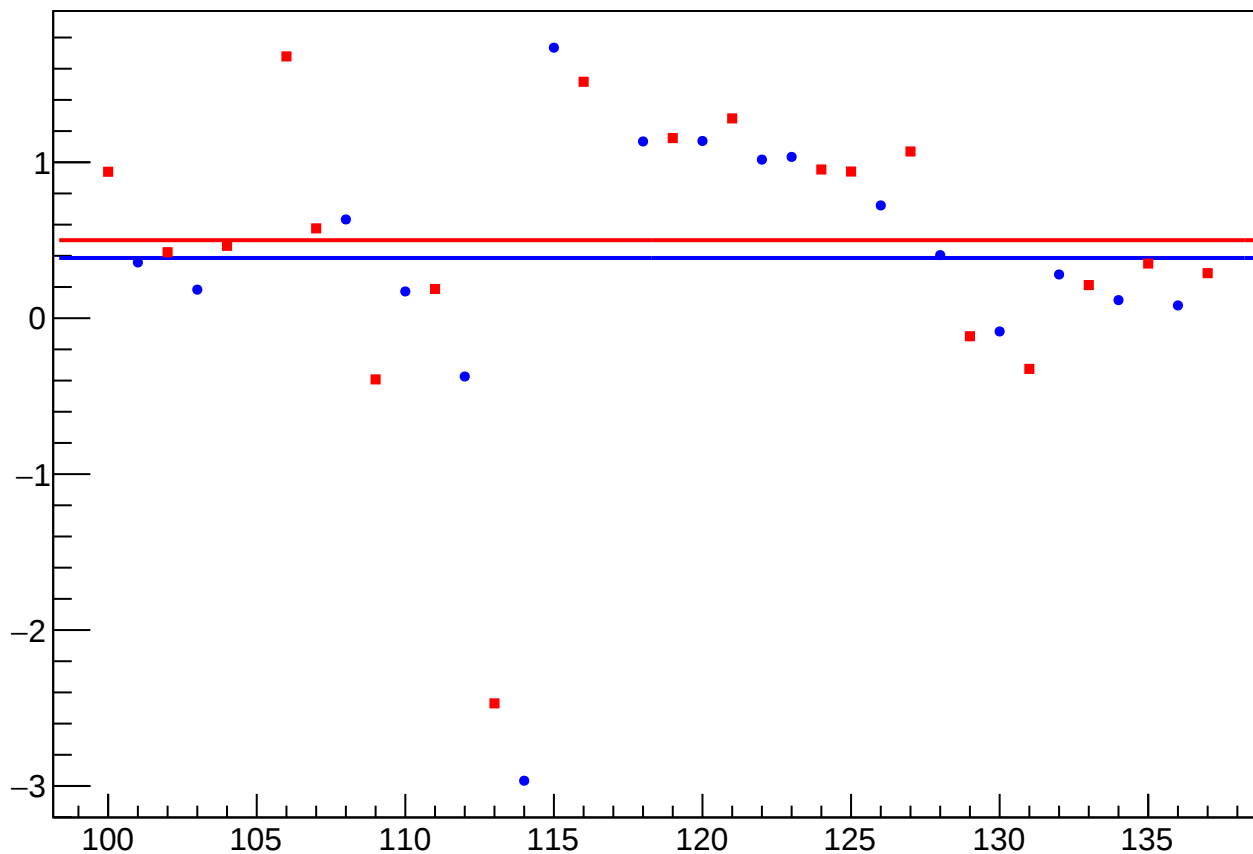
Right: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 2528646.1/35

In: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 1280342.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 2528646.1/35

# yield\_bpm1X\_mean vs Slug, Sign Corrected



Right In: 0.386 $\pm$ 0.000  $\chi^2$ /NDF: 246380221.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.500 $\pm$ 0.000  $\chi^2$ /NDF: 983386658.7/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

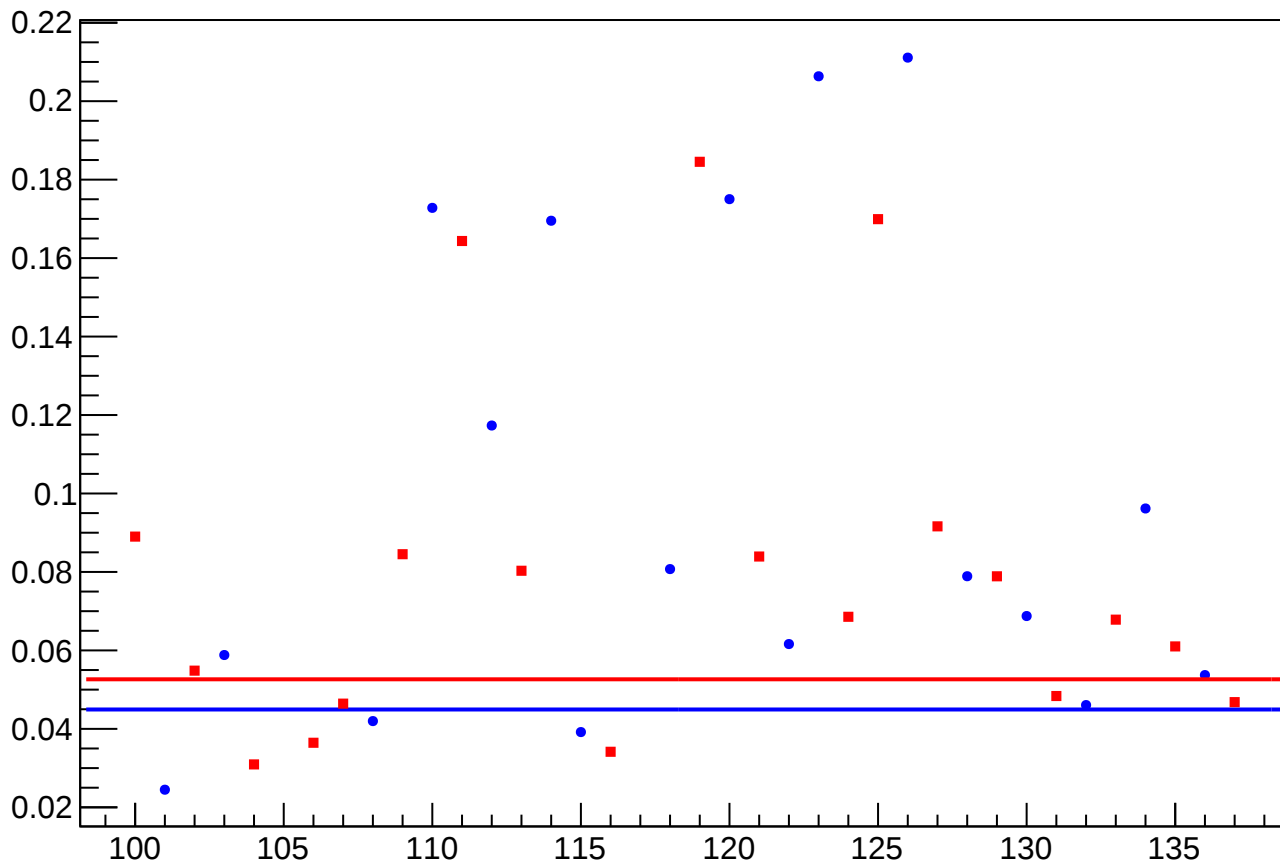
Right: 0.439 $\pm$ 0.000  $\chi^2$ /NDF: 1240216918.3/35

In: 0.386 $\pm$ 0.000  $\chi^2$ /NDF:246380221.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.439 $\pm$ 0.000  $\chi^2$ /NDF: 1240216918.3/35

# yield\_bpm1X\_rms vs Slug, Sign Corrected



Right In: 0.045+/-0.000  $\chi^2/\text{NDF}$ : 2788348.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.053+/-0.000  $\chi^2/\text{NDF}$ : 2191752.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

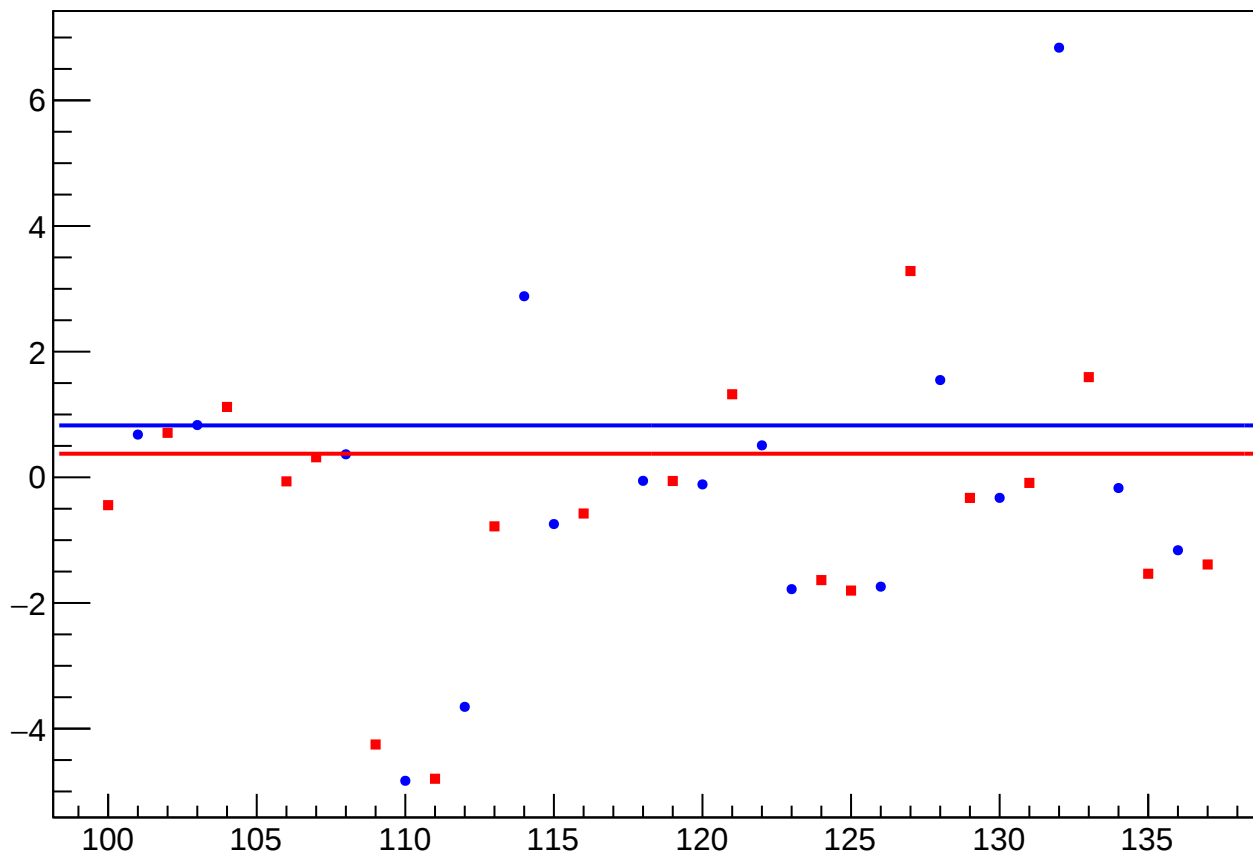
Right: 0.048+/-0.000  $\chi^2/\text{NDF}$ : 5075265.3/35

In: 0.045+/-0.000  $\chi^2/\text{NDF}$ :2788348.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.048+/-0.000  $\chi^2/\text{NDF}$ : 5075265.3/35

# yield\_bpm1Y\_mean vs Slug, Sign Corrected



Right In: 0.826+/-0.000  $\chi^2/\text{NDF}$ : 10945455664.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.376+/-0.000  $\chi^2/\text{NDF}$ : 4947158634.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

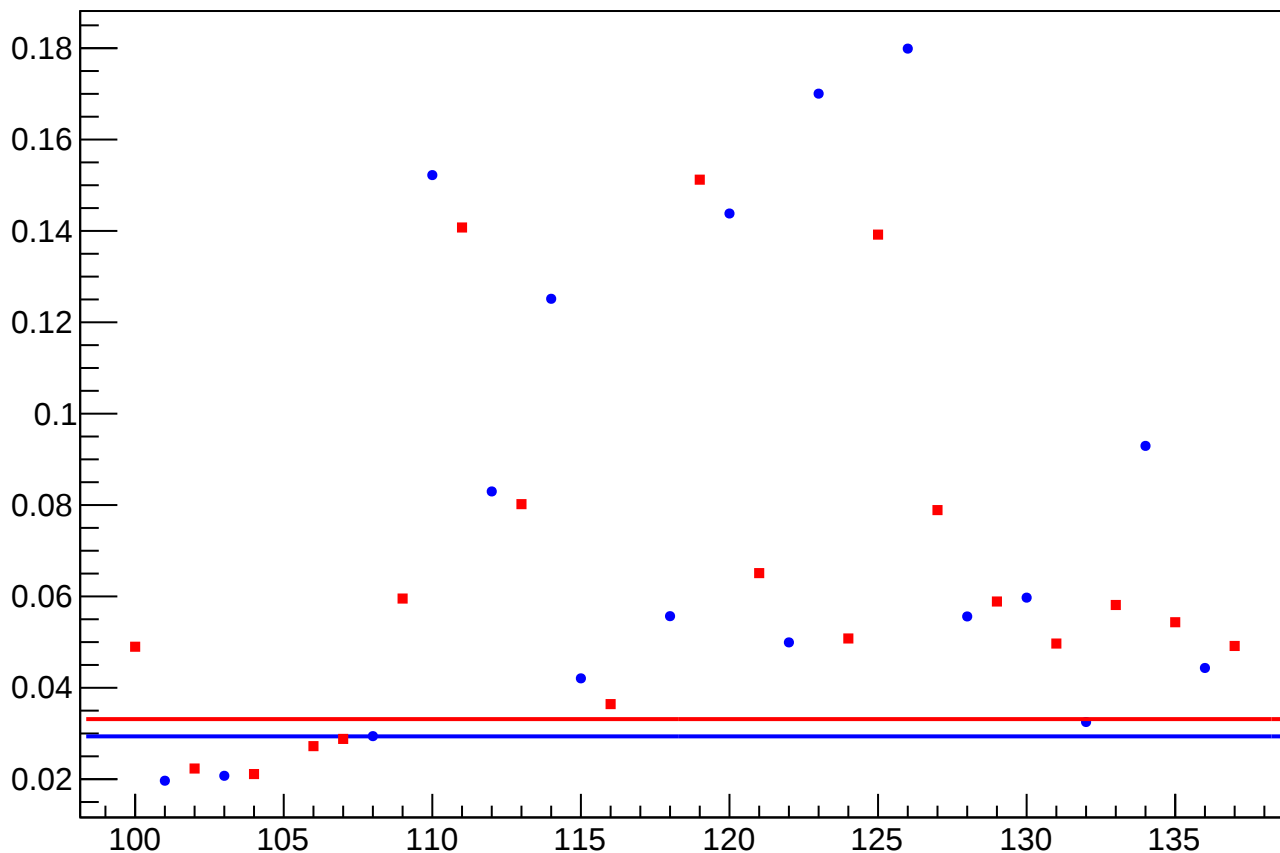
Right: 0.614+/-0.000  $\chi^2/\text{NDF}$ : 16267855103.5/35

In: 0.826+/-0.000  $\chi^2/\text{NDF}$ : 10945455664.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.614+/-0.000  $\chi^2/\text{NDF}$ : 16267855103.5/35

# yield\_bpm1Y\_rms vs Slug, Sign Corrected



Right In: 0.029+/-0.000  $\chi^2/\text{NDF}$ : 2987169.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.033+/-0.000  $\chi^2/\text{NDF}$ : 3099105.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

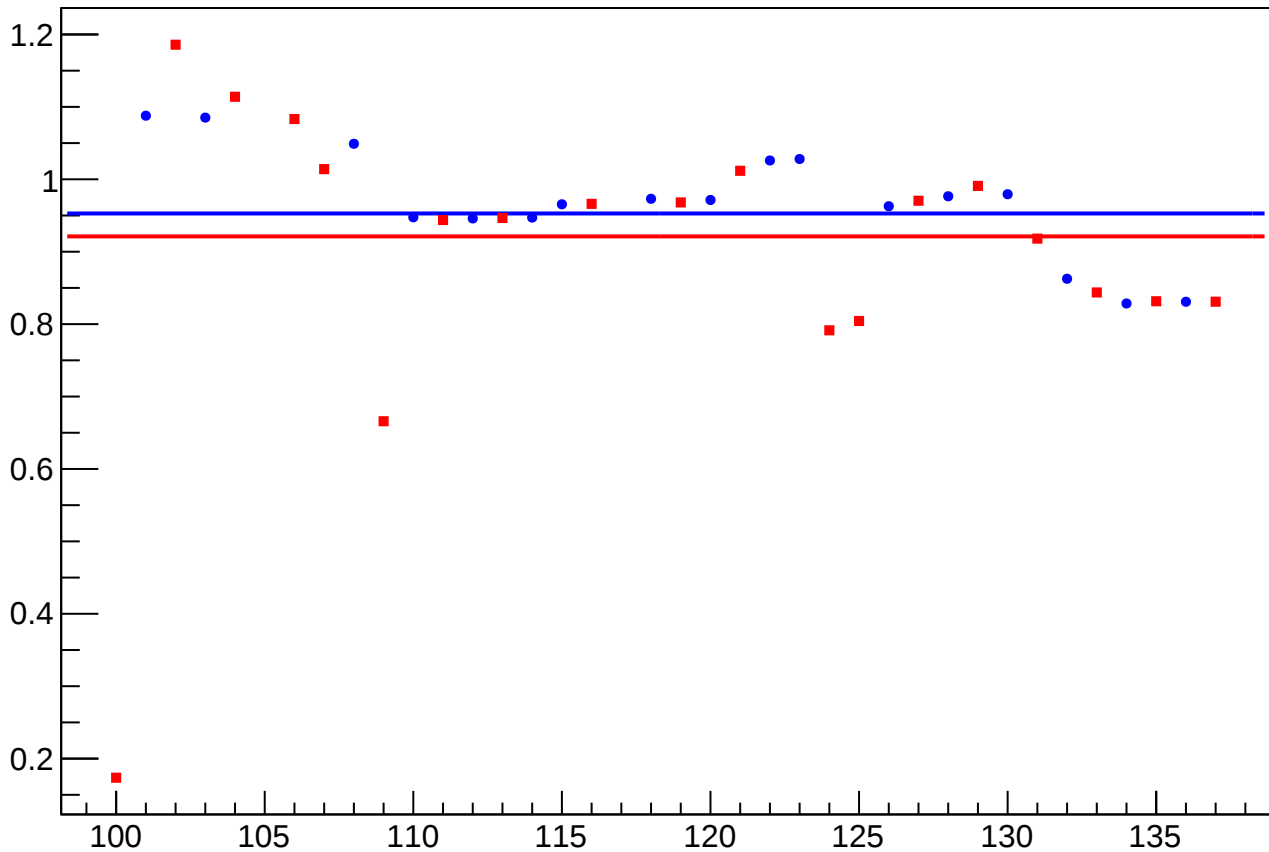
Right: 0.031+/-0.000  $\chi^2/\text{NDF}$ : 6139085.6/35

In: 0.029+/-0.000  $\chi^2/\text{NDF}$ : 2987169.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.031+/-0.000  $\chi^2/\text{NDF}$ : 6139085.6/35

# yield\_bpm11X\_mean vs Slug, Sign Corrected



Right In: 0.953+/-0.000  $\chi^2/\text{NDF}$ : 175750243.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.921+/-0.000  $\chi^2/\text{NDF}$ : 374151585.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

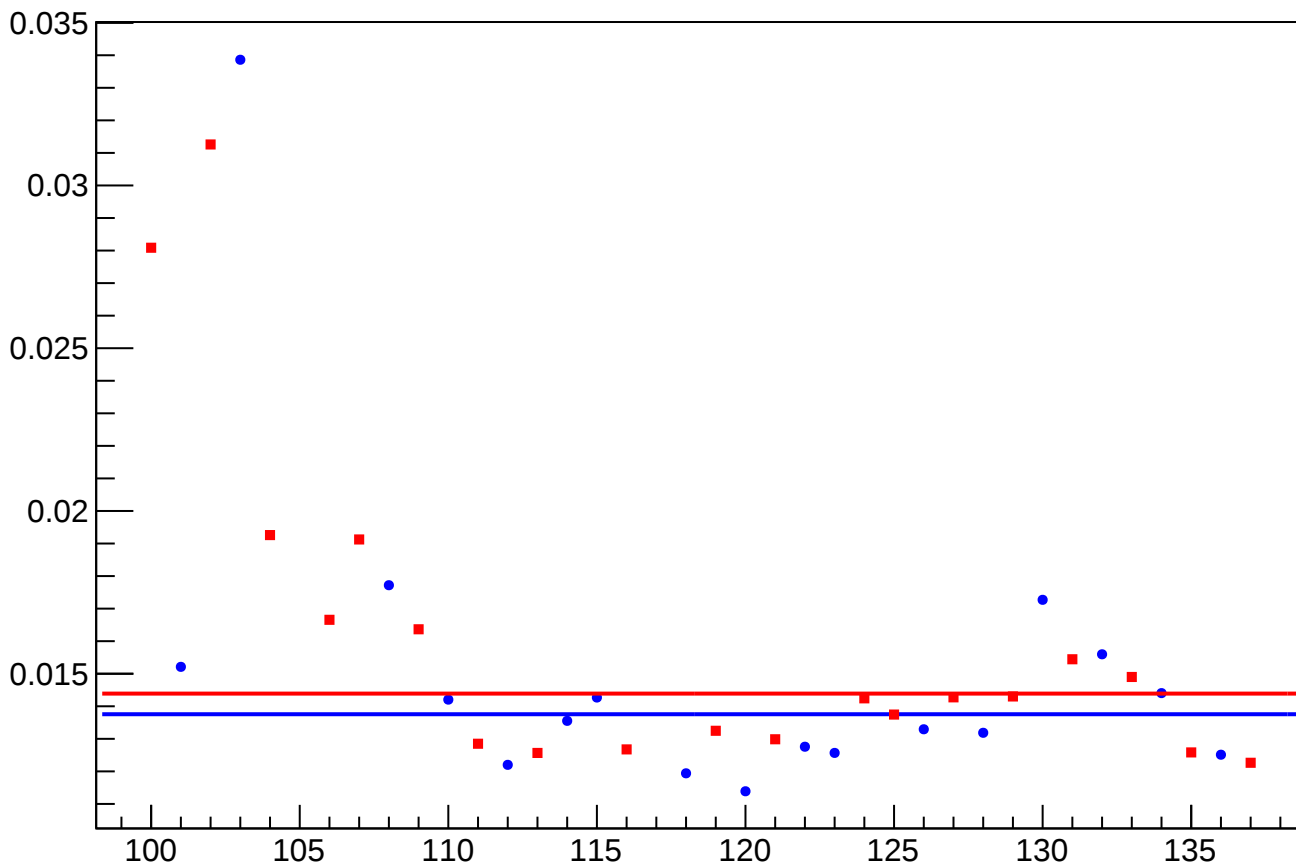
Right: 0.937+/-0.000  $\chi^2/\text{NDF}$ : 564889848.1/35

In: 0.953+/-0.000  $\chi^2/\text{NDF}$ : 175750243.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.937+/-0.000  $\chi^2/\text{NDF}$ : 564889848.1/35

# yield\_bpm11X\_rms vs Slug, Sign Corrected



Right In: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 538469.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 503813.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

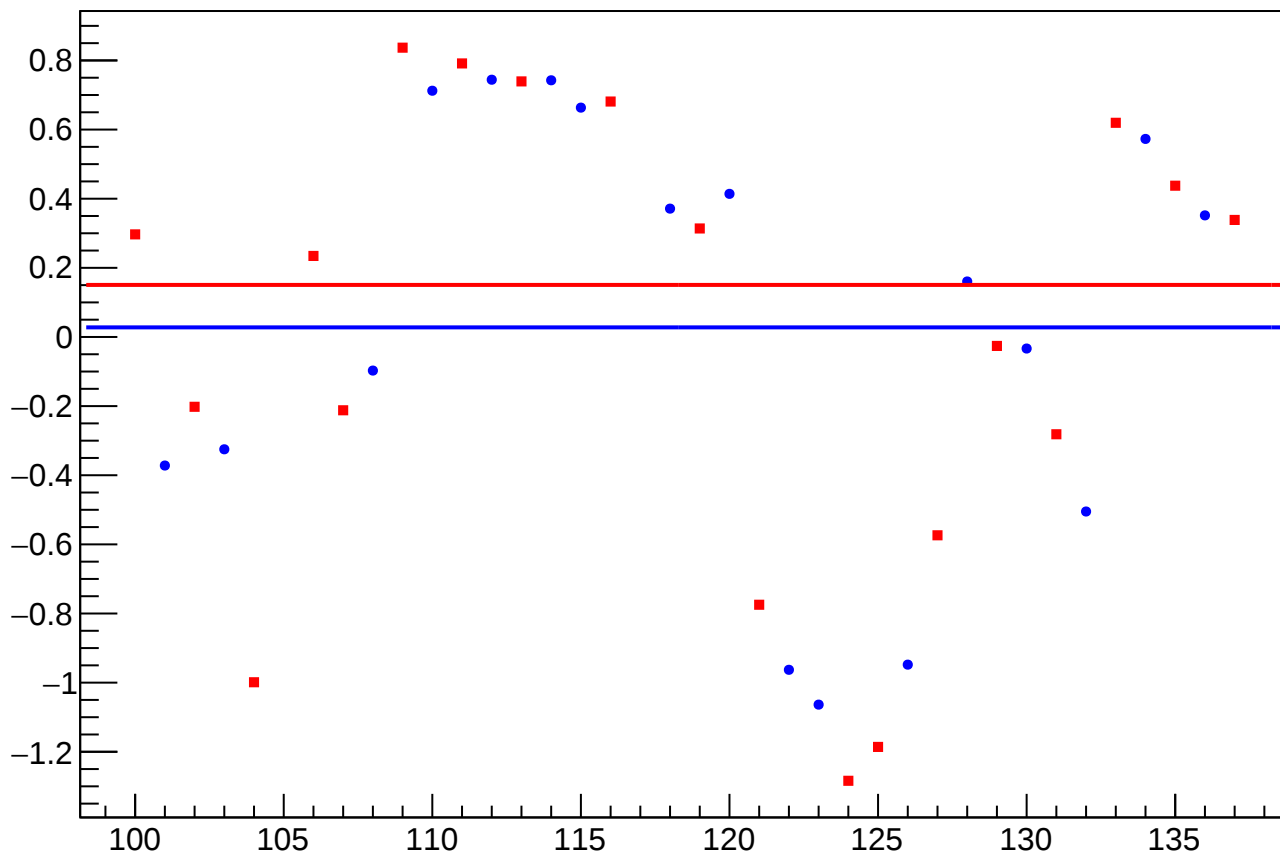
Right: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 1054284.2/35

In: 0.014+/-0.000  $\chi^2/\text{NDF}$ :538469.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 1054284.2/35

# yield\_bpm11Y\_mean vs Slug, Sign Corrected



Right In: 0.028+/-0.000  $\chi^2/\text{NDF}$ : 6276955529.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.151+/-0.000  $\chi^2/\text{NDF}$ : 12653743155.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

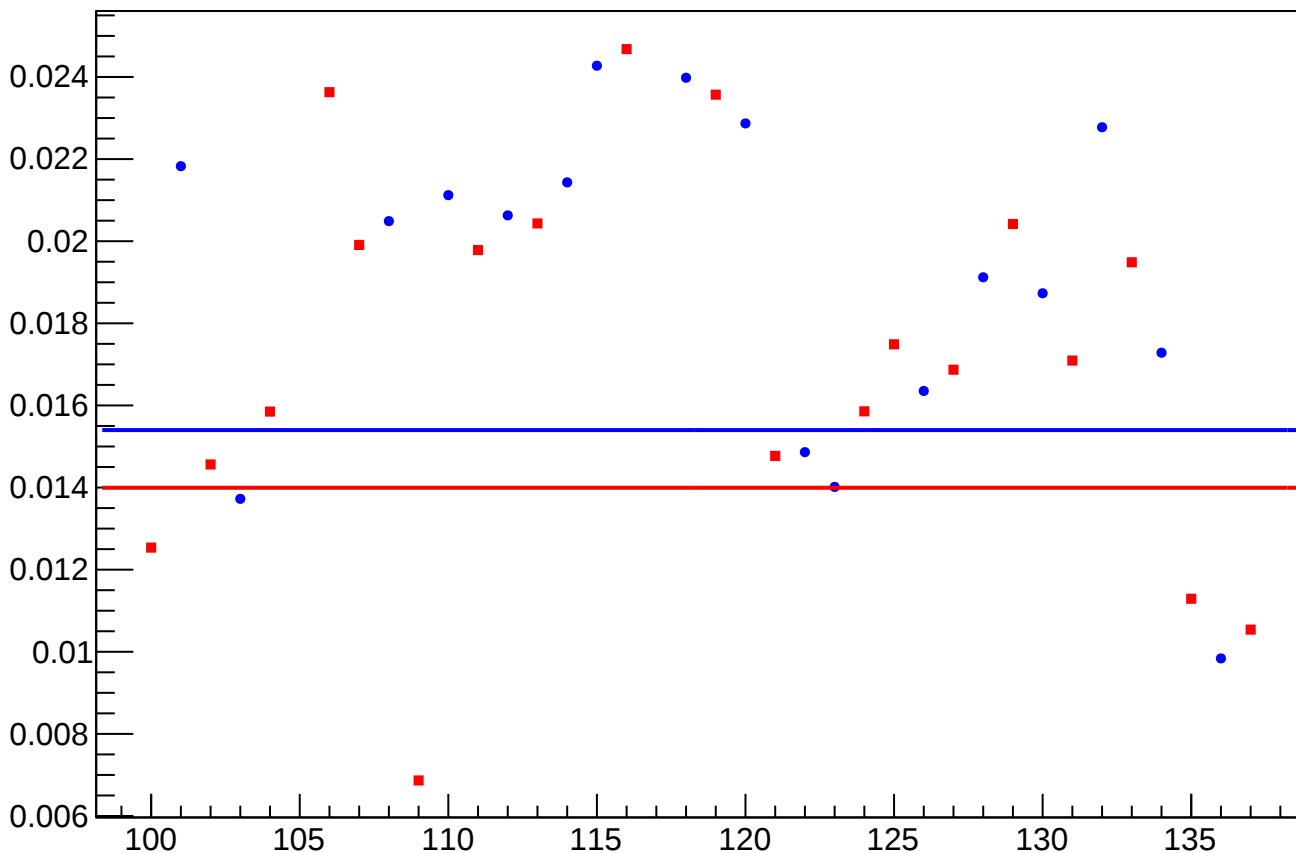
Right: 0.095+/-0.000  $\chi^2/\text{NDF}$ : 19125643372.9/35

In: 0.028+/-0.000  $\chi^2/\text{NDF}$ :6276955529.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.095+/-0.000  $\chi^2/\text{NDF}$ : 19125643372.9/35

# yield\_bpm11Y\_rms vs Slug, Sign Corrected



Right In: 0.015+/-0.000

$\chi^2/\text{NDF}$ : 1141655.8/16

Left Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.014+/-0.000

$\chi^2/\text{NDF}$ : 1561550.9/18

Left In: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right: 0.015+/-0.000

$\chi^2/\text{NDF}$ : 2754233.9/35

In: 0.015+/-0.000

$\chi^2/\text{NDF}$ : 1141655.8/16

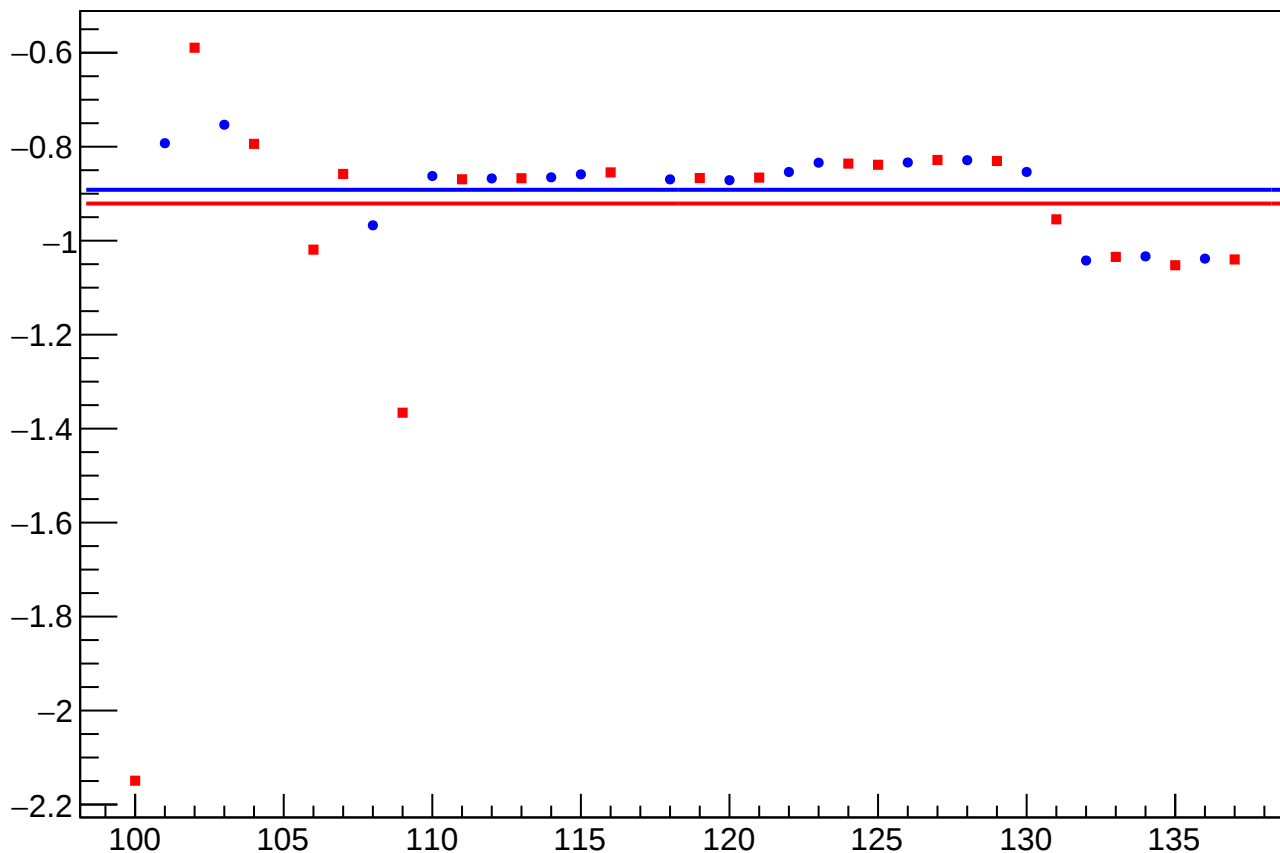
Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

All: 0.015+/-0.000

$\chi^2/\text{NDF}$ : 2754233.9/35

# yield\_bpm12X\_mean vs Slug, Sign Corrected



Right In: -0.892+/-0.000  $\chi^2/\text{NDF}$ : 39793337.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.921+/-0.000  $\chi^2/\text{NDF}$ : 131159330.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

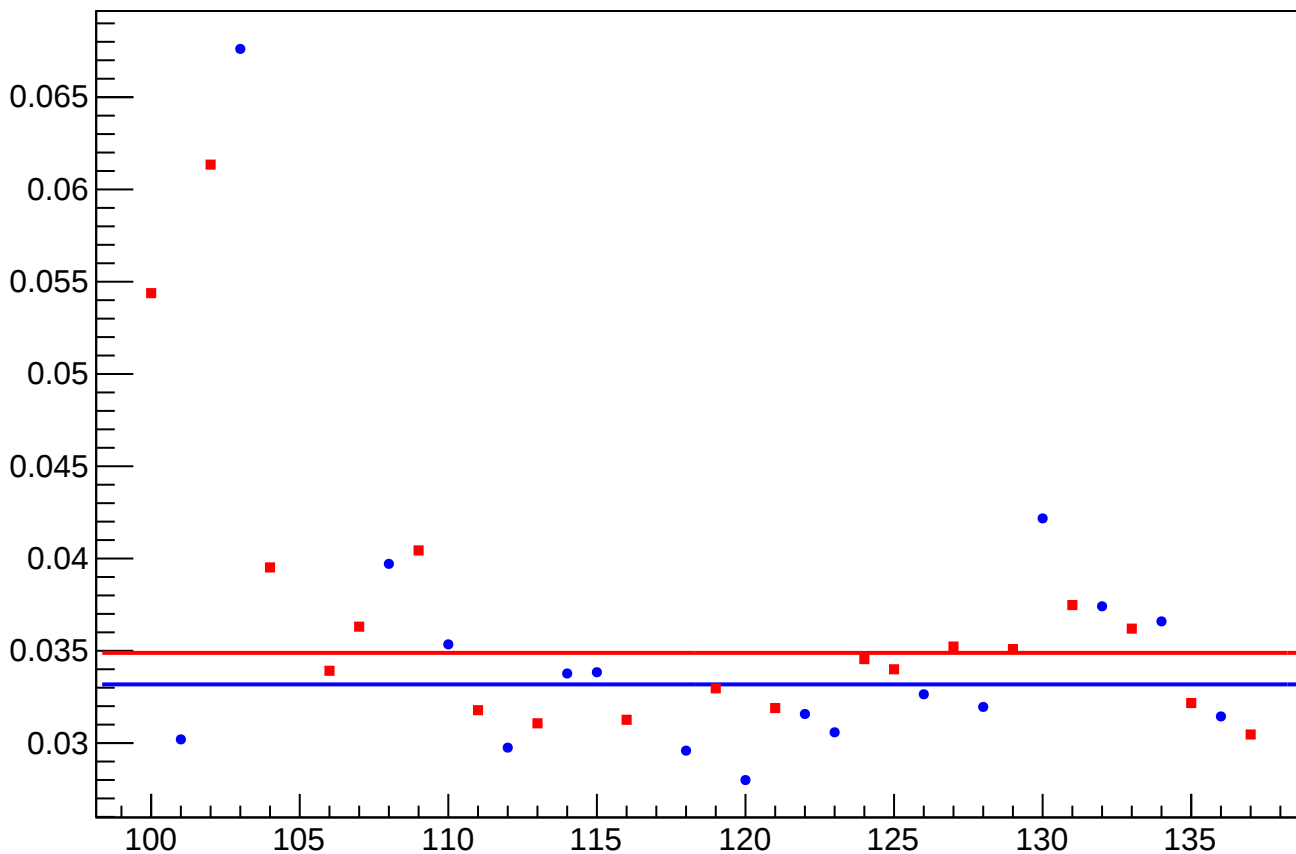
Right: -0.906+/-0.000  $\chi^2/\text{NDF}$ : 173170801.3/35

In: -0.892+/-0.000  $\chi^2/\text{NDF}$ : 39793337.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.906+/-0.000  $\chi^2/\text{NDF}$ : 173170801.3/35

# yield\_bpm12X\_rms vs Slug, Sign Corrected



Right In: 0.033+/-0.000  $\chi^2/\text{NDF}$ : 400106.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.035+/-0.000  $\chi^2/\text{NDF}$ : 275013.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

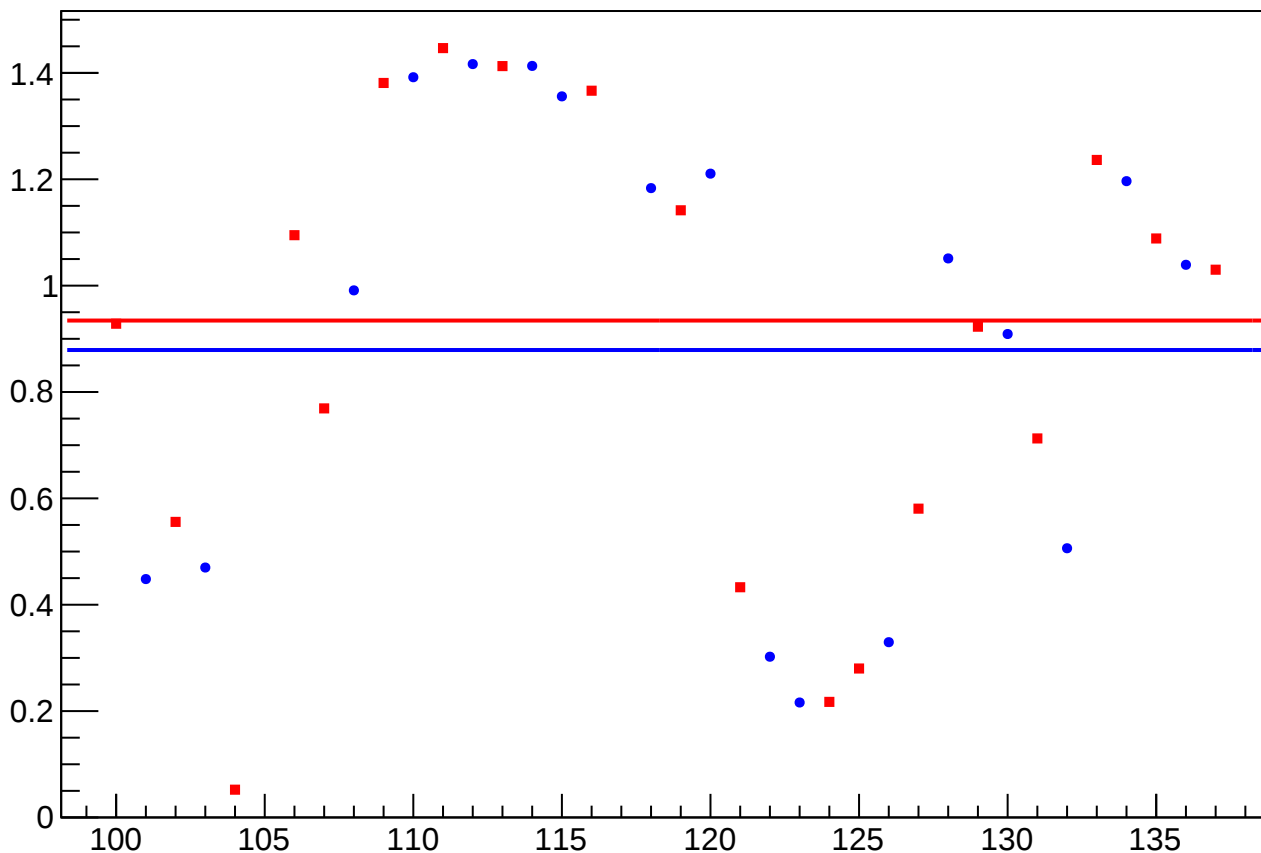
Right: 0.034+/-0.000  $\chi^2/\text{NDF}$ : 690186.6/35

In: 0.033+/-0.000  $\chi^2/\text{NDF}$ :400106.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.034+/-0.000  $\chi^2/\text{NDF}$ : 690186.6/35

# yield\_bpm12Y\_mean vs Slug, Sign Corrected



Right In: 0.879+/-0.000  $\chi^2/\text{NDF}$ : 6371602566.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.934+/-0.000  $\chi^2/\text{NDF}$ : 9827120184.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

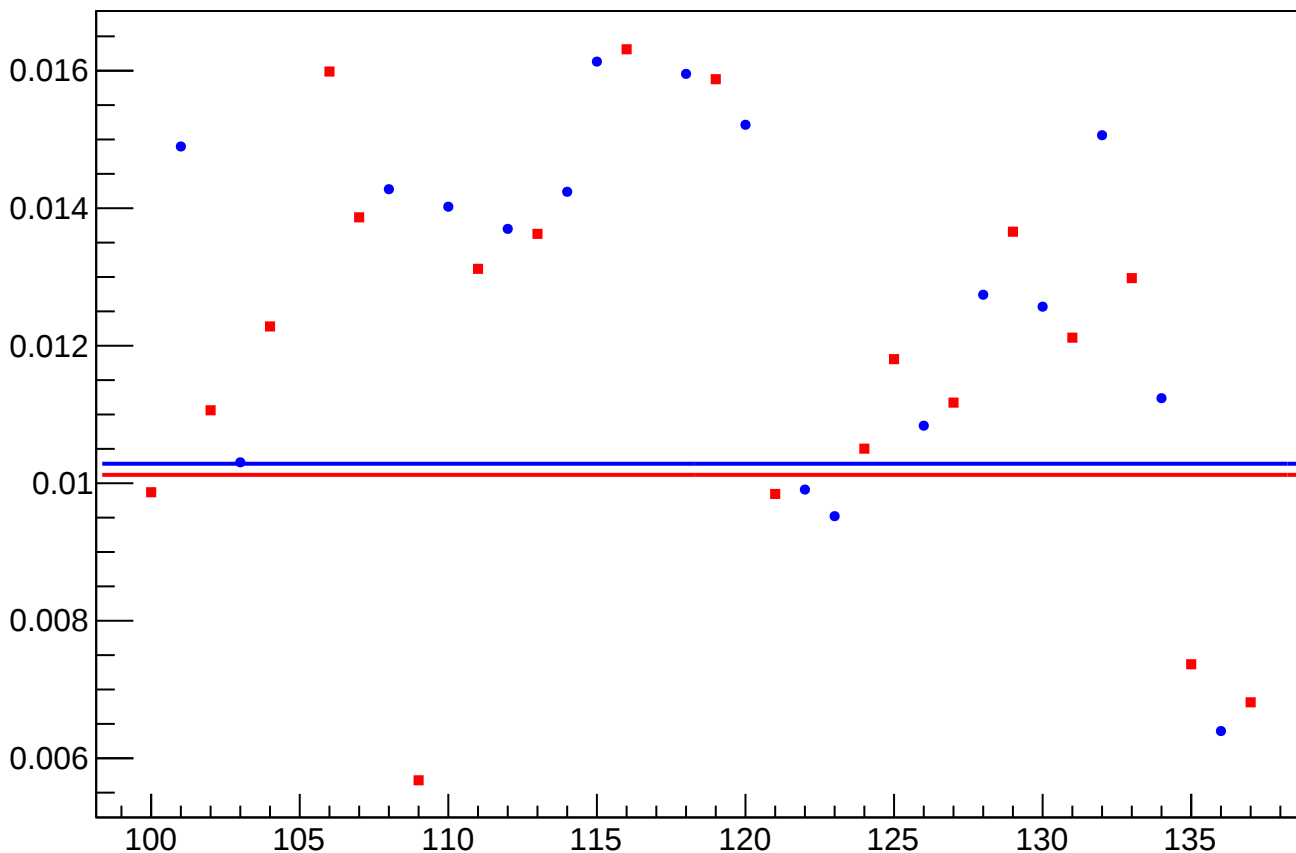
Right: 0.908+/-0.000  $\chi^2/\text{NDF}$ : 16282606826.3/35

In: 0.879+/-0.000  $\chi^2/\text{NDF}$ :6371602566.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.908+/-0.000  $\chi^2/\text{NDF}$ : 16282606826.3/35

# yield\_bpm12Y\_rms vs Slug, Sign Corrected



Right In: 0.010+/-0.000

$\chi^2/\text{NDF}$ : 1207460.1/16

Left Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.010+/-0.000

$\chi^2/\text{NDF}$ : 1176642.1/18

Left In: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

Right: 0.010+/-0.000

$\chi^2/\text{NDF}$ : 2385530.8/35

In: 0.010+/-0.000

$\chi^2/\text{NDF}$ : 1207460.1/16

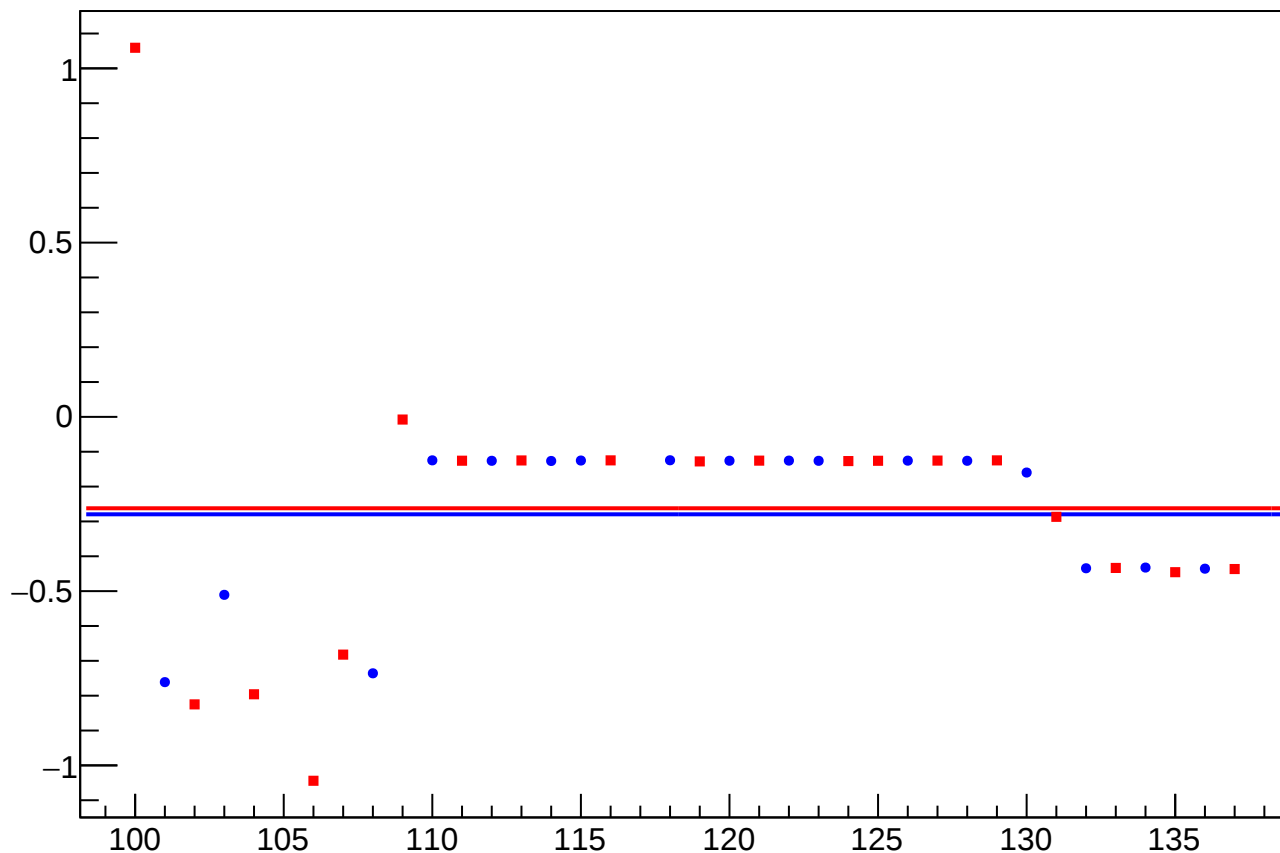
Out: 0.000+/-0.000

$\chi^2/\text{NDF}$ : 0.0/0

All: 0.010+/-0.000

$\chi^2/\text{NDF}$ : 2385530.8/35

# yield\_bpm16X\_mean vs Slug, Sign Corrected



Right In: -0.280+/-0.000  $\chi^2/\text{NDF}$ : 929210245.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -0.262+/-0.000  $\chi^2/\text{NDF}$ : 1006263824.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

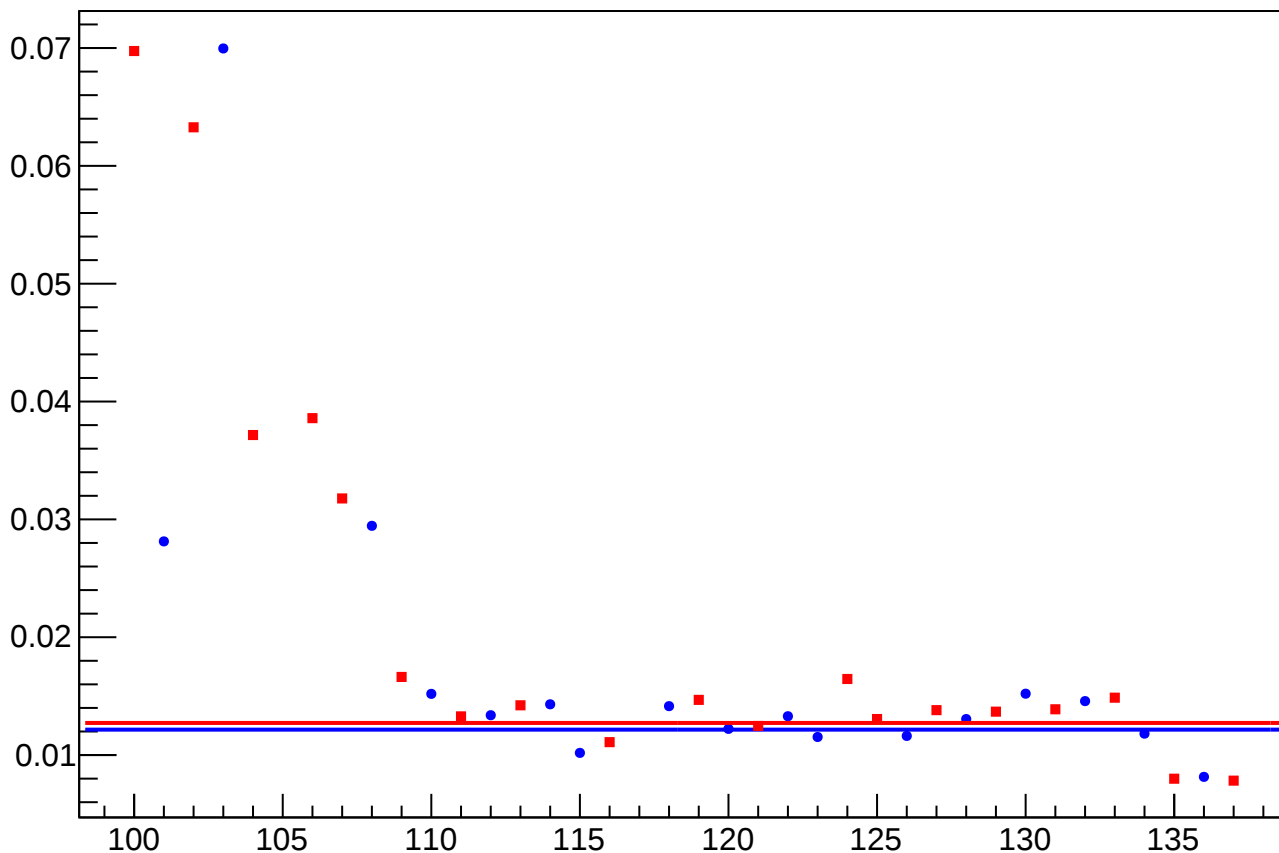
Right: -0.271+/-0.000  $\chi^2/\text{NDF}$ : 1940066892.0/35

In: -0.280+/-0.000  $\chi^2/\text{NDF}$ :929210245.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -0.271+/-0.000  $\chi^2/\text{NDF}$ : 1940066892.0/35

# yield\_bpm16X\_rms vs Slug, Sign Corrected



Right In: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 1722777.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.013+/-0.000  $\chi^2/\text{NDF}$ : 1967397.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

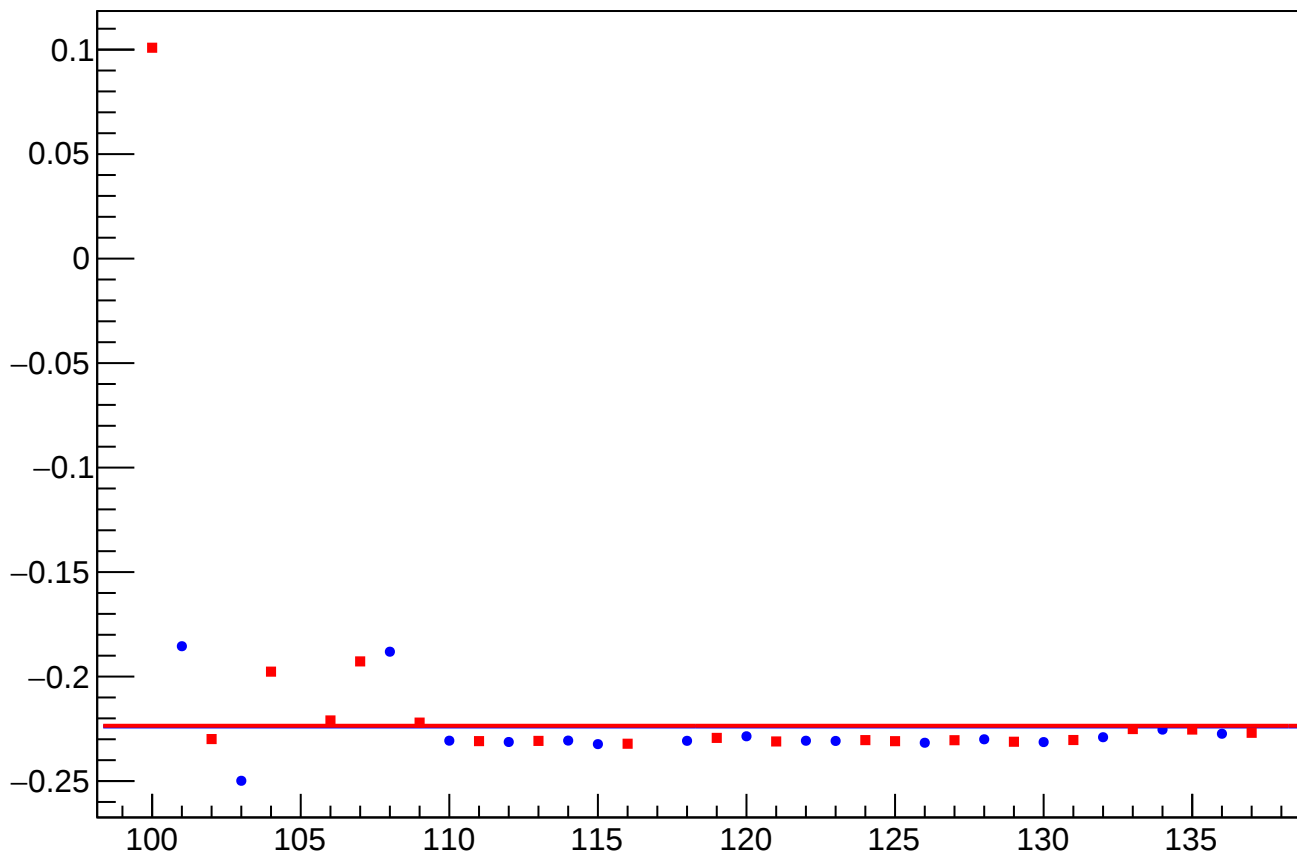
Right: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 3700041.2/35

In: 0.012+/-0.000  $\chi^2/\text{NDF}$ :1722777.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 3700041.2/35

# yield\_bpm16Y\_mean vs Slug, Sign Corrected



Right In: -0.224+/-0.000  $\chi^2/\text{NDF}$ : 74600073.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.224+/-0.000  $\chi^2/\text{NDF}$ : 168124199.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

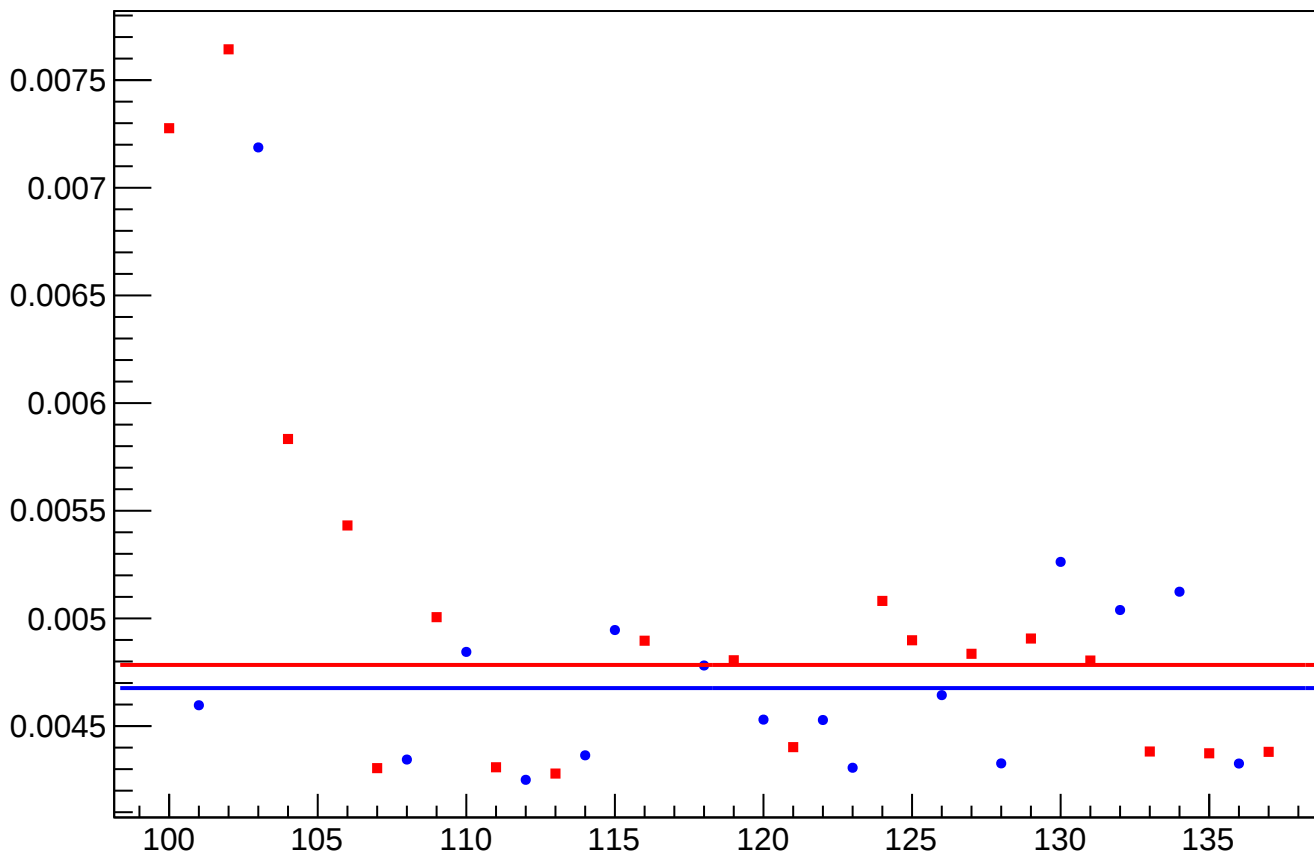
Right: -0.224+/-0.000  $\chi^2/\text{NDF}$ : 242740169.2/35

In: -0.224+/-0.000  $\chi^2/\text{NDF}$ : 74600073.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.224+/-0.000  $\chi^2/\text{NDF}$ : 242740169.2/35

# yield\_bpm16Y\_rms vs Slug, Sign Corrected



Right In: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 180780.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 248269.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

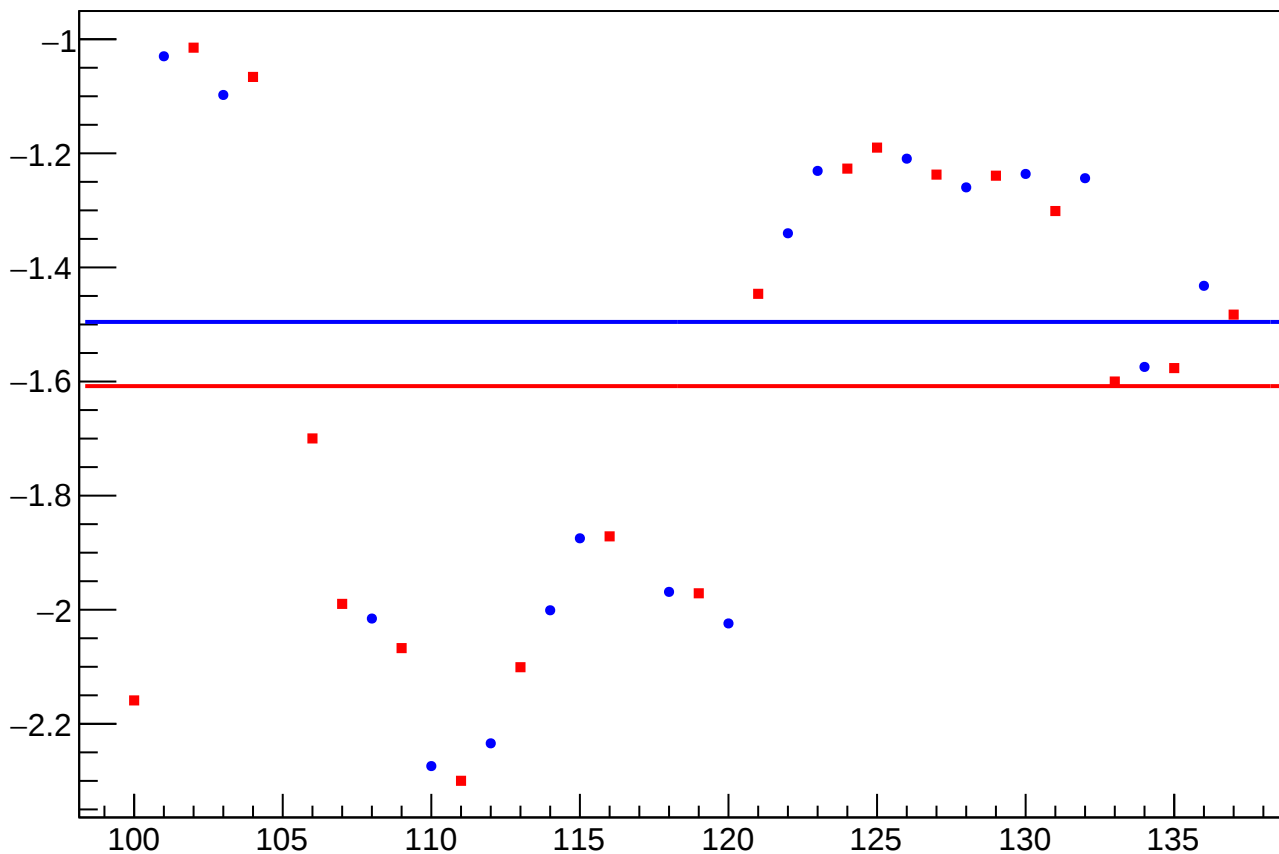
Right: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 432242.2/35

In: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 180780.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 432242.2/35

# yield\_bpm0l01X\_mean vs Slug, Sign Corrected



Right In: -1.496+/-0.000  $\chi^2/\text{NDF}$ : 22506050663.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1.608+/-0.000  $\chi^2/\text{NDF}$ : 27852841950.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

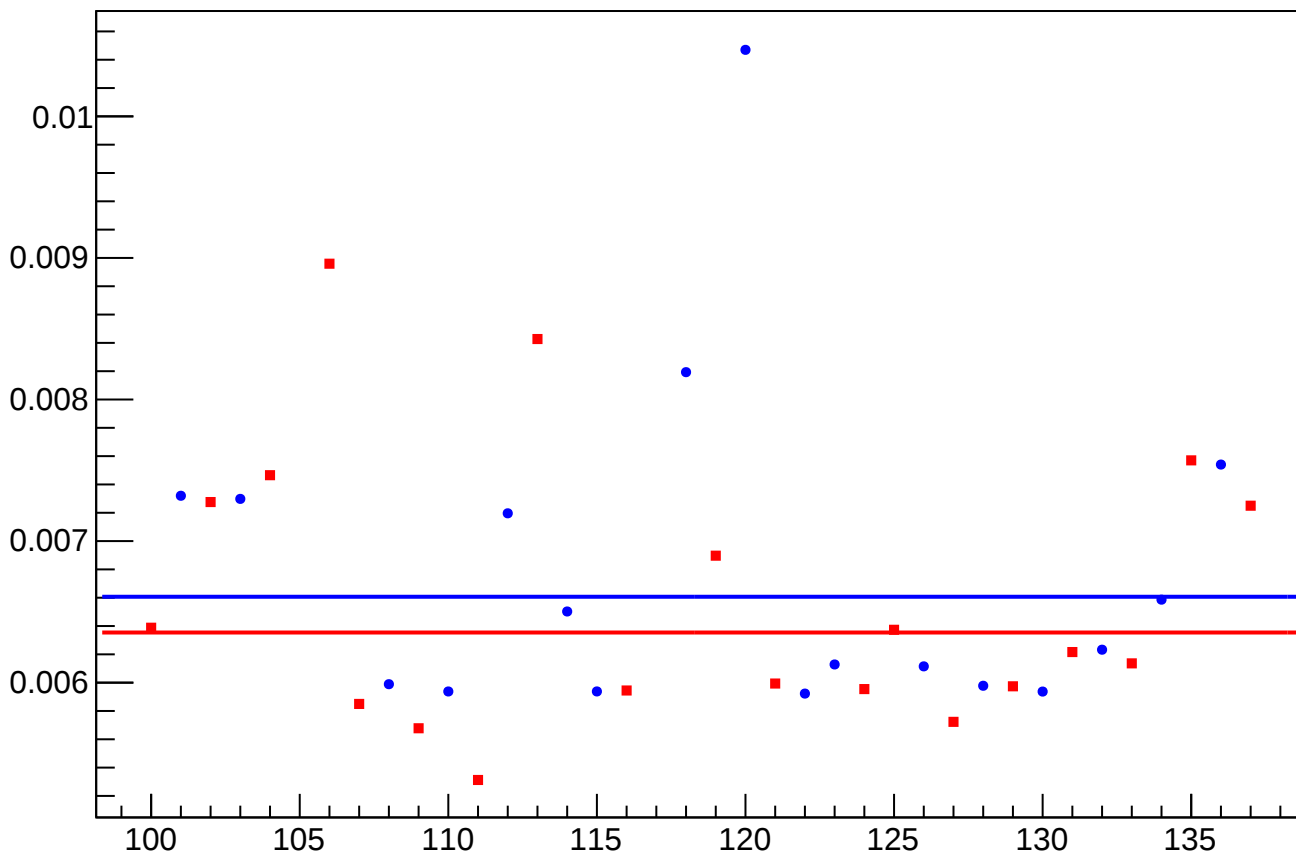
Right: -1.556+/-0.000  $\chi^2/\text{NDF}$ : 51308404748.0/35

In: -1.496+/-0.000  $\chi^2/\text{NDF}$ : 22506050663.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -1.556+/-0.000  $\chi^2/\text{NDF}$ : 51308404748.0/35

# yield\_bpm0l01X\_rms vs Slug, Sign Corrected



Right In: 0.007+/-0.000  $\chi^2/\text{NDF}$ : 201323.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.006+/-0.000  $\chi^2/\text{NDF}$ : 227287.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

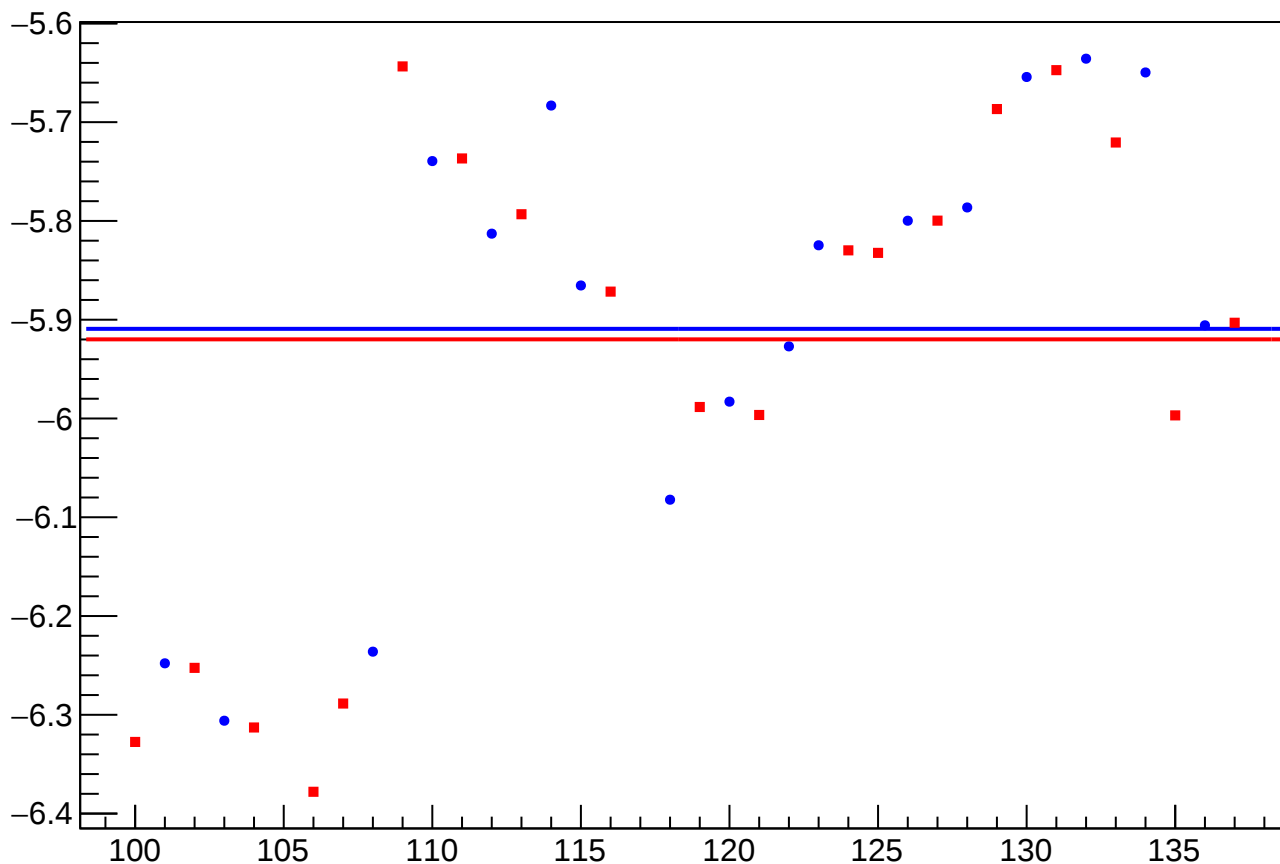
Right: 0.006+/-0.000  $\chi^2/\text{NDF}$ : 438183.3/35

In: 0.007+/-0.000  $\chi^2/\text{NDF}$ :201323.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.006+/-0.000  $\chi^2/\text{NDF}$ : 438183.3/35

# yield\_bpm0l01Y\_mean vs Slug, Sign Corrected



Right In: -5.909+/-0.000  $\chi^2/\text{NDF}$ : 11125163629.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -5.920+/-0.000  $\chi^2/\text{NDF}$ : 12785272526.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

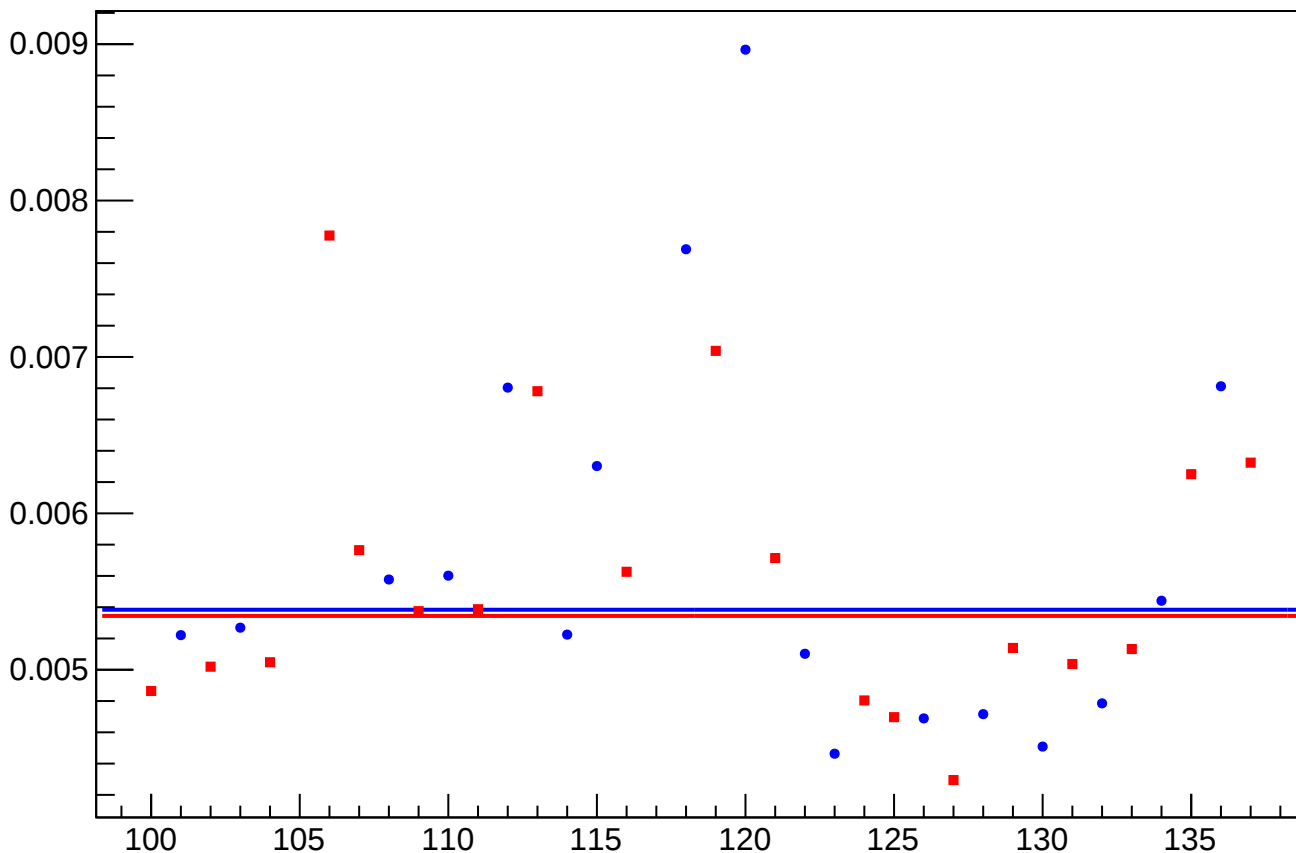
Right: -5.915+/-0.000  $\chi^2/\text{NDF}$ : 23922455242.5/35

In: -5.909+/-0.000  $\chi^2/\text{NDF}$ : 11125163629.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -5.915+/-0.000  $\chi^2/\text{NDF}$ : 23922455242.5/35

# yield\_bpm0l01Y\_rms vs Slug, Sign Corrected



Right In: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 347627.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 244700.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

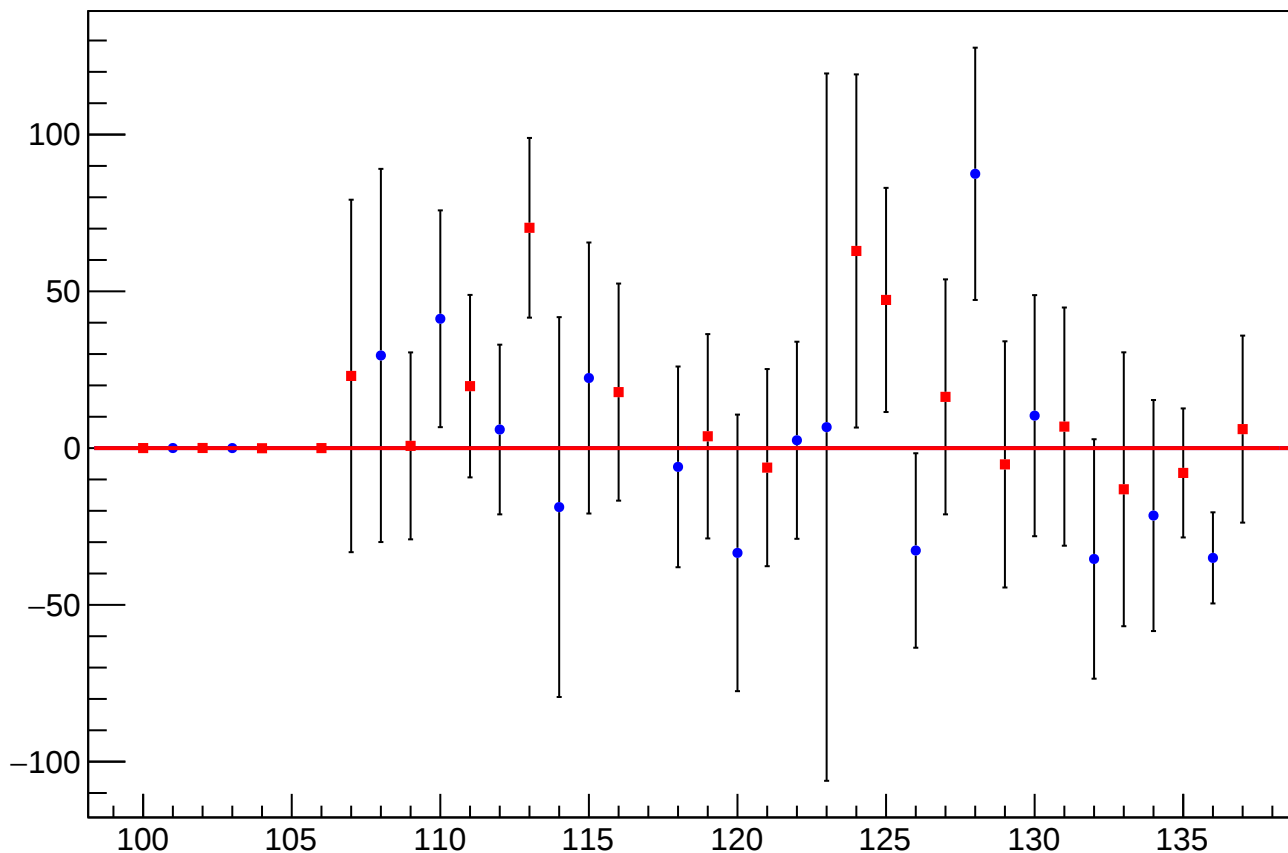
Right: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 592657.5/35

In: 0.005+/-0.000  $\chi^2/\text{NDF}$ :347627.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 592657.5/35

# diff\_cav4bX\_mean vs Slug, Sign Corrected



Right In: 0.013 $\pm$ 0.017  $\chi^2$ /NDF: 15.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.003 $\pm$ 0.016  $\chi^2$ /NDF: 15.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

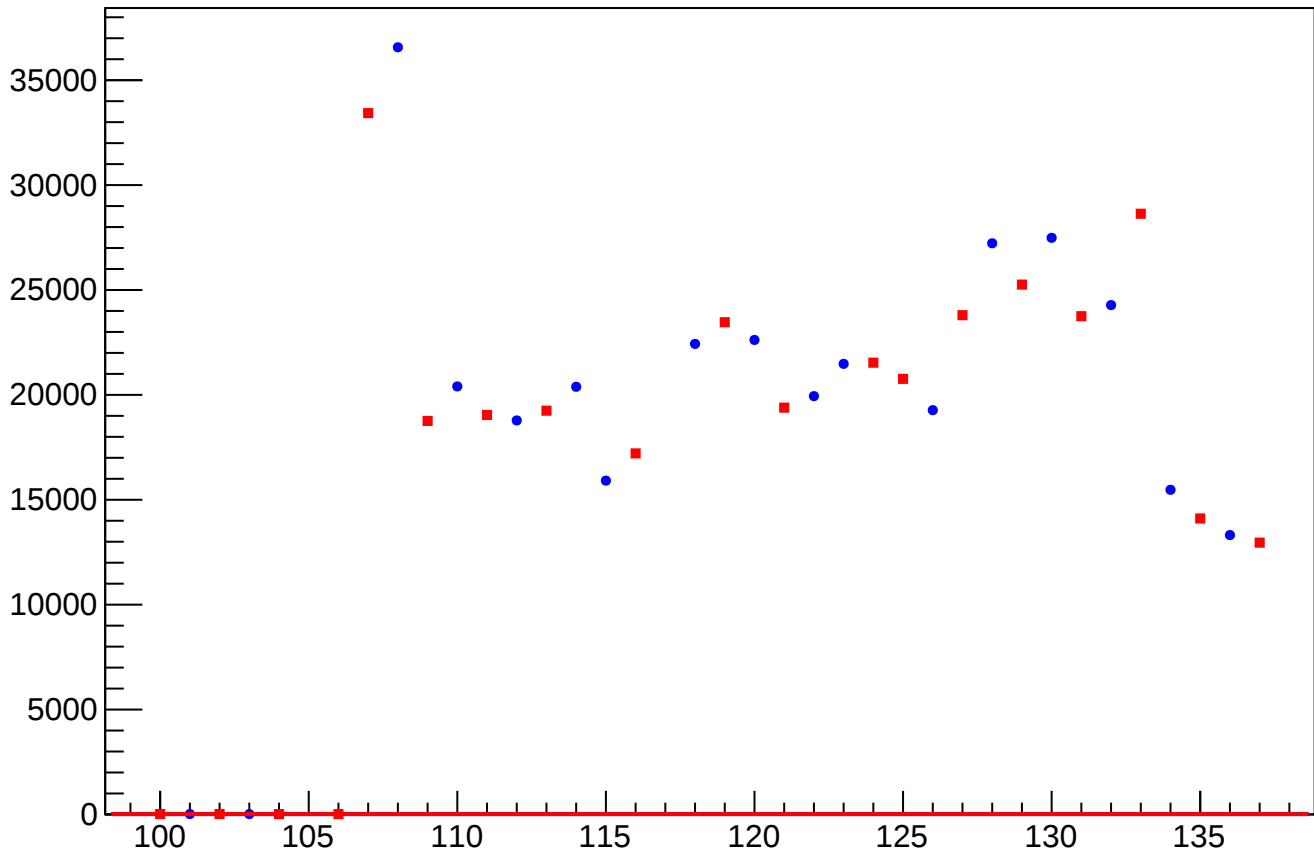
Right: 0.004 $\pm$ 0.012  $\chi^2$ /NDF: 31.6/35

In: 0.013 $\pm$ 0.017  $\chi^2$ /NDF:15.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.004 $\pm$ 0.012  $\chi^2$ /NDF: 31.6/35

# diff\_cav4bX\_rms vs Slug, Sign Corrected



Right In: 18.641+/-0.012  $\chi^2/\text{NDF}$ : 10841561.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 18.311+/-0.011  $\chi^2/\text{NDF}$ : 11103320.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

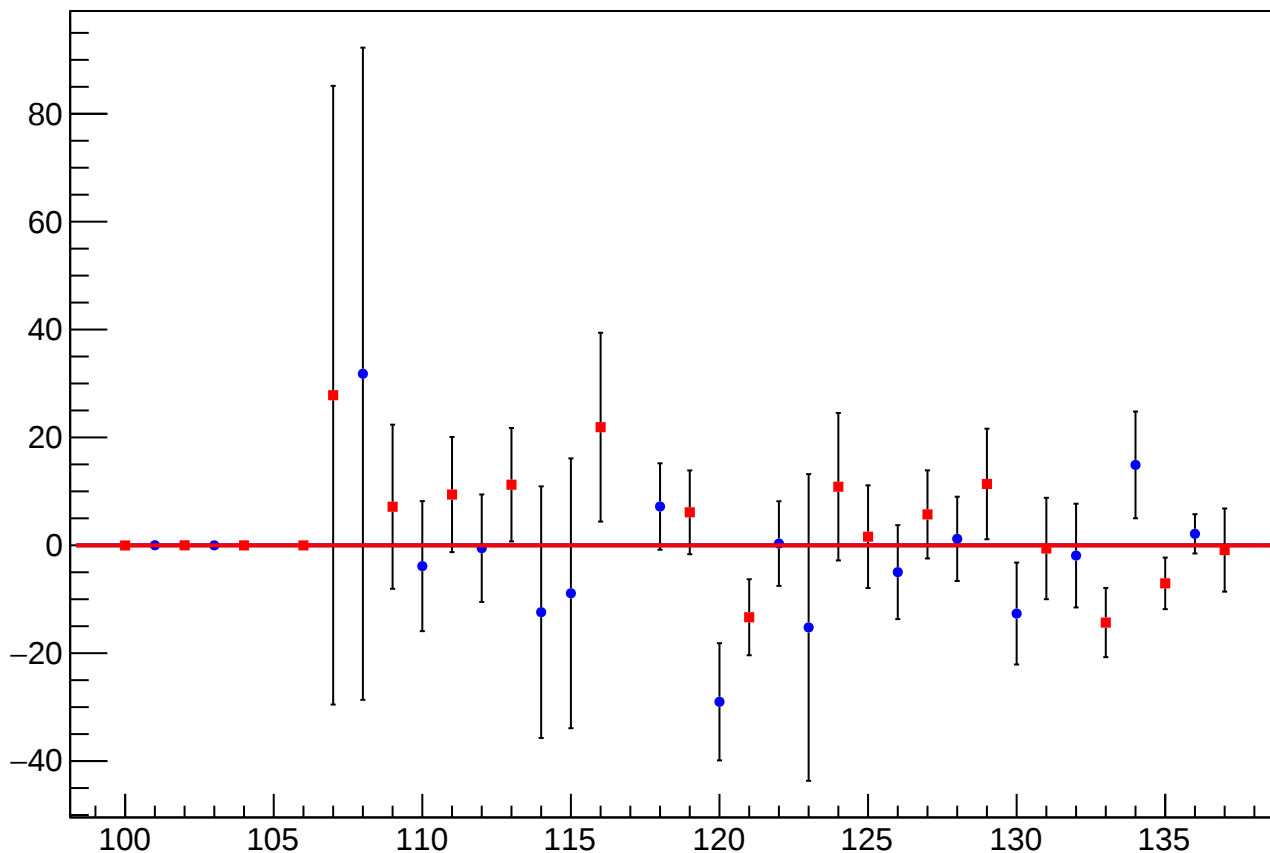
Right: 18.464+/-0.008  $\chi^2/\text{NDF}$ : 21945270.7/35

In: 18.641+/-0.012  $\chi^2/\text{NDF}$ : 10841561.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 18.464+/-0.008  $\chi^2/\text{NDF}$ : 21945270.7/35

# diff\_cav4bY\_mean vs Slug, Sign Corrected



Right In: 0.001 $\pm$ 0.009  $\chi^2$ /NDF: 14.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.014 $\pm$ 0.009  $\chi^2$ /NDF: 18.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

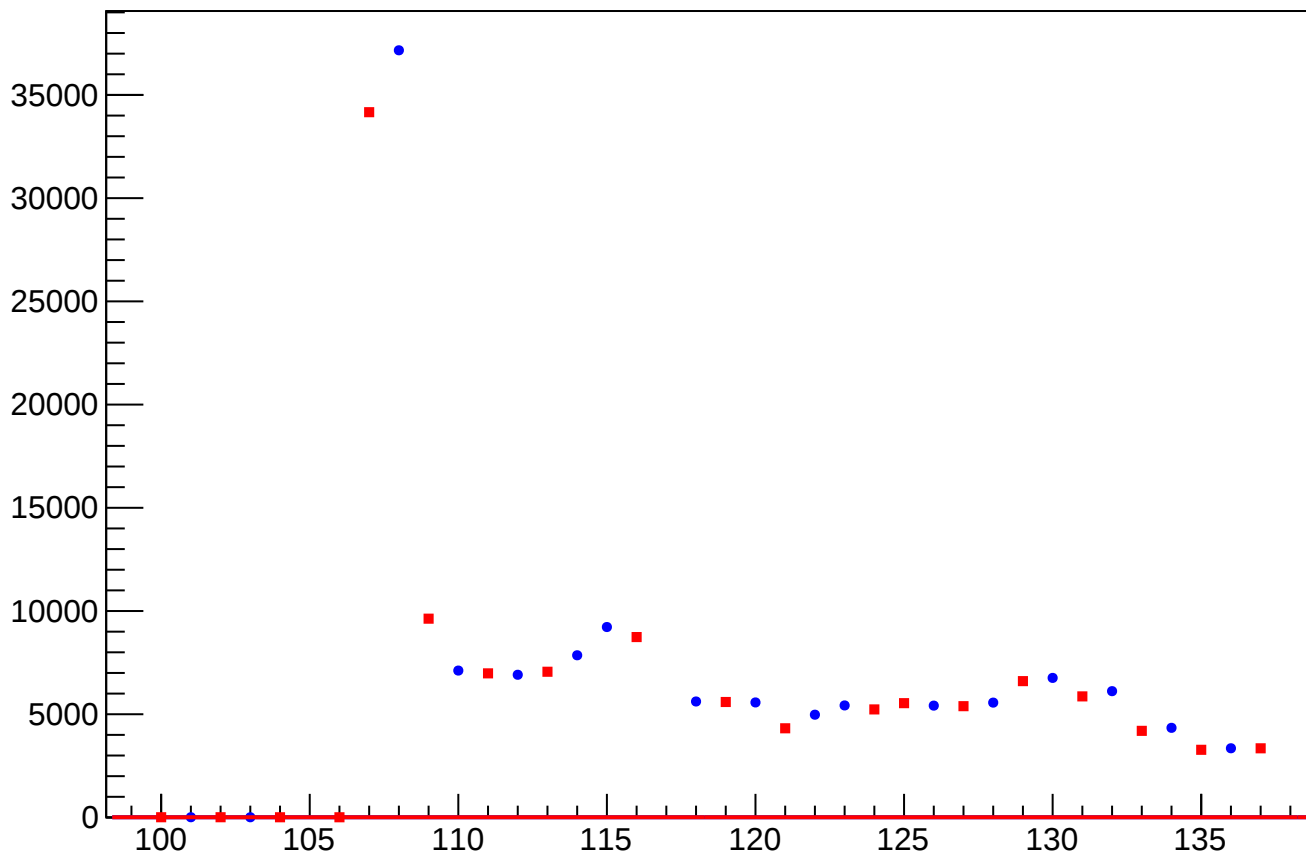
Right: -0.007 $\pm$ 0.006  $\chi^2$ /NDF: 34.7/35

In: 0.001 $\pm$ 0.009  $\chi^2$ /NDF:14.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -0.007 $\pm$ 0.006  $\chi^2$ /NDF: 34.7/35

# diff\_cav4bY\_rms vs Slug, Sign Corrected



Right In: 9.938+/-0.007     $\chi^2/\text{NDF}$ : 10973577.1/16

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 9.854+/-0.006     $\chi^2/\text{NDF}$ : 11152667.7/18

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

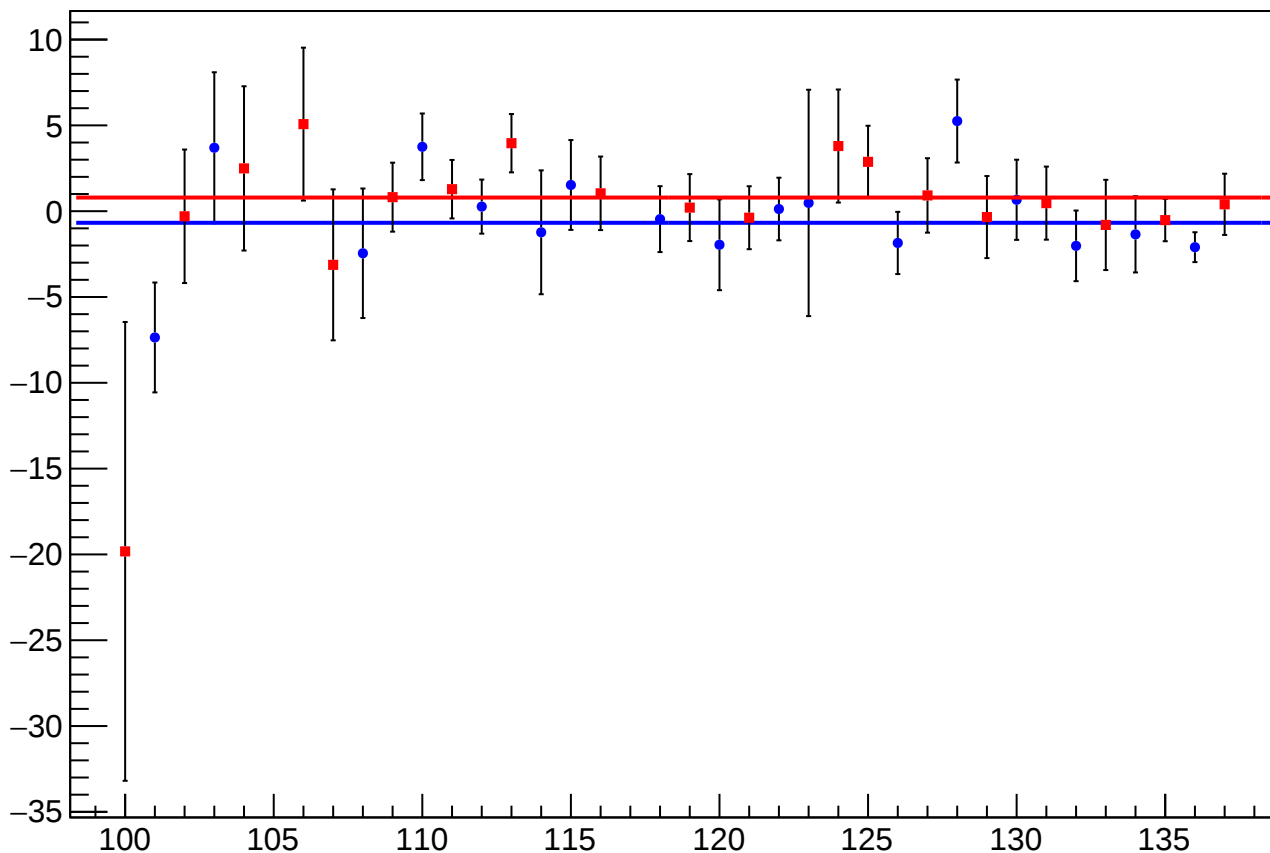
Right: 9.894+/-0.004     $\chi^2/\text{NDF}$ : 22126332.7/35

In: 9.938+/-0.007     $\chi^2/\text{NDF}$ : 10973577.1/16

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 9.894+/-0.004     $\chi^2/\text{NDF}$ : 22126332.7/35

# diff\_cav4cX\_mean vs Slug, Sign Corrected



Right In:  $-0.677 \pm 0.484$   $\chi^2/\text{NDF}$ : 22.3/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $0.795 \pm 0.501$   $\chi^2/\text{NDF}$ : 12.0/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

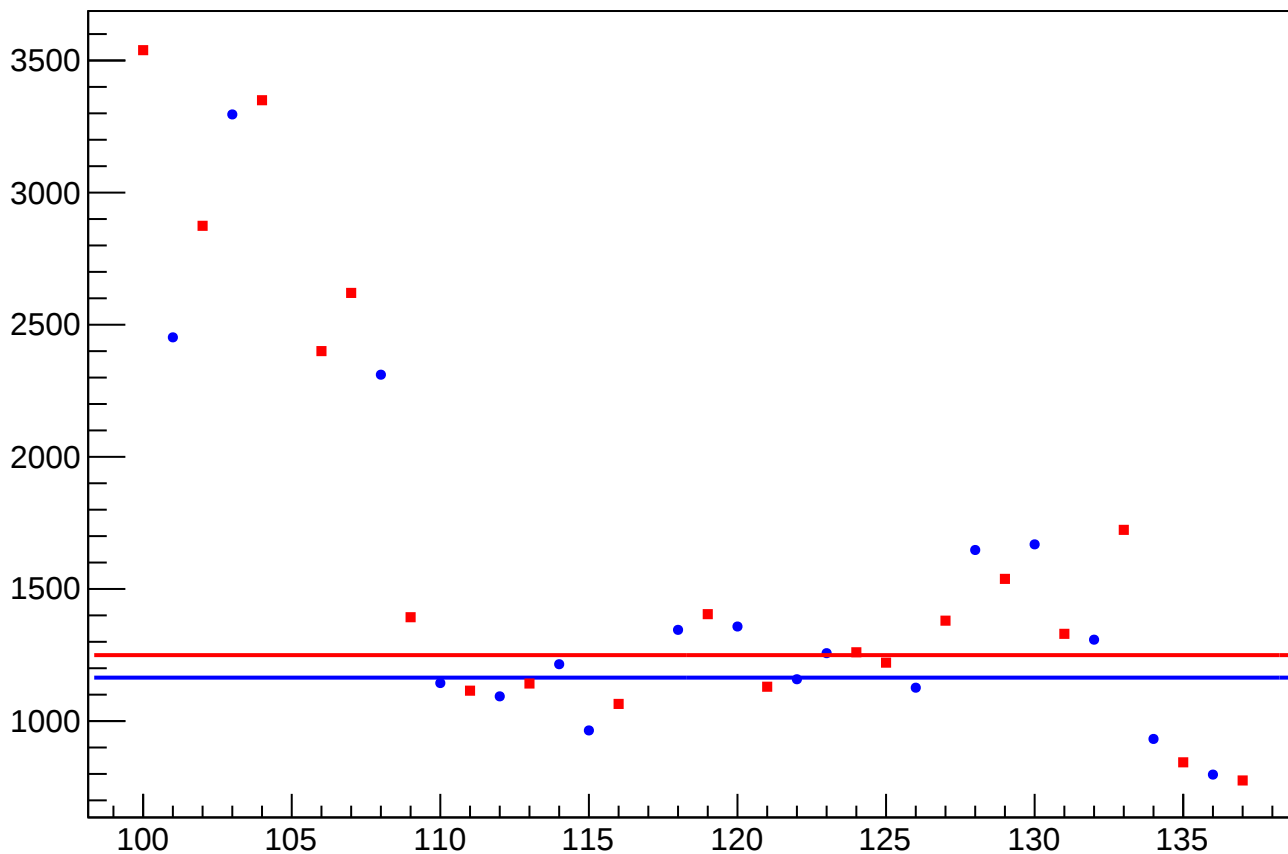
Right:  $0.033 \pm 0.348$   $\chi^2/\text{NDF}$ : 38.7/35

In:  $-0.677 \pm 0.484$   $\chi^2/\text{NDF}$ : 22.3/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $0.033 \pm 0.348$   $\chi^2/\text{NDF}$ : 38.7/35

# diff\_cav4cX\_rms vs Slug, Sign Corrected



Right In: 1164.459+/-0.342  $\chi^2/\text{NDF}$ : 1584212.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1249.596+/-0.354  $\chi^2/\text{NDF}$ : 1650133.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

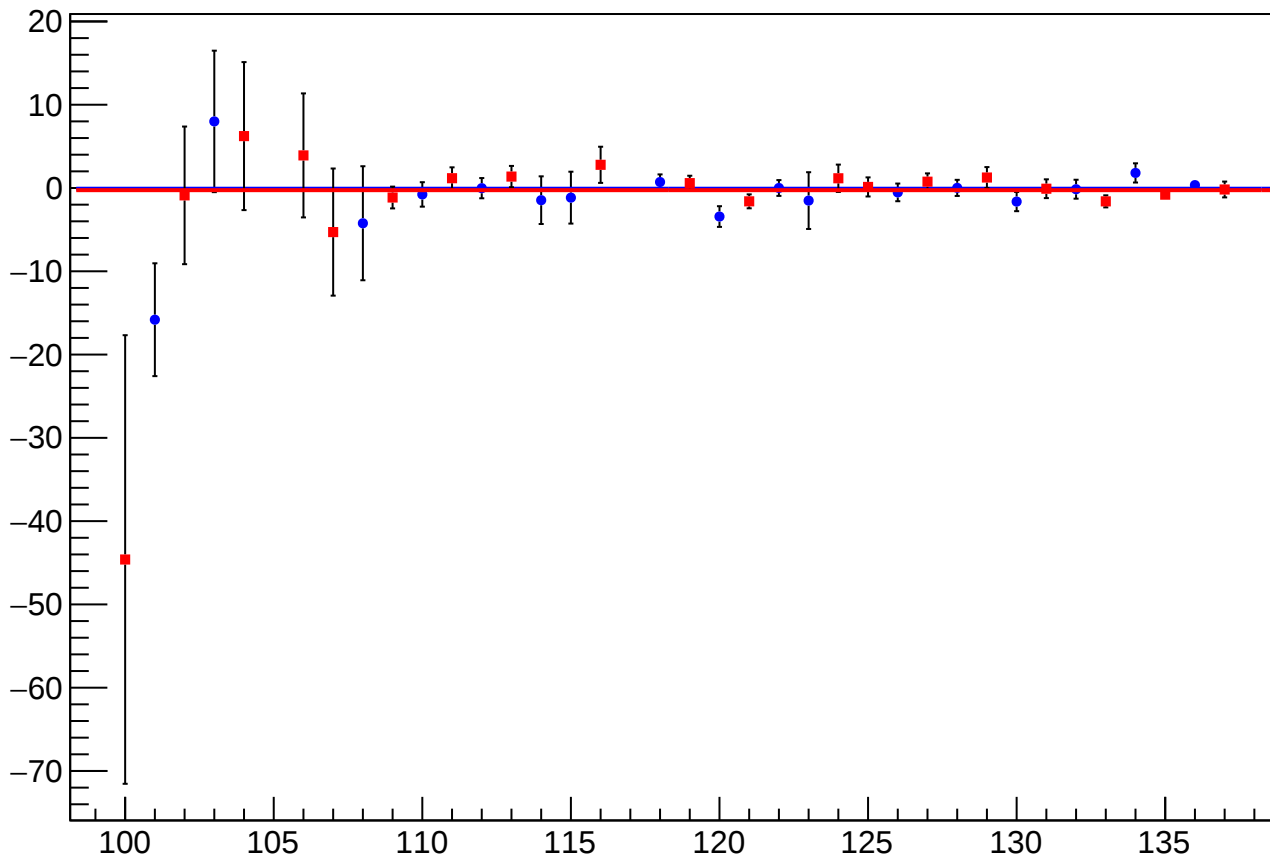
Right: 1205.546+/-0.246  $\chi^2/\text{NDF}$ : 3264193.7/35

In: 1164.459+/-0.342  $\chi^2/\text{NDF}$ : 1584212.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1205.546+/-0.246  $\chi^2/\text{NDF}$ : 3264193.7/35

# diff\_cav4cY\_mean vs Slug, Sign Corrected



Right In:  $-0.086 \pm 0.270$   $\chi^2/\text{NDF}$ : 21.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.259 \pm 0.264$   $\chi^2/\text{NDF}$ : 20.4/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

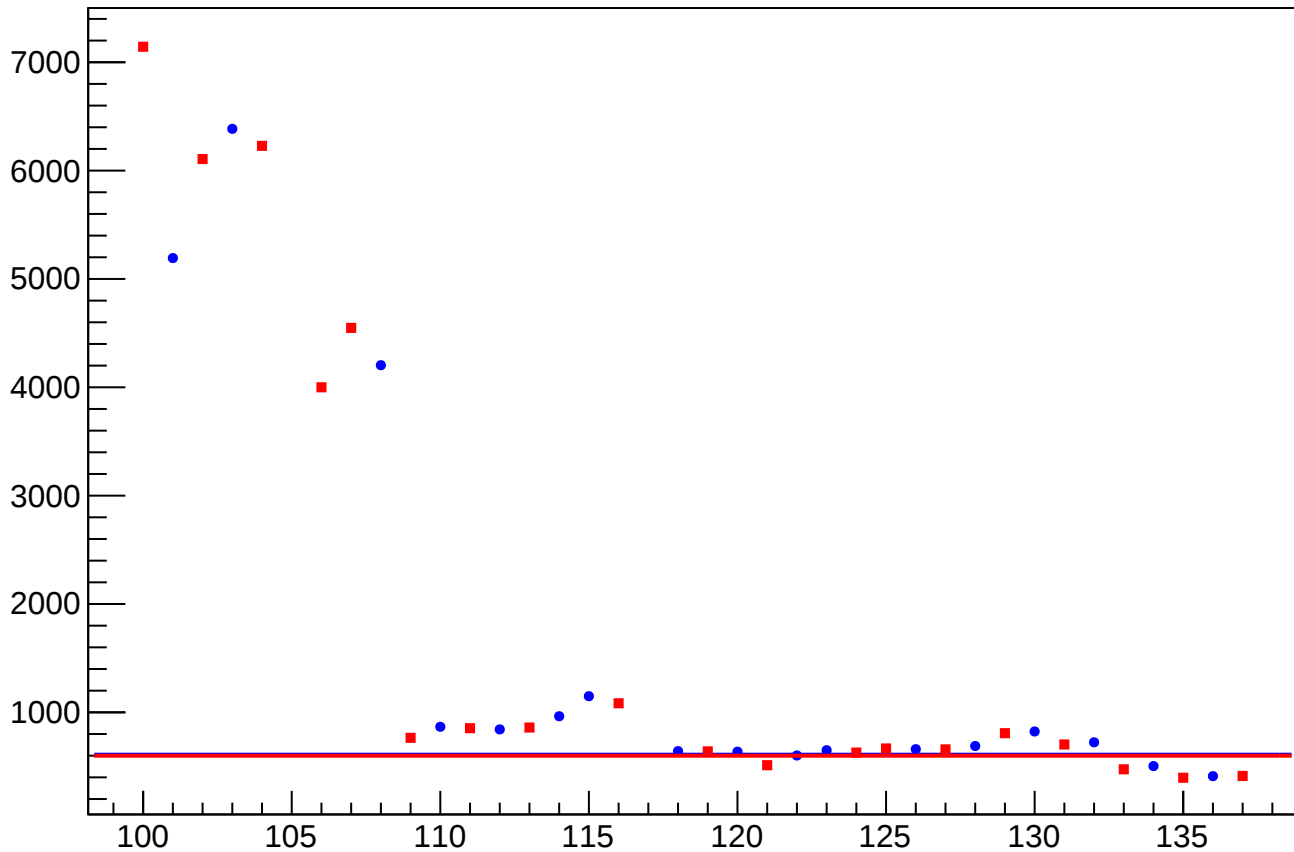
Right:  $-0.174 \pm 0.189$   $\chi^2/\text{NDF}$ : 41.7/35

In:  $-0.086 \pm 0.270$   $\chi^2/\text{NDF}$ : 21.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.174 \pm 0.189$   $\chi^2/\text{NDF}$ : 41.7/35

# diff\_cav4cY\_rms vs Slug, Sign Corrected



Right In: 609.016+/-0.191  $\chi^2/\text{NDF}$ : 3139231.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 599.910+/-0.187  $\chi^2/\text{NDF}$ : 3547599.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

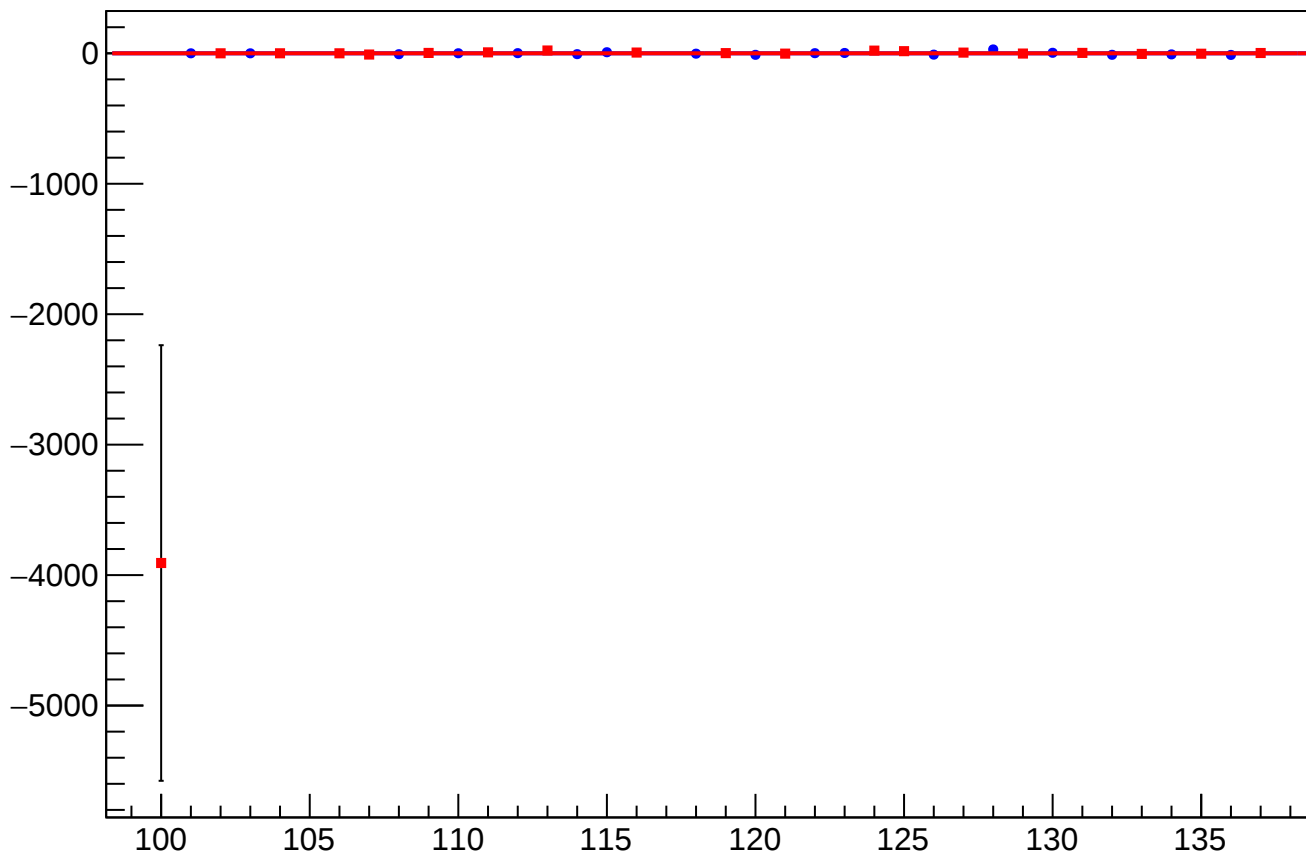
Right: 604.364+/-0.134  $\chi^2/\text{NDF}$ : 6687992.0/35

In: 609.016+/-0.191  $\chi^2/\text{NDF}$ :3139231.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 604.364+/-0.134  $\chi^2/\text{NDF}$ : 6687992.0/35

# diff\_cav4dX\_mean vs Slug, Sign Corrected



Right In: -0.022 $\pm$ 0.021  $\chi^2$ /NDF: 15.3/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 0.027 $\pm$ 0.020  $\chi^2$ /NDF: 17.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

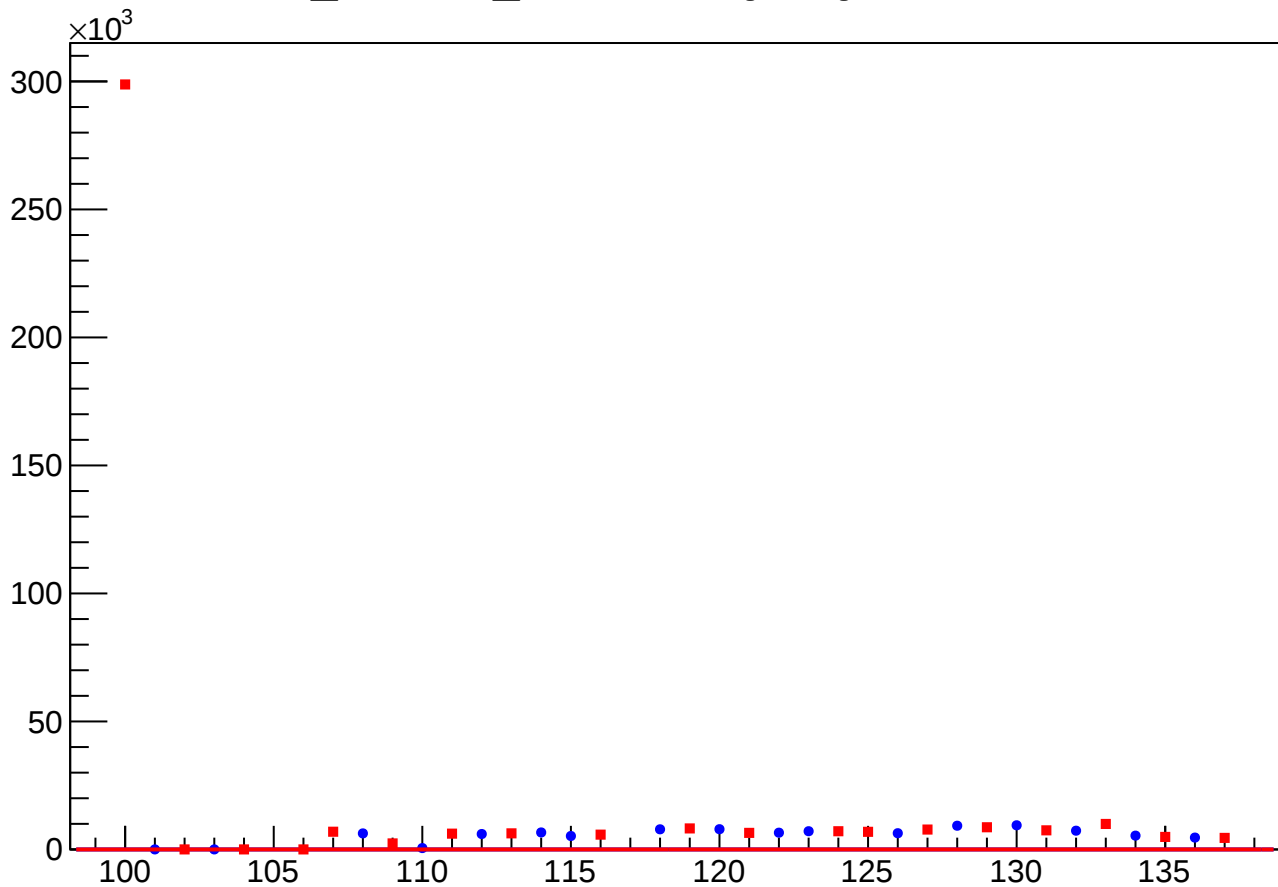
Right: 0.004 $\pm$ 0.014  $\chi^2$ /NDF: 35.4/35

In: -0.022 $\pm$ 0.021  $\chi^2$ /NDF: 15.3/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 0.004 $\pm$ 0.014  $\chi^2$ /NDF: 35.4/35

# diff\_cav4dX\_rms vs Slug, Sign Corrected



Right In:  $17.337 \pm 0.015$   $\chi^2/\text{NDF}: 10359409.4/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $17.268 \pm 0.014$   $\chi^2/\text{NDF}: 10813350.8/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

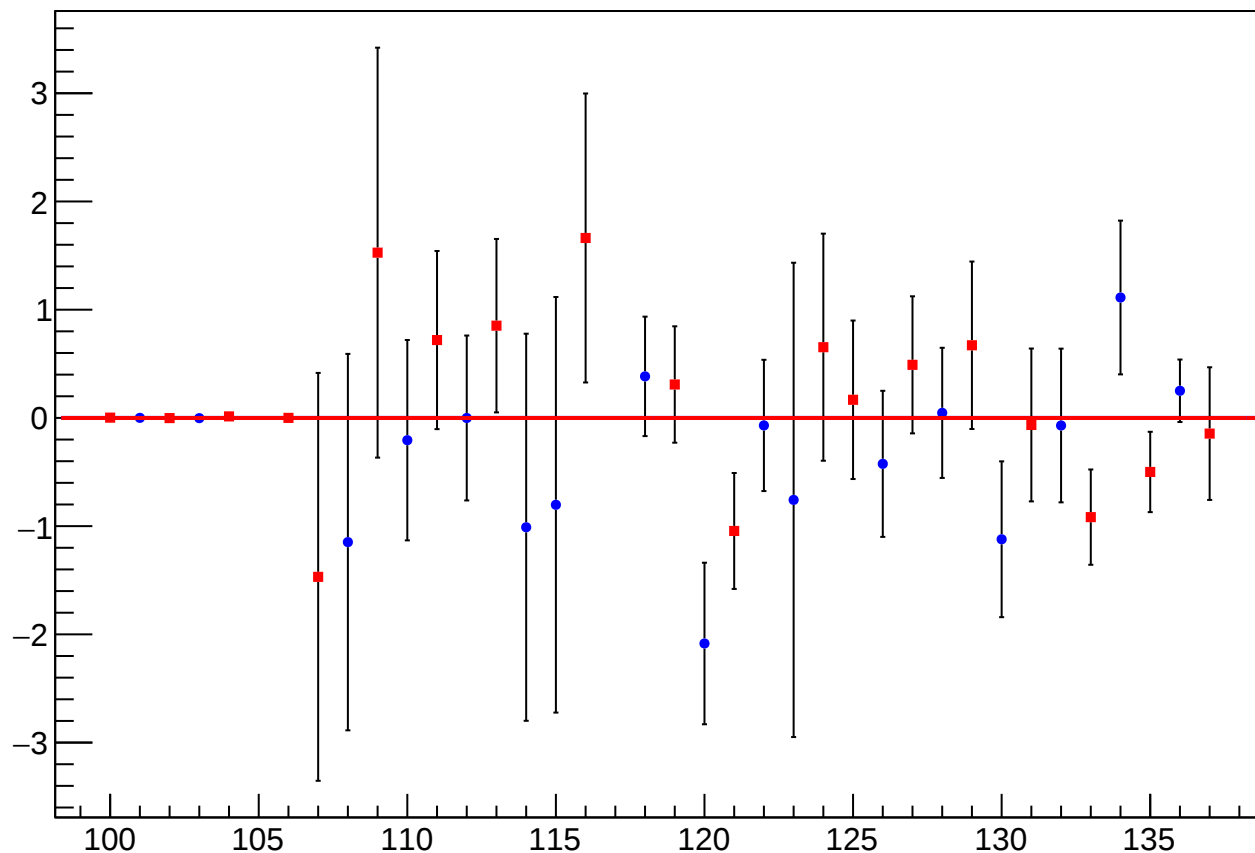
Right:  $17.301 \pm 0.010$   $\chi^2/\text{NDF}: 21172771.7/35$

In:  $17.337 \pm 0.015$   $\chi^2/\text{NDF}: 10359409.4/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $17.301 \pm 0.010$   $\chi^2/\text{NDF}: 21172771.7/35$

# diff\_cav4dY\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.002  $\chi^2/\text{NDF}$ : 15.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.001+/-0.002  $\chi^2/\text{NDF}$ : 17.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

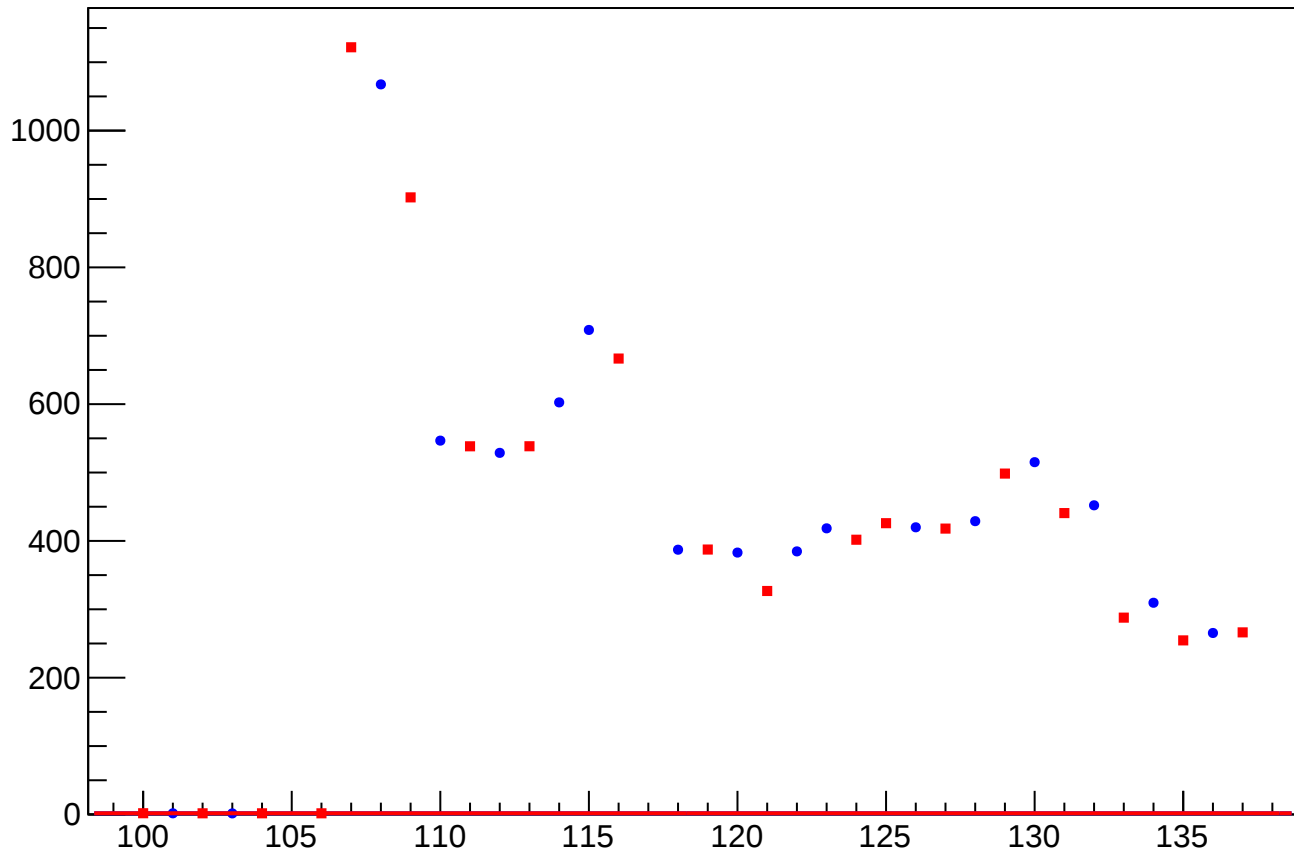
Right: -0.000+/-0.001  $\chi^2/\text{NDF}$ : 33.6/35

In: 0.000+/-0.002  $\chi^2/\text{NDF}$ : 15.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.000+/-0.001  $\chi^2/\text{NDF}$ : 33.6/35

# diff\_cav4dY\_rms vs Slug, Sign Corrected



Right In: 1.698+/-0.001  $\chi^2/\text{NDF}$ : 10911617.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 1.728+/-0.001  $\chi^2/\text{NDF}$ : 10736674.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

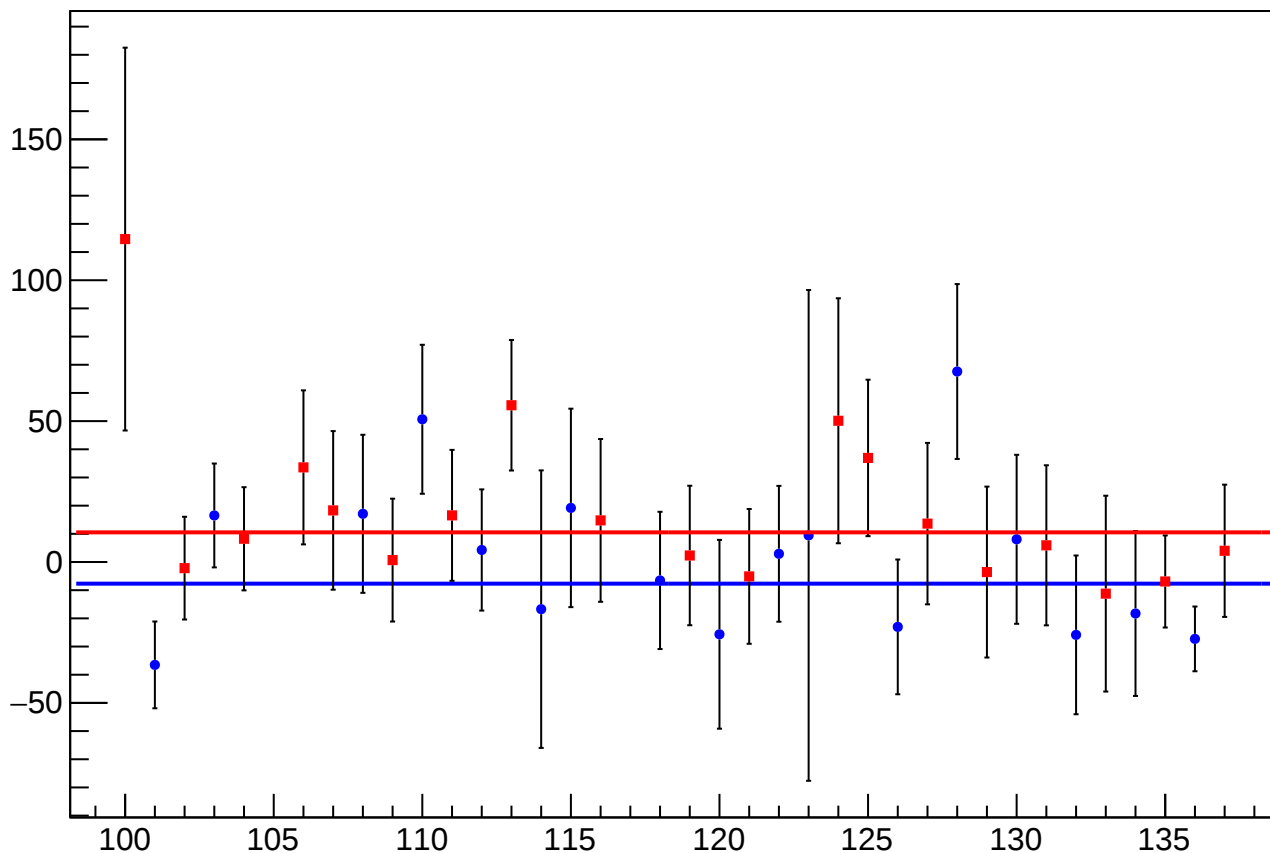
Right: 1.714+/-0.001  $\chi^2/\text{NDF}$ : 21648518.8/35

In: 1.698+/-0.001  $\chi^2/\text{NDF}$ :10911617.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 1.714+/-0.001  $\chi^2/\text{NDF}$ : 21648518.8/35

# diff\_bpm4aX\_mean vs Slug, Sign Corrected



Right In: -7.683+/-5.627  $\chi^2/\text{NDF}$ : 22.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 10.524+/-5.682  $\chi^2/\text{NDF}$ : 11.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

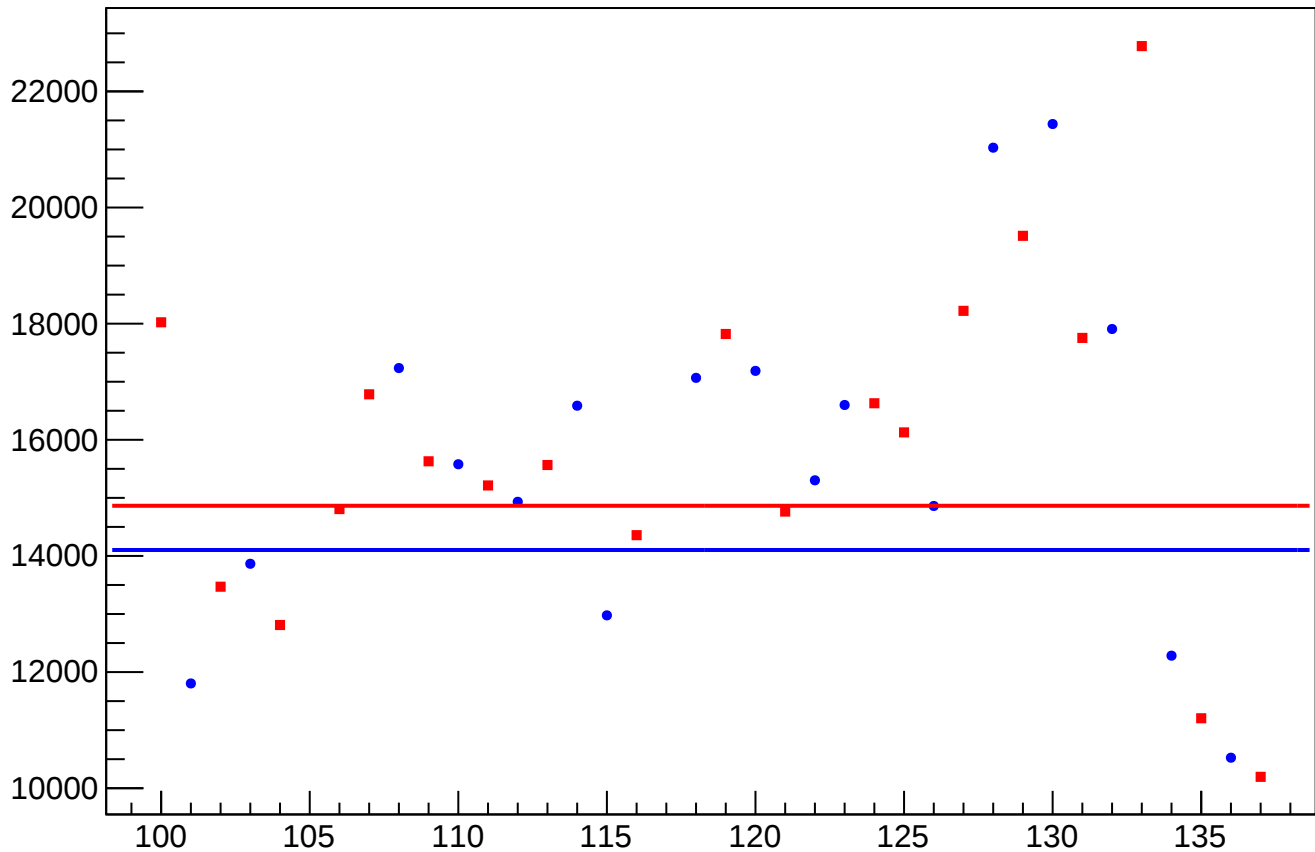
Right: 1.332+/-3.998  $\chi^2/\text{NDF}$ : 39.4/35

In: -7.683+/-5.627  $\chi^2/\text{NDF}$ : 22.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1.332+/-3.998  $\chi^2/\text{NDF}$ : 39.4/35

# diff\_bpm4aX\_rms vs Slug, Sign Corrected



Right In: 14102.522+/-3.979  $\chi^2/\text{NDF}$ : 598934.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 14864.163+/-4.018  $\chi^2/\text{NDF}$ : 470280.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

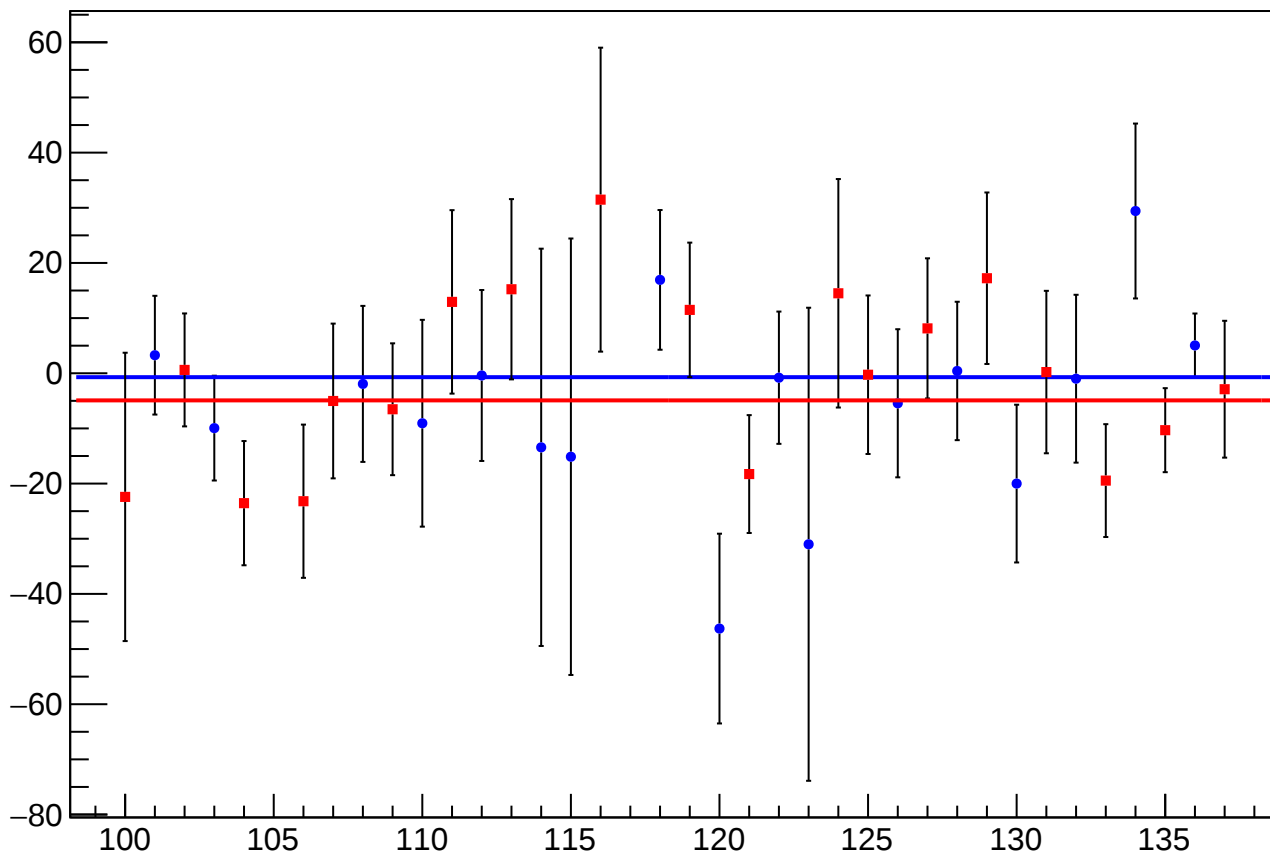
Right: 14479.636+/-2.827  $\chi^2/\text{NDF}$ : 1087356.3/35

In: 14102.522+/-3.979  $\chi^2/\text{NDF}$ :598934.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 14479.636+/-2.827  $\chi^2/\text{NDF}$ : 1087356.3/35

# diff\_bpm4aY\_mean vs Slug, Sign Corrected



Right In:  $-0.708 \pm 3.084$   $\chi^2/\text{NDF}: 17.6/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-4.918 \pm 2.940$   $\chi^2/\text{NDF}: 19.8/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

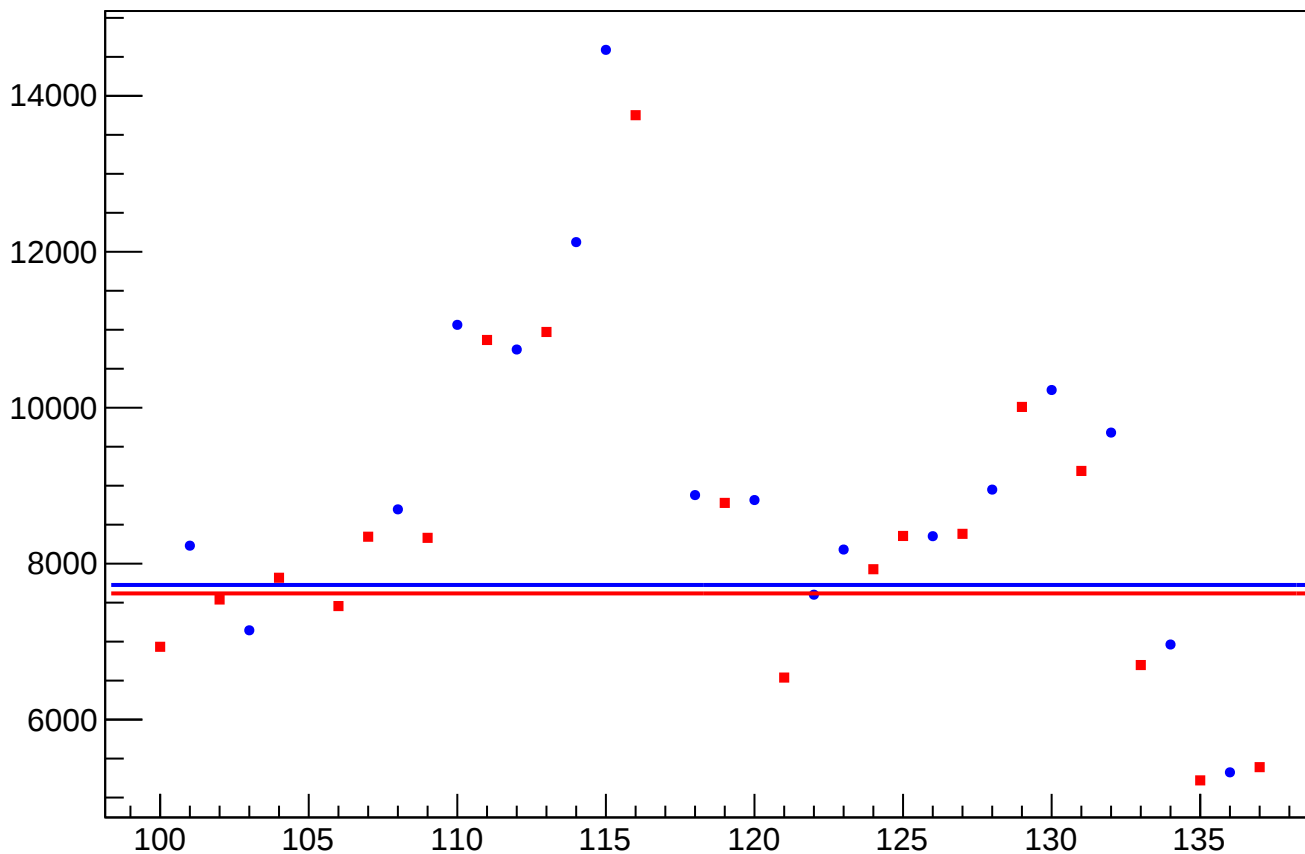
Right:  $-2.914 \pm 2.128$   $\chi^2/\text{NDF}: 38.3/35$

In:  $-0.708 \pm 3.084$   $\chi^2/\text{NDF}: 17.6/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-2.914 \pm 2.128$   $\chi^2/\text{NDF}: 38.3/35$

# diff\_bpm4aY\_rms vs Slug, Sign Corrected



Right In: 7726.745+/-2.180  $\chi^2/\text{NDF}$ : 742512.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 7618.206+/-2.079  $\chi^2/\text{NDF}$ : 675125.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

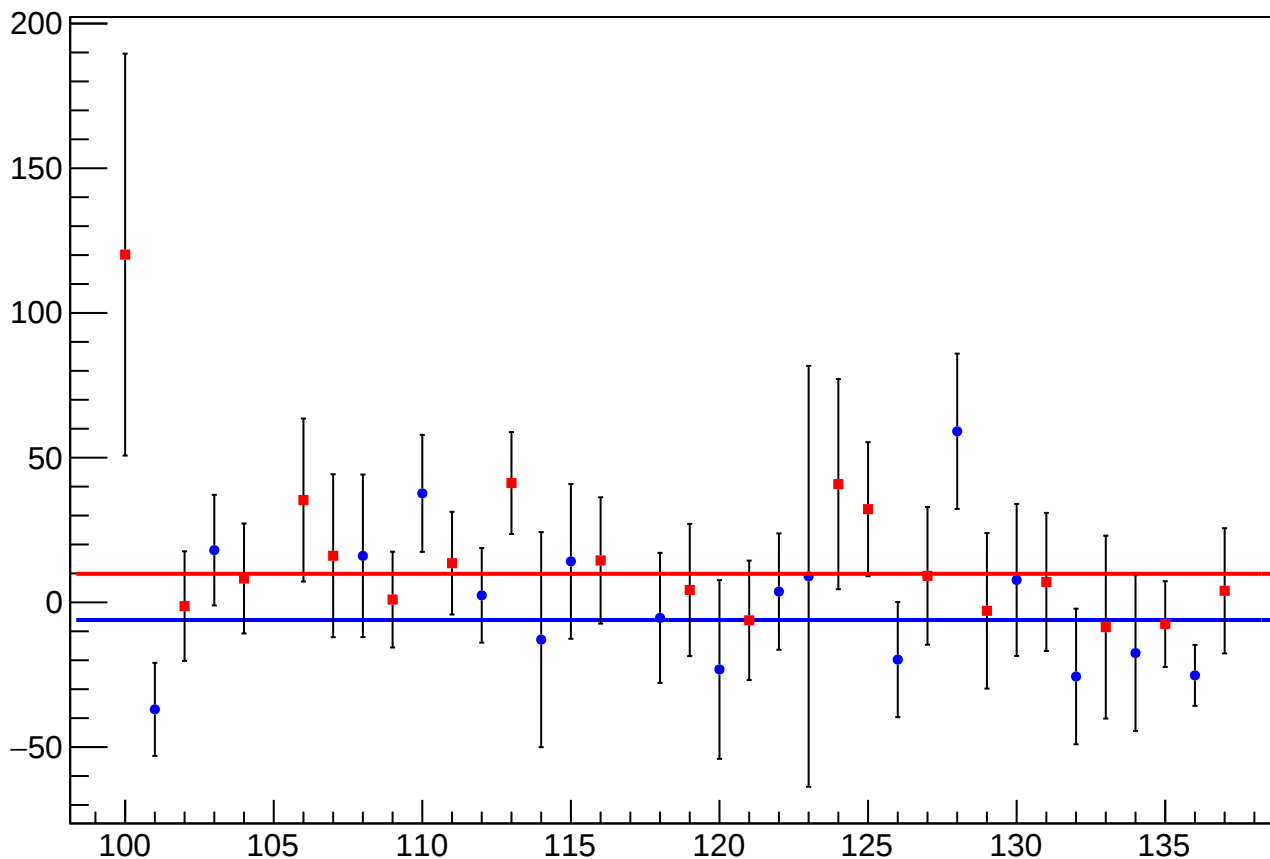
Right: 7669.883+/-1.504  $\chi^2/\text{NDF}$ : 1418936.4/35

In: 7726.745+/-2.180  $\chi^2/\text{NDF}$ : 742512.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 7669.883+/-1.504  $\chi^2/\text{NDF}$ : 1418936.4/35

# diff\_bpm4eX\_mean vs Slug, Sign Corrected



Right In: -6.092+/-5.034  $\chi^2/\text{NDF}$ : 22.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 9.864+/-5.004  $\chi^2/\text{NDF}$ : 11.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

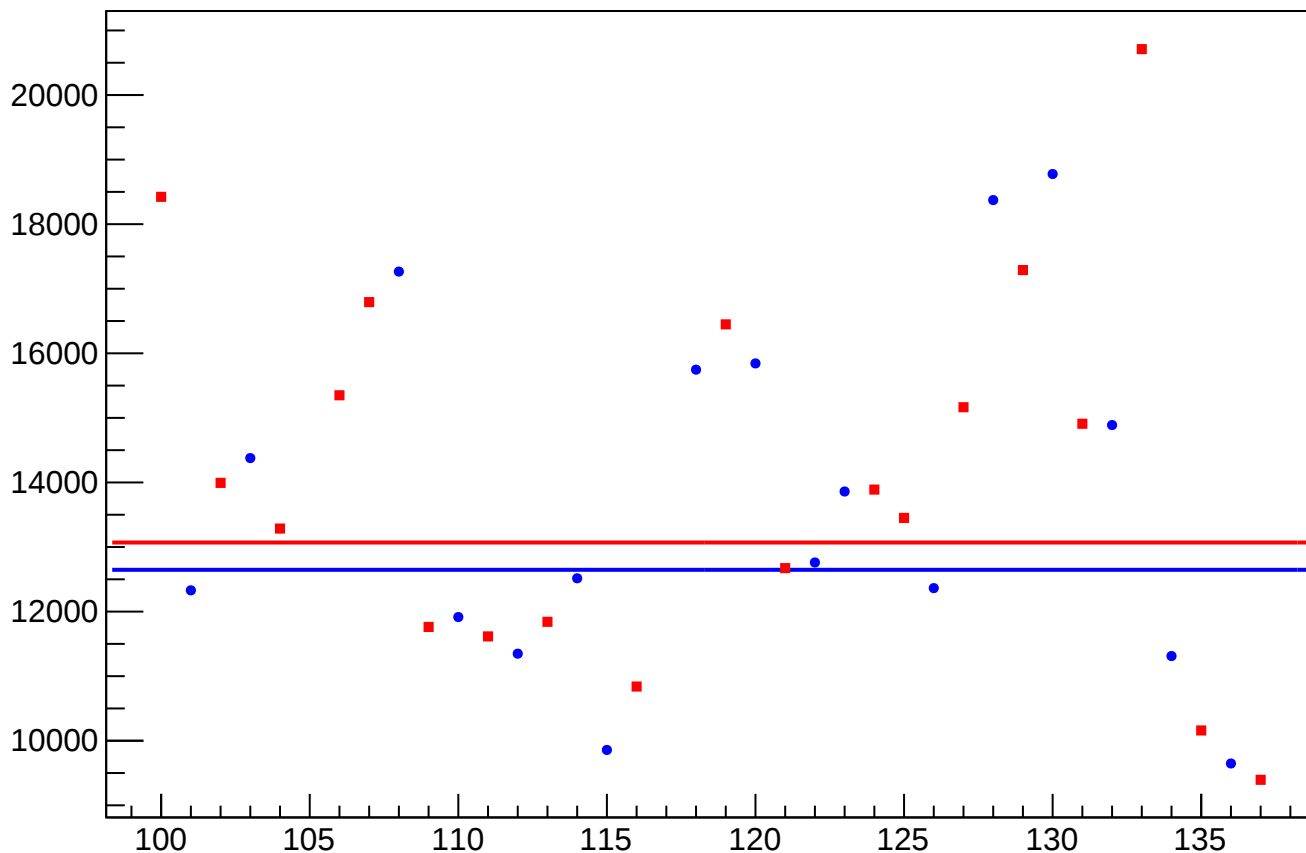
Right: 1.934+/-3.549  $\chi^2/\text{NDF}$ : 39.6/35

In: -6.092+/-5.034  $\chi^2/\text{NDF}$ :22.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 1.934+/-3.549  $\chi^2/\text{NDF}$ : 39.6/35

# diff\_bpm4eX\_rms vs Slug, Sign Corrected



Right In: 12647.257+/-3.559  $\chi^2/\text{NDF}$ : 554320.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 13069.930+/-3.538  $\chi^2/\text{NDF}$ : 496271.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

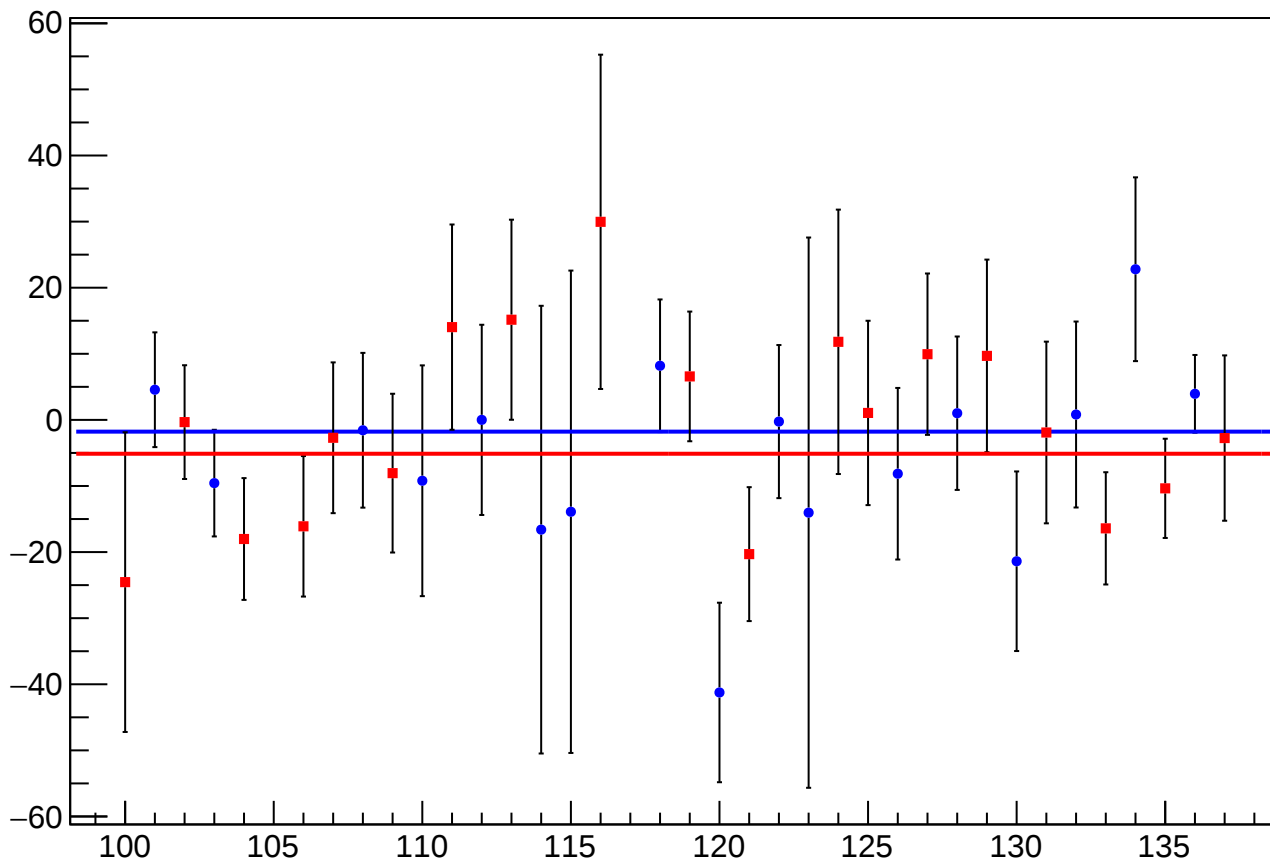
Right: 12859.864+/-2.509  $\chi^2/\text{NDF}$ : 1057685.3/35

In: 12647.257+/-3.559  $\chi^2/\text{NDF}$ : 554320.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 12859.864+/-2.509  $\chi^2/\text{NDF}$ : 1057685.3/35

# diff\_bpm4eY\_mean vs Slug, Sign Corrected



Right In: -1.777 $\pm$ 2.806  $\chi^2$ /NDF: 18.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -5.122 $\pm$ 2.642  $\chi^2$ /NDF: 18.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

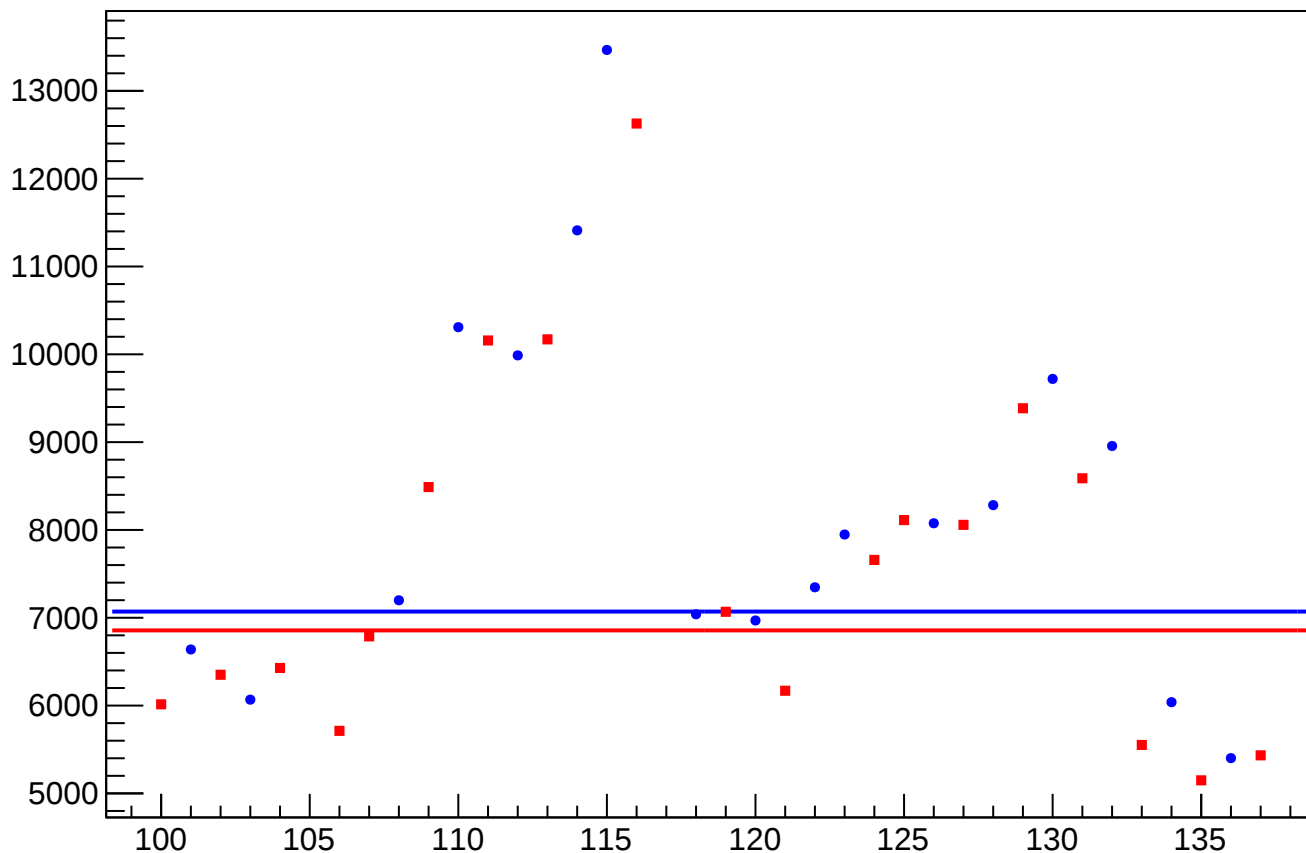
Right: -3.550 $\pm$ 1.923  $\chi^2$ /NDF: 37.6/35

In: -1.777 $\pm$ 2.806  $\chi^2$ /NDF:18.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -3.550 $\pm$ 1.923  $\chi^2$ /NDF: 37.6/35

# diff\_bpm4eY\_rms vs Slug, Sign Corrected



Right In: 7070.672+/-1.984  $\chi^2/\text{NDF}$ : 601692.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 6856.136+/-1.868  $\chi^2/\text{NDF}$ : 682220.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

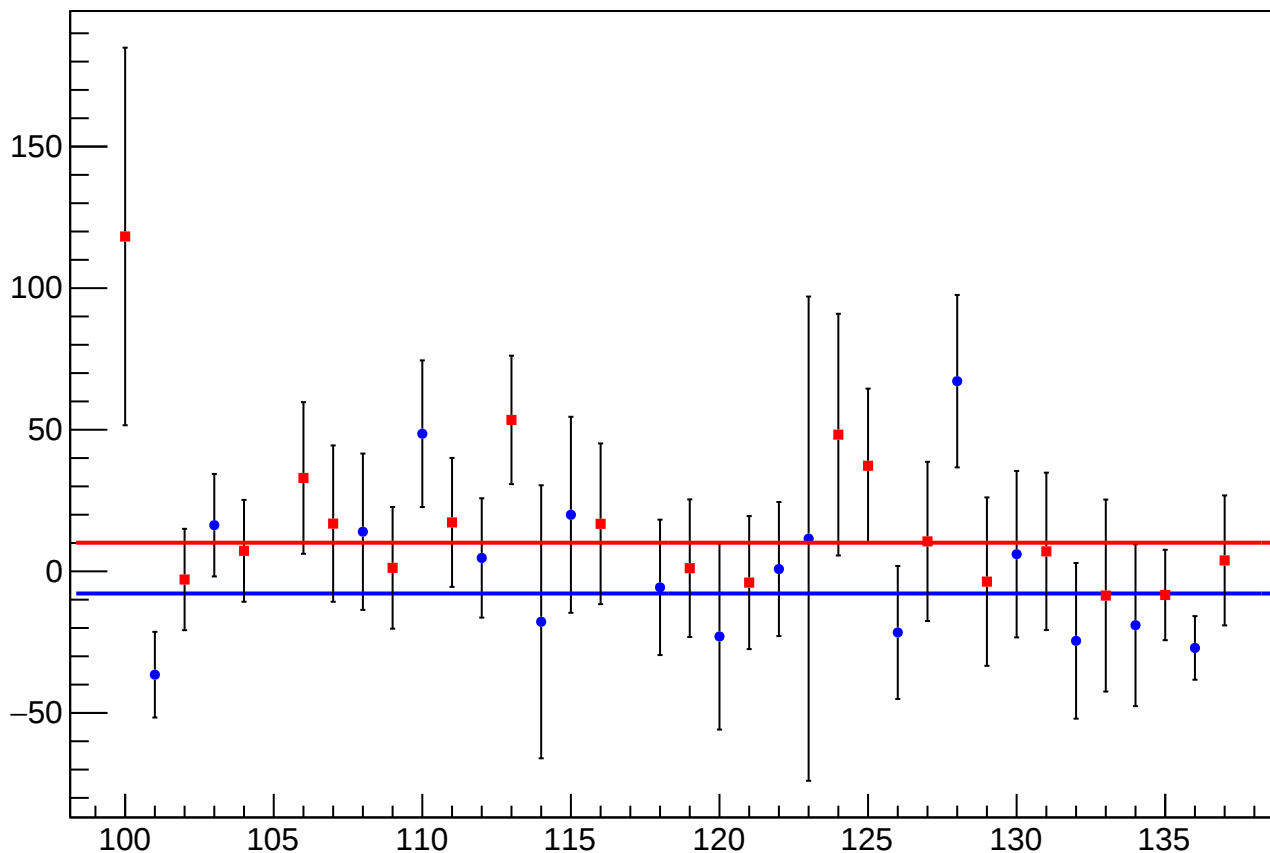
Right: 6956.947+/-1.360  $\chi^2/\text{NDF}$ : 1290110.2/35

In: 7070.672+/-1.984  $\chi^2/\text{NDF}$ : 601692.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 6956.947+/-1.360  $\chi^2/\text{NDF}$ : 1290110.2/35

# diff\_bpm4acX\_mean vs Slug, Sign Corrected



Right In: -7.825+/-5.516  $\chi^2/\text{NDF}$ : 22.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 10.117+/-5.571  $\chi^2/\text{NDF}$ : 12.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

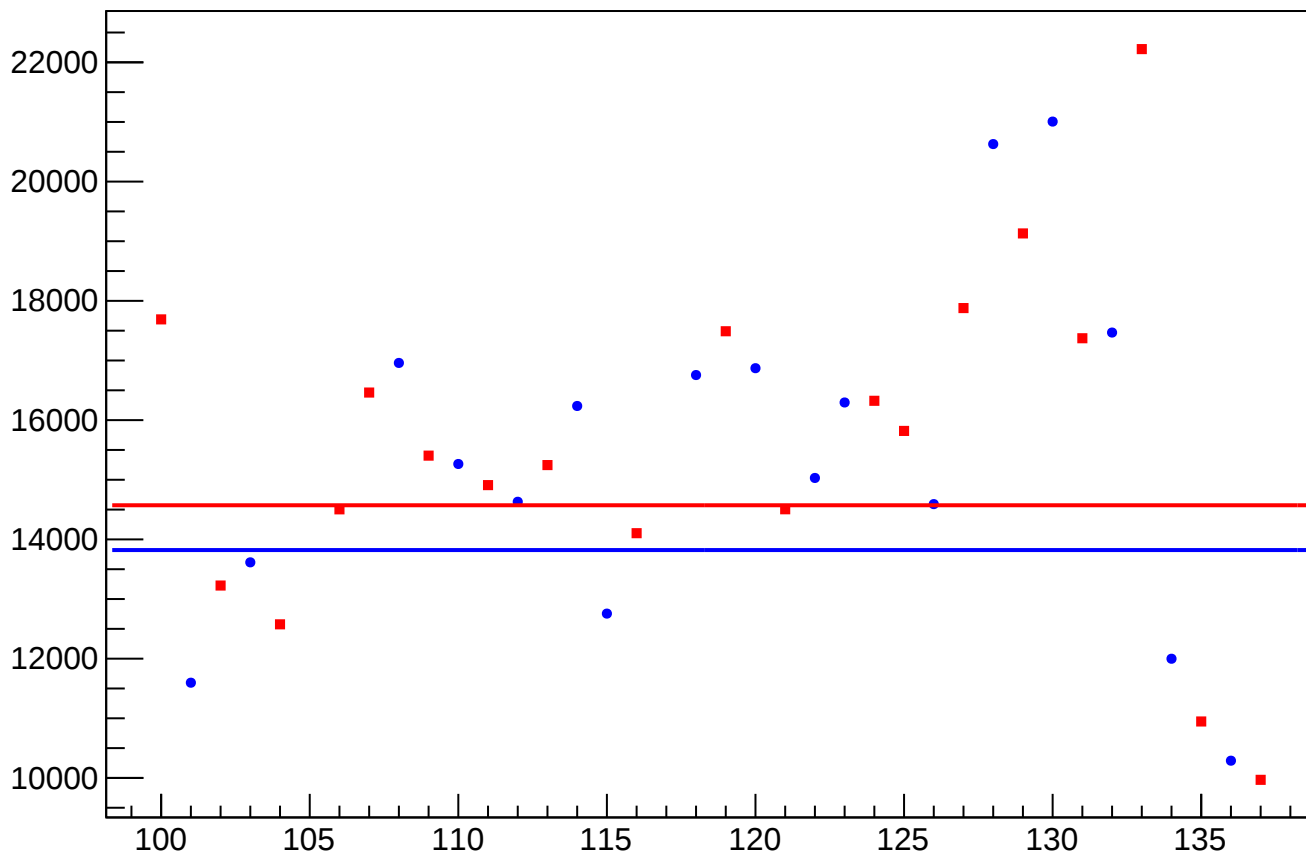
Right: 1.056+/-3.920  $\chi^2/\text{NDF}$ : 39.7/35

In: -7.825+/-5.516  $\chi^2/\text{NDF}$ : 22.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1.056+/-3.920  $\chi^2/\text{NDF}$ : 39.7/35

# diff\_bpm4acX\_rms vs Slug, Sign Corrected



Right In: 13821.195+/-3.900  $\chi^2/\text{NDF}$ : 602672.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 14572.437+/-3.939  $\chi^2/\text{NDF}$ : 472468.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

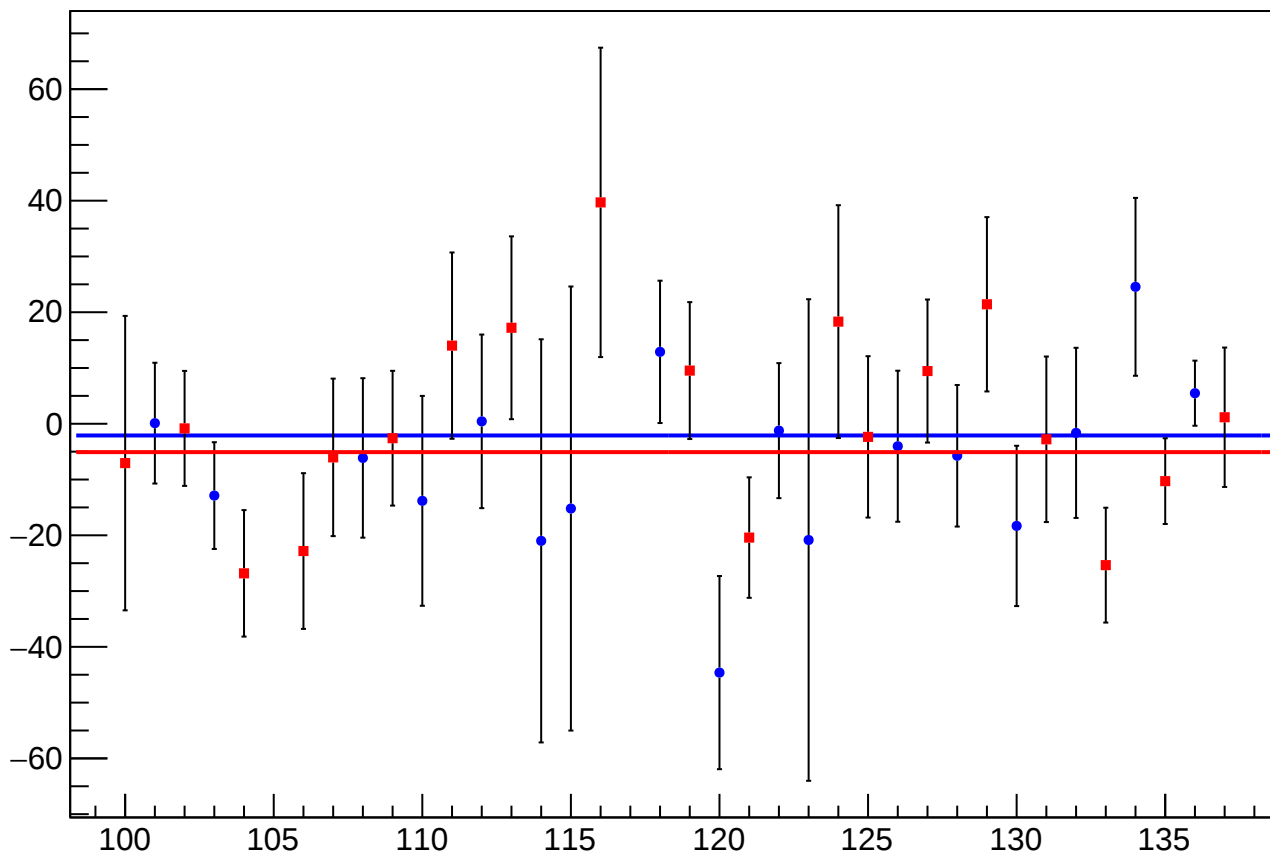
Right: 14193.062+/-2.772  $\chi^2/\text{NDF}$ : 1093505.5/35

In: 13821.195+/-3.900  $\chi^2/\text{NDF}$ : 602672.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 14193.062+/-2.772  $\chi^2/\text{NDF}$ : 1093505.5/35

# diff\_bpm4acY\_mean vs Slug, Sign Corrected



Right In:  $-2.098 \pm 3.106$   $\chi^2/\text{NDF}: 15.6/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-5.085 \pm 2.962$   $\chi^2/\text{NDF}: 24.8/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

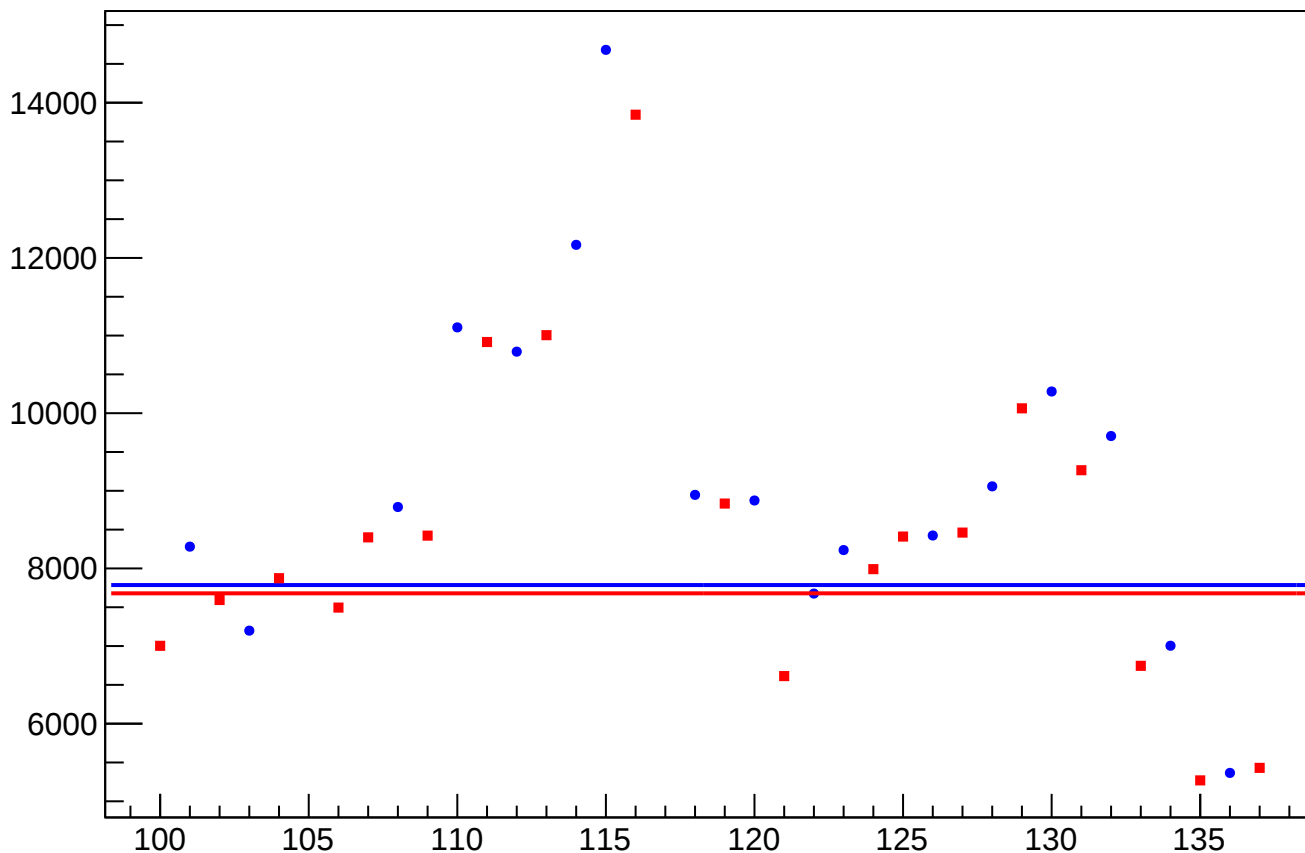
Right:  $-3.662 \pm 2.144$   $\chi^2/\text{NDF}: 40.9/35$

In:  $-2.098 \pm 3.106$   $\chi^2/\text{NDF}: 15.6/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-3.662 \pm 2.144$   $\chi^2/\text{NDF}: 40.9/35$

# diff\_bpm4acY\_rms vs Slug, Sign Corrected



Right In: 7785.931+/-2.197  $\chi^2/\text{NDF}$ : 738101.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 7679.182+/-2.095  $\chi^2/\text{NDF}$ : 668736.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

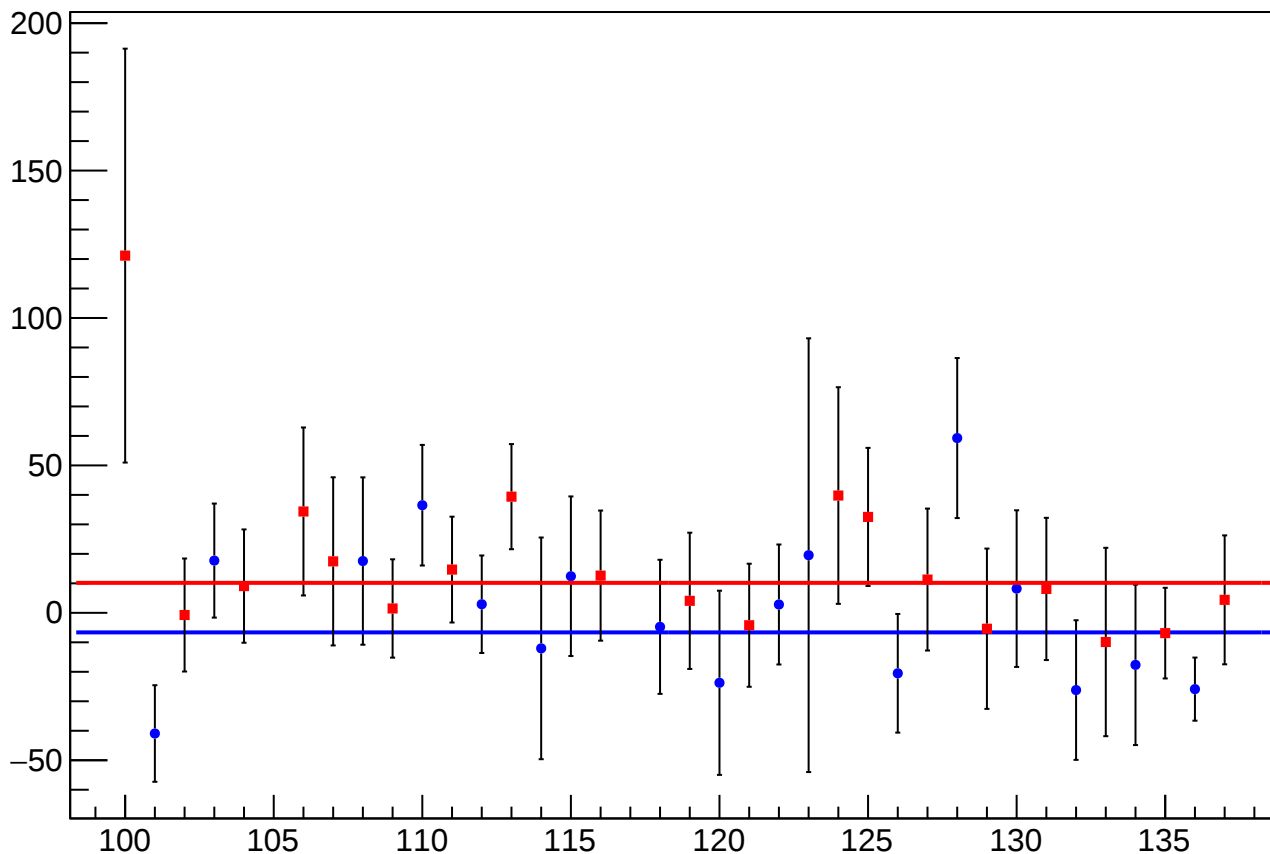
Right: 7730.020+/-1.516  $\chi^2/\text{NDF}$ : 1408075.7/35

In: 7785.931+/-2.197  $\chi^2/\text{NDF}$ : 738101.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 7730.020+/-1.516  $\chi^2/\text{NDF}$ : 1408075.7/35

# diff\_bpm4ecX\_mean vs Slug, Sign Corrected



Right In: -6.634 $\pm$ 5.101  $\chi^2$ /NDF: 23.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 10.172 $\pm$ 5.075  $\chi^2$ /NDF: 10.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

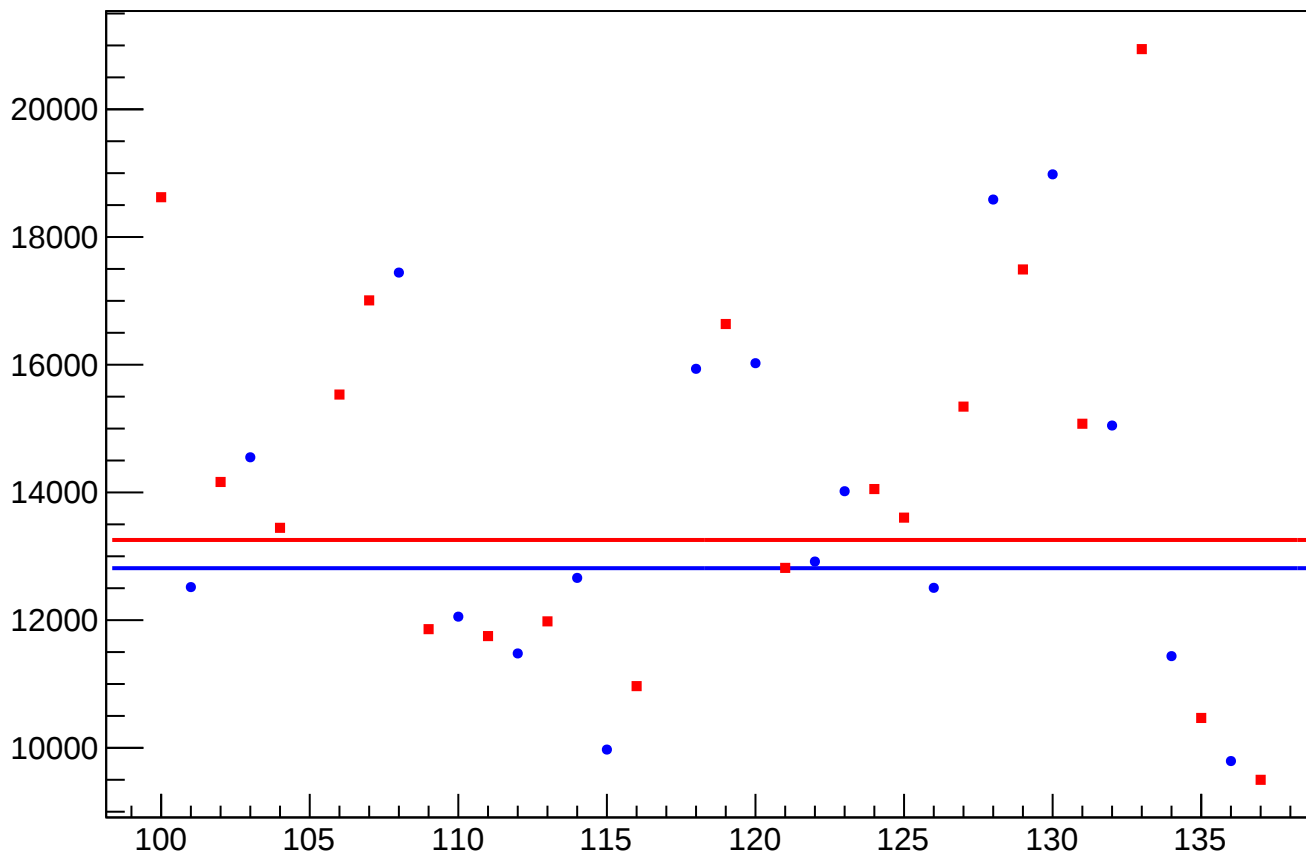
Right: 1.813 $\pm$ 3.598  $\chi^2$ /NDF: 39.7/35

In: -6.634 $\pm$ 5.101  $\chi^2$ /NDF:23.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1.813 $\pm$ 3.598  $\chi^2$ /NDF: 39.7/35

# diff\_bpm4ecX\_rms vs Slug, Sign Corrected



Right In: 12813.726+/-3.607  $\chi^2/\text{NDF}$ : 548127.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 13255.535+/-3.588  $\chi^2/\text{NDF}$ : 484287.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

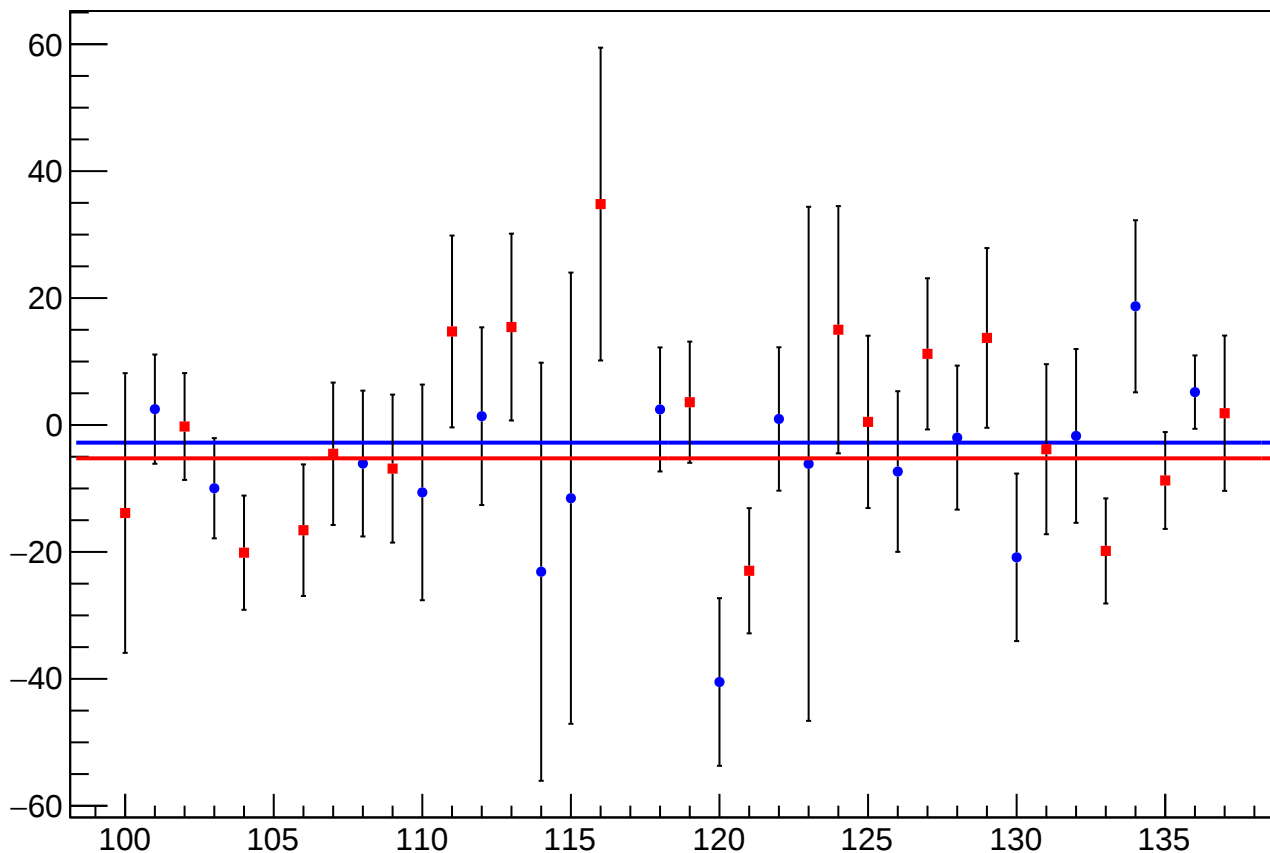
Right: 13035.784+/-2.544  $\chi^2/\text{NDF}$ : 1039954.9/35

In: 12813.726+/-3.607  $\chi^2/\text{NDF}$ : 548127.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 13035.784+/-2.544  $\chi^2/\text{NDF}$ : 1039954.9/35

# diff\_bpm4ecY\_mean vs Slug, Sign Corrected



Right In: -2.778 $\pm$ 2.747  $\chi^2$ /NDF: 17.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -5.252 $\pm$ 2.590  $\chi^2$ /NDF: 23.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

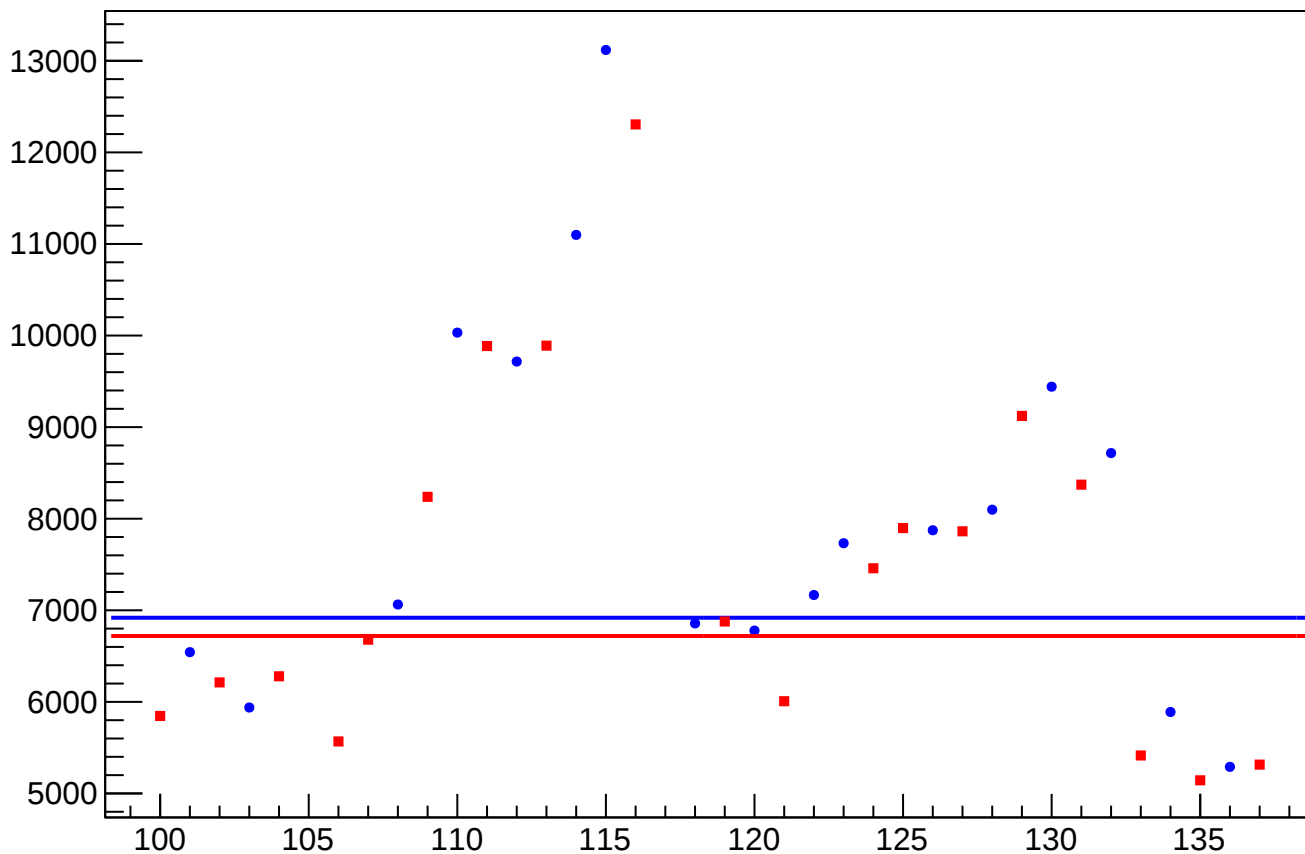
Right: -4.088 $\pm$ 1.884  $\chi^2$ /NDF: 41.0/35

In: -2.778 $\pm$ 2.747  $\chi^2$ /NDF:17.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -4.088 $\pm$ 1.884  $\chi^2$ /NDF: 41.0/35

# diff\_bpm4ecY\_rms vs Slug, Sign Corrected



Right In: 6918.554+/-1.943  $\chi^2/\text{NDF}$ : 587976.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 6719.404+/-1.831  $\chi^2/\text{NDF}$ : 653831.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

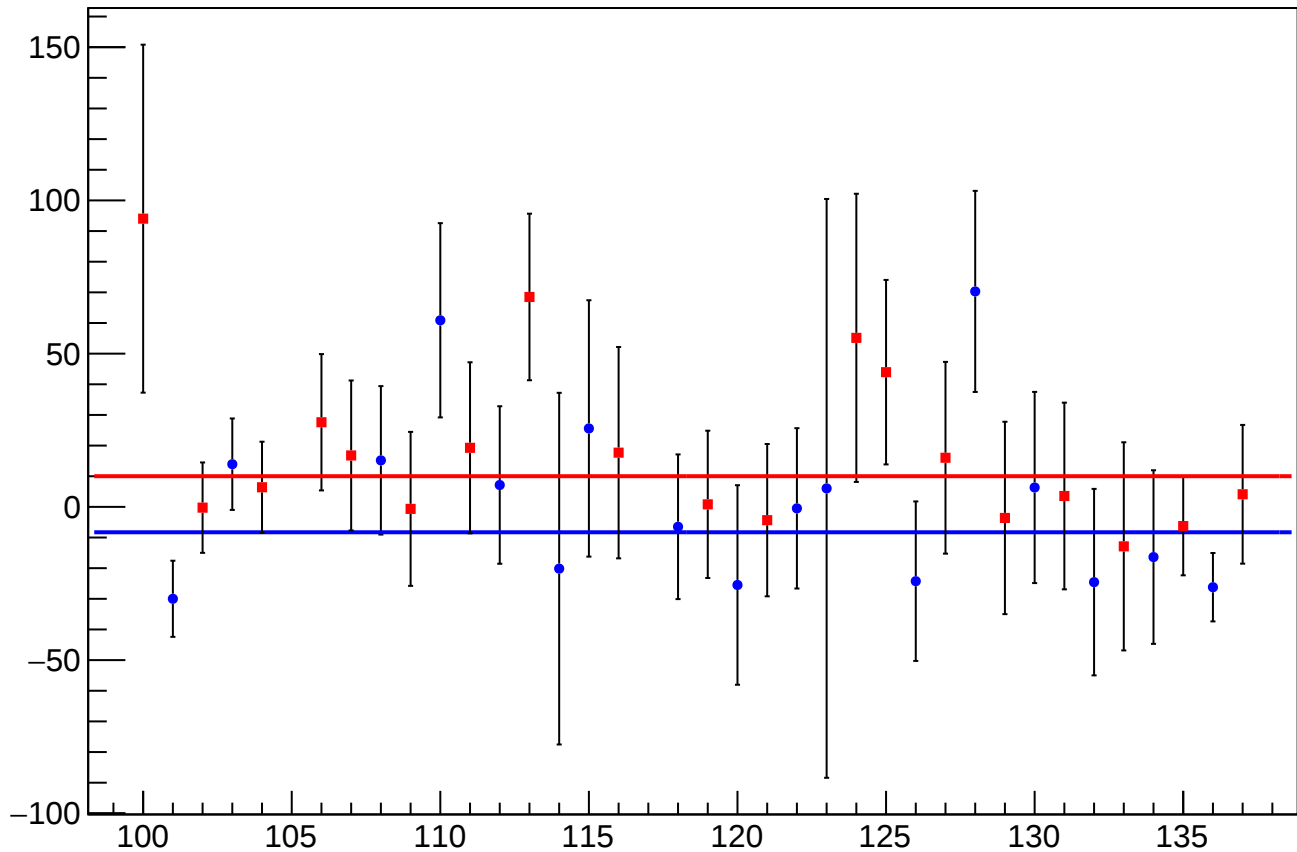
Right: 6813.106+/-1.332  $\chi^2/\text{NDF}$ : 1247373.6/35

In: 6918.554+/-1.943  $\chi^2/\text{NDF}$ : 587976.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 6813.106+/-1.332  $\chi^2/\text{NDF}$ : 1247373.6/35

# diff\_bpm1X\_mean vs Slug, Sign Corrected



Right In: -8.286+/-5.410  $\chi^2/\text{NDF}$ : 21.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 10.007+/-5.513  $\chi^2/\text{NDF}$ : 12.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

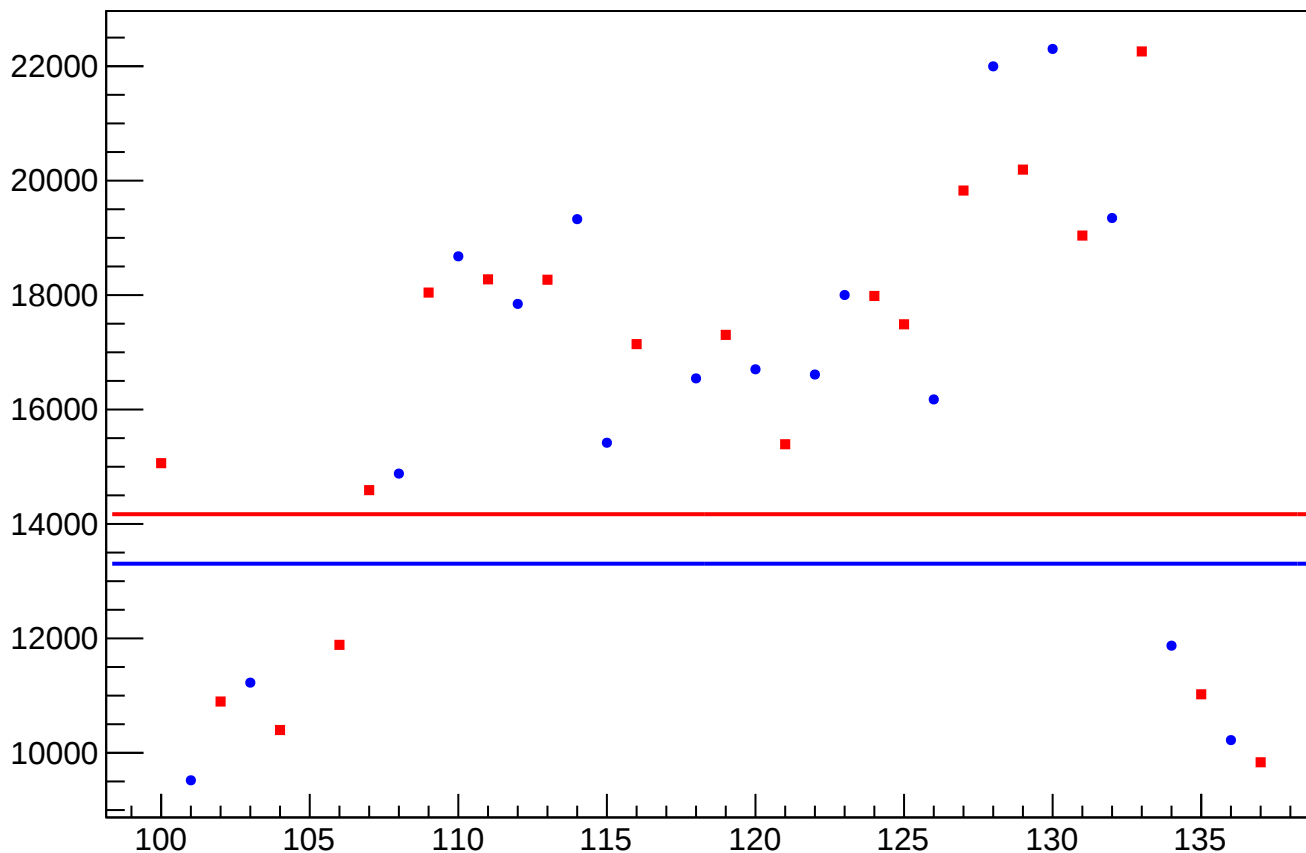
Right: 0.688+/-3.861  $\chi^2/\text{NDF}$ : 40.2/35

In: -8.286+/-5.410  $\chi^2/\text{NDF}$ : 21.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.688+/-3.861  $\chi^2/\text{NDF}$ : 40.2/35

# diff\_bpm1X\_rms vs Slug, Sign Corrected



Right In: 13305.410+/-3.826  $\chi^2/\text{NDF}$ : 1044091.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 14170.668+/-3.898  $\chi^2/\text{NDF}$ : 930612.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

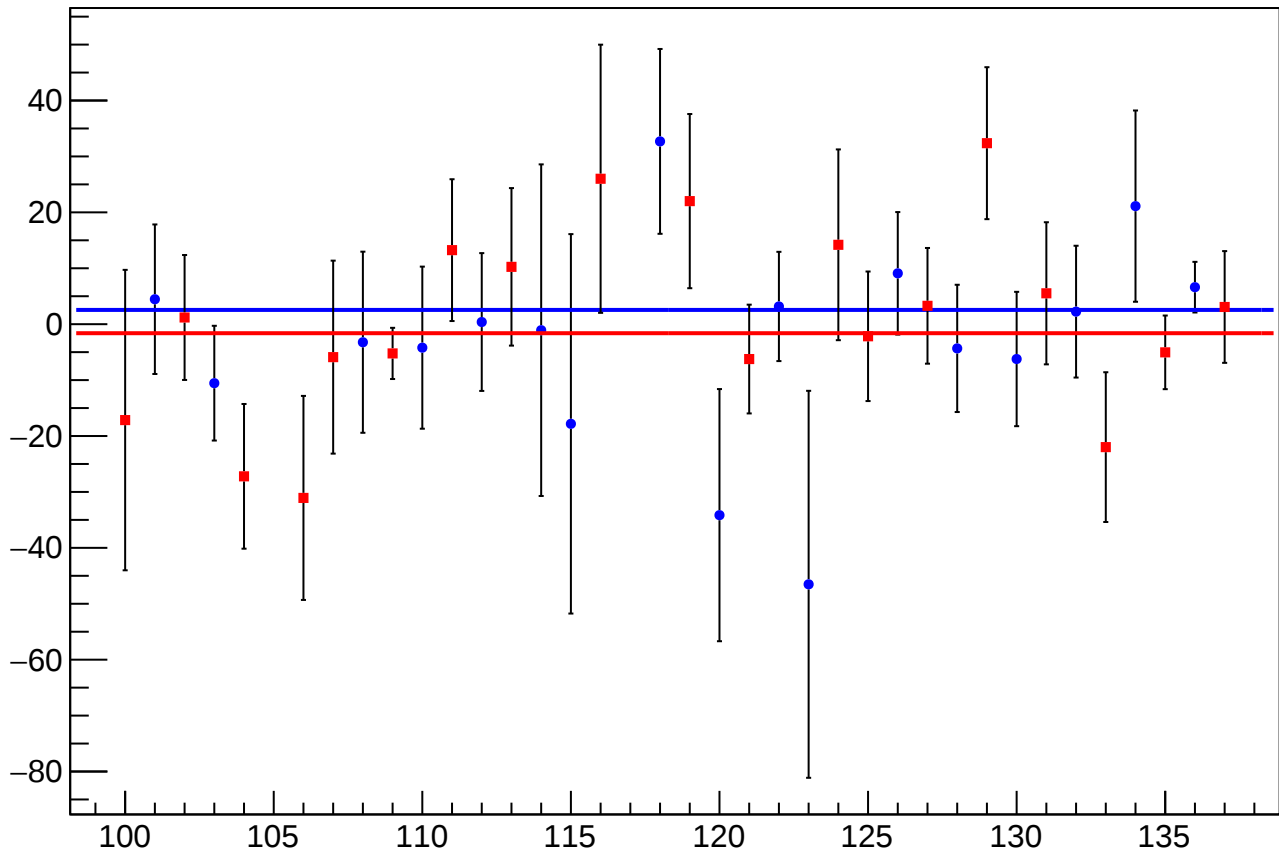
Right: 13729.884+/-2.730  $\chi^2/\text{NDF}$ : 1999799.5/35

In: 13305.410+/-3.826  $\chi^2/\text{NDF}$ : 1044091.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 13729.884+/-2.730  $\chi^2/\text{NDF}$ : 1999799.5/35

# diff\_bpm1Y\_mean vs Slug, Sign Corrected



Right In: 2.551+/-2.757  $\chi^2/\text{NDF}$ : 13.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1.613+/-2.442  $\chi^2/\text{NDF}$ : 24.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

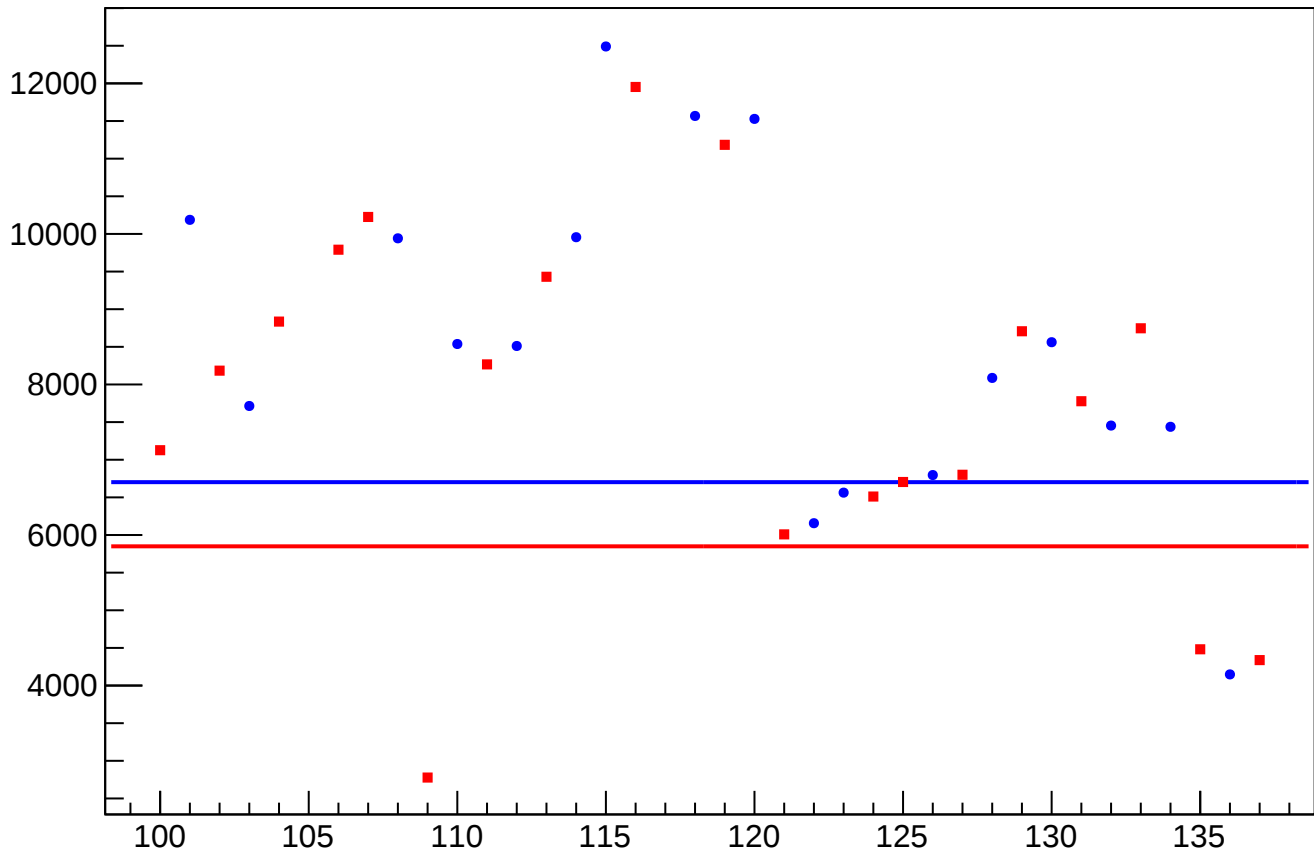
Right: 0.218+/-1.828  $\chi^2/\text{NDF}$ : 38.9/35

In: 2.551+/-2.757  $\chi^2/\text{NDF}$ : 13.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.218+/-1.828  $\chi^2/\text{NDF}$ : 38.9/35

# diff\_bpm1Y\_rms vs Slug, Sign Corrected



Right In: 6702.245+/-1.949  $\chi^2/\text{NDF}$ : 1389956.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 5849.606+/-1.727  $\chi^2/\text{NDF}$ : 2278464.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

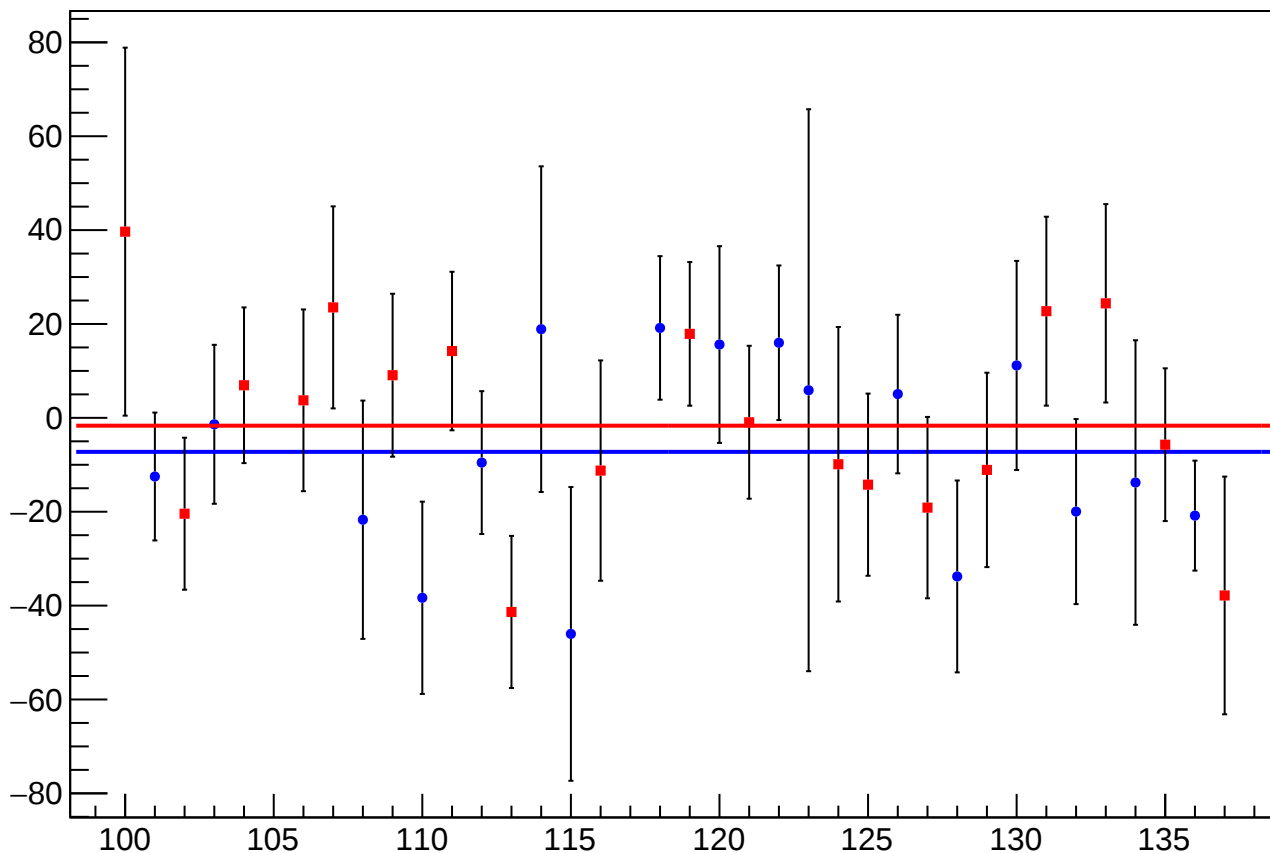
Right: 6224.538+/-1.293  $\chi^2/\text{NDF}$ : 3775609.7/35

In: 6702.245+/-1.949  $\chi^2/\text{NDF}$ : 1389956.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 6224.538+/-1.293  $\chi^2/\text{NDF}$ : 3775609.7/35

# diff\_bpm11X\_mean vs Slug, Sign Corrected



Right In: -7.245+/-4.547  $\chi^2/\text{NDF}$ : 15.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1.671+/-4.373  $\chi^2/\text{NDF}$ : 19.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

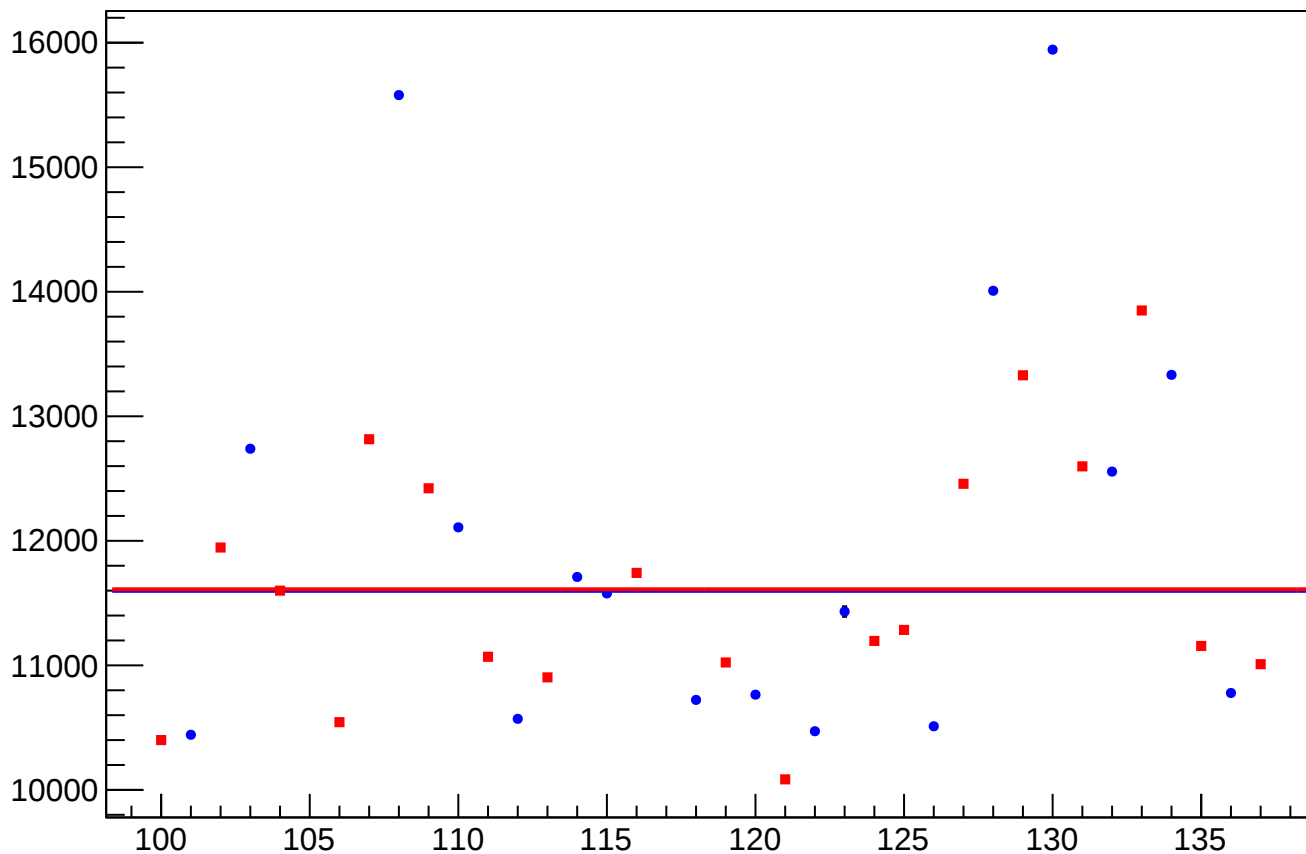
Right: -4.349+/-3.152  $\chi^2/\text{NDF}$ : 36.6/35

In: -7.245+/-4.547  $\chi^2/\text{NDF}$ : 15.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -4.349+/-3.152  $\chi^2/\text{NDF}$ : 36.6/35

# diff\_bpm11X\_rms vs Slug, Sign Corrected



Right In: 11598.751+/-3.215  $\chi^2/\text{NDF}$ : 235423.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 11610.941+/-3.092  $\chi^2/\text{NDF}$ : 94447.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

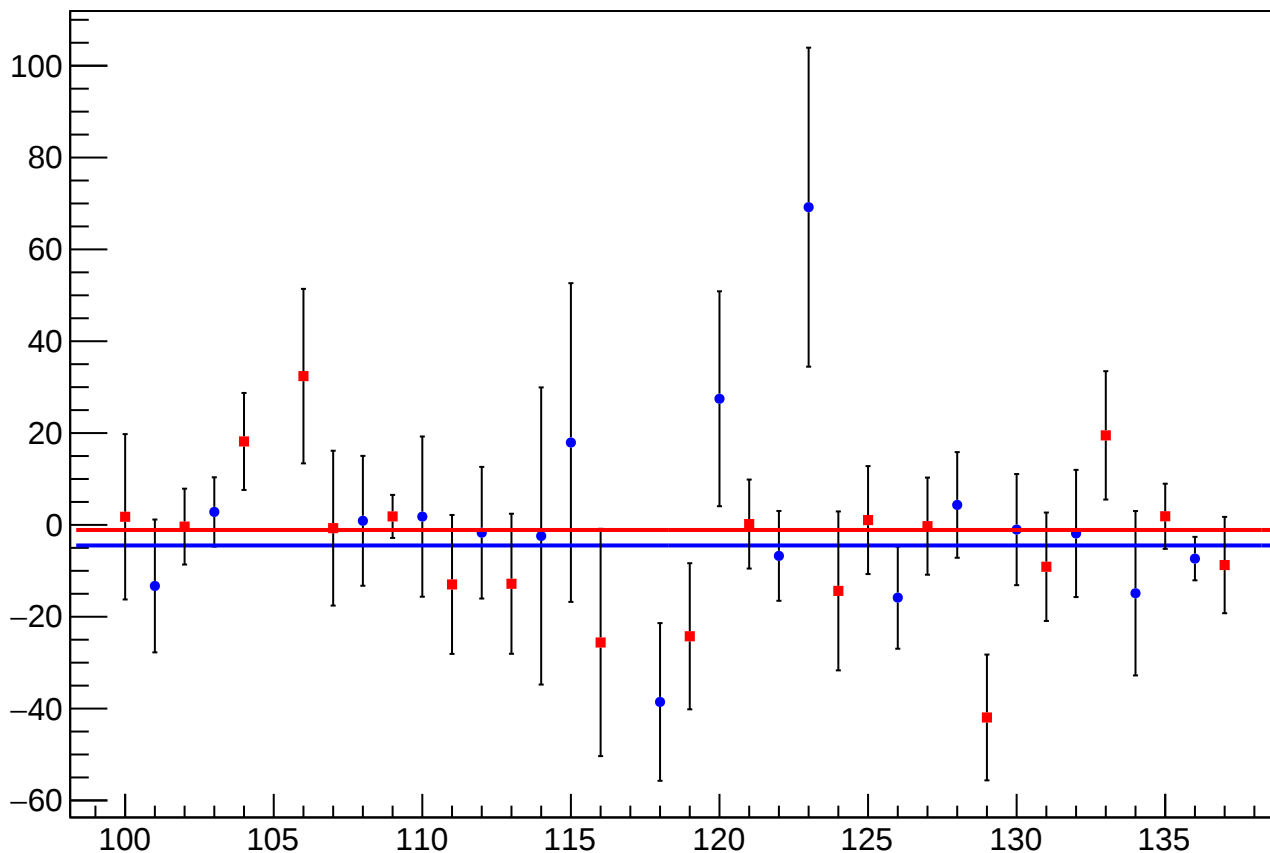
Right: 11605.084+/-2.229  $\chi^2/\text{NDF}$ : 329878.2/35

In: 11598.751+/-3.215  $\chi^2/\text{NDF}$ : 235423.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 11605.084+/-2.229  $\chi^2/\text{NDF}$ : 329878.2/35

# diff\_bpm11Y\_mean vs Slug, Sign Corrected



Right In: -4.476+/-2.782  $\chi^2/\text{NDF}$ : 14.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -1.105+/-2.429  $\chi^2/\text{NDF}$ : 24.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

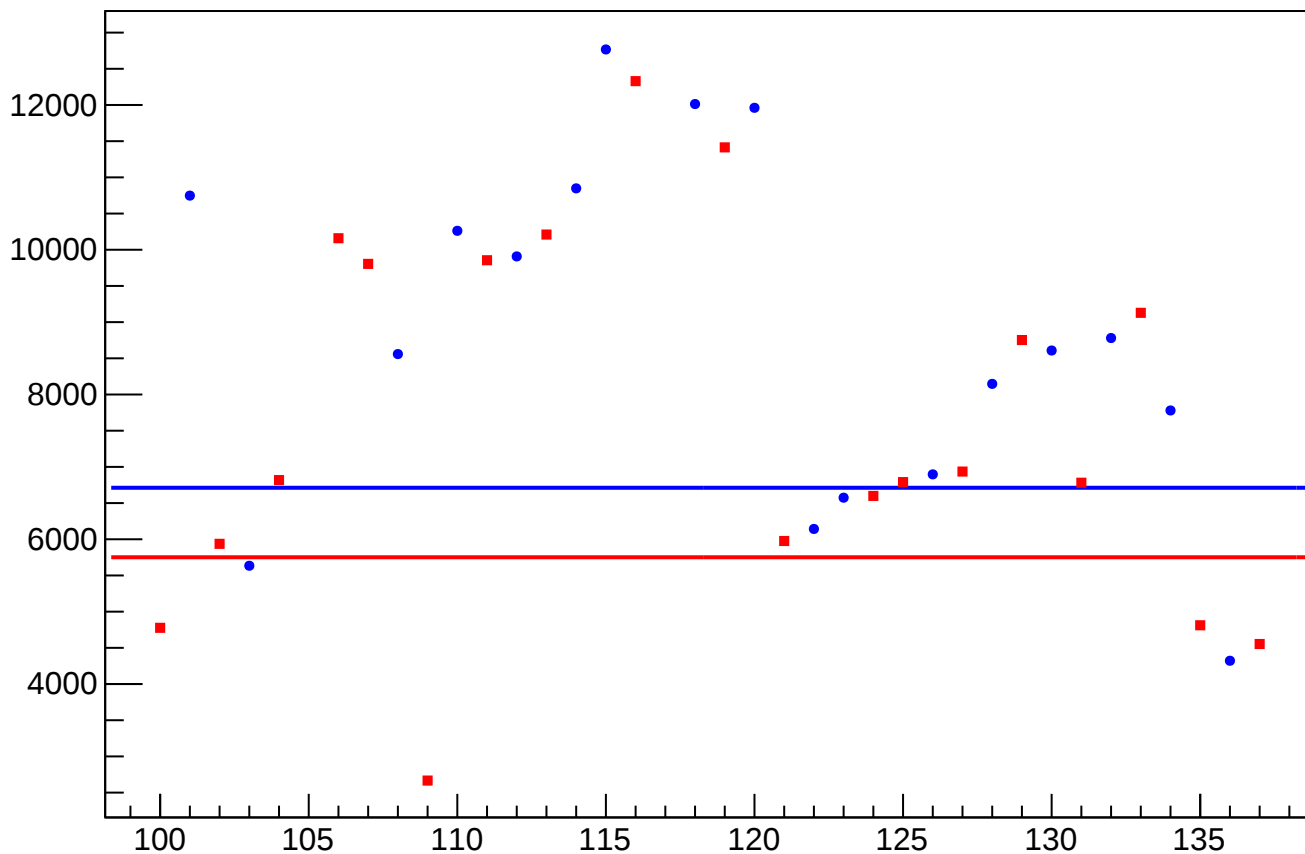
Right: -2.563+/-1.830  $\chi^2/\text{NDF}$ : 39.7/35

In: -4.476+/-2.782  $\chi^2/\text{NDF}$ :14.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -2.563+/-1.830  $\chi^2/\text{NDF}$ : 39.7/35

# diff\_bpm11Y\_rms vs Slug, Sign Corrected



Right In: 6711.550+/-1.967  $\chi^2/\text{NDF}$ : 1446972.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 5751.505+/-1.718  $\chi^2/\text{NDF}$ : 2165110.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

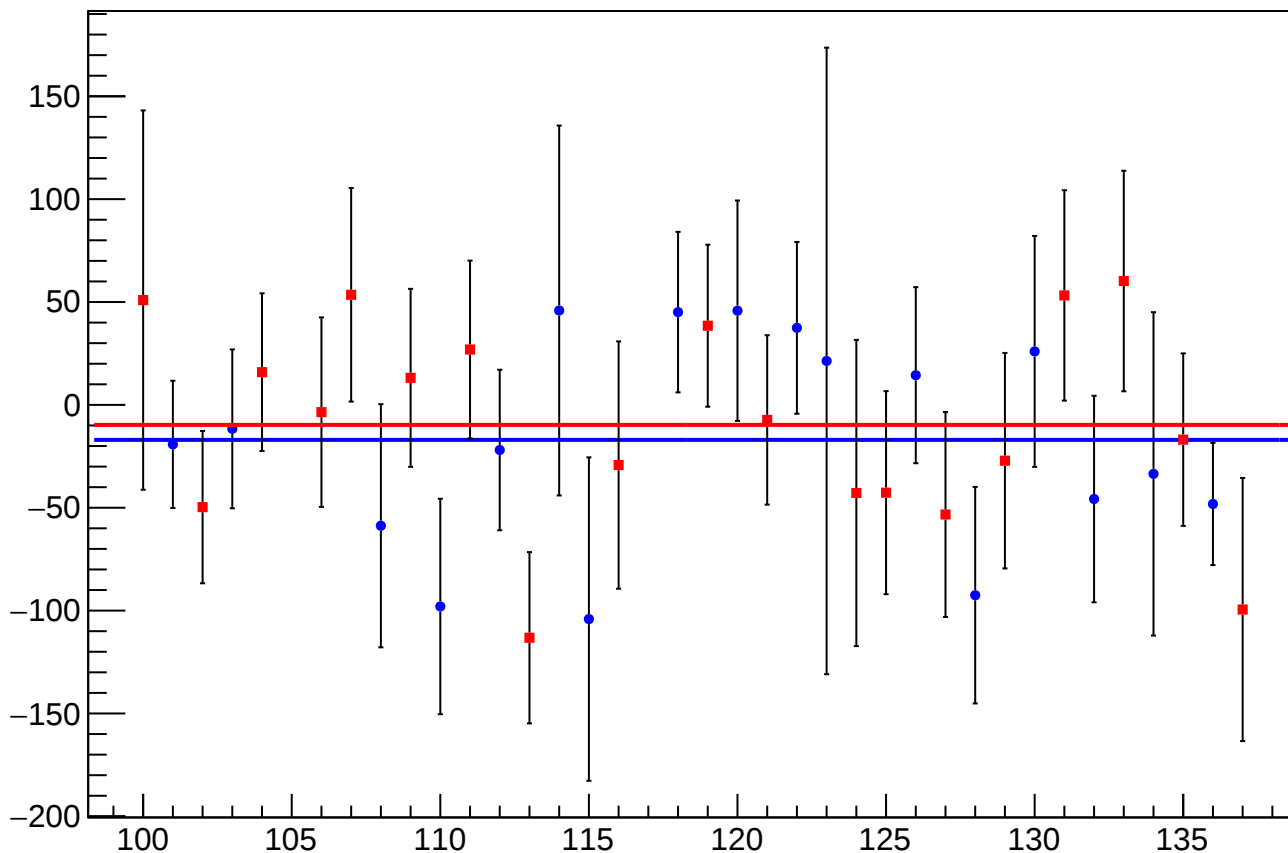
Right: 6166.836+/-1.294  $\chi^2/\text{NDF}$ : 3747249.5/35

In: 6711.550+/-1.967  $\chi^2/\text{NDF}$ : 1446972.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 6166.836+/-1.294  $\chi^2/\text{NDF}$ : 3747249.5/35

# diff\_bpm12X\_mean vs Slug, Sign Corrected



Right In:  $-17.010 \pm 11.287$   $\chi^2/\text{NDF}$ : 15.0/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-9.719 \pm 10.891$   $\chi^2/\text{NDF}$ : 19.1/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

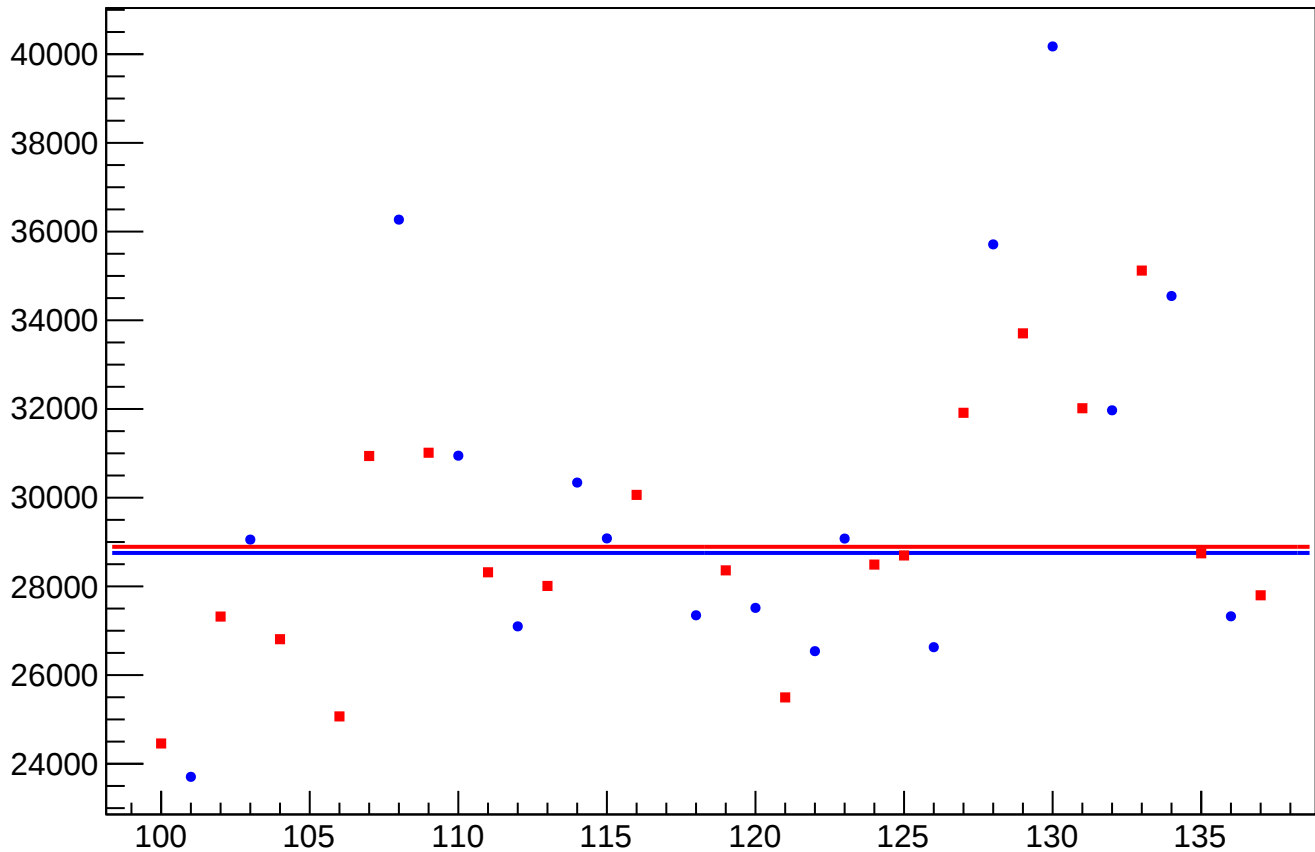
Right:  $-13.234 \pm 7.837$   $\chi^2/\text{NDF}$ : 34.3/35

In:  $-17.010 \pm 11.287$   $\chi^2/\text{NDF}$ : 15.0/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-13.234 \pm 7.837$   $\chi^2/\text{NDF}$ : 34.3/35

# diff\_bpm12X\_rms vs Slug, Sign Corrected



Right In: 28753.787+/-7.981  $\chi^2/\text{NDF}$ : 249215.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 28892.154+/-7.701  $\chi^2/\text{NDF}$ : 111241.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

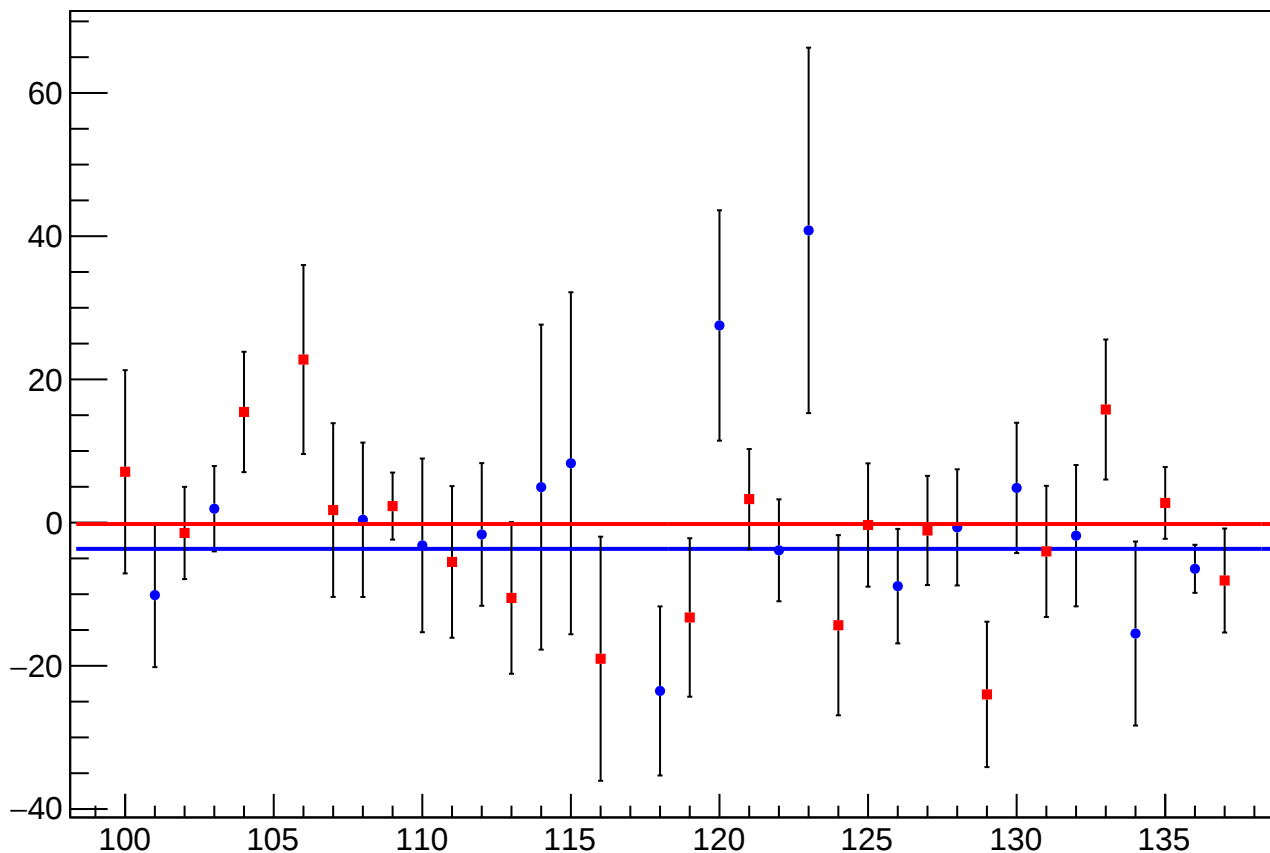
Right: 28825.443+/-5.542  $\chi^2/\text{NDF}$ : 360612.0/35

In: 28753.787+/-7.981  $\chi^2/\text{NDF}$ : 249215.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 28825.443+/-5.542  $\chi^2/\text{NDF}$ : 360612.0/35

# diff\_bpm12Y\_mean vs Slug, Sign Corrected



Right In: -3.668+/-2.010  $\chi^2/\text{NDF}$ : 14.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.199+/-1.893  $\chi^2/\text{NDF}$ : 22.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

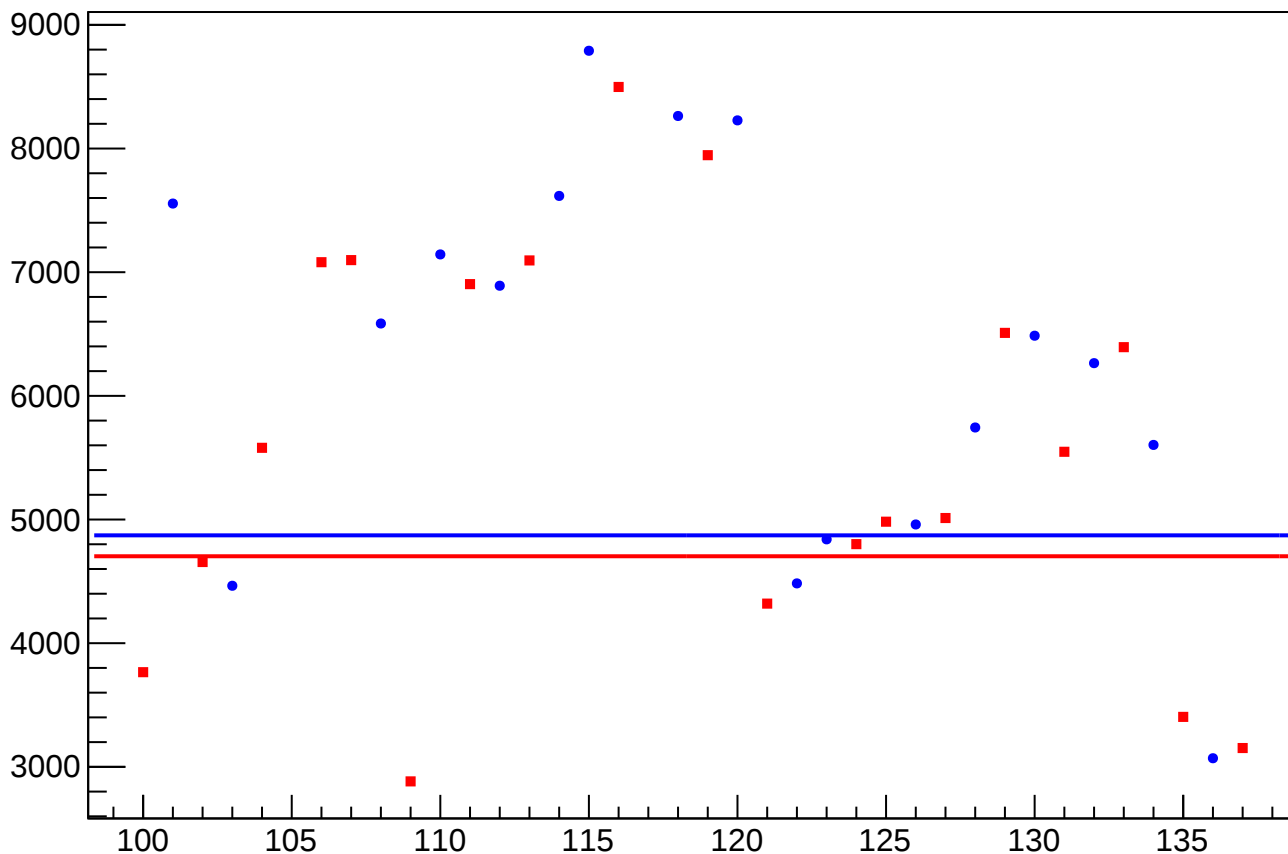
Right: -1.830+/-1.378  $\chi^2/\text{NDF}$ : 38.4/35

In: -3.668+/-2.010  $\chi^2/\text{NDF}$ : 14.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -1.830+/-1.378  $\chi^2/\text{NDF}$ : 38.4/35

# diff\_bpm12Y\_rms vs Slug, Sign Corrected



Right In: 4872.105+/-1.421  $\chi^2/\text{NDF}$ : 1405253.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 4702.994+/-1.338  $\chi^2/\text{NDF}$ : 1312720.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

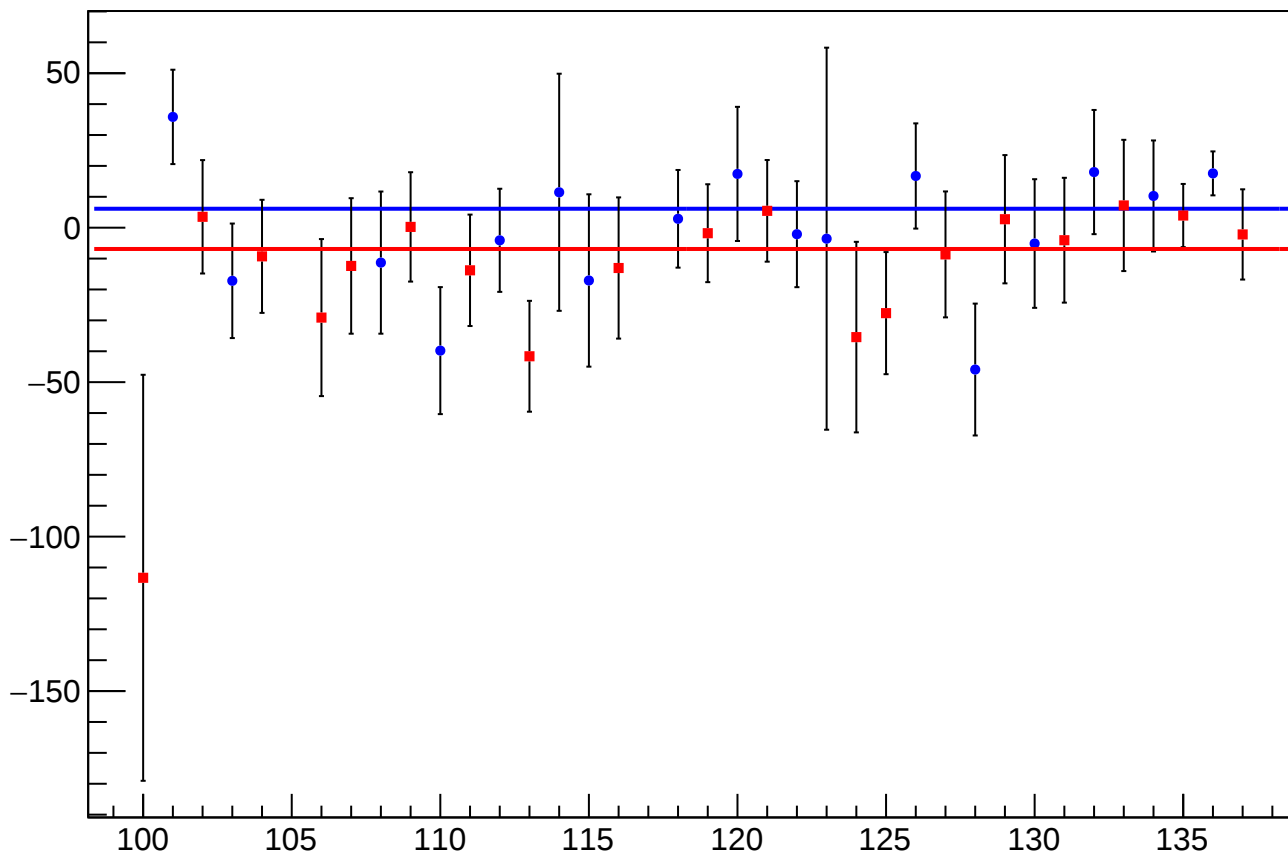
Right: 4782.480+/-0.974  $\chi^2/\text{NDF}$ : 2725478.8/35

In: 4872.105+/-1.421  $\chi^2/\text{NDF}$ : 1405253.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 4782.480+/-0.974  $\chi^2/\text{NDF}$ : 2725478.8/35

# diff\_bpm16X\_mean vs Slug, Sign Corrected



Right In: 6.133+/-4.080  $\chi^2/\text{NDF}$ : 22.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -6.892+/-4.224  $\chi^2/\text{NDF}$ : 12.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

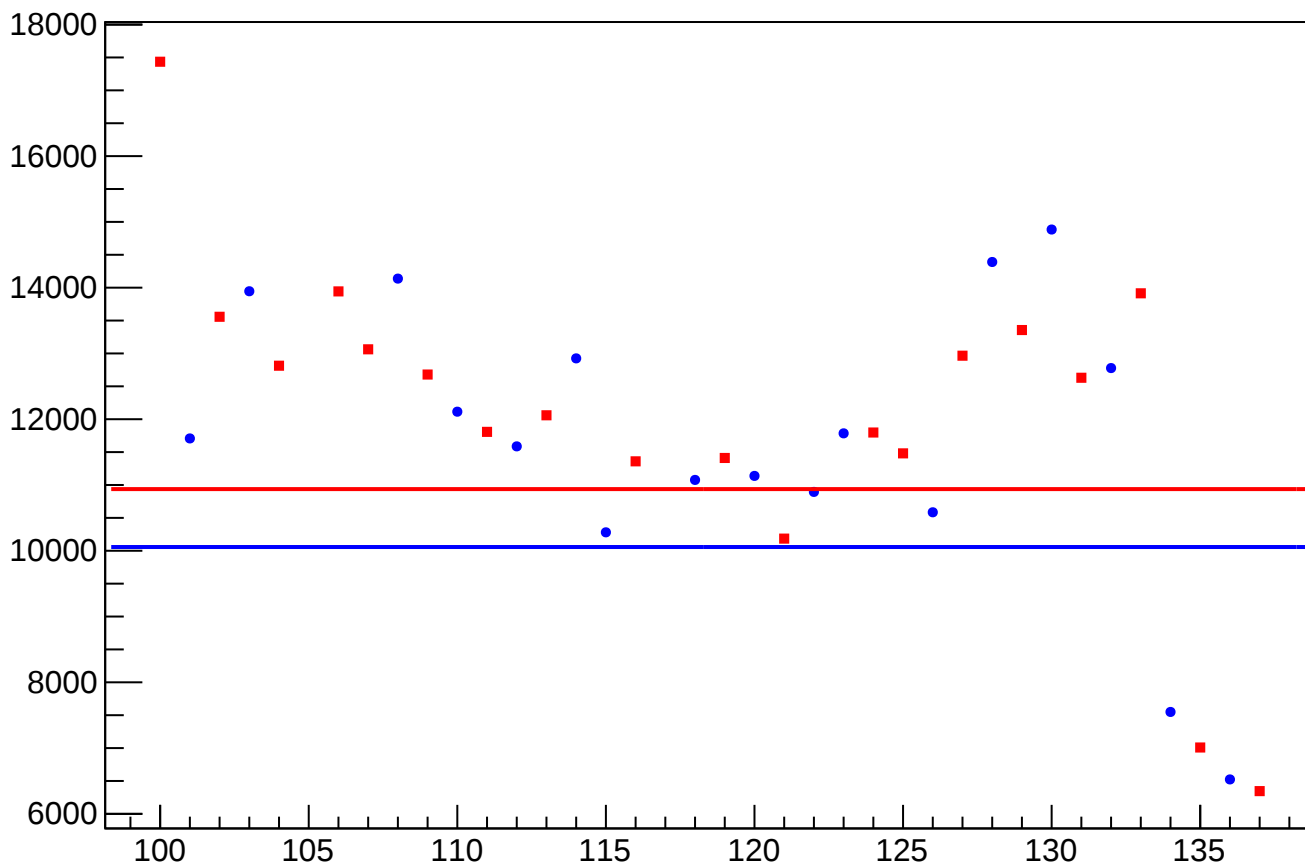
Right: -0.153+/-2.935  $\chi^2/\text{NDF}$ : 39.6/35

In: 6.133+/-4.080  $\chi^2/\text{NDF}$ : 22.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.153+/-2.935  $\chi^2/\text{NDF}$ : 39.6/35

# diff\_bpm16X\_rms vs Slug, Sign Corrected



Right In: 10056.991+/-2.885  $\chi^2/\text{NDF}$ : 1002872.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 10937.573+/-2.987  $\chi^2/\text{NDF}$ : 762909.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

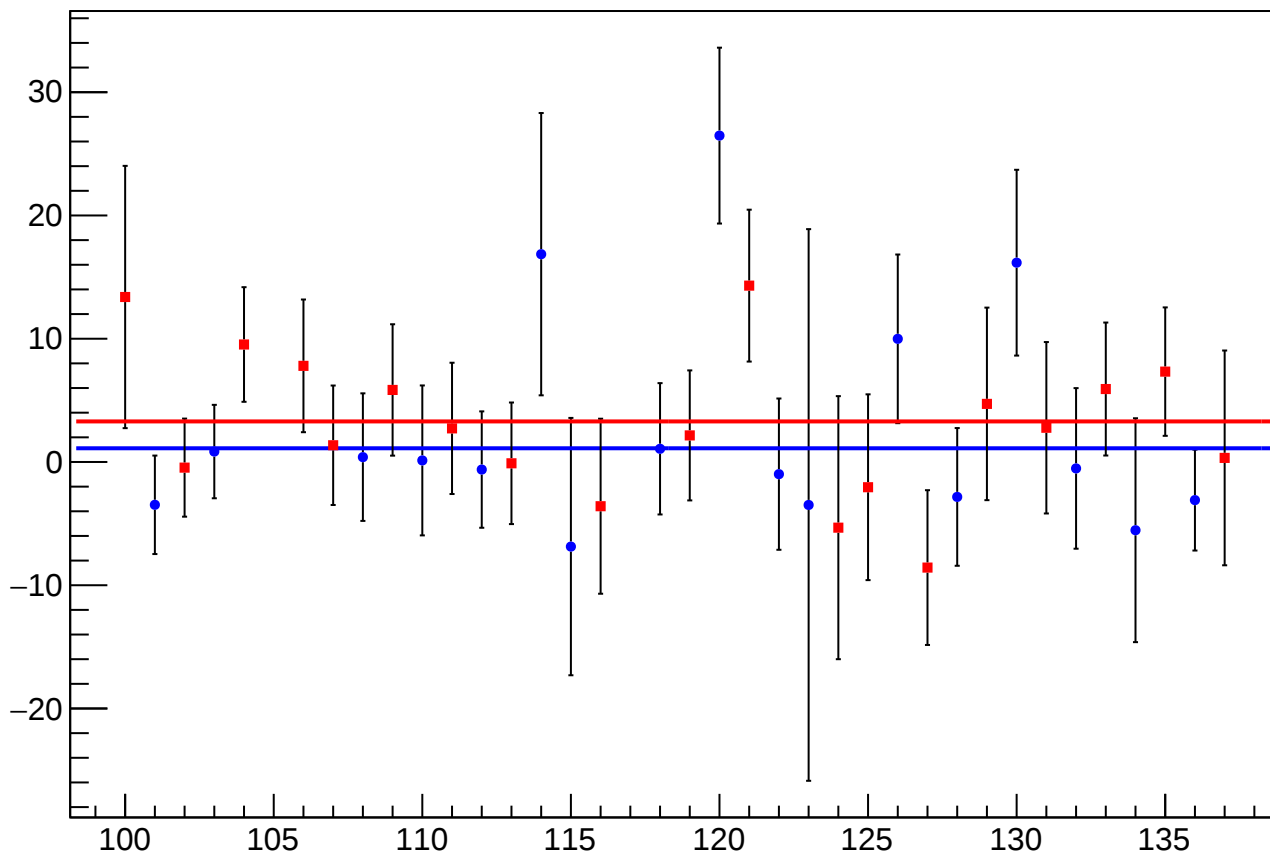
Right: 10481.996+/-2.075  $\chi^2/\text{NDF}$ : 1810742.6/35

In: 10056.991+/-2.885  $\chi^2/\text{NDF}$ : 1002872.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 10481.996+/-2.075  $\chi^2/\text{NDF}$ : 1810742.6/35

# diff\_bpm16Y\_mean vs Slug, Sign Corrected



Right In: 1.112 $\pm$ 1.403  $\chi^2$ /NDF: 24.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 3.290 $\pm$ 1.334  $\chi^2$ /NDF: 15.1/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

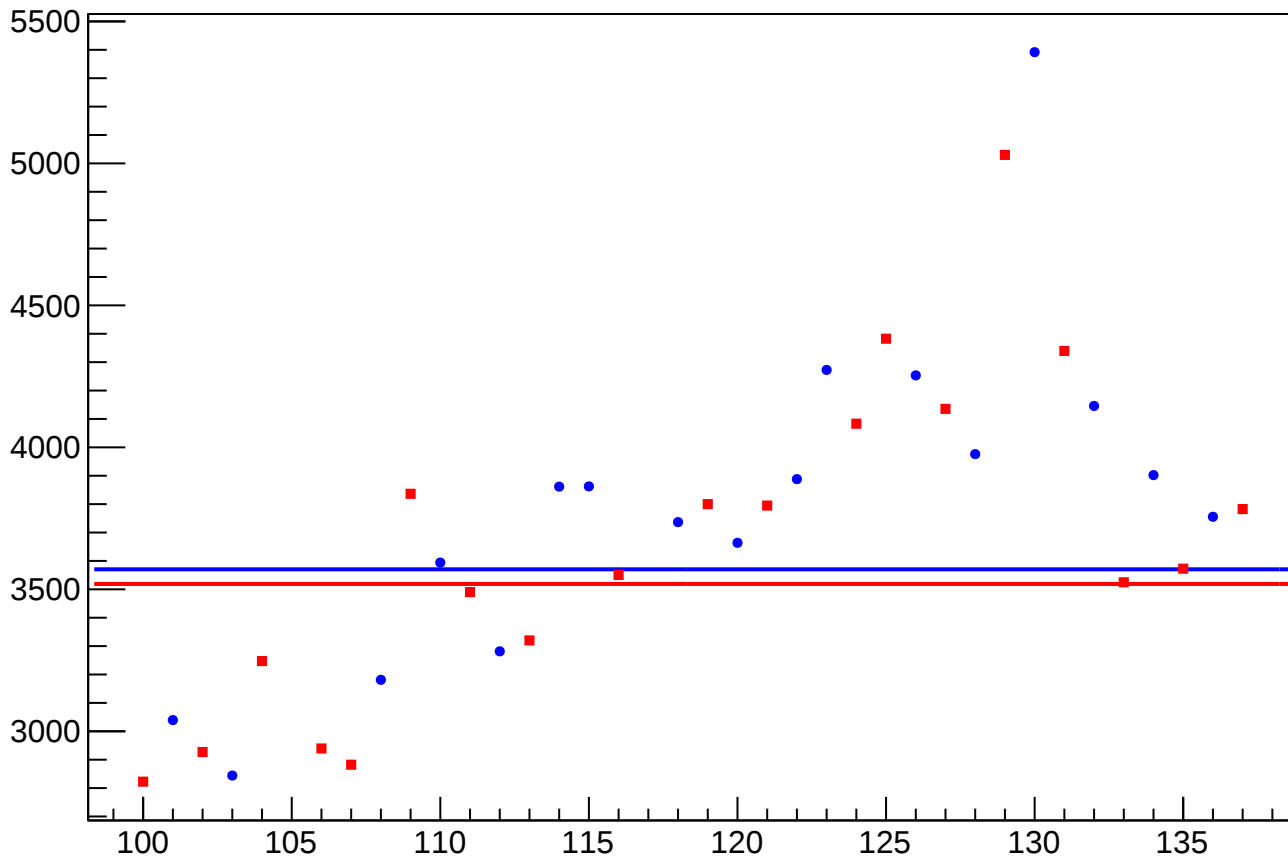
Right: 2.256 $\pm$ 0.967  $\chi^2$ /NDF: 40.9/35

In: 1.112 $\pm$ 1.403  $\chi^2$ /NDF:24.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 2.256 $\pm$ 0.967  $\chi^2$ /NDF: 40.9/35

# diff\_bpm16Y\_rms vs Slug, Sign Corrected



Right In: 3570.481+/-0.992  $\chi^2/\text{NDF}$ : 309699.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3518.886+/-0.943  $\chi^2/\text{NDF}$ : 293392.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

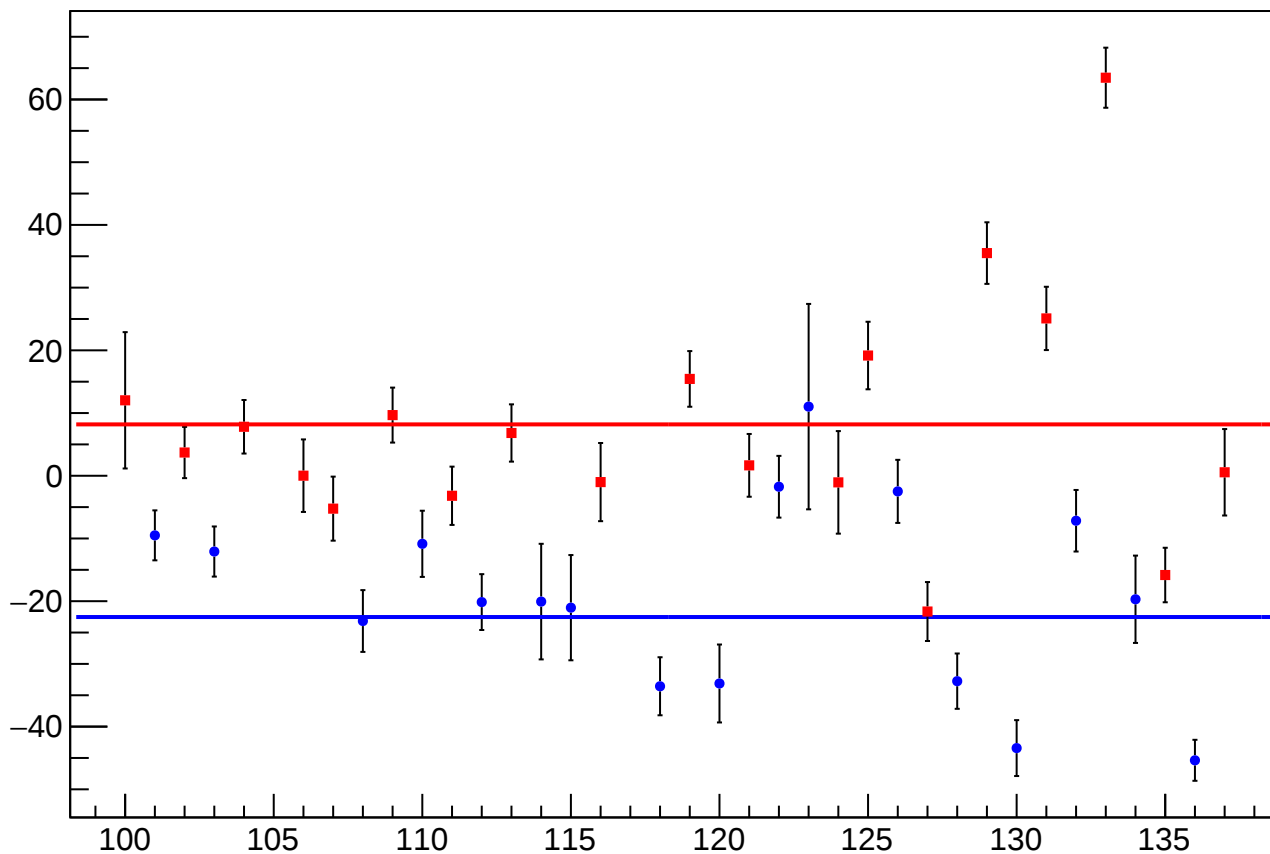
Right: 3543.379+/-0.683  $\chi^2/\text{NDF}$ : 604512.8/35

In: 3570.481+/-0.992  $\chi^2/\text{NDF}$ : 309699.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3543.379+/-0.683  $\chi^2/\text{NDF}$ : 604512.8/35

# diff\_bpm0l01X\_mean vs Slug, Sign Corrected



Right In: -22.526+/-1.201  $\chi^2/\text{NDF}$ : 155.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 8.192+/-1.157  $\chi^2/\text{NDF}$ : 275.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

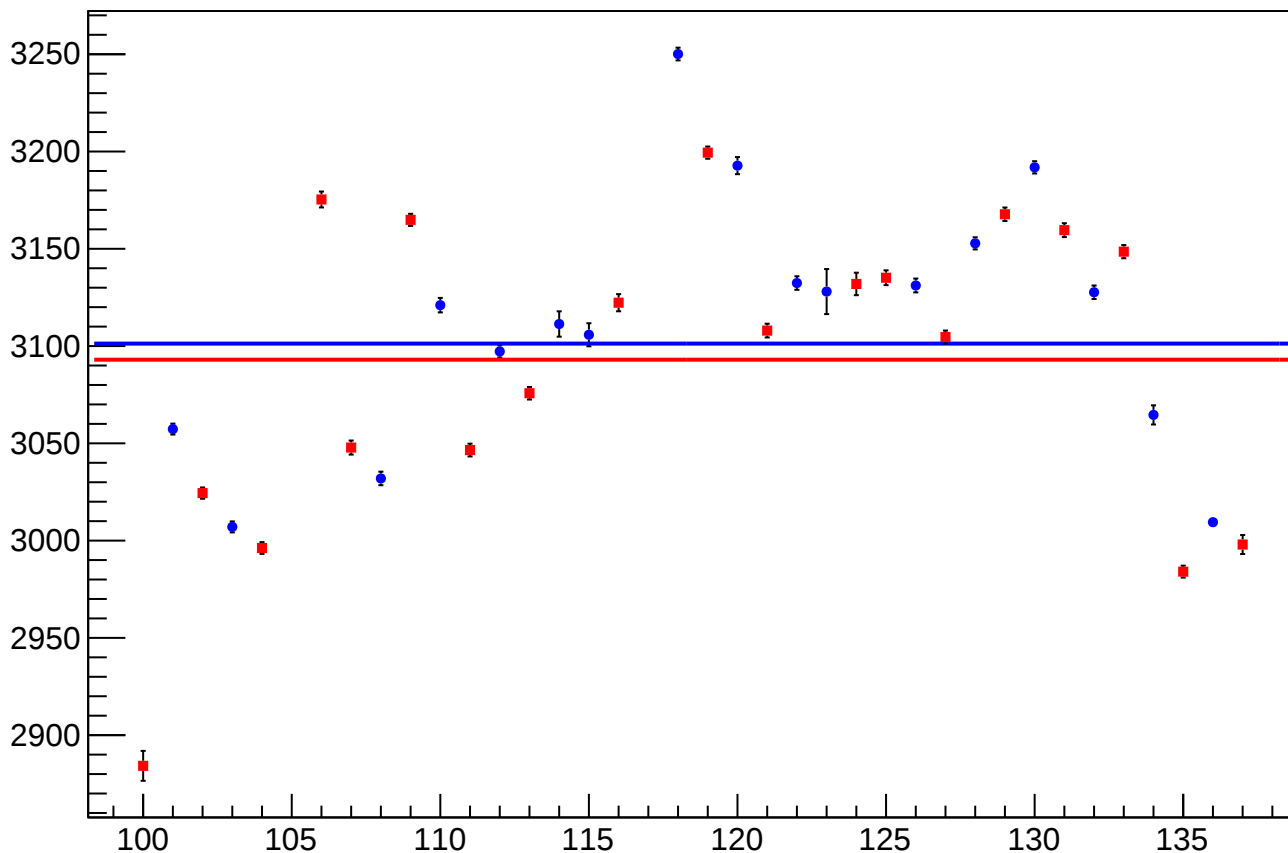
Right: -6.598+/-0.833  $\chi^2/\text{NDF}$ : 770.8/35

In: -22.526+/-1.201  $\chi^2/\text{NDF}$ : 155.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -6.598+/-0.833  $\chi^2/\text{NDF}$ : 770.8/35

# diff\_bpm0l01X\_rms vs Slug, Sign Corrected



Right In: 3101.270+/-0.849  $\chi^2/\text{NDF}$ : 7233.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3092.993+/-0.818  $\chi^2/\text{NDF}$ : 7766.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

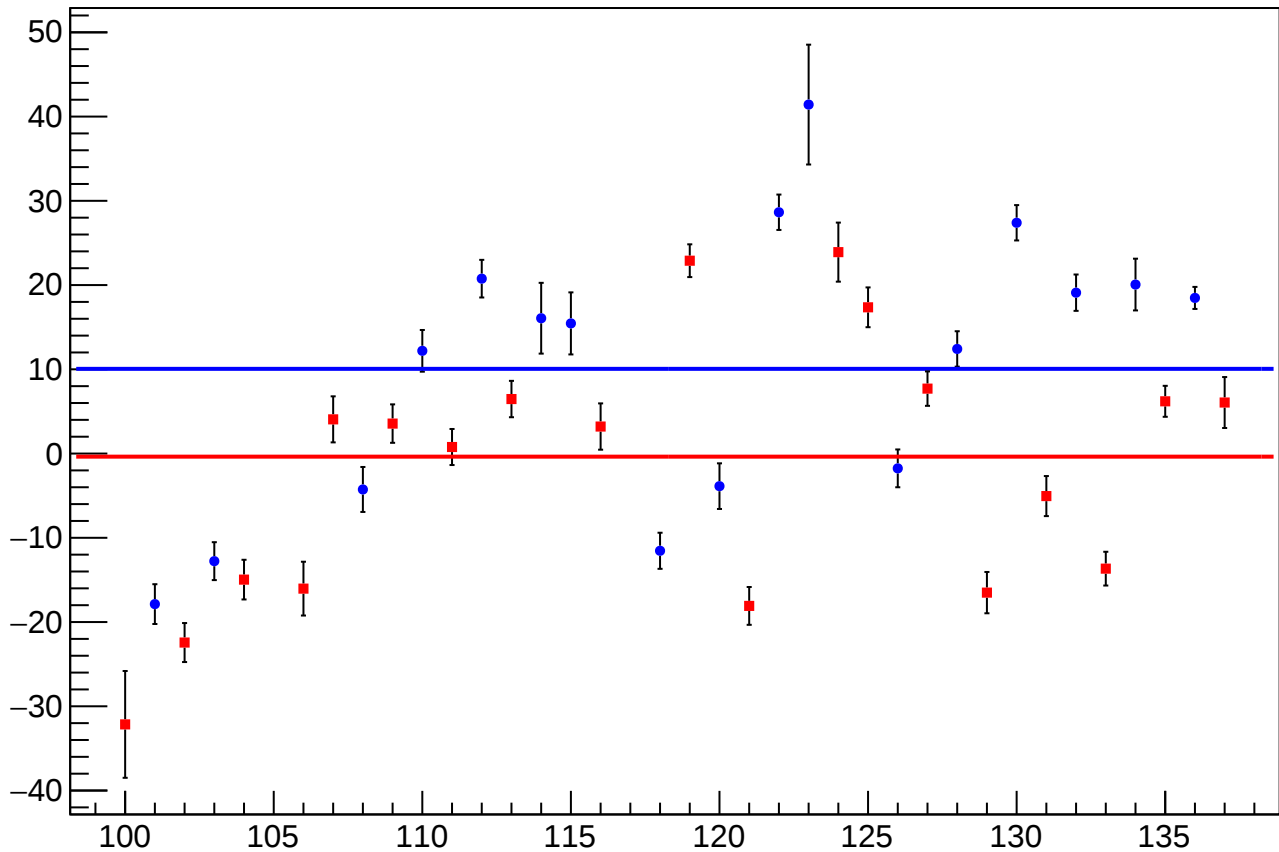
Right: 3096.979+/-0.589  $\chi^2/\text{NDF}$ : 15049.1/35

In: 3101.270+/-0.849  $\chi^2/\text{NDF}$ : 7233.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3096.979+/-0.589  $\chi^2/\text{NDF}$ : 15049.1/35

# diff\_bpm0l01Y\_mean vs Slug, Sign Corrected



Right In: 10.055+/-0.562  $\chi^2/\text{NDF}$ : 692.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.367+/-0.547  $\chi^2/\text{NDF}$ : 629.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

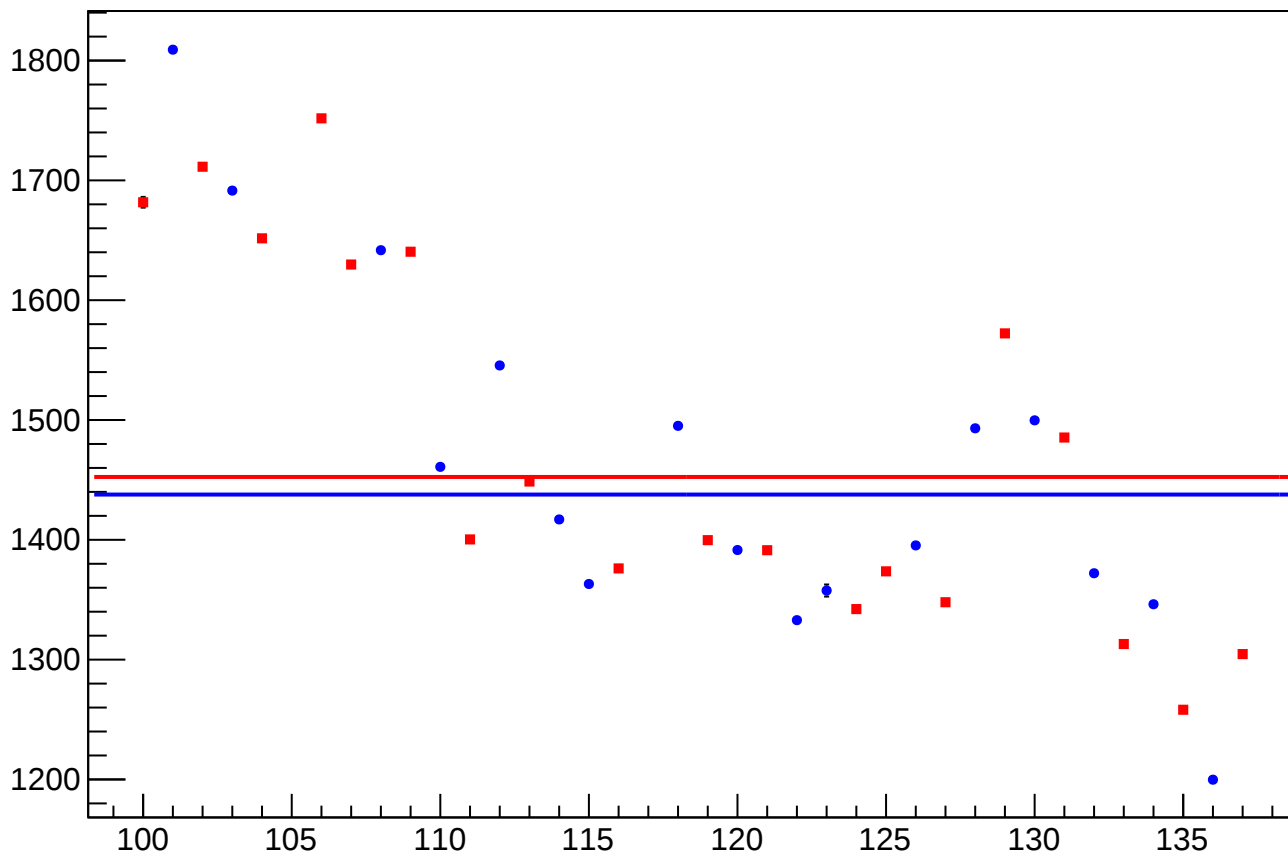
Right: 4.707+/-0.392  $\chi^2/\text{NDF}$ : 1498.8/35

In: 10.055+/-0.562  $\chi^2/\text{NDF}$ : 692.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 4.707+/-0.392  $\chi^2/\text{NDF}$ : 1498.8/35

# diff\_bpm0l01Y\_rms vs Slug, Sign Corrected



Right In: 1437.776+/-0.397  $\chi^2/\text{NDF}$ : 173216.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1452.469+/-0.387  $\chi^2/\text{NDF}$ : 138605.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

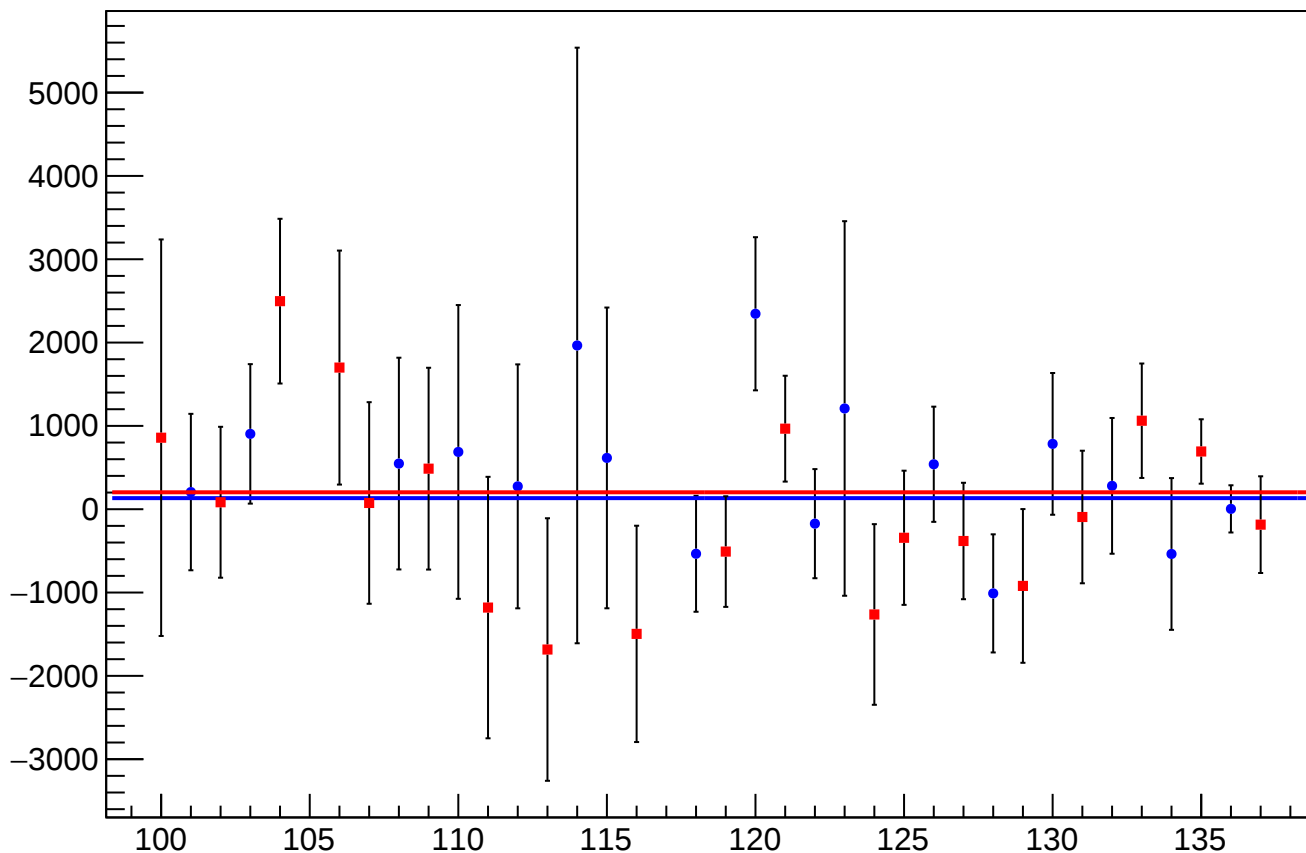
Right: 1445.316+/-0.277  $\chi^2/\text{NDF}$ : 312524.3/35

In: 1437.776+/-0.397  $\chi^2/\text{NDF}$ : 173216.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1445.316+/-0.277  $\chi^2/\text{NDF}$ : 312524.3/35

