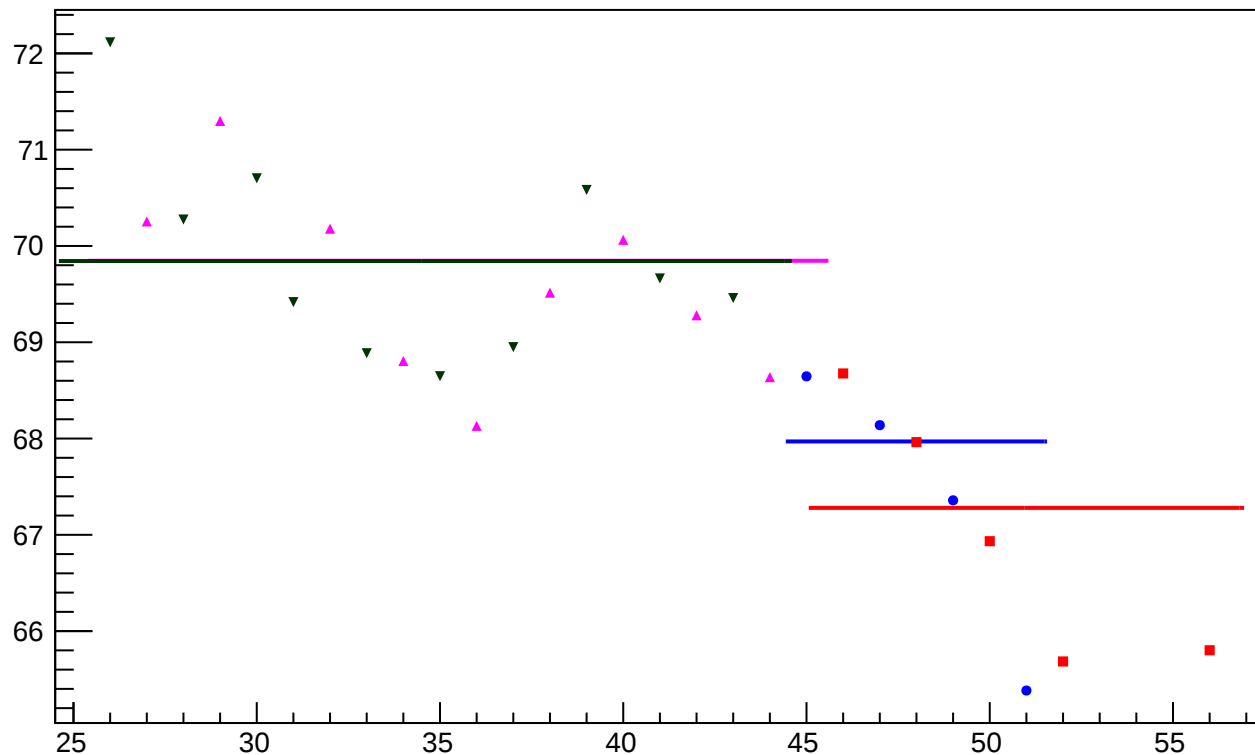


# yield\_usl\_mean vs slug



Right In:  $67.970 \pm 0.000$

$\chi^2/\text{NDF}$ : 39160910.4/3

$69.312 \pm 0.000$

$\chi^2/\text{NDF}$ : 518117985.6/13

Left Out:  $69.843 \pm 0.000$

$\chi^2/\text{NDF}$ : 214944835.0/9

Right Out:  $67.280 \pm 0.000$

$\chi^2/\text{NDF}$ : 112851047.4/4

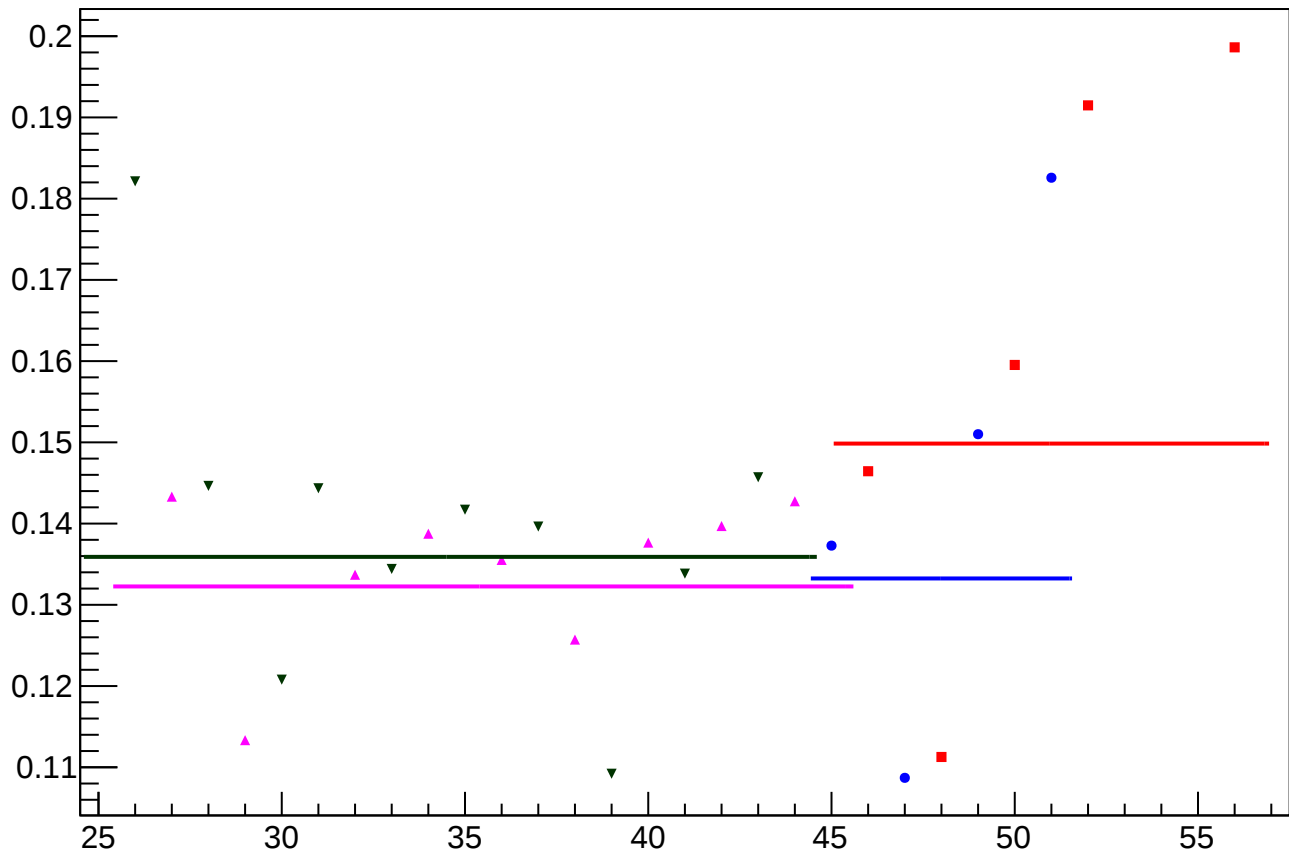
$69.231 \pm 0.000$

$\chi^2/\text{NDF}$ : 886424552.4/13

Left In:  $69.846 \pm 0.000$

$\chi^2/\text{NDF}$ : 291597621.2/8

# yield\_usl\_rms vs slug



Right In: 0.133+/-0.000  $\chi^2/\text{NDF}$ : 74356.8/3

Left Out: 0.136+/-0.000  $\chi^2/\text{NDF}$ : 142040.9/9

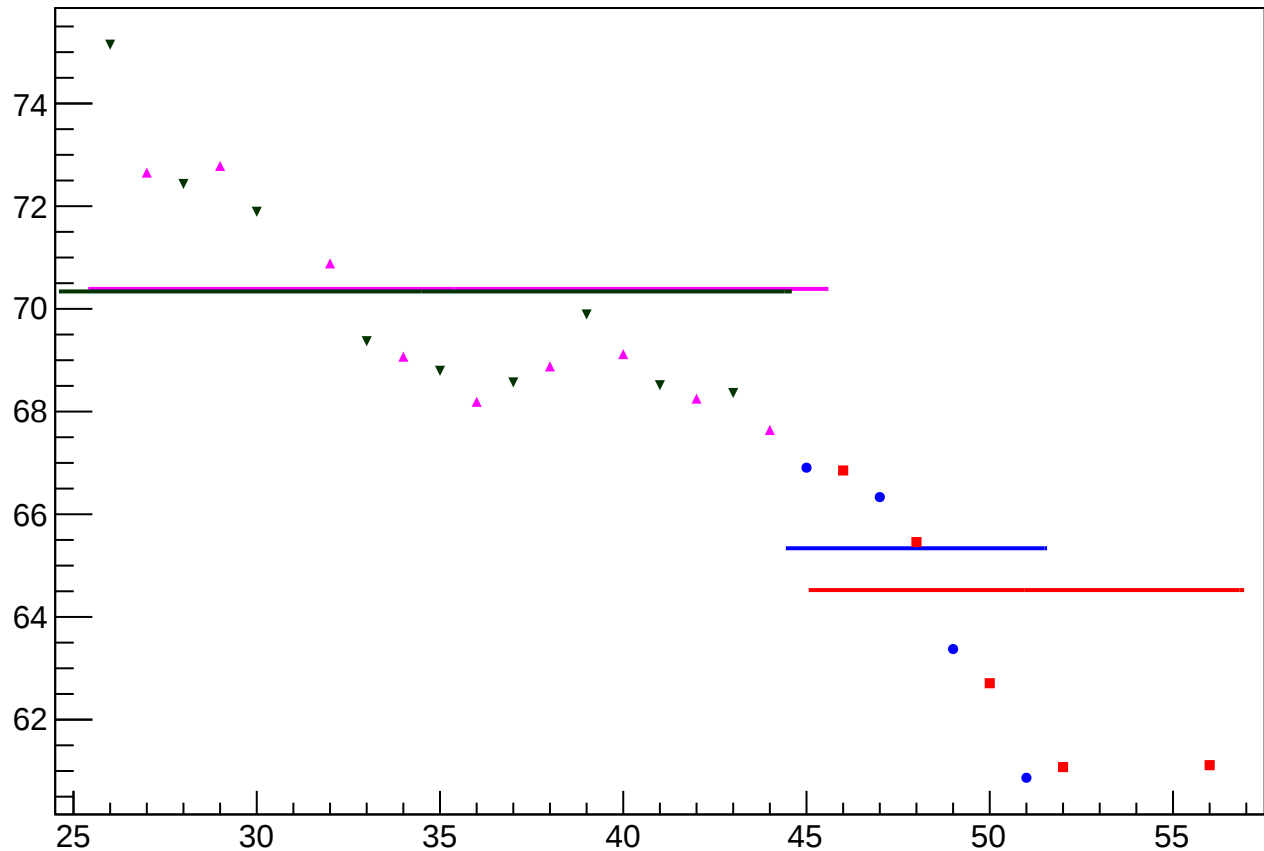
0.135+/-0.000  $\chi^2/\text{NDF}$ : 217459.9/13

Right Out: 0.150+/-0.000  $\chi^2/\text{NDF}$ : 208958.8/4

0.136+/-0.000  $\chi^2/\text{NDF}$ : 322464.0/13

Left In: 0.132+/-0.000  $\chi^2/\text{NDF}$ : 68230.8/8

# yield\_usr\_mean vs slug



Right In: 65.338+/-0.000  $\chi^2/\text{NDF}$ : 808867289.0/3

Left Out: 70.340+/-0.000  $\chi^2/\text{NDF}$ : 2358099133.7/8

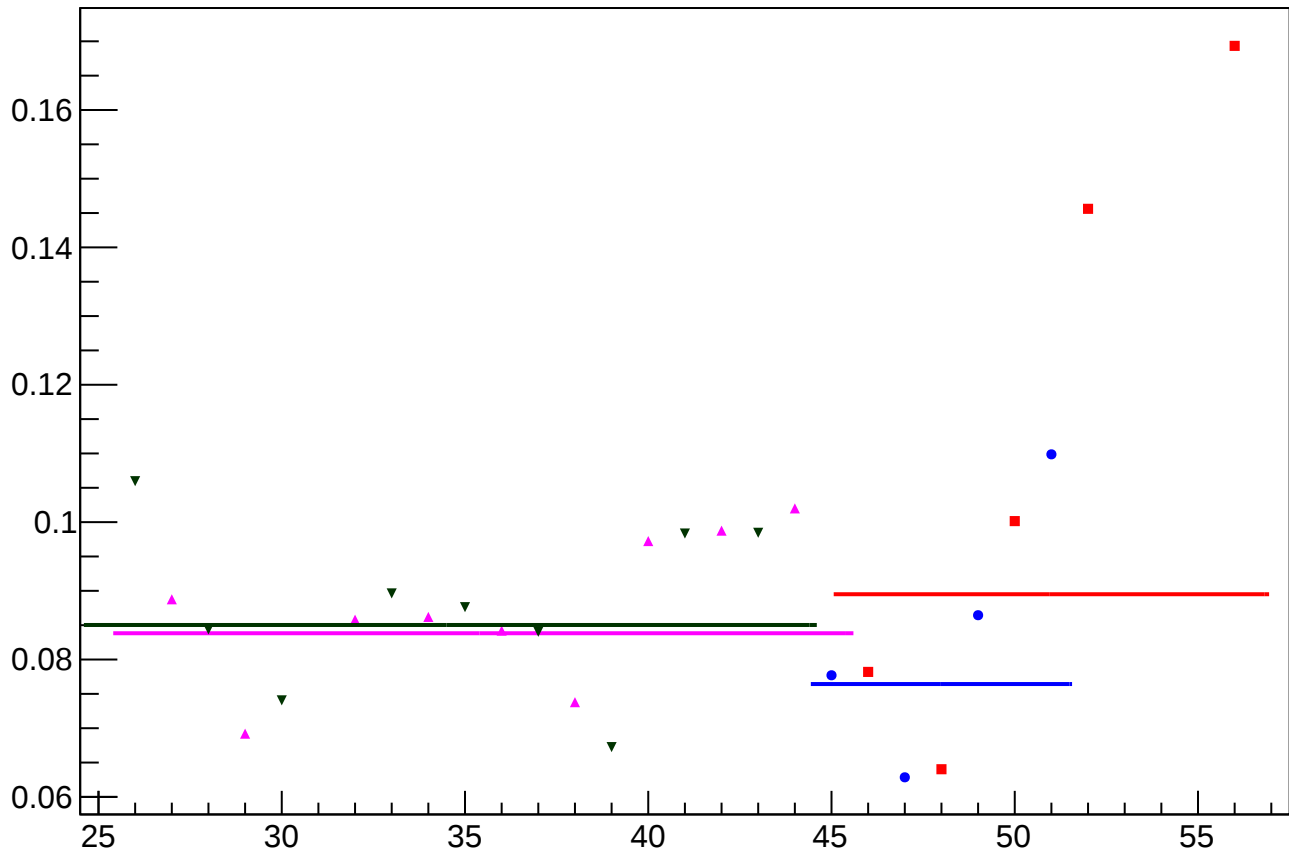
Right Out: 64.524+/-0.000  $\chi^2/\text{NDF}$ : 1001277937.9/4

Left In: 70.389+/-0.000  $\chi^2/\text{NDF}$ : 2703371735.7/8

68.685+/-0.000  $\chi^2/\text{NDF}$ : 8138697253.6/12

68.940+/-0.000  $\chi^2/\text{NDF}$ : 9876924477.1/13

# yield\_usr\_rms vs slug



Right In: 0.076+/-0.000  $\chi^2/\text{NDF}$ : 67531.7/3

Left Out: 0.085+/-0.000  $\chi^2/\text{NDF}$ :154523.7/8

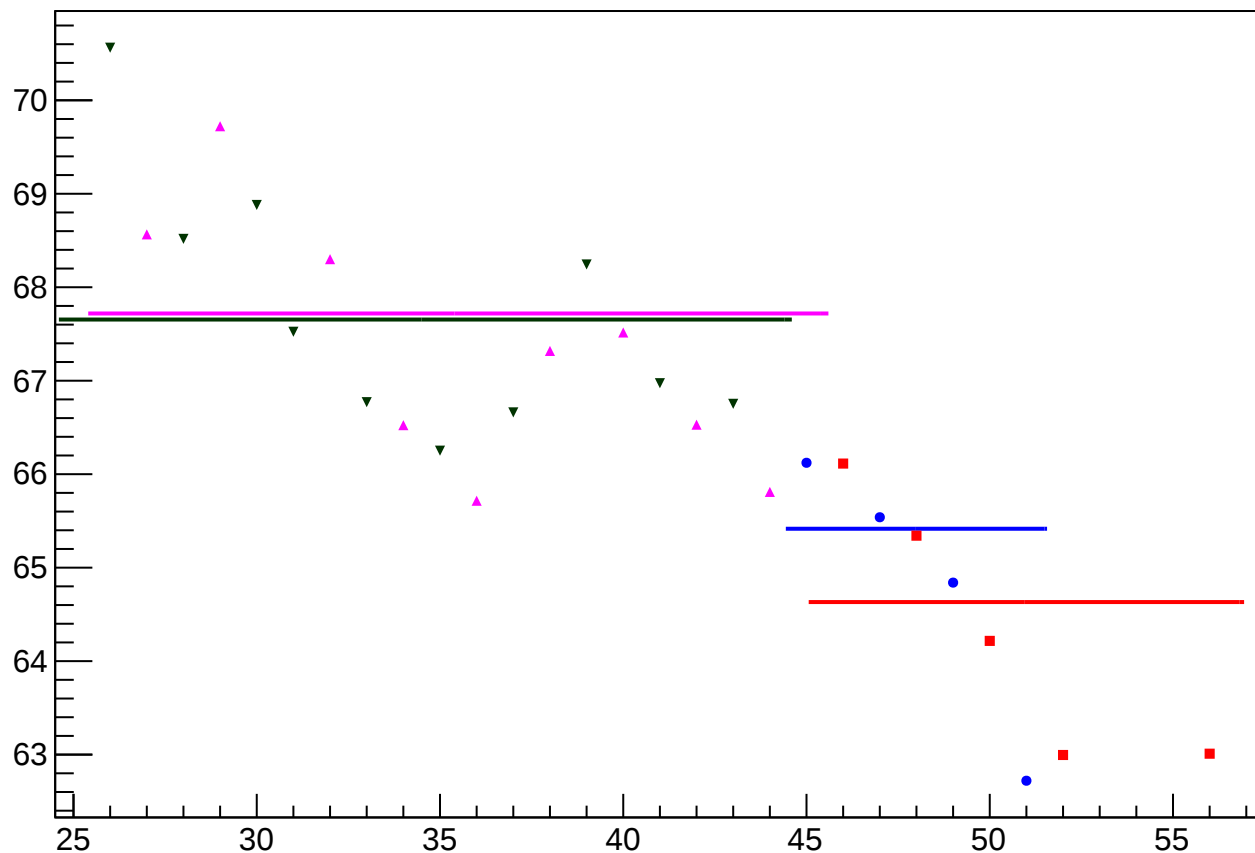
Right Out: 0.090+/-0.000  $\chi^2/\text{NDF}$ : 500311.3/4

Left In: 0.084+/-0.000  $\chi^2/\text{NDF}$ :162178.0/8

0.082+/-0.000  $\chi^2/\text{NDF}$ : 251435.1/12

0.085+/-0.000  $\chi^2/\text{NDF}$ : 674063.9/13

# yield\_dsl\_mean vs slug



Right In: 65.416+/-0.000  $\chi^2/\text{NDF}$ : 39015401.2/3

Left Out: 67.654+/-0.000  $\chi^2/\text{NDF}$ : 328545386.7/9

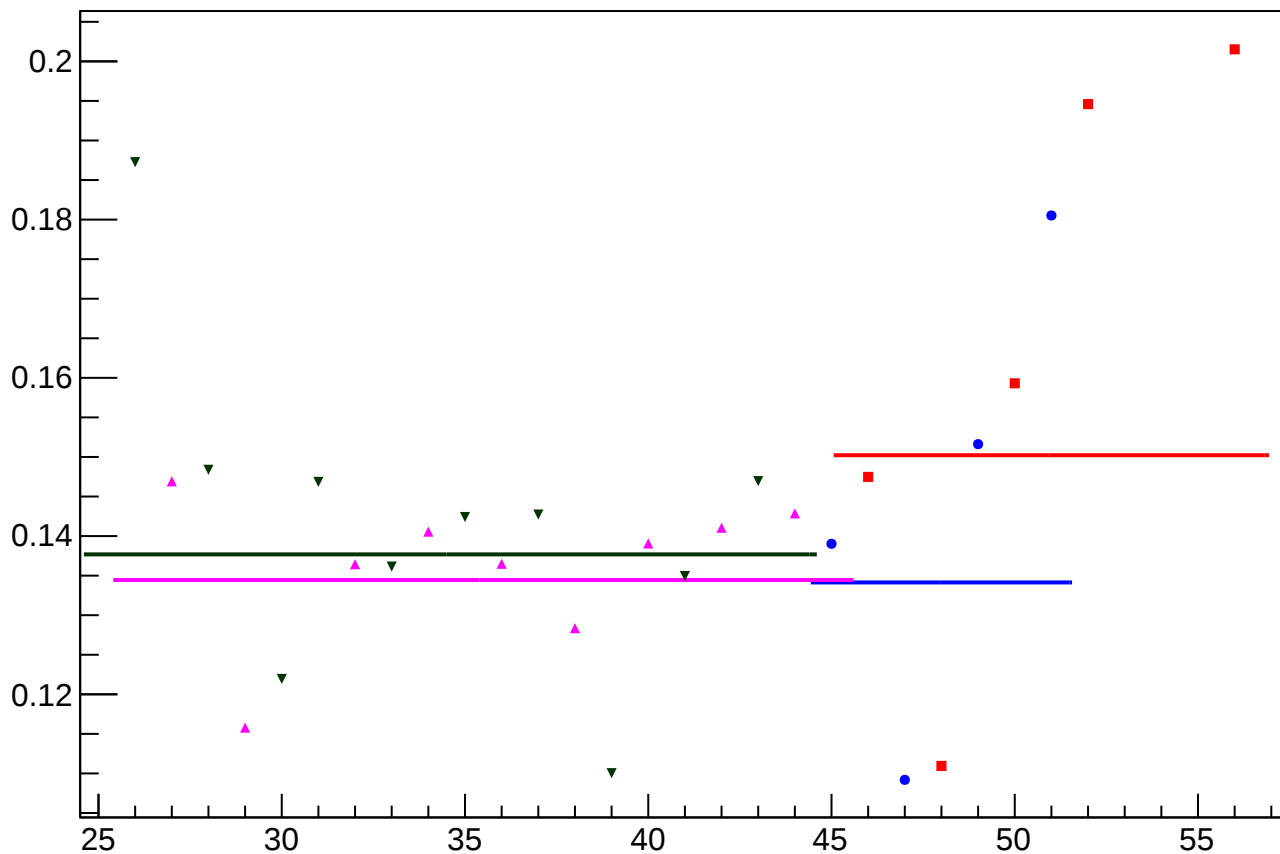
Right Out: 64.632+/-0.000  $\chi^2/\text{NDF}$ : 124531766.9/4

Left In: 67.719+/-0.000  $\chi^2/\text{NDF}$ : 544133409.1/8

67.014+/-0.000  $\chi^2/\text{NDF}$ : 738403446.4/13

66.965+/-0.000  $\chi^2/\text{NDF}$ : 1358944025.7/13

# yield\_dsl\_rms vs slug



Right In: 0.134+/-0.000  $\chi^2/\text{NDF}$ : 74110.4/3

Left Out: 0.138+/-0.000  $\chi^2/\text{NDF}$ :153493.7/9

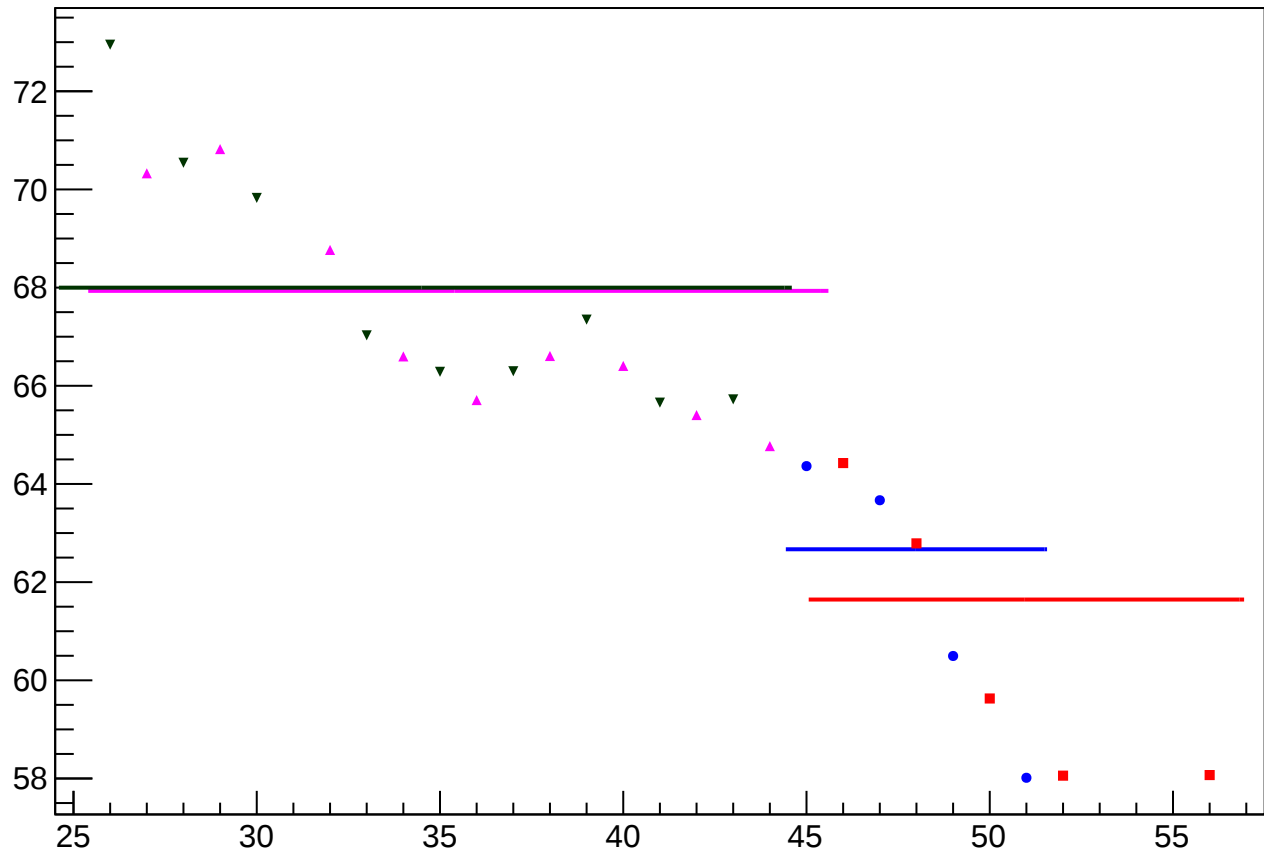
Right Out: 0.150+/-0.000  $\chi^2/\text{NDF}$ : 222179.0/4

Left In: 0.134+/-0.000  $\chi^2/\text{NDF}$ :63498.7/8

0.137+/-0.000  $\chi^2/\text{NDF}$ : 229463.7/13

0.138+/-0.000  $\chi^2/\text{NDF}$ : 321715.8/13

# yield\_dsr\_mean vs slug



Right In:  $62.669 \pm 0.000$   $\chi^2/\text{NDF}$ : 942988993.6/3

Left Out:  $67.999 \pm 0.000$   $\chi^2/\text{NDF}$ : 3088835100.9/8

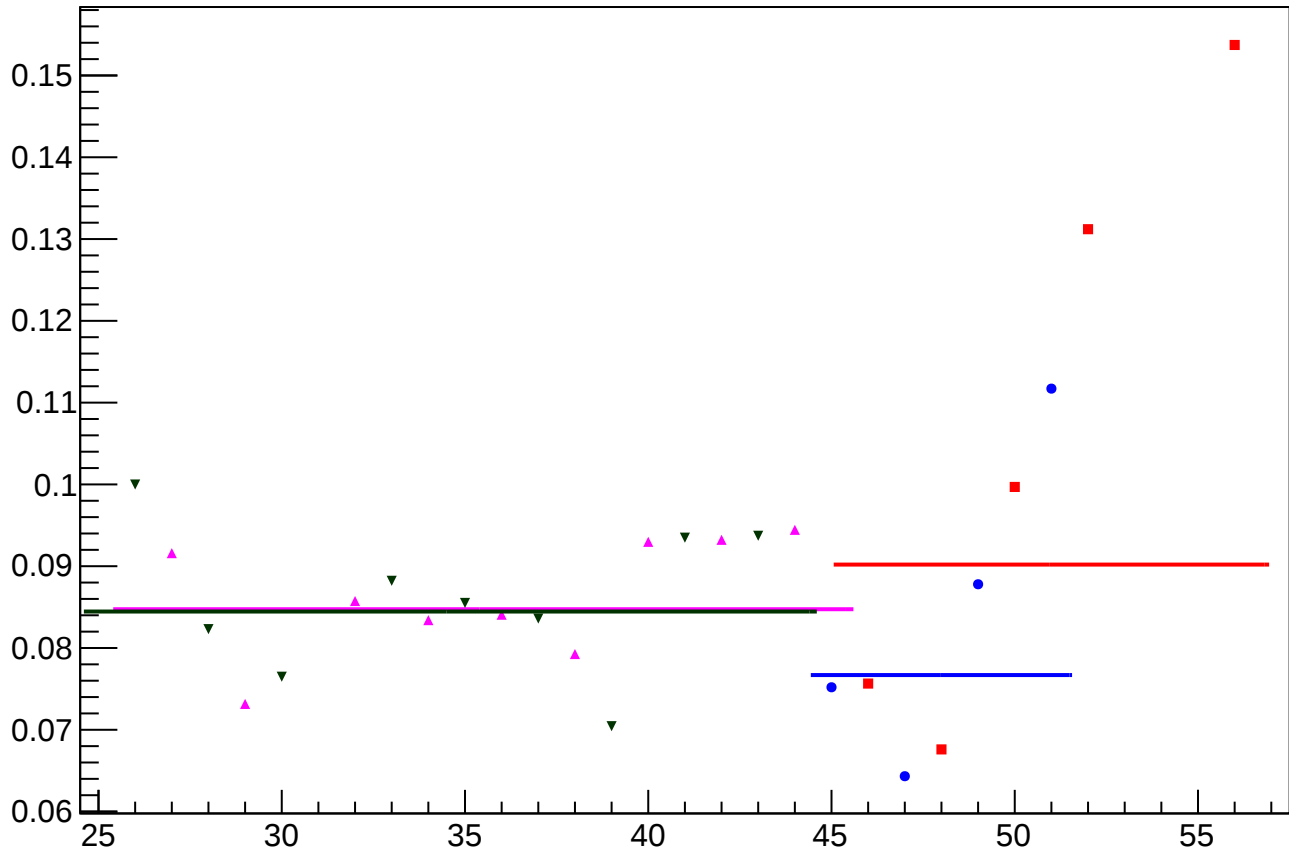
Right Out:  $61.645 \pm 0.000$   $\chi^2/\text{NDF}$ : 1381100736.1/4

Left In:  $67.934 \pm 0.000$   $\chi^2/\text{NDF}$ : 3365476193.8/8

$66.258 \pm 0.000$   $\chi^2/\text{NDF}$ : 9707227652.4/12

$66.341 \pm 0.000$   $\chi^2/\text{NDF}$ : 11915503425.9/13

# yield\_dsr\_rms vs slug



Right In: 0.077+/-0.000  $\chi^2/\text{NDF}$ : 65358.3/3

Left Out: 0.084+/-0.000  $\chi^2/\text{NDF}$ : 86764.0/8

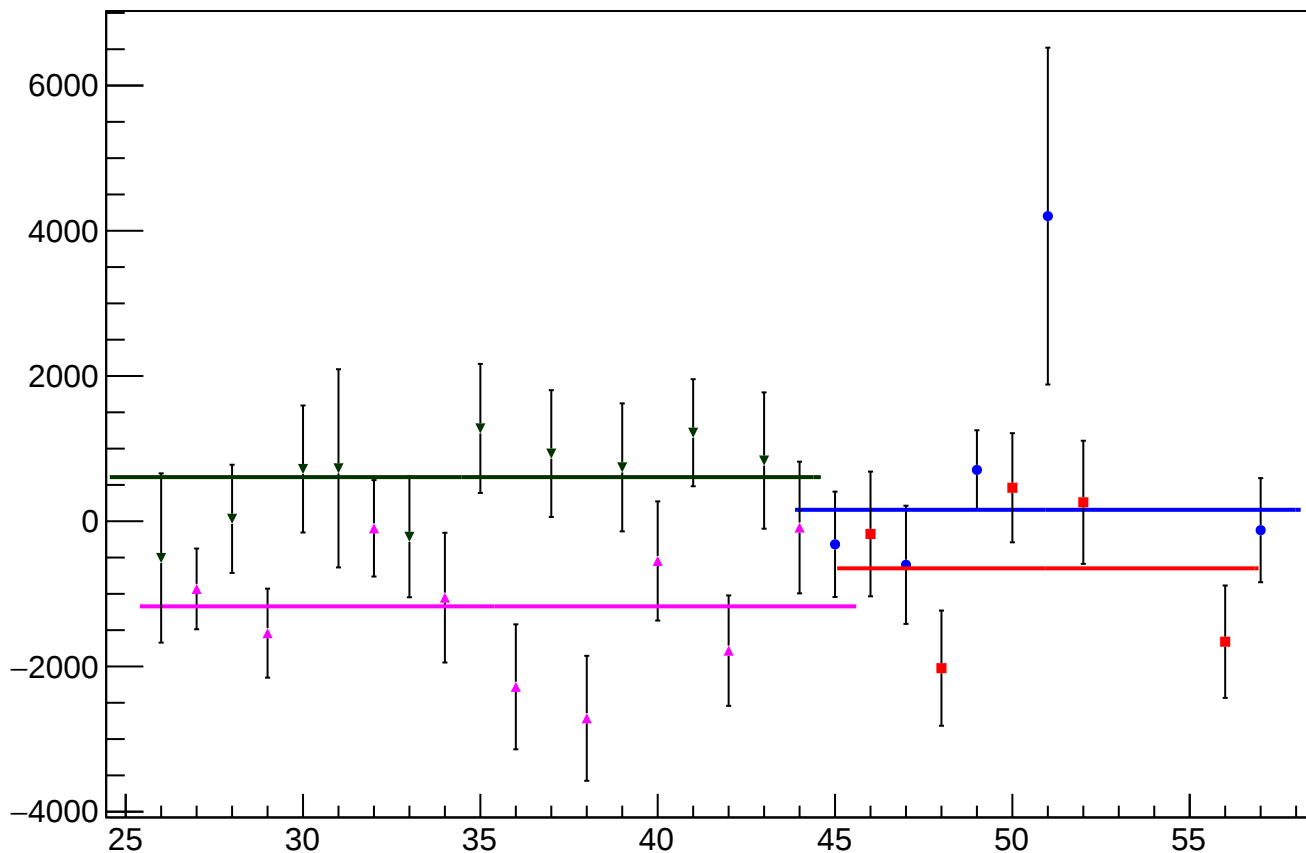
0.082+/-0.000  $\chi^2/\text{NDF}$ : 176233.3/12

Right Out: 0.090+/-0.000  $\chi^2/\text{NDF}$ : 375769.8/4

0.086+/-0.000  $\chi^2/\text{NDF}$ : 463294.2/13

Left In: 0.085+/-0.000  $\chi^2/\text{NDF}$ : 76721.4/8

# asym\_usl\_mean vs slug



Right In:  $157.419 \pm 335.343$   $\chi^2/\text{NDF}: 5.5/4$

Left Out:  $607.534 \pm 280.959$   $\chi^2/\text{NDF}: 4.0/9$

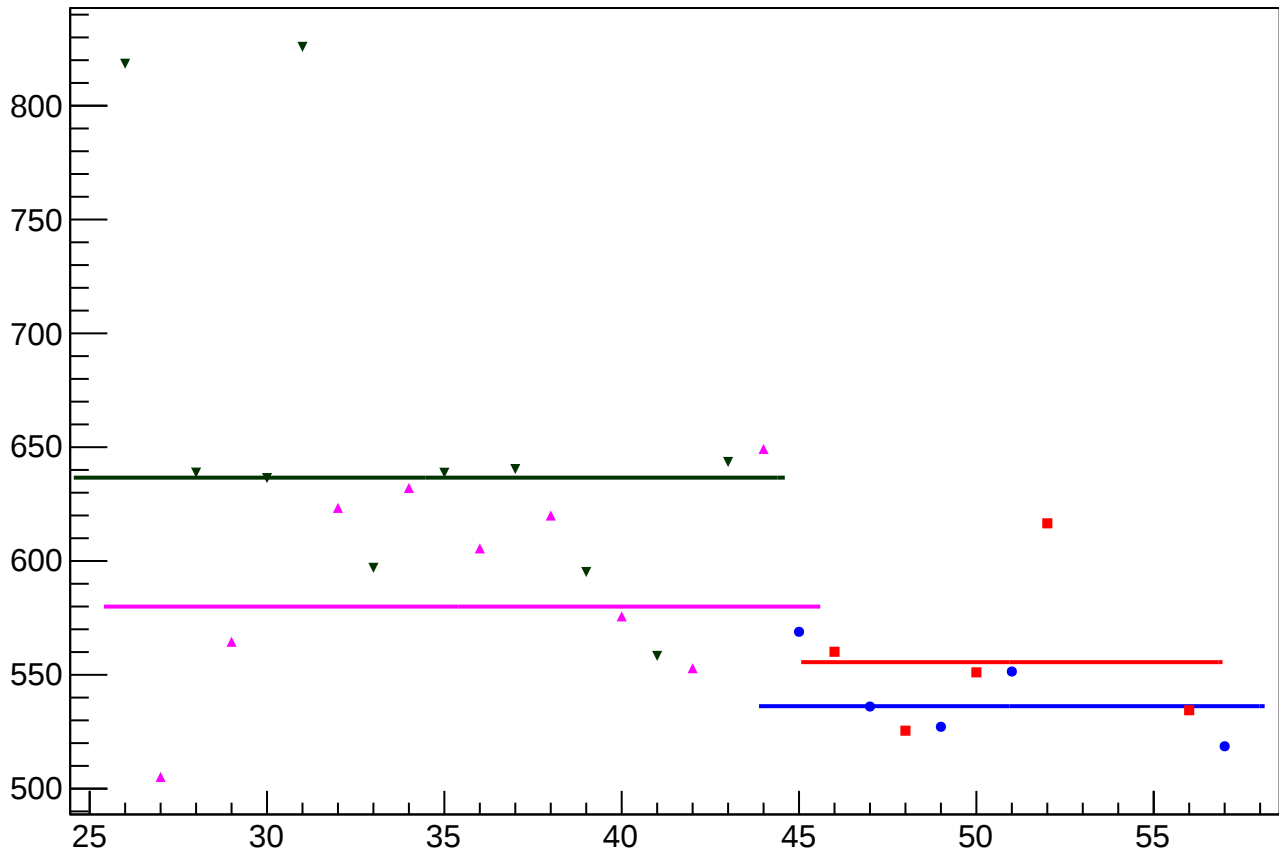
Right Out:  $-648.630 \pm 358.598$   $\chi^2/\text{NDF}: 8.3/4$

Left In:  $-1172.316 \pm 245.788$   $\chi^2/\text{NDF}: 10.7/8$

$421.889 \pm 215.362$   $\chi^2/\text{NDF}: 10.5/14$

$-1004.929 \pm 202.737$   $\chi^2/\text{NDF}: 20.5/13$

# asym\_usl\_rms vs slug



Right In:  $536.231 \pm 0.237$   $\chi^2/\text{NDF}$ : 5898.4/4

Left Out:  $636.619 \pm 0.199$   $\chi^2/\text{NDF}$ : 118822.0/9

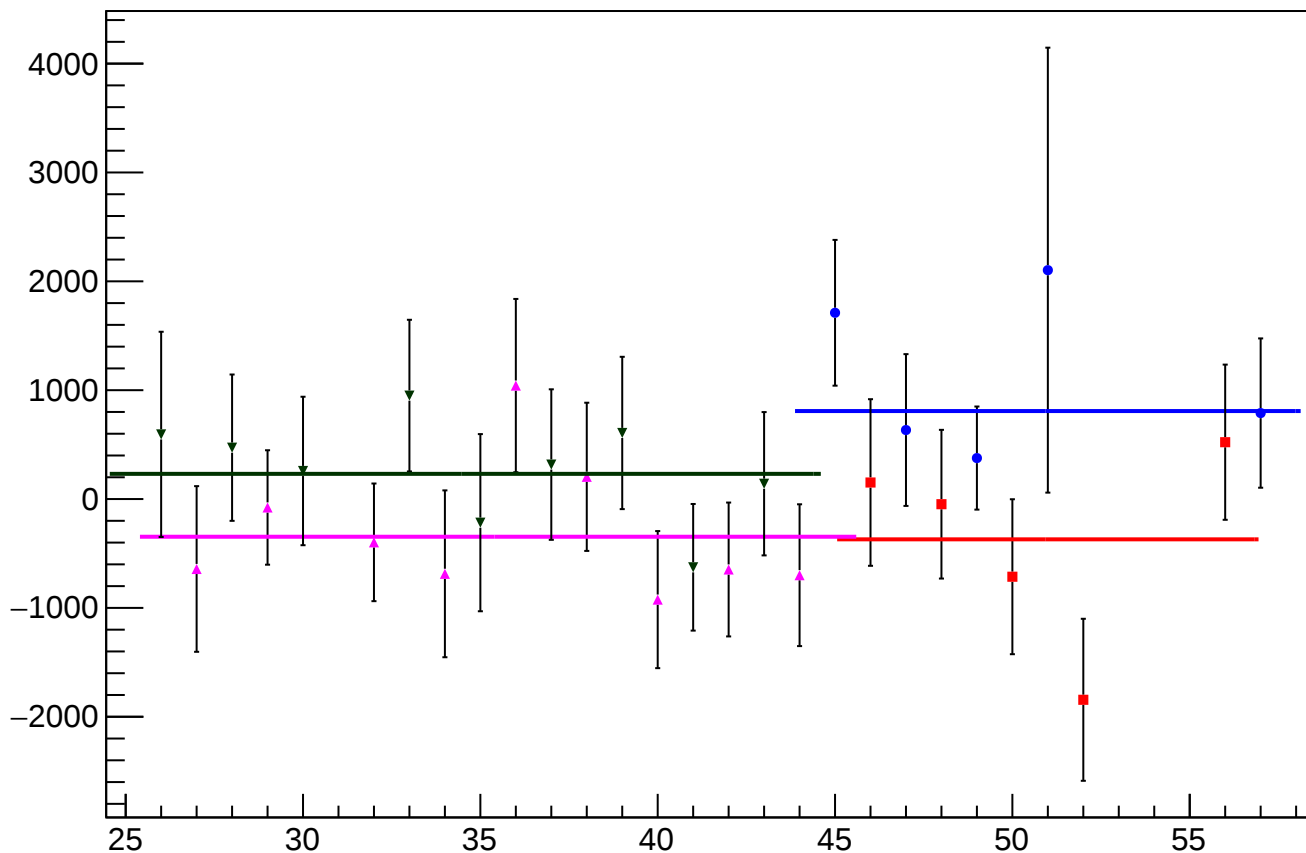
Right Out:  $555.564 \pm 0.254$   $\chi^2/\text{NDF}$ : 14844.9/4

Left In:  $579.971 \pm 0.174$   $\chi^2/\text{NDF}$ : 73206.6/8

$595.215 \pm 0.152$   $\chi^2/\text{NDF}$ : 230029.5/14

$572.170 \pm 0.143$   $\chi^2/\text{NDF}$ : 94354.7/13

# asym\_usr\_mean vs slug



Right In:  $808.324 \pm 299.966$   $\chi^2/\text{NDF}$ : 3.1/4

Left Out:  $231.411 \pm 232.753$   $\chi^2/\text{NDF}$ : 4.1/8

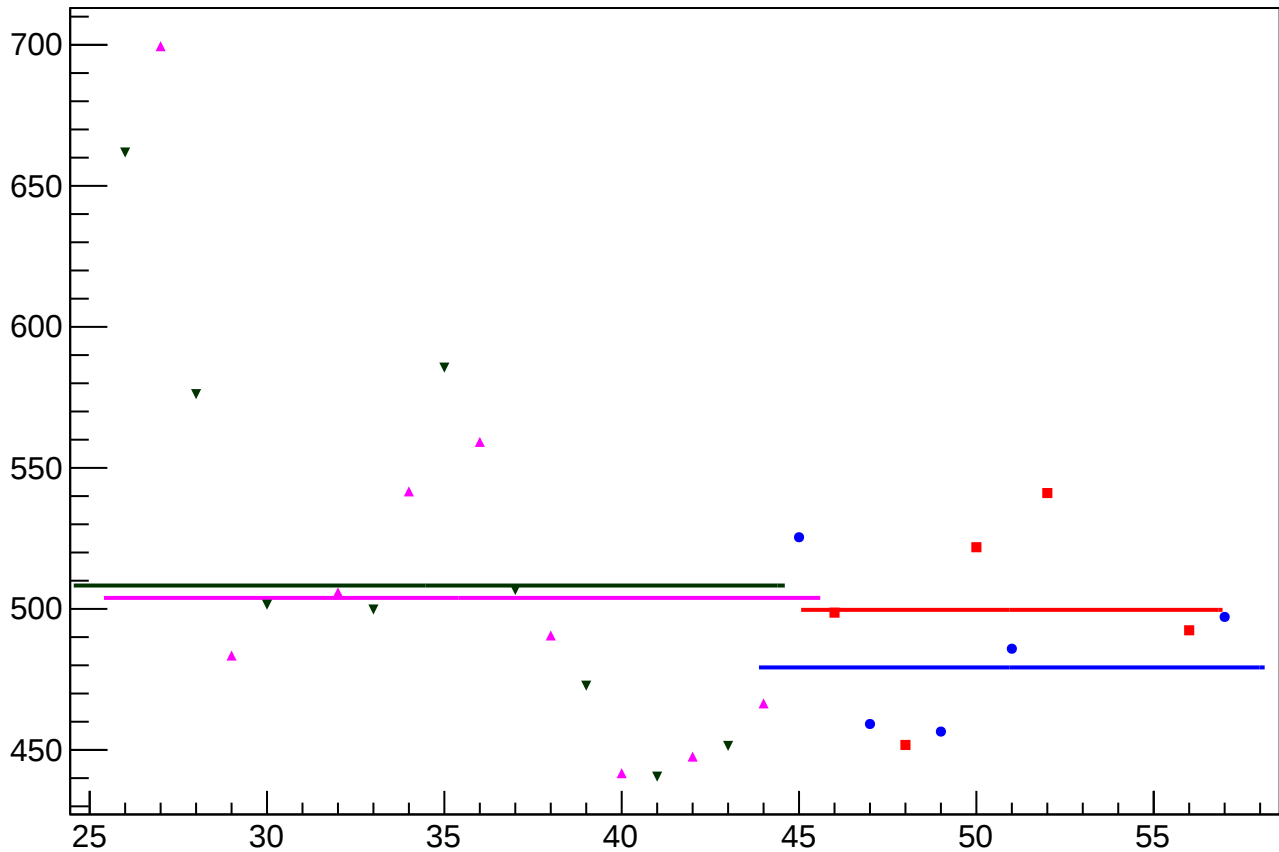
Right Out:  $-370.184 \pm 322.763$   $\chi^2/\text{NDF}$ : 6.4/4

Left In:  $-346.250 \pm 214.497$   $\chi^2/\text{NDF}$ : 5.7/8

$448.219 \pm 183.889$   $\chi^2/\text{NDF}$ : 9.6/13

$-353.582 \pm 178.646$   $\chi^2/\text{NDF}$ : 12.1/13

# asym\_usr\_rms vs slug



Right In: 479.250 $\pm$ 0.212  $\chi^2$ /NDF: 17162.6/4

Left Out: 508.292 $\pm$ 0.165  $\chi^2$ /NDF:139195.8/8

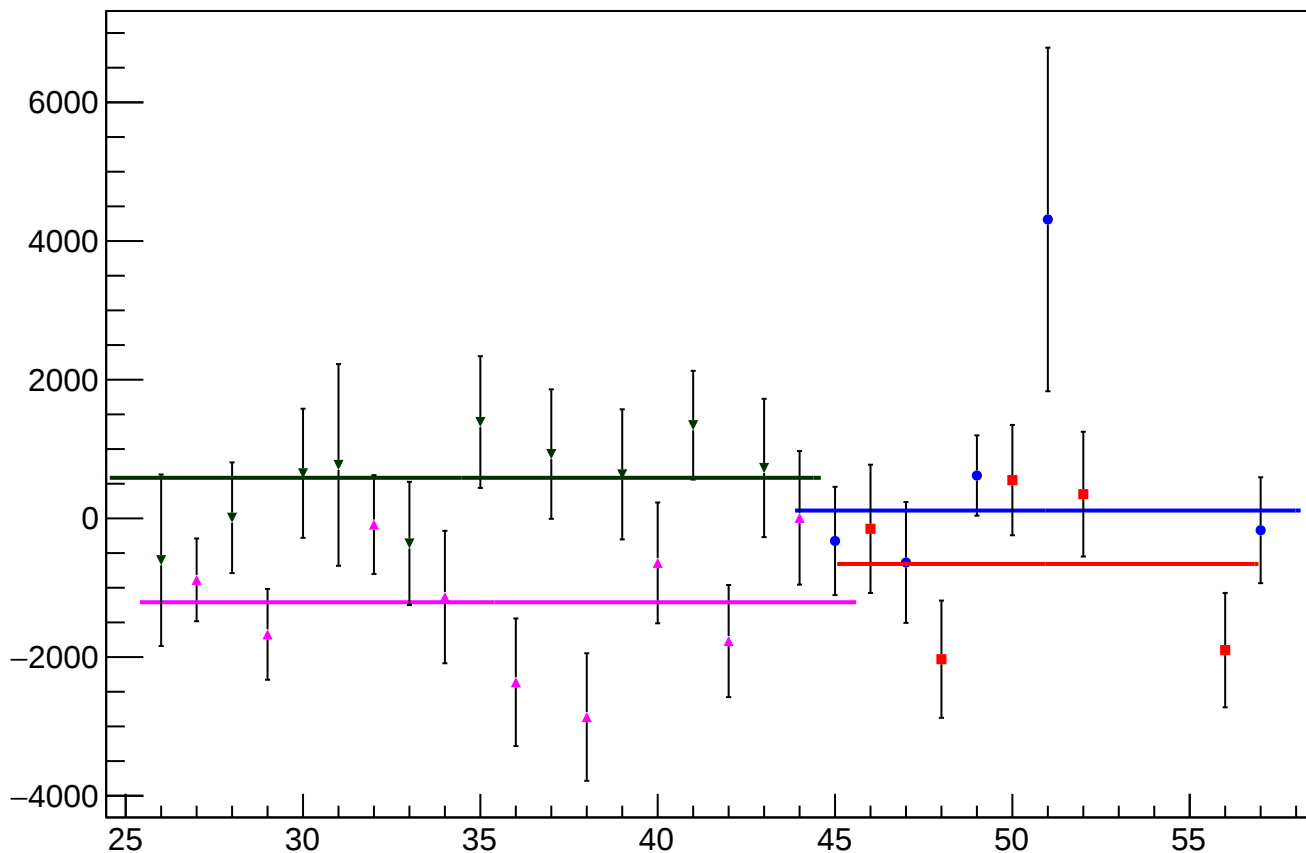
Right Out: 499.665 $\pm$ 0.228  $\chi^2$ /NDF: 18192.9/4

Left In: 503.902 $\pm$ 0.152  $\chi^2$ /NDF:193351.4/8

497.378 $\pm$ 0.130  $\chi^2$ /NDF: 168060.1/13

502.604 $\pm$ 0.126  $\chi^2$ /NDF: 211783.4/13

# asym\_dsl\_mean vs slug



Right In: 113.335+/-357.620  $\chi^2/\text{NDF}$ : 4.8/4

Left Out: 585.397+/-299.644  $\chi^2/\text{NDF}$ : 4.4/9

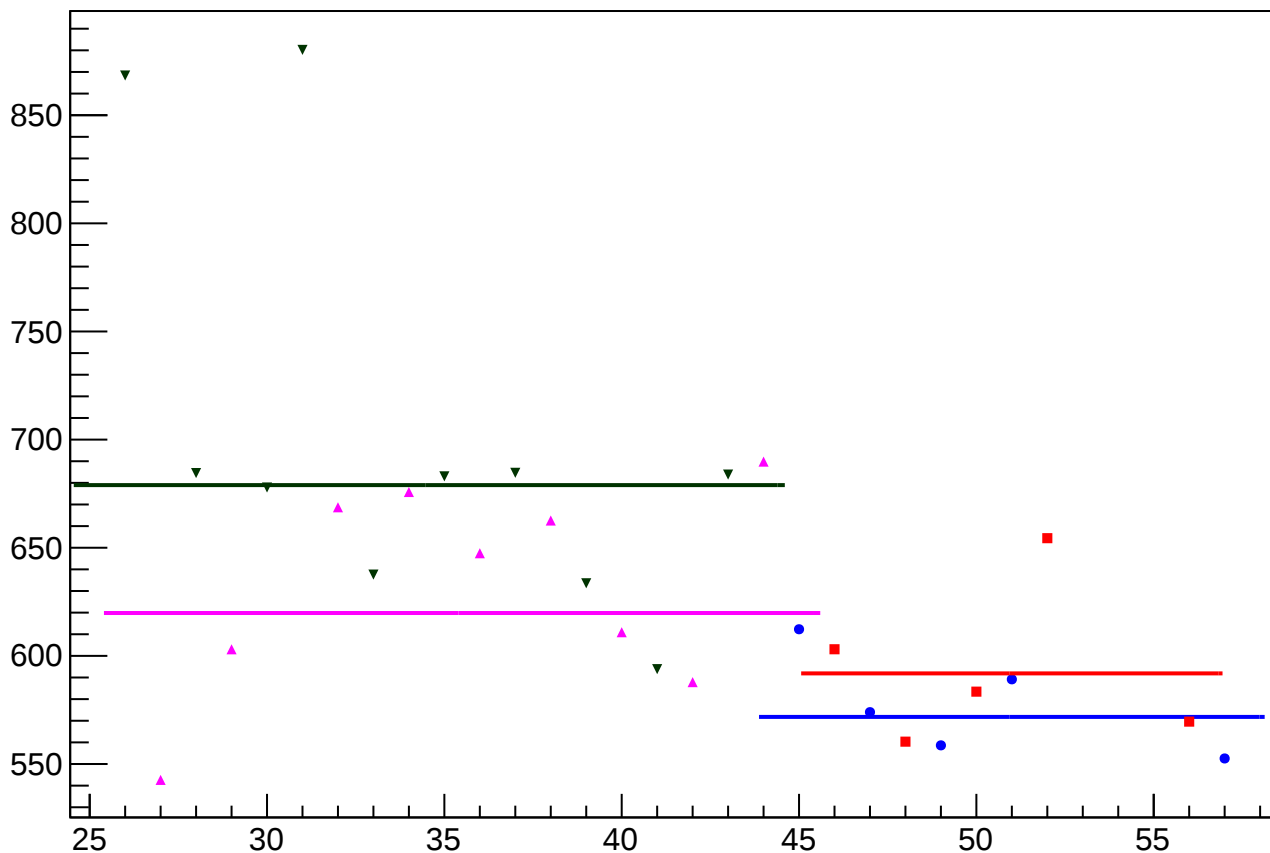
Right Out: -657.118+/-382.030  $\chi^2/\text{NDF}$ : 8.8/4

Left In: -1209.244+/-262.640  $\chi^2/\text{NDF}$ : 10.6/8

390.684+/-229.678  $\chi^2/\text{NDF}$ : 10.3/14

-1032.041+/-216.428  $\chi^2/\text{NDF}$ : 20.8/13

# asym\_dsl\_rms vs slug



Right In: 571.779+/-0.253     $\chi^2/\text{NDF}$ : 7796.9/4

Left Out: 678.962+/-0.212     $\chi^2/\text{NDF}$ :118027.5/9

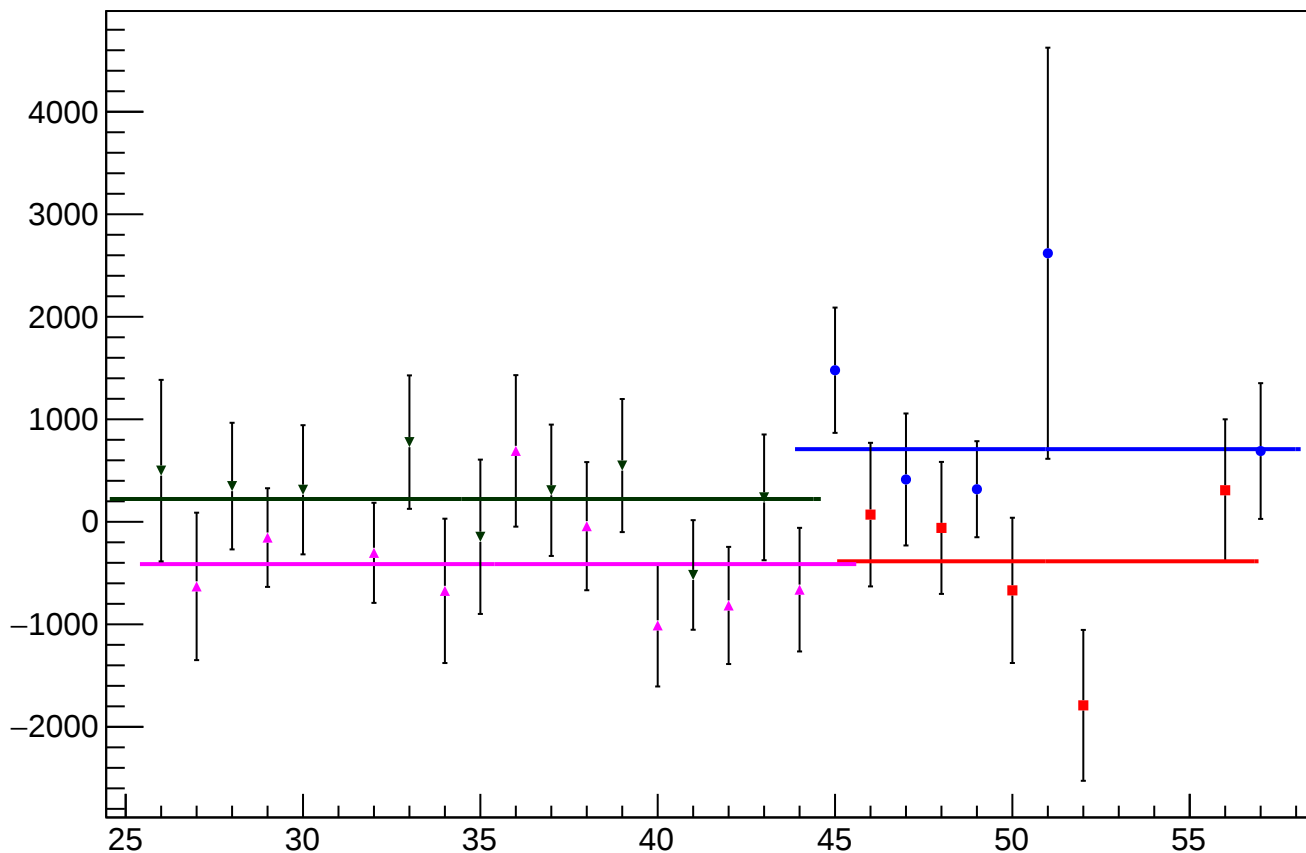
Right Out: 591.901+/-0.270     $\chi^2/\text{NDF}$ : 14414.3/4

Left In: 619.820+/-0.186     $\chi^2/\text{NDF}$ :71061.2/8

634.752+/-0.162     $\chi^2/\text{NDF}$ : 231375.8/14

610.859+/-0.153     $\chi^2/\text{NDF}$ : 92729.2/13

# asym\_dsr\_mean vs slug



Right In:  $708.856 \pm 286.544$   $\chi^2/\text{NDF}: 3.4/4$

Left Out:  $222.635 \pm 215.614$   $\chi^2/\text{NDF}: 3.3/8$

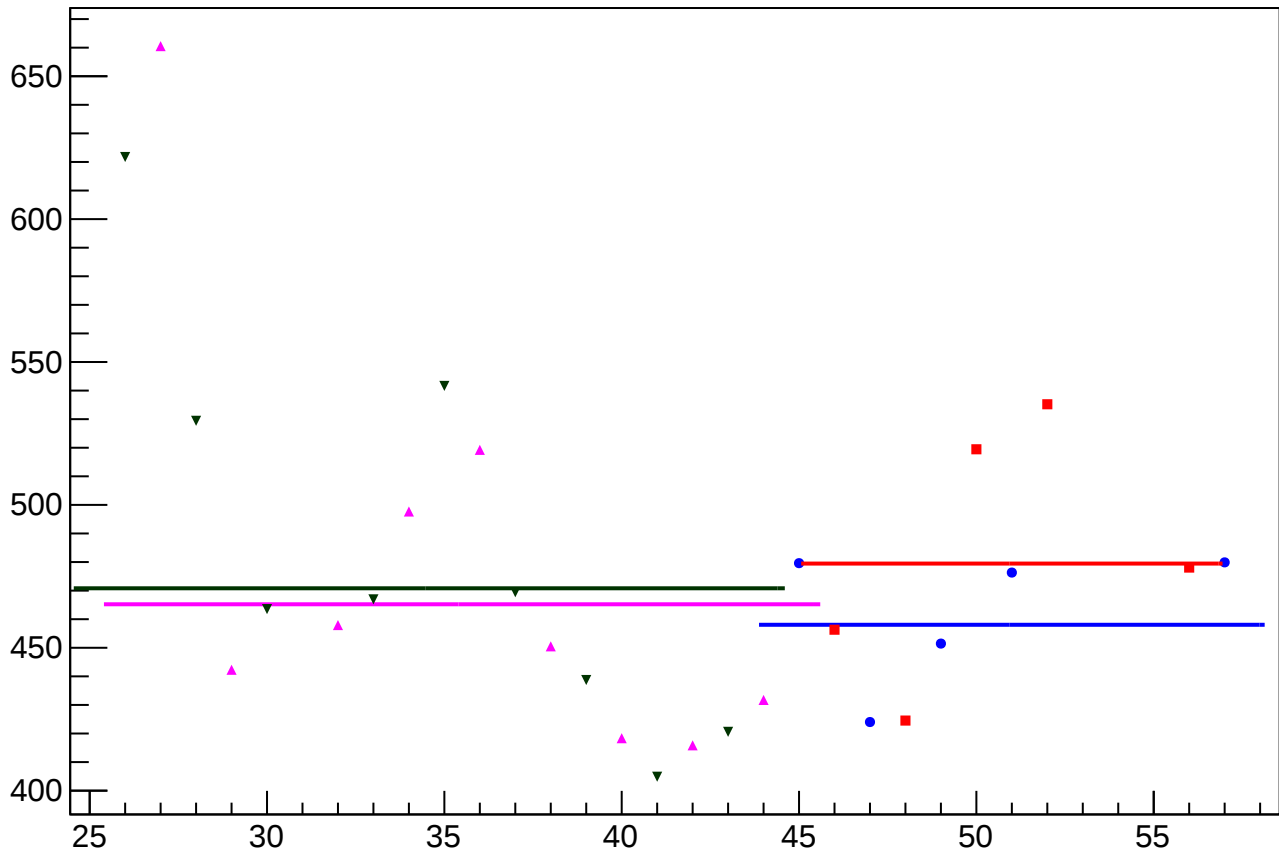
Right Out:  $-385.035 \pm 310.399$   $\chi^2/\text{NDF}: 5.5/4$

Left In:  $-412.499 \pm 198.099$   $\chi^2/\text{NDF}: 4.8/8$

$398.411 \pm 172.287$   $\chi^2/\text{NDF}: 8.6/13$

$-404.550 \pm 166.989$   $\chi^2/\text{NDF}: 10.3/13$

# asym\_dsr\_rms vs slug



Right In: 458.047+/-0.203  $\chi^2/\text{NDF}$ : 10816.7/4

Left Out: 470.818+/-0.152  $\chi^2/\text{NDF}$ :142935.9/8

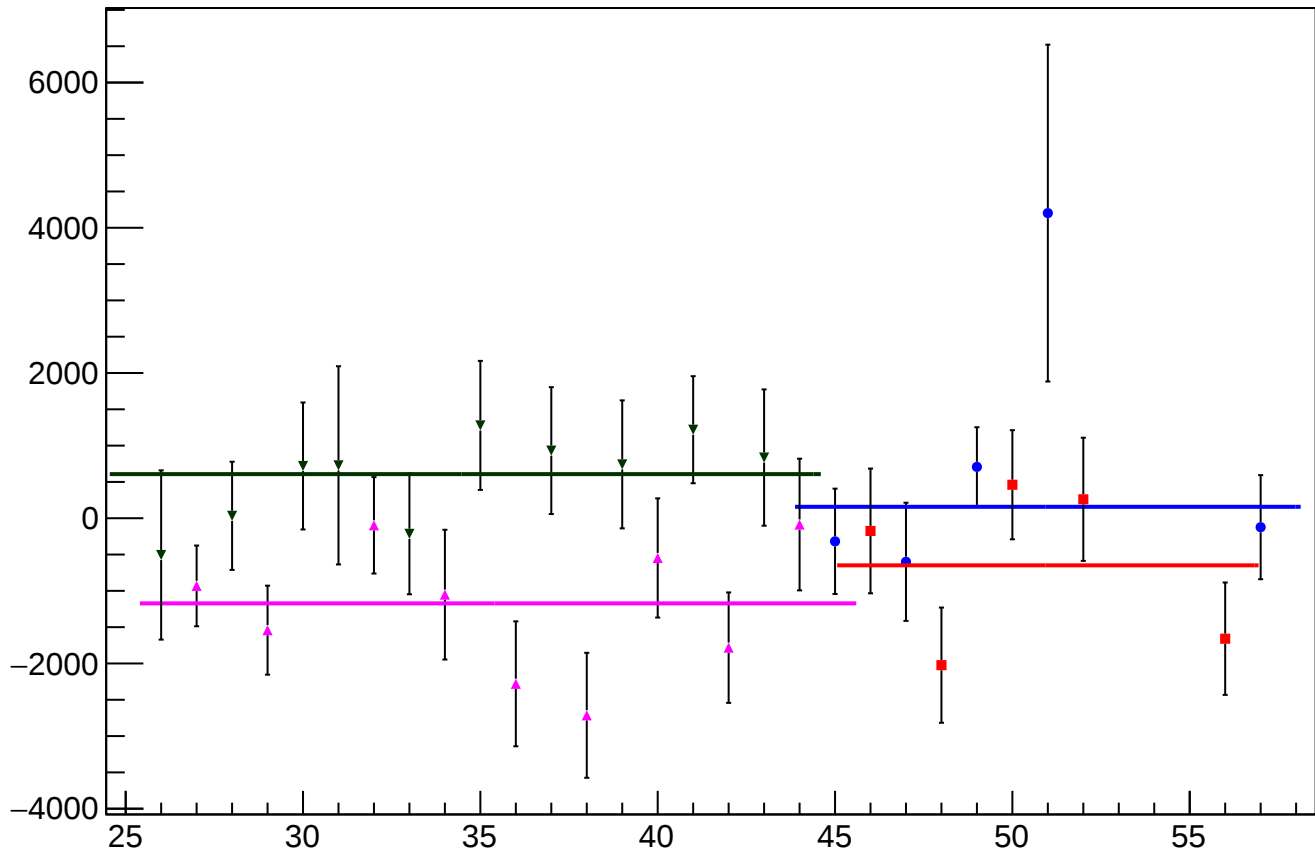
Right Out: 479.467+/-0.219  $\chi^2/\text{NDF}$ : 34607.7/4

Left In: 465.223+/-0.140  $\chi^2/\text{NDF}$ :202024.3/8

466.201+/-0.122  $\chi^2/\text{NDF}$ : 156289.0/13

469.345+/-0.118  $\chi^2/\text{NDF}$ : 239624.8/13

# cor\_usl\_mean vs slug



Right In: 157.419+/-335.343  $\chi^2/\text{NDF}$ : 5.5/4

Left Out: 607.534+/-280.959  $\chi^2/\text{NDF}$ : 4.0/9

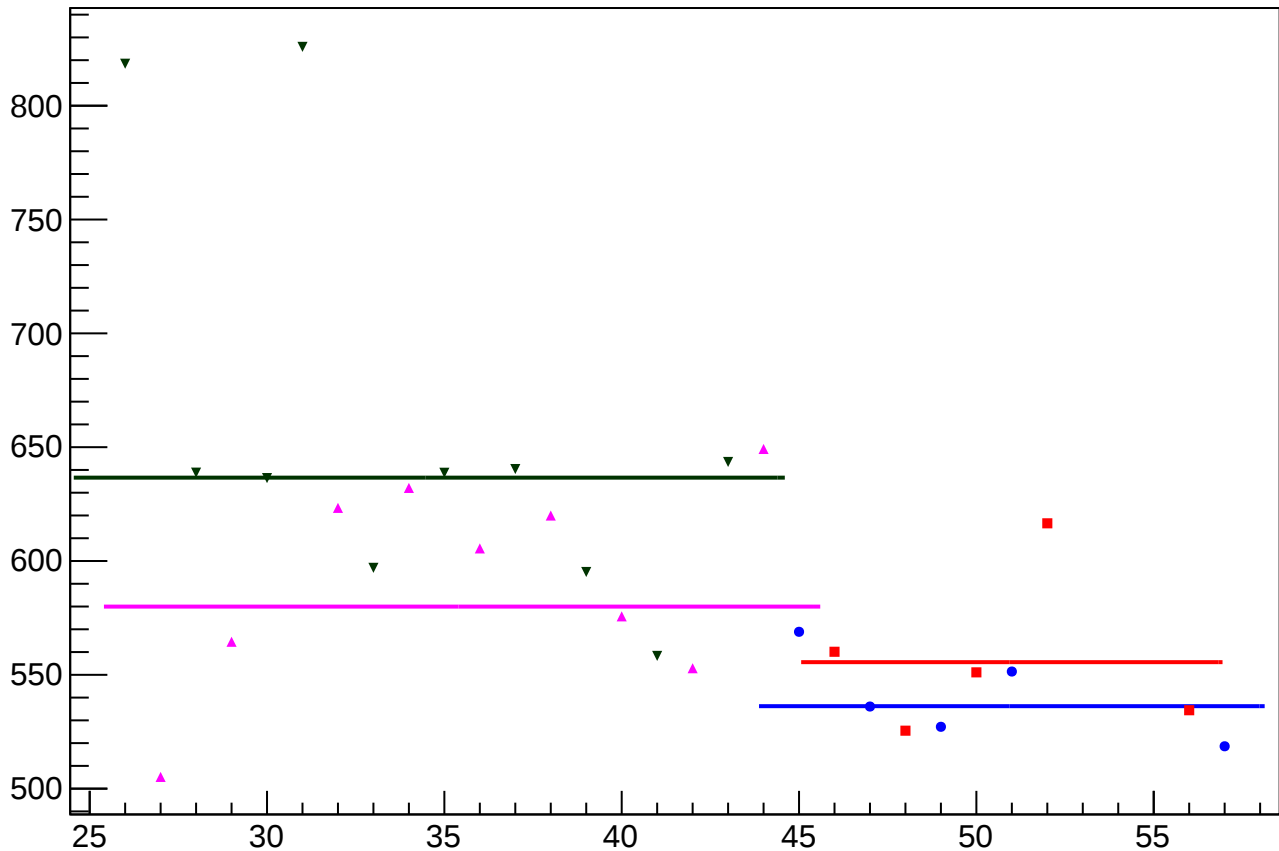
Right Out: -648.630+/-358.598  $\chi^2/\text{NDF}$ : 8.3/4

Left In: -1172.316+/-245.788  $\chi^2/\text{NDF}$ : 10.7/8

421.889+/-215.362  $\chi^2/\text{NDF}$ : 10.5/14

-1004.929+/-202.737  $\chi^2/\text{NDF}$ : 20.5/13

# cor\_usl\_rms vs slug



Right In: 536.231+/-0.237  $\chi^2/\text{NDF}$ : 5898.4/4

Left Out: 636.619+/-0.199  $\chi^2/\text{NDF}$ : 118822.0/9

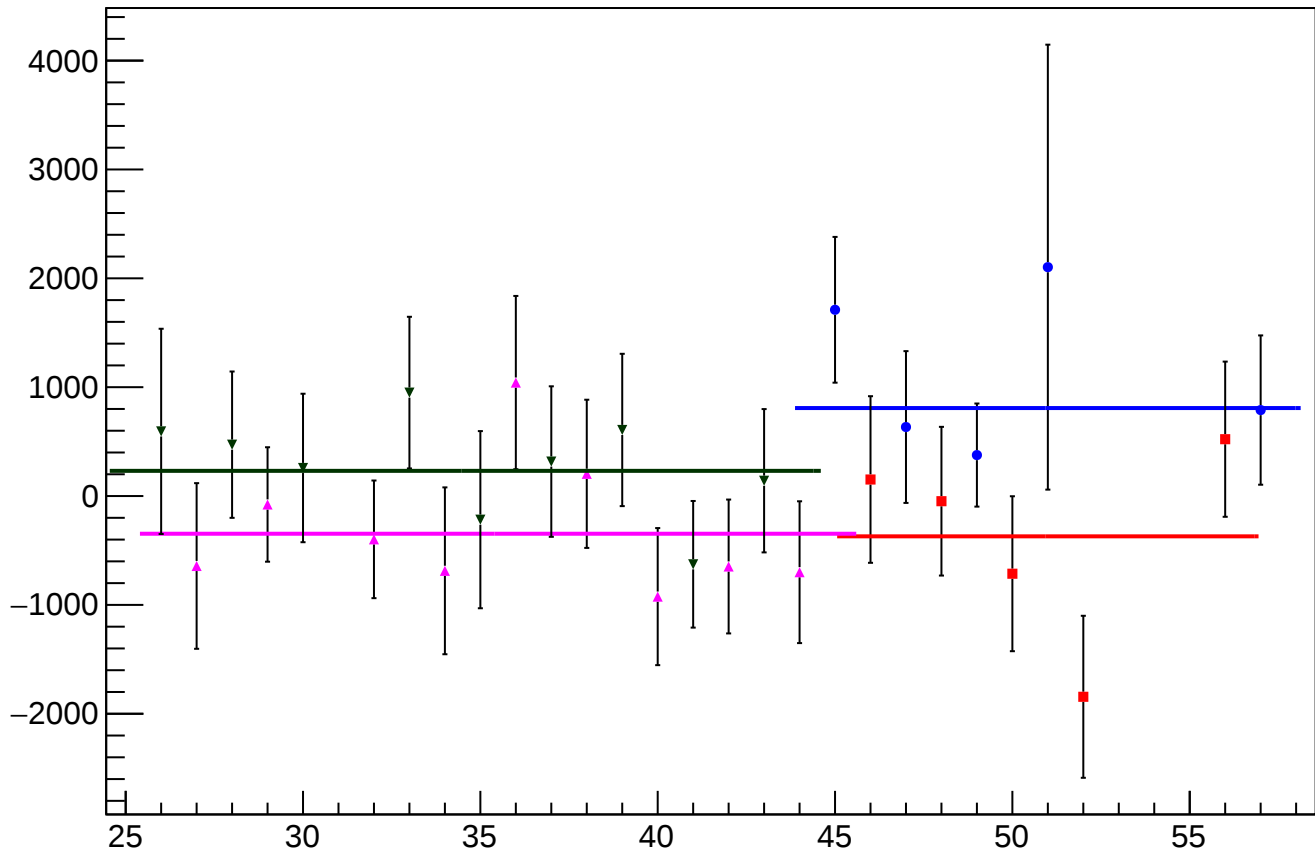
Right Out: 555.564+/-0.254  $\chi^2/\text{NDF}$ : 14844.9/4

Left In: 579.971+/-0.174  $\chi^2/\text{NDF}$ : 73206.6/8

595.215+/-0.152  $\chi^2/\text{NDF}$ : 230029.5/14

572.170+/-0.143  $\chi^2/\text{NDF}$ : 94354.7/13

# cor\_usr\_mean vs slug



Right In: 808.324+/-299.966  $\chi^2/\text{NDF}$ : 3.1/4

Left Out: 231.411+/-232.753  $\chi^2/\text{NDF}$ : 4.1/8

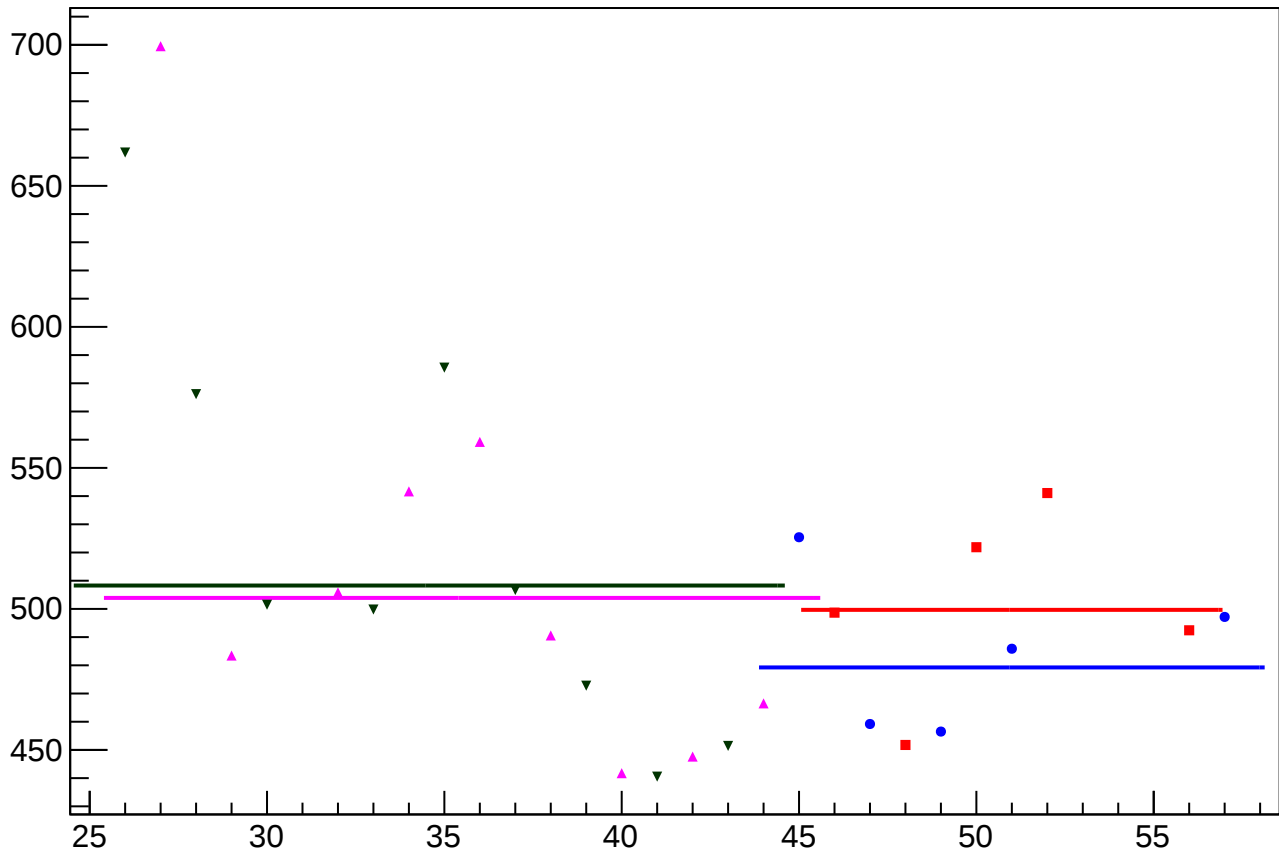
Right Out: -370.184+/-322.763  $\chi^2/\text{NDF}$ : 6.4/4

Left In: -346.250+/-214.497  $\chi^2/\text{NDF}$ : 5.7/8

448.219+/-183.889  $\chi^2/\text{NDF}$ : 9.6/13

-353.582+/-178.646  $\chi^2/\text{NDF}$ : 12.1/13

# cor\_usr\_rms vs slug



Right In: 479.250 $\pm$ 0.212  $\chi^2$ /NDF: 17162.6/4

Left Out: 508.292 $\pm$ 0.165  $\chi^2$ /NDF:139195.8/8

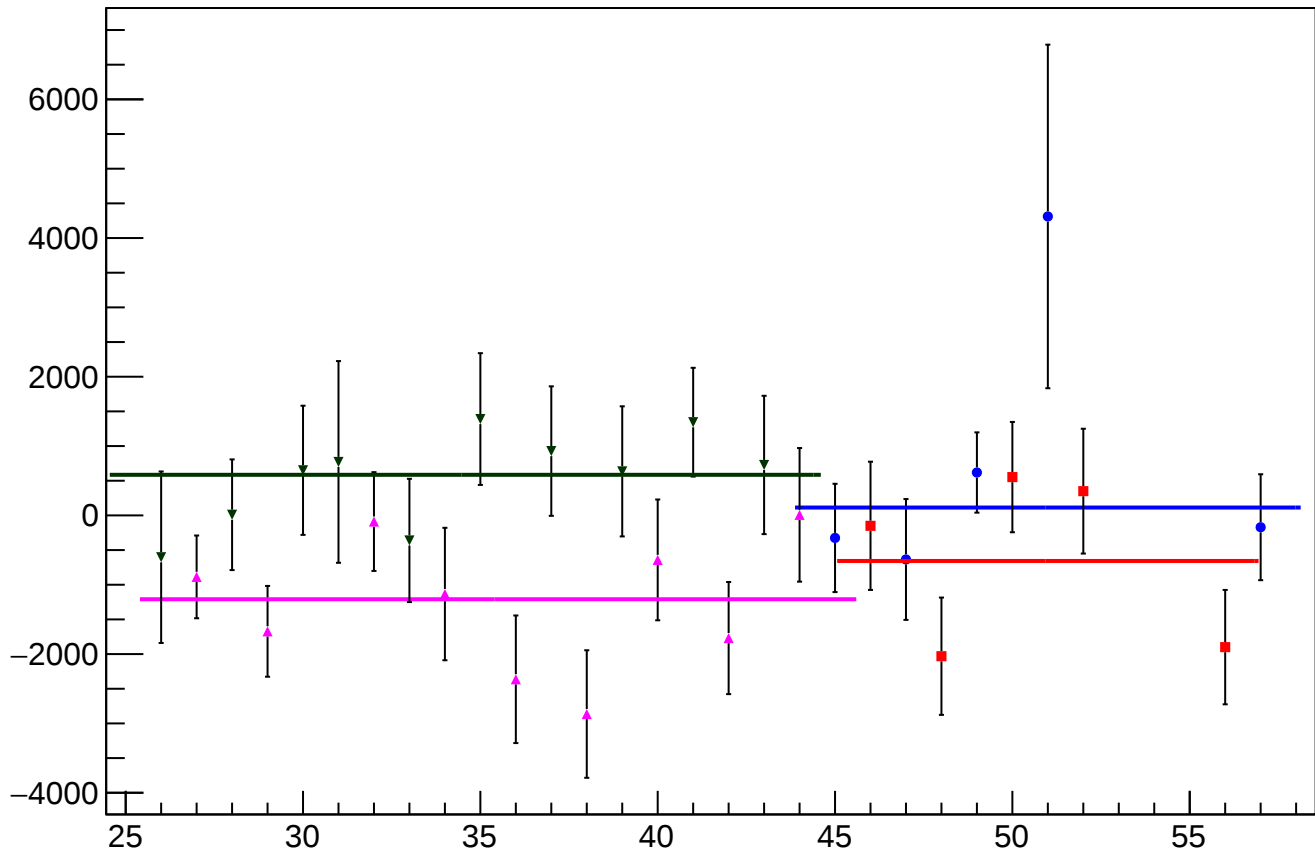
497.378 $\pm$ 0.130  $\chi^2$ /NDF: 168060.1/13

Right Out: 499.665 $\pm$ 0.228  $\chi^2$ /NDF: 18192.9/4

502.604 $\pm$ 0.126  $\chi^2$ /NDF: 211783.4/13

Left In: 503.902 $\pm$ 0.152  $\chi^2$ /NDF:193351.4/8

# cor\_dsl\_mean vs slug



Right In: 113.335+/-357.620  $\chi^2/\text{NDF}$ : 4.8/4

Left Out: 585.397+/-299.644  $\chi^2/\text{NDF}$ : 4.4/9

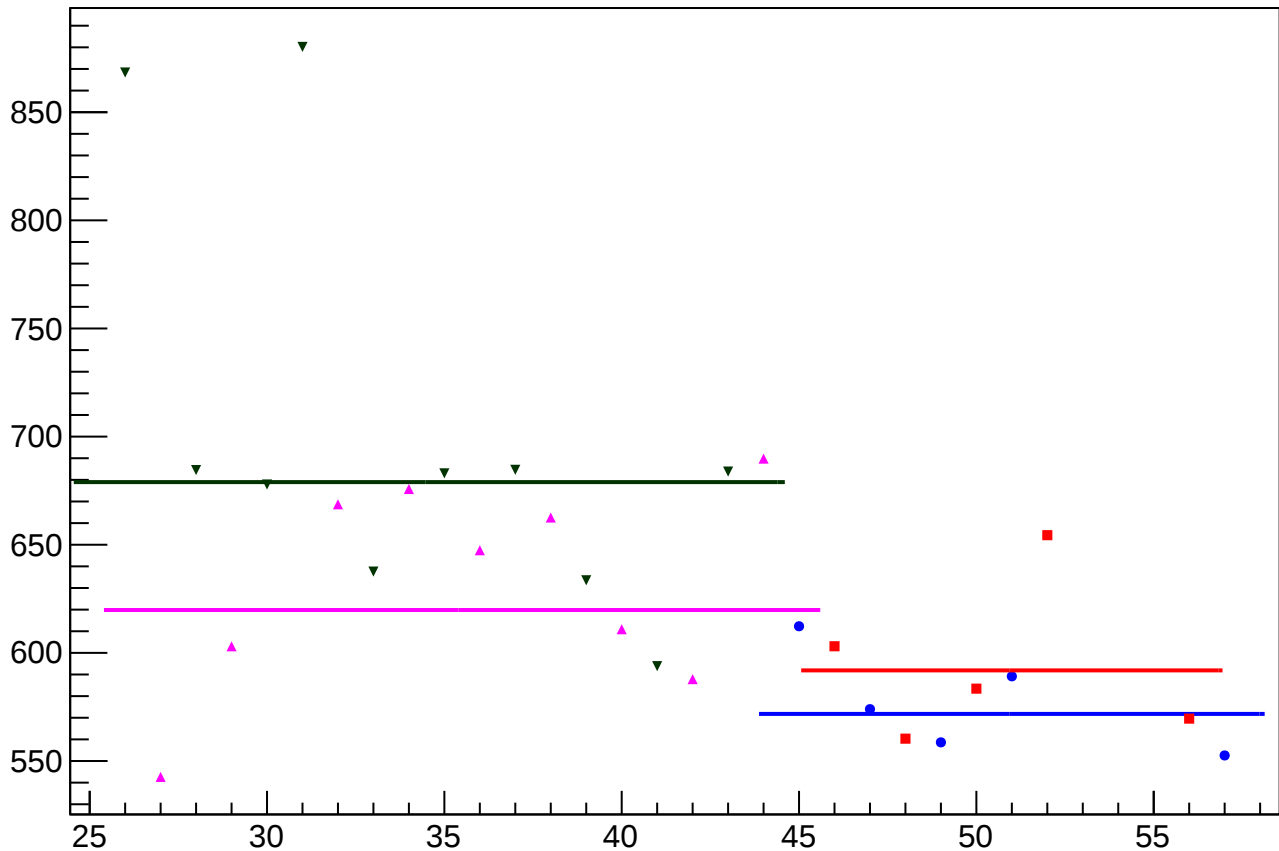
Right Out: -657.118+/-382.030  $\chi^2/\text{NDF}$ : 8.8/4

Left In: -1209.244+/-262.640  $\chi^2/\text{NDF}$ : 10.6/8

390.684+/-229.678  $\chi^2/\text{NDF}$ : 10.3/14

-1032.041+/-216.428  $\chi^2/\text{NDF}$ : 20.8/13

# cor\_dsl\_rms vs slug



Right In: 571.779 $\pm$ 0.253  $\chi^2$ /NDF: 7796.9/4

Left Out: 678.962 $\pm$ 0.212  $\chi^2$ /NDF:118027.5/9

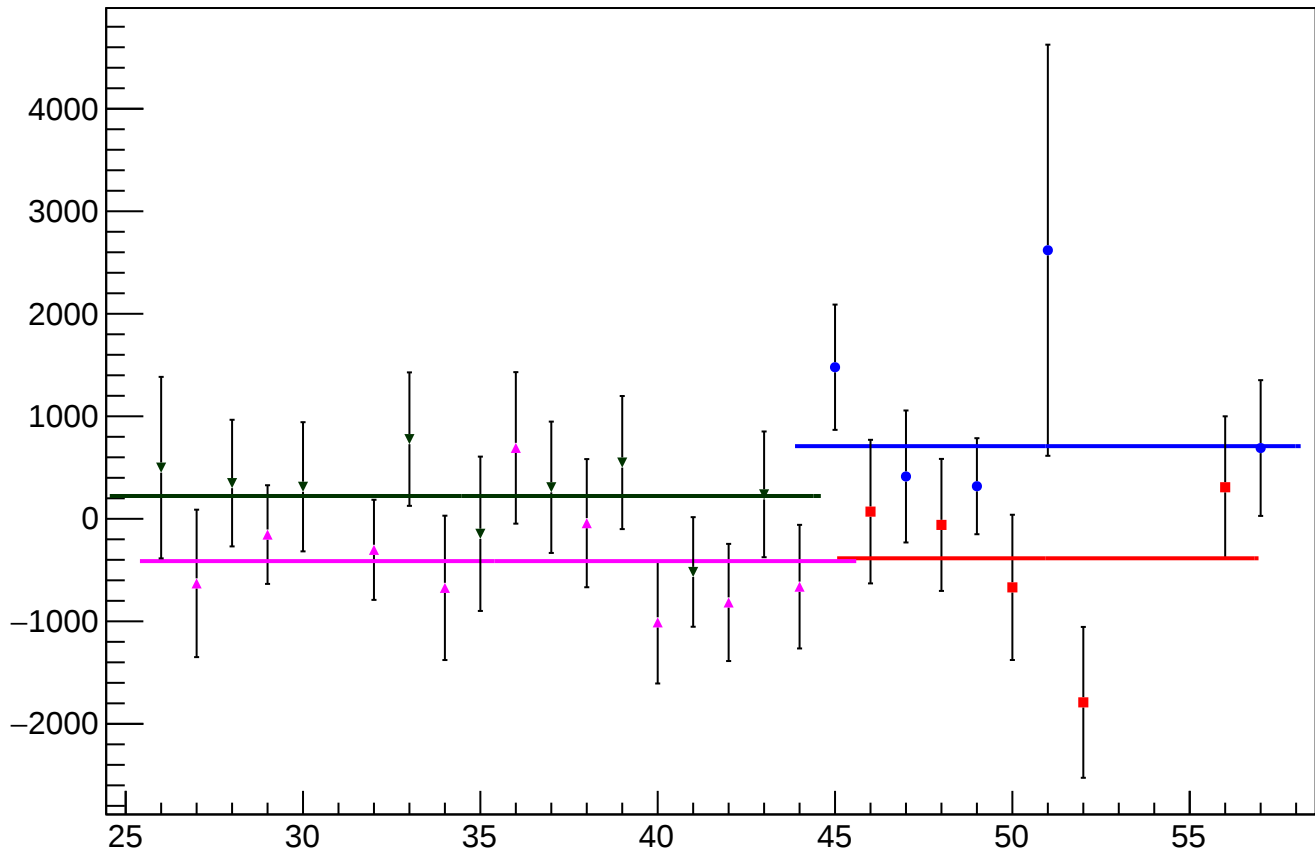
Right Out: 591.901 $\pm$ 0.270  $\chi^2$ /NDF: 14414.3/4

Left In: 619.820 $\pm$ 0.186  $\chi^2$ /NDF:71061.2/8

634.752 $\pm$ 0.162  $\chi^2$ /NDF: 231375.8/14

610.859 $\pm$ 0.153  $\chi^2$ /NDF: 92729.2/13

# cor\_dsr\_mean vs slug



Right In: 708.856+/-286.544  $\chi^2/\text{NDF}$ : 3.4/4

Left Out: 222.635+/-215.614  $\chi^2/\text{NDF}$ : 3.3/8

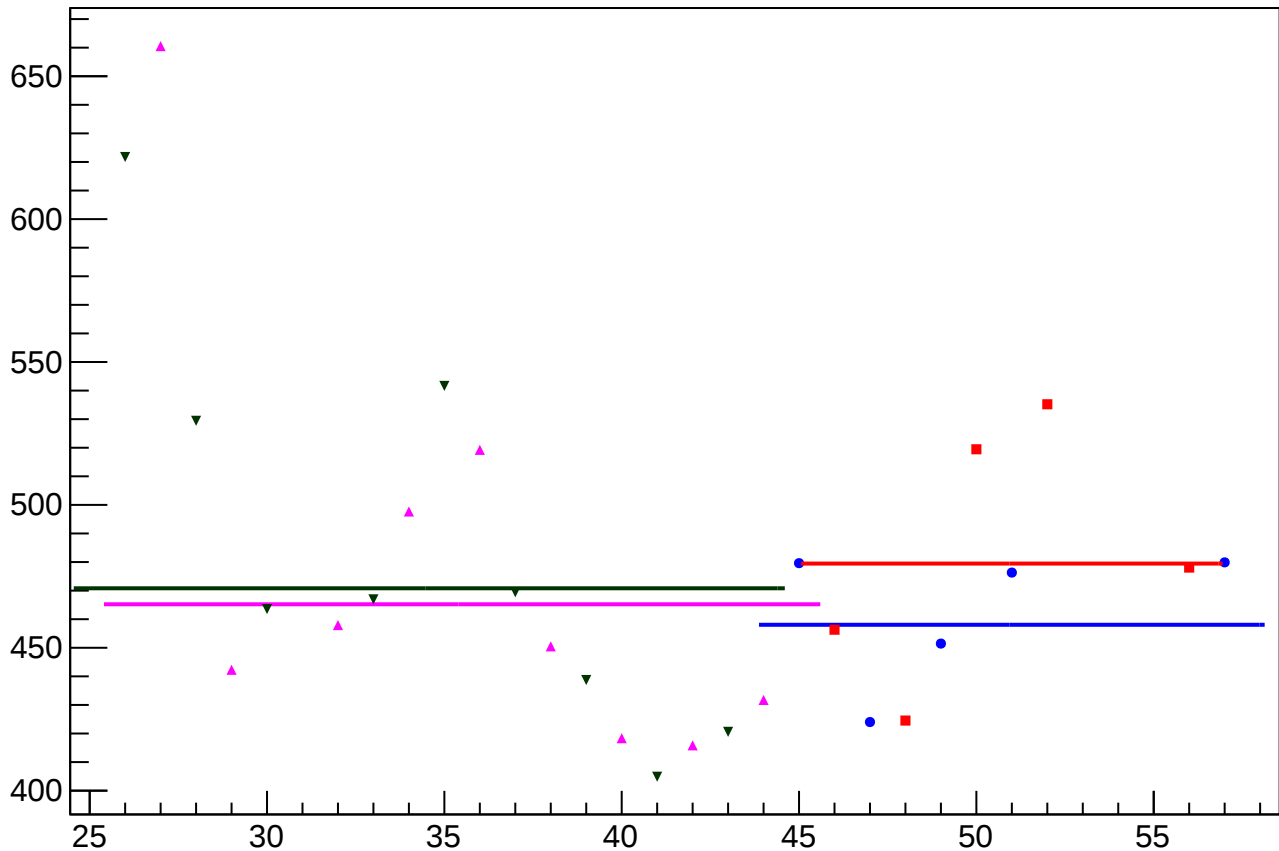
Right Out: -385.035+/-310.399  $\chi^2/\text{NDF}$ : 5.5/4

Left In: -412.499+/-198.099  $\chi^2/\text{NDF}$ : 4.8/8

398.411+/-172.287  $\chi^2/\text{NDF}$ : 8.6/13

-404.550+/-166.989  $\chi^2/\text{NDF}$ : 10.3/13

# cor\_dsr\_rms vs slug



Right In: 458.047+/-0.203  $\chi^2/\text{NDF}$ : 10816.7/4

Left Out: 470.818+/-0.152  $\chi^2/\text{NDF}$ :142935.9/8

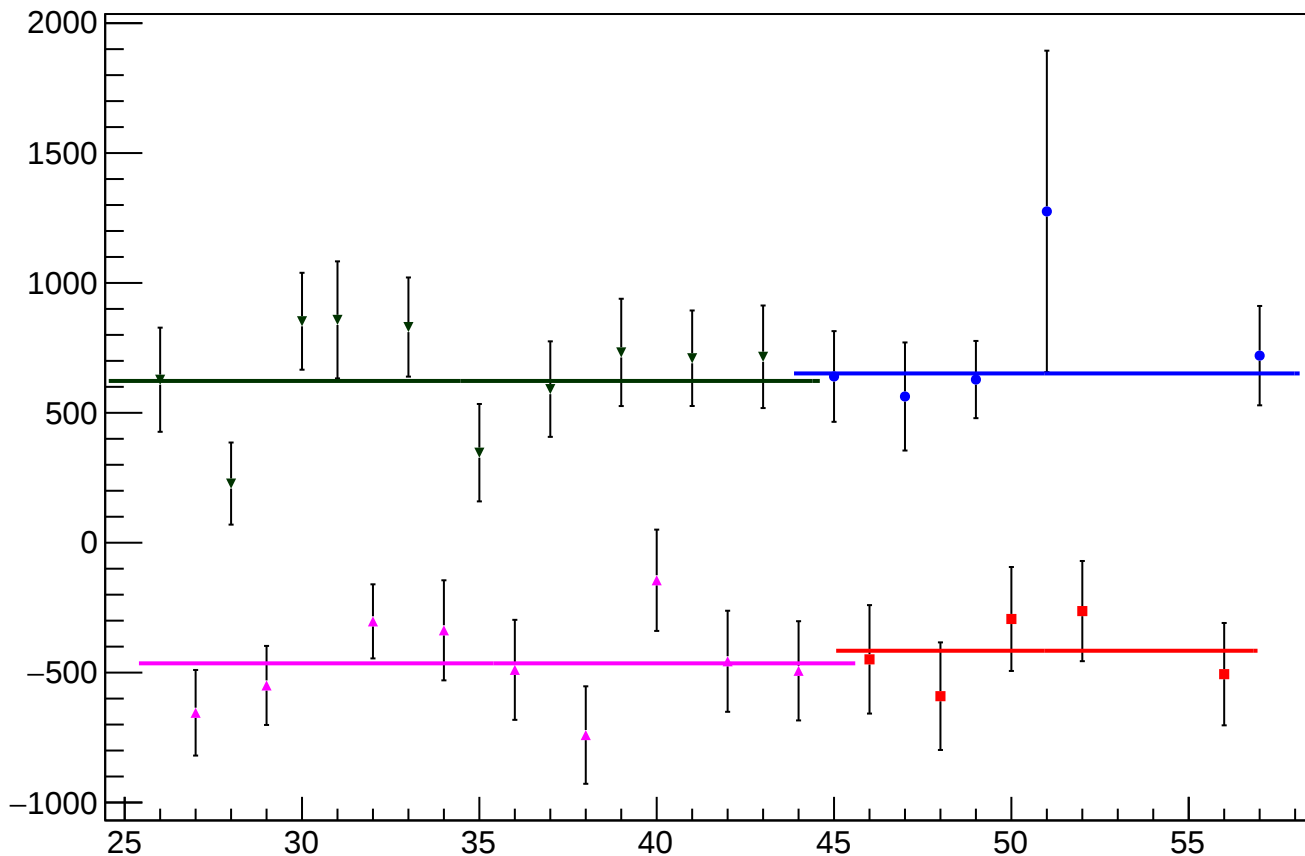
Right Out: 479.467+/-0.219  $\chi^2/\text{NDF}$ : 34607.7/4

Left In: 465.223+/-0.140  $\chi^2/\text{NDF}$ :202024.3/8

466.201+/-0.122  $\chi^2/\text{NDF}$ : 156289.0/13

469.345+/-0.118  $\chi^2/\text{NDF}$ : 239624.8/13

# reg\_asym\_usl\_mean vs slug



Right In: 651.650 $\pm$ 87.325  $\chi^2/\text{NDF}$ : 1.4/4

Left Out: 622.726 $\pm$ 60.025  $\chi^2/\text{NDF}$ :13.0/9

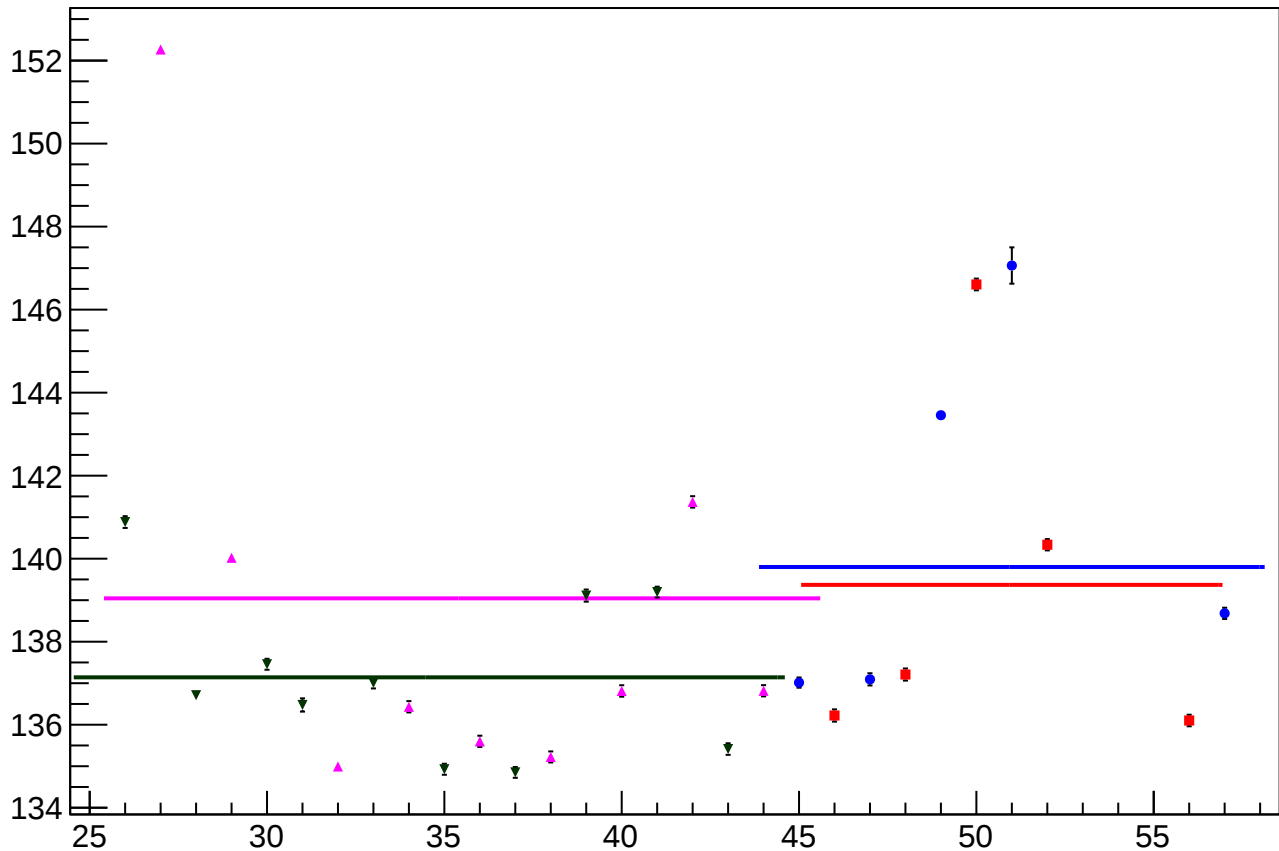
Right Out: -415.868 $\pm$ 89.837  $\chi^2/\text{NDF}$ : 1.9/4

Left In: -464.347 $\pm$ 58.554  $\chi^2/\text{NDF}$ :8.3/8

632.007 $\pm$ 49.466  $\chi^2/\text{NDF}$ : 14.4/14

-449.893 $\pm$ 49.054  $\chi^2/\text{NDF}$ : 10.4/13

# reg\_asym\_usl\_rms vs slug



Right In: 139.800 $\pm$ 0.062  $\chi^2$ /NDF: 2401.3/4

Left Out: 137.141 $\pm$ 0.042  $\chi^2$ /NDF:1909.5/9

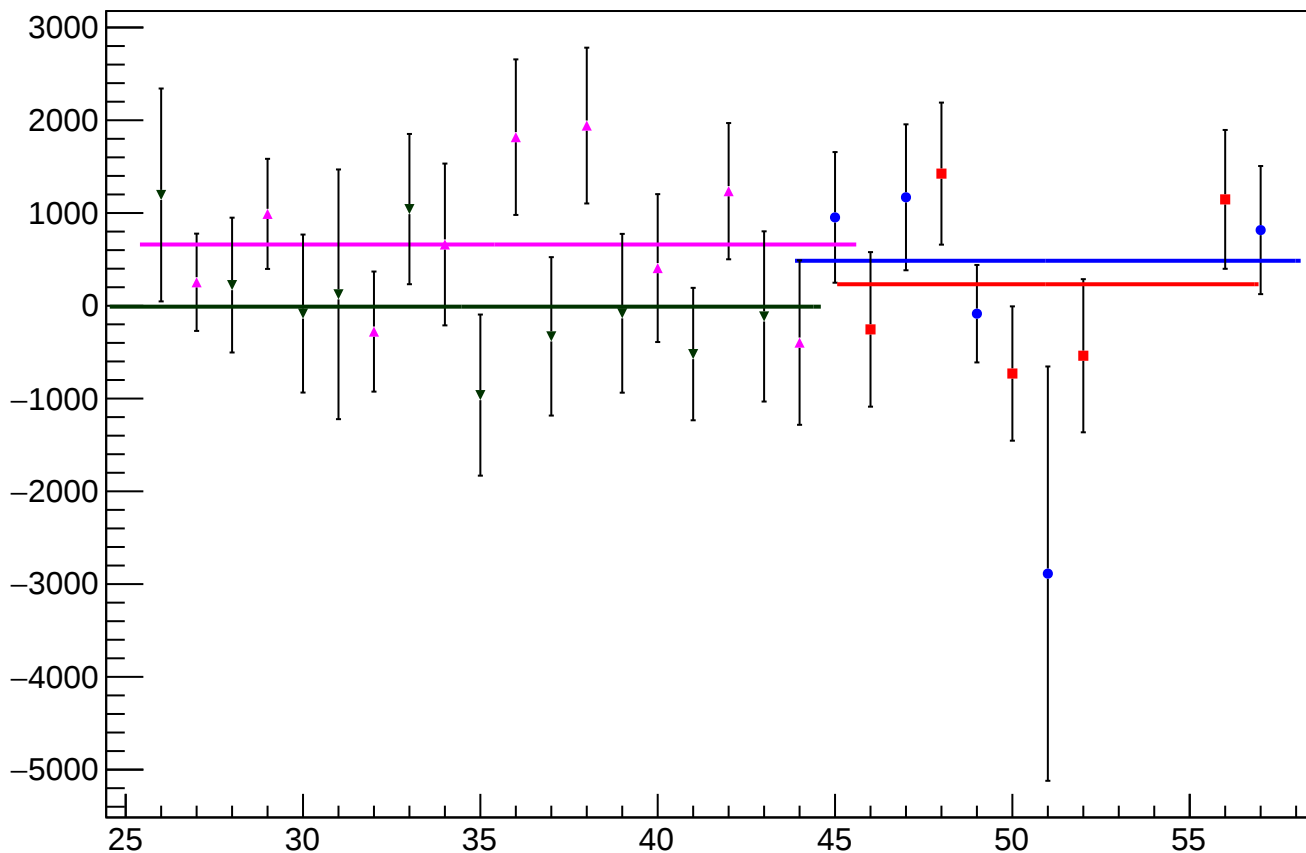
Right Out: 139.369 $\pm$ 0.064  $\chi^2$ /NDF: 3889.4/4

Left In: 139.044 $\pm$ 0.041  $\chi^2$ /NDF:17232.5/8

137.994 $\pm$ 0.035  $\chi^2$ /NDF: 5569.7/14

139.141 $\pm$ 0.035  $\chi^2$ /NDF: 21140.2/13

# asym\_usl\_correction\_mean vs slug



Right In:  $485.245 \pm 323.507$   $\chi^2/\text{NDF}$ : 4.9/4

Left Out:  $-9.377 \pm 273.969$   $\chi^2/\text{NDF}$ : 4.8/9

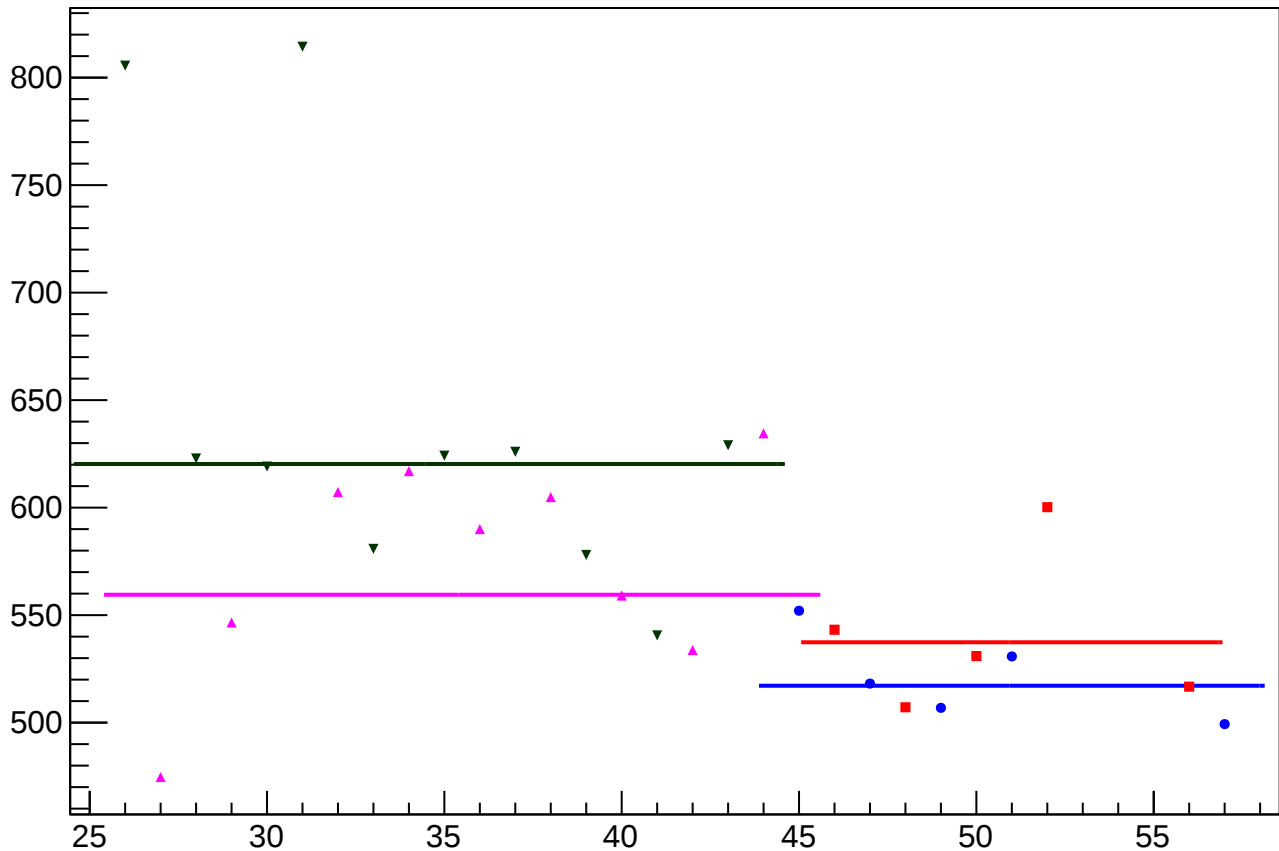
Right Out:  $232.183 \pm 346.937$   $\chi^2/\text{NDF}$ : 6.9/4

Left In:  $660.643 \pm 237.559$   $\chi^2/\text{NDF}$ : 9.4/8

$197.204 \pm 209.070$   $\chi^2/\text{NDF}$ : 11.0/14

$523.879 \pm 196.011$   $\chi^2/\text{NDF}$ : 17.3/13

# asym\_usl\_correction\_rms vs slug



Right In:  $517.160 \pm 0.229$   $\chi^2/\text{NDF}$ : 7086.9/4

Left Out:  $620.292 \pm 0.194$   $\chi^2/\text{NDF}$ : 128669.8/9

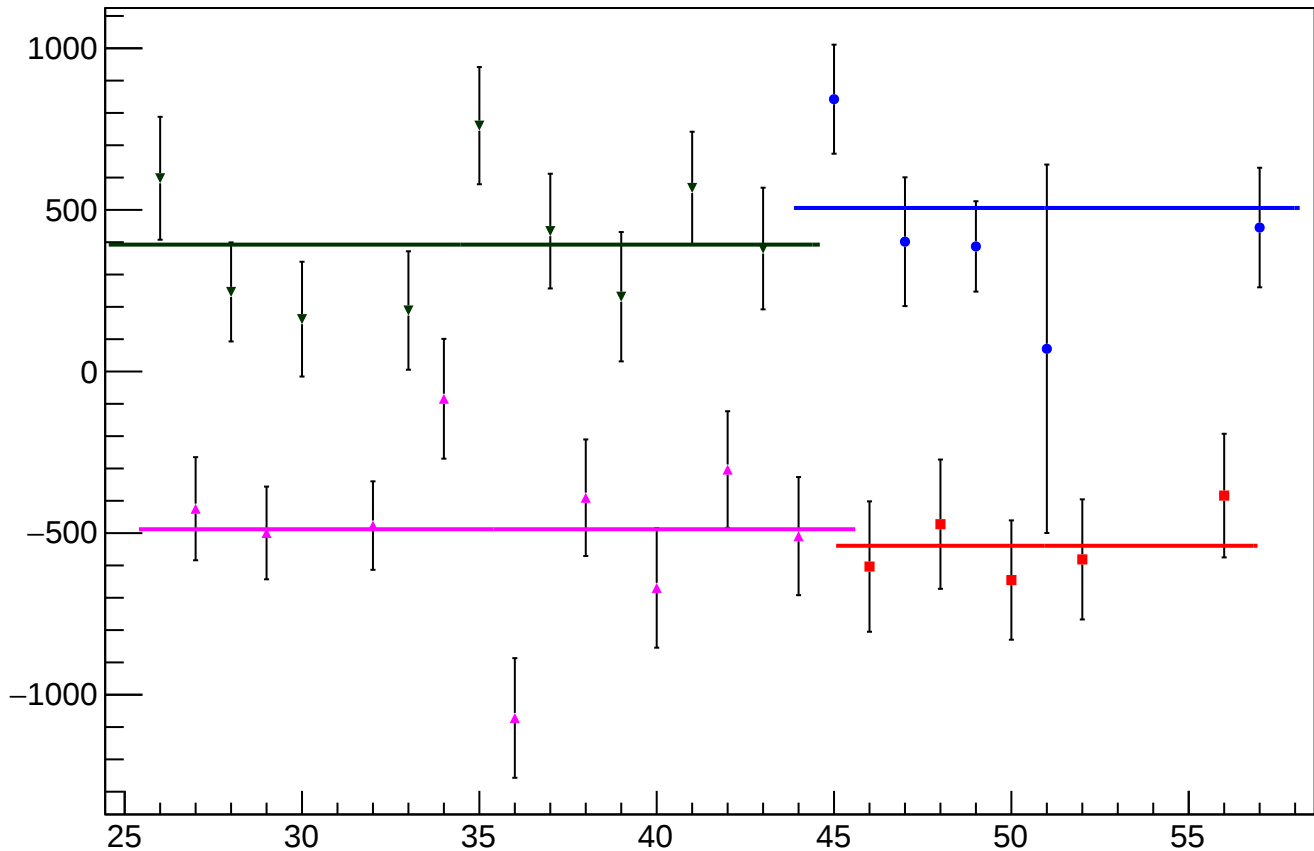
Right Out:  $537.372 \pm 0.245$   $\chi^2/\text{NDF}$ : 16483.3/4

Left In:  $559.478 \pm 0.168$   $\chi^2/\text{NDF}$ : 98135.2/8

$577.219 \pm 0.148$   $\chi^2/\text{NDF}$ : 254123.6/14

$552.422 \pm 0.139$   $\chi^2/\text{NDF}$ : 120146.3/13

# reg\_asym\_usr\_mean vs slug



Right In: 505.992 $\pm$ 83.388  $\chi^2/\text{NDF}$ : 5.7/4

Left Out: 392.566 $\pm$ 59.735  $\chi^2/\text{NDF}$ :10.8/8

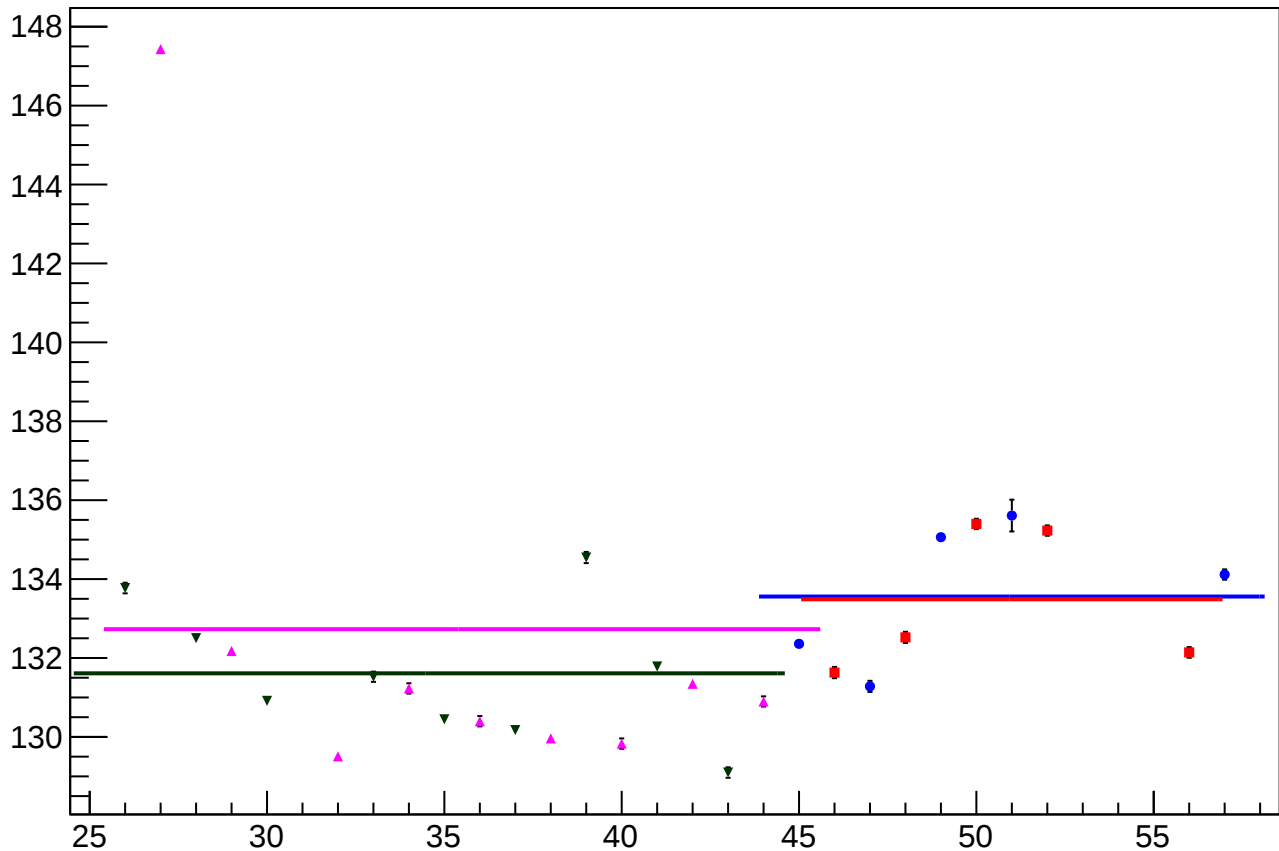
Right Out: -539.132 $\pm$ 85.995  $\chi^2/\text{NDF}$ : 1.3/4

Left In: -487.989 $\pm$ 55.878  $\chi^2/\text{NDF}$ :17.2/8

431.033 $\pm$ 48.561  $\chi^2/\text{NDF}$ : 17.7/13

-503.172 $\pm$ 46.855  $\chi^2/\text{NDF}$ : 18.7/13

# reg\_asym\_usr\_rms vs slug



Right In: 133.558+/-0.059  $\chi^2/\text{NDF}$ : 637.8/4

Left Out: 131.612+/-0.042  $\chi^2/\text{NDF}$ :1361.4/8

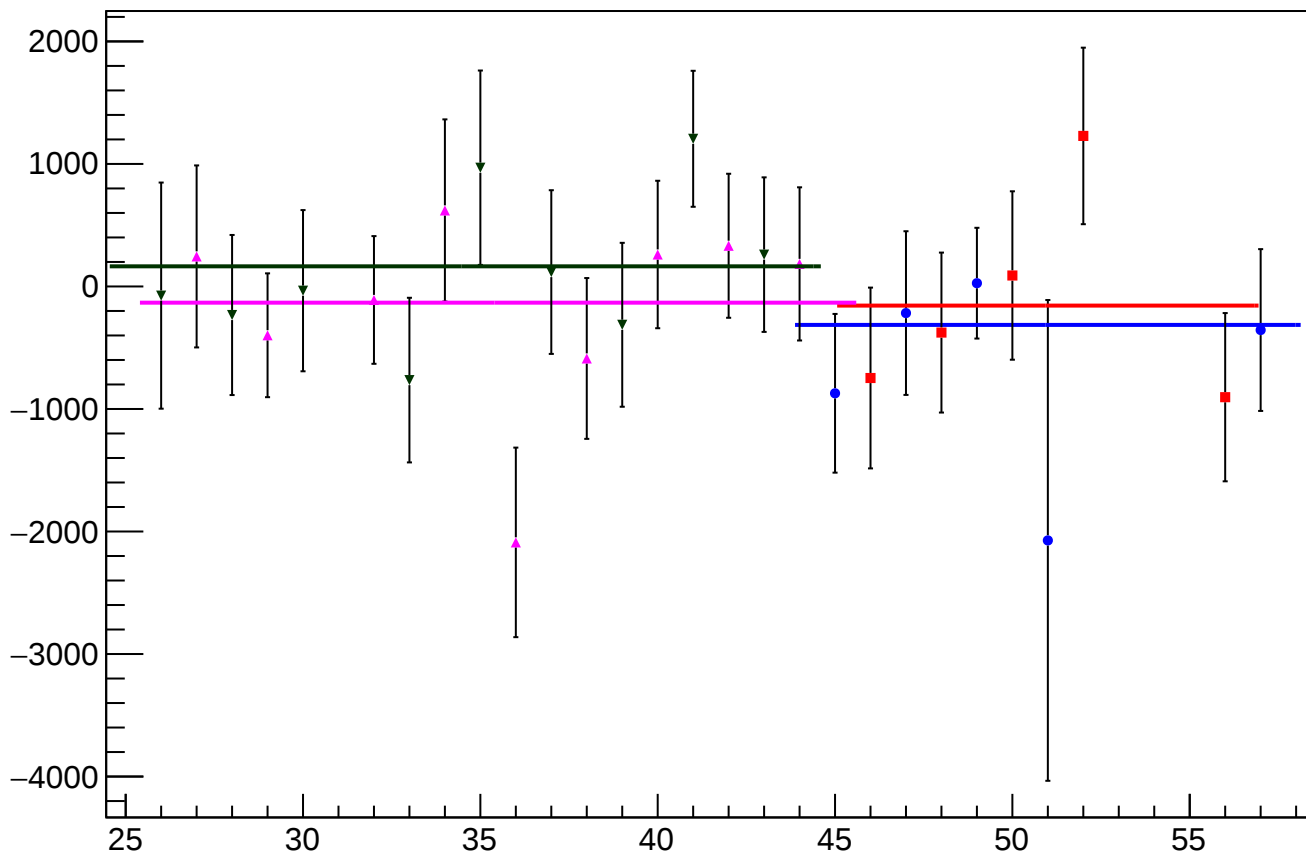
Right Out: 133.488+/-0.061  $\chi^2/\text{NDF}$ : 705.2/4

Left In: 132.730+/-0.040  $\chi^2/\text{NDF}$ :19860.4/8

132.272+/-0.034  $\chi^2/\text{NDF}$ : 2719.4/13

132.955+/-0.033  $\chi^2/\text{NDF}$ : 20674.7/13

# asym\_usr\_correction\_mean vs slug



Right In:  $-313.798 \pm 287.795$   $\chi^2/\text{NDF}$ : 2.1/4

Left Out:  $164.304 \pm 224.343$   $\chi^2/\text{NDF}$ : 7.5/8

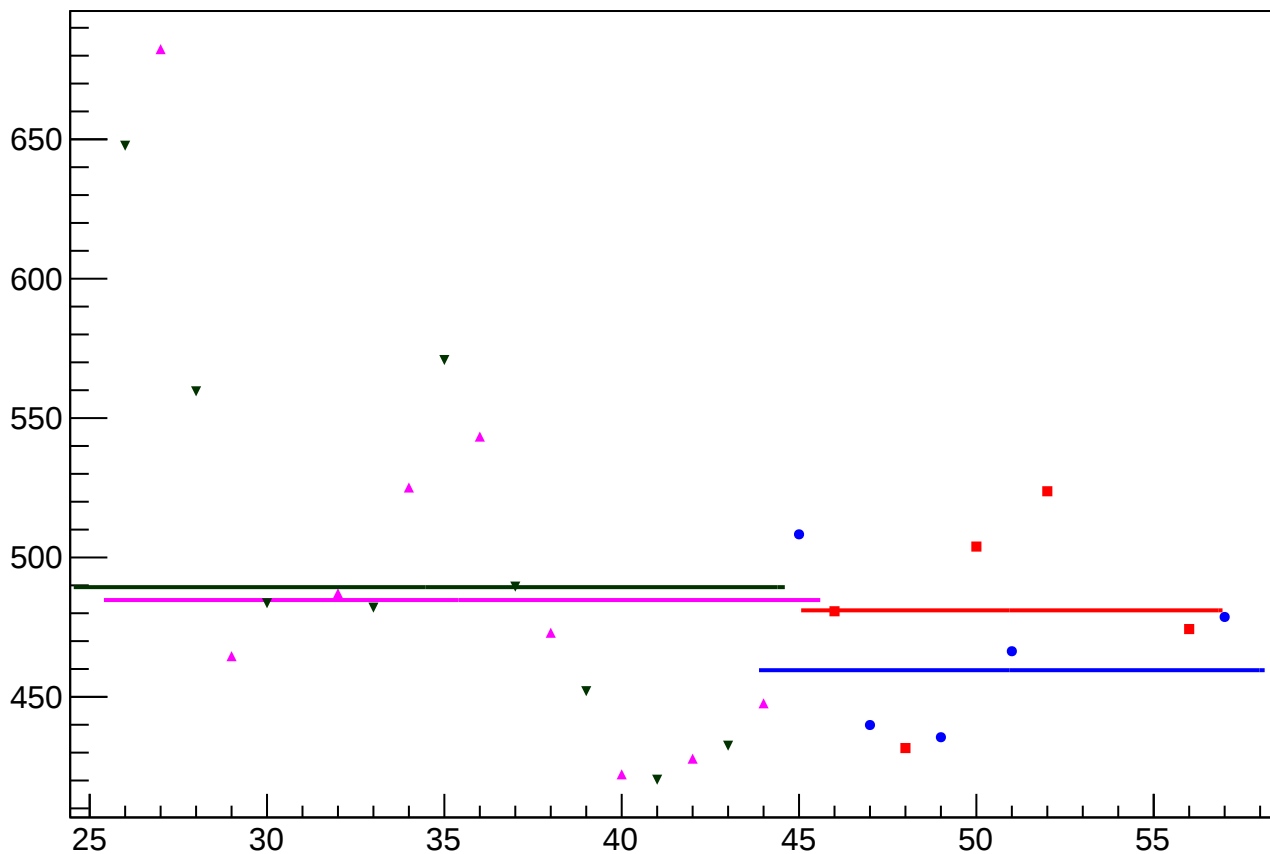
Right Out:  $-156.147 \pm 310.856$   $\chi^2/\text{NDF}$ : 5.8/4

Left In:  $-132.313 \pm 206.592$   $\chi^2/\text{NDF}$ : 9.7/8

$-16.408 \pm 176.936$   $\chi^2/\text{NDF}$ : 11.4/13

$-139.615 \pm 172.060$   $\chi^2/\text{NDF}$ : 15.5/13

# asym\_usr\_correction\_rms vs slug



Right In:  $459.566 \pm 0.204$   $\chi^2/\text{NDF}$ : 20413.1/4

Left Out:  $489.361 \pm 0.159$   $\chi^2/\text{NDF}$ : 156953.9/8

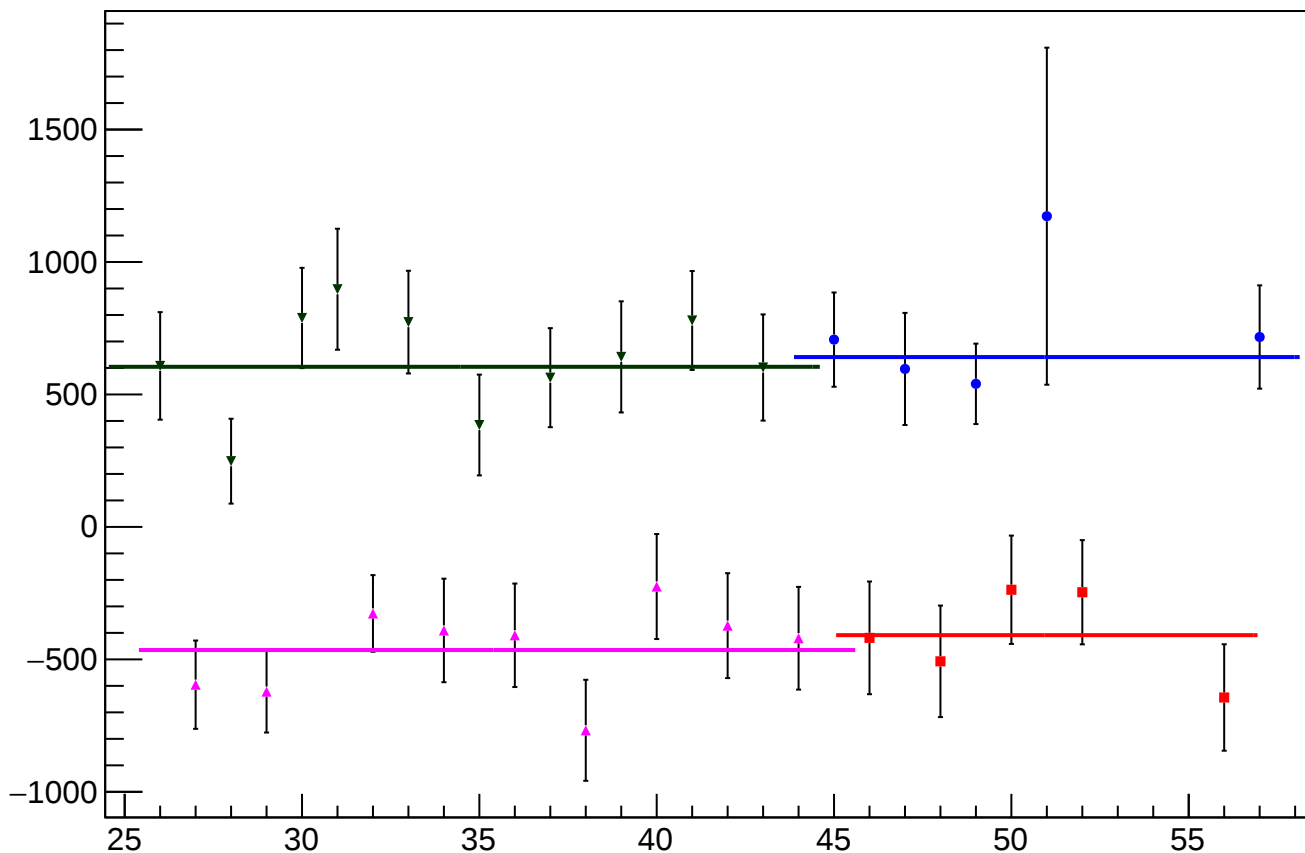
Right Out:  $481.034 \pm 0.220$   $\chi^2/\text{NDF}$ : 20892.6/4

Left In:  $484.733 \pm 0.146$   $\chi^2/\text{NDF}$ : 210159.4/8

$478.099 \pm 0.125$   $\chi^2/\text{NDF}$ : 190700.8/13

$483.600 \pm 0.122$   $\chi^2/\text{NDF}$ : 231248.4/13

# reg\_asym\_dsl\_mean vs slug



Right In: 641.126 $\pm$ 89.025  $\chi^2$ /NDF: 1.5/4

Left Out: 604.421 $\pm$ 60.916  $\chi^2$ /NDF:10.6/9

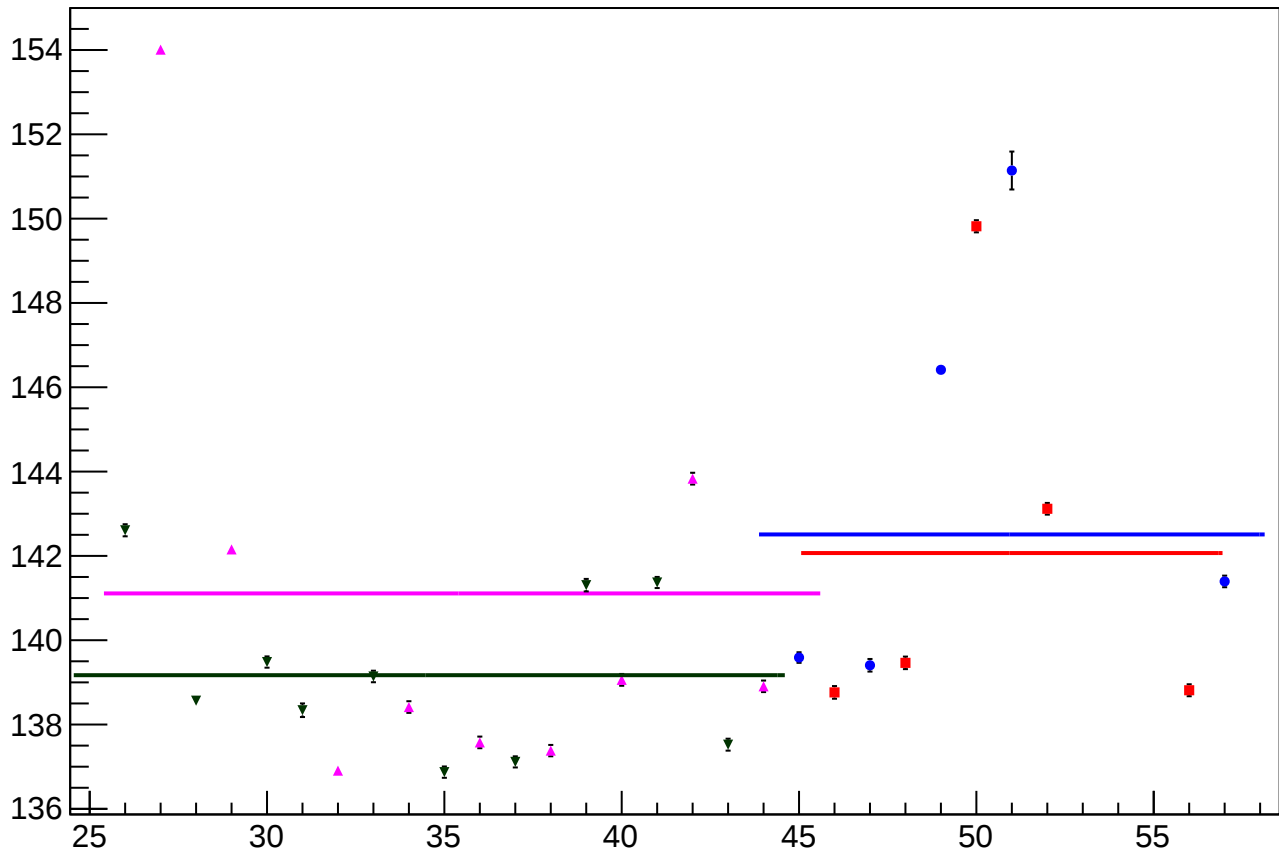
Right Out: -408.557 $\pm$ 91.586  $\chi^2$ /NDF: 3.0/4

Left In: -464.676 $\pm$ 59.428  $\chi^2$ /NDF:7.0/8

616.126 $\pm$ 50.273  $\chi^2$ /NDF: 12.2/14

-448.049 $\pm$ 49.853  $\chi^2$ /NDF: 10.3/13

# reg\_asym\_dsl\_rms vs slug



Right In: 142.509+/-0.063  $\chi^2/\text{NDF}$ : 2728.2/4

Left Out: 139.170+/-0.043  $\chi^2/\text{NDF}$ :1788.1/9

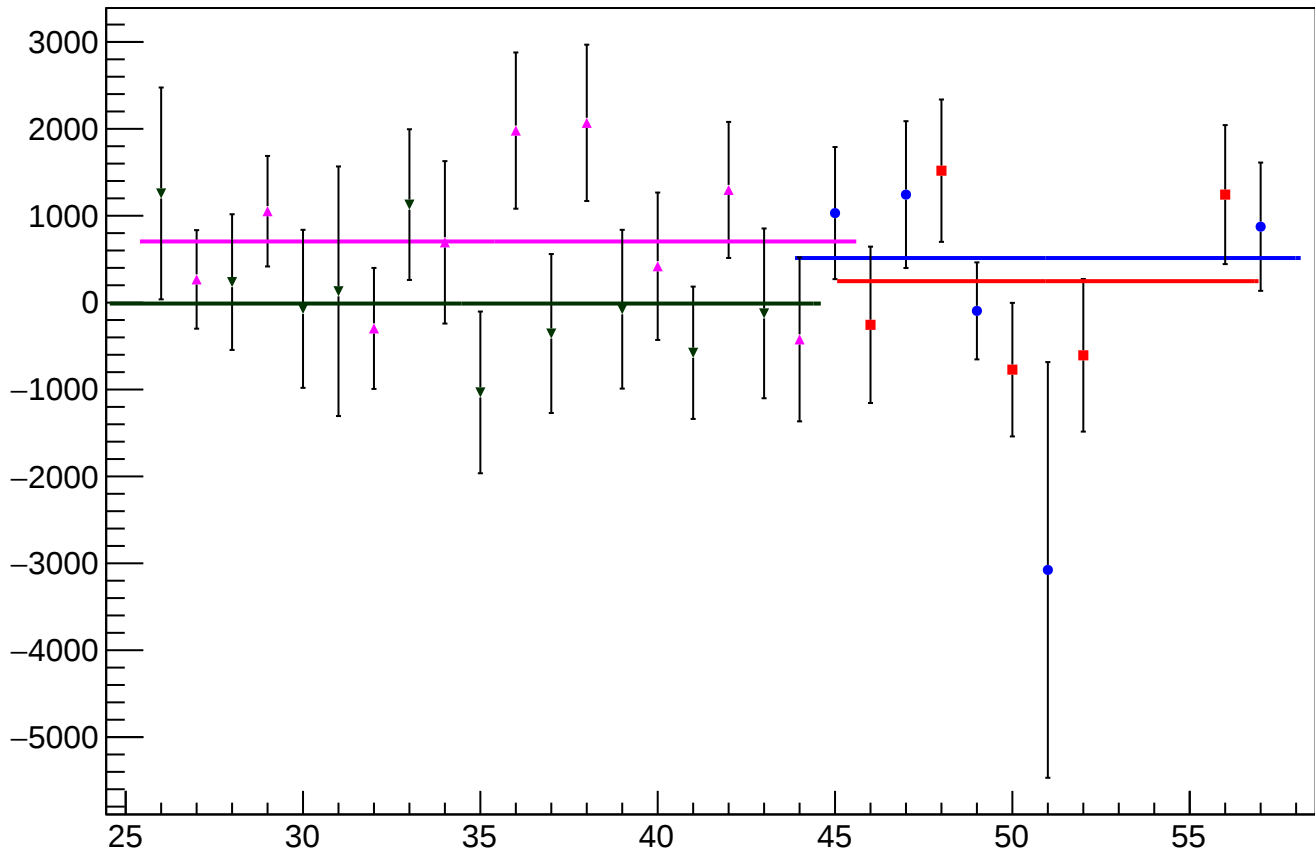
Right Out: 142.068+/-0.065  $\chi^2/\text{NDF}$ : 4244.5/4

Left In: 141.110+/-0.042  $\chi^2/\text{NDF}$ :16409.1/8

140.235+/-0.036  $\chi^2/\text{NDF}$ : 6432.0/14

141.394+/-0.035  $\chi^2/\text{NDF}$ : 20807.4/13

# asym\_dsl\_correction\_mean vs slug



Right In: 513.372 $\pm$ 346.069  $\chi^2$ /NDF: 4.9/4

Left Out: -10.463 $\pm$ 292.895  $\chi^2$ /NDF: 4.8/9

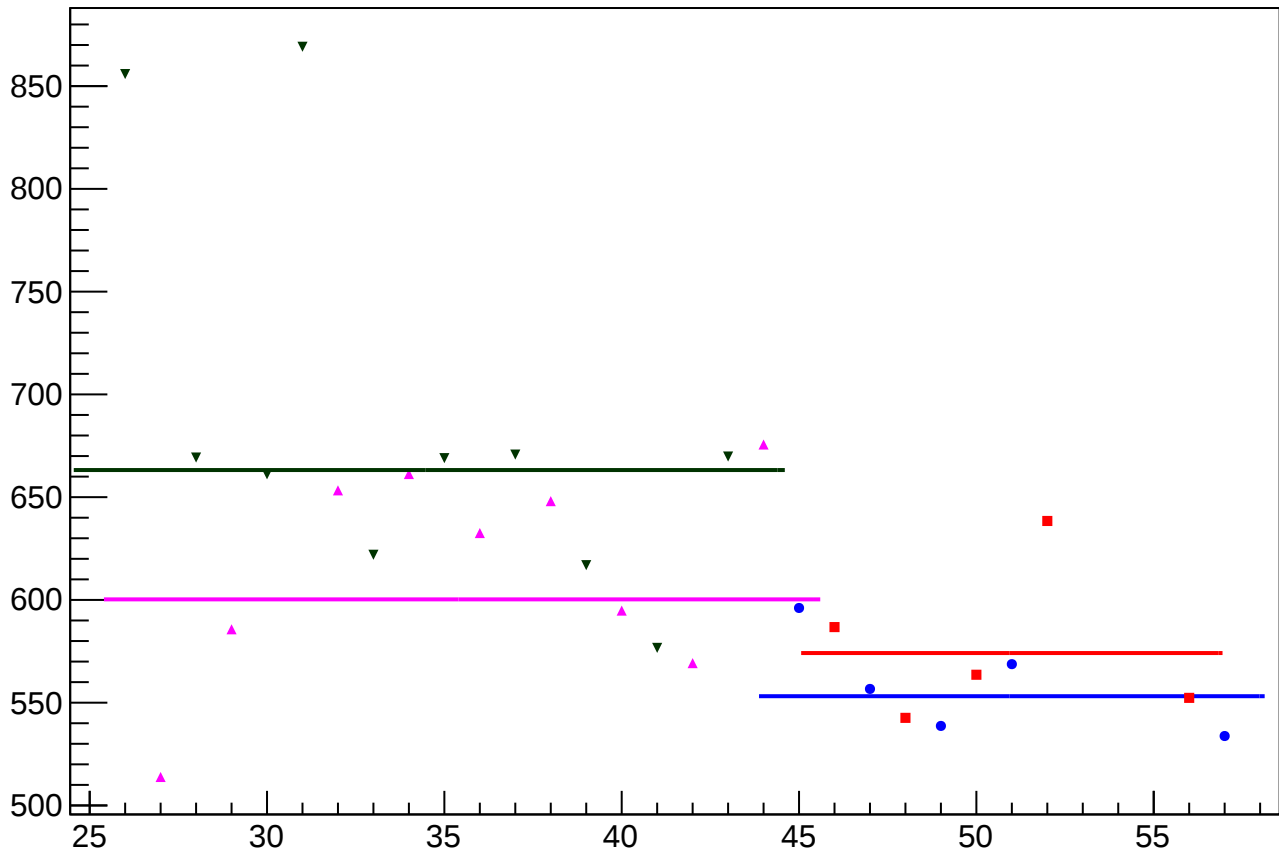
Right Out: 247.173 $\pm$ 370.654  $\chi^2$ /NDF: 7.0/4

Left In: 703.901 $\pm$ 254.767  $\chi^2$ /NDF: 9.4/8

208.162 $\pm$ 223.571  $\chi^2$ /NDF: 11.1/14

557.357 $\pm$ 209.954  $\chi^2$ /NDF: 17.4/13

# asym\_dsl\_correction\_rms vs slug



Right In: 553.155+/-0.245  $\chi^2/\text{NDF}$ : 9218.9/4

Left Out: 663.196+/-0.207  $\chi^2/\text{NDF}$ :126991.2/9

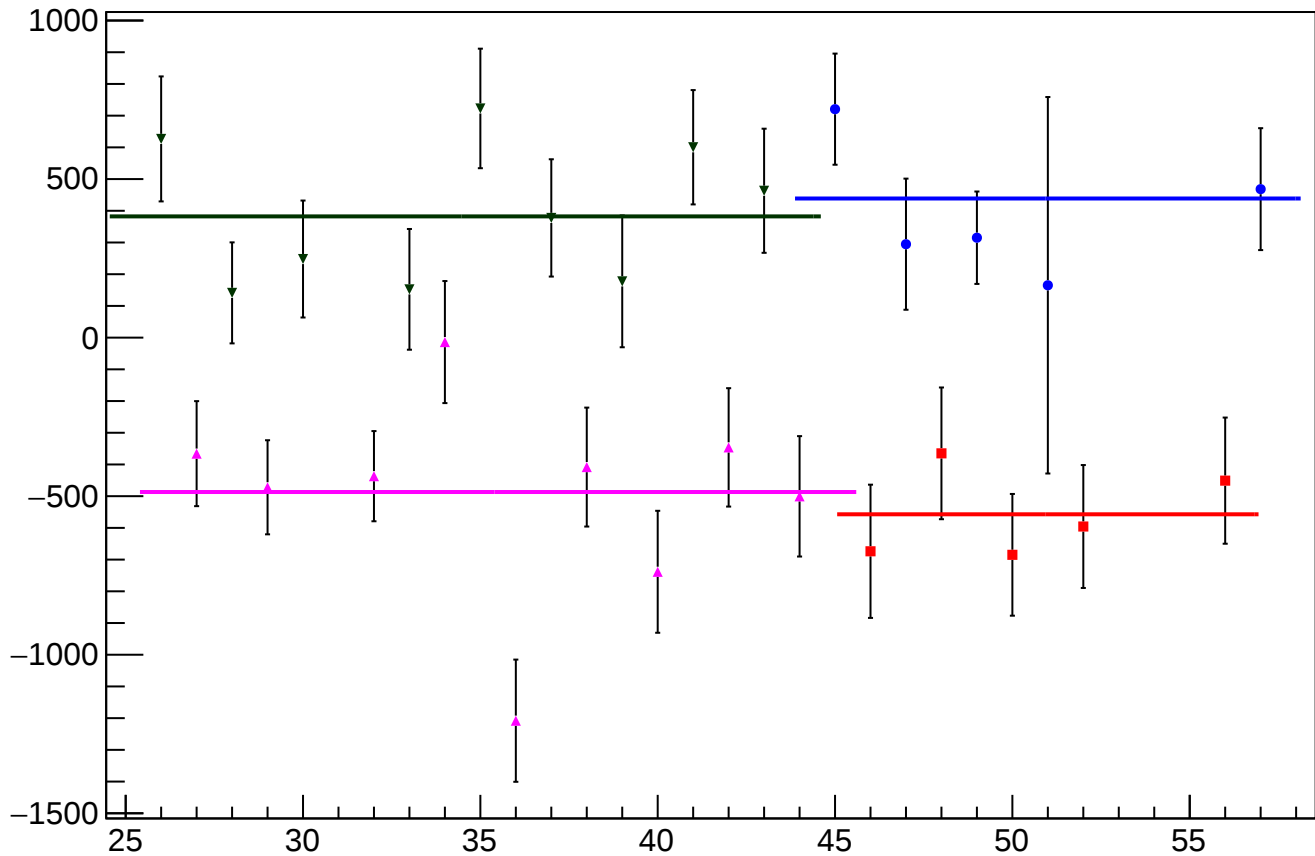
617.270+/-0.158  $\chi^2/\text{NDF}$ : 254030.6/14

Right Out: 574.154+/-0.262  $\chi^2/\text{NDF}$ : 15933.5/4

591.889+/-0.148  $\chi^2/\text{NDF}$ : 114485.1/13

Left In: 600.267+/-0.180  $\chi^2/\text{NDF}$ :91809.8/8

# reg\_asym\_dsr\_mean vs slug



Right In:  $438.750 \pm 86.721$   $\chi^2/\text{NDF}: 4.0/4$

Left Out:  $382.318 \pm 62.068$   $\chi^2/\text{NDF}: 11.7/8$

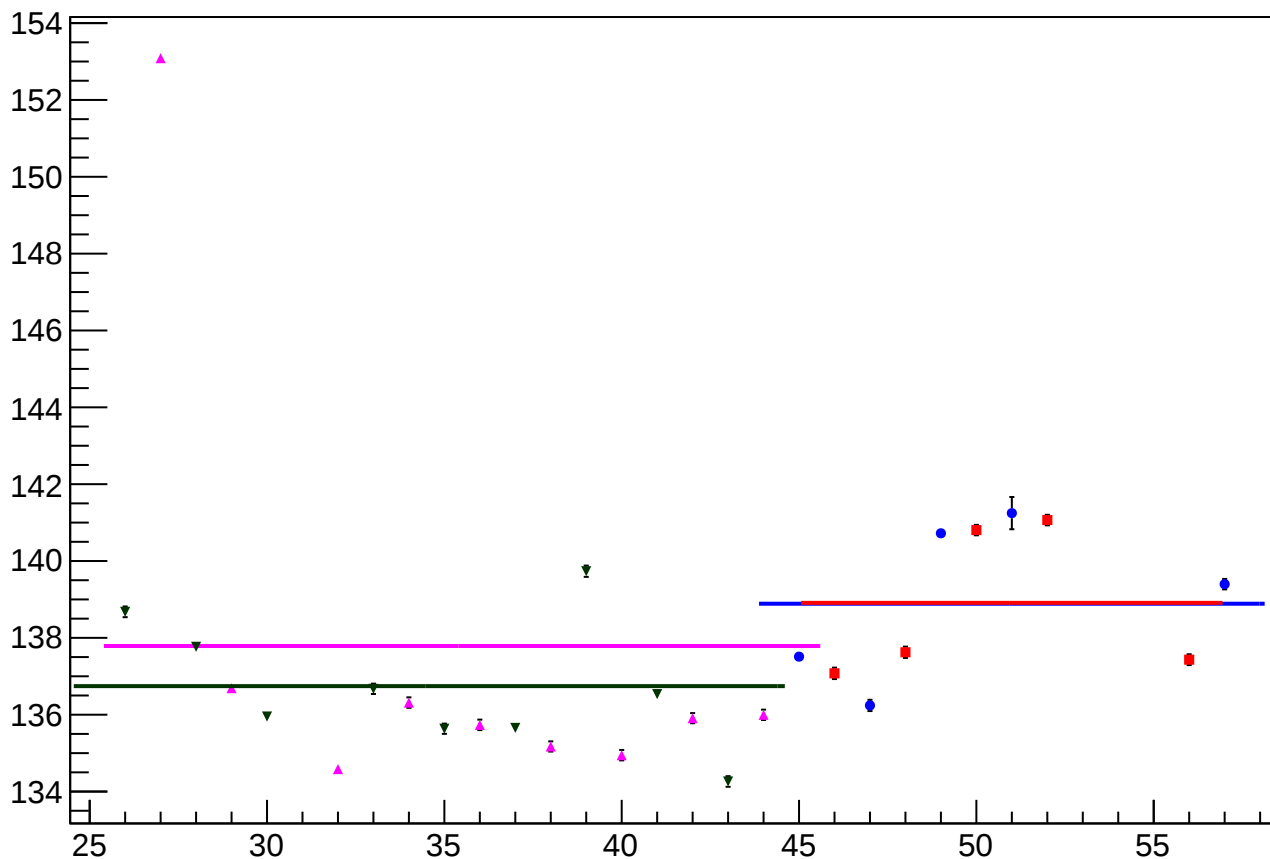
Right Out:  $-557.133 \pm 89.491$   $\chi^2/\text{NDF}: 1.9/4$

Left In:  $-486.864 \pm 58.008$   $\chi^2/\text{NDF}: 23.2/8$

$401.433 \pm 50.473$   $\chi^2/\text{NDF}: 16.0/13$

$-507.653 \pm 48.676$   $\chi^2/\text{NDF}: 25.5/13$

# reg\_asym\_dsr\_rms vs slug



Right In:  $138.889 \pm 0.061$   $\chi^2/\text{NDF}$ : 813.6/4

Left Out:  $136.744 \pm 0.044$   $\chi^2/\text{NDF}$ : 1188.8/8

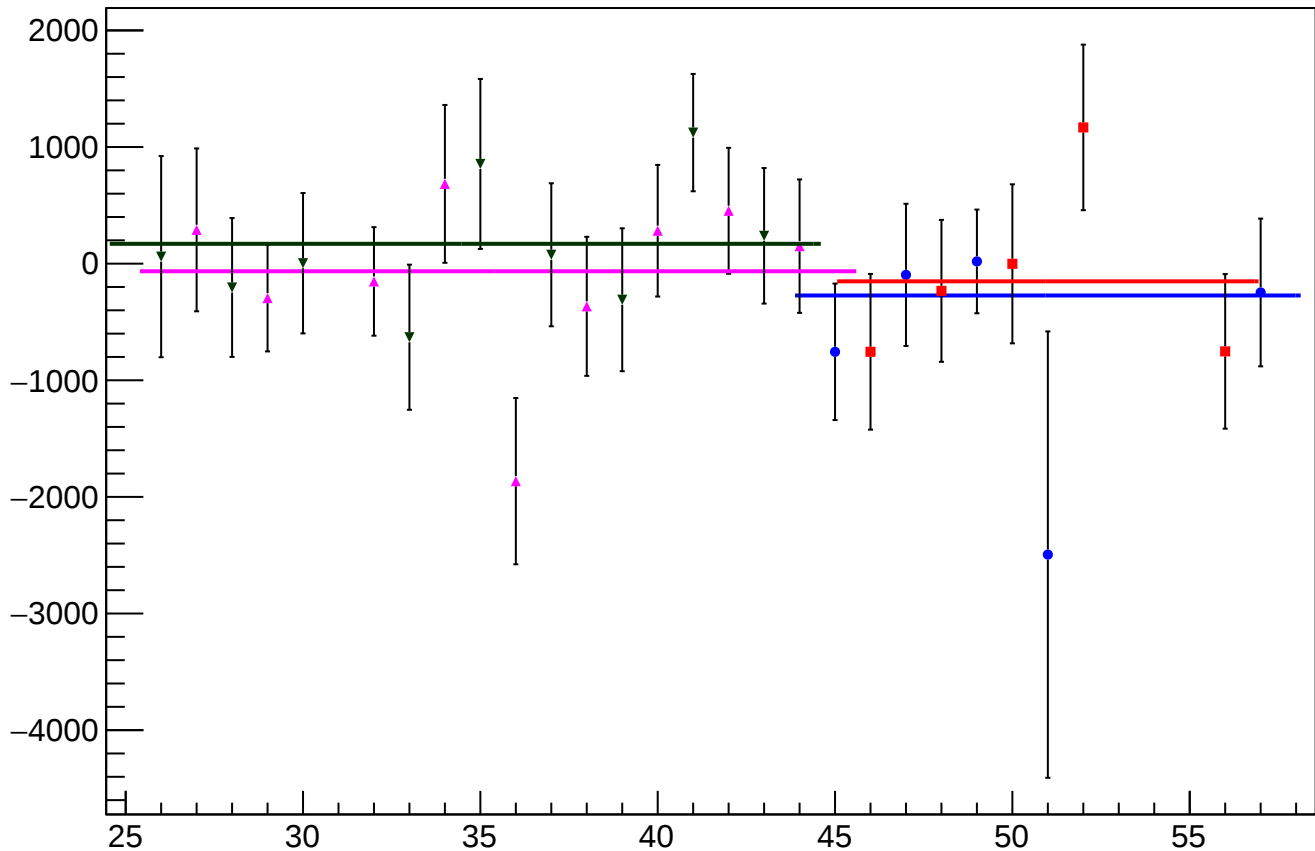
Right Out:  $138.911 \pm 0.063$   $\chi^2/\text{NDF}$ : 781.7/4

Left In:  $137.788 \pm 0.041$   $\chi^2/\text{NDF}$ : 19747.4/8

$137.470 \pm 0.036$   $\chi^2/\text{NDF}$ : 2811.4/13

$138.120 \pm 0.034$   $\chi^2/\text{NDF}$ : 20750.9/13

# asym\_dsr\_correction\_mean vs slug



Right In:  $-272.875 \pm 272.808$   $\chi^2/\text{NDF}$ : 2.5/4

Left Out:  $170.118 \pm 205.740$   $\chi^2/\text{NDF}$ : 7.3/8

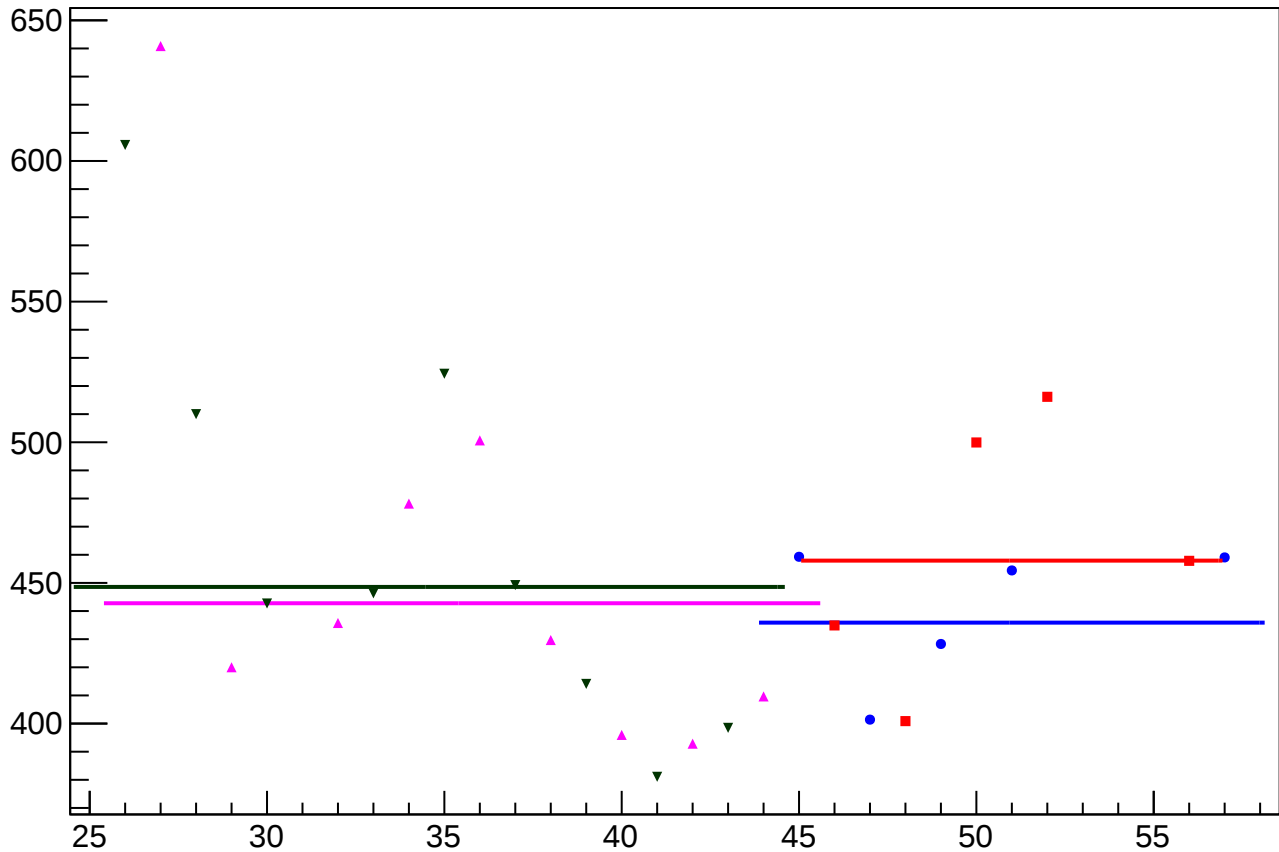
Right Out:  $-151.631 \pm 296.726$   $\chi^2/\text{NDF}$ : 5.2/4

Left In:  $-65.142 \pm 188.837$   $\chi^2/\text{NDF}$ : 9.8/8

$9.510 \pm 164.264$   $\chi^2/\text{NDF}$ : 11.5/13

$-90.073 \pm 159.312$   $\chi^2/\text{NDF}$ : 15.1/13

# asym\_dsr\_correction\_rms vs slug



Right In: 435.881 $\pm$ 0.193  $\chi^2$ /NDF: 13050.9/4

Left Out: 448.574 $\pm$ 0.145  $\chi^2$ /NDF:166684.5/8

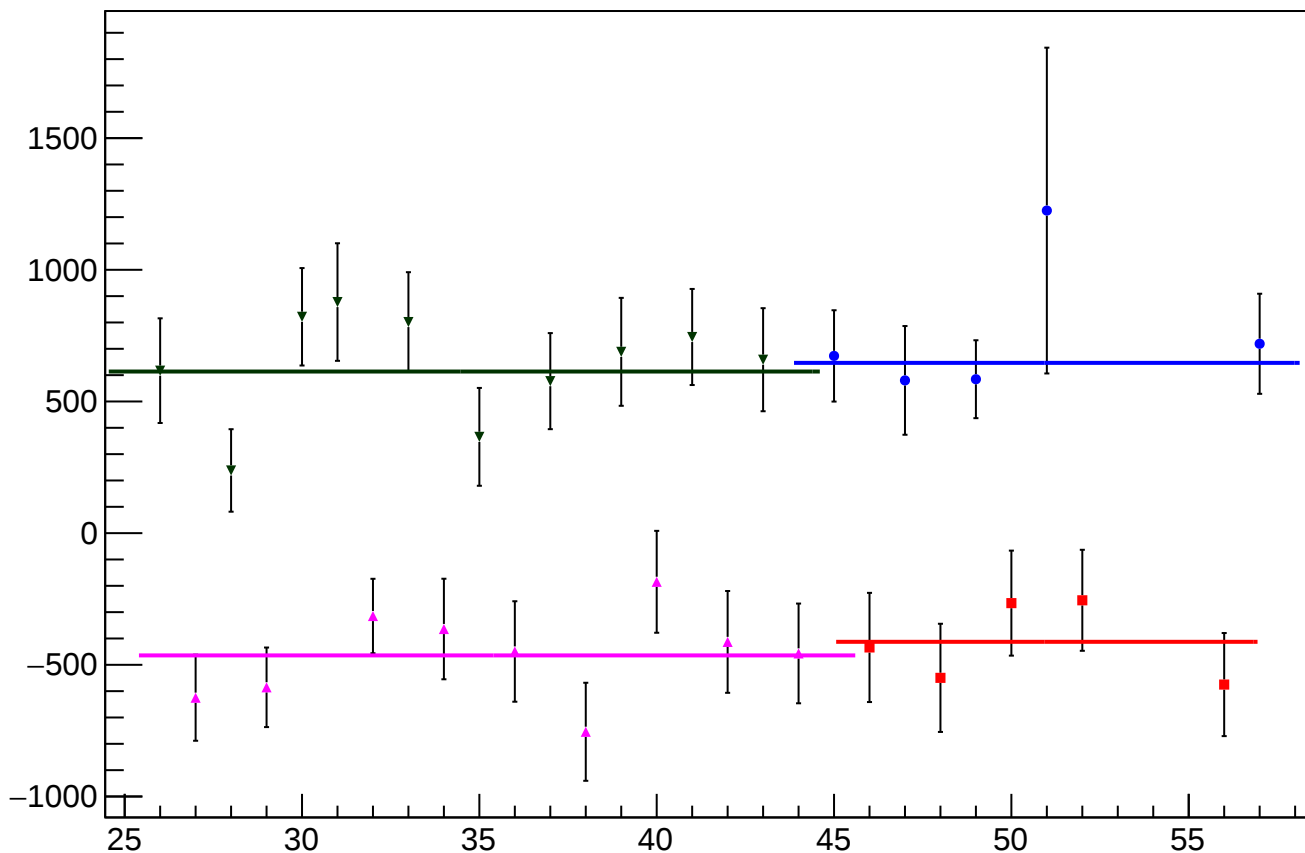
Right Out: 457.925 $\pm$ 0.210  $\chi^2$ /NDF: 41023.3/4

Left In: 442.773 $\pm$ 0.134  $\chi^2$ /NDF:223505.8/8

443.972 $\pm$ 0.116  $\chi^2$ /NDF: 182494.9/13

447.141 $\pm$ 0.113  $\chi^2$ /NDF: 268241.0/13

# reg\_asym\_left\_avg\_mean vs slug



Right In: 646.605 $\pm$ 86.799  $\chi^2$ /NDF: 1.3/4

Left Out: 613.726 $\pm$ 59.519  $\chi^2$ /NDF:11.9/9

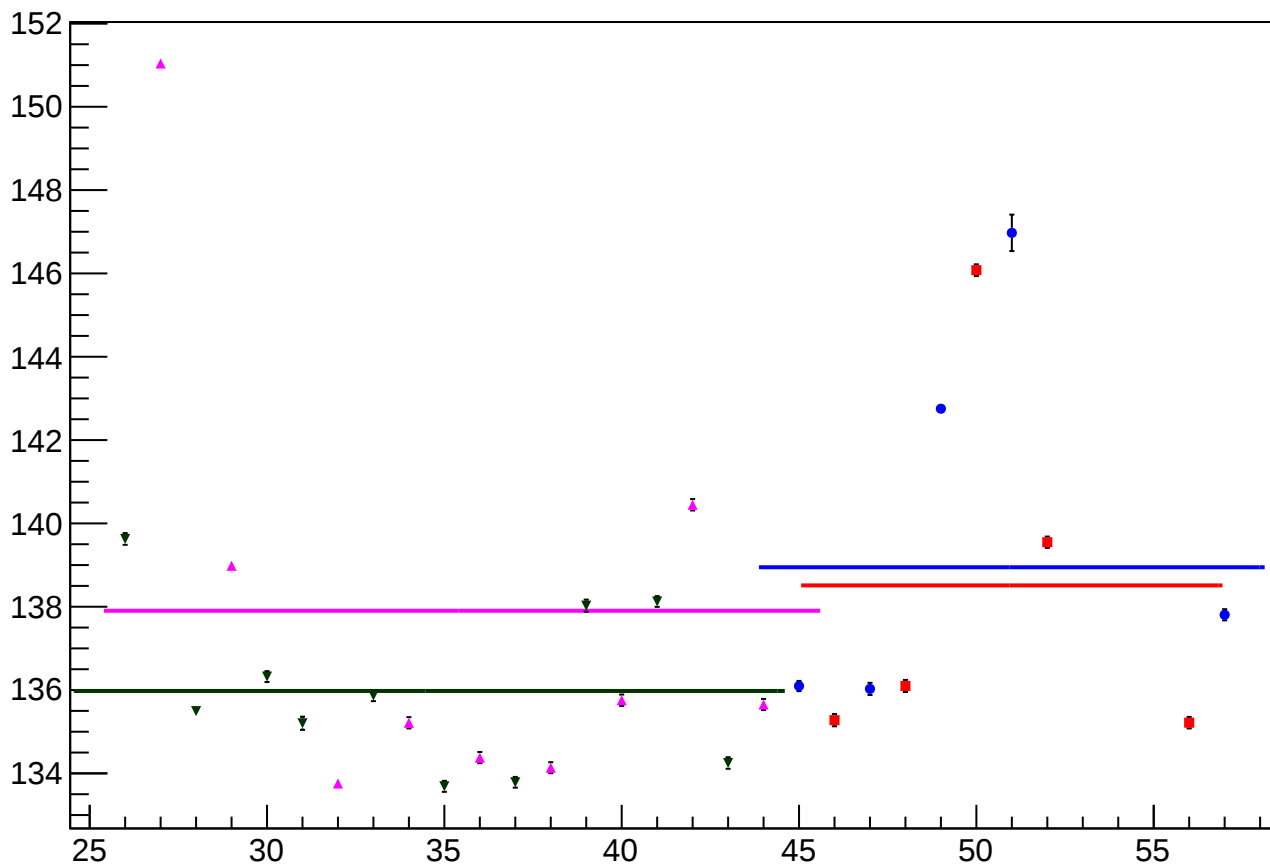
Right Out: -412.628 $\pm$ 89.293  $\chi^2$ /NDF: 2.4/4