# asym\_sam1\_mean vs Slug, Sign Corrected



Right In: 132.921 $\pm$ 180.271  $\chi^2$ /NDF: 12.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 203.062 $\pm$ 184.353  $\chi^2$ /NDF: 21.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

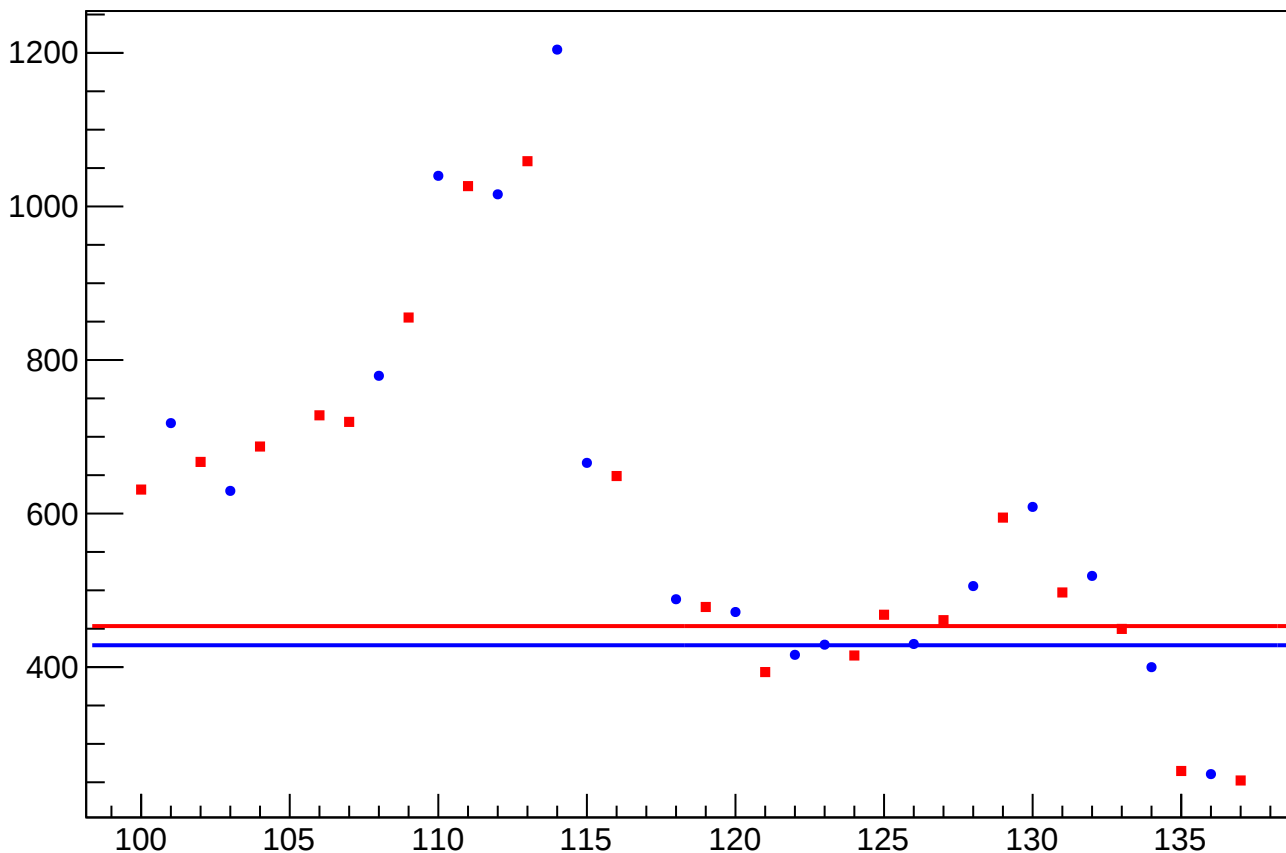
Right: 167.206 $\pm$ 128.890  $\chi^2$ /NDF: 34.4/35

In: 132.921 $\pm$ 180.271  $\chi^2$ /NDF:12.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 167.206 $\pm$ 128.890  $\chi^2$ /NDF: 34.4/35

# asym\_sam1\_rms vs Slug, Sign Corrected



Right In: 428.460+/-0.127  $\chi^2/\text{NDF}$ : 2011453.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 453.435+/-0.130  $\chi^2/\text{NDF}$ : 2029813.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

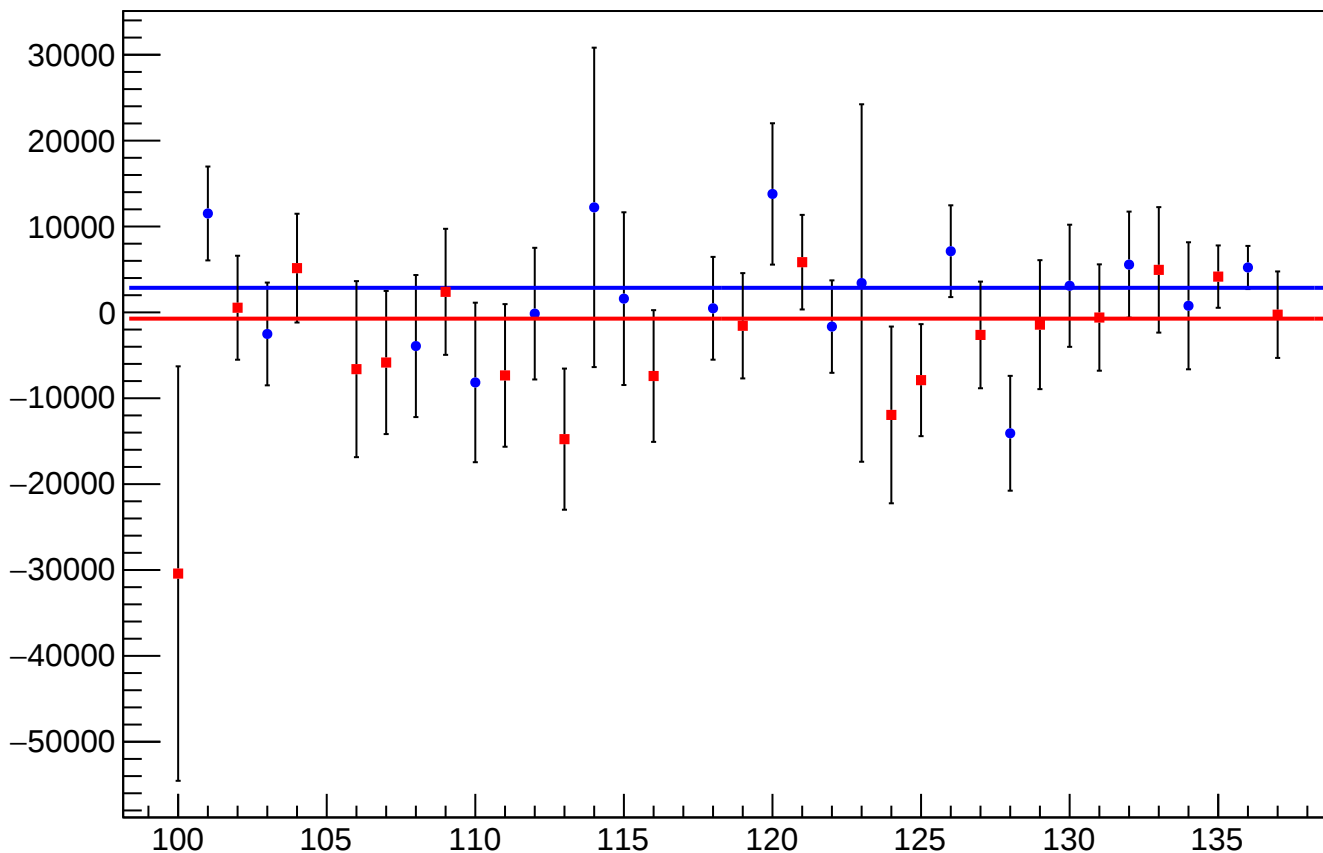
Right: 440.668+/-0.091  $\chi^2/\text{NDF}$ : 4060031.3/35

In: 428.460+/-0.127  $\chi^2/\text{NDF}$ : 2011453.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 440.668+/-0.091  $\chi^2/\text{NDF}$ : 4060031.3/35

# asym\_sam2\_mean vs Slug, Sign Corrected



Right In: 2859.622 $\pm$ 1447.884  $\chi^2$ /NDF: 16.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -729.571 $\pm$ 1509.224  $\chi^2$ /NDF: 14.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

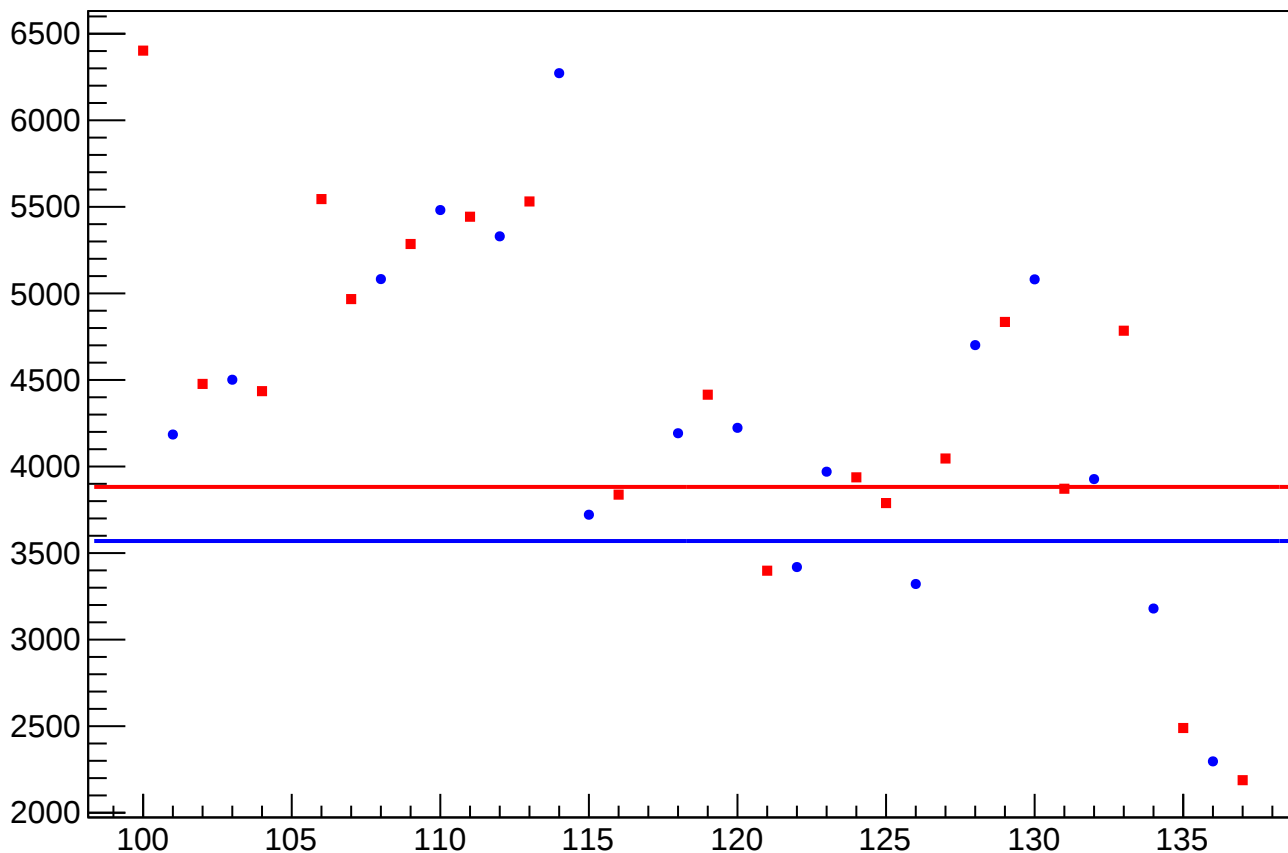
Right: 1139.446 $\pm$ 1044.821  $\chi^2$ /NDF: 33.6/35

In: 2859.622 $\pm$ 1447.884  $\chi^2$ /NDF:16.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1139.446 $\pm$ 1044.821  $\chi^2$ /NDF: 33.6/35

# asym\_sam2\_rms vs Slug, Sign Corrected



Right In: 3569.631+/-1.024  $\chi^2/\text{NDF}$ : 1087935.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3882.169+/-1.067  $\chi^2/\text{NDF}$ : 983087.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

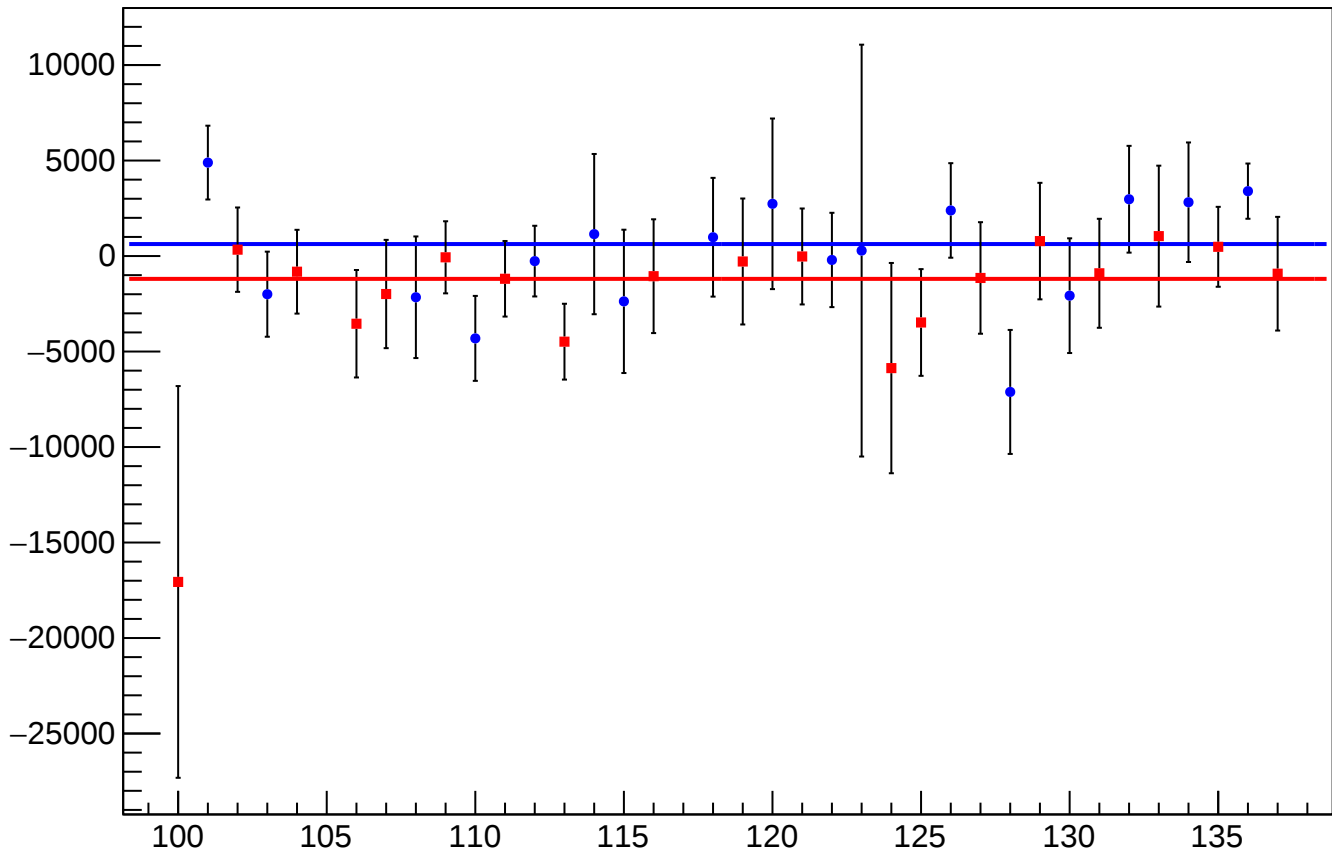
Right: 3719.420+/-0.739  $\chi^2/\text{NDF}$ : 2115685.3/35

In: 3569.631+/-1.024  $\chi^2/\text{NDF}$ : 1087935.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3719.420+/-0.739  $\chi^2/\text{NDF}$ : 2115685.3/35

# asym\_sam3\_mean vs Slug, Sign Corrected



Right In: 627.655+/-620.929  $\chi^2/\text{NDF}$ : 25.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1195.385+/-603.058  $\chi^2/\text{NDF}$ : 9.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

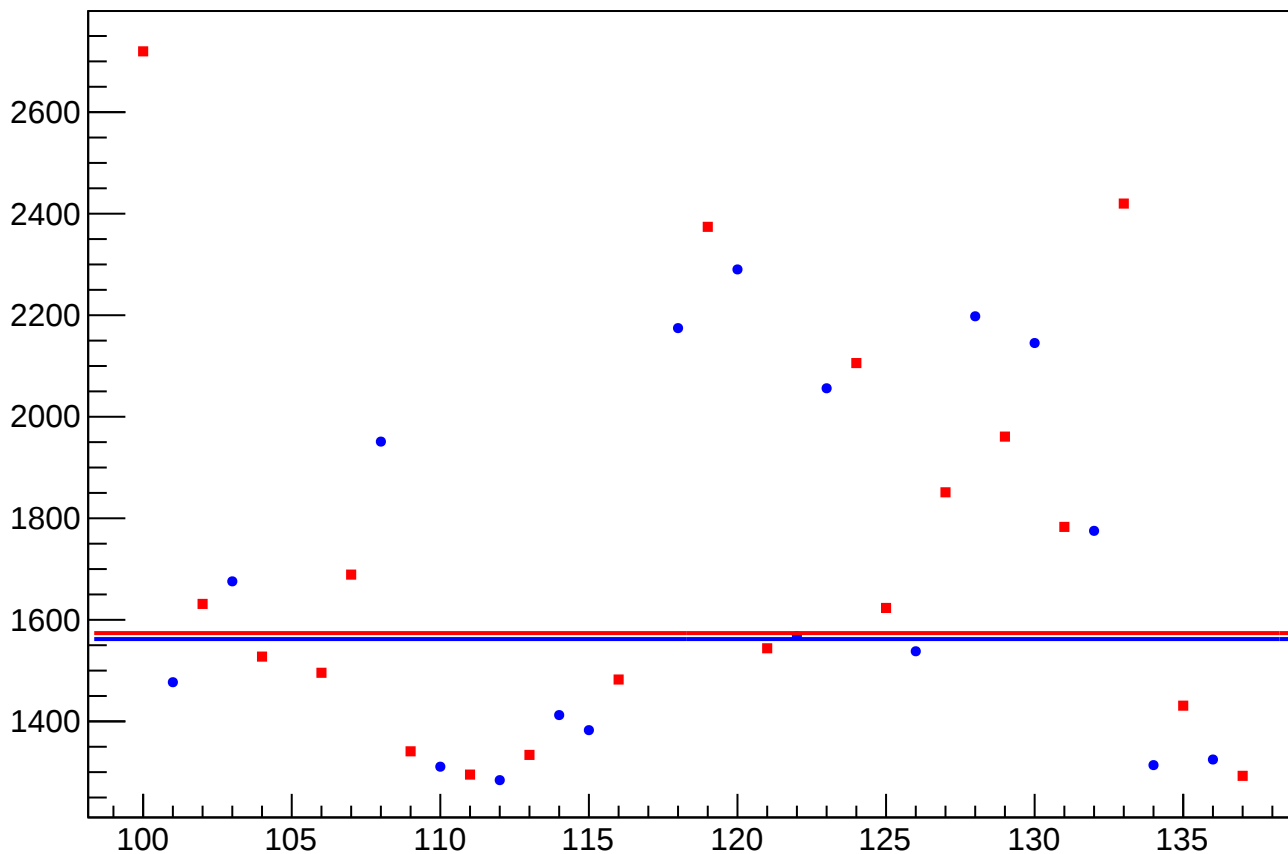
Right: -310.478+/-432.606  $\chi^2/\text{NDF}$ : 39.4/35

In: 627.655+/-620.929  $\chi^2/\text{NDF}$ : 25.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -310.478+/-432.606  $\chi^2/\text{NDF}$ : 39.4/35

# asym\_sam3\_rms vs Slug, Sign Corrected



Right In: 1562.101+/-0.439  $\chi^2/\text{NDF}$ : 482088.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1573.906+/-0.426  $\chi^2/\text{NDF}$ : 463991.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

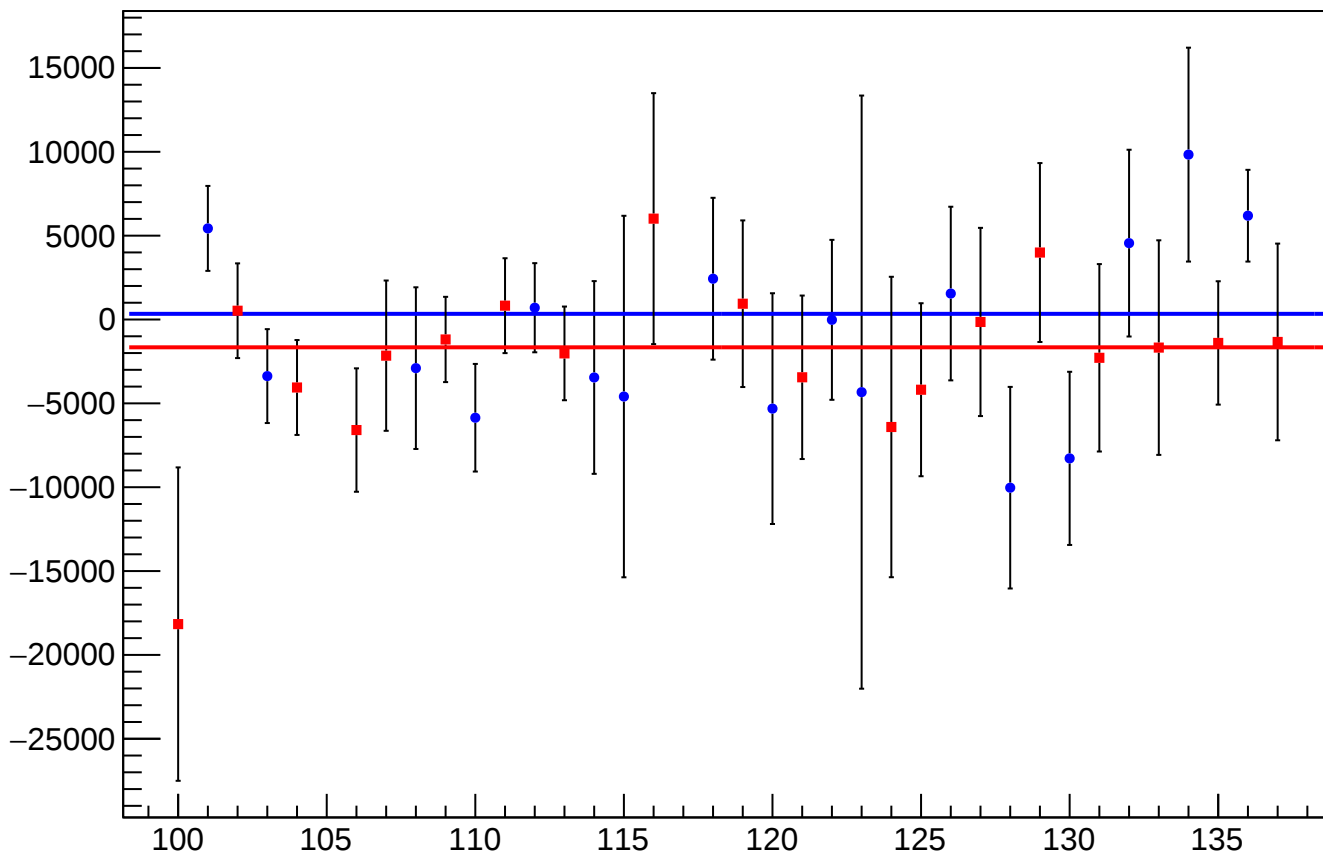
Right: 1568.176+/-0.306  $\chi^2/\text{NDF}$ : 946451.6/35

In: 1562.101+/-0.439  $\chi^2/\text{NDF}$ : 482088.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1568.176+/-0.306  $\chi^2/\text{NDF}$ : 946451.6/35

# asym\_sam4\_mean vs Slug, Sign Corrected



Right In: 338.117+/-995.842  $\chi^2/\text{NDF}$ : 24.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1658.069+/-924.453  $\chi^2/\text{NDF}$ : 10.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

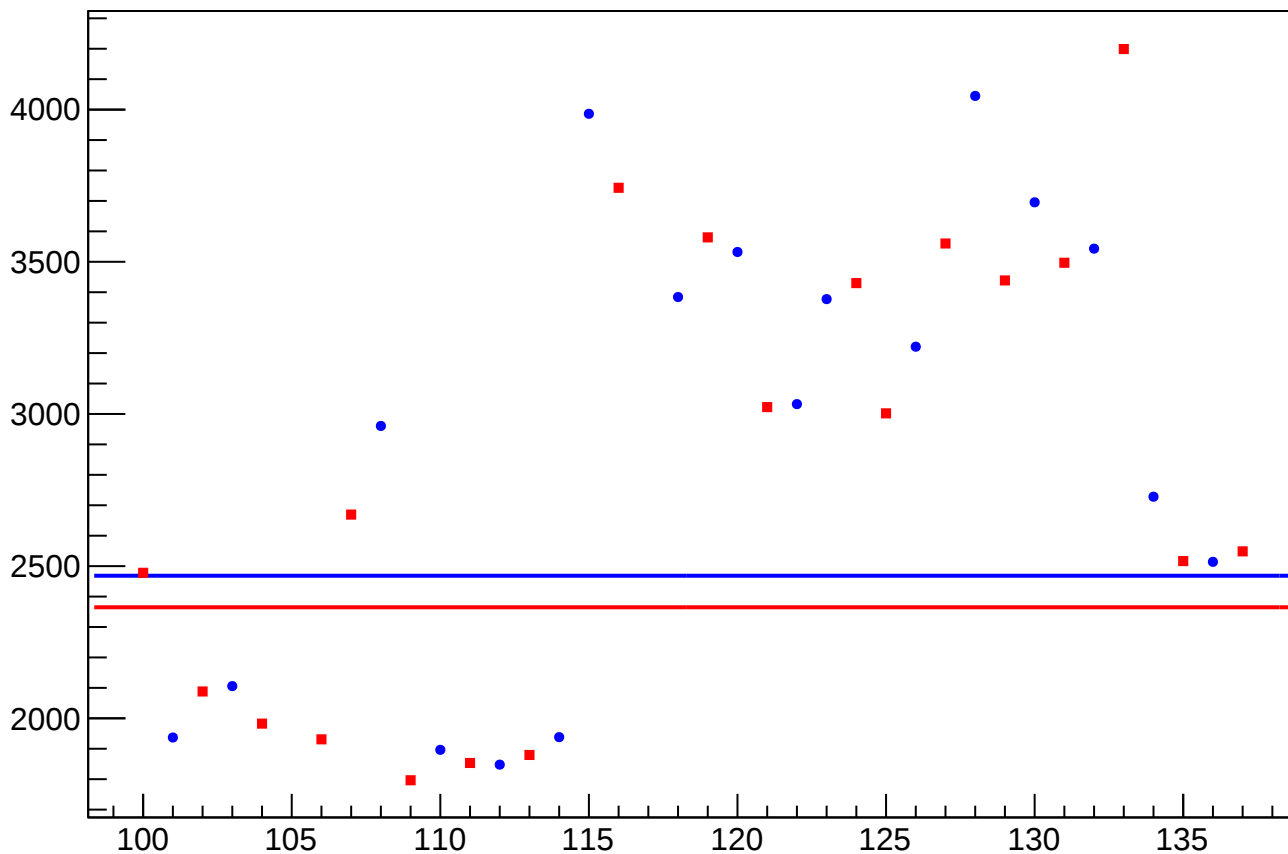
Right: -734.084+/-677.520  $\chi^2/\text{NDF}$ : 37.2/35

In: 338.117+/-995.842  $\chi^2/\text{NDF}$ : 24.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -734.084+/-677.520  $\chi^2/\text{NDF}$ : 37.2/35

# asym\_sam4\_rms vs Slug, Sign Corrected



Right In: 2468.489+/-0.704  $\chi^2/\text{NDF}$ : 896153.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2364.833+/-0.654  $\chi^2/\text{NDF}$ : 1025161.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

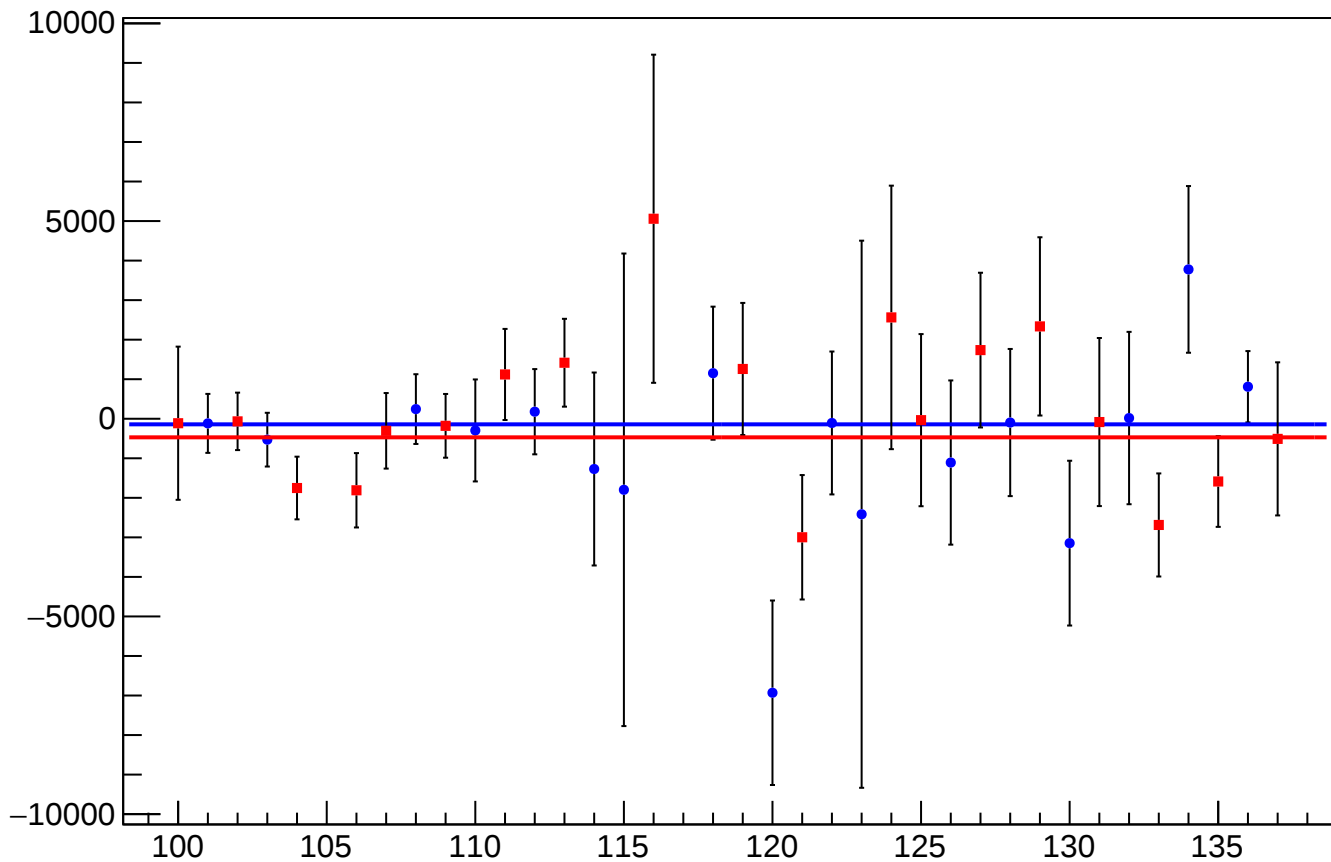
Right: 2412.813+/-0.479  $\chi^2/\text{NDF}$ : 1932953.4/35

In: 2468.489+/-0.704  $\chi^2/\text{NDF}$ : 896153.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2412.813+/-0.479  $\chi^2/\text{NDF}$ : 1932953.4/35

# asym\_sam5\_mean vs Slug, Sign Corrected



Right In:  $-141.213 \pm 313.319$   $\chi^2/\text{NDF}: 16.9/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-470.143 \pm 282.892$   $\chi^2/\text{NDF}: 22.9/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

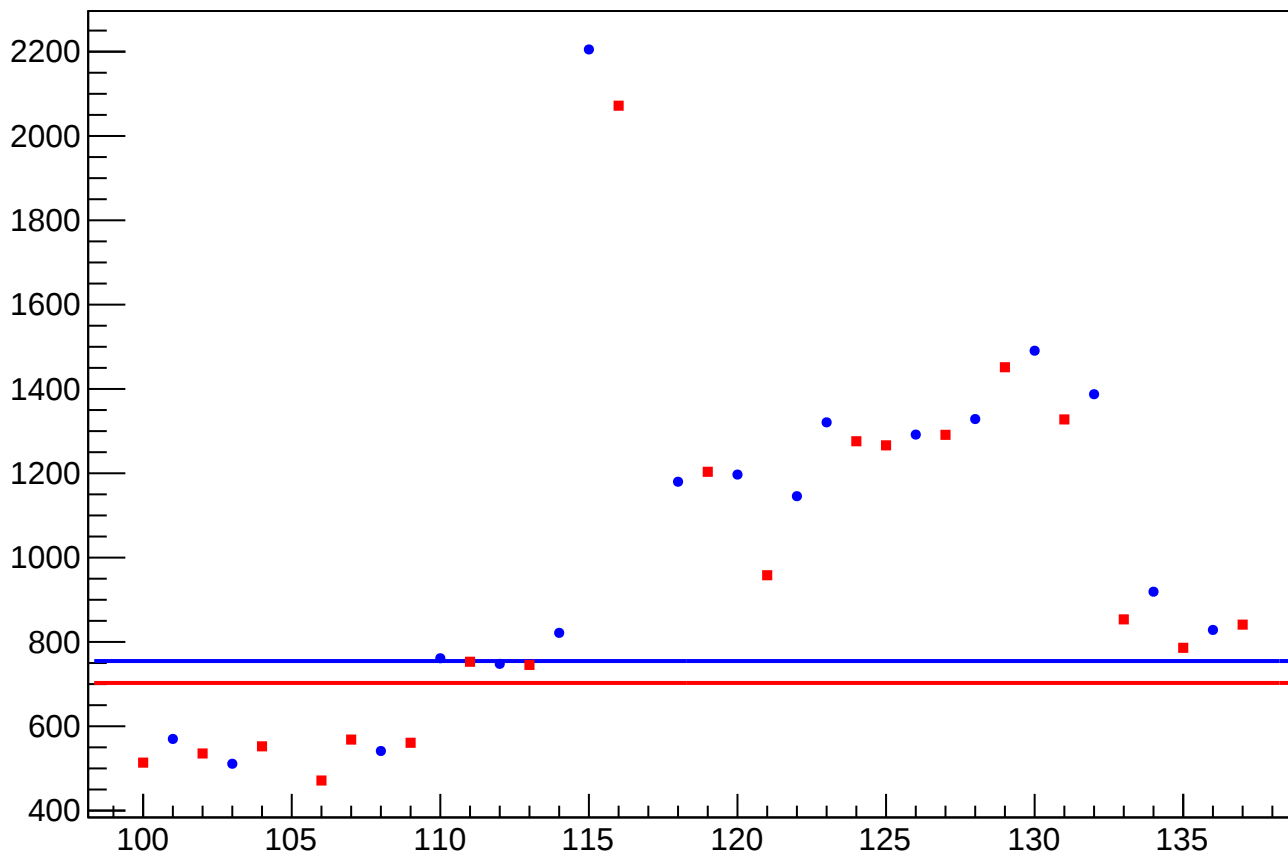
Right:  $-322.421 \pm 209.970$   $\chi^2/\text{NDF}: 40.5/35$

In:  $-141.213 \pm 313.319$   $\chi^2/\text{NDF}: 16.9/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-322.421 \pm 209.970$   $\chi^2/\text{NDF}: 40.5/35$

# asym\_sam5\_rms vs Slug, Sign Corrected



Right In: 754.684+/-0.222  $\chi^2/\text{NDF}$ : 1690621.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 702.721+/-0.200  $\chi^2/\text{NDF}$ : 1691602.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

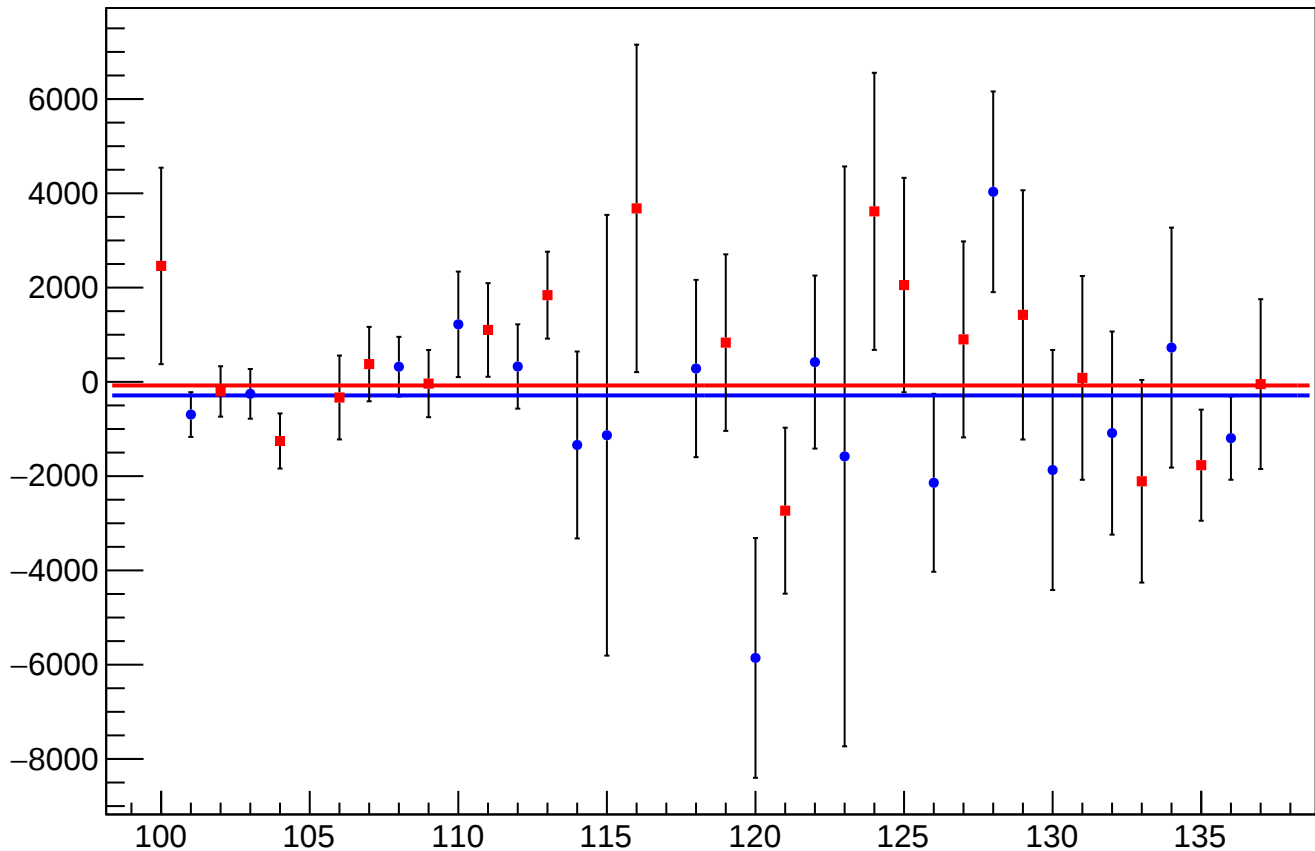
Right: 726.058+/-0.148  $\chi^2/\text{NDF}$ : 3412528.8/35

In: 754.684+/-0.222  $\chi^2/\text{NDF}$ : 1690621.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 726.058+/-0.148  $\chi^2/\text{NDF}$ : 3412528.8/35

# asym\_sam6\_mean vs Slug, Sign Corrected



Right In:  $-288.037 \pm 250.436$   $\chi^2/\text{NDF}$ : 16.2/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-76.119 \pm 246.083$   $\chi^2/\text{NDF}$ : 21.4/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

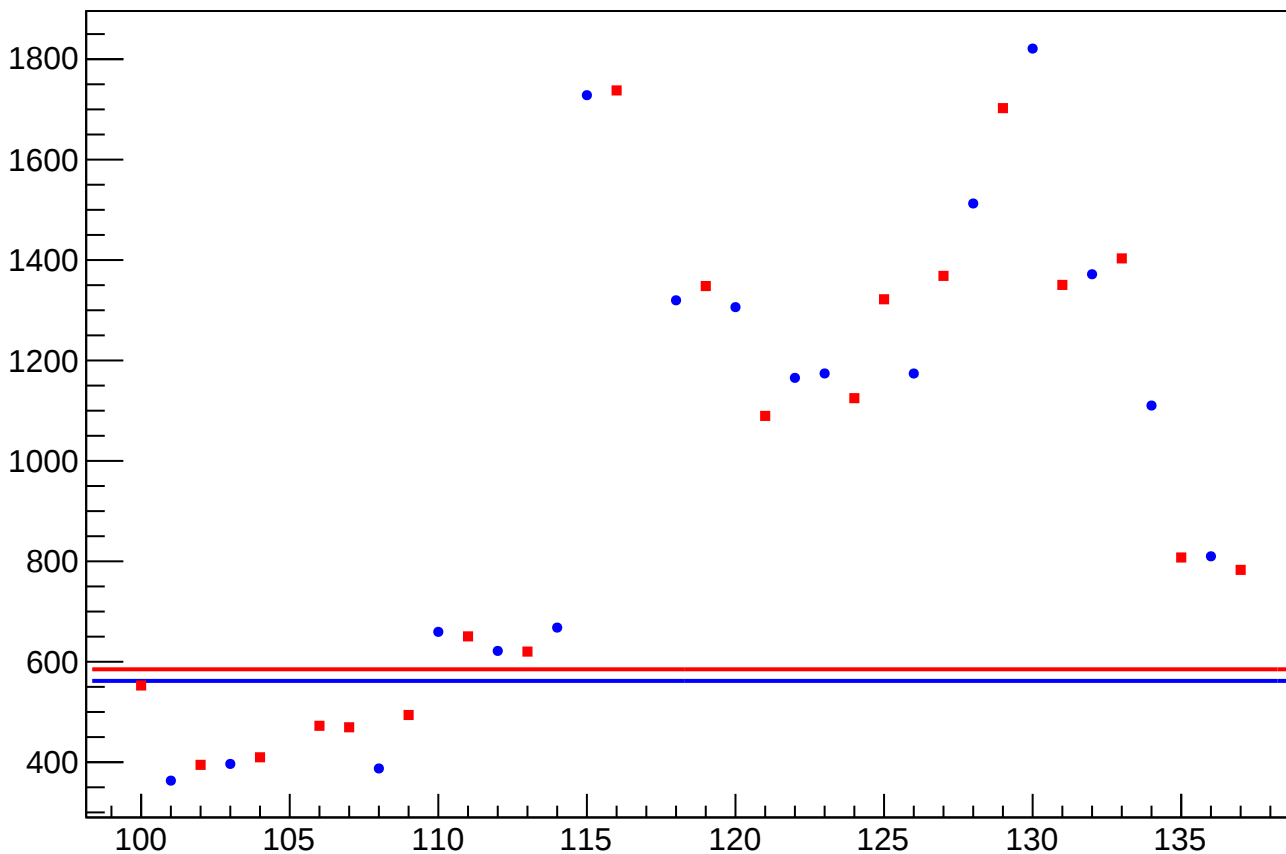
Right:  $-180.221 \pm 175.526$   $\chi^2/\text{NDF}$ : 37.9/35

In:  $-288.037 \pm 250.436$   $\chi^2/\text{NDF}$ : 16.2/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-180.221 \pm 175.526$   $\chi^2/\text{NDF}$ : 37.9/35

# asym\_sam6\_rms vs Slug, Sign Corrected



Right In: 561.894+/-0.177  $\chi^2/\text{NDF}$ : 3216651.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 584.993+/-0.174  $\chi^2/\text{NDF}$ : 2824449.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

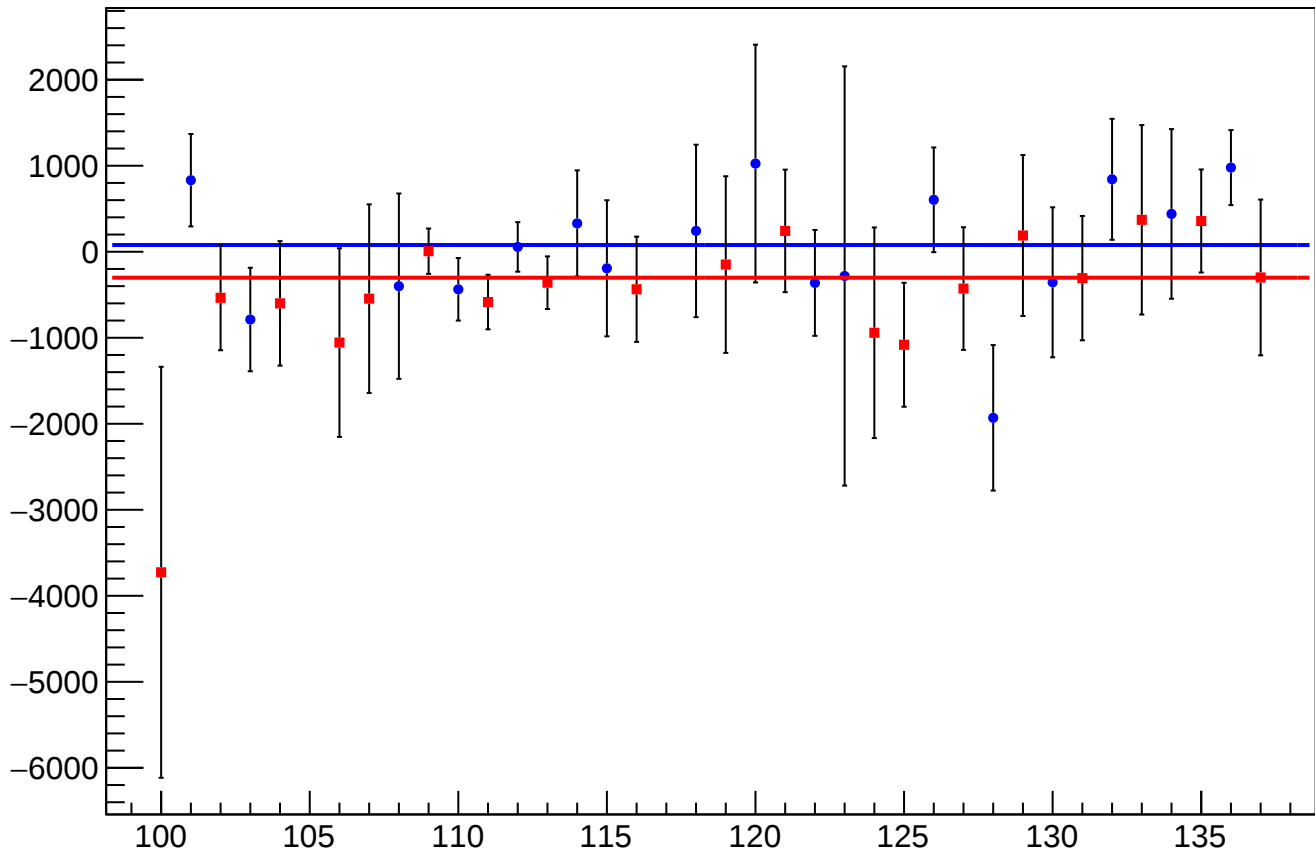
Right: 573.646+/-0.124  $\chi^2/\text{NDF}$ : 6049757.3/35

In: 561.894+/-0.177  $\chi^2/\text{NDF}$ : 3216651.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 573.646+/-0.124  $\chi^2/\text{NDF}$ : 6049757.3/35

# asym\_sam7\_mean vs Slug, Sign Corrected



Right In: 78.184+/-142.869  $\chi^2/\text{NDF}$ : 19.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -301.651+/-129.650  $\chi^2/\text{NDF}$ : 9.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

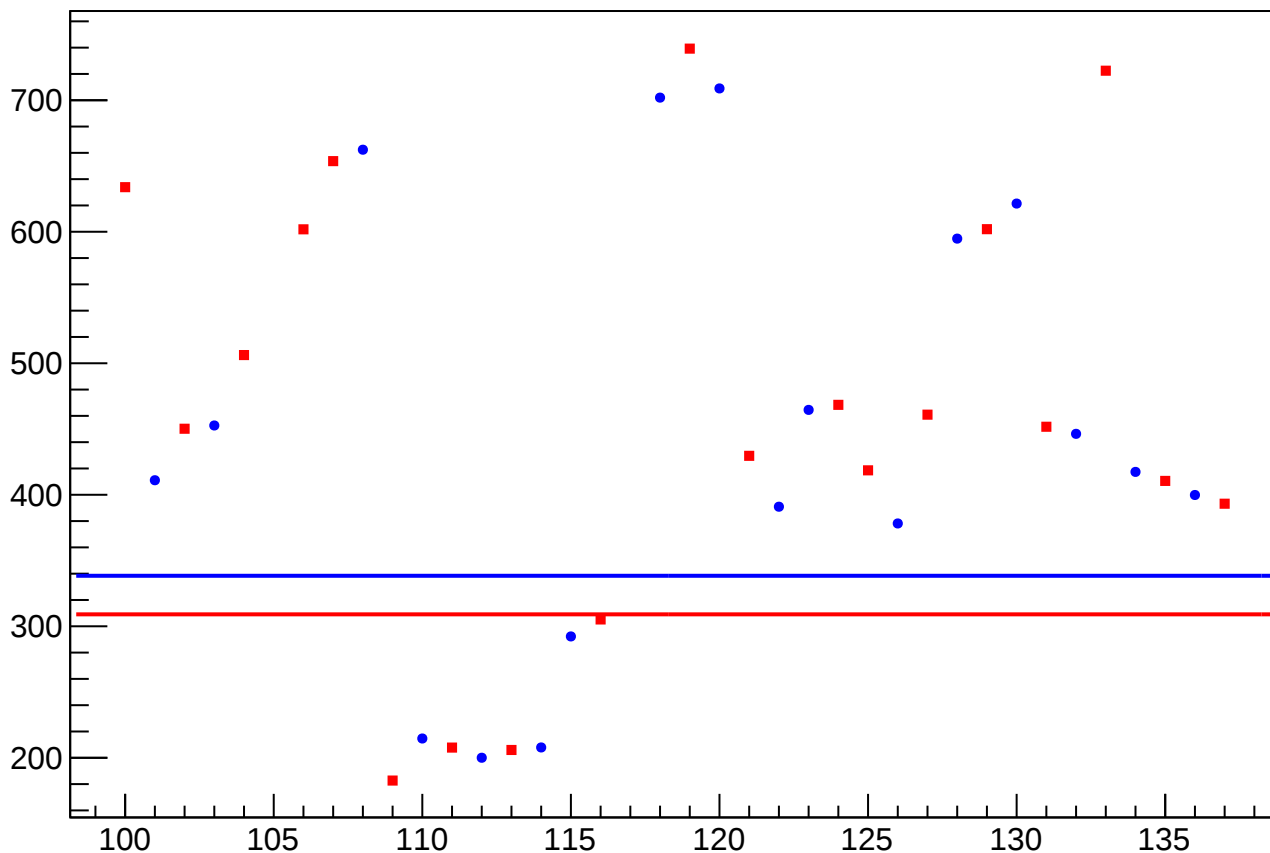
Right: -130.116+/-96.010  $\chi^2/\text{NDF}$ : 32.7/35

In: 78.184+/-142.869  $\chi^2/\text{NDF}$ : 19.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -130.116+/-96.010  $\chi^2/\text{NDF}$ : 32.7/35

# asym\_sam7\_rms vs Slug, Sign Corrected



Right In:  $338.408 \pm 0.101$   $\chi^2/\text{NDF}$ : 2009287.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $309.081 \pm 0.092$   $\chi^2/\text{NDF}$ : 2733465.5/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

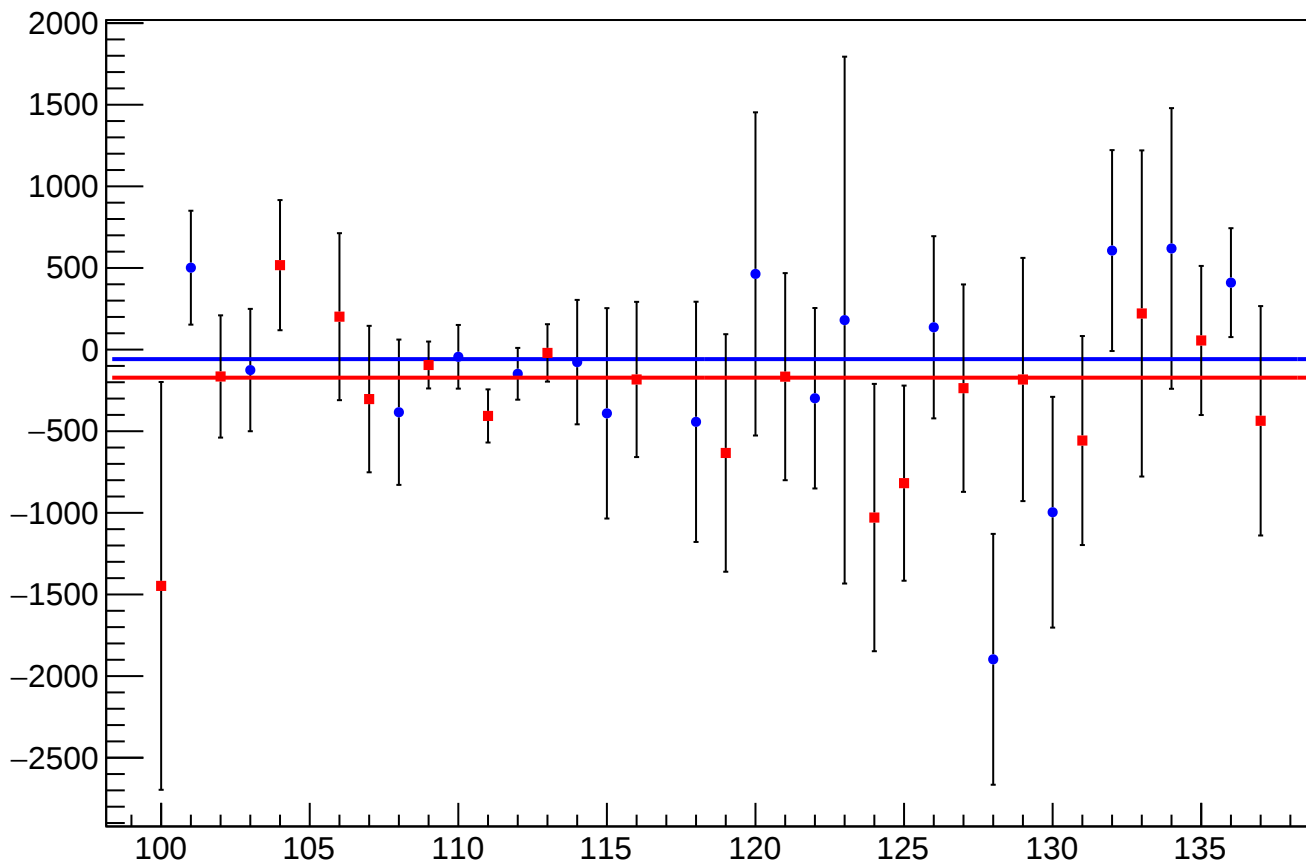
Right:  $322.325 \pm 0.068$   $\chi^2/\text{NDF}$ : 4788966.2/35

In:  $338.408 \pm 0.101$   $\chi^2/\text{NDF}$ : 2009287.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $322.325 \pm 0.068$   $\chi^2/\text{NDF}$ : 4788966.2/35

# asym\_sam8\_mean vs Slug, Sign Corrected



Right In:  $-58.299 \pm 90.484$   $\chi^2/\text{NDF}$ : 15.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-171.954 \pm 76.920$   $\chi^2/\text{NDF}$ : 11.3/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

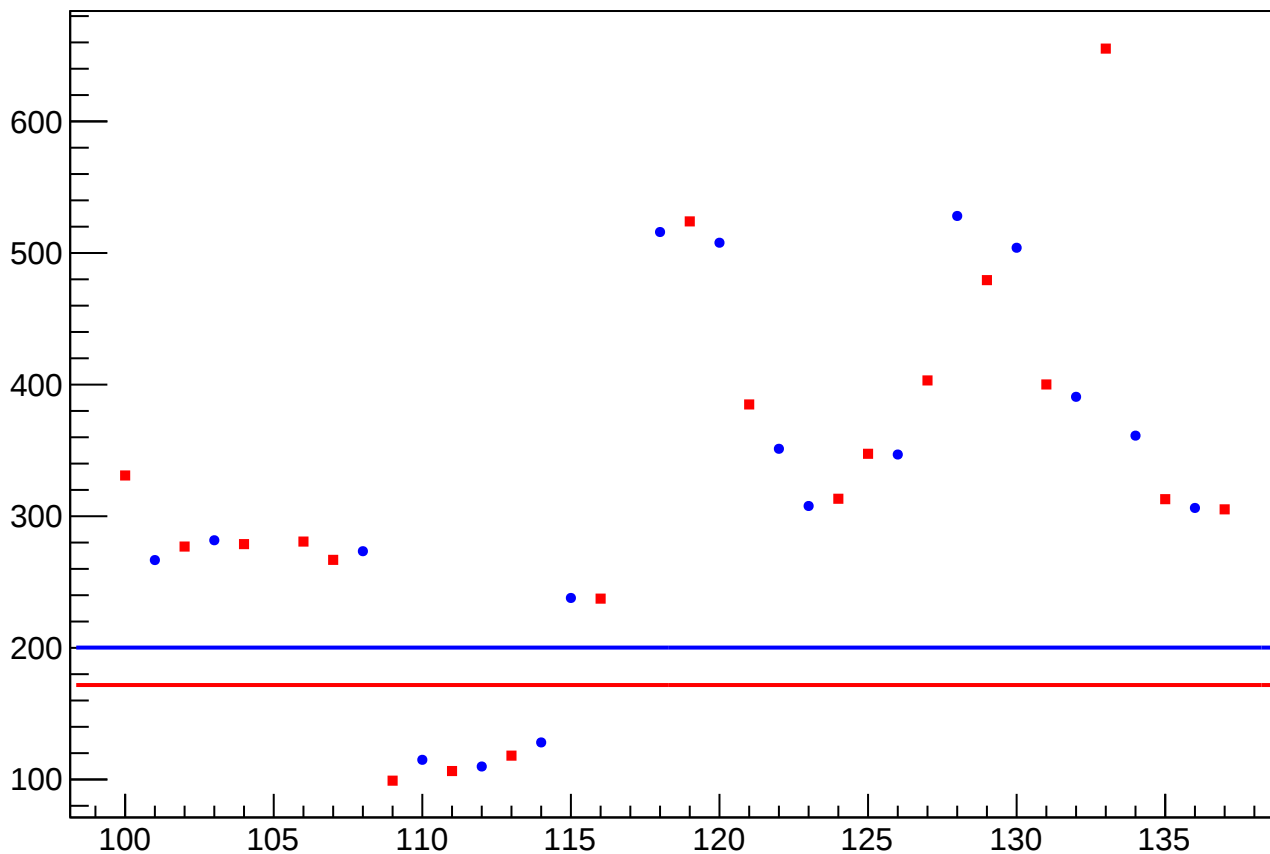
Right:  $-124.276 \pm 58.606$   $\chi^2/\text{NDF}$ : 28.1/35

In:  $-58.299 \pm 90.484$   $\chi^2/\text{NDF}$ : 15.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-124.276 \pm 58.606$   $\chi^2/\text{NDF}$ : 28.1/35

# asym\_sam8\_rms vs Slug, Sign Corrected



Right In: 200.209+/-0.064  $\chi^2/\text{NDF}$ : 3387197.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 171.757+/-0.054  $\chi^2/\text{NDF}$ : 4093922.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

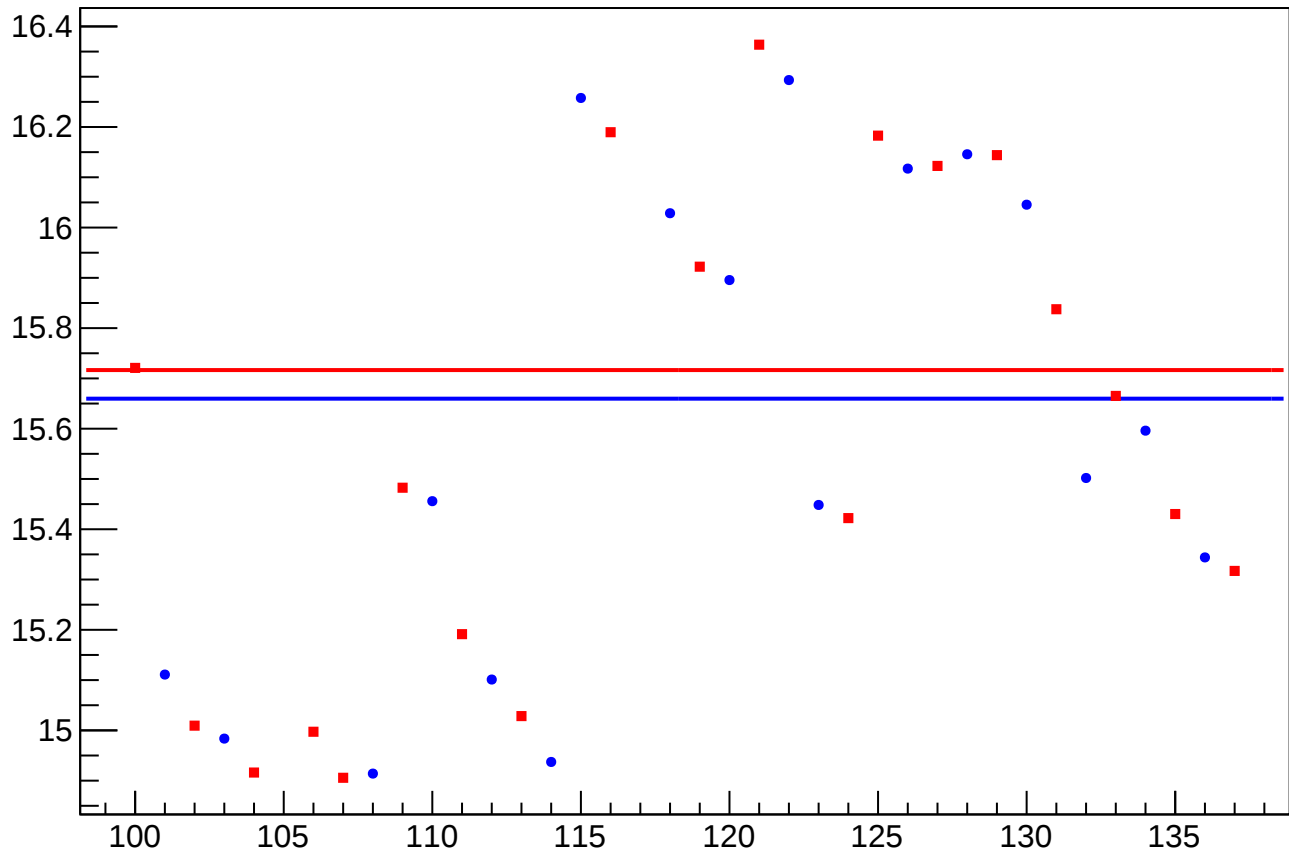
Right: 183.693+/-0.041  $\chi^2/\text{NDF}$ : 7595909.3/35

In: 200.209+/-0.064  $\chi^2/\text{NDF}$ :3387197.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 183.693+/-0.041  $\chi^2/\text{NDF}$ : 7595909.3/35

# yield\_sam1\_mean vs Slug, Sign Corrected



Right In: 15.660+/-0.000  $\chi^2/\text{NDF}$ : 5782644553.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 15.717+/-0.000  $\chi^2/\text{NDF}$ : 5461829475.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

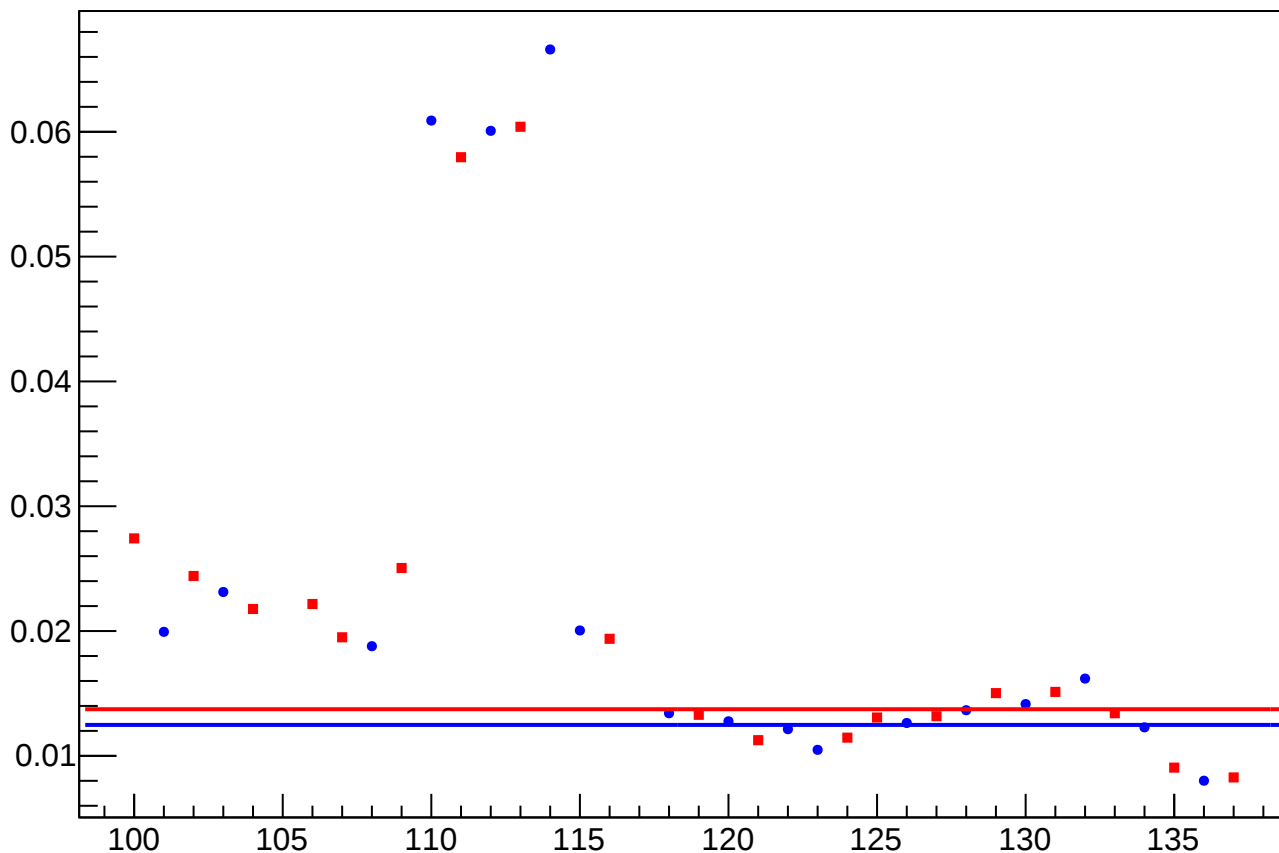
Right: 15.686+/-0.000  $\chi^2/\text{NDF}$ : 11294352327.9/35

In: 15.660+/-0.000  $\chi^2/\text{NDF}$ : 5782644553.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 15.686+/-0.000  $\chi^2/\text{NDF}$ : 11294352327.9

# yield\_sam1\_rms vs Slug, Sign Corrected



Right In: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 2152911.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 2077569.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

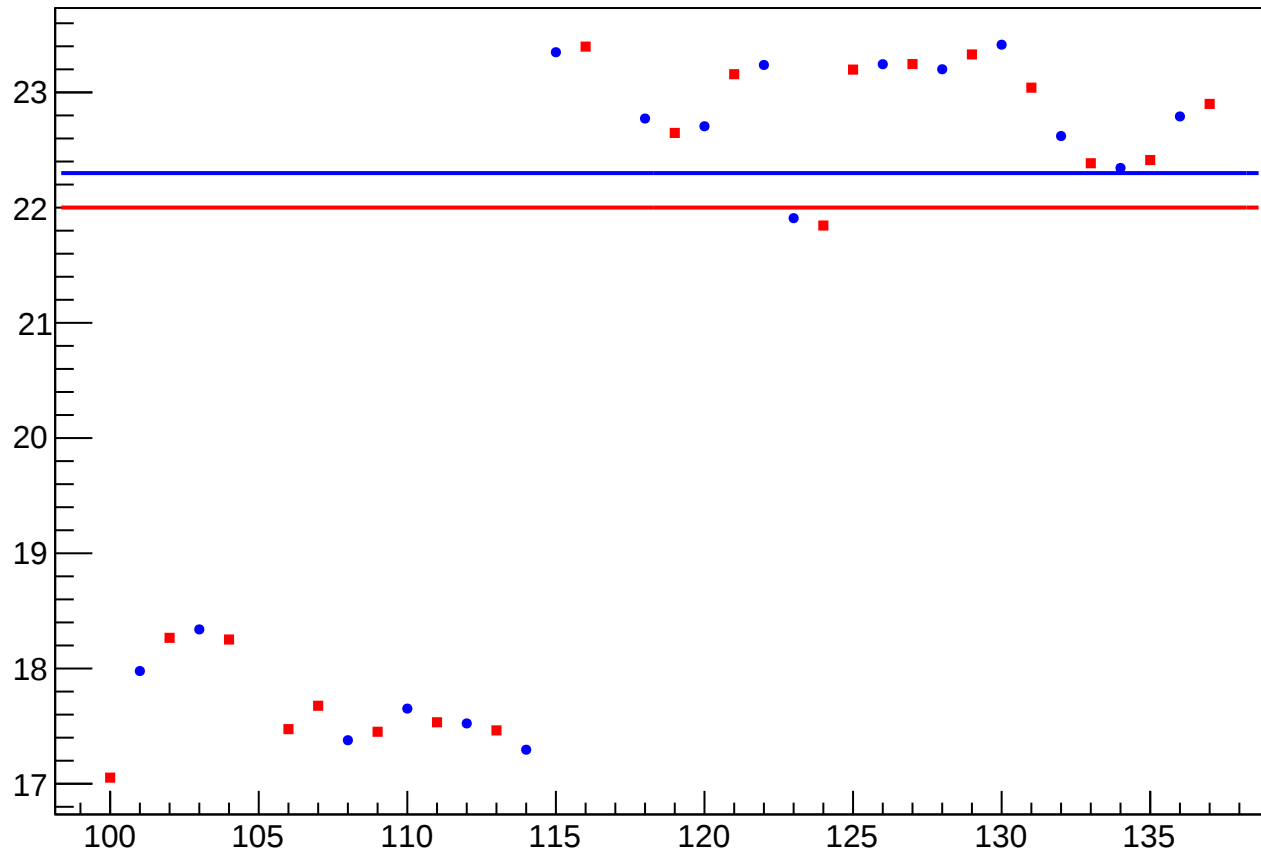
Right: 0.013+/-0.000  $\chi^2/\text{NDF}$ : 4279107.1/35

In: 0.012+/-0.000  $\chi^2/\text{NDF}$ :2152911.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.013+/-0.000  $\chi^2/\text{NDF}$ : 4279107.1/35

# yield\_sam2\_mean vs Slug, Sign Corrected



Right In: 22.300+/-0.000  $\chi^2/\text{NDF}$ : 938398636.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 22.001+/-0.000  $\chi^2/\text{NDF}$ : 1066041325.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

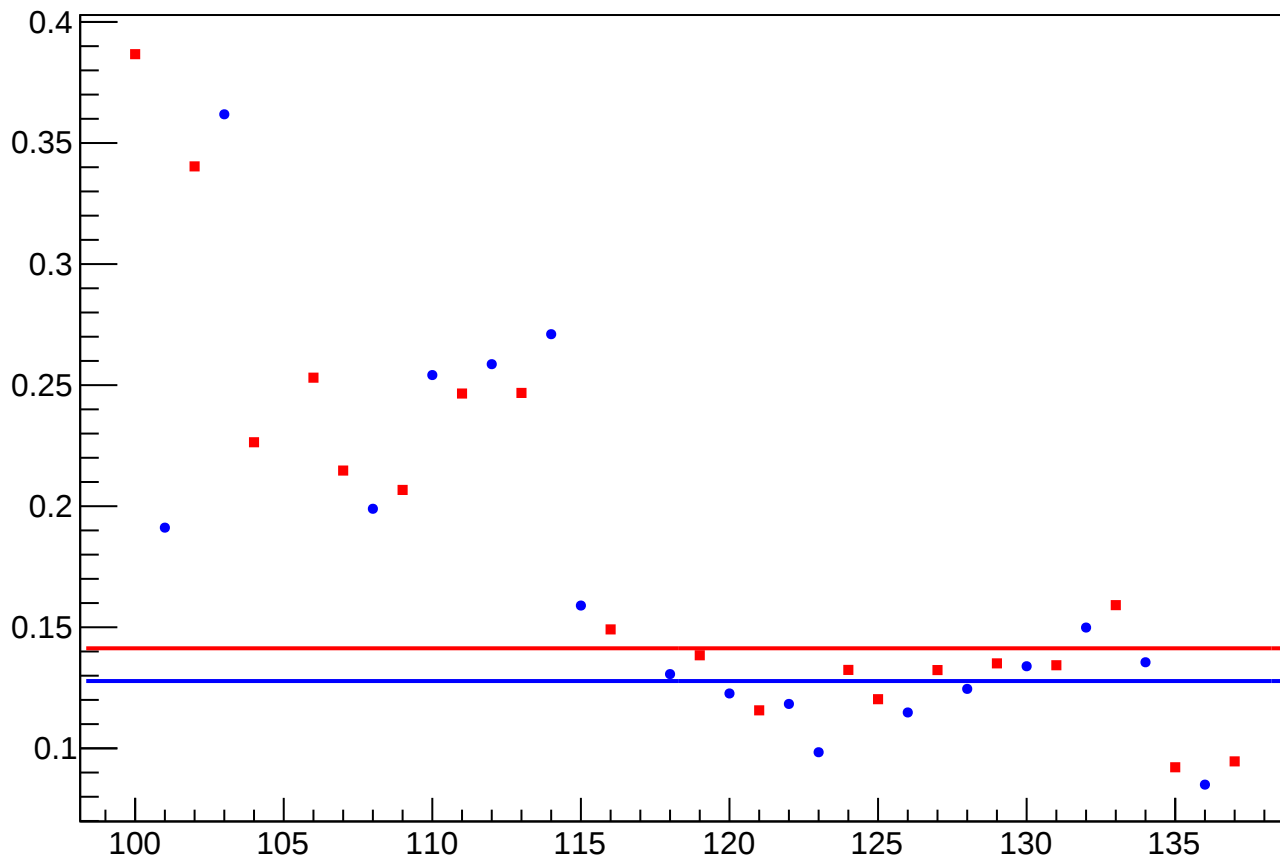
Right: 22.159+/-0.000  $\chi^2/\text{NDF}$ : 2017477949.3/35

In: 22.300+/-0.000  $\chi^2/\text{NDF}$ : 938398636.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 22.159+/-0.000  $\chi^2/\text{NDF}$ : 2017477949.3/35

# yield\_sam2\_rms vs Slug, Sign Corrected



Right In: 0.128+/-0.000  $\chi^2/\text{NDF}$ : 1492109.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.141+/-0.000  $\chi^2/\text{NDF}$ : 1449275.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

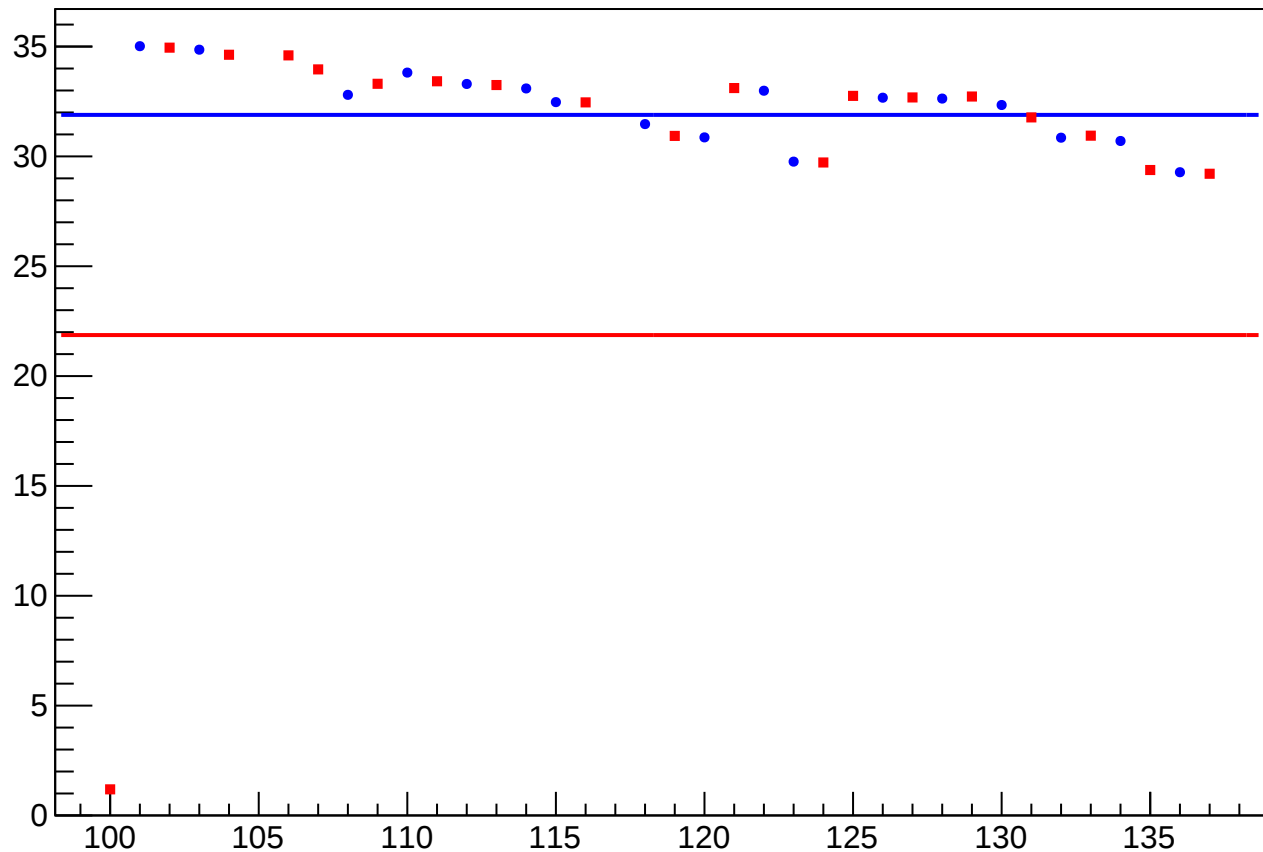
Right: 0.134+/-0.000  $\chi^2/\text{NDF}$ : 2994732.7/35

In: 0.128+/-0.000  $\chi^2/\text{NDF}$ : 1492109.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.134+/-0.000  $\chi^2/\text{NDF}$ : 2994732.7/35

# yield\_sam3\_mean vs Slug, Sign Corrected



Right In: 31.889+/-0.000  $\chi^2/\text{NDF}$ : 1930403776.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 21.867+/-0.000  $\chi^2/\text{NDF}$ : 230068750081.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

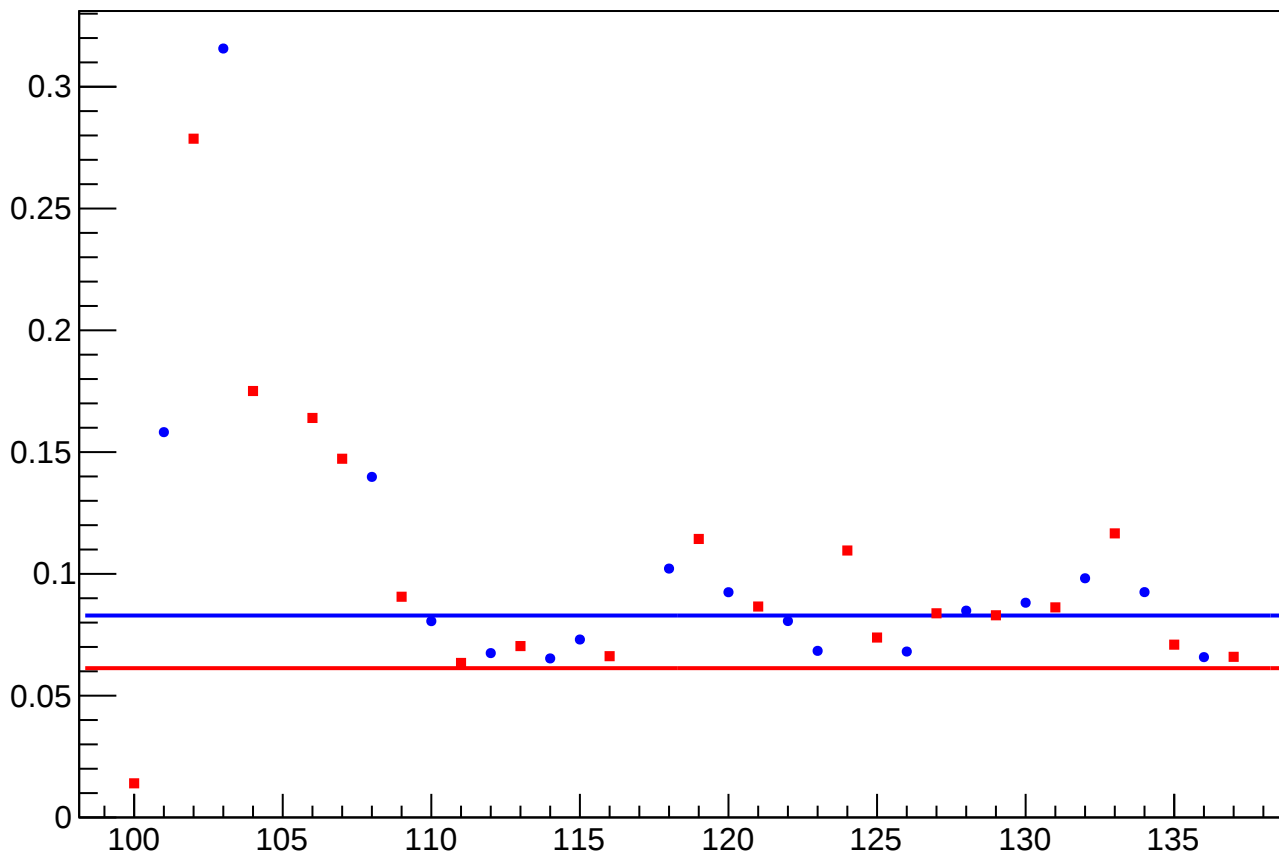
Right: 25.887+/-0.000  $\chi^2/\text{NDF}$ : 274879927198.7/35

In: 31.889+/-0.000  $\chi^2/\text{NDF}$ : 1930403776.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 25.887+/-0.000  $\chi^2/\text{NDF}$ : 274879927198.7/35

# yield\_sam3\_rms vs Slug, Sign Corrected



Right In: 0.083+/-0.000  $\chi^2/\text{NDF}$ : 1164452.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.061+/-0.000  $\chi^2/\text{NDF}$ : 3603853.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

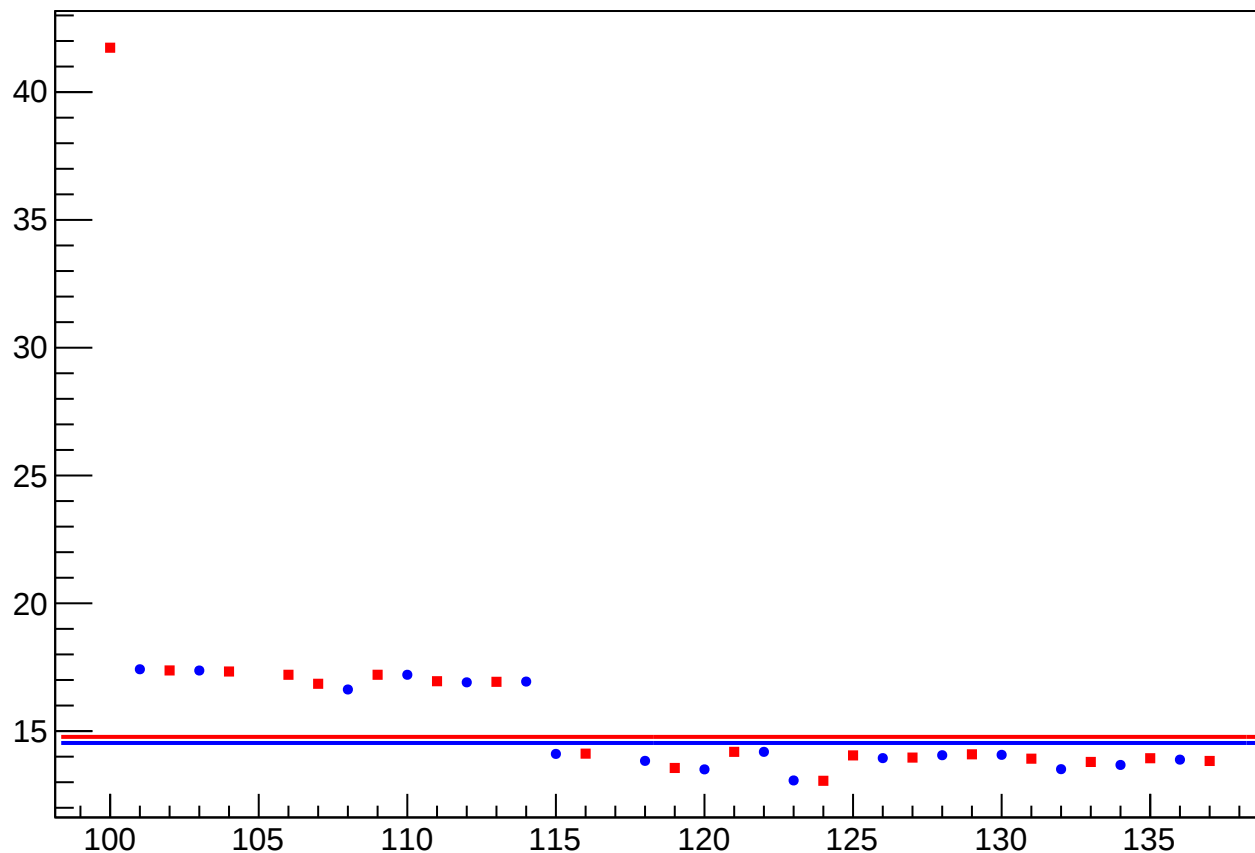
Right: 0.070+/-0.000  $\chi^2/\text{NDF}$ : 5167150.6/35

In: 0.083+/-0.000  $\chi^2/\text{NDF}$ : 1164452.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.070+/-0.000  $\chi^2/\text{NDF}$ : 5167150.6/35

# yield\_sam4\_mean vs Slug, Sign Corrected



Right In: 14.536+/-0.000  $\chi^2/\text{NDF}$ : 1470499792.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 14.774+/-0.000  $\chi^2/\text{NDF}$ : 1886755709.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

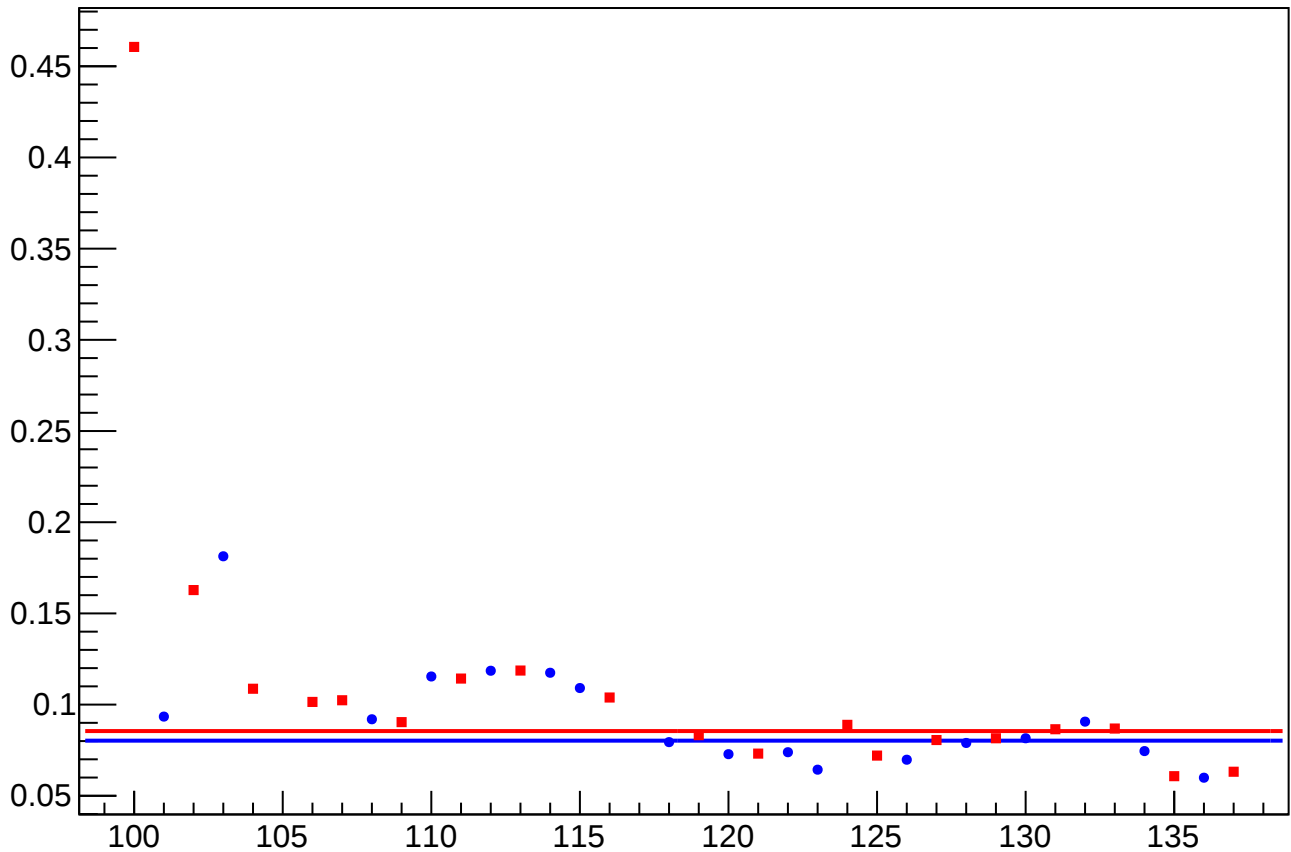
Right: 14.651+/-0.000  $\chi^2/\text{NDF}$ : 3380785876.4/35

In: 14.536+/-0.000  $\chi^2/\text{NDF}$ : 1470499792.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 14.651+/-0.000  $\chi^2/\text{NDF}$ : 3380785876.4/35

# yield\_sam4\_rms vs Slug, Sign Corrected



Right In: 0.080+/-0.000  $\chi^2/\text{NDF}$ : 778734.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.085+/-0.000  $\chi^2/\text{NDF}$ : 738043.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

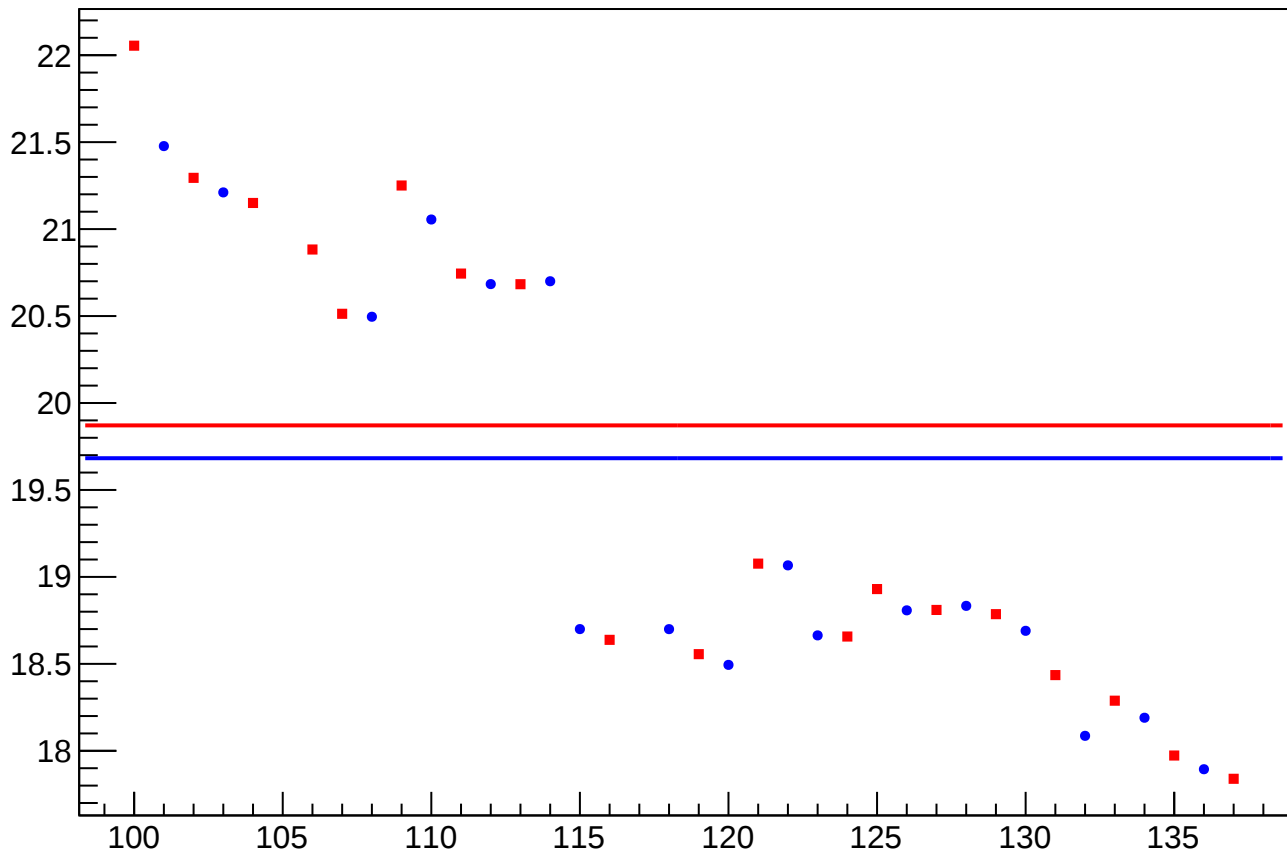
Right: 0.083+/-0.000  $\chi^2/\text{NDF}$ : 1539722.7/35

In: 0.080+/-0.000  $\chi^2/\text{NDF}$ : 778734.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.083+/-0.000  $\chi^2/\text{NDF}$ : 1539722.7/35

# yield\_sam5\_mean vs Slug, Sign Corrected



Right In: 19.683+/-0.000  $\chi^2/\text{NDF}$ : 12276801857.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 19.871+/-0.000  $\chi^2/\text{NDF}$ : 11324266794.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

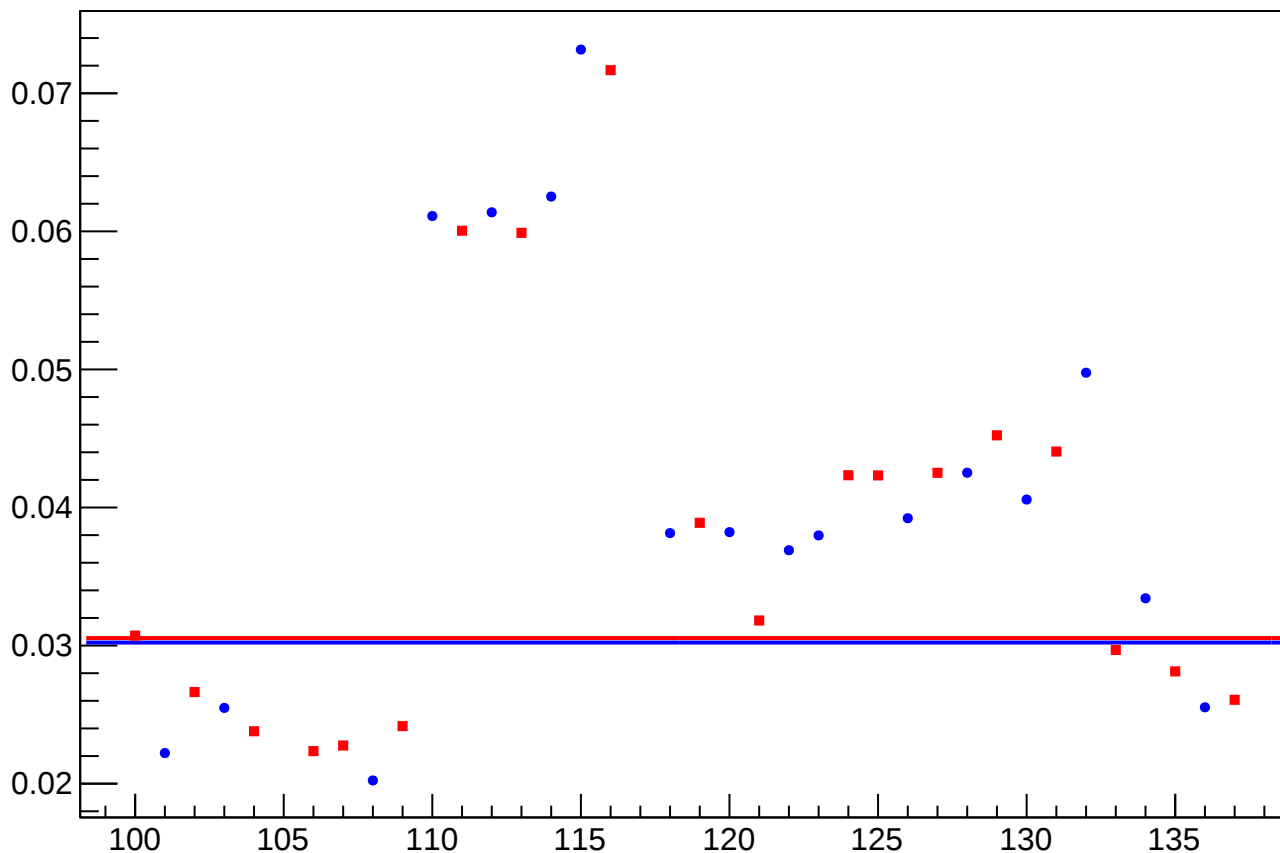
Right: 19.778+/-0.000  $\chi^2/\text{NDF}$ : 23711776447.8/35

In: 19.683+/-0.000  $\chi^2/\text{NDF}$ : 12276801857.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 19.778+/-0.000  $\chi^2/\text{NDF}$ : 23711776447.8

# yield\_sam5\_rms vs Slug, Sign Corrected



Right In: 0.030+/-0.000  $\chi^2/\text{NDF}$ : 1324518.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.031+/-0.000  $\chi^2/\text{NDF}$ : 1189734.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

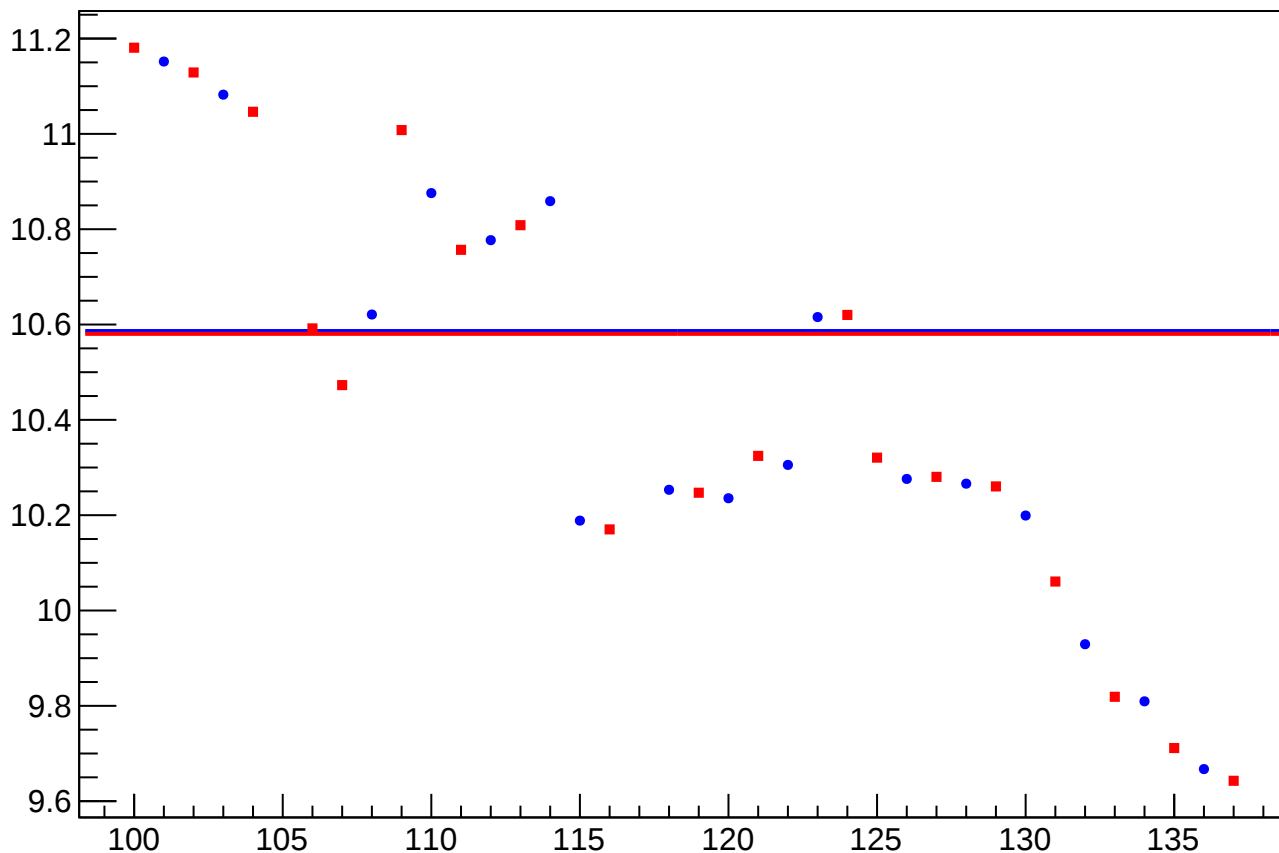
Right: 0.030+/-0.000  $\chi^2/\text{NDF}$ : 2514909.2/35

In: 0.030+/-0.000  $\chi^2/\text{NDF}$ :1324518.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.030+/-0.000  $\chi^2/\text{NDF}$ : 2514909.2/35

# yield\_sam6\_mean vs Slug, Sign Corrected



Right In: 10.586+/-0.000  $\chi^2/\text{NDF}$ : 7420104563.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 10.580+/-0.000  $\chi^2/\text{NDF}$ : 5763852721.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

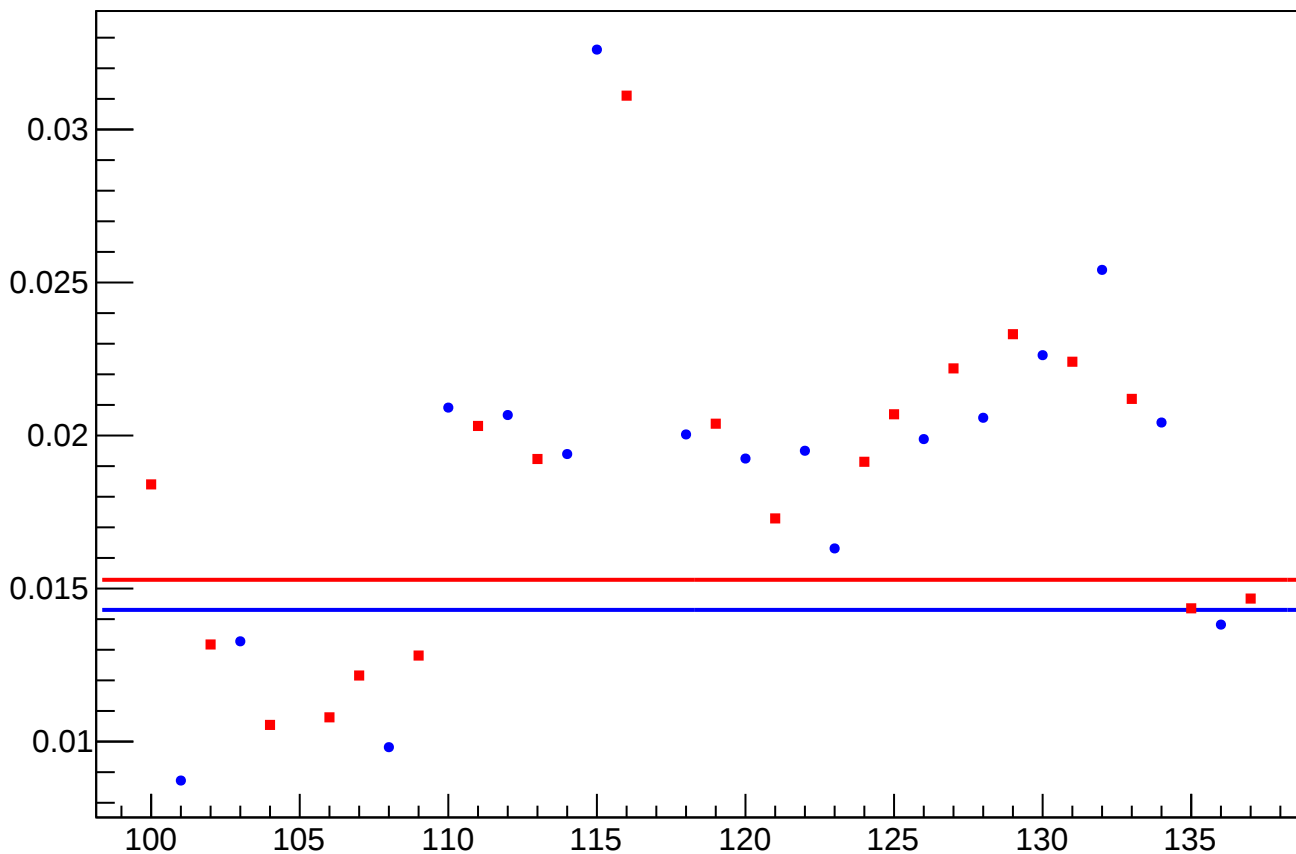
Right: 10.583+/-0.000  $\chi^2/\text{NDF}$ : 13184410027.5/35

In: 10.586+/-0.000  $\chi^2/\text{NDF}$ : 7420104563.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 10.583+/-0.000  $\chi^2/\text{NDF}$ : 13184410027.5

# yield\_sam6\_rms vs Slug, Sign Corrected



Right In: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 1408012.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.015+/-0.000  $\chi^2/\text{NDF}$ : 989017.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

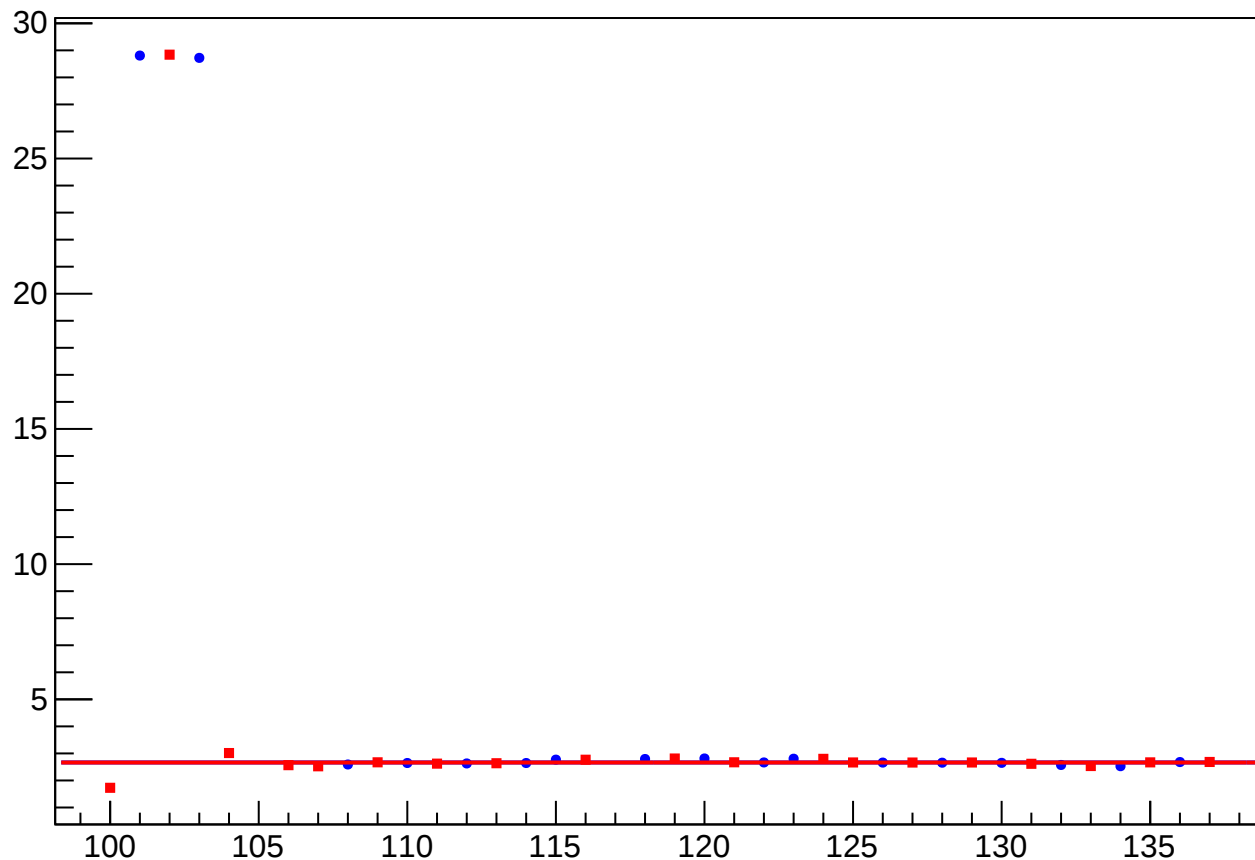
Right: 0.015+/-0.000  $\chi^2/\text{NDF}$ : 2421831.8/35

In: 0.014+/-0.000  $\chi^2/\text{NDF}$ :1408012.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.015+/-0.000  $\chi^2/\text{NDF}$ : 2421831.8/35

# yield\_sam7\_mean vs Slug, Sign Corrected



Right In: 2.666+/-0.000  $\chi^2/\text{NDF}$ : 163167327359.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.664+/-0.000  $\chi^2/\text{NDF}$ : 70398125461.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

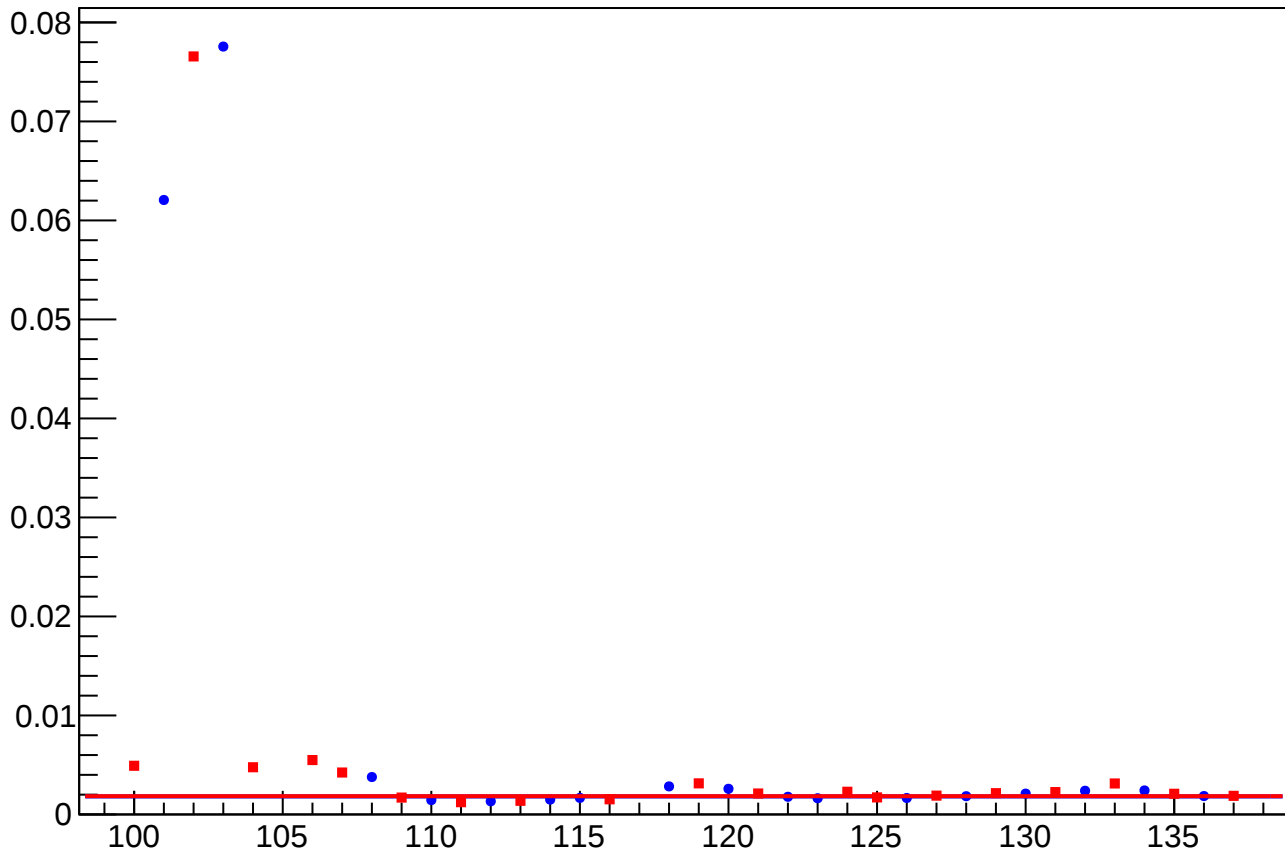
Right: 2.665+/-0.000  $\chi^2/\text{NDF}$ : 233569925265.6/35

In: 2.666+/-0.000  $\chi^2/\text{NDF}$ : 163167327359.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.665+/-0.000  $\chi^2/\text{NDF}$ : 233569925265.6

# yield\_sam7\_rms vs Slug, Sign Corrected



Right In: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 2661372.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 2331228.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

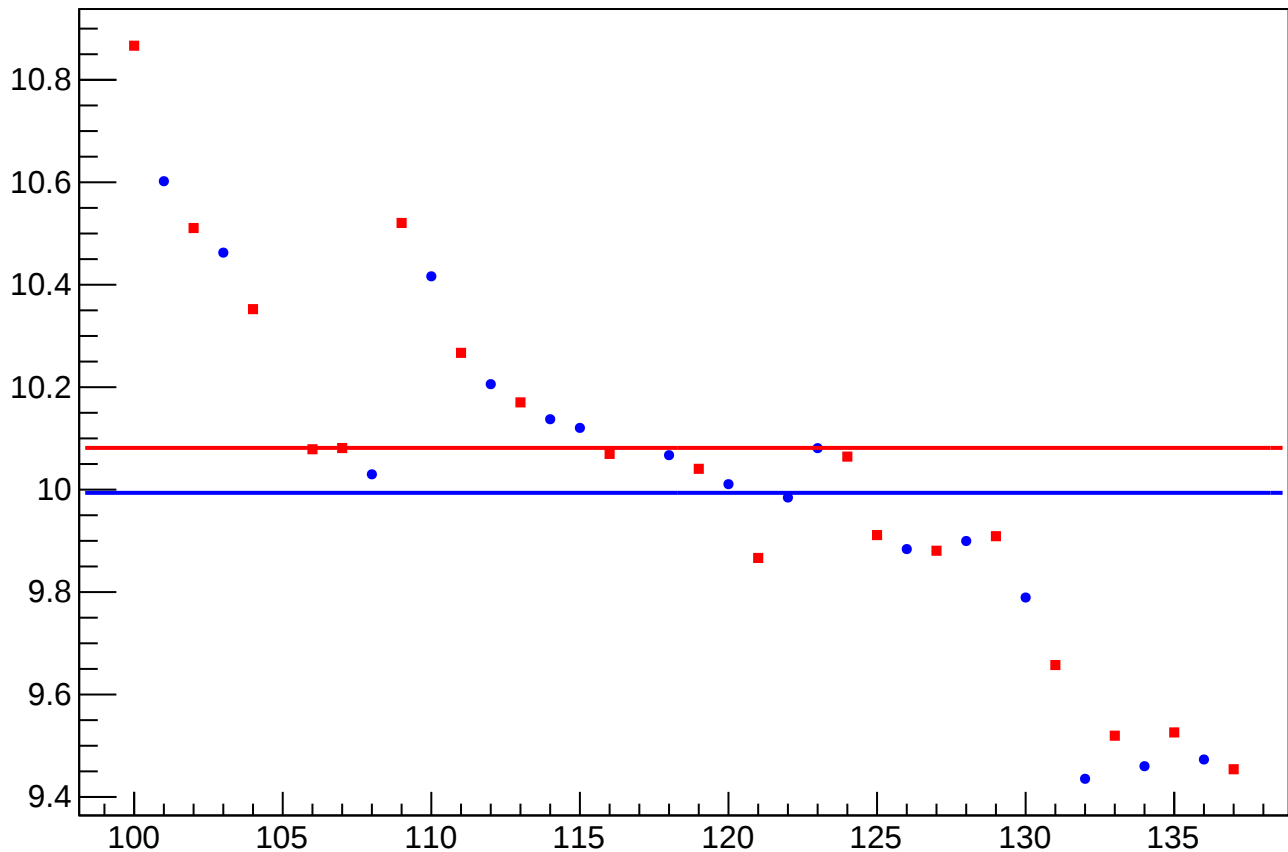
Right: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 4993749.3/35

In: 0.002+/-0.000  $\chi^2/\text{NDF}$ :2661372.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.002+/-0.000  $\chi^2/\text{NDF}$ : 4993749.3/35

# yield\_sam8\_mean vs Slug, Sign Corrected



Right In: 9.994+/-0.000  $\chi^2/\text{NDF}$ : 18815741664.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 10.082+/-0.000  $\chi^2/\text{NDF}$ : 15502695798.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

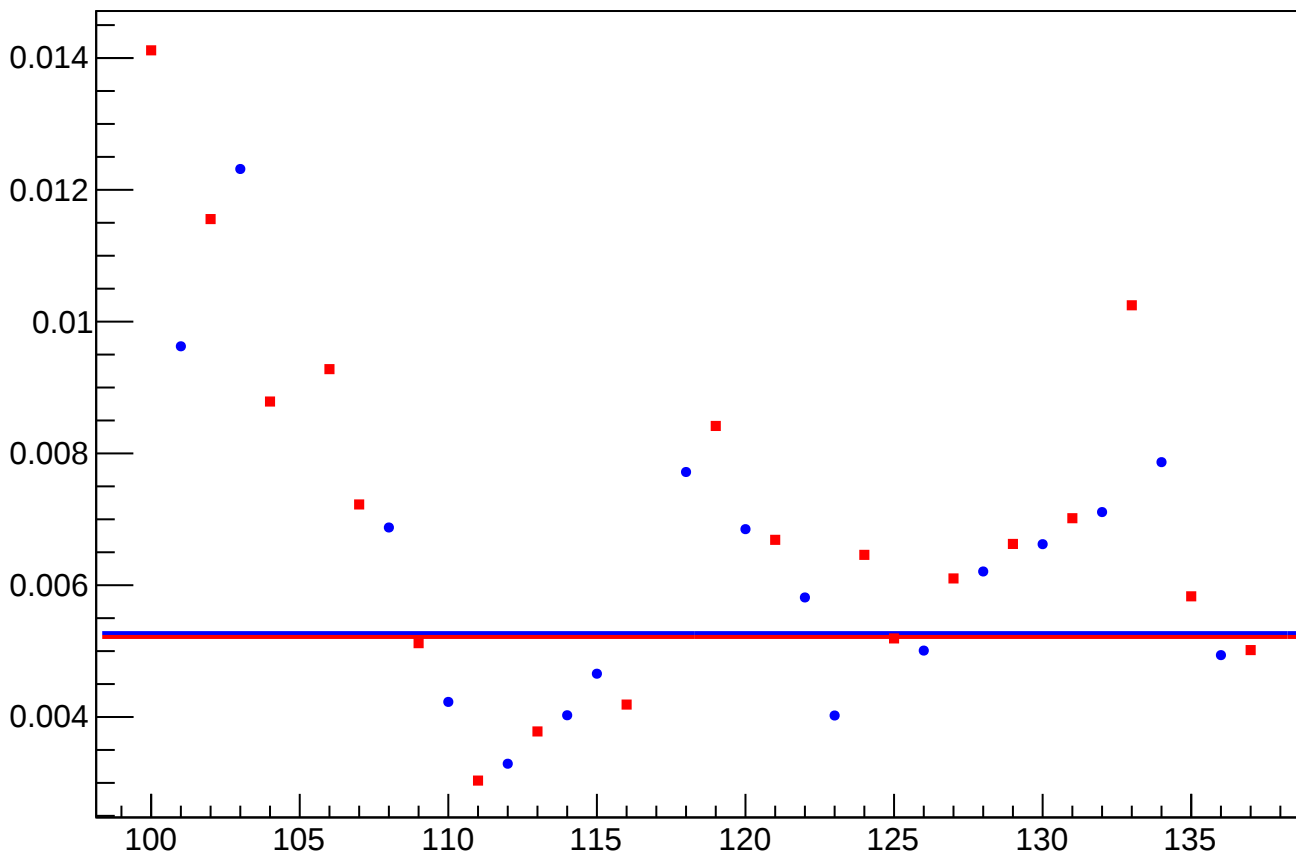
Right: 10.039+/-0.000  $\chi^2/\text{NDF}$ : 35036056098.5/35

In: 9.994+/-0.000  $\chi^2/\text{NDF}$ : 18815741664.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 10.039+/-0.000  $\chi^2/\text{NDF}$ : 35036056098.5

# yield\_sam8\_rms vs Slug, Sign Corrected



Right In: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 1245563.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 1657948.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 2904141.2/35

In: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 1245563.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 2904141.2/35

# cor\_sam1\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

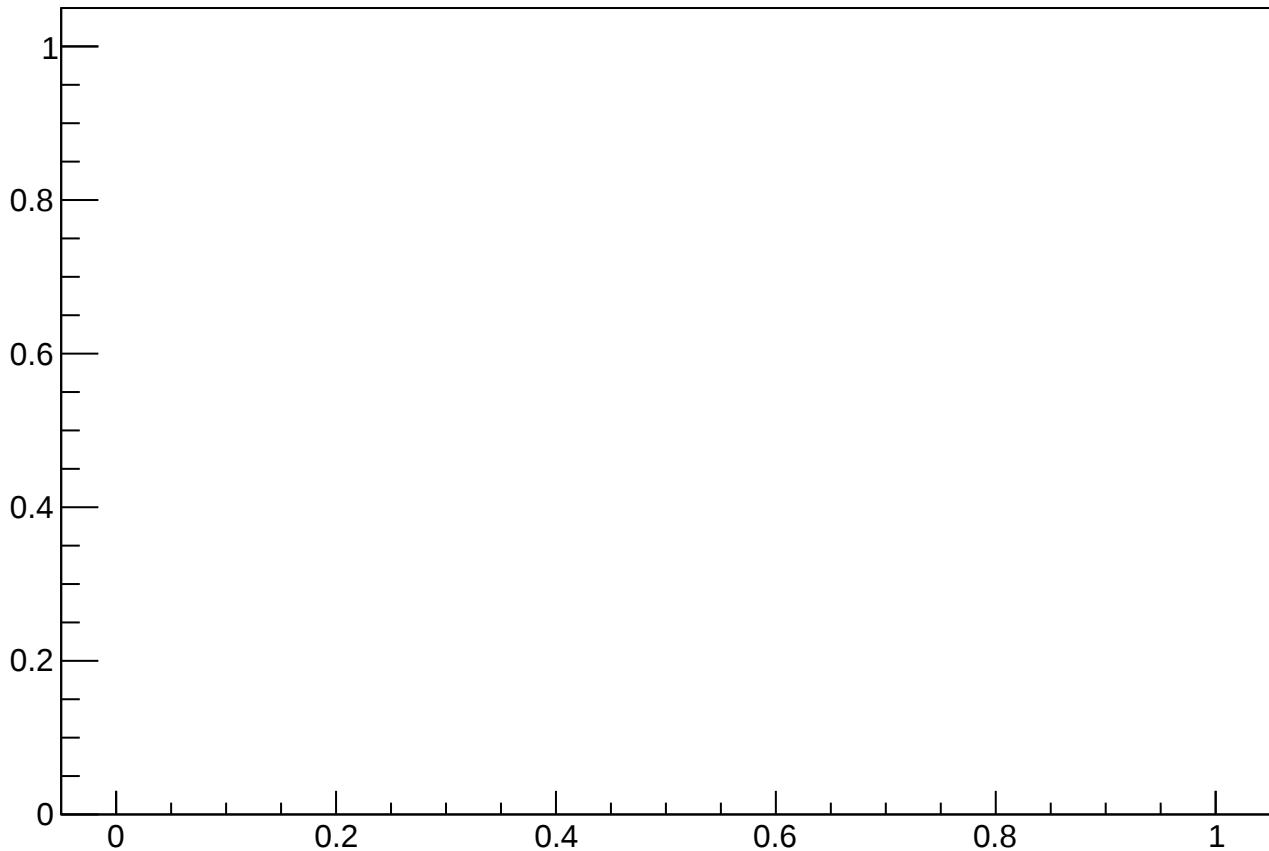
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam1\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

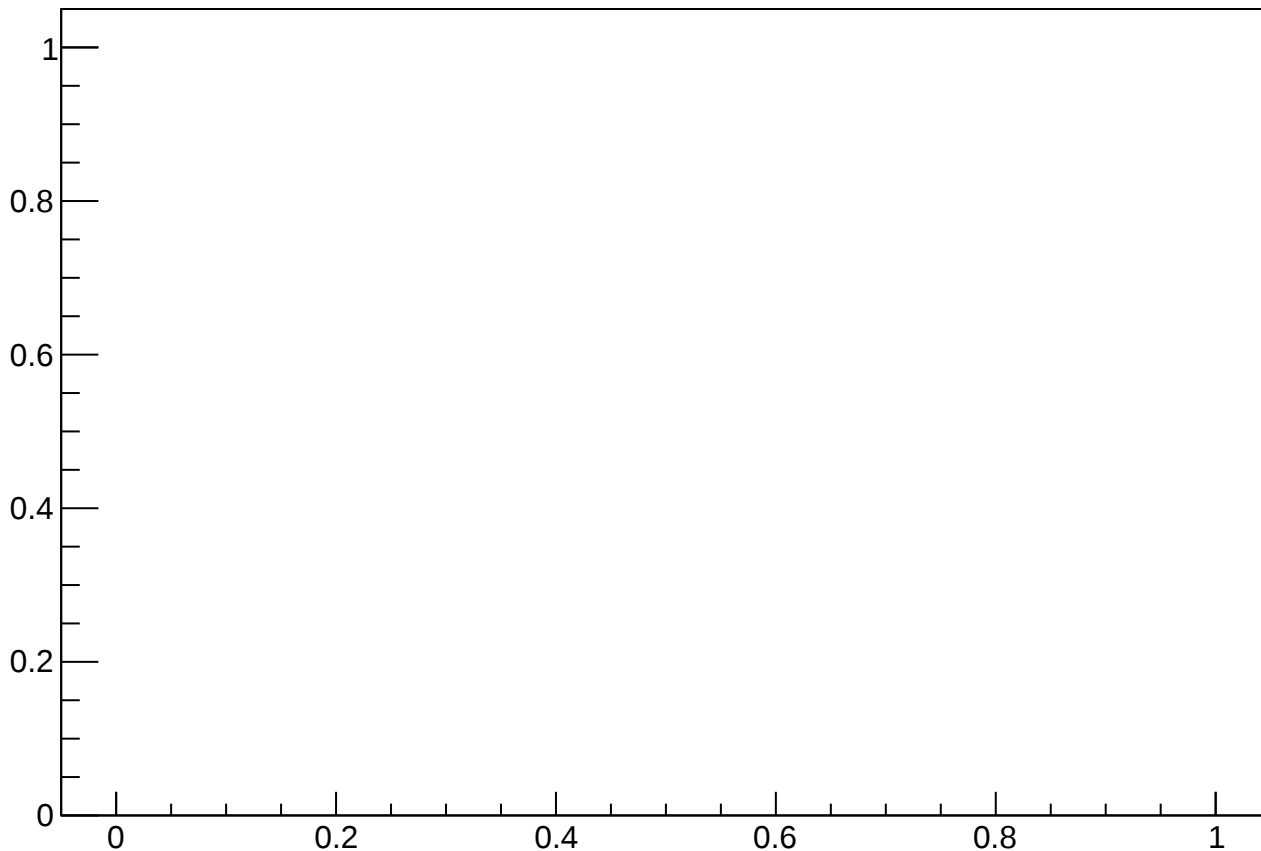
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam2\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

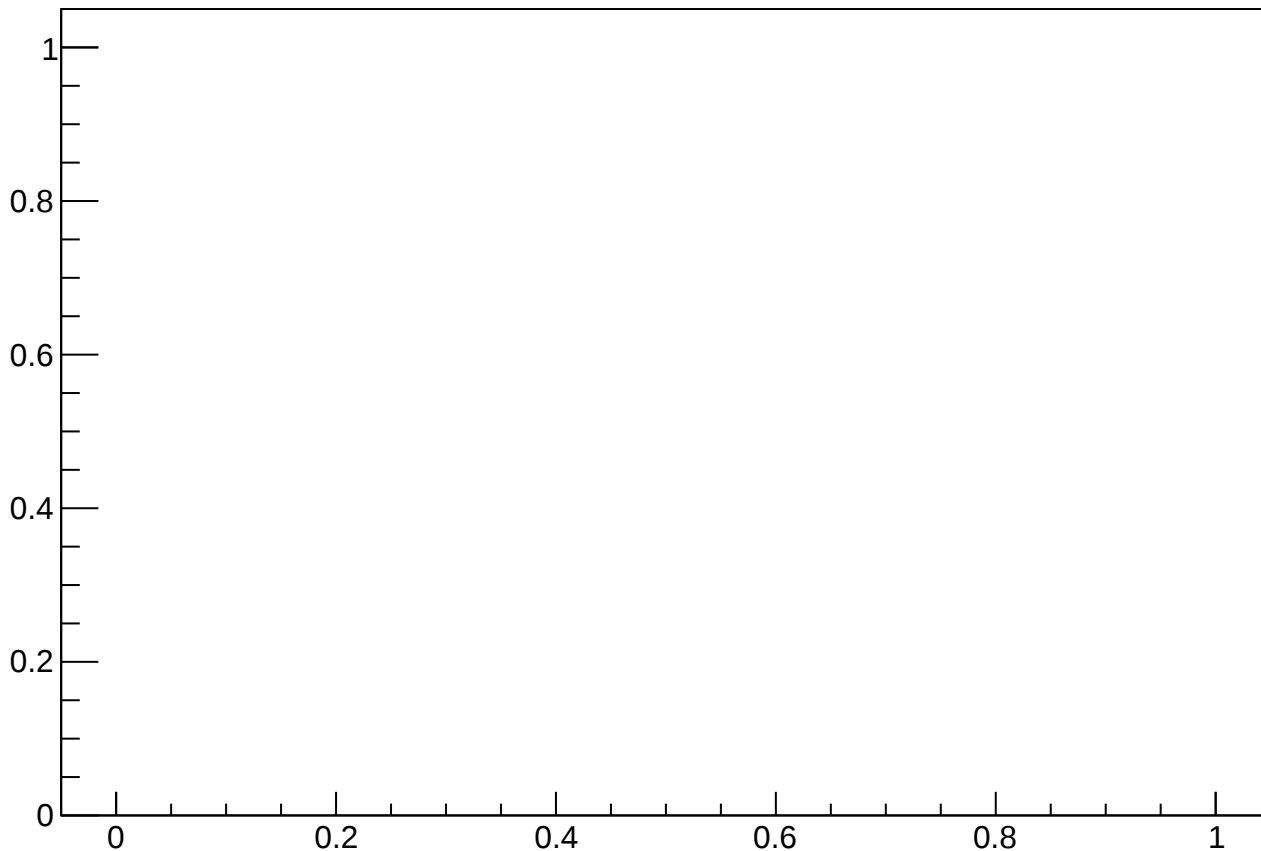
Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam2\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

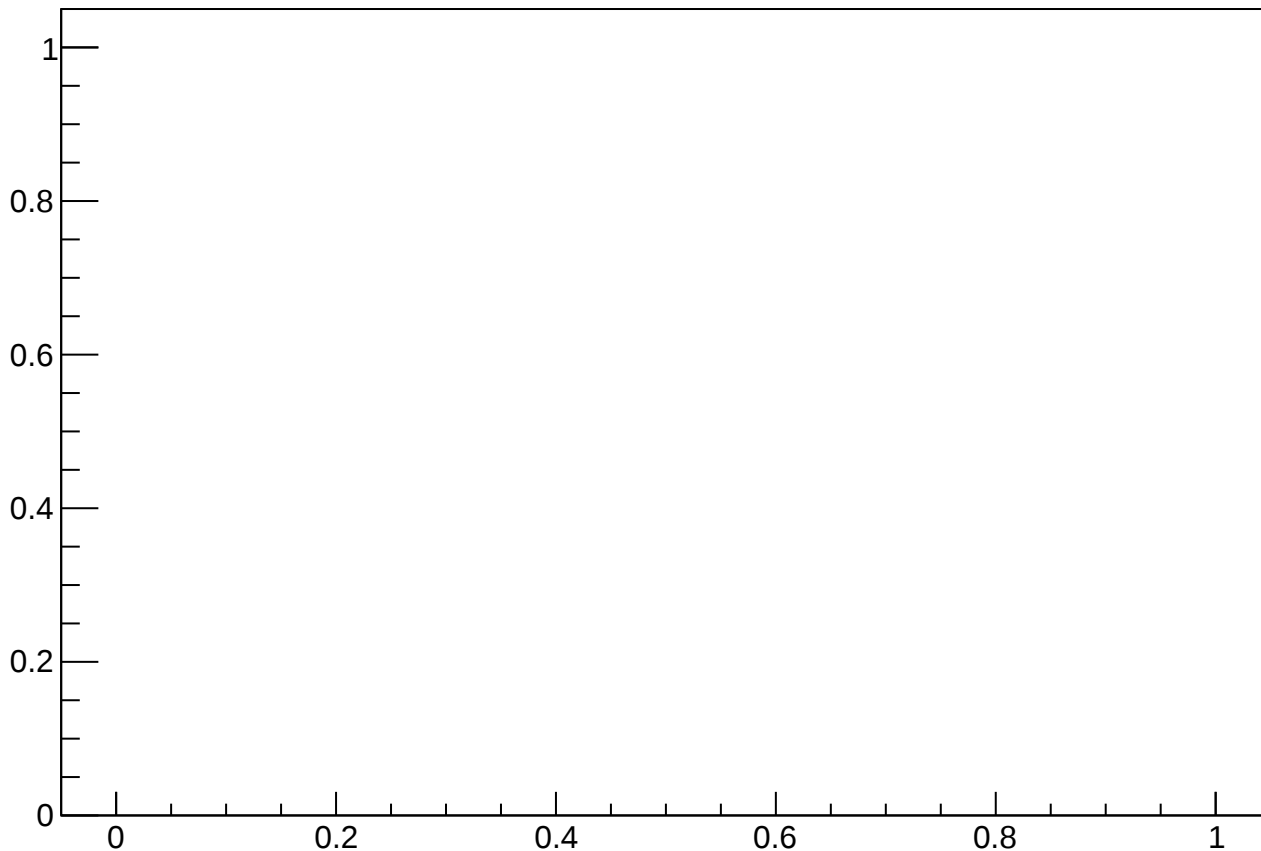
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam3\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam3\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

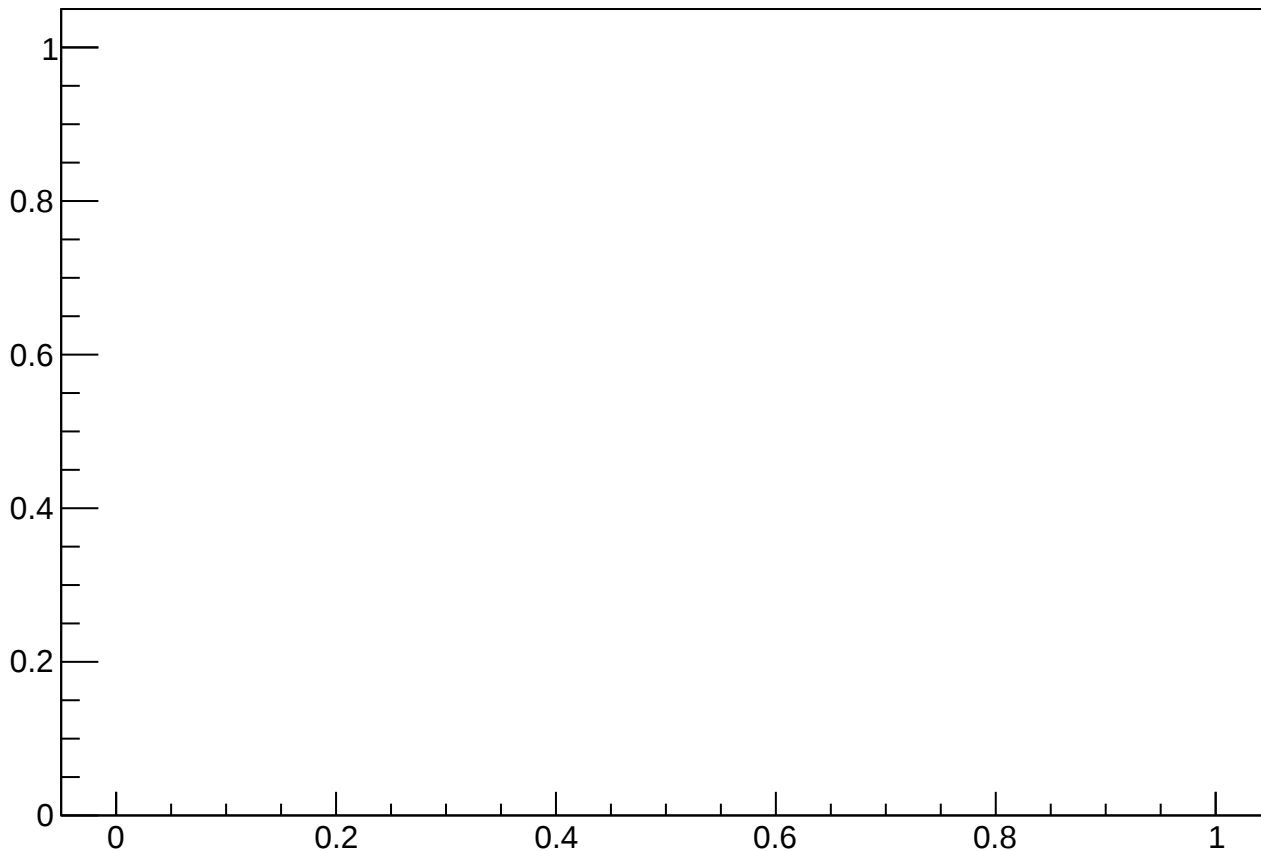
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam4\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam4\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

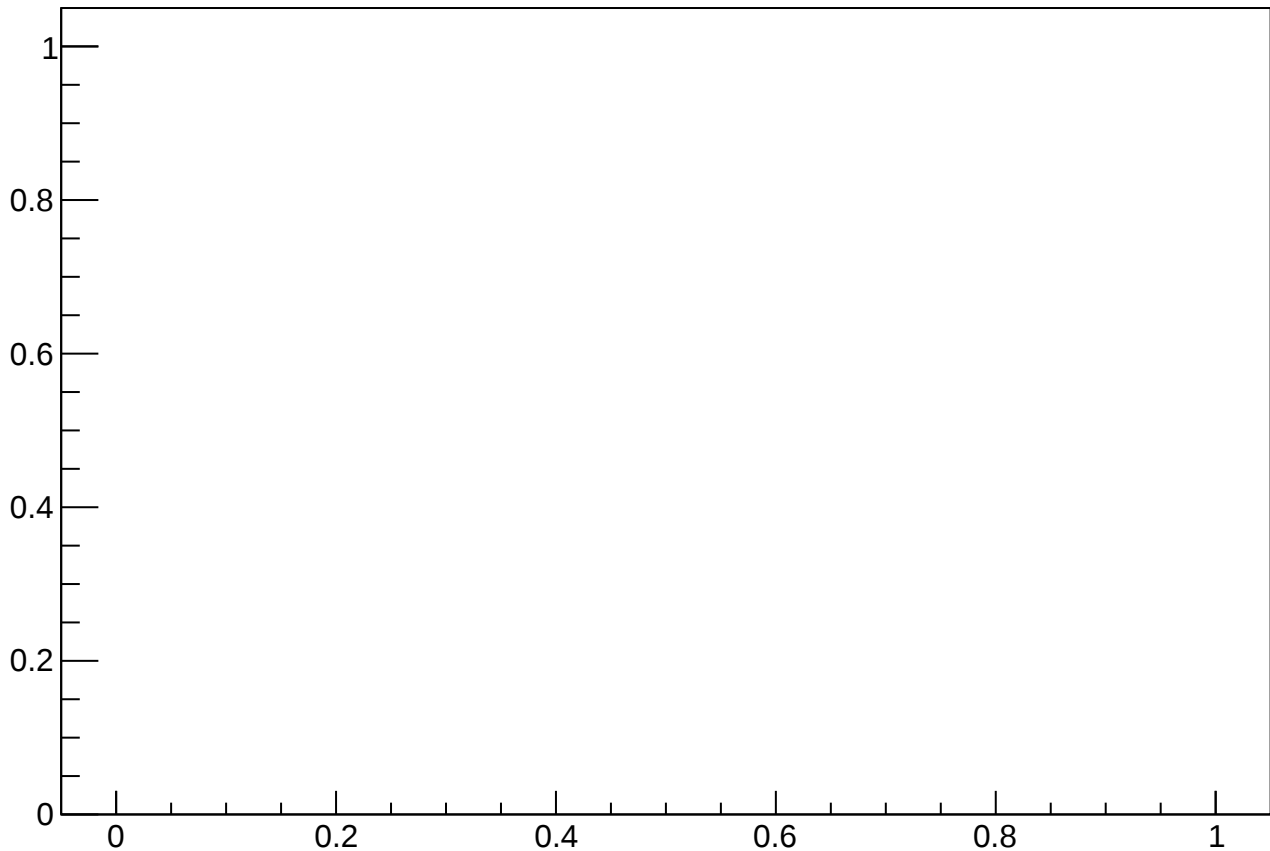
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam5\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

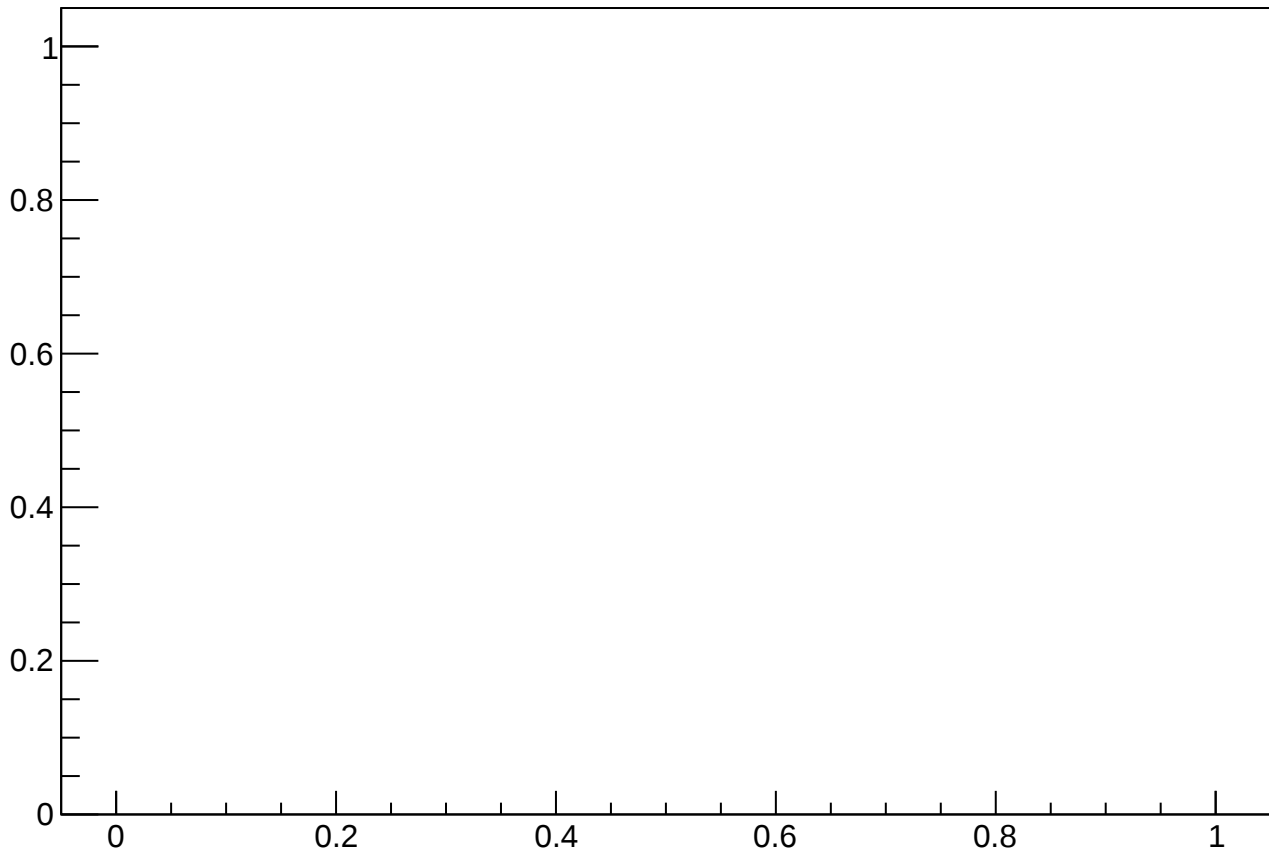
Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam5\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam6\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam6\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam7\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam7\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam8\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

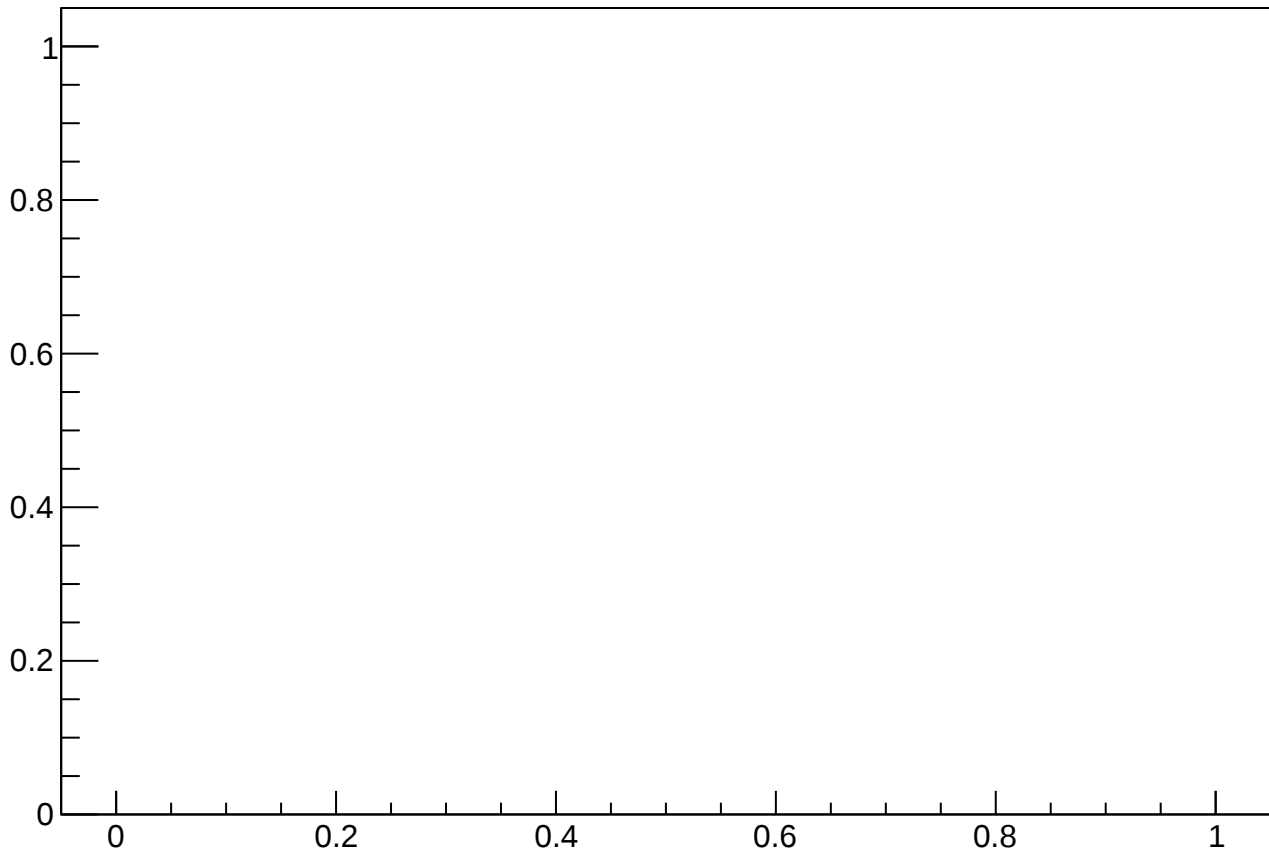
Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# cor\_sam8\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

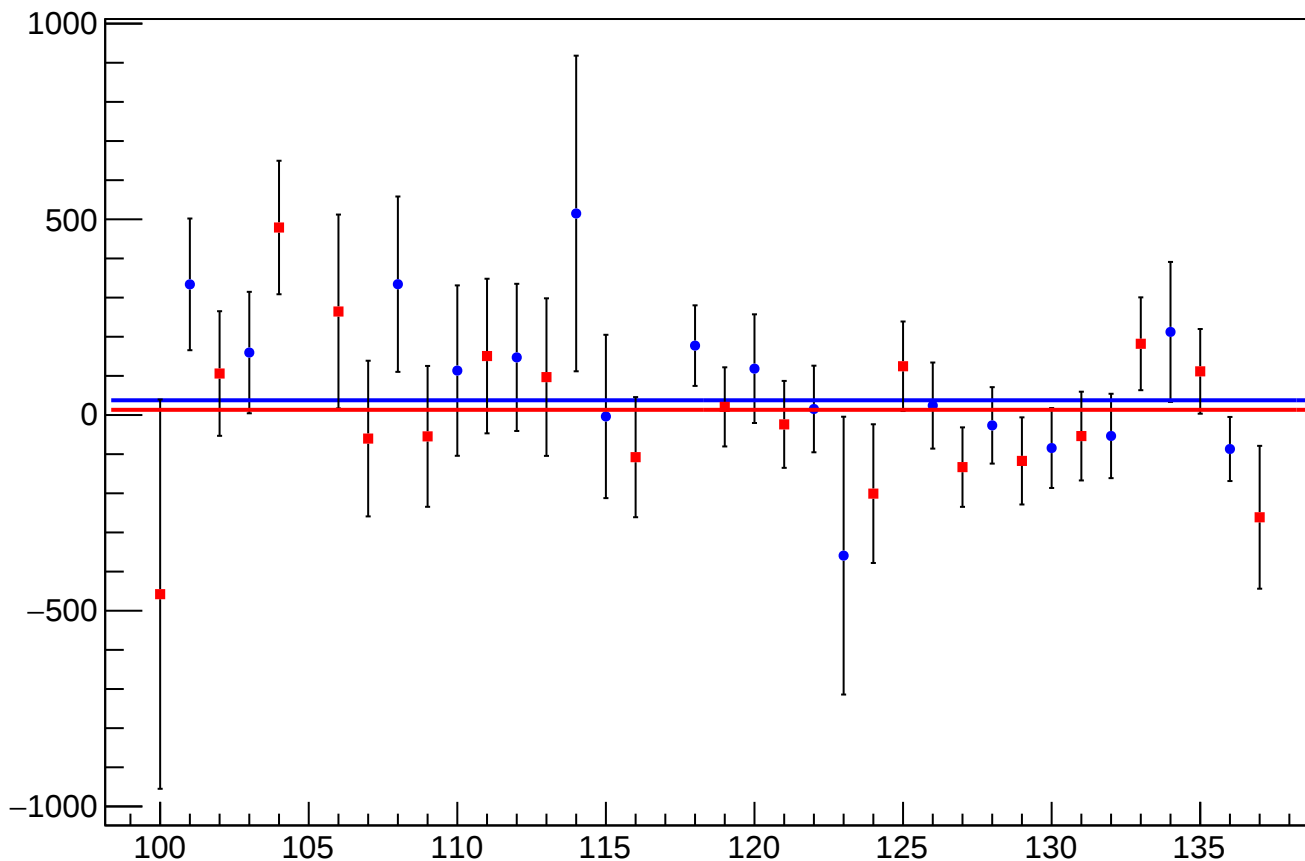
Right: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

# reg\_asym\_sam1\_mean vs Slug, Sign Corrected



Right In: 37.694+/-32.253  $\chi^2/\text{NDF}$ : 16.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 13.278+/-32.066  $\chi^2/\text{NDF}$ : 22.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

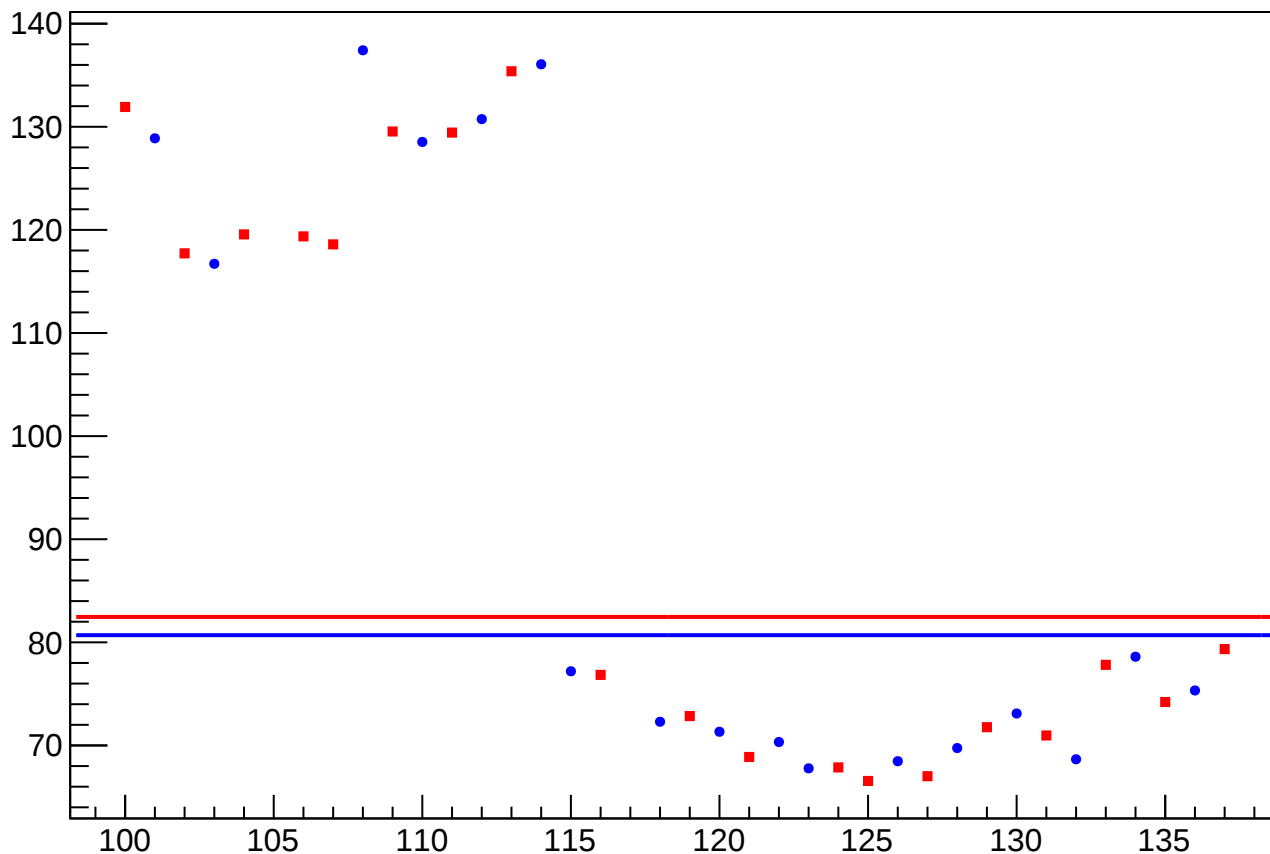
Right: 25.415+/-22.740  $\chi^2/\text{NDF}$ : 39.7/35

In: 37.694+/-32.253  $\chi^2/\text{NDF}$ : 16.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 25.415+/-22.740  $\chi^2/\text{NDF}$ : 39.7/35

# reg\_asym\_sam1\_rms vs Slug, Sign Corrected



Right In: 80.694+/-0.023  $\chi^2/\text{NDF}$ : 814026.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 82.464+/-0.023  $\chi^2/\text{NDF}$ : 914878.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

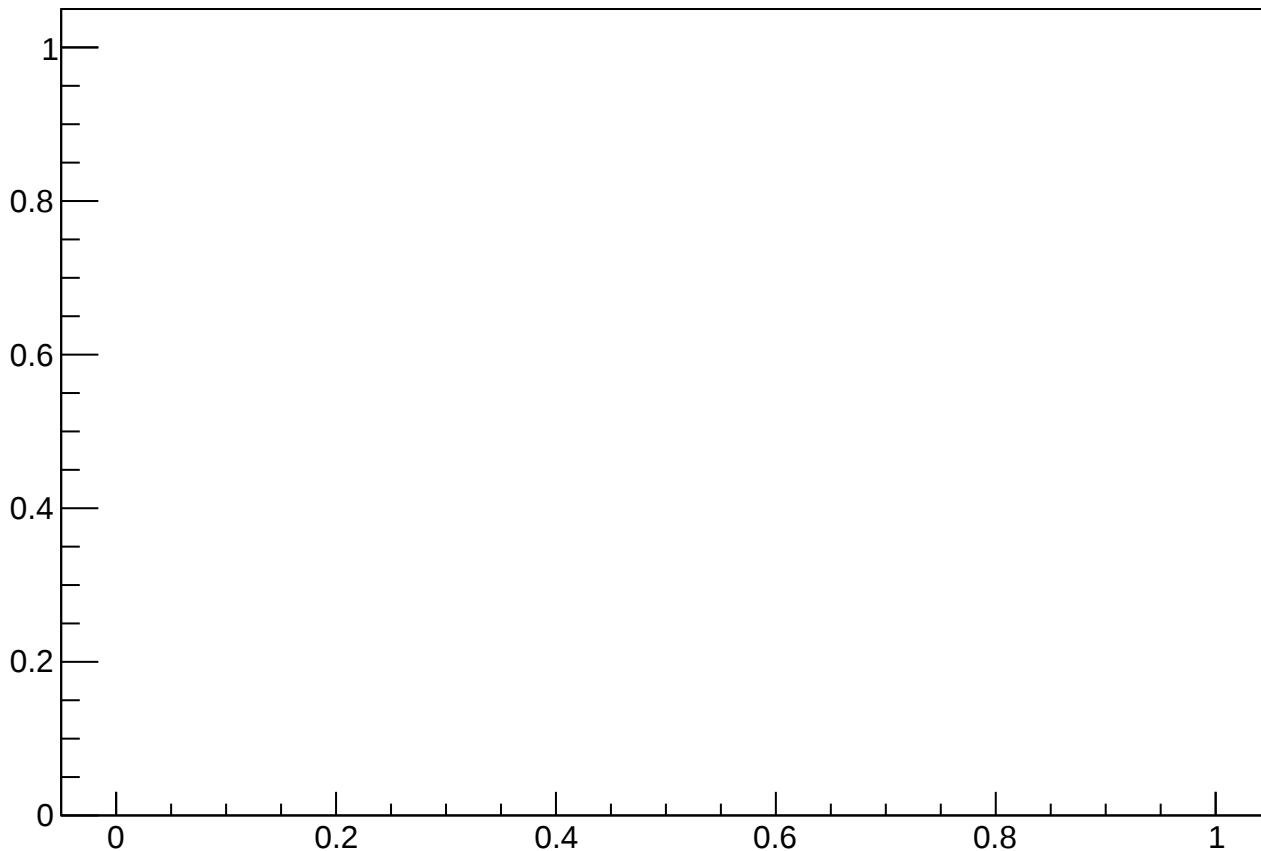
Right: 81.584+/-0.016  $\chi^2/\text{NDF}$ : 1731931.3/35

In: 80.694+/-0.023  $\chi^2/\text{NDF}$ : 814026.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 81.584+/-0.016  $\chi^2/\text{NDF}$ : 1731931.3/35

asym\_sam1\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

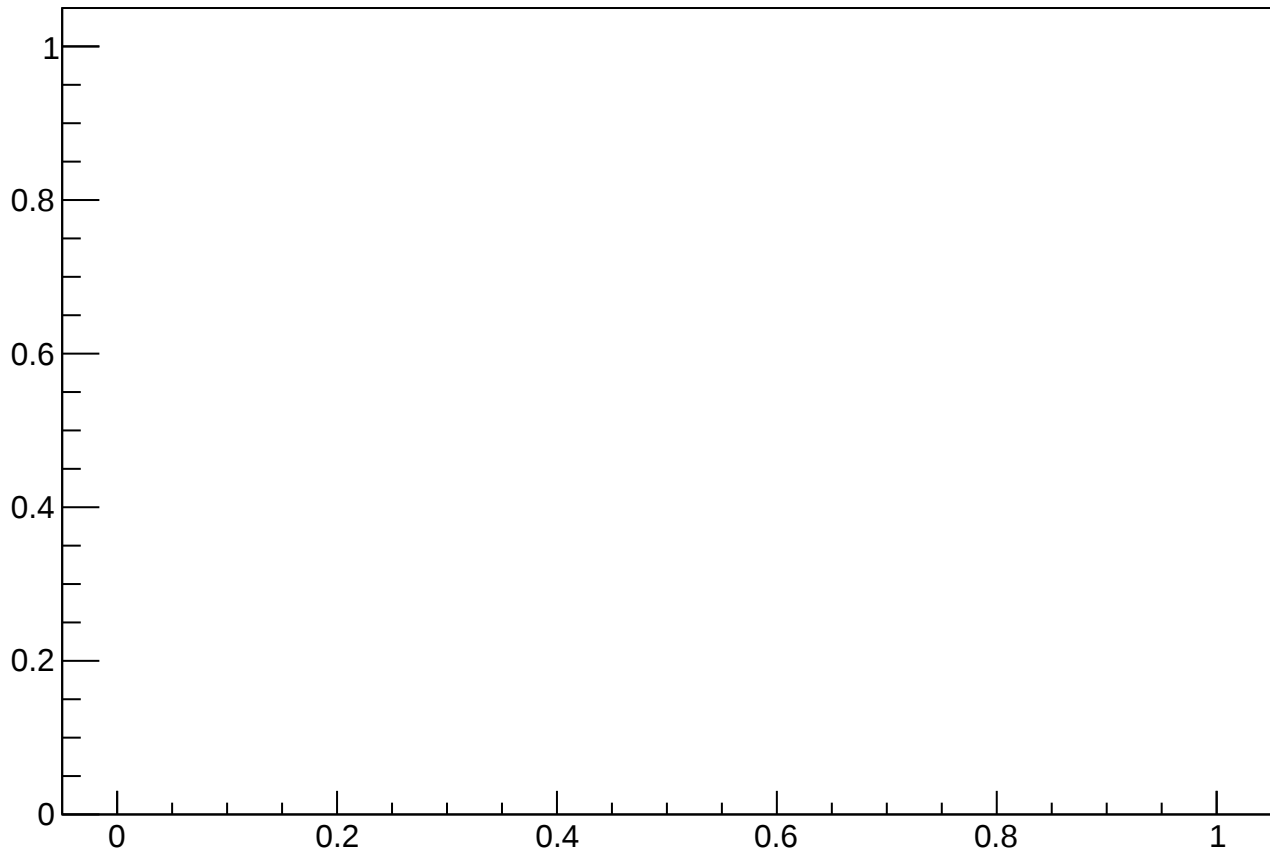
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_sam1\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

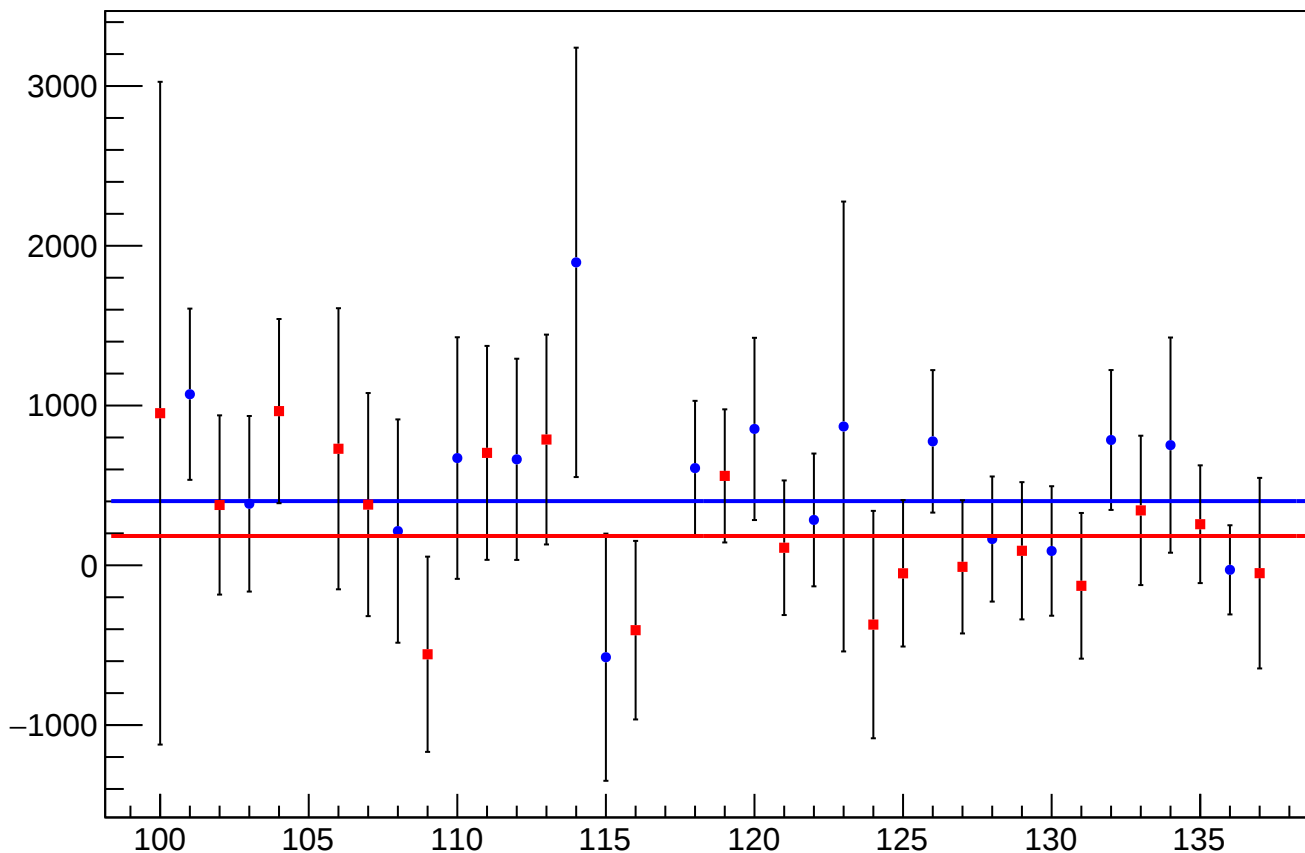
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# reg\_asym\_sam2\_mean vs Slug, Sign Corrected



Right In: 401.871+/-121.048  $\chi^2/\text{NDF}$ : 10.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 183.481+/-120.338  $\chi^2/\text{NDF}$ : 9.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

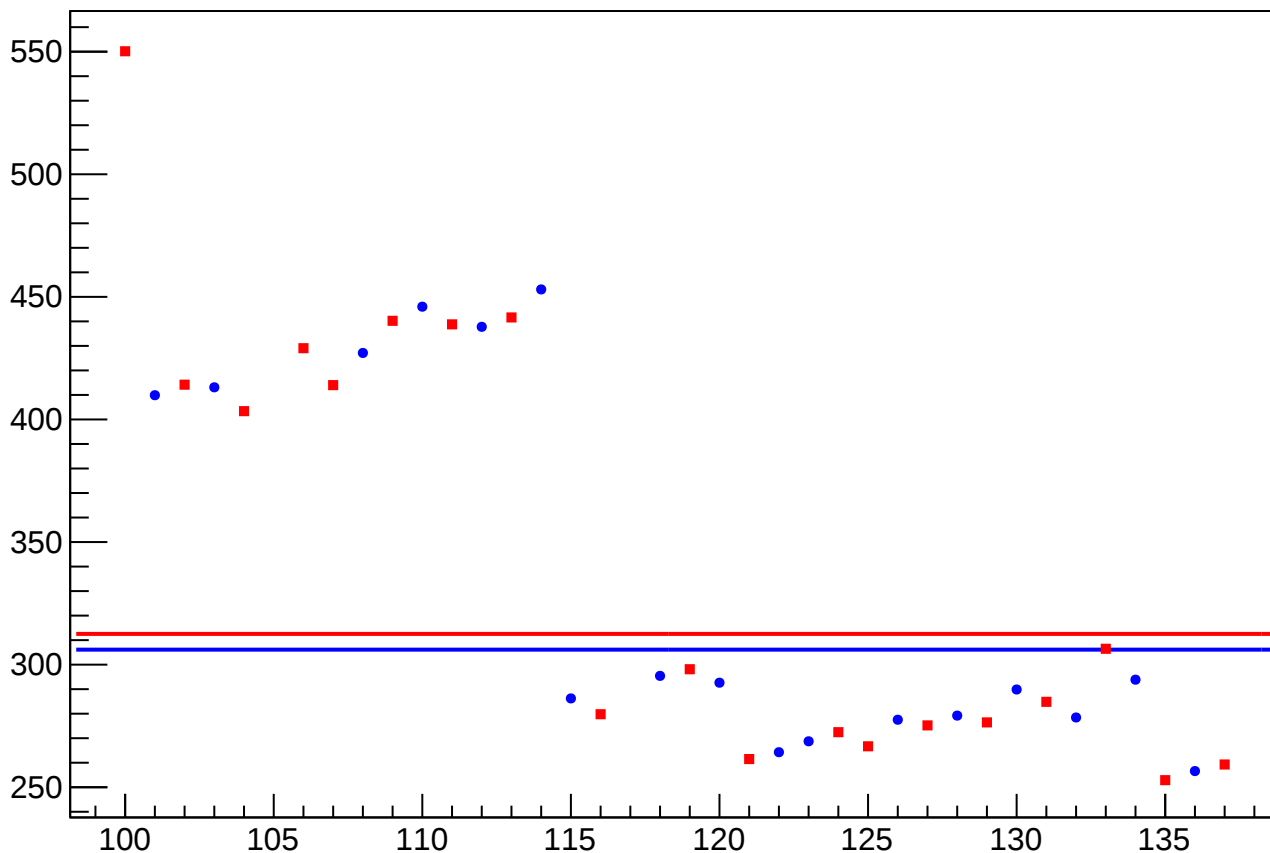
Right: 292.034+/-85.342  $\chi^2/\text{NDF}$ : 21.9/35

In: 401.871+/-121.048  $\chi^2/\text{NDF}$ : 10.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 292.034+/-85.342  $\chi^2/\text{NDF}$ : 21.9/35

# reg\_asym\_sam2\_rms vs Slug, Sign Corrected



Right In: 306.123+/-0.086  $\chi^2/\text{NDF}$ : 508435.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 312.543+/-0.085  $\chi^2/\text{NDF}$ : 625769.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 309.352+/-0.060  $\chi^2/\text{NDF}$ : 1137034.2/35

In: 306.123+/-0.086  $\chi^2/\text{NDF}$ : 508435.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 309.352+/-0.060  $\chi^2/\text{NDF}$ : 1137034.2/35

asym\_sam2\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

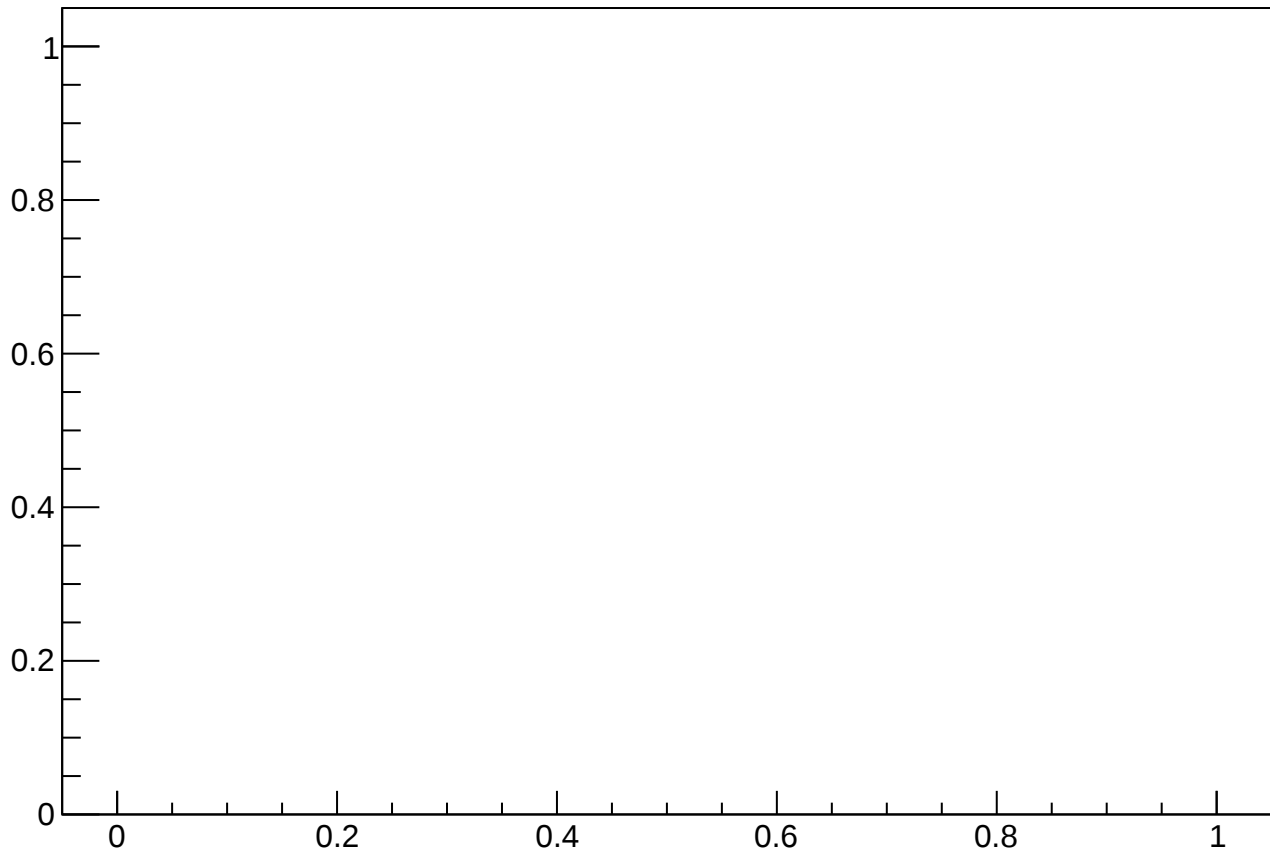
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_sam2\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

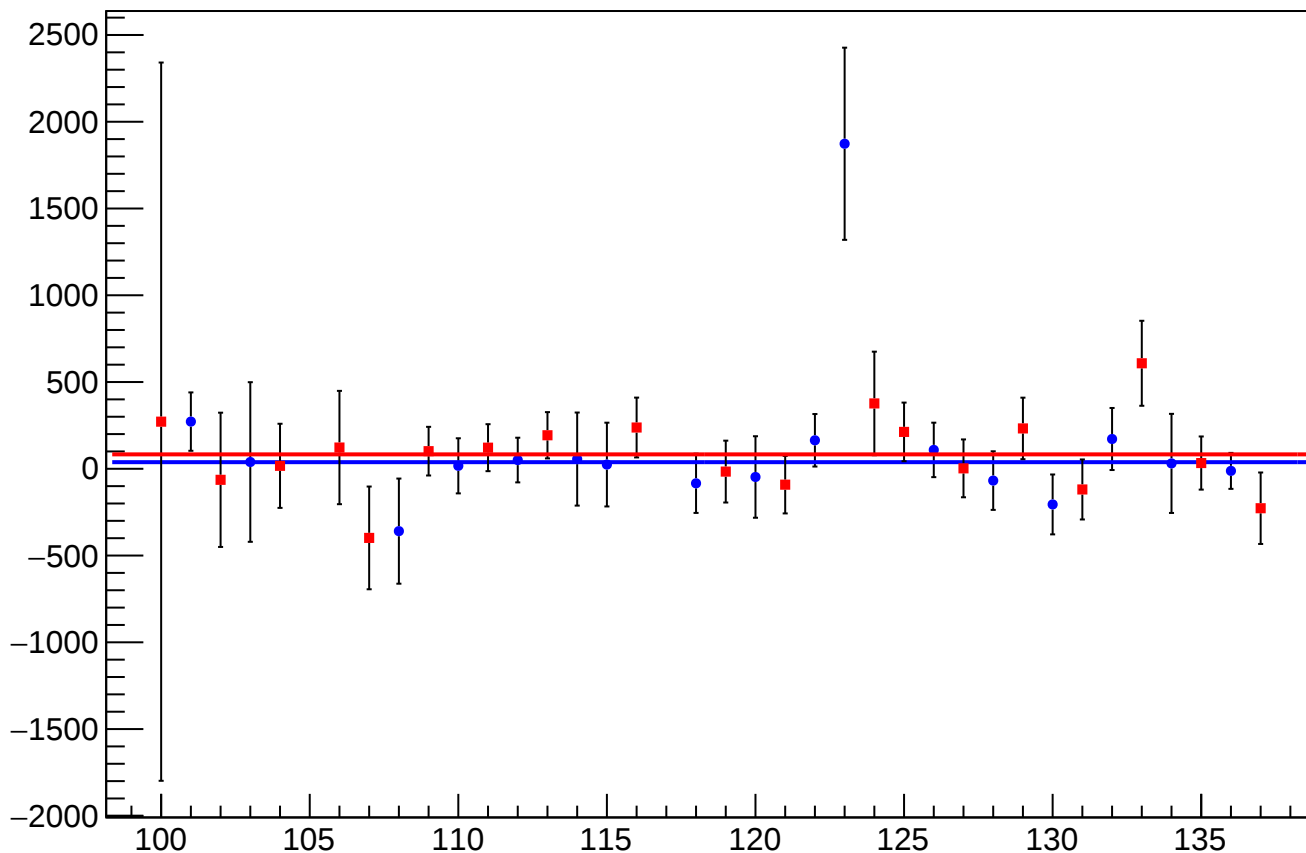
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# reg\_asym\_sam3\_mean vs Slug, Sign Corrected



Right In: 38.126+/-43.548  $\chi^2/\text{NDF}$ : 19.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 83.101+/-43.098  $\chi^2/\text{NDF}$ : 16.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

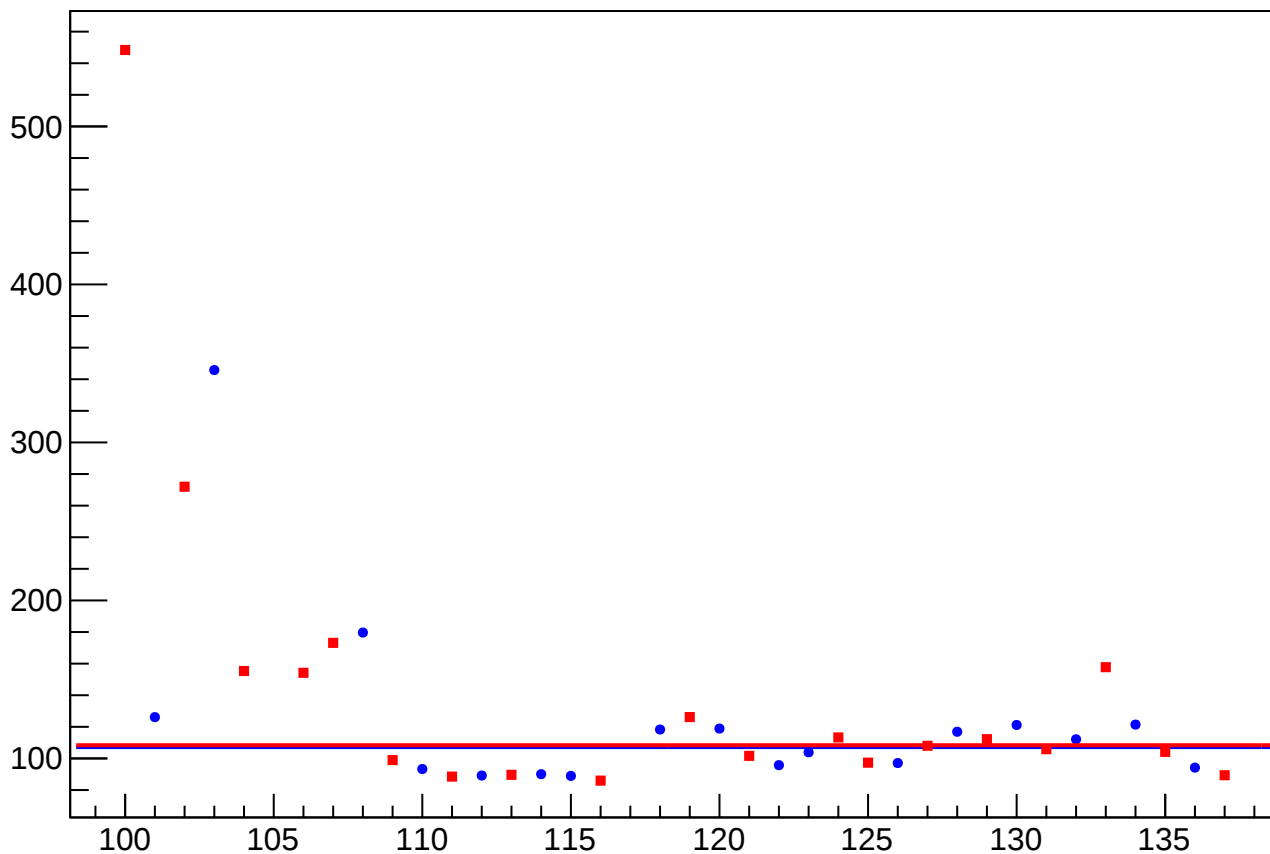
Right: 60.847+/-30.633  $\chi^2/\text{NDF}$ : 36.7/35

In: 38.126+/-43.548  $\chi^2/\text{NDF}$ : 19.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 60.847+/-30.633  $\chi^2/\text{NDF}$ : 36.7/35

# reg\_asym\_sam3\_rms vs Slug, Sign Corrected



Right In: 107.189+/-0.031  $\chi^2/\text{NDF}$ : 843115.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 108.359+/-0.030  $\chi^2/\text{NDF}$ : 917287.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

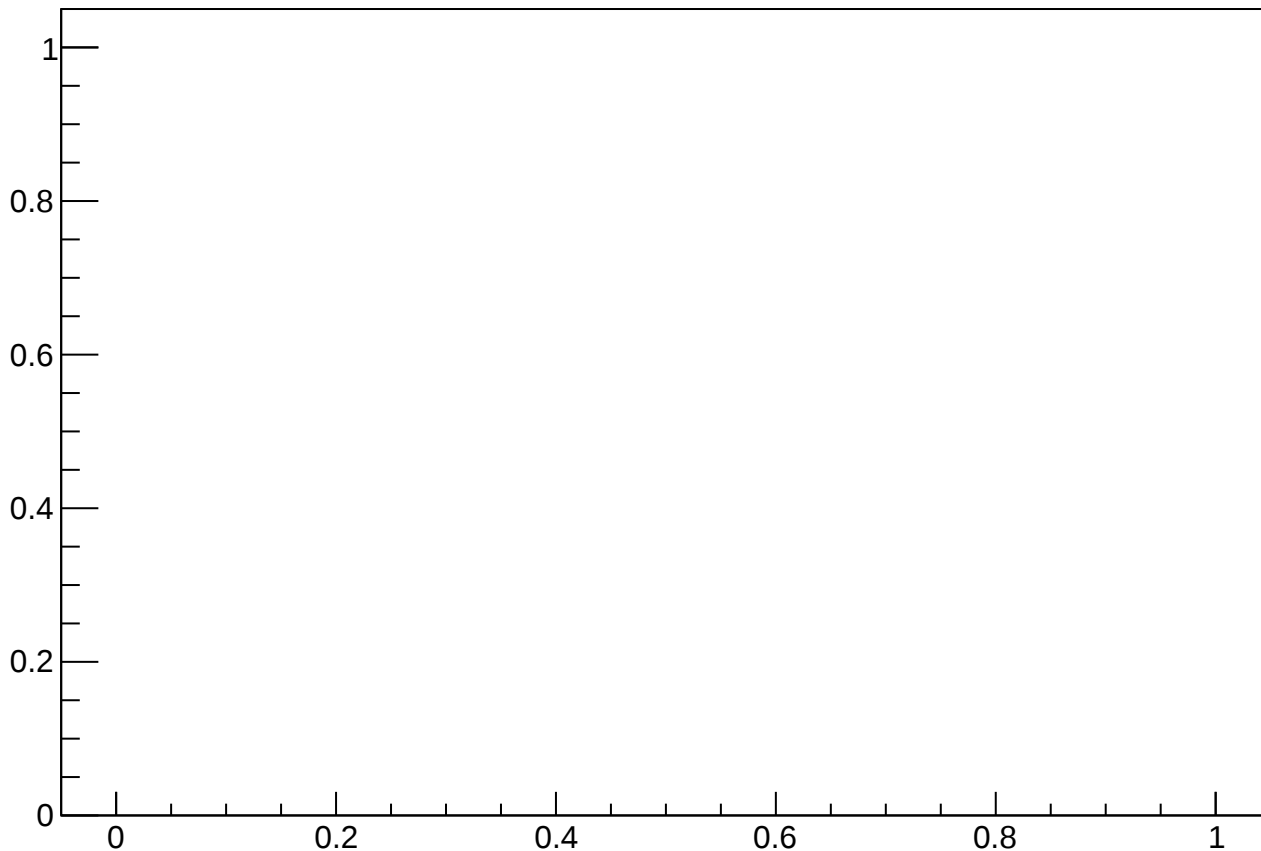
Right: 107.780+/-0.022  $\chi^2/\text{NDF}$ : 1761132.0/35

In: 107.189+/-0.031  $\chi^2/\text{NDF}$ : 843115.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 107.780+/-0.022  $\chi^2/\text{NDF}$ : 1761132.0/35

asym\_sam3\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

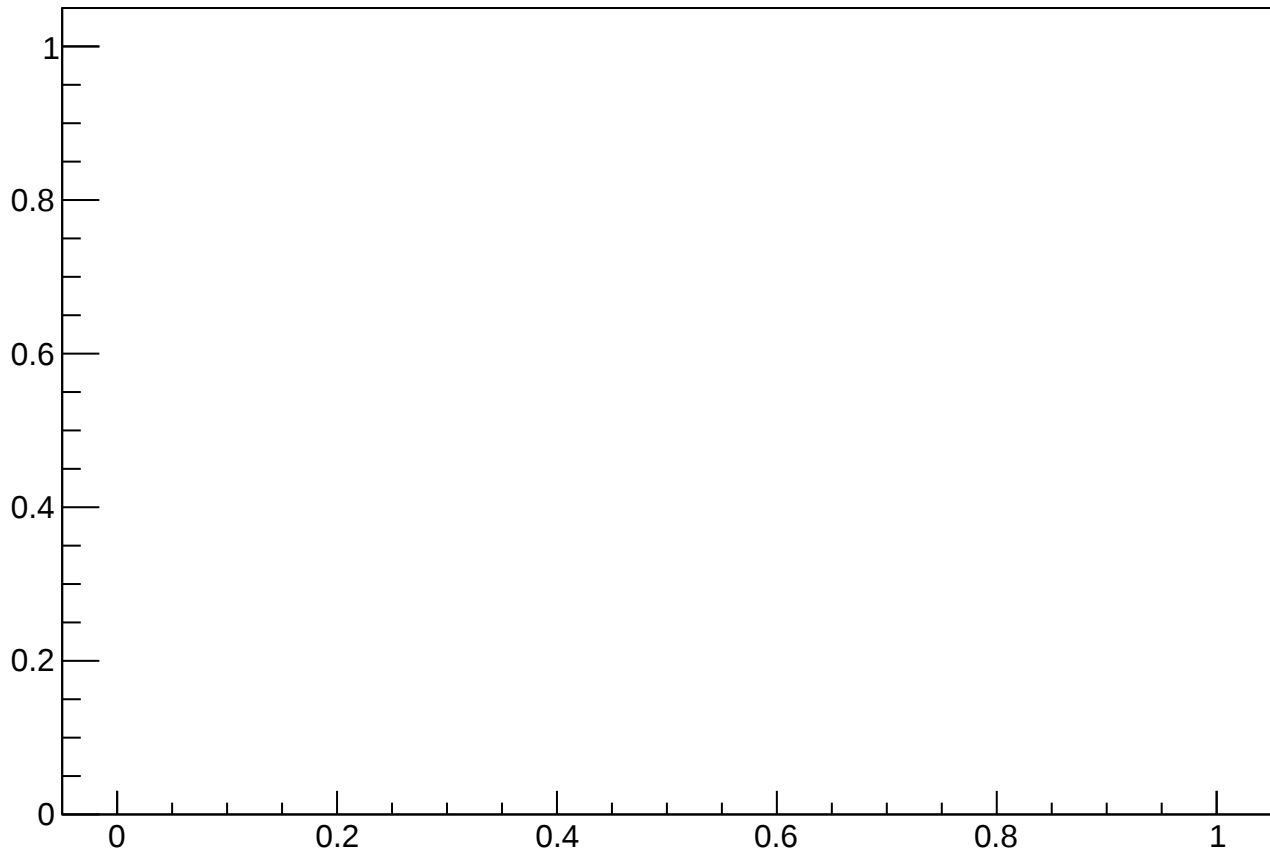
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_sam3\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

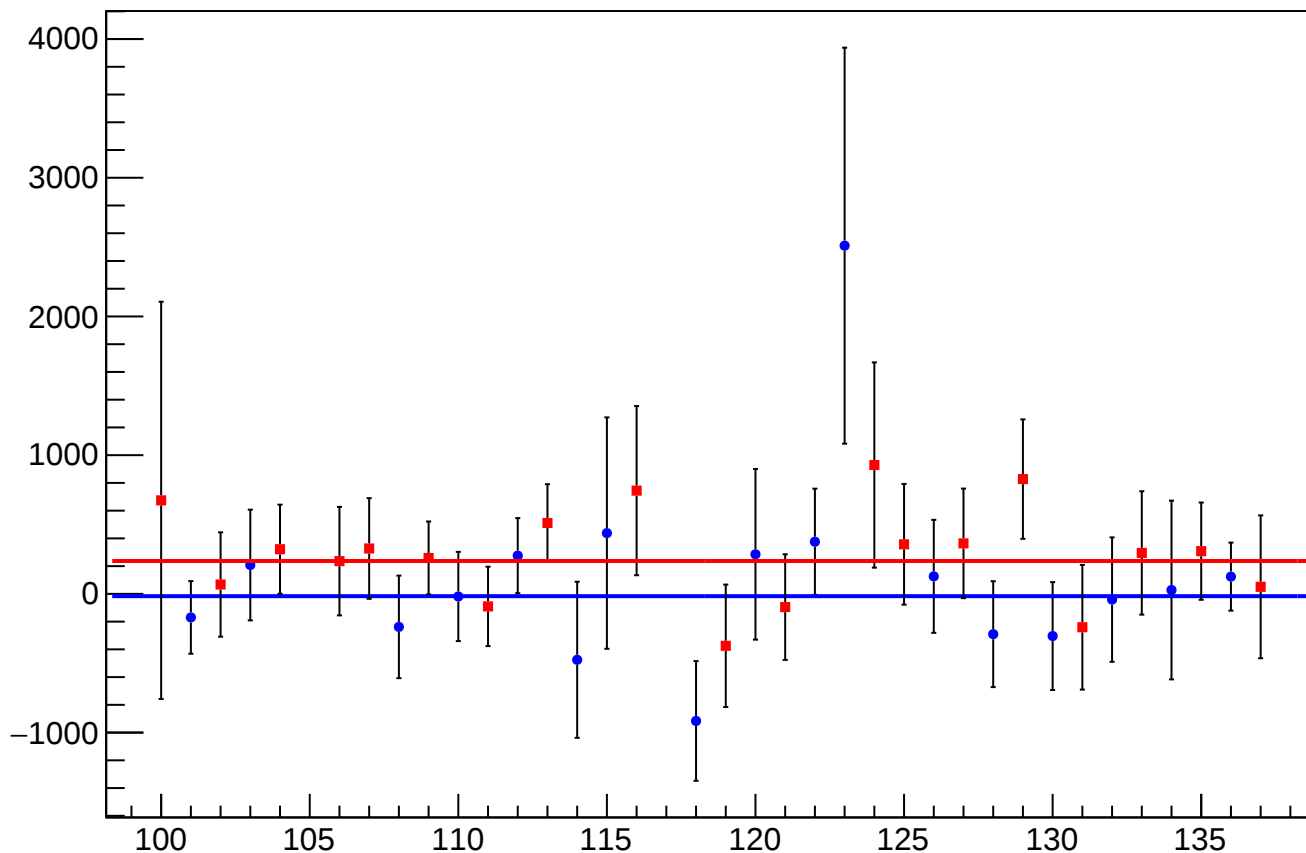
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# reg\_asym\_sam4\_mean vs Slug, Sign Corrected



Right In: -16.459+/-93.285  $\chi^2/\text{NDF}$ : 13.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 236.984+/-88.937  $\chi^2/\text{NDF}$ : 10.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

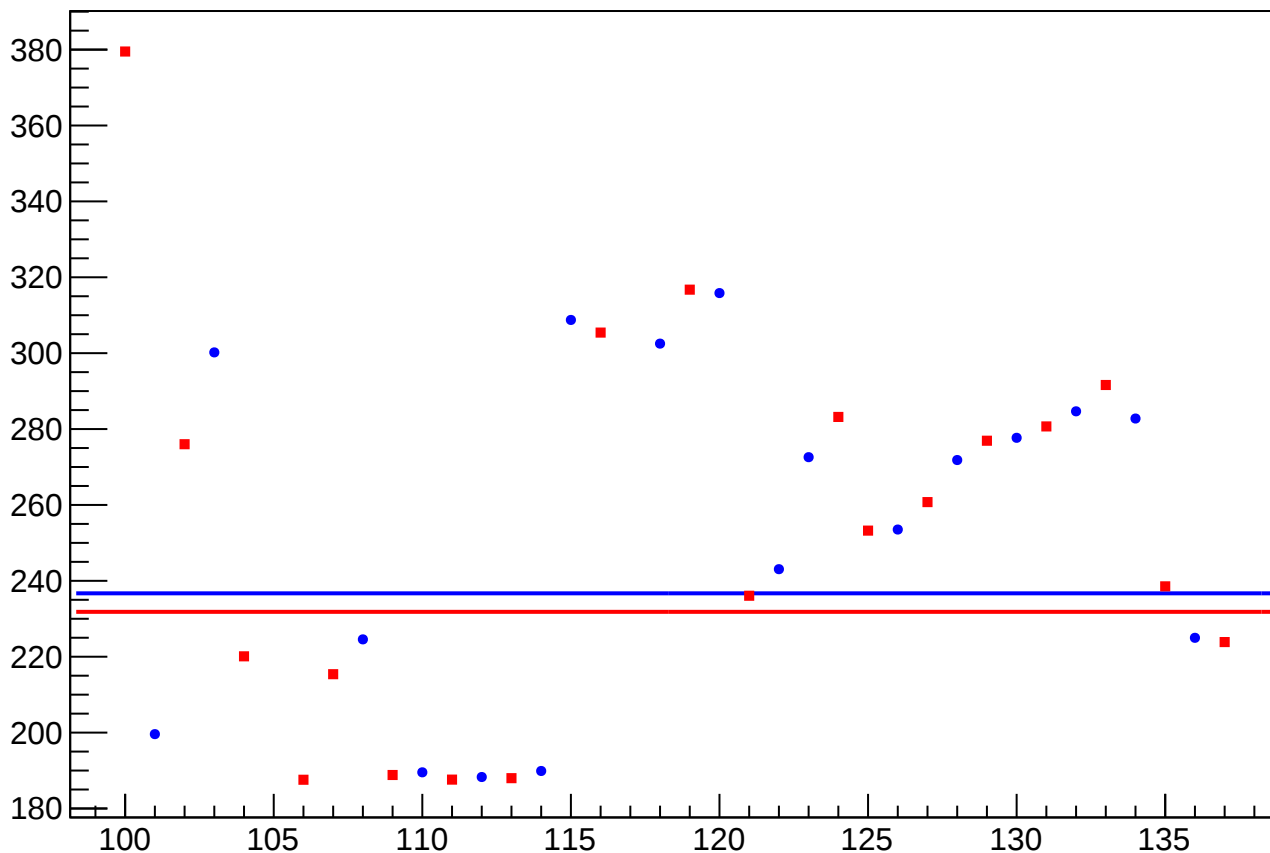
Right: 116.305+/-64.370  $\chi^2/\text{NDF}$ : 27.6/35

In: -16.459+/-93.285  $\chi^2/\text{NDF}$ : 13.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 116.305+/-64.370  $\chi^2/\text{NDF}$ : 27.6/35

# reg\_asym\_sam4\_rms vs Slug, Sign Corrected



Right In: 236.706+/-0.066  $\chi^2/\text{NDF}$ : 390344.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 231.828+/-0.063  $\chi^2/\text{NDF}$ : 443276.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

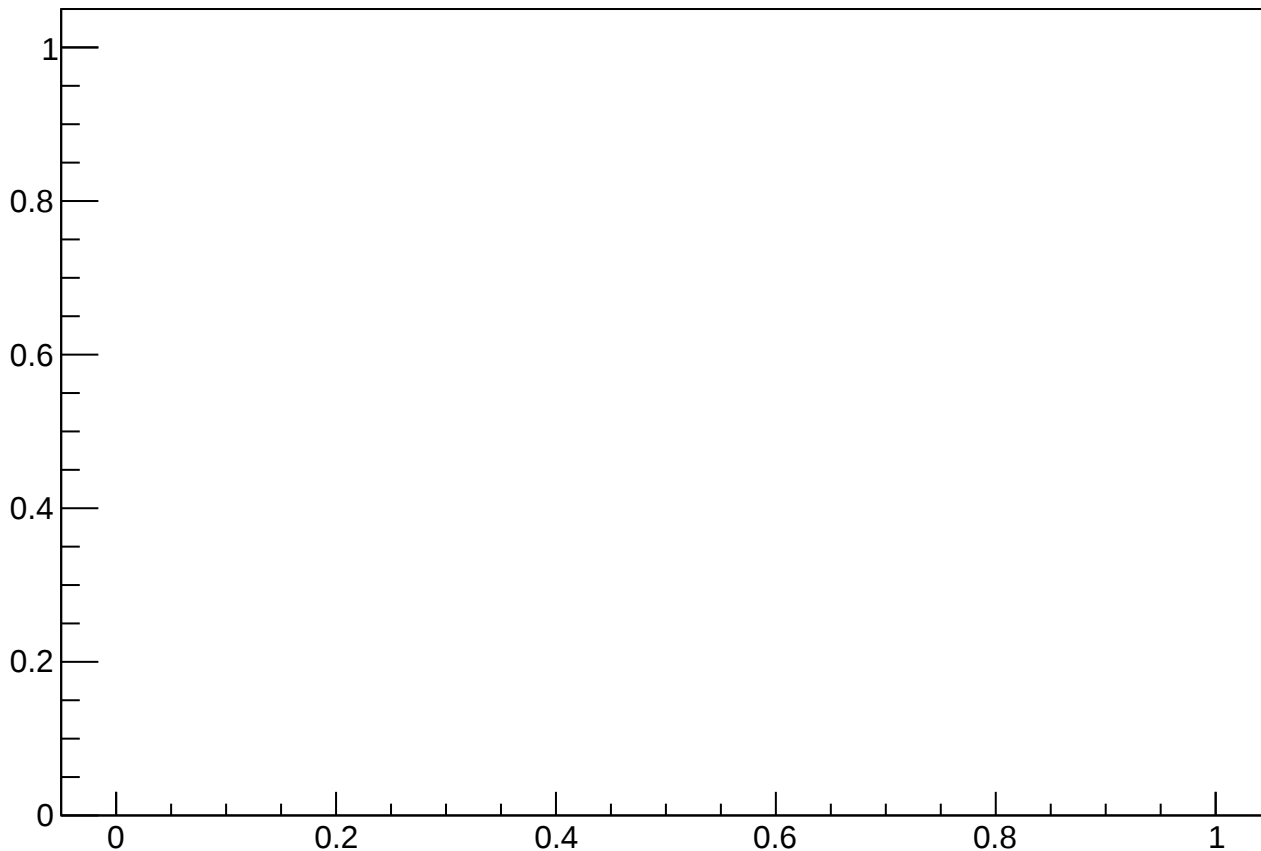
Right: 234.151+/-0.046  $\chi^2/\text{NDF}$ : 836486.0/35

In: 236.706+/-0.066  $\chi^2/\text{NDF}$ : 390344.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 234.151+/-0.046  $\chi^2/\text{NDF}$ : 836486.0/35

asym\_sam4\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

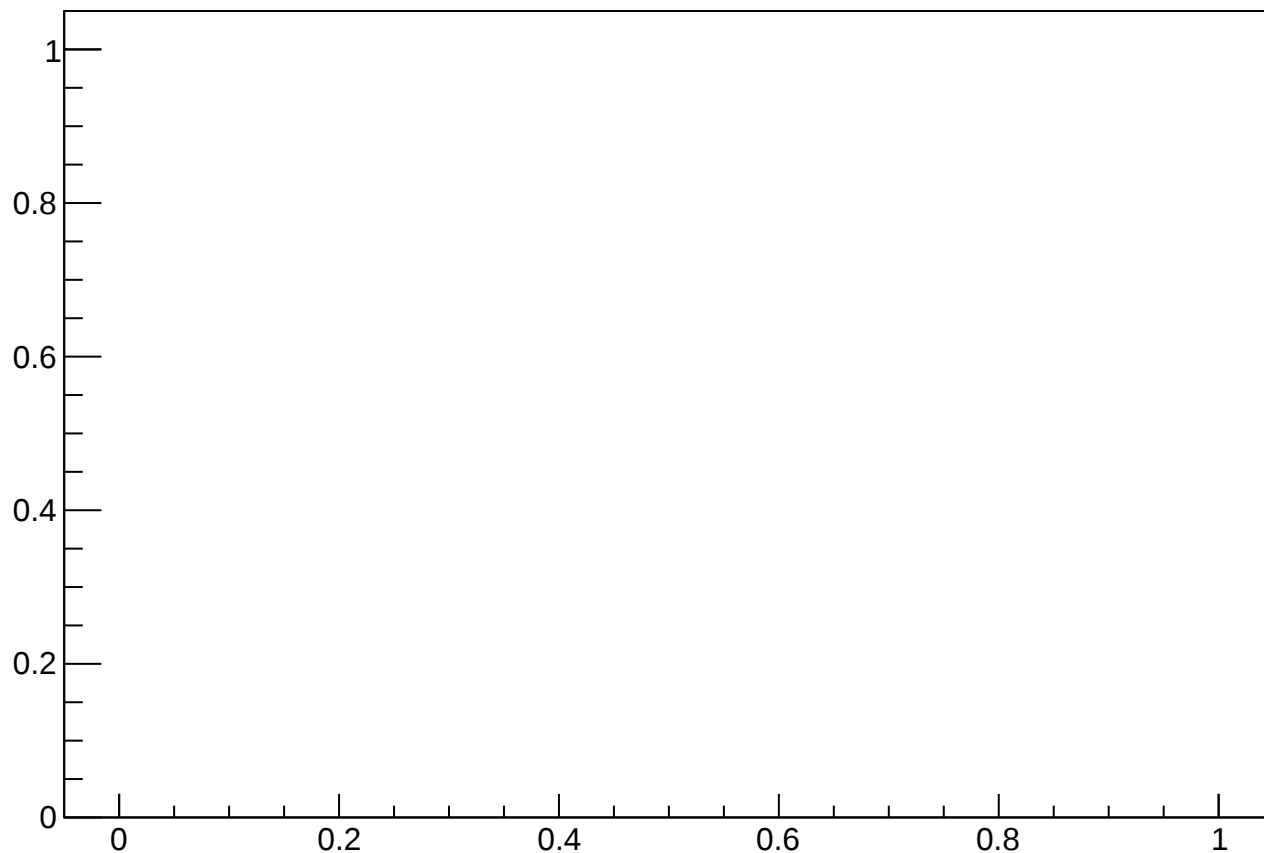
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_sam4\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

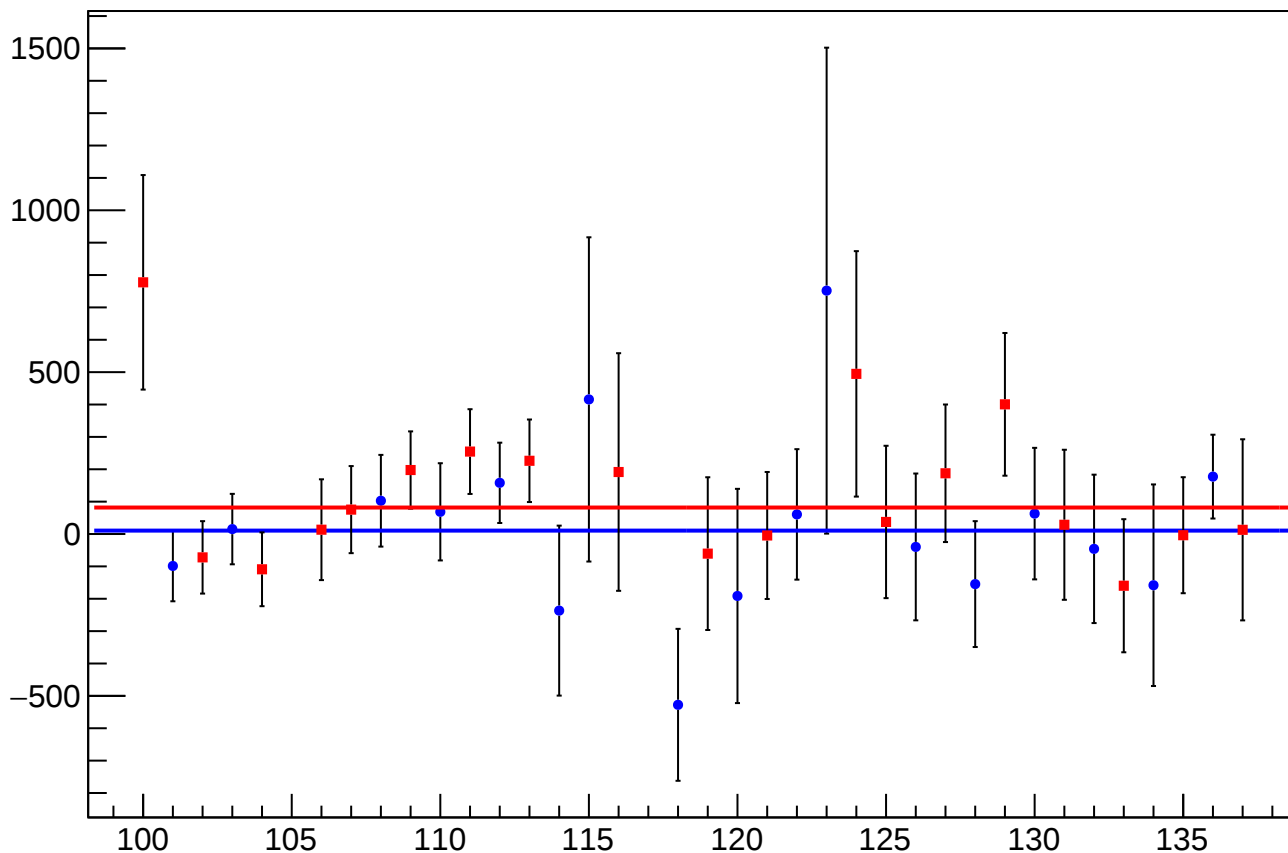
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# reg\_asym\_sam5\_mean vs Slug, Sign Corrected



Right In: 10.530+/-42.294  $\chi^2/\text{NDF}$ : 14.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 81.802+/-38.985  $\chi^2/\text{NDF}$ : 19.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

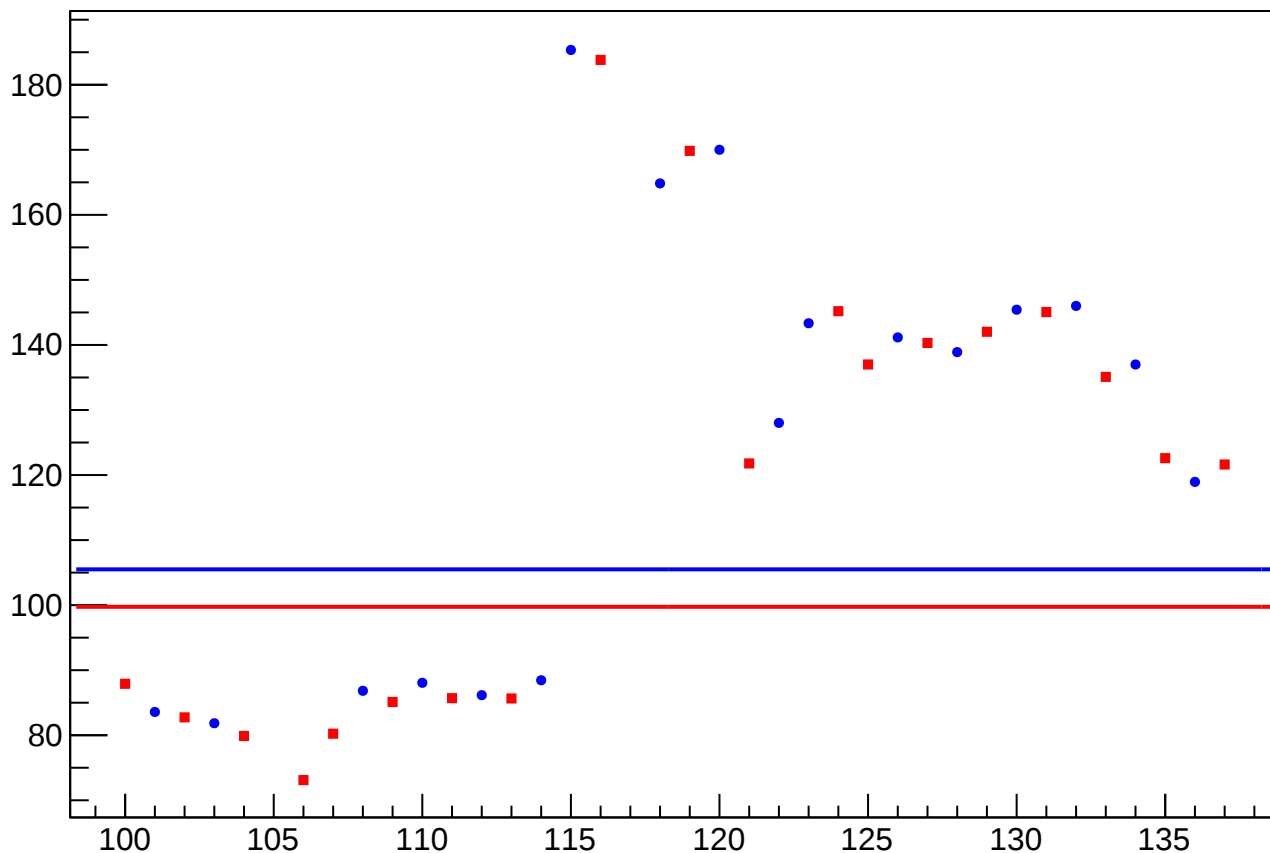
Right: 49.063+/-28.665  $\chi^2/\text{NDF}$ : 34.8/35

In: 10.530+/-42.294  $\chi^2/\text{NDF}$ : 14.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 49.063+/-28.665  $\chi^2/\text{NDF}$ : 34.8/35

# reg\_asym\_sam5\_rms vs Slug, Sign Corrected



Right In: 105.503+/-0.030  $\chi^2/\text{NDF}$ : 869022.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 99.744+/-0.028  $\chi^2/\text{NDF}$ : 1000097.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

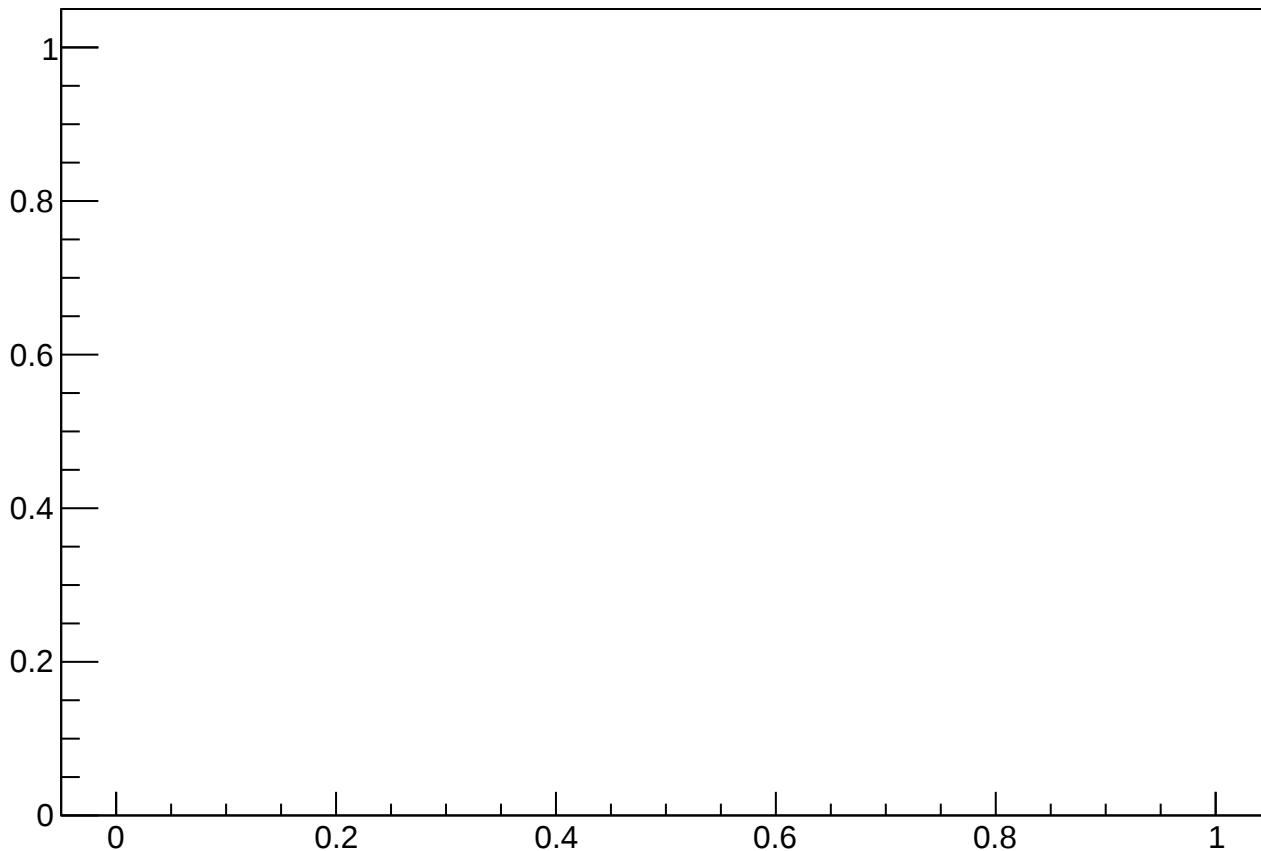
Right: 102.389+/-0.020  $\chi^2/\text{NDF}$ : 1889165.6/35

In: 105.503+/-0.030  $\chi^2/\text{NDF}$ : 869022.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 102.389+/-0.020  $\chi^2/\text{NDF}$ : 1889165.6/35

asym\_sam5\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

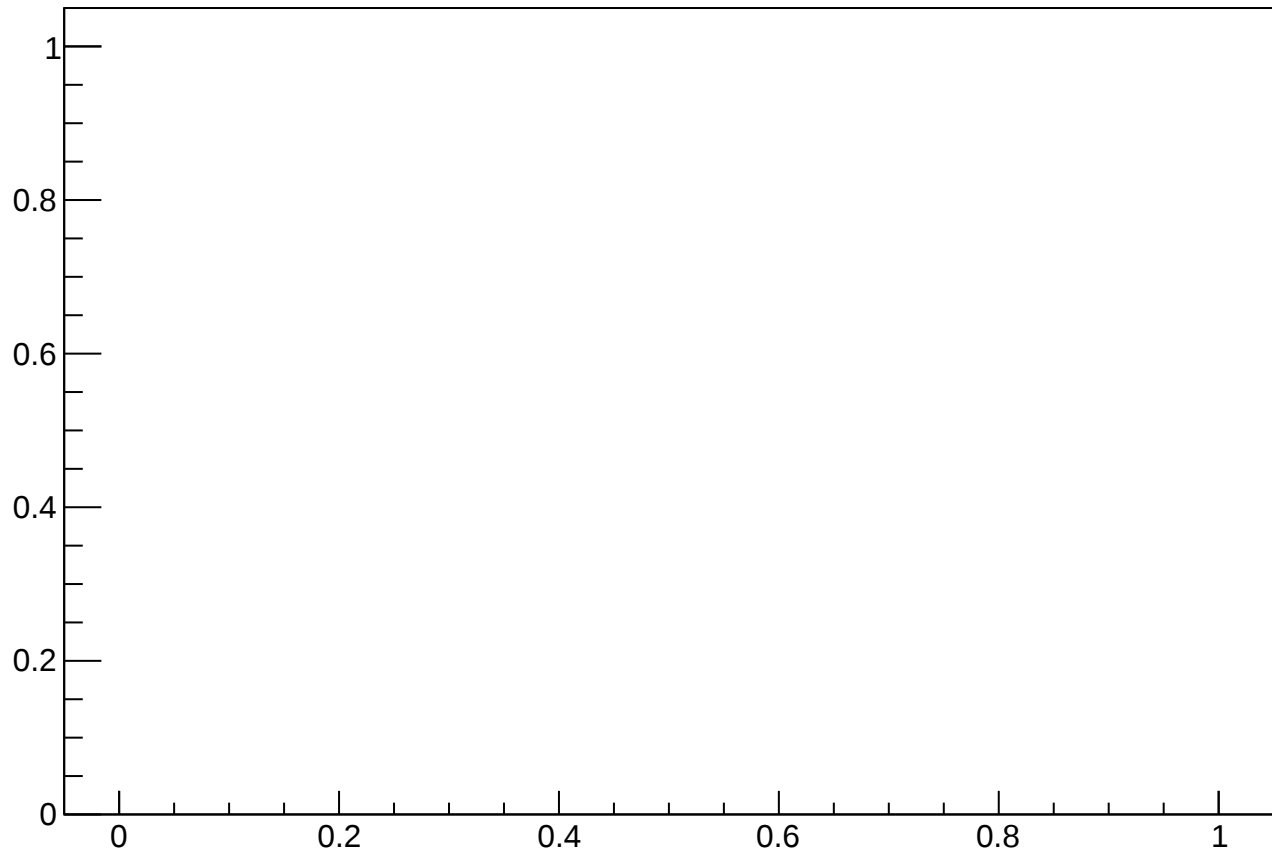
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_sam5\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

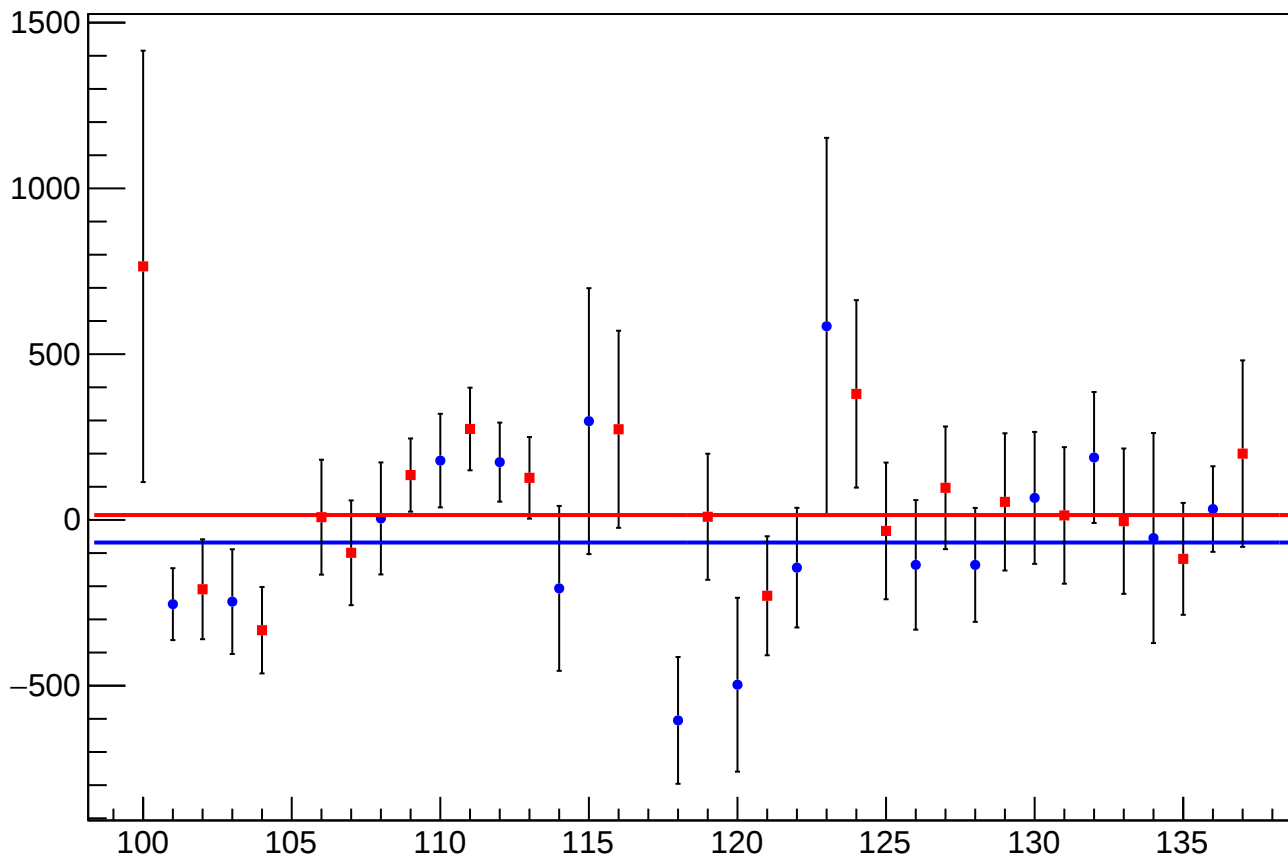
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# reg\_asym\_sam6\_mean vs Slug, Sign Corrected



Right In: -68.111+/-42.265  $\chi^2/\text{NDF}$ : 27.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 14.800+/-39.467  $\chi^2/\text{NDF}$ : 23.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

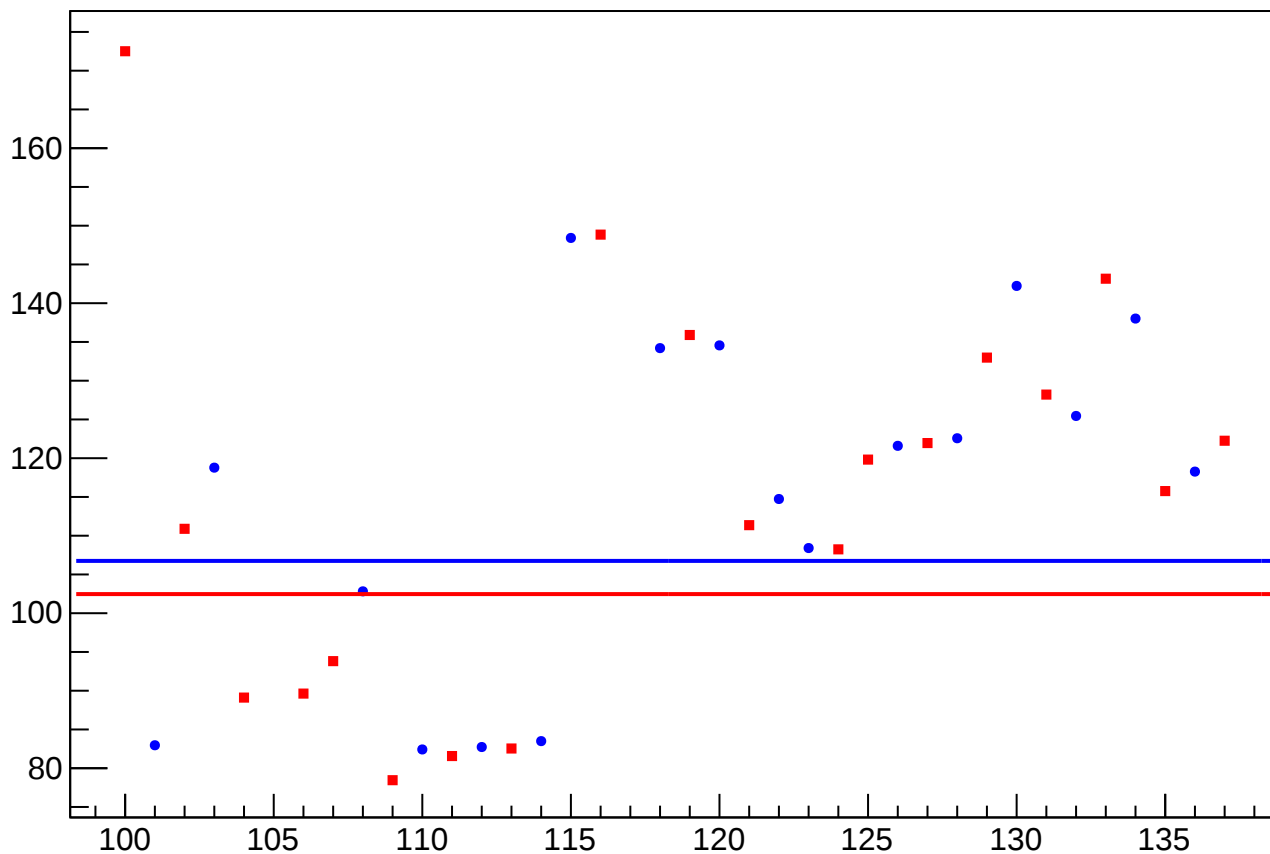
Right: -23.820+/-28.846  $\chi^2/\text{NDF}$ : 53.0/35

In: -68.111+/-42.265  $\chi^2/\text{NDF}$ : 27.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -23.820+/-28.846  $\chi^2/\text{NDF}$ : 53.0/35

# reg\_asym\_sam6\_rms vs Slug, Sign Corrected



Right In: 106.749+/-0.030  $\chi^2/\text{NDF}$ : 501742.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 102.467+/-0.028  $\chi^2/\text{NDF}$ : 589344.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

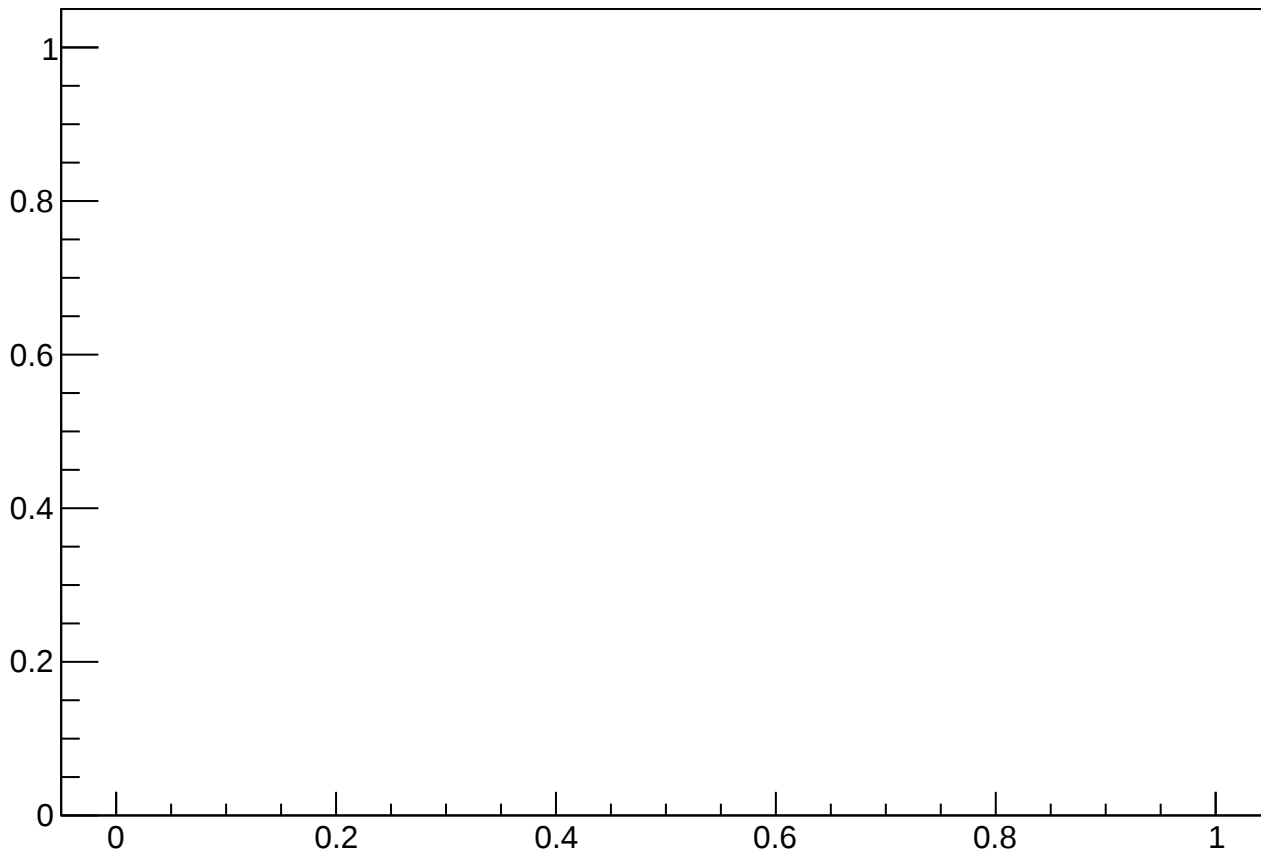
Right: 104.462+/-0.020  $\chi^2/\text{NDF}$ : 1102055.3/35

In: 106.749+/-0.030  $\chi^2/\text{NDF}$ : 501742.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 104.462+/-0.020  $\chi^2/\text{NDF}$ : 1102055.3/35

asym\_sam6\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_sam6\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

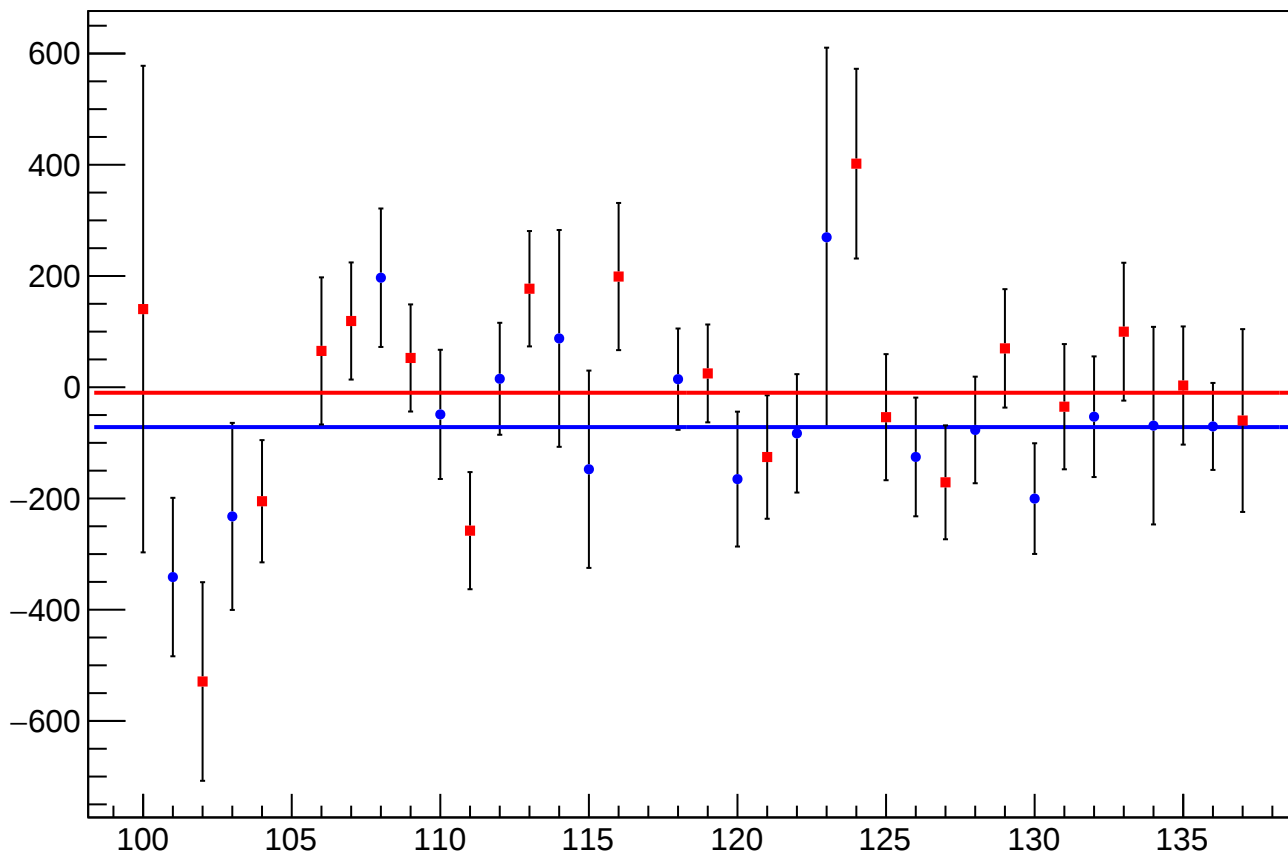
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# reg\_asym\_sam7\_mean vs Slug, Sign Corrected



Right In:  $-71.669 \pm 28.358$   $\chi^2/\text{NDF}: 15.2/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-9.917 \pm 26.816$   $\chi^2/\text{NDF}: 36.5/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

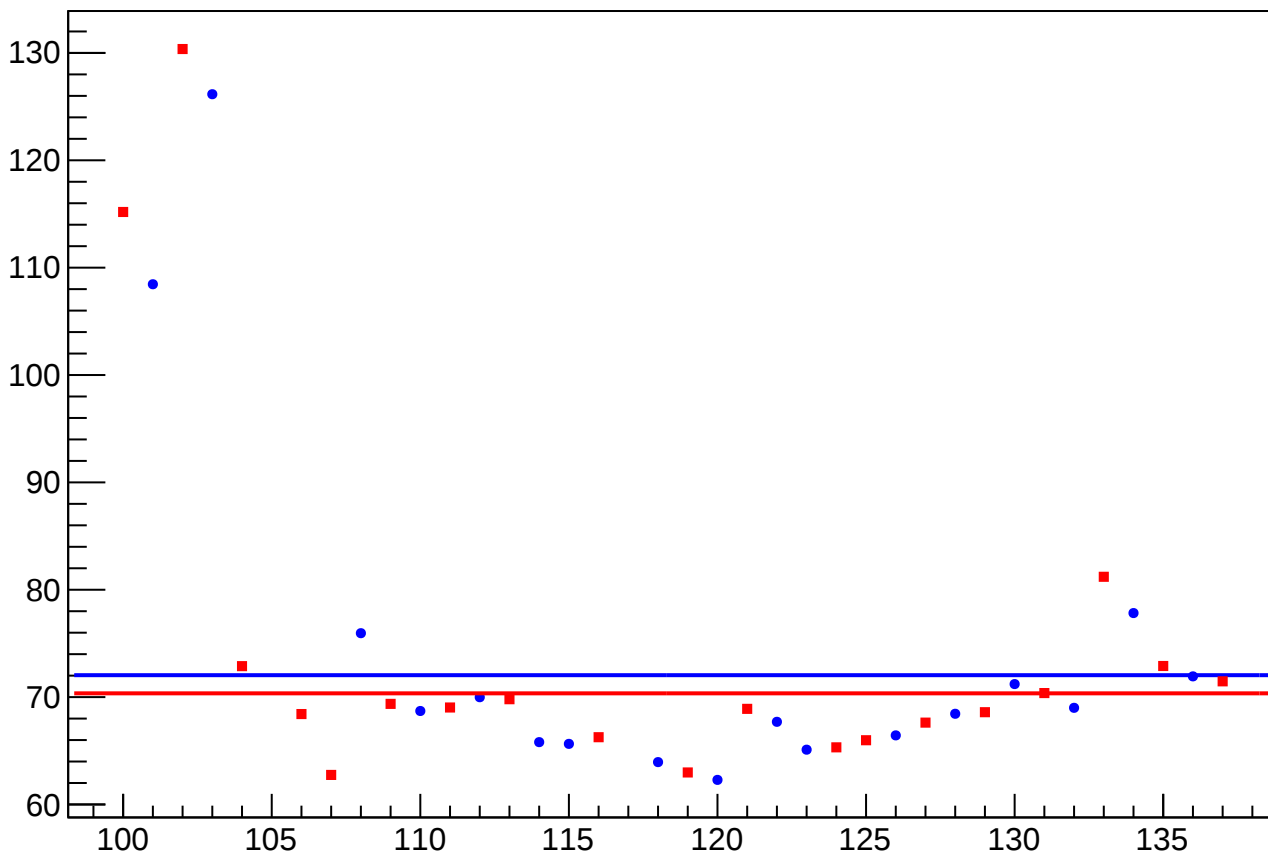
Right:  $-39.068 \pm 19.484$   $\chi^2/\text{NDF}: 54.2/35$

In:  $-71.669 \pm 28.358$   $\chi^2/\text{NDF}: 15.2/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-39.068 \pm 19.484$   $\chi^2/\text{NDF}: 54.2/35$

# reg\_asym\_sam7\_rms vs Slug, Sign Corrected



Right In: 72.042+/-0.020  $\chi^2/\text{NDF}$ : 391971.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 70.351+/-0.019  $\chi^2/\text{NDF}$ : 299005.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

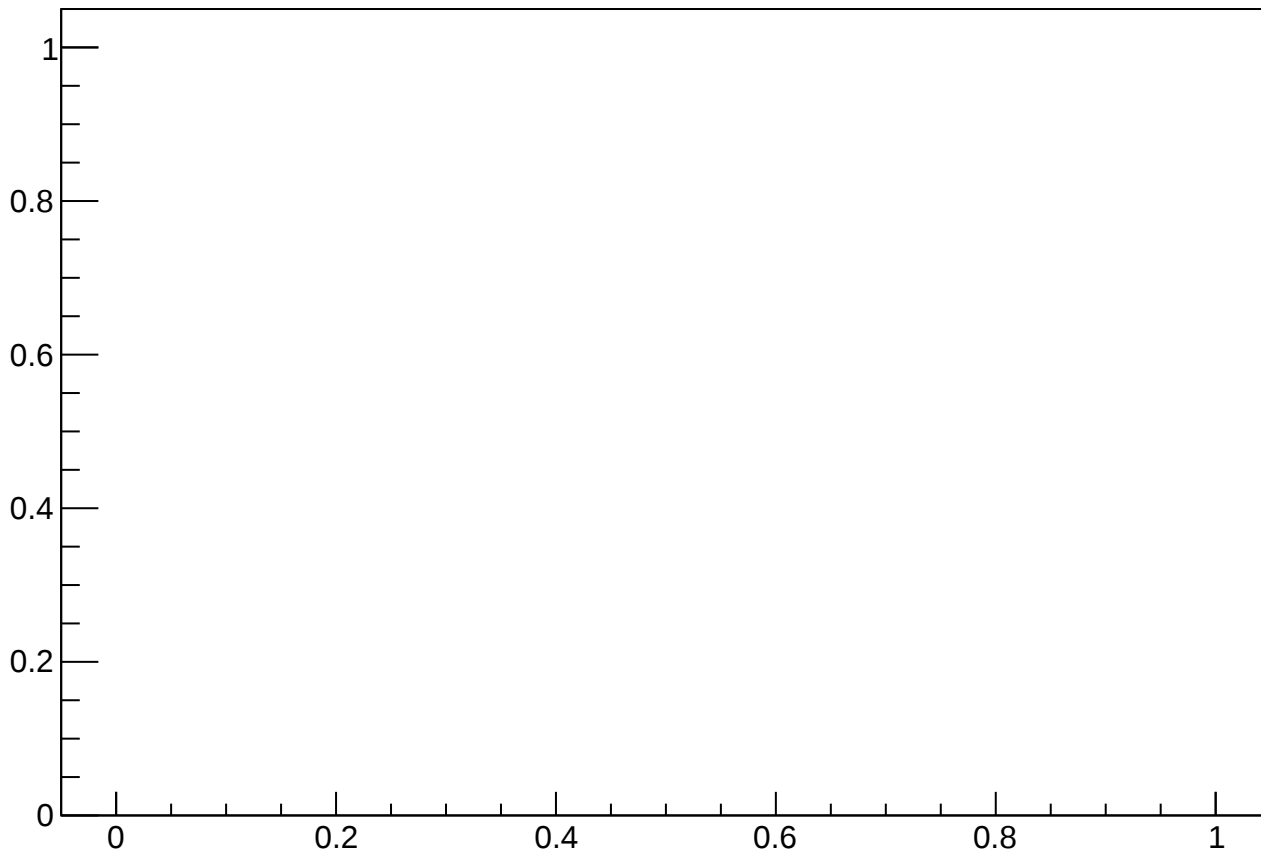
Right: 71.149+/-0.014  $\chi^2/\text{NDF}$ : 694733.5/35

In: 72.042+/-0.020  $\chi^2/\text{NDF}$ : 391971.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 71.149+/-0.014  $\chi^2/\text{NDF}$ : 694733.5/35

asym\_sam7\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

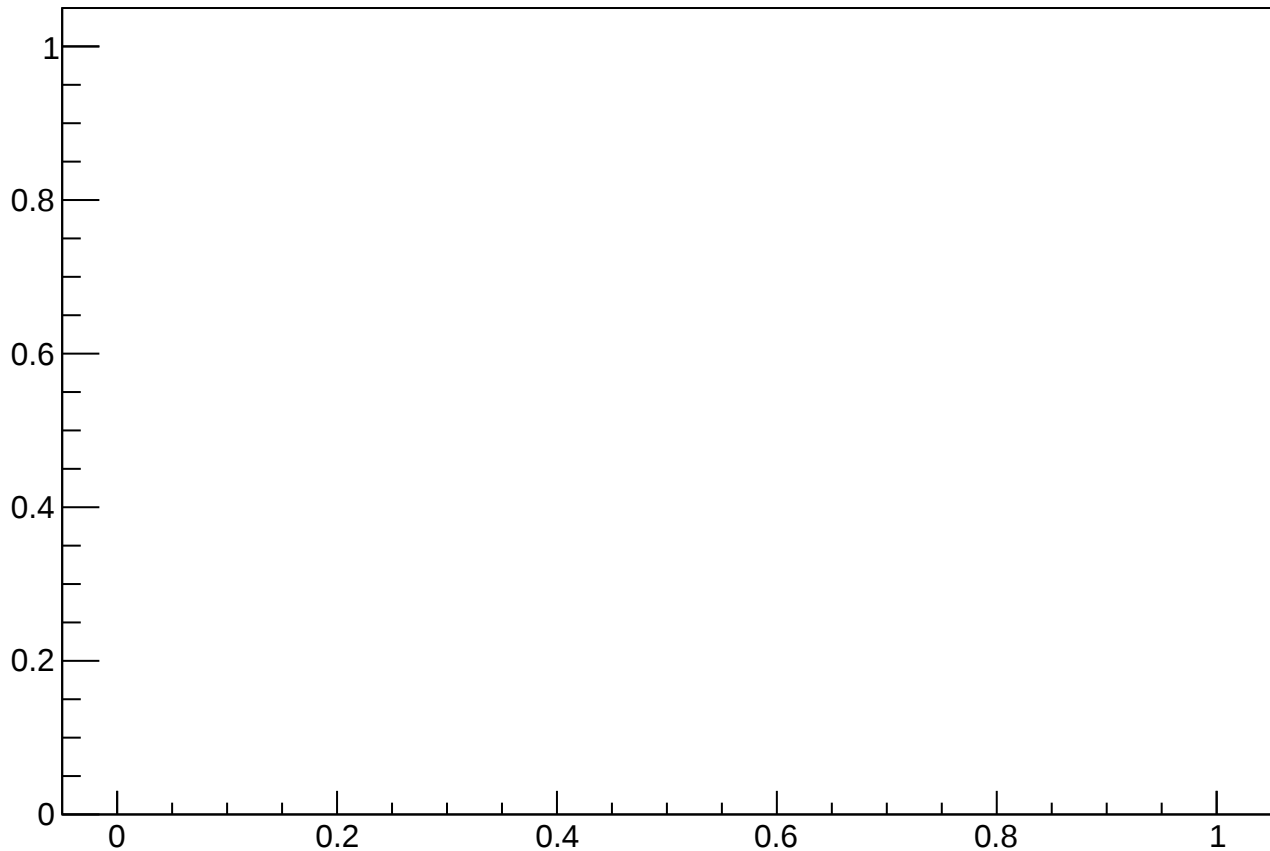
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_sam7\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

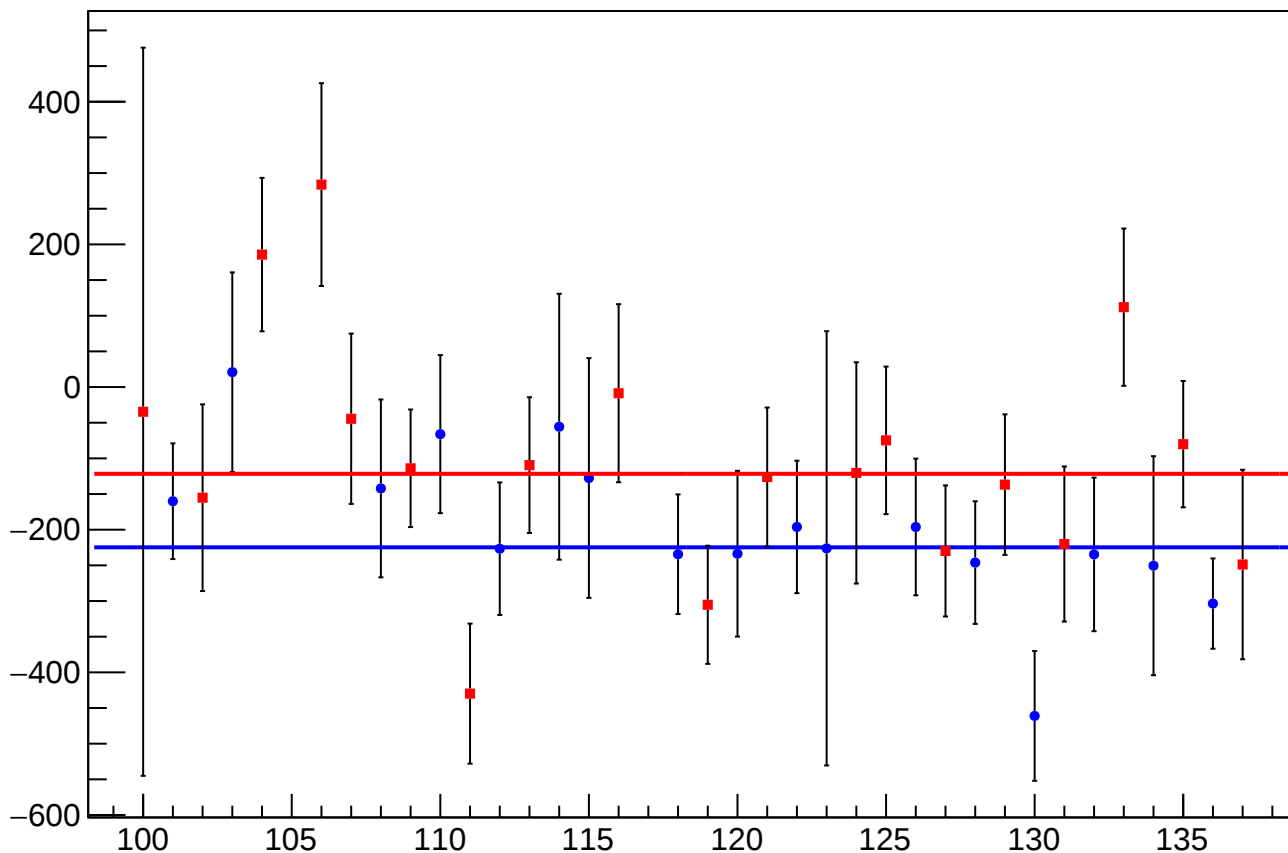
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# reg\_asym\_sam8\_mean vs Slug, Sign Corrected



Right In: -224.727 $\pm$ 24.880  $\chi^2$ /NDF: 16.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: -121.633 $\pm$ 24.599  $\chi^2$ /NDF: 40.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

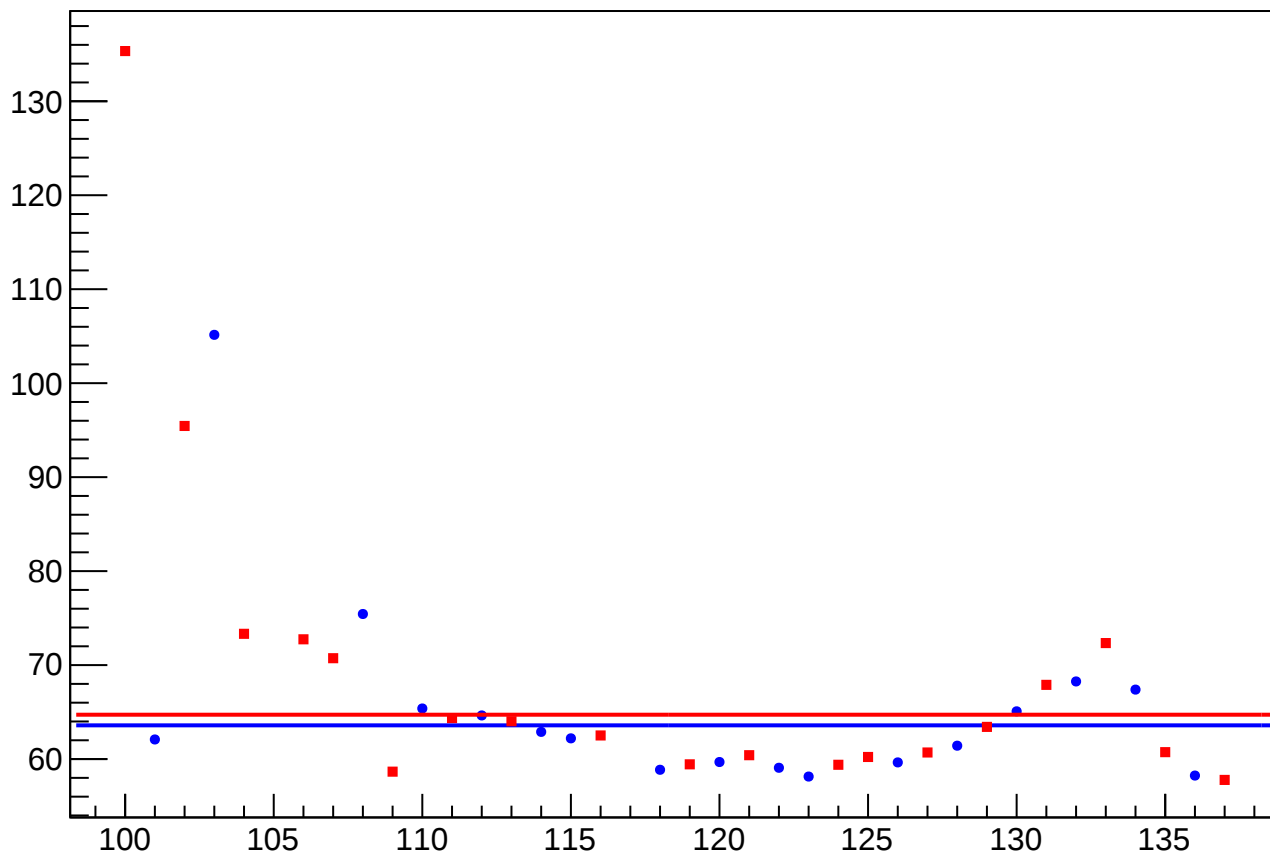
Right: -172.594 $\pm$ 17.493  $\chi^2$ /NDF: 65.1/35

In: -224.727 $\pm$ 24.880  $\chi^2$ /NDF: 16.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: -172.594 $\pm$ 17.493  $\chi^2$ /NDF: 65.1/35

# reg\_asym\_sam8\_rms vs Slug, Sign Corrected



Right In: 63.589+/-0.018  $\chi^2/\text{NDF}$ : 234601.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 64.720+/-0.017  $\chi^2/\text{NDF}$ : 227506.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

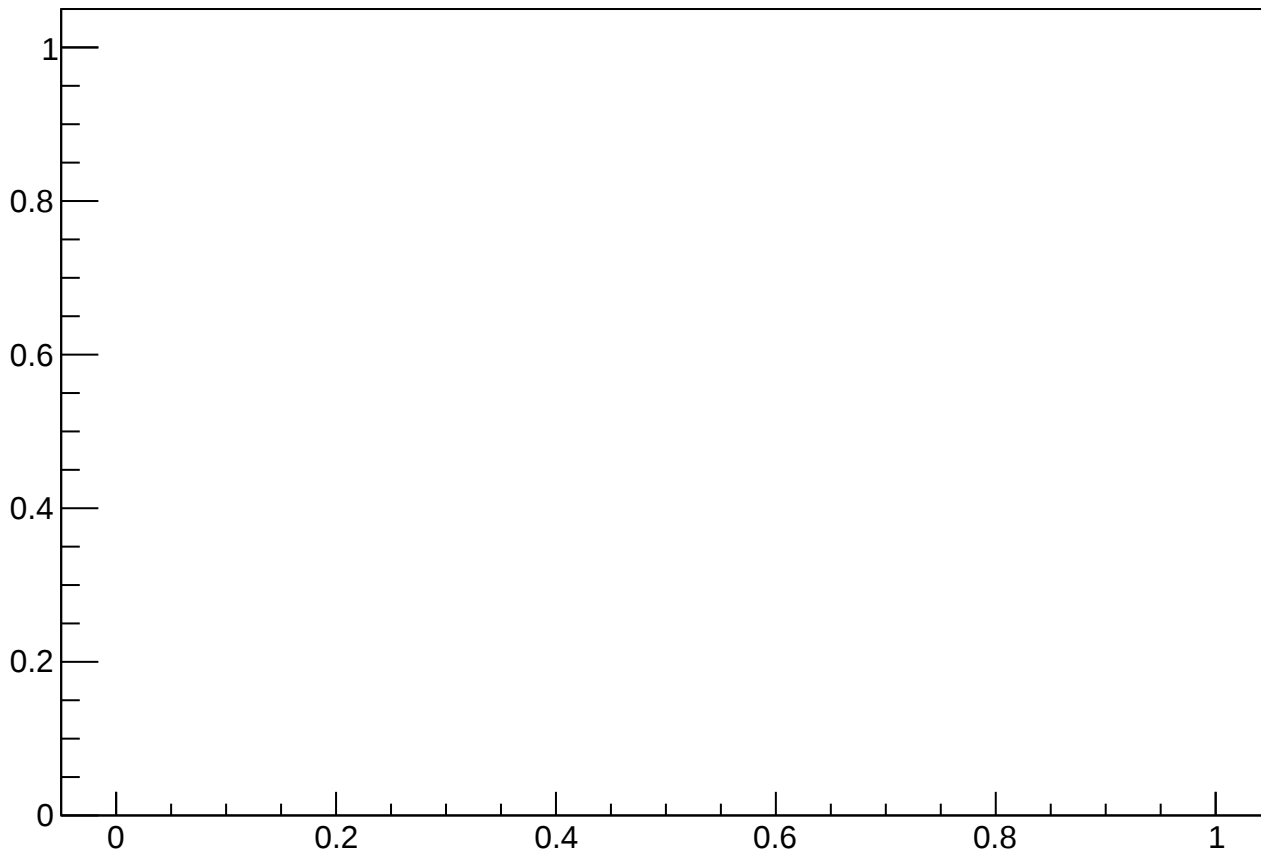
Right: 64.161+/-0.012  $\chi^2/\text{NDF}$ : 464197.3/35

In: 63.589+/-0.018  $\chi^2/\text{NDF}$ : 234601.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 64.161+/-0.012  $\chi^2/\text{NDF}$ : 464197.3/35

asym\_sam8\_correction\_mean vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

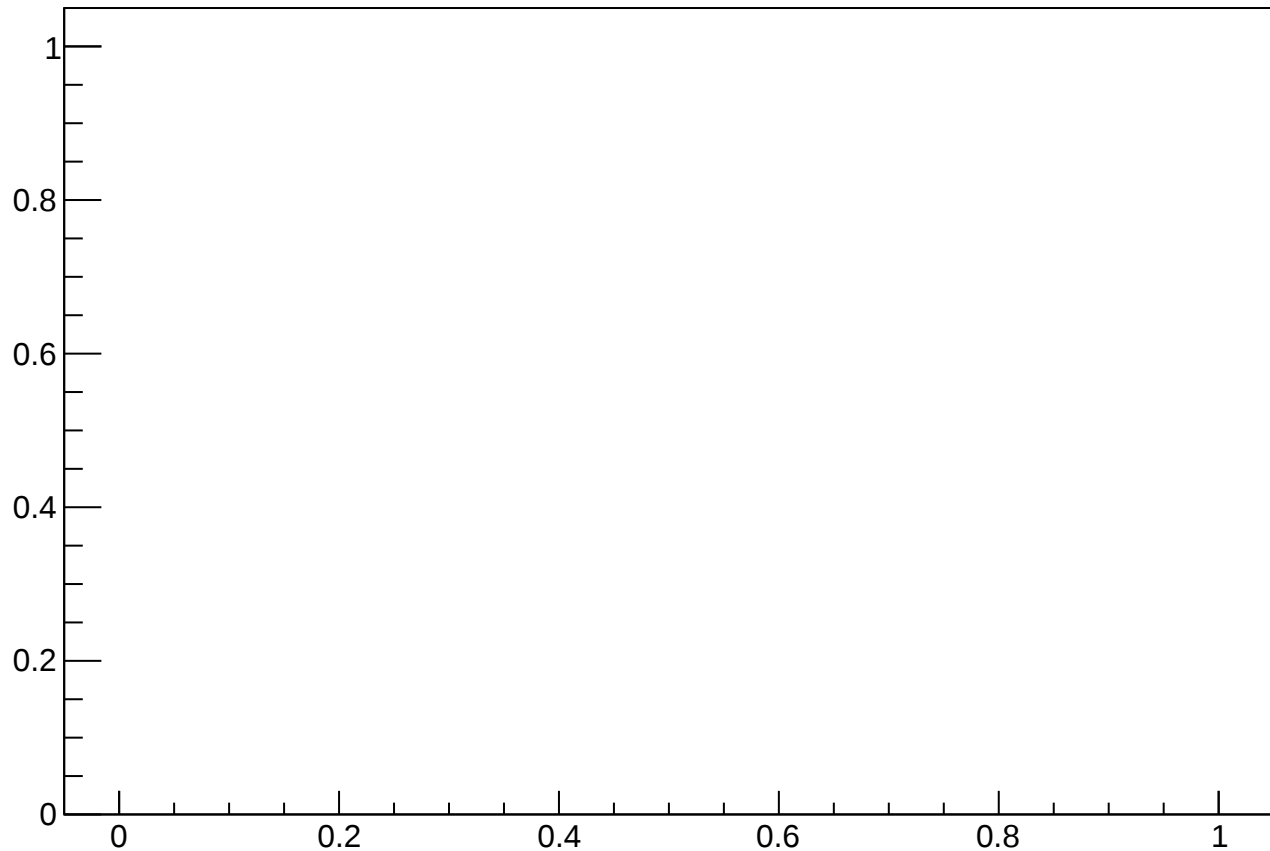
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

asym\_sam8\_correction\_rms vs Slug, Sign Corrected



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

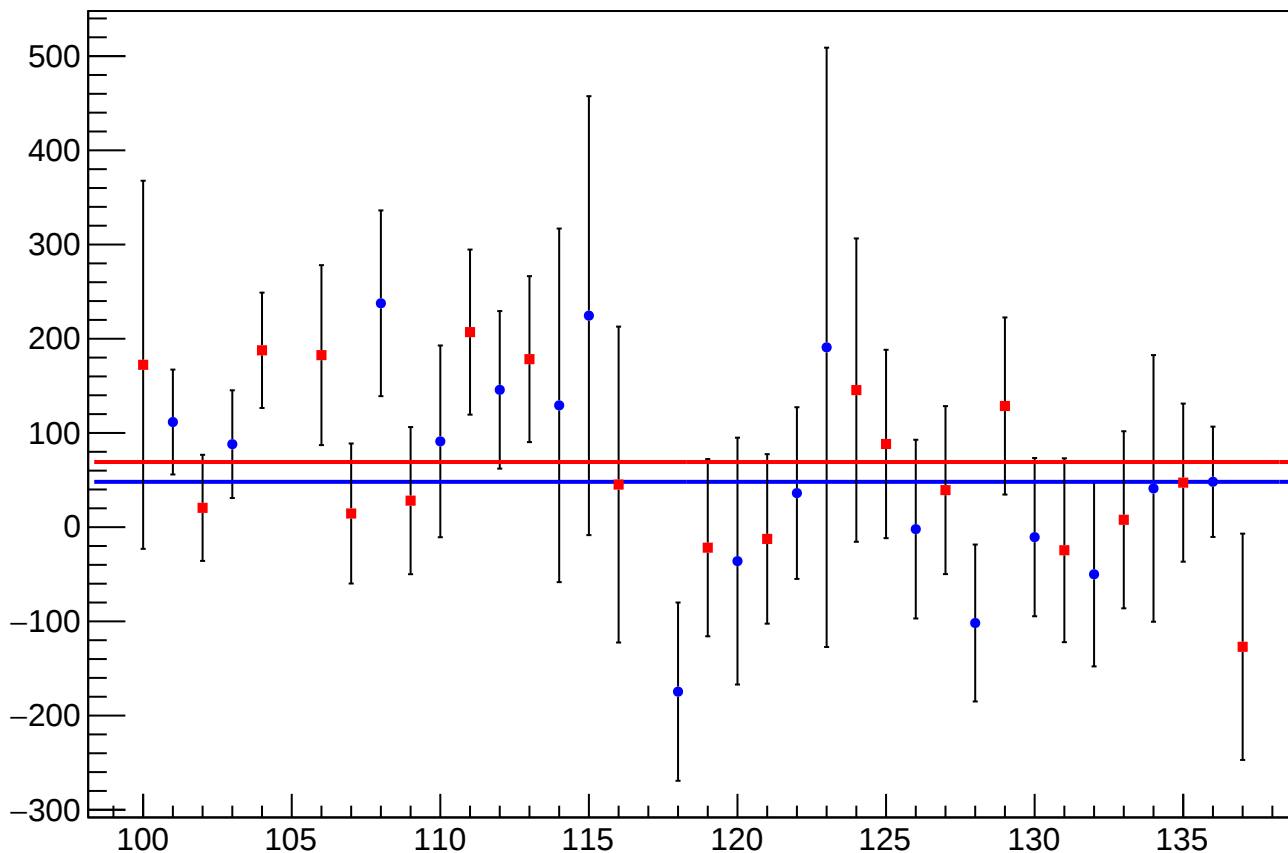
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

reg\_asym\_sam\_15\_avg\_mean vs Slug, Sign Corrected



Right In: 48.109+/-21.510  $\chi^2/\text{NDF}$ : 19.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 69.156+/-20.407  $\chi^2/\text{NDF}$ : 17.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

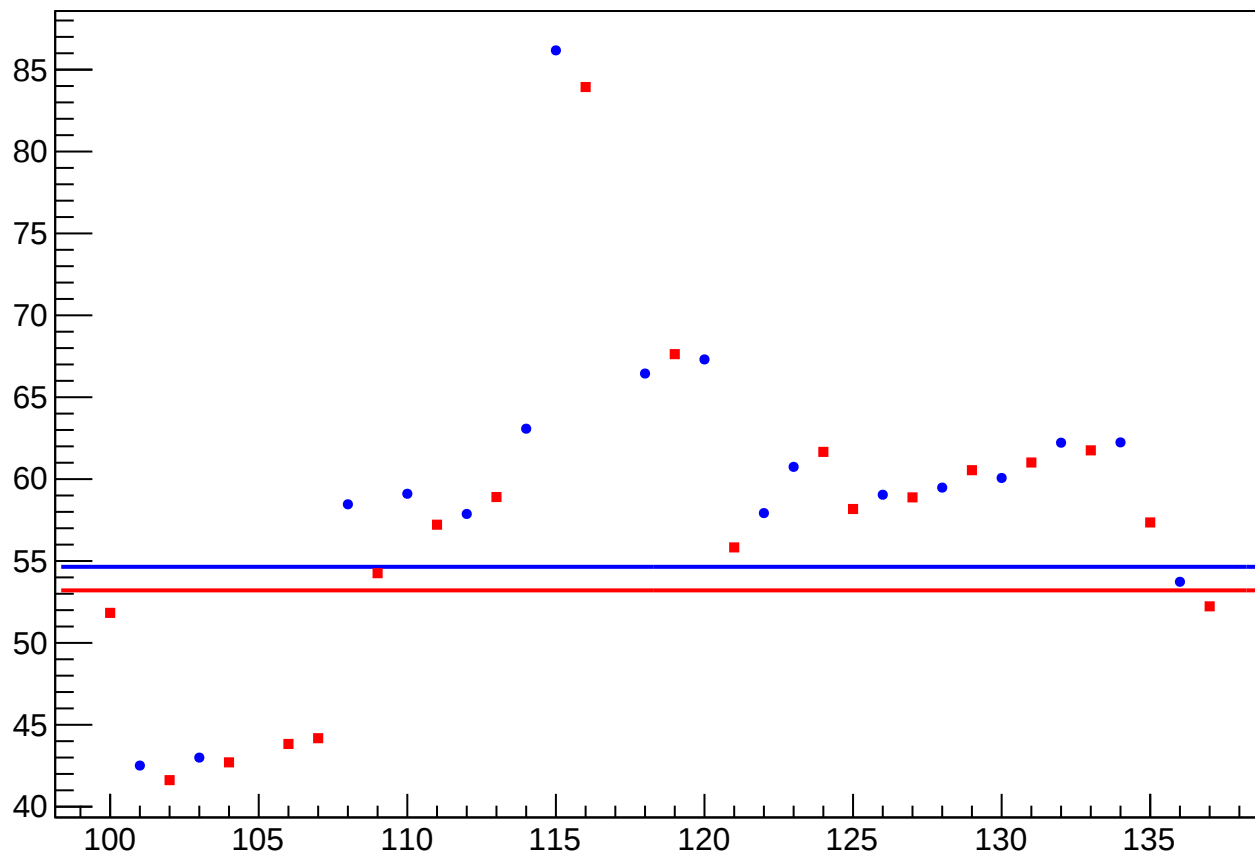
Right: 59.186+/-14.805  $\chi^2/\text{NDF}$ : 37.1/35

In: 48.109+/-21.510  $\chi^2/\text{NDF}$ : 19.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 59.186+/-14.805  $\chi^2/\text{NDF}$ : 37.1/35

reg\_asym\_sam\_15\_avg\_rms vs Slug, Sign Corrected



Right In: 54.645 $\pm$ 0.015  $\chi^2$ /NDF: 319300.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 53.207 $\pm$ 0.014  $\chi^2$ /NDF: 386295.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

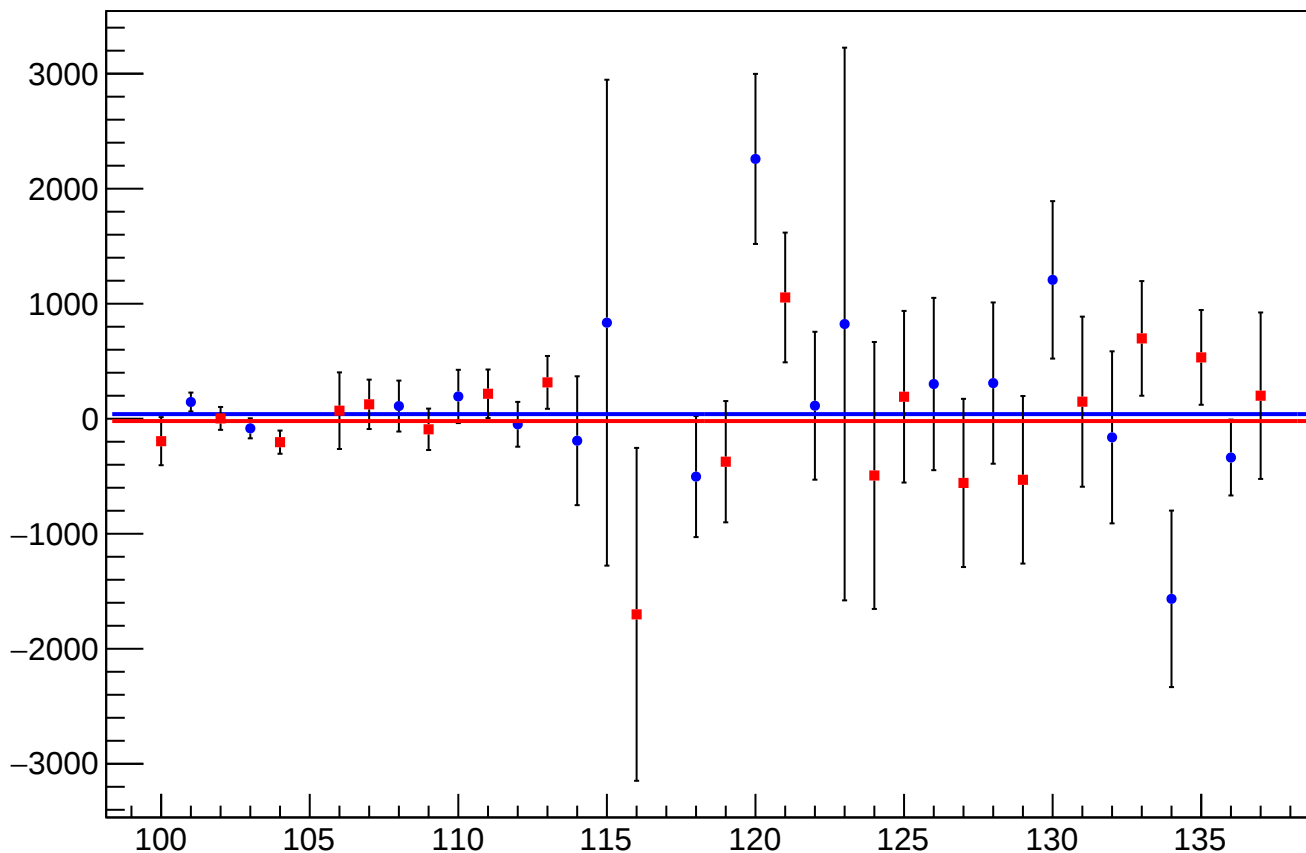
Right: 53.888 $\pm$ 0.010  $\chi^2$ /NDF: 710299.5/35