Left In: -464.245 $\pm$ 58.079  $\chi^2$ /NDF:7.6/8

624.242 $\pm$ 49.087  $\chi^2$ /NDF: 13.3/14

-448.900 $\pm$ 48.687  $\chi^2$ /NDF: 10.2/13

# reg\_asym\_left\_avg\_rms vs slug



Right In:  $138.947 \pm 0.061$   $\chi^2/\text{NDF}$ : 2673.0/4

Left Out:  $135.978 \pm 0.042$   $\chi^2/\text{NDF}$ : 1950.2/9

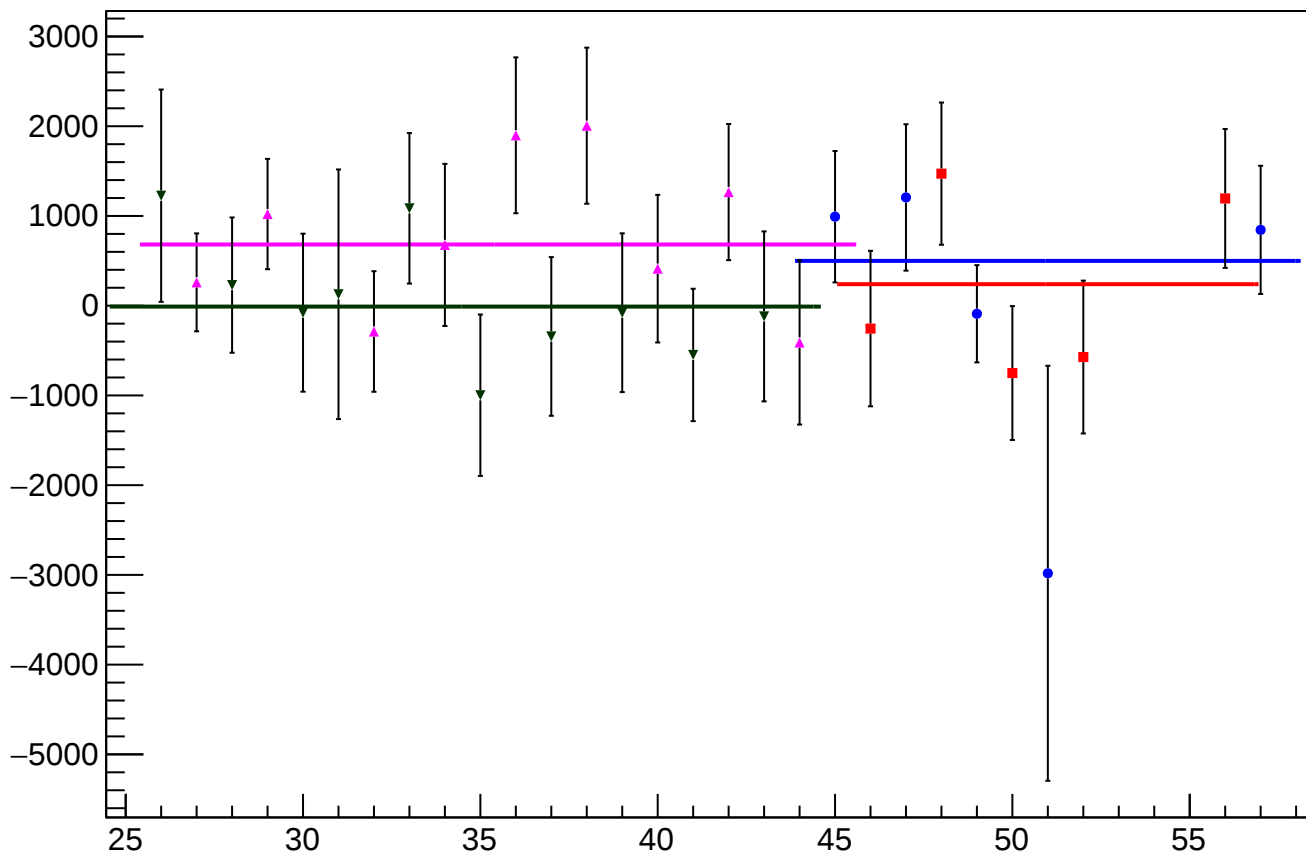
Right Out:  $138.512 \pm 0.063$   $\chi^2/\text{NDF}$ : 4267.6/4

Left In:  $137.903 \pm 0.041$   $\chi^2/\text{NDF}$ : 17511.1/8

$136.928 \pm 0.035$   $\chi^2/\text{NDF}$ : 6214.7/14

$138.084 \pm 0.034$   $\chi^2/\text{NDF}$ : 21844.0/13

# asym\_left\_avg\_correction\_mean vs slug



Right In: 499.319 $\pm$ 334.777  $\chi^2$ /NDF: 4.9/4

Left Out: -9.921 $\pm$ 283.426  $\chi^2$ /NDF: 4.8/9

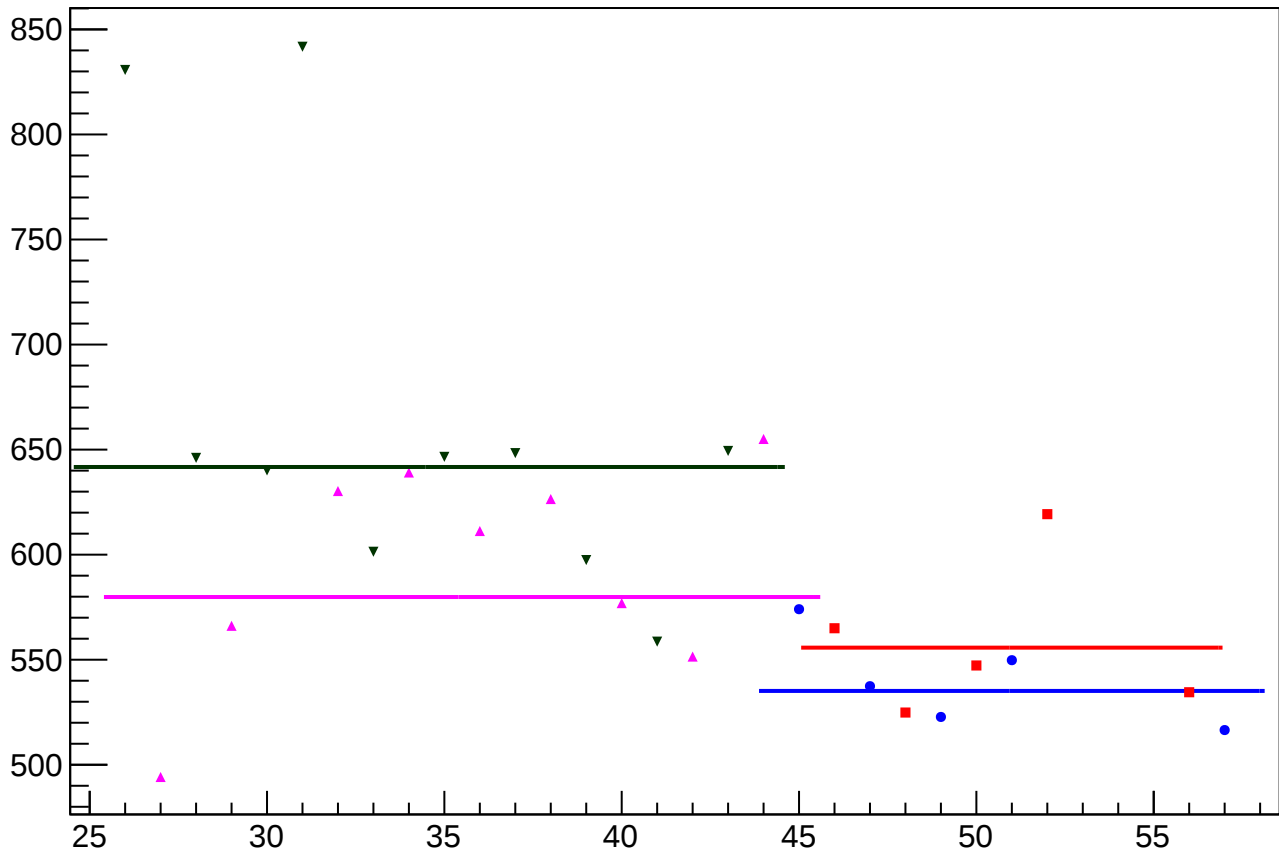
Right Out: 239.710 $\pm$ 358.783  $\chi^2$ /NDF: 6.9/4

Left In: 682.257 $\pm$ 246.151  $\chi^2$ /NDF: 9.4/8

202.689 $\pm$ 216.314  $\chi^2$ /NDF: 11.0/14

540.620 $\pm$ 202.974  $\chi^2$ /NDF: 17.4/13

# asym\_left\_avg\_correction\_rms vs slug



Right In: 535.143+/-0.237  $\chi^2/\text{NDF}$ : 8145.0/4

Left Out: 641.730+/-0.200  $\chi^2/\text{NDF}$ :127789.4/9

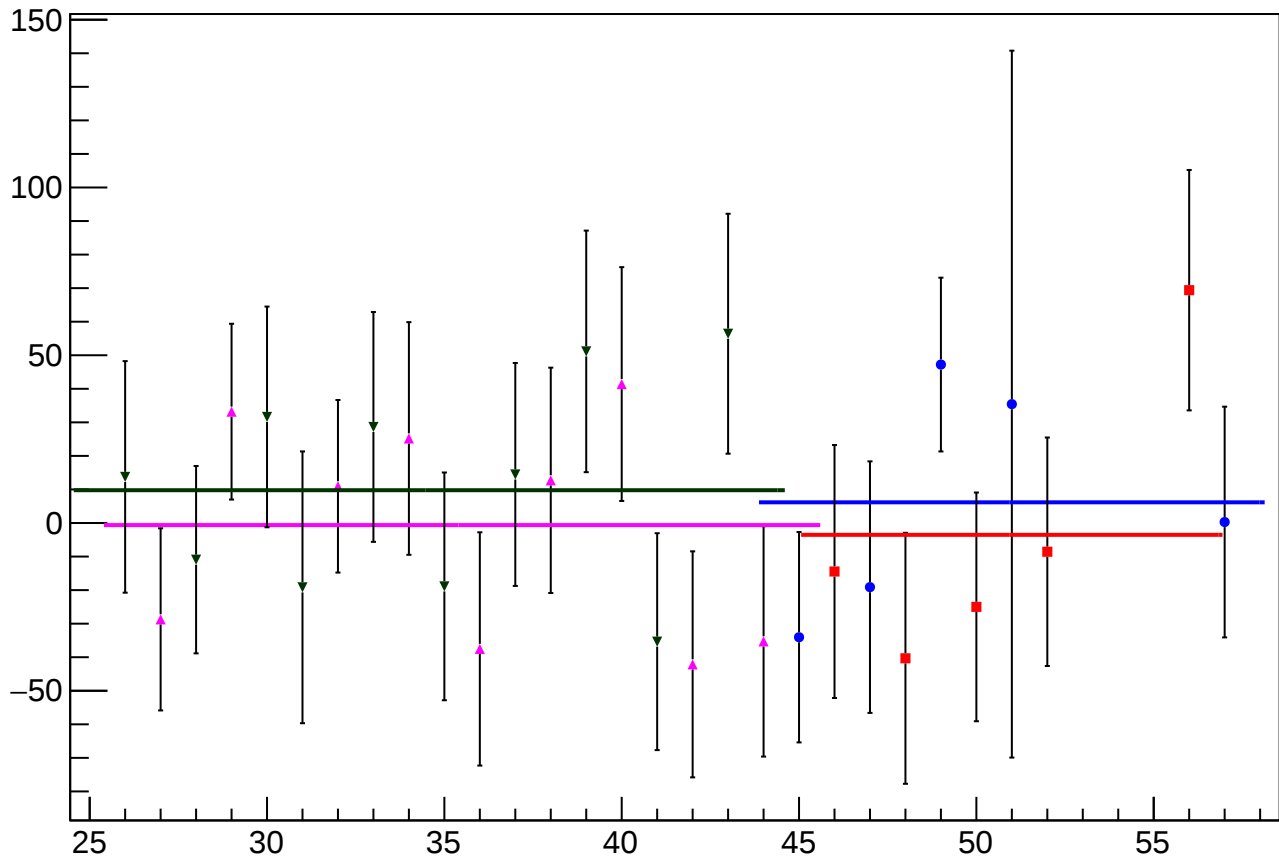
Right Out: 555.746+/-0.254  $\chi^2/\text{NDF}$ : 16158.4/4

Left In: 579.843+/-0.174  $\chi^2/\text{NDF}$ :94882.5/8

597.229+/-0.153  $\chi^2/\text{NDF}$ : 254027.3/14

572.131+/-0.144  $\chi^2/\text{NDF}$ : 117175.1/13

# reg\_asym\_left\_dd\_mean vs slug



Right In:  $6.165 \pm 15.511$   $\chi^2/\text{NDF}$ : 4.7/4

Left Out:  $9.773 \pm 10.664$   $\chi^2/\text{NDF}$ : 7.5/9

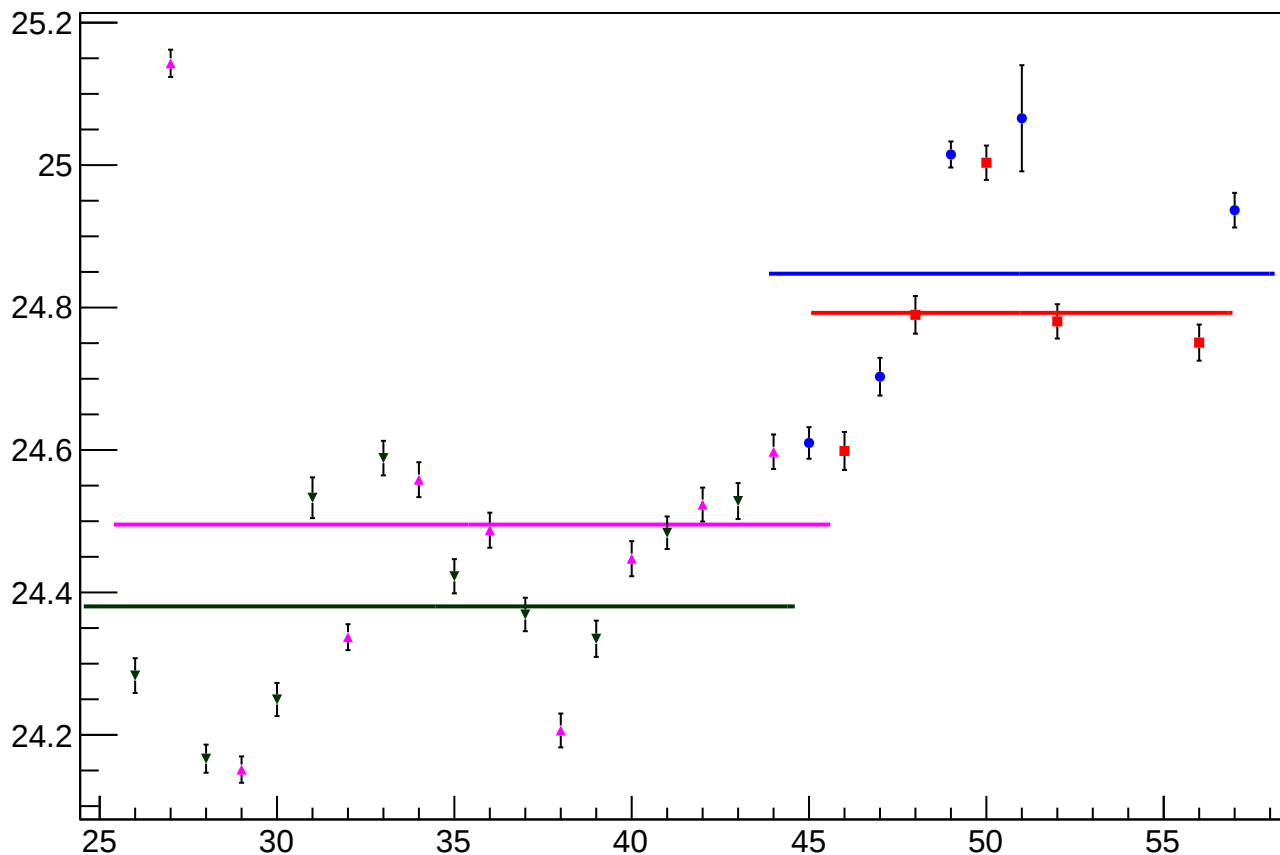
Right Out:  $-3.526 \pm 15.970$   $\chi^2/\text{NDF}$ : 5.6/4

Left In:  $-0.617 \pm 10.300$   $\chi^2/\text{NDF}$ : 8.8/8

$8.615 \pm 8.787$   $\chi^2/\text{NDF}$ : 12.3/14

$-1.472 \pm 8.656$   $\chi^2/\text{NDF}$ : 14.4/13

# reg\_asym\_left\_dd\_rms vs slug



Right In:  $24.848 \pm 0.011$   $\chi^2/\text{NDF}$ : 250.3/4

Left Out:  $24.380 \pm 0.008$   $\chi^2/\text{NDF}$ : 328.2/9

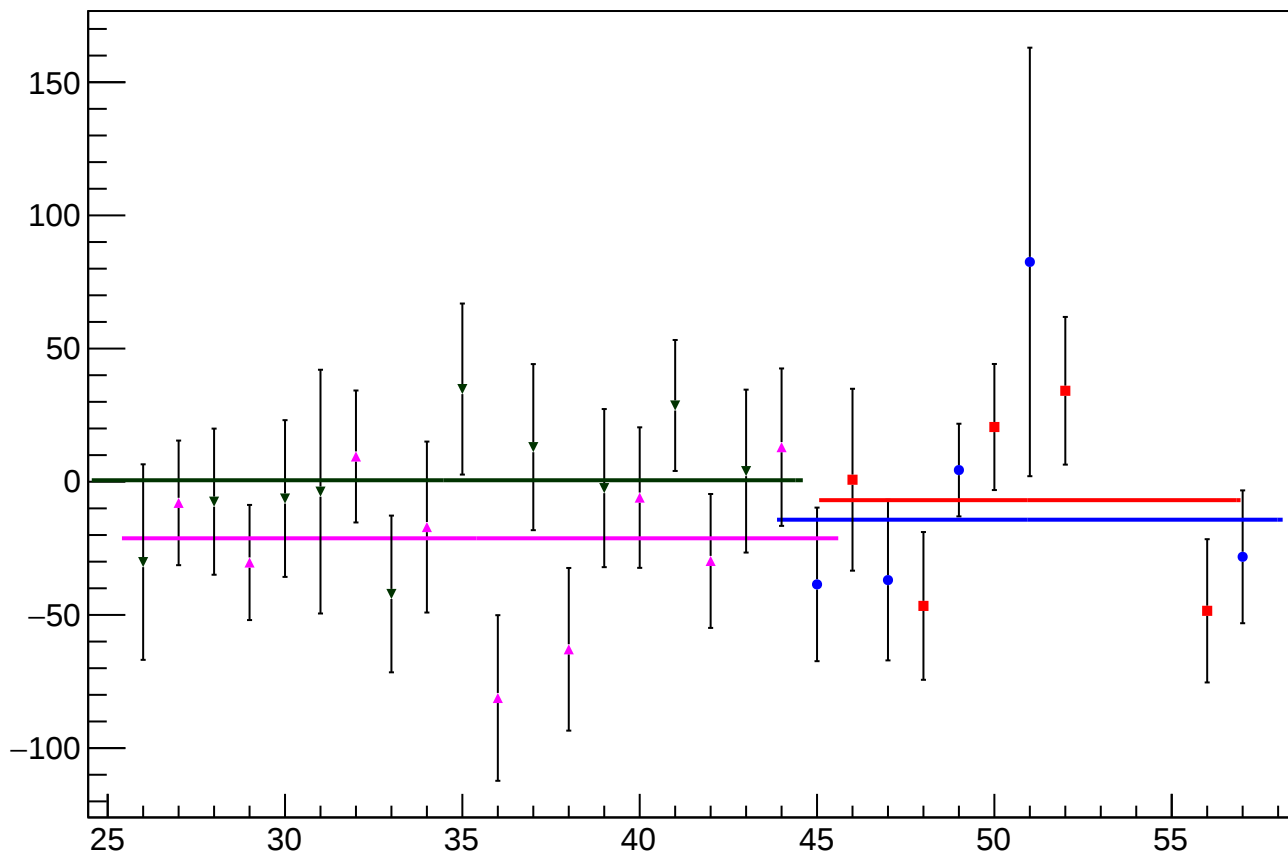
Right Out:  $24.793 \pm 0.011$   $\chi^2/\text{NDF}$ : 132.3/4

Left In:  $24.495 \pm 0.007$   $\chi^2/\text{NDF}$ : 1736.8/8

$24.530 \pm 0.006$   $\chi^2/\text{NDF}$ : 1810.2/14

$24.583 \pm 0.006$   $\chi^2/\text{NDF}$ : 2358.6/13

# asym\_left\_dd\_correction\_mean vs slug



Right In:  $-14.248 \pm 11.647$   $\chi^2/\text{NDF}$ : 4.2/4

Left Out:  $0.565 \pm 9.660$   $\chi^2/\text{NDF}$ : 5.6/9

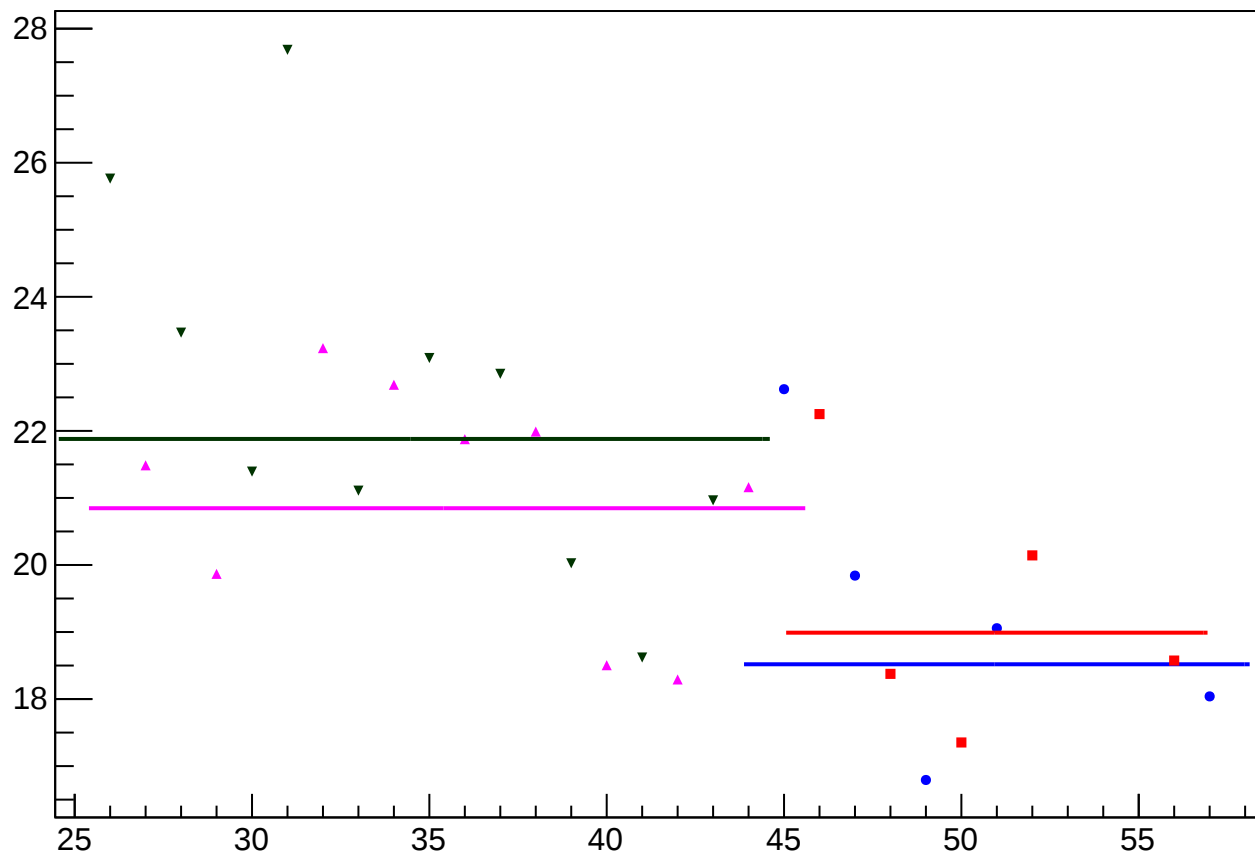
Right Out:  $-6.912 \pm 12.284$   $\chi^2/\text{NDF}$ : 8.0/4

Left In:  $-21.229 \pm 8.825$   $\chi^2/\text{NDF}$ : 9.4/8

$-5.472 \pm 7.435$   $\chi^2/\text{NDF}$ : 10.7/14

$-16.355 \pm 7.167$   $\chi^2/\text{NDF}$ : 18.3/13

# asym\_left\_dd\_correction\_rms vs slug



Right In:  $18.519 \pm 0.008$   $\chi^2/\text{NDF}$ : 64888.2/4

Left Out:  $21.880 \pm 0.007$   $\chi^2/\text{NDF}$ : 112714.4/9

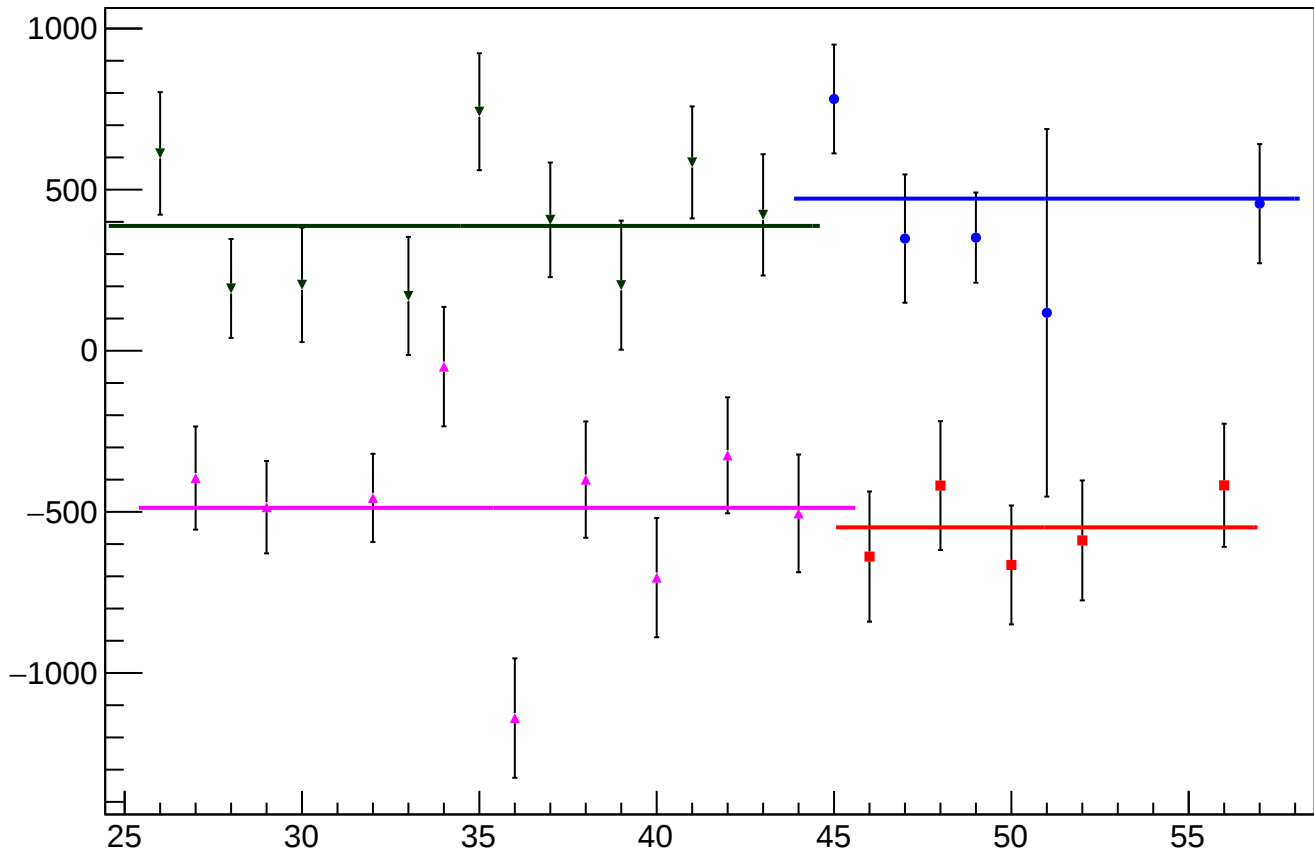
Right Out:  $18.990 \pm 0.009$   $\chi^2/\text{NDF}$ : 32736.5/4

Left In:  $20.847 \pm 0.006$   $\chi^2/\text{NDF}$ : 72407.5/8

$20.510 \pm 0.005$   $\chi^2/\text{NDF}$ : 276280.7/14

$20.215 \pm 0.005$   $\chi^2/\text{NDF}$ : 135274.3/13

# reg\_asym\_right\_avg\_mean vs slug



Right In:  $472.169 \pm 83.396$   $\chi^2/\text{NDF}$ : 4.9/4

Left Out:  $387.415 \pm 59.778$   $\chi^2/\text{NDF}$ : 11.5/8

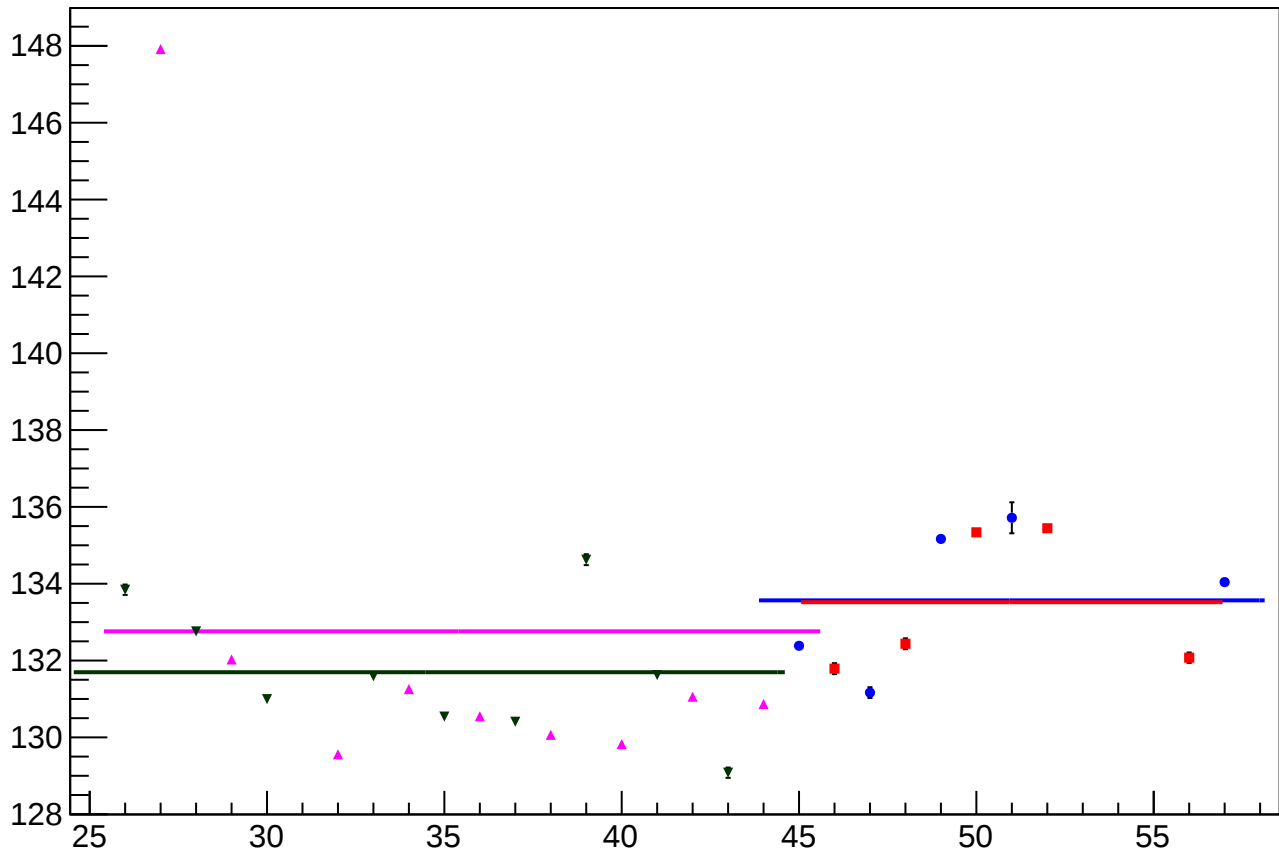
Right Out:  $-548.089 \pm 86.016$   $\chi^2/\text{NDF}$ : 1.5/4

Left In:  $-487.470 \pm 55.895$   $\chi^2/\text{NDF}$ : 20.8/8

$416.181 \pm 48.585$   $\chi^2/\text{NDF}$ : 17.0/13

$-505.467 \pm 46.868$   $\chi^2/\text{NDF}$ : 22.7/13

# reg\_asym\_right\_avg\_rms vs slug



Right In:  $133.567 \pm 0.059$   $\chi^2/\text{NDF}$ : 692.0/4

Left Out:  $131.696 \pm 0.042$   $\chi^2/\text{NDF}$ : 1383.5/8

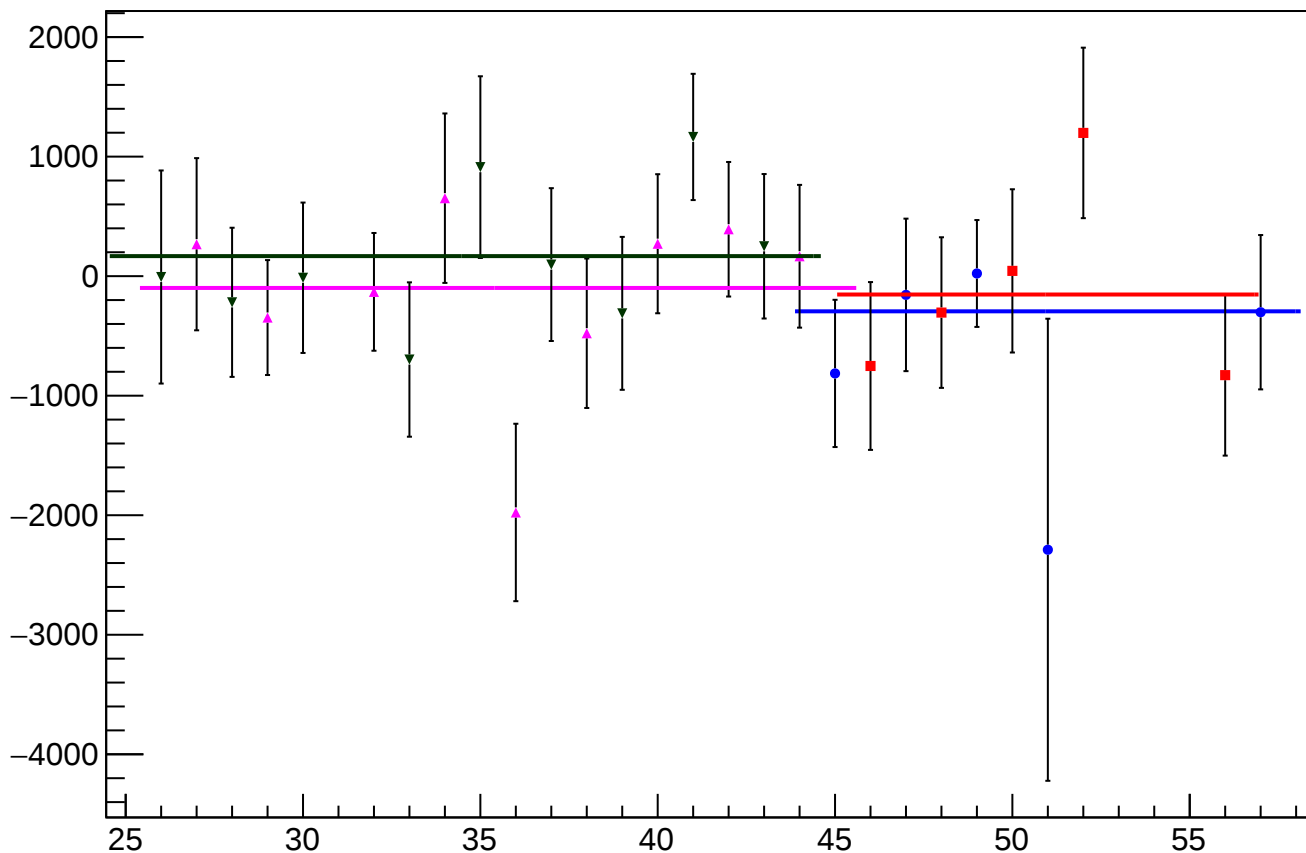
Right Out:  $133.519 \pm 0.061$   $\chi^2/\text{NDF}$ : 727.7/4

Left In:  $132.760 \pm 0.040$   $\chi^2/\text{NDF}$ : 20848.0/8

$132.331 \pm 0.034$   $\chi^2/\text{NDF}$ : 2740.2/13

$132.985 \pm 0.033$   $\chi^2/\text{NDF}$ : 21685.1/13

# asym\_right\_avg\_correction\_mean vs slug



Right In: -294.235+/-279.887  $\chi^2/\text{NDF}$ : 2.3/4

Left Out: 167.658+/-214.670  $\chi^2/\text{NDF}$ : 7.4/8

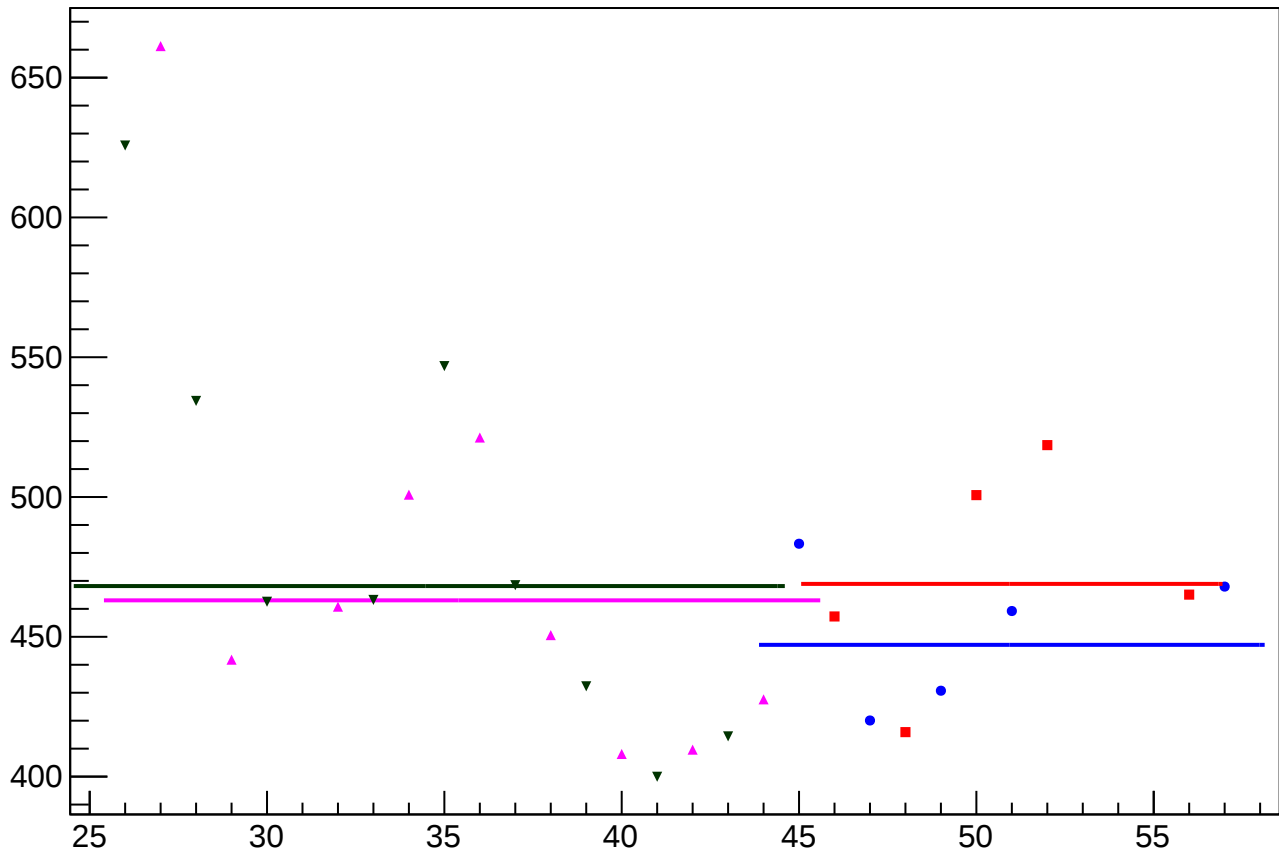
Right Out: -153.600+/-303.360  $\chi^2/\text{NDF}$ : 5.5/4

Left In: -98.634+/-197.418  $\chi^2/\text{NDF}$ : 9.8/8

-3.420+/-170.337  $\chi^2/\text{NDF}$ : 11.5/13

-114.987+/-165.466  $\chi^2/\text{NDF}$ : 15.3/13

# asym\_right\_avg\_correction\_rms vs slug



Right In: 447.127+/-0.198     $\chi^2/\text{NDF}$ : 15350.0/4

Left Out: 468.153+/-0.152     $\chi^2/\text{NDF}$ :162231.1/8

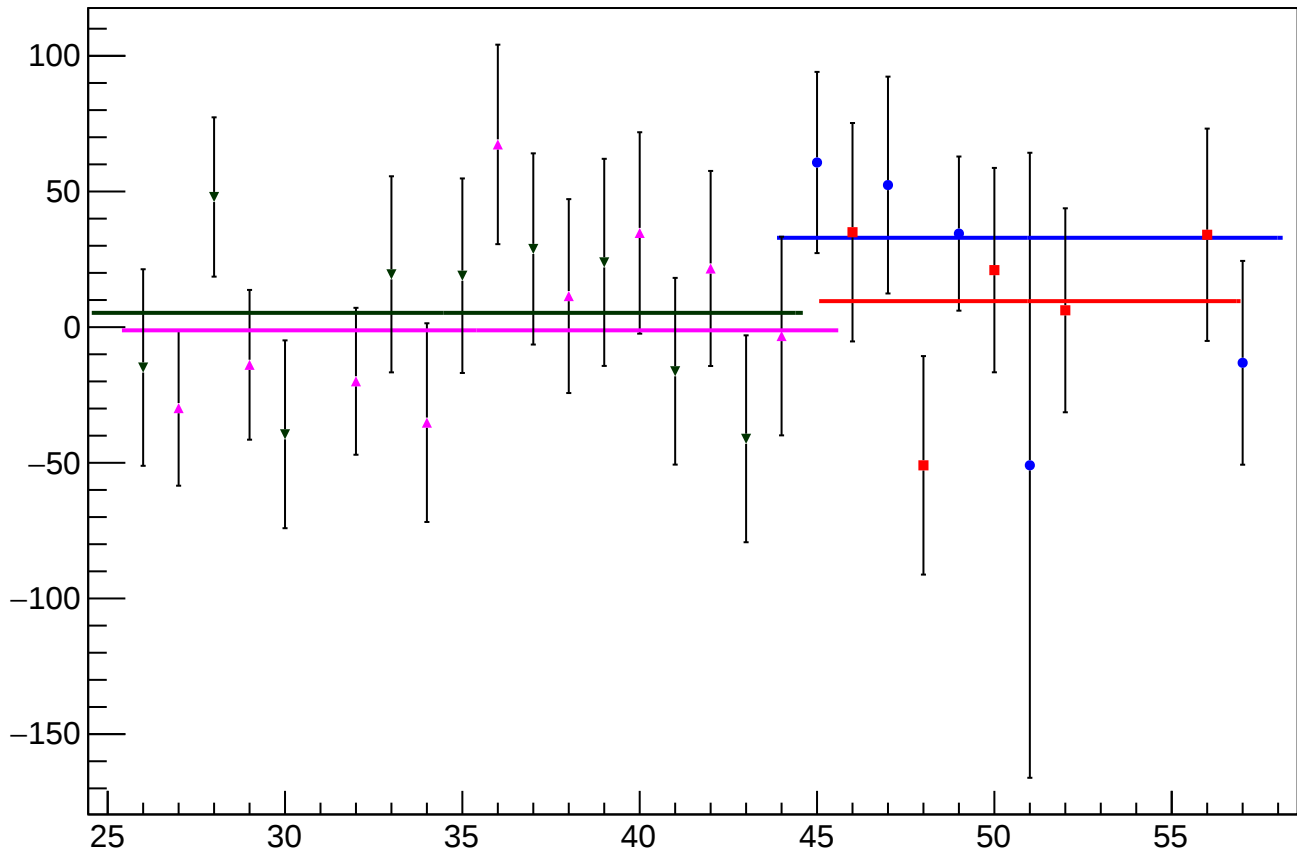
Right Out: 468.927+/-0.215     $\chi^2/\text{NDF}$ : 28795.9/4

Left In: 463.043+/-0.140     $\chi^2/\text{NDF}$ :217147.7/8

460.365+/-0.120     $\chi^2/\text{NDF}$ : 184687.2/13

464.794+/-0.117     $\chi^2/\text{NDF}$ : 246472.2/13

# reg\_asym\_right\_dd\_mean vs slug



Right In: 32.936 $\pm$ 16.792  $\chi^2$ /NDF: 3.0/4

Left Out: 5.270 $\pm$ 11.684  $\chi^2$ /NDF: 7.0/8

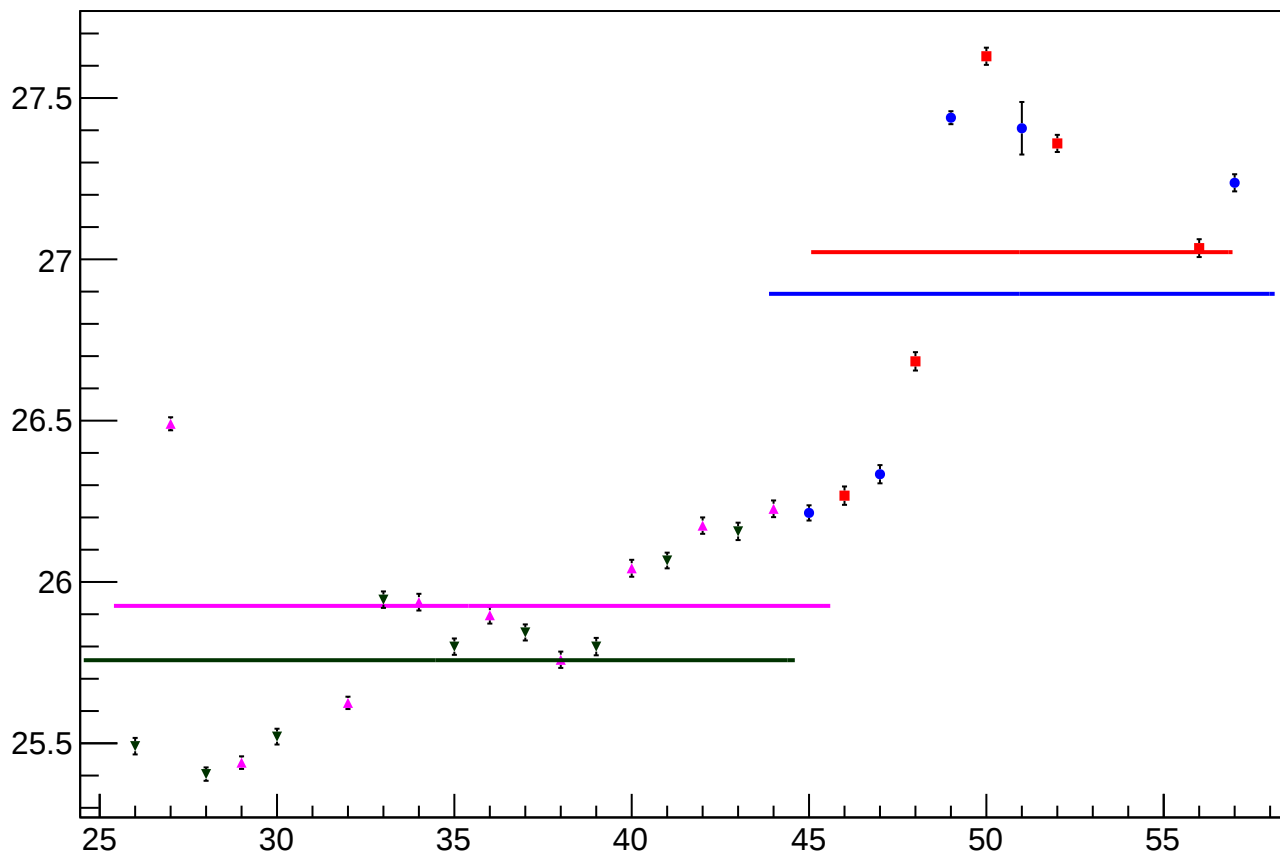
Right Out: 9.589 $\pm$ 17.409  $\chi^2$ /NDF: 3.1/4

Left In: -1.172 $\pm$ 10.902  $\chi^2$ /NDF: 7.5/8

14.295 $\pm$ 9.591  $\chi^2$ /NDF: 11.7/13

1.859 $\pm$ 9.240  $\chi^2$ /NDF: 10.9/13

# reg\_asym\_right\_dd\_rms vs slug



Right In: 26.893±/0.012  $\chi^2/\text{NDF}$ : 2164.7/4

Left Out: 25.758±/0.008  $\chi^2/\text{NDF}$ :942.7/8

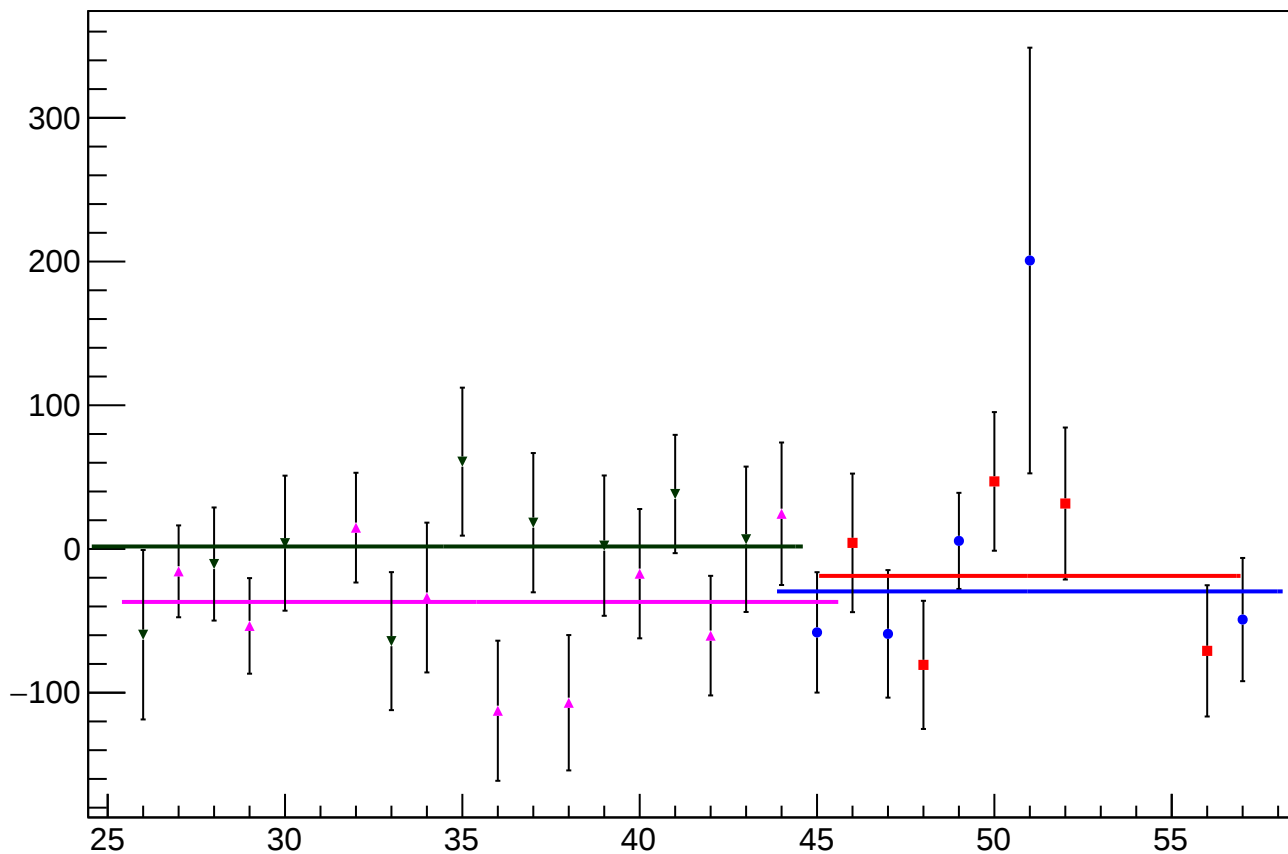
Right Out: 27.022±/0.012  $\chi^2/\text{NDF}$ : 1524.9/4

Left In: 25.926±/0.008  $\chi^2/\text{NDF}$ :1940.9/8

26.128±/0.007  $\chi^2/\text{NDF}$ : 9270.2/13

26.235±/0.007  $\chi^2/\text{NDF}$ : 9163.4/13

# asym\_right\_dd\_correction\_mean vs slug



Right In:  $-29.518 \pm 19.757$   $\chi^2/\text{NDF}$ : 4.6/4

Left Out:  $1.740 \pm 15.763$   $\chi^2/\text{NDF}$ : 5.3/8

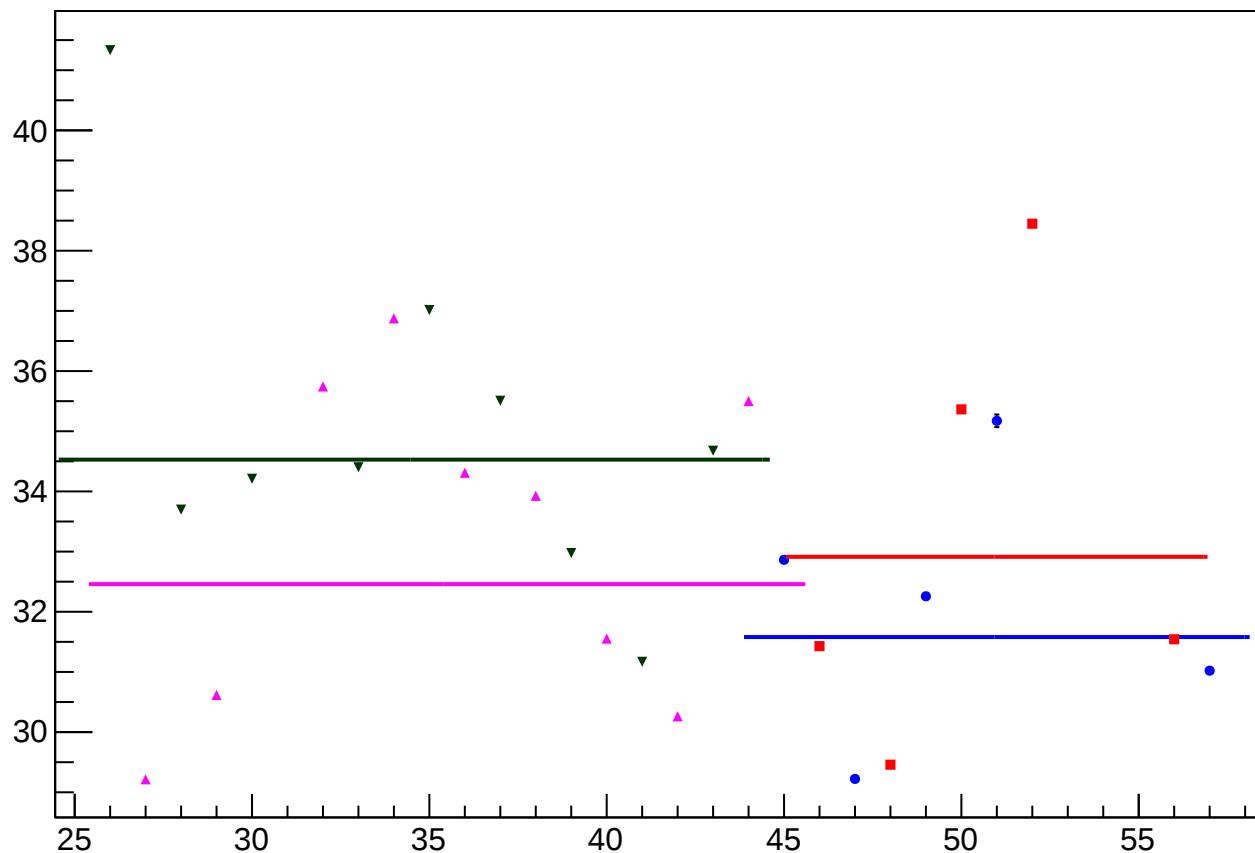
Right Out:  $-18.727 \pm 21.319$   $\chi^2/\text{NDF}$ : 6.2/4

Left In:  $-36.849 \pm 13.752$   $\chi^2/\text{NDF}$ : 9.2/8

$-10.418 \pm 12.322$   $\chi^2/\text{NDF}$ : 11.5/13

$-31.524 \pm 11.556$   $\chi^2/\text{NDF}$ : 15.9/13

# asym\_right\_dd\_correction\_rms vs slug



Right In: 31.580+/-0.014  $\chi^2/\text{NDF}$ : 9864.1/4

Left Out: 34.528+/-0.011  $\chi^2/\text{NDF}$ : 48487.1/8

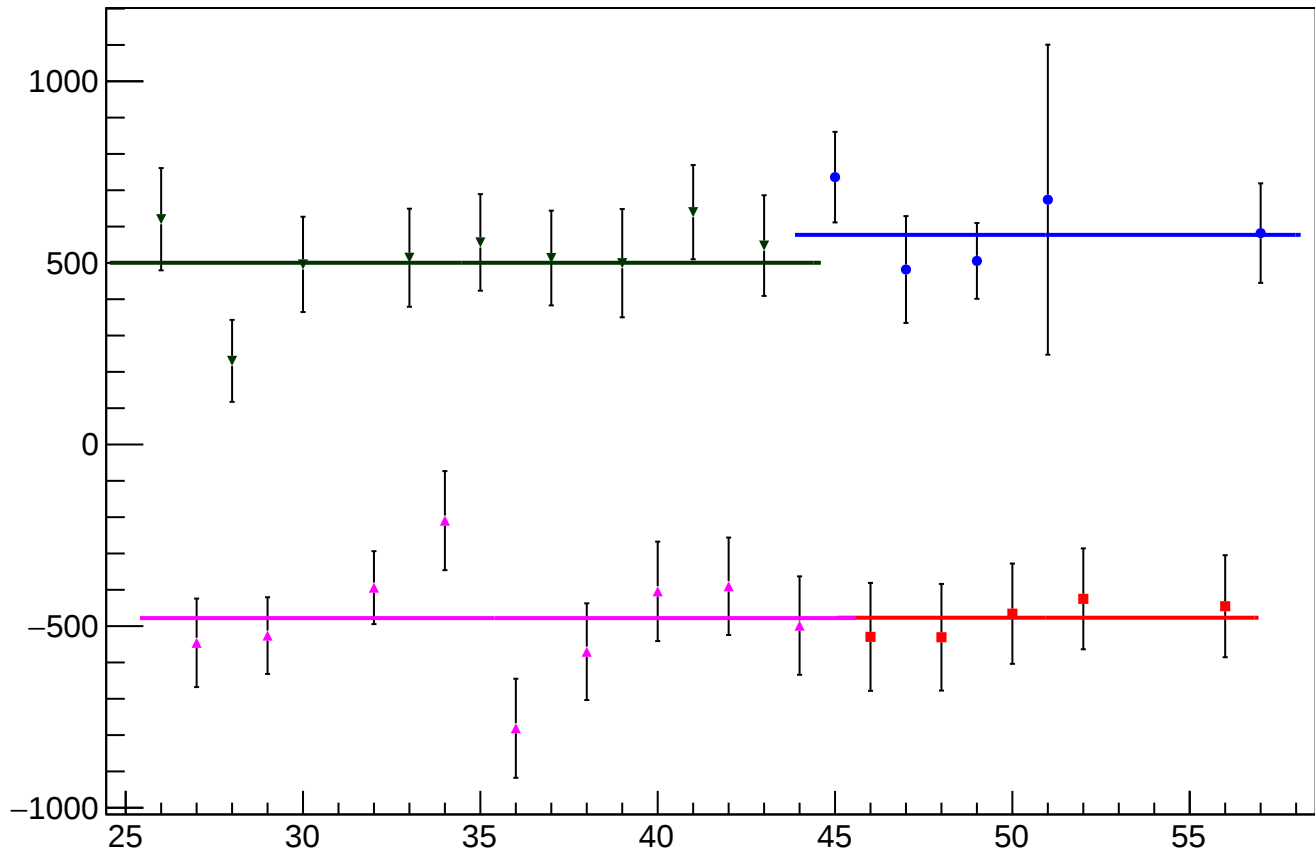
Right Out: 32.913+/-0.015  $\chi^2/\text{NDF}$ : 42780.0/4

Left In: 32.459+/-0.010  $\chi^2/\text{NDF}$ : 74635.6/8

33.382+/-0.009  $\chi^2/\text{NDF}$ : 85568.6/13

32.593+/-0.008  $\chi^2/\text{NDF}$ : 118055.6/13

# reg\_asym\_us\_avg\_mean vs slug



Right In: 577.188 $\pm$ 61.857  $\chi^2$ /NDF: 2.6/4

Left Out: 500.356 $\pm$ 44.116  $\chi^2$ /NDF: 7.9/8

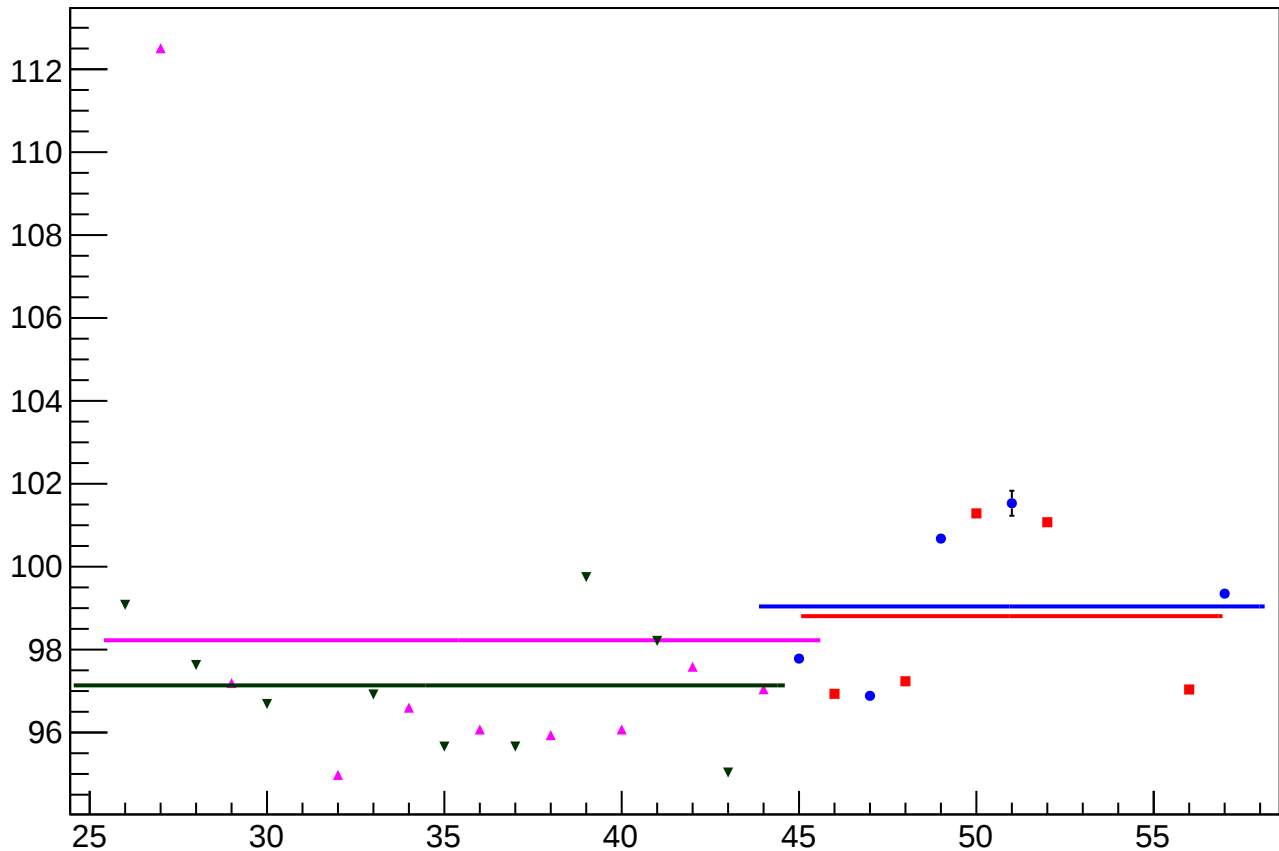
Right Out: -476.843 $\pm$ 63.670  $\chi^2$ /NDF: 0.5/4

Left In: -477.865 $\pm$ 41.389  $\chi^2$ /NDF: 11.3/8

526.260 $\pm$ 35.917  $\chi^2$ /NDF: 11.5/13

-477.561 $\pm$ 34.701  $\chi^2$ /NDF: 11.7/13

# reg\_asym\_us\_avg\_rms vs slug



Right In: 99.041+/-0.044  $\chi^2/\text{NDF}$ : 1204.5/4

Left Out: 97.137+/-0.031  $\chi^2/\text{NDF}$ : 2162.7/8

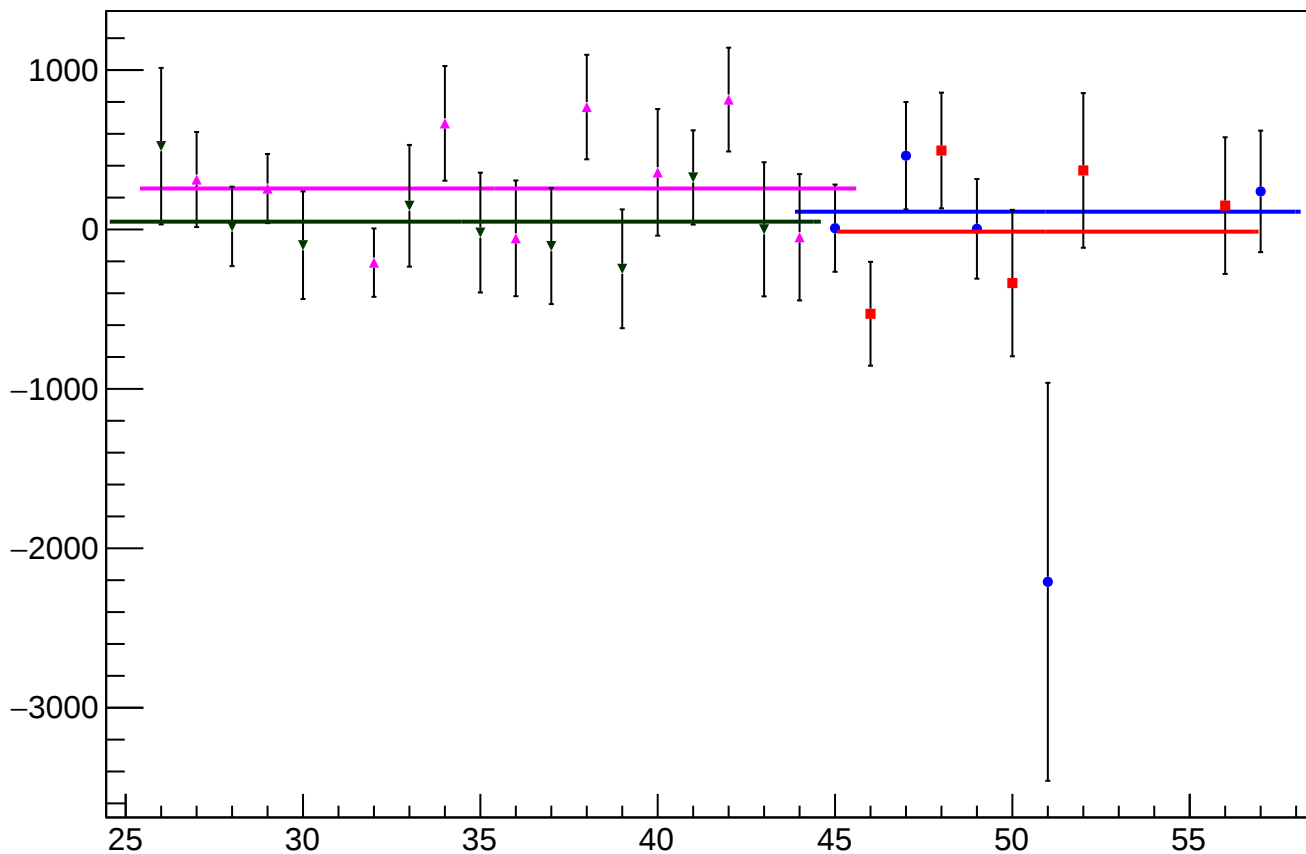
Right Out: 98.807+/-0.045  $\chi^2/\text{NDF}$ : 2041.2/4

Left In: 98.225+/-0.029  $\chi^2/\text{NDF}$ : 31817.4/8

97.779+/-0.025  $\chi^2/\text{NDF}$ : 4623.7/13

98.398+/-0.025  $\chi^2/\text{NDF}$ : 33975.9/13

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



Right In: 111.563 $\pm$ 158.262  $\chi^2$ /NDF: 4.9/4

Left Out: 49.096 $\pm$ 115.577  $\chi^2$ /NDF: 2.9/8

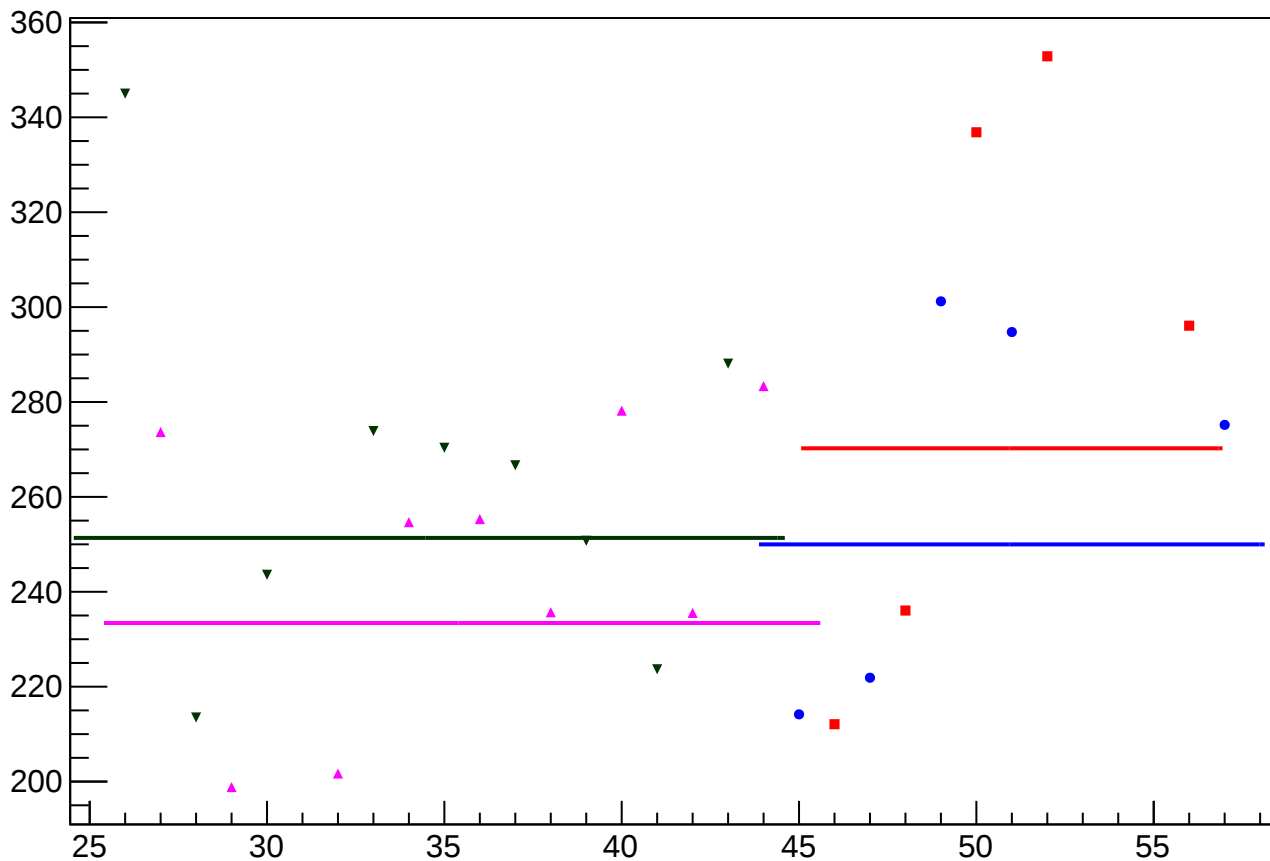
Right Out: -13.562 $\pm$ 178.347  $\chi^2$ /NDF: 5.7/4

Left In: 257.038 $\pm$ 99.480  $\chi^2$ /NDF: 12.8/8

70.823 $\pm$ 93.337  $\chi^2$ /NDF: 8.0/13

192.825 $\pm$ 86.878  $\chi^2$ /NDF: 20.3/13

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



Right In: 249.990+/-0.112  $\chi^2/\text{NDF}$ : 113198.9/4

Left Out: 251.356+/-0.082  $\chi^2/\text{NDF}$ :168505.5/8

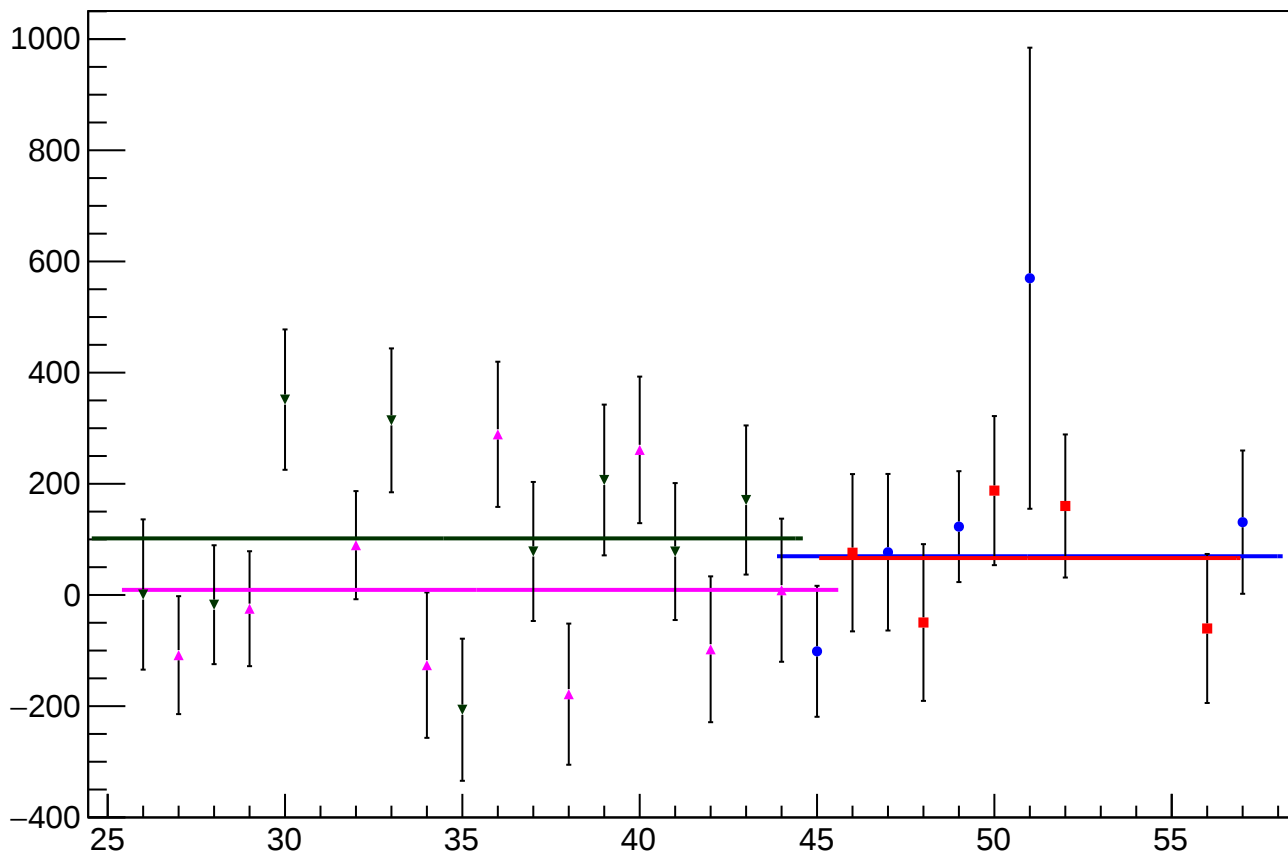
250.881+/-0.066  $\chi^2/\text{NDF}$ : 281801.6/13

Right Out: 270.241+/-0.126  $\chi^2/\text{NDF}$ : 188792.6/4

242.155+/-0.061  $\chi^2/\text{NDF}$ : 456565.0/13

Left In: 233.417+/-0.070  $\chi^2/\text{NDF}$ :202742.1/8

# reg\_asym\_us\_dd\_mean vs slug



Right In: 69.673+/-58.827     $\chi^2/\text{NDF}$ : 4.1/4

Left Out: 101.794+/-42.049     $\chi^2/\text{NDF}$ :15.2/8

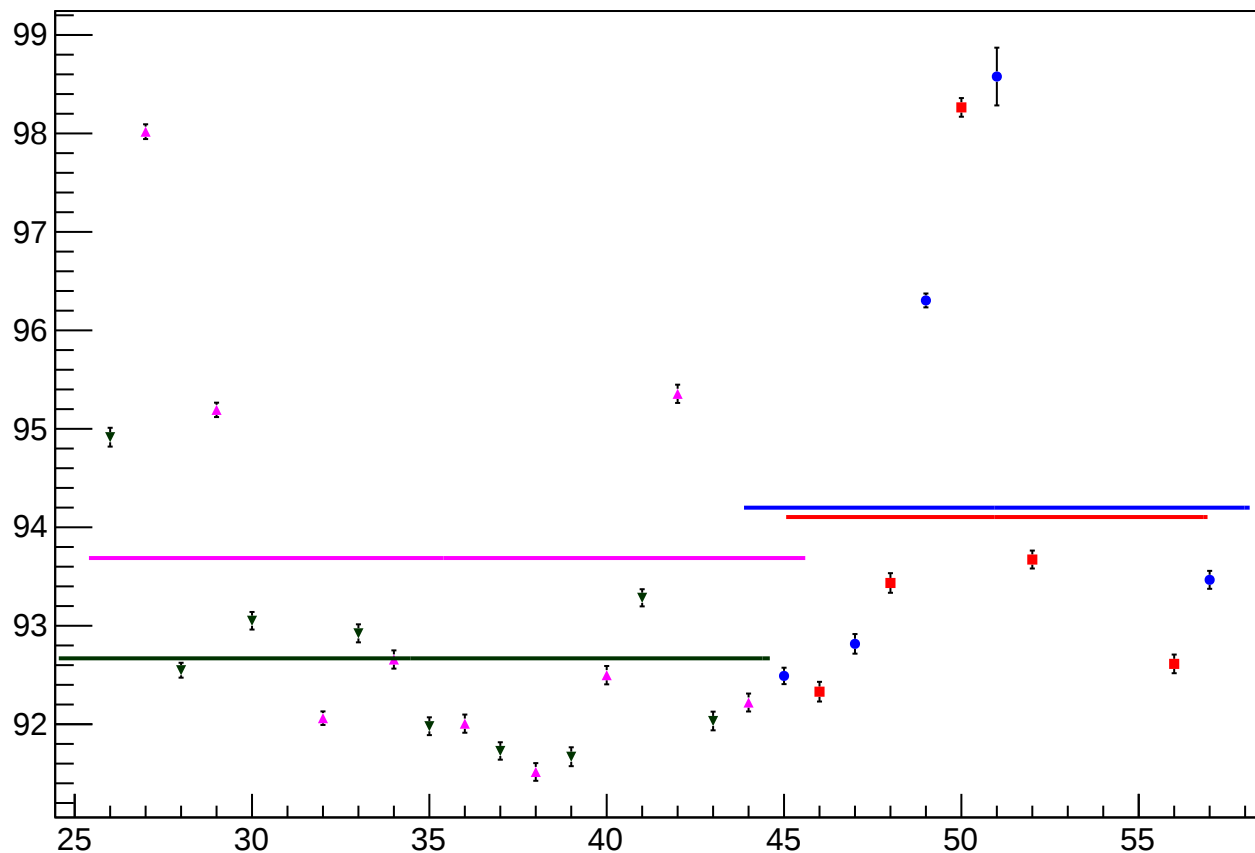
Right Out: 66.405+/-60.648     $\chi^2/\text{NDF}$ : 2.9/4

Left In: 9.181+/-39.431     $\chi^2/\text{NDF}$ :14.2/8

90.932+/-34.208     $\chi^2/\text{NDF}$ : 19.4/13

26.183+/-33.058     $\chi^2/\text{NDF}$ : 17.7/13

# reg\_asym\_us\_dd\_rms vs slug



Right In: 94.199+/-0.042  $\chi^2/\text{NDF}$ : 1791.4/4

Left Out: 92.669+/-0.030  $\chi^2/\text{NDF}$ : 955.5/8

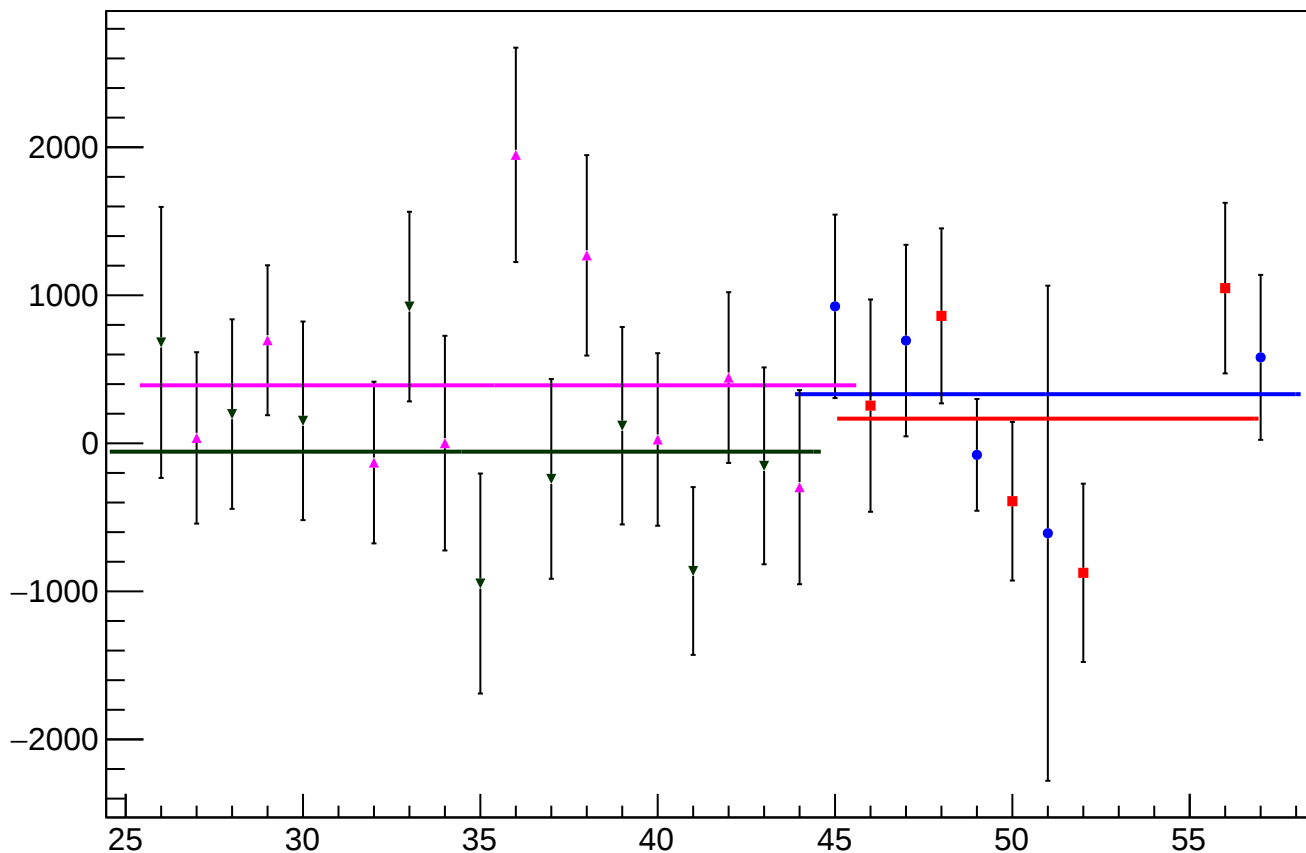
Right Out: 94.104+/-0.043  $\chi^2/\text{NDF}$ : 2554.3/4

Left In: 93.688+/-0.028  $\chi^2/\text{NDF}$ : 6102.1/8

93.187+/-0.024  $\chi^2/\text{NDF}$ : 3642.6/13

93.812+/-0.023  $\chi^2/\text{NDF}$ : 8722.6/13

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



Right In: 331.881 $\pm$ 253.244  $\chi^2/\text{NDF}$ : 2.9/4

Left Out: -56.319 $\pm$ 224.014  $\chi^2/\text{NDF}$ : 6.9/8

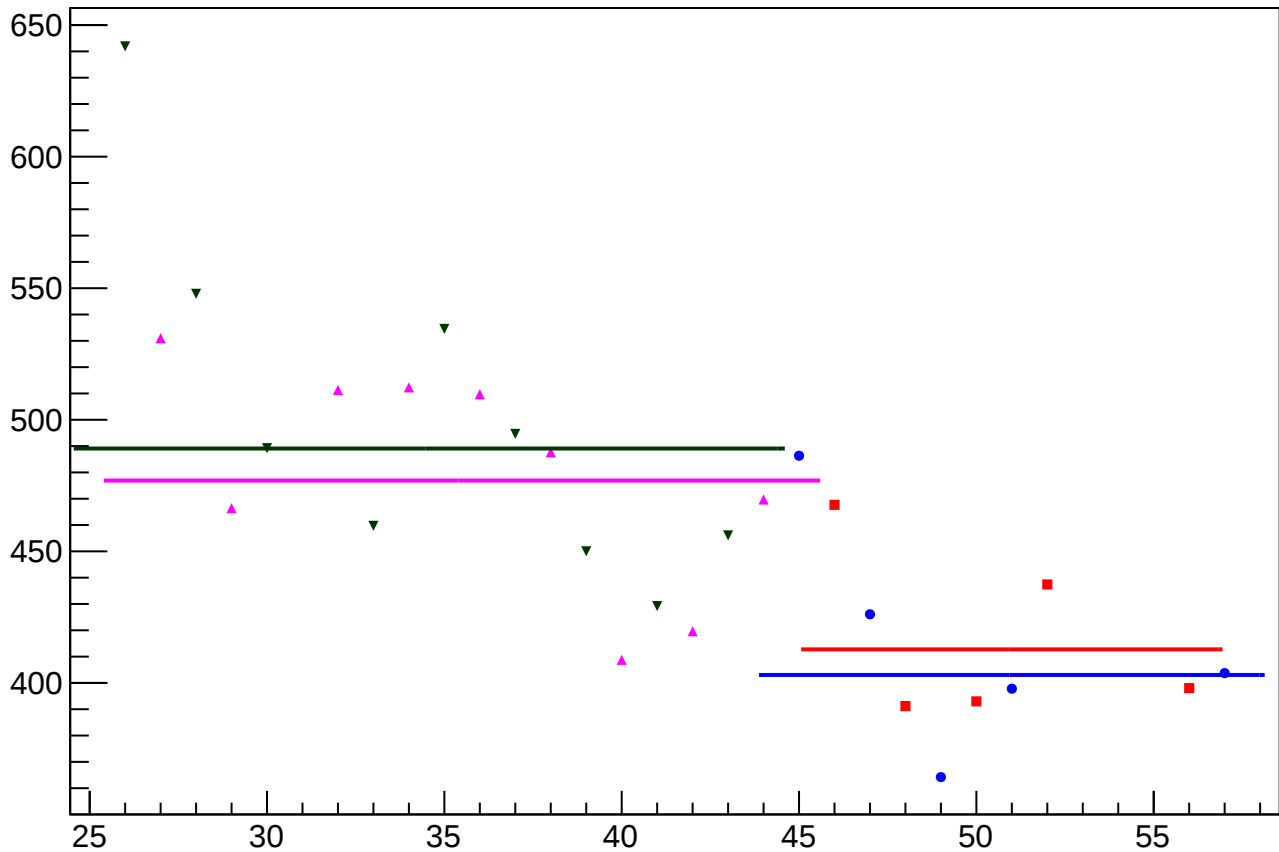
Right Out: 166.712 $\pm$ 266.700  $\chi^2/\text{NDF}$ : 7.8/4

Left In: 391.848 $\pm$ 202.004  $\chi^2/\text{NDF}$ : 9.7/8

114.095 $\pm$ 167.789  $\chi^2/\text{NDF}$ : 11.1/13

309.775 $\pm$ 161.028  $\chi^2/\text{NDF}$ : 18.0/13

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



Right In:  $403.029 \pm 0.179$   $\chi^2/\text{NDF}$ : 59870.2/4

Left Out:  $489.081 \pm 0.158$   $\chi^2/\text{NDF}$ : 118576.3/8

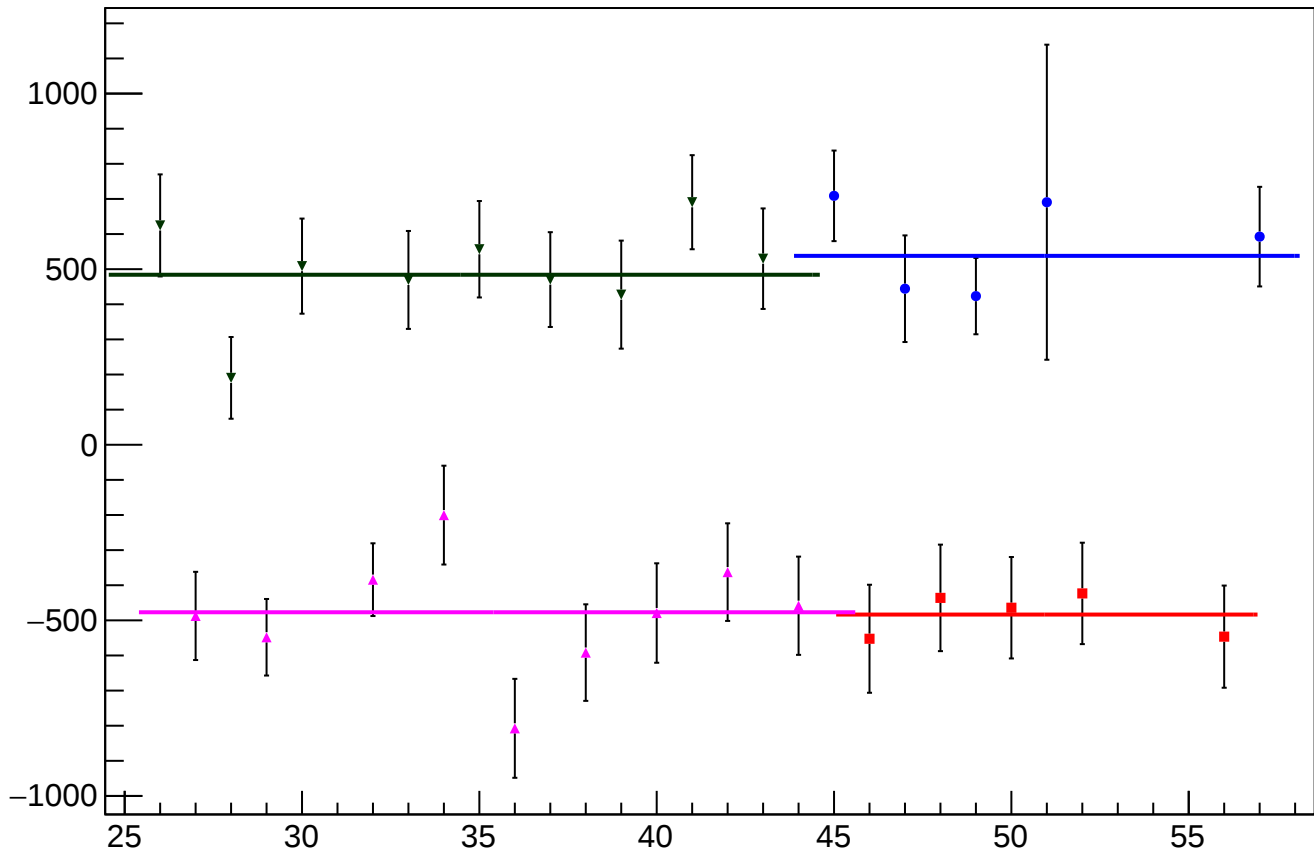
Right Out:  $412.753 \pm 0.189$   $\chi^2/\text{NDF}$ : 21766.4/4

Left In:  $476.913 \pm 0.143$   $\chi^2/\text{NDF}$ : 82979.3/8

$451.306 \pm 0.119$   $\chi^2/\text{NDF}$ : 308001.5/13

$453.524 \pm 0.114$   $\chi^2/\text{NDF}$ : 178298.1/13

# reg\_asym\_ds\_avg\_mean vs slug



Right In:  $537.912 \pm 64.166$   $\chi^2/\text{NDF}$ : 3.5/4

Left Out:  $484.116 \pm 45.554$   $\chi^2/\text{NDF}$ : 10.3/8

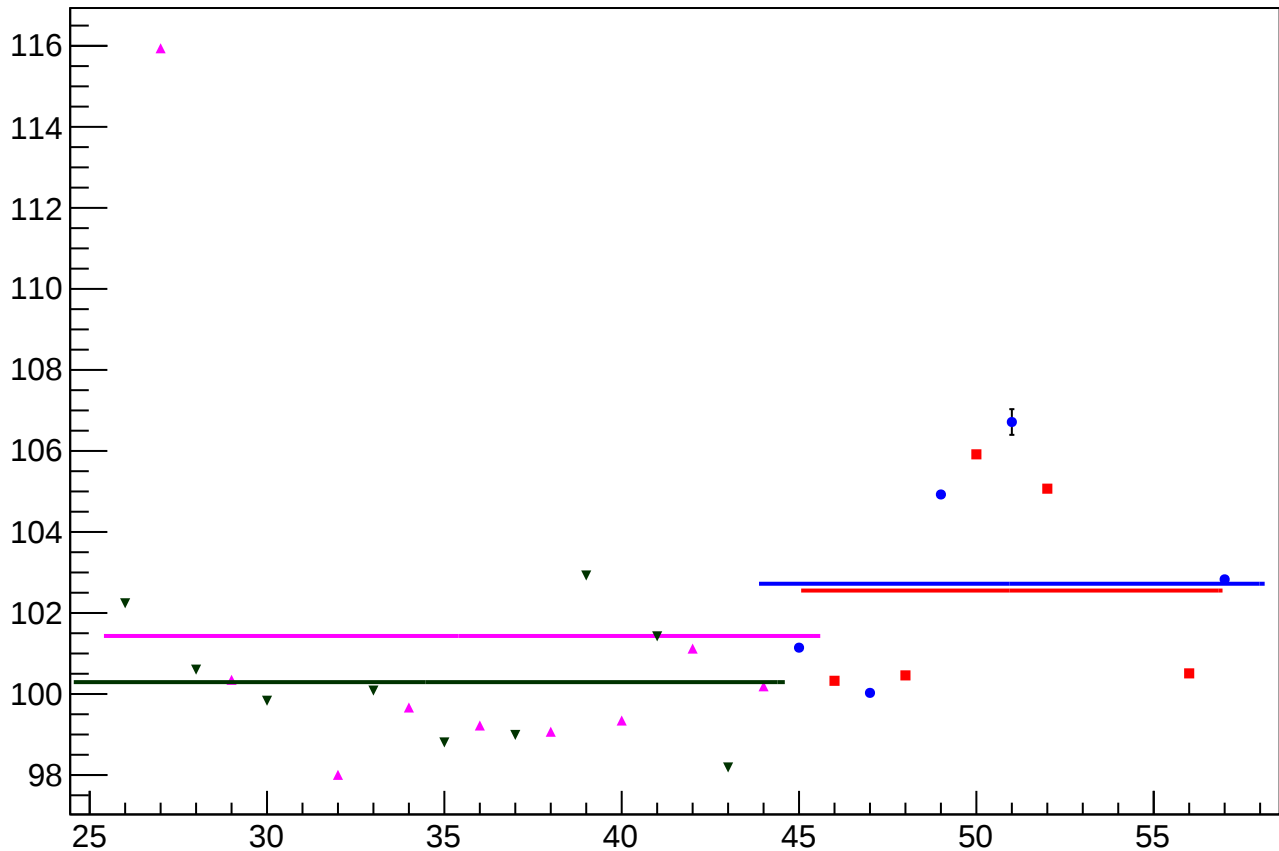
Right Out:  $-483.492 \pm 66.094$   $\chi^2/\text{NDF}$ : 0.7/4

Left In:  $-476.948 \pm 42.742$   $\chi^2/\text{NDF}$ : 12.0/8

$502.143 \pm 37.145$   $\chi^2/\text{NDF}$ : 14.2/13

$-478.878 \pm 35.891$   $\chi^2/\text{NDF}$ : 12.7/13

# reg\_asym\_ds\_avg\_rms vs slug



Right In:  $102.722 \pm 0.045$   $\chi^2/\text{NDF}$ : 1910.9/4

Left Out:  $100.293 \pm 0.032$   $\chi^2/\text{NDF}$ : 1983.2/8

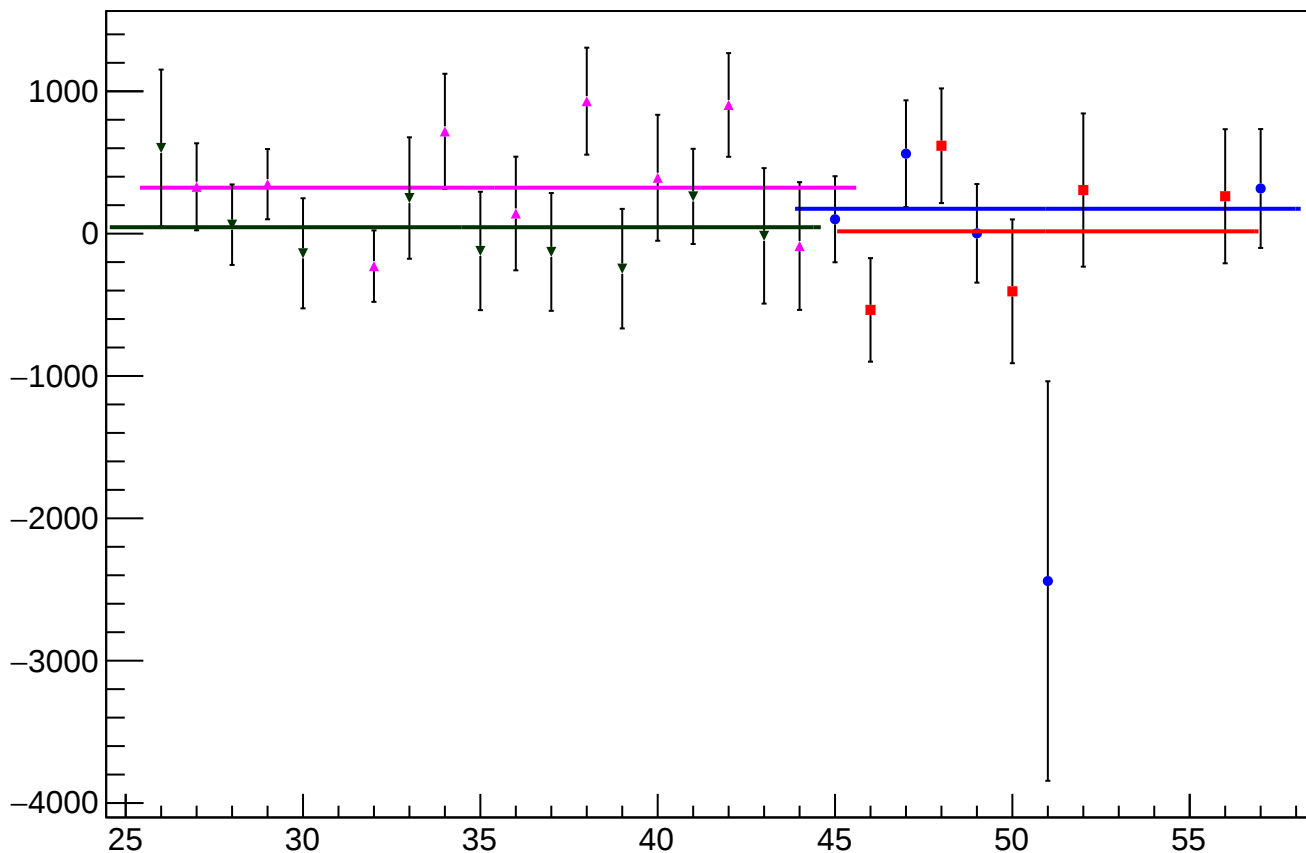
Right Out:  $102.554 \pm 0.047$   $\chi^2/\text{NDF}$ : 2887.0/4

Left In:  $101.433 \pm 0.030$   $\chi^2/\text{NDF}$ : 31082.7/8

$101.107 \pm 0.026$   $\chi^2/\text{NDF}$ : 5799.2/13

$101.763 \pm 0.025$   $\chi^2/\text{NDF}$ : 34375.5/13

# asym\_ds\_avg\_correction\_mean vs slug



Right In: 174.663 $\pm$ 175.049  $\chi^2$ /NDF: 5.0/4

Left Out: 45.072 $\pm$ 130.602  $\chi^2$ /NDF: 2.7/8

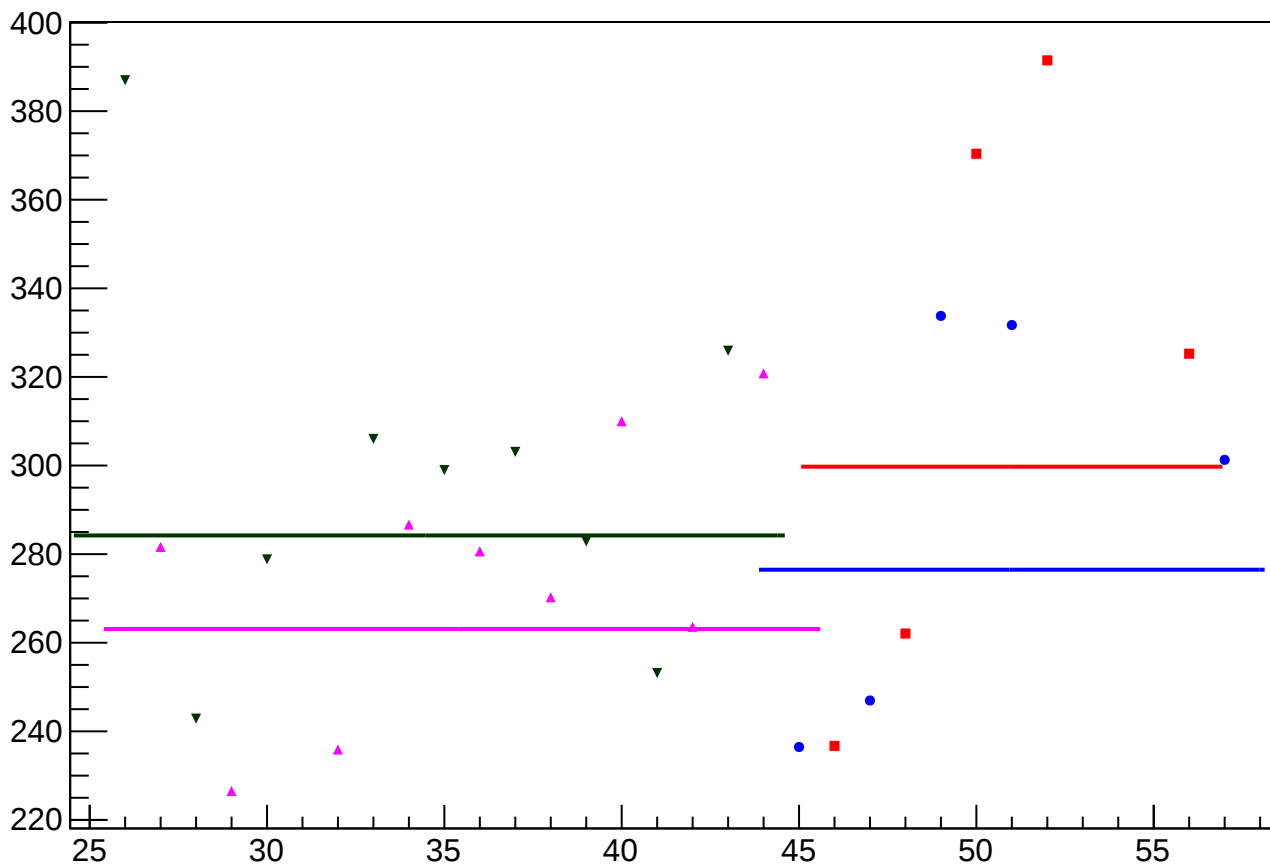
Right Out: 16.027 $\pm$ 197.641  $\chi^2$ /NDF: 5.8/4

Left In: 322.770 $\pm$ 111.748  $\chi^2$ /NDF: 12.0/8

91.413 $\pm$ 104.678  $\chi^2$ /NDF: 8.0/13

248.464 $\pm$ 97.276  $\chi^2$ /NDF: 19.6/13

# asym\_ds\_avg\_correction\_rms vs slug



Right In: 276.486 $\pm$ 0.124  $\chi^2$ /NDF: 112337.7/4

Left Out: 284.218 $\pm$ 0.092  $\chi^2$ /NDF:157337.5/8

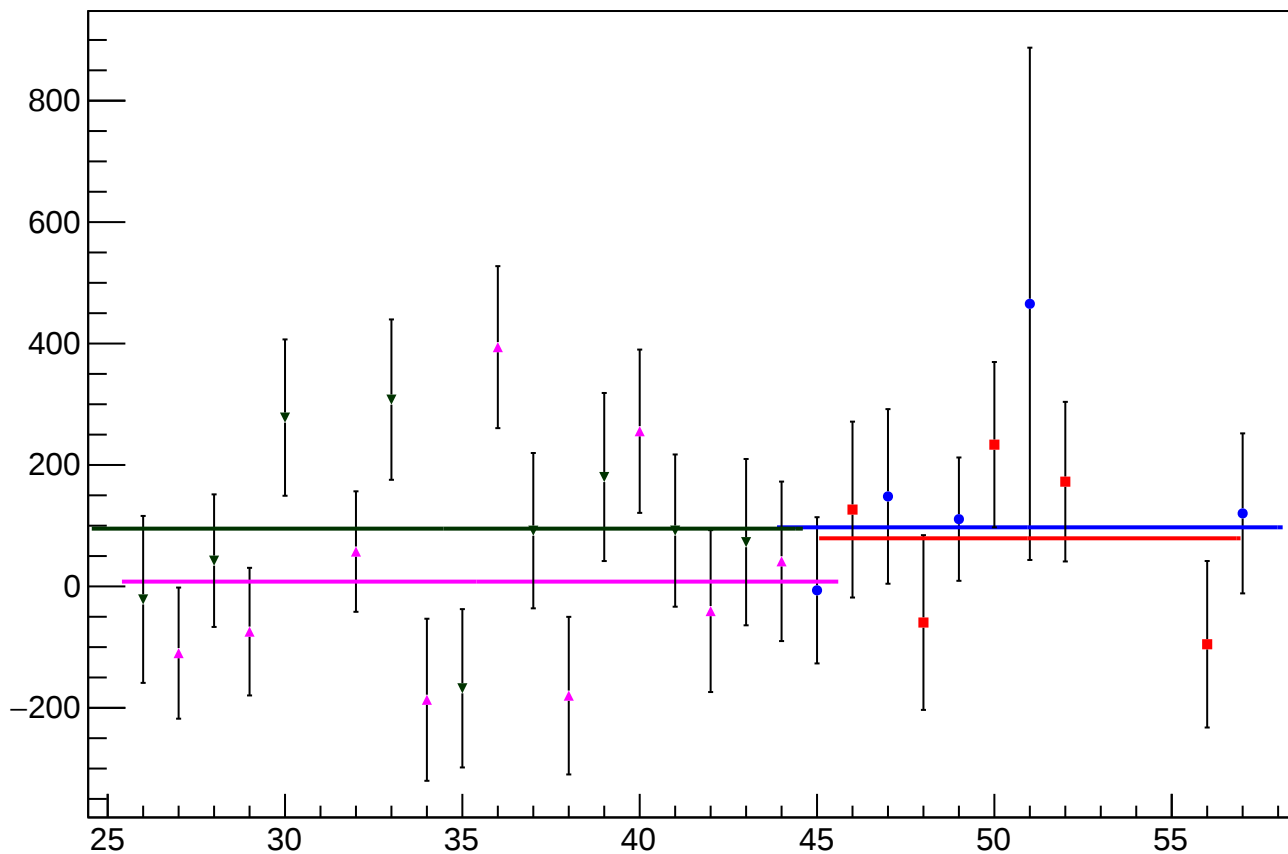
Right Out: 299.745 $\pm$ 0.140  $\chi^2$ /NDF: 180593.2/4

Left In: 263.097 $\pm$ 0.079  $\chi^2$ /NDF:141755.0/8

281.453 $\pm$ 0.074  $\chi^2$ /NDF: 272182.1/13

271.975 $\pm$ 0.069  $\chi^2$ /NDF: 374458.3/13

reg\_asym\_ds\_dd\_mean vs slug



Right In: 97.323+/-60.033  $\chi^2/\text{NDF}$ : 1.7/4

Left Out: 95.153+/-42.894  $\chi^2/\text{NDF}$ :10.0/8

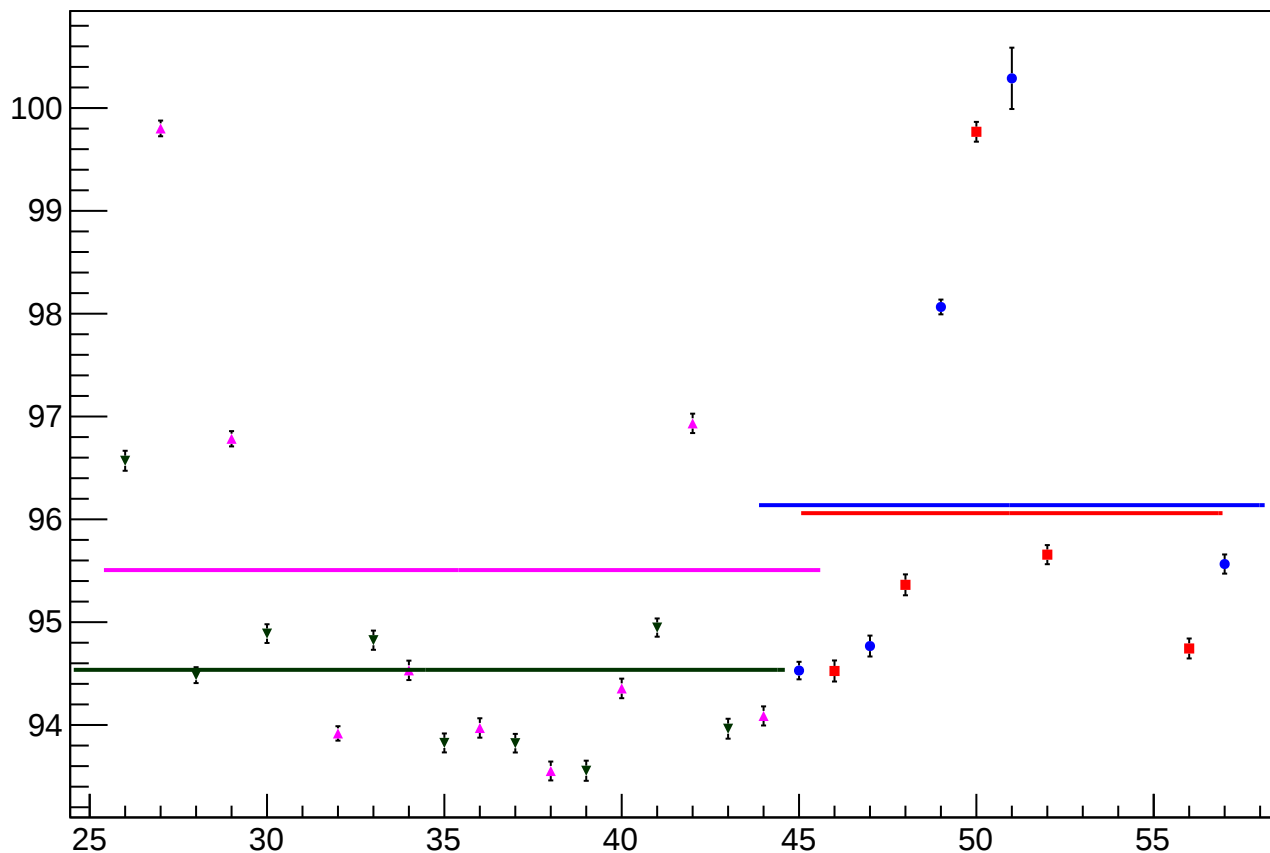
Right Out: 79.226+/-61.901  $\chi^2/\text{NDF}$ : 4.4/4

Left In: 7.892+/-40.192  $\chi^2/\text{NDF}$ :18.2/8

95.887+/-34.900  $\chi^2/\text{NDF}$ : 11.7/13

29.046+/-33.709  $\chi^2/\text{NDF}$ : 23.6/13

# reg\_asym\_ds\_dd\_rms vs slug



Right In:  $96.138 \pm 0.042$   $\chi^2/\text{NDF}$ : 1490.3/4

Left Out:  $94.536 \pm 0.030$   $\chi^2/\text{NDF}$ : 741.0/8

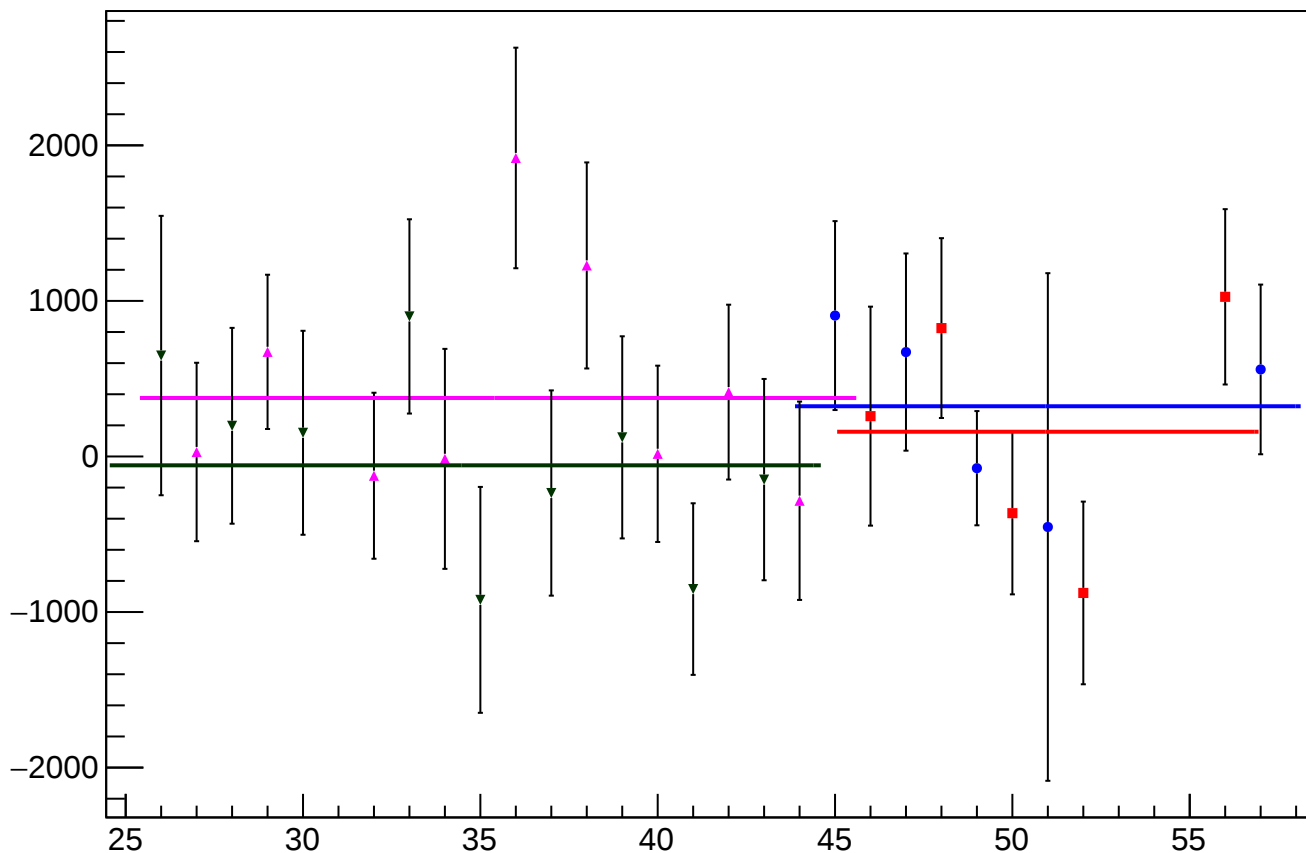
Right Out:  $96.060 \pm 0.044$   $\chi^2/\text{NDF}$ : 1959.2/4

Left In:  $95.507 \pm 0.028$   $\chi^2/\text{NDF}$ : 5405.6/8

$95.078 \pm 0.025$   $\chi^2/\text{NDF}$ : 3173.6/13

$95.671 \pm 0.024$   $\chi^2/\text{NDF}$ : 7477.3/13

# asym\_ds\_dd\_correction\_mean vs slug



Right In: 322.777 $\pm$ 247.271  $\chi^2/\text{NDF}$ : 2.8/4

Left Out: -56.903 $\pm$ 218.768  $\chi^2/\text{NDF}$ : 6.9/8

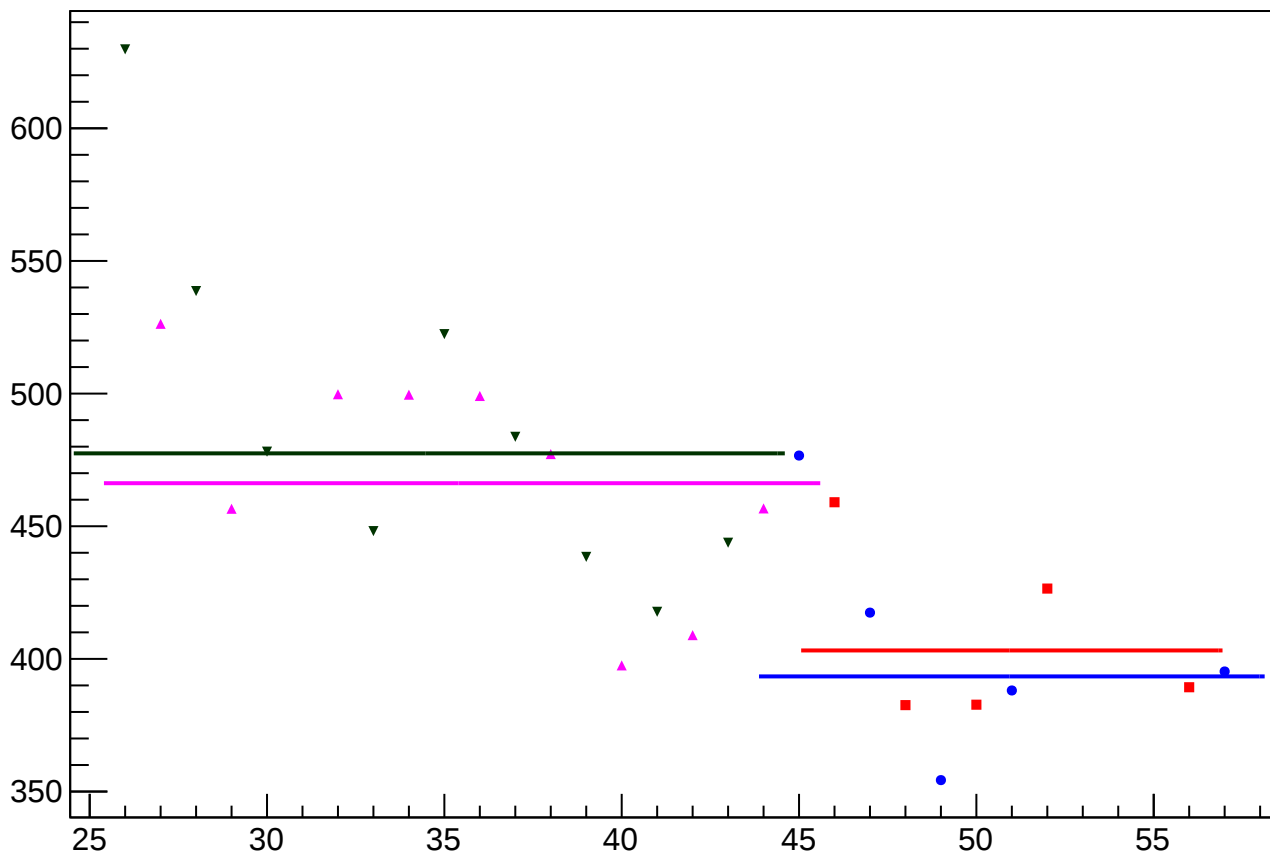
Right Out: 158.987 $\pm$ 260.544  $\chi^2/\text{NDF}$ : 7.8/4

Left In: 376.012 $\pm$ 197.531  $\chi^2/\text{NDF}$ : 9.8/8

109.802 $\pm$ 163.847  $\chi^2/\text{NDF}$ : 11.0/13

296.799 $\pm$ 157.407  $\chi^2/\text{NDF}$ : 18.1/13

# asym\_ds\_dd\_correction\_rms vs slug



Right In:  $393.397 \pm 0.175$   $\chi^2/\text{NDF}$ : 63176.8/4

Left Out:  $477.470 \pm 0.155$   $\chi^2/\text{NDF}$ : 124730.4/8

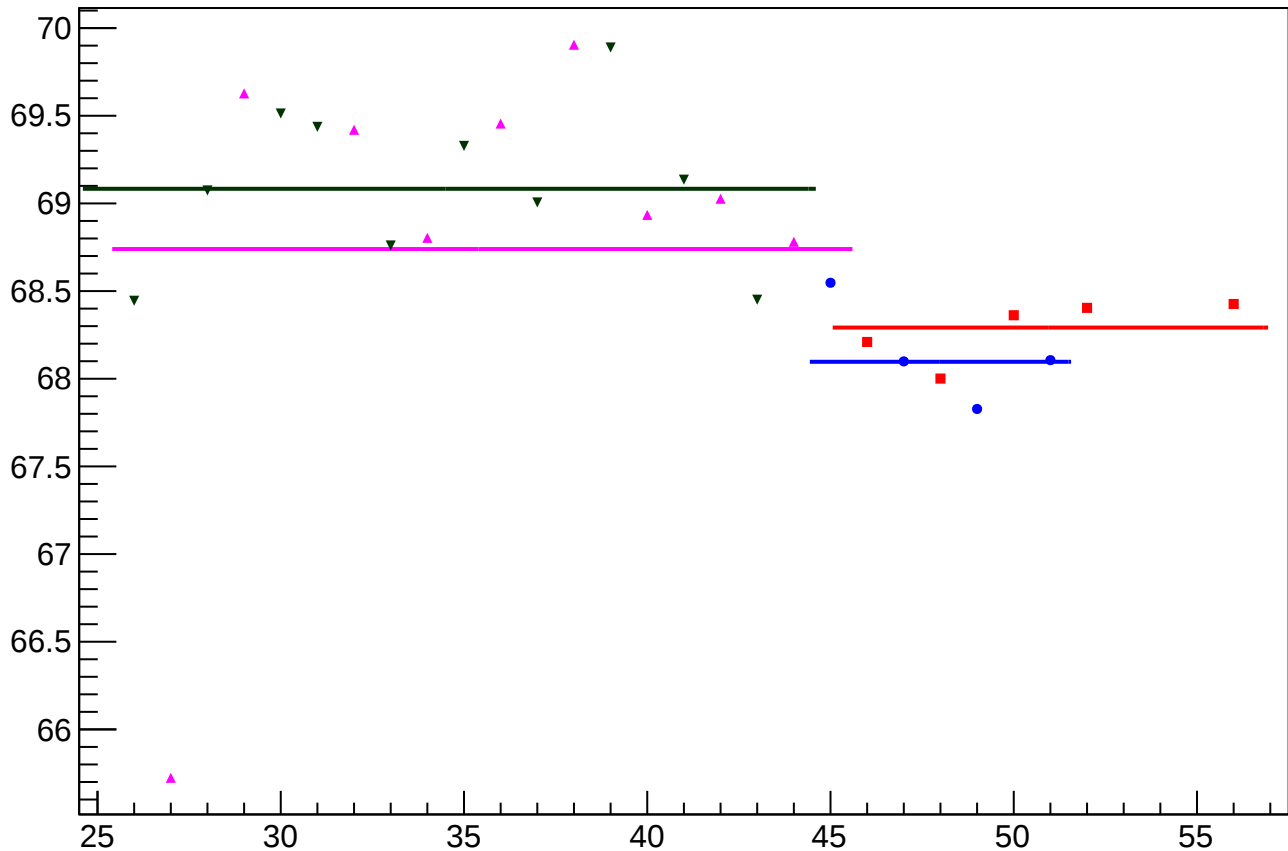
Right Out:  $403.185 \pm 0.184$   $\chi^2/\text{NDF}$ : 22577.1/4

Left In:  $466.224 \pm 0.140$   $\chi^2/\text{NDF}$ : 90489.0/8

$440.557 \pm 0.116$   $\chi^2/\text{NDF}$ : 317599.2/13

$443.215 \pm 0.111$   $\chi^2/\text{NDF}$ : 187413.1/13

# yield\_bcm\_an\_ds\_mean vs slug



Right In: 68.097+/-0.000  $\chi^2/\text{NDF}$ : 4463011.8/3

Left Out: 69.083+/-0.000  $\chi^2/\text{NDF}$ : 27004165.7/9

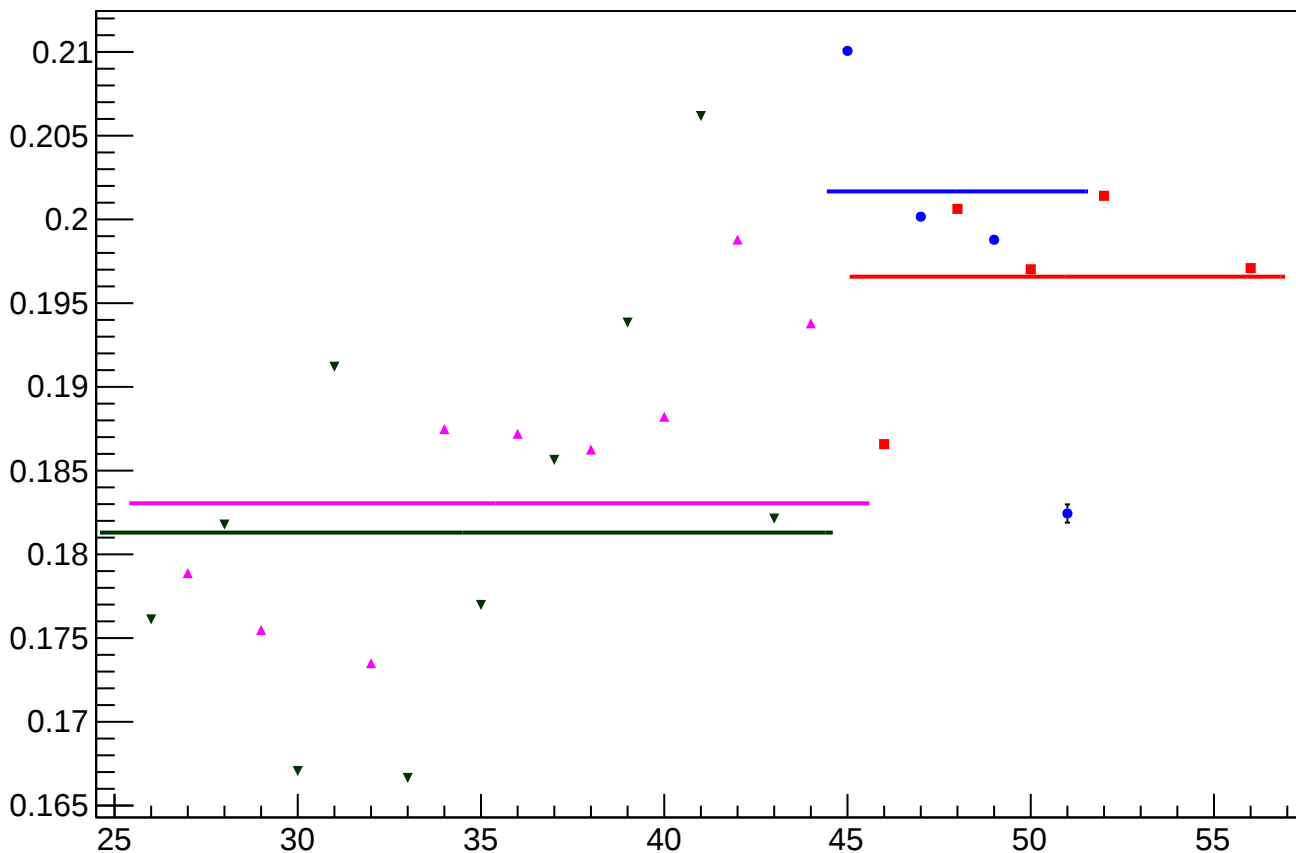
Right Out: 68.292+/-0.000  $\chi^2/\text{NDF}$ : 1410849.6/4

Left In: 68.740+/-0.000  $\chi^2/\text{NDF}$ : 294554075.3/8

68.842+/-0.000  $\chi^2/\text{NDF}$ : 67653132.2/13

68.618+/-0.000  $\chi^2/\text{NDF}$ : 304796717.4/13

# yield\_bcm\_an\_ds\_rms vs slug



Right In:  $0.202 \pm 0.000$   $\chi^2/\text{NDF}$ : 3612.2/3

Left Out:  $0.181 \pm 0.000$   $\chi^2/\text{NDF}$ : 38931.4/9

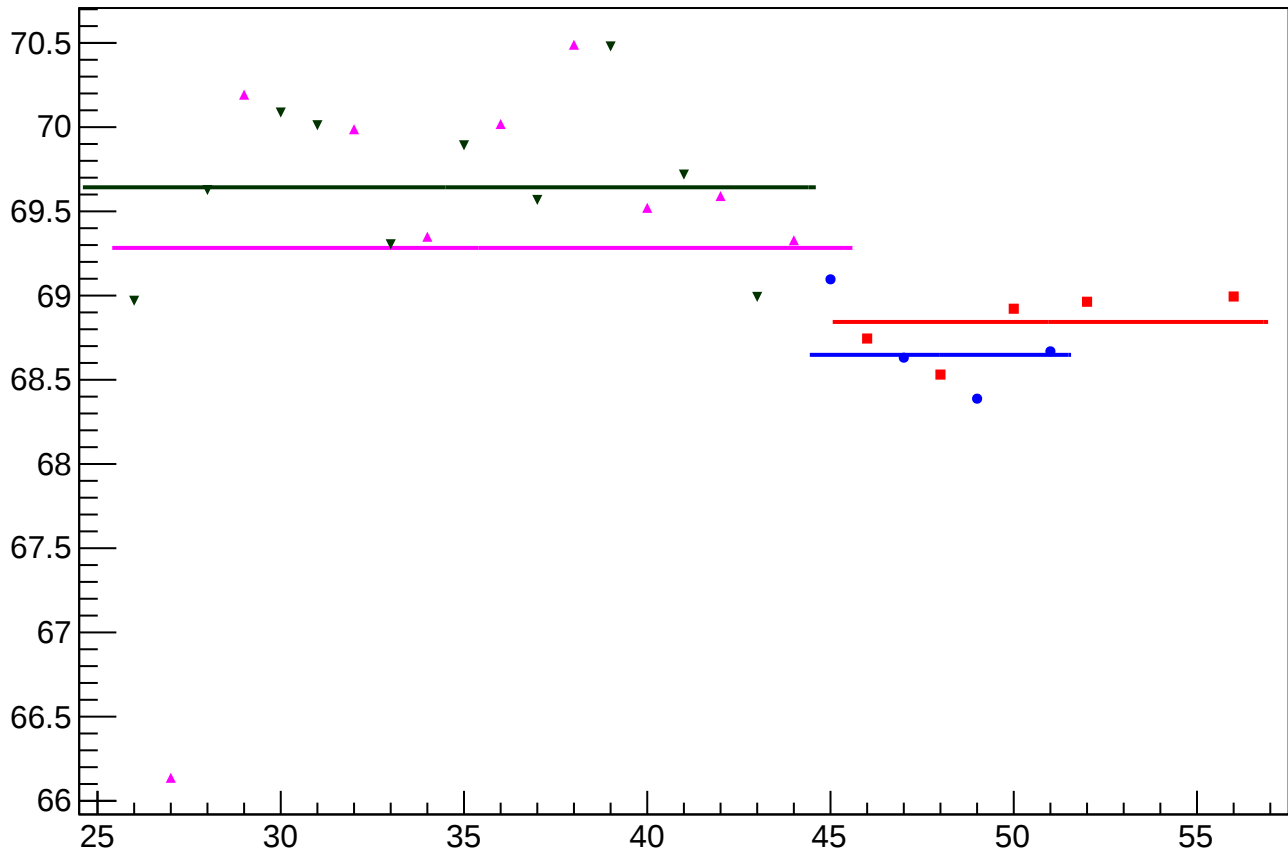
Right Out:  $0.197 \pm 0.000$   $\chi^2/\text{NDF}$ : 3280.5/4

Left In:  $0.183 \pm 0.000$   $\chi^2/\text{NDF}$ : 20520.7/8

$0.186 \pm 0.000$   $\chi^2/\text{NDF}$ : 73393.9/13

$0.187 \pm 0.000$   $\chi^2/\text{NDF}$ : 39930.3/13

# yield\_bcm\_an\_ds3\_mean vs slug



Right In: 68.648 $\pm$ 0.000  $\chi^2$ /NDF: 4128739.8/3

Left Out: 69.643 $\pm$ 0.000  $\chi^2$ /NDF:27921804.9/9

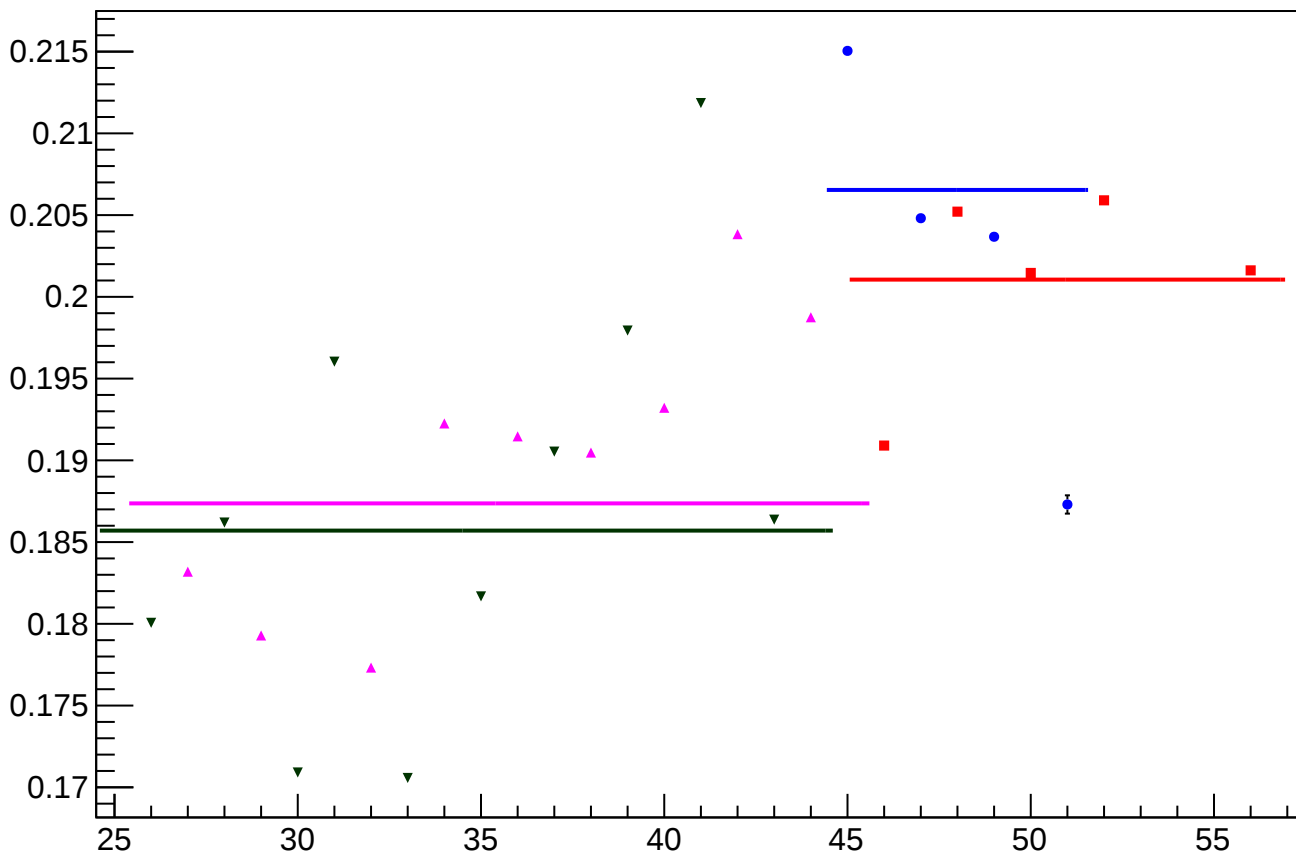
Right Out: 68.843 $\pm$ 0.000  $\chi^2$ /NDF: 1604199.8/4

Left In: 69.283 $\pm$ 0.000  $\chi^2$ /NDF:304584553.9/8

69.400 $\pm$ 0.000  $\chi^2$ /NDF: 67116321.9/13

69.163 $\pm$ 0.000  $\chi^2$ /NDF: 314321473.9/13

# yield\_bcm\_an\_ds3\_rms vs slug



Right In: 0.207 $\pm$ 0.000  $\chi^2$ /NDF: 3499.4/3

Left Out: 0.186 $\pm$ 0.000  $\chi^2$ /NDF:39898.3/9

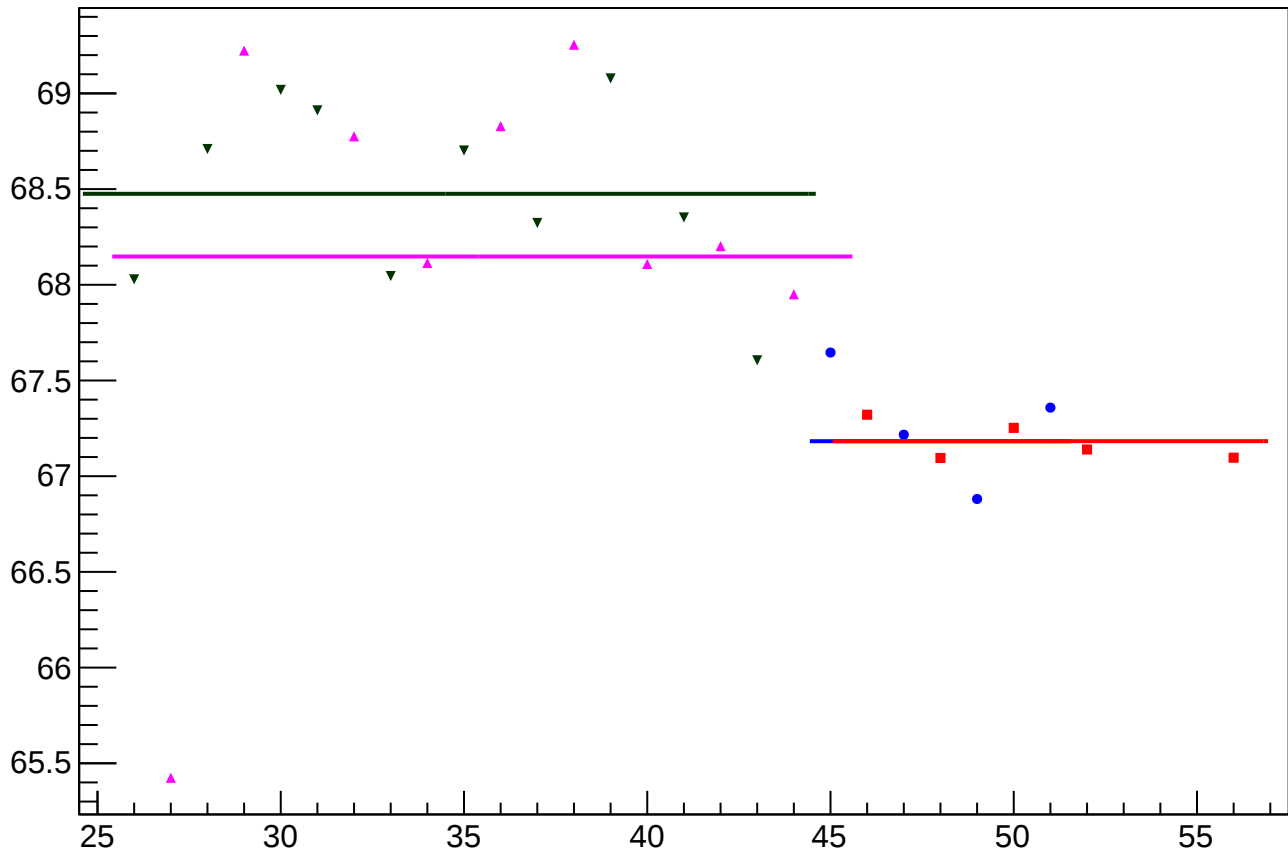
Right Out: 0.201 $\pm$ 0.000  $\chi^2$ /NDF: 3225.6/4

Left In: 0.187 $\pm$ 0.000  $\chi^2$ /NDF:21703.3/8

0.191 $\pm$ 0.000  $\chi^2$ /NDF: 74165.1/13

0.191 $\pm$ 0.000  $\chi^2$ /NDF: 40698.9/13

# yield\_bcm\_an\_us\_mean vs slug



Right In: 67.183+/-0.000  $\chi^2/\text{NDF}$ : 5279859.3/3

Left Out: 68.475+/-0.000  $\chi^2/\text{NDF}$ : 31409059.3/9

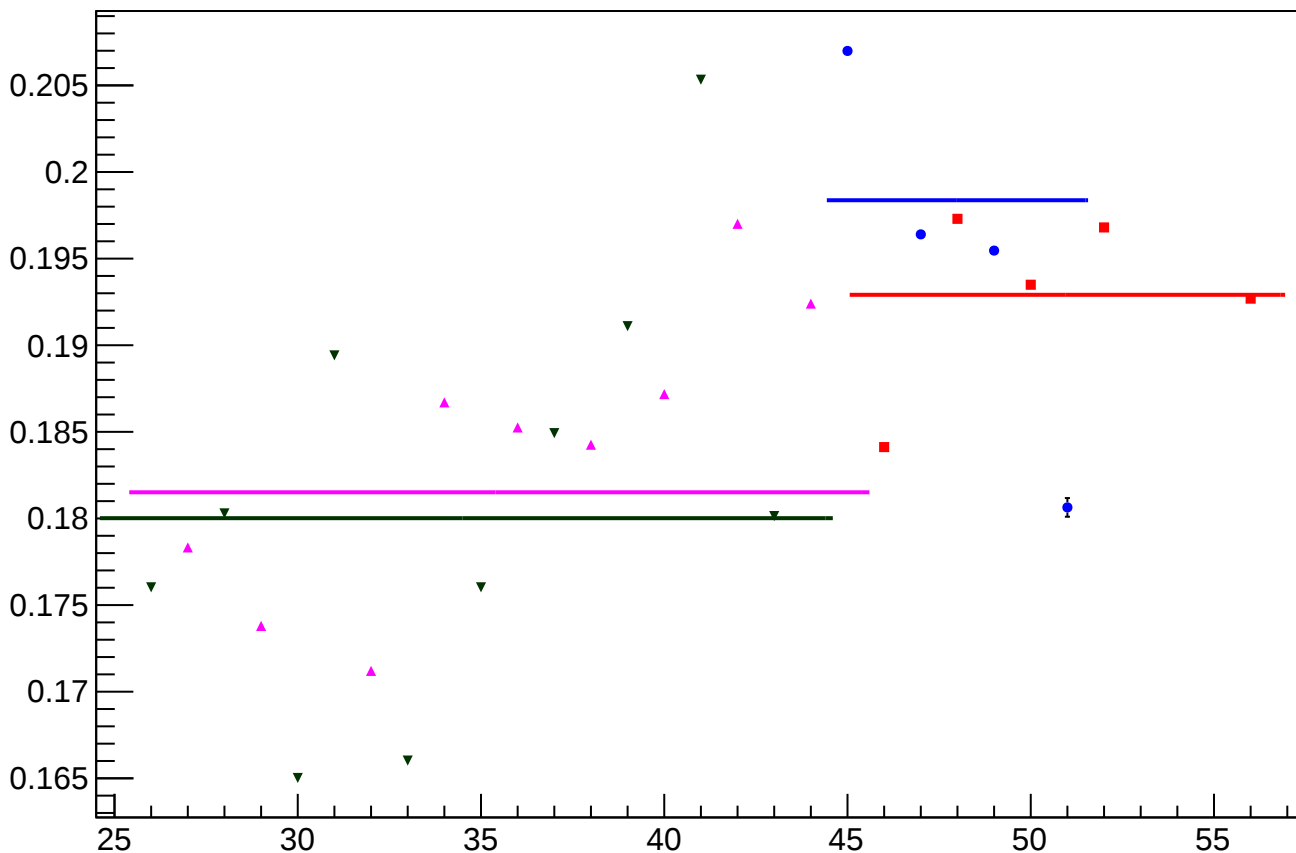
Right Out: 67.183+/-0.000  $\chi^2/\text{NDF}$ : 498797.1/4

Left In: 68.148+/-0.000  $\chi^2/\text{NDF}$ : 258142323.5/8

68.155+/-0.000  $\chi^2/\text{NDF}$ : 100537056.1/13

67.882+/-0.000  $\chi^2/\text{NDF}$ : 300976208.3/13

# yield\_bcm\_an\_us\_rms vs slug



Right In: 0.198+/-0.000  $\chi^2/\text{NDF}$ : 3669.4/3

Left Out: 0.180+/-0.000  $\chi^2/\text{NDF}$ : 38903.0/9

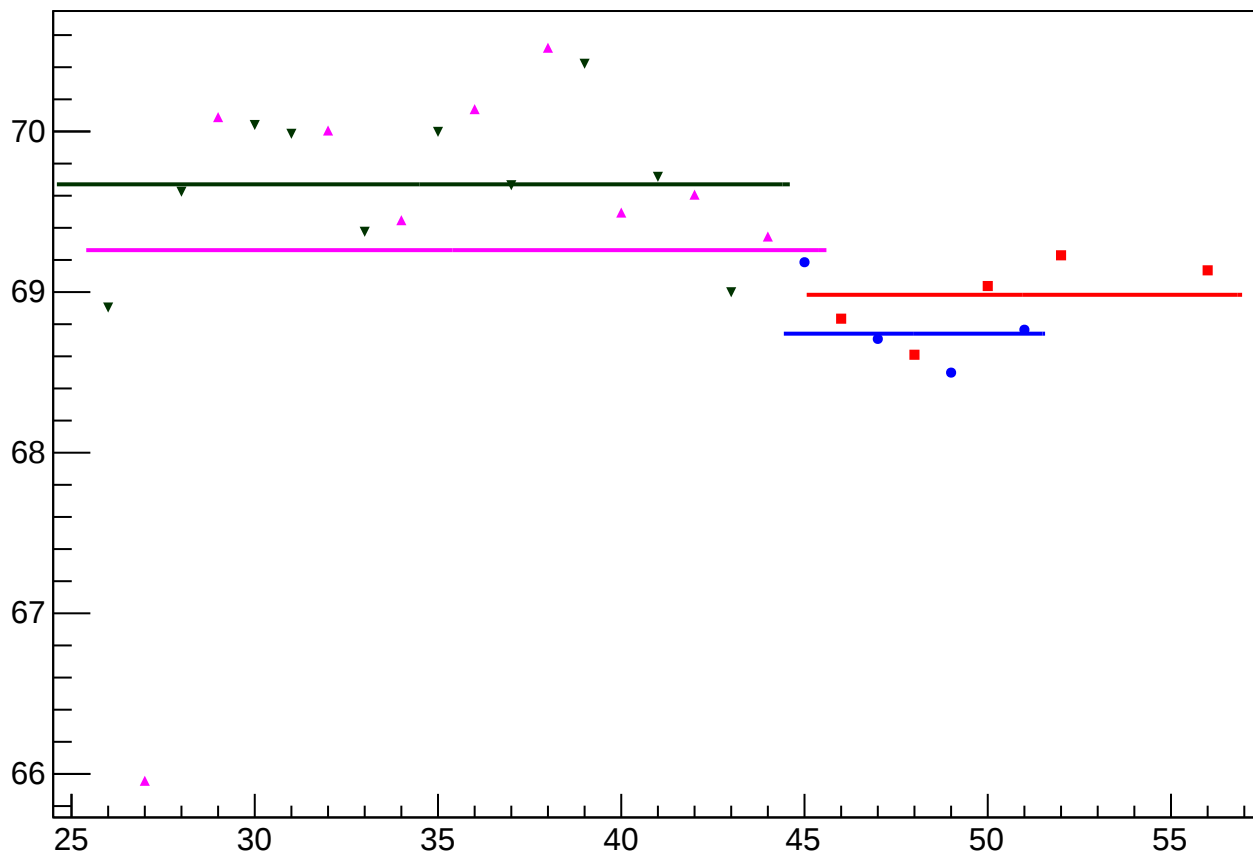
Right Out: 0.193+/-0.000  $\chi^2/\text{NDF}$ : 2680.6/4

Left In: 0.182+/-0.000  $\chi^2/\text{NDF}$ : 21618.7/8

0.185+/-0.000  $\chi^2/\text{NDF}$ : 68316.5/13

0.185+/-0.000  $\chi^2/\text{NDF}$ : 36119.2/13

# yield\_bcm\_dg\_us\_mean vs slug



Right In: 68.741 $\pm$ 0.000  $\chi^2$ /NDF: 3565326.4/3

Left Out: 69.671 $\pm$ 0.000  $\chi^2$ /NDF: 26242172.7/9

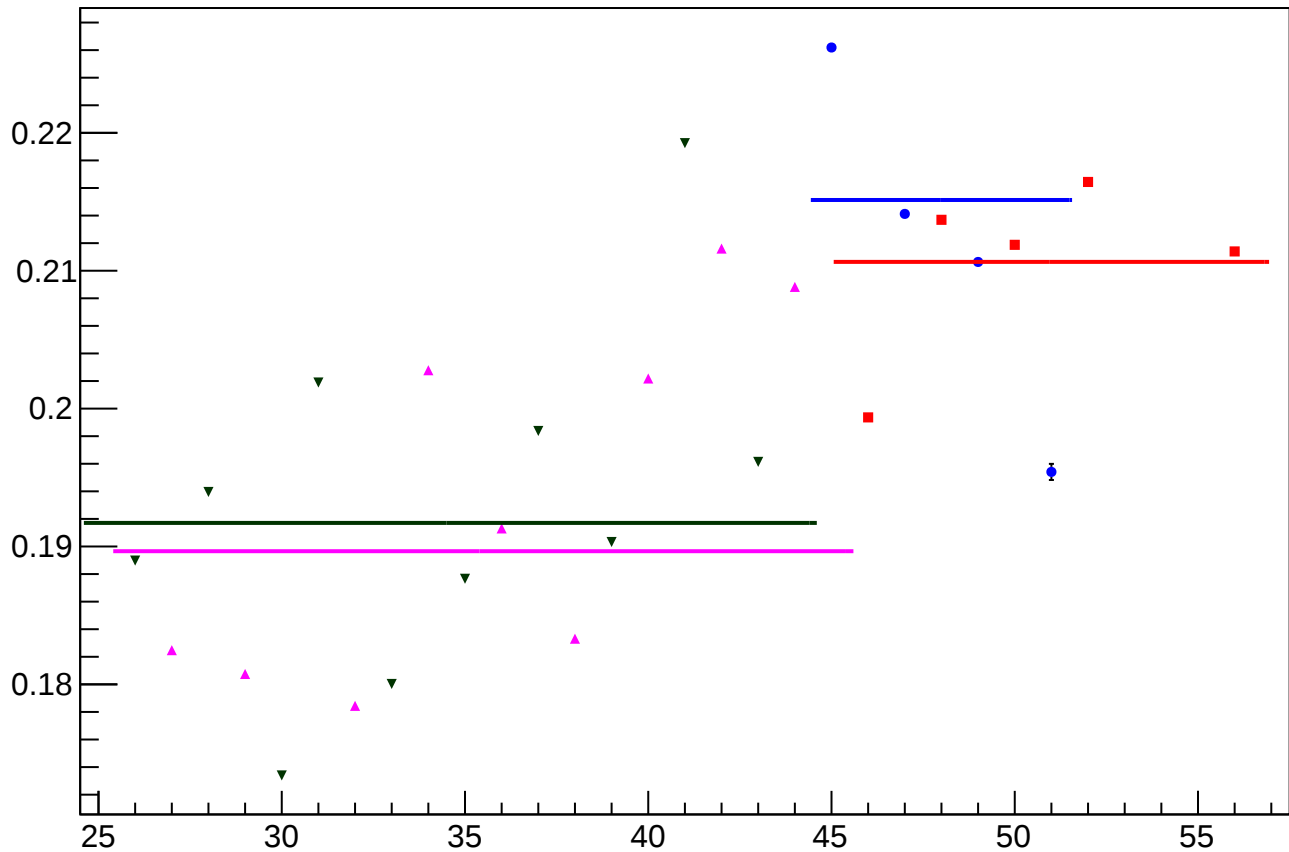
Right Out: 68.983 $\pm$ 0.000  $\chi^2$ /NDF: 2459668.5/4

Left In: 69.261 $\pm$ 0.000  $\chi^2$ /NDF: 334102481.9/8

69.447 $\pm$ 0.000  $\chi^2$ /NDF: 58164474.5/13

69.189 $\pm$ 0.000  $\chi^2$ /NDF: 339577322.5/13

# yield\_bcm\_dg\_us\_rms vs slug



Right In: 0.215 $\pm$ 0.000  $\chi^2$ /NDF: 4887.0/3

Left Out: 0.192 $\pm$ 0.000  $\chi^2$ /NDF: 37598.0/9

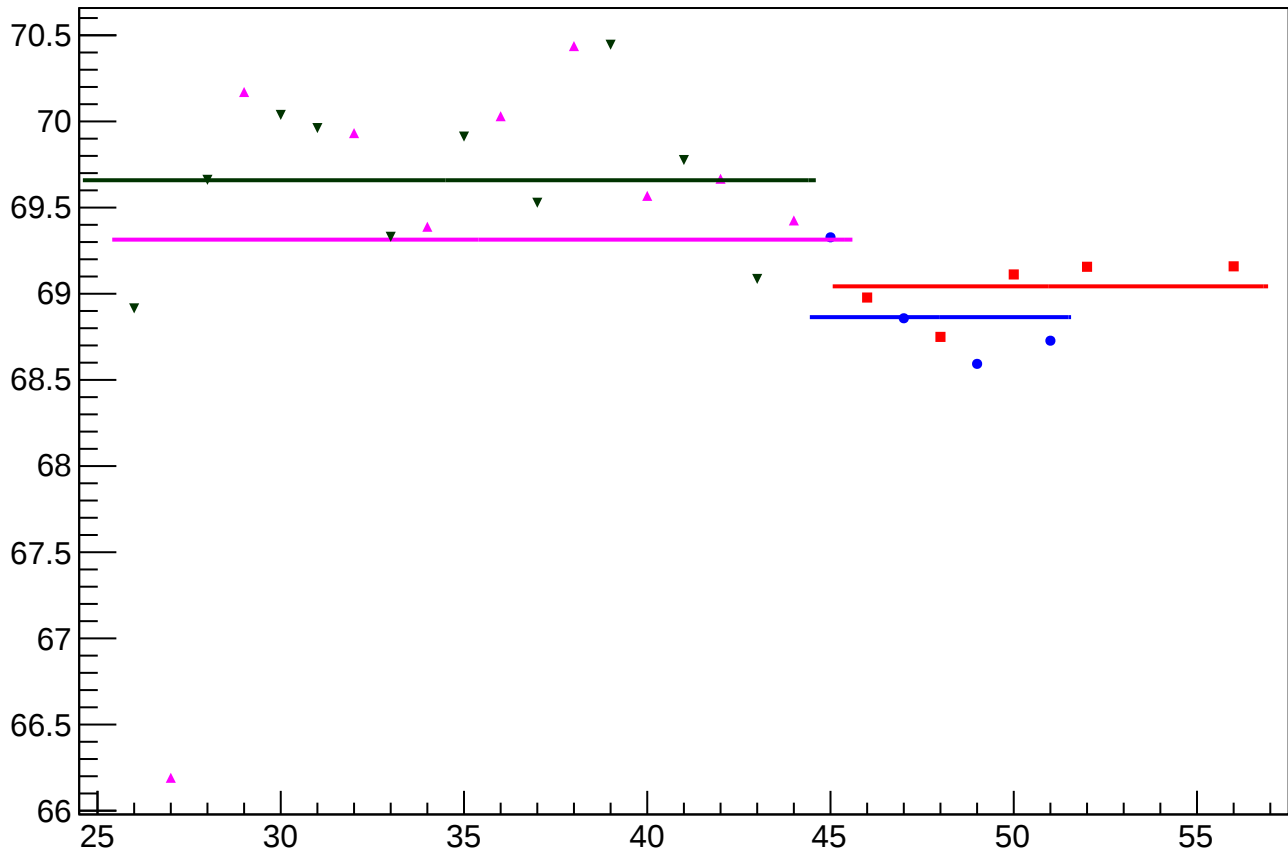
0.197 $\pm$ 0.000  $\chi^2$ /NDF: 78474.2/13

Right Out: 0.211 $\pm$ 0.000  $\chi^2$ /NDF: 3557.6/4

0.195 $\pm$ 0.000  $\chi^2$ /NDF: 79471.5/13

Left In: 0.190 $\pm$ 0.000  $\chi^2$ /NDF: 41564.7/8

# yield\_bcm\_dg\_ds\_mean vs slug



Right In: 68.864 $\pm$ 0.000  $\chi^2$ /NDF: 4356560.3/3

Left Out: 69.659 $\pm$ 0.000  $\chi^2$ /NDF: 25938166.8/9

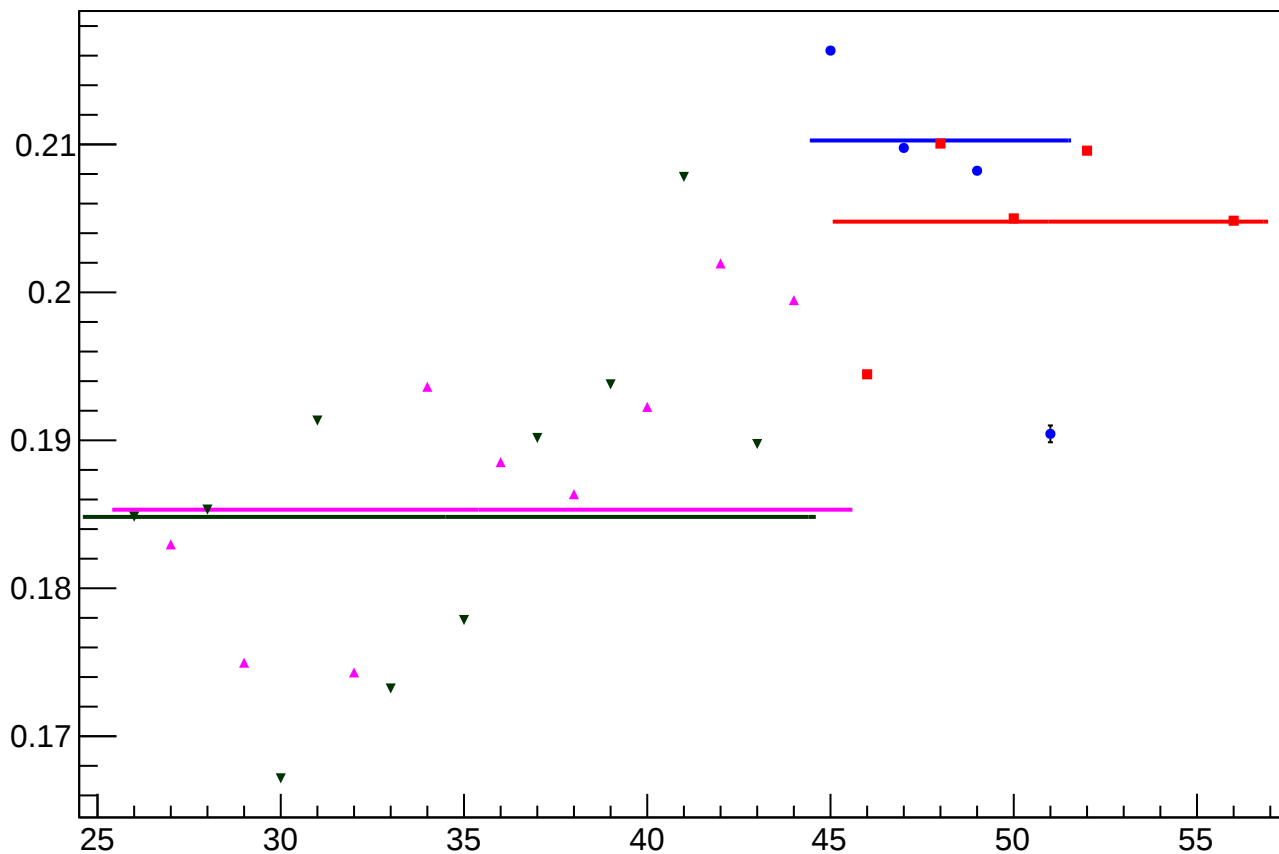
Right Out: 69.043 $\pm$ 0.000  $\chi^2$ /NDF: 1230331.4/4

Left In: 69.314 $\pm$ 0.000  $\chi^2$ /NDF: 295105046.6/8

69.471 $\pm$ 0.000  $\chi^2$ /NDF: 52124324.1/13

69.243 $\pm$ 0.000  $\chi^2$ /NDF: 299362530.8/13

# yield\_bcm\_dg\_ds\_rms vs slug



Right In: 0.210+/-0.000  $\chi^2/\text{NDF}$ : 2351.6/3

Left Out: 0.185+/-0.000  $\chi^2/\text{NDF}$ : 35228.3/9

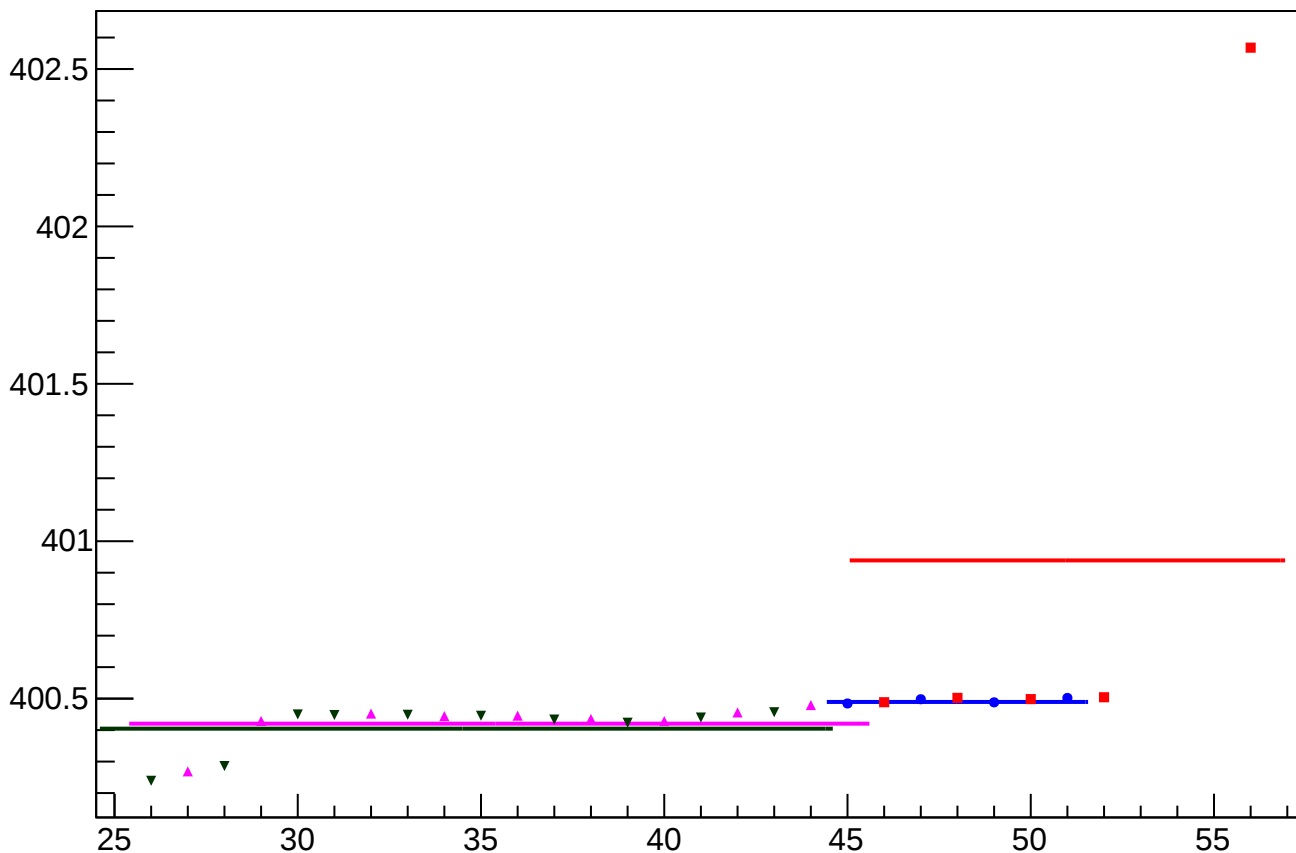
Right Out: 0.205+/-0.000  $\chi^2/\text{NDF}$ : 3361.8/4

Left In: 0.185+/-0.000  $\chi^2/\text{NDF}$ : 27999.5/8

0.191+/-0.000  $\chi^2/\text{NDF}$ : 82352.2/13

0.190+/-0.000  $\chi^2/\text{NDF}$ : 62595.4/13

# yield\_cav4bQ\_mean vs slug



Right In: 400.489+/-0.000  $\chi^2/\text{NDF}$ : 1260657.2/3

Left Out: 400.405+/-0.000  $\chi^2/\text{NDF}$ : 612909021.6/9

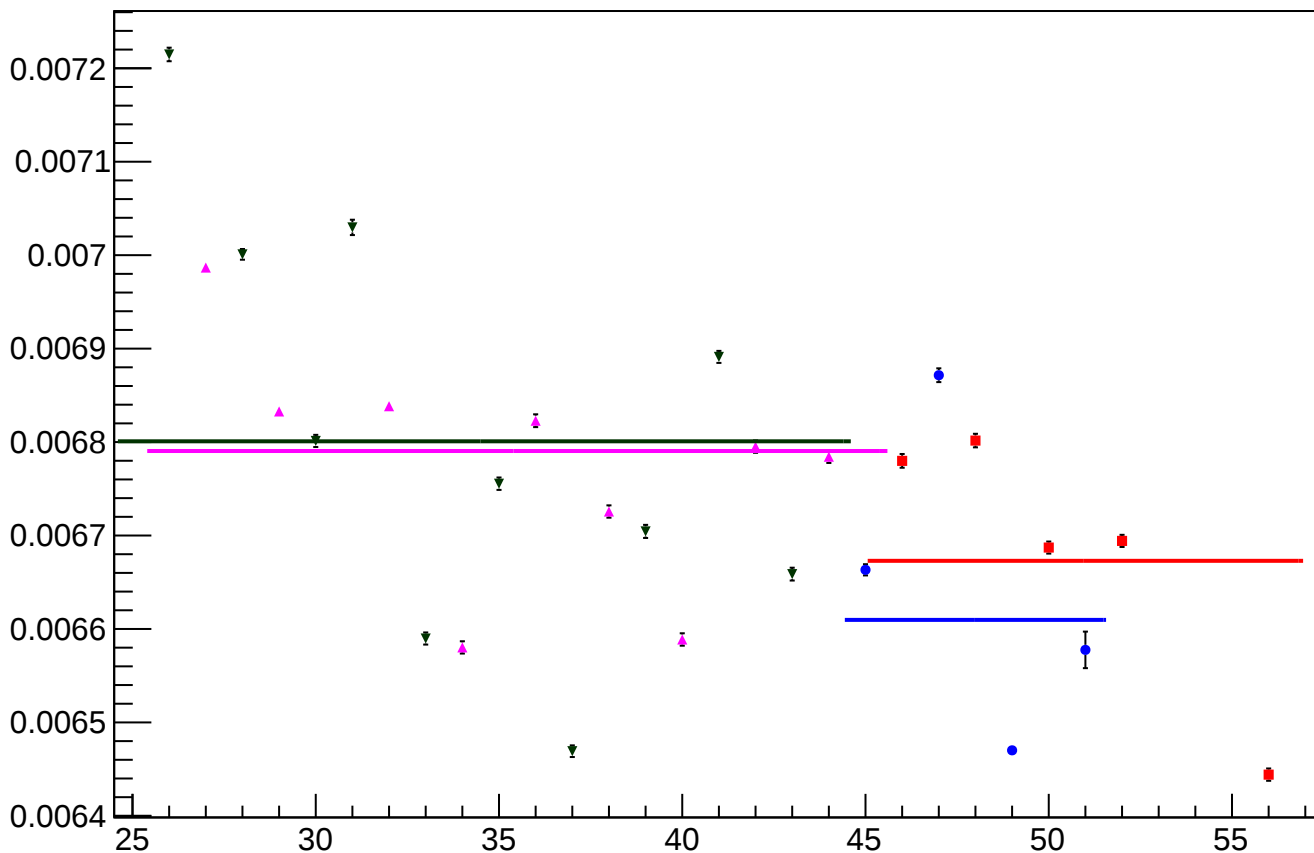
400.429+/-0.000  $\chi^2/\text{NDF}$ : 851541868.7/13

Right Out: 400.939+/-0.000  $\chi^2/\text{NDF}$ : 38722157271.2/4

400.579+/-0.000  $\chi^2/\text{NDF}$ : 49295856482.3/13

Left In: 400.420+/-0.000  $\chi^2/\text{NDF}$ : 493855654.6/8

# yield\_cav4bQ\_rms vs slug



Right In: 0.007+/-0.000  $\chi^2/\text{NDF}$ : 2209.3/3

Left Out: 0.007+/-0.000  $\chi^2/\text{NDF}$ : 9984.5/9

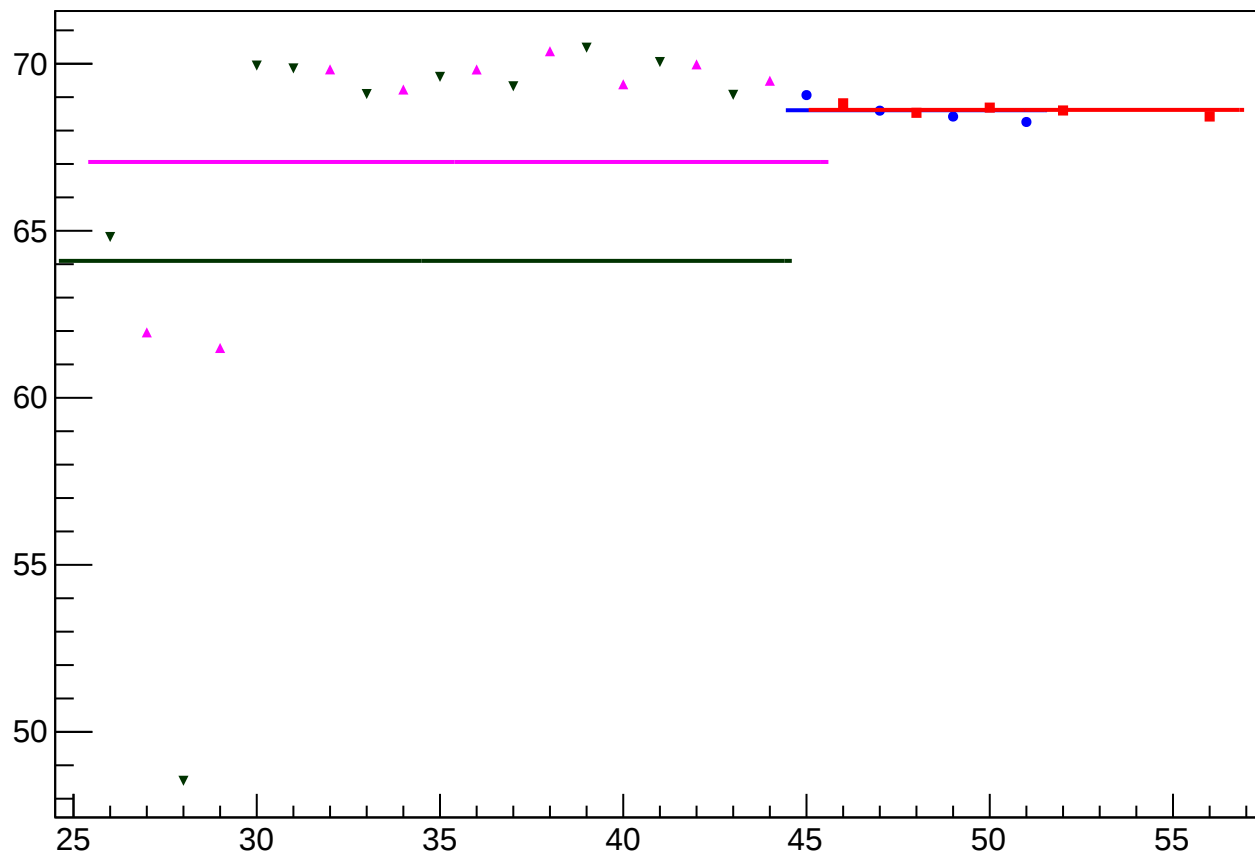
Right Out: 0.007+/-0.000  $\chi^2/\text{NDF}$ : 1743.6/4

Left In: 0.007+/-0.000  $\chi^2/\text{NDF}$ : 3569.0/8

0.007+/-0.000  $\chi^2/\text{NDF}$ : 14602.0/13

0.007+/-0.000  $\chi^2/\text{NDF}$ : 6347.5/13

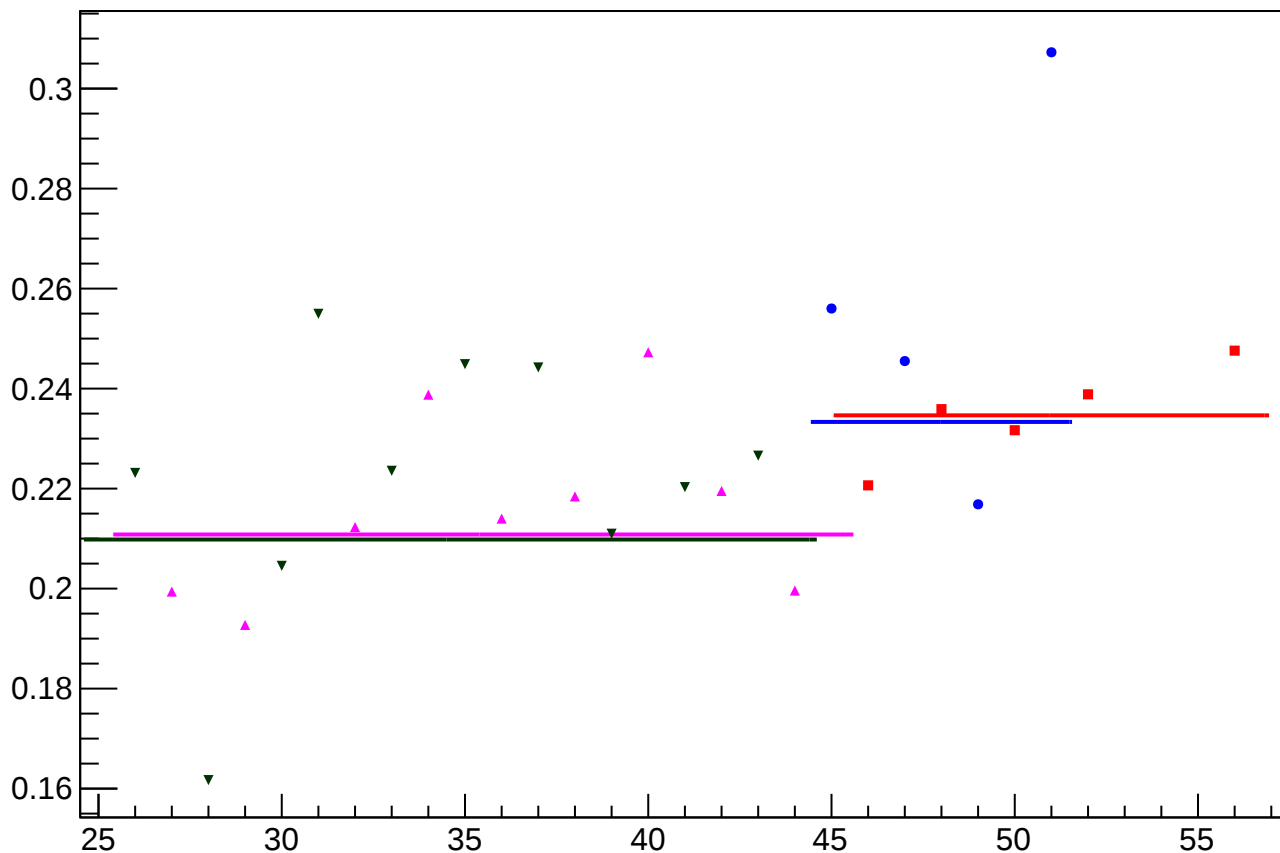
# yield\_cav4cQ\_mean vs slug



Right In: 68.609+/-0.000  $\chi^2/\text{NDF}$ : 2546349.9/3  
 Left Out: 64.100+/-0.000  $\chi^2/\text{NDF}$ :8515869637.9/9  
 Right Out: 68.619+/-0.000  $\chi^2/\text{NDF}$ : 698277.1/4  
 Left In: 67.060+/-0.000  $\chi^2/\text{NDF}$ :1652976727.1/8

65.224+/-0.000  $\chi^2/\text{NDF}$ : 9053234038.6/13  
 67.469+/-0.000  $\chi^2/\text{NDF}$ : 1726373898.8/13

yield\_cav4cQ\_rms vs slug



Right In: 0.233+/-0.000  $\chi^2/\text{NDF}$ : 27757.8/3

Left Out: 0.210+/-0.000  $\chi^2/\text{NDF}$ :194381.5/9

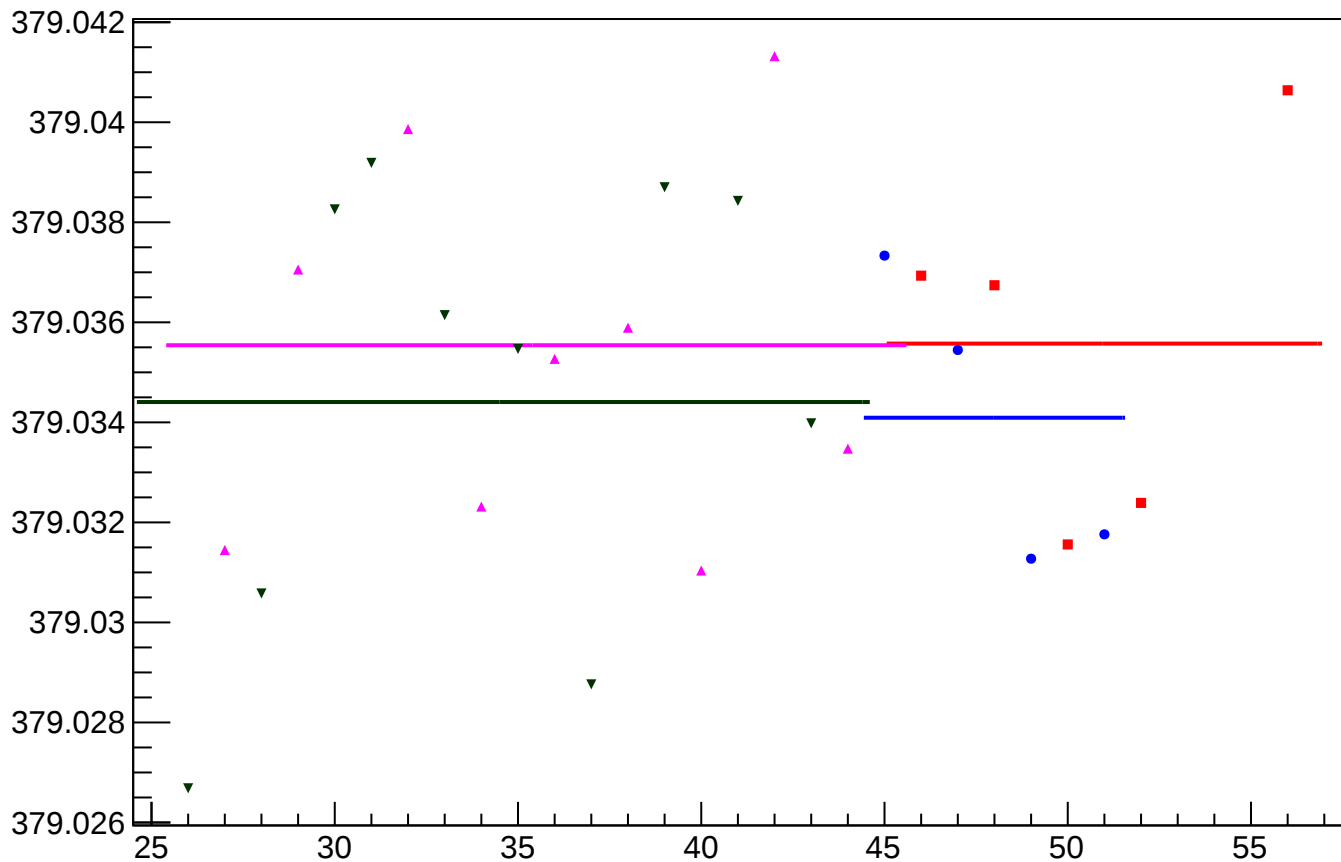
Right Out: 0.235+/-0.000  $\chi^2/\text{NDF}$ : 6095.1/4

Left In: 0.211+/-0.000  $\chi^2/\text{NDF}$ :55422.0/8

0.216+/-0.000  $\chi^2/\text{NDF}$ : 251239.2/13

0.217+/-0.000  $\chi^2/\text{NDF}$ : 95476.4/13

# yield\_cav4dQ\_mean vs slug



Right In: 379.034 $\pm$ 0.000  $\chi^2/\text{NDF}: 305604.9/3$

Left Out: 379.034 $\pm$ 0.000  $\chi^2/\text{NDF}: 1980422.2/9$

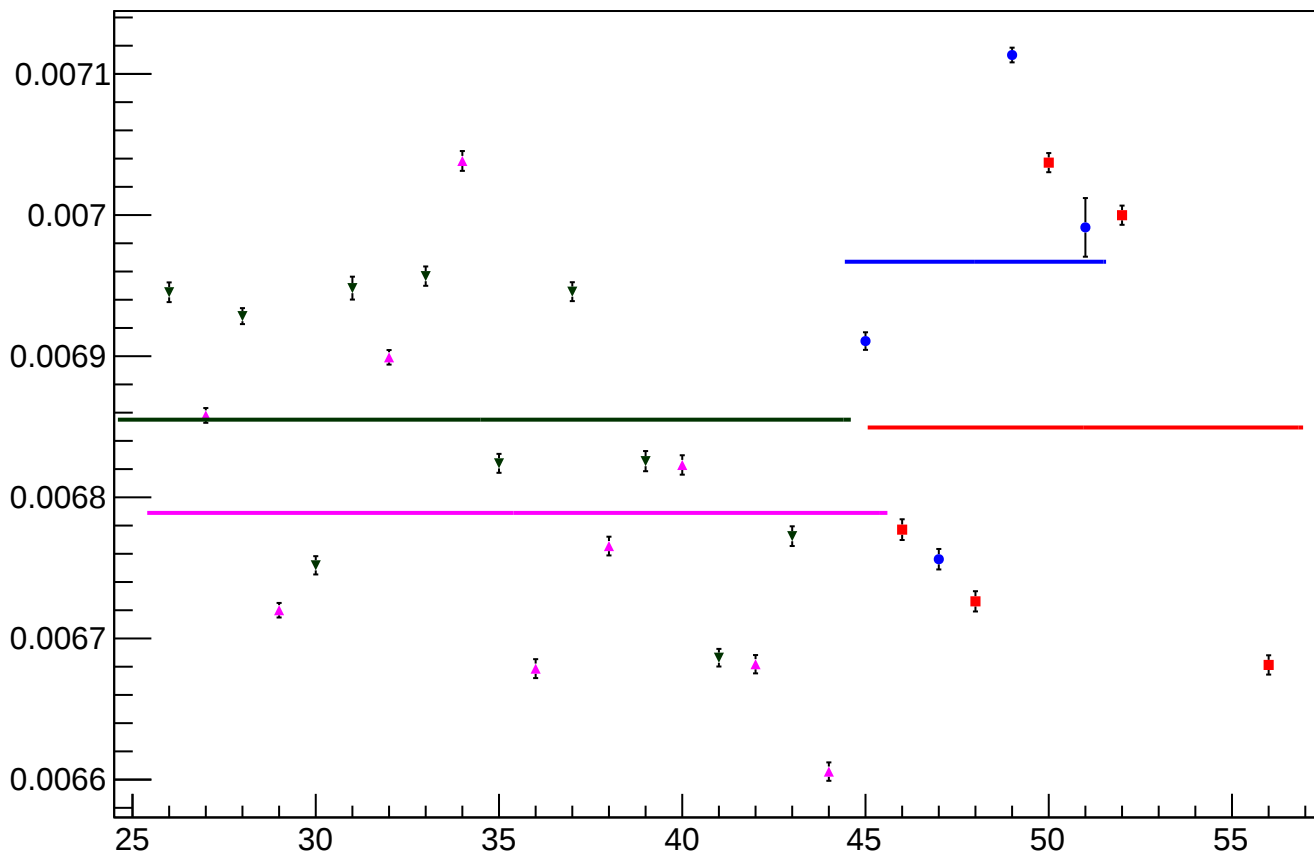
Right Out: 379.036 $\pm$ 0.000  $\chi^2/\text{NDF}: 589118.3/4$

Left In: 379.036 $\pm$ 0.000  $\chi^2/\text{NDF}: 1469093.4/8$

379.034 $\pm$ 0.000  $\chi^2/\text{NDF}: 2289028.2/13$

379.036 $\pm$ 0.000  $\chi^2/\text{NDF}: 2058249.9/13$

# yield\_cav4dQ\_rms vs slug



Right In: 0.007+/-0.000  $\chi^2/\text{NDF}$ : 1718.2/3

Left Out: 0.007+/-0.000  $\chi^2/\text{NDF}$ :2032.2/9

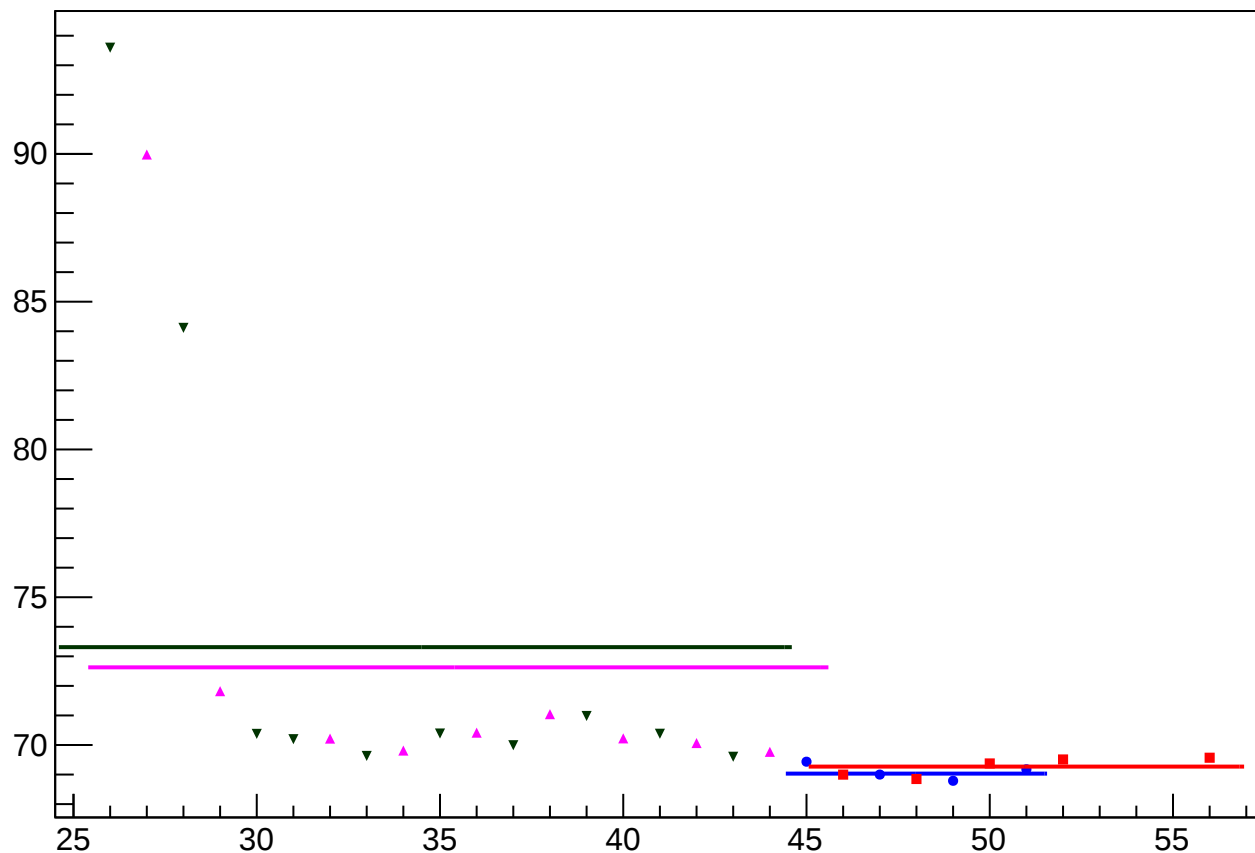
Right Out: 0.007+/-0.000  $\chi^2/\text{NDF}$ : 2250.1/4

Left In: 0.007+/-0.000  $\chi^2/\text{NDF}$ :3439.6/8

0.007+/-0.000  $\chi^2/\text{NDF}$ : 4513.7/13

0.007+/-0.000  $\chi^2/\text{NDF}$ : 5954.6/13

# yield\_bcm0l02\_mean vs slug



Right In: 69.032 $\pm$ 0.000  $\chi^2$ /NDF: 1916968.7/3

Left Out: 73.311 $\pm$ 0.000  $\chi^2$ /NDF: 3714317508.5/9

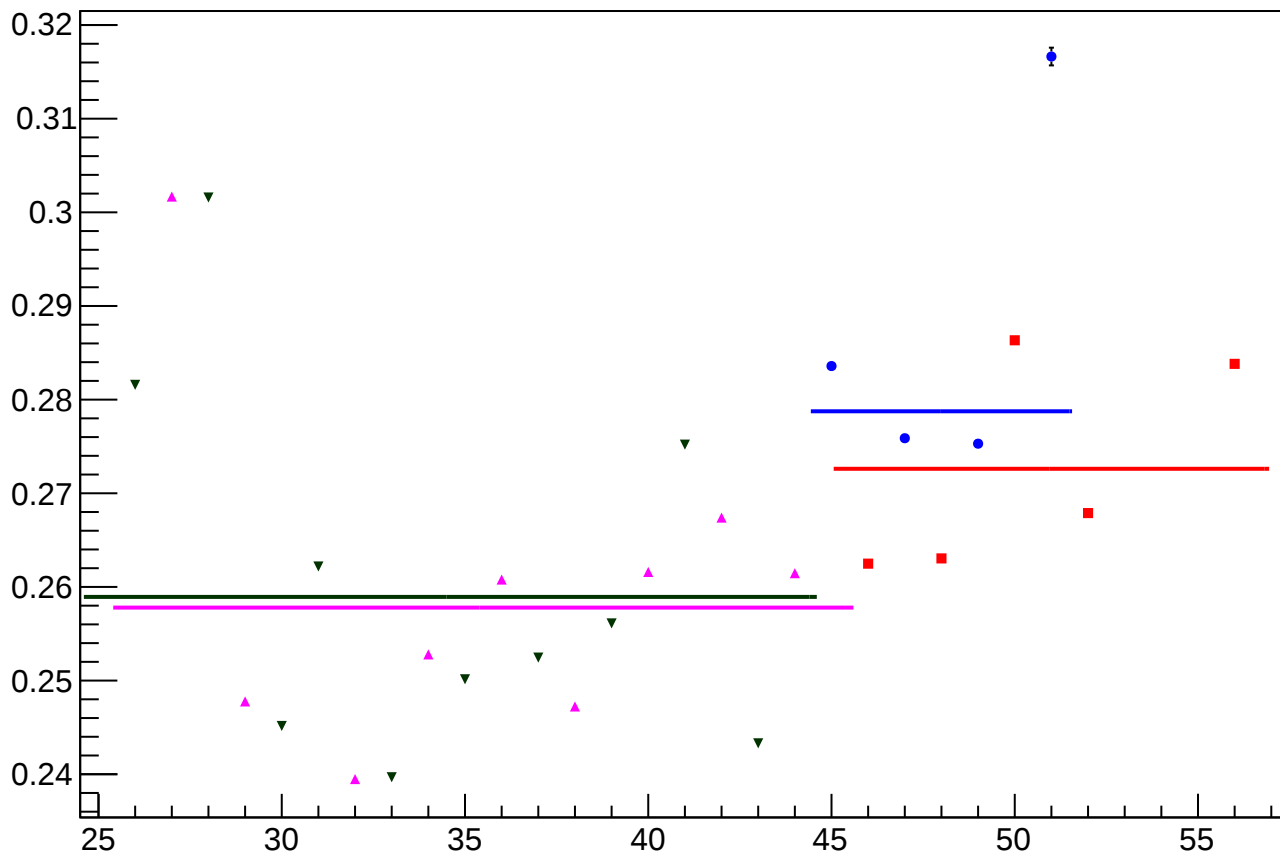
Right Out: 69.269 $\pm$ 0.000  $\chi^2$ /NDF: 2465785.8/4

Left In: 72.627 $\pm$ 0.000  $\chi^2$ /NDF: 2928974770.7/8

72.190 $\pm$ 0.000  $\chi^2$ /NDF: 4057735279.3/13

71.686 $\pm$ 0.000  $\chi^2$ /NDF: 3181178173.0/13

# yield\_bcm0l02\_rms vs slug



Right In: 0.279+/-0.000  $\chi^2/\text{NDF}$ : 2319.0/3

Left Out: 0.259+/-0.000  $\chi^2/\text{NDF}$ : 47766.7/9

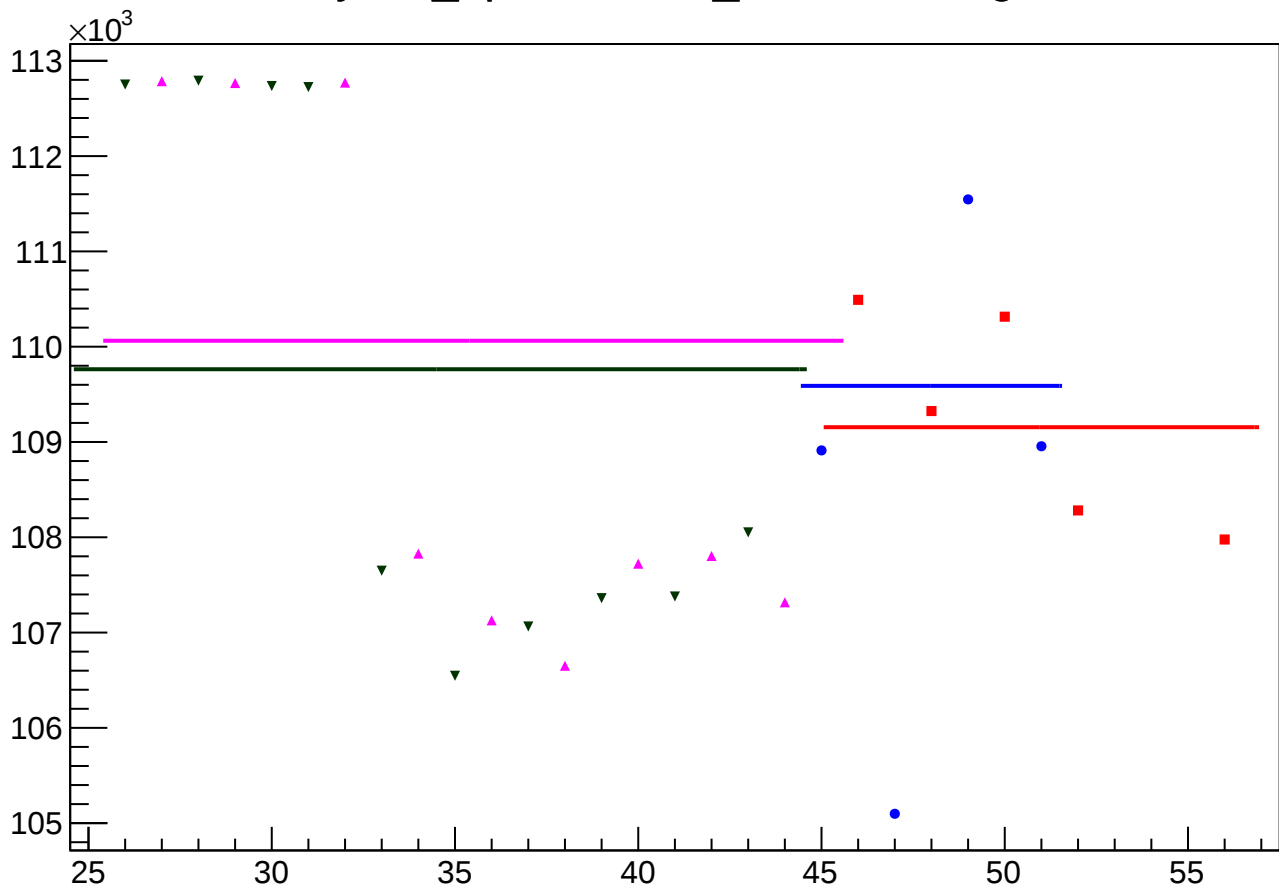
Right Out: 0.273+/-0.000  $\chi^2/\text{NDF}$ : 6376.2/4

Left In: 0.258+/-0.000  $\chi^2/\text{NDF}$ : 49222.3/8

0.264+/-0.000  $\chi^2/\text{NDF}$ : 64738.5/13

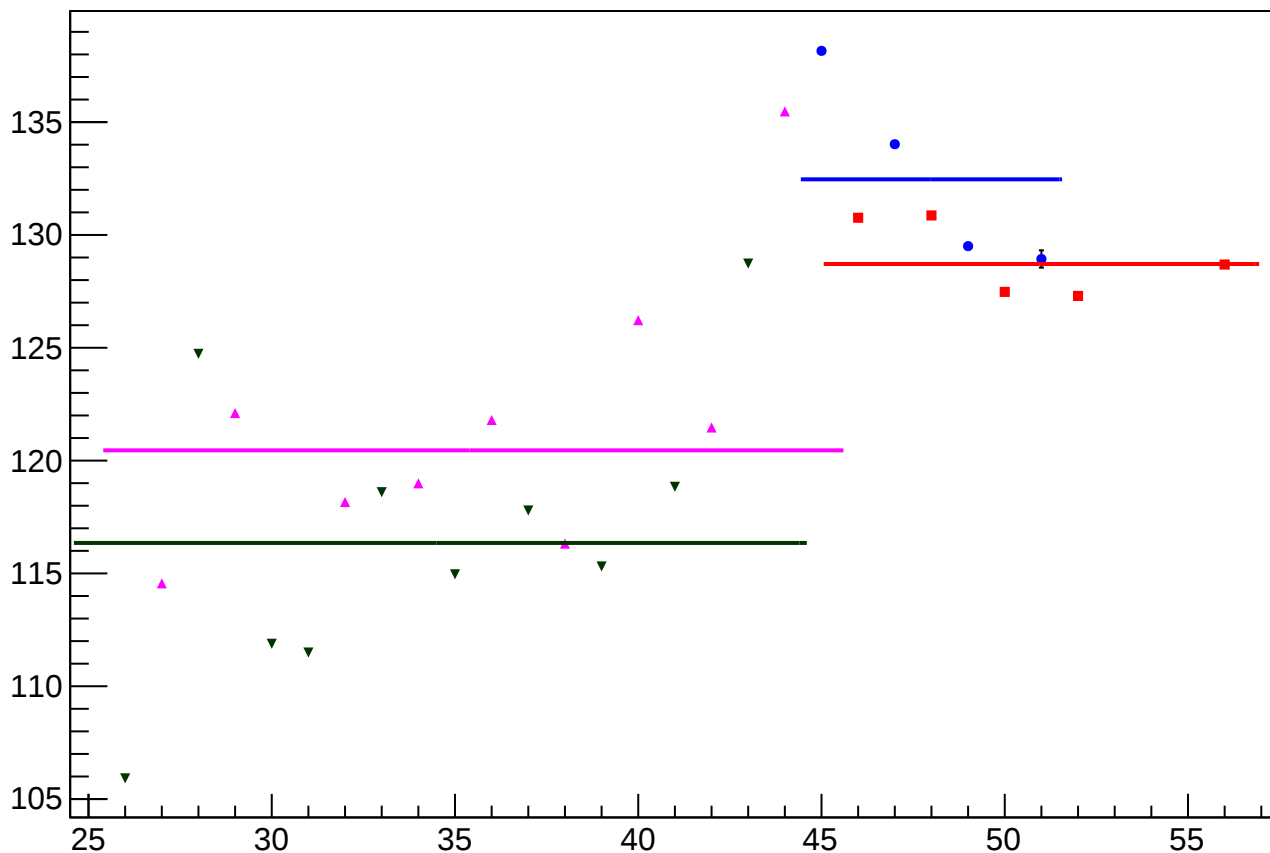
0.262+/-0.000  $\chi^2/\text{NDF}$ : 65329.6/13

# yield\_bpm2i01WS\_mean vs slug



|                                   |                               |                        |                                |
|-----------------------------------|-------------------------------|------------------------|--------------------------------|
| Right In: 109588.851 $\pm$ 0.099  | $\chi^2$ /NDF: 615526435.8/3  | 109723.333 $\pm$ 0.047 | $\chi^2$ /NDF: 3203461767.9/13 |
| Left Out: 109763.312 $\pm$ 0.054  | $\chi^2$ /NDF: 2585526424.9/9 |                        |                                |
| Right Out: 109155.123 $\pm$ 0.087 | $\chi^2$ /NDF: 136206339.7/4  | 109813.342 $\pm$ 0.045 | $\chi^2$ /NDF: 2805709518.4/13 |
| Left In: 110062.231 $\pm$ 0.053   | $\chi^2$ /NDF: 2589926778.7/8 |                        |                                |

# yield\_bpm2i01WS\_rms vs slug



Right In: 132.465 $\pm$ 0.070  $\chi^2$ /NDF: 2766.8/3

Left Out: 116.351 $\pm$ 0.038  $\chi^2$ /NDF: 26842.3/9

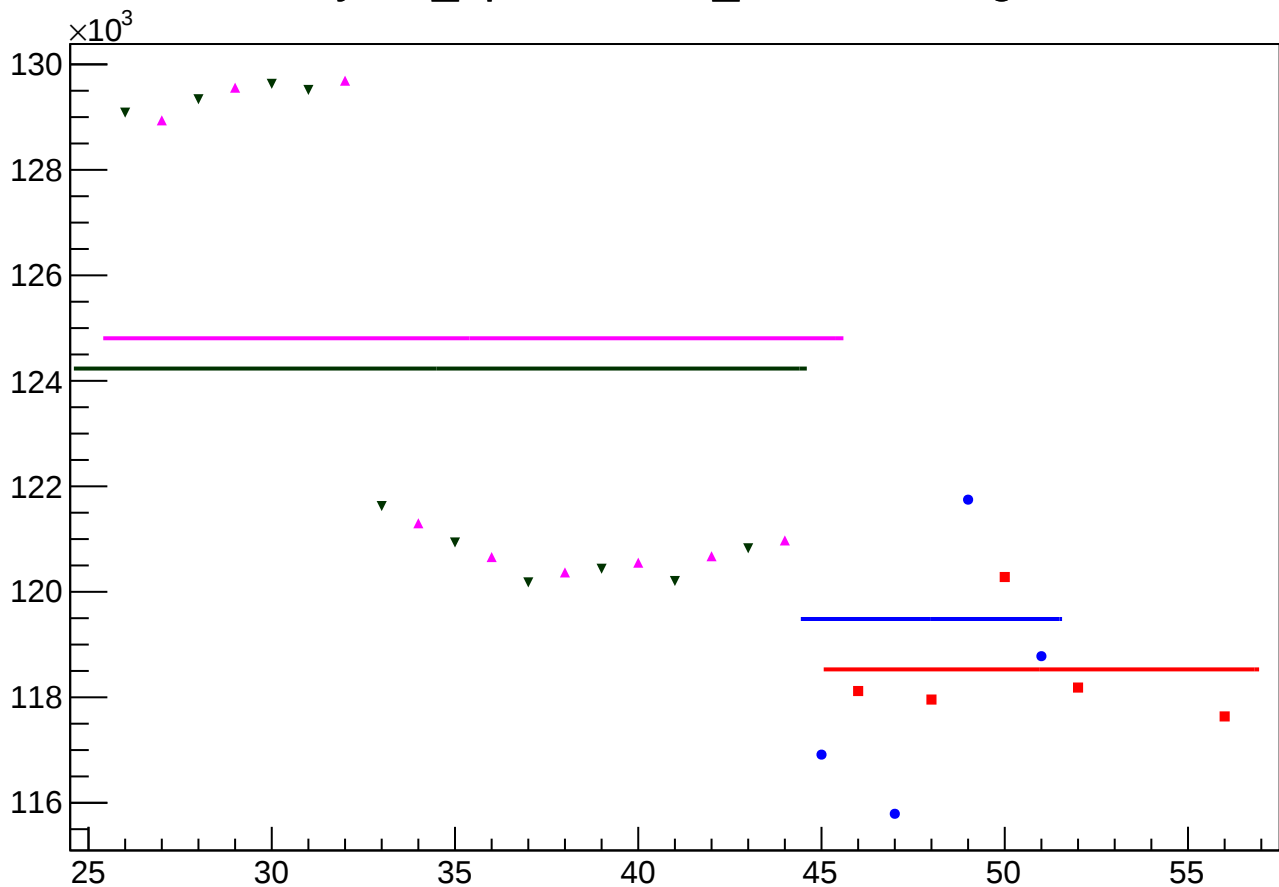
Right Out: 128.712 $\pm$ 0.061  $\chi^2$ /NDF: 589.4/4

Left In: 120.454 $\pm$ 0.038  $\chi^2$ /NDF: 19093.6/8

120.043 $\pm$ 0.033  $\chi^2$ /NDF: 70709.7/13

122.720 $\pm$ 0.032  $\chi^2$ /NDF: 32874.8/13

# yield\_bpm0i07WS\_mean vs slug



Right In: 119484.947 $\pm$ 0.152  $\chi^2$ /NDF: 291809911.8/3

Left Out: 124233.008 $\pm$ 0.092  $\chi^2$ /NDF: 2216187419.4/9

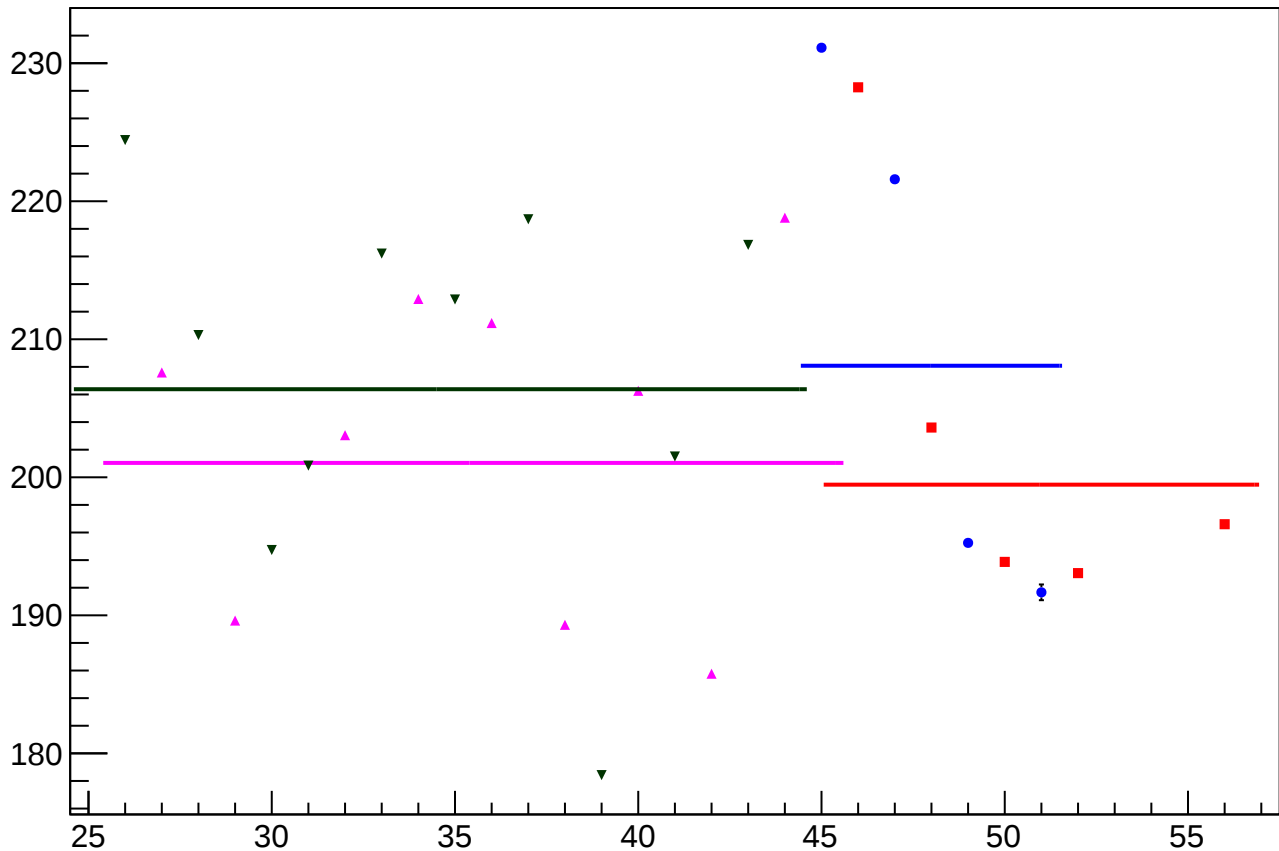
Right Out: 118529.321 $\pm$ 0.134  $\chi^2$ /NDF: 57626693.5/4

Left In: 124806.973 $\pm$ 0.085  $\chi^2$ /NDF: 2610337744.8/8

122968.736 $\pm$ 0.079  $\chi^2$ /NDF: 3222162417.8/13

122999.630 $\pm$ 0.072  $\chi^2$ /NDF: 4236801430.0/13

# yield\_bpm0i07WS\_rms vs slug



Right In:  $208.082 \pm 0.108$   $\chi^2/\text{NDF}$ : 22269.4/3

Left Out:  $206.382 \pm 0.065$   $\chi^2/\text{NDF}$ : 41185.7/9

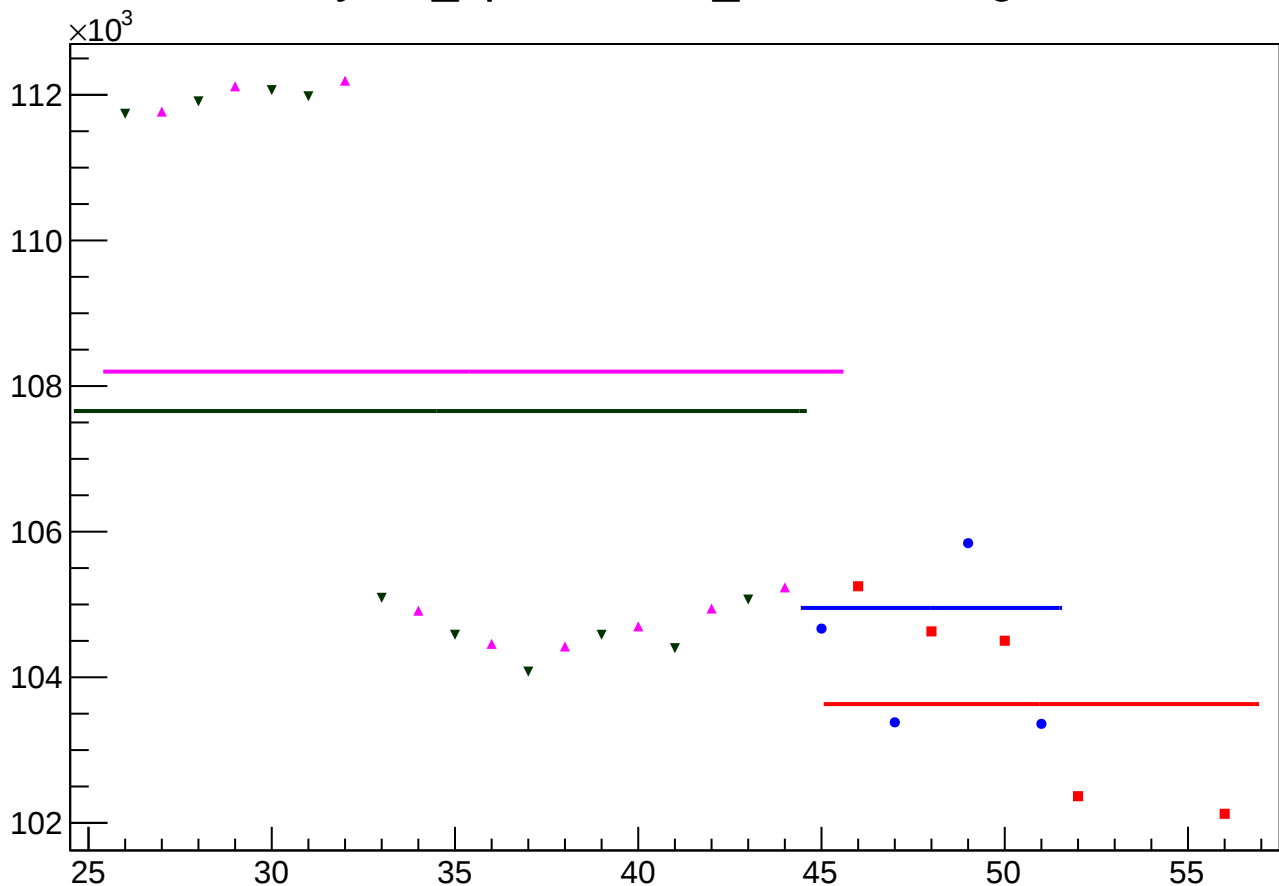
Right Out:  $199.467 \pm 0.095$   $\chi^2/\text{NDF}$ : 11795.6/4

Left In:  $201.043 \pm 0.060$   $\chi^2/\text{NDF}$ : 31613.9/8

$206.834 \pm 0.056$   $\chi^2/\text{NDF}$ : 63638.3/13

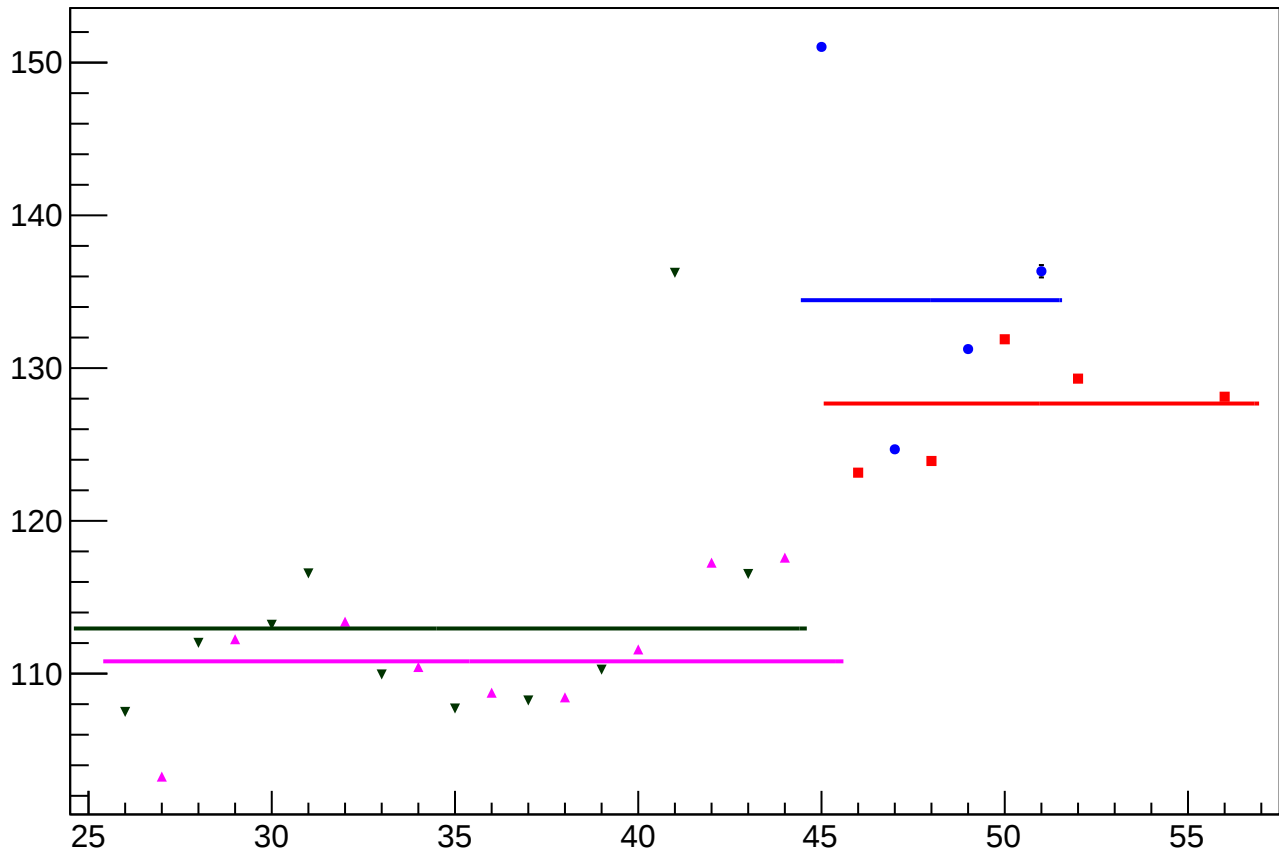
$200.589 \pm 0.051$   $\chi^2/\text{NDF}$ : 43607.2/13

# yield\_bpm0l01WS\_mean vs slug



|                               |                                      |                    |                                       |
|-------------------------------|--------------------------------------|--------------------|---------------------------------------|
| Right In: 104952.765+/-0.099  | $\chi^2/\text{NDF}$ : 108094294.2/3  | 107099.137+/-0.045 | $\chi^2/\text{NDF}$ : 5838452418.0/13 |
| Left Out: 107656.991+/-0.050  | $\chi^2/\text{NDF}$ : 5135639688.0/9 |                    |                                       |
| Right Out: 103631.675+/-0.086 | $\chi^2/\text{NDF}$ : 214355374.4/4  | 107147.262+/-0.041 | $\chi^2/\text{NDF}$ : 8388155376.7/13 |
| Left In: 108198.580+/-0.047   | $\chi^2/\text{NDF}$ : 5989856583.8/8 |                    |                                       |

# yield\_bpm0l01WS\_rms vs slug



Right In: 134.446 $\pm$ 0.070  $\chi^2$ /NDF: 18309.7/3

Left Out: 112.955 $\pm$ 0.036  $\chi^2$ /NDF: 43068.9/9

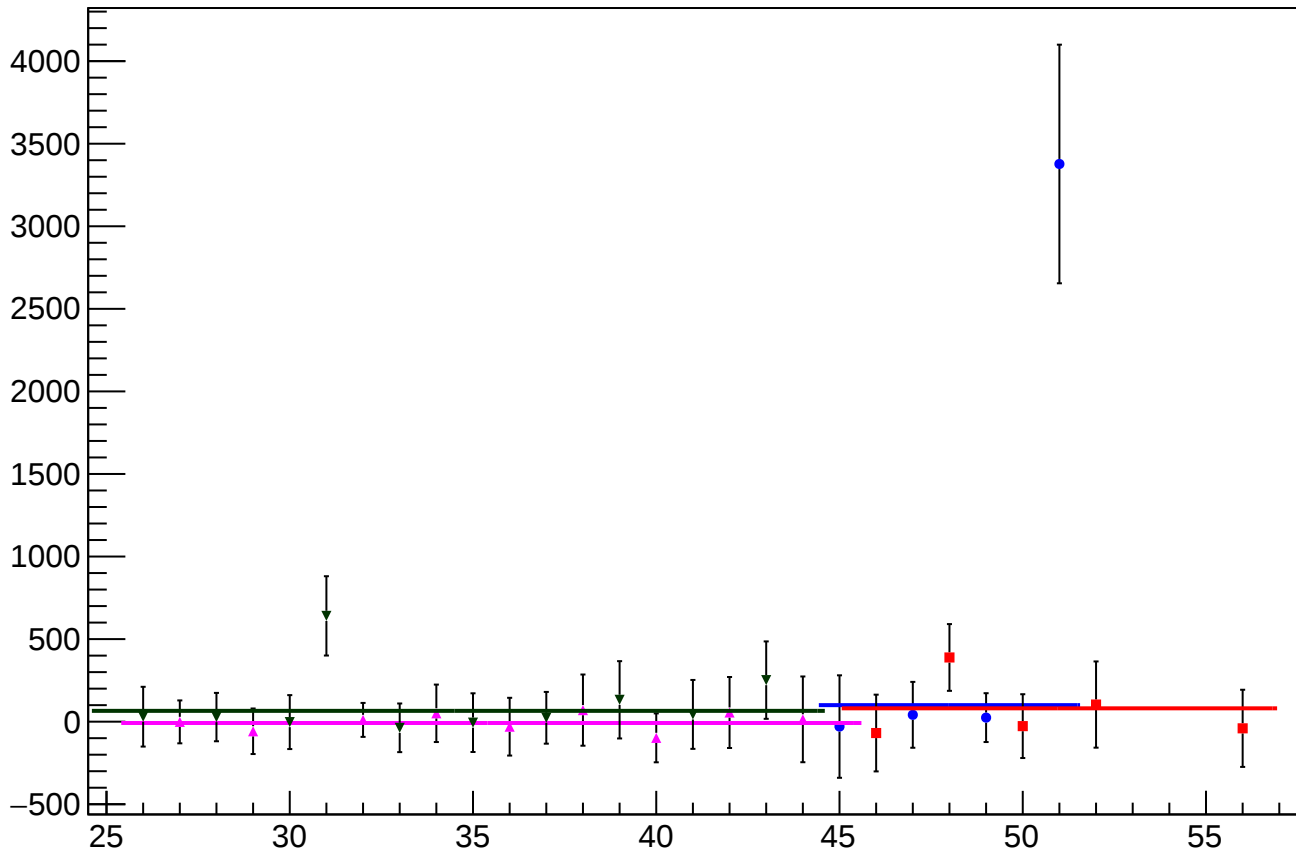
Right Out: 127.681 $\pm$ 0.061  $\chi^2$ /NDF: 2764.4/4

Left In: 110.804 $\pm$ 0.033  $\chi^2$ /NDF: 17540.0/8

117.388 $\pm$ 0.032  $\chi^2$ /NDF: 136506.7/13

114.689 $\pm$ 0.029  $\chi^2$ /NDF: 79957.1/13

# asym\_bcm\_an\_ds\_mean vs slug



Right In: 100.103 $\pm$ 109.656  $\chi^2/\text{NDF}$ : 21.1/3

Left Out: 65.484 $\pm$ 56.811  $\chi^2/\text{NDF}$ : 7.5/9

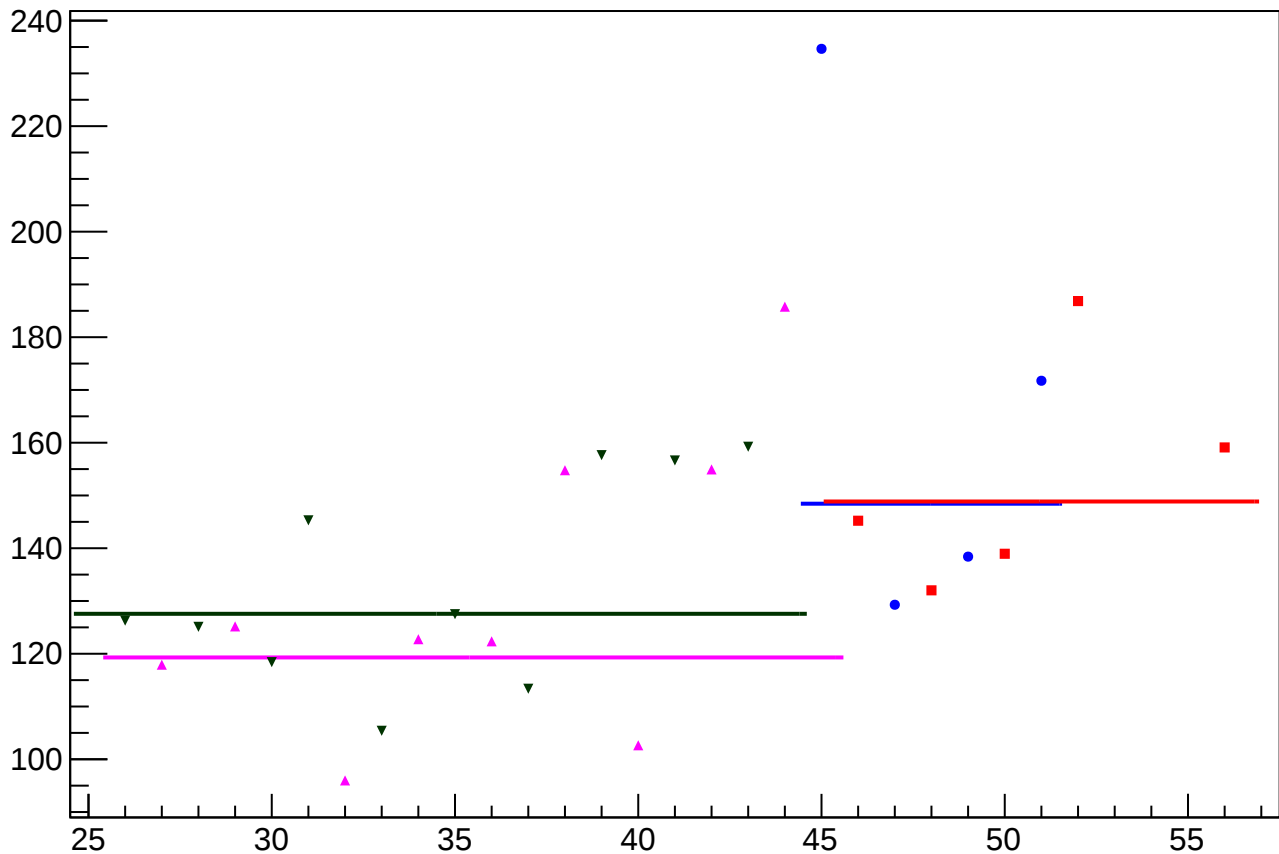
Right Out: 80.784 $\pm$ 98.639  $\chi^2/\text{NDF}$ : 3.3/4

Left In: -7.966 $\pm$ 51.584  $\chi^2/\text{NDF}$ : 0.9/8

72.810 $\pm$ 50.443  $\chi^2/\text{NDF}$ : 28.6/13

11.093 $\pm$ 45.711  $\chi^2/\text{NDF}$ : 4.9/13

# asym\_bcm\_an\_ds\_rms vs slug



Right In: 148.440 $\pm$ 0.078  $\chi^2$ /NDF: 184143.7/3

Left Out: 127.571 $\pm$ 0.040  $\chi^2$ /NDF:187904.2/9

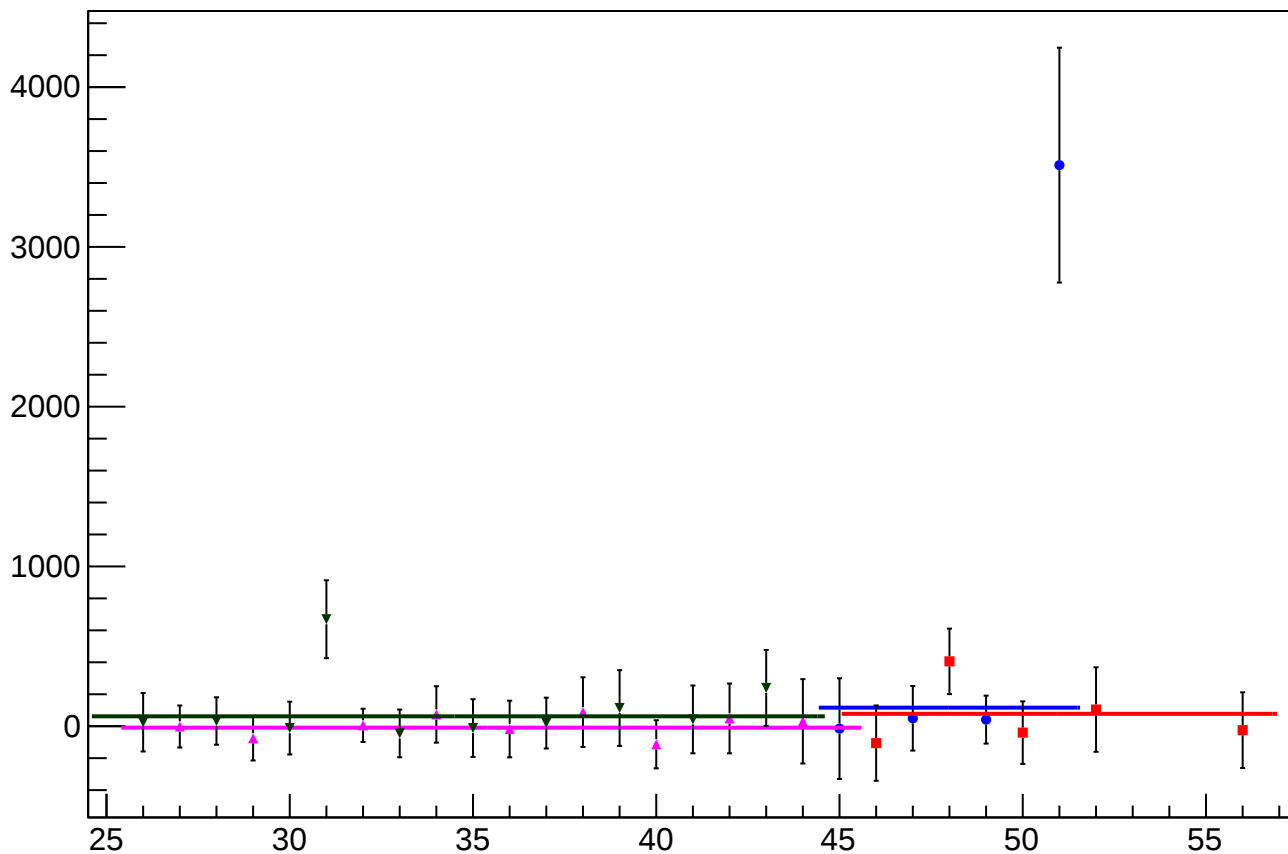
Right Out: 148.857 $\pm$ 0.070  $\chi^2$ /NDF: 65821.6/4

Left In: 119.298 $\pm$ 0.036  $\chi^2$ /NDF:373710.1/8

131.987 $\pm$ 0.036  $\chi^2$ /NDF: 429158.0/13

125.646 $\pm$ 0.032  $\chi^2$ /NDF: 580564.1/13

# asym\_bcm\_an\_ds3\_mean vs slug



Right In:  $116.096 \pm 111.229$   $\chi^2/\text{NDF}: 21.9/3$

Left Out:  $61.888 \pm 57.600$   $\chi^2/\text{NDF}: 7.9/9$

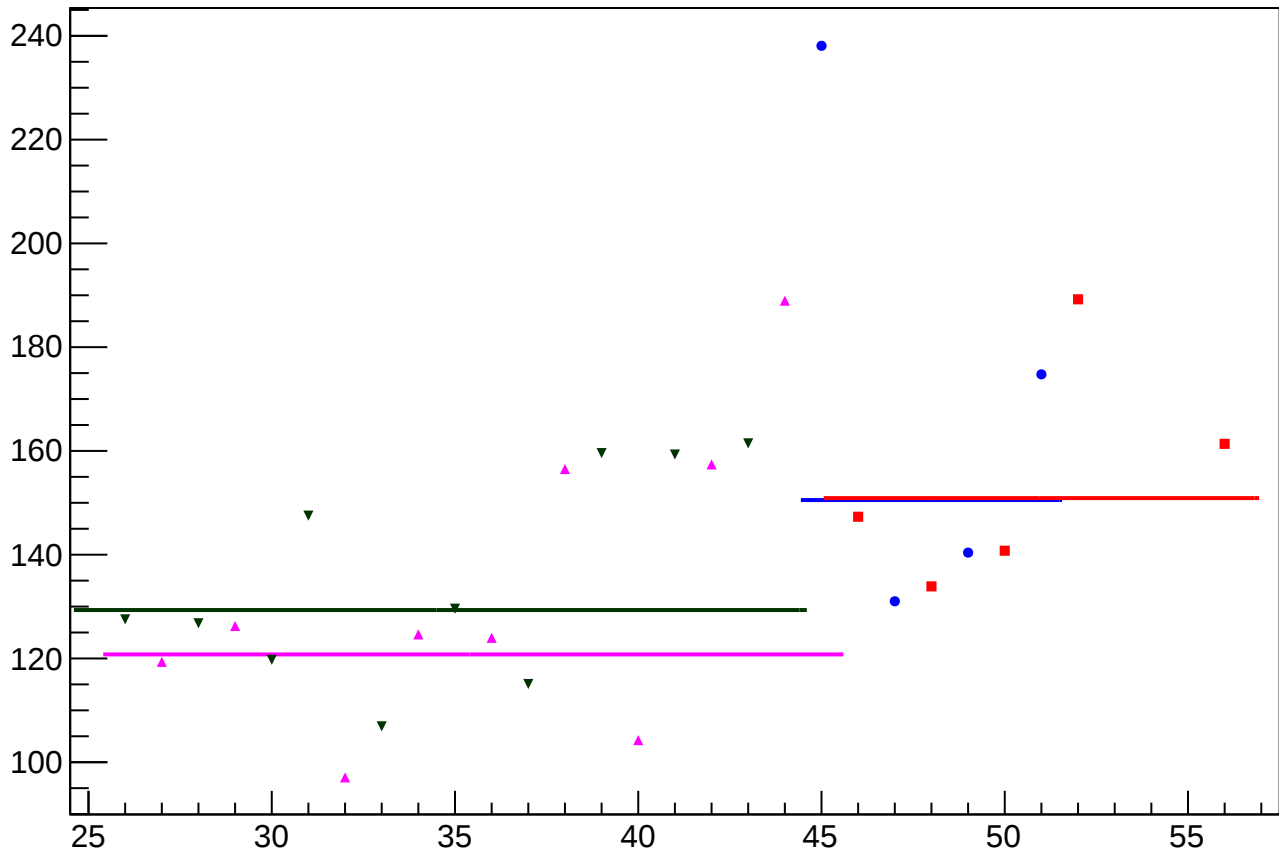
Right Out:  $77.494 \pm 99.995$   $\chi^2/\text{NDF}: 3.7/4$

Left In:  $-9.264 \pm 52.240$   $\chi^2/\text{NDF}: 1.2/8$

$73.351 \pm 51.149$   $\chi^2/\text{NDF}: 29.9/13$

$9.338 \pm 46.302$   $\chi^2/\text{NDF}: 5.6/13$

# asym\_bcm\_an\_ds3\_rms vs slug



Right In: 150.532 $\pm$ 0.079  $\chi^2$ /NDF: 184503.1/3

Left Out: 129.330 $\pm$ 0.041  $\chi^2$ /NDF:188760.2/9

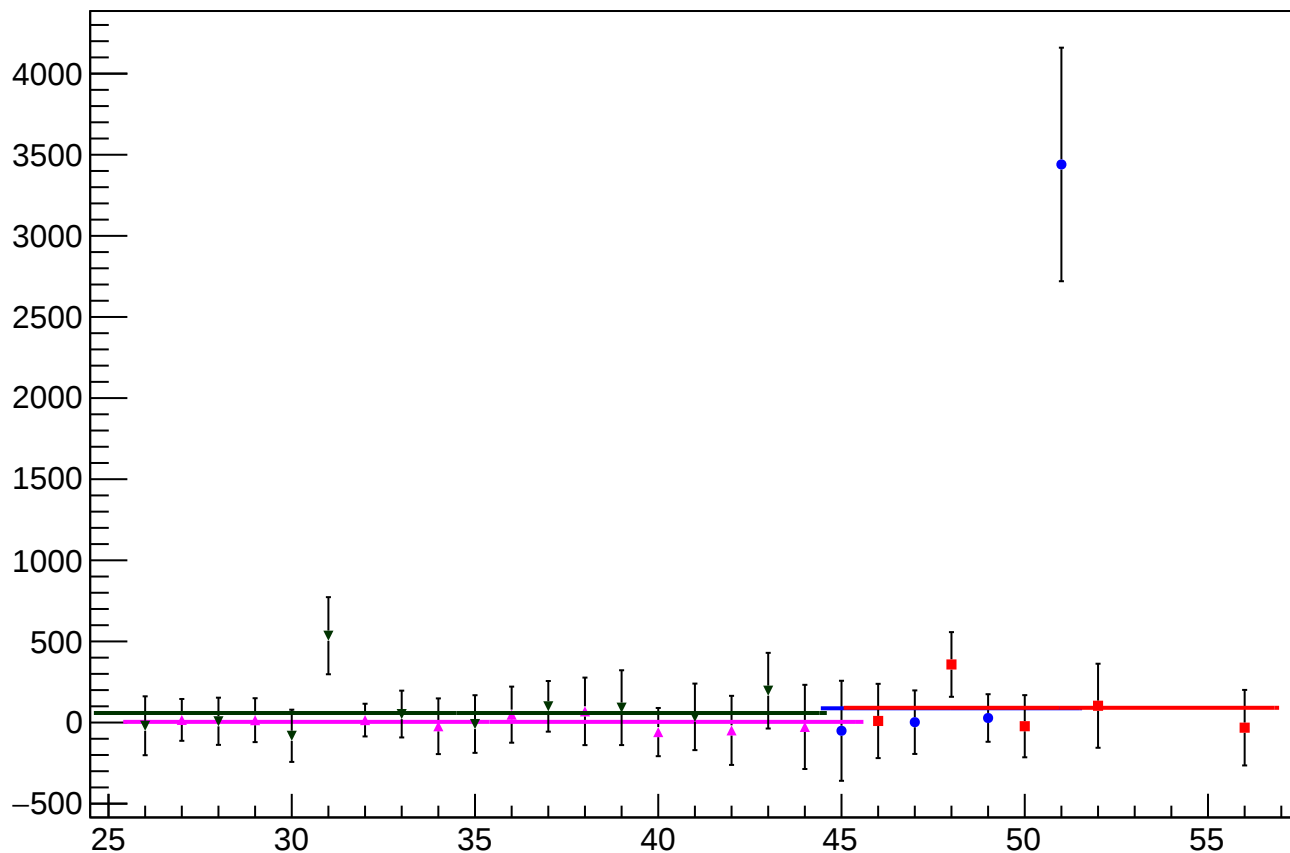
Right Out: 150.907 $\pm$ 0.071  $\chi^2$ /NDF: 65502.7/4

Left In: 120.780 $\pm$ 0.037  $\chi^2$ /NDF:376423.6/8

133.814 $\pm$ 0.036  $\chi^2$ /NDF: 430562.9/13

127.240 $\pm$ 0.033  $\chi^2$ /NDF: 584543.9/13

# asym\_bcm\_an\_us\_mean vs slug



Right In: 87.817 $\pm$ 108.441  $\chi^2/\text{NDF}$ : 22.2/3

Left Out: 58.851 $\pm$ 56.282  $\chi^2/\text{NDF}$ : 5.7/9

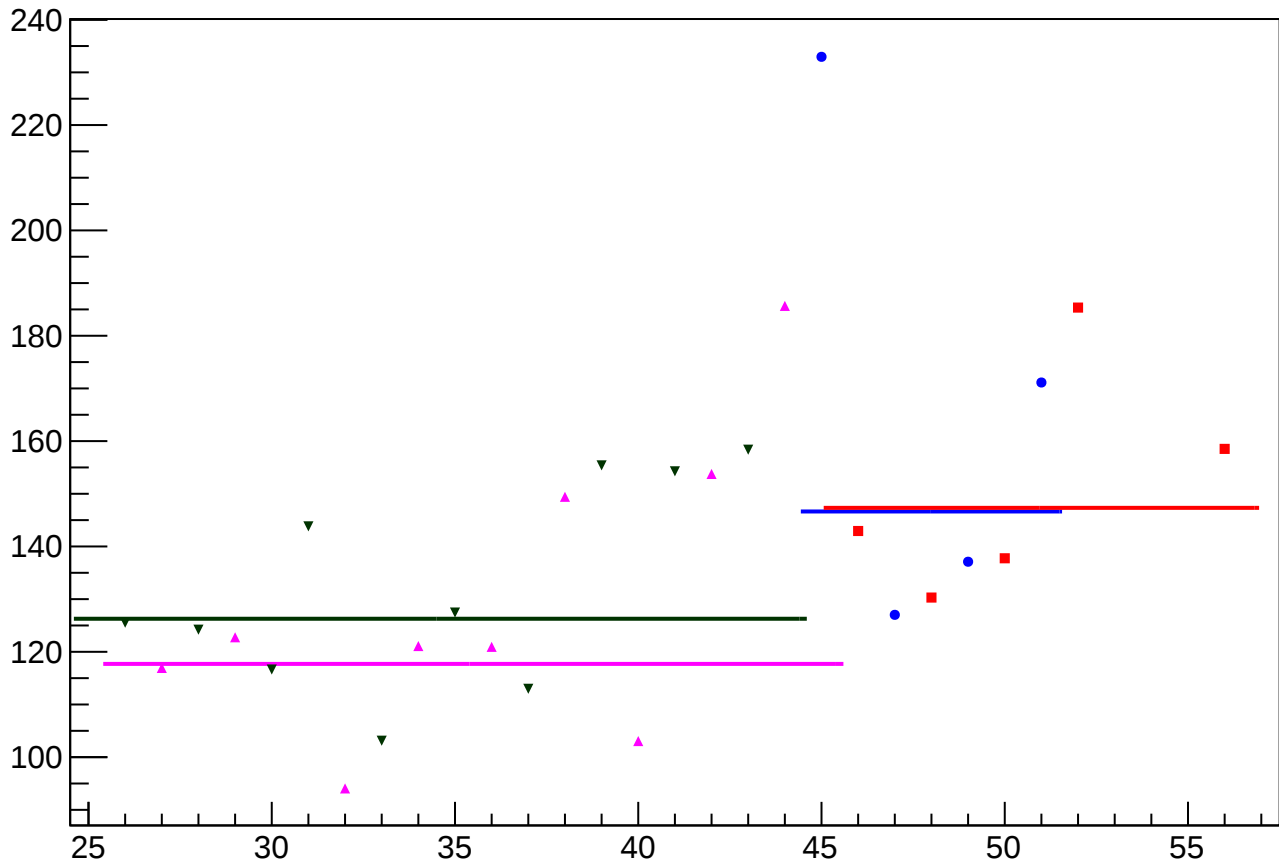
Right Out: 90.907 $\pm$ 97.666  $\chi^2/\text{NDF}$ : 2.6/4

Left In: 4.097 $\pm$ 50.903  $\chi^2/\text{NDF}$ : 0.5/8

64.997 $\pm$ 49.955  $\chi^2/\text{NDF}$ : 28.0/13

22.641 $\pm$ 45.140  $\chi^2/\text{NDF}$ : 3.6/13

# asym\_bcm\_an\_us\_rms vs slug



Right In:  $146.642 \pm 0.077$   $\chi^2/\text{NDF}$ : 187605.9/3

Left Out:  $126.276 \pm 0.040$   $\chi^2/\text{NDF}$ : 191667.2/9

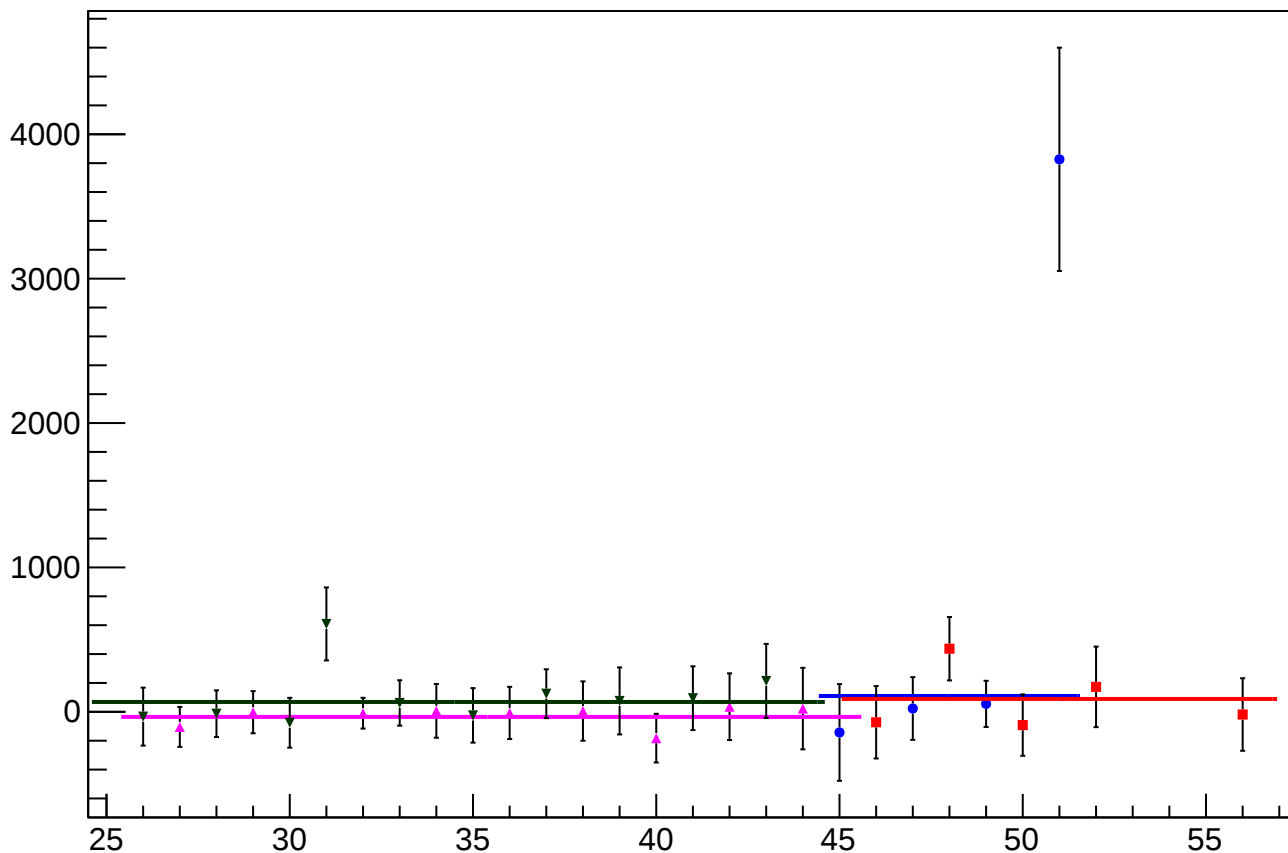
Right Out:  $147.331 \pm 0.069$   $\chi^2/\text{NDF}$ : 68021.0/4

Left In:  $117.706 \pm 0.036$   $\chi^2/\text{NDF}$ : 374878.6/8

$130.598 \pm 0.035$   $\chi^2/\text{NDF}$ : 434842.6/13

$124.034 \pm 0.032$   $\chi^2/\text{NDF}$ : 587608.1/13

# asym\_bcm\_dg\_us\_mean vs slug



Right In: 109.568+/-118.725  $\chi^2/\text{NDF}$ : 23.9/3

Left Out: 68.281+/-60.848  $\chi^2/\text{NDF}$ : 6.5/9

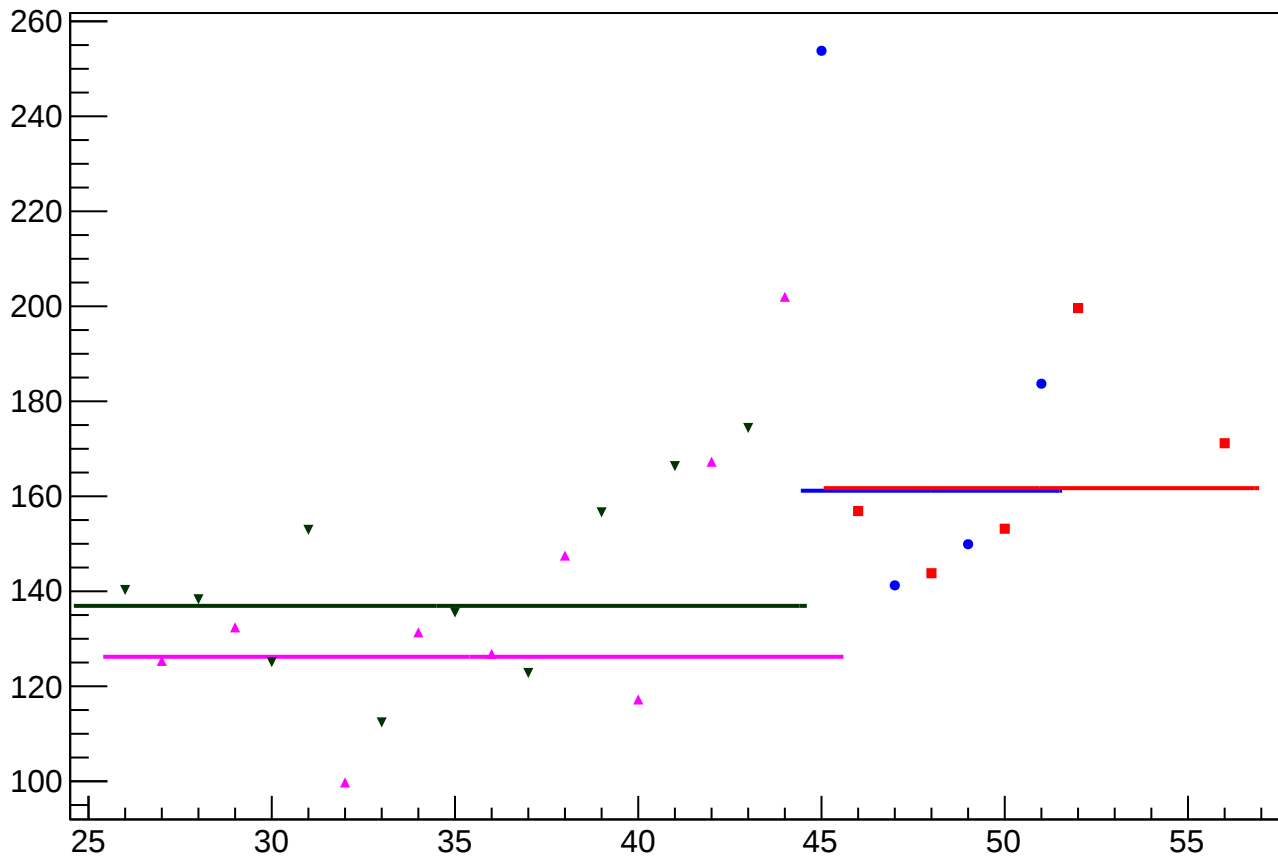
Right Out: 89.212+/-106.918  $\chi^2/\text{NDF}$ : 3.9/4

Left In: -35.096+/-54.517  $\chi^2/\text{NDF}$ : 1.4/8

76.870+/-54.150  $\chi^2/\text{NDF}$ : 30.5/13

-9.446+/-48.567  $\chi^2/\text{NDF}$ : 6.4/13

# asym\_bcm\_dg\_us\_rms vs slug



Right In: 161.174+/-0.084  $\chi^2/\text{NDF}$ : 181386.9/3

Left Out: 136.932+/-0.043  $\chi^2/\text{NDF}$ :173473.1/9

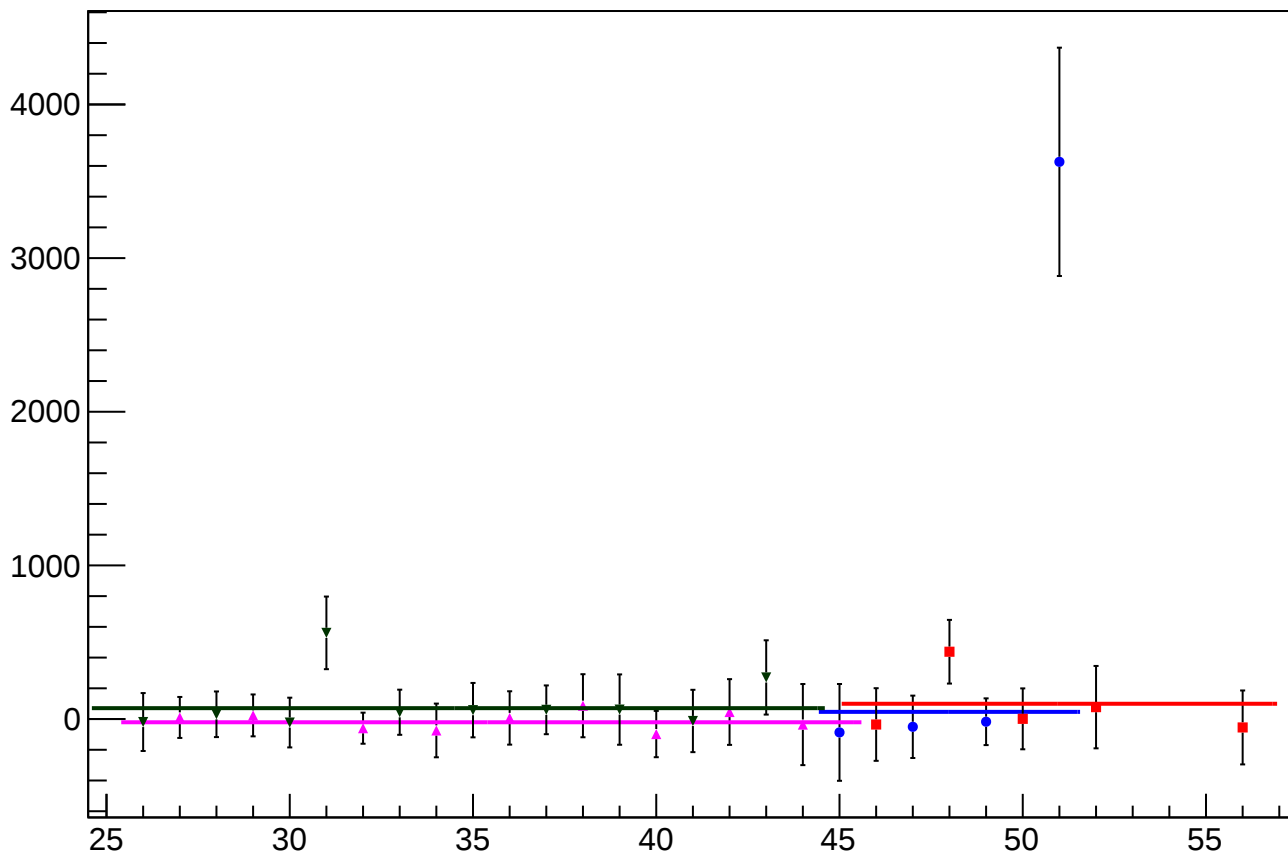
Right Out: 161.717+/-0.076  $\chi^2/\text{NDF}$ : 57073.9/4

Left In: 126.213+/-0.039  $\chi^2/\text{NDF}$ :362550.8/8

141.975+/-0.038  $\chi^2/\text{NDF}$ : 420898.4/13

133.539+/-0.034  $\chi^2/\text{NDF}$ : 594654.2/13

# asym\_bcm\_dg\_ds\_mean vs slug



Right In: 46.711+/-112.227  $\chi^2/\text{NDF}$ : 23.8/3

Left Out: 70.831+/-56.980  $\chi^2/\text{NDF}$ : 5.8/9

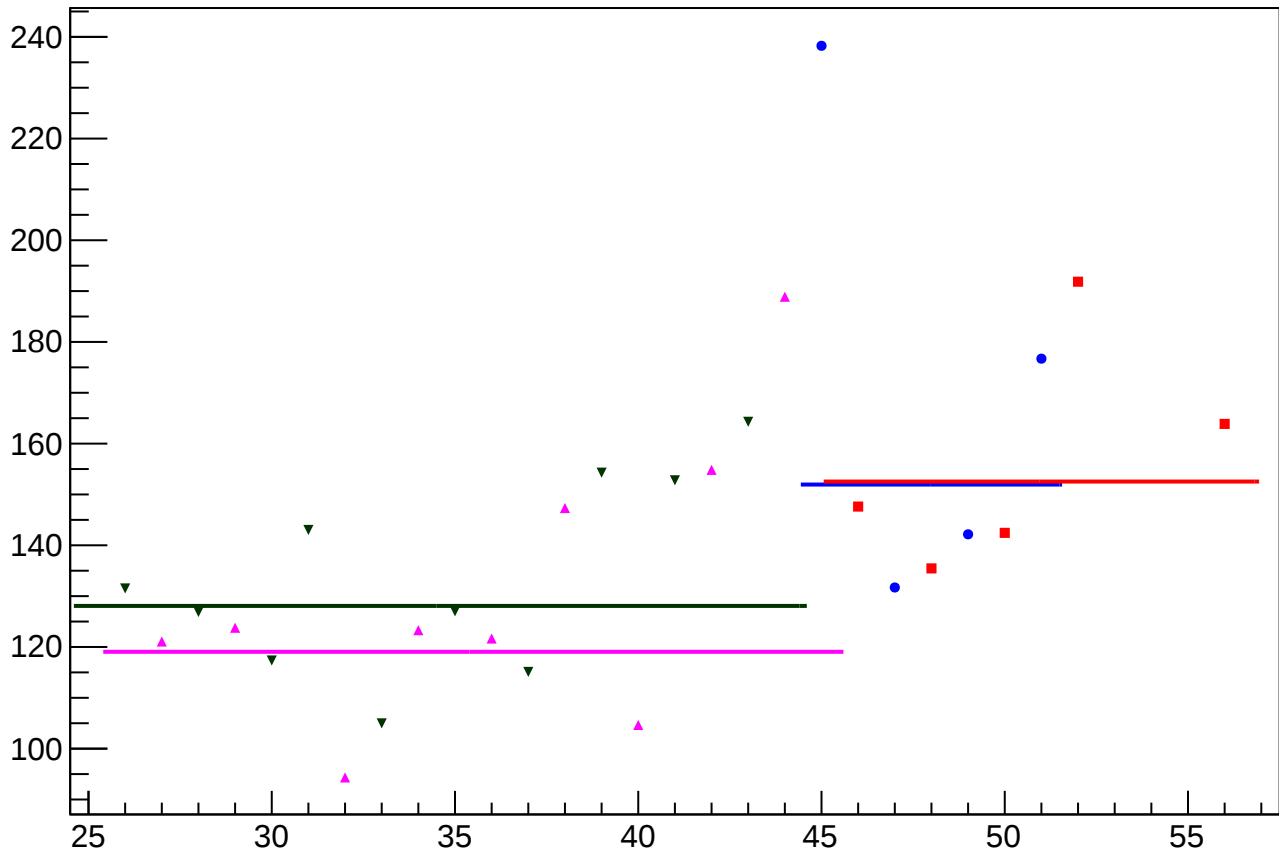
Right Out: 99.456+/-101.104  $\chi^2/\text{NDF}$ : 3.7/4

Left In: -20.980+/-51.456  $\chi^2/\text{NDF}$ : 1.1/8

65.888+/-50.807  $\chi^2/\text{NDF}$ : 29.7/13

3.797+/-45.858  $\chi^2/\text{NDF}$ : 5.8/13

# asym\_bcm\_dg\_ds\_rms vs slug



Right In: 151.948 $\pm$ 0.079  $\chi^2$ /NDF: 180497.3/3

Left Out: 128.077 $\pm$ 0.040  $\chi^2$ /NDF:181273.8/9

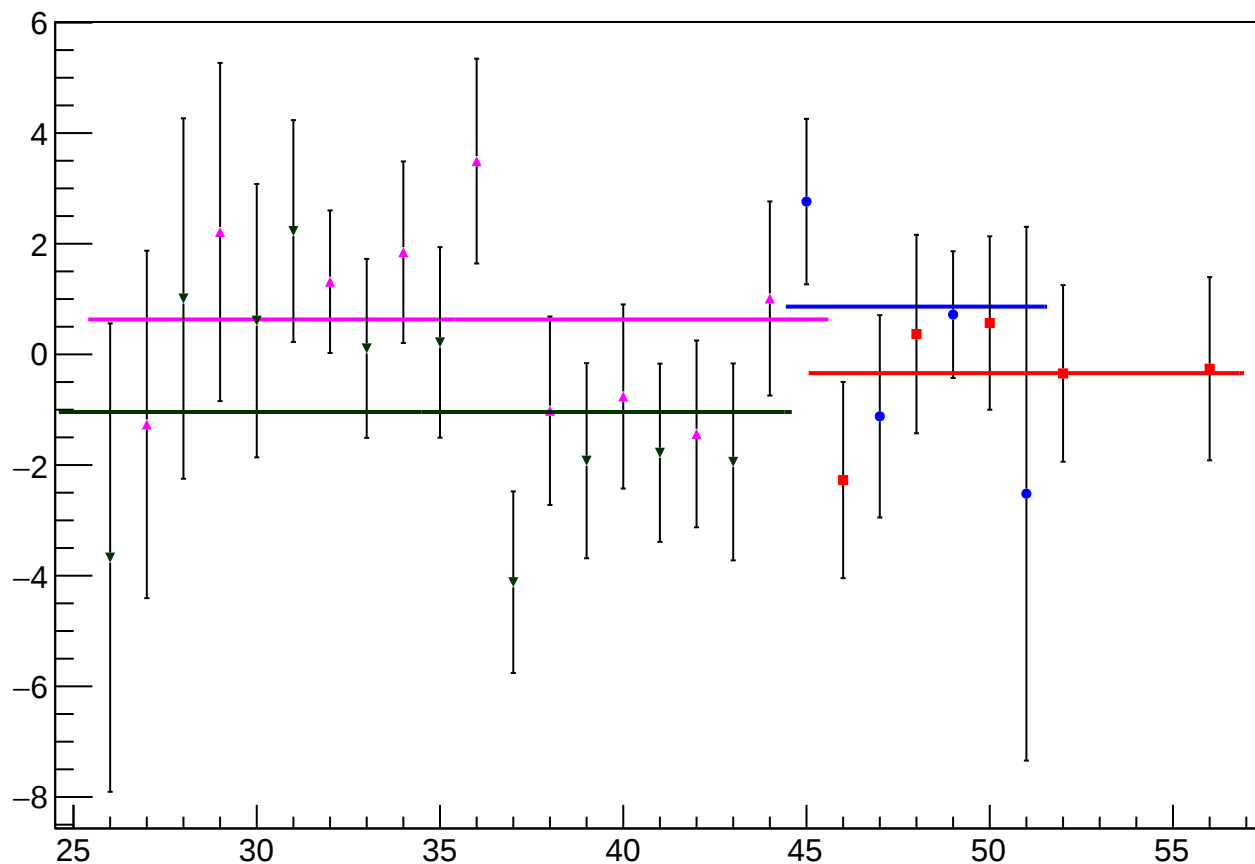
Right Out: 152.539 $\pm$ 0.071  $\chi^2$ /NDF: 67078.8/4

Left In: 119.049 $\pm$ 0.036  $\chi^2$ /NDF:376169.4/8

132.970 $\pm$ 0.036  $\chi^2$ /NDF: 433711.6/13

125.939 $\pm$ 0.032  $\chi^2$ /NDF: 617541.7/13

# asym\_cav4bQ\_mean vs slug



Right In:  $0.863 \pm 0.803$   $\chi^2/\text{NDF}: 3.3/3$

Left Out:  $-1.041 \pm 0.611$   $\chi^2/\text{NDF}: 9.2/9$

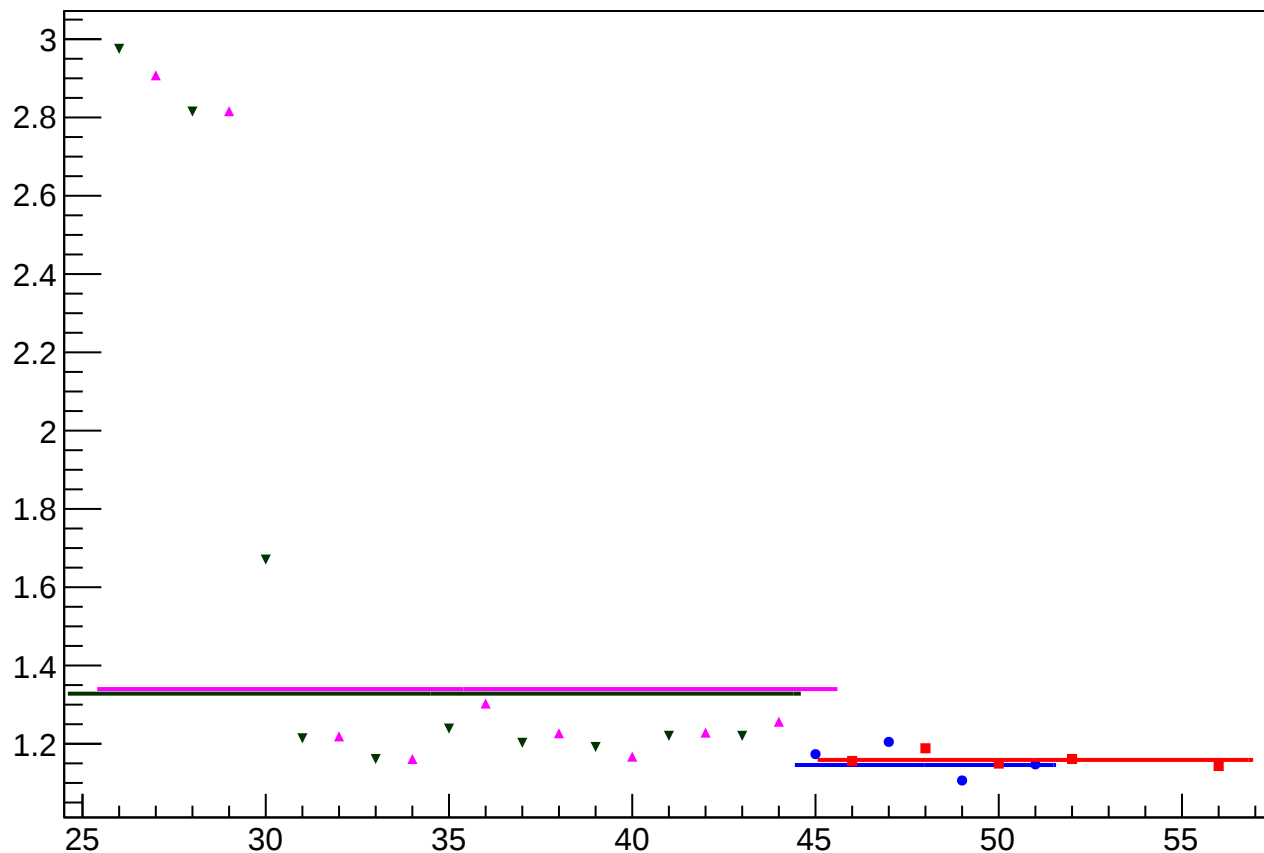
Right Out:  $-0.338 \pm 0.747$   $\chi^2/\text{NDF}: 1.7/4$

Left In:  $0.631 \pm 0.592$   $\chi^2/\text{NDF}: 7.0/8$

$-0.342 \pm 0.486$   $\chi^2/\text{NDF}: 16.0/13$

$0.257 \pm 0.464$   $\chi^2/\text{NDF}: 9.8/13$

# asym\_cav4bQ\_rms vs slug



Right In: 1.146+/-0.001  $\chi^2/\text{NDF}$ : 5156.0/3

Left Out: 1.328+/-0.000  $\chi^2/\text{NDF}$ :831193.5/9

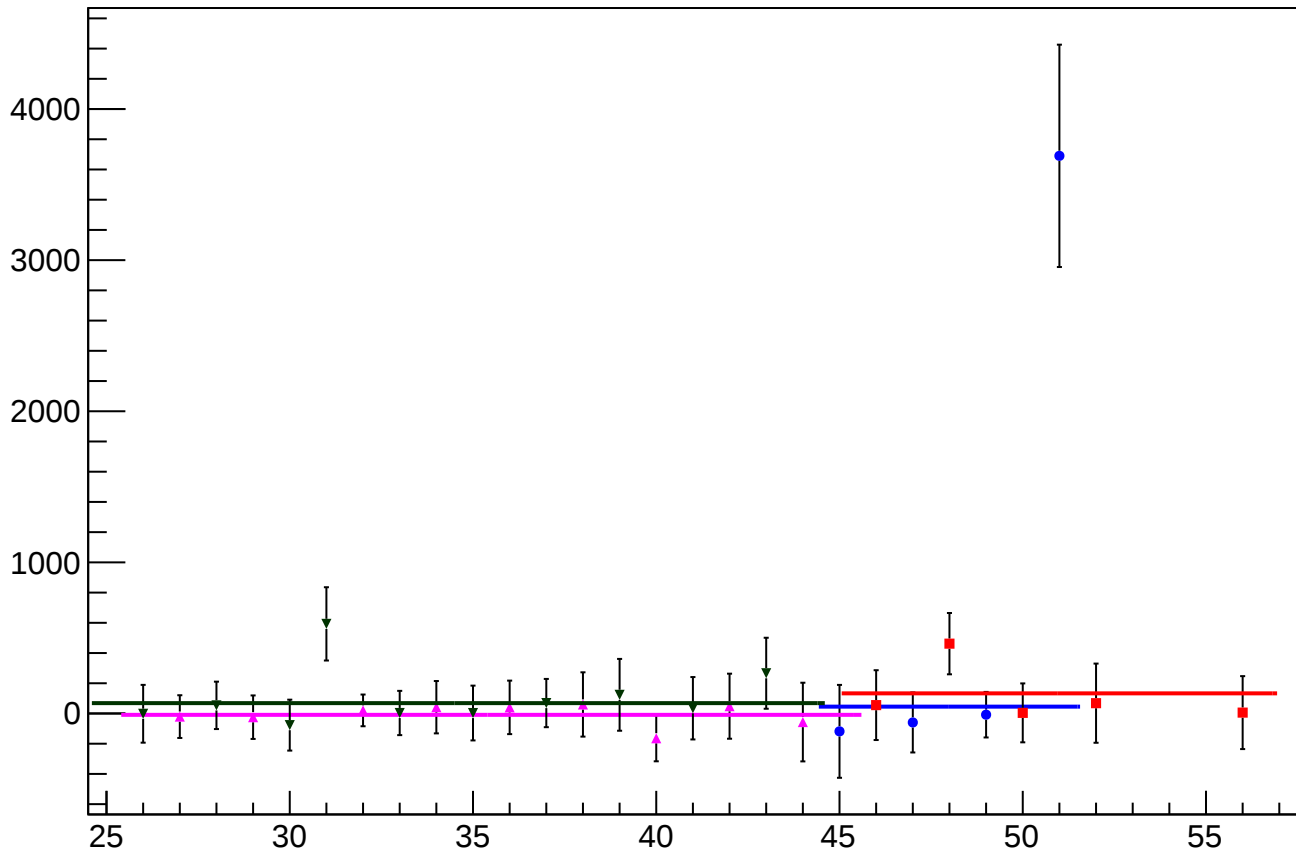
Right Out: 1.159+/-0.001  $\chi^2/\text{NDF}$ : 801.2/4

Left In: 1.340+/-0.000  $\chi^2/\text{NDF}$ :1050932.3/8

1.261+/-0.000  $\chi^2/\text{NDF}$ : 901578.1/13

1.270+/-0.000  $\chi^2/\text{NDF}$ : 1123893.7/13

# asym\_cav4cQ\_mean vs slug



Right In: 45.294+/-110.548  $\chi^2/\text{NDF}$ : 25.2/3

Left Out: 68.524+/-58.147  $\chi^2/\text{NDF}$ : 6.7/9

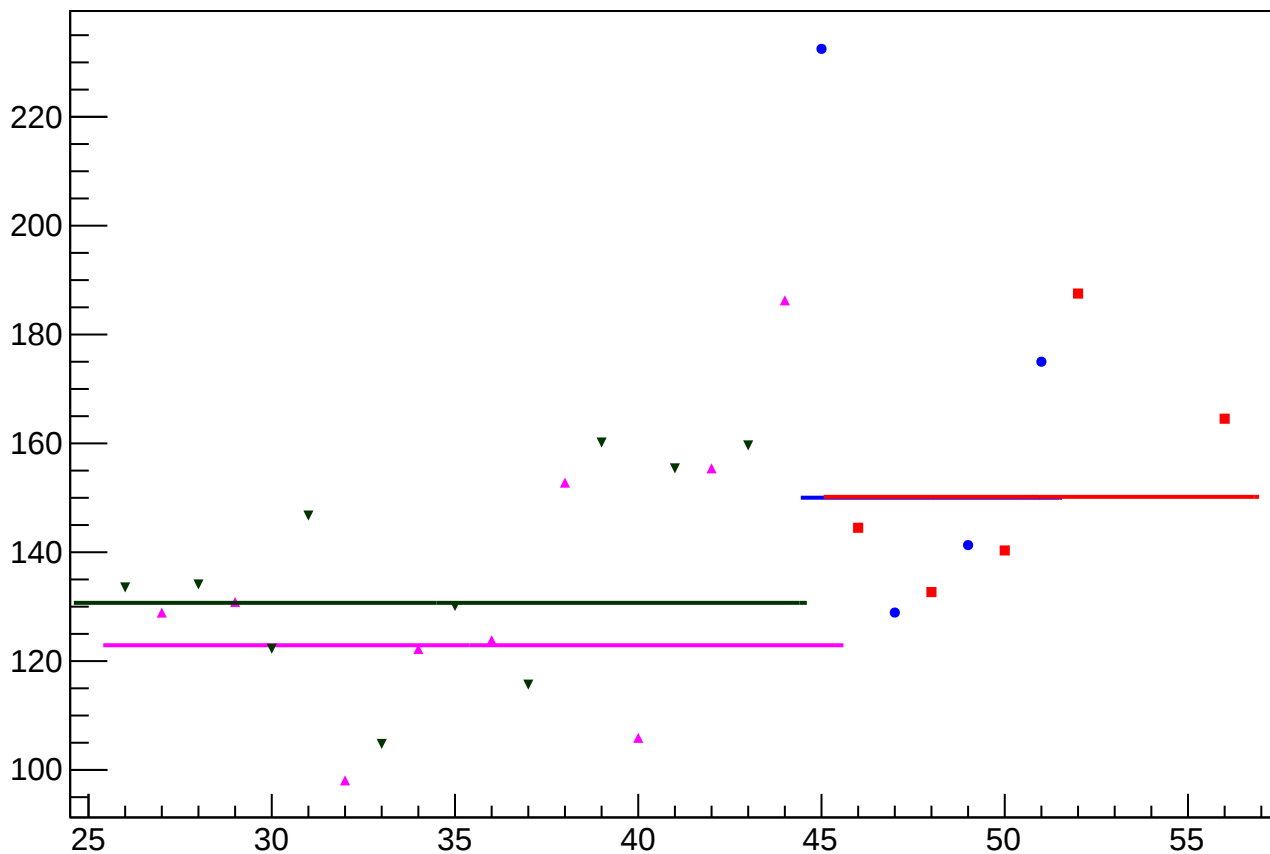
Right Out: 133.170+/-99.461  $\chi^2/\text{NDF}$ : 3.5/4

Left In: -9.045+/-53.017  $\chi^2/\text{NDF}$ : 1.5/8

63.490+/-51.462  $\chi^2/\text{NDF}$ : 32.0/13

22.422+/-46.785  $\chi^2/\text{NDF}$ : 6.6/13

# asym\_cav4cQ\_rms vs slug



Right In: 150.022+/-0.078     $\chi^2/\text{NDF}$ : 175525.7/3

Left Out: 130.703+/-0.041     $\chi^2/\text{NDF}$ :185197.8/9

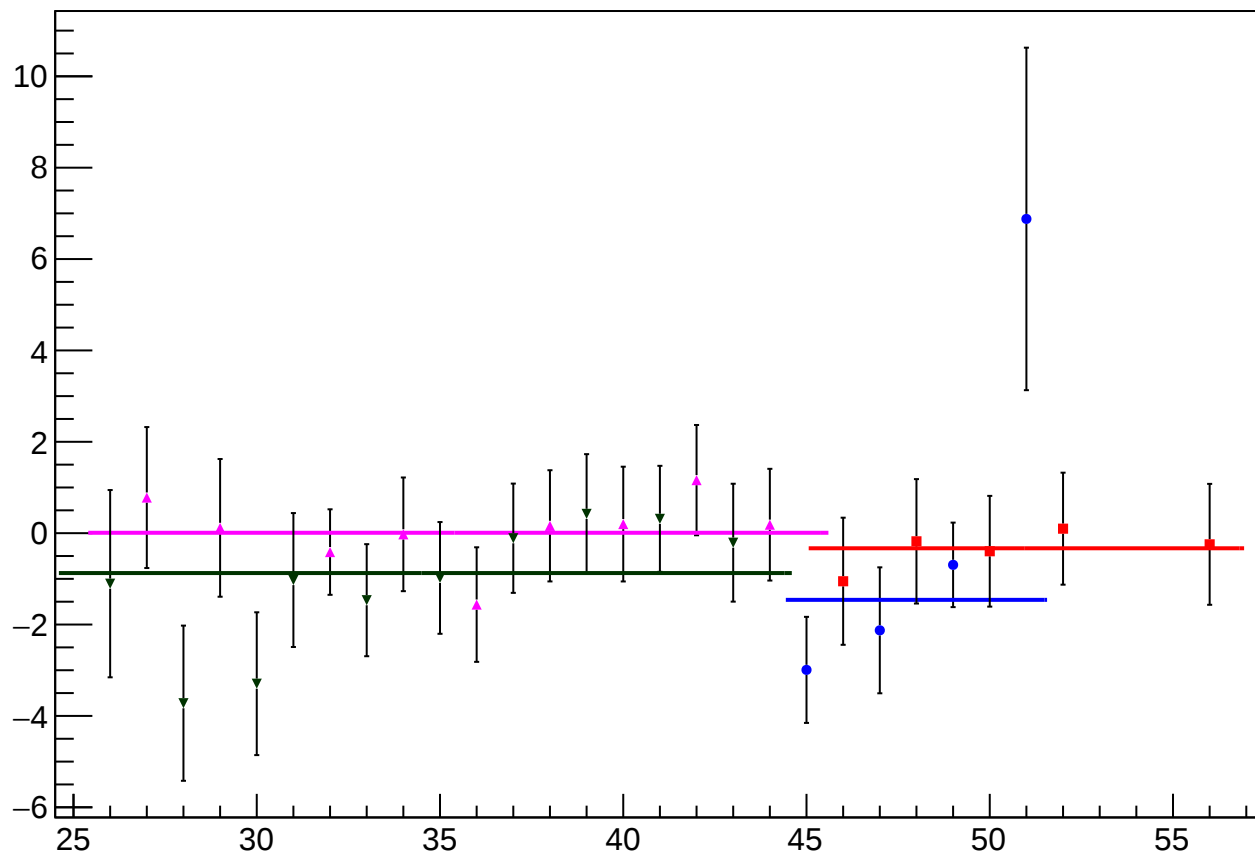
Right Out: 150.179+/-0.070     $\chi^2/\text{NDF}$ : 68924.3/4

Left In: 122.914+/-0.037     $\chi^2/\text{NDF}$ :350280.2/8

134.890+/-0.036     $\chi^2/\text{NDF}$ : 408566.0/13

128.947+/-0.033     $\chi^2/\text{NDF}$ : 536240.0/13

# asym\_cav4dQ\_mean vs slug



Right In: -1.459+/-0.631  $\chi^2/\text{NDF}$ : 7.6/3

Left Out: -0.873+/-0.429  $\chi^2/\text{NDF}$ : 8.2/9

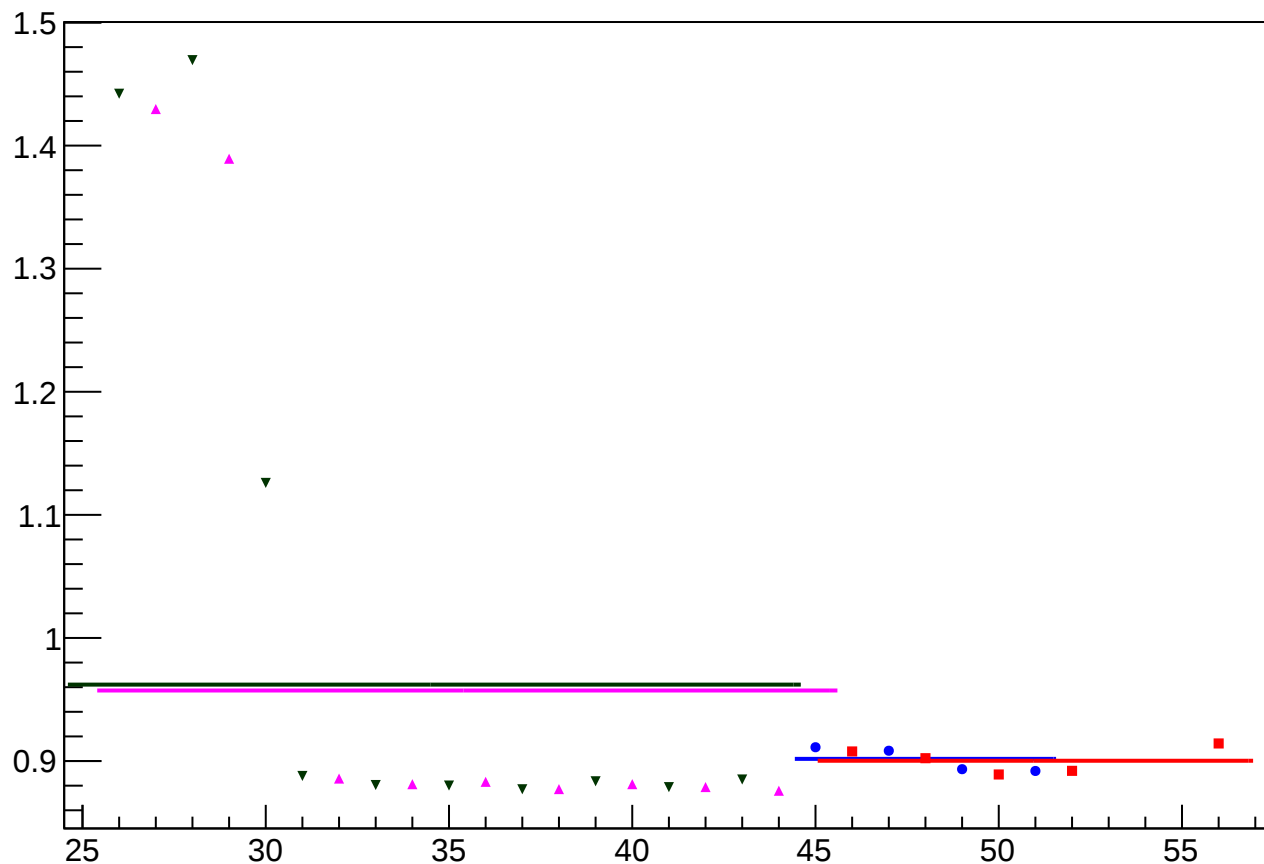
Right Out: -0.331+/-0.580  $\chi^2/\text{NDF}$ : 0.4/4

Left In: 0.009+/-0.410  $\chi^2/\text{NDF}$ : 3.0/8

-1.058+/-0.355  $\chi^2/\text{NDF}$ : 16.4/13

-0.104+/-0.335  $\chi^2/\text{NDF}$ : 3.6/13

# asym\_cav4dQ\_rms vs slug



Right In: 0.902+/-0.000  $\chi^2/\text{NDF}$ : 356.7/3

Left Out: 0.962+/-0.000  $\chi^2/\text{NDF}$ : 367875.5/9

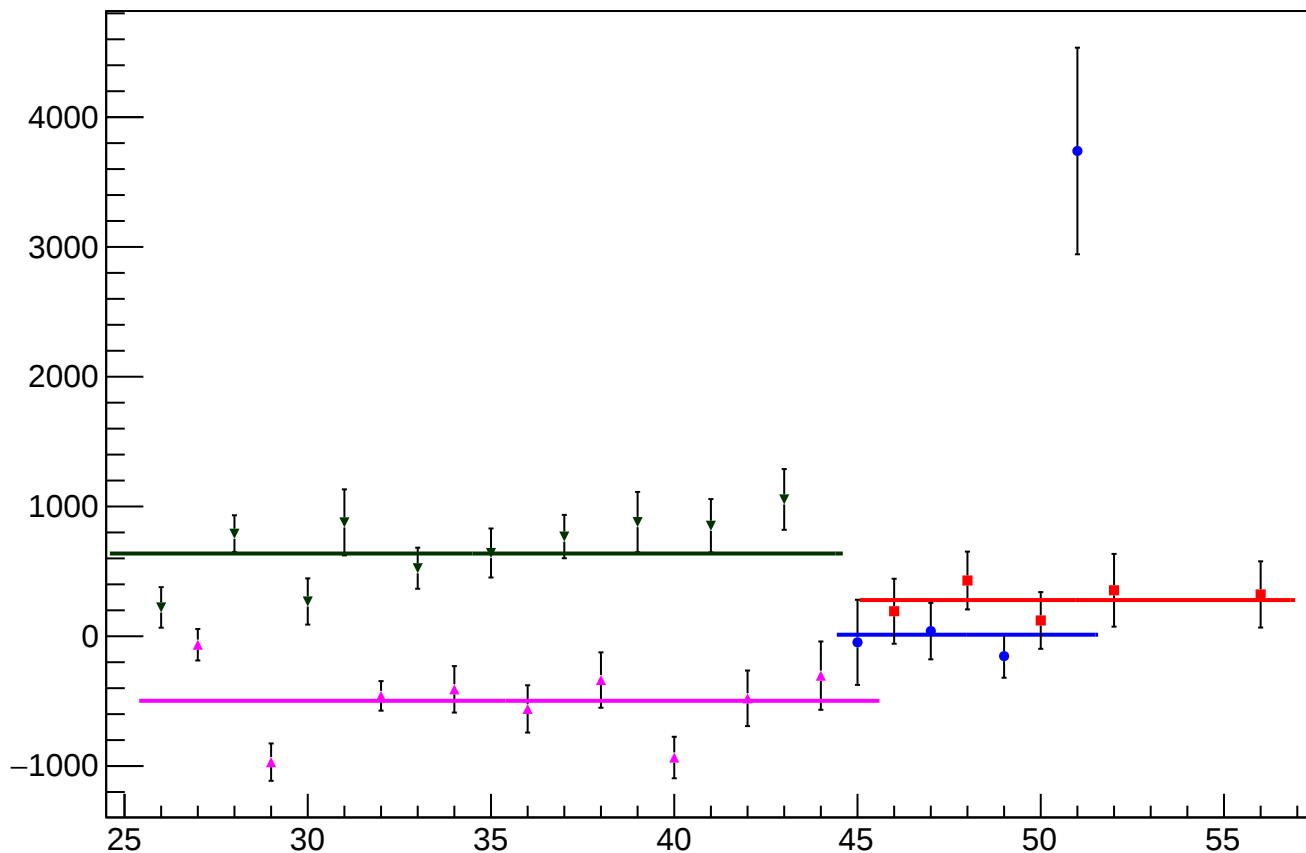
Right Out: 0.900+/-0.000  $\chi^2/\text{NDF}$ : 547.4/4

Left In: 0.957+/-0.000  $\chi^2/\text{NDF}$ : 411279.5/8

0.943+/-0.000  $\chi^2/\text{NDF}$ : 380715.9/13

0.938+/-0.000  $\chi^2/\text{NDF}$ : 424743.4/13

# asym\_bcm0l02\_mean vs slug



Right In: 12.013 $\pm$ 121.330  $\chi^2/\text{NDF}$ : 23.0/3

Left Out: 637.702 $\pm$ 57.571  $\chi^2/\text{NDF}$ :19.9/9

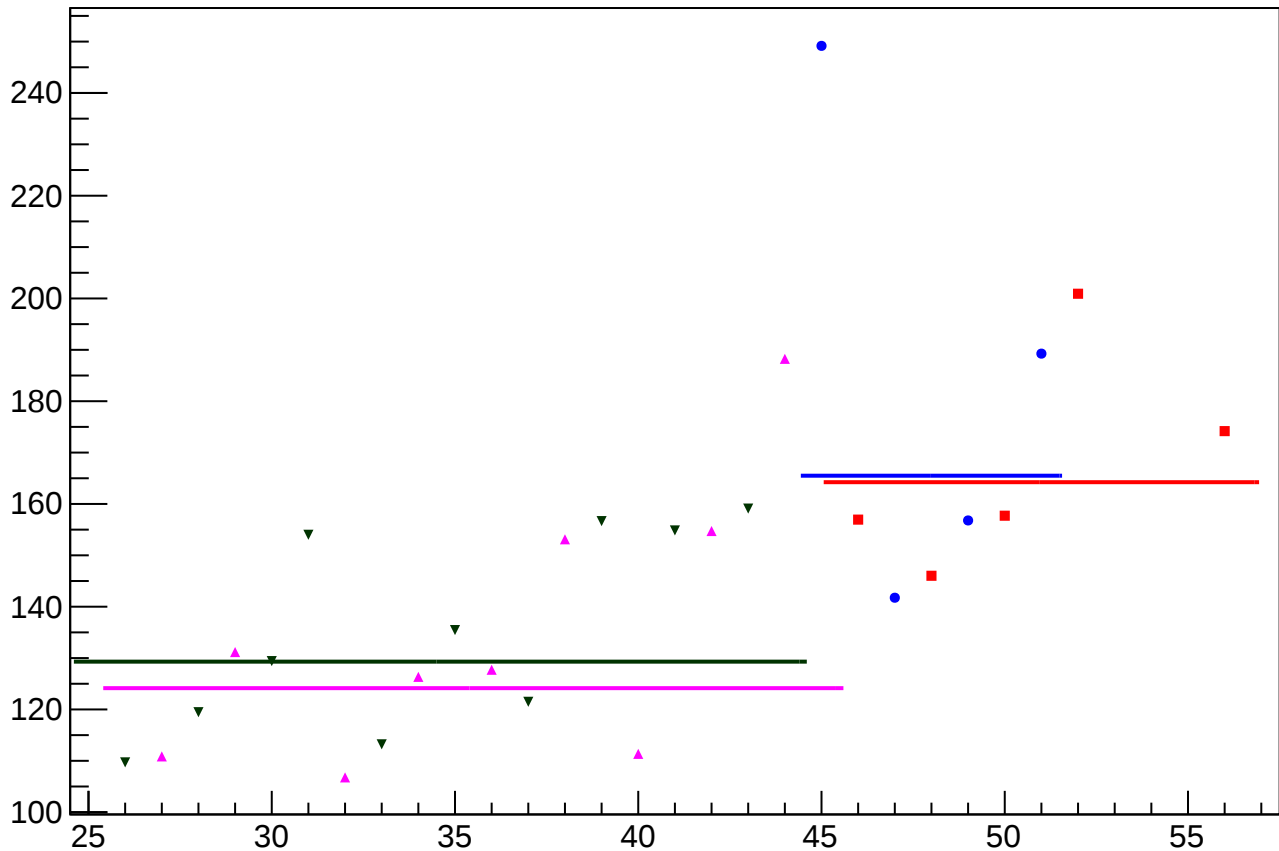
Right Out: 278.900 $\pm$ 108.405  $\chi^2/\text{NDF}$ : 1.2/4

Left In: -497.375 $\pm$ 53.287  $\chi^2/\text{NDF}$ :32.6/8

522.718 $\pm$ 52.013  $\chi^2/\text{NDF}$ : 64.5/13

-346.308 $\pm$ 47.822  $\chi^2/\text{NDF}$ : 75.0/13

# asym\_bcm0l02\_rms vs slug



Right In: 165.499+/-0.086  $\chi^2/\text{NDF}$ : 161121.5/3

Left Out: 129.305+/-0.041  $\chi^2/\text{NDF}$ : 178100.8/9

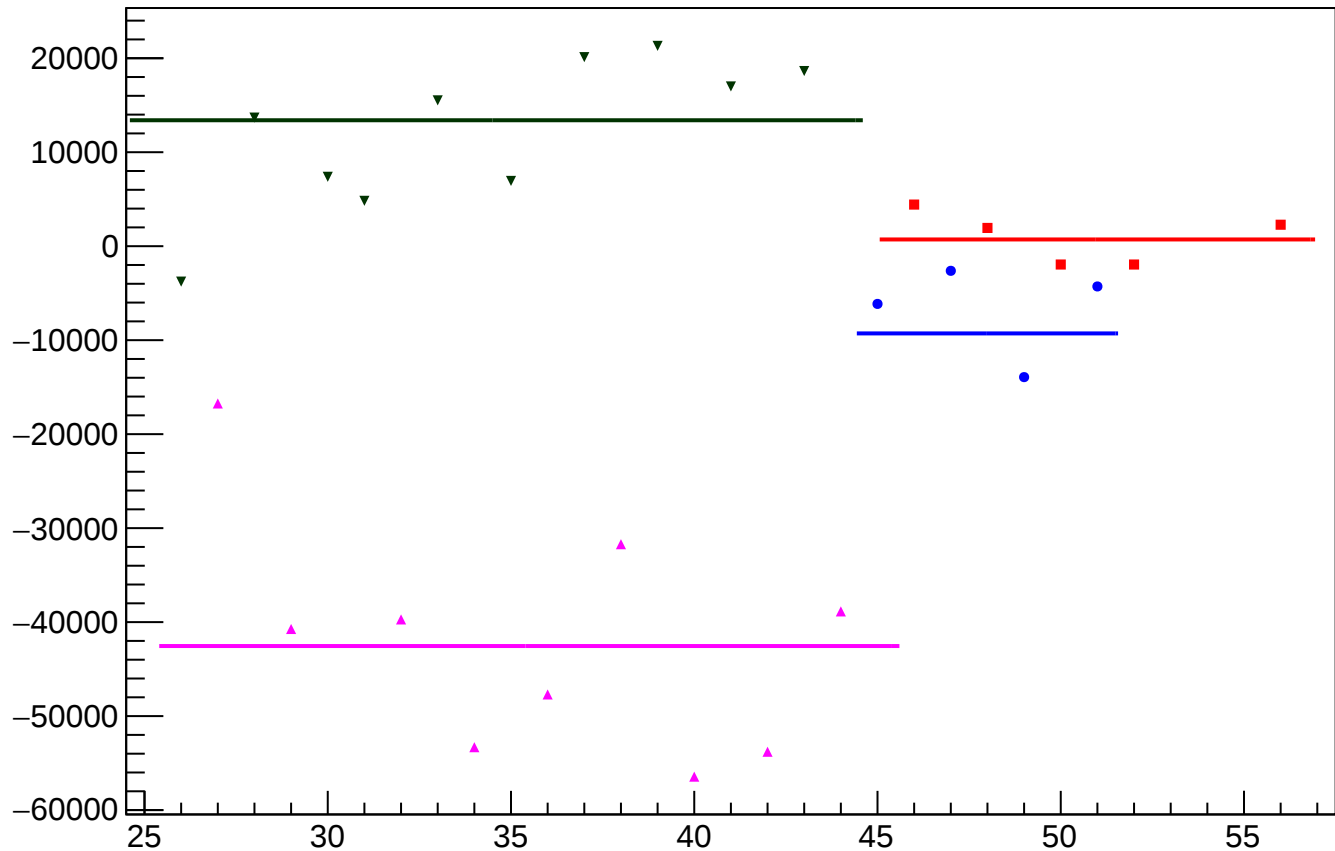
Right Out: 164.236+/-0.077  $\chi^2/\text{NDF}$ : 54123.0/4

Left In: 124.144+/-0.038  $\chi^2/\text{NDF}$ : 285490.5/8

135.957+/-0.037  $\chi^2/\text{NDF}$ : 484493.3/13

131.946+/-0.034  $\chi^2/\text{NDF}$ : 559930.2/13

# asym\_bpm2i01WS\_mean vs slug



Right In: -9280.829+/-69.244  $\chi^2/\text{NDF}$ : 4864.1/3

Left Out: 13400.444+/-42.949  $\chi^2/\text{NDF}$ : 28731.1/9

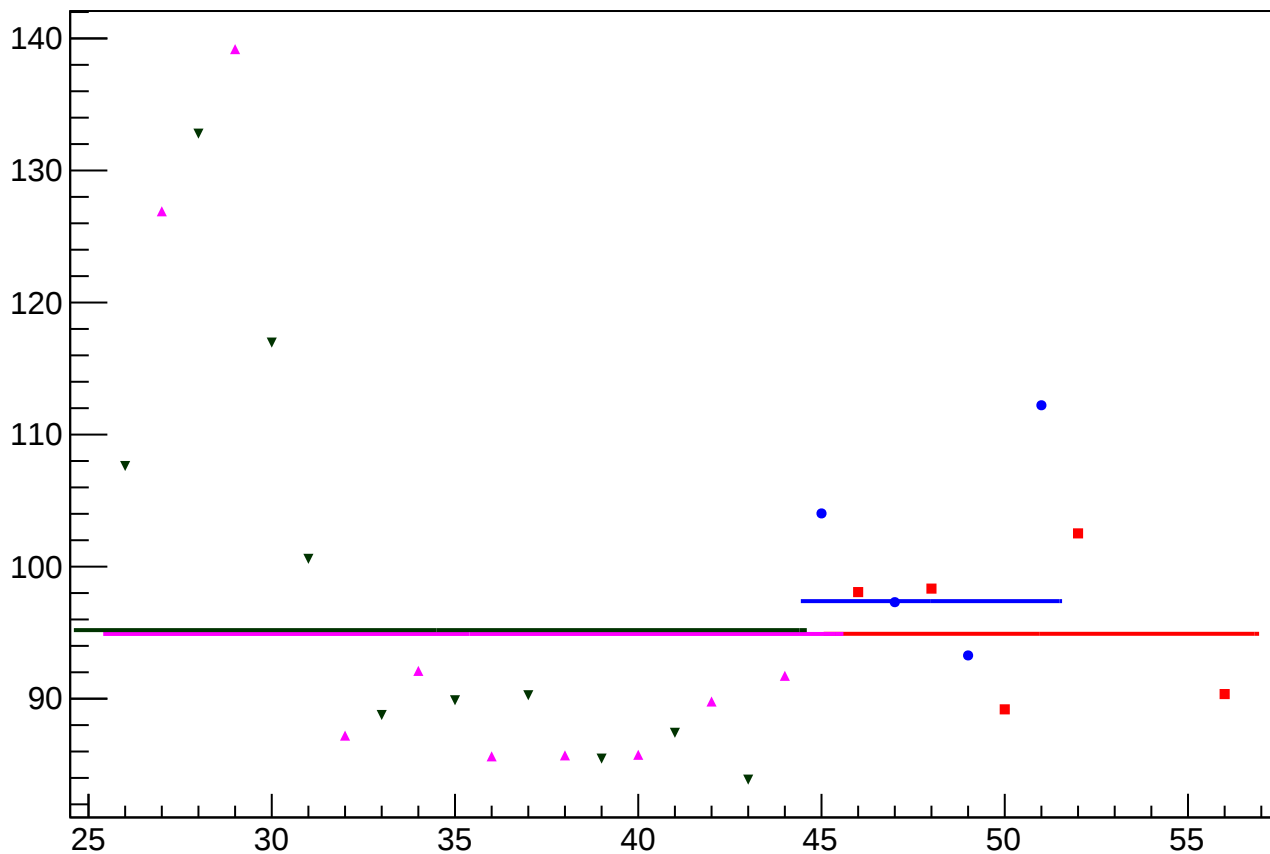
7098.835+/-36.498  $\chi^2/\text{NDF}$ : 111079.0/13

Right Out: 716.588+/-62.153  $\chi^2/\text{NDF}$ : 1609.6/4

-29241.114+/-34.466  $\chi^2/\text{NDF}$ : 408449.4/13

Left In: -42544.825+/-41.418  $\chi^2/\text{NDF}$ : 71344.1/8

asym\_bpm2i01WS\_rms vs slug



Right In: 97.388 $\pm$ 0.049  $\chi^2$ /NDF: 10388.5/3

Left Out: 95.193 $\pm$ 0.030  $\chi^2$ /NDF: 206589.2/9

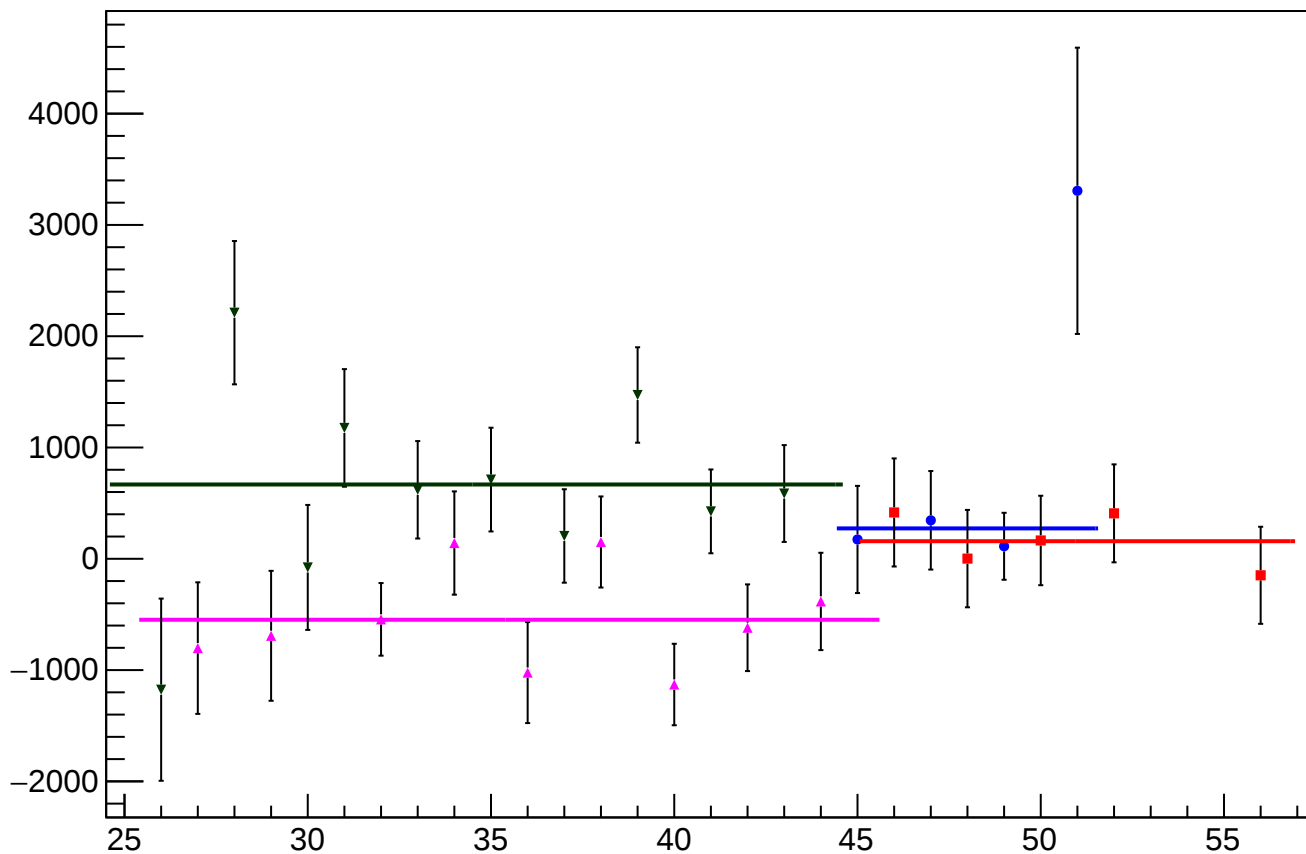
Right Out: 94.914 $\pm$ 0.044  $\chi^2$ /NDF: 14115.9/4

Left In: 94.903 $\pm$ 0.029  $\chi^2$ /NDF: 314276.8/8

95.803 $\pm$ 0.026  $\chi^2$ /NDF: 218429.4/13

94.906 $\pm$ 0.024  $\chi^2$ /NDF: 328392.7/13

# asym\_bpm0i07WS\_mean vs slug



Right In: 273.114 $\pm$ 217.848  $\chi^2/\text{NDF}$ : 5.9/3

Left Out: 667.747 $\pm$ 150.881  $\chi^2/\text{NDF}$ :18.7/9

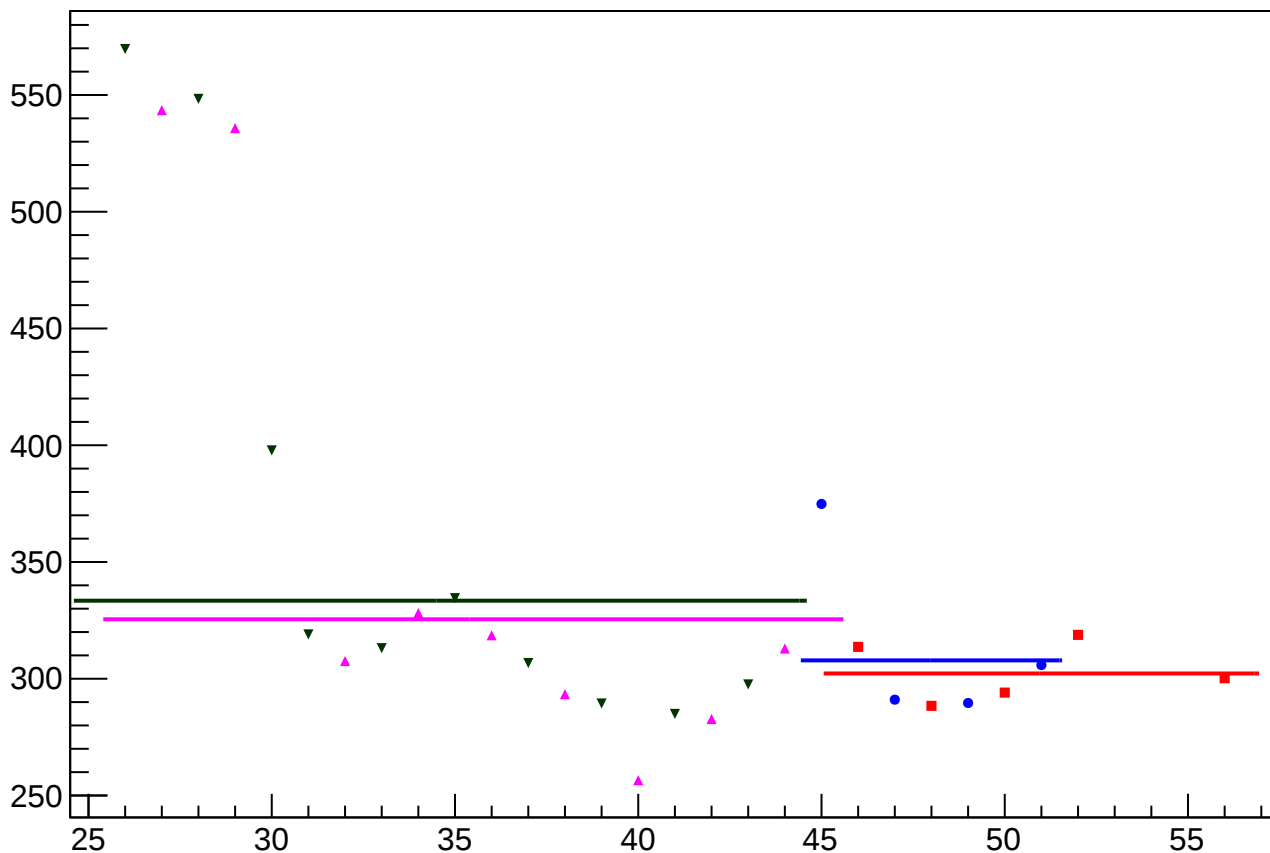
Right Out: 158.074 $\pm$ 195.846  $\chi^2/\text{NDF}$ : 1.2/4

Left In: -547.894 $\pm$ 141.485  $\chi^2/\text{NDF}$ :9.2/8

539.813 $\pm$ 124.037  $\chi^2/\text{NDF}$ : 26.8/13

-305.797 $\pm$ 114.688  $\chi^2/\text{NDF}$ : 18.9/13

# asym\_bpm0i07WS\_rms vs slug



Right In: 307.865 $\pm$ 0.154     $\chi^2$ /NDF: 48965.0/3

Left Out: 333.428 $\pm$ 0.107     $\chi^2$ /NDF:497404.6/9

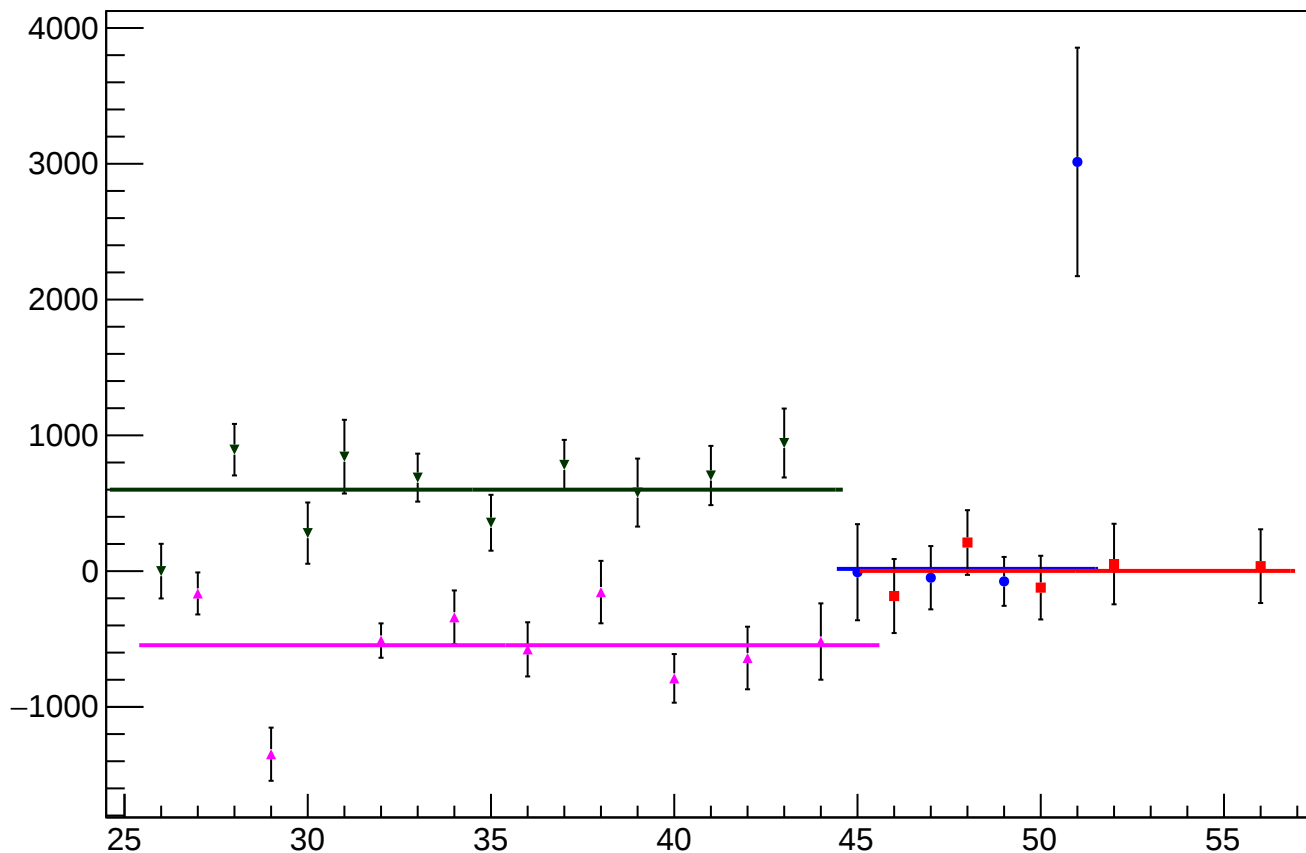
Right Out: 302.253 $\pm$ 0.138     $\chi^2$ /NDF: 6806.6/4

Left In: 325.459 $\pm$ 0.100     $\chi^2$ /NDF:647226.3/8

325.141 $\pm$ 0.088     $\chi^2$ /NDF: 564980.7/13

317.501 $\pm$ 0.081     $\chi^2$ /NDF: 672484.3/13

# asym\_bpm0l01WS\_mean vs slug



Right In: 16.623+/-130.595  $\chi^2/\text{NDF}$ : 13.0/3

Left Out: 600.051+/-66.921  $\chi^2/\text{NDF}$ :18.8/9

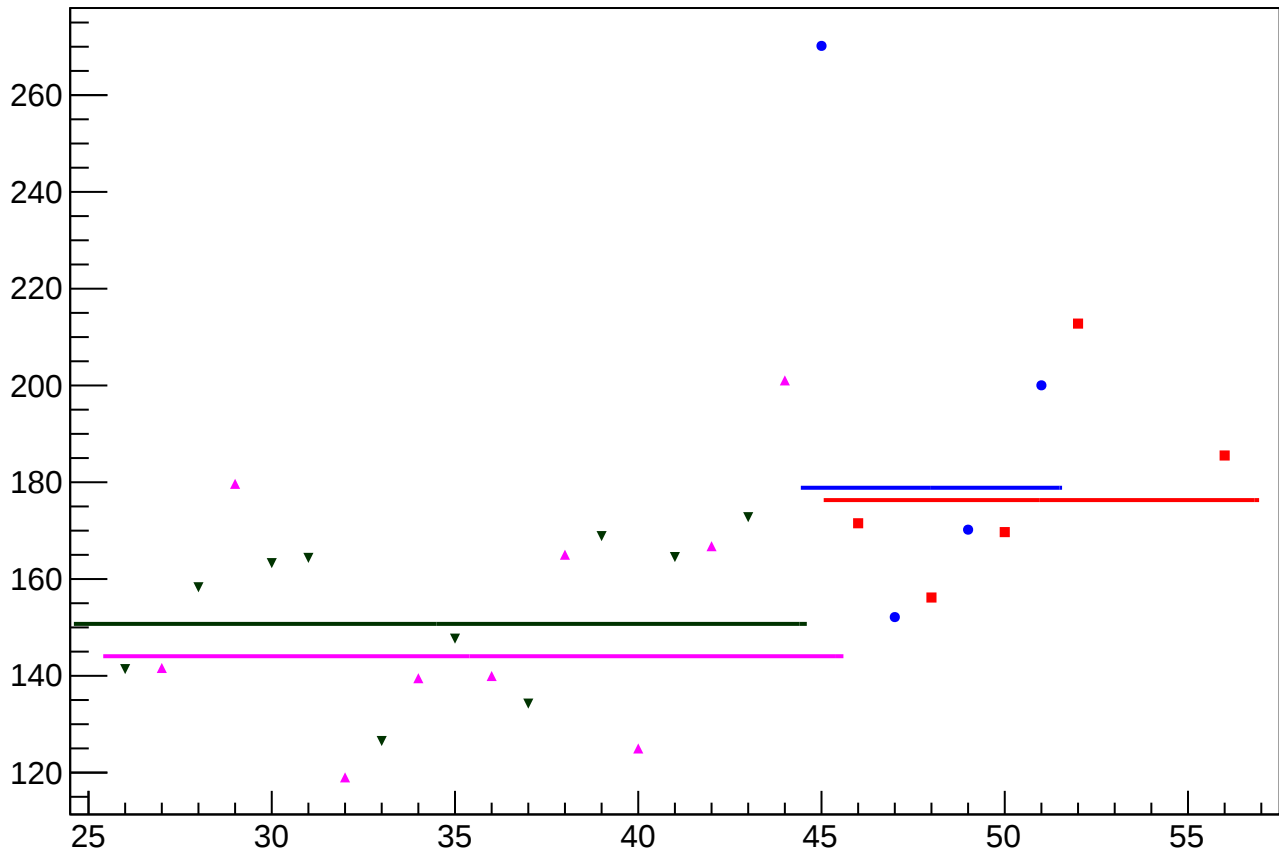
Right Out: 1.763+/-116.111  $\chi^2/\text{NDF}$ : 1.6/4

Left In: -545.607+/-61.713  $\chi^2/\text{NDF}$ :29.0/8

478.712+/-59.557  $\chi^2/\text{NDF}$ : 47.7/13

-425.038+/-54.494  $\chi^2/\text{NDF}$ : 47.9/13

asym\_bpm0l01WS\_rms vs slug



Right In: 178.863+/-0.092  $\chi^2/\text{NDF}$ : 165280.8/3

Left Out: 150.733+/-0.047  $\chi^2/\text{NDF}$ :106311.0/9

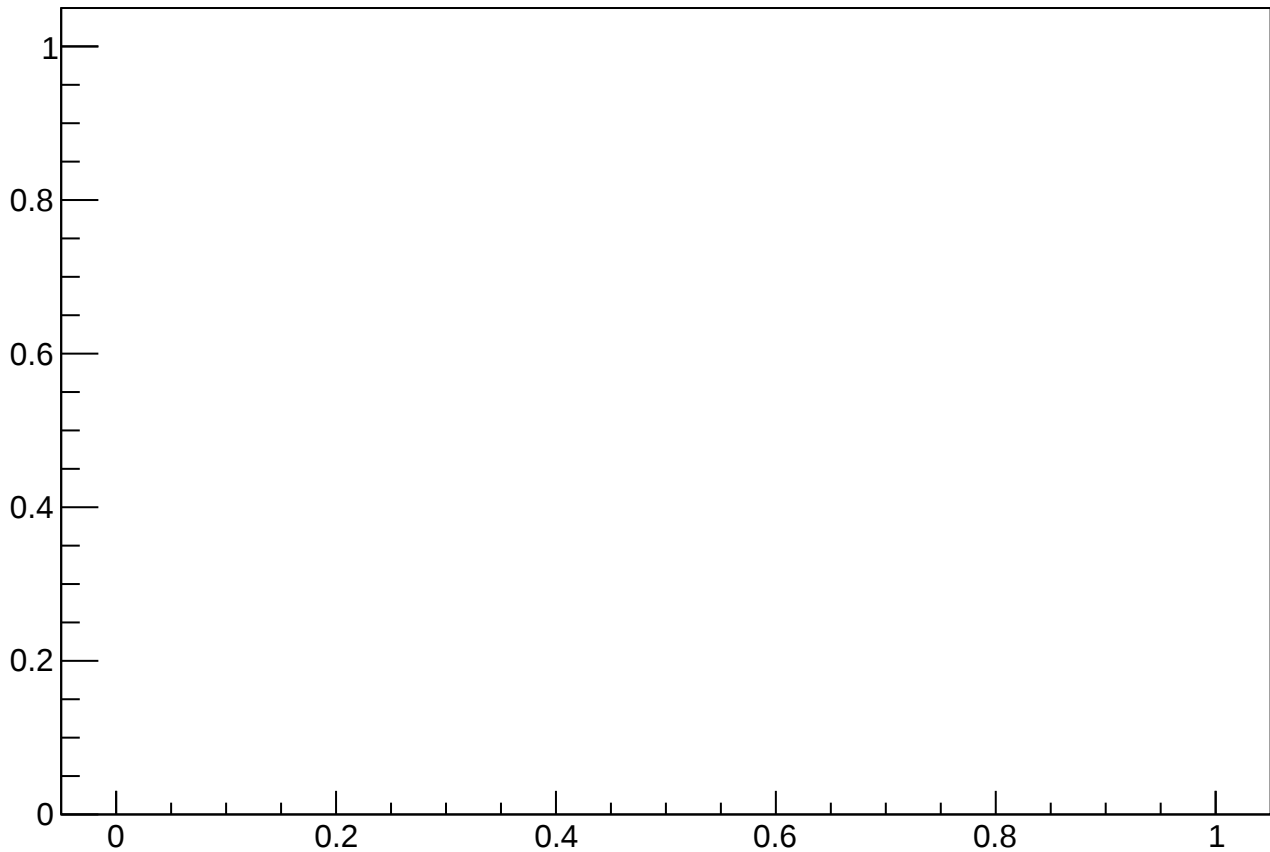
Right Out: 176.315+/-0.082  $\chi^2/\text{NDF}$ : 49025.9/4

Left In: 144.050+/-0.044  $\chi^2/\text{NDF}$ :287778.2/8

156.583+/-0.042  $\chi^2/\text{NDF}$ : 345089.1/13

151.157+/-0.039  $\chi^2/\text{NDF}$ : 457224.0/13

# bcm\_an\_us\_ds\_avg\_mean vs slug



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

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

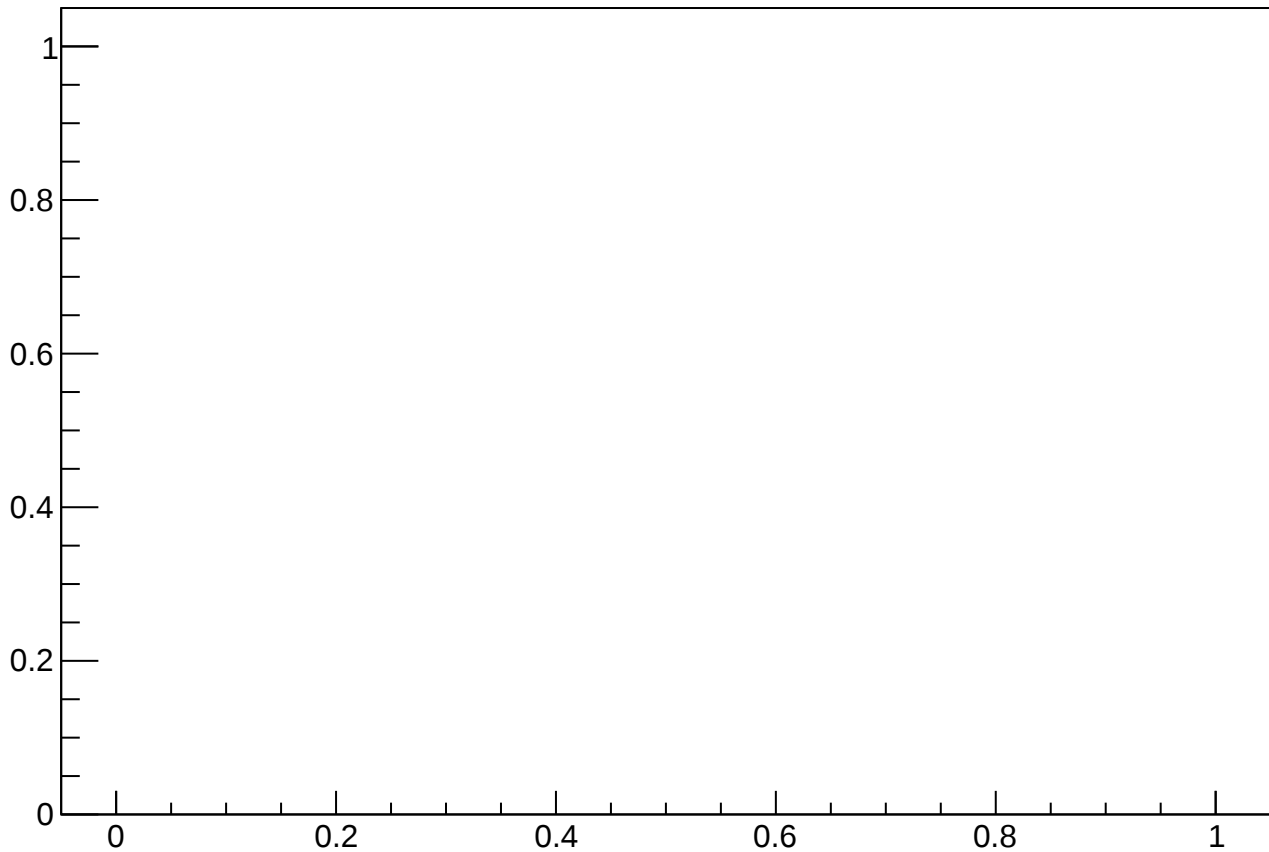
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_an\_us\_ds\_avg\_rms vs slug



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

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

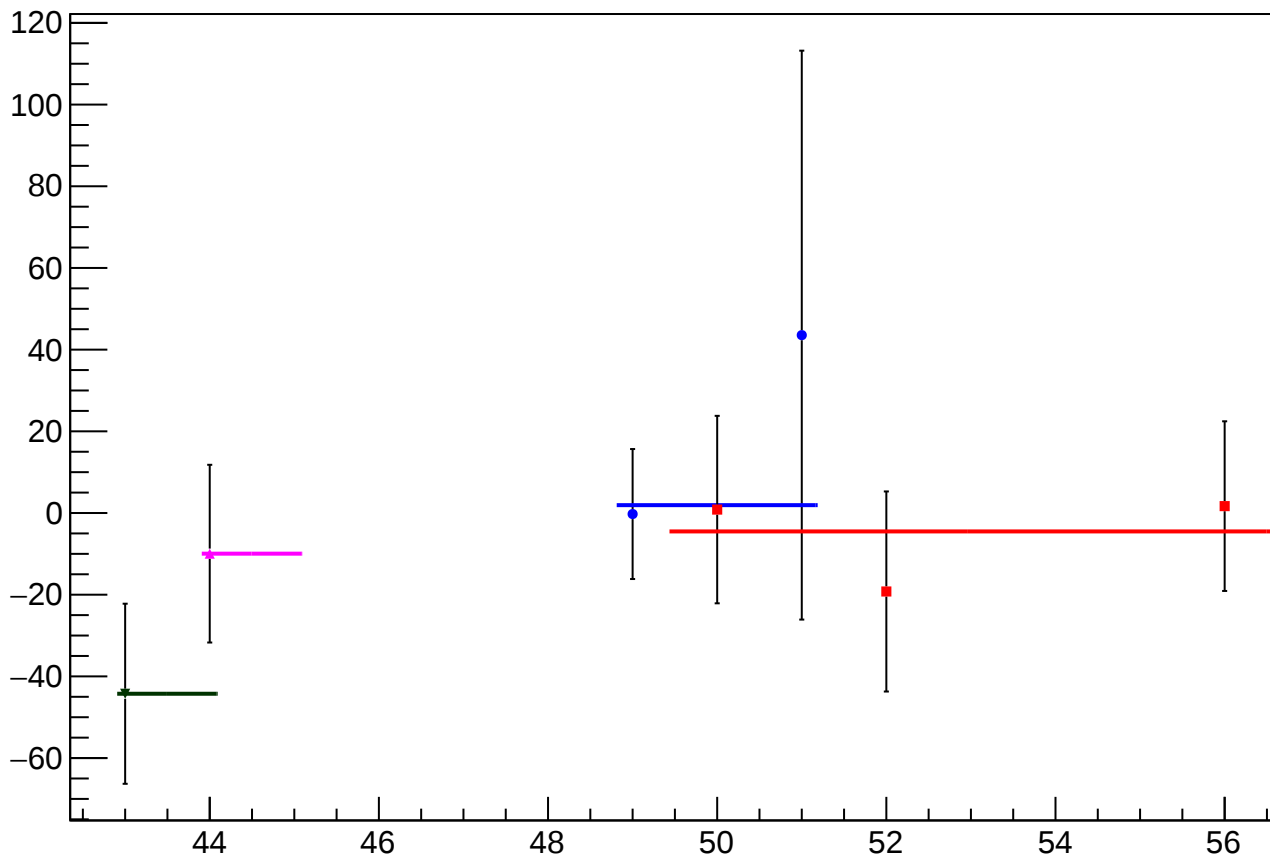
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_an\_us\_ds\_dd\_mean vs slug



Right In:  $1.924 \pm 15.513$   $\chi^2/\text{NDF}: 0.4/1$

Left Out:  $-44.252 \pm 22.047$   $\chi^2/\text{NDF}: 0.0/0$

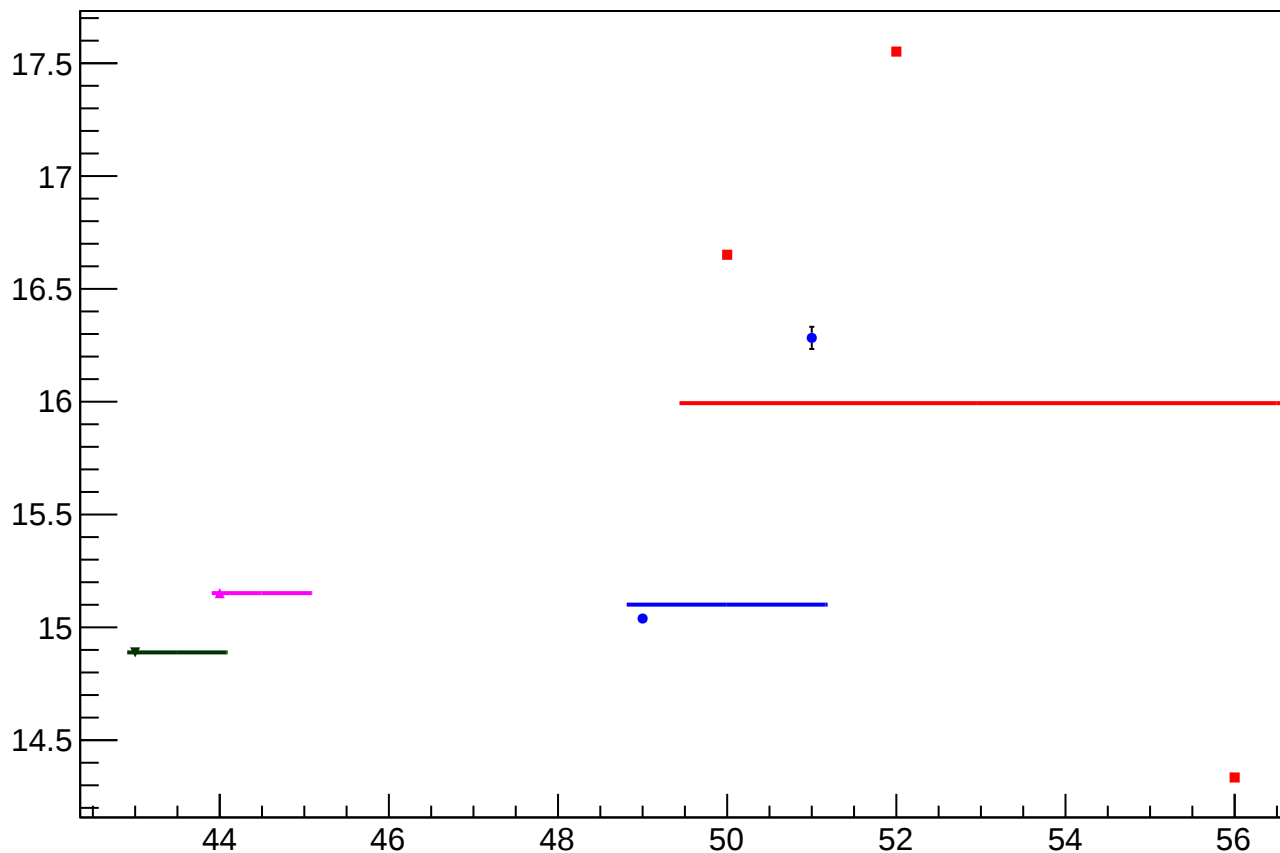
Right Out:  $-4.508 \pm 13.037$   $\chi^2/\text{NDF}: 0.5/2$

Left In:  $-9.952 \pm 21.757$   $\chi^2/\text{NDF}: 0.0/0$

$-13.367 \pm 12.687$   $\chi^2/\text{NDF}: 3.3/2$

$-5.946 \pm 11.183$   $\chi^2/\text{NDF}: 0.5/3$

# bcm\_an\_us\_ds\_dd \_rms vs slug



Right In: 15.101+/-0.011  $\chi^2/\text{NDF}$ : 606.2/1

Left Out: 14.889+/-0.016  $\chi^2/\text{NDF}$ : 0.0/0

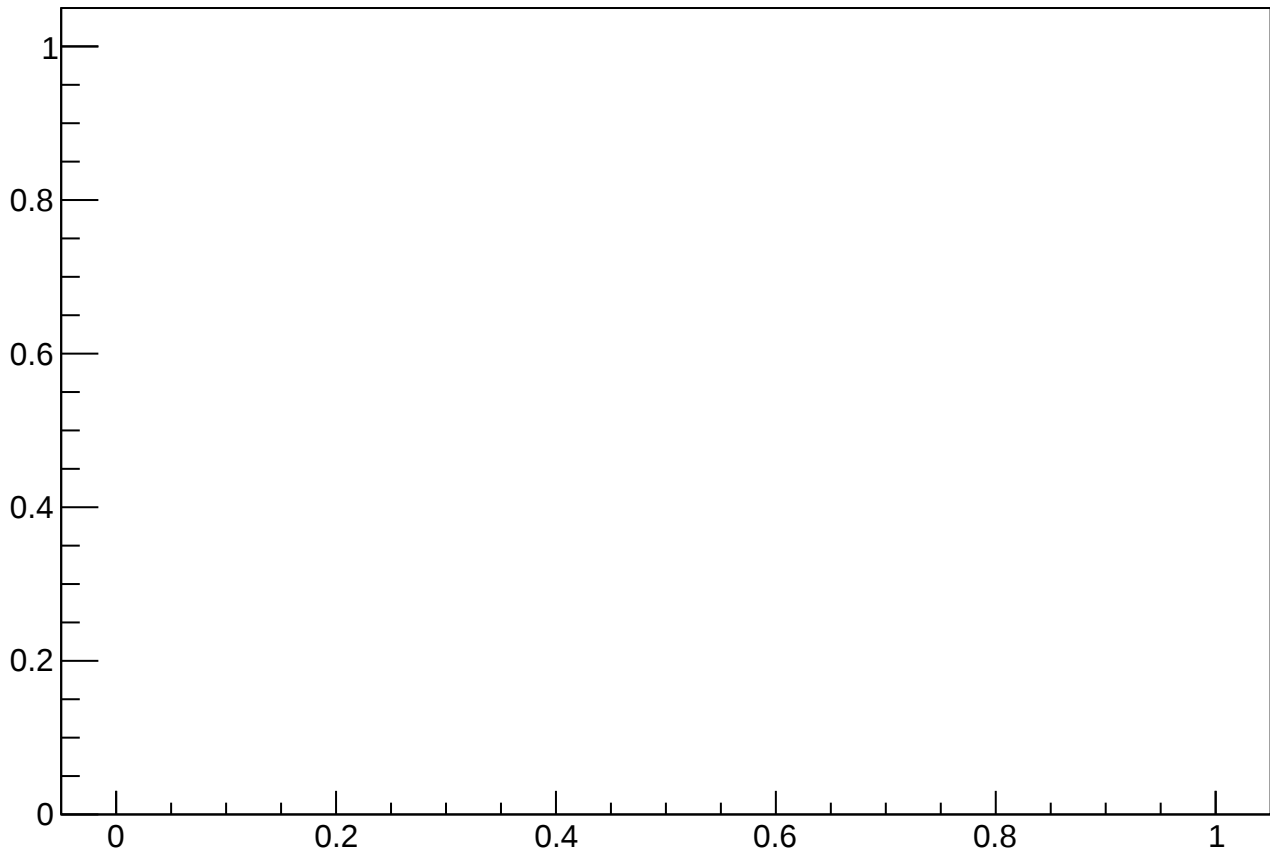
Right Out: 15.994+/-0.009  $\chi^2/\text{NDF}$ : 22493.4/2

Left In: 15.152+/-0.015  $\chi^2/\text{NDF}$ : 0.0/0

15.031+/-0.009  $\chi^2/\text{NDF}$ : 729.6/2

15.771+/-0.008  $\chi^2/\text{NDF}$ : 24697.0/3

# bcm\_an\_us\_ds3\_dd\_mean vs slug



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

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

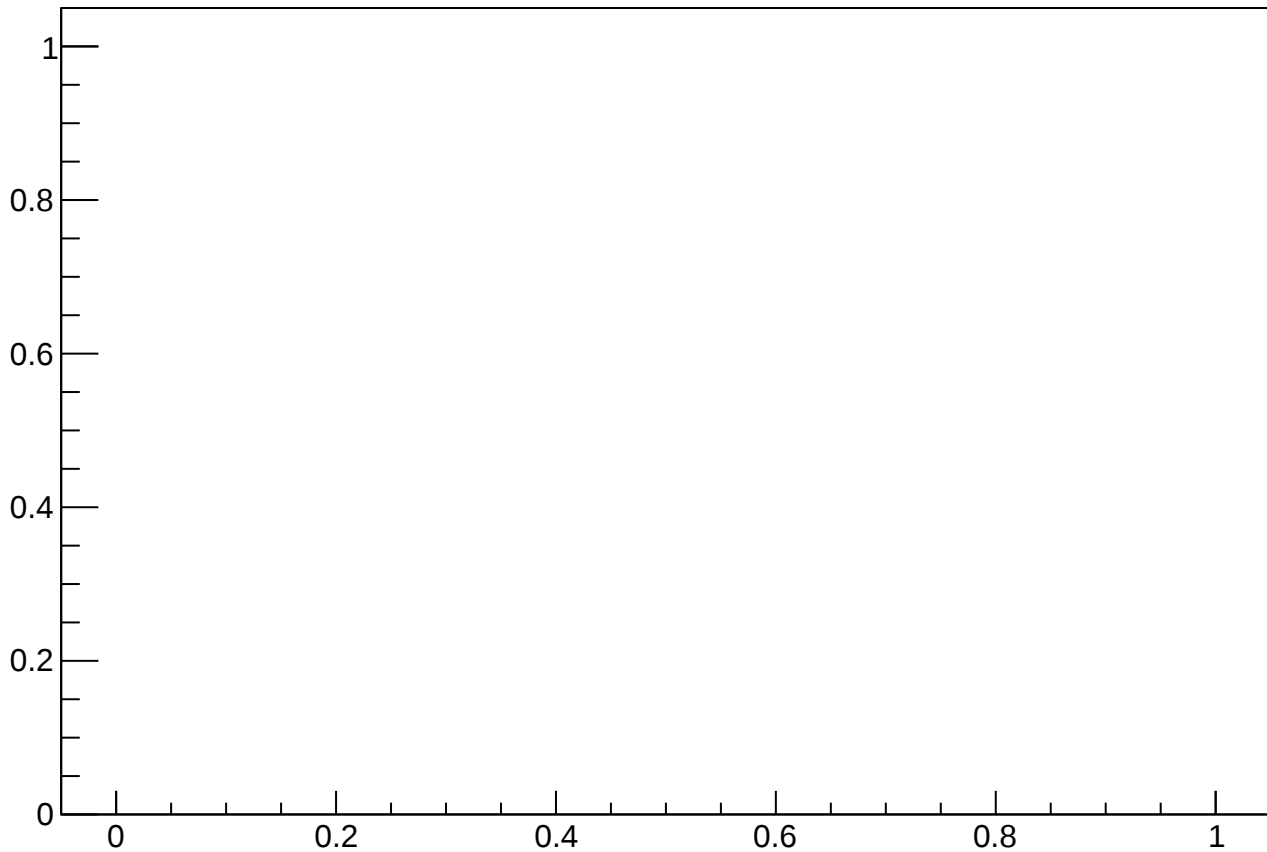
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_an\_us\_ds3\_dd\_rms vs slug