In: 54.645 $\pm$ 0.015  $\chi^2$ /NDF:319300.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 53.888 $\pm$ 0.010  $\chi^2$ /NDF: 710299.5/35

asym\_sam\_15\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: 40.207+/-51.542  $\chi^2/\text{NDF}$ : 23.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -20.232+/-53.274  $\chi^2/\text{NDF}$ : 18.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

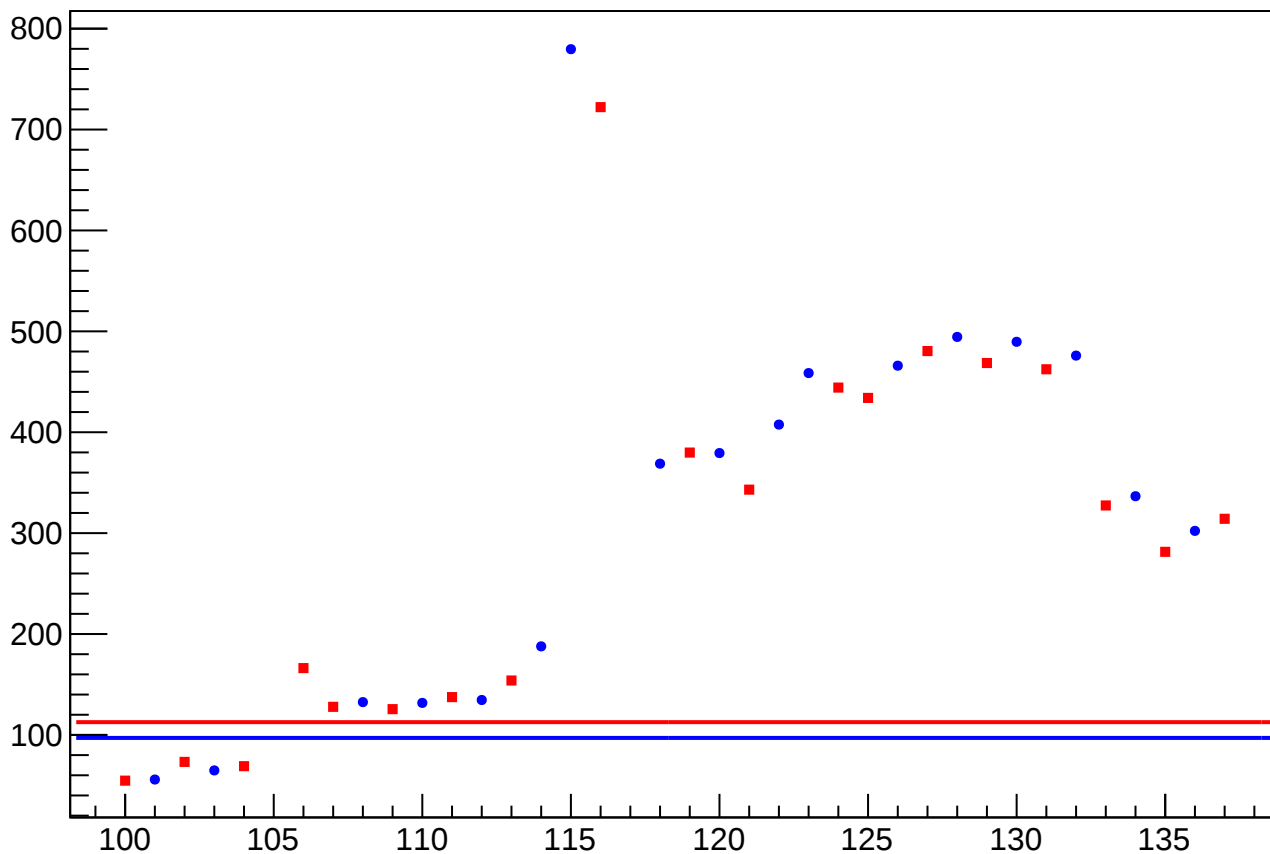
Right: 10.986+/-37.043  $\chi^2/\text{NDF}$ : 43.4/35

In: 40.207+/-51.542  $\chi^2/\text{NDF}$ : 23.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 10.986+/-37.043  $\chi^2/\text{NDF}$ : 43.4/35

asym\_sam\_15\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 97.039+/-0.036  $\chi^2/\text{NDF}$ : 5819709.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 112.653+/-0.038  $\chi^2/\text{NDF}$ : 5036306.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

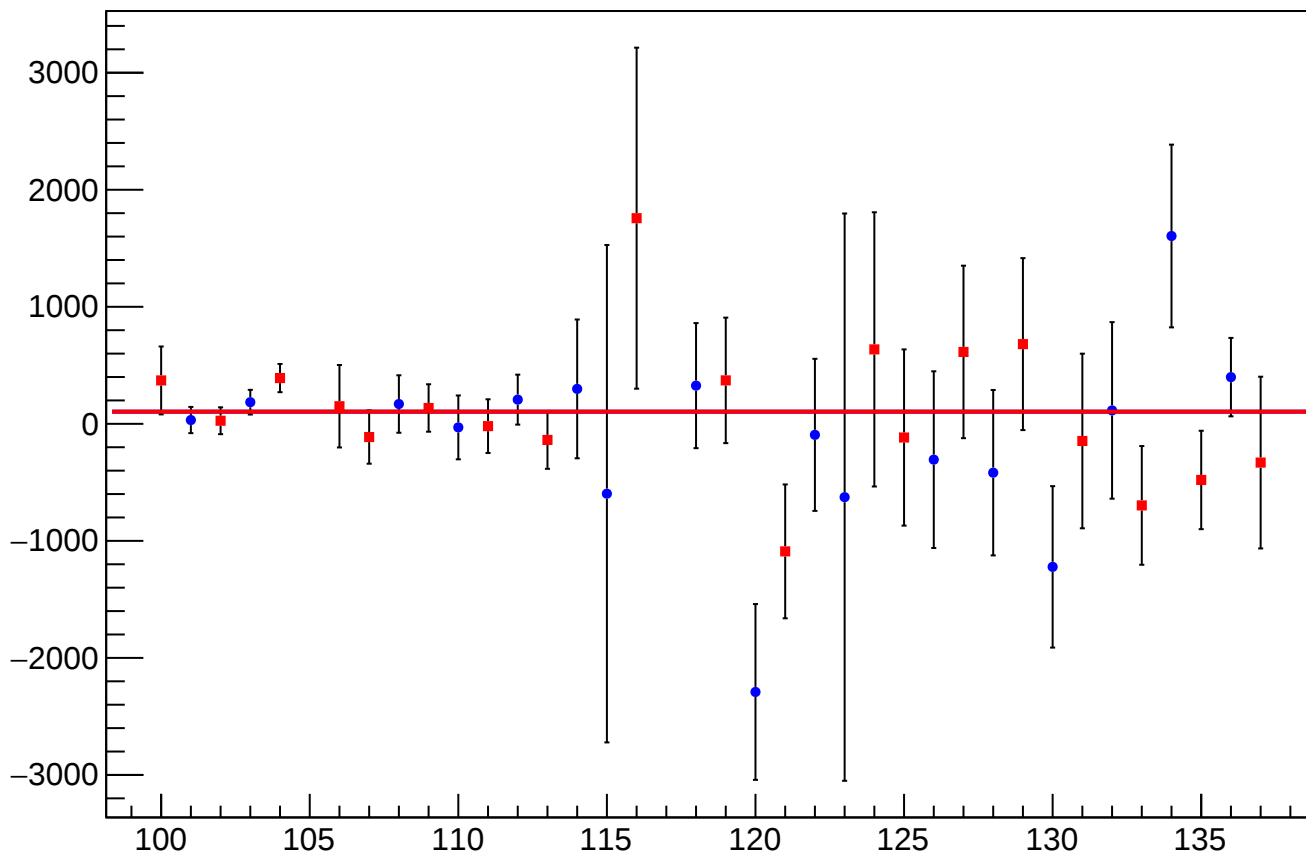
Right: 104.588+/-0.026  $\chi^2/\text{NDF}$ : 10944761.2/35

In: 97.039+/-0.036  $\chi^2/\text{NDF}$ : 5819709.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 104.588+/-0.026  $\chi^2/\text{NDF}$ : 10944761.2/35

# asym\_sam\_15\_avg\_mean vs Slug, Sign Corrected



Right In: 104.001 $\pm$ 63.156  $\chi^2$ /NDF: 21.3/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 104.140 $\pm$ 60.857  $\chi^2$ /NDF: 21.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

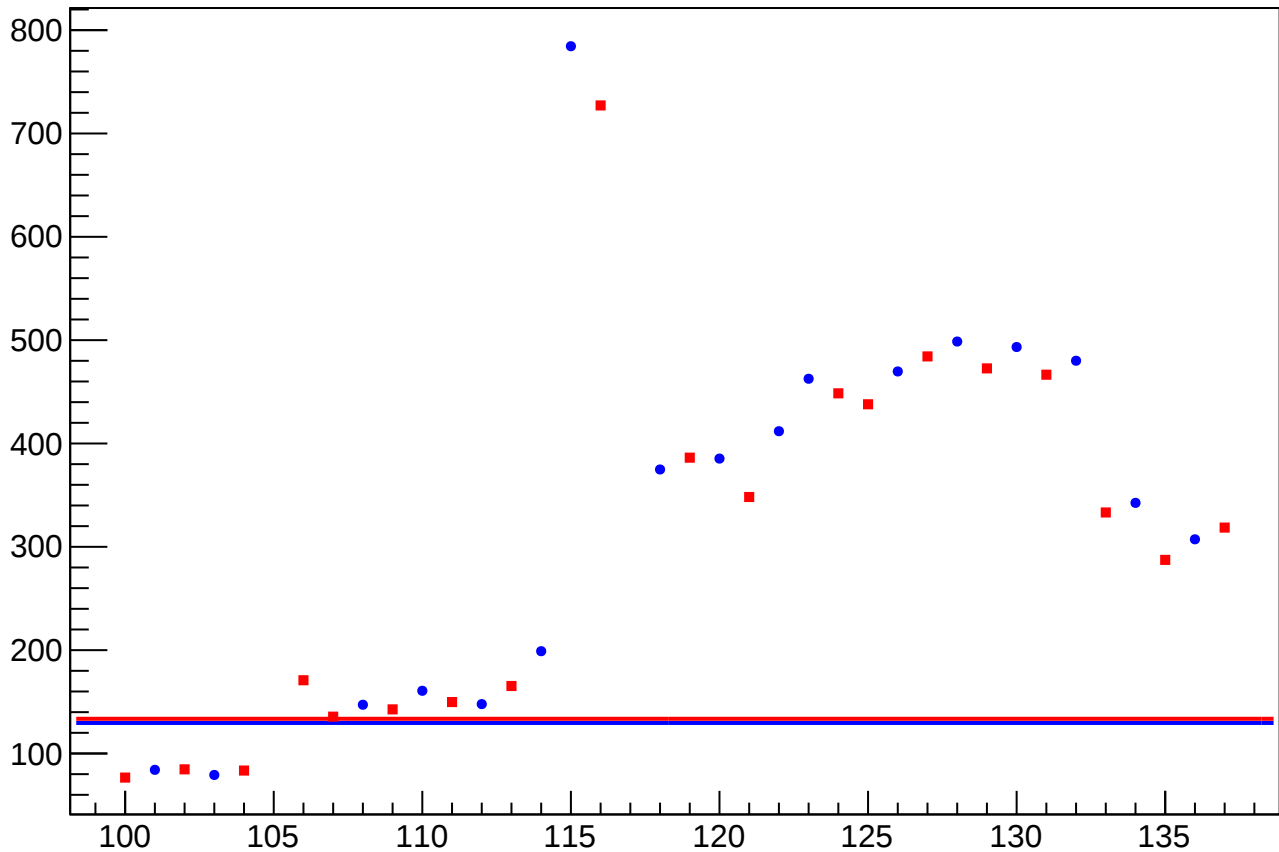
Right: 104.073 $\pm$ 43.823  $\chi^2$ /NDF: 42.6/35

In: 104.001 $\pm$ 63.156  $\chi^2$ /NDF:21.3/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 104.073 $\pm$ 43.823  $\chi^2$ /NDF: 42.6/35

# asym\_sam\_15\_avg\_rms vs Slug, Sign Corrected



Right In: 129.552+/-0.045  $\chi^2/\text{NDF}$ : 4772450.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 133.593+/-0.043  $\chi^2/\text{NDF}$ : 4366252.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

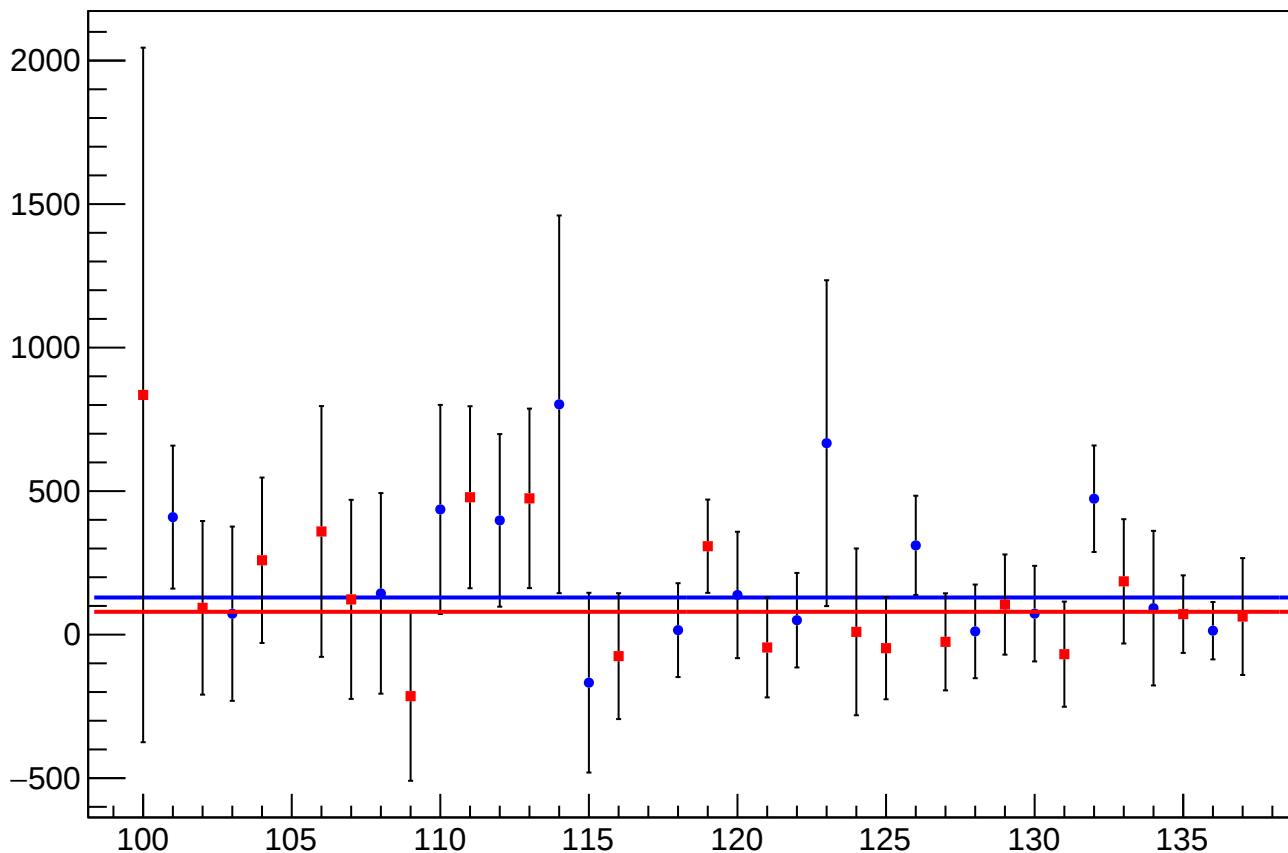
Right: 131.647+/-0.031  $\chi^2/\text{NDF}$ : 9142947.8/35

In: 129.552+/-0.045  $\chi^2/\text{NDF}$ :4772450.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 131.647+/-0.031  $\chi^2/\text{NDF}$ : 9142947.8/35

# reg\_asym\_sam\_26\_avg\_mean vs Slug, Sign Corrected



Right In: 129.398 $\pm$ 49.122  $\chi^2$ /NDF: 12.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 79.483 $\pm$ 49.886  $\chi^2$ /NDF: 10.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

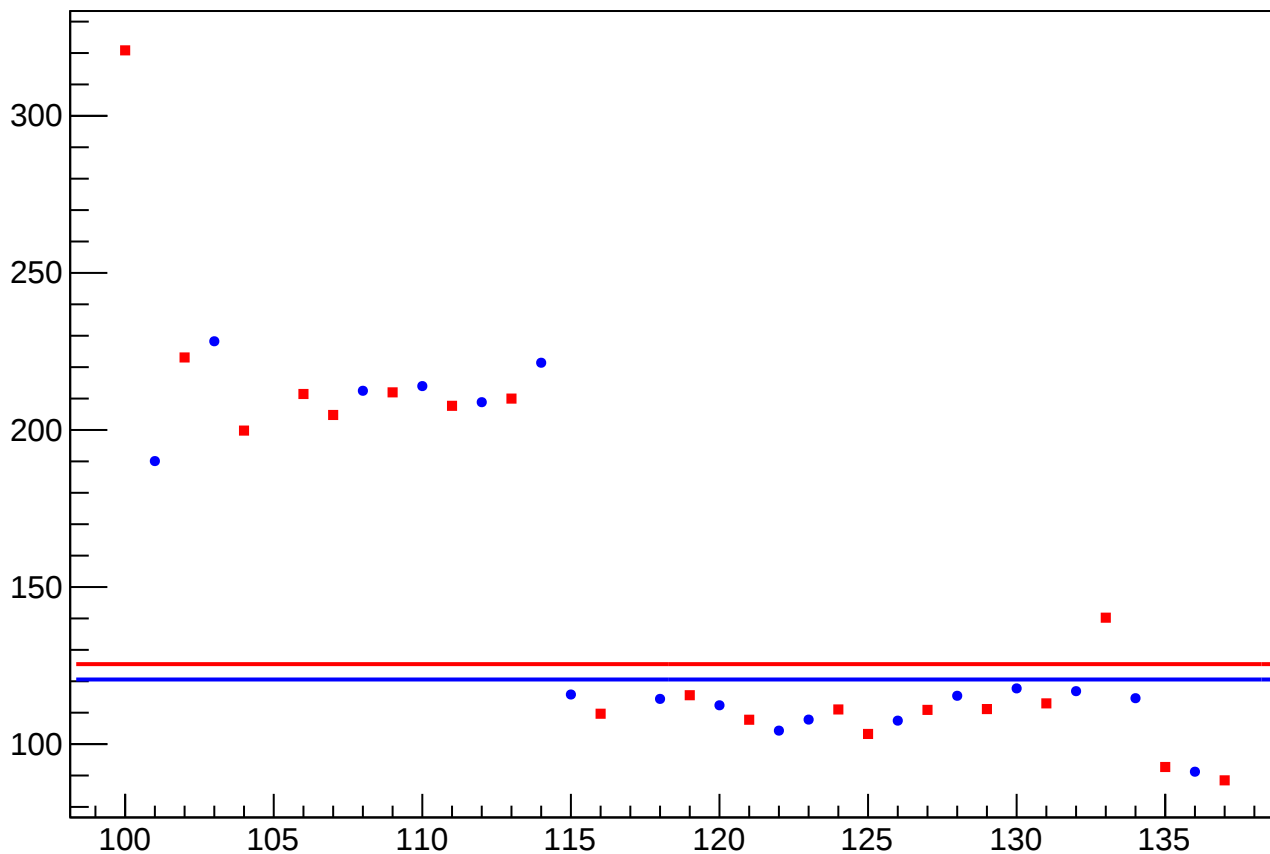
Right: 104.826 $\pm$ 35.001  $\chi^2$ /NDF: 23.7/35

In: 129.398 $\pm$ 49.122  $\chi^2$ /NDF:12.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 104.826 $\pm$ 35.001  $\chi^2$ /NDF: 23.7/35

reg\_asym\_sam\_26\_avg\_rms vs Slug, Sign Corrected



Right In: 120.565 $\pm$ 0.035  $\chi^2$ /NDF: 1112076.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 125.458 $\pm$ 0.035  $\chi^2$ /NDF: 1333754.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

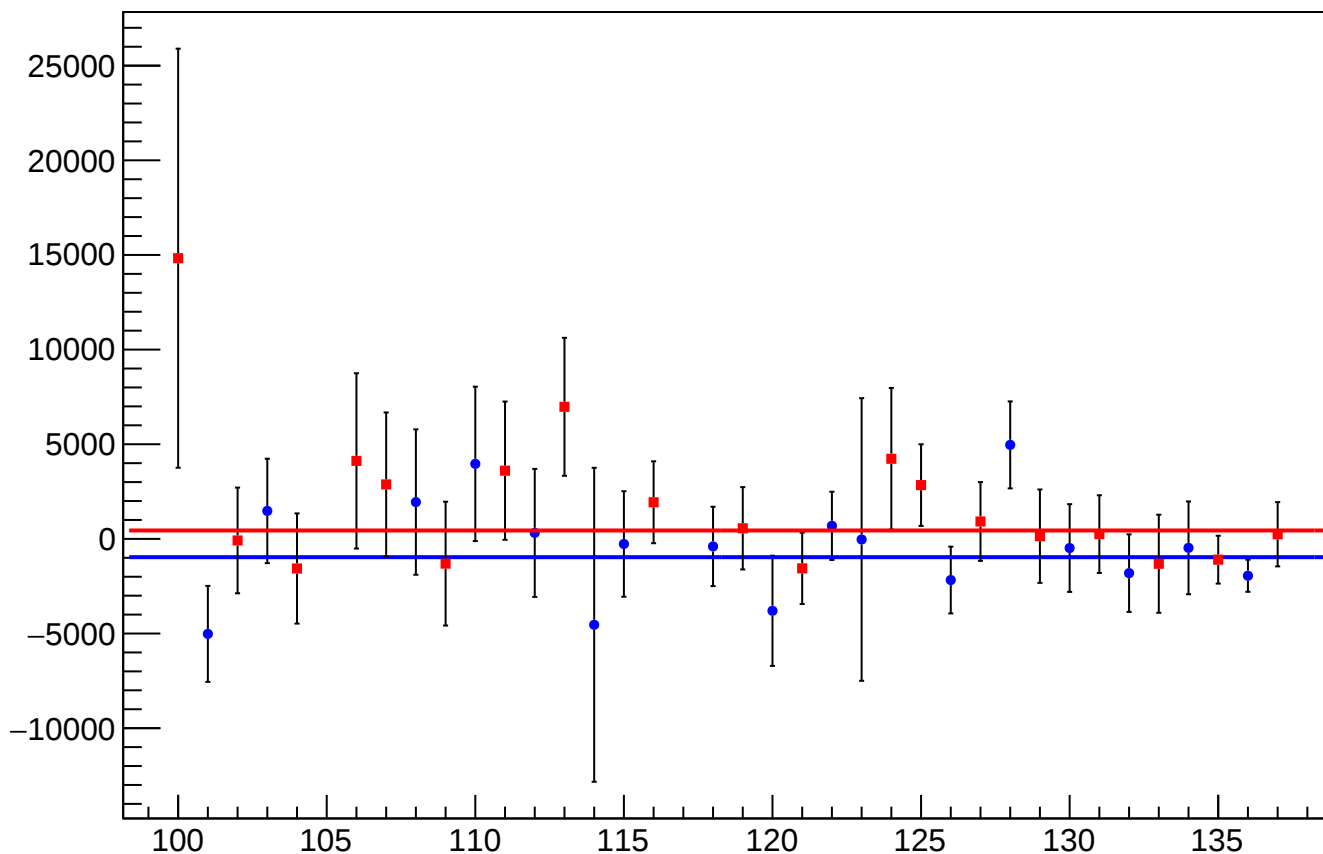
Right: 122.974 $\pm$ 0.025  $\chi^2$ /NDF: 2455600.4/35

In: 120.565 $\pm$ 0.035  $\chi^2$ /NDF:1112076.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 122.974 $\pm$ 0.025  $\chi^2$ /NDF: 2455600.4/35

asym\_sam\_26\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -966.587+/-512.340  $\chi^2/\text{NDF}$ : 16.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 444.406+/-545.370  $\chi^2/\text{NDF}$ : 13.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

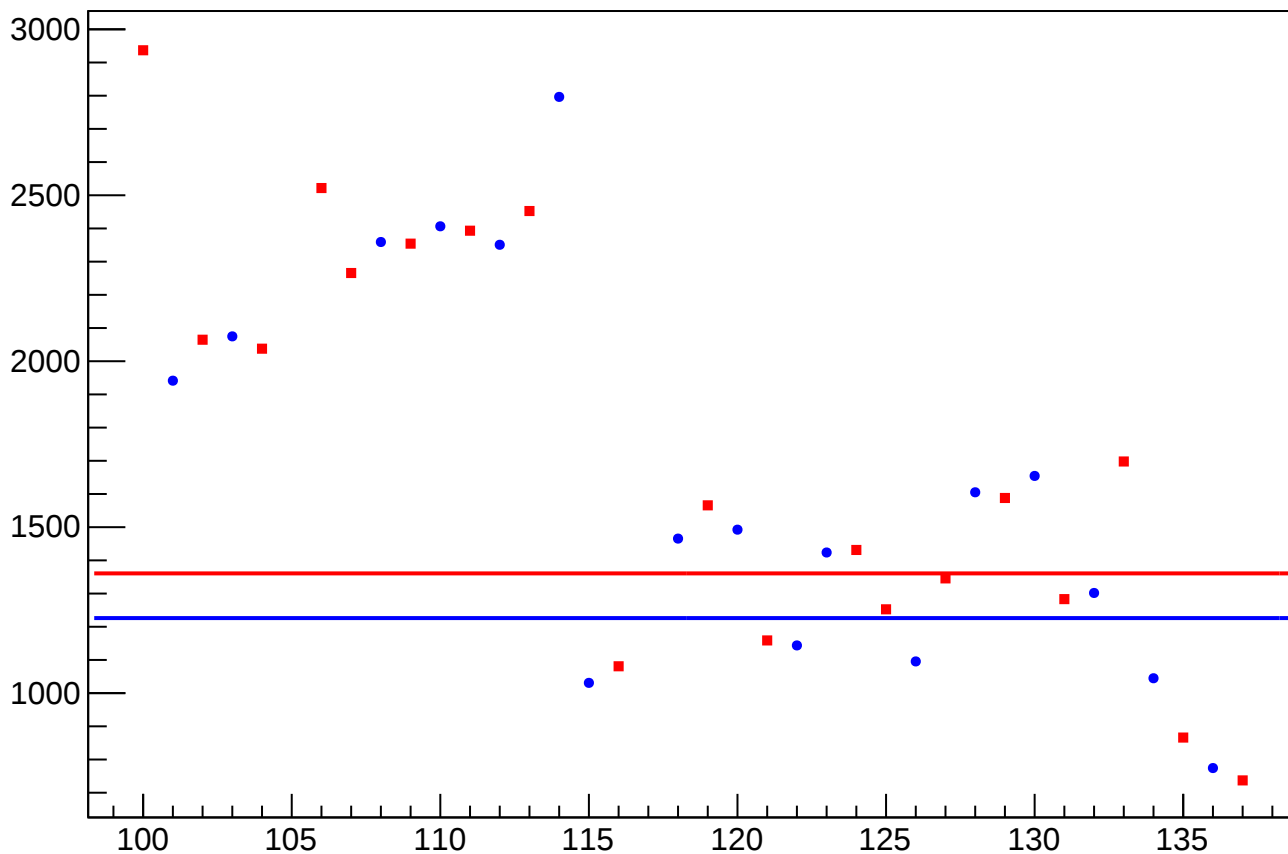
Right: -305.110+/-373.410  $\chi^2/\text{NDF}$ : 33.3/35

In: -966.587+/-512.340  $\chi^2/\text{NDF}$ : 16.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -305.110+/-373.410  $\chi^2/\text{NDF}$ : 33.3/35

asym\_sam\_26\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 1226.135+/-0.362  $\chi^2/\text{NDF}$ : 1756323.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1360.770+/-0.386  $\chi^2/\text{NDF}$ : 1749074.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

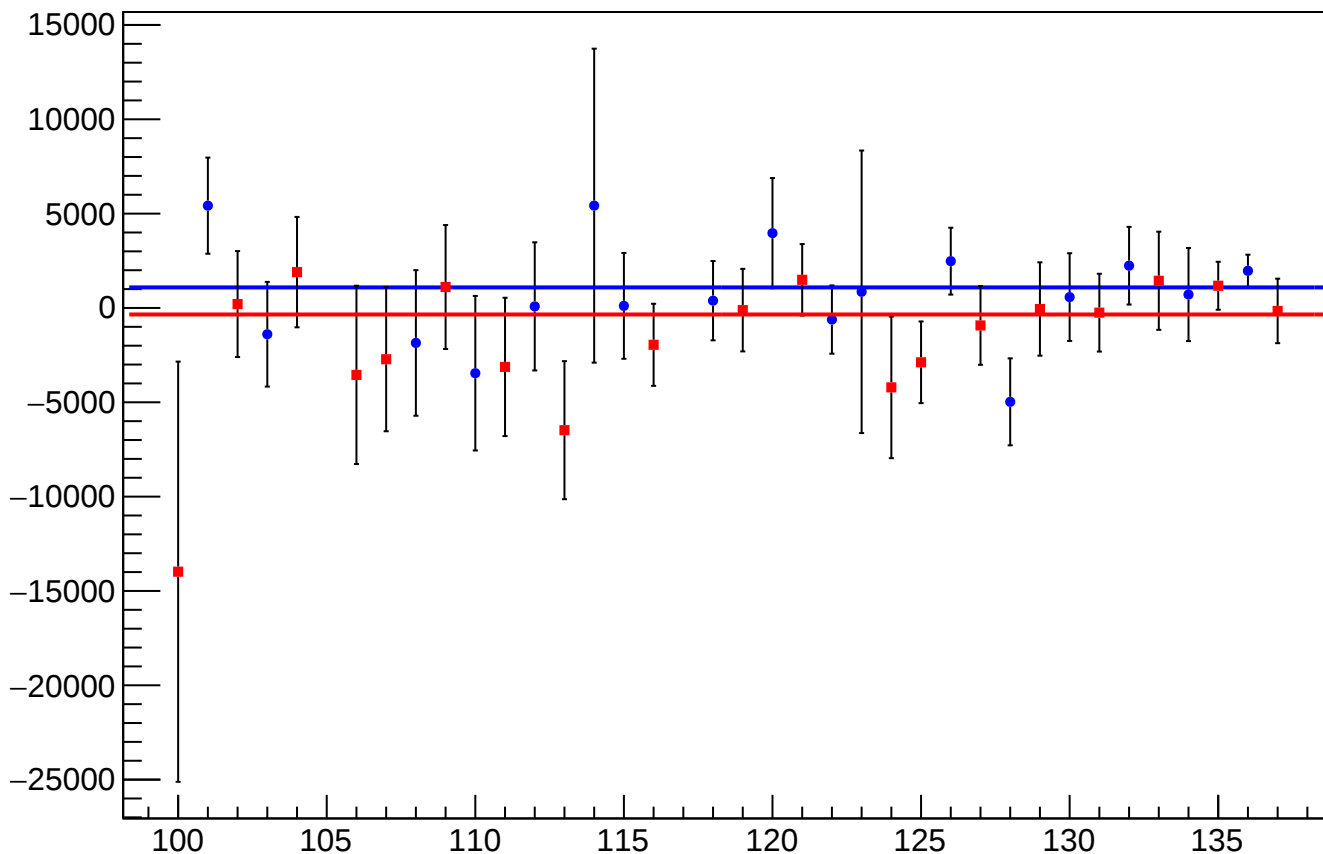
Right: 1289.252+/-0.264  $\chi^2/\text{NDF}$ : 3570145.2/35

In: 1226.135+/-0.362  $\chi^2/\text{NDF}$ : 1756323.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1289.252+/-0.264  $\chi^2/\text{NDF}$ : 3570145.2/35

asym\_sam\_26\_avg\_mean vs Slug, Sign Corrected



Right In: 1089.066 $\pm$ 515.272  $\chi^2$ /NDF: 16.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -345.640 $\pm$ 548.191  $\chi^2$ /NDF: 12.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

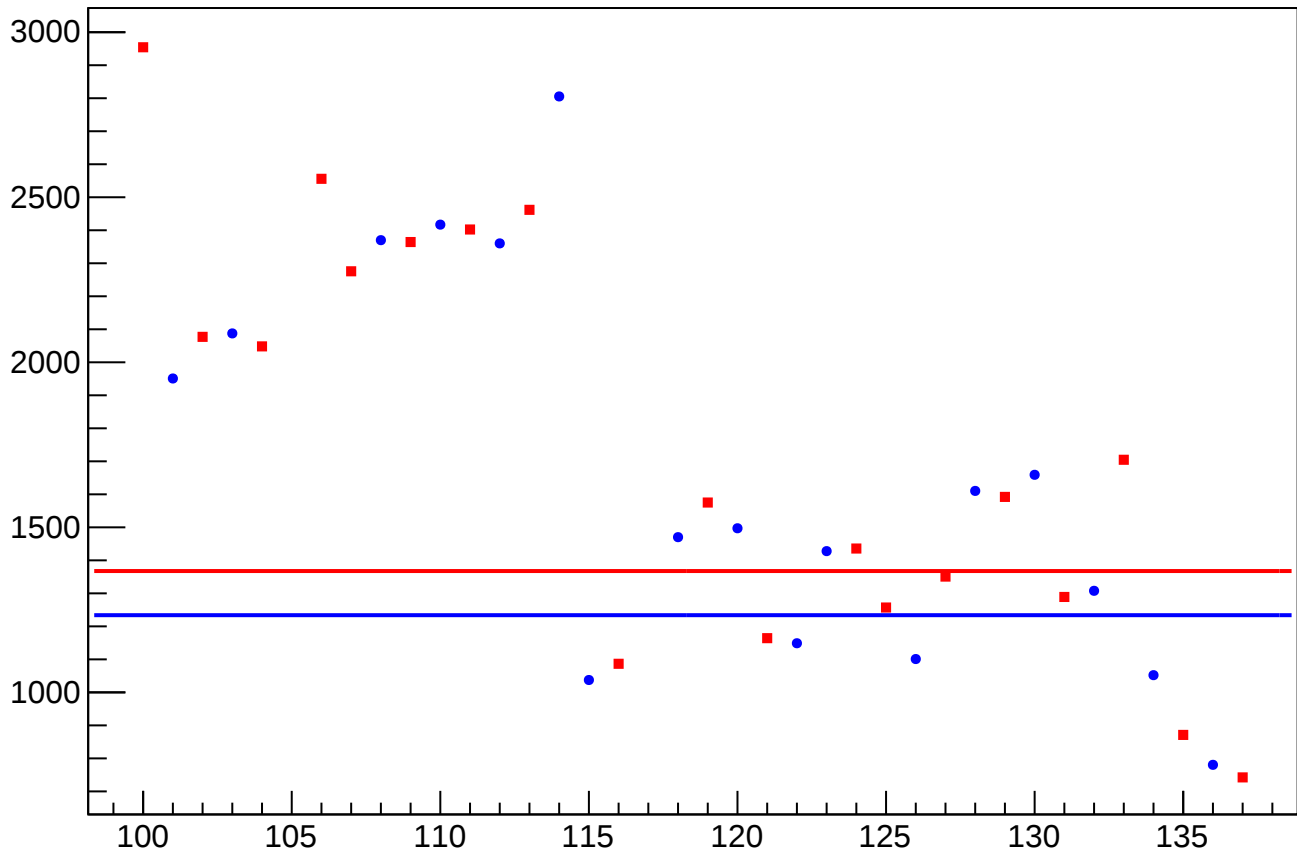
Right: 416.082 $\pm$ 375.451  $\chi^2$ /NDF: 33.1/35

In: 1089.066 $\pm$ 515.272  $\chi^2$ /NDF:16.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 416.082 $\pm$ 375.451  $\chi^2$ /NDF: 33.1/35

# asym\_sam\_26\_avg\_rms vs Slug, Sign Corrected



Right In: 1233.863+/-0.364  $\chi^2/\text{NDF}$ : 1744048.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1367.609+/-0.388  $\chi^2/\text{NDF}$ : 1744594.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

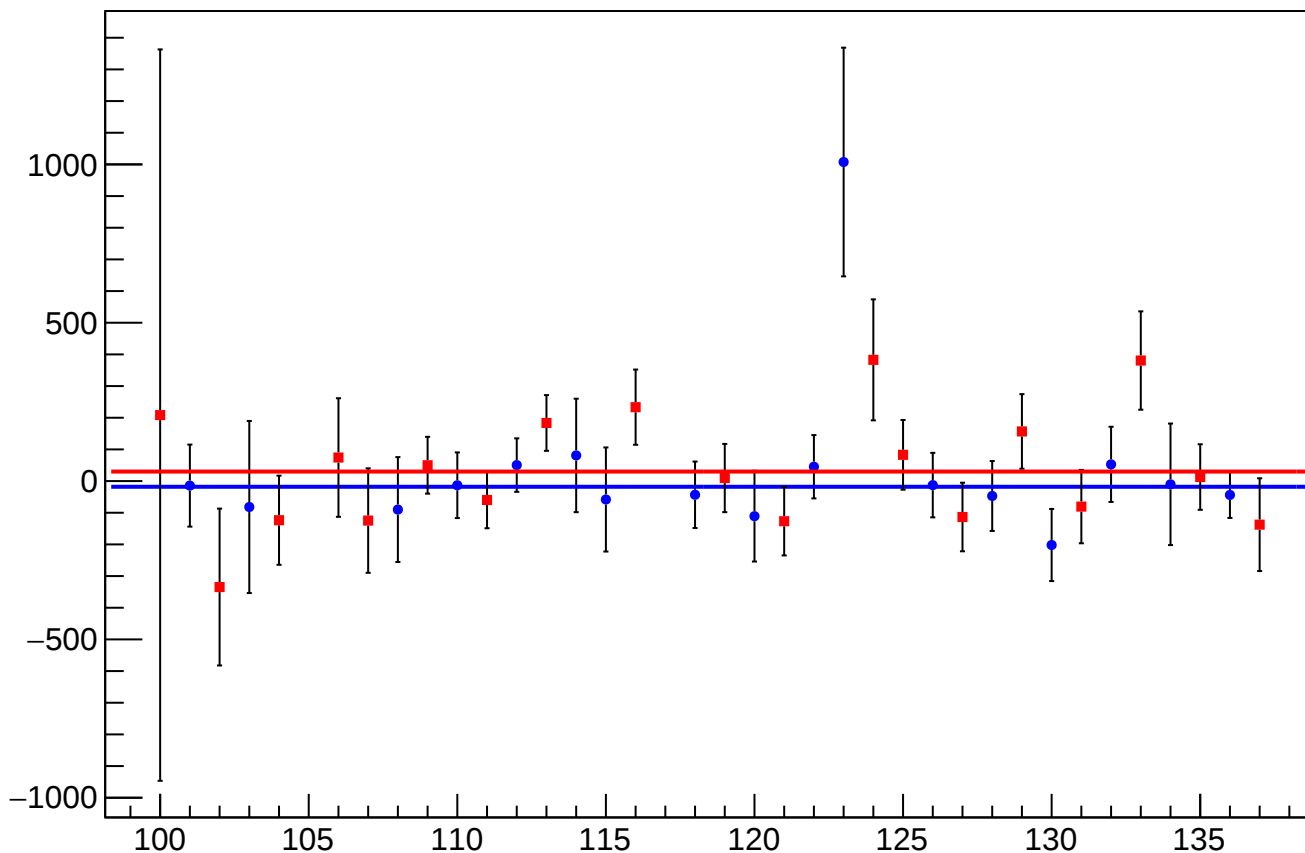
Right: 1296.600+/-0.265  $\chi^2/\text{NDF}$ : 3551849.9/35

In: 1233.863+/-0.364  $\chi^2/\text{NDF}$ : 1744048.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1296.600+/-0.265  $\chi^2/\text{NDF}$ : 3551849.9/35

# reg\_asym\_sam\_37\_avg\_mean vs Slug, Sign Corrected



Right In:  $-17.972 \pm 28.848$   $\chi^2/\text{NDF}$ : 13.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $30.070 \pm 27.976$   $\chi^2/\text{NDF}$ : 27.4/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

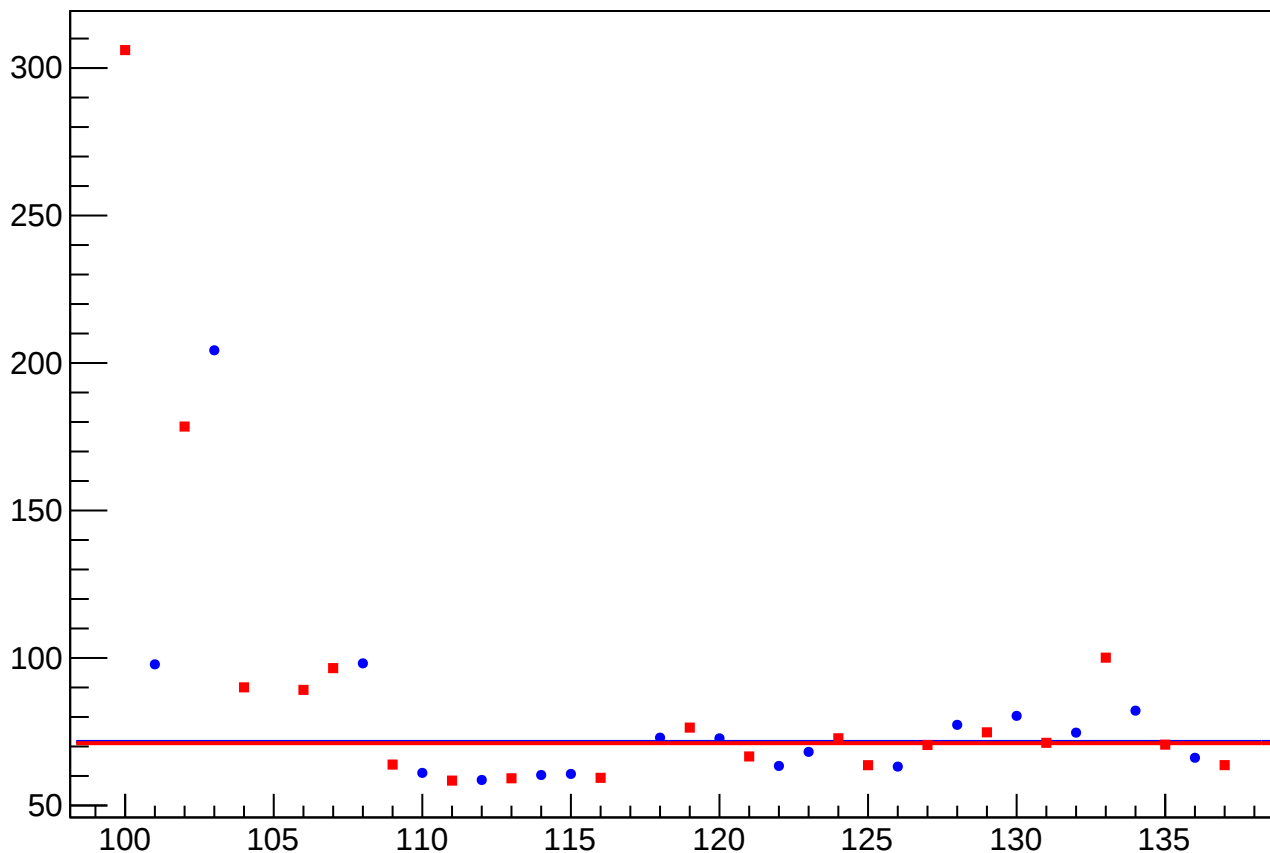
Right:  $6.786 \pm 20.083$   $\chi^2/\text{NDF}$ : 42.2/35

In:  $-17.972 \pm 28.848$   $\chi^2/\text{NDF}$ : 13.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $6.786 \pm 20.083$   $\chi^2/\text{NDF}$ : 42.2/35

reg\_asym\_sam\_37\_avg\_rms vs Slug, Sign Corrected



Right In: 71.536 $\pm$ 0.020  $\chi^2$ /NDF: 758961.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 71.115 $\pm$ 0.020  $\chi^2$ /NDF: 765159.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

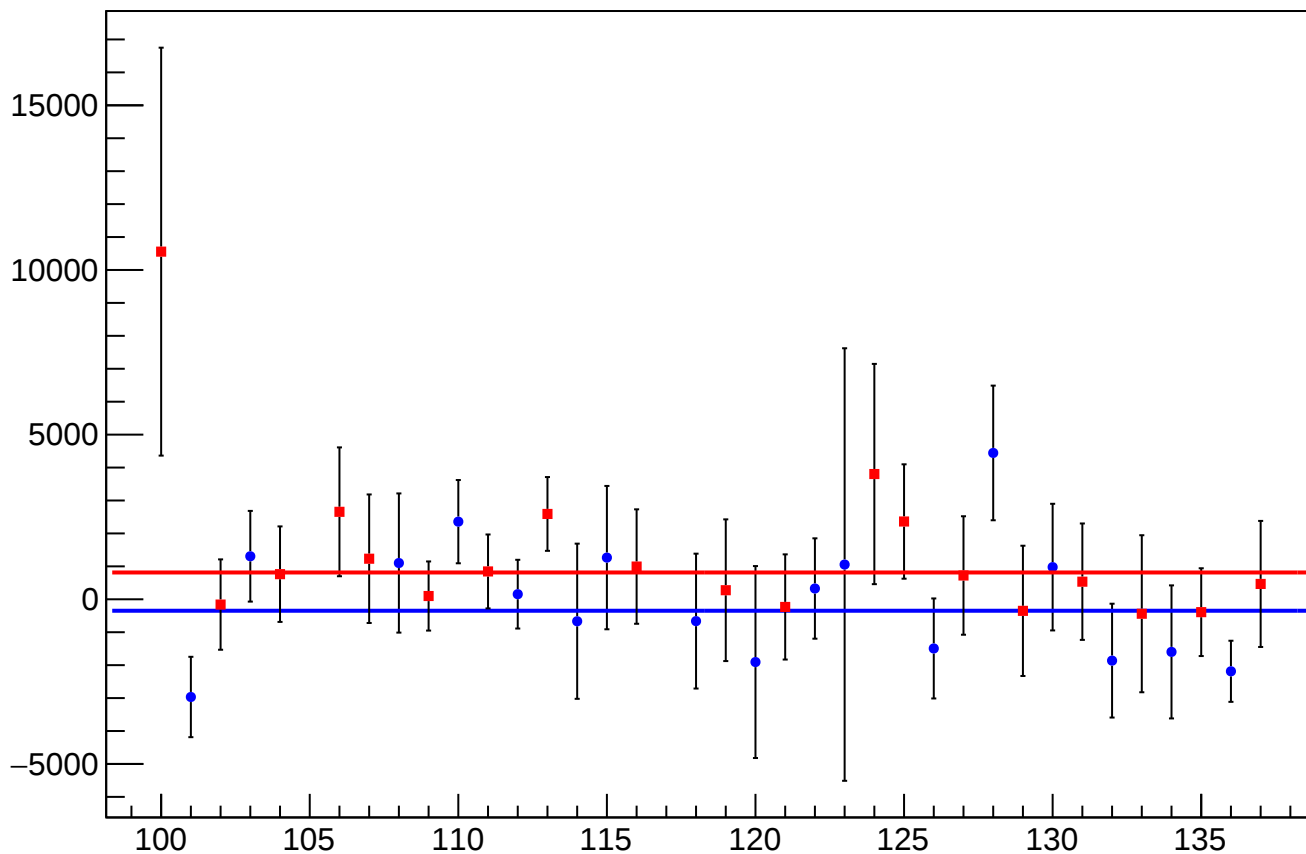
Right: 71.319 $\pm$ 0.014  $\chi^2$ /NDF: 1524340.2/35

In: 71.536 $\pm$ 0.020  $\chi^2$ /NDF:758961.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 71.319 $\pm$ 0.014  $\chi^2$ /NDF: 1524340.2/35

asym\_sam\_37\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -347.939+/-381.994  $\chi^2/\text{NDF}$ : 24.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 814.154+/-369.807  $\chi^2/\text{NDF}$ : 10.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

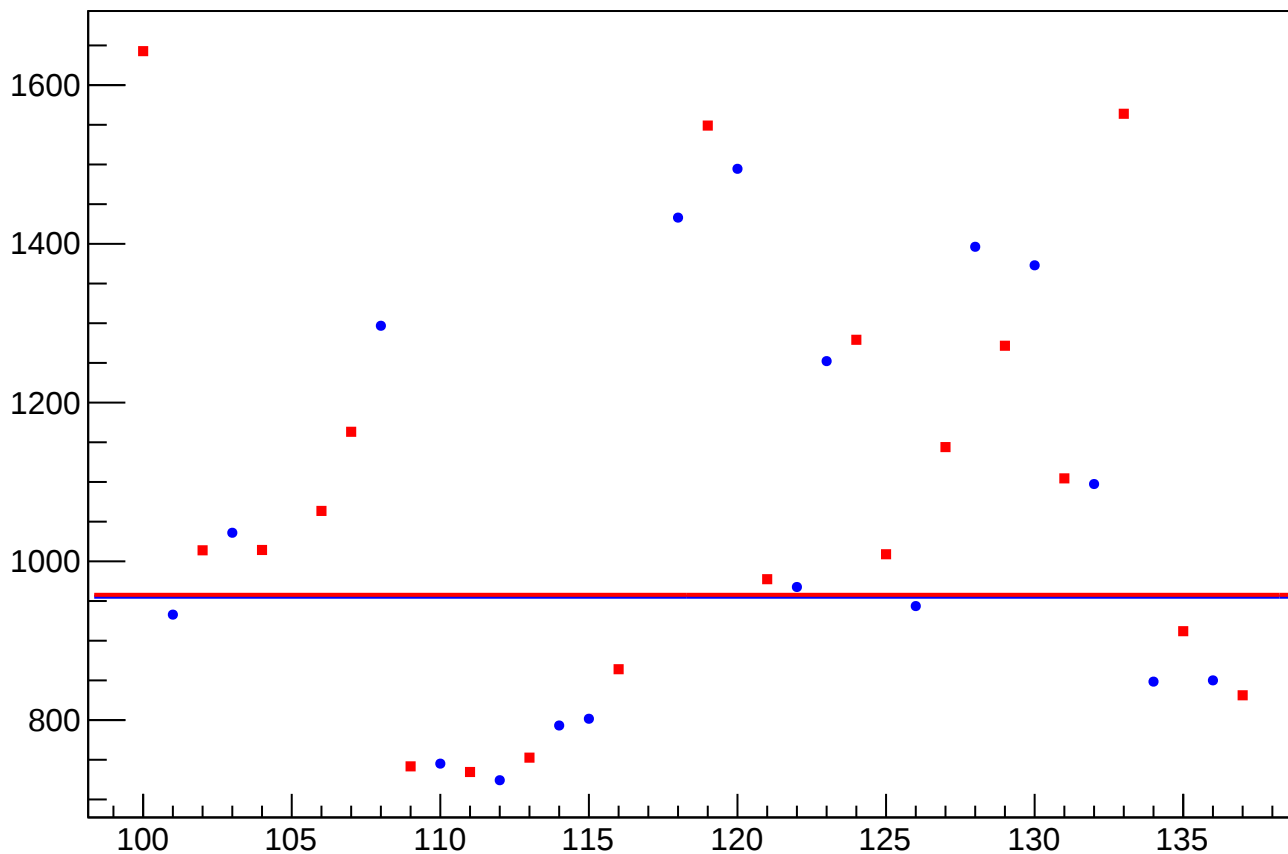
Right: 251.940+/-265.697  $\chi^2/\text{NDF}$ : 39.3/35

In: -347.939+/-381.994  $\chi^2/\text{NDF}$ : 24.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 251.940+/-265.697  $\chi^2/\text{NDF}$ : 39.3/35

asym\_sam\_37\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 955.425+/-0.270  $\chi^2/\text{NDF}$ : 646512.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 957.849+/-0.261  $\chi^2/\text{NDF}$ : 693081.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

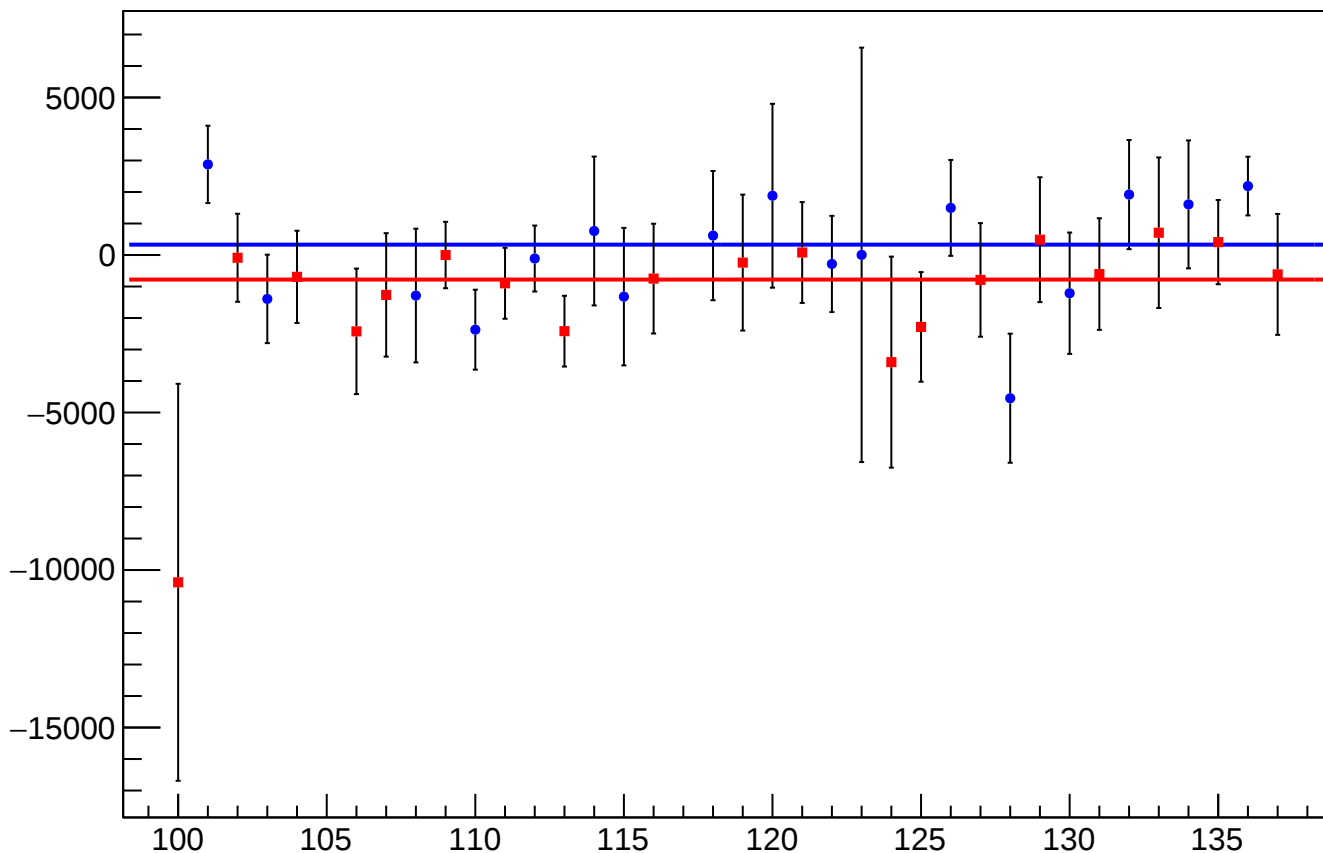
Right: 956.676+/-0.188  $\chi^2/\text{NDF}$ : 1339635.8/35

In: 955.425+/-0.270  $\chi^2/\text{NDF}$ : 646512.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 956.676+/-0.188  $\chi^2/\text{NDF}$ : 1339635.8/35

asym\_sam\_37\_avg\_mean vs Slug, Sign Corrected



Right In: 329.164 $\pm$ 383.728  $\chi^2$ /NDF: 24.3/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -779.623 $\pm$ 371.673  $\chi^2$ /NDF: 9.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

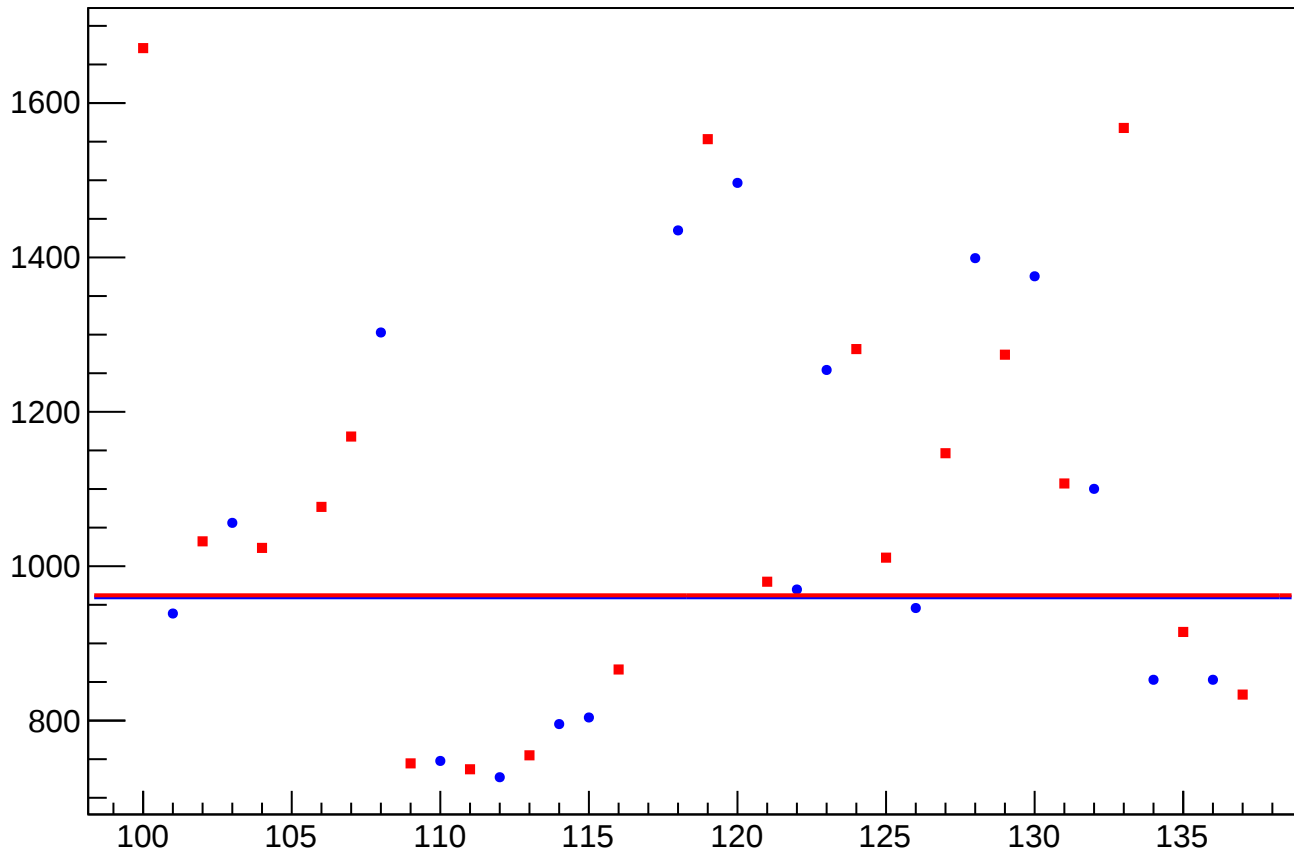
Right: -242.920 $\pm$ 266.973  $\chi^2$ /NDF: 37.9/35

In: 329.164 $\pm$ 383.728  $\chi^2$ /NDF:24.3/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -242.920 $\pm$ 266.973  $\chi^2$ /NDF: 37.9/35

# asym\_sam\_37\_avg\_rms vs Slug, Sign Corrected



Right In: 959.770+/-0.271  $\chi^2/\text{NDF}$ : 646727.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 962.314+/-0.263  $\chi^2/\text{NDF}$ : 695757.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

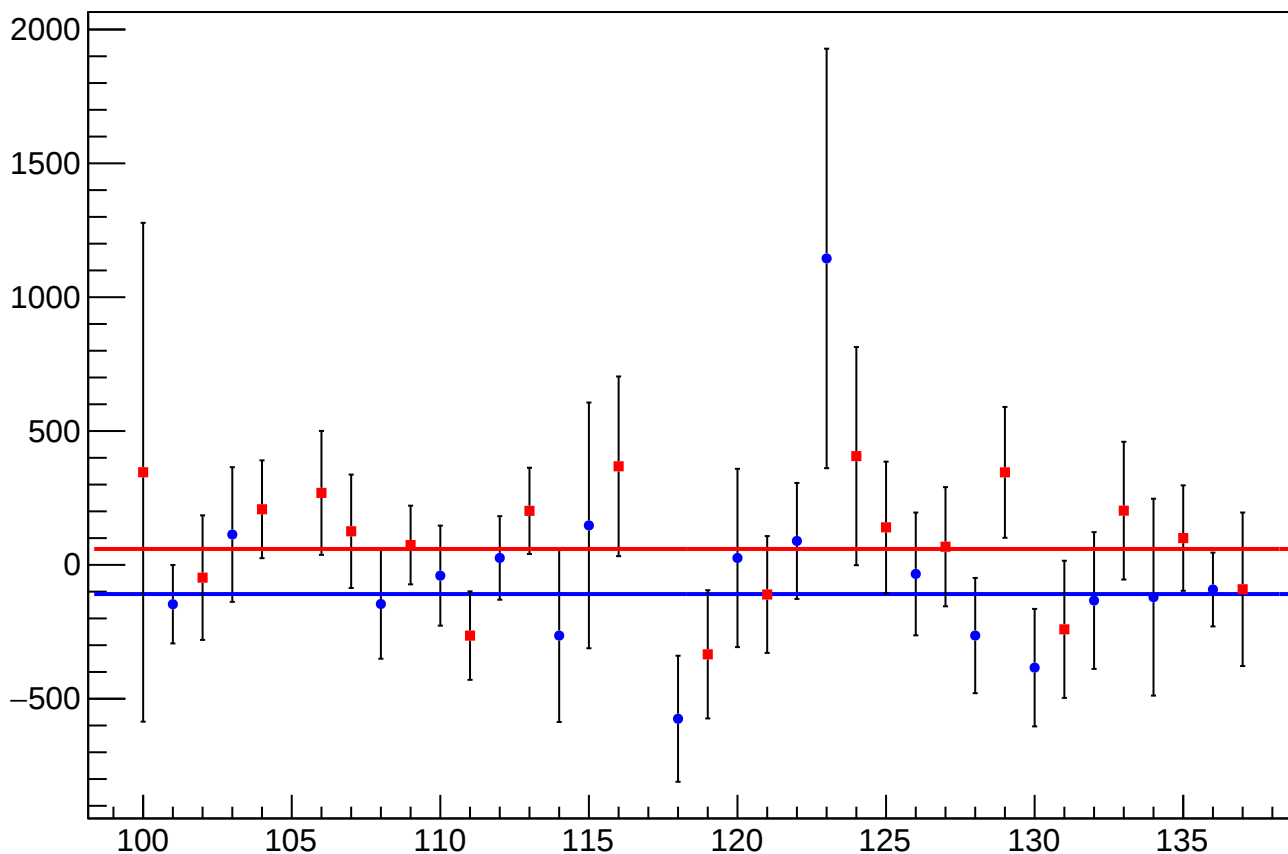
Right: 961.083+/-0.189  $\chi^2/\text{NDF}$ : 1342530.4/35

In: 959.770+/-0.271  $\chi^2/\text{NDF}$ :646727.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 961.083+/-0.189  $\chi^2/\text{NDF}$ : 1342530.4/35

# reg\_asym\_sam\_48\_avg\_mean vs Slug, Sign Corrected



Right In:  $-108.977 \pm 52.923$   $\chi^2/\text{NDF}: 12.0/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $59.475 \pm 50.822$   $\chi^2/\text{NDF}: 14.9/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

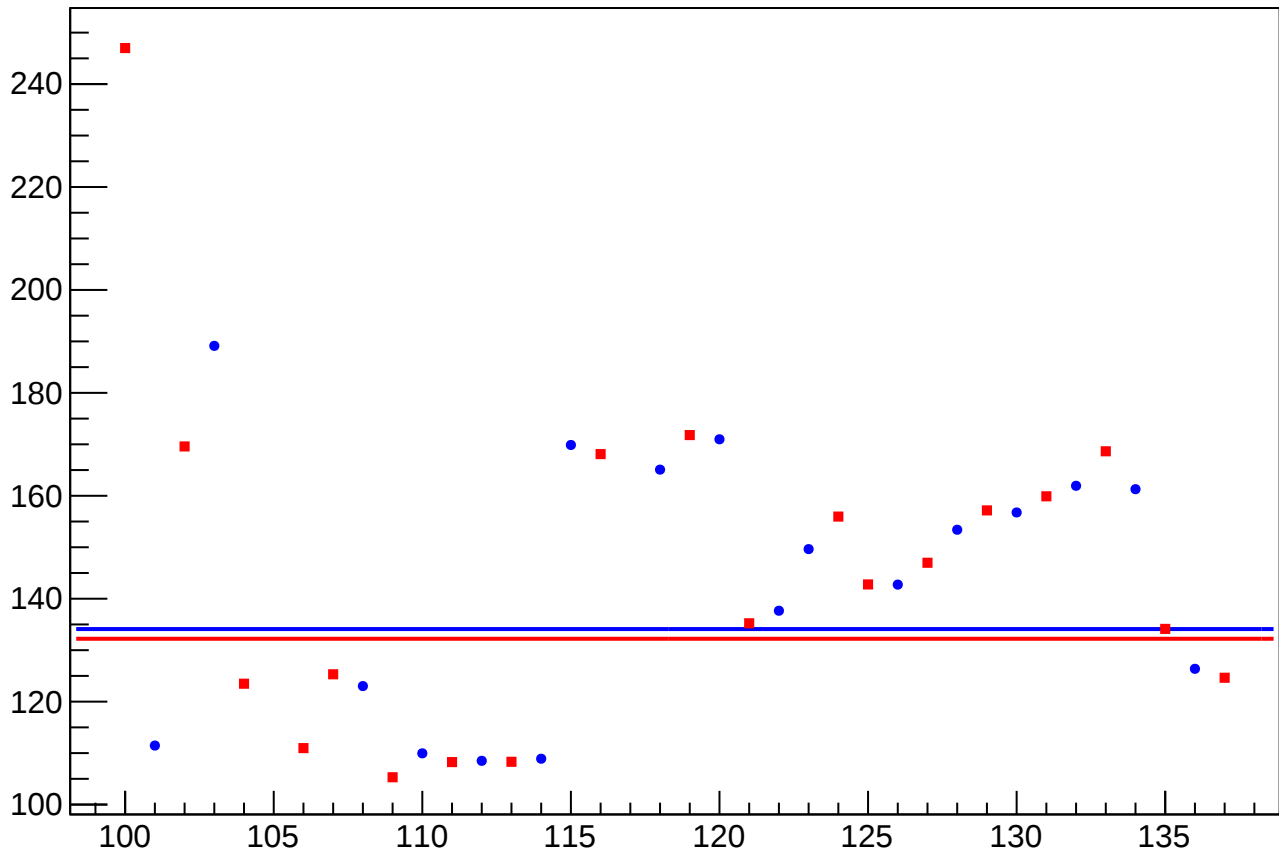
Right:  $-21.341 \pm 36.657$   $\chi^2/\text{NDF}: 32.2/35$

In:  $-108.977 \pm 52.923$   $\chi^2/\text{NDF}: 12.0/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-21.341 \pm 36.657$   $\chi^2/\text{NDF}: 32.2/35$

reg\_asym\_sam\_48\_avg\_rms vs Slug, Sign Corrected



Right In: 134.103+/-0.037  $\chi^2/\text{NDF}$ : 402581.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 132.219+/-0.036  $\chi^2/\text{NDF}$ : 441738.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

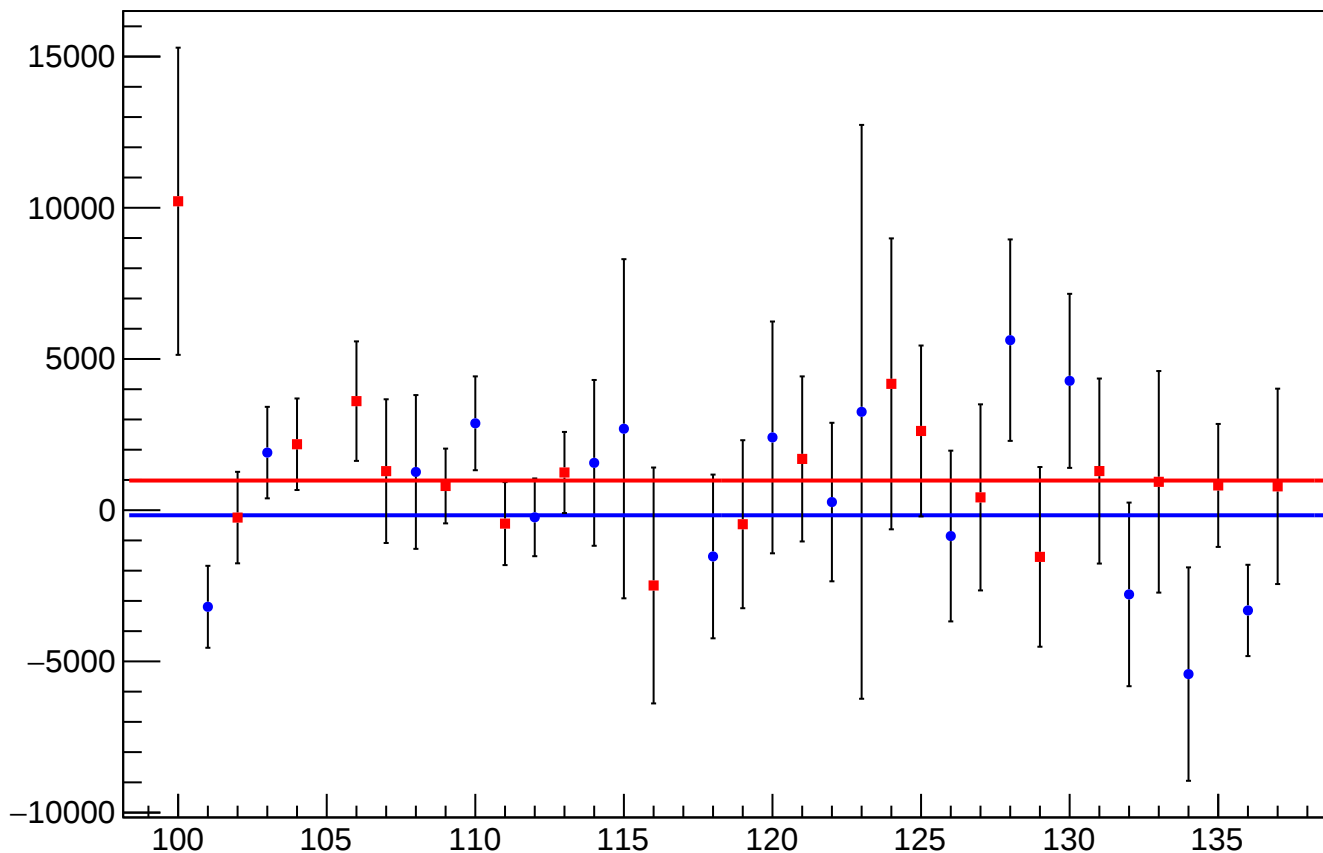
Right: 133.123+/-0.026  $\chi^2/\text{NDF}$ : 845638.9/35

In: 134.103+/-0.037  $\chi^2/\text{NDF}$ : 402581.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 133.123+/-0.026  $\chi^2/\text{NDF}$ : 845638.9/35

asym\_sam\_48\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -168.237+/-523.672  $\chi^2/\text{NDF}$ : 25.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 980.517+/-480.968  $\chi^2/\text{NDF}$ : 10.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

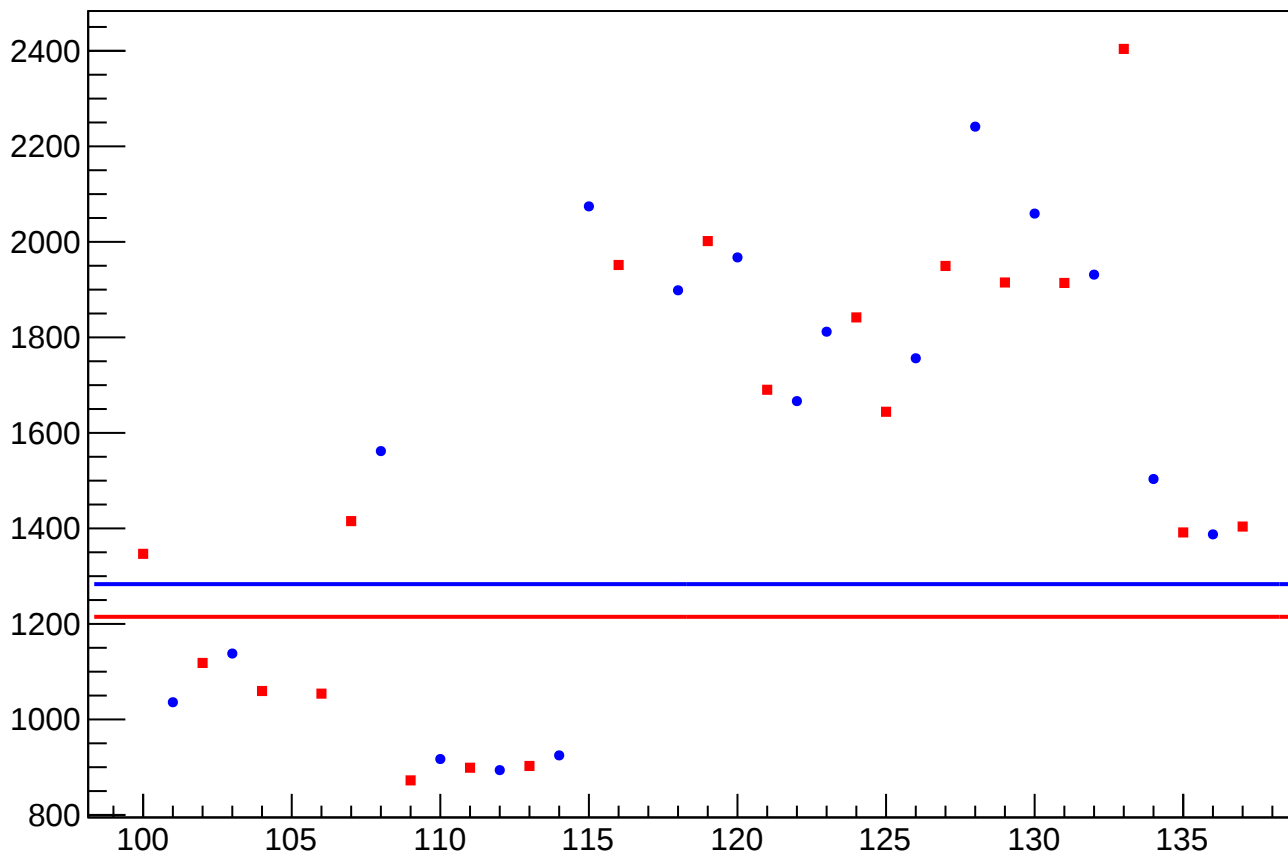
Right: 454.882+/-354.232  $\chi^2/\text{NDF}$ : 38.1/35

In: -168.237+/-523.672  $\chi^2/\text{NDF}$ : 25.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 454.882+/-354.232  $\chi^2/\text{NDF}$ : 38.1/35

asym\_sam\_48\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 1283.318+/-0.370  $\chi^2/\text{NDF}$ : 1169431.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1214.883+/-0.340  $\chi^2/\text{NDF}$ : 1360860.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

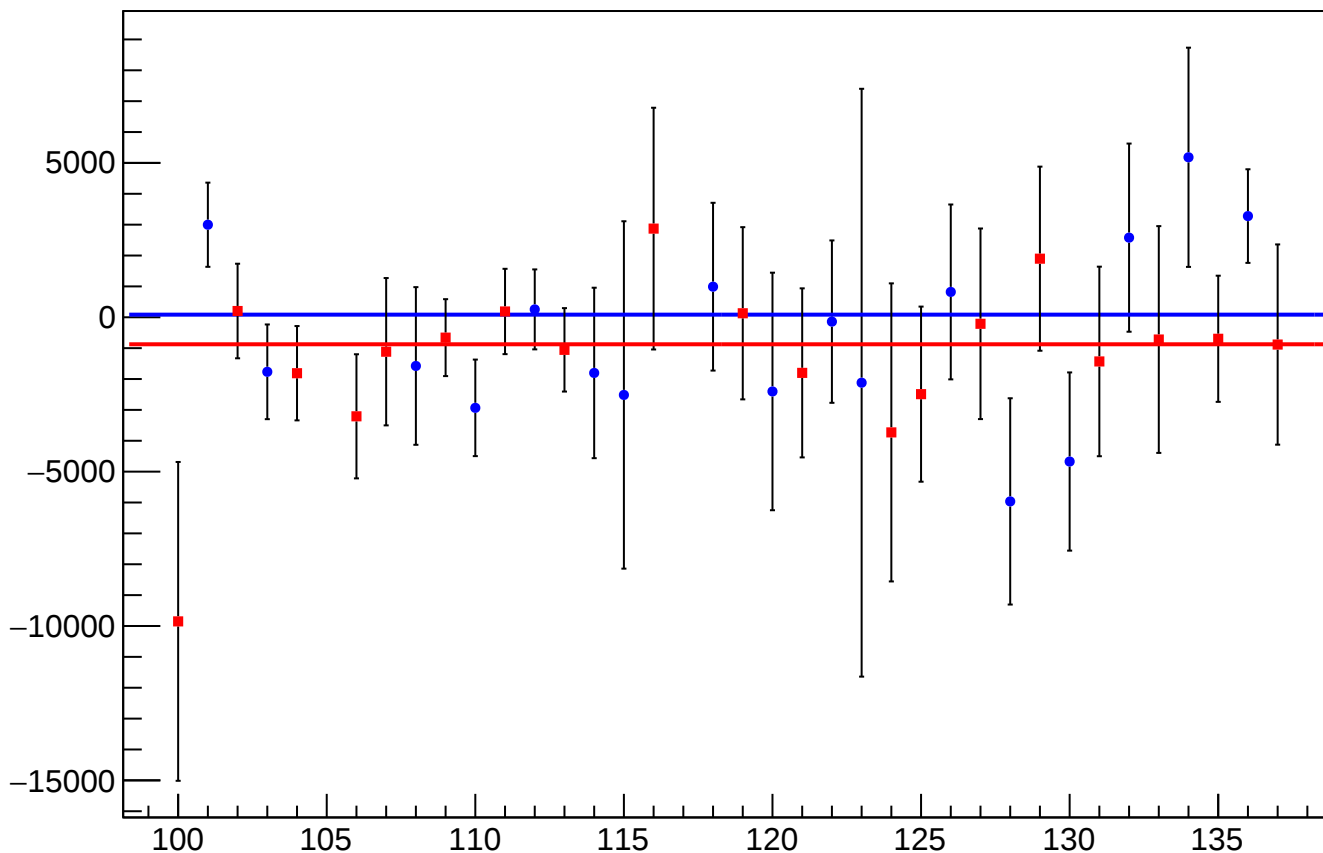
Right: 1246.197+/-0.250  $\chi^2/\text{NDF}$ : 2548819.1/35

In: 1283.318+/-0.370  $\chi^2/\text{NDF}$ : 1169431.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1246.197+/-0.250  $\chi^2/\text{NDF}$ : 2548819.1/35

asym\_sam\_48\_avg\_mean vs Slug, Sign Corrected



Right In: 85.077+/-527.082  $\chi^2/\text{NDF}$ : 24.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -874.592+/-484.647  $\chi^2/\text{NDF}$ : 8.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

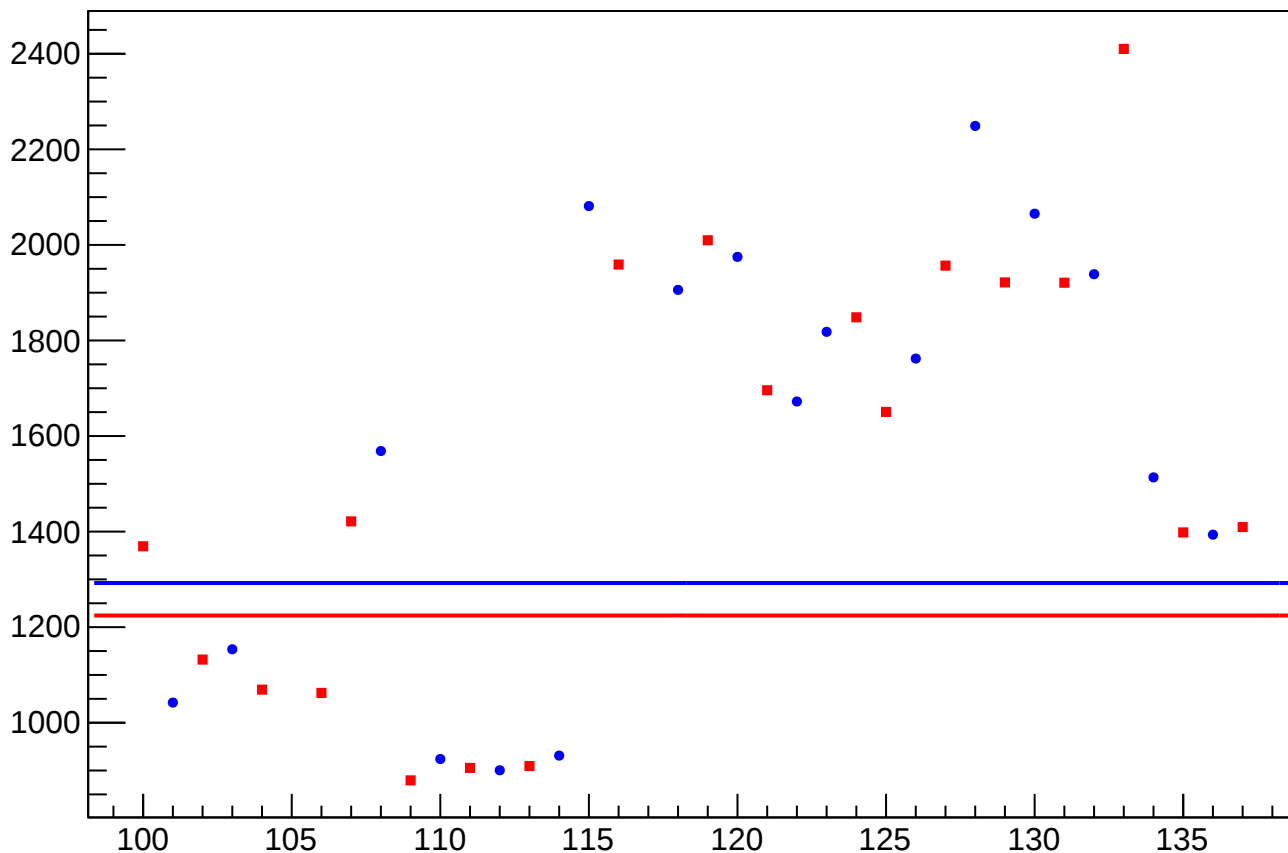
Right: -434.939+/-356.757  $\chi^2/\text{NDF}$ : 35.2/35

In: 85.077+/-527.082  $\chi^2/\text{NDF}$ : 24.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -434.939+/-356.757  $\chi^2/\text{NDF}$ : 35.2/35

# asym\_sam\_48\_avg\_rms vs Slug, Sign Corrected



Right In: 1292.426+/-0.373  $\chi^2/\text{NDF}$ : 1156576.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1224.429+/-0.343  $\chi^2/\text{NDF}$ : 1345748.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

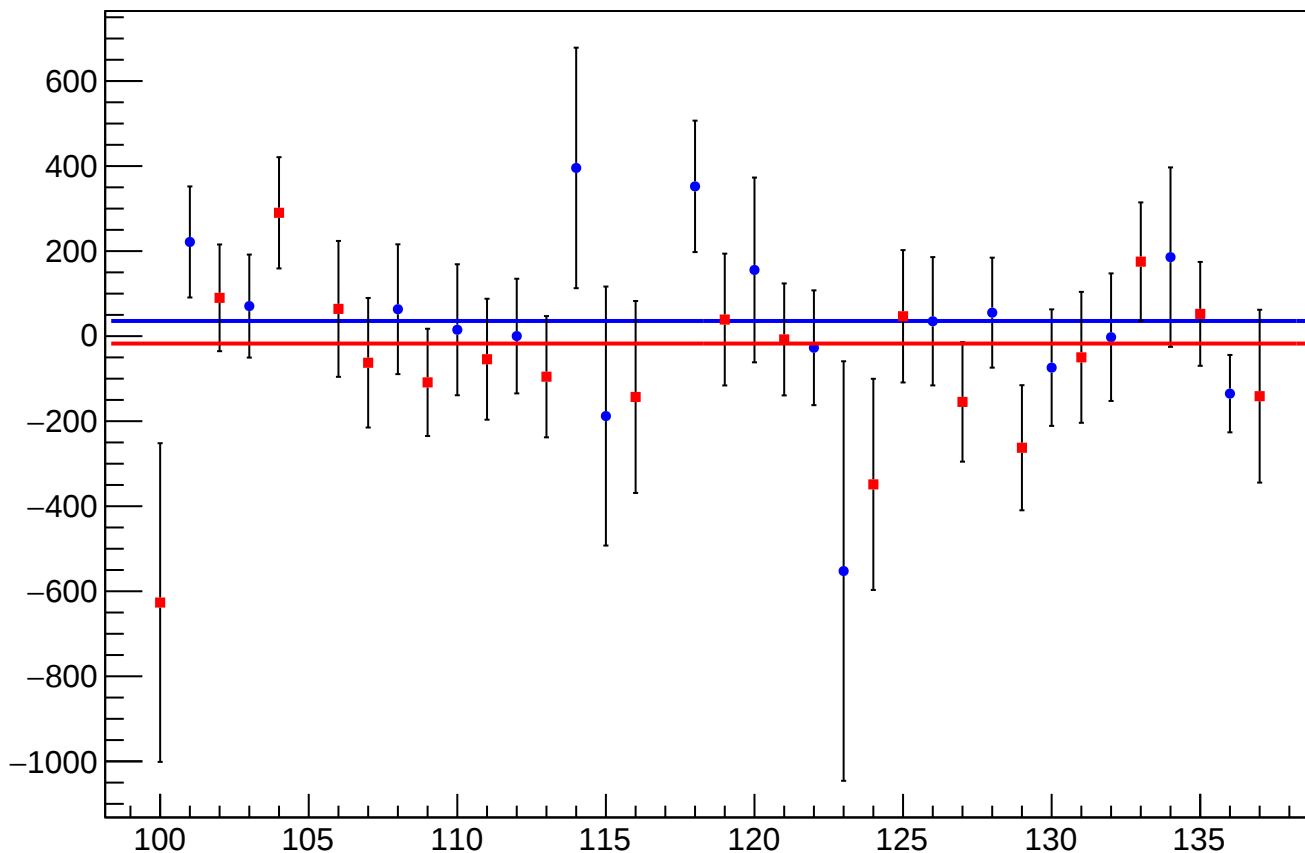
Right: 1255.580+/-0.252  $\chi^2/\text{NDF}$ : 2520360.3/35

In: 1292.426+/-0.373  $\chi^2/\text{NDF}$ : 1156576.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1255.580+/-0.252  $\chi^2/\text{NDF}$ : 2520360.3/35

reg\_asym\_sam\_15\_dd\_mean vs Slug, Sign Corrected



Right In: 35.679+/-36.350  $\chi^2/\text{NDF}$ : 15.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -17.418+/-34.691  $\chi^2/\text{NDF}$ : 18.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

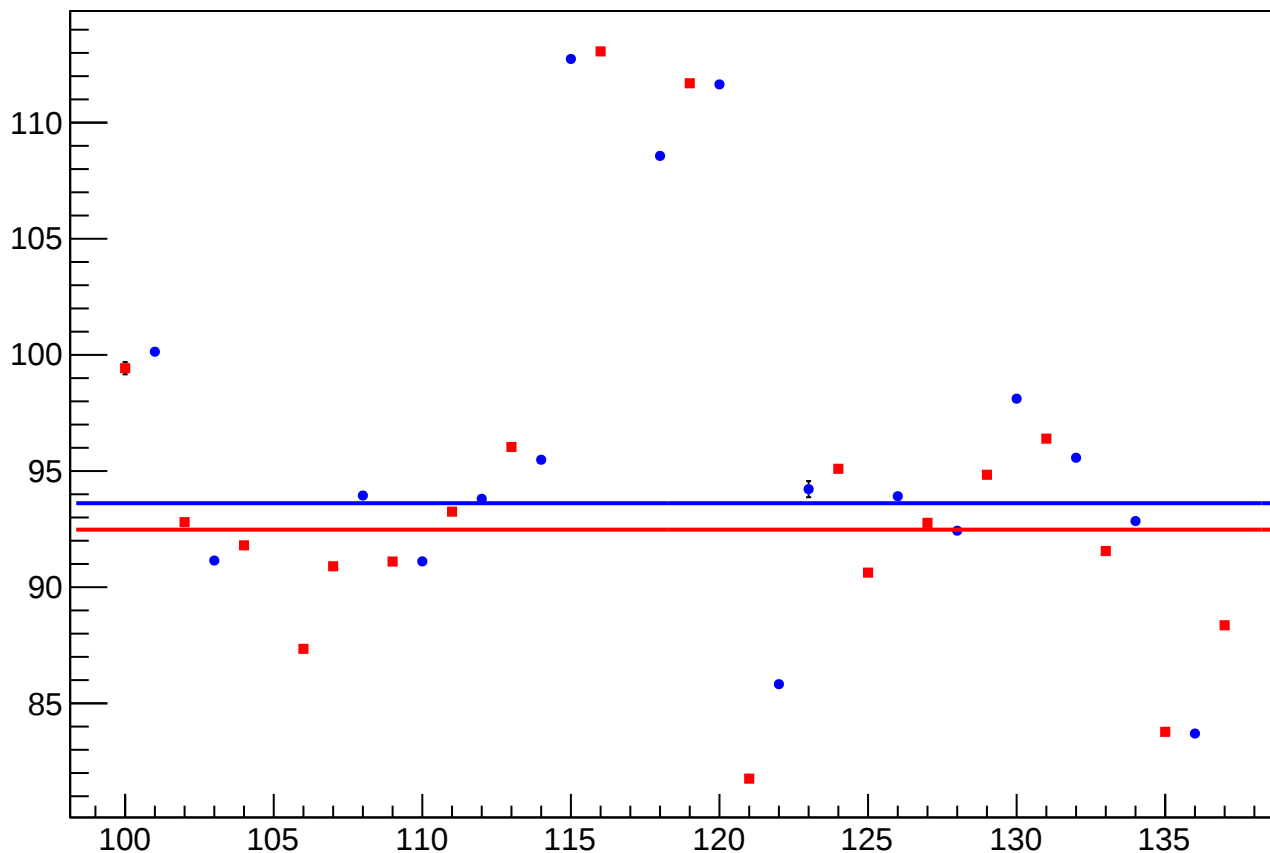
Right: 7.891+/-25.096  $\chi^2/\text{NDF}$ : 35.3/35

In: 35.679+/-36.350  $\chi^2/\text{NDF}$ : 15.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 7.891+/-25.096  $\chi^2/\text{NDF}$ : 35.3/35

# reg\_asym\_sam\_15\_dd\_rms vs Slug, Sign Corrected



Right In: 93.616+/-0.026  $\chi^2/\text{NDF}$ : 79928.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 92.477+/-0.025  $\chi^2/\text{NDF}$ : 78591.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

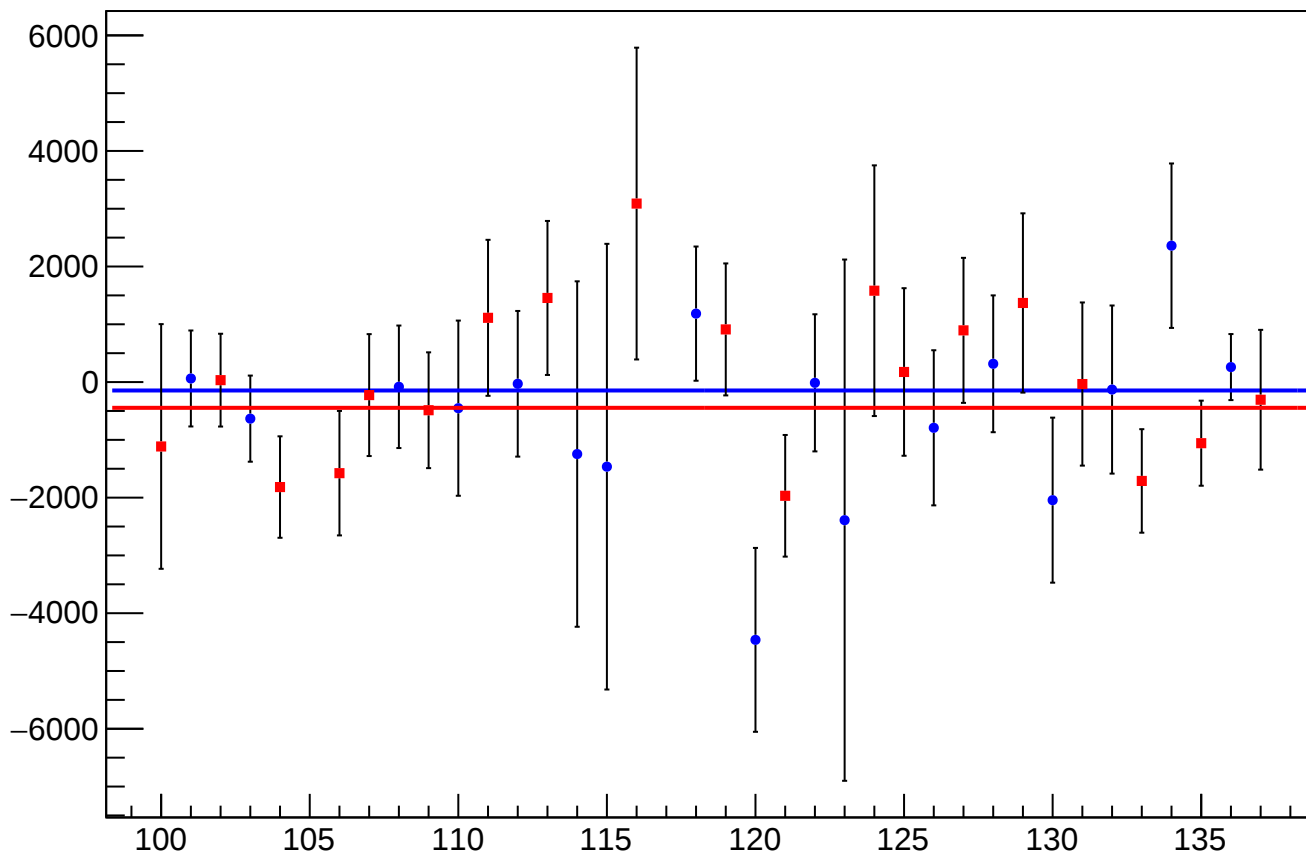
Right: 93.020+/-0.018  $\chi^2/\text{NDF}$ : 159546.8/35

In: 93.616+/-0.026  $\chi^2/\text{NDF}$ : 79928.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 93.020+/-0.018  $\chi^2/\text{NDF}$ : 159546.8/35

asym\_sam\_15\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: -145.464+/-276.629  $\chi^2/\text{NDF}$ : 15.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -445.575+/-260.276  $\chi^2/\text{NDF}$ : 19.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

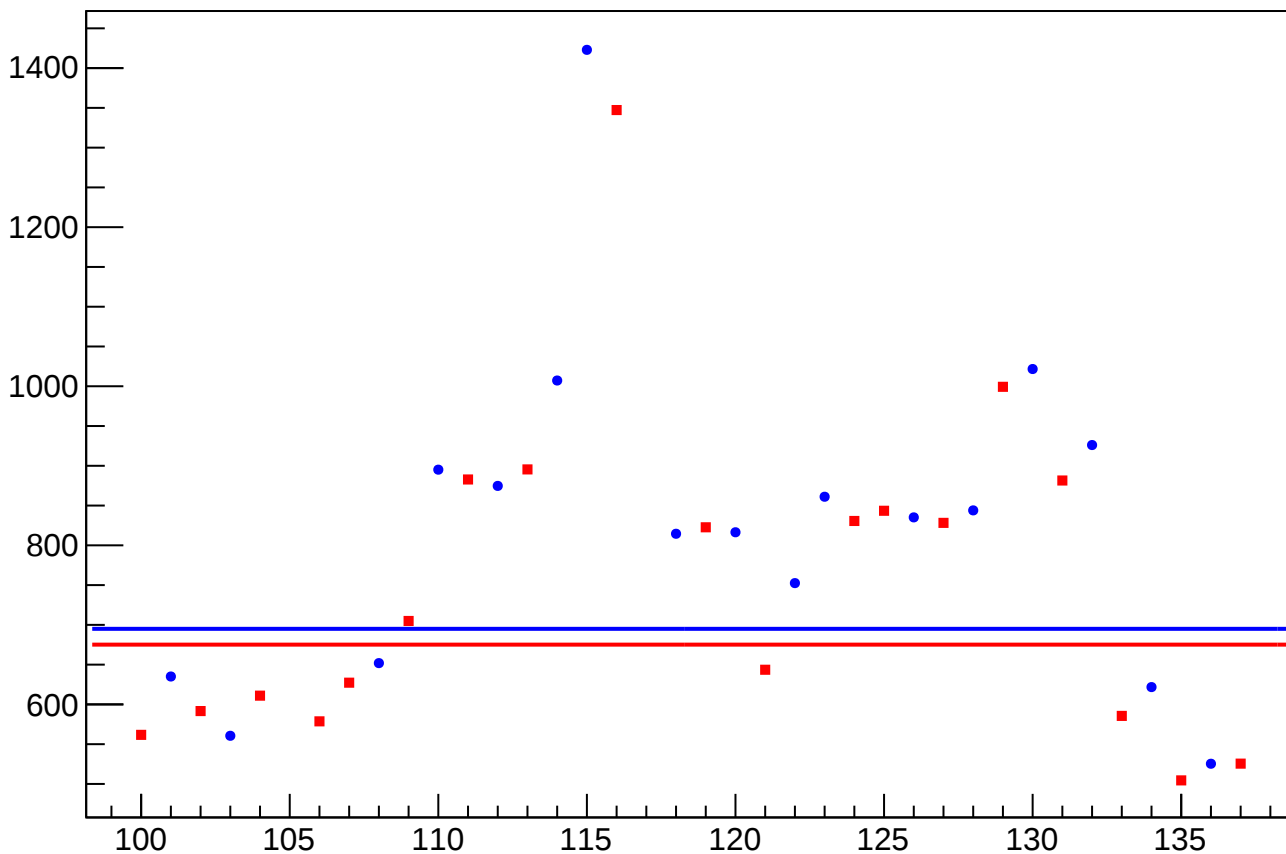
Right: -304.652+/-189.560  $\chi^2/\text{NDF}$ : 35.1/35

In: -145.464+/-276.629  $\chi^2/\text{NDF}$ : 15.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -304.652+/-189.560  $\chi^2/\text{NDF}$ : 35.1/35

asym\_sam\_15\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 695.014+/-0.196  $\chi^2/\text{NDF}$ : 677713.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 675.151+/-0.184  $\chi^2/\text{NDF}$ : 676394.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

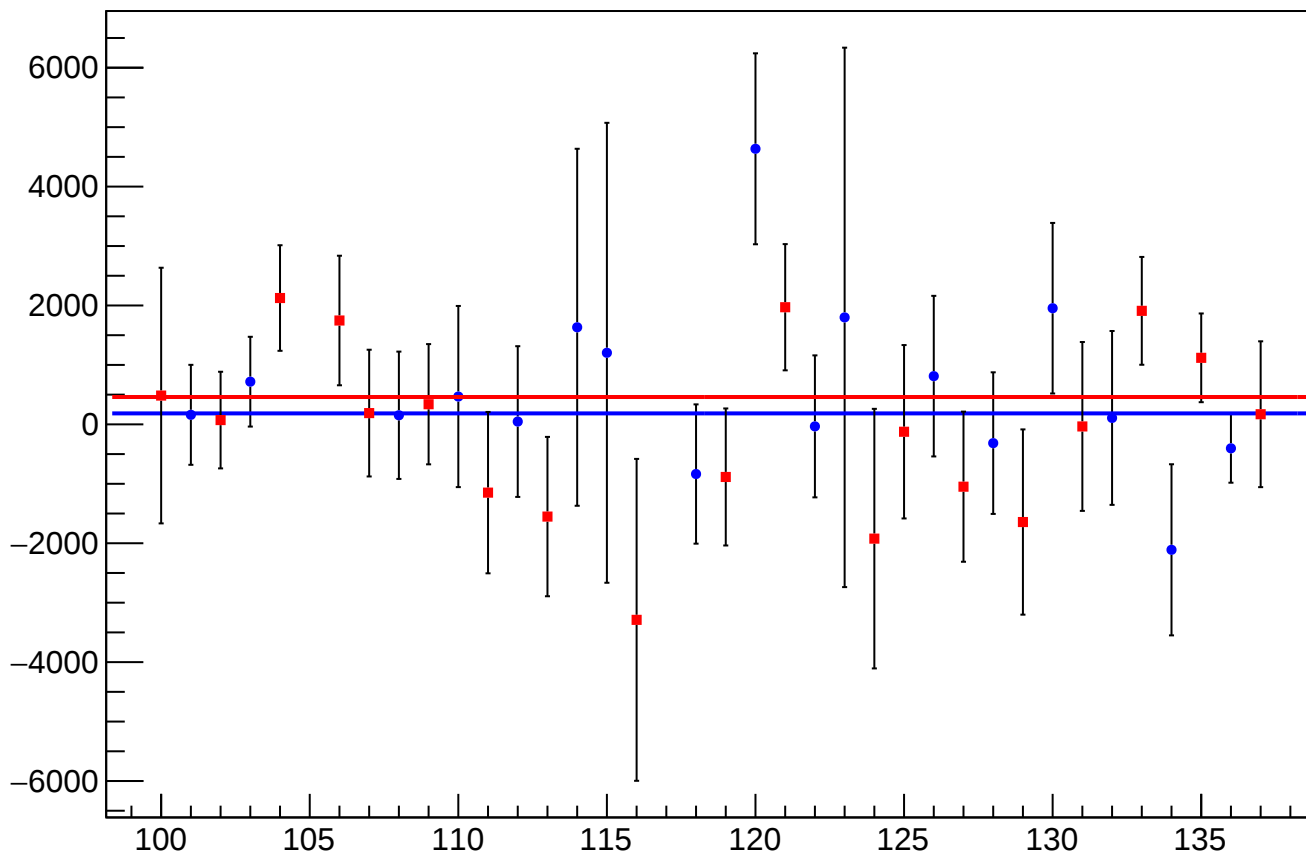
Right: 684.478+/-0.134  $\chi^2/\text{NDF}$ : 1359576.7/35

In: 695.014+/-0.196  $\chi^2/\text{NDF}$ : 677713.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 684.478+/-0.134  $\chi^2/\text{NDF}$ : 1359576.7/35

# asym\_sam\_15\_dd\_mean vs Slug, Sign Corrected



Right In: 184.518+/-279.390  $\chi^2/\text{NDF}$ : 14.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 460.174+/-262.960  $\chi^2/\text{NDF}$ : 22.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

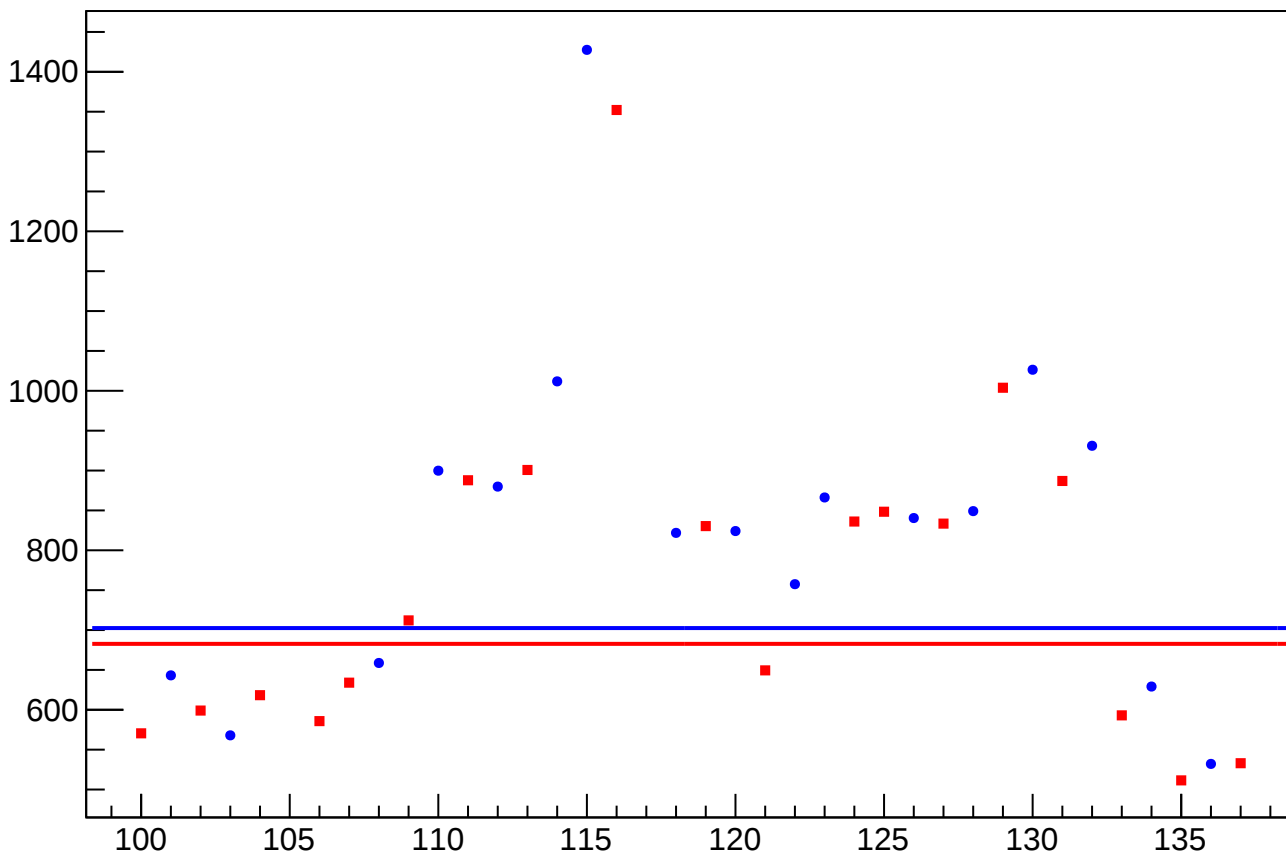
Right: 330.689+/-191.486  $\chi^2/\text{NDF}$ : 37.7/35

In: 184.518+/-279.390  $\chi^2/\text{NDF}$ : 14.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 330.689+/-191.486  $\chi^2/\text{NDF}$ : 37.7/35

# asym\_sam\_15\_dd\_rms vs Slug, Sign Corrected



Right In: 702.469+/-0.198  $\chi^2/\text{NDF}$ : 660525.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 682.662+/-0.186  $\chi^2/\text{NDF}$ : 659521.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

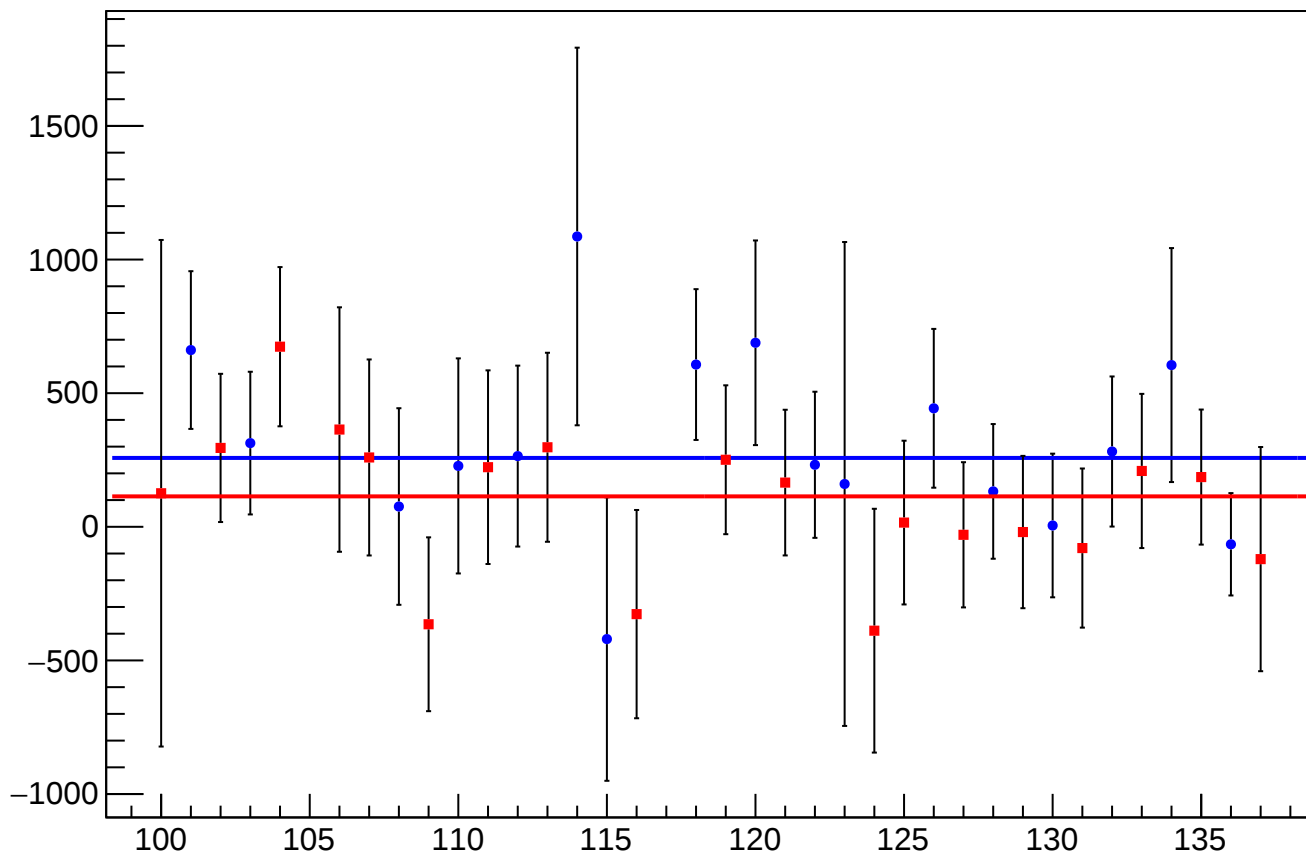
Right: 691.966+/-0.135  $\chi^2/\text{NDF}$ : 1325377.5/35

In: 702.469+/-0.198  $\chi^2/\text{NDF}$ : 660525.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 691.966+/-0.135  $\chi^2/\text{NDF}$ : 1325377.5/35

reg\_asym\_sam\_26\_dd\_mean vs Slug, Sign Corrected



Right In: 257.721 $\pm$ 75.931  $\chi^2$ /NDF: 13.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 113.851 $\pm$ 74.211  $\chi^2$ /NDF: 11.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

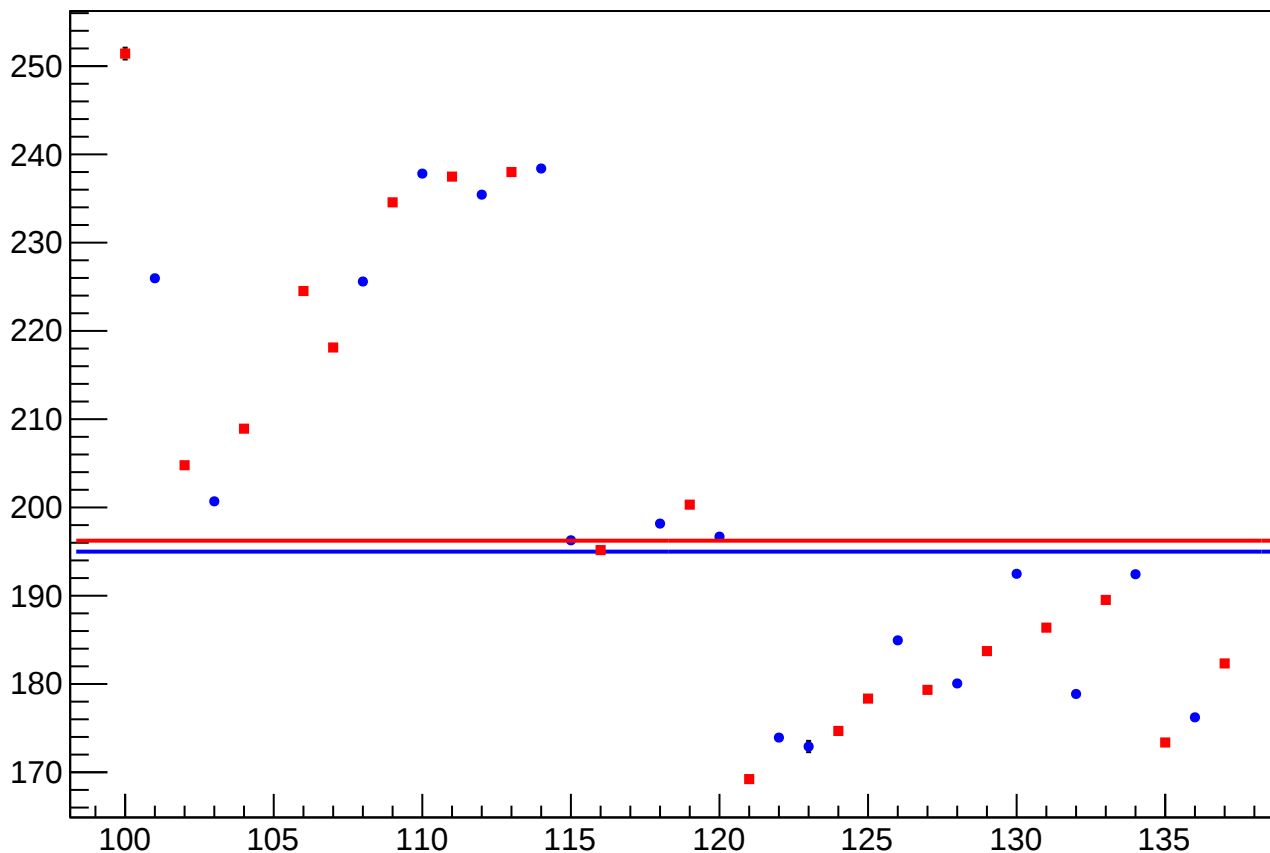
Right: 184.138 $\pm$ 53.073  $\chi^2$ /NDF: 26.1/35

In: 257.721 $\pm$ 75.931  $\chi^2$ /NDF:13.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 184.138 $\pm$ 53.073  $\chi^2$ /NDF: 26.1/35

reg\_asym\_sam\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 194.994 $\pm$ 0.054  $\chi^2$ /NDF: 144271.1/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 196.235 $\pm$ 0.052  $\chi^2$ /NDF: 173491.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

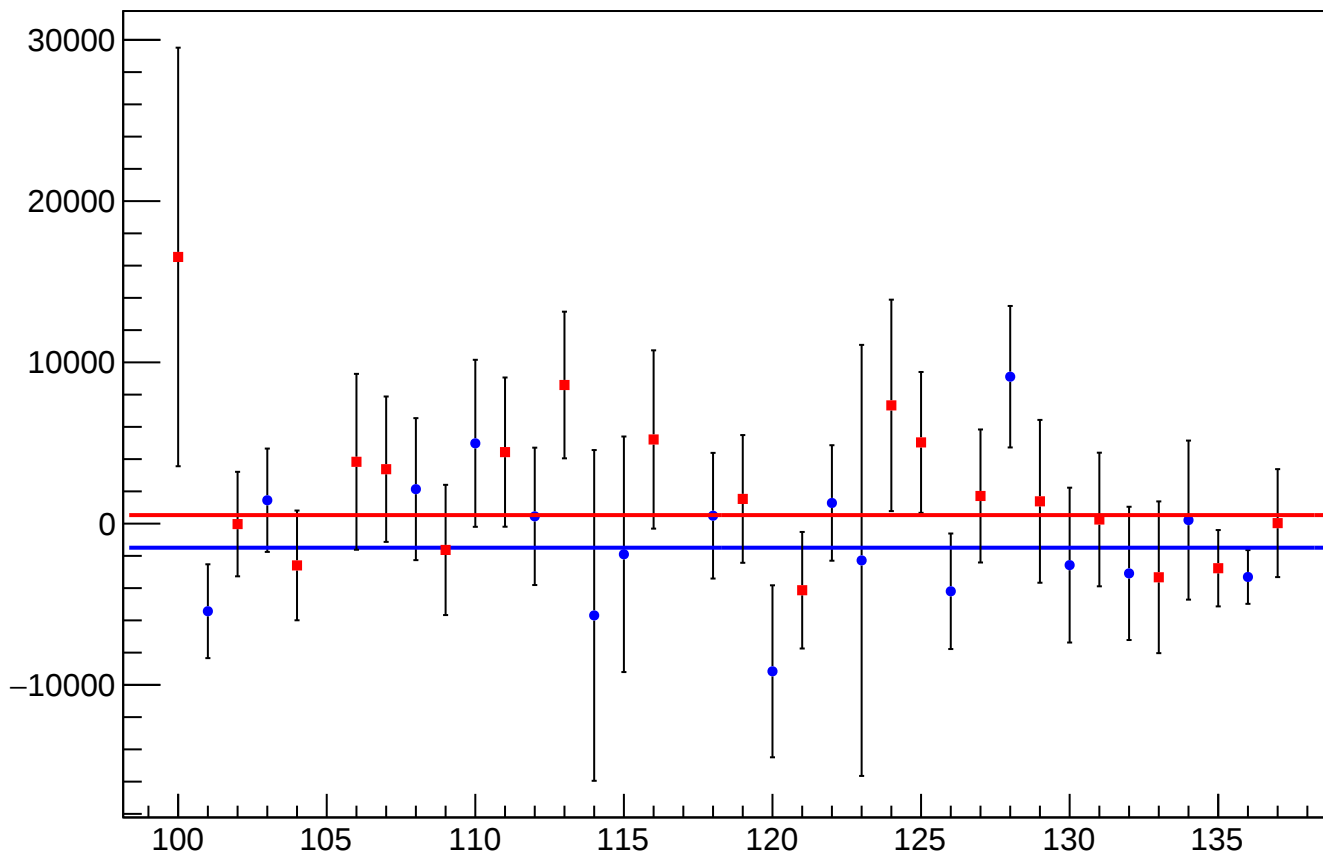
Right: 195.629 $\pm$ 0.038  $\chi^2$ /NDF: 318035.8/35

In: 194.994 $\pm$ 0.054  $\chi^2$ /NDF:144271.1/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 195.629 $\pm$ 0.038  $\chi^2$ /NDF: 318035.8/35

asym\_sam\_26\_dd\_correction\_mean vs Slug, Sign Corrected



Right In:  $-1493.280 \pm 910.834$   $\chi^2/\text{NDF}$ : 16.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $528.758 \pm 934.718$   $\chi^2/\text{NDF}$ : 14.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

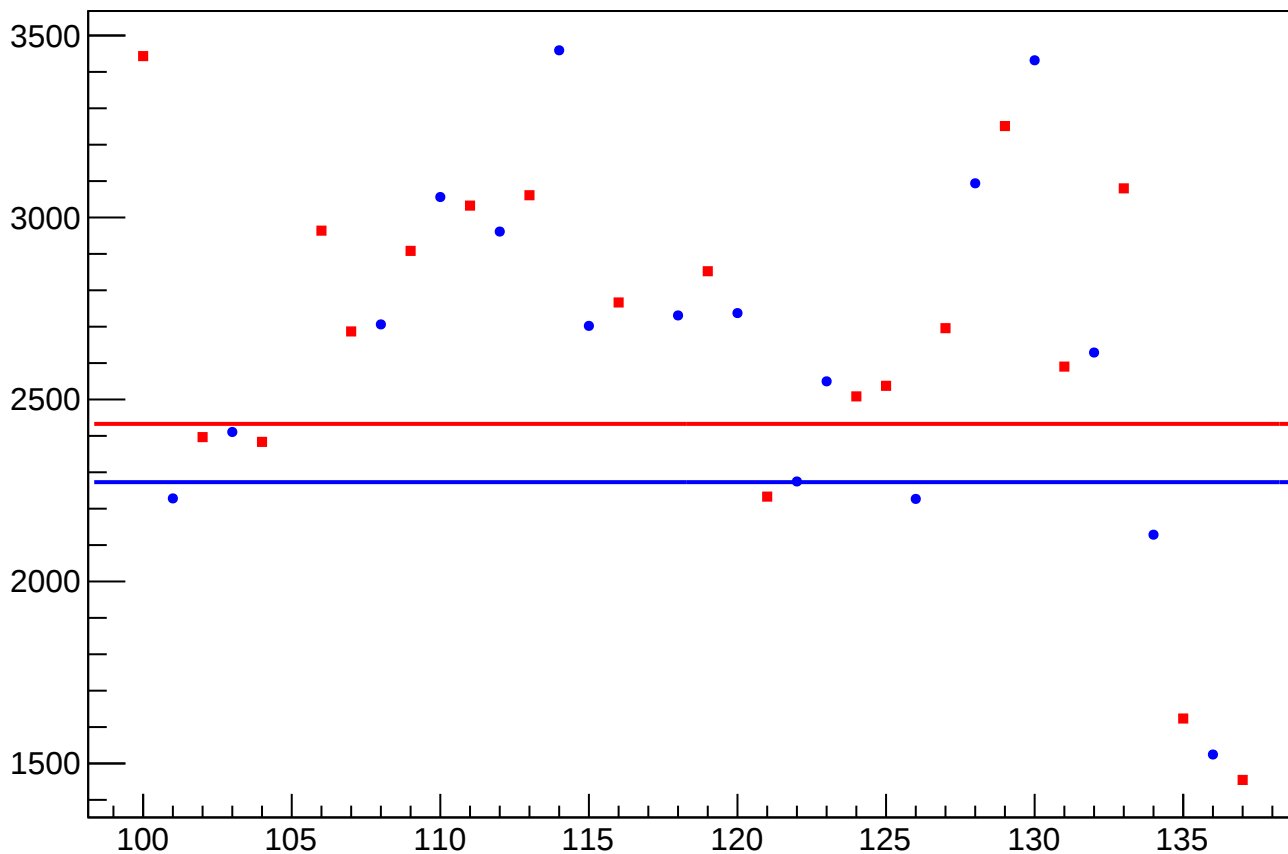
Right:  $-508.424 \pm 652.337$   $\chi^2/\text{NDF}$ : 33.2/35

In:  $-1493.280 \pm 910.834$   $\chi^2/\text{NDF}$ : 16.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-508.424 \pm 652.337$   $\chi^2/\text{NDF}$ : 33.2/35

asym\_sam\_26\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 2272.883+/-0.644  $\chi^2/\text{NDF}$ : 805650.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2432.950+/-0.661  $\chi^2/\text{NDF}$ : 680783.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

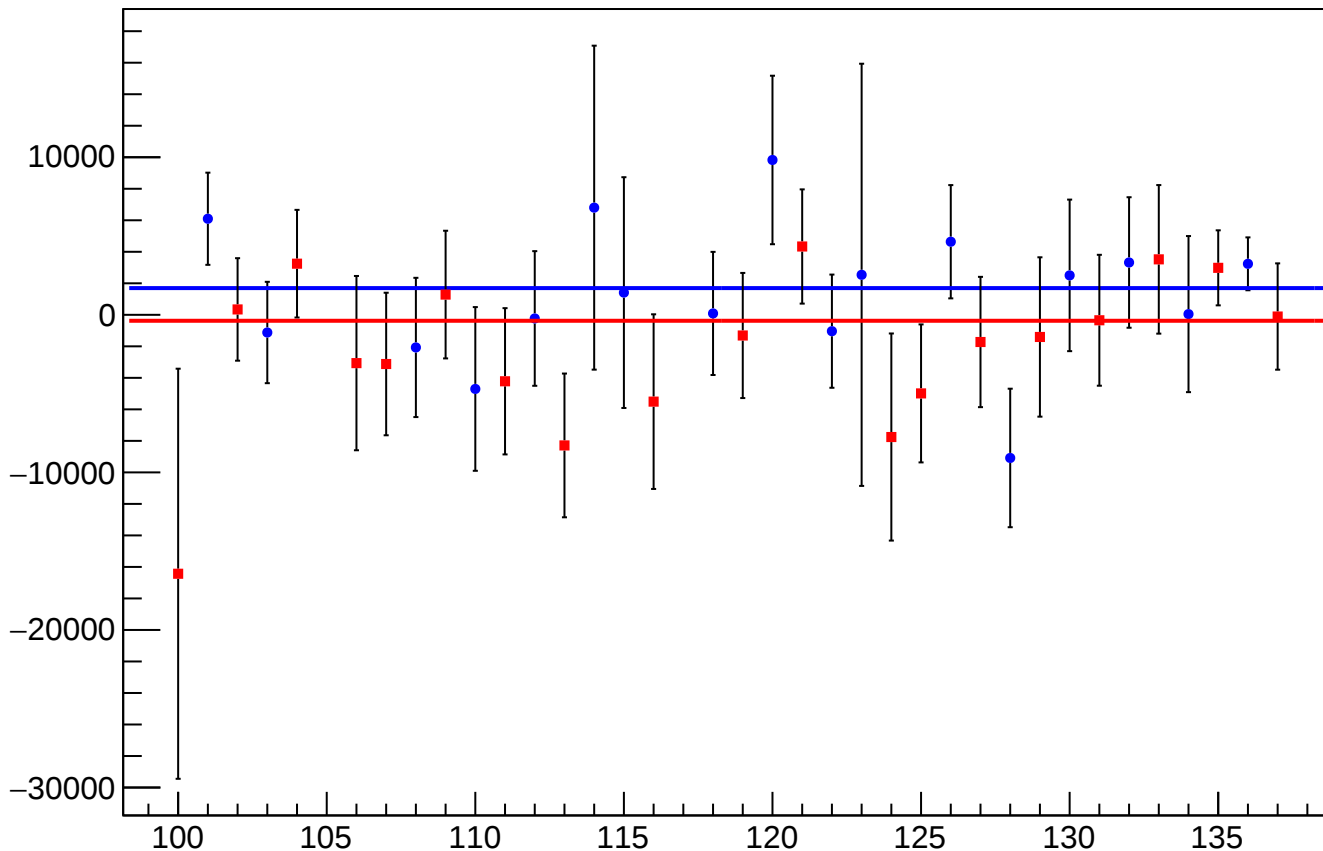
Right: 2350.846+/-0.461  $\chi^2/\text{NDF}$ : 1516518.2/35

In: 2272.883+/-0.644  $\chi^2/\text{NDF}$ : 805650.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2350.846+/-0.461  $\chi^2/\text{NDF}$ : 1516518.2/35

# asym\_sam\_26\_dd\_mean vs Slug, Sign Corrected



Right In: 1695.956+/-914.855  $\chi^2/\text{NDF}$ : 16.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -377.629+/-938.528  $\chi^2/\text{NDF}$ : 15.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

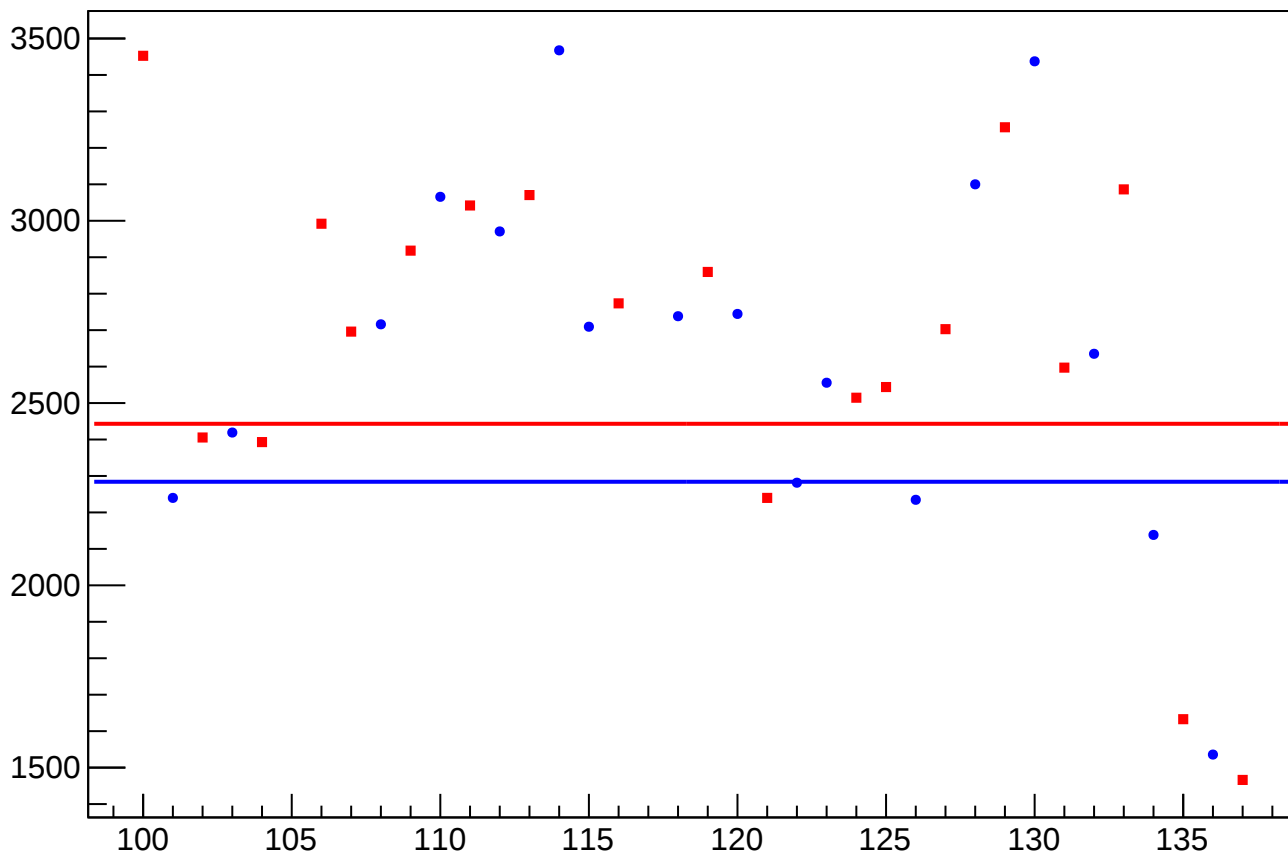
Right: 685.645+/-655.109  $\chi^2/\text{NDF}$ : 34.1/35

In: 1695.956+/-914.855  $\chi^2/\text{NDF}$ : 16.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 685.645+/-655.109  $\chi^2/\text{NDF}$ : 34.1/35

# asym\_sam\_26\_dd\_rms vs Slug, Sign Corrected



Right In: 2284.104+/-0.647  $\chi^2/\text{NDF}$ : 793993.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2443.124+/-0.664  $\chi^2/\text{NDF}$ : 672899.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

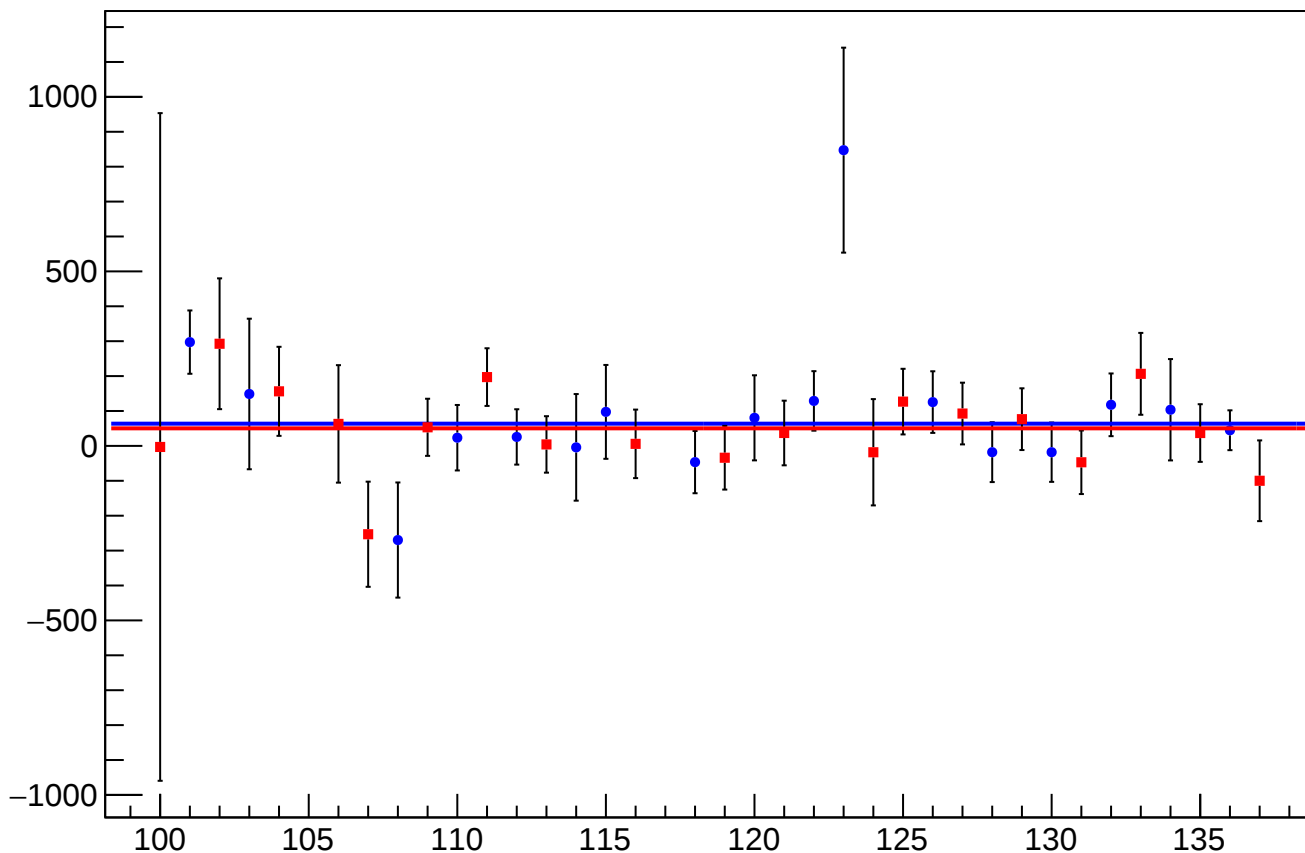
Right: 2361.583+/-0.463  $\chi^2/\text{NDF}$ : 1496334.9/35

In: 2284.104+/-0.647  $\chi^2/\text{NDF}$ : 793993.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2361.583+/-0.463  $\chi^2/\text{NDF}$ : 1496334.9/35

reg\_asym\_sam\_37\_dd\_mean vs Slug, Sign Corrected



Right In: 63.666 $\pm$ 23.743  $\chi^2$ /NDF: 23.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 50.278 $\pm$ 23.661  $\chi^2$ /NDF: 16.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

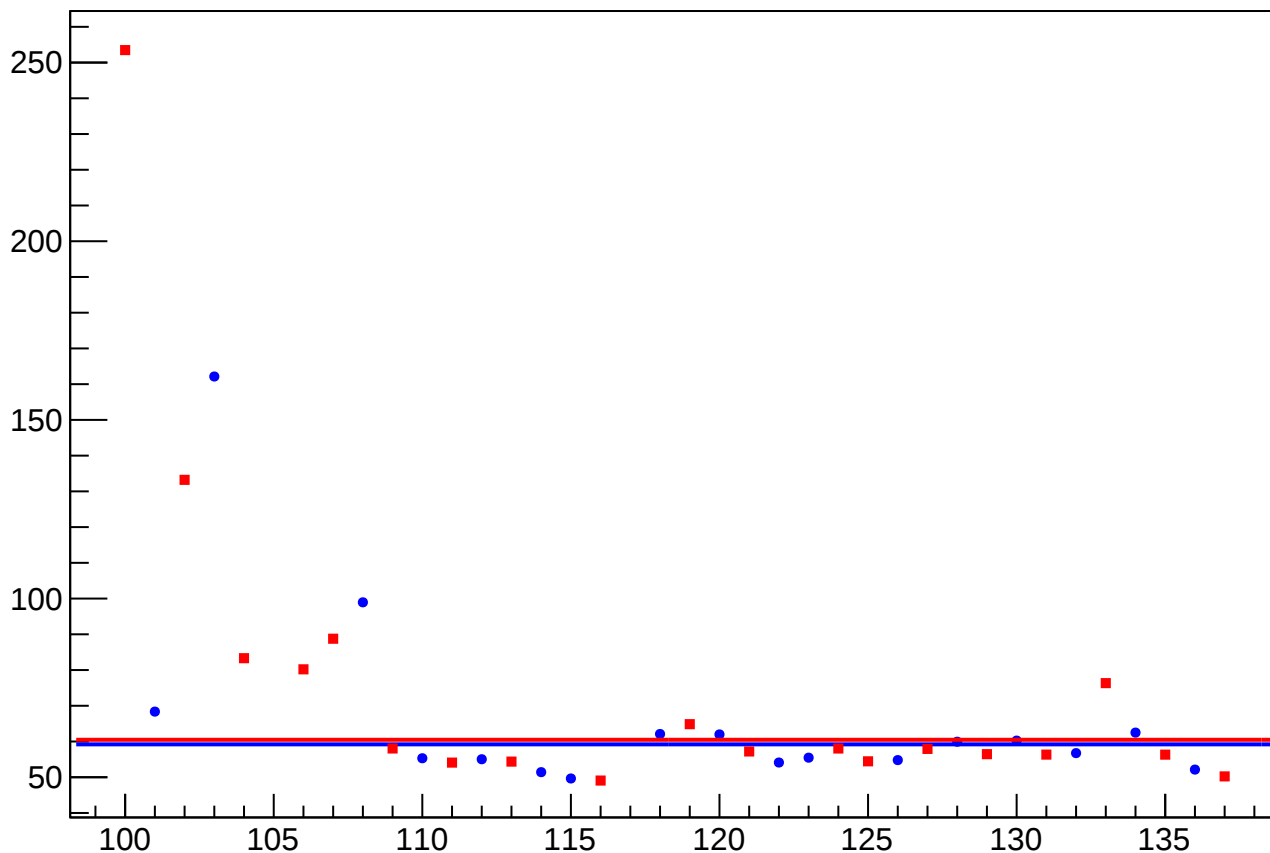
Right: 56.949 $\pm$ 16.760  $\chi^2$ /NDF: 40.6/35

In: 63.666 $\pm$ 23.743  $\chi^2$ /NDF:23.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 56.949 $\pm$ 16.760  $\chi^2$ /NDF: 40.6/35

reg\_asym\_sam\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 59.200 $\pm$ 0.017  $\chi^2$ /NDF: 665472.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 60.483 $\pm$ 0.017  $\chi^2$ /NDF: 680059.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

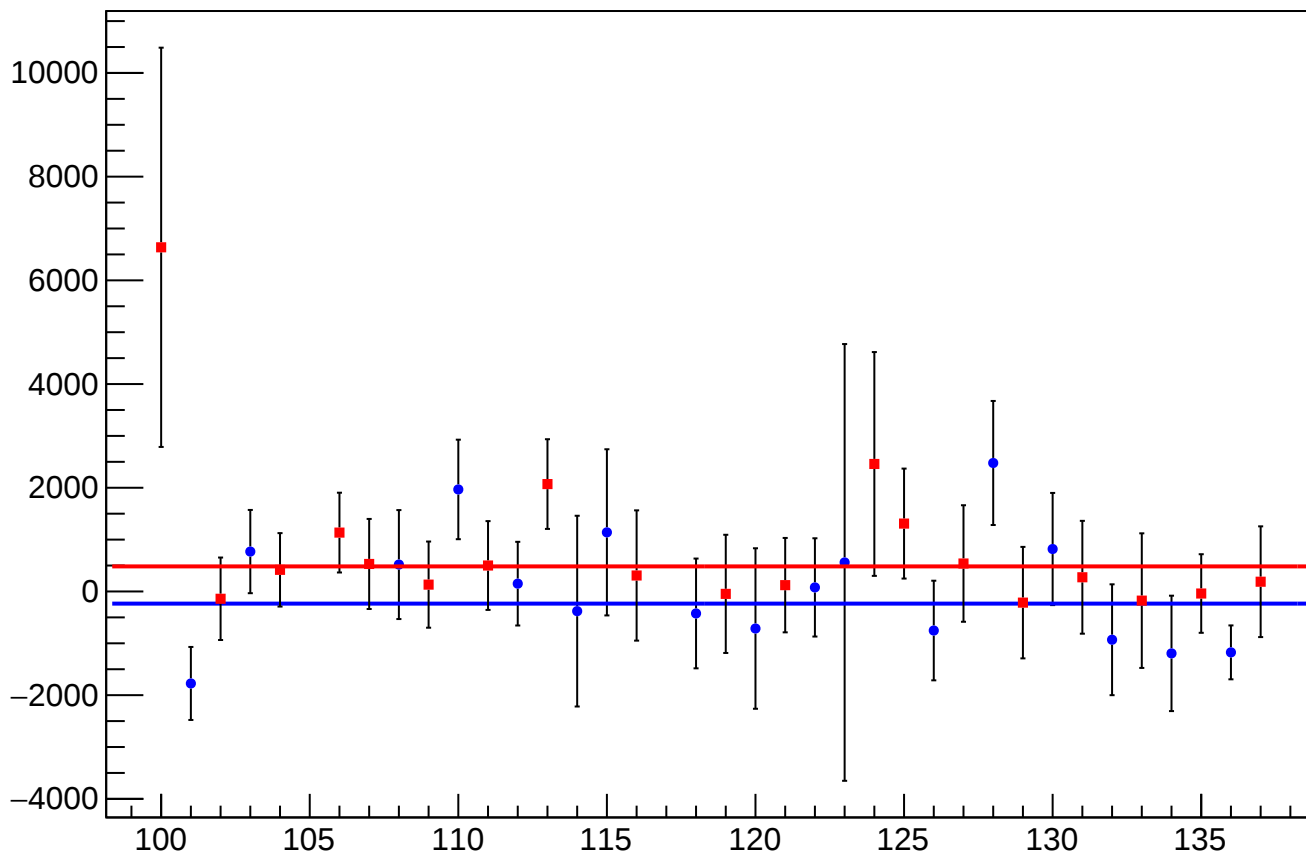
Right: 59.844 $\pm$ 0.012  $\chi^2$ /NDF: 1348461.0/35

In: 59.200 $\pm$ 0.017  $\chi^2$ /NDF: 665472.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 59.844 $\pm$ 0.012  $\chi^2$ /NDF: 1348461.0/35

asym\_sam\_37\_dd\_correction\_mean vs Slug, Sign Corrected



Right In:  $-234.492 \pm 233.880$   $\chi^2/\text{NDF}$ : 24.2/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $483.305 \pm 222.314$   $\chi^2/\text{NDF}$ : 10.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

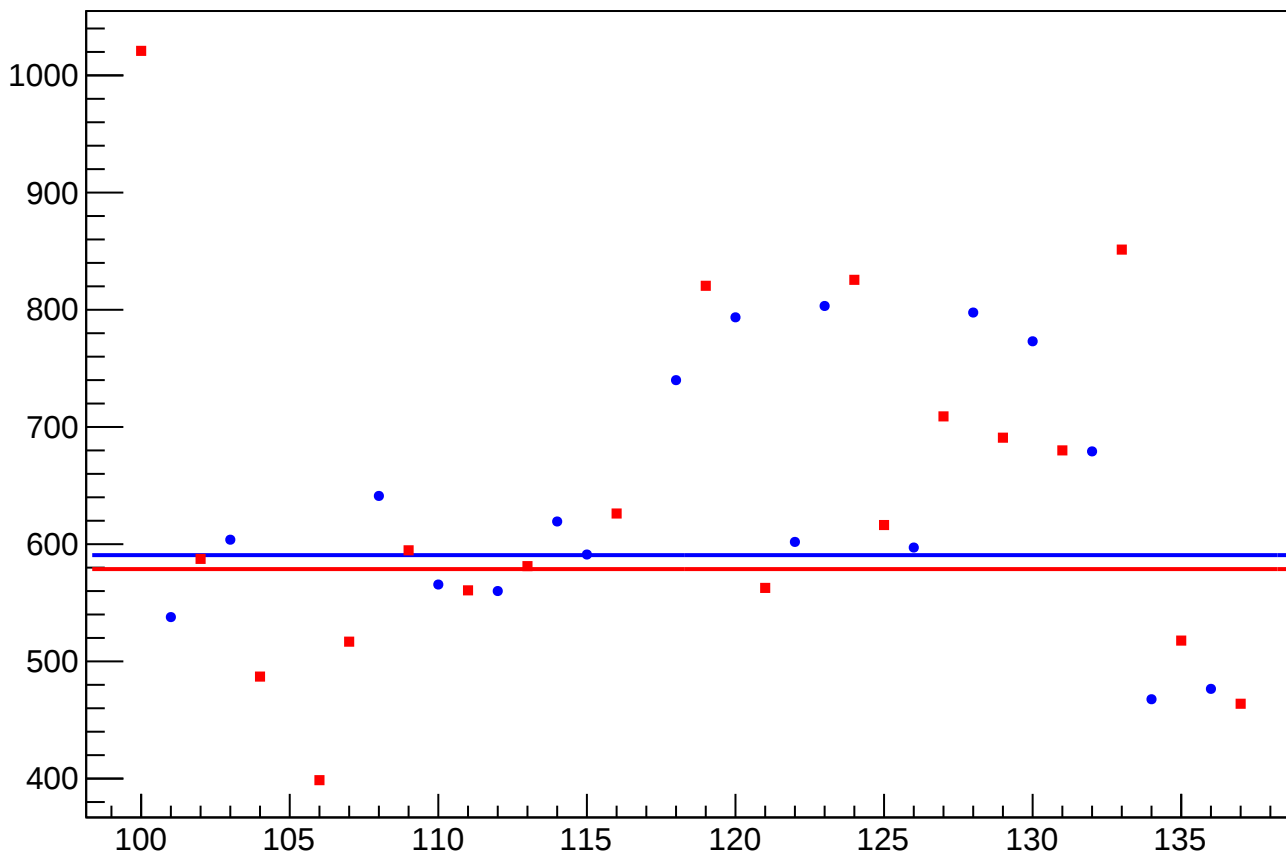
Right:  $142.594 \pm 161.133$   $\chi^2/\text{NDF}$ : 39.7/35

In:  $-234.492 \pm 233.880$   $\chi^2/\text{NDF}$ : 24.2/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $142.594 \pm 161.133$   $\chi^2/\text{NDF}$ : 39.7/35

asym\_sam\_37\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 590.659+/-0.165  $\chi^2/\text{NDF}$ : 352080.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 578.753+/-0.157  $\chi^2/\text{NDF}$ : 493962.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

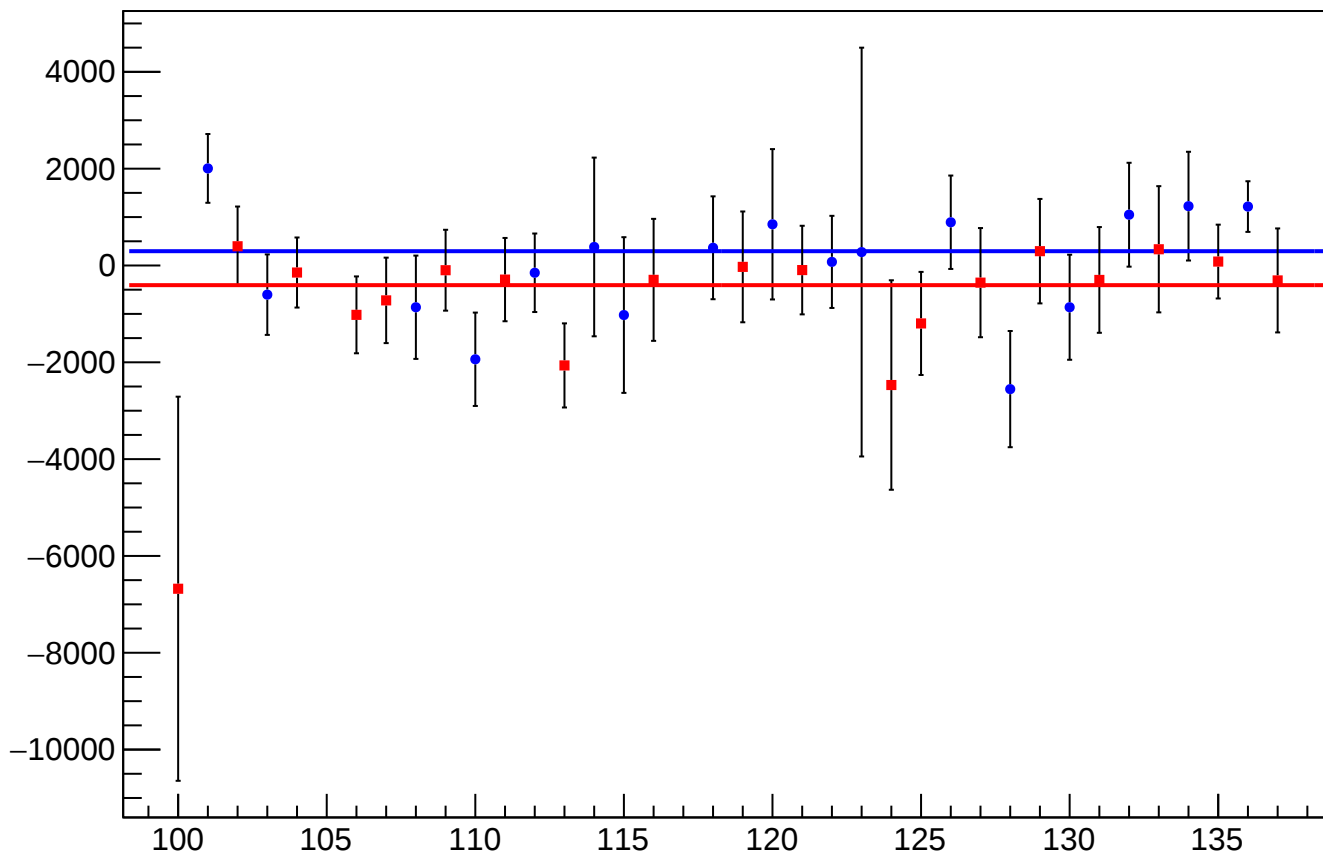
Right: 584.404+/-0.114  $\chi^2/\text{NDF}$ : 848765.8/35

In: 590.659+/-0.165  $\chi^2/\text{NDF}$ : 352080.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 584.404+/-0.114  $\chi^2/\text{NDF}$ : 848765.8/35

# asym\_sam\_37\_dd\_mean vs Slug, Sign Corrected



Right In: 295.401 $\pm$ 235.860  $\chi^2$ /NDF: 26.1/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -406.158 $\pm$ 224.855  $\chi^2$ /NDF: 11.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

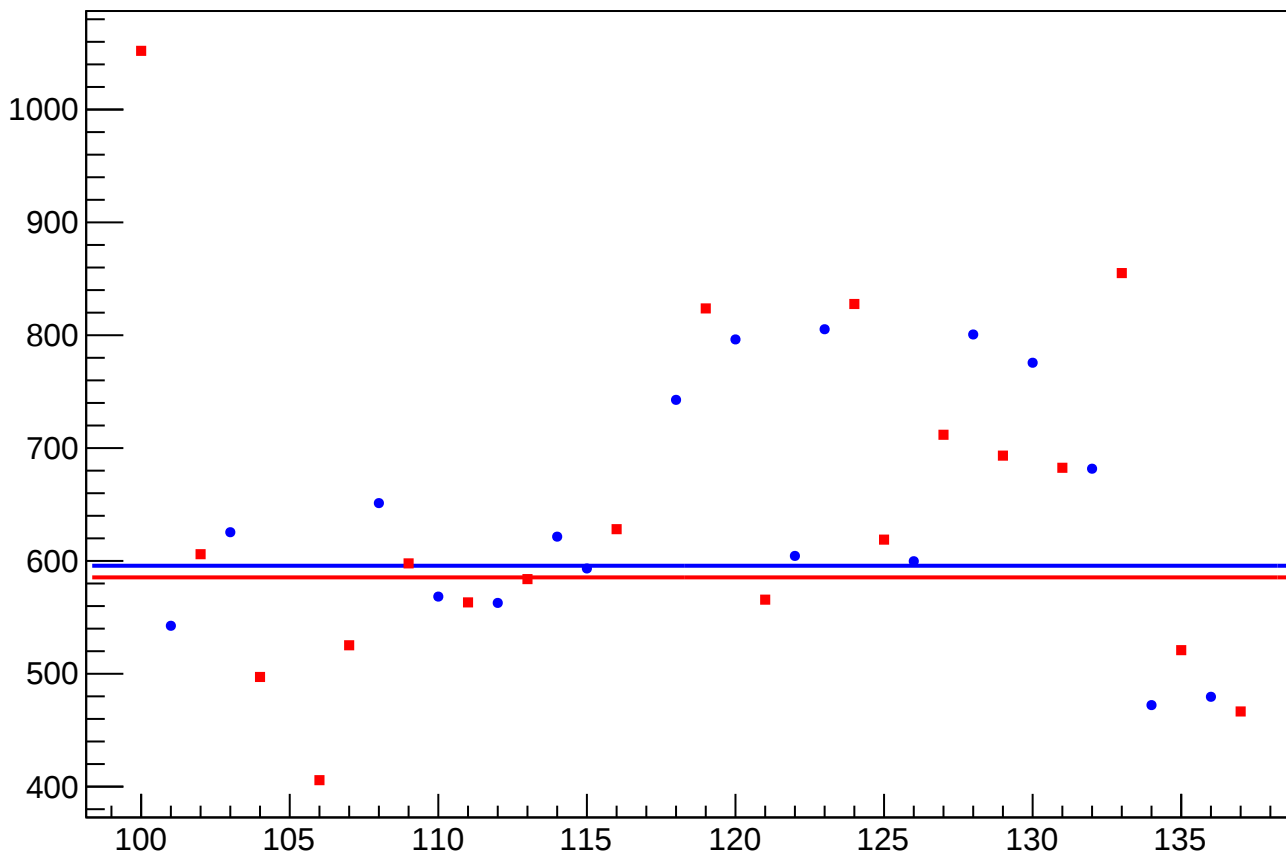
Right: -72.128 $\pm$ 162.748  $\chi^2$ /NDF: 41.7/35

In: 295.401 $\pm$ 235.860  $\chi^2$ /NDF:26.1/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -72.128 $\pm$ 162.748  $\chi^2$ /NDF: 41.7/35

# asym\_sam\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 595.734+/-0.167  $\chi^2/\text{NDF}$ : 350058.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 585.421+/-0.159  $\chi^2/\text{NDF}$ : 474472.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

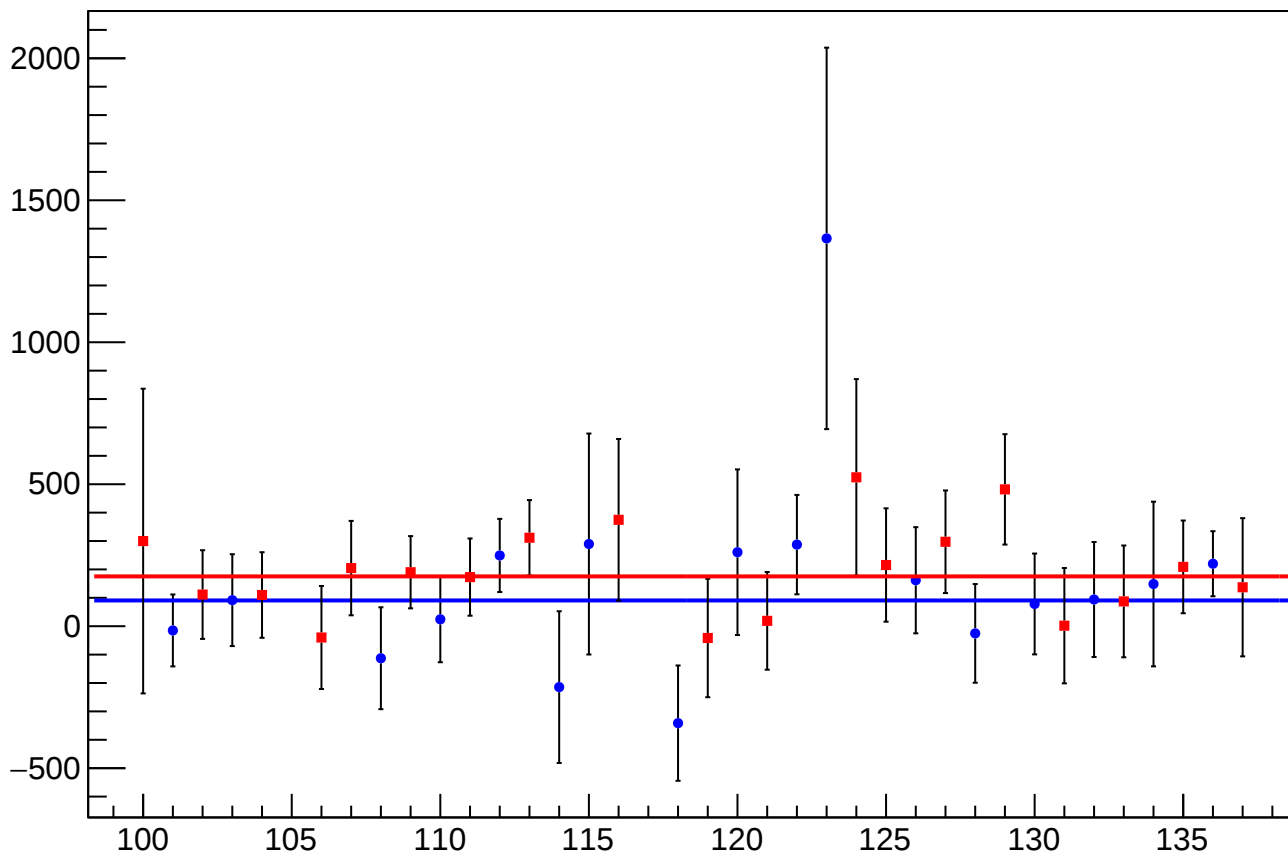
Right: 590.331+/-0.115  $\chi^2/\text{NDF}$ : 826533.5/35

In: 595.734+/-0.167  $\chi^2/\text{NDF}$ : 350058.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 590.331+/-0.115  $\chi^2/\text{NDF}$ : 826533.5/35

# reg\_asym\_sam\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 90.711+/-43.312  $\chi^2/\text{NDF}$ : 16.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 175.485+/-41.101  $\chi^2/\text{NDF}$ : 10.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

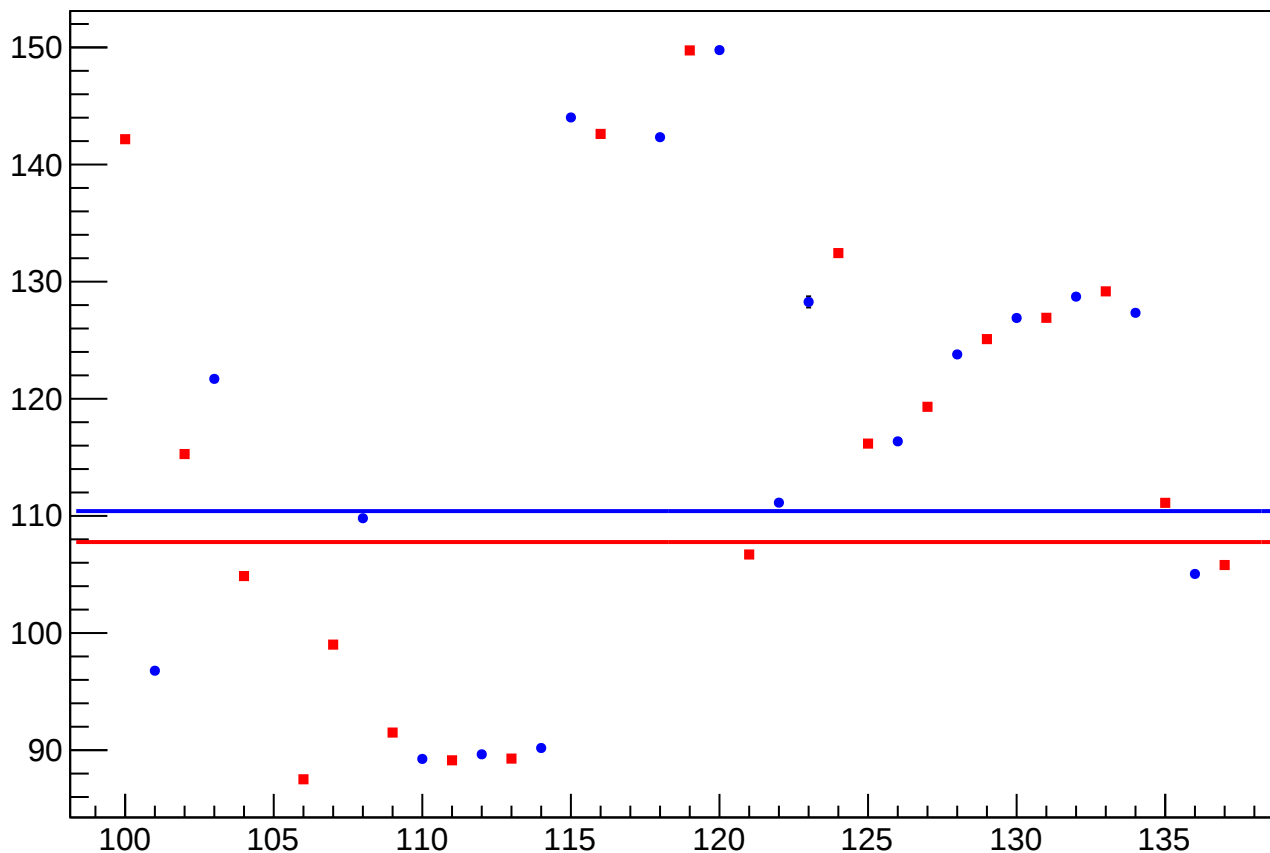
Right: 135.317+/-29.814  $\chi^2/\text{NDF}$ : 29.2/35

In: 90.711+/-43.312  $\chi^2/\text{NDF}$ : 16.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 135.317+/-29.814  $\chi^2/\text{NDF}$ : 29.2/35

# reg\_asym\_sam\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 110.411+/-0.031  $\chi^2/\text{NDF}$ : 296425.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 107.768+/-0.029  $\chi^2/\text{NDF}$ : 344441.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

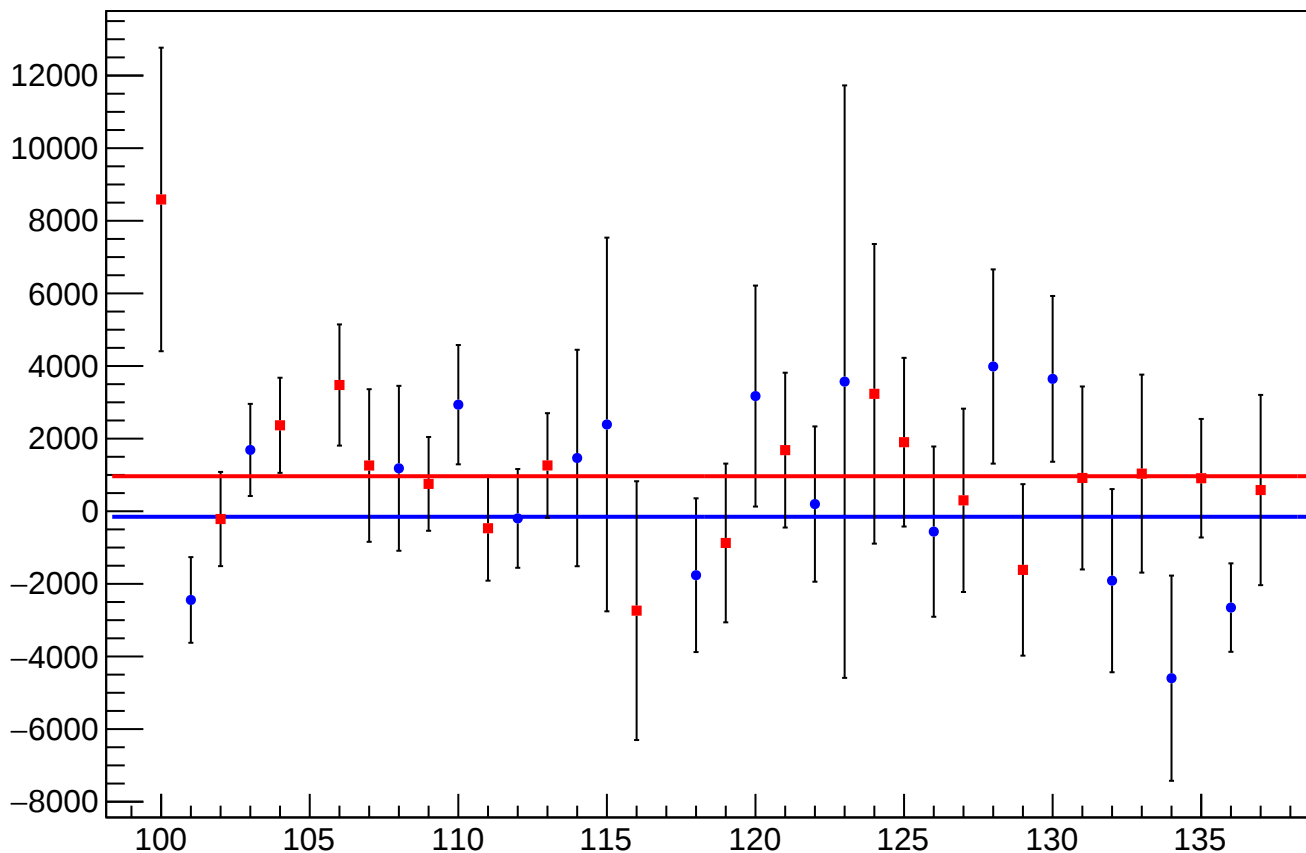
Right: 109.020+/-0.021  $\chi^2/\text{NDF}$ : 644787.1/35

In: 110.411+/-0.031  $\chi^2/\text{NDF}$ : 296425.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 109.020+/-0.021  $\chi^2/\text{NDF}$ : 644787.1/35

asym\_sam\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In:  $-152.403 \pm 464.753$   $\chi^2/\text{NDF}$ : 24.7/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $964.716 \pm 435.111$   $\chi^2/\text{NDF}$ : 12.3/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

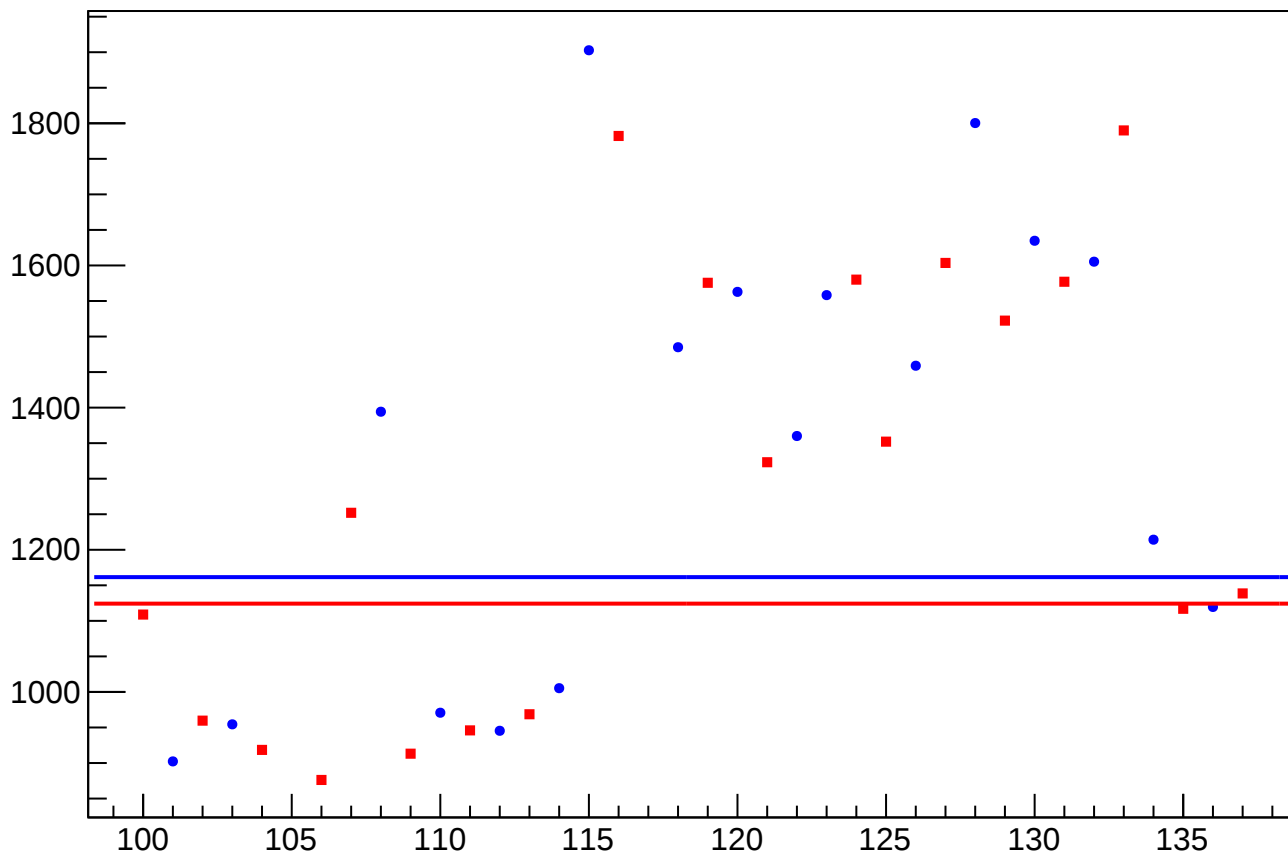
Right:  $442.914 \pm 317.632$   $\chi^2/\text{NDF}$ : 40.0/35

In:  $-152.403 \pm 464.753$   $\chi^2/\text{NDF}$ : 24.7/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $442.914 \pm 317.632$   $\chi^2/\text{NDF}$ : 40.0/35

asym\_sam\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 1161.530+/-0.329  $\chi^2/\text{NDF}$ : 695906.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1124.235+/-0.308  $\chi^2/\text{NDF}$ : 767790.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

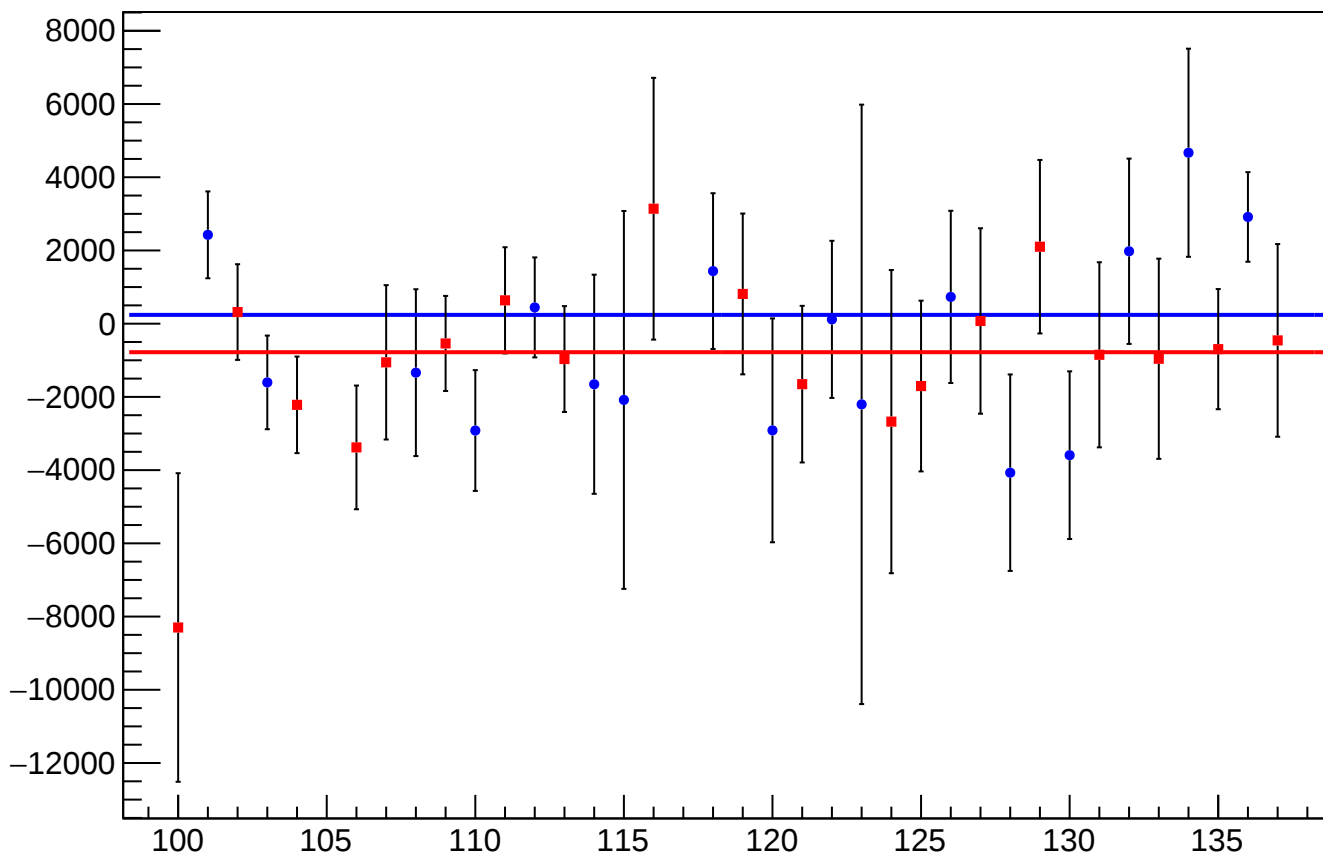
Right: 1141.655+/-0.225  $\chi^2/\text{NDF}$ : 1470560.5/35

In: 1161.530+/-0.329  $\chi^2/\text{NDF}$ : 695906.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1141.655+/-0.225  $\chi^2/\text{NDF}$ : 1470560.5/35

# asym\_sam\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 240.732 $\pm$ 467.036  $\chi^2$ /NDF: 24.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -779.192 $\pm$ 437.487  $\chi^2$ /NDF: 12.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

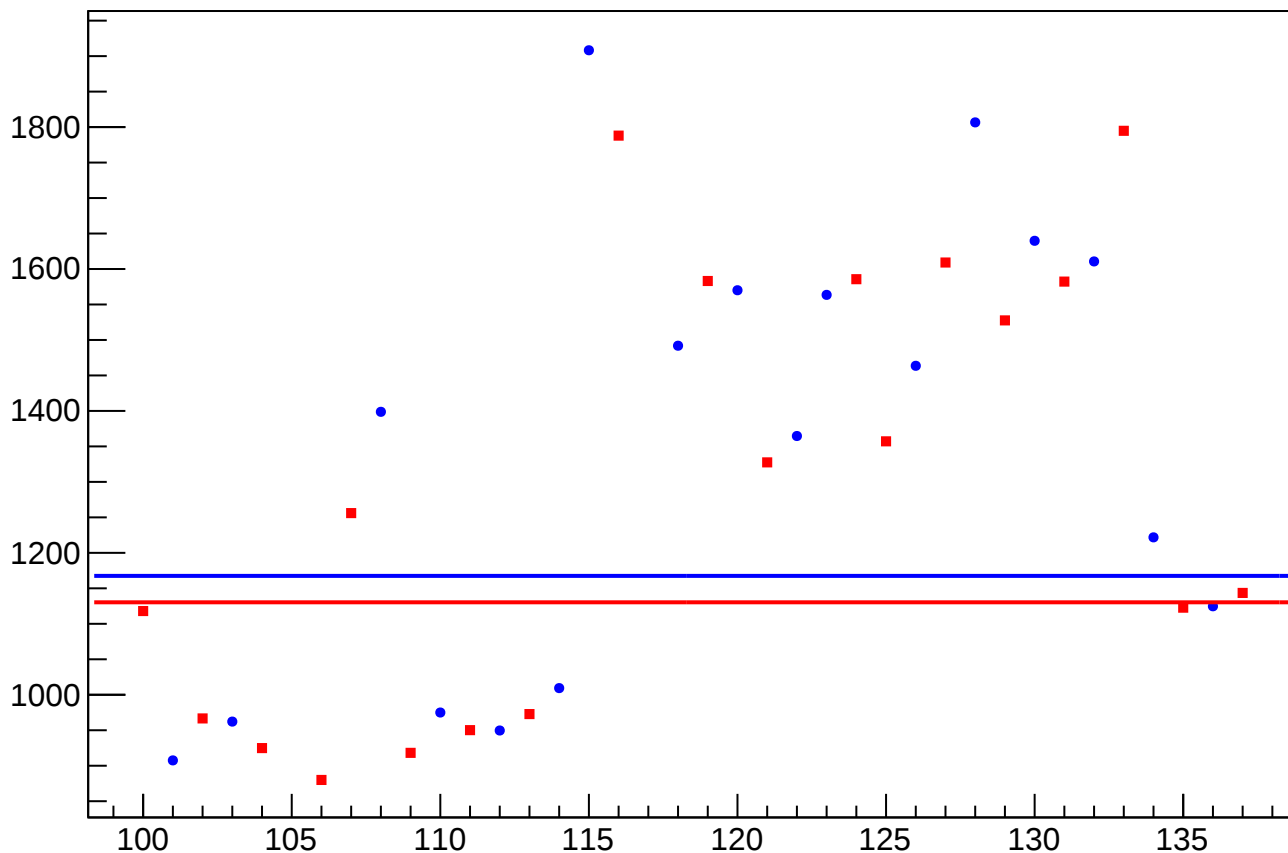
Right: -302.513 $\pm$ 319.286  $\chi^2$ /NDF: 39.7/35

In: 240.732 $\pm$ 467.036  $\chi^2$ /NDF:24.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -302.513 $\pm$ 319.286  $\chi^2$ /NDF: 39.7/35

# asym\_sam\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 1167.539+/-0.330  $\chi^2/\text{NDF}$ : 690485.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1130.301+/-0.309  $\chi^2/\text{NDF}$ : 761503.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

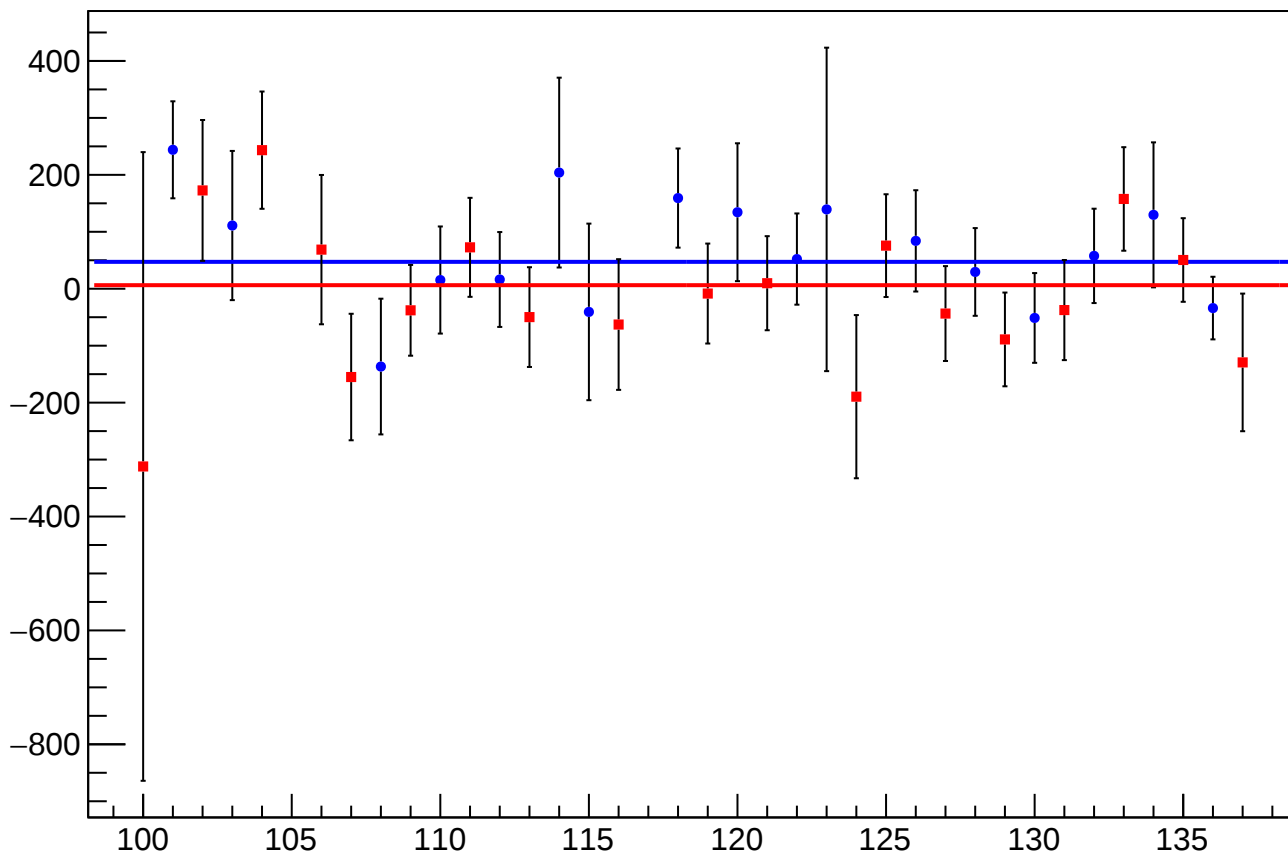
Right: 1147.705+/-0.226  $\chi^2/\text{NDF}$ : 1458761.3/35

In: 1167.539+/-0.330  $\chi^2/\text{NDF}$ : 690485.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1147.705+/-0.226  $\chi^2/\text{NDF}$ : 1458761.3/35

reg\_asym\_sam\_13\_57\_dd\_mean vs Slug, Sign Corrected



Right In: 47.220 $\pm$ 22.565  $\chi^2$ /NDF: 16.1/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 6.246 $\pm$ 22.128  $\chi^2$ /NDF: 20.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

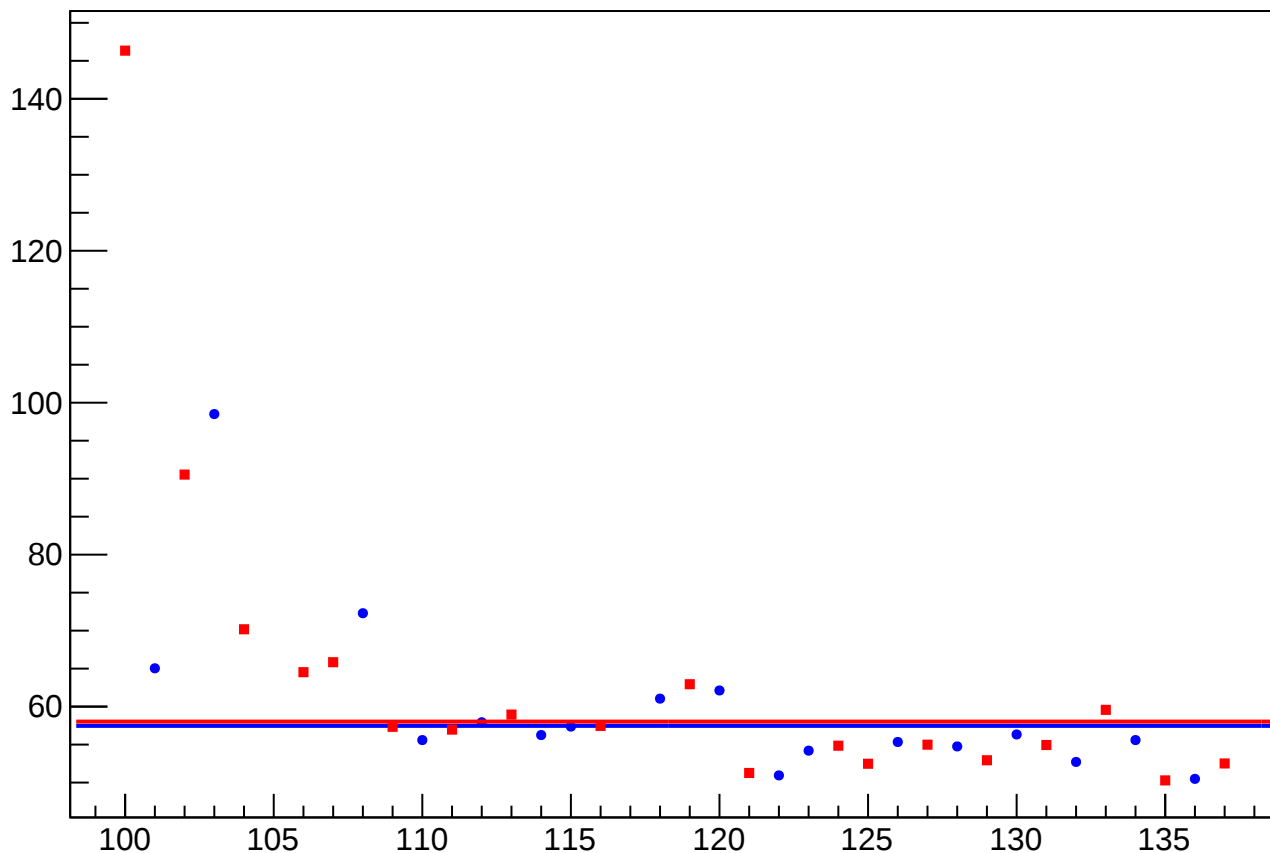
Right: 26.333 $\pm$ 15.799  $\chi^2$ /NDF: 38.1/35

In: 47.220 $\pm$ 22.565  $\chi^2$ /NDF:16.1/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 26.333 $\pm$ 15.799  $\chi^2$ /NDF: 38.1/35

reg\_asym\_sam\_13\_57\_dd\_rms vs Slug, Sign Corrected



Right In: 57.465+/-0.016  $\chi^2/\text{NDF}$ : 307156.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 58.027+/-0.016  $\chi^2/\text{NDF}$ : 300788.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

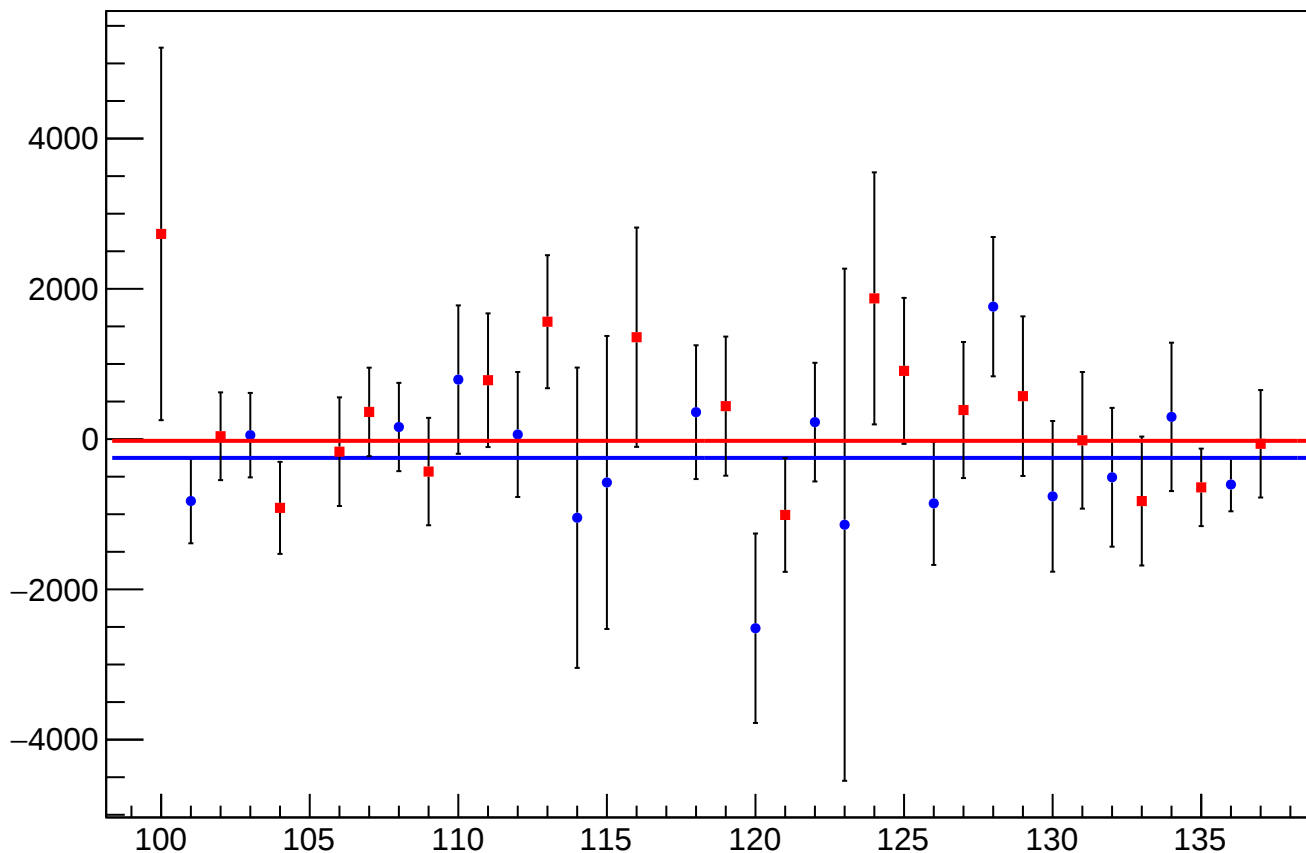
Right: 57.752+/-0.011  $\chi^2/\text{NDF}$ : 608576.3/35

In: 57.465+/-0.016  $\chi^2/\text{NDF}$ : 307156.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 57.752+/-0.011  $\chi^2/\text{NDF}$ : 608576.3/35

asym\_sam\_13\_57\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: -250.140+/-184.092  $\chi^2/\text{NDF}$ : 14.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -23.314+/-181.834  $\chi^2/\text{NDF}$ : 16.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

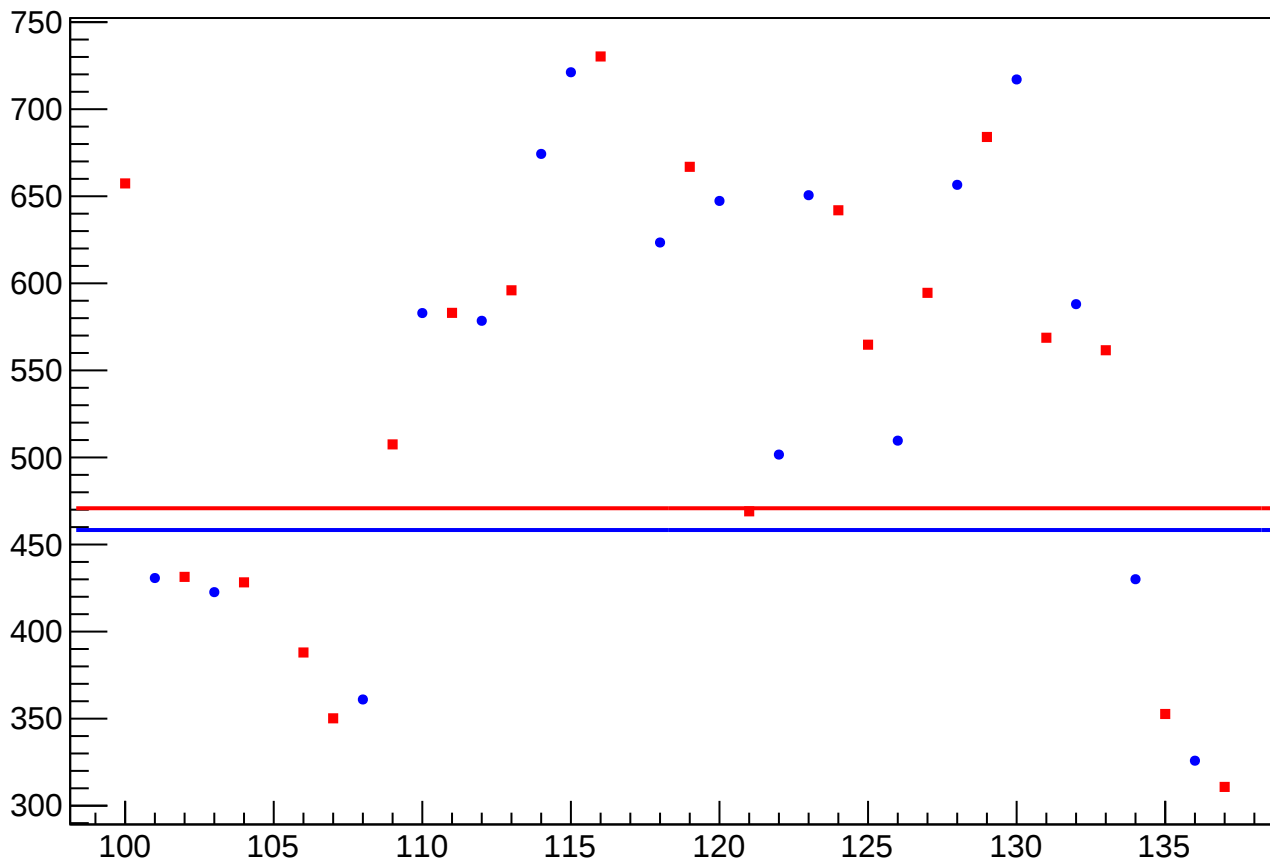
Right: -135.327+/-129.367  $\chi^2/\text{NDF}$ : 31.1/35

In: -250.140+/-184.092  $\chi^2/\text{NDF}$ : 14.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -135.327+/-129.367  $\chi^2/\text{NDF}$ : 31.1/35

asym\_sam\_13\_57\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 458.324+/-0.130  $\chi^2/\text{NDF}$ : 877201.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 470.827+/-0.129  $\chi^2/\text{NDF}$ : 778635.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

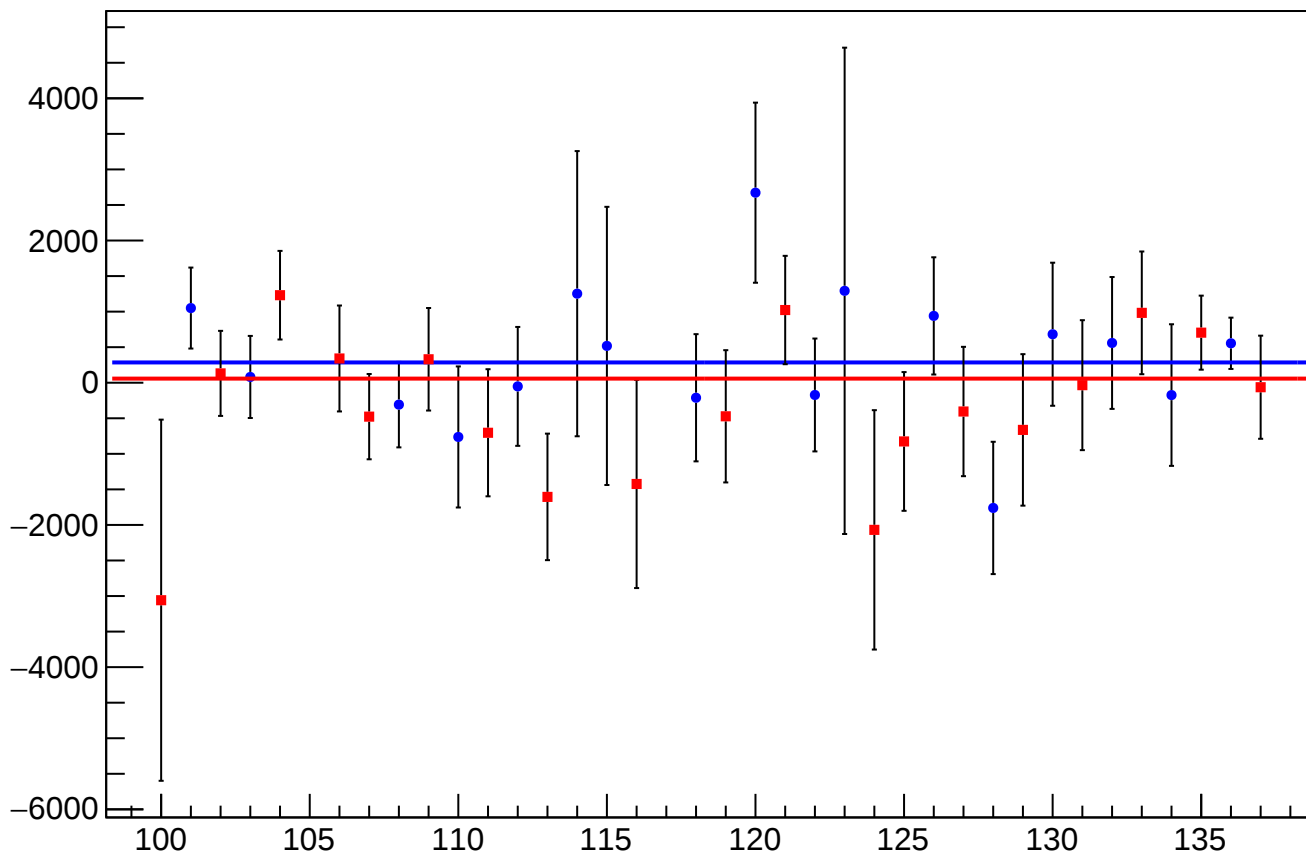
Right: 464.653+/-0.091  $\chi^2/\text{NDF}$ : 1660506.8/35

In: 458.324+/-0.130  $\chi^2/\text{NDF}$ : 877201.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 464.653+/-0.091  $\chi^2/\text{NDF}$ : 1660506.8/35

asym\_sam\_13\_57\_dd\_mean vs Slug, Sign Corrected



Right In: 285.349 $\pm$ 186.262  $\chi^2$ /NDF: 15.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 58.001 $\pm$ 184.074  $\chi^2$ /NDF: 19.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

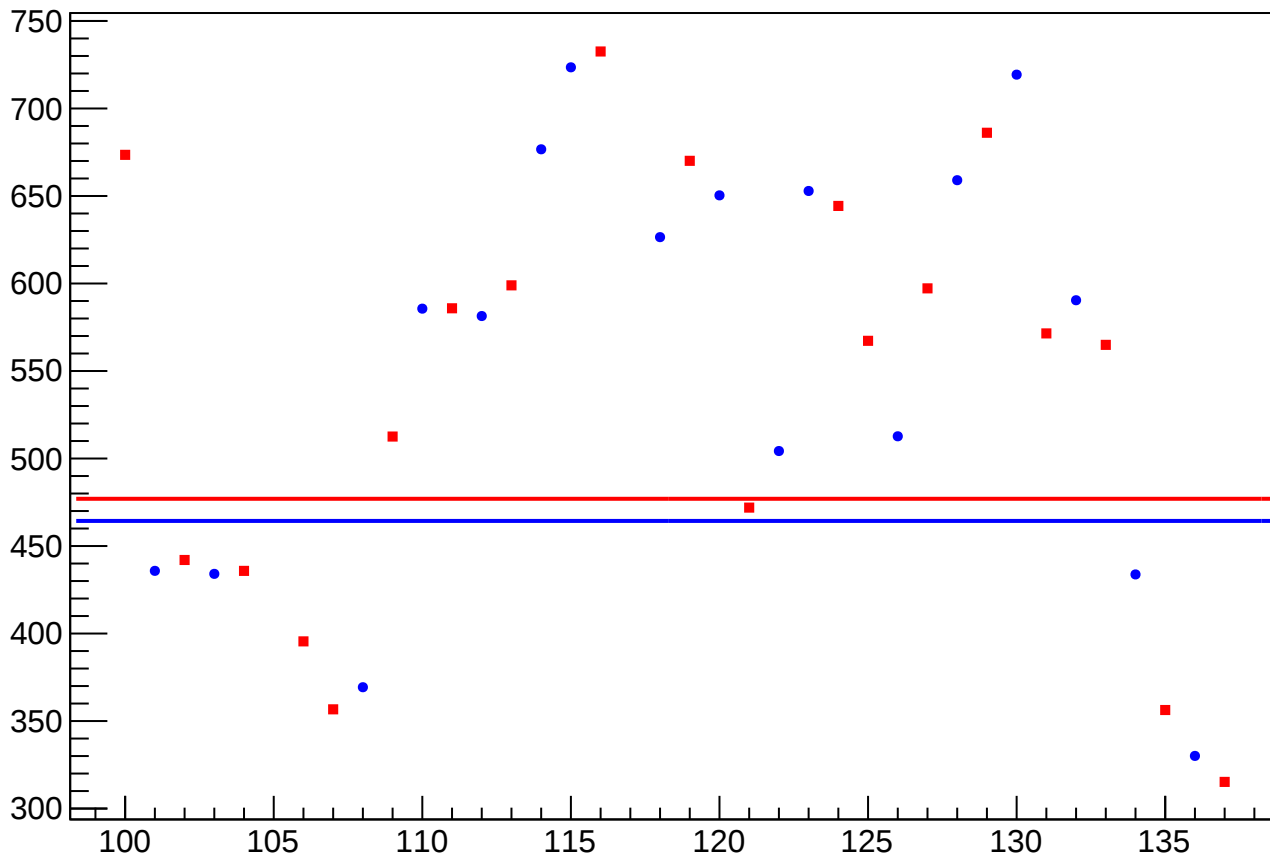
Right: 170.332 $\pm$ 130.927  $\chi^2$ /NDF: 35.1/35

In: 285.349 $\pm$ 186.262  $\chi^2$ /NDF: 15.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 170.332 $\pm$ 130.927  $\chi^2$ /NDF: 35.1/35

asym\_sam\_13\_57\_dd\_rms vs Slug, Sign Corrected



Right In: 464.341+/-0.132  $\chi^2/\text{NDF}$ : 845900.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 476.989+/-0.130  $\chi^2/\text{NDF}$ : 749331.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

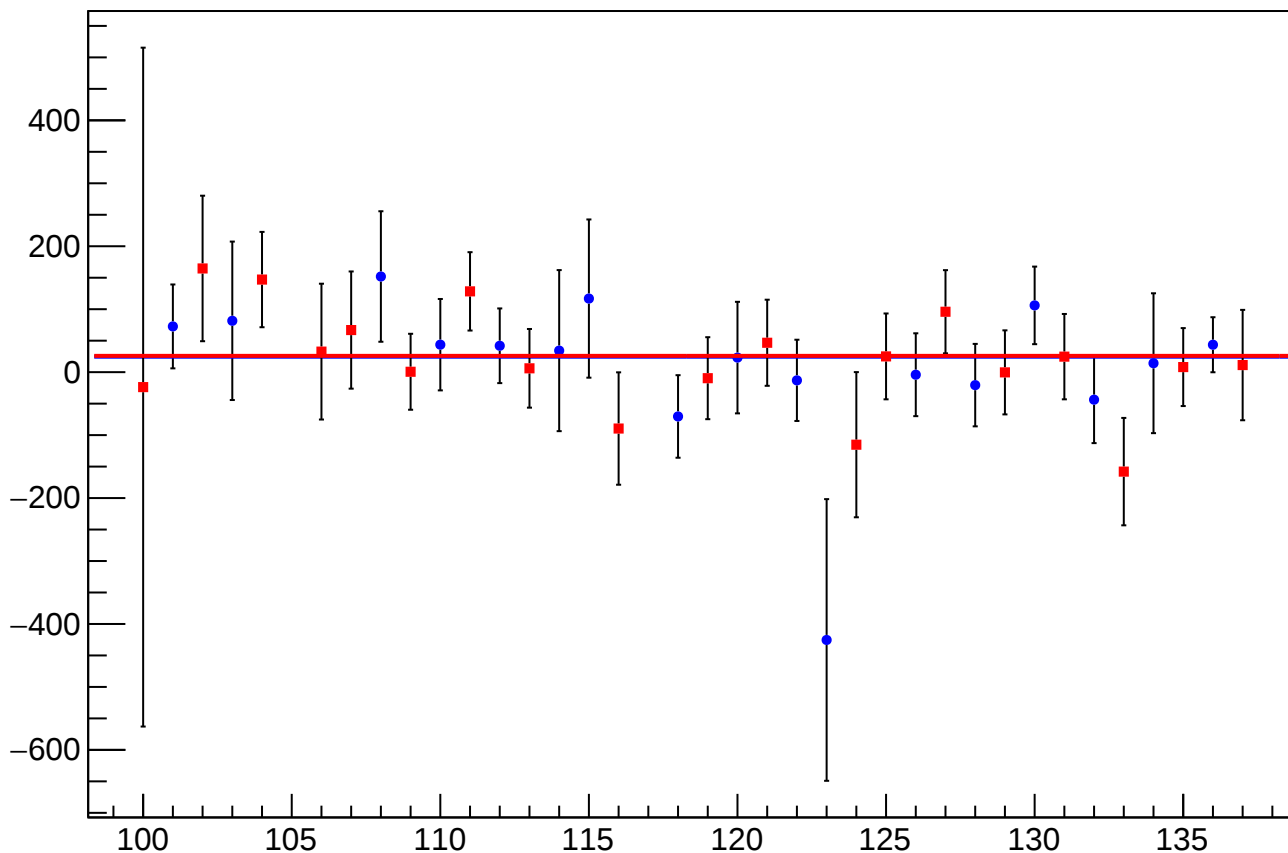
Right: 470.740+/-0.093  $\chi^2/\text{NDF}$ : 1599897.5/35

In: 464.341+/-0.132  $\chi^2/\text{NDF}$ :845900.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 470.740+/-0.093  $\chi^2/\text{NDF}$ : 1599897.5/35

reg\_asym\_sam\_15\_37\_dd\_mean vs Slug, Sign Corrected



Right In: 24.584 $\pm$ 17.839  $\chi^2$ /NDF: 13.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 25.884 $\pm$ 17.386  $\chi^2$ /NDF: 16.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

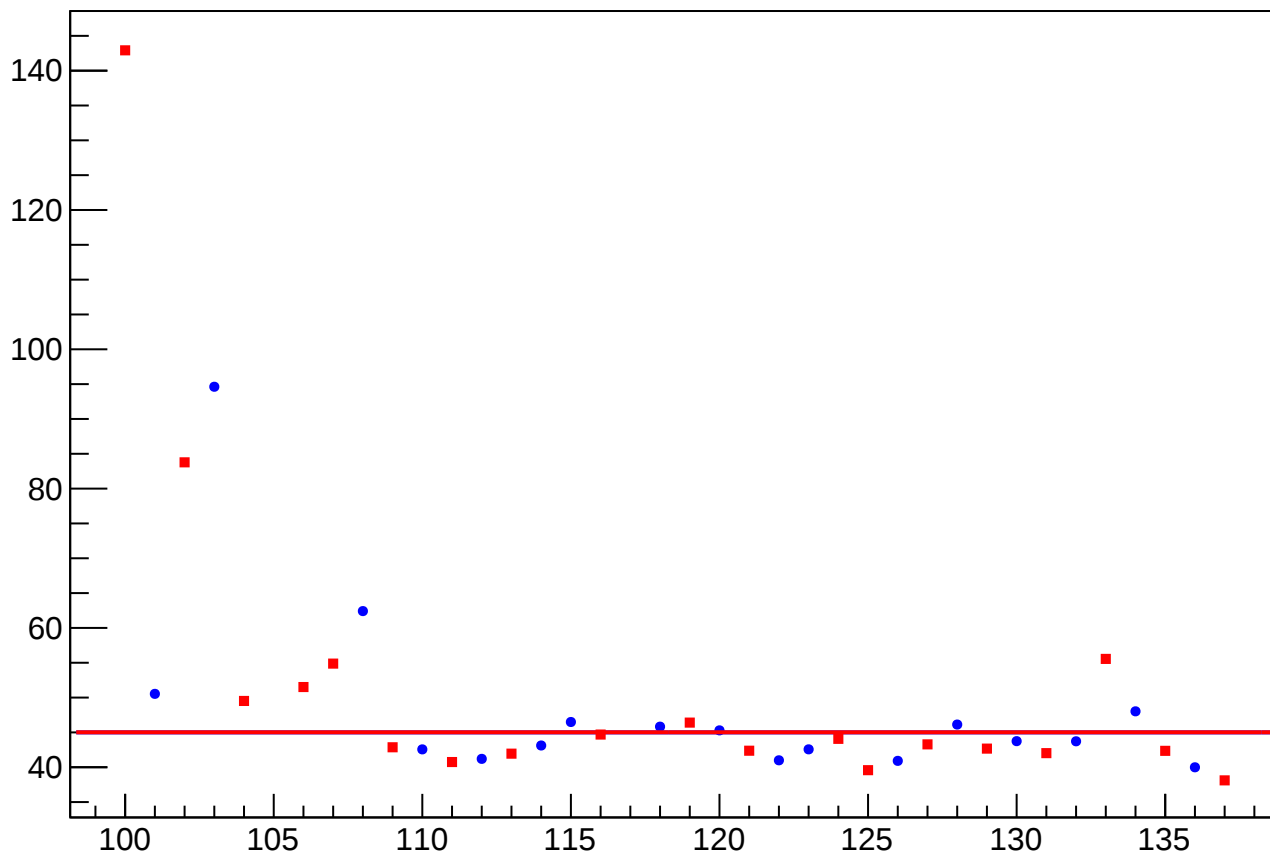
Right: 25.251 $\pm$ 12.451  $\chi^2$ /NDF: 29.8/35

In: 24.584 $\pm$ 17.839  $\chi^2$ /NDF:13.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 25.251 $\pm$ 12.451  $\chi^2$ /NDF: 29.8/35

reg\_asym\_sam\_15\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 45.001+/-0.013     $\chi^2/\text{NDF}$ : 438352.8/16

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 45.017+/-0.012     $\chi^2/\text{NDF}$ : 415509.0/18

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

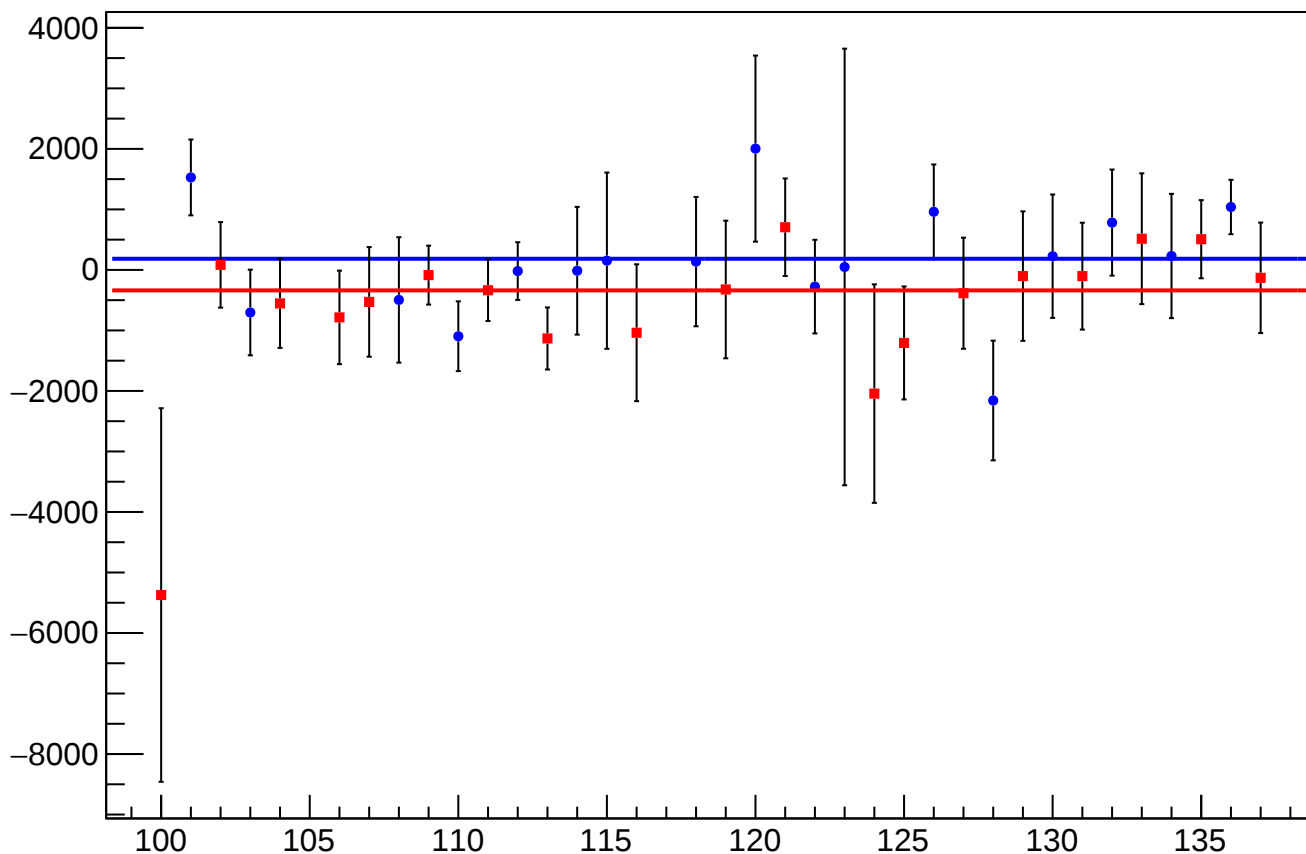
Right: 45.009+/-0.009     $\chi^2/\text{NDF}$ : 853862.6/35

In: 45.001+/-0.013     $\chi^2/\text{NDF}$ : 438352.8/16

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 45.009+/-0.009     $\chi^2/\text{NDF}$ : 853862.6/35

asym\_sam\_15\_37\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 184.184+/-188.558  $\chi^2/\text{NDF}$ : 24.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -338.329+/-179.381  $\chi^2/\text{NDF}$ : 12.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

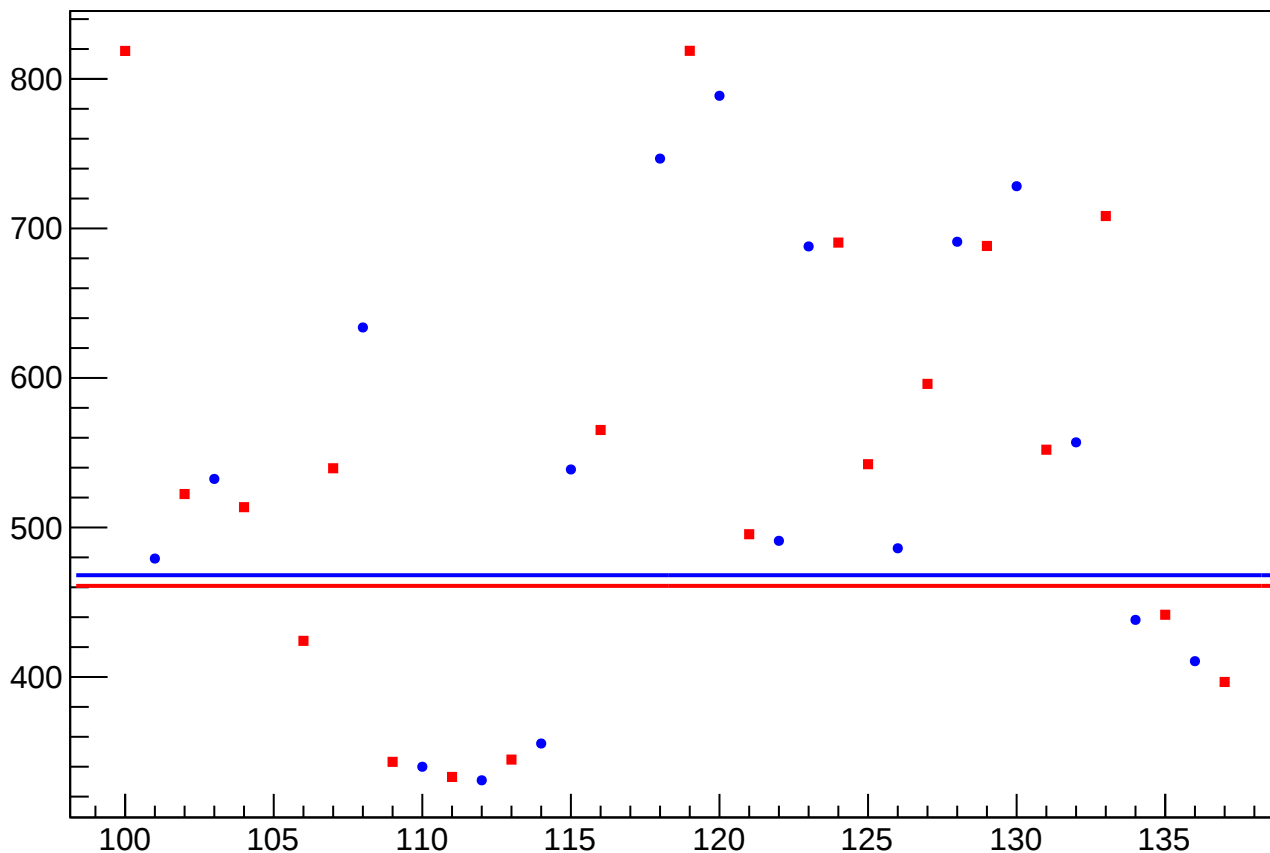
Right: -90.096+/-129.965  $\chi^2/\text{NDF}$ : 40.7/35

In: 184.184+/-188.558  $\chi^2/\text{NDF}$ : 24.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -90.096+/-129.965  $\chi^2/\text{NDF}$ : 40.7/35

asym\_sam\_15\_37\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 468.071+/-0.133  $\chi^2/\text{NDF}$ : 880319.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 460.939+/-0.127  $\chi^2/\text{NDF}$ : 955028.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

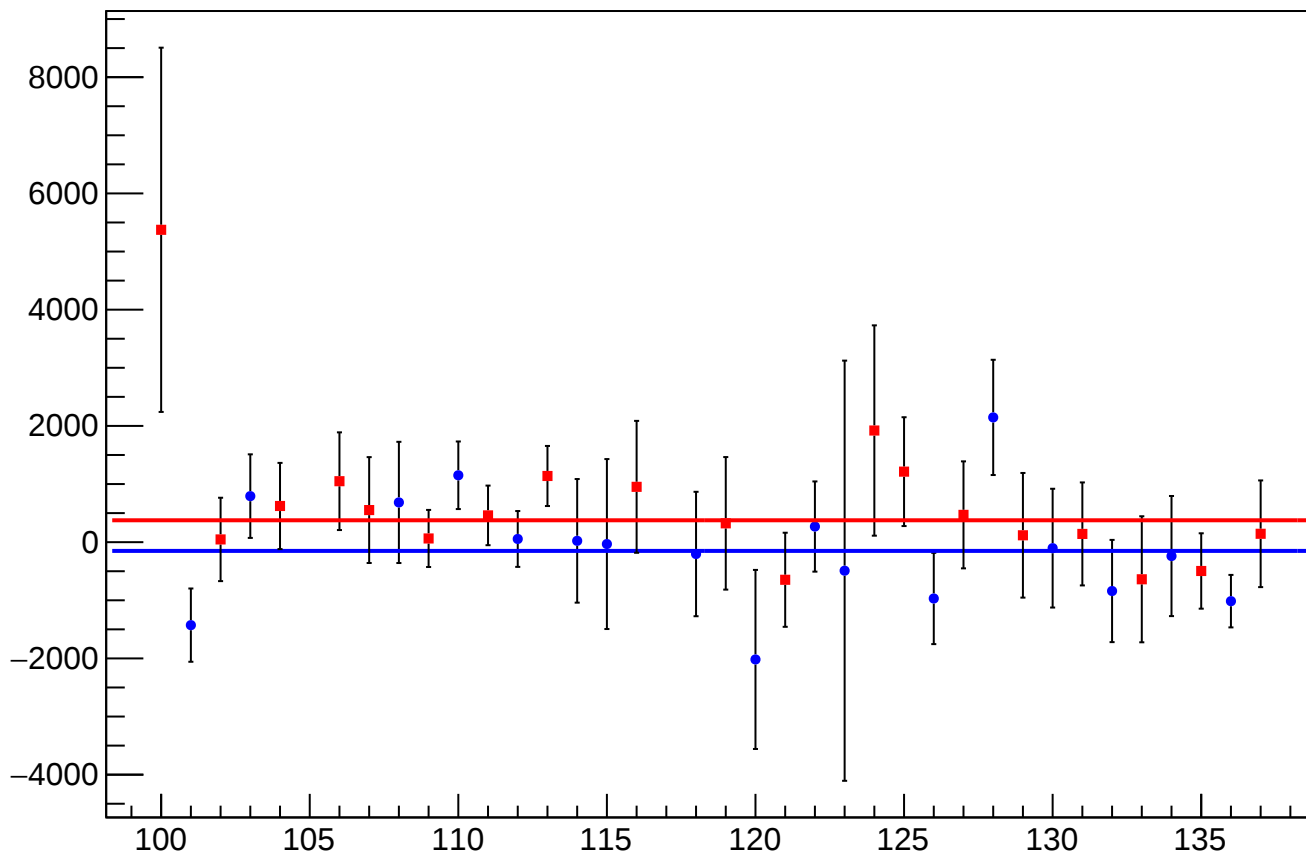
Right: 464.328+/-0.092  $\chi^2/\text{NDF}$ : 1836849.7/35

In: 468.071+/-0.133  $\chi^2/\text{NDF}$ : 880319.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 464.328+/-0.092  $\chi^2/\text{NDF}$ : 1836849.7/35

# asym\_sam\_15\_37\_dd\_mean vs Slug, Sign Corrected



Right In: -150.305+/-189.729  $\chi^2/\text{NDF}$ : 24.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 376.554+/-181.258  $\chi^2/\text{NDF}$ : 12.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

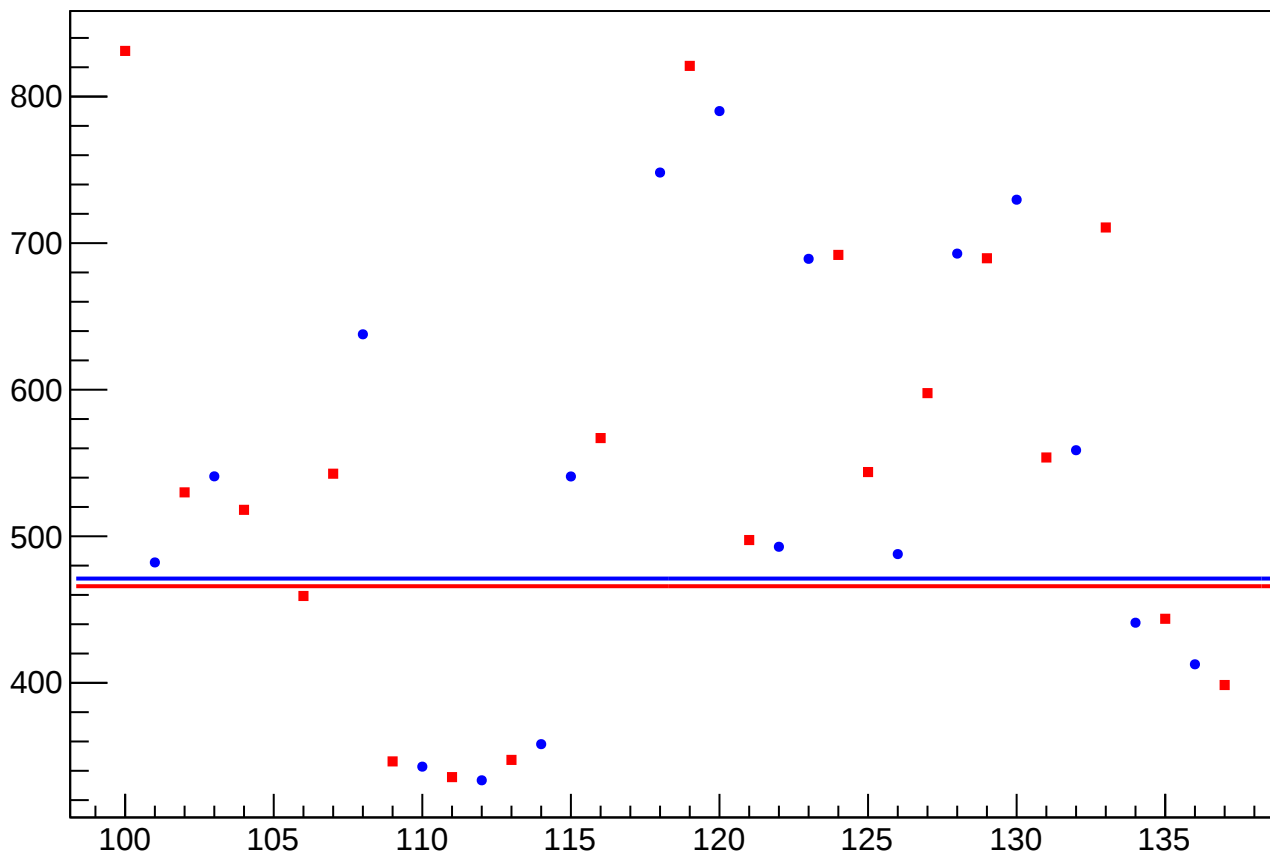
Right: 125.150+/-131.061  $\chi^2/\text{NDF}$ : 40.7/35

In: -150.305+/-189.729  $\chi^2/\text{NDF}$ :24.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 125.150+/-131.061  $\chi^2/\text{NDF}$ : 40.7/35

# asym\_sam\_15\_37\_dd\_rms vs Slug, Sign Corrected



Right In: 471.156+/-0.134  $\chi^2/\text{NDF}$ : 871832.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 465.935+/-0.128  $\chi^2/\text{NDF}$ : 940521.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

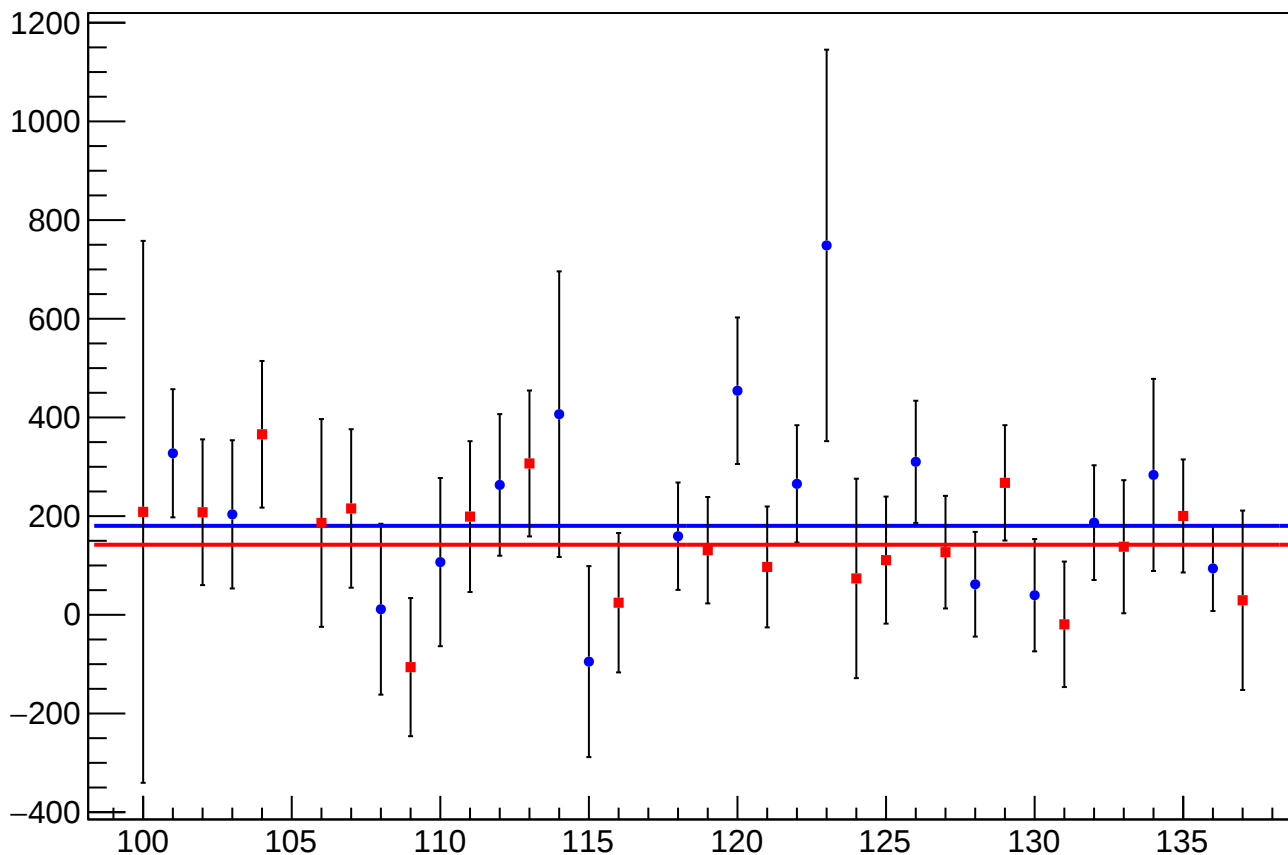
Right: 468.427+/-0.093  $\chi^2/\text{NDF}$ : 1813145.9/35

In: 471.156+/-0.134  $\chi^2/\text{NDF}$ : 871832.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 468.427+/-0.093  $\chi^2/\text{NDF}$ : 1813145.9/35

reg\_asym\_sam\_24\_68\_dd\_mean vs Slug, Sign Corrected



Right In: 180.326 $\pm$ 32.769  $\chi^2$ /NDF: 16.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 142.040 $\pm$ 32.338  $\chi^2$ /NDF: 11.7/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

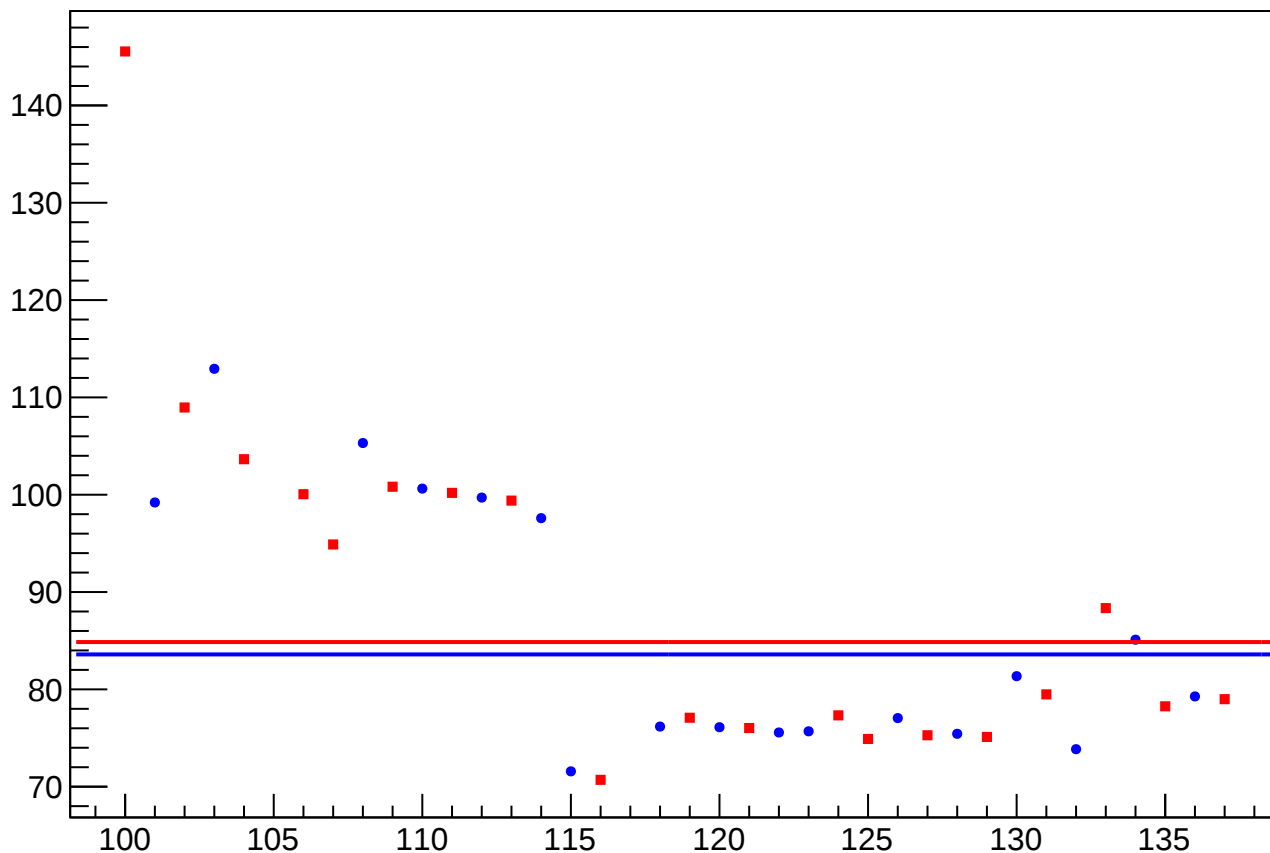
Right: 160.930 $\pm$ 23.017  $\chi^2$ /NDF: 28.9/35

In: 180.326 $\pm$ 32.769  $\chi^2$ /NDF:16.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 160.930 $\pm$ 23.017  $\chi^2$ /NDF: 28.9/35

reg\_asym\_sam\_24\_68\_dd\_rms vs Slug, Sign Corrected



Right In: 83.591 $\pm$ 0.023  $\chi^2$ /NDF: 255921.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 84.861 $\pm$ 0.023  $\chi^2$ /NDF: 290606.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

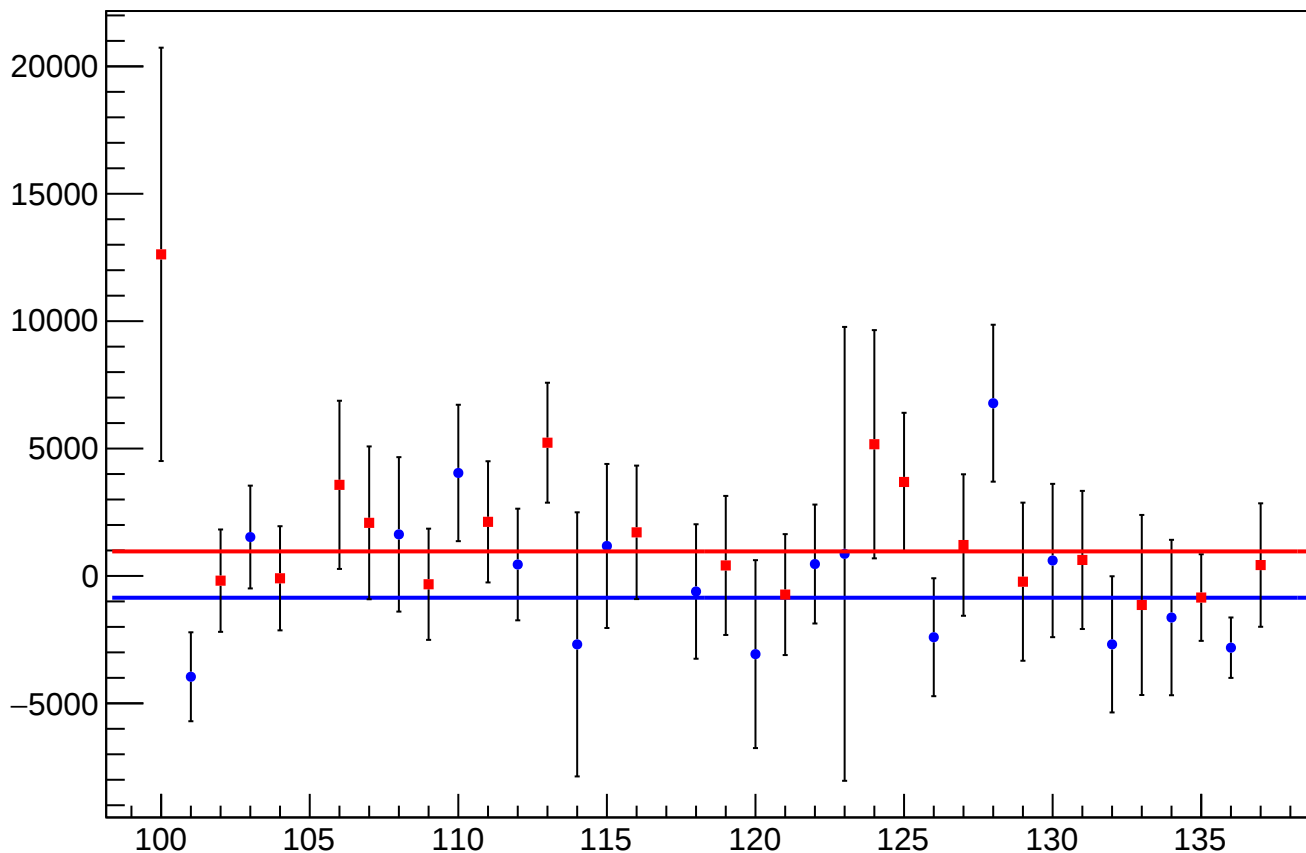
Right: 84.234 $\pm$ 0.016  $\chi^2$ /NDF: 548050.9/35

In: 83.591 $\pm$ 0.023  $\chi^2$ /NDF: 255921.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 84.234 $\pm$ 0.016  $\chi^2$ /NDF: 548050.9/35

asym\_sam\_24\_68\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: -855.308+/-583.290  $\chi^2/\text{NDF}$ : 20.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 962.932+/-589.071  $\chi^2/\text{NDF}$ : 11.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

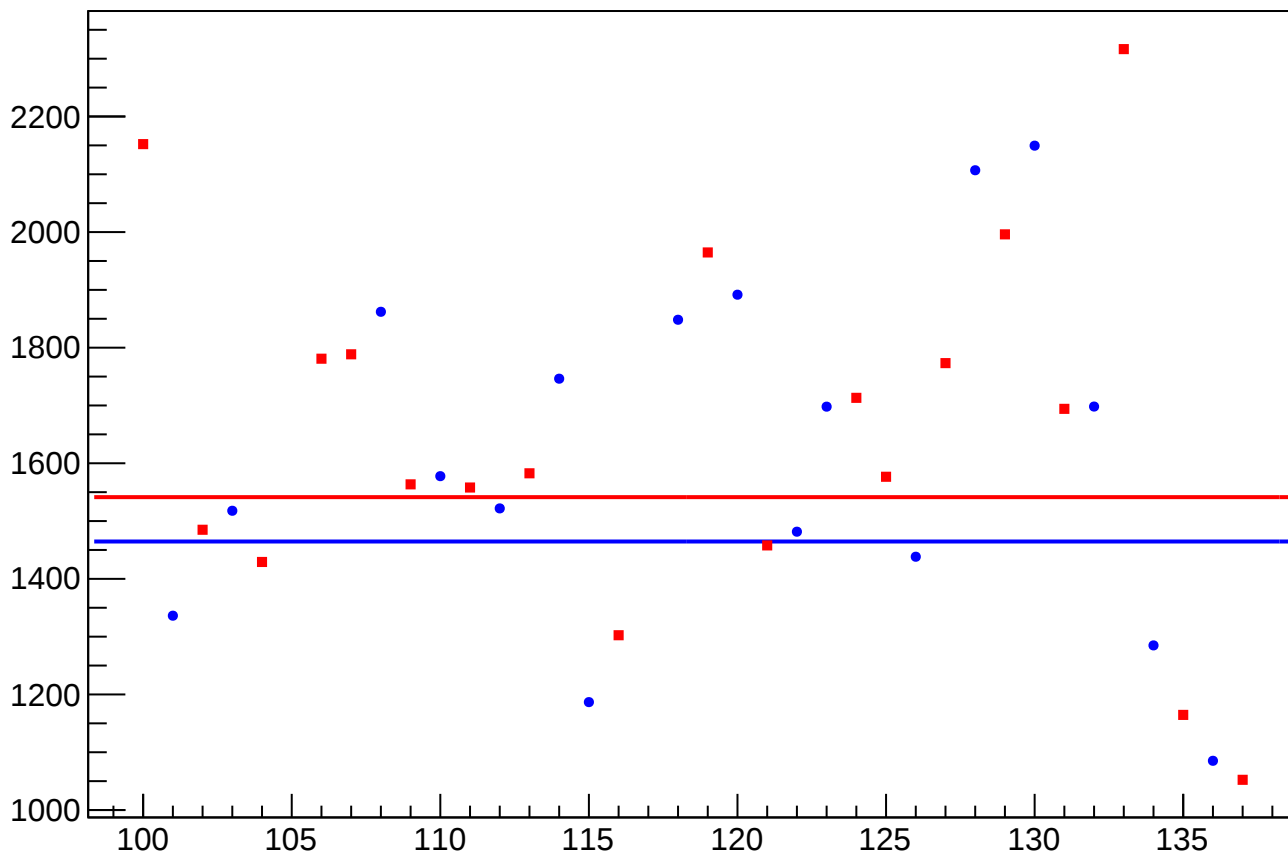
Right: 44.847+/-414.477  $\chi^2/\text{NDF}$ : 36.6/35

In: -855.308+/-583.290  $\chi^2/\text{NDF}$ : 20.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 44.847+/-414.477  $\chi^2/\text{NDF}$ : 36.6/35

asym\_sam\_24\_68\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 1464.636+/-0.412  $\chi^2/\text{NDF}$ : 560863.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 1541.388+/-0.417  $\chi^2/\text{NDF}$ : 453710.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

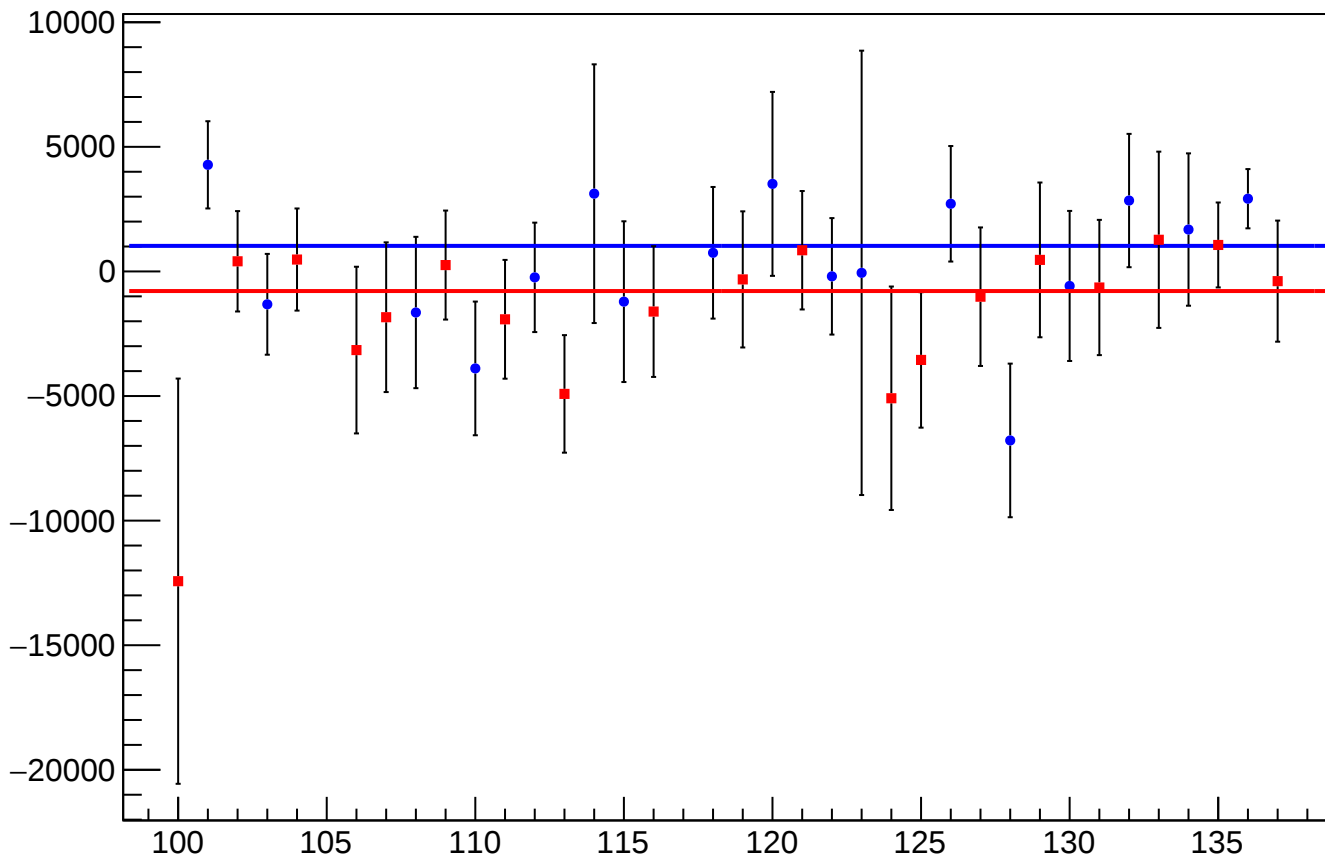
Right: 1502.634+/-0.293  $\chi^2/\text{NDF}$ : 1031717.7/35

In: 1464.636+/-0.412  $\chi^2/\text{NDF}$ :560863.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 1502.634+/-0.293  $\chi^2/\text{NDF}$ : 1031717.7/35

asym\_sam\_24\_68\_dd\_mean vs Slug, Sign Corrected



Right In: 1025.527 $\pm$ 584.500  $\chi^2$ /NDF: 20.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: -787.007 $\pm$ 590.388  $\chi^2$ /NDF: 11.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

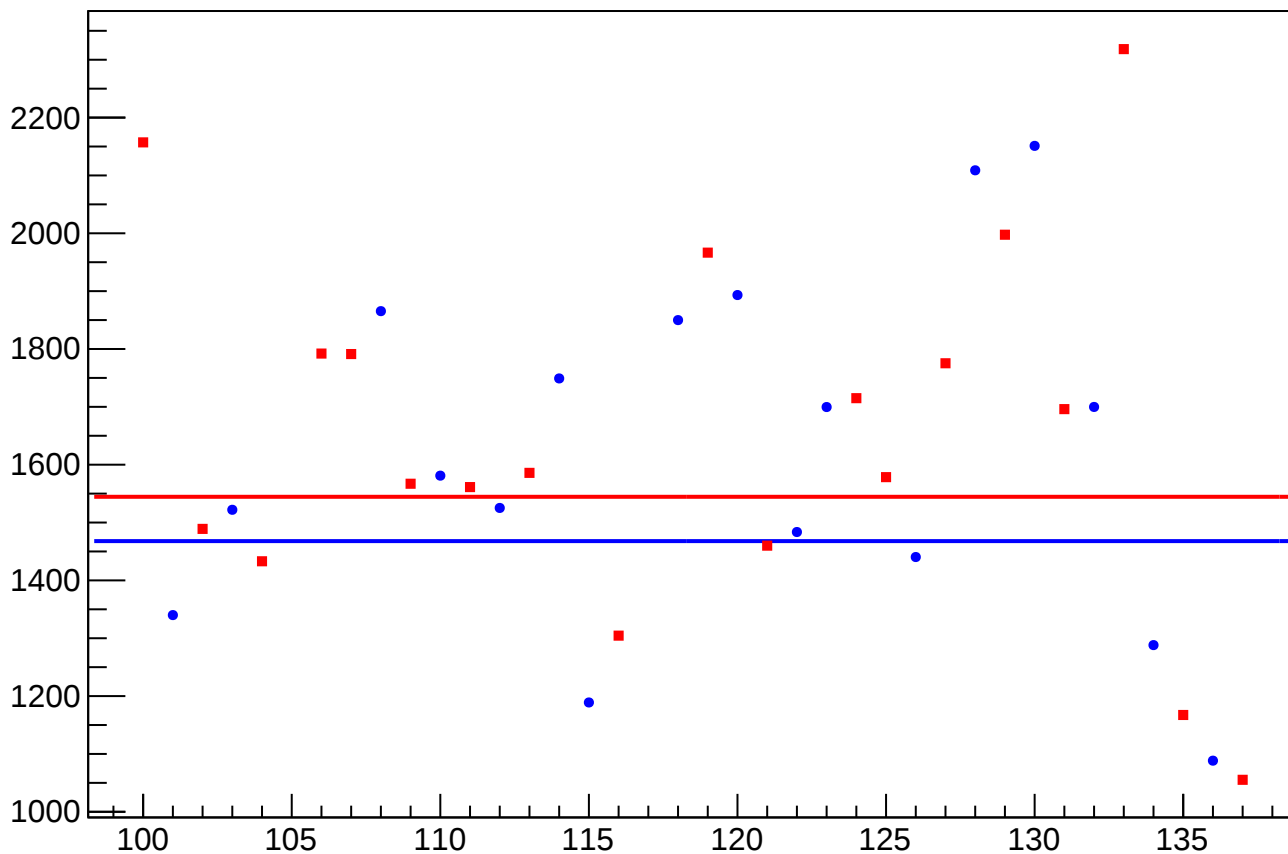
Right: 128.343 $\pm$ 415.370  $\chi^2$ /NDF: 36.9/35

In: 1025.527 $\pm$ 584.500  $\chi^2$ /NDF: 20.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 128.343 $\pm$ 415.370  $\chi^2$ /NDF: 36.9/35

asym\_sam\_24\_68\_dd\_rms vs Slug, Sign Corrected



Right In: 1467.905+/-0.413  $\chi^2/\text{NDF}$ : 557458.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1544.513+/-0.417  $\chi^2/\text{NDF}$ : 451805.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

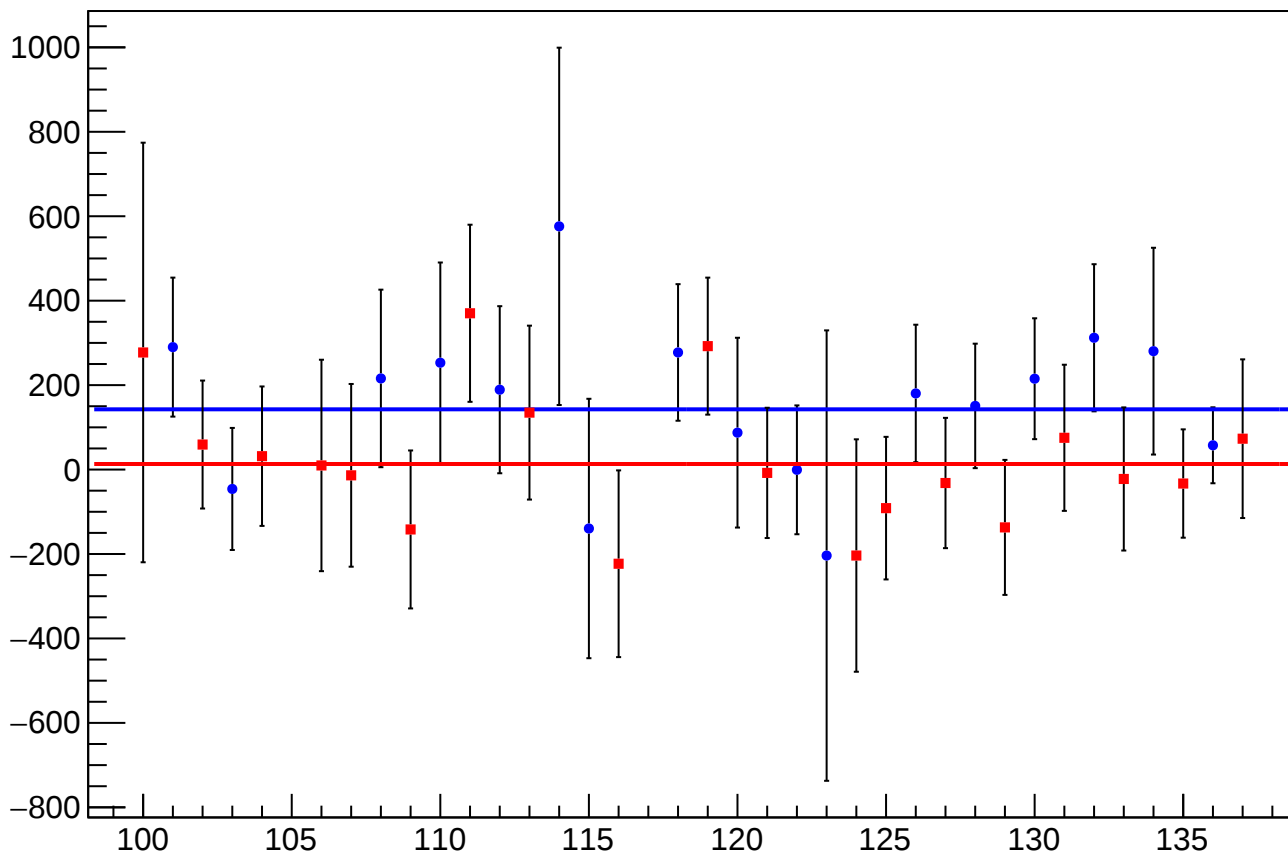
Right: 1505.825+/-0.294  $\chi^2/\text{NDF}$ : 1026270.9/35

In: 1467.905+/-0.413  $\chi^2/\text{NDF}$ : 557458.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1505.825+/-0.294  $\chi^2/\text{NDF}$ : 1026270.9/35

reg\_asym\_sam\_26\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 142.683 $\pm$ 41.625  $\chi^2$ /NDF: 9.3/16

Left Out: 0.000 $\pm$ -0.000  $\chi^2$ /NDF:0.0/0

Right Out: 13.177 $\pm$ -41.396  $\chi^2$ /NDF: 10.8/18

Left In: 0.000 $\pm$ -0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ -0.000  $\chi^2$ /NDF: 0.0/0

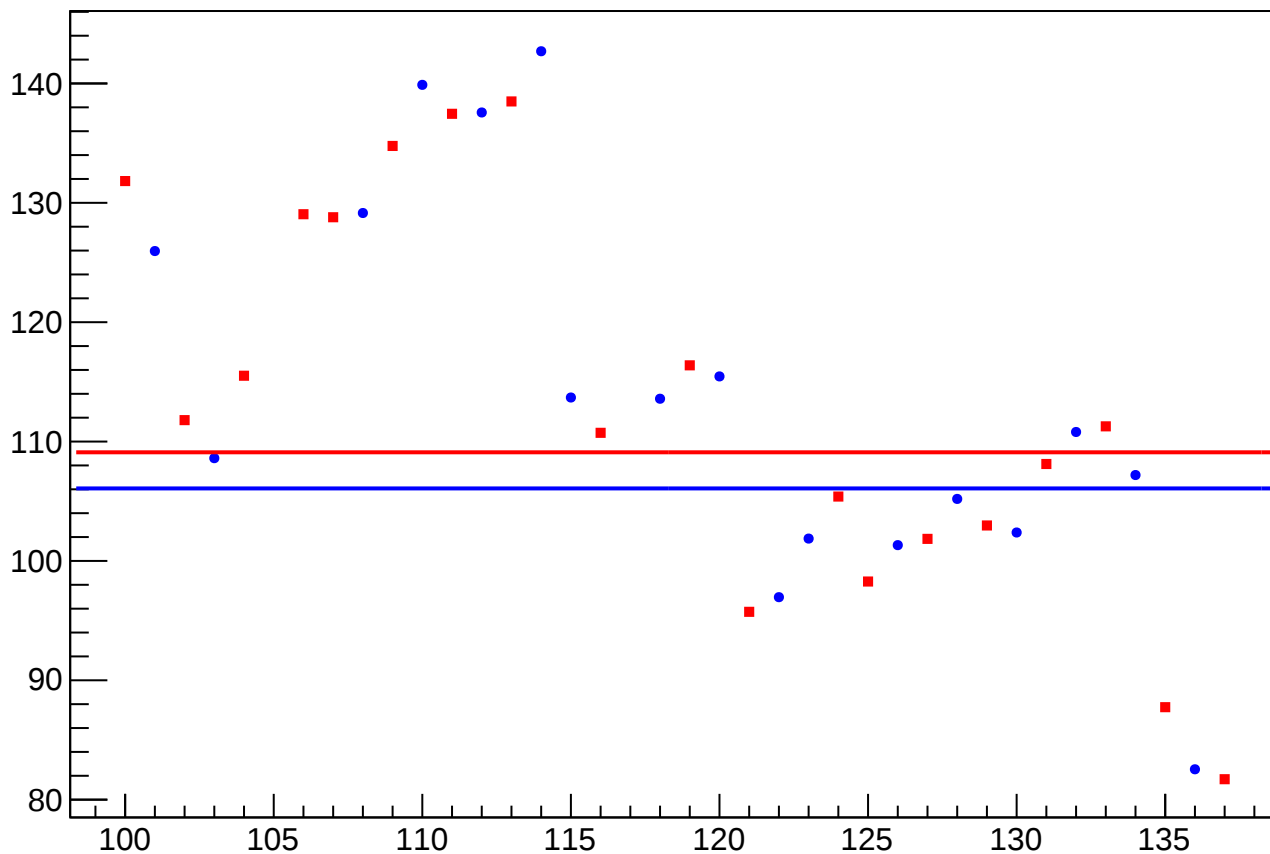
Right: 77.572 $\pm$ -29.352  $\chi^2$ /NDF: 25.0/35

In: 142.683 $\pm$ -41.625  $\chi^2$ /NDF:9.3/16

Out: 0.000 $\pm$ -0.000  $\chi^2$ /NDF:0.0/0

All: 77.572 $\pm$ -29.352  $\chi^2$ /NDF: 25.0/35

reg\_asym\_sam\_26\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 106.074+/-0.029  $\chi^2/\text{NDF}$ : 317907.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 109.100+/-0.029  $\chi^2/\text{NDF}$ : 285394.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

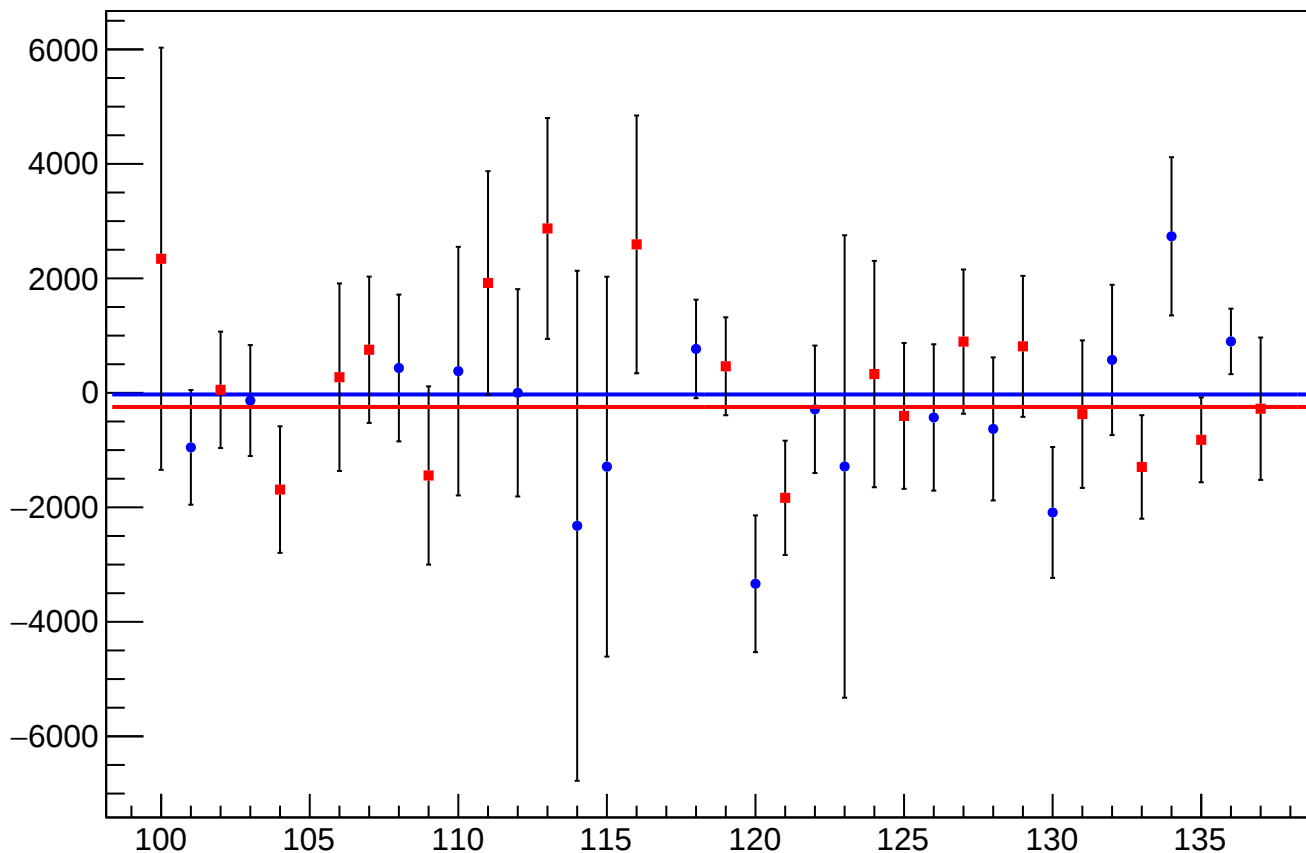
Right: 107.595+/-0.021  $\chi^2/\text{NDF}$ : 608619.1/35

In: 106.074+/-0.029  $\chi^2/\text{NDF}$ : 317907.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 107.595+/-0.021  $\chi^2/\text{NDF}$ : 608619.1/35

asym\_sam\_26\_48\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: -27.969+/-283.741  $\chi^2/\text{NDF}$ : 20.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -246.386+/-279.451  $\chi^2/\text{NDF}$ : 15.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

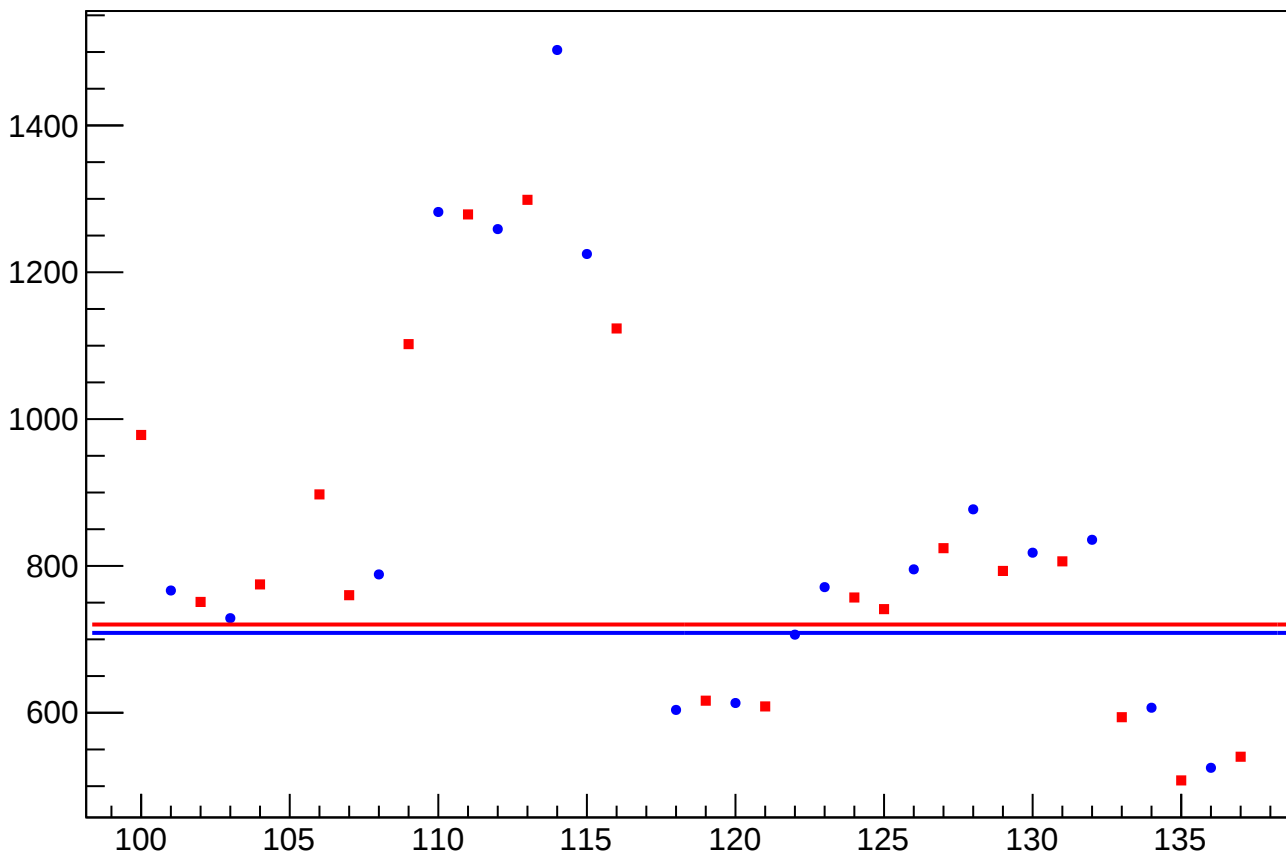
Right: -138.842+/-199.101  $\chi^2/\text{NDF}$ : 36.7/35

In: -27.969+/-283.741  $\chi^2/\text{NDF}$ : 20.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -138.842+/-199.101  $\chi^2/\text{NDF}$ : 36.7/35

asym\_sam\_26\_48\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 708.784+/-0.201  $\chi^2/\text{NDF}$ : 793538.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 720.201+/-0.198  $\chi^2/\text{NDF}$ : 899934.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

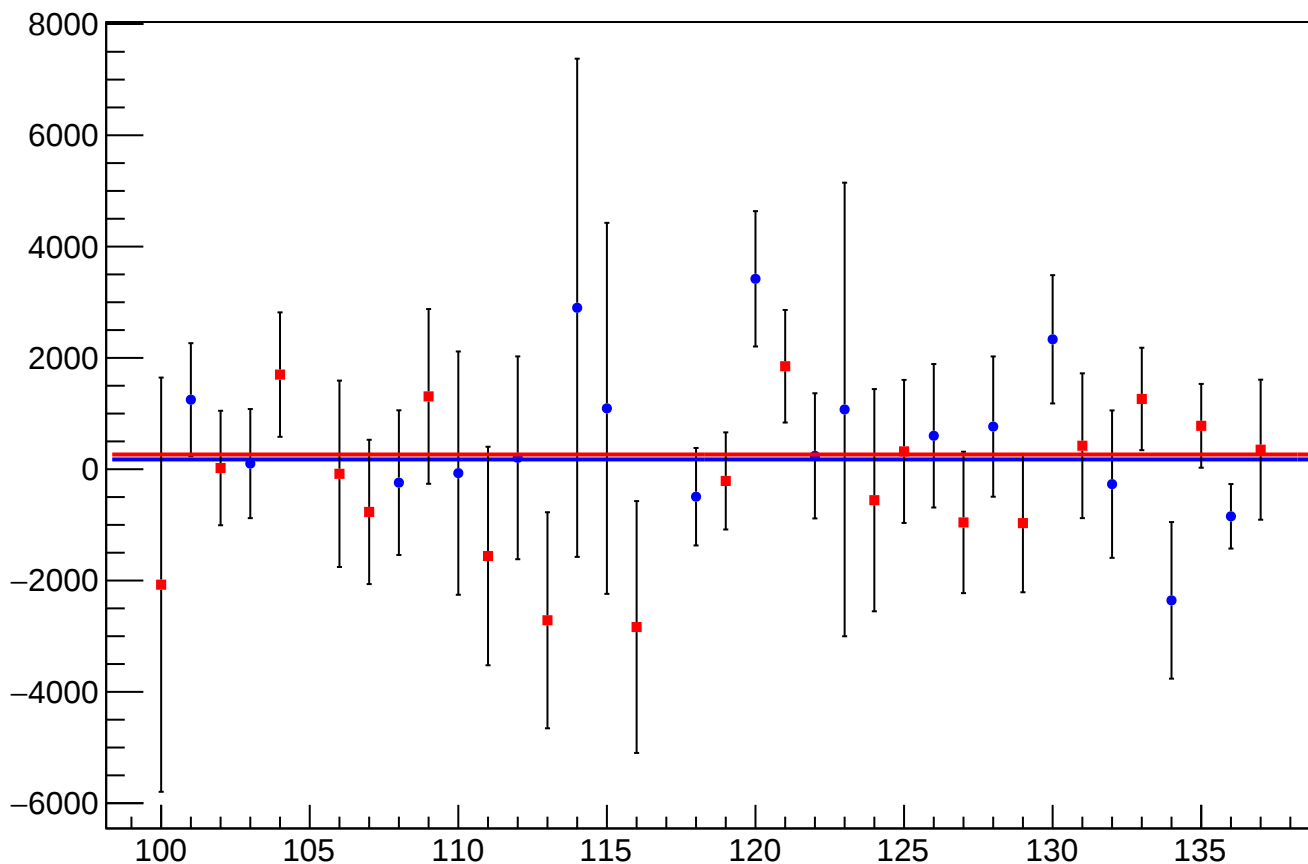
Right: 714.580+/-0.141  $\chi^2/\text{NDF}$ : 1695116.1/35

In: 708.784+/-0.201  $\chi^2/\text{NDF}$ : 793538.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 714.580+/-0.141  $\chi^2/\text{NDF}$ : 1695116.1/35

asym\_sam\_26\_48\_dd\_mean vs Slug, Sign Corrected



Right In: 175.854 $\pm$ 287.218  $\chi^2$ /NDF: 19.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 264.622 $\pm$ 283.074  $\chi^2$ /NDF: 14.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