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

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

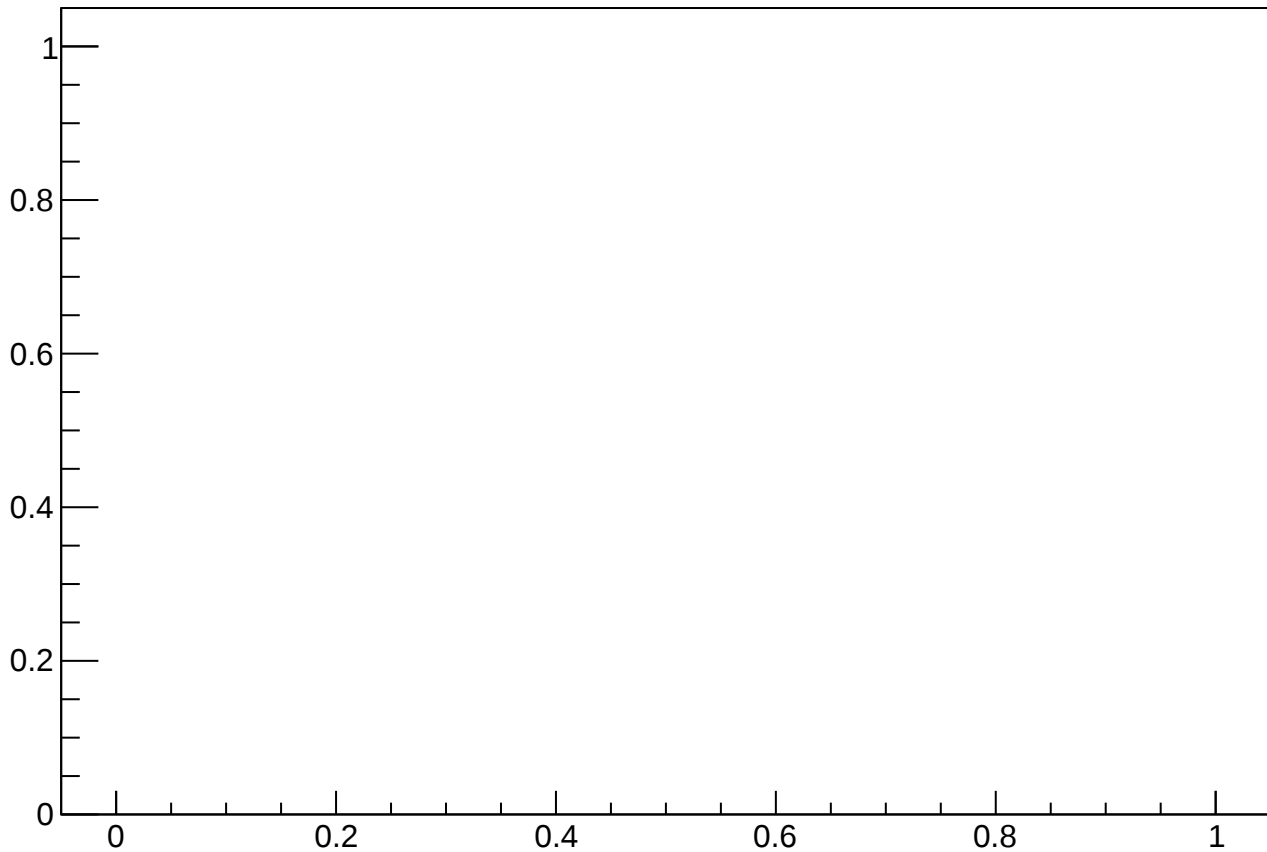
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

bcm\_an\_ds\_ds3\_dd\_mean vs slug



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

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

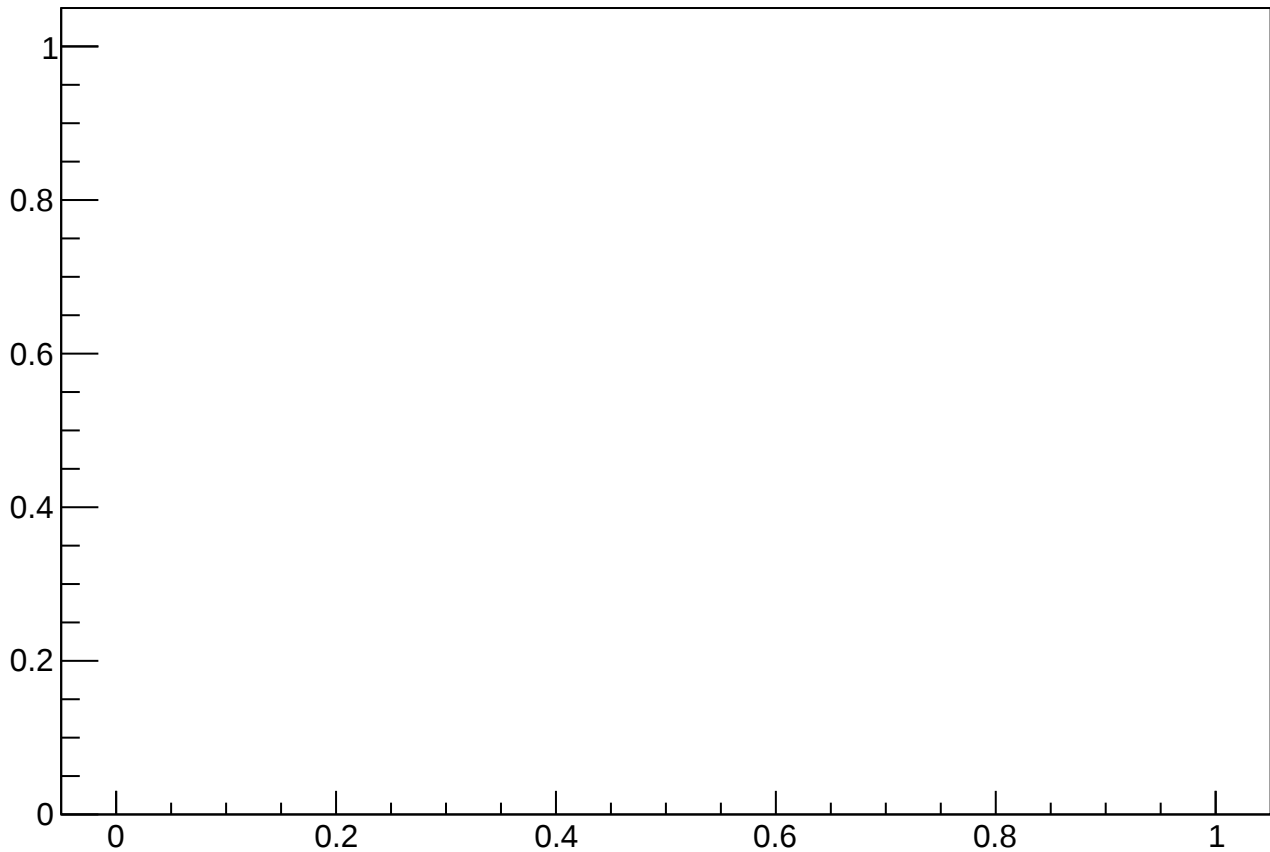
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_an\_ds\_ds3\_dd\_rms vs slug



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

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

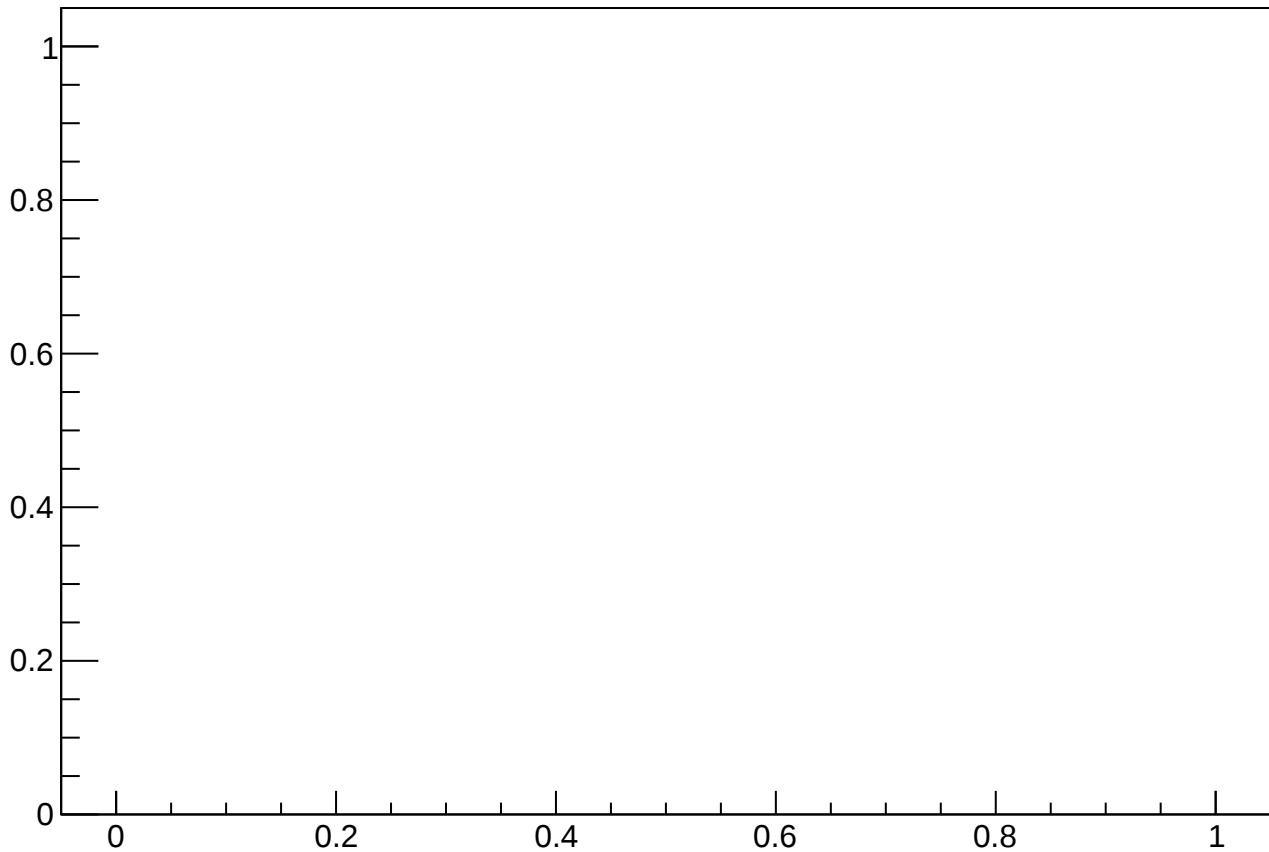
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_dg\_us\_ds\_avg\_mean vs slug



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

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

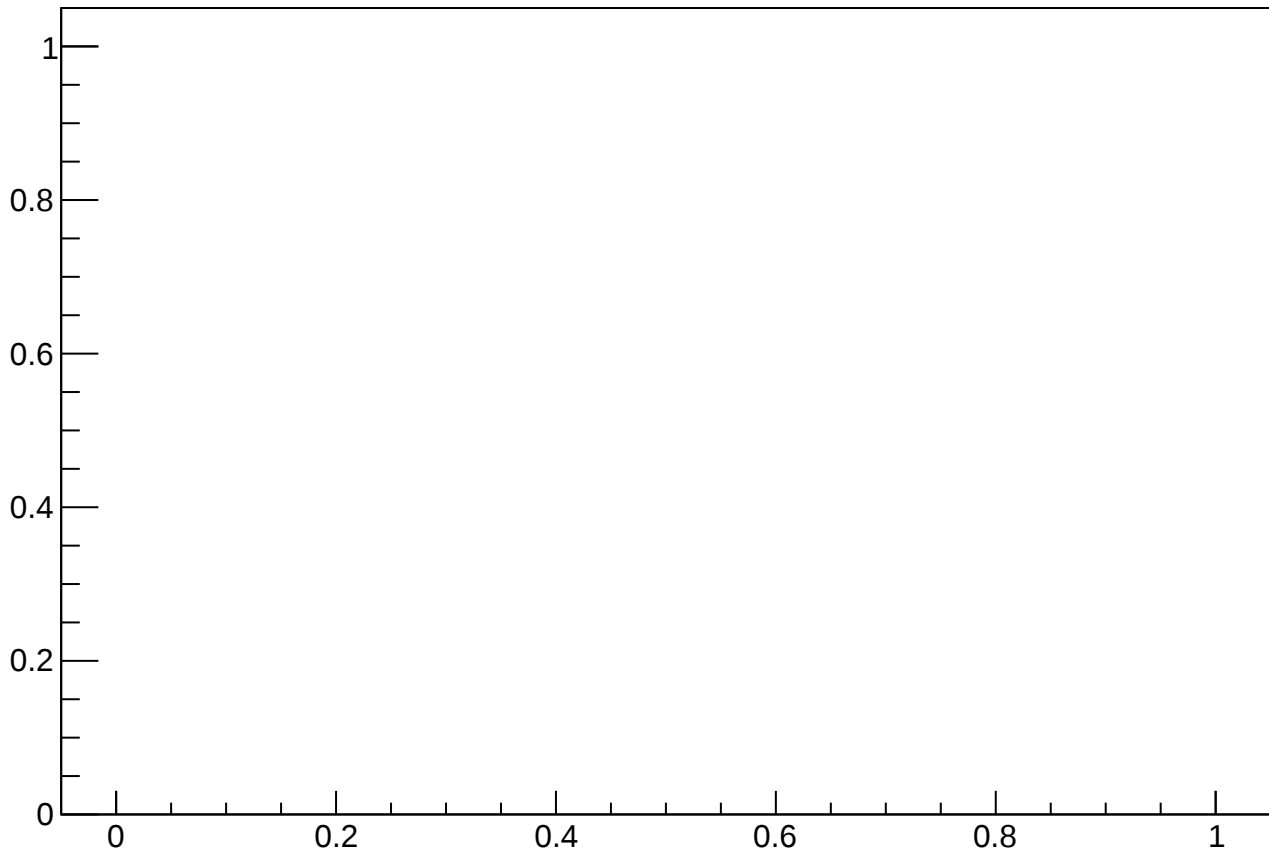
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

bcm\_dg\_us\_ds\_avg\_rms vs slug



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

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

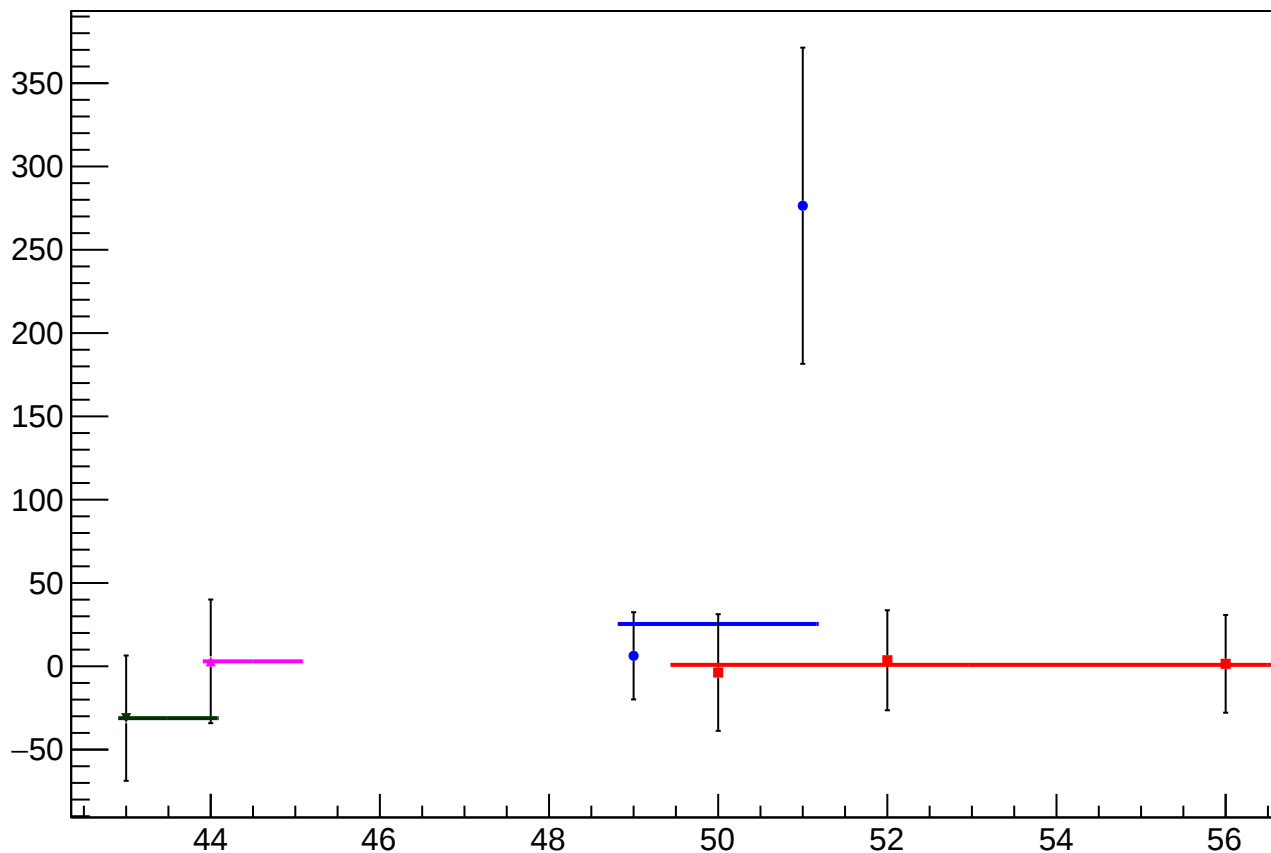
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_dg\_us\_ds\_dd\_mean vs slug



Right In: 25.397 $\pm$ 25.234  $\chi^2$ /NDF: 7.5/1

Left Out: -31.130 $\pm$ 37.603  $\chi^2$ /NDF: 0.0/0

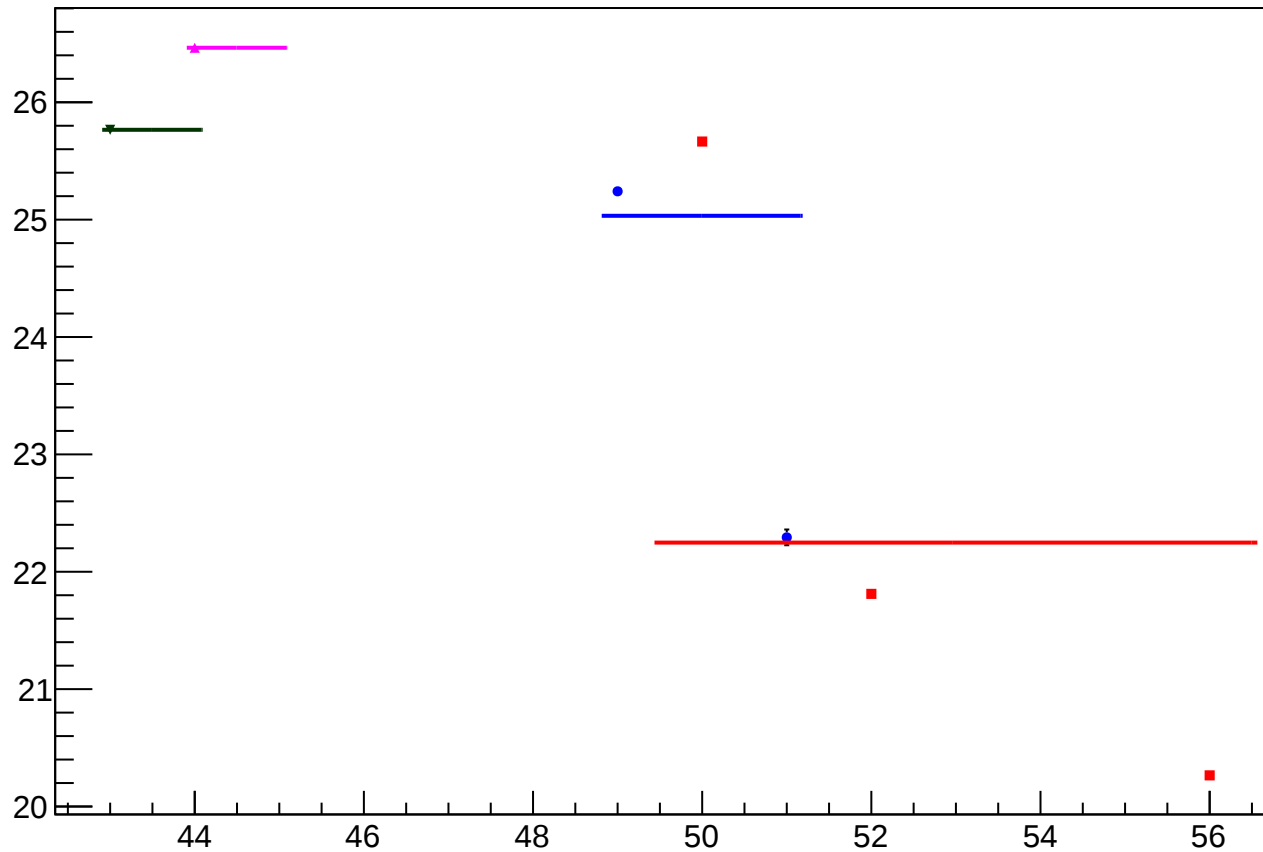
Right Out: 0.864 $\pm$ 17.999  $\chi^2$ /NDF: 0.0/2

Left In: 2.964 $\pm$ 37.111  $\chi^2$ /NDF: 0.0/0

7.845 $\pm$ 20.953  $\chi^2$ /NDF: 9.1/2

1.264 $\pm$ 16.194  $\chi^2$ /NDF: 0.0/3

# bcm\_dg\_us\_ds\_dd \_rms vs slug



Right In: 25.033 $\pm$ 0.018  $\chi^2$ /NDF: 1794.8/1

Left Out: 25.766 $\pm$ 0.027  $\chi^2$ /NDF: 0.0/0

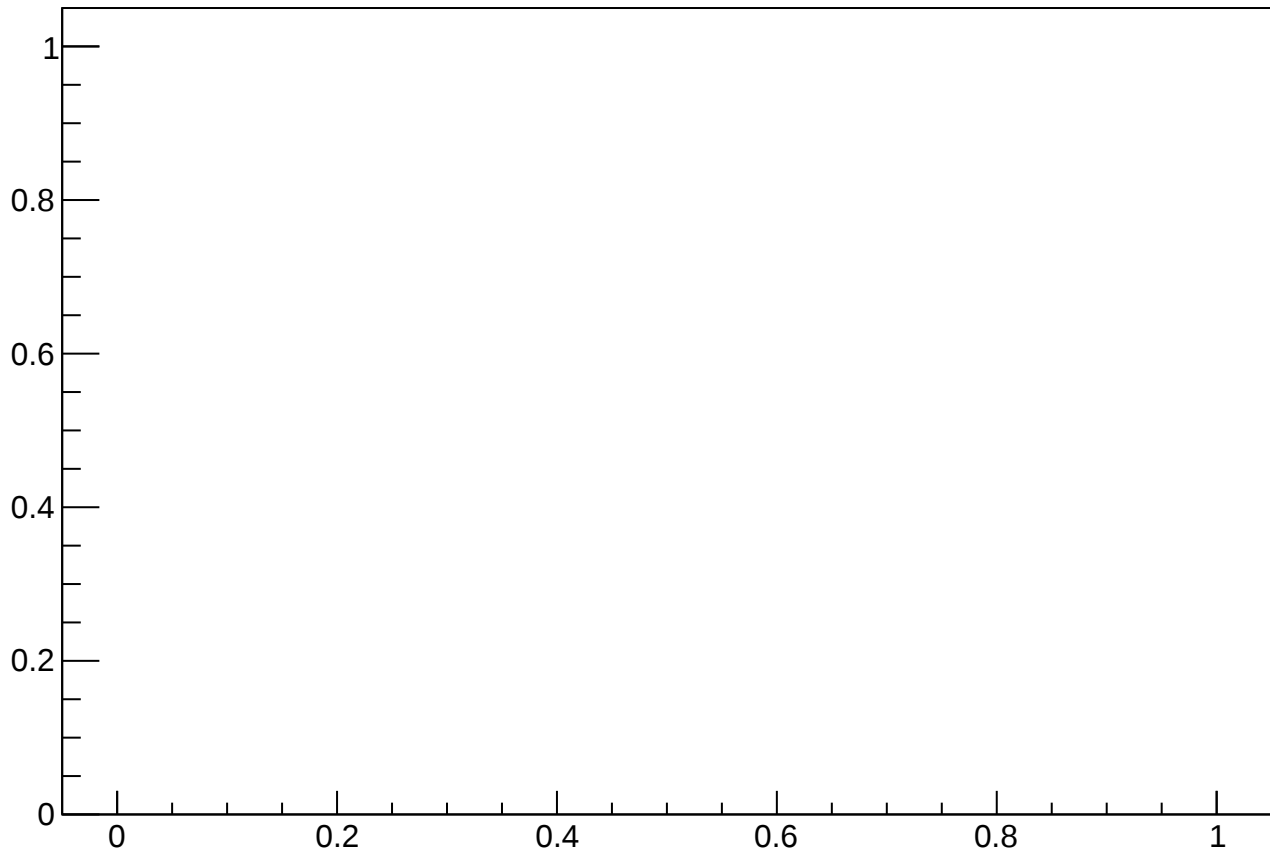
Right Out: 22.249 $\pm$ 0.013  $\chi^2$ /NDF: 28609.9/2

Left In: 26.465 $\pm$ 0.026  $\chi^2$ /NDF: 0.0/0

25.260 $\pm$ 0.015  $\chi^2$ /NDF: 2318.3/2

23.051 $\pm$ 0.011  $\chi^2$ /NDF: 49506.3/3

# bcm\_dg\_us\_ds3\_dd\_mean vs slug



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

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

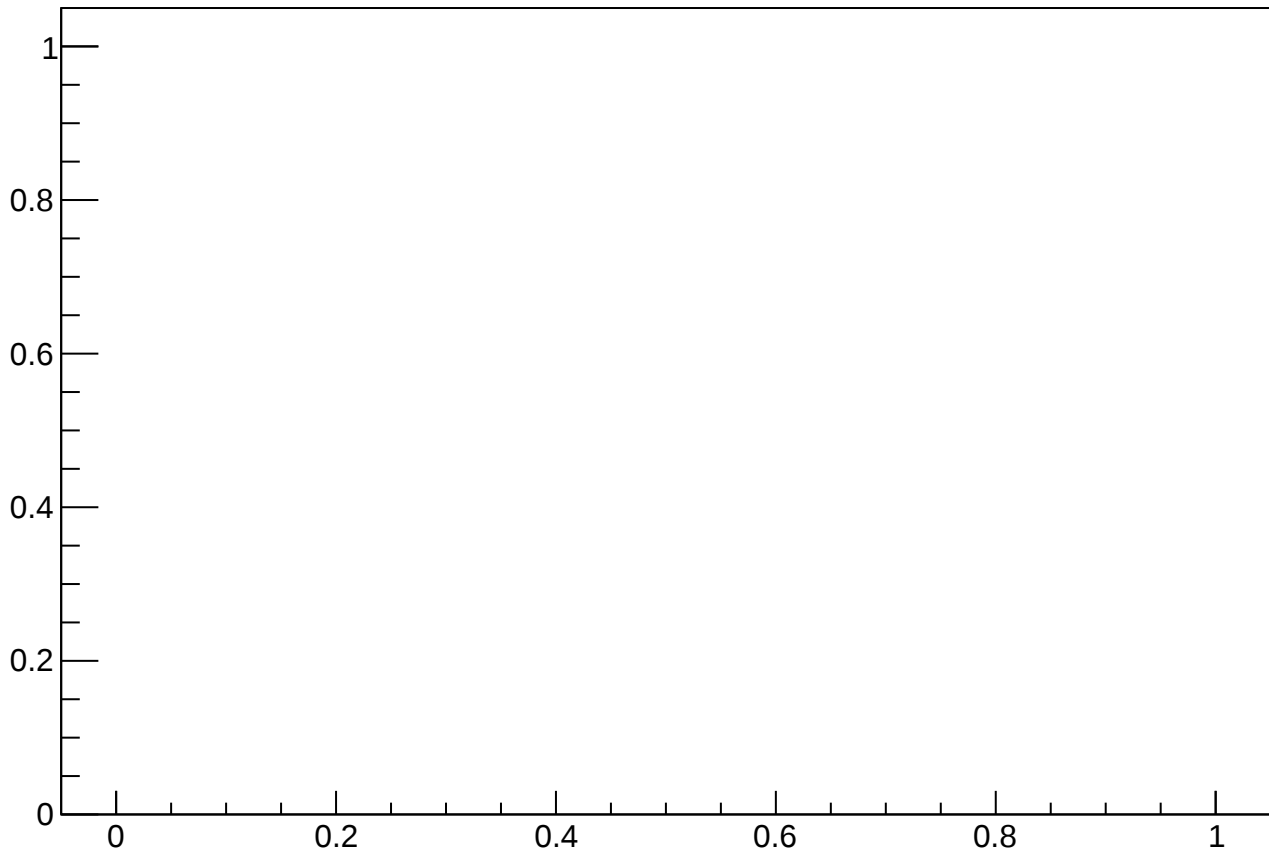
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_dg\_us\_ds3\_dd\_rms vs slug



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

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

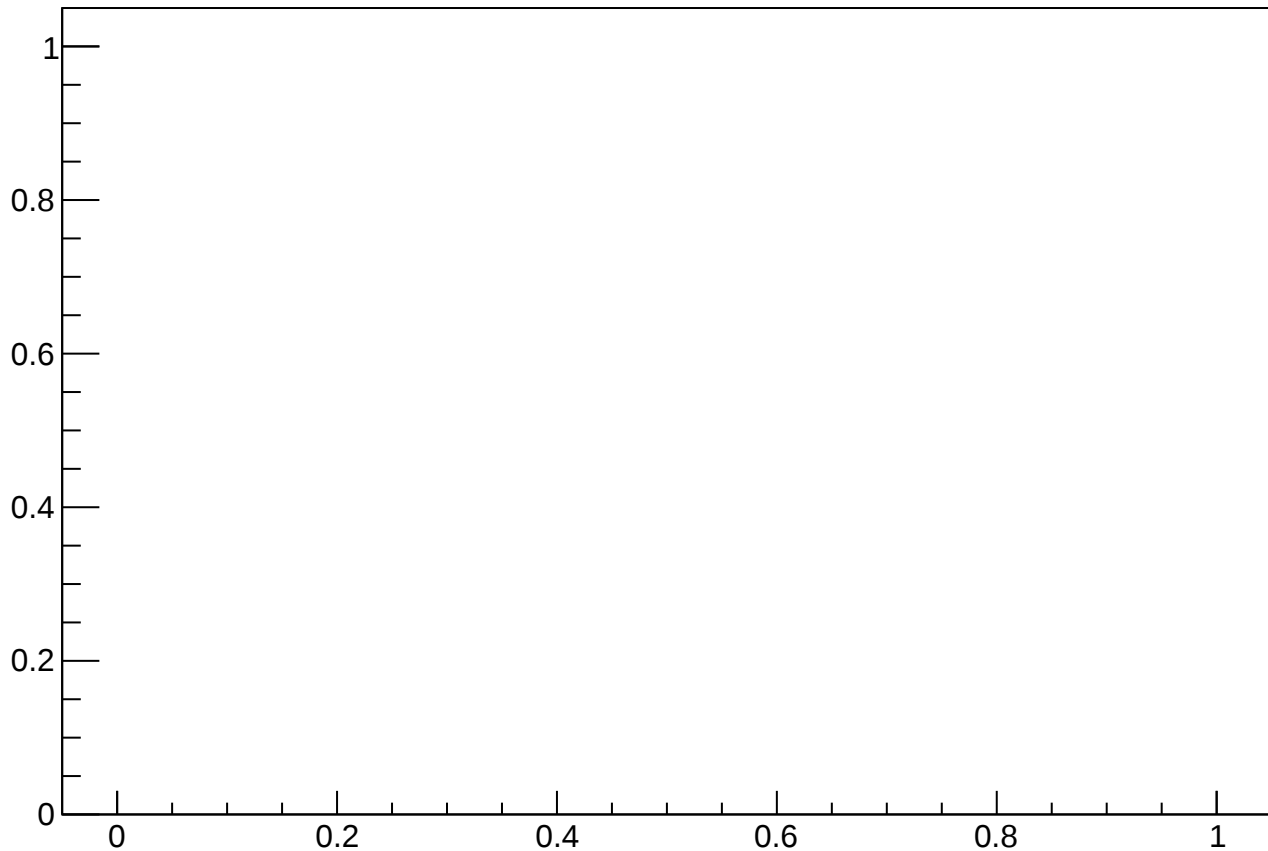
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

bcm\_dg\_ds\_ds\_avg\_mean vs slug



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

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

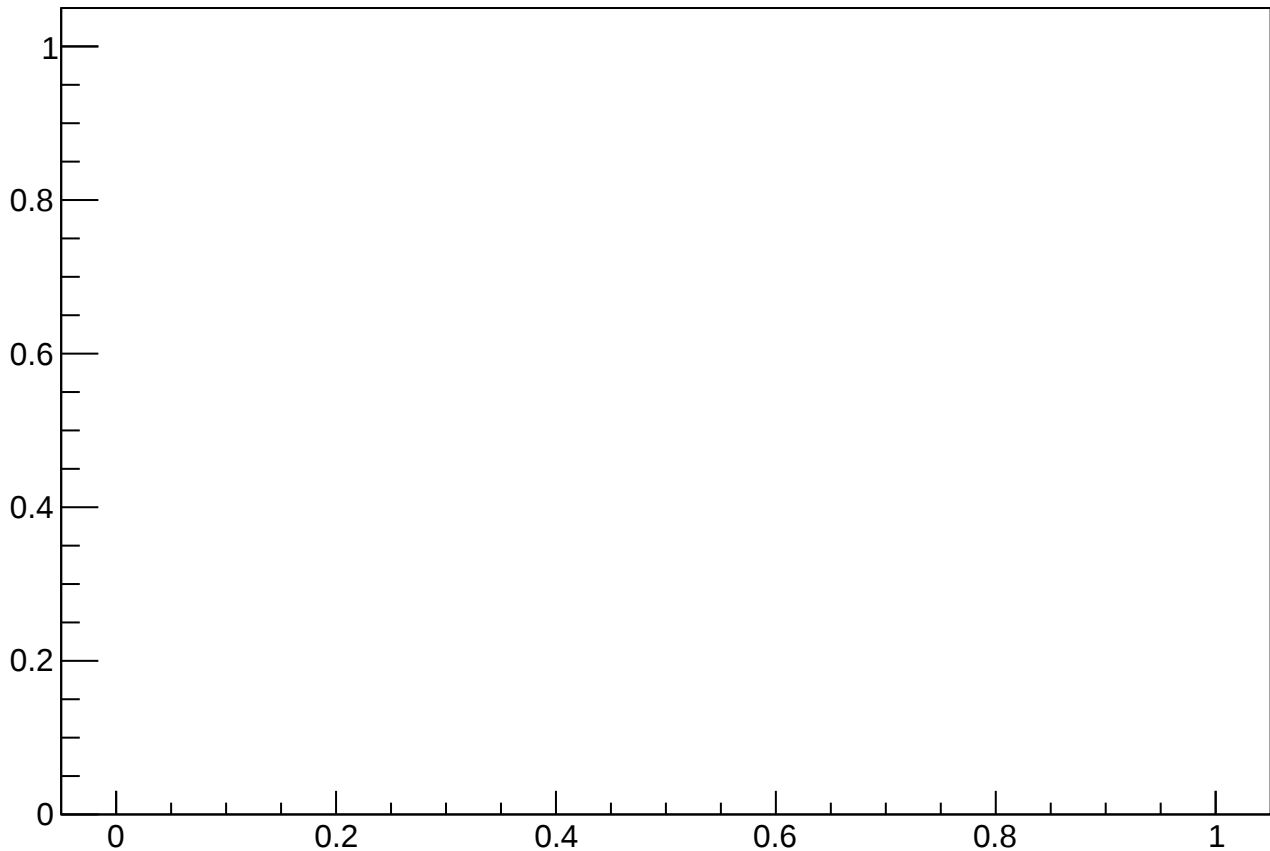
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_dg\_ds\_ds\_avg\_rms vs slug



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

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

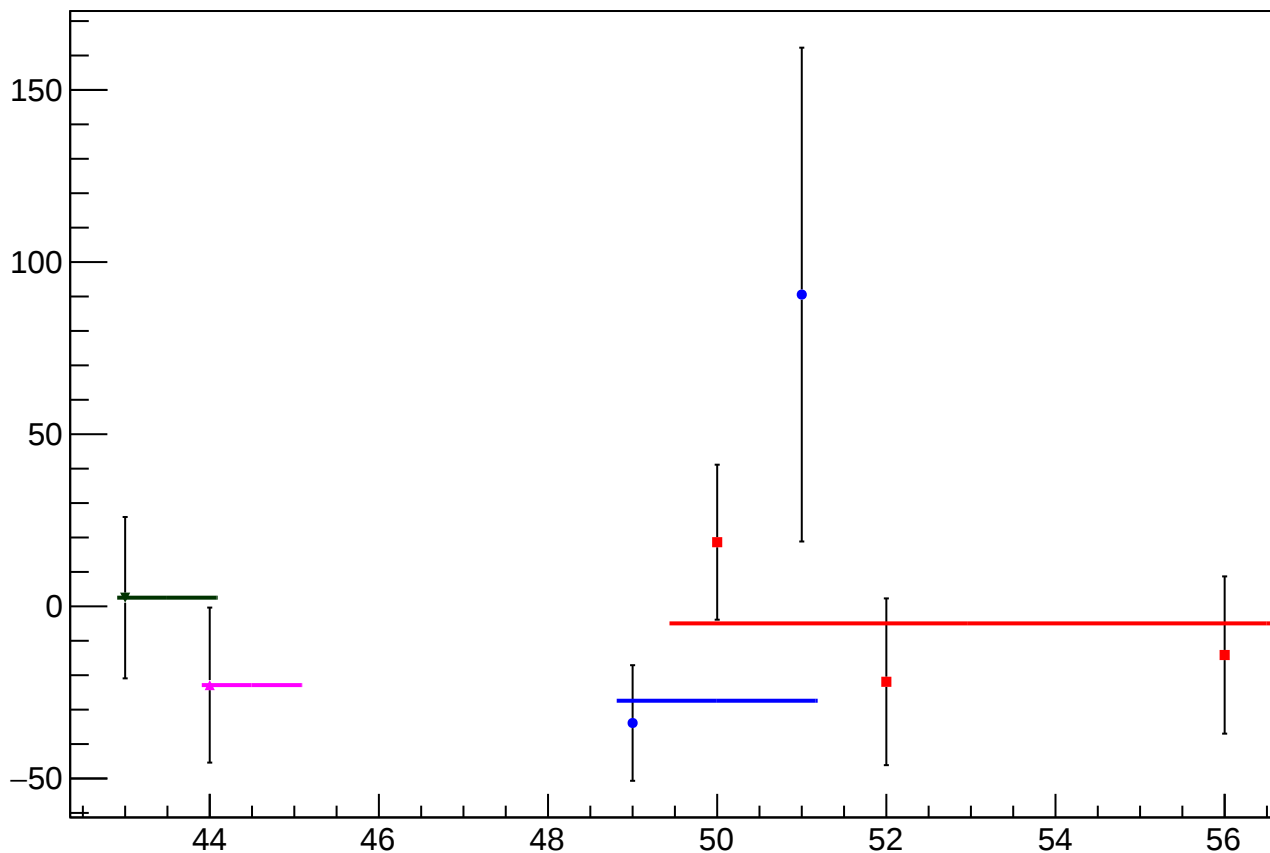
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

bcm\_dg\_ds\_ds\_dd\_mean vs slug



Right In:  $-27.414 \pm 16.348$   $\chi^2/\text{NDF}$ : 2.9/1

Left Out:  $2.521 \pm 23.436$   $\chi^2/\text{NDF}$ : 0.0/0

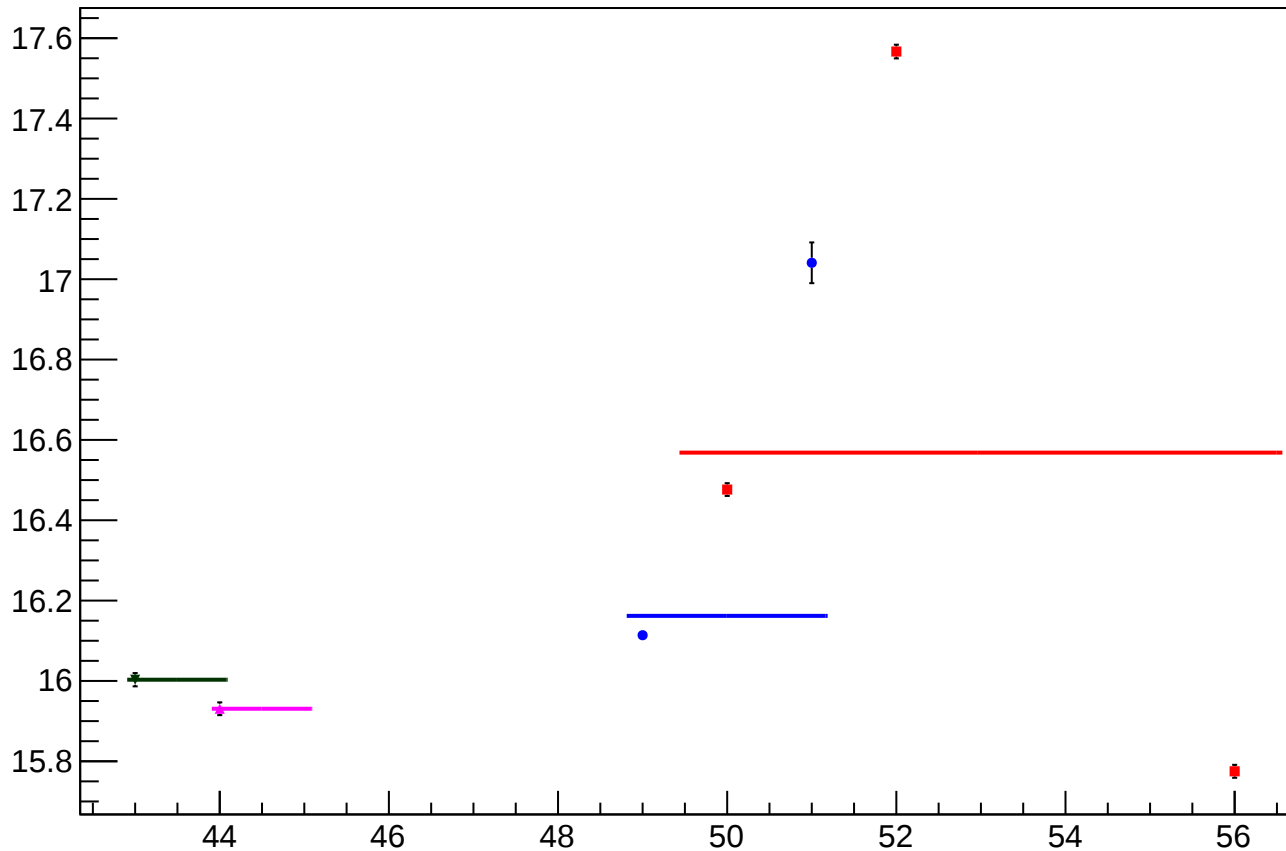
Right Out:  $-4.948 \pm 13.368$   $\chi^2/\text{NDF}$ : 1.7/2

Left In:  $-22.872 \pm 22.514$   $\chi^2/\text{NDF}$ : 0.0/0

$-17.616 \pm 13.408$   $\chi^2/\text{NDF}$ : 4.0/2

$-9.620 \pm 11.494$   $\chi^2/\text{NDF}$ : 2.2/3

bcm\_dg\_ds\_ds\_dd \_rms vs slug



Right In: 16.162 $\pm$ 0.012     $\chi^2$ /NDF: 316.8/1

Left Out: 16.003 $\pm$ 0.017     $\chi^2$ /NDF: 0.0/0

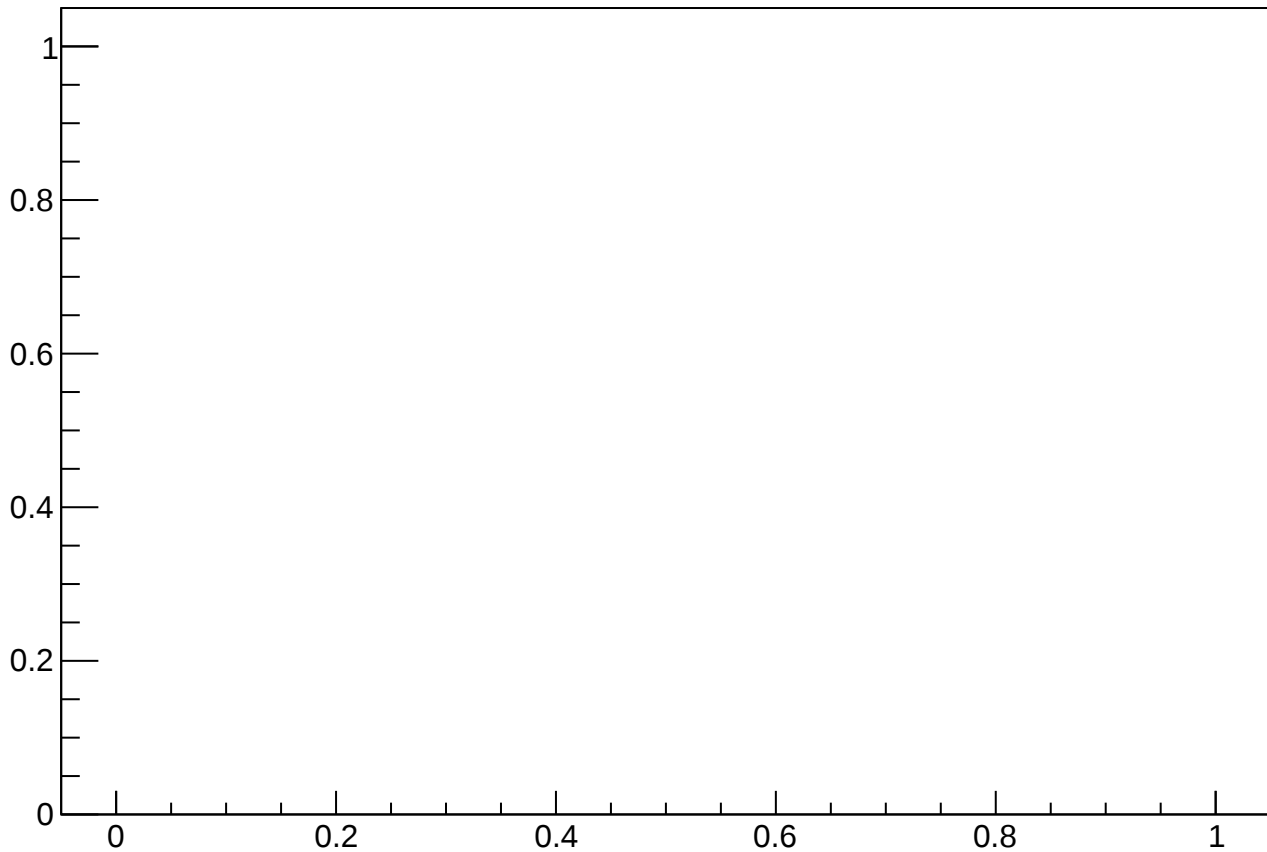
Right Out: 16.568 $\pm$ 0.009     $\chi^2$ /NDF: 5846.0/2

Left In: 15.931 $\pm$ 0.016     $\chi^2$ /NDF: 0.0/0

16.110 $\pm$ 0.009     $\chi^2$ /NDF: 378.7/2

16.402 $\pm$ 0.008     $\chi^2$ /NDF: 7031.8/3

bcm\_dg\_ds\_ds3\_avg\_mean vs slug



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

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

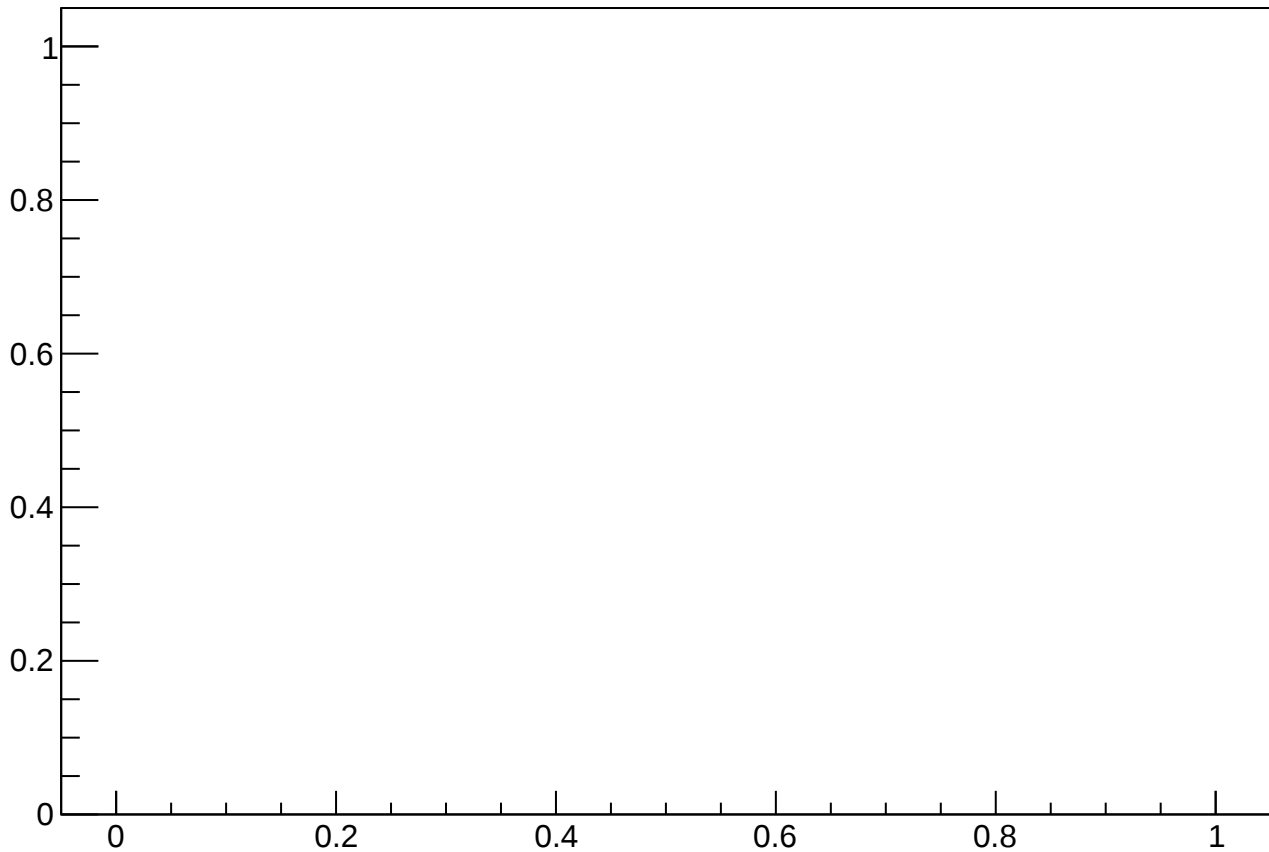
Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

# bcm\_dg\_ds\_ds3\_avg\_rms vs slug



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

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

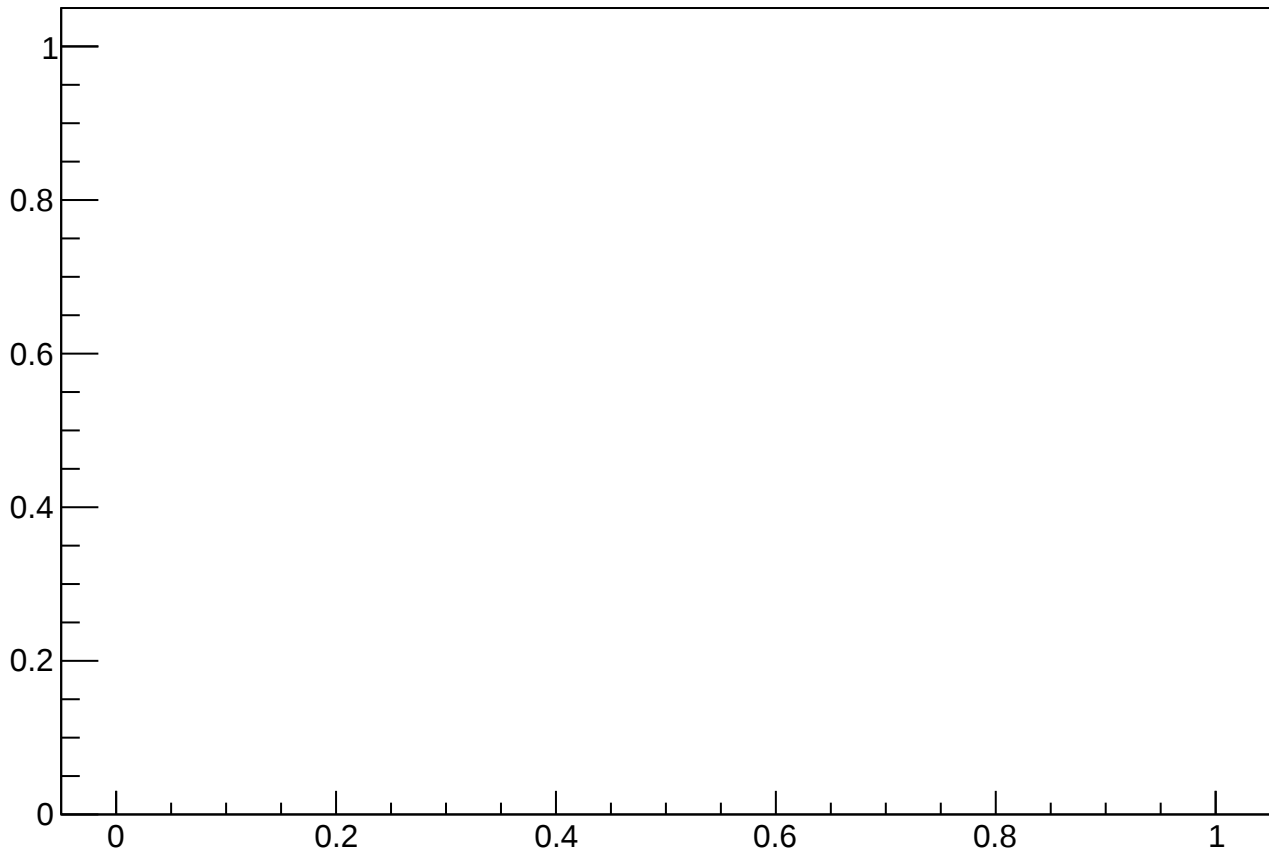
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

bcm\_dg\_ds\_ds3\_dd \_mean vs slug



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

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

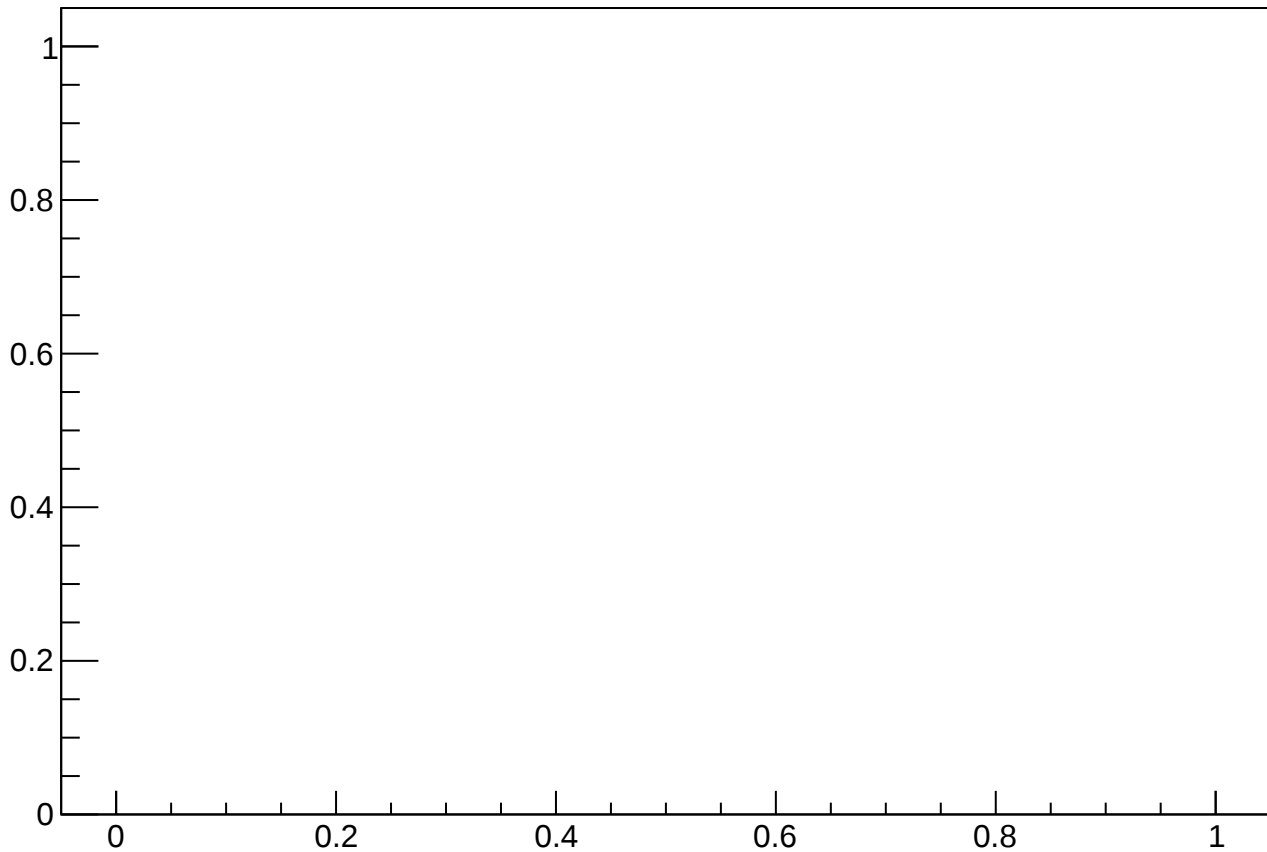
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_dg\_ds\_ds3\_dd\_rms vs slug



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

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

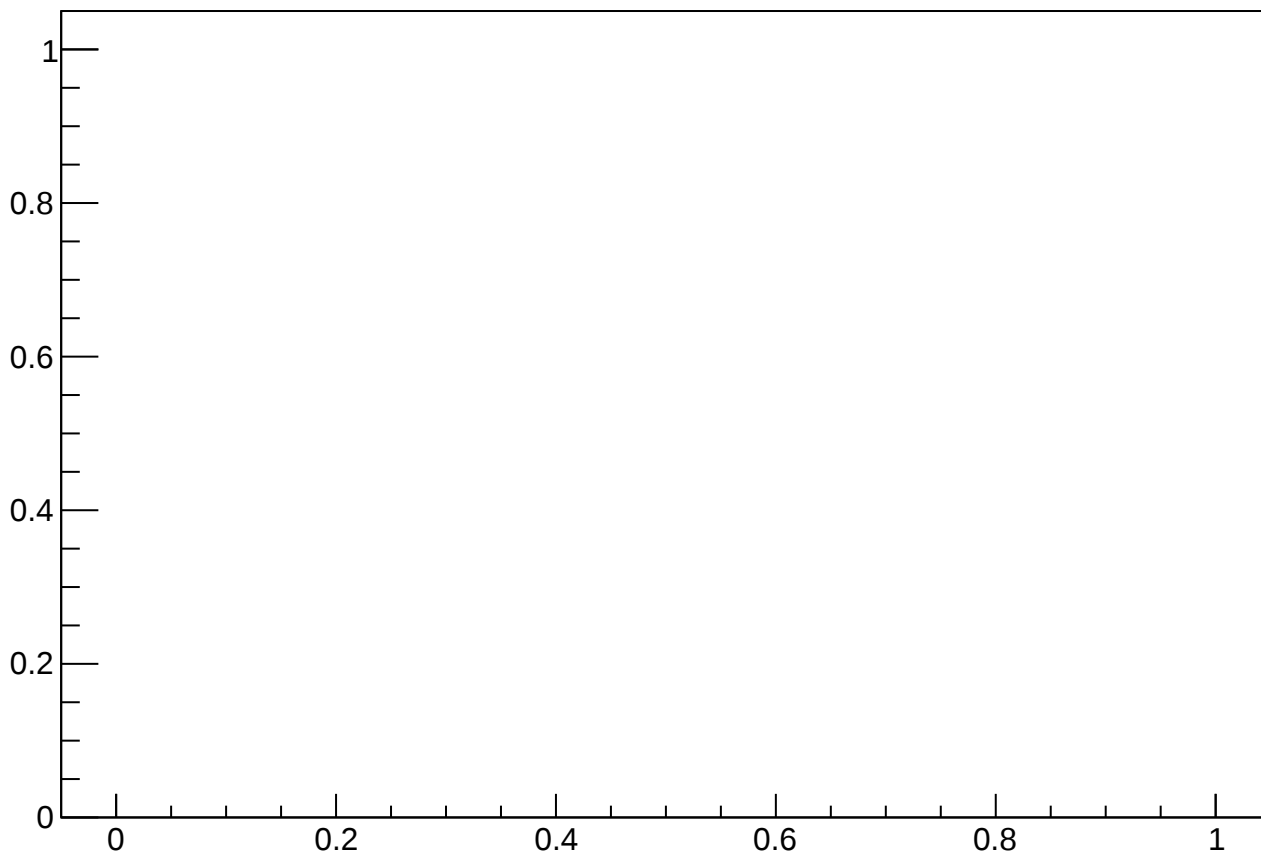
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

# bcm\_cav4cQ\_ds\_avg\_mean vs slug



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

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

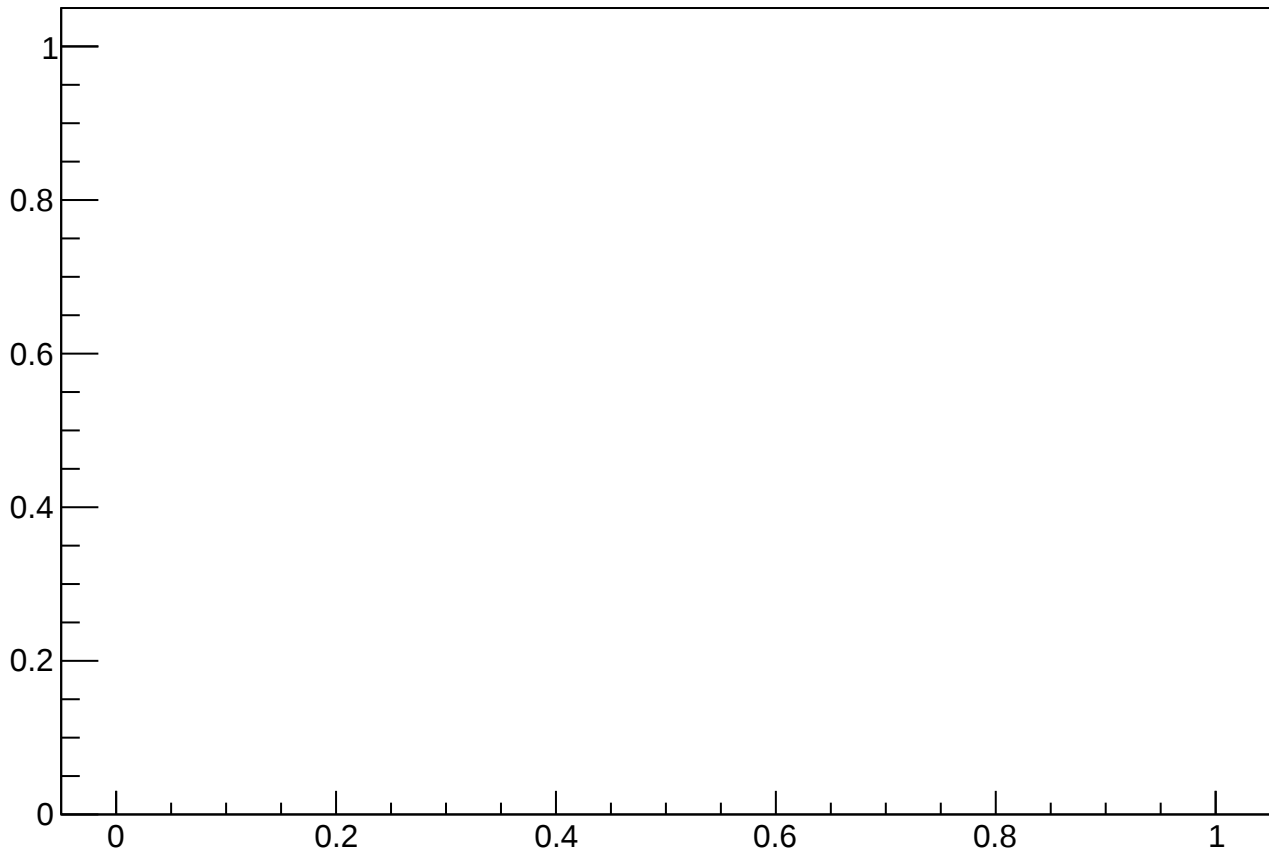
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_cav4cQ\_ds\_avg\_rms vs slug



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

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

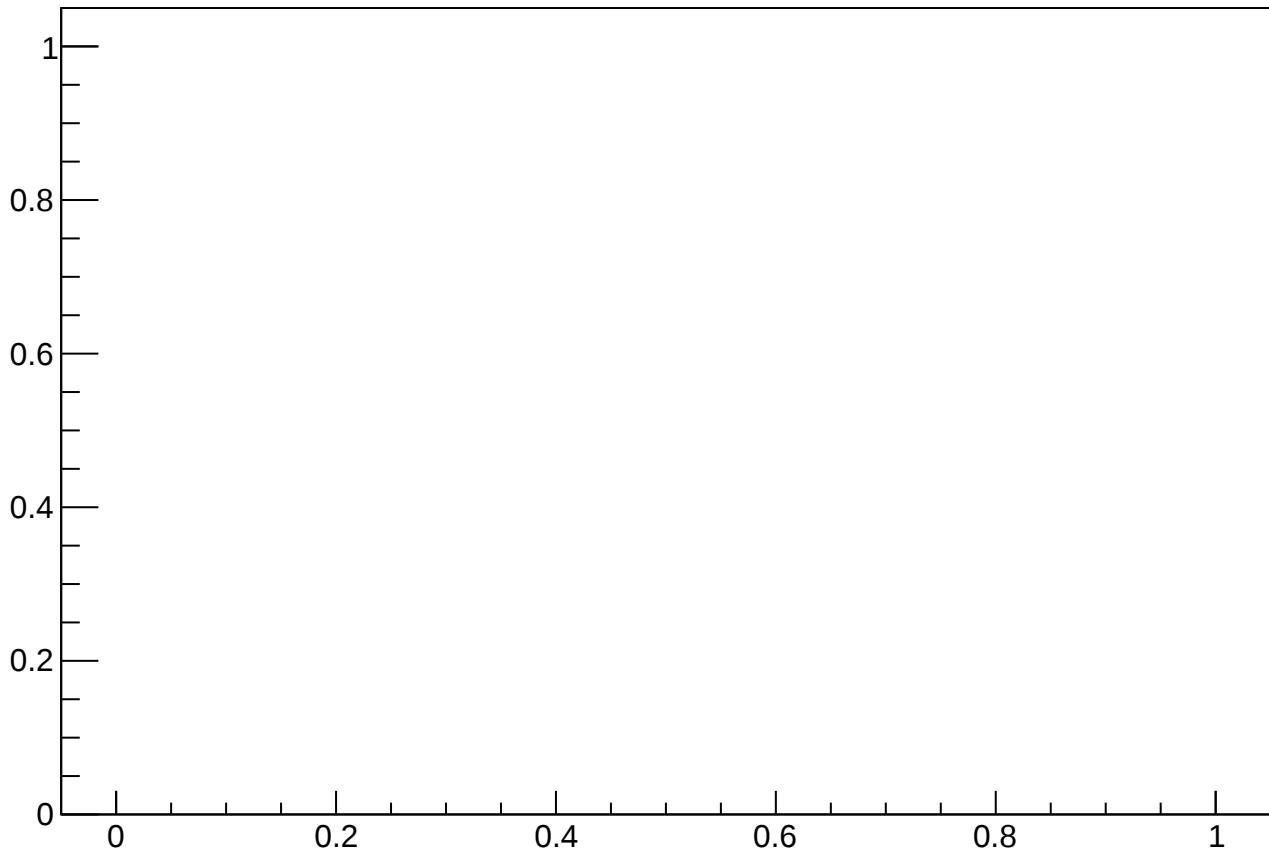
Right Out: 0.000+/-0.000     $\chi^2$ /NDF: 0.0/0

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

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

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

bcm\_cav4cQ\_ds\_dd\_mean vs slug



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

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

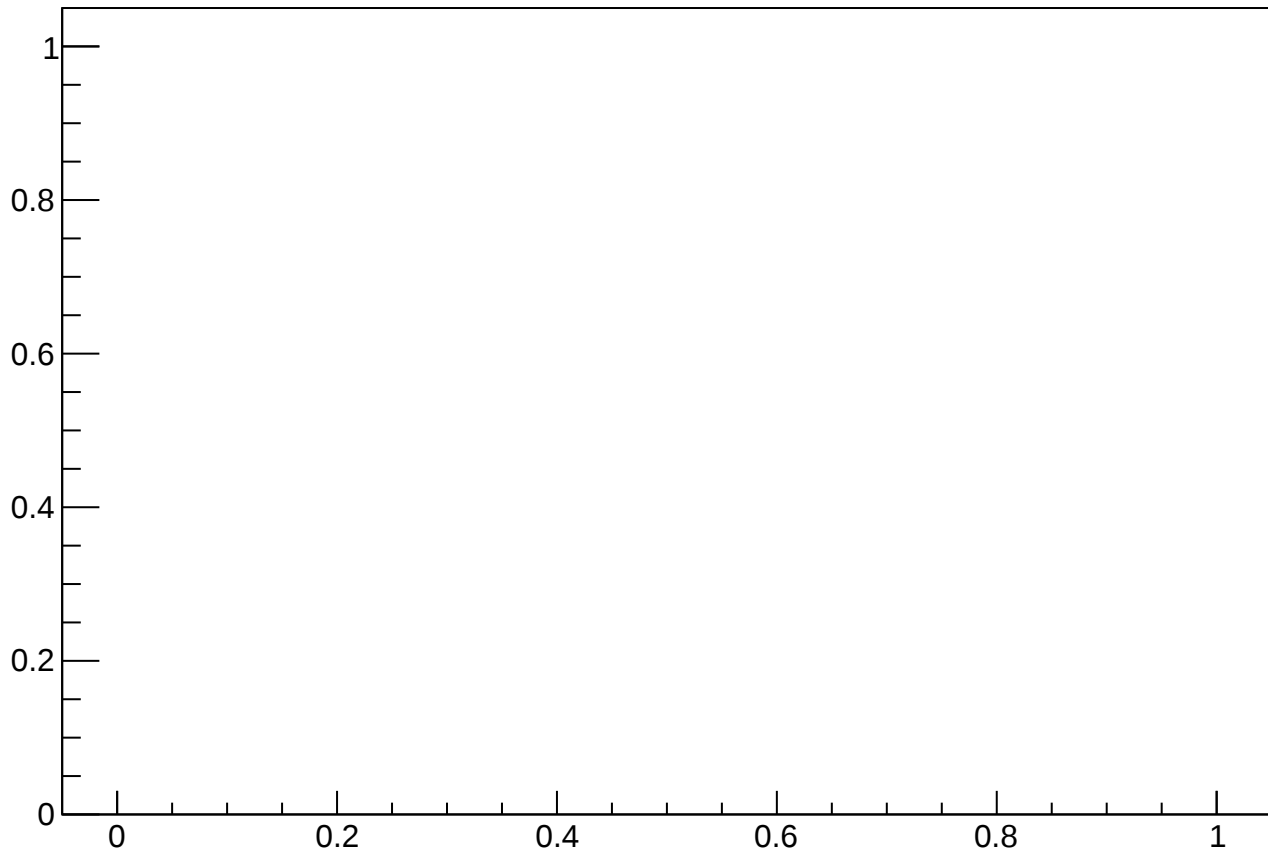
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_cav4cQ\_ds\_dd \_rms vs slug



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

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

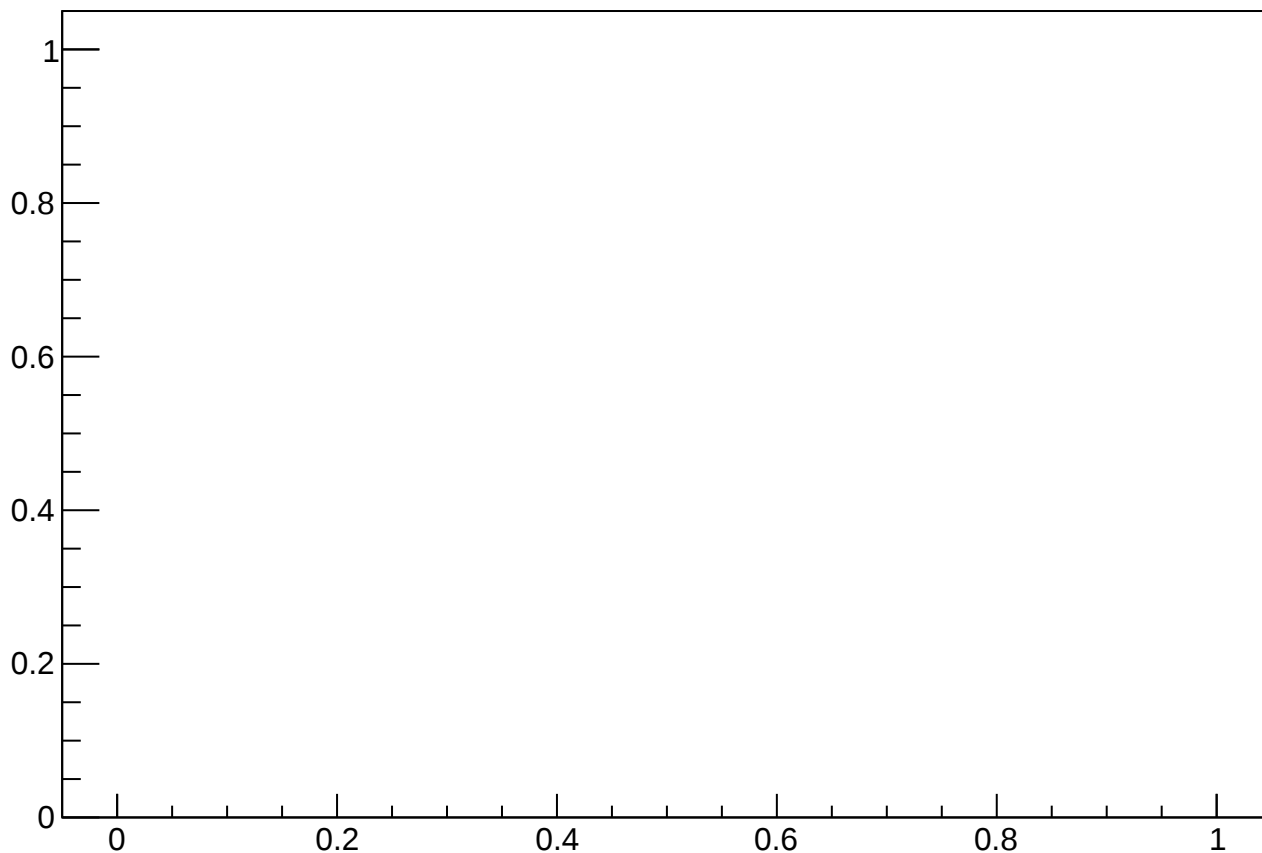
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_cav4cQ\_ds3\_dd\_mean vs slug



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

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

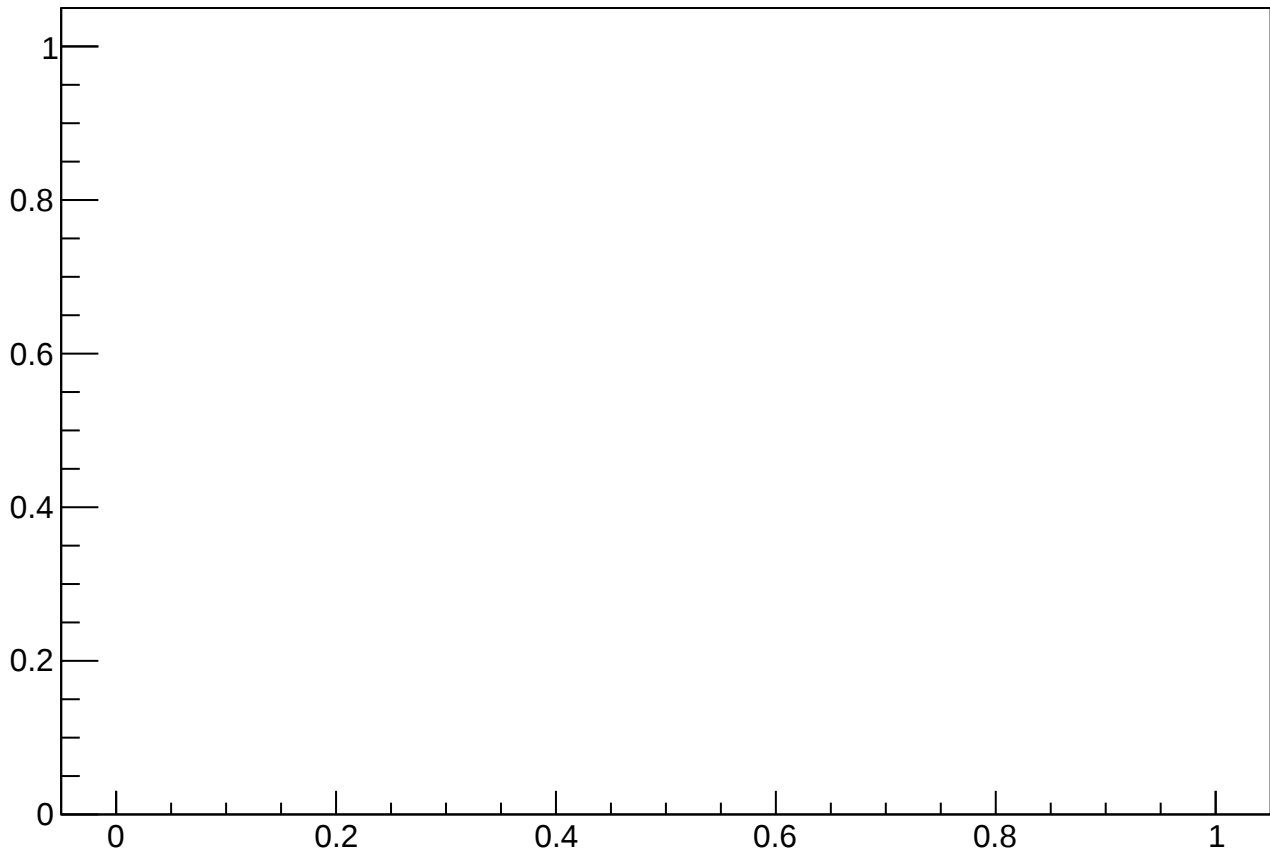
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_cav4cQ\_ds3\_dd\_rms vs slug



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

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

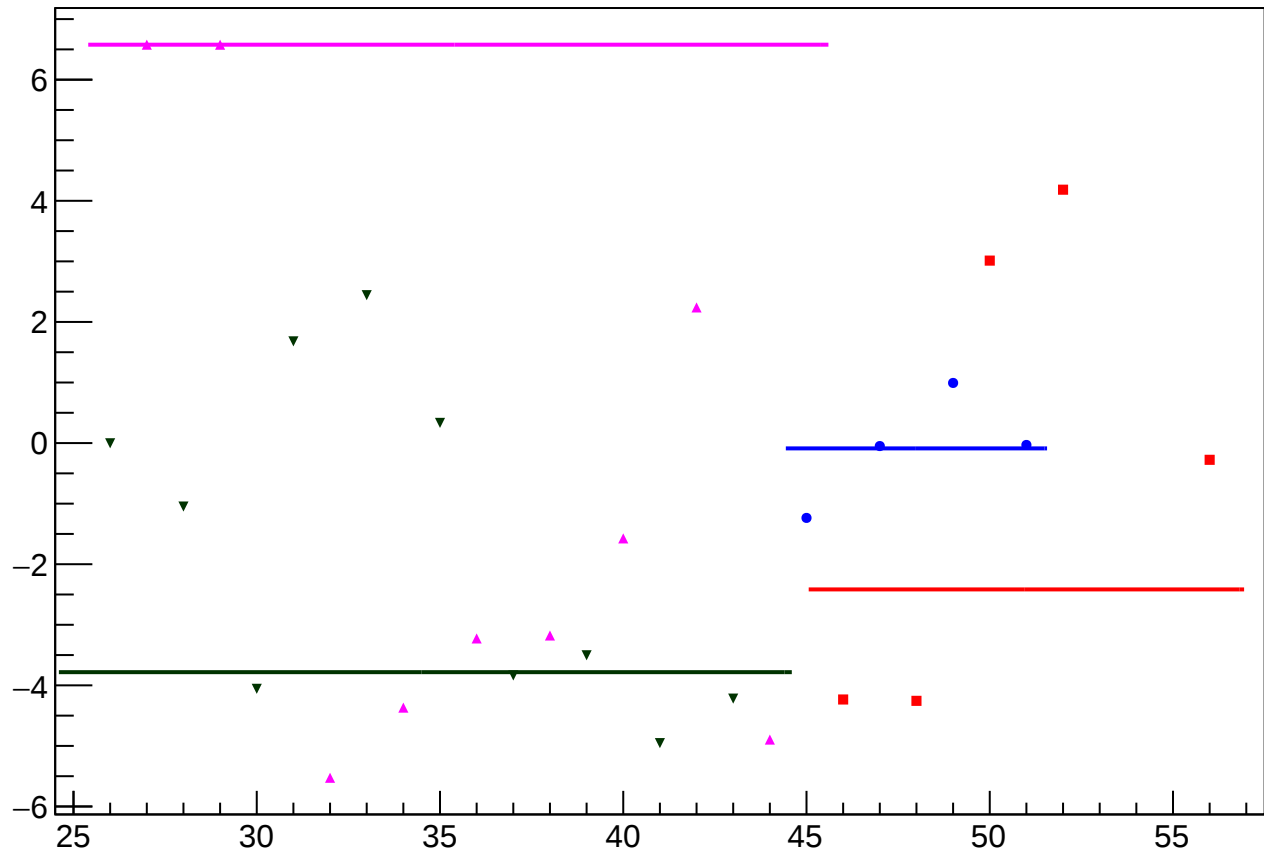
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# yield\_cav4bX\_mean vs slug



Right In:  $-0.088 \pm 0.002$   $\chi^2/\text{NDF}: 278364.1/3$

Left Out:  $-3.782 \pm 0.001$   $\chi^2/\text{NDF}: 5650855.8/9$

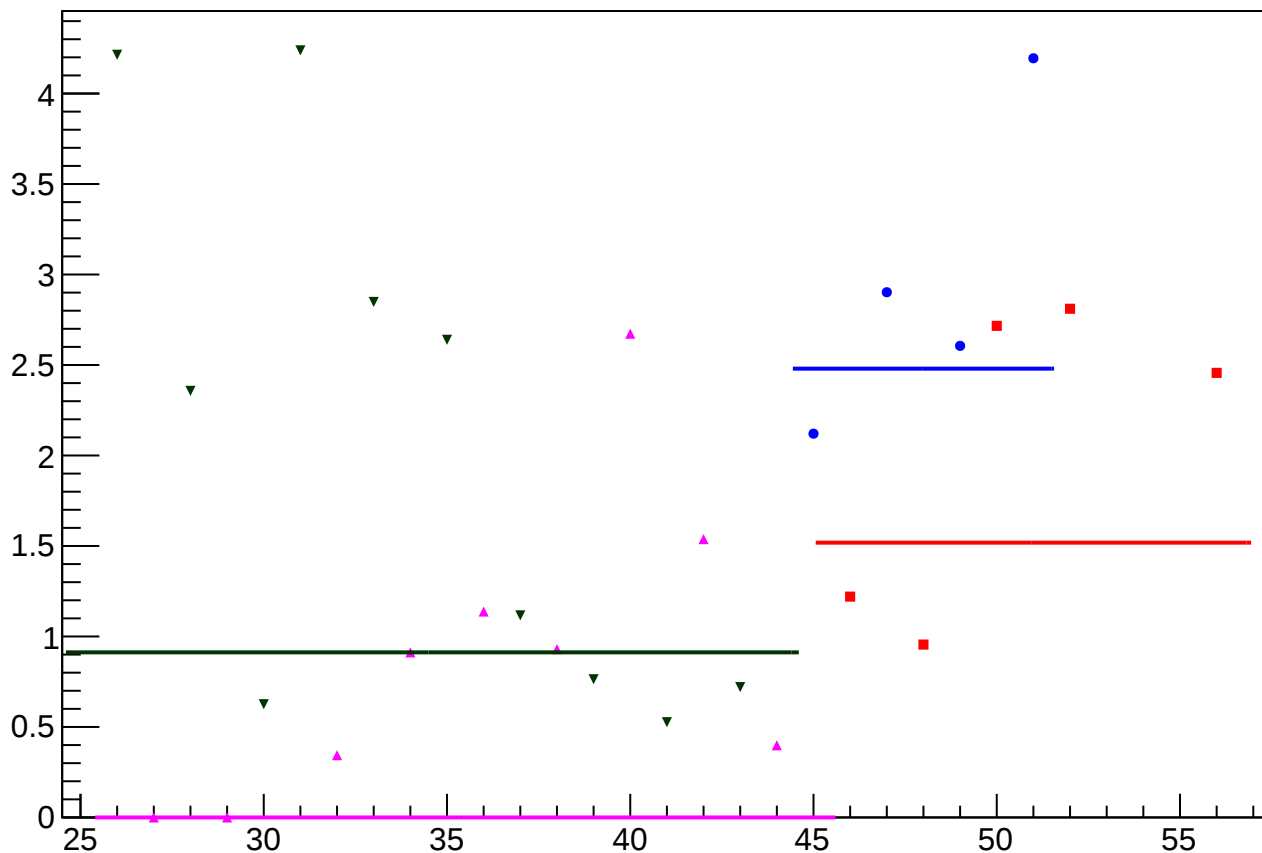
Right Out:  $-2.416 \pm 0.001$   $\chi^2/\text{NDF}: 5864065.9/4$

Left In:  $6.578 \pm 0.000$   $\chi^2/\text{NDF}: 822801976.9/8$

$-3.419 \pm 0.001$   $\chi^2/\text{NDF}: 9297663.4/13$

$6.578 \pm 0.000$   $\chi^2/\text{NDF}: 878646305.1/13$

# yield\_cav4bX\_rms vs slug



Right In: 2.480 $\pm$ 0.001  $\chi^2$ /NDF: 67023.2/3

Left Out: 0.912 $\pm$ 0.000  $\chi^2$ /NDF: 2500224.2/9

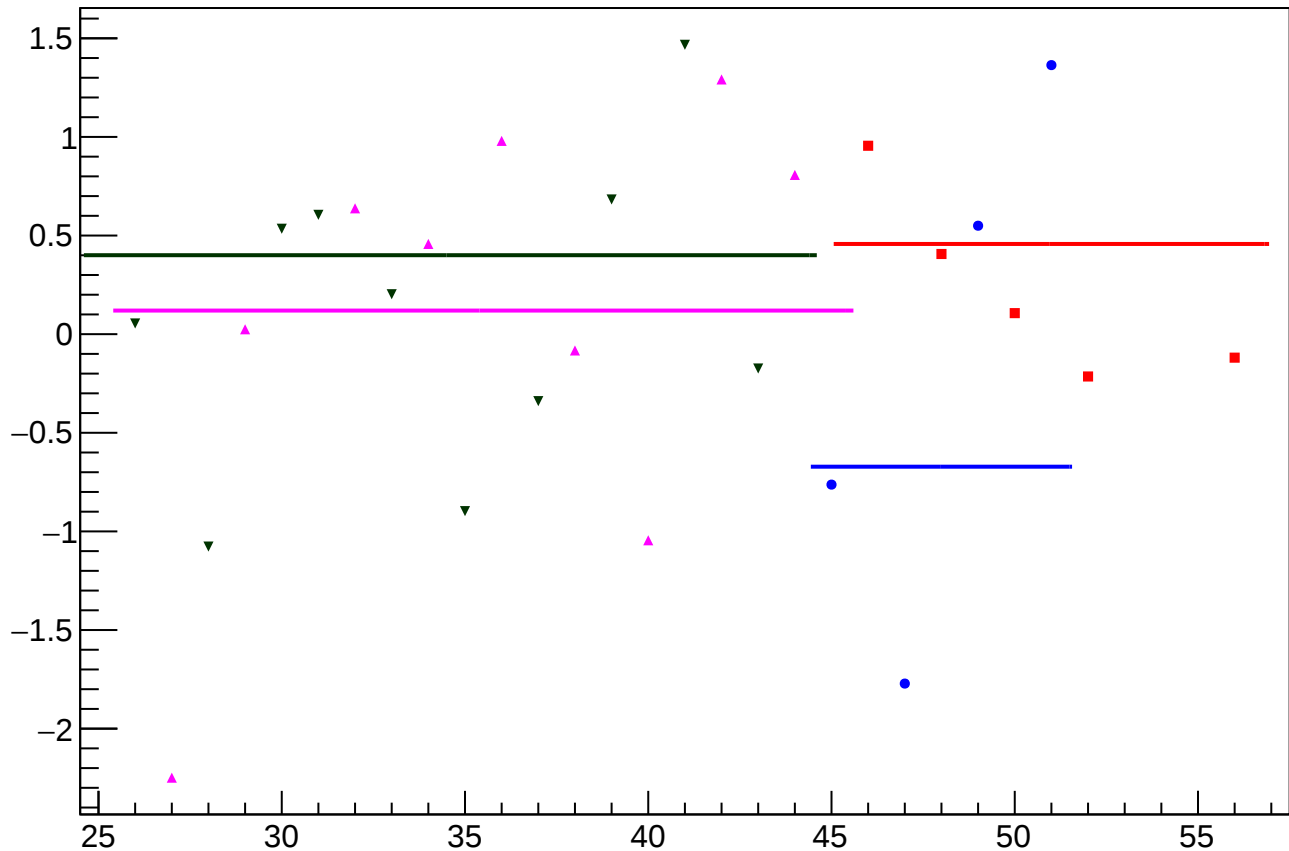
Right Out: 1.518 $\pm$ 0.001  $\chi^2$ /NDF: 654222.7/4

Left In: 0.000 $\pm$ 0.000  $\chi^2$ /NDF: 4639772.6/8

1.067 $\pm$ 0.000  $\chi^2$ /NDF: 3780190.0/13

0.000 $\pm$ 0.000  $\chi^2$ /NDF: 8142749.5/13

# yield\_cav4bY\_mean vs slug



Right In: -0.672+/-0.001  $\chi^2/\text{NDF}$ : 1377325.4/3

Left Out: 0.400+/-0.000  $\chi^2/\text{NDF}$ : 6822365.2/9

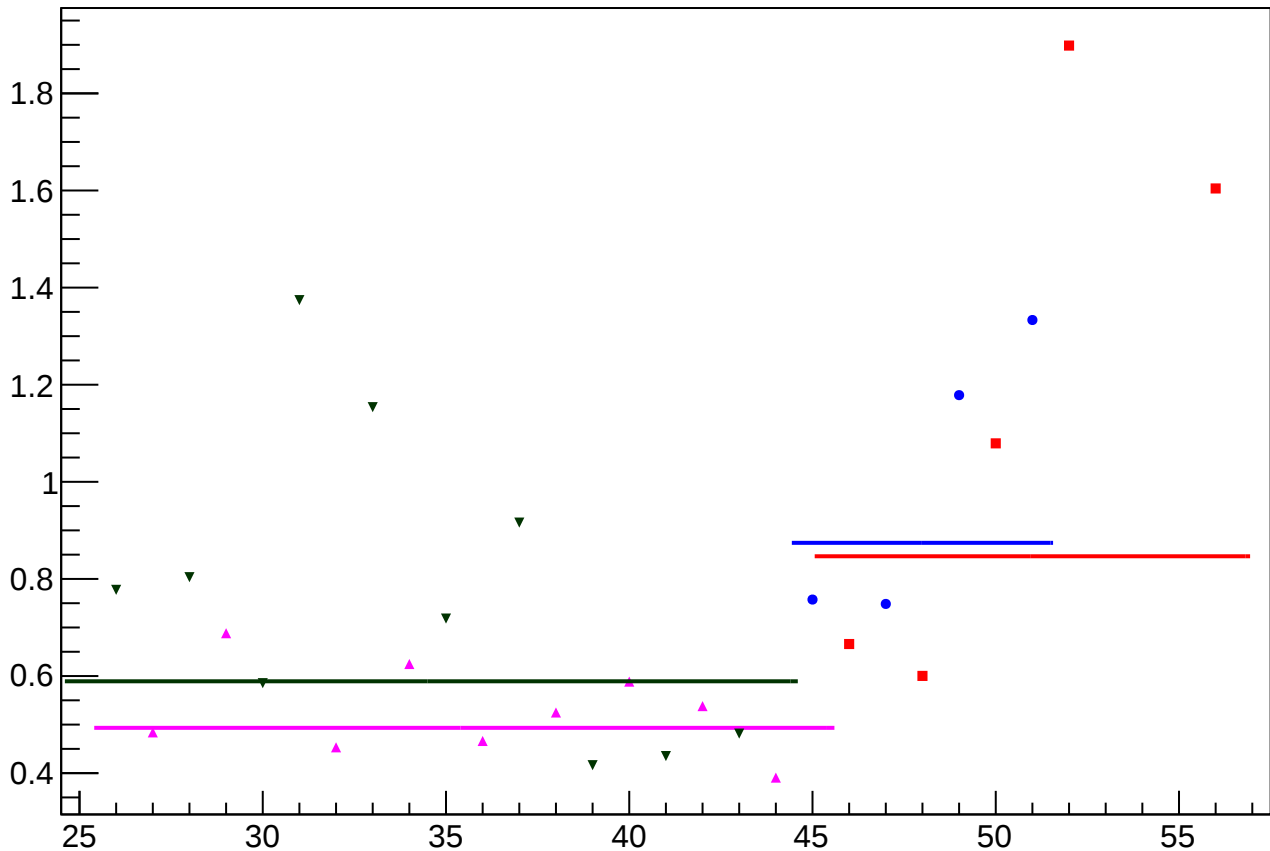
Right Out: 0.457+/-0.001  $\chi^2/\text{NDF}$ : 346502.1/4

Left In: 0.120+/-0.000  $\chi^2/\text{NDF}$ : 20095384.6/8

0.240+/-0.000  $\chi^2/\text{NDF}$ : 9869626.7/13

0.163+/-0.000  $\chi^2/\text{NDF}$ : 20671945.5/13

# yield\_cav4bY\_rms vs slug



Right In: 0.874+/-0.001  $\chi^2/\text{NDF}$ : 130297.4/3

Left Out: 0.589+/-0.000  $\chi^2/\text{NDF}$ : 892098.1/9

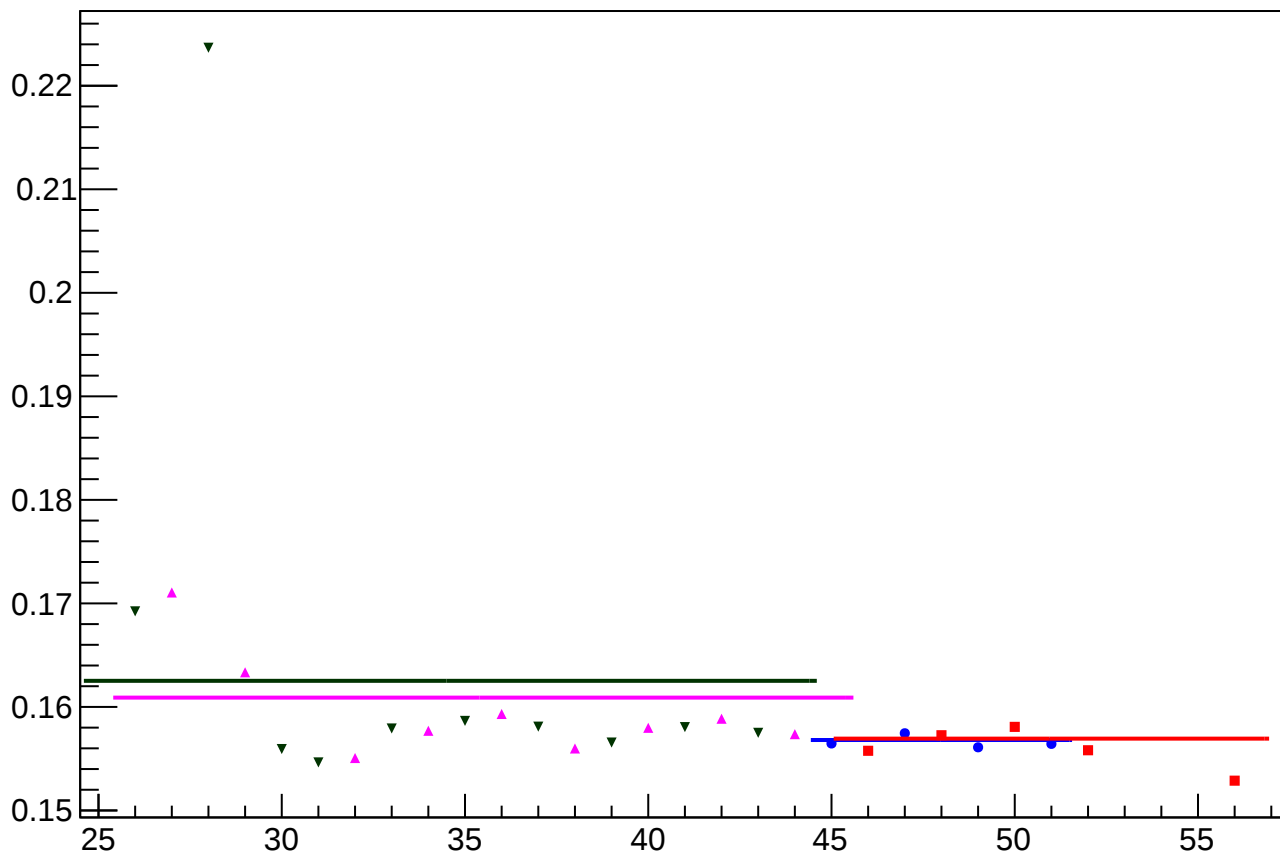
0.632+/-0.000  $\chi^2/\text{NDF}$ : 1258627.7/13

Right Out: 0.847+/-0.000  $\chi^2/\text{NDF}$ : 708943.6/4

0.538+/-0.000  $\chi^2/\text{NDF}$ : 1427898.6/13

Left In: 0.493+/-0.000  $\chi^2/\text{NDF}$ : 215120.3/8

# yield\_cav4cX\_mean vs slug



Right In:  $0.157 \pm 0.000$   $\chi^2/\text{NDF}$ : 66978.5/3

Left Out:  $0.163 \pm 0.000$   $\chi^2/\text{NDF}$ : 101831934.2/9

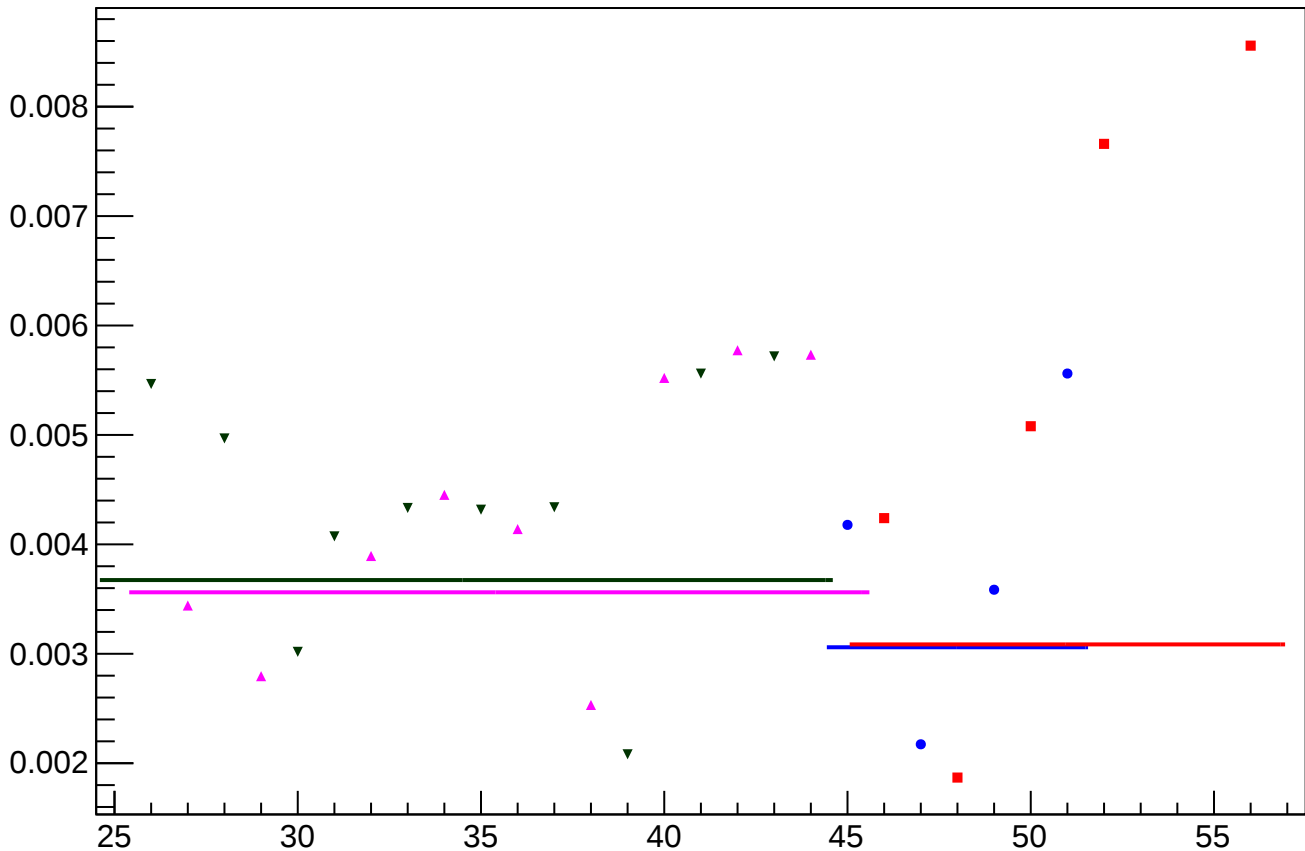
Right Out:  $0.157 \pm 0.000$   $\chi^2/\text{NDF}$ : 181586.9/4

Left In:  $0.161 \pm 0.000$   $\chi^2/\text{NDF}$ : 11666609.8/8

$0.161 \pm 0.000$   $\chi^2/\text{NDF}$ : 105599459.9/13

$0.160 \pm 0.000$   $\chi^2/\text{NDF}$ : 13702759.1/13

# yield\_cav4cX\_rms vs slug



Right In: 0.003+/-0.000  $\chi^2/\text{NDF}$ : 261357.7/3

Left Out: 0.004+/-0.000  $\chi^2/\text{NDF}$ :1041439.4/9

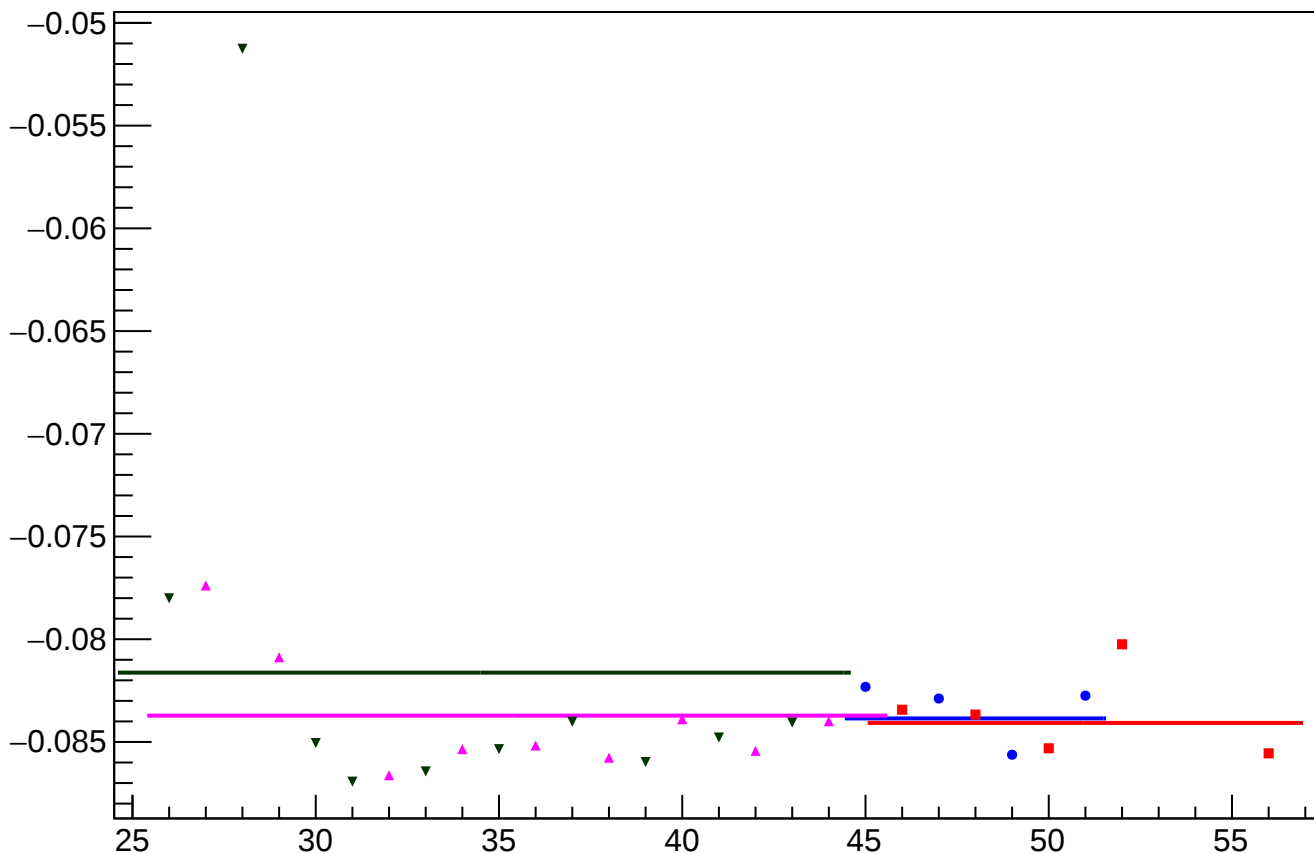
0.003+/-0.000  $\chi^2/\text{NDF}$ : 1388243.2/13

Right Out: 0.003+/-0.000  $\chi^2/\text{NDF}$ : 1292693.7/4

0.003+/-0.000  $\chi^2/\text{NDF}$ : 2096911.5/13

Left In: 0.004+/-0.000  $\chi^2/\text{NDF}$ :750635.1/8

# yield\_cav4cY\_mean vs slug



Right In:  $-0.084 \pm 0.000$   $\chi^2/\text{NDF}$ : 262853.3/3

Left Out:  $-0.082 \pm 0.000$   $\chi^2/\text{NDF}$ : 35910160.7/9

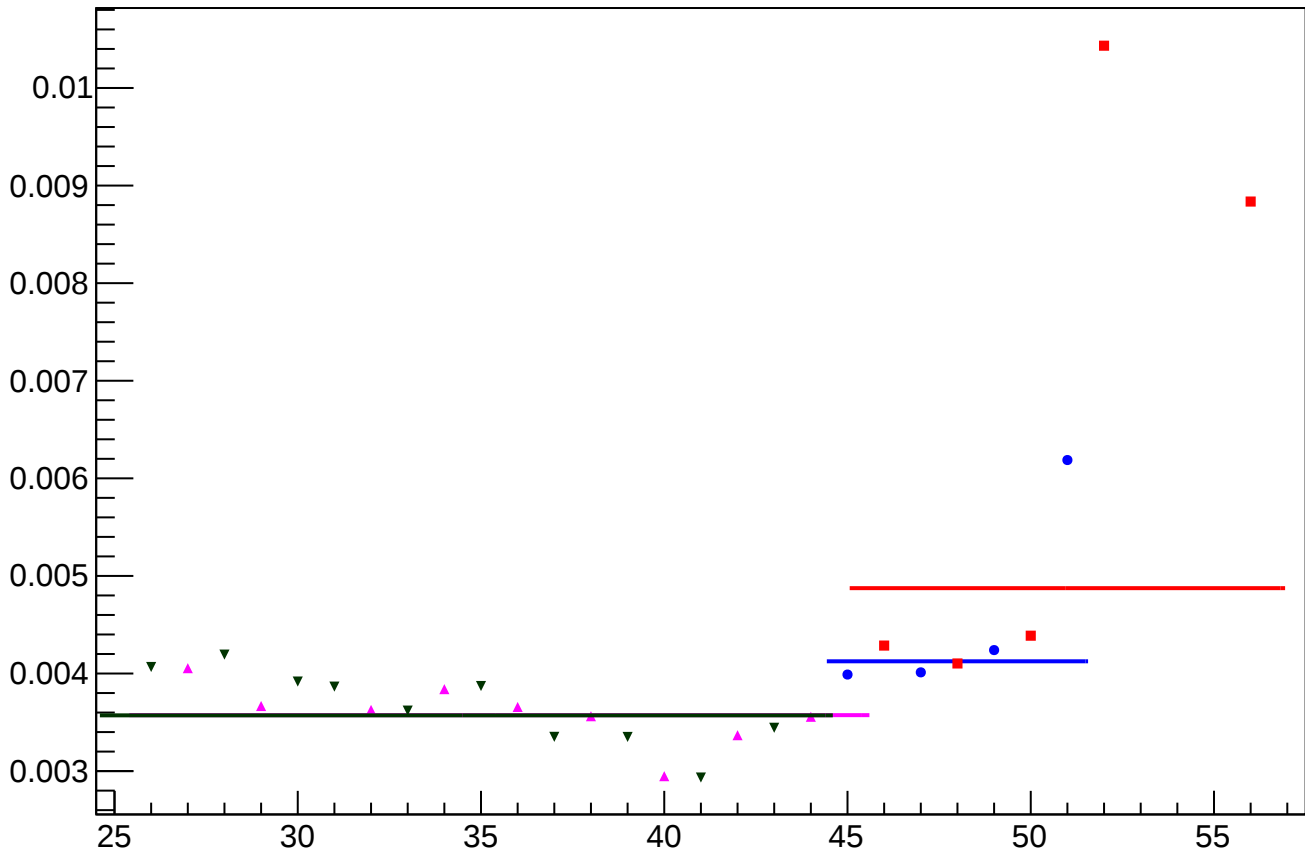
Right Out:  $-0.084 \pm 0.000$   $\chi^2/\text{NDF}$ : 131498.8/4

Left In:  $-0.084 \pm 0.000$   $\chi^2/\text{NDF}$ : 3520419.1/8

$-0.082 \pm 0.000$   $\chi^2/\text{NDF}$ : 36604196.0/13

$-0.084 \pm 0.000$   $\chi^2/\text{NDF}$ : 3660797.3/13

# yield\_cav4cY\_rms vs slug



Right In: 0.004+/-0.000  $\chi^2/\text{NDF}$ : 13846.5/3

Left Out: 0.004+/-0.000  $\chi^2/\text{NDF}$ :122018.5/9

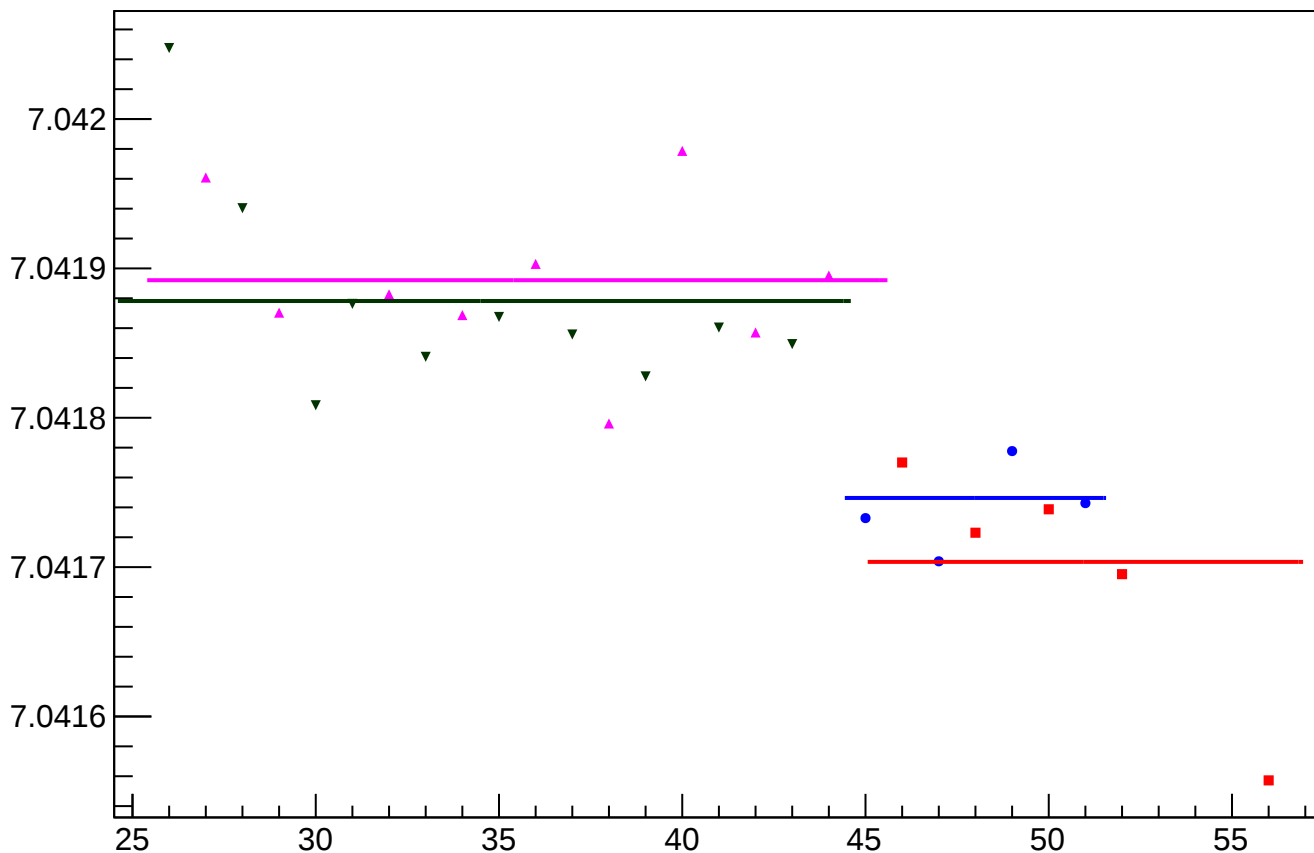
Right Out: 0.005+/-0.000  $\chi^2/\text{NDF}$ : 499409.9/4

Left In: 0.004+/-0.000  $\chi^2/\text{NDF}$ :77539.3/8

0.004+/-0.000  $\chi^2/\text{NDF}$ : 189096.1/13

0.004+/-0.000  $\chi^2/\text{NDF}$ : 814694.4/13

# yield\_cav4dX\_mean vs slug



Right In: 7.042 $\pm$ 0.000  $\chi^2$ /NDF: 65522.0/3

Left Out: 7.042 $\pm$ 0.000  $\chi^2$ /NDF:814684.7/9

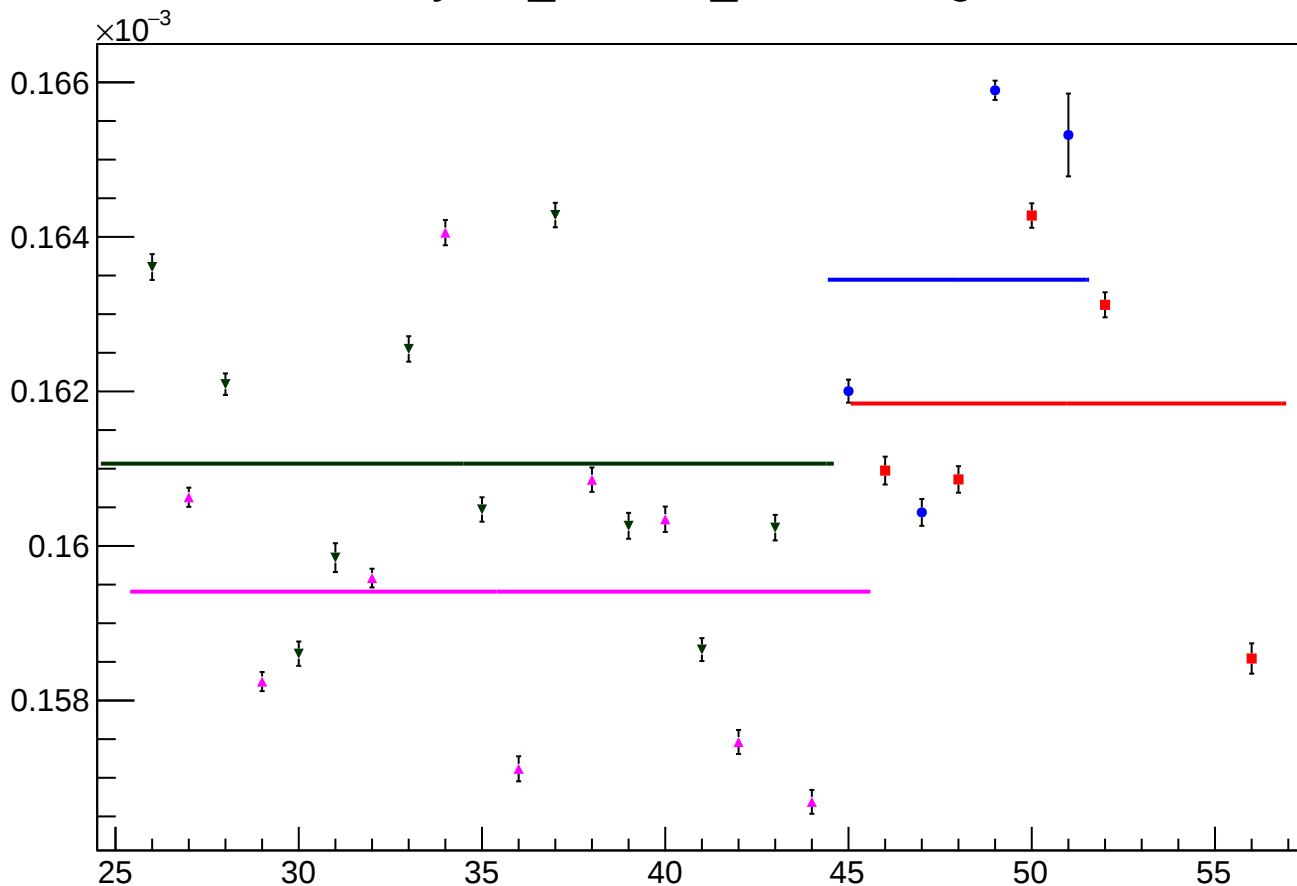
Right Out: 7.042 $\pm$ 0.000  $\chi^2$ /NDF: 378401.5/4

Left In: 7.042 $\pm$ 0.000  $\chi^2$ /NDF:534073.6/8

7.042 $\pm$ 0.000  $\chi^2$ /NDF: 1803634.3/13

7.042 $\pm$ 0.000  $\chi^2$ /NDF: 3073181.5/13

# yield\_cav4dX\_rms vs slug



Right In: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 792.1/3

Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ :1391.6/9

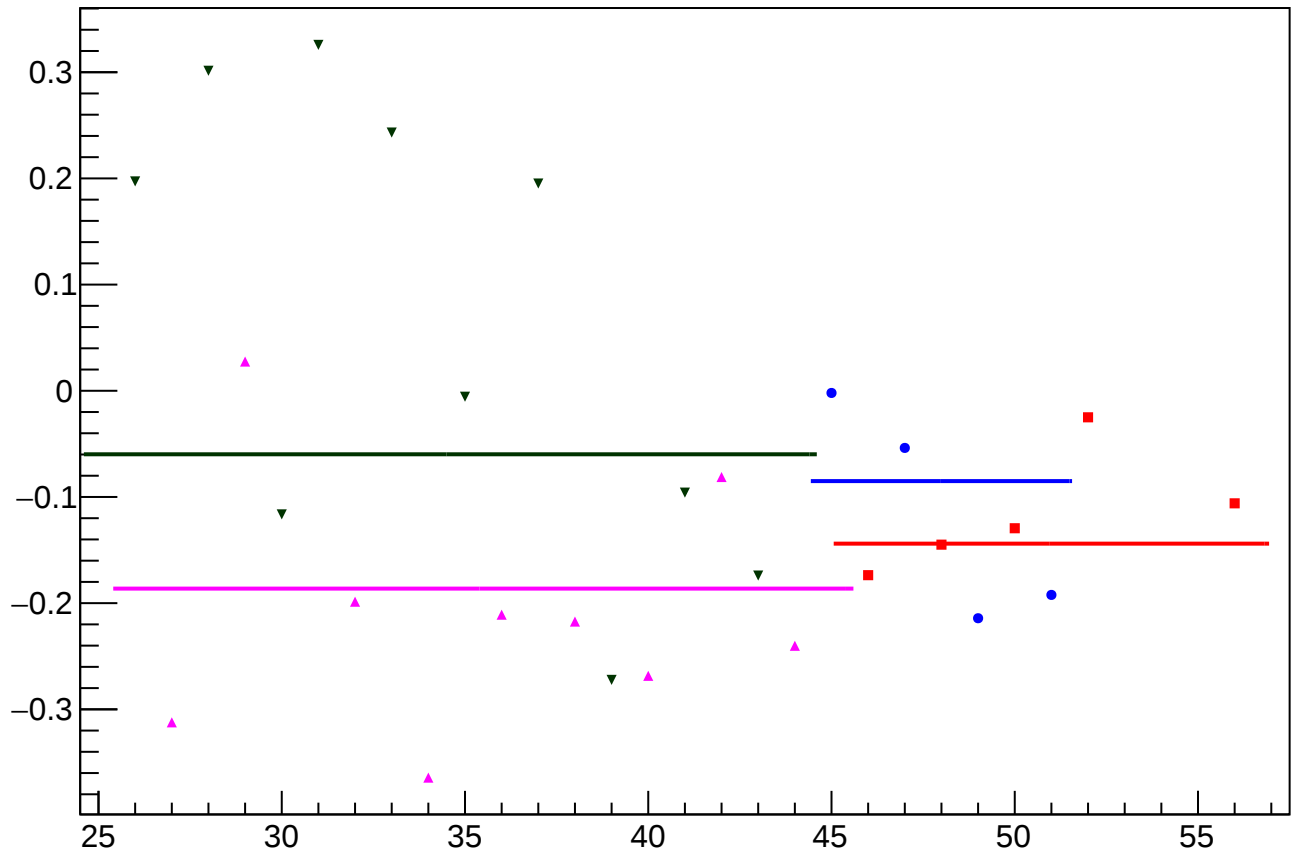
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 636.9/4

Left In: 0.000+/-0.000  $\chi^2/\text{NDF}$ :1775.1/8

0.000+/-0.000  $\chi^2/\text{NDF}$ : 2785.6/13

0.000+/-0.000  $\chi^2/\text{NDF}$ : 3132.2/13

# yield\_cav4dY\_mean vs slug



Right In: -0.085+/-0.000  $\chi^2/\text{NDF}$ : 818523.3/3

Left Out: -0.060+/-0.000  $\chi^2/\text{NDF}$ :19501975.2/9

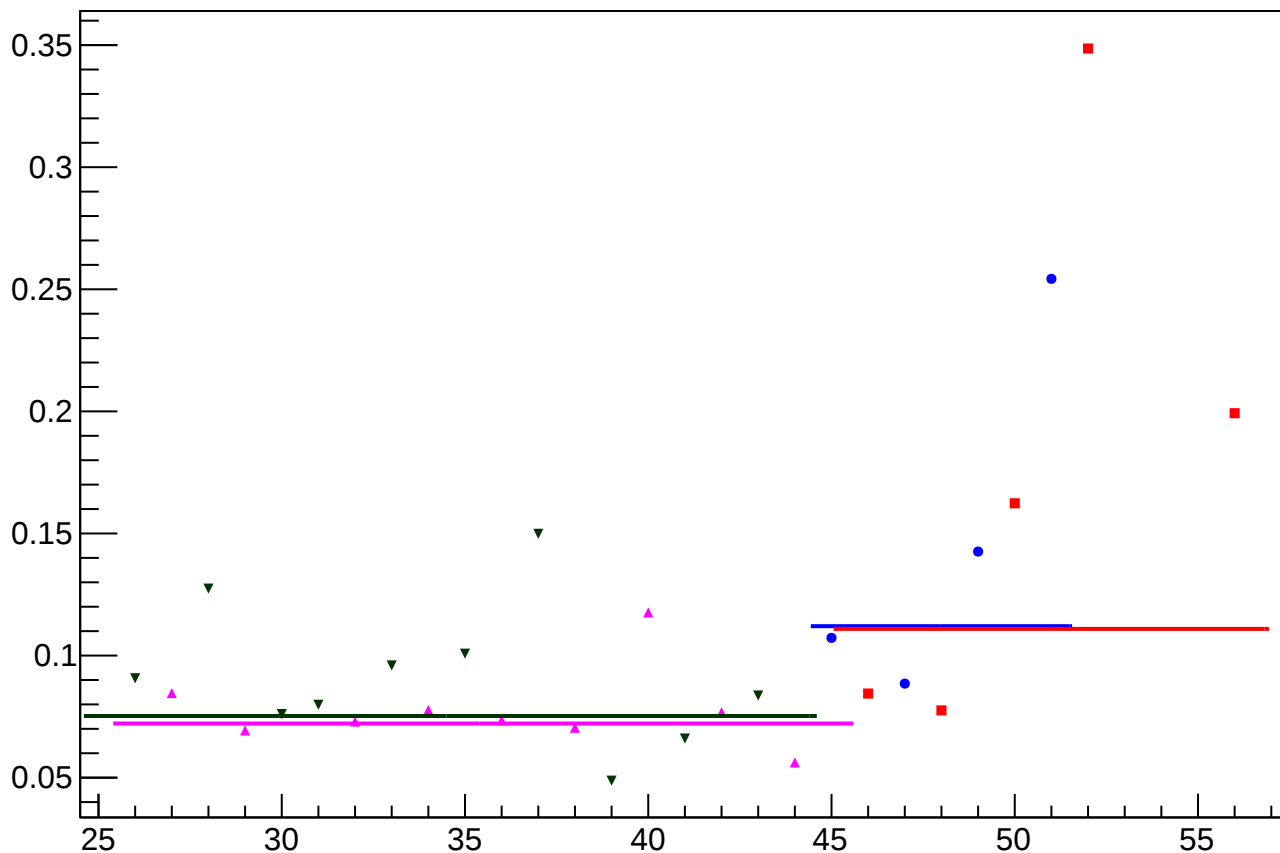
Right Out: -0.144+/-0.000  $\chi^2/\text{NDF}$ : 103586.4/4

Left In: -0.186+/-0.000  $\chi^2/\text{NDF}$ :8361135.8/8

-0.064+/-0.000  $\chi^2/\text{NDF}$ : 20376271.5/13

-0.180+/-0.000  $\chi^2/\text{NDF}$ : 8633000.4/13

# yield\_cav4dY\_rms vs slug



Right In: 0.112+/-0.000  $\chi^2/\text{NDF}$ : 136292.1/3

Left Out: 0.075+/-0.000  $\chi^2/\text{NDF}$ : 580705.7/9

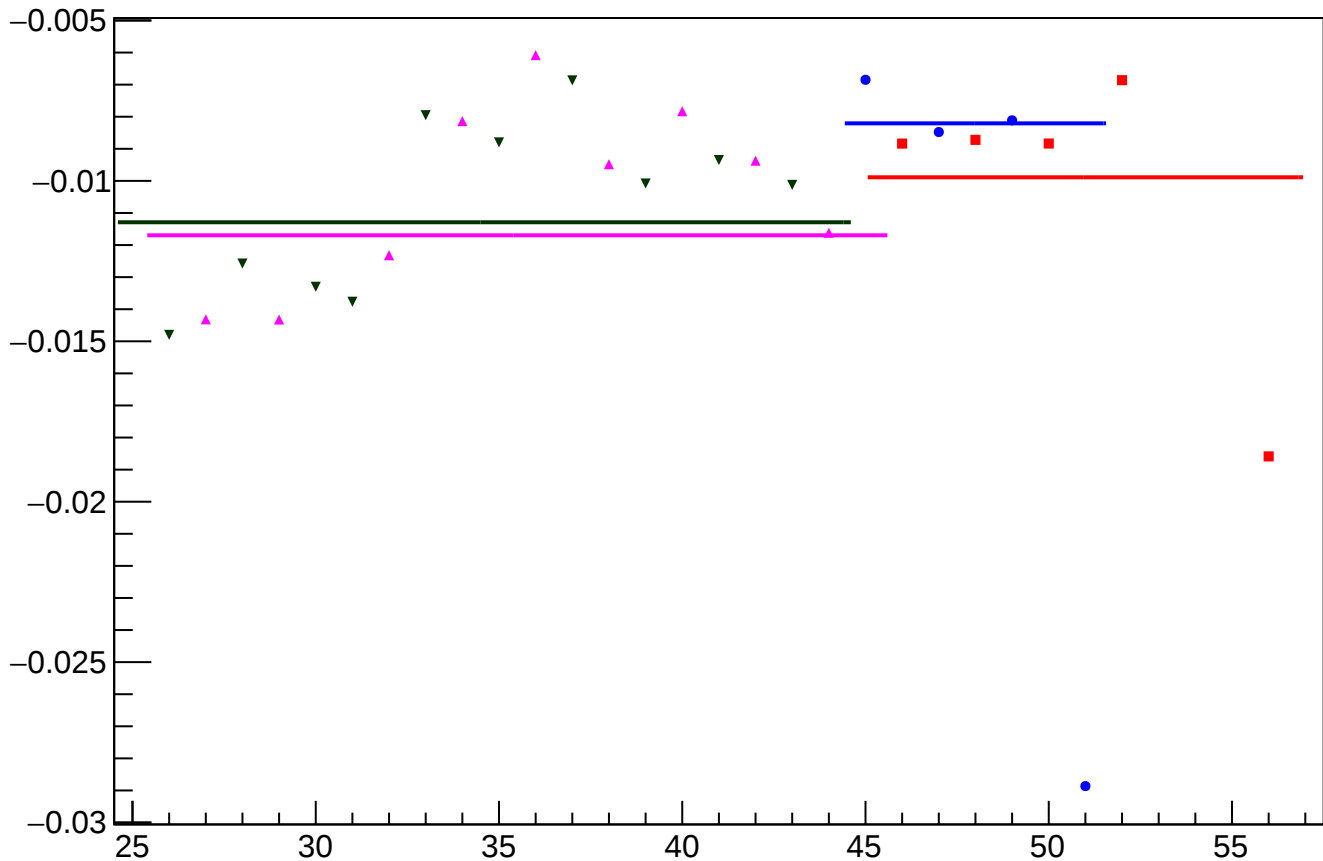
Right Out: 0.111+/-0.000  $\chi^2/\text{NDF}$ : 834243.5/4

Left In: 0.072+/-0.000  $\chi^2/\text{NDF}$ : 194281.2/8

0.082+/-0.000  $\chi^2/\text{NDF}$ : 953647.8/13

0.078+/-0.000  $\chi^2/\text{NDF}$ : 1310458.4/13

# yield\_bpm4aX\_mean vs slug



Right In: -0.008+/-0.000  $\chi^2/\text{NDF}$ : 160525.0/3

Left Out: -0.011+/-0.000  $\chi^2/\text{NDF}$ : 378643.1/9

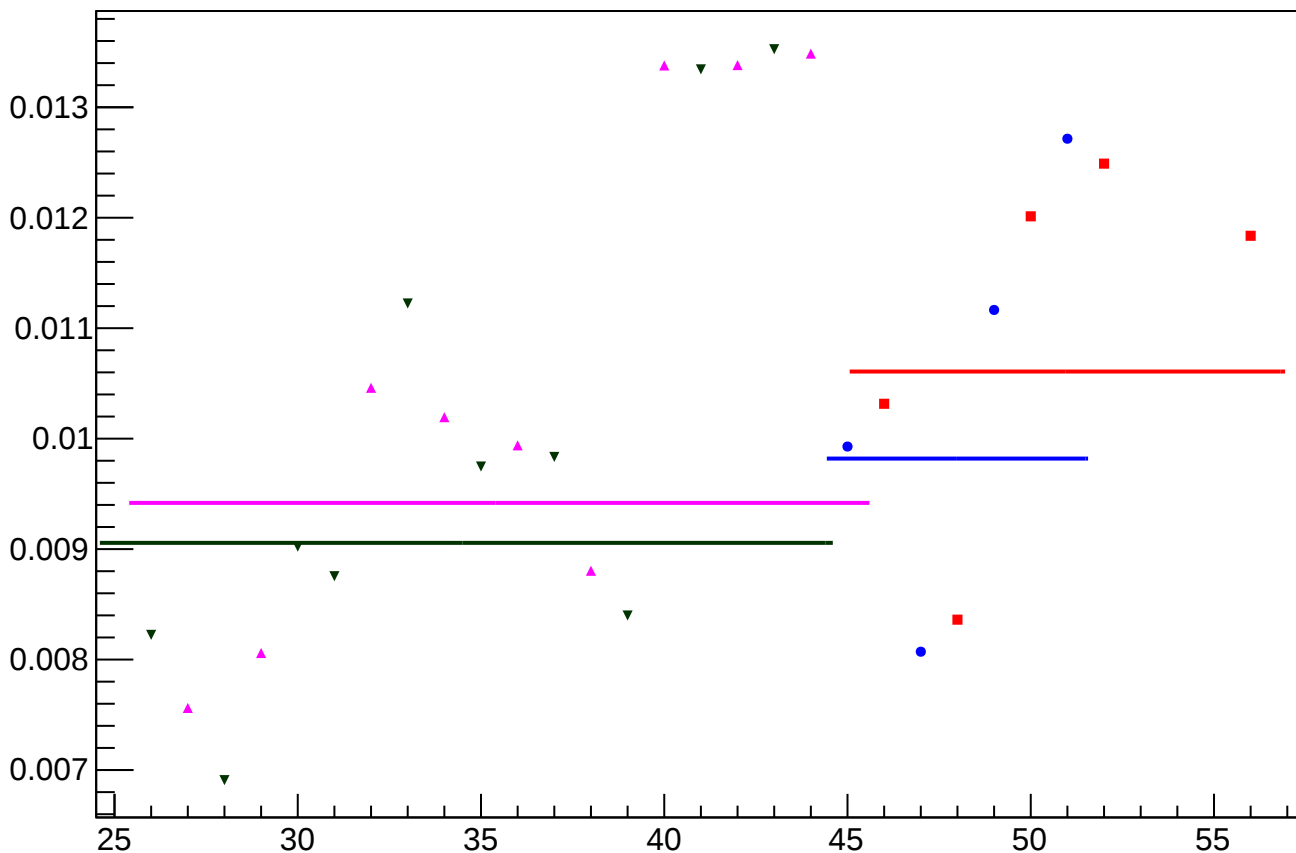
-0.011+/-0.000  $\chi^2/\text{NDF}$ : 681980.0/13

Right Out: -0.010+/-0.000  $\chi^2/\text{NDF}$ : 266324.7/4

-0.011+/-0.000  $\chi^2/\text{NDF}$ : 808345.9/13

Left In: -0.012+/-0.000  $\chi^2/\text{NDF}$ : 493253.3/8

# yield\_bpm4aX\_rms vs slug



Right In: 0.010+/-0.000  $\chi^2/\text{NDF}$ : 71596.9/3

Left Out: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 416147.1/9

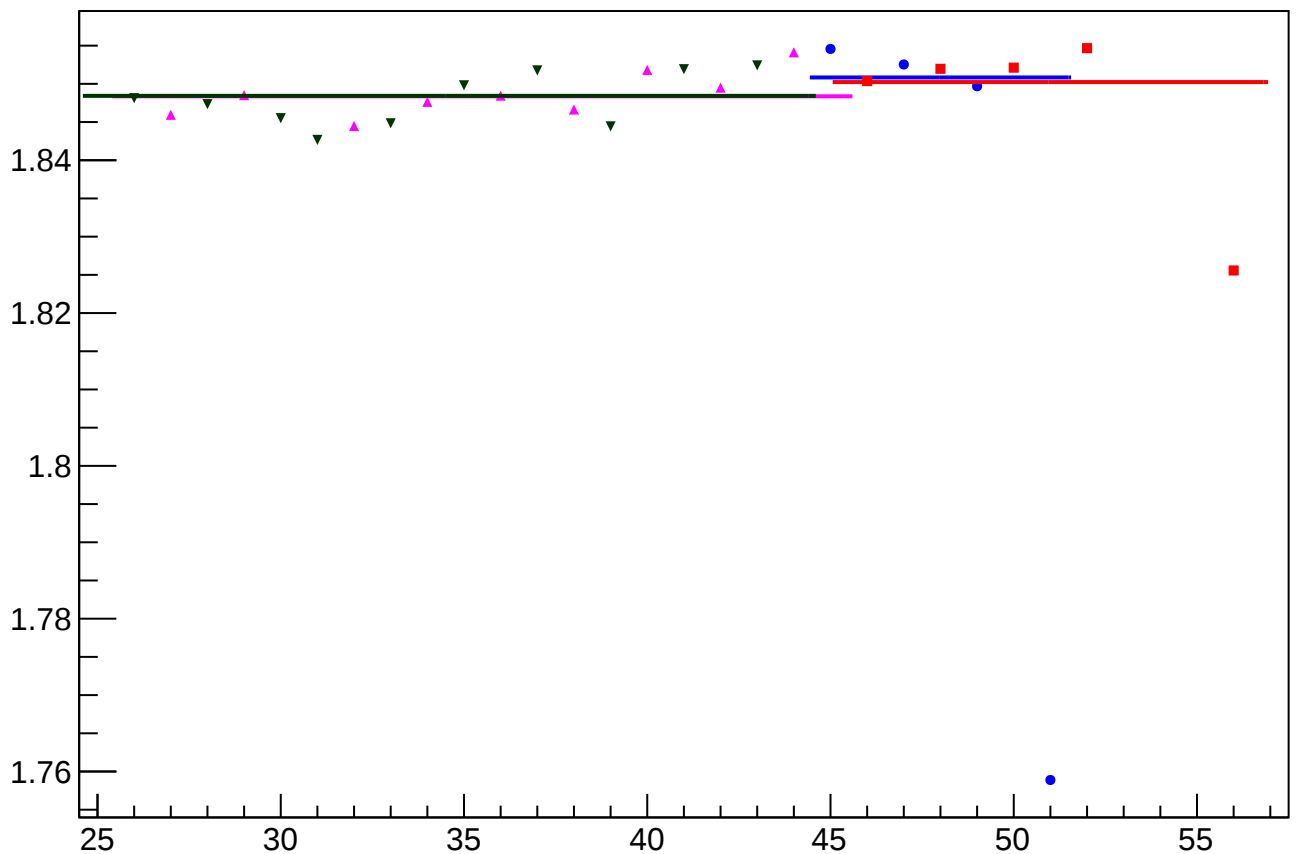
Right Out: 0.011+/-0.000  $\chi^2/\text{NDF}$ : 110268.9/4

Left In: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 448115.9/8

0.009+/-0.000  $\chi^2/\text{NDF}$ : 505239.6/13

0.010+/-0.000  $\chi^2/\text{NDF}$ : 600584.9/13

# yield\_bpm4aY\_mean vs slug



Right In: 1.851+/-0.000  $\chi^2/\text{NDF}$ : 817141.8/3

Left Out: 1.848+/-0.000  $\chi^2/\text{NDF}$ : 272295.3/9

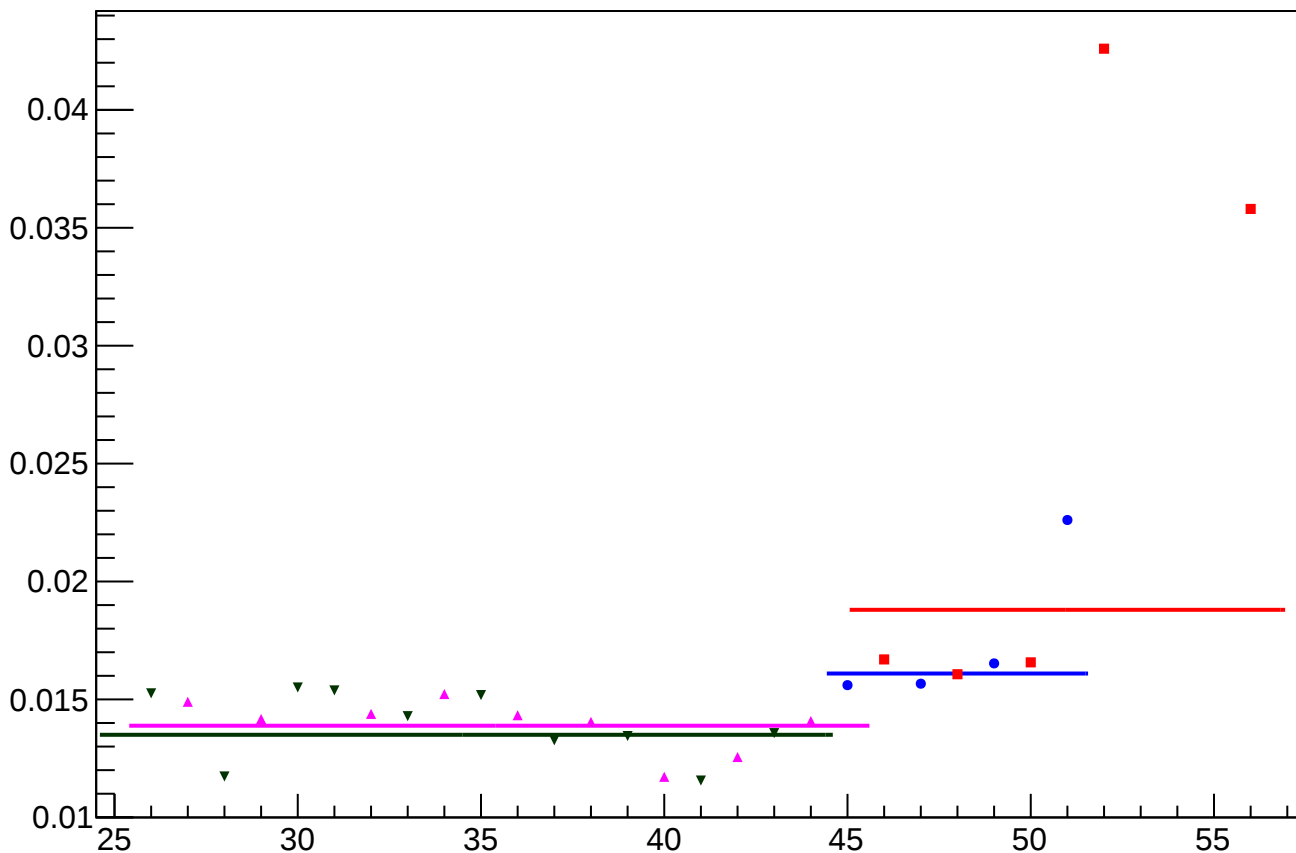
Right Out: 1.850+/-0.000  $\chi^2/\text{NDF}$ : 212563.7/4

Left In: 1.848+/-0.000  $\chi^2/\text{NDF}$ : 226340.4/8

1.849+/-0.000  $\chi^2/\text{NDF}$ : 1123006.0/13

1.849+/-0.000  $\chi^2/\text{NDF}$ : 455139.1/13

# yield\_bpm4aY\_rms vs slug



Right In: 0.016+/-0.000  $\chi^2/\text{NDF}$ : 10743.2/3

Left Out: 0.013+/-0.000  $\chi^2/\text{NDF}$ :115025.1/9

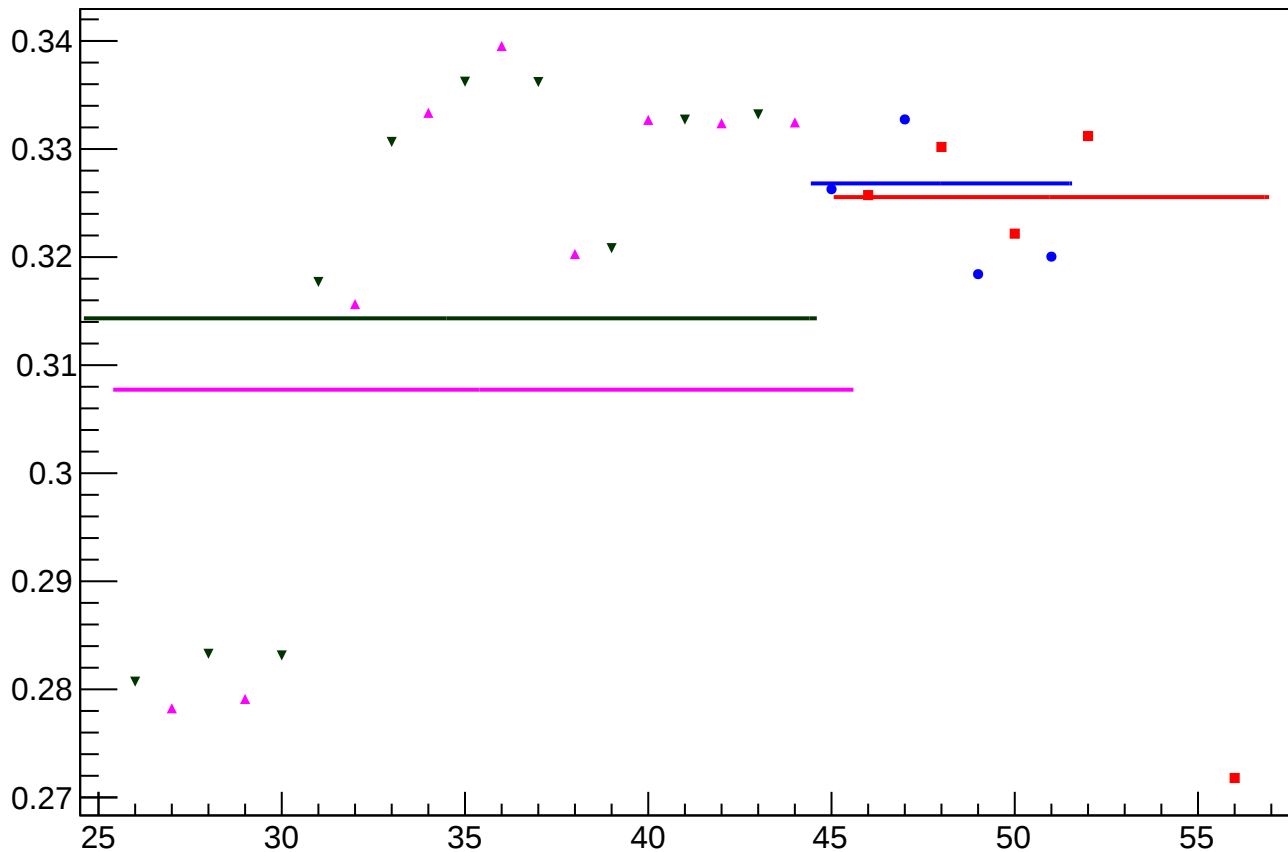
Right Out: 0.019+/-0.000  $\chi^2/\text{NDF}$ : 545980.6/4

Left In: 0.014+/-0.000  $\chi^2/\text{NDF}$ :63870.3/8

0.014+/-0.000  $\chi^2/\text{NDF}$ : 203952.7/13

0.015+/-0.000  $\chi^2/\text{NDF}$ : 835921.2/13

# yield\_bpm4eX\_mean vs slug



Right In: 0.327 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 161873.0/3

Left Out: 0.314 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 5131381.6/9

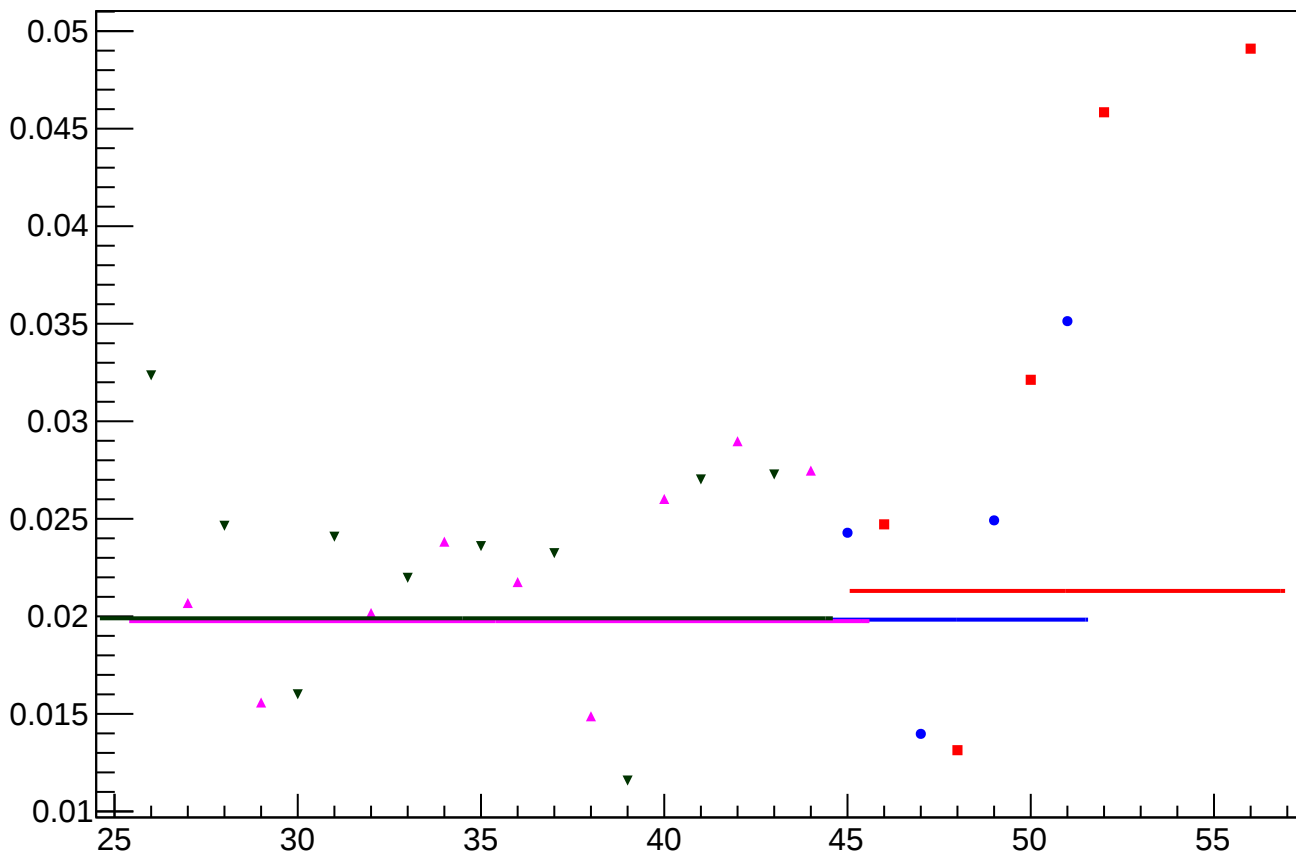
Right Out: 0.326 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 624562.6/4

Left In: 0.308 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 7379435.7/8

0.318 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 5775574.6/13

0.312 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 8938492.1/13

# yield\_bpm4eX\_rms vs slug



Right In: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 258117.4/3

Left Out: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 884674.2/9

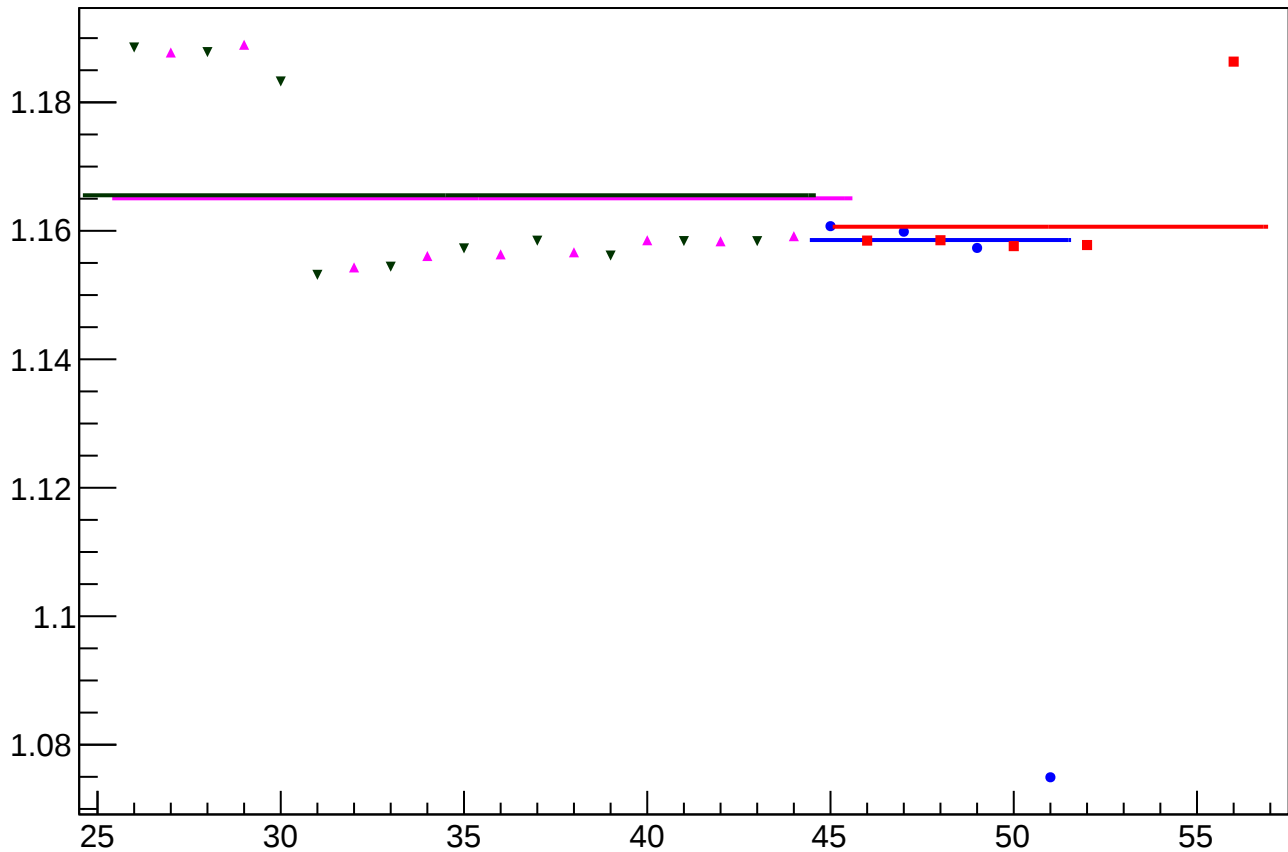
Right Out: 0.021+/-0.000  $\chi^2/\text{NDF}$ : 1025138.2/4

Left In: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 480943.5/8

0.020+/-0.000  $\chi^2/\text{NDF}$ : 1142820.7/13

0.020+/-0.000  $\chi^2/\text{NDF}$ : 1520200.0/13

# yield\_bpm4eY\_mean vs slug



Right In:  $1.159 \pm 0.000$      $\chi^2/\text{NDF}$ : 1141341.7/3

Left Out:  $1.166 \pm 0.000$      $\chi^2/\text{NDF}$ : 12029920.3/9

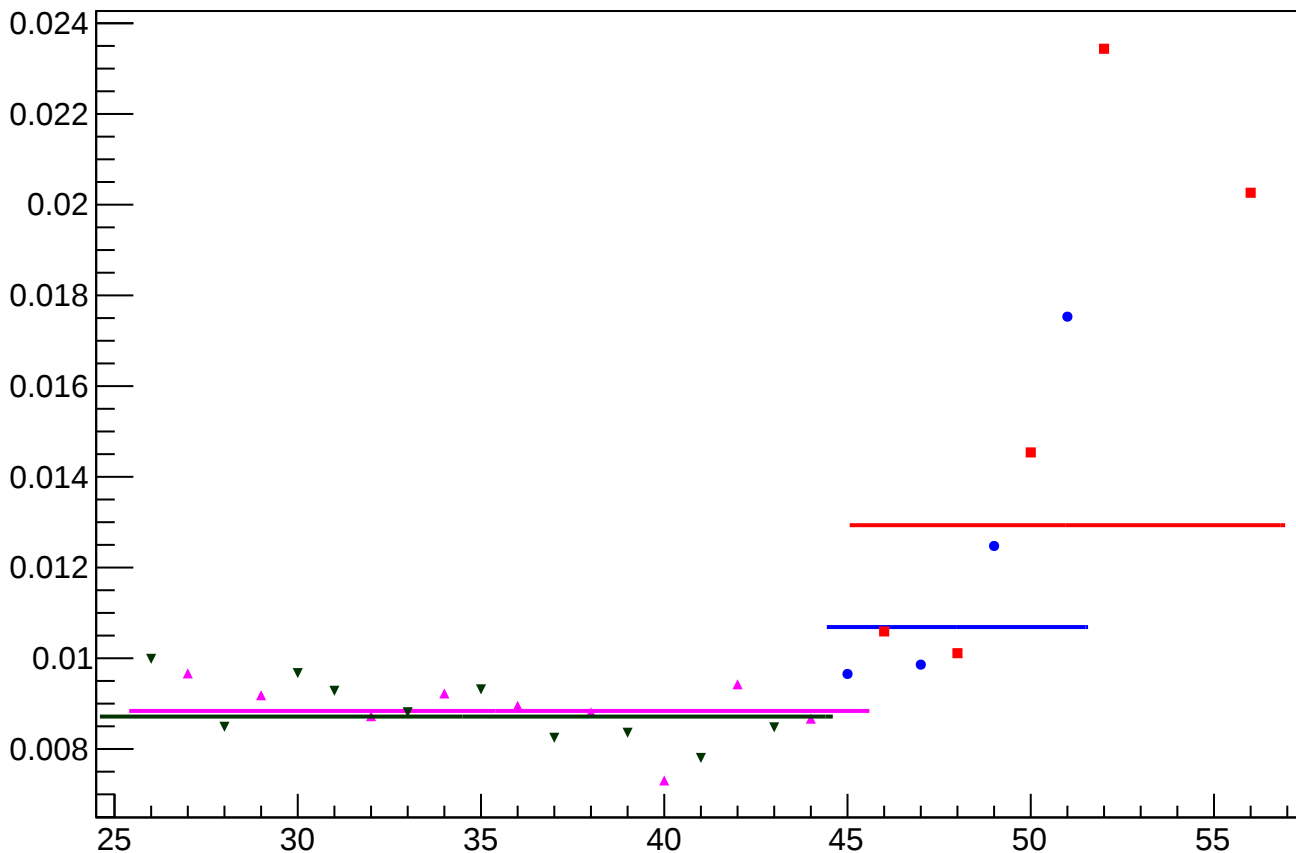
Right Out:  $1.161 \pm 0.000$      $\chi^2/\text{NDF}$ : 726383.9/4

Left In:  $1.165 \pm 0.000$      $\chi^2/\text{NDF}$ : 13350723.3/8

$1.164 \pm 0.000$      $\chi^2/\text{NDF}$ : 13792573.2/13

$1.164 \pm 0.000$      $\chi^2/\text{NDF}$ : 14275625.9/13

# yield\_bpm4eY\_rms vs slug



Right In: 0.011+/-0.000  $\chi^2/\text{NDF}$ : 66789.1/3

Left Out: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 53979.4/9

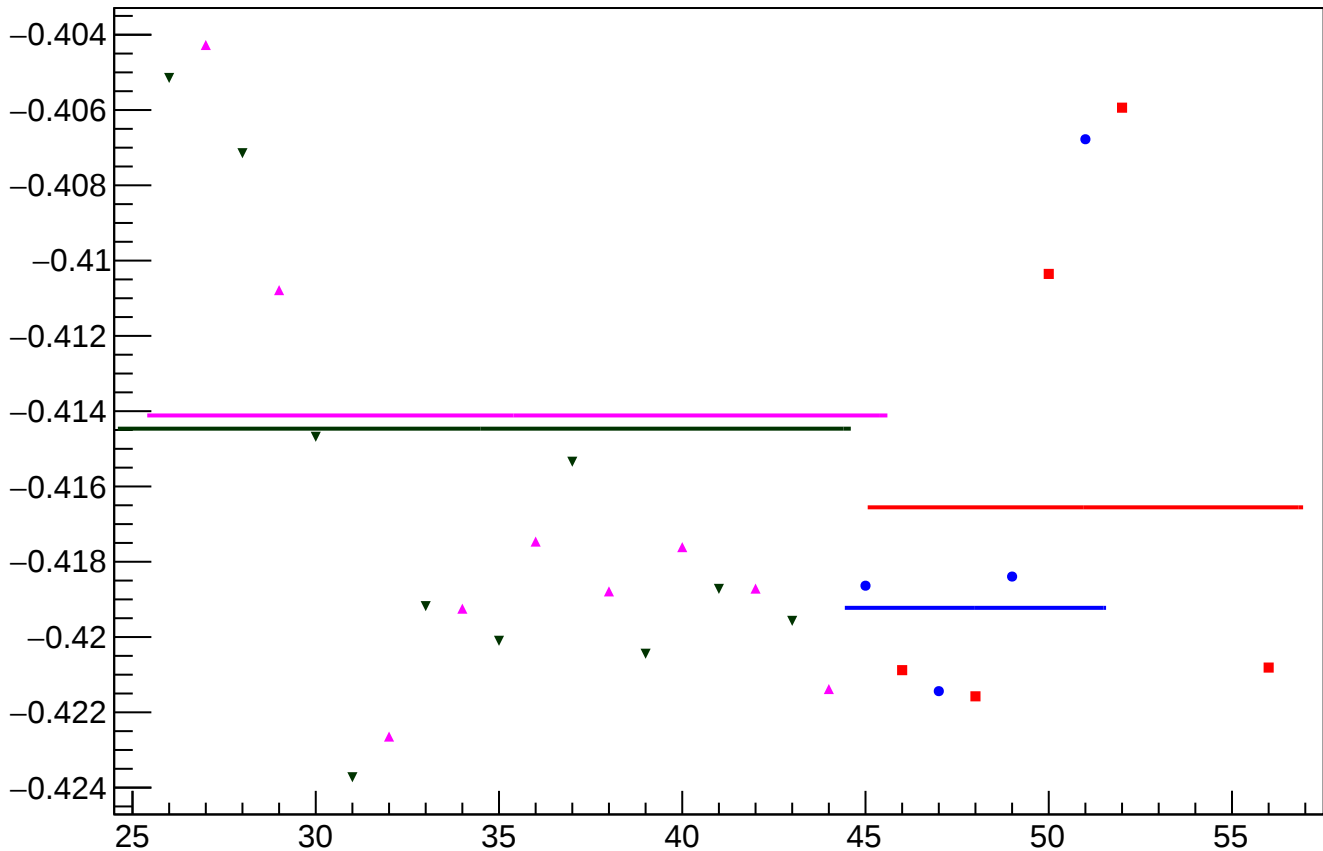
0.009+/-0.000  $\chi^2/\text{NDF}$ : 220469.8/13

Right Out: 0.013+/-0.000  $\chi^2/\text{NDF}$ : 420855.8/4

0.009+/-0.000  $\chi^2/\text{NDF}$ : 824246.0/13

Left In: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 62872.2/8

# yield\_bpm4acX\_mean vs slug



Right In: -0.419+/-0.000  $\chi^2/\text{NDF}$ : 92229.1/3

Left Out: -0.414+/-0.000  $\chi^2/\text{NDF}$ : 2317186.9/9

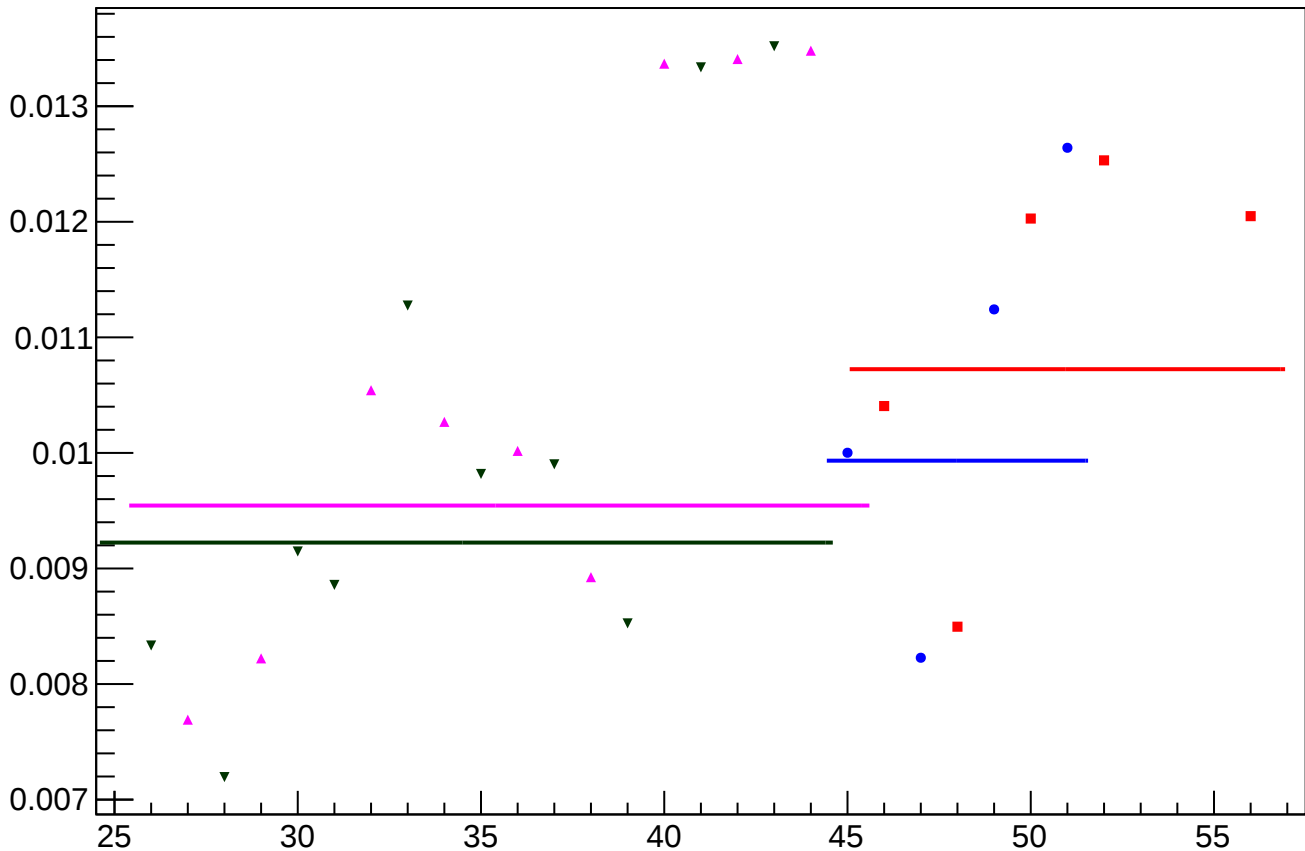
Right Out: -0.417+/-0.000  $\chi^2/\text{NDF}$ : 787425.9/4

Left In: -0.414+/-0.000  $\chi^2/\text{NDF}$ : 2652501.7/8

-0.416+/-0.000  $\chi^2/\text{NDF}$ : 2742149.7/13

-0.415+/-0.000  $\chi^2/\text{NDF}$ : 3527080.0/13

# yield\_bpm4acX\_rms vs slug



Right In: 0.010+/-0.000  $\chi^2/\text{NDF}$ : 65862.9/3

Left Out: 0.009+/-0.000  $\chi^2/\text{NDF}$ : 372041.8/9

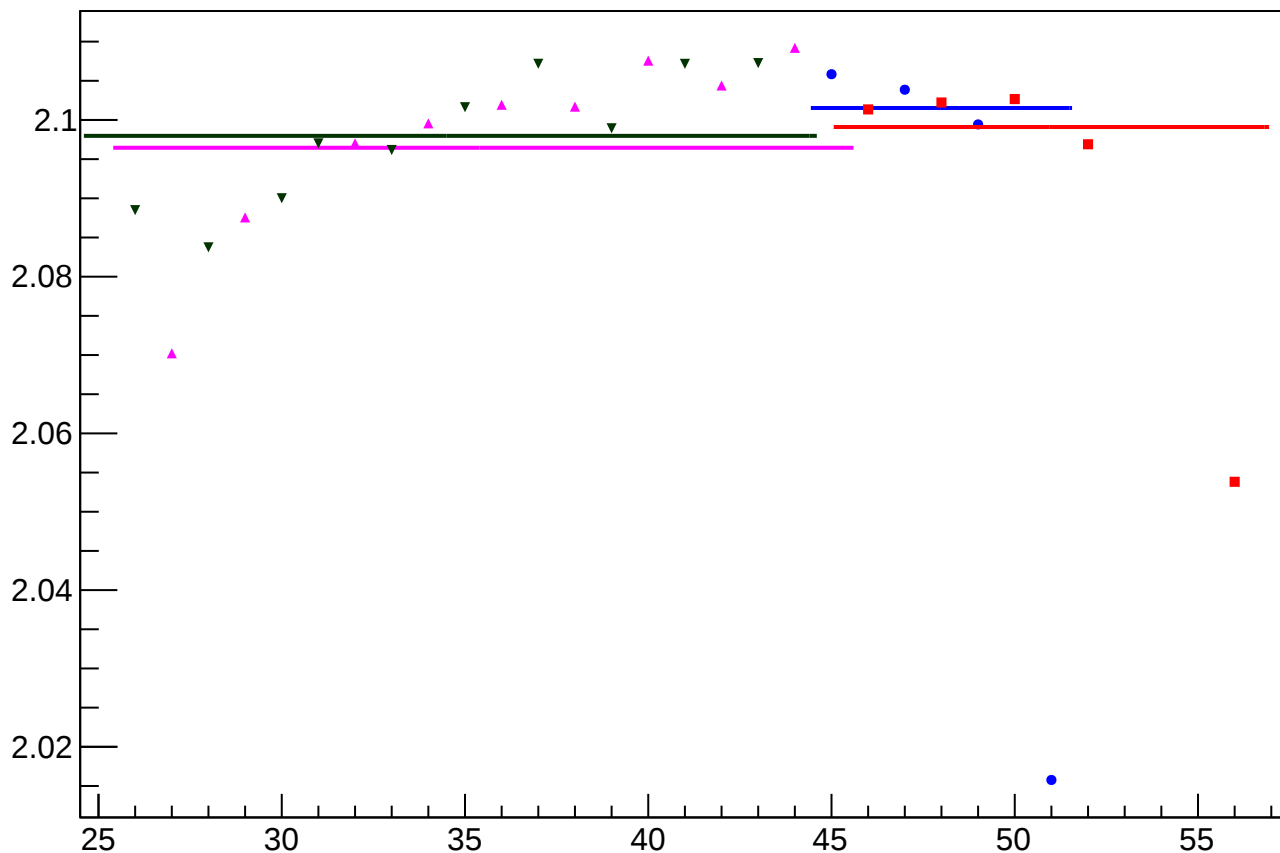
0.009+/-0.000  $\chi^2/\text{NDF}$ : 452660.3/13

Right Out: 0.011+/-0.000  $\chi^2/\text{NDF}$ : 104455.0/4

0.010+/-0.000  $\chi^2/\text{NDF}$ : 566191.2/13

Left In: 0.010+/-0.000  $\chi^2/\text{NDF}$ : 420991.7/8

# yield\_bpm4acY\_mean vs slug



Right In: 2.102 $\pm$ 0.000  $\chi^2$ /NDF: 733079.7/3

Left Out: 2.098 $\pm$ 0.000  $\chi^2$ /NDF:1974278.7/9

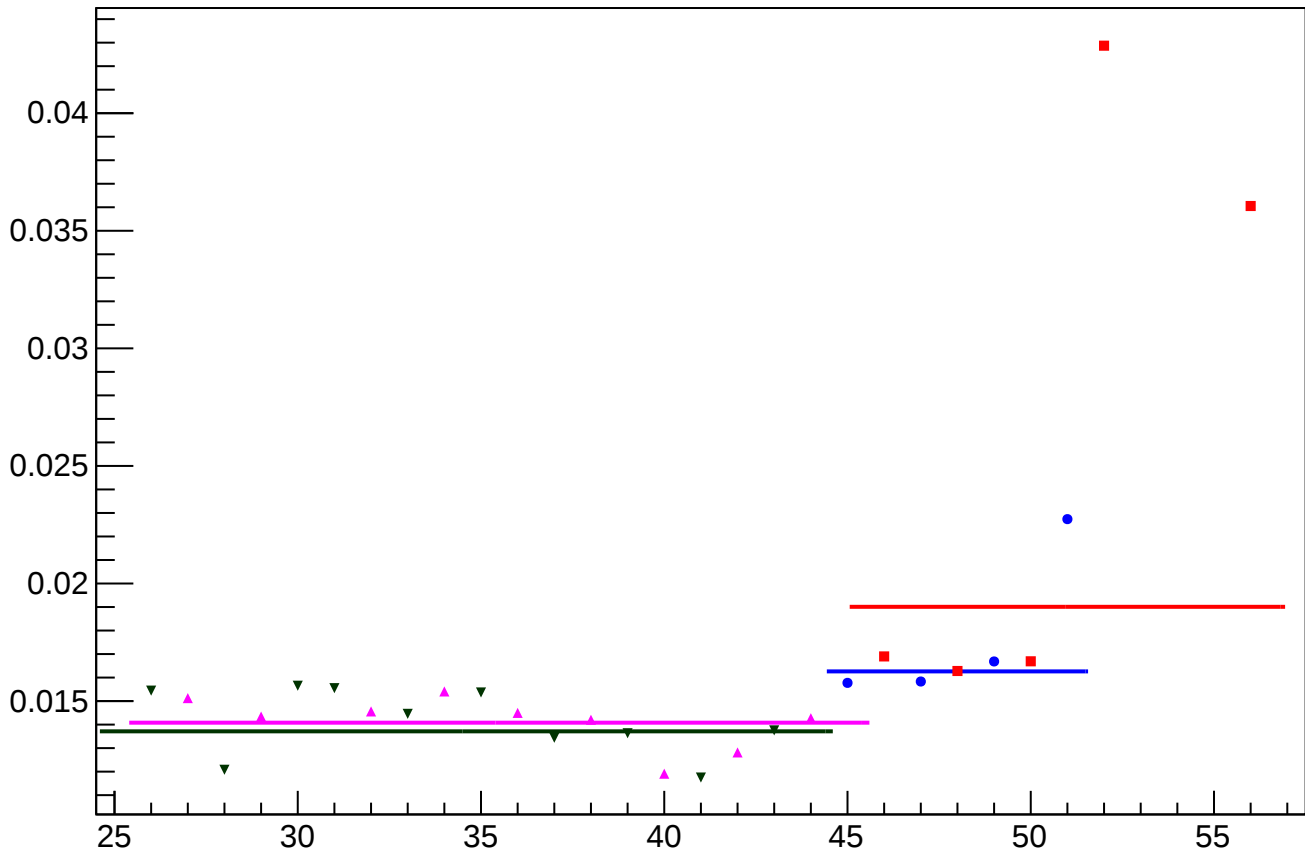
Right Out: 2.099 $\pm$ 0.000  $\chi^2$ /NDF: 697732.9/4

Left In: 2.096 $\pm$ 0.000  $\chi^2$ /NDF:3989569.5/8

2.099 $\pm$ 0.000  $\chi^2$ /NDF: 2778971.7/13

2.097 $\pm$ 0.000  $\chi^2$ /NDF: 4719323.0/13

# yield\_bpm4acY\_rms vs slug



Right In: 0.016+/-0.000  $\chi^2/\text{NDF}$ : 10454.4/3

Left Out: 0.014+/-0.000  $\chi^2/\text{NDF}$ :105896.2/9

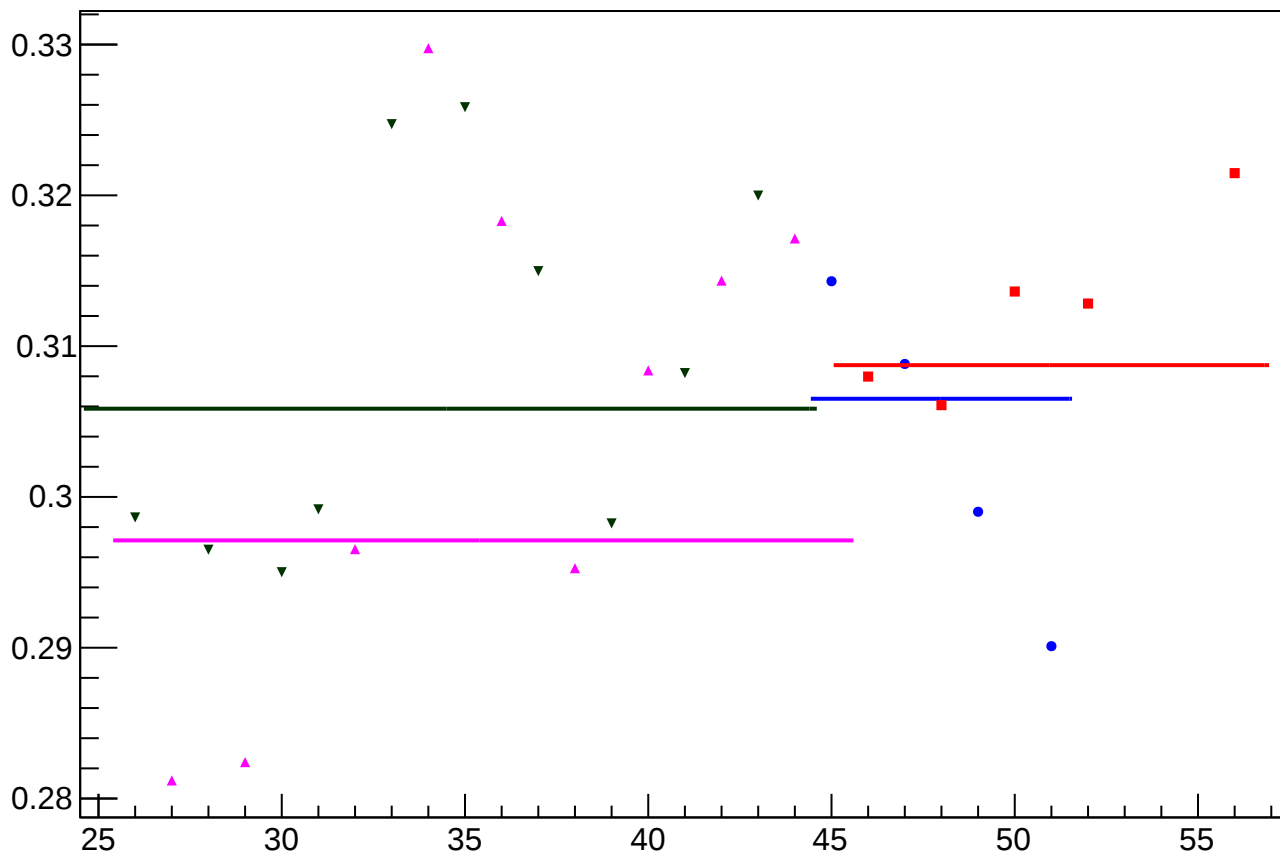
0.014+/-0.000  $\chi^2/\text{NDF}$ : 189949.5/13

Right Out: 0.019+/-0.000  $\chi^2/\text{NDF}$ : 542233.9/4

0.015+/-0.000  $\chi^2/\text{NDF}$ : 824719.2/13

Left In: 0.014+/-0.000  $\chi^2/\text{NDF}$ :60734.0/8

# yield\_bpm4ecX\_mean vs slug



Right In: 0.307 $\pm$ 0.000  $\chi^2$ /NDF: 168387.8/3

Left Out: 0.306 $\pm$ 0.000  $\chi^2$ /NDF:1444203.8/9

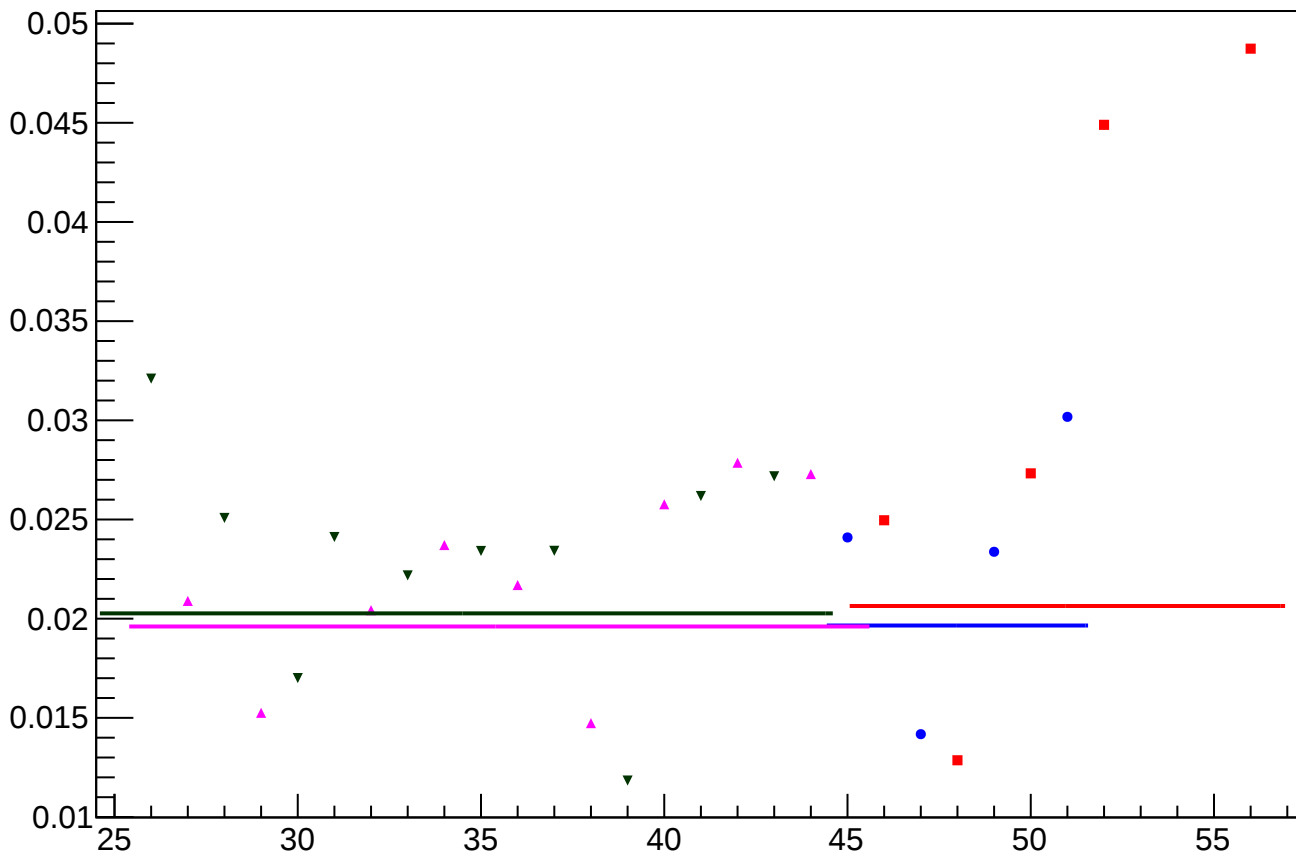
Right Out: 0.309 $\pm$ 0.000  $\chi^2$ /NDF: 69699.7/4

Left In: 0.297 $\pm$ 0.000  $\chi^2$ /NDF:3115158.7/8

0.306 $\pm$ 0.000  $\chi^2$ /NDF: 1613969.8/13

0.300 $\pm$ 0.000  $\chi^2$ /NDF: 3609210.2/13

# yield\_bpm4ecX\_rms vs slug



Right In: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 206951.2/3

Left Out: 0.020+/-0.000  $\chi^2/\text{NDF}$ :805825.9/9

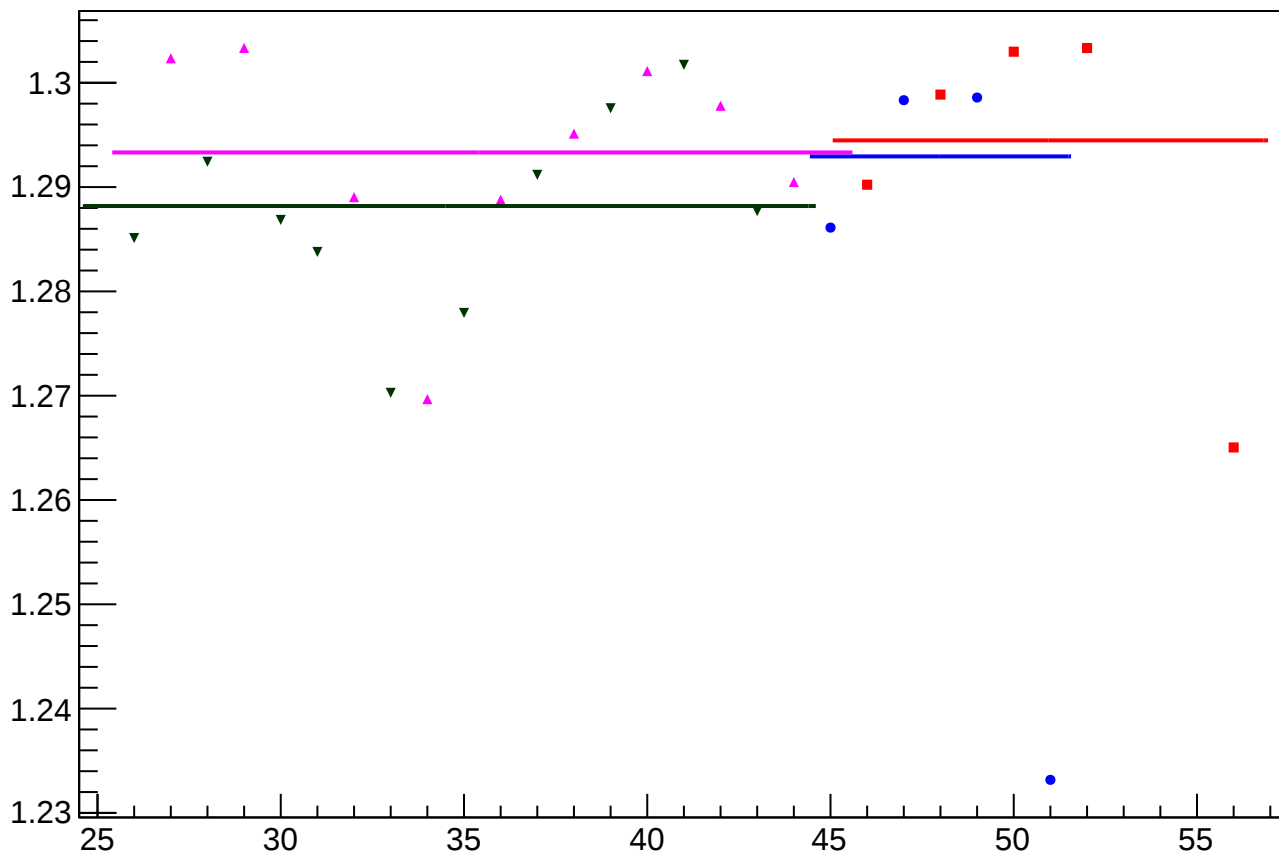
Right Out: 0.021+/-0.000  $\chi^2/\text{NDF}$ : 984161.2/4

Left In: 0.020+/-0.000  $\chi^2/\text{NDF}$ :492370.5/8

0.020+/-0.000  $\chi^2/\text{NDF}$ : 1015156.1/13

0.020+/-0.000  $\chi^2/\text{NDF}$ : 1483238.7/13

# yield\_bpm4ecY\_mean vs slug



Right In: 1.293+/-0.000  $\chi^2/\text{NDF}$ : 913636.8/3

Left Out: 1.288+/-0.000  $\chi^2/\text{NDF}$ : 3977019.1/9

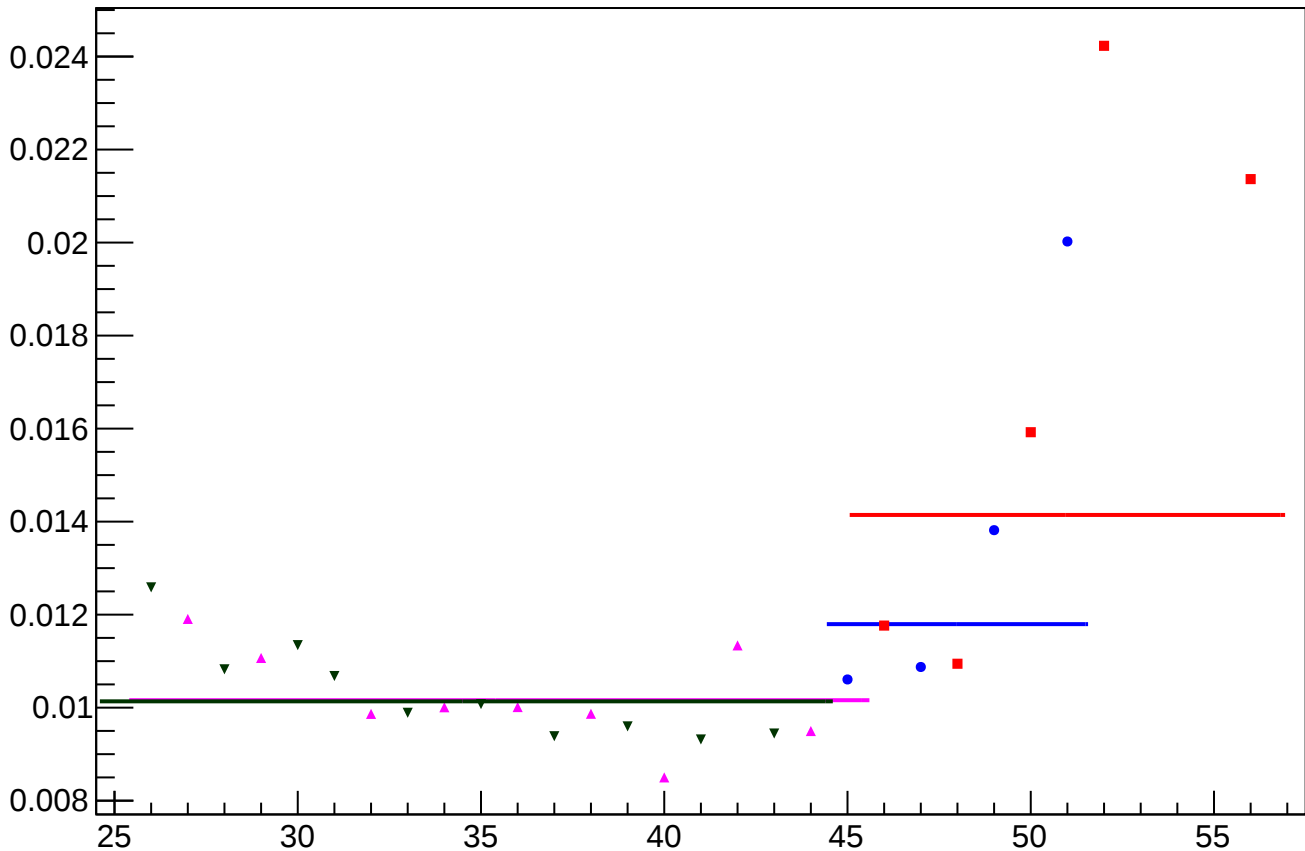
Right Out: 1.294+/-0.000  $\chi^2/\text{NDF}$ : 1111232.8/4

Left In: 1.293+/-0.000  $\chi^2/\text{NDF}$ : 4684548.1/8

1.289+/-0.000  $\chi^2/\text{NDF}$ : 5124184.5/13

1.294+/-0.000  $\chi^2/\text{NDF}$ : 5807000.1/13

# yield\_bpm4ecY\_rms vs slug



Right In: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 71705.5/3

Left Out: 0.010+/-0.000  $\chi^2/\text{NDF}$ : 77620.6/9

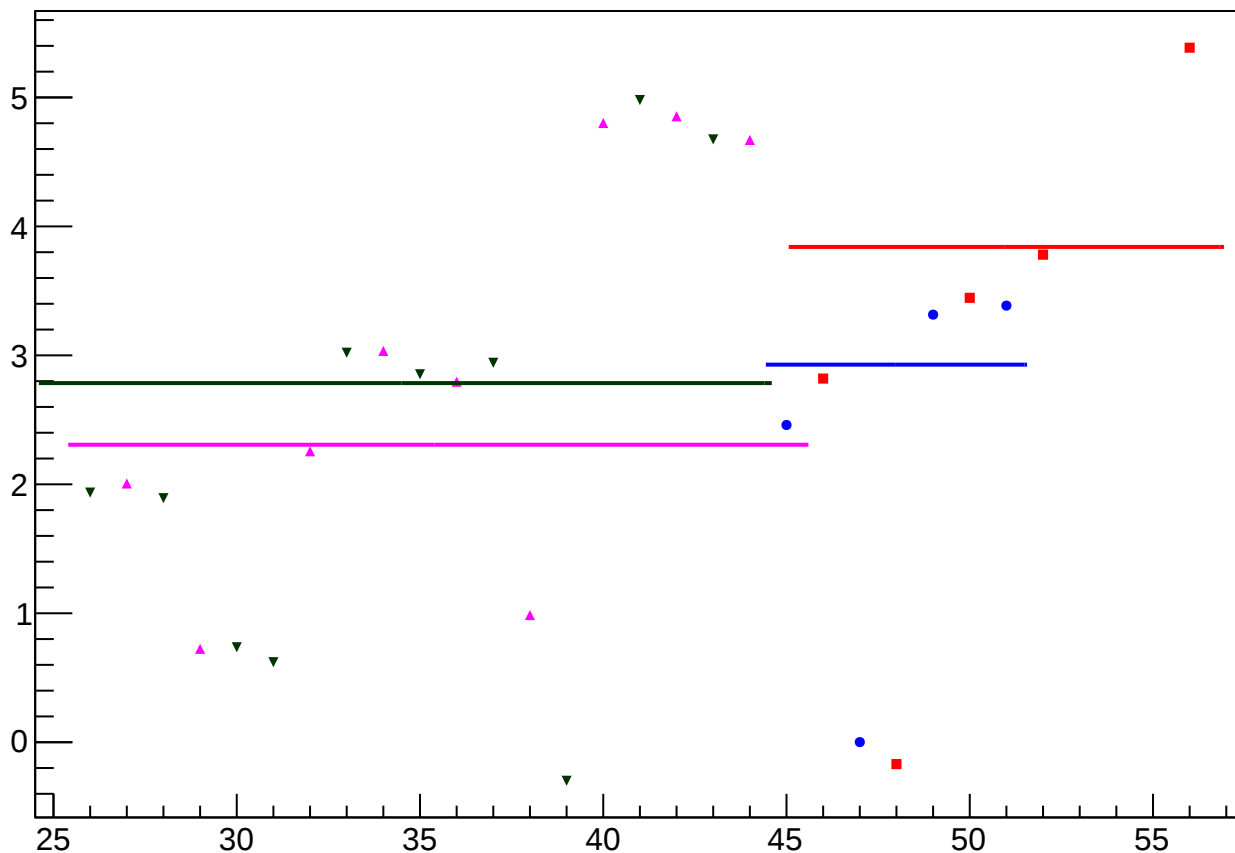
Right Out: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 380852.8/4

Left In: 0.010+/-0.000  $\chi^2/\text{NDF}$ : 100523.1/8

0.010+/-0.000  $\chi^2/\text{NDF}$ : 206213.5/13

0.011+/-0.000  $\chi^2/\text{NDF}$ : 749079.8/13

# yield\_bpm1X\_mean vs slug



Right In:  $2.928 \pm 0.000$   $\chi^2/\text{NDF}$ : 191702419.5/3

Left Out:  $2.785 \pm 0.000$   $\chi^2/\text{NDF}$ : 937439159.6/9

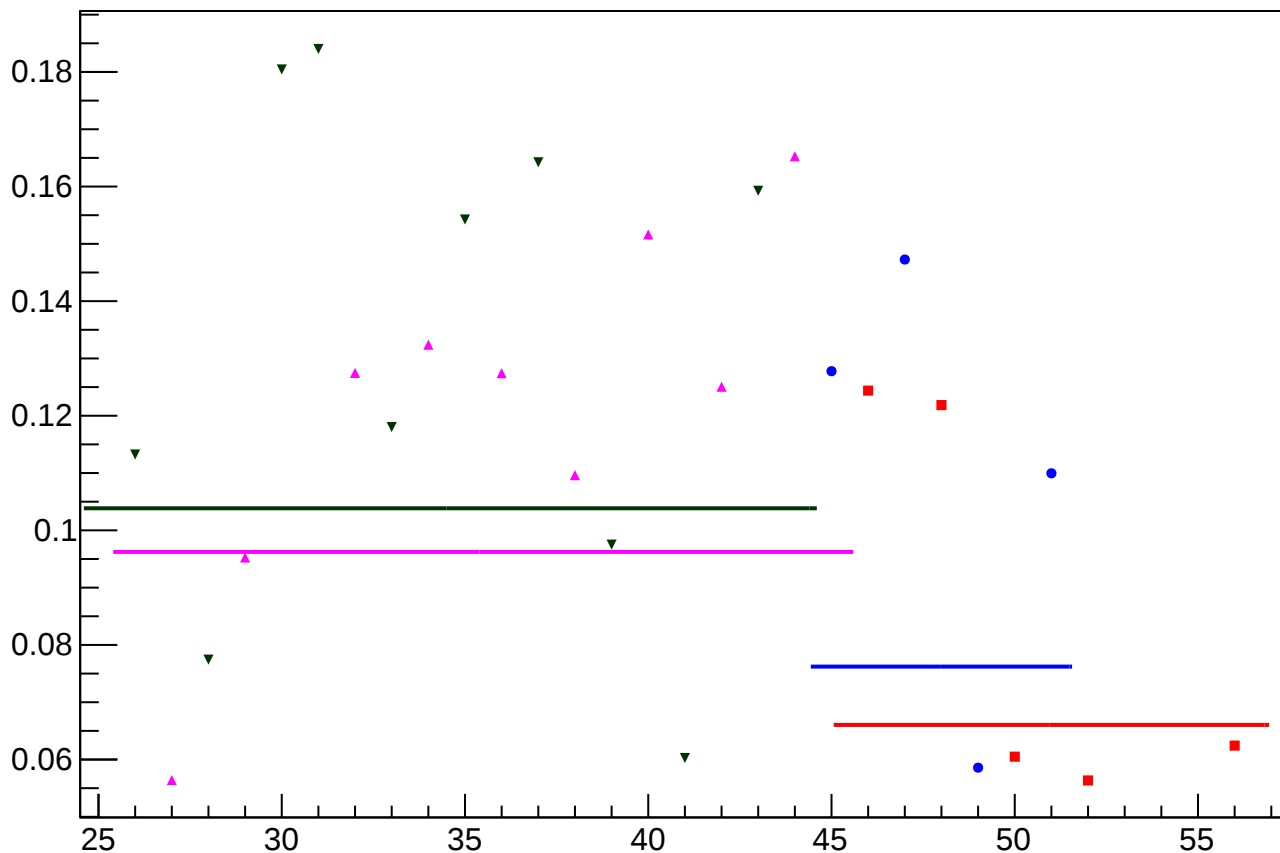
Right Out:  $3.841 \pm 0.000$   $\chi^2/\text{NDF}$ : 691385027.9/4

Left In:  $2.307 \pm 0.000$   $\chi^2/\text{NDF}$ : 636892146.9/8

$2.844 \pm 0.000$   $\chi^2/\text{NDF}$ : 1131839558.2/13

$3.072 \pm 0.000$   $\chi^2/\text{NDF}$ : 1816001199.3/13

# yield\_bpm1X\_rms vs slug



Right In: 0.076+/-0.000  $\chi^2/\text{NDF}$ : 464091.3/3

Left Out: 0.104+/-0.000  $\chi^2/\text{NDF}$ :1069454.4/9

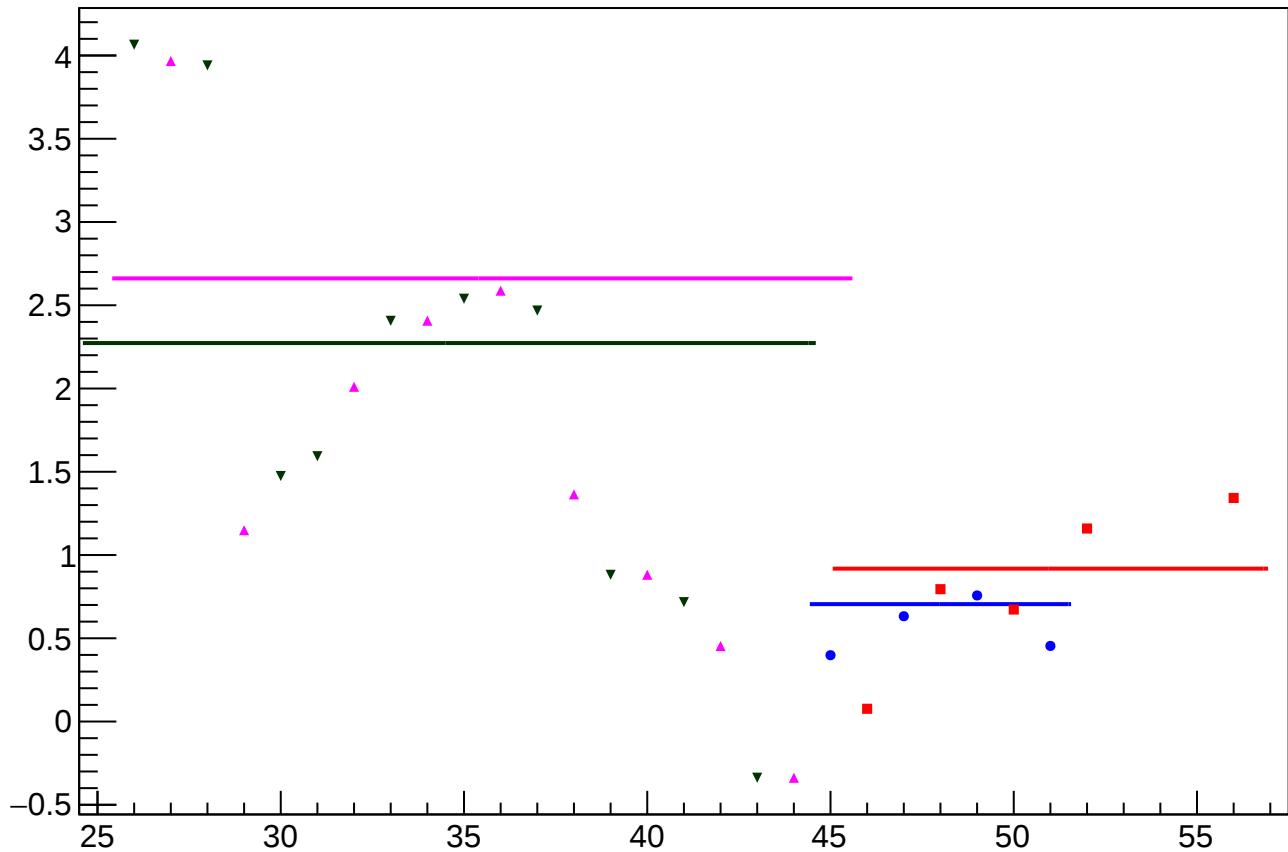
Right Out: 0.066+/-0.000  $\chi^2/\text{NDF}$ : 321970.9/4

Left In: 0.096+/-0.000  $\chi^2/\text{NDF}$ :1064500.6/8

0.092+/-0.000  $\chi^2/\text{NDF}$ : 1734528.9/13

0.081+/-0.000  $\chi^2/\text{NDF}$ : 1764471.8/13

# yield\_bpm1Y\_mean vs slug



Right In: 0.705 $\pm$ 0.000  $\chi^2$ /NDF: 6340270.1/3

Left Out: 2.273 $\pm$ 0.000  $\chi^2$ /NDF:1459606873.3/9

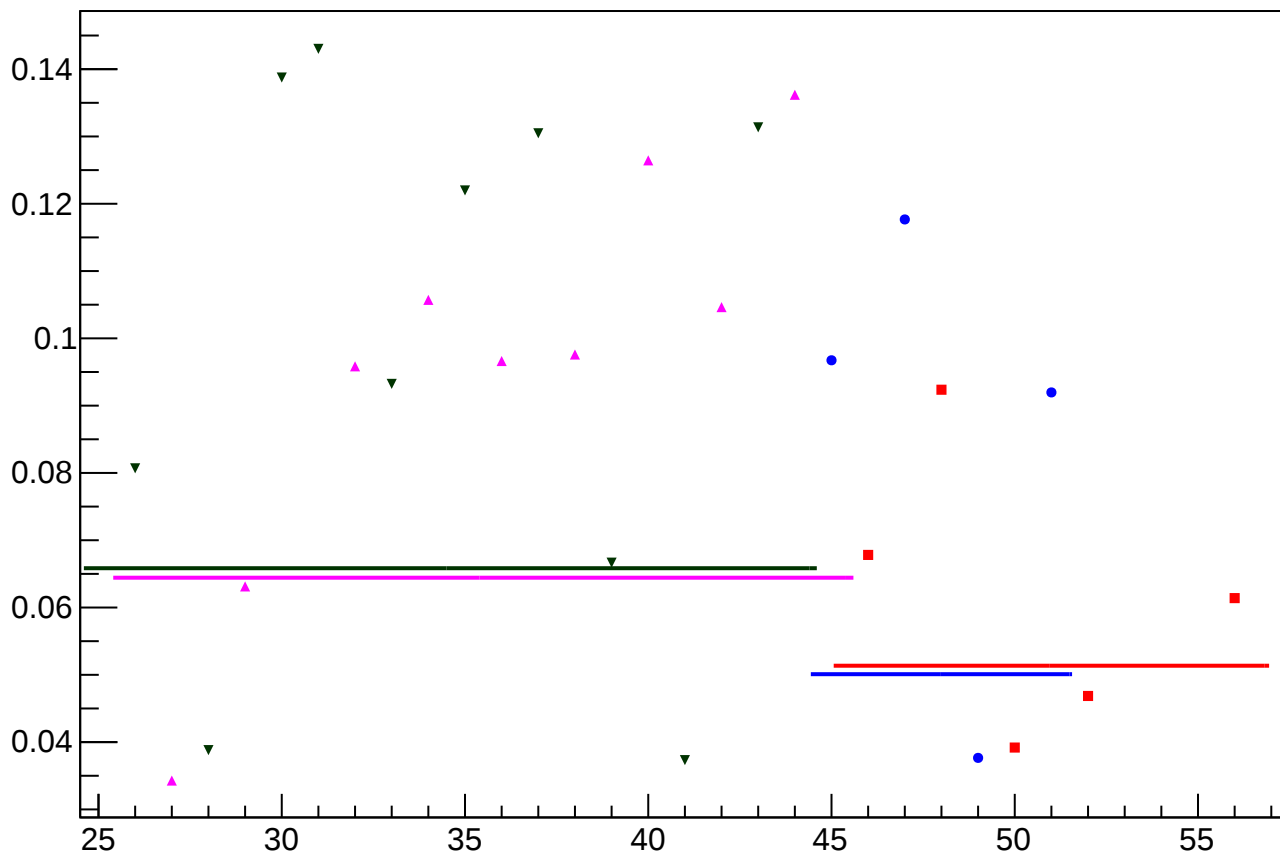
1.631 $\pm$ 0.000  $\chi^2$ /NDF: 2128071869.7/13

Right Out: 0.918 $\pm$ 0.000  $\chi^2$ /NDF: 80611255.3/4

1.896 $\pm$ 0.000  $\chi^2$ /NDF: 2741160365.5/13

Left In: 2.661 $\pm$ 0.000  $\chi^2$ /NDF:1577424597.4/8

# yield\_bpm1Y\_rms vs slug



Right In: 0.050+/-0.000  $\chi^2/\text{NDF}$ : 623070.4/3

Left Out: 0.066+/-0.000  $\chi^2/\text{NDF}$ : 1775612.2/9

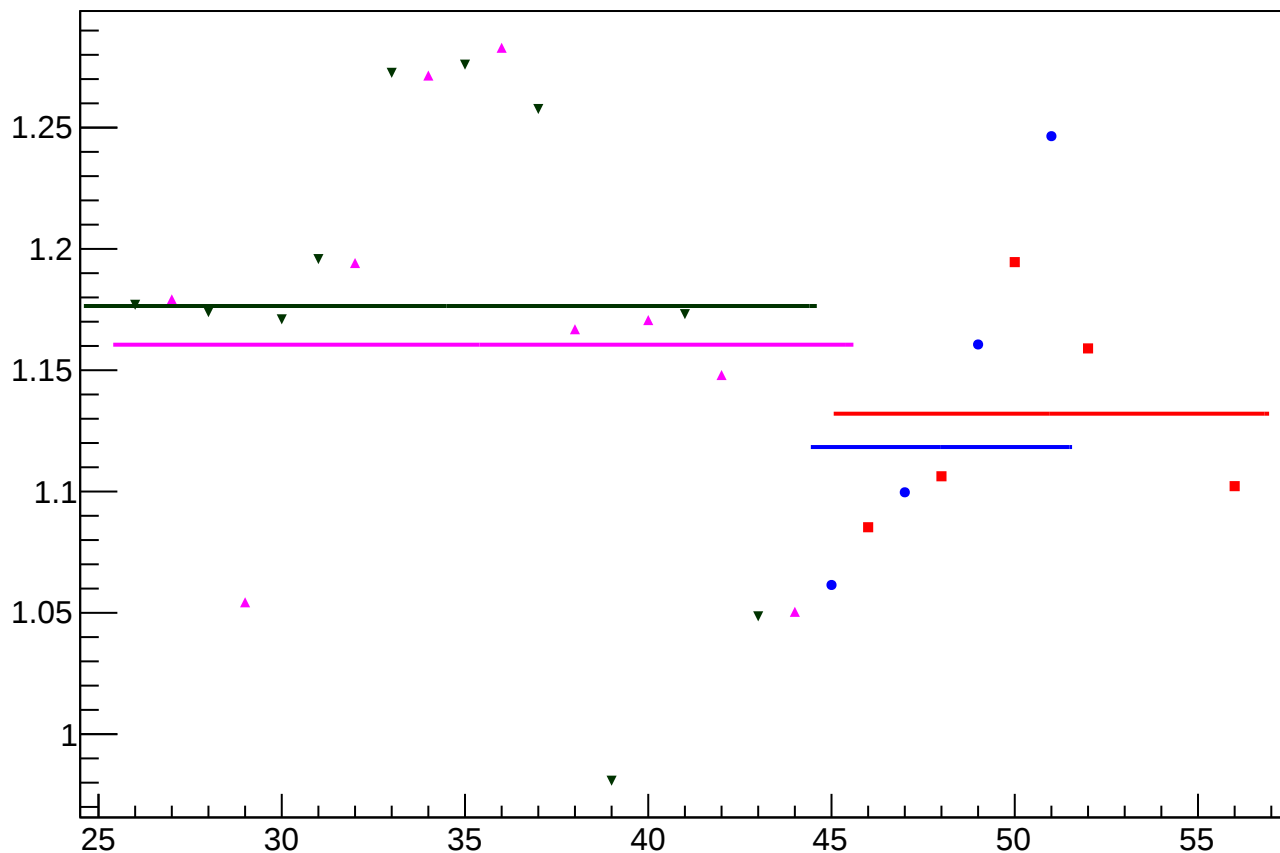
Right Out: 0.051+/-0.000  $\chi^2/\text{NDF}$ : 262039.1/4

Left In: 0.064+/-0.000  $\chi^2/\text{NDF}$ : 1803430.9/8

0.059+/-0.000  $\chi^2/\text{NDF}$ : 2532257.8/13

0.059+/-0.000  $\chi^2/\text{NDF}$ : 2187393.9/13

# yield\_bpm11X\_mean vs slug



Right In:  $1.118 \pm 0.000$   $\chi^2/\text{NDF}$ : 7142820.4/3

Left Out:  $1.176 \pm 0.000$   $\chi^2/\text{NDF}$ : 66030727.8/9

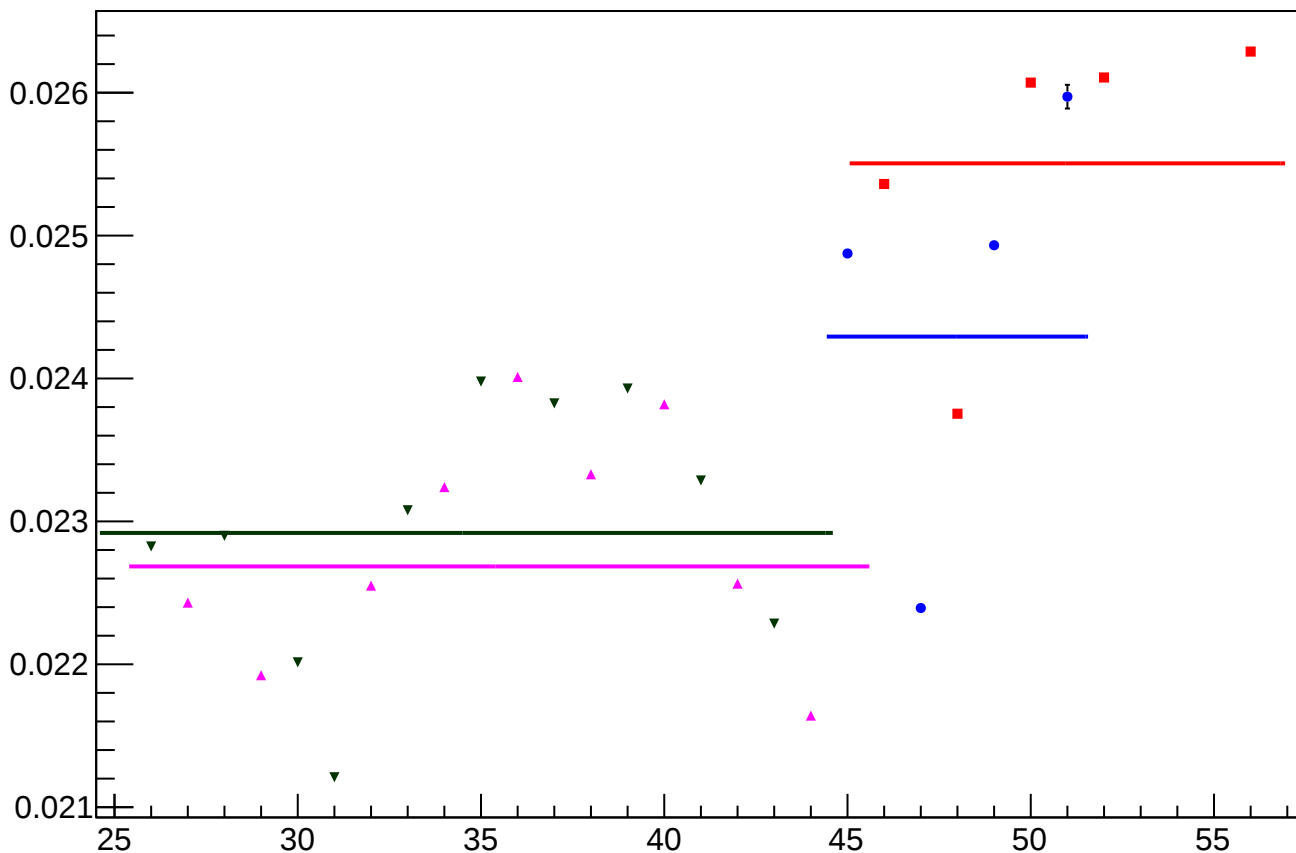
Right Out:  $1.132 \pm 0.000$   $\chi^2/\text{NDF}$ : 5851304.5/4

Left In:  $1.161 \pm 0.000$   $\chi^2/\text{NDF}$ : 58013078.5/8

$1.161 \pm 0.000$   $\chi^2/\text{NDF}$ : 81451374.3/13

$1.153 \pm 0.000$   $\chi^2/\text{NDF}$ : 65991162.3/13

# yield\_bpm11X\_rms vs slug



Right In: 0.024+/-0.000  $\chi^2/\text{NDF}$ : 8292.3/3

Left Out: 0.023+/-0.000  $\chi^2/\text{NDF}$ :12479.4/9

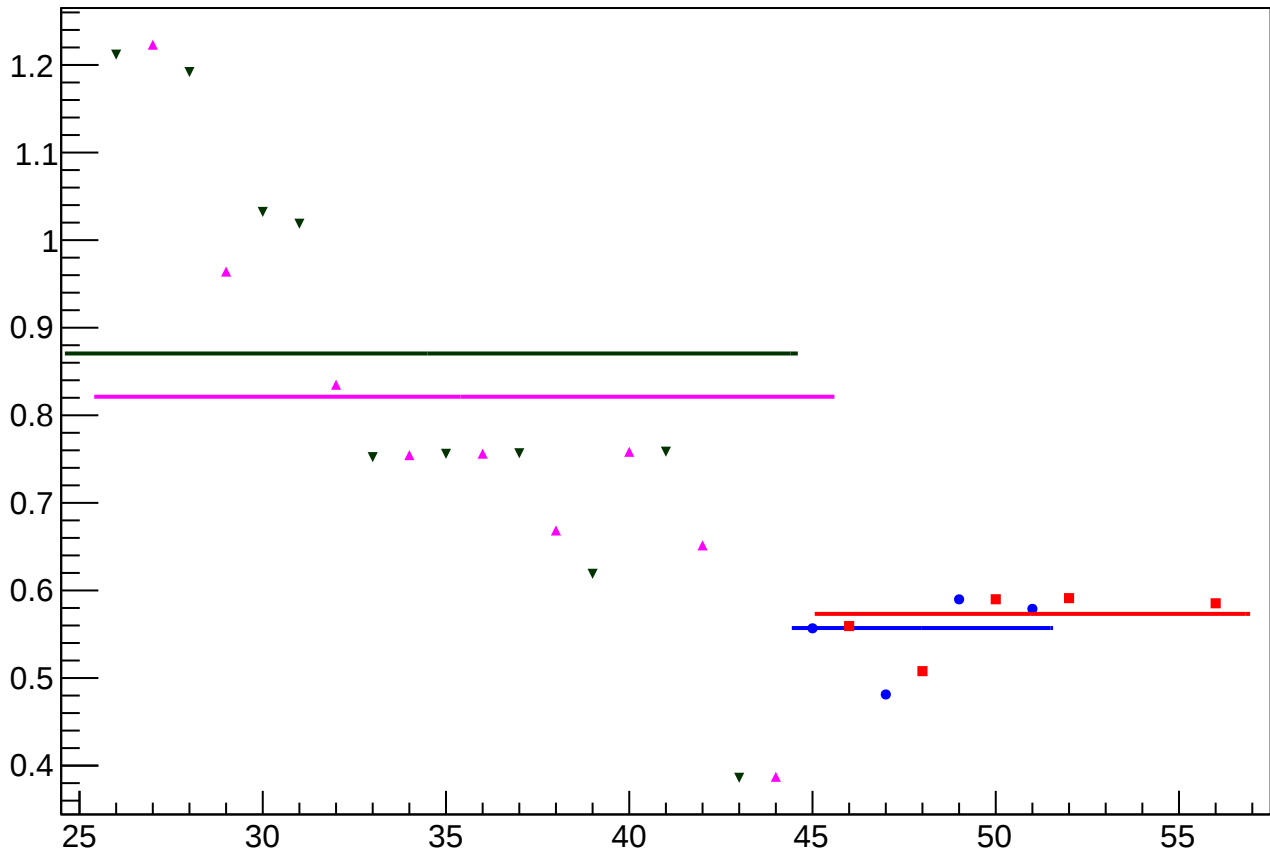
Right Out: 0.026+/-0.000  $\chi^2/\text{NDF}$ : 6466.3/4

Left In: 0.023+/-0.000  $\chi^2/\text{NDF}$ :10953.7/8

0.023+/-0.000  $\chi^2/\text{NDF}$ : 30019.1/13

0.023+/-0.000  $\chi^2/\text{NDF}$ : 59258.6/13

# yield\_bpm11Y\_mean vs slug



Right In: 0.557+/-0.000  $\chi^2/\text{NDF}$ : 173016516.9/3

Left Out: 0.871+/-0.000  $\chi^2/\text{NDF}$ :19713959128.0/9

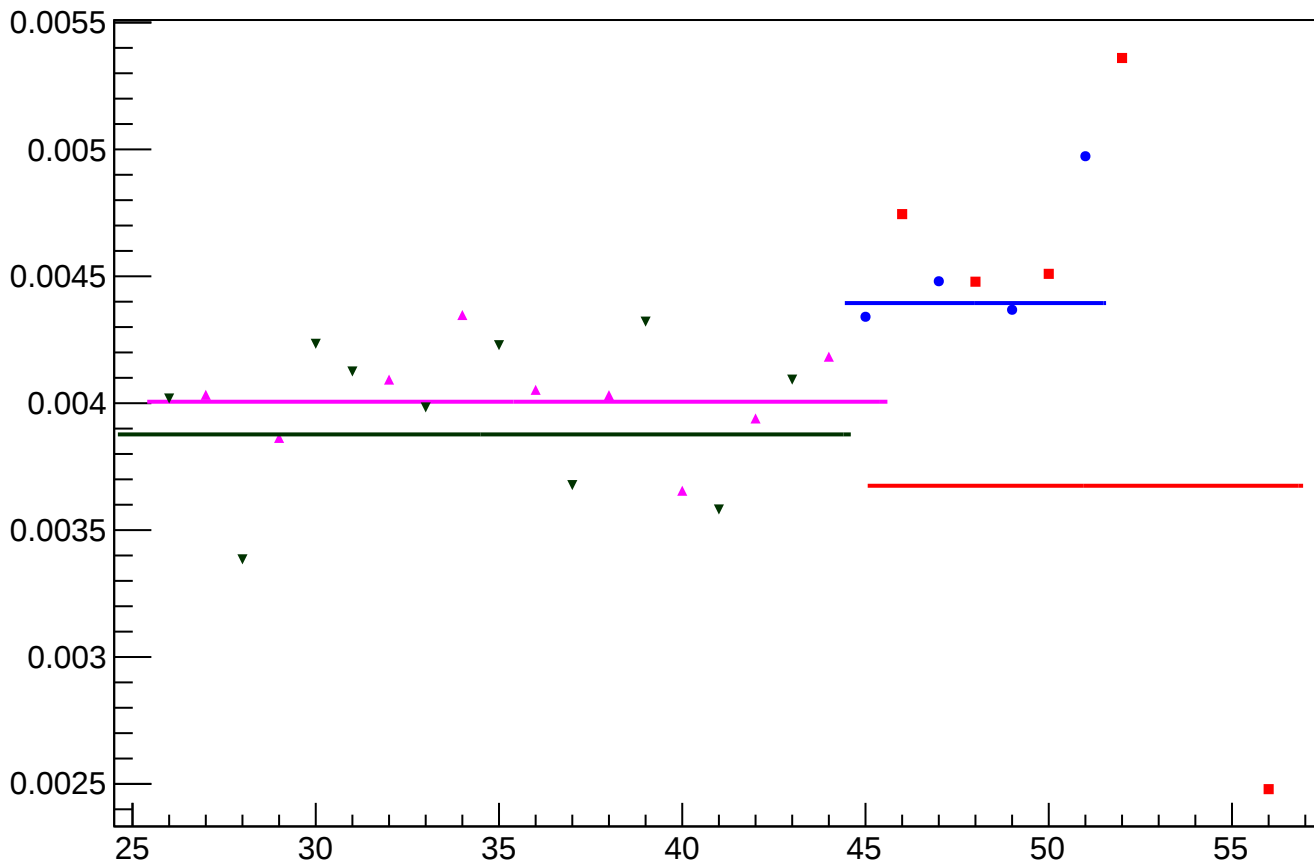
0.795+/-0.000  $\chi^2/\text{NDF}$ : 27549083051.9/13

Right Out: 0.573+/-0.000  $\chi^2/\text{NDF}$ : 120759440.9/4

0.742+/-0.000  $\chi^2/\text{NDF}$ : 23713553489.3/13

Left In: 0.821+/-0.000  $\chi^2/\text{NDF}$ :16933098882.9/8

# yield\_bpm11Y\_rms vs slug



Right In: 0.004+/-0.000  $\chi^2/\text{NDF}$ : 1939.1/3

Left Out: 0.004+/-0.000  $\chi^2/\text{NDF}$ : 65331.5/9

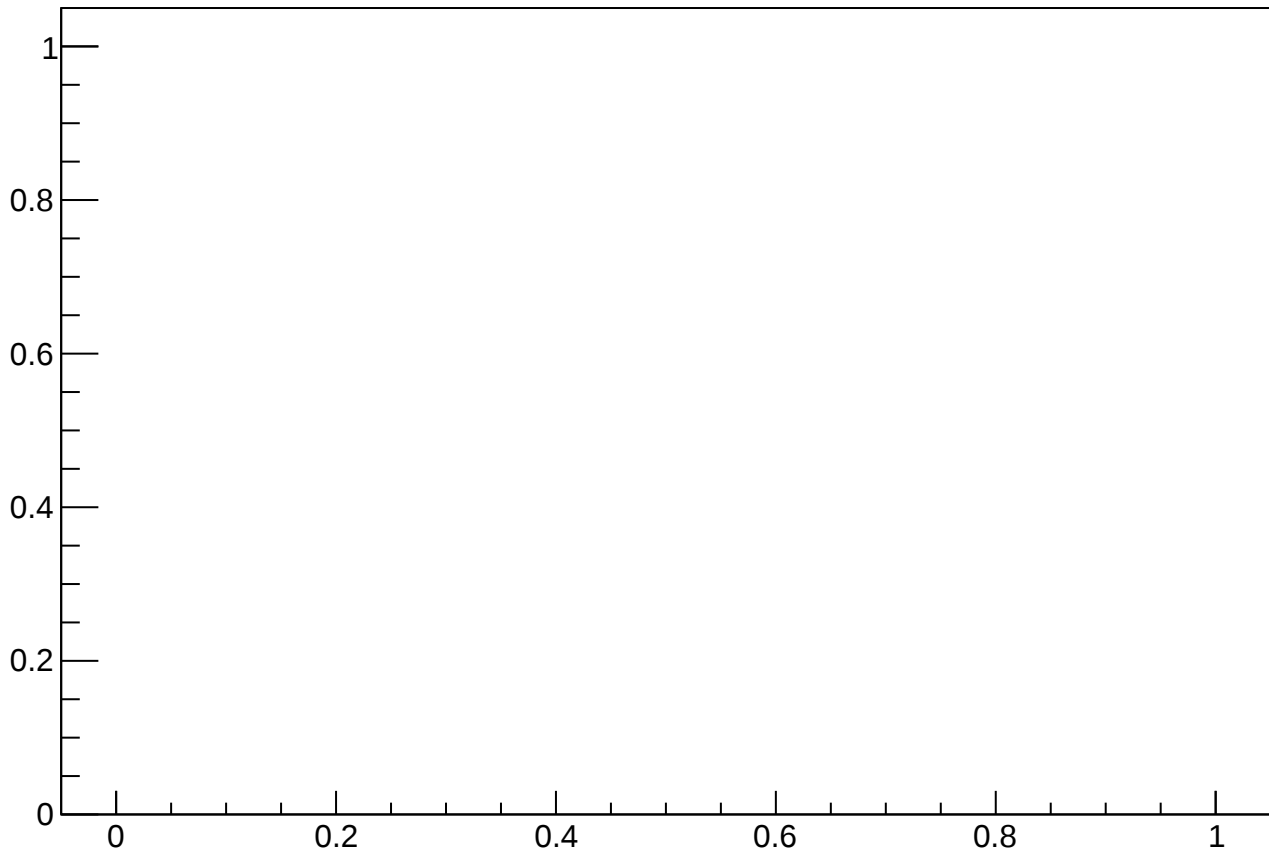
Right Out: 0.004+/-0.000  $\chi^2/\text{NDF}$ : 423225.3/4

Left In: 0.004+/-0.000  $\chi^2/\text{NDF}$ : 20427.1/8

0.004+/-0.000  $\chi^2/\text{NDF}$ : 109031.5/13

0.004+/-0.000  $\chi^2/\text{NDF}$ : 467404.0/13

# yield\_bpm14X\_mean vs slug



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

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

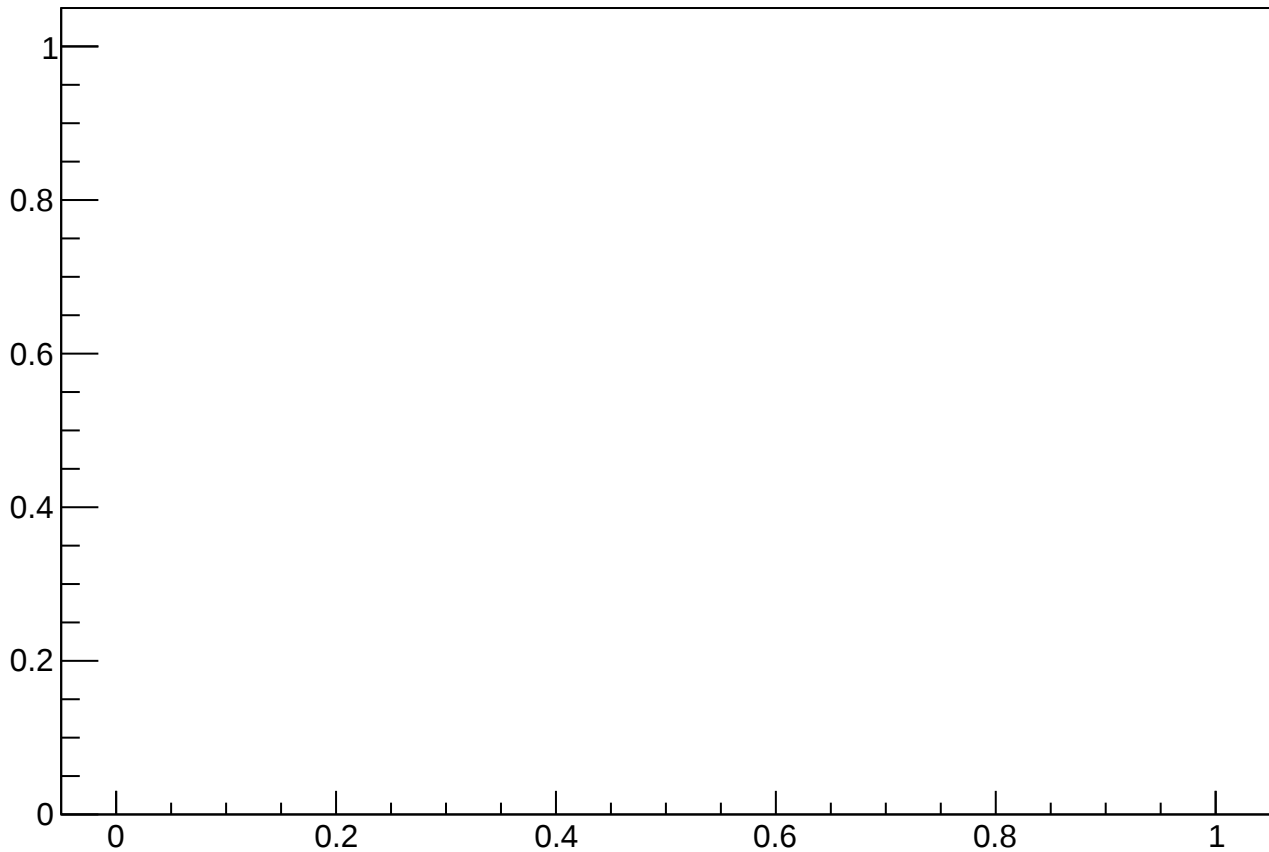
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# yield\_bpm14X\_rms vs slug



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

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

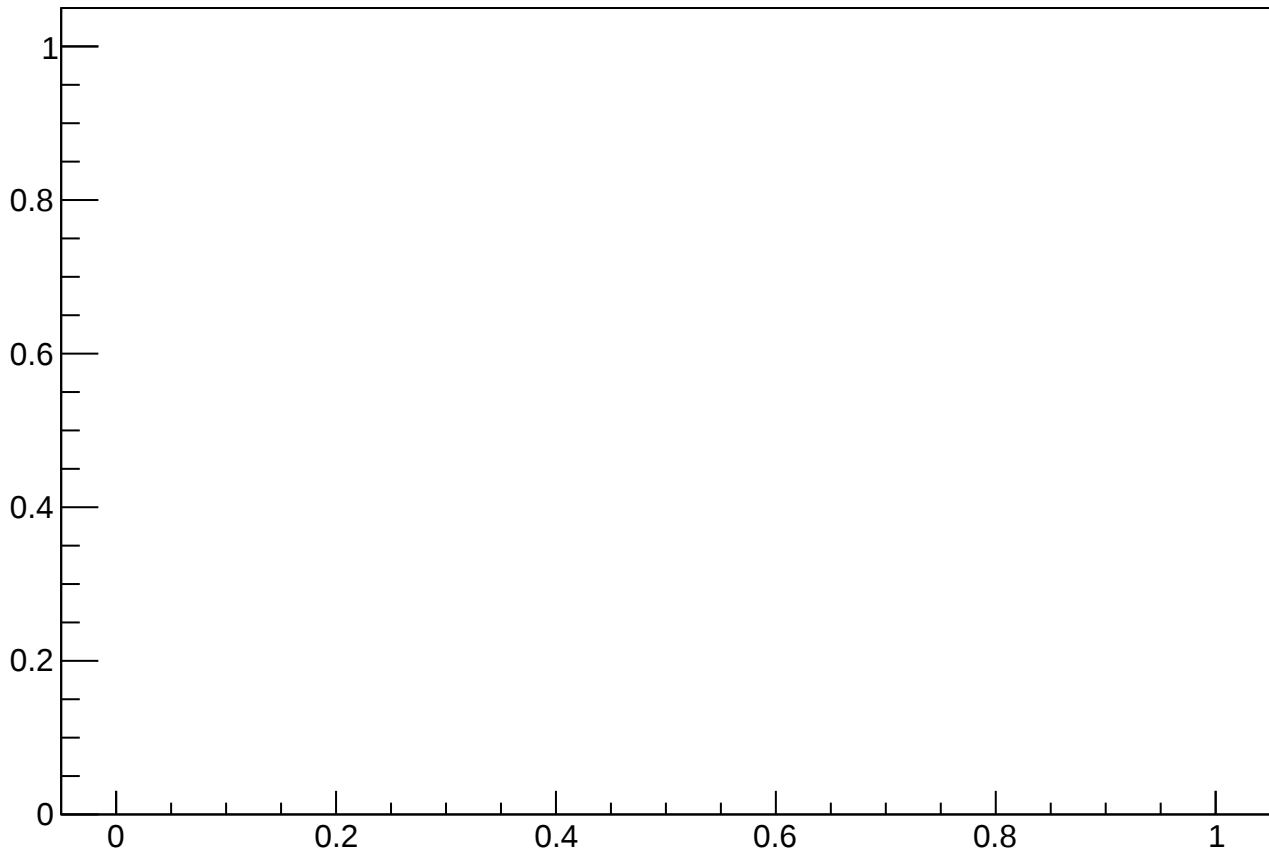
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# yield\_bpm14Y\_mean vs slug



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

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

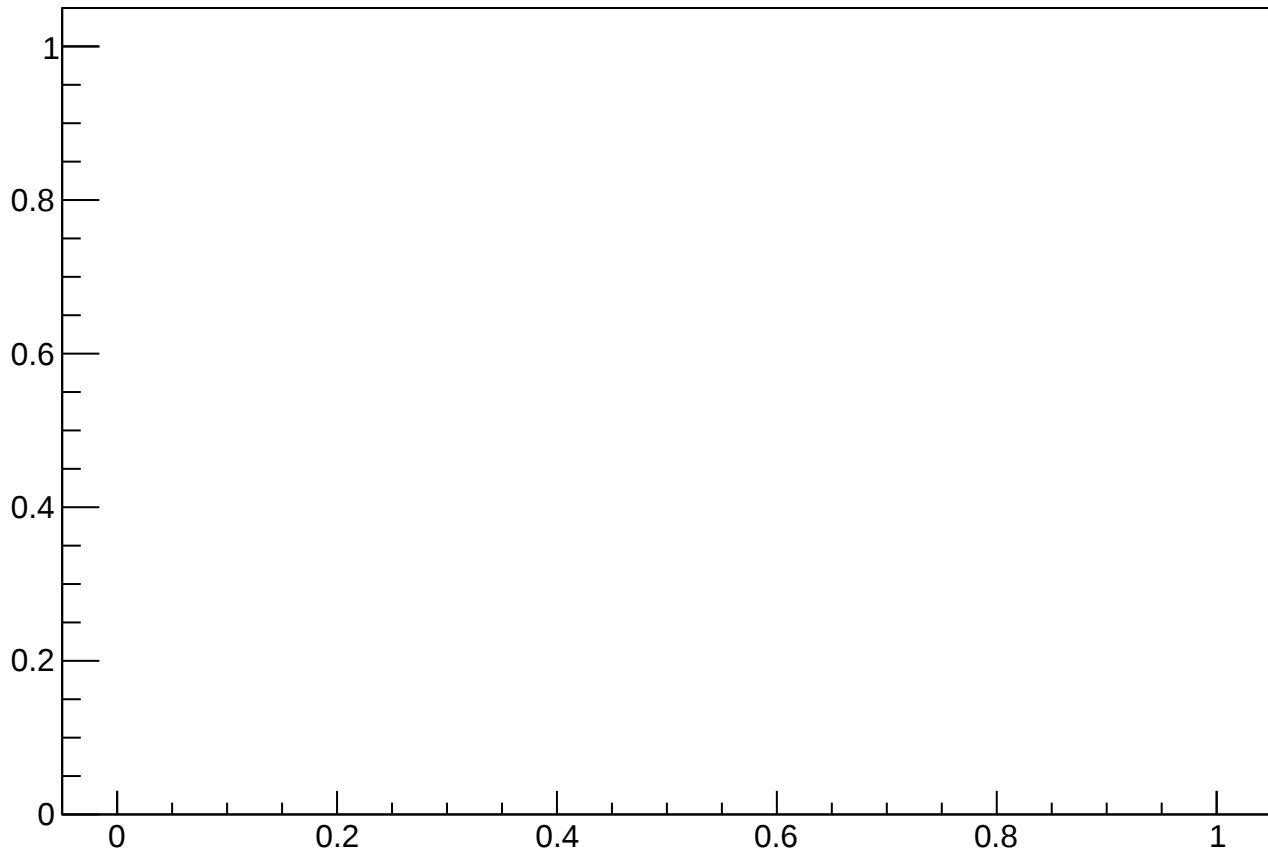
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

yield\_bpm14Y\_rms vs slug



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

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

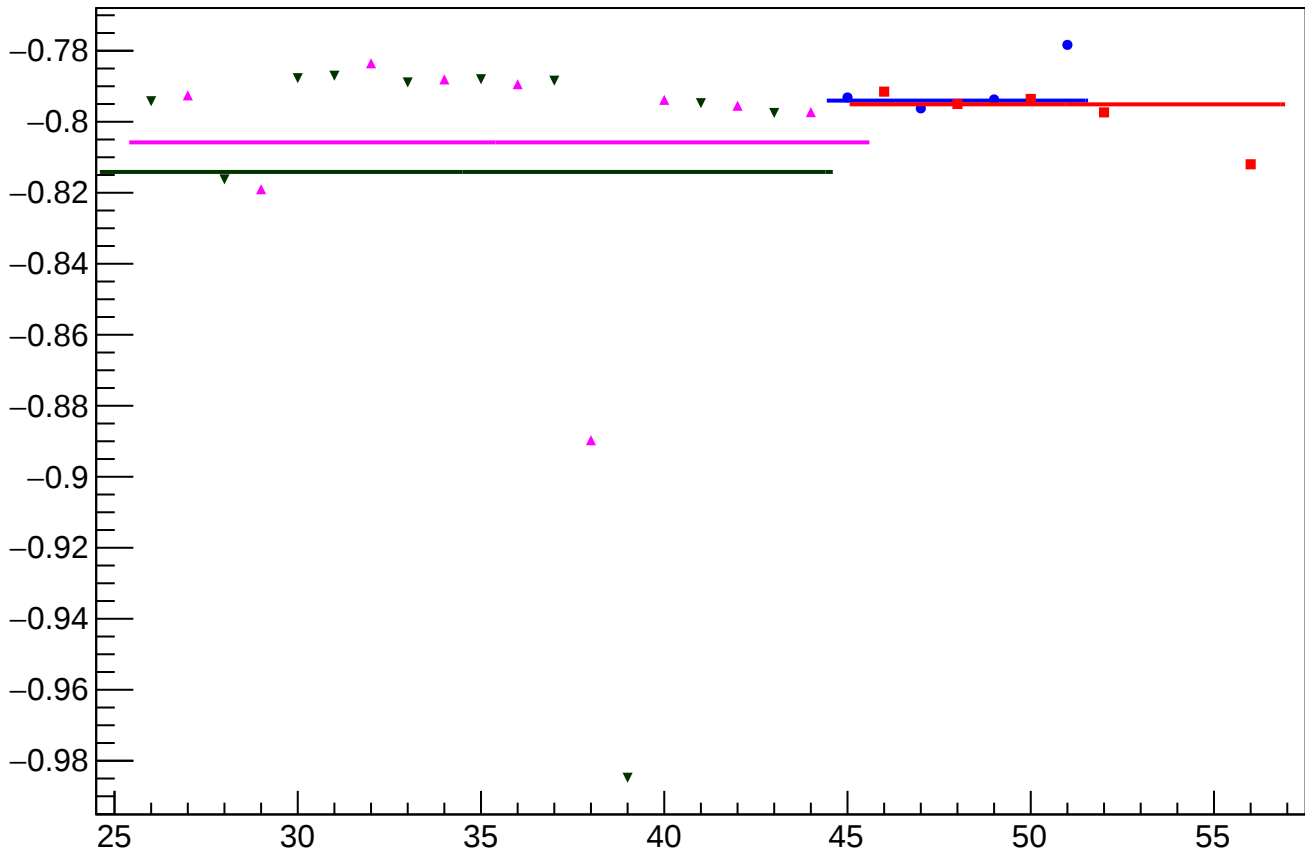
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# yield\_bpm12X\_mean vs slug



Right In: -0.794+/-0.000  $\chi^2/\text{NDF}$ : 117582.6/3

Left Out: -0.814+/-0.000  $\chi^2/\text{NDF}$ : 256384261.5/9

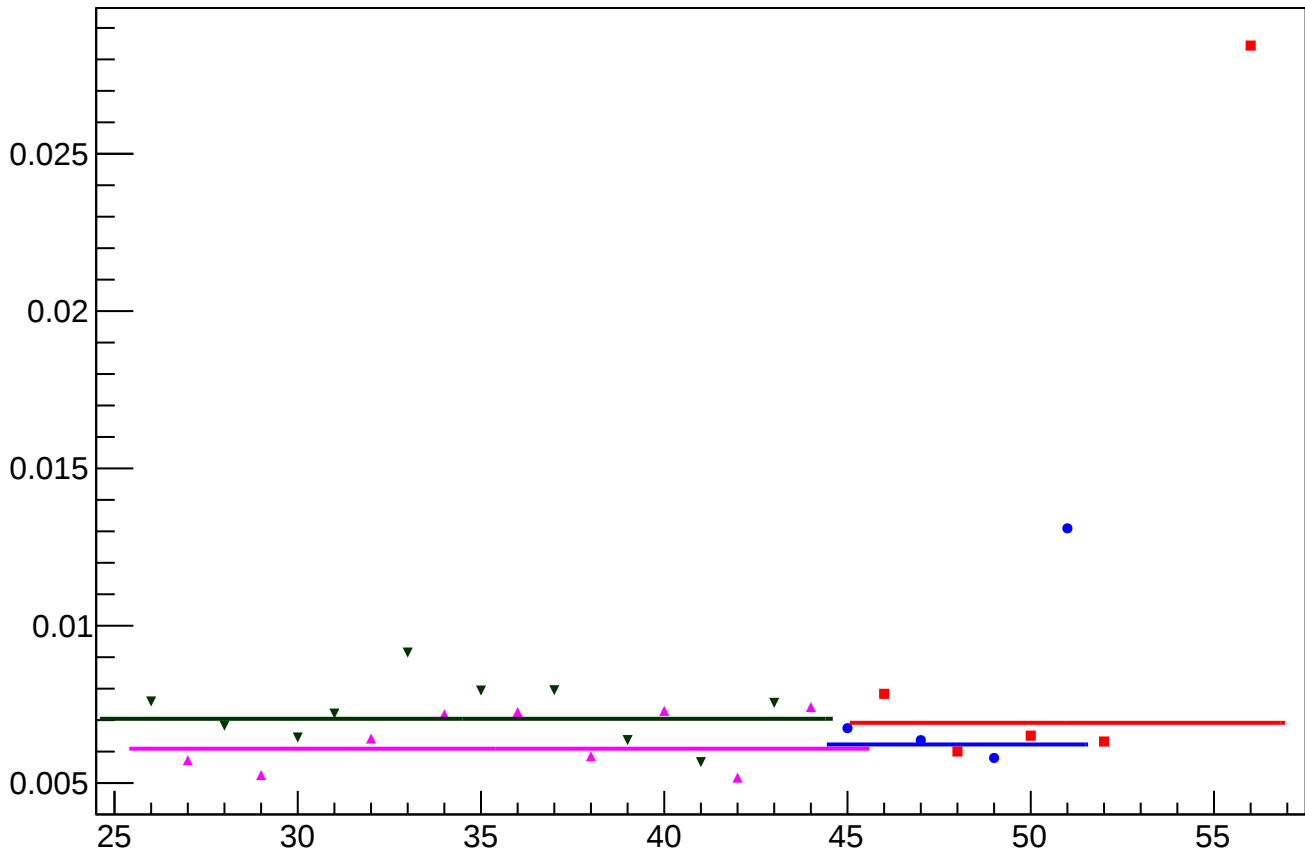
-0.808+/-0.000  $\chi^2/\text{NDF}$ : 266401302.1/13

Right Out: -0.795+/-0.000  $\chi^2/\text{NDF}$ : 289909.3/4

-0.803+/-0.000  $\chi^2/\text{NDF}$ : 98486529.2/13

Left In: -0.806+/-0.000  $\chi^2/\text{NDF}$ : 95420690.3/8

# yield\_bpm12X\_rms vs slug



Right In: 0.006+/-0.000  $\chi^2/\text{NDF}$ : 38110.4/3

Left Out: 0.007+/-0.000  $\chi^2/\text{NDF}$ :134724.6/9

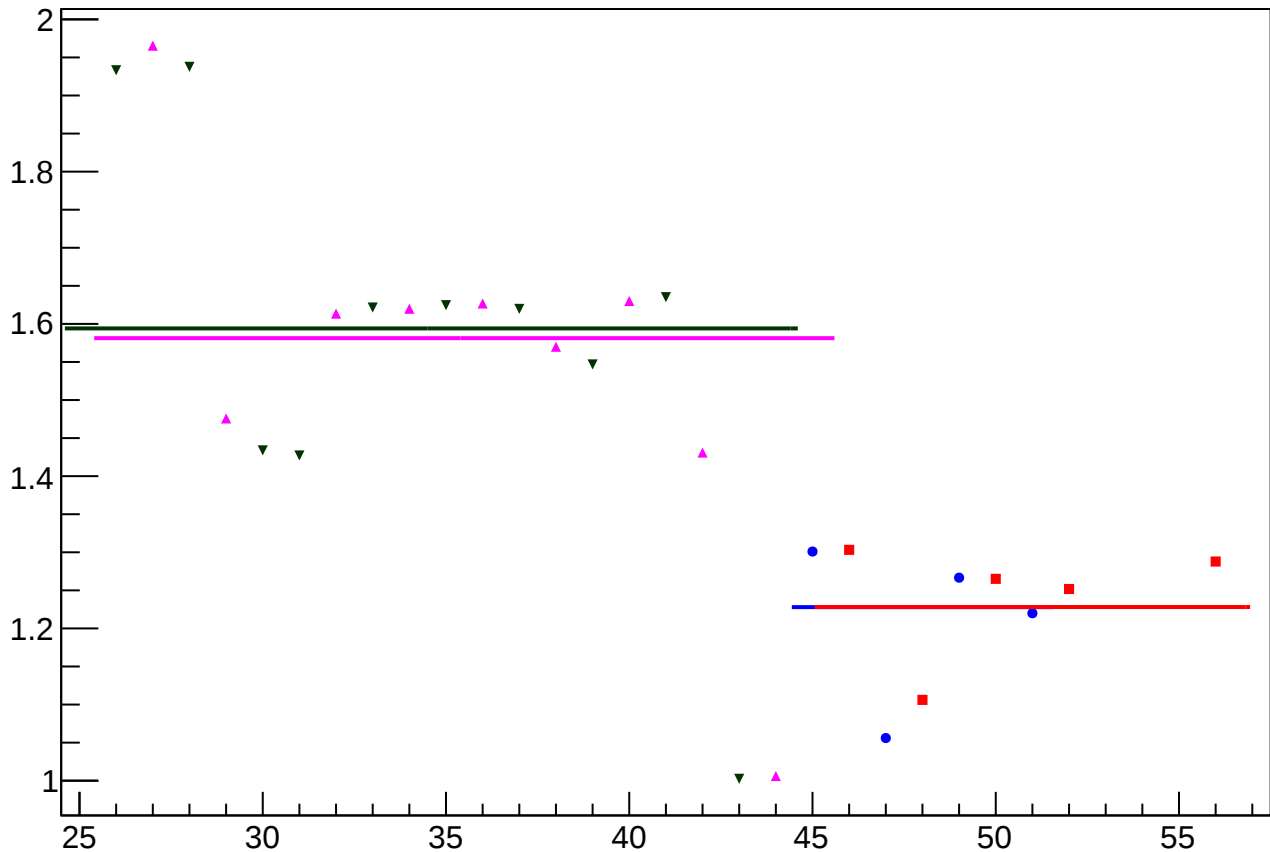
0.007+/-0.000  $\chi^2/\text{NDF}$ : 205507.7/13

Right Out: 0.007+/-0.000  $\chi^2/\text{NDF}$ : 572332.6/4

0.006+/-0.000  $\chi^2/\text{NDF}$ : 747842.0/13

Left In: 0.006+/-0.000  $\chi^2/\text{NDF}$ :142799.7/8

# yield\_bpm12Y\_mean vs slug



Right In: 1.228 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 378658542.2/3

Left Out: 1.594 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 6691352437.6/9

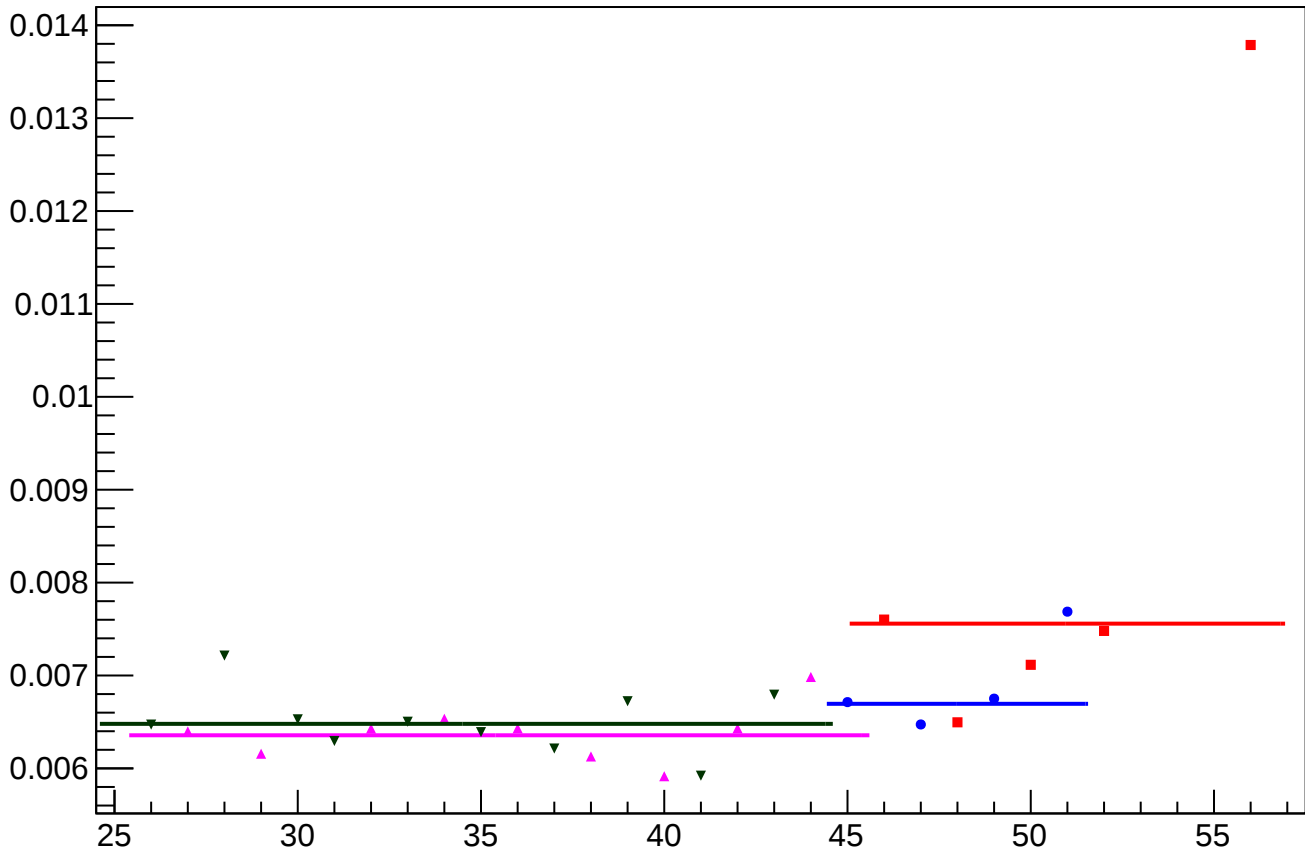
Right Out: 1.228 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 209540750.3/4

Left In: 1.581 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 6756932210.6/8

1.495 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 11161605020.1/13

1.501 $\pm$ 0.000  $\chi^2/\text{NDF}$ : 10594103980.5/13

# yield\_bpm12Y\_rms vs slug



Right In: 0.007+/-0.000  $\chi^2/\text{NDF}$ : 2751.0/3

Left Out: 0.006+/-0.000  $\chi^2/\text{NDF}$ :27801.2/9

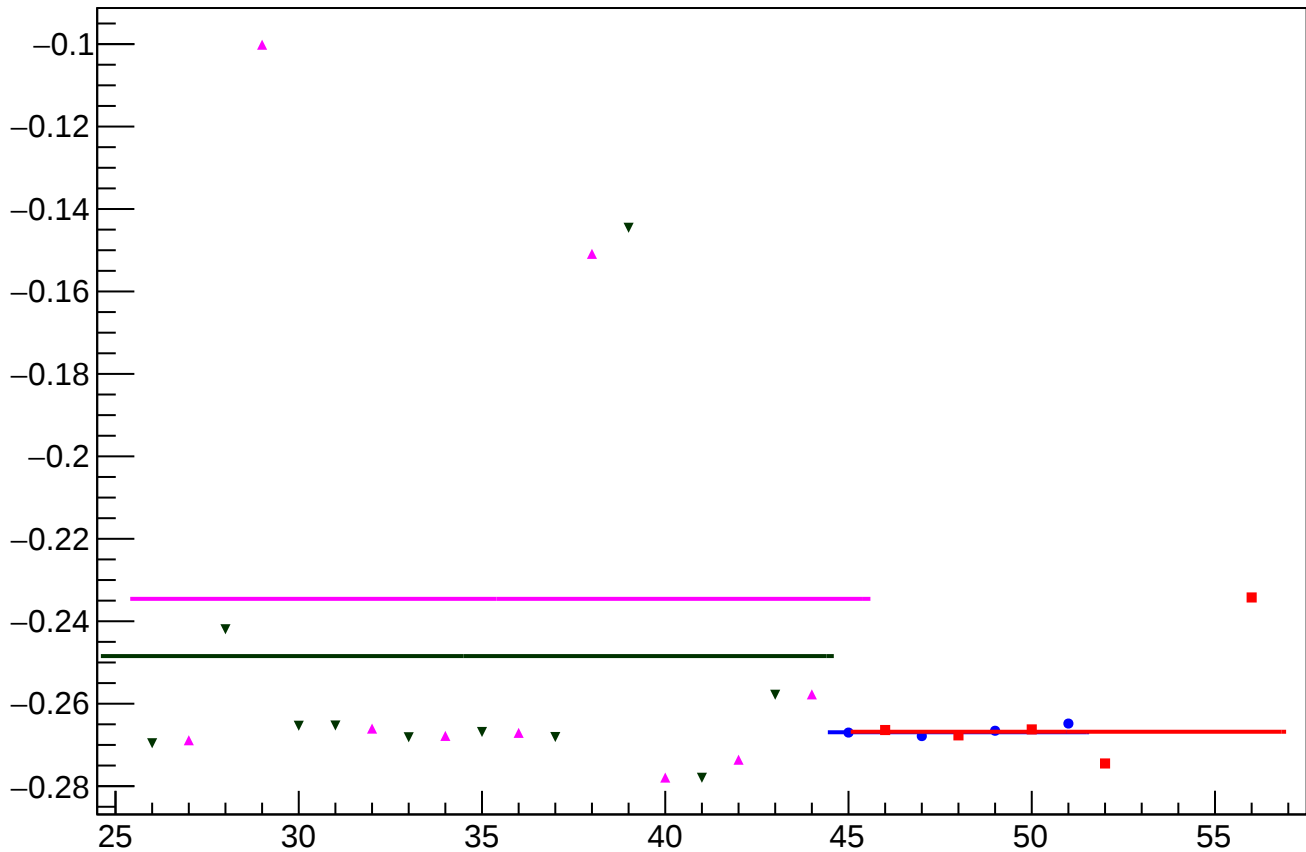
0.007+/-0.000  $\chi^2/\text{NDF}$ : 33393.9/13

Right Out: 0.008+/-0.000  $\chi^2/\text{NDF}$ : 217096.7/4

0.007+/-0.000  $\chi^2/\text{NDF}$ : 318122.3/13

Left In: 0.006+/-0.000  $\chi^2/\text{NDF}$ :17007.3/8

# yield\_bpm16X\_mean vs slug



Right In: -0.267+/-0.000  $\chi^2/\text{NDF}$ : 34502.1/3

Left Out: -0.248+/-0.000  $\chi^2/\text{NDF}$ : 259449025.3/9

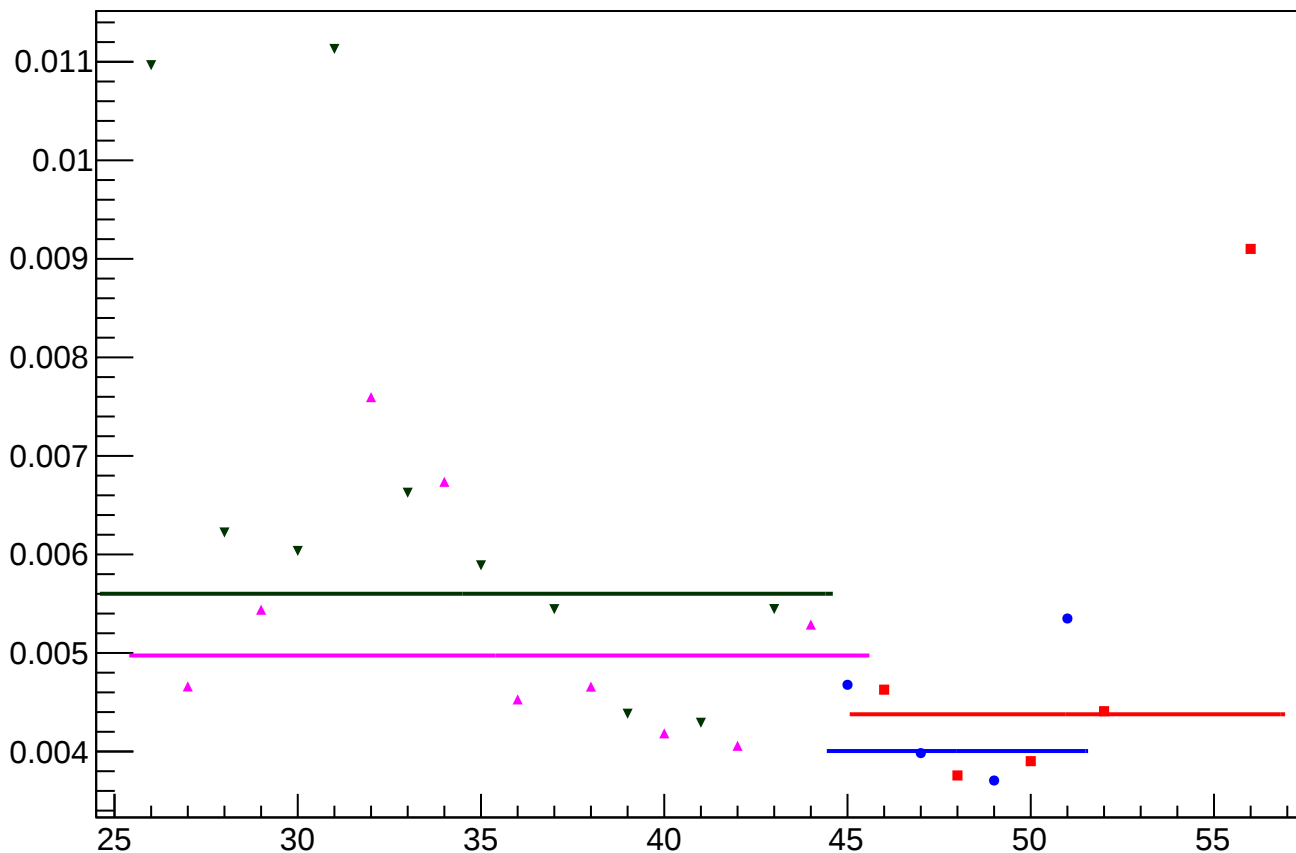
Right Out: -0.267+/-0.000  $\chi^2/\text{NDF}$ : 7520822.0/4

Left In: -0.235+/-0.000  $\chi^2/\text{NDF}$ : 786946325.9/8

-0.256+/-0.000  $\chi^2/\text{NDF}$ : 279950015.6/13

-0.246+/-0.000  $\chi^2/\text{NDF}$ : 864356321.4/13

# yield\_bpm16X\_rms vs slug



Right In: 0.004+/-0.000  $\chi^2/\text{NDF}$ : 36487.3/3

Left Out: 0.006+/-0.000  $\chi^2/\text{NDF}$ :602560.3/9

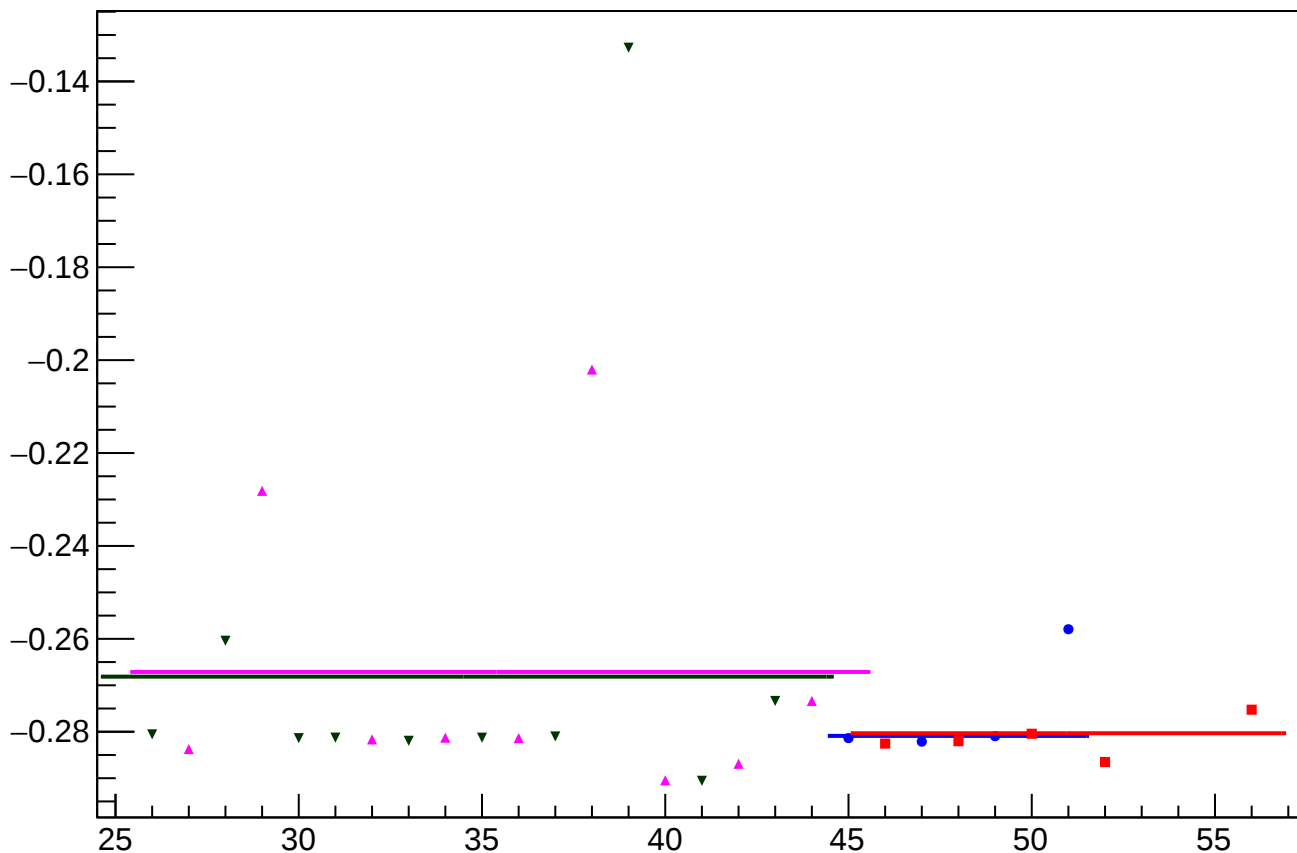
Right Out: 0.004+/-0.000  $\chi^2/\text{NDF}$ : 291466.1/4

Left In: 0.005+/-0.000  $\chi^2/\text{NDF}$ :363316.6/8

0.005+/-0.000  $\chi^2/\text{NDF}$ : 944415.3/13

0.005+/-0.000  $\chi^2/\text{NDF}$ : 702661.5/13

# yield\_bpm16Y\_mean vs slug



Right In: -0.281+/-0.000  $\chi^2/\text{NDF}$ : 2185971.1/3

Left Out: -0.268+/-0.000  $\chi^2/\text{NDF}$ : 960438127.5/9

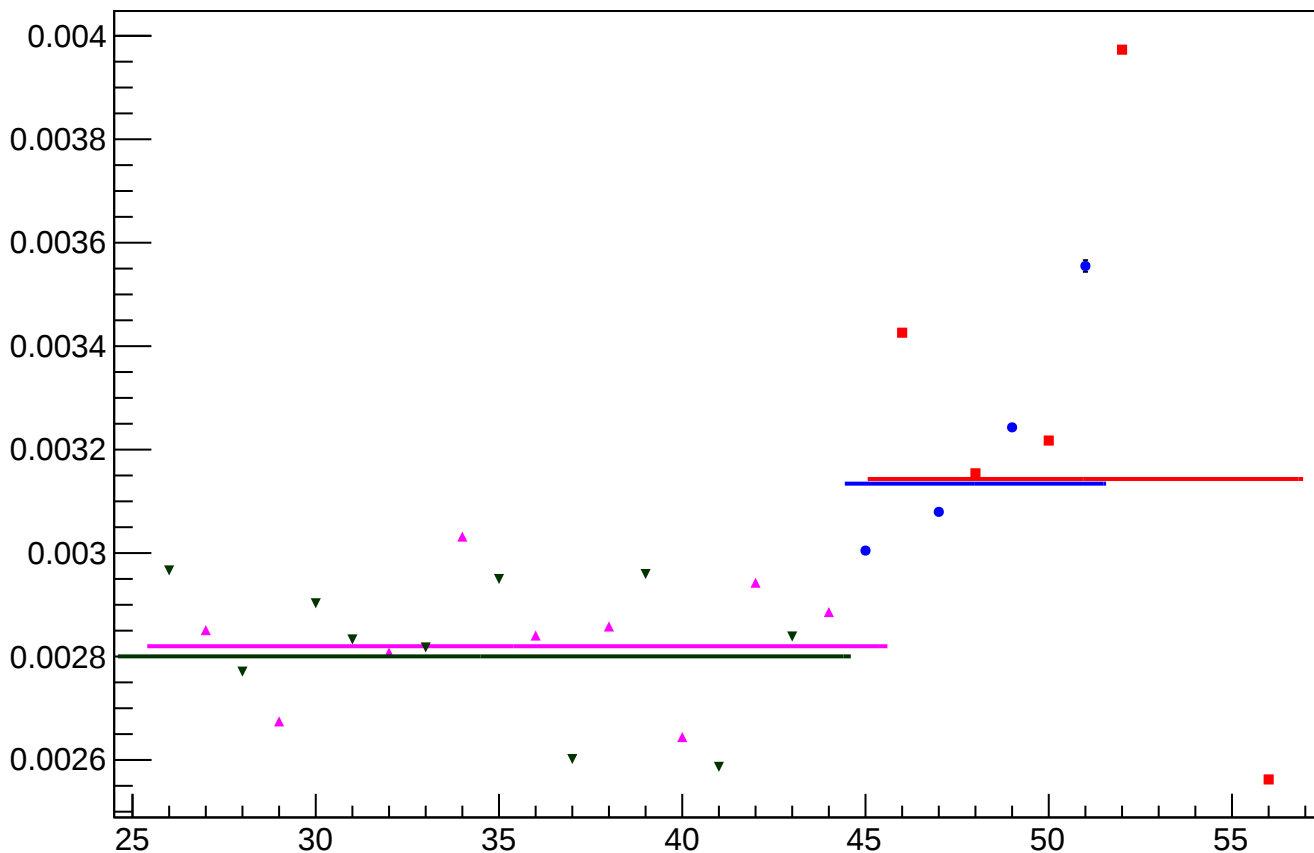
Right Out: -0.280+/-0.000  $\chi^2/\text{NDF}$ : 3408287.5/4

Left In: -0.267+/-0.000  $\chi^2/\text{NDF}$ : 554012466.4/8

-0.271+/-0.000  $\chi^2/\text{NDF}$ : 987512404.5/13

-0.270+/-0.000  $\chi^2/\text{NDF}$ : 587743895.8/13

# yield\_bpm16Y\_rms vs slug



Right In: 0.003+/-0.000  $\chi^2/\text{NDF}$ : 5964.2/3

Left Out: 0.003+/-0.000  $\chi^2/\text{NDF}$ : 23694.6/9

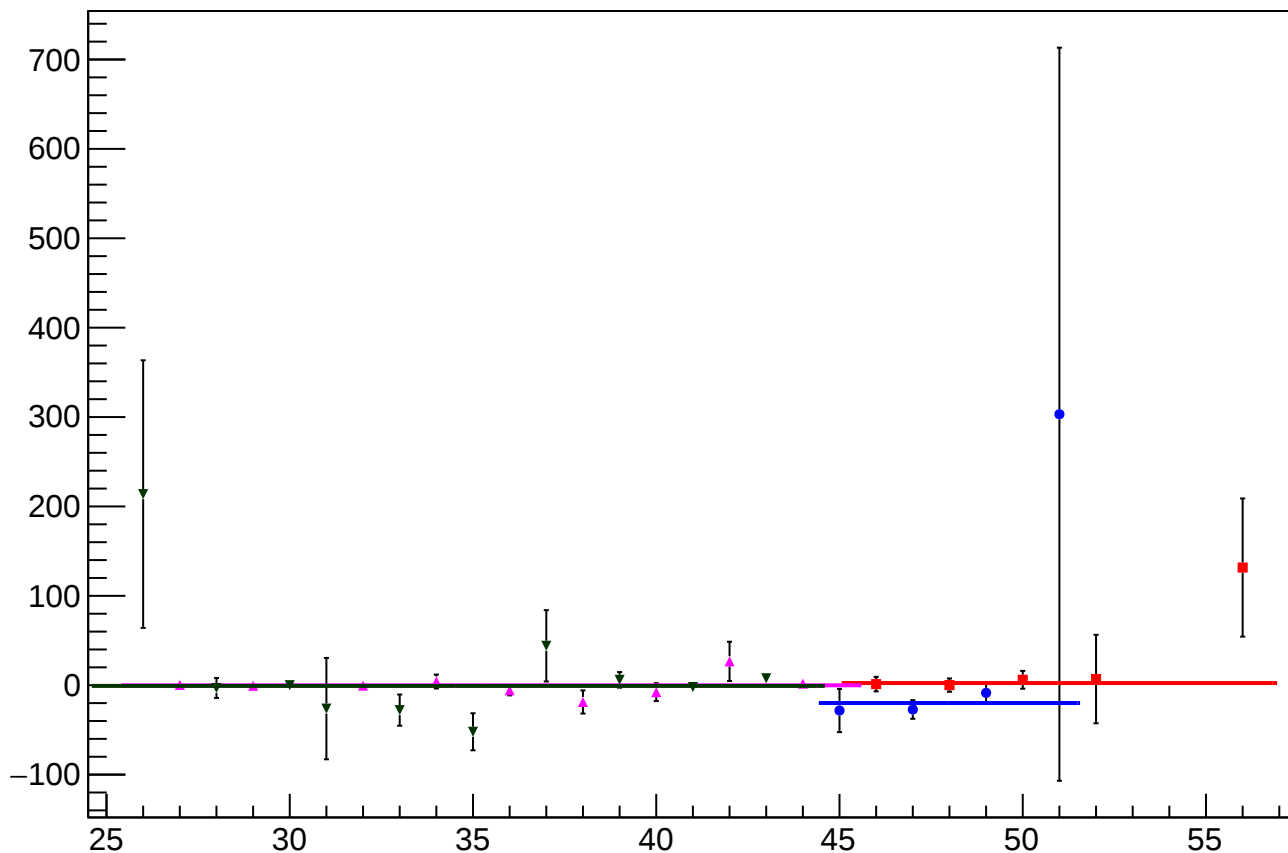
Right Out: 0.003+/-0.000  $\chi^2/\text{NDF}$ : 100077.6/4

Left In: 0.003+/-0.000  $\chi^2/\text{NDF}$ : 16393.9/8

0.003+/-0.000  $\chi^2/\text{NDF}$ : 63772.8/13

0.003+/-0.000  $\chi^2/\text{NDF}$ : 152895.4/13

# diff\_cav4bX\_mean vs slug



Right In: -19.893 $\pm$ 7.471  $\chi^2/\text{NDF}$ : 2.1/3

Left Out: -0.755 $\pm$ 1.557  $\chi^2/\text{NDF}$ : 15.9/9

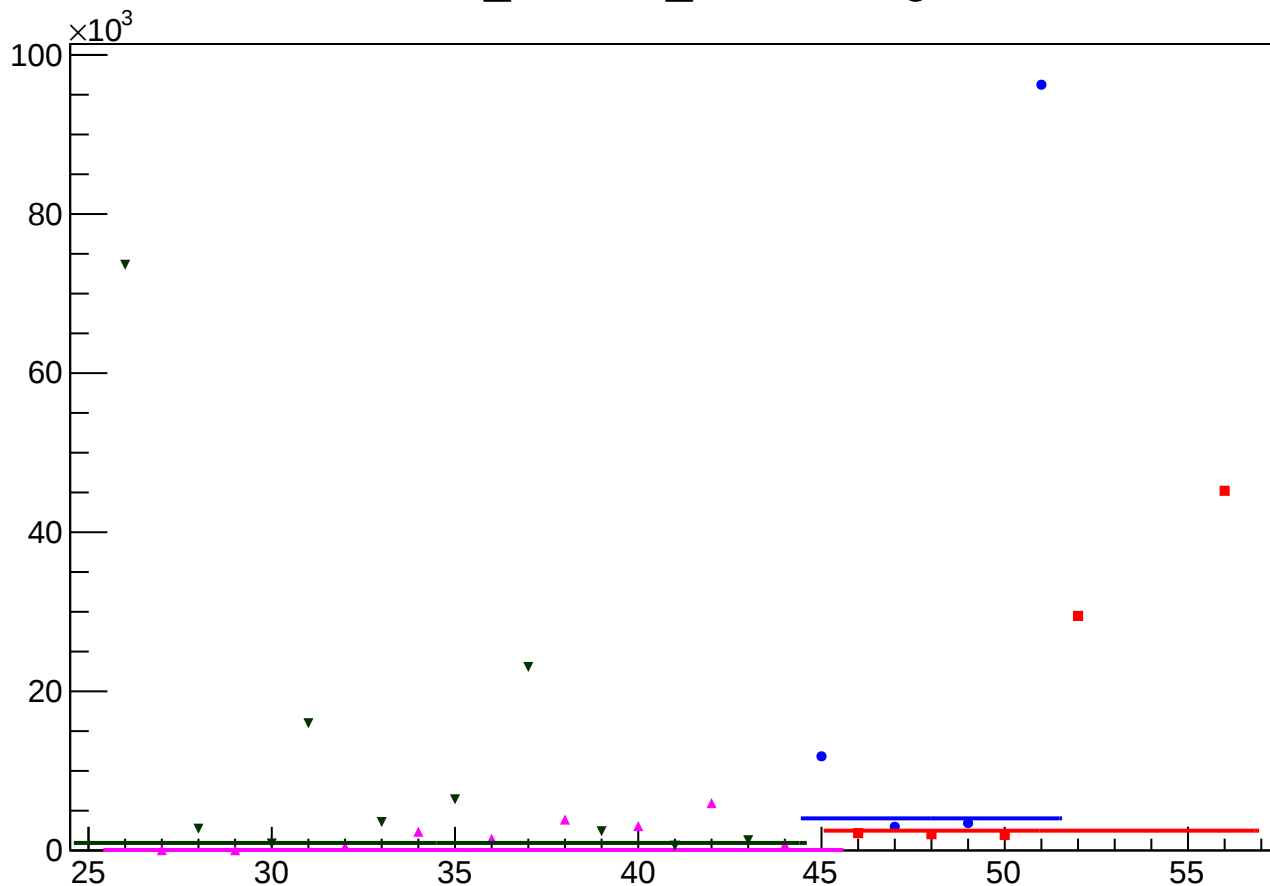
Right Out: 2.462 $\pm$ 4.776  $\chi^2/\text{NDF}$ : 3.1/4

Left In: -0.086 $\pm$ 0.168  $\chi^2/\text{NDF}$ : 15.5/8

-1.552 $\pm$ 1.524  $\chi^2/\text{NDF}$ : 24.3/13

-0.083 $\pm$ 0.168  $\chi^2/\text{NDF}$ : 18.9/13

# diff\_cav4bX\_rms vs slug



Right In: 4032.612 $\pm$ 5.282  $\chi^2/\text{NDF}$ : 334584.4/3

Left Out: 946.747 $\pm$ 1.101  $\chi^2/\text{NDF}$ : 1585820.7/9

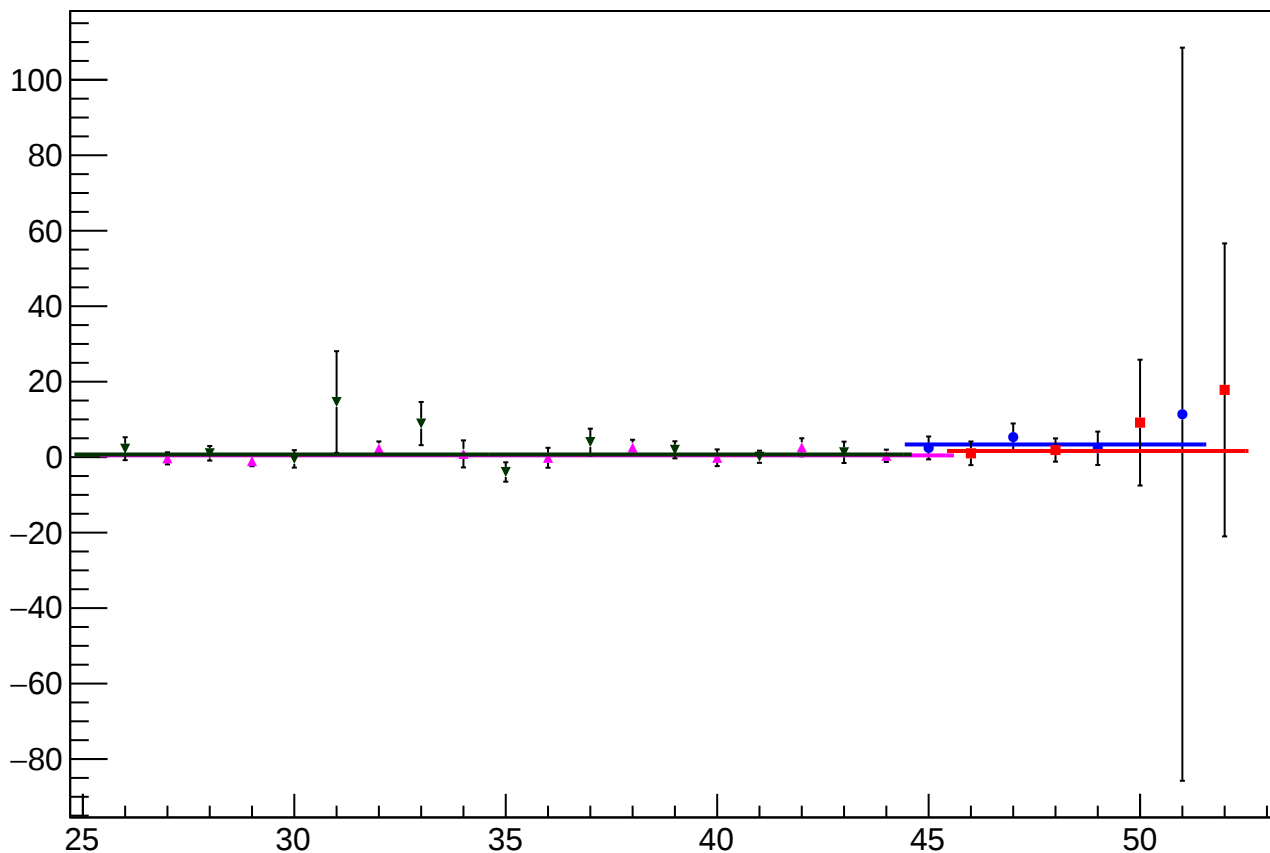
Right Out: 2486.879 $\pm$ 3.377  $\chi^2/\text{NDF}$ : 1222714.8/4

Left In: 61.511 $\pm$ 0.119  $\chi^2/\text{NDF}$ : 1573172.2/8

1075.246 $\pm$ 1.078  $\chi^2/\text{NDF}$ : 2247447.7/13

64.515 $\pm$ 0.119  $\chi^2/\text{NDF}$ : 3310921.5/13

# diff\_cav4bY\_mean vs slug



Right In:  $3.363 \pm 2.053$      $\chi^2/\text{NDF}$ : 0.4/3

Left Out:  $0.707 \pm 0.808$      $\chi^2/\text{NDF}$ : 8.2/9

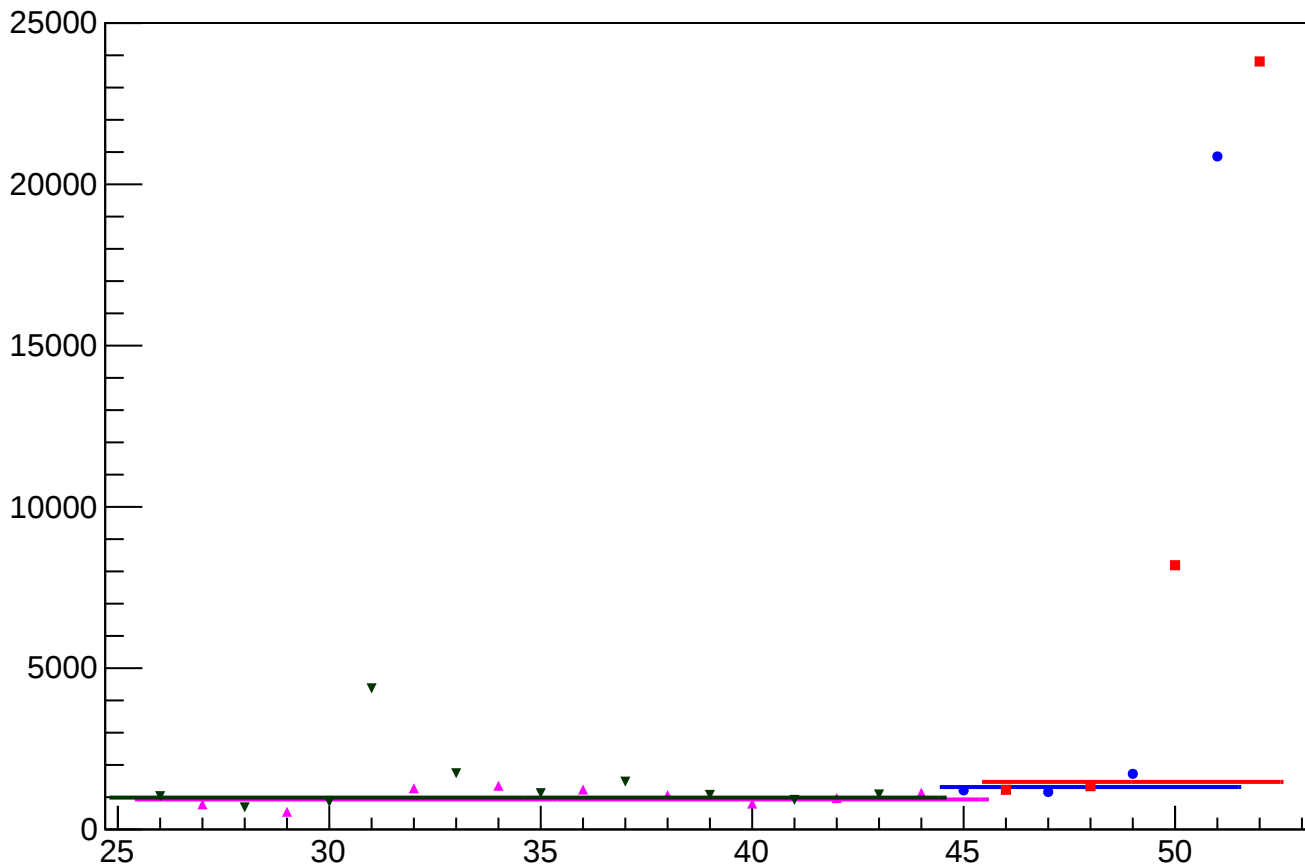
Right Out:  $1.640 \pm 2.173$      $\chi^2/\text{NDF}$ : 0.4/3

Left In:  $0.468 \pm 0.642$      $\chi^2/\text{NDF}$ : 4.4/8

$1.062 \pm 0.752$      $\chi^2/\text{NDF}$ : 10.1/13

$0.562 \pm 0.616$      $\chi^2/\text{NDF}$ : 5.1/12

# diff\_cav4bY\_rms vs slug



Right In: 1315.143+/-1.452  $\chi^2/\text{NDF}$ : 104123.1/3

Left Out: 987.900+/-0.571  $\chi^2/\text{NDF}$ : 270892.3/9

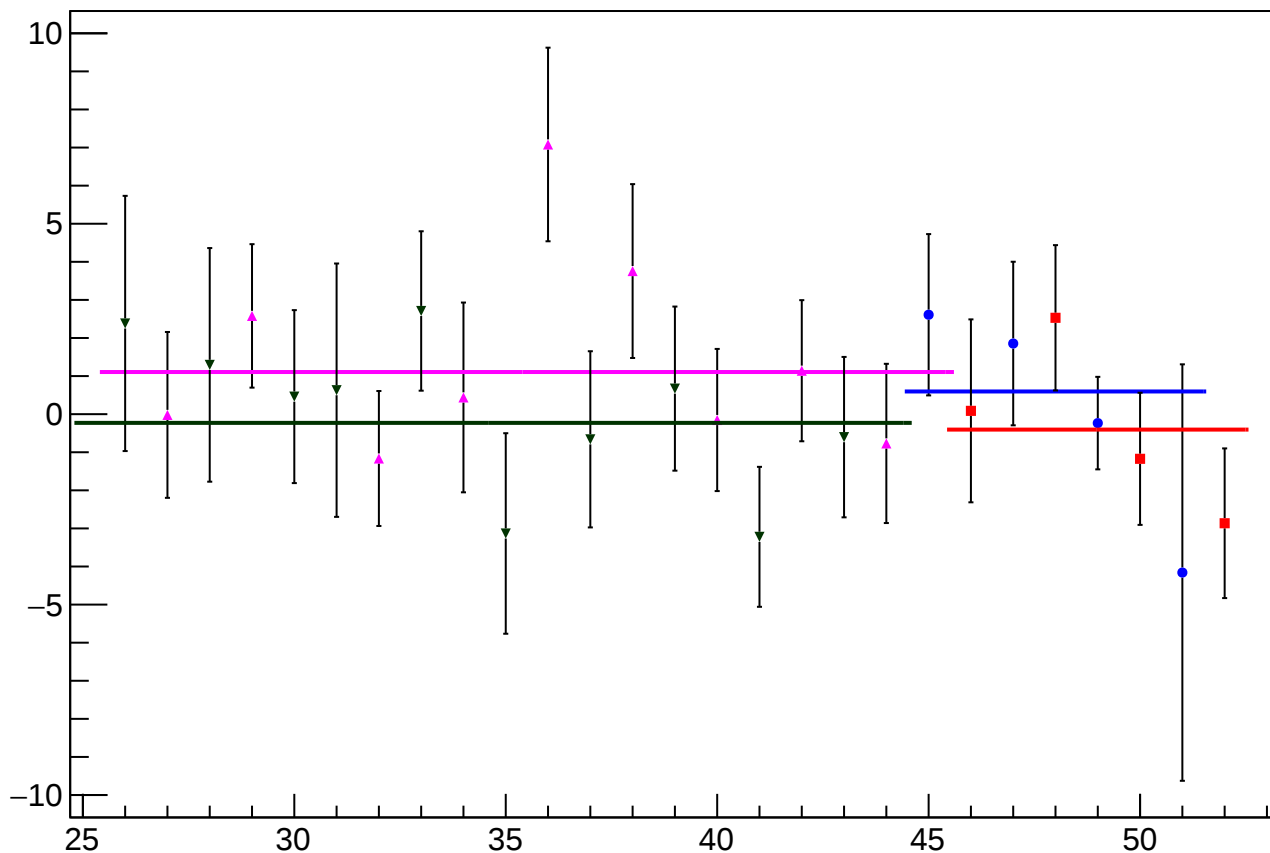
1031.731+/-0.531  $\chi^2/\text{NDF}$ : 419006.9/13

Right Out: 1474.477+/-1.536  $\chi^2/\text{NDF}$ : 1002623.9/3

973.774+/-0.435  $\chi^2/\text{NDF}$ : 1466985.8/12

Left In: 930.059+/-0.454  $\chi^2/\text{NDF}$ : 348877.4/8

diff\_cav4cX\_mean vs slug



Right In: 0.596 $\pm$ 0.932  $\chi^2/\text{NDF}$ : 2.5/3

Left Out: -0.229 $\pm$ 0.750  $\chi^2/\text{NDF}$ : 7.1/9

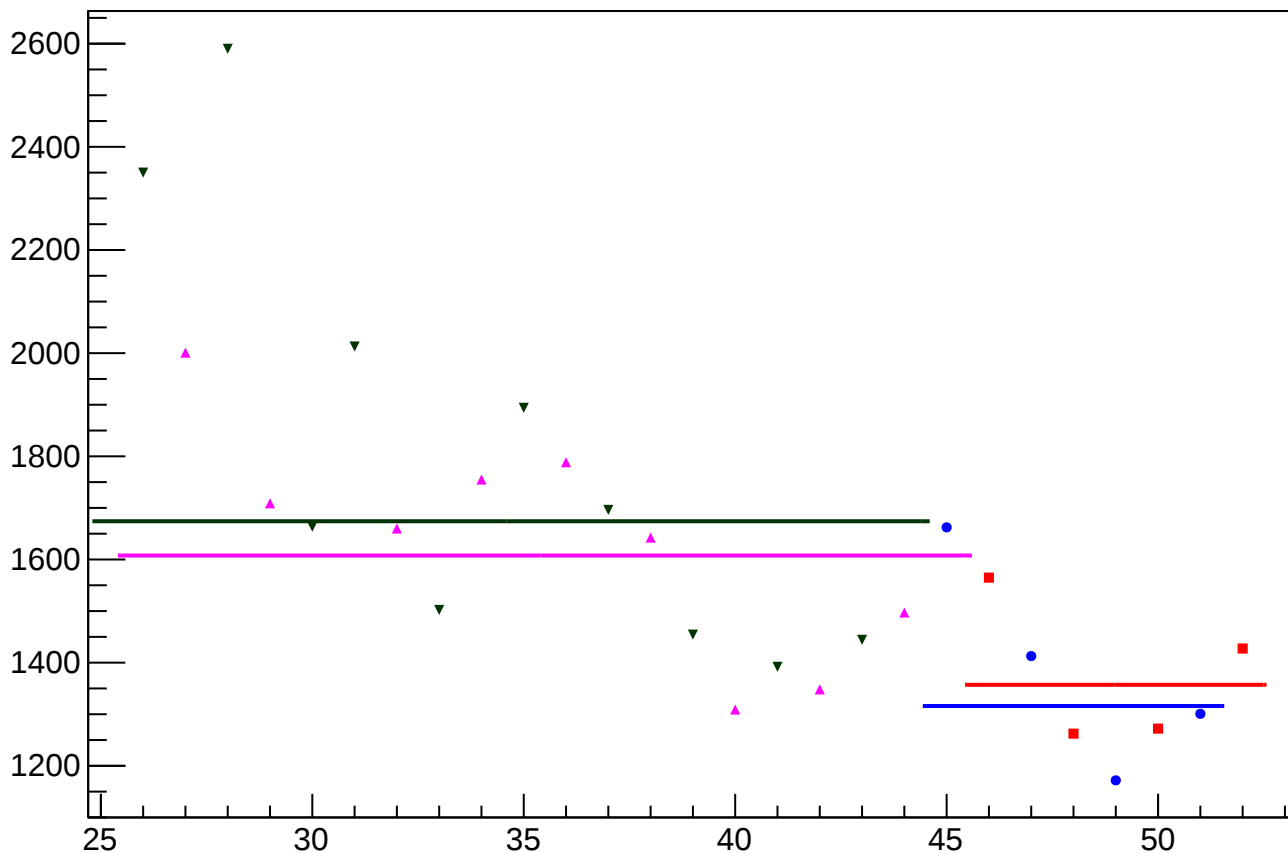
Right Out: -0.405 $\pm$ 0.981  $\chi^2/\text{NDF}$ : 4.2/3

Left In: 1.107 $\pm$ 0.686  $\chi^2/\text{NDF}$ : 10.7/8

0.096 $\pm$ 0.584  $\chi^2/\text{NDF}$ : 10.0/13

0.610 $\pm$ 0.562  $\chi^2/\text{NDF}$ : 16.5/12

# diff\_cav4cX\_rms vs slug



Right In: 1315.947+/-0.659  $\chi^2/\text{NDF}$ : 85733.9/3

Left Out: 1674.116+/-0.531  $\chi^2/\text{NDF}$ : 399958.8/9

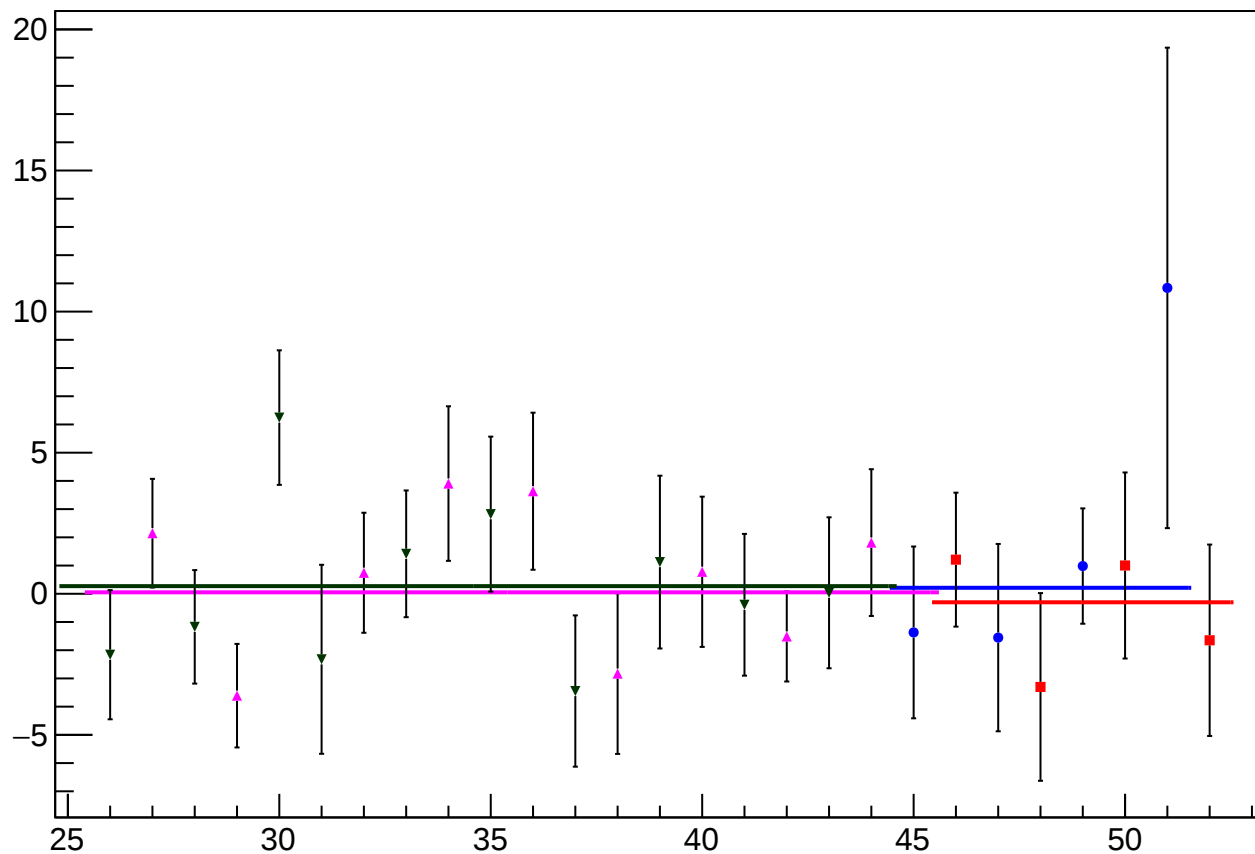
Right Out: 1357.076+/-0.694  $\chi^2/\text{NDF}$ : 27251.2/3

Left In: 1607.717+/-0.485  $\chi^2/\text{NDF}$ : 186348.1/8

1533.268+/-0.413  $\chi^2/\text{NDF}$ : 664913.8/13

1525.435+/-0.397  $\chi^2/\text{NDF}$ : 301310.0/12

# diff\_cav4cY\_mean vs slug



Right In: 0.212 $\pm$ 1.488  $\chi^2$ /NDF: 2.3/3

Left Out: 0.271 $\pm$ 0.796  $\chi^2$ /NDF:11.7/9

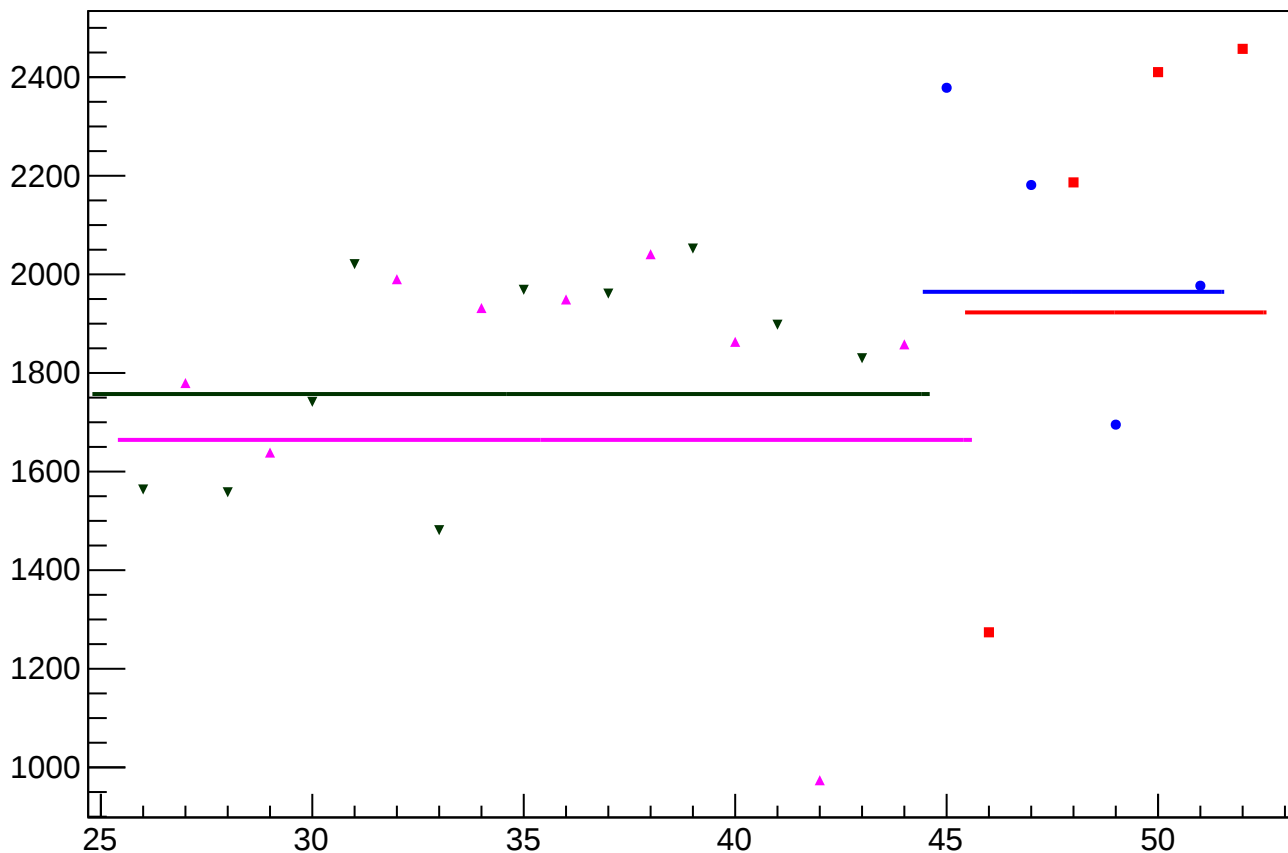
Right Out: -0.302 $\pm$ 1.496  $\chi^2$ /NDF: 1.5/3

Left In: 0.052 $\pm$ 0.734  $\chi^2$ /NDF:11.4/8

0.258 $\pm$ 0.702  $\chi^2$ /NDF: 14.0/13

-0.017 $\pm$ 0.659  $\chi^2$ /NDF: 13.0/12

# diff\_cav4cY\_rms vs slug



Right In: 1964.618+/-1.052  $\chi^2/\text{NDF}$ : 80248.1/3

Left Out: 1757.264+/-0.563  $\chi^2/\text{NDF}$ :126368.6/9

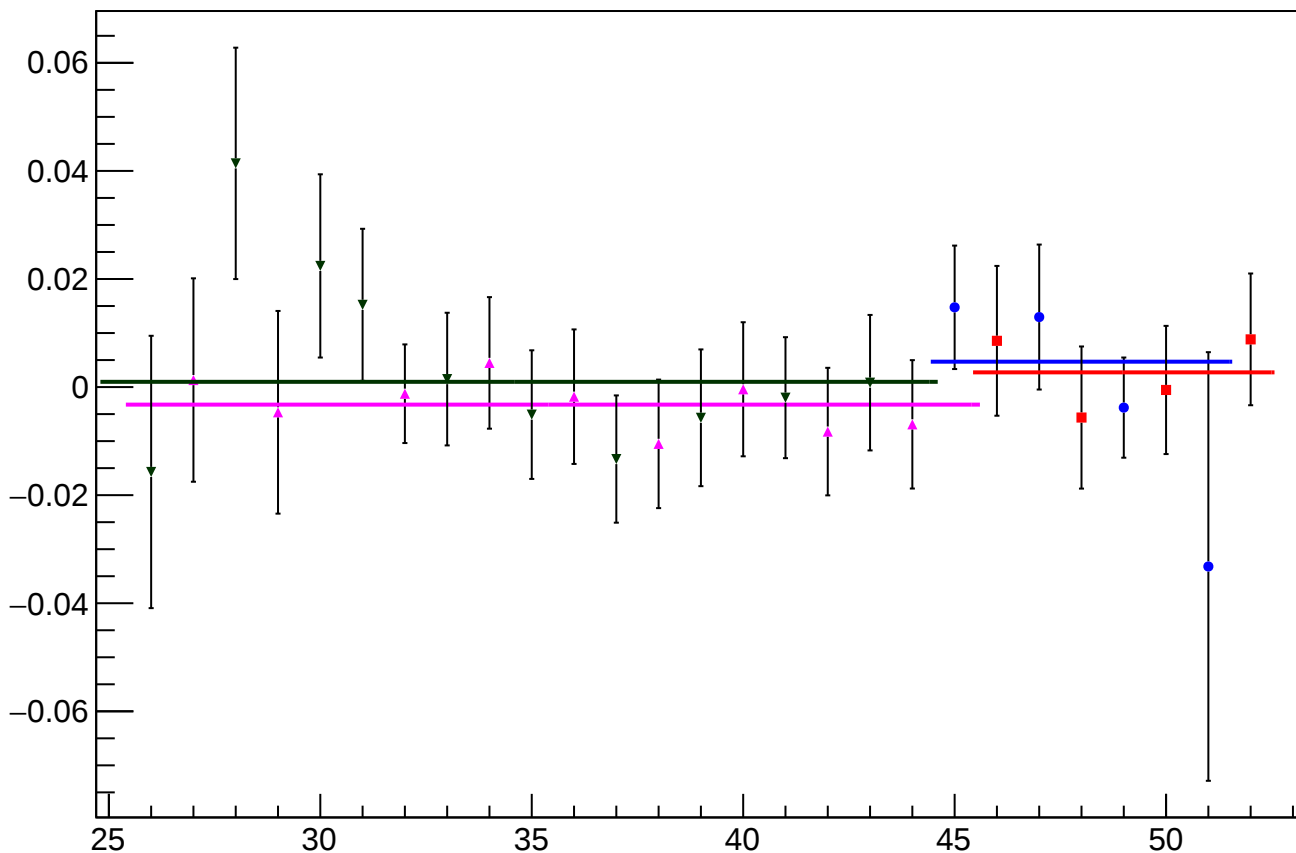
Right Out: 1922.824+/-1.058  $\chi^2/\text{NDF}$ : 255408.3/3

Left In: 1664.275+/-0.519  $\chi^2/\text{NDF}$ :526260.0/8

1803.421+/-0.496  $\chi^2/\text{NDF}$ : 236824.1/13

1714.453+/-0.466  $\chi^2/\text{NDF}$ : 829810.5/12

# diff\_cav4dX\_mean vs slug



Right In: 0.005 $\pm$ 0.006     $\chi^2/\text{NDF}$ : 2.9/3

Left Out: 0.001 $\pm$ 0.004     $\chi^2/\text{NDF}$ : 8.7/9

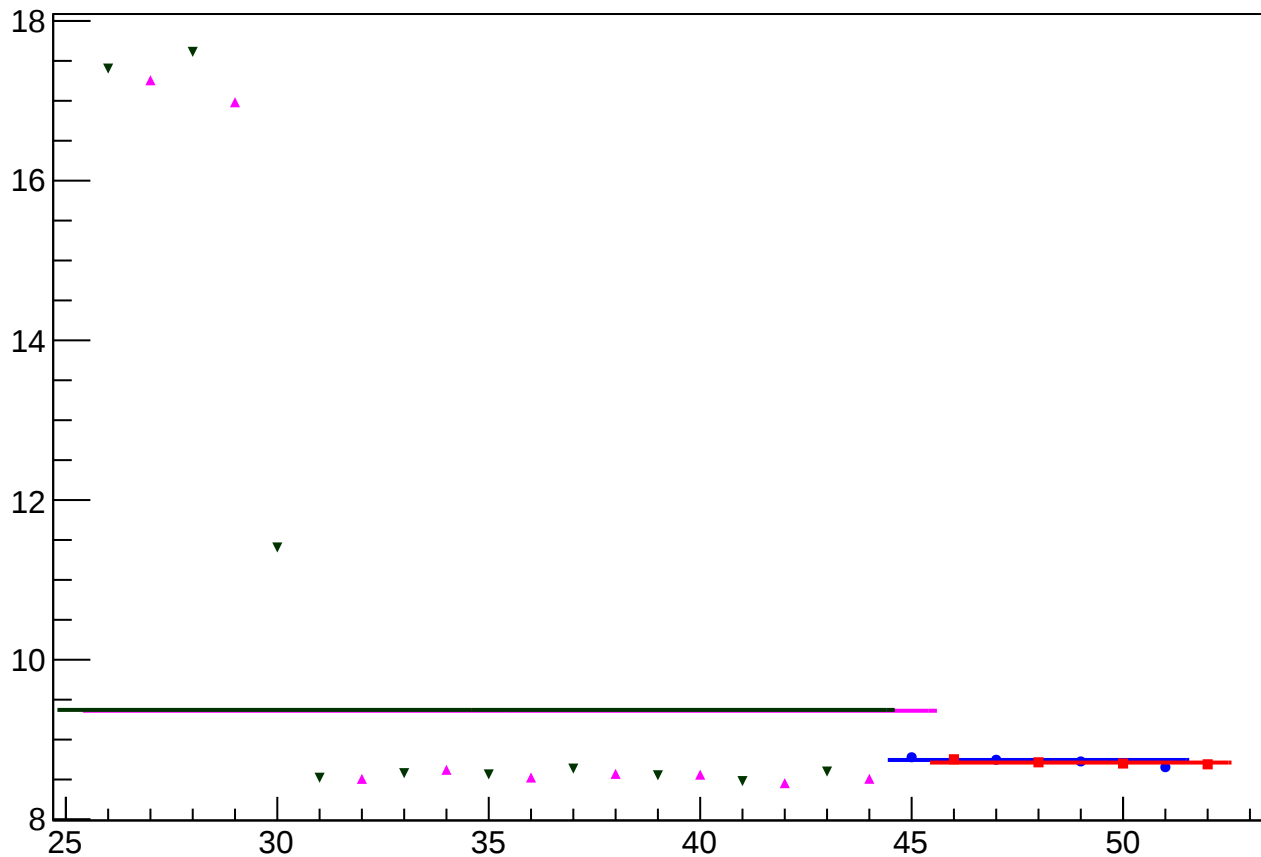
Right Out: 0.003 $\pm$ 0.006     $\chi^2/\text{NDF}$ : 0.9/3

Left In: -0.003 $\pm$ 0.004     $\chi^2/\text{NDF}$ : 1.2/8

0.002 $\pm$ 0.004     $\chi^2/\text{NDF}$ : 11.9/13

-0.001 $\pm$ 0.003     $\chi^2/\text{NDF}$ : 2.8/12

# diff\_cav4dX\_rms vs slug



Right In: 8.745+/-0.004  $\chi^2/\text{NDF}$ : 35.8/3

Left Out: 9.372+/-0.003  $\chi^2/\text{NDF}$ : 589618.0/9

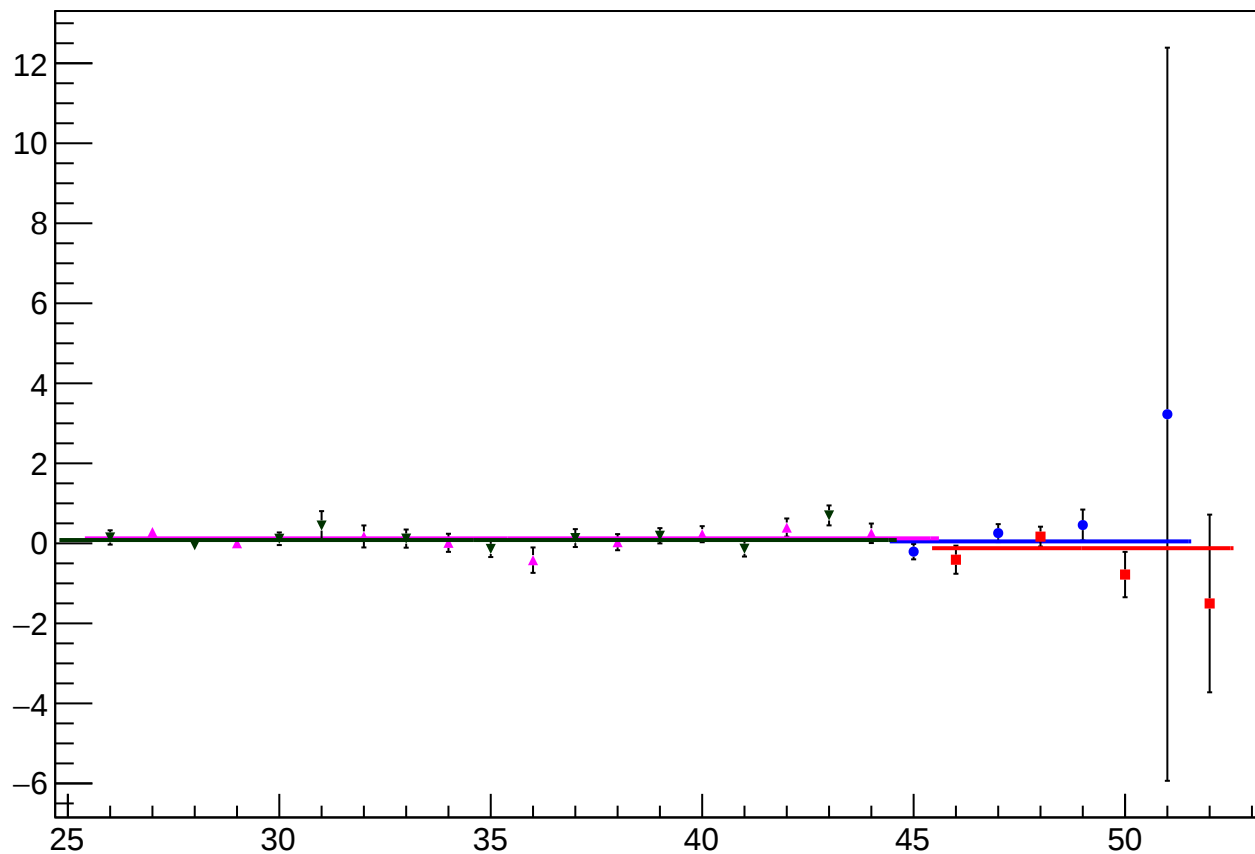
Right Out: 8.712+/-0.004  $\chi^2/\text{NDF}$ : 26.0/3

Left In: 9.361+/-0.003  $\chi^2/\text{NDF}$ : 755360.8/8

9.170+/-0.003  $\chi^2/\text{NDF}$ : 603249.9/13

9.168+/-0.002  $\chi^2/\text{NDF}$ : 770078.0/12

# diff\_cav4dY\_mean vs slug



Right In:  $0.049 \pm 0.137$   $\chi^2/\text{NDF}$ : 3.9/3

Left Out:  $0.083 \pm 0.059$   $\chi^2/\text{NDF}$ : 11.3/9

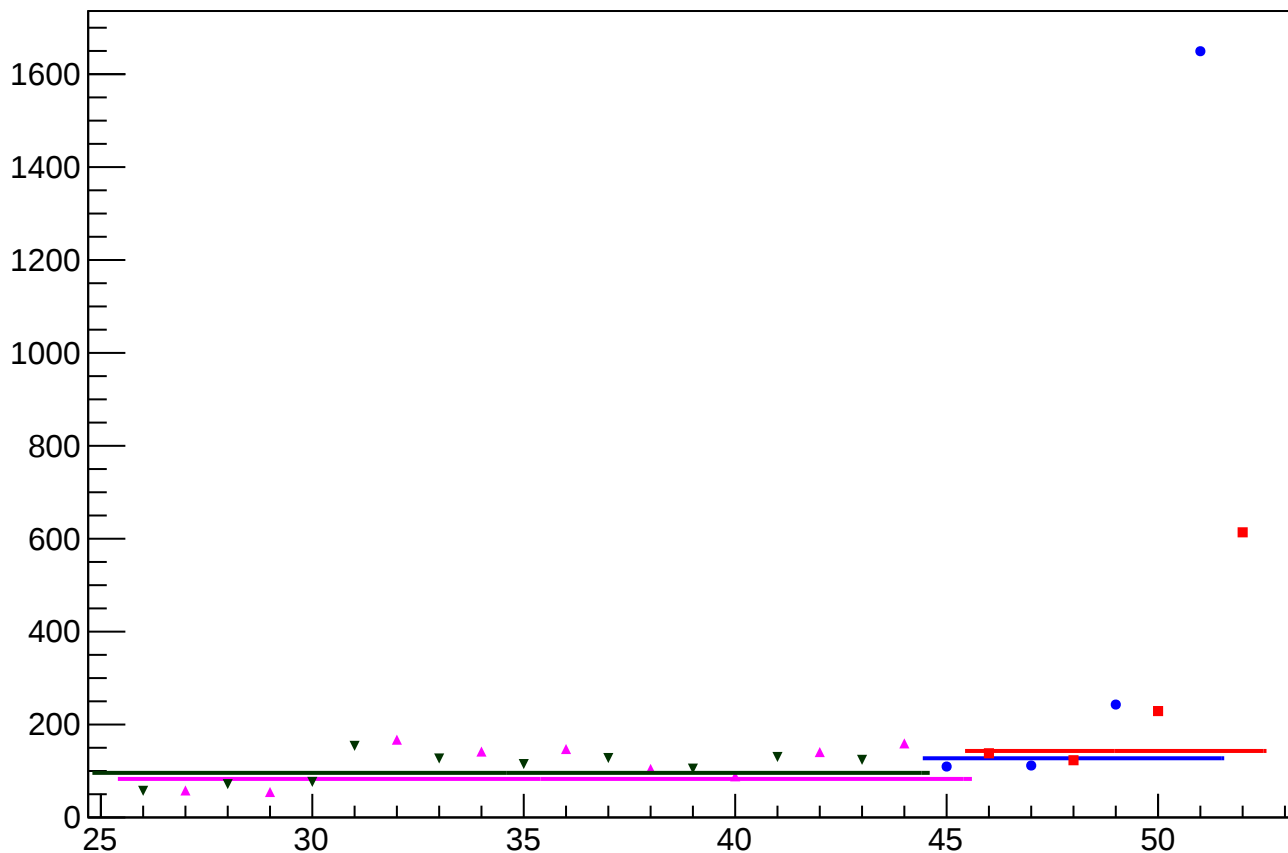
Right Out:  $-0.121 \pm 0.190$   $\chi^2/\text{NDF}$ : 3.8/3

Left In:  $0.125 \pm 0.053$   $\chi^2/\text{NDF}$ : 9.7/8

$0.078 \pm 0.054$   $\chi^2/\text{NDF}$ : 15.3/13

$0.107 \pm 0.051$   $\chi^2/\text{NDF}$ : 15.0/12

# diff\_cav4dY\_rms vs slug



Right In: 127.397+/-0.097     $\chi^2/\text{NDF}$ : 260686.3/3

Left Out: 95.985+/-0.042     $\chi^2/\text{NDF}$ : 447225.2/9

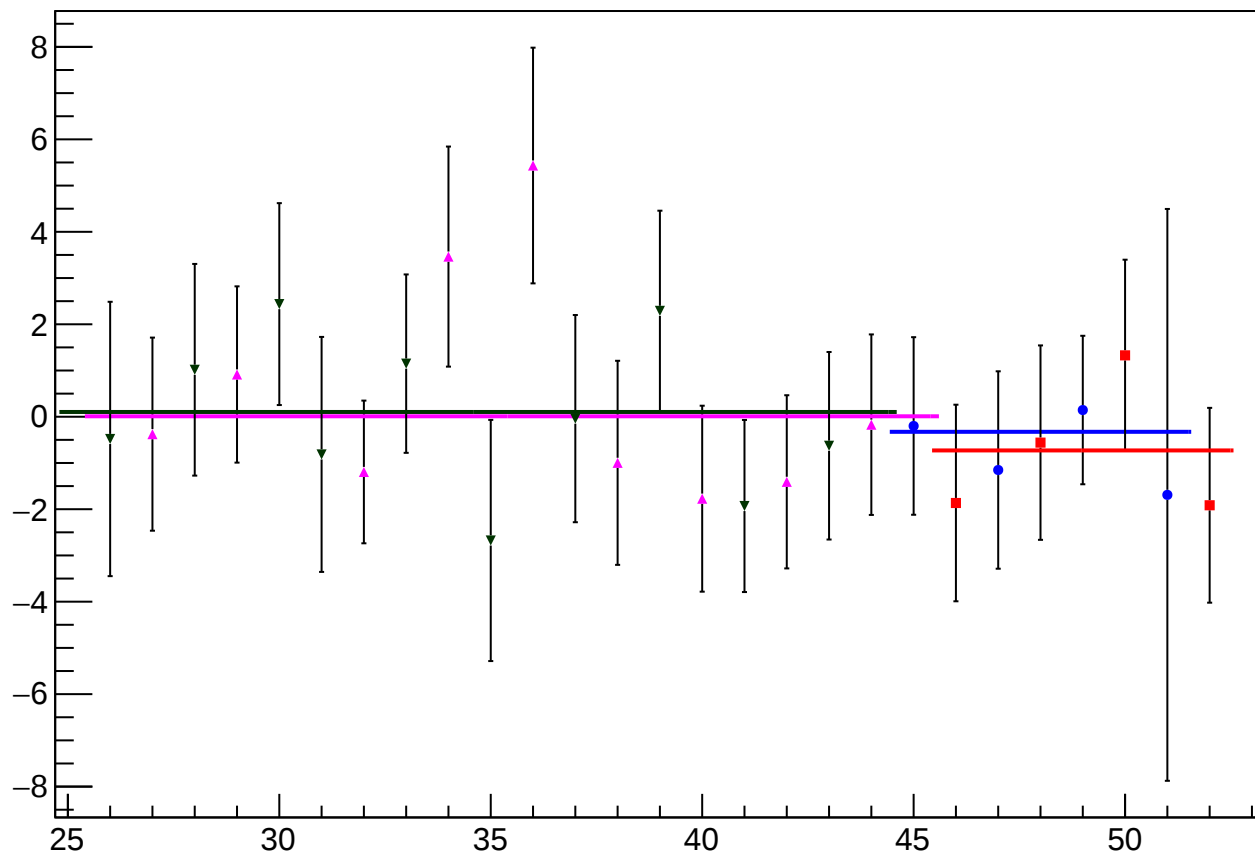
Right Out: 143.133+/-0.135     $\chi^2/\text{NDF}$ : 148984.2/3

Left In: 82.933+/-0.038     $\chi^2/\text{NDF}$ : 1079060.0/8

100.957+/-0.038     $\chi^2/\text{NDF}$ : 796887.1/13

87.297+/-0.036     $\chi^2/\text{NDF}$ : 1413293.4/12

# diff\_bpm4aX\_mean vs slug



Right In:  $-0.326 \pm 1.052$   $\chi^2/\text{NDF}$ : 0.3/3

Left Out:  $0.103 \pm 0.702$   $\chi^2/\text{NDF}$ : 5.2/9

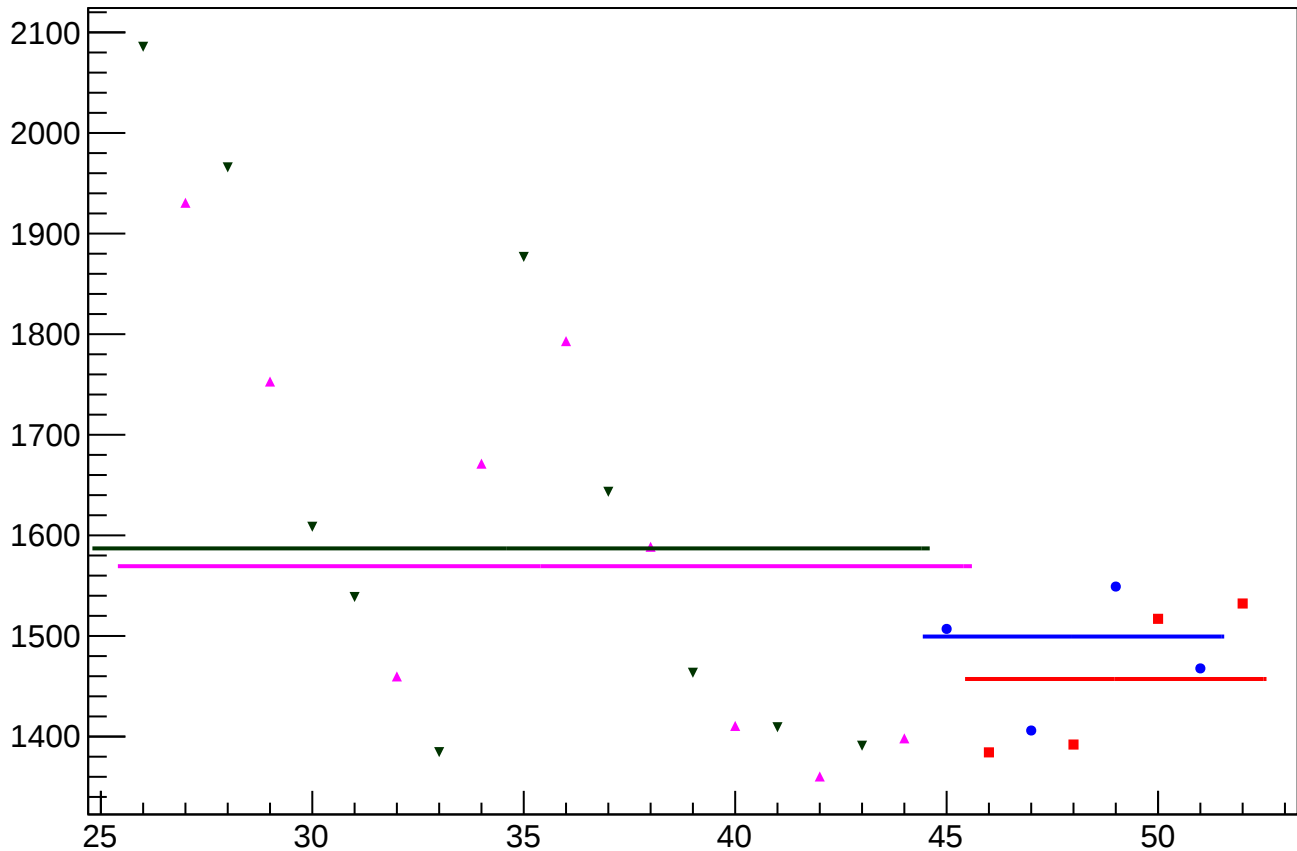
Right Out:  $-0.729 \pm 1.050$   $\chi^2/\text{NDF}$ : 1.6/3

Left In:  $0.010 \pm 0.666$   $\chi^2/\text{NDF}$ : 9.1/8

$-0.029 \pm 0.584$   $\chi^2/\text{NDF}$ : 5.7/13

$-0.202 \pm 0.562$   $\chi^2/\text{NDF}$ : 11.0/12

# diff\_bpm4aX\_rms vs slug



Right In: 1499.441+/-0.744  $\chi^2/\text{NDF}$ : 5825.6/3

Left Out: 1587.052+/-0.496  $\chi^2/\text{NDF}$ : 203584.7/9

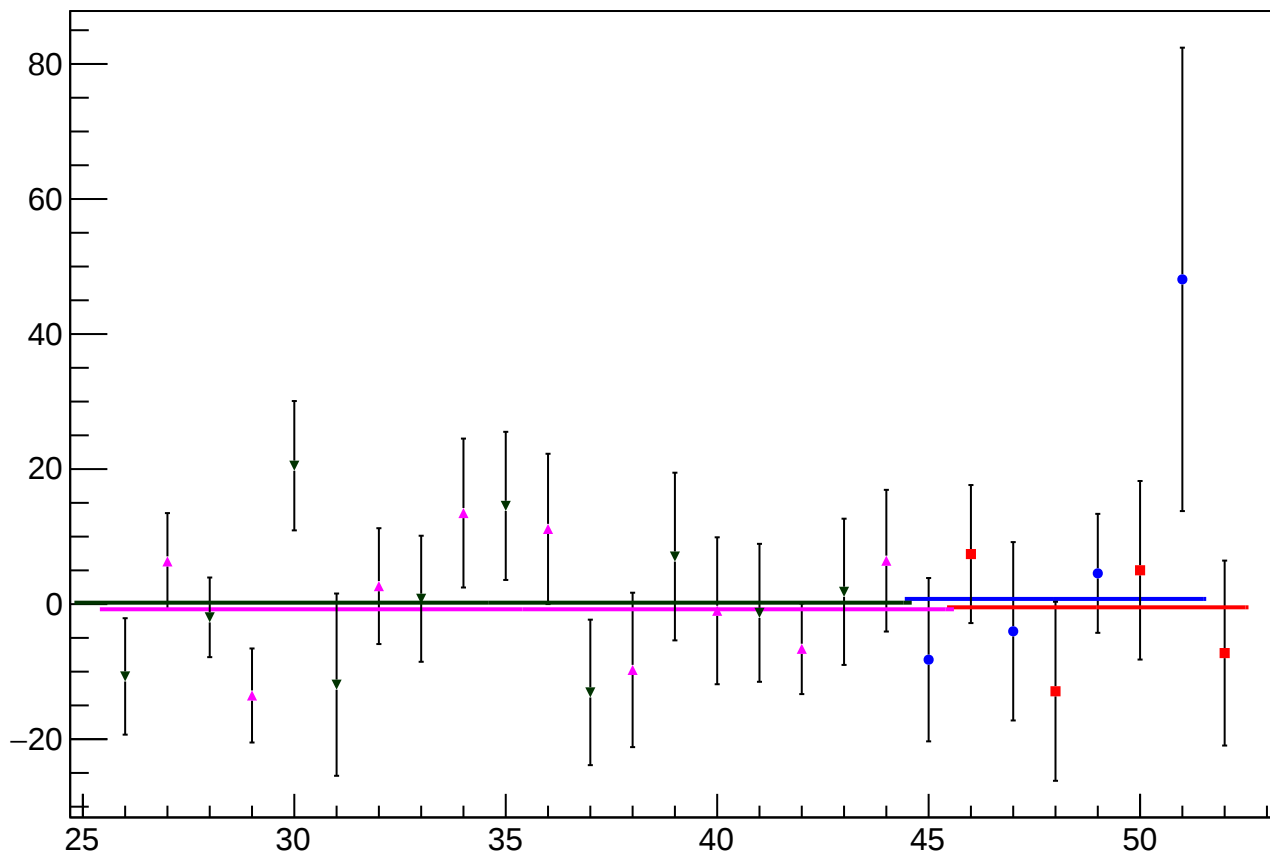
1560.035+/-0.413  $\chi^2/\text{NDF}$ : 219013.1/13

Right Out: 1457.239+/-0.743  $\chi^2/\text{NDF}$ : 8483.2/3

1537.212+/-0.398  $\chi^2/\text{NDF}$ : 185176.1/12

Left In: 1569.361+/-0.471  $\chi^2/\text{NDF}$ : 160439.4/8

# diff\_bpm4aY\_mean vs slug



Right In:  $0.772 \pm 6.166$   $\chi^2/\text{NDF}$ : 2.8/3

Left Out:  $0.216 \pm 2.994$   $\chi^2/\text{NDF}$ : 10.6/9

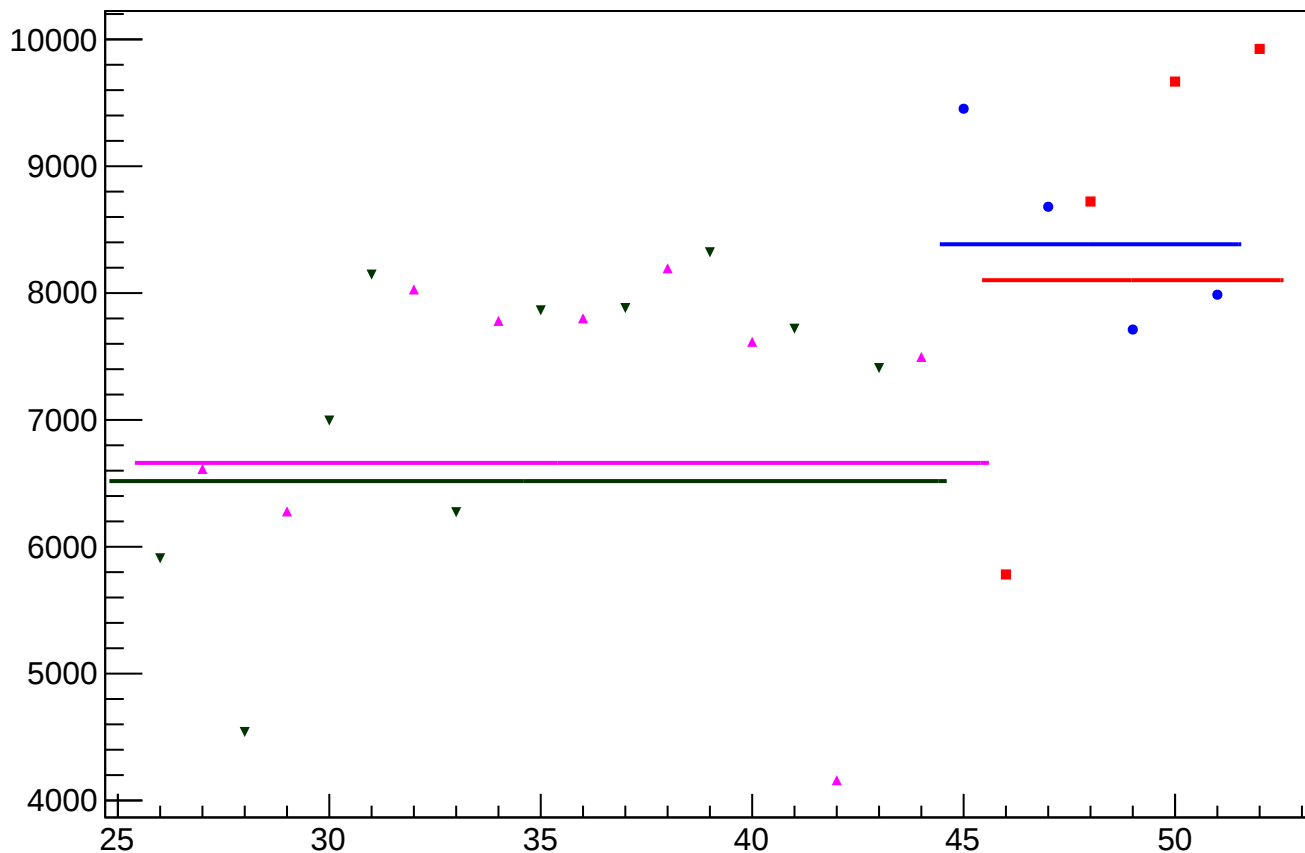
Right Out:  $-0.472 \pm 6.165$   $\chi^2/\text{NDF}$ : 1.9/3

Left In:  $-0.763 \pm 2.918$   $\chi^2/\text{NDF}$ : 9.2/8

$0.322 \pm 2.693$   $\chi^2/\text{NDF}$ : 13.4/13

$-0.710 \pm 2.638$   $\chi^2/\text{NDF}$ : 11.1/12

# diff\_bpm4aY\_rms vs slug



Right In: 8384.823+/-4.360  $\chi^2/\text{NDF}$ : 28520.1/3

Left Out: 6517.791+/-2.117  $\chi^2/\text{NDF}$ : 416045.1/9

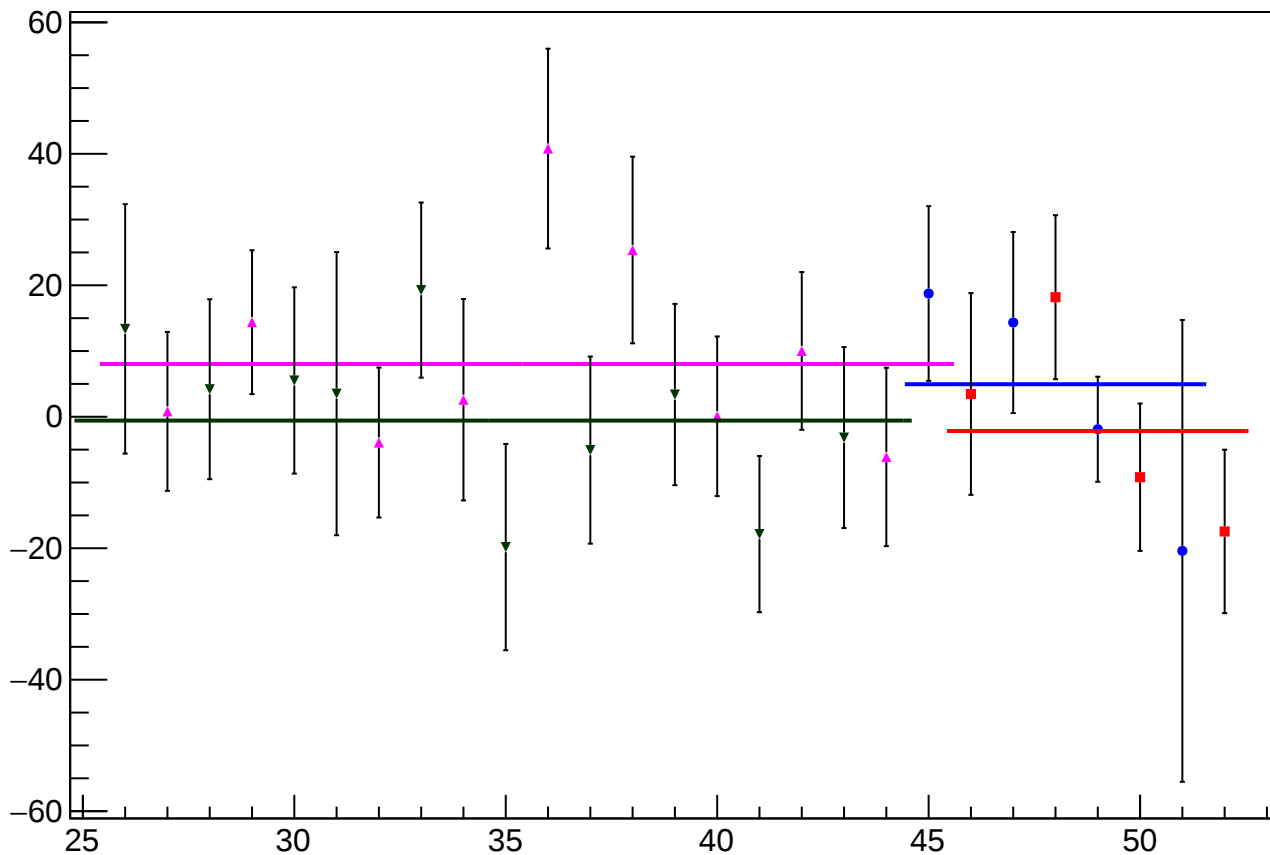
6873.888+/-1.904  $\chi^2/\text{NDF}$ : 592947.5/13