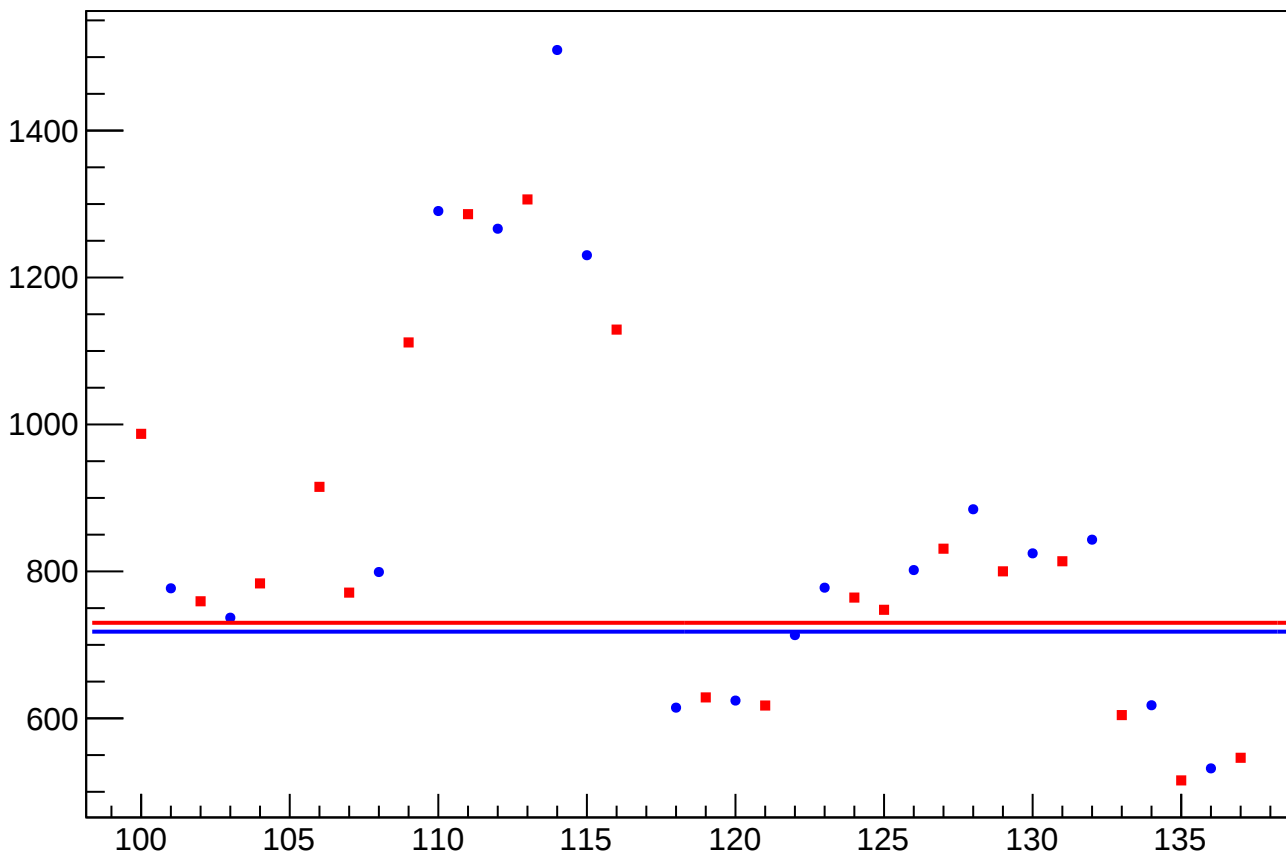
Right: 220.883 $\pm$ 201.613  $\chi^2$ /NDF: 34.6/35

In: 175.854 $\pm$ 287.218  $\chi^2$ /NDF:19.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 220.883 $\pm$ 201.613  $\chi^2$ /NDF: 34.6/35

asym\_sam\_26\_48\_dd\_rms vs Slug, Sign Corrected



Right In: 717.973+/-0.203  $\chi^2/\text{NDF}$ : 778580.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 730.040+/-0.200  $\chi^2/\text{NDF}$ : 881842.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

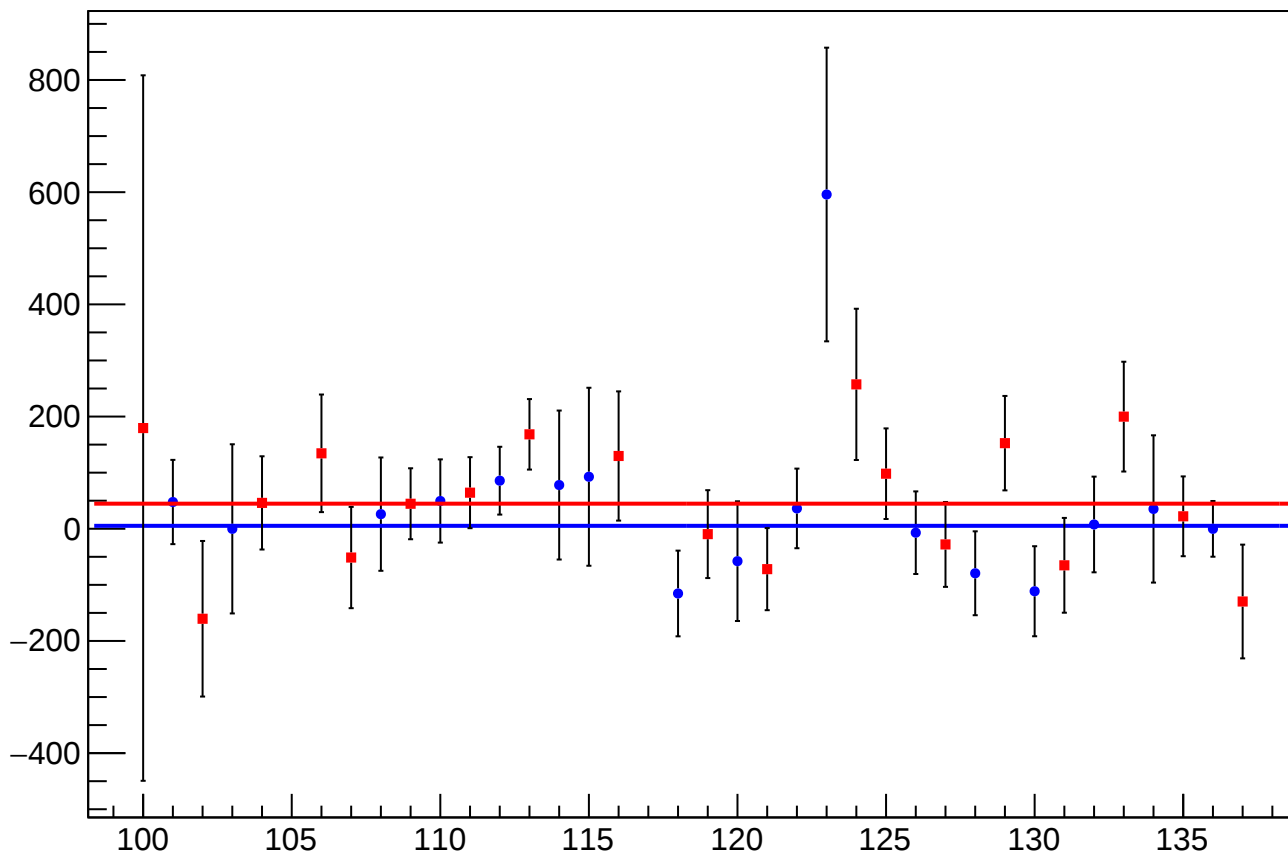
Right: 724.094+/-0.143  $\chi^2/\text{NDF}$ : 1662212.8/35

In: 717.973+/-0.203  $\chi^2/\text{NDF}$ : 778580.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 724.094+/-0.143  $\chi^2/\text{NDF}$ : 1662212.8/35

reg\_asym\_sam\_1357\_avg\_mean vs Slug, Sign Corrected



Right In: 5.220 $\pm$ 20.150  $\chi^2$ /NDF: 14.7/16

Left Out: 0.000 $\pm$ -0.000  $\chi^2$ /NDF:0.0/0

Right Out: 44.715 $\pm$ -19.410  $\chi^2$ /NDF: 24.4/18

Left In: 0.000 $\pm$ -0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ -0.000  $\chi^2$ /NDF: 0.0/0

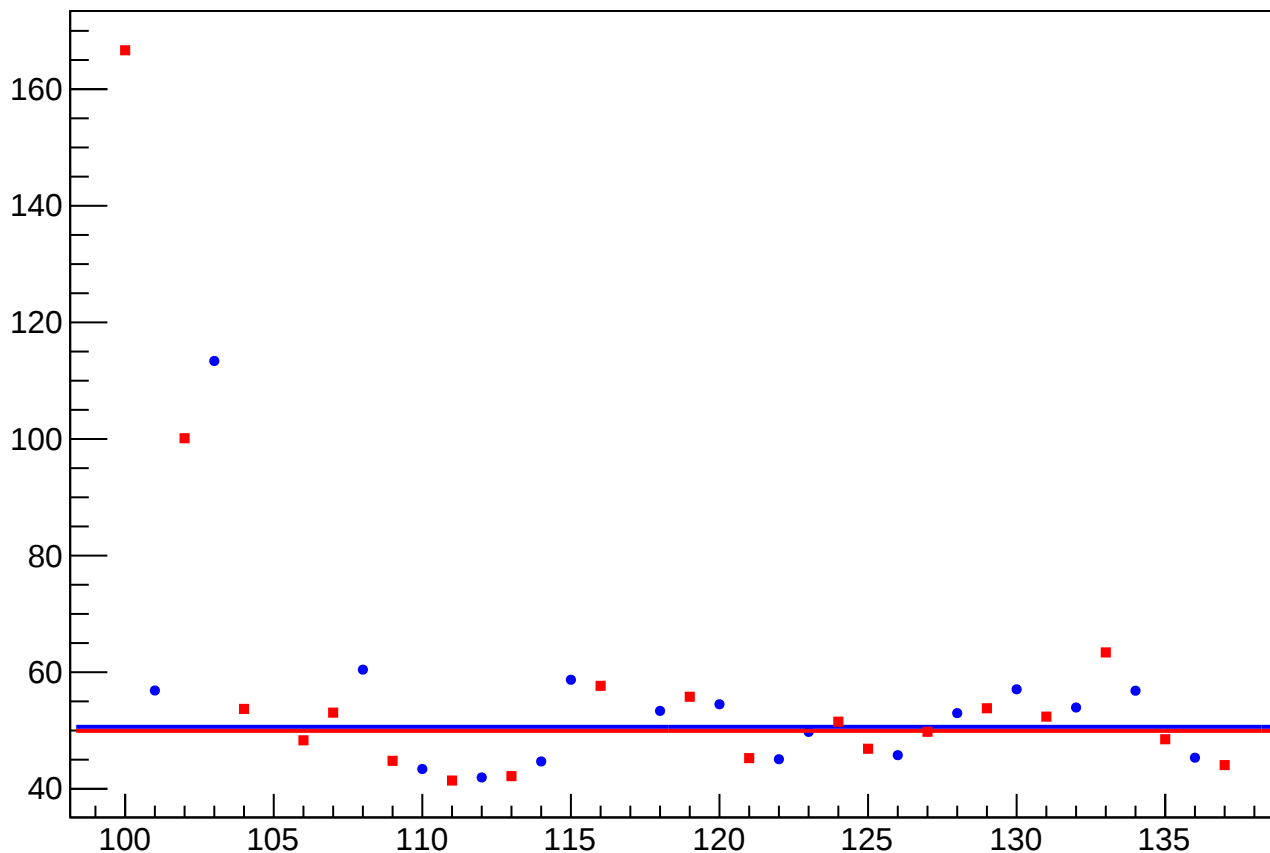
Right: 25.706 $\pm$ -13.979  $\chi^2$ /NDF: 41.1/35

In: 5.220 $\pm$ -20.150  $\chi^2$ /NDF:14.7/16

Out: 0.000 $\pm$ -0.000  $\chi^2$ /NDF:0.0/0

All: 25.706 $\pm$ -13.979  $\chi^2$ /NDF: 41.1/35

reg\_asym\_sam\_1357\_avg\_rms vs Slug, Sign Corrected



Right In: 50.635+/-0.014  $\chi^2/\text{NDF}$ : 519687.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 49.943+/-0.014  $\chi^2/\text{NDF}$ : 500488.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

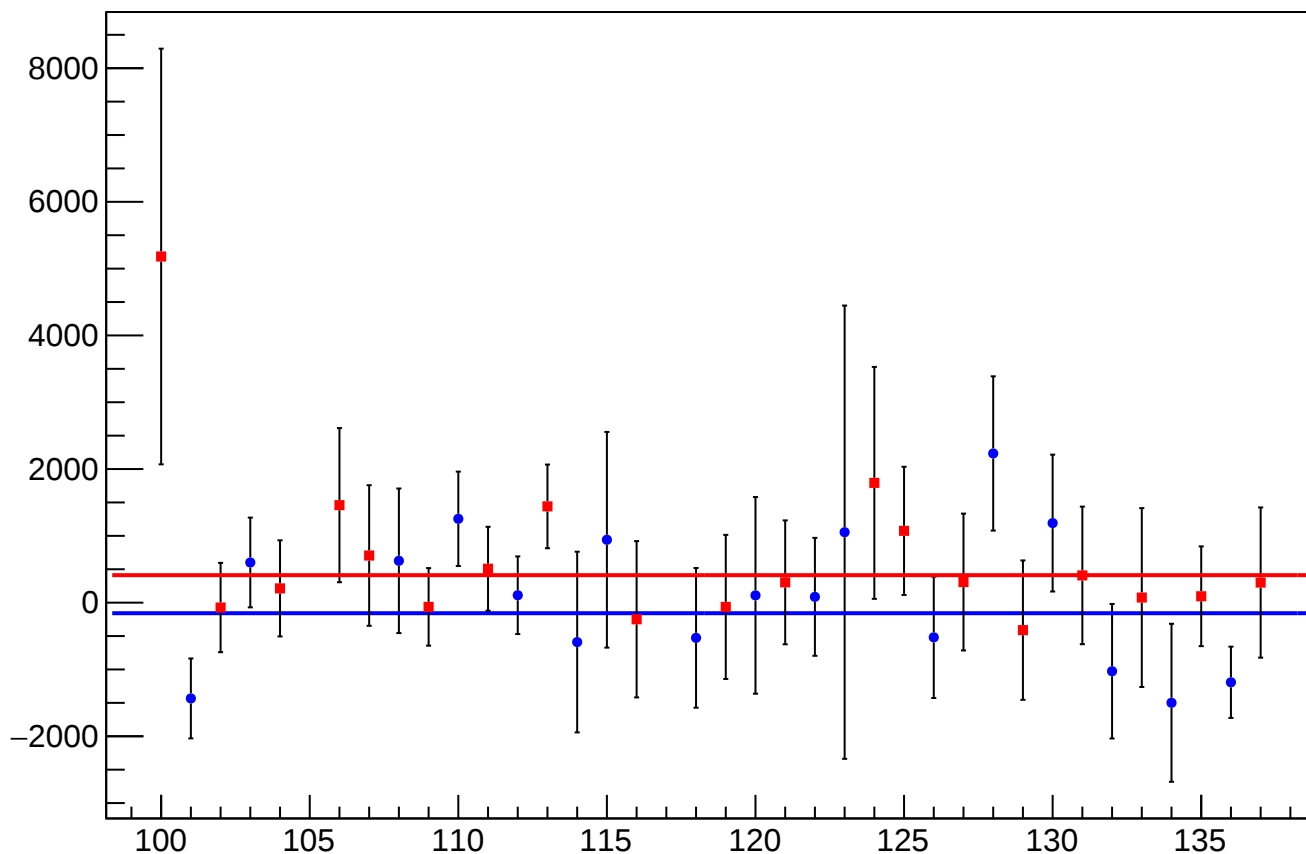
Right: 50.276+/-0.010  $\chi^2/\text{NDF}$ : 1021399.4/35

In: 50.635+/-0.014  $\chi^2/\text{NDF}$ : 519687.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 50.276+/-0.010  $\chi^2/\text{NDF}$ : 1021399.4/35

asym\_sam\_1357\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -158.001 $\pm$ 210.181  $\chi^2$ /NDF: 23.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 411.611 $\pm$ 203.633  $\chi^2$ /NDF: 9.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

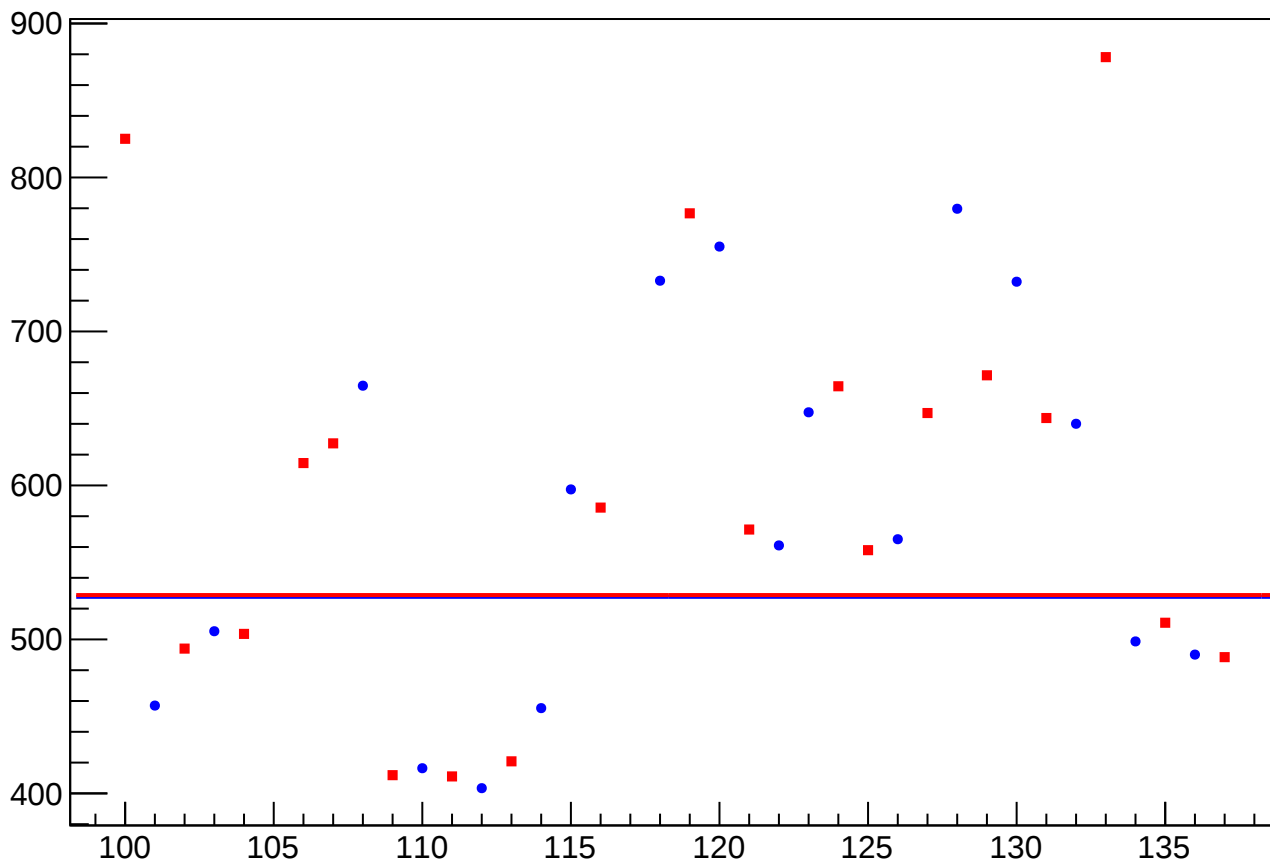
Right: 135.816 $\pm$ 146.251  $\chi^2$ /NDF: 37.0/35

In: -158.001 $\pm$ 210.181  $\chi^2$ /NDF:23.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 135.816 $\pm$ 146.251  $\chi^2$ /NDF: 37.0/35

asym\_sam\_1357\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 527.663+/-0.149  $\chi^2/\text{NDF}$ : 557423.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 528.806+/-0.144  $\chi^2/\text{NDF}$ : 623364.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

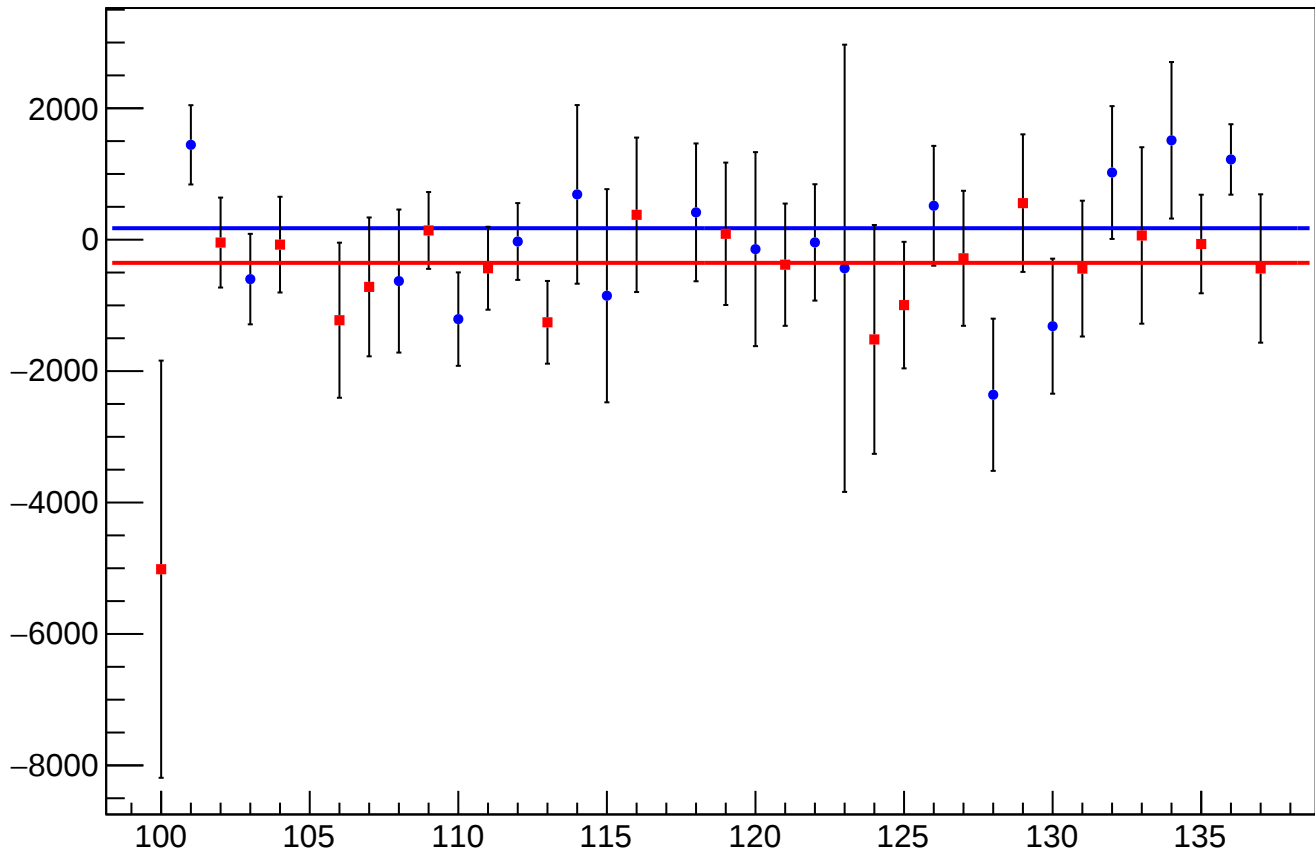
Right: 528.253+/-0.103  $\chi^2/\text{NDF}$ : 1180818.7/35

In: 527.663+/-0.149  $\chi^2/\text{NDF}$ : 557423.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 528.253+/-0.103  $\chi^2/\text{NDF}$ : 1180818.7/35

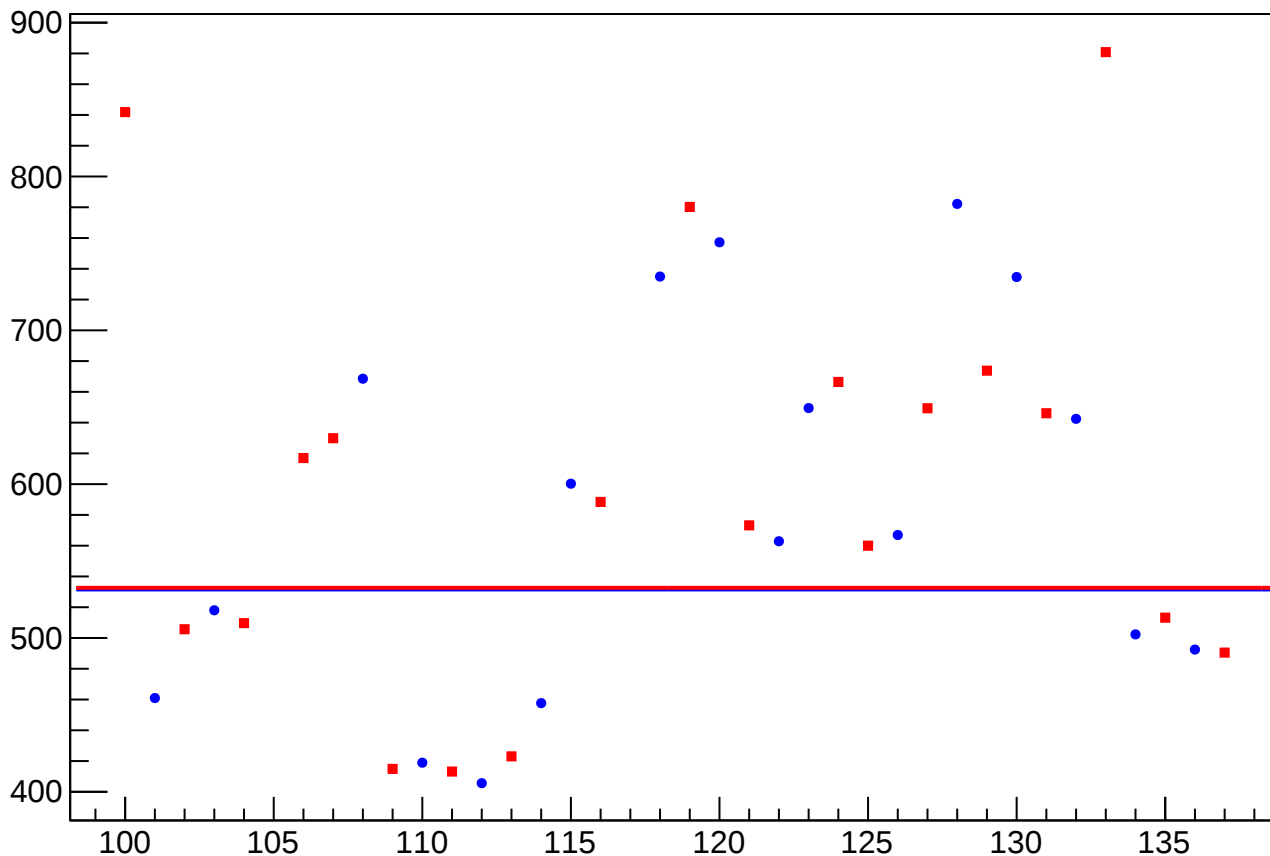
# asym\_sam\_1357\_avg\_mean vs Slug, Sign Corrected



Right In: 174.605+/-211.662     $\chi^2/\text{NDF}$ : 23.7/16  
 Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -352.570+/-205.204     $\chi^2/\text{NDF}$ : 8.4/18  
 Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0  
 Right: -97.148+/-147.331     $\chi^2/\text{NDF}$ : 35.3/35  
 In: 174.605+/-211.662     $\chi^2/\text{NDF}$ : 23.7/16  
 Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0  
 All: -97.148+/-147.331     $\chi^2/\text{NDF}$ : 35.3/35

asym\_sam\_1357\_avg\_rms vs Slug, Sign Corrected



Right In: 531.554+/-0.150  $\chi^2/\text{NDF}$ : 550087.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 532.620+/-0.145  $\chi^2/\text{NDF}$ : 615746.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

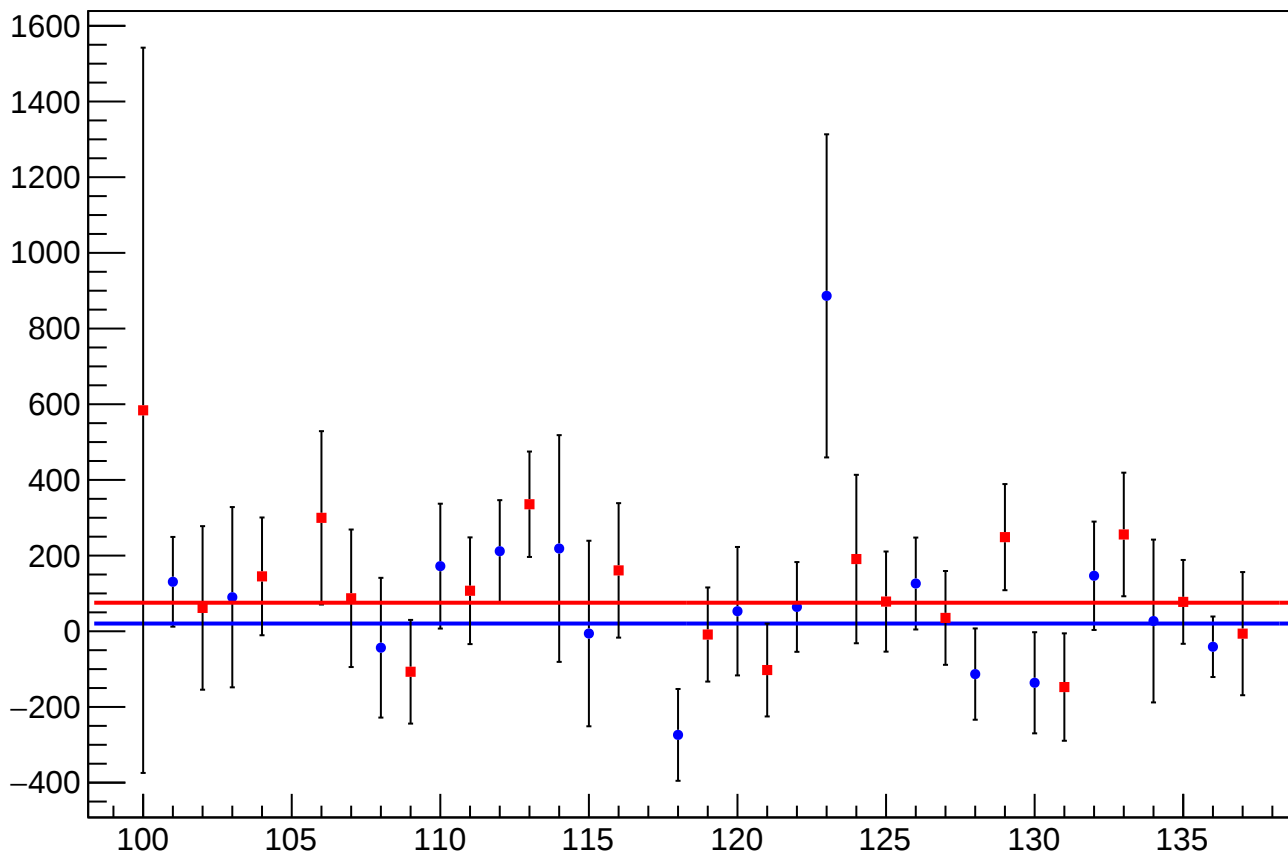
Right: 532.104+/-0.104  $\chi^2/\text{NDF}$ : 1165860.0/35

In: 531.554+/-0.150  $\chi^2/\text{NDF}$ : 550087.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 532.104+/-0.104  $\chi^2/\text{NDF}$ : 1165860.0/35

reg\_asym\_sam\_2468\_avg\_mean vs Slug, Sign Corrected



Right In: 20.441+/-34.583  $\chi^2/\text{NDF}$ : 19.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 75.454+/-34.698  $\chi^2/\text{NDF}$ : 15.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

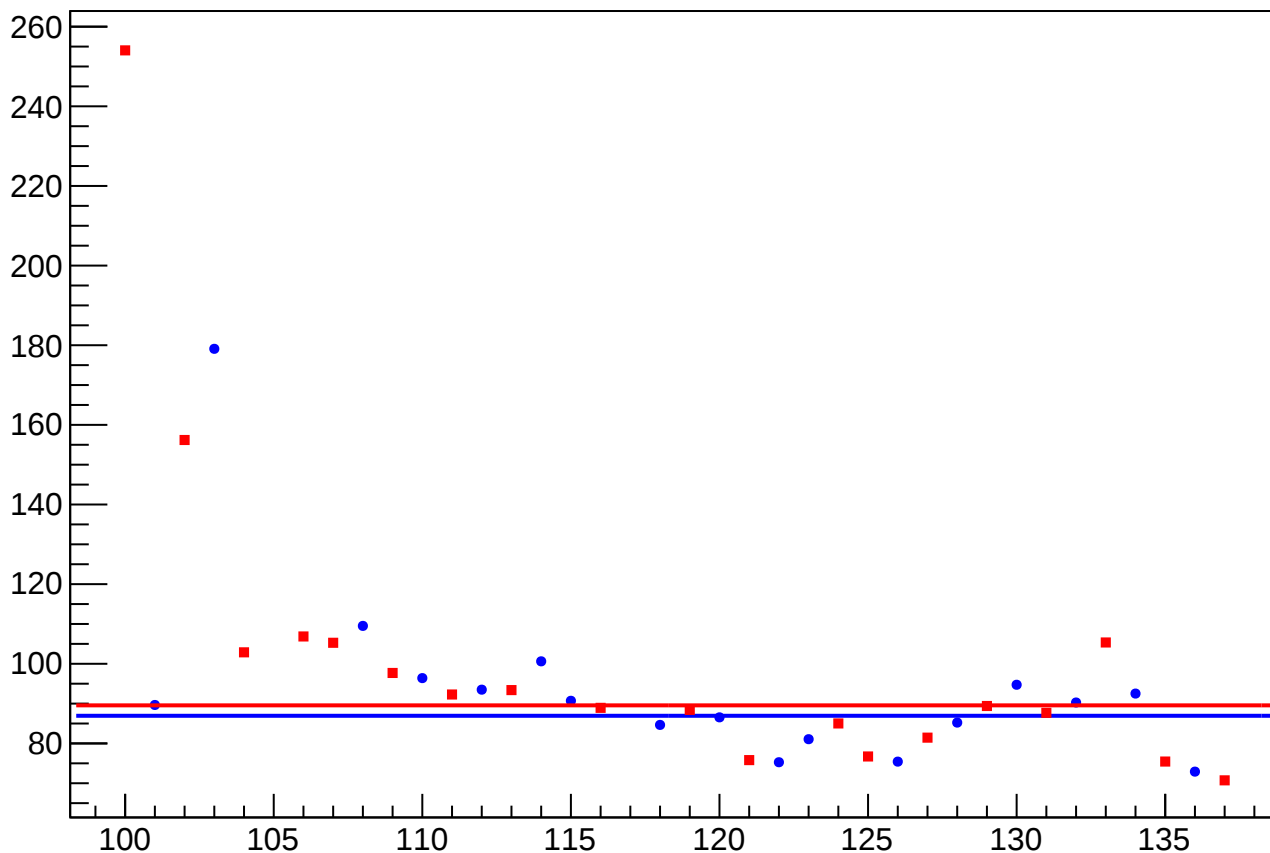
Right: 47.856+/-24.495  $\chi^2/\text{NDF}$ : 35.9/35

In: 20.441+/-34.583  $\chi^2/\text{NDF}$ : 19.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 47.856+/-24.495  $\chi^2/\text{NDF}$ : 35.9/35

reg\_asym\_sam\_2468\_avg\_rms vs Slug, Sign Corrected



Right In: 86.943+/-0.024  $\chi^2/\text{NDF}$ : 455809.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 89.561+/-0.025  $\chi^2/\text{NDF}$ : 431229.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

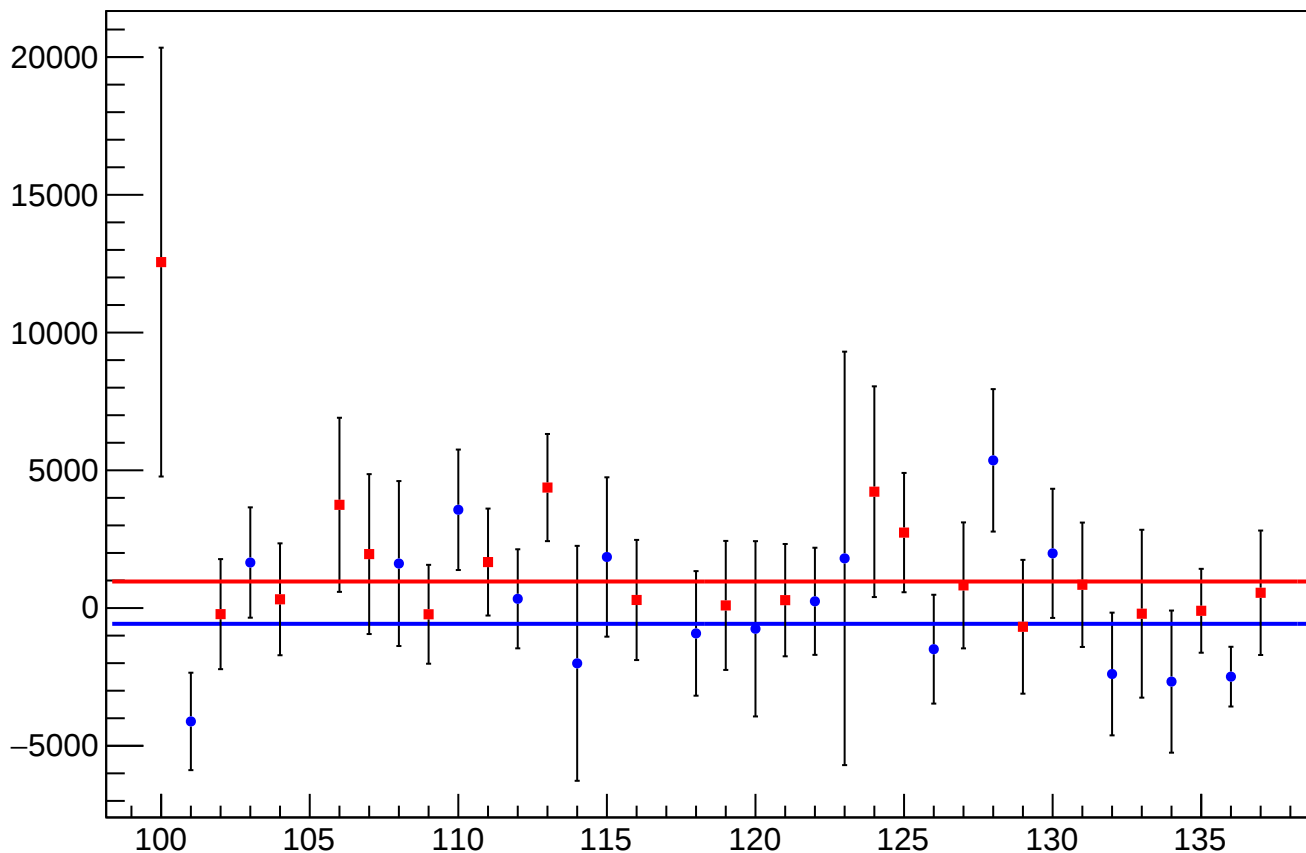
Right: 88.247+/-0.017  $\chi^2/\text{NDF}$ : 892752.0/35

In: 86.943+/-0.024  $\chi^2/\text{NDF}$ : 455809.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 88.247+/-0.017  $\chi^2/\text{NDF}$ : 892752.0/35

asym\_sam\_2468\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -572.342+/-517.020  $\chi^2/\text{NDF}$ : 21.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 963.846+/-514.621  $\chi^2/\text{NDF}$ : 10.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

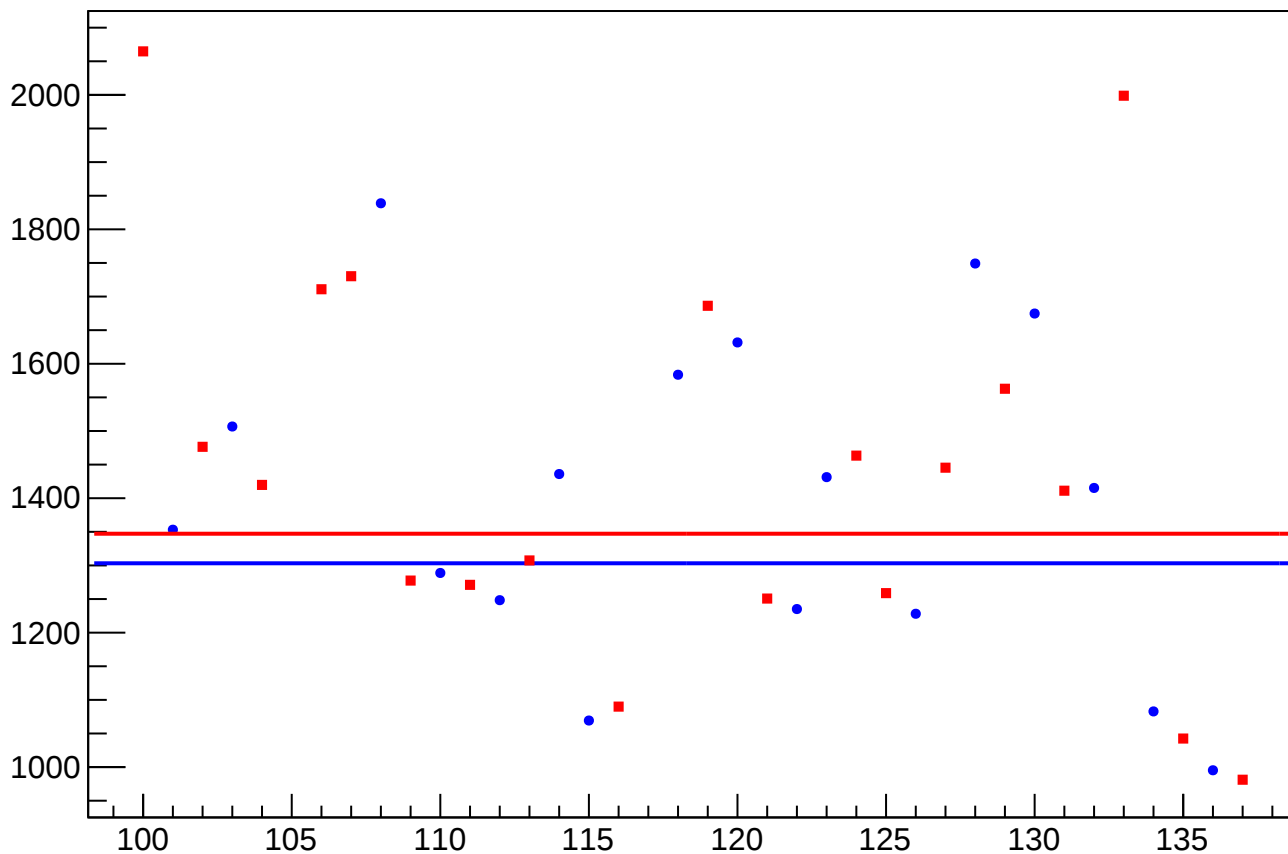
Right: 199.325+/-364.737  $\chi^2/\text{NDF}$ : 36.4/35

In: -572.342+/-517.020  $\chi^2/\text{NDF}$ : 21.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 199.325+/-364.737  $\chi^2/\text{NDF}$ : 36.4/35

asym\_sam\_2468\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 1303.201+/-0.366  $\chi^2/\text{NDF}$ : 451961.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1347.177+/-0.364  $\chi^2/\text{NDF}$ : 420774.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

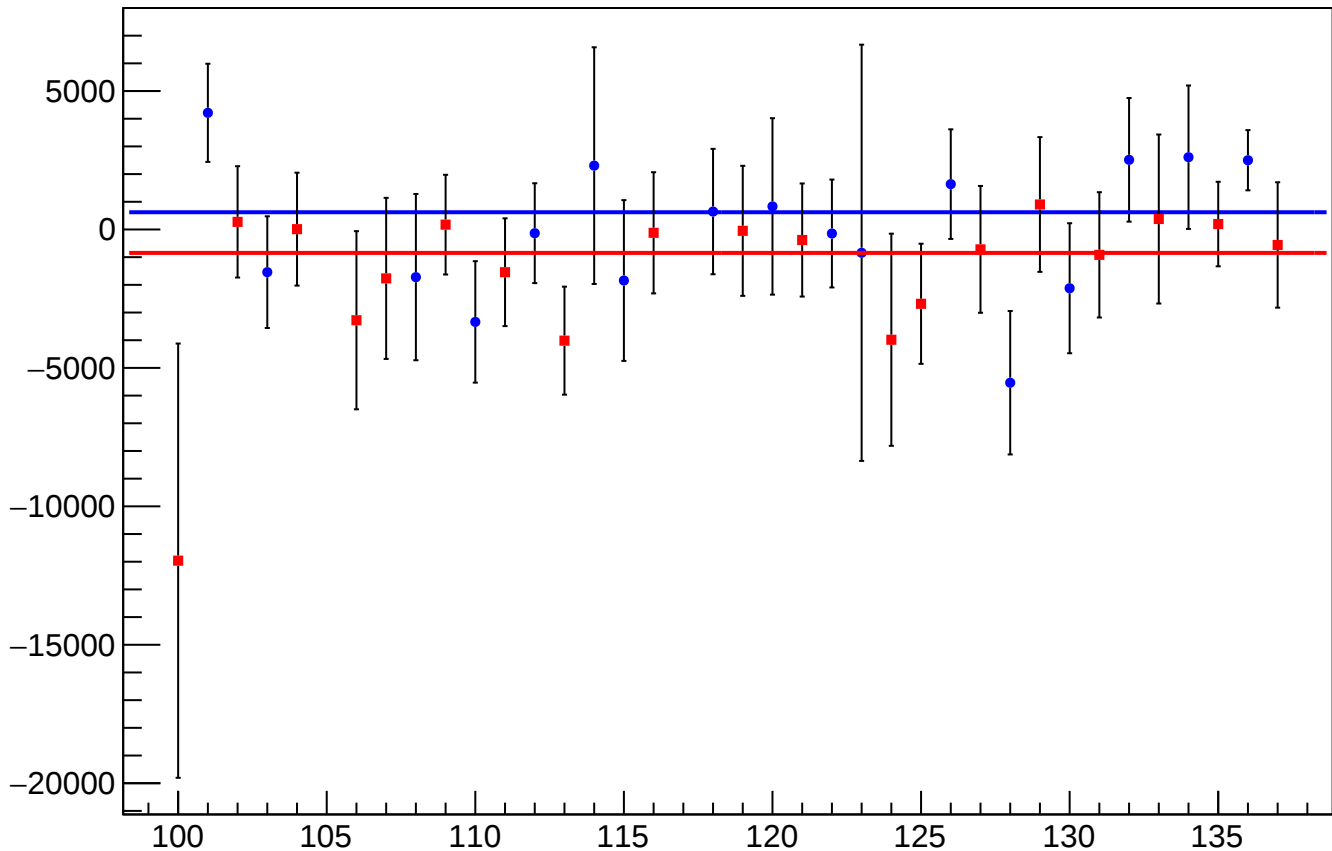
Right: 1325.291+/-0.258  $\chi^2/\text{NDF}$ : 880004.2/35

In: 1303.201+/-0.366  $\chi^2/\text{NDF}$ : 451961.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1325.291+/-0.258  $\chi^2/\text{NDF}$ : 880004.2/35

asym\_sam\_2468\_avg\_mean vs Slug, Sign Corrected



Right In: 622.411 $\pm$ 518.496  $\chi^2$ /NDF: 22.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -846.021 $\pm$ 516.325  $\chi^2$ /NDF: 9.1/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

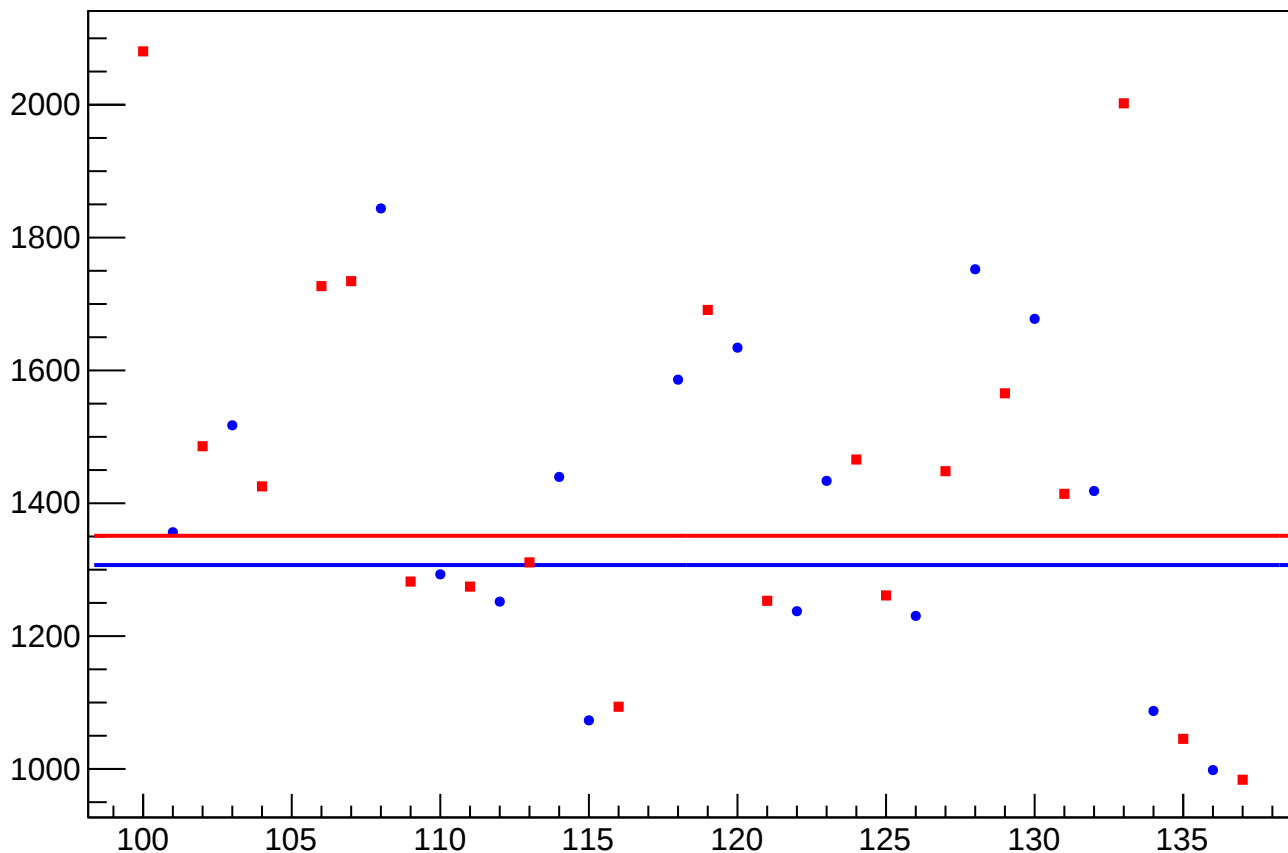
Right: -114.886 $\pm$ 365.862  $\chi^2$ /NDF: 35.1/35

In: 622.411 $\pm$ 518.496  $\chi^2$ /NDF:22.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -114.886 $\pm$ 365.862  $\chi^2$ /NDF: 35.1/35

asym\_sam\_2468\_avg\_rms vs Slug, Sign Corrected



Right In: 1306.980+/-0.367  $\chi^2/\text{NDF}$ : 451191.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1351.096+/-0.365  $\chi^2/\text{NDF}$ : 421804.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

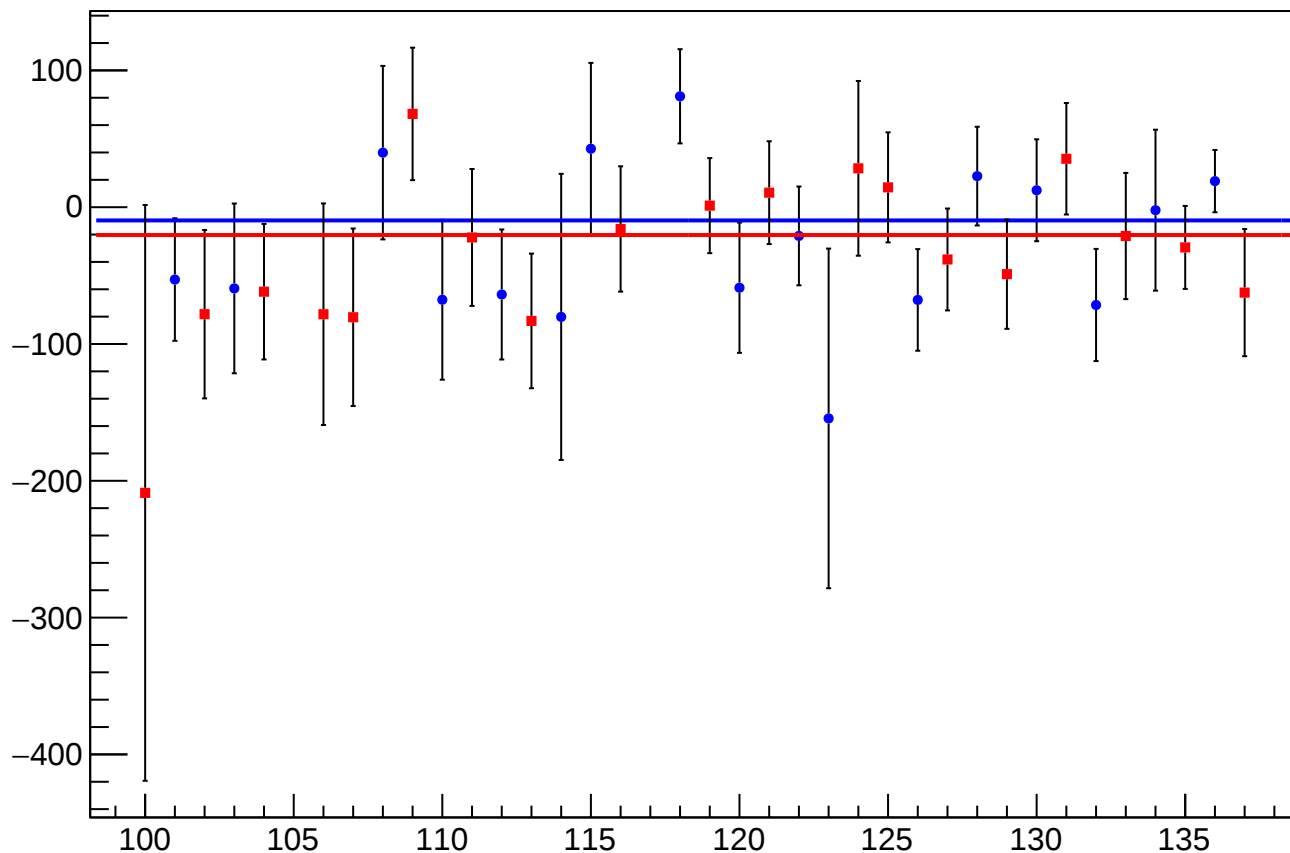
Right: 1329.131+/-0.259  $\chi^2/\text{NDF}$ : 880266.0/35

In: 1306.980+/-0.367  $\chi^2/\text{NDF}$ : 451191.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1329.131+/-0.259  $\chi^2/\text{NDF}$ : 880266.0/35

reg\_asym\_sam\_1357\_2468\_dd\_mean vs Slug, Sign Corrected



Right In:  $-9.669 \pm 10.408$   $\chi^2/\text{NDF}$ : 22.6/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-20.335 \pm 10.444$   $\chi^2/\text{NDF}$ : 14.7/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

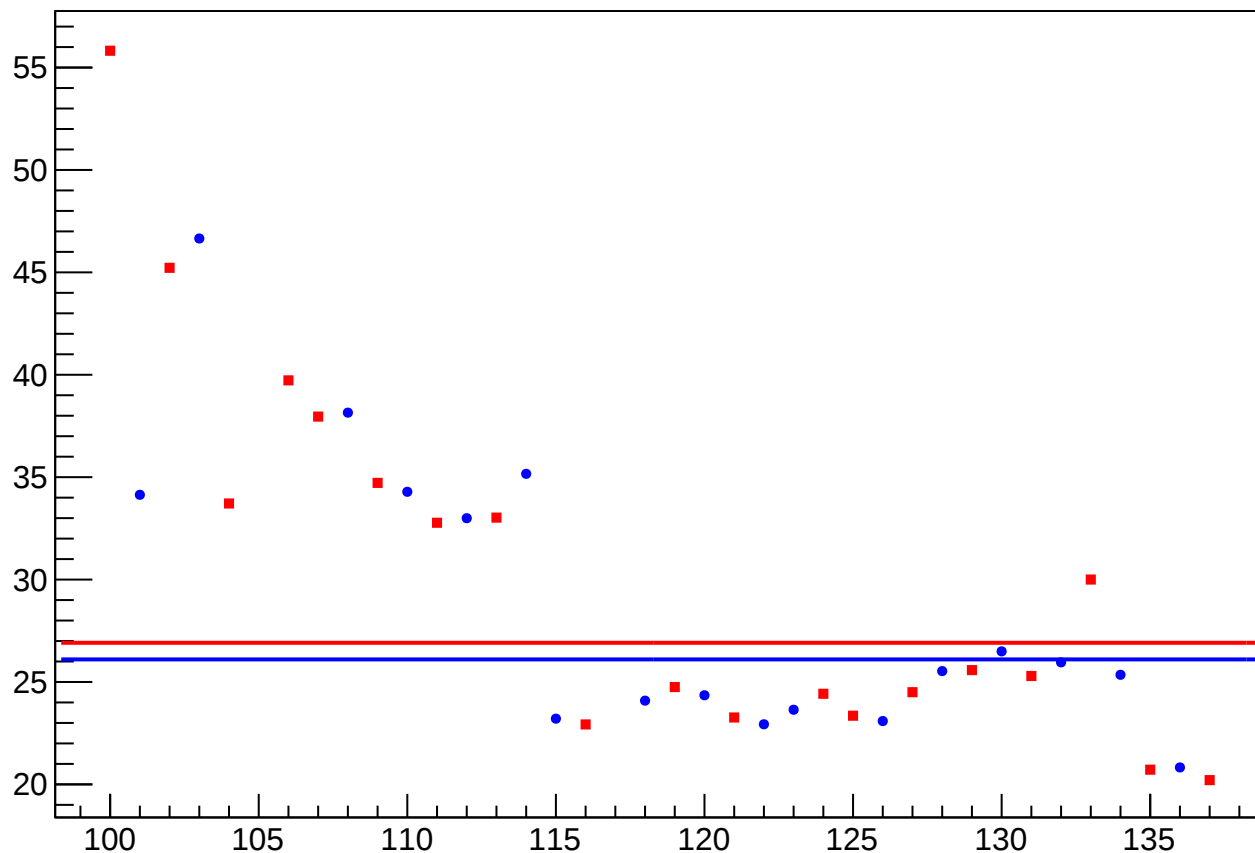
Right:  $-14.983 \pm 7.372$   $\chi^2/\text{NDF}$ : 37.7/35

In:  $-9.669 \pm 10.408$   $\chi^2/\text{NDF}$ : 22.6/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-14.983 \pm 7.372$   $\chi^2/\text{NDF}$ : 37.7/35

reg\_asym\_sam\_1357\_2468\_dd\_rms vs Slug, Sign Corrected



Right In: 26.103+/-0.007  $\chi^2/\text{NDF}$ : 604038.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 26.914+/-0.007  $\chi^2/\text{NDF}$ : 678970.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

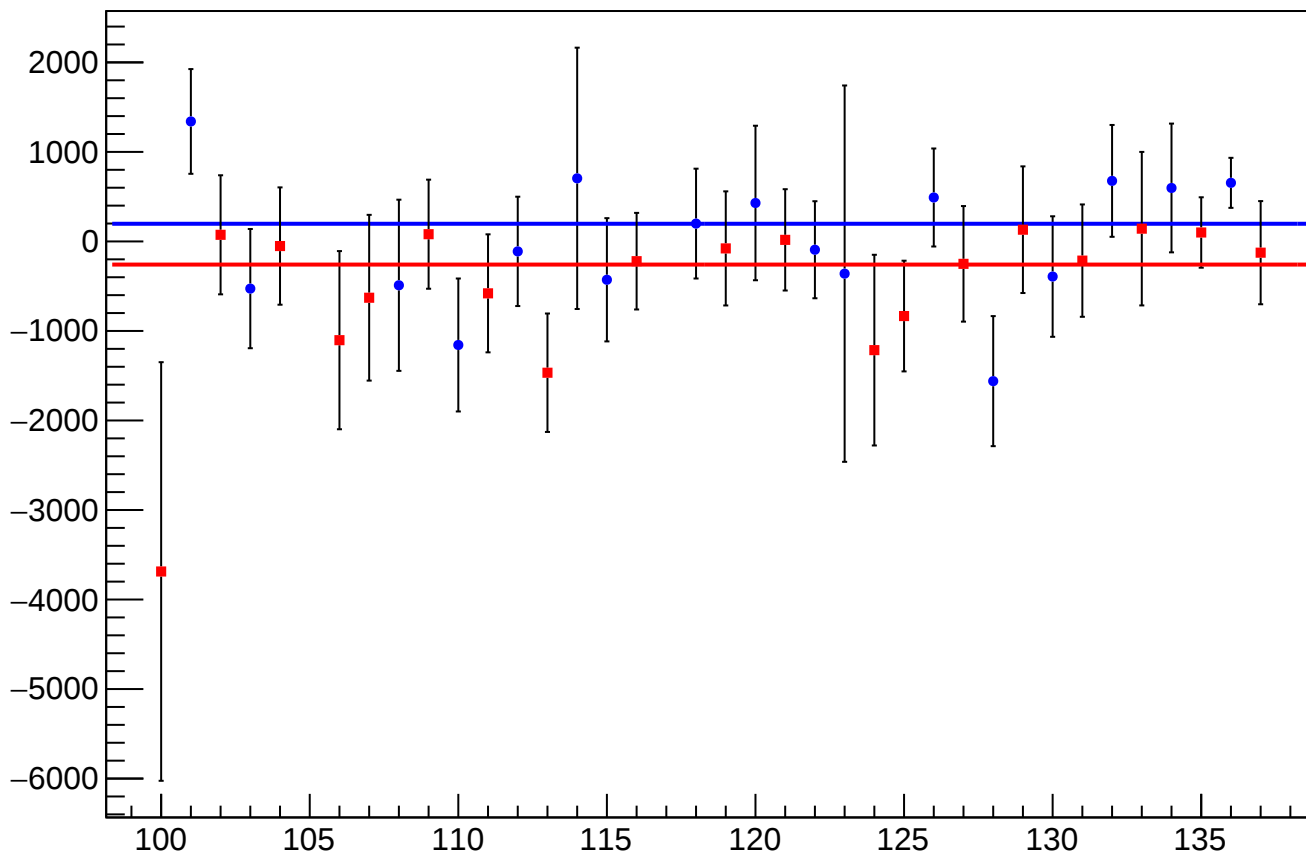
Right: 26.507+/-0.005  $\chi^2/\text{NDF}$ : 1289062.8/35

In: 26.103+/-0.007  $\chi^2/\text{NDF}$ : 604038.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 26.507+/-0.005  $\chi^2/\text{NDF}$ : 1289062.8/35

asym\_sam\_1357\_2468\_dd\_correction\_mean vs Slug, Sign Corrected



Right In: 197.327 $\pm$ 147.883  $\chi^2$ /NDF: 21.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -258.537 $\pm$ 149.867  $\chi^2$ /NDF: 10.7/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

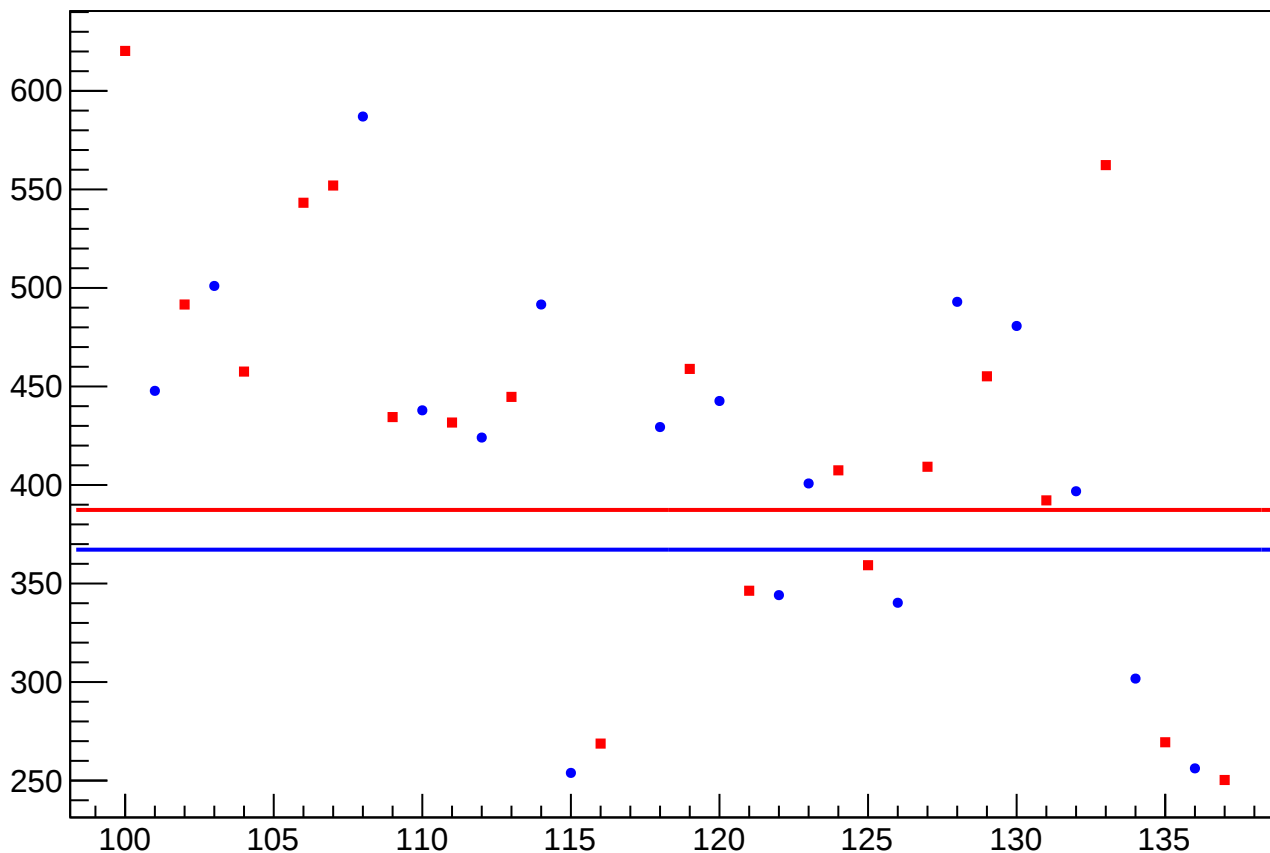
Right: -27.568 $\pm$ 105.264  $\chi^2$ /NDF: 36.3/35

In: 197.327 $\pm$ 147.883  $\chi^2$ /NDF:21.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -27.568 $\pm$ 105.264  $\chi^2$ /NDF: 36.3/35

asym\_sam\_1357\_2468\_dd\_correction\_rms vs Slug, Sign Corrected



Right In: 367.180 $\pm$ 0.105  $\chi^2$ /NDF: 827148.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 387.344 $\pm$ 0.106  $\chi^2$ /NDF: 774562.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

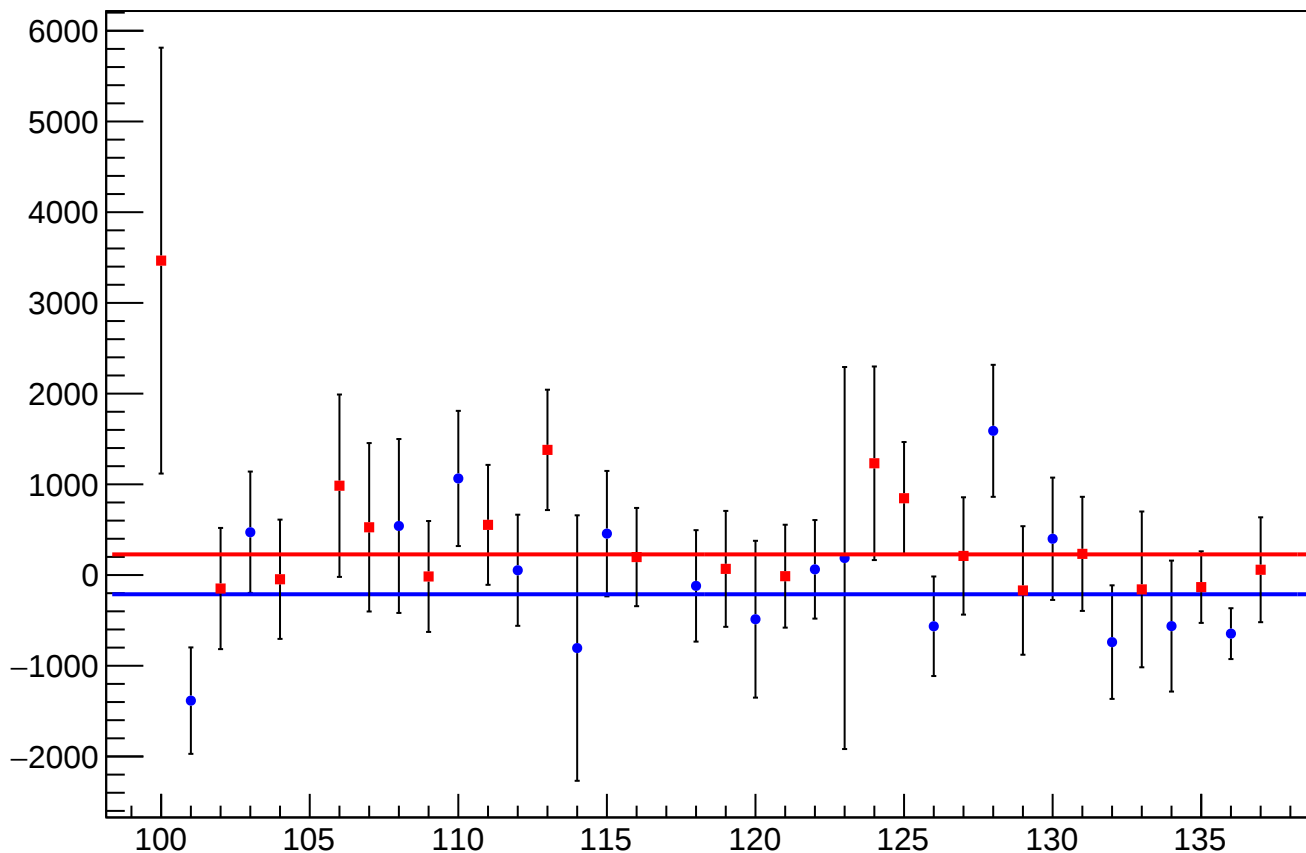
Right: 377.128 $\pm$ 0.074  $\chi^2$ /NDF: 1620053.1/35

In: 367.180 $\pm$ 0.105  $\chi^2$ /NDF:827148.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 377.128 $\pm$ 0.074  $\chi^2$ /NDF: 1620053.1/35

asym\_sam\_1357\_2468\_dd\_mean vs Slug, Sign Corrected



Right In: -211.859+/-148.316  $\chi^2/\text{NDF}$ : 21.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 227.831+/-150.317  $\chi^2/\text{NDF}$ : 10.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

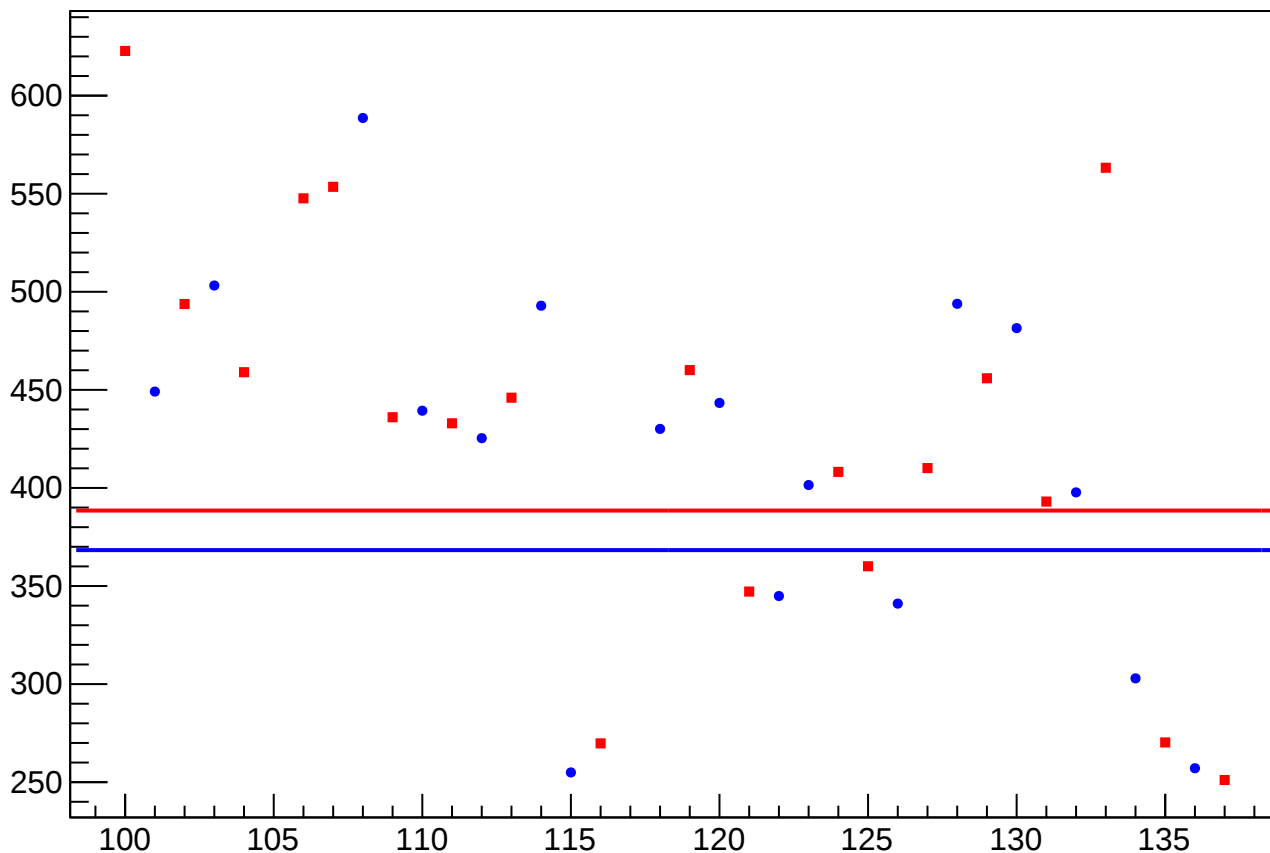
Right: 5.040+/-105.575  $\chi^2/\text{NDF}$ : 35.4/35

In: -211.859+/-148.316  $\chi^2/\text{NDF}$ : 21.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 5.040+/-105.575  $\chi^2/\text{NDF}$ : 35.4/35

asym\_sam\_1357\_2468\_dd\_rms vs Slug, Sign Corrected



Right In: 368.302 $\pm$ 0.105  $\chi^2$ /NDF: 824619.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 388.472 $\pm$ 0.106  $\chi^2$ /NDF: 774717.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

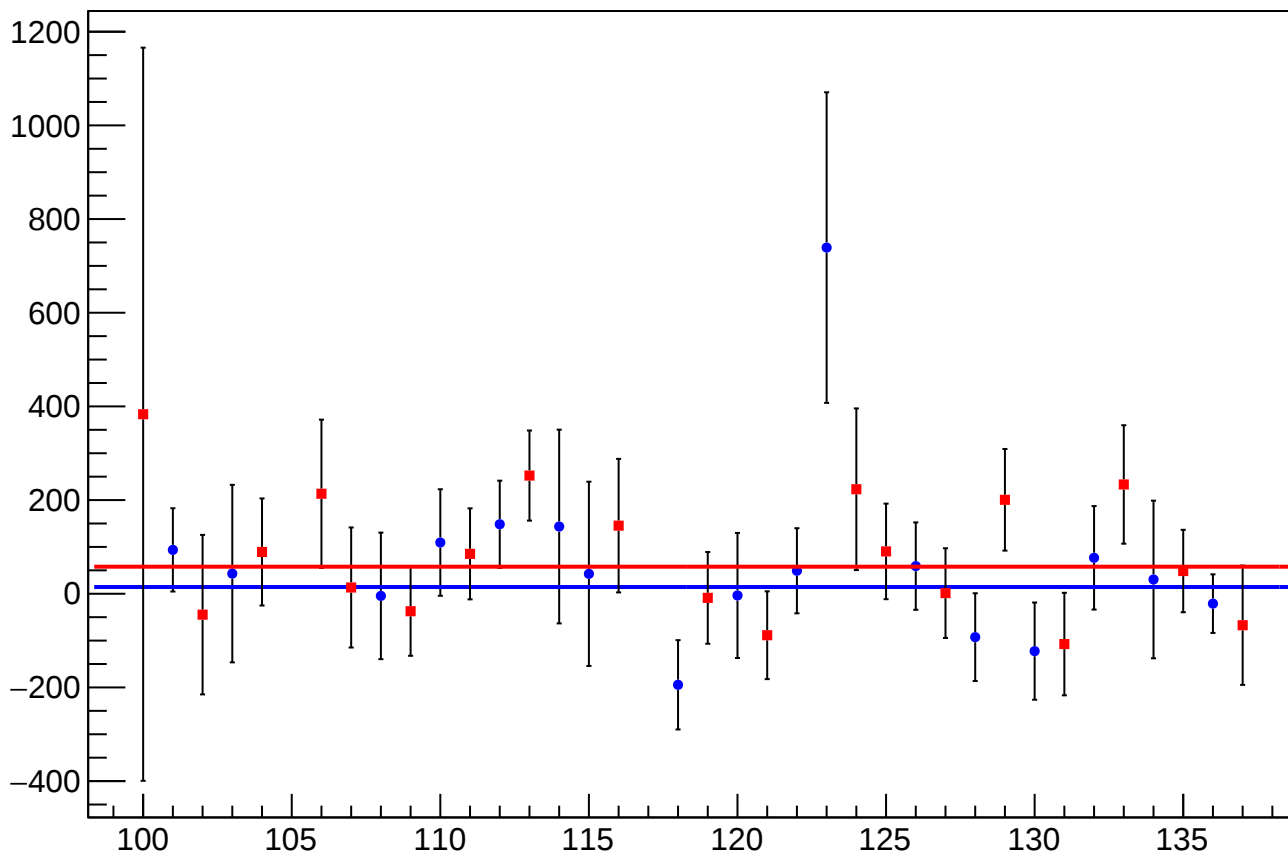
Right: 378.252 $\pm$ 0.075  $\chi^2$ /NDF: 1617584.5/35

In: 368.302 $\pm$ 0.105  $\chi^2$ /NDF:824619.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 378.252 $\pm$ 0.075  $\chi^2$ /NDF: 1617584.5/35

reg\_asym\_sam\_12345678\_avg\_mean vs Slug, Sign Corrected



Right In: 14.385+/-26.334  $\chi^2/\text{NDF}$ : 17.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 57.795+/-26.121  $\chi^2/\text{NDF}$ : 18.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

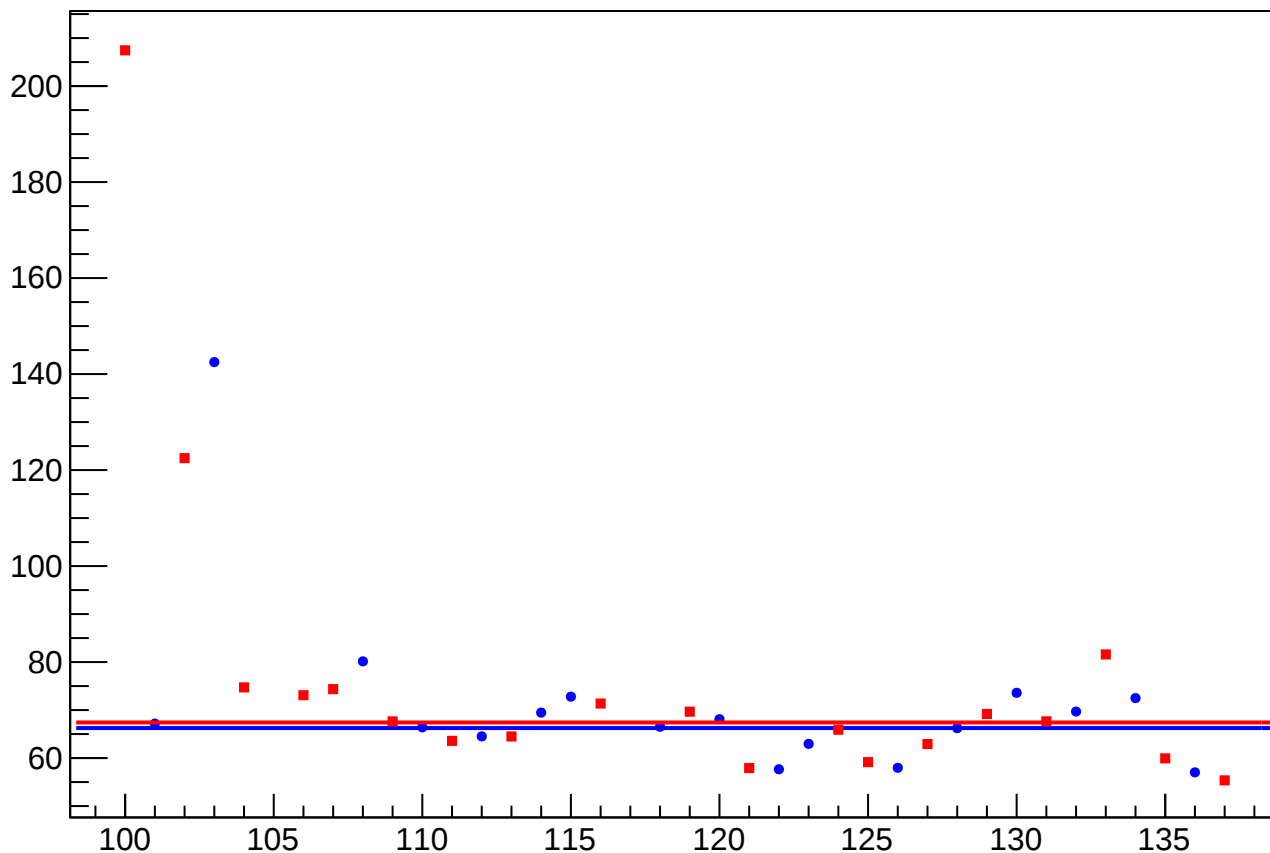
Right: 36.266+/-18.545  $\chi^2/\text{NDF}$ : 37.5/35

In: 14.385+/-26.334  $\chi^2/\text{NDF}$ : 17.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 36.266+/-18.545  $\chi^2/\text{NDF}$ : 37.5/35

reg\_asym\_sam\_12345678\_avg\_rms vs Slug, Sign Corrected



Right In: 66.247+/-0.019  $\chi^2/\text{NDF}$ : 440944.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 67.415+/-0.018  $\chi^2/\text{NDF}$ : 393608.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

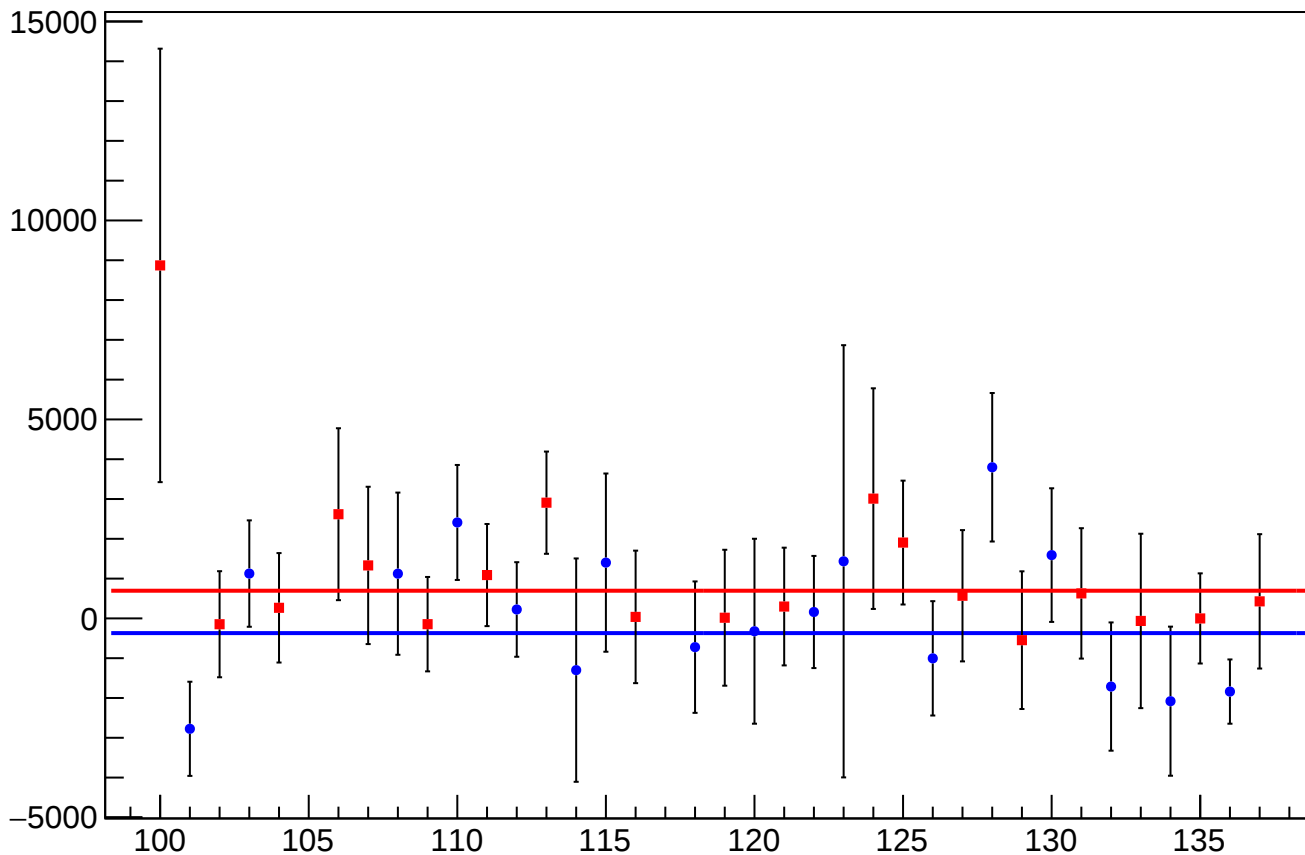
Right: 66.836+/-0.013  $\chi^2/\text{NDF}$ : 836536.0/35

In: 66.247+/-0.019  $\chi^2/\text{NDF}$ : 440944.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 66.836+/-0.013  $\chi^2/\text{NDF}$ : 836536.0/35

asym\_sam\_12345678\_avg\_correction\_mean vs Slug, Sign Corrected



Right In: -369.546+/-366.432  $\chi^2/\text{NDF}$ : 22.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 695.425+/-361.887  $\chi^2/\text{NDF}$ : 9.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

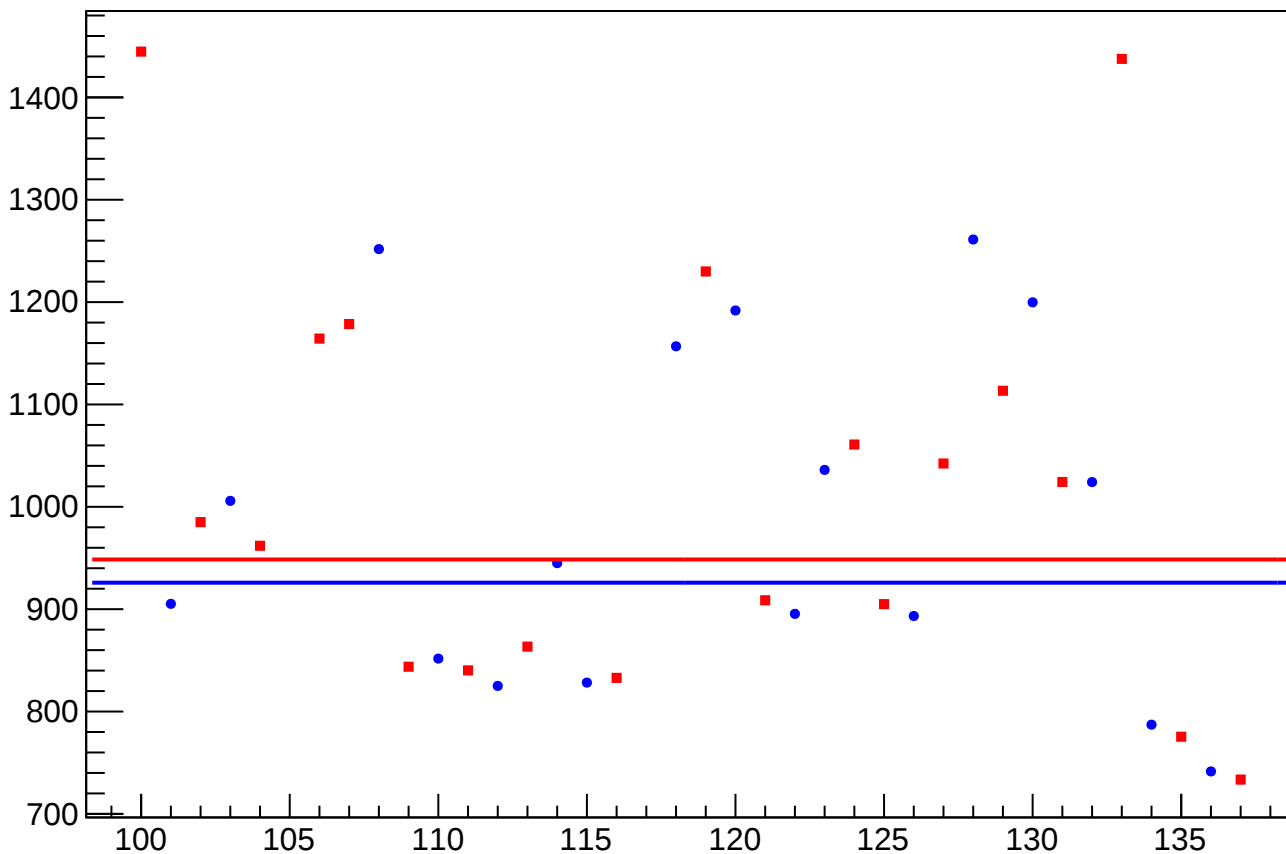
Right: 169.586+/-257.485  $\chi^2/\text{NDF}$ : 36.5/35

In: -369.546+/-366.432  $\chi^2/\text{NDF}$ : 22.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 169.586+/-257.485  $\chi^2/\text{NDF}$ : 36.5/35

asym\_sam\_12345678\_avg\_correction\_rms vs Slug, Sign Corrected



Right In: 925.885+/-0.259  $\chi^2/\text{NDF}$ : 391084.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 948.553+/-0.256  $\chi^2/\text{NDF}$ : 381931.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

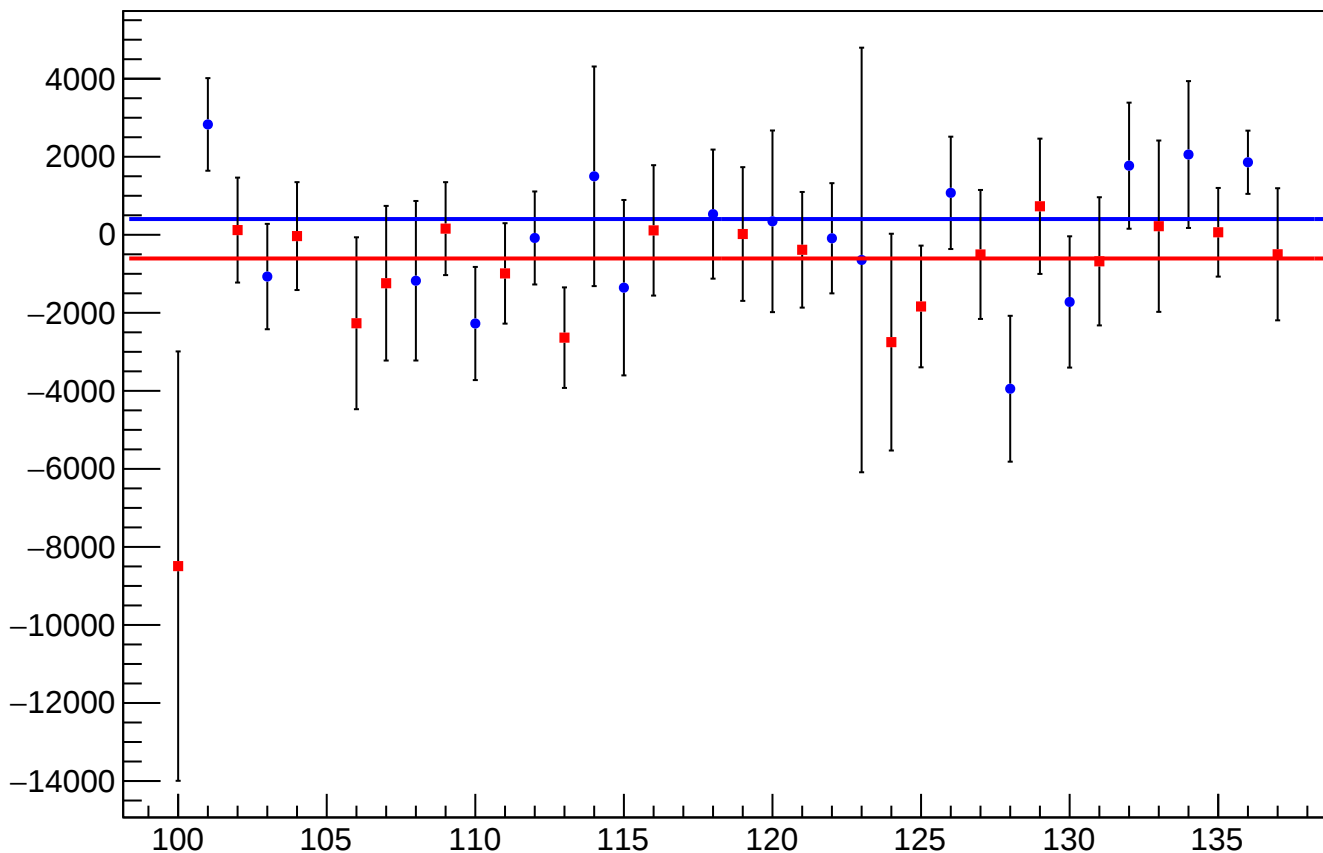
Right: 937.360+/-0.182  $\chi^2/\text{NDF}$ : 776890.8/35

In: 925.885+/-0.259  $\chi^2/\text{NDF}$ : 391084.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 937.360+/-0.182  $\chi^2/\text{NDF}$ : 776890.8/35

asym\_sam\_12345678\_avg\_mean vs Slug, Sign Corrected



Right In: 403.591+/-367.686  $\chi^2/\text{NDF}$ : 22.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -607.276+/-363.327  $\chi^2/\text{NDF}$ : 8.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

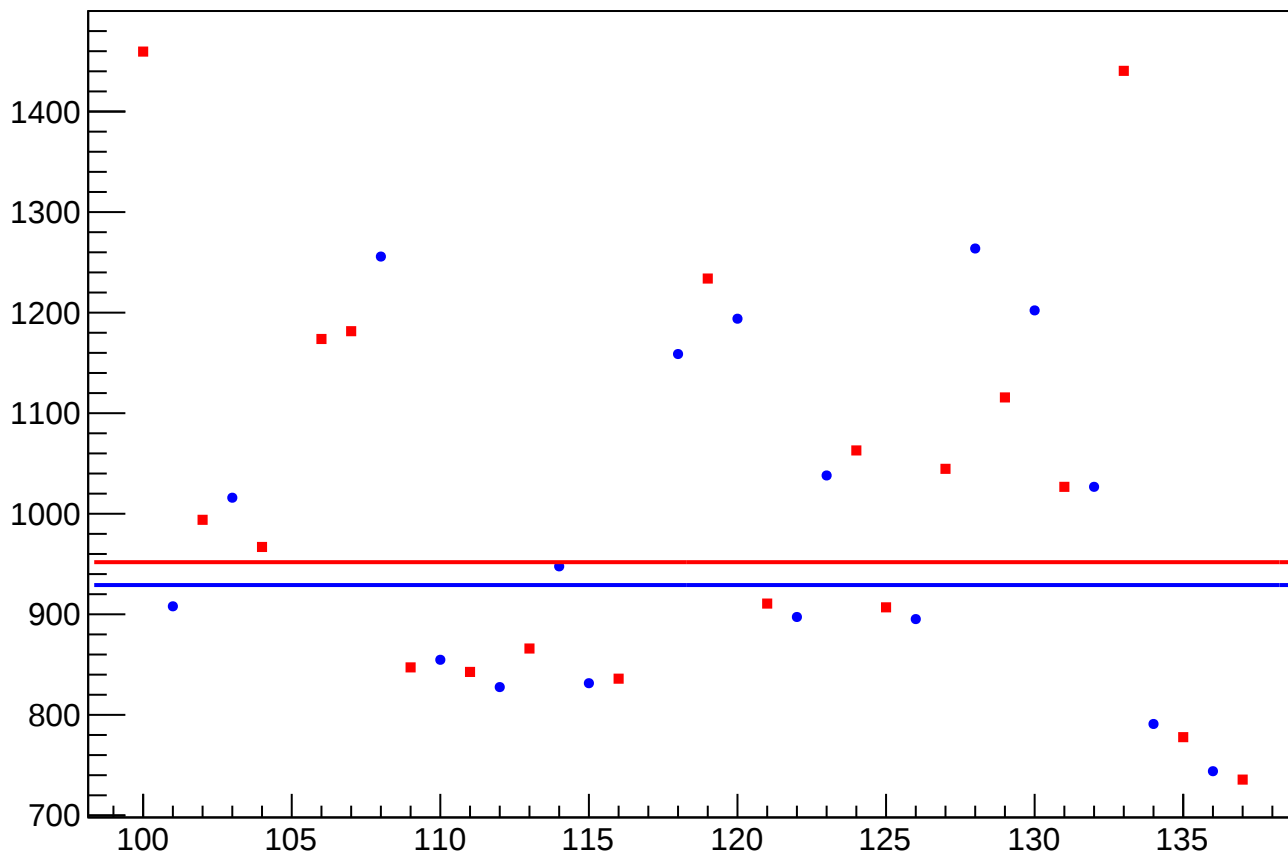
Right: -107.869+/-258.438  $\chi^2/\text{NDF}$ : 35.1/35

In: 403.591+/-367.686  $\chi^2/\text{NDF}$ : 22.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -107.869+/-258.438  $\chi^2/\text{NDF}$ : 35.1/35

asym\_sam\_12345678\_avg\_rms vs Slug, Sign Corrected



Right In: 929.096+/-0.260  $\chi^2/\text{NDF}$ : 390292.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 951.847+/-0.257  $\chi^2/\text{NDF}$ : 382219.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

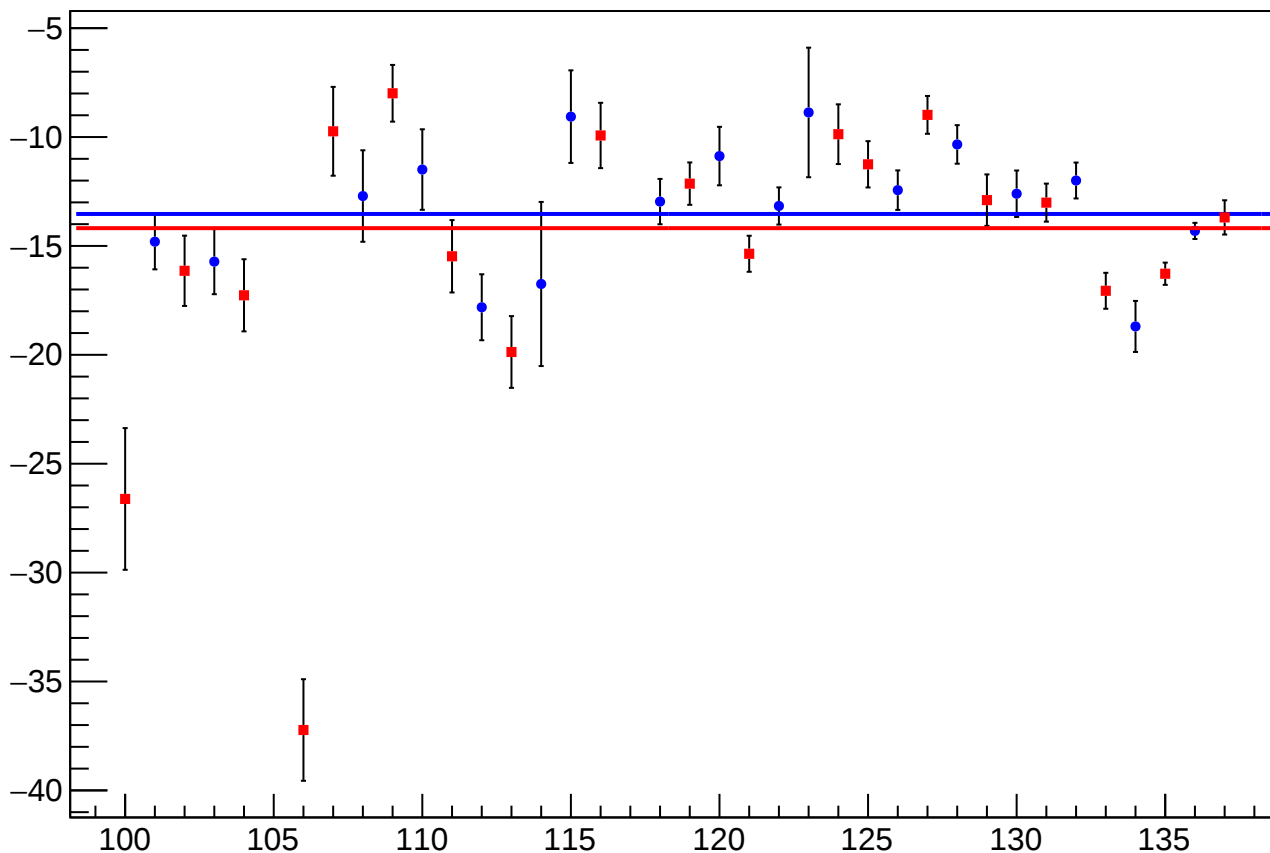
Right: 940.607+/-0.183  $\chi^2/\text{NDF}$ : 776385.5/35

In: 929.096+/-0.260  $\chi^2/\text{NDF}$ : 390292.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 940.607+/-0.183  $\chi^2/\text{NDF}$ : 776385.5/35

reg\_asym\_sam1\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-13.532 \pm 0.235$   $\chi^2/\text{NDF}$ : 67.0/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-14.184 \pm 0.241$   $\chi^2/\text{NDF}$ : 257.2/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

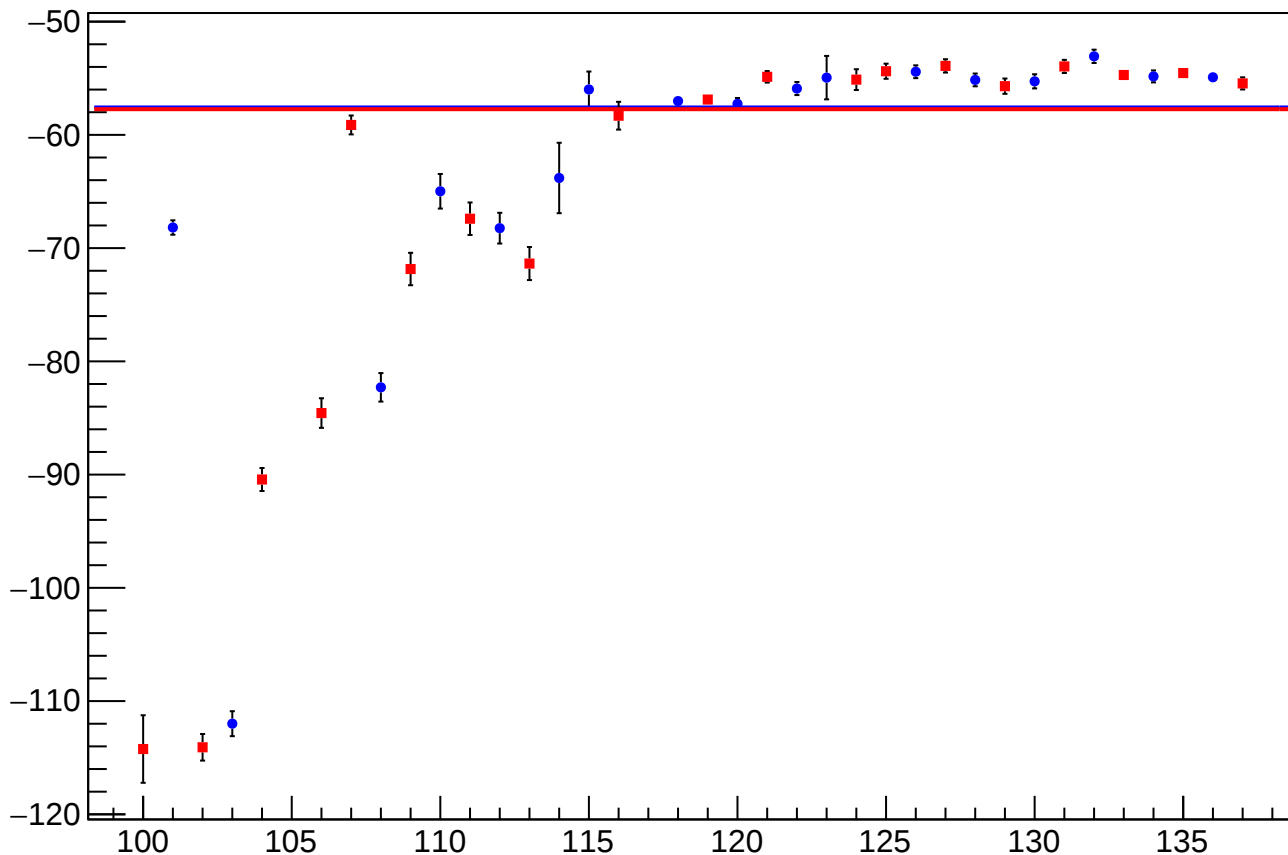
Right:  $-13.850 \pm 0.168$   $\chi^2/\text{NDF}$ : 328.0/35

In:  $-13.532 \pm 0.235$   $\chi^2/\text{NDF}$ : 67.0/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-13.850 \pm 0.168$   $\chi^2/\text{NDF}$ : 328.0/35

reg\_asym\_sam1\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-57.581 \pm 0.143$   $\chi^2/\text{NDF}$ : 3455.5/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-57.732 \pm 0.143$   $\chi^2/\text{NDF}$ : 4698.5/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

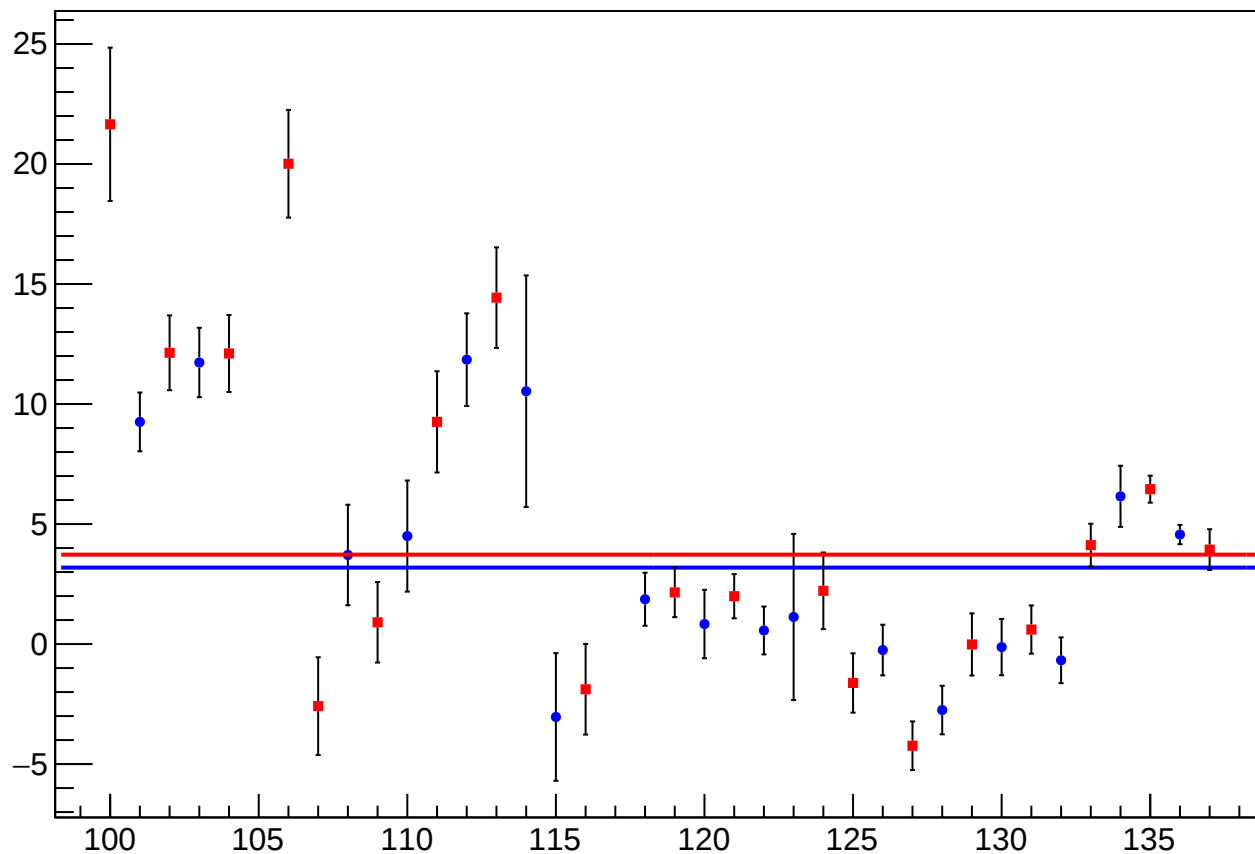
Right:  $-57.657 \pm 0.101$   $\chi^2/\text{NDF}$ : 8154.5/35

In:  $-57.581 \pm 0.143$   $\chi^2/\text{NDF}$ : 3455.5/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-57.657 \pm 0.101$   $\chi^2/\text{NDF}$ : 8154.5/35

reg\_asym\_sam1\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 3.185+/-0.259  $\chi^2/\text{NDF}$ : 185.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3.726+/-0.268  $\chi^2/\text{NDF}$ : 324.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

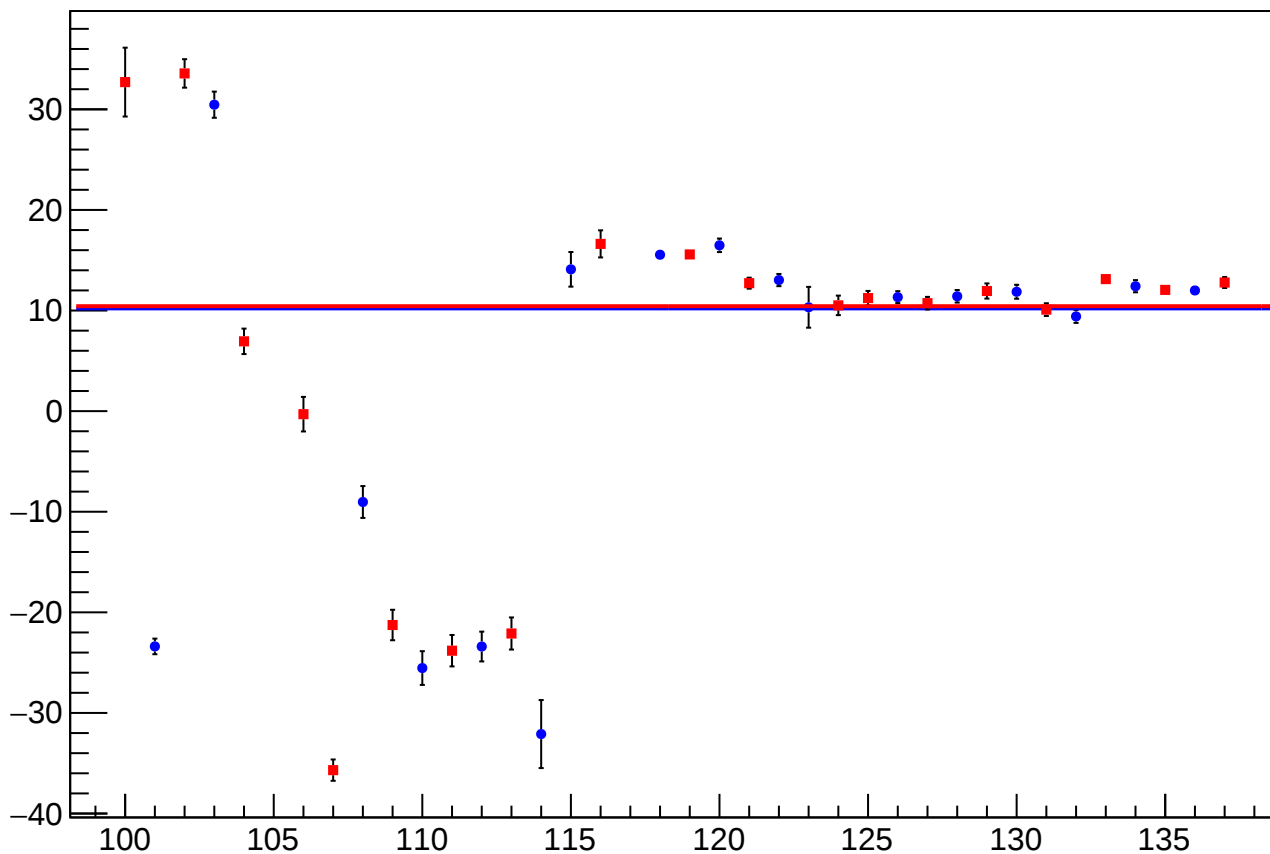
Right: 3.447+/-0.186  $\chi^2/\text{NDF}$ : 512.0/35

In: 3.185+/-0.259  $\chi^2/\text{NDF}$ : 185.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.447+/-0.186  $\chi^2/\text{NDF}$ : 512.0/35

reg\_asym\_sam1\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 10.215+/-0.158  $\chi^2/\text{NDF}$ : 3692.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 10.430+/-0.160  $\chi^2/\text{NDF}$ : 3826.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

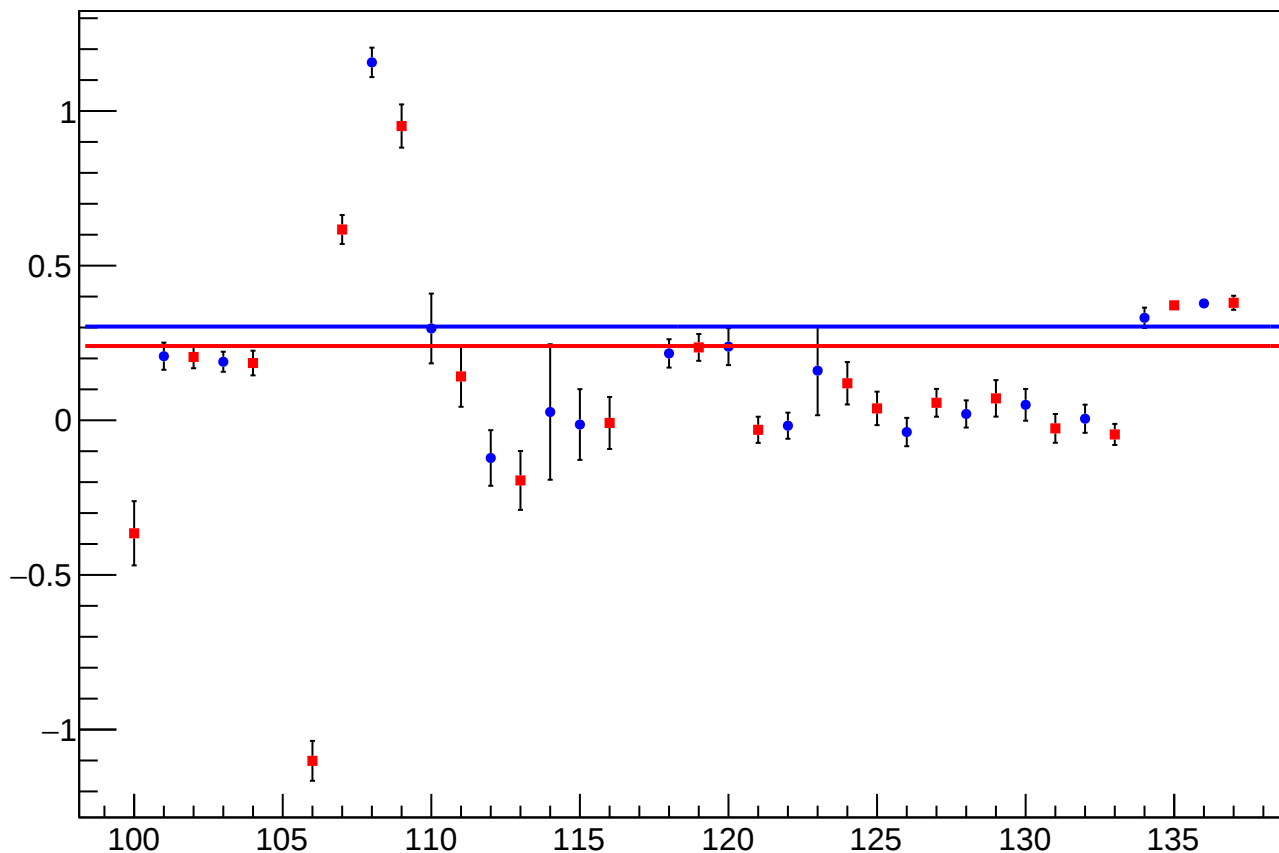
Right: 10.321+/-0.112  $\chi^2/\text{NDF}$ : 7520.5/35

In: 10.215+/-0.158  $\chi^2/\text{NDF}$ :3692.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 10.321+/-0.112  $\chi^2/\text{NDF}$ : 7520.5/35

reg\_asym\_sam1\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.303 $\pm$ 0.008  $\chi^2$ /NDF: 646.3/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.240 $\pm$ 0.009  $\chi^2$ /NDF: 984.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

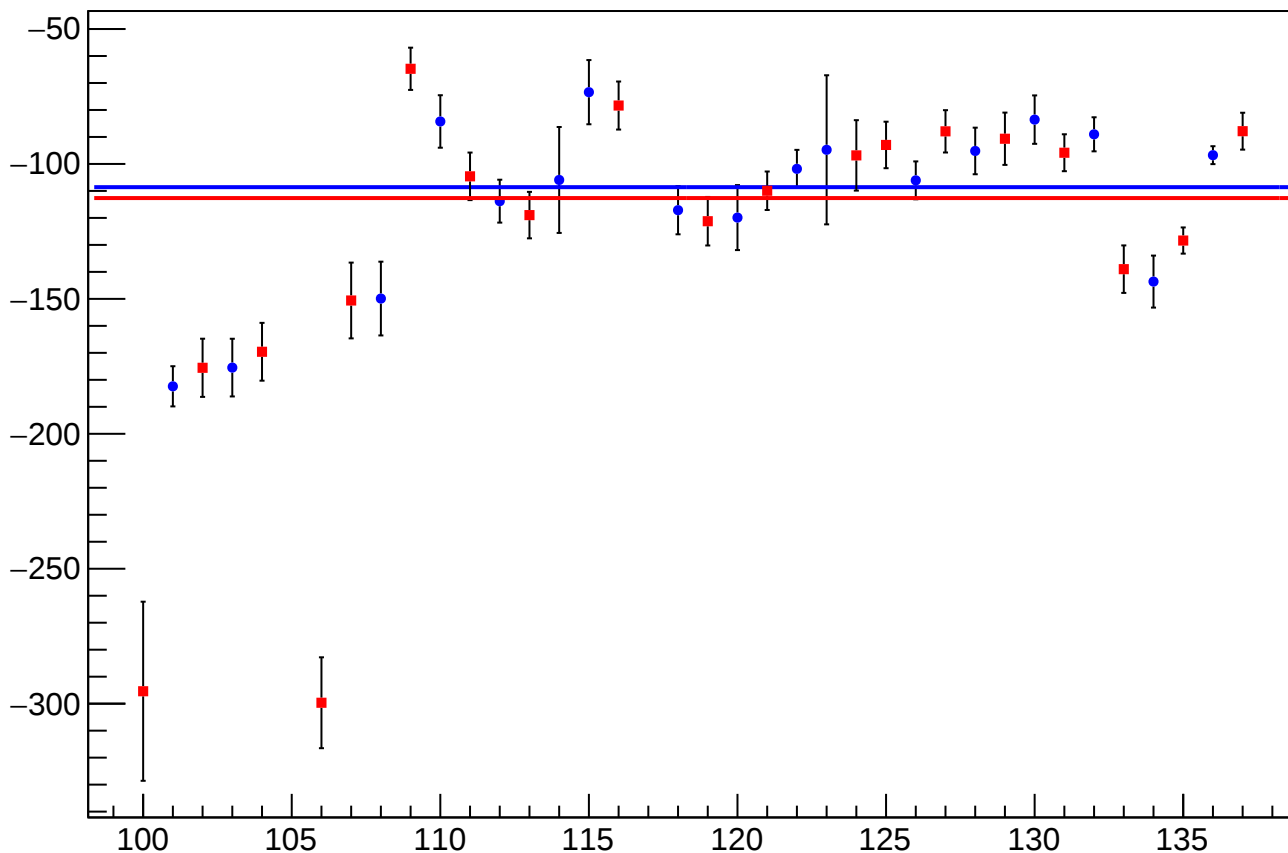
Right: 0.273 $\pm$ 0.006  $\chi^2$ /NDF: 1658.9/35

In: 0.303 $\pm$ 0.008  $\chi^2$ /NDF:646.3/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.273 $\pm$ 0.006  $\chi^2$ /NDF: 1658.9/35

reg\_asym\_sam2\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-108.603 \pm 1.883$   $\chi^2/\text{NDF}: 210.8/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-112.644 \pm 1.966$   $\chi^2/\text{NDF}: 338.5/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

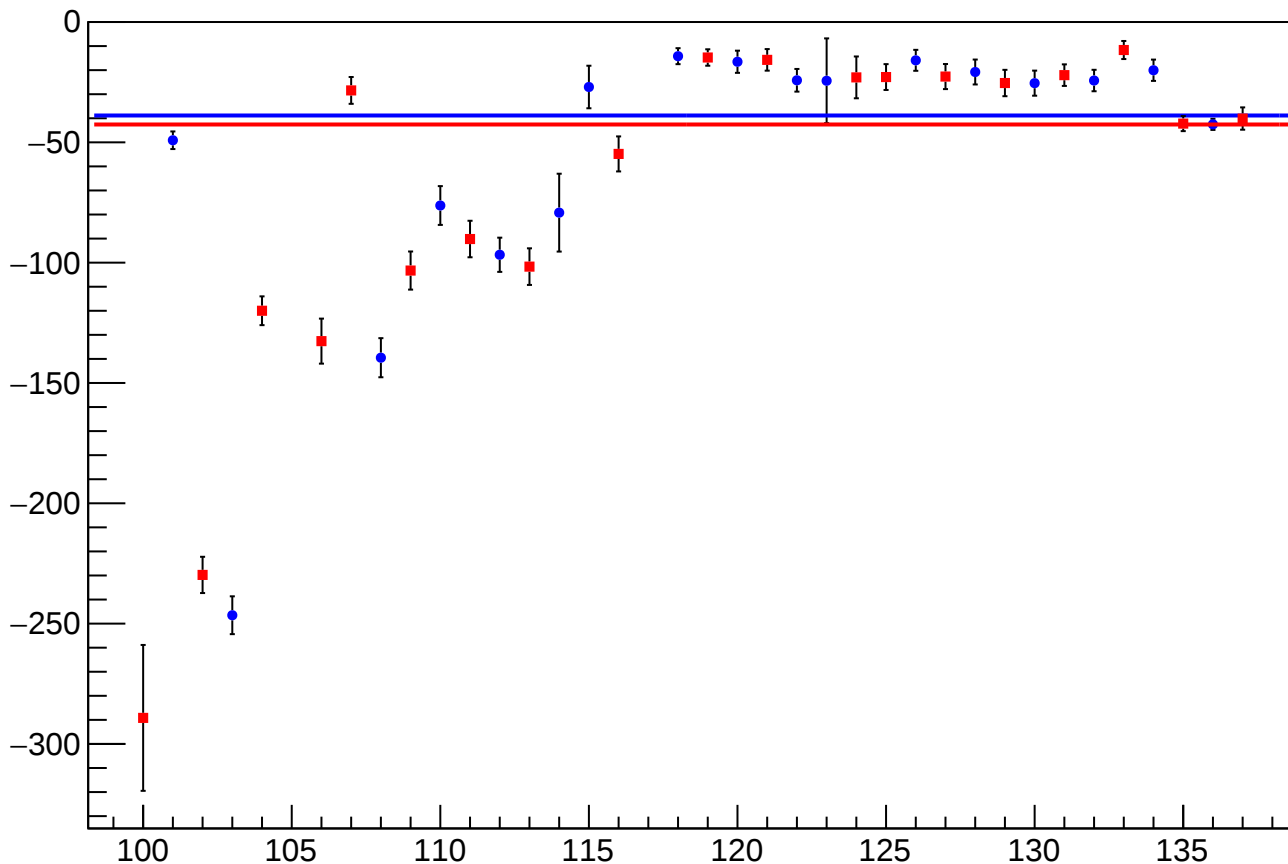
Right:  $-110.536 \pm 1.360$   $\chi^2/\text{NDF}: 551.5/35$

In:  $-108.603 \pm 1.883$   $\chi^2/\text{NDF}: 210.8/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-110.536 \pm 1.360$   $\chi^2/\text{NDF}: 551.5/35$

reg\_asym\_sam2\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-38.844 \pm 1.148$   $\chi^2/\text{NDF}: 1121.9/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-42.586 \pm 1.210$   $\chi^2/\text{NDF}: 1345.7/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

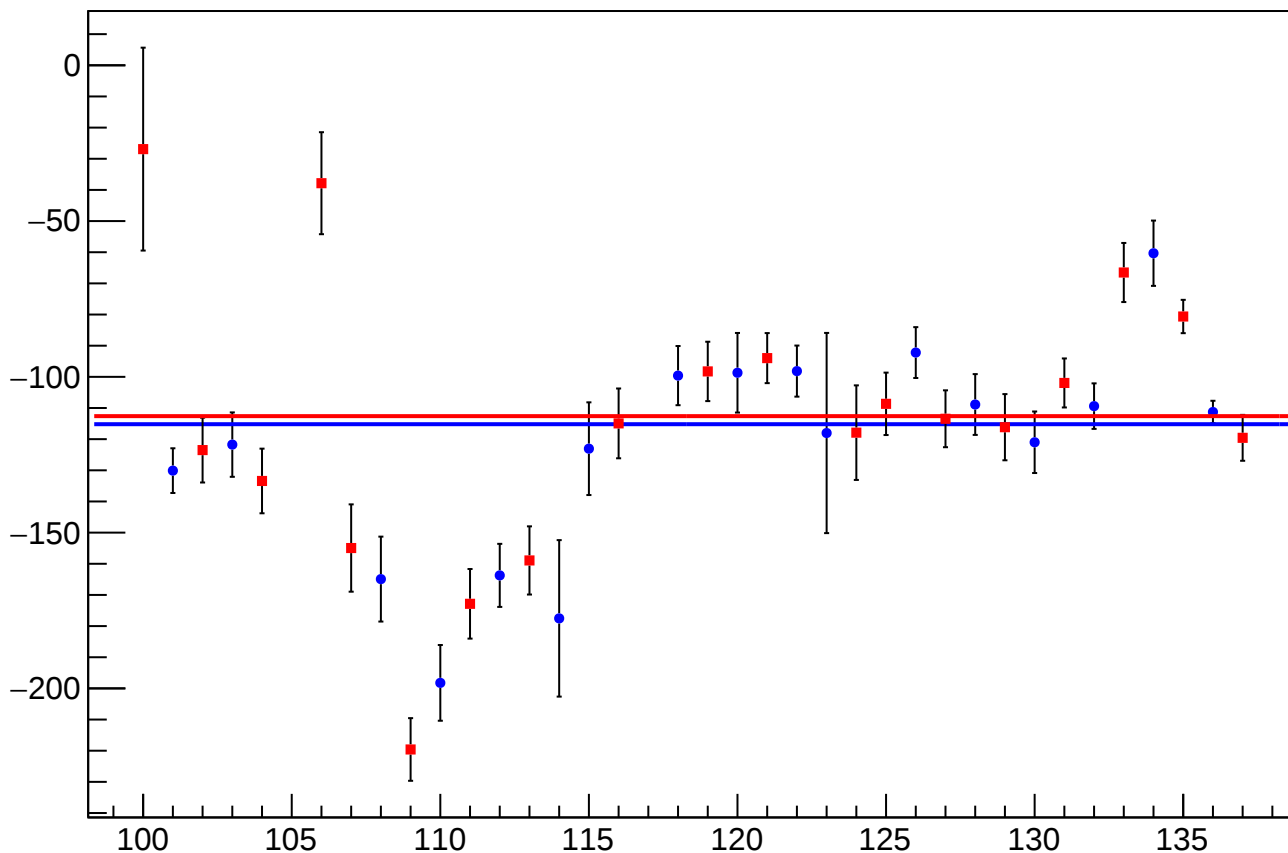
Right:  $-40.617 \pm 0.833$   $\chi^2/\text{NDF}: 2472.6/35$

In:  $-38.844 \pm 1.148$   $\chi^2/\text{NDF}: 1121.9/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-40.617 \pm 0.833$   $\chi^2/\text{NDF}: 2472.6/35$

reg\_asym\_sam2\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -115.199+/-2.081  $\chi^2/\text{NDF}$ : 140.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -112.611+/-2.209  $\chi^2/\text{NDF}$ : 272.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

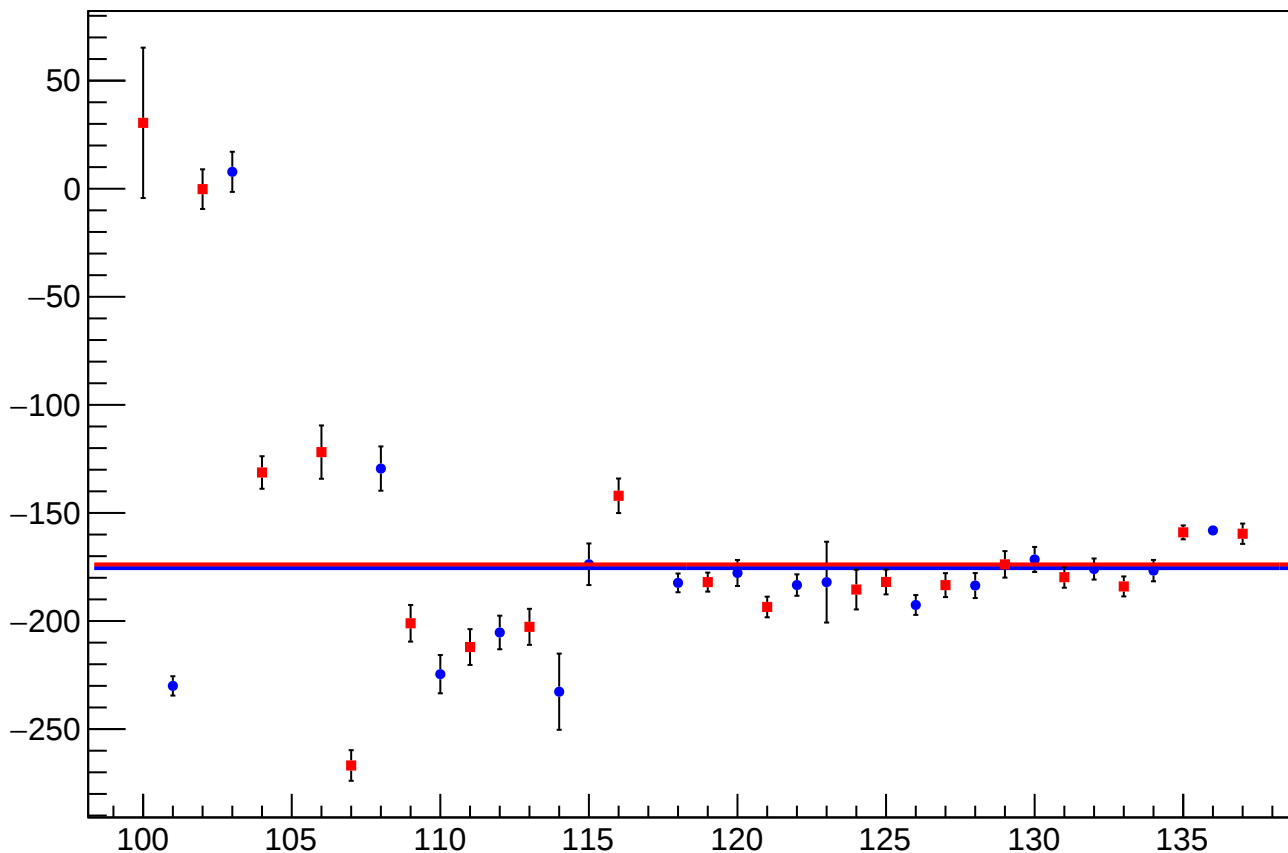
Right: -113.982+/-1.515  $\chi^2/\text{NDF}$ : 413.9/35

In: -115.199+/-2.081  $\chi^2/\text{NDF}$ : 140.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -113.982+/-1.515  $\chi^2/\text{NDF}$ : 413.9/35

reg\_asym\_sam2\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-175.521 \pm 1.277$   $\chi^2/\text{NDF}$ : 692.3/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-173.830 \pm 1.357$   $\chi^2/\text{NDF}$ : 737.9/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

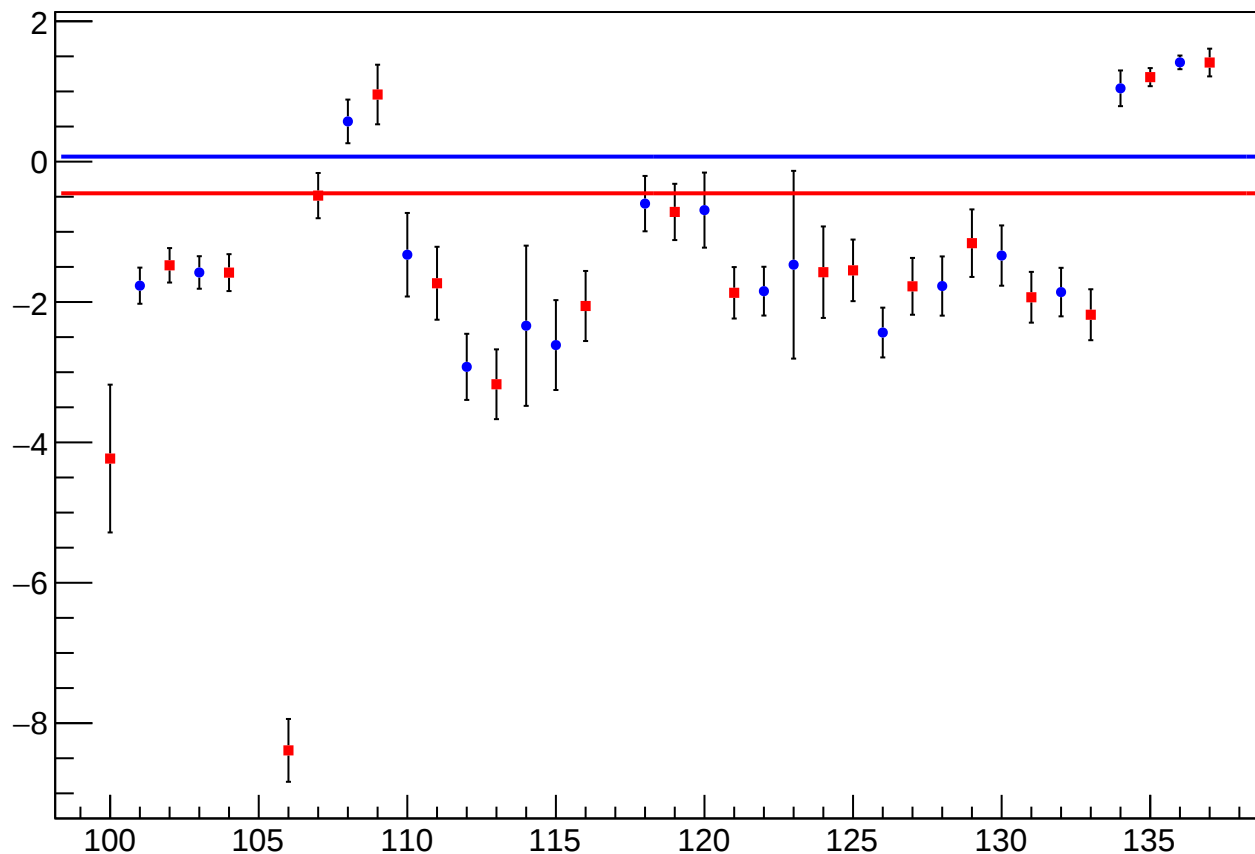
Right:  $-174.726 \pm 0.930$   $\chi^2/\text{NDF}$ : 1431.0/35

In:  $-175.521 \pm 1.277$   $\chi^2/\text{NDF}$ : 692.3/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-174.726 \pm 0.930$   $\chi^2/\text{NDF}$ : 1431.0/35

reg\_asym\_sam2\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.072 $\pm$ 0.067  $\chi^2$ /NDF: 525.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.451 $\pm$ 0.071  $\chi^2$ /NDF: 751.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

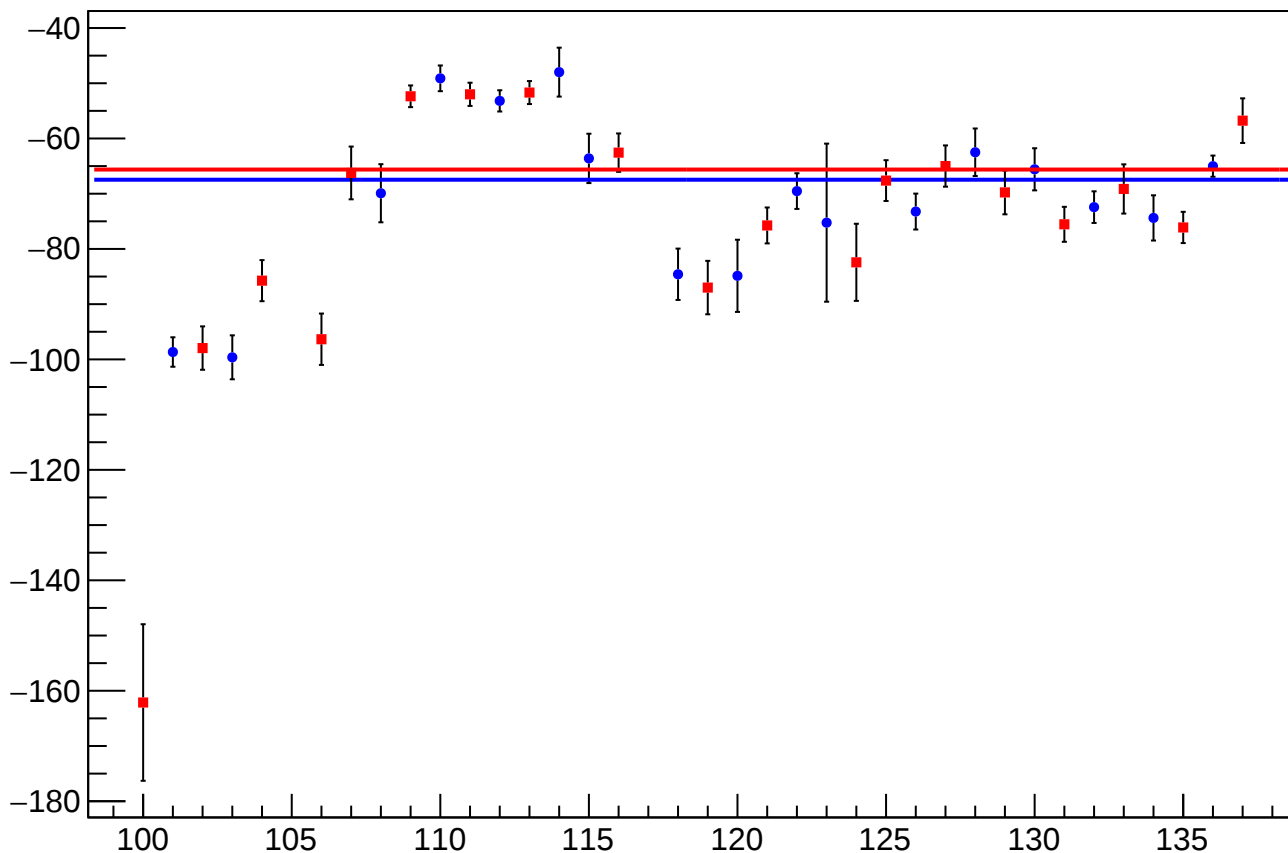
Right: -0.174 $\pm$ 0.049  $\chi^2$ /NDF: 1305.0/35

In: 0.072 $\pm$ 0.067  $\chi^2$ /NDF:525.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -0.174 $\pm$ 0.049  $\chi^2$ /NDF: 1305.0/35

reg\_asym\_sam3\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-67.467 \pm 0.782$   $\chi^2/\text{NDF}$ : 373.3/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-65.625 \pm 0.759$   $\chi^2/\text{NDF}$ : 385.5/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

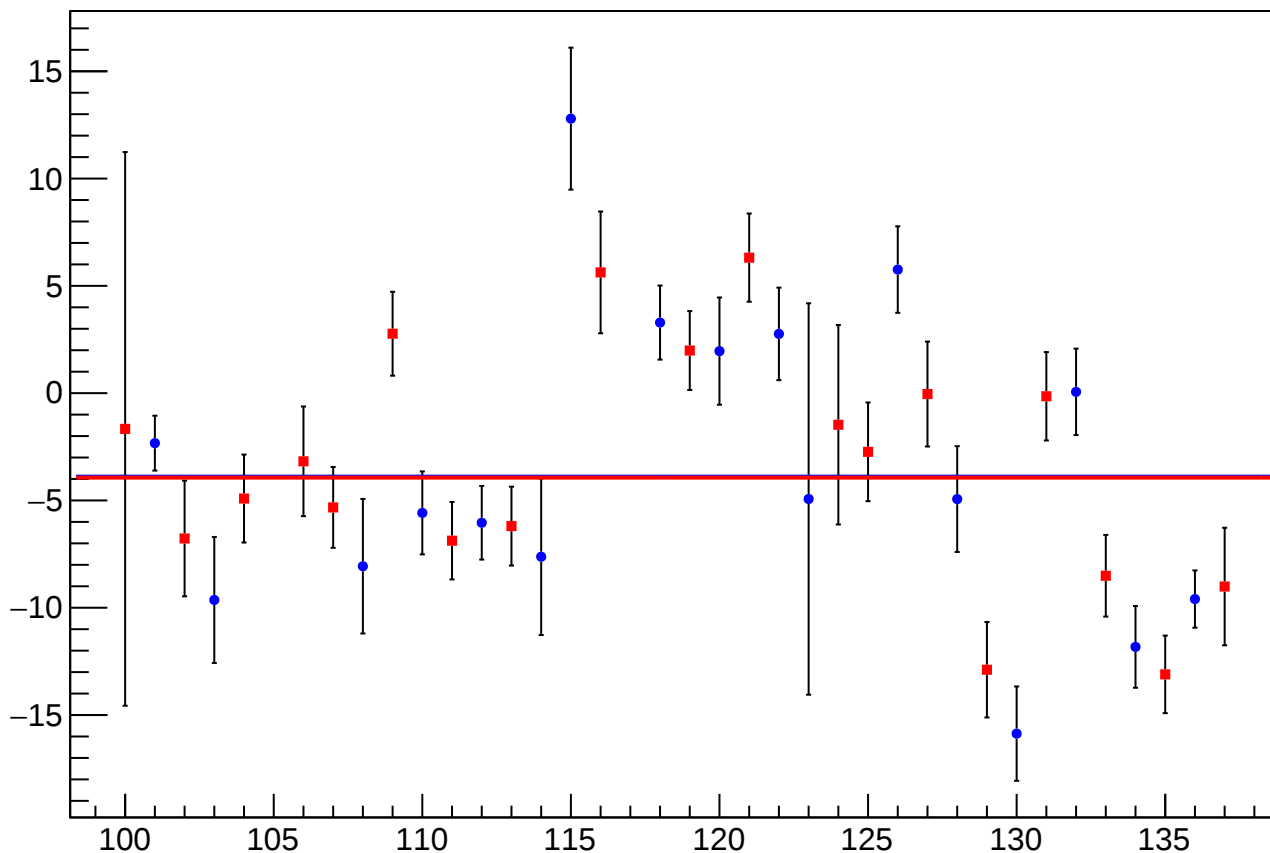
Right:  $-66.520 \pm 0.545$   $\chi^2/\text{NDF}$ : 761.7/35

In:  $-67.467 \pm 0.782$   $\chi^2/\text{NDF}$ : 373.3/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-66.520 \pm 0.545$   $\chi^2/\text{NDF}$ : 761.7/35

reg\_asym\_sam3\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -3.890+/-0.498  $\chi^2/\text{NDF}$ : 160.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -3.937+/-0.507  $\chi^2/\text{NDF}$ : 122.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

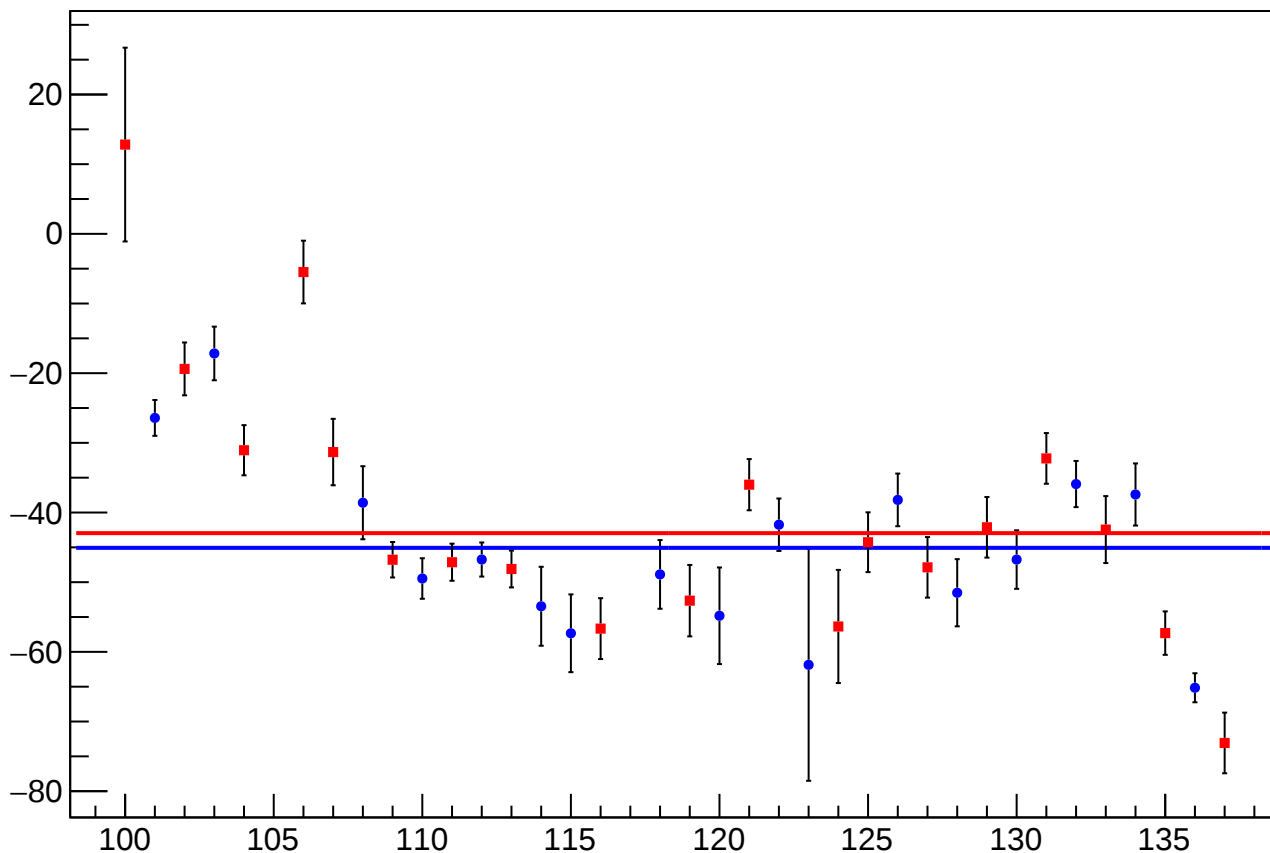
Right: -3.913+/-0.355  $\chi^2/\text{NDF}$ : 282.6/35

In: -3.890+/-0.498  $\chi^2/\text{NDF}$ :160.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -3.913+/-0.355  $\chi^2/\text{NDF}$ : 282.6/35

reg\_asym\_sam3\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -45.070+/-0.883  $\chi^2/\text{NDF}$ : 229.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -42.959+/-0.878  $\chi^2/\text{NDF}$ : 248.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

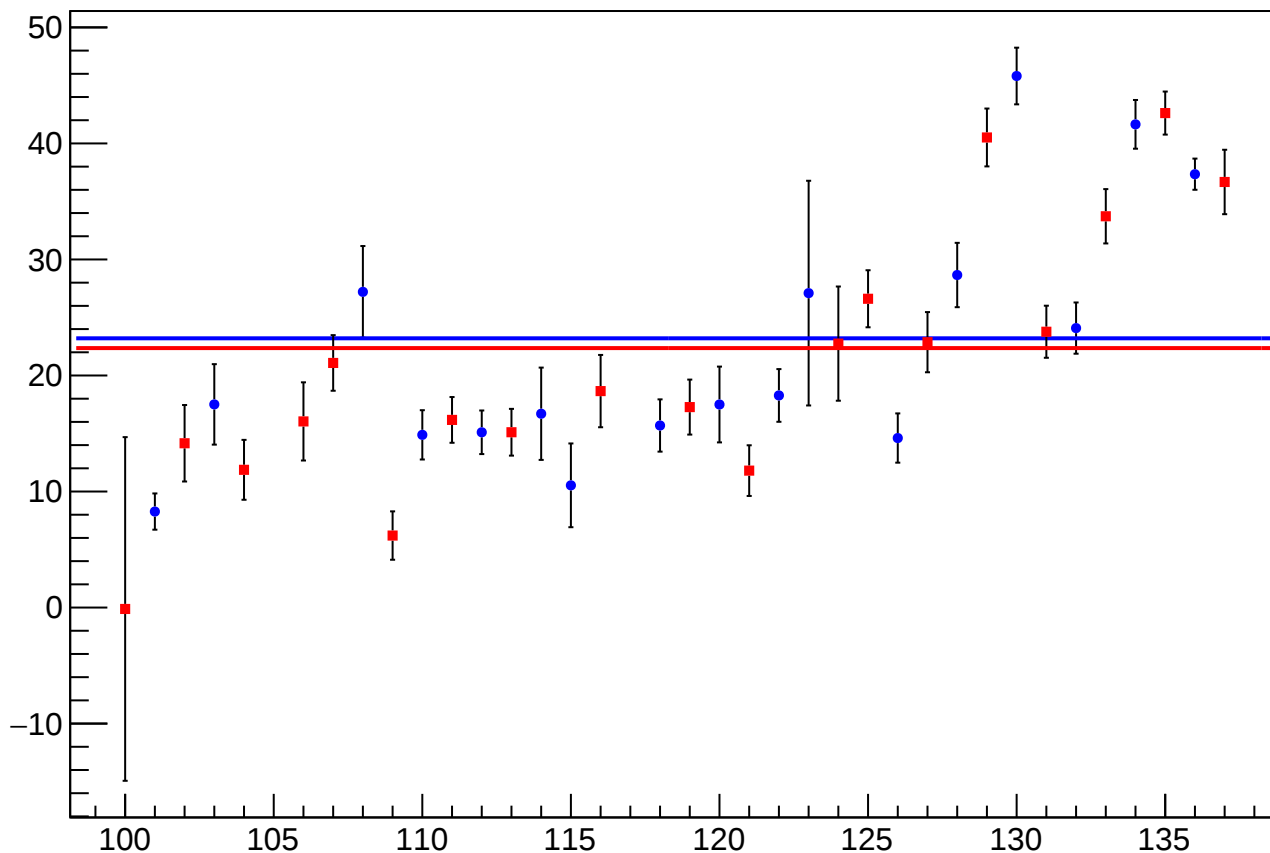
Right: -44.008+/-0.623  $\chi^2/\text{NDF}$ : 480.9/35

In: -45.070+/-0.883  $\chi^2/\text{NDF}$ : 229.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -44.008+/-0.623  $\chi^2/\text{NDF}$ : 480.9/35

reg\_asym\_sam3\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 23.205 $\pm$ 0.559  $\chi^2$ /NDF: 457.3/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 22.361 $\pm$ 0.573  $\chi^2$ /NDF: 366.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

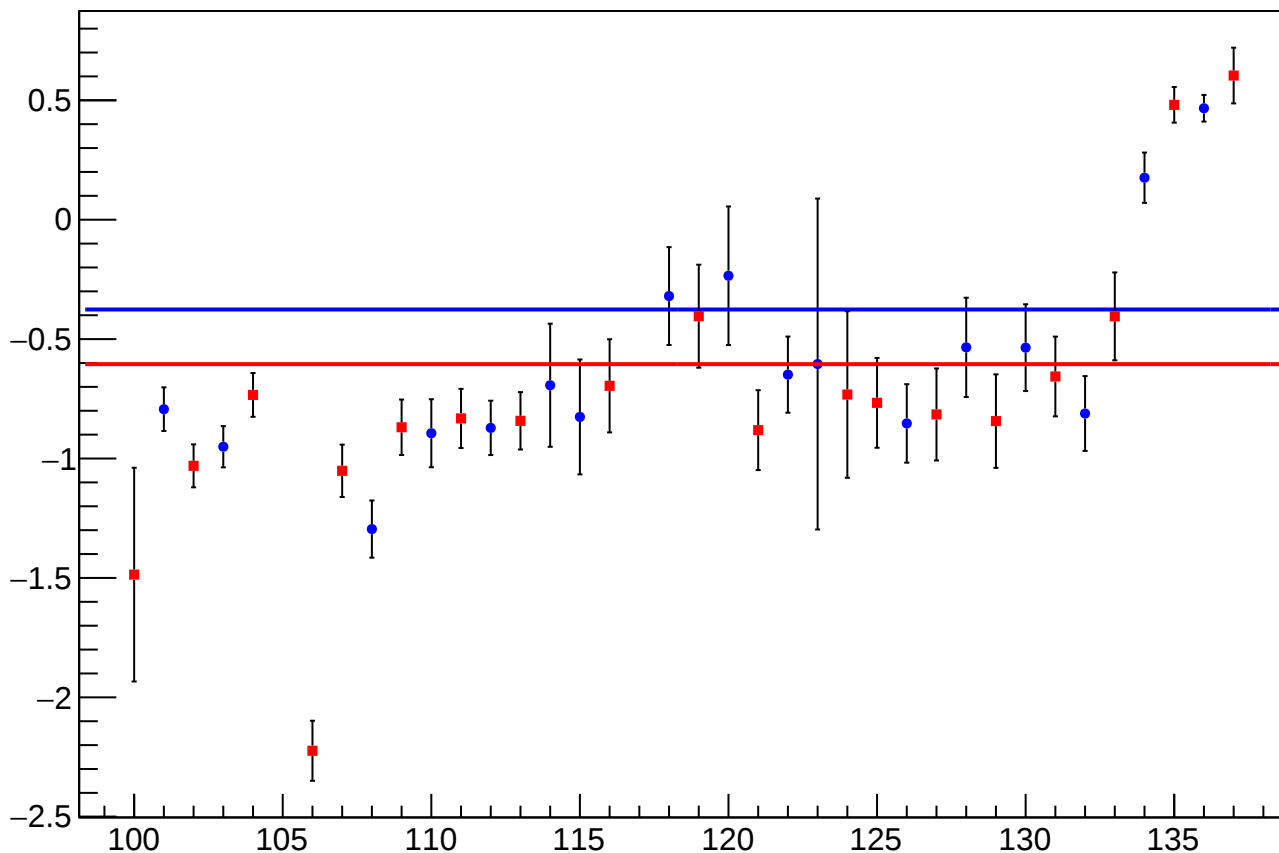
Right: 22.793 $\pm$ 0.400  $\chi^2$ /NDF: 825.2/35

In: 23.205 $\pm$ 0.559  $\chi^2$ /NDF:457.3/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 22.793 $\pm$ 0.400  $\chi^2$ /NDF: 825.2/35

reg\_asym\_sam3\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.376 \pm 0.030$   $\chi^2/\text{NDF}: 437.3/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-0.605 \pm 0.030$   $\chi^2/\text{NDF}: 551.1/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

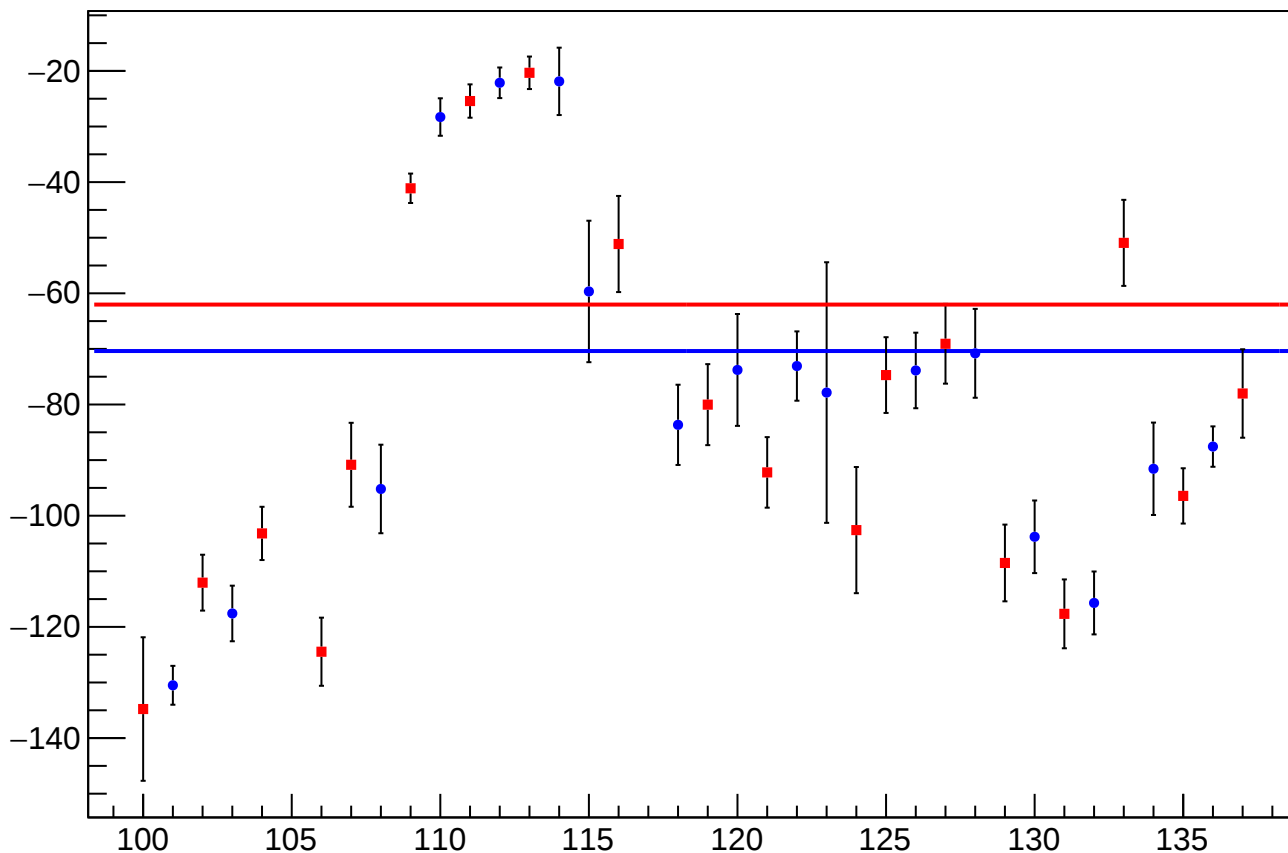
Right:  $-0.490 \pm 0.021$   $\chi^2/\text{NDF}: 1017.2/35$

In:  $-0.376 \pm 0.030$   $\chi^2/\text{NDF}: 437.3/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-0.490 \pm 0.021$   $\chi^2/\text{NDF}: 1017.2/35$

reg\_asym\_sam4\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-70.382 \pm 1.260$   $\chi^2/\text{NDF}$ : 1045.7/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-62.026 \pm 1.170$   $\chi^2/\text{NDF}$ : 965.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

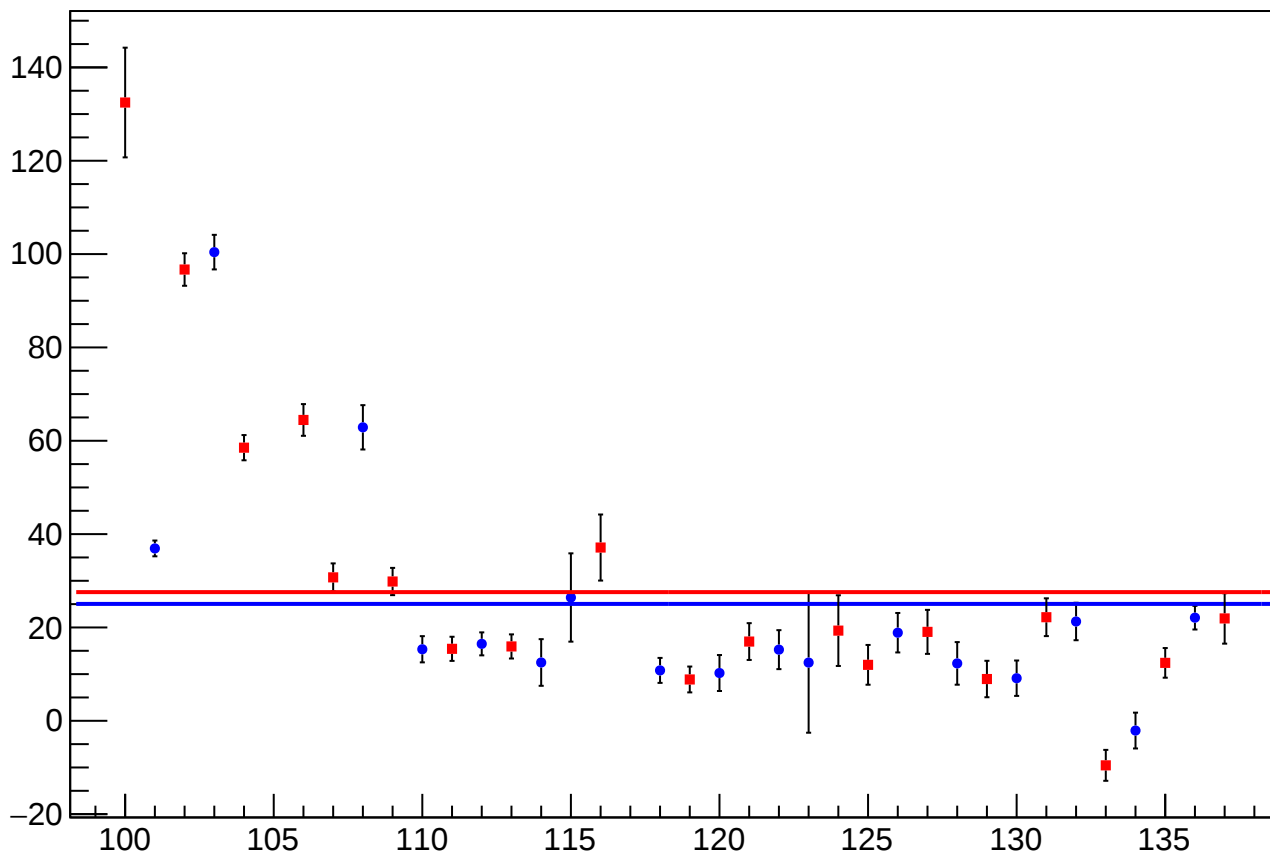
Right:  $-65.896 \pm 0.857$   $\chi^2/\text{NDF}$ : 2034.9/35

In:  $-70.382 \pm 1.260$   $\chi^2/\text{NDF}$ : 1045.7/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-65.896 \pm 0.857$   $\chi^2/\text{NDF}$ : 2034.9/35

reg\_asym\_sam4\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 25.045+/-0.806  $\chi^2/\text{NDF}$ : 686.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 27.573+/-0.810  $\chi^2/\text{NDF}$ : 1012.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

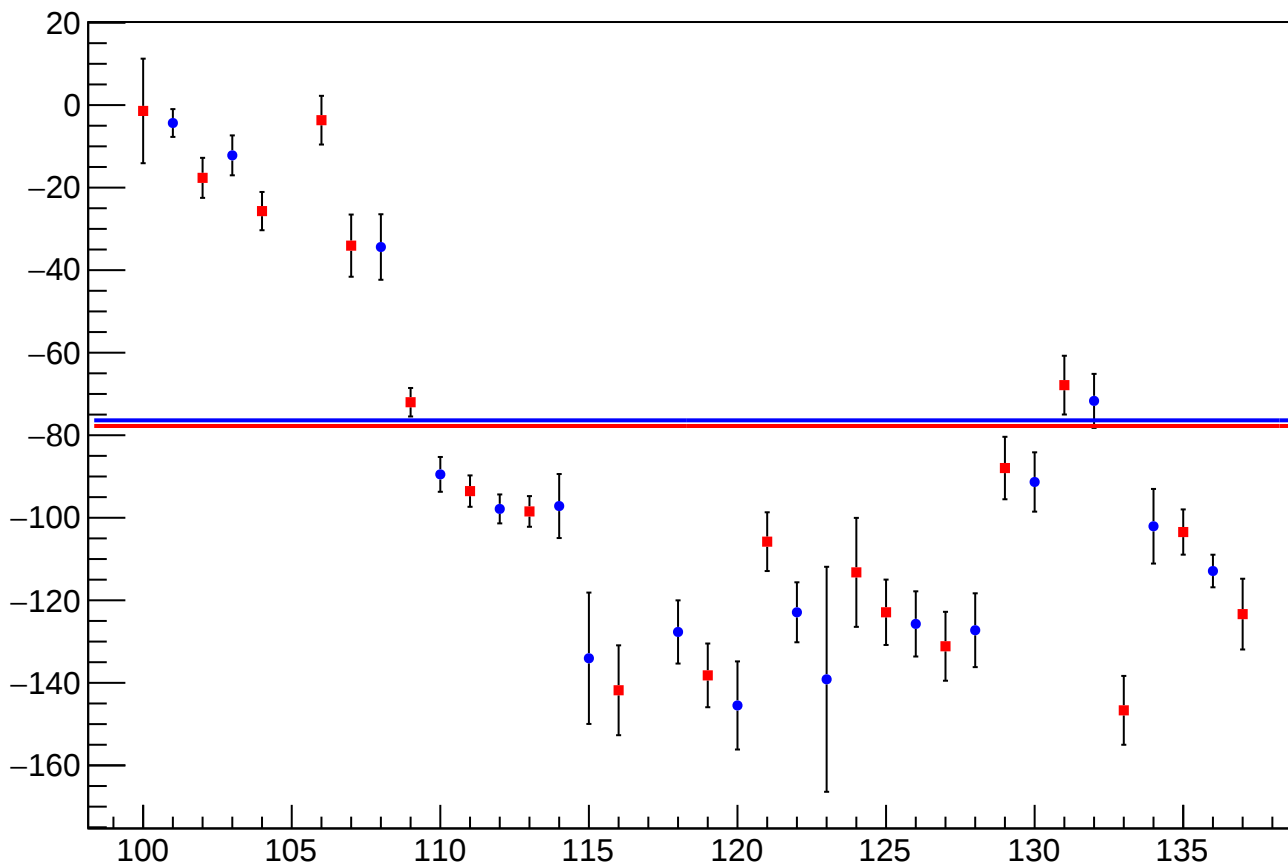
Right: 26.303+/-0.571  $\chi^2/\text{NDF}$ : 1704.1/35

In: 25.045+/-0.806  $\chi^2/\text{NDF}$ : 686.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 26.303+/-0.571  $\chi^2/\text{NDF}$ : 1704.1/35

reg\_asym\_sam4\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -76.392+/-1.416  $\chi^2/\text{NDF}$ : 1031.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -77.761+/-1.353  $\chi^2/\text{NDF}$ : 872.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

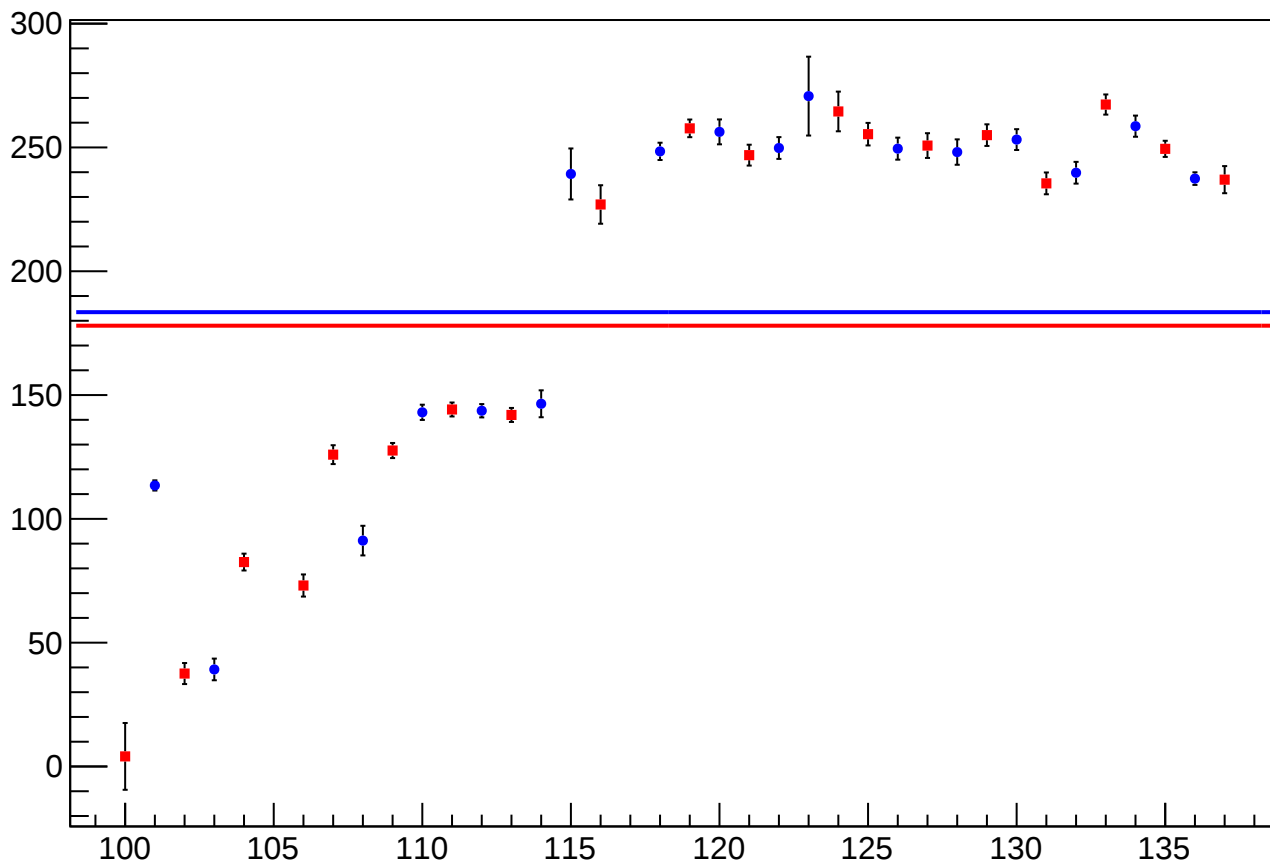
Right: -77.108+/-0.978  $\chi^2/\text{NDF}$ : 1905.1/35

In: -76.392+/-1.416  $\chi^2/\text{NDF}$ : 1031.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -77.108+/-0.978  $\chi^2/\text{NDF}$ : 1905.1/35

reg\_asym\_sam4\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 183.478+/-0.919  $\chi^2/\text{NDF}$ : 5331.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 178.011+/-0.924  $\chi^2/\text{NDF}$ : 6345.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

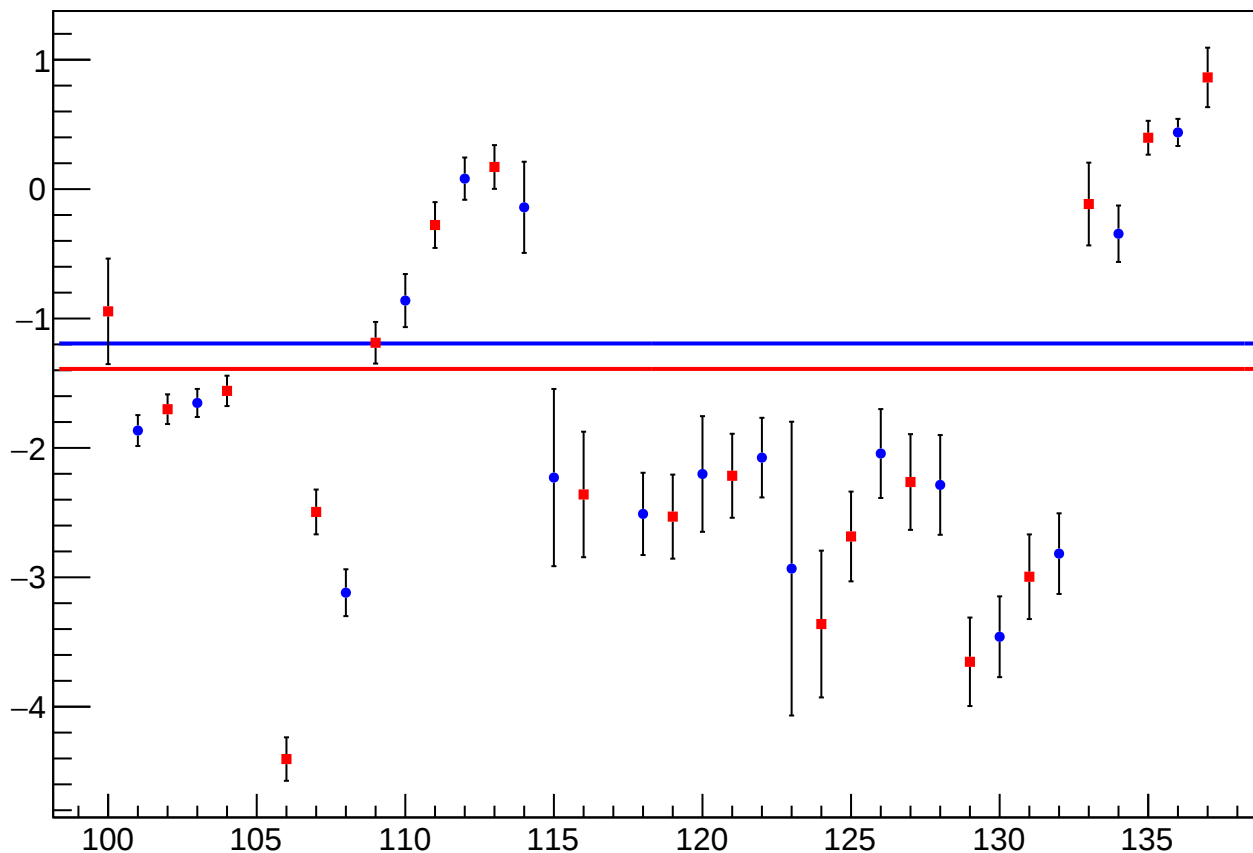
Right: 180.761+/-0.651  $\chi^2/\text{NDF}$ : 11694.8/35

In: 183.478+/-0.919  $\chi^2/\text{NDF}$ : 5331.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 180.761+/-0.651  $\chi^2/\text{NDF}$ : 11694.8/35

reg\_asym\_sam4\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -1.193+/-0.048  $\chi^2/\text{NDF}$ : 621.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1.390+/-0.046  $\chi^2/\text{NDF}$ : 920.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

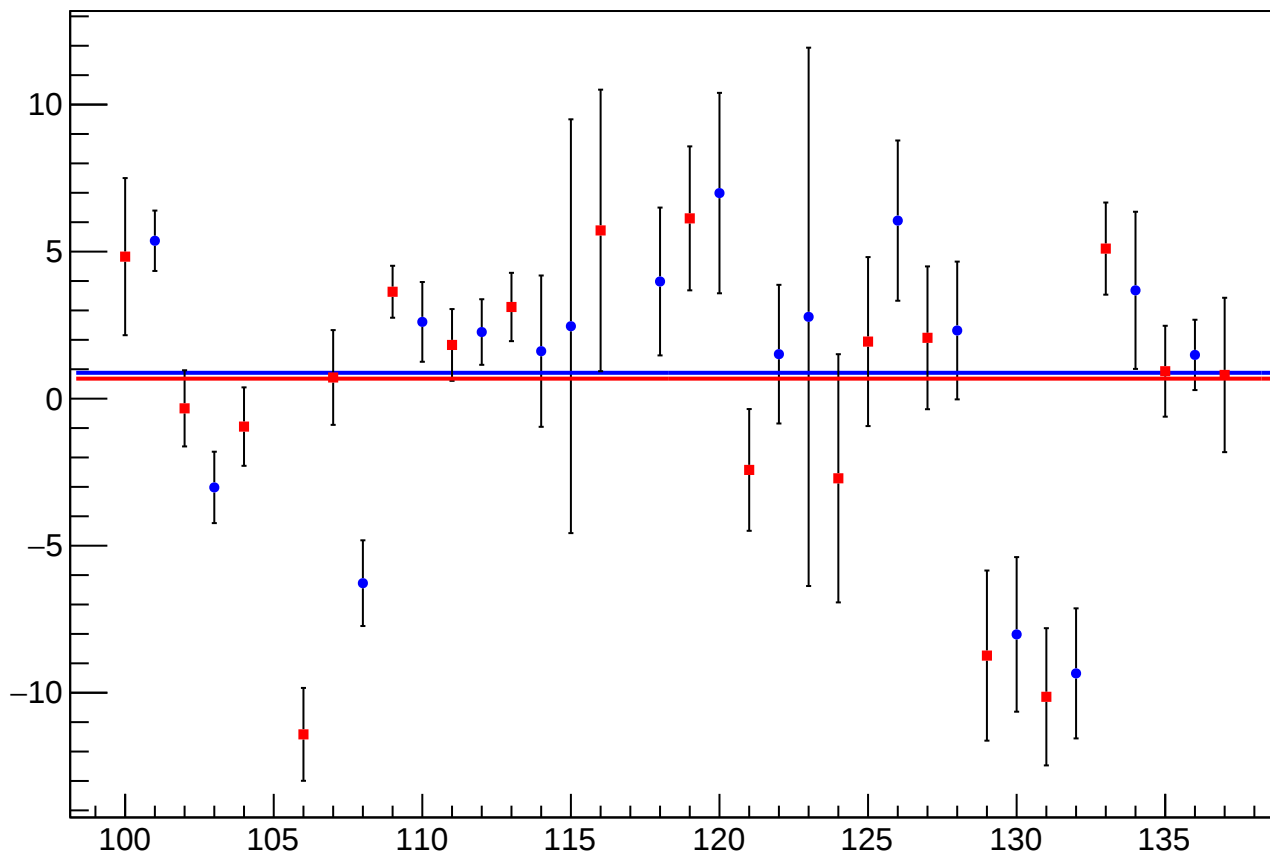
Right: -1.296+/-0.033  $\chi^2/\text{NDF}$ : 1551.0/35

In: -1.193+/-0.048  $\chi^2/\text{NDF}$ : 621.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -1.296+/-0.033  $\chi^2/\text{NDF}$ : 1551.0/35

reg\_asym\_sam5\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 0.879+/-0.424  $\chi^2/\text{NDF}$ : 99.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.681+/-0.382  $\chi^2/\text{NDF}$ : 129.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

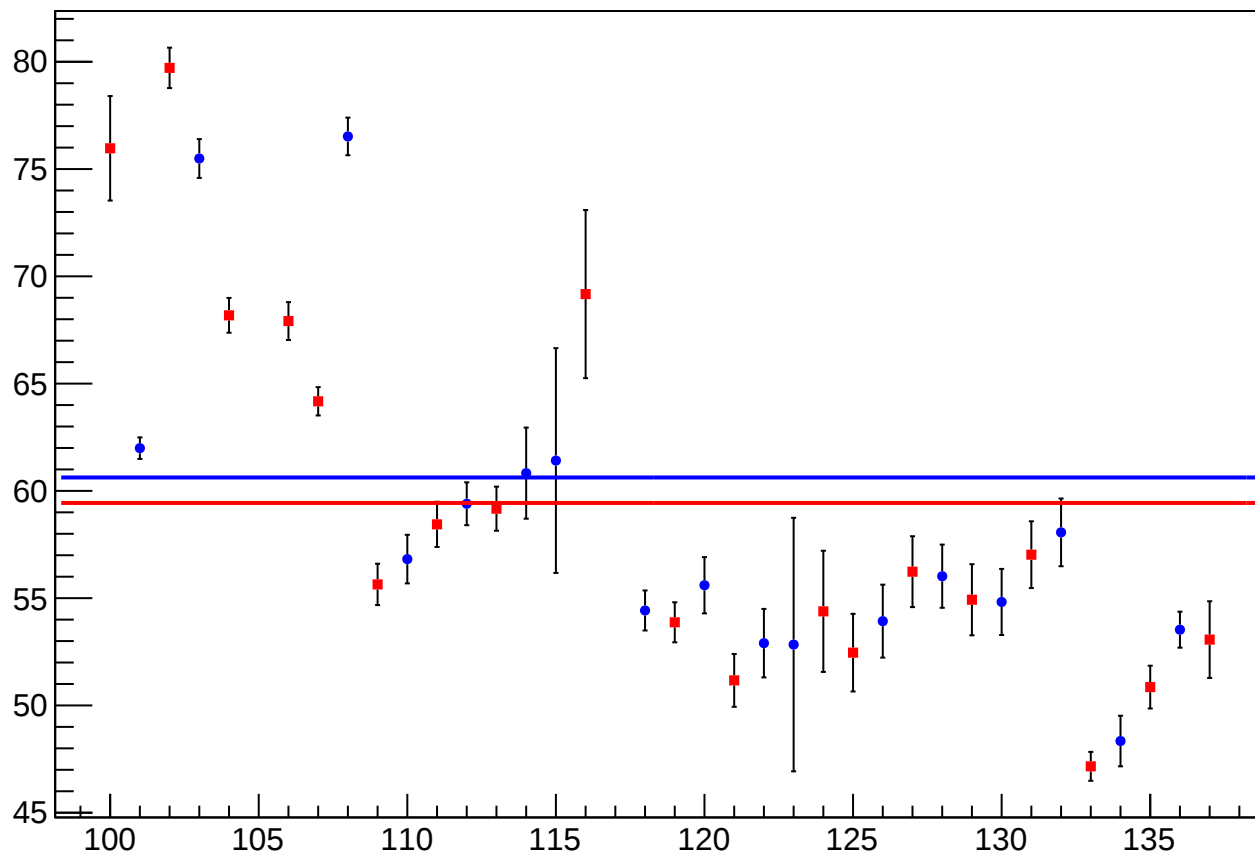
Right: 0.770+/-0.284  $\chi^2/\text{NDF}$ : 229.2/35

In: 0.879+/-0.424  $\chi^2/\text{NDF}$ : 99.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.770+/-0.284  $\chi^2/\text{NDF}$ : 229.2/35

reg\_asym\_sam5\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 60.625 $\pm$ 0.263  $\chi^2$ /NDF: 924.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 59.438 $\pm$ 0.248  $\chi^2$ /NDF: 1323.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

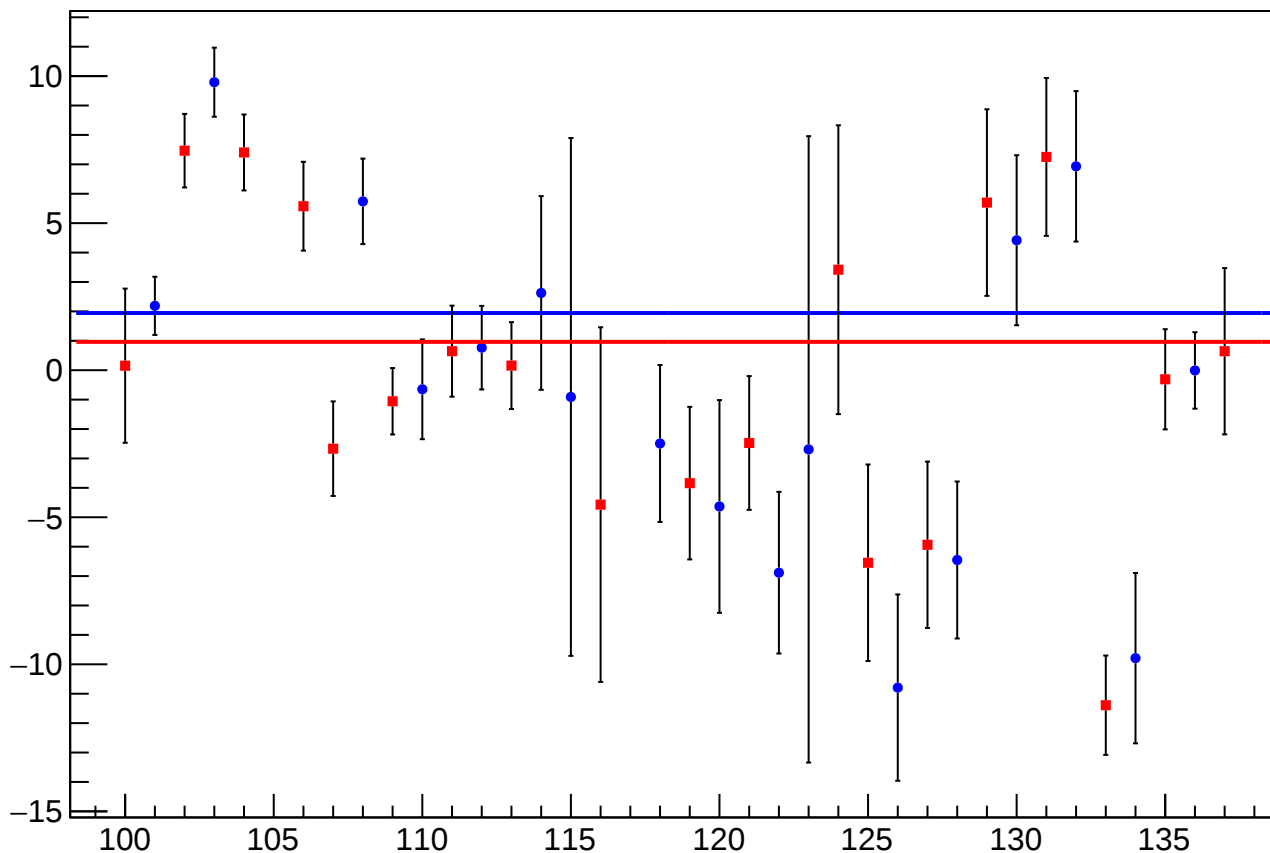
Right: 59.996 $\pm$ 0.180  $\chi^2$ /NDF: 2258.7/35

In: 60.625 $\pm$ 0.263  $\chi^2$ /NDF:924.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 59.996 $\pm$ 0.180  $\chi^2$ /NDF: 2258.7/35

reg\_asym\_sam5\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 1.945 $\pm$ 0.459  $\chi^2$ /NDF: 120.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.964 $\pm$ 0.424  $\chi^2$ /NDF: 149.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

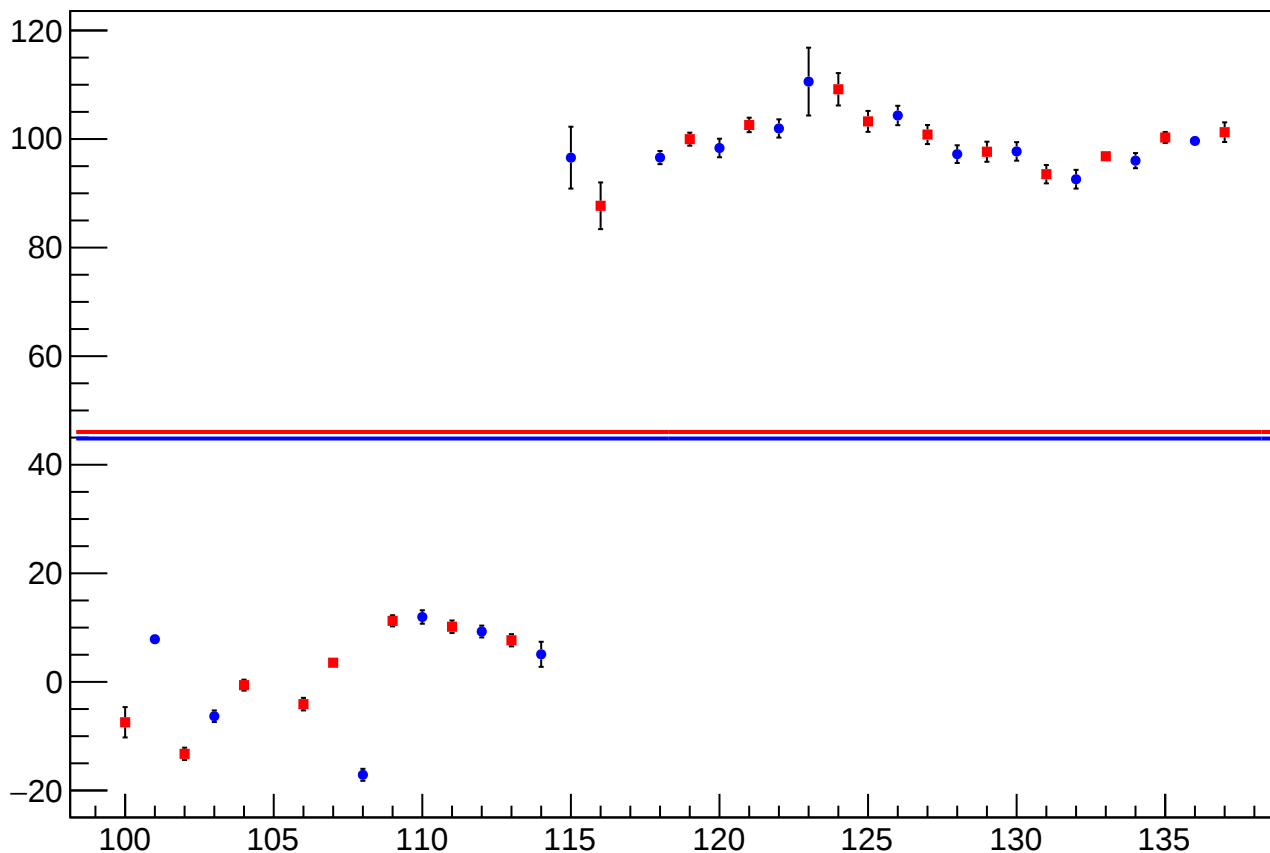
Right: 1.416 $\pm$ 0.312  $\chi^2$ /NDF: 272.6/35

In: 1.945 $\pm$ 0.459  $\chi^2$ /NDF:120.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1.416 $\pm$ 0.312  $\chi^2$ /NDF: 272.6/35

reg\_asym\_sam5\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 44.829+/-0.305  $\chi^2/\text{NDF}$ : 24763.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 46.040+/-0.289  $\chi^2/\text{NDF}$ : 28263.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

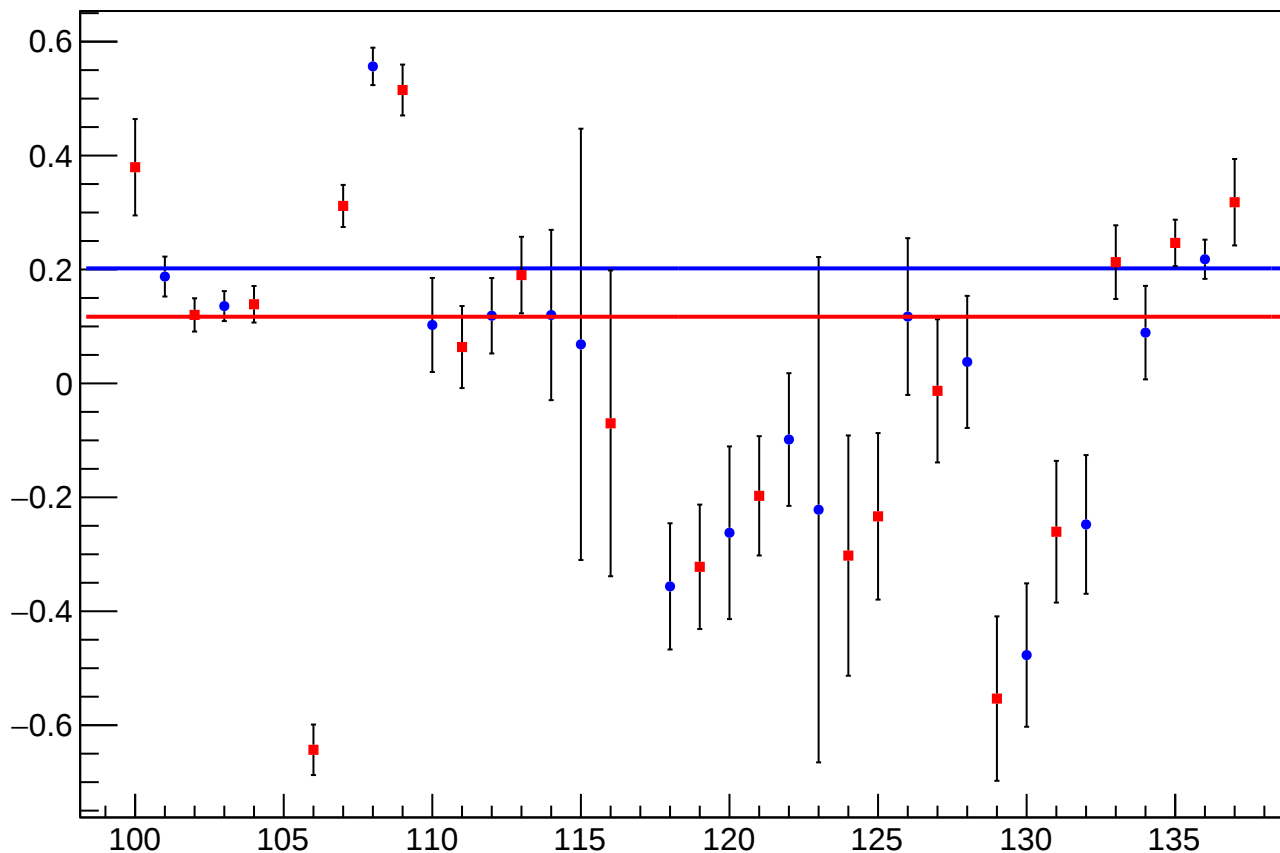
Right: 45.465+/-0.210  $\chi^2/\text{NDF}$ : 53034.8/35

In: 44.829+/-0.305  $\chi^2/\text{NDF}$ :24763.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 45.465+/-0.210  $\chi^2/\text{NDF}$ : 53034.8/35

reg\_asym\_sam5\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.202 $\pm$ 0.014  $\chi^2$ /NDF: 216.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.117 $\pm$ 0.013  $\chi^2$ /NDF: 499.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

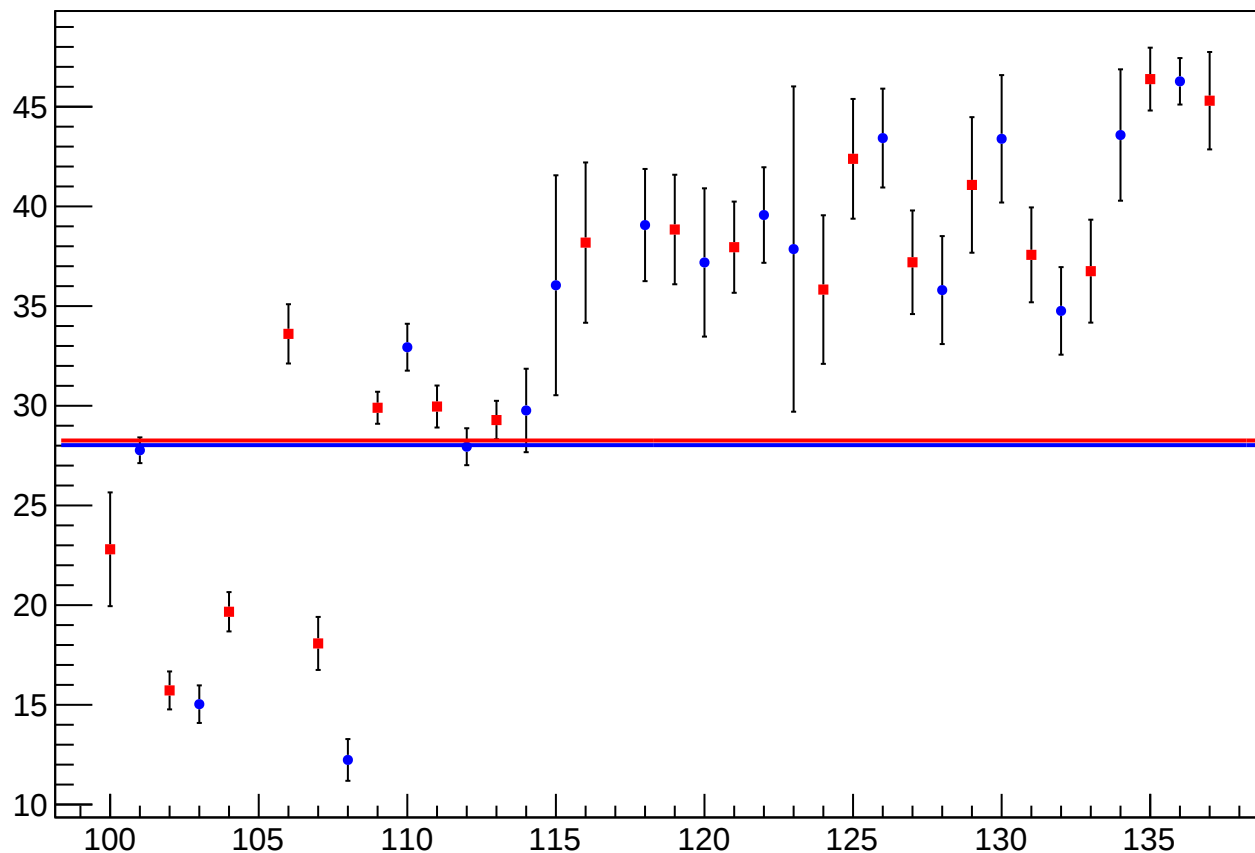
Right: 0.156 $\pm$ 0.010  $\chi^2$ /NDF: 735.2/35

In: 0.202 $\pm$ 0.014  $\chi^2$ /NDF:216.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.156 $\pm$ 0.010  $\chi^2$ /NDF: 735.2/35

reg\_asym\_sam6\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 28.025+/-0.345  $\chi^2/\text{NDF}$ : 831.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 28.258+/-0.343  $\chi^2/\text{NDF}$ : 630.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

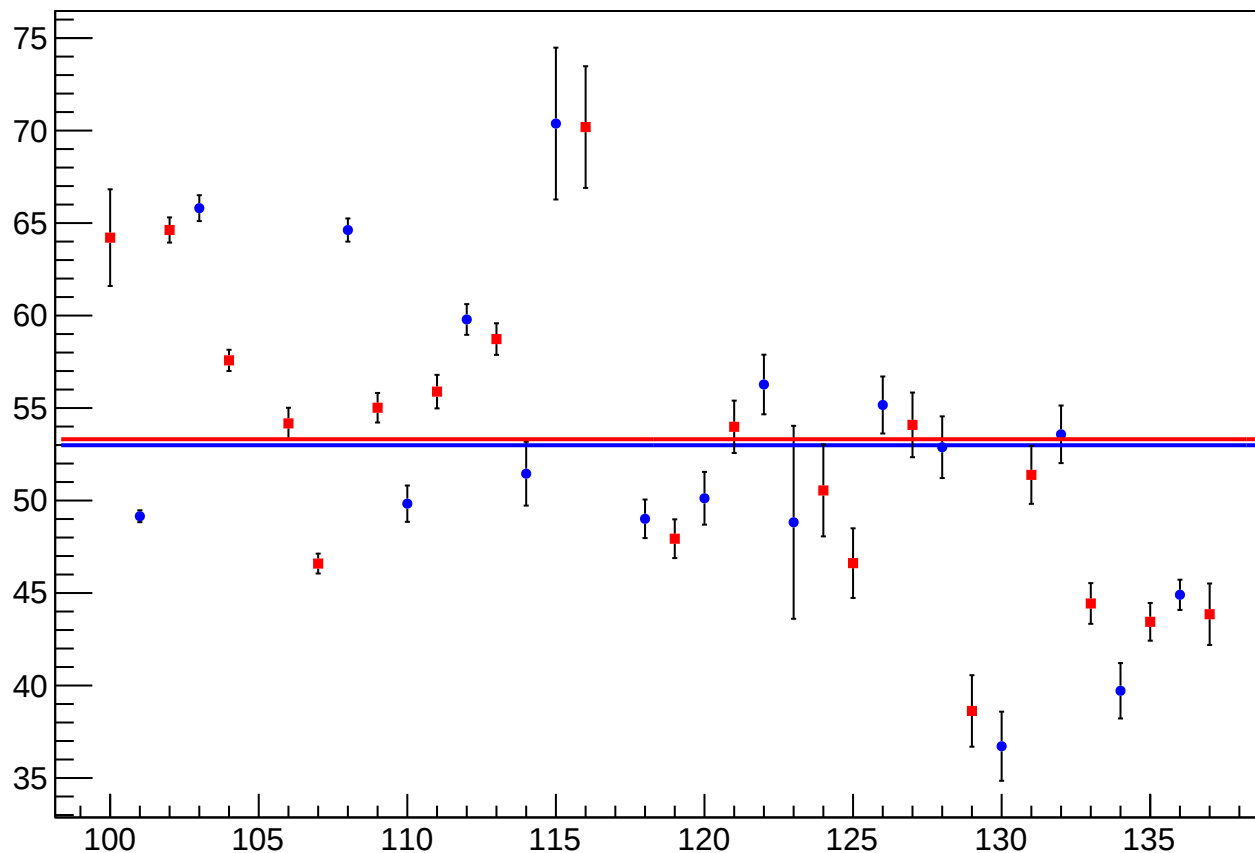
Right: 28.142+/-0.243  $\chi^2/\text{NDF}$ : 1461.8/35

In: 28.025+/-0.345  $\chi^2/\text{NDF}$ : 831.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 28.142+/-0.243  $\chi^2/\text{NDF}$ : 1461.8/35

reg\_asym\_sam6\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 52.989+/-0.211  $\chi^2/\text{NDF}$ : 1198.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 53.315+/-0.227  $\chi^2/\text{NDF}$ : 875.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

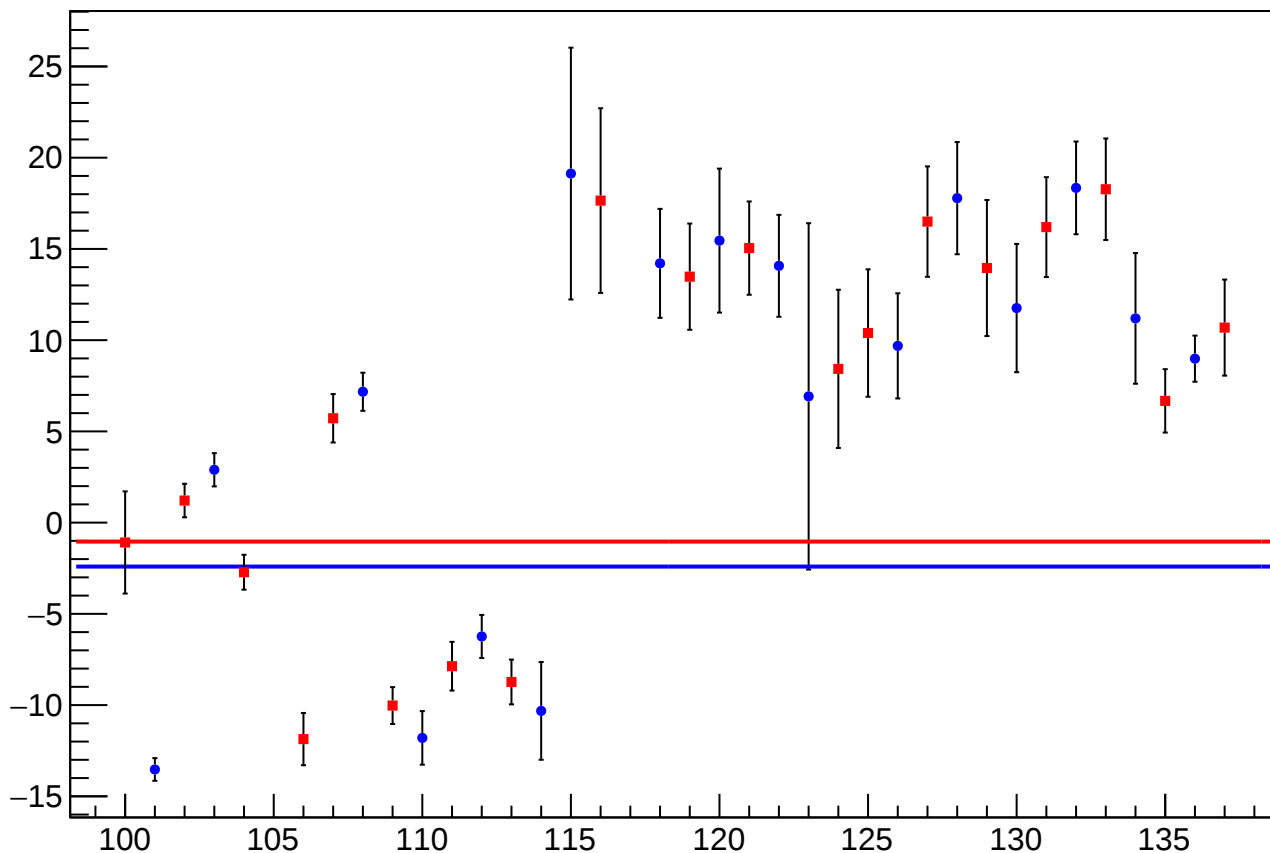
Right: 53.140+/-0.154  $\chi^2/\text{NDF}$ : 2074.7/35

In: 52.989+/-0.211  $\chi^2/\text{NDF}$ :1198.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 53.140+/-0.154  $\chi^2/\text{NDF}$ : 2074.7/35

reg\_asym\_sam6\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -2.409+/-0.364  $\chi^2$ /NDF: 834.6/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: -1.040+/-0.377  $\chi^2$ /NDF: 507.5/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

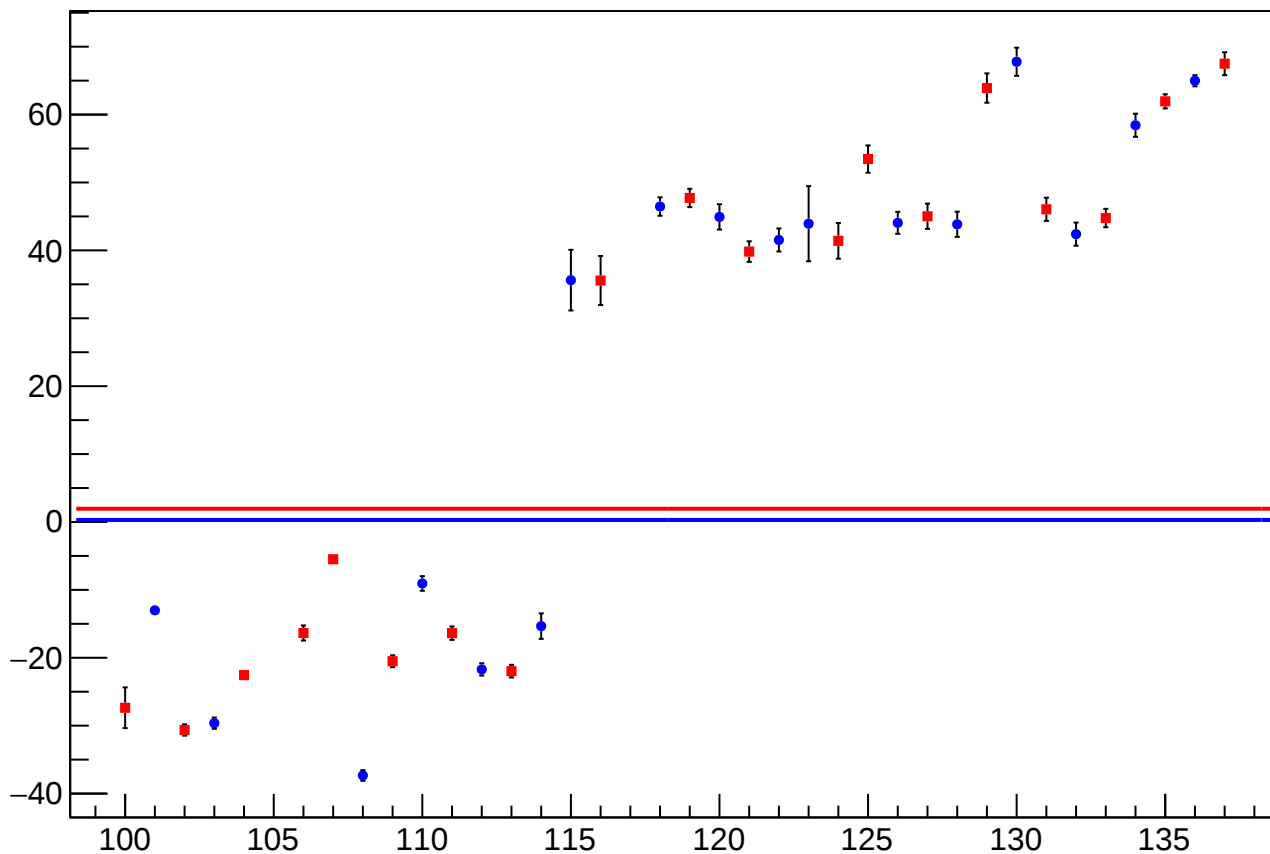
Right: -1.748+/-0.262  $\chi^2$ /NDF: 1349.0/35

In: -2.409+/-0.364  $\chi^2$ /NDF:834.6/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: -1.748+/-0.262  $\chi^2$ /NDF: 1349.0/35

reg\_asym\_sam6\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.300+/-0.247  $\chi^2/\text{NDF}$ : 18259.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1.952+/-0.267  $\chi^2/\text{NDF}$ : 15450.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

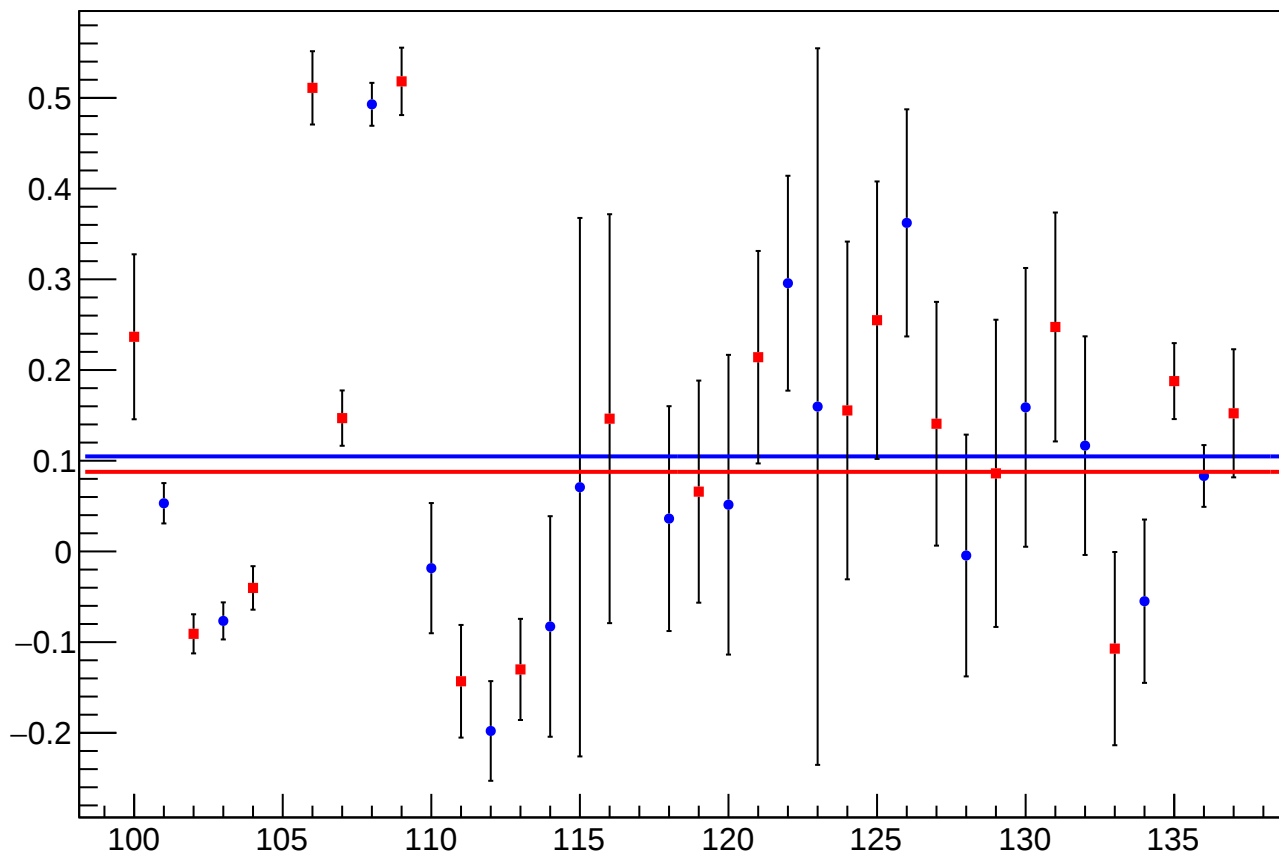
Right: 1.065+/-0.181  $\chi^2/\text{NDF}$ : 33730.4/35

In: 0.300+/-0.247  $\chi^2/\text{NDF}$ : 18259.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1.065+/-0.181  $\chi^2/\text{NDF}$ : 33730.4/35

reg\_asym\_sam6\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.105 $\pm$ 0.011  $\chi^2$ /NDF: 400.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.088 $\pm$ 0.011  $\chi^2$ /NDF: 390.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

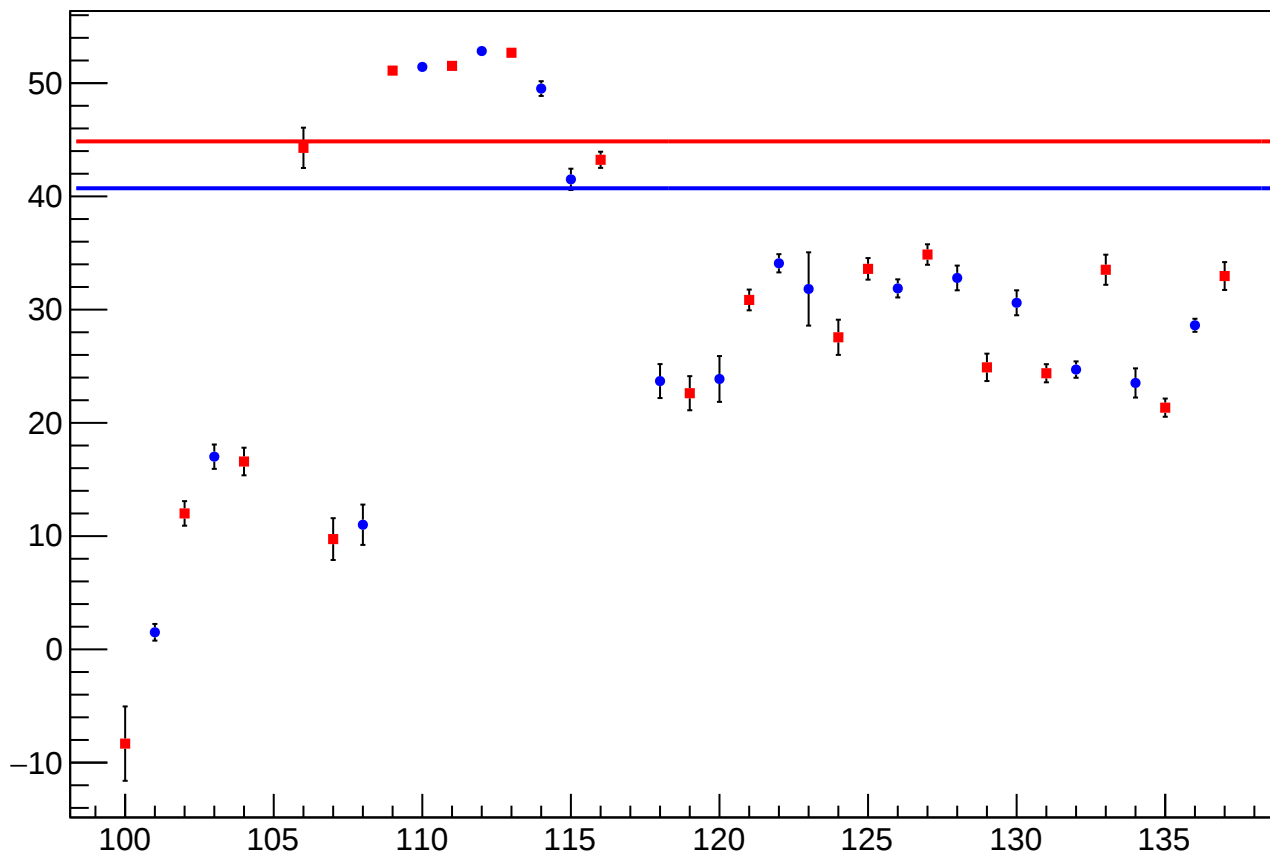
Right: 0.096 $\pm$ 0.008  $\chi^2$ /NDF: 792.8/35

In: 0.105 $\pm$ 0.011  $\chi^2$ /NDF:400.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.096 $\pm$ 0.008  $\chi^2$ /NDF: 792.8/35

reg\_asym\_sam7\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 40.717 $\pm$ 0.167  $\chi^2$ /NDF: 7858.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 44.857 $\pm$ 0.148  $\chi^2$ /NDF: 6393.7/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

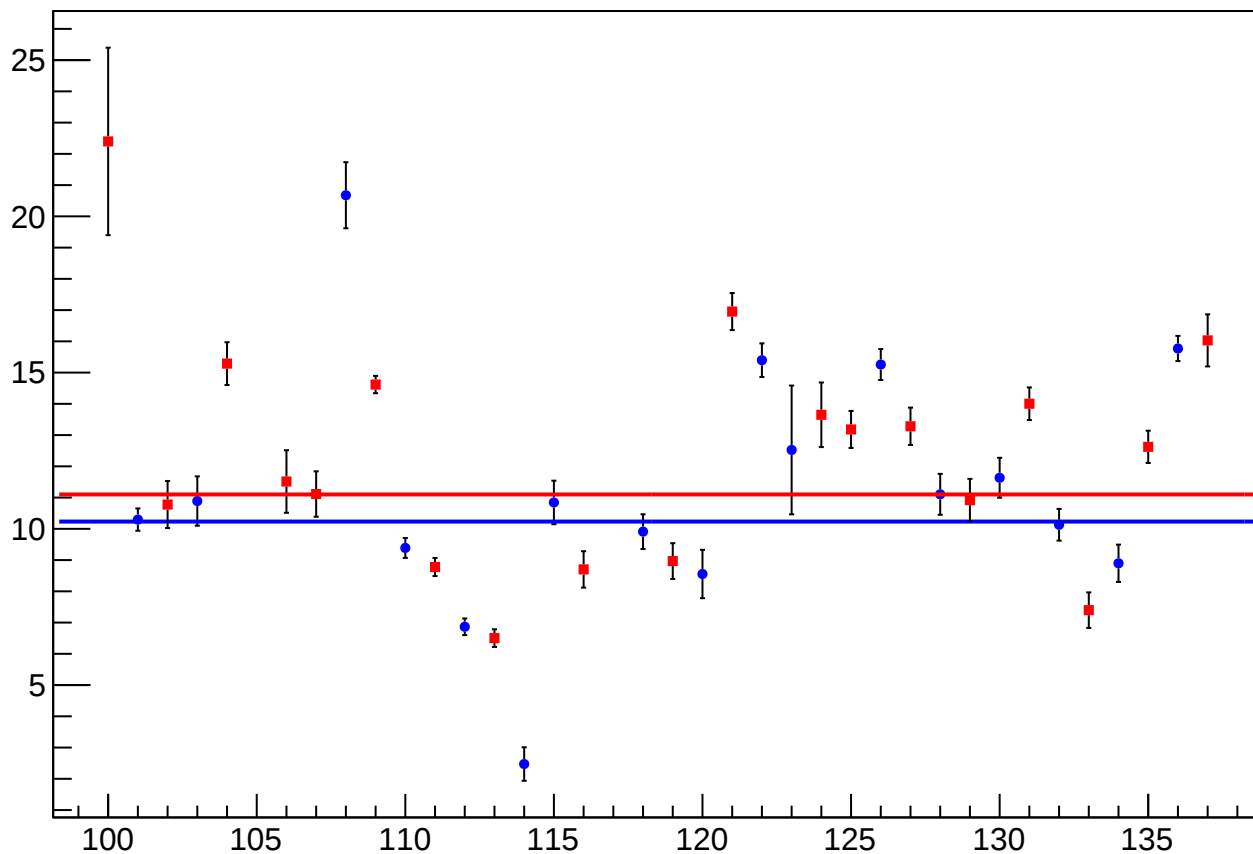
Right: 43.043 $\pm$ 0.111  $\chi^2$ /NDF: 14595.8/35

In: 40.717 $\pm$ 0.167  $\chi^2$ /NDF:7858.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 43.043 $\pm$ 0.111  $\chi^2$ /NDF: 14595.8/35

reg\_asym\_sam7\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 10.232+/-0.119  $\chi^2/\text{NDF}$ : 876.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 11.100+/-0.116  $\chi^2/\text{NDF}$ : 817.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

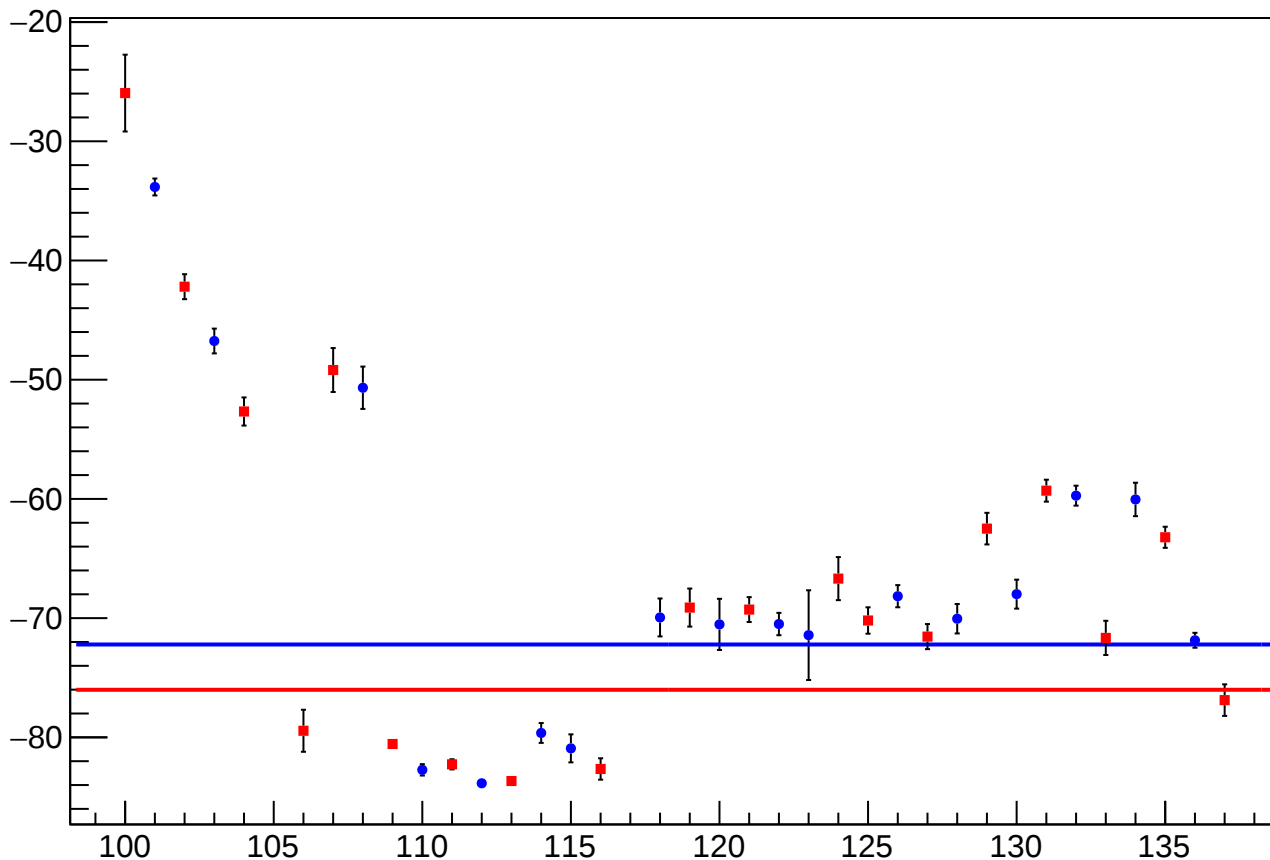
Right: 10.677+/-0.083  $\chi^2/\text{NDF}$ : 1721.6/35

In: 10.232+/-0.119  $\chi^2/\text{NDF}$ : 876.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 10.677+/-0.083  $\chi^2/\text{NDF}$ : 1721.6/35

reg\_asym\_sam7\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -72.211+/-0.198  $\chi^2/\text{NDF}$ : 5566.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -76.009+/-0.181  $\chi^2/\text{NDF}$ : 3463.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

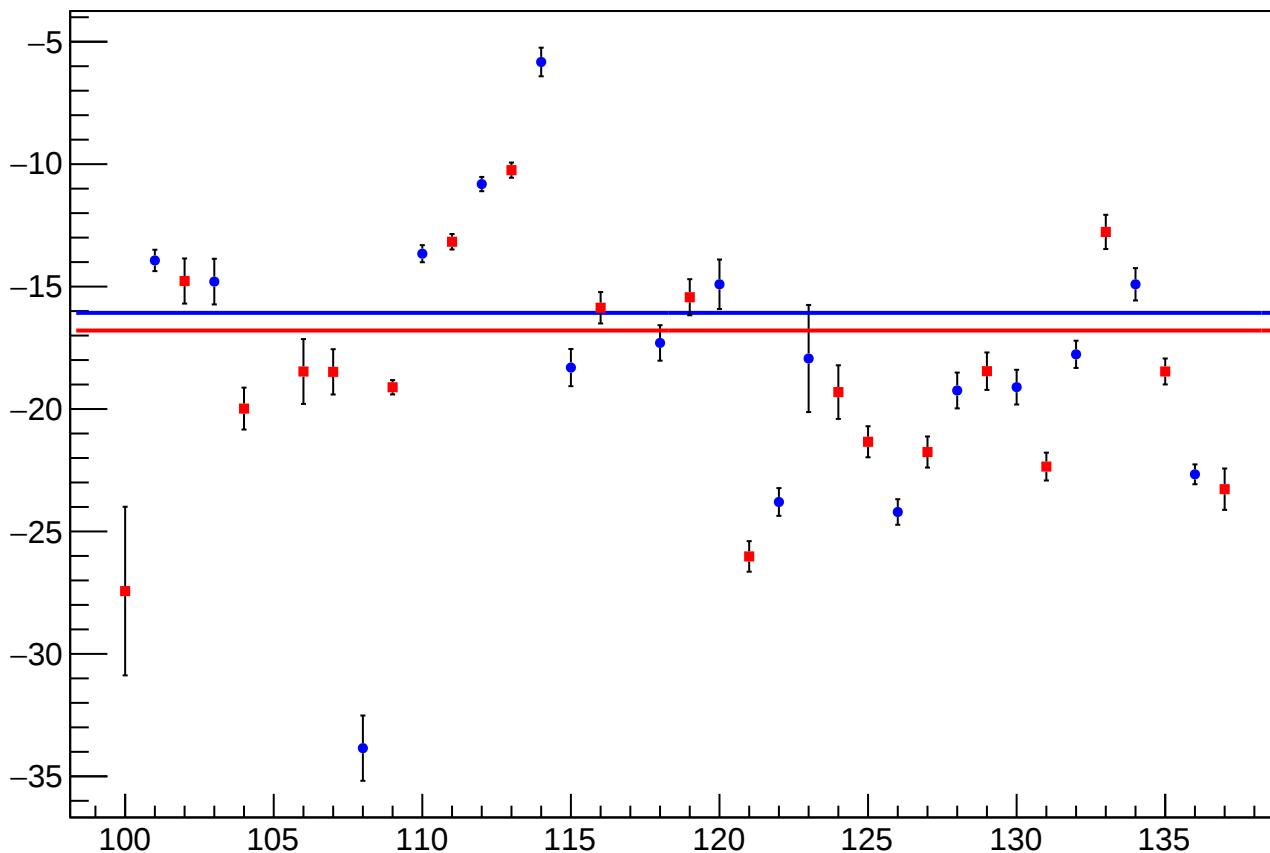
Right: -74.280+/-0.134  $\chi^2/\text{NDF}$ : 9230.0/35

In: -72.211+/-0.198  $\chi^2/\text{NDF}$ : 5566.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -74.280+/-0.134  $\chi^2/\text{NDF}$ : 9230.0/35

reg\_asym\_sam7\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -16.073 $\pm$ 0.133  $\chi^2$ /NDF: 1640.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -16.795 $\pm$ 0.128  $\chi^2$ /NDF: 1216.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

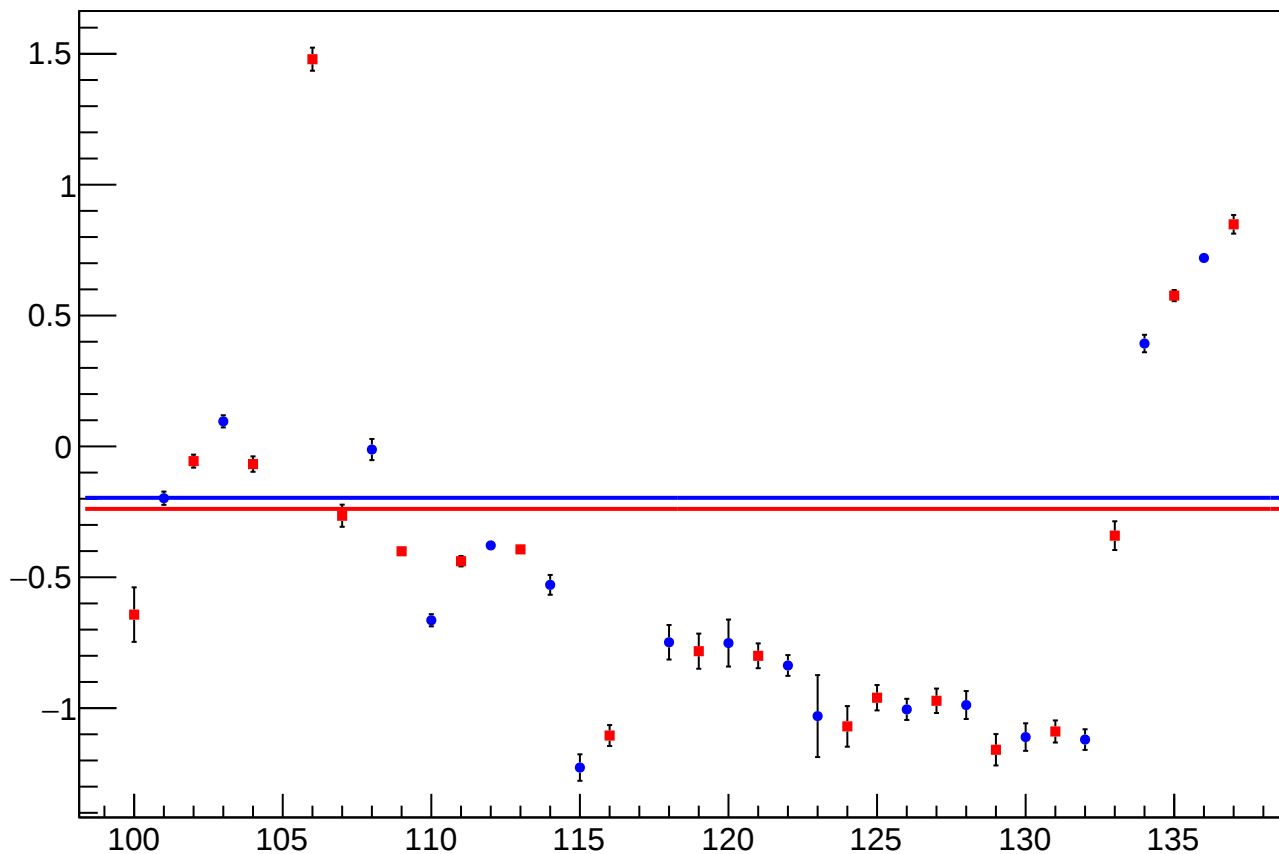
Right: -16.446 $\pm$ 0.092  $\chi^2$ /NDF: 2871.9/35

In: -16.073 $\pm$ 0.133  $\chi^2$ /NDF:1640.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -16.446 $\pm$ 0.092  $\chi^2$ /NDF: 2871.9/35

reg\_asym\_sam7\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.196 \pm 0.008$   $\chi^2/\text{NDF}$ : 6323.5/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.239 \pm 0.007$   $\chi^2/\text{NDF}$ : 6188.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

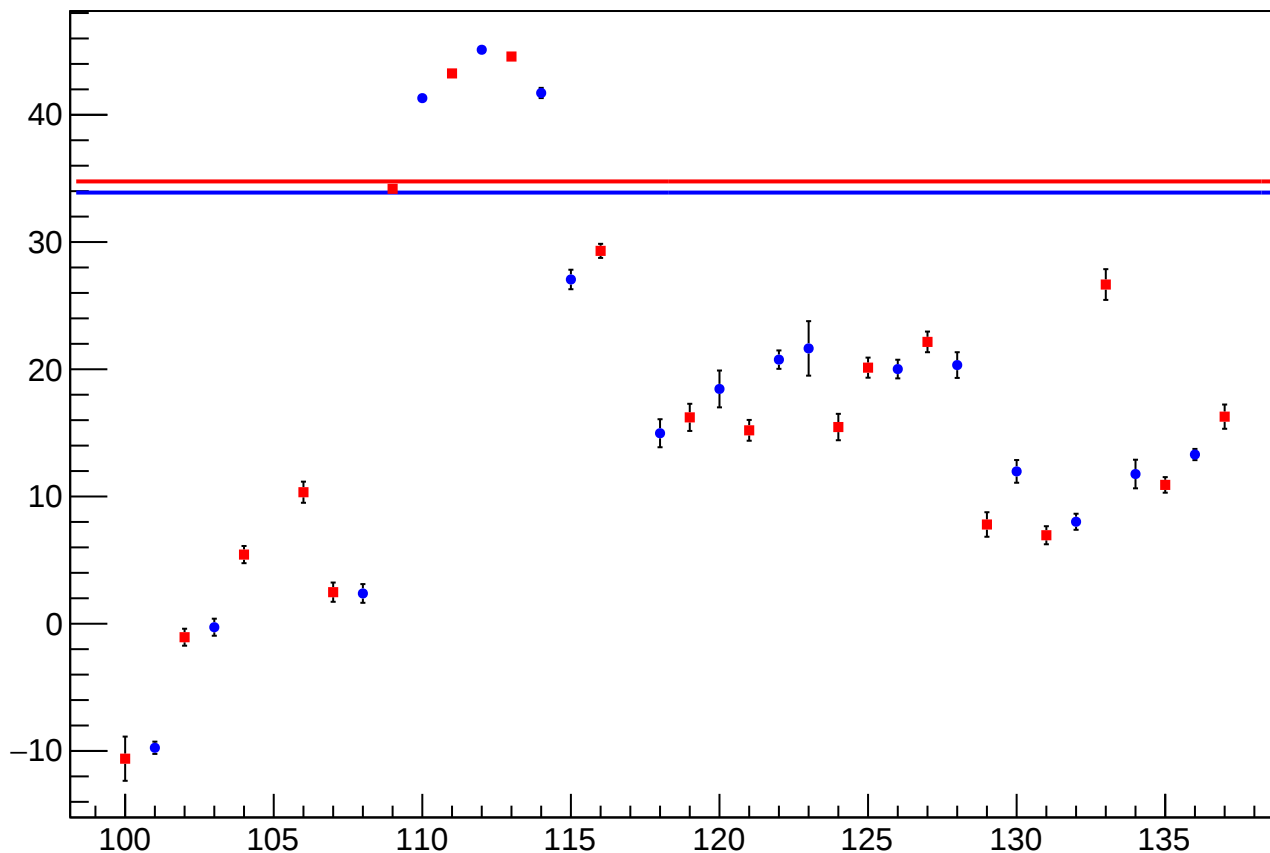
Right:  $-0.219 \pm 0.005$   $\chi^2/\text{NDF}$ : 12528.7/35

In:  $-0.196 \pm 0.008$   $\chi^2/\text{NDF}$ : 6323.5/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.219 \pm 0.005$   $\chi^2/\text{NDF}$ : 12528.7/35

reg\_asym\_sam8\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 33.888+/-0.104  $\chi^2/\text{NDF}$ : 25227.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 34.764+/-0.087  $\chi^2/\text{NDF}$ : 19582.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

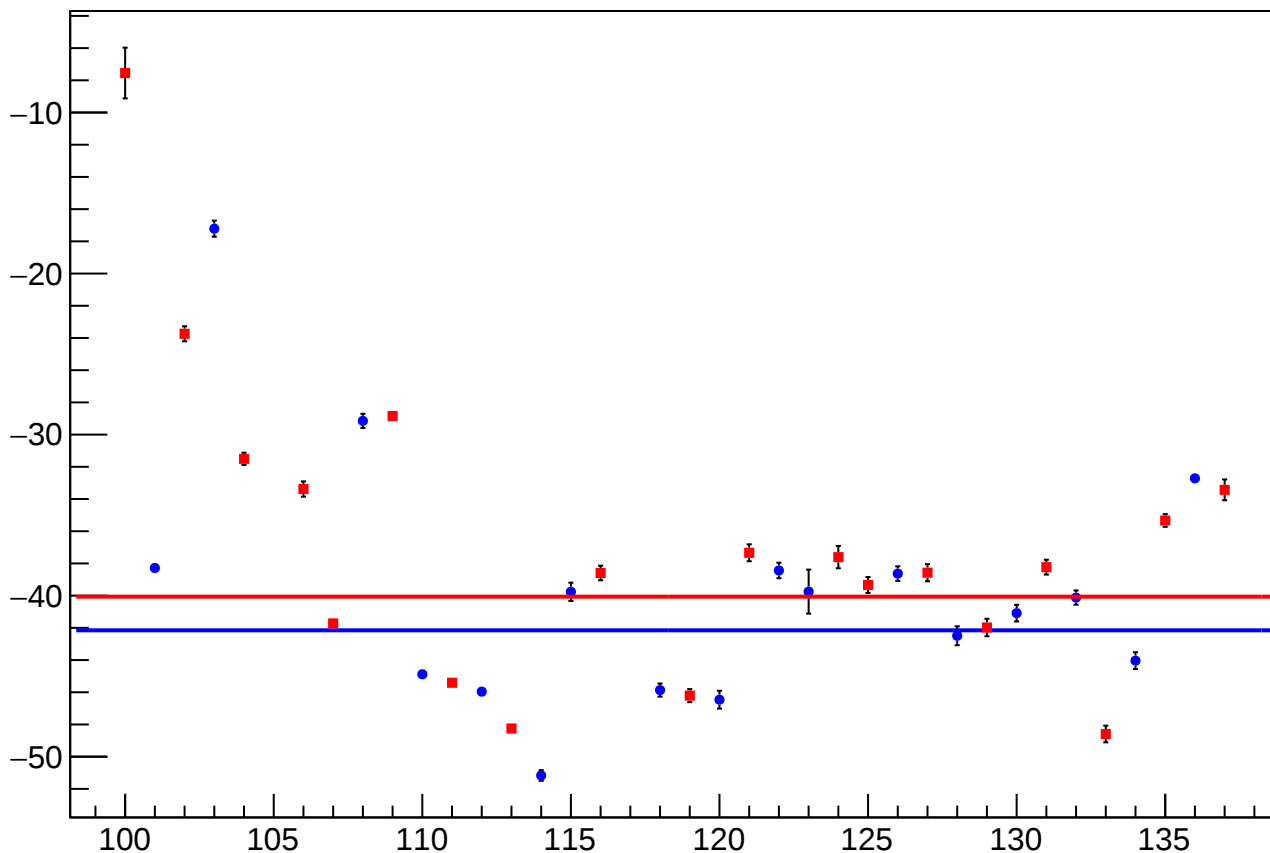
Right: 34.405+/-0.066  $\chi^2/\text{NDF}$ : 44851.5/35

In: 33.888+/-0.104  $\chi^2/\text{NDF}$ : 25227.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 34.405+/-0.066  $\chi^2/\text{NDF}$ : 44851.5/35

reg\_asym\_sam8\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-42.153 \pm 0.078$   $\chi^2/\text{NDF}$ : 6557.8/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-40.062 \pm 0.073$   $\chi^2/\text{NDF}$ : 11322.2/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

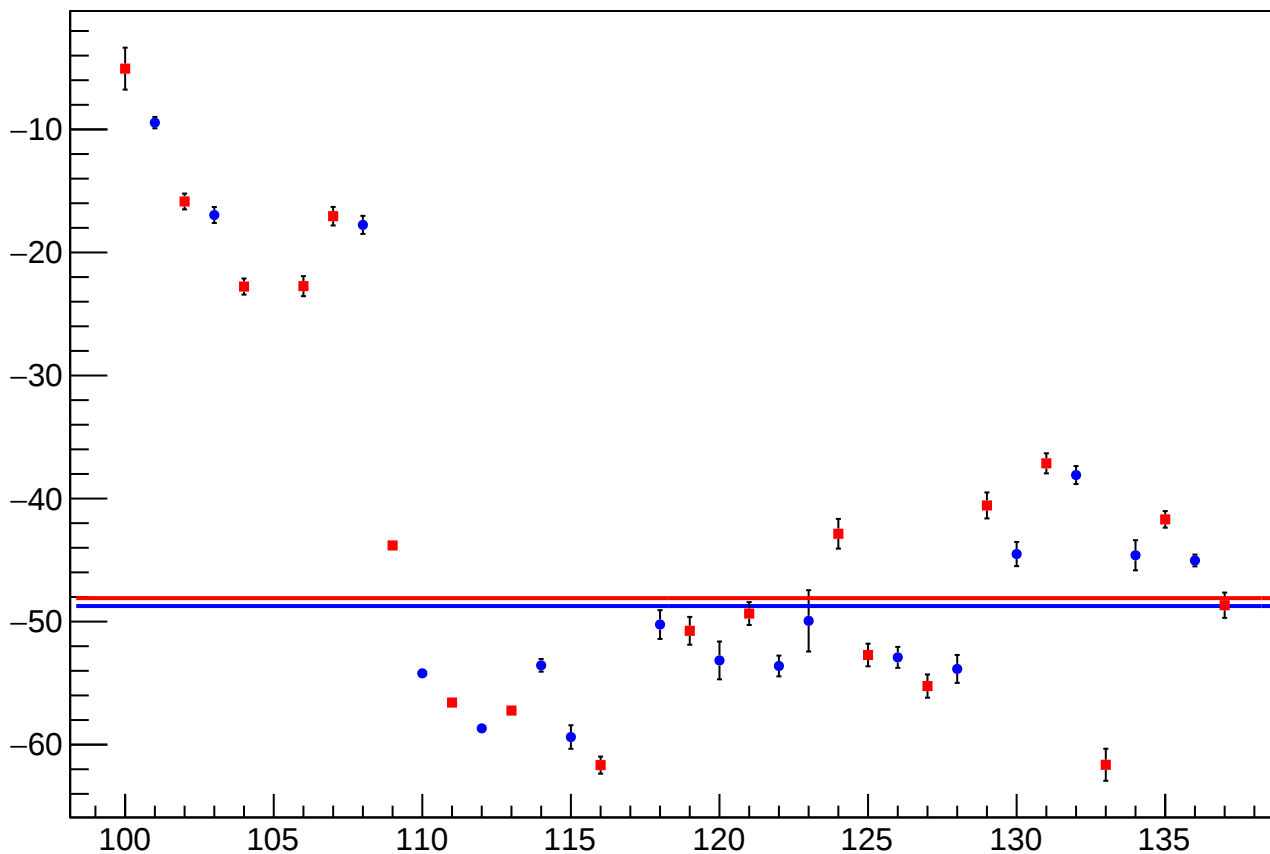
Right:  $-41.035 \pm 0.053$   $\chi^2/\text{NDF}$ : 18264.1/35

In:  $-42.153 \pm 0.078$   $\chi^2/\text{NDF}$ : 6557.8/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-41.035 \pm 0.053$   $\chi^2/\text{NDF}$ : 18264.1/35

reg\_asym\_sam8\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-48.737 \pm 0.125$   $\chi^2/\text{NDF}: 14658.1/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-48.092 \pm 0.107$   $\chi^2/\text{NDF}: 11733.2/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

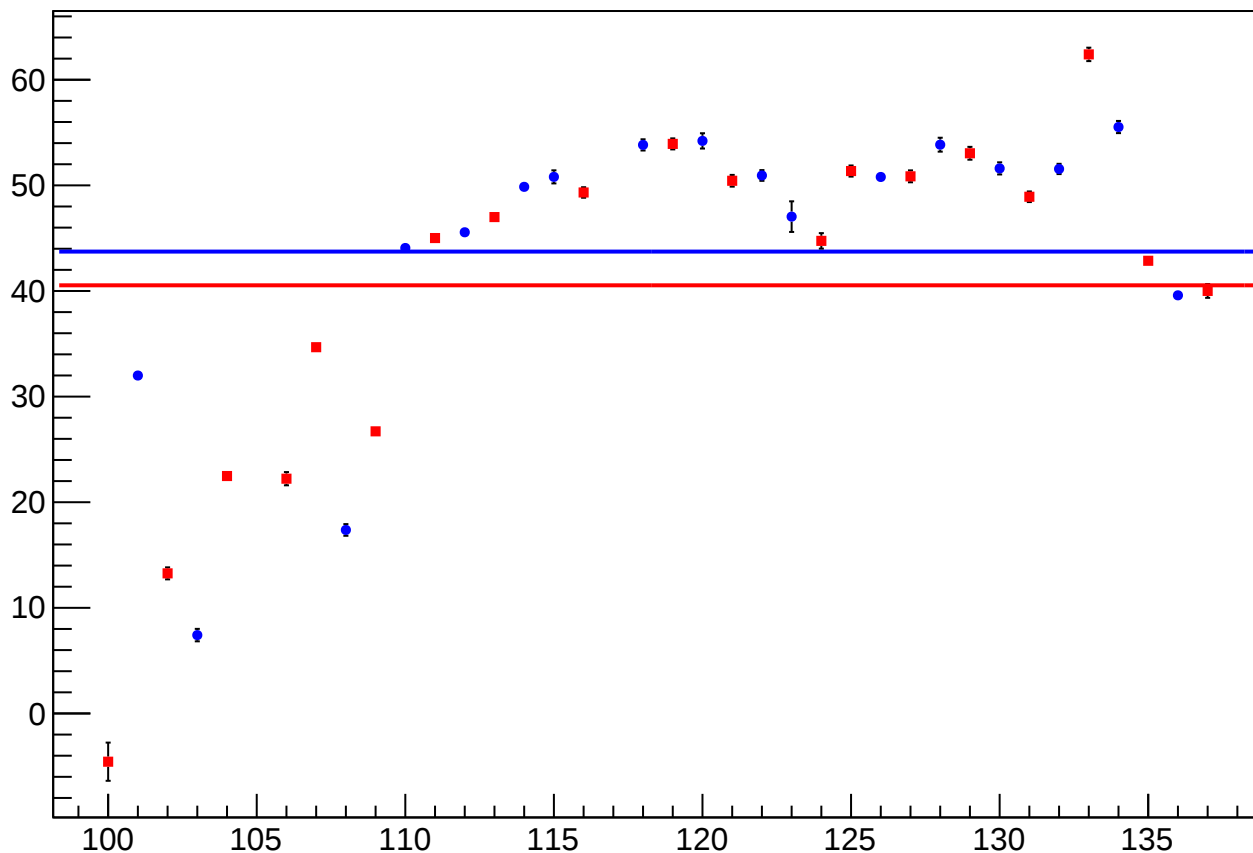
Right:  $-48.367 \pm 0.081$   $\chi^2/\text{NDF}: 26406.8/35$

In:  $-48.737 \pm 0.125$   $\chi^2/\text{NDF}: 14658.1/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-48.367 \pm 0.081$   $\chi^2/\text{NDF}: 26406.8/35$

reg\_asym\_sam8\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 43.731+/-0.087  $\chi^2/\text{NDF}$ : 10567.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 40.537+/-0.080  $\chi^2/\text{NDF}$ : 17601.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

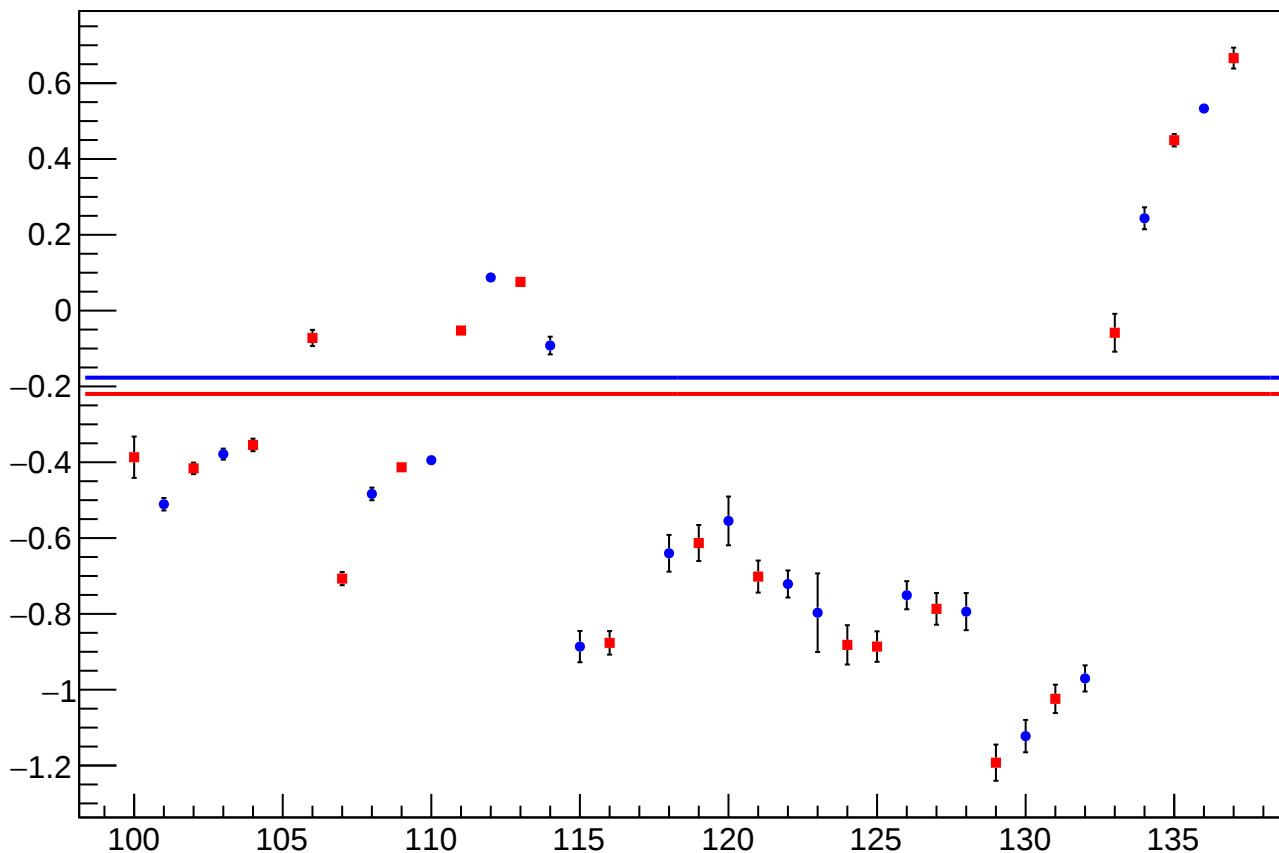
Right: 42.007+/-0.059  $\chi^2/\text{NDF}$ : 28898.9/35

In: 43.731+/-0.087  $\chi^2/\text{NDF}$ : 10567.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 42.007+/-0.059  $\chi^2/\text{NDF}$ : 28898.9/35

reg\_asym\_sam8\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.177 \pm 0.005$   $\chi^2/\text{NDF}$ : 7364.7/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.220 \pm 0.004$   $\chi^2/\text{NDF}$ : 7430.4/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

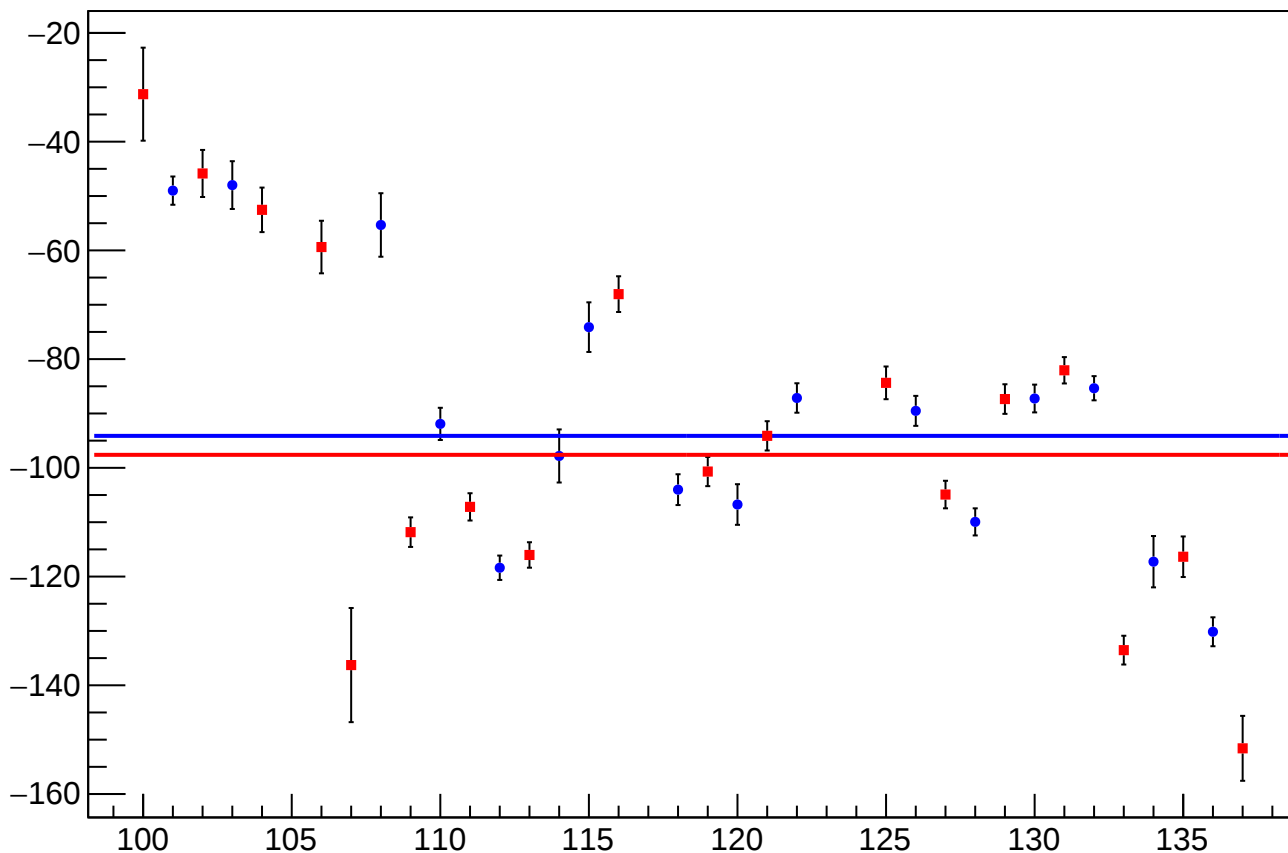
Right:  $-0.201 \pm 0.003$   $\chi^2/\text{NDF}$ : 14839.1/35

In:  $-0.177 \pm 0.005$   $\chi^2/\text{NDF}$ : 7364.7/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.201 \pm 0.003$   $\chi^2/\text{NDF}$ : 14839.1/35

reg\_asym\_usl\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -94.119+/-0.746  $\chi^2/\text{NDF}$ : 896.3/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -97.608+/-0.738  $\chi^2/\text{NDF}$ : 962.0/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

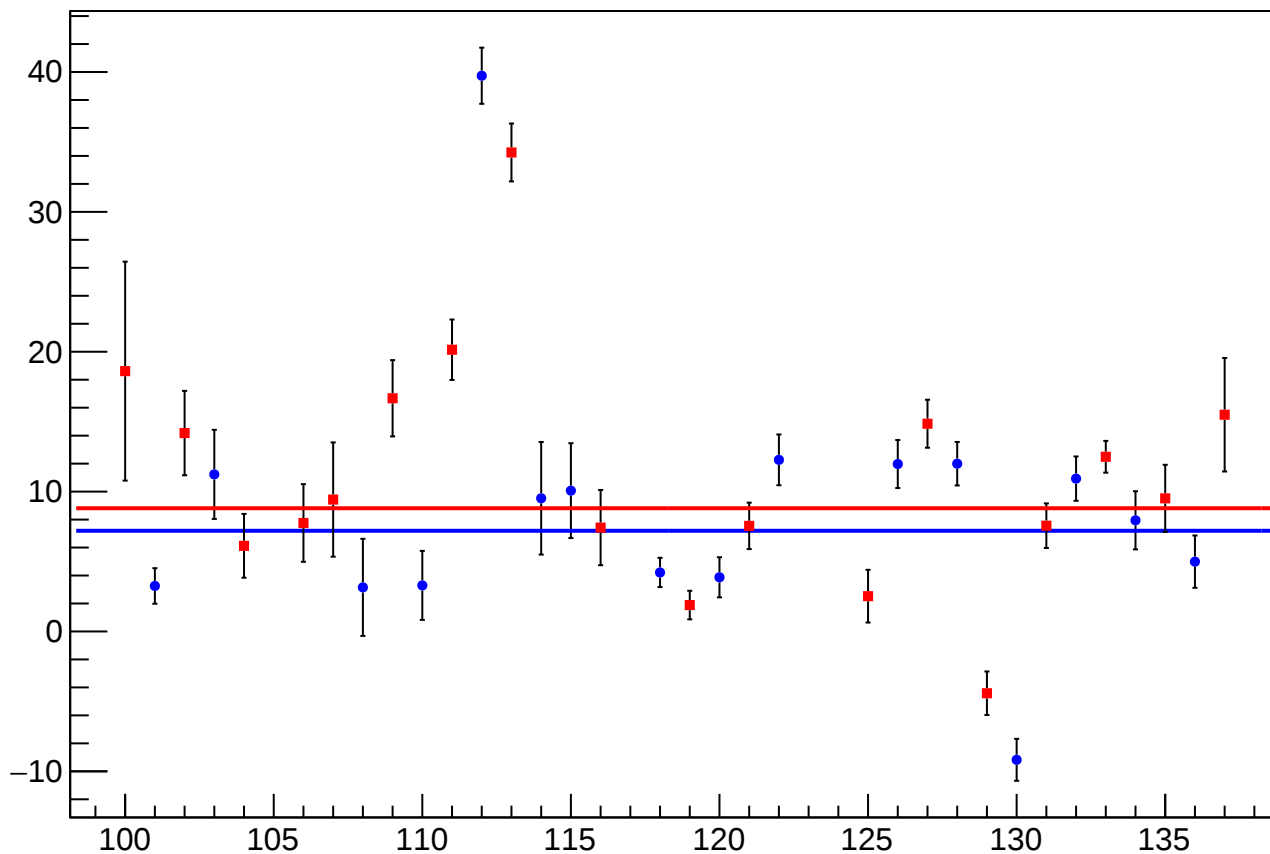
Right: -95.883+/-0.524  $\chi^2/\text{NDF}$ : 1869.3/33

In: -94.119+/-0.746  $\chi^2/\text{NDF}$ : 896.3/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -95.883+/-0.524  $\chi^2/\text{NDF}$ : 1869.3/33

reg\_asym\_usl\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 7.199+/-0.440  $\chi^2/\text{NDF}$ : 443.8/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 8.810+/-0.448  $\chi^2/\text{NDF}$ : 349.7/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

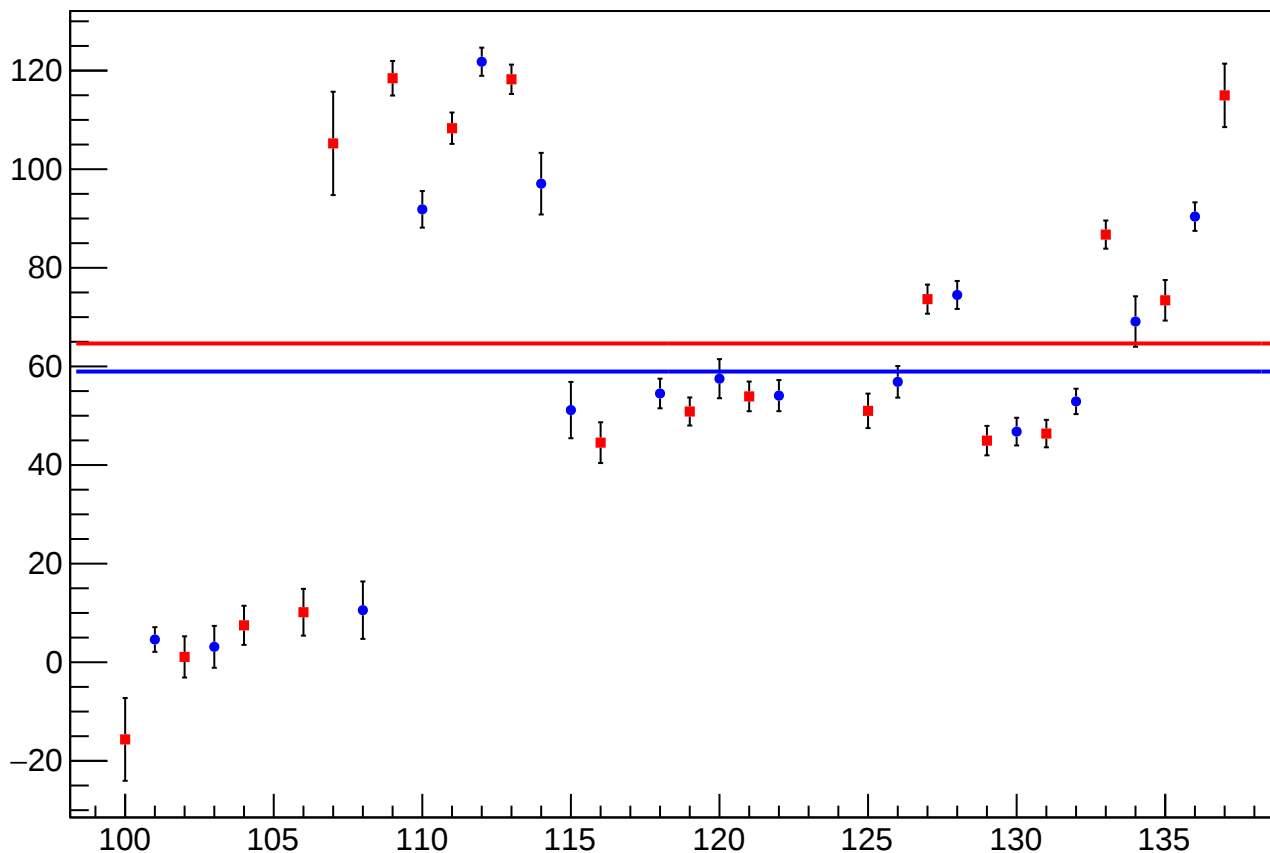
Right: 7.990+/-0.314  $\chi^2/\text{NDF}$ : 800.1/33

In: 7.199+/-0.440  $\chi^2/\text{NDF}$ : 443.8/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 7.990+/-0.314  $\chi^2/\text{NDF}$ : 800.1/33

# reg\_asym\_usl\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 58.962 $\pm$ 0.837  $\chi^2$ /NDF: 1496.5/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 64.655 $\pm$ 0.840  $\chi^2$ /NDF: 1721.8/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

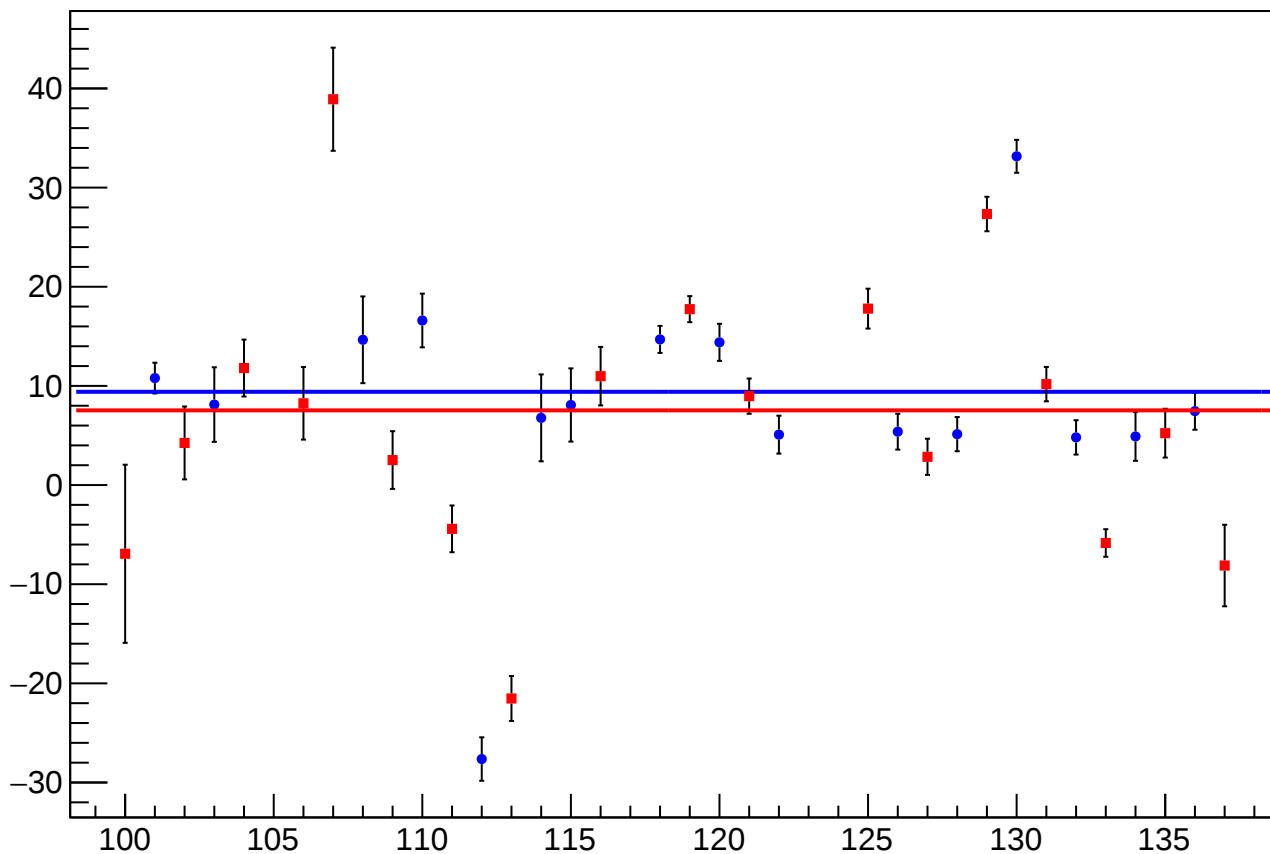
Right: 61.798 $\pm$ 0.593  $\chi^2$ /NDF: 3241.4/33

In: 58.962 $\pm$ 0.837  $\chi^2$ /NDF:1496.5/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 61.798 $\pm$ 0.593  $\chi^2$ /NDF: 3241.4/33

reg\_asym\_usl\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 9.405+/-0.507  $\chi^2/\text{NDF}$ : 549.5/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 7.533+/-0.515  $\chi^2/\text{NDF}$ : 569.8/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

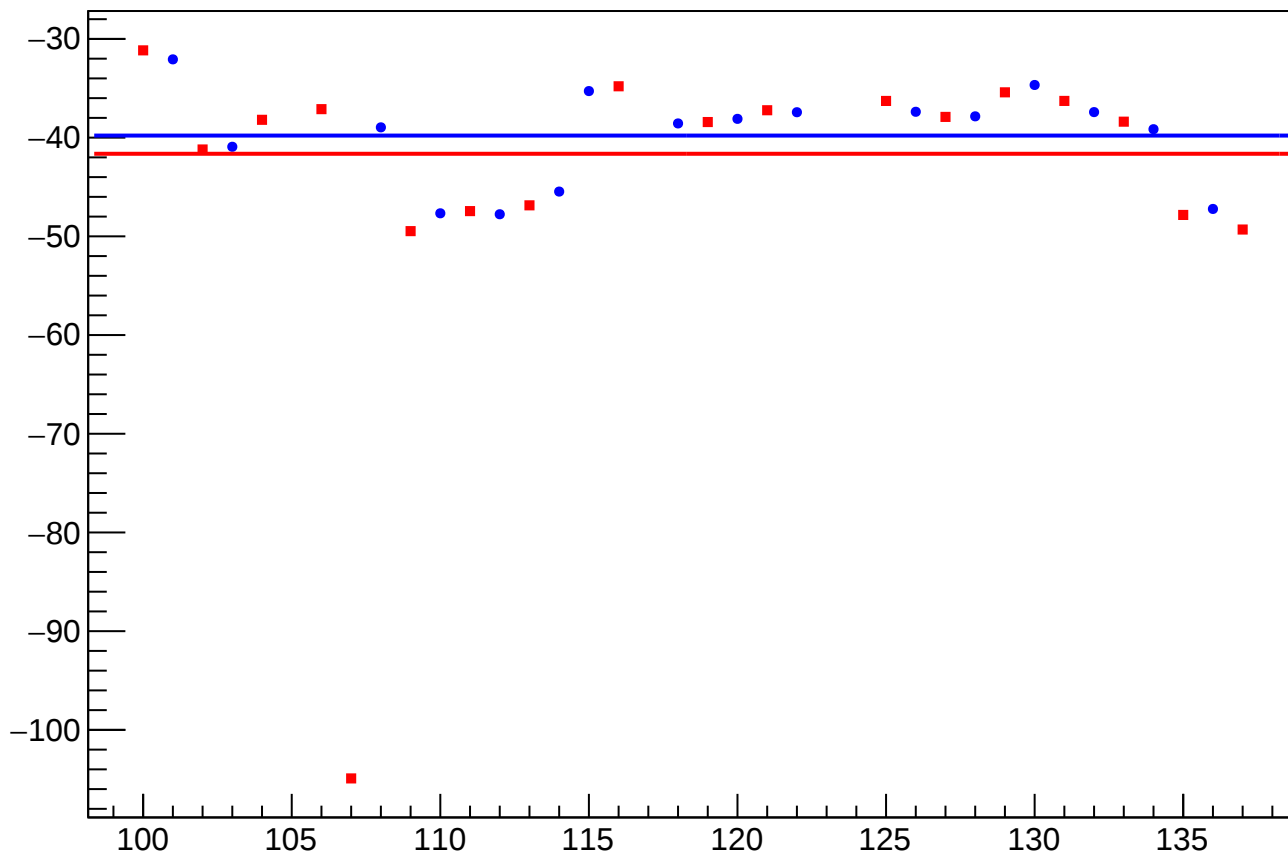
Right: 8.484+/-0.361  $\chi^2/\text{NDF}$ : 1126.0/33