Right Out: 8101.792+/-4.360  $\chi^2/\text{NDF}$ : 170877.2/3

6924.945+/-1.865  $\chi^2/\text{NDF}$ : 700726.8/12

Left In: 6661.299+/-2.063  $\chi^2/\text{NDF}$ : 440651.7/8

# diff\_bpm4eX\_mean vs slug



Right In:  $4.950 \pm 6.043$   $\chi^2/\text{NDF}: 2.8/3$

Left Out:  $-0.581 \pm 4.588$   $\chi^2/\text{NDF}: 6.9/9$

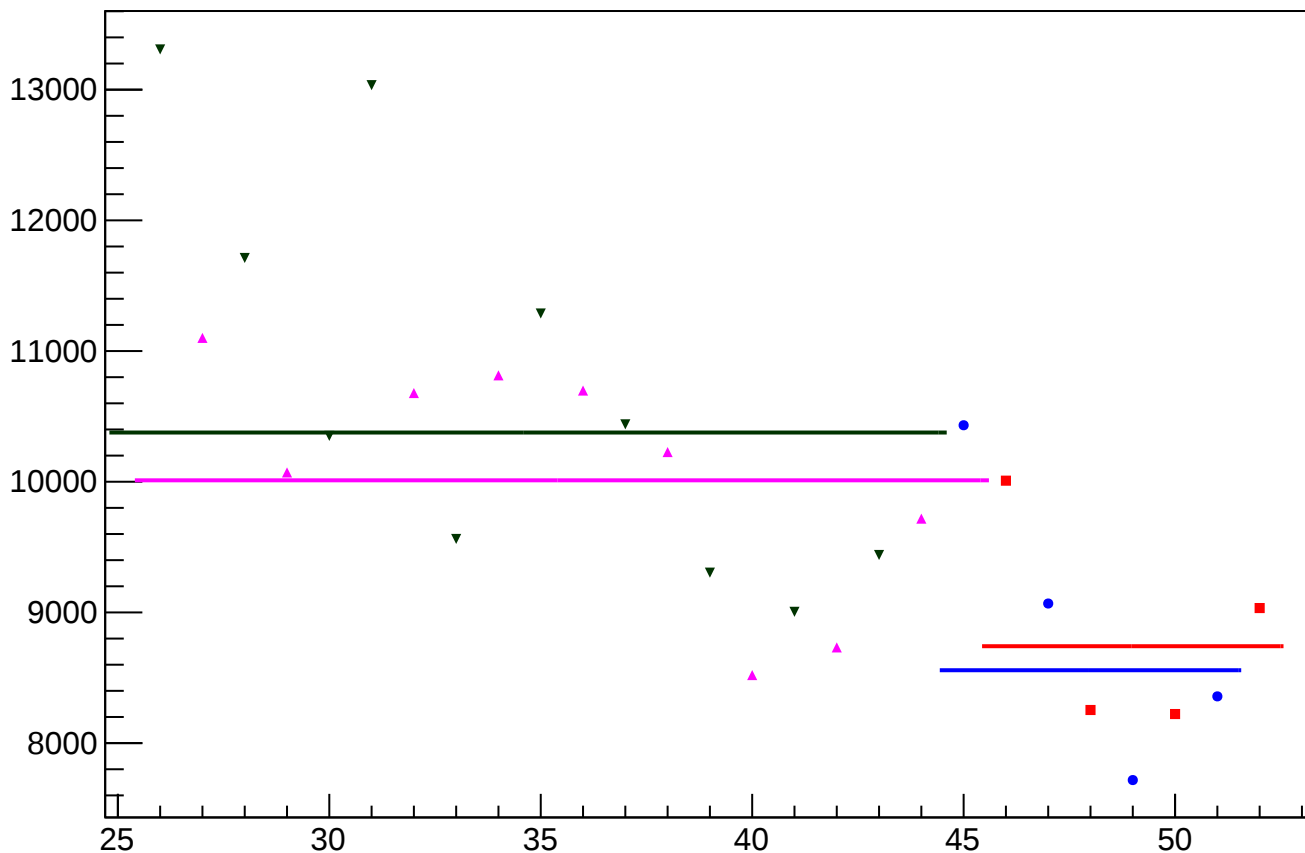
Right Out:  $-2.162 \pm 6.313$   $\chi^2/\text{NDF}: 4.7/3$

Left In:  $8.023 \pm 4.241$   $\chi^2/\text{NDF}: 9.6/8$

$1.442 \pm 3.654$   $\chi^2/\text{NDF}: 10.3/13$

$4.856 \pm 3.520$   $\chi^2/\text{NDF}: 16.1/12$

# diff\_bpm4eX\_rms vs slug



Right In: 8557.698+/-4.273  $\chi^2/\text{NDF}$ : 64693.9/3

Left Out: 10376.591+/-3.244  $\chi^2/\text{NDF}$ : 159508.6/9

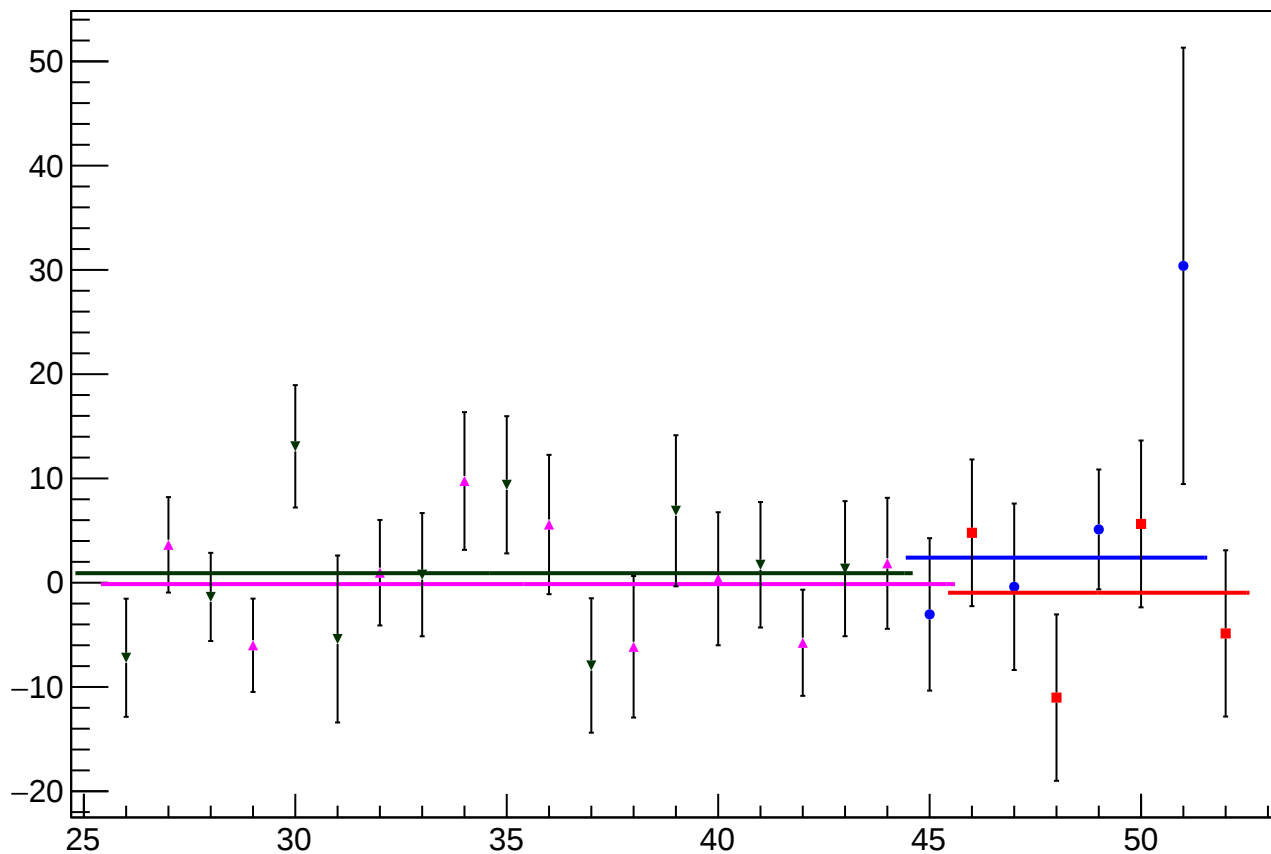
9711.485+/-2.584  $\chi^2/\text{NDF}$ : 339143.3/13

Right Out: 8741.509+/-4.464  $\chi^2/\text{NDF}$ : 22071.5/3

9616.118+/-2.489  $\chi^2/\text{NDF}$ : 164756.4/12

Left In: 10010.873+/-2.999  $\chi^2/\text{NDF}$ : 86966.6/8

# diff\_bpm4eY\_mean vs slug



Right In:  $2.405 \pm 3.865$   $\chi^2/\text{NDF}: 2.7/3$

Left Out:  $0.913 \pm 1.896$   $\chi^2/\text{NDF}: 11.5/9$

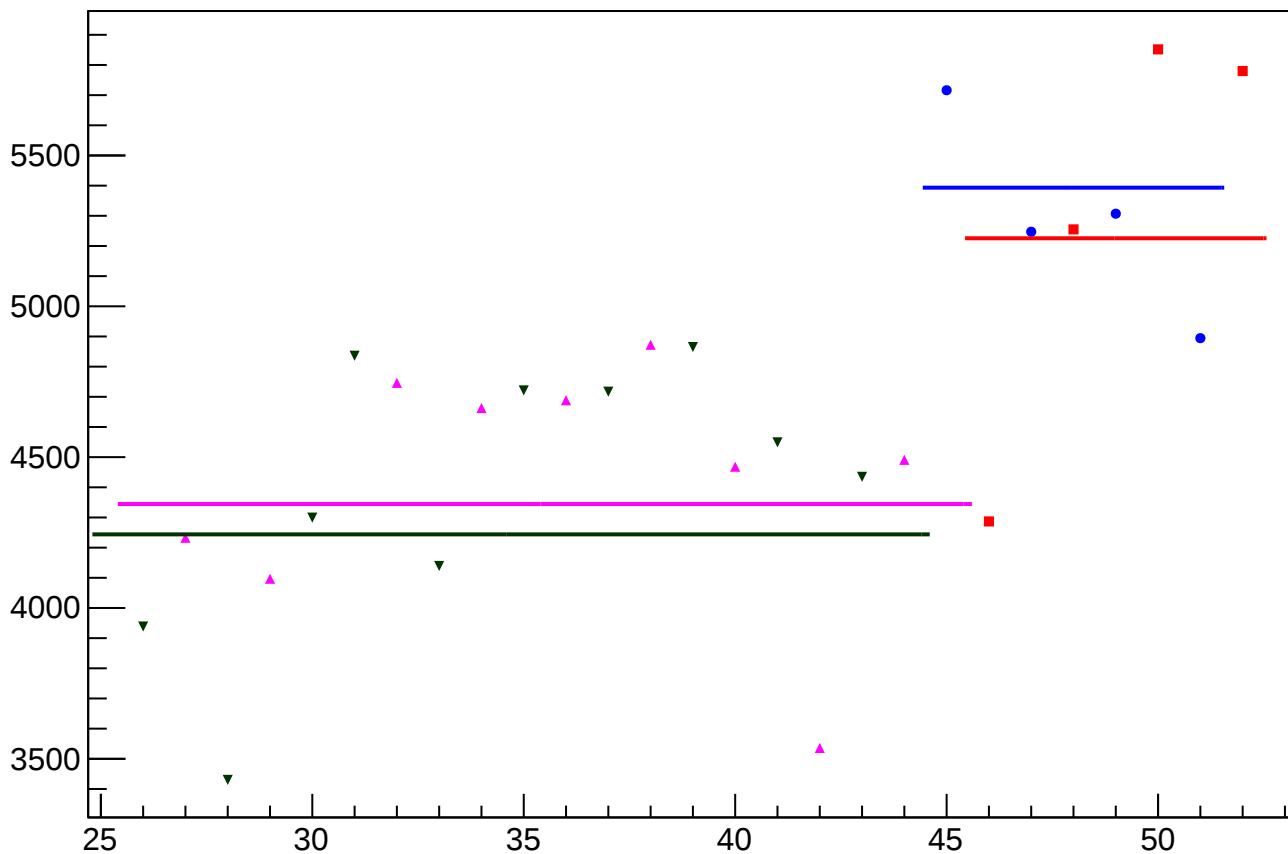
Right Out:  $-0.963 \pm 3.856$   $\chi^2/\text{NDF}: 3.2/3$

Left In:  $-0.134 \pm 1.850$   $\chi^2/\text{NDF}: 7.5/8$

$1.203 \pm 1.703$   $\chi^2/\text{NDF}: 14.3/13$

$-0.289 \pm 1.668$   $\chi^2/\text{NDF}: 10.7/12$

# diff\_bpm4eY\_rms vs slug



Right In: 5393.332+/-2.733  $\chi^2/\text{NDF}$ : 6160.6/3

Left Out: 4243.997+/-1.341  $\chi^2/\text{NDF}$ :134537.2/9

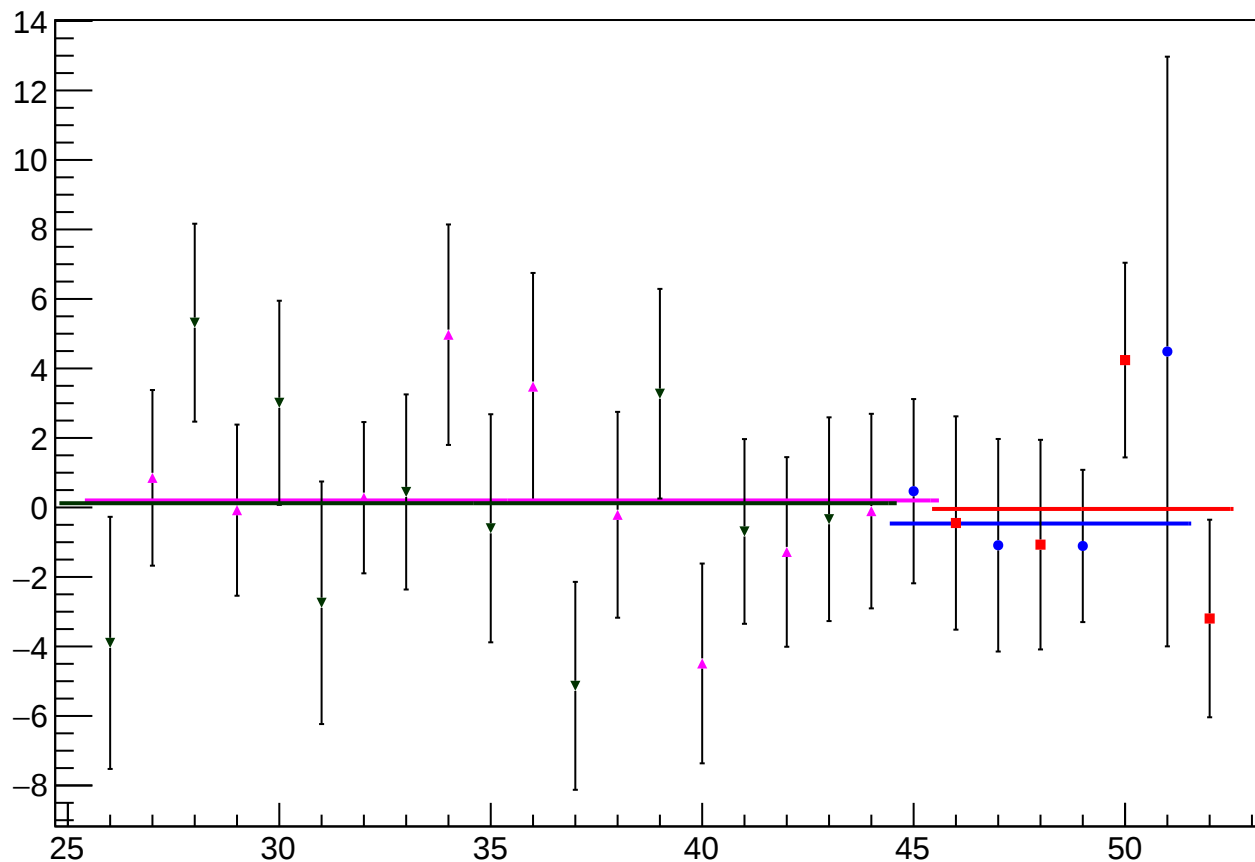
4467.016+/-1.204  $\chi^2/\text{NDF}$ : 283234.9/13

Right Out: 5225.520+/-2.726  $\chi^2/\text{NDF}$ : 57557.7/3

4509.414+/-1.179  $\chi^2/\text{NDF}$ : 236689.0/12

Left In: 4344.593+/-1.308  $\chi^2/\text{NDF}$ :94267.5/8

# diff\_bpm4acX\_mean vs slug



Right In:  $-0.463 \pm 1.456$   $\chi^2/\text{NDF}$ : 0.6/3

Left Out:  $0.122 \pm 0.955$   $\chi^2/\text{NDF}$ : 10.6/9

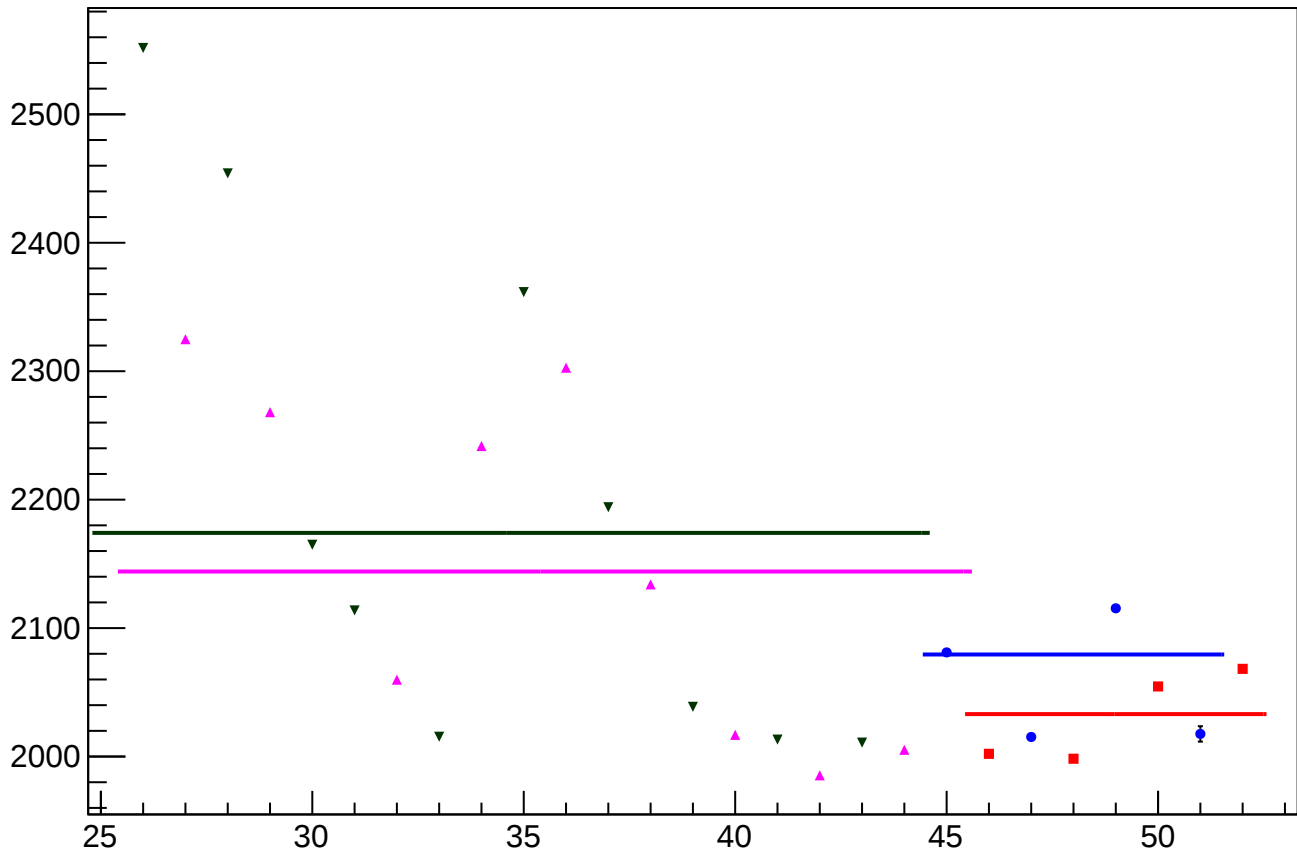
Right Out:  $-0.043 \pm 1.463$   $\chi^2/\text{NDF}$ : 3.7/3

Left In:  $0.202 \pm 0.904$   $\chi^2/\text{NDF}$ : 6.3/8

$-0.054 \pm 0.799$   $\chi^2/\text{NDF}$ : 11.3/13

$0.134 \pm 0.769$   $\chi^2/\text{NDF}$ : 10.1/12

# diff\_bpm4acX\_rms vs slug



Right In: 2079.457+/-1.030  $\chi^2/\text{NDF}$ : 1527.7/3

Left Out: 2174.130+/-0.675  $\chi^2/\text{NDF}$ : 72174.6/9

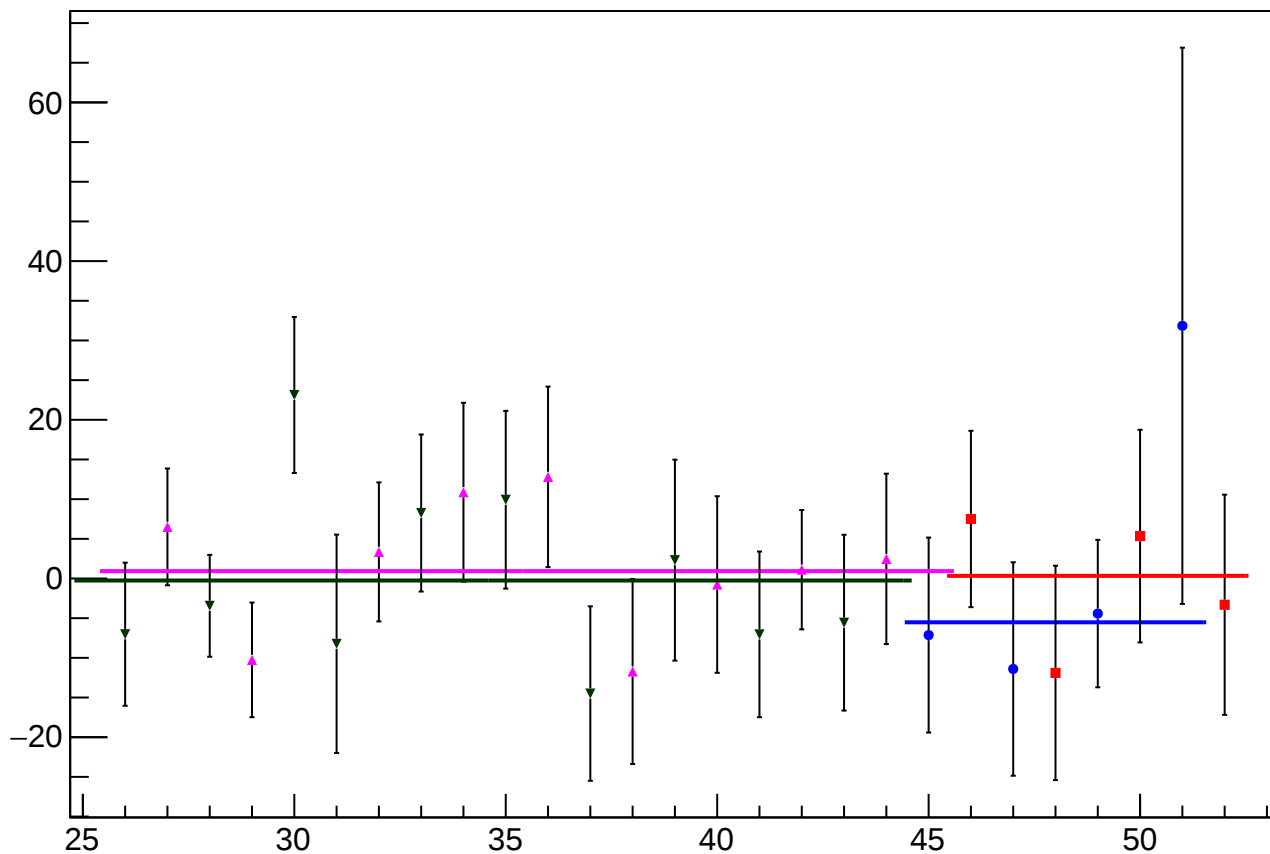
2145.666+/-0.565  $\chi^2/\text{NDF}$ : 79612.6/13

Right Out: 2033.044+/-1.034  $\chi^2/\text{NDF}$ : 893.8/3

2113.352+/-0.544  $\chi^2/\text{NDF}$ : 49764.2/12

Left In: 2144.053+/-0.640  $\chi^2/\text{NDF}$ : 40538.6/8

# diff\_bpm4acY\_mean vs slug



Right In:  $-5.520 \pm 6.383$   $\chi^2/\text{NDF}: 1.4/3$

Left Out:  $-0.253 \pm 3.128$   $\chi^2/\text{NDF}: 10.7/9$

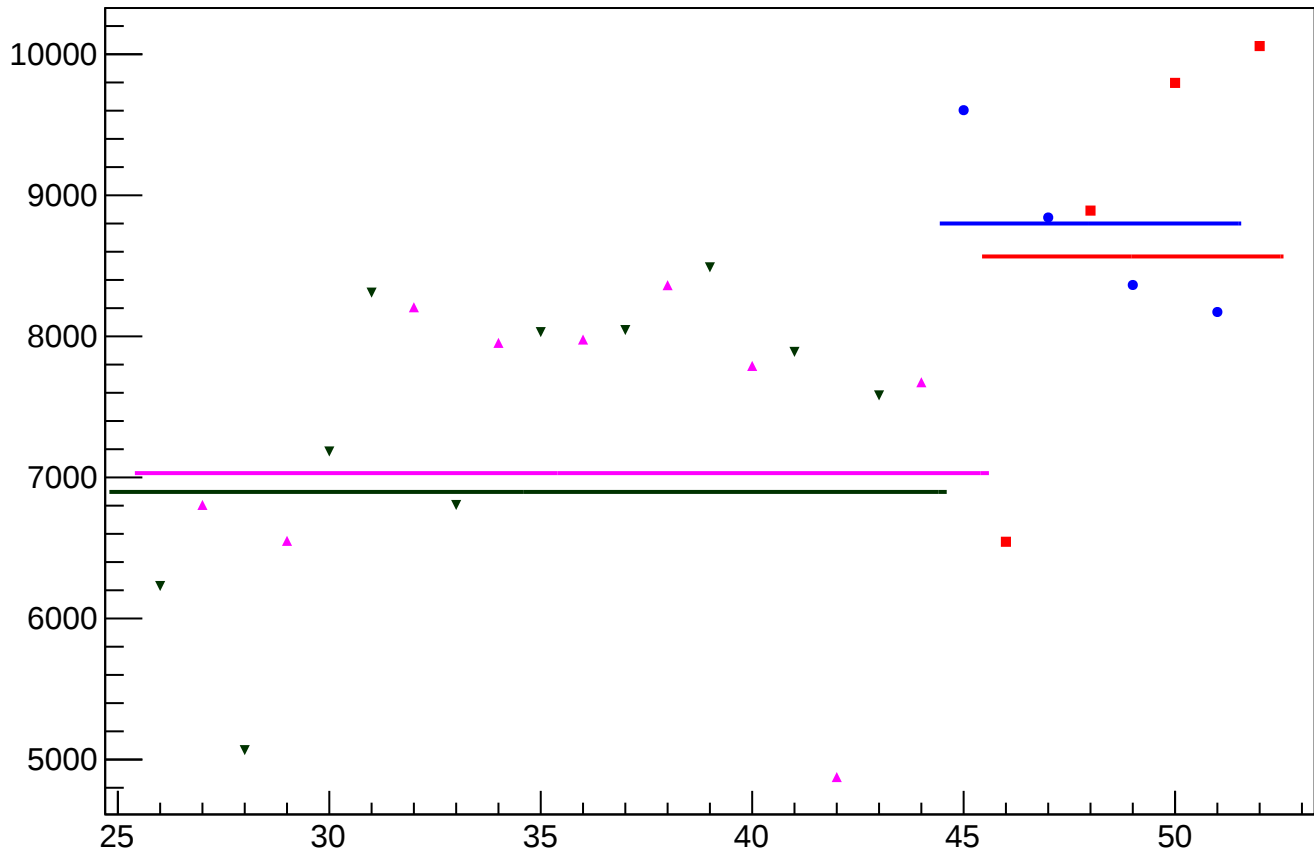
Right Out:  $0.336 \pm 6.409$   $\chi^2/\text{NDF}: 1.4/3$

Left In:  $0.933 \pm 3.043$   $\chi^2/\text{NDF}: 6.1/8$

$-1.273 \pm 2.809$   $\chi^2/\text{NDF}: 12.7/13$

$0.823 \pm 2.749$   $\chi^2/\text{NDF}: 7.6/12$

# diff\_bpm4acY\_rms vs slug



Right In: 8800.198 $\pm$ 4.513  $\chi^2$ /NDF: 13613.7/3

Left Out: 6897.291 $\pm$ 2.212  $\chi^2$ /NDF: 296077.9/9

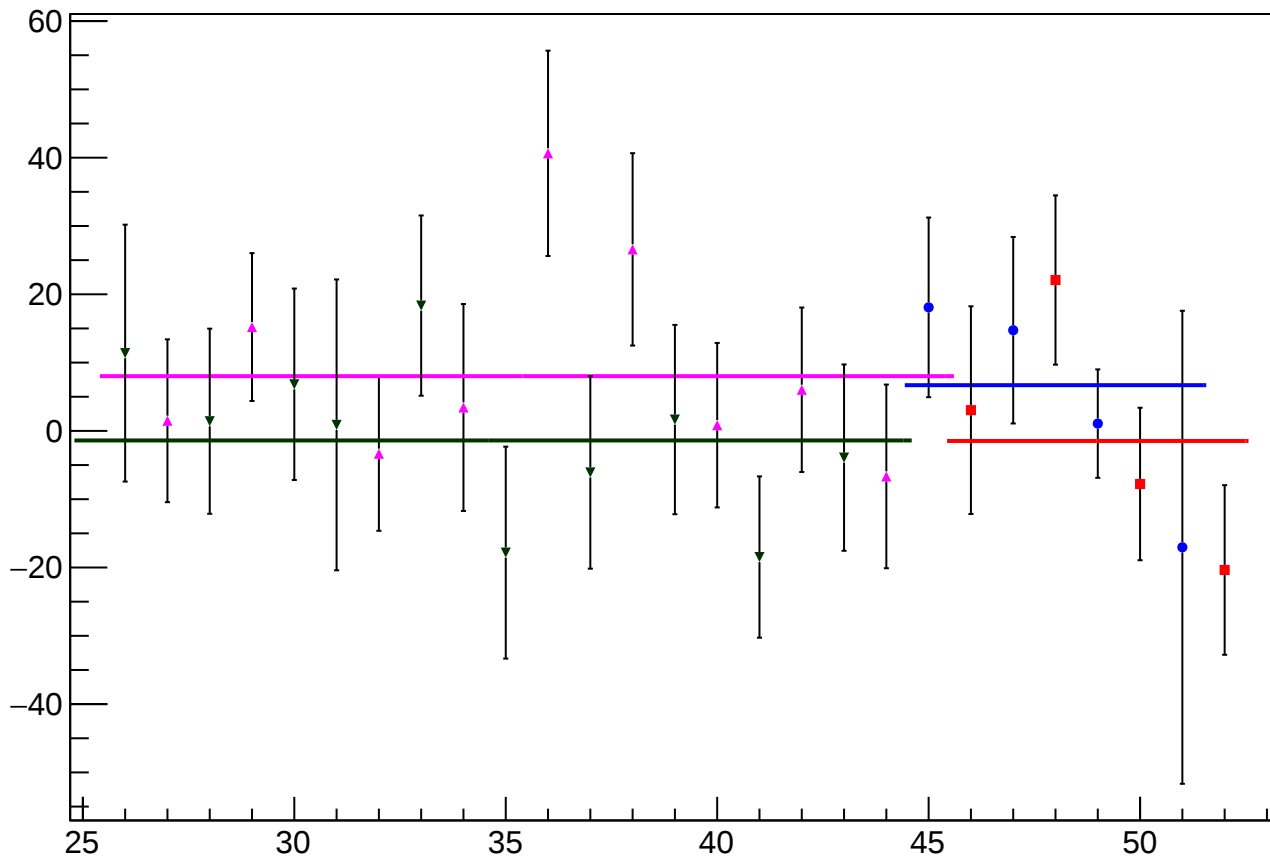
7265.805 $\pm$ 1.986  $\chi^2$ /NDF: 453024.1/13

Right Out: 8566.467 $\pm$ 4.532  $\chi^2$ /NDF: 107399.7/3

7313.034 $\pm$ 1.944  $\chi^2$ /NDF: 481839.1/12

Left In: 7030.553 $\pm$ 2.152  $\chi^2$ /NDF: 280714.3/8

# diff\_bpm4ecX\_mean vs slug



Right In:  $6.693 \pm 5.992$   $\chi^2/\text{NDF}: 2.1/3$

Left Out:  $-1.399 \pm 4.552$   $\chi^2/\text{NDF}: 6.5/9$

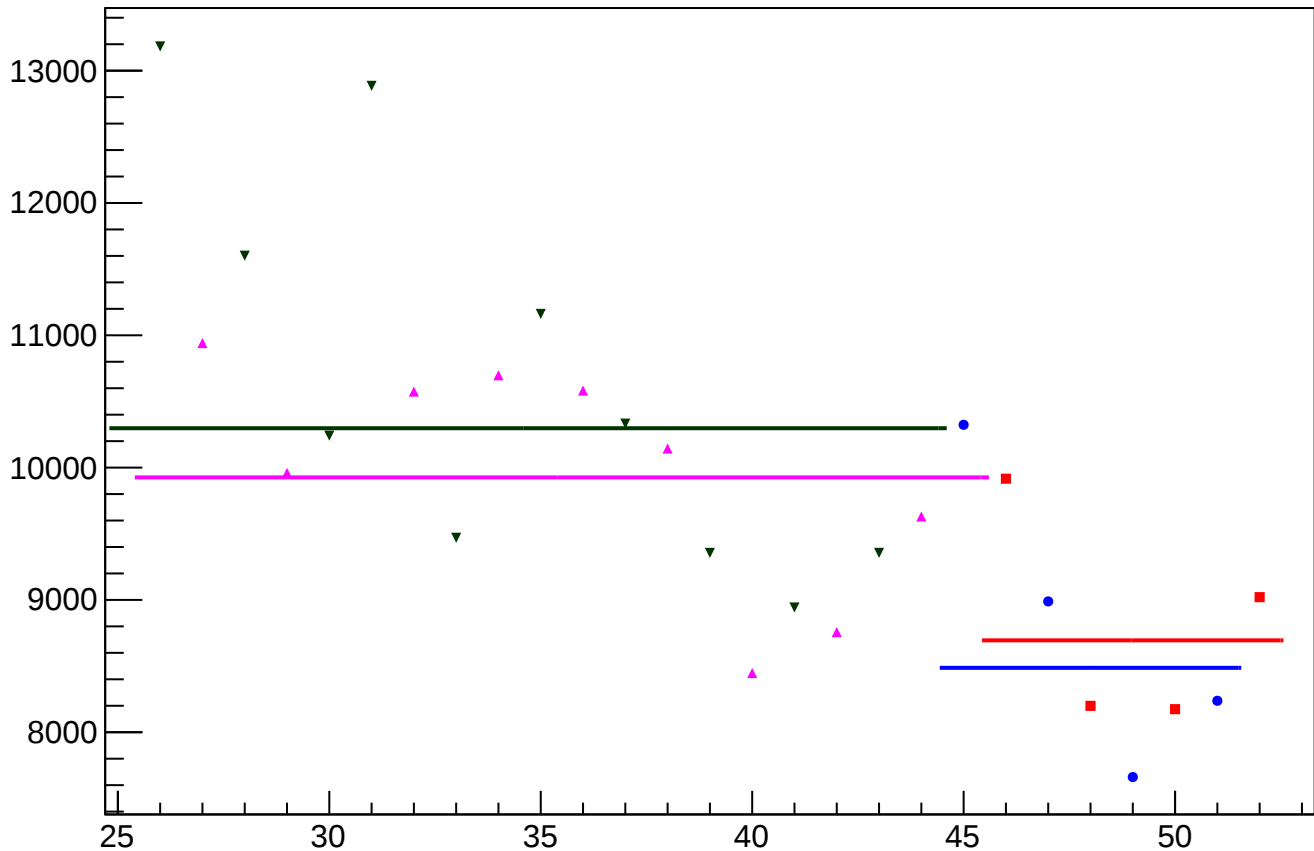
Right Out:  $-1.475 \pm 6.281$   $\chi^2/\text{NDF}: 6.3/3$

Left In:  $8.013 \pm 4.204$   $\chi^2/\text{NDF}: 9.9/8$

$1.562 \pm 3.625$   $\chi^2/\text{NDF}: 9.7/13$

$5.077 \pm 3.494$   $\chi^2/\text{NDF}: 17.8/12$

# diff\_bpm4ecX\_rms vs slug



Right In: 8486.880+/-4.237  $\chi^2/\text{NDF}$ : 63452.5/3

Left Out: 10297.699+/-3.219  $\chi^2/\text{NDF}$ :154377.9/9

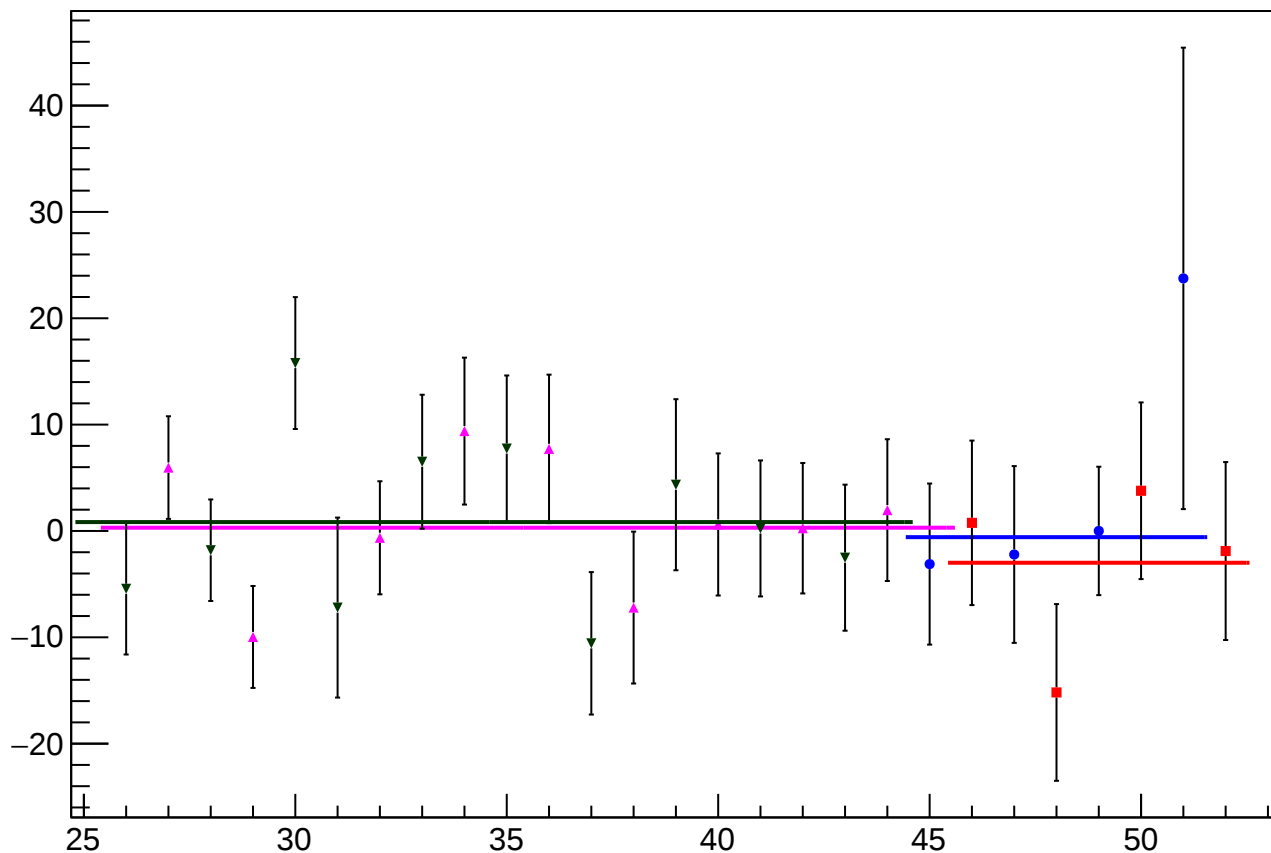
9635.041+/-2.563  $\chi^2/\text{NDF}$ : 333647.5/13

Right Out: 8694.478+/-4.441  $\chi^2/\text{NDF}$ : 21826.1/3

9544.999+/-2.470  $\chi^2/\text{NDF}$ : 155533.7/12

Left In: 9926.075+/-2.973  $\chi^2/\text{NDF}$ :80597.8/8

# diff\_bpm4ecY\_mean vs slug



Right In:  $-0.582 \pm 4.033$   $\chi^2/\text{NDF}$ : 1.4/3

Left Out:  $0.835 \pm 2.042$   $\chi^2/\text{NDF}$ : 13.2/9

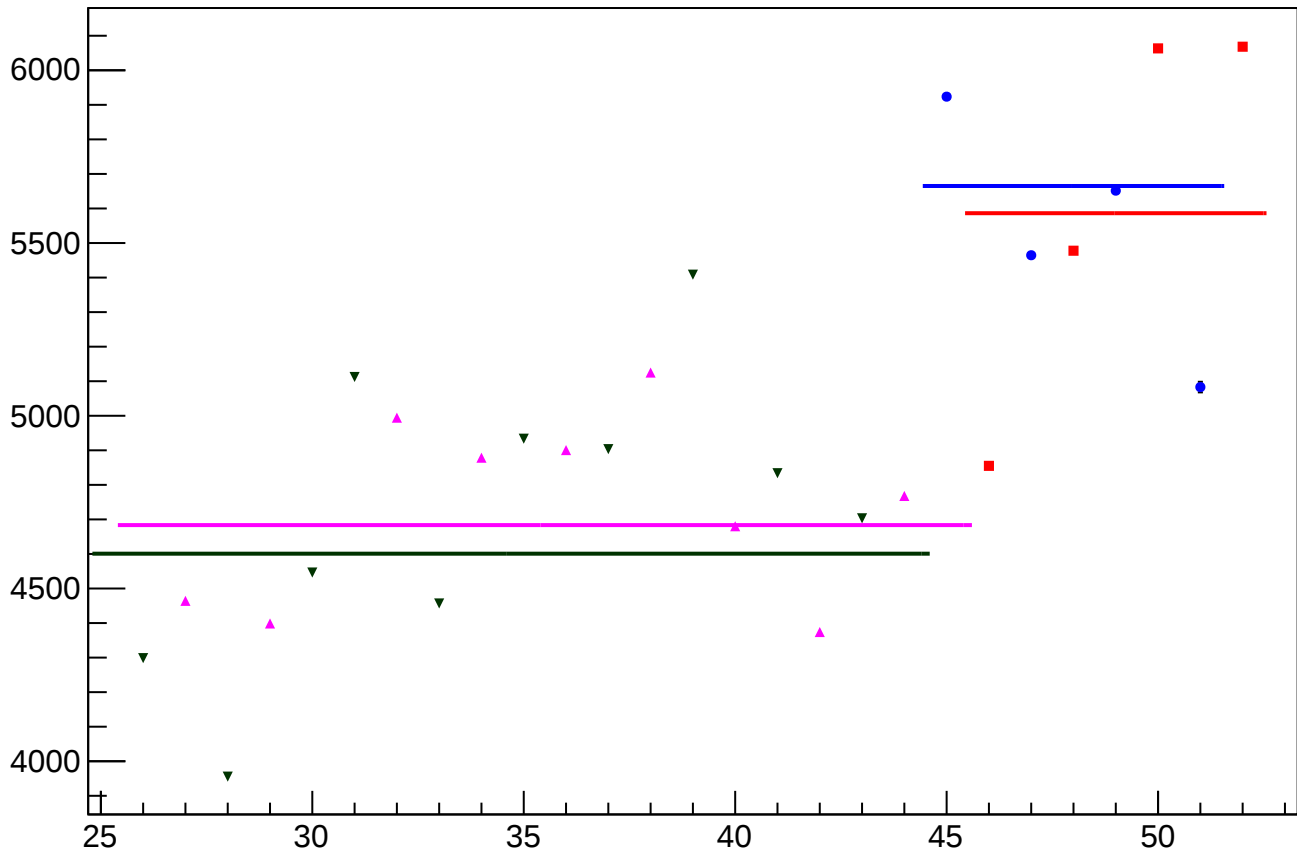
Right Out:  $-2.990 \pm 4.083$   $\chi^2/\text{NDF}$ : 3.1/3

Left In:  $0.306 \pm 1.982$   $\chi^2/\text{NDF}$ : 10.0/8

$0.546 \pm 1.822$   $\chi^2/\text{NDF}$ : 14.7/13

$-0.323 \pm 1.783$   $\chi^2/\text{NDF}$ : 13.6/12

# diff\_bpm4ecY\_rms vs slug



Right In:  $5665.100 \pm 2.852$   $\chi^2/\text{NDF}$ : 4944.5/3

Left Out:  $4600.808 \pm 1.444$   $\chi^2/\text{NDF}$ : 81875.8/9

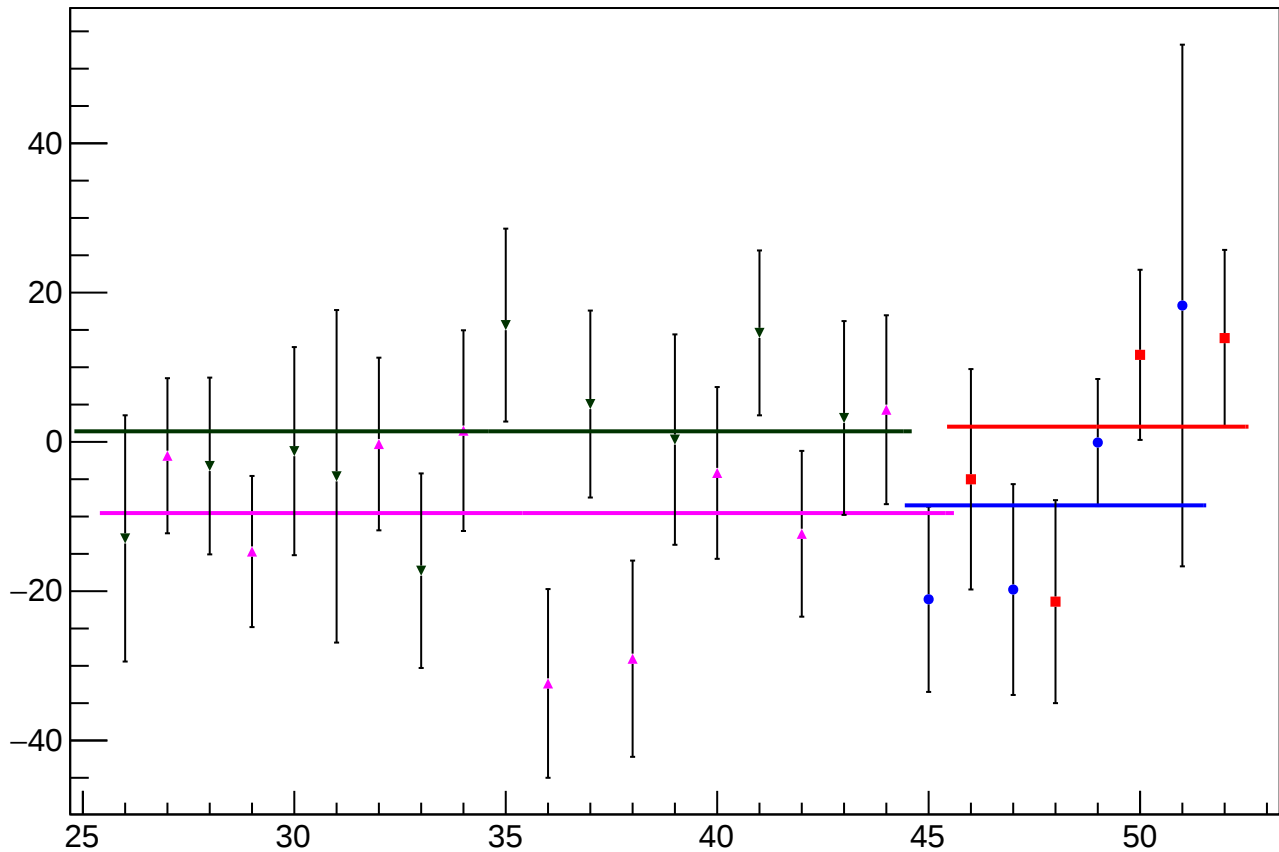
Right Out:  $5586.329 \pm 2.887$   $\chi^2/\text{NDF}$ : 31458.3/3

Left In:  $4683.543 \pm 1.402$   $\chi^2/\text{NDF}$ : 34622.6/8

$4817.968 \pm 1.288$   $\chi^2/\text{NDF}$ : 197674.9/13

$4855.775 \pm 1.261$   $\chi^2/\text{NDF}$ : 145207.2/12

# diff\_bpm1X\_mean vs slug



Right In:  $-8.502 \pm 6.186$   $\chi^2/\text{NDF}$ : 3.2/3

Left Out:  $1.417 \pm 4.249$   $\chi^2/\text{NDF}$ : 5.8/9

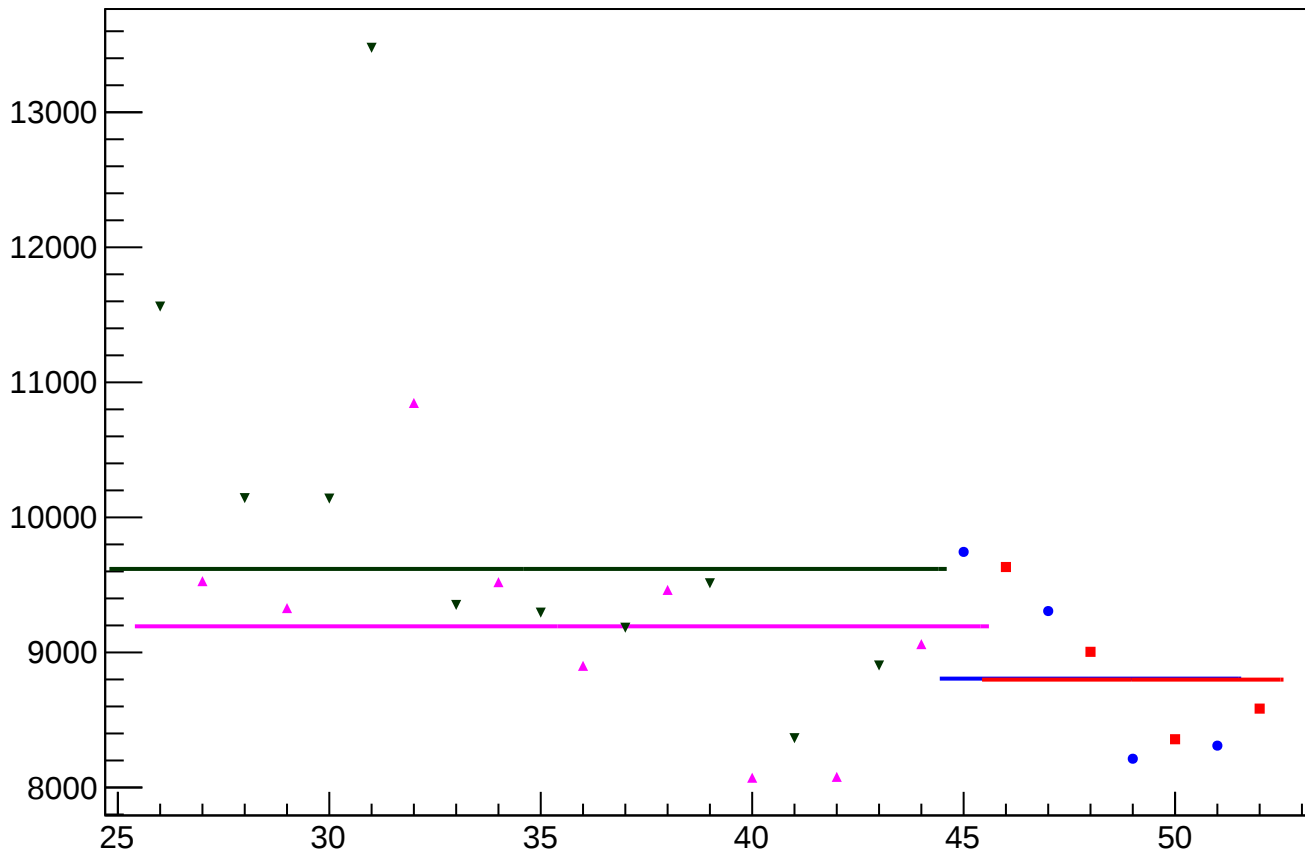
Right Out:  $2.041 \pm 6.342$   $\chi^2/\text{NDF}$ : 4.9/3

Left In:  $-9.535 \pm 3.893$   $\chi^2/\text{NDF}$ : 9.1/8

$-1.763 \pm 3.502$   $\chi^2/\text{NDF}$ : 10.8/13

$-6.367 \pm 3.318$   $\chi^2/\text{NDF}$ : 16.4/12

# diff\_bpm1X\_rms vs slug



Right In: 8806.163+/-4.374  $\chi^2/\text{NDF}$ : 24062.3/3

Left Out: 9618.418+/-3.005  $\chi^2/\text{NDF}$ :130935.9/9

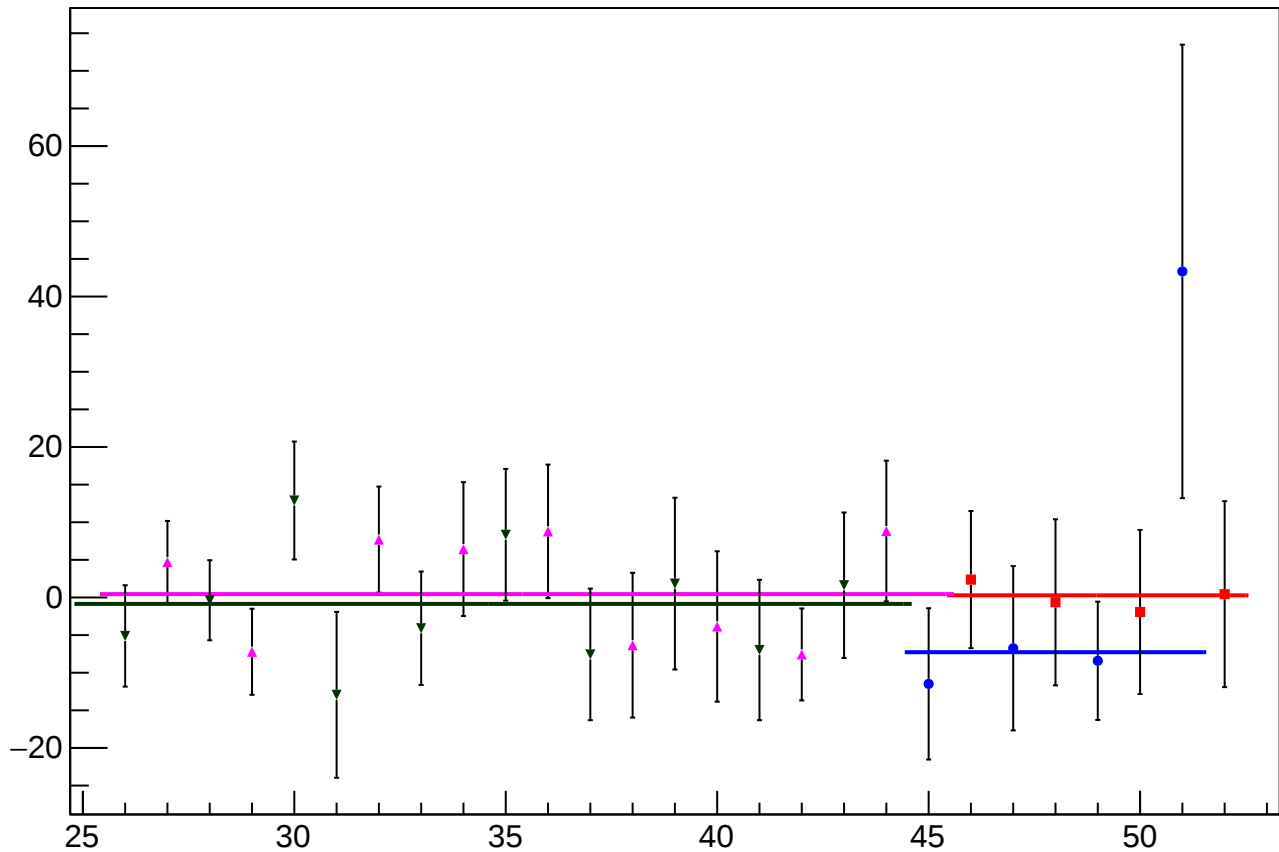
Right Out: 8798.800+/-4.485  $\chi^2/\text{NDF}$ : 10498.9/3

Left In: 9193.401+/-2.753  $\chi^2/\text{NDF}$ :85779.3/8

9358.033+/-2.477  $\chi^2/\text{NDF}$ : 178427.2/13

9085.407+/-2.346  $\chi^2/\text{NDF}$ : 101901.8/12

# diff\_bpm1Y\_mean vs slug



Right In:  $-7.274 \pm 5.304$   $\chi^2/\text{NDF}: 3.0/3$

Left Out:  $-0.856 \pm 2.537$   $\chi^2/\text{NDF}: 7.1/9$

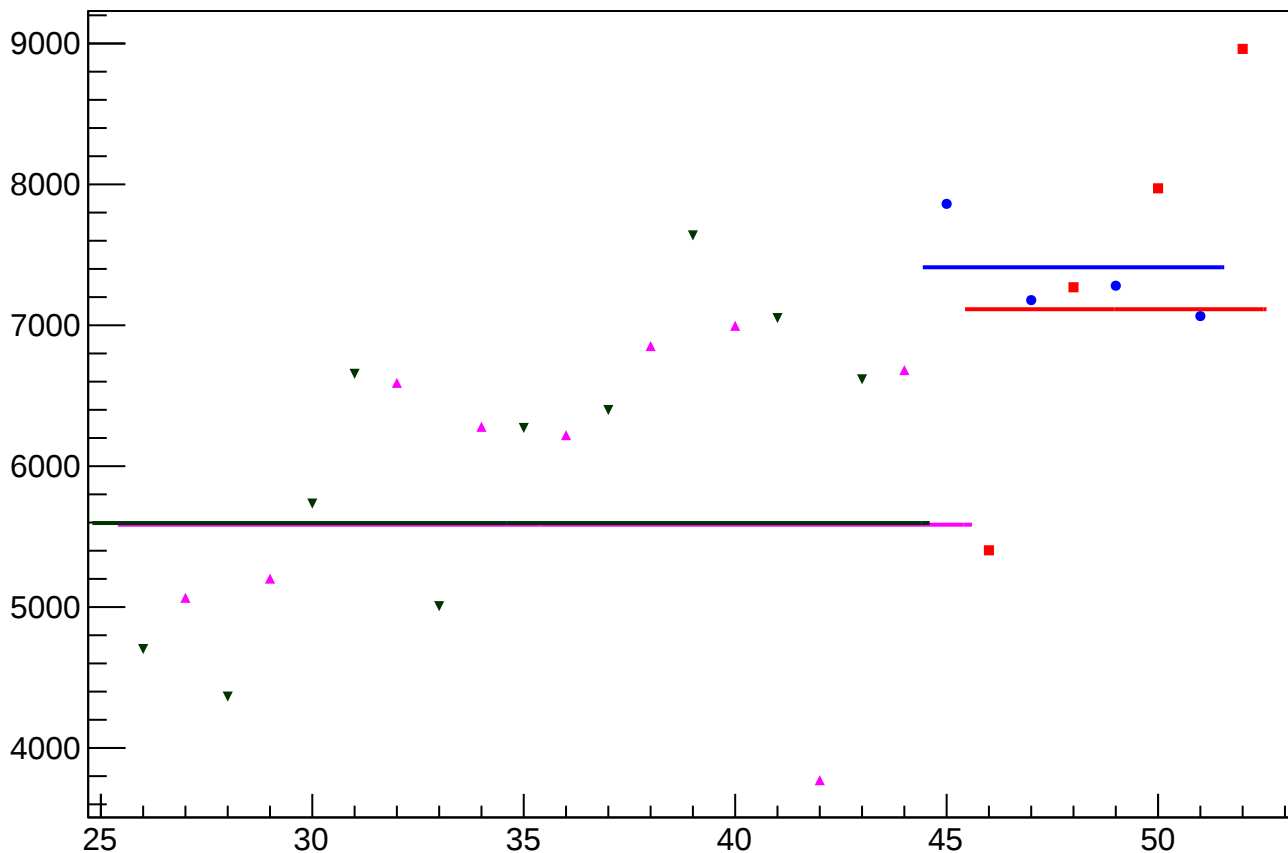
Right Out:  $0.286 \pm 5.330$   $\chi^2/\text{NDF}: 0.1/3$

Left In:  $0.448 \pm 2.437$   $\chi^2/\text{NDF}: 8.0/8$

$-2.051 \pm 2.289$   $\chi^2/\text{NDF}: 11.3/13$

$0.420 \pm 2.217$   $\chi^2/\text{NDF}: 8.1/12$

# diff\_bpm1Y\_rms vs slug



Right In: 7411.690+/-3.750  $\chi^2/\text{NDF}$ : 5736.7/3

Left Out: 5596.473+/-1.794  $\chi^2/\text{NDF}$ : 337129.9/9

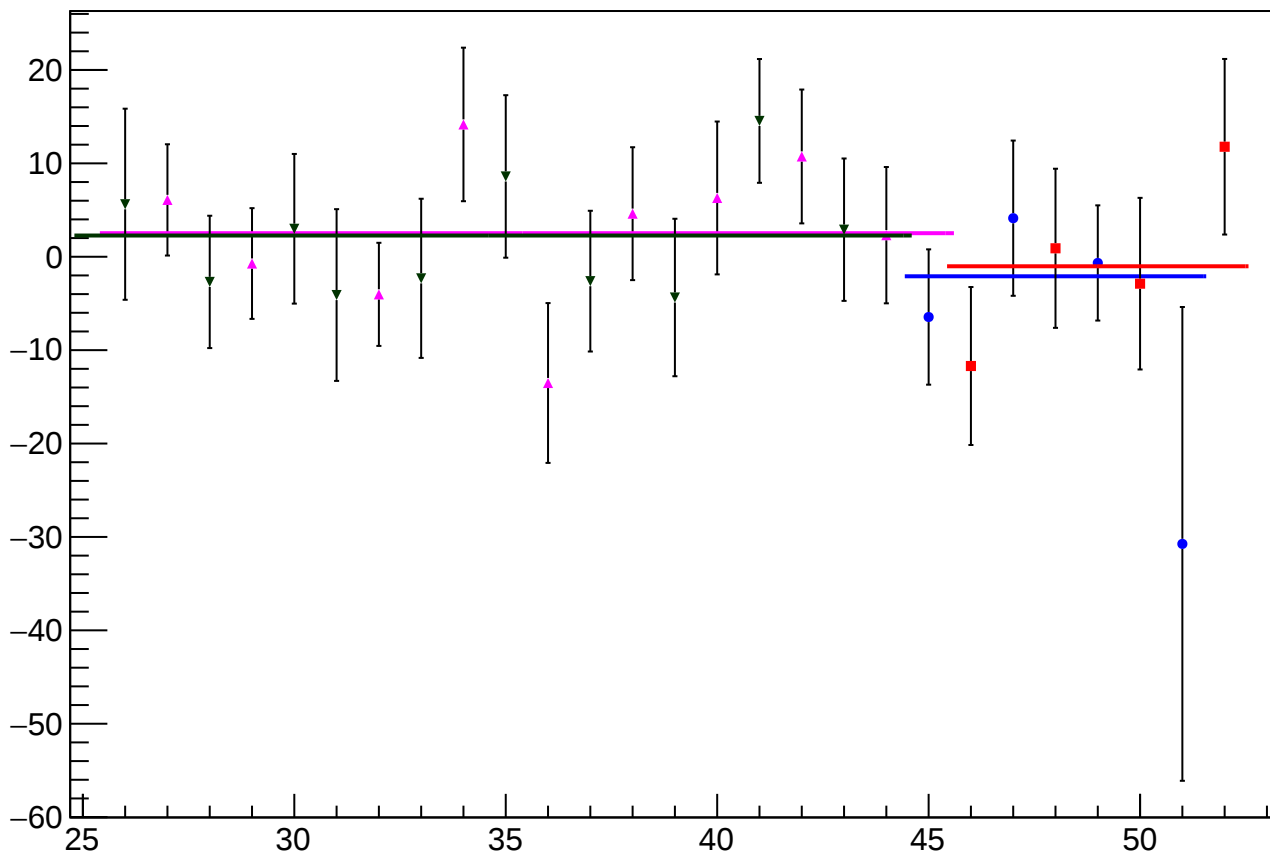
Right Out: 7114.059+/-3.769  $\chi^2/\text{NDF}$ : 127943.9/3

Left In: 5584.691+/-1.723  $\chi^2/\text{NDF}$ : 368292.2/8

5934.477+/-1.618  $\chi^2/\text{NDF}$ : 533501.2/13

5849.153+/-1.567  $\chi^2/\text{NDF}$ : 632410.4/12

# diff\_bpm11X\_mean vs slug



Right In:  $-2.092 \pm 4.037$   $\chi^2/\text{NDF}$ : 2.3/3

Left Out:  $2.274 \pm 2.536$   $\chi^2/\text{NDF}$ : 6.4/9

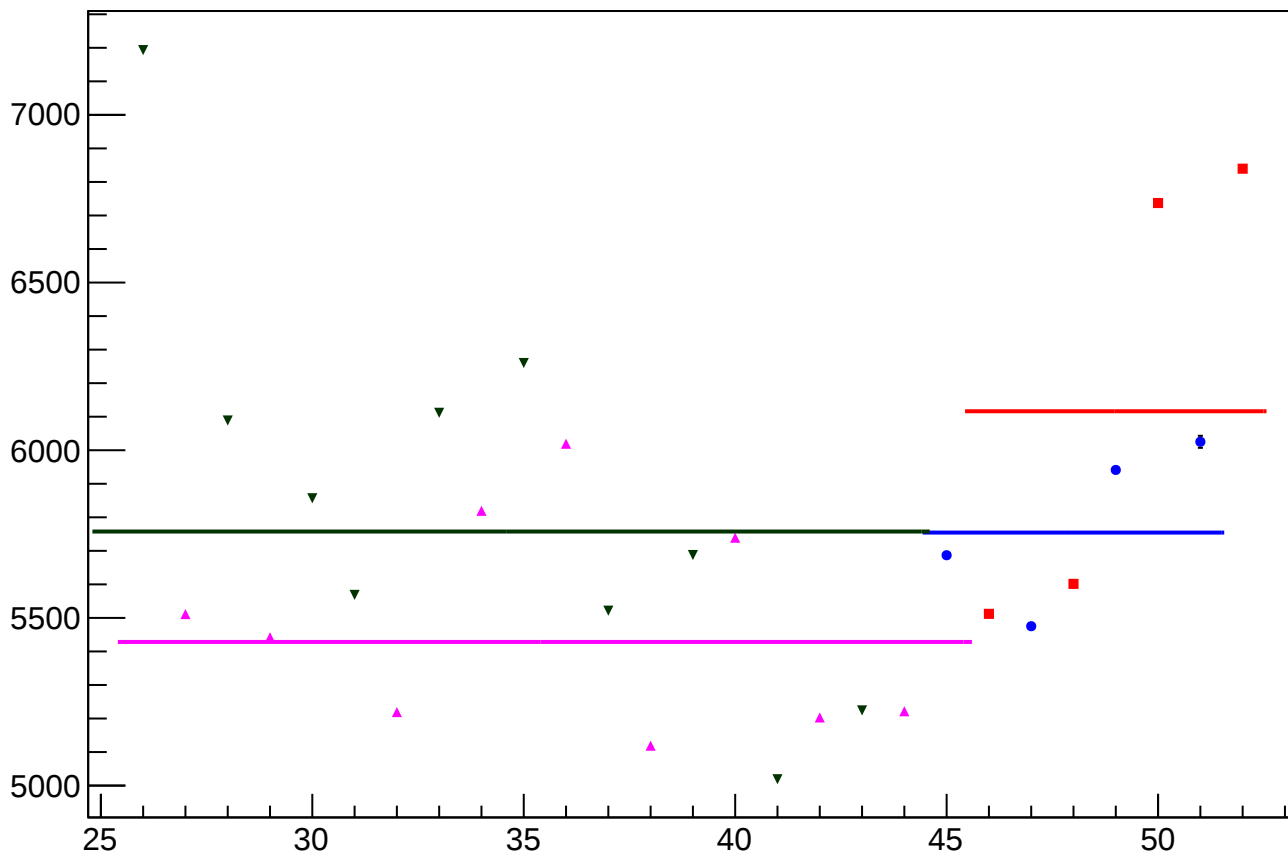
Right Out:  $-1.020 \pm 4.431$   $\chi^2/\text{NDF}$ : 3.5/3

Left In:  $2.523 \pm 2.289$   $\chi^2/\text{NDF}$ : 9.2/8

$1.039 \pm 2.147$   $\chi^2/\text{NDF}$ : 9.5/13

$1.777 \pm 2.034$   $\chi^2/\text{NDF}$ : 13.2/12

diff\_bpm11X\_rms vs slug



Right In: 5754.480+/-2.854  $\chi^2/\text{NDF}$ : 4493.3/3

Left Out: 5757.593+/-1.793  $\chi^2/\text{NDF}$ : 91757.3/9

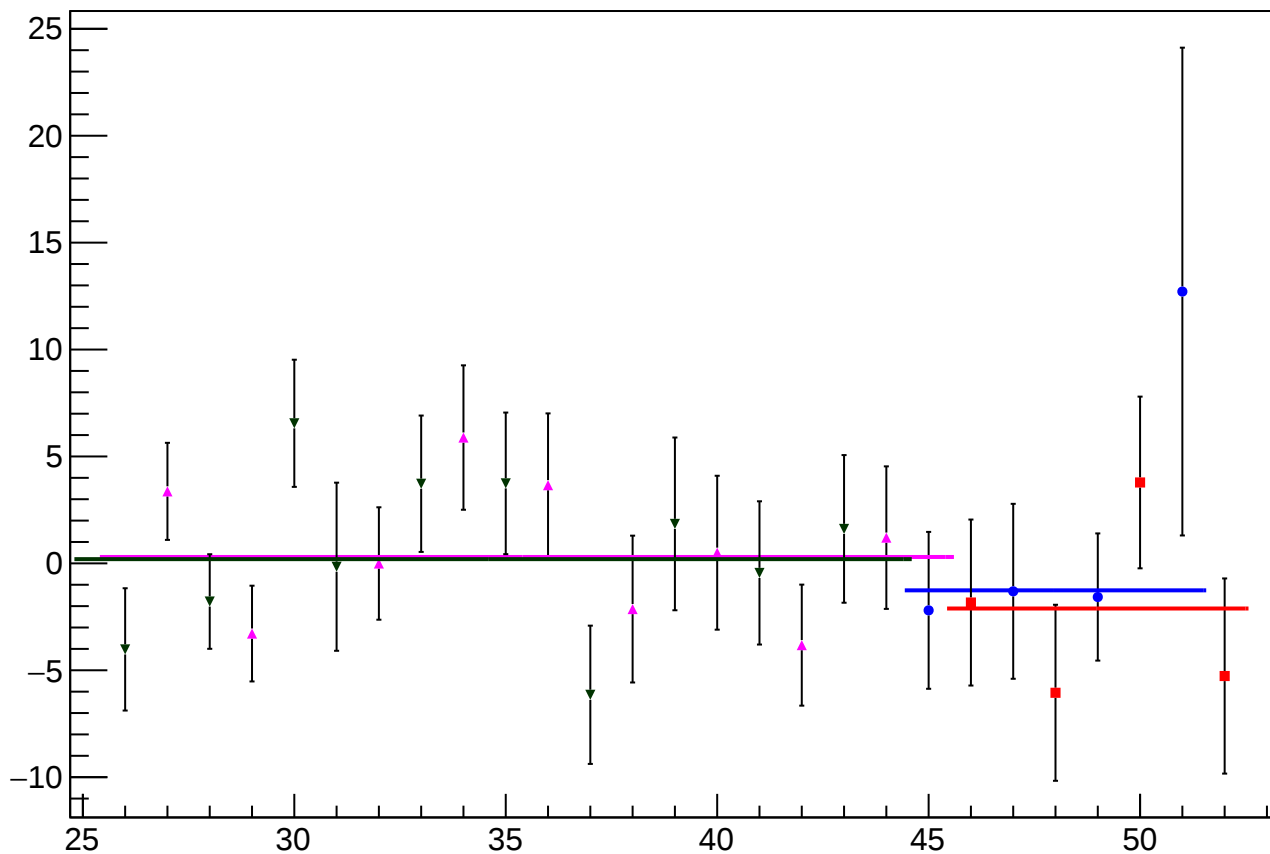
Right Out: 6116.260+/-3.133  $\chi^2/\text{NDF}$ : 38481.7/3

Left In: 5428.326+/-1.619  $\chi^2/\text{NDF}$ : 27585.4/8

5756.712+/-1.518  $\chi^2/\text{NDF}$ : 96251.5/13

5573.226+/-1.438  $\chi^2/\text{NDF}$ : 104114.7/12

# diff\_bpm11Y\_mean vs slug



Right In:  $-1.262 \pm 1.981$   $\chi^2/\text{NDF}: 1.6/3$

Left Out:  $0.198 \pm 0.988$   $\chi^2/\text{NDF}: 14.1/9$

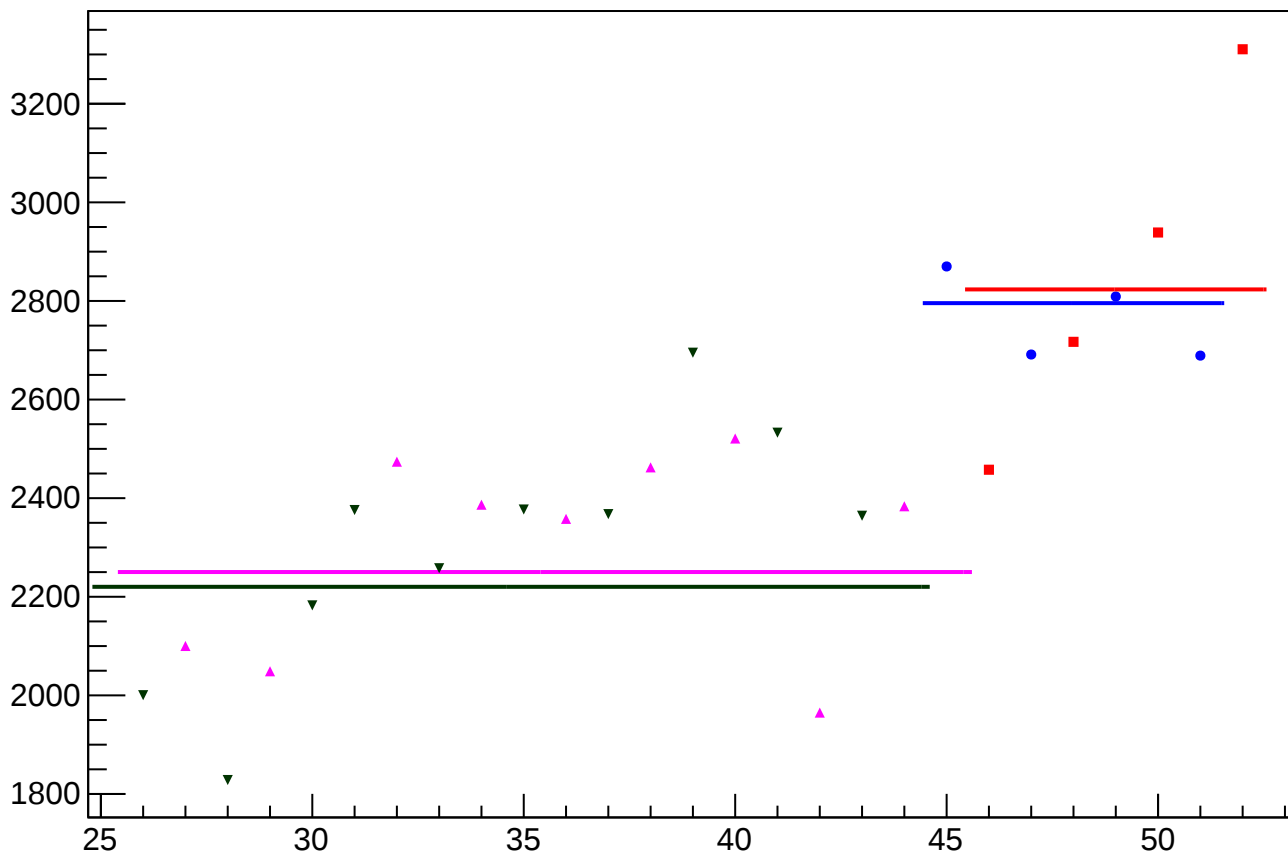
Right Out:  $-2.111 \pm 2.061$   $\chi^2/\text{NDF}: 3.6/3$

Left In:  $0.299 \pm 0.957$   $\chi^2/\text{NDF}: 10.8/8$

$-0.093 \pm 0.884$   $\chi^2/\text{NDF}: 16.2/13$

$-0.129 \pm 0.868$   $\chi^2/\text{NDF}: 15.5/12$

# diff\_bpm11Y\_rms vs slug



Right In: 2795.568+/-1.401  $\chi^2/\text{NDF}$ : 2335.2/3

Left Out: 2220.193+/-0.699  $\chi^2/\text{NDF}$ :135533.9/9

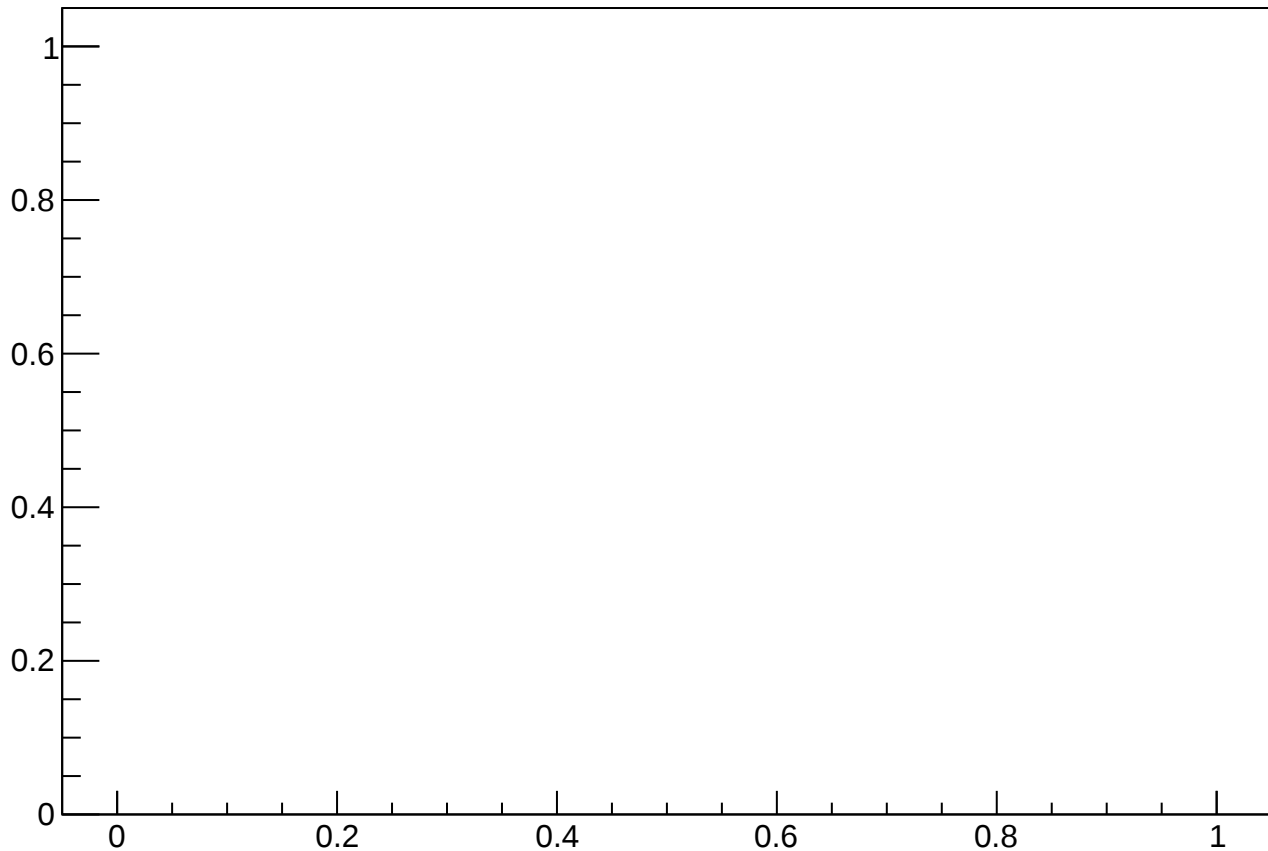
Right Out: 2823.409+/-1.457  $\chi^2/\text{NDF}$ : 43527.5/3

Left In: 2250.180+/-0.677  $\chi^2/\text{NDF}$ :87193.5/8

2334.833+/-0.625  $\chi^2/\text{NDF}$ : 272951.0/13

2351.880+/-0.614  $\chi^2/\text{NDF}$ : 257986.2/12

diff\_bpm14X\_mean vs slug



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

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

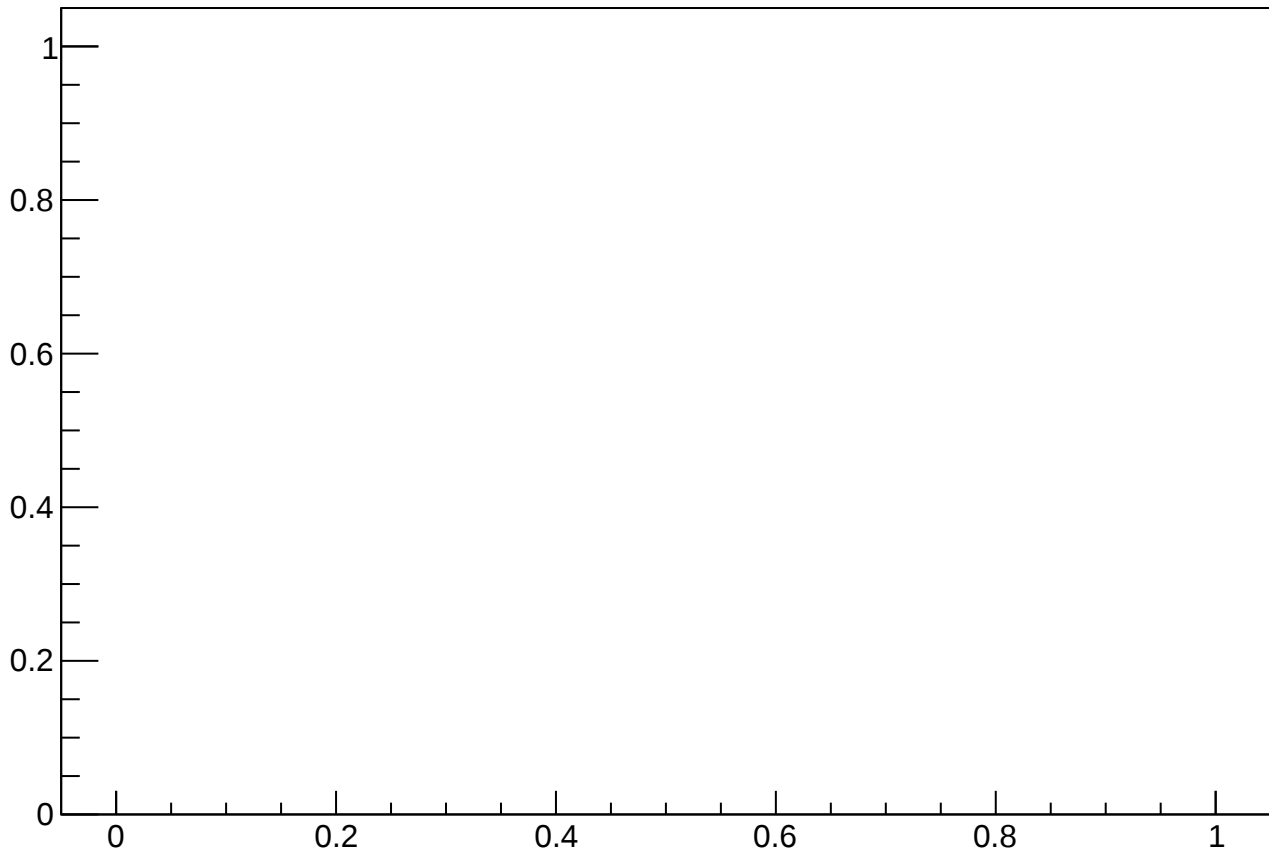
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# diff\_bpm14X\_rms vs slug



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

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

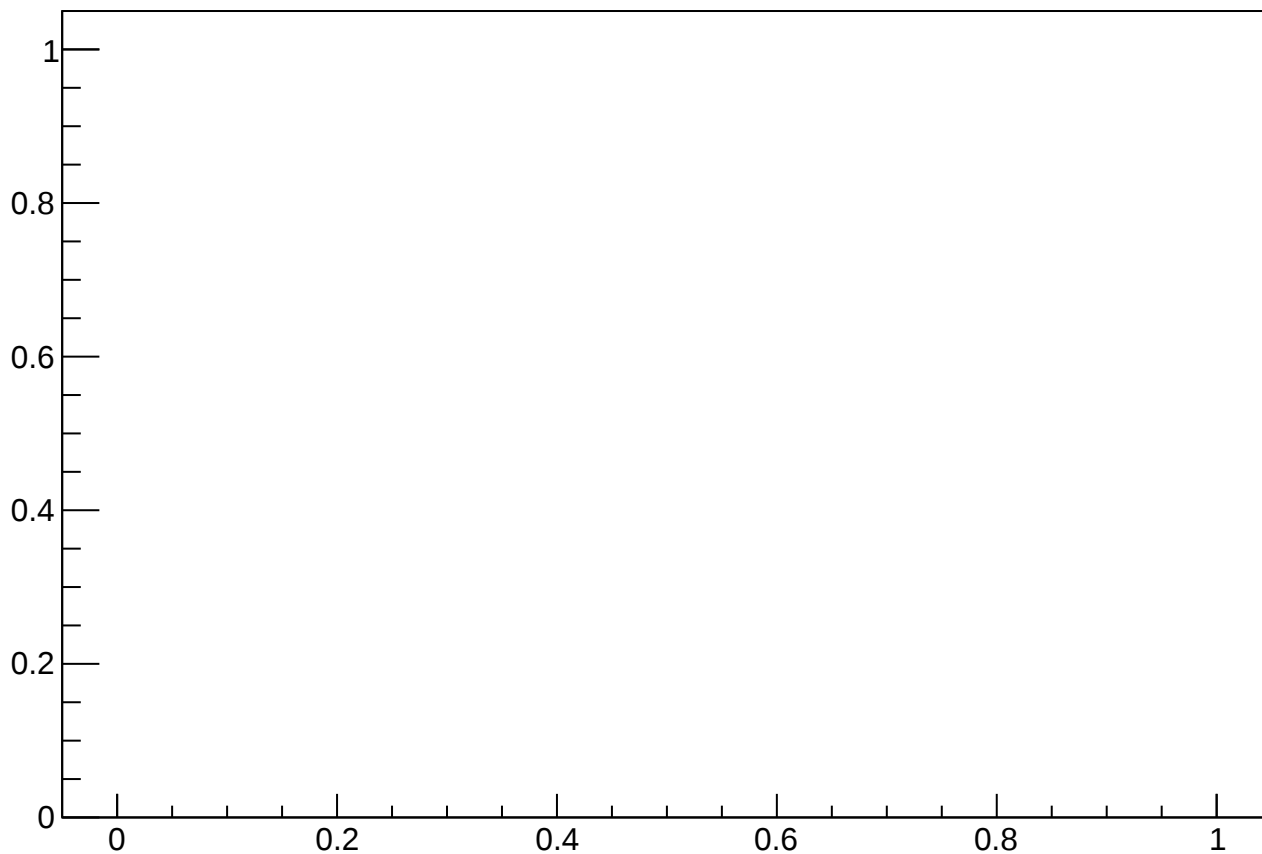
Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

diff\_bpm14Y\_mean vs slug



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

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

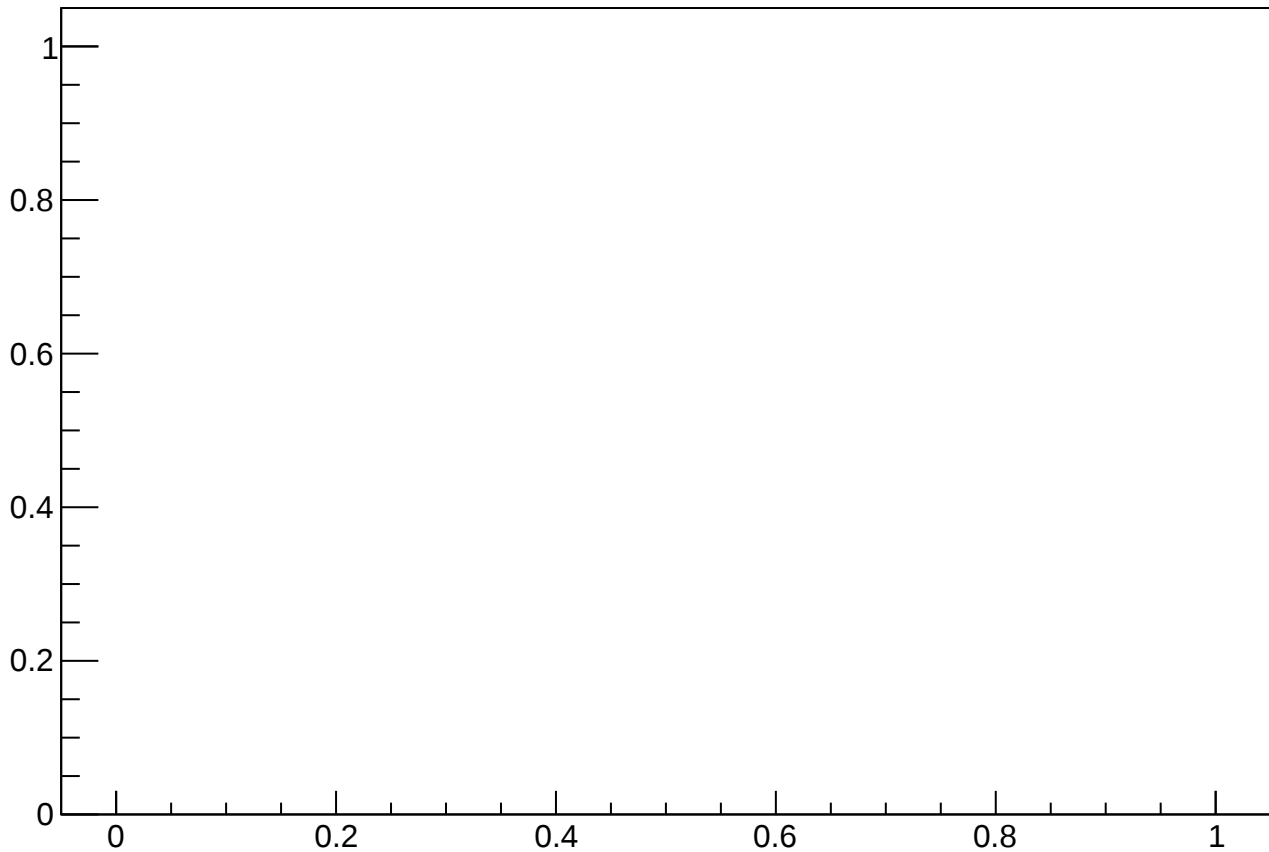
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# diff\_bpm14Y\_rms vs slug



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

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

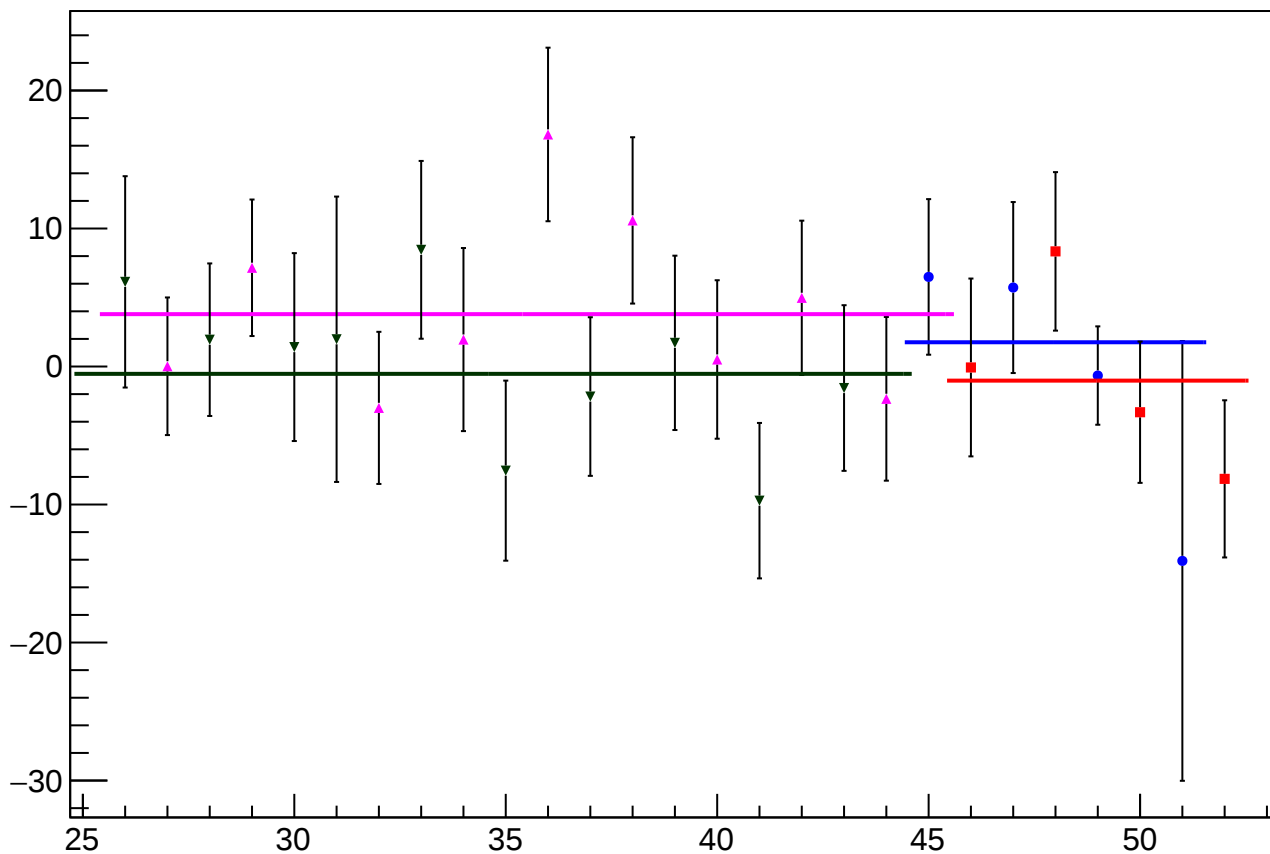
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# diff\_bpm16X\_mean vs slug



Right In:  $1.757 \pm 2.671$   $\chi^2/\text{NDF}: 2.6/3$

Left Out:  $-0.532 \pm 2.029$   $\chi^2/\text{NDF}: 7.1/9$

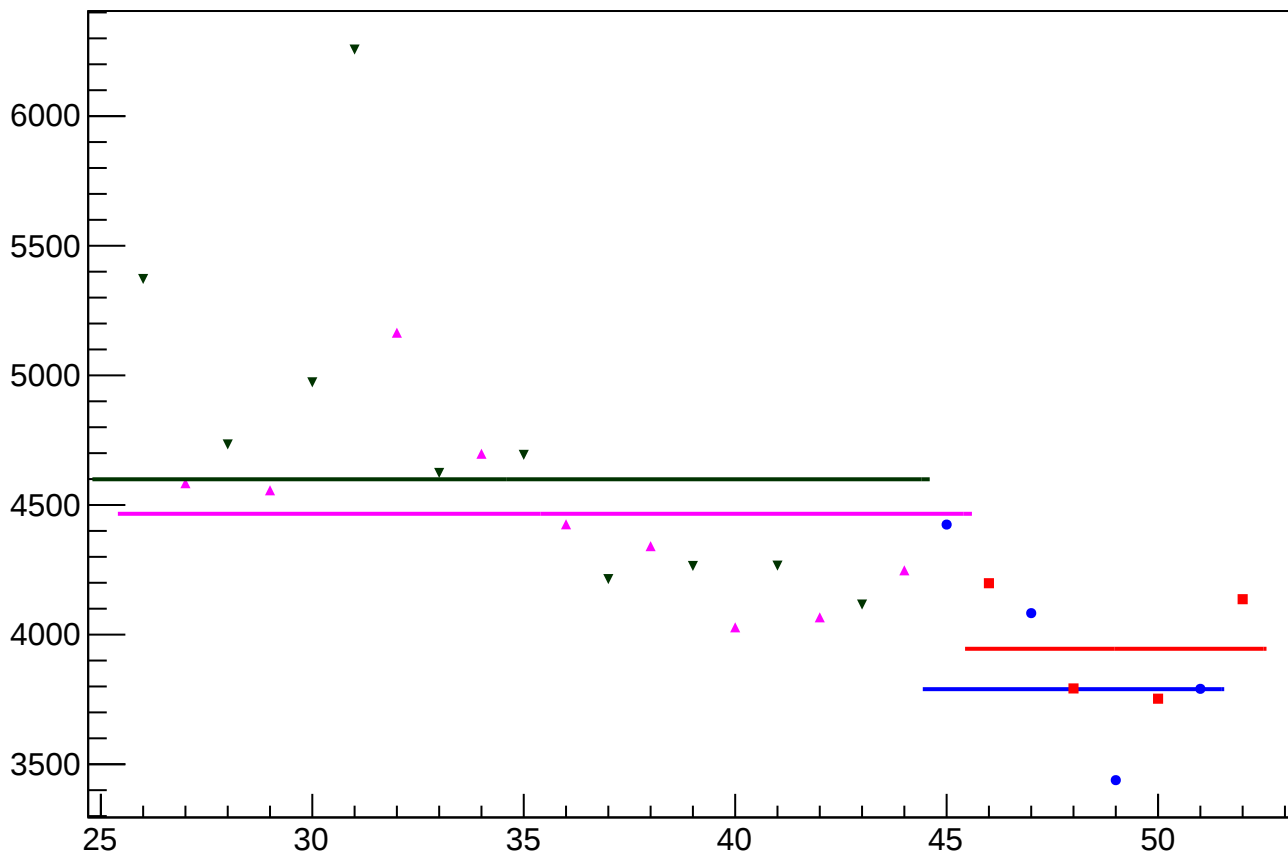
Right Out:  $-1.022 \pm 2.846$   $\chi^2/\text{NDF}: 4.4/3$

Left In:  $3.795 \pm 1.889$   $\chi^2/\text{NDF}: 9.6/8$

$0.306 \pm 1.616$   $\chi^2/\text{NDF}: 10.1/13$

$2.322 \pm 1.574$   $\chi^2/\text{NDF}: 16.1/12$

# diff\_bpm16X\_rms vs slug



Right In: 3789.604+/-1.889  $\chi^2/\text{NDF}$ : 49246.2/3

Left Out: 4599.203+/-1.435  $\chi^2/\text{NDF}$ : 113974.5/9

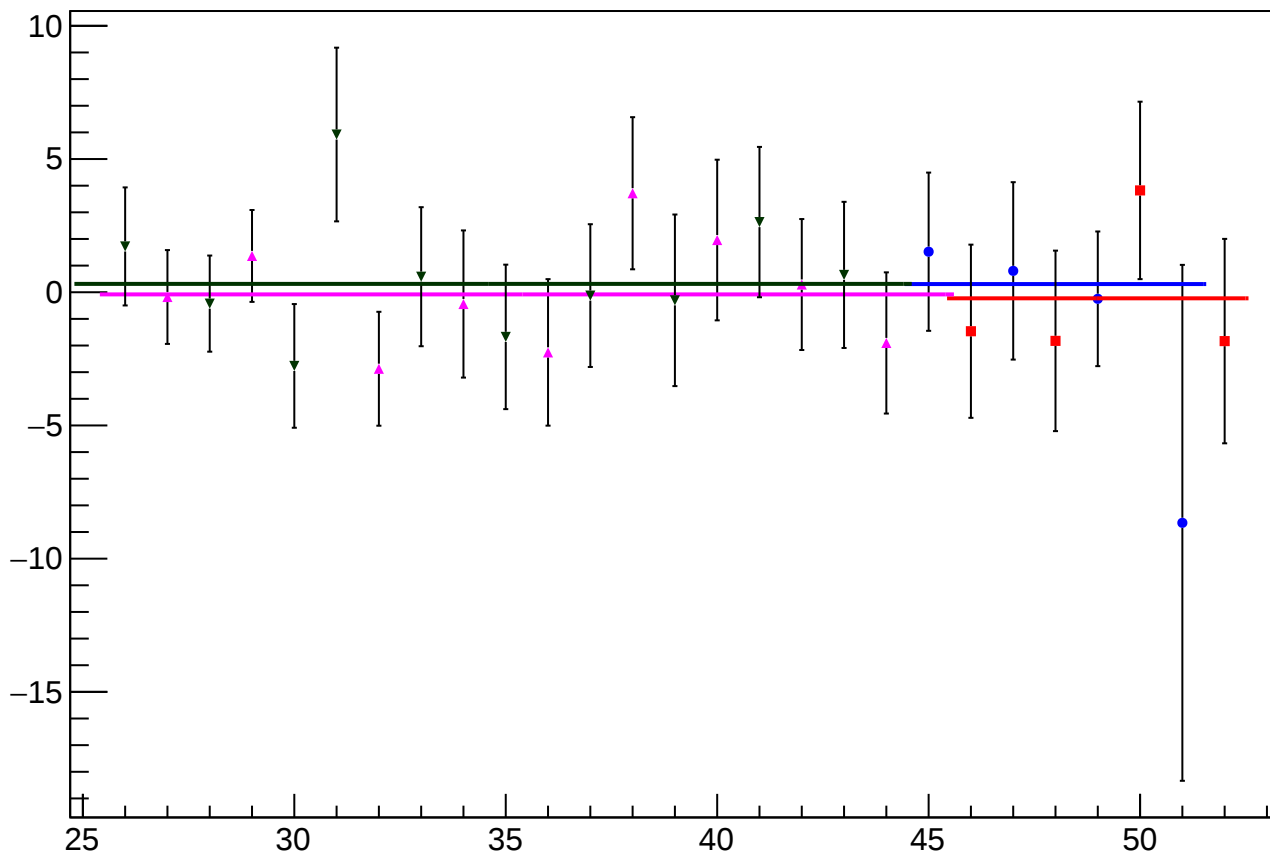
Right Out: 3945.381+/-2.013  $\chi^2/\text{NDF}$ : 9587.5/3

Left In: 4466.079+/-1.336  $\chi^2/\text{NDF}$ : 61840.0/8

4302.985+/-1.142  $\chi^2/\text{NDF}$ : 279750.0/13

4306.899+/-1.113  $\chi^2/\text{NDF}$ : 117896.7/12

# diff\_bpm16Y\_mean vs slug



Right In:  $0.307 \pm 1.642$   $\chi^2/\text{NDF}$ : 1.1/3

Left Out:  $0.314 \pm 0.799$   $\chi^2/\text{NDF}$ : 6.6/9

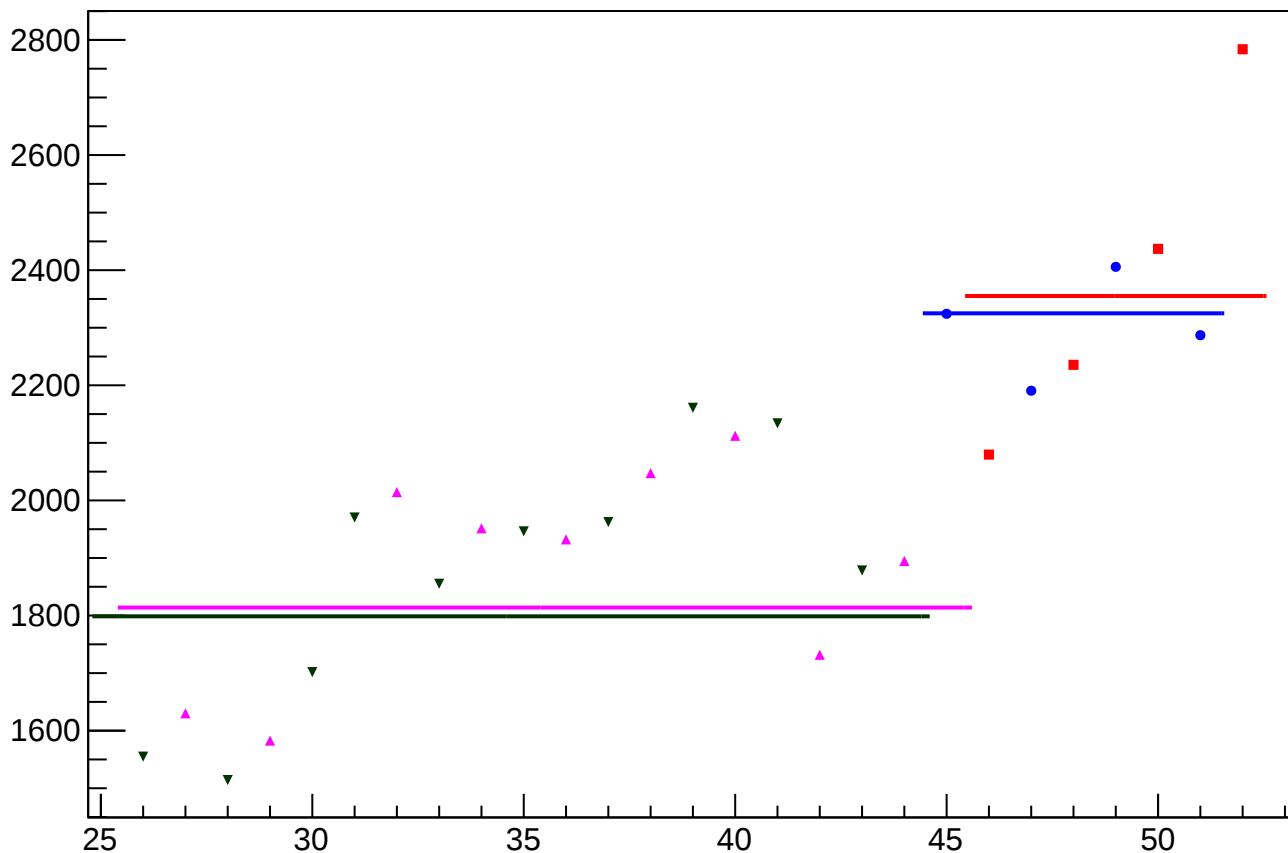
Right Out:  $-0.228 \pm 1.715$   $\chi^2/\text{NDF}$ : 2.0/3

Left In:  $-0.081 \pm 0.771$   $\chi^2/\text{NDF}$ : 5.8/8

$0.312 \pm 0.718$   $\chi^2/\text{NDF}$ : 7.7/13

$-0.106 \pm 0.703$   $\chi^2/\text{NDF}$ : 7.8/12

# diff\_bpm16Y\_rms vs slug



Right In: 2325.065+/-1.161  $\chi^2/\text{NDF}$ : 5332.3/3

Left Out: 1798.642+/-0.565  $\chi^2/\text{NDF}$ :152532.1/9

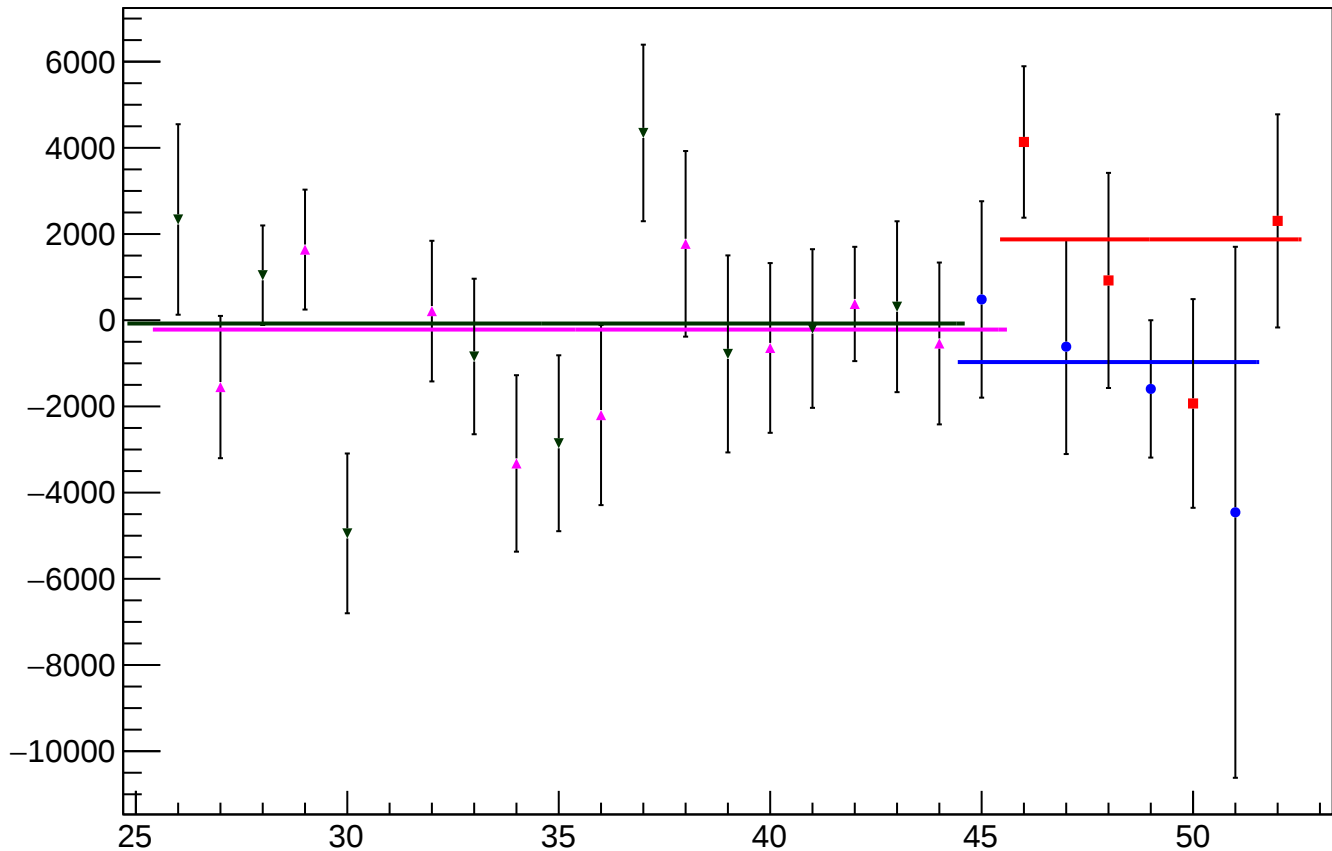
Right Out: 2355.172+/-1.213  $\chi^2/\text{NDF}$ : 43036.6/3

Left In: 1813.909+/-0.545  $\chi^2/\text{NDF}$ :121075.3/8

1899.340+/-0.508  $\chi^2/\text{NDF}$ : 324073.2/13

1904.917+/-0.497  $\chi^2/\text{NDF}$ : 329780.4/12

# asym\_sam1\_mean vs slug



Right In:  $-970.636 \pm 1136.795$   $\chi^2/\text{NDF}: 0.9/3$

Left Out:  $-76.487 \pm 600.613$   $\chi^2/\text{NDF}: 15.9/8$

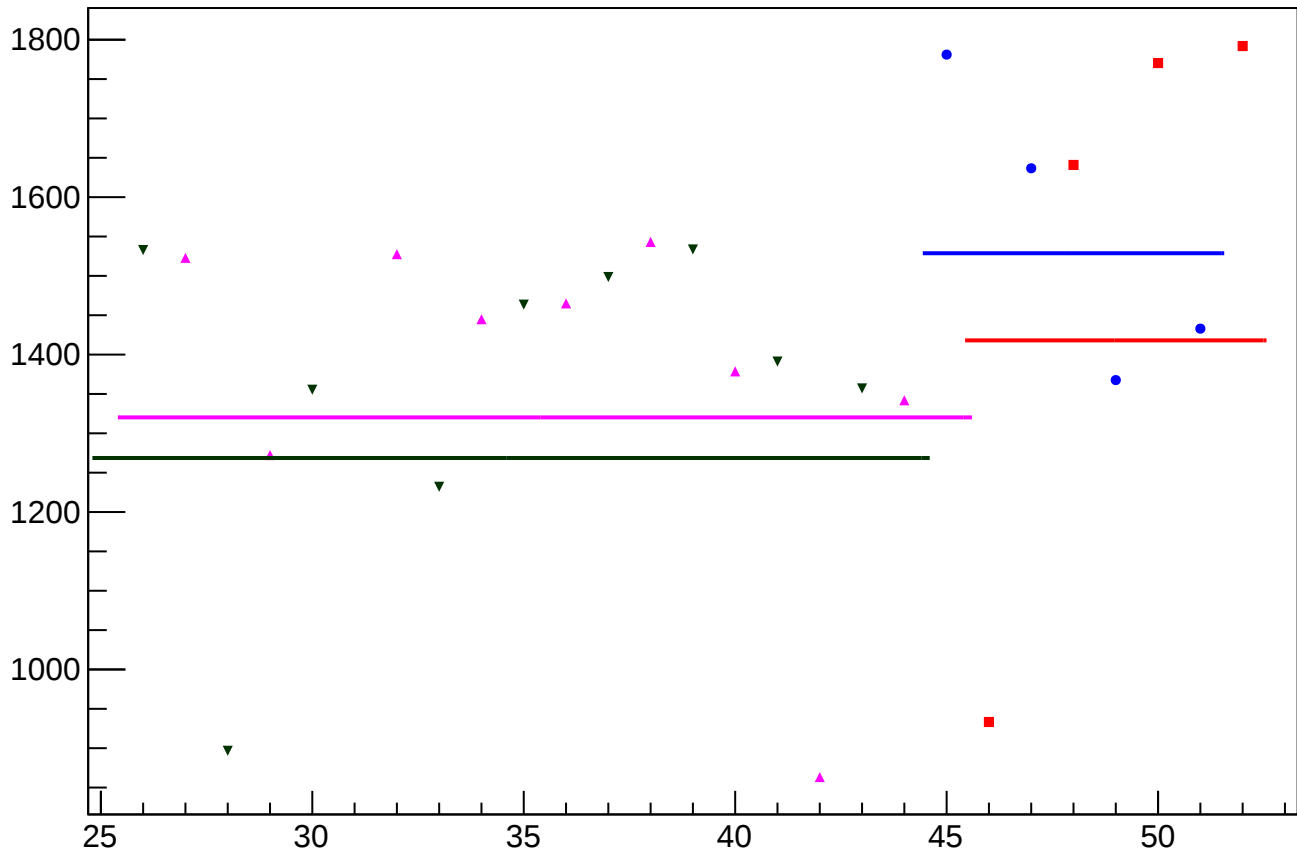
Right Out:  $1875.877 \pm 1105.336$   $\chi^2/\text{NDF}: 4.3/3$

Left In:  $-216.843 \pm 572.349$   $\chi^2/\text{NDF}: 6.8/8$

$-271.614 \pm 531.050$   $\chi^2/\text{NDF}: 17.3/12$

$225.625 \pm 508.253$   $\chi^2/\text{NDF}: 14.0/12$

# asym\_sam1\_rms vs slug



Right In:  $1528.761 \pm 0.804$   $\chi^2/\text{NDF}$ : 49209.2/3

Left Out:  $1268.658 \pm 0.425$   $\chi^2/\text{NDF}$ : 324399.1/8

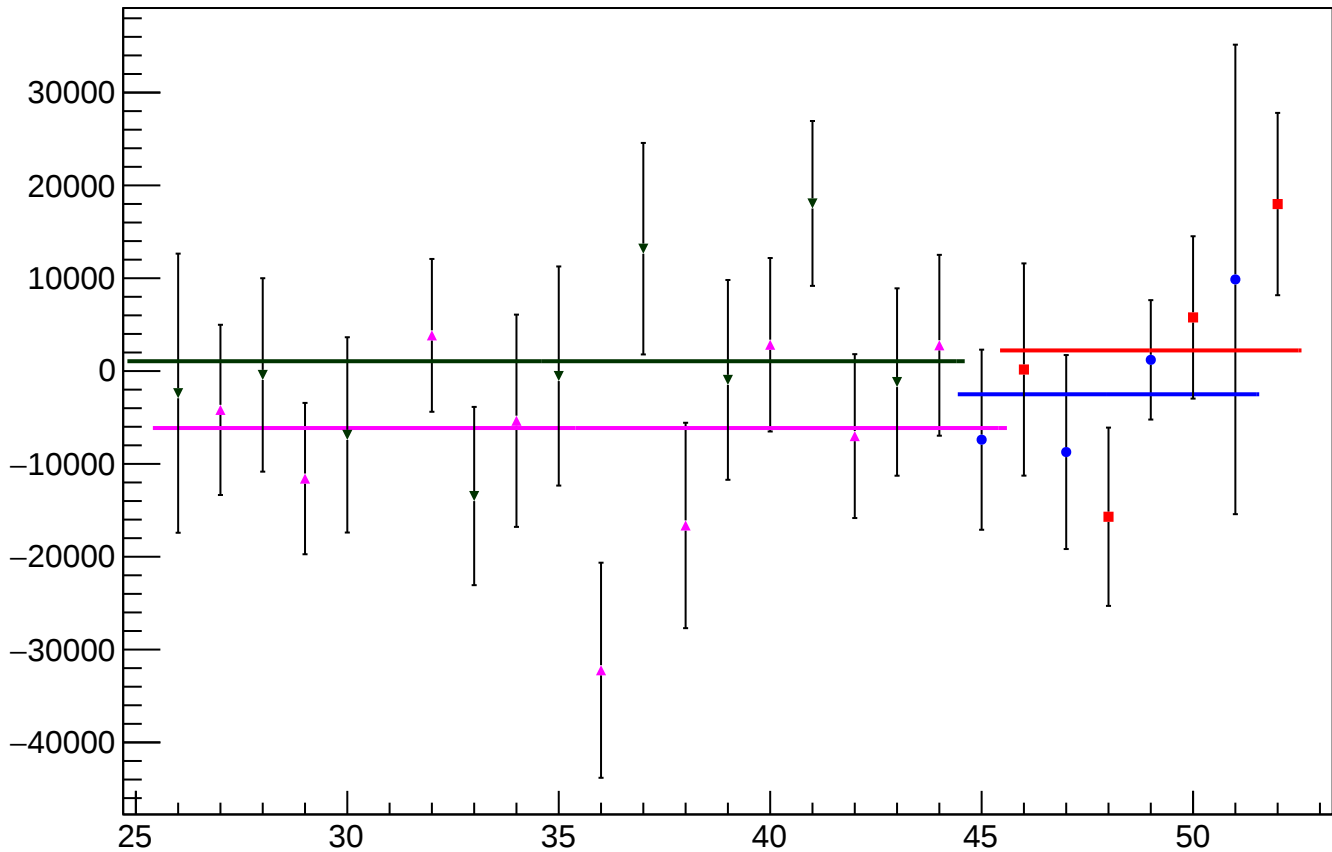
$1325.419 \pm 0.376$   $\chi^2/\text{NDF}$ : 455462.2/12

Right Out:  $1418.052 \pm 0.782$   $\chi^2/\text{NDF}$ : 256248.0/3

$1340.907 \pm 0.359$   $\chi^2/\text{NDF}$ : 611361.9/12

Left In:  $1320.223 \pm 0.405$   $\chi^2/\text{NDF}$ : 342759.8/8

# asym\_sam2\_mean vs slug



Right In: -2500.582 +/- 4686.765  $\chi^2/\text{NDF}$ : 1.2/3

Left Out: 1060.376 +/- 3545.636  $\chi^2/\text{NDF}$ : 7.8/8

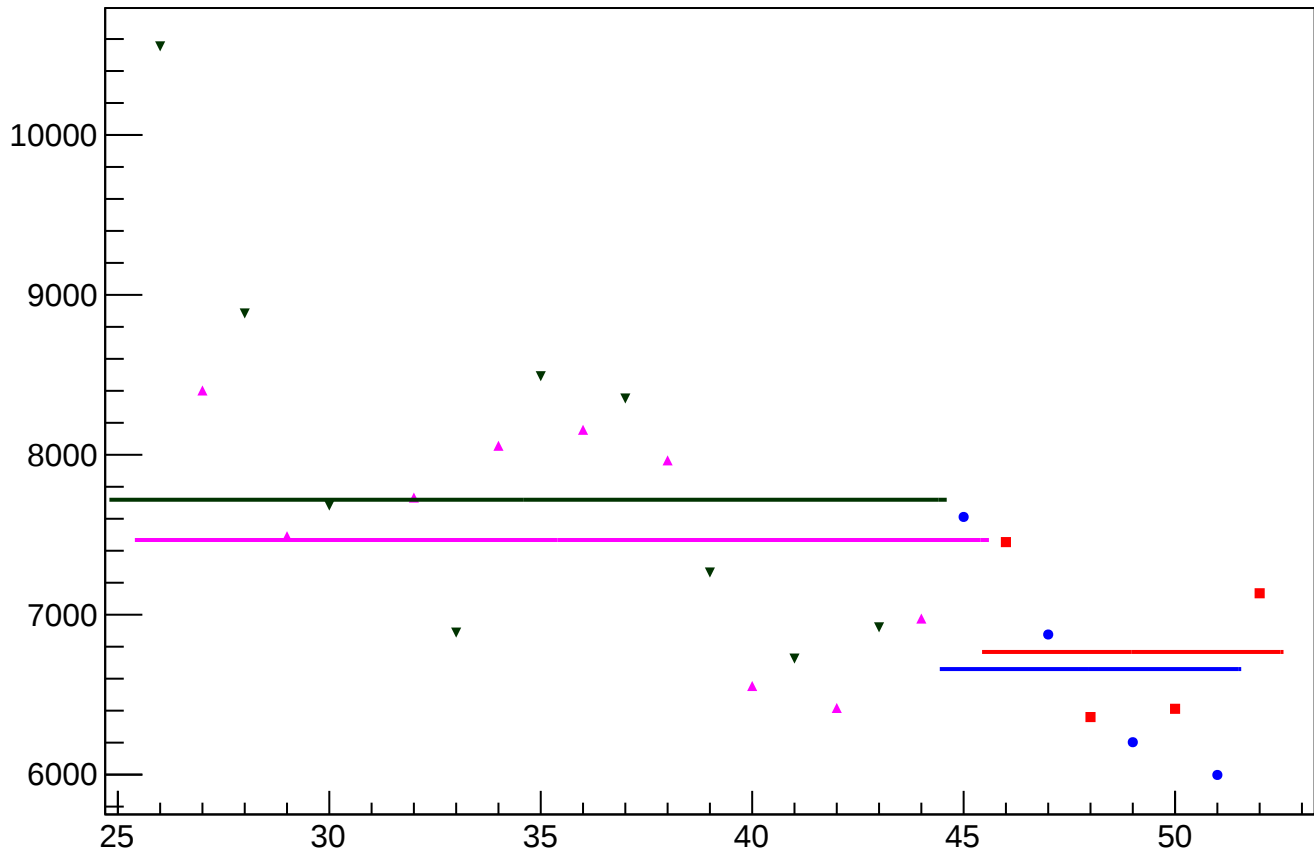
Right Out: 2222.532 +/- 4882.483  $\chi^2/\text{NDF}$ : 6.3/3

Left In: -6136.125 +/- 3165.179  $\chi^2/\text{NDF}$ : 9.7/8

-235.809 +/- 2827.634  $\chi^2/\text{NDF}$ : 9.4/12

-3662.781 +/- 2655.919  $\chi^2/\text{NDF}$ : 18.0/12

# asym\_sam2\_rms vs slug



Right In: 6660.061+/-3.314  $\chi^2/\text{NDF}$ : 31580.0/3

Left Out: 7718.910+/-2.507  $\chi^2/\text{NDF}$ :166985.2/8

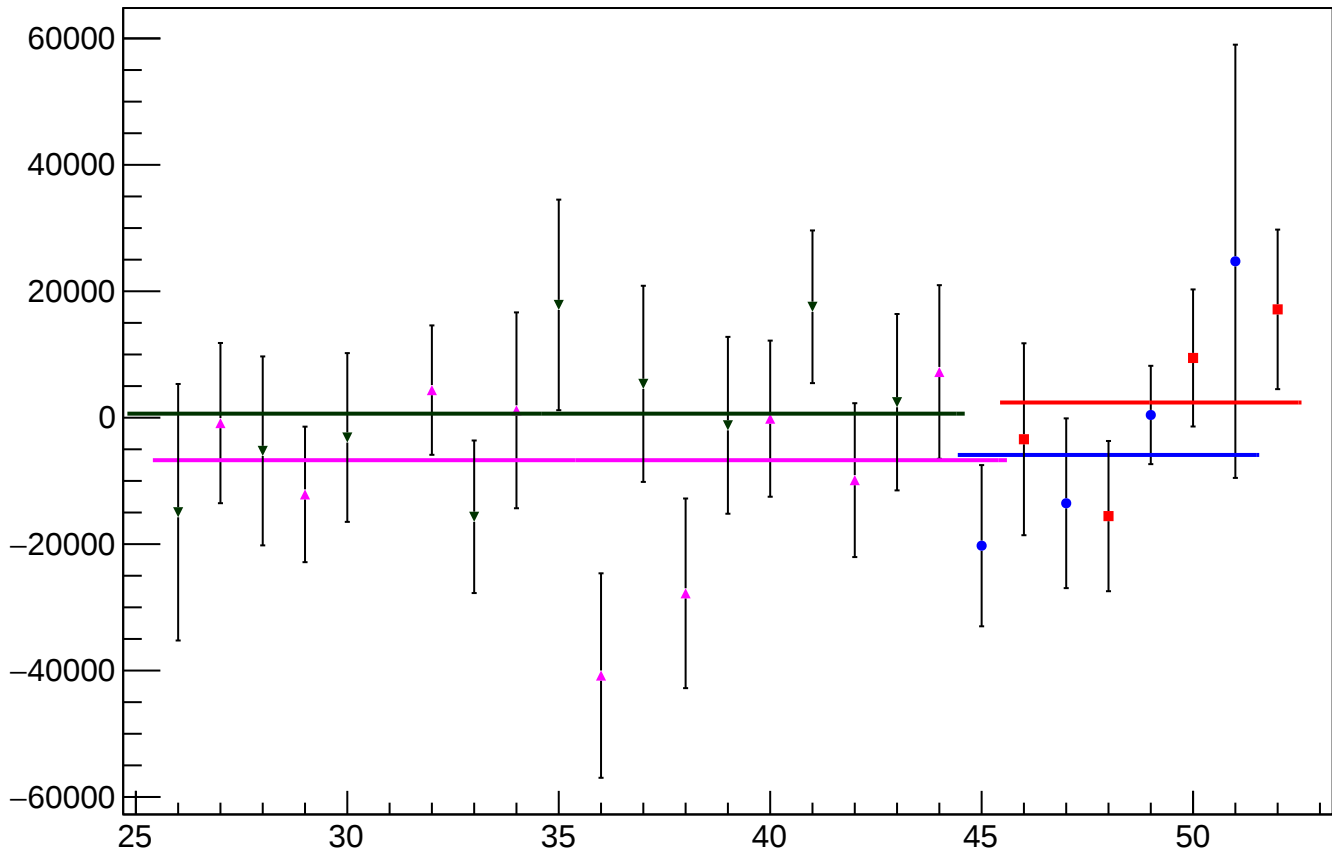
7333.490+/-1.999  $\chi^2/\text{NDF}$ : 263489.8/12

Right Out: 6767.084+/-3.452  $\chi^2/\text{NDF}$ : 16917.2/3

7260.026+/-1.878  $\chi^2/\text{NDF}$ : 137719.9/12

Left In: 7467.189+/-2.238  $\chi^2/\text{NDF}$ :91848.7/8

# asym\_sam3\_mean vs slug



Right In: -5892.419+/-5863.593  $\chi^2/\text{NDF}$ : 3.1/3

Left Out: 639.789+/-4753.910  $\chi^2/\text{NDF}$ : 5.8/8

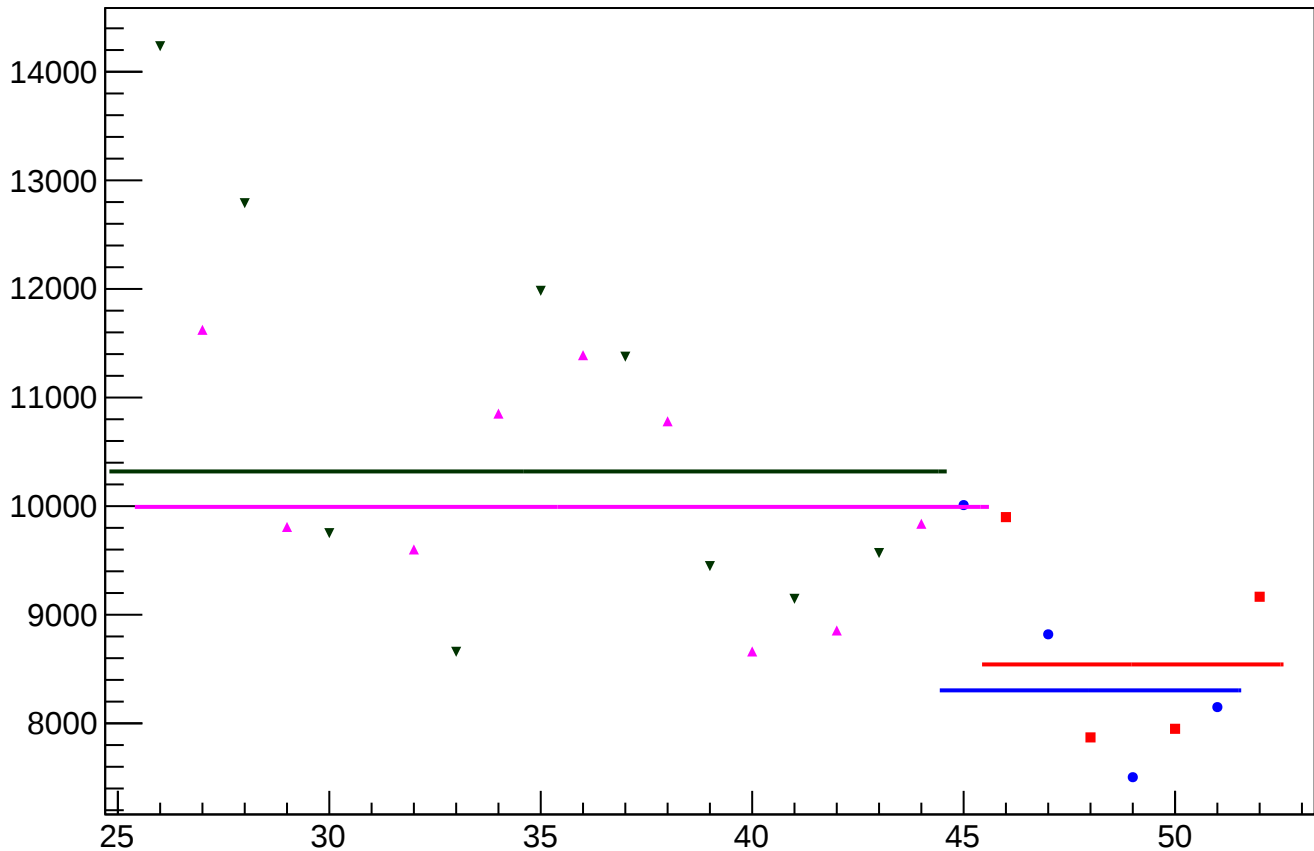
-1950.981+/-3692.736  $\chi^2/\text{NDF}$ : 9.6/12

Right Out: 2403.845+/-6177.139  $\chi^2/\text{NDF}$ : 4.2/3

-3795.375+/-3497.996  $\chi^2/\text{NDF}$ : 15.4/12

Left In: -6721.702+/-4244.047  $\chi^2/\text{NDF}$ : 9.7/8

# asym\_sam3\_rms vs slug



Right In: 8303.604+/-4.146  $\chi^2/\text{NDF}$ : 59939.7/3

Left Out: 10319.525+/-3.362  $\chi^2/\text{NDF}$ : 232272.2/8

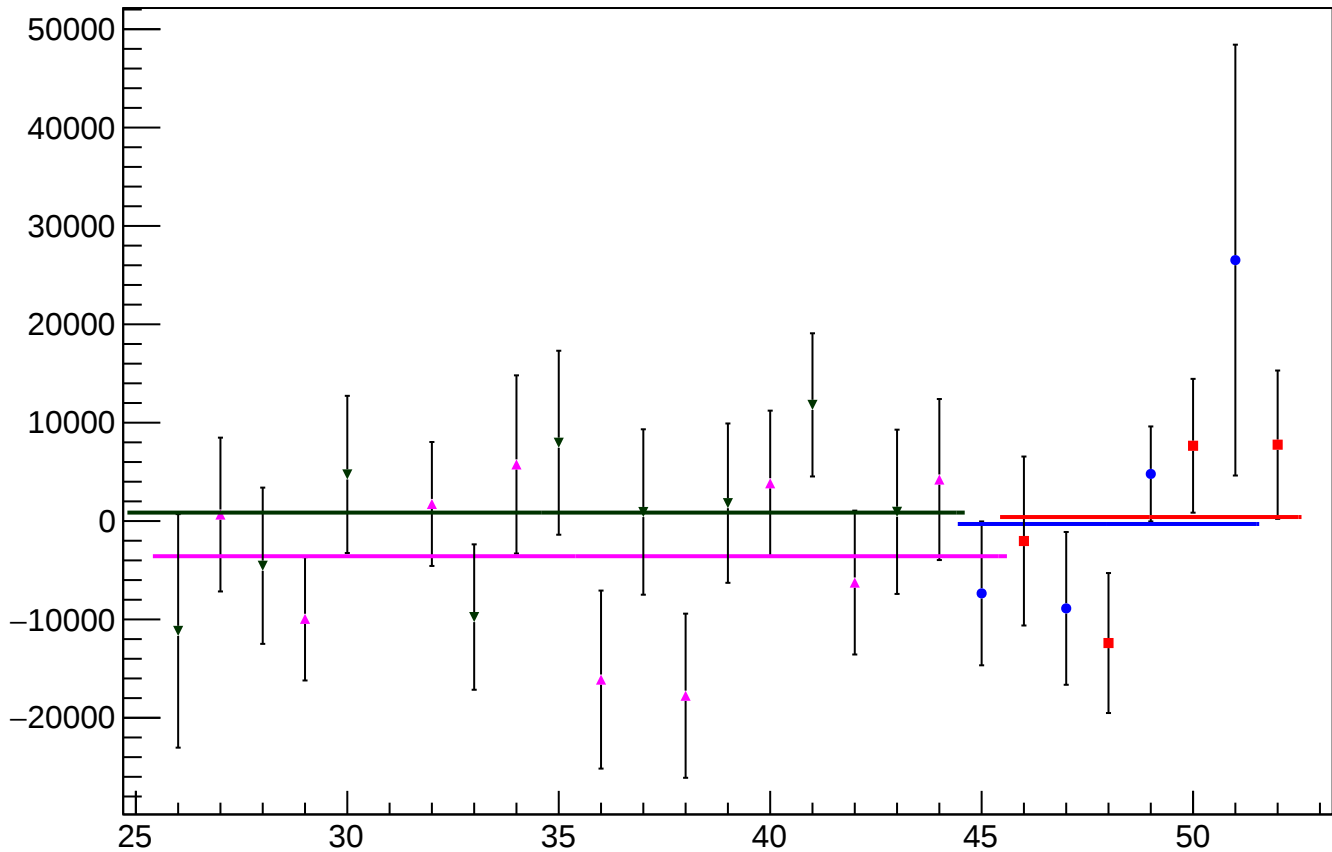
Right Out: 8542.421+/-4.368  $\chi^2/\text{NDF}$ : 33220.8/3

Left In: 9993.116+/-3.001  $\chi^2/\text{NDF}$ : 104211.5/8

9519.981+/-2.611  $\chi^2/\text{NDF}$ : 434852.9/12

9527.915+/-2.473  $\chi^2/\text{NDF}$ : 212367.4/12

# asym\_sam4\_mean vs slug



Right In: -297.955+/-3529.864  $\chi^2/\text{NDF}$ : 4.8/3

Left Out: 860.253+/-2763.123  $\chi^2/\text{NDF}$ :6.6/8

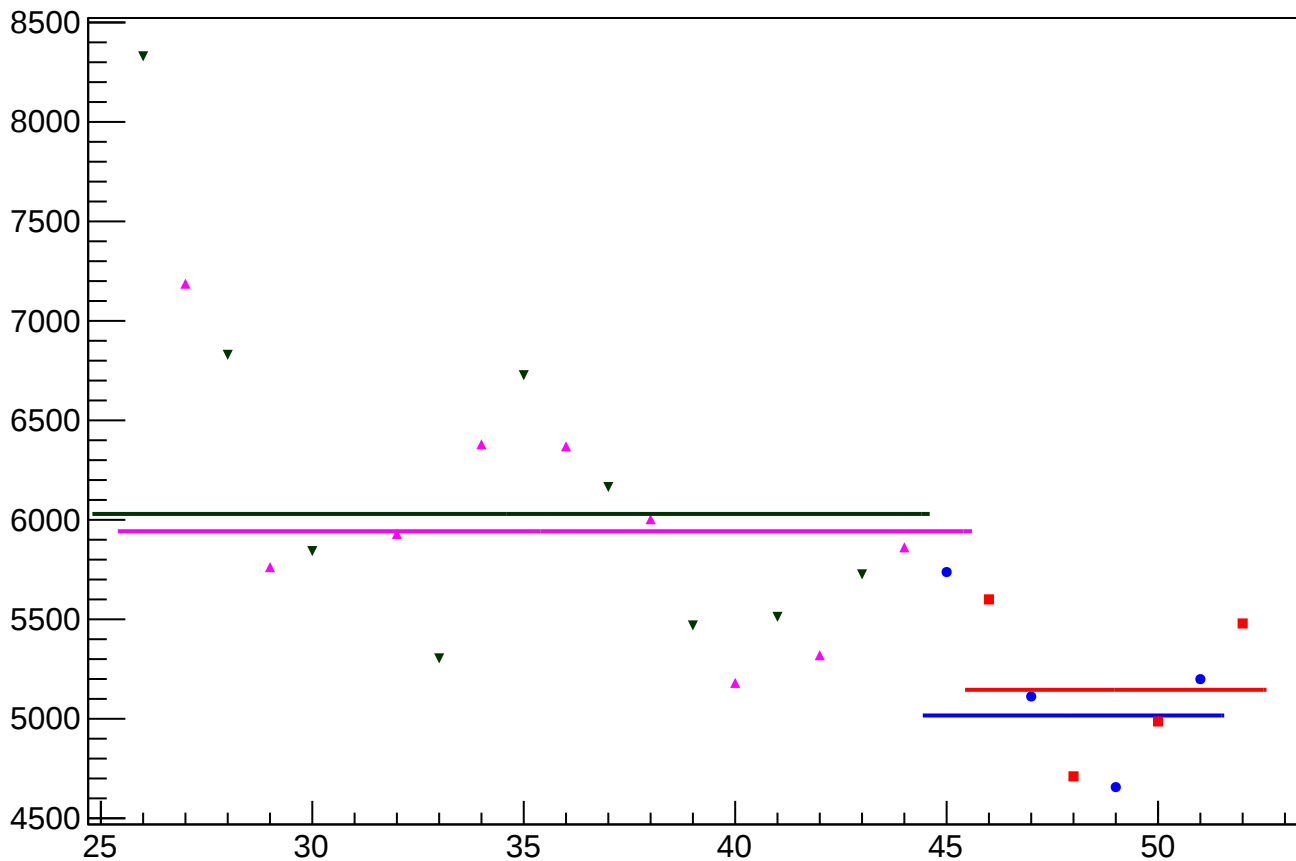
Right Out: 408.351+/-3713.107  $\chi^2/\text{NDF}$ : 5.4/3

Left In: -3574.359+/-2517.724  $\chi^2/\text{NDF}$ :10.0/8

420.201+/-2175.787  $\chi^2/\text{NDF}$ : 11.5/12

-2319.961+/-2083.847  $\chi^2/\text{NDF}$ : 16.2/12

# asym\_sam4\_rms vs slug



Right In: 5016.639+/-2.496  $\chi^2/\text{NDF}$ : 31002.5/3

Left Out: 6029.703+/-1.954  $\chi^2/\text{NDF}$ :149738.9/8

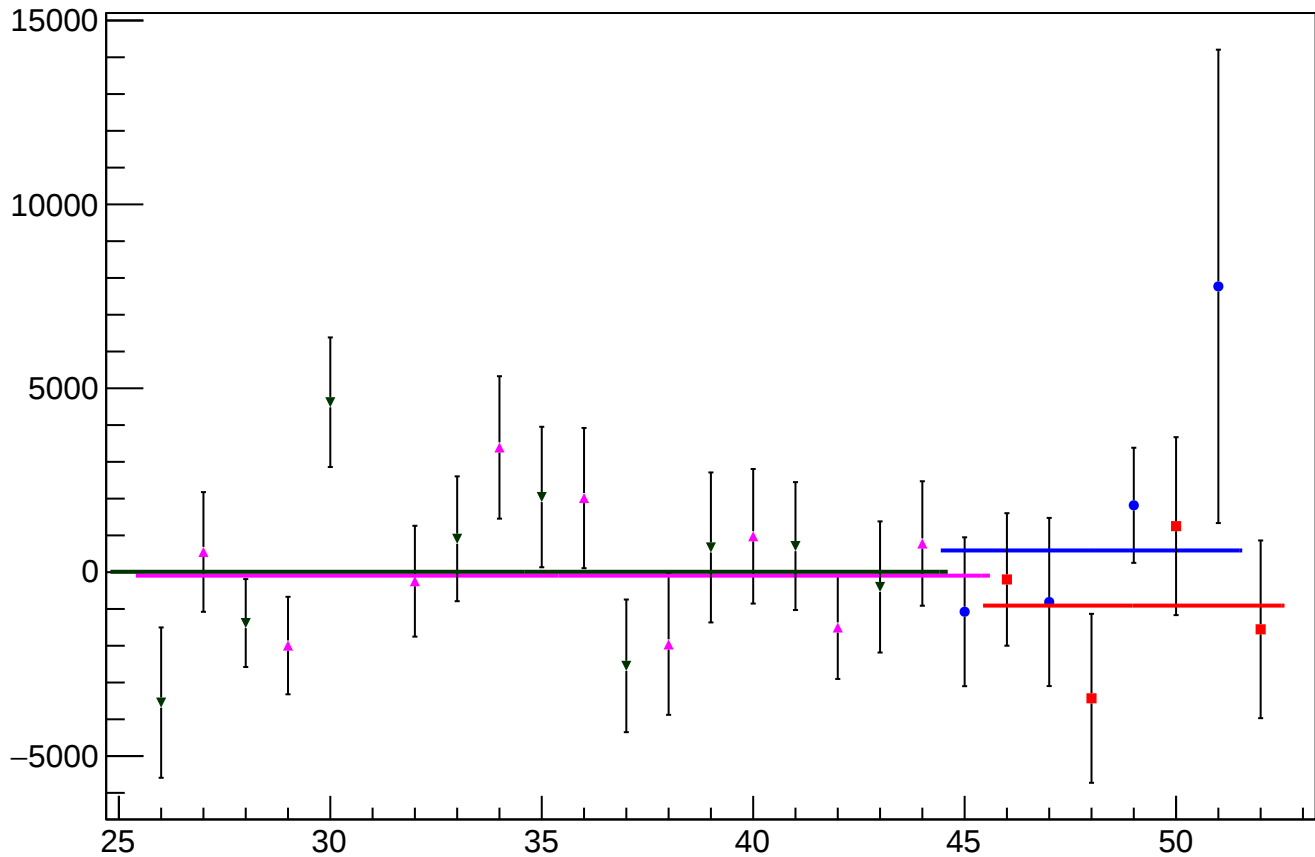
5644.798+/-1.539  $\chi^2/\text{NDF}$ : 282887.3/12

Right Out: 5145.712+/-2.626  $\chi^2/\text{NDF}$ : 18078.3/3

5691.806+/-1.474  $\chi^2/\text{NDF}$ : 178782.8/12

Left In: 5942.884+/-1.780  $\chi^2/\text{NDF}$ :97554.3/8

# asym\_sam5\_mean vs slug



Right In: 590.735+/-1073.310  $\chi^2/\text{NDF}$ : 2.9/3

Left Out: 11.403+/-570.182  $\chi^2/\text{NDF}$ : 15.0/8

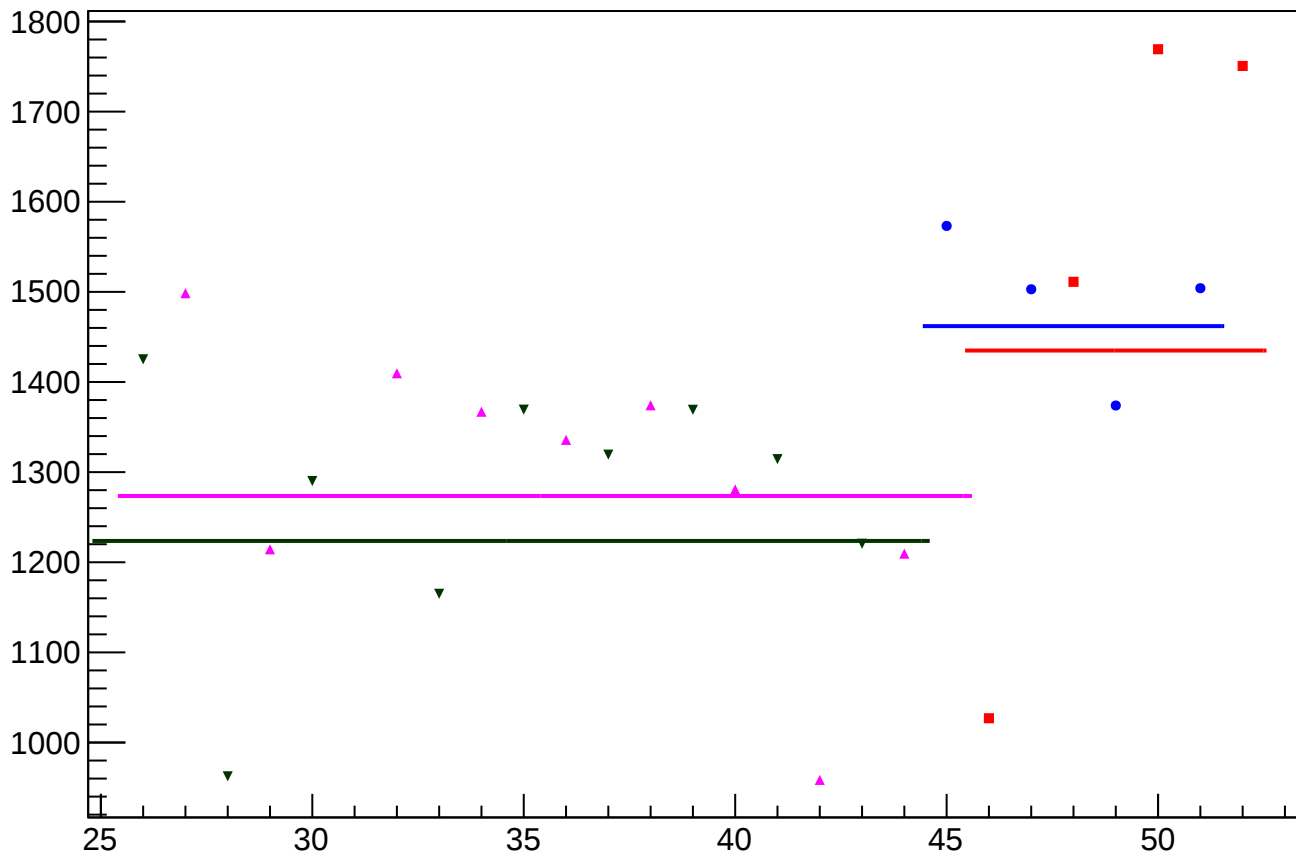
138.913+/-503.539  $\chi^2/\text{NDF}$ : 18.1/12

Right Out: -908.638+/-1091.174  $\chi^2/\text{NDF}$ : 2.2/3

-256.864+/-487.949  $\chi^2/\text{NDF}$ : 11.9/12

Left In: -93.953+/-545.533  $\chi^2/\text{NDF}$ : 9.3/8

# asym\_sam5\_rms vs slug



Right In: 1462.002 $\pm$ 0.759  $\chi^2$ /NDF: 13098.1/3

Left Out: 1223.657 $\pm$ 0.403  $\chi^2$ /NDF: 153036.7/8

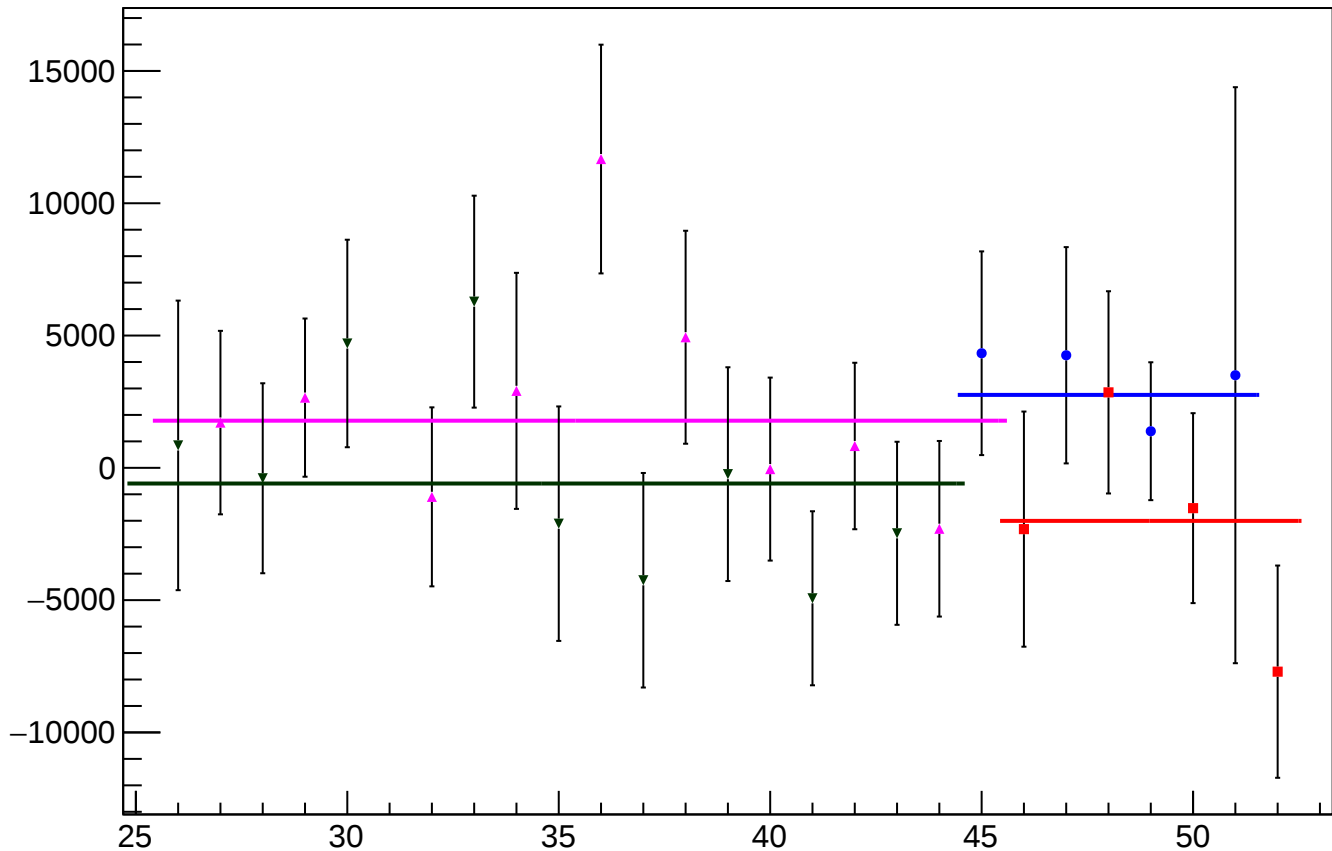
Right Out: 1434.909 $\pm$ 0.772  $\chi^2$ /NDF: 177131.0/3

Left In: 1273.541 $\pm$ 0.386  $\chi^2$ /NDF: 174992.2/8

1276.117 $\pm$ 0.356  $\chi^2$ /NDF: 243053.0/12

1305.809 $\pm$ 0.345  $\chi^2$ /NDF: 387116.5/12

# asym\_sam6\_mean vs slug



Right In: 2756.959+/-1879.482  $\chi^2/\text{NDF}$ : 0.6/3

Left Out: -592.543+/-1304.748  $\chi^2/\text{NDF}$ : 7.8/8

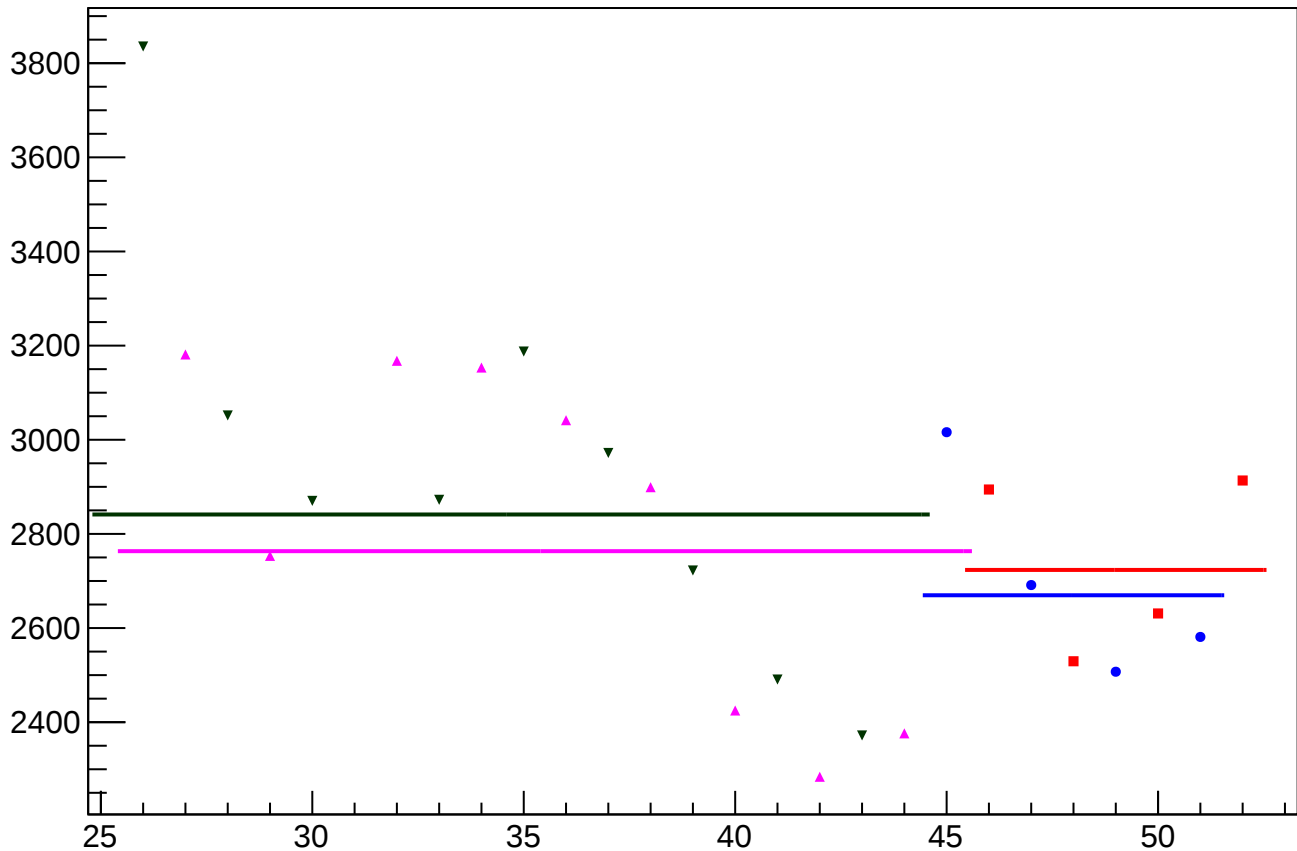
Right Out: -2004.885+/-1965.406  $\chi^2/\text{NDF}$ : 3.7/3

Left In: 1782.022+/-1175.711  $\chi^2/\text{NDF}$ : 8.6/8

496.717+/-1071.800  $\chi^2/\text{NDF}$ : 10.5/12

784.022+/-1008.963  $\chi^2/\text{NDF}$ : 15.0/12

# asym\_sam6\_rms vs slug



Right In: 2669.663+/-1.329  $\chi^2/\text{NDF}$ : 24159.5/3

Left Out: 2841.264+/-0.923  $\chi^2/\text{NDF}$ :148700.6/8

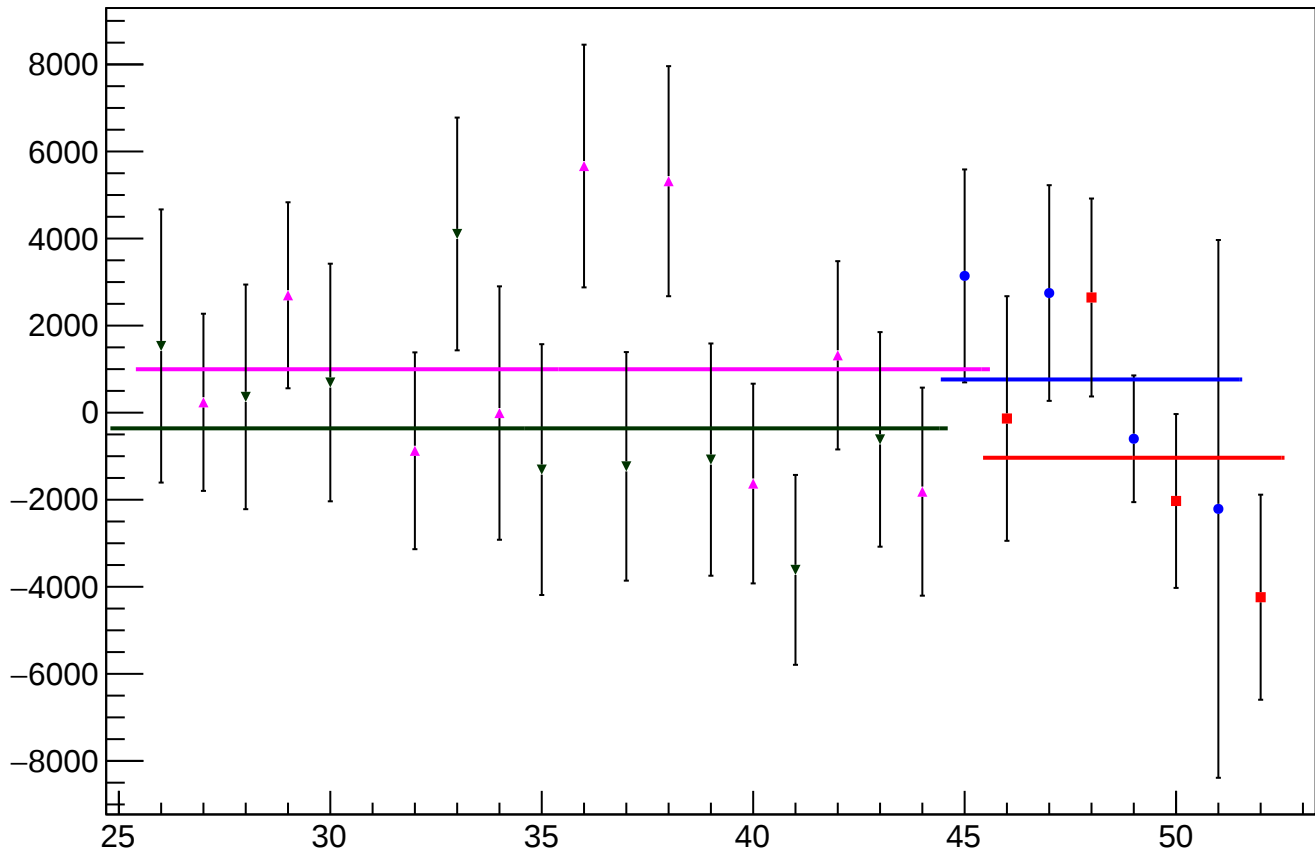
Right Out: 2723.476+/-1.390  $\chi^2/\text{NDF}$ : 13925.9/3

Left In: 2763.332+/-0.831  $\chi^2/\text{NDF}$ :176305.8/8

2785.459+/-0.758  $\chi^2/\text{NDF}$ : 184110.5/12

2752.829+/-0.713  $\chi^2/\text{NDF}$ : 190837.4/12

# asym\_sam7\_mean vs slug



Right In:  $762.785 \pm 1098.688$   $\chi^2/\text{NDF}$ : 2.7/3

Left Out:  $-360.260 \pm 874.765$   $\chi^2/\text{NDF}$ : 5.9/8

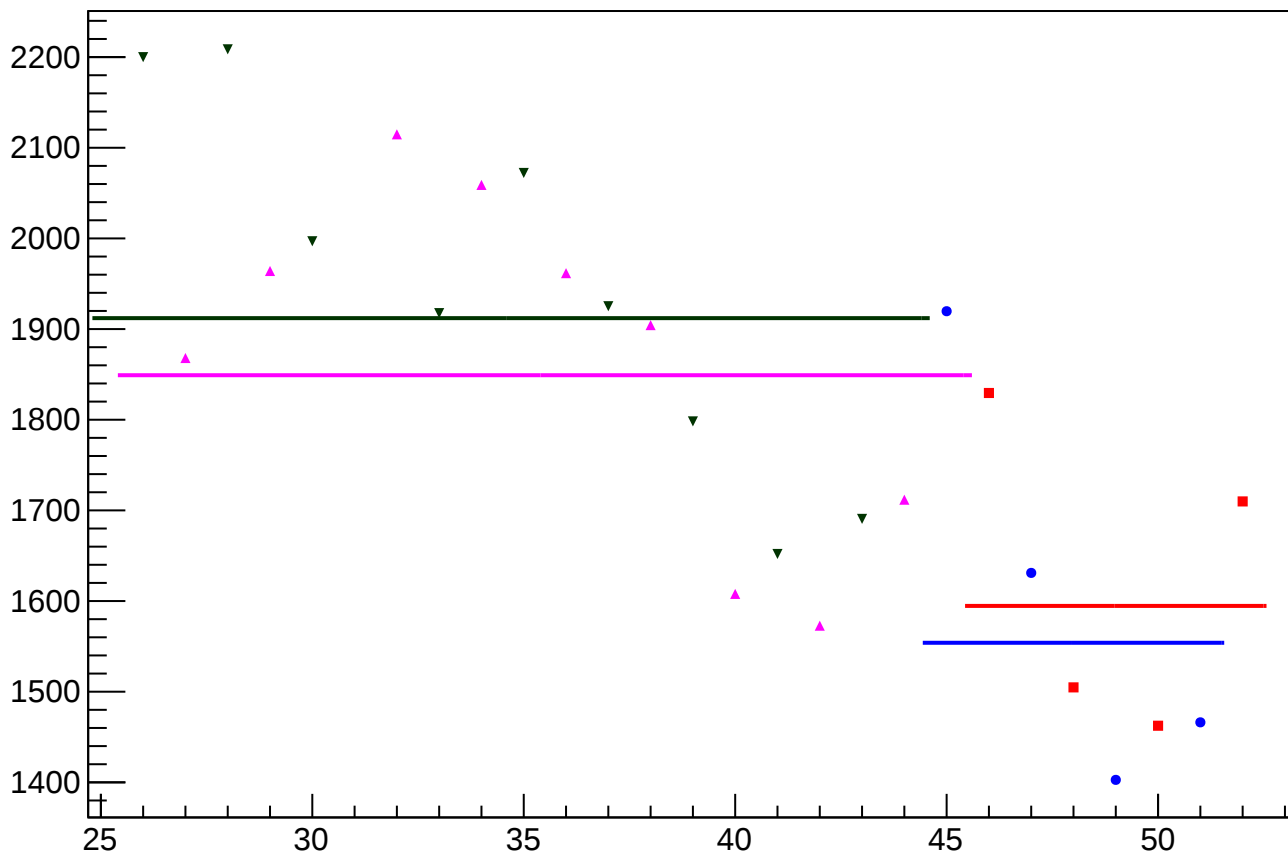
Right Out:  $-1035.724 \pm 1153.848$   $\chi^2/\text{NDF}$ : 4.8/3

Left In:  $997.468 \pm 784.441$   $\chi^2/\text{NDF}$ : 9.8/8

$75.453 \pm 684.346$   $\chi^2/\text{NDF}$ : 9.2/12

$354.784 \pm 648.721$   $\chi^2/\text{NDF}$ : 16.7/12

# asym\_sam7\_rms vs slug



Right In:  $1553.969 \pm 0.777$   $\chi^2/\text{NDF}$ : 68651.2/3

Left Out:  $1912.062 \pm 0.619$   $\chi^2/\text{NDF}$ : 99663.2/8

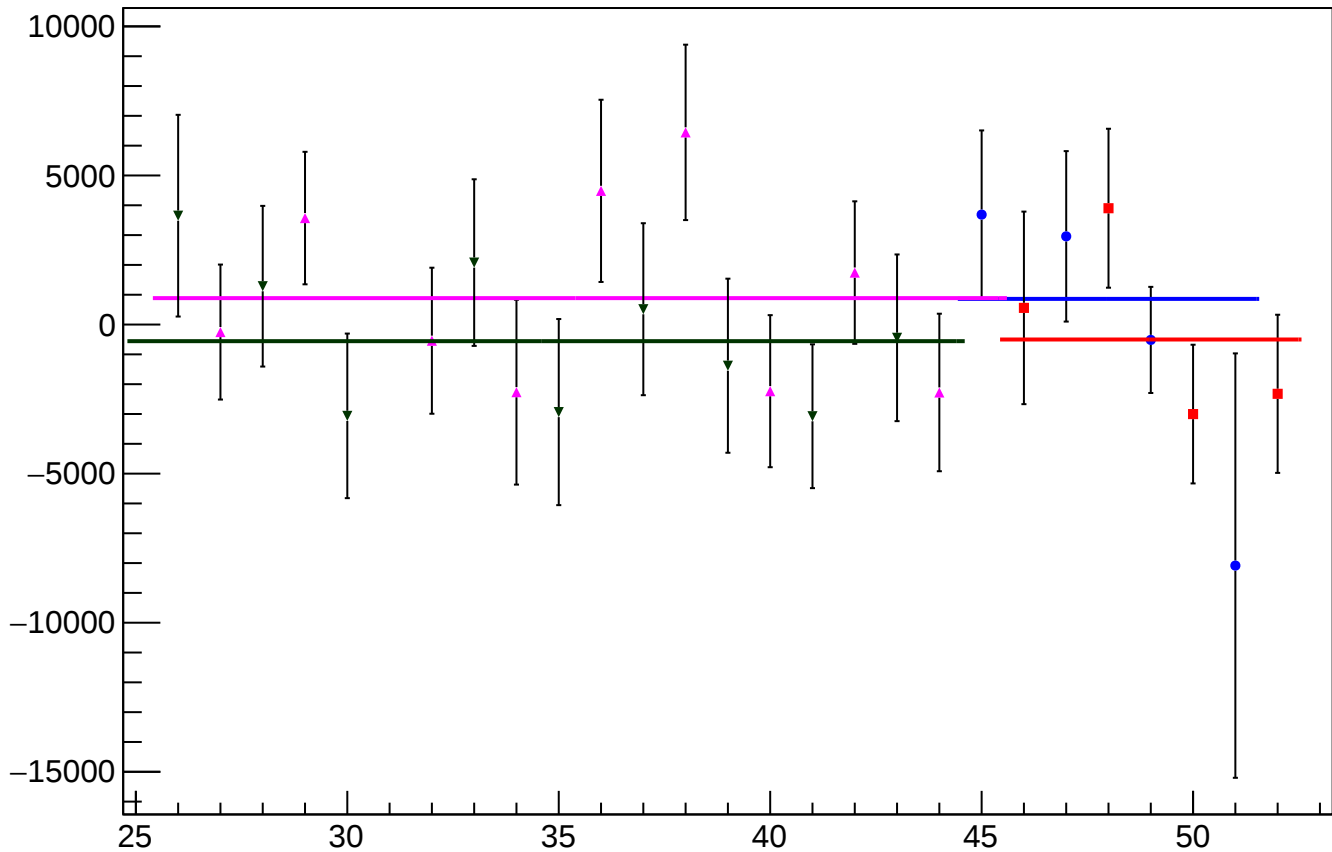
Right Out:  $1594.631 \pm 0.816$   $\chi^2/\text{NDF}$ : 30649.0/3

Left In:  $1849.099 \pm 0.555$   $\chi^2/\text{NDF}$ : 109500.6/8

$1773.131 \pm 0.484$   $\chi^2/\text{NDF}$ : 298344.5/12

$1768.663 \pm 0.459$   $\chi^2/\text{NDF}$ : 206676.0/12

# asym\_sam8\_mean vs slug



Right In: 860.774+/-1309.251  $\chi^2/\text{NDF}$ : 3.7/3

Left Out: -557.273+/-942.969  $\chi^2/\text{NDF}$ :5.6/8

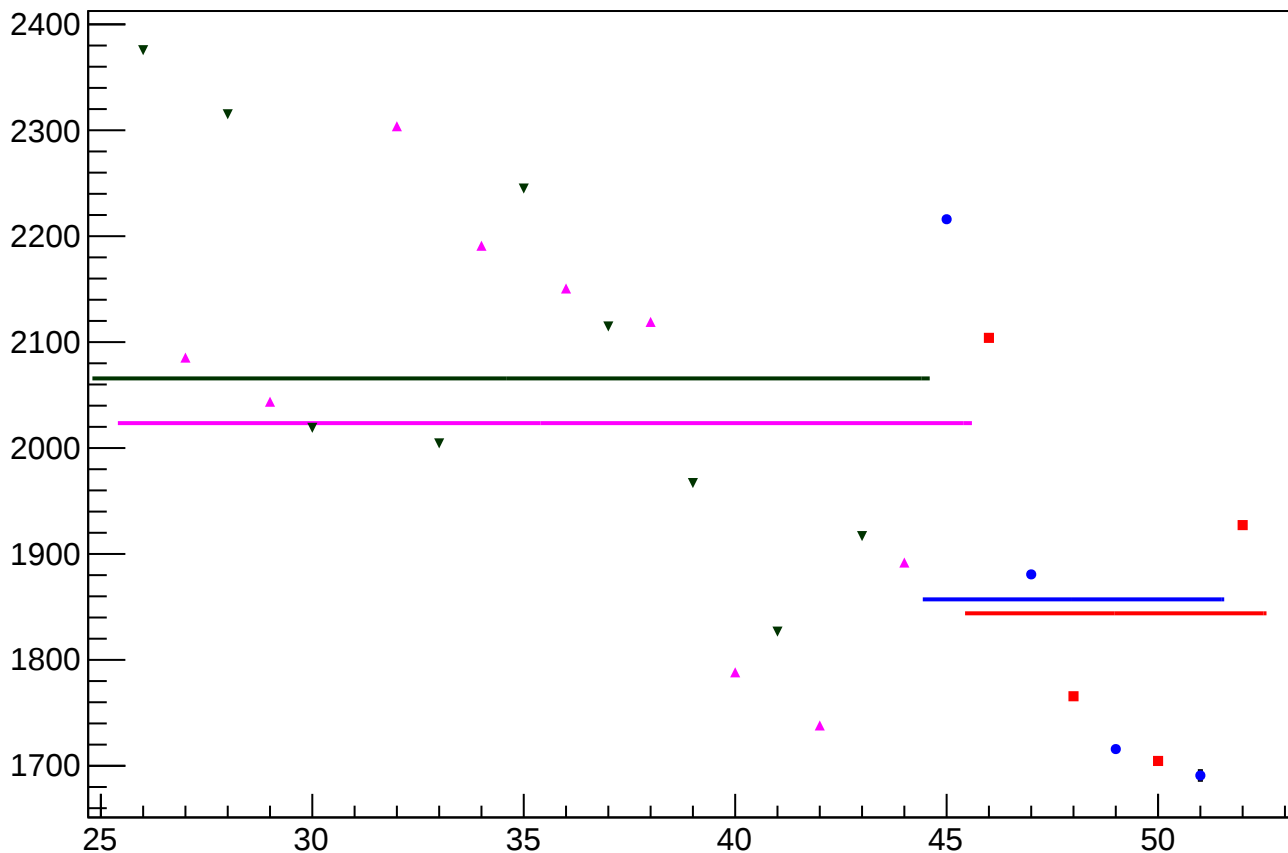
Right Out: -501.367+/-1331.937  $\chi^2/\text{NDF}$ : 4.5/3

Left In: 886.158+/-856.437  $\chi^2/\text{NDF}$ :11.1/8

-72.927+/-765.166  $\chi^2/\text{NDF}$ : 10.1/12

480.291+/-720.369  $\chi^2/\text{NDF}$ : 16.3/12

# asym\_sam8\_rms vs slug



Right In: 1857.129+/-0.926     $\chi^2/\text{NDF}$ : 46160.1/3

Left Out: 2065.730+/-0.667     $\chi^2/\text{NDF}$ : 70231.7/8

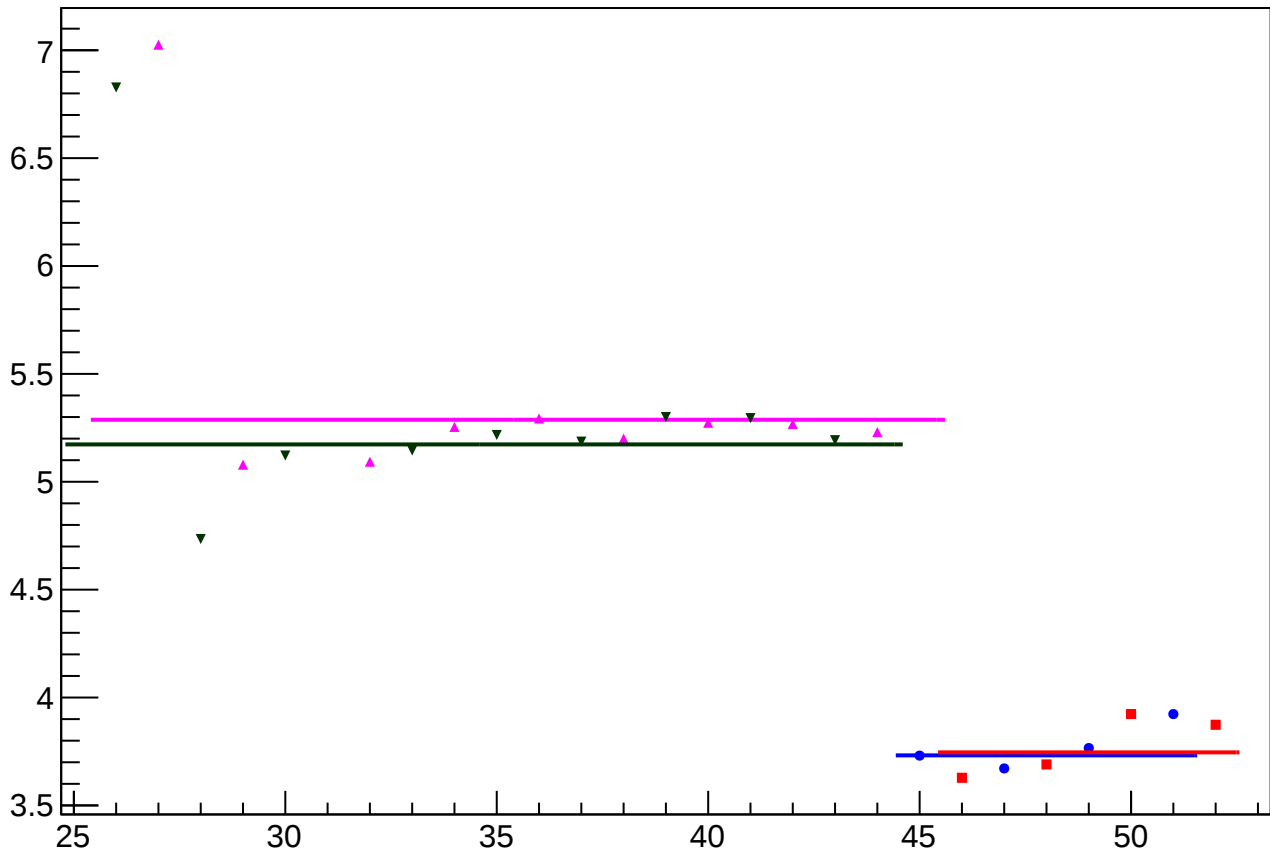
Right Out: 1843.962+/-0.942     $\chi^2/\text{NDF}$ : 23853.0/3

Left In: 2023.519+/-0.606     $\chi^2/\text{NDF}$ : 89775.7/8

1994.480+/-0.541     $\chi^2/\text{NDF}$ : 149821.8/12

1970.996+/-0.509     $\chi^2/\text{NDF}$ : 139343.5/12

# yield\_sam1\_mean vs slug



Right In: 3.732+/-0.000  $\chi^2/\text{NDF}$ : 16367834.9/3

Left Out: 5.173+/-0.000  $\chi^2/\text{NDF}$ : 2171929405.9/8

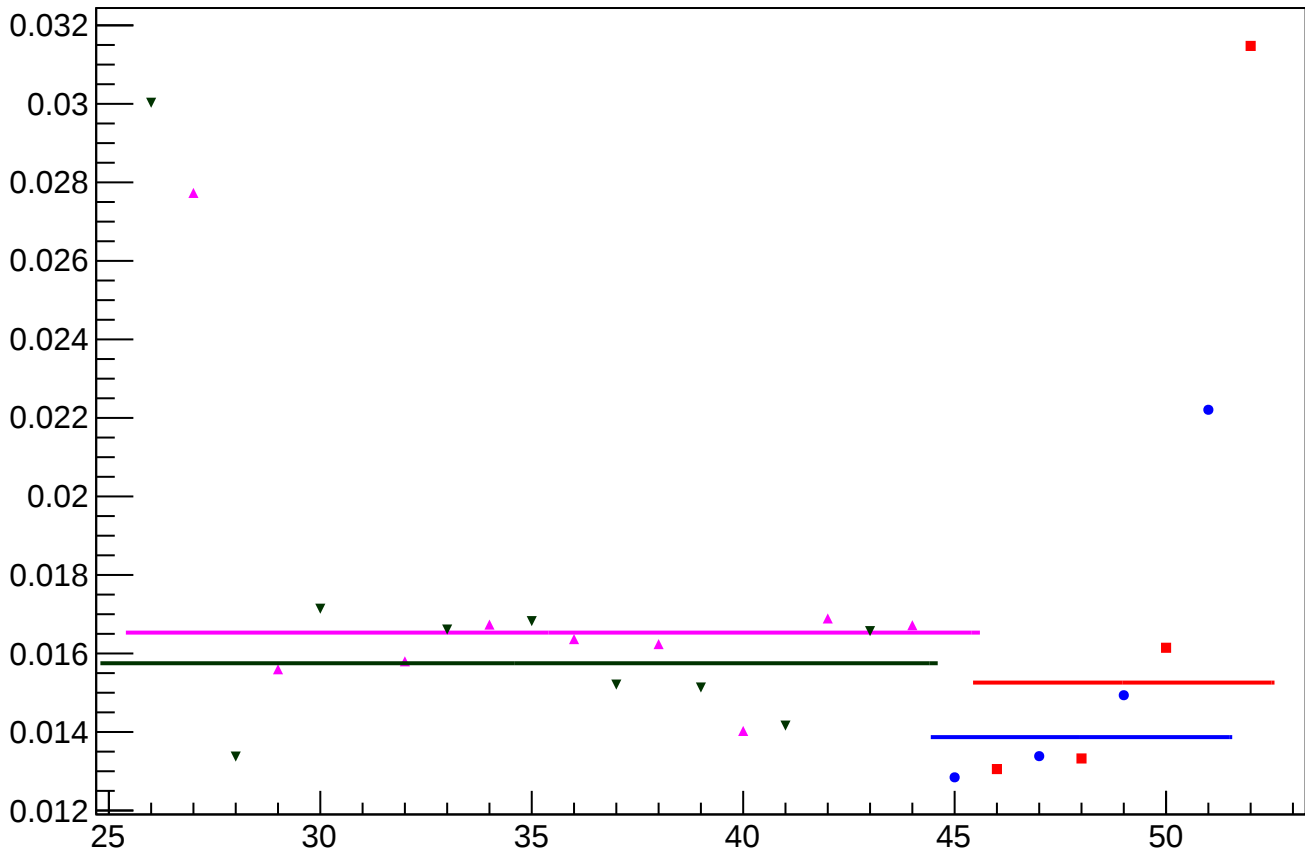
Right Out: 3.746+/-0.000  $\chi^2/\text{NDF}$ : 107913066.7/3

Left In: 5.287+/-0.000  $\chi^2/\text{NDF}$ : 3281292278.3/8

4.665+/-0.000  $\chi^2/\text{NDF}$ : 15210505292.4/12

4.870+/-0.000  $\chi^2/\text{NDF}$ : 15663124620.0/12

# yield\_sam1\_rms vs slug



Right In: 0.014+/-0.000  $\chi^2/\text{NDF}$ : 30596.9/3

Left Out: 0.016+/-0.000  $\chi^2/\text{NDF}$ : 285999.2/8

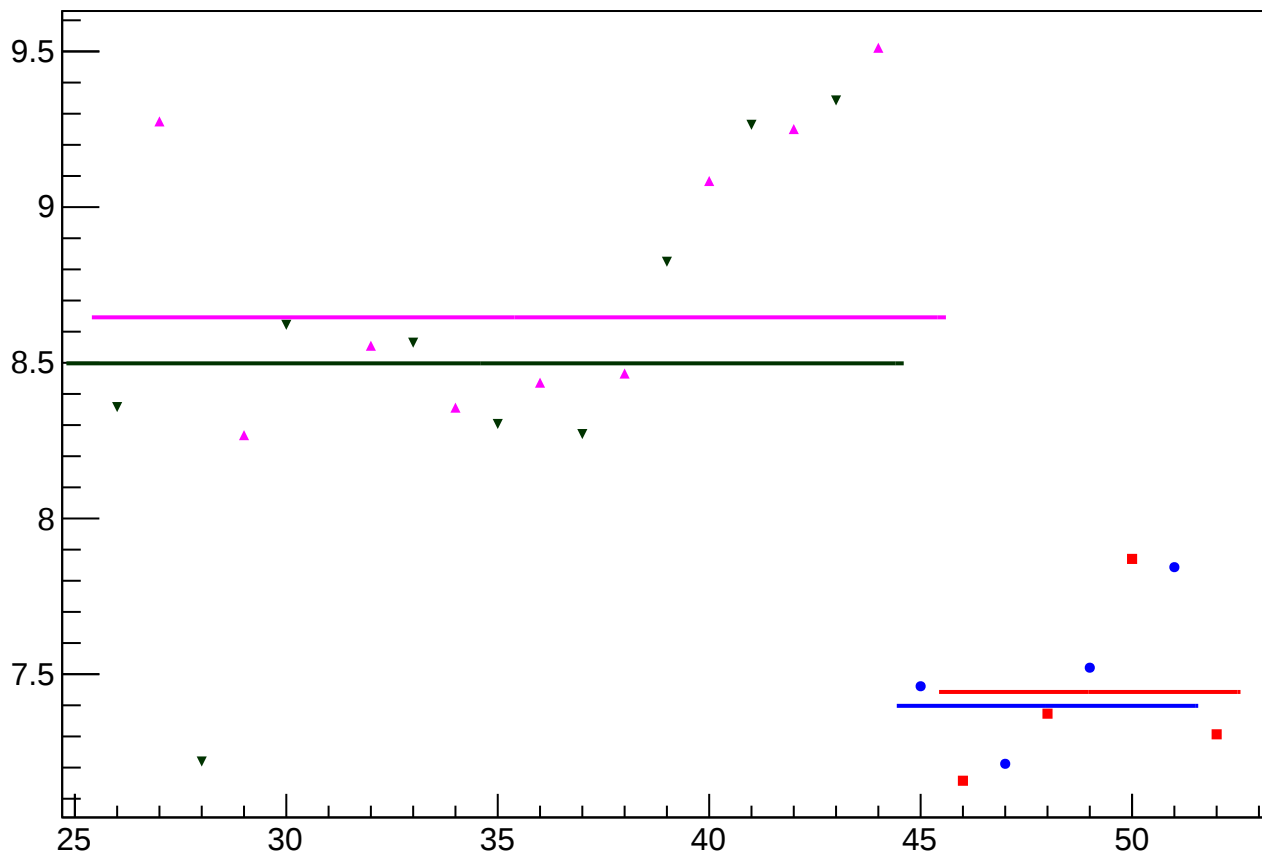
0.015+/-0.000  $\chi^2/\text{NDF}$ : 360993.9/12

Right Out: 0.015+/-0.000  $\chi^2/\text{NDF}$ : 300982.0/3

0.016+/-0.000  $\chi^2/\text{NDF}$ : 606546.9/12

Left In: 0.017+/-0.000  $\chi^2/\text{NDF}$ : 288823.4/8

# yield\_sam2\_mean vs slug



Right In: 7.398+/-0.000  $\chi^2/\text{NDF}$ : 3179641.0/3

Left Out: 8.498+/-0.000  $\chi^2/\text{NDF}$ : 85994294.5/8

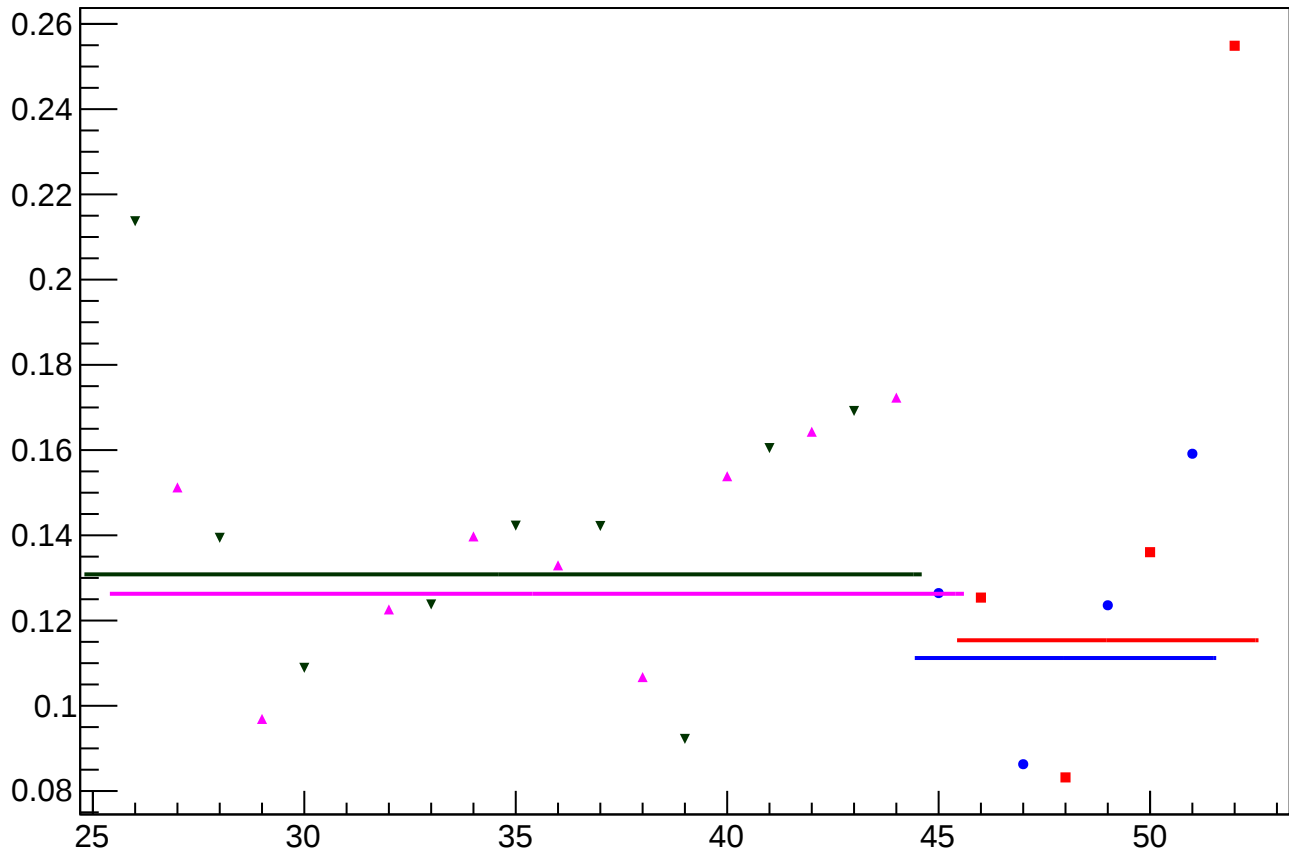
Right Out: 7.443+/-0.000  $\chi^2/\text{NDF}$ : 7512950.0/3

Left In: 8.646+/-0.000  $\chi^2/\text{NDF}$ : 53836286.5/8

8.097+/-0.000  $\chi^2/\text{NDF}$ : 200955448.4/12

8.320+/-0.000  $\chi^2/\text{NDF}$ : 186839551.4/12

# yield\_sam2\_rms vs slug



Right In: 0.111+/-0.000  $\chi^2/\text{NDF}$ : 107917.3/3

Left Out: 0.131+/-0.000  $\chi^2/\text{NDF}$ : 435345.2/8

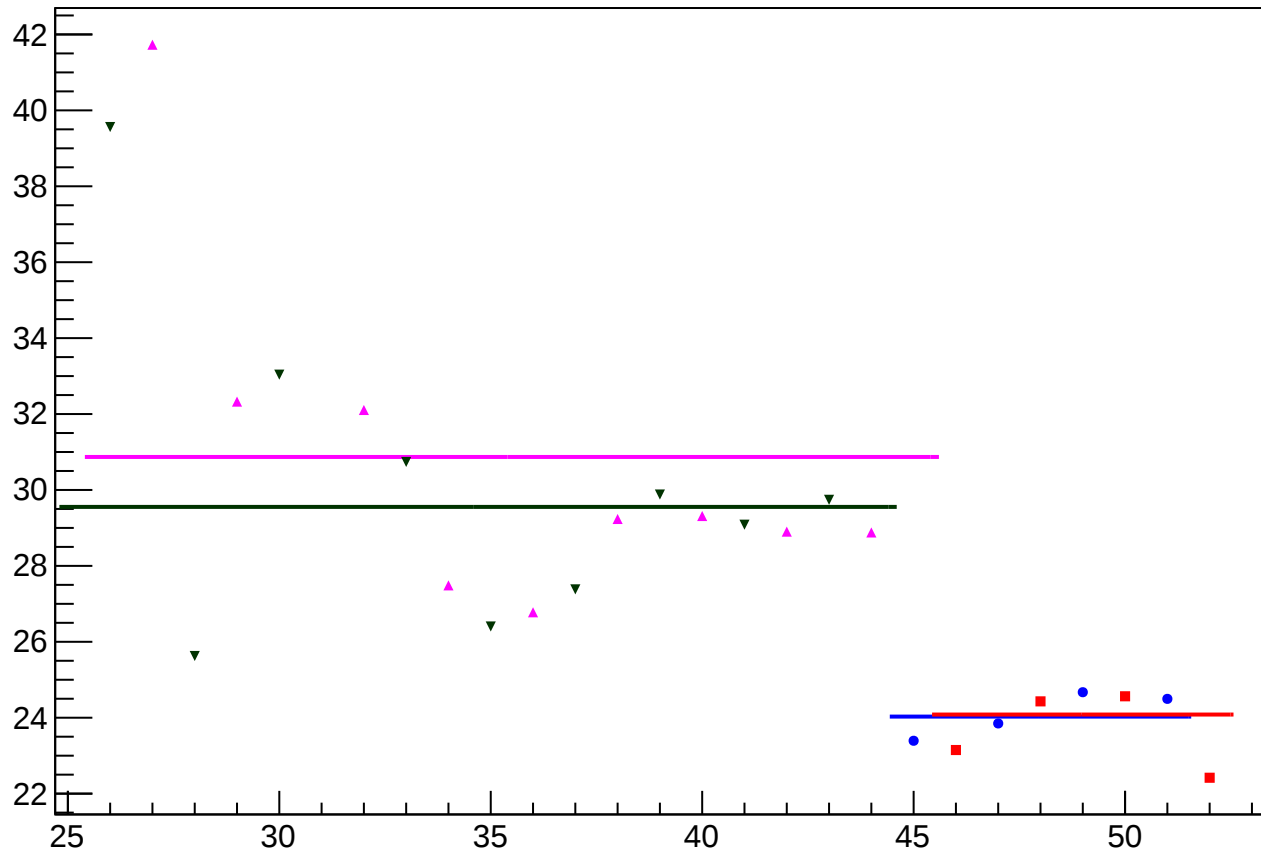
Right Out: 0.115+/-0.000  $\chi^2/\text{NDF}$ : 452410.0/3

Left In: 0.126+/-0.000  $\chi^2/\text{NDF}$ : 385323.8/8

0.124+/-0.000  $\chi^2/\text{NDF}$ : 614466.9/12

0.123+/-0.000  $\chi^2/\text{NDF}$ : 858364.2/12

# yield\_sam3\_mean vs slug



Right In: 24.030+/-0.000  $\chi^2/\text{NDF}$ : 2172669.2/3

Left Out: 29.554+/-0.000  $\chi^2/\text{NDF}$ : 93160989.6/8

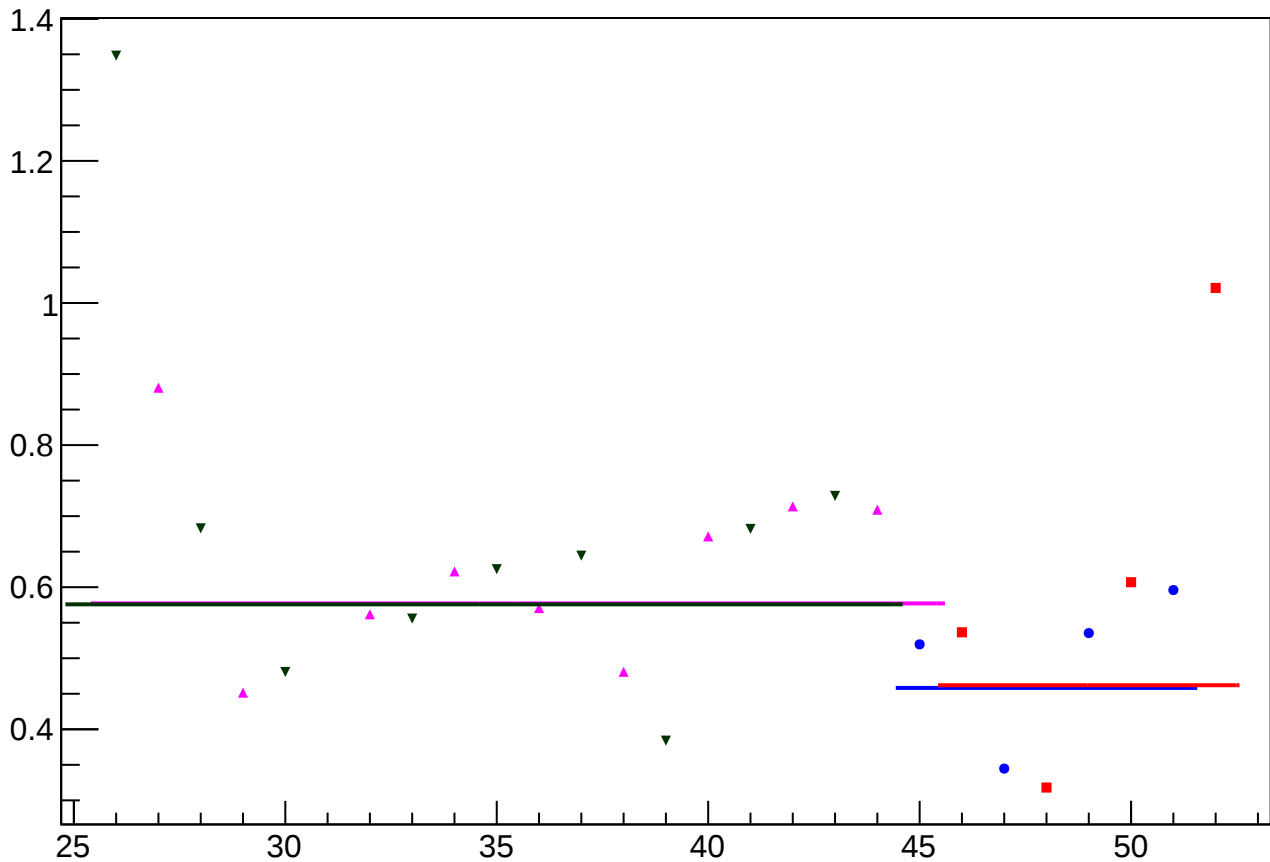
Right Out: 24.084+/-0.000  $\chi^2/\text{NDF}$ : 3252825.2/3

Left In: 30.869+/-0.000  $\chi^2/\text{NDF}$ : 179538741.3/8

27.357+/-0.000  $\chi^2/\text{NDF}$ : 248775595.7/12

28.707+/-0.000  $\chi^2/\text{NDF}$ : 403506637.2/12

# yield\_sam3\_rms vs slug



Right In: 0.458+/-0.000  $\chi^2/\text{NDF}$ : 138460.8/3

Left Out: 0.576+/-0.000  $\chi^2/\text{NDF}$ : 671672.2/8

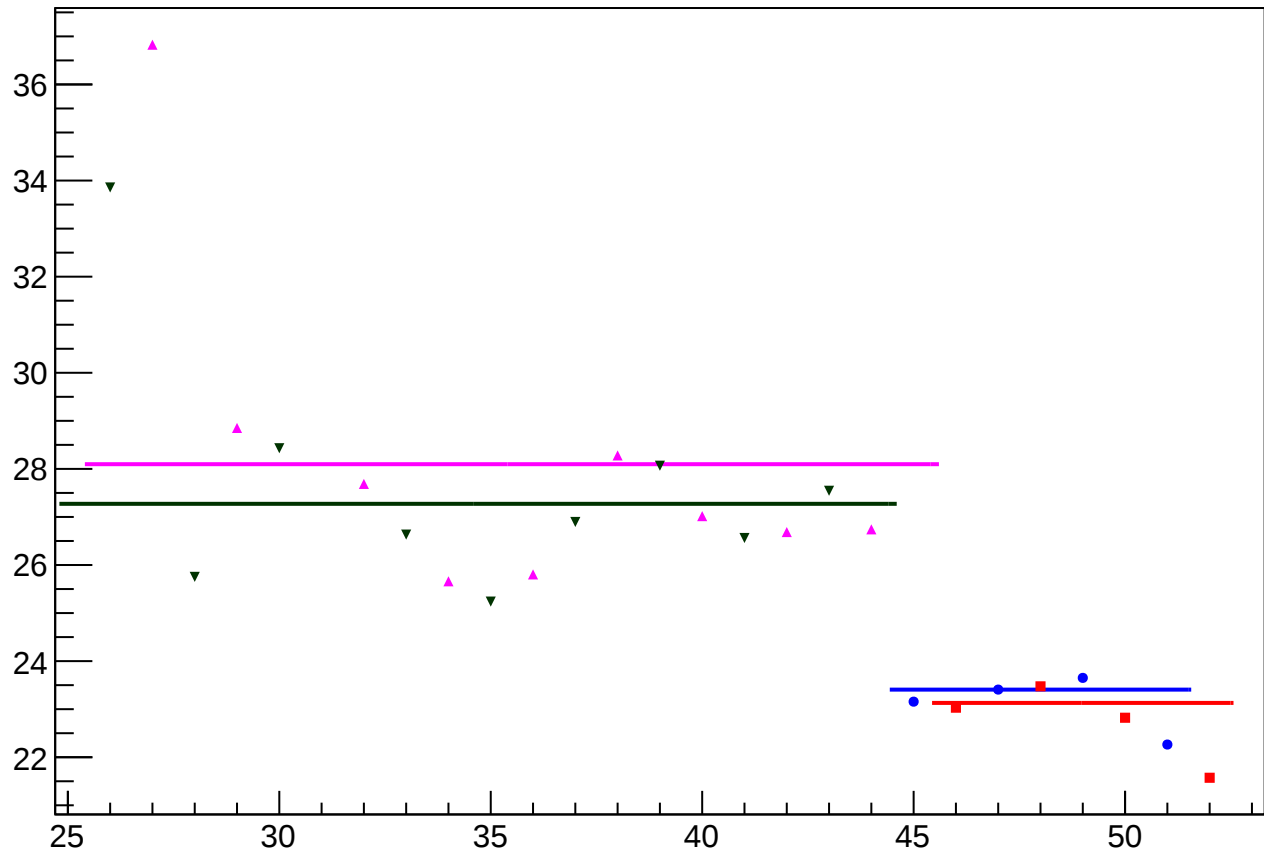
0.529+/-0.000  $\chi^2/\text{NDF}$ : 949298.4/12

Right Out: 0.462+/-0.000  $\chi^2/\text{NDF}$ : 537463.4/3

0.540+/-0.000  $\chi^2/\text{NDF}$ : 1093573.6/12

Left In: 0.577+/-0.000  $\chi^2/\text{NDF}$ : 428925.6/8

# yield\_sam4\_mean vs slug



Right In: 23.407+/-0.000  $\chi^2/\text{NDF}$ : 1254787.6/3

Left Out: 27.273+/-0.000  $\chi^2/\text{NDF}$ : 91783516.1/8

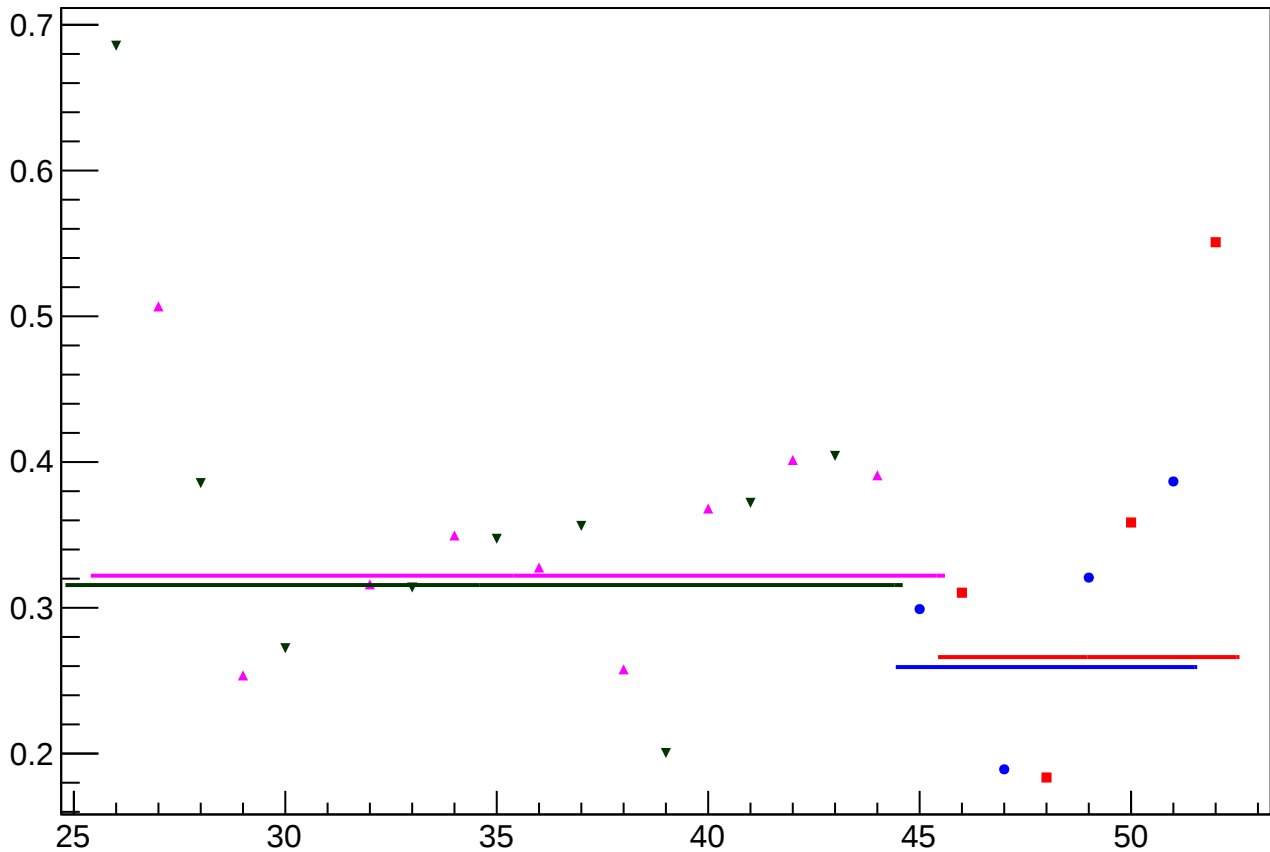
Right Out: 23.130+/-0.000  $\chi^2/\text{NDF}$ : 5894899.2/3

Left In: 28.098+/-0.000  $\chi^2/\text{NDF}$ : 296123459.5/8

25.822+/-0.000  $\chi^2/\text{NDF}$ : 331818391.9/12

26.577+/-0.000  $\chi^2/\text{NDF}$ : 668042906.5/12

# yield\_sam4\_rms vs slug



Right In: 0.259+/-0.000  $\chi^2/\text{NDF}$ : 197742.9/3

Left Out: 0.316+/-0.000  $\chi^2/\text{NDF}$ : 711532.8/8

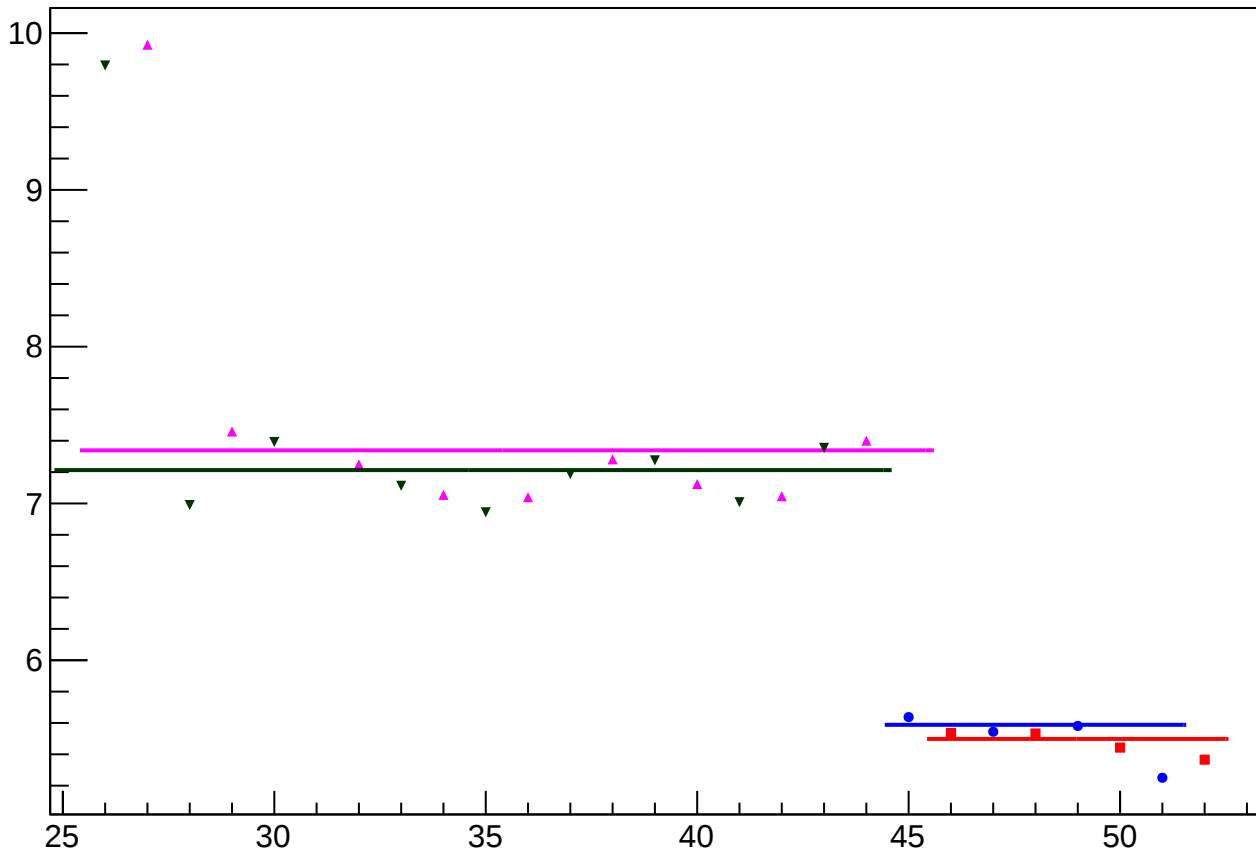
Right Out: 0.266+/-0.000  $\chi^2/\text{NDF}$ : 515639.4/3

Left In: 0.322+/-0.000  $\chi^2/\text{NDF}$ : 461575.4/8

0.294+/-0.000  $\chi^2/\text{NDF}$ : 1010414.3/12

0.305+/-0.000  $\chi^2/\text{NDF}$ : 1069767.1/12

# yield\_sam5\_mean vs slug



Right In: 5.588+/-0.000  $\chi^2/\text{NDF}$ : 13215185.8/3

Left Out: 7.213+/-0.000  $\chi^2/\text{NDF}$ : 2427551863.7/8

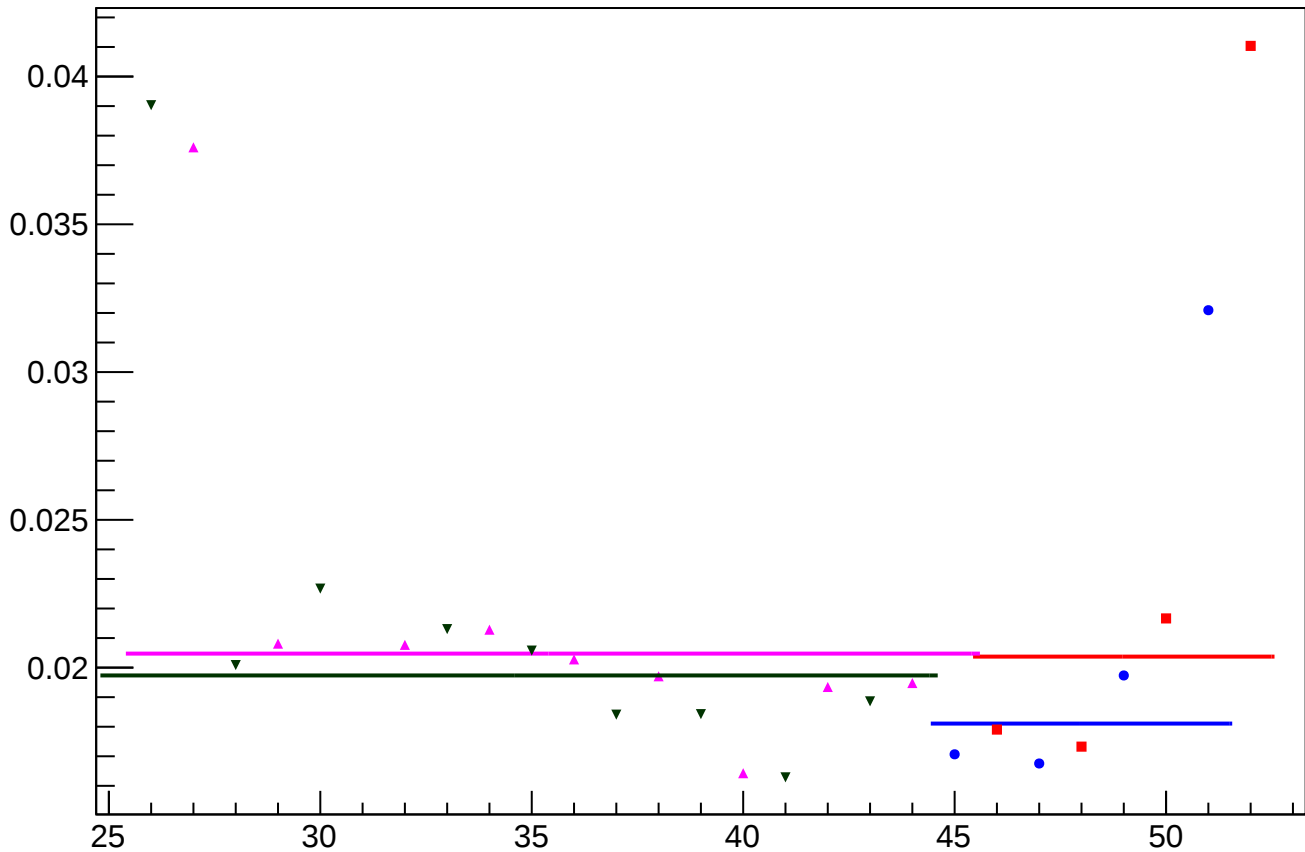
Right Out: 5.498+/-0.000  $\chi^2/\text{NDF}$ : 11750644.4/3

Left In: 7.339+/-0.000  $\chi^2/\text{NDF}$ : 4002199265.2/8

6.675+/-0.000  $\chi^2/\text{NDF}$ : 12379784838.0/12

6.890+/-0.000  $\chi^2/\text{NDF}$ : 14177115064.7/12

# yield\_sam5\_rms vs slug



Right In: 0.018+/-0.000  $\chi^2/\text{NDF}$ : 39283.5/3

Left Out: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 320845.5/8

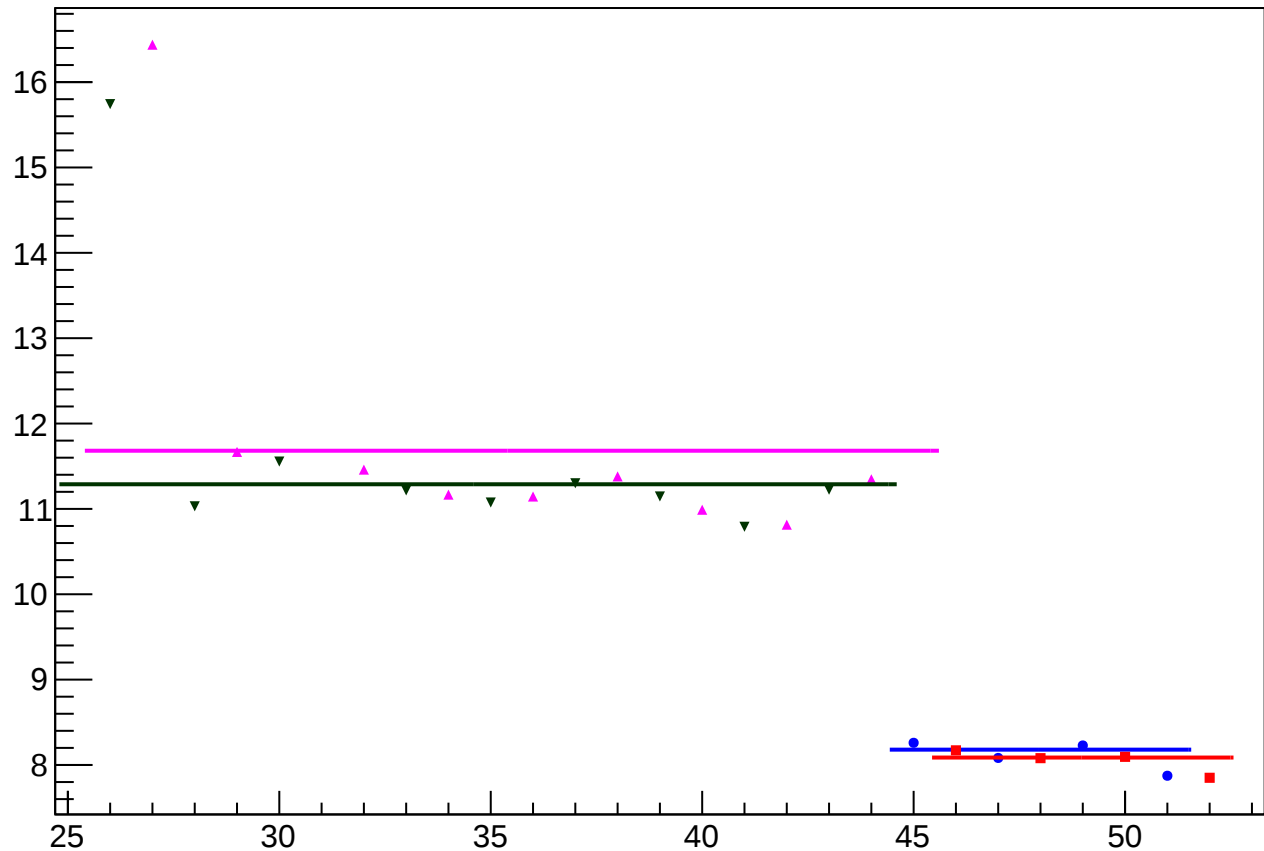
0.019+/-0.000  $\chi^2/\text{NDF}$ : 380106.6/12

Right Out: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 292630.5/3

0.020+/-0.000  $\chi^2/\text{NDF}$ : 673023.5/12

Left In: 0.020+/-0.000  $\chi^2/\text{NDF}$ : 380331.0/8

# yield\_sam6\_mean vs slug



Right In: 8.179+/-0.000  $\chi^2/\text{NDF}$ : 4733559.0/3

Left Out: 11.289+/-0.000  $\chi^2/\text{NDF}$ : 475112866.3/8

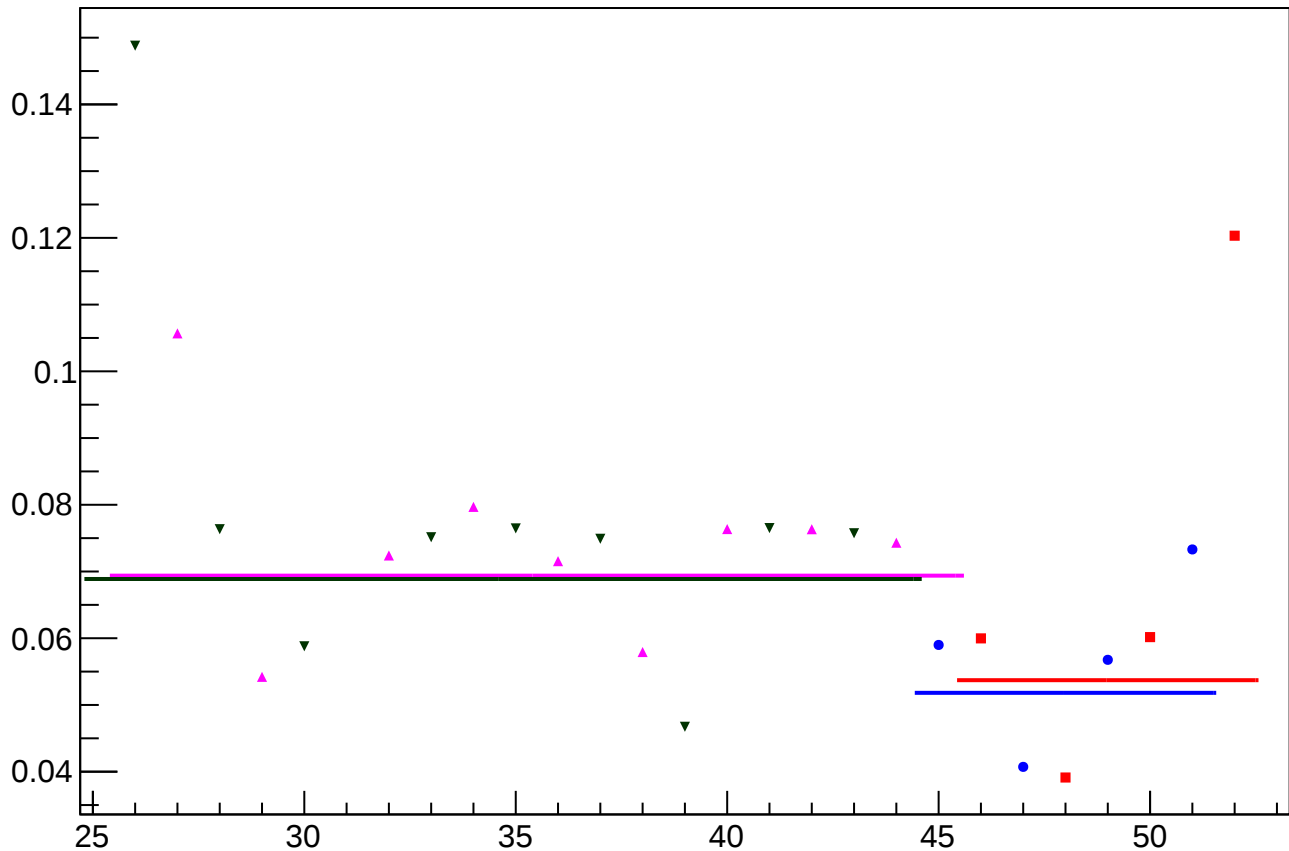
9.963+/-0.000  $\chi^2/\text{NDF}$ : 4191775254.2/12

Right Out: 8.087+/-0.000  $\chi^2/\text{NDF}$ : 2719864.6/3

10.450+/-0.000  $\chi^2/\text{NDF}$ : 6448023261.1/12

Left In: 11.681+/-0.000  $\chi^2/\text{NDF}$ : 1757981772.9/8

# yield\_sam6\_rms vs slug



Right In: 0.052 $\pm$ 0.000  $\chi^2$ /NDF: 96236.0/3

Left Out: 0.069 $\pm$ 0.000  $\chi^2$ /NDF:542333.9/8

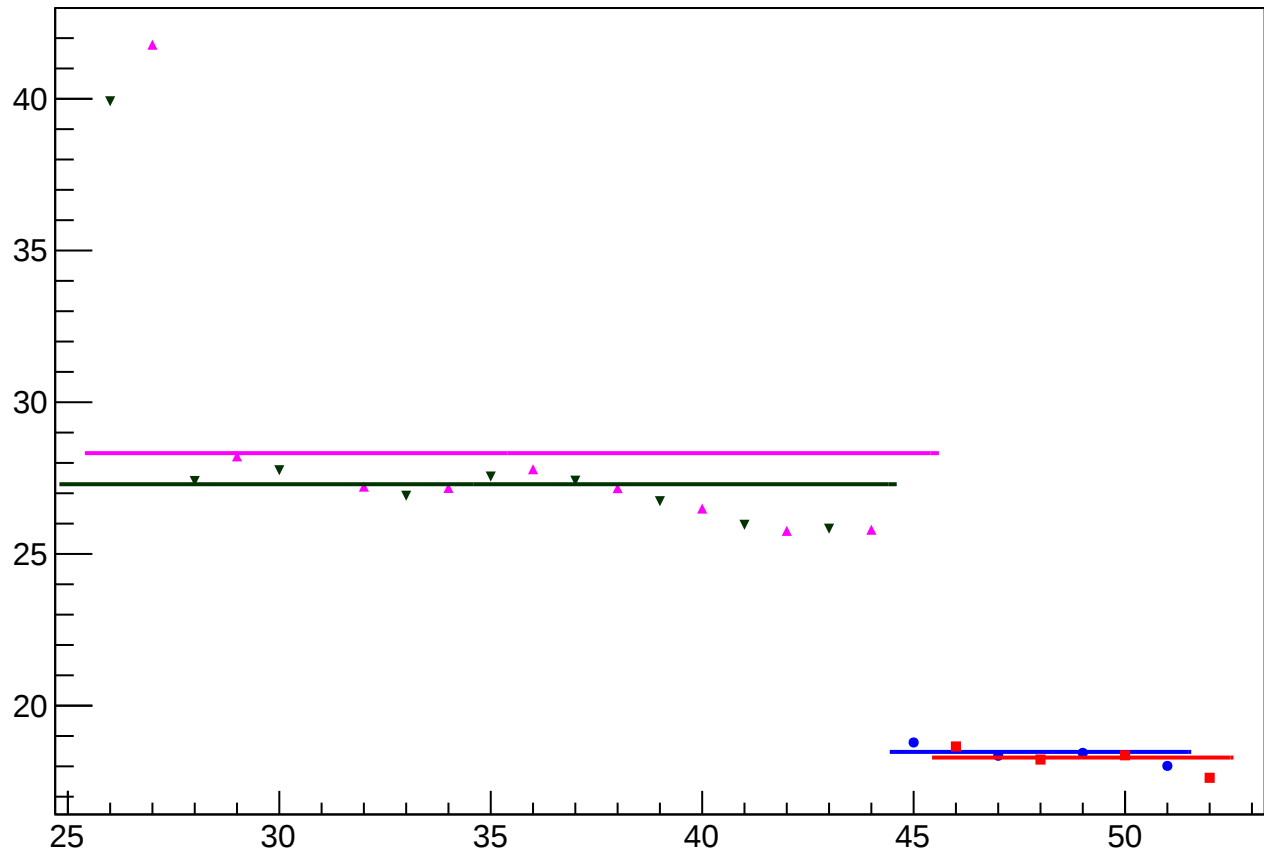
0.062 $\pm$ 0.000  $\chi^2$ /NDF: 862128.5/12

Right Out: 0.054 $\pm$ 0.000  $\chi^2$ /NDF: 440851.2/3

0.064 $\pm$ 0.000  $\chi^2$ /NDF: 1001673.9/12

Left In: 0.069 $\pm$ 0.000  $\chi^2$ /NDF:382716.0/8

# yield\_sam7\_mean vs slug



Right In: 18.476+/-0.000     $\chi^2/\text{NDF}$ : 12803953.3/3

Left Out: 27.298+/-0.000     $\chi^2/\text{NDF}$ :1975060613.1/8

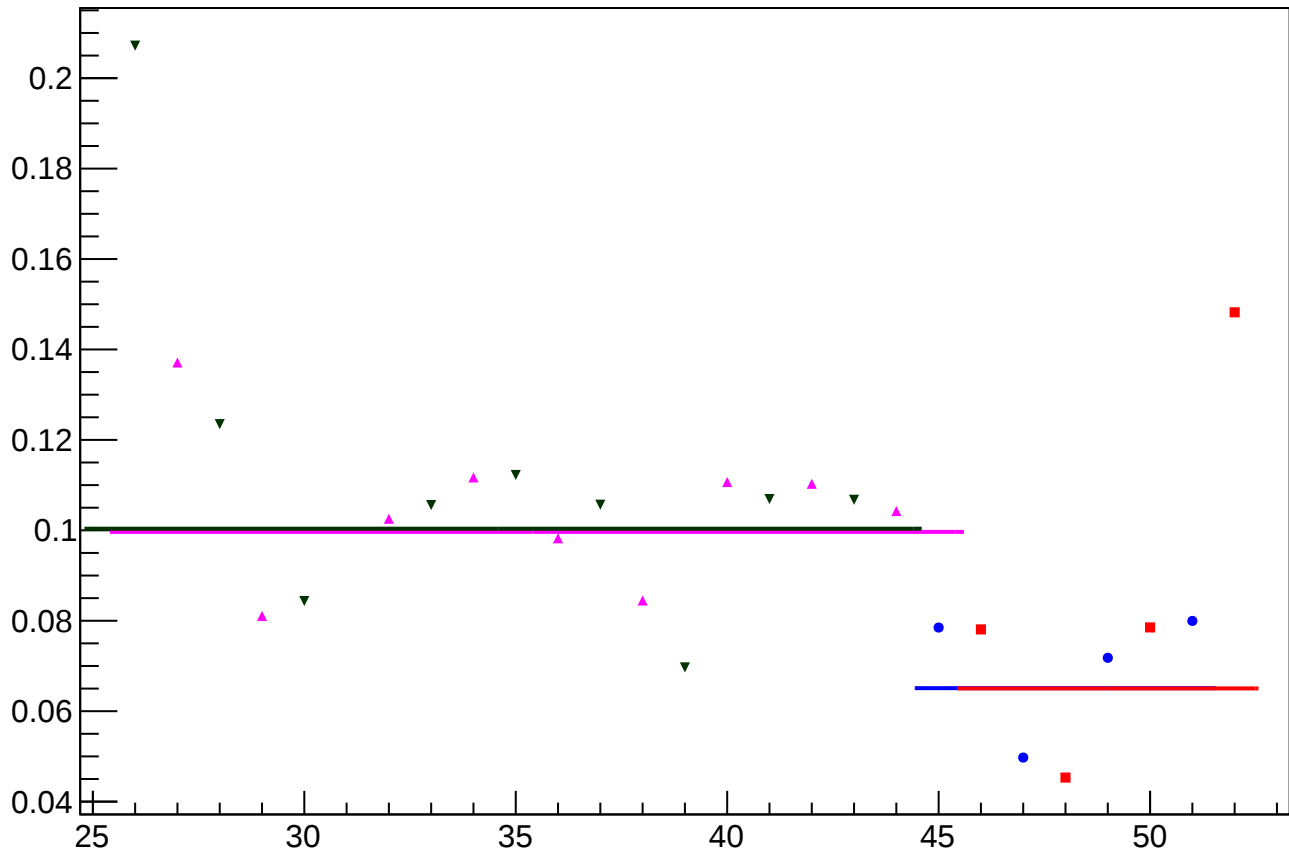
22.932+/-0.000     $\chi^2/\text{NDF}$ : 18185026128.5/12

Right Out: 18.290+/-0.000     $\chi^2/\text{NDF}$ : 19594219.4/3

24.198+/-0.000     $\chi^2/\text{NDF}$ : 29223729570.1/12

Left In: 28.322+/-0.000     $\chi^2/\text{NDF}$ :8116696622.8/8

# yield\_sam7\_rms vs slug



Right In: 0.065+/-0.000  $\chi^2/\text{NDF}$ : 122965.9/3

Left Out: 0.100+/-0.000  $\chi^2/\text{NDF}$ : 509899.4/8

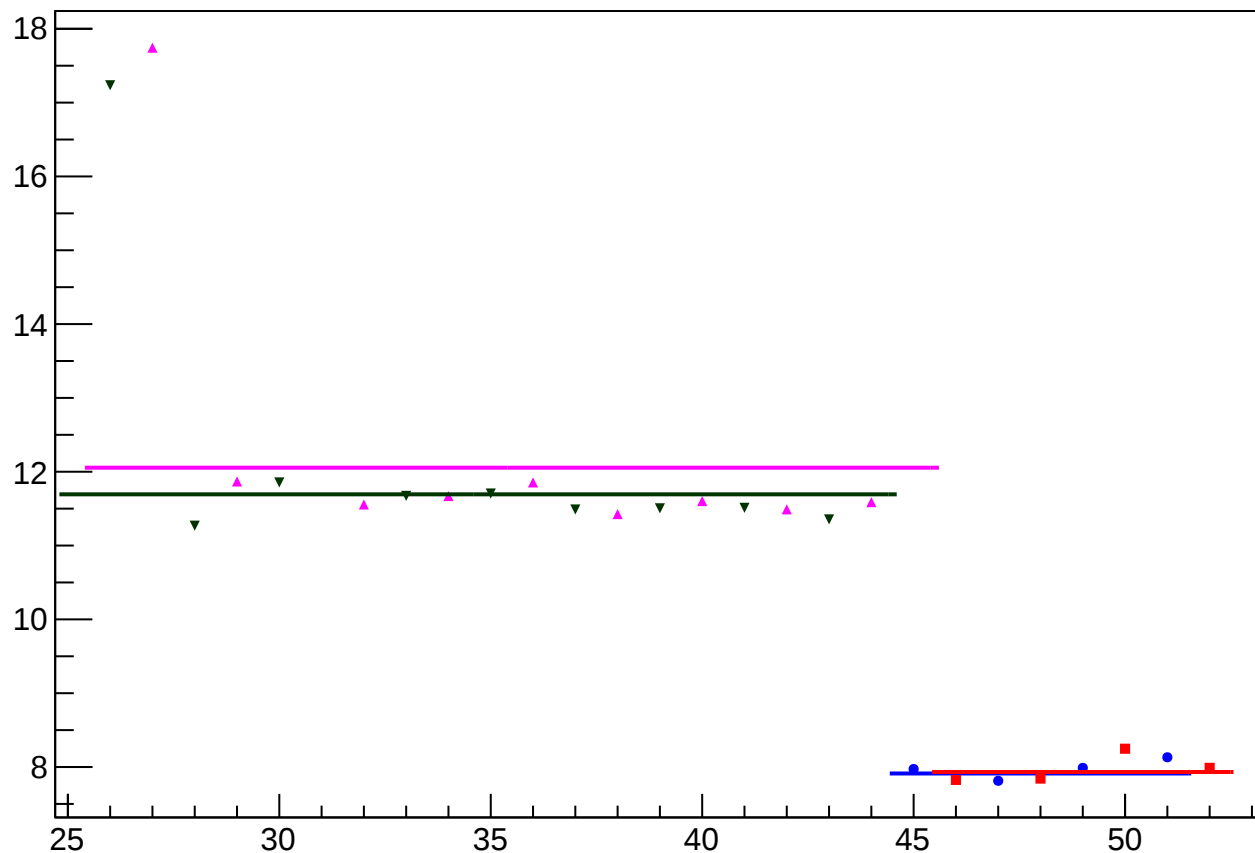
Right Out: 0.065+/-0.000  $\chi^2/\text{NDF}$ : 518306.9/3

Left In: 0.100+/-0.000  $\chi^2/\text{NDF}$ : 255418.8/8

0.083+/-0.000  $\chi^2/\text{NDF}$ : 1150676.1/12

0.085+/-0.000  $\chi^2/\text{NDF}$ : 1275941.4/12

# yield\_sam8\_mean vs slug



Right In: 7.912 $\pm$ 0.000  $\chi^2$ /NDF: 12968988.9/3

Left Out: 11.694 $\pm$ 0.000  $\chi^2$ /NDF: 1571804703.3/8

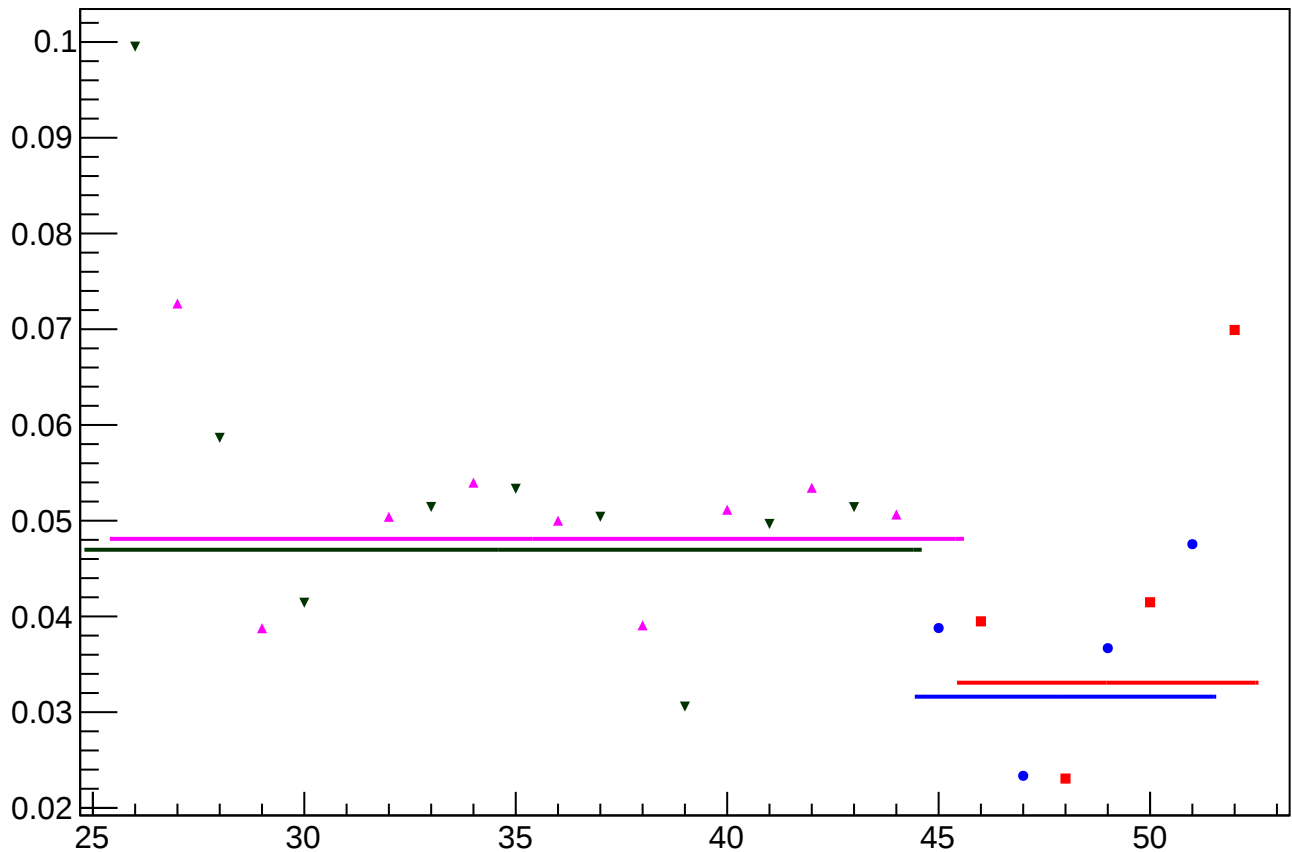
Right Out: 7.933 $\pm$ 0.000  $\chi^2$ /NDF: 37246072.4/3

Left In: 12.055 $\pm$ 0.000  $\chi^2$ /NDF: 5109226136.0/8

9.917 $\pm$ 0.000  $\chi^2$ /NDF: 14702586875.0/12

10.453 $\pm$ 0.000  $\chi^2$ /NDF: 19659822675.3/12

# yield\_sam8\_rms vs slug



Right In: 0.032+/-0.000  $\chi^2/\text{NDF}$ : 179679.9/3

Left Out: 0.047+/-0.000  $\chi^2/\text{NDF}$ : 612154.7/8

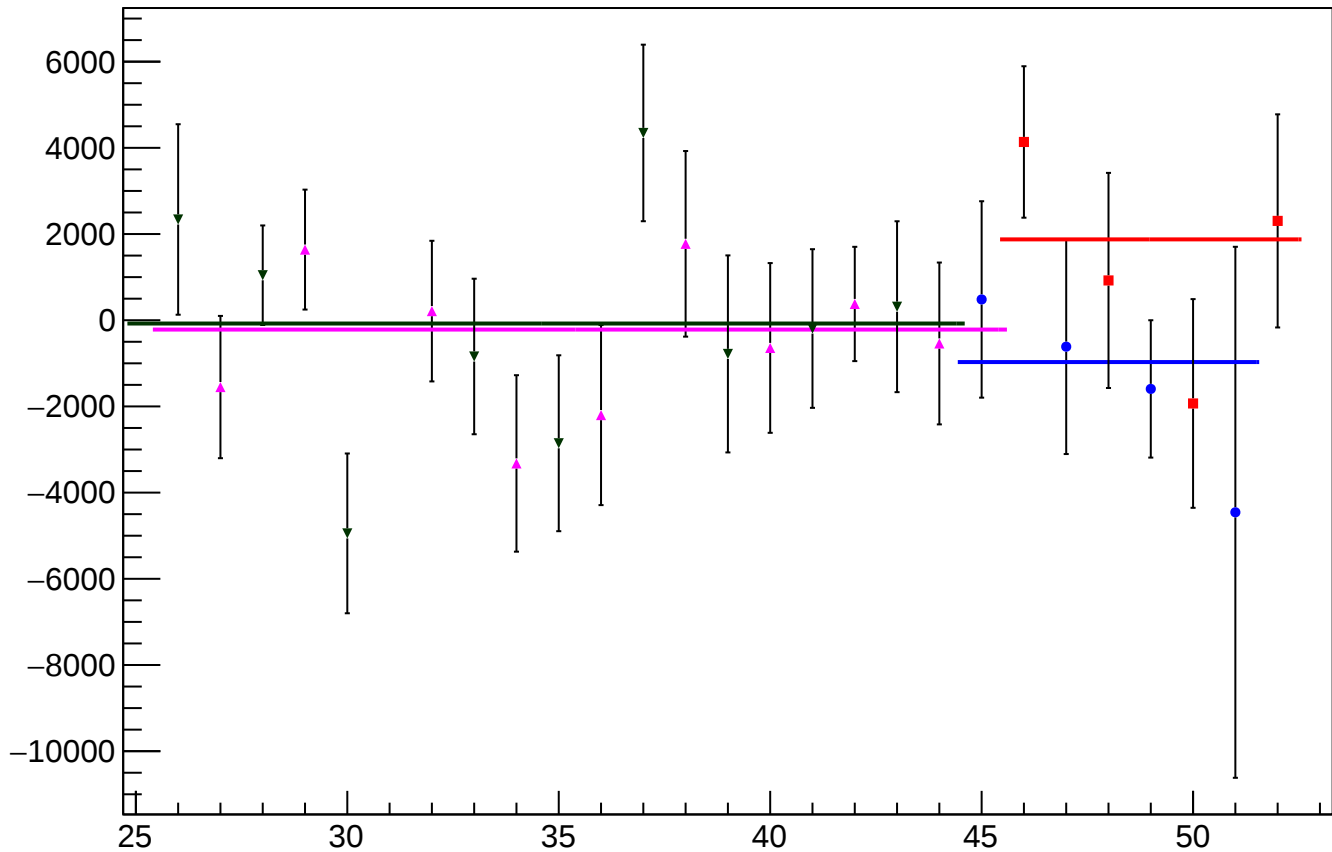
Right Out: 0.033+/-0.000  $\chi^2/\text{NDF}$ : 494944.2/3

Left In: 0.048+/-0.000  $\chi^2/\text{NDF}$ : 348766.4/8

0.040+/-0.000  $\chi^2/\text{NDF}$ : 1223991.5/12

0.042+/-0.000  $\chi^2/\text{NDF}$ : 1229387.5/12

# cor\_sam1\_mean vs slug



Right In:  $-970.636 \pm 1136.795$   $\chi^2/\text{NDF}$ : 0.9/3

Left Out:  $-76.487 \pm 600.613$   $\chi^2/\text{NDF}$ : 15.9/8

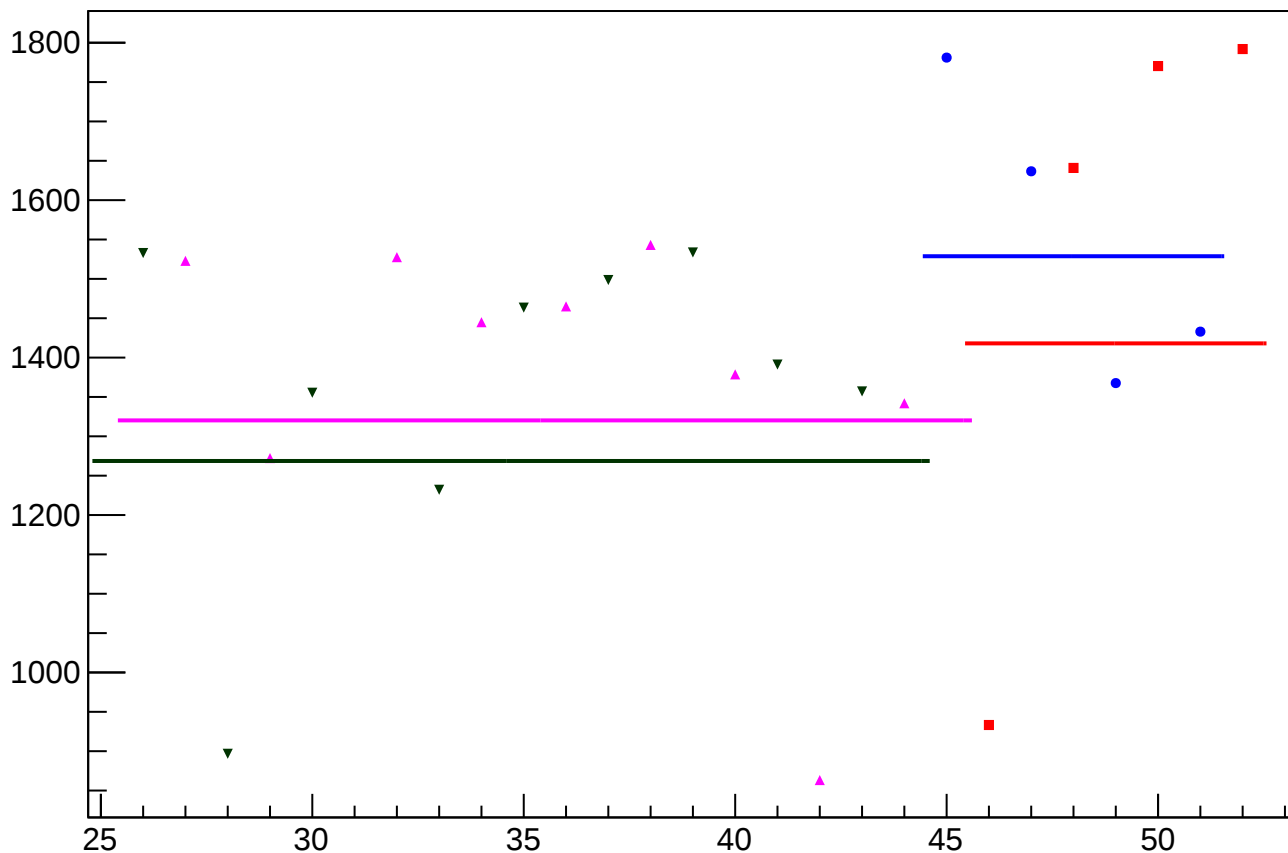
Right Out:  $1875.877 \pm 1105.336$   $\chi^2/\text{NDF}$ : 4.3/3

Left In:  $-216.843 \pm 572.349$   $\chi^2/\text{NDF}$ : 6.8/8

$-271.614 \pm 531.050$   $\chi^2/\text{NDF}$ : 17.3/12

$225.625 \pm 508.253$   $\chi^2/\text{NDF}$ : 14.0/12

# cor\_sam1\_rms vs slug



Right In:  $1528.761 \pm 0.804$   $\chi^2/\text{NDF}$ : 49209.2/3

Left Out:  $1268.658 \pm 0.425$   $\chi^2/\text{NDF}$ : 324399.1/8

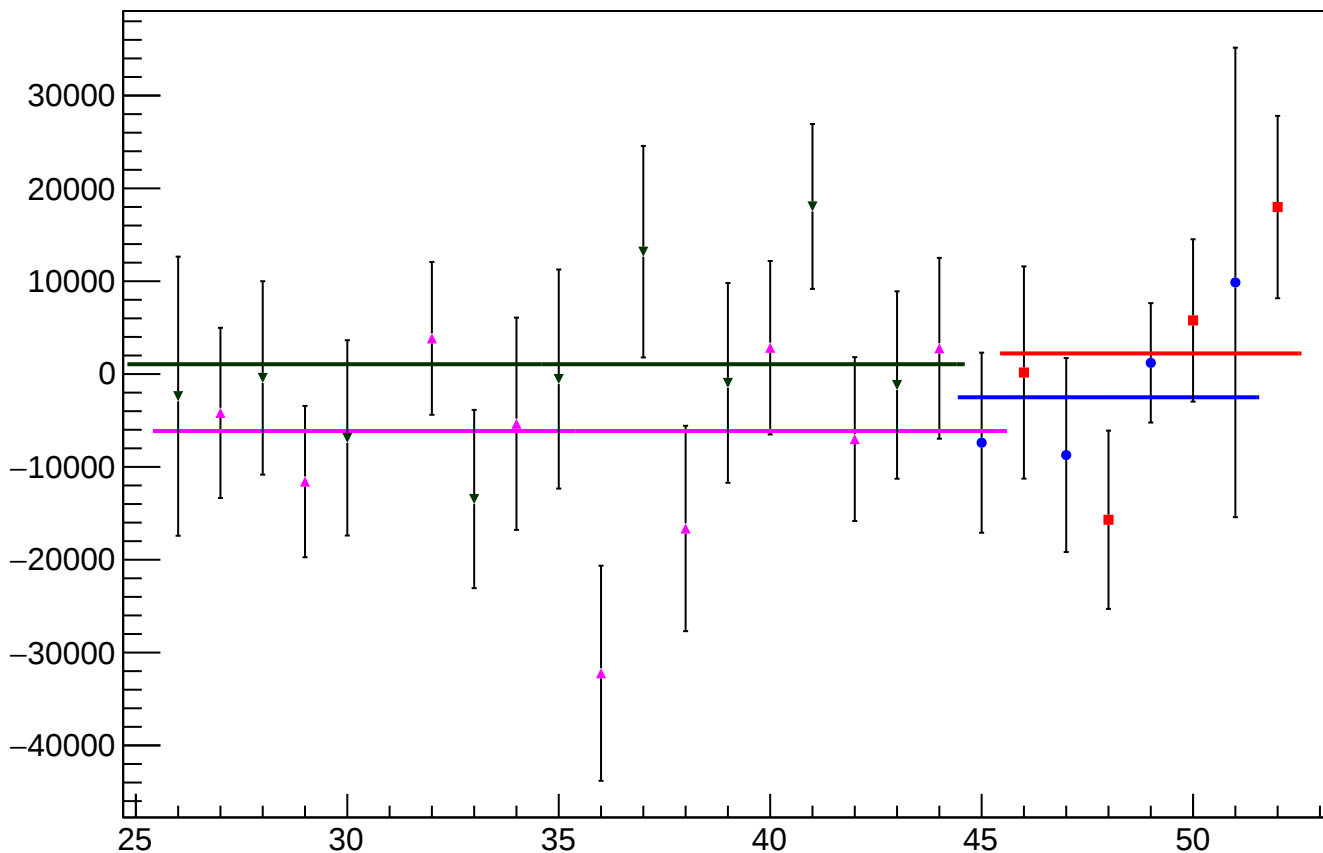
Right Out:  $1418.052 \pm 0.782$   $\chi^2/\text{NDF}$ : 256248.0/3

Left In:  $1320.223 \pm 0.405$   $\chi^2/\text{NDF}$ : 342759.8/8

$1325.419 \pm 0.376$   $\chi^2/\text{NDF}$ : 455462.2/12

$1340.907 \pm 0.359$   $\chi^2/\text{NDF}$ : 611361.9/12

# cor\_sam2\_mean vs slug



Right In: -2500.582 $\pm$ 4686.765  $\chi^2$ /NDF: 1.2/3

Left Out: 1060.376 $\pm$ 3545.636  $\chi^2$ /NDF: 7.8/8

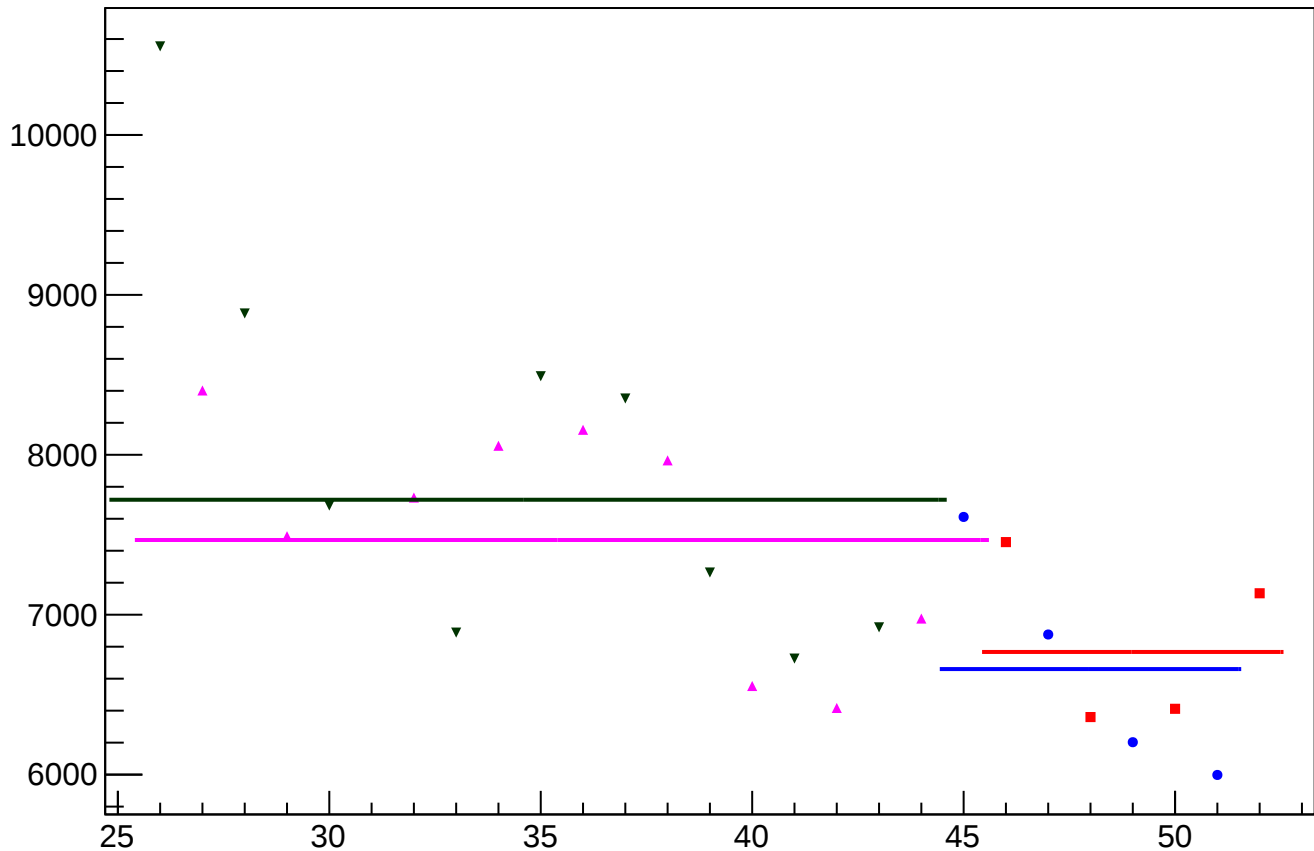
Right Out: 2222.532 $\pm$ 4882.483  $\chi^2$ /NDF: 6.3/3

Left In: -6136.125 $\pm$ 3165.179  $\chi^2$ /NDF: 9.7/8

-235.809 $\pm$ 2827.634  $\chi^2$ /NDF: 9.4/12

-3662.781 $\pm$ 2655.919  $\chi^2$ /NDF: 18.0/12

# cor\_sam2\_rms vs slug



Right In: 6660.061+/-3.314  $\chi^2/\text{NDF}$ : 31580.0/3

Left Out: 7718.910+/-2.507  $\chi^2/\text{NDF}$ :166985.2/8

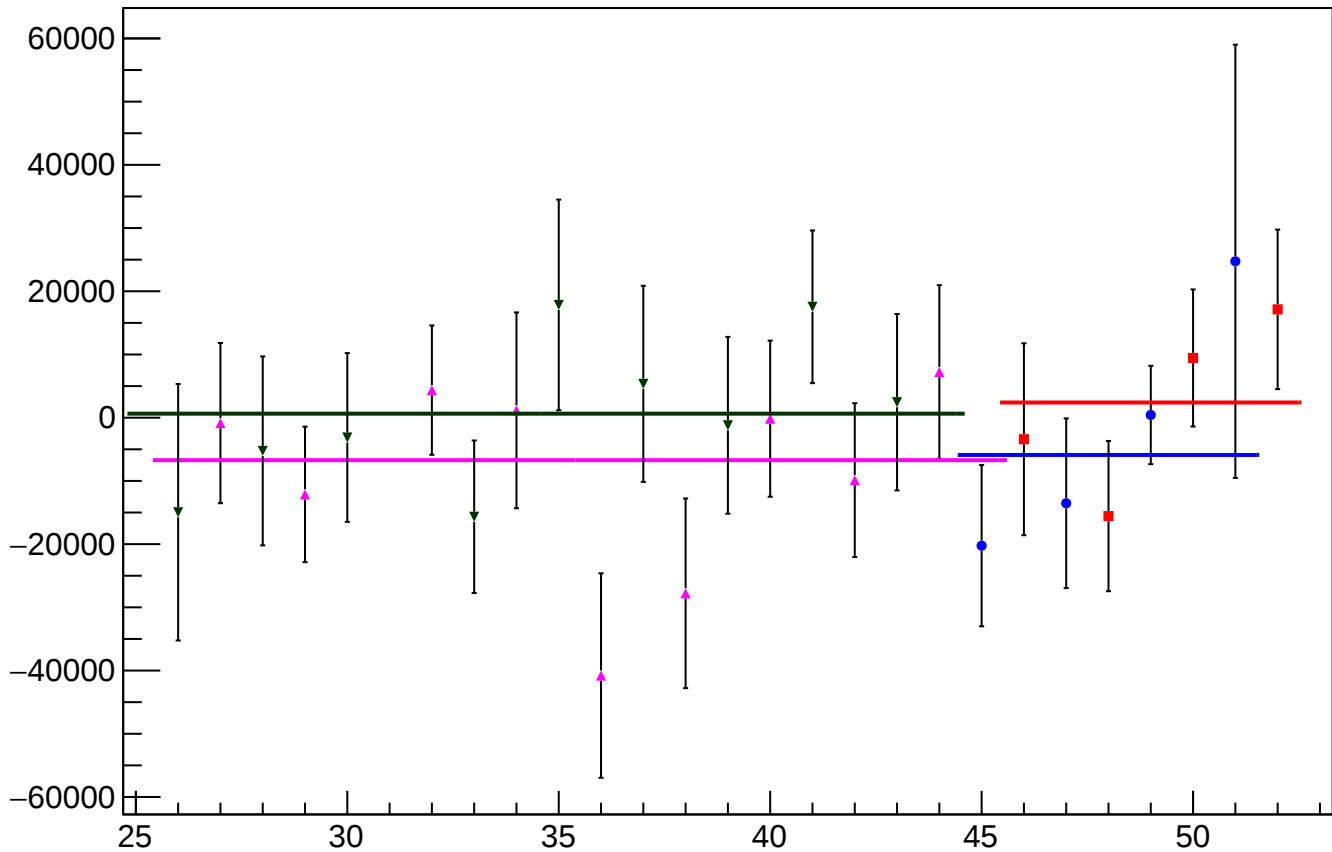
7333.490+/-1.999  $\chi^2/\text{NDF}$ : 263489.8/12

Right Out: 6767.084+/-3.452  $\chi^2/\text{NDF}$ : 16917.2/3

7260.026+/-1.878  $\chi^2/\text{NDF}$ : 137719.9/12

Left In: 7467.189+/-2.238  $\chi^2/\text{NDF}$ :91848.7/8

# cor\_sam3\_mean vs slug



Right In: -5892.419 $\pm$ 5863.593  $\chi^2$ /NDF: 3.1/3

Left Out: 639.789 $\pm$ 4753.910  $\chi^2$ /NDF: 5.8/8

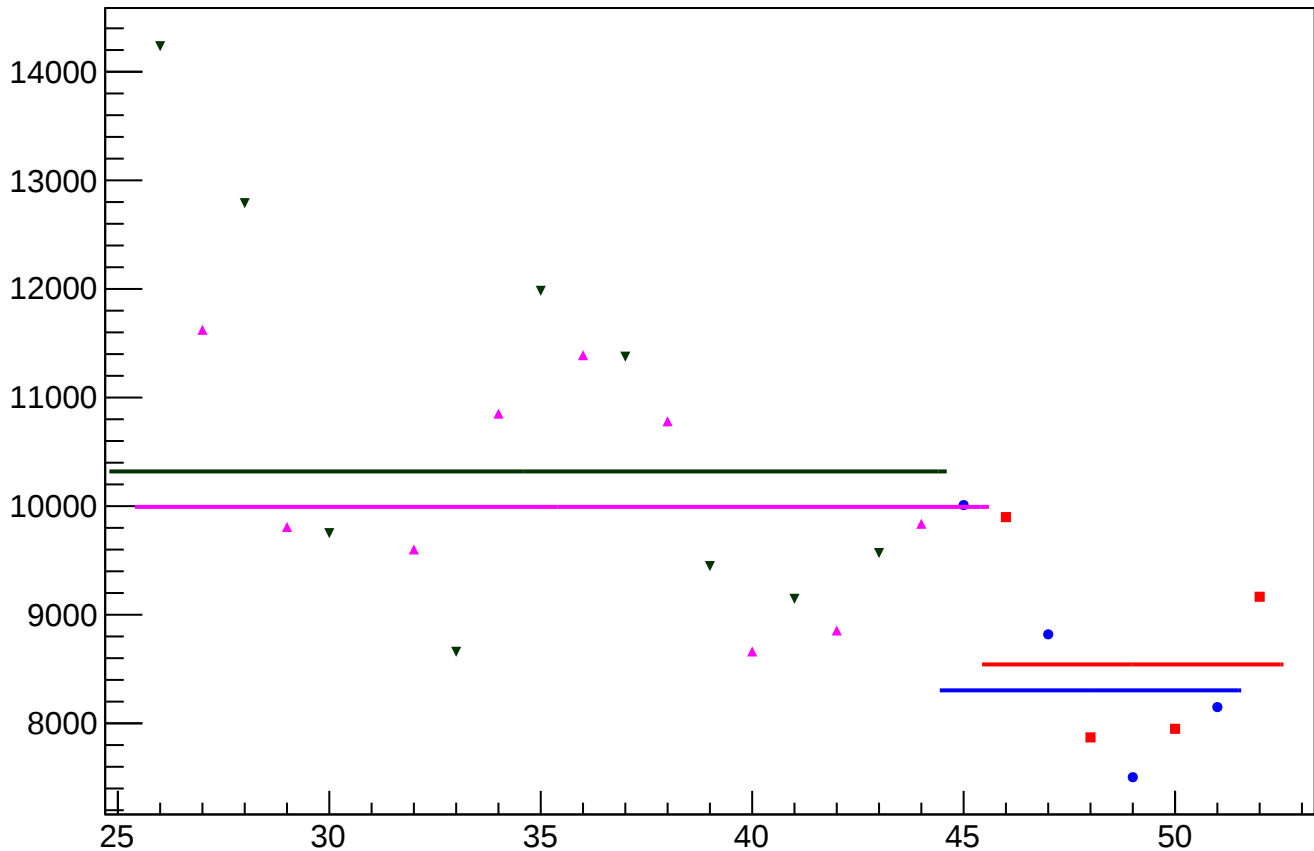
-1950.981 $\pm$ 3692.736  $\chi^2$ /NDF: 9.6/12

Right Out: 2403.845 $\pm$ 6177.139  $\chi^2$ /NDF: 4.2/3

-3795.375 $\pm$ 3497.996  $\chi^2$ /NDF: 15.4/12

Left In: -6721.702 $\pm$ 4244.047  $\chi^2$ /NDF: 9.7/8

# cor\_sam3\_rms vs slug



Right In: 8303.604+/-4.146  $\chi^2/\text{NDF}$ : 59939.7/3

Left Out: 10319.525+/-3.362  $\chi^2/\text{NDF}$ : 232272.2/8

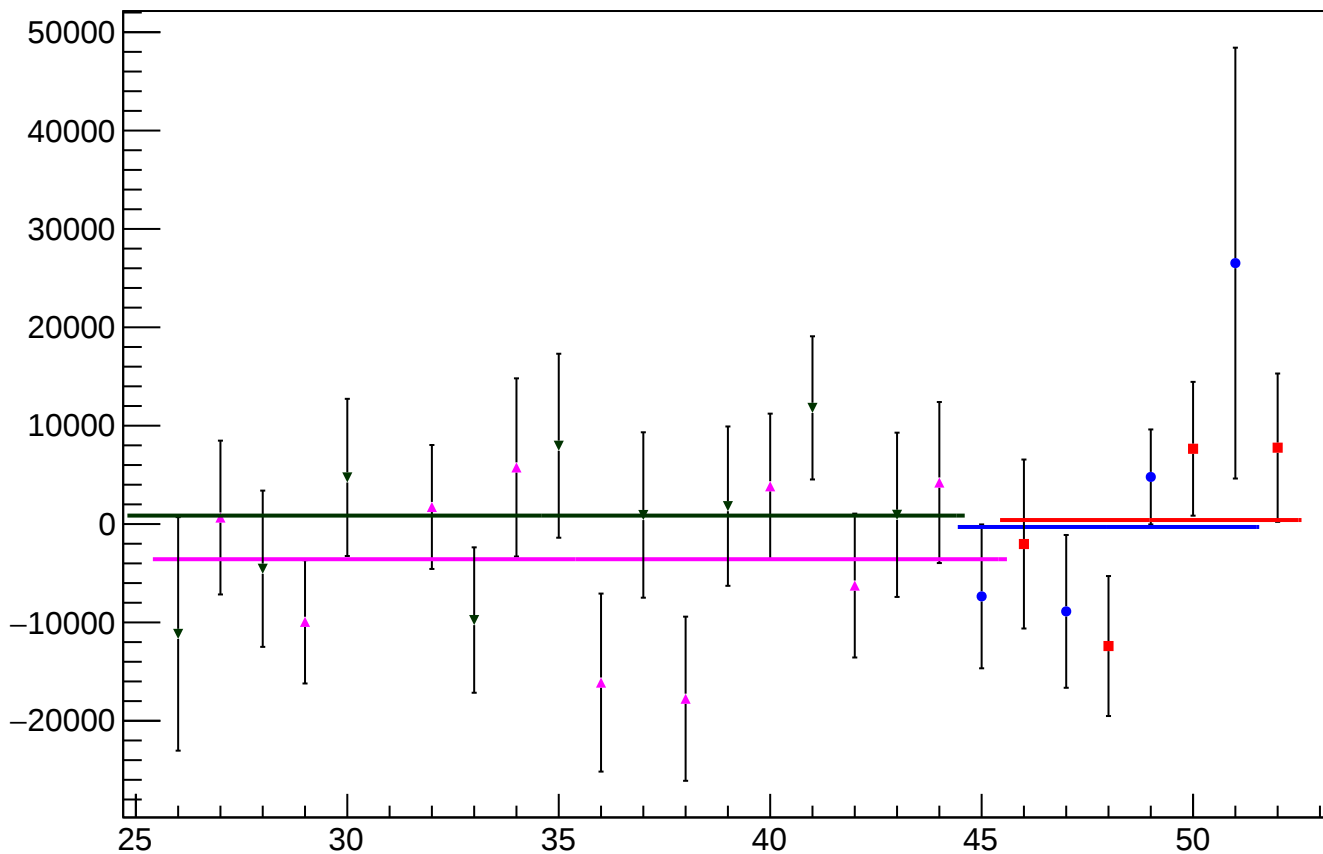
Right Out: 8542.421+/-4.368  $\chi^2/\text{NDF}$ : 33220.8/3

Left In: 9993.116+/-3.001  $\chi^2/\text{NDF}$ : 104211.5/8

9519.981+/-2.611  $\chi^2/\text{NDF}$ : 434852.9/12

9527.915+/-2.473  $\chi^2/\text{NDF}$ : 212367.4/12

# cor\_sam4\_mean vs slug



Right In: -297.955+/-3529.864  $\chi^2/\text{NDF}$ : 4.8/3

Left Out: 860.253+/-2763.123  $\chi^2/\text{NDF}$ :6.6/8

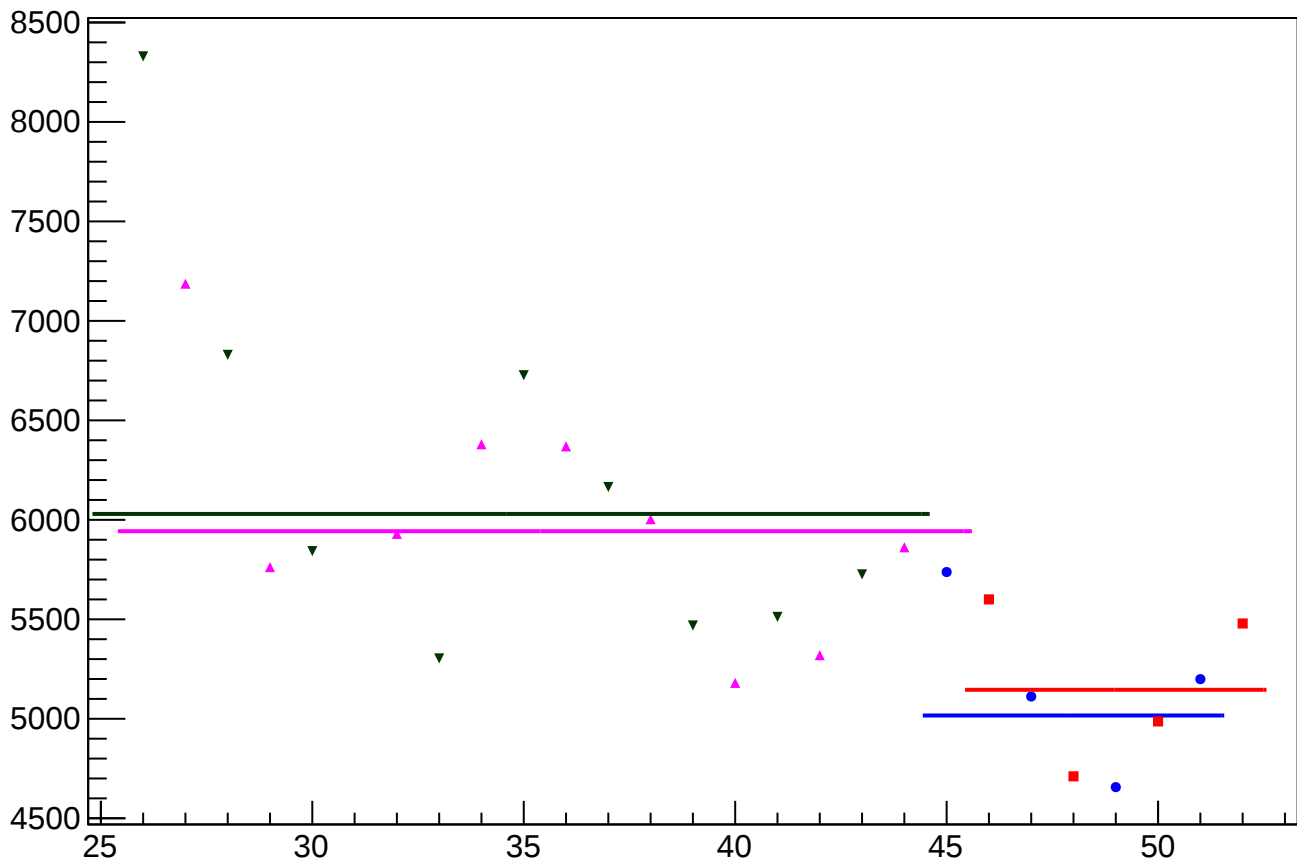
Right Out: 408.351+/-3713.107  $\chi^2/\text{NDF}$ : 5.4/3

Left In: -3574.359+/-2517.724  $\chi^2/\text{NDF}$ :10.0/8

420.201+/-2175.787  $\chi^2/\text{NDF}$ : 11.5/12

-2319.961+/-2083.847  $\chi^2/\text{NDF}$ : 16.2/12

# cor\_sam4\_rms vs slug



Right In: 5016.639 +/- 2.496     $\chi^2/\text{NDF}$ : 31002.5/3

Left Out: 6029.703 +/- 1.954     $\chi^2/\text{NDF}$ : 149738.9/8

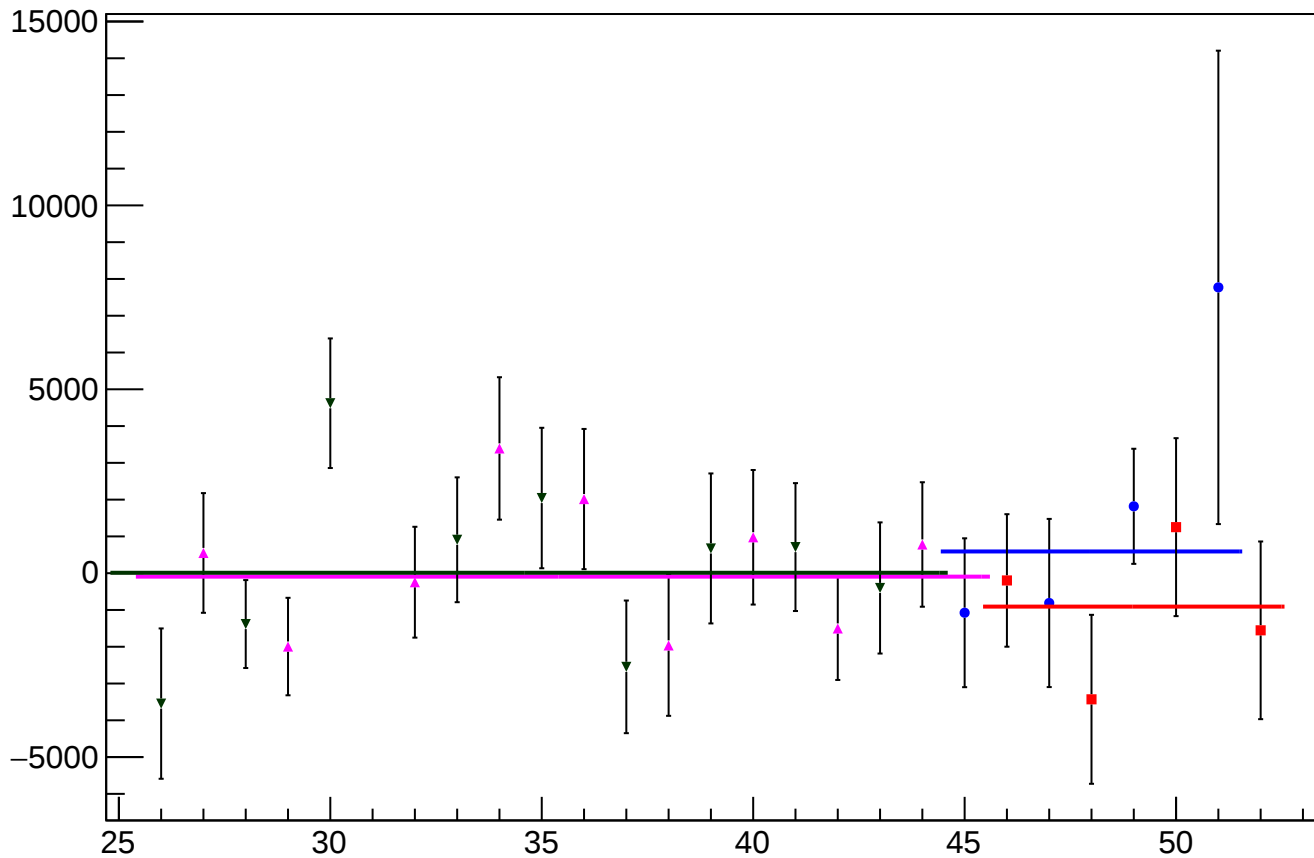
Right Out: 5145.712 +/- 2.626     $\chi^2/\text{NDF}$ : 18078.3/3

Left In: 5942.884 +/- 1.780     $\chi^2/\text{NDF}$ : 97554.3/8

5644.798 +/- 1.539     $\chi^2/\text{NDF}$ : 282887.3/12

5691.806 +/- 1.474     $\chi^2/\text{NDF}$ : 178782.8/12

# cor\_sam5\_mean vs slug



Right In: 590.735+/-1073.310  $\chi^2/\text{NDF}$ : 2.9/3

Left Out: 11.403+/-570.182  $\chi^2/\text{NDF}$ : 15.0/8

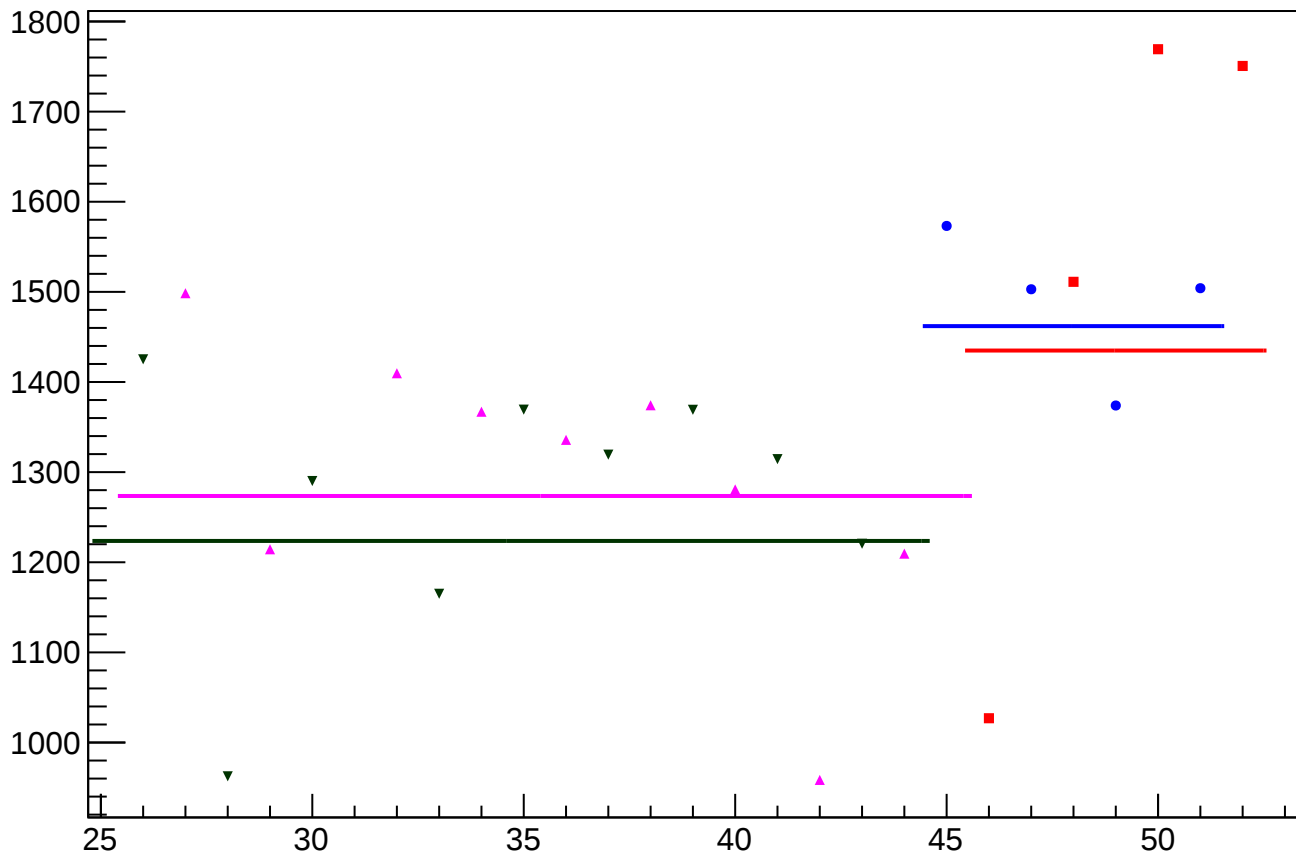
Right Out: -908.638+/-1091.174  $\chi^2/\text{NDF}$ : 2.2/3

Left In: -93.953+/-545.533  $\chi^2/\text{NDF}$ : 9.3/8

138.913+/-503.539  $\chi^2/\text{NDF}$ : 18.1/12

-256.864+/-487.949  $\chi^2/\text{NDF}$ : 11.9/12

# cor\_sam5\_rms vs slug



Right In: 1462.002 $\pm$ 0.759  $\chi^2$ /NDF: 13098.1/3

Left Out: 1223.657 $\pm$ 0.403  $\chi^2$ /NDF:153036.7/8

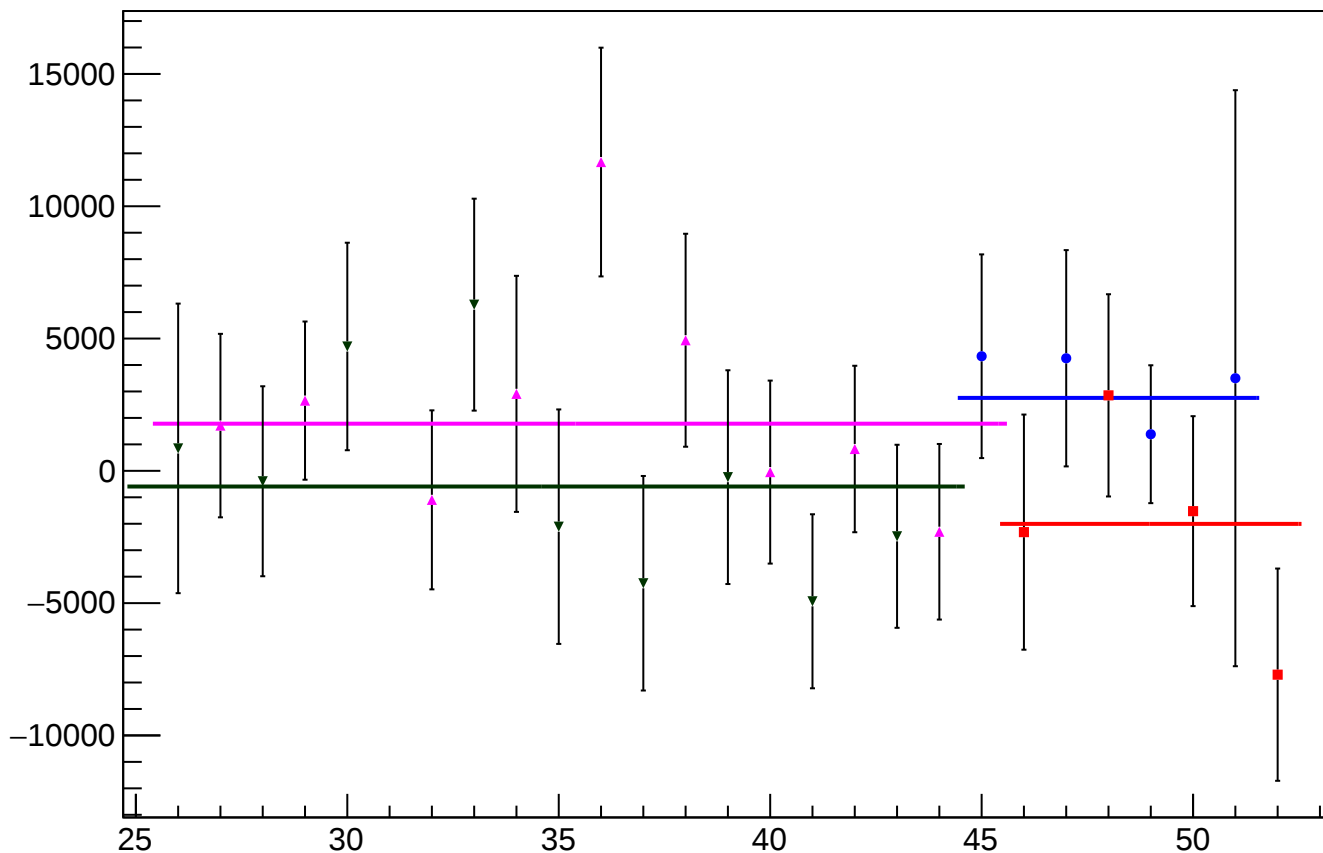
Right Out: 1434.909 $\pm$ 0.772  $\chi^2$ /NDF: 177131.0/3

Left In: 1273.541 $\pm$ 0.386  $\chi^2$ /NDF:174992.2/8

1276.117 $\pm$ 0.356  $\chi^2$ /NDF: 243053.0/12

1305.809 $\pm$ 0.345  $\chi^2$ /NDF: 387116.5/12

# cor\_sam6\_mean vs slug



Right In:  $2756.959 \pm 1879.482$   $\chi^2/\text{NDF}$ : 0.6/3

Left Out:  $-592.543 \pm 1304.748$   $\chi^2/\text{NDF}$ : 7.8/8

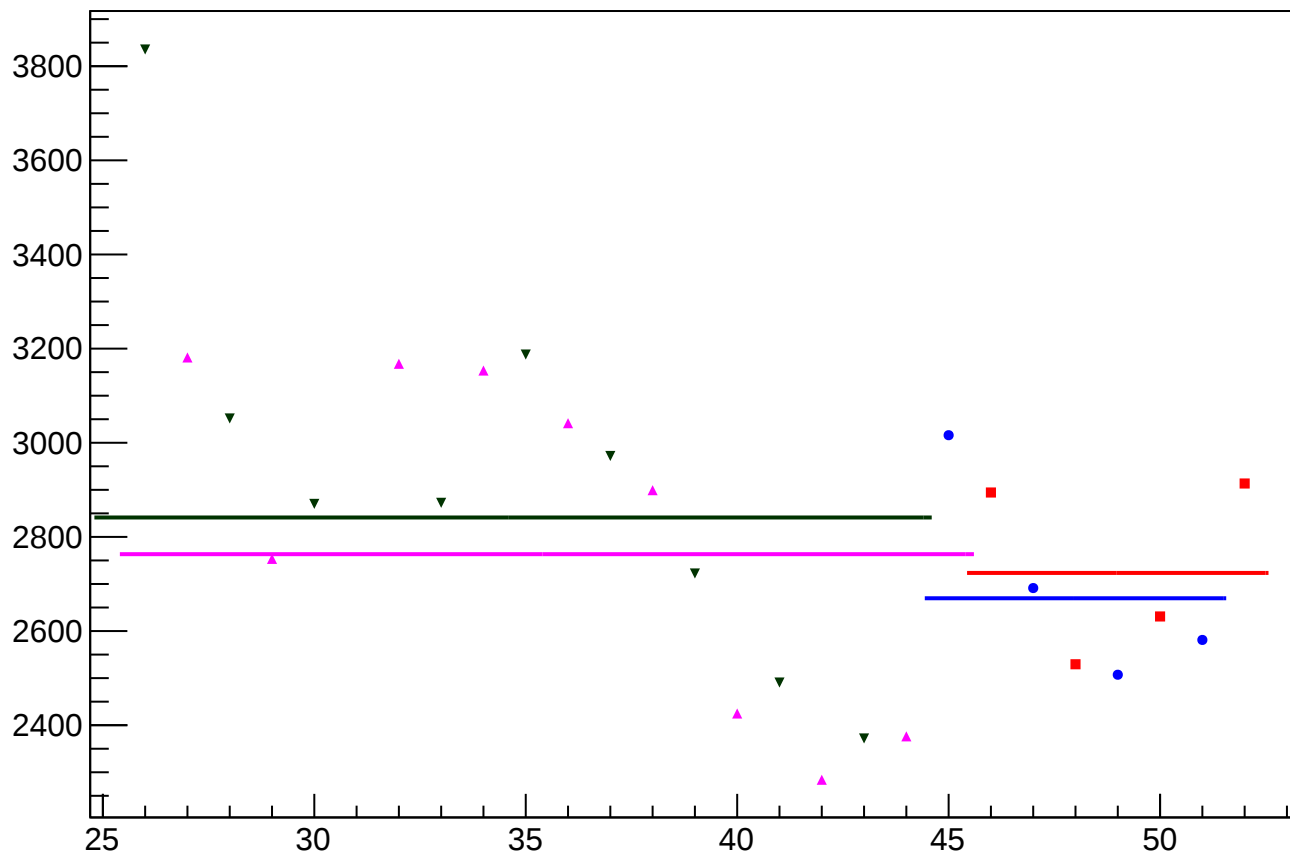
Right Out:  $-2004.885 \pm 1965.406$   $\chi^2/\text{NDF}$ : 3.7/3

Left In:  $1782.022 \pm 1175.711$   $\chi^2/\text{NDF}$ : 8.6/8

$496.717 \pm 1071.800$   $\chi^2/\text{NDF}$ : 10.5/12

$784.022 \pm 1008.963$   $\chi^2/\text{NDF}$ : 15.0/12

# cor\_sam6\_rms vs slug



Right In: 2669.663+/-1.329  $\chi^2/\text{NDF}$ : 24159.5/3

Left Out: 2841.264+/-0.923  $\chi^2/\text{NDF}$ :148700.6/8

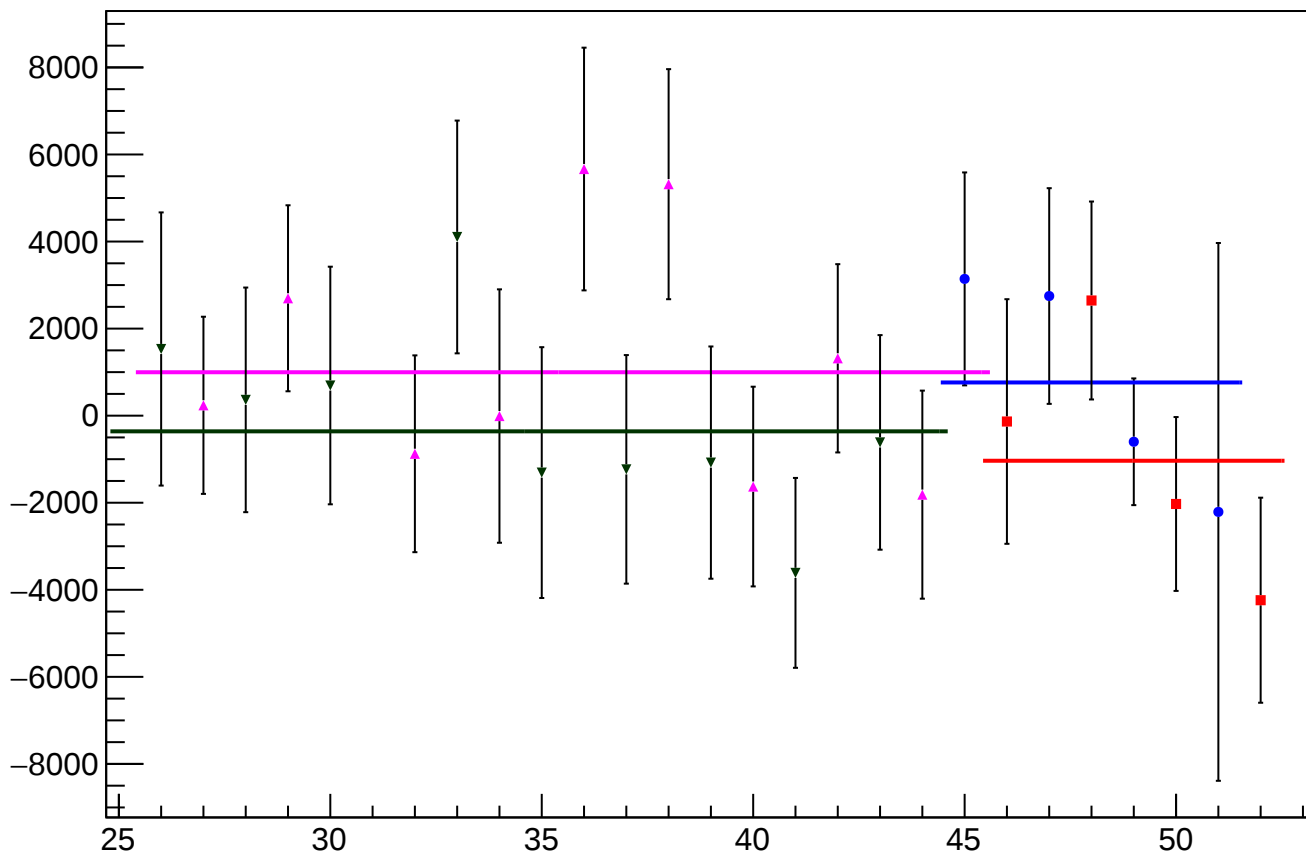
Right Out: 2723.476+/-1.390  $\chi^2/\text{NDF}$ : 13925.9/3

Left In: 2763.332+/-0.831  $\chi^2/\text{NDF}$ :176305.8/8

2785.459+/-0.758  $\chi^2/\text{NDF}$ : 184110.5/12

2752.829+/-0.713  $\chi^2/\text{NDF}$ : 190837.4/12

# cor\_sam7\_mean vs slug



Right In:  $762.785 \pm 1098.688$   $\chi^2/\text{NDF}$ : 2.7/3

Left Out:  $-360.260 \pm 874.765$   $\chi^2/\text{NDF}$ : 5.9/8

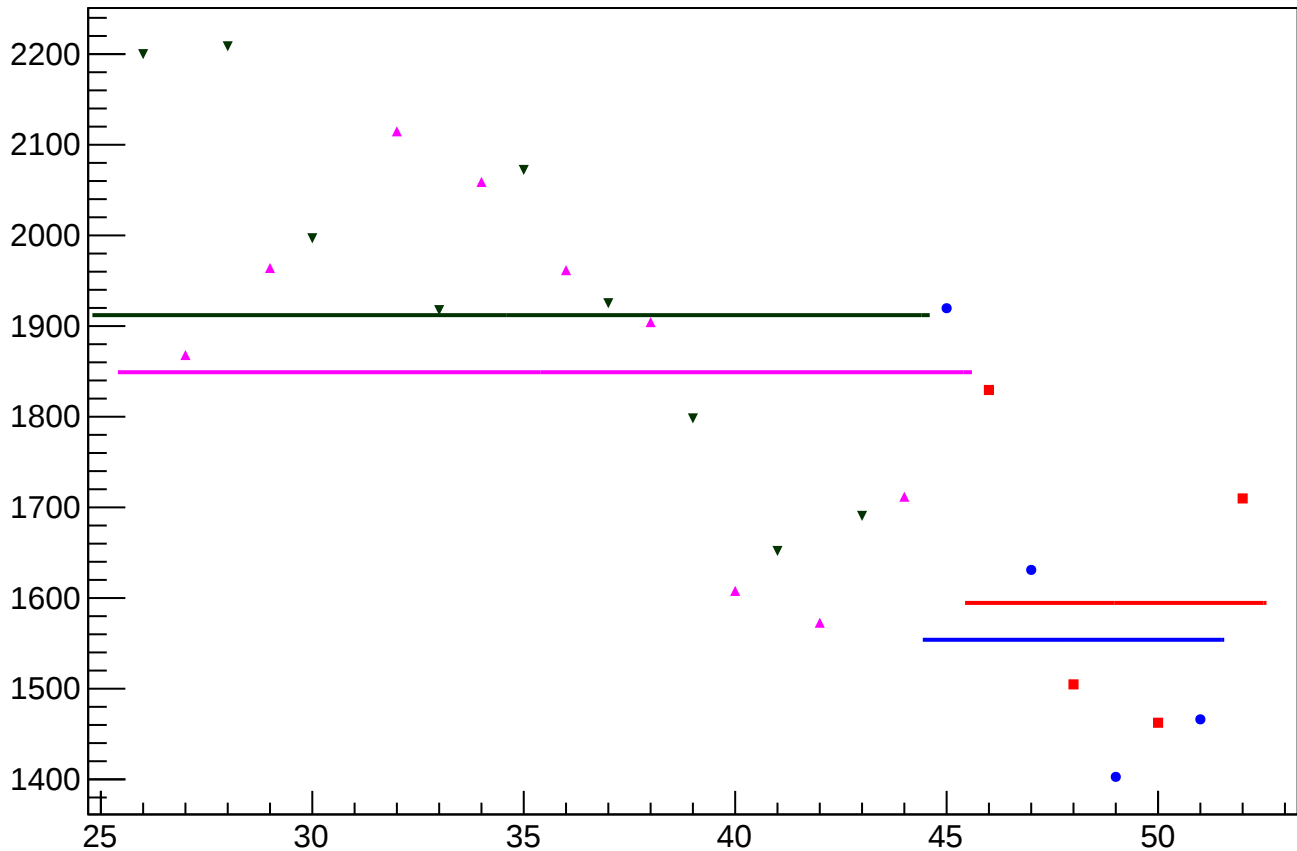
Right Out:  $-1035.724 \pm 1153.848$   $\chi^2/\text{NDF}$ : 4.8/3

Left In:  $997.468 \pm 784.441$   $\chi^2/\text{NDF}$ : 9.8/8

$75.453 \pm 684.346$   $\chi^2/\text{NDF}$ : 9.2/12

$354.784 \pm 648.721$   $\chi^2/\text{NDF}$ : 16.7/12

# cor\_sam7\_rms vs slug



Right In: 1553.969+/-0.777  $\chi^2/\text{NDF}$ : 68651.2/3

Left Out: 1912.062+/-0.619  $\chi^2/\text{NDF}$ : 99663.2/8

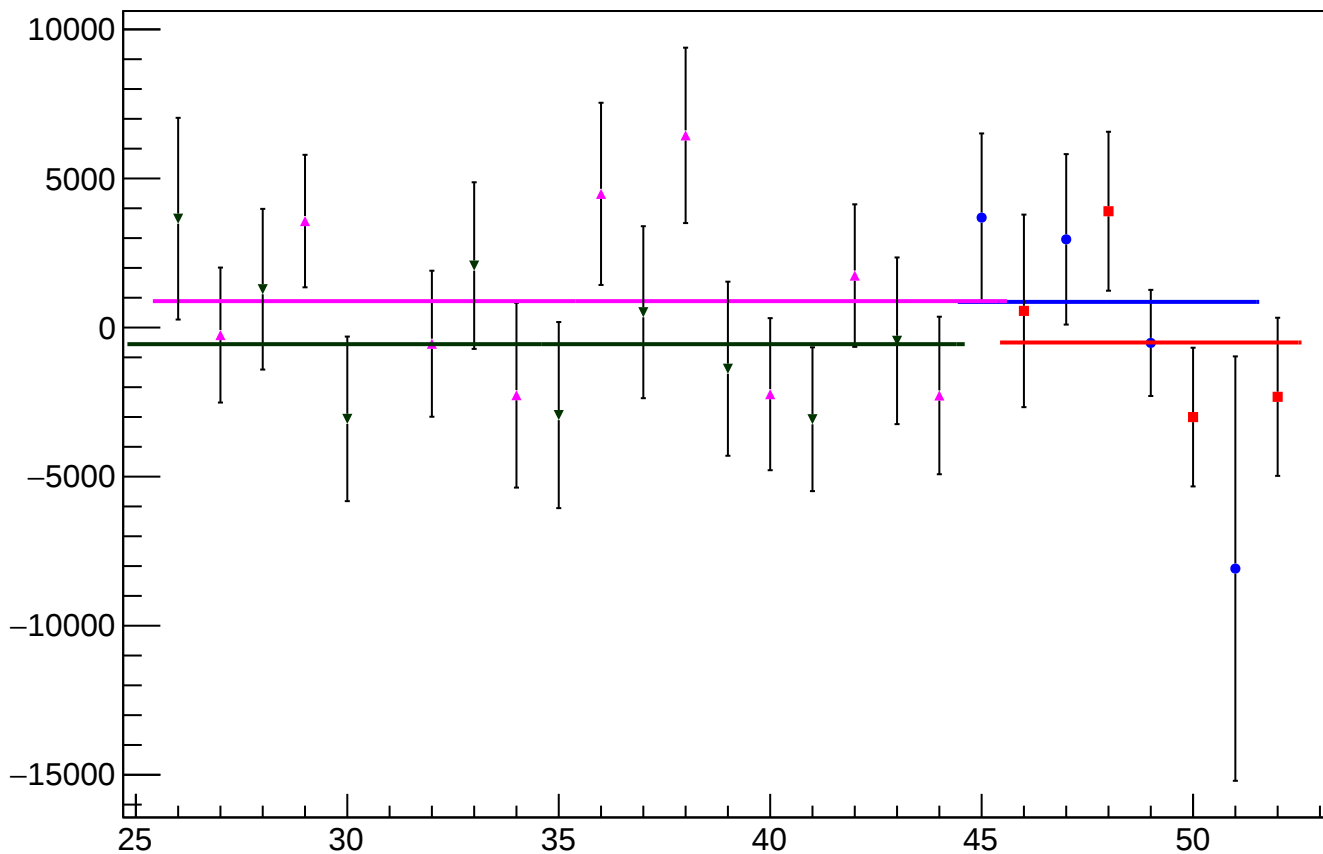
Right Out: 1594.631+/-0.816  $\chi^2/\text{NDF}$ : 30649.0/3

Left In: 1849.099+/-0.555  $\chi^2/\text{NDF}$ : 109500.6/8

1773.131+/-0.484  $\chi^2/\text{NDF}$ : 298344.5/12

1768.663+/-0.459  $\chi^2/\text{NDF}$ : 206676.0/12

# cor\_sam8\_mean vs slug



Right In: 860.774 $\pm$ 1309.251  $\chi^2$ /NDF: 3.7/3

Left Out: -557.273 $\pm$ 942.969  $\chi^2$ /NDF: 5.6/8

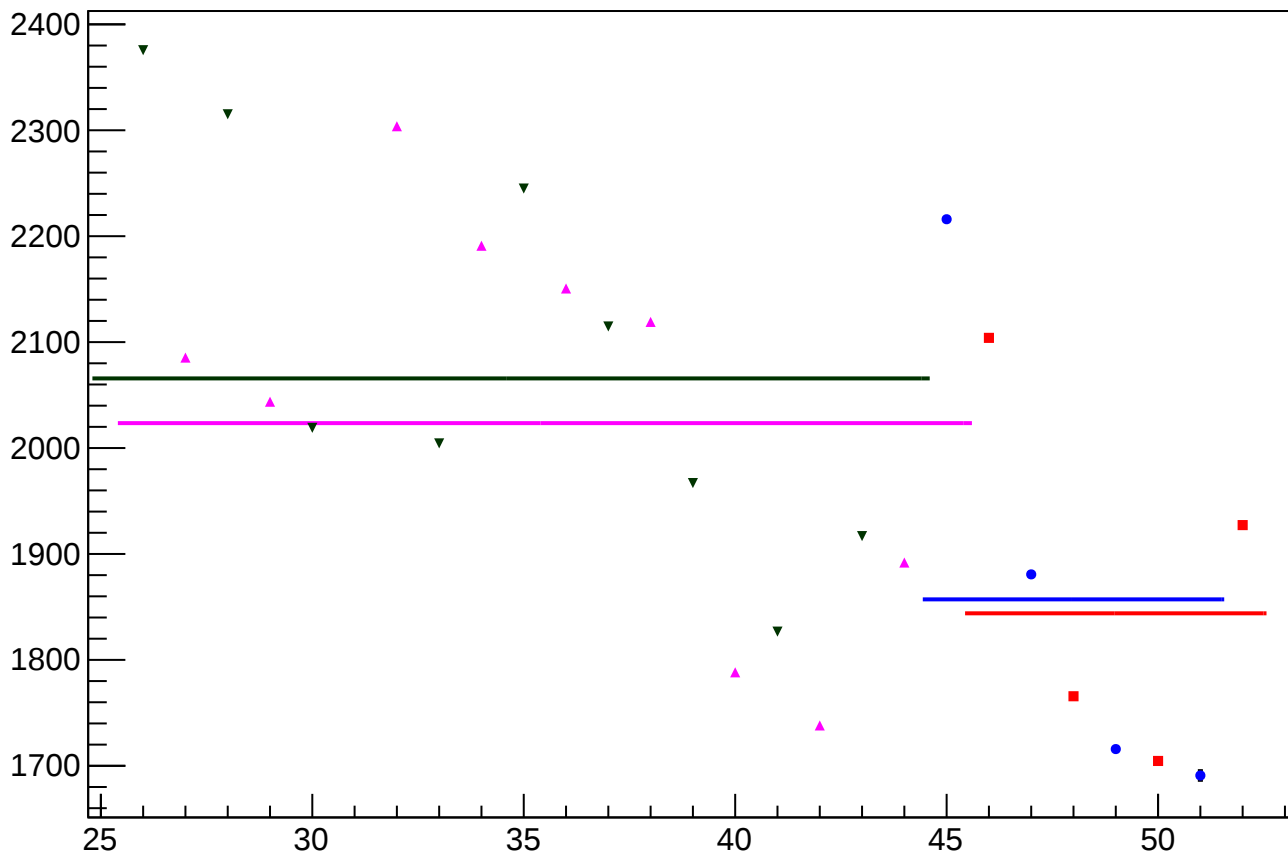
Right Out: -501.367 $\pm$ 1331.937  $\chi^2$ /NDF: 4.5/3

Left In: 886.158 $\pm$ 856.437  $\chi^2$ /NDF: 11.1/8

-72.927 $\pm$ 765.166  $\chi^2$ /NDF: 10.1/12

480.291 $\pm$ 720.369  $\chi^2$ /NDF: 16.3/12

# cor\_sam8\_rms vs slug



Right In: 1857.129+/-0.926  $\chi^2/\text{NDF}$ : 46160.1/3

Left Out: 2065.730+/-0.667  $\chi^2/\text{NDF}$ : 70231.7/8

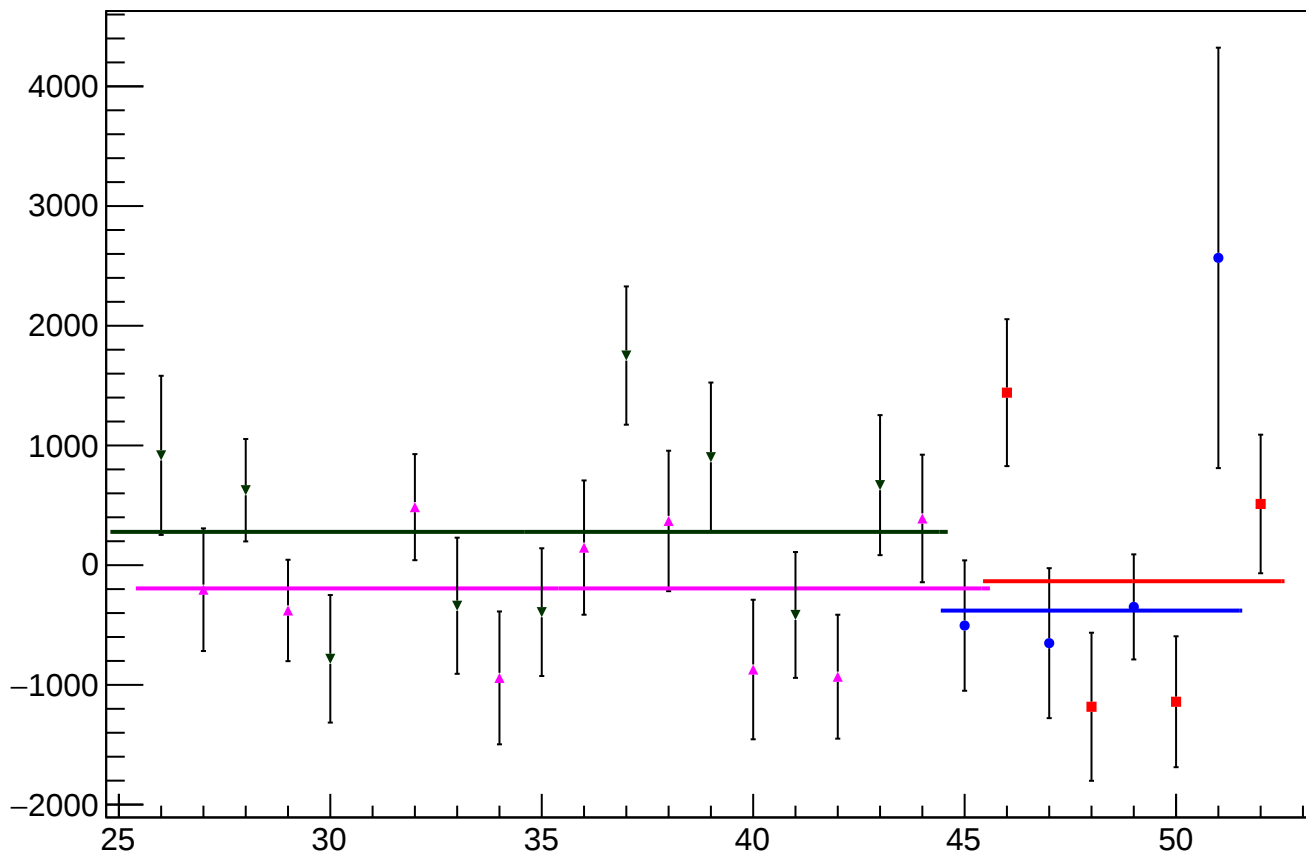
Right Out: 1843.962+/-0.942  $\chi^2/\text{NDF}$ : 23853.0/3

Left In: 2023.519+/-0.606  $\chi^2/\text{NDF}$ : 89775.7/8

1994.480+/-0.541  $\chi^2/\text{NDF}$ : 149821.8/12

1970.996+/-0.509  $\chi^2/\text{NDF}$ : 139343.5/12

# reg\_asym\_sam1\_mean vs slug



Right In:  $-379.366 \pm 295.705$   $\chi^2/\text{NDF}: 3.1/3$

Left Out:  $278.172 \pm 182.670$   $\chi^2/\text{NDF}: 18.0/8$

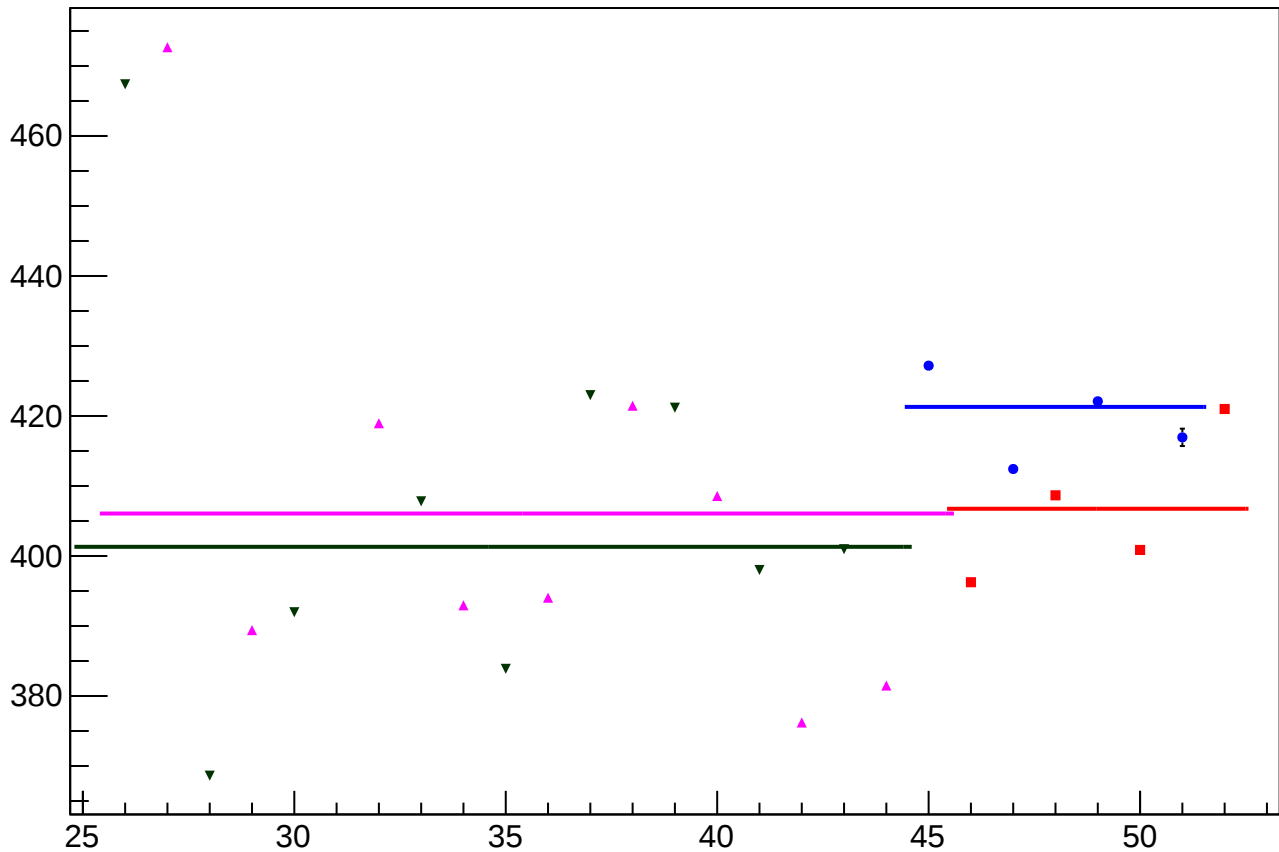
Right Out:  $-134.021 \pm 293.628$   $\chi^2/\text{NDF}: 14.1/3$

Left In:  $-194.244 \pm 171.477$   $\chi^2/\text{NDF}: 10.2/8$

$96.557 \pm 155.408$   $\chi^2/\text{NDF}: 24.6/12$

$-178.928 \pm 148.075$   $\chi^2/\text{NDF}: 24.4/12$

# reg\_asym\_sam1\_rms vs slug



Right In: 421.298+/-0.209     $\chi^2/\text{NDF}$ : 654.2/3

Left Out: 401.310+/-0.129     $\chi^2/\text{NDF}$ : 39388.5/8

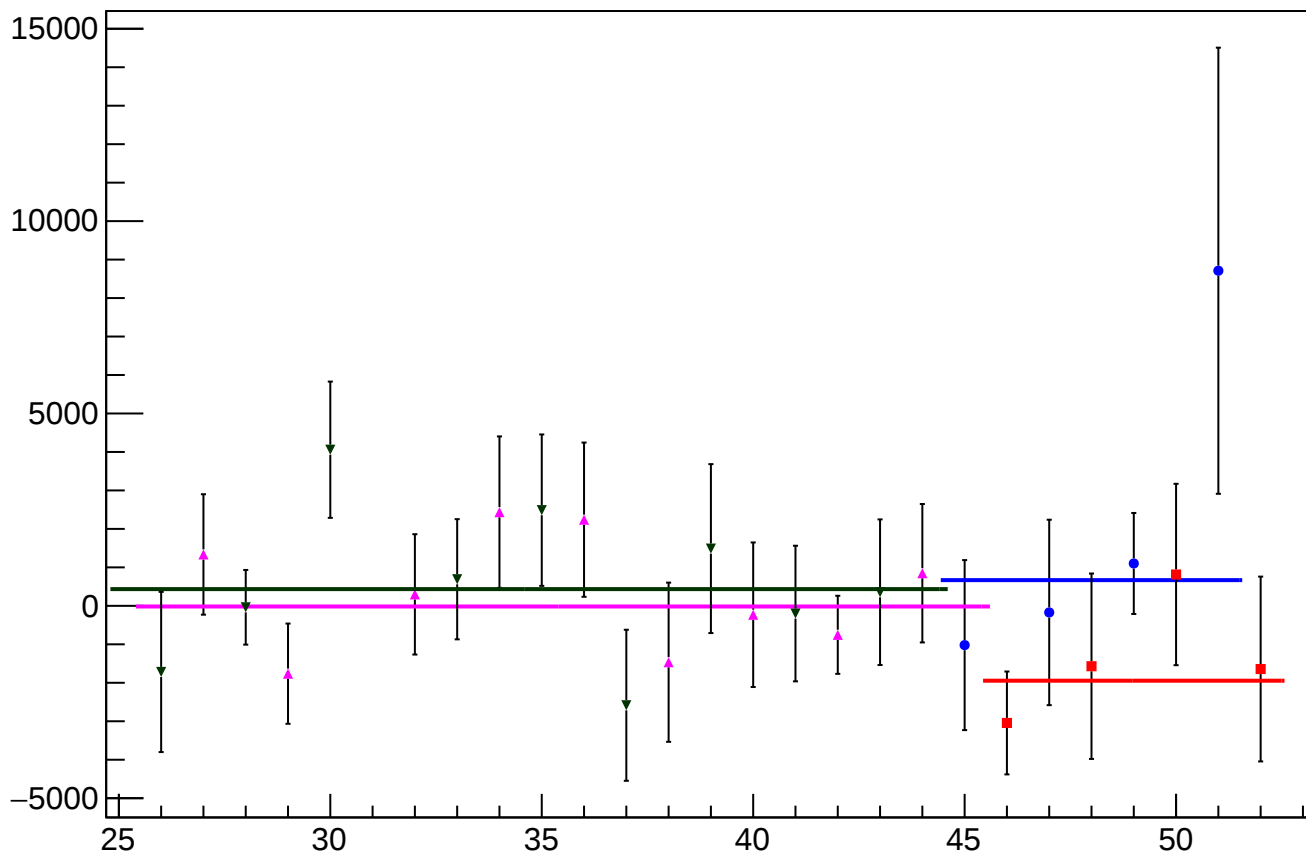
406.831+/-0.110     $\chi^2/\text{NDF}$ : 46656.5/12

Right Out: 406.746+/-0.208     $\chi^2/\text{NDF}$ : 2048.0/3

406.239+/-0.105     $\chi^2/\text{NDF}$ : 55009.3/12

Left In: 406.066+/-0.121     $\chi^2/\text{NDF}$ : 52953.2/8

# asym\_sam1\_correction\_mean vs slug



Right In:  $668.232 \pm 1006.491$   $\chi^2/\text{NDF}: 2.7/3$

Left Out:  $434.930 \pm 546.579$   $\chi^2/\text{NDF}: 9.3/8$

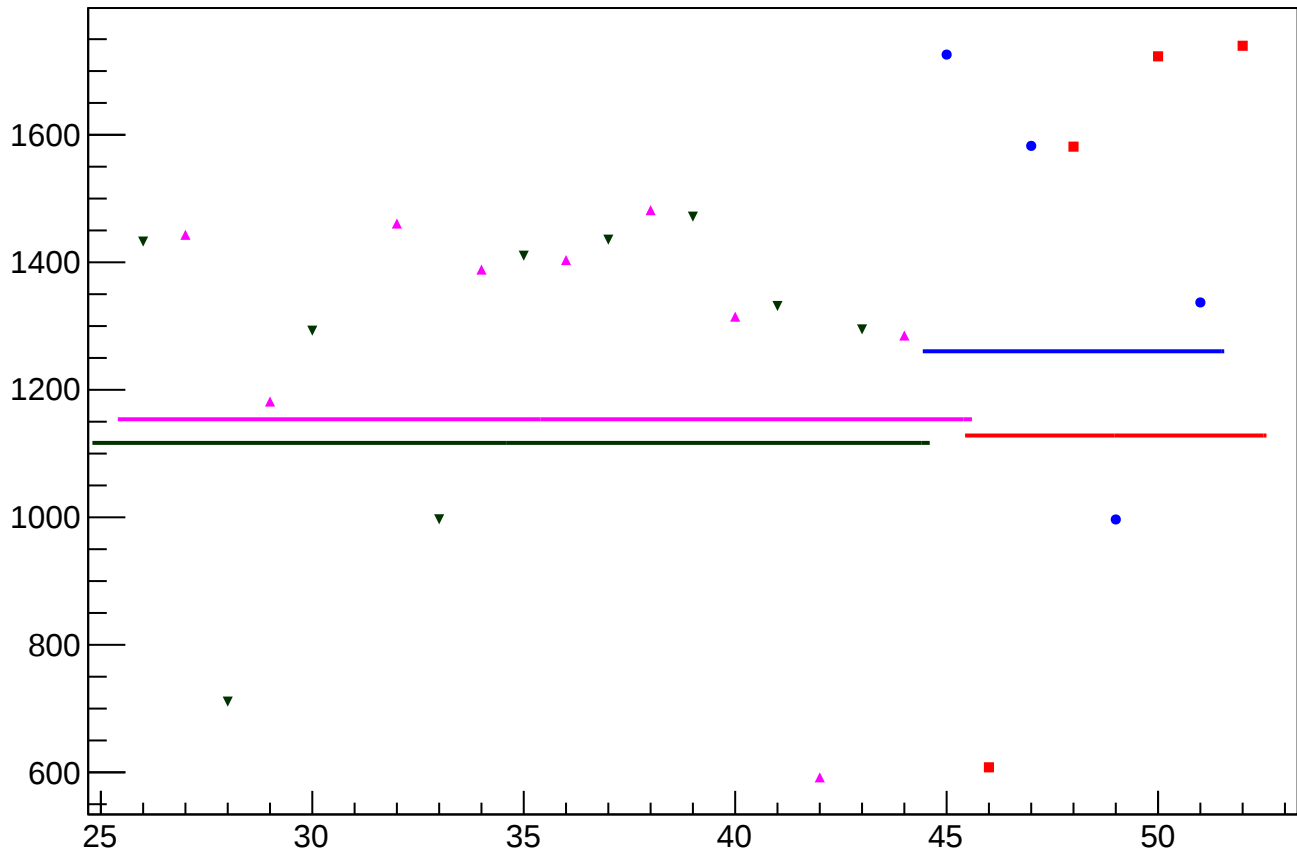
Right Out:  $-1945.922 \pm 960.185$   $\chi^2/\text{NDF}: 2.1/3$

Left In:  $-17.108 \pm 519.136$   $\chi^2/\text{NDF}: 6.7/8$

$488.063 \pm 480.323$   $\chi^2/\text{NDF}: 12.1/12$

$-453.397 \pm 456.664$   $\chi^2/\text{NDF}: 11.9/12$

# asym\_sam1\_correction\_rms vs slug



Right In: 1260.441+/-0.712  $\chi^2/\text{NDF}$ : 205608.5/3

Left Out: 1116.751+/-0.386  $\chi^2/\text{NDF}$ : 624096.5/8

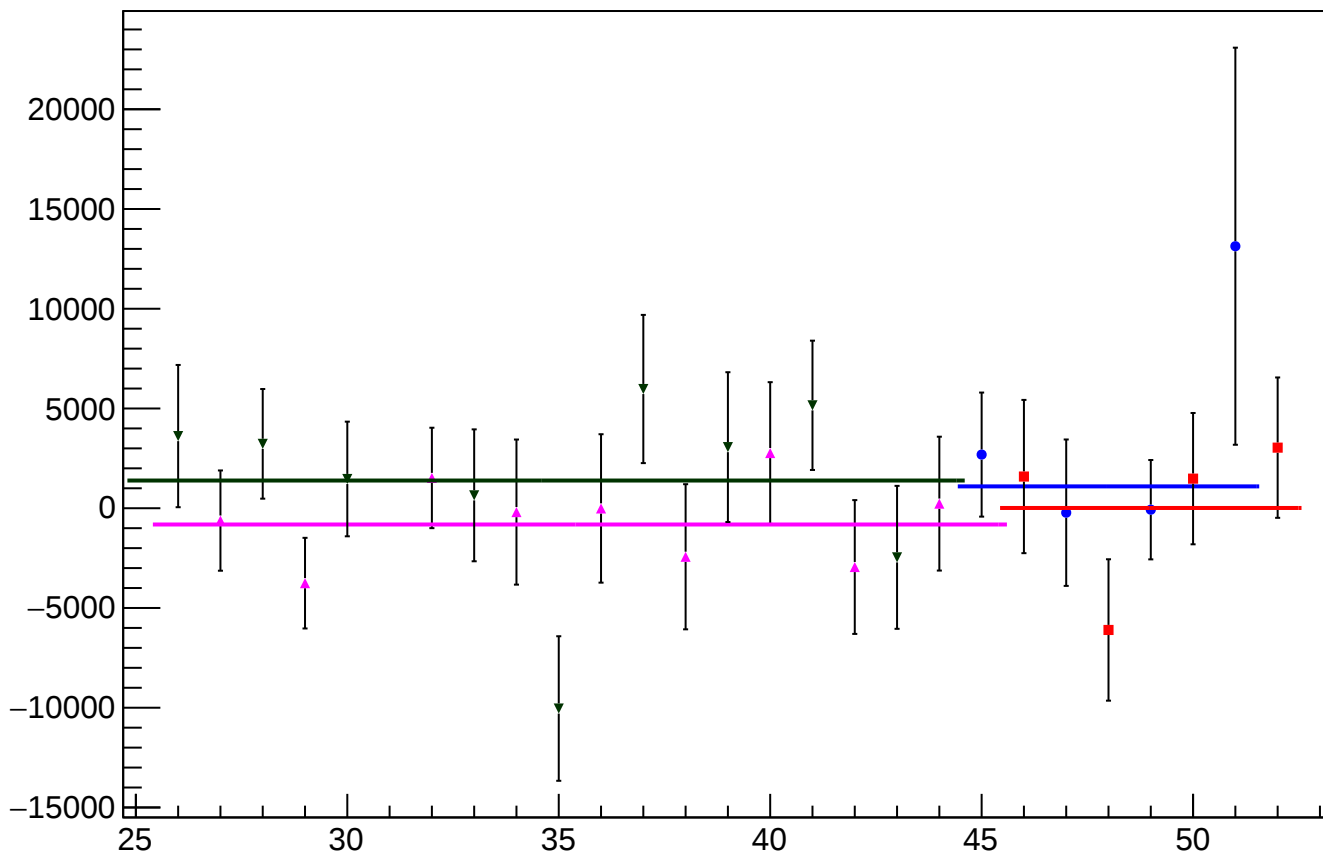
Right Out: 1128.322+/-0.679  $\chi^2/\text{NDF}$ : 630502.4/3

Left In: 1153.785+/-0.367  $\chi^2/\text{NDF}$ : 894420.7/8

1149.475+/-0.340  $\chi^2/\text{NDF}$ : 861184.3/12

1148.026+/-0.323  $\chi^2/\text{NDF}$ : 1526011.4/12

# reg\_asym\_sam2\_mean vs slug



Right In: 1095.323+/-1692.750  $\chi^2/\text{NDF}$ : 2.1/3

Left Out: 1388.791+/-1106.824  $\chi^2/\text{NDF}$ :15.1/8

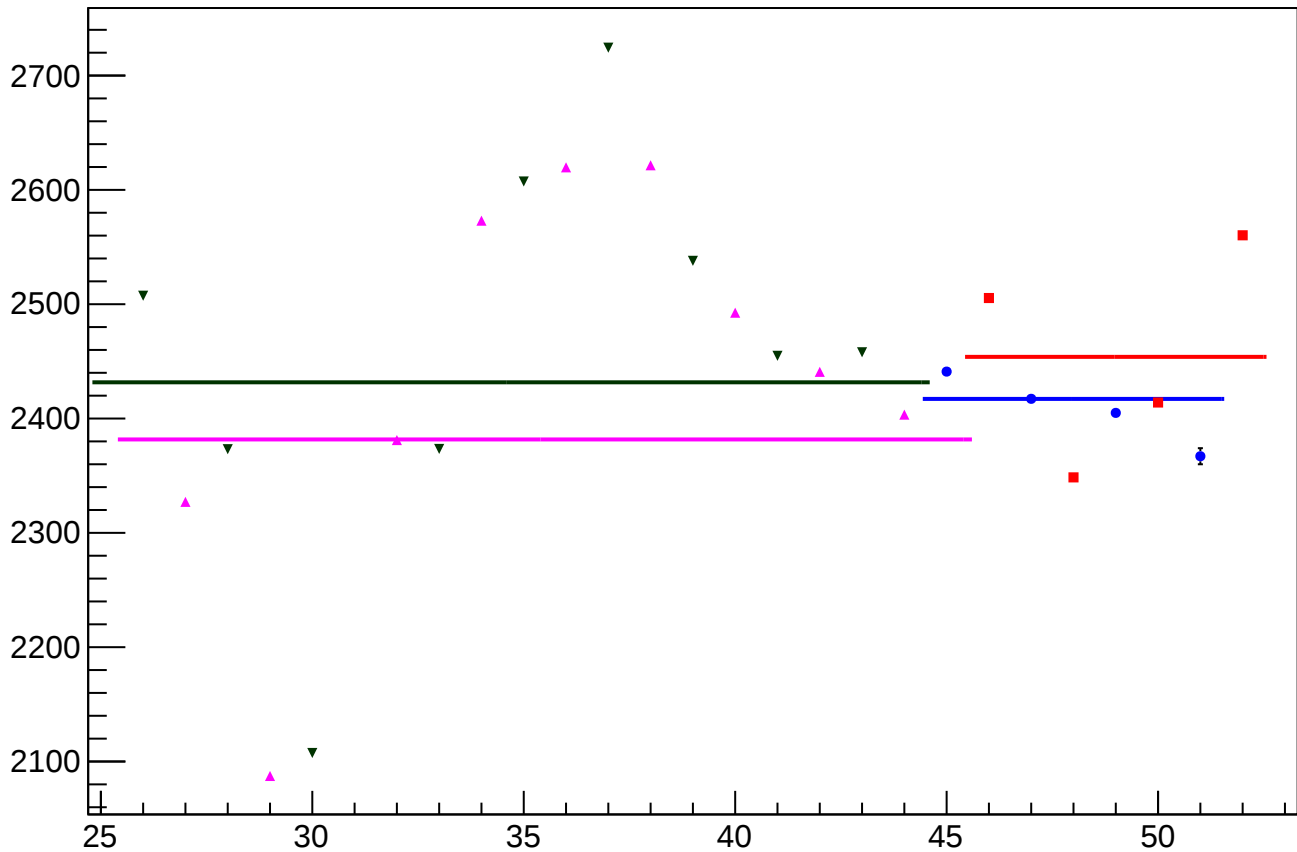
Right Out: 12.975+/-1766.463  $\chi^2/\text{NDF}$ : 4.1/3

Left In: -815.233+/-1004.854  $\chi^2/\text{NDF}$ :4.3/8

1300.900+/-926.372  $\chi^2/\text{NDF}$ : 17.2/12

-612.753+/-873.426  $\chi^2/\text{NDF}$ : 8.6/12

# reg\_asym\_sam2\_rms vs slug



Right In: 2417.165+/-1.197  $\chi^2/\text{NDF}$ : 216.9/3

Left Out: 2431.683+/-0.783  $\chi^2/\text{NDF}$ : 46819.5/8

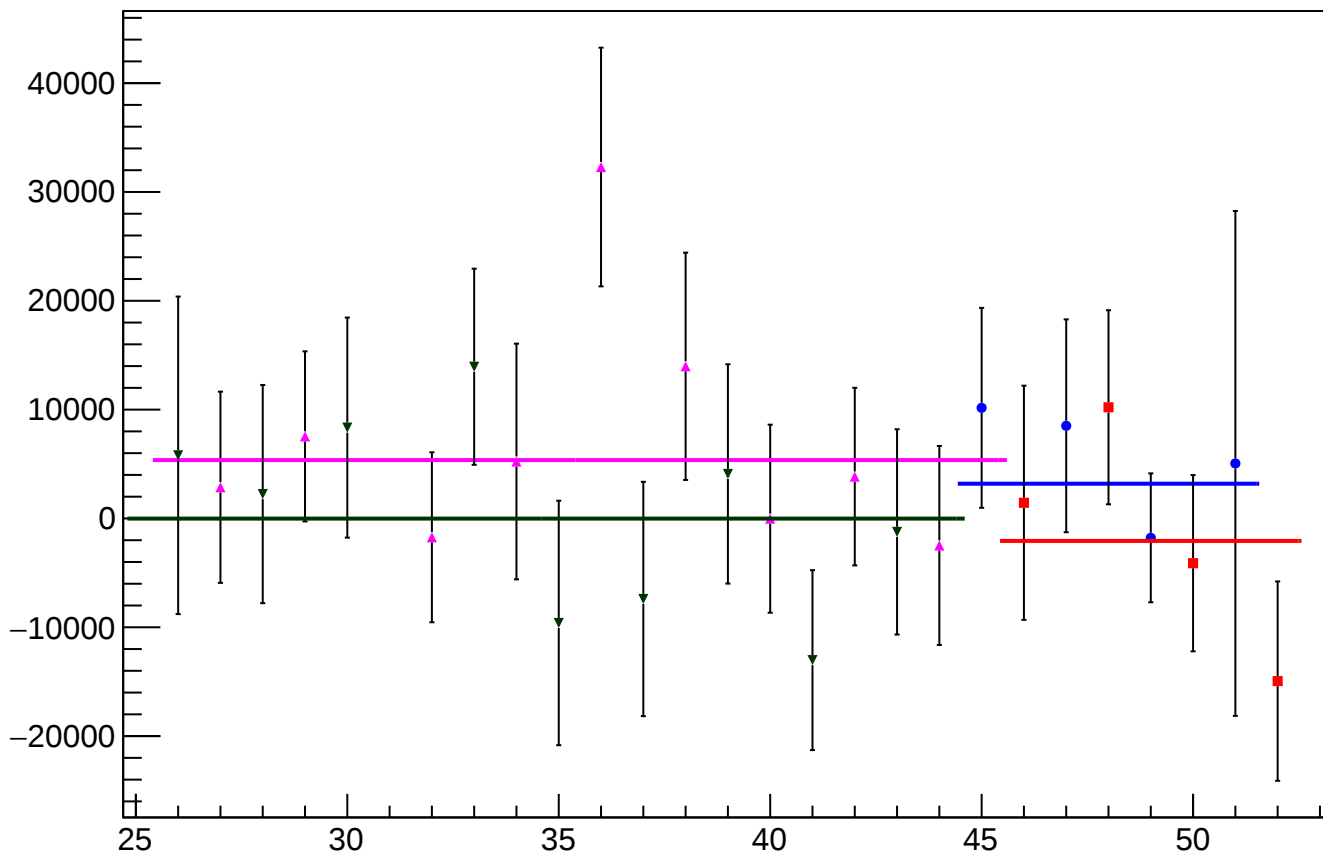
Right Out: 2453.949+/-1.249  $\chi^2/\text{NDF}$ : 4249.6/3

Left In: 2381.709+/-0.711  $\chi^2/\text{NDF}$ : 59588.8/8

2427.335+/-0.655  $\chi^2/\text{NDF}$ : 47139.4/12

2399.370+/-0.618  $\chi^2/\text{NDF}$ : 66365.5/12

# asym\_sam2\_correction\_mean vs slug



Right In: 3191.590+/-4357.477  $\chi^2/\text{NDF}$ : 1.6/3

Left Out: -13.656+/-3351.634  $\chi^2/\text{NDF}$ : 7.1/8

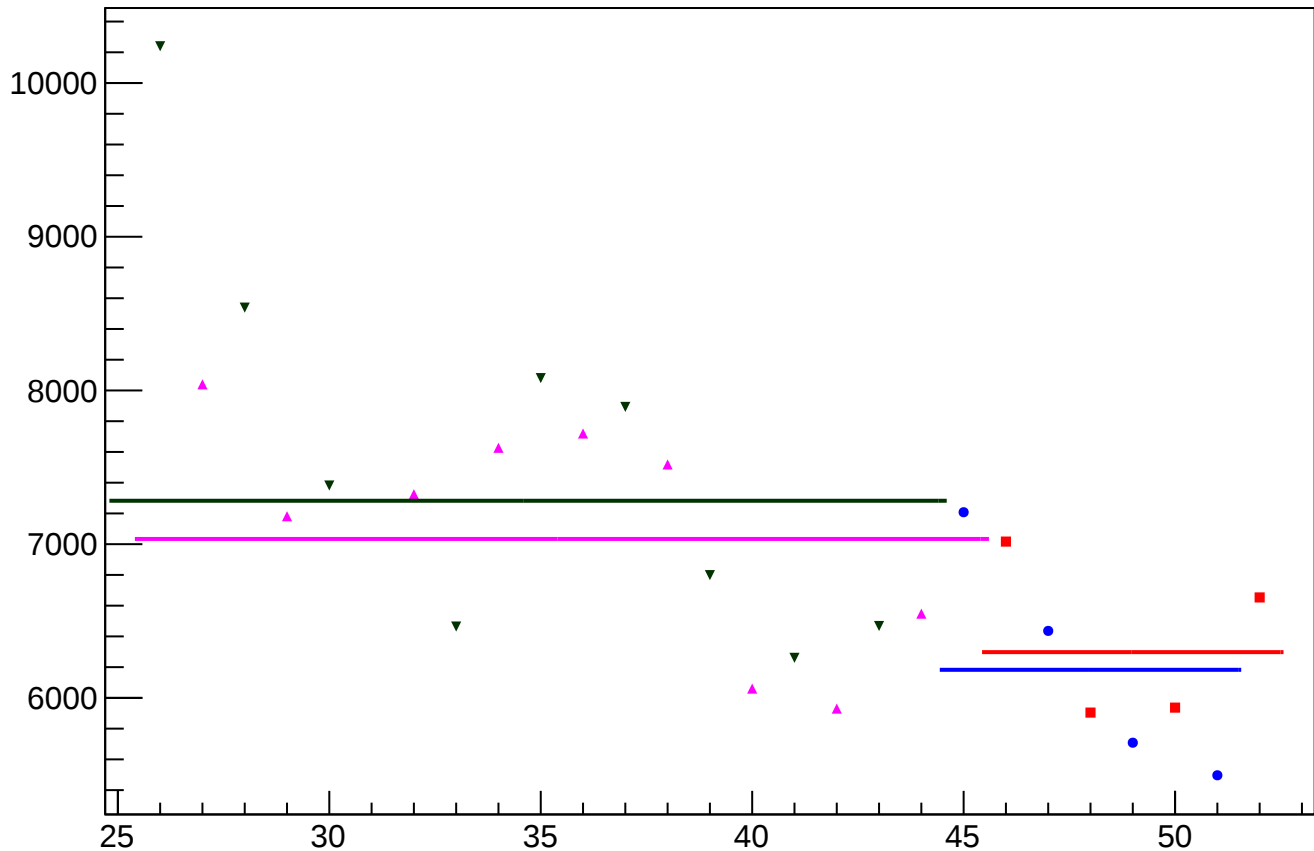
Right Out: -2065.455+/-4546.572  $\chi^2/\text{NDF}$ : 4.0/3

Left In: 5363.340+/-2986.715  $\chi^2/\text{NDF}$ : 8.9/8

1177.764+/-2656.665  $\chi^2/\text{NDF}$ : 9.1/12

3123.923+/-2496.274  $\chi^2/\text{NDF}$ : 14.8/12

# asym\_sam2\_correction\_rms vs slug



Right In: 6182.722+/-3.081  $\chi^2$ /NDF: 40817.3/3

Left Out: 7282.484+/-2.370  $\chi^2$ /NDF:196859.8/8

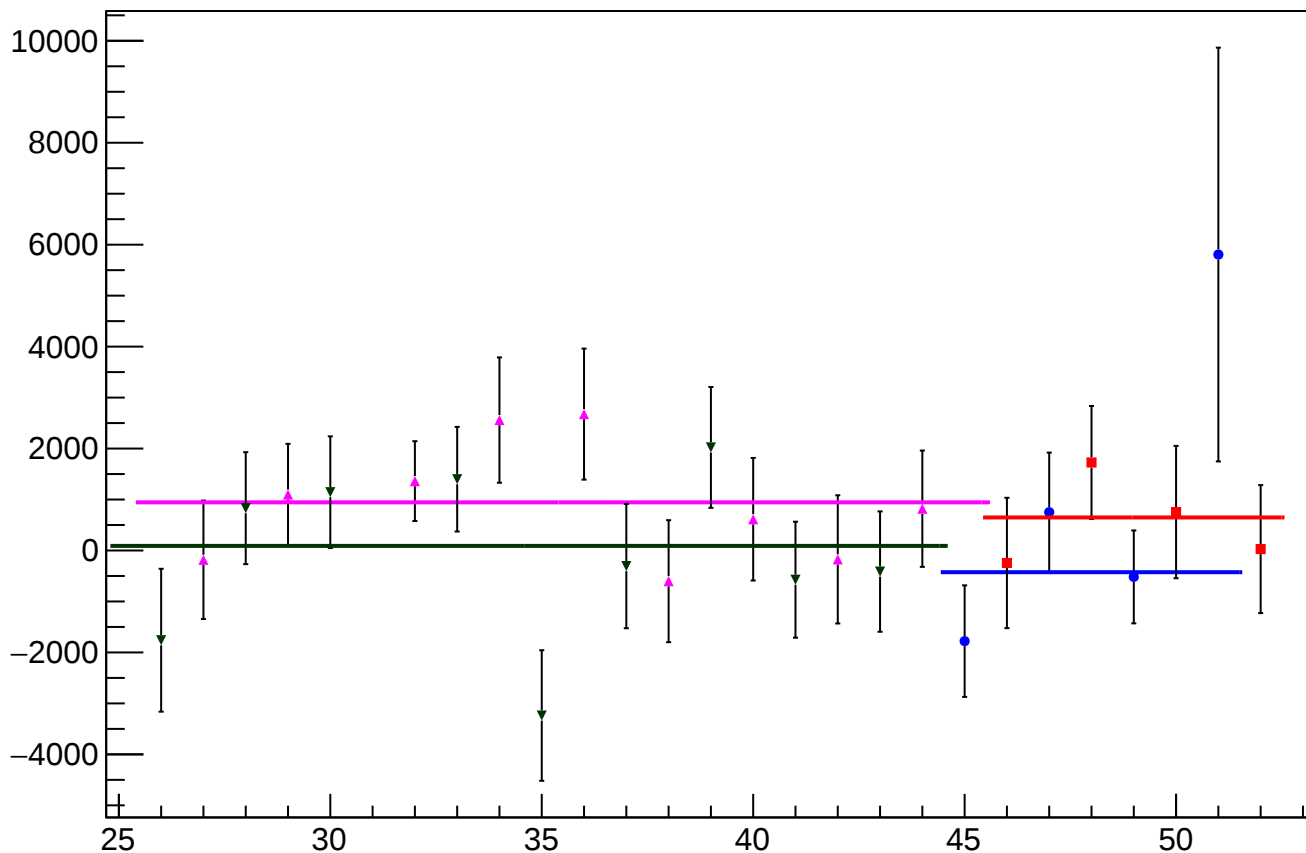
6873.692+/-1.879  $\chi^2$ /NDF: 317719.0/12