In: 9.405+/-0.507  $\chi^2/\text{NDF}$ : 549.5/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 8.484+/-0.361  $\chi^2/\text{NDF}$ : 1126.0/33

reg\_asym\_usl\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -39.791 $\pm$ 0.031  $\chi^2$ /NDF: 26138.6/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -41.635 $\pm$ 0.031  $\chi^2$ /NDF: 94393.1/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

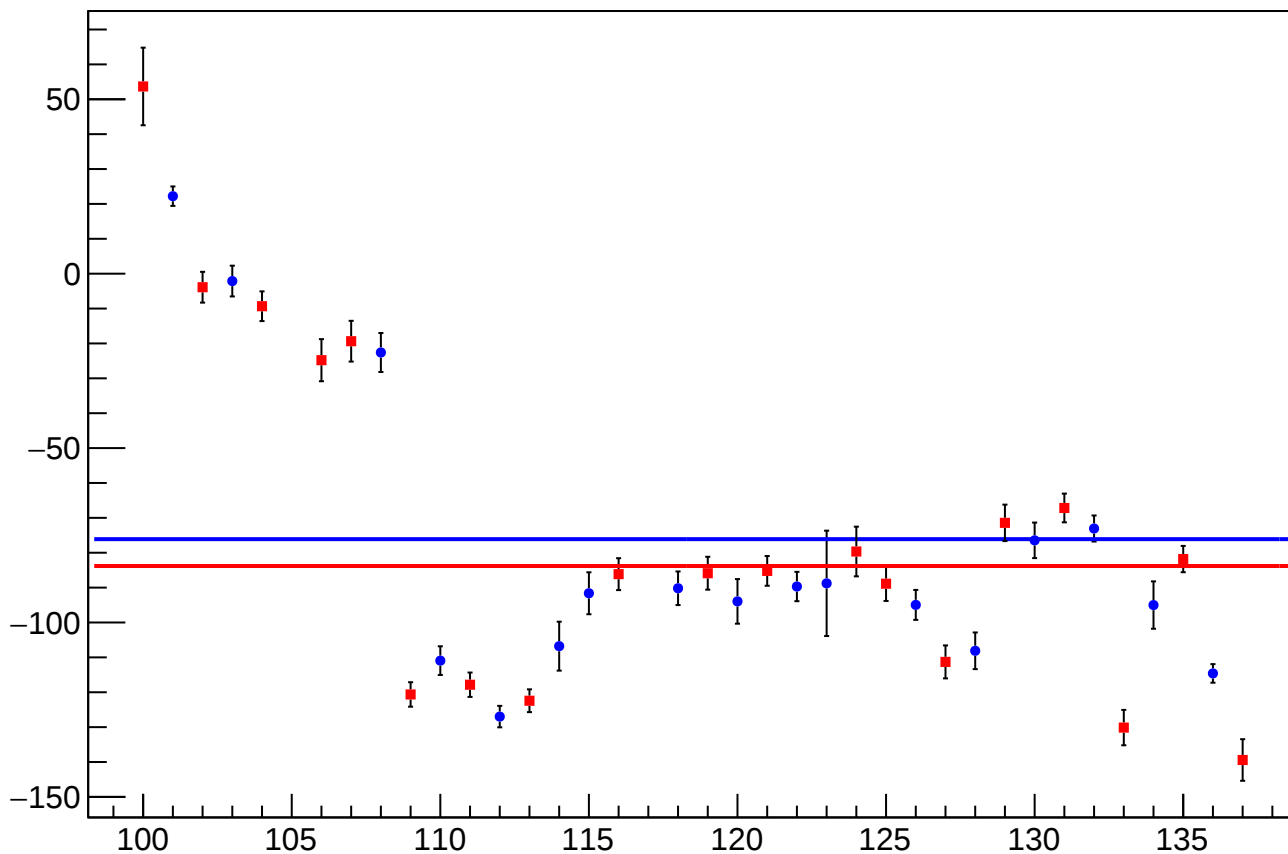
Right: -40.714 $\pm$ 0.022  $\chi^2$ /NDF: 122277.1/33

In: -39.791 $\pm$ 0.031  $\chi^2$ /NDF:26138.6/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -40.714 $\pm$ 0.022  $\chi^2$ /NDF: 122277.1/33

reg\_asym\_usr\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -76.106 $\pm$ 1.044  $\chi^2$ /NDF: 2289.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: -83.809 $\pm$ 1.046  $\chi^2$ /NDF: 1577.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

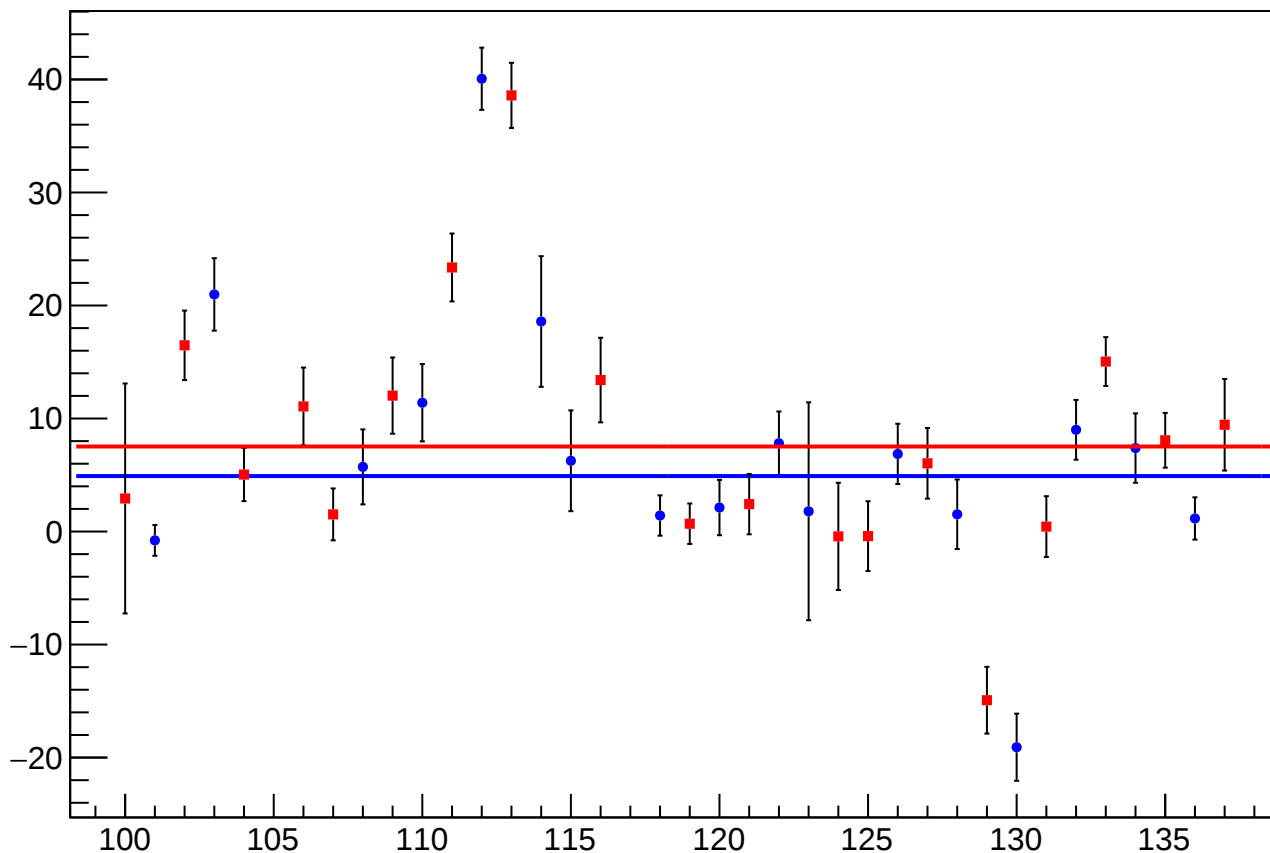
Right: -79.953 $\pm$ 0.739  $\chi^2$ /NDF: 3893.7/35

In: -76.106 $\pm$ 1.044  $\chi^2$ /NDF: 2289.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: -79.953 $\pm$ 0.739  $\chi^2$ /NDF: 3893.7/35

reg\_asym\_usr\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 4.907 $\pm$ 0.628  $\chi^2$ /NDF: 295.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 7.523 $\pm$ 0.651  $\chi^2$ /NDF: 270.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

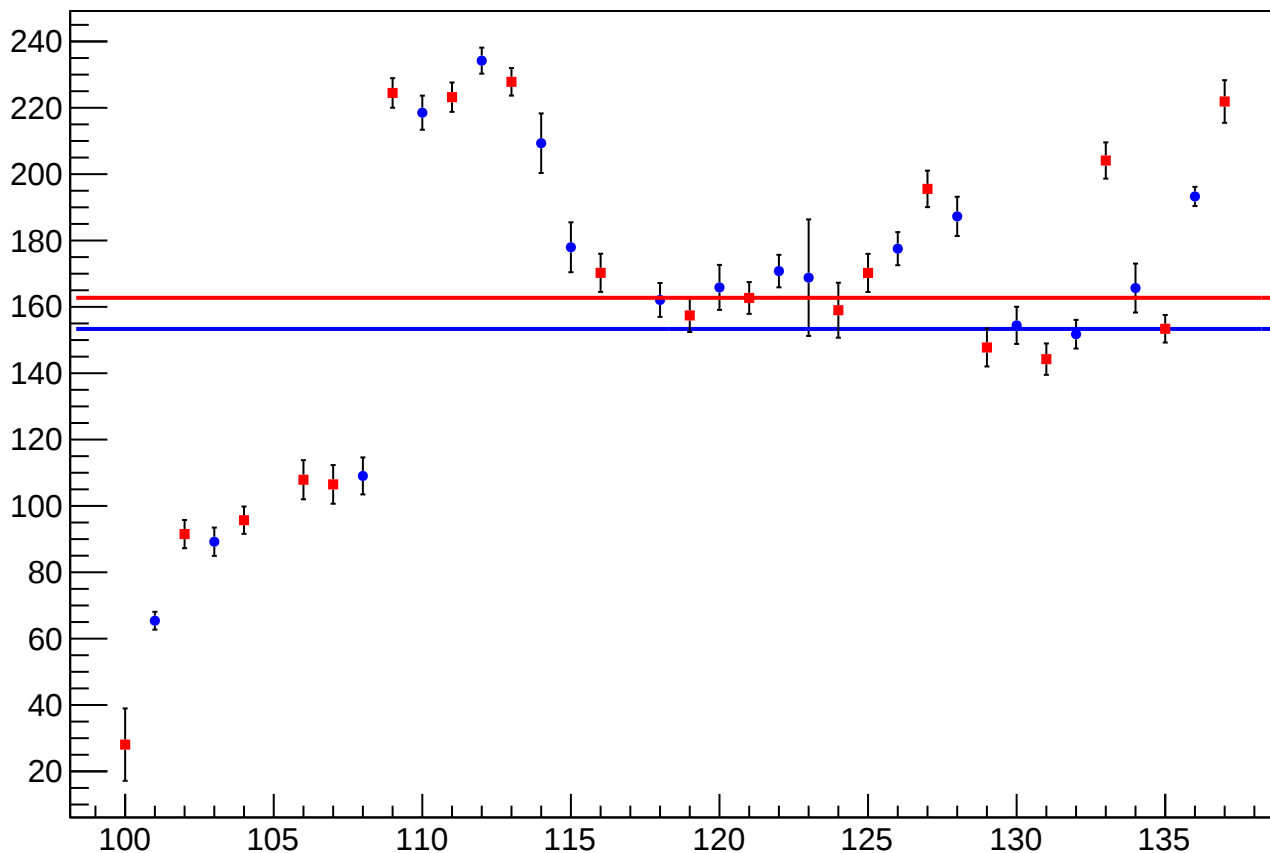
Right: 6.168 $\pm$ 0.452  $\chi^2$ /NDF: 574.4/35

In: 4.907 $\pm$ 0.628  $\chi^2$ /NDF:295.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 6.168 $\pm$ 0.452  $\chi^2$ /NDF: 574.4/35

# reg\_asym\_usr\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 153.350+/-1.150  $\chi^2/\text{NDF}$ : 2268.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 162.734+/-1.177  $\chi^2/\text{NDF}$ : 1708.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

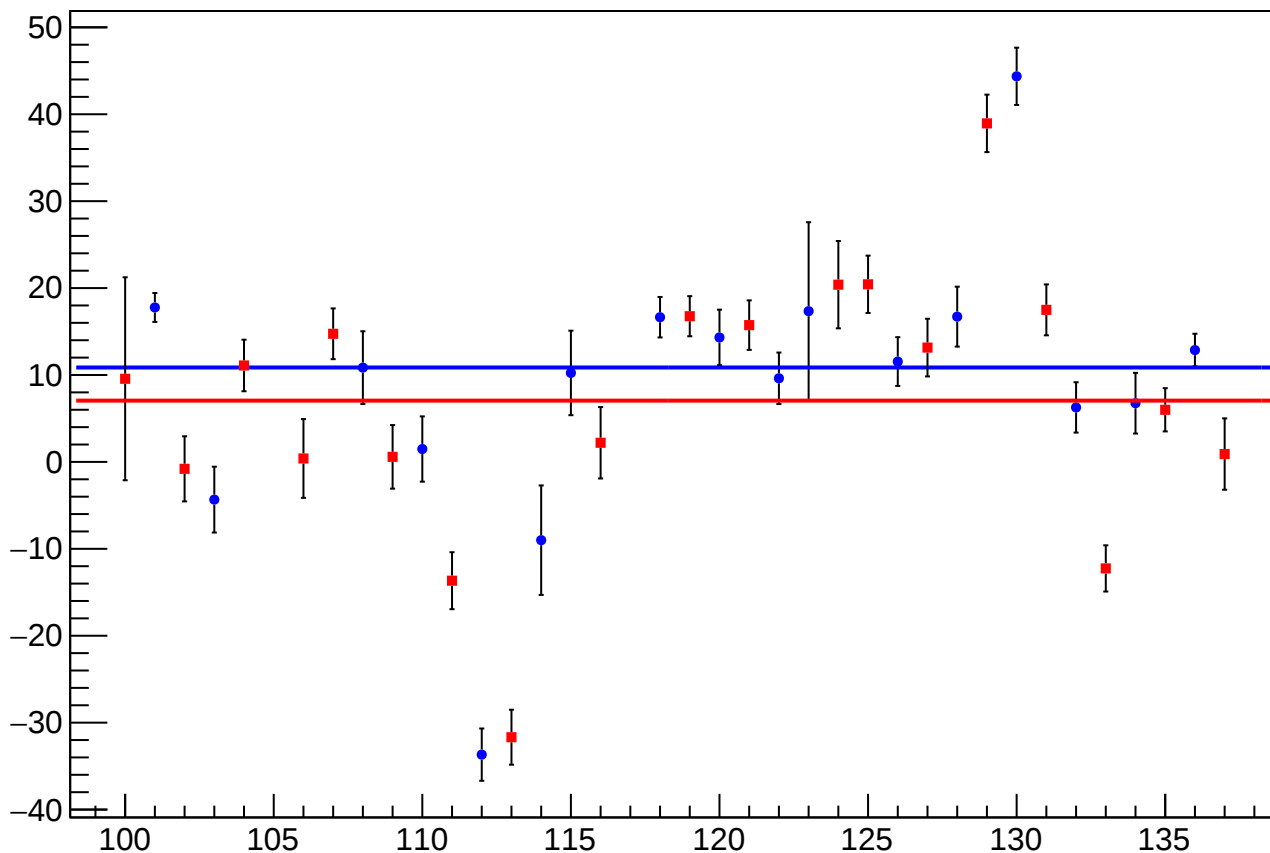
Right: 157.935+/-0.823  $\chi^2/\text{NDF}$ : 4009.6/35

In: 153.350+/-1.150  $\chi^2/\text{NDF}$ : 2268.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 157.935+/-0.823  $\chi^2/\text{NDF}$ : 4009.6/35

reg\_asym\_usr\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 10.864+/-0.719  $\chi^2/\text{NDF}$ : 387.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 7.052+/-0.748  $\chi^2/\text{NDF}$ : 424.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

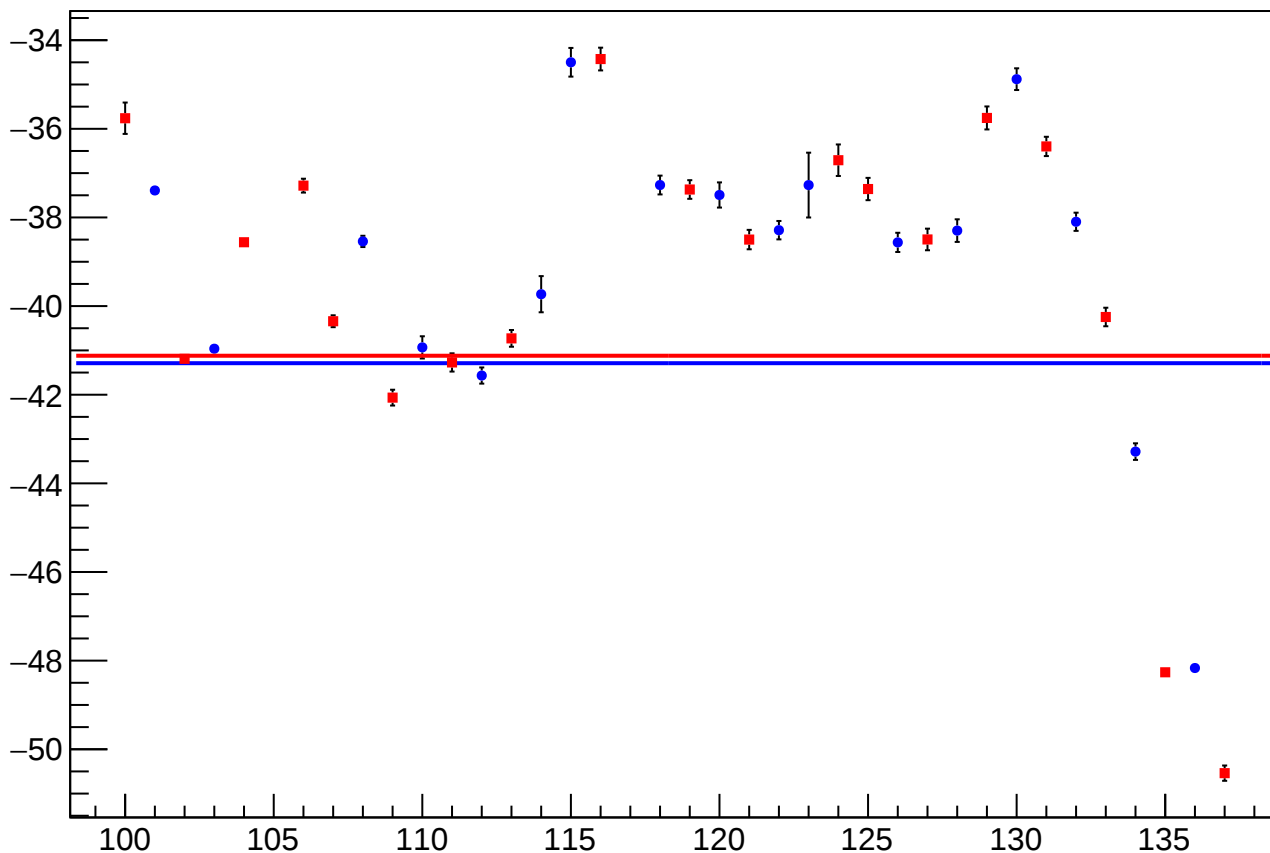
Right: 9.031+/-0.518  $\chi^2/\text{NDF}$ : 826.1/35

In: 10.864+/-0.719  $\chi^2/\text{NDF}$ : 387.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 9.031+/-0.518  $\chi^2/\text{NDF}$ : 826.1/35

reg\_asym\_usr\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -41.289 $\pm$ 0.039  $\chi^2$ /NDF: 12509.1/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -41.120 $\pm$ 0.039  $\chi^2$ /NDF: 12110.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

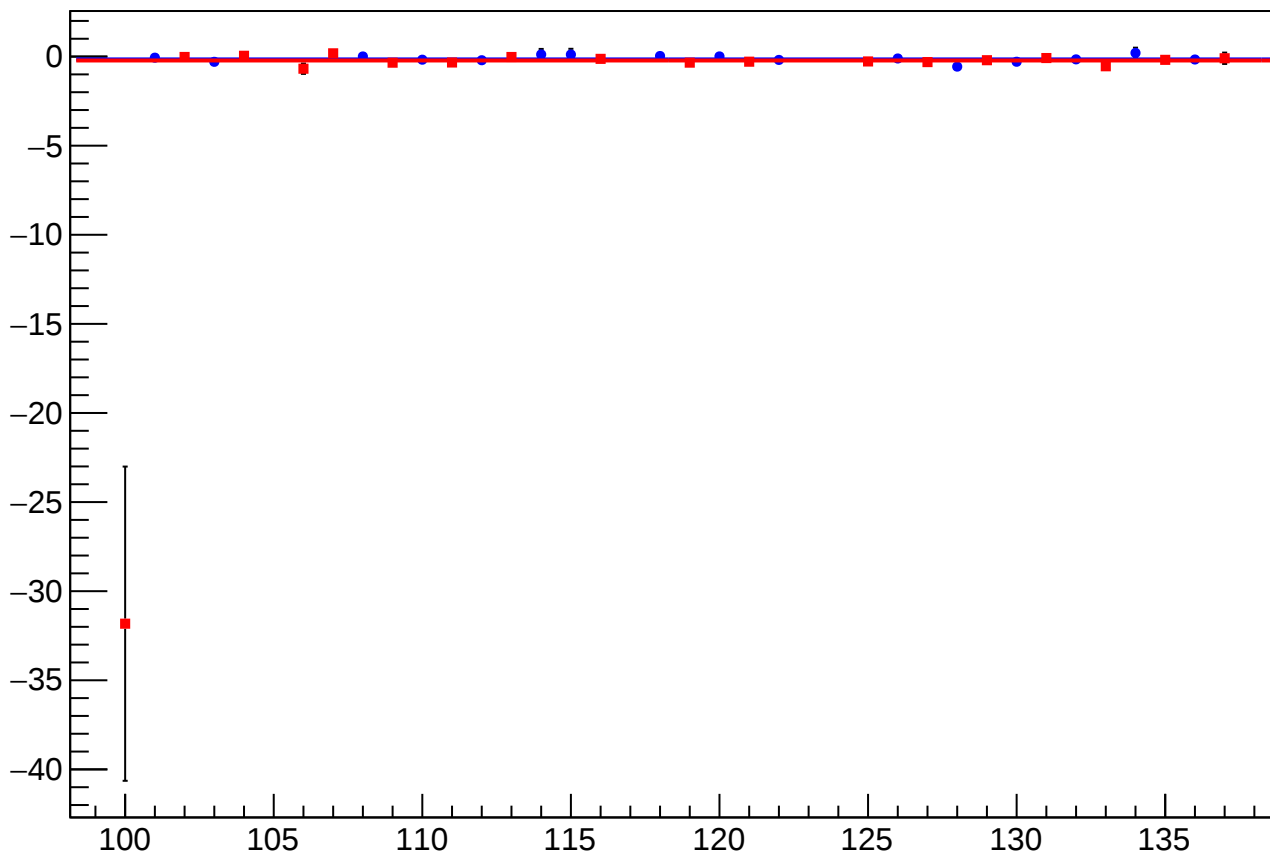
Right: -41.205 $\pm$ 0.027  $\chi^2$ /NDF: 24629.1/35

In: -41.289 $\pm$ 0.039  $\chi^2$ /NDF:12509.1/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -41.205 $\pm$ 0.027  $\chi^2$ /NDF: 24629.1/35

reg\_asym\_dsl\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -0.159+/-0.048  $\chi^2/\text{NDF}$ : 11.8/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.219+/-0.048  $\chi^2/\text{NDF}$ : 27.8/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

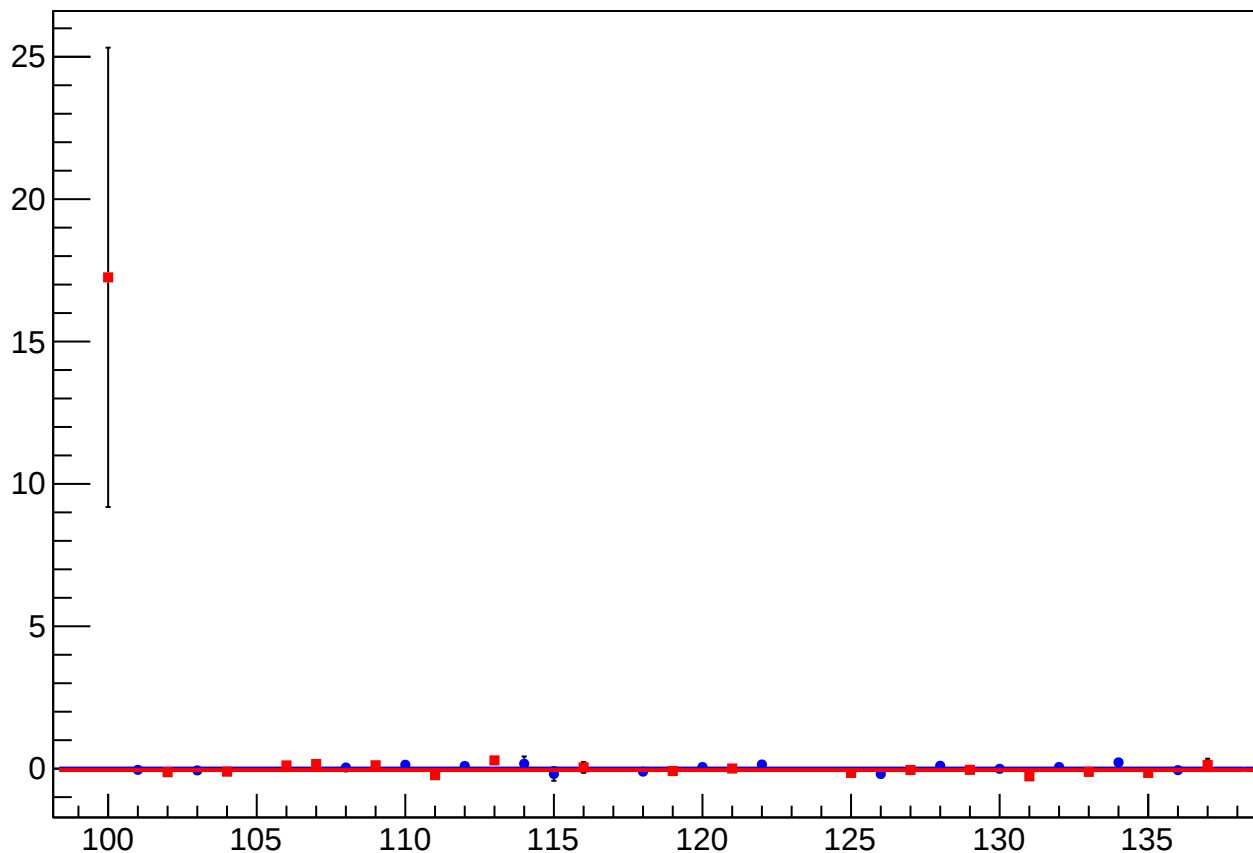
Right: -0.189+/-0.034  $\chi^2/\text{NDF}$ : 40.3/33

In: -0.159+/-0.048  $\chi^2/\text{NDF}$ : 11.8/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.189+/-0.034  $\chi^2/\text{NDF}$ : 40.3/33

reg\_asym\_dsl\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.003+/-0.029  $\chi^2/\text{NDF}$ : 12.4/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.050+/-0.029  $\chi^2/\text{NDF}$ : 25.6/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

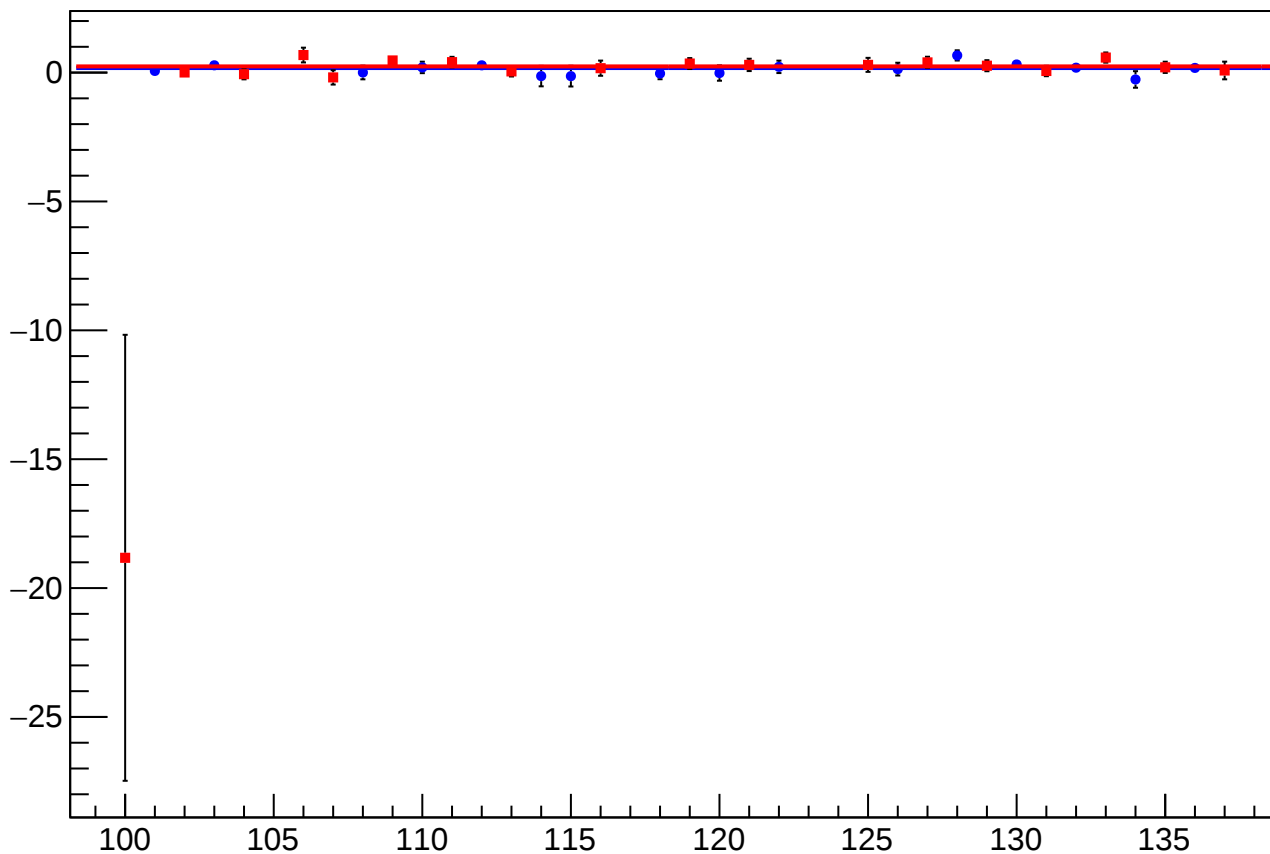
Right: -0.023+/-0.020  $\chi^2/\text{NDF}$ : 39.7/33

In: 0.003+/-0.029  $\chi^2/\text{NDF}$ : 12.4/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.023+/-0.020  $\chi^2/\text{NDF}$ : 39.7/33

reg\_asym\_dsl\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.176+/-0.053     $\chi^2/\text{NDF}$ : 13.0/15

Left Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.240+/-0.054     $\chi^2/\text{NDF}$ : 21.6/17

Left In: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

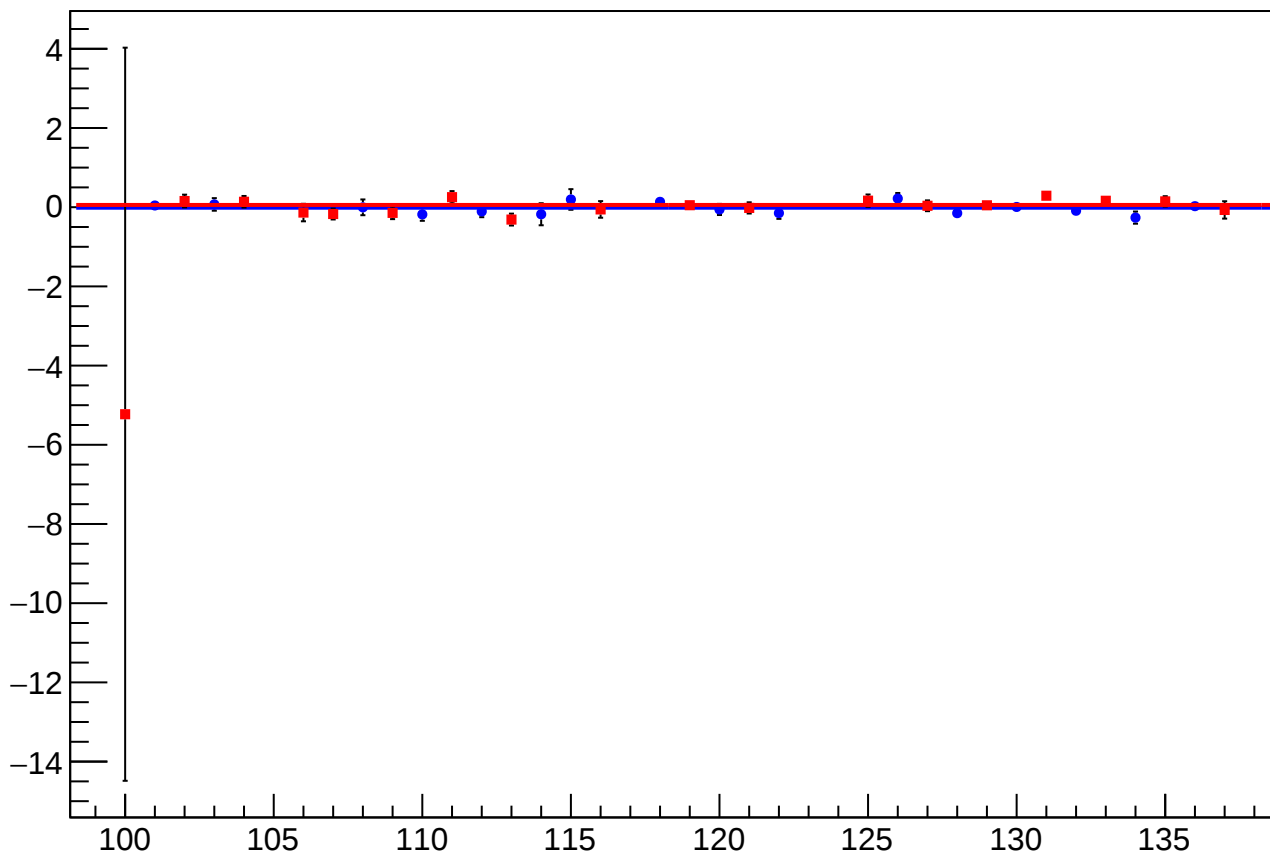
Right: 0.207+/-0.038     $\chi^2/\text{NDF}$ : 35.3/33

In: 0.176+/-0.053     $\chi^2/\text{NDF}$ : 13.0/15

Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

All: 0.207+/-0.038     $\chi^2/\text{NDF}$ : 35.3/33

reg\_asym\_dsl\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -0.013+/-0.033  $\chi^2/\text{NDF}$ : 13.6/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.057+/-0.034  $\chi^2/\text{NDF}$ : 20.3/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

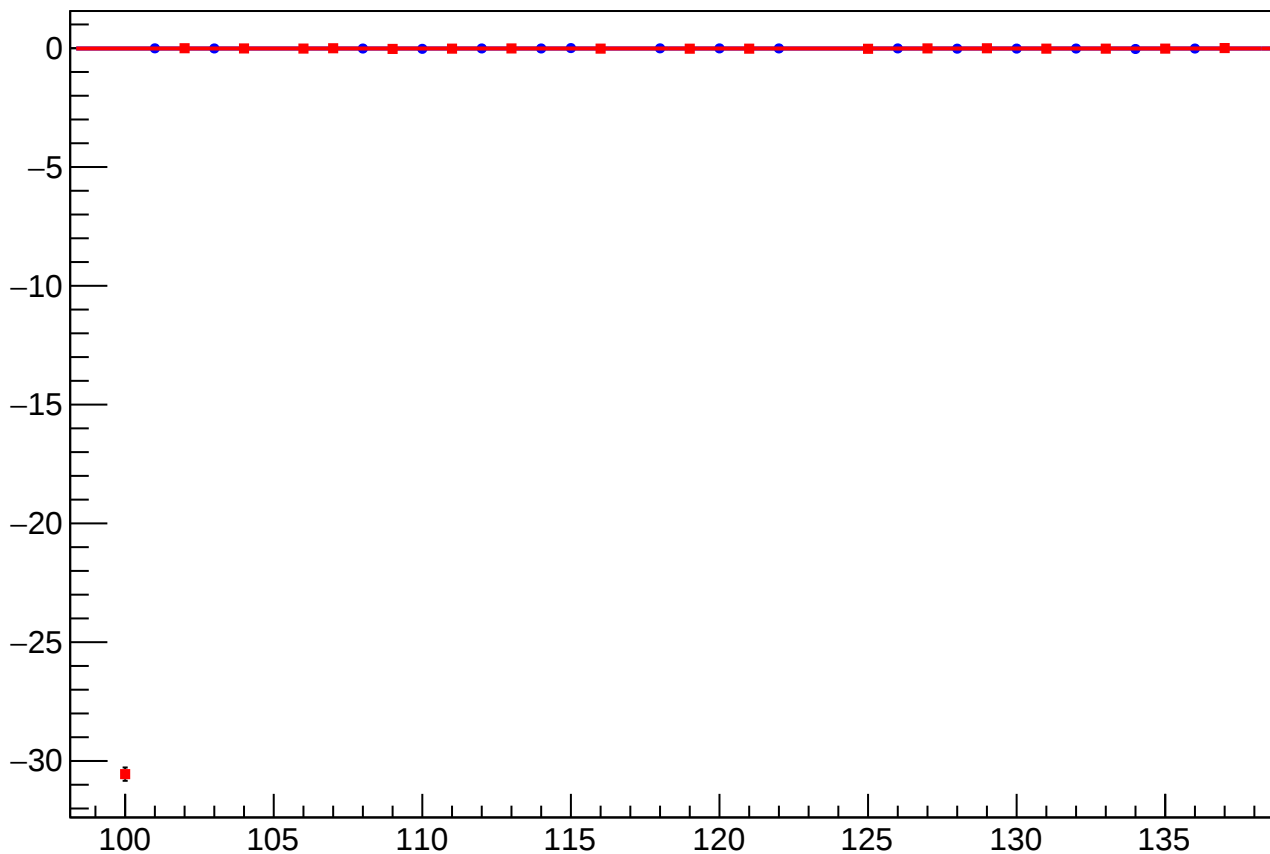
Right: 0.021+/-0.024  $\chi^2/\text{NDF}$ : 36.2/33

In: -0.013+/-0.033  $\chi^2/\text{NDF}$ : 13.6/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.021+/-0.024  $\chi^2/\text{NDF}$ : 36.2/33

reg\_asym\_dsl\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.012 $\pm$ 0.002  $\chi^2$ /NDF: 12.8/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.012 $\pm$ 0.002  $\chi^2$ /NDF: 11891.4/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

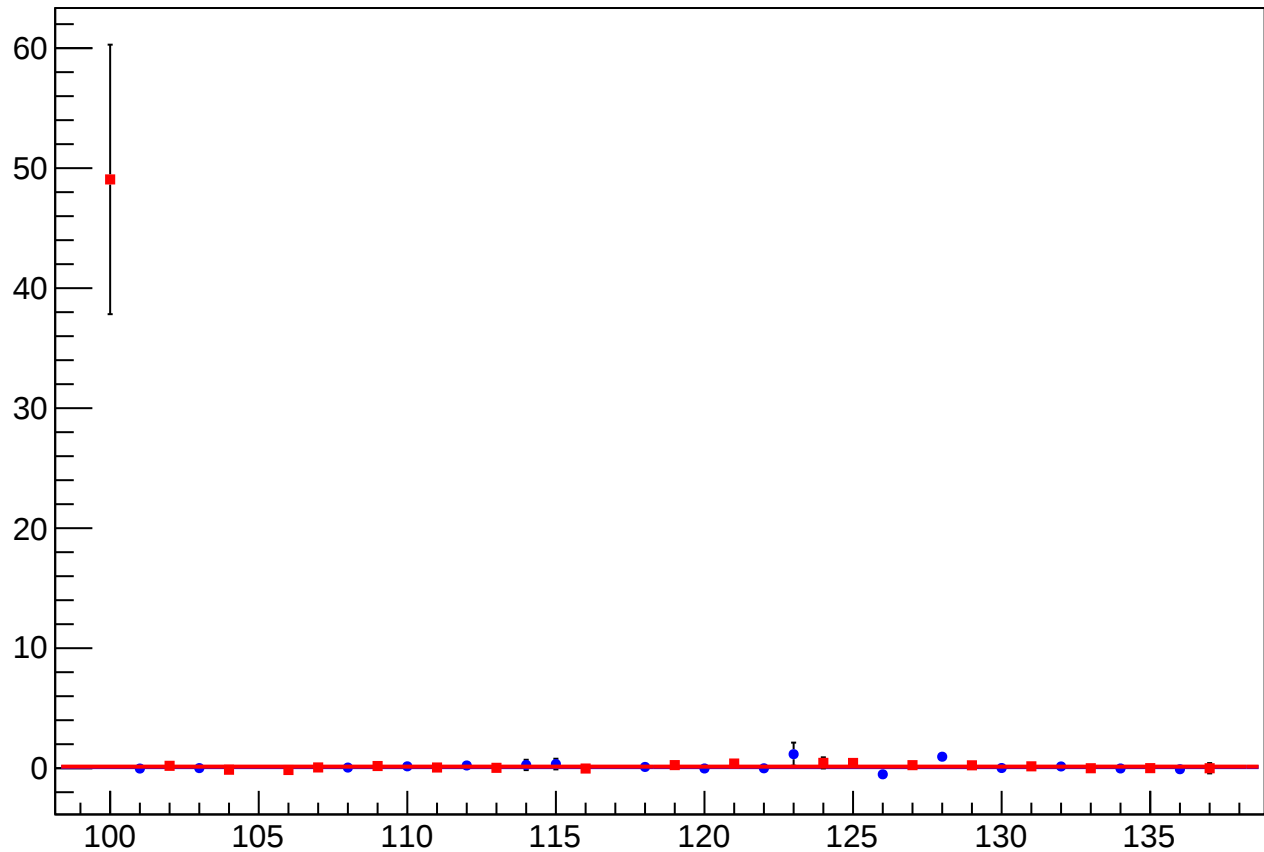
Right: -0.012 $\pm$ 0.001  $\chi^2$ /NDF: 11904.1/33

In: -0.012 $\pm$ 0.002  $\chi^2$ /NDF:12.8/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -0.012 $\pm$ 0.001  $\chi^2$ /NDF: 11904.1/33

reg\_asym\_dsr\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 0.091+/-0.062  $\chi^2/\text{NDF}$ : 21.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.133+/-0.064  $\chi^2/\text{NDF}$ : 24.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

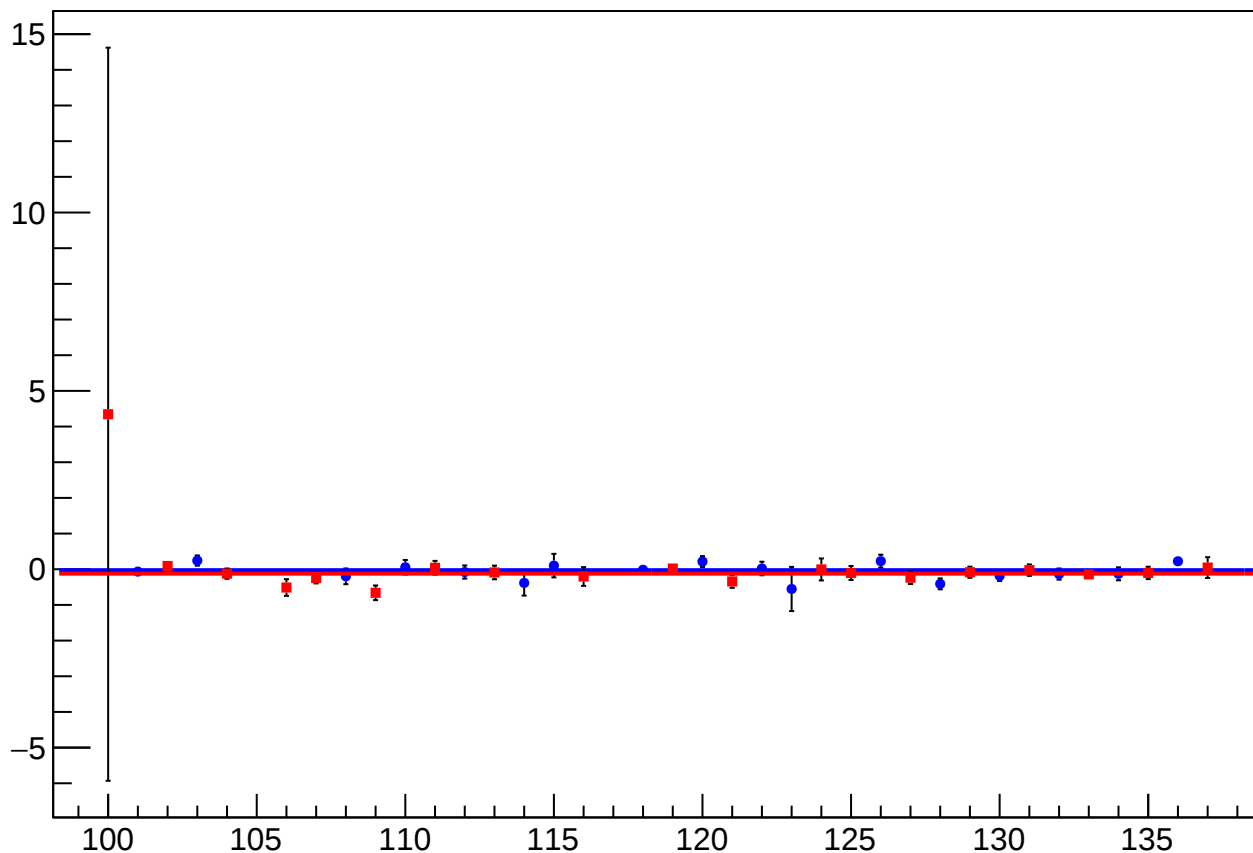
Right: 0.111+/-0.044  $\chi^2/\text{NDF}$ : 46.3/35

In: 0.091+/-0.062  $\chi^2/\text{NDF}$ : 21.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.111+/-0.044  $\chi^2/\text{NDF}$ : 46.3/35

reg\_asym\_dsr\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -0.026 $\pm$ 0.037  $\chi^2$ /NDF: 22.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.124 $\pm$ 0.039  $\chi^2$ /NDF: 18.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

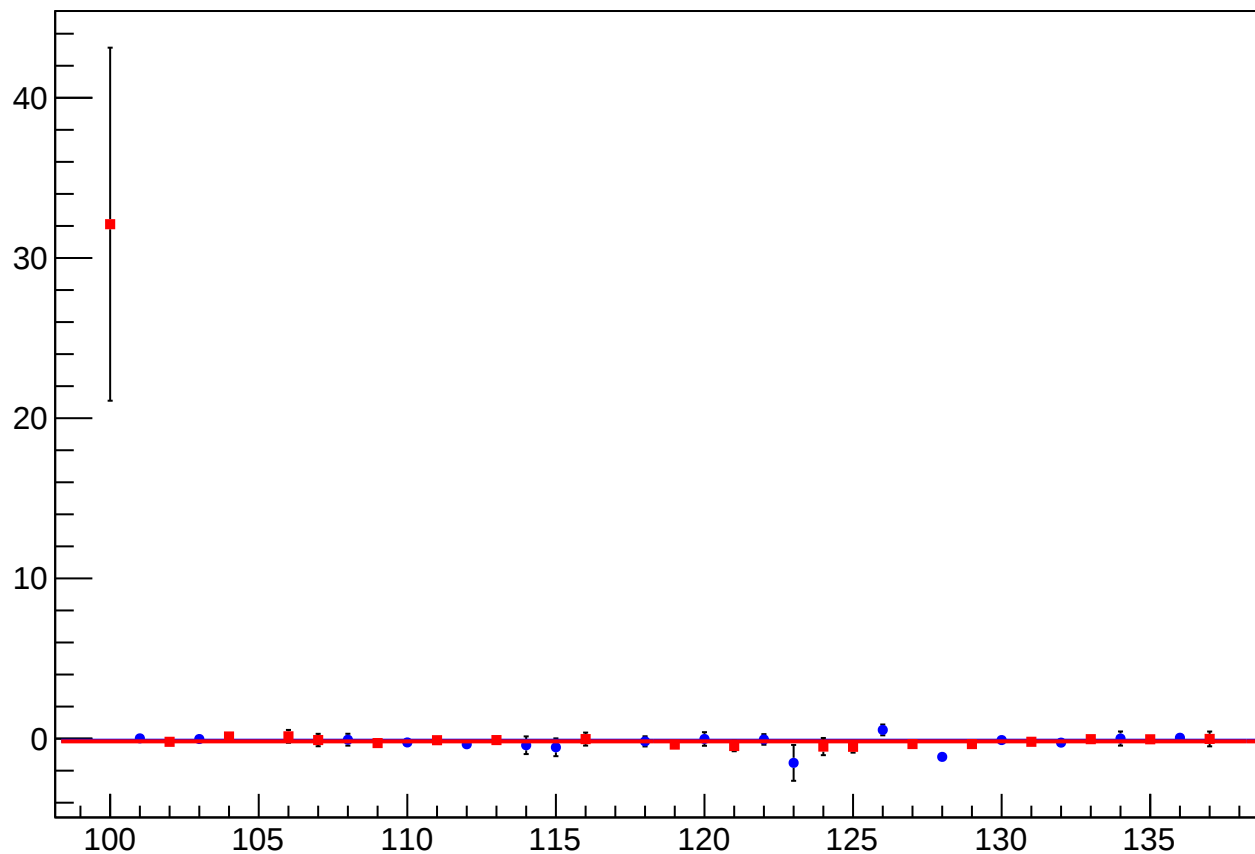
Right: -0.072 $\pm$ 0.027  $\chi^2$ /NDF: 44.3/35

In: -0.026 $\pm$ 0.037  $\chi^2$ /NDF:22.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -0.072 $\pm$ 0.027  $\chi^2$ /NDF: 44.3/35

reg\_asym\_dsr\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-0.129 \pm 0.067$   $\chi^2/\text{NDF}: 23.1/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-0.172 \pm 0.071$   $\chi^2/\text{NDF}: 14.9/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

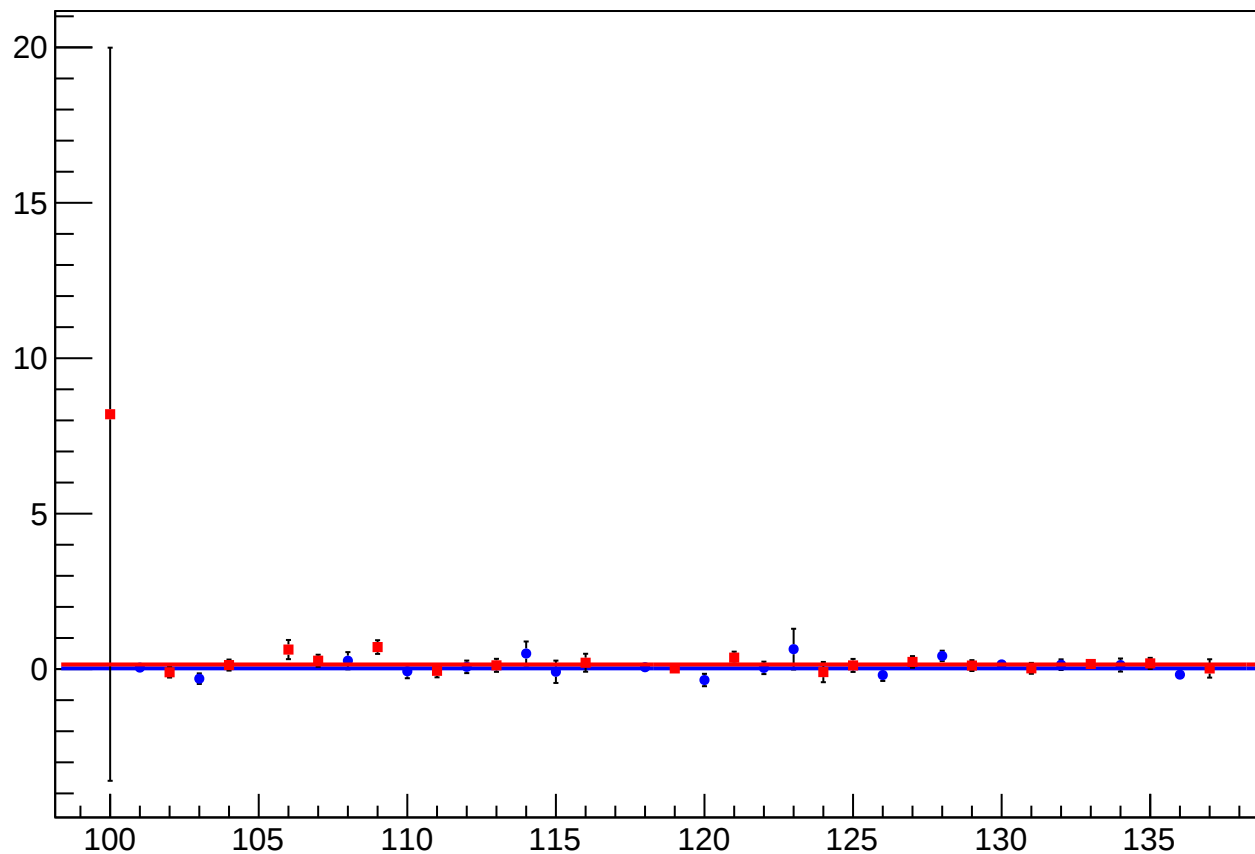
Right:  $-0.150 \pm 0.049$   $\chi^2/\text{NDF}: 38.2/35$

In:  $-0.129 \pm 0.067$   $\chi^2/\text{NDF}: 23.1/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-0.150 \pm 0.049$   $\chi^2/\text{NDF}: 38.2/35$

reg\_asym\_dsr\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.023+/-0.043  $\chi^2/\text{NDF}$ : 21.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.148+/-0.045  $\chi^2/\text{NDF}$ : 16.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

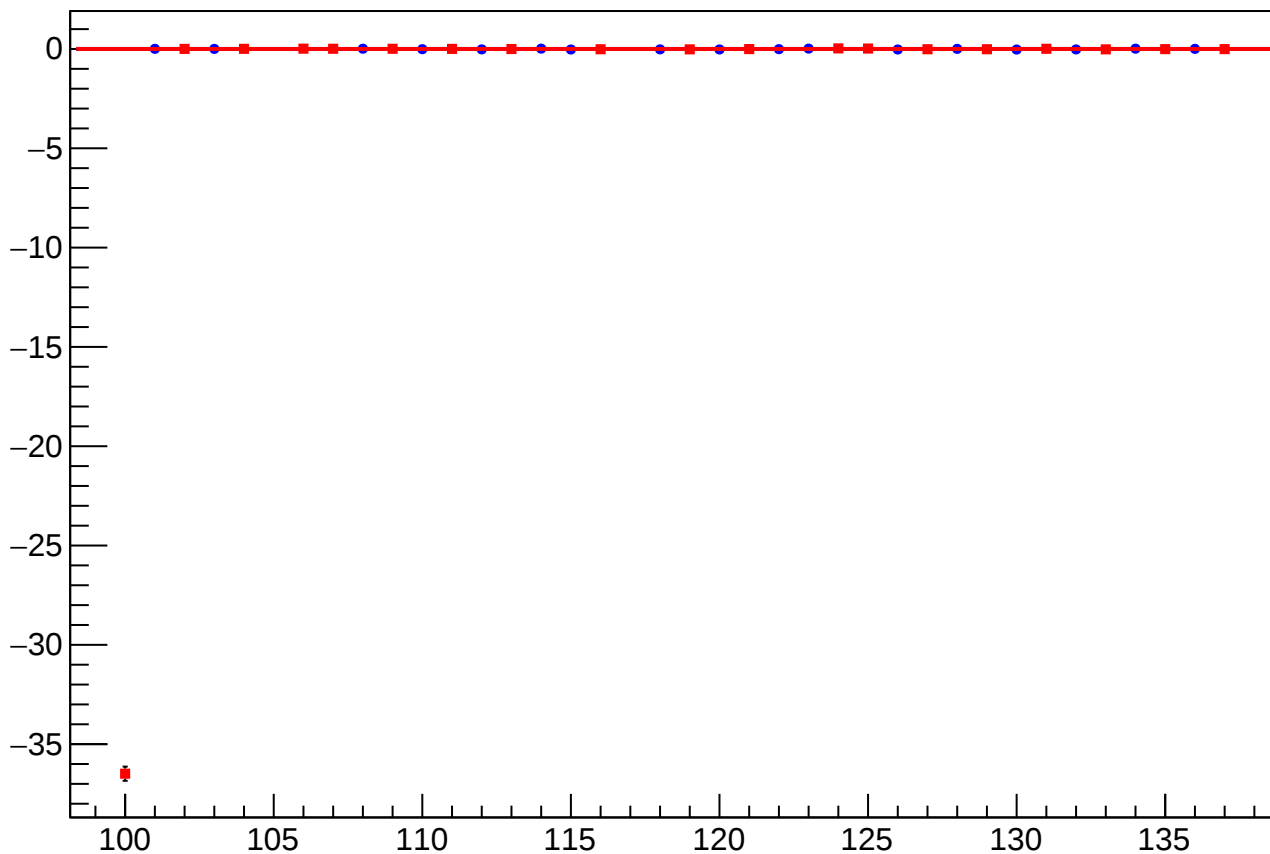
Right: 0.082+/-0.031  $\chi^2/\text{NDF}$ : 41.9/35

In: 0.023+/-0.043  $\chi^2/\text{NDF}$ : 21.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.082+/-0.031  $\chi^2/\text{NDF}$ : 41.9/35

reg\_asym\_dsr\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.001+/-0.002  $\chi^2/\text{NDF}$ : 30.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.001+/-0.002  $\chi^2/\text{NDF}$ : 10449.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

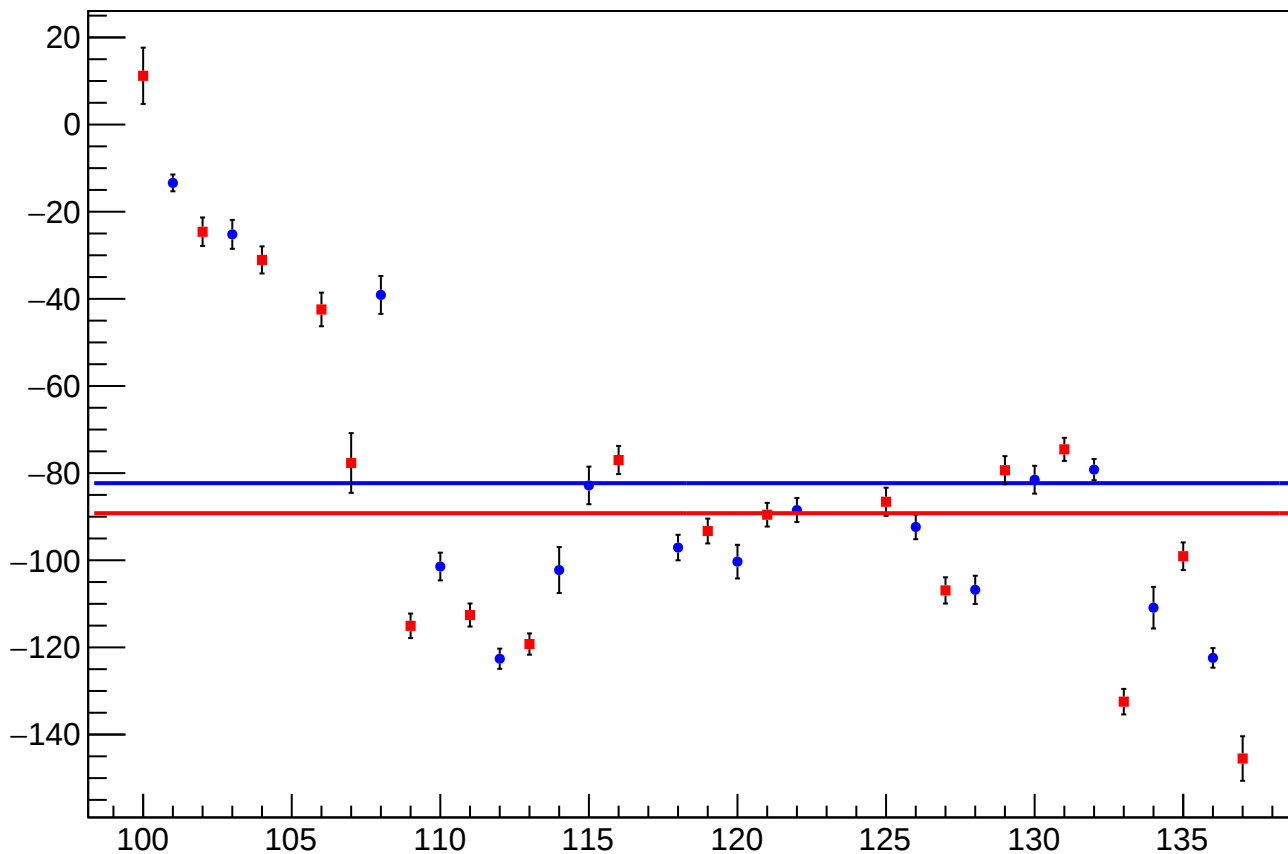
Right: 0.001+/-0.002  $\chi^2/\text{NDF}$ : 10479.7/35

In: 0.001+/-0.002  $\chi^2/\text{NDF}$ : 30.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.001+/-0.002  $\chi^2/\text{NDF}$ : 10479.7/35

reg\_asym\_us\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -82.301+/-0.738  $\chi^2/\text{NDF}$ : 2510.0/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -89.193+/-0.746  $\chi^2/\text{NDF}$ : 1884.2/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

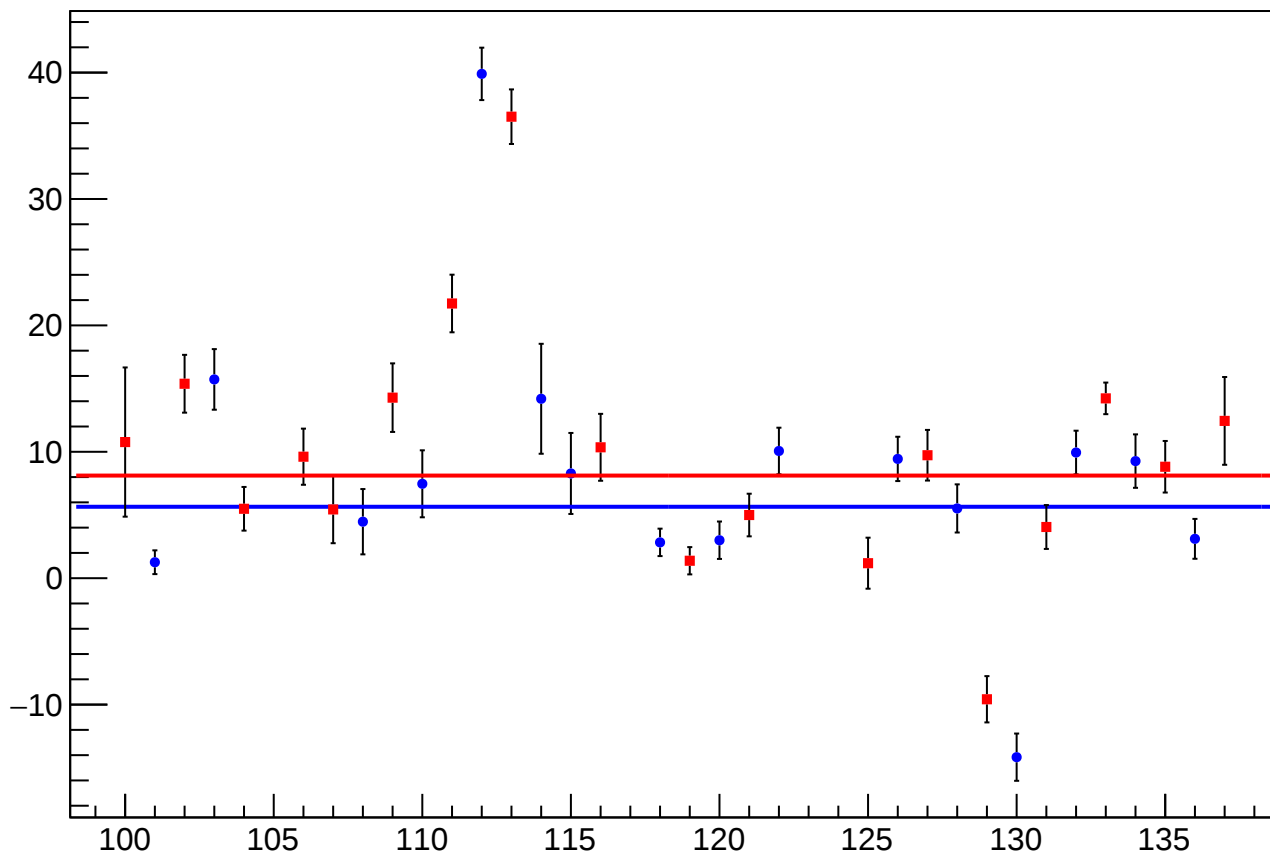
Right: -85.714+/-0.525  $\chi^2/\text{NDF}$ : 4437.3/33

In: -82.301+/-0.738  $\chi^2/\text{NDF}$ : 2510.0/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -85.714+/-0.525  $\chi^2/\text{NDF}$ : 4437.3/33

reg\_asym\_us\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 5.651+/-0.429  $\chi^2/\text{NDF}$ : 461.9/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 8.119+/-0.453  $\chi^2/\text{NDF}$ : 407.9/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

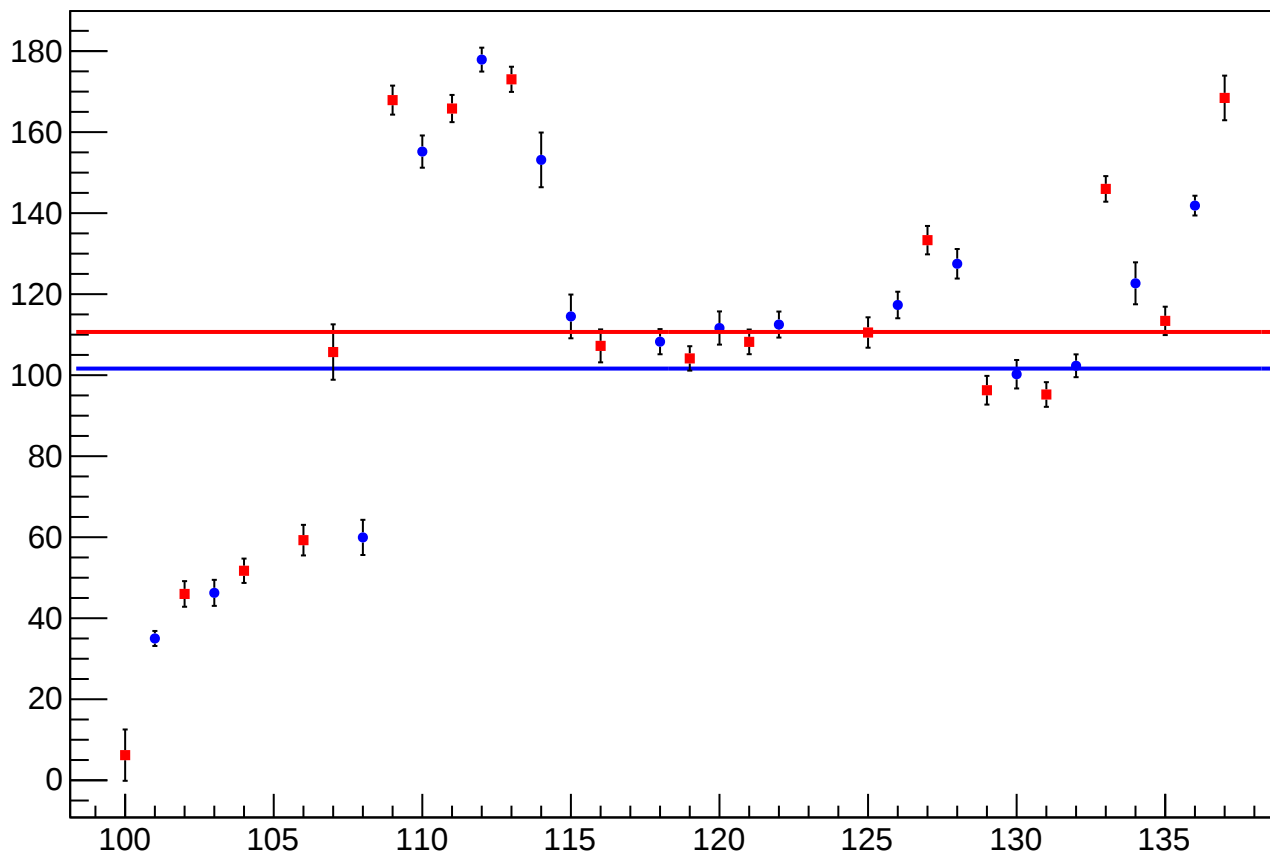
Right: 6.819+/-0.311  $\chi^2/\text{NDF}$ : 885.4/33

In: 5.651+/-0.429  $\chi^2/\text{NDF}$ :461.9/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 6.819+/-0.311  $\chi^2/\text{NDF}$ : 885.4/33

reg\_asym\_us\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 101.630+/-0.812  $\chi^2/\text{NDF}$ : 2980.2/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 110.669+/-0.836  $\chi^2/\text{NDF}$ : 2514.0/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

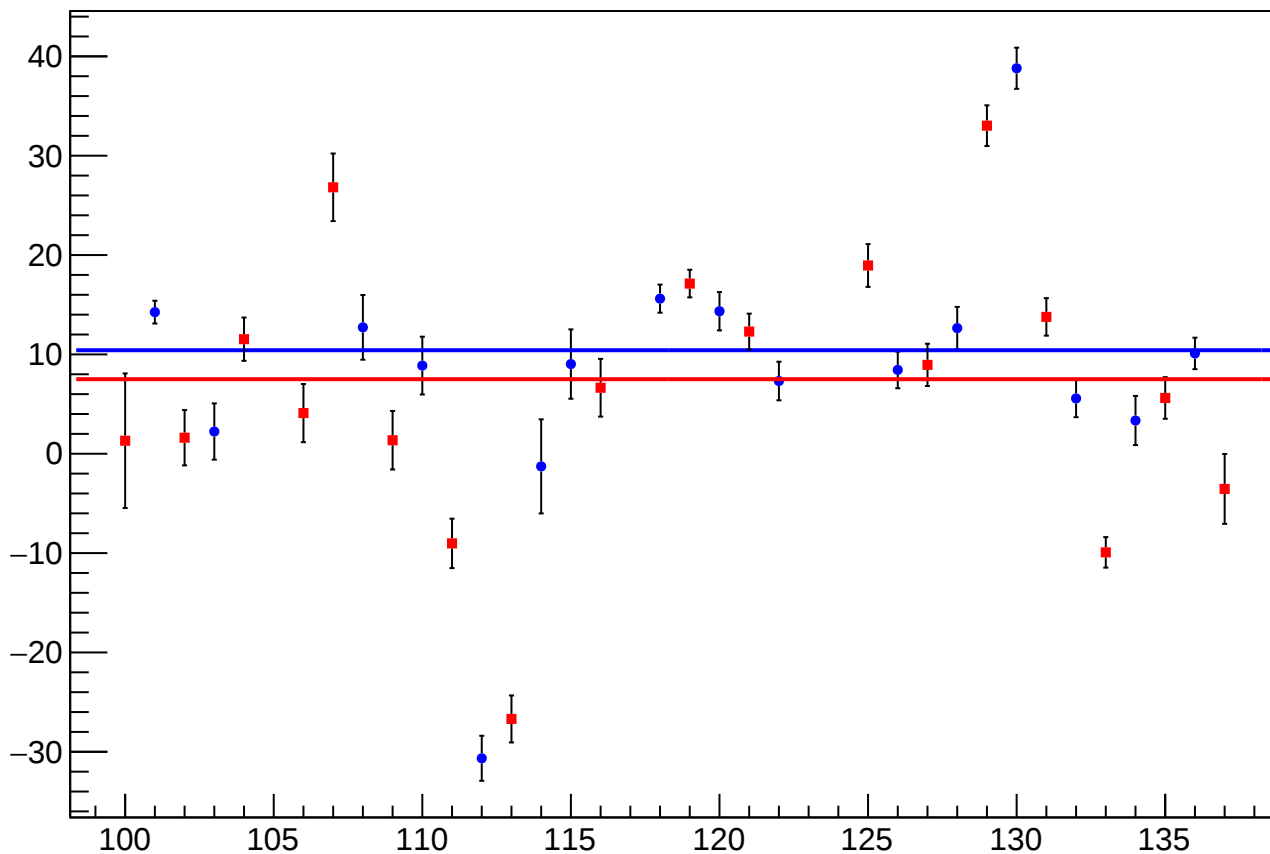
Right: 106.018+/-0.583  $\chi^2/\text{NDF}$ : 5554.3/33

In: 101.630+/-0.812  $\chi^2/\text{NDF}$ : 2980.2/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 106.018+/-0.583  $\chi^2/\text{NDF}$ : 5554.3/33

reg\_asym\_us\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 10.420+/-0.497  $\chi^2/\text{NDF}$ : 579.7/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 7.502+/-0.523  $\chi^2/\text{NDF}$ : 689.4/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

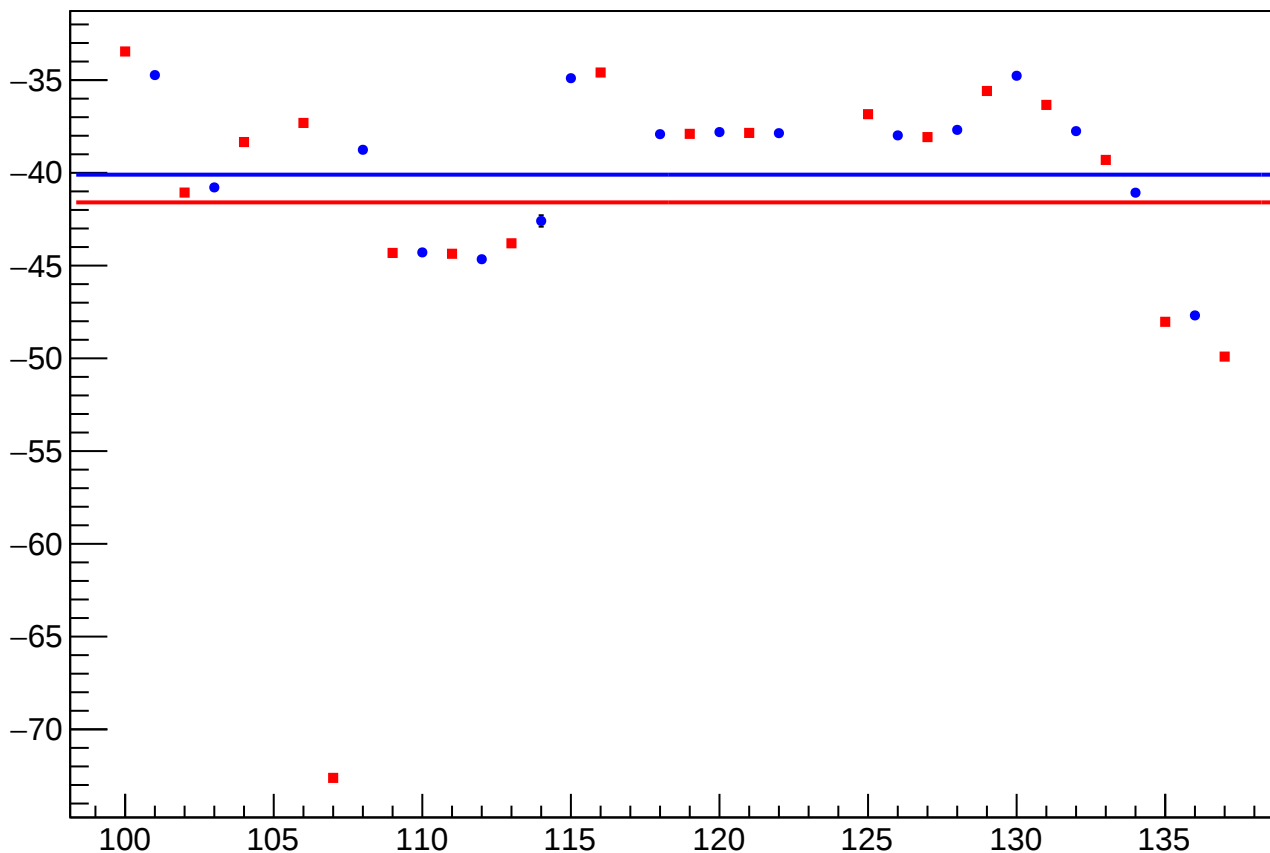
Right: 9.035+/-0.360  $\chi^2/\text{NDF}$ : 1285.5/33

In: 10.420+/-0.497  $\chi^2/\text{NDF}$ : 579.7/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 9.035+/-0.360  $\chi^2/\text{NDF}$ : 1285.5/33

reg\_asym\_us\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -40.098+/-0.028  $\chi^2/\text{NDF}$ : 25073.4/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -41.592+/-0.029  $\chi^2/\text{NDF}$ : 61677.7/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

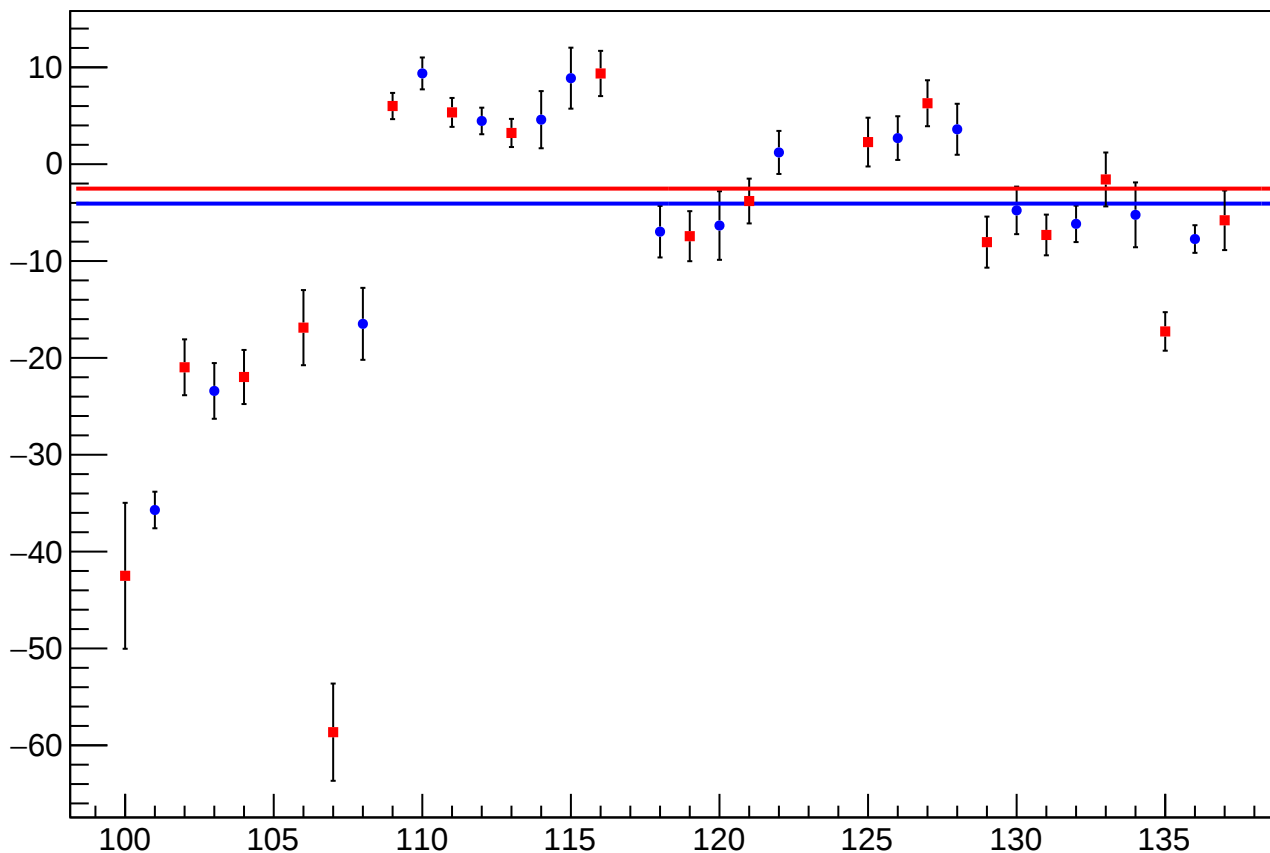
Right: -40.838+/-0.020  $\chi^2/\text{NDF}$ : 88129.3/33

In: -40.098+/-0.028  $\chi^2/\text{NDF}$ : 25073.4/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -40.838+/-0.020  $\chi^2/\text{NDF}$ : 88129.3/33

reg\_asym\_us\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-4.071 \pm 0.544$   $\chi^2/\text{NDF}$ : 500.7/15

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-2.523 \pm 0.531$   $\chi^2/\text{NDF}$ : 452.4/17

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

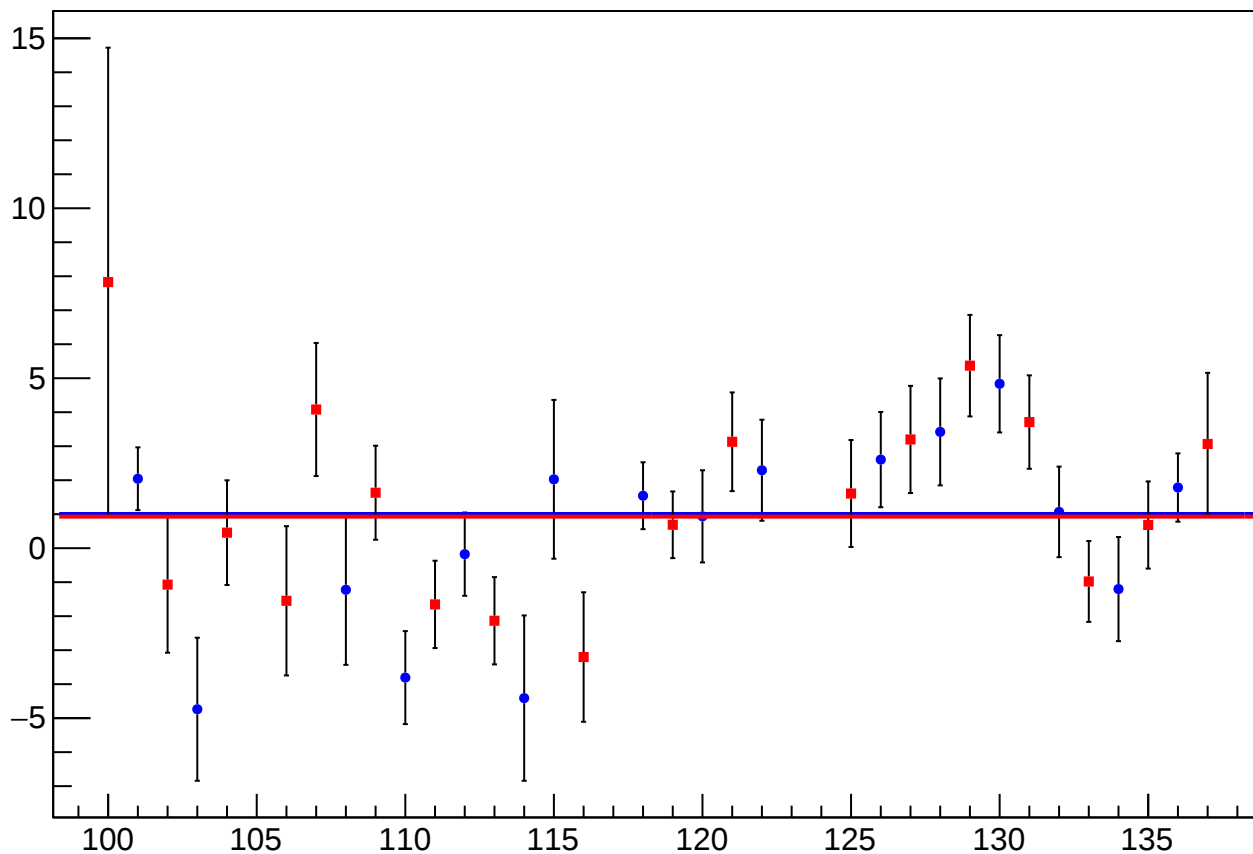
Right:  $-3.278 \pm 0.380$   $\chi^2/\text{NDF}$ : 957.3/33

In:  $-4.071 \pm 0.544$   $\chi^2/\text{NDF}$ : 500.7/15

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-3.278 \pm 0.380$   $\chi^2/\text{NDF}$ : 957.3/33

reg\_asym\_us\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.006 $\pm$ 0.342  $\chi^2$ /NDF: 42.7/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.929 $\pm$ 0.353  $\chi^2$ /NDF: 41.9/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

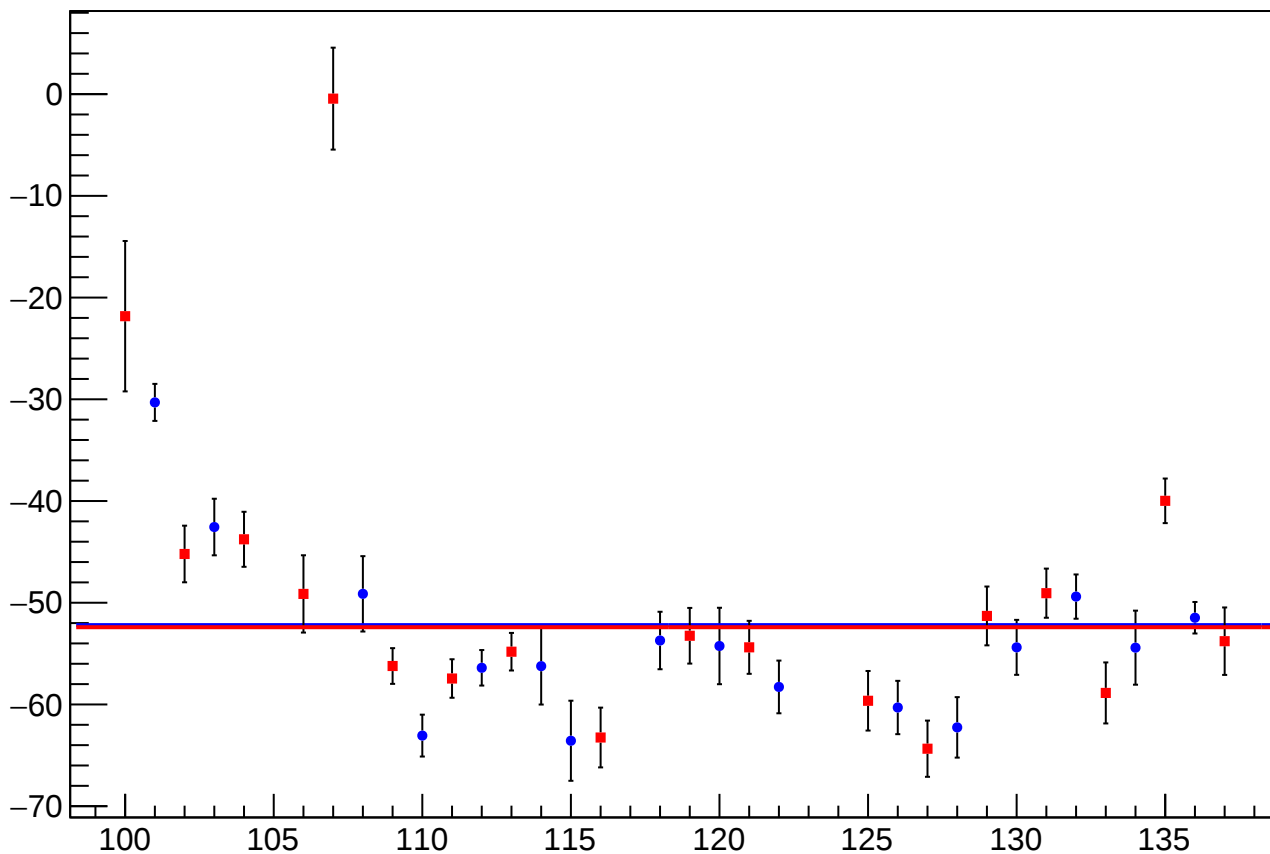
Right: 0.969 $\pm$ 0.246  $\chi^2$ /NDF: 84.6/33

In: 1.006 $\pm$ 0.342  $\chi^2$ /NDF:42.7/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.969 $\pm$ 0.246  $\chi^2$ /NDF: 84.6/33

reg\_asym\_us\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -52.200 $\pm$ 0.615  $\chi^2$ /NDF: 230.6/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -52.407 $\pm$ 0.616  $\chi^2$ /NDF: 233.9/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

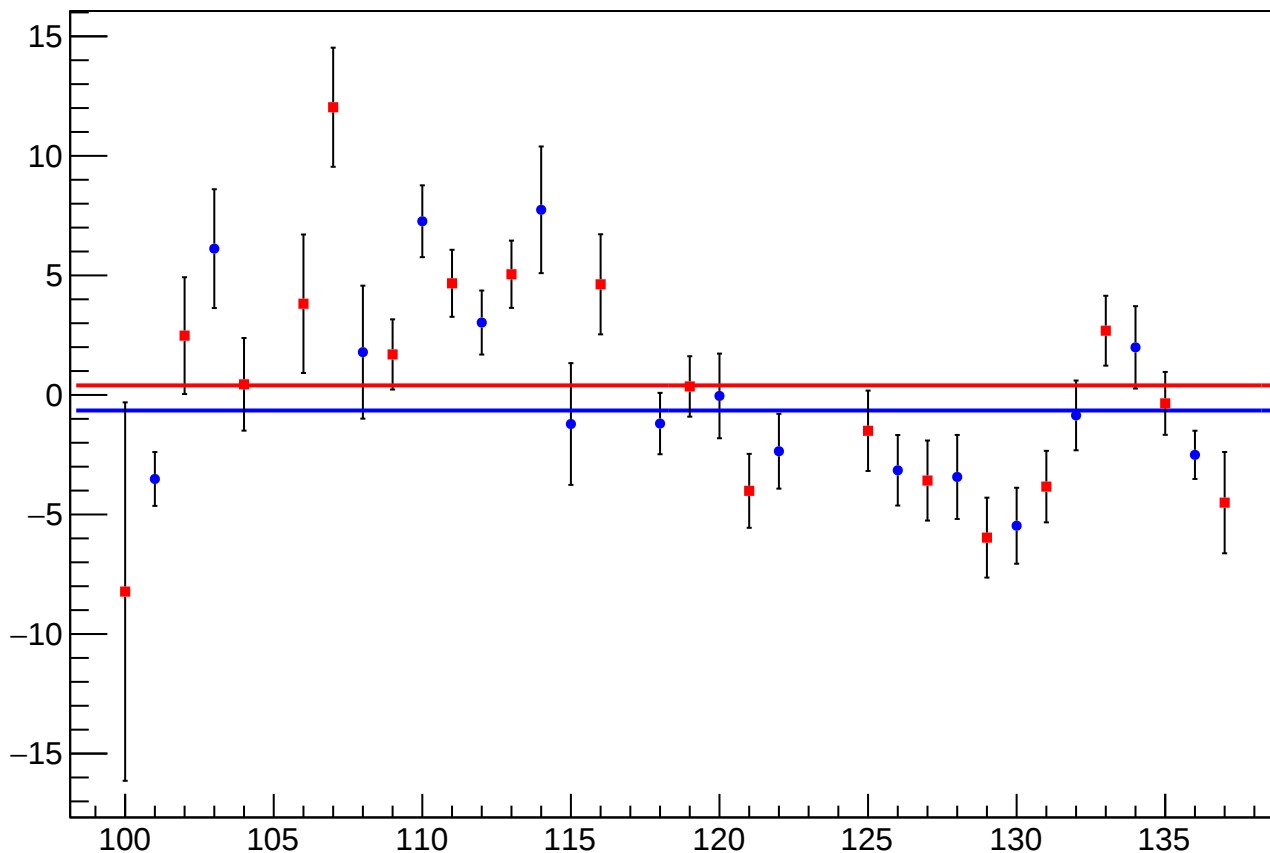
Right: -52.303 $\pm$ 0.435  $\chi^2$ /NDF: 464.6/33

In: -52.200 $\pm$ 0.615  $\chi^2$ /NDF:230.6/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -52.303 $\pm$ 0.435  $\chi^2$ /NDF: 464.6/33

reg\_asym\_us\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -0.651+/-0.387  $\chi^2/\text{NDF}$ : 81.9/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.400+/-0.399  $\chi^2/\text{NDF}$ : 95.9/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

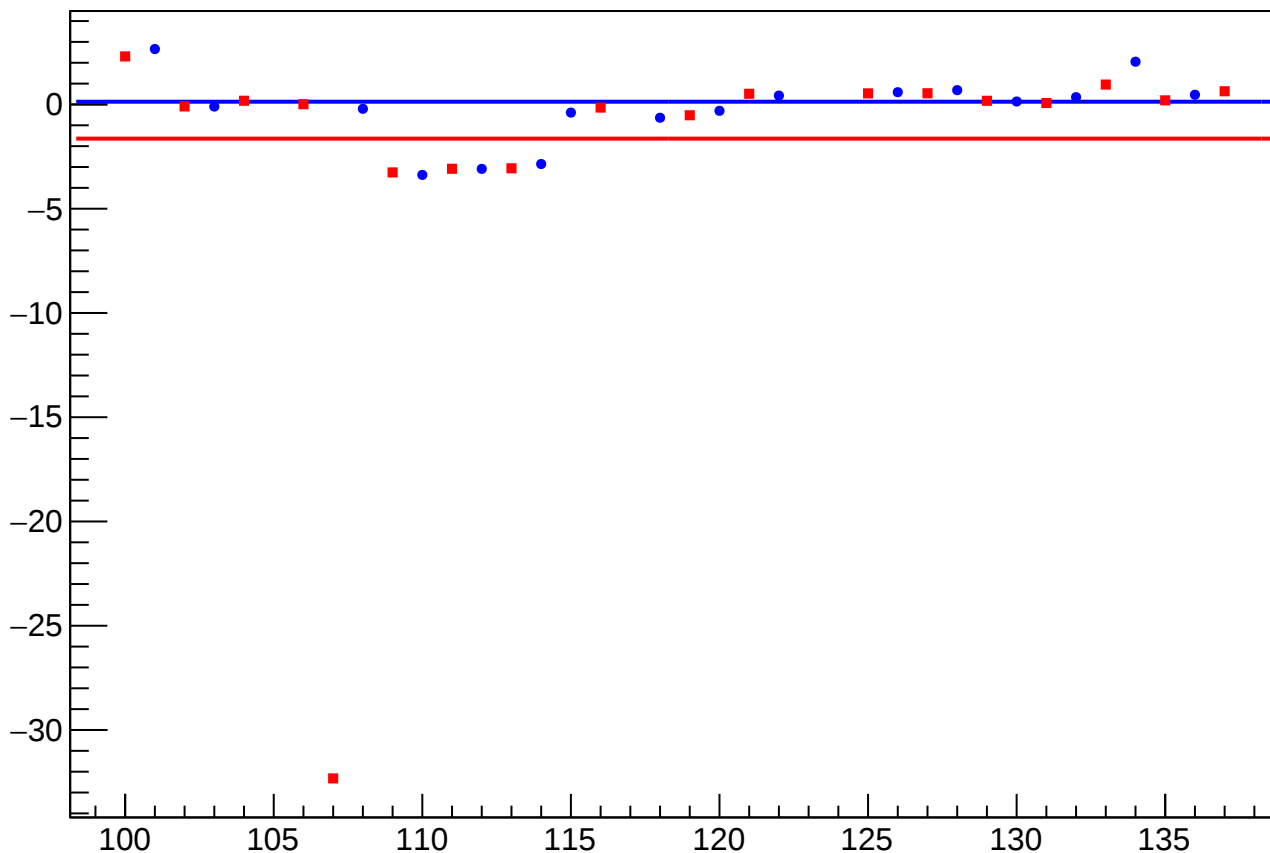
Right: -0.142+/-0.278  $\chi^2/\text{NDF}$ : 181.4/33

In: -0.651+/-0.387  $\chi^2/\text{NDF}$ :81.9/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -0.142+/-0.278  $\chi^2/\text{NDF}$ : 181.4/33

reg\_asym\_us\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.132 $\pm$ 0.022  $\chi^2$ /NDF: 5247.5/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -1.638 $\pm$ 0.022  $\chi^2$ /NDF: 77848.3/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

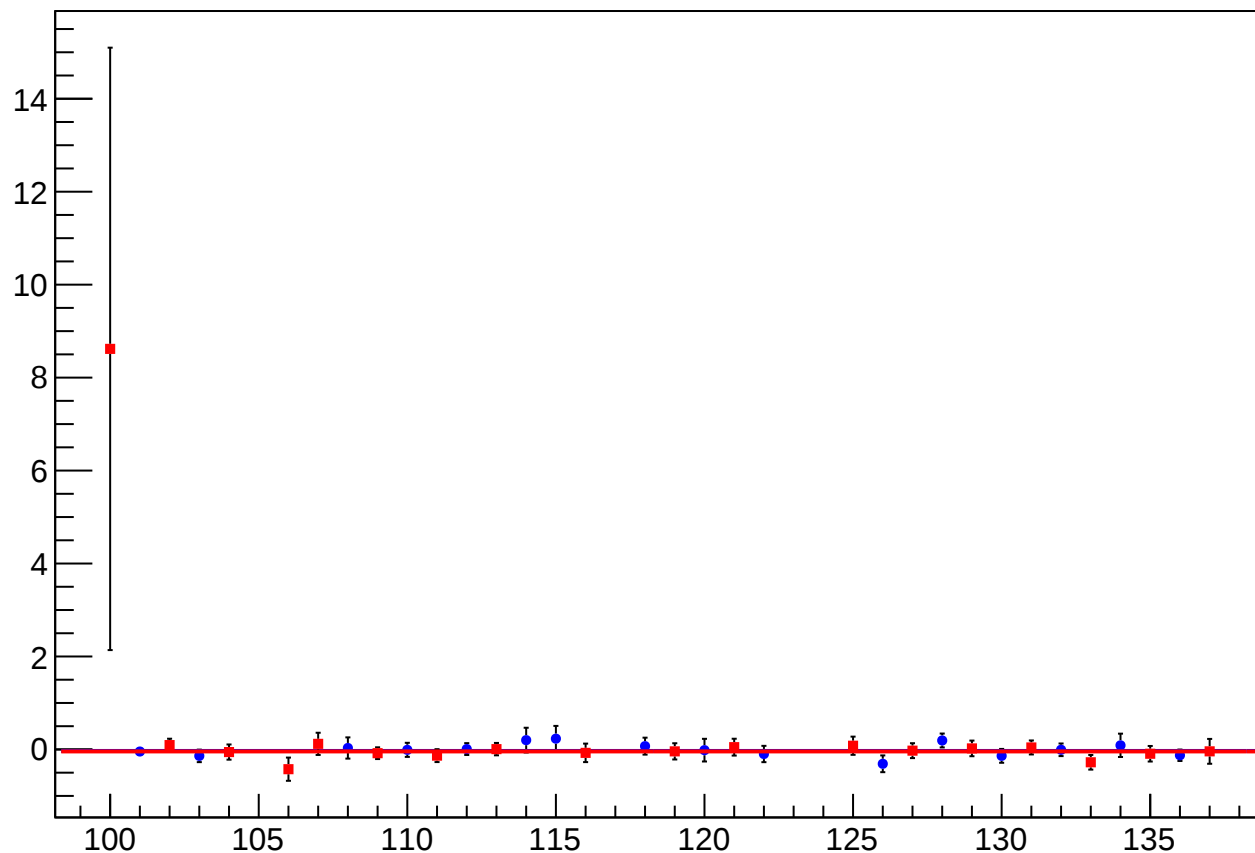
Right: -0.742 $\pm$ 0.015  $\chi^2$ /NDF: 86422.1/33

In: 0.132 $\pm$ 0.022  $\chi^2$ /NDF:5247.5/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -0.742 $\pm$ 0.015  $\chi^2$ /NDF: 86422.1/33

reg\_asym\_ds\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-0.033 \pm 0.039$   $\chi^2/\text{NDF}$ : 9.0/15

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.043 \pm 0.040$   $\chi^2/\text{NDF}$ : 9.7/17

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

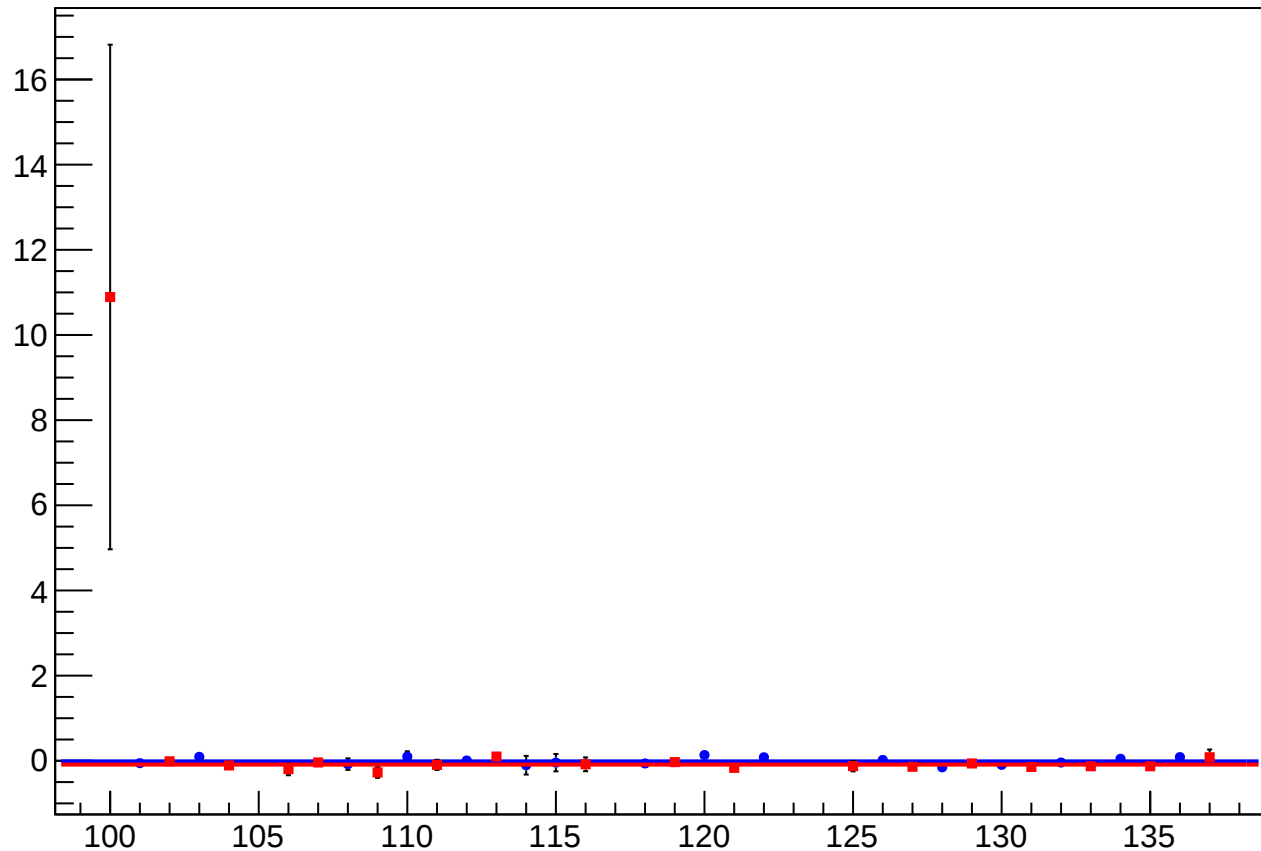
Right:  $-0.038 \pm 0.028$   $\chi^2/\text{NDF}$ : 18.7/33

In:  $-0.033 \pm 0.039$   $\chi^2/\text{NDF}$ : 9.0/15

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.038 \pm 0.028$   $\chi^2/\text{NDF}$ : 18.7/33

reg\_asym\_ds\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -0.013 $\pm$ 0.023  $\chi^2$ /NDF: 11.7/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.089 $\pm$ 0.025  $\chi^2$ /NDF: 13.0/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

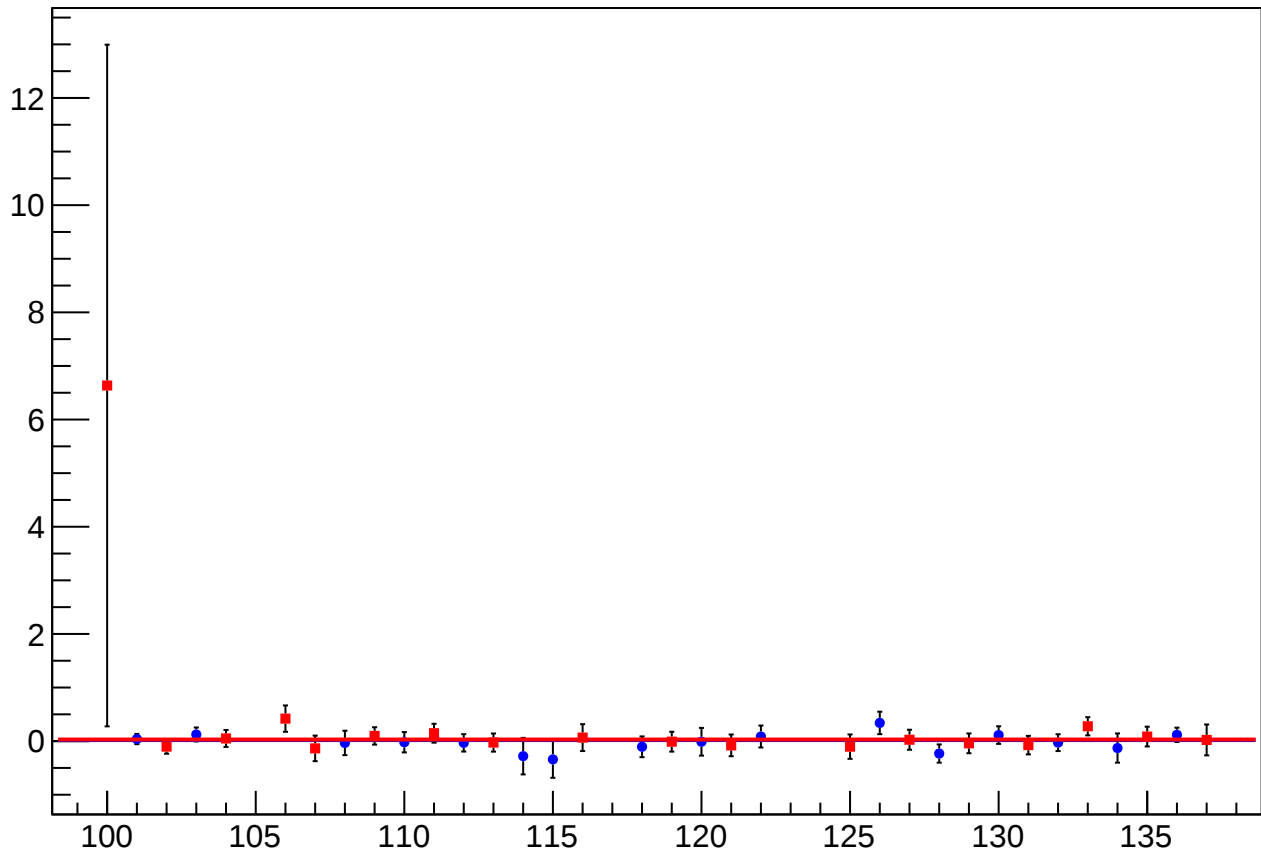
Right: -0.049 $\pm$ 0.017  $\chi^2$ /NDF: 29.6/33

In: -0.013 $\pm$ 0.023  $\chi^2$ /NDF:11.7/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -0.049 $\pm$ 0.017  $\chi^2$ /NDF: 29.6/33

reg\_asym\_ds\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.020+/-0.043  $\chi^2/\text{NDF}$ : 9.1/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.030+/-0.045  $\chi^2/\text{NDF}$ : 9.2/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

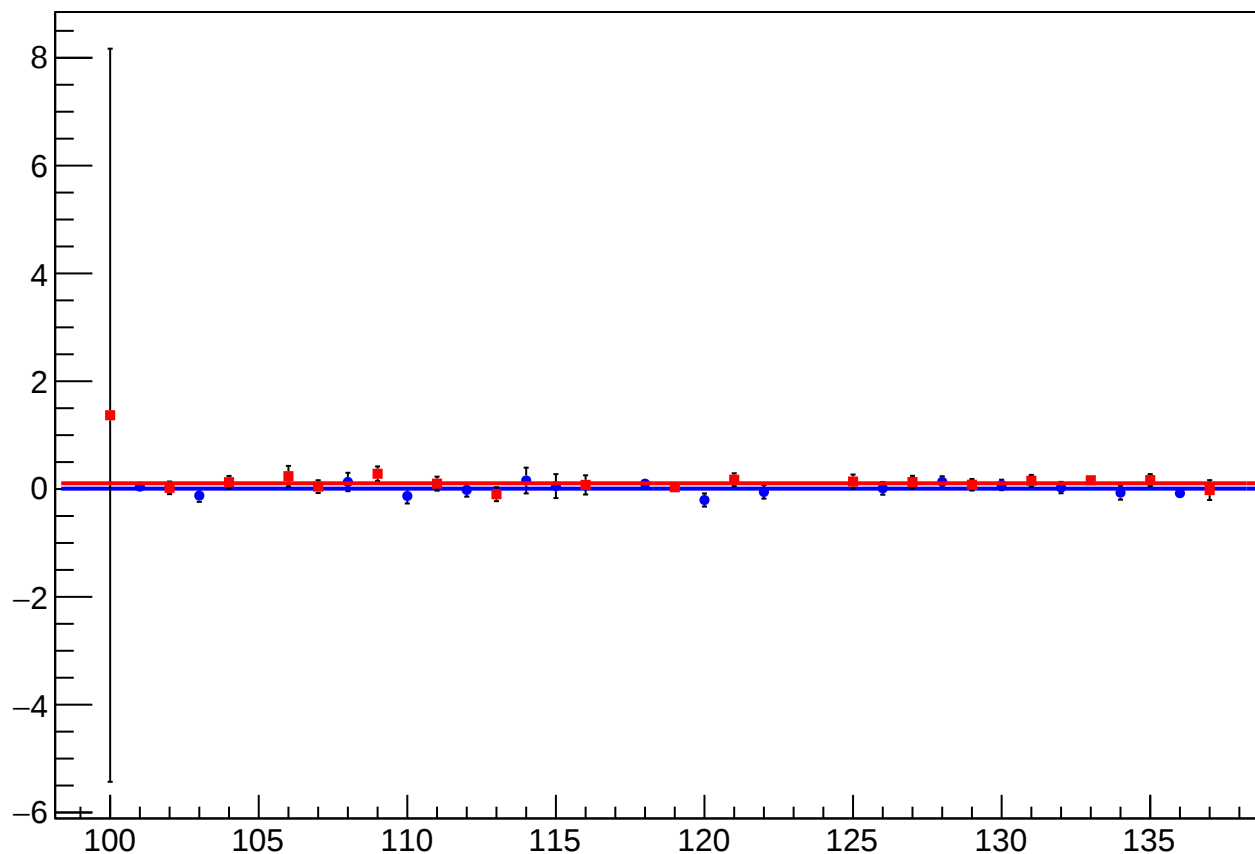
Right: 0.025+/-0.031  $\chi^2/\text{NDF}$ : 18.3/33

In: 0.020+/-0.043  $\chi^2/\text{NDF}$ : 9.1/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.025+/-0.031  $\chi^2/\text{NDF}$ : 18.3/33

reg\_asym\_ds\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 0.007+/-0.027  $\chi^2/\text{NDF}$ : 11.3/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.107+/-0.029  $\chi^2/\text{NDF}$ : 8.2/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

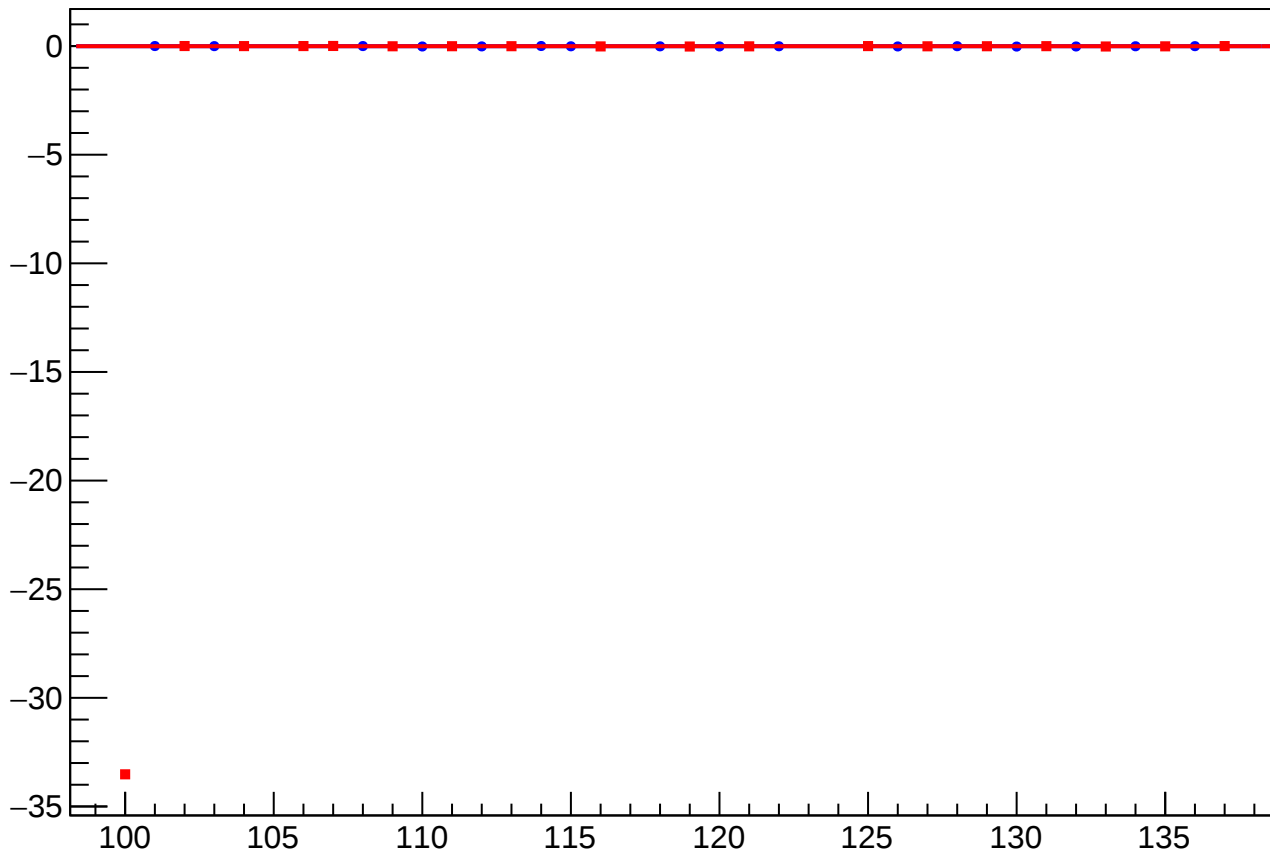
Right: 0.054+/-0.020  $\chi^2/\text{NDF}$ : 25.8/33

In: 0.007+/-0.027  $\chi^2/\text{NDF}$ : 11.3/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.054+/-0.020  $\chi^2/\text{NDF}$ : 25.8/33

reg\_asym\_ds\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.005+/-0.001  $\chi^2/\text{NDF}$ : 21.8/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.006+/-0.001  $\chi^2/\text{NDF}$ : 26508.7/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

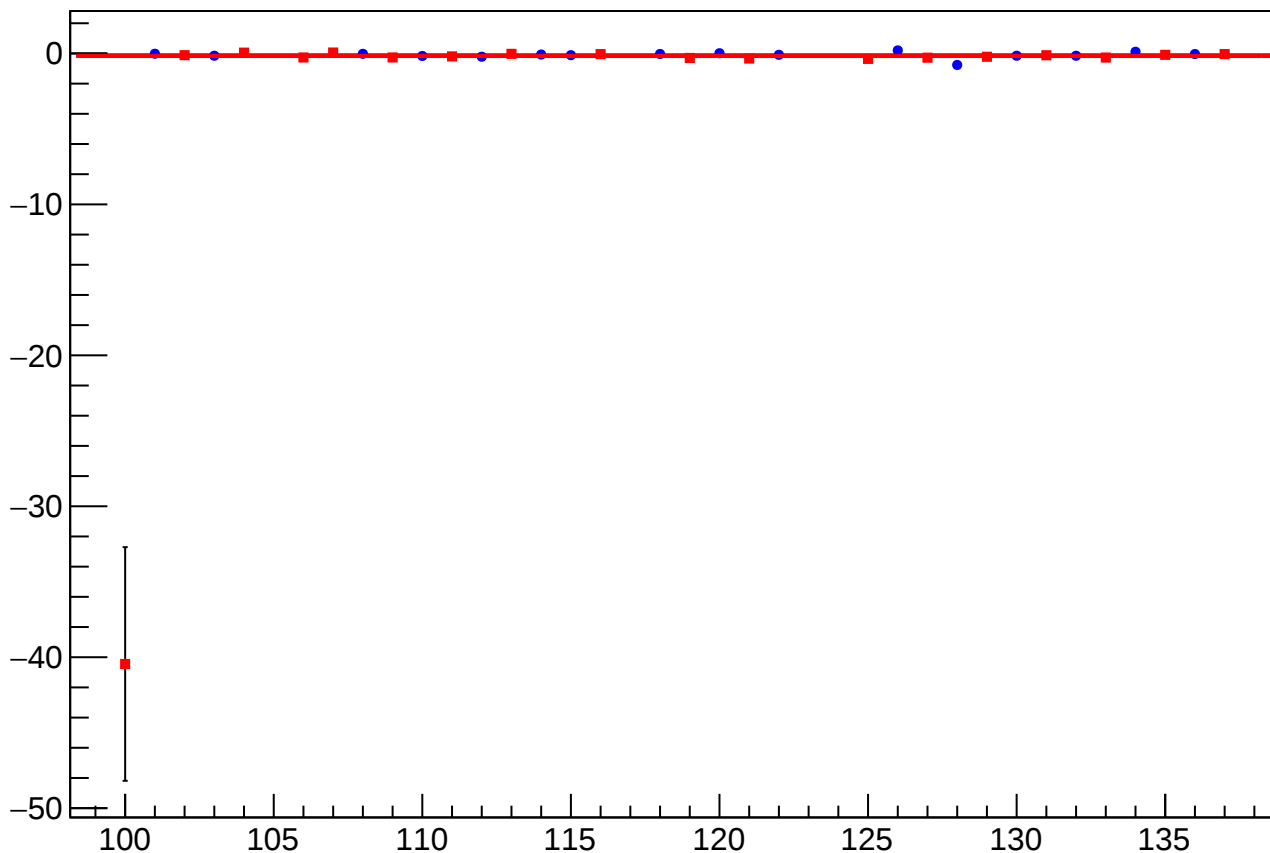
Right: -0.006+/-0.001  $\chi^2/\text{NDF}$ : 26530.6/33

In: -0.005+/-0.001  $\chi^2/\text{NDF}$ : 21.8/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.006+/-0.001  $\chi^2/\text{NDF}$ : 26530.6/33

reg\_asym\_ds\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -0.127+/-0.039  $\chi^2/\text{NDF}$ : 25.5/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.171+/-0.040  $\chi^2/\text{NDF}$ : 36.2/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

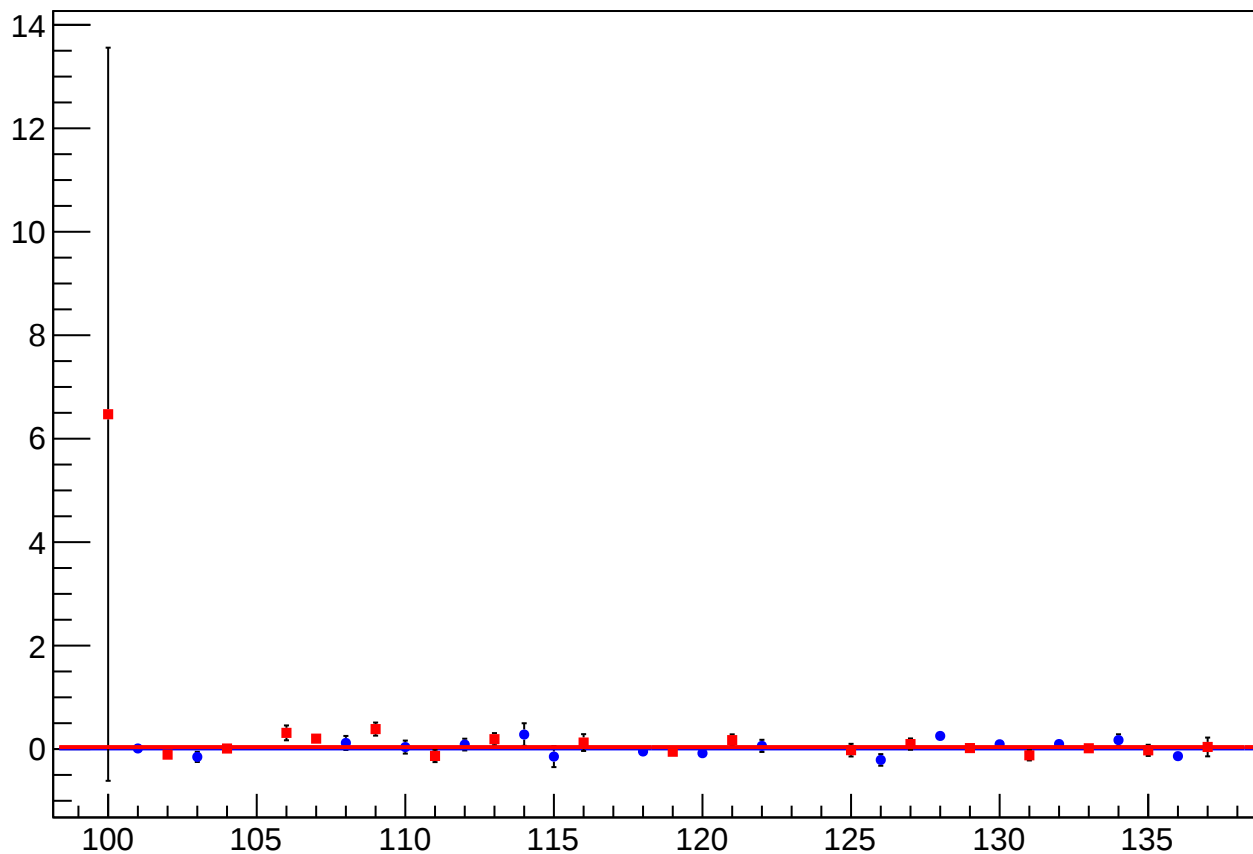
Right: -0.148+/-0.028  $\chi^2/\text{NDF}$ : 62.4/33

In: -0.127+/-0.039  $\chi^2/\text{NDF}$ : 25.5/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.148+/-0.028  $\chi^2/\text{NDF}$ : 62.4/33

reg\_asym\_ds\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.012 $\pm$ 0.023  $\chi^2/\text{NDF}$ : 25.0/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.038 $\pm$ 0.025  $\chi^2/\text{NDF}$ : 28.4/17

Left In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

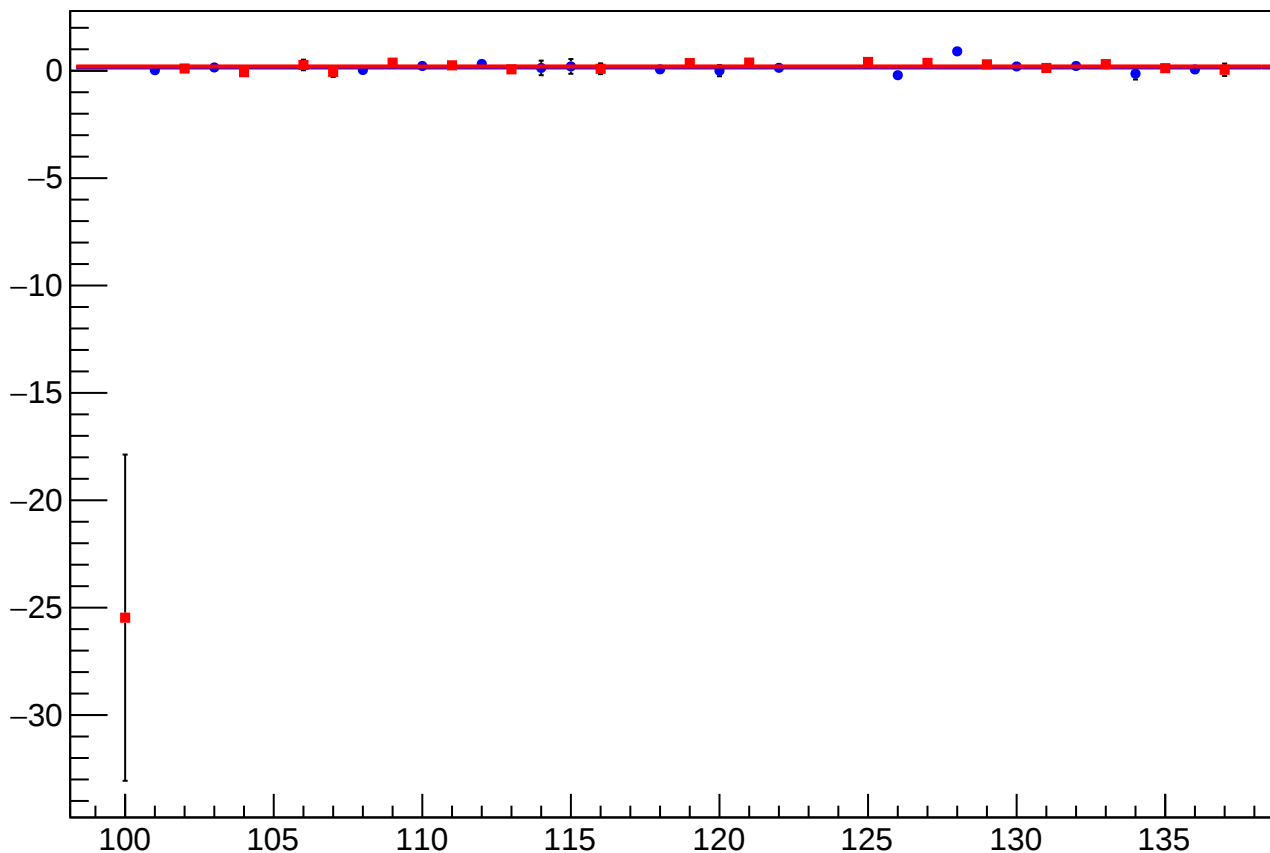
Right: 0.025 $\pm$ 0.017  $\chi^2/\text{NDF}$ : 54.0/33

In: 0.012 $\pm$ 0.023  $\chi^2/\text{NDF}$ : 25.0/15

Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.025 $\pm$ 0.017  $\chi^2/\text{NDF}$ : 54.0/33

reg\_asym\_ds\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 0.154+/-0.043  $\chi^2/\text{NDF}$ : 27.9/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.201+/-0.045  $\chi^2/\text{NDF}$ : 22.6/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

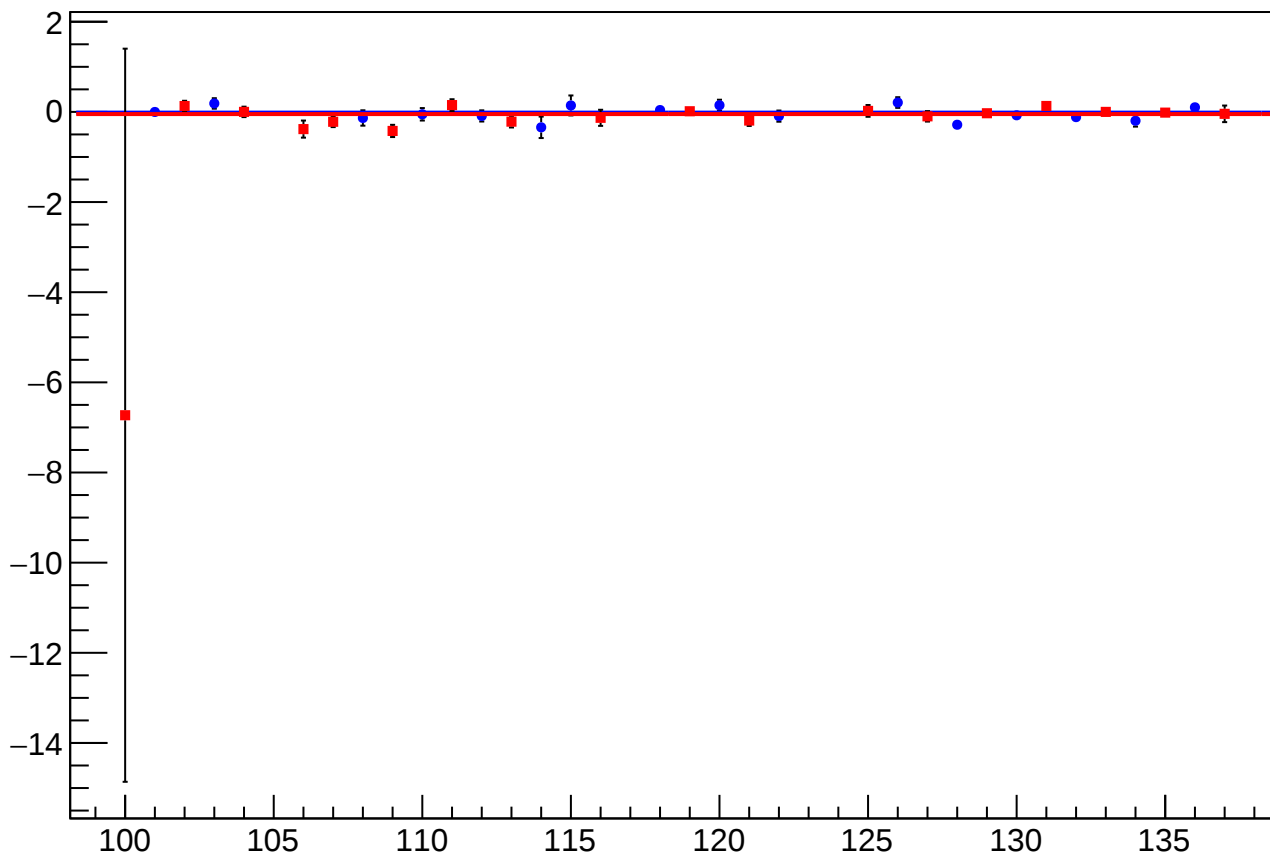
Right: 0.177+/-0.031  $\chi^2/\text{NDF}$ : 51.1/33

In: 0.154+/-0.043  $\chi^2/\text{NDF}$ : 27.9/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.177+/-0.031  $\chi^2/\text{NDF}$ : 51.1/33

reg\_asym\_ds\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-0.016 \pm 0.027$   $\chi^2/\text{NDF}: 24.3/15$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-0.048 \pm 0.029$   $\chi^2/\text{NDF}: 25.9/17$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

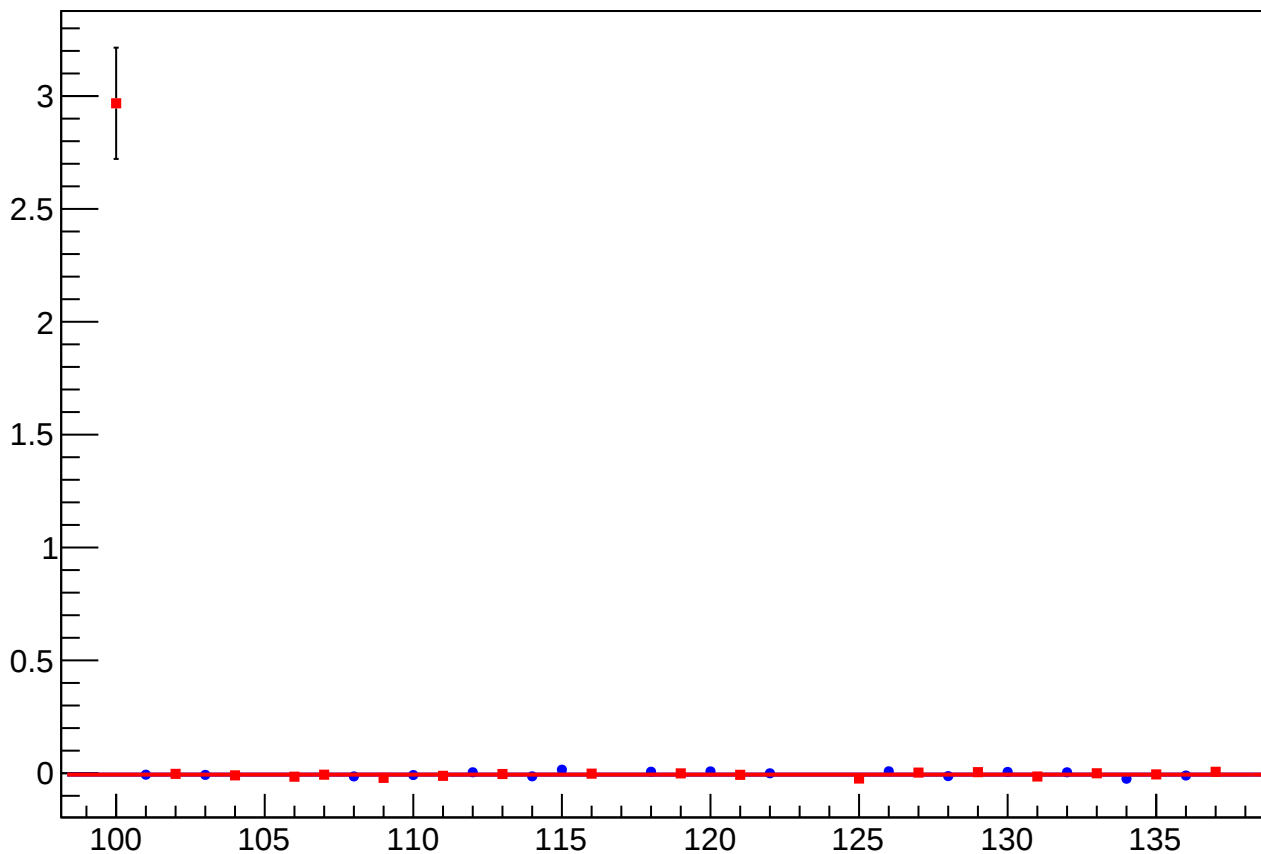
Right:  $-0.031 \pm 0.020$   $\chi^2/\text{NDF}: 51.0/33$

In:  $-0.016 \pm 0.027$   $\chi^2/\text{NDF}: 24.3/15$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-0.031 \pm 0.020$   $\chi^2/\text{NDF}: 51.0/33$

reg\_asym\_ds\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.006 $\pm$ 0.001  $\chi^2$ /NDF: 27.3/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.006 $\pm$ 0.001  $\chi^2$ /NDF: 165.9/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

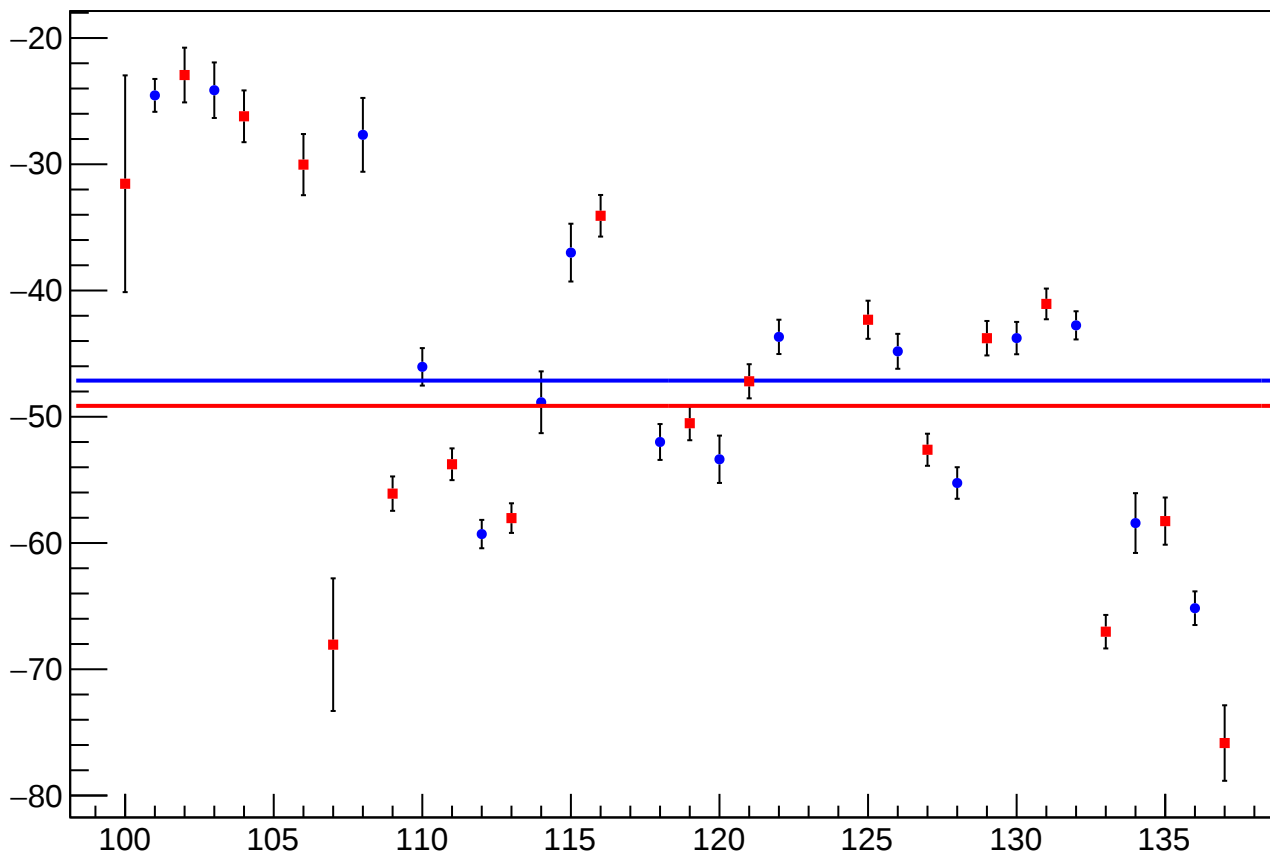
Right: -0.006 $\pm$ 0.001  $\chi^2$ /NDF: 193.3/33

In: -0.006 $\pm$ 0.001  $\chi^2$ /NDF:27.3/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -0.006 $\pm$ 0.001  $\chi^2$ /NDF: 193.3/33

reg\_asym\_left\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -47.135+/-0.374  $\chi^2/\text{NDF}$ : 894.5/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -49.137+/-0.371  $\chi^2/\text{NDF}$ : 906.7/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

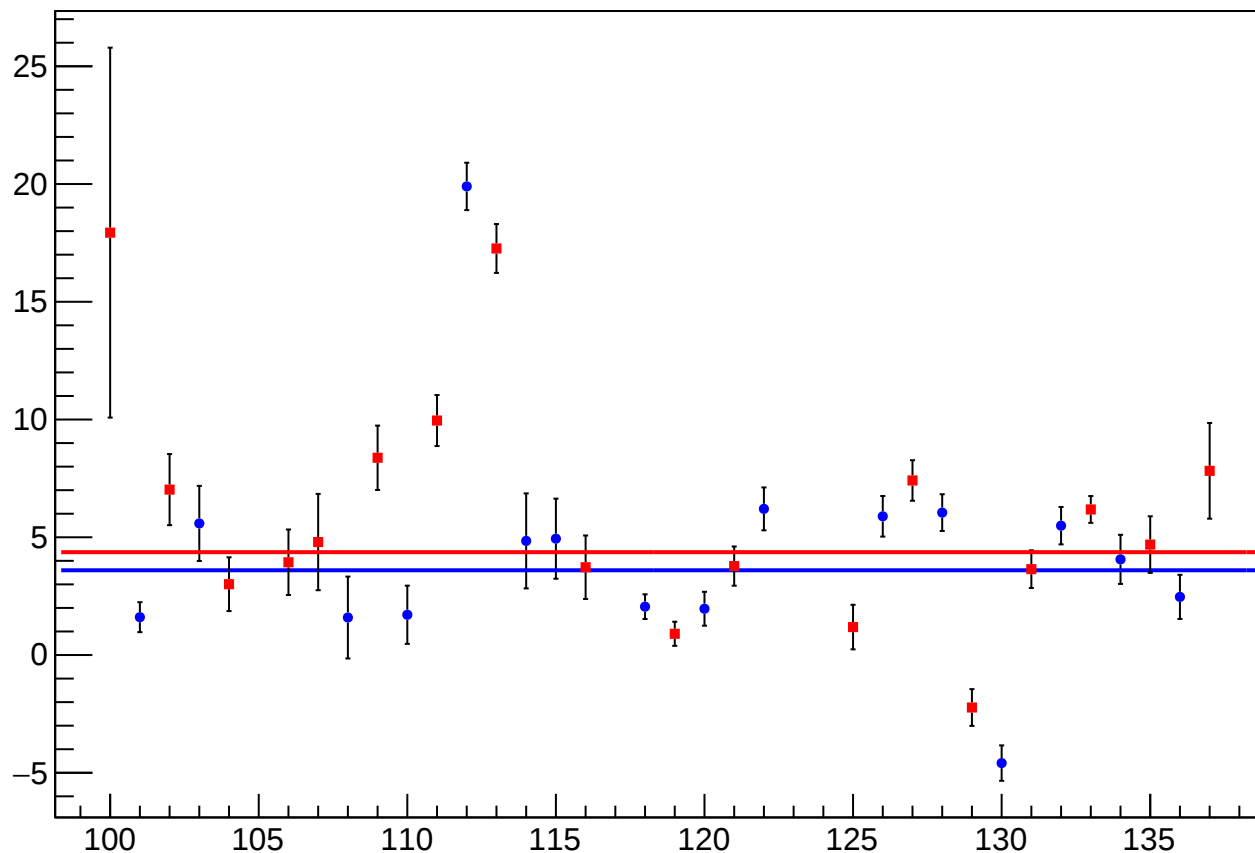
Right: -48.144+/-0.263  $\chi^2/\text{NDF}$ : 1815.7/33

In: -47.135+/-0.374  $\chi^2/\text{NDF}$ : 894.5/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -48.144+/-0.263  $\chi^2/\text{NDF}$ : 1815.7/33

reg\_asym\_left\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 3.599+/-0.220  $\chi^2/\text{NDF}$ : 443.4/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 4.367+/-0.225  $\chi^2/\text{NDF}$ : 353.1/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

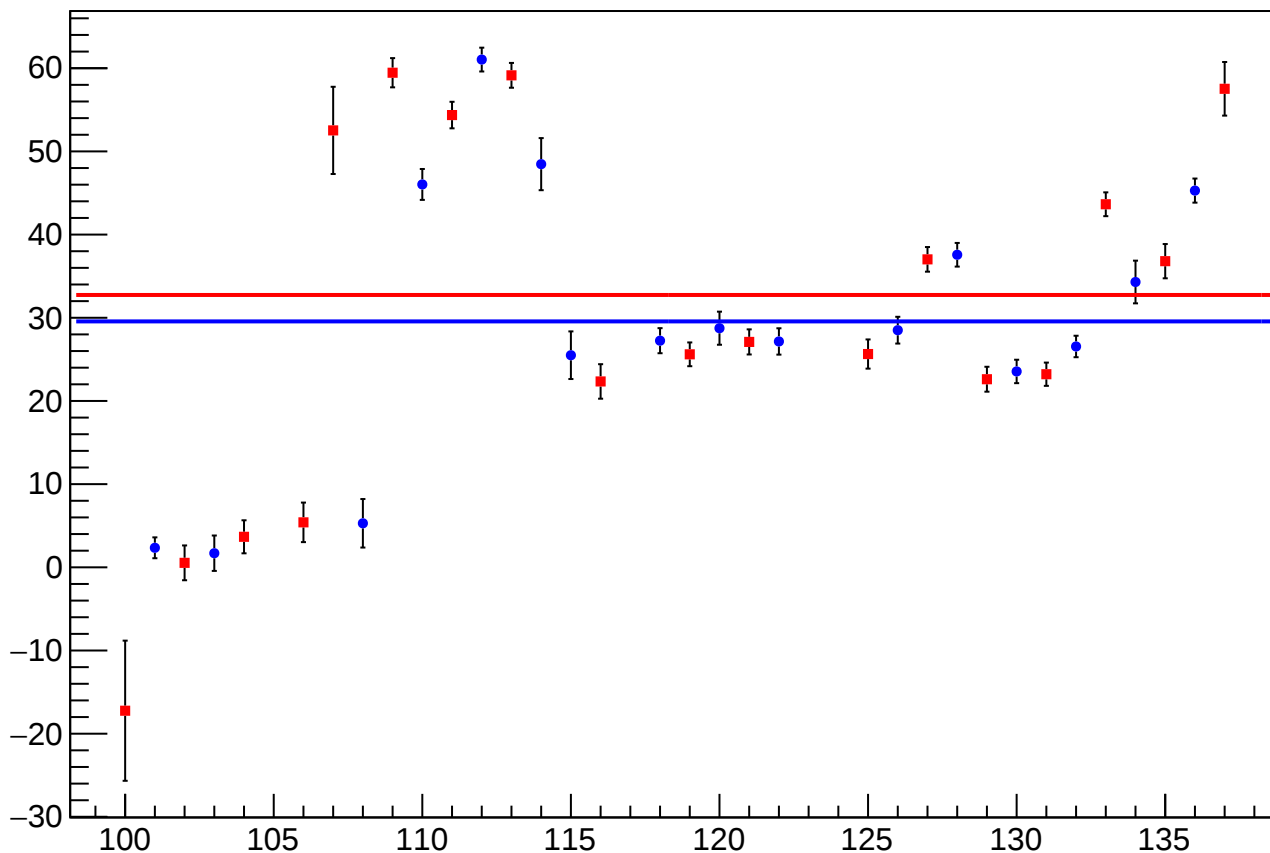
Right: 3.975+/-0.157  $\chi^2/\text{NDF}$ : 802.5/33

In: 3.599+/-0.220  $\chi^2/\text{NDF}$ : 443.4/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.975+/-0.157  $\chi^2/\text{NDF}$ : 802.5/33

reg\_asym\_left\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 29.564 $\pm$ 0.420  $\chi^2$ /NDF: 1494.6/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 32.741 $\pm$ 0.423  $\chi^2$ /NDF: 1663.3/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

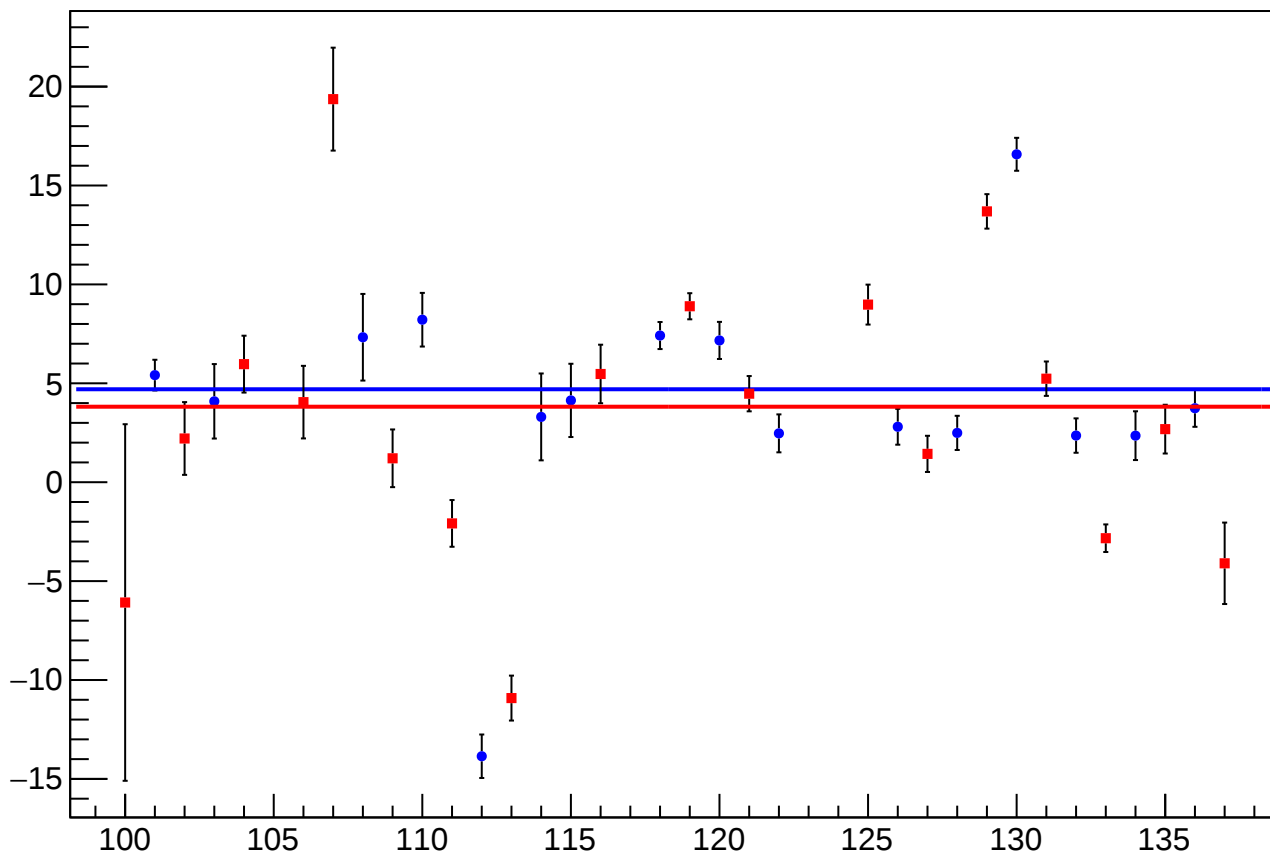
Right: 31.140 $\pm$ 0.298  $\chi^2$ /NDF: 3186.3/33

In: 29.564 $\pm$ 0.420  $\chi^2$ /NDF:1494.6/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 31.140 $\pm$ 0.298  $\chi^2$ /NDF: 3186.3/33

reg\_asym\_left\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 4.699+/-0.254  $\chi^2/\text{NDF}$ : 548.9/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3.817+/-0.258  $\chi^2/\text{NDF}$ : 567.6/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

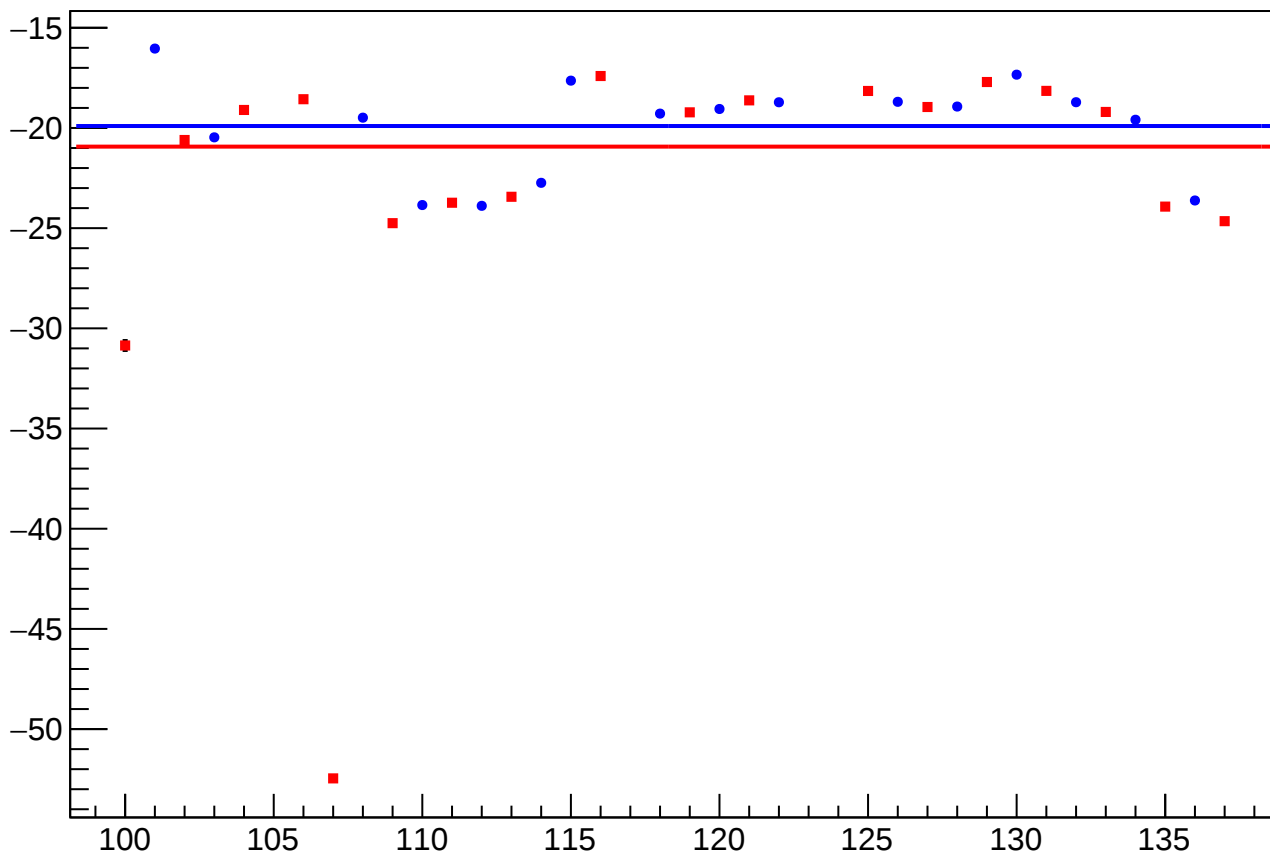
Right: 4.265+/-0.181  $\chi^2/\text{NDF}$ : 1122.4/33

In: 4.699+/-0.254  $\chi^2/\text{NDF}$ : 548.9/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 4.265+/-0.181  $\chi^2/\text{NDF}$ : 1122.4/33

reg\_asym\_left\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -19.902+/-0.016  $\chi^2/\text{NDF}$ : 26054.0/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -20.931+/-0.016  $\chi^2/\text{NDF}$ : 94008.3/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

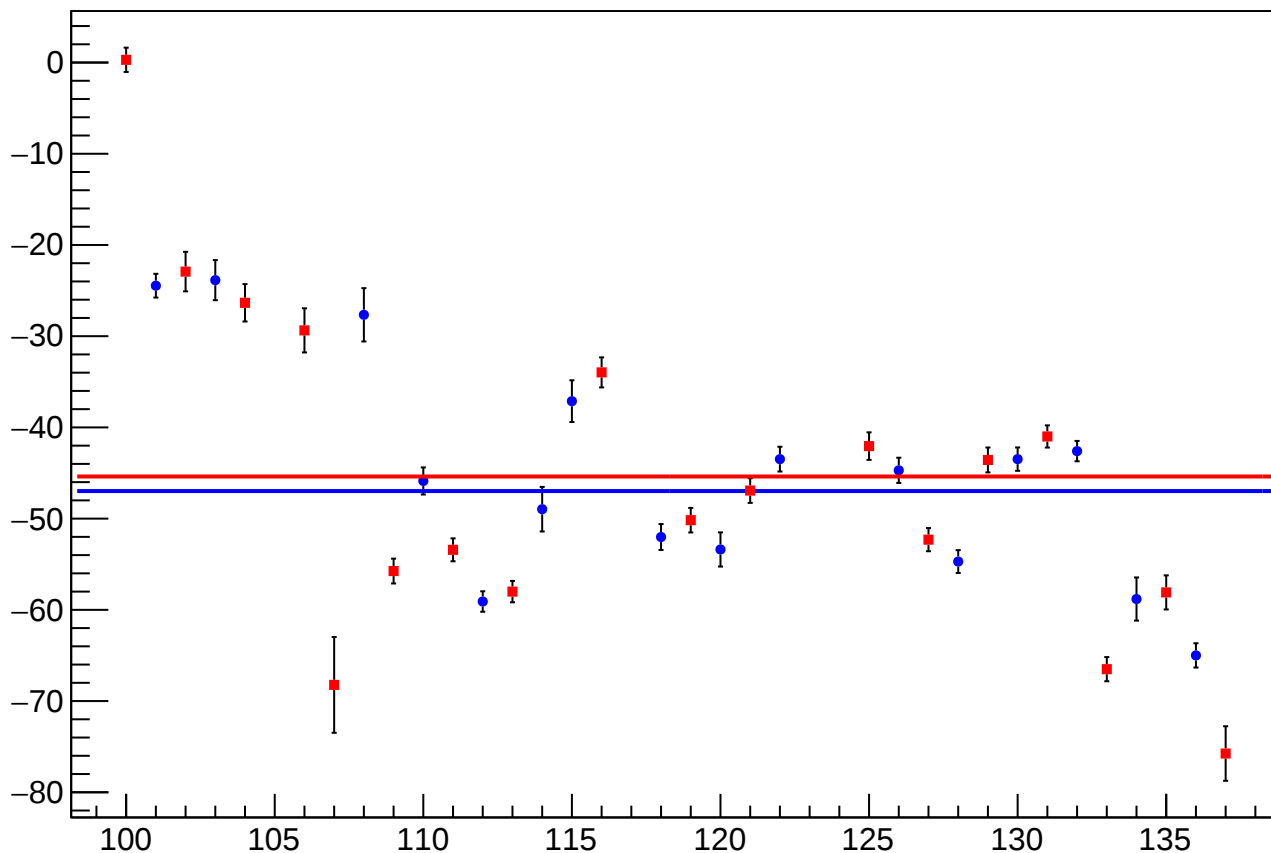
Right: -20.414+/-0.011  $\chi^2/\text{NDF}$ : 122212.6/33

In: -19.902+/-0.016  $\chi^2/\text{NDF}$ :26054.0/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -20.414+/-0.011  $\chi^2/\text{NDF}$ : 122212.6/33

reg\_asym\_left\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -46.978 $\pm$ 0.374  $\chi^2$ /NDF: 892.4/15

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -45.382 $\pm$ 0.357  $\chi^2$ /NDF: 2165.3/17

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

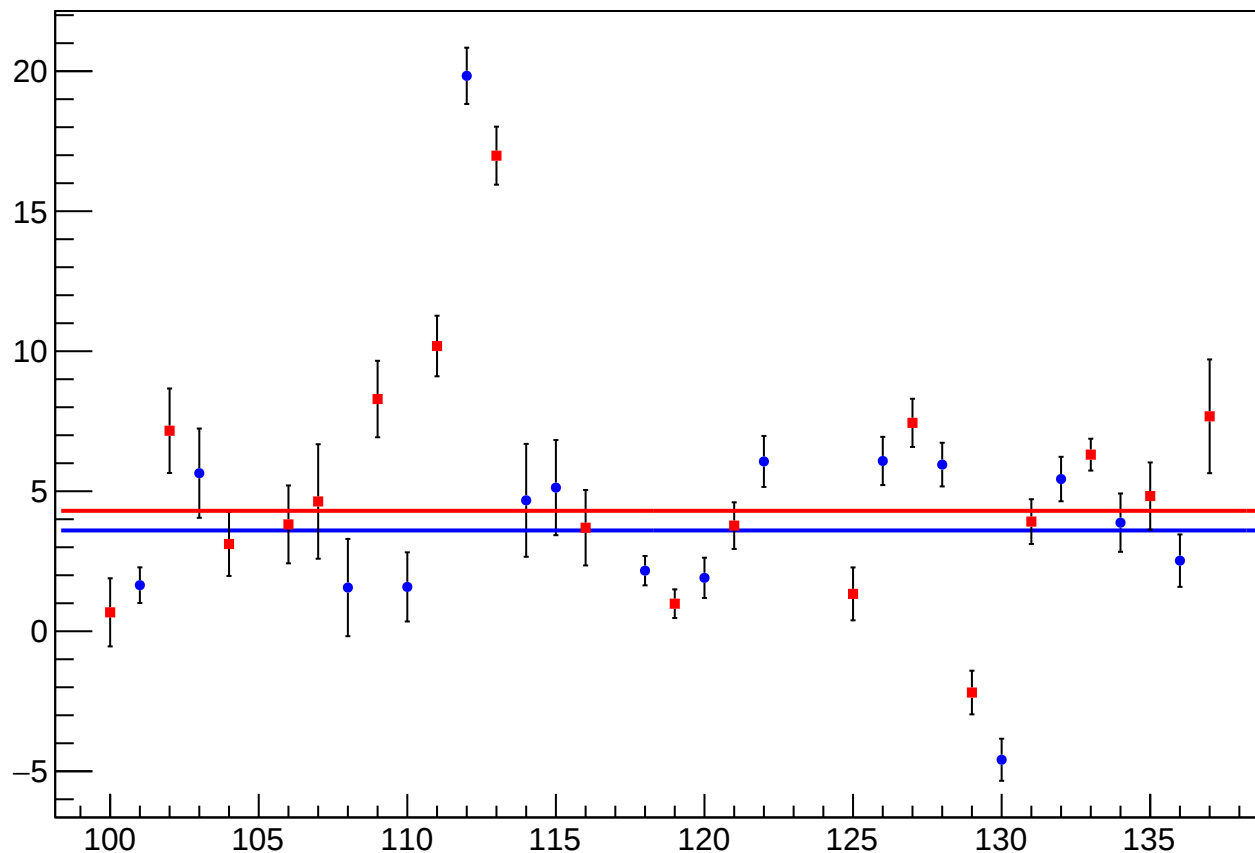
Right: -46.144 $\pm$ 0.258  $\chi^2$ /NDF: 3067.2/33

In: -46.978 $\pm$ 0.374  $\chi^2$ /NDF:892.4/15

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -46.144 $\pm$ 0.258  $\chi^2$ /NDF: 3067.2/33

reg\_asym\_left\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 3.599+/-0.220  $\chi^2/\text{NDF}$ : 440.3/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 4.301+/-0.221  $\chi^2/\text{NDF}$ : 352.1/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

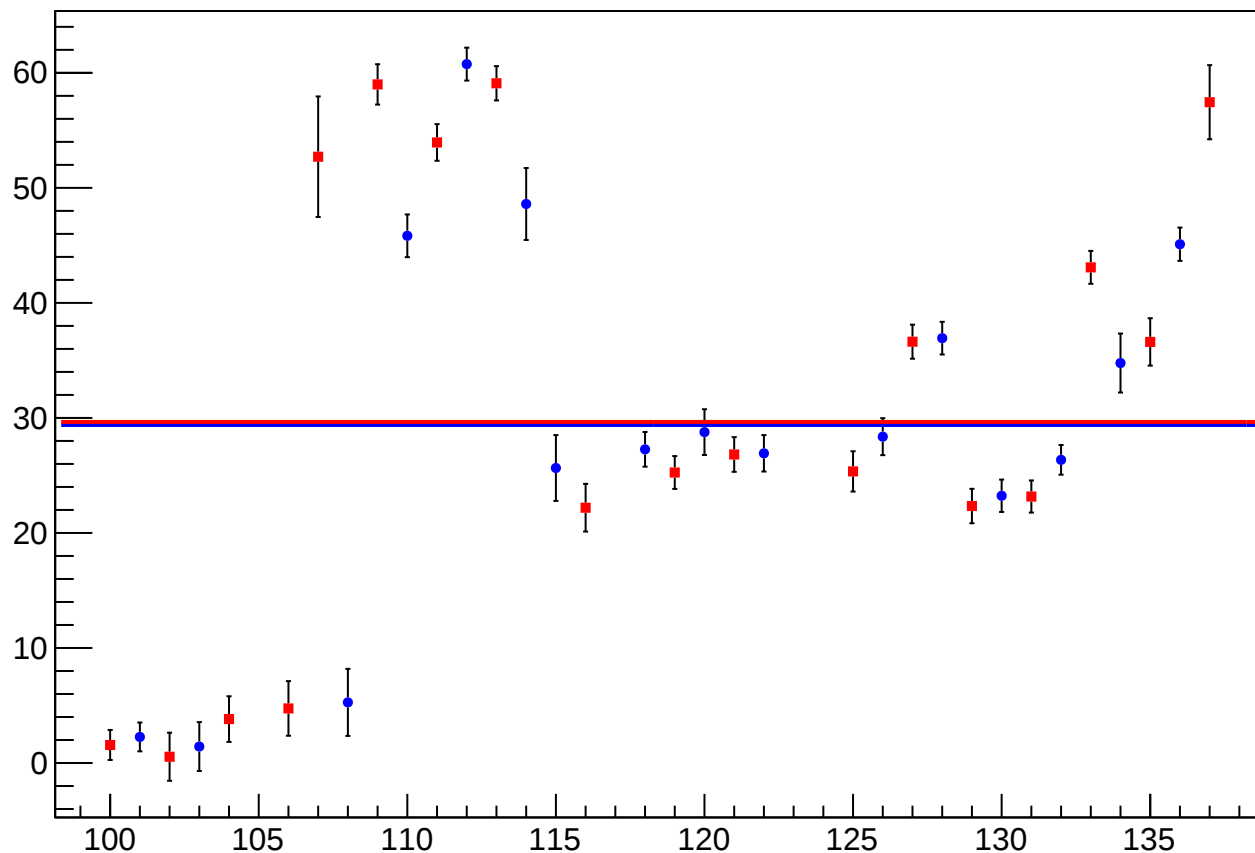
Right: 3.949+/-0.156  $\chi^2/\text{NDF}$ : 797.4/33

In: 3.599+/-0.220  $\chi^2/\text{NDF}$ : 440.3/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.949+/-0.156  $\chi^2/\text{NDF}$ : 797.4/33

reg\_asym\_left\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 29.387+/-0.419  $\chi^2$ /NDF: 1488.6/15

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 29.652+/-0.402  $\chi^2$ /NDF: 2131.0/17

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

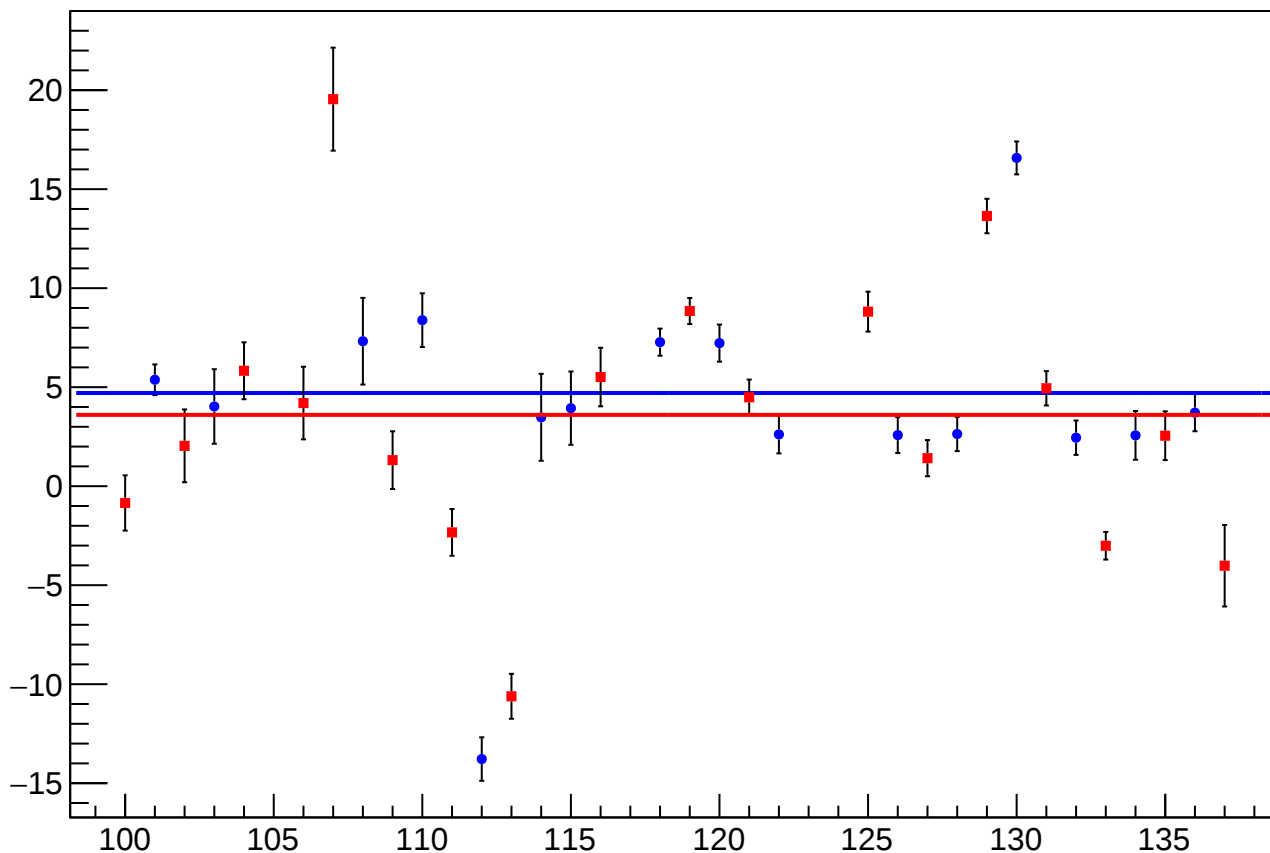
Right: 29.525+/-0.290  $\chi^2$ /NDF: 3619.8/33

In: 29.387+/-0.419  $\chi^2$ /NDF:1488.6/15

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 29.525+/-0.290  $\chi^2$ /NDF: 3619.8/33

reg\_asym\_left\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 4.706+/-0.254  $\chi^2/\text{NDF}$ : 545.2/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3.601+/-0.254  $\chi^2/\text{NDF}$ : 573.4/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

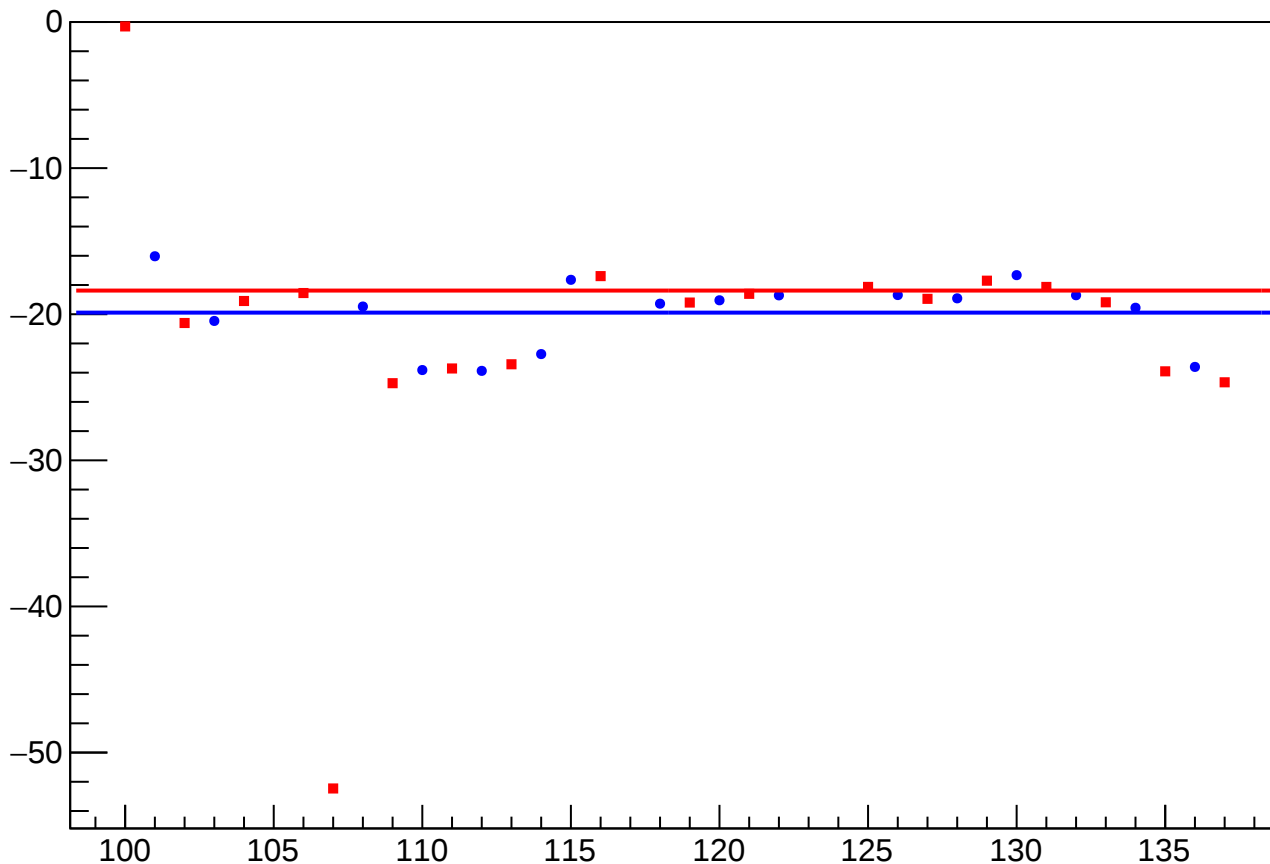
Right: 4.154+/-0.180  $\chi^2/\text{NDF}$ : 1128.1/33

In: 4.706+/-0.254  $\chi^2/\text{NDF}$ : 545.2/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 4.154+/-0.180  $\chi^2/\text{NDF}$ : 1128.1/33

reg\_asym\_left\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -19.890+/-0.016  $\chi^2/\text{NDF}$ : 26044.4/15

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -18.380+/-0.015  $\chi^2/\text{NDF}$ : 300999.4/17

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

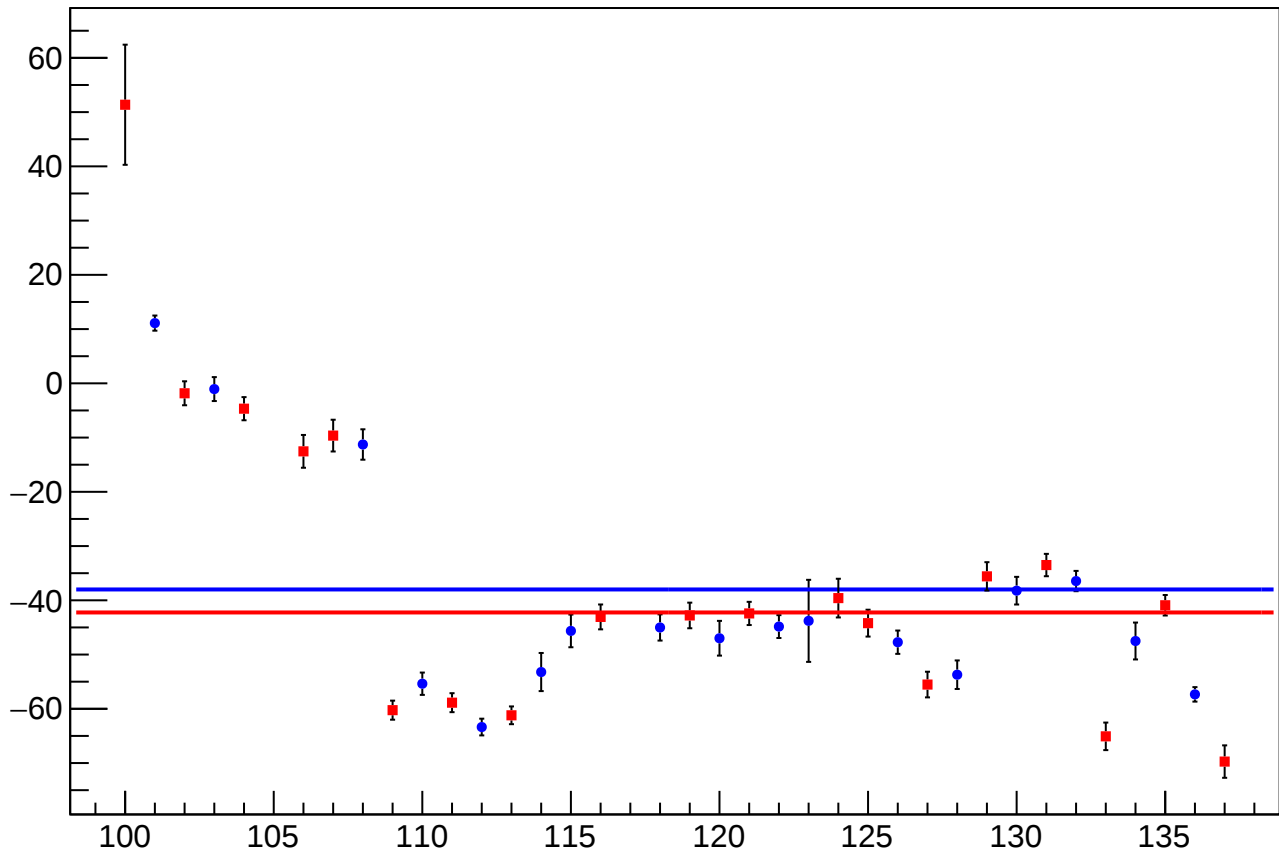
Right: -19.091+/-0.011  $\chi^2/\text{NDF}$ : 331979.2/33

In: -19.890+/-0.016  $\chi^2/\text{NDF}$ : 26044.4/15

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -19.091+/-0.011  $\chi^2/\text{NDF}$ : 331979.2/33

reg\_asym\_right\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-37.999 \pm 0.523$   $\chi^2/\text{NDF}$ : 2279.0/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-42.240 \pm 0.526$   $\chi^2/\text{NDF}$ : 1489.5/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

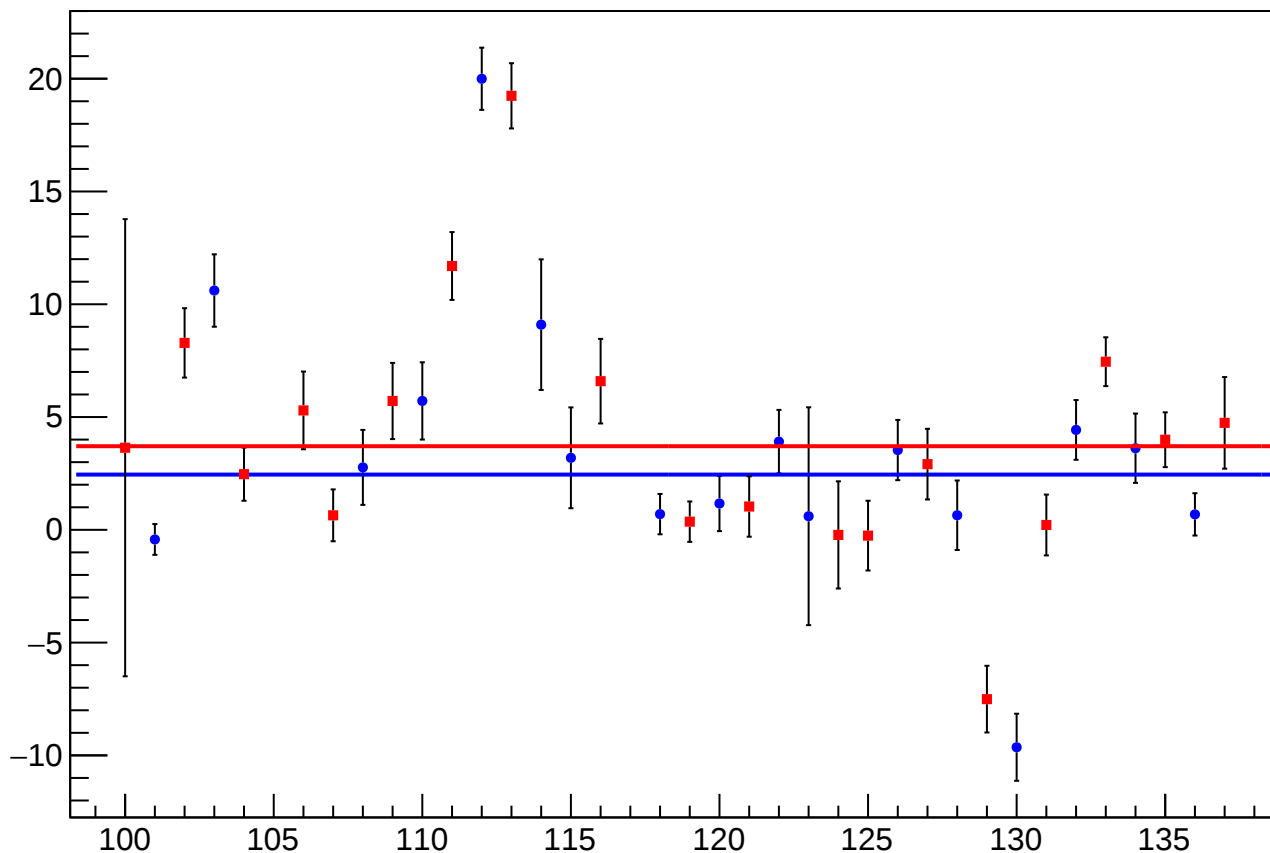
Right:  $-40.110 \pm 0.371$   $\chi^2/\text{NDF}$ : 3801.2/35

In:  $-37.999 \pm 0.523$   $\chi^2/\text{NDF}$ : 2279.0/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-40.110 \pm 0.371$   $\chi^2/\text{NDF}$ : 3801.2/35

reg\_asym\_right\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 2.449+/-0.314  $\chi^2/\text{NDF}$ : 295.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3.707+/-0.326  $\chi^2/\text{NDF}$ : 269.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

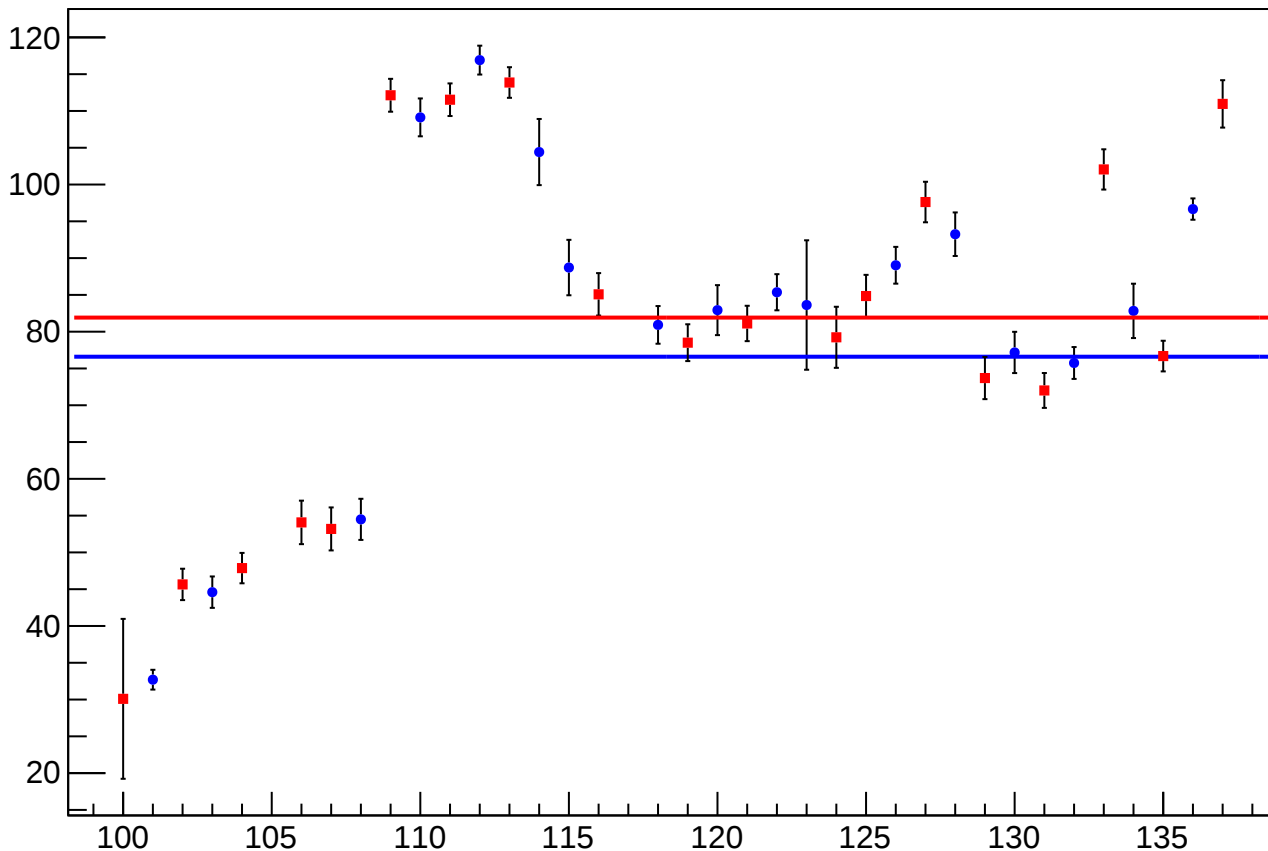
Right: 3.055+/-0.226  $\chi^2/\text{NDF}$ : 572.4/35

In: 2.449+/-0.314  $\chi^2/\text{NDF}$ : 295.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.055+/-0.226  $\chi^2/\text{NDF}$ : 572.4/35

reg\_asym\_right\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 76.598+/-0.576  $\chi^2/\text{NDF}$ : 2255.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 81.916+/-0.592  $\chi^2/\text{NDF}$ : 1570.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

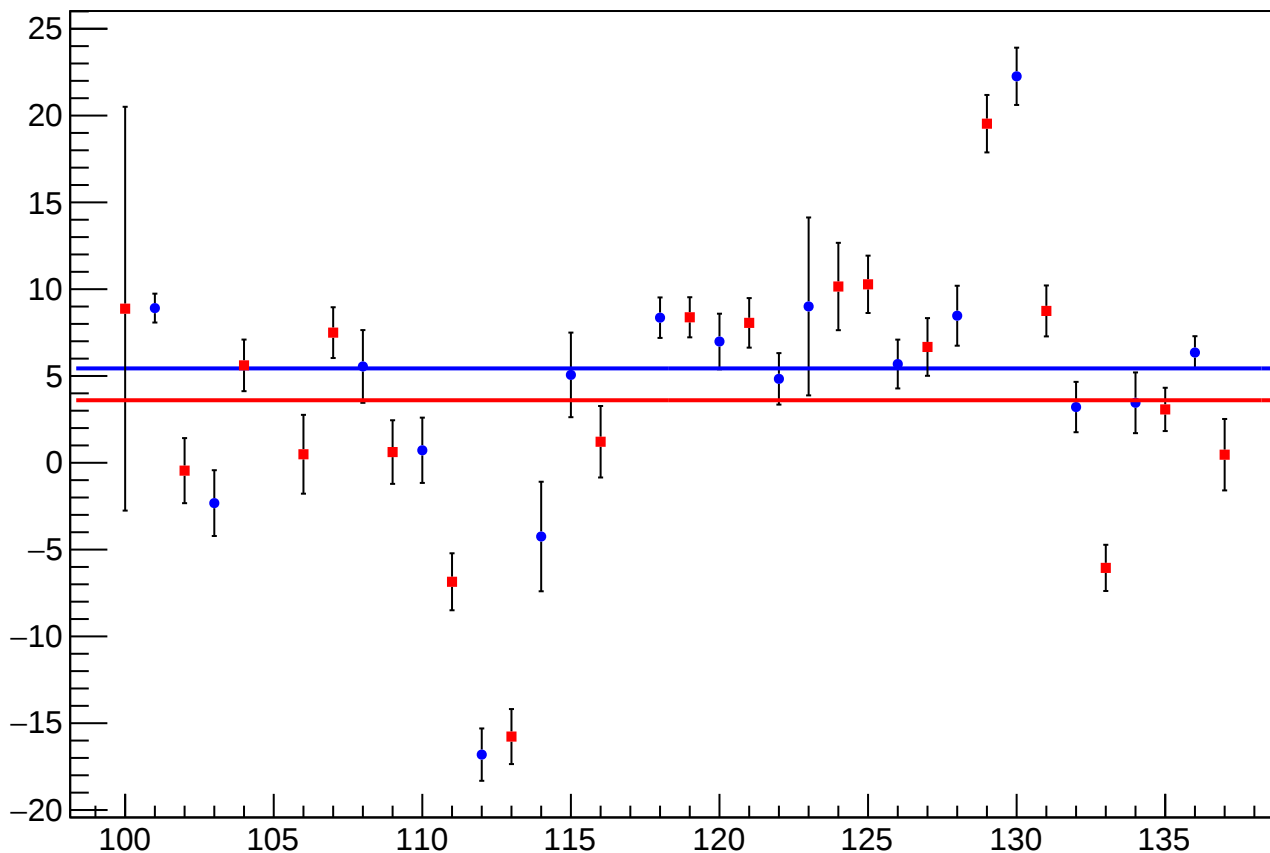
Right: 79.184+/-0.413  $\chi^2/\text{NDF}$ : 3867.3/35

In: 76.598+/-0.576  $\chi^2/\text{NDF}$ : 2255.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 79.184+/-0.413  $\chi^2/\text{NDF}$ : 3867.3/35

reg\_asym\_right\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 5.436 $\pm$ 0.360  $\chi^2$ /NDF: 387.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 3.602 $\pm$ 0.375  $\chi^2$ /NDF: 423.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

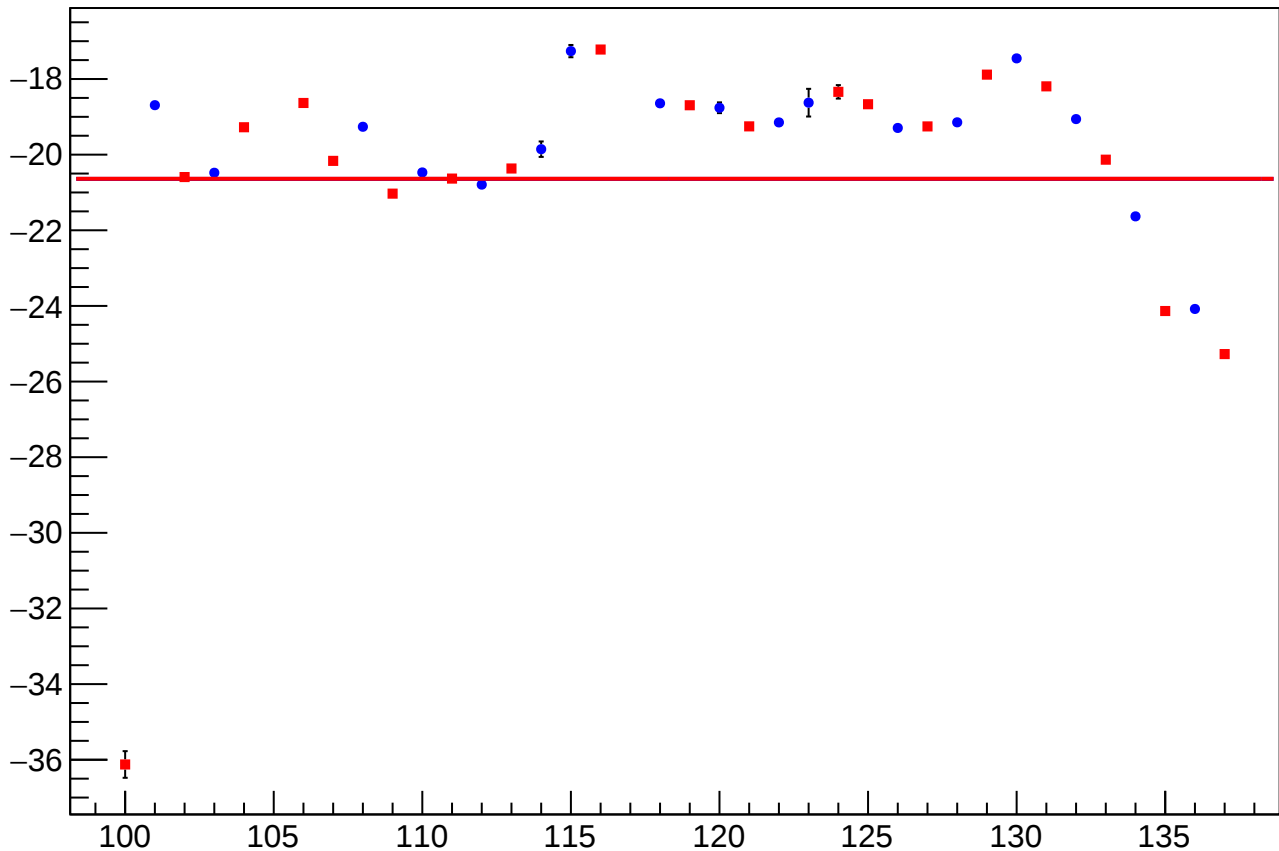
Right: 4.556 $\pm$ 0.260  $\chi^2$ /NDF: 823.0/35

In: 5.436 $\pm$ 0.360  $\chi^2$ /NDF:387.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 4.556 $\pm$ 0.260  $\chi^2$ /NDF: 823.0/35

reg\_asym\_right\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -20.642 $\pm$ 0.019  $\chi^2$ /NDF: 12431.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -20.638 $\pm$ 0.019  $\chi^2$ /NDF: 13783.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

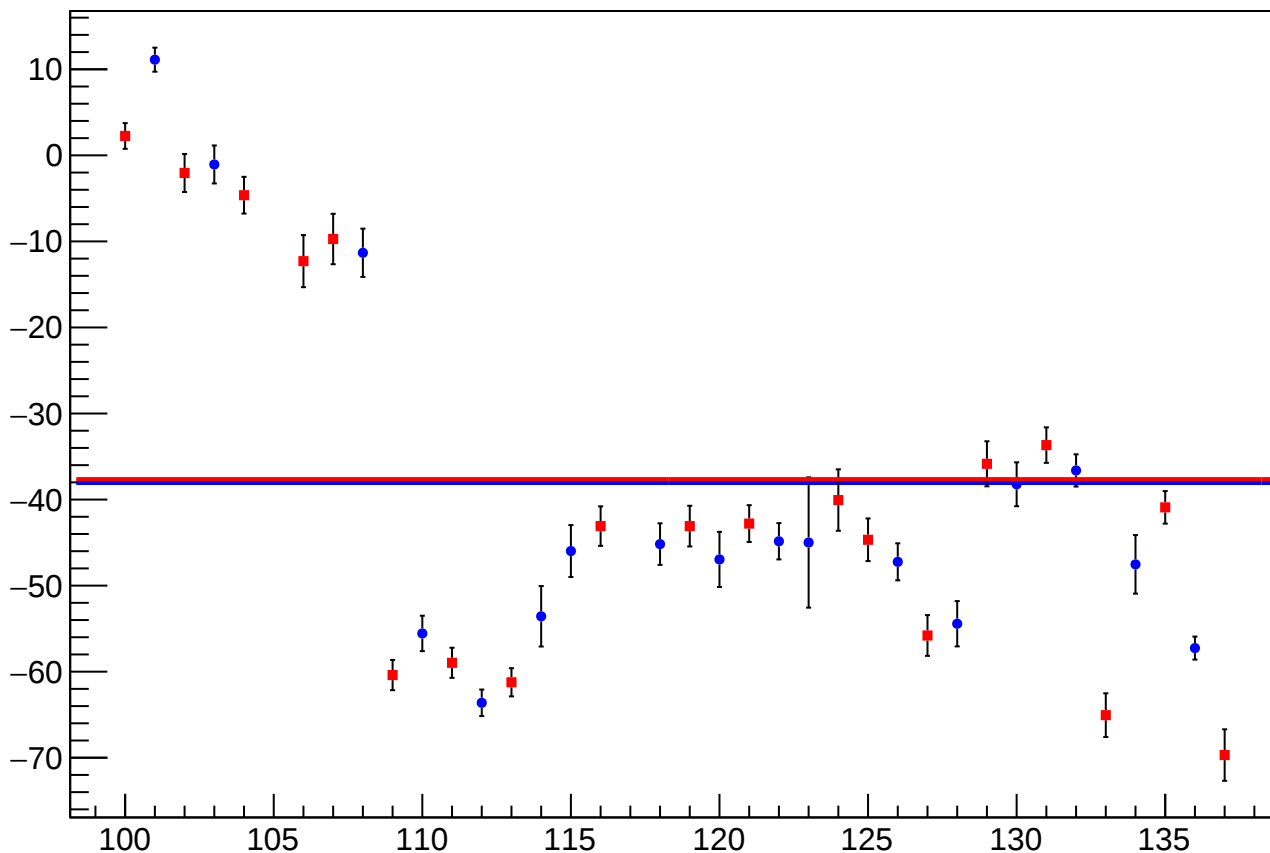
Right: -20.640 $\pm$ 0.014  $\chi^2$ /NDF: 26214.9/35

In: -20.642 $\pm$ 0.019  $\chi^2$ /NDF:12431.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -20.640 $\pm$ 0.014  $\chi^2$ /NDF: 26214.9/35

reg\_asym\_right\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-38.073 \pm 0.523$   $\chi^2/\text{NDF}$ : 2285.7/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-37.622 \pm 0.496$   $\chi^2/\text{NDF}$ : 2220.2/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

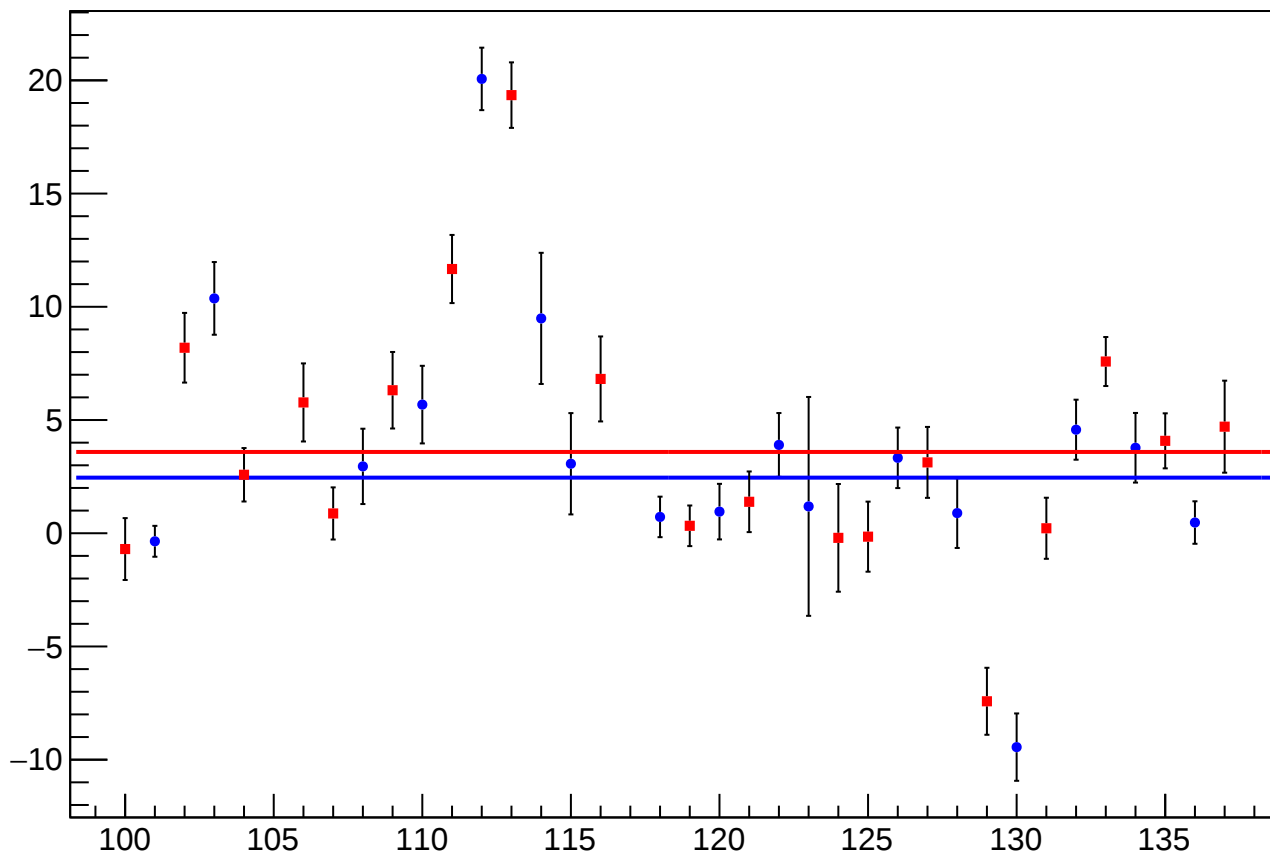
Right:  $-37.836 \pm 0.360$   $\chi^2/\text{NDF}$ : 4506.3/35

In:  $-38.073 \pm 0.523$   $\chi^2/\text{NDF}$ : 2285.7/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-37.836 \pm 0.360$   $\chi^2/\text{NDF}$ : 4506.3/35

reg\_asym\_right\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 2.455+/-0.315  $\chi^2/\text{NDF}$ : 293.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3.590+/-0.318  $\chi^2/\text{NDF}$ : 279.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

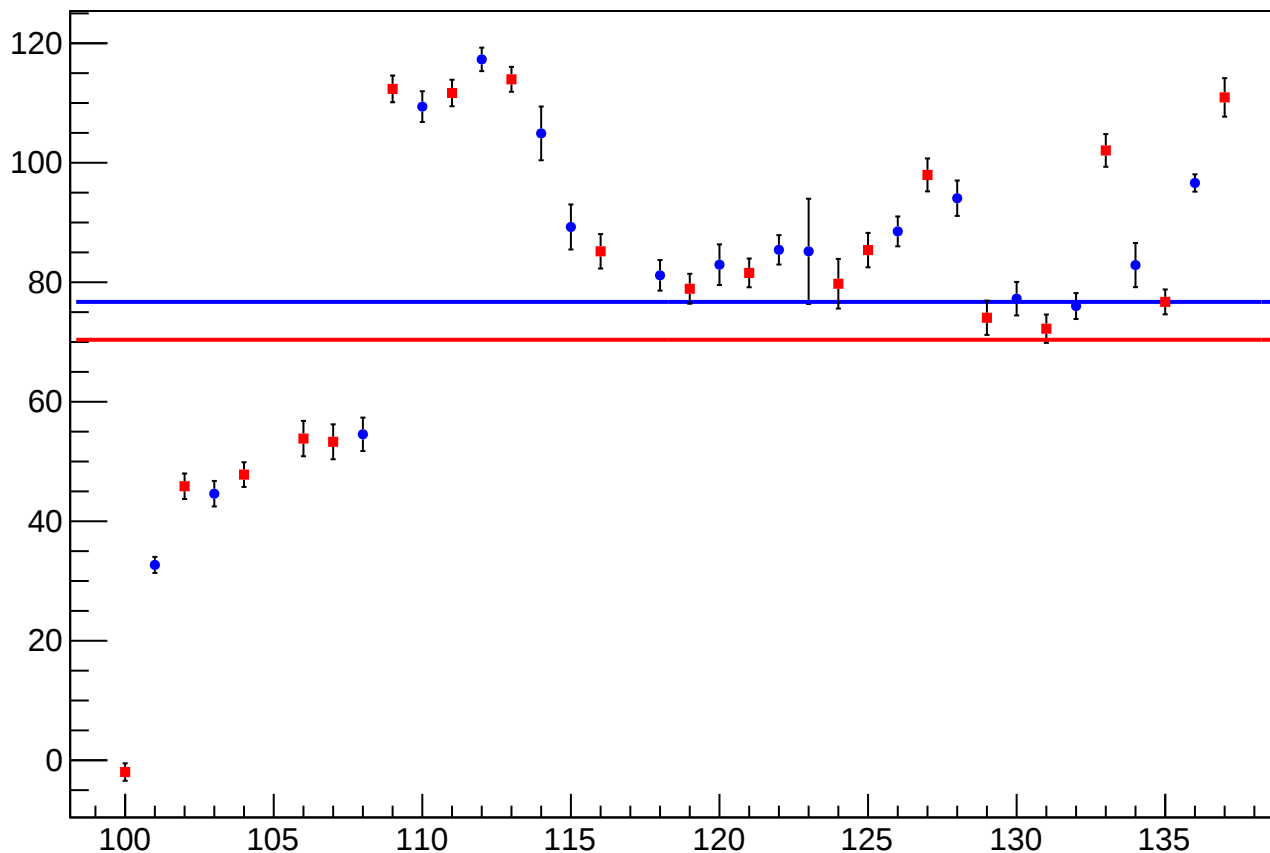
Right: 3.017+/-0.224  $\chi^2/\text{NDF}$ : 579.8/35

In: 2.455+/-0.315  $\chi^2/\text{NDF}$ : 293.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.017+/-0.224  $\chi^2/\text{NDF}$ : 579.8/35

reg\_asym\_right\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 76.713+/-0.576  $\chi^2$ /NDF: 2266.6/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 70.376+/-0.550  $\chi^2$ /NDF: 4390.7/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

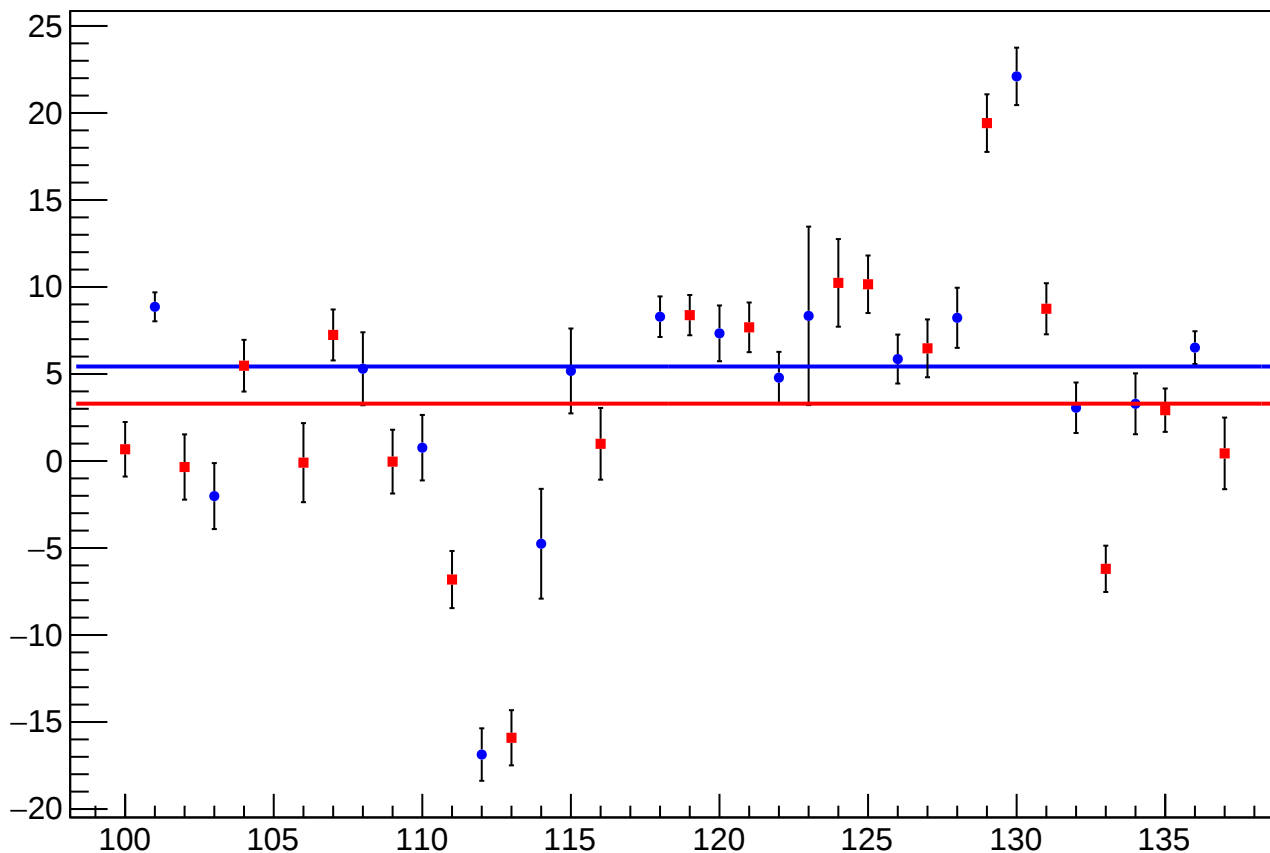
Right: 73.396+/-0.398  $\chi^2$ /NDF: 6720.6/35

In: 76.713+/-0.576  $\chi^2$ /NDF:2266.6/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 73.396+/-0.398  $\chi^2$ /NDF: 6720.6/35

reg\_asym\_right\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 5.430 $\pm$ 0.361  $\chi^2$ /NDF: 385.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 3.295 $\pm$ 0.365  $\chi^2$ /NDF: 426.1/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

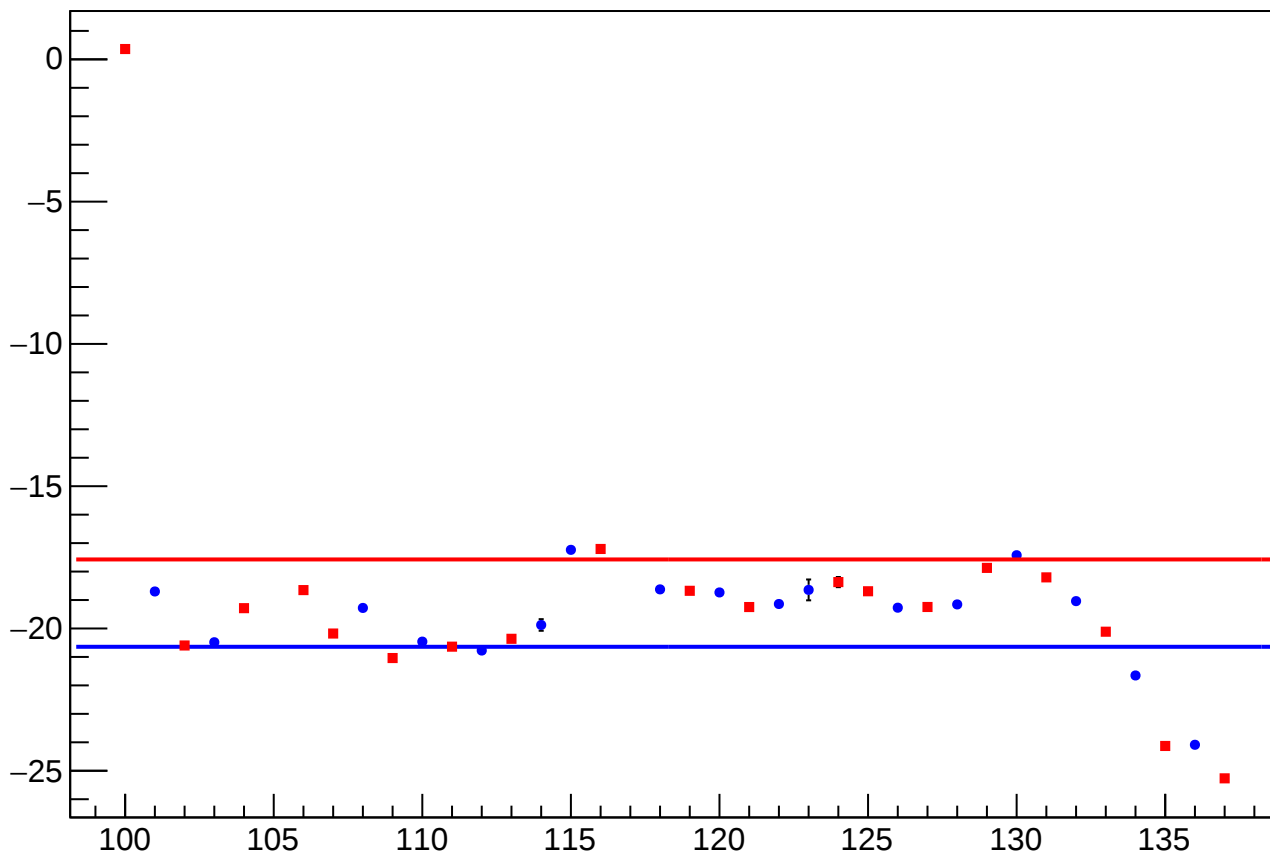
Right: 4.376 $\pm$ 0.257  $\chi^2$ /NDF: 829.3/35

In: 5.430 $\pm$ 0.361  $\chi^2$ /NDF:385.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 4.376 $\pm$ 0.257  $\chi^2$ /NDF: 829.3/35

reg\_asym\_right\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-20.643 \pm 0.019$   $\chi^2/\text{NDF}: 12468.6/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-17.574 \pm 0.018$   $\chi^2/\text{NDF}: 178327.0/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

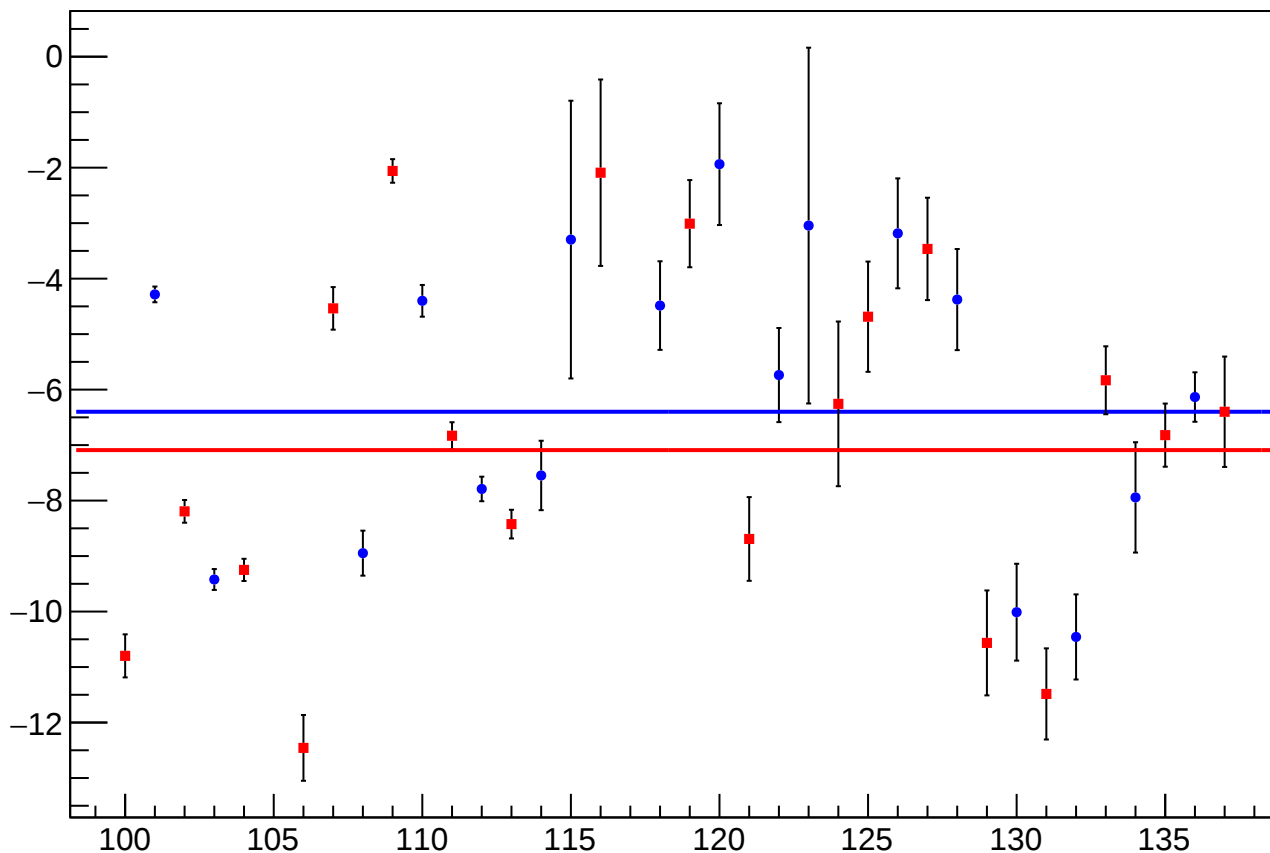
Right:  $-19.001 \pm 0.013$   $\chi^2/\text{NDF}: 204262.7/35$

In:  $-20.643 \pm 0.019$   $\chi^2/\text{NDF}: 12468.6/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-19.001 \pm 0.013$   $\chi^2/\text{NDF}: 204262.7/35$

reg\_asym\_sam\_15\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-6.399 \pm 0.086$   $\chi^2/\text{NDF}$ : 700.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-7.090 \pm 0.086$   $\chi^2/\text{NDF}$ : 1060.0/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

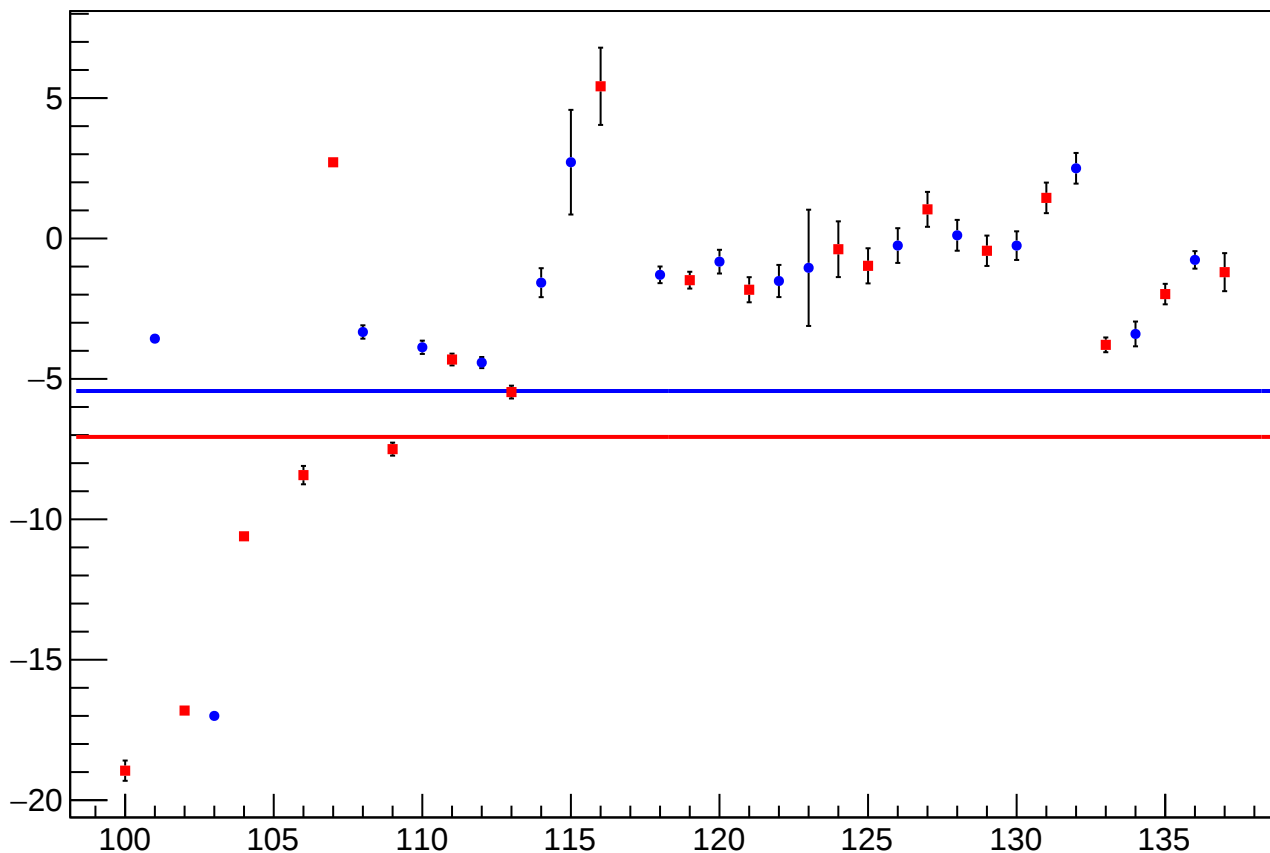
Right:  $-6.745 \pm 0.061$   $\chi^2/\text{NDF}$ : 1793.1/35

In:  $-6.399 \pm 0.086$   $\chi^2/\text{NDF}$ : 700.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-6.745 \pm 0.061$   $\chi^2/\text{NDF}$ : 1793.1/35

reg\_asym\_sam\_15\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -5.431+/-0.055  $\chi^2/\text{NDF}$ : 9233.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -7.066+/-0.059  $\chi^2/\text{NDF}$ : 12306.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

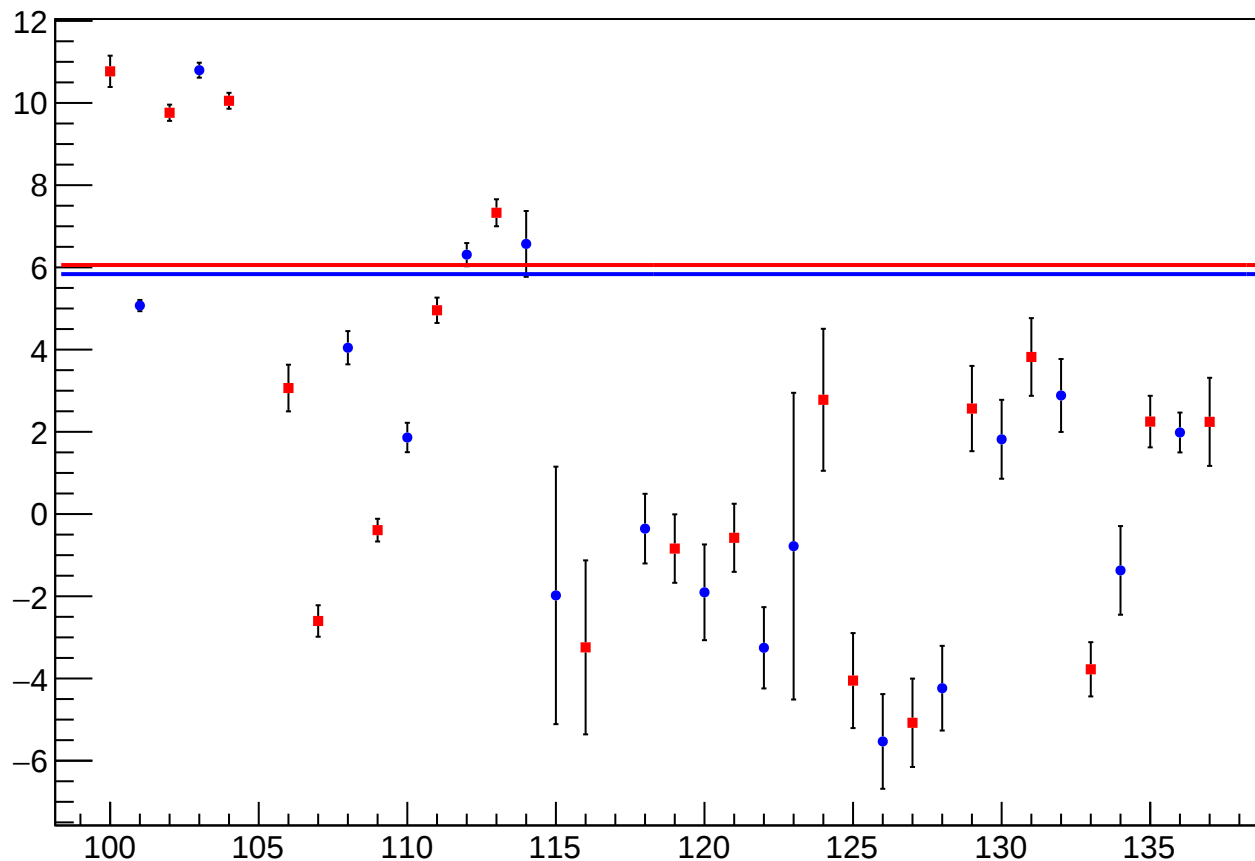
Right: -6.189+/-0.040  $\chi^2/\text{NDF}$ : 21952.0/35

In: -5.431+/-0.055  $\chi^2/\text{NDF}$ :9233.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -6.189+/-0.040  $\chi^2/\text{NDF}$ : 21952.0/35

reg\_asym\_sam\_15\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 5.836+/-0.090  $\chi^2/\text{NDF}$ : 1440.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 6.057+/-0.093  $\chi^2/\text{NDF}$ : 2668.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

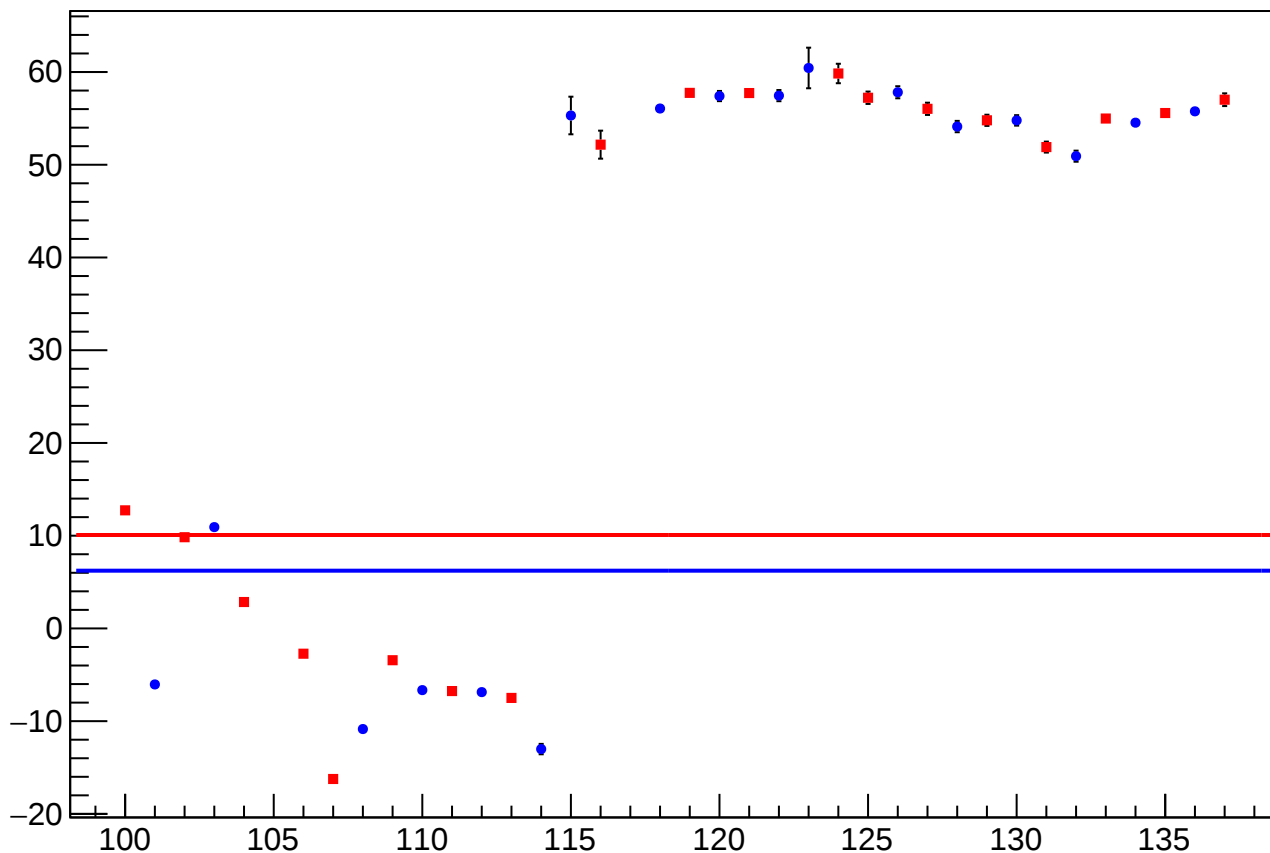
Right: 5.942+/-0.065  $\chi^2/\text{NDF}$ : 4112.7/35

In: 5.836+/-0.090  $\chi^2/\text{NDF}$ :1440.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 5.942+/-0.065  $\chi^2/\text{NDF}$ : 4112.7/35

reg\_asym\_sam\_15\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 6.226+/-0.065  $\chi^2/\text{NDF}$ : 120955.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 10.075+/-0.070  $\chi^2/\text{NDF}$ : 122049.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

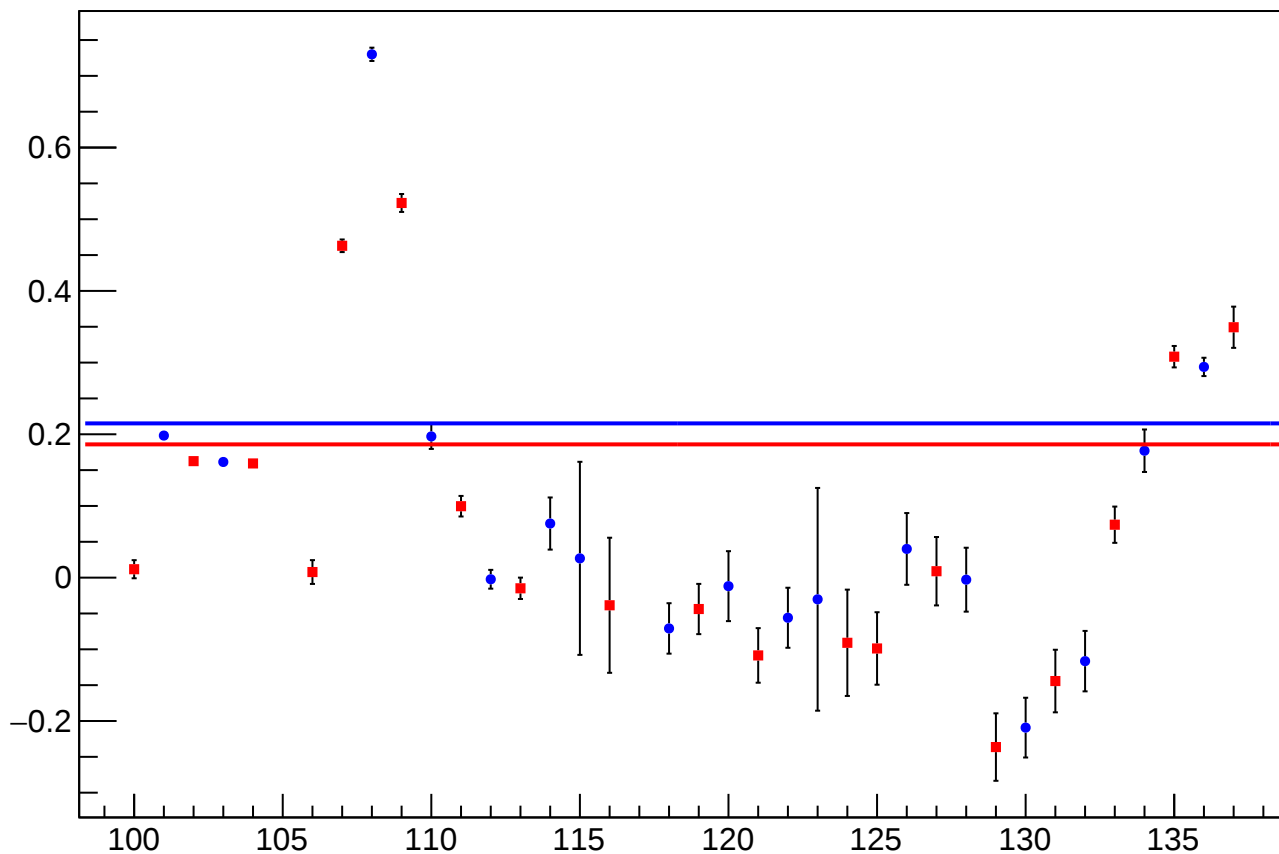
Right: 8.011+/-0.047  $\chi^2/\text{NDF}$ : 244638.0/35

In: 6.226+/-0.065  $\chi^2/\text{NDF}$ : 120955.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 8.011+/-0.047  $\chi^2/\text{NDF}$ : 244638.0/35

reg\_asym\_sam\_15\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.215+/-0.003  $\chi^2/\text{NDF}$ : 3925.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.186+/-0.003  $\chi^2/\text{NDF}$ : 2718.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

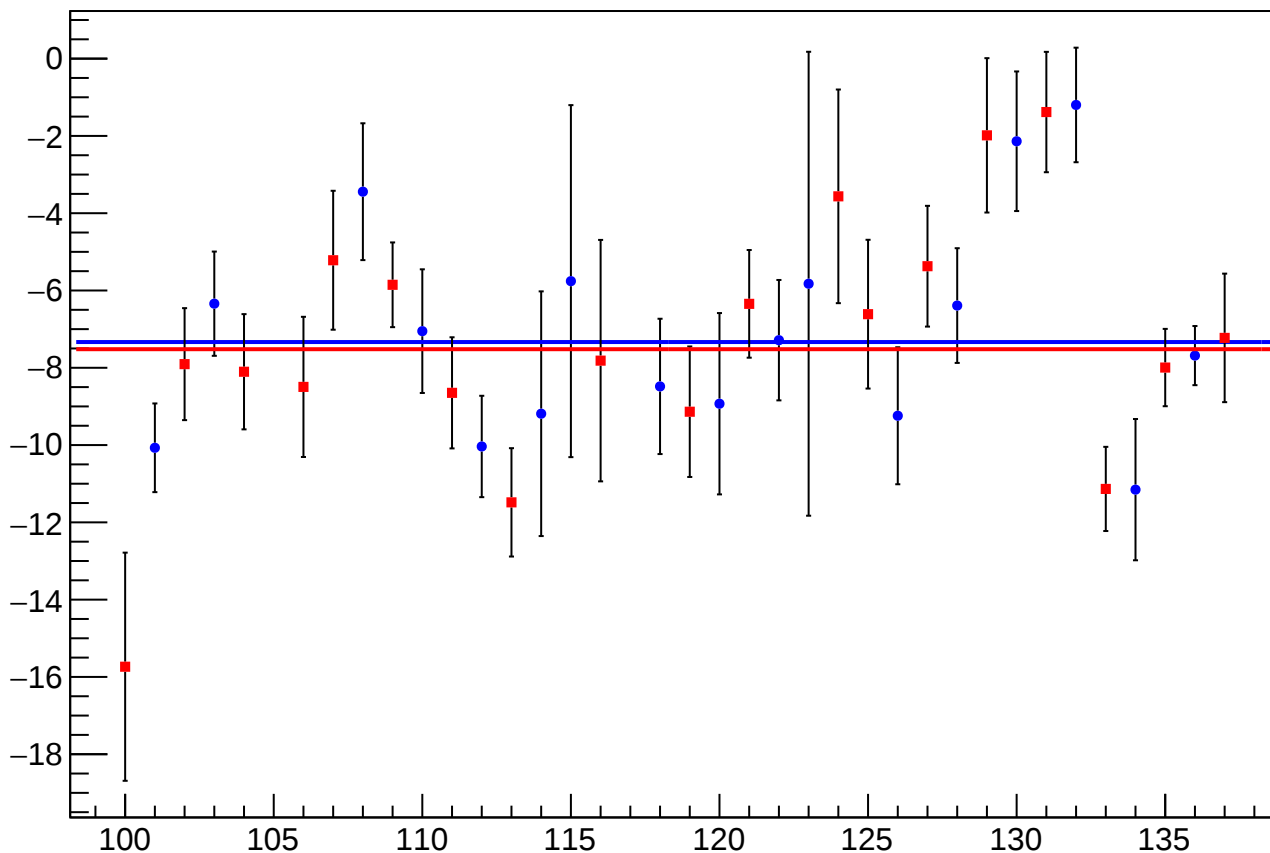
Right: 0.200+/-0.002  $\chi^2/\text{NDF}$ : 6701.6/35

In: 0.215+/-0.003  $\chi^2/\text{NDF}$ : 3925.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.200+/-0.002  $\chi^2/\text{NDF}$ : 6701.6/35

reg\_asym\_sam\_15\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -7.334+/-0.372  $\chi^2/\text{NDF}$ : 48.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -7.519+/-0.351  $\chi^2/\text{NDF}$ : 61.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

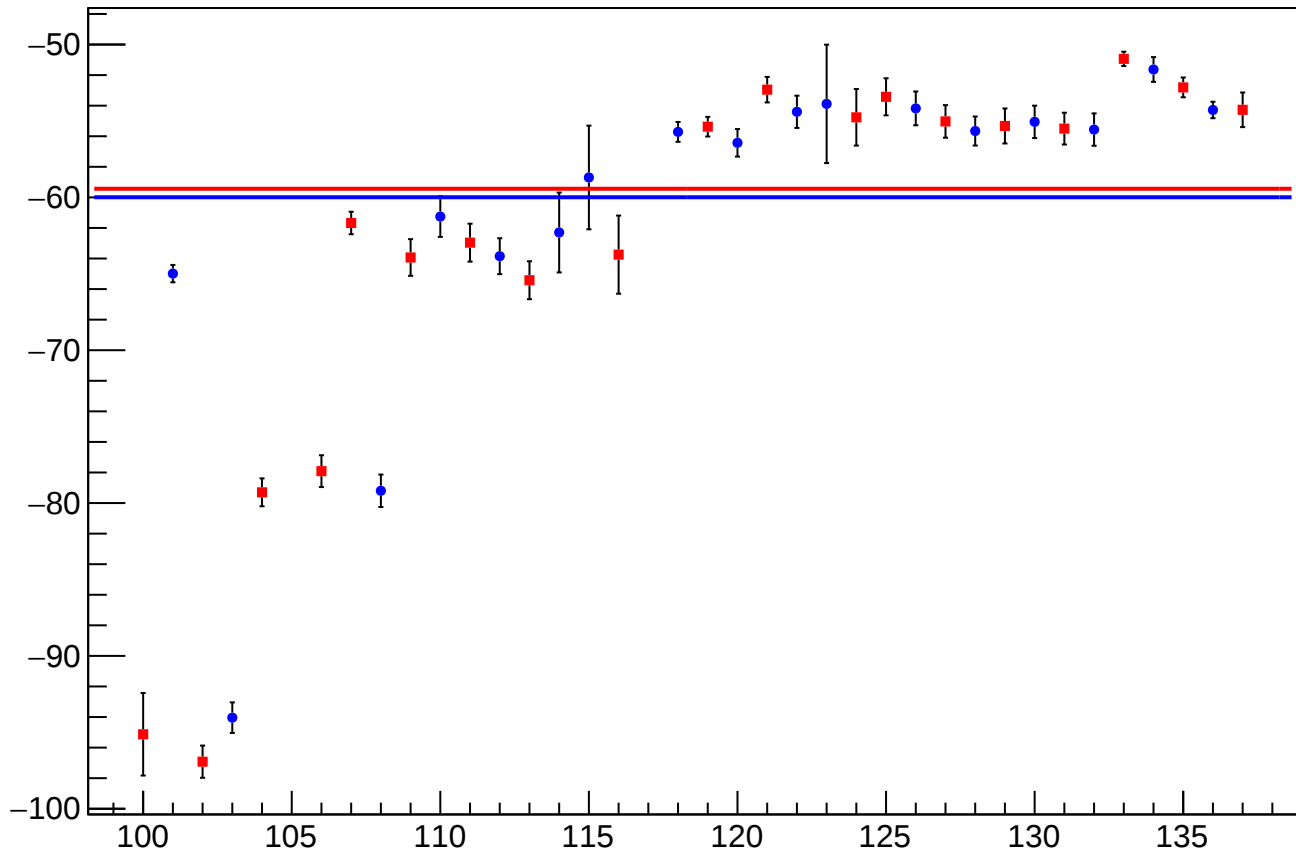
Right: -7.432+/-0.255  $\chi^2/\text{NDF}$ : 109.5/35

In: -7.334+/-0.372  $\chi^2/\text{NDF}$ : 48.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -7.432+/-0.255  $\chi^2/\text{NDF}$ : 109.5/35

reg\_asym\_sam\_15\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-59.992 \pm 0.225$   $\chi^2/\text{NDF}$ : 1972.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-59.435 \pm 0.212$   $\chi^2/\text{NDF}$ : 2917.9/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

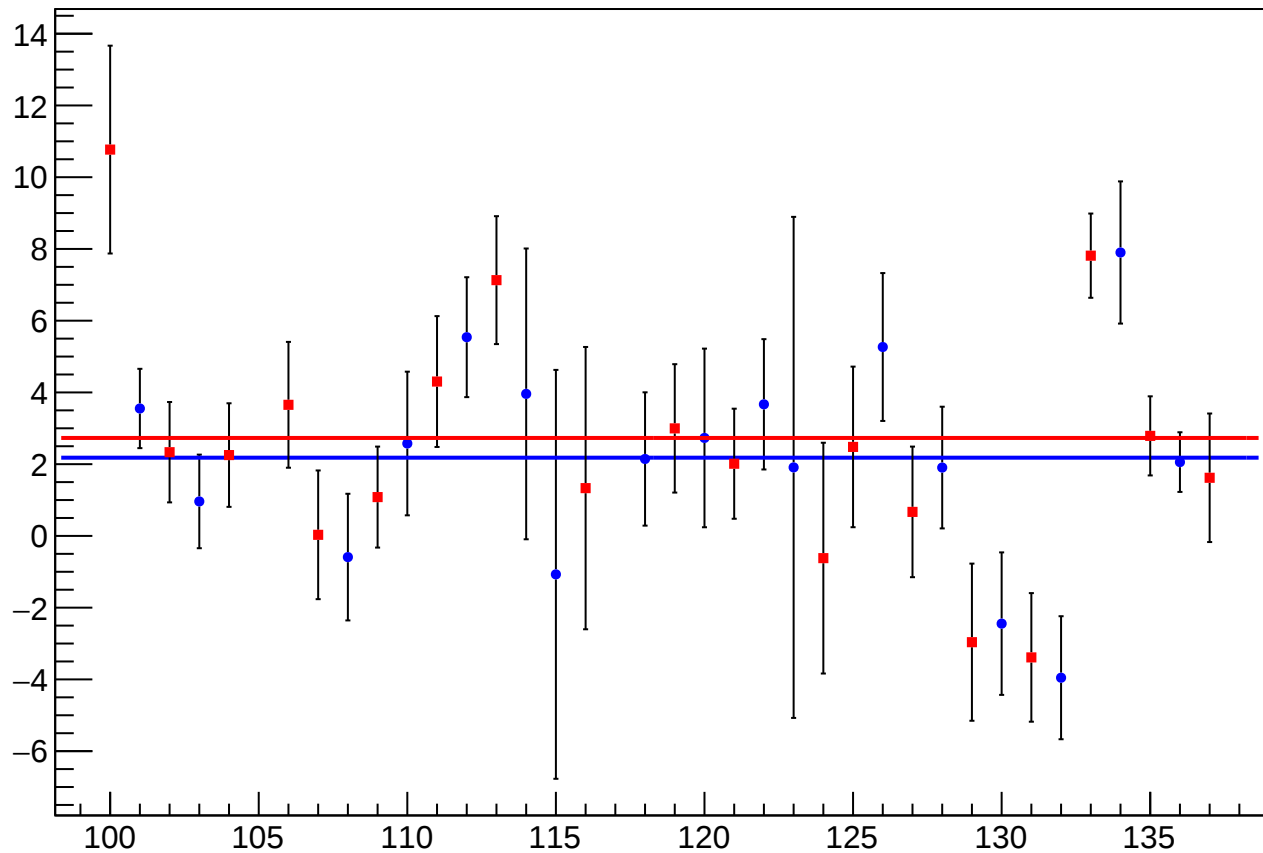
Right:  $-59.697 \pm 0.154$   $\chi^2/\text{NDF}$ : 4894.0/35

In:  $-59.992 \pm 0.225$   $\chi^2/\text{NDF}$ : 1972.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-59.697 \pm 0.154$   $\chi^2/\text{NDF}$ : 4894.0/35

reg\_asym\_sam\_15\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 2.181+/-0.406  $\chi^2/\text{NDF}$ : 39.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.731+/-0.388  $\chi^2/\text{NDF}$ : 58.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

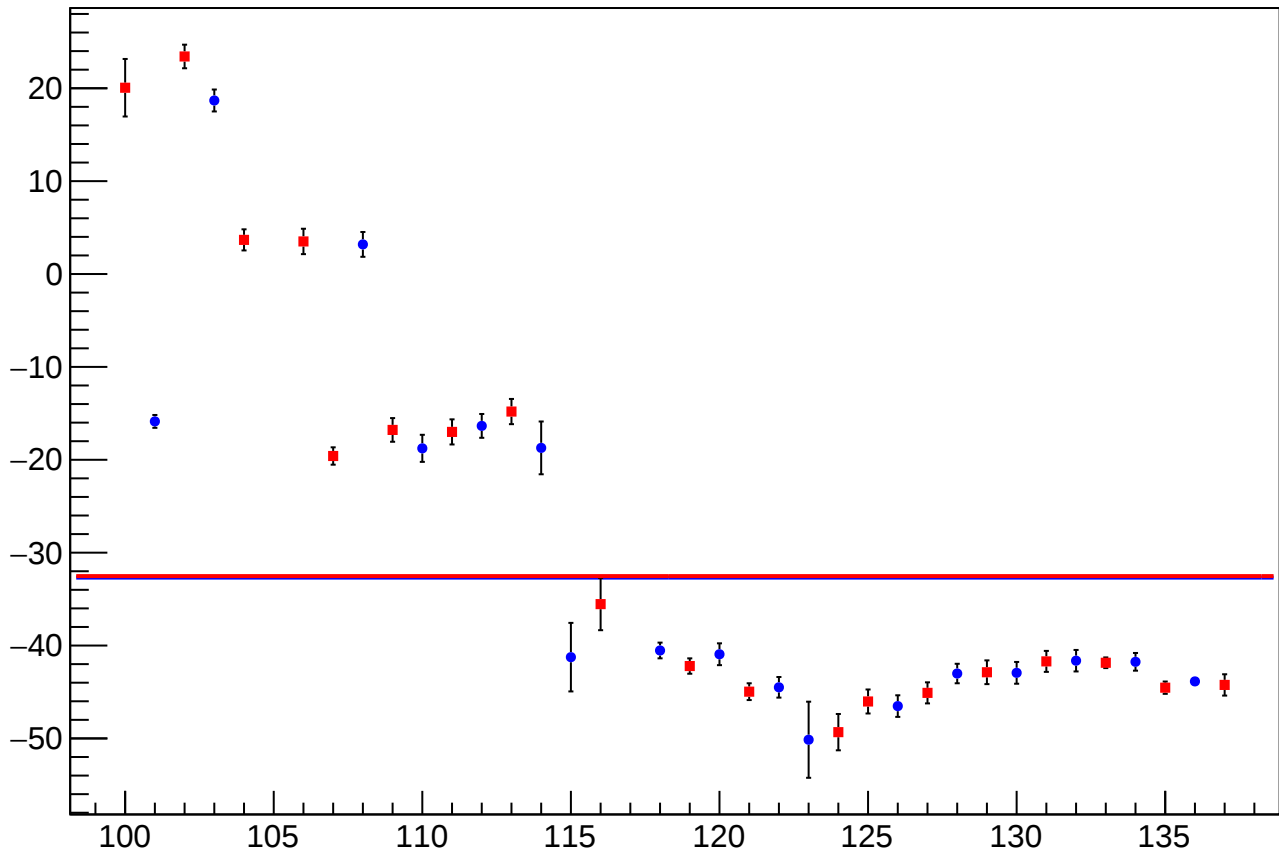
Right: 2.468+/-0.280  $\chi^2/\text{NDF}$ : 98.9/35

In: 2.181+/-0.406  $\chi^2/\text{NDF}$ : 39.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.468+/-0.280  $\chi^2/\text{NDF}$ : 98.9/35

reg\_asym\_sam\_15\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-32.682 \pm 0.256$   $\chi^2/\text{NDF}: 4646.9/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-32.523 \pm 0.244$   $\chi^2/\text{NDF}: 6045.3/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

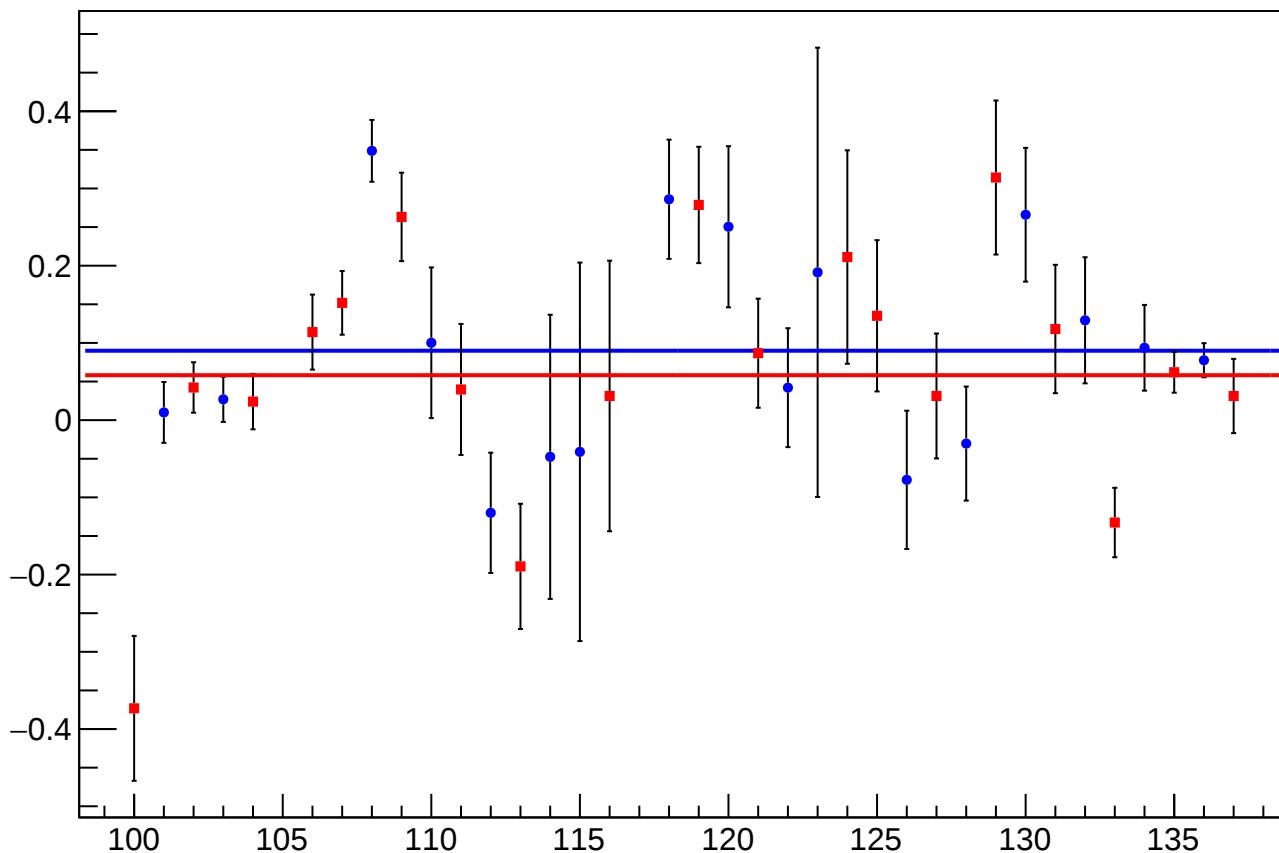
Right:  $-32.599 \pm 0.177$   $\chi^2/\text{NDF}: 10692.4/35$

In:  $-32.682 \pm 0.256$   $\chi^2/\text{NDF}: 4646.9/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-32.599 \pm 0.177$   $\chi^2/\text{NDF}: 10692.4/35$

reg\_asym\_sam\_15\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.090 $\pm$ 0.013  $\chi^2$ /NDF: 78.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.058 $\pm$ 0.012  $\chi^2$ /NDF: 87.1/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

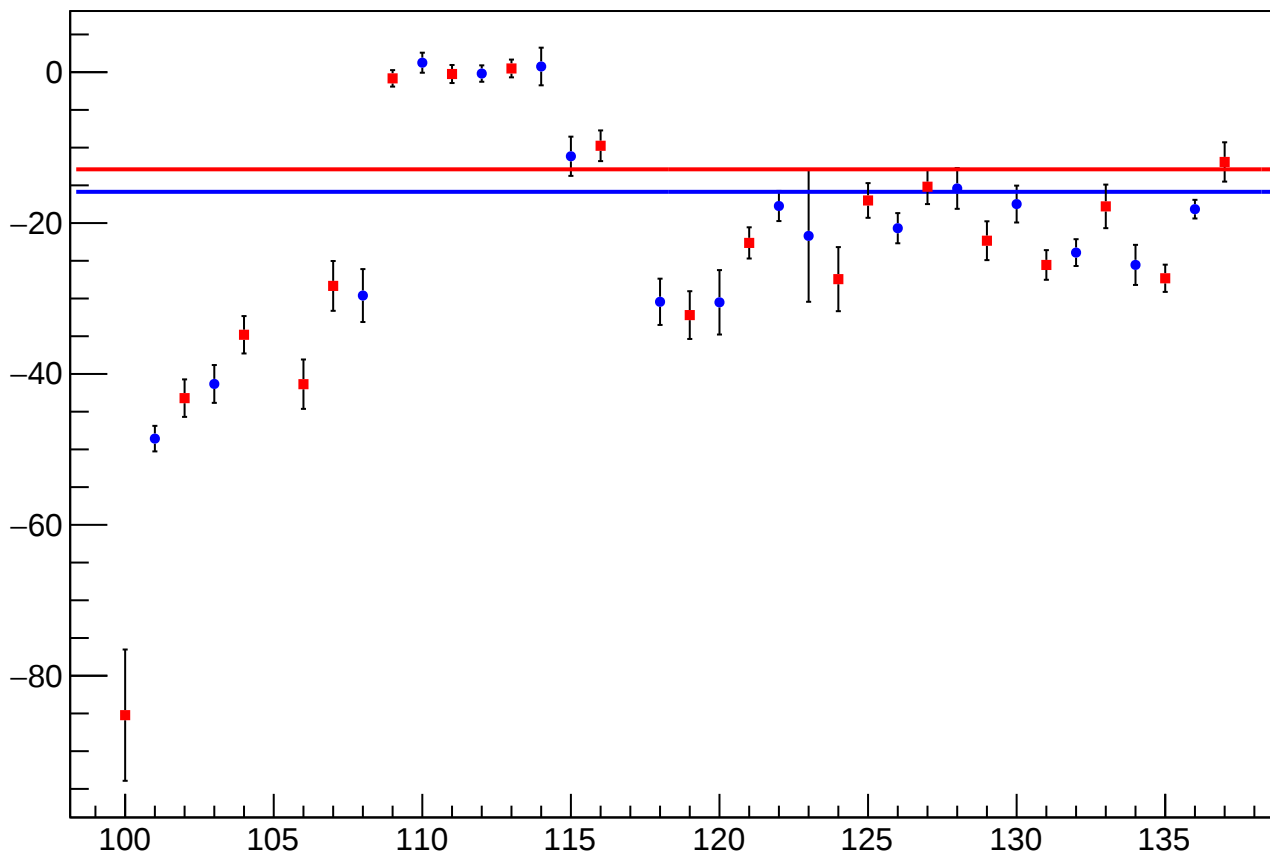
Right: 0.073 $\pm$ 0.009  $\chi^2$ /NDF: 169.1/35

In: 0.090 $\pm$ 0.013  $\chi^2$ /NDF:78.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.073 $\pm$ 0.009  $\chi^2$ /NDF: 169.1/35

reg\_asym\_sam\_37\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -15.858+/-0.477  $\chi^2/\text{NDF}$ : 992.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -12.877+/-0.458  $\chi^2/\text{NDF}$ : 956.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

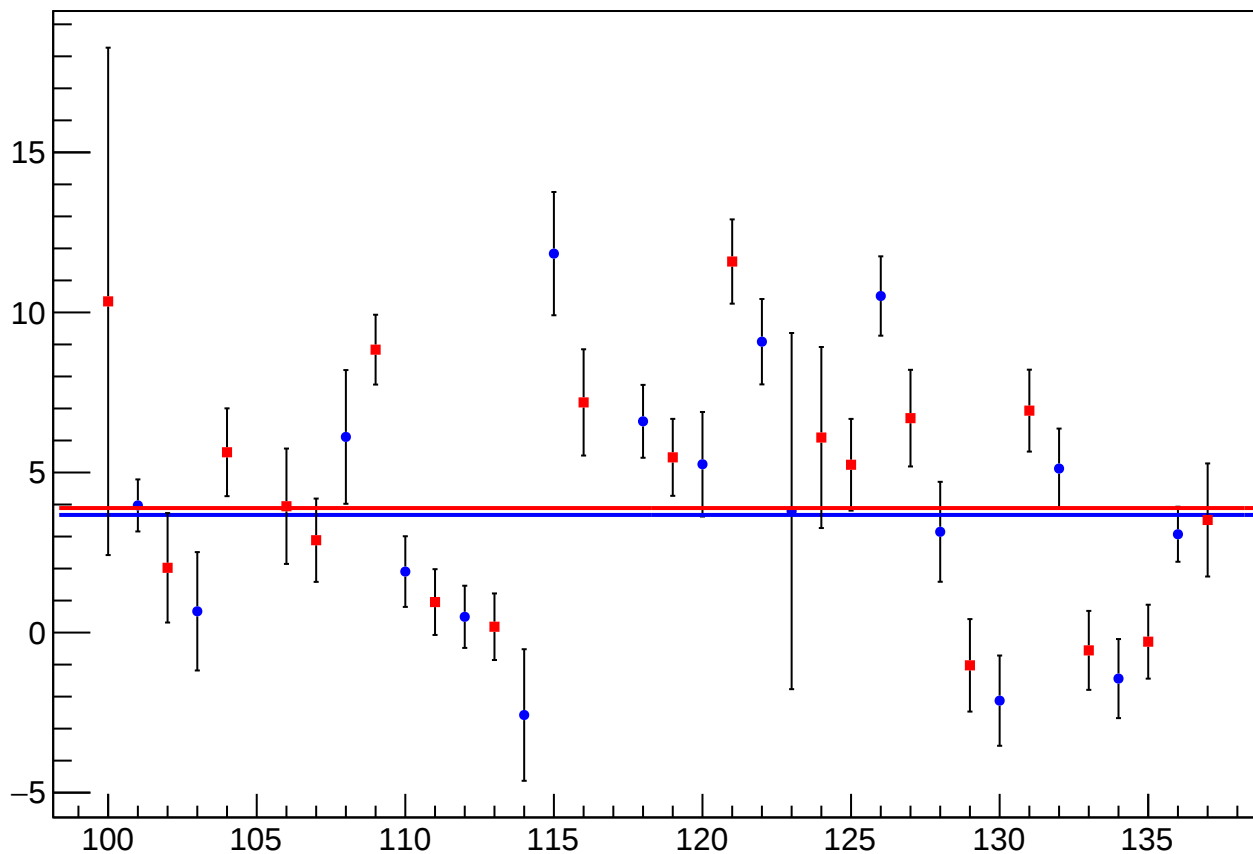
Right: -14.308+/-0.330  $\chi^2/\text{NDF}$ : 1969.1/35

In: -15.858+/-0.477  $\chi^2/\text{NDF}$ : 992.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -14.308+/-0.330  $\chi^2/\text{NDF}$ : 1969.1/35

reg\_asym\_sam\_37\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 3.675+/-0.310  $\chi^2/\text{NDF}$ : 135.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3.890+/-0.316  $\chi^2/\text{NDF}$ : 133.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

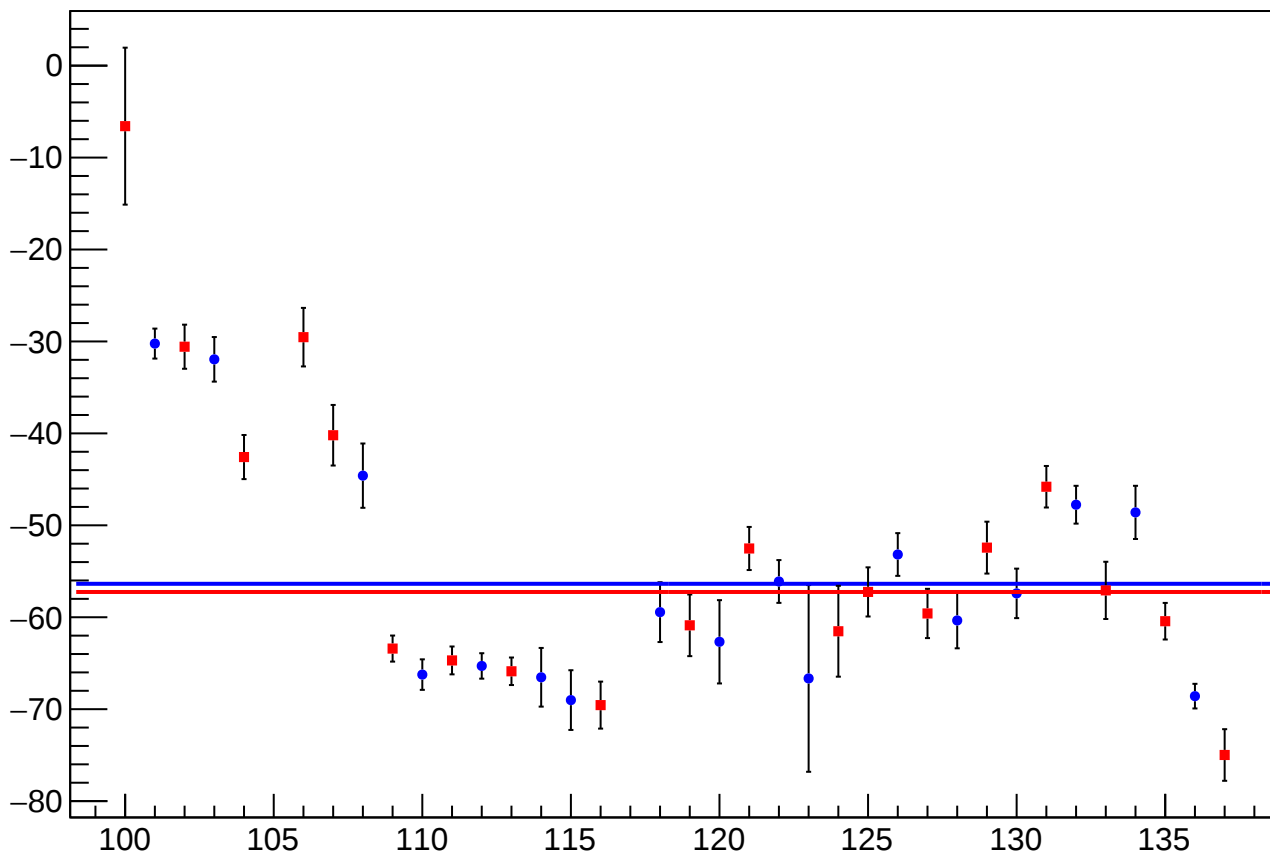
Right: 3.780+/-0.221  $\chi^2/\text{NDF}$ : 269.1/35

In: 3.675+/-0.310  $\chi^2/\text{NDF}$ : 135.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.780+/-0.221  $\chi^2/\text{NDF}$ : 269.1/35

reg\_asym\_sam\_37\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -56.362 $\pm$ 0.543  $\chi^2$ /NDF: 587.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -57.252 $\pm$ 0.536  $\chi^2$ /NDF: 476.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

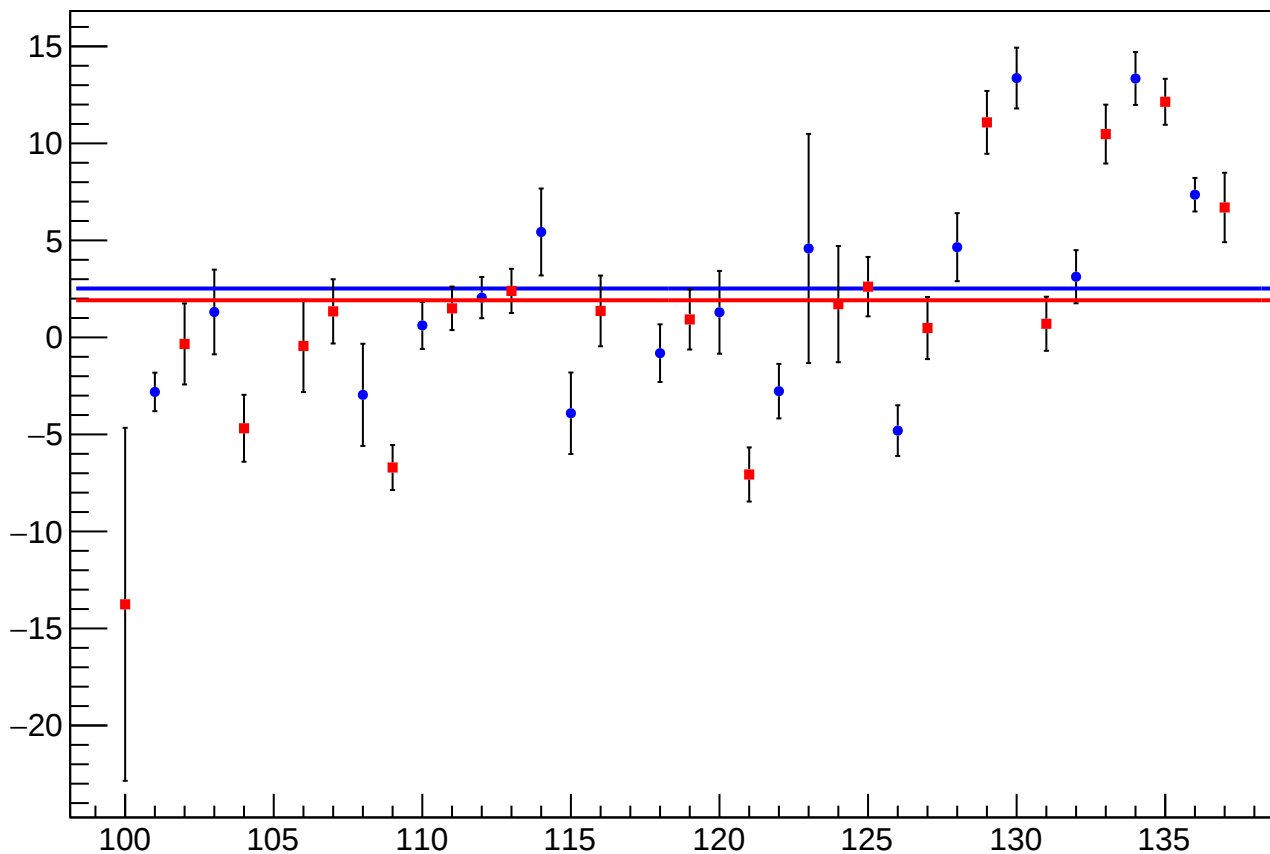
Right: -56.813 $\pm$ 0.382  $\chi^2$ /NDF: 1064.6/35

In: -56.362 $\pm$ 0.543  $\chi^2$ /NDF:587.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -56.813 $\pm$ 0.382  $\chi^2$ /NDF: 1064.6/35

reg\_asym\_sam\_37\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 2.520+/-0.347  $\chi^2/\text{NDF}$ : 242.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1.914+/-0.355  $\chi^2/\text{NDF}$ : 264.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

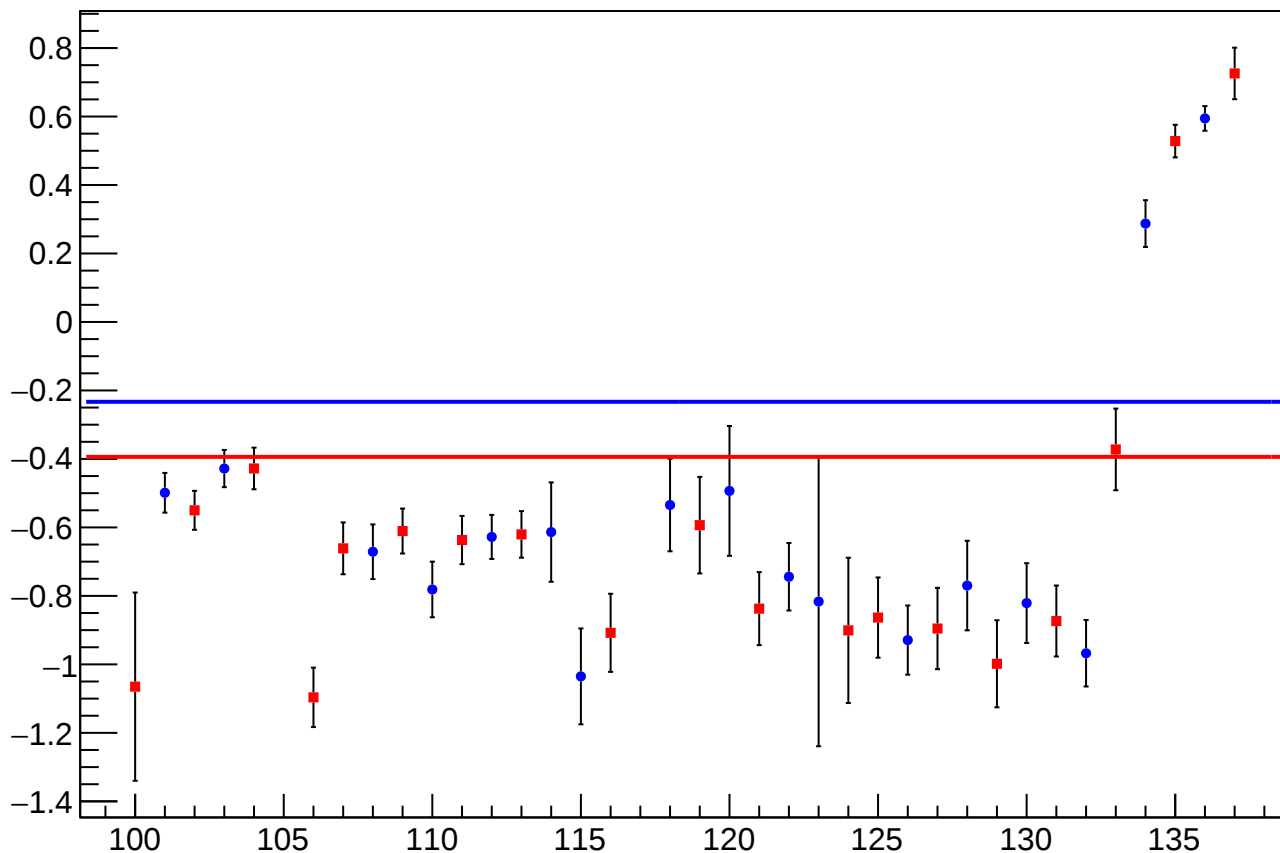
Right: 2.224+/-0.248  $\chi^2/\text{NDF}$ : 508.4/35

In: 2.520+/-0.347  $\chi^2/\text{NDF}$ : 242.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.224+/-0.248  $\chi^2/\text{NDF}$ : 508.4/35

reg\_asym\_sam\_37\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.233+/-0.019  $\chi^2/\text{NDF}$ : 956.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.394+/-0.019  $\chi^2/\text{NDF}$ : 845.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

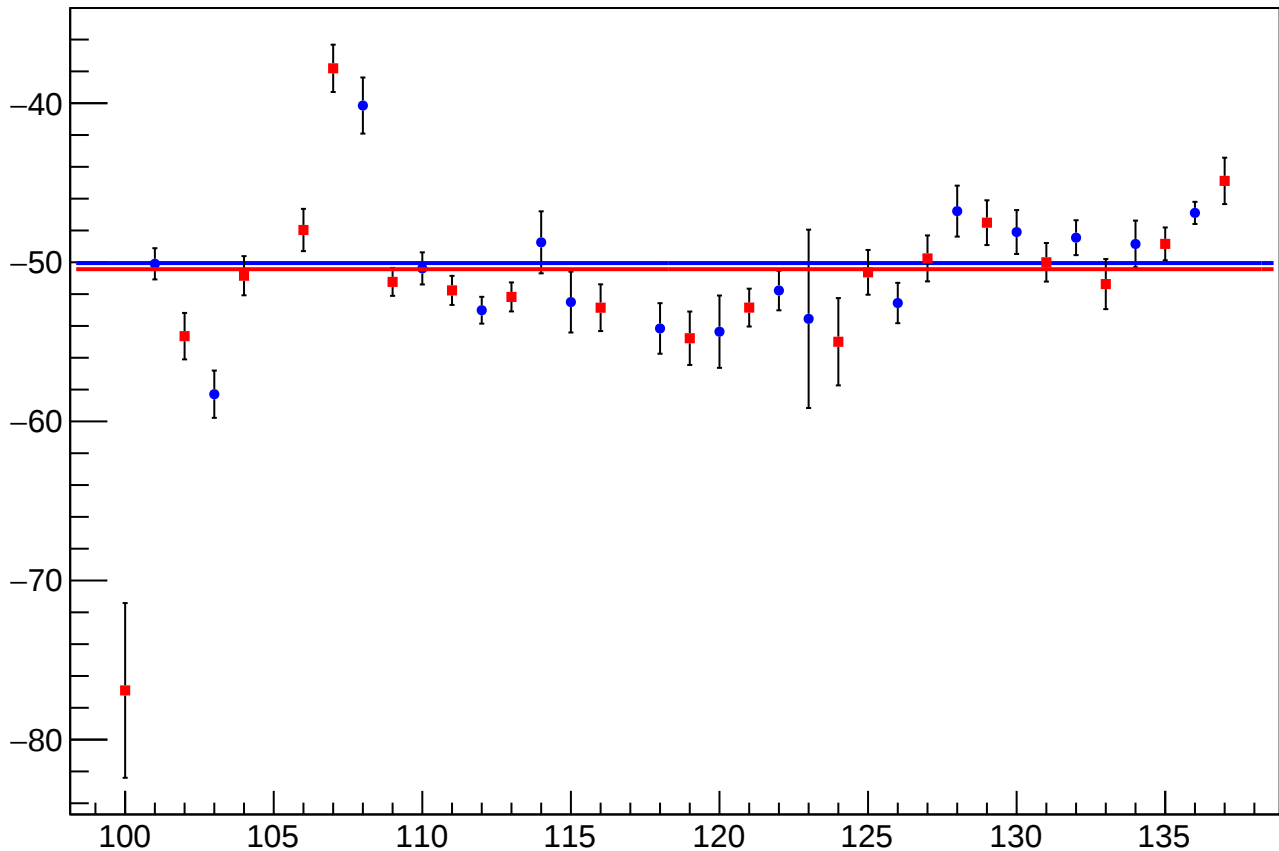
Right: -0.313+/-0.013  $\chi^2/\text{NDF}$ : 1838.0/35

In: -0.233+/-0.019  $\chi^2/\text{NDF}$ : 956.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.313+/-0.013  $\chi^2/\text{NDF}$ : 1838.0/35

reg\_asym\_sam\_37\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -50.048+/-0.303  $\chi^2/\text{NDF}$ : 122.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -50.434+/-0.295  $\chi^2/\text{NDF}$ : 151.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

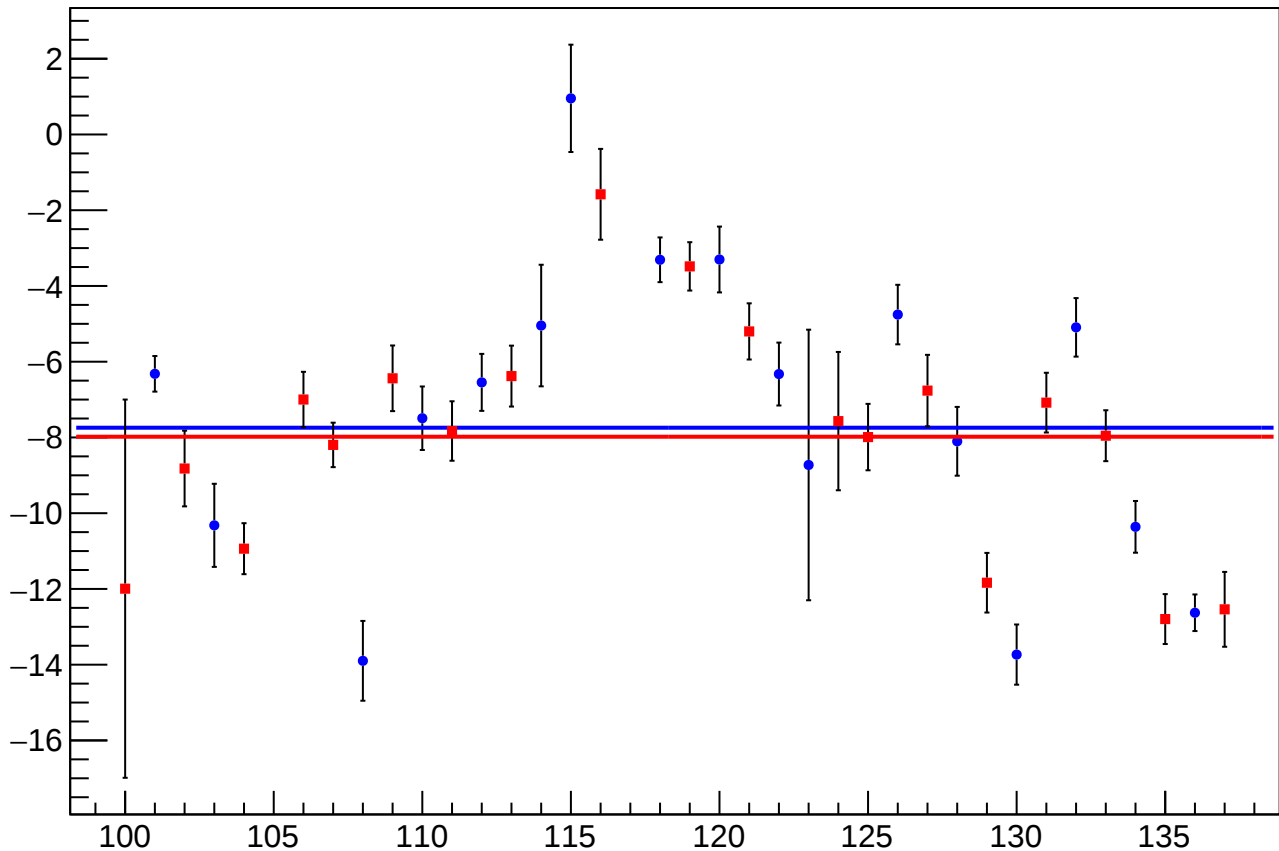
Right: -50.246+/-0.211  $\chi^2/\text{NDF}$ : 275.7/35

In: -50.048+/-0.303  $\chi^2/\text{NDF}$ : 122.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -50.246+/-0.211  $\chi^2/\text{NDF}$ : 275.7/35

reg\_asym\_sam\_37\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -7.743+/-0.187  $\chi^2/\text{NDF}$ : 377.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -7.981+/-0.186  $\chi^2/\text{NDF}$ : 223.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

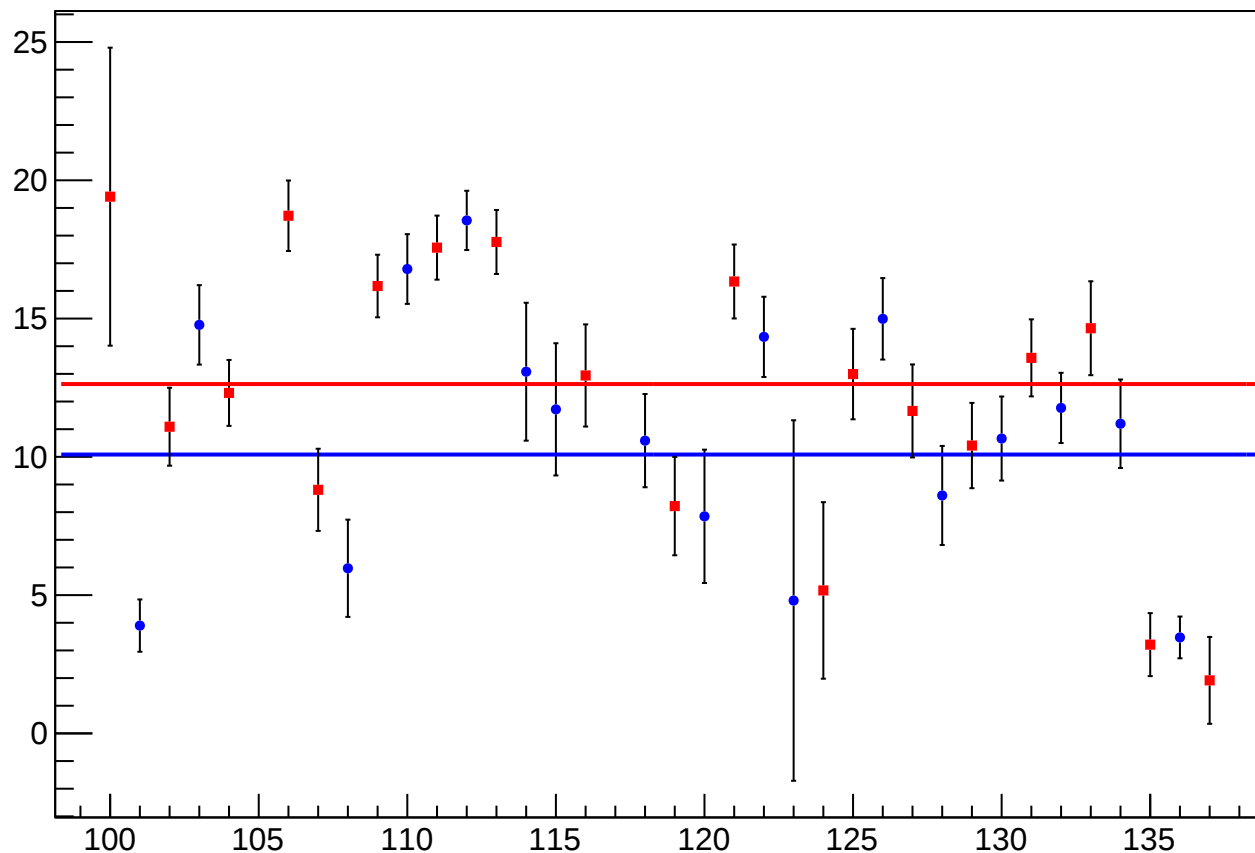
Right: -7.863+/-0.132  $\chi^2/\text{NDF}$ : 601.9/35

In: -7.743+/-0.187  $\chi^2/\text{NDF}$ :377.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -7.863+/-0.132  $\chi^2/\text{NDF}$ : 601.9/35

reg\_asym\_sam\_37\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 10.083+/-0.338  $\chi^2/\text{NDF}$ : 252.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 12.632+/-0.333  $\chi^2/\text{NDF}$ : 218.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

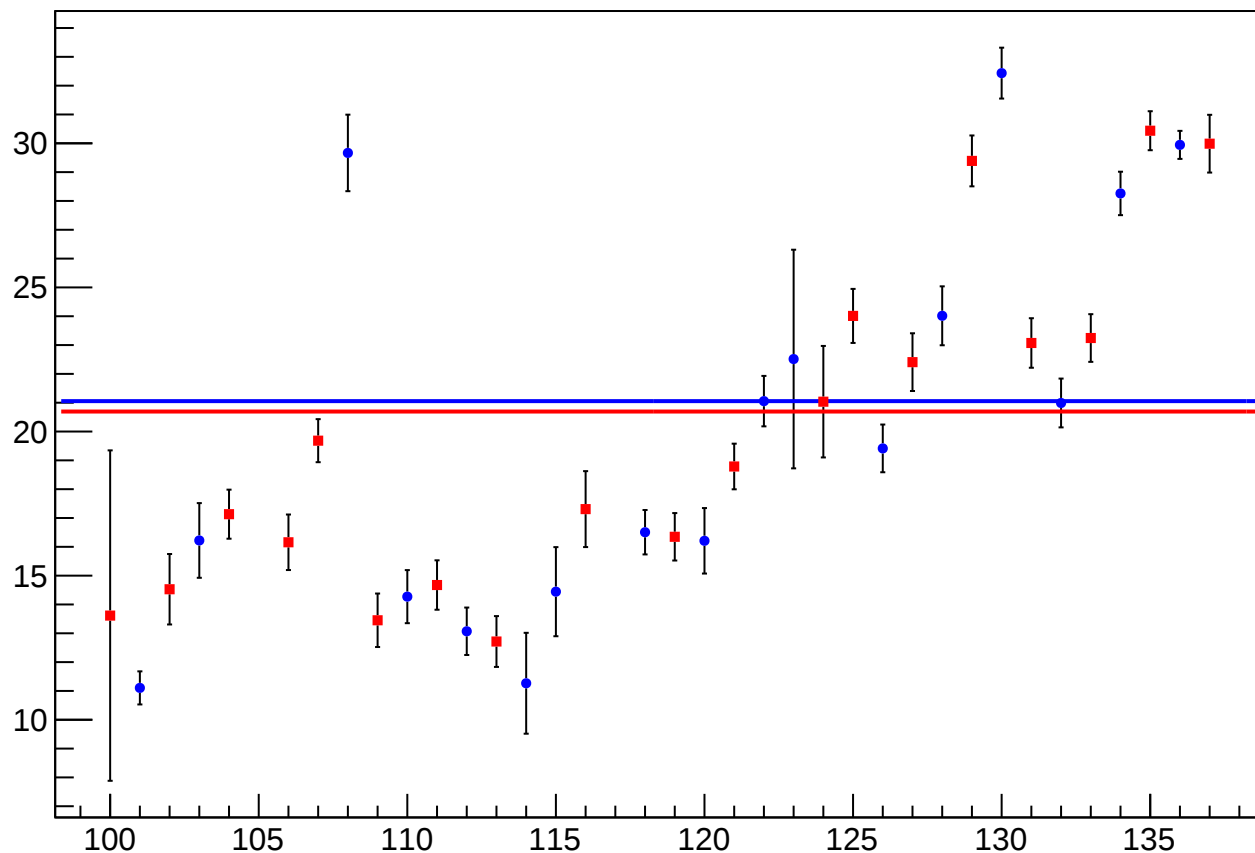
Right: 11.377+/-0.237  $\chi^2/\text{NDF}$ : 500.1/35

In: 10.083+/-0.338  $\chi^2/\text{NDF}$ : 252.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 11.377+/-0.237  $\chi^2/\text{NDF}$ : 500.1/35

reg\_asym\_sam\_37\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 21.055+/-0.211  $\chi^2/\text{NDF}$ : 1211.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 20.694+/-0.213  $\chi^2/\text{NDF}$ : 724.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

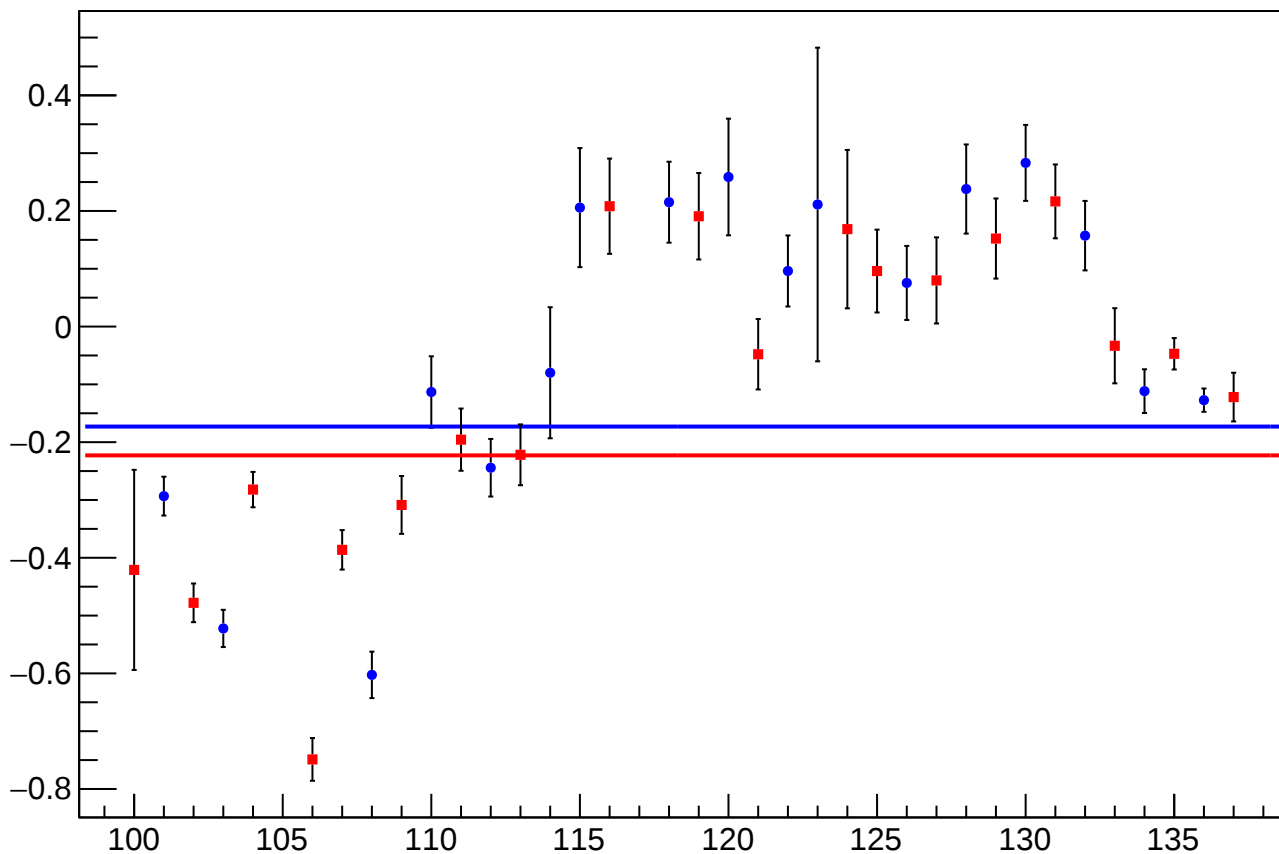
Right: 20.876+/-0.150  $\chi^2/\text{NDF}$ : 1937.3/35

In: 21.055+/-0.211  $\chi^2/\text{NDF}$ : 1211.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 20.876+/-0.150  $\chi^2/\text{NDF}$ : 1937.3/35

reg\_asym\_sam\_37\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.173 \pm 0.011$   $\chi^2/\text{NDF}$ : 461.8/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.223 \pm 0.011$   $\chi^2/\text{NDF}$ : 535.1/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

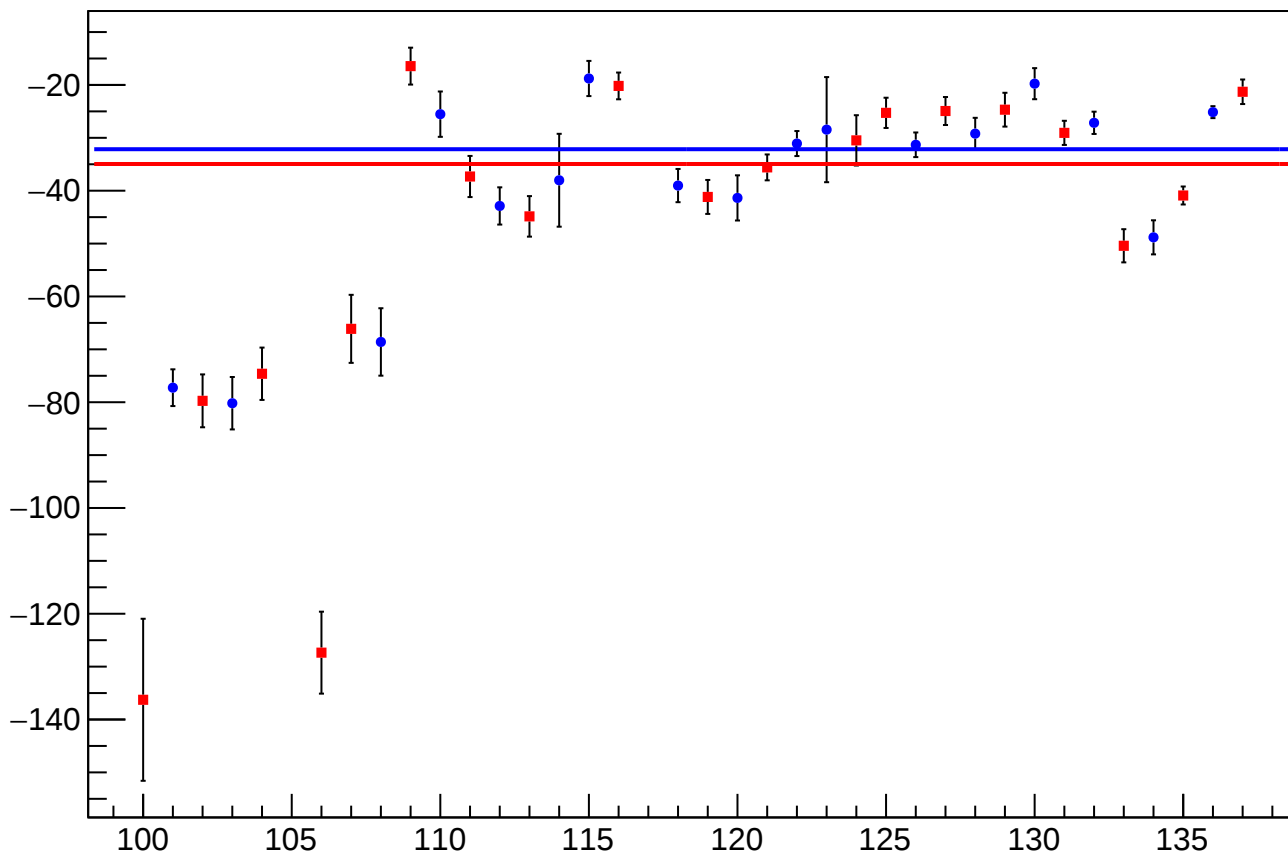
Right:  $-0.198 \pm 0.008$   $\chi^2/\text{NDF}$ : 1007.1/35

In:  $-0.173 \pm 0.011$   $\chi^2/\text{NDF}$ : 461.8/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.198 \pm 0.008$   $\chi^2/\text{NDF}$ : 1007.1/35

reg\_asym\_sam\_26\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -32.154+/-0.667  $\chi^2/\text{NDF}$ : 423.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -34.950+/-0.708  $\chi^2/\text{NDF}$ : 541.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

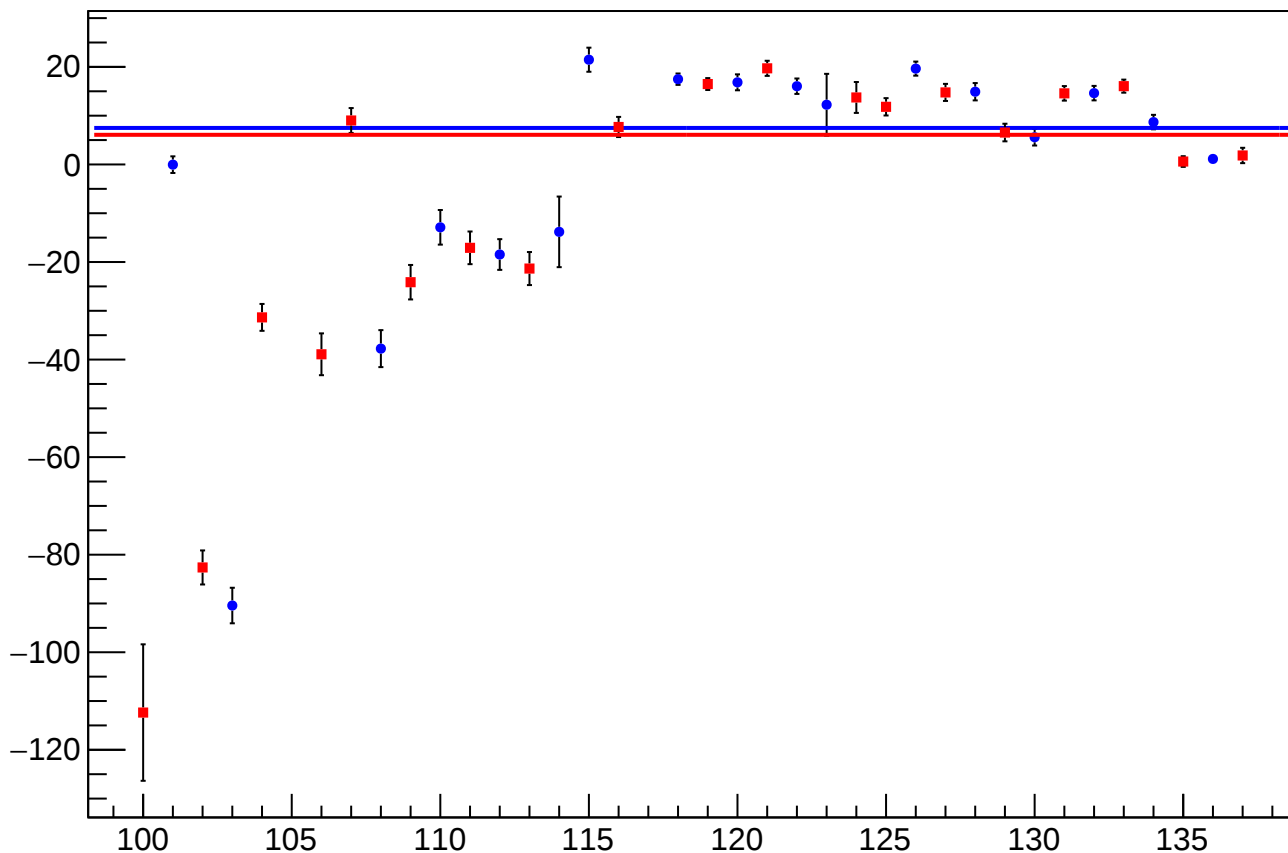
Right: -33.468+/-0.485  $\chi^2/\text{NDF}$ : 973.0/35

In: -32.154+/-0.667  $\chi^2/\text{NDF}$ : 423.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -33.468+/-0.485  $\chi^2/\text{NDF}$ : 973.0/35

reg\_asym\_sam\_26\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 7.488+/-0.407  $\chi^2/\text{NDF}$ : 1340.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 6.078+/-0.434  $\chi^2/\text{NDF}$ : 1512.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

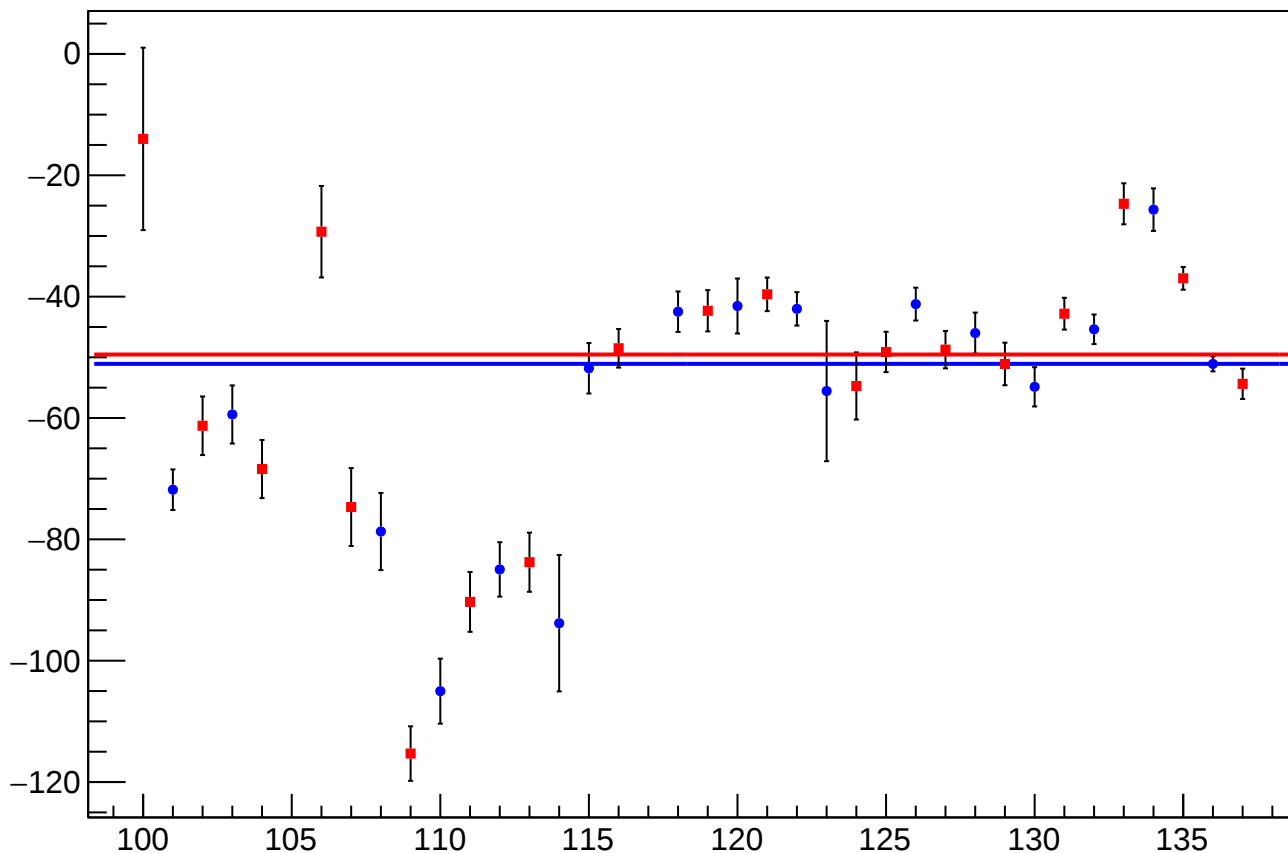
Right: 6.829+/-0.297  $\chi^2/\text{NDF}$ : 2858.2/35

In: 7.488+/-0.407  $\chi^2/\text{NDF}$ : 1340.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 6.829+/-0.297  $\chi^2/\text{NDF}$ : 2858.2/35

reg\_asym\_sam\_26\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -51.077+/-0.741  $\chi^2/\text{NDF}$ : 330.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -49.537+/-0.798  $\chi^2/\text{NDF}$ : 509.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

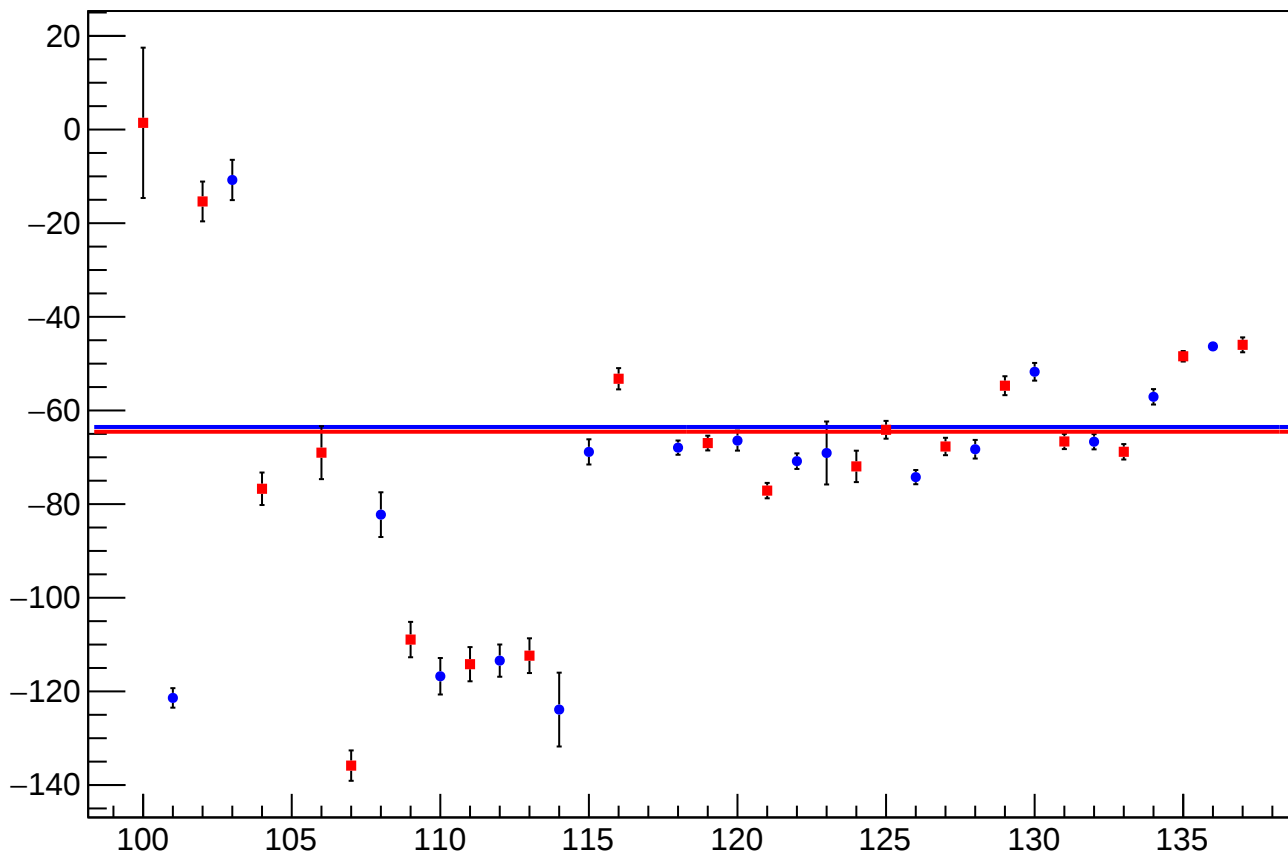
Right: -50.365+/-0.543  $\chi^2/\text{NDF}$ : 841.8/35

In: -51.077+/-0.741  $\chi^2/\text{NDF}$ : 330.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -50.365+/-0.543  $\chi^2/\text{NDF}$ : 841.8/35

reg\_asym\_sam\_26\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-63.525 \pm 0.449$   $\chi^2/\text{NDF}$ : 2010.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-64.540 \pm 0.483$   $\chi^2/\text{NDF}$ : 1603.1/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

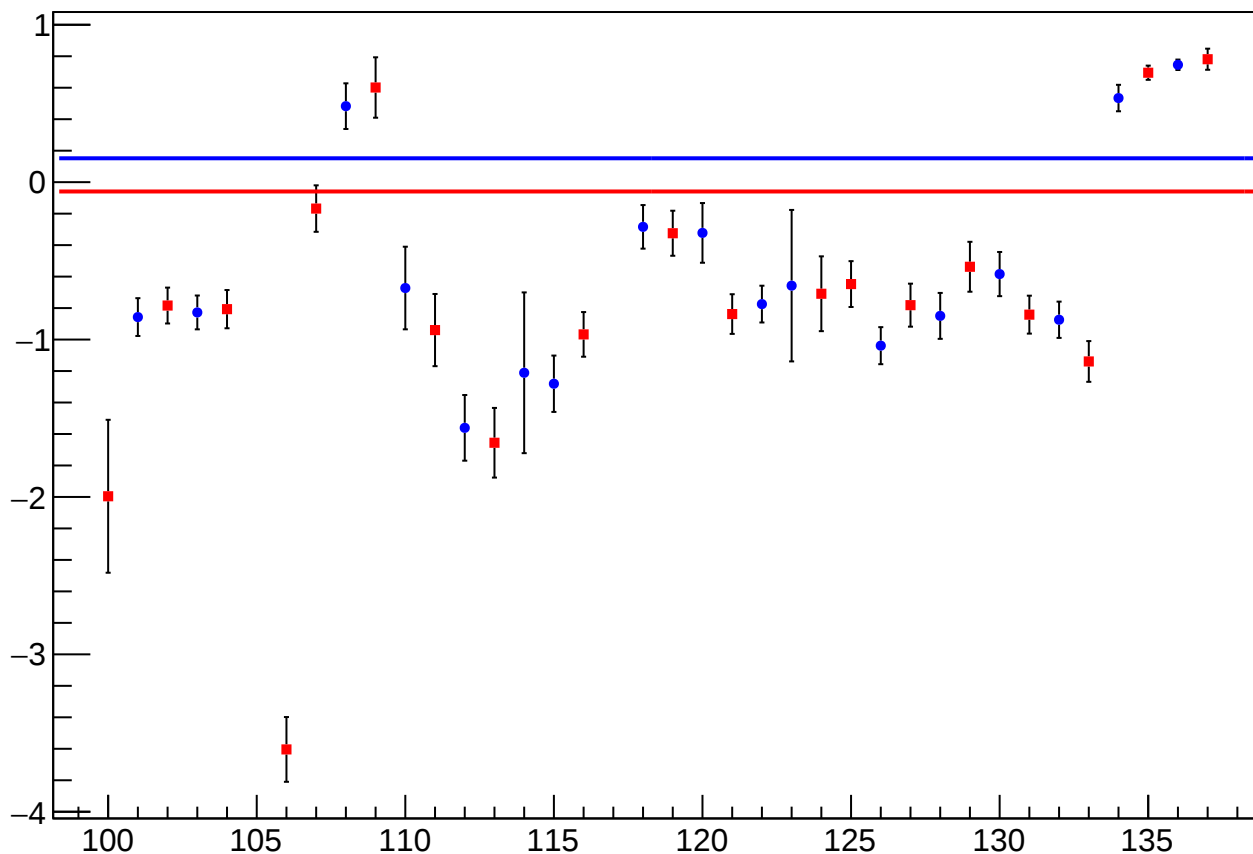
Right:  $-63.995 \pm 0.329$   $\chi^2/\text{NDF}$ : 3616.4/35

In:  $-63.525 \pm 0.449$   $\chi^2/\text{NDF}$ : 2010.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-63.995 \pm 0.329$   $\chi^2/\text{NDF}$ : 3616.4/35

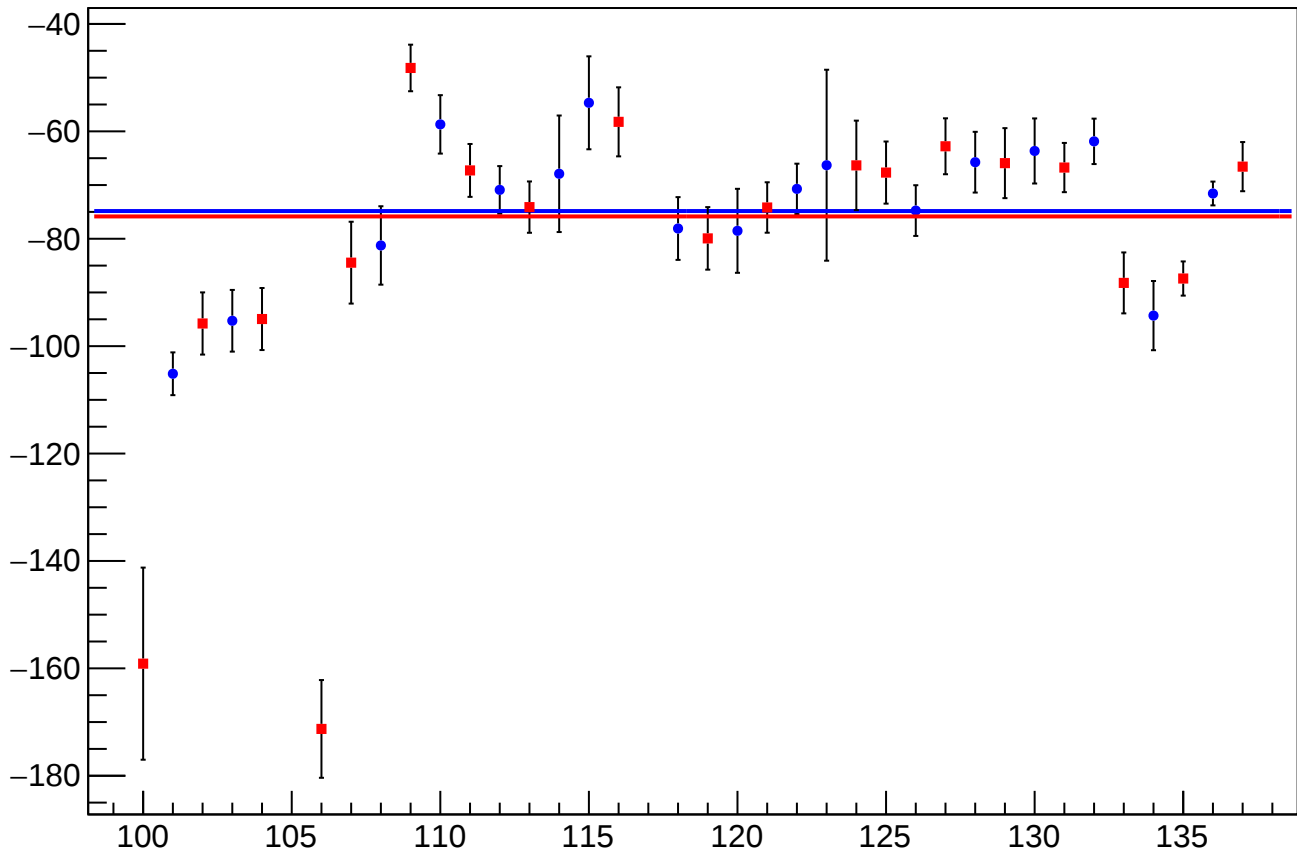
reg\_asym\_sam\_26\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.152+/-0.024  $\chi^2/\text{NDF}$ : 987.4/16  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -0.059+/-0.026  $\chi^2/\text{NDF}$ : 1161.9/18  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right: 0.056+/-0.018  $\chi^2/\text{NDF}$ : 2184.3/35  
 In: 0.152+/-0.024  $\chi^2/\text{NDF}$ : 987.4/16  
 Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 0.056+/-0.018  $\chi^2/\text{NDF}$ : 2184.3/35

reg\_asym\_sam\_26\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-74.841 \pm 1.195$   $\chi^2/\text{NDF}$ : 115.0/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-75.844 \pm 1.232$   $\chi^2/\text{NDF}$ : 245.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

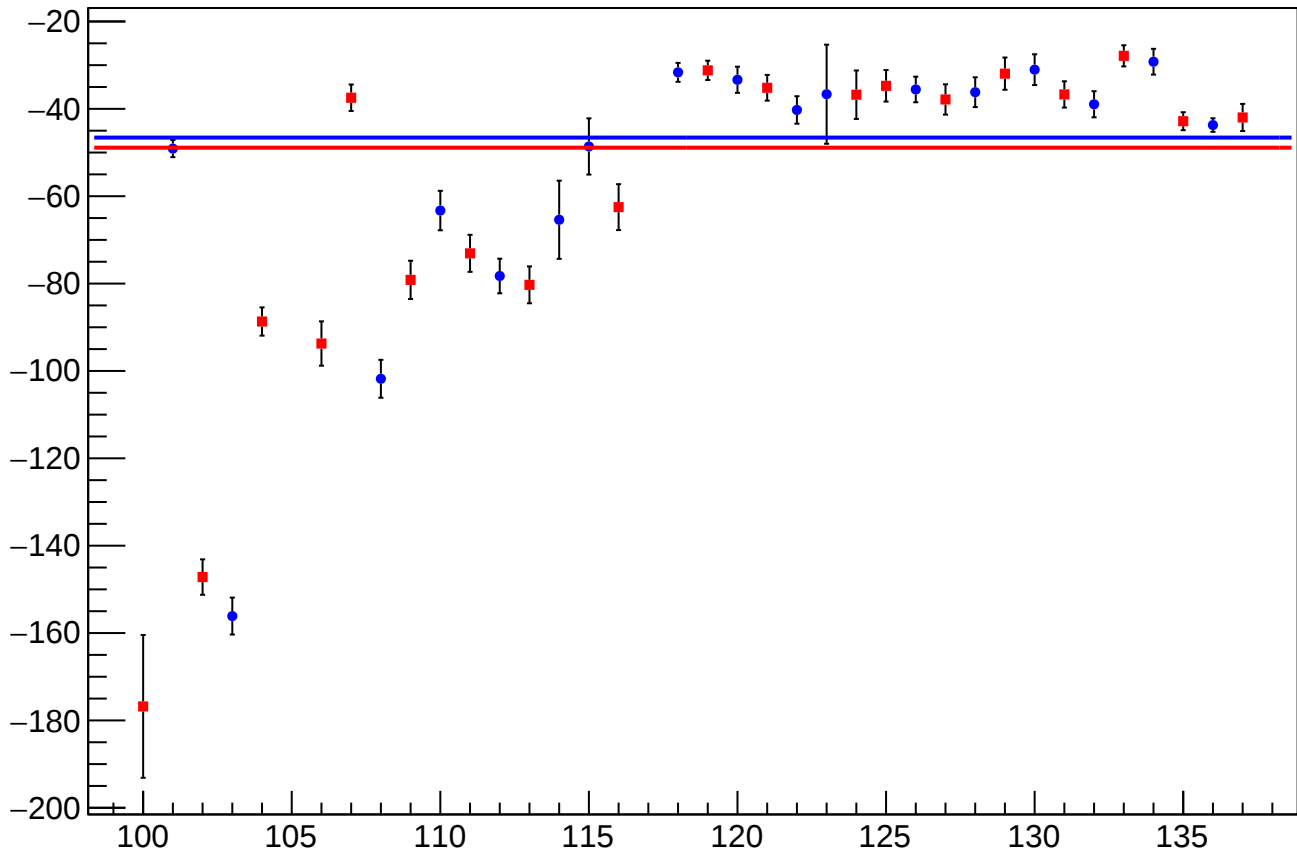
Right:  $-75.328 \pm 0.858$   $\chi^2/\text{NDF}$ : 360.9/35

In:  $-74.841 \pm 1.195$   $\chi^2/\text{NDF}$ : 115.0/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-75.328 \pm 0.858$   $\chi^2/\text{NDF}$ : 360.9/35

reg\_asym\_sam\_26\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -46.579 $\pm$ 0.730  $\chi^2$ /NDF: 1076.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -48.888 $\pm$ 0.763  $\chi^2$ /NDF: 1277.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

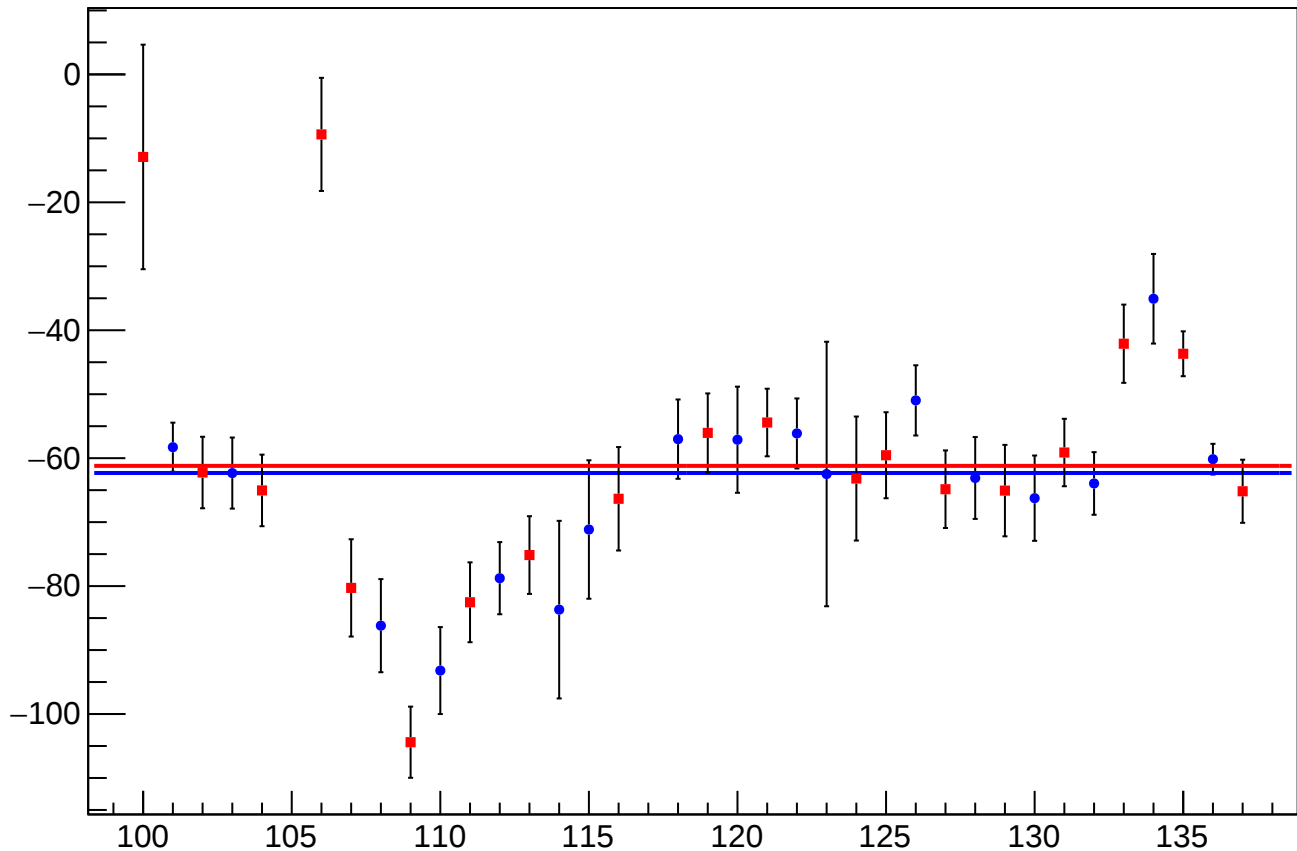
Right: -47.681 $\pm$ 0.527  $\chi^2$ /NDF: 2358.7/35

In: -46.579 $\pm$ 0.730  $\chi^2$ /NDF:1076.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -47.681 $\pm$ 0.527  $\chi^2$ /NDF: 2358.7/35

reg\_asym\_sam\_26\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-62.315 \pm 1.316$   $\chi^2/\text{NDF}$ : 67.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-61.203 \pm 1.381$   $\chi^2/\text{NDF}$ : 165.0/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

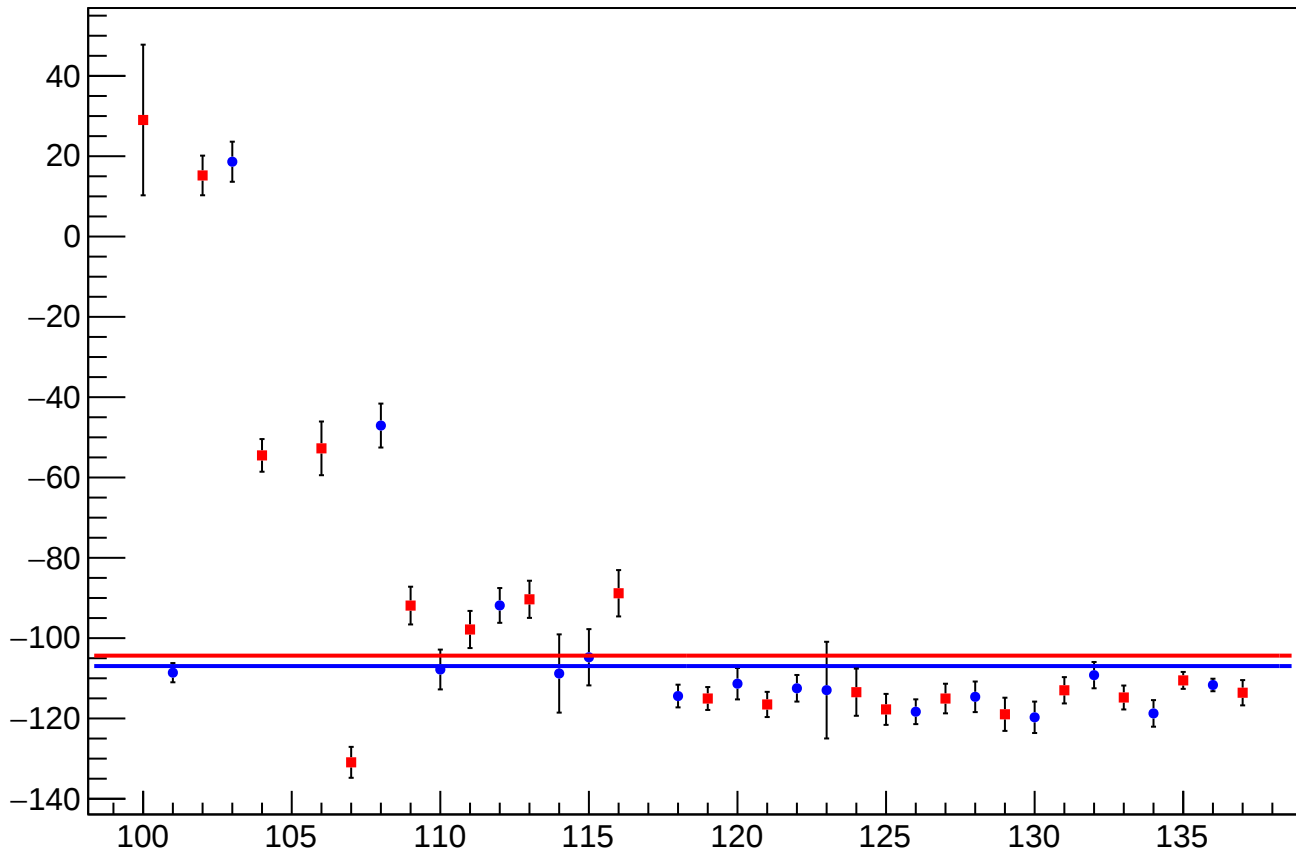
Right:  $-61.786 \pm 0.953$   $\chi^2/\text{NDF}$ : 232.5/35

In:  $-62.315 \pm 1.316$   $\chi^2/\text{NDF}$ : 67.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-61.786 \pm 0.953$   $\chi^2/\text{NDF}$ : 232.5/35

reg\_asym\_sam\_26\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -106.954+/-0.817  $\chi^2/\text{NDF}$ : 827.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -104.356+/-0.861  $\chi^2/\text{NDF}$ : 1021.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

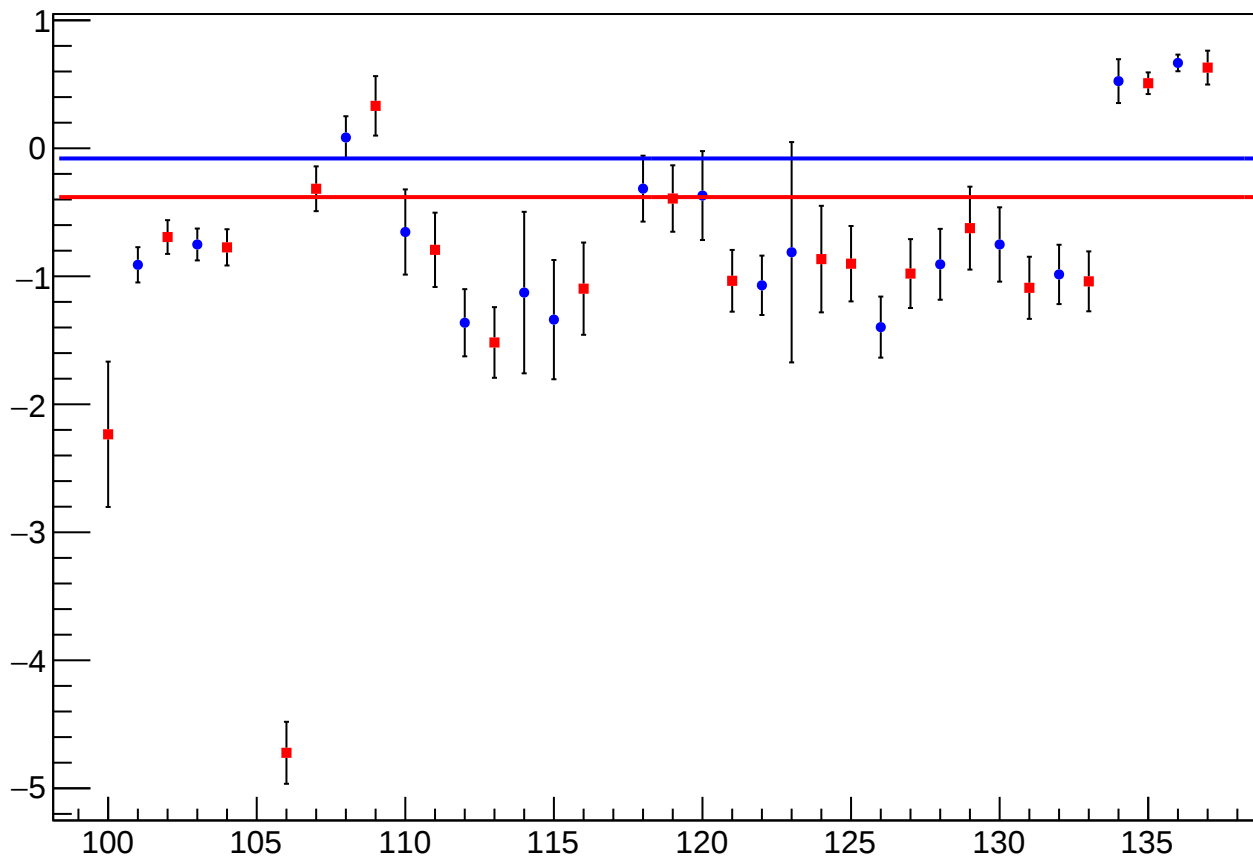
Right: -105.723+/-0.593  $\chi^2/\text{NDF}$ : 1853.0/35

In: -106.954+/-0.817  $\chi^2/\text{NDF}$ : 827.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -105.723+/-0.593  $\chi^2/\text{NDF}$ : 1853.0/35

reg\_asym\_sam\_26\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.079 \pm 0.042$   $\chi^2/\text{NDF}$ : 328.5/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.381 \pm 0.044$   $\chi^2/\text{NDF}$ : 580.5/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

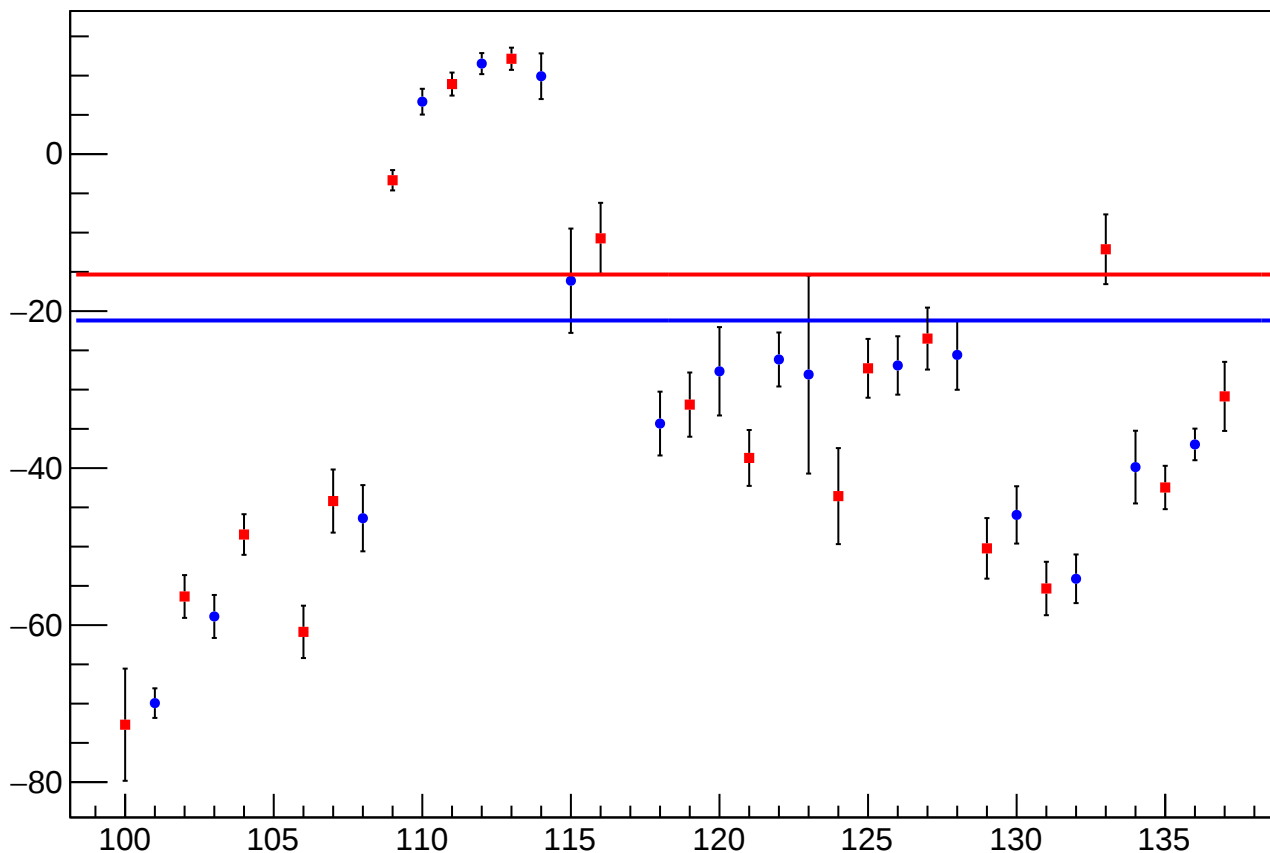
Right:  $-0.224 \pm 0.030$   $\chi^2/\text{NDF}$ : 933.5/35

In:  $-0.079 \pm 0.042$   $\chi^2/\text{NDF}$ : 328.5/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.224 \pm 0.030$   $\chi^2/\text{NDF}$ : 933.5/35

reg\_asym\_sam\_48\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-21.194 \pm 0.657$   $\chi^2/\text{NDF}$ : 2145.3/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-15.339 \pm 0.603$   $\chi^2/\text{NDF}$ : 1855.8/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

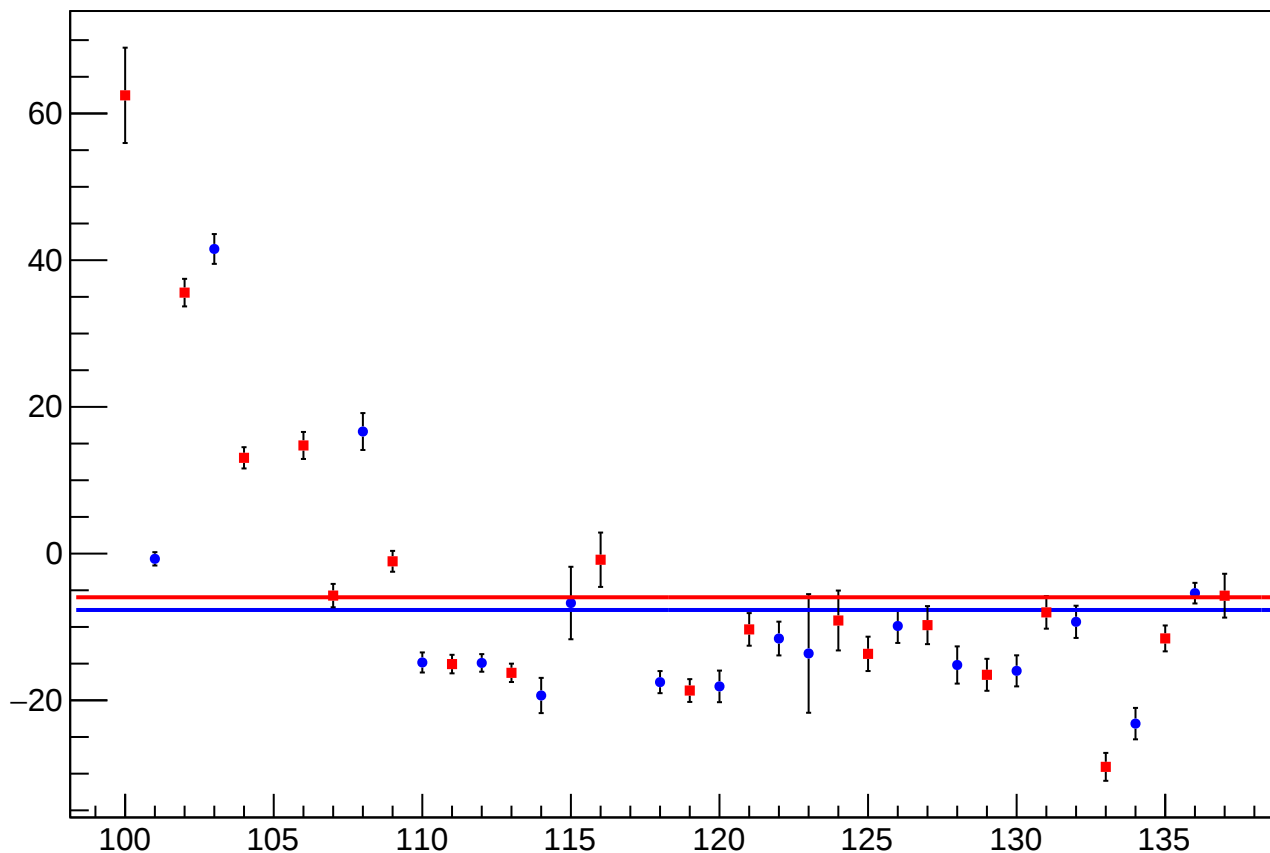
Right:  $-18.013 \pm 0.444$   $\chi^2/\text{NDF}$ : 4044.2/35

In:  $-21.194 \pm 0.657$   $\chi^2/\text{NDF}$ : 2145.3/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-18.013 \pm 0.444$   $\chi^2/\text{NDF}$ : 4044.2/35

reg\_asym\_sam\_48\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-7.686 \pm 0.430$   $\chi^2/\text{NDF}$ : 975.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-5.953 \pm 0.429$   $\chi^2/\text{NDF}$ : 1298.1/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

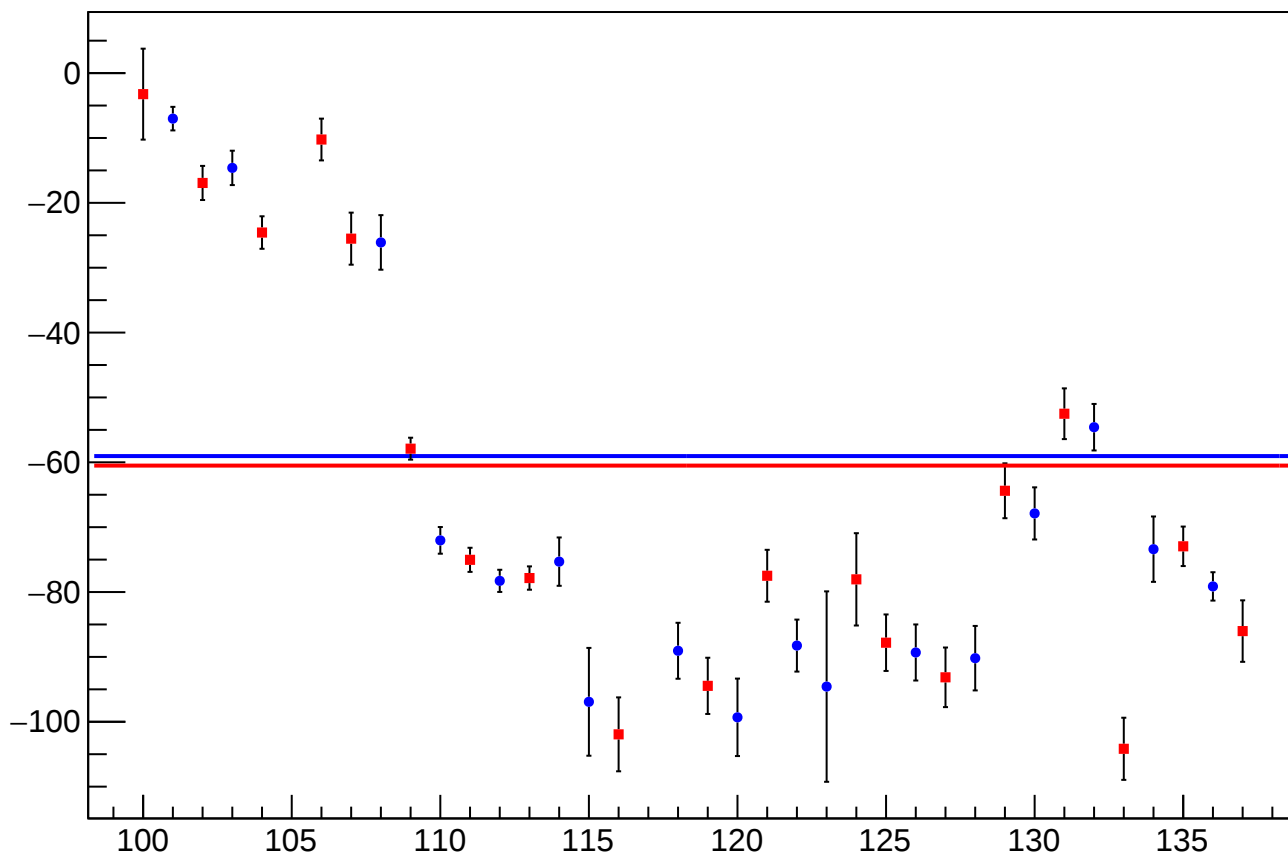
Right:  $-6.817 \pm 0.304$   $\chi^2/\text{NDF}$ : 2282.2/35

In:  $-7.686 \pm 0.430$   $\chi^2/\text{NDF}$ : 975.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-6.817 \pm 0.304$   $\chi^2/\text{NDF}$ : 2282.2/35

reg\_asym\_sam\_48\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -59.039 $\pm$ 0.746  $\chi^2$ /NDF: 1709.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -60.507 $\pm$ 0.704  $\chi^2$ /NDF: 1384.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

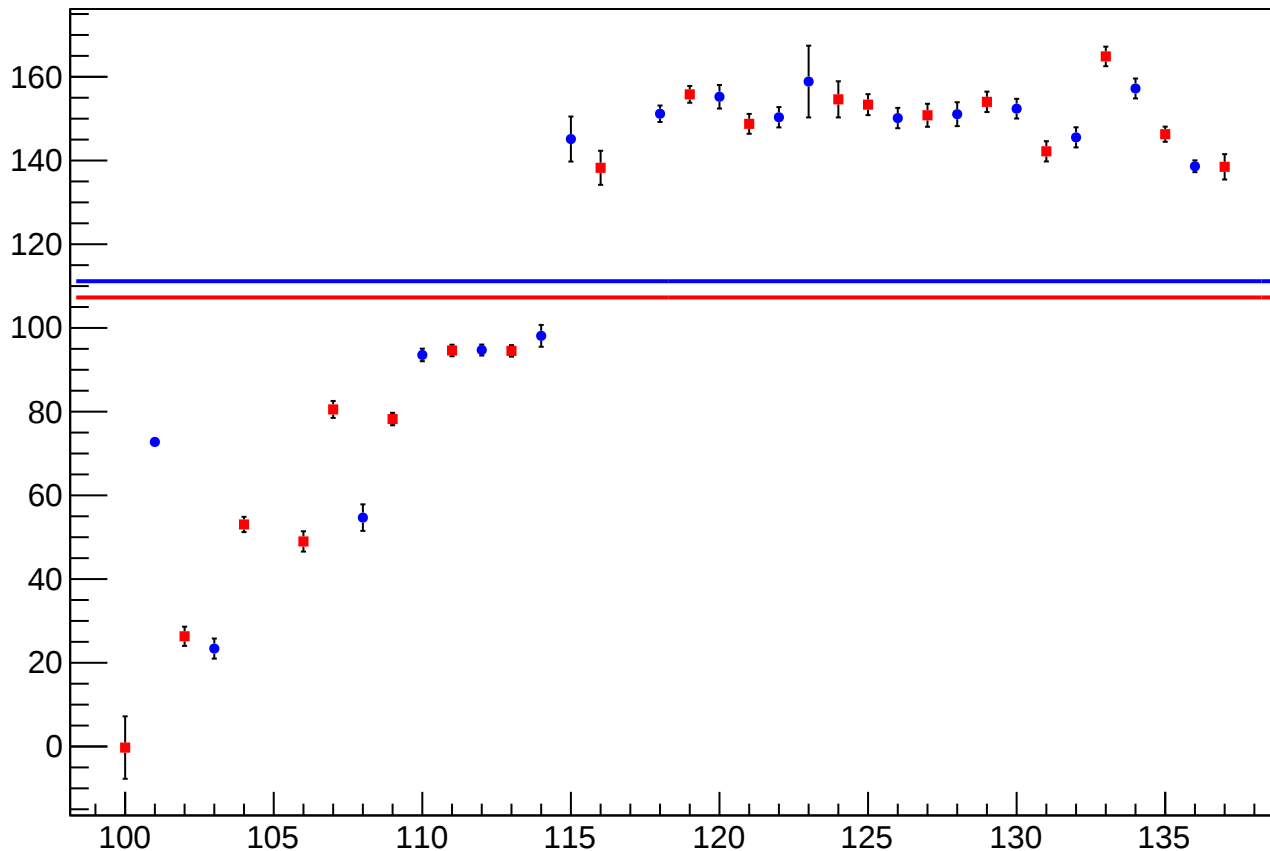
Right: -59.815 $\pm$ 0.512  $\chi^2$ /NDF: 3096.4/35

In: -59.039 $\pm$ 0.746  $\chi^2$ /NDF:1709.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -59.815 $\pm$ 0.512  $\chi^2$ /NDF: 3096.4/35

reg\_asym\_sam\_48\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 111.160+/-0.489  $\chi^2/\text{NDF}$ : 5877.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 107.283+/-0.488  $\chi^2/\text{NDF}$ : 7055.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

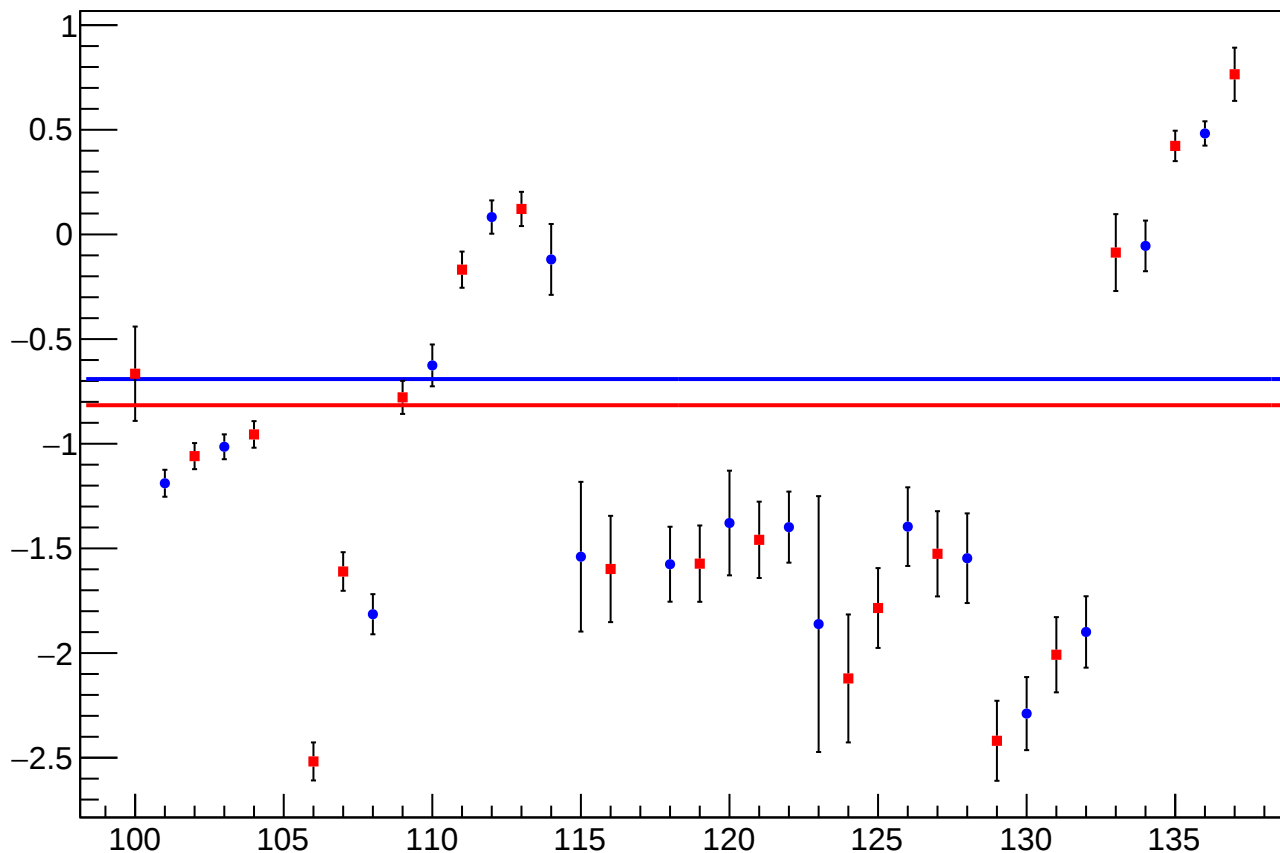
Right: 109.217+/-0.345  $\chi^2/\text{NDF}$ : 12964.2/35

In: 111.160+/-0.489  $\chi^2/\text{NDF}$ : 5877.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 109.217+/-0.345  $\chi^2/\text{NDF}$ : 12964.2/35

reg\_asym\_sam\_48\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.691 \pm 0.026$   $\chi^2/\text{NDF}$ : 990.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.816 \pm 0.024$   $\chi^2/\text{NDF}$ : 1304.4/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

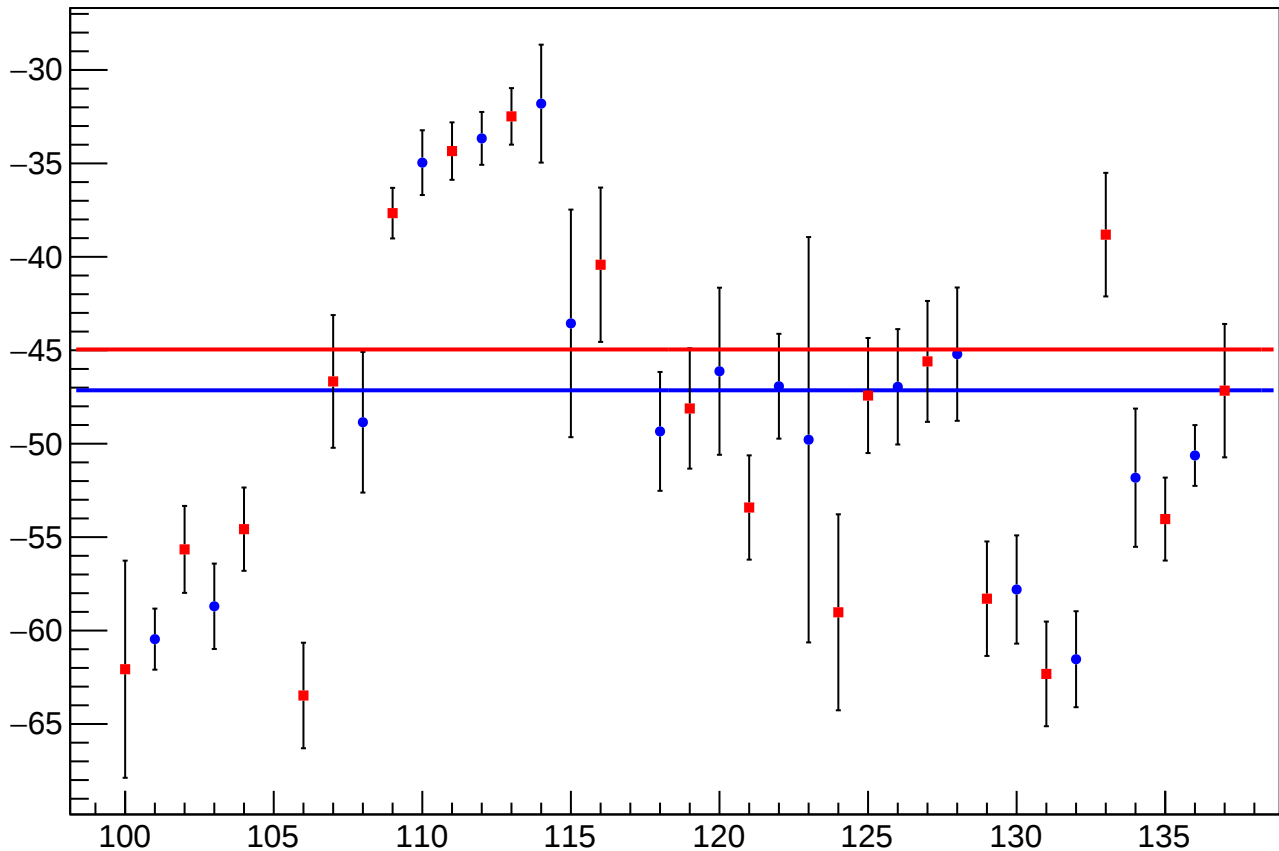
Right:  $-0.757 \pm 0.018$   $\chi^2/\text{NDF}$ : 2307.7/35

In:  $-0.691 \pm 0.026$   $\chi^2/\text{NDF}$ : 990.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.757 \pm 0.018$   $\chi^2/\text{NDF}$ : 2307.7/35

reg\_asym\_sam\_48\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-47.143 \pm 0.599$   $\chi^2/\text{NDF}$ : 308.5/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-44.958 \pm 0.563$   $\chi^2/\text{NDF}$ : 333.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

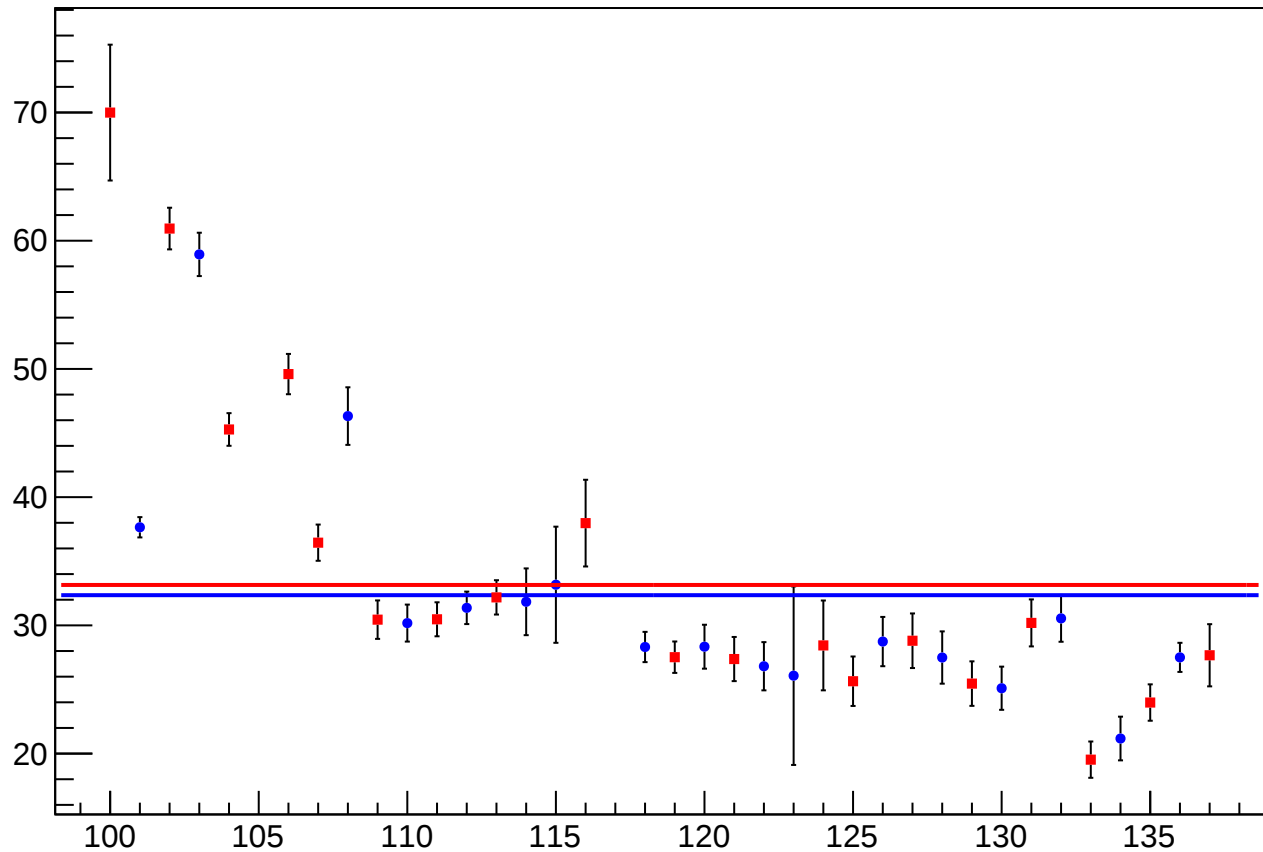
Right:  $-45.983 \pm 0.410$   $\chi^2/\text{NDF}$ : 649.1/35

In:  $-47.143 \pm 0.599$   $\chi^2/\text{NDF}$ : 308.5/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-45.983 \pm 0.410$   $\chi^2/\text{NDF}$ : 649.1/35

reg\_asym\_sam\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 32.355+/-0.375  $\chi^2/\text{NDF}$ : 450.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 33.152+/-0.379  $\chi^2/\text{NDF}$ : 772.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

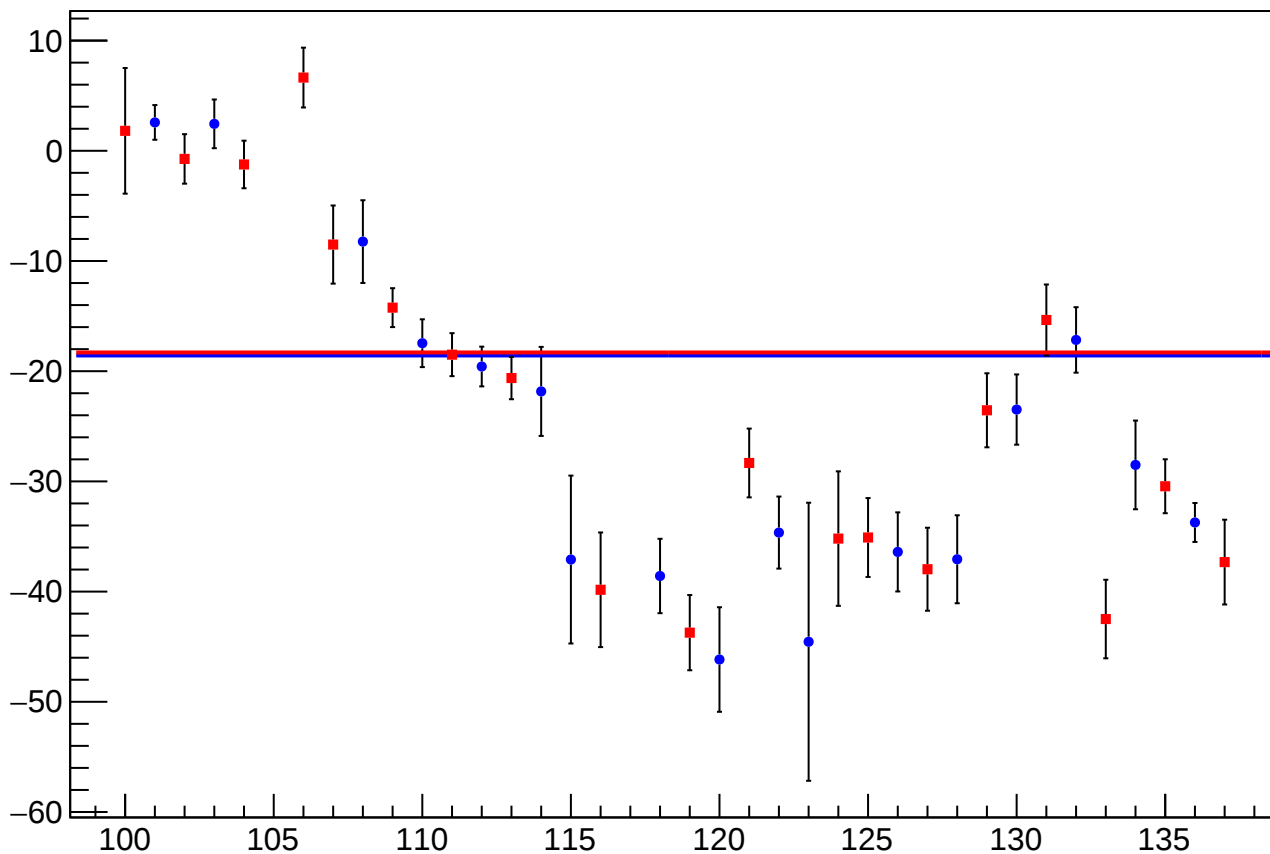
Right: 32.750+/-0.267  $\chi^2/\text{NDF}$ : 1224.7/35

In: 32.355+/-0.375  $\chi^2/\text{NDF}$ : 450.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 32.750+/-0.267  $\chi^2/\text{NDF}$ : 1224.7/35

reg\_asym\_sam\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-18.572 \pm 0.667$   $\chi^2/\text{NDF}: 511.5/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-18.300 \pm 0.644$   $\chi^2/\text{NDF}: 473.4/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

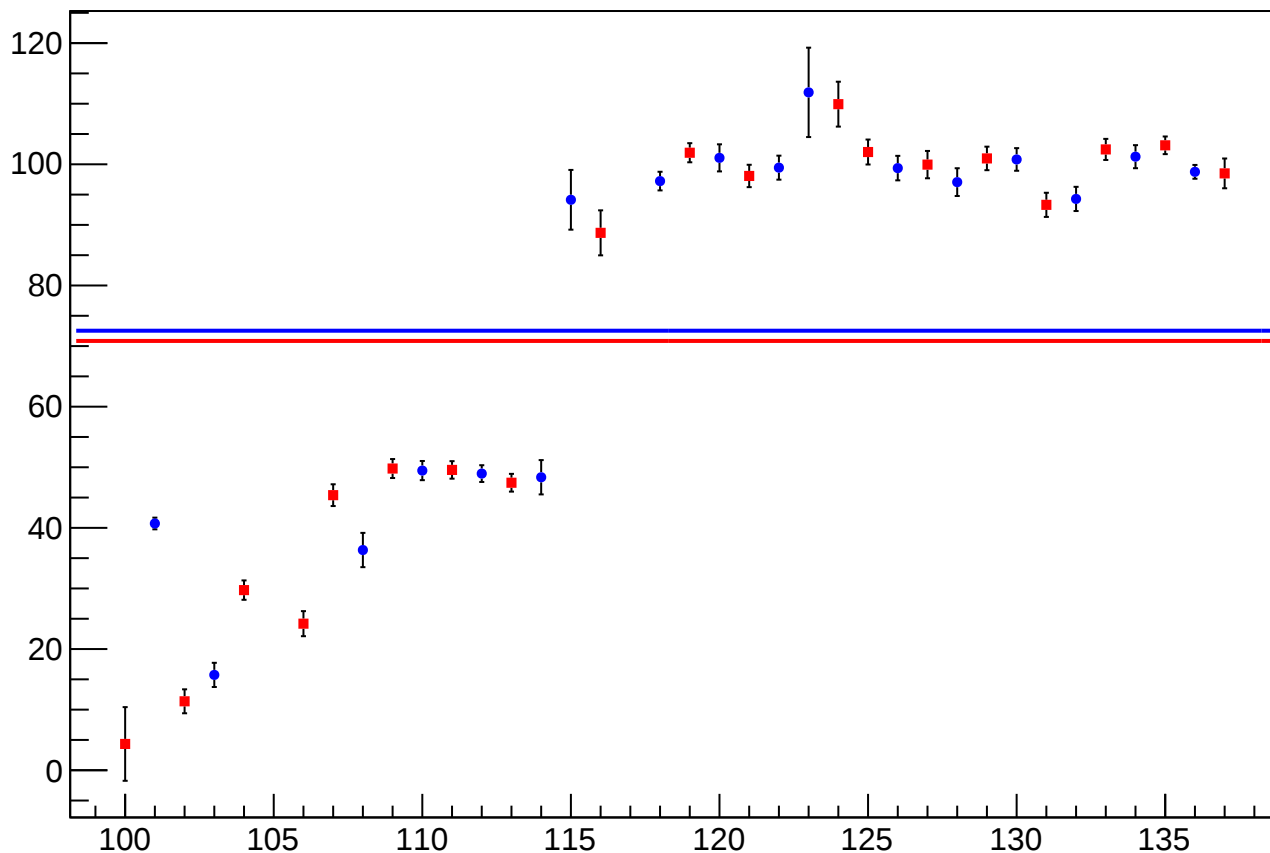
Right:  $-18.431 \pm 0.463$   $\chi^2/\text{NDF}: 984.9/35$

In:  $-18.572 \pm 0.667$   $\chi^2/\text{NDF}: 511.5/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-18.431 \pm 0.463$   $\chi^2/\text{NDF}: 984.9/35$

reg\_asym\_sam\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 72.537+/-0.428  $\chi^2$ /NDF: 4684.1/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 70.849+/-0.433  $\chi^2$ /NDF: 5500.2/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

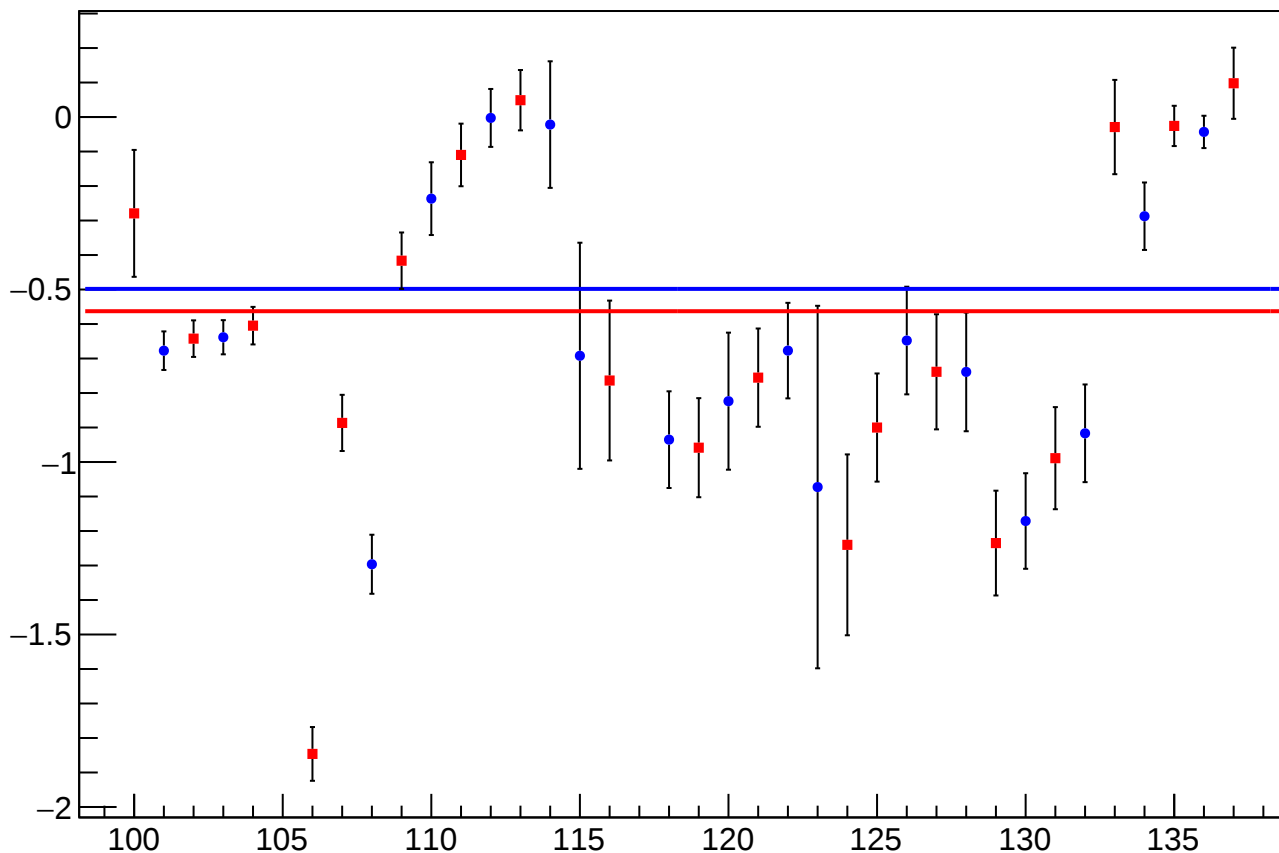
Right: 71.702+/-0.305  $\chi^2$ /NDF: 10192.0/35

In: 72.537+/-0.428  $\chi^2$ /NDF:4684.1/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 71.702+/-0.305  $\chi^2$ /NDF: 10192.0/35

reg\_asym\_sam\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.498 \pm 0.022$   $\chi^2/\text{NDF}$ : 302.8/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.563 \pm 0.021$   $\chi^2/\text{NDF}$ : 560.8/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

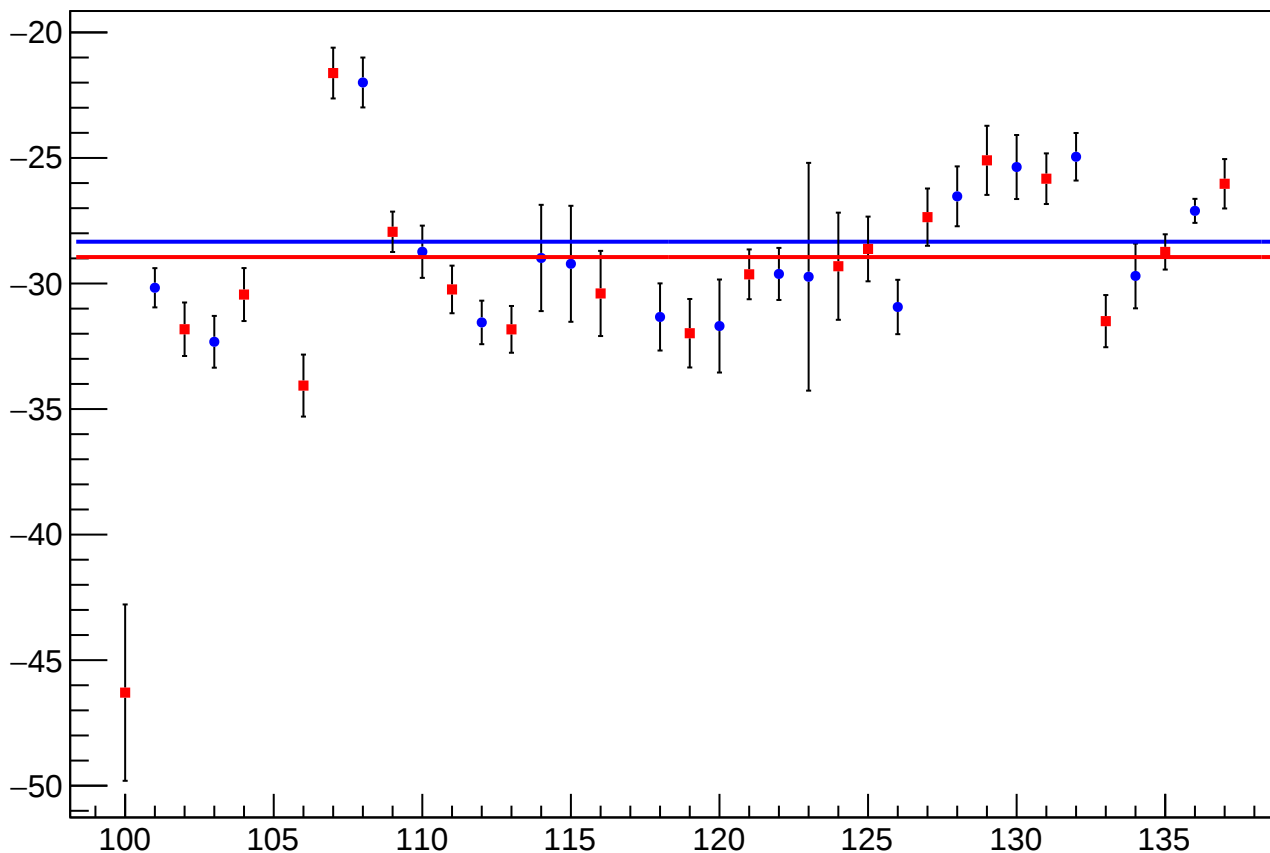
Right:  $-0.532 \pm 0.015$   $\chi^2/\text{NDF}$ : 867.9/35

In:  $-0.498 \pm 0.022$   $\chi^2/\text{NDF}$ : 302.8/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.532 \pm 0.015$   $\chi^2/\text{NDF}$ : 867.9/35

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -28.336 $\pm$ 0.247  $\chi^2$ /NDF: 119.3/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -28.947 $\pm$ 0.248  $\chi^2$ /NDF: 156.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

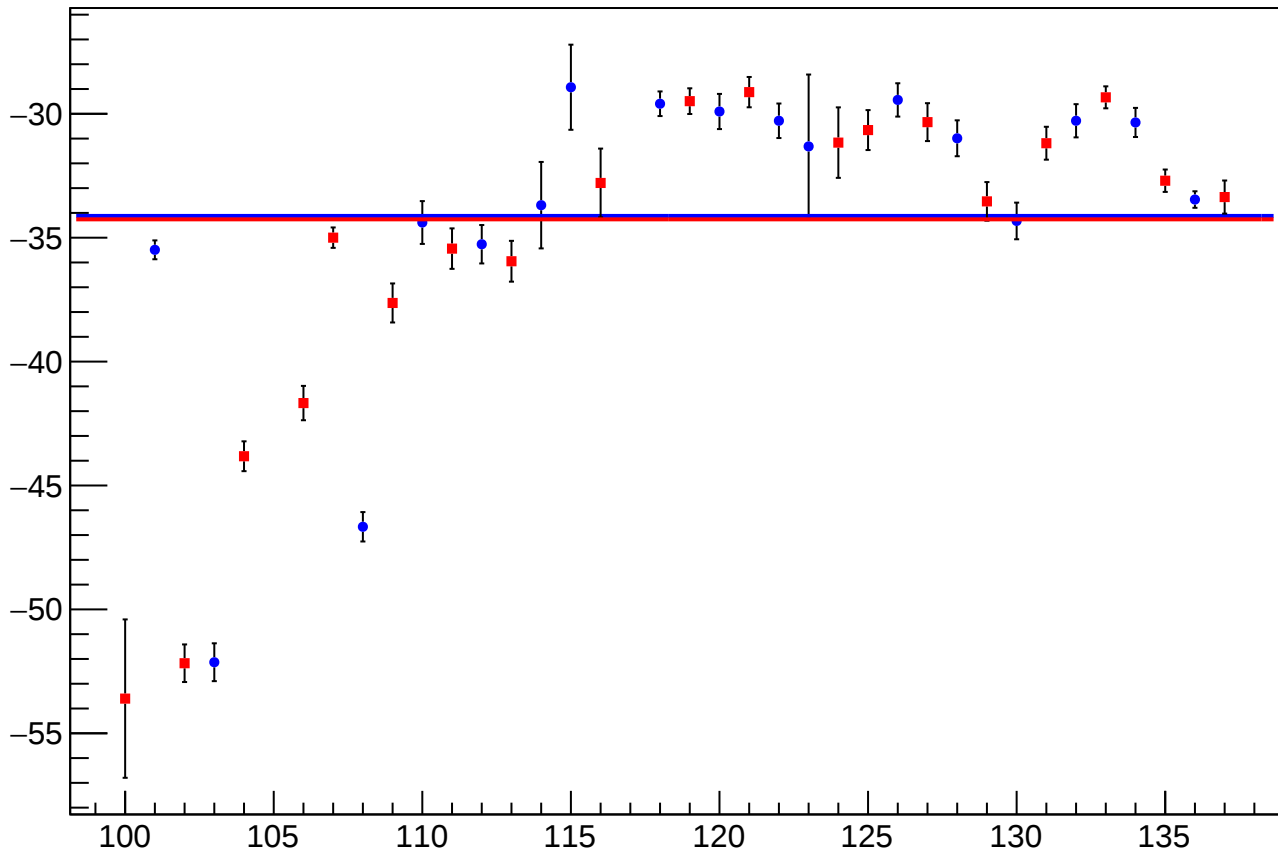
Right: -28.641 $\pm$ 0.175  $\chi^2$ /NDF: 279.2/35

In: -28.336 $\pm$ 0.247  $\chi^2$ /NDF:119.3/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -28.641 $\pm$ 0.175  $\chi^2$ /NDF: 279.2/35

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-34.122 \pm 0.152$   $\chi^2/\text{NDF}$ : 1322.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-34.260 \pm 0.151$   $\chi^2/\text{NDF}$ : 1354.9/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

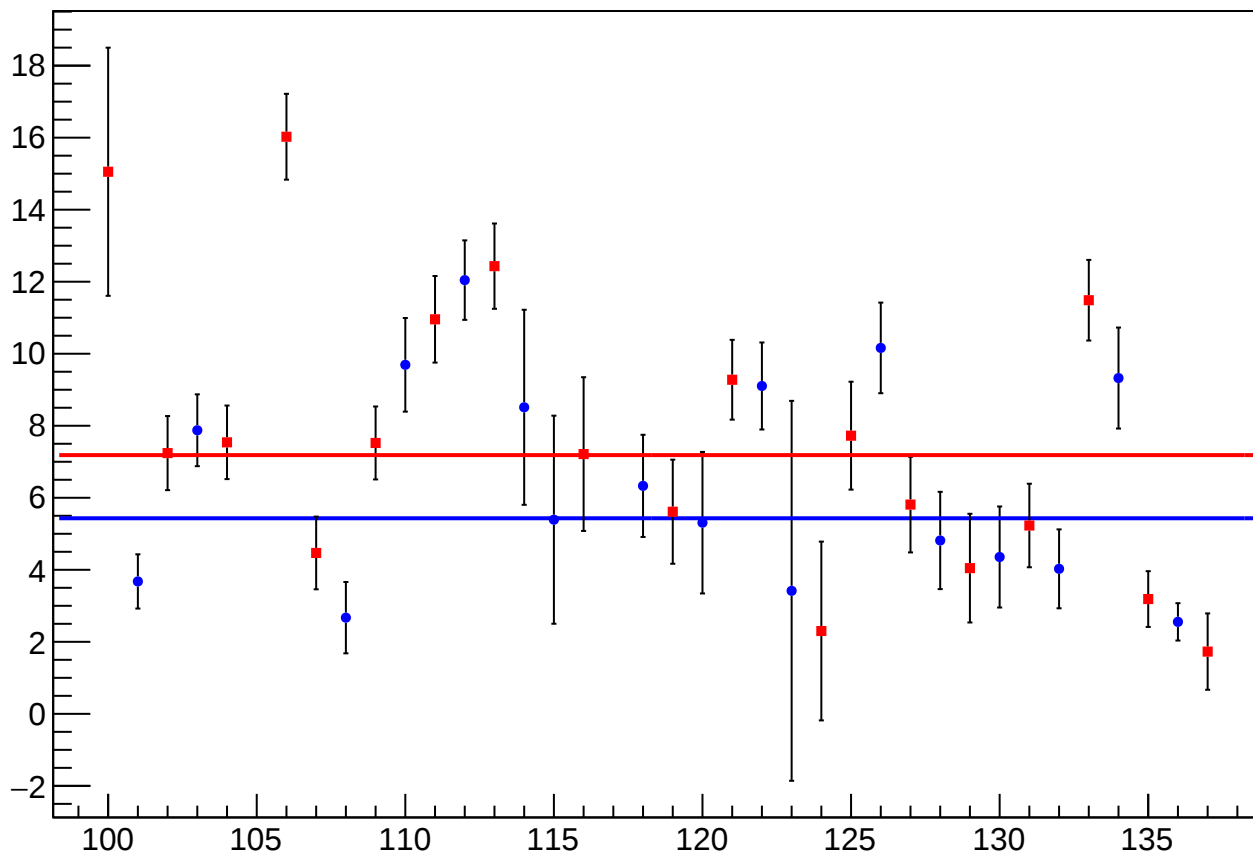
Right:  $-34.191 \pm 0.107$   $\chi^2/\text{NDF}$ : 2677.8/35

In:  $-34.122 \pm 0.152$   $\chi^2/\text{NDF}$ : 1322.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-34.191 \pm 0.107$   $\chi^2/\text{NDF}$ : 2677.8/35

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 5.431+/-0.270  $\chi^2/\text{NDF}$ : 132.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 7.185+/-0.274  $\chi^2/\text{NDF}$ : 182.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

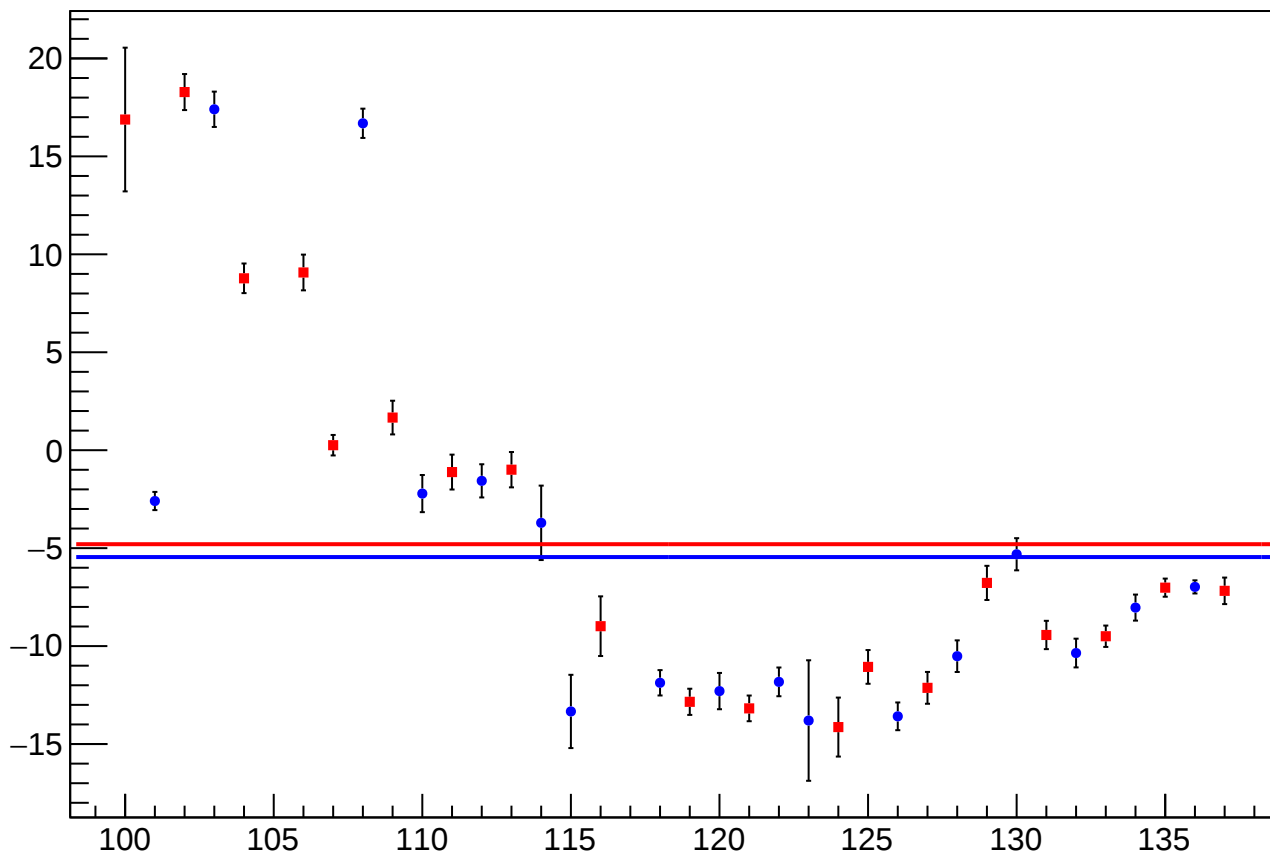
Right: 6.295+/-0.193  $\chi^2/\text{NDF}$ : 334.8/35

In: 5.431+/-0.270  $\chi^2/\text{NDF}$ : 132.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 6.295+/-0.193  $\chi^2/\text{NDF}$ : 334.8/35

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-5.455 \pm 0.171$   $\chi^2/\text{NDF}$ : 2096.5/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-4.798 \pm 0.173$   $\chi^2/\text{NDF}$ : 2047.4/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

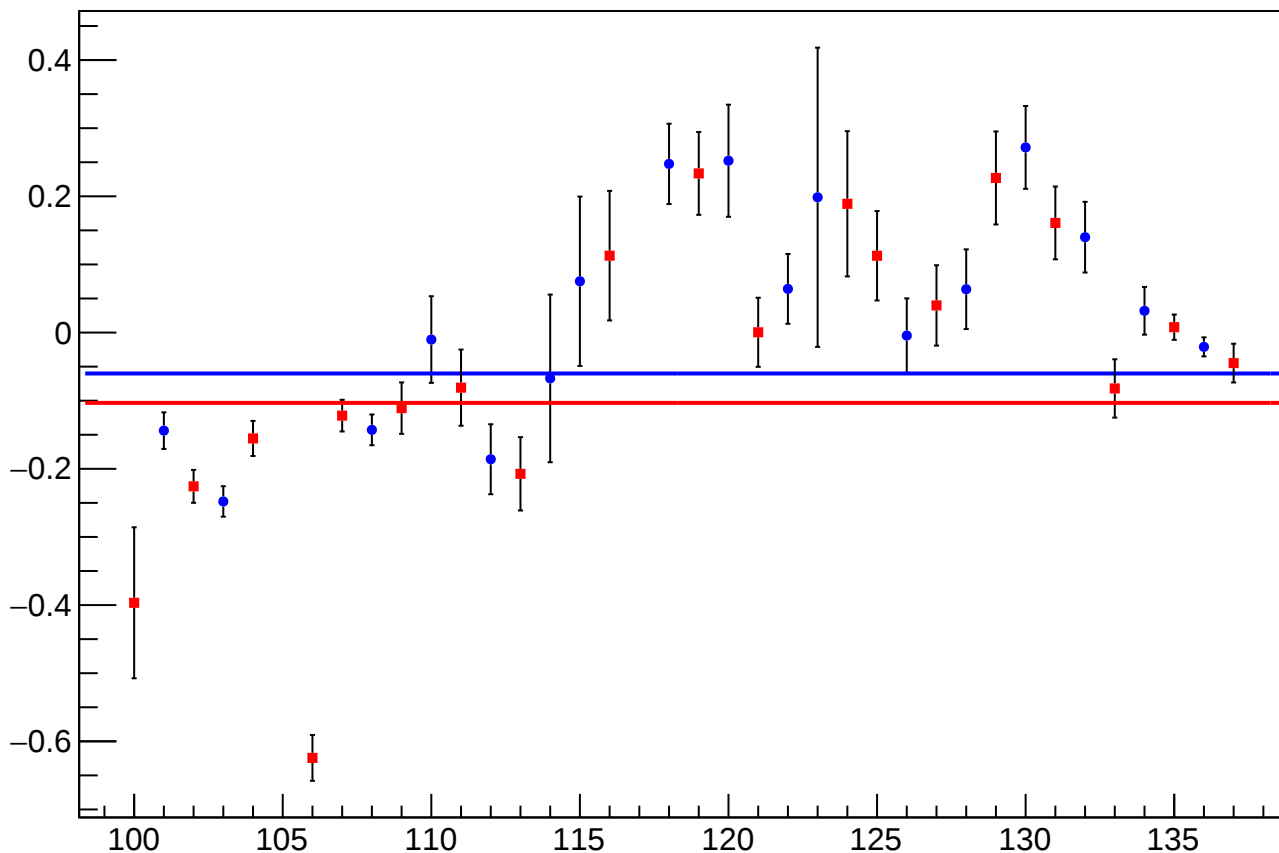
Right:  $-5.131 \pm 0.122$   $\chi^2/\text{NDF}$ : 4151.2/35

In:  $-5.455 \pm 0.171$   $\chi^2/\text{NDF}$ : 2096.5/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-5.131 \pm 0.122$   $\chi^2/\text{NDF}$ : 4151.2/35

reg\_asym\_sam\_13\_57\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.060 \pm 0.008$   $\chi^2/\text{NDF}$ : 215.5/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.103 \pm 0.008$   $\chi^2/\text{NDF}$ : 434.3/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

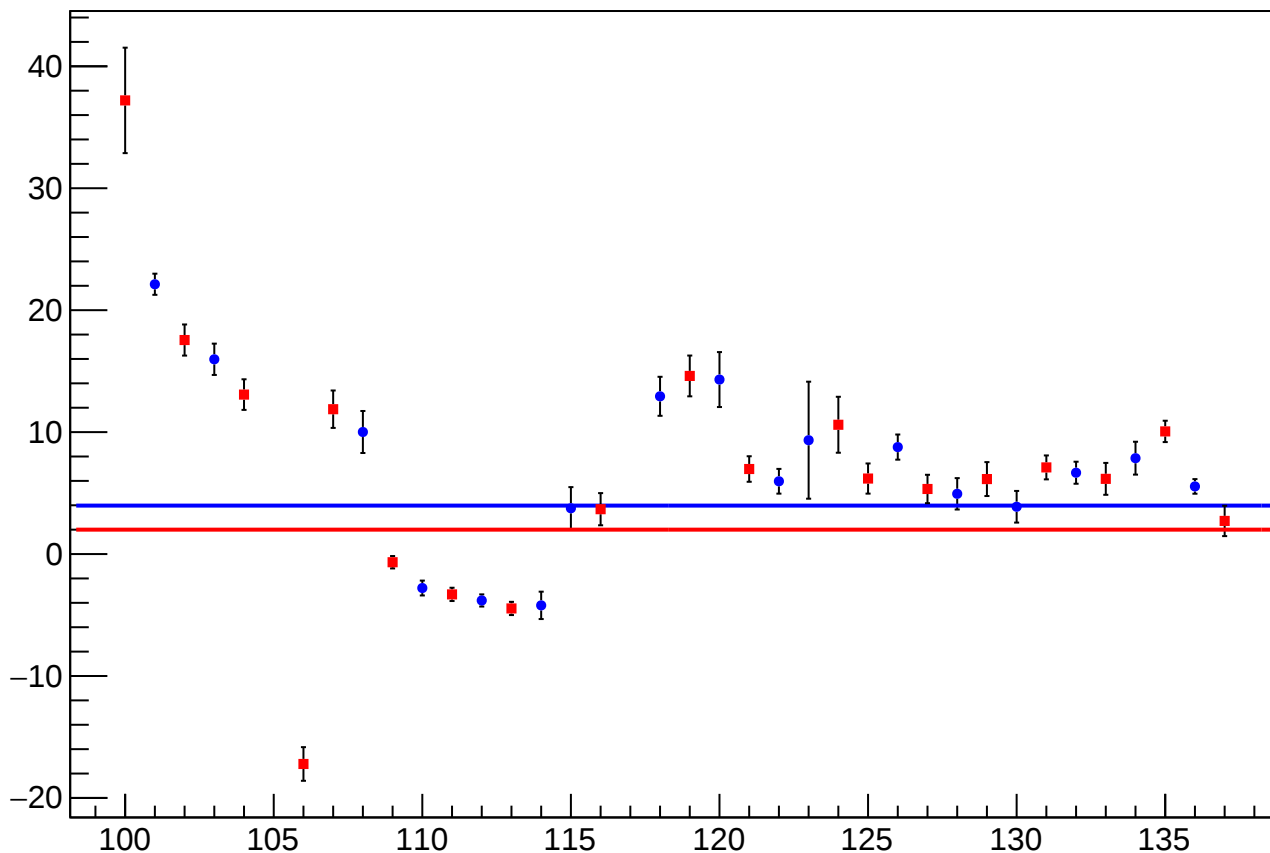
Right:  $-0.082 \pm 0.006$   $\chi^2/\text{NDF}$ : 662.9/35

In:  $-0.060 \pm 0.008$   $\chi^2/\text{NDF}$ : 215.5/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.082 \pm 0.006$   $\chi^2/\text{NDF}$ : 662.9/35

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 3.974+/-0.233  $\chi^2/\text{NDF}$ : 1061.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.002+/-0.221  $\chi^2/\text{NDF}$ : 1038.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

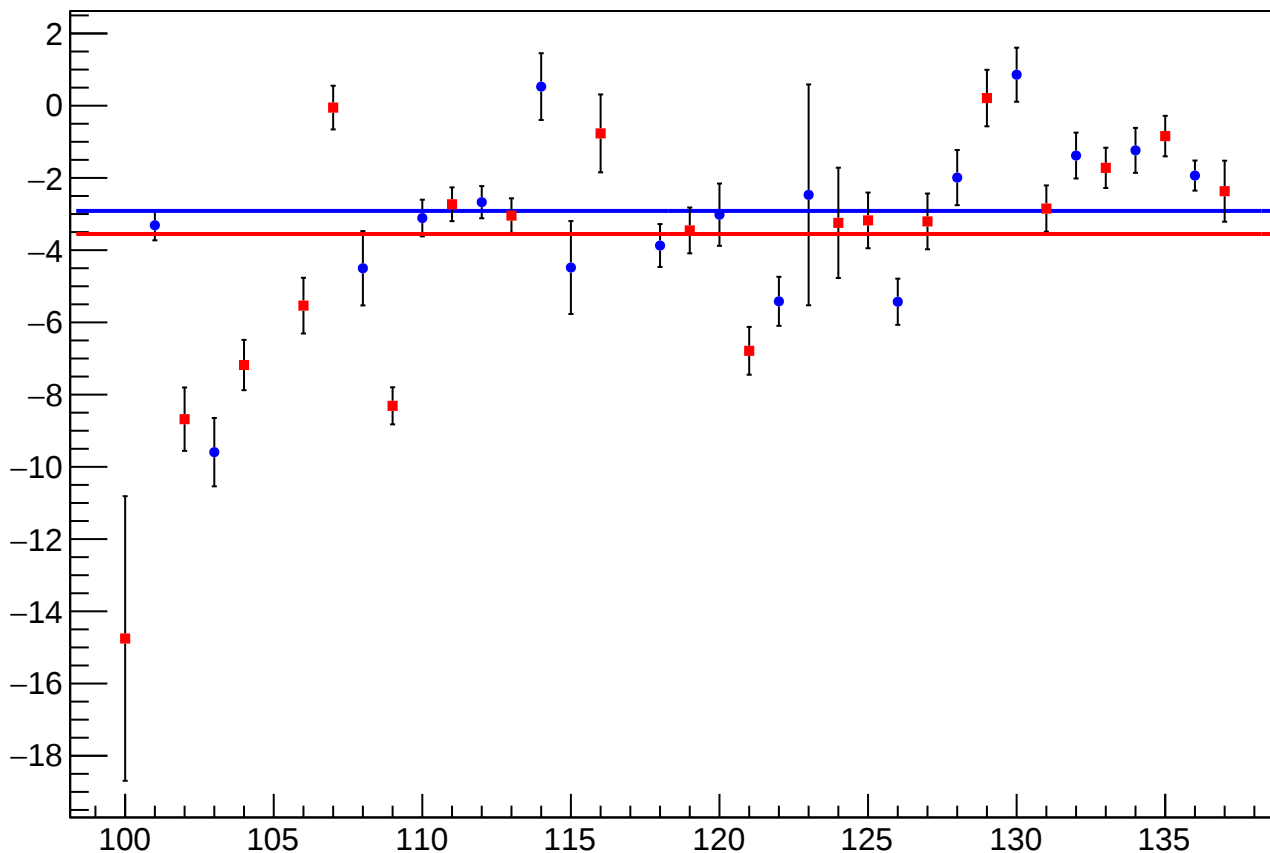
Right: 2.937+/-0.160  $\chi^2/\text{NDF}$ : 2137.6/35

In: 3.974+/-0.233  $\chi^2/\text{NDF}$ : 1061.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.937+/-0.160  $\chi^2/\text{NDF}$ : 2137.6/35

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-2.914 \pm 0.155$   $\chi^2/\text{NDF}$ : 146.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-3.553 \pm 0.155$   $\chi^2/\text{NDF}$ : 290.9/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

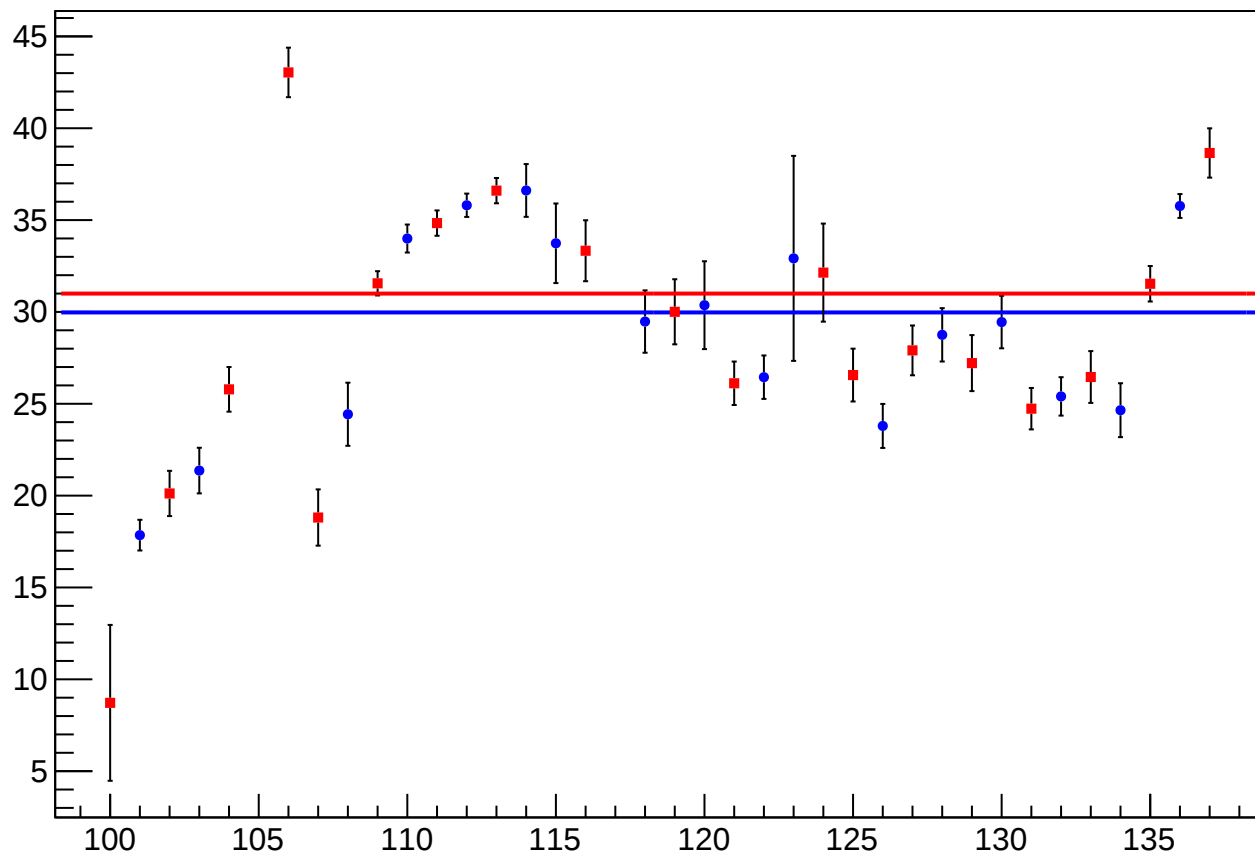
Right:  $-3.234 \pm 0.109$   $\chi^2/\text{NDF}$ : 445.5/35

In:  $-2.914 \pm 0.155$   $\chi^2/\text{NDF}$ : 146.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-3.234 \pm 0.109$   $\chi^2/\text{NDF}$ : 445.5/35

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 29.972+/-0.267  $\chi^2/\text{NDF}$ : 554.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 30.999+/-0.260  $\chi^2/\text{NDF}$ : 479.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

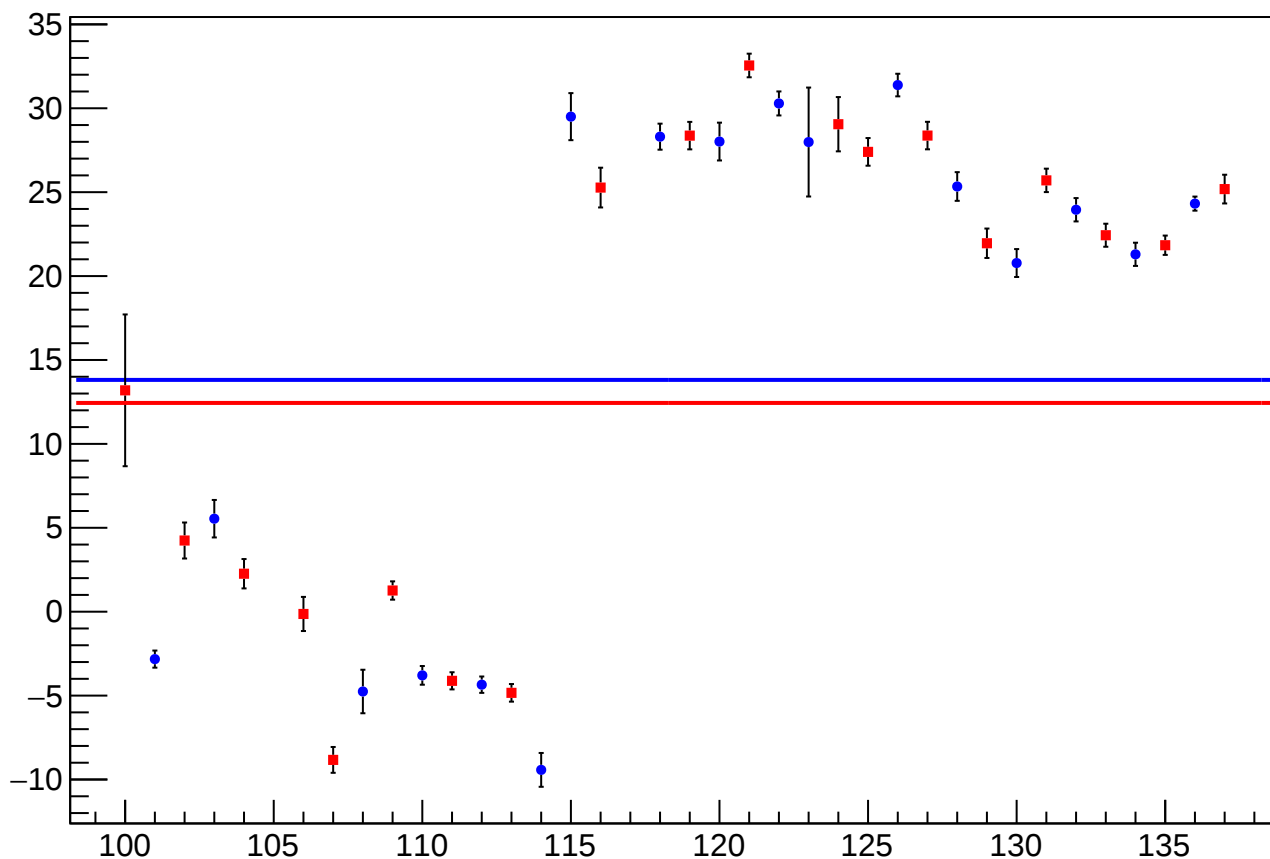
Right: 30.500+/-0.186  $\chi^2/\text{NDF}$ : 1041.4/35

In: 29.972+/-0.267  $\chi^2/\text{NDF}$ : 554.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 30.500+/-0.186  $\chi^2/\text{NDF}$ : 1041.4/35

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 13.813+/-0.173  $\chi^2/\text{NDF}$ : 7318.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 12.440+/-0.174  $\chi^2/\text{NDF}$ : 6970.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

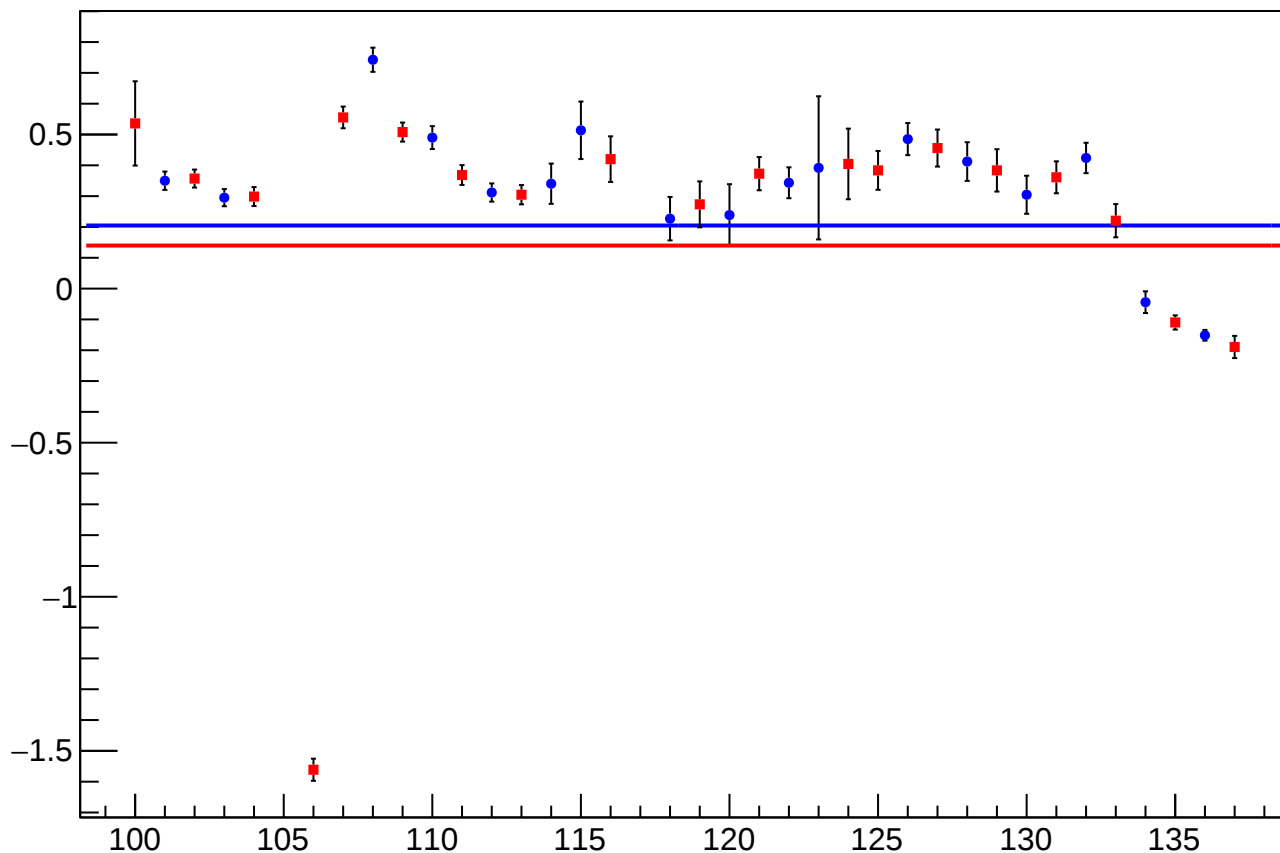
Right: 13.131+/-0.122  $\chi^2/\text{NDF}$ : 14320.3/35

In: 13.813+/-0.173  $\chi^2/\text{NDF}$ : 7318.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 13.131+/-0.122  $\chi^2/\text{NDF}$ : 14320.3/35

reg\_asym\_sam\_15\_37\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.205+/-0.009  $\chi^2/\text{NDF}$ : 845.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 0.140+/-0.009  $\chi^2/\text{NDF}$ : 3014.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

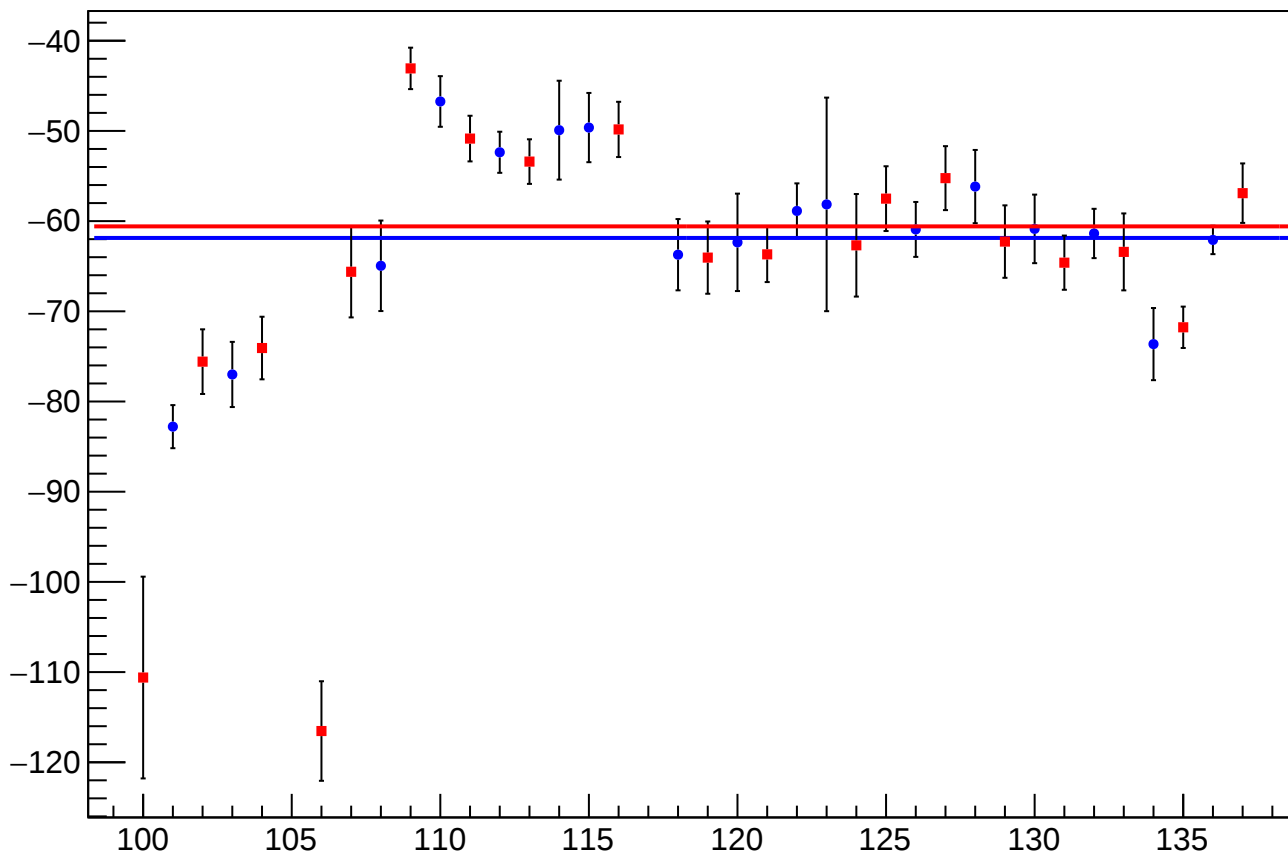
Right: 0.172+/-0.007  $\chi^2/\text{NDF}$ : 3884.5/35

In: 0.205+/-0.009  $\chi^2/\text{NDF}$ :845.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 0.172+/-0.007  $\chi^2/\text{NDF}$ : 3884.5/35

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-61.865 \pm 0.753$   $\chi^2/\text{NDF}$ : 168.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-60.584 \pm 0.762$   $\chi^2/\text{NDF}$ : 282.4/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

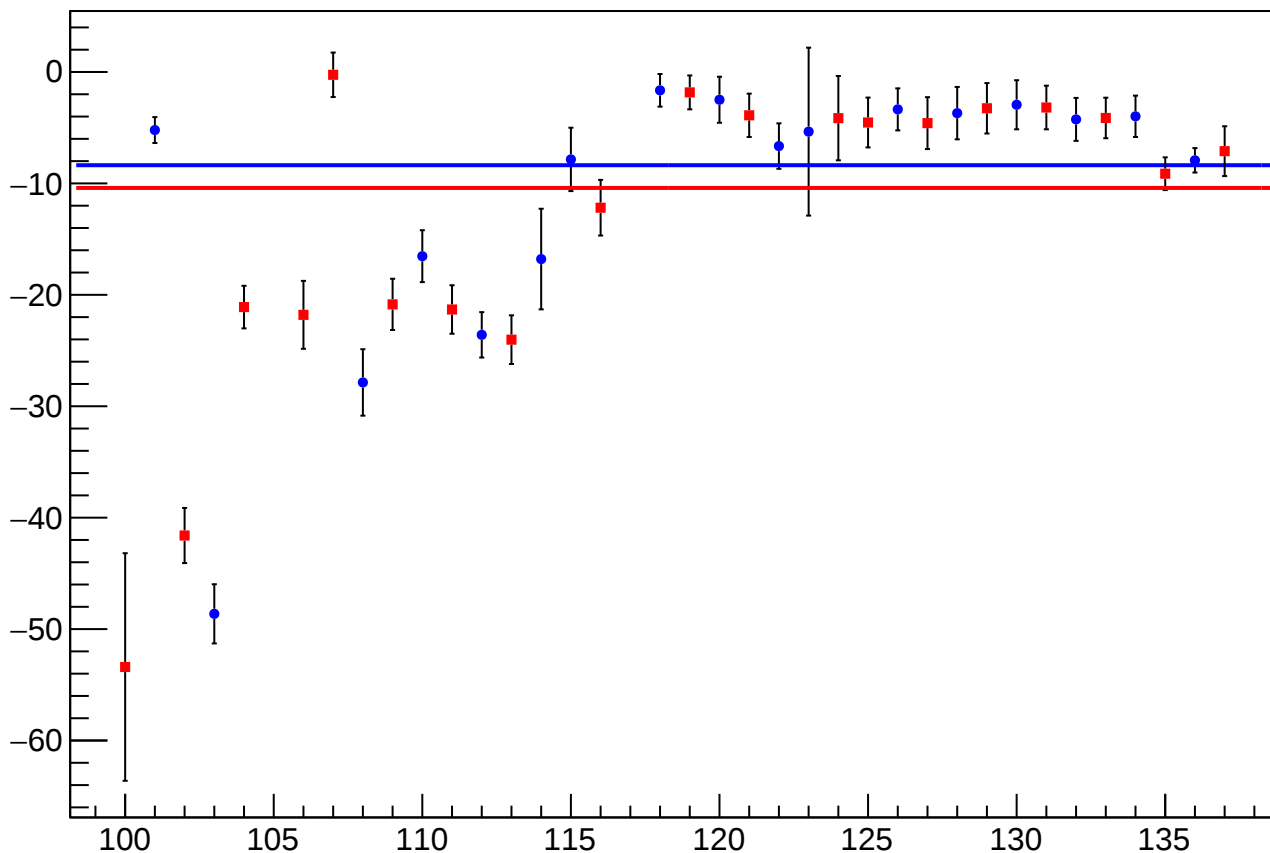
Right:  $-61.232 \pm 0.536$   $\chi^2/\text{NDF}$ : 452.0/35

In:  $-61.865 \pm 0.753$   $\chi^2/\text{NDF}$ : 168.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-61.232 \pm 0.536$   $\chi^2/\text{NDF}$ : 452.0/35

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -8.367 $\pm$ 0.466  $\chi^2$ /NDF: 408.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -10.405 $\pm$ 0.491  $\chi^2$ /NDF: 430.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

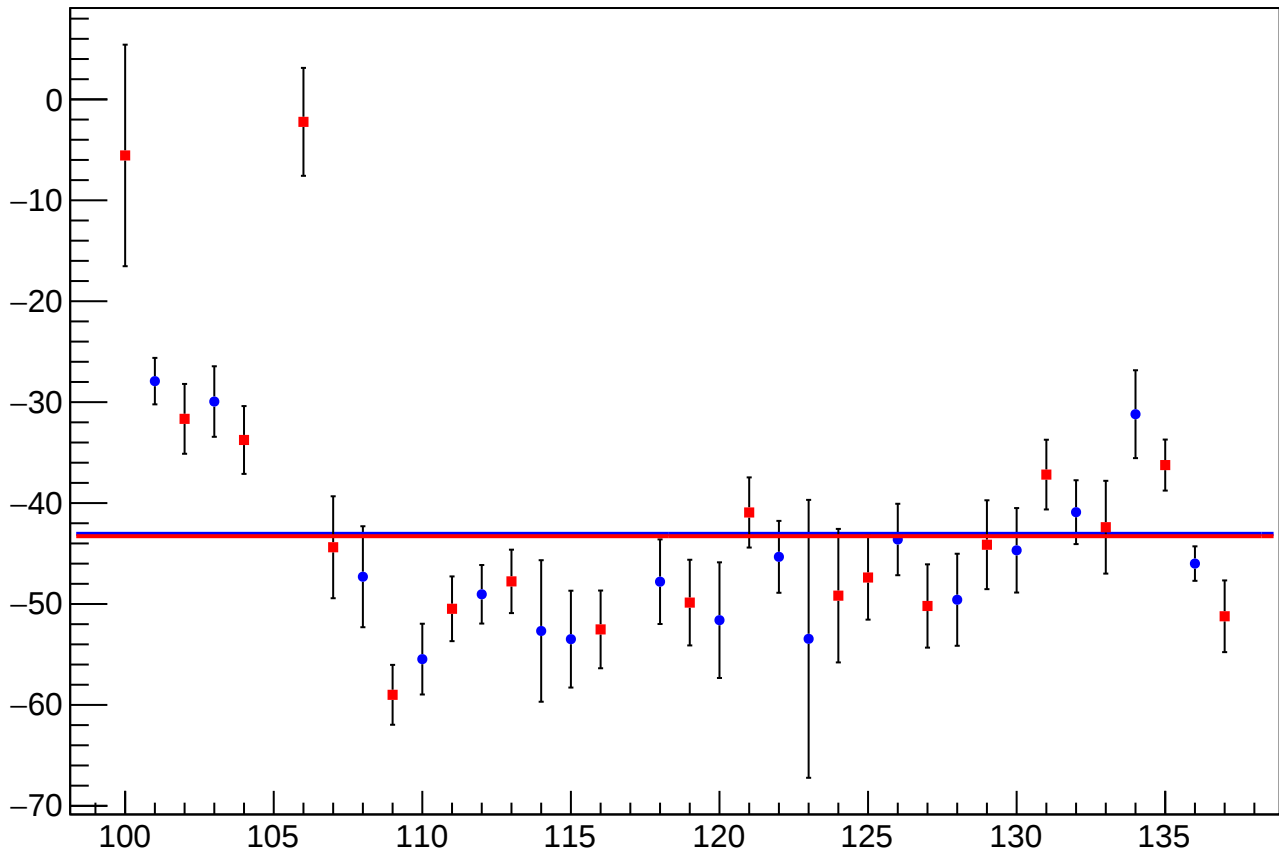
Right: -9.333 $\pm$ 0.338  $\chi^2$ /NDF: 848.2/35

In: -8.367 $\pm$ 0.466  $\chi^2$ /NDF:408.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -9.333 $\pm$ 0.338  $\chi^2$ /NDF: 848.2/35

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-43.047 \pm 0.837$   $\chi^2/\text{NDF}$ : 99.0/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-43.282 \pm 0.867$   $\chi^2/\text{NDF}$ : 154.4/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

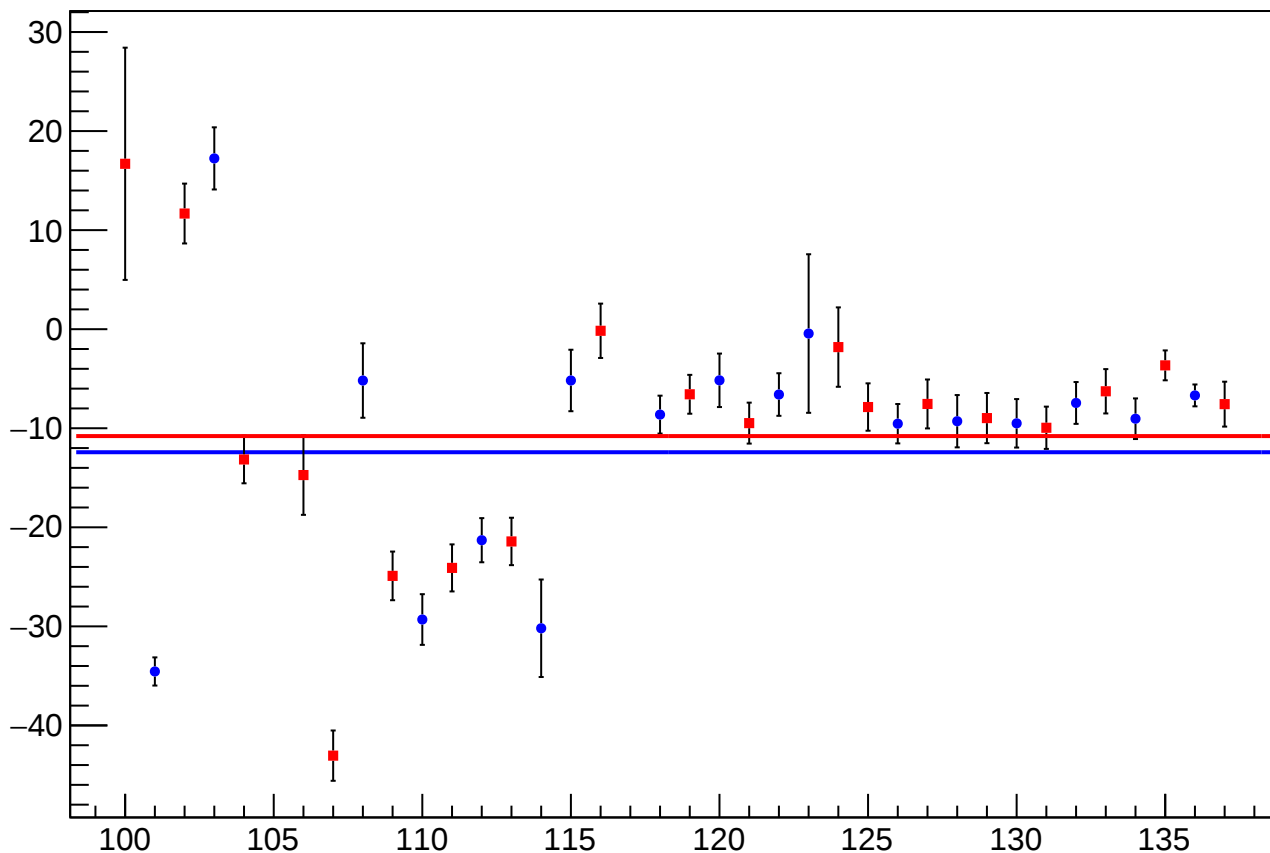
Right:  $-43.161 \pm 0.602$   $\chi^2/\text{NDF}$ : 253.4/35

In:  $-43.047 \pm 0.837$   $\chi^2/\text{NDF}$ : 99.0/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-43.161 \pm 0.602$   $\chi^2/\text{NDF}$ : 253.4/35

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -12.421 $\pm$ 0.523  $\chi^2$ /NDF: 474.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -10.791 $\pm$ 0.554  $\chi^2$ /NDF: 365.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

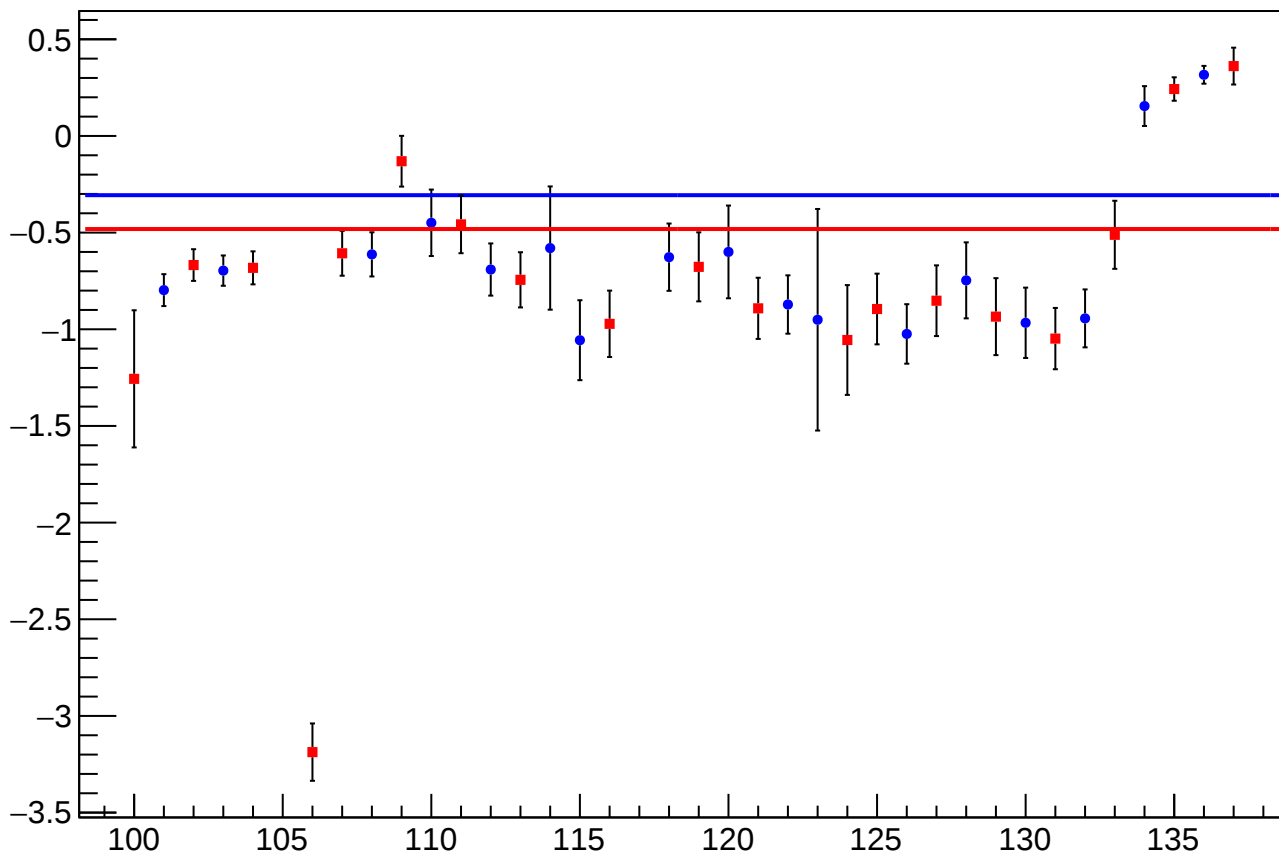
Right: -11.652 $\pm$ 0.380  $\chi^2$ /NDF: 844.7/35

In: -12.421 $\pm$ 0.523  $\chi^2$ /NDF:474.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -11.652 $\pm$ 0.380  $\chi^2$ /NDF: 844.7/35

reg\_asym\_sam\_24\_68\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.306 \pm 0.028$   $\chi^2/\text{NDF}$ : 371.7/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.481 \pm 0.029$   $\chi^2/\text{NDF}$ : 628.3/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

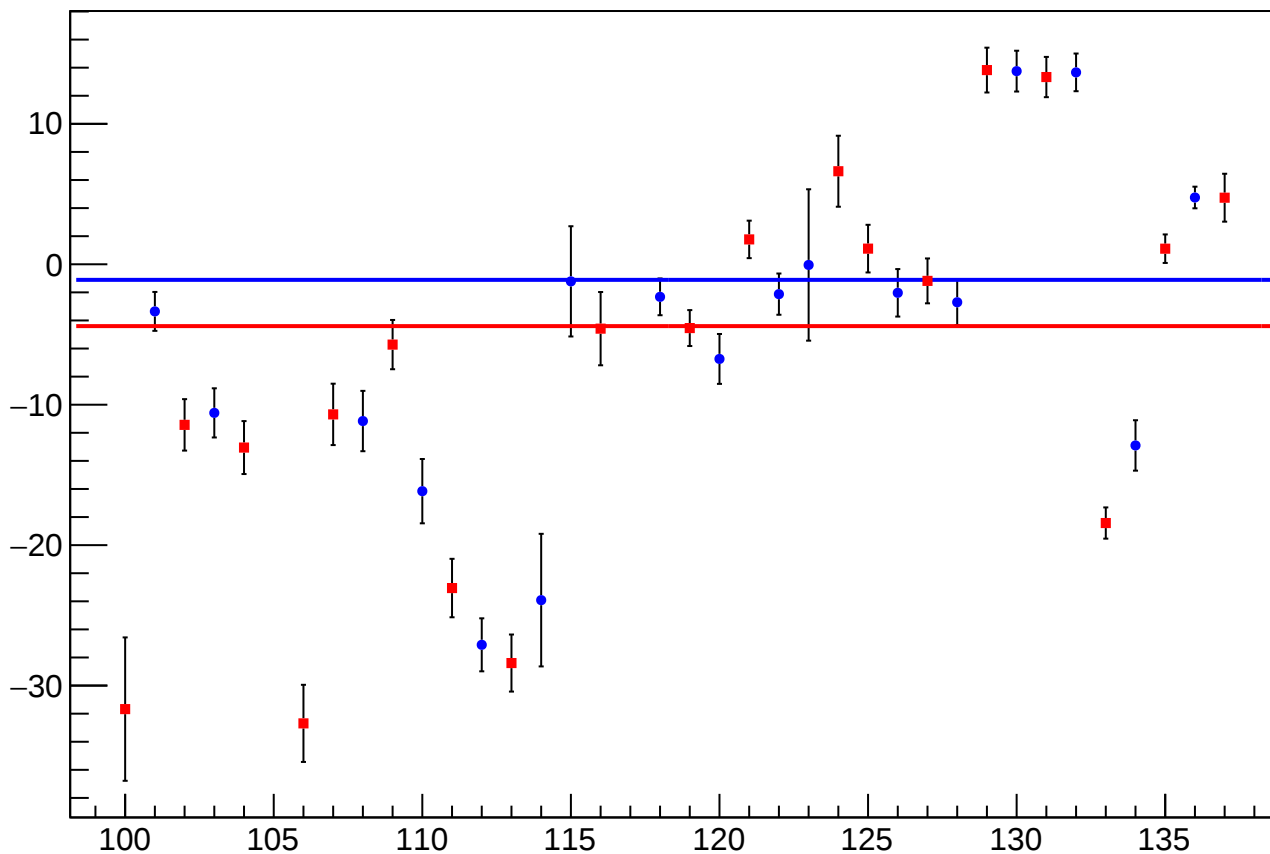
Right:  $-0.391 \pm 0.020$   $\chi^2/\text{NDF}$ : 1019.4/35

In:  $-0.306 \pm 0.028$   $\chi^2/\text{NDF}$ : 371.7/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.391 \pm 0.020$   $\chi^2/\text{NDF}$ : 1019.4/35

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -1.109+/-0.384  $\chi^2/\text{NDF}$ : 649.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -4.403+/-0.379  $\chi^2/\text{NDF}$ : 954.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

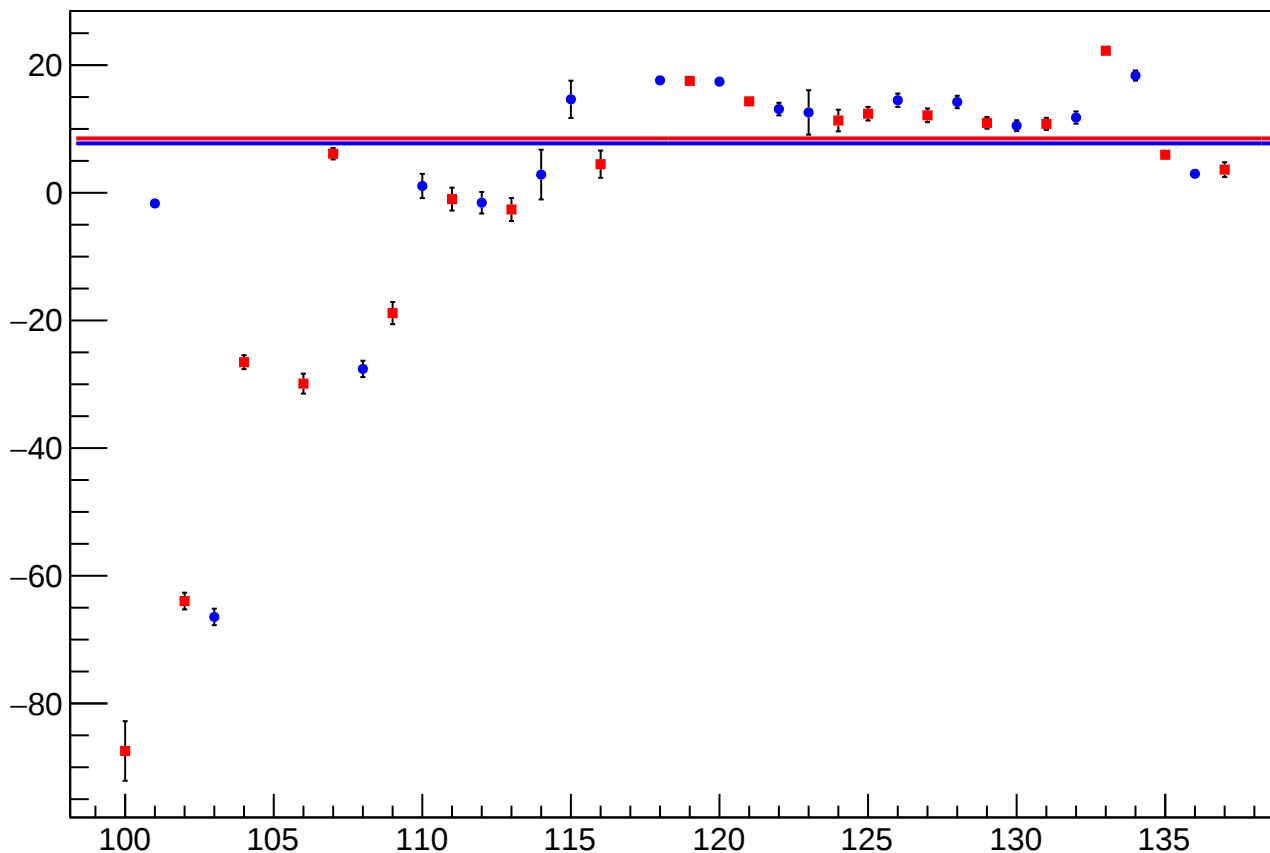
Right: -2.778+/-0.269  $\chi^2/\text{NDF}$ : 1642.0/35

In: -1.109+/-0.384  $\chi^2/\text{NDF}$ : 649.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -2.778+/-0.269  $\chi^2/\text{NDF}$ : 1642.0/35

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 7.737 $\pm$ 0.218  $\chi^2$ /NDF: 5300.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 8.514 $\pm$ 0.213  $\chi^2$ /NDF: 6719.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

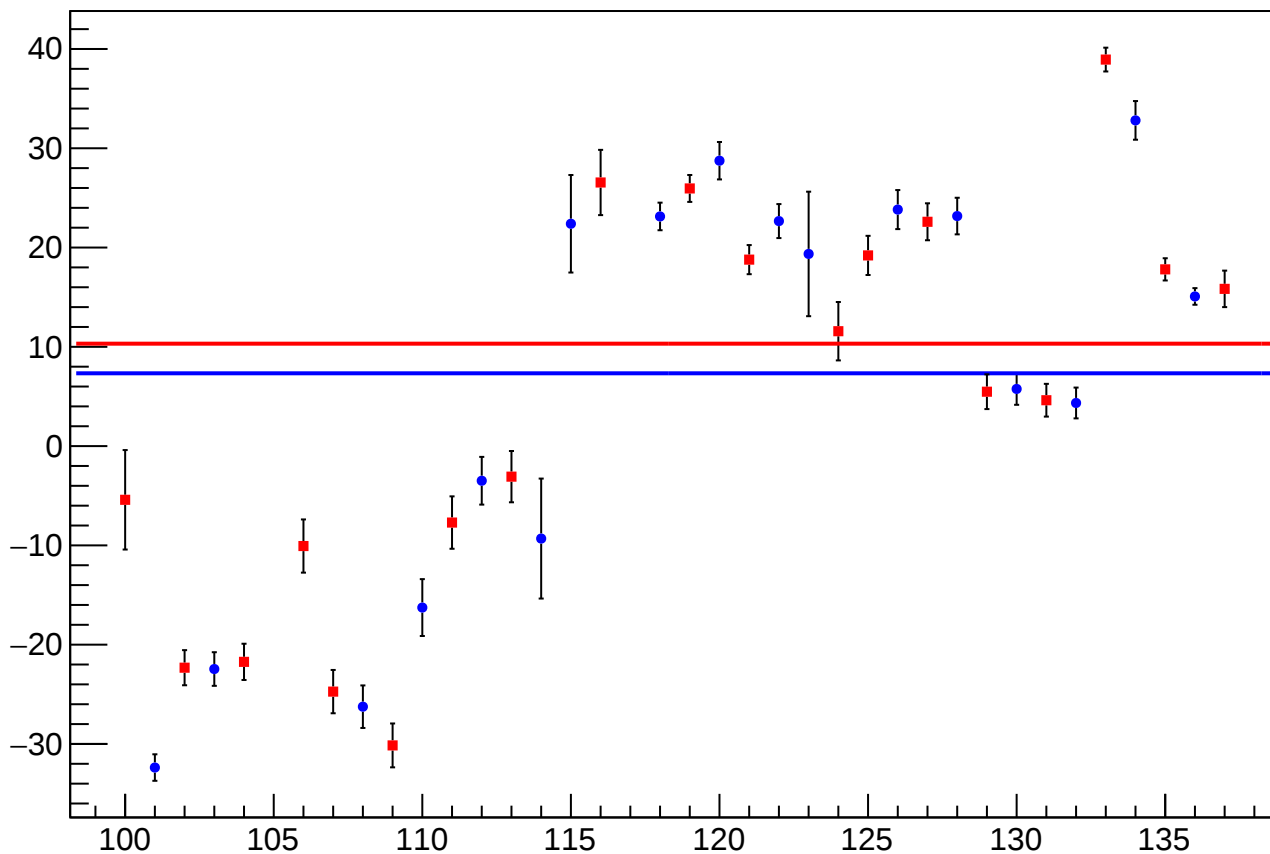
Right: 8.134 $\pm$ 0.152  $\chi^2$ /NDF: 12026.5/35

In: 7.737 $\pm$ 0.218  $\chi^2$ /NDF:5300.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 8.134 $\pm$ 0.152  $\chi^2$ /NDF: 12026.5/35

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 7.333+/-0.419  $\chi^2/\text{NDF}$ : 2293.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 10.317+/-0.417  $\chi^2/\text{NDF}$ : 2281.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

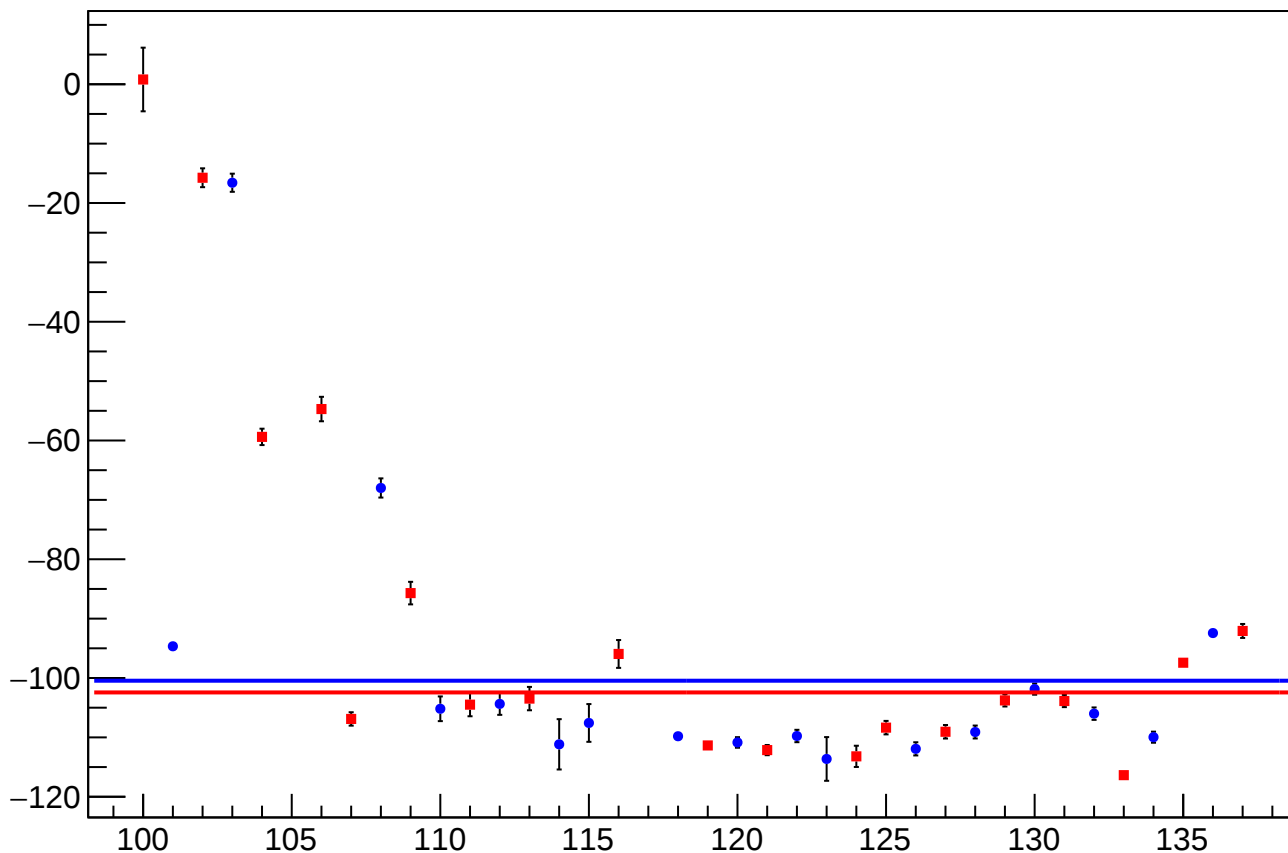
Right: 8.831+/-0.295  $\chi^2/\text{NDF}$ : 4600.2/35

In: 7.333+/-0.419  $\chi^2/\text{NDF}$ : 2293.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 8.831+/-0.295  $\chi^2/\text{NDF}$ : 4600.2/35

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-100.457 \pm 0.251$   $\chi^2/\text{NDF}$ : 4461.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-102.431 \pm 0.246$   $\chi^2/\text{NDF}$ : 6094.3/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

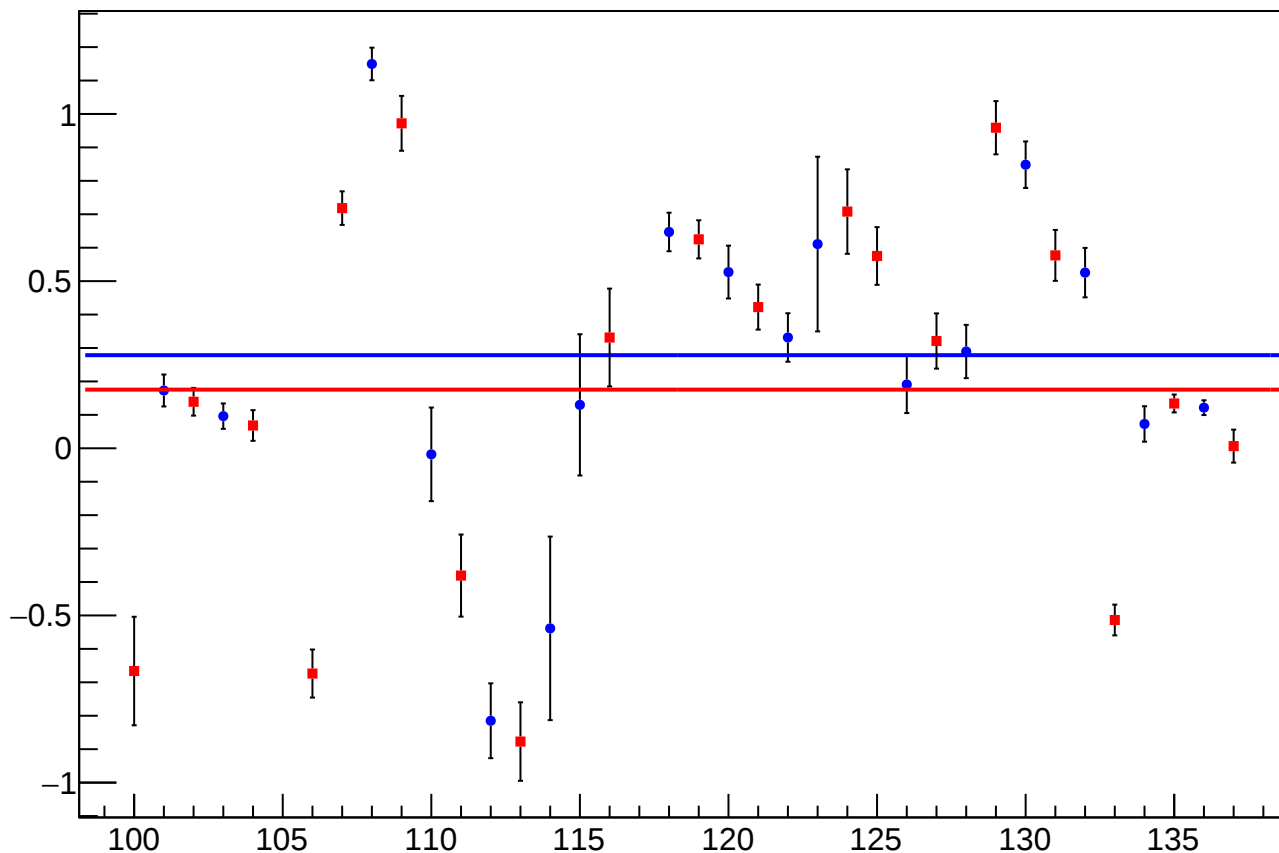
Right:  $-101.462 \pm 0.176$   $\chi^2/\text{NDF}$ : 10586.9/35

In:  $-100.457 \pm 0.251$   $\chi^2/\text{NDF}$ : 4461.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-101.462 \pm 0.176$   $\chi^2/\text{NDF}$ : 10586.9/35

reg\_asym\_sam\_26\_48\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.279 $\pm$ 0.014  $\chi^2$ /NDF: 653.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.175 $\pm$ 0.013  $\chi^2$ /NDF: 967.7/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

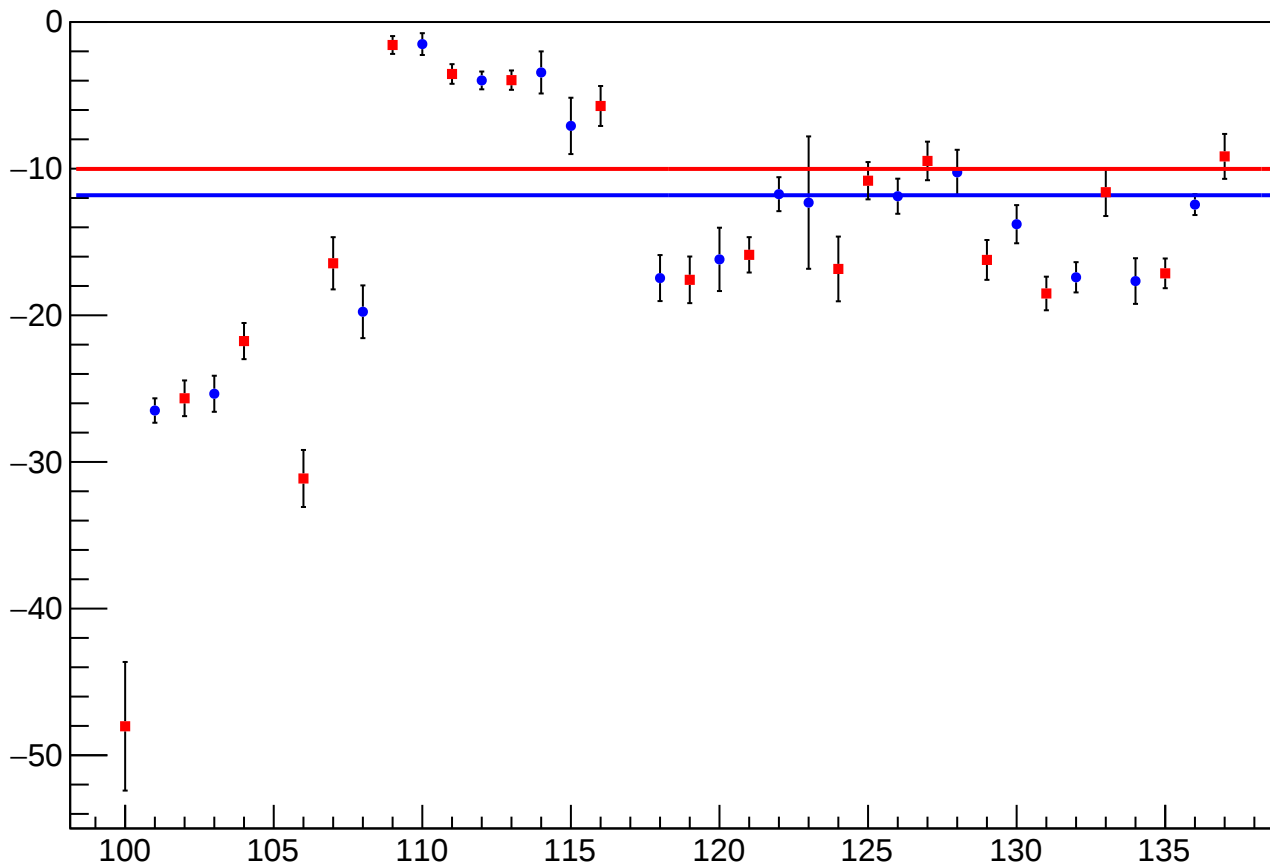
Right: 0.227 $\pm$ 0.010  $\chi^2$ /NDF: 1650.8/35

In: 0.279 $\pm$ 0.014  $\chi^2$ /NDF:653.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.227 $\pm$ 0.010  $\chi^2$ /NDF: 1650.8/35

reg\_asym\_sam\_1357\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-11.812 \pm 0.266$   $\chi^2/\text{NDF}: 914.6/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-10.018 \pm 0.256$   $\chi^2/\text{NDF}: 1025.0/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

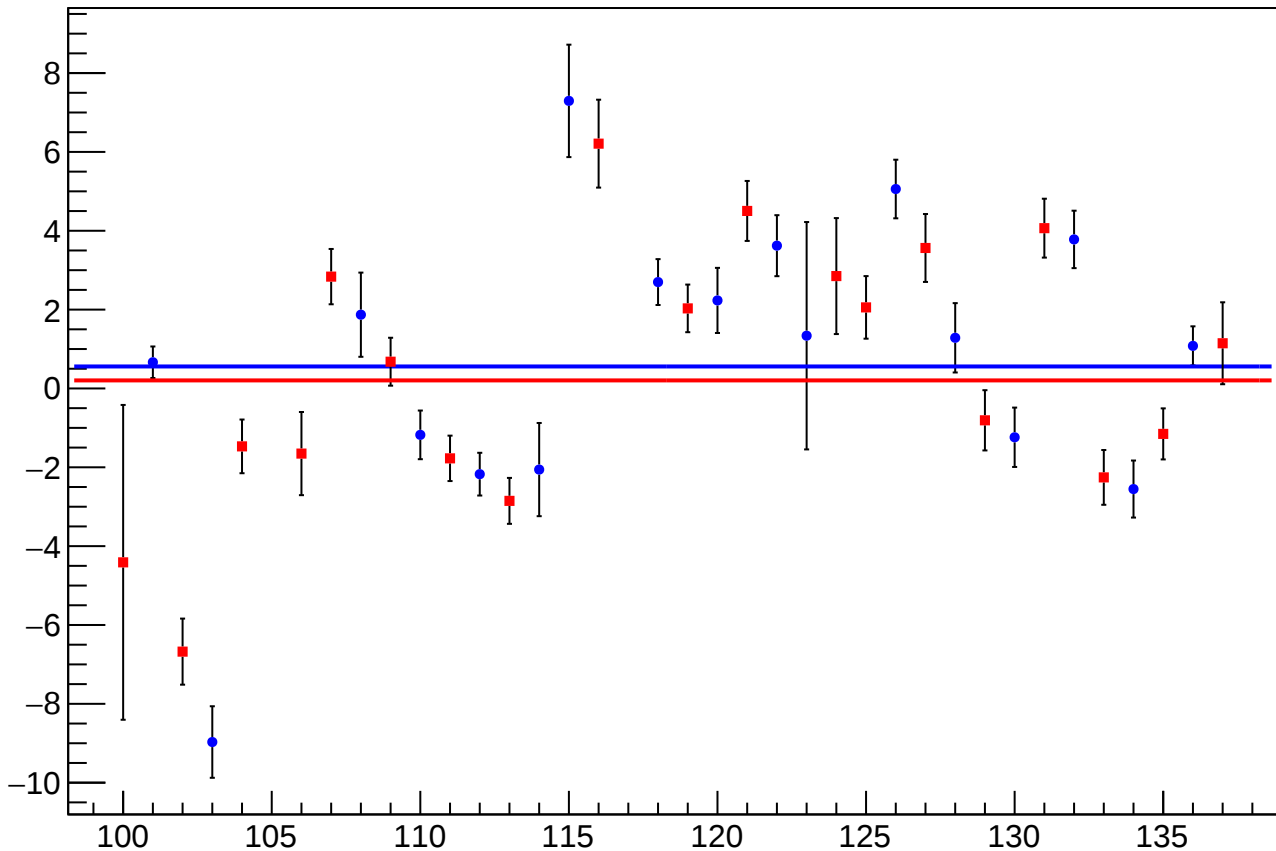
Right:  $-10.880 \pm 0.184$   $\chi^2/\text{NDF}: 1963.3/35$

In:  $-11.812 \pm 0.266$   $\chi^2/\text{NDF}: 914.6/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-10.880 \pm 0.184$   $\chi^2/\text{NDF}: 1963.3/35$

reg\_asym\_sam\_1357\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 0.558+/-0.170  $\chi^2/\text{NDF}$ : 287.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.204+/-0.175  $\chi^2/\text{NDF}$ : 272.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

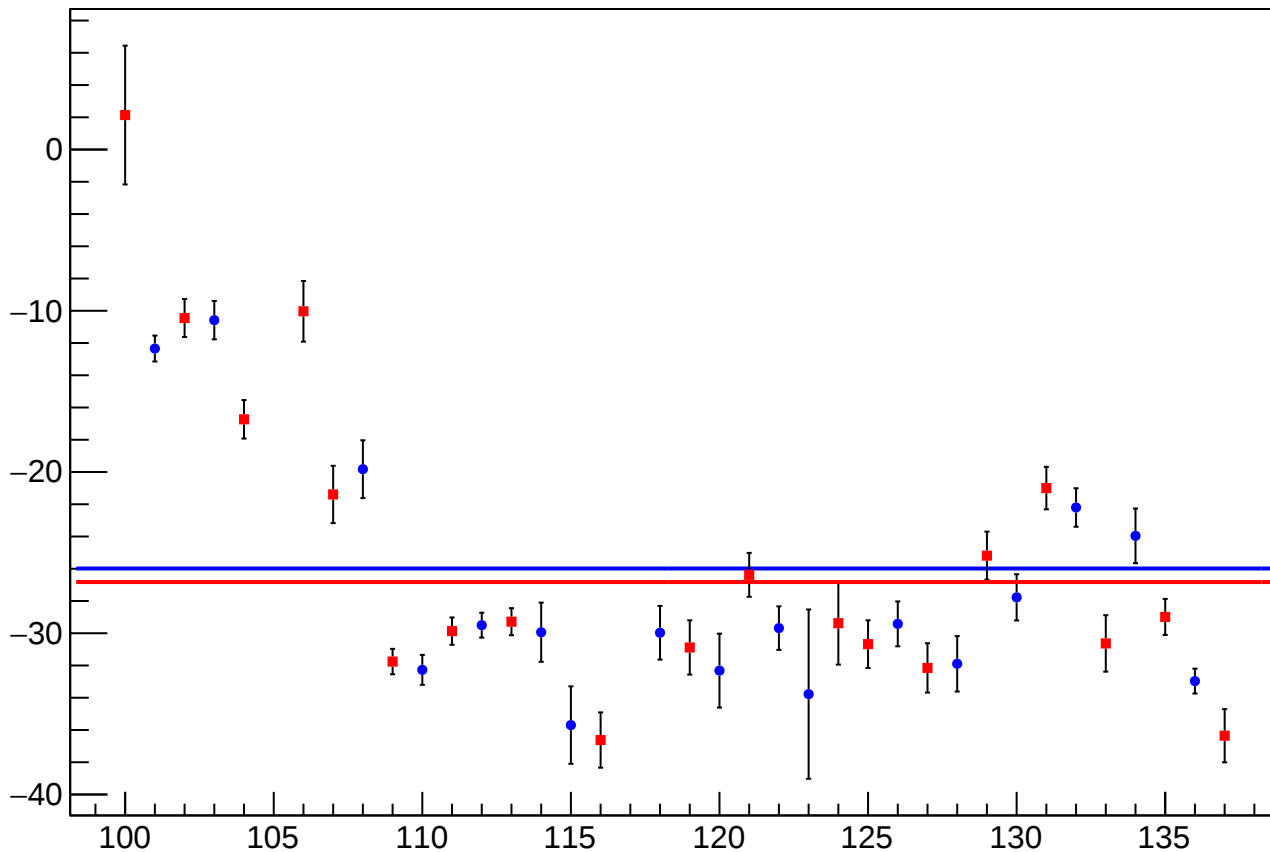
Right: 0.386+/-0.122  $\chi^2/\text{NDF}$ : 562.1/35

In: 0.558+/-0.170  $\chi^2/\text{NDF}$ : 287.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.386+/-0.122  $\chi^2/\text{NDF}$ : 562.1/35

reg\_asym\_sam\_1357\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-25.984 \pm 0.300$   $\chi^2/\text{NDF}$ : 691.5/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-26.825 \pm 0.298$   $\chi^2/\text{NDF}$ : 581.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

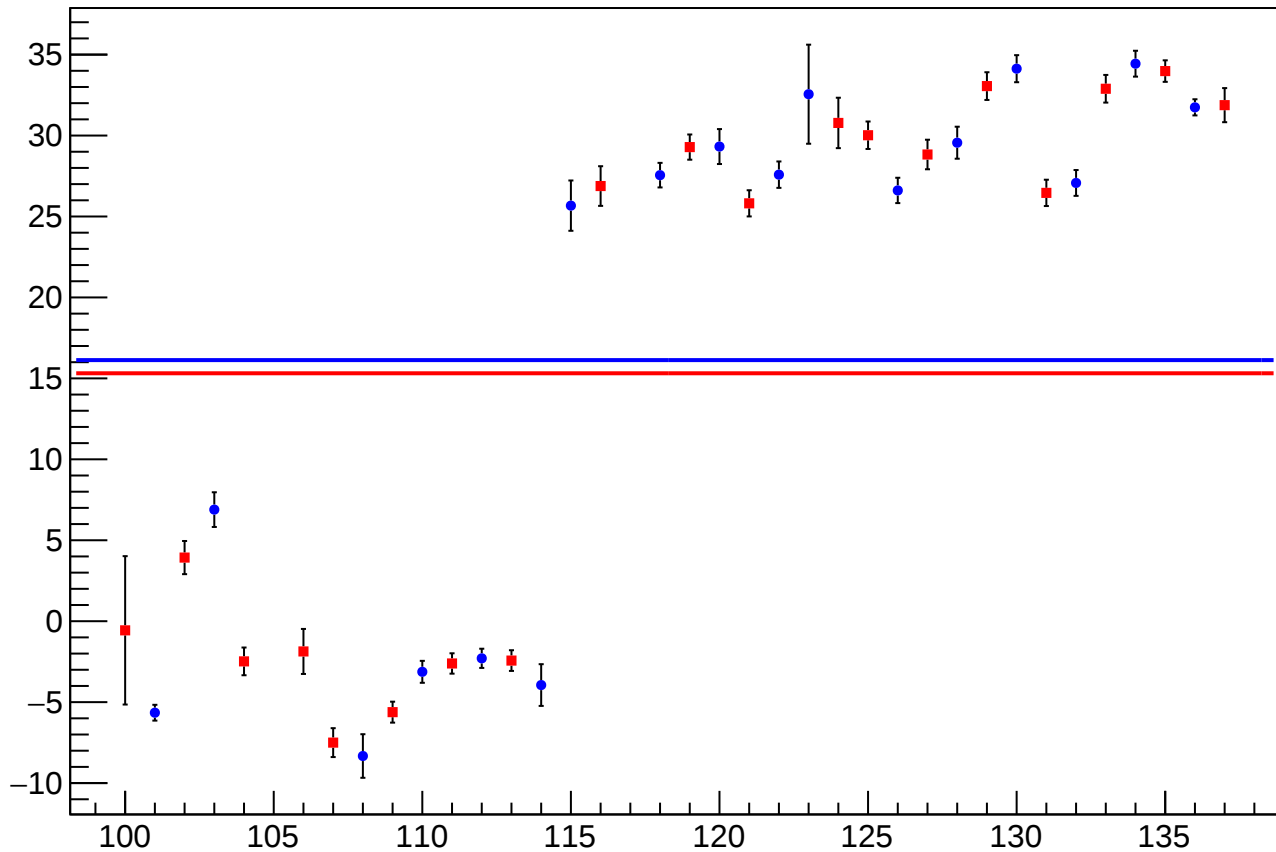
Right:  $-26.408 \pm 0.211$   $\chi^2/\text{NDF}$ : 1277.0/35

In:  $-25.984 \pm 0.300$   $\chi^2/\text{NDF}$ : 691.5/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-26.408 \pm 0.211$   $\chi^2/\text{NDF}$ : 1277.0/35

reg\_asym\_sam\_1357\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 16.129+/-0.192  $\chi^2$ /NDF: 7572.5/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 15.315+/-0.197  $\chi^2$ /NDF: 7278.1/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

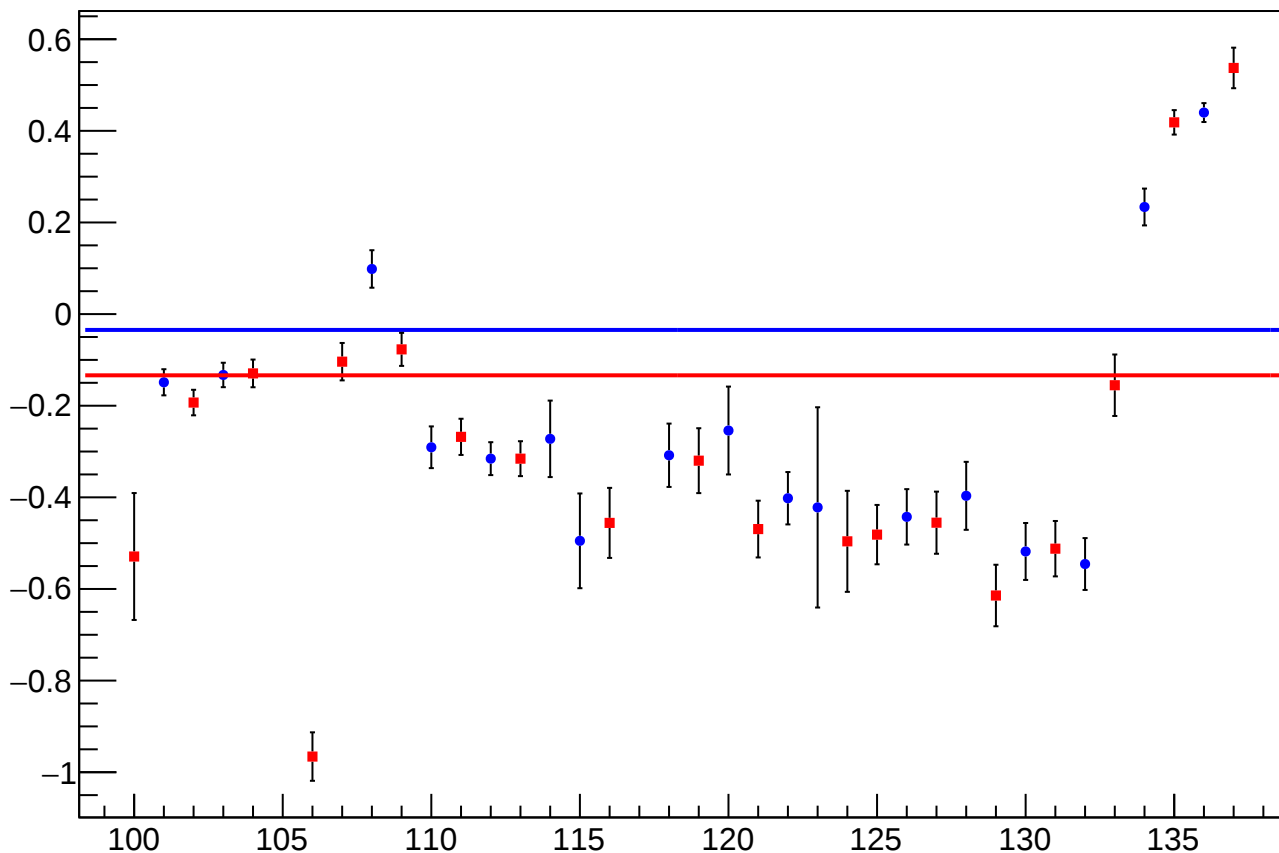
Right: 15.732+/-0.138  $\chi^2$ /NDF: 14859.4/35

In: 16.129+/-0.192  $\chi^2$ /NDF:7572.5/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 15.732+/-0.138  $\chi^2$ /NDF: 14859.4/35

reg\_asym\_sam\_1357\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.035+/-0.010  $\chi^2/\text{NDF}$ : 1011.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -0.134+/-0.010  $\chi^2/\text{NDF}$ : 1161.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

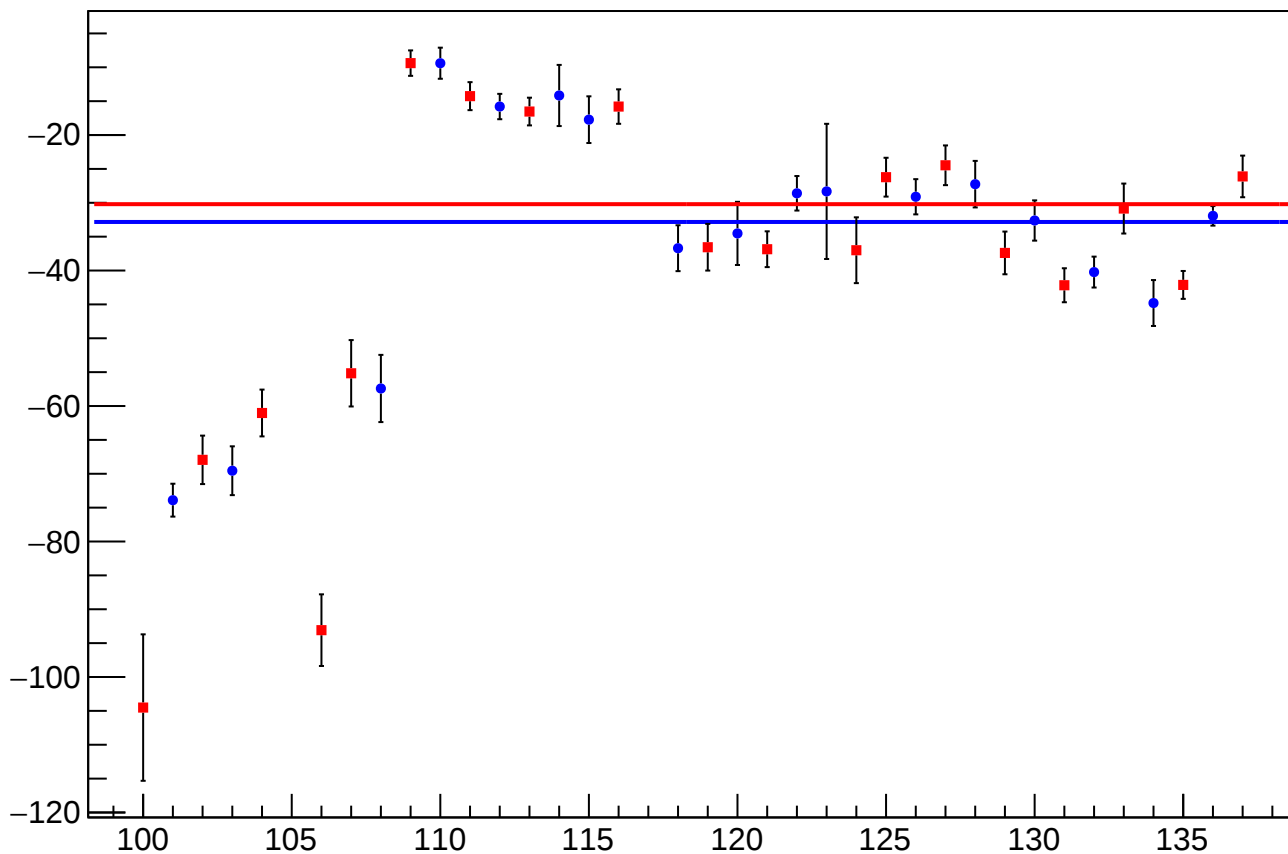
Right: -0.084+/-0.007  $\chi^2/\text{NDF}$ : 2219.2/35

In: -0.035+/-0.010  $\chi^2/\text{NDF}$ :1011.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -0.084+/-0.007  $\chi^2/\text{NDF}$ : 2219.2/35

reg\_asym\_sam\_2468\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-32.831 \pm 0.659$   $\chi^2/\text{NDF}$ : 670.8/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-30.204 \pm 0.653$   $\chi^2/\text{NDF}$ : 745.5/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

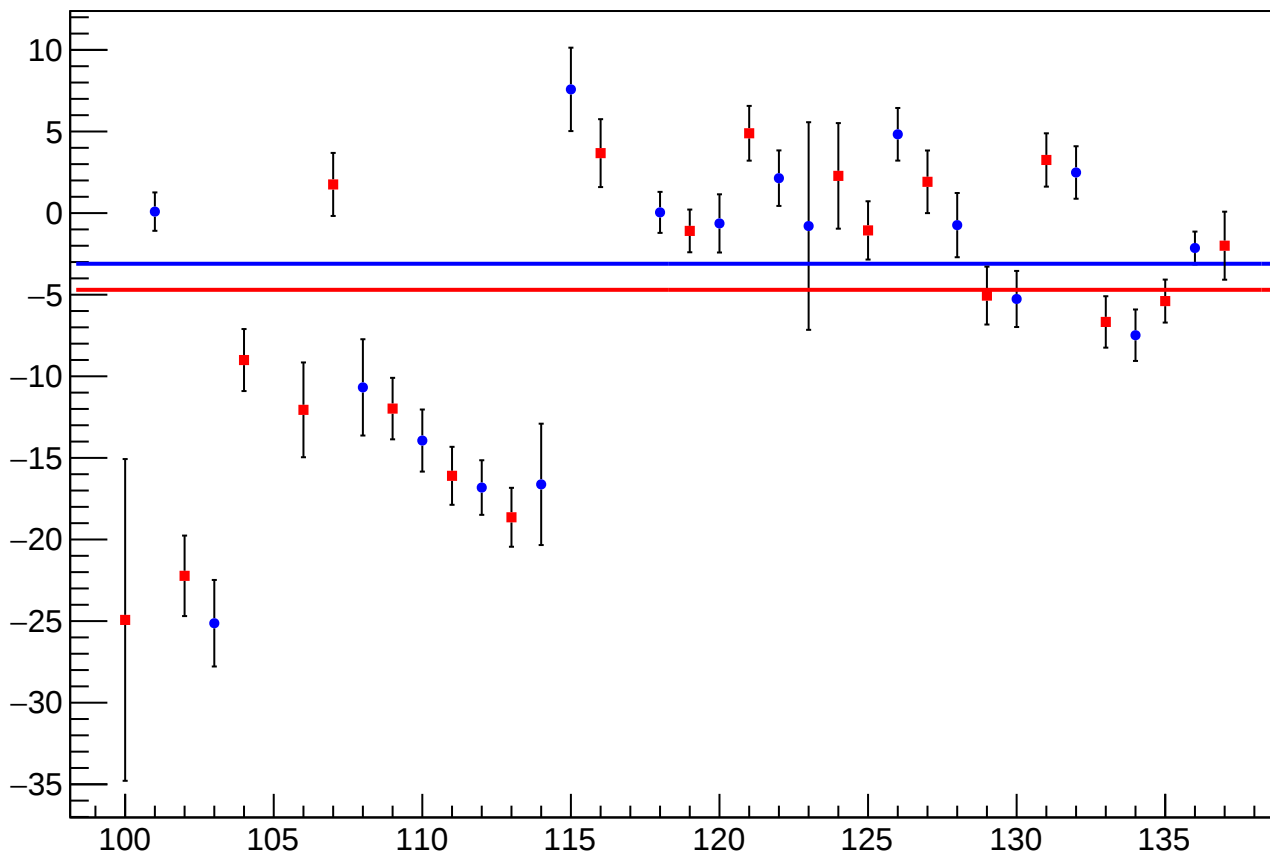
Right:  $-31.505 \pm 0.464$   $\chi^2/\text{NDF}$ : 1424.3/35

In:  $-32.831 \pm 0.659$   $\chi^2/\text{NDF}$ : 670.8/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-31.505 \pm 0.464$   $\chi^2/\text{NDF}$ : 1424.3/35

reg\_asym\_sam\_2468\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-3.104 \pm 0.411$   $\chi^2/\text{NDF}$ : 279.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-4.701 \pm 0.427$   $\chi^2/\text{NDF}$ : 297.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

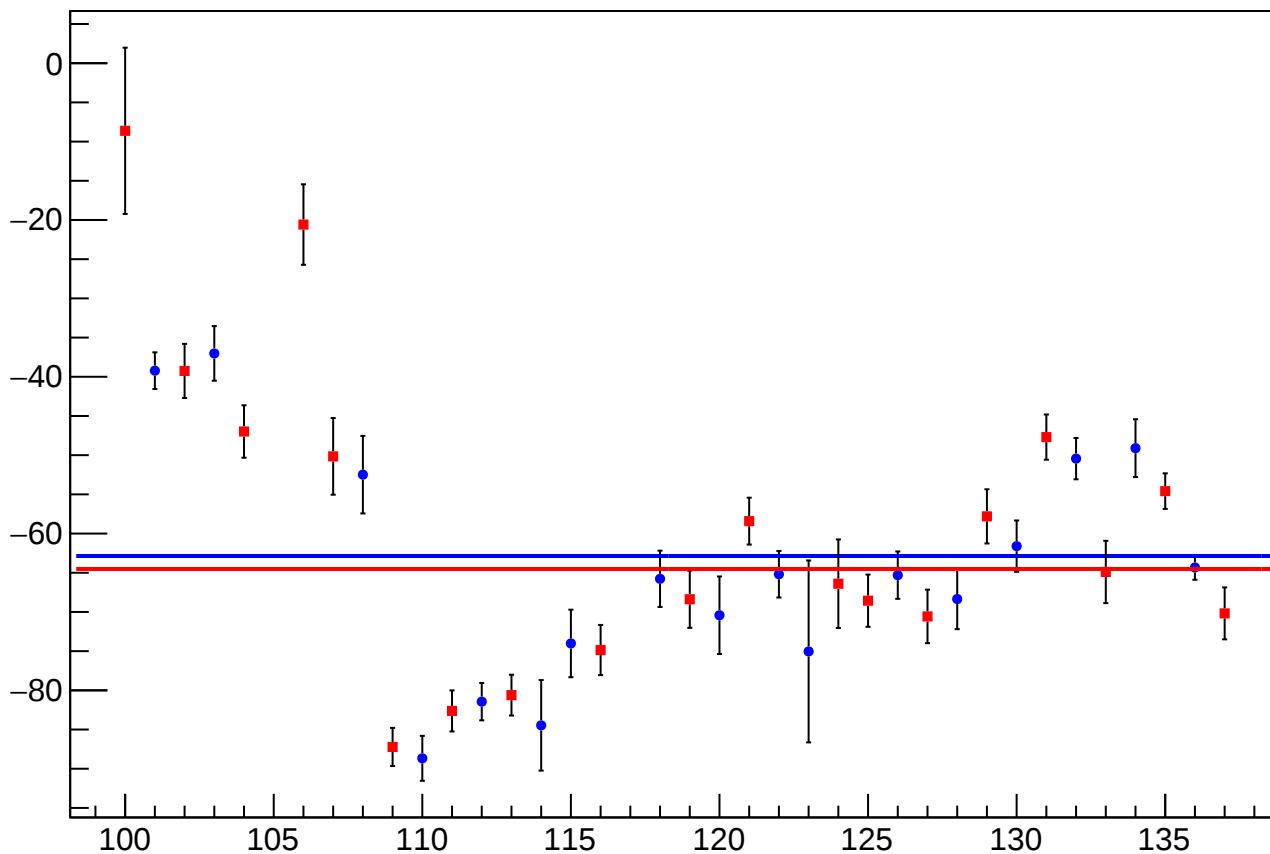
Right:  $-3.873 \pm 0.296$   $\chi^2/\text{NDF}$ : 584.0/35

In:  $-3.104 \pm 0.411$   $\chi^2/\text{NDF}$ : 279.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-3.873 \pm 0.296$   $\chi^2/\text{NDF}$ : 584.0/35

reg\_asym\_sam\_2468\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -62.863 $\pm$ 0.741  $\chi^2$ /NDF: 368.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -64.517 $\pm$ 0.752  $\chi^2$ /NDF: 444.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

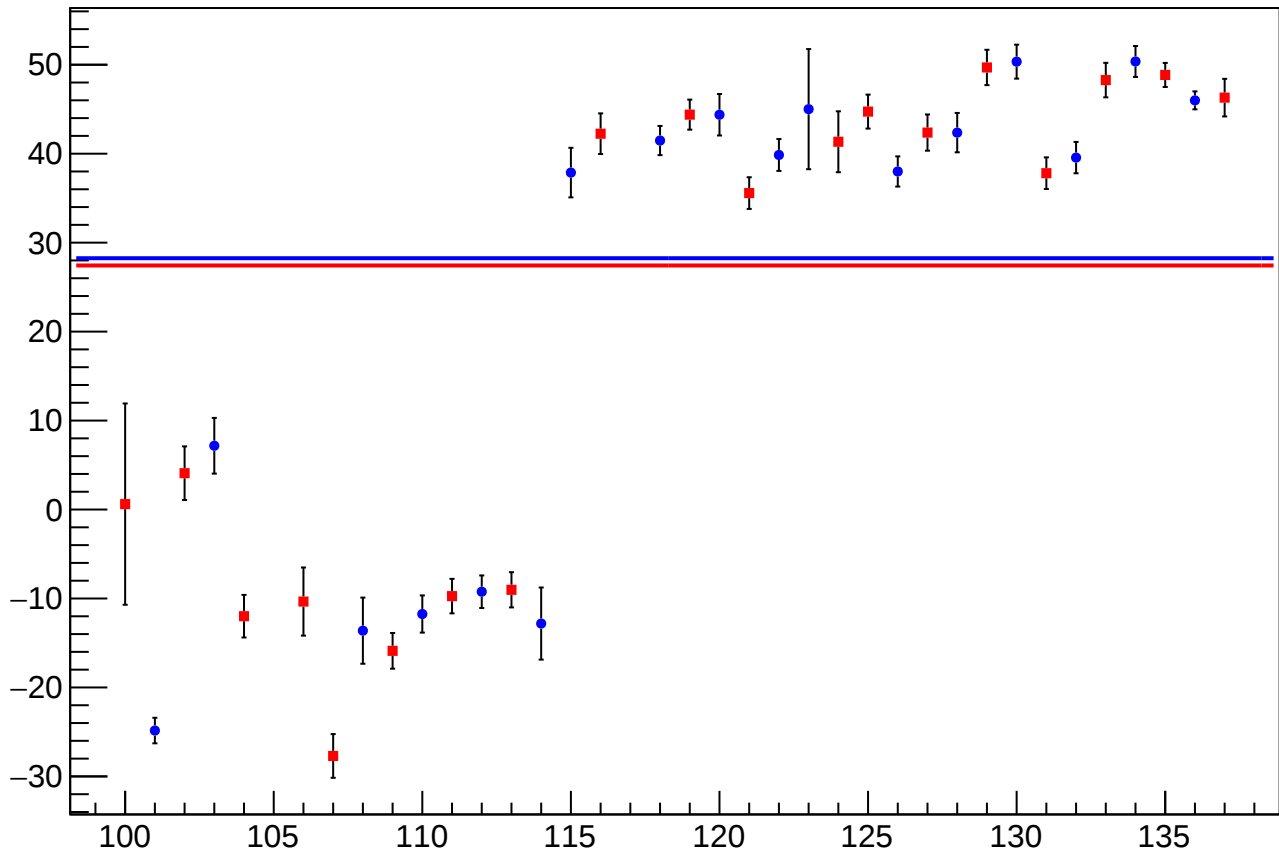
Right: -63.677 $\pm$ 0.528  $\chi^2$ /NDF: 815.4/35

In: -62.863 $\pm$ 0.741  $\chi^2$ /NDF:368.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -63.677 $\pm$ 0.528  $\chi^2$ /NDF: 815.4/35

reg\_asym\_sam\_2468\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 28.250 $\pm$ 0.460  $\chi^2$ /NDF: 3319.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 27.435 $\pm$ 0.479  $\chi^2$ /NDF: 3032.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

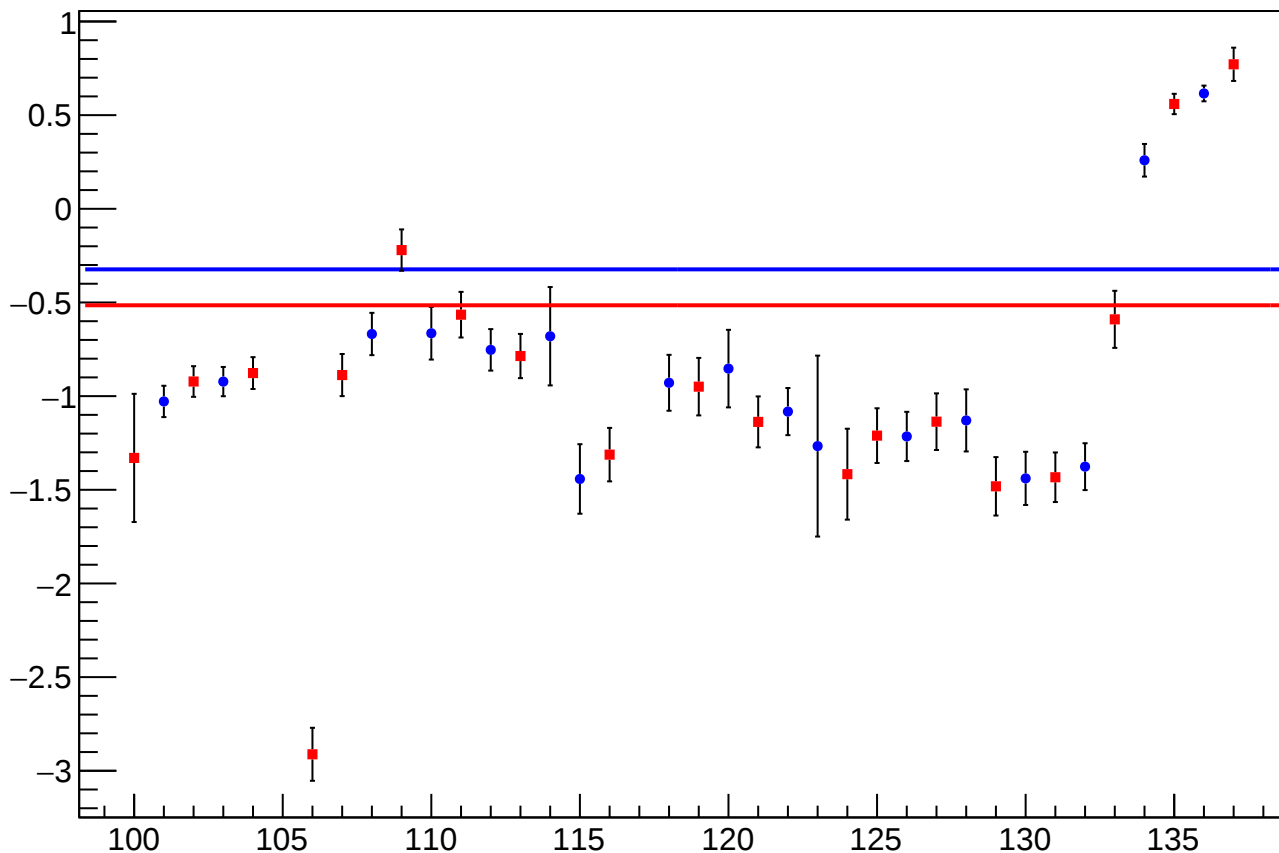
Right: 27.859 $\pm$ 0.332  $\chi^2$ /NDF: 6353.5/35

In: 28.250 $\pm$ 0.460  $\chi^2$ /NDF:3319.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 27.859 $\pm$ 0.332  $\chi^2$ /NDF: 6353.5/35

reg\_asym\_sam\_2468\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-0.323 \pm 0.025$   $\chi^2/\text{NDF}$ : 1010.8/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.515 \pm 0.026$   $\chi^2/\text{NDF}$ : 1160.9/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

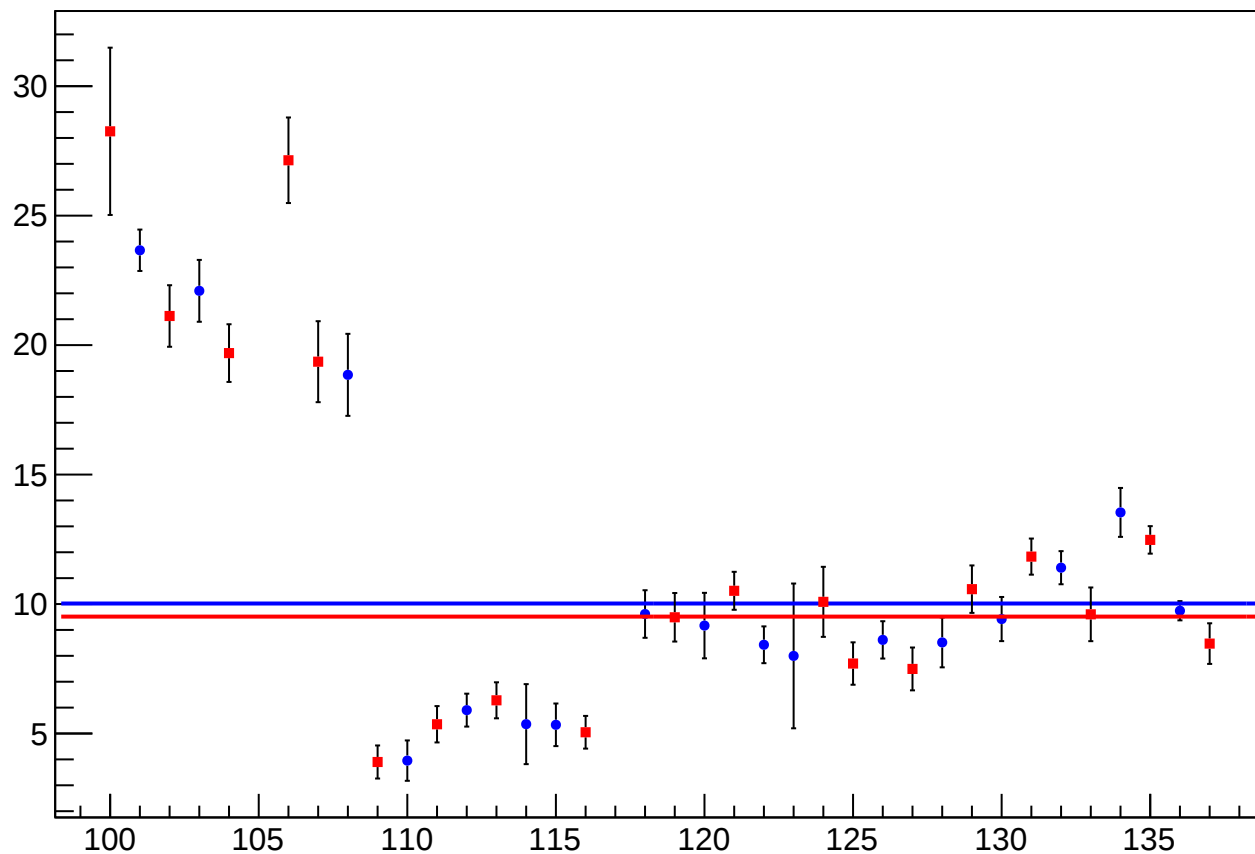
Right:  $-0.416 \pm 0.018$   $\chi^2/\text{NDF}$ : 2200.2/35

In:  $-0.323 \pm 0.025$   $\chi^2/\text{NDF}$ : 1010.8/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.416 \pm 0.018$   $\chi^2/\text{NDF}$ : 2200.2/35

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 10.021+/-0.190  $\chi^2/\text{NDF}$ : 600.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 9.515+/-0.191  $\chi^2/\text{NDF}$ : 608.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

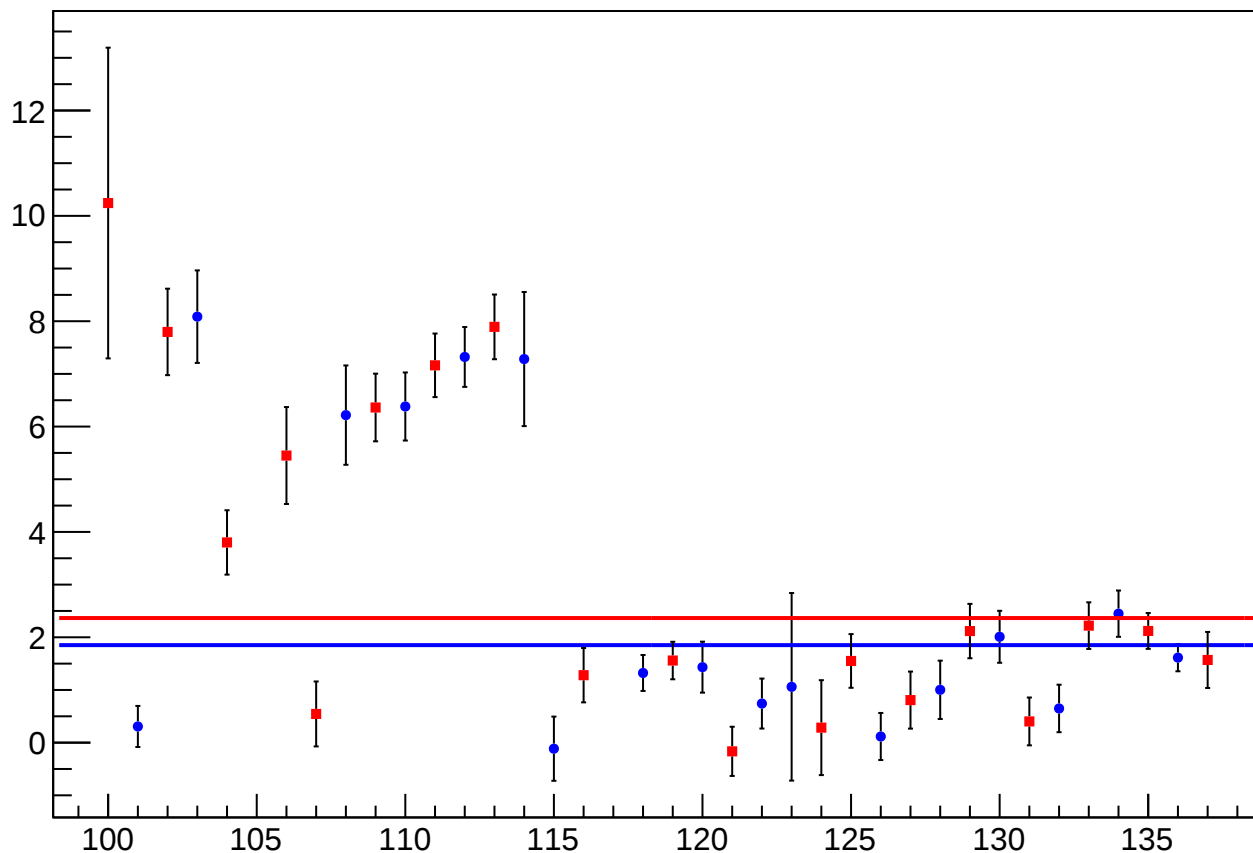
Right: 9.770+/-0.135  $\chi^2/\text{NDF}$ : 1212.3/35

In: 10.021+/-0.190  $\chi^2/\text{NDF}$ : 600.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 9.770+/-0.135  $\chi^2/\text{NDF}$ : 1212.3/35

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.851+/-0.117  $\chi^2/\text{NDF}$ : 294.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.365+/-0.123  $\chi^2/\text{NDF}$ : 336.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

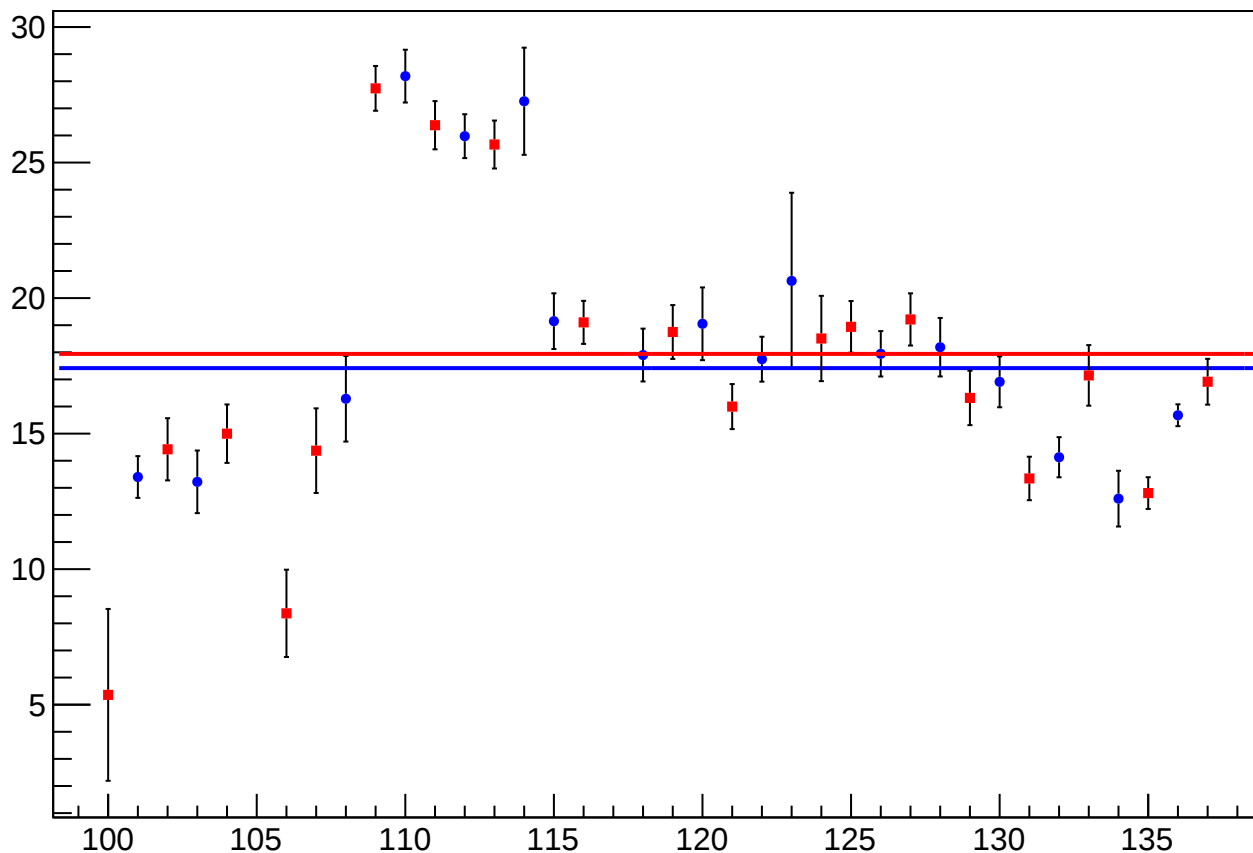
Right: 2.097+/-0.085  $\chi^2/\text{NDF}$ : 639.6/35

In: 1.851+/-0.117  $\chi^2/\text{NDF}$ : 294.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.097+/-0.085  $\chi^2/\text{NDF}$ : 639.6/35

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 17.417+/-0.213  $\chi^2/\text{NDF}$ : 367.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 17.941+/-0.219  $\chi^2/\text{NDF}$ : 505.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

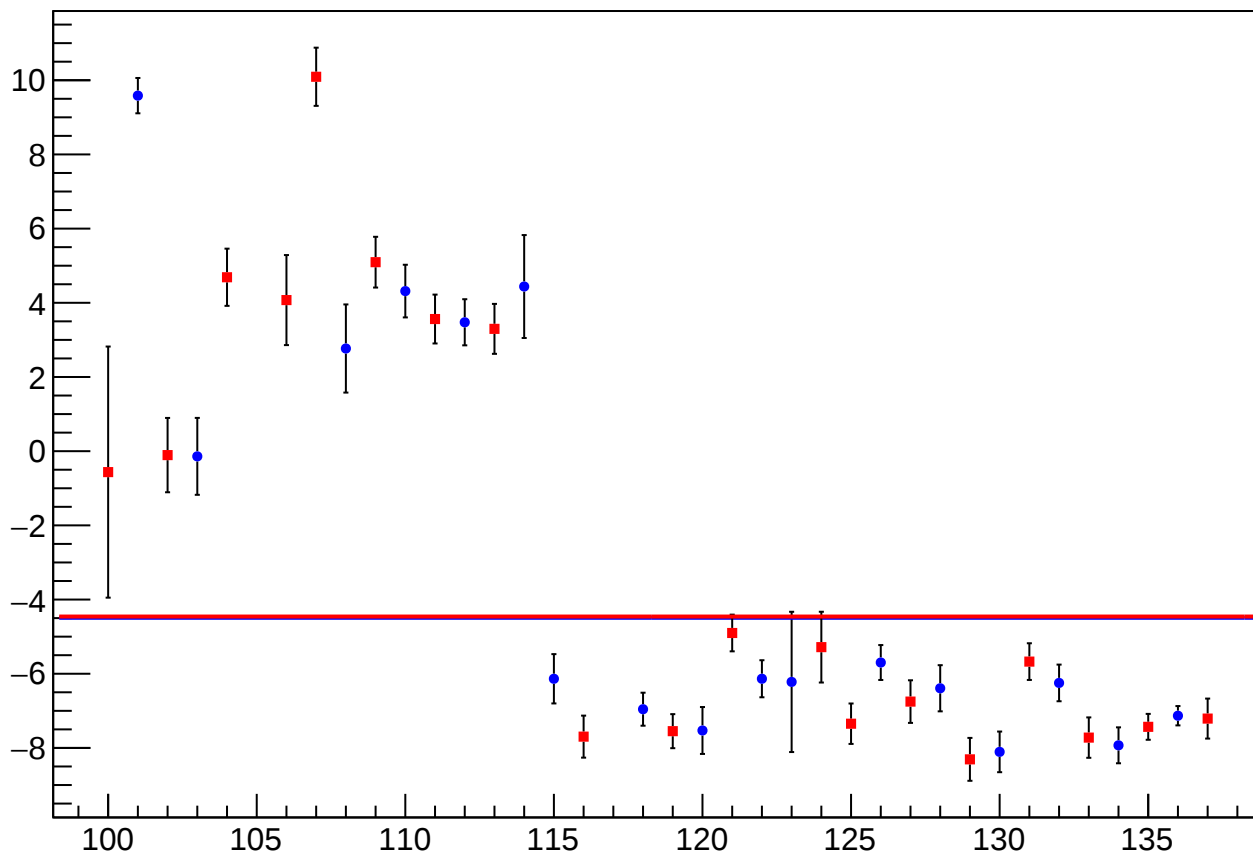
Right: 17.671+/-0.153  $\chi^2/\text{NDF}$ : 875.6/35

In: 17.417+/-0.213  $\chi^2/\text{NDF}$ : 367.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 17.671+/-0.153  $\chi^2/\text{NDF}$ : 875.6/35

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -4.491+/-0.130  $\chi^2/\text{NDF}$ : 1585.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -4.458+/-0.137  $\chi^2/\text{NDF}$ : 1338.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

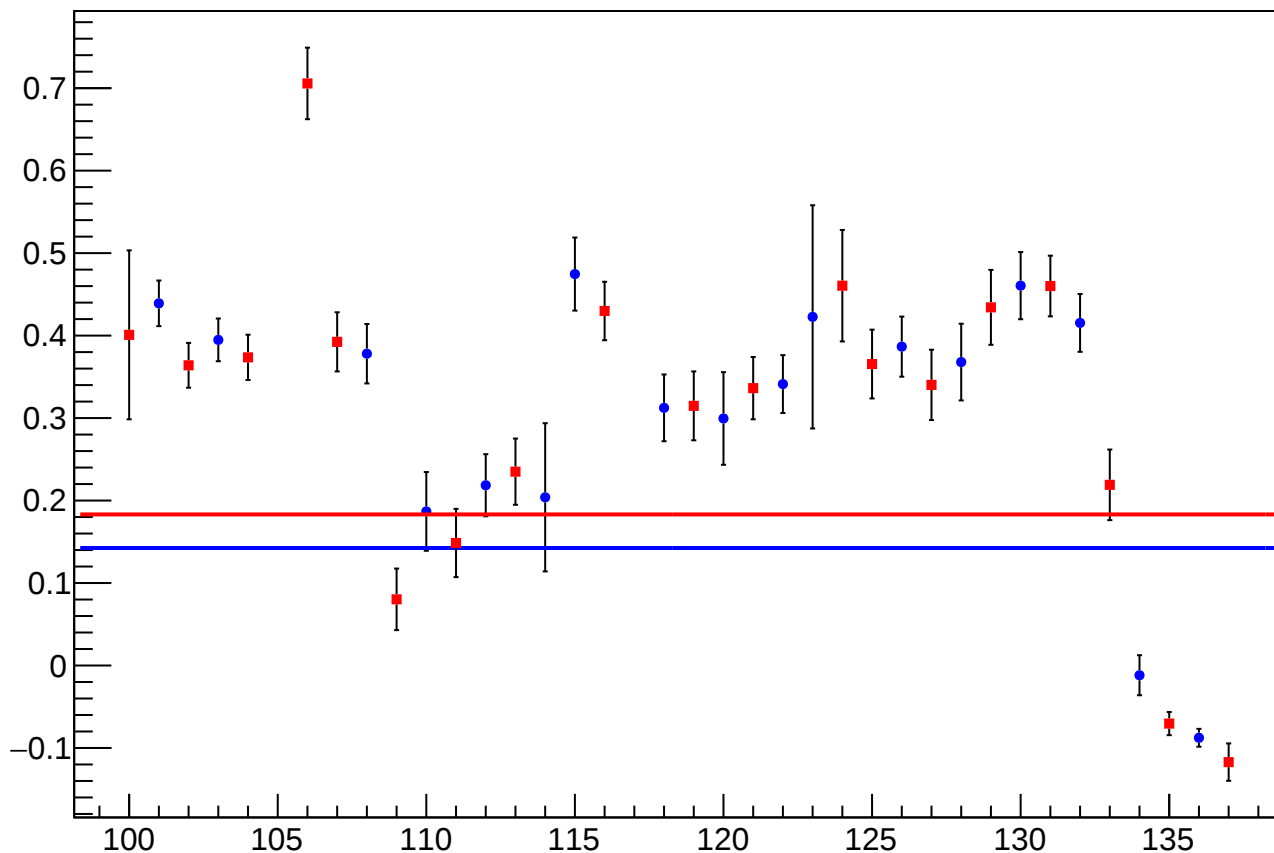
Right: -4.476+/-0.094  $\chi^2/\text{NDF}$ : 2924.4/35

In: -4.491+/-0.130  $\chi^2/\text{NDF}$ :1585.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -4.476+/-0.094  $\chi^2/\text{NDF}$ : 2924.4/35

reg\_asym\_sam\_1357\_2468\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.142 $\pm$ 0.007  $\chi^2$ /NDF: 1058.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.183 $\pm$ 0.007  $\chi^2$ /NDF: 1000.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

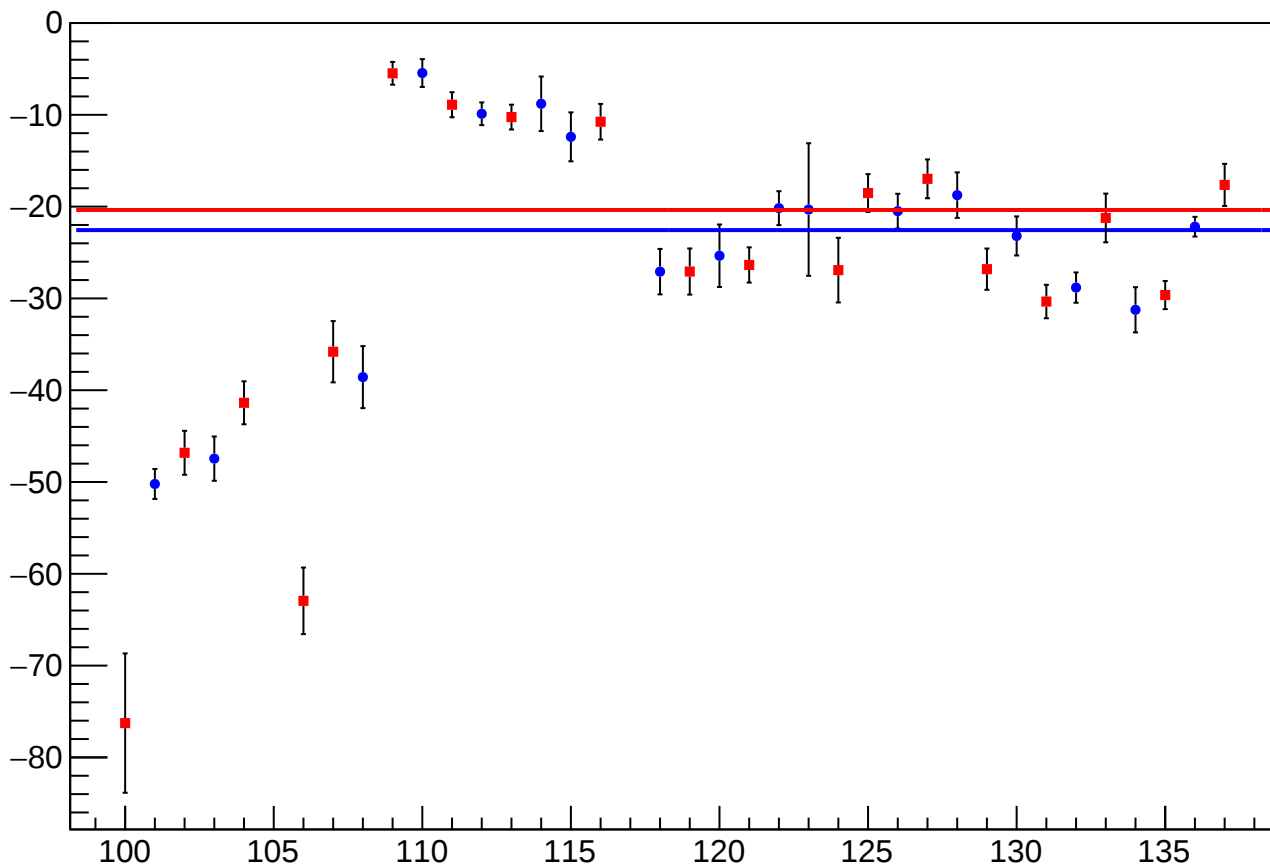
Right: 0.162 $\pm$ 0.005  $\chi^2$ /NDF: 2075.4/35

In: 0.142 $\pm$ 0.007  $\chi^2$ /NDF:1058.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.162 $\pm$ 0.005  $\chi^2$ /NDF: 2075.4/35

reg\_asym\_sam\_12345678\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -22.559+/-0.466  $\chi^2/\text{NDF}$ : 721.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -20.367+/-0.458  $\chi^2/\text{NDF}$ : 811.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

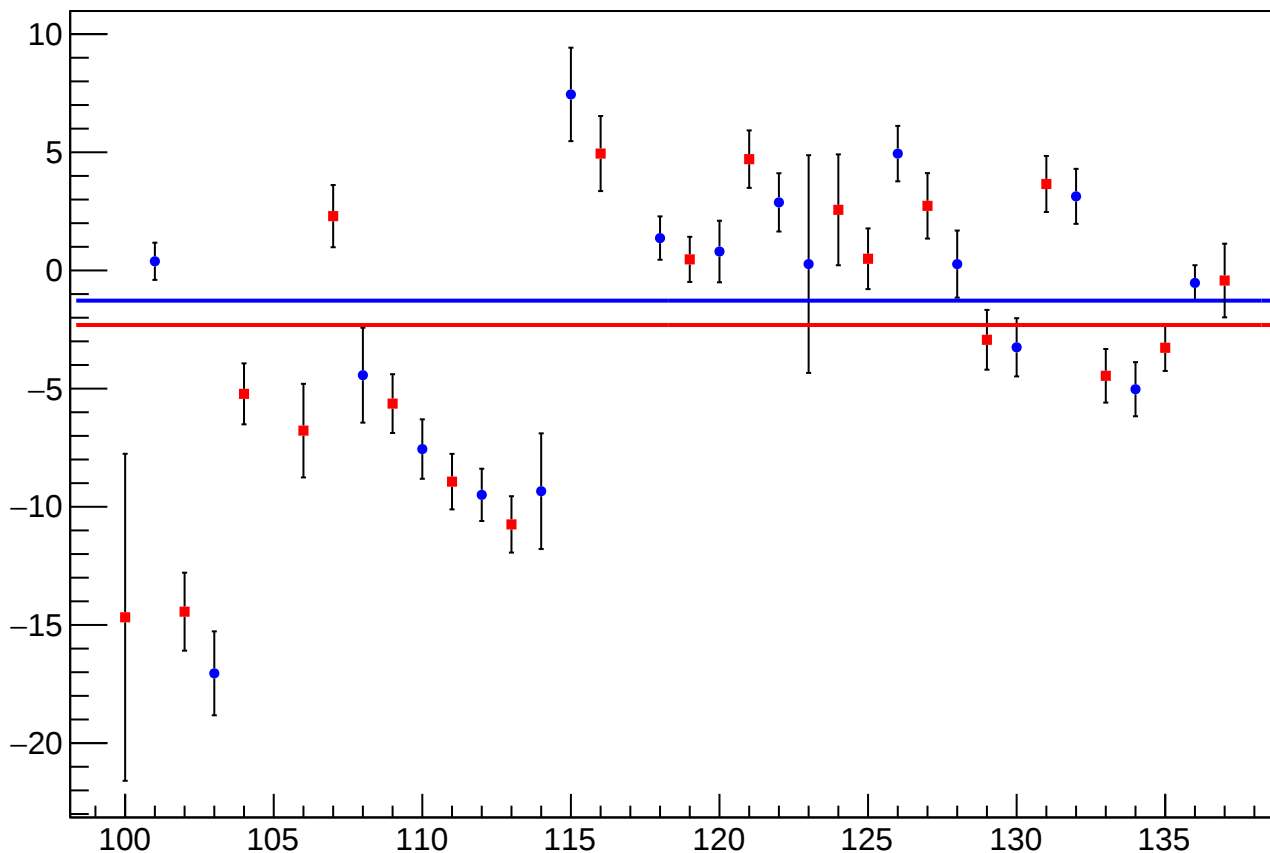
Right: -21.444+/-0.327  $\chi^2/\text{NDF}$ : 1544.2/35

In: -22.559+/-0.466  $\chi^2/\text{NDF}$ : 721.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -21.444+/-0.327  $\chi^2/\text{NDF}$ : 1544.2/35

reg\_asym\_sam\_12345678\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -1.278+/-0.292  $\chi^2/\text{NDF}$ : 276.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -2.309+/-0.302  $\chi^2/\text{NDF}$ : 285.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

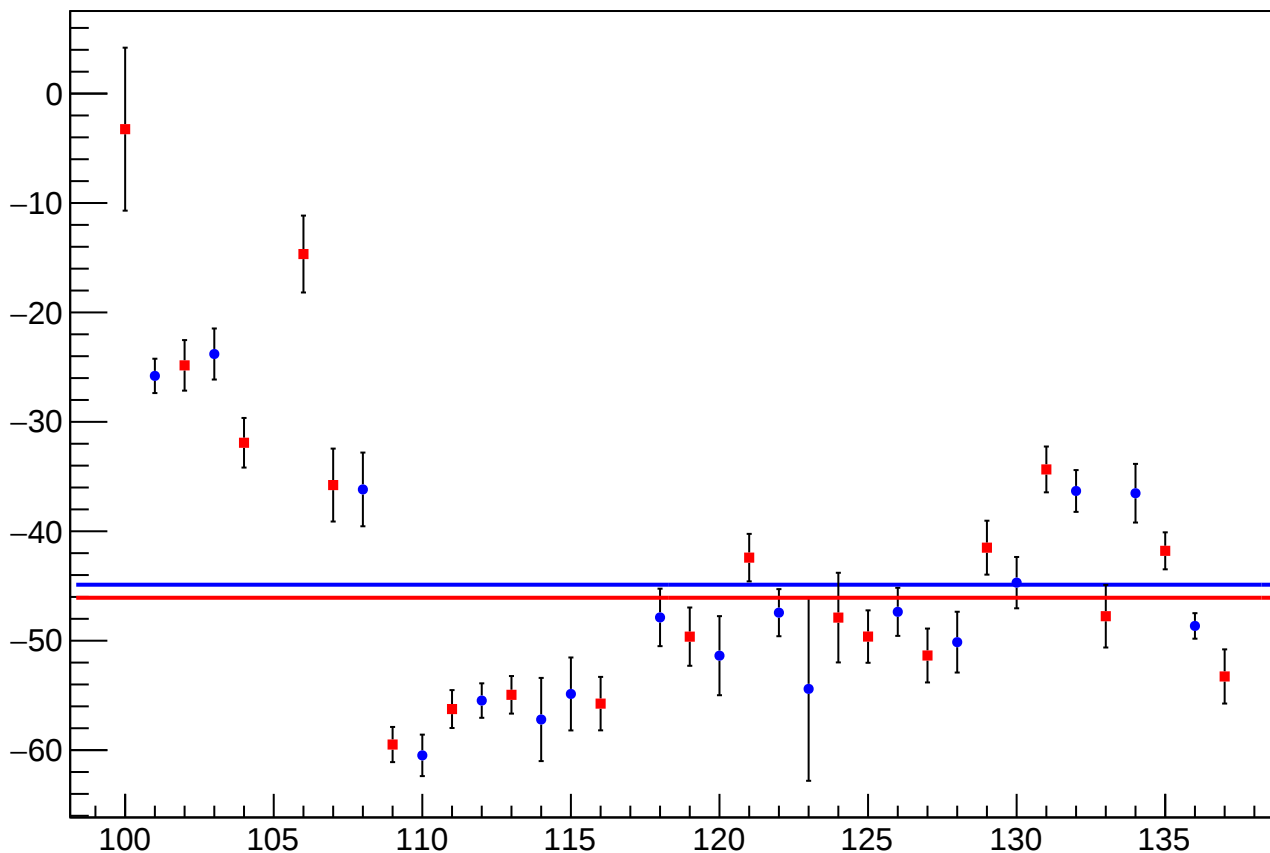
Right: -1.776+/-0.210  $\chi^2/\text{NDF}$ : 567.8/35

In: -1.278+/-0.292  $\chi^2/\text{NDF}$ : 276.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -1.776+/-0.210  $\chi^2/\text{NDF}$ : 567.8/35

reg\_asym\_sam\_12345678\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -44.883 $\pm$ 0.524  $\chi^2$ /NDF: 421.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -46.075 $\pm$ 0.529  $\chi^2$ /NDF: 454.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

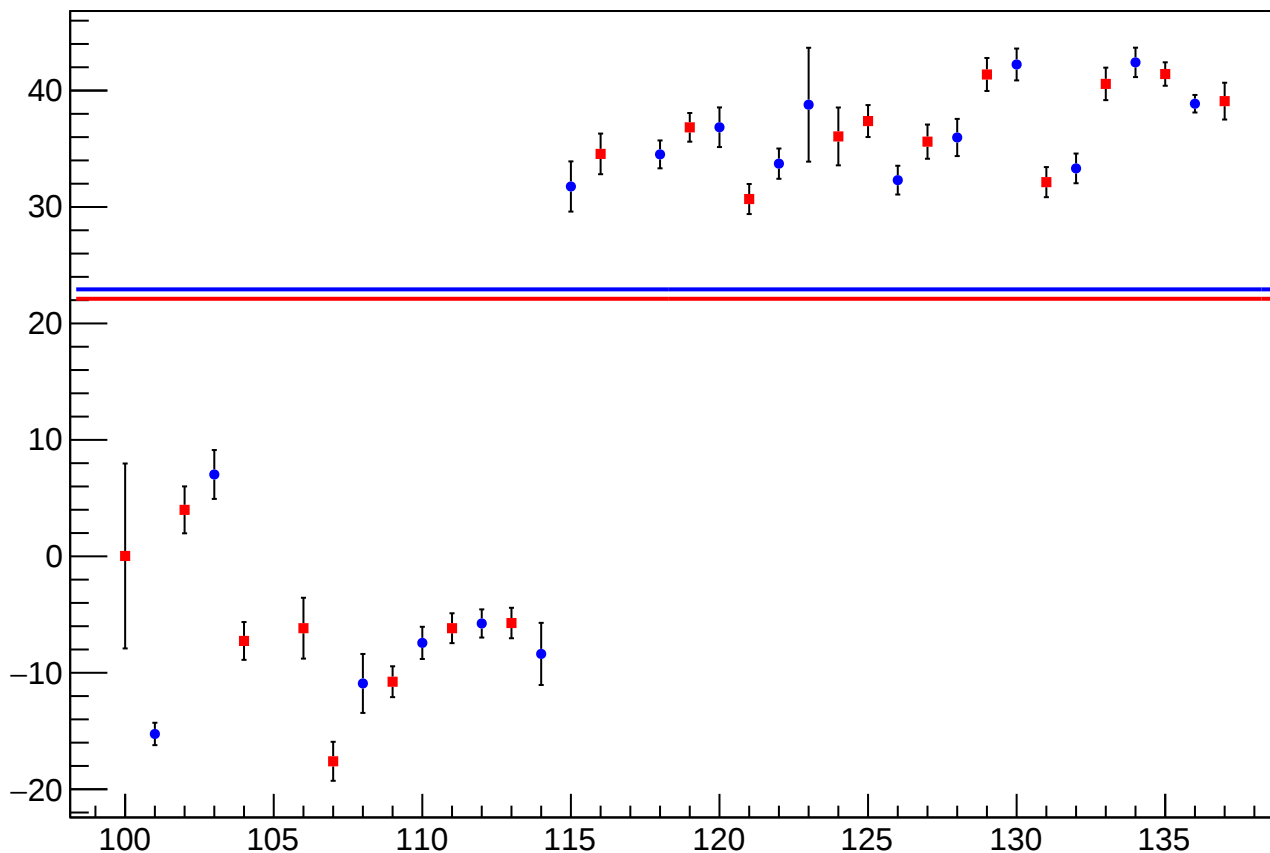
Right: -45.474 $\pm$ 0.372  $\chi^2$ /NDF: 877.8/35

In: -44.883 $\pm$ 0.524  $\chi^2$ /NDF:421.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -45.474 $\pm$ 0.372  $\chi^2$ /NDF: 877.8/35

reg\_asym\_sam\_12345678\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 22.926+/-0.328  $\chi^2/\text{NDF}$ : 4330.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 22.117+/-0.340  $\chi^2/\text{NDF}$ : 4033.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

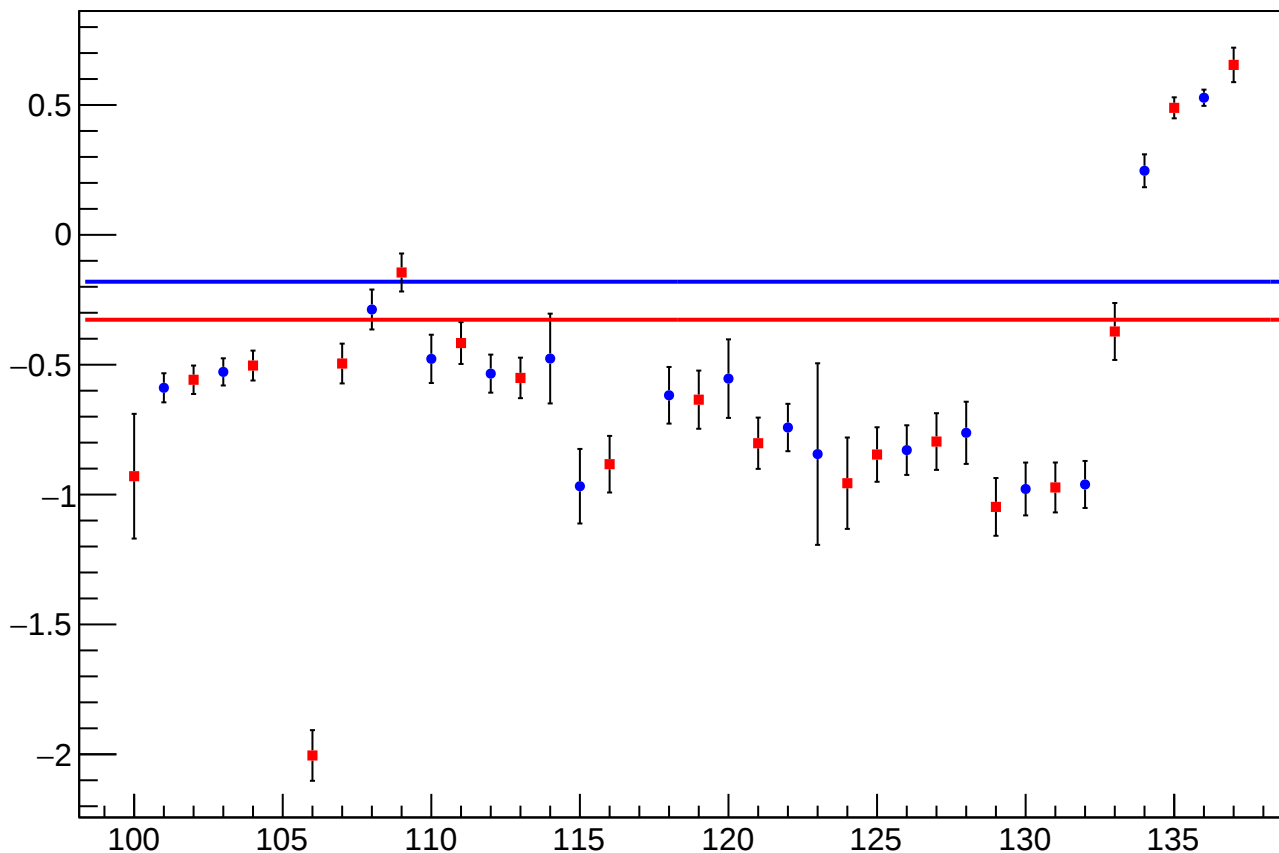
Right: 22.536+/-0.236  $\chi^2/\text{NDF}$ : 8366.6/35

In: 22.926+/-0.328  $\chi^2/\text{NDF}$ : 4330.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 22.536+/-0.236  $\chi^2/\text{NDF}$ : 8366.6/35

reg\_asym\_sam\_12345678\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -0.180+/-0.018  $\chi^2$ /NDF: 995.7/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.327+/-0.018  $\chi^2$ /NDF: 1175.6/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

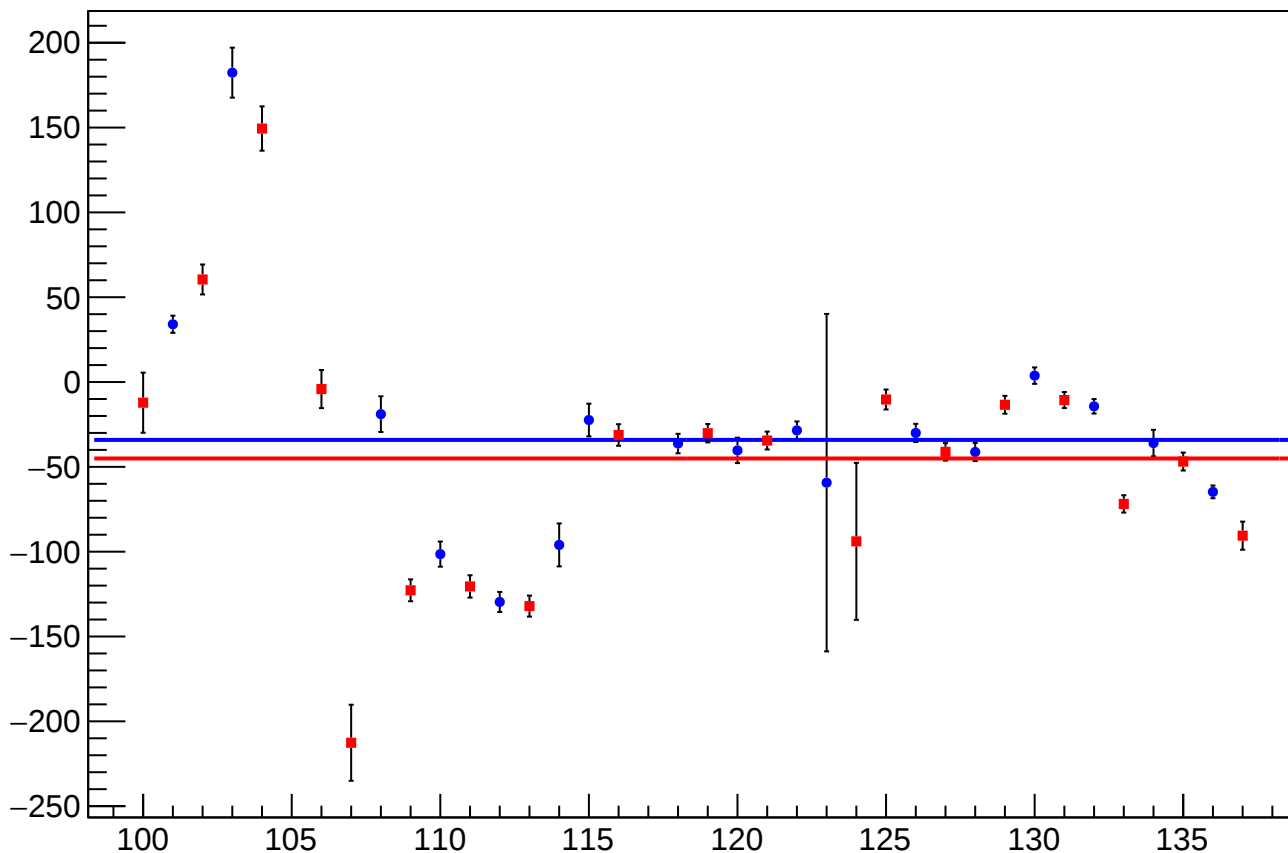
Right: -0.252+/-0.013  $\chi^2$ /NDF: 2204.4/35

In: -0.180+/-0.018  $\chi^2$ /NDF:995.7/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: -0.252+/-0.013  $\chi^2$ /NDF: 2204.4/35

reg\_asym\_atl1\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-34.105 \pm 1.482$   $\chi^2/\text{NDF}$ : 922.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-45.066 \pm 1.515$   $\chi^2/\text{NDF}$ : 1110.0/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

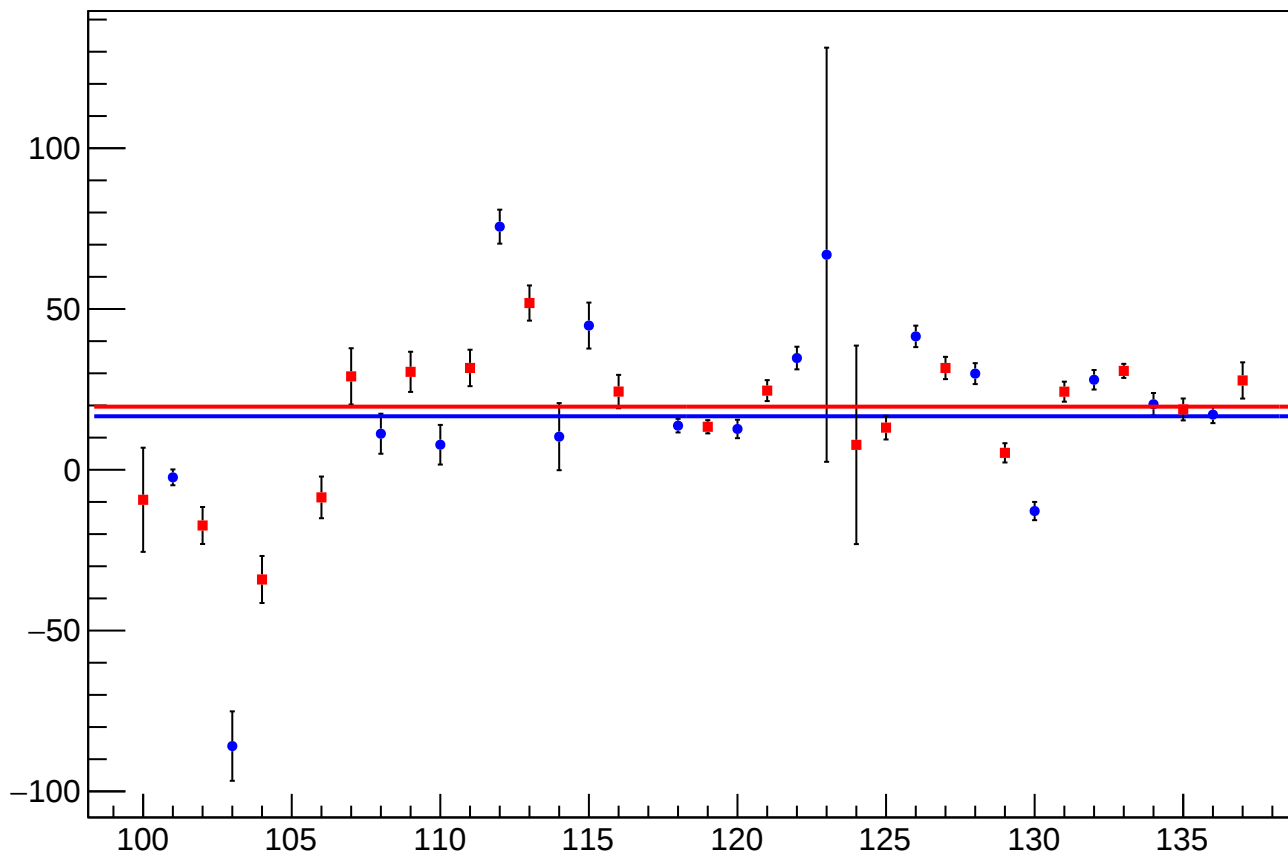
Right:  $-39.463 \pm 1.059$   $\chi^2/\text{NDF}$ : 2059.7/35

In:  $-34.105 \pm 1.482$   $\chi^2/\text{NDF}$ : 922.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-39.463 \pm 1.059$   $\chi^2/\text{NDF}$ : 2059.7/35

reg\_asym\_atl1\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 16.641 $\pm$ 0.859  $\chi^2$ /NDF: 518.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 19.632 $\pm$ 0.896  $\chi^2$ /NDF: 241.7/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

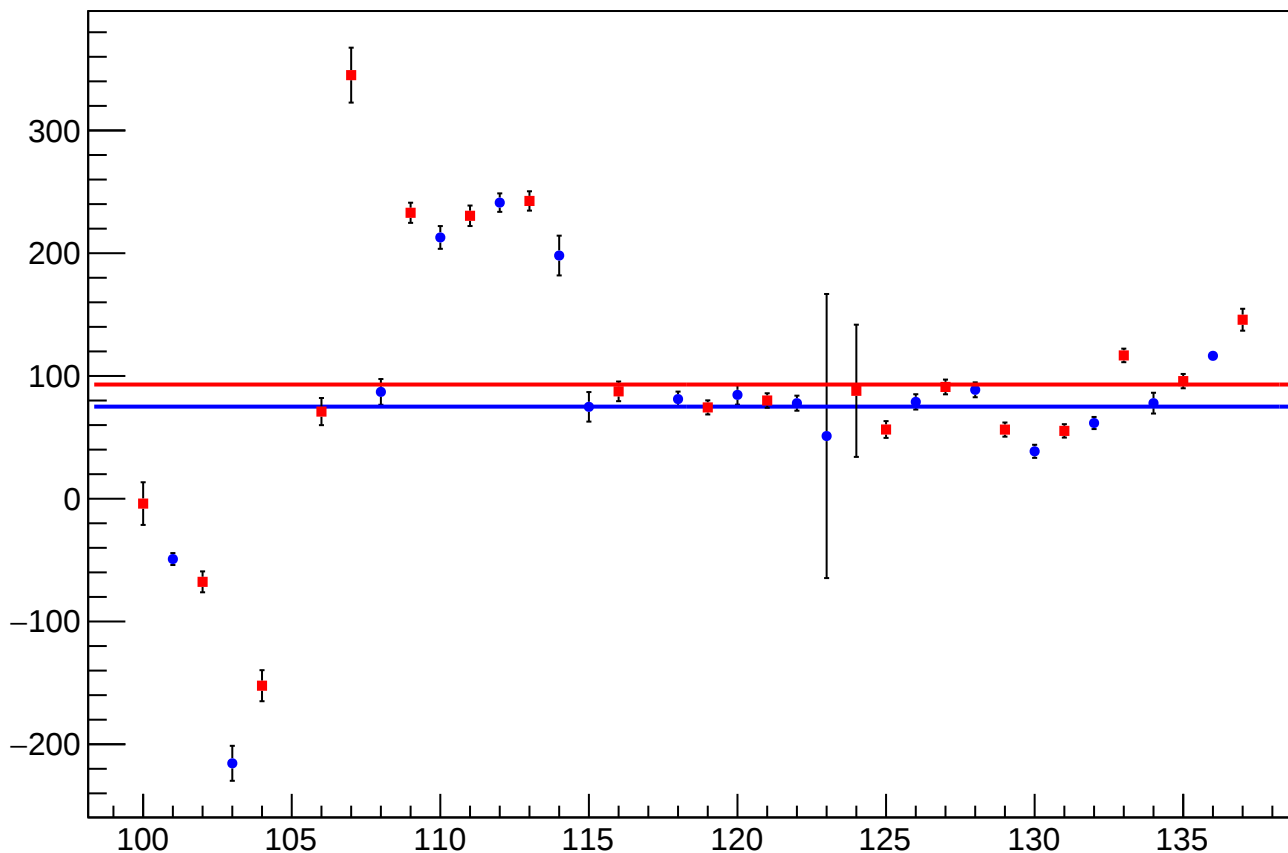
Right: 18.072 $\pm$ 0.620  $\chi^2$ /NDF: 766.4/35

In: 16.641 $\pm$ 0.859  $\chi^2$ /NDF: 518.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 18.072 $\pm$ 0.620  $\chi^2$ /NDF: 766.4/35

reg\_asym\_atl1\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 75.032 $\pm$ 1.647  $\chi^2$ /NDF: 1999.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 93.028 $\pm$ 1.711  $\chi^2$ /NDF: 2003.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

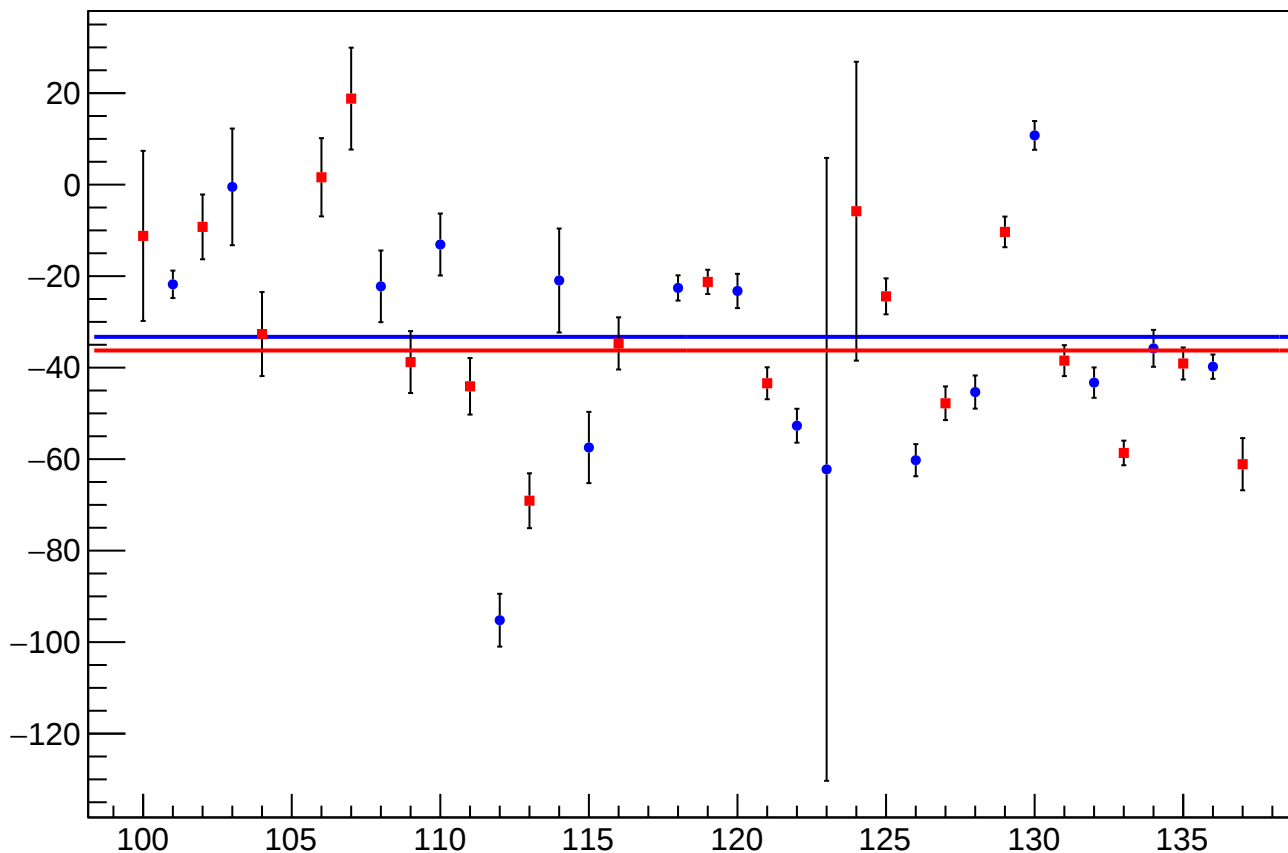
Right: 83.683 $\pm$ 1.187  $\chi^2$ /NDF: 4060.7/35

In: 75.032 $\pm$ 1.647  $\chi^2$ /NDF:1999.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 83.683 $\pm$ 1.187  $\chi^2$ /NDF: 4060.7/35

reg\_asym\_atl1\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-33.272 \pm 0.982$   $\chi^2/\text{NDF}$ : 489.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-36.251 \pm 1.024$   $\chi^2/\text{NDF}$ : 297.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

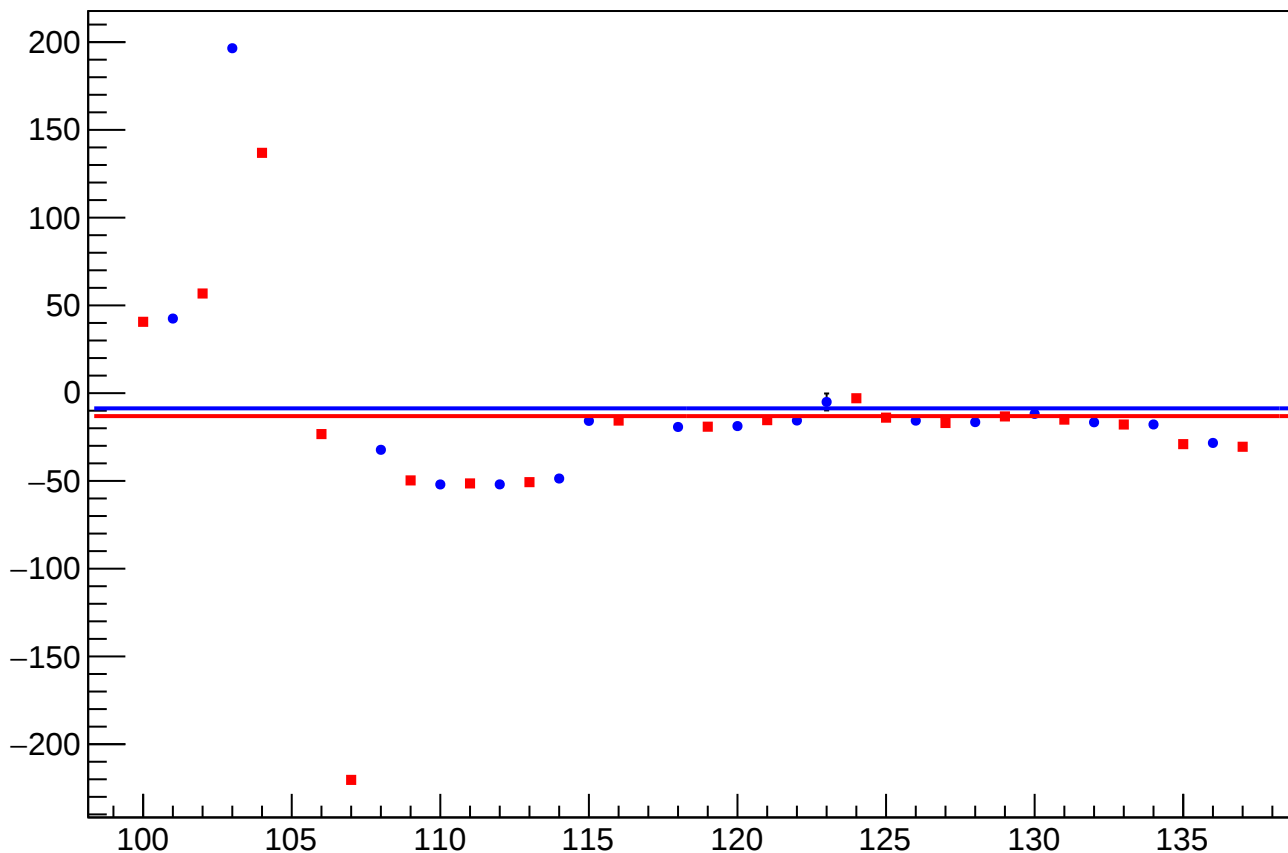
Right:  $-34.699 \pm 0.709$   $\chi^2/\text{NDF}$ : 791.4/35

In:  $-33.272 \pm 0.982$   $\chi^2/\text{NDF}$ : 489.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-34.699 \pm 0.709$   $\chi^2/\text{NDF}$ : 791.4/35

reg\_asym\_atl1\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-8.657 \pm 0.059$   $\chi^2/\text{NDF}$ : 575742.7/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-13.077 \pm 0.062$   $\chi^2/\text{NDF}$ : 558318.9/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

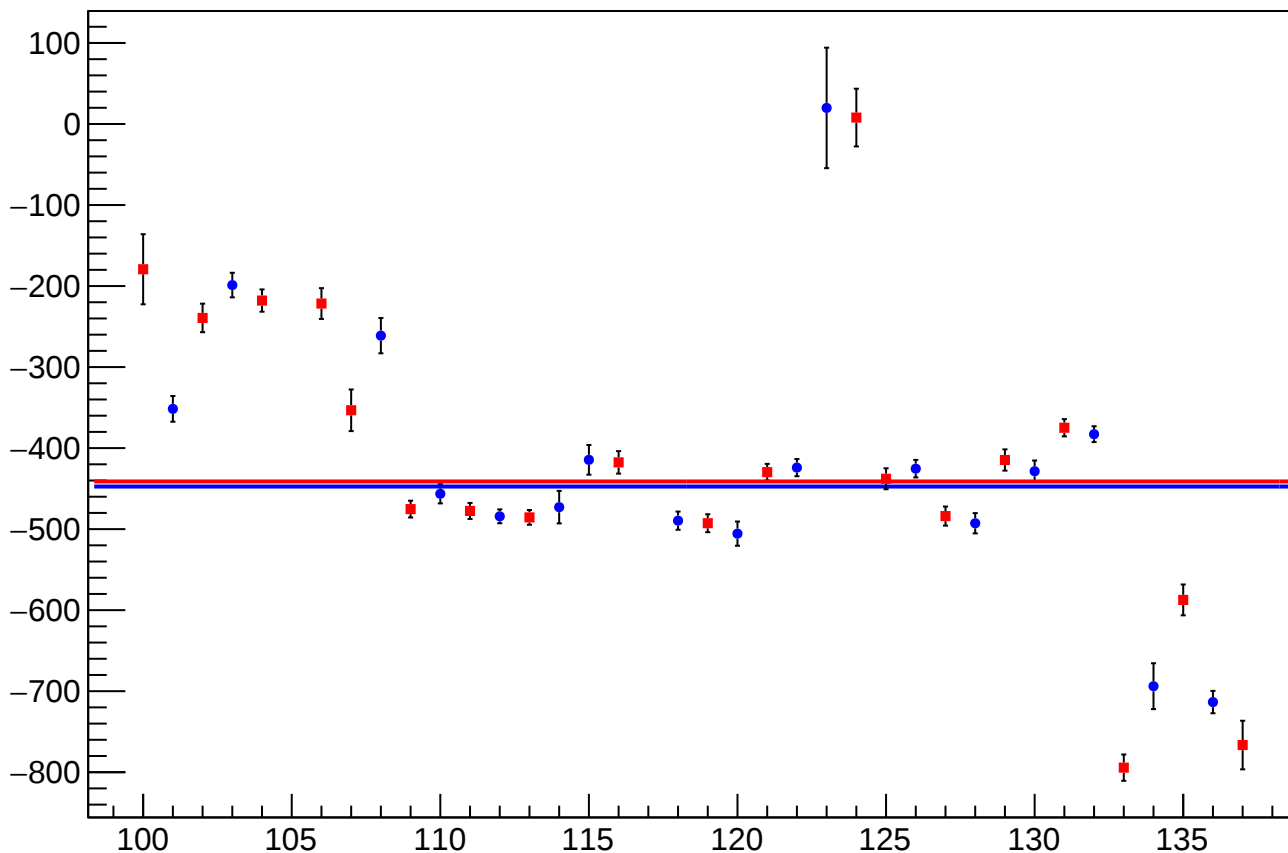
Right:  $-10.767 \pm 0.043$   $\chi^2/\text{NDF}$ : 1136731.7/35

In:  $-8.657 \pm 0.059$   $\chi^2/\text{NDF}$ : 575742.7/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-10.767 \pm 0.043$   $\chi^2/\text{NDF}$ : 1136731.7/35

# reg\_asym\_atl2\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -447.440+/-3.231  $\chi^2/\text{NDF}$ : 985.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -441.170+/-3.098  $\chi^2/\text{NDF}$ : 1516.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

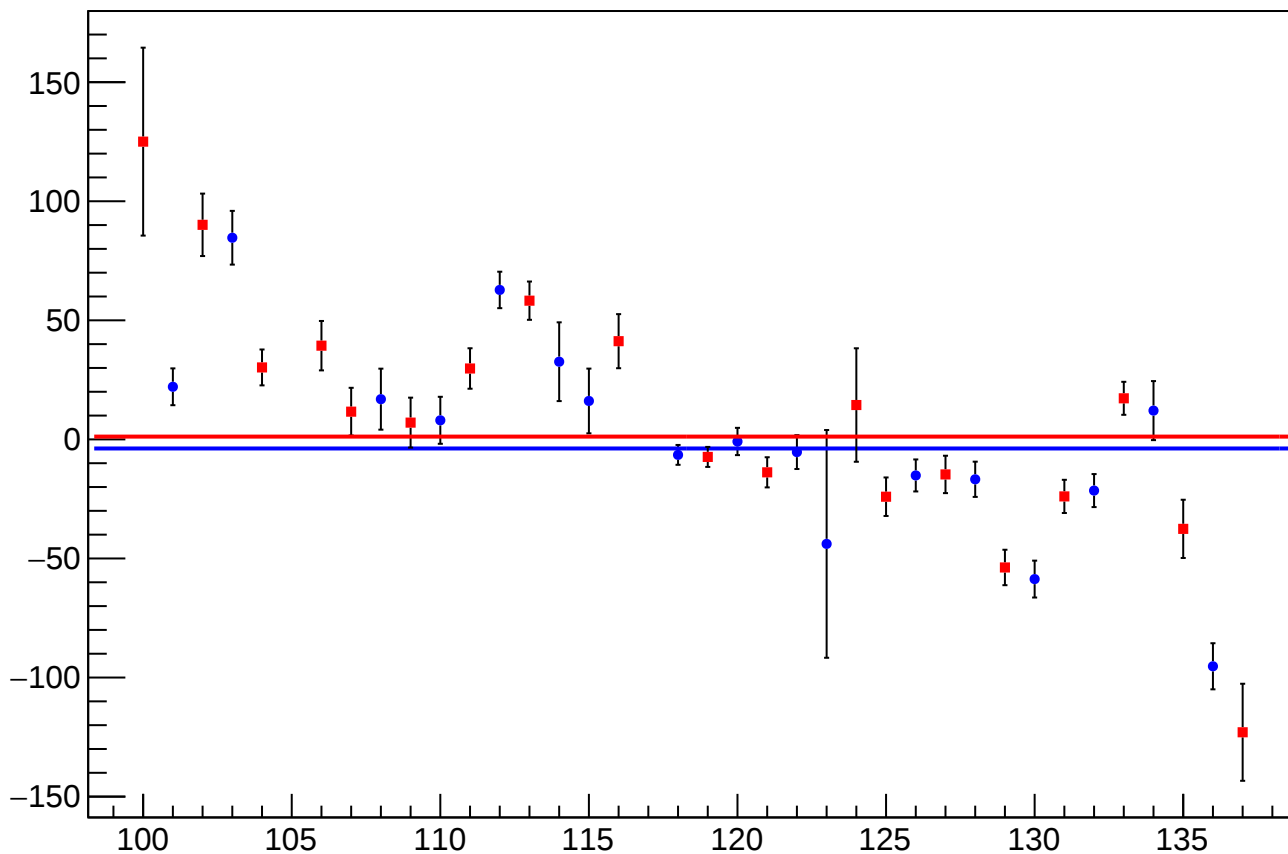
Right: -444.173+/-2.236  $\chi^2/\text{NDF}$ : 2503.9/35

In: -447.440+/-3.231  $\chi^2/\text{NDF}$ : 985.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -444.173+/-2.236  $\chi^2/\text{NDF}$ : 2503.9/35

reg\_asym\_atl2\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -3.815+/-1.923  $\chi^2$ /NDF: 314.3/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1.175+/-1.914  $\chi^2$ /NDF: 303.9/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

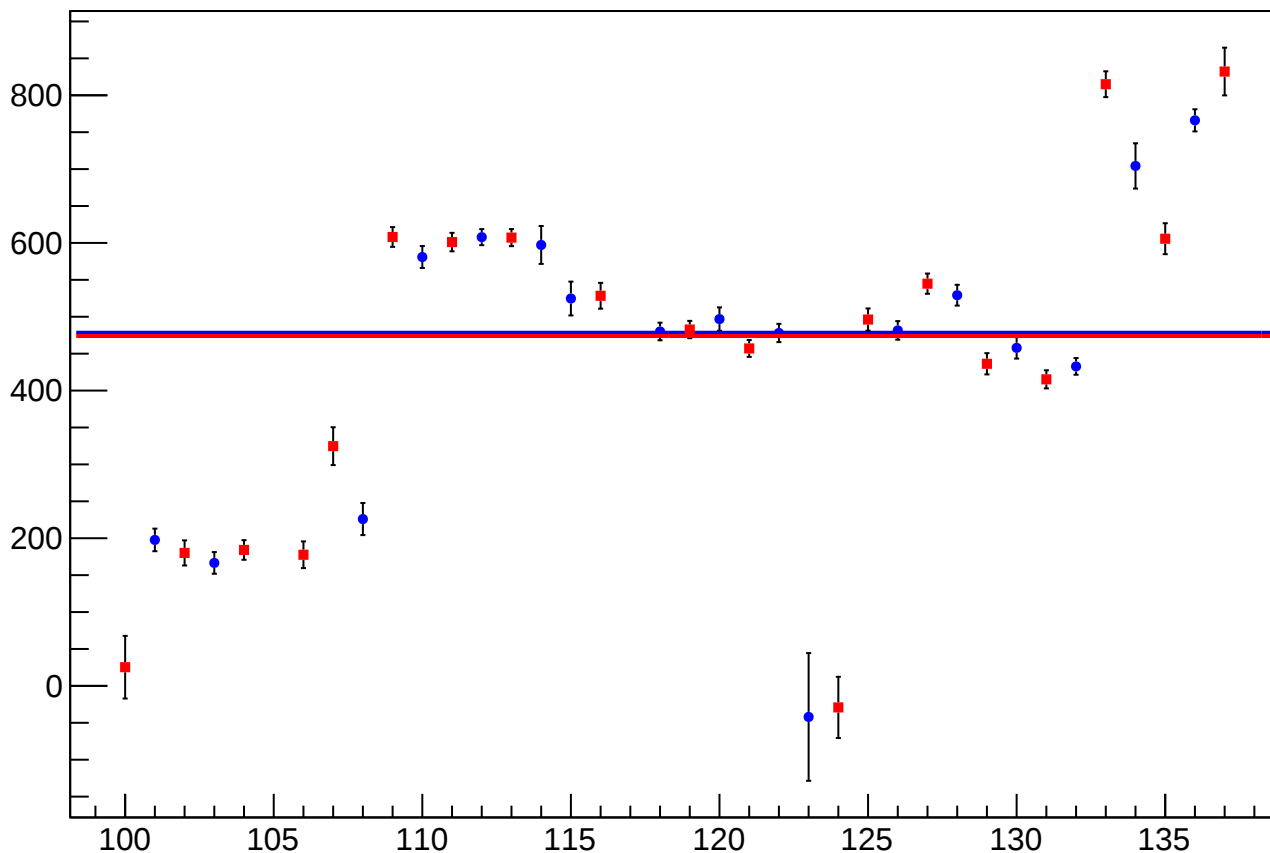
Right: -1.308+/-1.356  $\chi^2$ /NDF: 621.6/35

In: -3.815+/-1.923  $\chi^2$ /NDF:314.3/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: -1.308+/-1.356  $\chi^2$ /NDF: 621.6/35

reg\_asym\_atl2\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 478.334+/-3.662  $\chi^2$ /NDF: 1628.8/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 473.902+/-3.531  $\chi^2$ /NDF: 2285.0/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

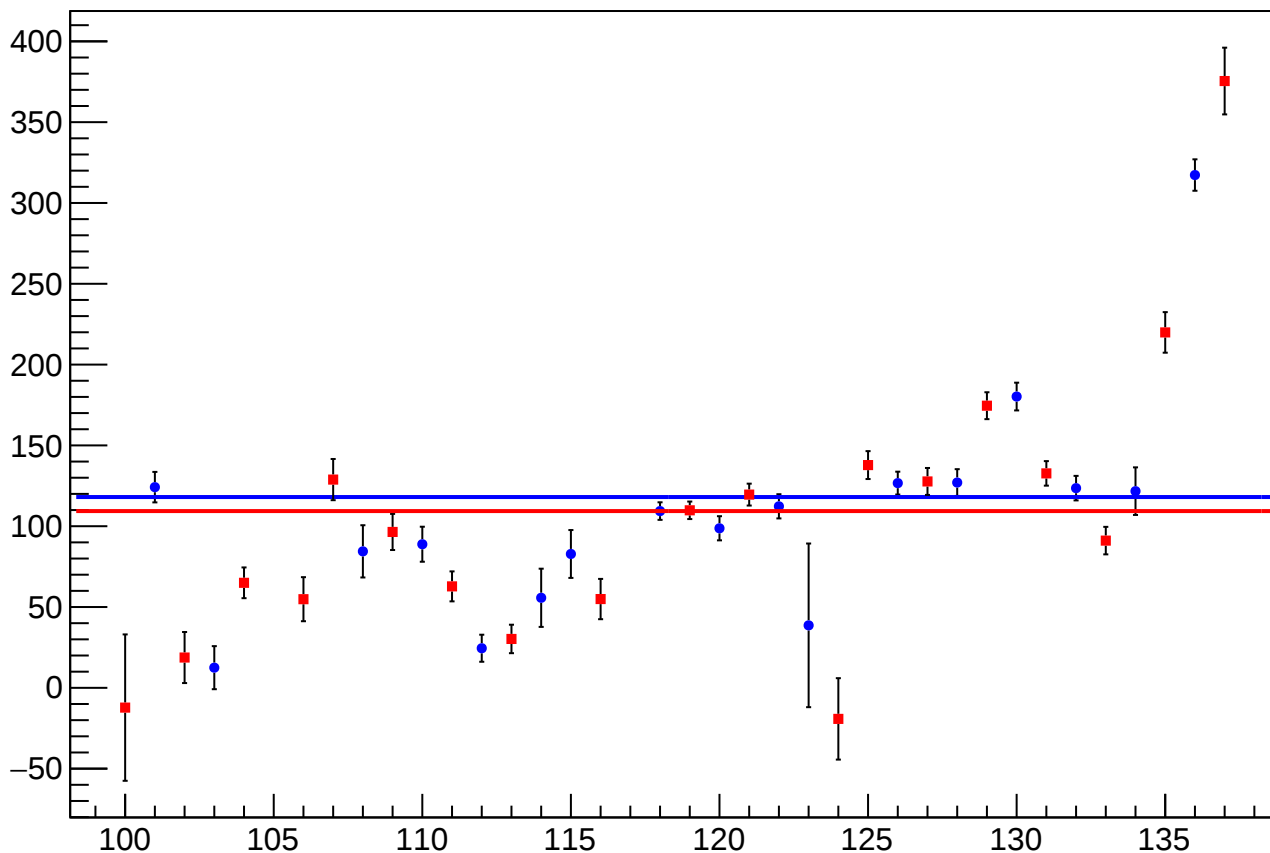
Right: 476.038+/-2.542  $\chi^2$ /NDF: 3914.6/35

In: 478.334+/-3.662  $\chi^2$ /NDF:1628.8/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 476.038+/-2.542  $\chi^2$ /NDF: 3914.6/35

reg\_asym\_atl2\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 118.055+/-2.225  $\chi^2/\text{NDF}$ : 705.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 109.367+/-2.205  $\chi^2/\text{NDF}$ : 569.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

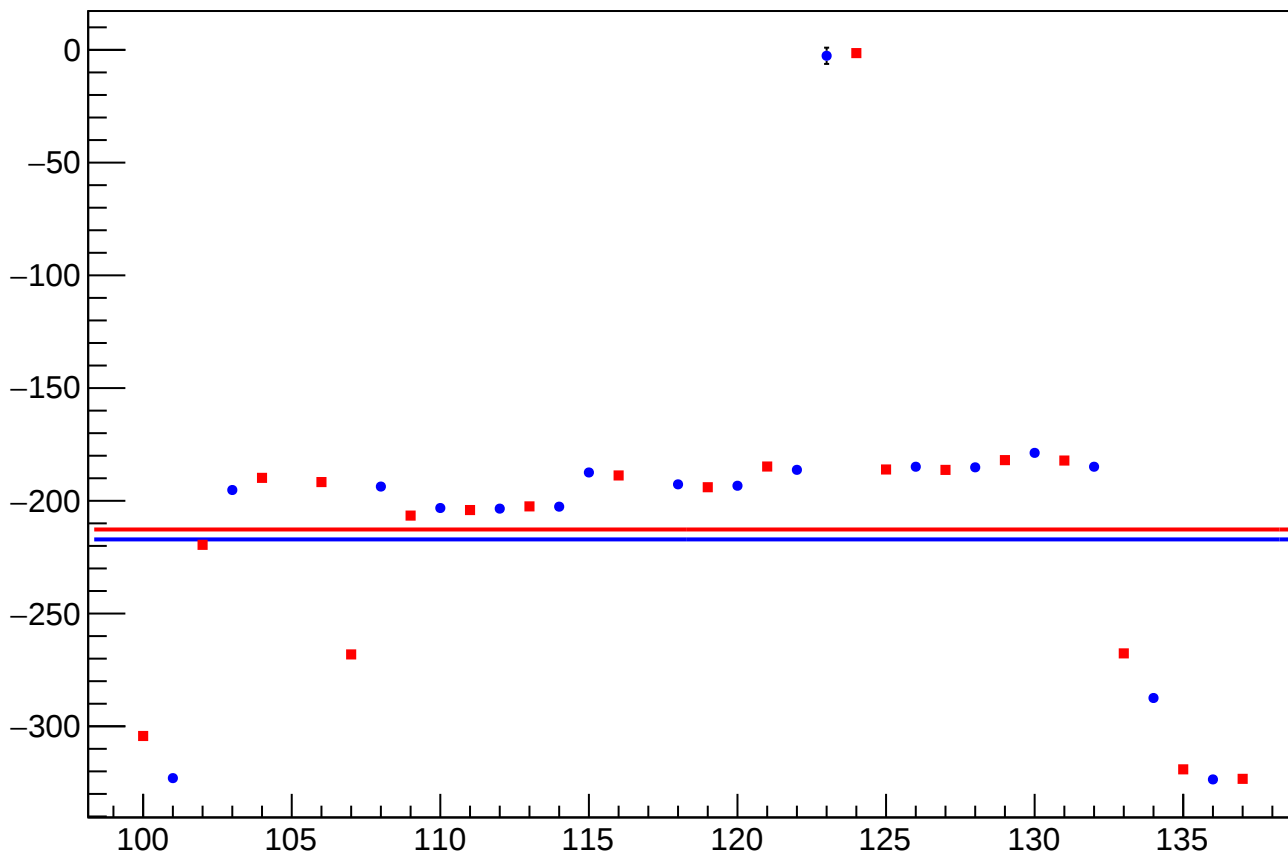
Right: 113.671+/-1.566  $\chi^2/\text{NDF}$ : 1282.8/35

In: 118.055+/-2.225  $\chi^2/\text{NDF}$ : 705.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 113.671+/-1.566  $\chi^2/\text{NDF}$ : 1282.8/35

reg\_asym\_atl2\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -217.120+/-0.137  $\chi^2/\text{NDF}$ : 146559.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -212.715+/-0.130  $\chi^2/\text{NDF}$ : 115566.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

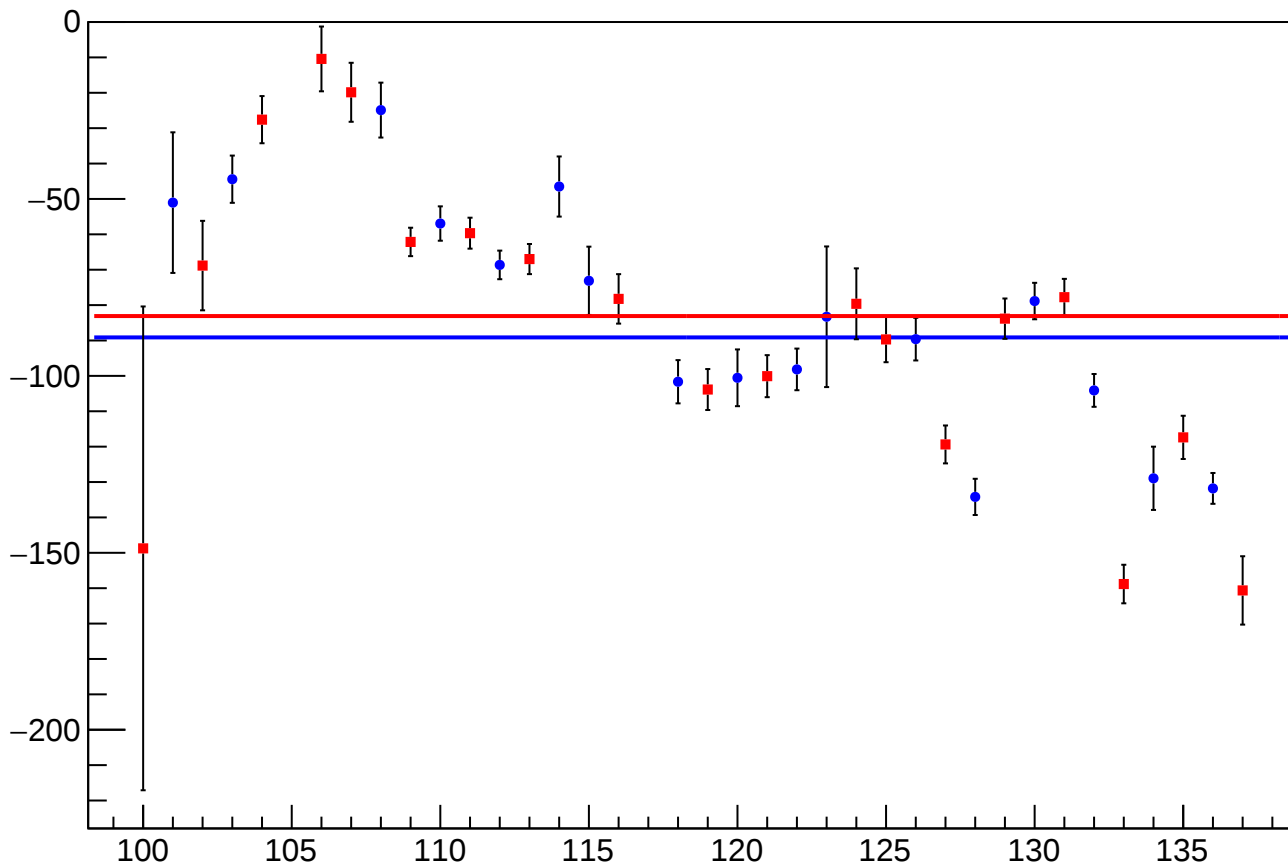
Right: -214.812+/-0.094  $\chi^2/\text{NDF}$ : 262670.9/35

In: -217.120+/-0.137  $\chi^2/\text{NDF}$ : 146559.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -214.812+/-0.094  $\chi^2/\text{NDF}$ : 262670.9/35

reg\_asym\_atr1\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-89.129 \pm 1.476$   $\chi^2/\text{NDF}$ : 431.0/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-83.095 \pm 1.398$   $\chi^2/\text{NDF}$ : 621.1/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

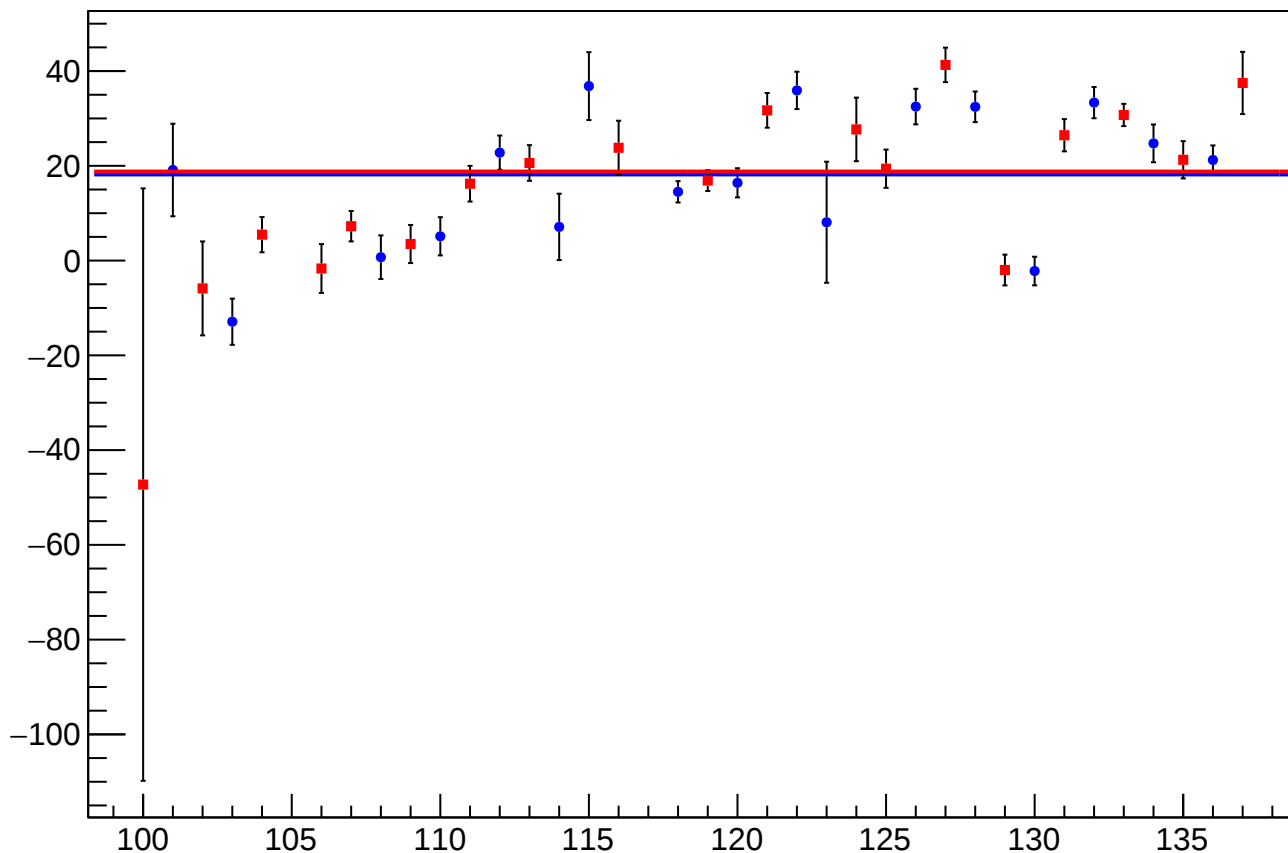
Right:  $-85.947 \pm 1.015$   $\chi^2/\text{NDF}$ : 1061.0/35

In:  $-89.129 \pm 1.476$   $\chi^2/\text{NDF}$ : 431.0/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-85.947 \pm 1.015$   $\chi^2/\text{NDF}$ : 1061.0/35

reg\_asym\_atr1\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 18.188+/-0.917  $\chi^2$ /NDF: 204.9/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 18.791+/-0.863  $\chi^2$ /NDF: 198.8/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

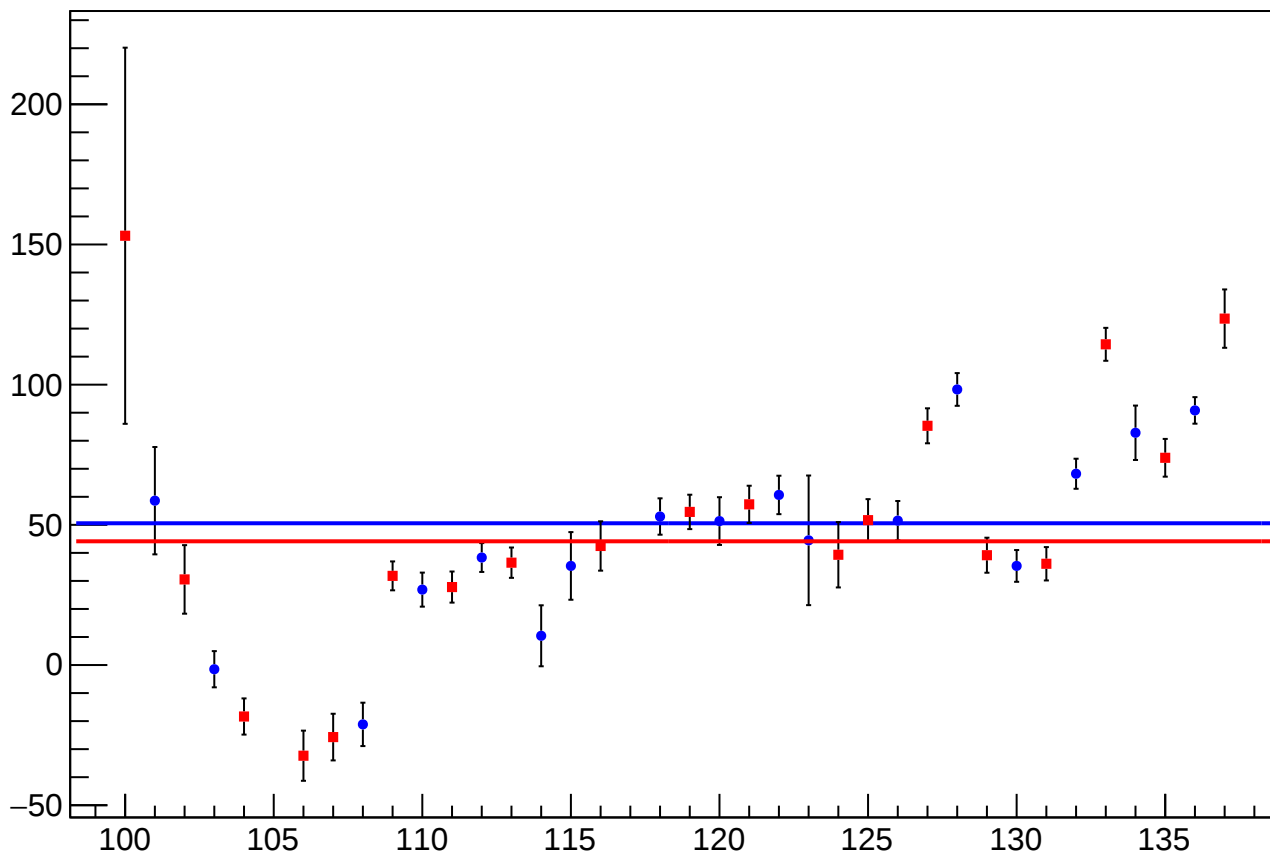
Right: 18.508+/-0.628  $\chi^2$ /NDF: 403.9/35

In: 18.188+/-0.917  $\chi^2$ /NDF:204.9/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 18.508+/-0.628  $\chi^2$ /NDF: 403.9/35

reg\_asym\_atr1\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 50.565+/-1.678  $\chi^2/\text{NDF}$ : 357.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 44.132+/-1.603  $\chi^2/\text{NDF}$ : 532.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

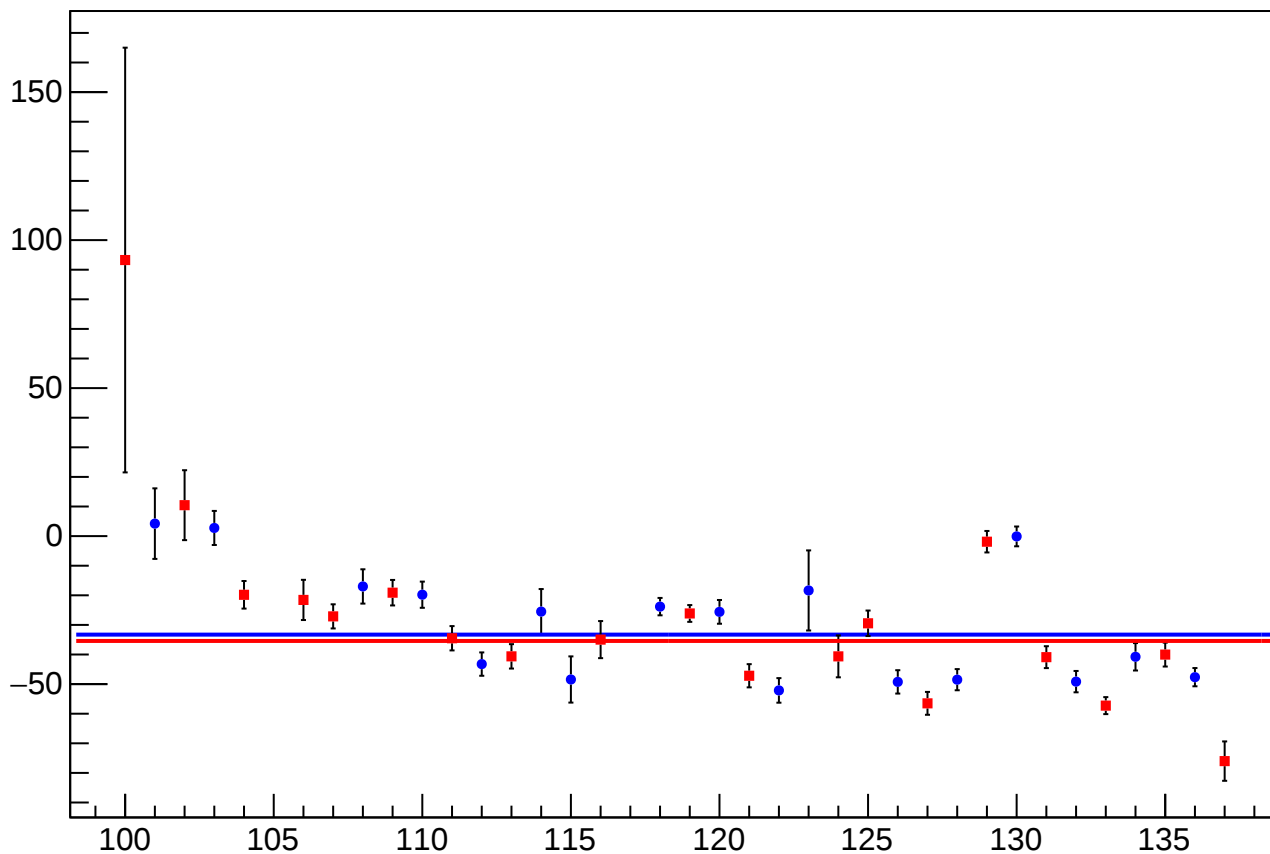
Right: 47.201+/-1.159  $\chi^2/\text{NDF}$ : 898.2/35

In: 50.565+/-1.678  $\chi^2/\text{NDF}$ : 357.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 47.201+/-1.159  $\chi^2/\text{NDF}$ : 898.2/35

reg\_asym\_atr1\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-33.281 \pm 1.043$   $\chi^2/\text{NDF}$ : 290.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-35.417 \pm 0.991$   $\chi^2/\text{NDF}$ : 289.7/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

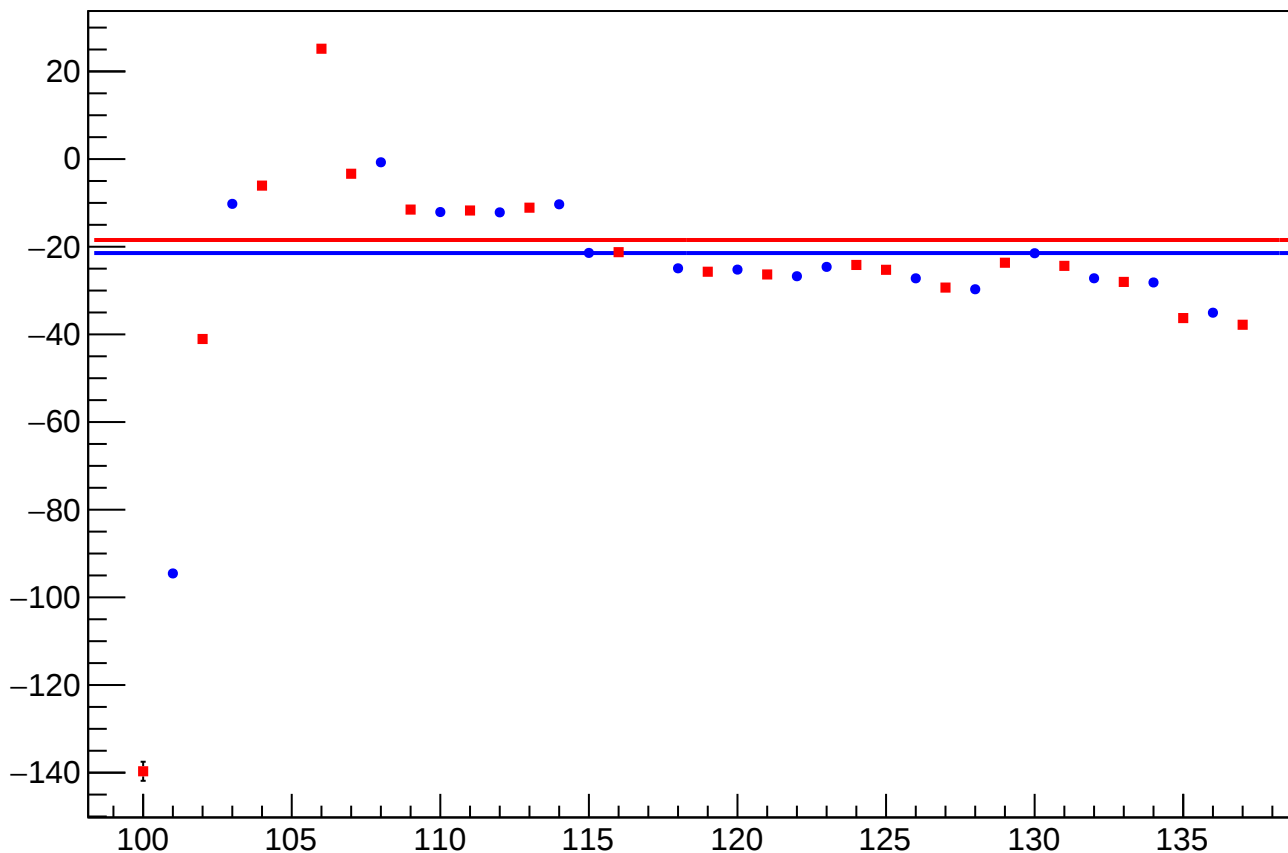
Right:  $-34.404 \pm 0.719$   $\chi^2/\text{NDF}$ : 582.0/35

In:  $-33.281 \pm 1.043$   $\chi^2/\text{NDF}$ : 290.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-34.404 \pm 0.719$   $\chi^2/\text{NDF}$ : 582.0/35

reg\_asym\_atr1\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -21.442+/-0.059  $\chi^2/\text{NDF}$ : 48968.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -18.463+/-0.057  $\chi^2/\text{NDF}$ : 80470.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

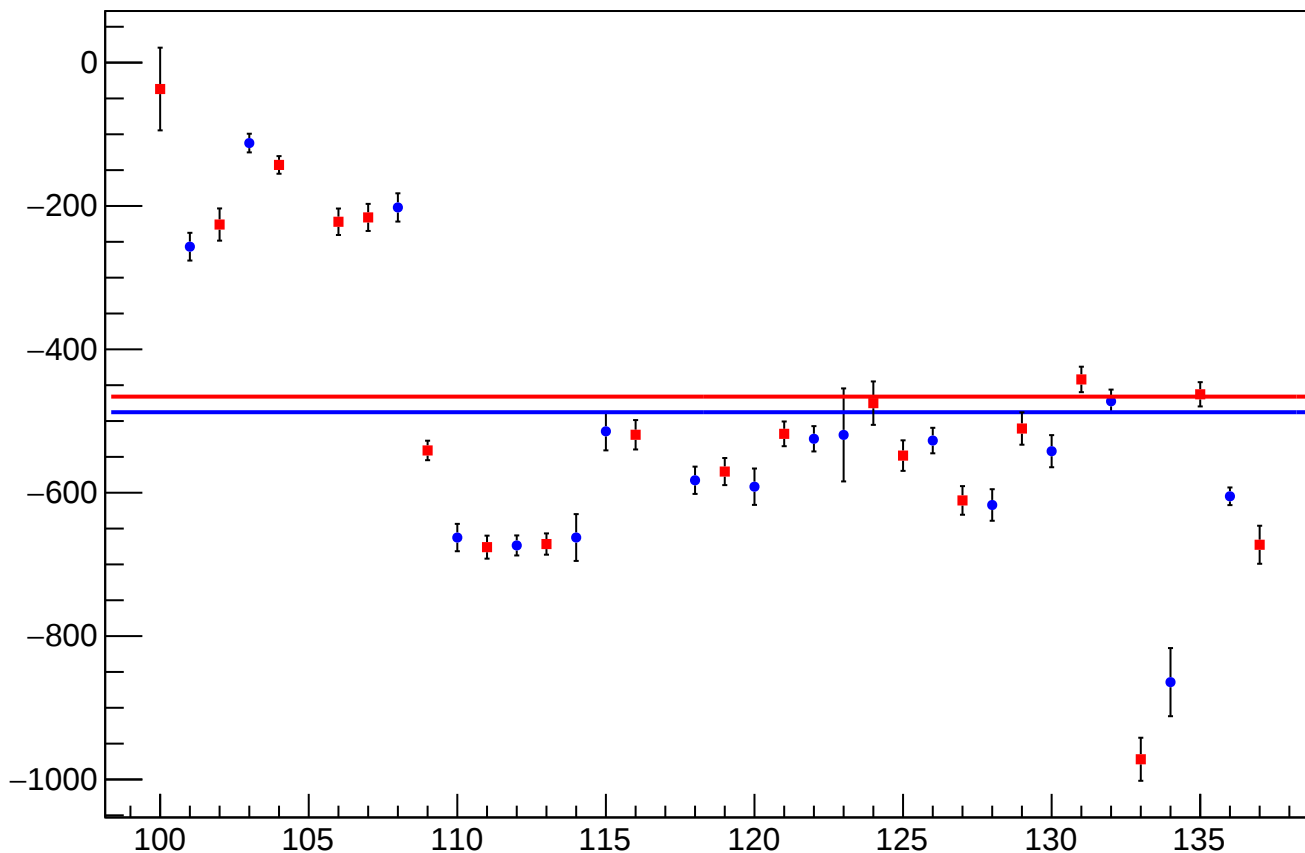
Right: -19.914+/-0.041  $\chi^2/\text{NDF}$ : 130751.2/35

In: -21.442+/-0.059  $\chi^2/\text{NDF}$ : 48968.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -19.914+/-0.041  $\chi^2/\text{NDF}$ : 130751.2/35

reg\_asym\_atr2\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -487.691+/-4.605  $\chi^2/\text{NDF}$ : 1720.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -465.935+/-4.305  $\chi^2/\text{NDF}$ : 2068.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

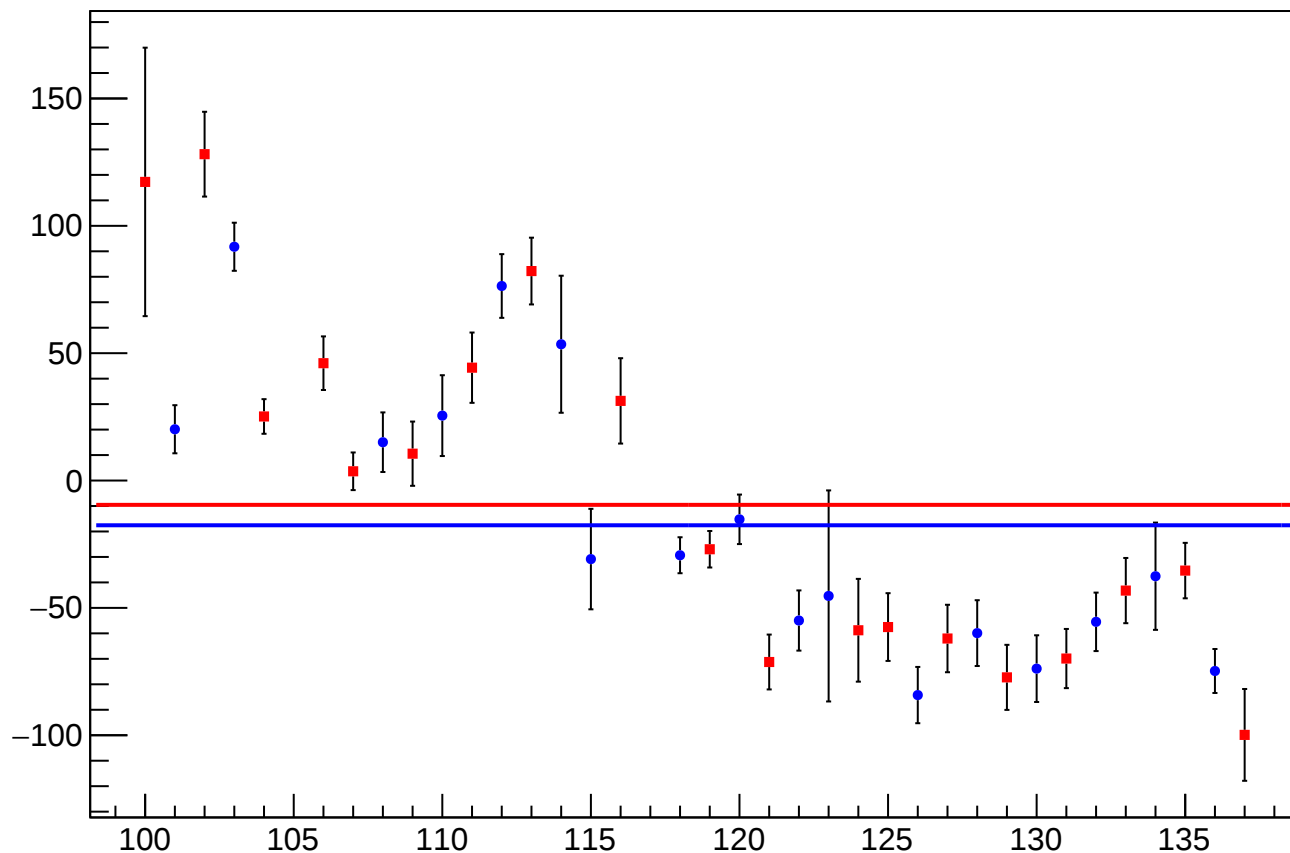
Right: -476.082+/-3.145  $\chi^2/\text{NDF}$ : 3800.9/35

In: -487.691+/-4.605  $\chi^2/\text{NDF}$ : 1720.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -476.082+/-3.145  $\chi^2/\text{NDF}$ : 3800.9/35

reg\_asym\_atr2\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -17.564 $\pm$ 2.820  $\chi^2$ /NDF: 363.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -9.547 $\pm$ 2.609  $\chi^2$ /NDF: 370.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

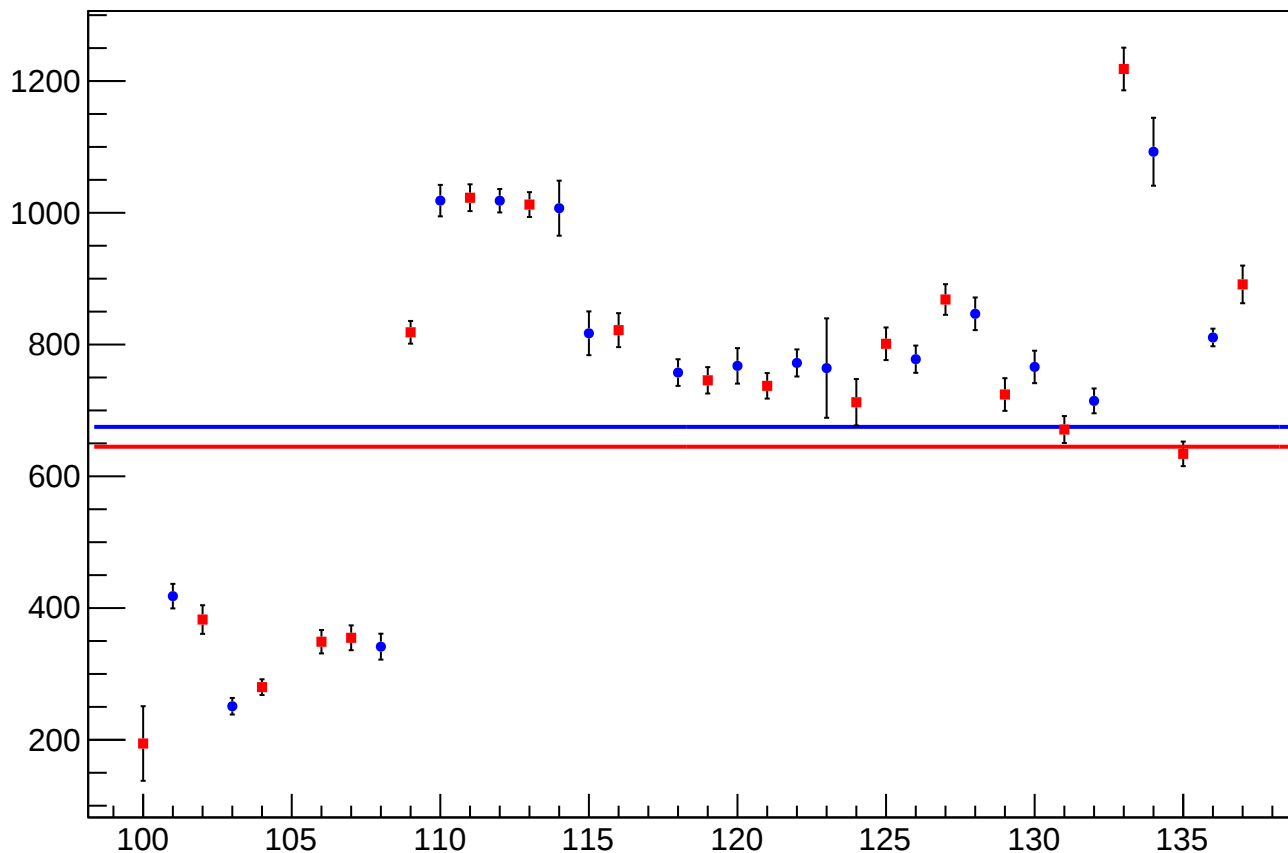
Right: -13.243 $\pm$ 1.915  $\chi^2$ /NDF: 738.4/35

In: -17.564 $\pm$ 2.820  $\chi^2$ /NDF:363.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -13.243 $\pm$ 1.915  $\chi^2$ /NDF: 738.4/35

reg\_asym\_atr2\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 675.045+/-5.067  $\chi^2/\text{NDF}$ : 2584.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 644.915+/-4.761  $\chi^2/\text{NDF}$ : 3122.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

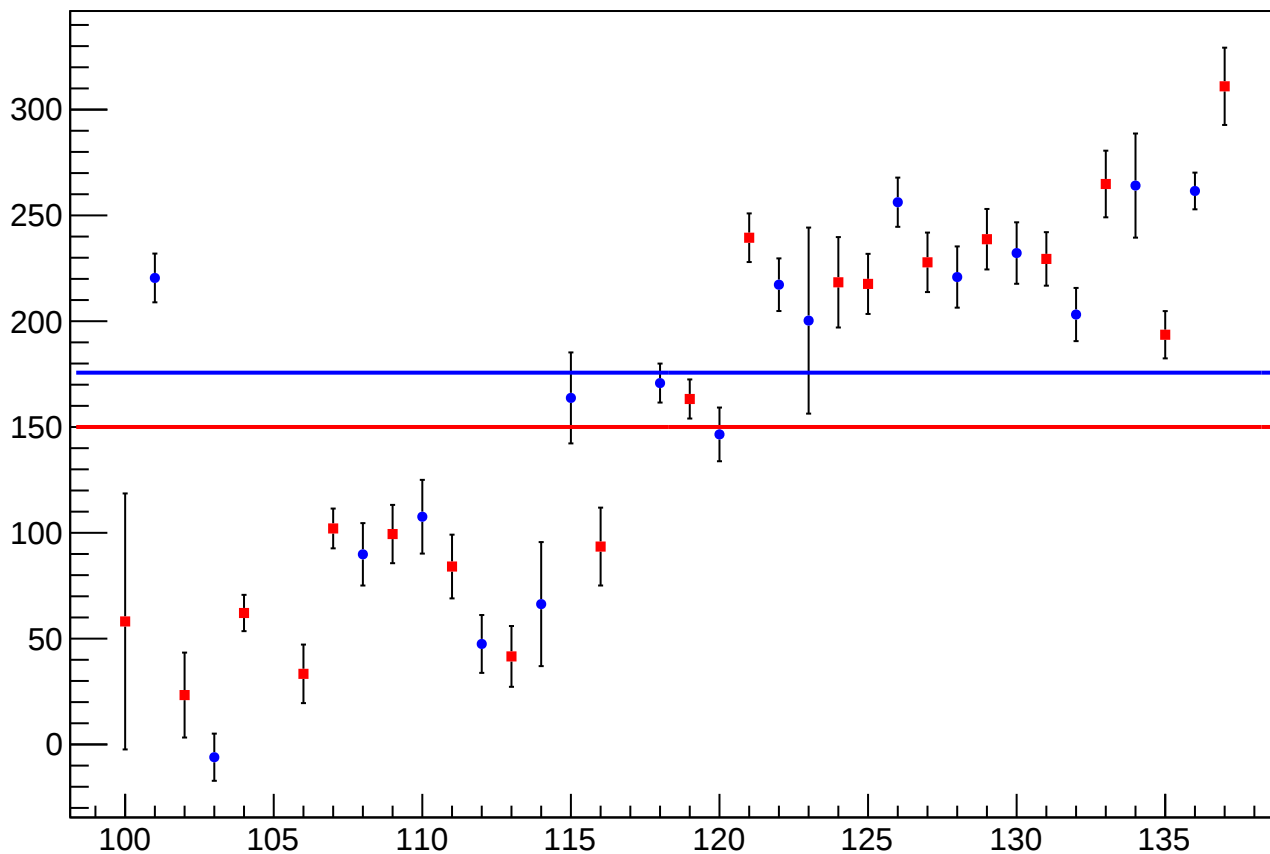
Right: 659.042+/-3.470  $\chi^2/\text{NDF}$ : 5725.3/35

In: 675.045+/-5.067  $\chi^2/\text{NDF}$ : 2584.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 659.042+/-3.470  $\chi^2/\text{NDF}$ : 5725.3/35

reg\_asym\_atr2\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 175.686+/-3.239  $\chi^2/\text{NDF}$ : 637.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 150.017+/-3.042  $\chi^2/\text{NDF}$ : 693.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

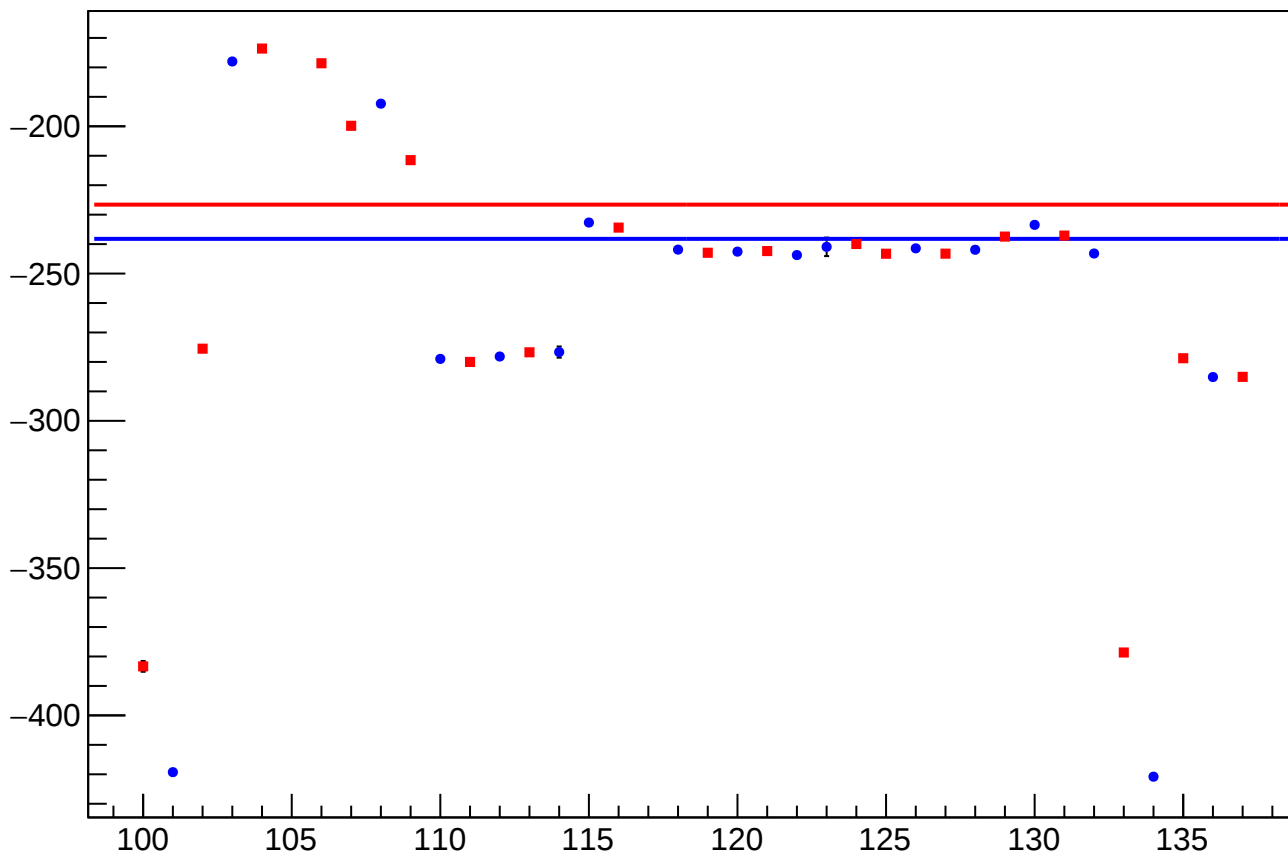
Right: 162.048+/-2.217  $\chi^2/\text{NDF}$ : 1365.0/35

In: 175.686+/-3.239  $\chi^2/\text{NDF}$ : 637.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 162.048+/-2.217  $\chi^2/\text{NDF}$ : 1365.0/35

reg\_asym\_atr2\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -238.217+/-0.160  $\chi^2/\text{NDF}$ : 167120.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -226.597+/-0.151  $\chi^2/\text{NDF}$ : 102562.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

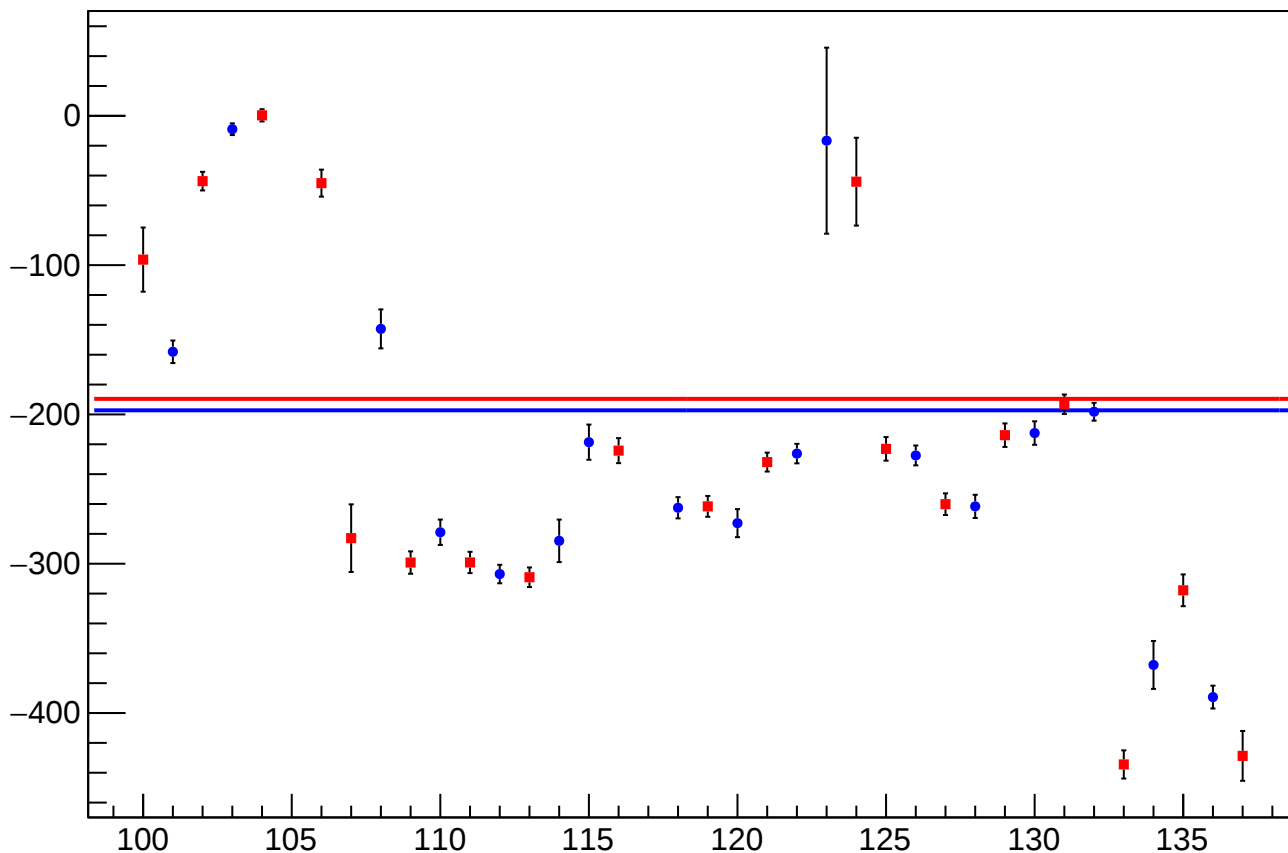
Right: -232.063+/-0.110  $\chi^2/\text{NDF}$ : 272459.7/35

In: -238.217+/-0.160  $\chi^2/\text{NDF}$ : 167120.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -232.063+/-0.110  $\chi^2/\text{NDF}$ : 272459.7/35

reg\_asym\_atl\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -197.253+/-1.826  $\chi^2/\text{NDF}$ : 3823.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -189.563+/-1.763  $\chi^2/\text{NDF}$ : 5104.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

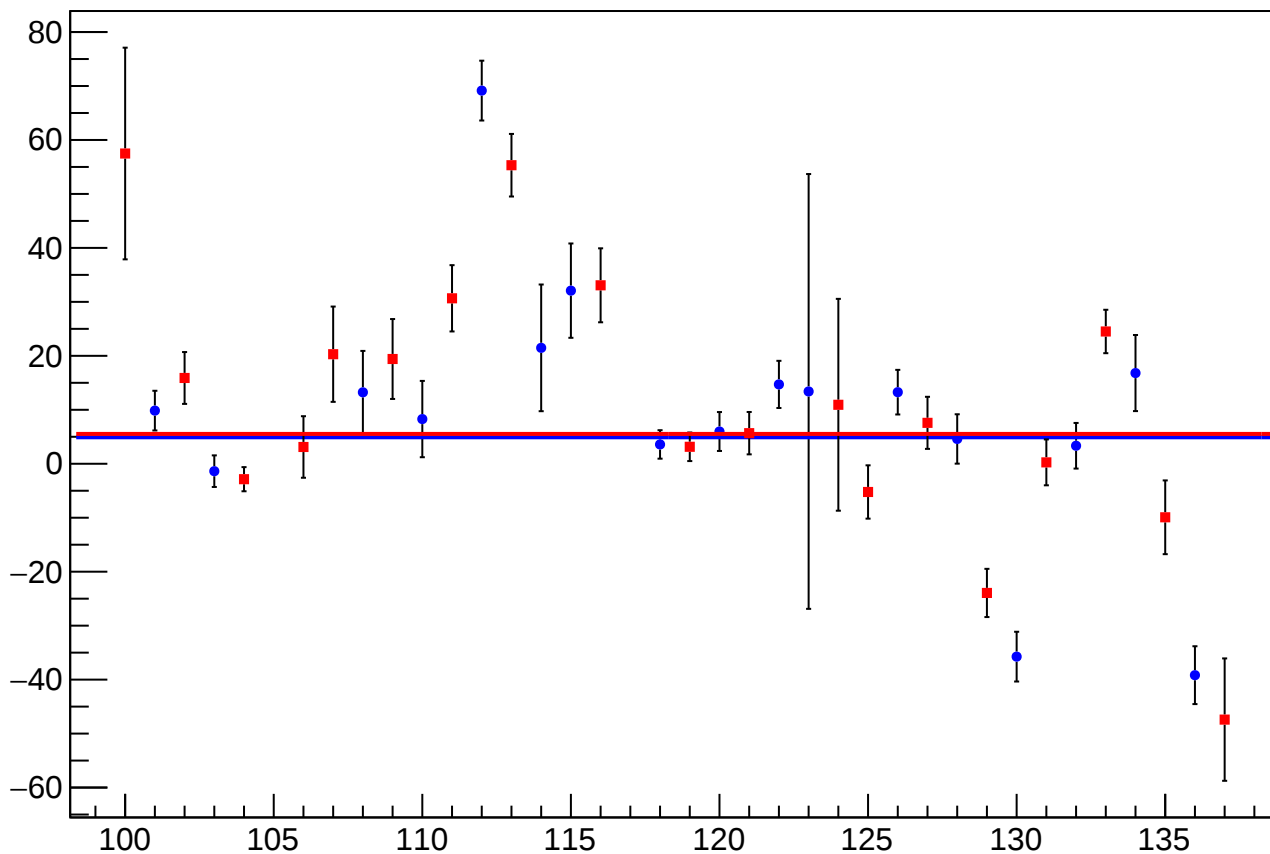
Right: -193.275+/-1.268  $\chi^2/\text{NDF}$ : 8937.4/35

In: -197.253+/-1.826  $\chi^2/\text{NDF}$ : 3823.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -193.275+/-1.268  $\chi^2/\text{NDF}$ : 8937.4/35

reg\_asym\_atl\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 4.905+/-1.105  $\chi^2/\text{NDF}$ : 311.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 5.530+/-1.069  $\chi^2/\text{NDF}$ : 238.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

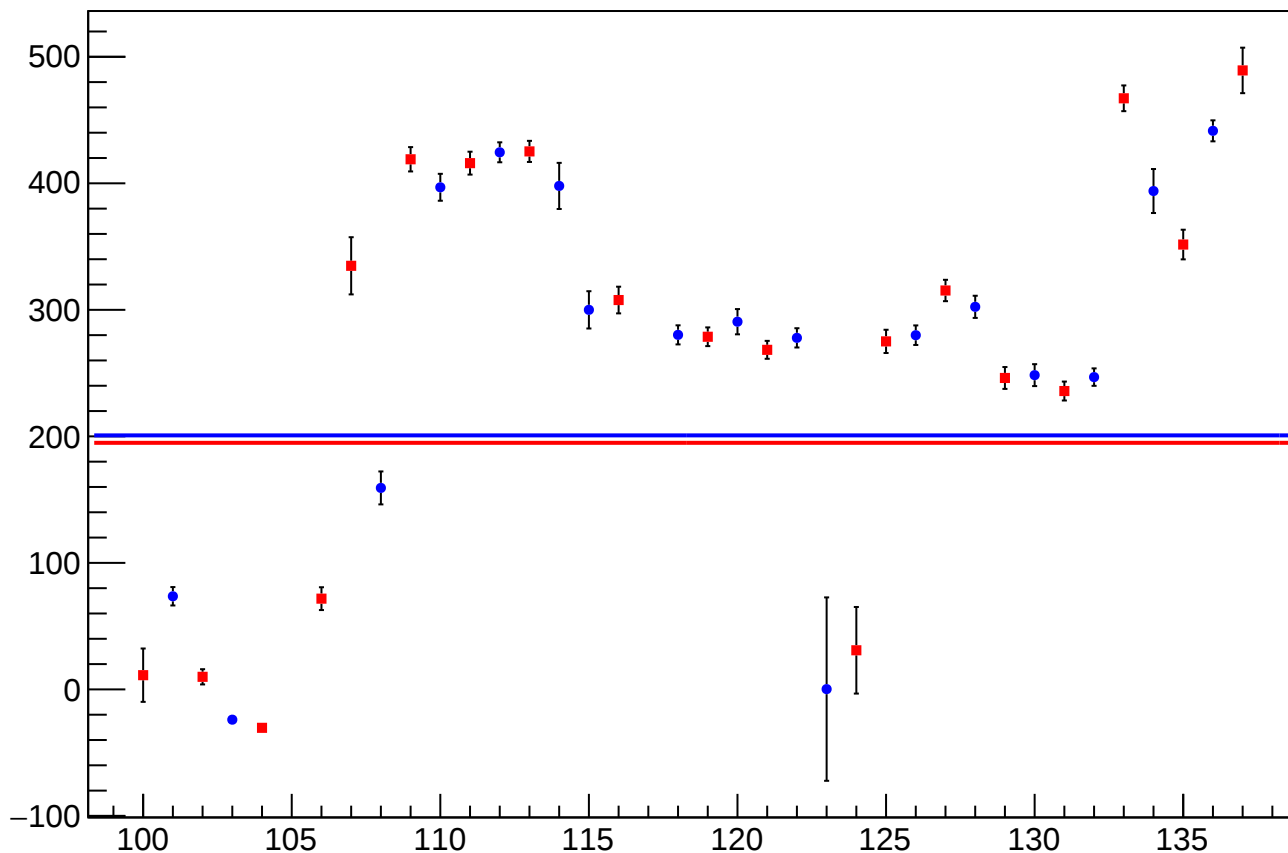
Right: 5.228+/-0.768  $\chi^2/\text{NDF}$ : 550.7/35

In: 4.905+/-1.105  $\chi^2/\text{NDF}$ : 311.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 5.228+/-0.768  $\chi^2/\text{NDF}$ : 550.7/35

reg\_asym\_atl\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 200.773+/-1.983  $\chi^2/\text{NDF}$ : 6733.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 194.892+/-1.924  $\chi^2/\text{NDF}$ : 8247.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

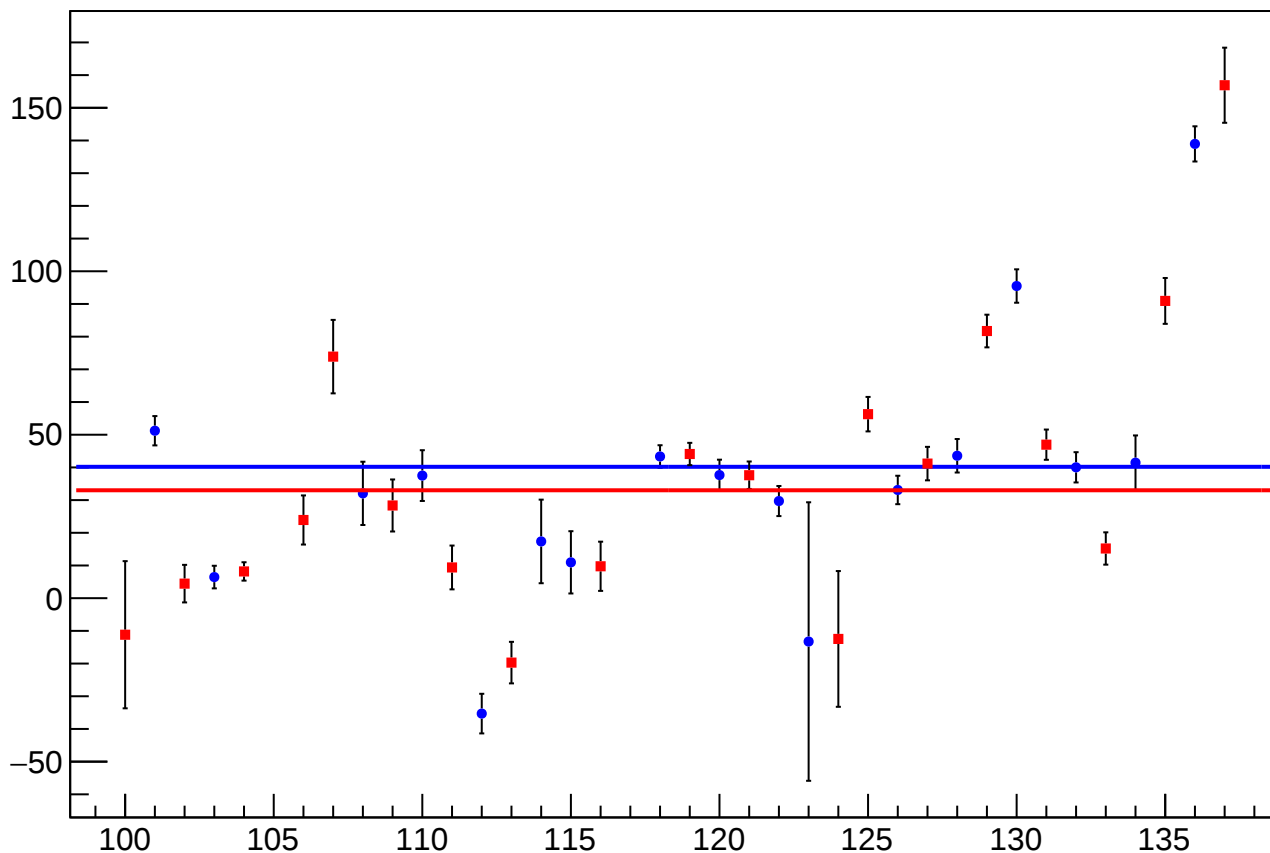
Right: 197.743+/-1.381  $\chi^2/\text{NDF}$ : 14984.6/35

In: 200.773+/-1.983  $\chi^2/\text{NDF}$ : 6733.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 197.743+/-1.381  $\chi^2/\text{NDF}$ : 14984.6/35

reg\_asym\_atl\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 40.185+/-1.283  $\chi^2/\text{NDF}$ : 734.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 33.006+/-1.250  $\chi^2/\text{NDF}$ : 552.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

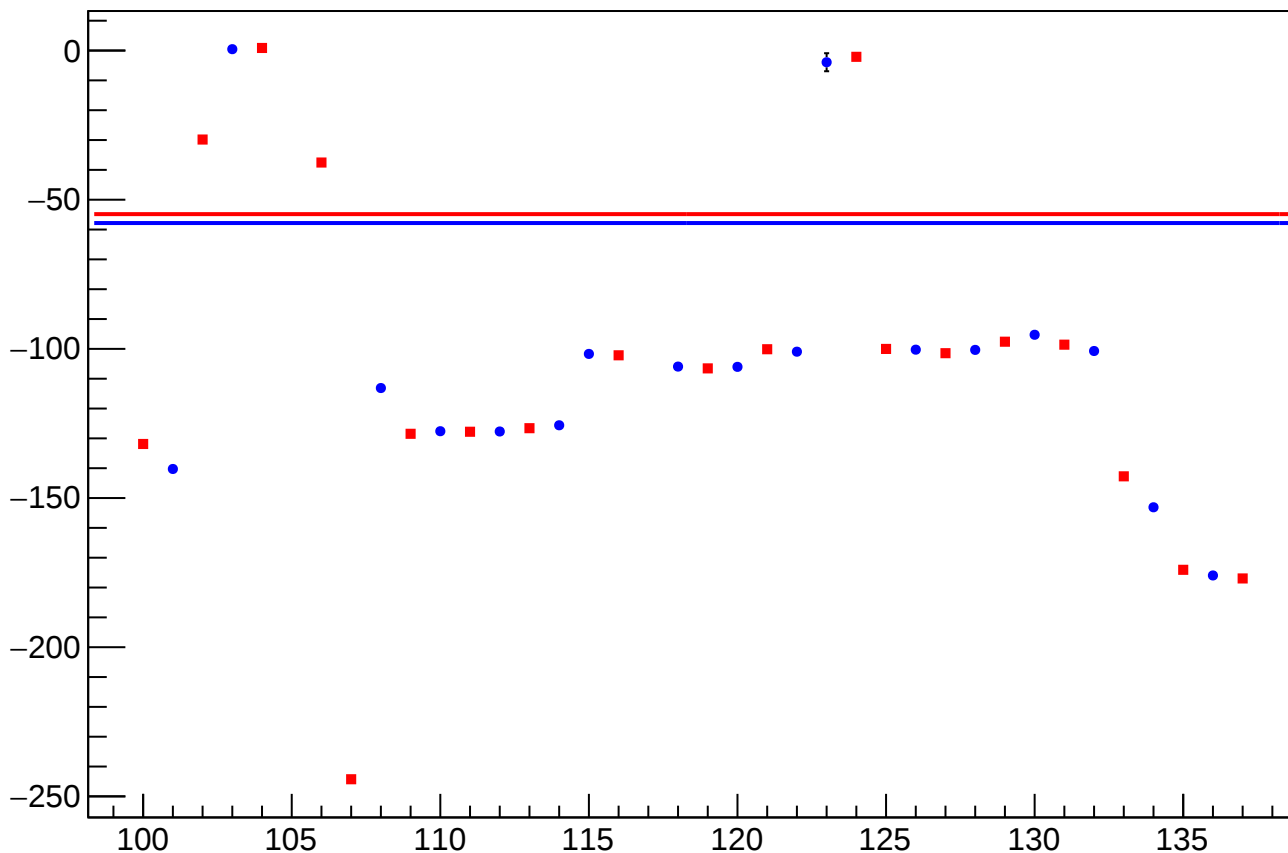
Right: 36.503+/-0.896  $\chi^2/\text{NDF}$ : 1303.3/35

In: 40.185+/-1.283  $\chi^2/\text{NDF}$ : 734.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 36.503+/-0.896  $\chi^2/\text{NDF}$ : 1303.3/35

reg\_asym\_atl\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -57.821 $\pm$ 0.062  $\chi^2$ /NDF: 1101296.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -54.833 $\pm$ 0.060  $\chi^2$ /NDF: 1000741.7/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

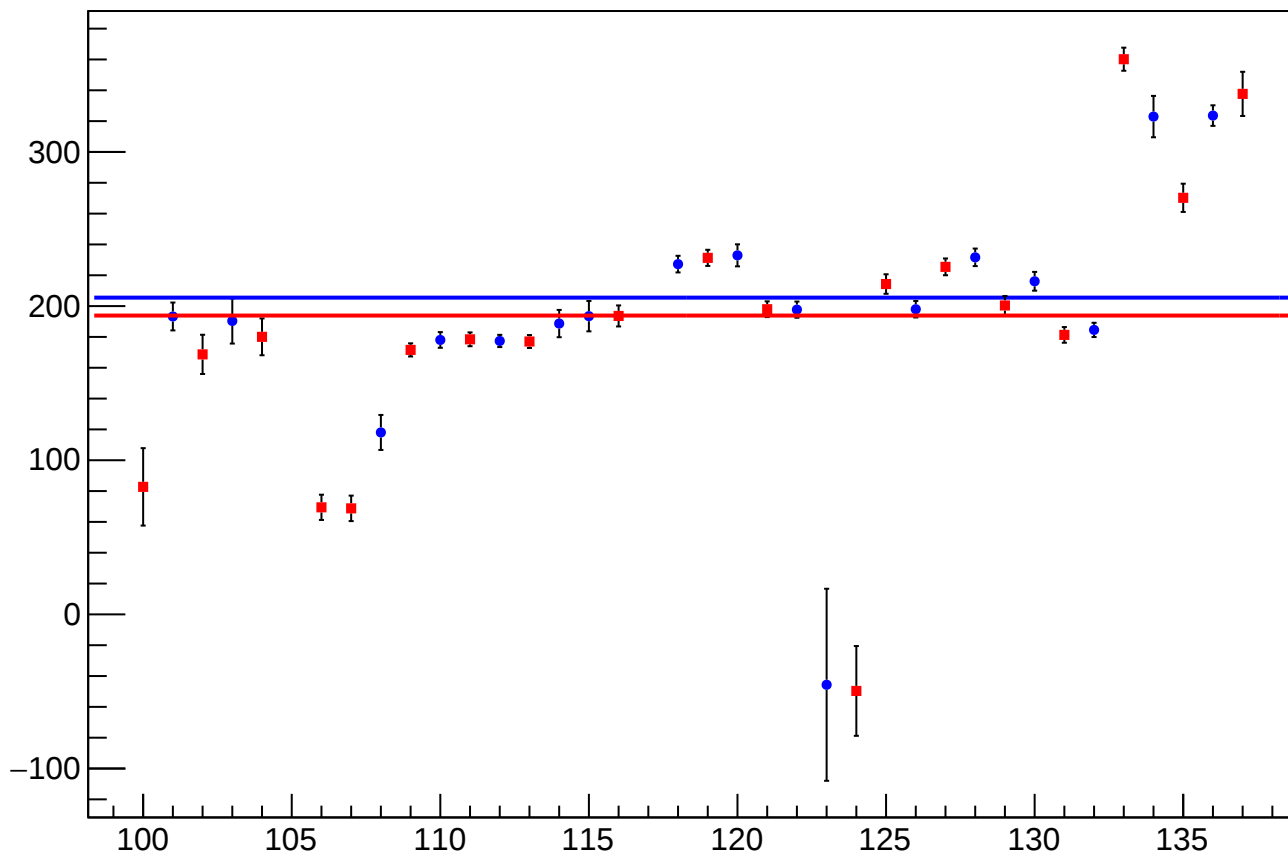
Right: -56.289 $\pm$ 0.043  $\chi^2$ /NDF: 2103236.7/35

In: -57.821 $\pm$ 0.062  $\chi^2$ /NDF:1101296.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -56.289 $\pm$ 0.043  $\chi^2$ /NDF: 2103236.7/35

reg\_asym\_atl\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 205.494 $\pm$ 1.565  $\chi^2$ /NDF: 633.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 193.862 $\pm$ 1.470  $\chi^2$ /NDF: 1377.1/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

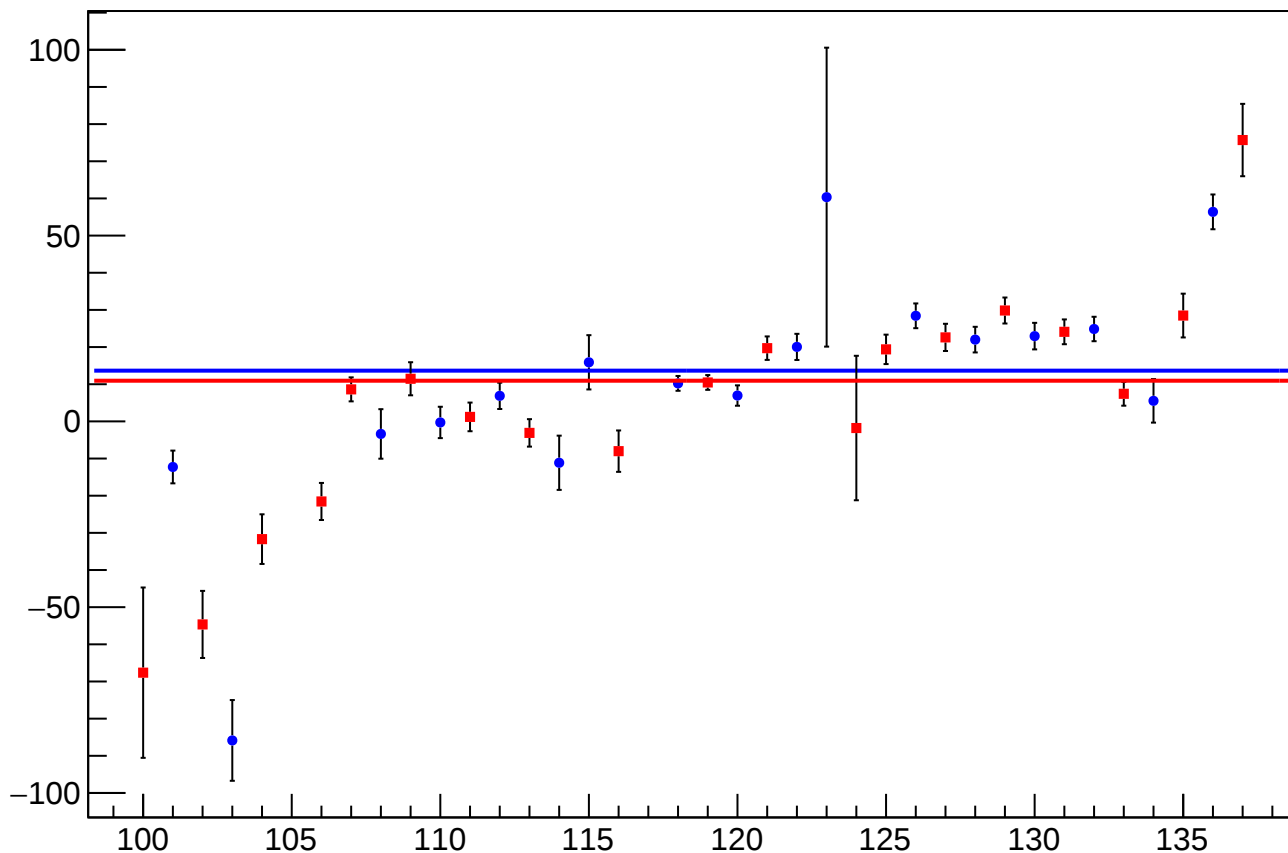
Right: 199.317 $\pm$ 1.072  $\chi^2$ /NDF: 2039.4/35

In: 205.494 $\pm$ 1.565  $\chi^2$ /NDF: 633.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 199.317 $\pm$ 1.072  $\chi^2$ /NDF: 2039.4/35

reg\_asym\_atl\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 13.652 $\pm$ 0.936  $\chi^2$ /NDF: 294.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 10.944 $\pm$ 0.913  $\chi^2$ /NDF: 302.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

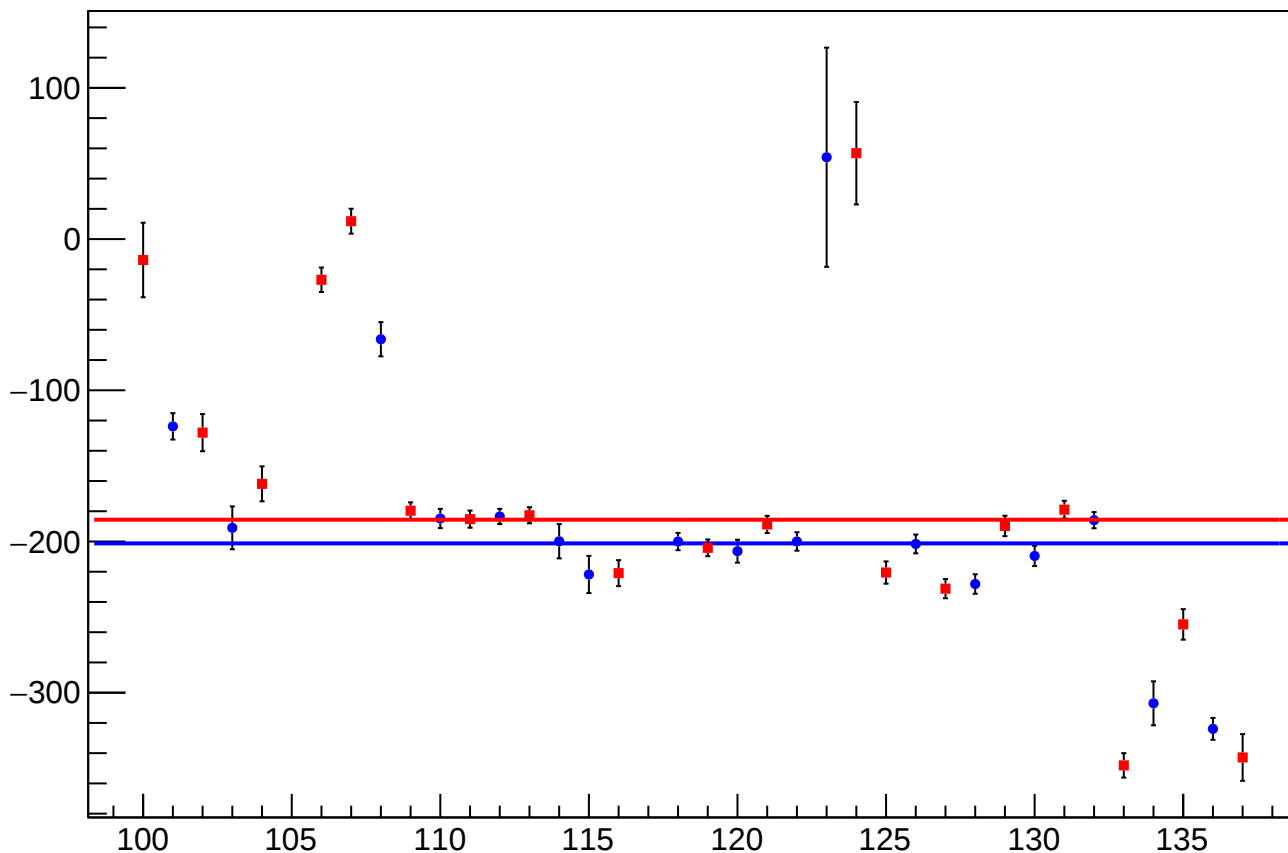
Right: 12.264 $\pm$ 0.654  $\chi^2$ /NDF: 600.9/35

In: 13.652 $\pm$ 0.936  $\chi^2$ /NDF: 294.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 12.264 $\pm$ 0.654  $\chi^2$ /NDF: 600.9/35

reg\_asym\_atl\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -201.266+/-1.795  $\chi^2$ /NDF: 623.4/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: -185.593+/-1.699  $\chi^2$ /NDF: 1746.0/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

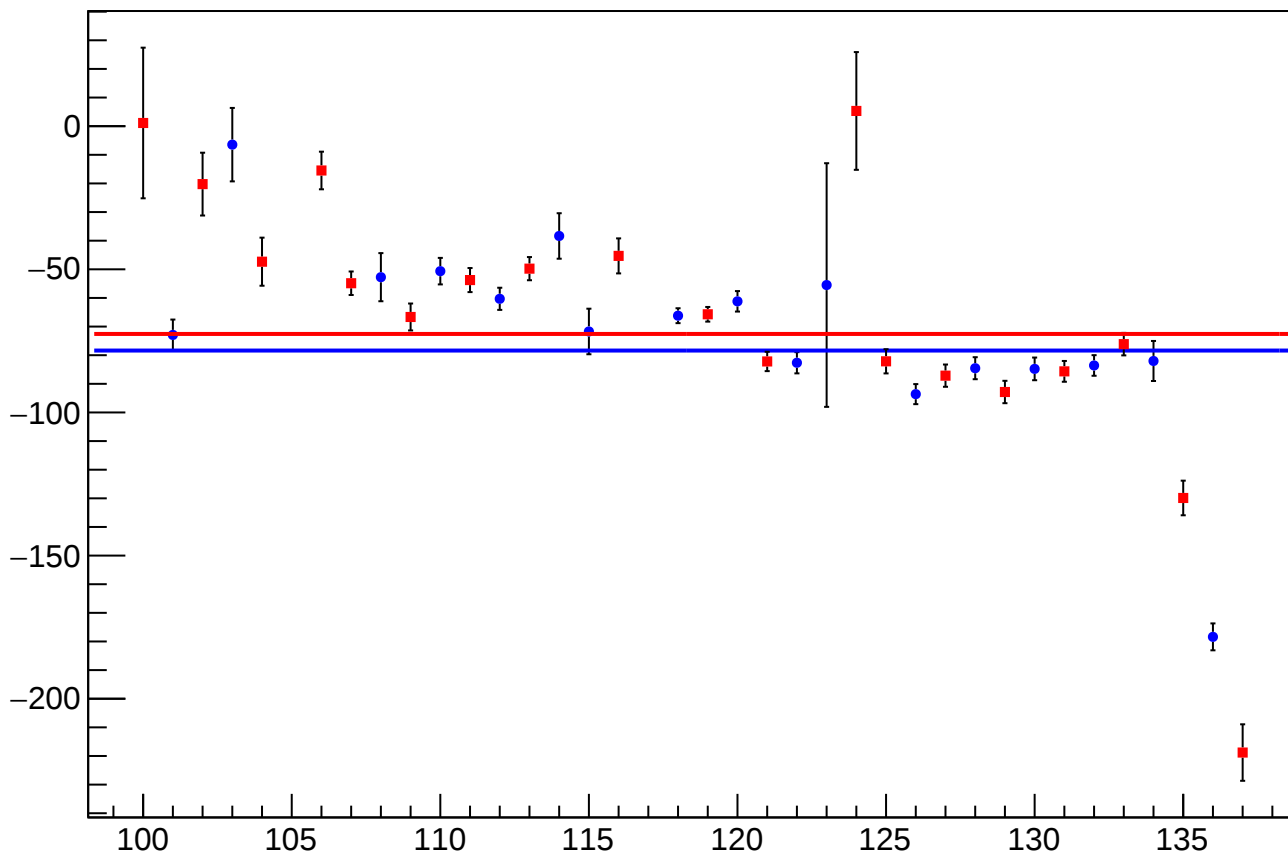
Right: -192.999+/-1.234  $\chi^2$ /NDF: 2409.6/35

In: -201.266+/-1.795  $\chi^2$ /NDF:623.4/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: -192.999+/-1.234  $\chi^2$ /NDF: 2409.6/35

reg\_asym\_atl\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-78.376 \pm 1.081$   $\chi^2/\text{NDF}$ : 651.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-72.577 \pm 1.052$   $\chi^2/\text{NDF}$ : 605.8/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

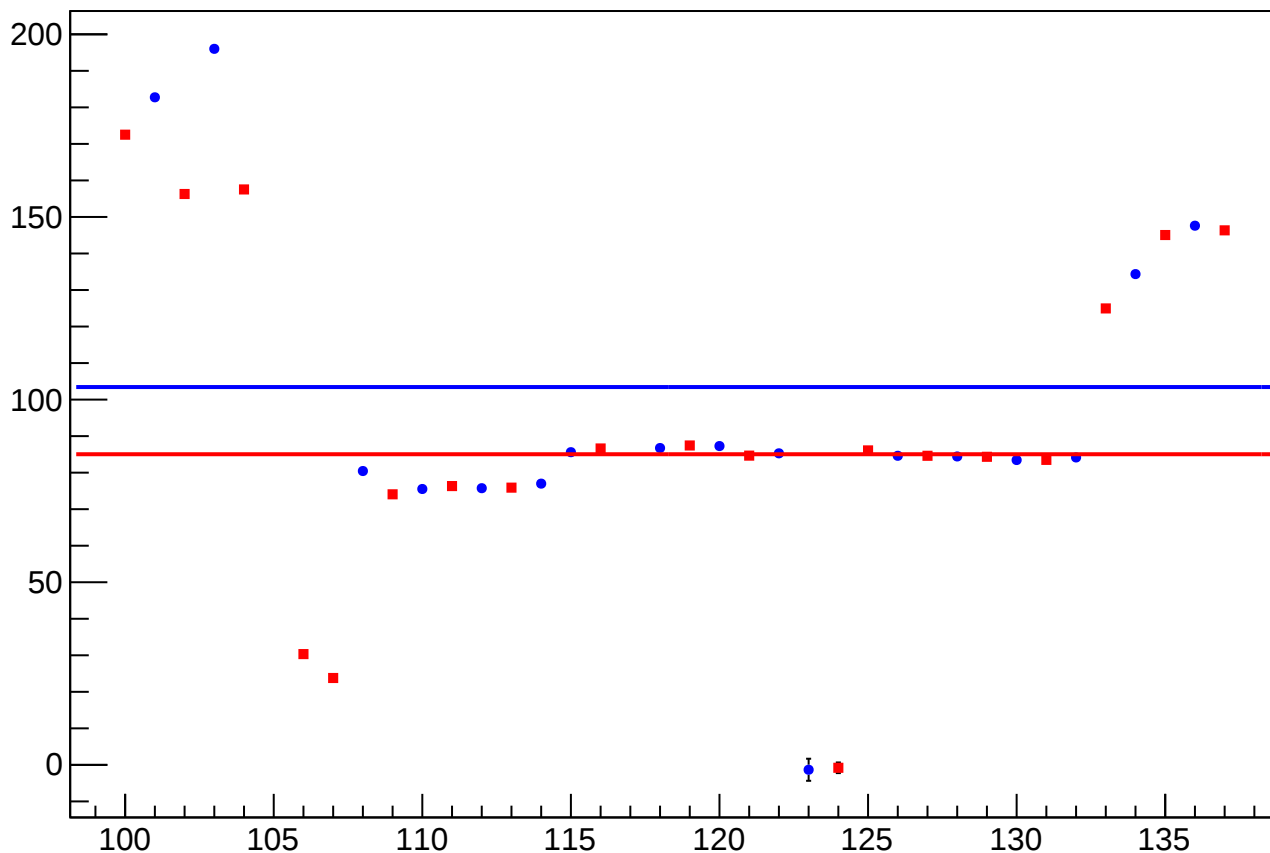
Right:  $-75.395 \pm 0.754$   $\chi^2/\text{NDF}$ : 1272.0/35

In:  $-78.376 \pm 1.081$   $\chi^2/\text{NDF}$ : 651.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-75.395 \pm 0.754$   $\chi^2/\text{NDF}$ : 1272.0/35

reg\_asym\_atl\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 103.436 $\pm$ 0.071  $\chi^2$ /NDF: 272785.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 85.043 $\pm$ 0.064  $\chi^2$ /NDF: 422343.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

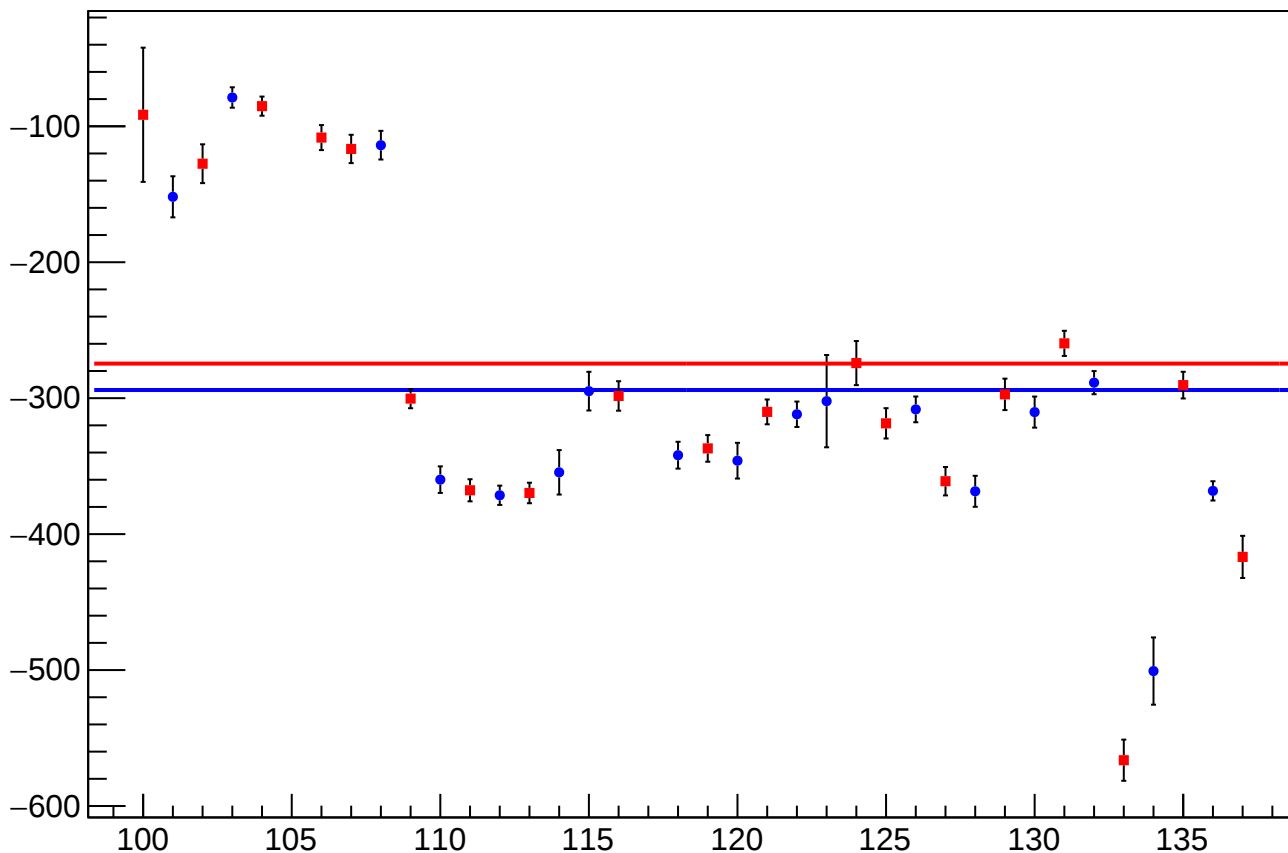
Right: 93.267 $\pm$ 0.047  $\chi^2$ /NDF: 732362.9/35

In: 103.436 $\pm$ 0.071  $\chi^2$ /NDF:272785.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 93.267 $\pm$ 0.047  $\chi^2$ /NDF: 732362.9/35

reg\_asym\_atr\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-293.996 \pm 2.498$   $\chi^2/\text{NDF}$ : 1648.7/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-274.569 \pm 2.299$   $\chi^2/\text{NDF}$ : 2313.7/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

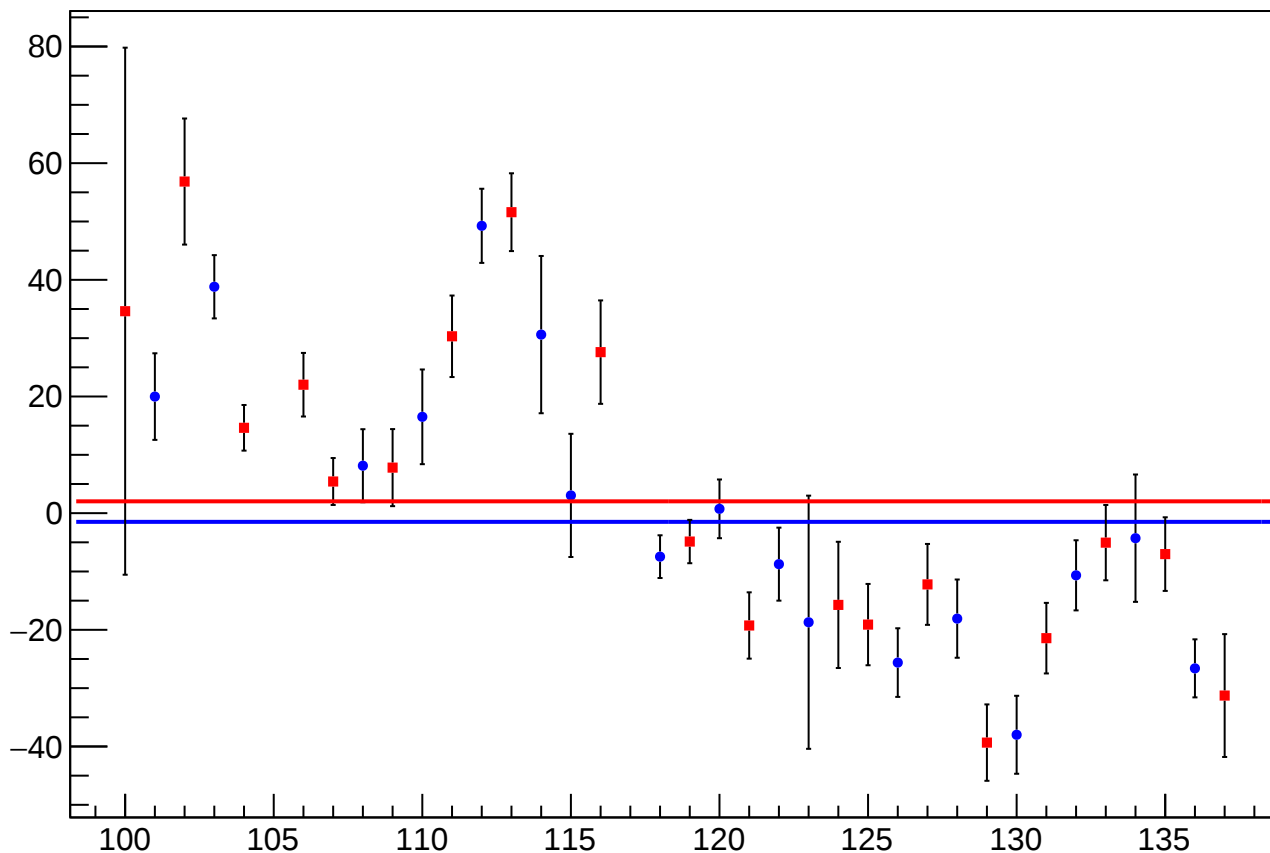
Right:  $-283.478 \pm 1.692$   $\chi^2/\text{NDF}$ : 3995.2/35

In:  $-293.996 \pm 2.498$   $\chi^2/\text{NDF}$ : 1648.7/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-283.478 \pm 1.692$   $\chi^2/\text{NDF}$ : 3995.2/35

reg\_asym\_atr\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -1.490+/-1.536  $\chi^2/\text{NDF}$ : 226.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.028+/-1.400  $\chi^2/\text{NDF}$ : 233.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

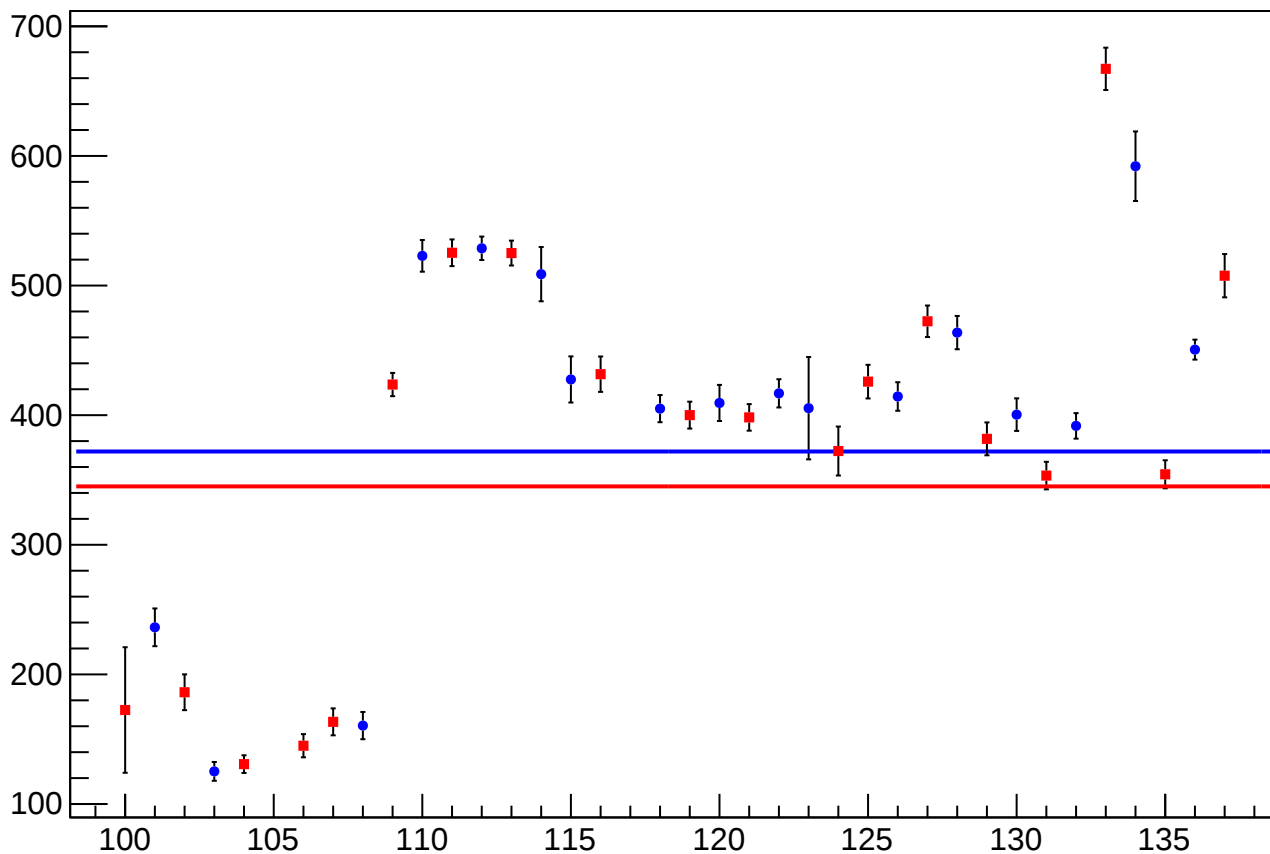
Right: 0.432+/-1.035  $\chi^2/\text{NDF}$ : 462.1/35

In: -1.490+/-1.536  $\chi^2/\text{NDF}$ : 226.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.432+/-1.035  $\chi^2/\text{NDF}$ : 462.1/35

reg\_asym\_atr\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 371.975+/-2.778  $\chi^2/\text{NDF}$ : 2432.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 345.043+/-2.562  $\chi^2/\text{NDF}$ : 3415.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

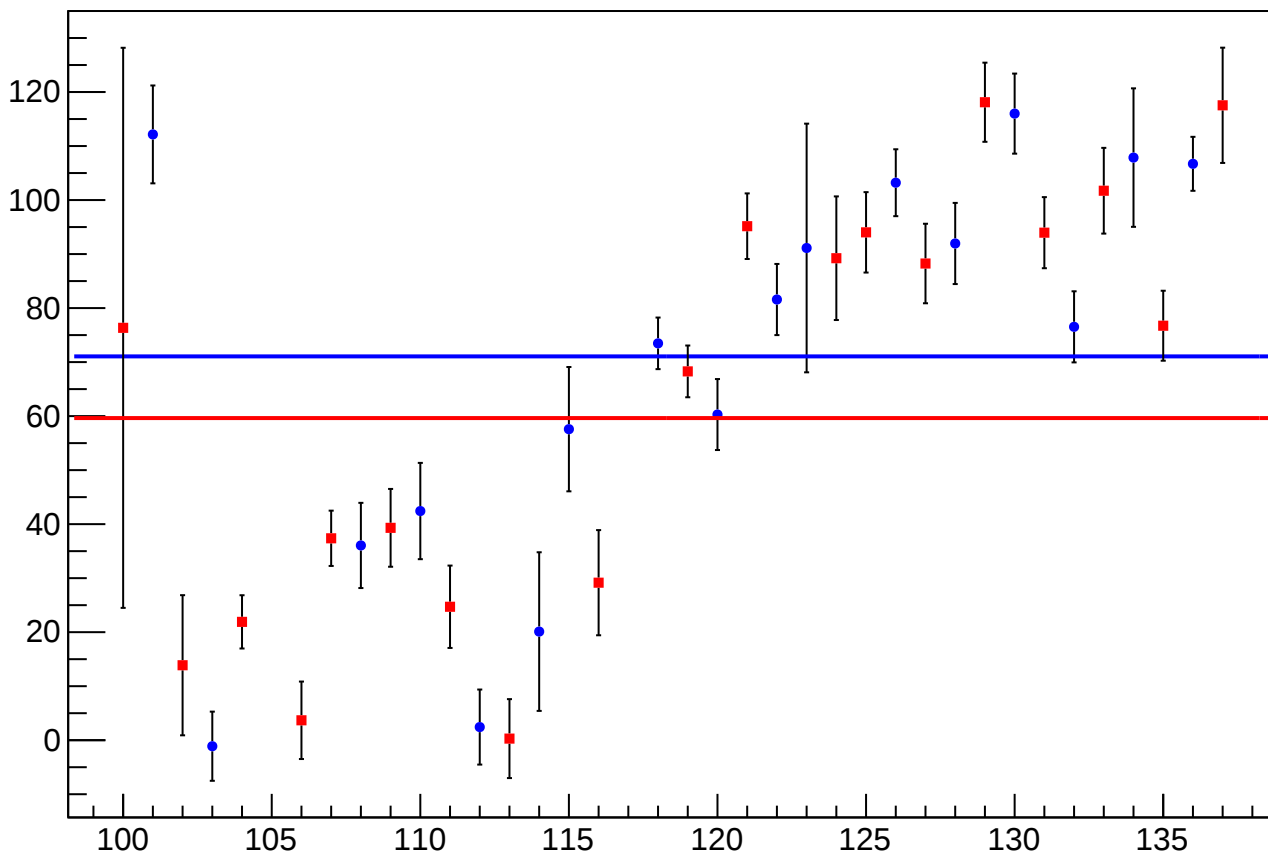
Right: 357.423+/-1.883  $\chi^2/\text{NDF}$ : 5898.6/35

In: 371.975+/-2.778  $\chi^2/\text{NDF}$ : 2432.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 357.423+/-1.883  $\chi^2/\text{NDF}$ : 5898.6/35

reg\_asym\_atr\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 71.056+/-1.764  $\chi^2$ /NDF: 426.2/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 59.637+/-1.631  $\chi^2$ /NDF: 491.6/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

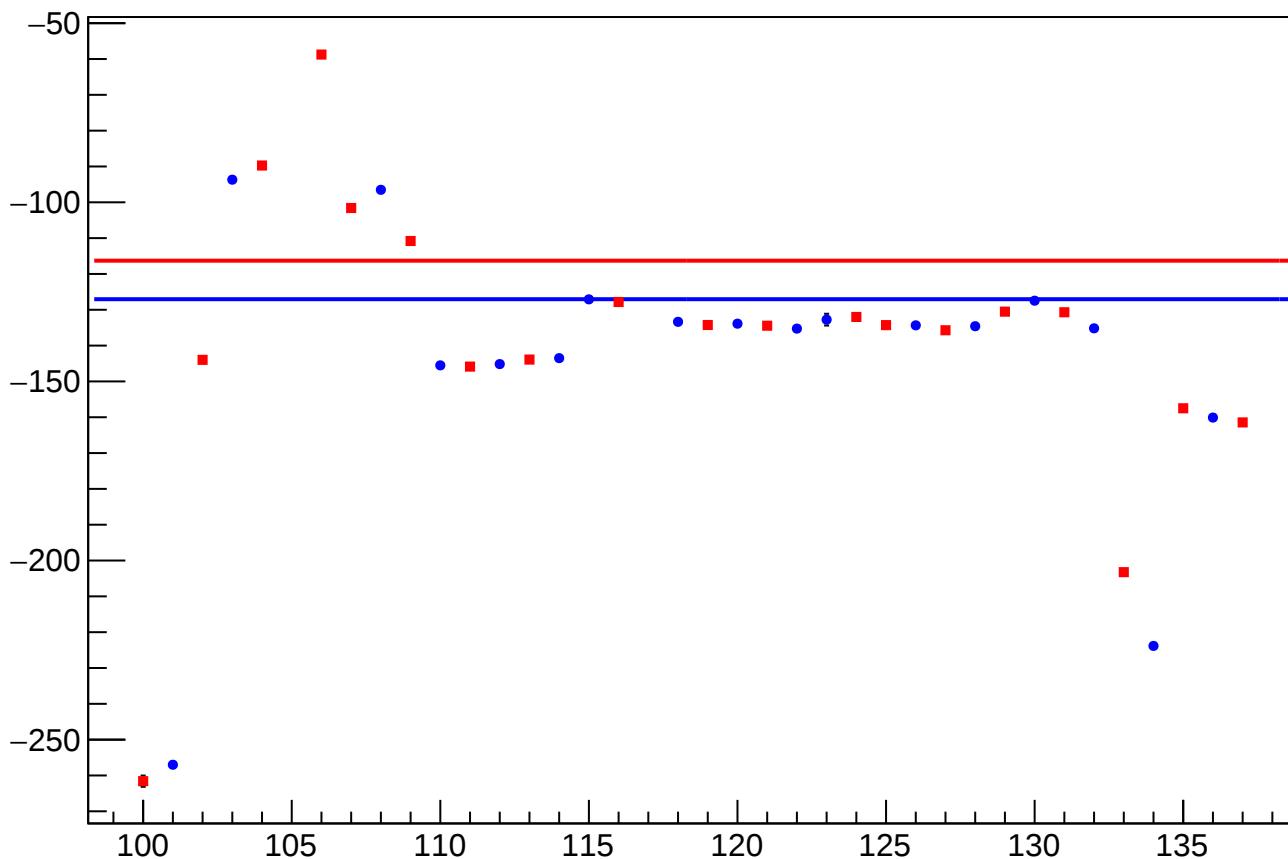
Right: 64.900+/-1.198  $\chi^2$ /NDF: 940.4/35

In: 71.056+/-1.764  $\chi^2$ /NDF:426.2/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 64.900+/-1.198  $\chi^2$ /NDF: 940.4/35

reg\_asym\_atr\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -127.049+/-0.090  $\chi^2/\text{NDF}$ : 167014.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -116.295+/-0.083  $\chi^2/\text{NDF}$ : 167109.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

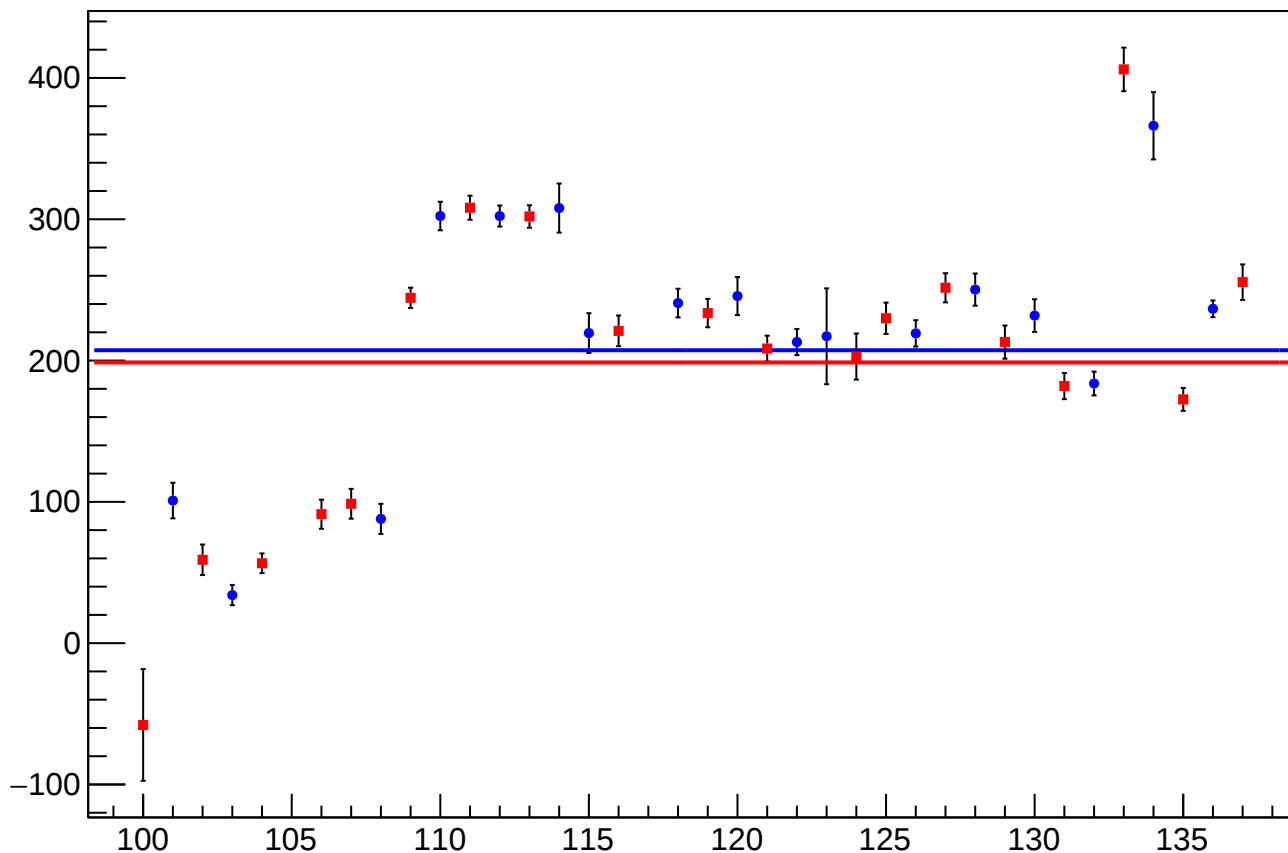
Right: -121.250+/-0.061  $\chi^2/\text{NDF}$ : 341860.6/35

In: -127.049+/-0.090  $\chi^2/\text{NDF}$ : 167014.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -121.250+/-0.061  $\chi^2/\text{NDF}$ : 341860.6/35

reg\_asym\_atr\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 207.310 $\pm$ 2.428  $\chi^2$ /NDF: 1181.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 198.679 $\pm$ 2.273  $\chi^2$ /NDF: 1466.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

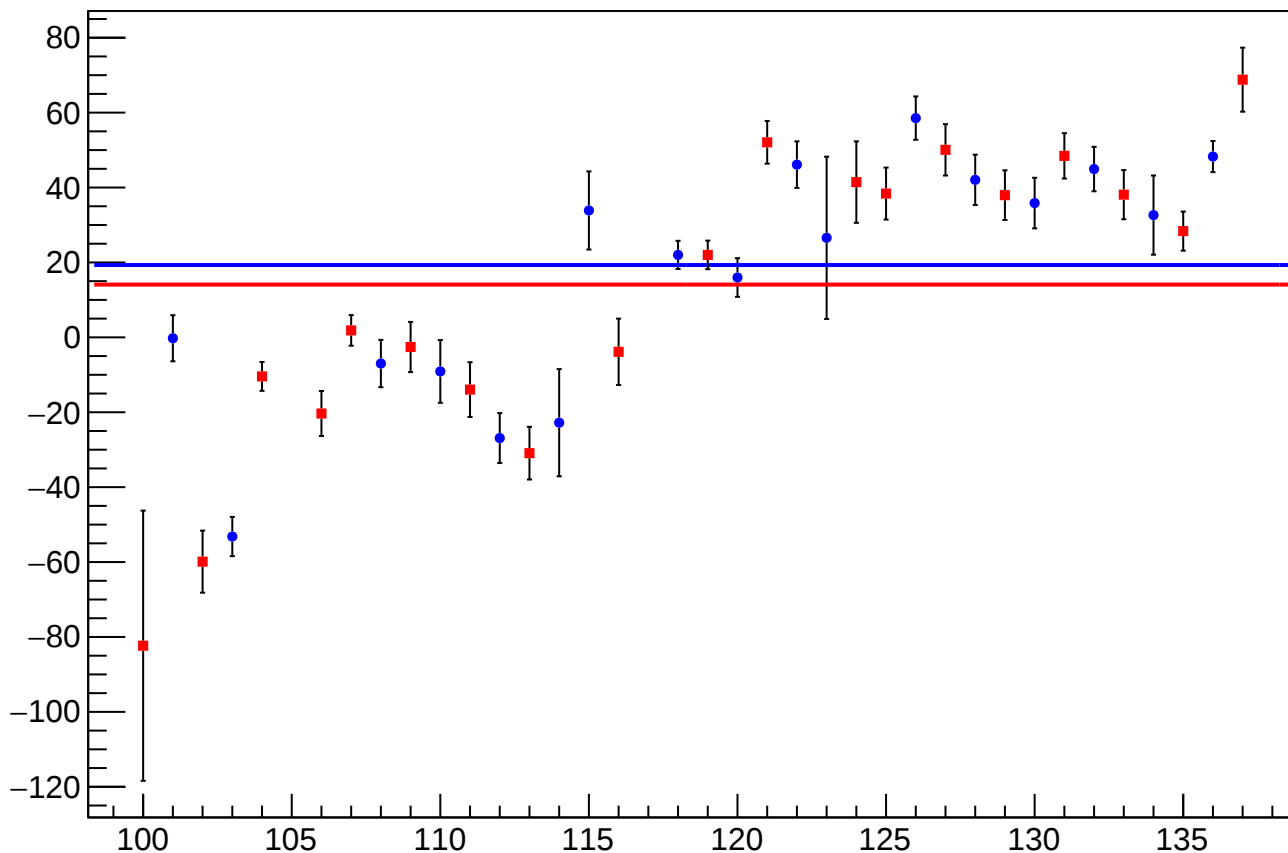
Right: 202.711 $\pm$ 1.660  $\chi^2$ /NDF: 2654.5/35

In: 207.310 $\pm$ 2.428  $\chi^2$ /NDF: 1181.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 202.711 $\pm$ 1.660  $\chi^2$ /NDF: 2654.5/35

reg\_asym\_atr\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 19.308+/-1.500  $\chi^2/\text{NDF}$ : 441.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 14.083+/-1.390  $\chi^2/\text{NDF}$ : 436.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

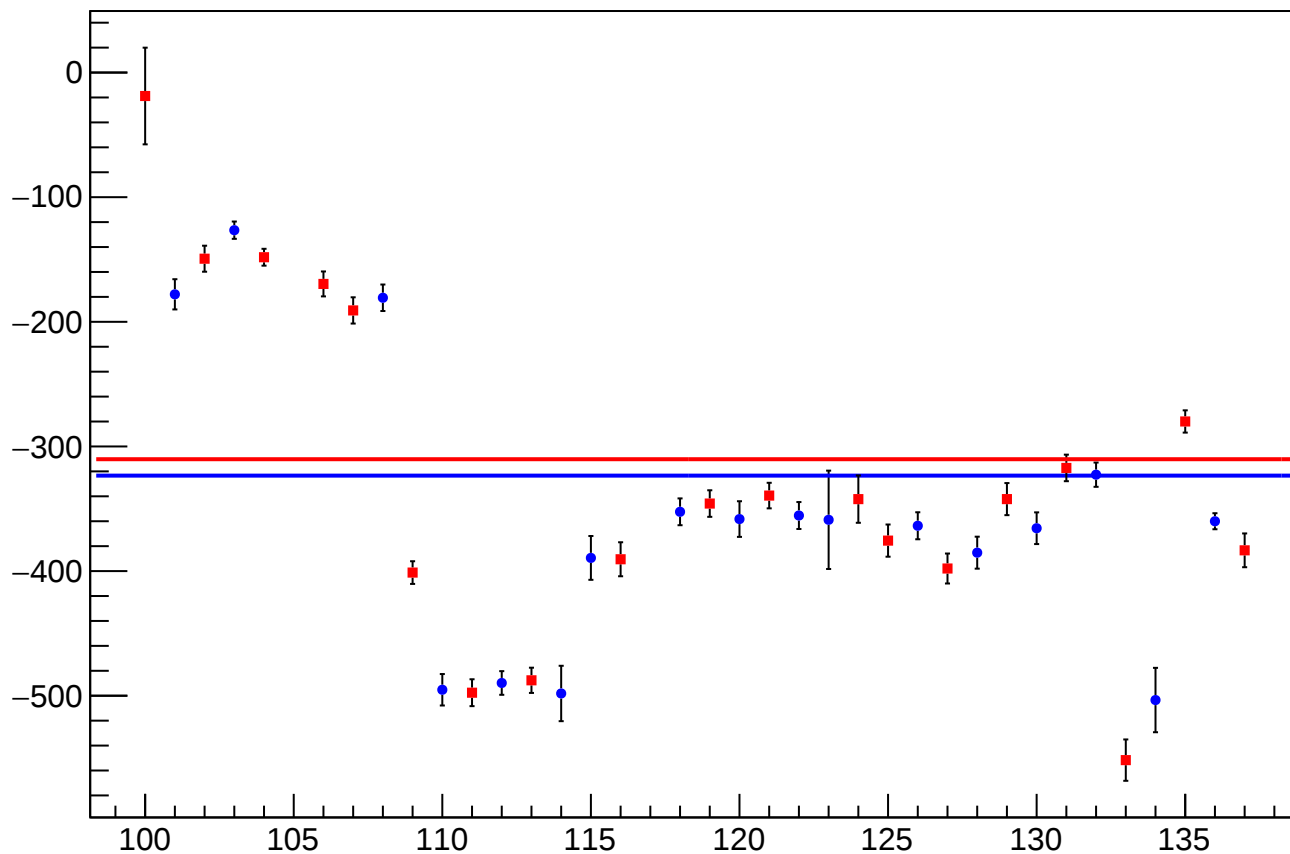
Right: 16.496+/-1.020  $\chi^2/\text{NDF}$ : 884.7/35

In: 19.308+/-1.500  $\chi^2/\text{NDF}$ : 441.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 16.496+/-1.020  $\chi^2/\text{NDF}$ : 884.7/35

reg\_asym\_atr\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-323.402 \pm 2.684$   $\chi^2/\text{NDF}$ : 1849.6/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-310.236 \pm 2.523$   $\chi^2/\text{NDF}$ : 2298.8/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

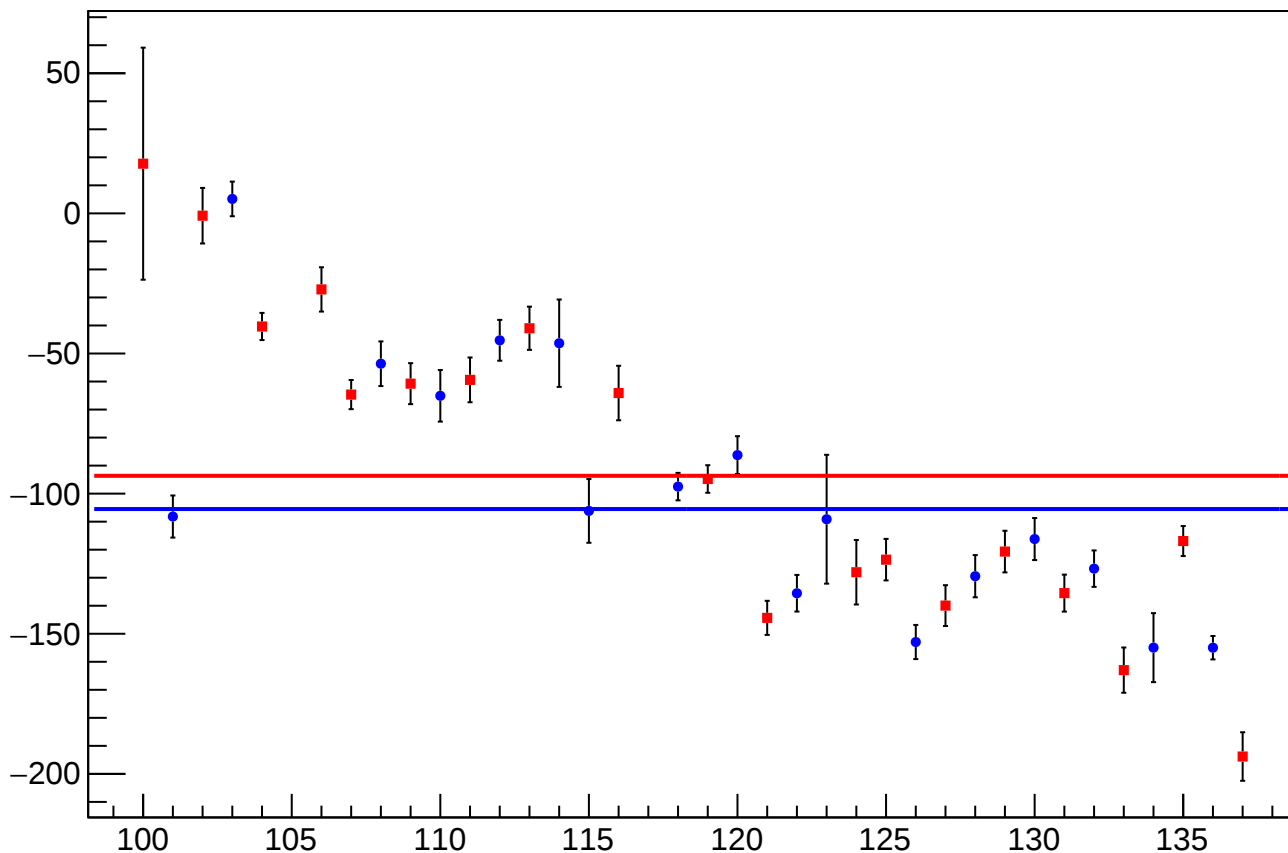
Right:  $-316.413 \pm 1.838$   $\chi^2/\text{NDF}$ : 4161.2/35

In:  $-323.402 \pm 2.684$   $\chi^2/\text{NDF}$ : 1849.6/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-316.413 \pm 1.838$   $\chi^2/\text{NDF}$ : 4161.2/35

reg\_asym\_atr\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -105.496+/-1.712  $\chi^2/\text{NDF}$ : 737.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -93.637+/-1.610  $\chi^2/\text{NDF}$ : 827.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

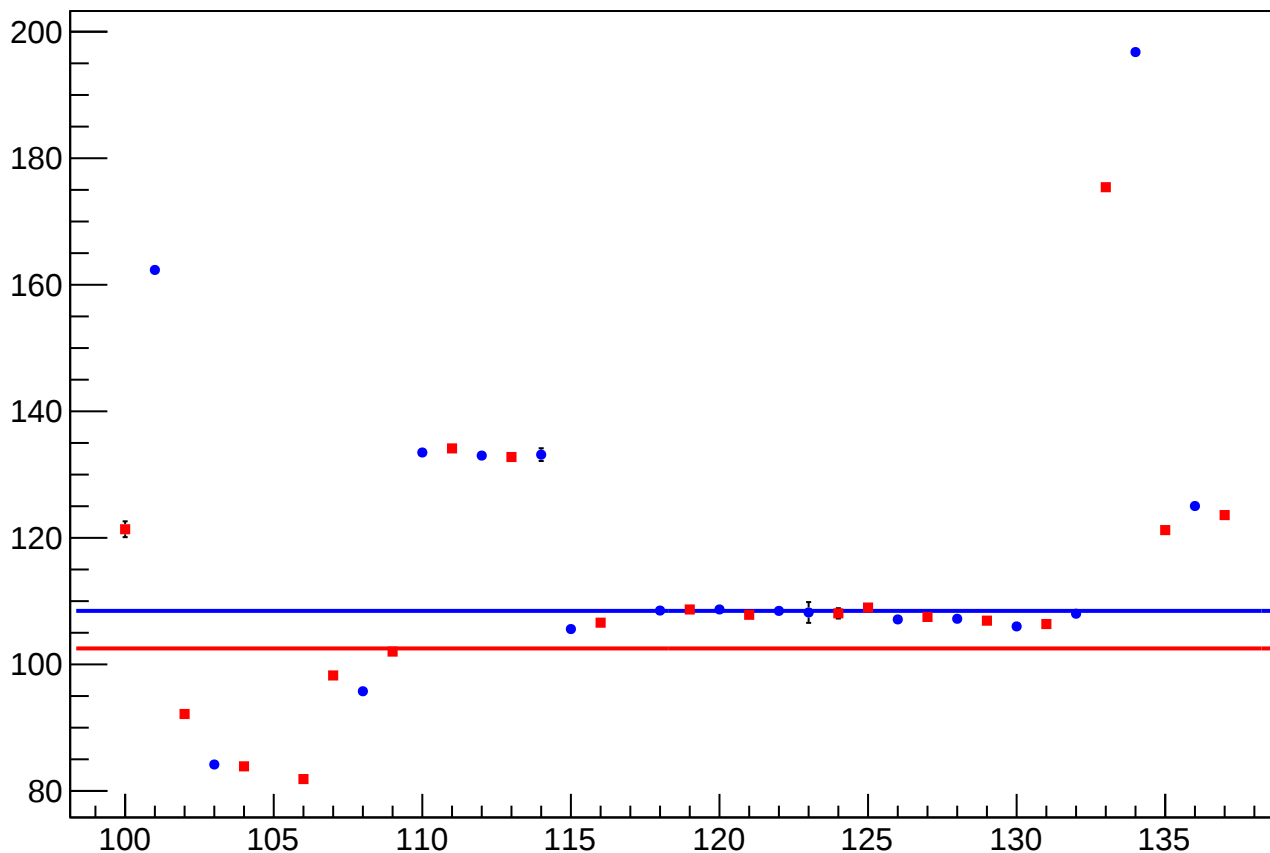
Right: -99.203+/-1.173  $\chi^2/\text{NDF}$ : 1589.9/35

In: -105.496+/-1.712  $\chi^2/\text{NDF}$ : 737.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -99.203+/-1.173  $\chi^2/\text{NDF}$ : 1589.9/35

reg\_asym\_atr\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 108.460 $\pm$ 0.085  $\chi^2$ /NDF: 73301.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 102.521 $\pm$ 0.080  $\chi^2$ /NDF: 52992.1/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

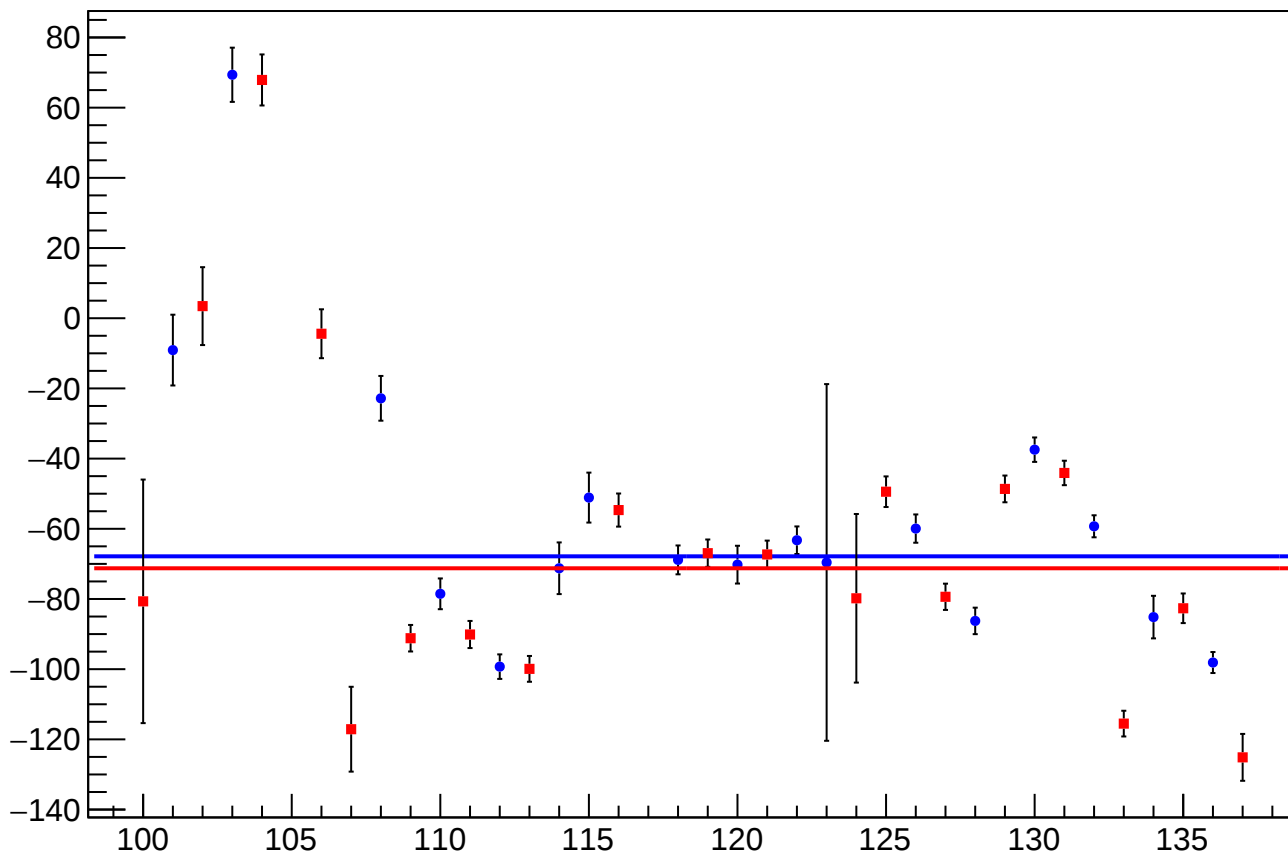
Right: 105.294 $\pm$ 0.058  $\chi^2$ /NDF: 128896.1/35

In: 108.460 $\pm$ 0.085  $\chi^2$ /NDF:73301.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 105.294 $\pm$ 0.058  $\chi^2$ /NDF: 128896.1/35

reg\_asym\_at1\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -67.844 $\pm$ 1.093  $\chi^2/\text{NDF}$ : 715.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -71.252 $\pm$ 1.071  $\chi^2/\text{NDF}$ : 989.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

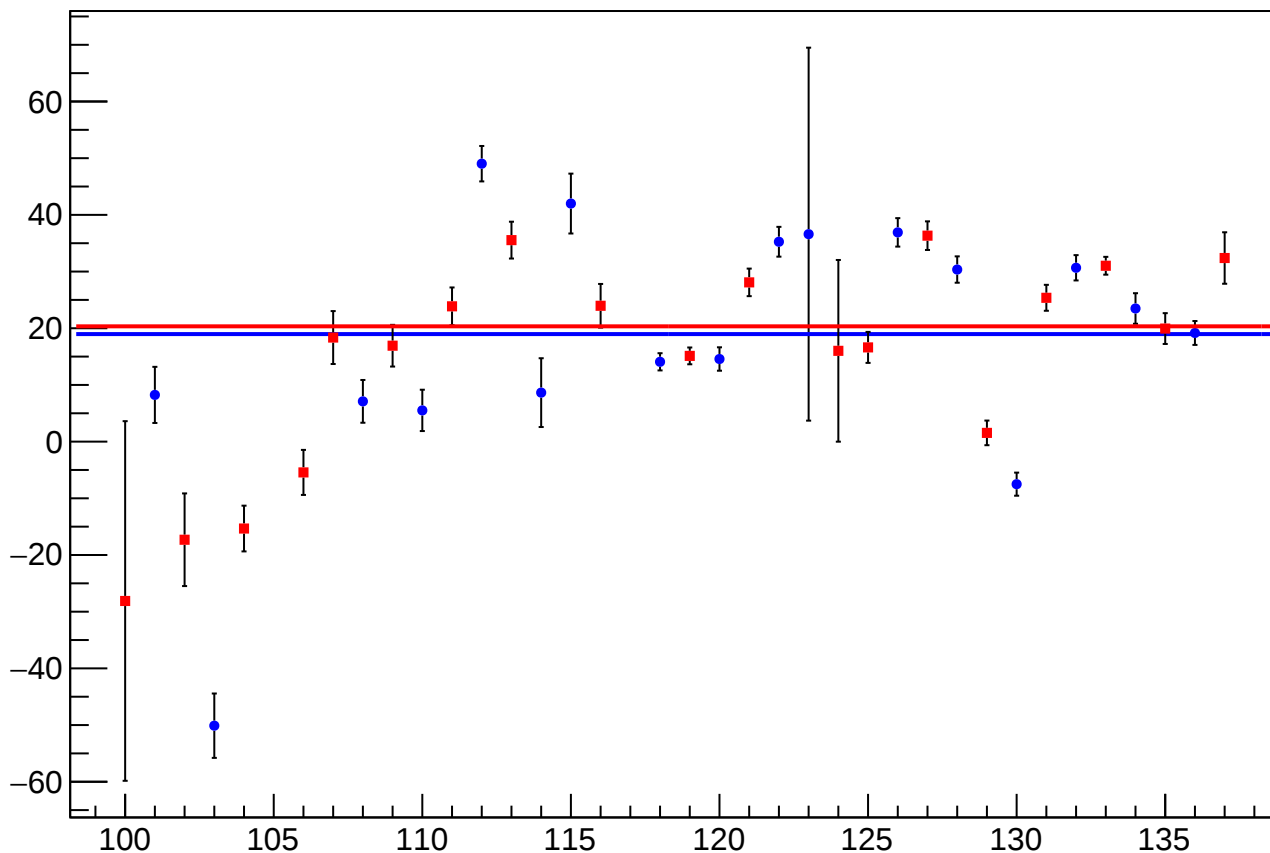
Right: -69.582 $\pm$ 0.765  $\chi^2/\text{NDF}$ : 1709.6/35

In: -67.844 $\pm$ 1.093  $\chi^2/\text{NDF}$ : 715.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -69.582 $\pm$ 0.765  $\chi^2/\text{NDF}$ : 1709.6/35

reg\_asym\_at1\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 18.970 $\pm$ 0.653  $\chi^2$ /NDF: 618.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 20.338 $\pm$ 0.642  $\chi^2$ /NDF: 366.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

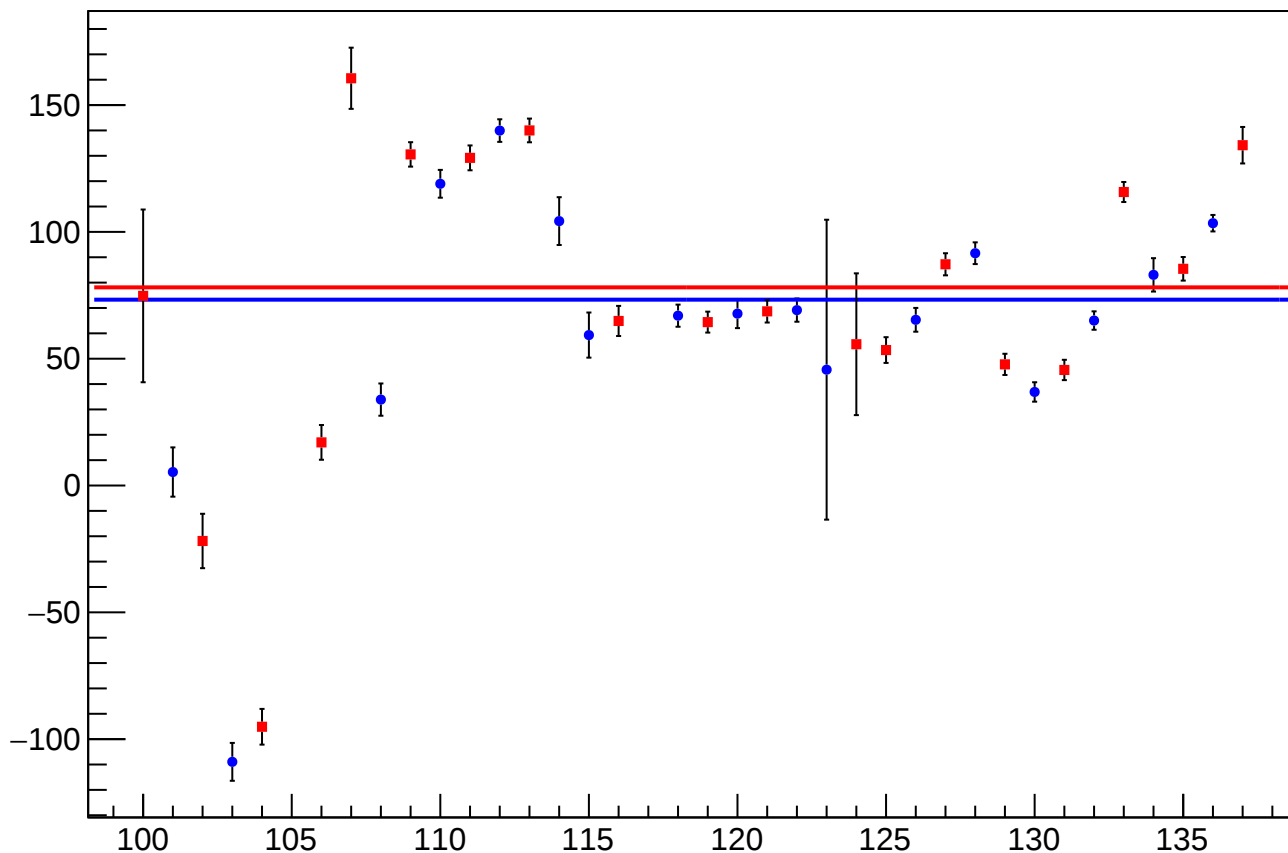
Right: 19.666 $\pm$ 0.458  $\chi^2$ /NDF: 987.0/35

In: 18.970 $\pm$ 0.653  $\chi^2$ /NDF:618.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 19.666 $\pm$ 0.458  $\chi^2$ /NDF: 987.0/35

reg\_asym\_at1\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 73.278 $\pm$ 1.236  $\chi^2$ /NDF: 1198.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 78.130 $\pm$ 1.223  $\chi^2$ /NDF: 1543.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

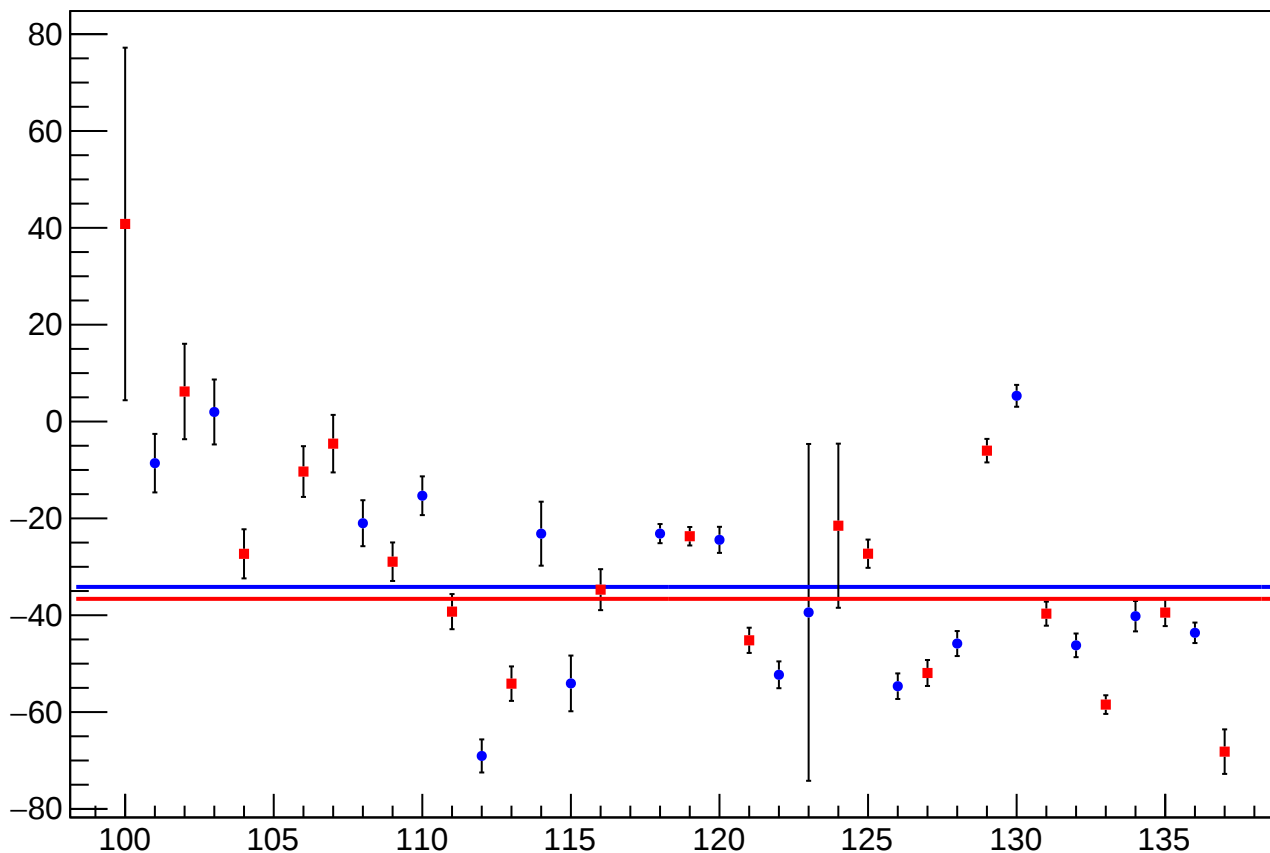
Right: 75.732 $\pm$ 0.869  $\chi^2$ /NDF: 2749.7/35

In: 73.278 $\pm$ 1.236  $\chi^2$ /NDF: 1198.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 75.732 $\pm$ 0.869  $\chi^2$ /NDF: 2749.7/35

reg\_asym\_at1\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-34.153 \pm 0.745$   $\chi^2/\text{NDF}: 717.5/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-36.618 \pm 0.736$   $\chi^2/\text{NDF}: 547.0/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

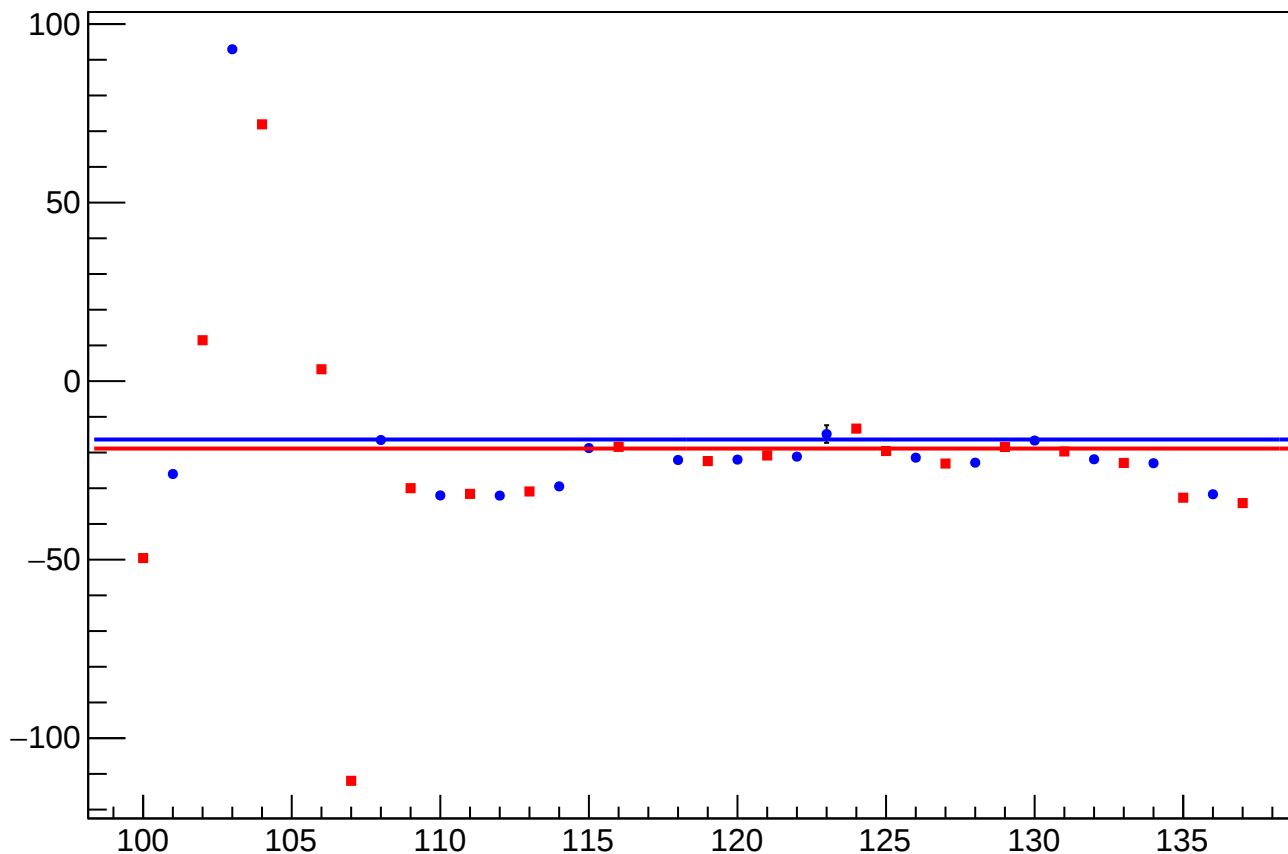
Right:  $-35.401 \pm 0.523$   $\chi^2/\text{NDF}: 1270.0/35$

In:  $-34.153 \pm 0.745$   $\chi^2/\text{NDF}: 717.5/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-35.401 \pm 0.523$   $\chi^2/\text{NDF}: 1270.0/35$

reg\_asym\_at1\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In:  $-16.349 \pm 0.045$   $\chi^2/\text{NDF}: 474192.3/16$

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Right Out:  $-18.886 \pm 0.045$   $\chi^2/\text{NDF}: 433793.7/18$

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

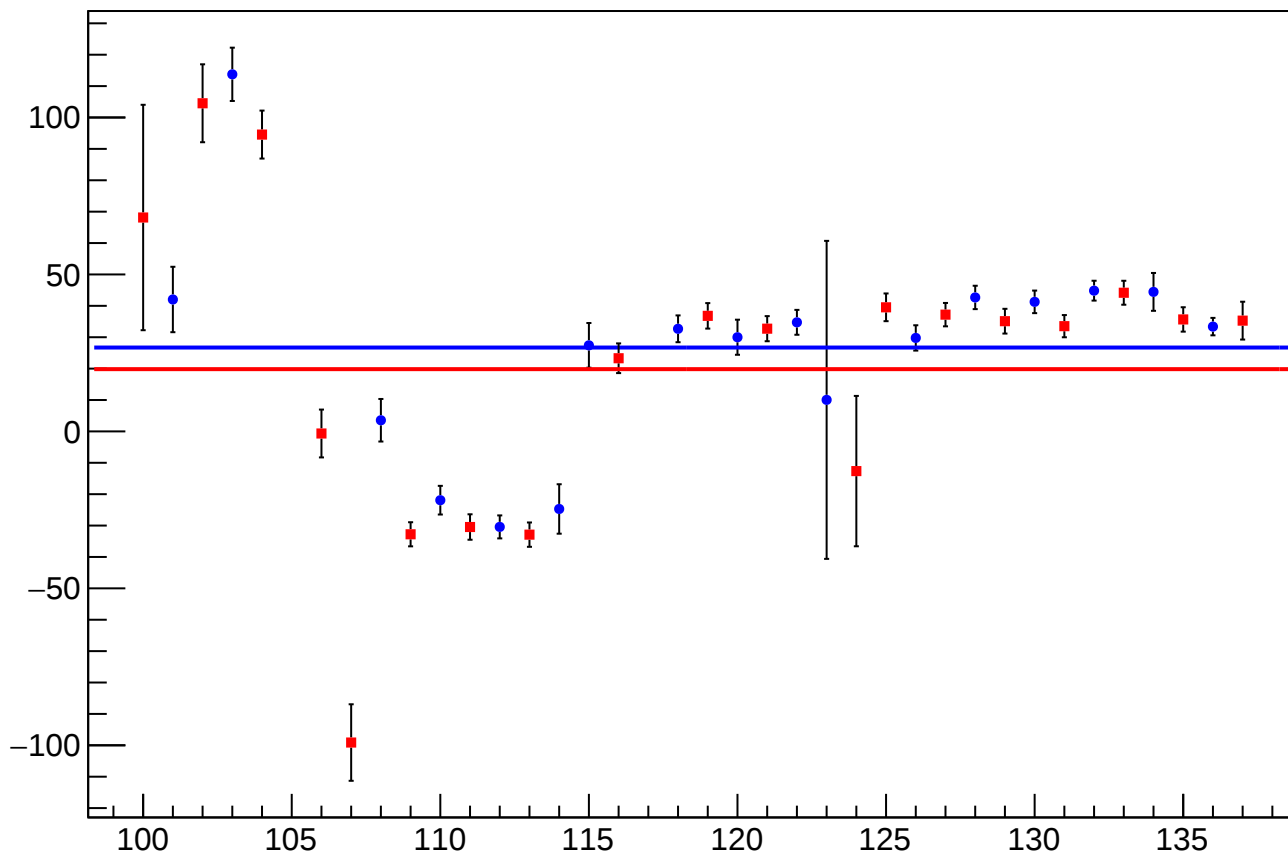
Right:  $-17.599 \pm 0.032$   $\chi^2/\text{NDF}: 909577.8/35$

In:  $-16.349 \pm 0.045$   $\chi^2/\text{NDF}: 474192.3/16$

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

All:  $-17.599 \pm 0.032$   $\chi^2/\text{NDF}: 909577.8/35$

reg\_asym\_at1\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 26.715+/-1.103  $\chi^2$ /NDF: 607.6/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 19.831+/-1.089  $\chi^2$ /NDF: 938.8/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

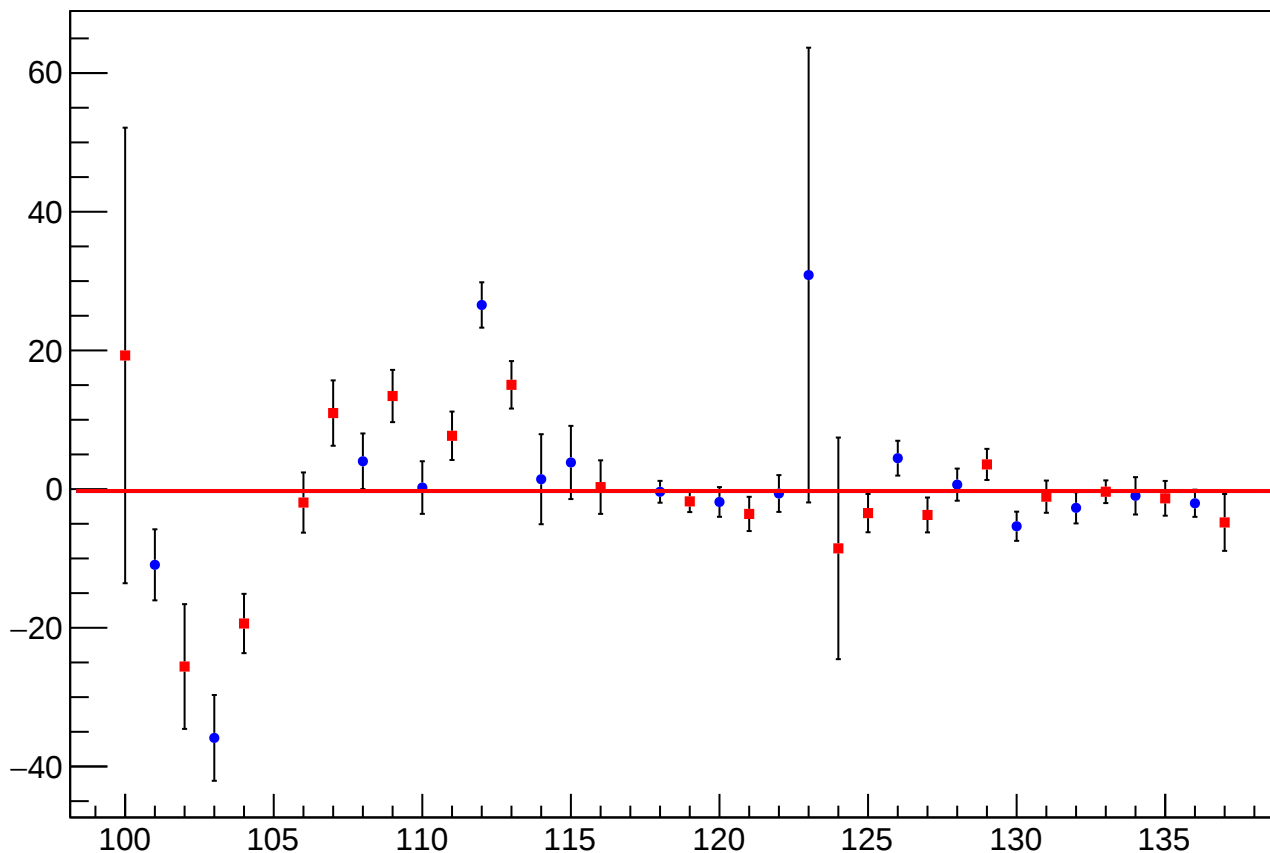
Right: 23.230+/-0.775  $\chi^2$ /NDF: 1566.2/35

In: 26.715+/-1.103  $\chi^2$ /NDF:607.6/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 23.230+/-0.775  $\chi^2$ /NDF: 1566.2/35

reg\_asym\_at1\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-0.280 \pm 0.662$   $\chi^2/\text{NDF}$ : 119.5/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-0.270 \pm 0.656$   $\chi^2/\text{NDF}$ : 83.2/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

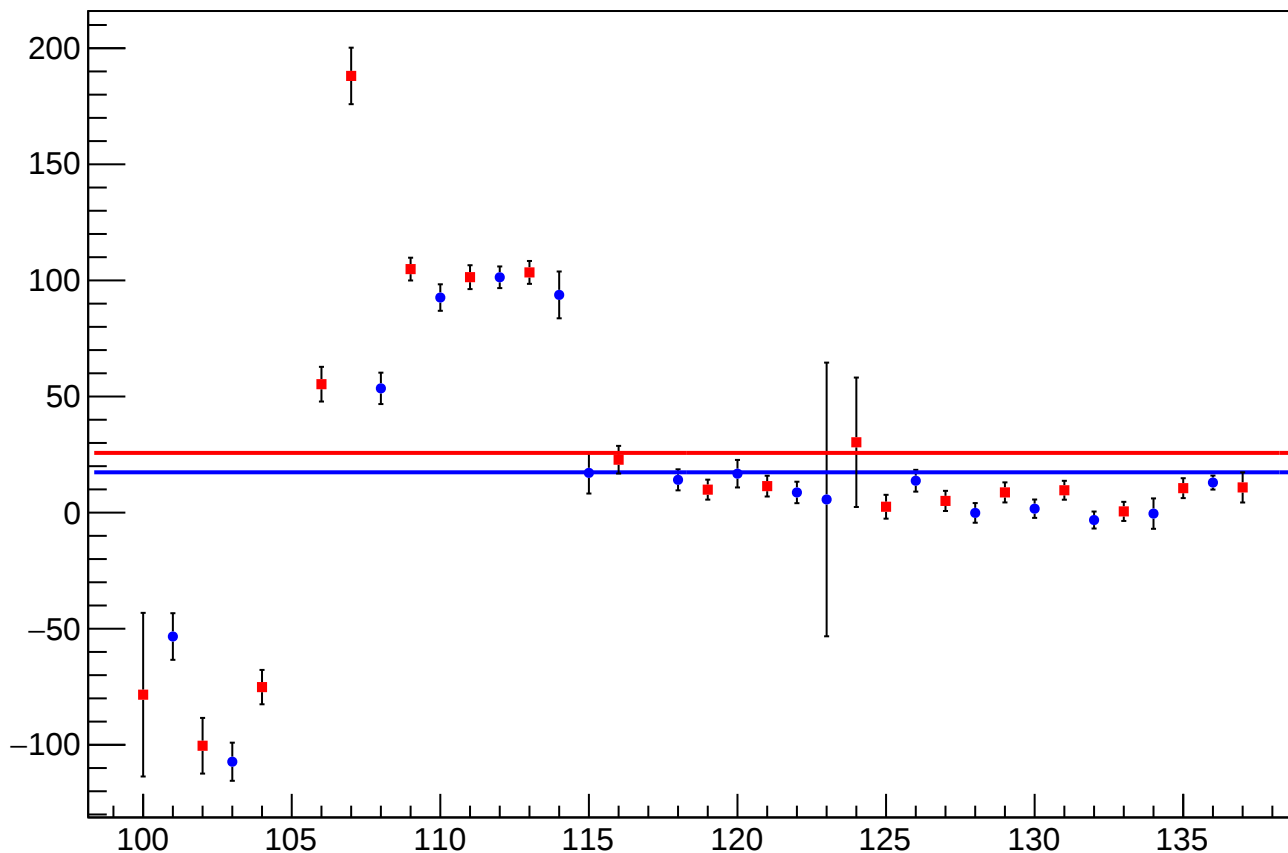
Right:  $-0.275 \pm 0.466$   $\chi^2/\text{NDF}$ : 202.7/35

In:  $-0.280 \pm 0.662$   $\chi^2/\text{NDF}$ : 119.5/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-0.275 \pm 0.466$   $\chi^2/\text{NDF}$ : 202.7/35

reg\_asym\_at1\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 17.361+/-1.247  $\chi^2/\text{NDF}$ : 943.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 25.717+/-1.243  $\chi^2/\text{NDF}$ : 1378.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

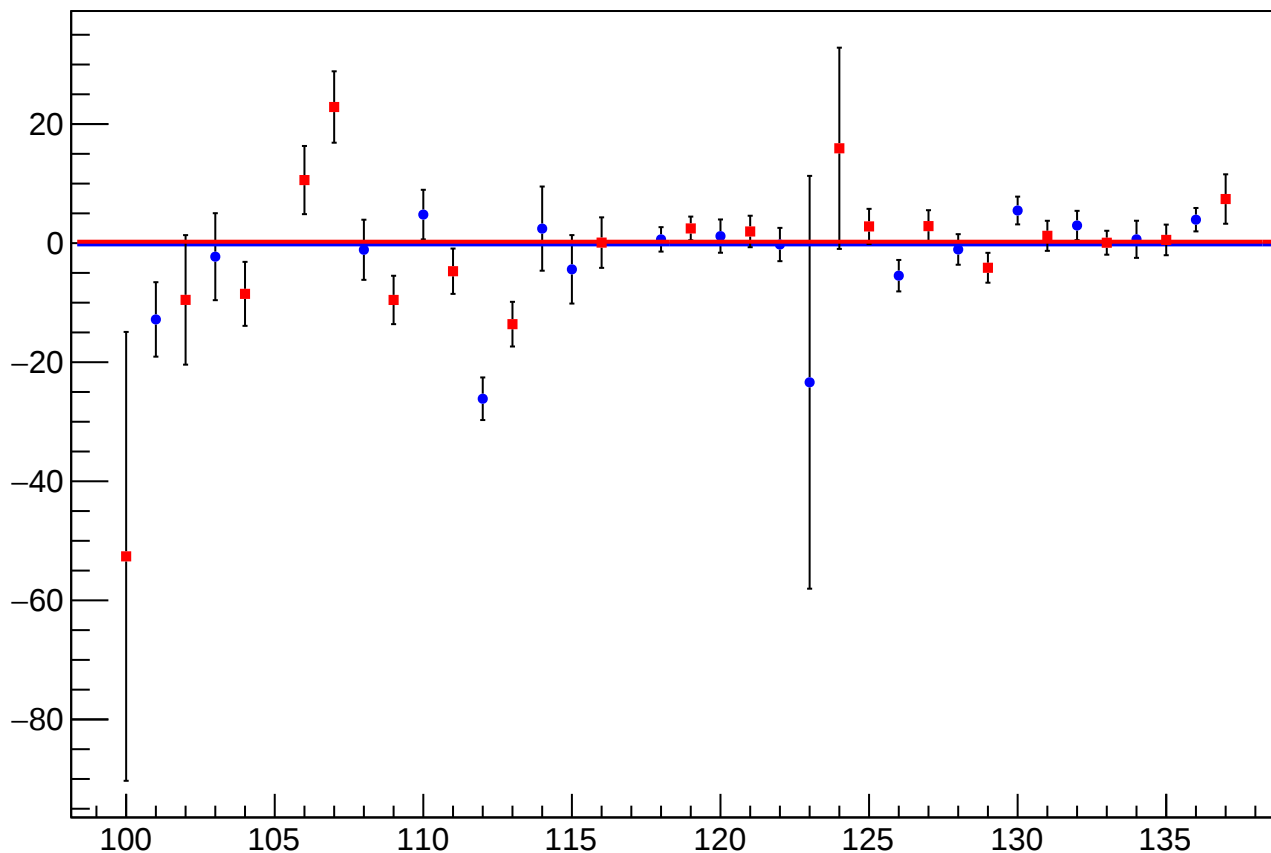
Right: 21.552+/-0.880  $\chi^2/\text{NDF}$ : 2344.4/35

In: 17.361+/-1.247  $\chi^2/\text{NDF}$ : 943.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 21.552+/-0.880  $\chi^2/\text{NDF}$ : 2344.4/35

reg\_asym\_at1\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-0.211 \pm 0.752$   $\chi^2/\text{NDF}$ : 75.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $0.239 \pm 0.748$   $\chi^2/\text{NDF}$ : 54.5/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

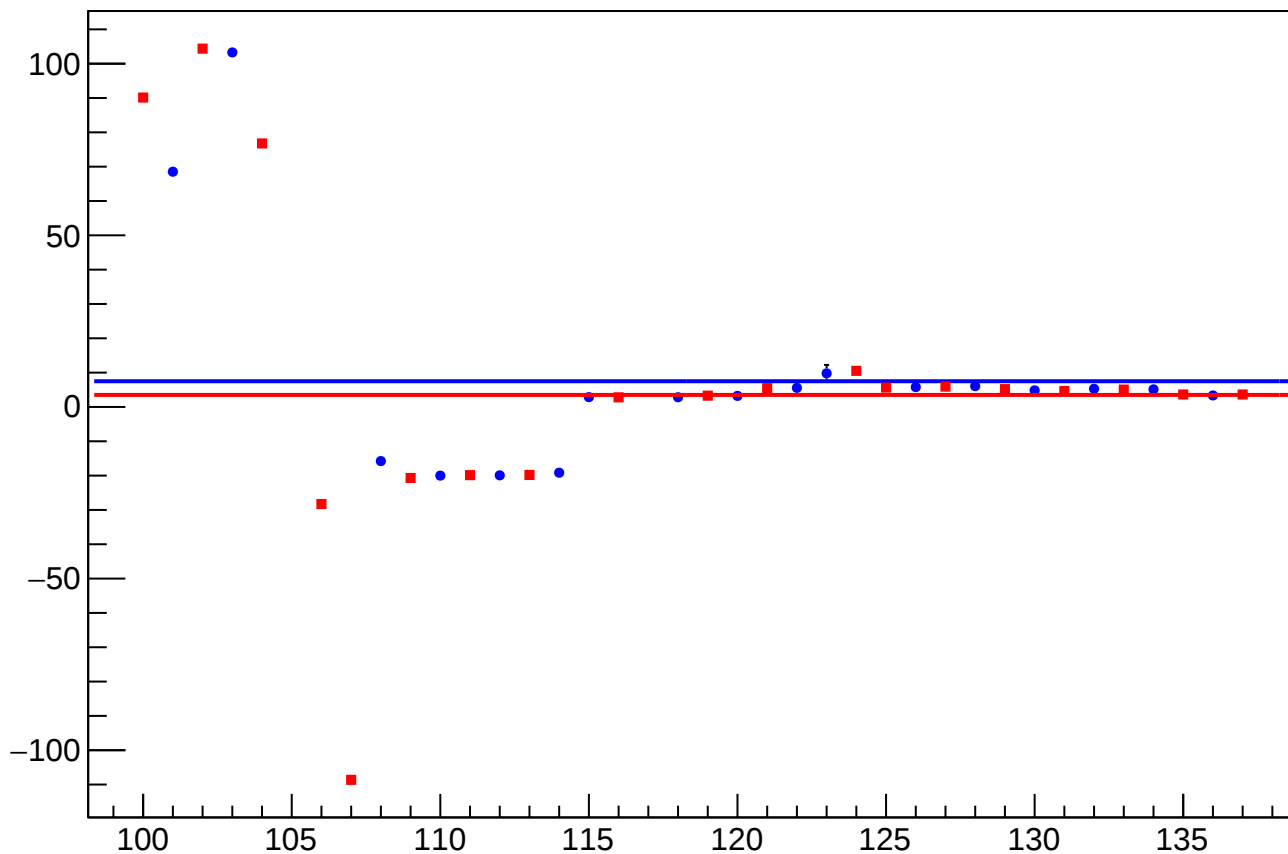
Right:  $0.015 \pm 0.530$   $\chi^2/\text{NDF}$ : 130.6/35

In:  $-0.211 \pm 0.752$   $\chi^2/\text{NDF}$ : 75.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $0.015 \pm 0.530$   $\chi^2/\text{NDF}$ : 130.6/35

reg\_asym\_at1\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 7.492+/-0.045  $\chi^2/\text{NDF}$ : 355979.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 3.504+/-0.046  $\chi^2/\text{NDF}$ : 510579.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

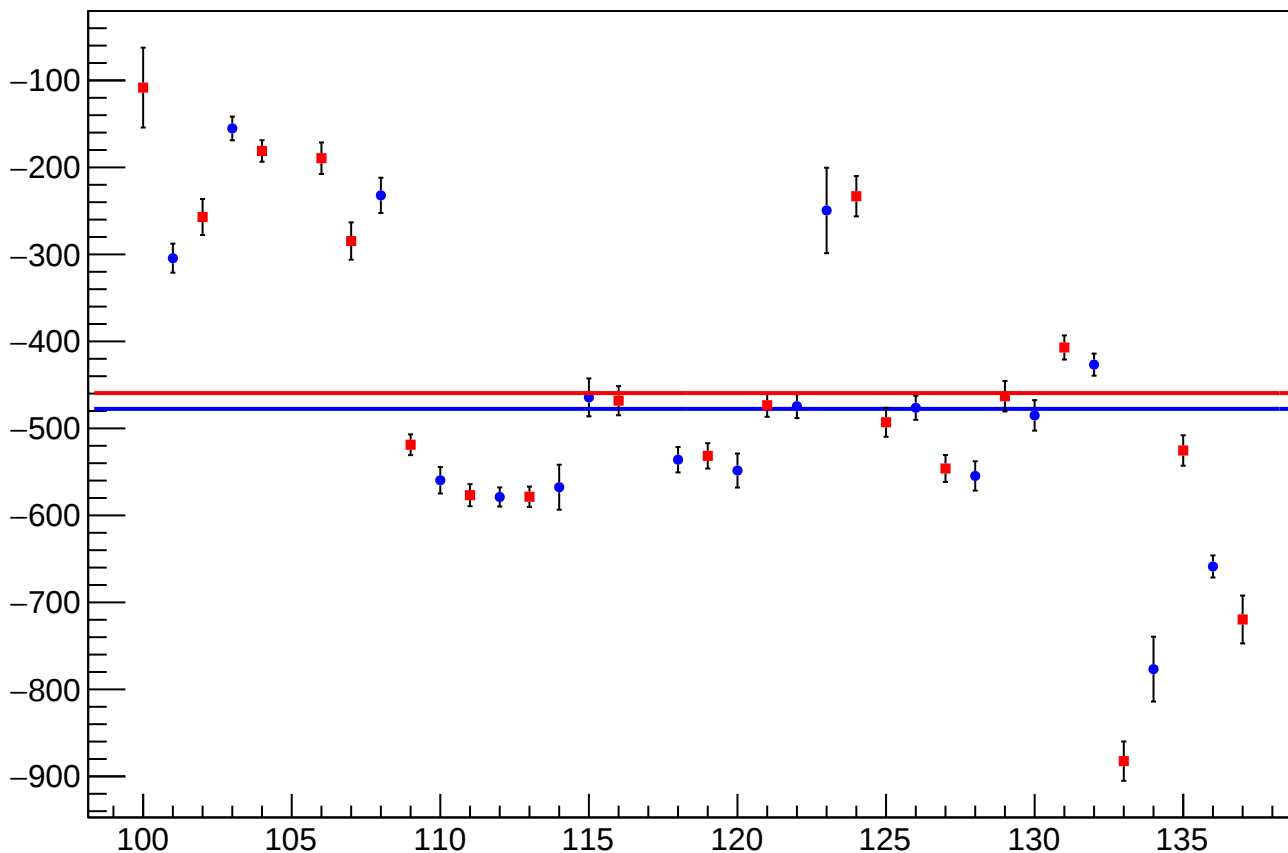
Right: 5.541+/-0.032  $\chi^2/\text{NDF}$ : 870462.8/35

In: 7.492+/-0.045  $\chi^2/\text{NDF}$ : 355979.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 5.541+/-0.032  $\chi^2/\text{NDF}$ : 870462.8/35

reg\_asym\_at2\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -477.563+/-3.898  $\chi^2/\text{NDF}$ : 1298.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -459.384+/-3.682  $\chi^2/\text{NDF}$ : 1788.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

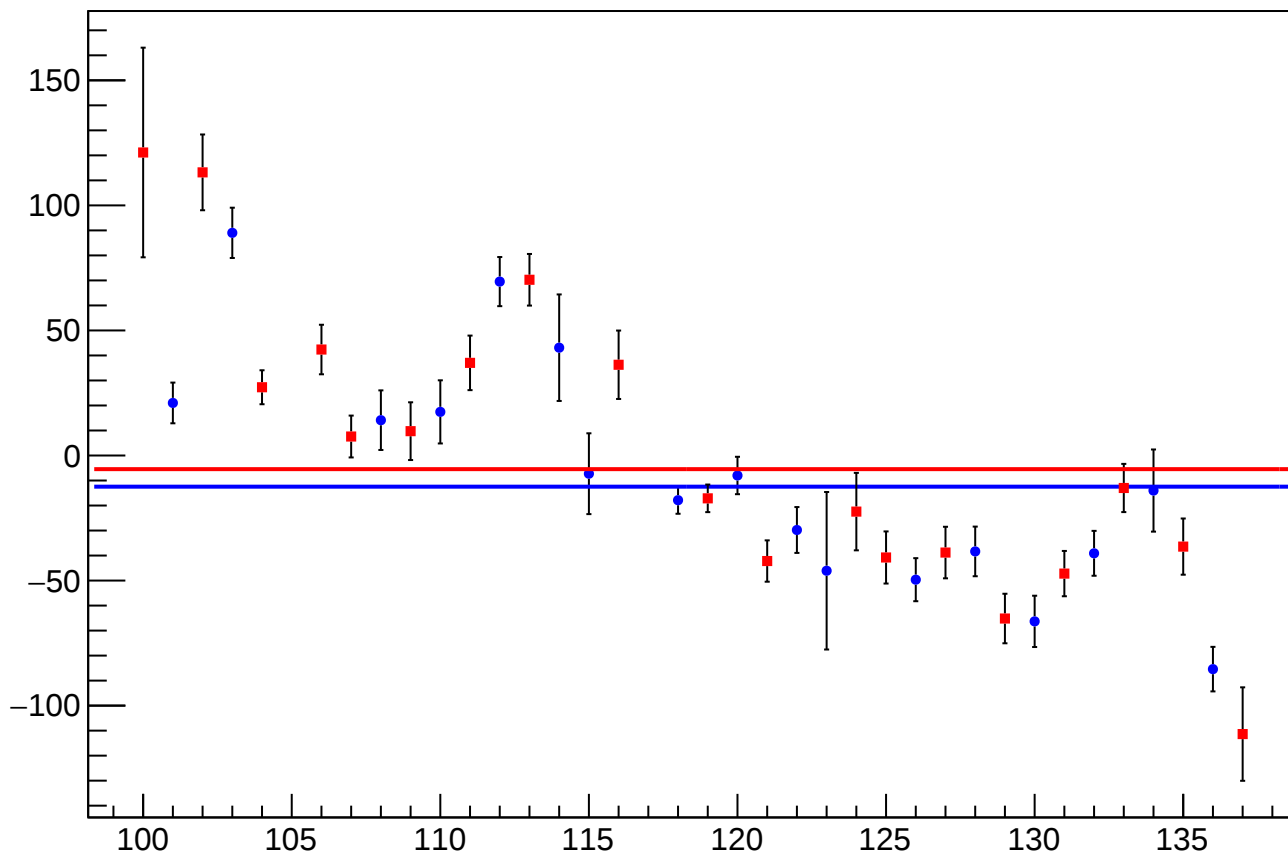
Right: -467.957+/-2.677  $\chi^2/\text{NDF}$ : 3098.2/35

In: -477.563+/-3.898  $\chi^2/\text{NDF}$ : 1298.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -467.957+/-2.677  $\chi^2/\text{NDF}$ : 3098.2/35

reg\_asym\_at2\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -12.458+/-2.349  $\chi^2/\text{NDF}$ : 341.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -5.453+/-2.259  $\chi^2/\text{NDF}$ : 345.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

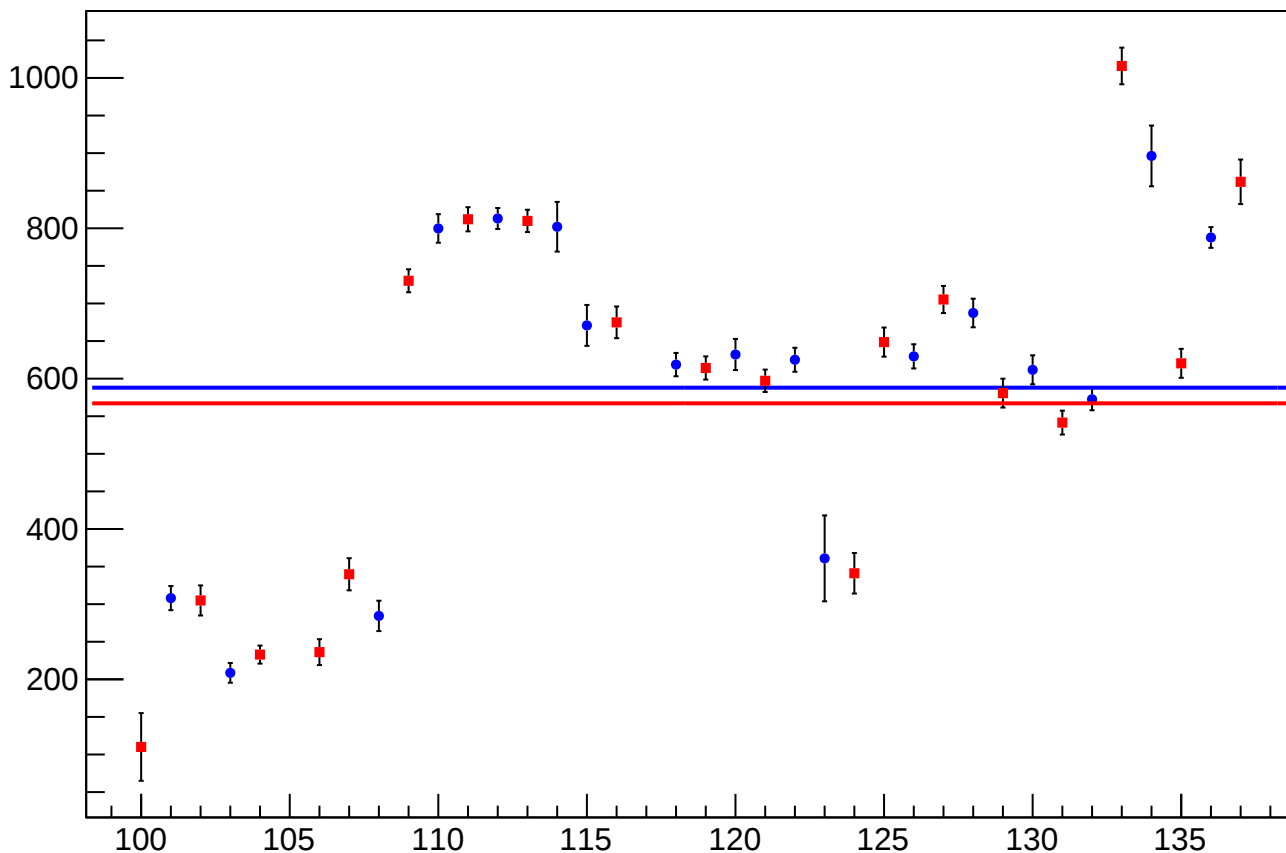
Right: -8.819+/-1.628  $\chi^2/\text{NDF}$ : 690.7/35

In: -12.458+/-2.349  $\chi^2/\text{NDF}$ :341.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -8.819+/-1.628  $\chi^2/\text{NDF}$ : 690.7/35

reg\_asym\_at2\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 587.994+/-4.353  $\chi^2/\text{NDF}$ : 2129.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 567.179+/-4.136  $\chi^2/\text{NDF}$ : 2783.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

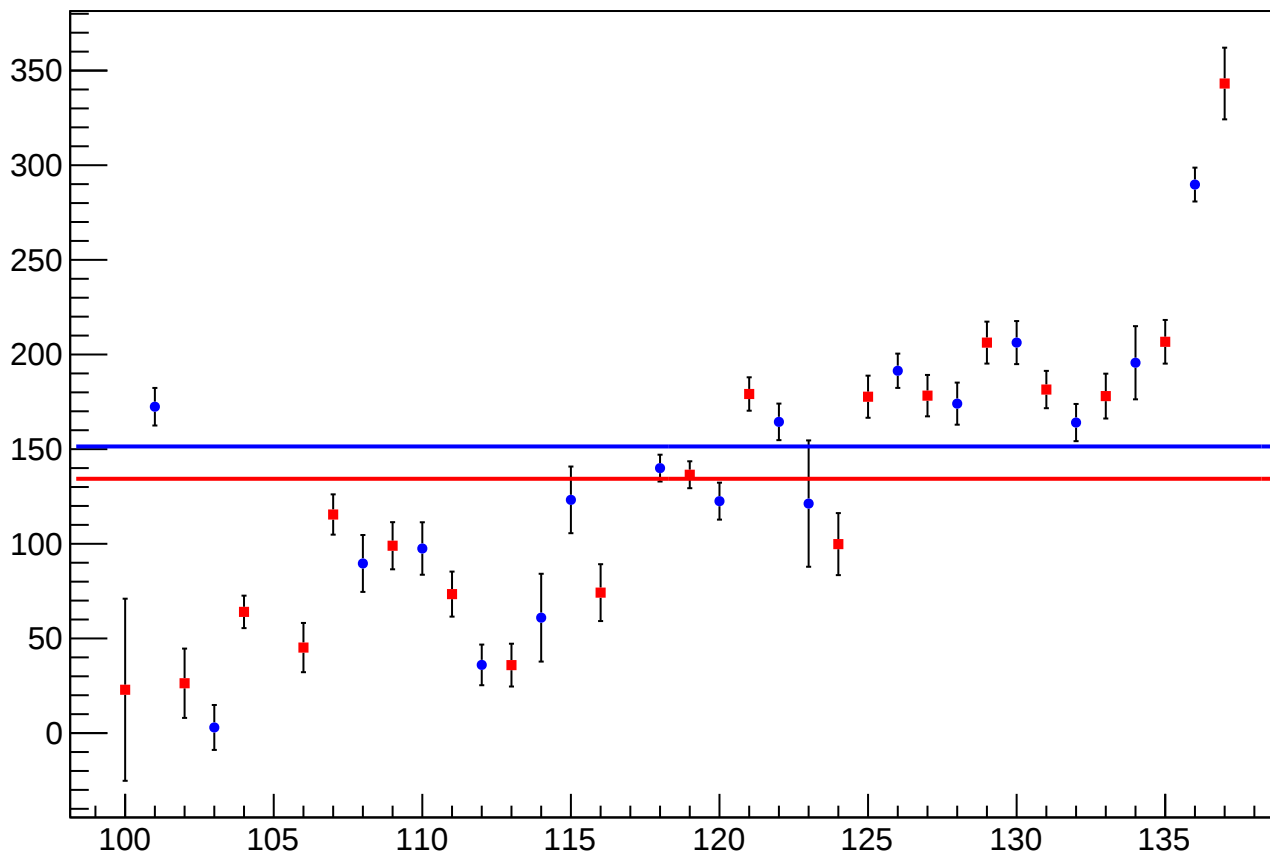
Right: 577.056+/-2.998  $\chi^2/\text{NDF}$ : 4924.8/35

In: 587.994+/-4.353  $\chi^2/\text{NDF}$ : 2129.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 577.056+/-2.998  $\chi^2/\text{NDF}$ : 4924.8/35

reg\_asym\_at2\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 151.421+/-2.709  $\chi^2/\text{NDF}$ : 633.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 134.346+/-2.616  $\chi^2/\text{NDF}$ : 584.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

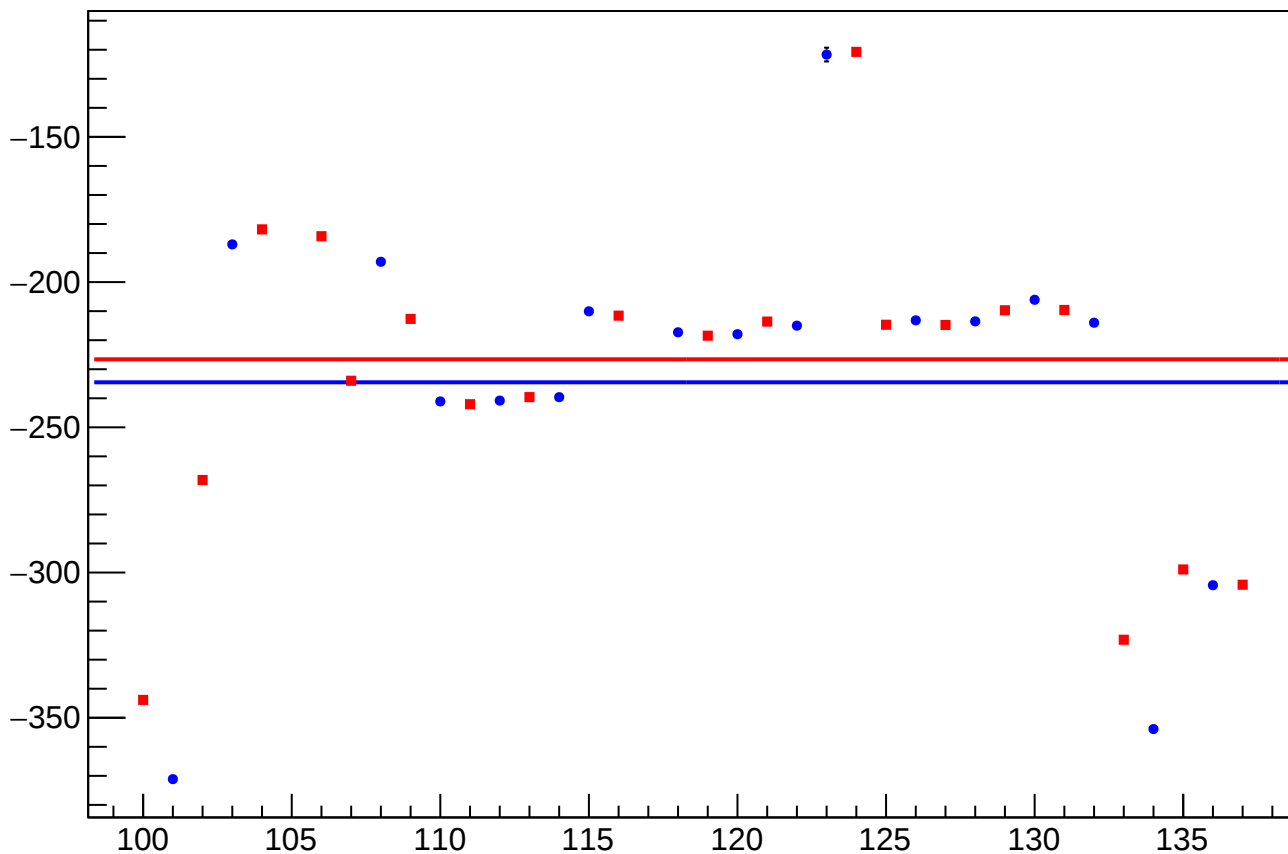
Right: 142.583+/-1.882  $\chi^2/\text{NDF}$ : 1238.7/35

In: 151.421+/-2.709  $\chi^2/\text{NDF}$ : 633.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 142.583+/-1.882  $\chi^2/\text{NDF}$ : 1238.7/35

reg\_asym\_at2\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -234.501 $\pm$ 0.149  $\chi^2$ /NDF: 145046.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -226.581 $\pm$ 0.141  $\chi^2$ /NDF: 98968.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

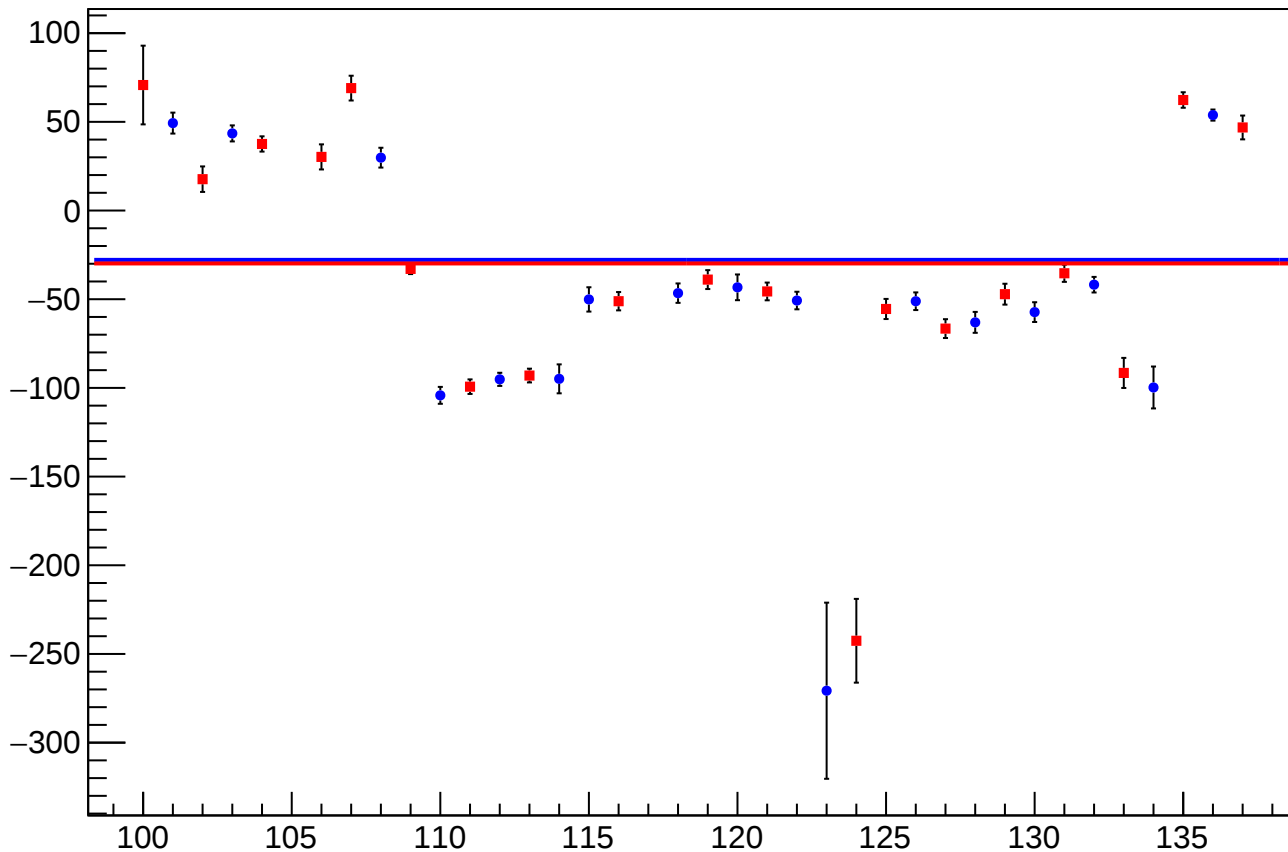
Right: -230.333 $\pm$ 0.103  $\chi^2$ /NDF: 245501.4/35

In: -234.501 $\pm$ 0.149  $\chi^2$ /NDF:145046.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -230.333 $\pm$ 0.103  $\chi^2$ /NDF: 245501.4/35

reg\_asym\_at2\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-27.816 \pm 1.271$   $\chi^2/\text{NDF}$ : 2066.3/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-29.835 \pm 1.196$   $\chi^2/\text{NDF}$ : 1951.7/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

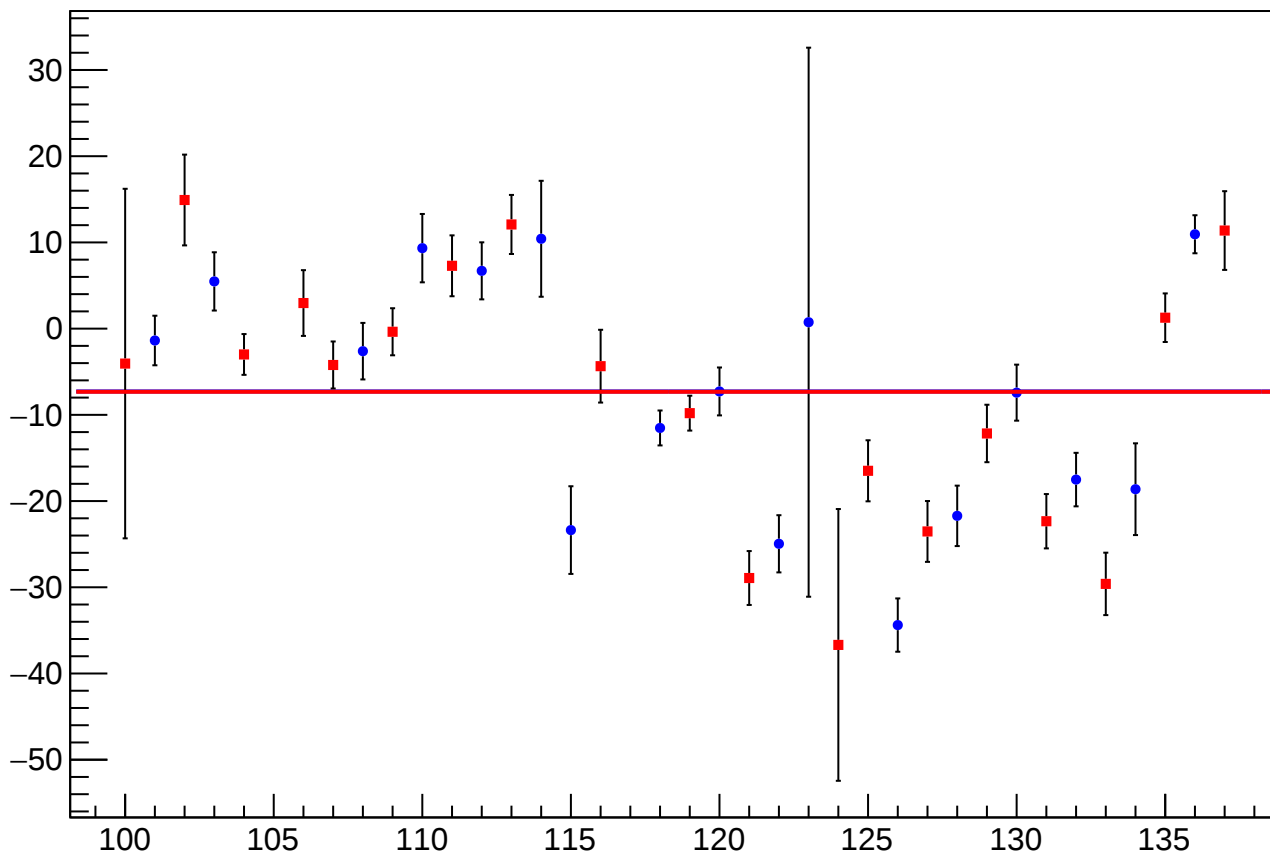
Right:  $-28.887 \pm 0.871$   $\chi^2/\text{NDF}$ : 4019.3/35

In:  $-27.816 \pm 1.271$   $\chi^2/\text{NDF}$ : 2066.3/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-28.887 \pm 0.871$   $\chi^2/\text{NDF}$ : 4019.3/35

reg\_asym\_at2\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -7.284+/-0.789  $\chi^2/\text{NDF}$ : 283.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -7.323+/-0.761  $\chi^2/\text{NDF}$ : 255.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

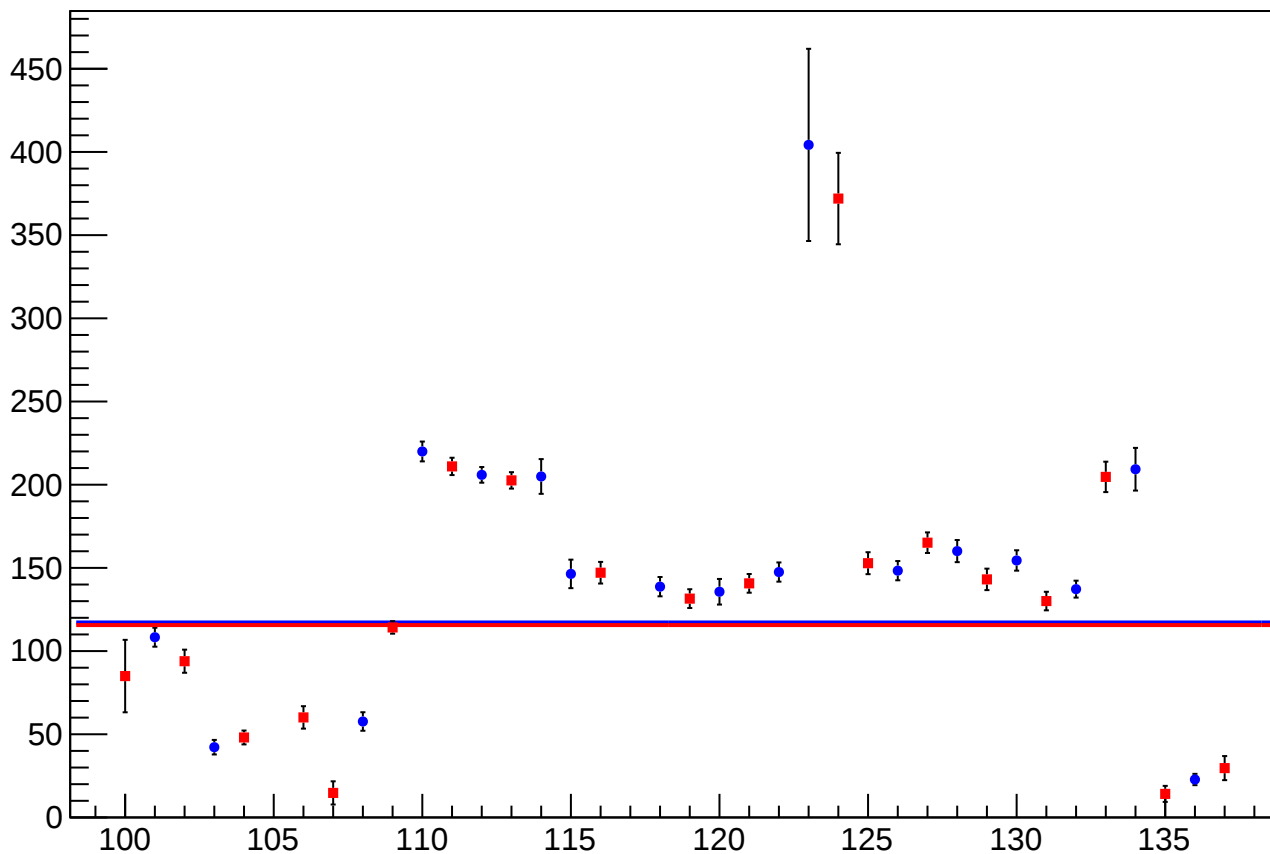
Right: -7.304+/-0.548  $\chi^2/\text{NDF}$ : 538.5/35

In: -7.284+/-0.789  $\chi^2/\text{NDF}$ :283.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -7.304+/-0.548  $\chi^2/\text{NDF}$ : 538.5/35

reg\_asym\_at2\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 117.187+/-1.416  $\chi^2/\text{NDF}$ : 2161.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 115.632+/-1.361  $\chi^2/\text{NDF}$ : 2137.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

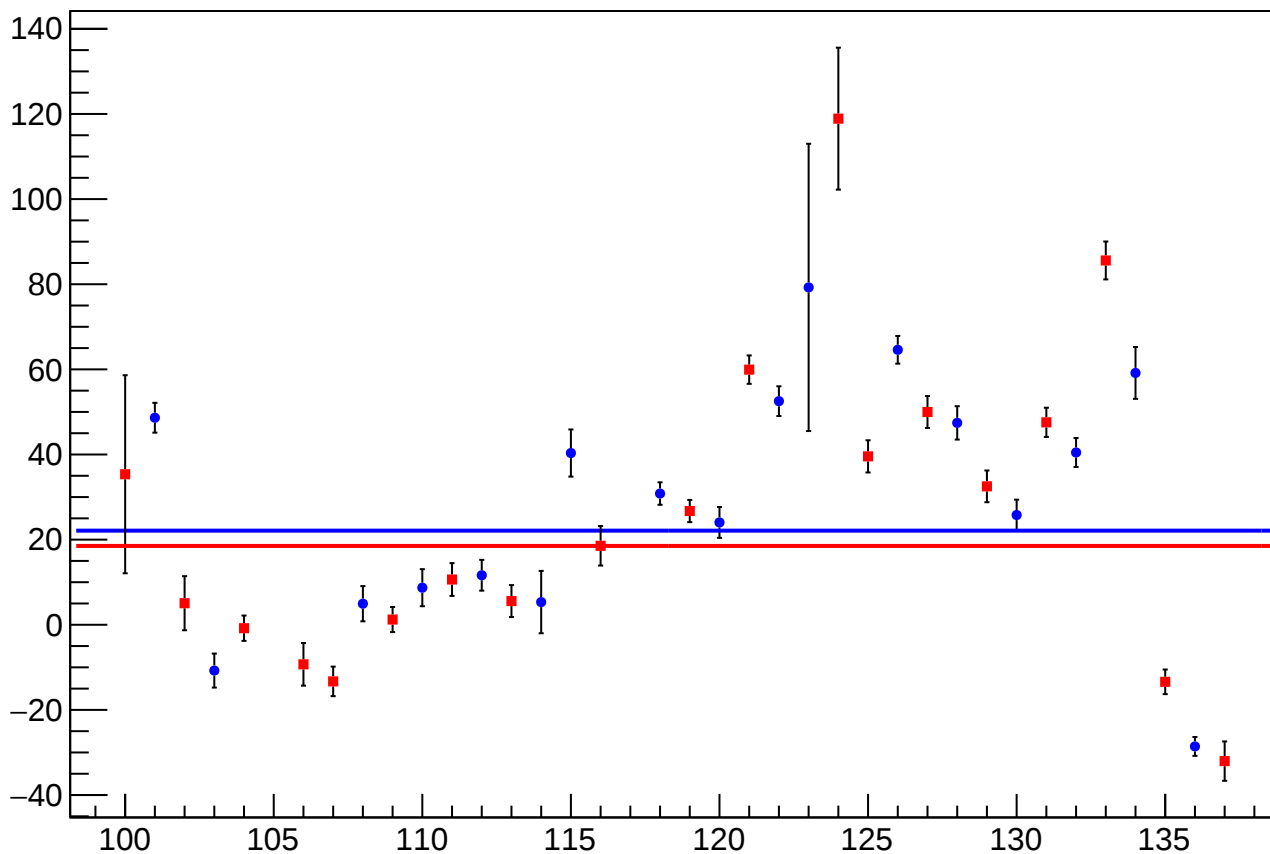
Right: 116.378+/-0.981  $\chi^2/\text{NDF}$ : 4299.2/35

In: 117.187+/-1.416  $\chi^2/\text{NDF}$ : 2161.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 116.378+/-0.981  $\chi^2/\text{NDF}$ : 4299.2/35

reg\_asym\_at2\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 22.110+/-0.898  $\chi^2/\text{NDF}$ : 1070.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: 18.521+/-0.871  $\chi^2/\text{NDF}$ : 1068.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

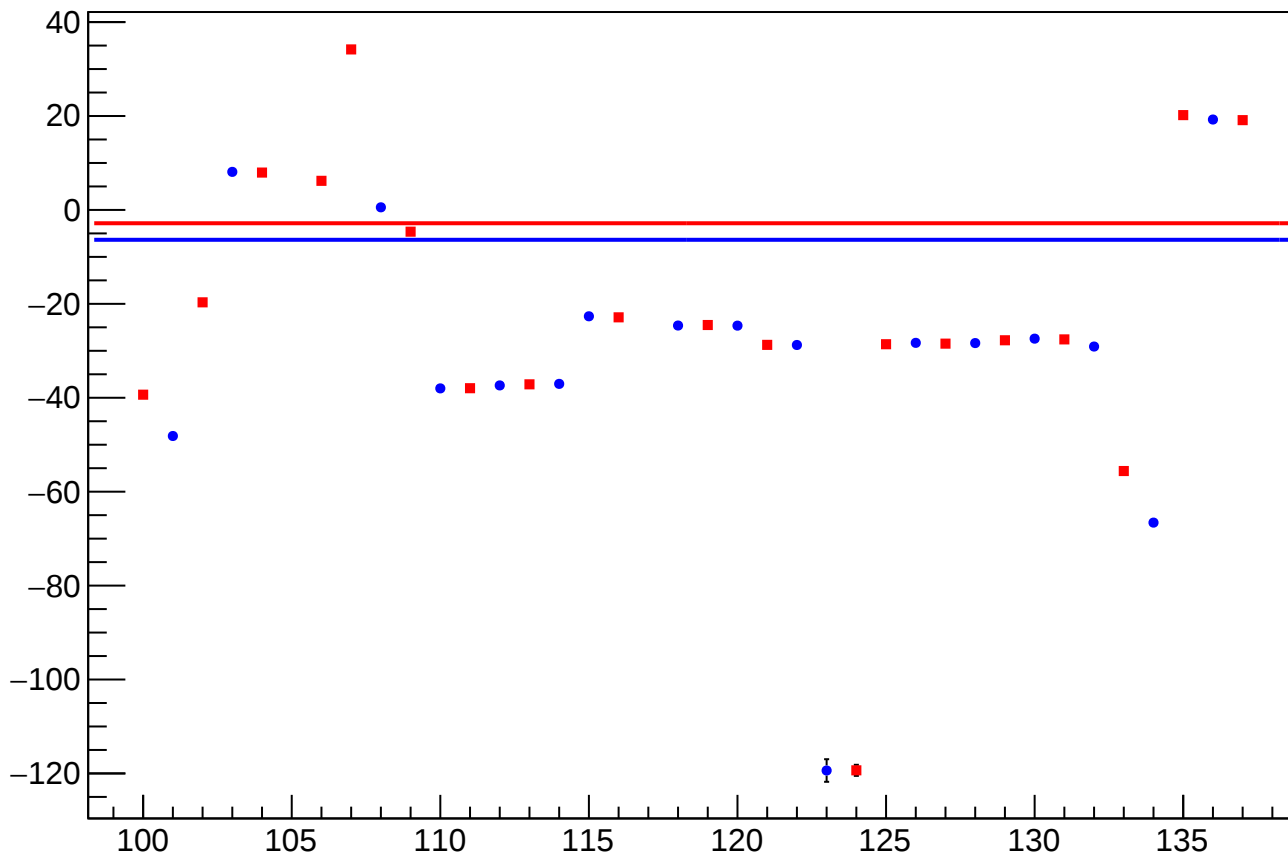
Right: 20.261+/-0.625  $\chi^2/\text{NDF}$ : 2147.1/35

In: 22.110+/-0.898  $\chi^2/\text{NDF}$ :1070.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: 20.261+/-0.625  $\chi^2/\text{NDF}$ : 2147.1/35

reg\_asym\_at2\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -6.360+/-0.046  $\chi^2/\text{NDF}$ : 264750.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -2.837+/-0.046  $\chi^2/\text{NDF}$ : 265573.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

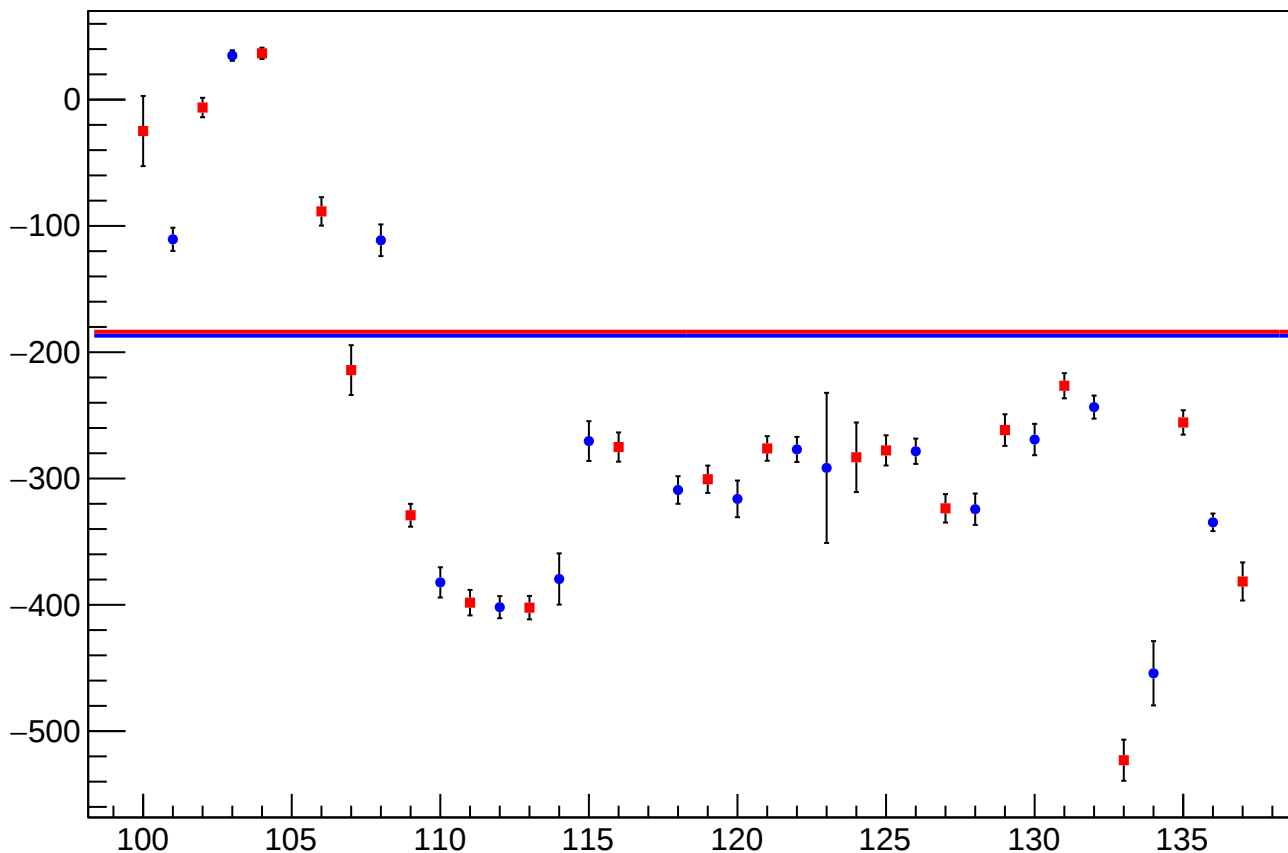
Right: -4.577+/-0.033  $\chi^2/\text{NDF}$ : 533252.4/35

In: -6.360+/-0.046  $\chi^2/\text{NDF}$ : 264750.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -4.577+/-0.033  $\chi^2/\text{NDF}$ : 533252.4/35

reg\_asym\_atl1r2\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: -186.862 $\pm$ 2.342  $\chi^2$ /NDF: 5033.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -183.765 $\pm$ 2.294  $\chi^2$ /NDF: 5528.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

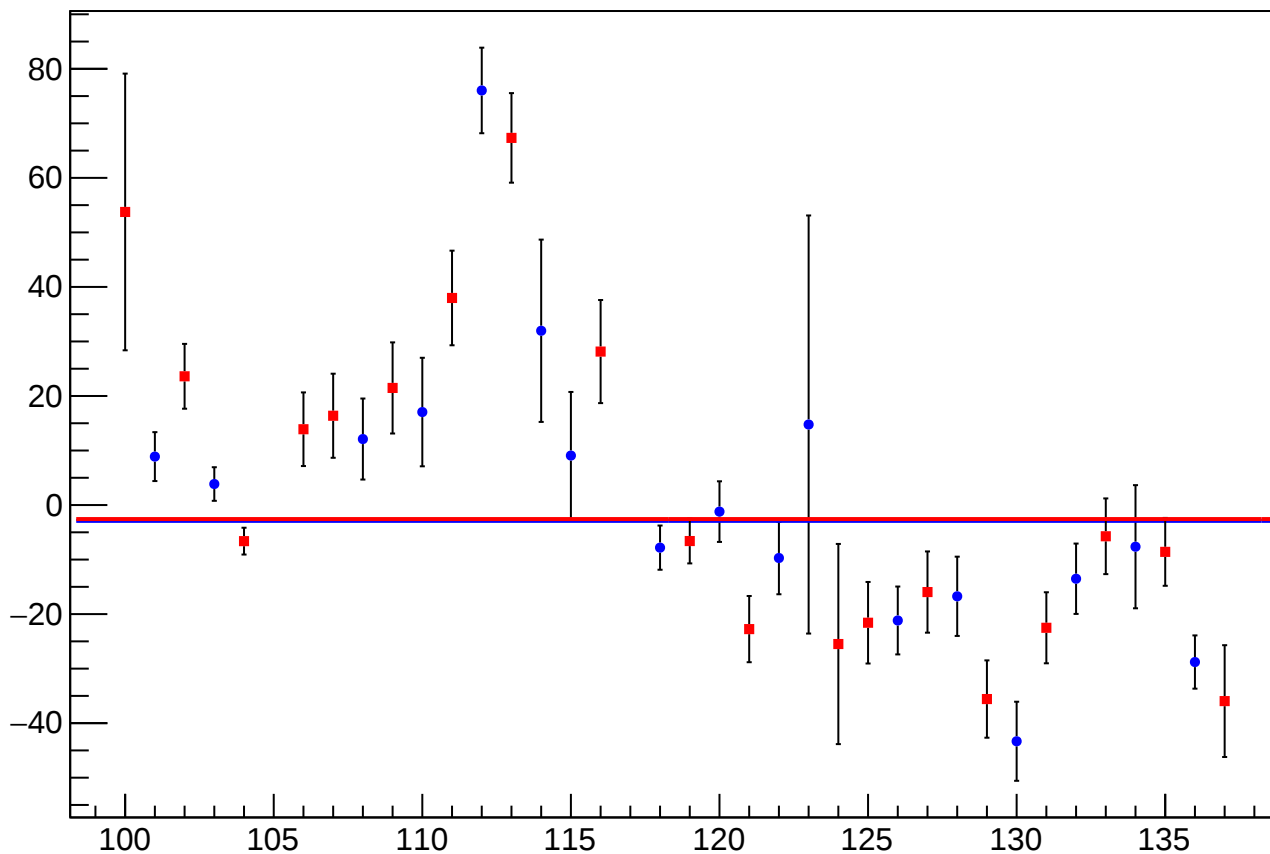
Right: -185.281 $\pm$ 1.639  $\chi^2$ /NDF: 10562.8/35

In: -186.862 $\pm$ 2.342  $\chi^2$ /NDF:5033.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -185.281 $\pm$ 1.639  $\chi^2$ /NDF: 10562.8/35

reg\_asym\_atl1r2\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In:  $-2.901 \pm 1.467$   $\chi^2/\text{NDF}$ : 203.6/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-2.570 \pm 1.396$   $\chi^2/\text{NDF}$ : 218.2/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

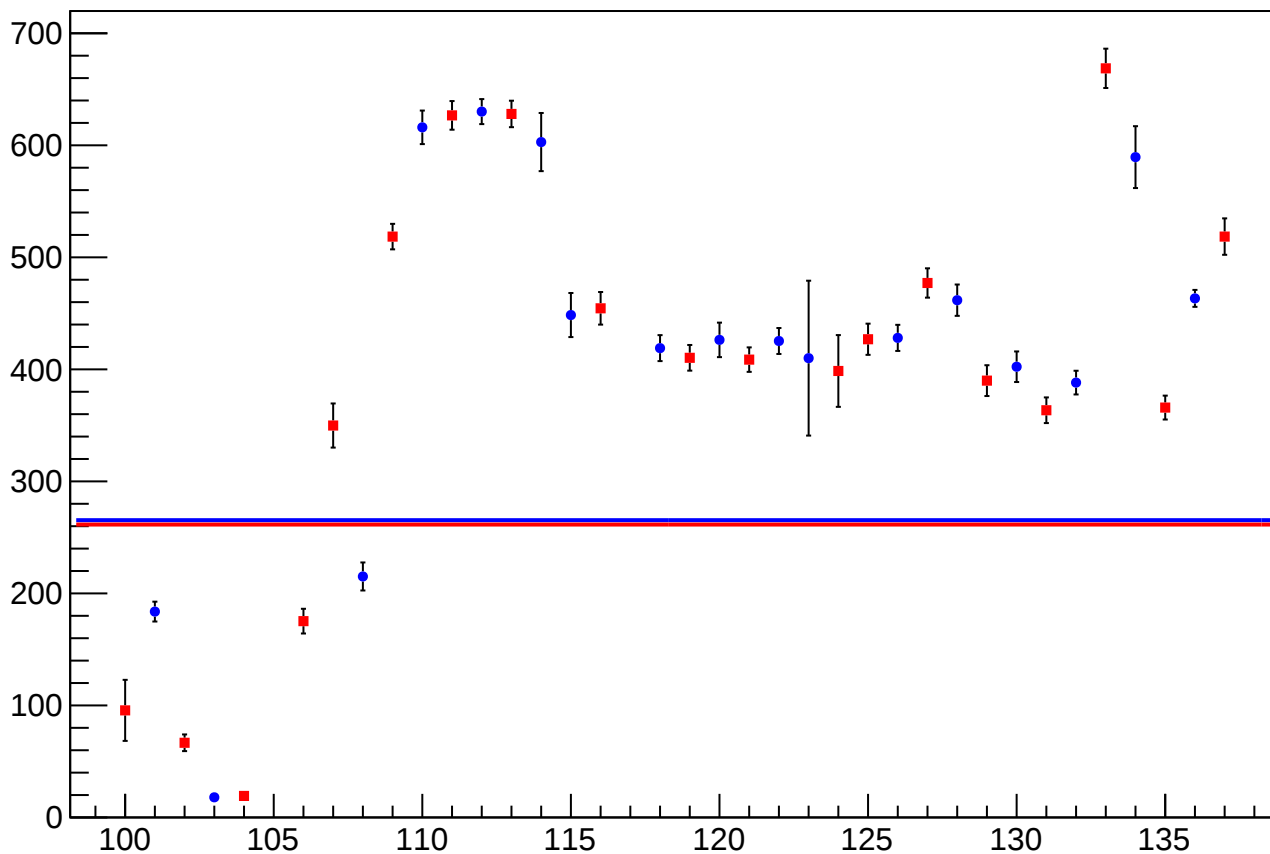
Right:  $-2.728 \pm 1.011$   $\chi^2/\text{NDF}$ : 421.8/35

In:  $-2.901 \pm 1.467$   $\chi^2/\text{NDF}$ : 203.6/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-2.728 \pm 1.011$   $\chi^2/\text{NDF}$ : 421.8/35

reg\_asym\_atl1r2\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 265.369+/-2.488  $\chi^2/\text{NDF}$ : 7633.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 261.465+/-2.458  $\chi^2/\text{NDF}$ : 8204.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

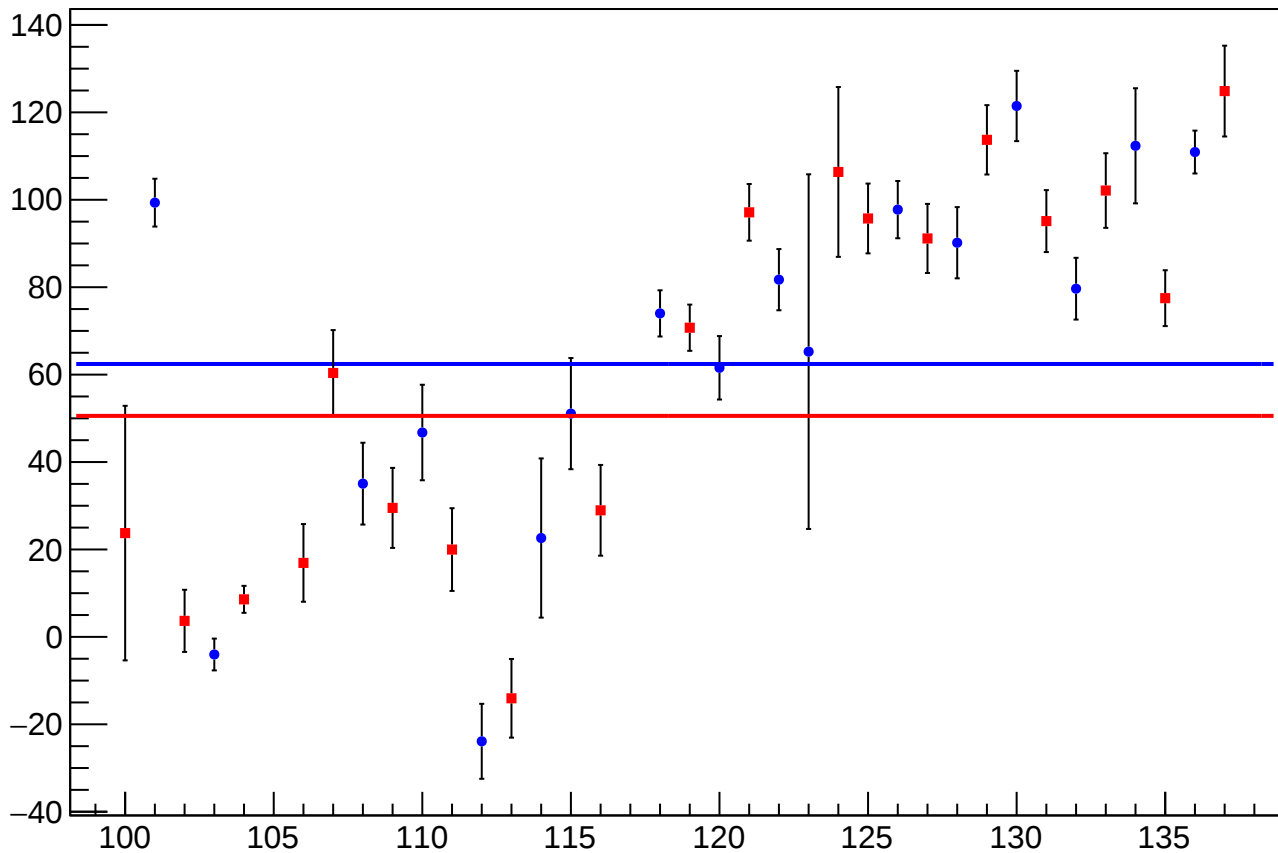
Right: 263.393+/-1.749  $\chi^2/\text{NDF}$ : 15839.3/35

In: 265.369+/-2.488  $\chi^2/\text{NDF}$ : 7633.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 263.393+/-1.749  $\chi^2/\text{NDF}$ : 15839.3/35

reg\_asym\_atl1r2\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 62.434+/-1.694  $\chi^2/\text{NDF}$ : 721.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 50.560+/-1.642  $\chi^2/\text{NDF}$ : 657.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

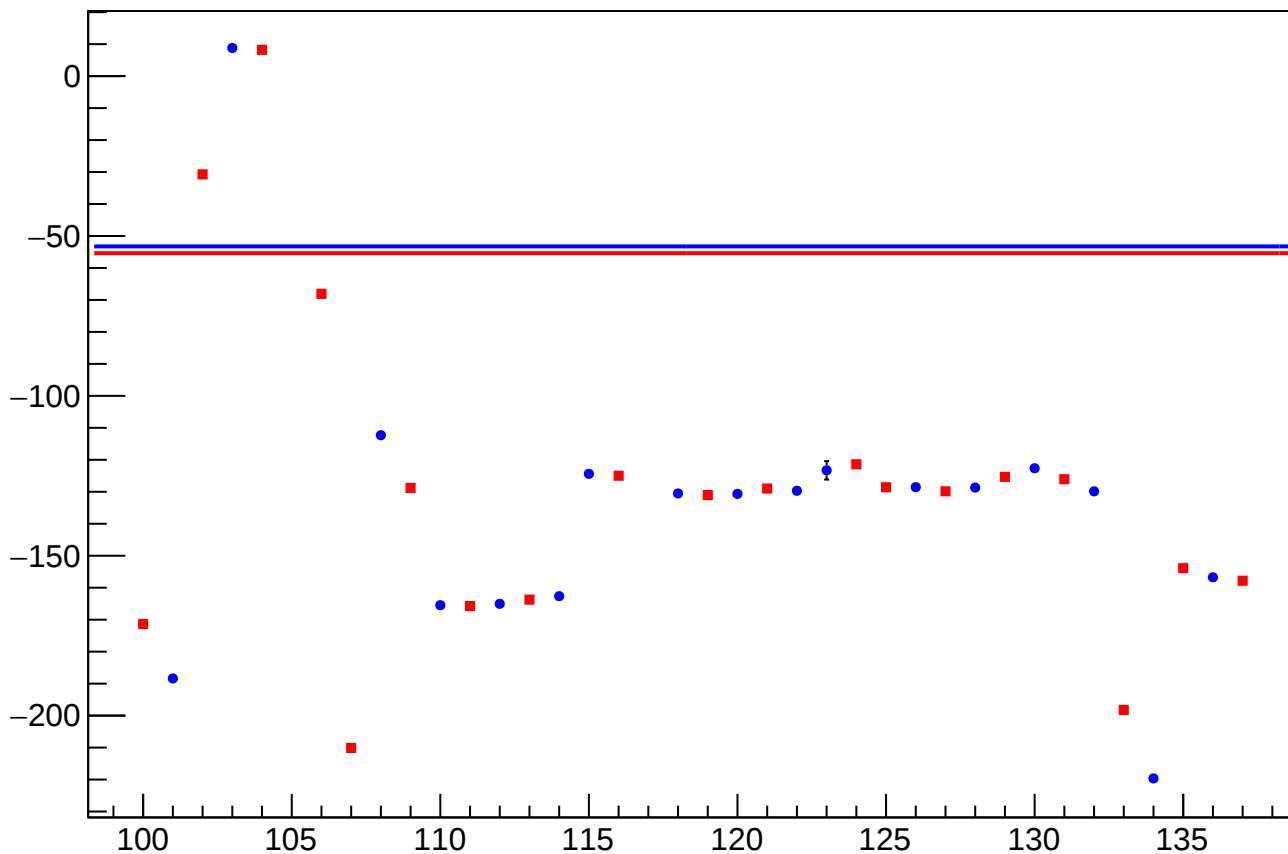
Right: 56.313+/-1.179  $\chi^2/\text{NDF}$ : 1404.5/35

In: 62.434+/-1.694  $\chi^2/\text{NDF}$ : 721.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 56.313+/-1.179  $\chi^2/\text{NDF}$ : 1404.5/35

reg\_asym\_atl1r2\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -53.264 $\pm$ 0.070  $\chi^2$ /NDF: 1225492.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -55.373 $\pm$ 0.072  $\chi^2$ /NDF: 967027.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

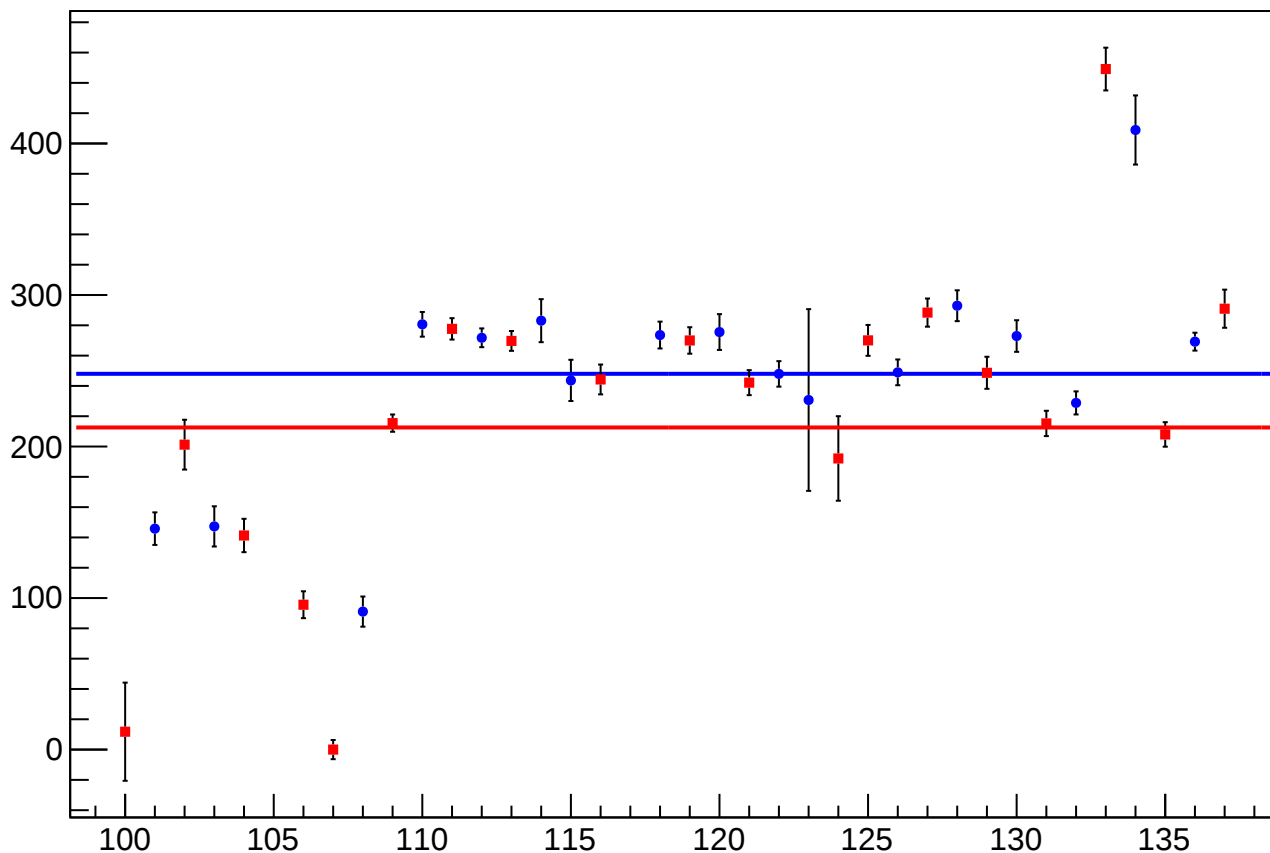
Right: -54.295 $\pm$ 0.050  $\chi^2$ /NDF: 2192958.9/35

In: -53.264 $\pm$ 0.070  $\chi^2$ /NDF:1225492.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -54.295 $\pm$ 0.050  $\chi^2$ /NDF: 2192958.9/35

reg\_asym\_atl1r2\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 247.995+/-2.290  $\chi^2/\text{NDF}$ : 541.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 212.579+/-2.062  $\chi^2/\text{NDF}$ : 2041.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

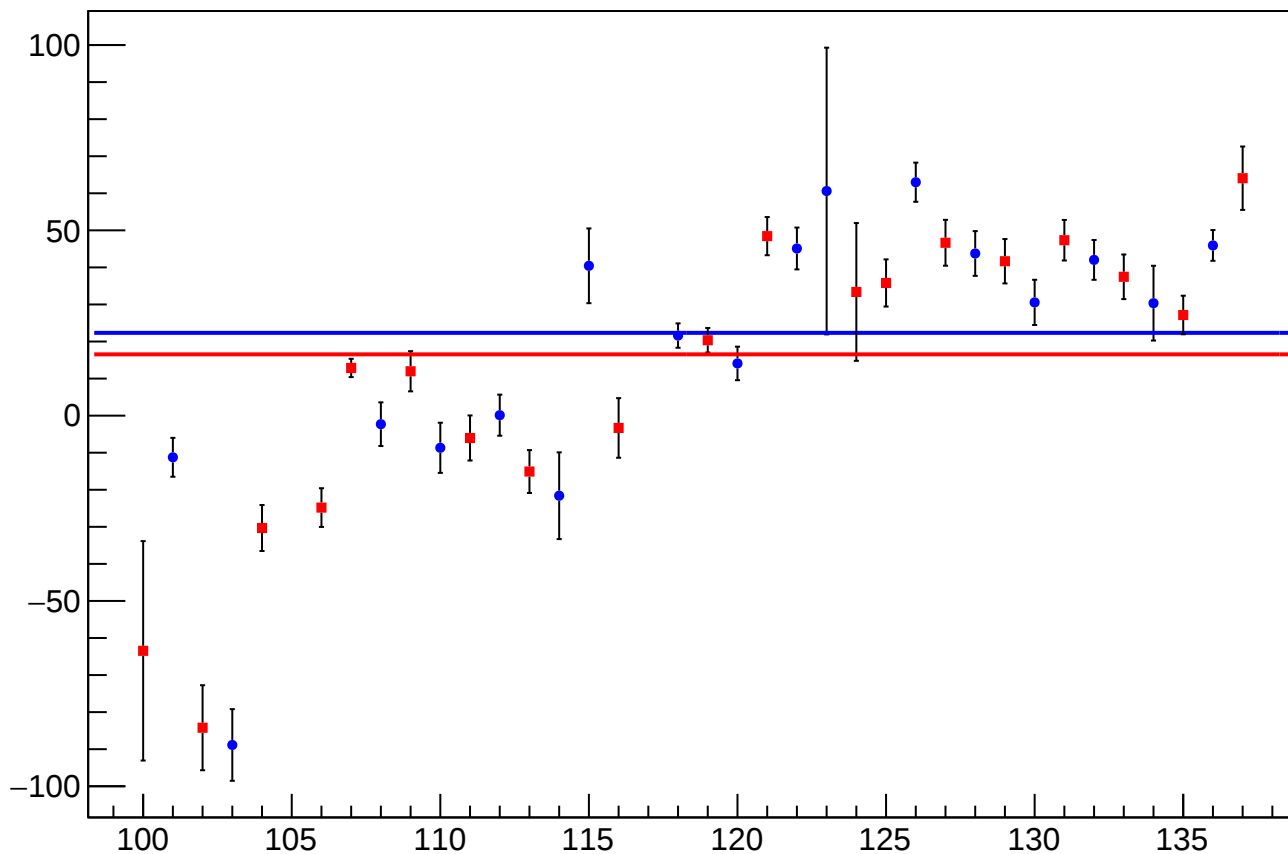
Right: 228.437+/-1.532  $\chi^2/\text{NDF}$ : 2715.5/35

In: 247.995+/-2.290  $\chi^2/\text{NDF}$ : 541.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 228.437+/-1.532  $\chi^2/\text{NDF}$ : 2715.5/35

reg\_asym\_atl1r2\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 22.342 $\pm$ 1.395  $\chi^2$ /NDF: 385.8/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 16.537 $\pm$ 1.227  $\chi^2$ /NDF: 426.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

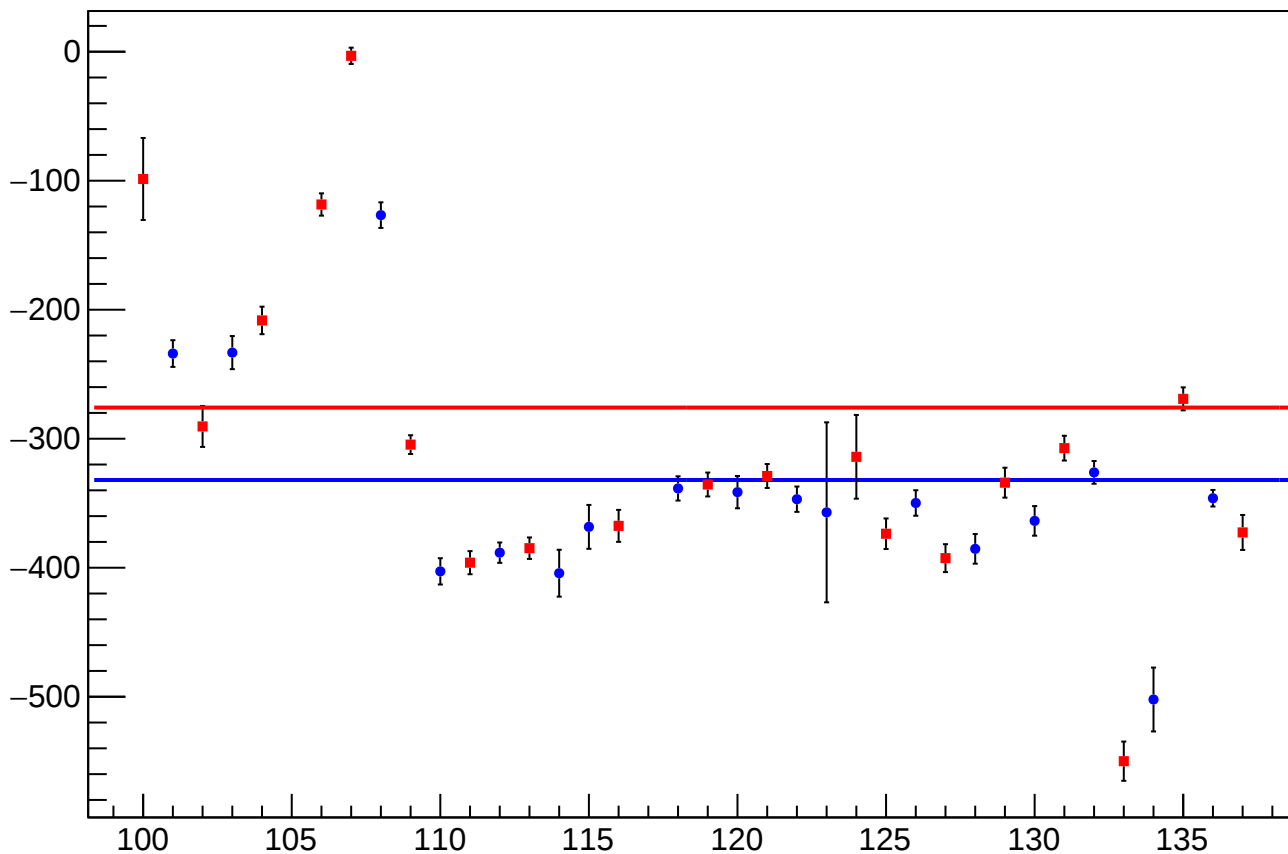
Right: 19.069 $\pm$ 0.922  $\chi^2$ /NDF: 822.2/35

In: 22.342 $\pm$ 1.395  $\chi^2$ /NDF: 385.8/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 19.069 $\pm$ 0.922  $\chi^2$ /NDF: 822.2/35

reg\_asym\_atl1r2\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-331.989 \pm 2.580$   $\chi^2/\text{NDF}$ : 785.0/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-275.842 \pm 2.325$   $\chi^2/\text{NDF}$ : 3362.2/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

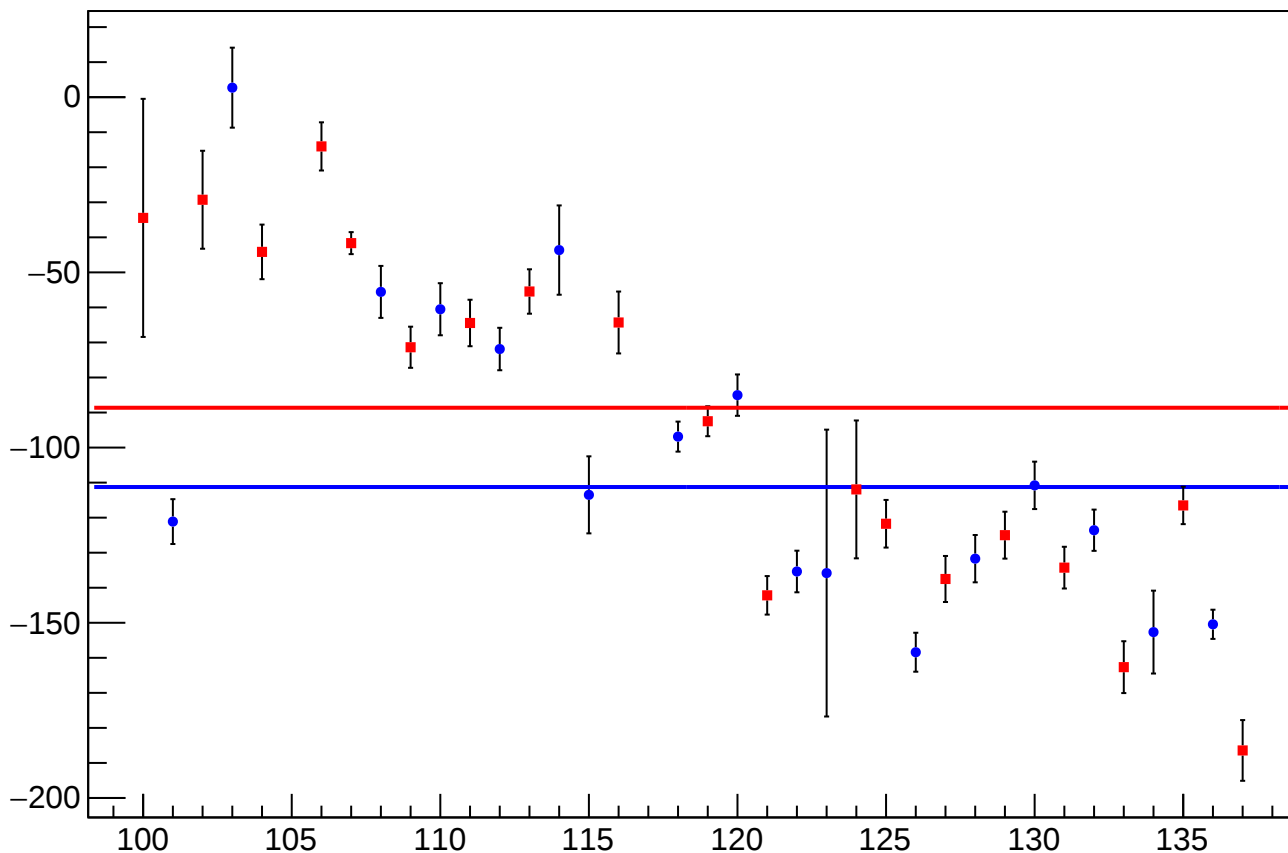
Right:  $-300.997 \pm 1.727$   $\chi^2/\text{NDF}$ : 4408.6/35

In:  $-331.989 \pm 2.580$   $\chi^2/\text{NDF}$ : 785.0/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-300.997 \pm 1.727$   $\chi^2/\text{NDF}$ : 4408.6/35

reg\_asym\_atl1r2\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -111.257+/-1.597  $\chi^2/\text{NDF}$ : 509.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -88.633+/-1.433  $\chi^2/\text{NDF}$ : 971.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

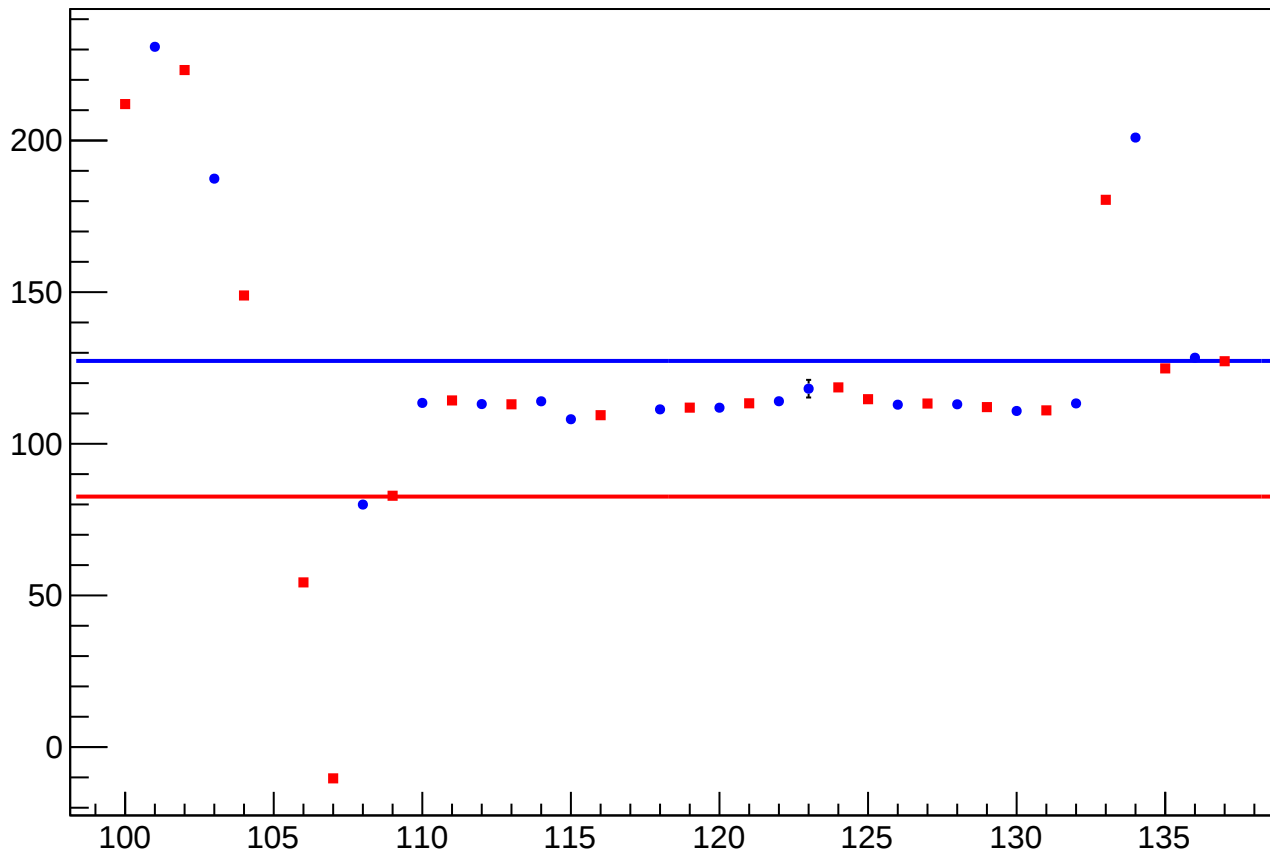
Right: -98.723+/-1.067  $\chi^2/\text{NDF}$ : 1591.7/35

In: -111.257+/-1.597  $\chi^2/\text{NDF}$ : 509.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -98.723+/-1.067  $\chi^2/\text{NDF}$ : 1591.7/35

reg\_asym\_atl1r2\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 127.323+/-0.089  $\chi^2/\text{NDF}$ : 187776.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 82.595+/-0.075  $\chi^2/\text{NDF}$ : 765022.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

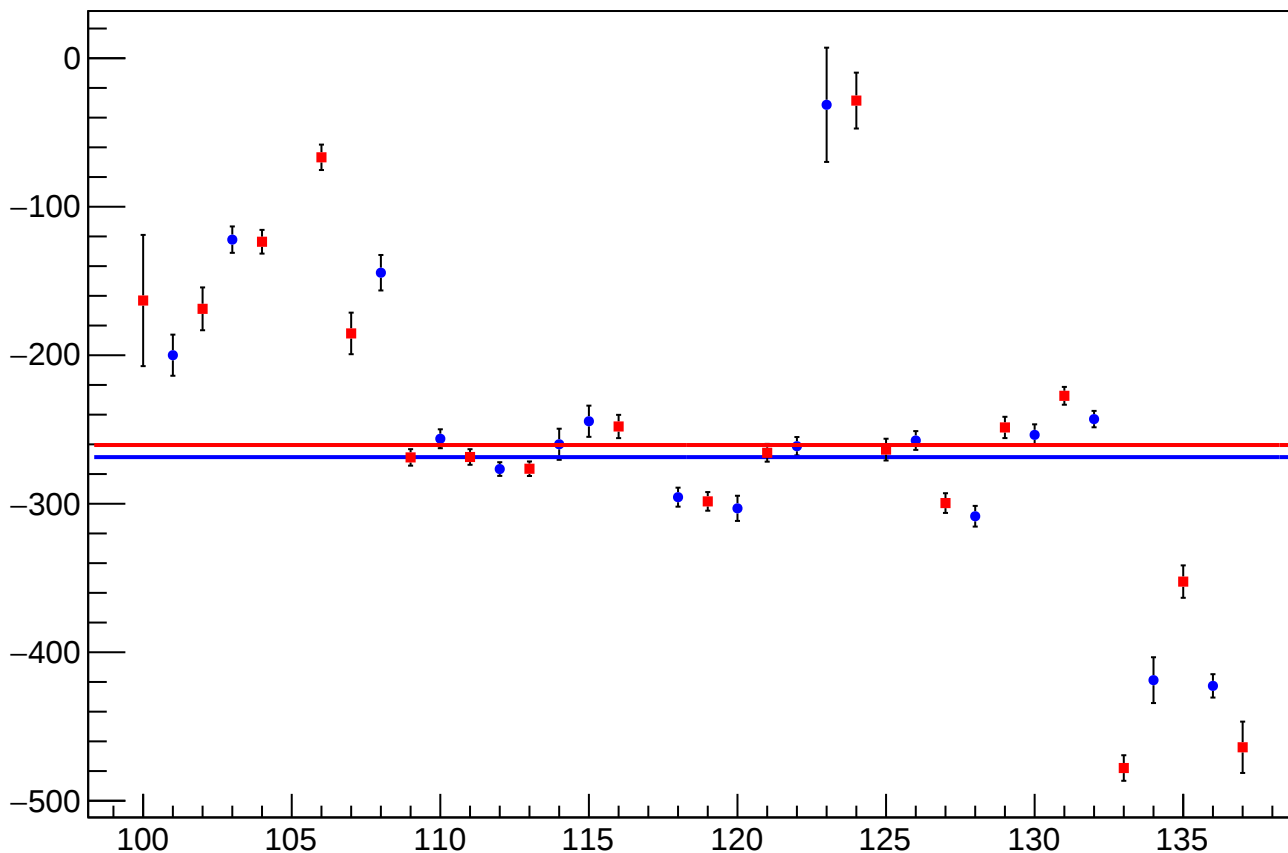
Right: 101.169+/-0.058  $\chi^2/\text{NDF}$ : 1099026.8/35

In: 127.323+/-0.089  $\chi^2/\text{NDF}$ : 187776.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 101.169+/-0.058  $\chi^2/\text{NDF}$ : 1099026.8/35

reg\_asym\_atr1l2\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-268.595 \pm 1.830$   $\chi^2/\text{NDF}$ : 1029.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-260.449 \pm 1.724$   $\chi^2/\text{NDF}$ : 2003.6/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

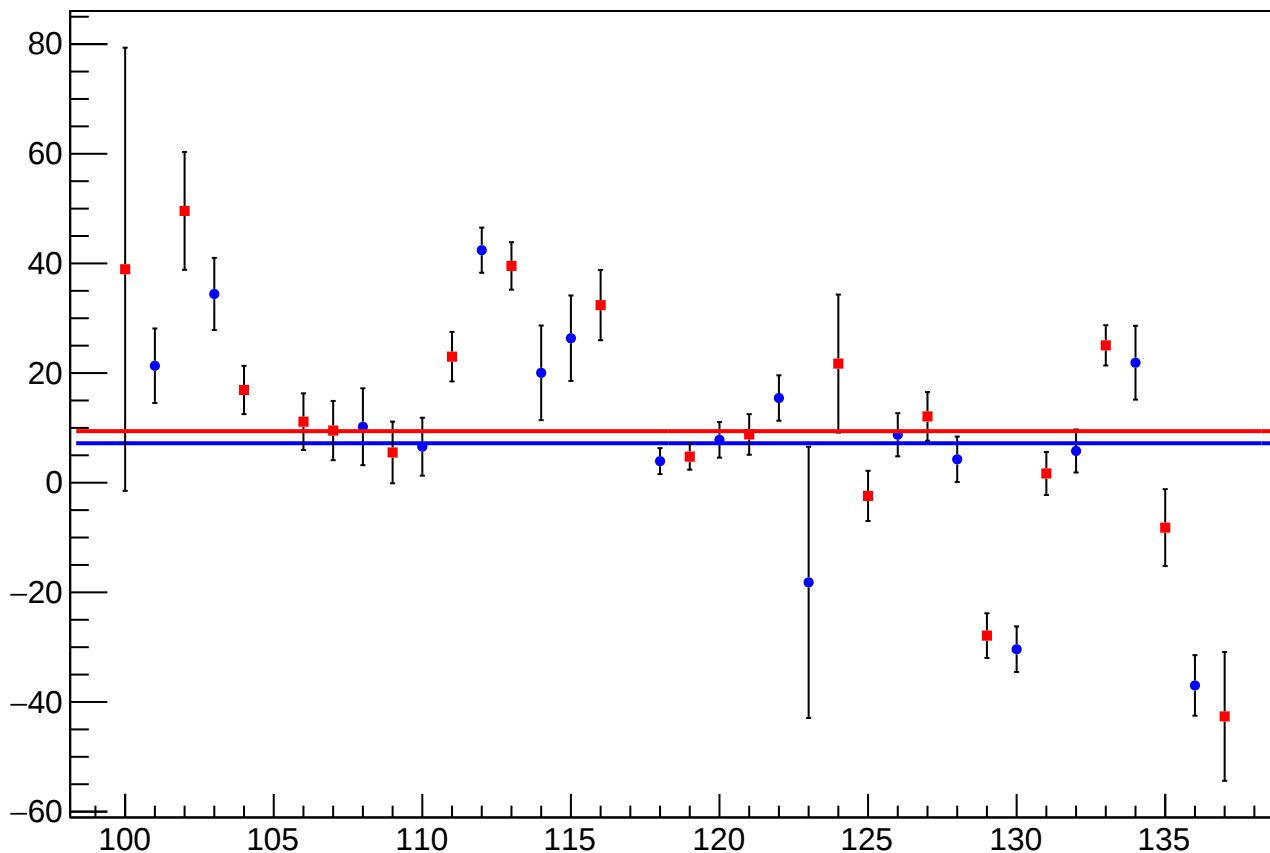
Right:  $-264.281 \pm 1.255$   $\chi^2/\text{NDF}$ : 3044.1/35

In:  $-268.595 \pm 1.830$   $\chi^2/\text{NDF}$ : 1029.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-264.281 \pm 1.255$   $\chi^2/\text{NDF}$ : 3044.1/35

reg\_asym\_atr1l2\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 7.199+/-1.103  $\chi^2/\text{NDF}$ : 260.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 9.403+/-1.071  $\chi^2/\text{NDF}$ : 232.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

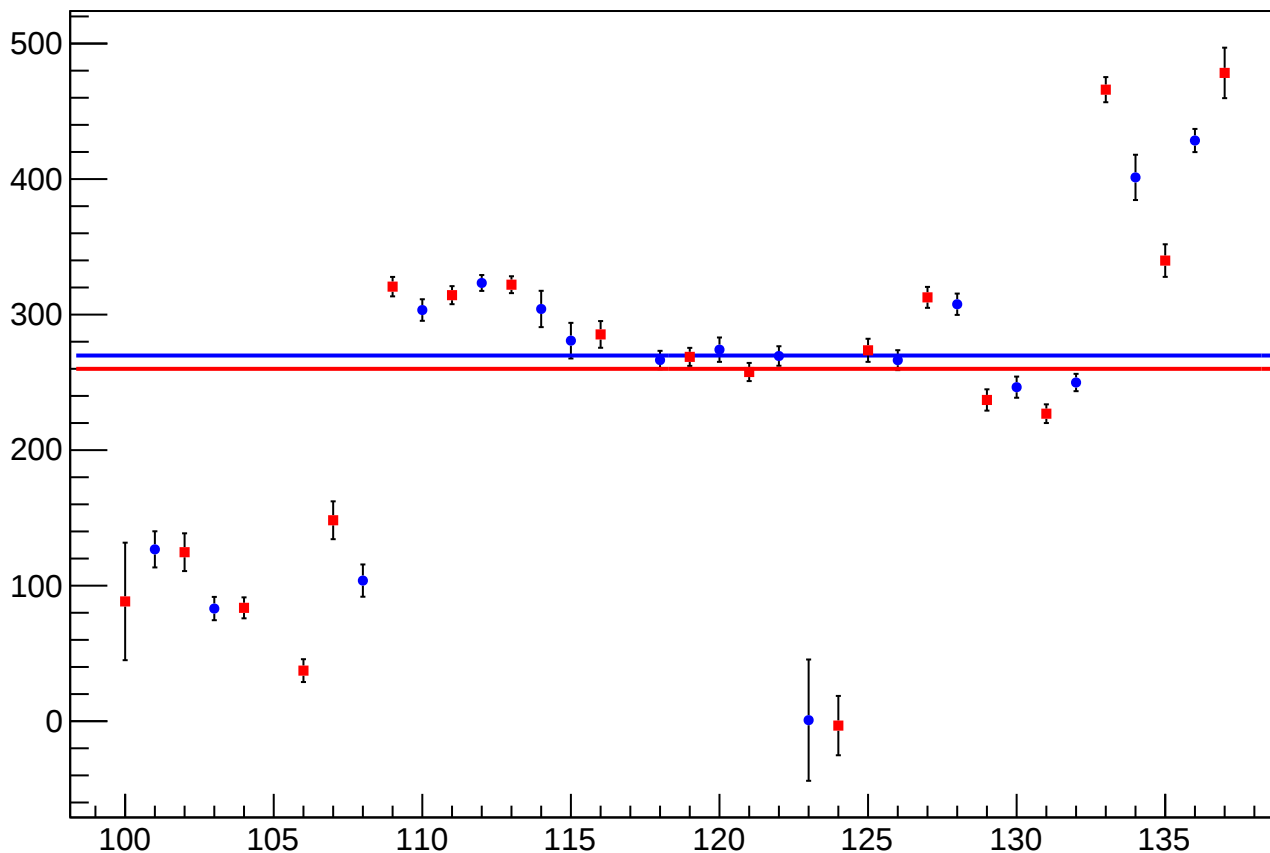
Right: 8.333+/-0.768  $\chi^2/\text{NDF}$ : 495.1/35

In: 7.199+/-1.103  $\chi^2/\text{NDF}$ : 260.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 8.333+/-0.768  $\chi^2/\text{NDF}$ : 495.1/35

reg\_asym\_atr1l2\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 269.806+/-2.089  $\chi^2/\text{NDF}$ : 1374.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 259.980+/-1.977  $\chi^2/\text{NDF}$ : 2538.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

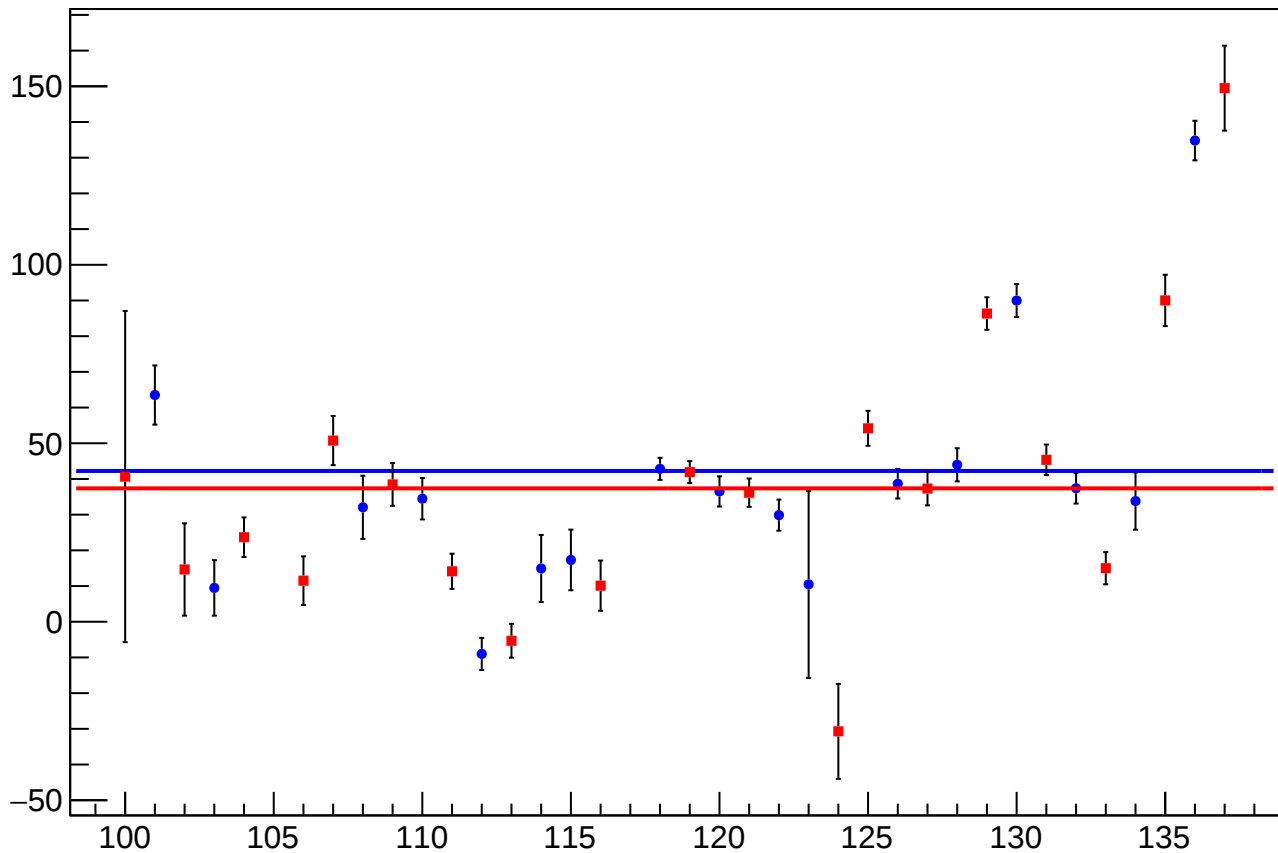
Right: 264.622+/-1.436  $\chi^2/\text{NDF}$ : 3924.4/35

In: 269.806+/-2.089  $\chi^2/\text{NDF}$ : 1374.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 264.622+/-1.436  $\chi^2/\text{NDF}$ : 3924.4/35

reg\_asym\_atr1l2\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 42.242 $\pm$ 1.274  $\chi^2$ /NDF: 574.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 37.367 $\pm$ 1.235  $\chi^2$ /NDF: 472.3/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

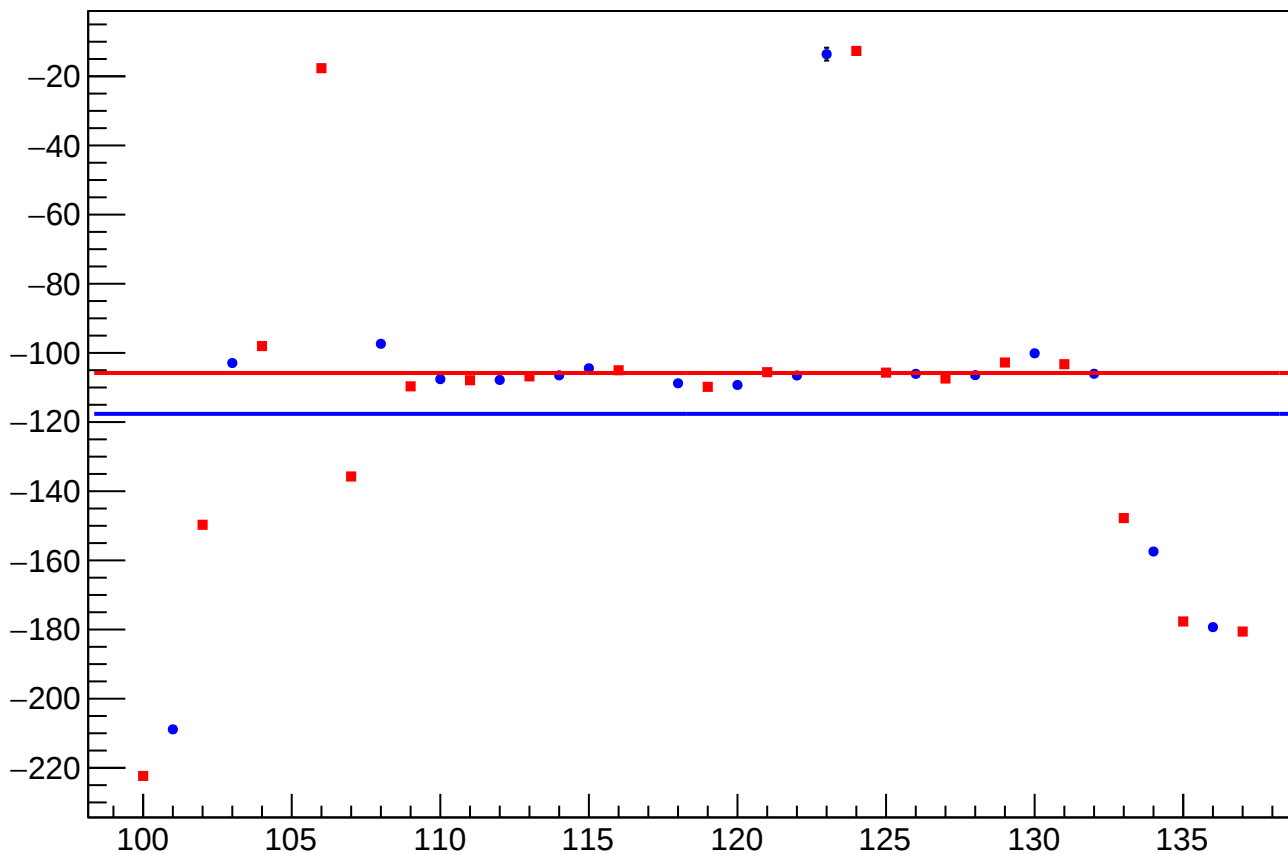
Right: 39.728 $\pm$ 0.886  $\chi^2$ /NDF: 1054.2/35

In: 42.242 $\pm$ 1.274  $\chi^2$ /NDF:574.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 39.728 $\pm$ 0.886  $\chi^2$ /NDF: 1054.2/35

reg\_asym\_atr1l2\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -117.625+/-0.079  $\chi^2/\text{NDF}$ : 141872.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -105.807+/-0.073  $\chi^2/\text{NDF}$ : 323108.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

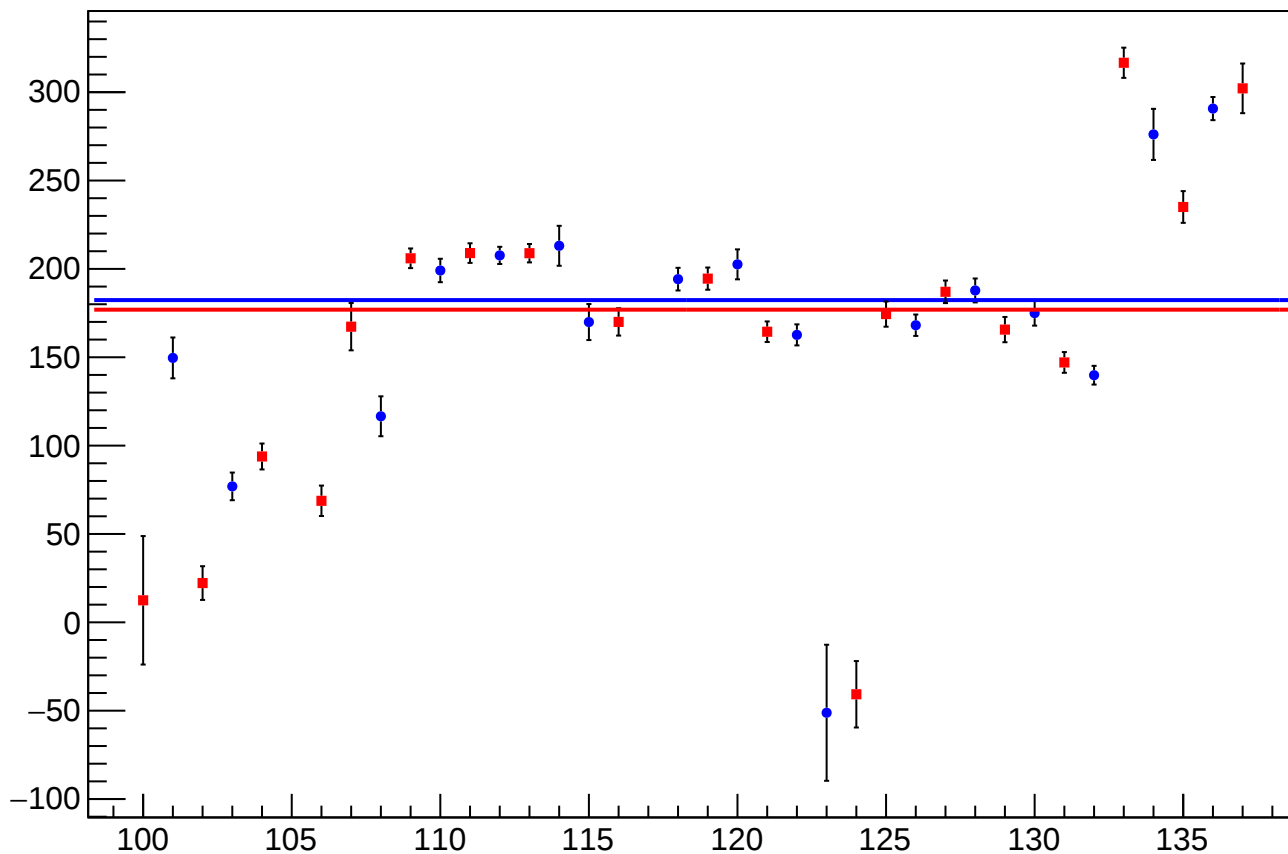
Right: -111.270+/-0.053  $\chi^2/\text{NDF}$ : 477157.6/35

In: -117.625+/-0.079  $\chi^2/\text{NDF}$ : 141872.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -111.270+/-0.053  $\chi^2/\text{NDF}$ : 477157.6/35

reg\_asym\_atr1l2\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 182.351+/-1.784  $\chi^2/\text{NDF}$ : 710.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 176.927+/-1.692  $\chi^2/\text{NDF}$ : 1235.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

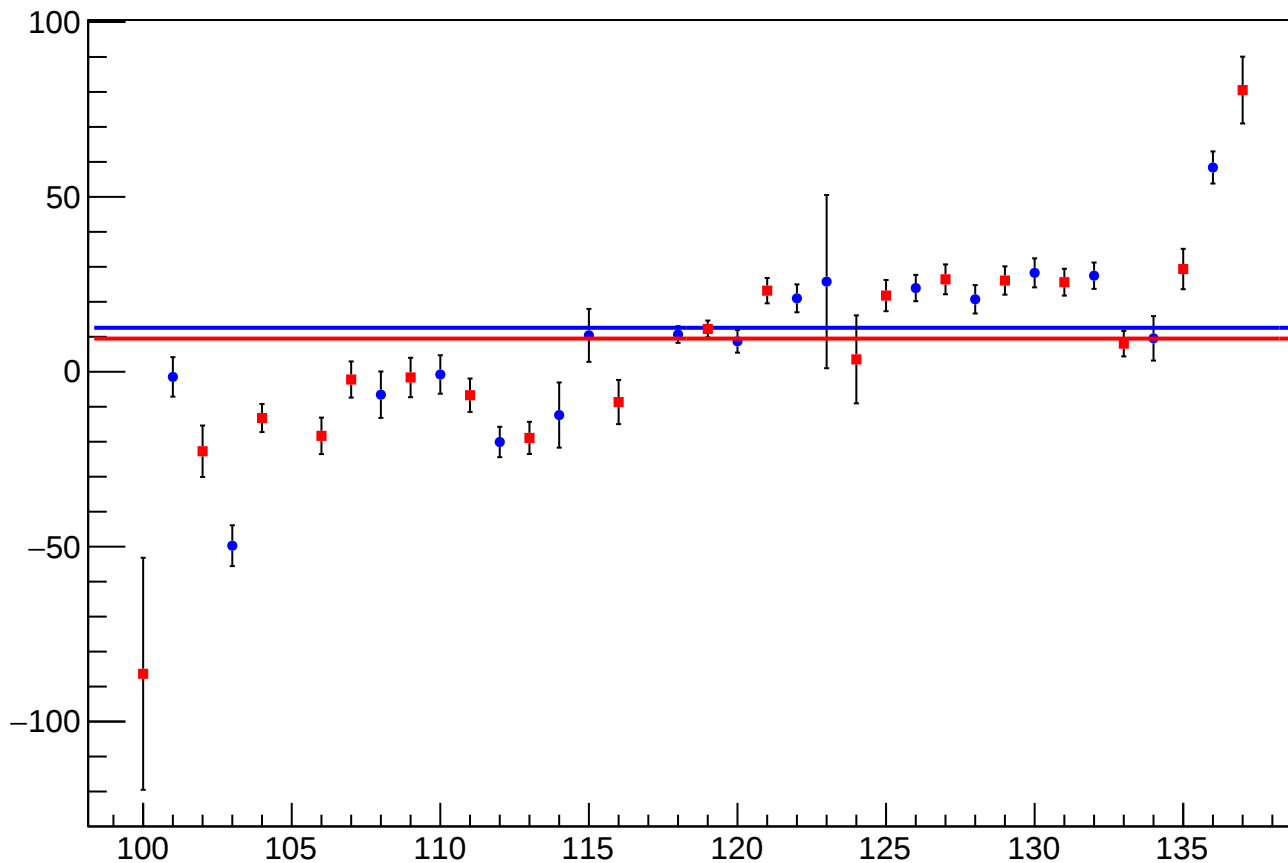
Right: 179.495+/-1.228  $\chi^2/\text{NDF}$ : 1950.7/35

In: 182.351+/-1.784  $\chi^2/\text{NDF}$ : 710.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 179.495+/-1.228  $\chi^2/\text{NDF}$ : 1950.7/35

reg\_asym\_atr1l2\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 12.574+/-1.074  $\chi^2/\text{NDF}$ : 348.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 9.493+/-1.047  $\chi^2/\text{NDF}$ : 295.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

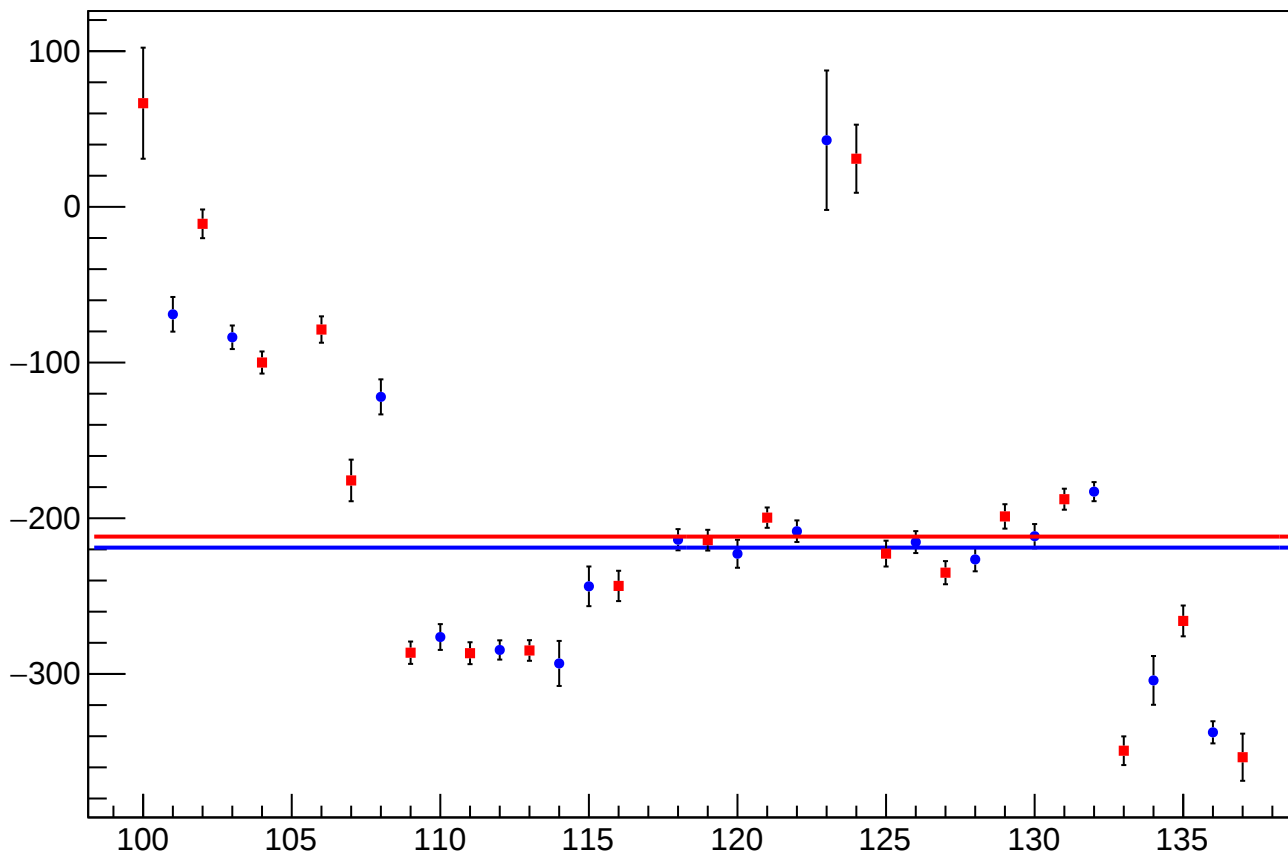
Right: 10.995+/-0.750  $\chi^2/\text{NDF}$ : 648.0/35

In: 12.574+/-1.074  $\chi^2/\text{NDF}$ : 348.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 10.995+/-0.750  $\chi^2/\text{NDF}$ : 648.0/35

reg\_asym\_atr1l2\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-218.855 \pm 2.023$   $\chi^2/\text{NDF}$ : 1146.6/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-211.780 \pm 1.924$   $\chi^2/\text{NDF}$ : 1885.2/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

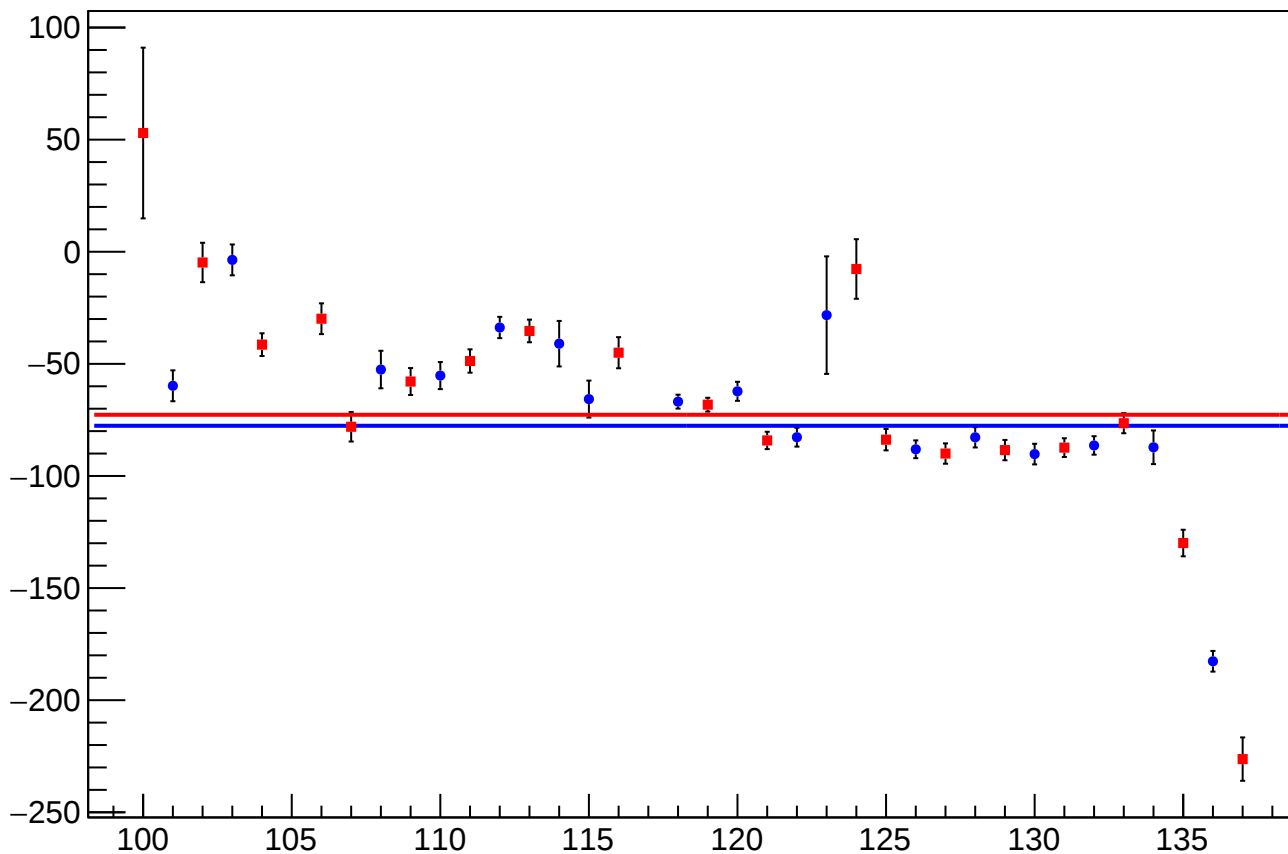
Right:  $-215.141 \pm 1.394$   $\chi^2/\text{NDF}$ : 3038.2/35

In:  $-218.855 \pm 2.023$   $\chi^2/\text{NDF}$ : 1146.6/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-215.141 \pm 1.394$   $\chi^2/\text{NDF}$ : 3038.2/35

reg\_asym\_atr1l2\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-77.612 \pm 1.236$   $\chi^2/\text{NDF}$ : 815.9/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-72.710 \pm 1.206$   $\chi^2/\text{NDF}$ : 671.4/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

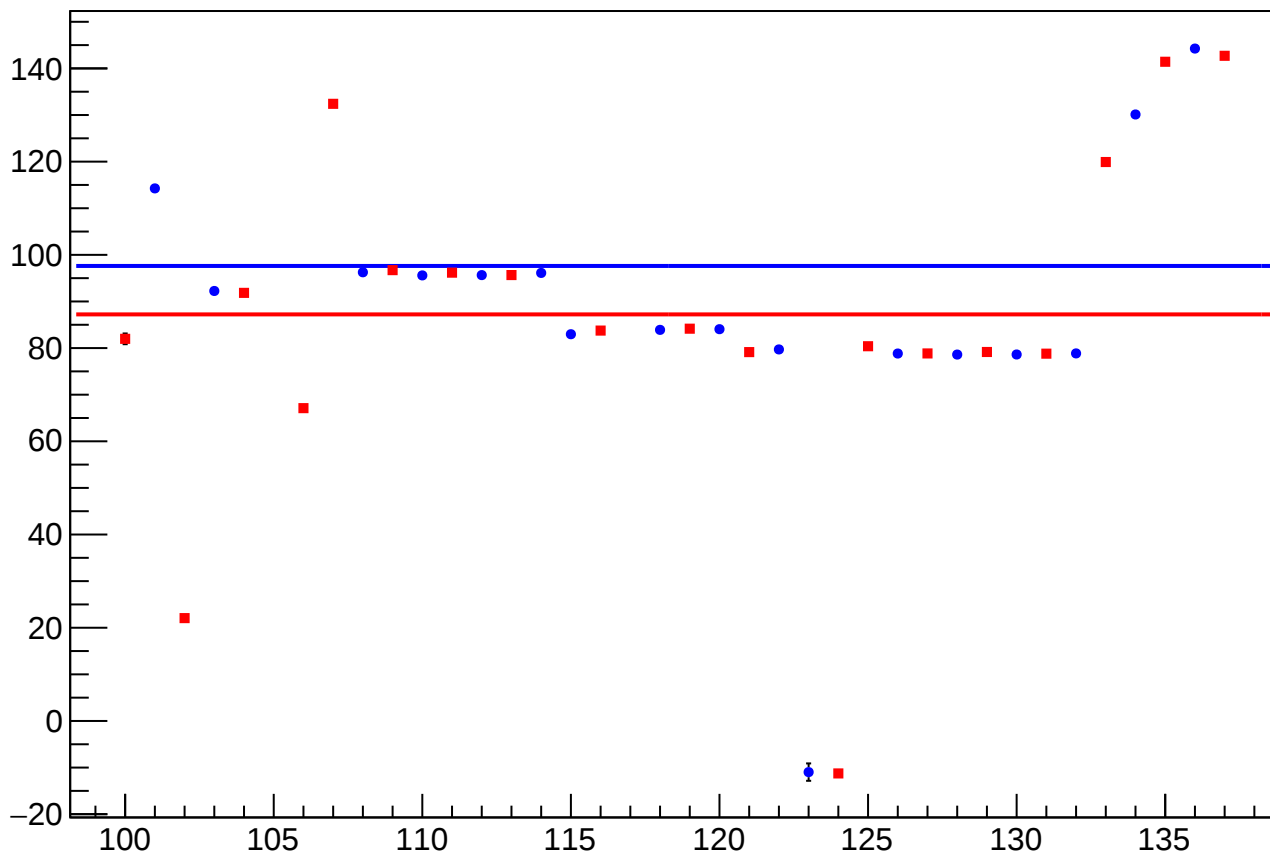
Right:  $-75.100 \pm 0.863$   $\chi^2/\text{NDF}$ : 1495.4/35

In:  $-77.612 \pm 1.236$   $\chi^2/\text{NDF}$ : 815.9/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-75.100 \pm 0.863$   $\chi^2/\text{NDF}$ : 1495.4/35

reg\_asym\_atr1l2\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 97.620 $\pm$ 0.074  $\chi^2$ /NDF: 94045.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 87.226 $\pm$ 0.068  $\chi^2$ /NDF: 220850.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

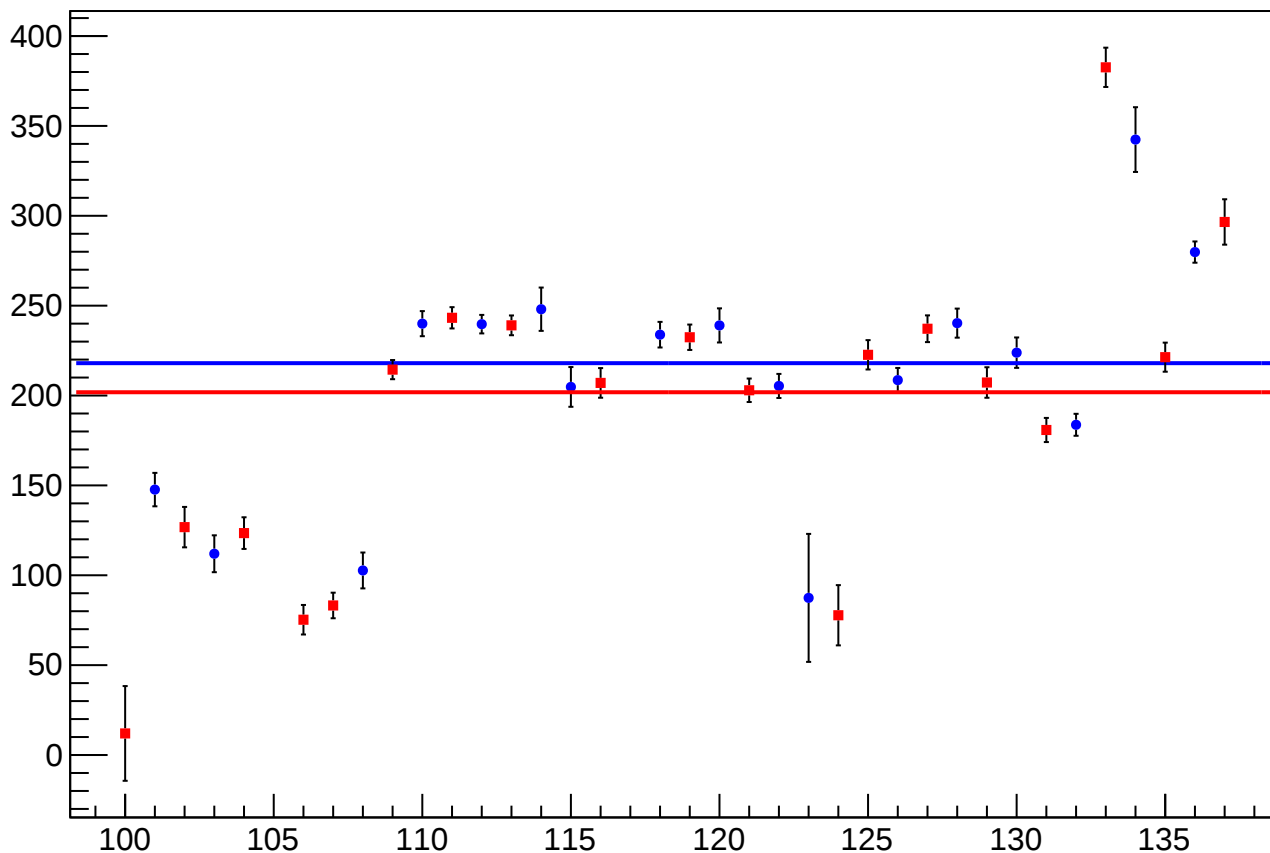
Right: 92.025 $\pm$ 0.050  $\chi^2$ /NDF: 325598.1/35

In: 97.620 $\pm$ 0.074  $\chi^2$ /NDF: 94045.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 92.025 $\pm$ 0.050  $\chi^2$ /NDF: 325598.1/35

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 218.005 $\pm$ 1.932  $\chi^2$ /NDF: 558.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 201.827 $\pm$ 1.783  $\chi^2$ /NDF: 1239.8/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

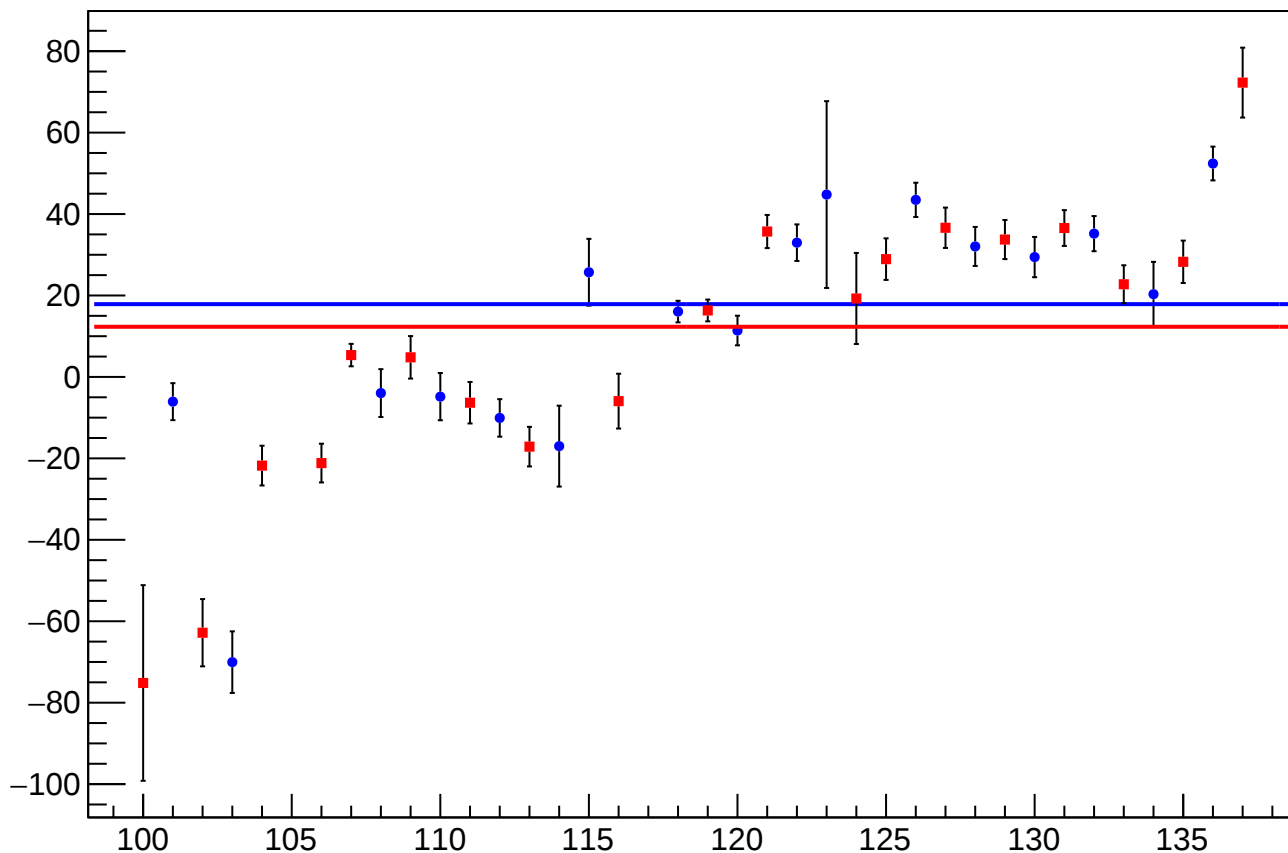
Right: 209.269 $\pm$ 1.310  $\chi^2$ /NDF: 1835.9/35

In: 218.005 $\pm$ 1.932  $\chi^2$ /NDF: 558.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 209.269 $\pm$ 1.310  $\chi^2$ /NDF: 1835.9/35

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 17.872+/-1.166  $\chi^2/\text{NDF}$ : 395.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 12.317+/-1.083  $\chi^2/\text{NDF}$ : 444.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

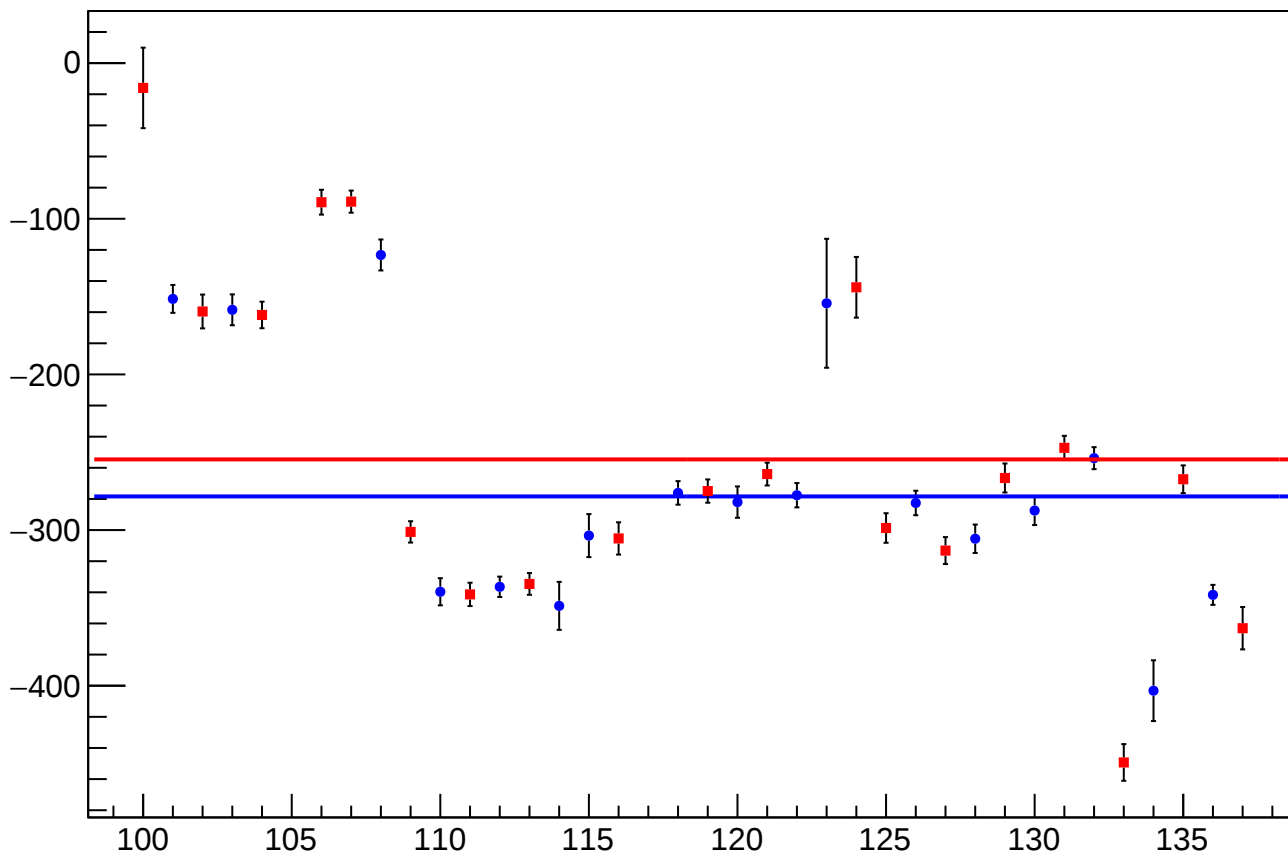
Right: 14.891+/-0.794  $\chi^2/\text{NDF}$ : 851.6/35

In: 17.872+/-1.166  $\chi^2/\text{NDF}$ : 395.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 14.891+/-0.794  $\chi^2/\text{NDF}$ : 851.6/35

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -278.380+/-2.185  $\chi^2/\text{NDF}$ : 910.6/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -254.603+/-2.020  $\chi^2/\text{NDF}$ : 2037.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

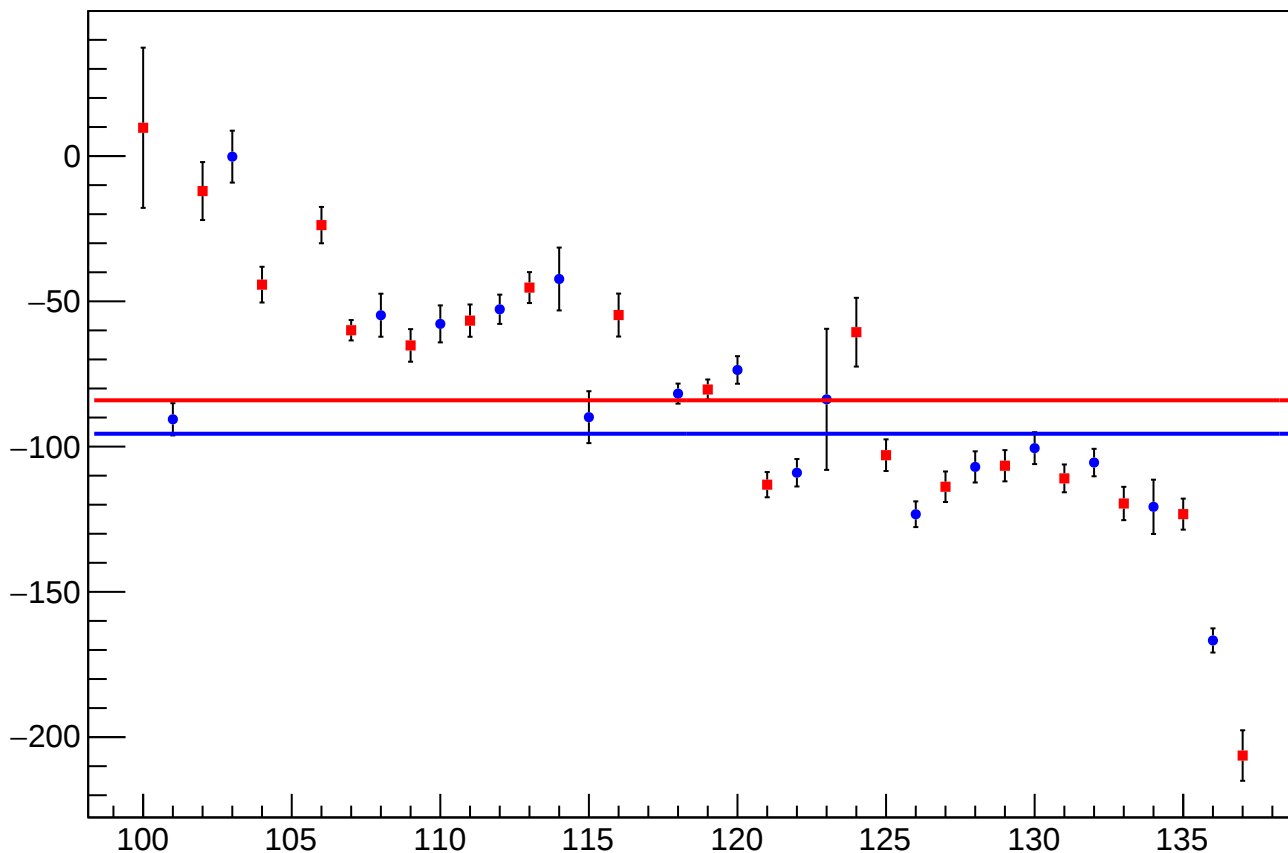
Right: -265.560+/-1.483  $\chi^2/\text{NDF}$ : 3011.9/35

In: -278.380+/-2.185  $\chi^2/\text{NDF}$ : 910.6/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -265.560+/-1.483  $\chi^2/\text{NDF}$ : 3011.9/35

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-95.576 \pm 1.340$   $\chi^2/\text{NDF}$ : 671.2/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-84.062 \pm 1.257$   $\chi^2/\text{NDF}$ : 783.2/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

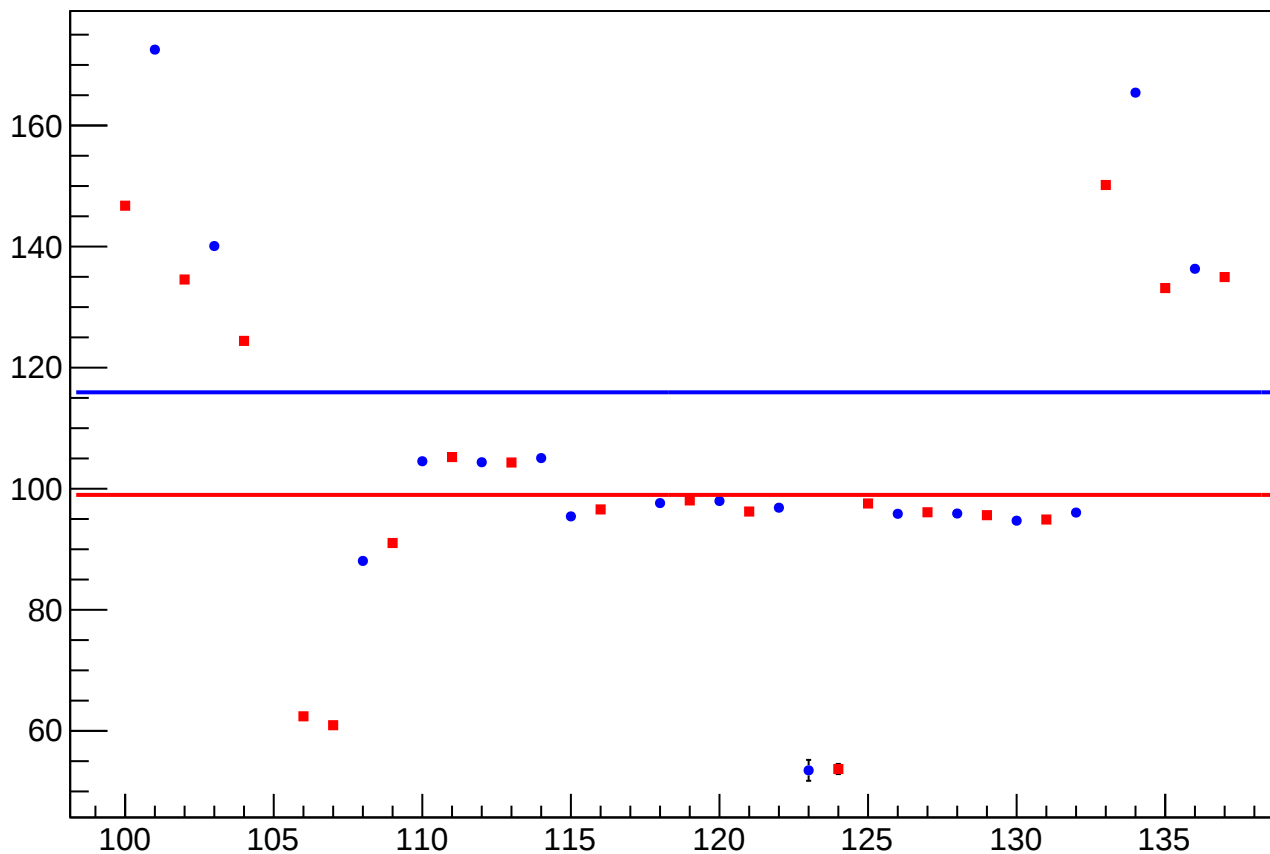
Right:  $-89.449 \pm 0.917$   $\chi^2/\text{NDF}$ : 1493.7/35

In:  $-95.576 \pm 1.340$   $\chi^2/\text{NDF}$ : 671.2/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-89.449 \pm 0.917$   $\chi^2/\text{NDF}$ : 1493.7/35

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 115.927 $\pm$ 0.078  $\chi^2$ /NDF: 105791.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 98.981 $\pm$ 0.069  $\chi^2$ /NDF: 172974.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

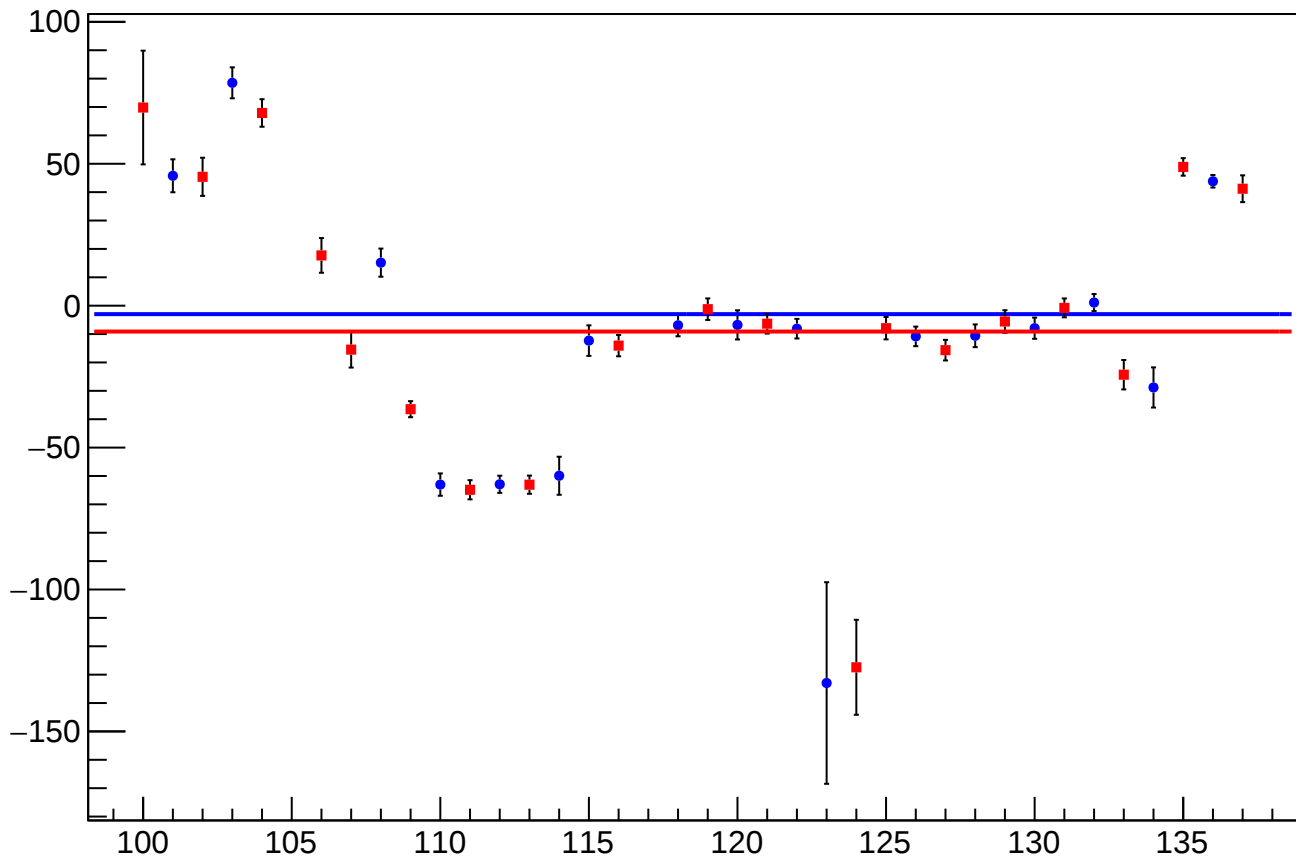
Right: 106.321 $\pm$ 0.052  $\chi^2$ /NDF: 305233.1/35

In: 115.927 $\pm$ 0.078  $\chi^2$ /NDF: 105791.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: 106.321 $\pm$ 0.052  $\chi^2$ /NDF: 305233.1/35

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-2.980 \pm 0.963$   $\chi^2/\text{NDF}$ : 1500.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-9.113 \pm 0.938$   $\chi^2/\text{NDF}$ : 1544.7/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

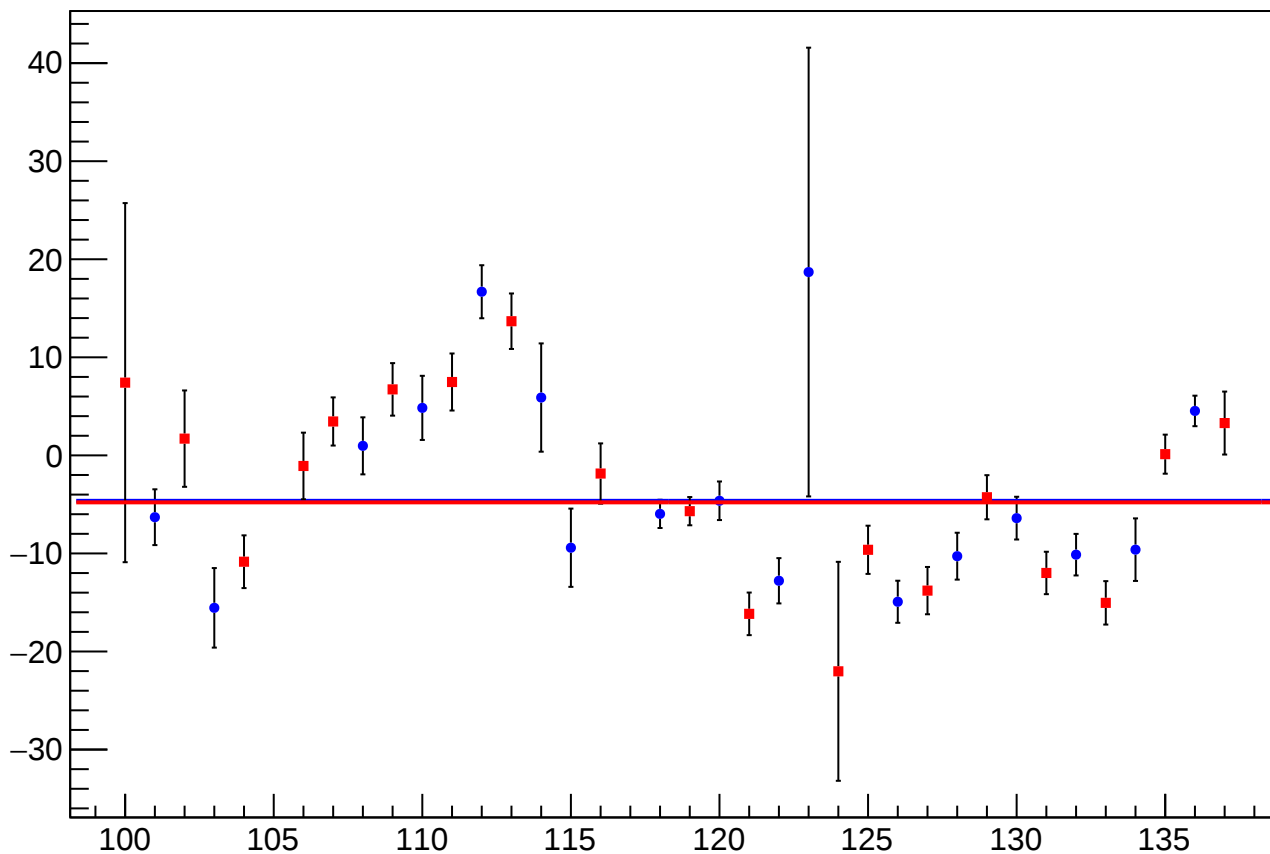
Right:  $-6.129 \pm 0.672$   $\chi^2/\text{NDF}$ : 3065.9/35

In:  $-2.980 \pm 0.963$   $\chi^2/\text{NDF}$ : 1500.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-6.129 \pm 0.672$   $\chi^2/\text{NDF}$ : 3065.9/35

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: -4.637+/-0.588  $\chi^2/\text{NDF}$ : 174.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -4.791+/-0.585  $\chi^2/\text{NDF}$ : 192.5/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

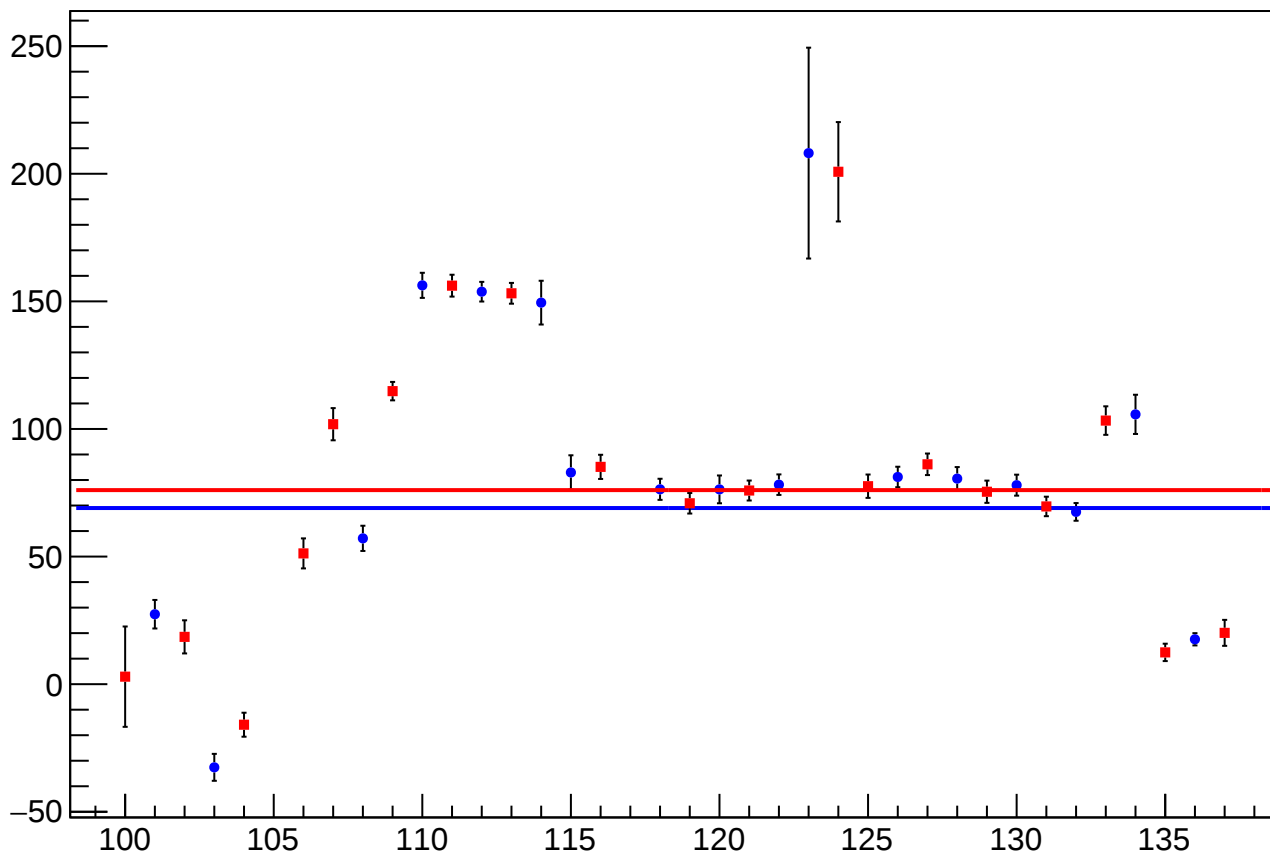
Right: -4.714+/-0.414  $\chi^2/\text{NDF}$ : 367.0/35

In: -4.637+/-0.588  $\chi^2/\text{NDF}$ : 174.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -4.714+/-0.414  $\chi^2/\text{NDF}$ : 367.0/35

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 69.019+/-1.083  $\chi^2/\text{NDF}$ : 1848.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 76.041+/-1.070  $\chi^2/\text{NDF}$ : 1881.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

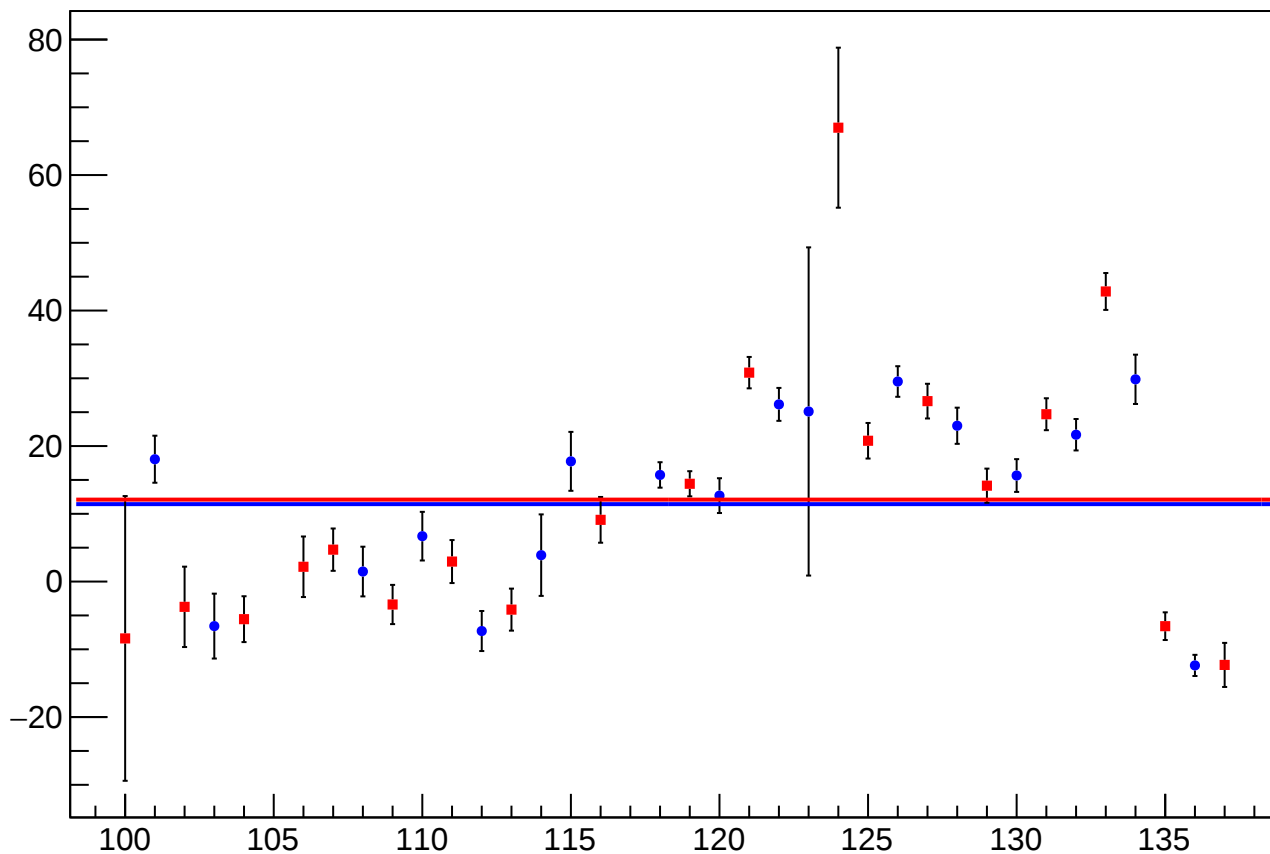
Right: 72.574+/-0.761  $\chi^2/\text{NDF}$ : 3751.2/35

In: 69.019+/-1.083  $\chi^2/\text{NDF}$ : 1848.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 72.574+/-0.761  $\chi^2/\text{NDF}$ : 3751.2/35

reg\_asym\_atl\_dd\_atr\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 11.428+/-0.665  $\chi^2$ /NDF: 476.8/16

Left Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Right Out: 12.095+/-0.664  $\chi^2$ /NDF: 539.1/18

Left In: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

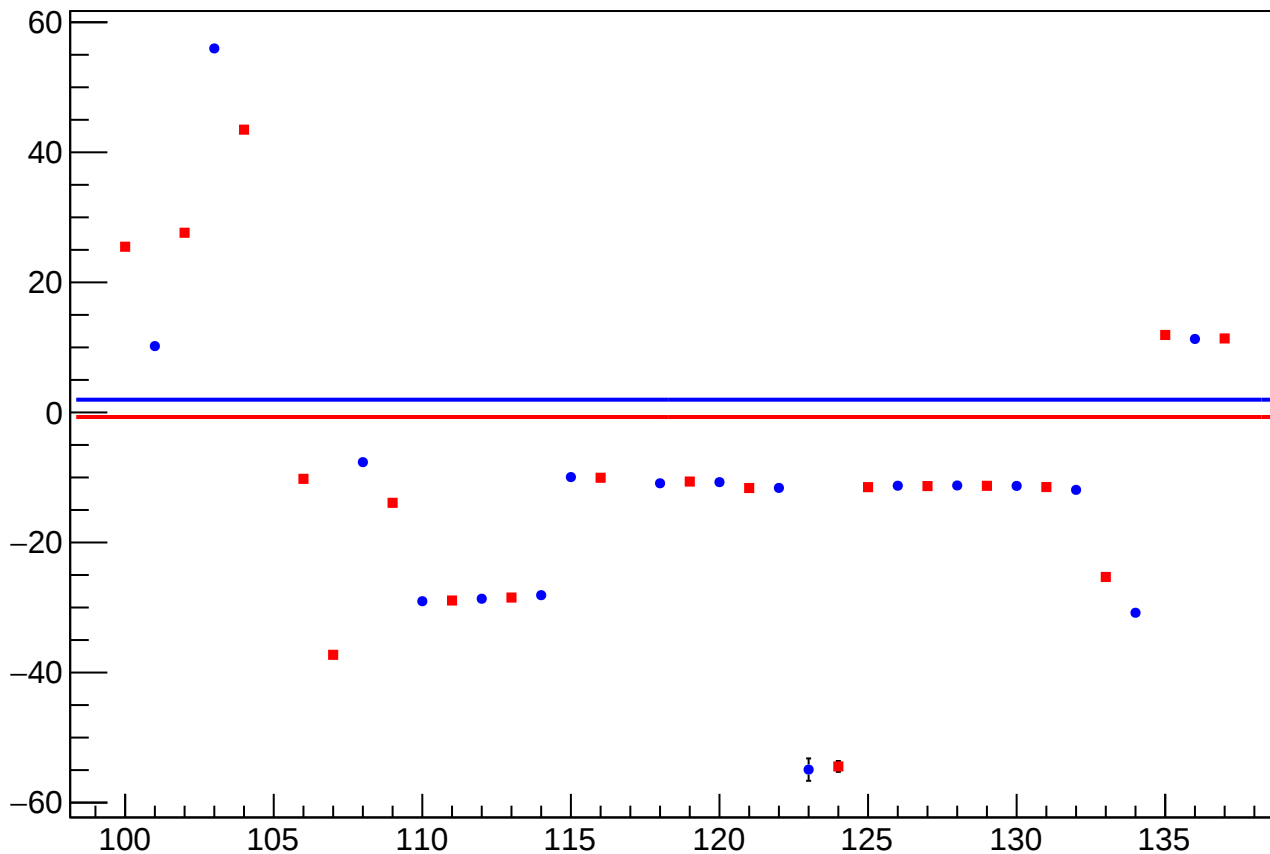
Right: 11.762+/-0.470  $\chi^2$ /NDF: 1016.4/35

In: 11.428+/-0.665  $\chi^2$ /NDF:476.8/16

Out: 0.000+/-0.000  $\chi^2$ /NDF:0.0/0

All: 11.762+/-0.470  $\chi^2$ /NDF: 1016.4/35

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 1.960 $\pm$ 0.037  $\chi^2$ /NDF: 358457.0/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.704 $\pm$ 0.037  $\chi^2$ /NDF: 361168.6/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

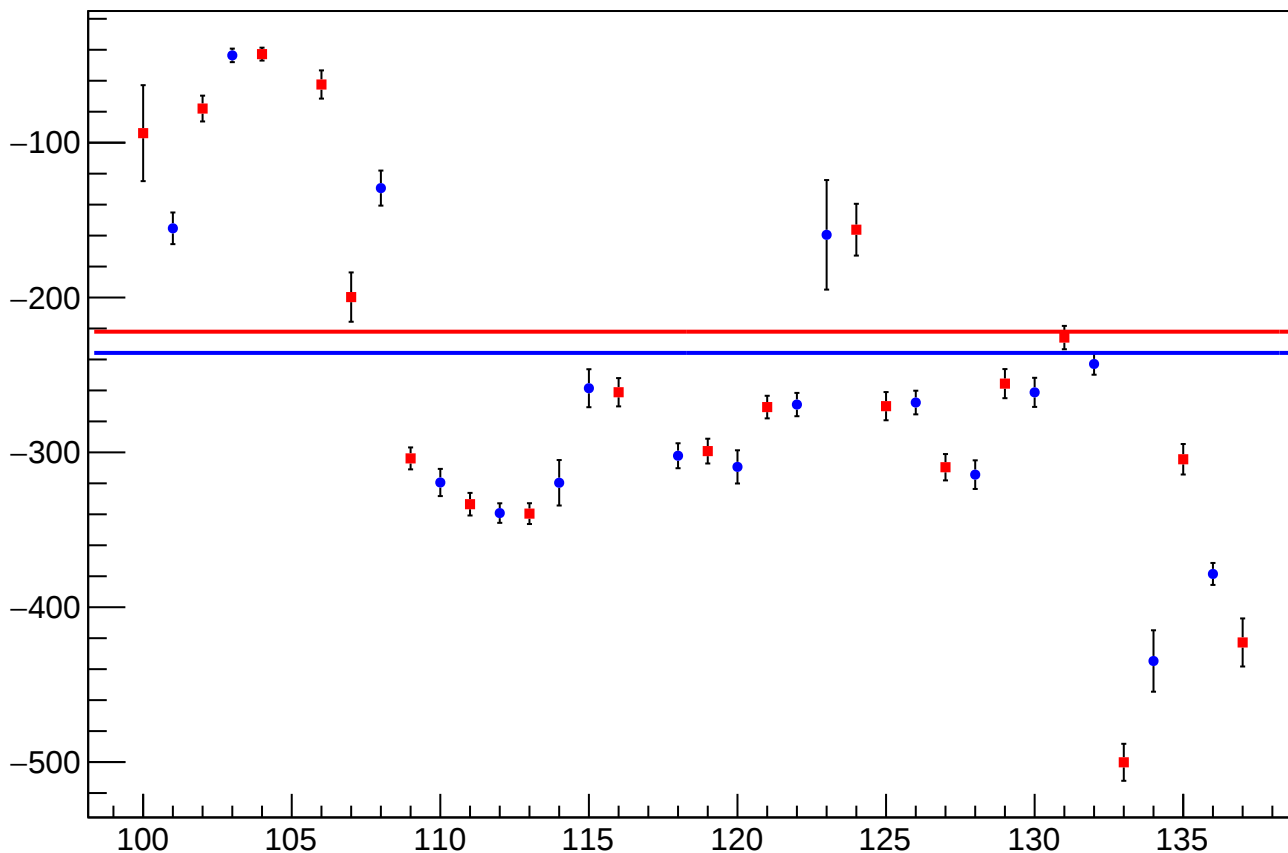
Right: 0.627 $\pm$ 0.026  $\chi^2$ /NDF: 722198.2/35

In: 1.960 $\pm$ 0.037  $\chi^2$ /NDF:358457.0/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.627 $\pm$ 0.026  $\chi^2$ /NDF: 722198.2/35

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In:  $-235.761 \pm 2.021$   $\chi^2/\text{NDF}$ : 3220.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-222.056 \pm 1.903$   $\chi^2/\text{NDF}$ : 4245.8/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

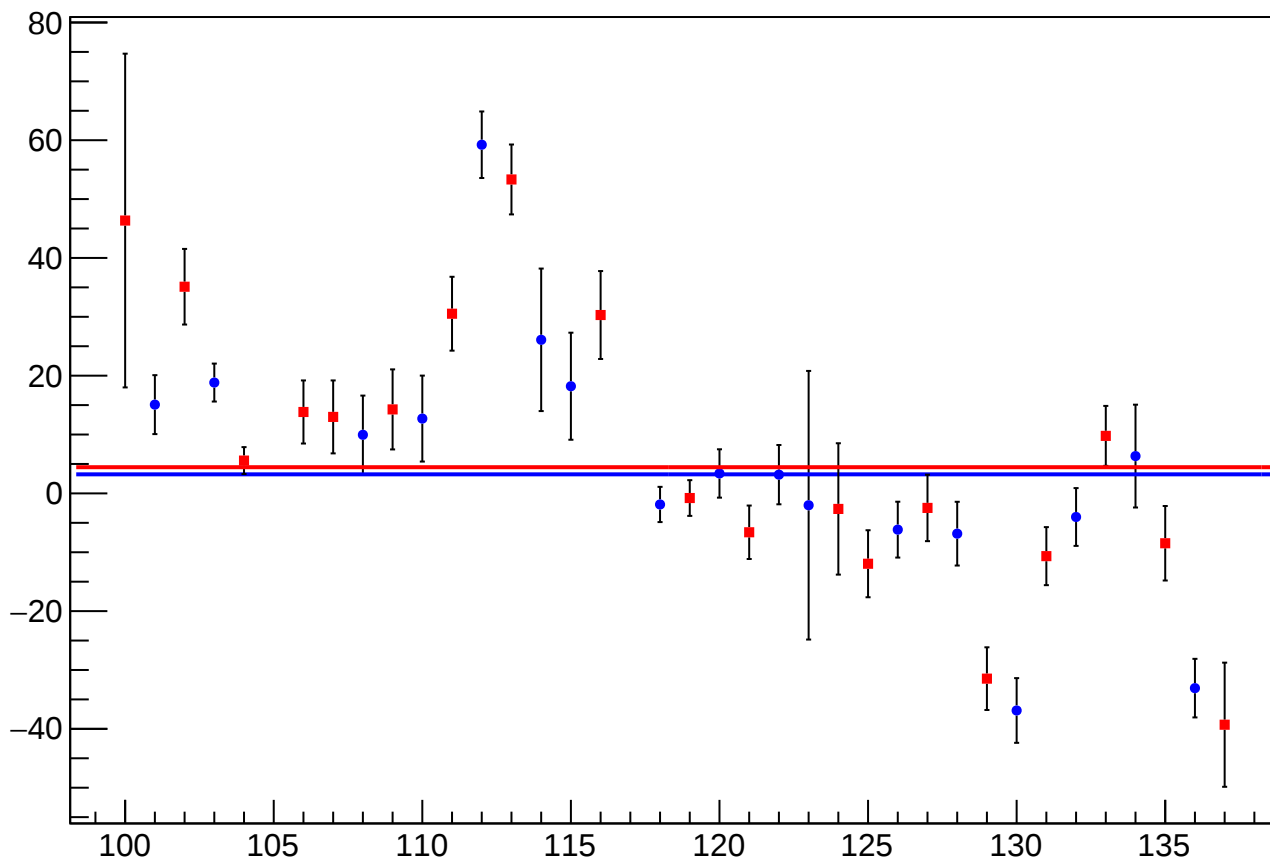
Right:  $-228.498 \pm 1.385$   $\chi^2/\text{NDF}$ : 7490.5/35

In:  $-235.761 \pm 2.021$   $\chi^2/\text{NDF}$ : 3220.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-228.498 \pm 1.385$   $\chi^2/\text{NDF}$ : 7490.5/35

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 3.237+/-1.244  $\chi^2/\text{NDF}$ : 255.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 4.450+/-1.157  $\chi^2/\text{NDF}$ : 225.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

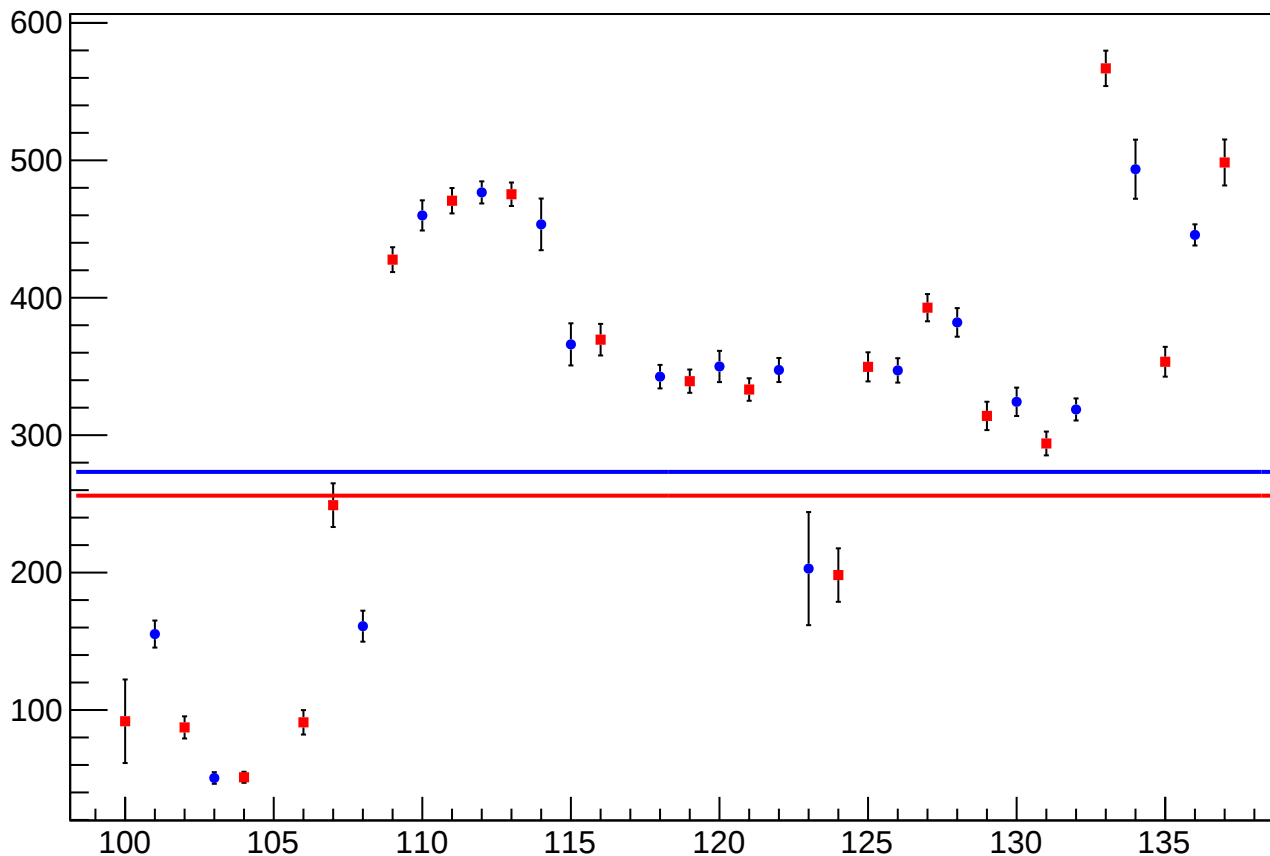
Right: 3.887+/-0.847  $\chi^2/\text{NDF}$ : 481.6/35

In: 3.237+/-1.244  $\chi^2/\text{NDF}$ : 255.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.887+/-0.847  $\chi^2/\text{NDF}$ : 481.6/35

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: 273.276+/-2.205  $\chi^2/\text{NDF}$ : 5101.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 255.985+/-2.080  $\chi^2/\text{NDF}$ : 6438.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

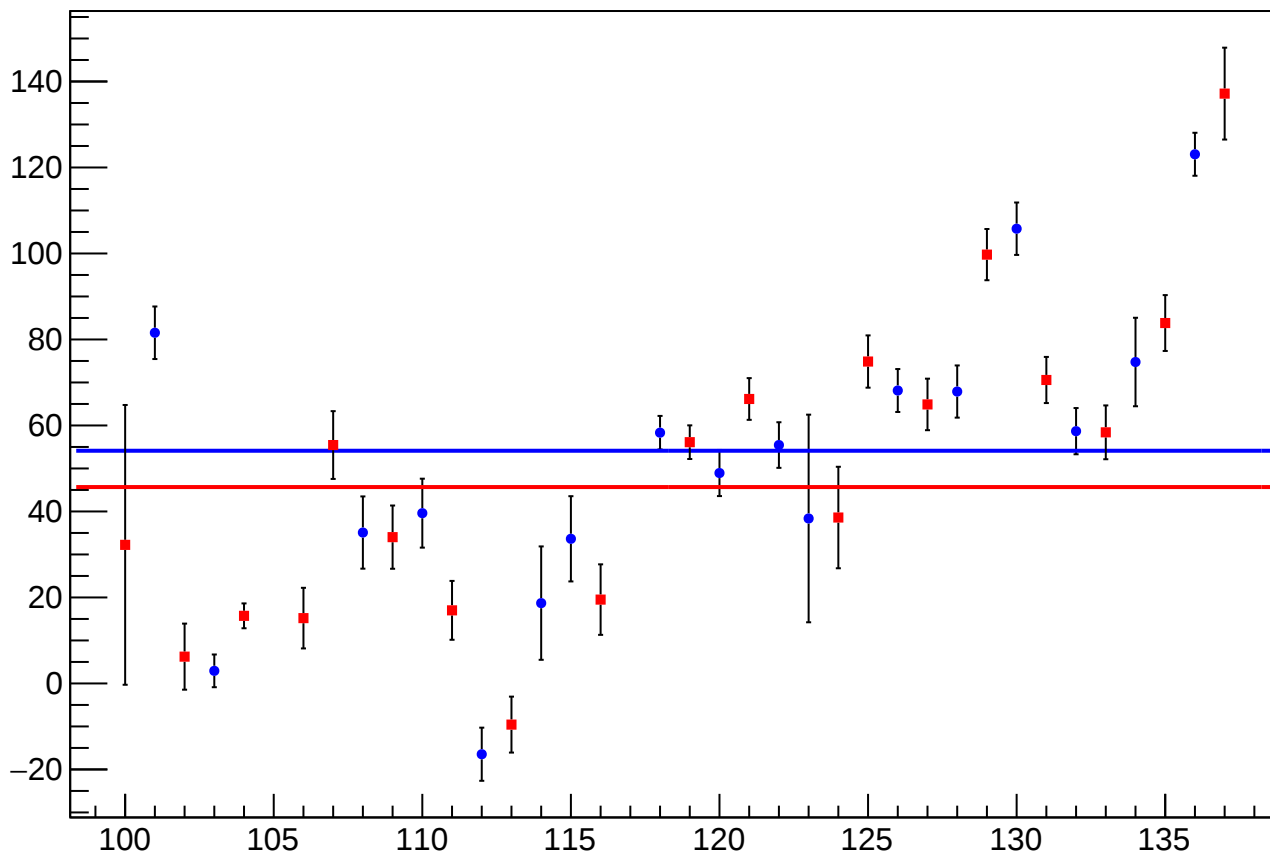
Right: 264.127+/-1.513  $\chi^2/\text{NDF}$ : 11572.5/35

In: 273.276+/-2.205  $\chi^2/\text{NDF}$ : 5101.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 264.127+/-1.513  $\chi^2/\text{NDF}$ : 11572.5/35

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: 54.119+/-1.438  $\chi^2/\text{NDF}$ : 633.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 45.675+/-1.357  $\chi^2/\text{NDF}$ : 531.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

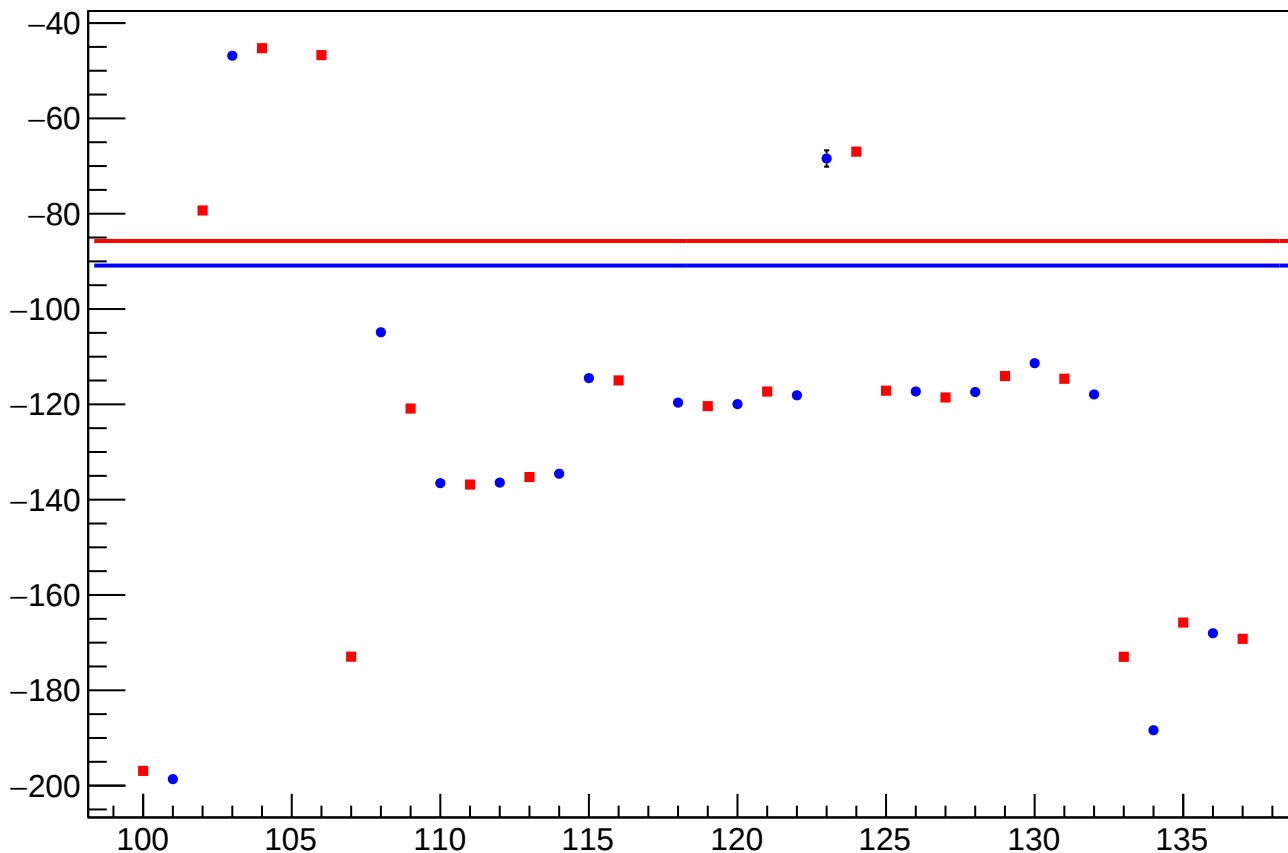
Right: 49.654+/-0.987  $\chi^2/\text{NDF}$ : 1183.2/35

In: 54.119+/-1.438  $\chi^2/\text{NDF}$ : 633.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 49.654+/-0.987  $\chi^2/\text{NDF}$ : 1183.2/35

reg\_asym\_atl\_avg\_atr\_avg\_avg\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: -90.881+/-0.068  $\chi^2/\text{NDF}$ : 533423.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -85.722+/-0.065  $\chi^2/\text{NDF}$ : 494183.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

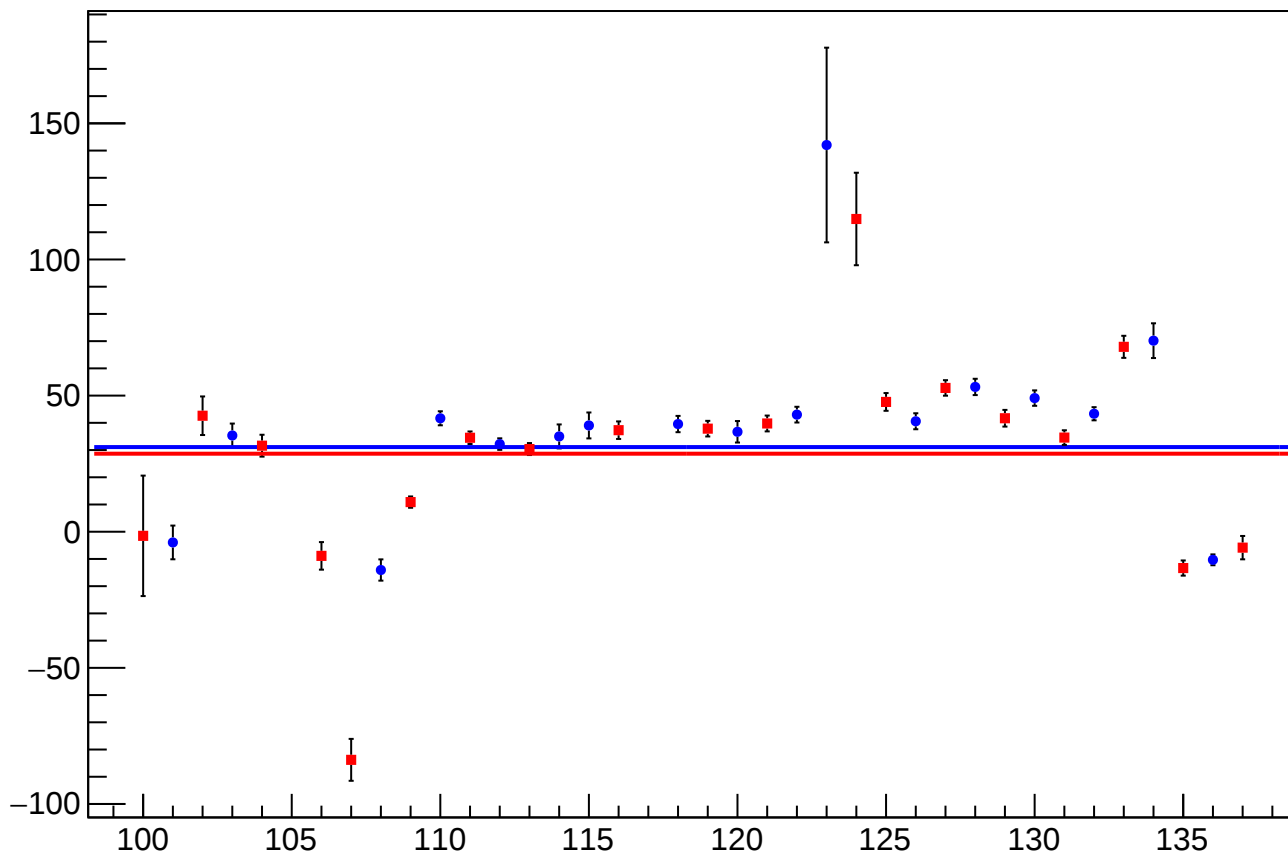
Right: -88.197+/-0.047  $\chi^2/\text{NDF}$ : 1030623.7/35

In: -90.881+/-0.068  $\chi^2/\text{NDF}$ :533423.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -88.197+/-0.047  $\chi^2/\text{NDF}$ : 1030623.7/35

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 31.094+/-0.765  $\chi^2/\text{NDF}$ : 824.2/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 28.660+/-0.743  $\chi^2/\text{NDF}$ : 927.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

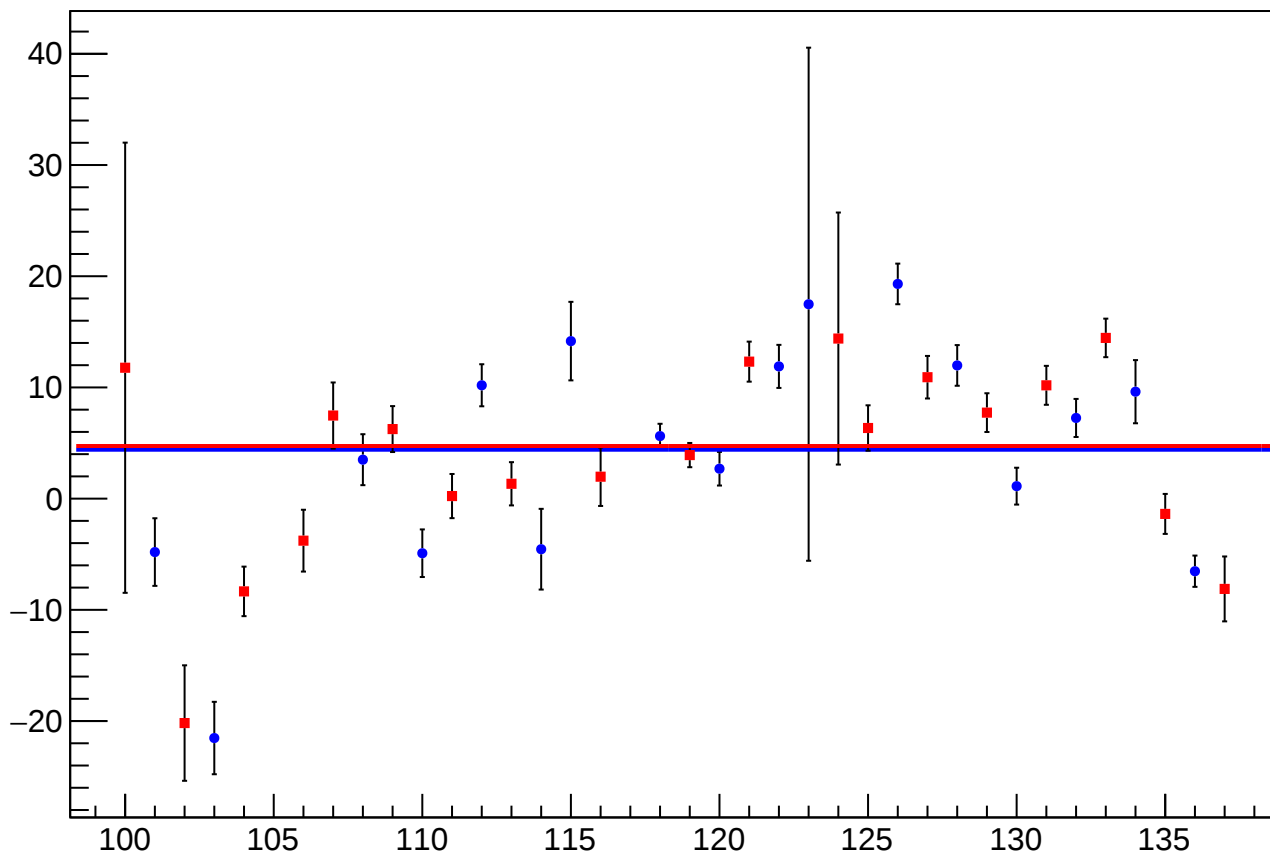
Right: 29.841+/-0.533  $\chi^2/\text{NDF}$ : 1757.3/35

In: 31.094+/-0.765  $\chi^2/\text{NDF}$ : 824.2/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 29.841+/-0.533  $\chi^2/\text{NDF}$ : 1757.3/35

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 4.399+/-0.471  $\chi^2/\text{NDF}$ : 286.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 4.732+/-0.473  $\chi^2/\text{NDF}$ : 182.9/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

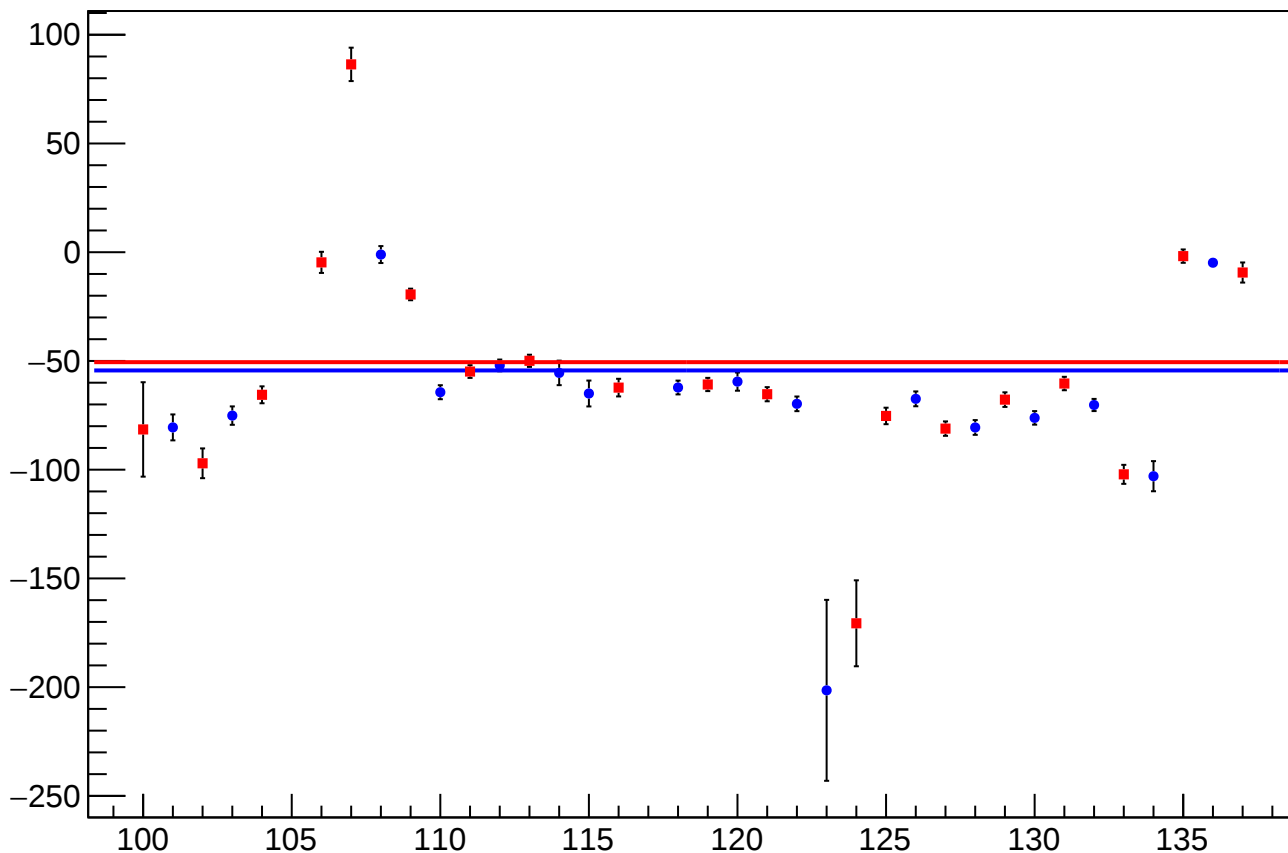
Right: 4.565+/-0.334  $\chi^2/\text{NDF}$ : 470.0/35

In: 4.399+/-0.471  $\chi^2/\text{NDF}$ : 286.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 4.565+/-0.334  $\chi^2/\text{NDF}$ : 470.0/35

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -54.365+/-0.868  $\chi^2/\text{NDF}$ : 1013.5/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -50.554+/-0.858  $\chi^2/\text{NDF}$ : 1321.3/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

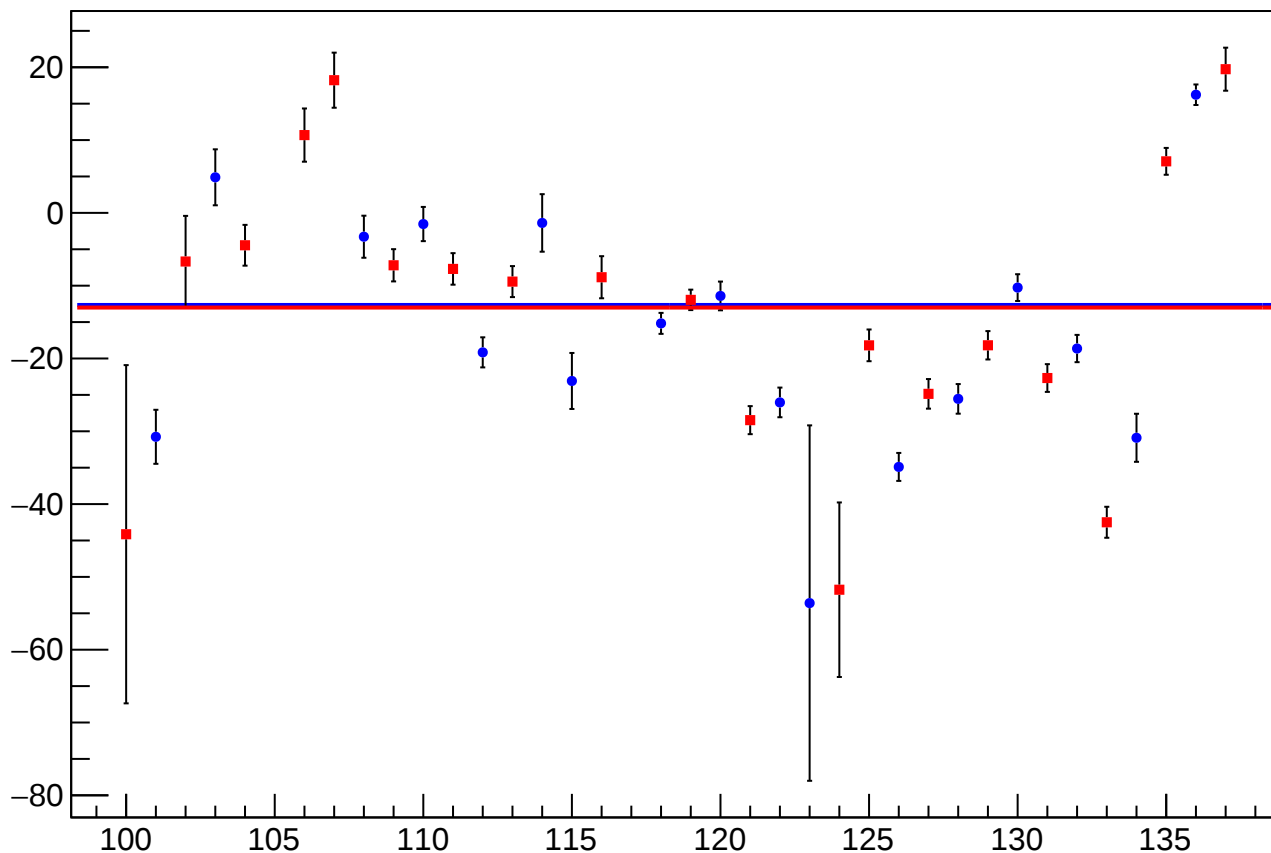
Right: -52.436+/-0.610  $\chi^2/\text{NDF}$ : 2344.5/35

In: -54.365+/-0.868  $\chi^2/\text{NDF}$ : 1013.5/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -52.436+/-0.610  $\chi^2/\text{NDF}$ : 2344.5/35

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -12.648+/-0.536  $\chi^2/\text{NDF}$ : 788.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -13.005+/-0.538  $\chi^2/\text{NDF}$ : 721.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

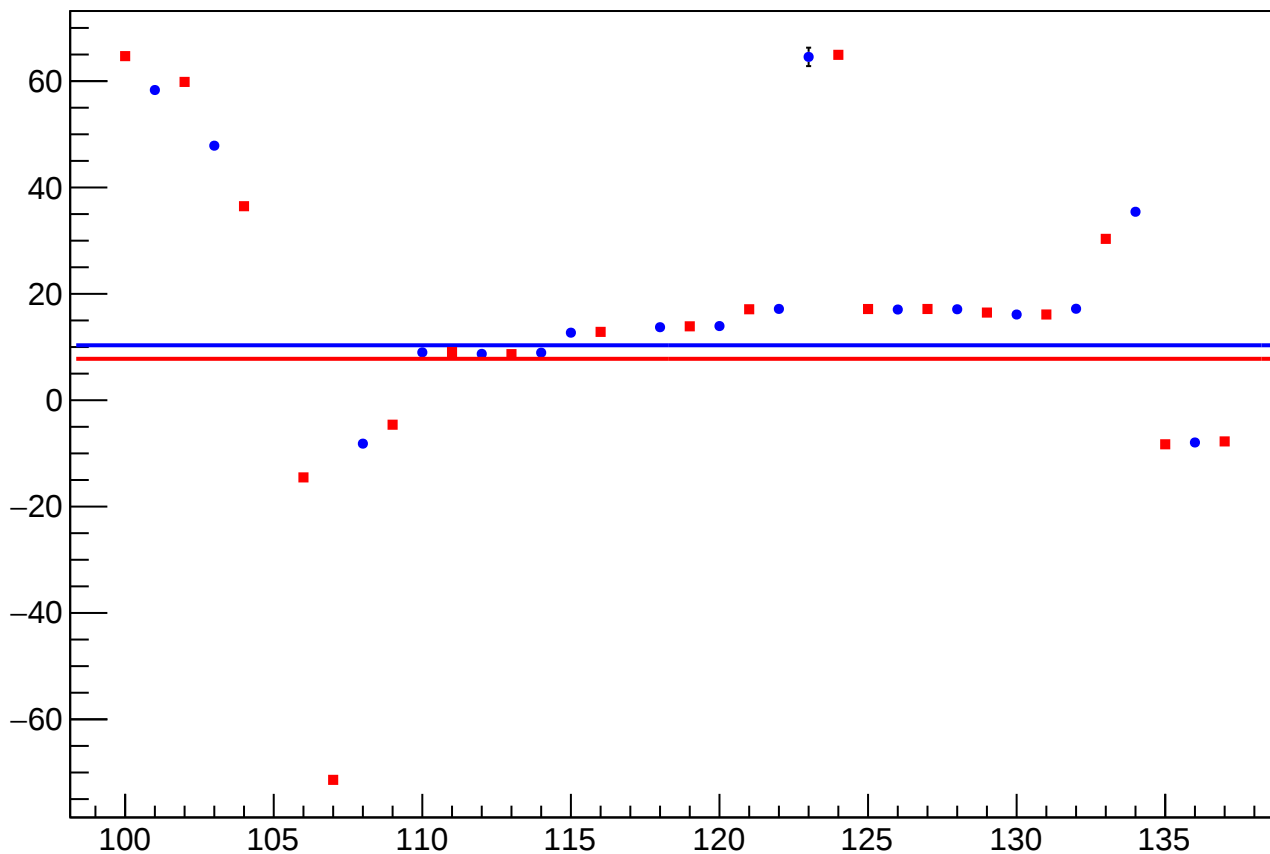
Right: -12.826+/-0.380  $\chi^2/\text{NDF}$ : 1510.1/35

In: -12.648+/-0.536  $\chi^2/\text{NDF}$ :788.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -12.826+/-0.380  $\chi^2/\text{NDF}$ : 1510.1/35

reg\_asym\_atl\_avg\_atr\_avg\_dd\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 10.330+/-0.031  $\chi^2/\text{NDF}$ : 380857.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 7.786+/-0.031  $\chi^2/\text{NDF}$ : 544119.7/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

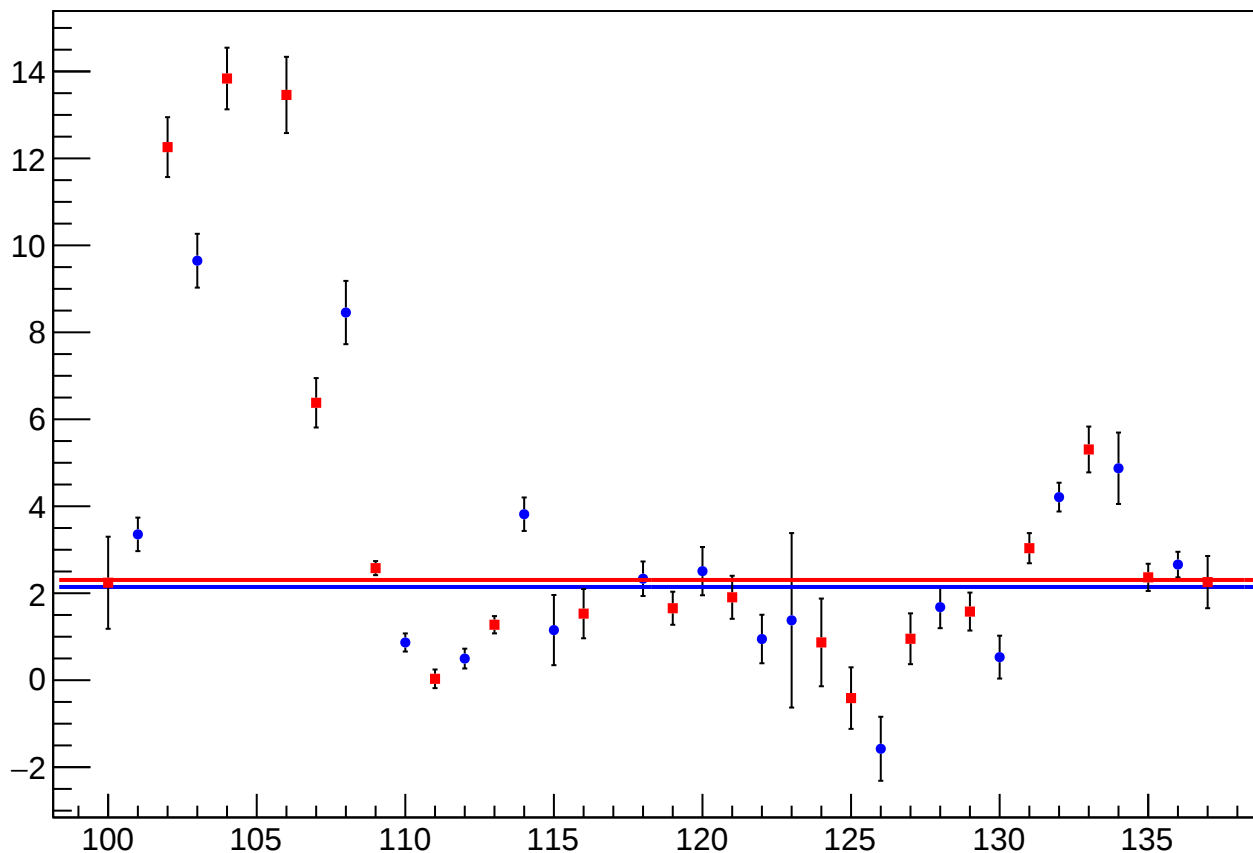
Right: 9.084+/-0.022  $\chi^2/\text{NDF}$ : 928345.1/35

In: 10.330+/-0.031  $\chi^2/\text{NDF}$ : 380857.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 9.084+/-0.022  $\chi^2/\text{NDF}$ : 928345.1/35

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 2.144+/-0.097  $\chi^2/\text{NDF}$ : 438.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.305+/-0.083  $\chi^2/\text{NDF}$ : 896.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

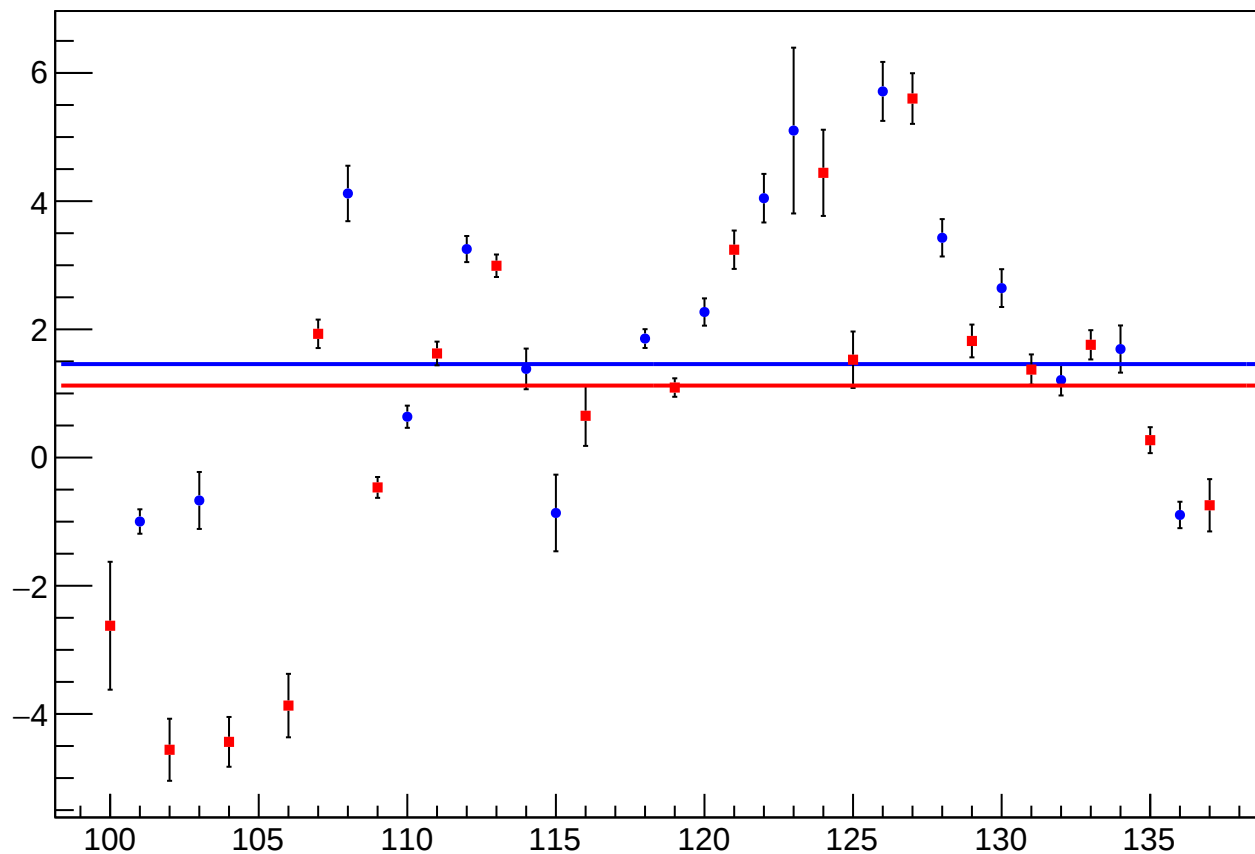
Right: 2.237+/-0.063  $\chi^2/\text{NDF}$ : 1336.1/35

In: 2.144+/-0.097  $\chi^2/\text{NDF}$ : 438.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.237+/-0.063  $\chi^2/\text{NDF}$ : 1336.1/35

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.458 $\pm$ 0.062  $\chi^2$ /NDF: 698.2/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1.123 $\pm$ 0.058  $\chi^2$ /NDF: 947.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

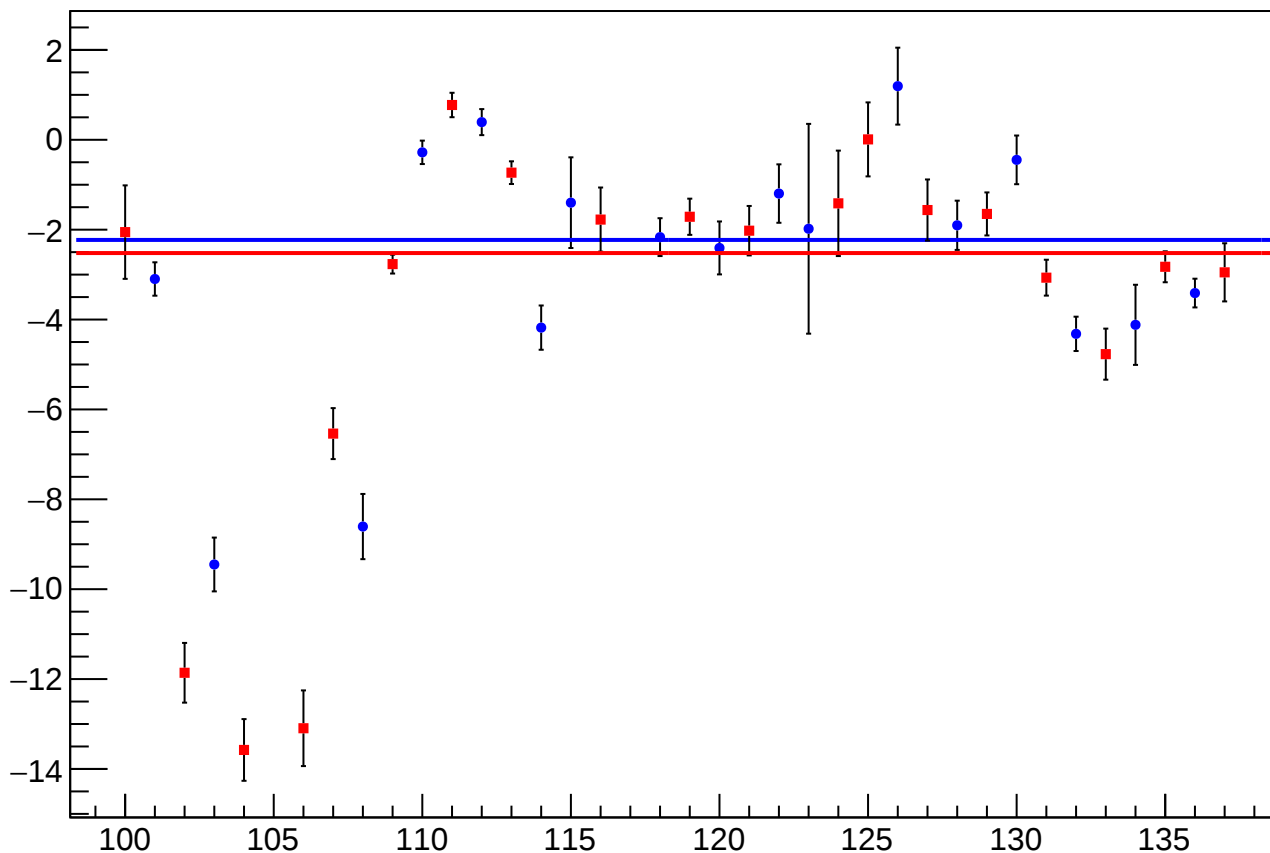
Right: 1.280 $\pm$ 0.042  $\chi^2$ /NDF: 1661.2/35

In: 1.458 $\pm$ 0.062  $\chi^2$ /NDF:698.2/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1.280 $\pm$ 0.042  $\chi^2$ /NDF: 1661.2/35

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.228 \pm 0.111$   $\chi^2/\text{NDF}$ : 460.4/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-2.520 \pm 0.099$   $\chi^2/\text{NDF}$ : 904.0/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

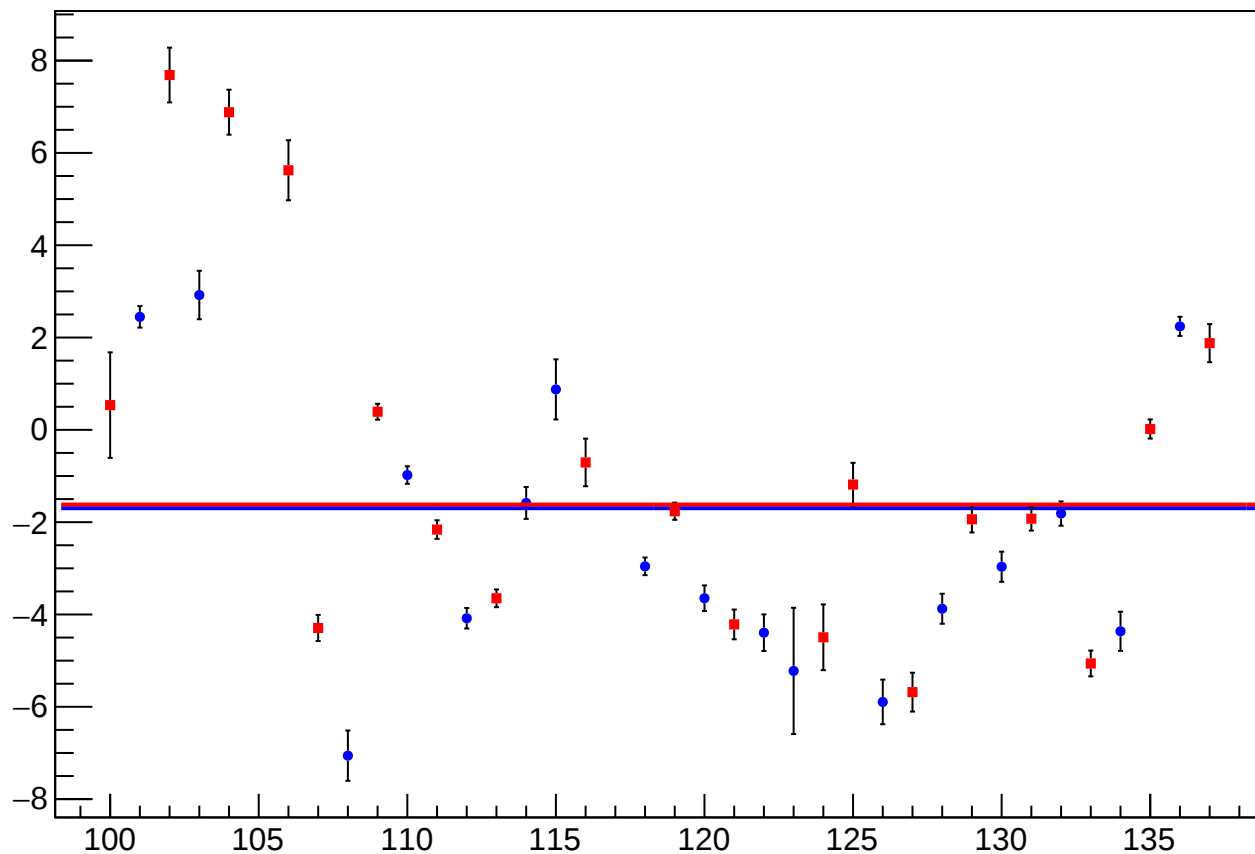
Right:  $-2.391 \pm 0.074$   $\chi^2/\text{NDF}$ : 1368.3/35

In:  $-2.228 \pm 0.111$   $\chi^2/\text{NDF}$ : 460.4/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-2.391 \pm 0.074$   $\chi^2/\text{NDF}$ : 1368.3/35

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -1.697 $\pm$ 0.071  $\chi^2$ /NDF: 1319.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -1.618 $\pm$ 0.066  $\chi^2$ /NDF: 1489.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

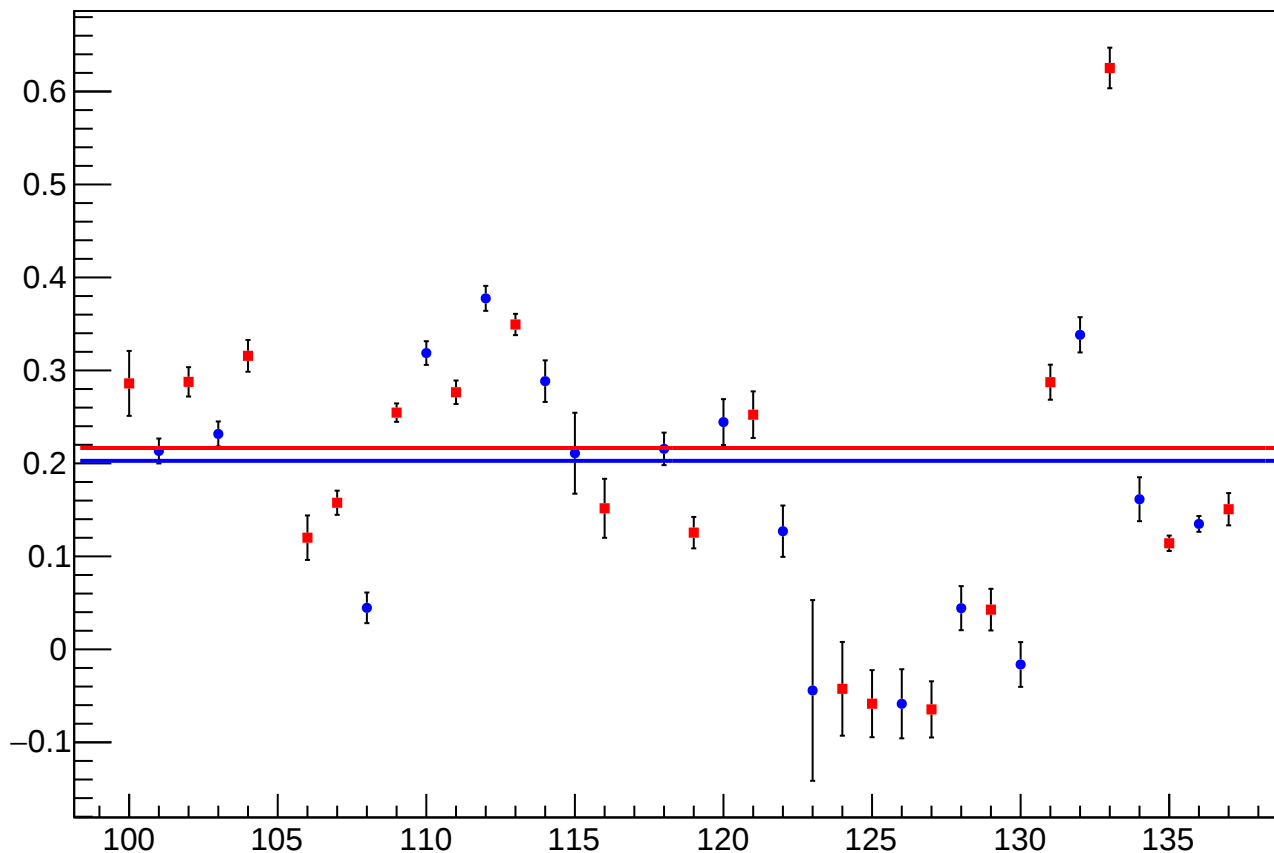
Right: -1.655 $\pm$ 0.048  $\chi^2$ /NDF: 2809.3/35

In: -1.697 $\pm$ 0.071  $\chi^2$ /NDF:1319.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -1.655 $\pm$ 0.048  $\chi^2$ /NDF: 2809.3/35

reg\_asym\_bcm\_an\_ds3\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.203 $\pm$ 0.004  $\chi^2$ /NDF: 676.5/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.217 $\pm$ 0.004  $\chi^2$ /NDF: 1064.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

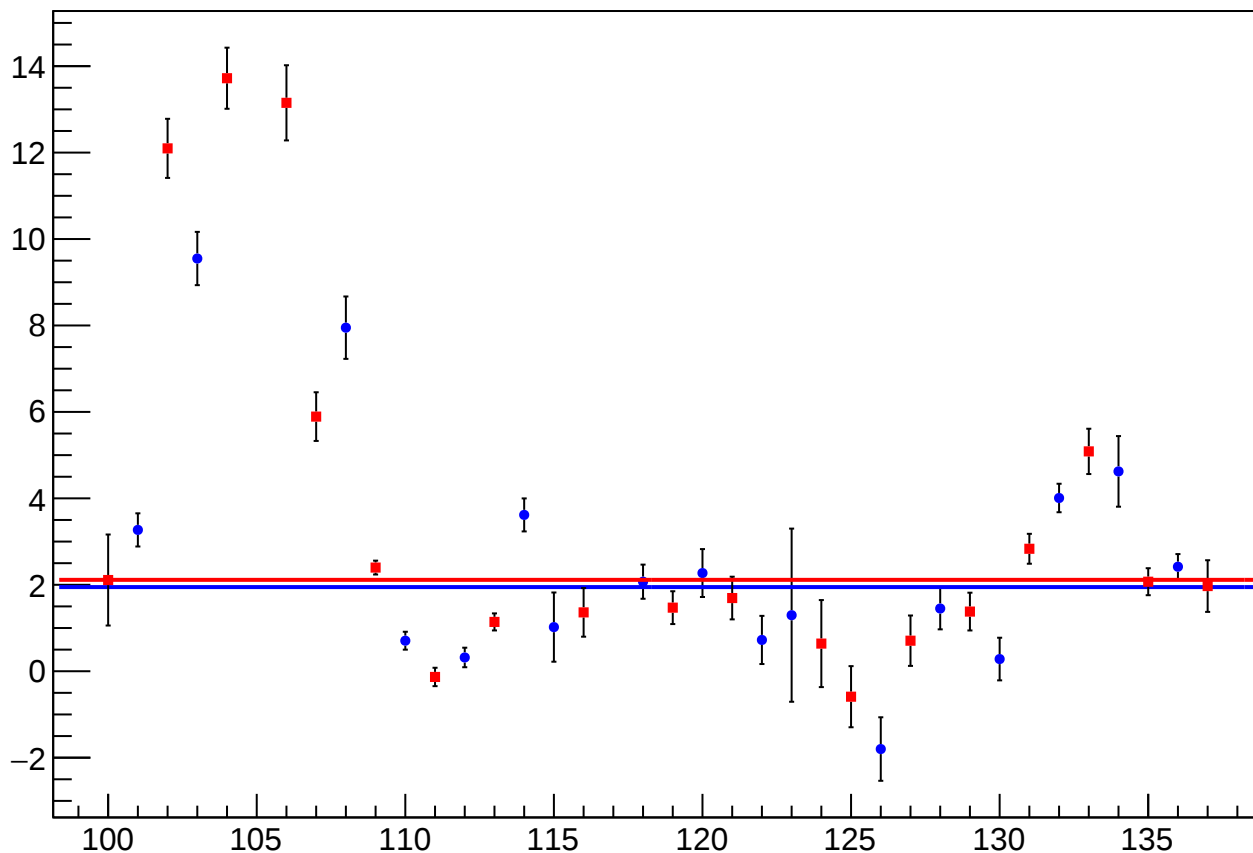
Right: 0.210 $\pm$ 0.003  $\chi^2$ /NDF: 1747.1/35

In: 0.203 $\pm$ 0.004  $\chi^2$ /NDF:676.5/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.210 $\pm$ 0.003  $\chi^2$ /NDF: 1747.1/35

reg\_asym\_bcm\_an\_ds\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 1.947+/-0.096  $\chi^2/\text{NDF}$ : 437.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.114+/-0.083  $\chi^2/\text{NDF}$ : 895.2/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

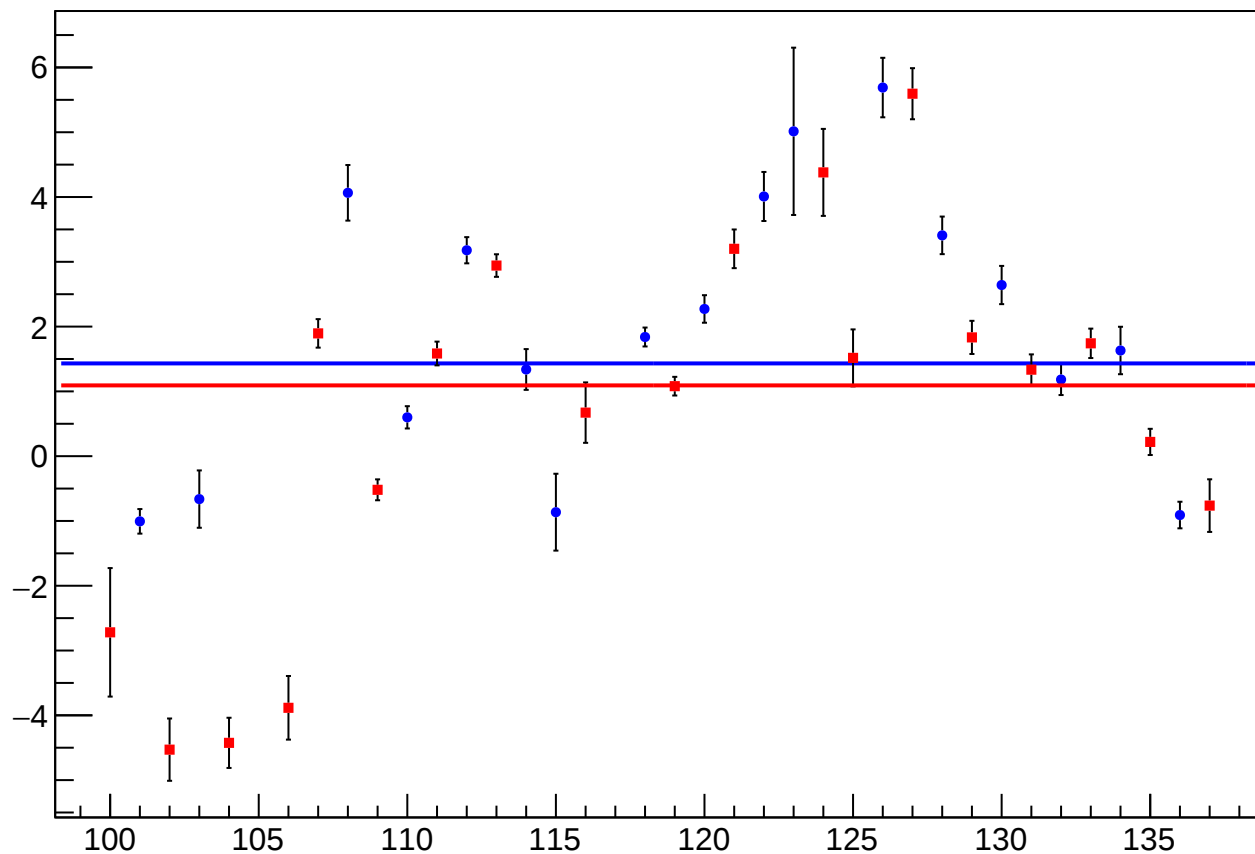
Right: 2.043+/-0.063  $\chi^2/\text{NDF}$ : 1334.6/35

In: 1.947+/-0.096  $\chi^2/\text{NDF}$ : 437.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.043+/-0.063  $\chi^2/\text{NDF}$ : 1334.6/35

reg\_asym\_bcm\_an\_ds\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.432 $\pm$ 0.062  $\chi^2$ /NDF: 696.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1.092 $\pm$ 0.058  $\chi^2$ /NDF: 953.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

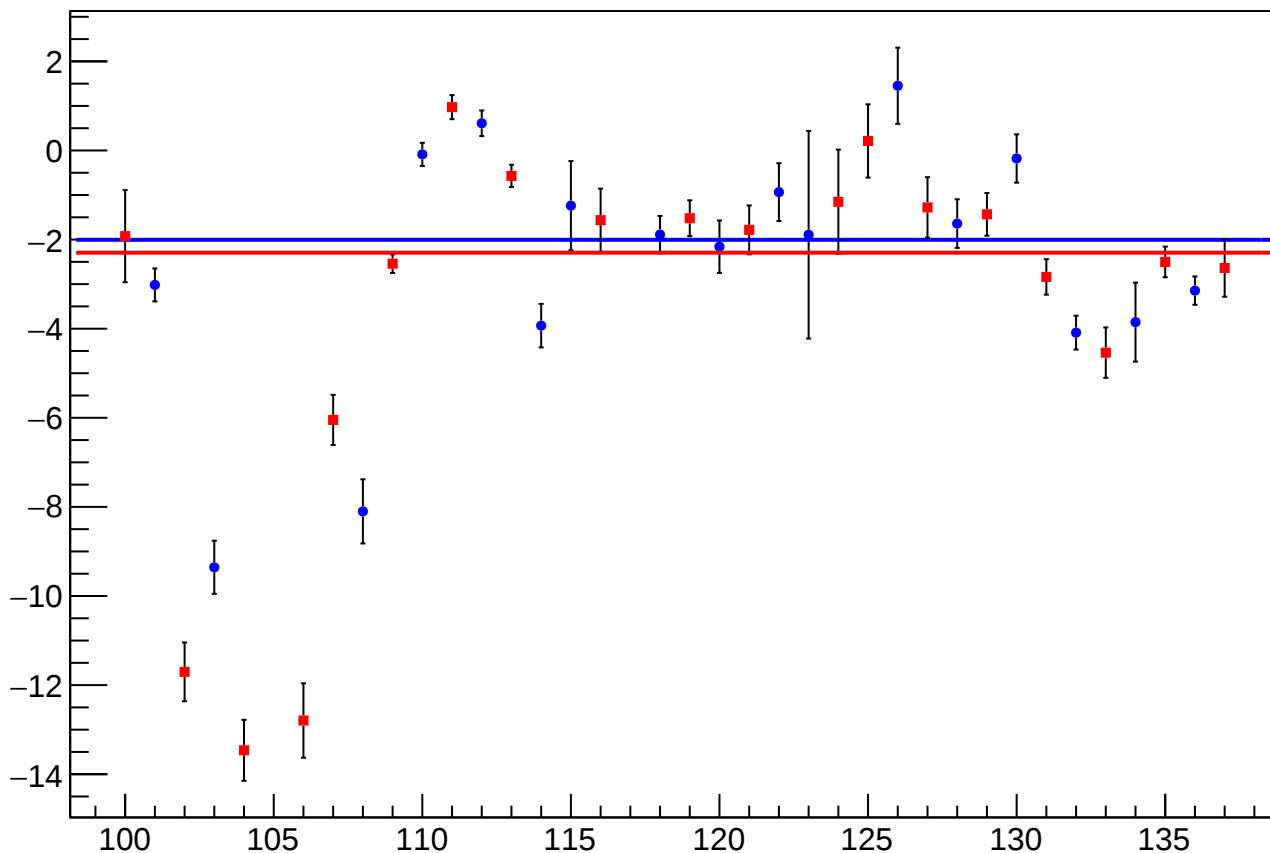
Right: 1.251 $\pm$ 0.042  $\chi^2$ /NDF: 1665.8/35

In: 1.432 $\pm$ 0.062  $\chi^2$ /NDF:696.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1.251 $\pm$ 0.042  $\chi^2$ /NDF: 1665.8/35

reg\_asym\_bcm\_an\_ds\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.005 \pm 0.111$   $\chi^2/\text{NDF}$ : 463.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-2.295 \pm 0.098$   $\chi^2/\text{NDF}$ : 907.2/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

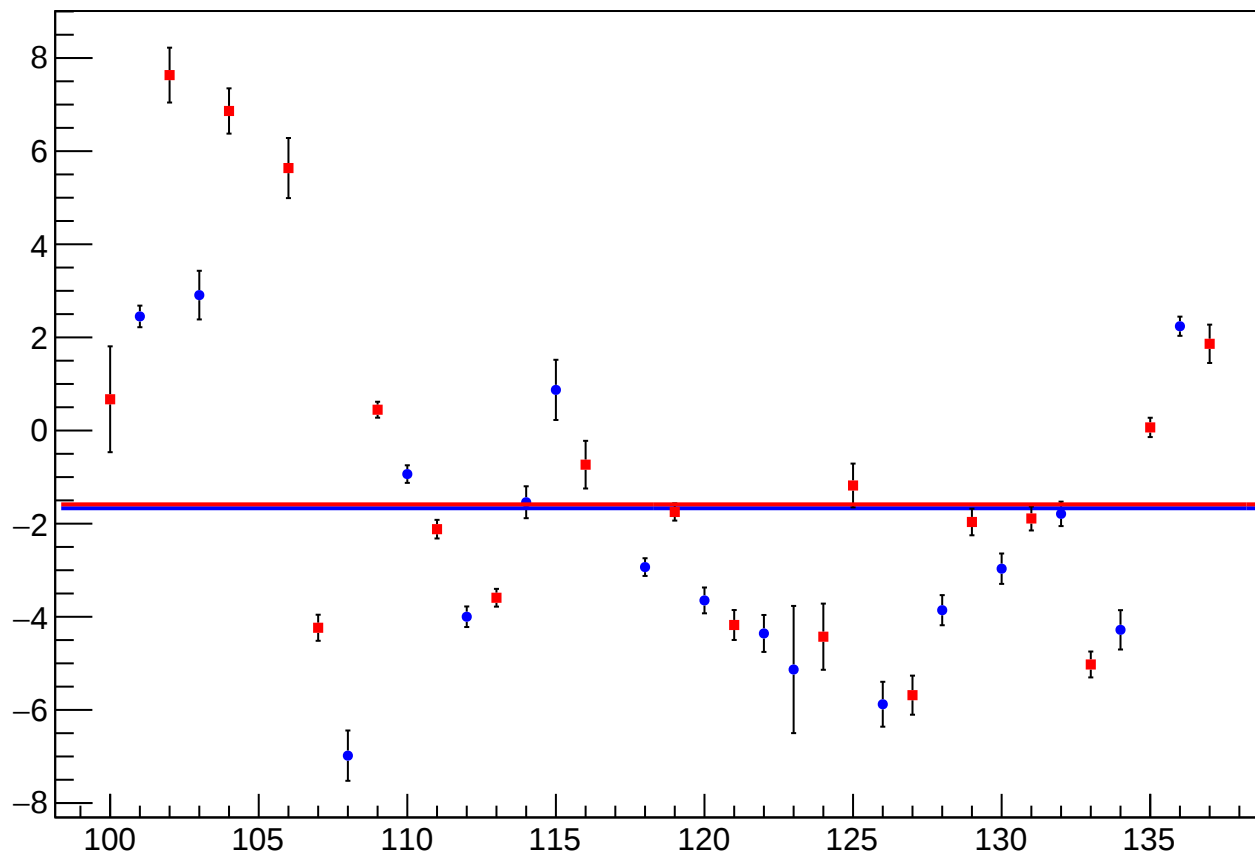
Right:  $-2.167 \pm 0.074$   $\chi^2/\text{NDF}$ : 1374.2/35

In:  $-2.005 \pm 0.111$   $\chi^2/\text{NDF}$ : 463.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-2.167 \pm 0.074$   $\chi^2/\text{NDF}$ : 1374.2/35

reg\_asym\_bcm\_an\_ds\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -1.669 $\pm$ 0.071  $\chi^2$ /NDF: 1314.9/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -1.585 $\pm$ 0.065  $\chi^2$ /NDF: 1494.7/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

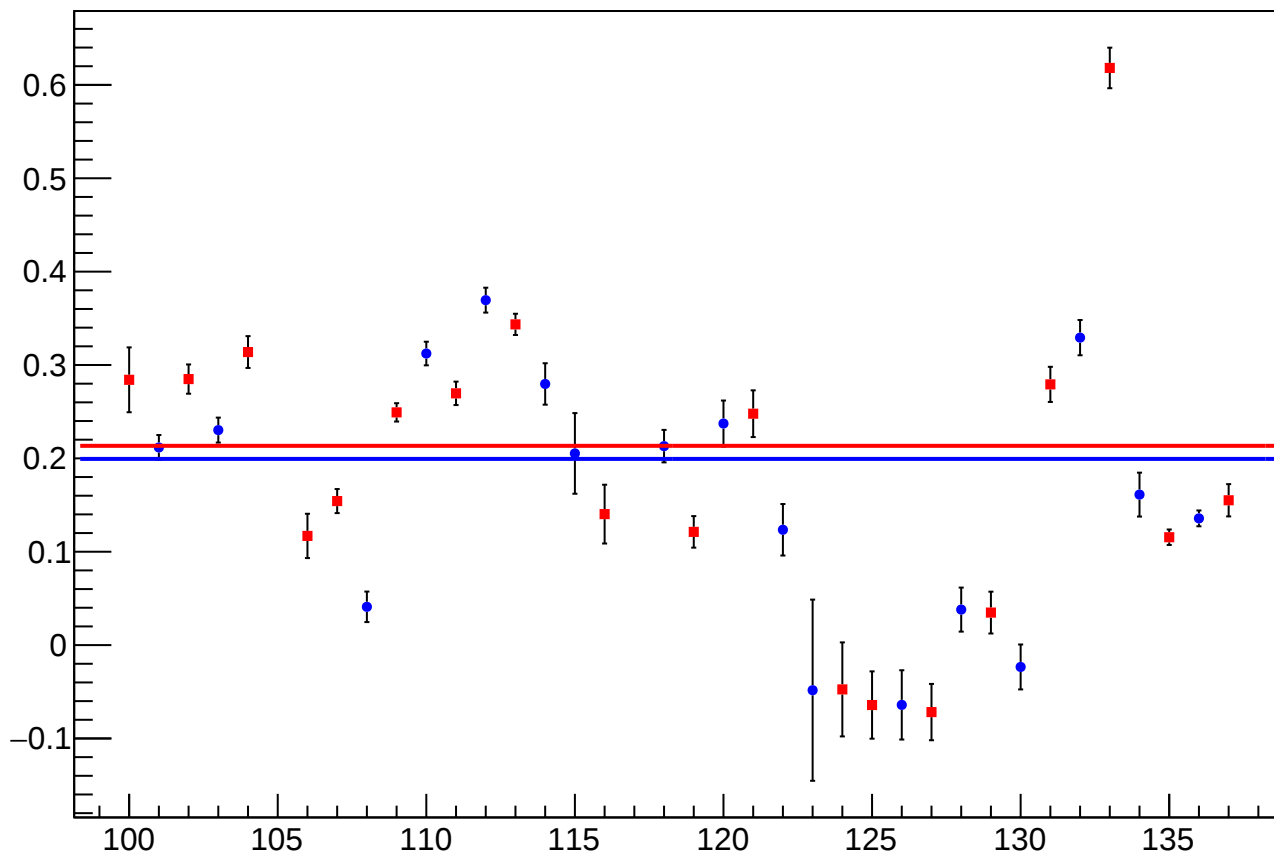
Right: -1.624 $\pm$ 0.048  $\chi^2$ /NDF: 2810.4/35

In: -1.669 $\pm$ 0.071  $\chi^2$ /NDF:1314.9/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: -1.624 $\pm$ 0.048  $\chi^2$ /NDF: 2810.4/35

reg\_asym\_bcm\_an\_ds\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.199 $\pm$ 0.004  $\chi^2$ /NDF: 662.1/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.213 $\pm$ 0.004  $\chi^2$ /NDF: 1048.2/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

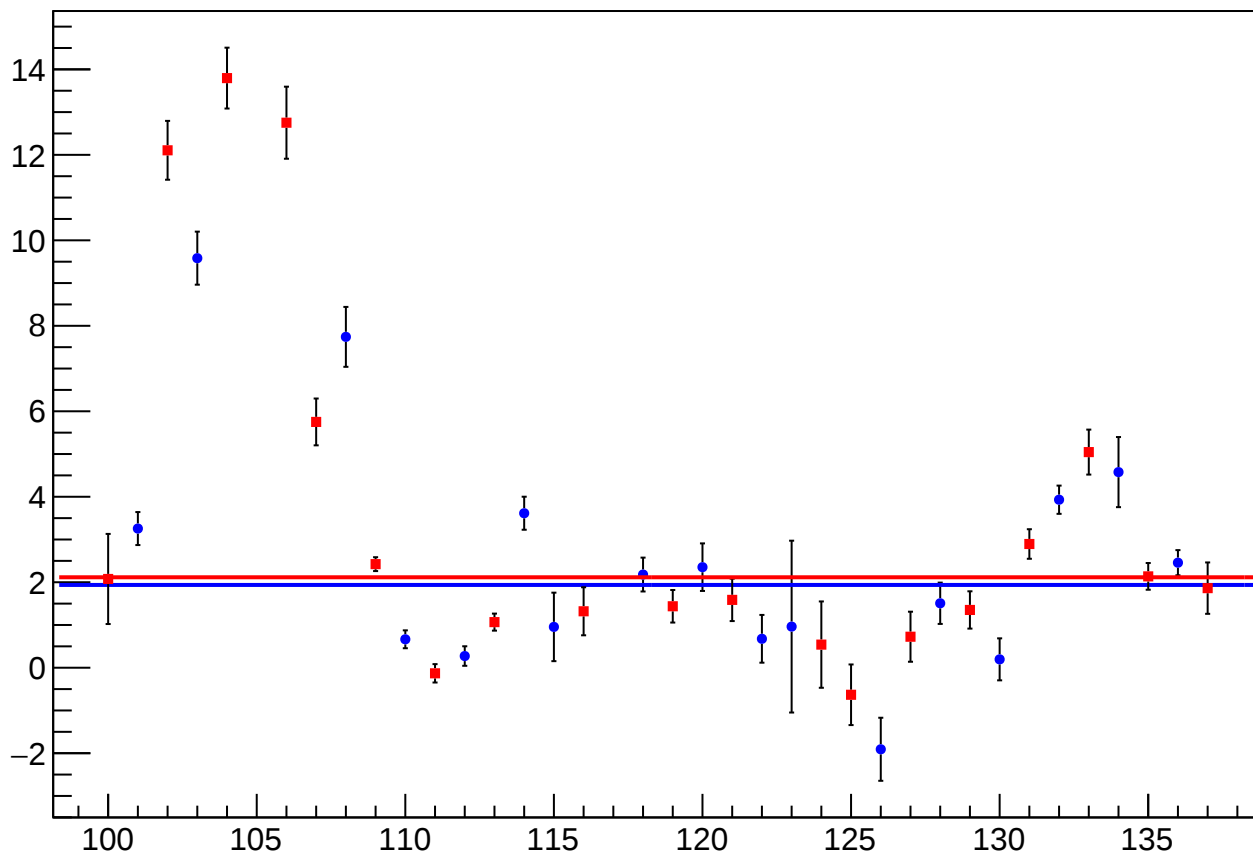
Right: 0.207 $\pm$ 0.003  $\chi^2$ /NDF: 1716.7/35

In: 0.199 $\pm$ 0.004  $\chi^2$ /NDF:662.1/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.207 $\pm$ 0.003  $\chi^2$ /NDF: 1716.7/35

reg\_asym\_bcm\_an\_us\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 1.937+/-0.097  $\chi^2/\text{NDF}$ : 439.1/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.116+/-0.083  $\chi^2/\text{NDF}$ : 892.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

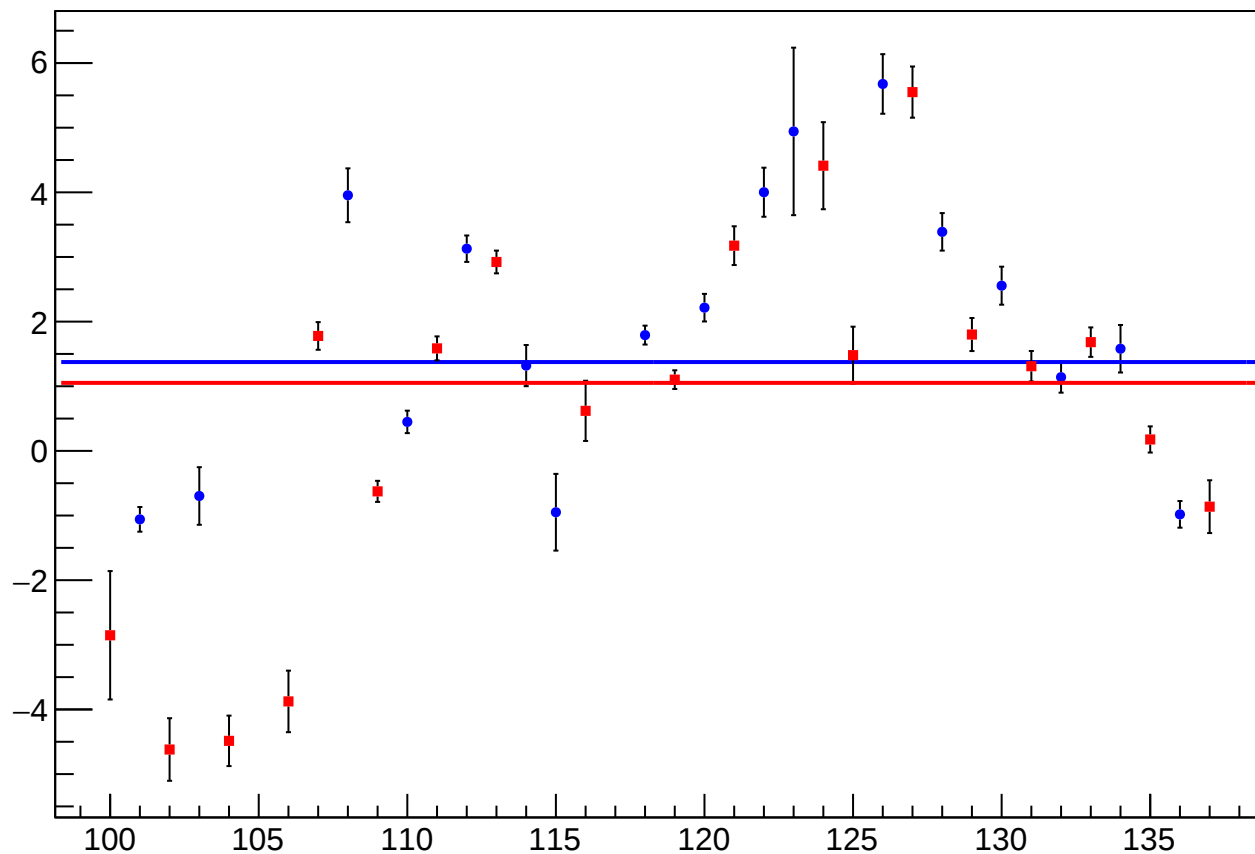
Right: 2.040+/-0.063  $\chi^2/\text{NDF}$ : 1333.2/35

In: 1.937+/-0.097  $\chi^2/\text{NDF}$ : 439.1/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.040+/-0.063  $\chi^2/\text{NDF}$ : 1333.2/35

reg\_asym\_bcm\_an\_us\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.375 $\pm$ 0.062  $\chi^2$ /NDF: 702.4/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1.052 $\pm$ 0.058  $\chi^2$ /NDF: 964.0/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

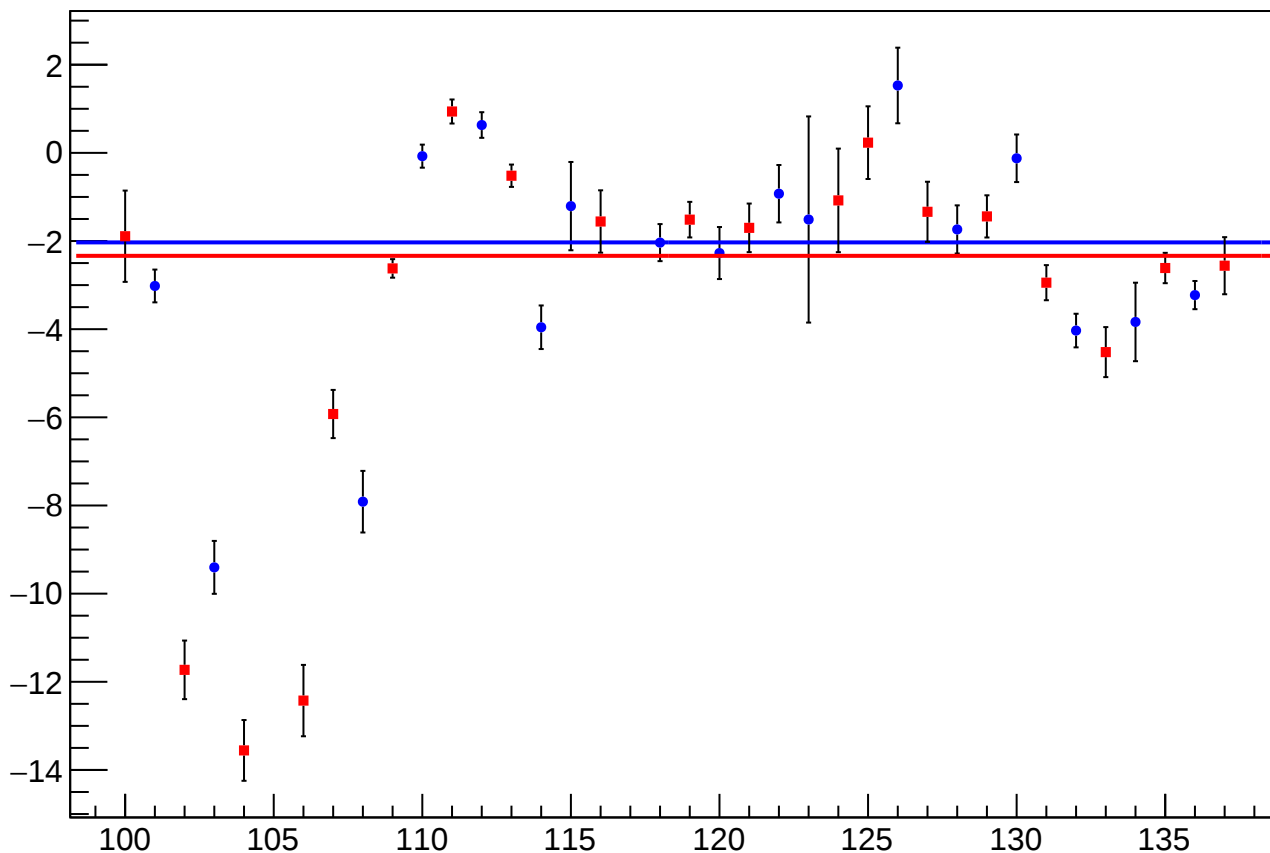
Right: 1.203 $\pm$ 0.042  $\chi^2$ /NDF: 1680.9/35

In: 1.375 $\pm$ 0.062  $\chi^2$ /NDF:702.4/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1.203 $\pm$ 0.042  $\chi^2$ /NDF: 1680.9/35

reg\_asym\_bcm\_an\_us\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.031 \pm 0.111$   $\chi^2/\text{NDF}$ : 463.2/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-2.336 \pm 0.099$   $\chi^2/\text{NDF}$ : 902.0/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

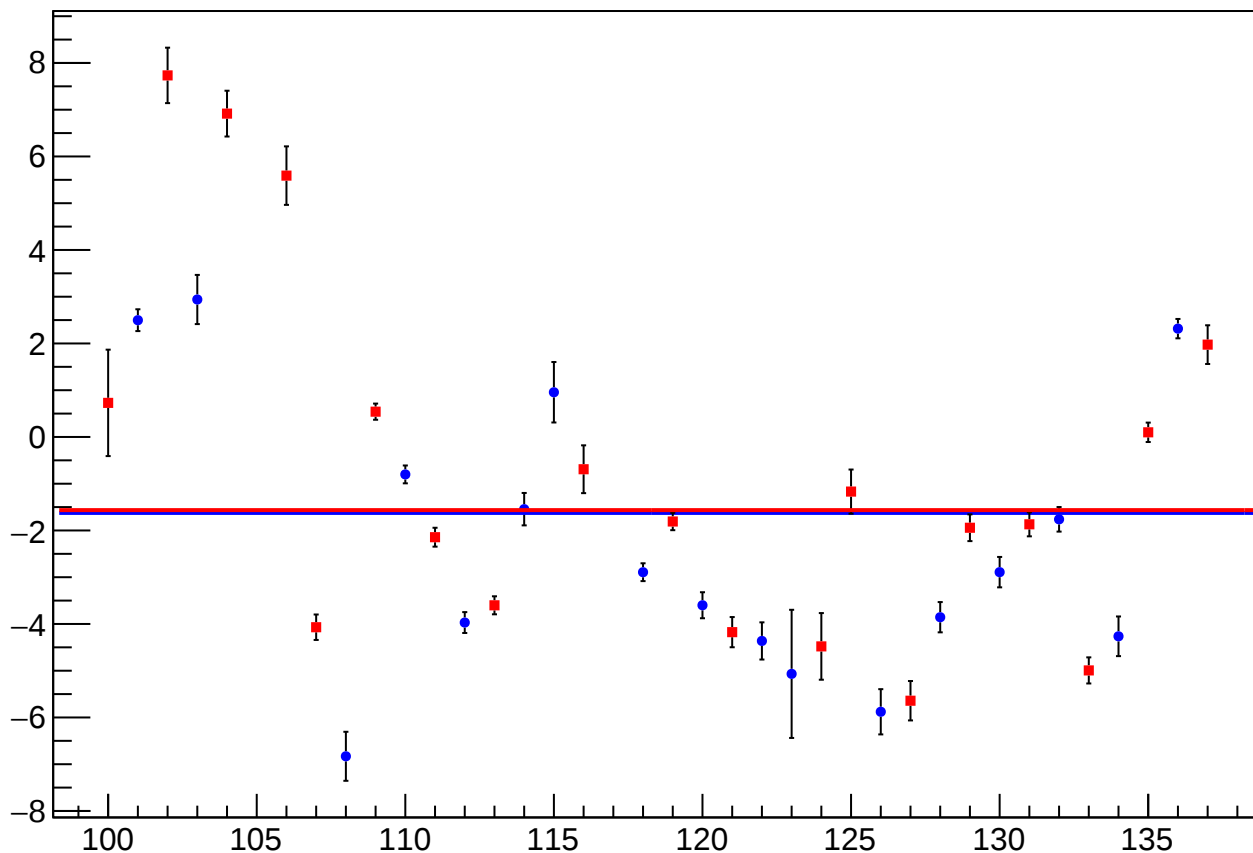
Right:  $-2.202 \pm 0.074$   $\chi^2/\text{NDF}$ : 1369.3/35

In:  $-2.031 \pm 0.111$   $\chi^2/\text{NDF}$ : 463.2/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-2.202 \pm 0.074$   $\chi^2/\text{NDF}$ : 1369.3/35

reg\_asym\_bcm\_an\_us\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In: -1.625+/-0.071  $\chi^2/\text{NDF}$ : 1320.8/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Right Out: -1.565+/-0.066  $\chi^2/\text{NDF}$ : 1505.8/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

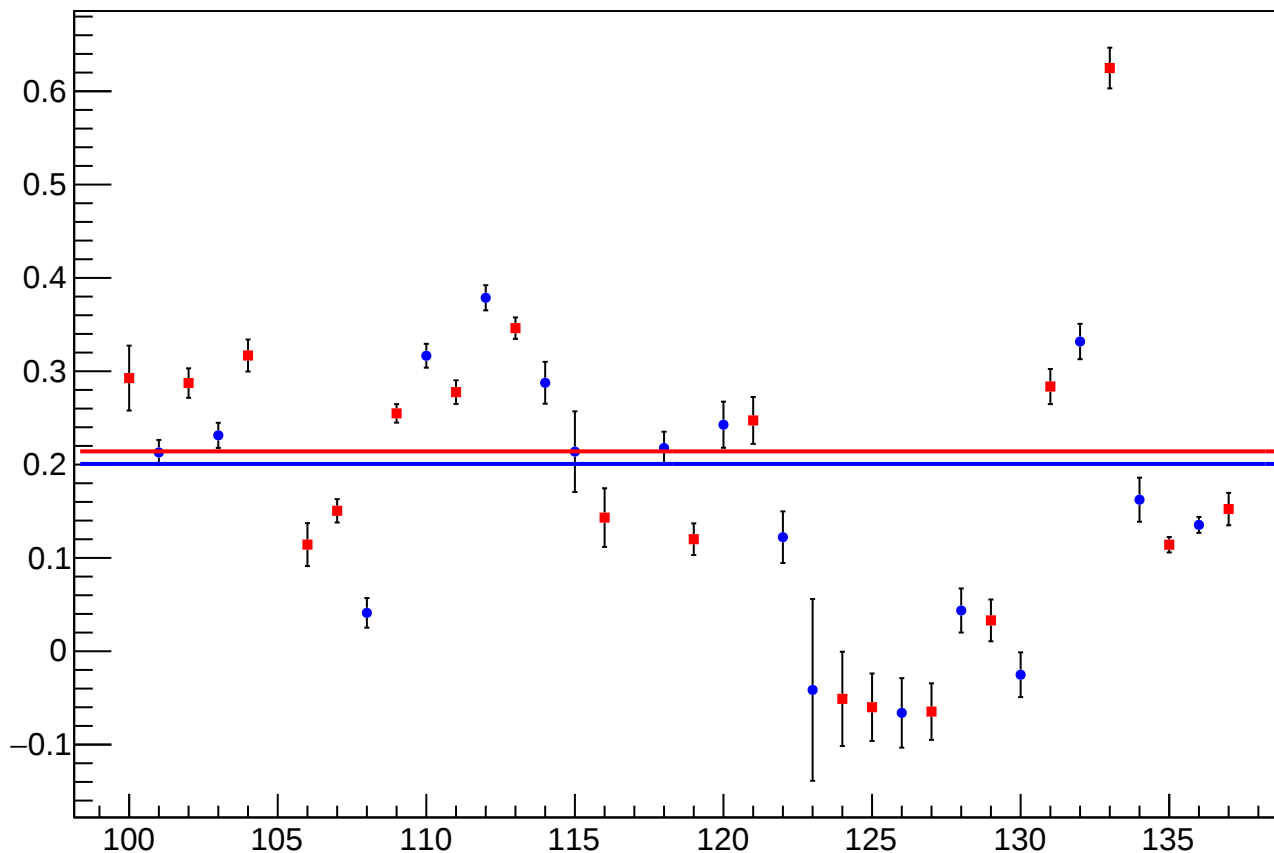
Right: -1.592+/-0.048  $\chi^2/\text{NDF}$ : 2826.9/35

In: -1.625+/-0.071  $\chi^2/\text{NDF}$ :1320.8/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :0.0/0

All: -1.592+/-0.048  $\chi^2/\text{NDF}$ : 2826.9/35

reg\_asym\_bcm\_an\_us\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.201 $\pm$ 0.004  $\chi^2/\text{NDF}$ : 690.6/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.214 $\pm$ 0.004  $\chi^2/\text{NDF}$ : 1080.4/18

Left In: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

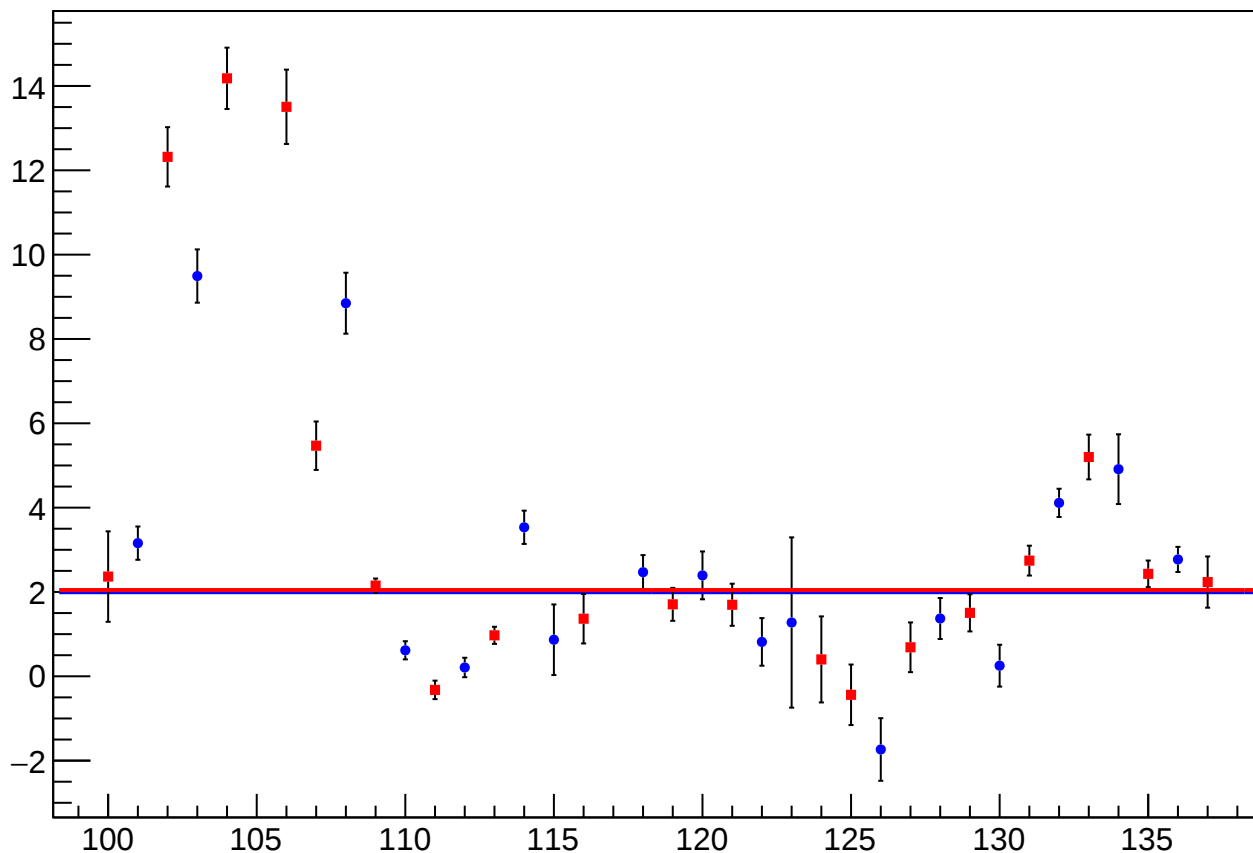
Right: 0.208 $\pm$ 0.003  $\chi^2/\text{NDF}$ : 1776.9/35

In: 0.201 $\pm$ 0.004  $\chi^2/\text{NDF}$ : 690.6/16

Out: 0.000 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.208 $\pm$ 0.003  $\chi^2/\text{NDF}$ : 1776.9/35

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 1.994+/-0.098  $\chi^2/\text{NDF}$ : 461.9/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.046+/-0.085  $\chi^2/\text{NDF}$ : 906.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

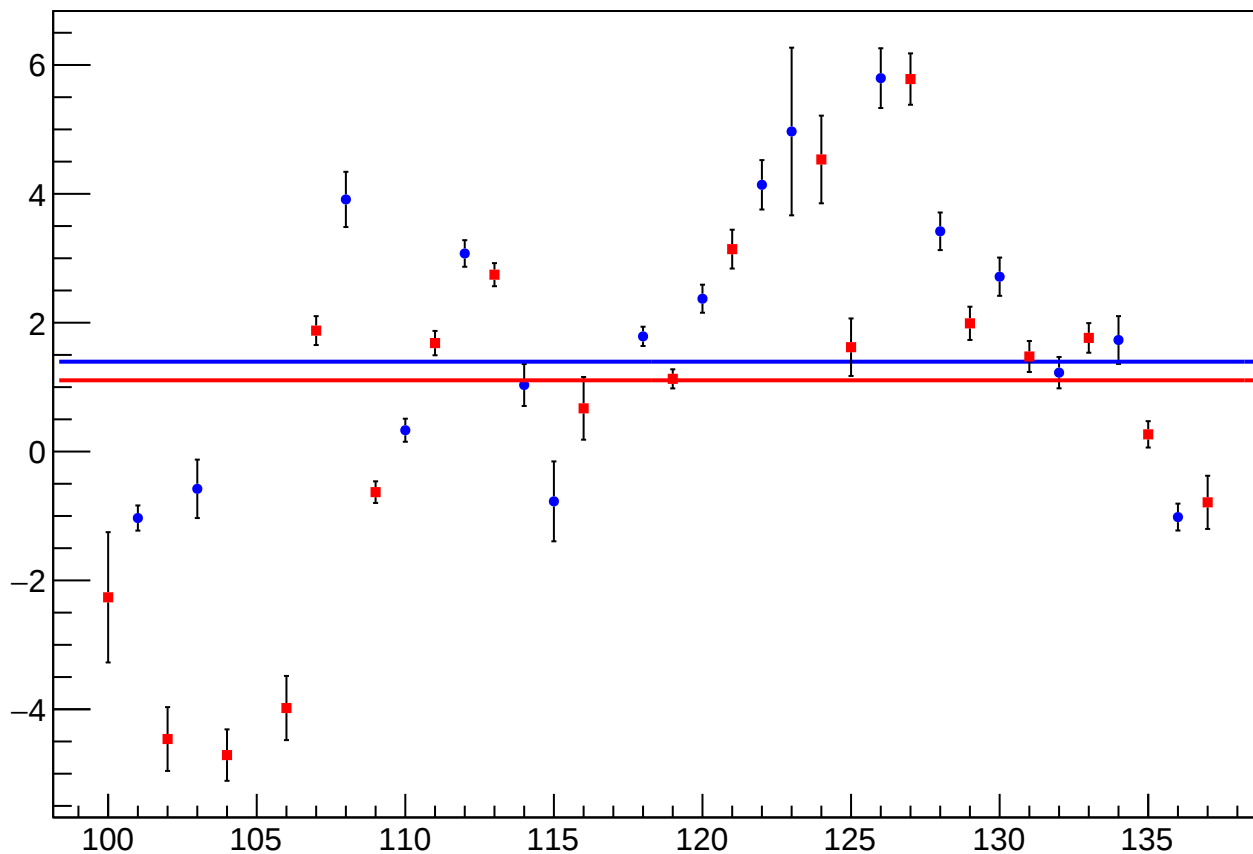
Right: 2.024+/-0.064  $\chi^2/\text{NDF}$ : 1368.0/35

In: 1.994+/-0.098  $\chi^2/\text{NDF}$ : 461.9/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.024+/-0.064  $\chi^2/\text{NDF}$ : 1368.0/35

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.395+/-0.063  $\chi^2/\text{NDF}$ : 701.4/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 1.106+/-0.059  $\chi^2/\text{NDF}$ : 937.0/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

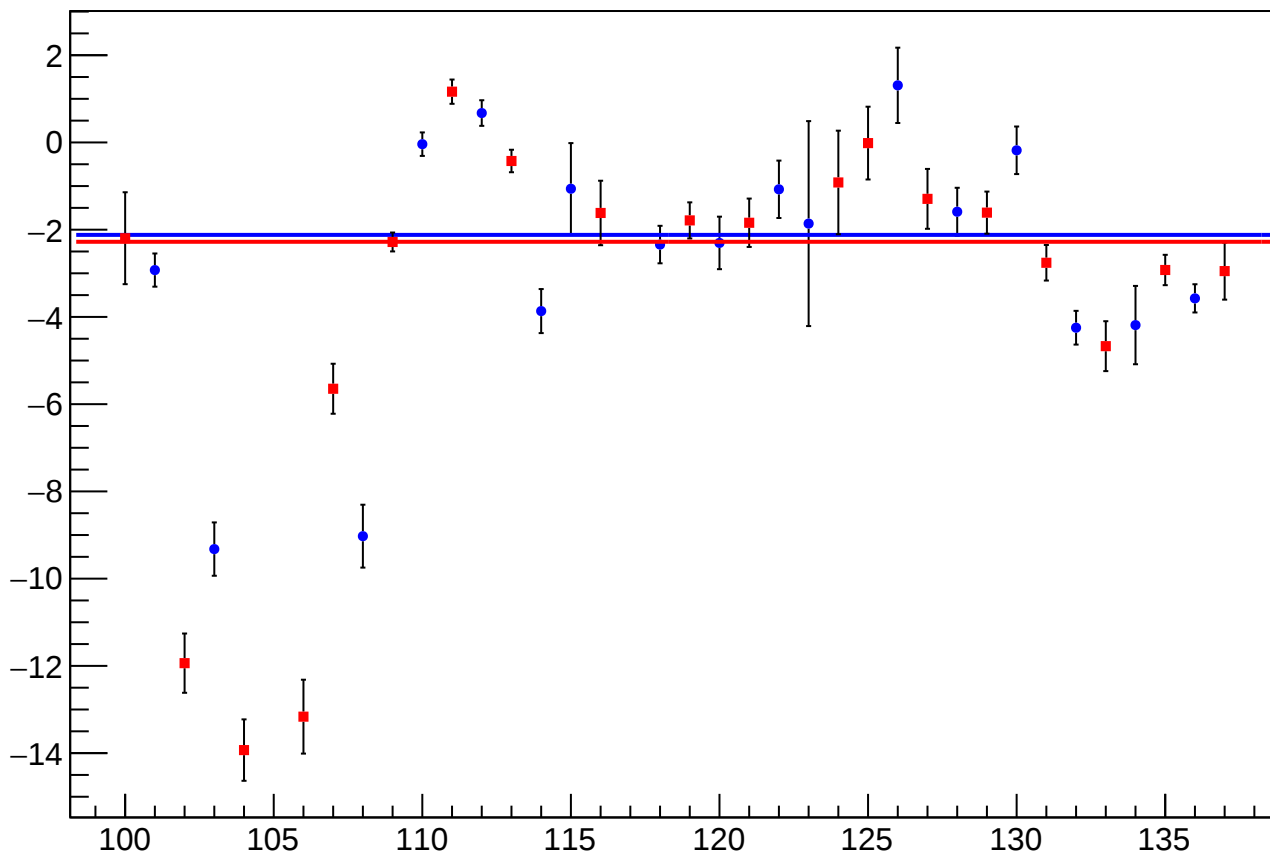
Right: 1.241+/-0.043  $\chi^2/\text{NDF}$ : 1649.6/35

In: 1.395+/-0.063  $\chi^2/\text{NDF}$ : 701.4/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 1.241+/-0.043  $\chi^2/\text{NDF}$ : 1649.6/35

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In: -2.119+/-0.113  $\chi^2/\text{NDF}$ : 486.3/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -2.277+/-0.101  $\chi^2/\text{NDF}$ : 919.4/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

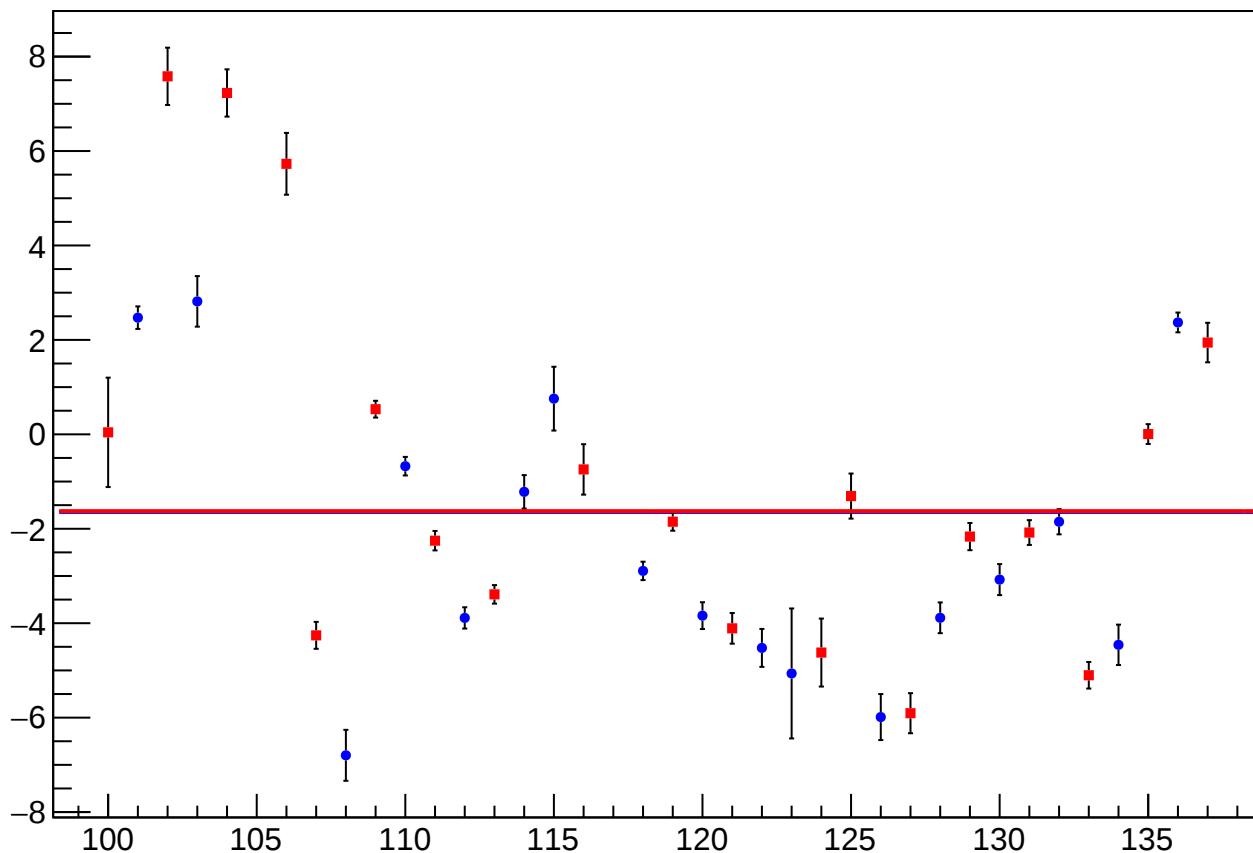
Right: -2.207+/-0.075  $\chi^2/\text{NDF}$ : 1406.8/35

In: -2.119+/-0.113  $\chi^2/\text{NDF}$ : 486.3/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -2.207+/-0.075  $\chi^2/\text{NDF}$ : 1406.8/35

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-1.643 \pm 0.072$   $\chi^2/\text{NDF}$ : 1310.1/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-1.627 \pm 0.067$   $\chi^2/\text{NDF}$ : 1468.1/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

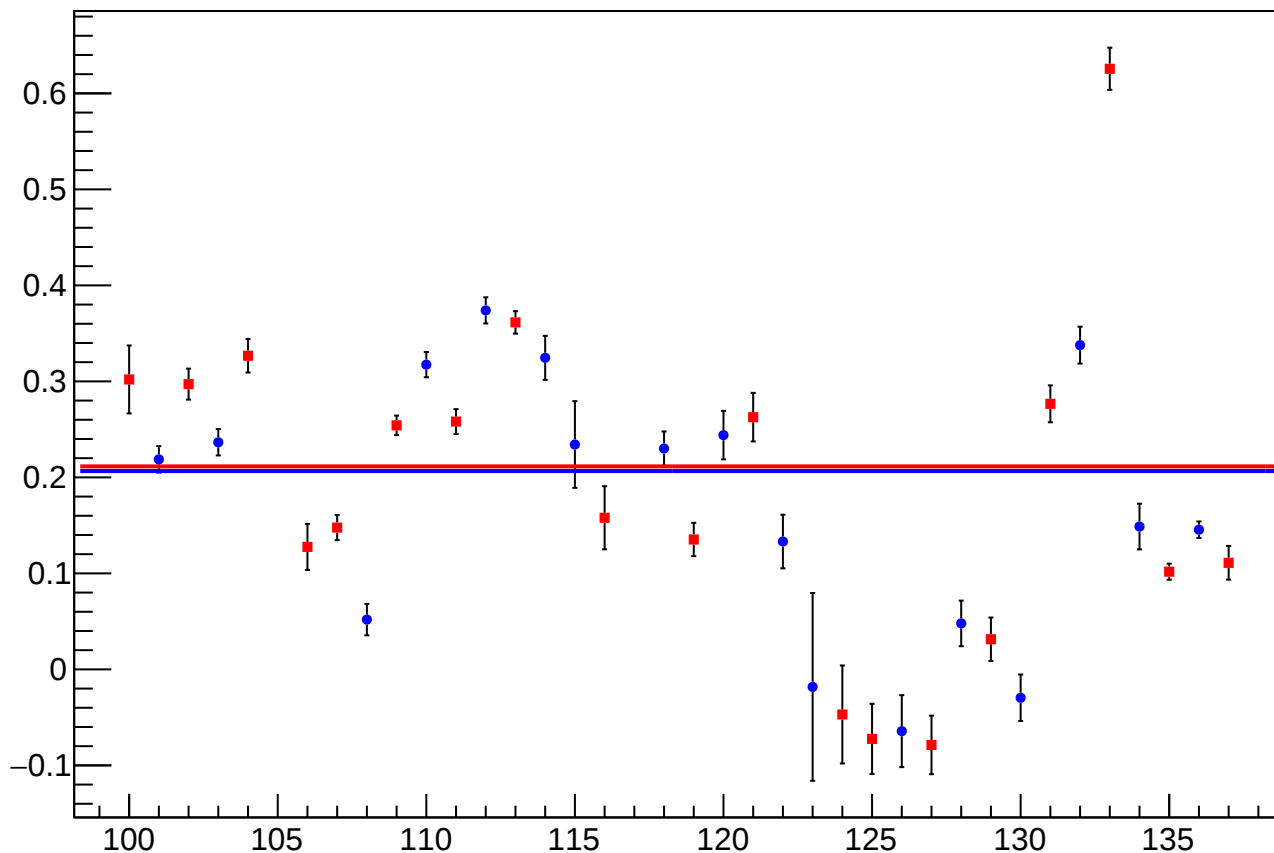
Right:  $-1.635 \pm 0.049$   $\chi^2/\text{NDF}$ : 2778.2/35

In:  $-1.643 \pm 0.072$   $\chi^2/\text{NDF}$ : 1310.1/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-1.635 \pm 0.049$   $\chi^2/\text{NDF}$ : 2778.2/35

reg\_asym\_bcm\_dg\_ds\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.207+/-0.004  $\chi^2/\text{NDF}$ : 655.0/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 0.211+/-0.004  $\chi^2/\text{NDF}$ : 1145.6/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

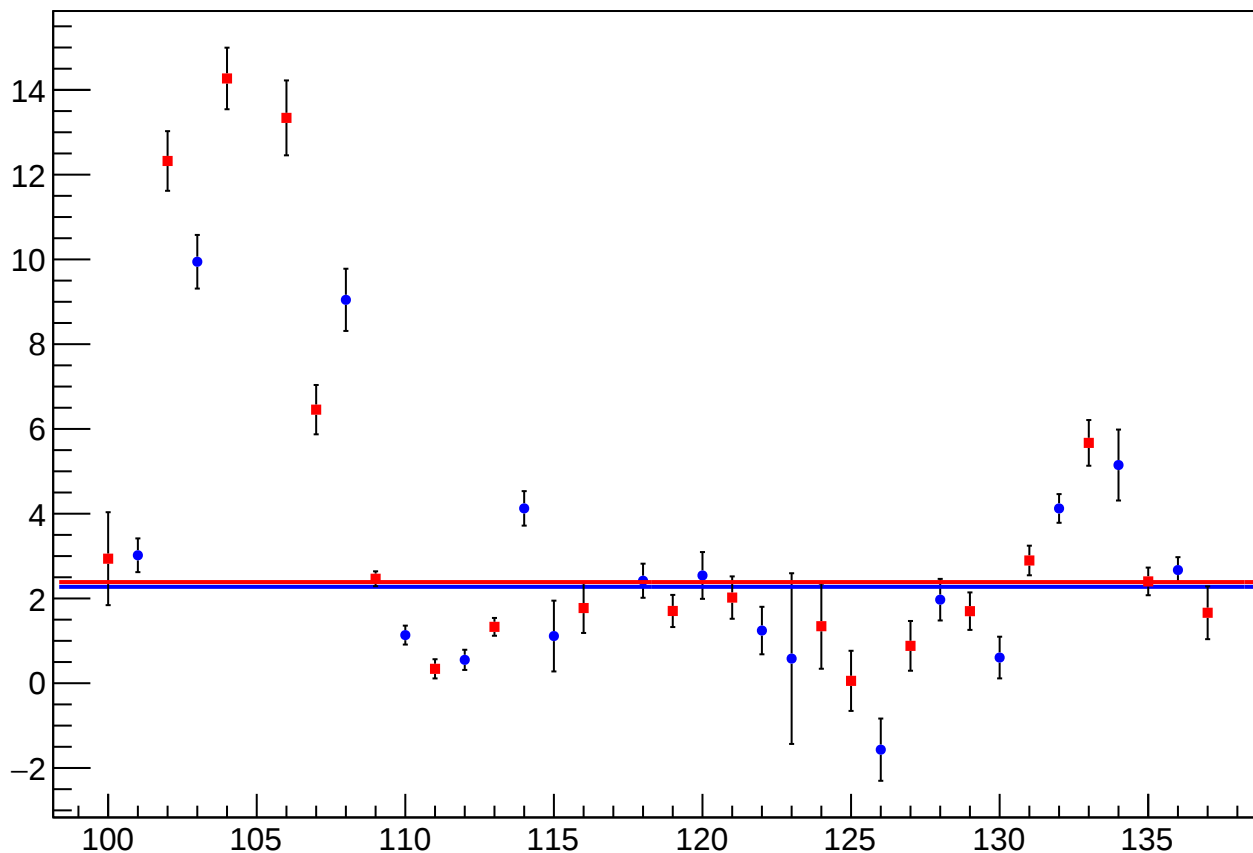
Right: 0.209+/-0.003  $\chi^2/\text{NDF}$ : 1801.3/35

In: 0.207+/-0.004  $\chi^2/\text{NDF}$ : 655.0/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.209+/-0.003  $\chi^2/\text{NDF}$ : 1801.3/35

reg\_asym\_bcm\_dg\_us\_diff\_bpm4aX\_slope vs Slug, Sign Corrected



Right In: 2.274+/-0.100  $\chi^2/\text{NDF}$ : 423.7/16

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 2.387+/-0.087  $\chi^2/\text{NDF}$ : 843.1/18

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

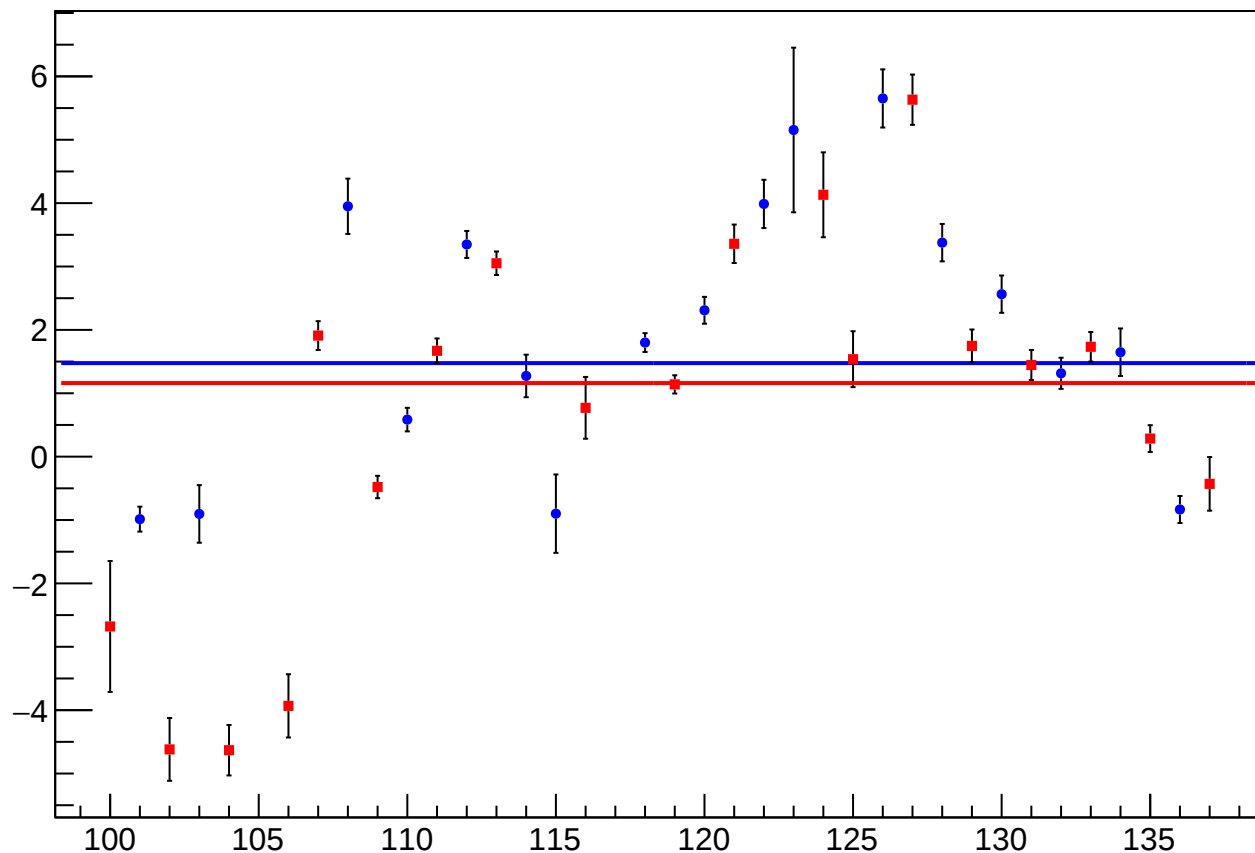
Right: 2.338+/-0.066  $\chi^2/\text{NDF}$ : 1267.5/35

In: 2.274+/-0.100  $\chi^2/\text{NDF}$ : 423.7/16

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 2.338+/-0.066  $\chi^2/\text{NDF}$ : 1267.5/35

reg\_asym\_bcm\_dg\_us\_diff\_bpm4aY\_slope vs Slug, Sign Corrected



Right In: 1.476 $\pm$ 0.064  $\chi^2$ /NDF: 659.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 1.161 $\pm$ 0.060  $\chi^2$ /NDF: 917.9/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

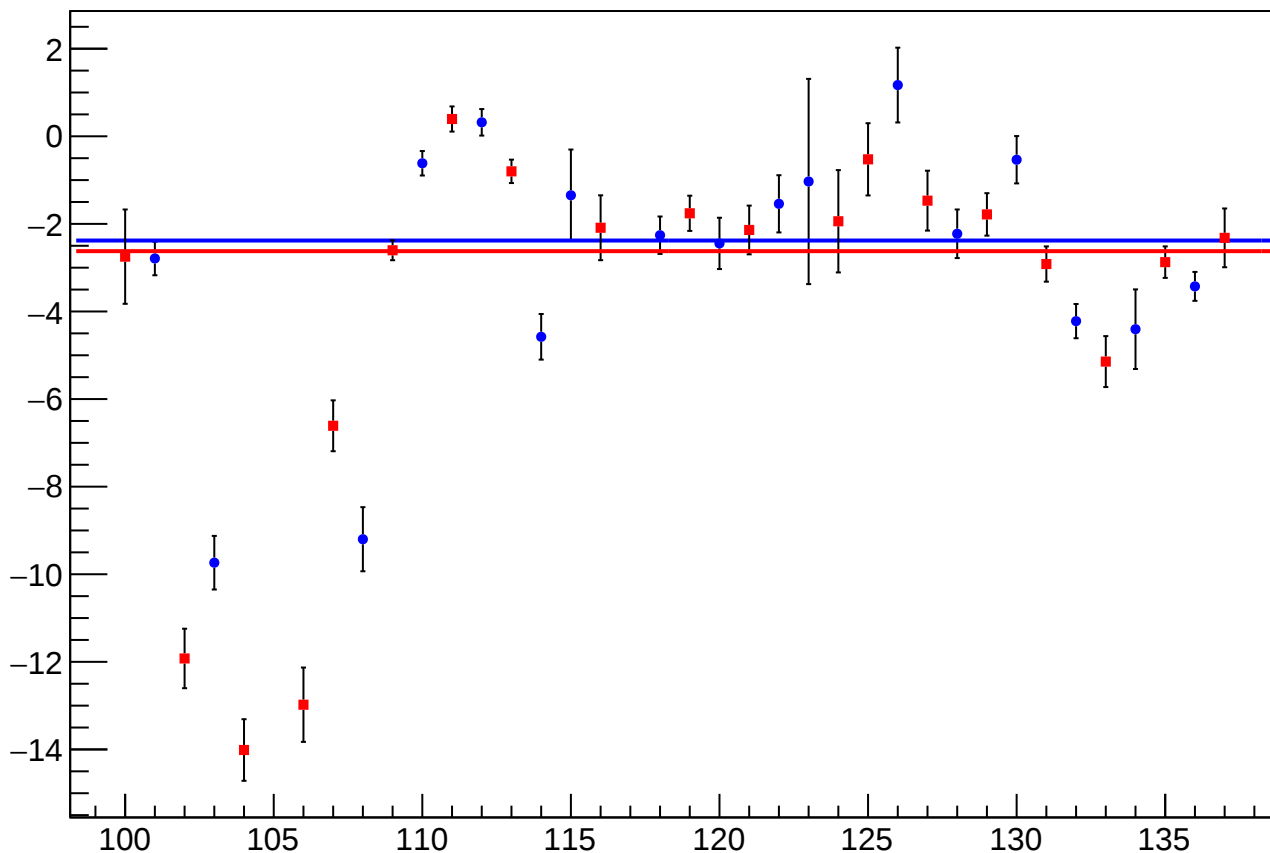
Right: 1.309 $\pm$ 0.044  $\chi^2$ /NDF: 1590.5/35

In: 1.476 $\pm$ 0.064  $\chi^2$ /NDF:659.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 1.309 $\pm$ 0.044  $\chi^2$ /NDF: 1590.5/35

reg\_asym\_bcm\_dg\_us\_diff\_bpm4eX\_slope vs Slug, Sign Corrected



Right In:  $-2.380 \pm 0.115$   $\chi^2/\text{NDF}$ : 438.8/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-2.623 \pm 0.103$   $\chi^2/\text{NDF}$ : 841.3/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

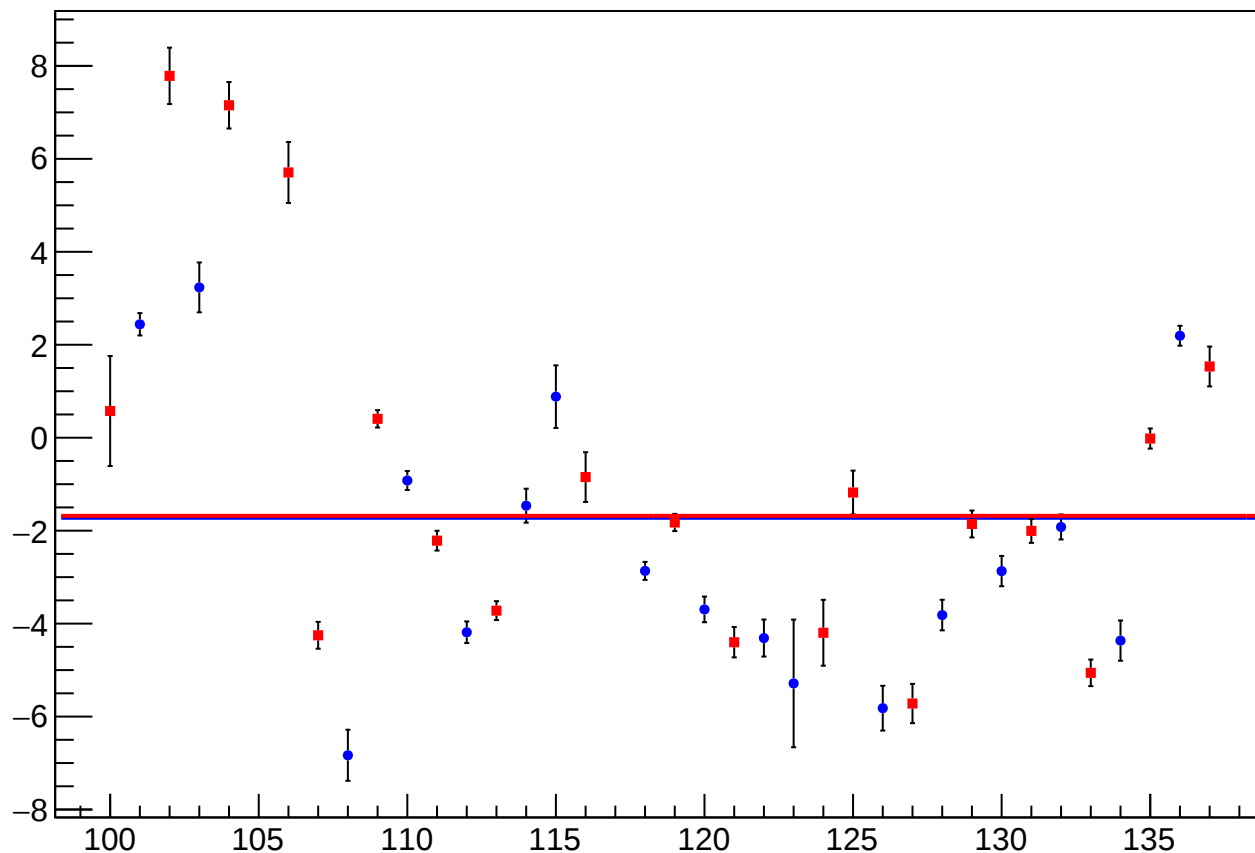
Right:  $-2.514 \pm 0.077$   $\chi^2/\text{NDF}$ : 1282.5/35

In:  $-2.380 \pm 0.115$   $\chi^2/\text{NDF}$ : 438.8/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-2.514 \pm 0.077$   $\chi^2/\text{NDF}$ : 1282.5/35

reg\_asym\_bcm\_dg\_us\_diff\_bpm4eY\_slope vs Slug, Sign Corrected



Right In:  $-1.722 \pm 0.073$   $\chi^2/\text{NDF}$ : 1247.6/16

Left Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Right Out:  $-1.681 \pm 0.068$   $\chi^2/\text{NDF}$ : 1431.0/18

Left In:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

Left:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

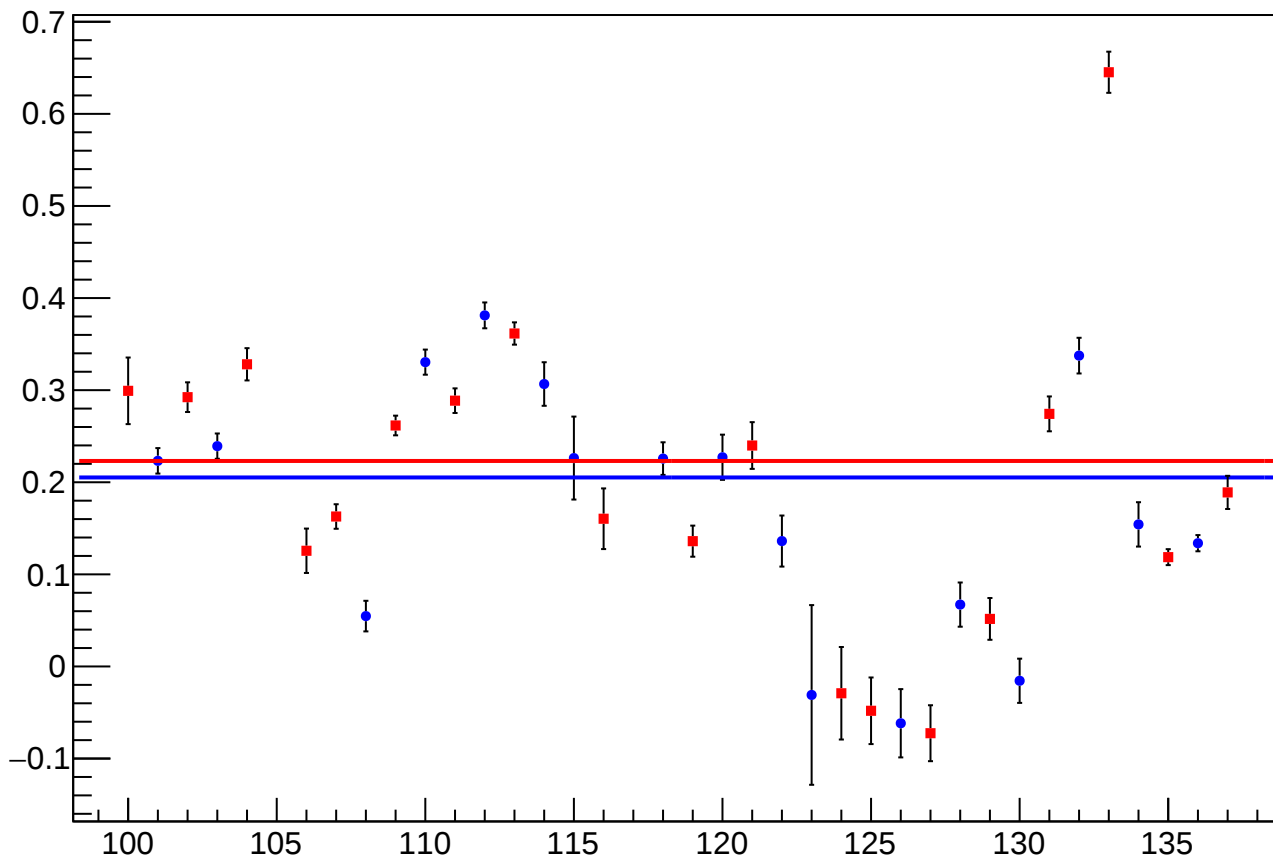
Right:  $-1.700 \pm 0.050$   $\chi^2/\text{NDF}$ : 2678.8/35

In:  $-1.722 \pm 0.073$   $\chi^2/\text{NDF}$ : 1247.6/16

Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}$ : 0.0/0

All:  $-1.700 \pm 0.050$   $\chi^2/\text{NDF}$ : 2678.8/35

reg\_asym\_bcm\_dg\_us\_diff\_bpm12X\_slope vs Slug, Sign Corrected



Right In: 0.205 $\pm$ 0.004  $\chi^2$ /NDF: 650.7/16

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: 0.223 $\pm$ 0.004  $\chi^2$ /NDF: 1040.5/18

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

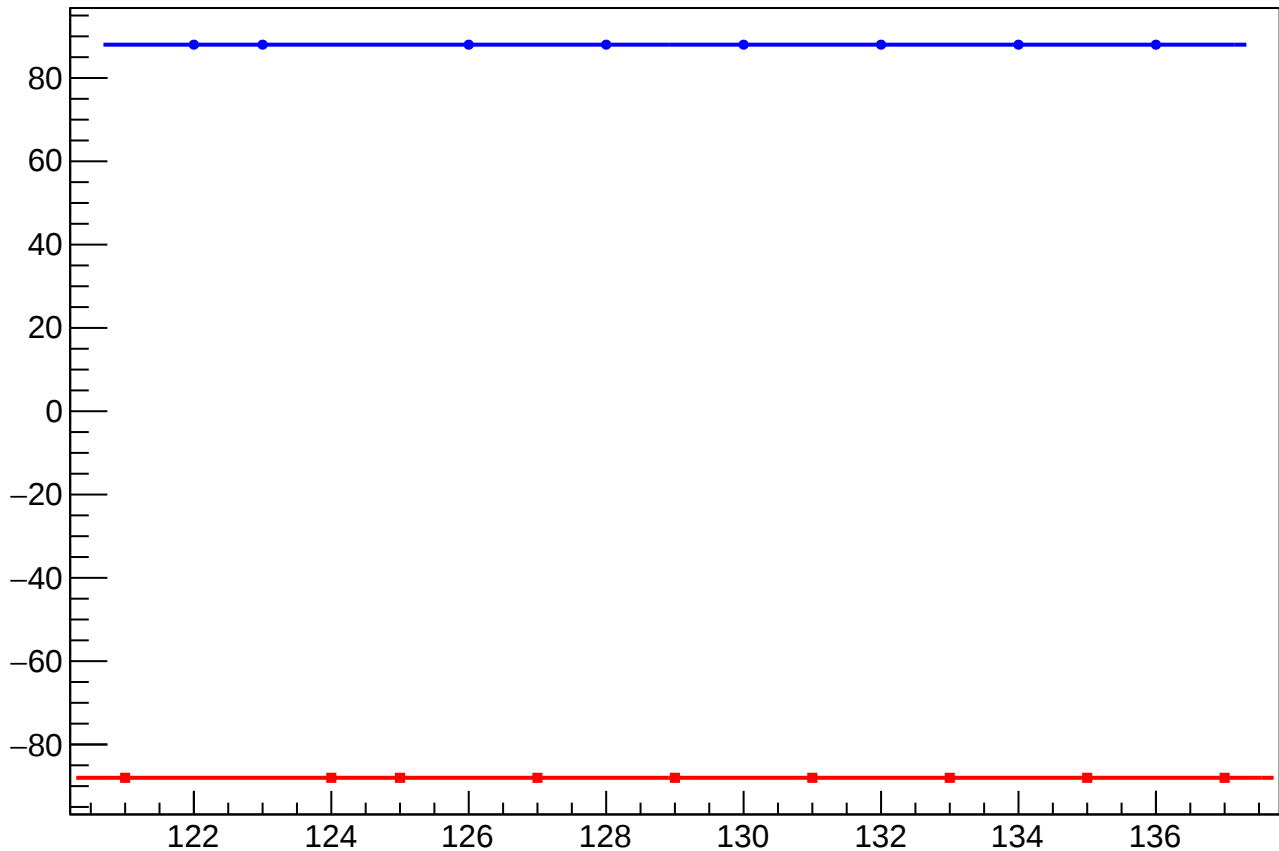
Right: 0.215 $\pm$ 0.003  $\chi^2$ /NDF: 1700.9/35

In: 0.205 $\pm$ 0.004  $\chi^2$ /NDF:650.7/16

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

All: 0.215 $\pm$ 0.003  $\chi^2$ /NDF: 1700.9/35

# VWienAngle\_mean vs Slug, Sign Corrected



Right In: 88.001+/-0.000  $\chi^2/\text{NDF}$ : 714089.5/7

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -88.001+/-0.000  $\chi^2/\text{NDF}$ : 109456.0/8

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

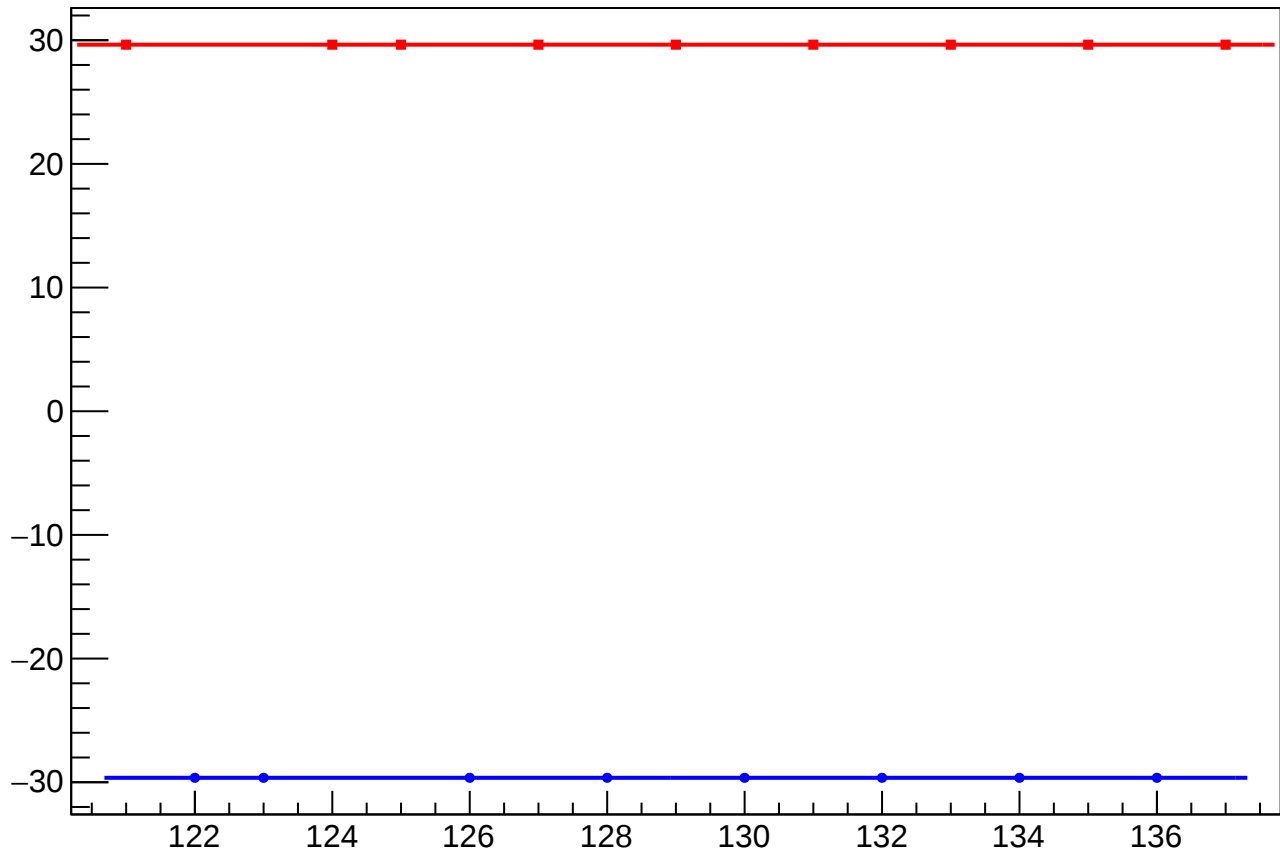
Right: 3.062+/-0.000  $\chi^2/\text{NDF}$ : 51126681569224617

In: 88.001+/-0.000  $\chi^2/\text{NDF}$ : 714089.5/7

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 3.062+/-0.000  $\chi^2/\text{NDF}$ : 51126681569224617

# HWienAngle\_mean vs Slug, Sign Corrected



Right In: -29.641 $\pm$ 0.000  $\chi^2$ /NDF: 405045.4/7

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Right Out: 29.641 $\pm$ 0.000  $\chi^2$ /NDF: 29358.2/8

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

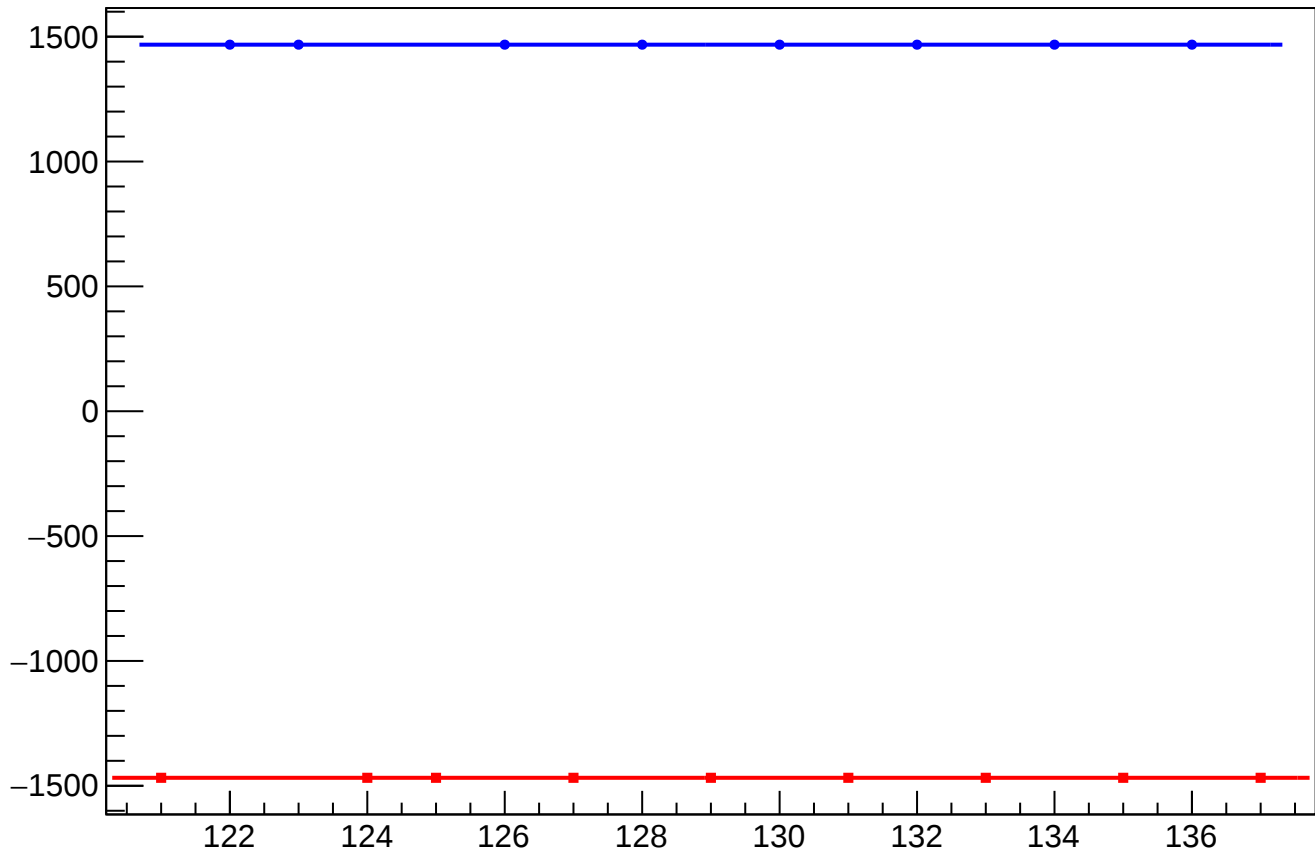
Right: -1.031 $\pm$ 0.000  $\chi^2$ /NDF: 5800324943766944

In: -29.641 $\pm$ 0.000  $\chi^2$ /NDF: 405045.4/7

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

All: -1.031 $\pm$ 0.000  $\chi^2$ /NDF: 5800324943766

# psub\_pl\_pos\_mean vs Slug, Sign Corrected



Right In: 1467.979+/-0.000  $\chi^2/\text{NDF}$ : 436234375.5/7

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -1467.979+/-0.000  $\chi^2/\text{NDF}$ : 83183350.3/8

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

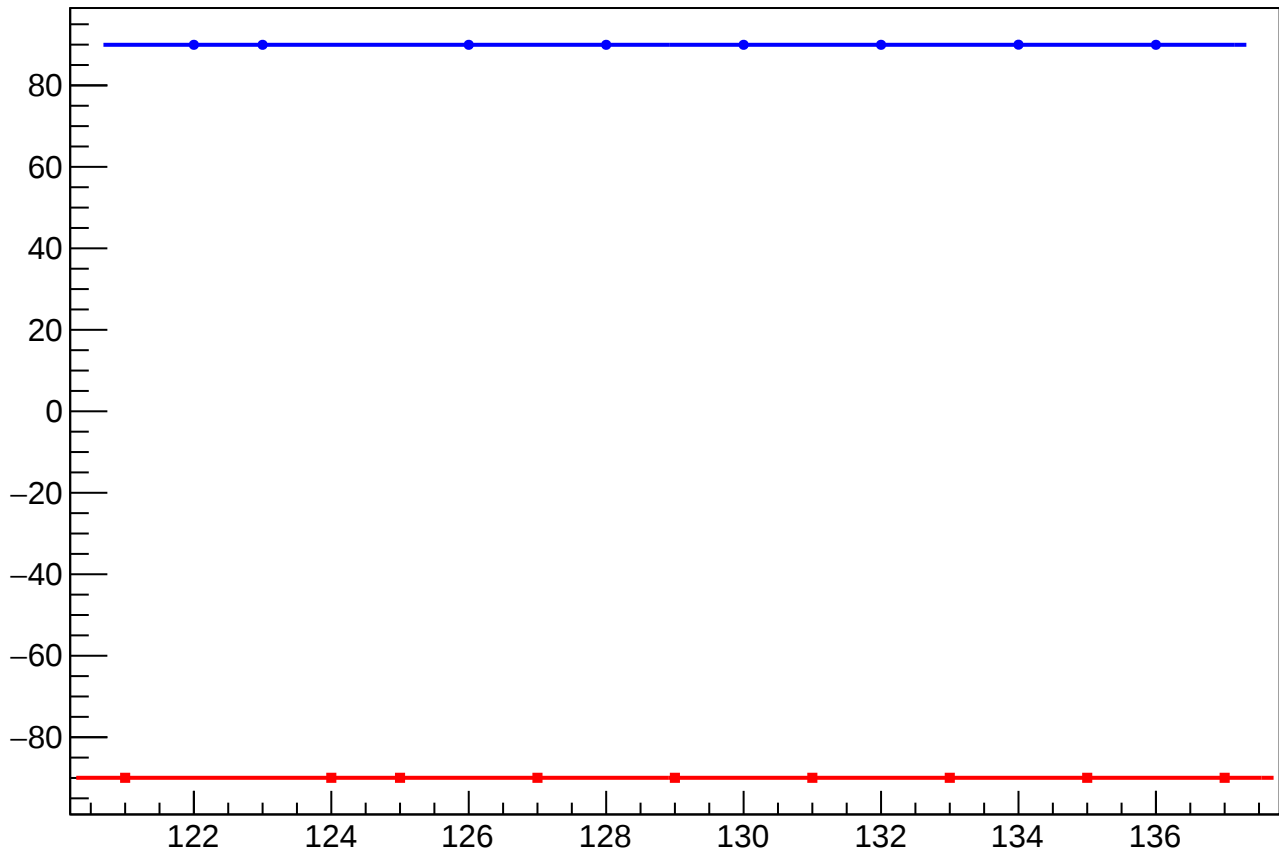
Right: 51.079+/-0.000  $\chi^2/\text{NDF}$ : 1422706063207371

In: 1467.979+/-0.000  $\chi^2/\text{NDF}$ : 436234375.5/7

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

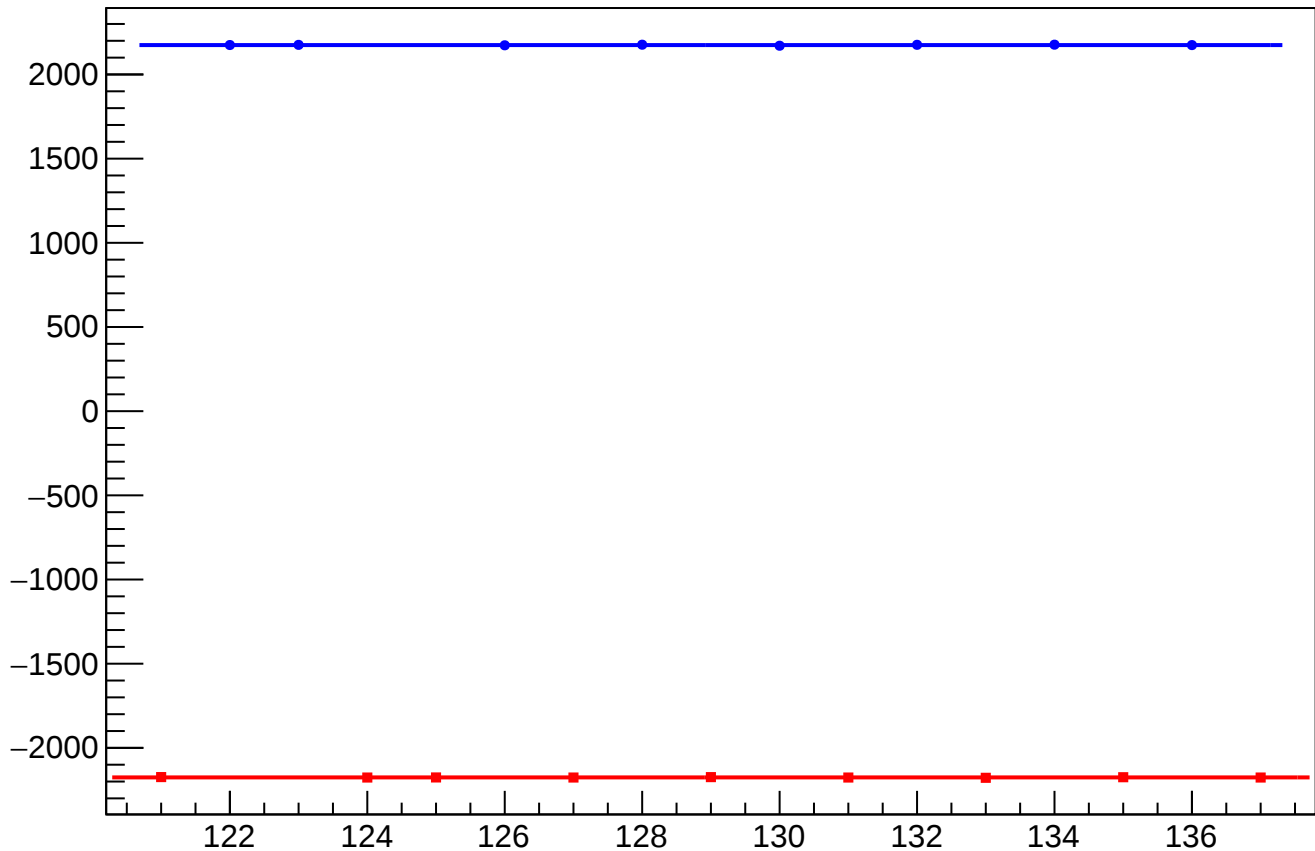
All: 51.079+/-0.000  $\chi^2/\text{NDF}$ : 1422706063207371

# Phi\_FG\_mean vs Slug, Sign Corrected



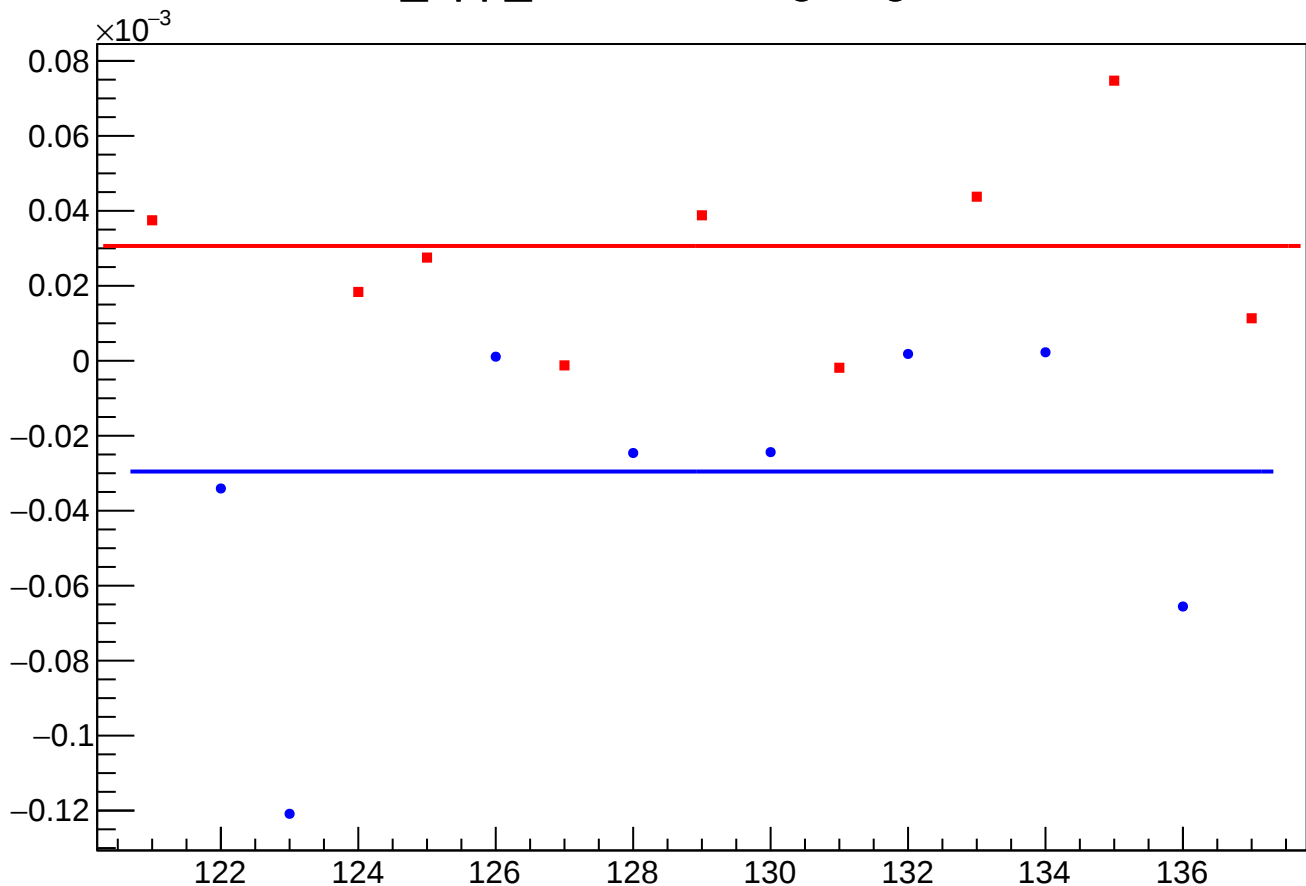
Right In: 89.961+/-0.000  $\chi^2/\text{NDF}$ : 21528640598708602874349223936.0/7  
Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
Right Out: -89.959+/-0.000  $\chi^2/\text{NDF}$ : 331397.3/8  
Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
In: 89.961+/-0.000  $\chi^2/\text{NDF}$ : 21528640598708602874349223936.0/7  
Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
All: 3.131+/-0.000  $\chi^2/\text{NDF}$ : 53429021948733419

# HALLA\_p\_mean vs Slug, Sign Corrected



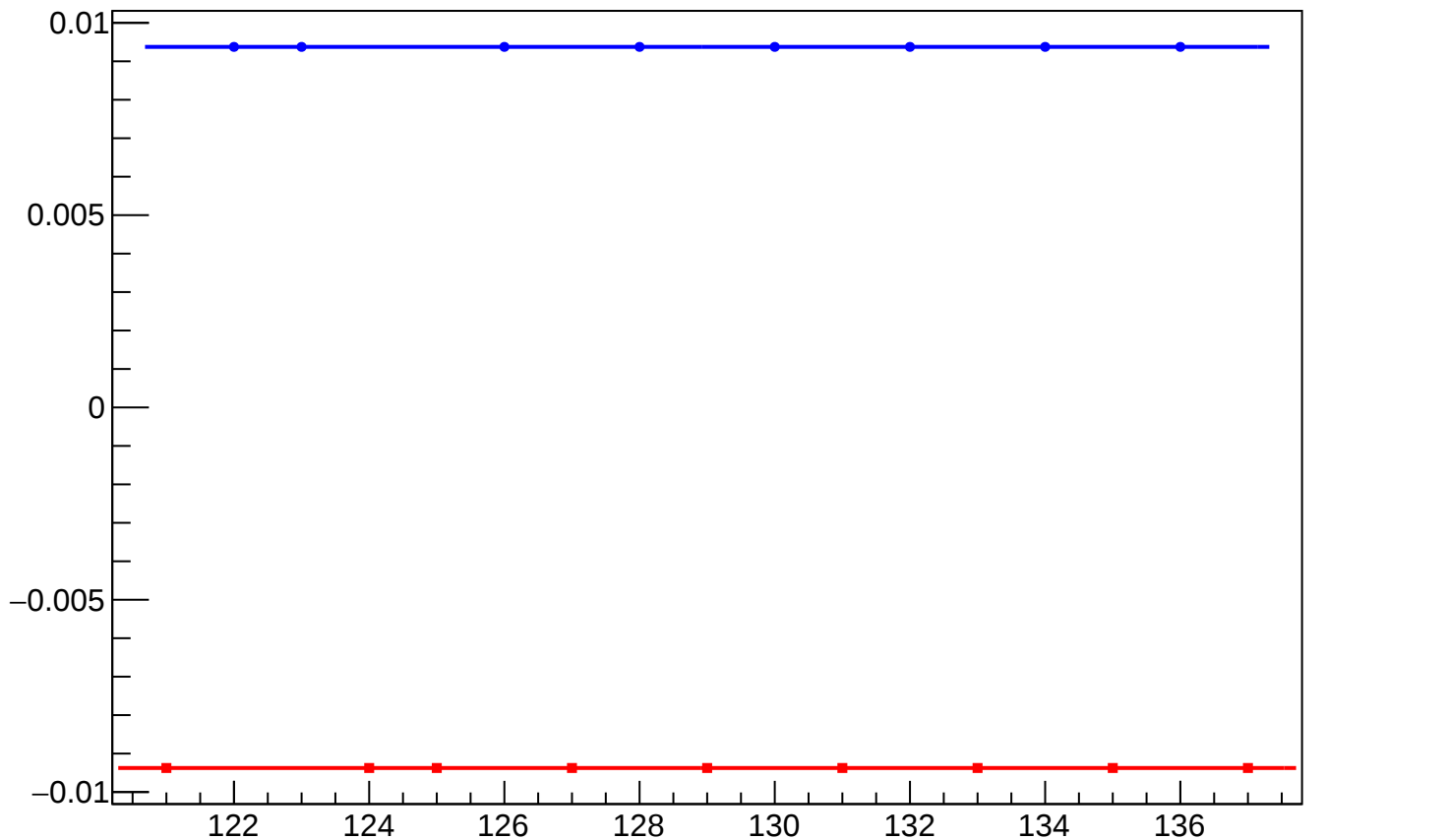
Right In: 2174.572+/-0.000  $\chi^2/\text{NDF}$ : 1360264074026849381407550448074752.0/7  
Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
Right Out: -2175.442+/-0.000  $\chi^2/\text{NDF}$ : 610778445075790556034346524868608.0/8  
Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
All: 75.246+/-0.000  $\chi^2/\text{NDF}$ : 3123179758766980

# HALLA\_dpp\_mean vs Slug, Sign Corrected



Right In: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 250161267307815387529216.0/7  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 196732771178766734983168.0/8  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: -0.000+/-0.000  $\chi^2/\text{NDF}$ : 1044577663810456

# MQ171LM\_mean vs Slug, Sign Corrected



Right In: 0.009 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/7

Left Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Right Out: -0.009 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/8

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

Left: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

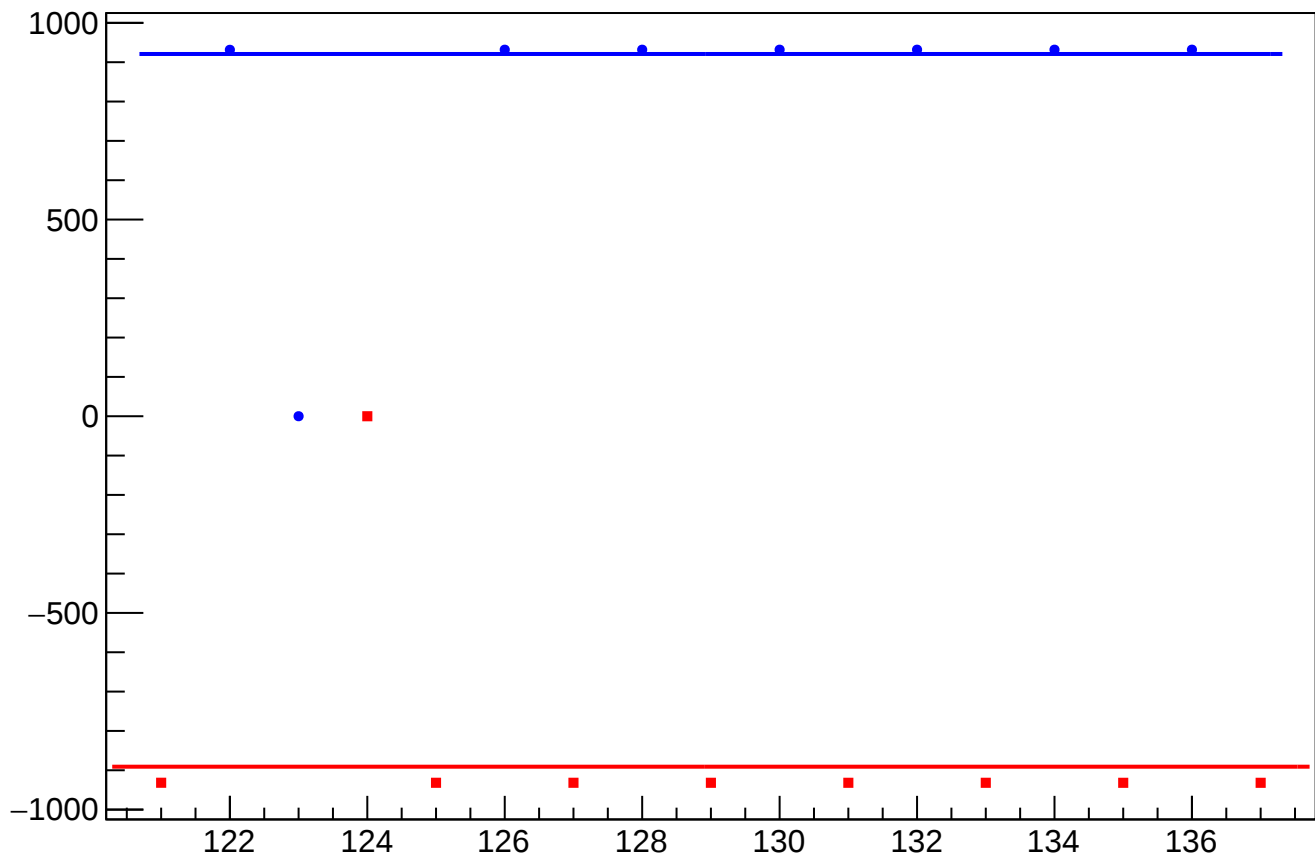
Right: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 58025364031769994

In: 0.009 $\pm$ 0.000  $\chi^2$ /NDF:0.0/7

Out: 0.000 $\pm$ 0.000  $\chi^2$ /NDF:0.0/0

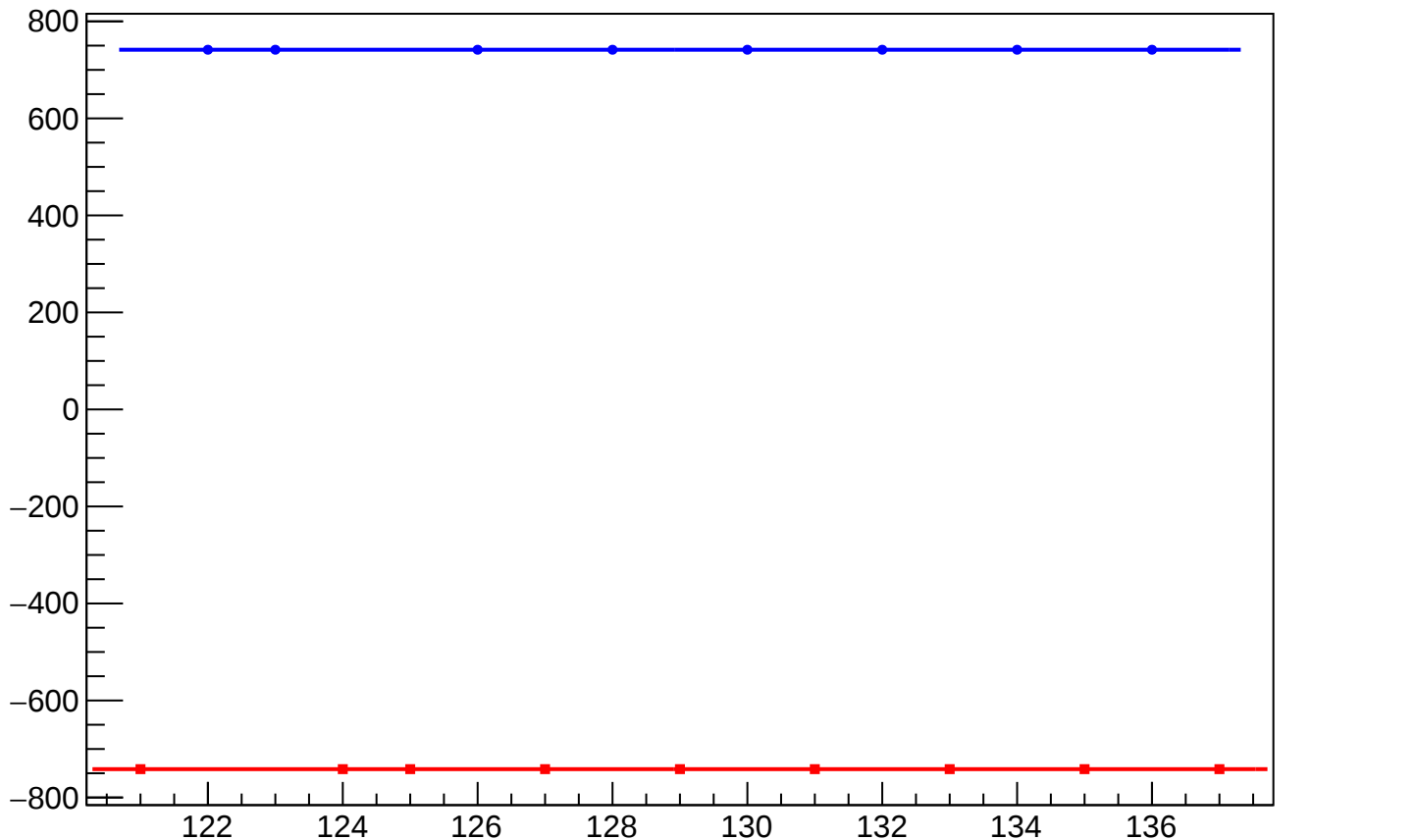
All: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 58025364031769

# HacL\_Q2\_HP3458A\_IOUT\_mean vs Slug, Sign Corrected



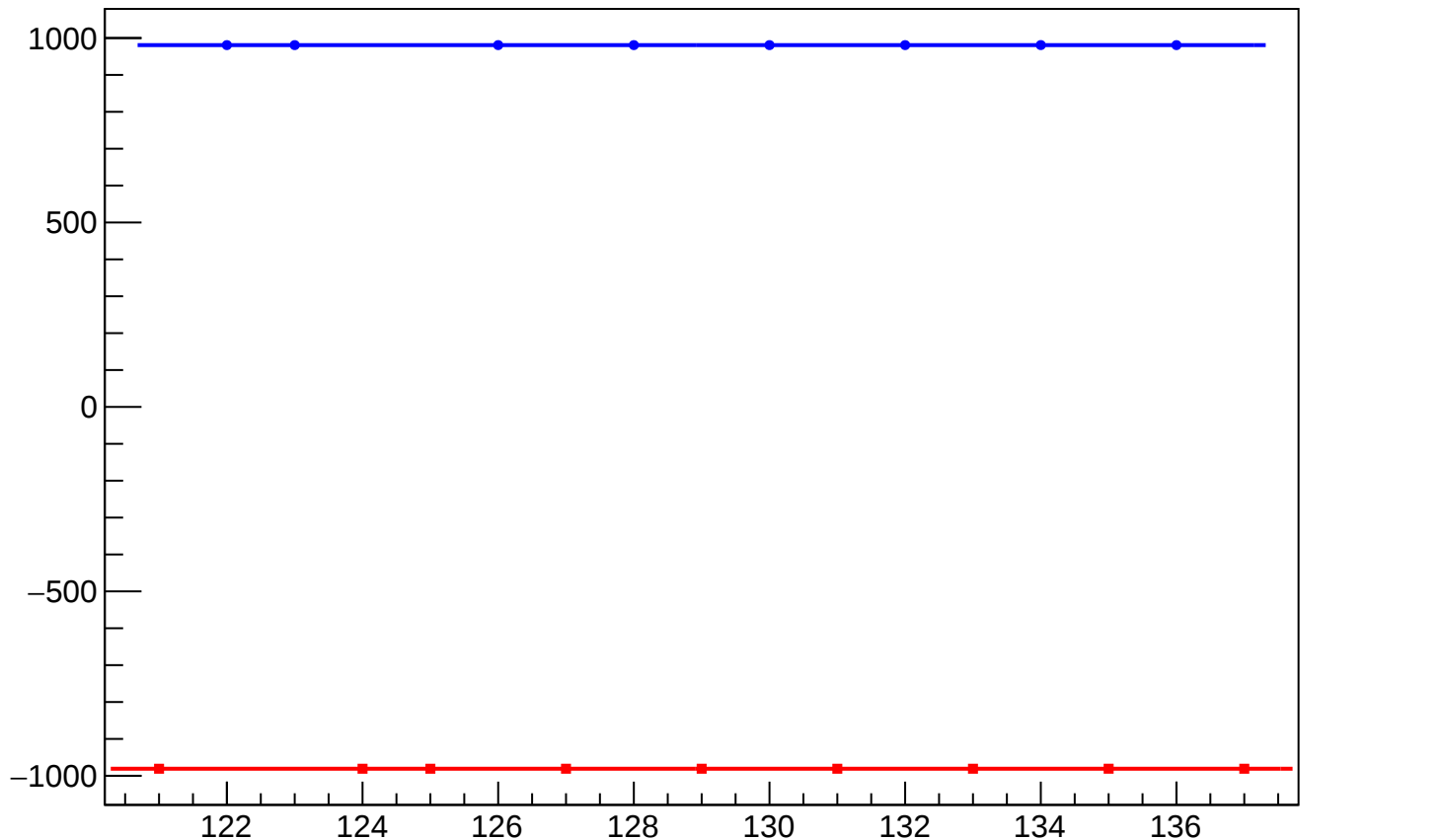
Right In: 920.898+/-0.000  $\chi^2/\text{NDF}$ : 3432128841951899861299566212080992256.0/7  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -890.923+/-0.000  $\chi^2/\text{NDF}$ : 11621671430114409722932854398744788992.0/8  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 46.509+/-0.000  $\chi^2/\text{NDF}$ : 5568625454904034

# HacL\_D1\_HP3458A\_IOUT\_mean vs Slug, Sign Corrected



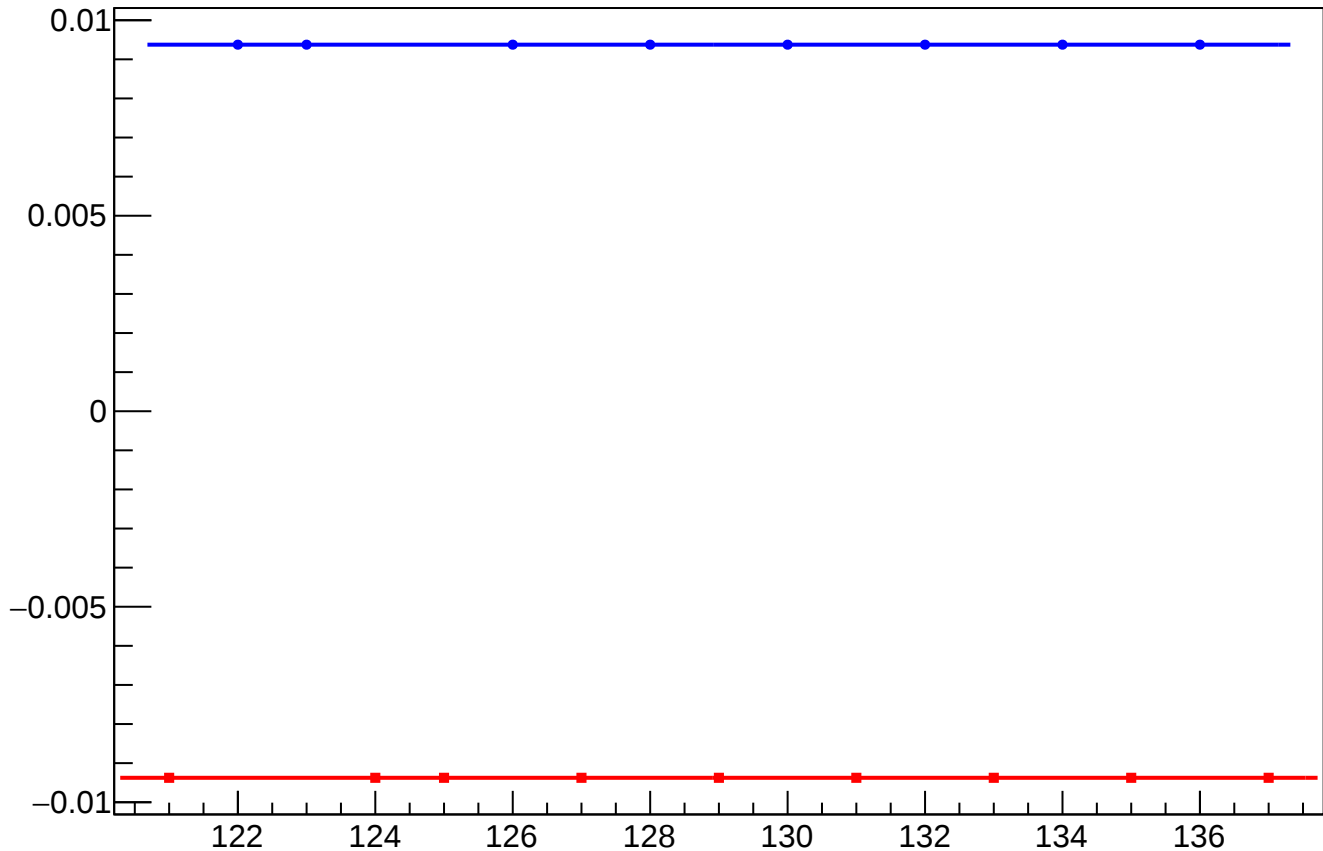
Right In: 741.528+/-0.000  $\chi^2/\text{NDF}$ : 18896144326732419810052800512.0/7  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -741.529+/-0.000  $\chi^2/\text{NDF}$ : 16580353917842624420385914880.0/8  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 25.802+/-0.000  $\chi^2/\text{NDF}$ : 3630199450079866

# HacL\_Q3\_HP3458A\_IOUT\_mean vs Slug, Sign Corrected



Right In: 980.825+/-0.000  $\chi^2/\text{NDF}$ : 159345321268745350954763681792.0/7  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -980.818+/-0.000  $\chi^2/\text{NDF}$ : 143689912167528137563261894656.0/8  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 34.132+/-0.000  $\chi^2/\text{NDF}$ : 6351195317188543

# MQ172RM\_mean vs Slug, Sign Corrected



Right In: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 0.0/7

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.009+/-0.000  $\chi^2/\text{NDF}$ : 0.0/8

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

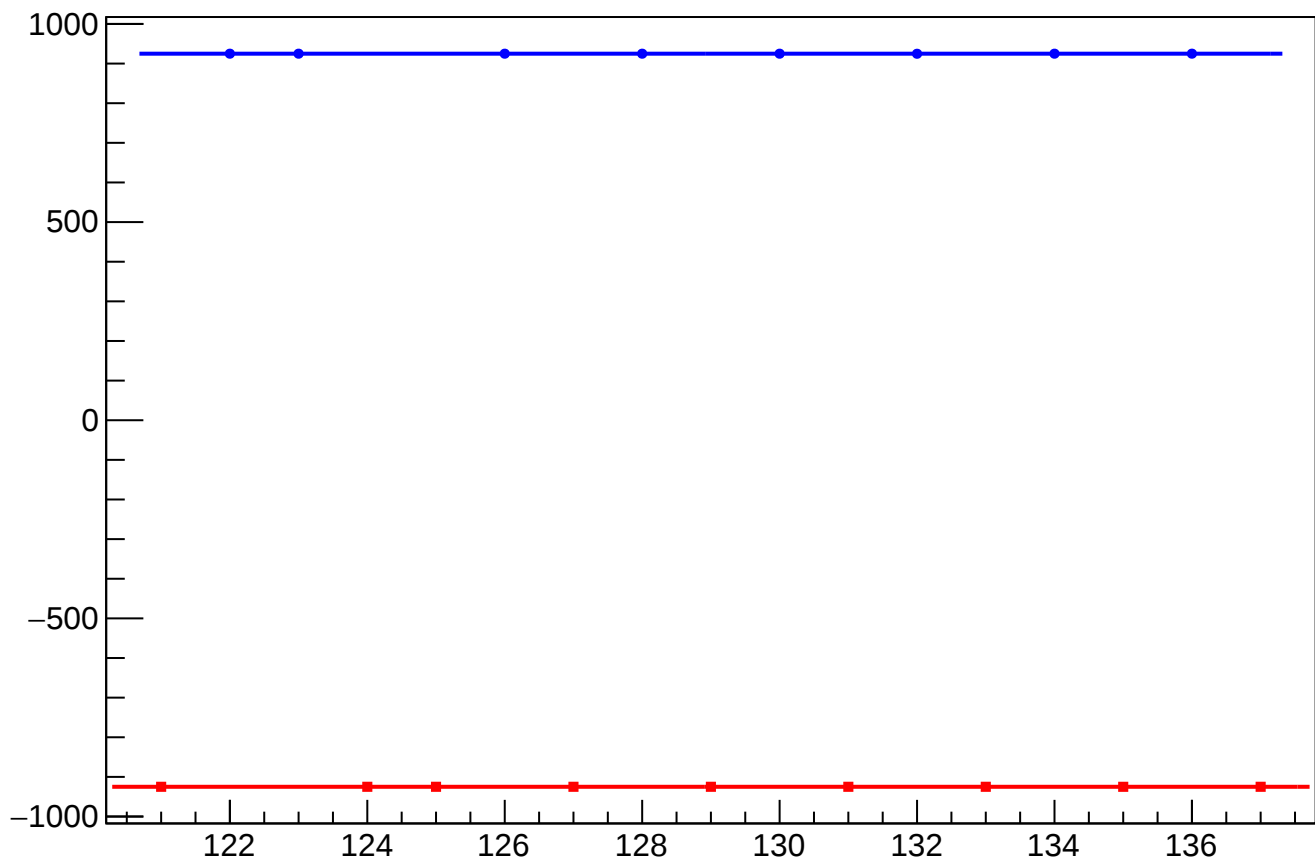
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 58025364031769994

In: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 0.0/7

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

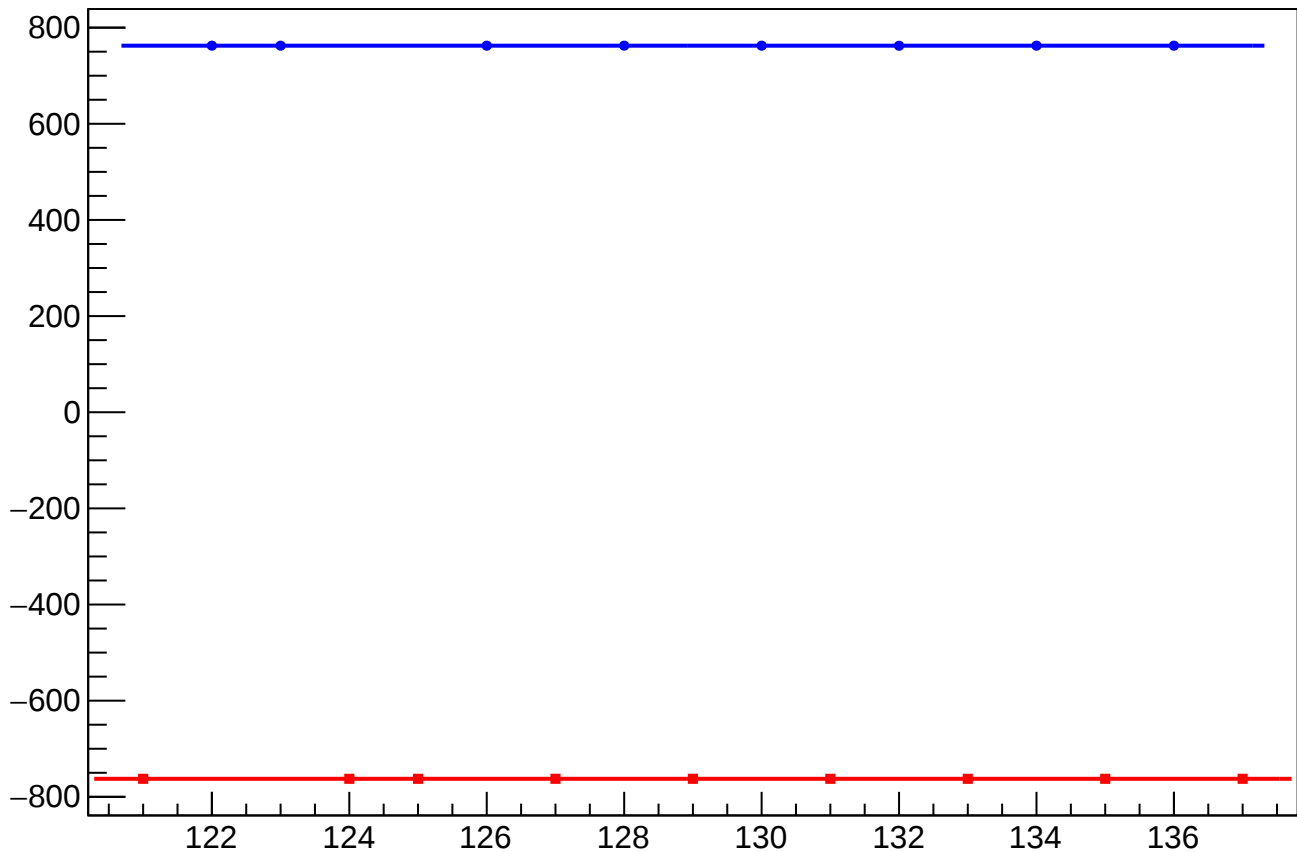
All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 58025364031769994

# HacR\_Q2\_HP3458A\_IOUT\_mean vs Slug, Sign Corrected



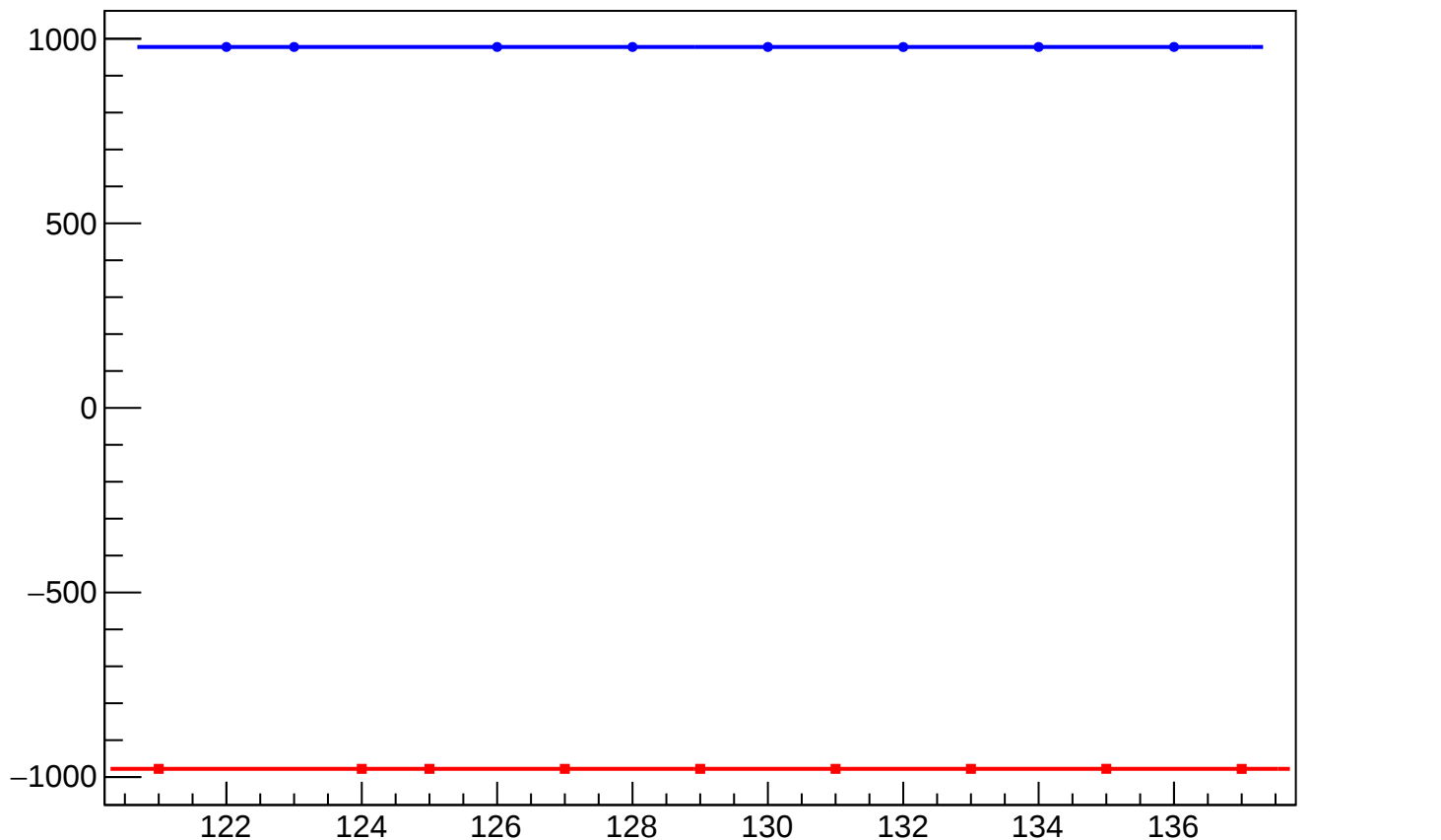
Right In: 924.939+/-0.000  $\chi^2/\text{NDF}$ : 1401458495809517406218388242432.0/7  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -924.957+/-0.000  $\chi^2/\text{NDF}$ : 71808709366506786060310151168.0/8  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 32.175+/-0.000  $\chi^2/\text{NDF}$ : 5648201825061875

# HacR\_D1\_HP3458A\_IOUT\_mean vs Slug, Sign Corrected



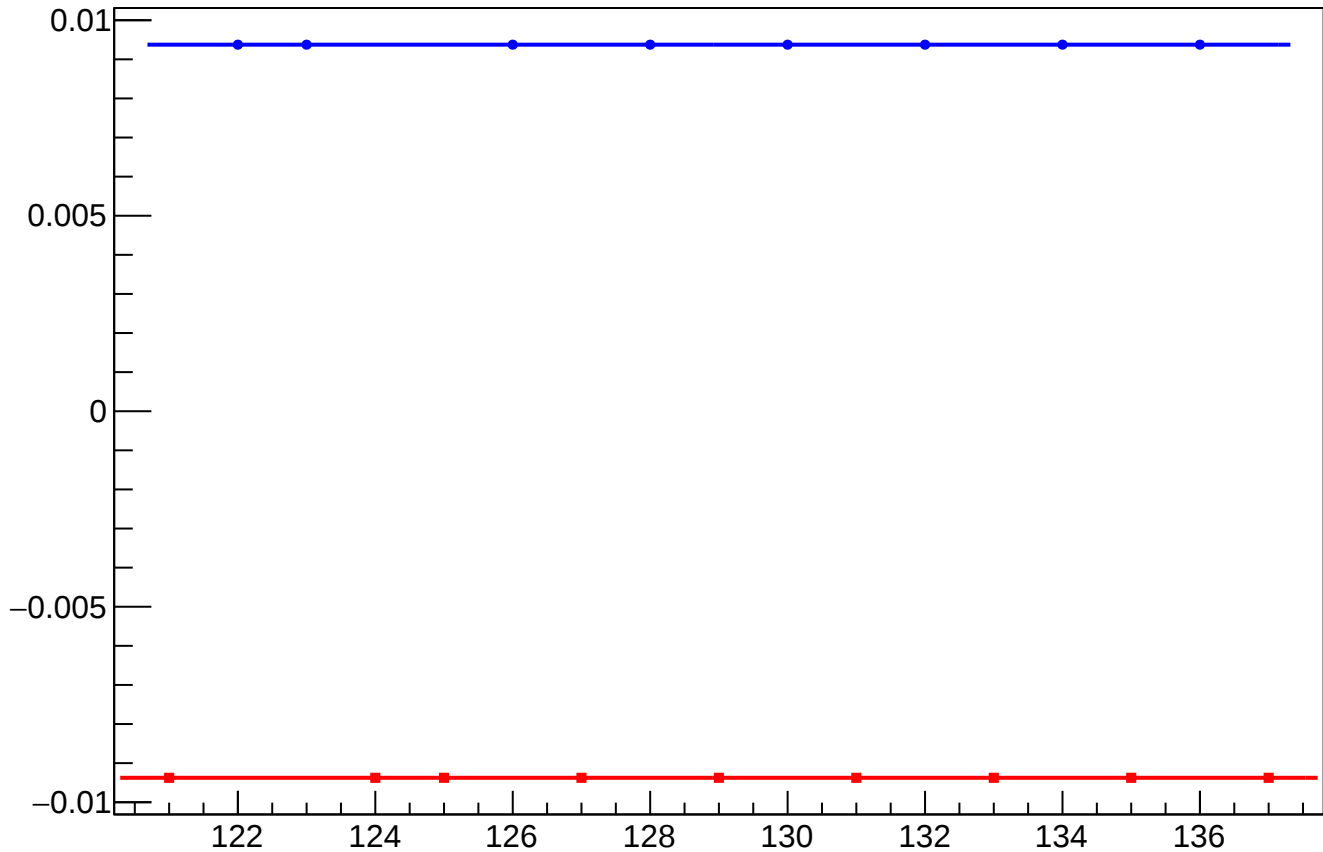
Right In: 762.484+/-0.000  $\chi^2/\text{NDF}$ : 784430761251084401798891438080.0/7  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -762.501+/-0.000  $\chi^2/\text{NDF}$ : 469794702848036819563446272.0/8  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 26.523+/-0.000  $\chi^2/\text{NDF}$ : 3838365691051738

# HacR\_Q3\_HP3458A\_IOUT\_mean vs Slug, Sign Corrected



Right In: 977.741+/-0.000  $\chi^2/\text{NDF}$ : 1738104571804792841781326643200.0/7  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -977.737+/-0.000  $\chi^2/\text{NDF}$ : 772313054358211830610902646784.0/8  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: 34.023+/-0.000  $\chi^2/\text{NDF}$ : 6311333196839596

# hesDipole\_current\_mean vs Slug, Sign Corrected



Right In: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 0.0/7

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.009+/-0.000  $\chi^2/\text{NDF}$ : 0.0/8

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

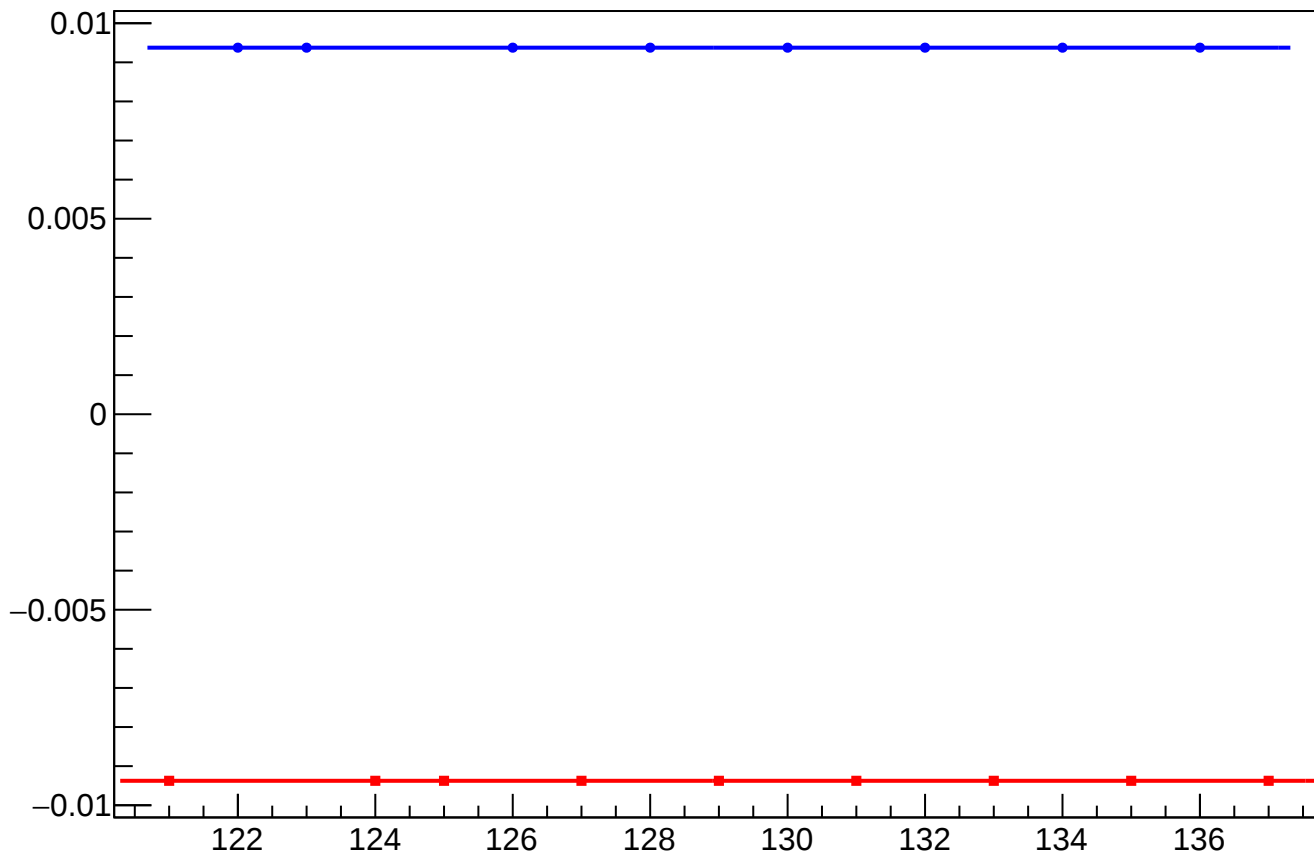
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 58025364031769994

In: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 0.0/7

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 58025364031769994

# MSUPERBIGBITereadcalc\_mean vs Slug, Sign Corrected



Right In: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 0.0/7

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -0.009+/-0.000  $\chi^2/\text{NDF}$ : 0.0/8

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

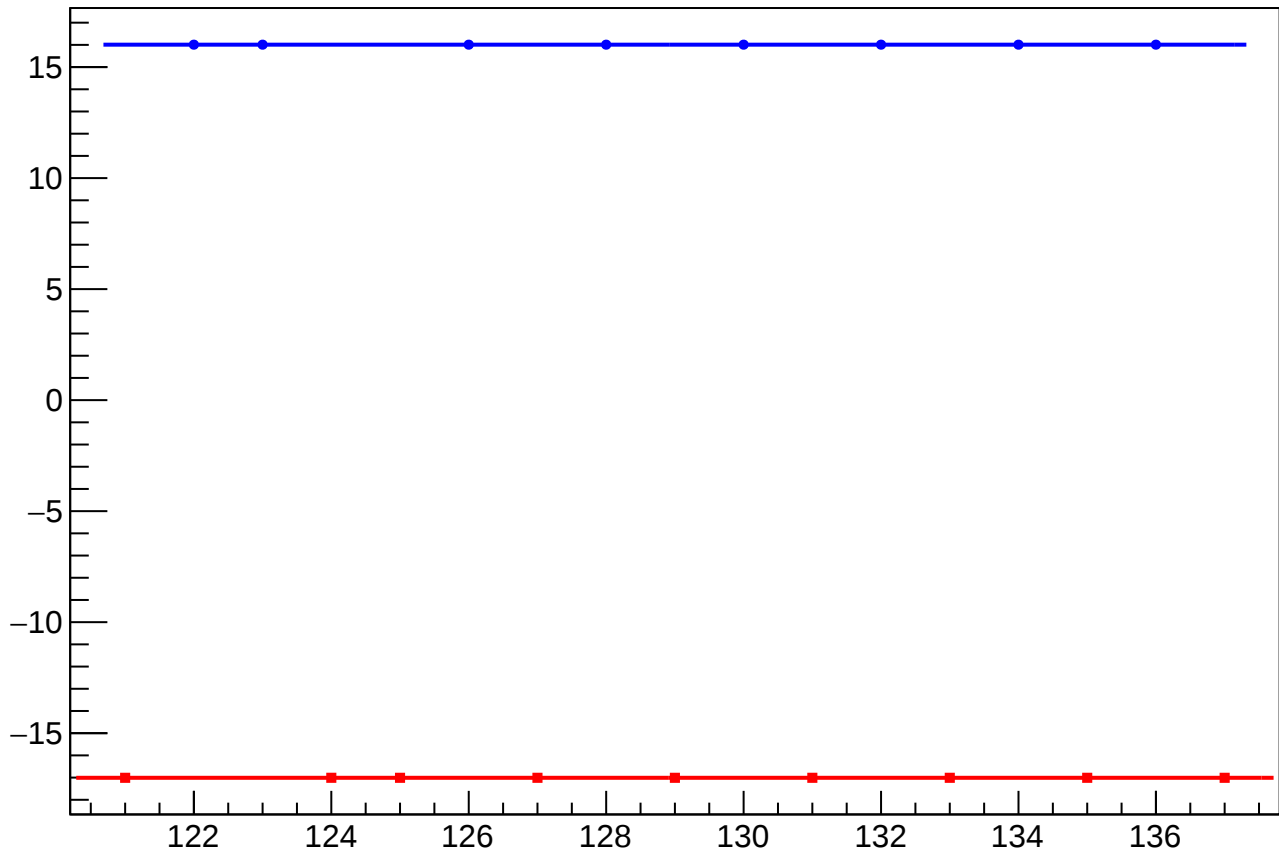
Right: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 58025364031769994

In: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 0.0/7

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 58025364031769994

# IGL1I00DI24\_24M\_mean vs Slug, Sign Corrected



Right In: 16.009+/-0.000  $\chi^2/\text{NDF}$ : 30506.8/7

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -17.009+/-0.000  $\chi^2/\text{NDF}$ : 8333578329558812540796928.0/8

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

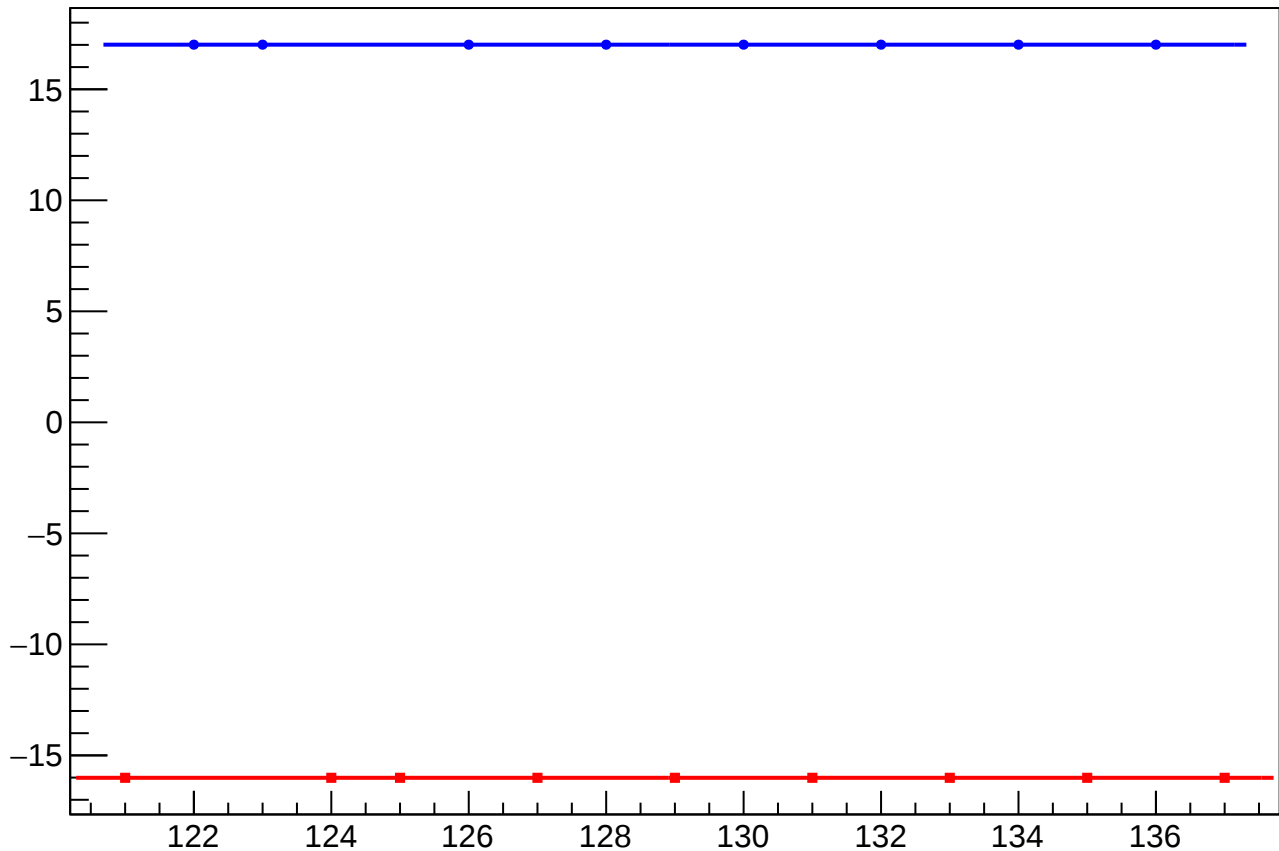
Right: -0.126+/-0.000  $\chi^2/\text{NDF}$ : 1683539334964133

In: 16.009+/-0.000  $\chi^2/\text{NDF}$ : 30506.8/7

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

All: -0.126+/-0.000  $\chi^2/\text{NDF}$ : 1683539334964

# IGL1I00OD16\_16\_mean vs Slug, Sign Corrected



Right In: 17.009+/-0.000  $\chi^2/\text{NDF}$ : 76109.3/7

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: -16.009+/-0.000  $\chi^2/\text{NDF}$ : 17859.8/8

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

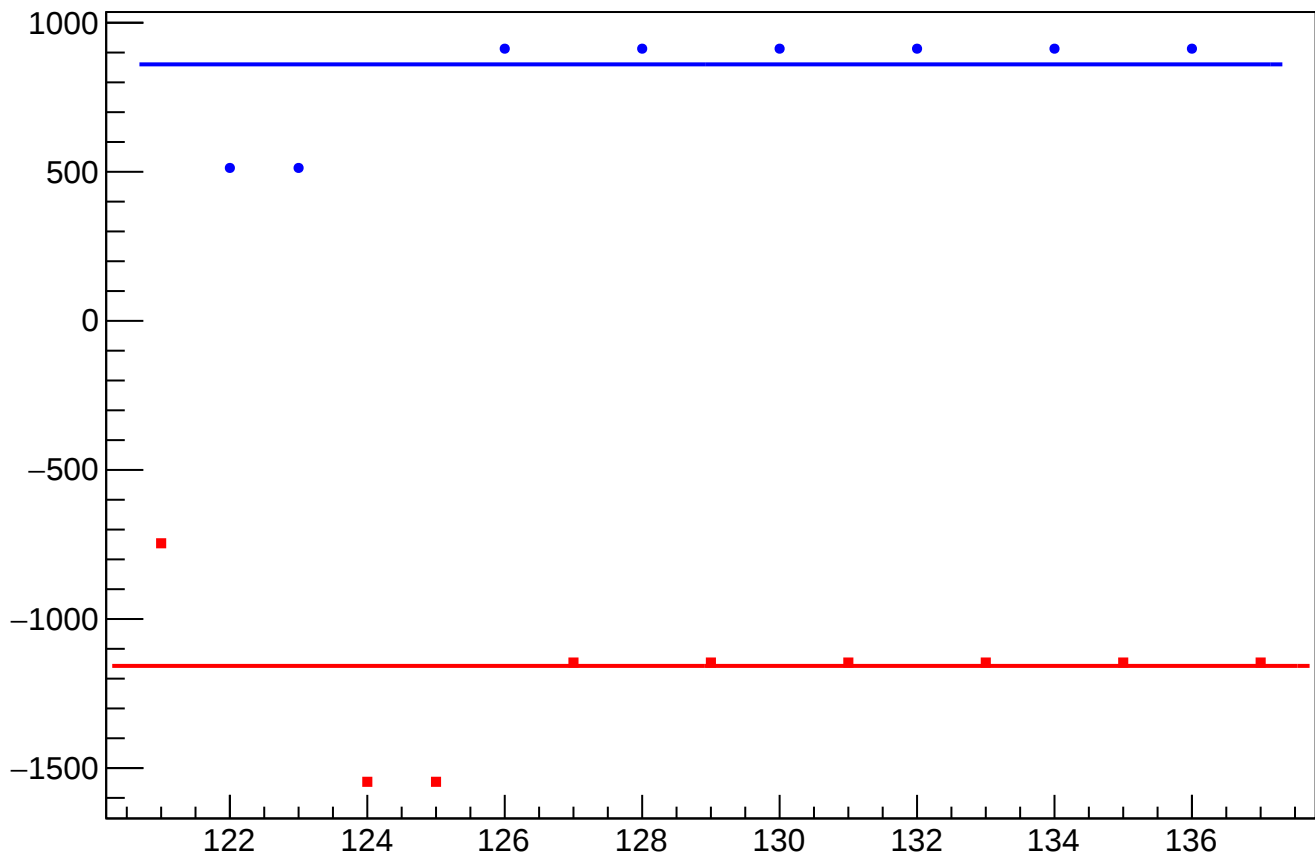
Right: 1.074+/-0.000  $\chi^2/\text{NDF}$ : 17994367493156690

In: 17.009+/-0.000  $\chi^2/\text{NDF}$ : 76109.3/7

Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

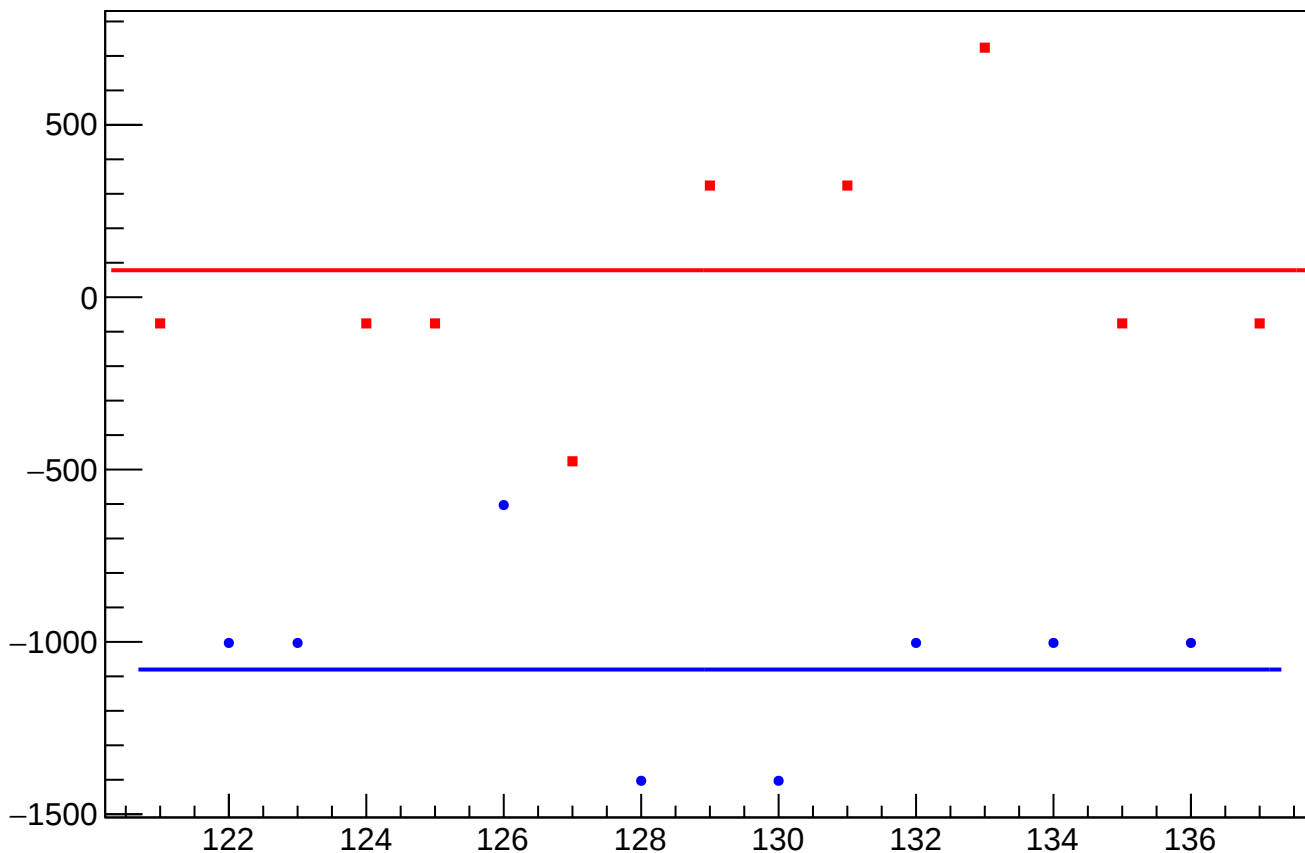
All: 1.074+/-0.000  $\chi^2/\text{NDF}$ : 17994367493156690

# RTPAPOSUCNT\_mean vs Slug, Sign Corrected



Right In: 860.361+/-0.000  $\chi^2/\text{NDF}$ : 6252693455178703850651720460594577408.0/7  
 Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 Right Out: -1157.295+/-0.000  $\chi^2/\text{NDF}$ : 13880040120623316310083946144856014848.0/8  
 Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
 All: -113.364+/-0.000  $\chi^2/\text{NDF}$ : 69204021310114

# RTPAPOSVCNT\_mean vs Slug, Sign Corrected



Right In: -1080.182+/-0.000  $\chi^2/\text{NDF}$ : 21641787691490496475350584298794123264.0/7

Left: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0  
Right: -521.133+/-0.000  $\chi^2/\text{NDF}$ : 28273431193063

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Right Out: 78.224+/-0.000  $\chi^2/\text{NDF}$ : 39611265375063350144036471826150326272.0/8  
In: -1080.182+/-0.000  $\chi^2/\text{NDF}$ : 216417876914904  
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

All: -521.133+/-0.000  $\chi^2/\text{NDF}$ : 28273431193