Right Out: 6297.671+/-3.215  $\chi^2$ /NDF: 19813.6/3

6812.049+/-1.765  $\chi^2$ /NDF: 171937.0/12

Left In: 7034.023+/-2.112  $\chi^2$ /NDF:115477.2/8

# reg\_asym\_sam3\_mean vs slug



Right In: -425.899+/-594.283  $\chi^2/\text{NDF}$ : 4.9/3

Left Out: 90.339+/-389.088  $\chi^2/\text{NDF}$ : 14.8/8

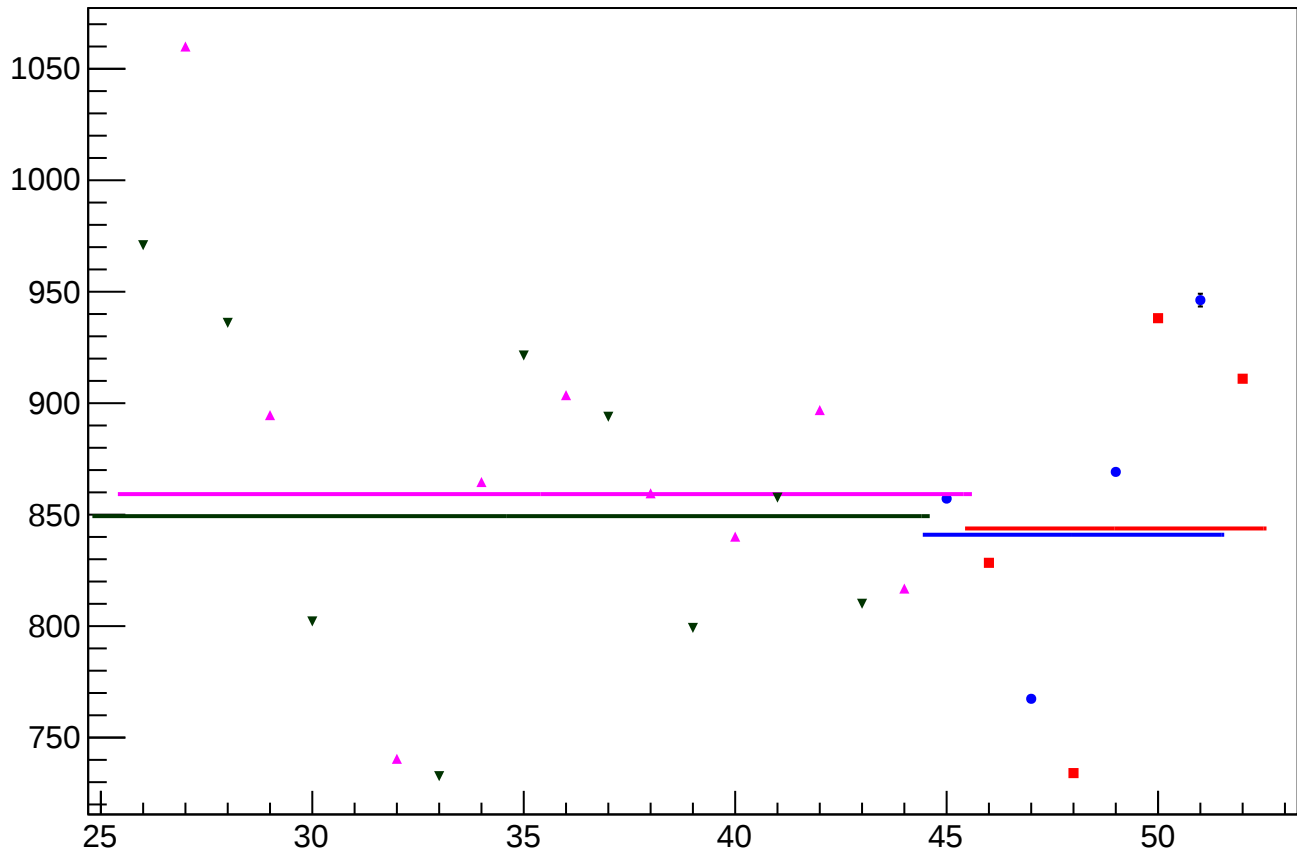
Right Out: 648.114+/-613.989  $\chi^2/\text{NDF}$ : 1.7/3

Left In: 944.816+/-366.628  $\chi^2/\text{NDF}$ : 7.3/8

-64.554+/-325.525  $\chi^2/\text{NDF}$ : 20.2/12

866.830+/-314.779  $\chi^2/\text{NDF}$ : 9.2/12

# reg\_asym\_sam3\_rms vs slug



Right In: 840.992 $\pm$ 0.420  $\chi^2$ /NDF: 11624.0/3

Left Out: 849.335 $\pm$ 0.275  $\chi^2$ /NDF: 71988.4/8

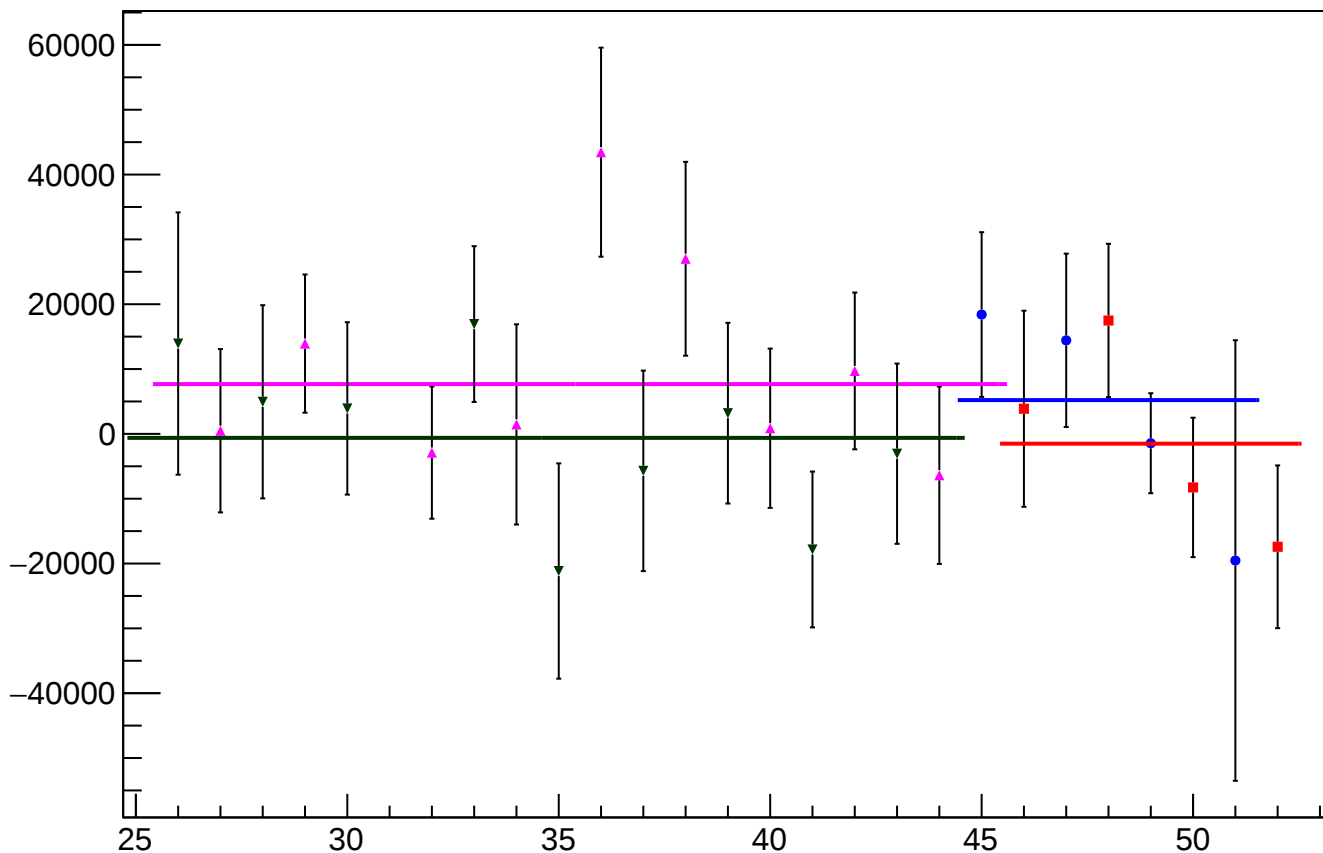
846.831 $\pm$ 0.230  $\chi^2$ /NDF: 83888.3/12

Right Out: 843.801 $\pm$ 0.434  $\chi^2$ /NDF: 36158.0/3

855.164 $\pm$ 0.223  $\chi^2$ /NDF: 152804.2/12

Left In: 859.215 $\pm$ 0.259  $\chi^2$ /NDF: 115716.9/8

# asym\_sam3\_correction\_mean vs slug



Right In: 5209.823+/-5825.016  $\chi^2/\text{NDF}$ : 2.8/3

Left Out: -616.435+/-4735.998  $\chi^2/\text{NDF}$ : 6.7/8

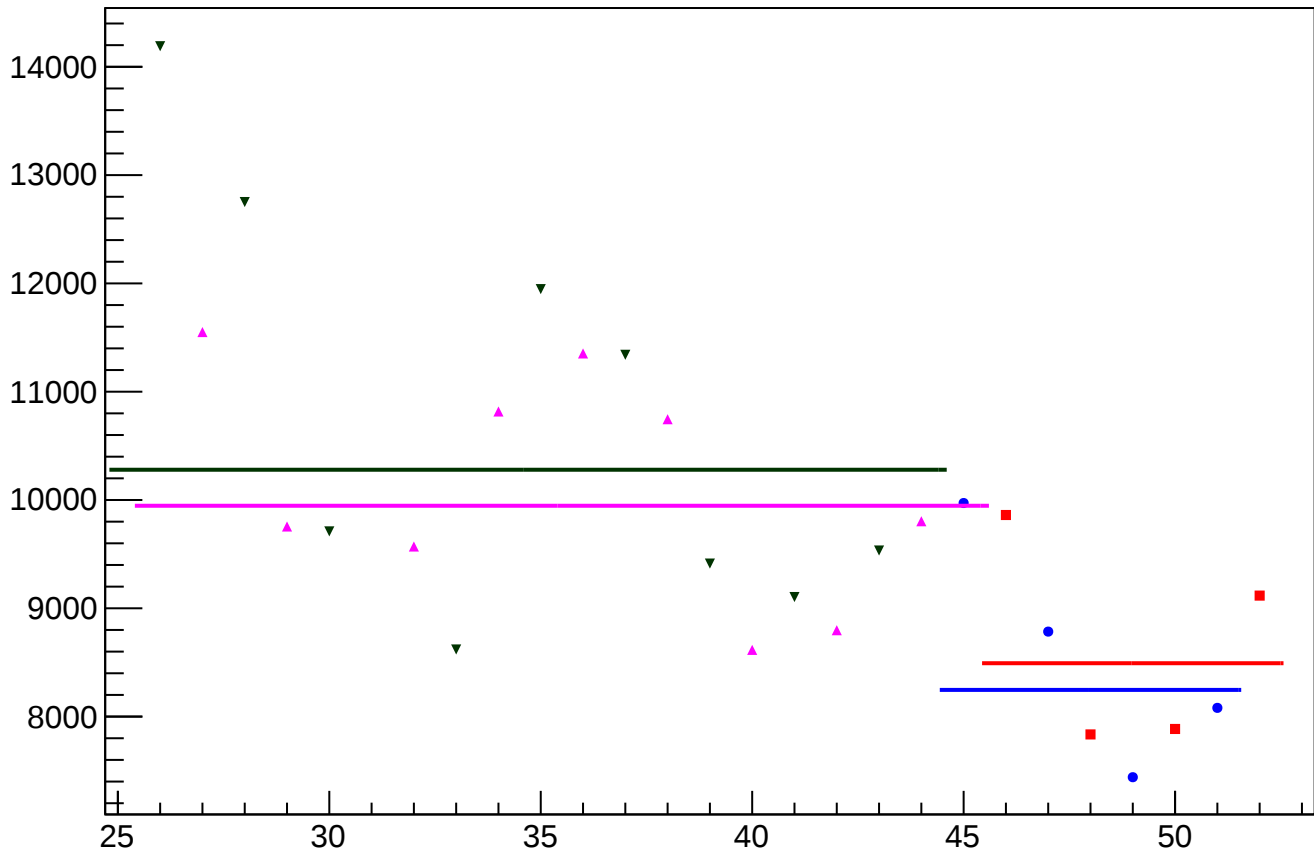
Right Out: -1511.543+/-6141.800  $\chi^2/\text{NDF}$ : 4.7/3

Left In: 7678.057+/-4224.700  $\chi^2/\text{NDF}$ : 9.9/8

1702.230+/-3674.695  $\chi^2/\text{NDF}$ : 10.1/12

4726.512+/-3480.744  $\chi^2/\text{NDF}$ : 16.1/12

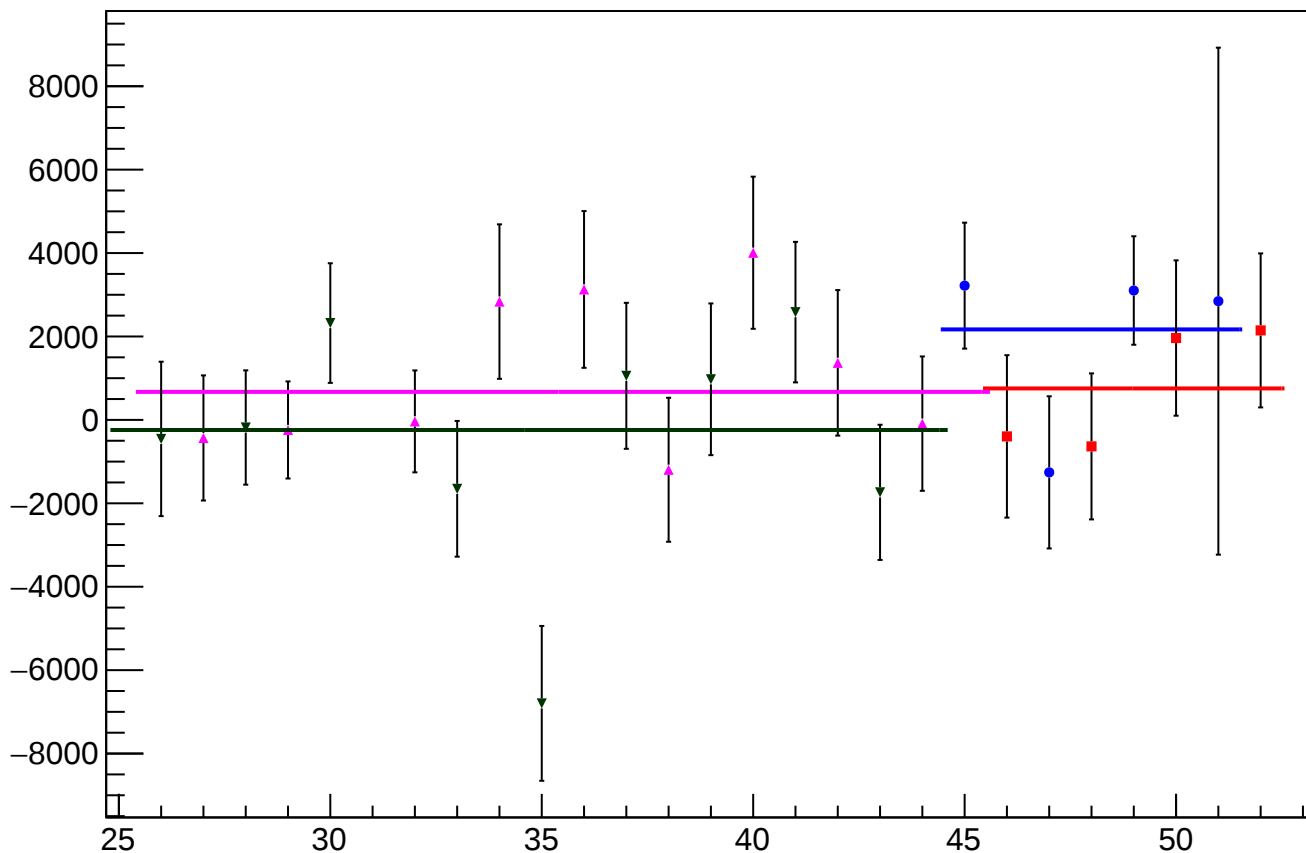
# asym\_sam3\_correction\_rms vs slug



Right In:  $8246.378 \pm 4.119$      $\chi^2/\text{NDF}$ : 62049.0/3  
 Left Out:  $10279.392 \pm 3.349$      $\chi^2/\text{NDF}$ : 233836.0/8  
 Right Out:  $8492.797 \pm 4.343$      $\chi^2/\text{NDF}$ : 33879.4/3  
 Left In:  $9946.833 \pm 2.987$      $\chi^2/\text{NDF}$ : 104837.7/8

$9470.318 \pm 2.598$      $\chi^2/\text{NDF}$ : 442553.2/12  
 $9479.821 \pm 2.461$      $\chi^2/\text{NDF}$ : 214809.4/12

# reg\_asym\_sam4\_mean vs slug



Right In: 2169.519 $\pm$ 858.268  $\chi^2$ /NDF: 4.5/3

Left Out: -242.182 $\pm$ 547.136  $\chi^2$ /NDF:21.1/8

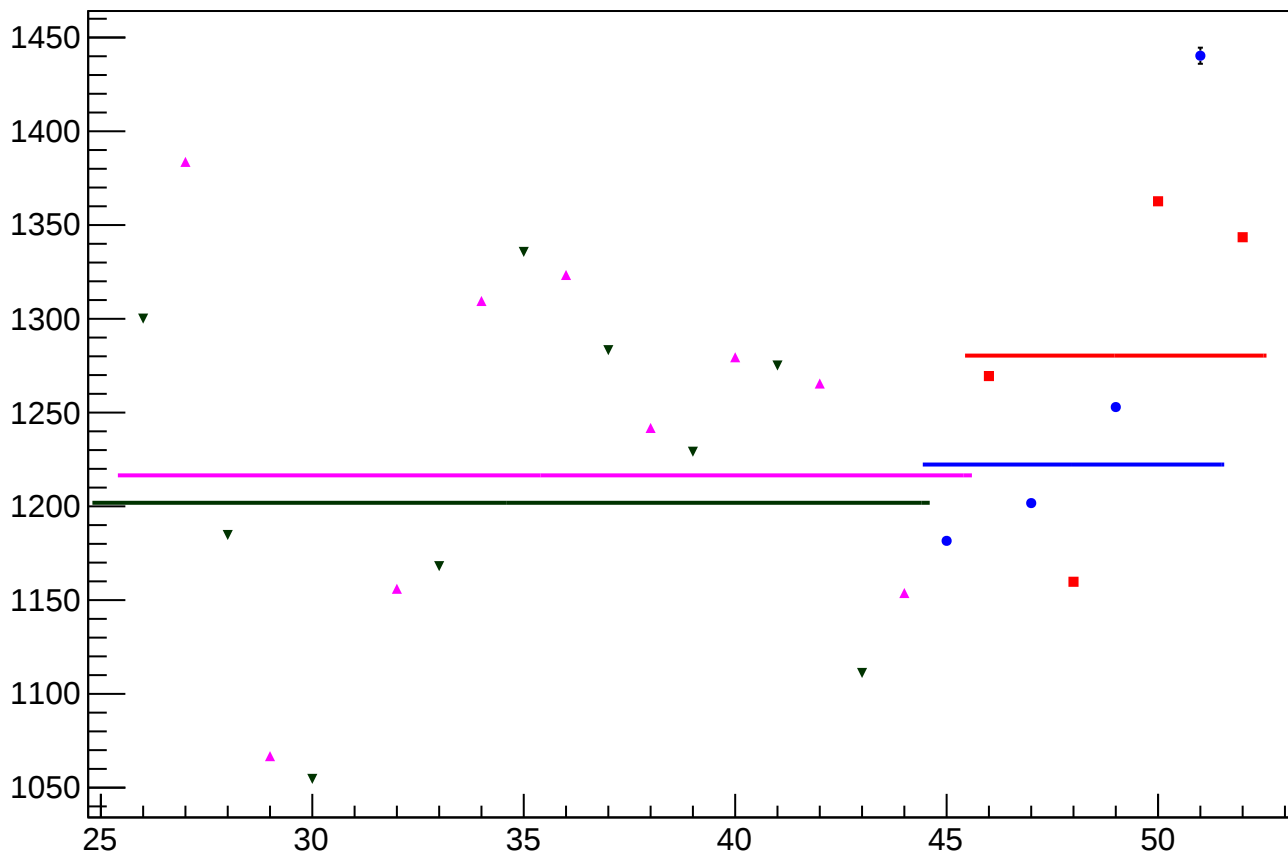
Right Out: 754.009 $\pm$ 923.808  $\chi^2$ /NDF: 2.0/3

Left In: 671.583 $\pm$ 514.509  $\chi^2$ /NDF:9.5/8

454.704 $\pm$ 461.362  $\chi^2$ /NDF: 31.2/12

691.097 $\pm$ 449.497  $\chi^2$ /NDF: 11.4/12

# reg\_asym\_sam4\_rms vs slug



Right In: 1222.295+/-0.607  $\chi^2/\text{NDF}$ : 5390.3/3

Left Out: 1201.899+/-0.387  $\chi^2/\text{NDF}$ : 53101.4/8

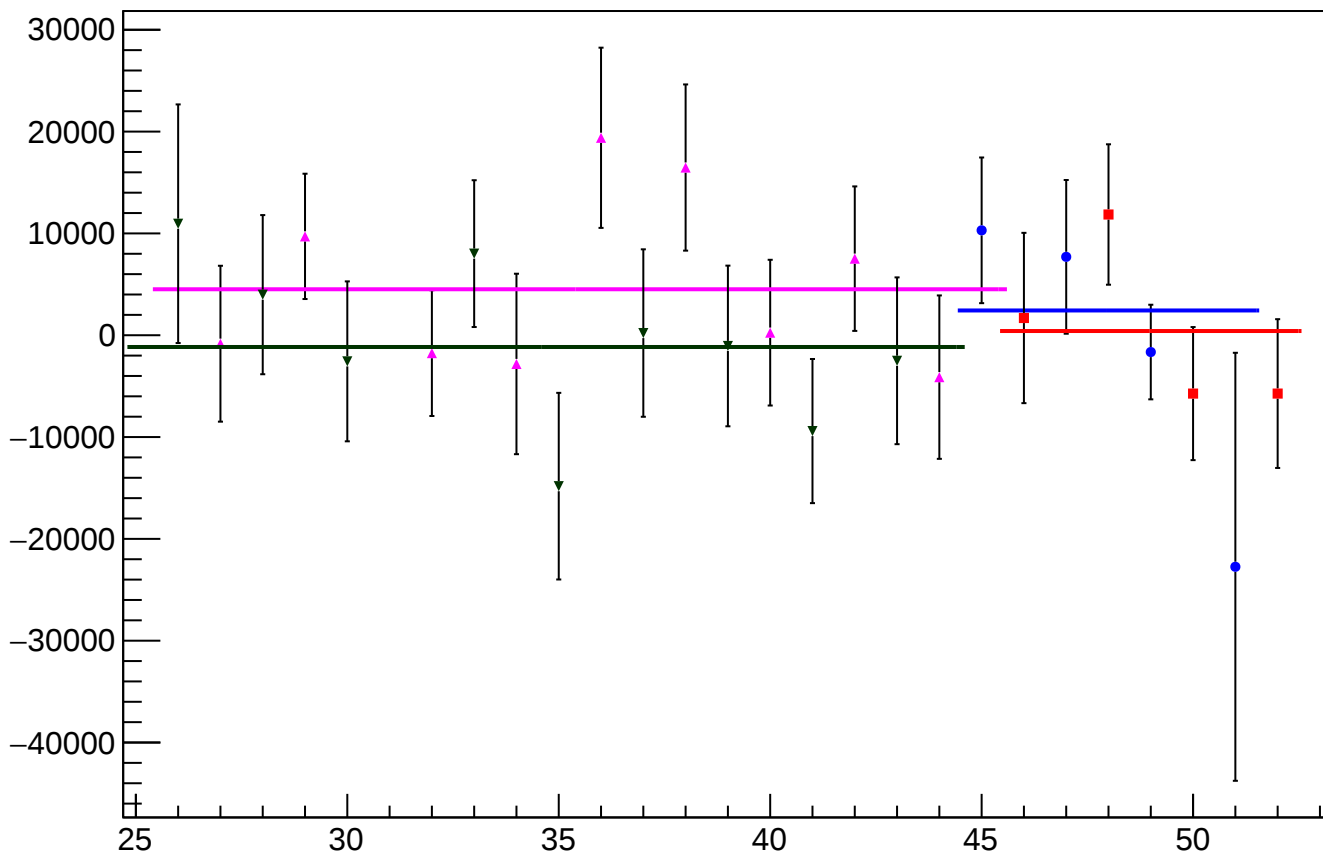
Right Out: 1280.385+/-0.653  $\chi^2/\text{NDF}$ : 15797.4/3

Left In: 1216.519+/-0.364  $\chi^2/\text{NDF}$ : 81775.0/8

1207.792+/-0.326  $\chi^2/\text{NDF}$ : 59294.8/12

1231.639+/-0.318  $\chi^2/\text{NDF}$ : 104868.1/12

# asym\_sam4\_correction\_mean vs slug



Right In:  $2432.621 \pm 3416.070$   $\chi^2/\text{NDF}: 3.9/3$

Left Out:  $-1154.532 \pm 2704.371$   $\chi^2/\text{NDF}: 6.8/8$

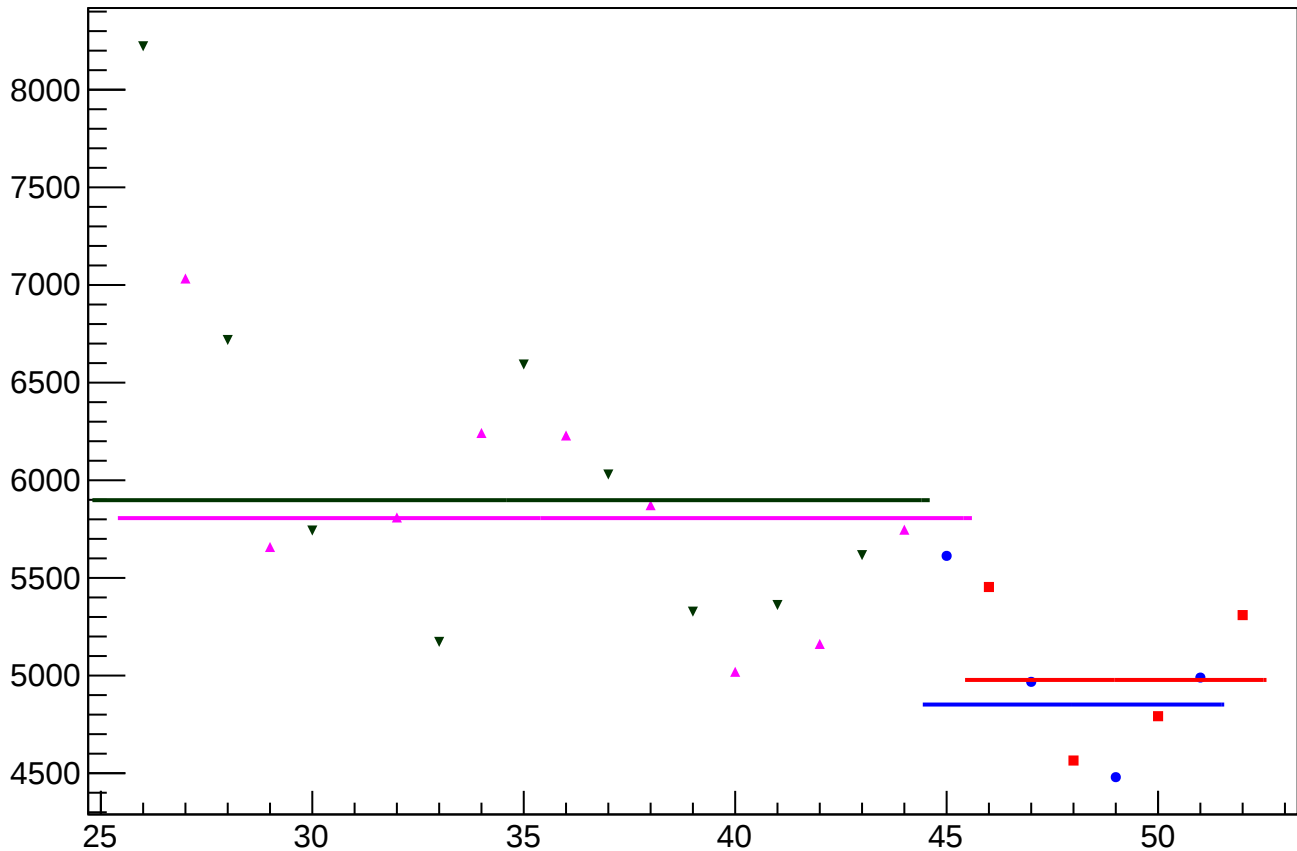
Right Out:  $413.652 \pm 3592.631$   $\chi^2/\text{NDF}: 4.4/3$

Left In:  $4514.840 \pm 2460.865$   $\chi^2/\text{NDF}: 9.6/8$

$227.487 \pm 2120.356$   $\chi^2/\text{NDF}: 11.4/12$

$3205.111 \pm 2030.245$   $\chi^2/\text{NDF}: 14.8/12$

# asym\_sam4\_correction\_rms vs slug



Right In:  $4851.606 \pm 2.416$   $\chi^2/\text{NDF}$ : 36025.8/3

Left Out:  $5898.122 \pm 1.912$   $\chi^2/\text{NDF}$ : 158096.1/8

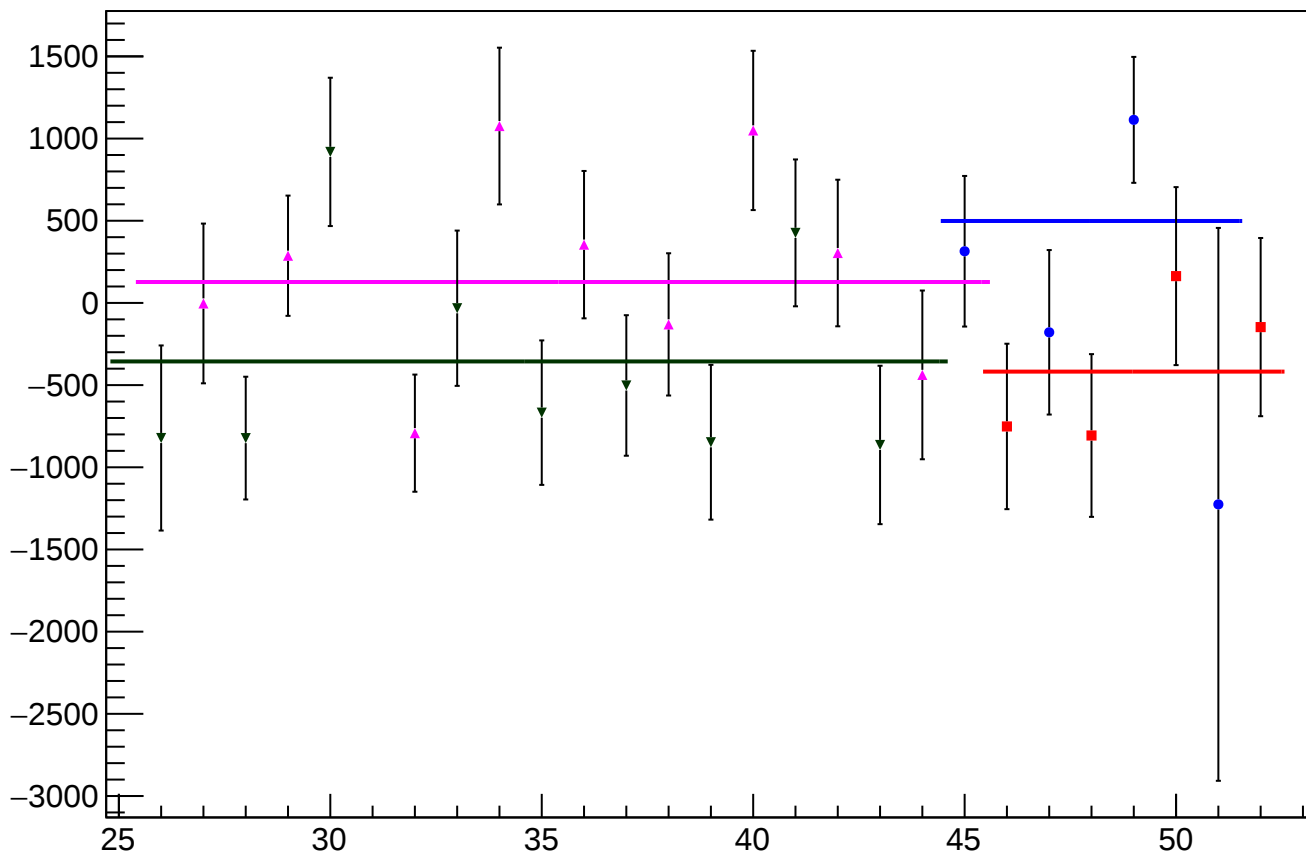
Right Out:  $4977.577 \pm 2.540$   $\chi^2/\text{NDF}$ : 19385.4/3

Left In:  $5806.244 \pm 1.740$   $\chi^2/\text{NDF}$ : 102859.9/8

$5494.932 \pm 1.499$   $\chi^2/\text{NDF}$ : 309507.9/12

$5541.606 \pm 1.436$   $\chi^2/\text{NDF}$ : 194670.1/12

# reg\_asym\_sam5\_mean vs slug



Right In: 498.580 $\pm$ 250.599  $\chi^2/\text{NDF}$ : 5.6/3

Left Out: -356.000 $\pm$ 150.426  $\chi^2/\text{NDF}$ :16.6/8

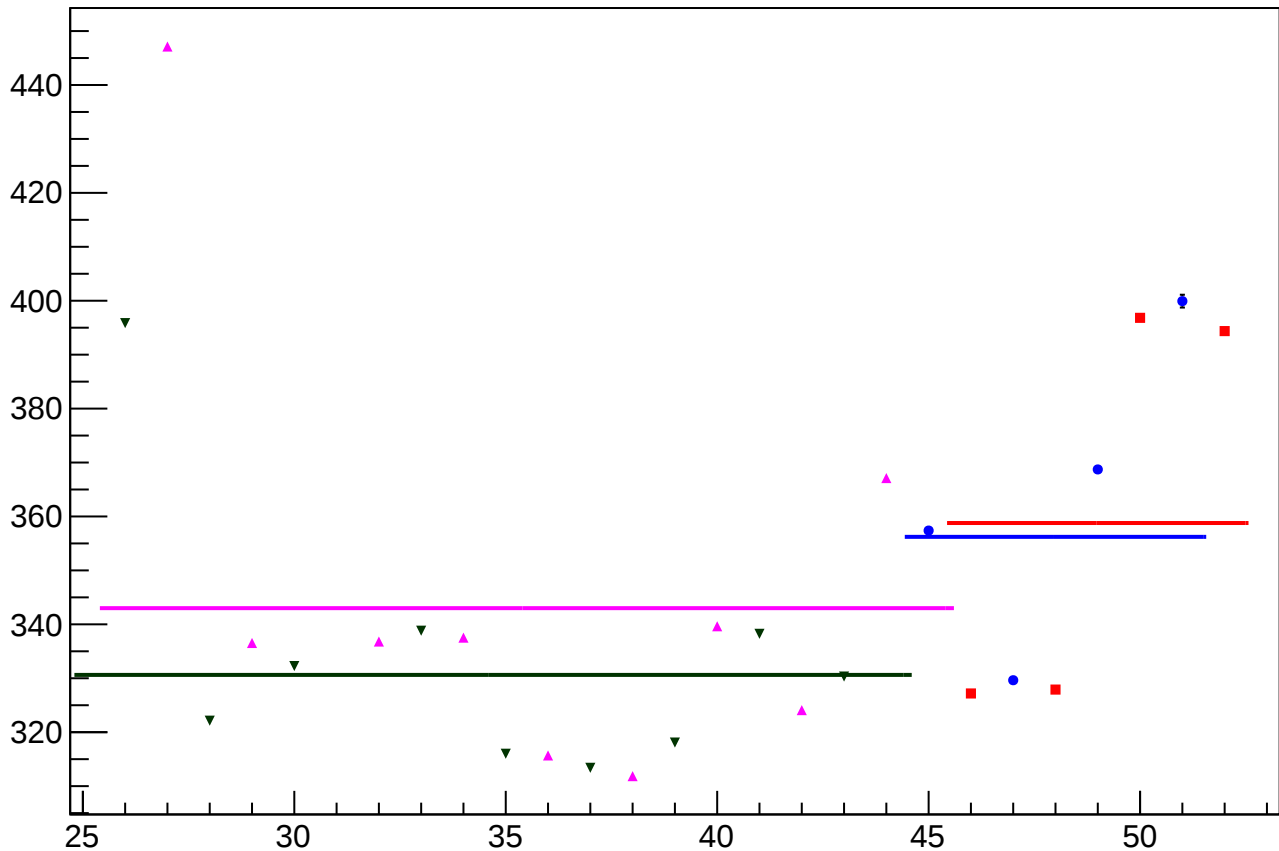
Right Out: -417.896 $\pm$ 259.578  $\chi^2/\text{NDF}$ : 2.5/3

Left In: 127.293 $\pm$ 145.286  $\chi^2/\text{NDF}$ :16.5/8

-129.641 $\pm$ -128.974  $\chi^2/\text{NDF}$ : 30.8/12

-2.755 $\pm$ -126.779  $\chi^2/\text{NDF}$ : 22.3/12

# reg\_asym\_sam5\_rms vs slug



Right In: 356.221+/-0.177  $\chi^2/\text{NDF}$ : 9135.2/3

Left Out: 330.623+/-0.106  $\chi^2/\text{NDF}$ : 35956.4/8

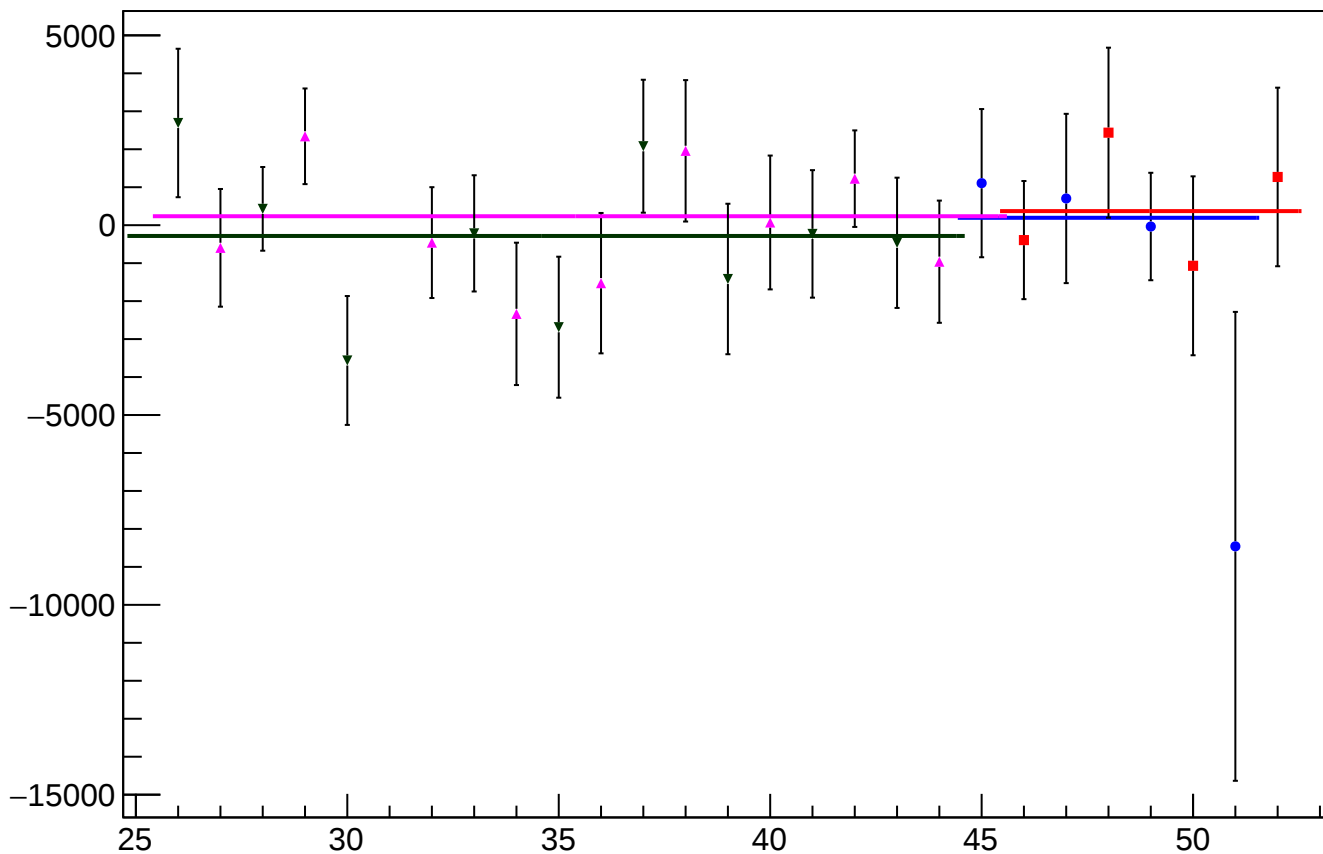
Right Out: 358.786+/-0.184  $\chi^2/\text{NDF}$ : 34158.7/3

Left In: 342.999+/-0.103  $\chi^2/\text{NDF}$ : 119222.1/8

337.403+/-0.091  $\chi^2/\text{NDF}$ : 60432.2/12

346.765+/-0.090  $\chi^2/\text{NDF}$ : 159014.1/12

# asym\_sam5\_correction\_mean vs slug



Right In: 195.009 $\pm$ 1005.356  $\chi^2$ /NDF: 2.3/3

Left Out: -283.767 $\pm$ 540.454  $\chi^2$ /NDF:10.3/8

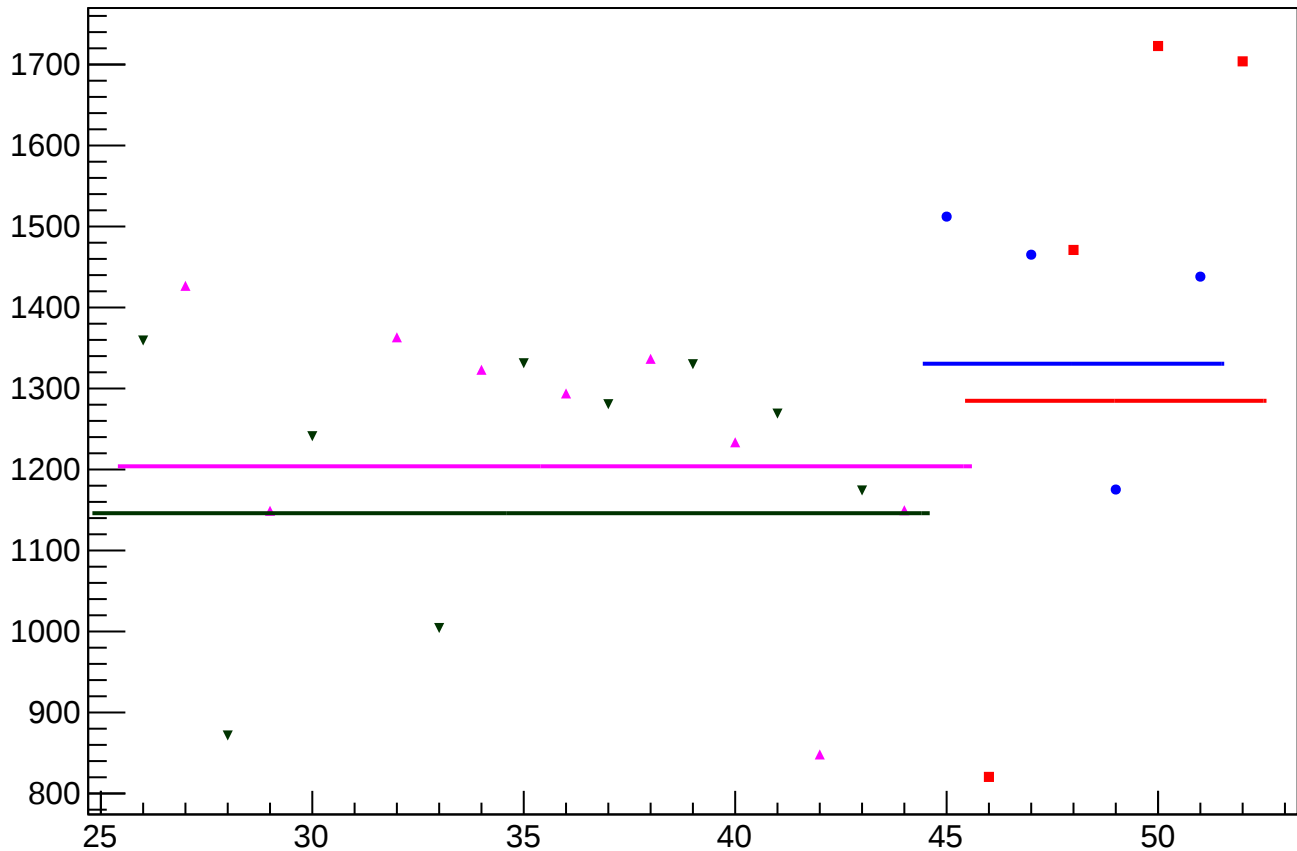
Right Out: 370.846 $\pm$ 1013.522  $\chi^2$ /NDF: 1.6/3

Left In: 235.887 $\pm$ 519.362  $\chi^2$ /NDF:8.1/8

-176.427 $\pm$ 476.030  $\chi^2$ /NDF: 12.7/12

263.955 $\pm$ 462.210  $\chi^2$ /NDF: 9.7/12

# asym\_sam5\_correction\_rms vs slug



Right In: 1330.594+/-0.711  $\chi^2/\text{NDF}$ : 49314.2/3

Left Out: 1146.036+/-0.382  $\chi^2/\text{NDF}$ : 231345.1/8

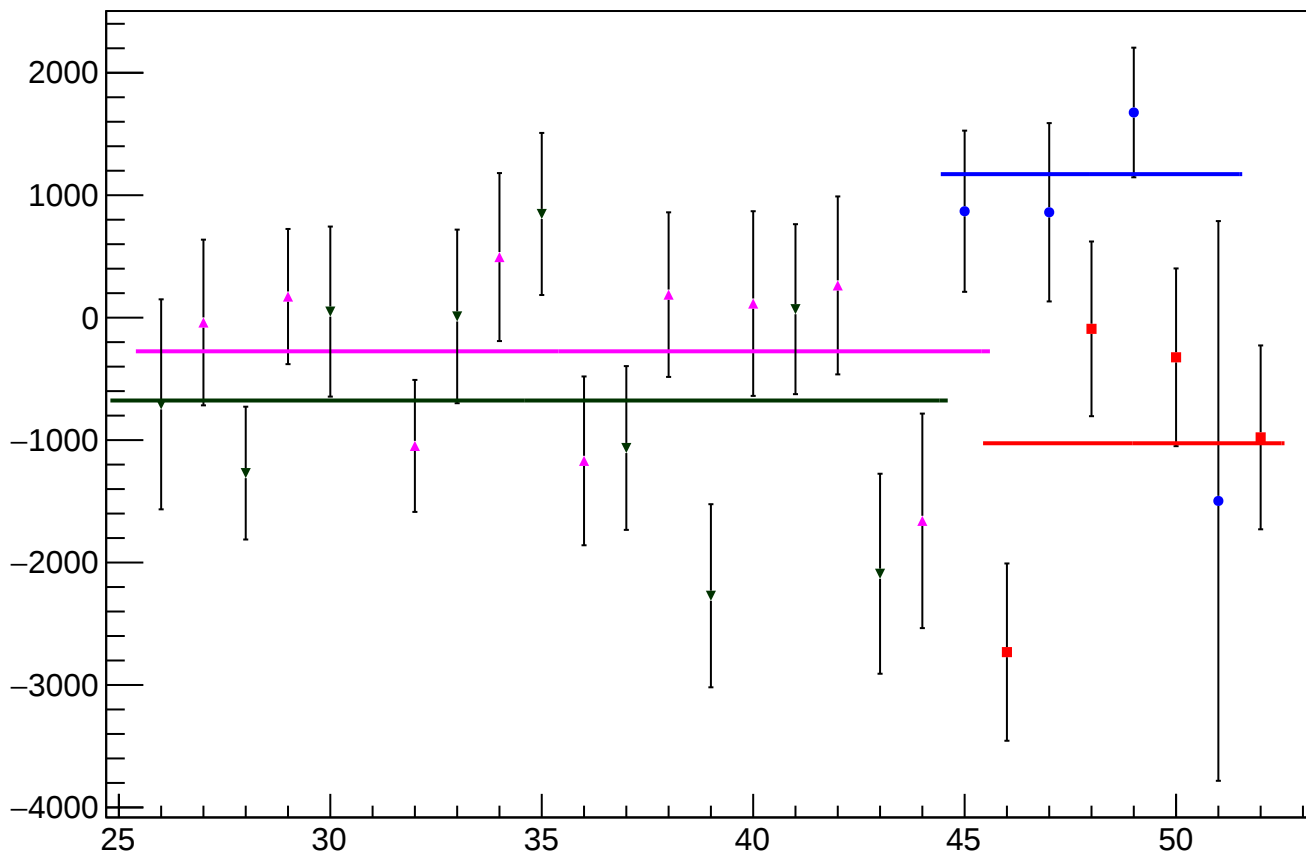
Right Out: 1284.811+/-0.717  $\chi^2/\text{NDF}$ : 324593.5/3

Left In: 1203.948+/-0.367  $\chi^2/\text{NDF}$ : 251295.7/8

1187.414+/-0.337  $\chi^2/\text{NDF}$ : 332947.5/12

1220.765+/-0.327  $\chi^2/\text{NDF}$ : 585972.7/12

# reg\_asym\_sam6\_mean vs slug



Right In:  $1172.116 \pm 354.590$   $\chi^2/\text{NDF}$ : 2.7/3

Left Out:  $-676.628 \pm 231.223$   $\chi^2/\text{NDF}$ : 17.6/8

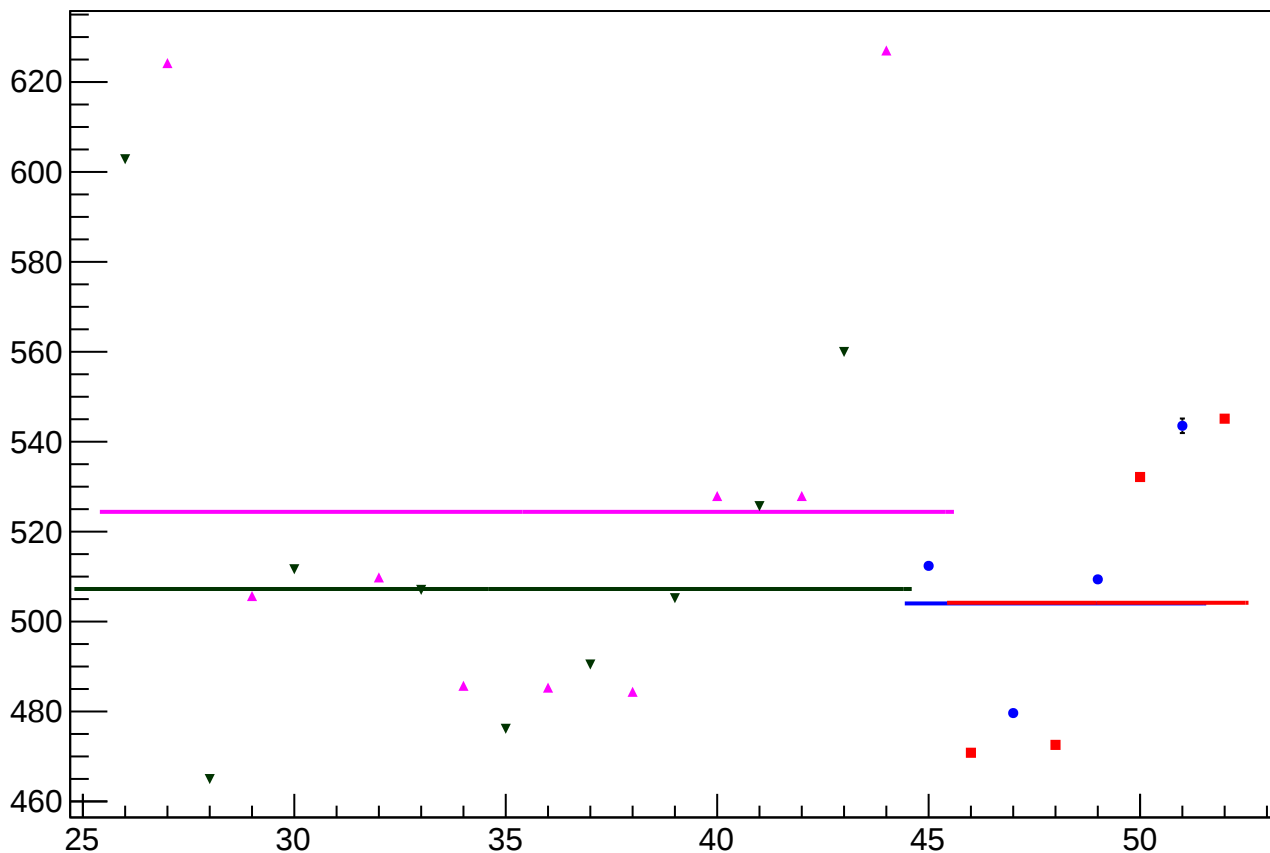
Right Out:  $-1025.827 \pm 364.058$   $\chi^2/\text{NDF}$ : 8.2/3

Left In:  $-274.897 \pm 221.916$   $\chi^2/\text{NDF}$ : 9.6/8

$-125.050 \pm 193.683$   $\chi^2/\text{NDF}$ : 39.3/12

$-478.329 \pm 189.487$   $\chi^2/\text{NDF}$ : 20.9/12

# reg\_asym\_sam6\_rms vs slug



Right In: 504.031+/-0.251  $\chi^2/\text{NDF}$ : 3366.8/3

Left Out: 507.245+/-0.163  $\chi^2/\text{NDF}$ : 52506.9/8

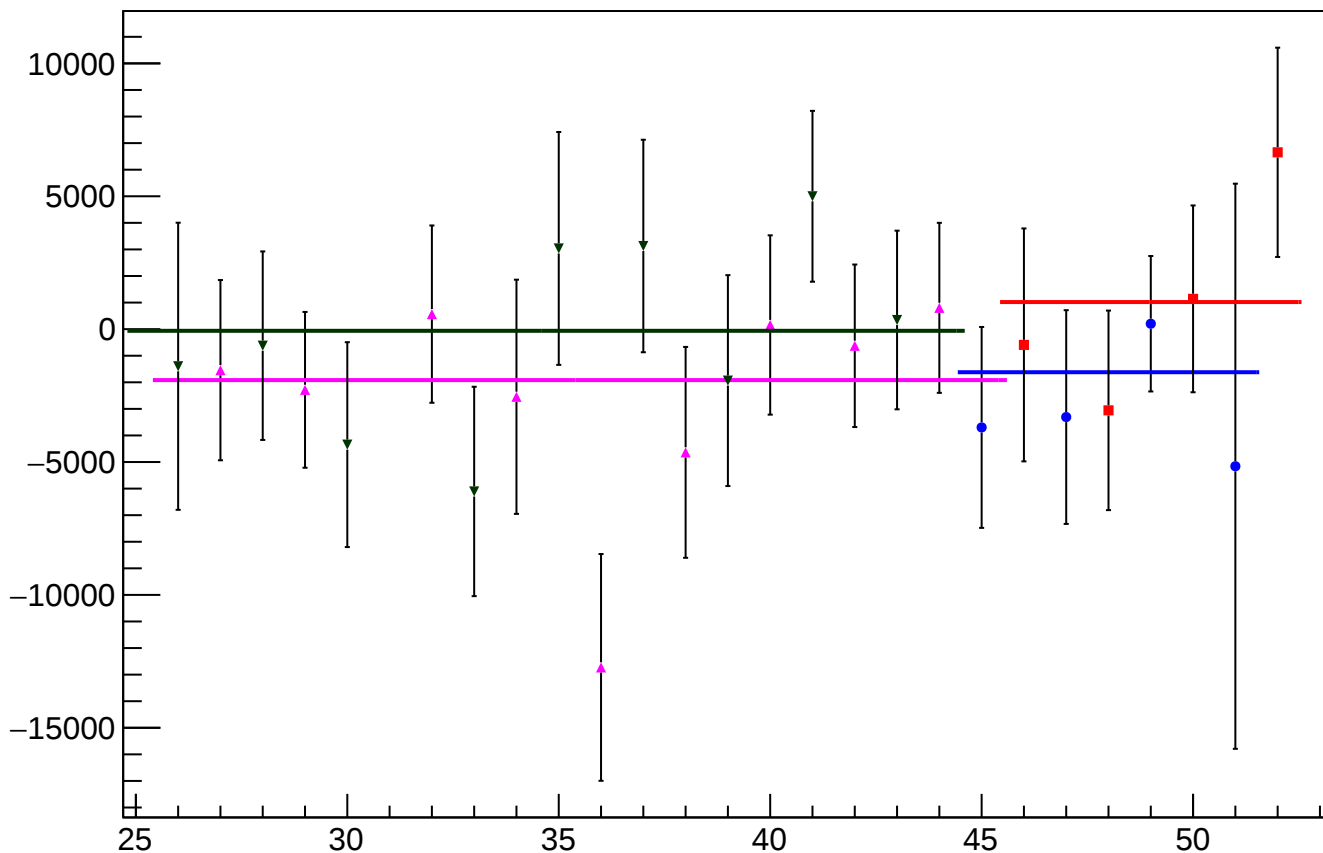
506.286+/-0.137  $\chi^2/\text{NDF}$ : 55988.9/12

Right Out: 504.179+/-0.257  $\chi^2/\text{NDF}$ : 17090.0/3

518.923+/-0.134  $\chi^2/\text{NDF}$ : 116299.0/12

Left In: 524.401+/-0.157  $\chi^2/\text{NDF}$ : 94710.0/8

# asym\_sam6\_correction\_mean vs slug



Right In: -1620.993 $\pm$ 1842.087  $\chi^2/\text{NDF}: 1.1/3$

Left Out: -62.354 $\pm$ 1281.480  $\chi^2/\text{NDF}: 7.5/8$

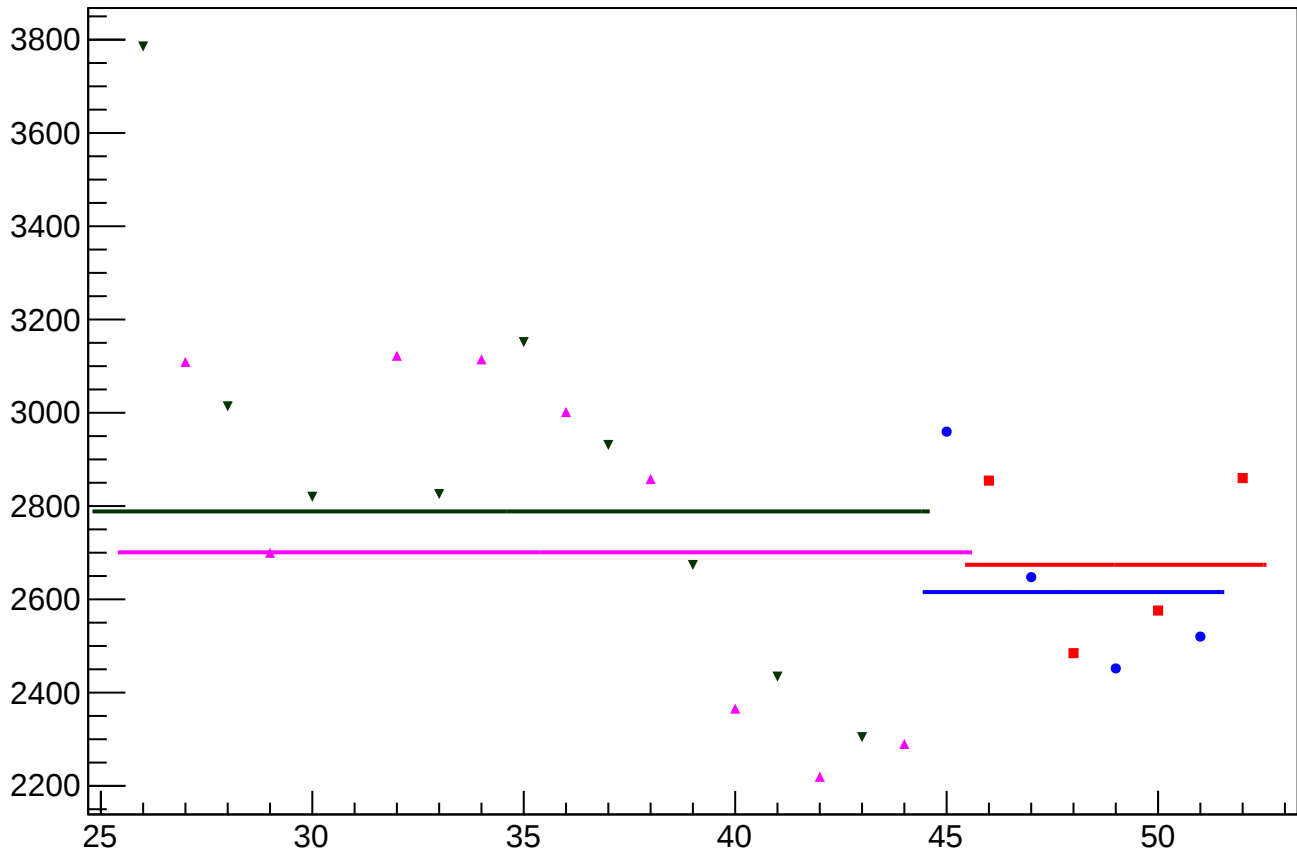
Right Out: 1019.638 $\pm$ 1930.024  $\chi^2/\text{NDF}: 3.4/3$

Left In: -1917.139 $\pm$ 1150.328  $\chi^2/\text{NDF}: 8.8/8$

-570.665 $\pm$ 1051.966  $\chi^2/\text{NDF}: 9.1/12$

-1147.346 $\pm$ 988.130  $\chi^2/\text{NDF}: 13.8/12$

# asym\_sam6\_correction\_rms vs slug



Right In:  $2615.596 \pm 1.303$   $\chi^2/\text{NDF}$ : 25111.0/3

Left Out:  $2788.520 \pm 0.906$   $\chi^2/\text{NDF}$ : 160197.2/8

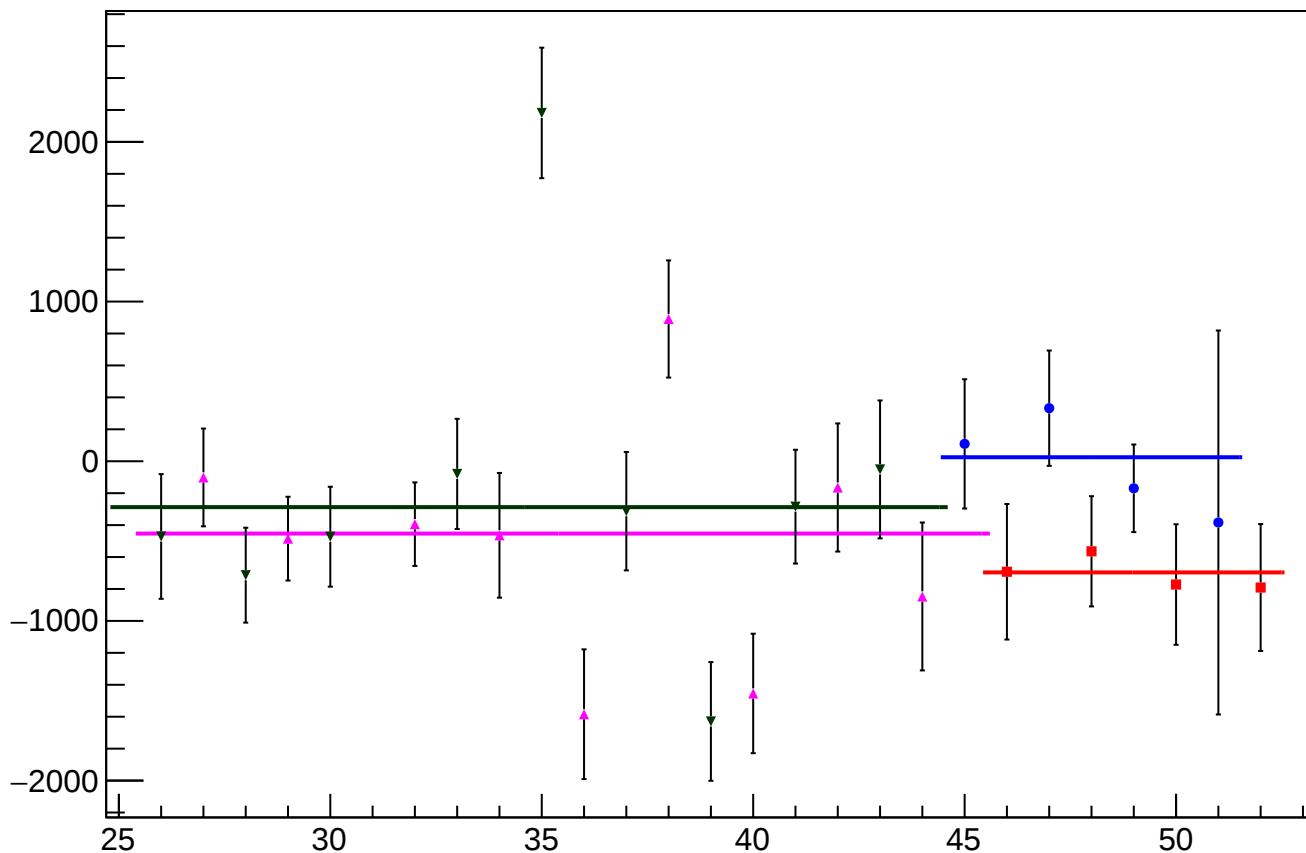
Right Out:  $2674.099 \pm 1.365$   $\chi^2/\text{NDF}$ : 14508.2/3

Left In:  $2700.808 \pm 0.813$   $\chi^2/\text{NDF}$ : 193934.1/8

$2732.125 \pm 0.744$   $\chi^2/\text{NDF}$ : 197185.0/12

$2693.807 \pm 0.699$   $\chi^2/\text{NDF}$ : 208724.9/12

# reg\_asym\_sam7\_mean vs slug



Right In: 25.051+/-189.821  $\chi^2/\text{NDF}$ : 1.4/3

Left Out: -287.418+/-119.318  $\chi^2/\text{NDF}$ : 52.8/8

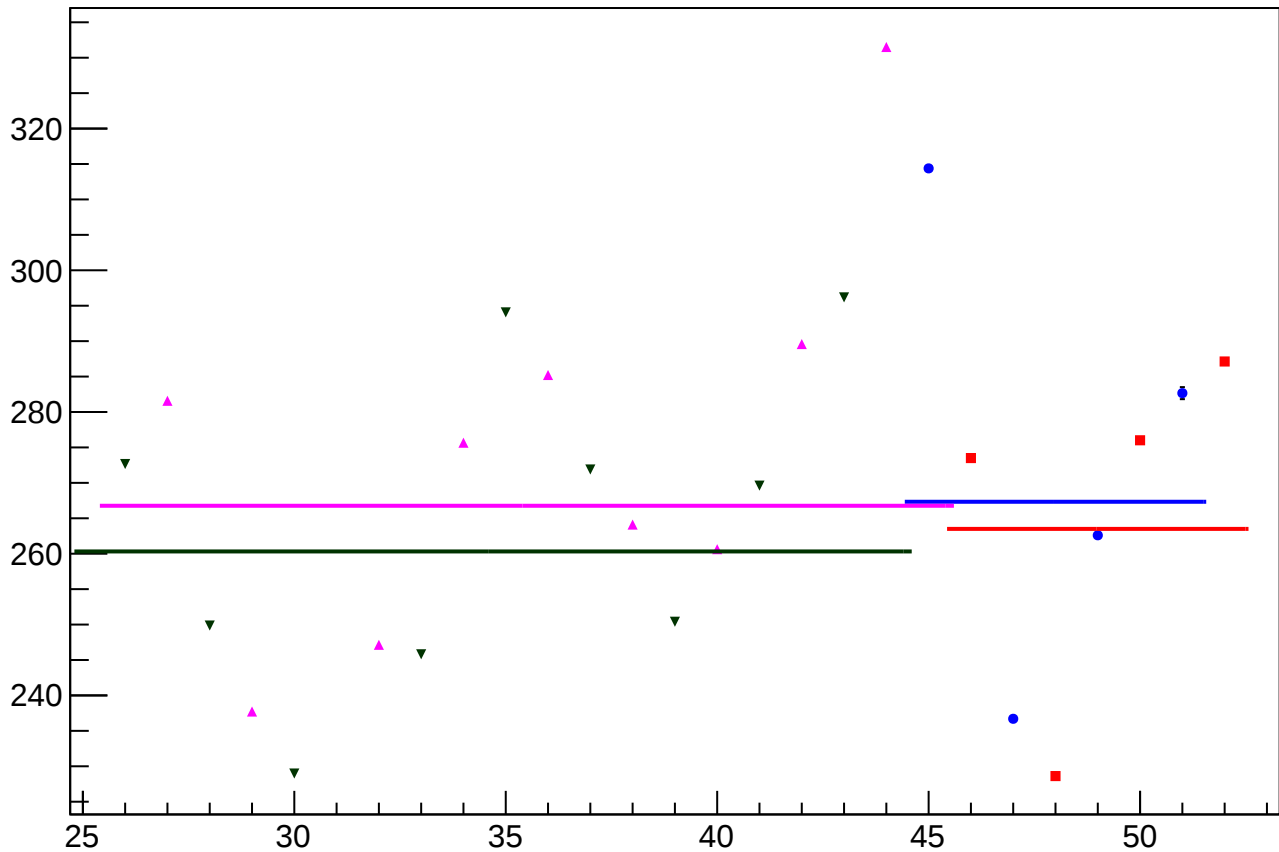
Right Out: -696.230+/-191.410  $\chi^2/\text{NDF}$ : 0.2/3

Left In: -452.872+/-113.322  $\chi^2/\text{NDF}$ : 31.0/8

-198.922+/-101.018  $\chi^2/\text{NDF}$ : 56.2/12

-516.033+/-97.514  $\chi^2/\text{NDF}$ : 32.4/12

# reg\_asym\_sam7\_rms vs slug



Right In: 267.331+/-0.134  $\chi^2/\text{NDF}$ : 42328.8/3

Left Out: 260.321+/-0.084  $\chi^2/\text{NDF}$ :60237.4/8

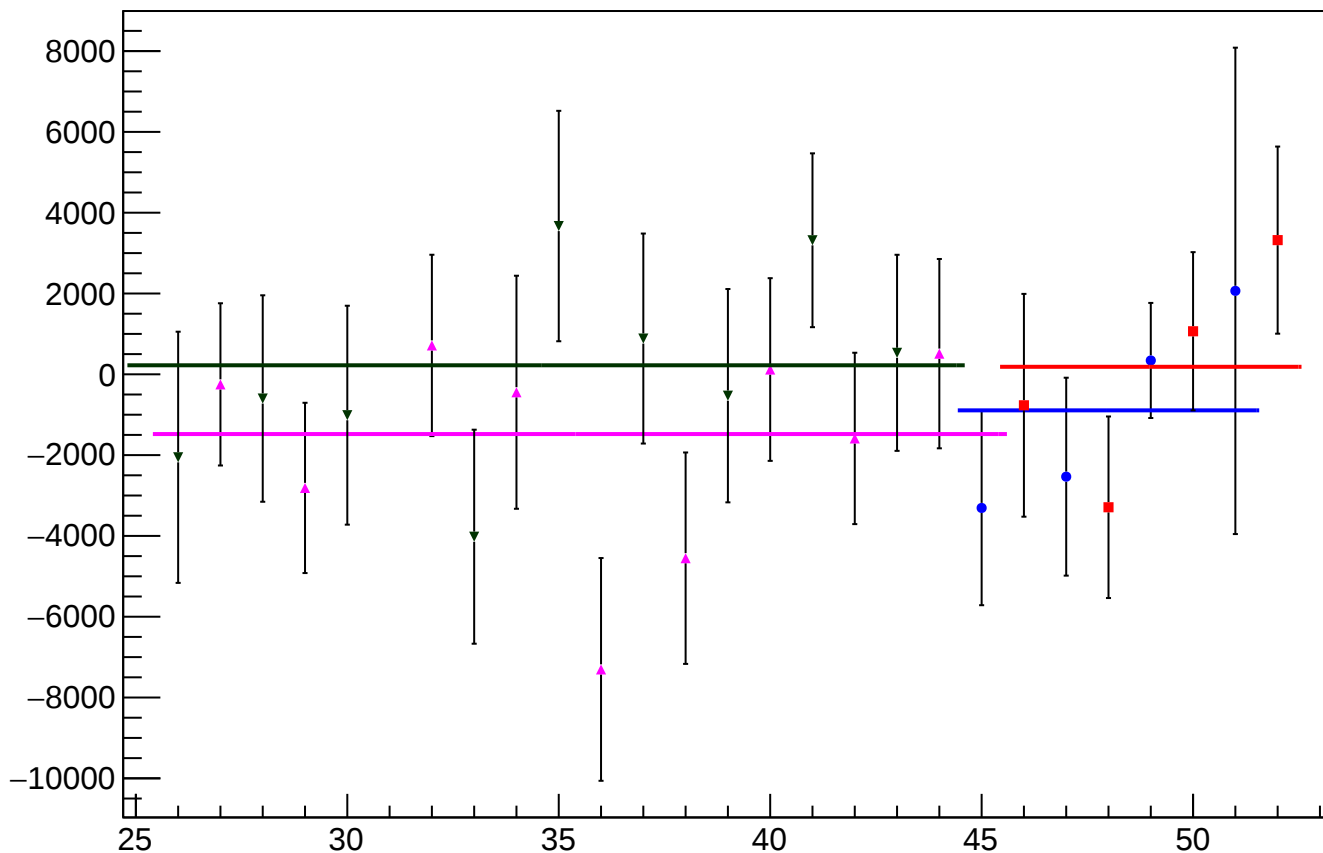
Right Out: 263.503+/-0.135  $\chi^2/\text{NDF}$ : 30805.9/3

Left In: 266.767+/-0.080  $\chi^2/\text{NDF}$ :91803.4/8

262.306+/-0.071  $\chi^2/\text{NDF}$ : 104521.8/12

265.920+/-0.069  $\chi^2/\text{NDF}$ : 123040.0/12

# asym\_sam7\_correction\_mean vs slug



Right In: -892.374+/-1078.485  $\chi^2/\text{NDF}$ : 2.4/3

Left Out: 223.347+/-865.231  $\chi^2/\text{NDF}$ : 7.1/8

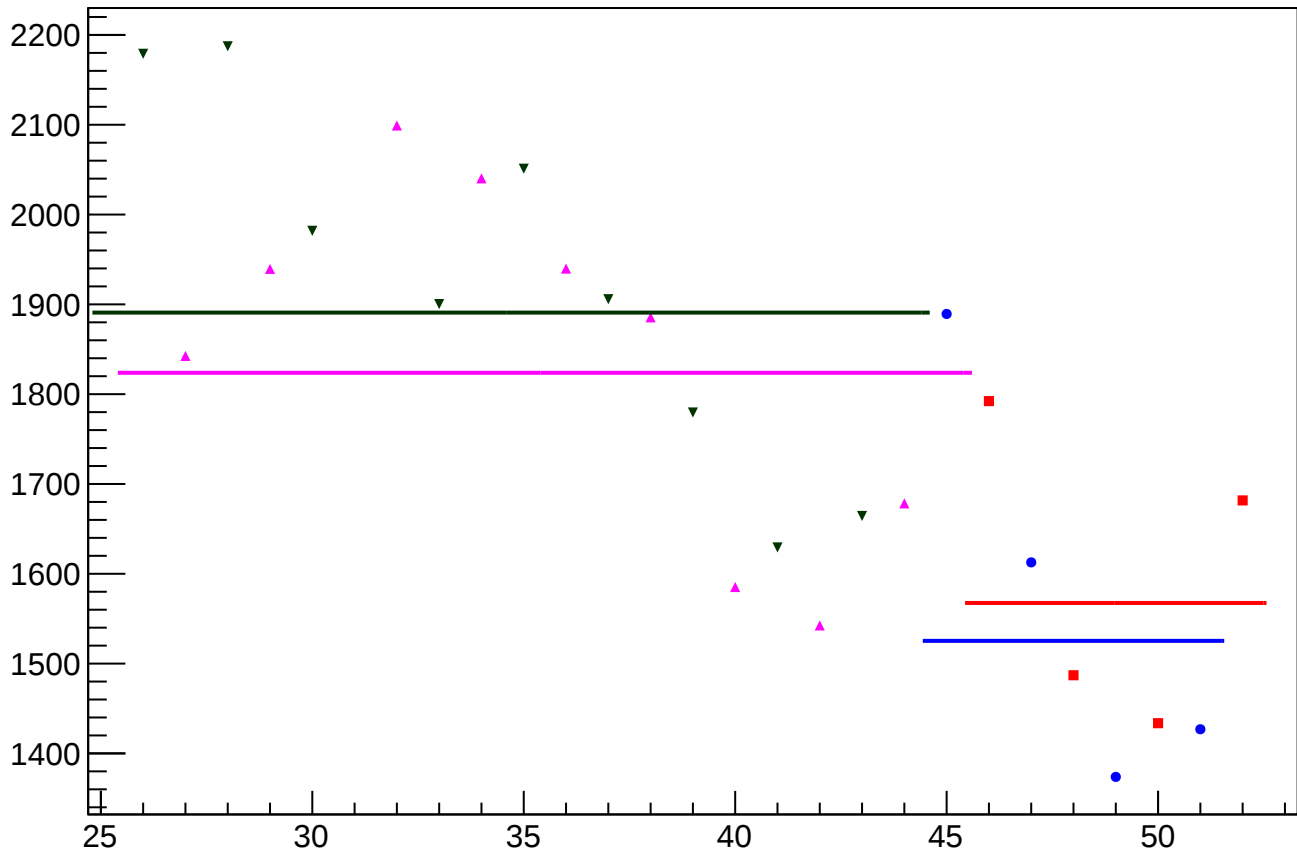
Right Out: 185.917+/-1134.579  $\chi^2/\text{NDF}$ : 4.5/3

Left In: -1478.705+/-773.885  $\chi^2/\text{NDF}$ : 8.9/8

-213.558+/-674.885  $\chi^2/\text{NDF}$ : 10.2/12

-950.152+/-639.324  $\chi^2/\text{NDF}$ : 14.9/12

# asym\_sam7\_correction\_rms vs slug



Right In: 1525.317+/-0.763  $\chi^2/\text{NDF}$ : 71428.1/3

Left Out: 1890.834+/-0.612  $\chi^2/\text{NDF}$ :103303.6/8

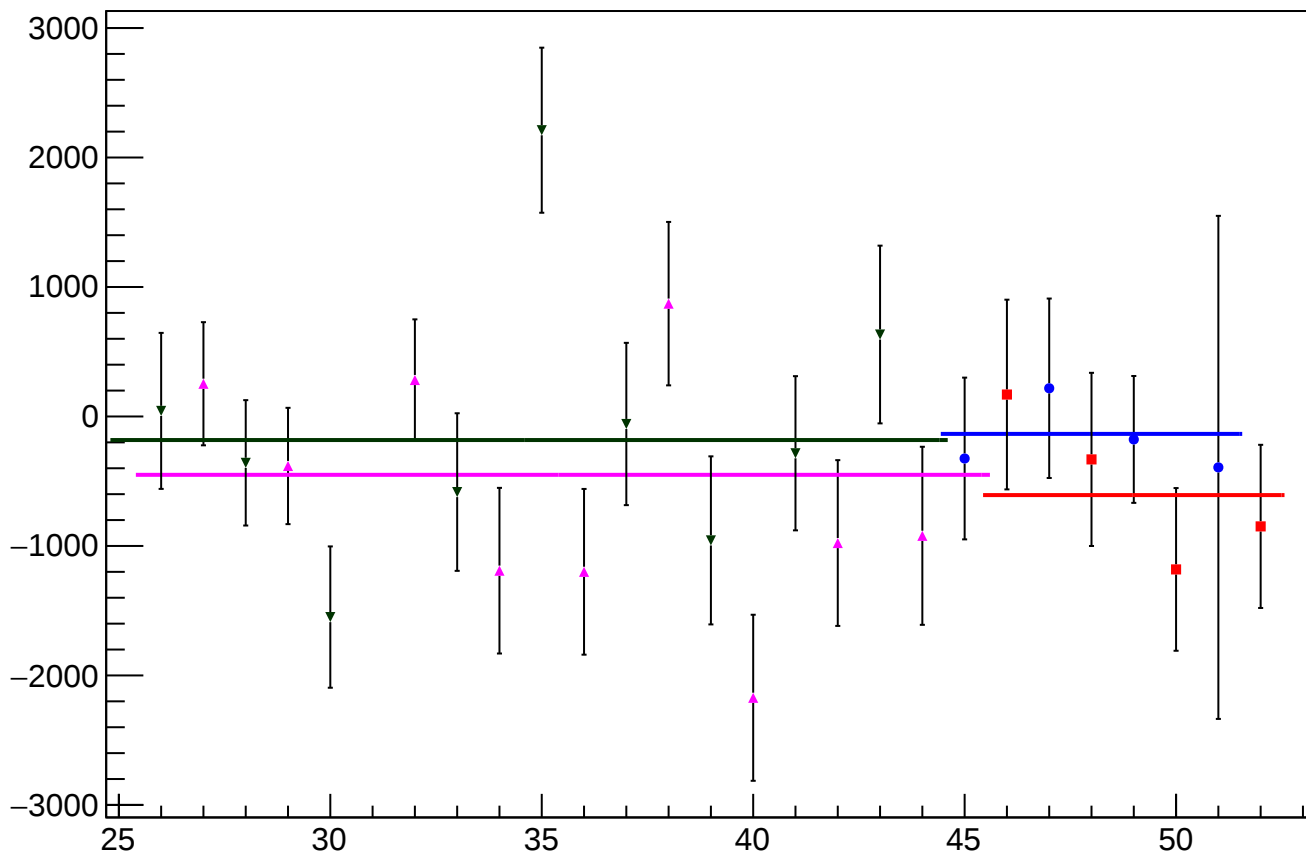
Right Out: 1567.519+/-0.802  $\chi^2/\text{NDF}$ : 30064.3/3

Left In: 1823.820+/-0.547  $\chi^2/\text{NDF}$ :117391.1/8

1747.701+/-0.477  $\chi^2/\text{NDF}$ : 314501.3/12

1742.439+/-0.452  $\chi^2/\text{NDF}$ : 217110.4/12

# reg\_asym\_sam8\_mean vs slug



Right In: -134.501+/-331.917  $\chi^2/\text{NDF}$ : 0.4/3

Left Out: -181.996+/-198.404  $\chi^2/\text{NDF}$ :24.0/8

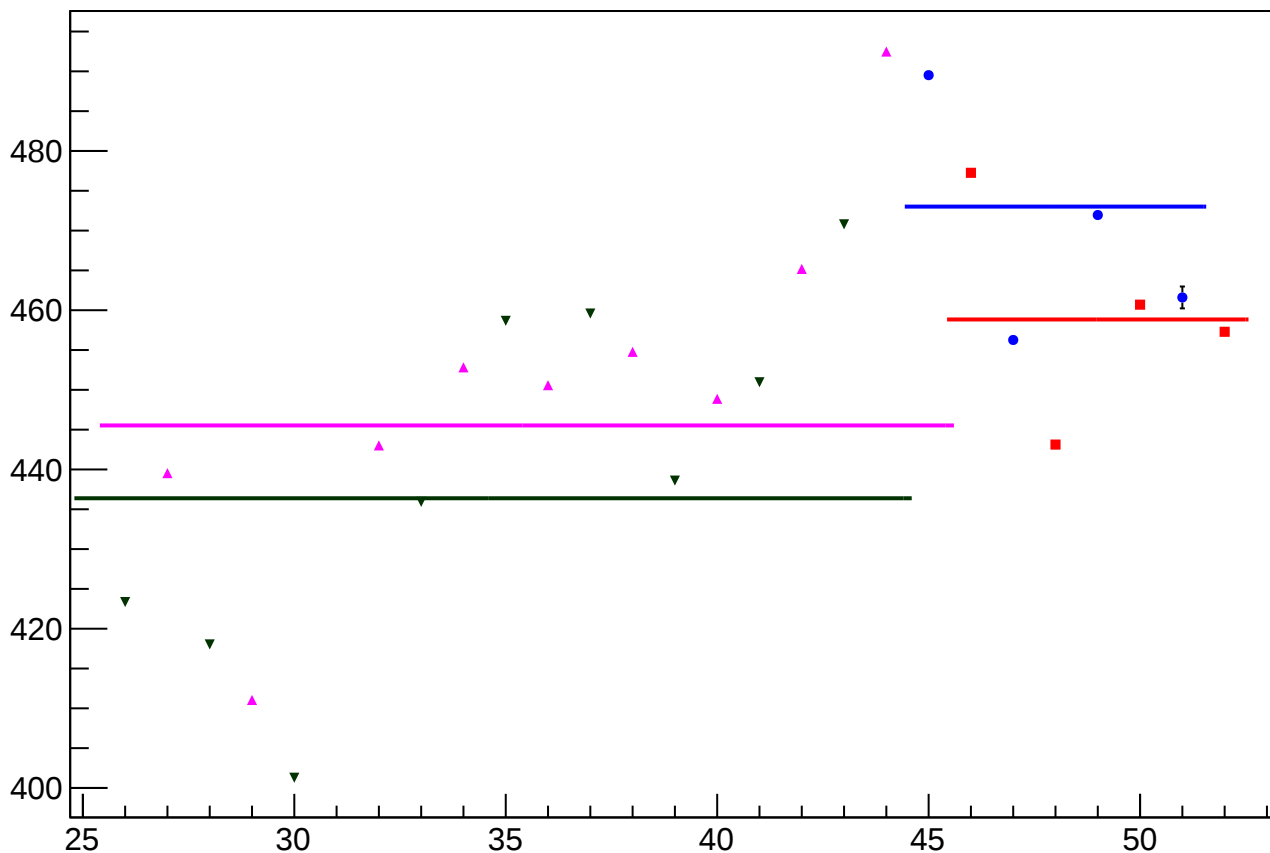
Right Out: -607.121+/-330.554  $\chi^2/\text{NDF}$ : 2.3/3

Left In: -450.653+/-187.903  $\chi^2/\text{NDF}$ :20.1/8

-169.493+/-170.299  $\chi^2/\text{NDF}$ : 24.4/12

-488.865+/-163.355  $\chi^2/\text{NDF}$ : 22.6/12

# reg\_asym\_sam8\_rms vs slug



Right In: 473.013+/-0.235     $\chi^2/\text{NDF}$ : 2644.0/3

Left Out: 436.383+/-0.140     $\chi^2/\text{NDF}$ : 23517.4/8

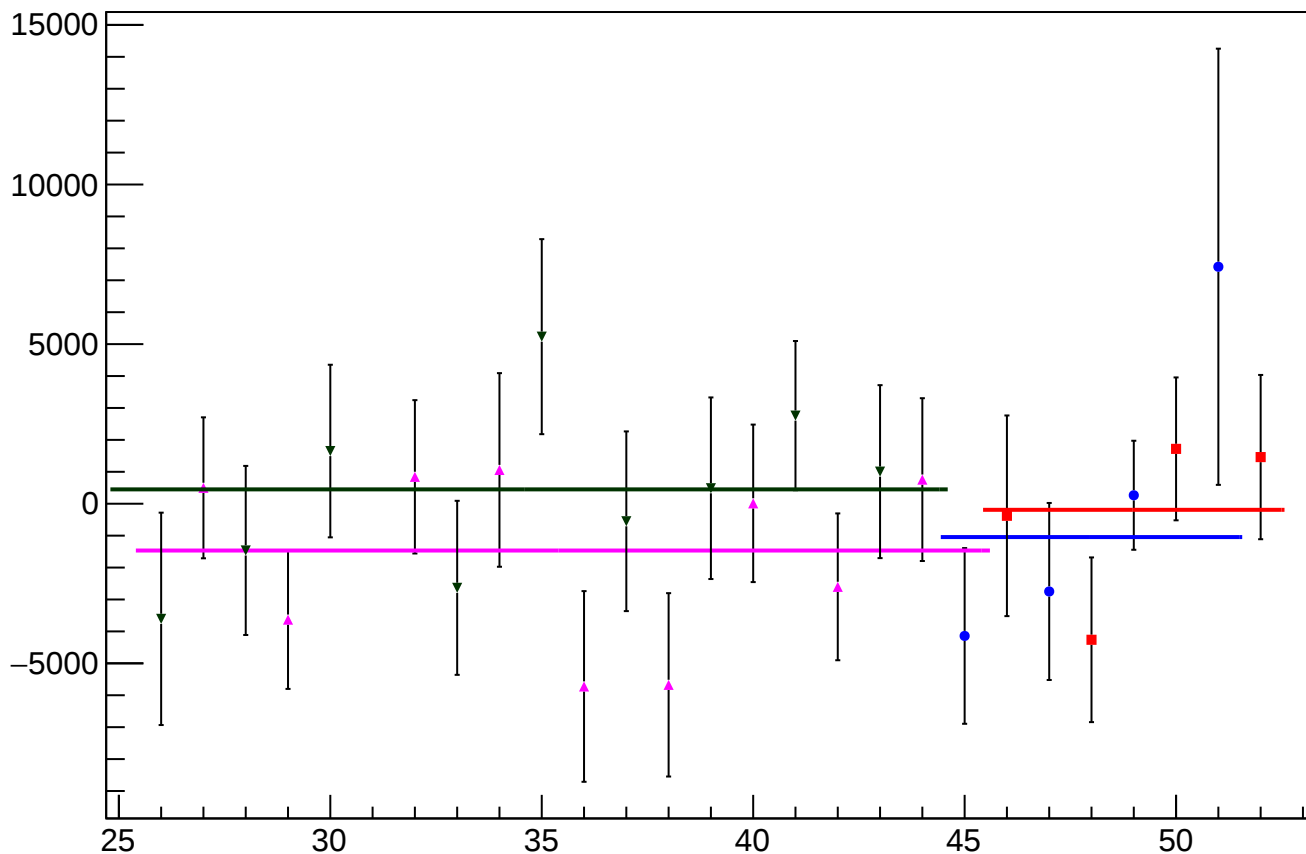
Right Out: 458.838+/-0.234     $\chi^2/\text{NDF}$ : 2398.2/3

Left In: 445.528+/-0.133     $\chi^2/\text{NDF}$ : 24241.7/8

446.026+/-0.120     $\chi^2/\text{NDF}$ : 44107.7/12

448.779+/-0.116     $\chi^2/\text{NDF}$ : 29090.4/12

# asym\_sam8\_correction\_mean vs slug



Right In:  $-1044.710 \pm 1263.403$   $\chi^2/\text{NDF}: 3.8/3$

Left Out:  $449.371 \pm 920.334$   $\chi^2/\text{NDF}: 7.1/8$

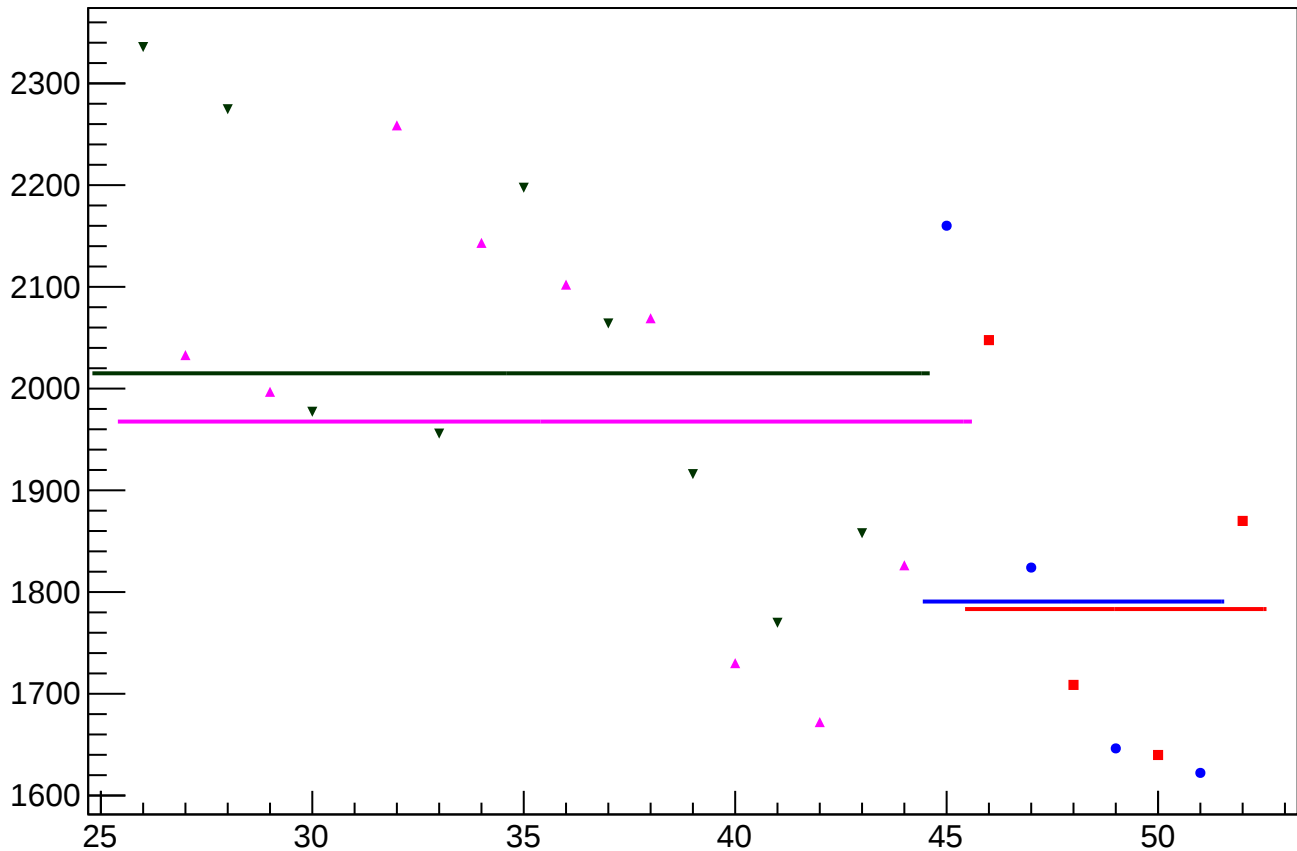
Right Out:  $-191.041 \pm 1288.668$   $\chi^2/\text{NDF}: 3.6/3$

Left In:  $-1466.179 \pm 833.373$   $\chi^2/\text{NDF}: 8.9/8$

$-68.601 \pm 743.888$   $\chi^2/\text{NDF}: 11.8/12$

$-1090.158 \pm 699.791$   $\chi^2/\text{NDF}: 13.3/12$

# asym\_sam8\_correction\_rms vs slug



Right In: 1790.676+/-0.893  $\chi^2/\text{NDF}$ : 51837.9/3

Left Out: 2015.018+/-0.651  $\chi^2/\text{NDF}$ : 78061.6/8

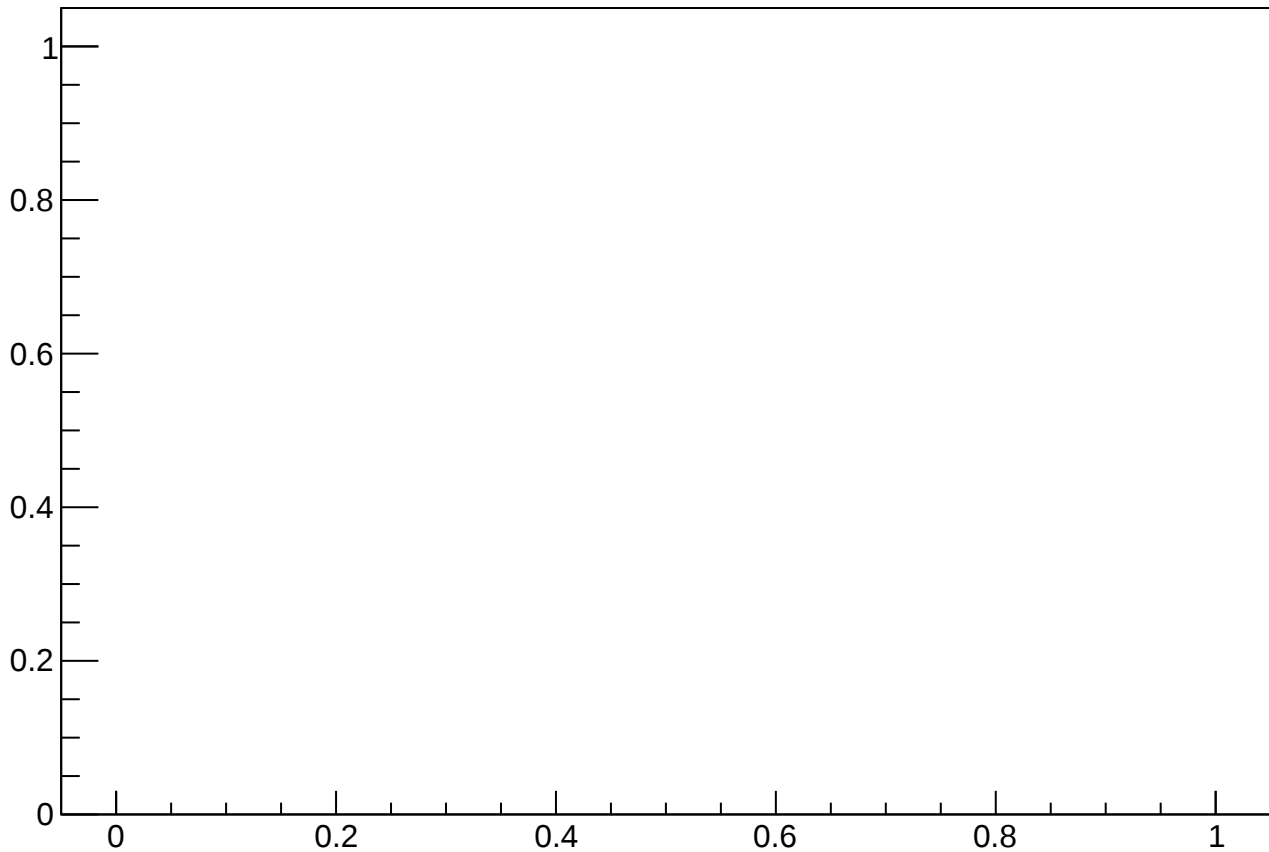
Right Out: 1783.285+/-0.911  $\chi^2/\text{NDF}$ : 26307.4/3

Left In: 1967.585+/-0.589  $\chi^2/\text{NDF}$ : 102442.6/8

1937.242+/-0.526  $\chi^2/\text{NDF}$ : 171099.1/12

1913.237+/-0.495  $\chi^2/\text{NDF}$ : 157594.1/12

# bcm\_an\_us\_ds3\_avg\_mean vs slug



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

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

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

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

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

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

# bcm\_an\_us\_ds3\_avg\_rms vs slug



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

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

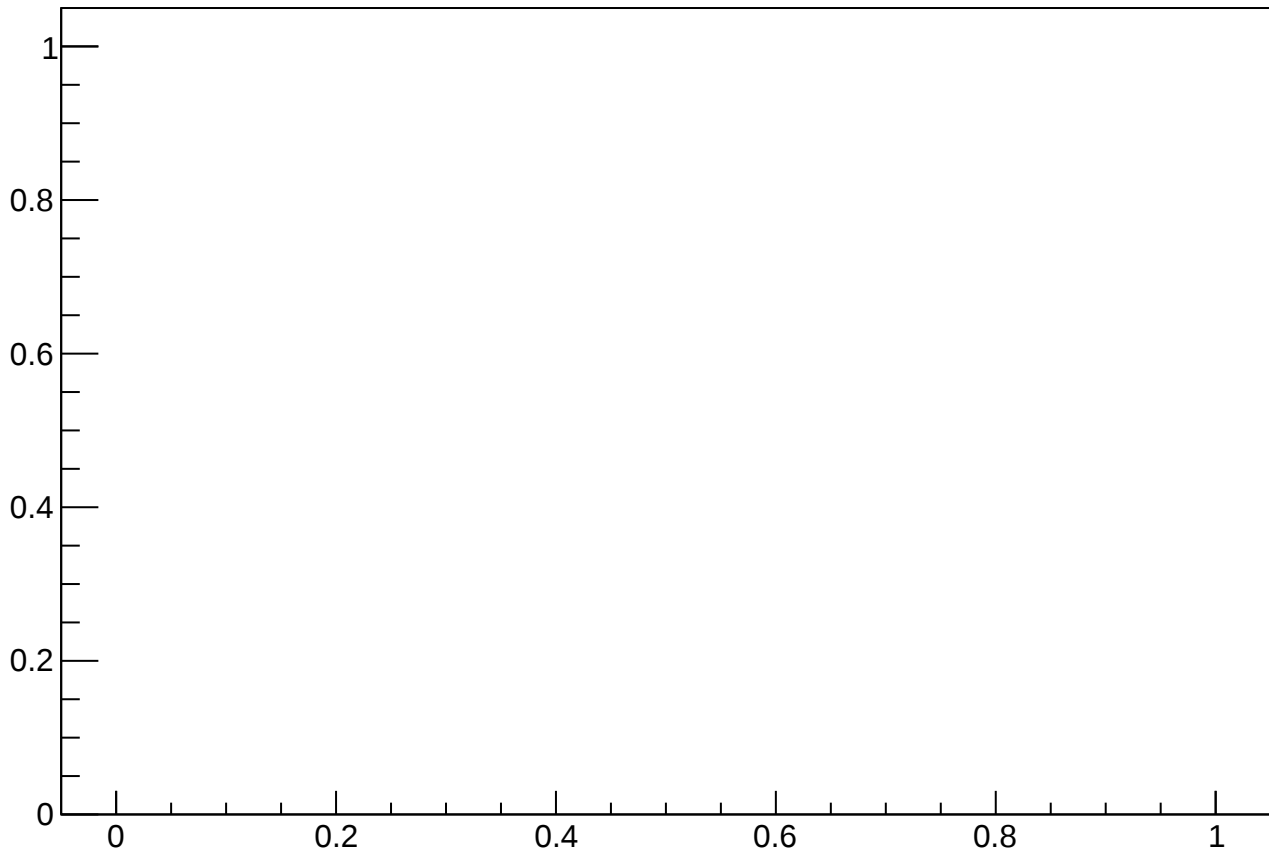
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

bcm\_an\_ds\_ds3\_avg\_mean vs slug



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

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

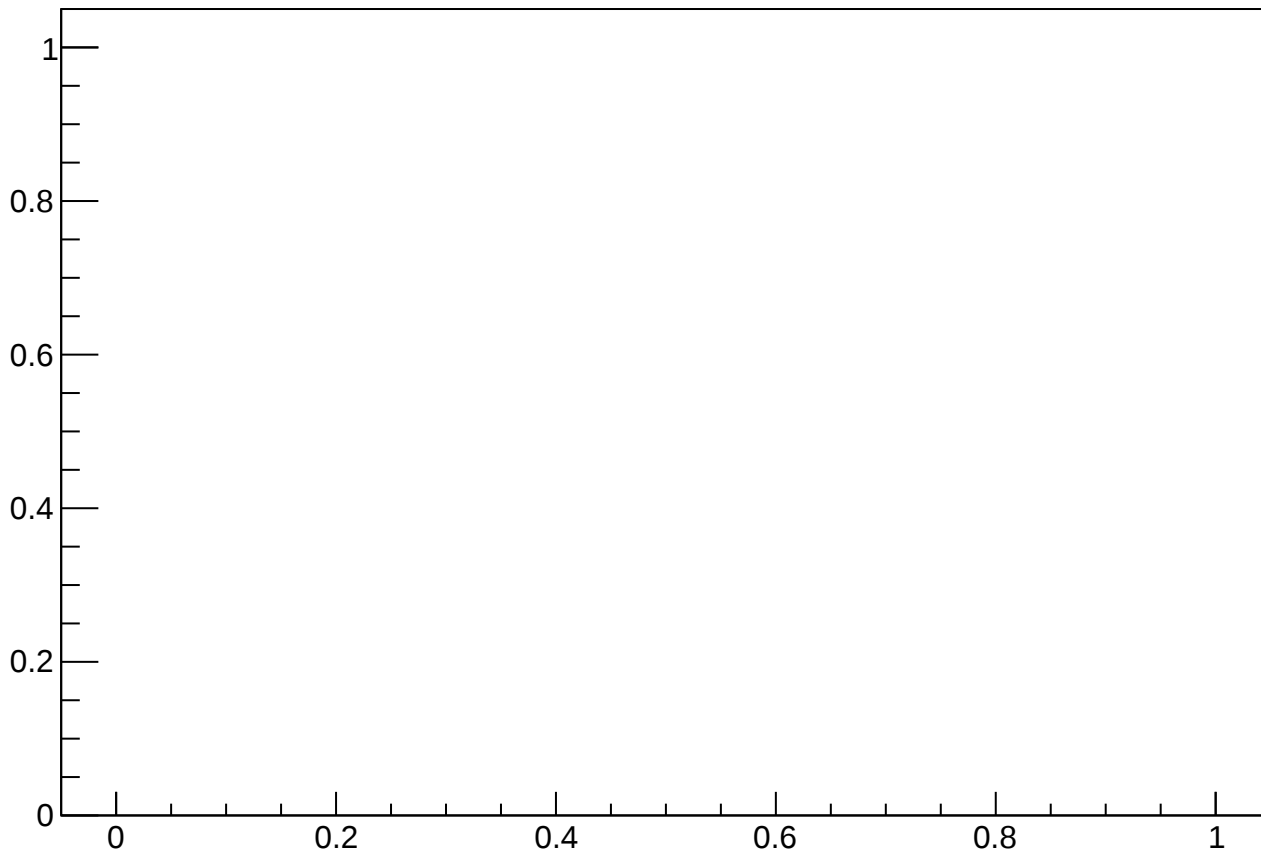
Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

# bcm\_an\_ds\_ds3\_avg\_rms vs slug



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

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

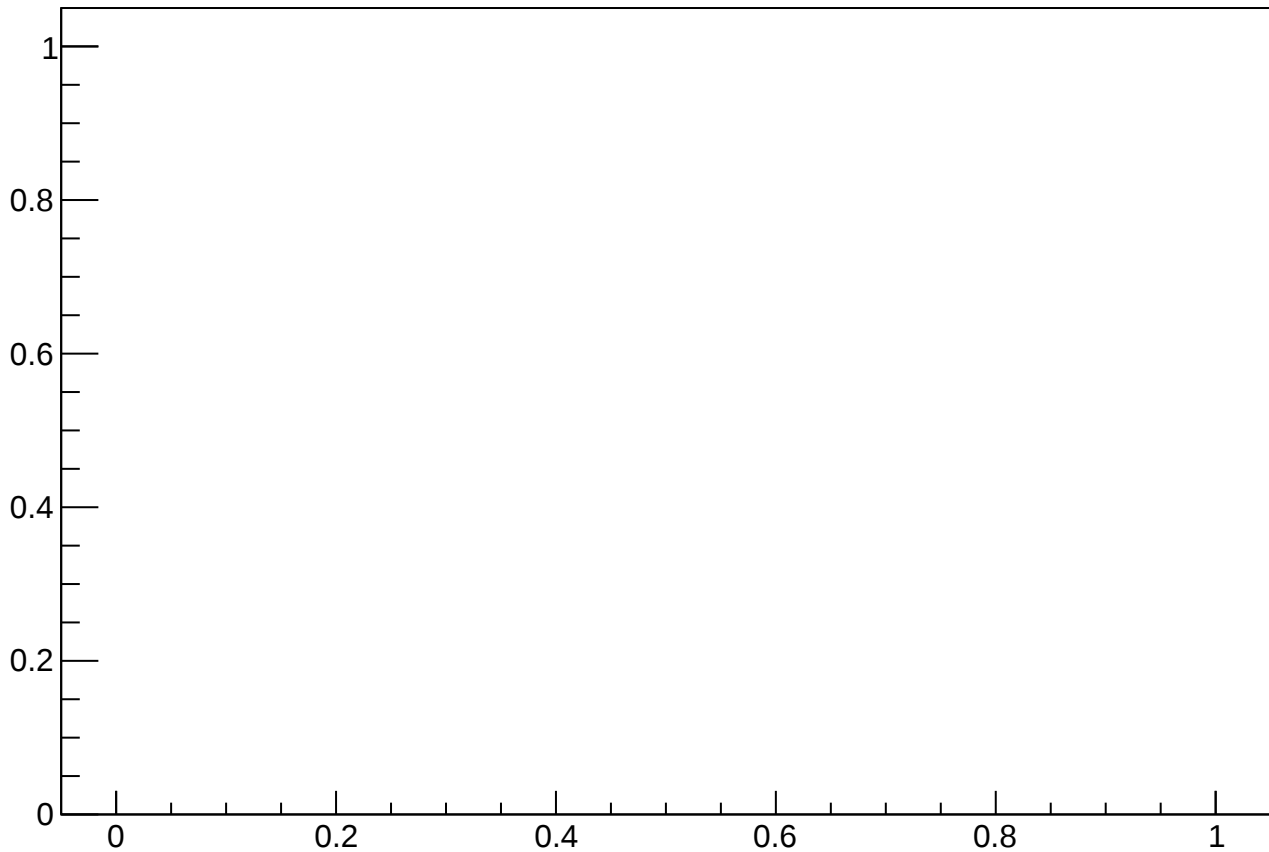
Right Out: 0.000+/-0.000     $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_dg\_us\_ds3\_avg\_mean vs slug



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

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

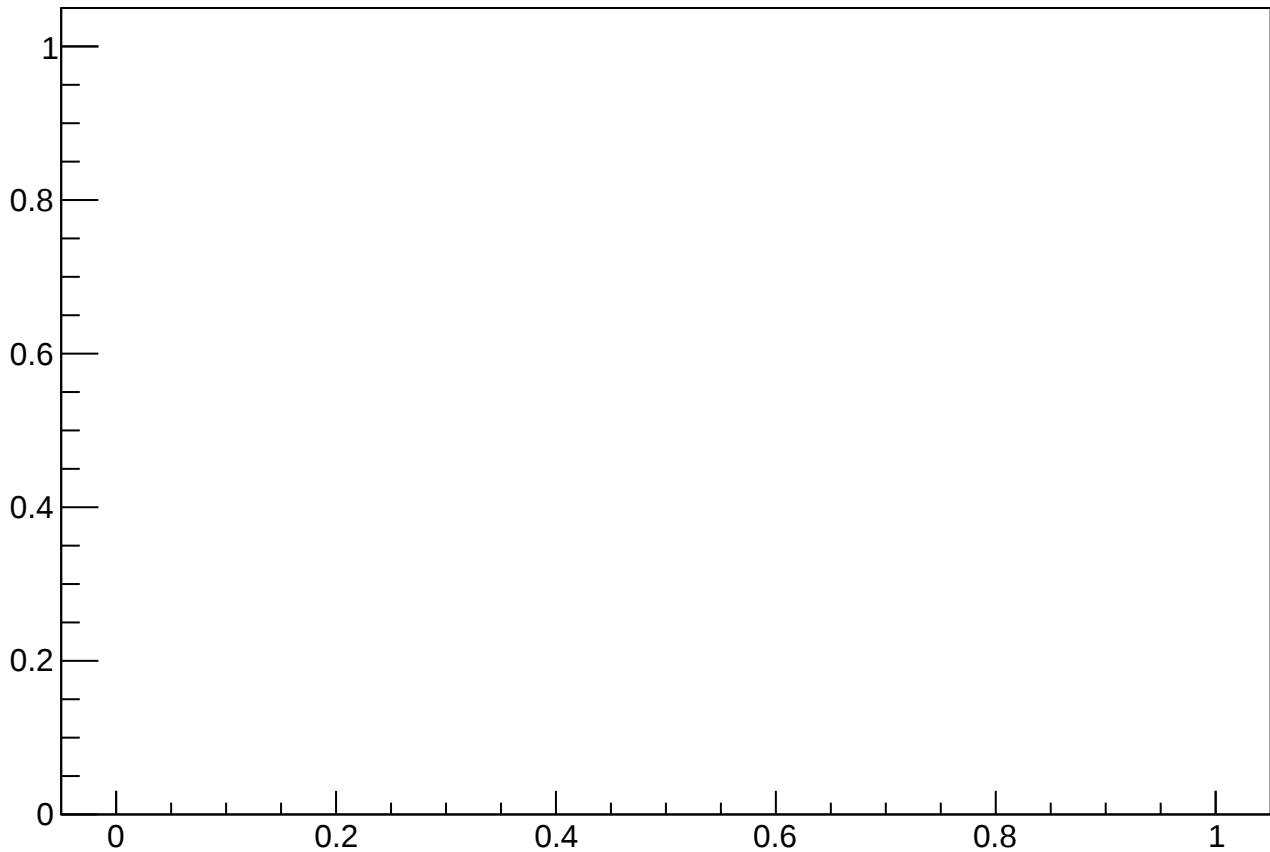
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_dg\_us\_ds3\_avg\_rms vs slug



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

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

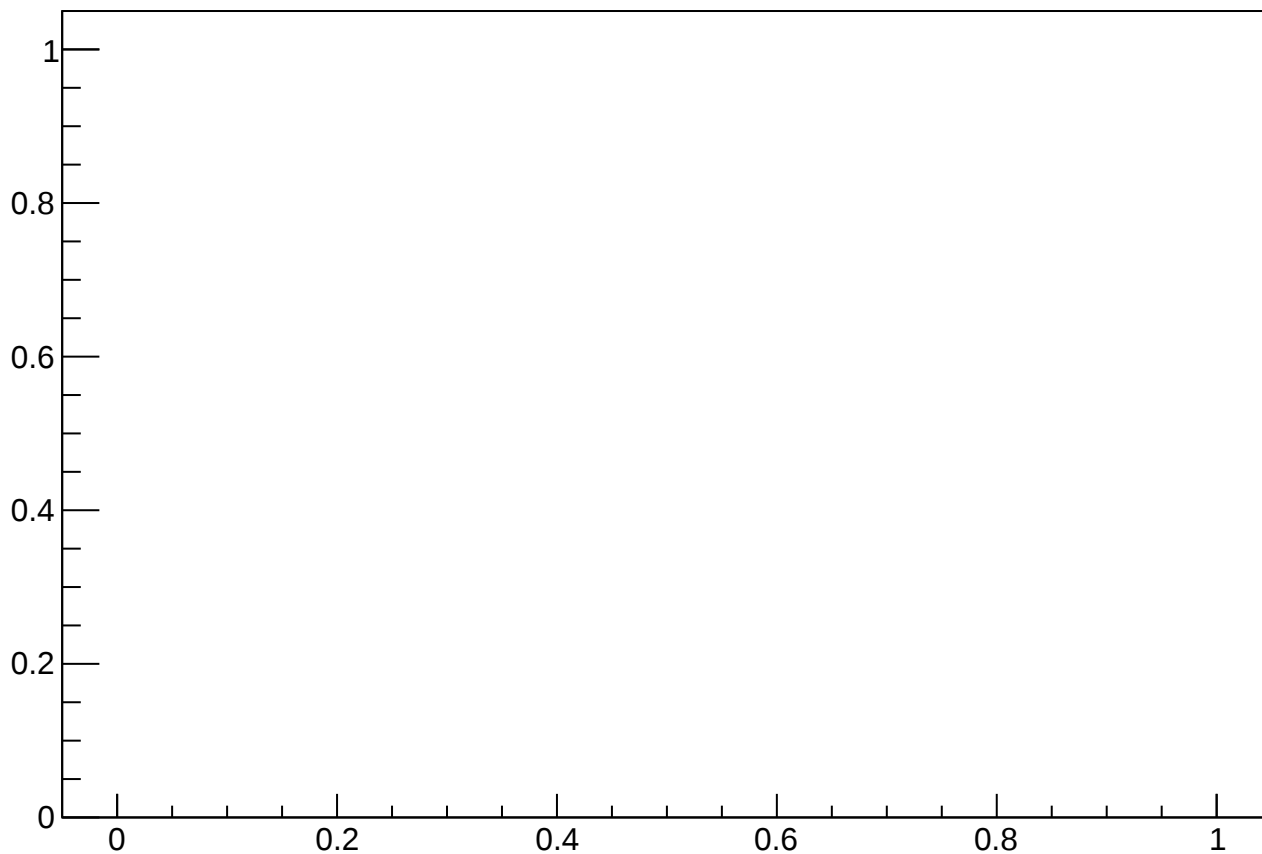
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_cav4cQ\_ds3\_avg\_mean vs slug



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

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

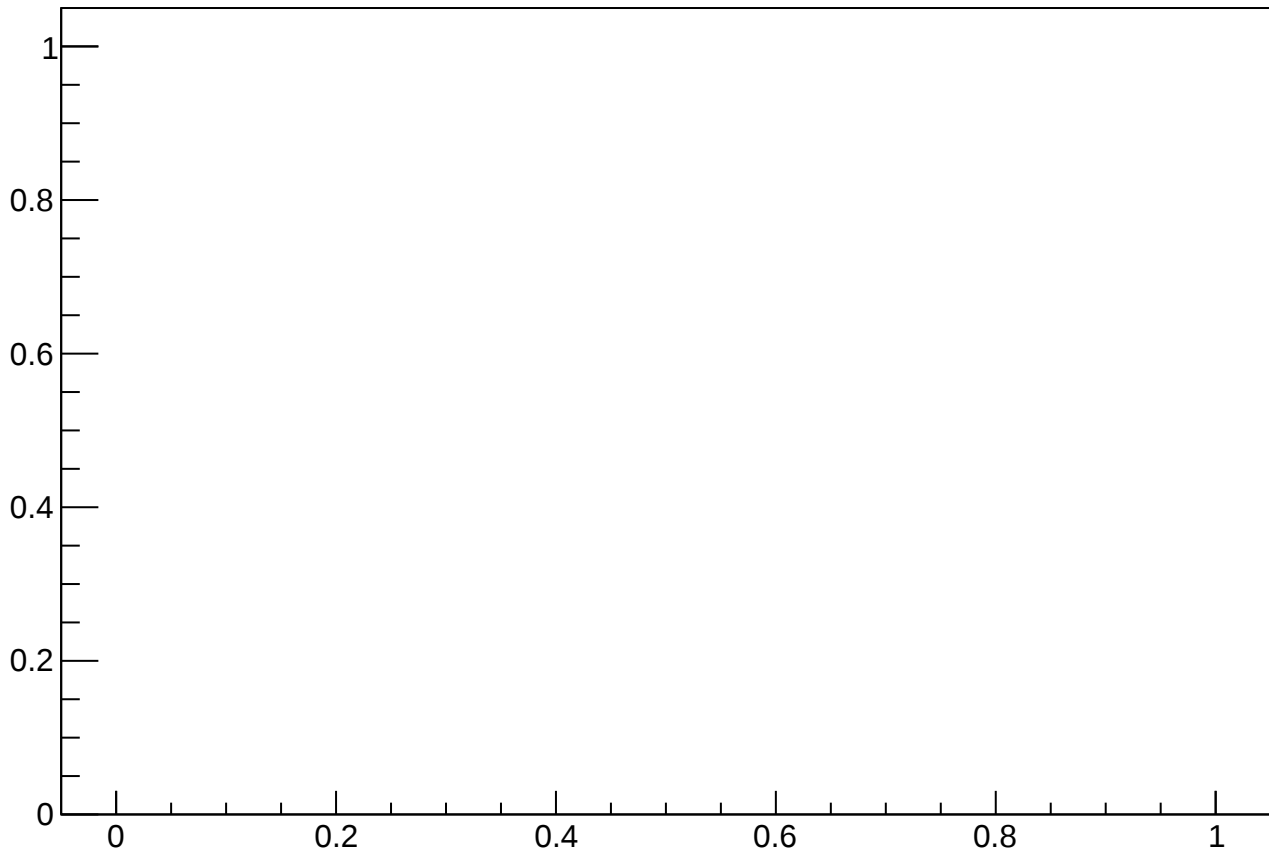
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_cav4cQ\_ds3\_avg\_rms vs slug



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

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

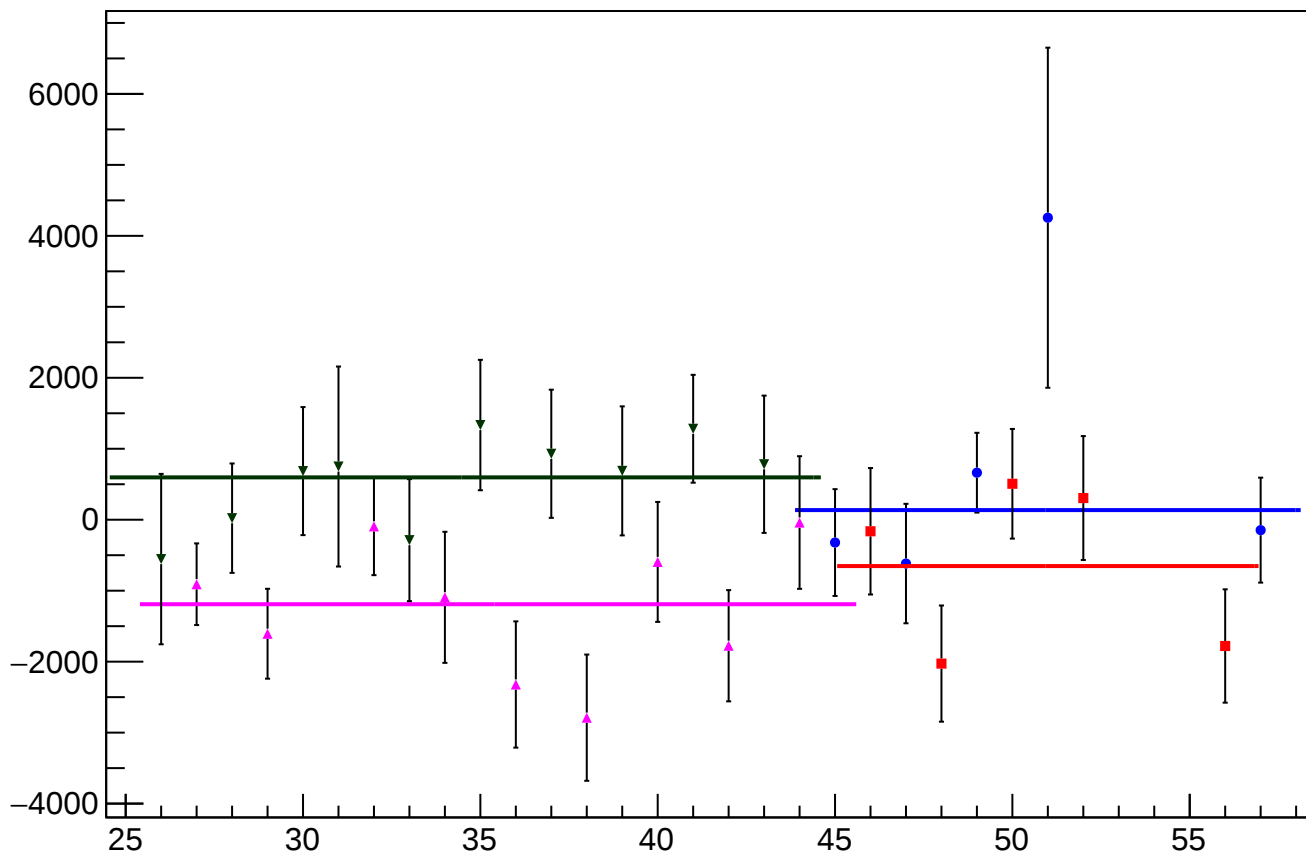
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# asym\_left\_avg\_mean vs slug



Right In: 135.633+/-346.113  $\chi^2/\text{NDF}$ : 5.2/4

Left Out: 596.646+/-290.082  $\chi^2/\text{NDF}$ : 4.2/9

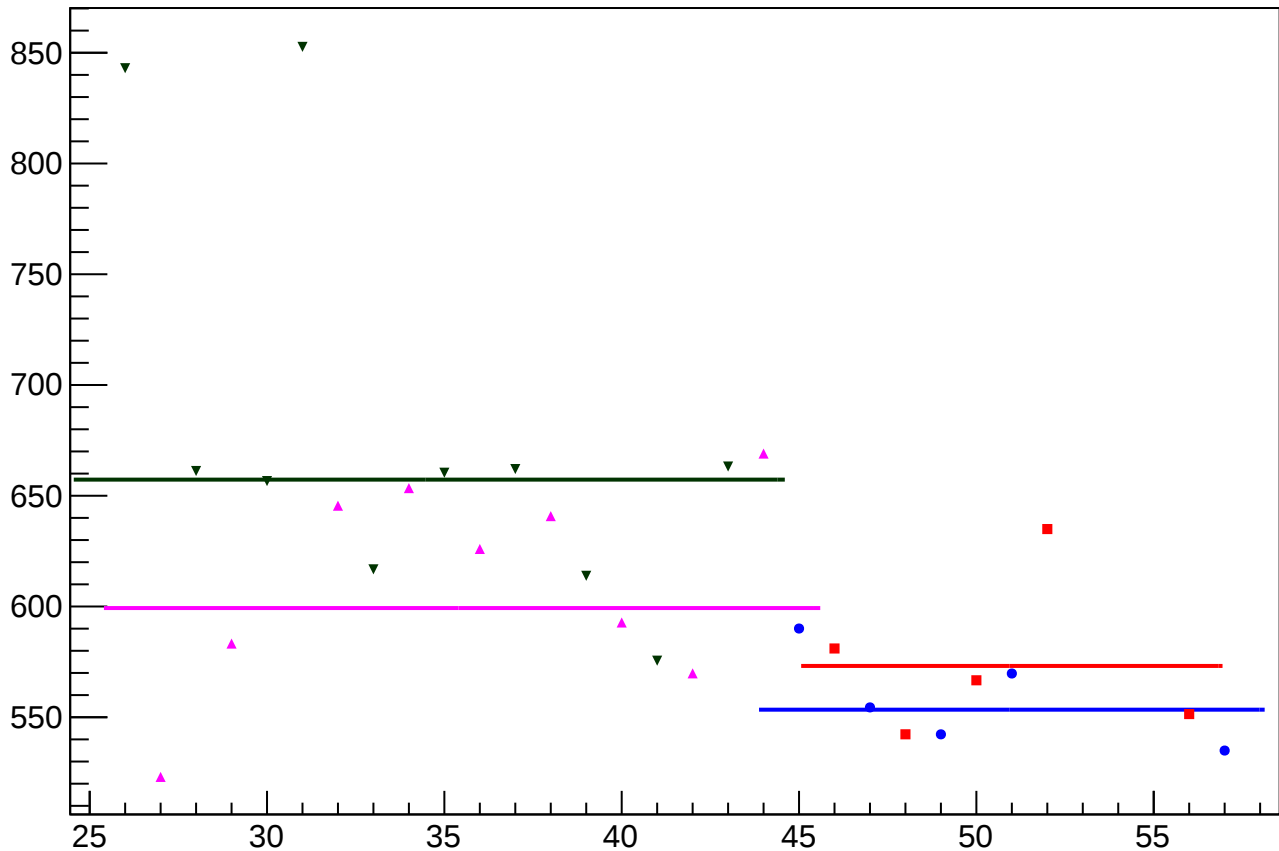
Right Out: -653.013+/-369.947  $\chi^2/\text{NDF}$ : 8.6/4

Left In: -1190.705+/-253.970  $\chi^2/\text{NDF}$ : 10.6/8

406.429+/-222.324  $\chi^2/\text{NDF}$ : 10.4/14

-1018.470+/-209.379  $\chi^2/\text{NDF}$ : 20.7/13

# asym\_left\_avg\_rms vs slug



Right In:  $553.414 \pm 0.245$   $\chi^2/\text{NDF}$ : 6866.2/4

Left Out:  $657.280 \pm 0.205$   $\chi^2/\text{NDF}$ : 118673.7/9

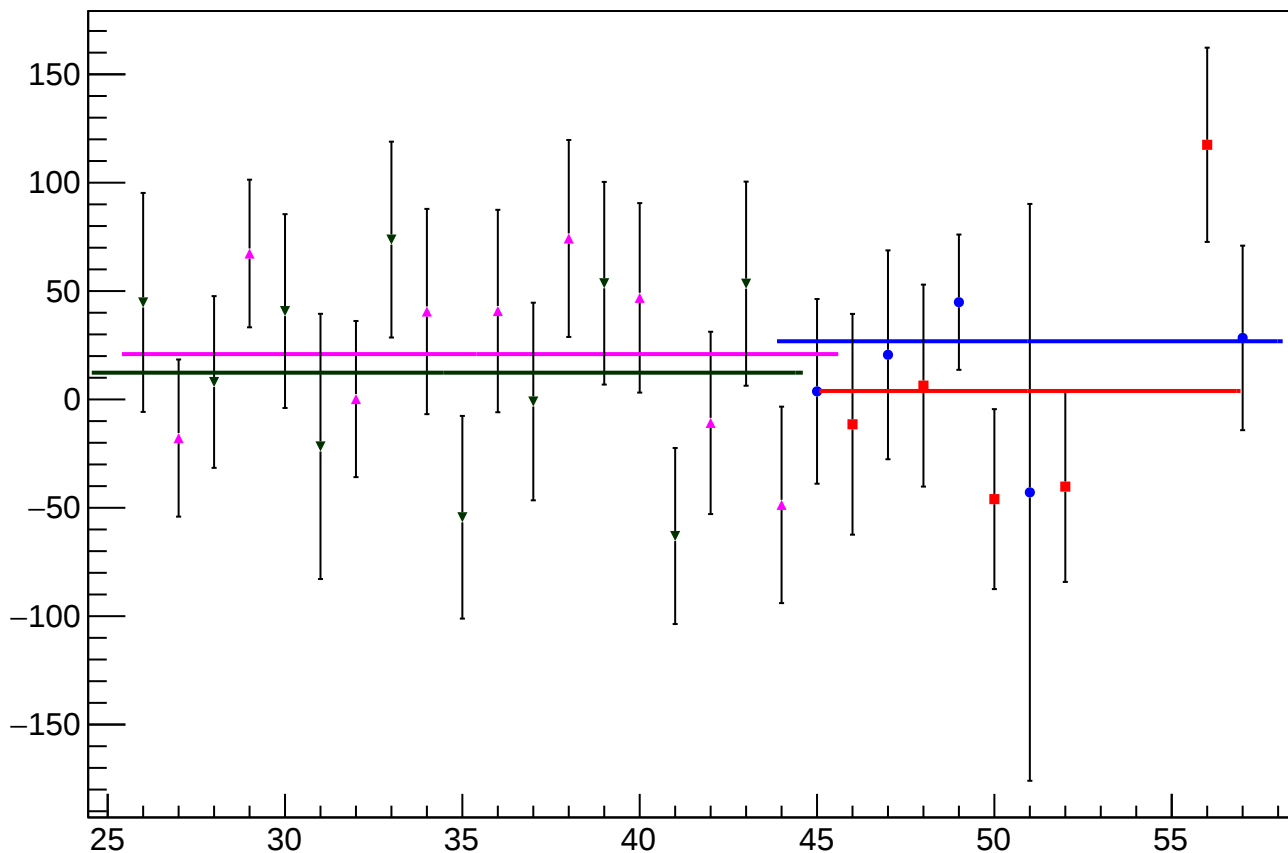
Right Out:  $573.162 \pm 0.262$   $\chi^2/\text{NDF}$ : 14638.0/4

Left In:  $599.296 \pm 0.180$   $\chi^2/\text{NDF}$ : 72545.0/8

$614.424 \pm 0.157$   $\chi^2/\text{NDF}$ : 231337.1/14

$590.924 \pm 0.148$   $\chi^2/\text{NDF}$ : 93966.6/13

# asym\_left\_dd\_mean vs slug



Right In:  $26.838 \pm 19.550$      $\chi^2/\text{NDF}$ : 0.9/4

Left Out:  $12.342 \pm 14.526$      $\chi^2/\text{NDF}$ : 10.1/9

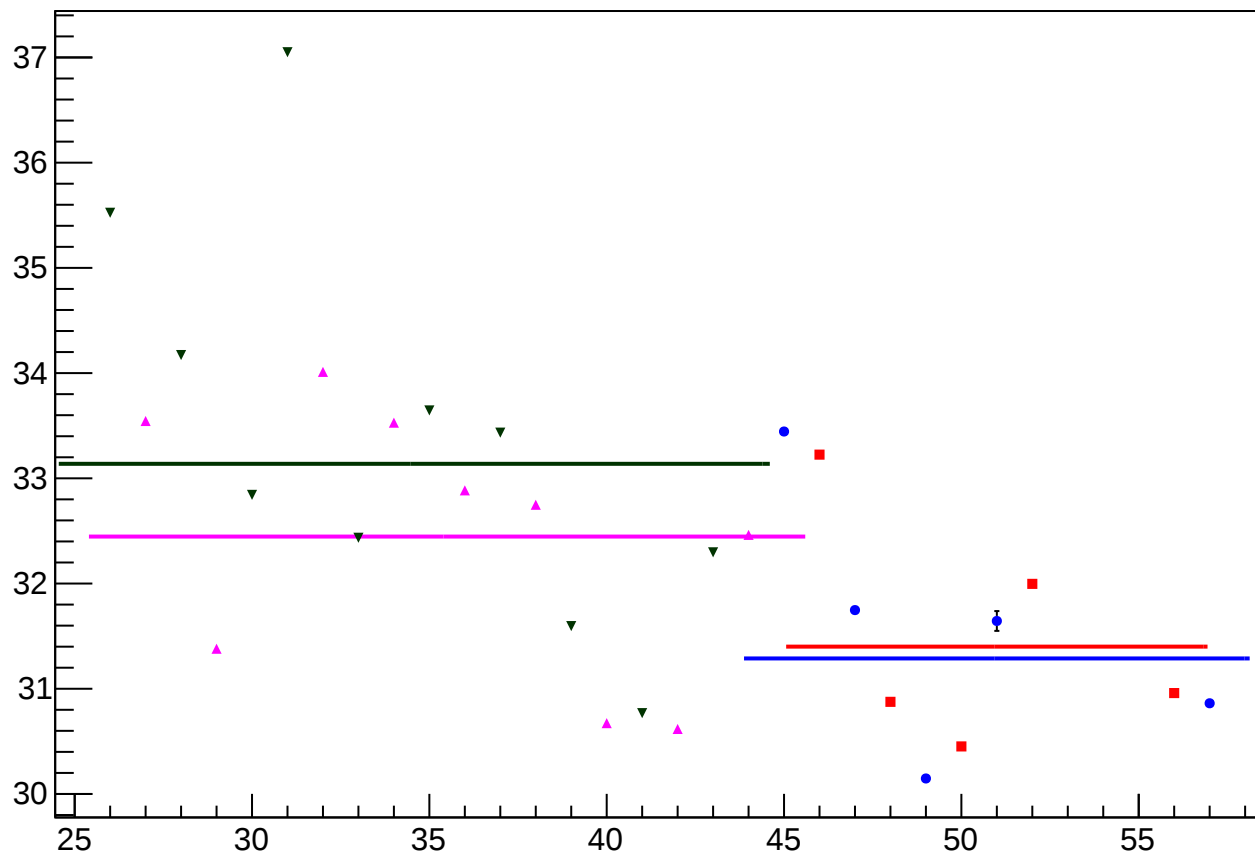
Right Out:  $3.908 \pm 20.238$      $\chi^2/\text{NDF}$ : 9.0/4

Left In:  $20.920 \pm 13.661$      $\chi^2/\text{NDF}$ : 8.3/8

$17.498 \pm 11.660$      $\chi^2/\text{NDF}$ : 11.4/14

$15.595 \pm 11.323$      $\chi^2/\text{NDF}$ : 17.8/13

# asym\_left\_dd\_rms vs slug



Right In: 31.288 $\pm$ 0.014  $\chi^2$ /NDF: 8193.7/4

Left Out: 33.138 $\pm$ 0.010  $\chi^2$ /NDF: 24511.4/9

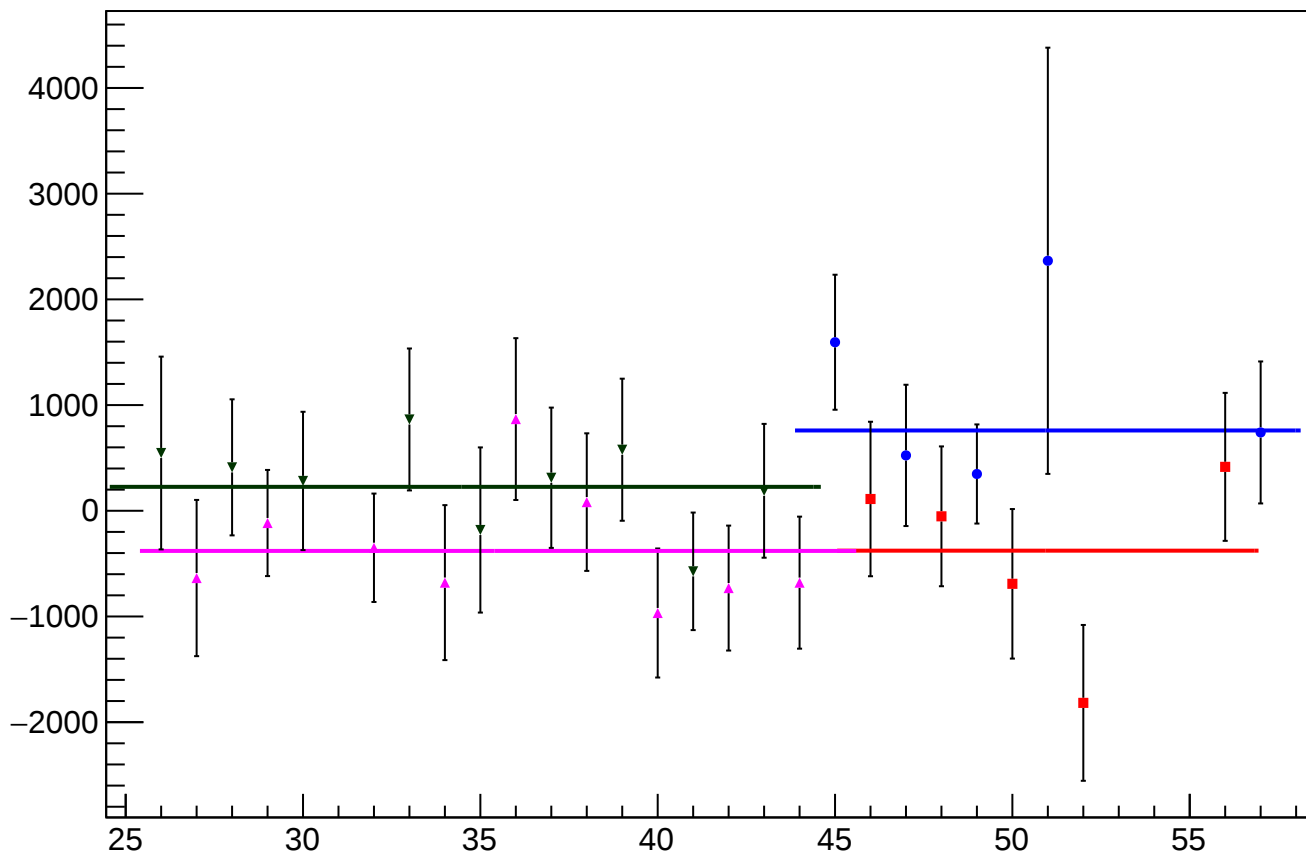
Right Out: 31.400 $\pm$ 0.014  $\chi^2$ /NDF: 4427.3/4

Left In: 32.446 $\pm$ 0.010  $\chi^2$ /NDF: 15954.4/8

32.480 $\pm$ 0.008  $\chi^2$ /NDF: 44241.8/14

32.119 $\pm$ 0.008  $\chi^2$ /NDF: 24052.2/13

# asym\_right\_avg\_mean vs slug



Right In: 759.736 $\pm$ 292.339  $\chi^2/\text{NDF}$ : 3.2/4

Left Out: 226.455 $\pm$ 223.469  $\chi^2/\text{NDF}$ : 3.7/8

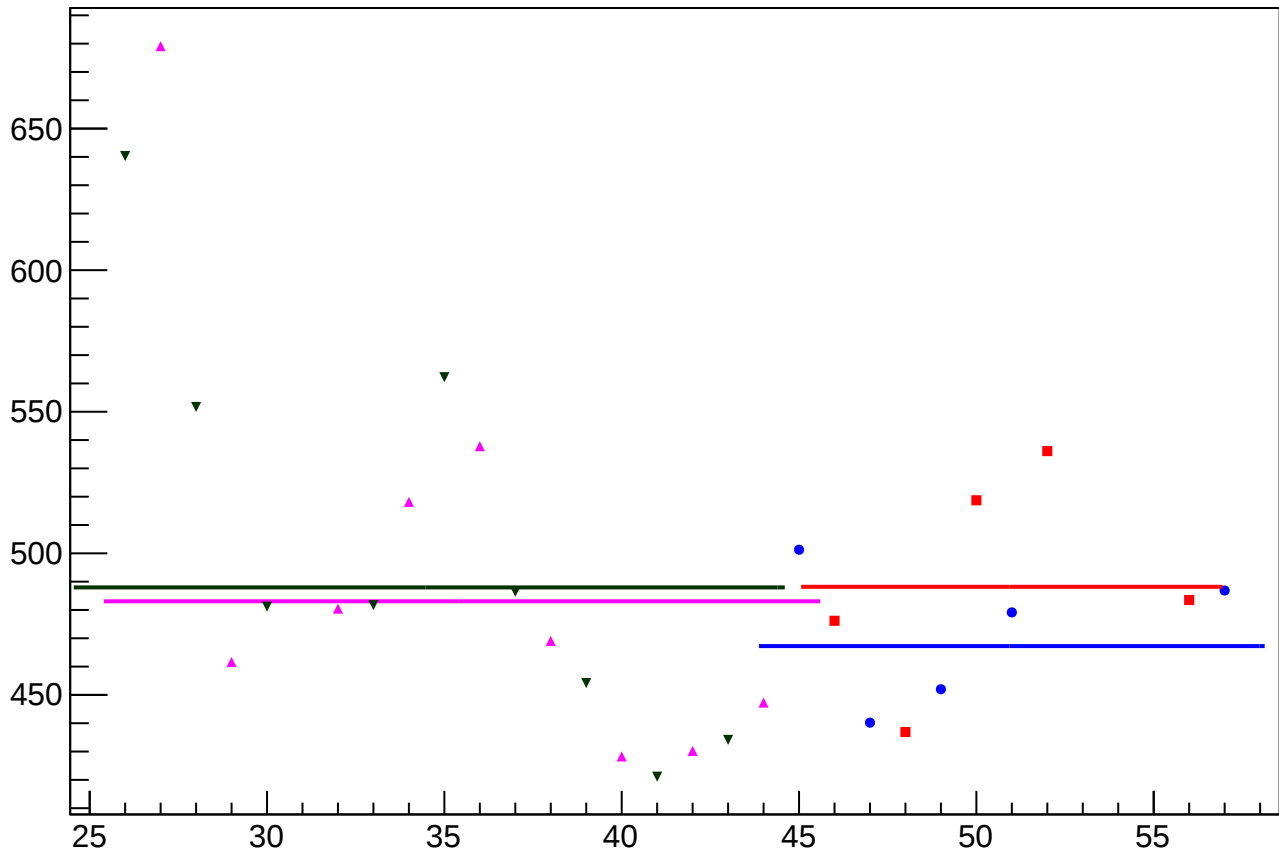
Right Out: -377.373 $\pm$ 315.630  $\chi^2/\text{NDF}$ : 6.0/4

Left In: -379.789 $\pm$ 205.675  $\chi^2/\text{NDF}$ : 5.2/8

423.140 $\pm$ 177.539  $\chi^2/\text{NDF}$ : 9.1/13

-379.069 $\pm$ 172.318  $\chi^2/\text{NDF}$ : 11.2/13

# asym\_right\_avg\_rms vs slug



Right In:  $467.237 \pm 0.207$   $\chi^2/\text{NDF}$ : 12842.9/4

Left Out:  $487.967 \pm 0.158$   $\chi^2/\text{NDF}$ : 142313.3/8

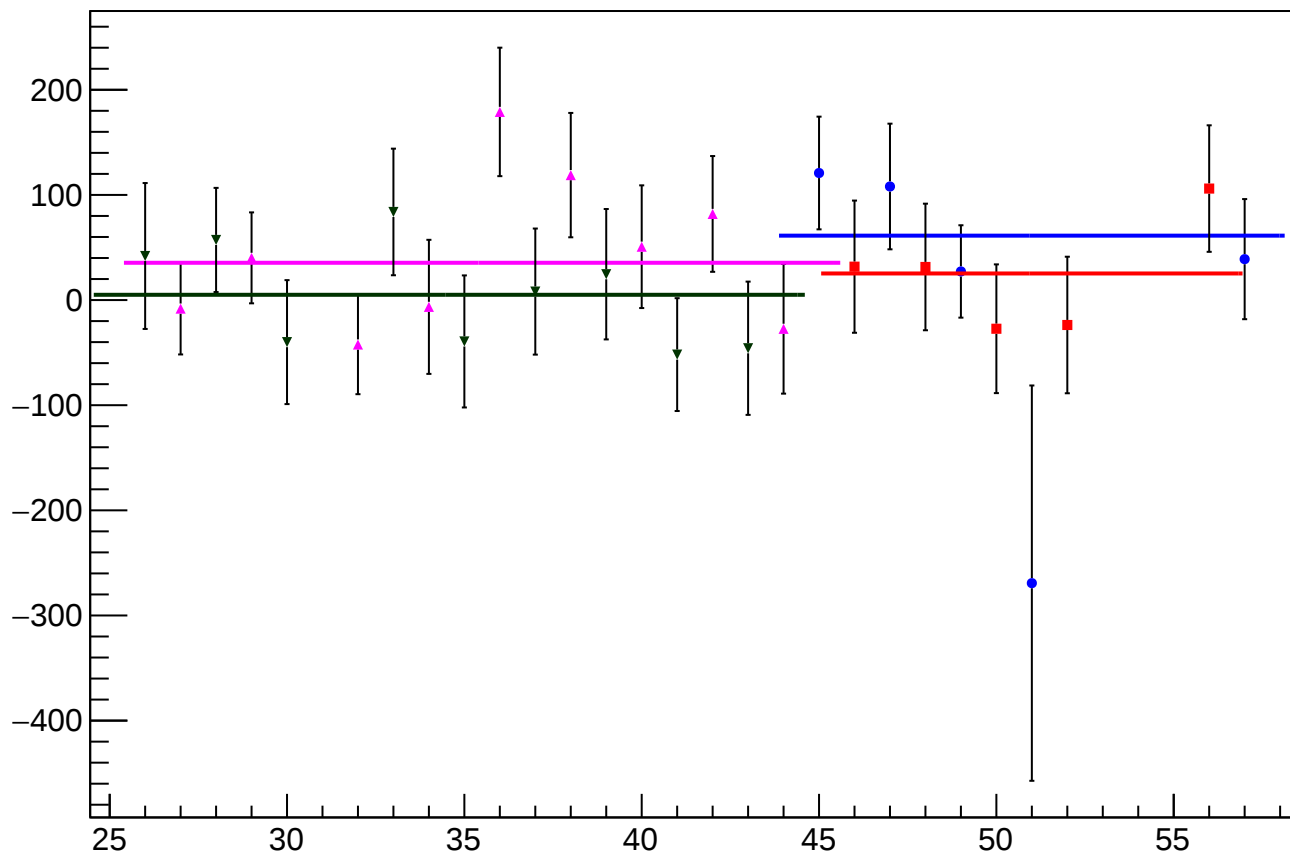
Right Out:  $488.181 \pm 0.223$   $\chi^2/\text{NDF}$ : 24832.8/4

Left In:  $483.059 \pm 0.145$   $\chi^2/\text{NDF}$ : 198865.1/8

$480.321 \pm 0.126$   $\chi^2/\text{NDF}$ : 161503.6/13

$484.585 \pm 0.122$   $\chi^2/\text{NDF}$ : 224067.6/13

# asym\_right\_dd\_mean vs slug



Right In: 61.268 $\pm$ 25.985  $\chi^2/\text{NDF}$ : 5.7/4

Left Out: 5.008 $\pm$ 19.738  $\chi^2/\text{NDF}$ : 6.1/8

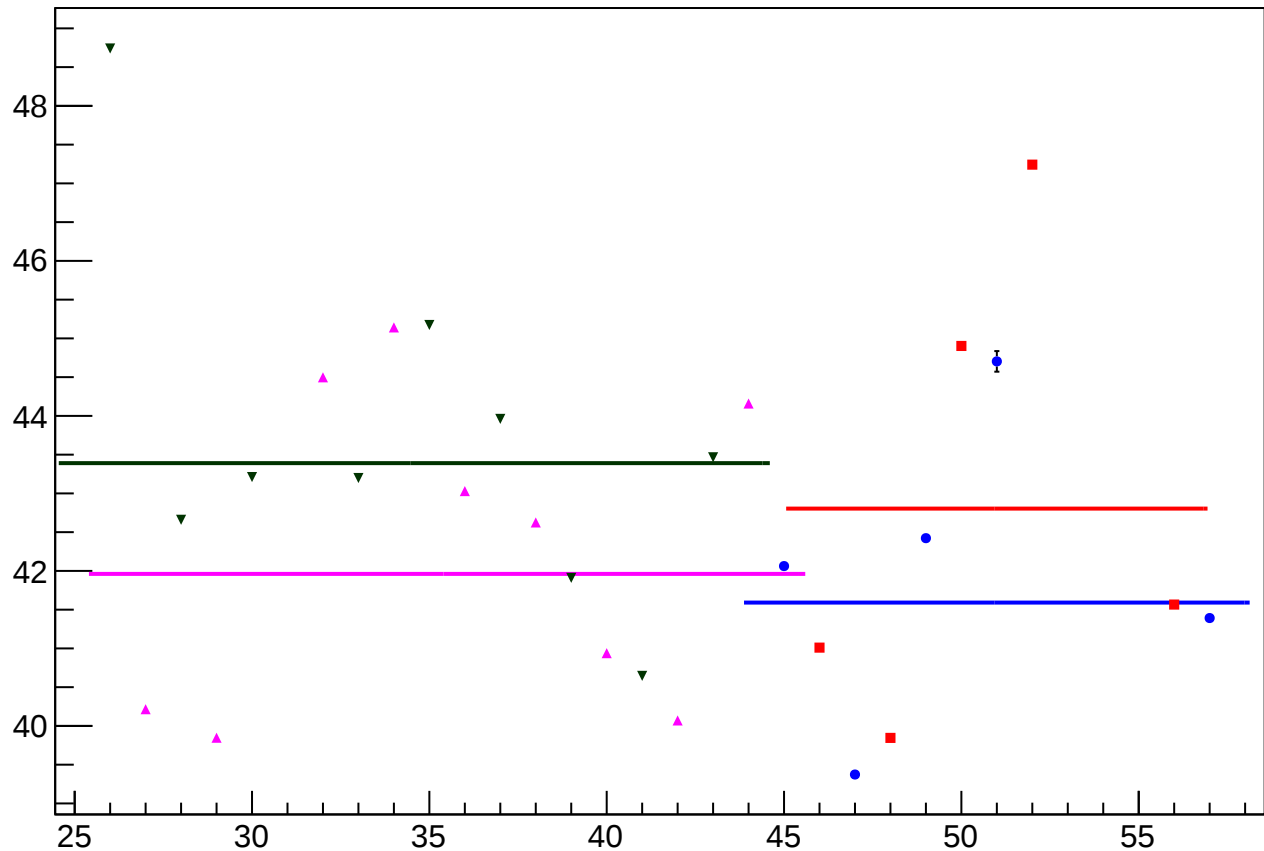
Right Out: 25.294 $\pm$ 27.639  $\chi^2/\text{NDF}$ : 3.1/4

Left In: 35.466 $\pm$ 17.692  $\chi^2/\text{NDF}$ : 13.5/8

25.593 $\pm$ 15.718  $\chi^2/\text{NDF}$ : 14.7/13

32.510 $\pm$ 14.901  $\chi^2/\text{NDF}$ : 16.7/13

# asym\_right\_dd\_rms vs slug



Right In: 41.591+/-0.018  $\chi^2/\text{NDF}$ : 4199.3/4

Left Out: 43.391+/-0.014  $\chi^2/\text{NDF}$ : 20529.6/8

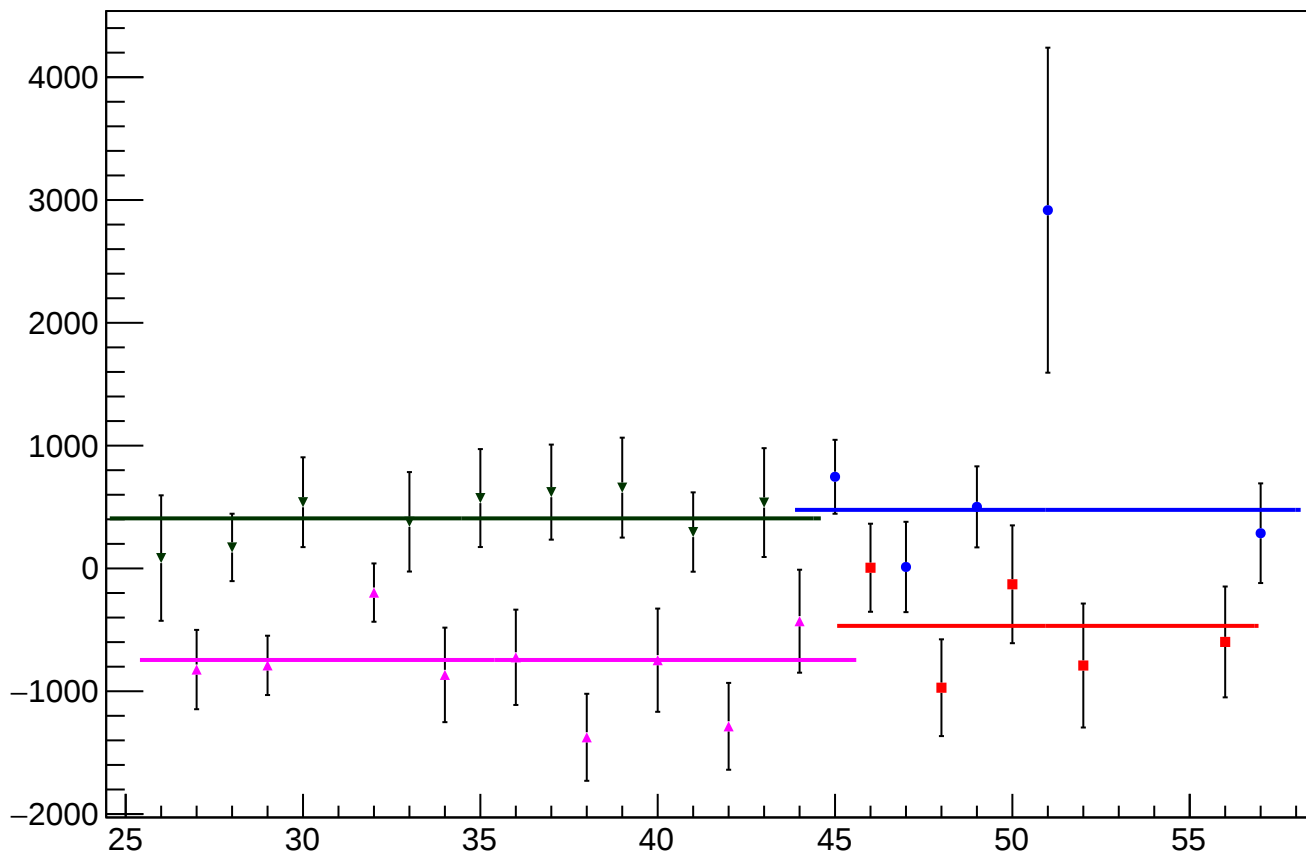
Right Out: 42.804+/-0.020  $\chi^2/\text{NDF}$ : 18994.5/4

Left In: 41.961+/-0.013  $\chi^2/\text{NDF}$ : 25099.5/8

42.732+/-0.011  $\chi^2/\text{NDF}$ : 30808.8/13

42.206+/-0.011  $\chi^2/\text{NDF}$ : 45412.3/13

# asym\_us\_avg\_mean vs slug



Right In: 476.918+/-170.832  $\chi^2/\text{NDF}$ : 6.0/4

Left Out: 407.654+/-124.646  $\chi^2/\text{NDF}$ : 2.3/8

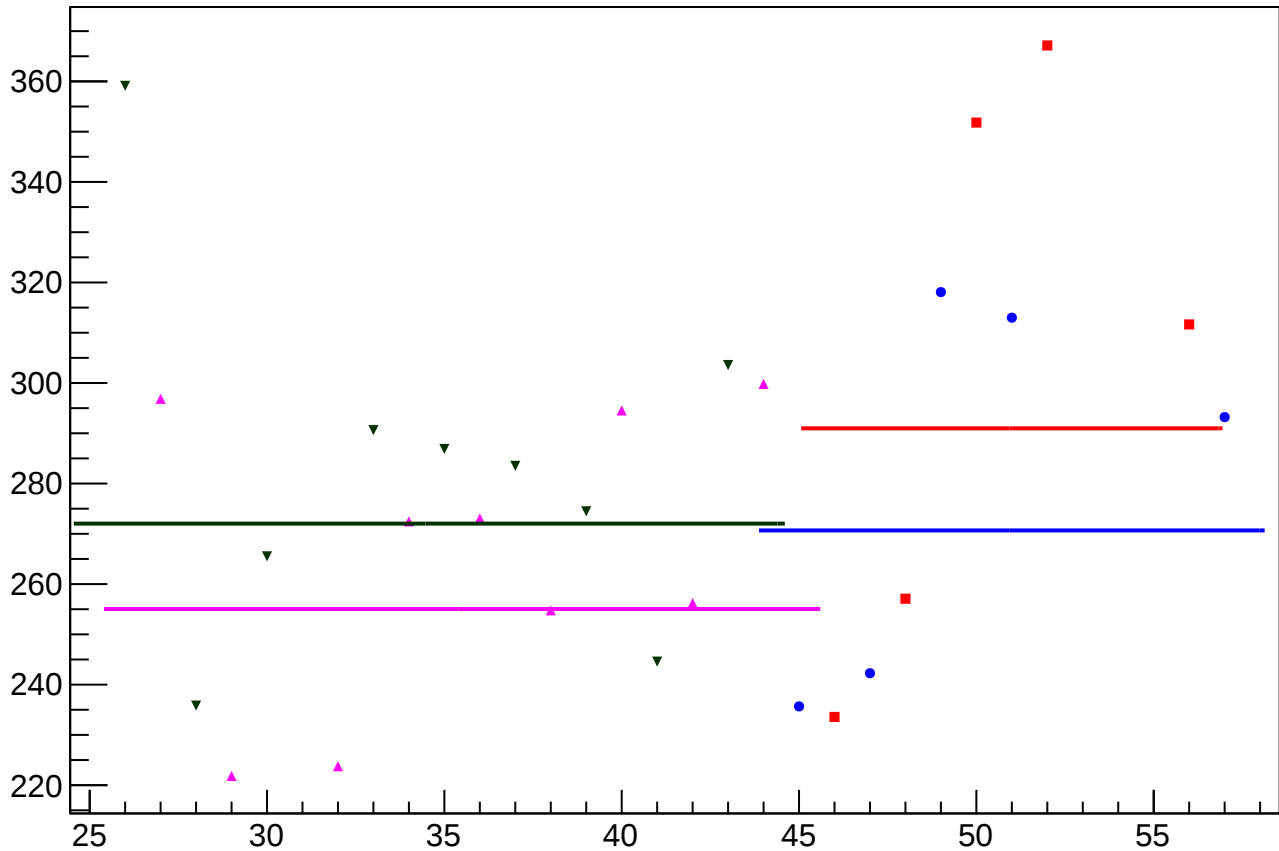
Right Out: -467.682+/-191.035  $\chi^2/\text{NDF}$ : 4.4/4

Left In: -745.341+/-108.352  $\chi^2/\text{NDF}$ : 11.6/8

431.718+/-100.692  $\chi^2/\text{NDF}$ : 8.5/13

-677.759+/-94.248  $\chi^2/\text{NDF}$ : 17.6/13

# asym\_us\_avg\_rms vs slug



Right In:  $270.673 \pm 0.121$   $\chi^2/\text{NDF}$ : 88496.5/4

Left Out:  $272.030 \pm 0.088$   $\chi^2/\text{NDF}$ : 126979.0/8

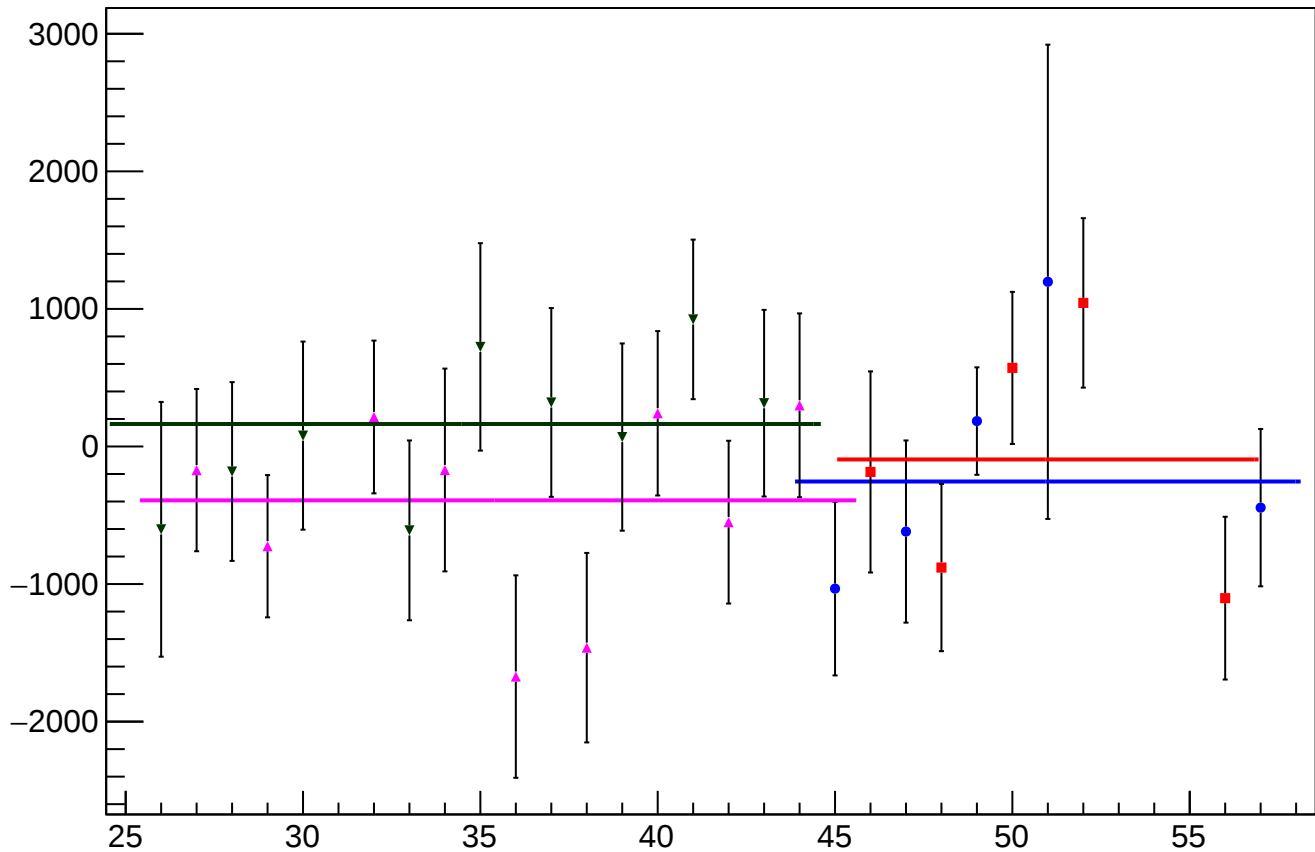
Right Out:  $290.982 \pm 0.135$   $\chi^2/\text{NDF}$ : 147961.2/4

Left In:  $255.044 \pm 0.077$   $\chi^2/\text{NDF}$ : 154932.2/8

$271.558 \pm 0.071$   $\chi^2/\text{NDF}$ : 215557.8/13

$263.792 \pm 0.067$   $\chi^2/\text{NDF}$ : 356443.8/13

# asym\_us\_dd\_mean vs slug



Right In:  $-254.644 \pm 260.442$   $\chi^2/\text{NDF}: 3.9/4$

Left Out:  $163.472 \pm 228.189$   $\chi^2/\text{NDF}: 4.8/8$

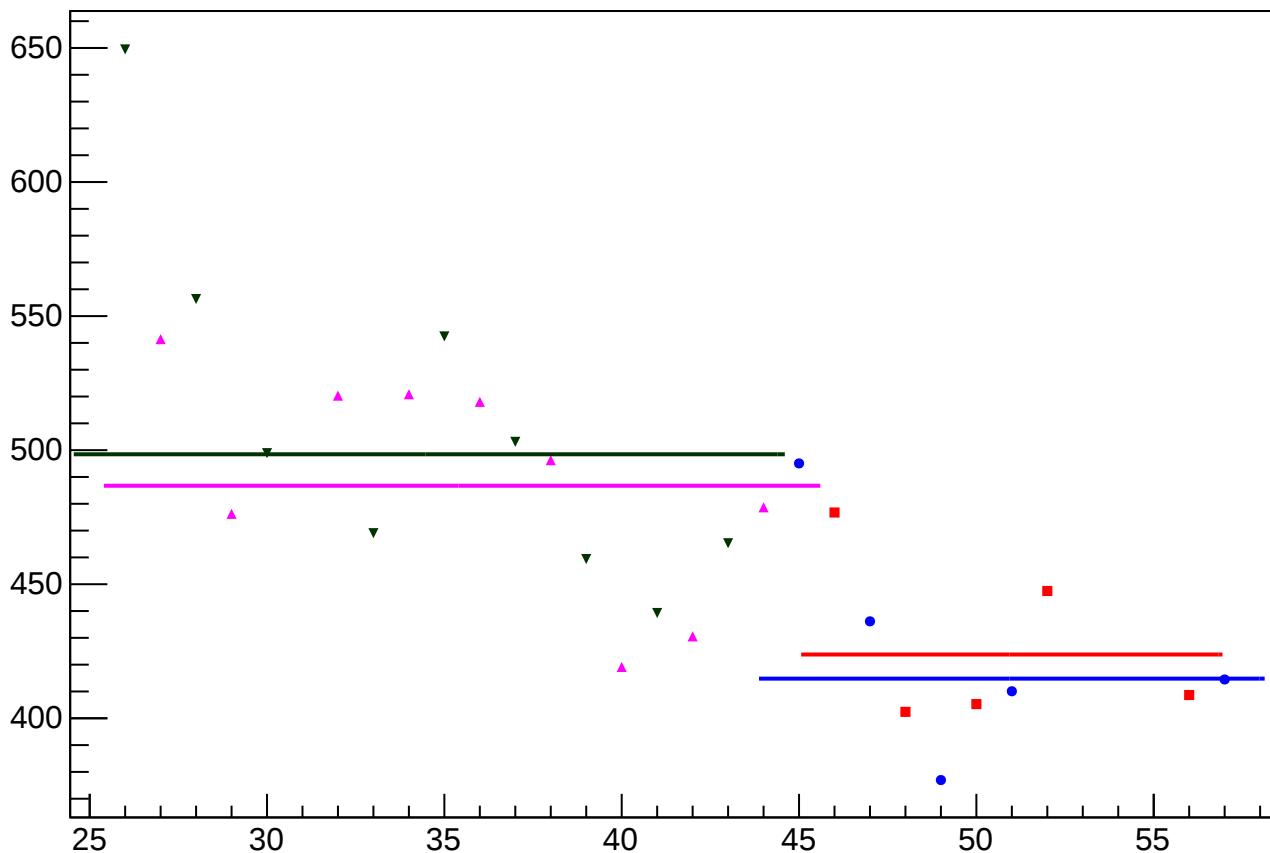
Right Out:  $-94.223 \pm 273.742$   $\chi^2/\text{NDF}: 9.5/4$

Left In:  $-391.603 \pm 206.064$   $\chi^2/\text{NDF}: 9.5/8$

$-18.107 \pm 171.631$   $\chi^2/\text{NDF}: 10.1/13$

$-284.041 \pm 164.632$   $\chi^2/\text{NDF}: 19.8/13$

# asym\_us\_dd\_rms vs slug



Right In:  $414.792 \pm 0.184$   $\chi^2/\text{NDF}: 53253.1/4$

Left Out:  $498.461 \pm 0.161$   $\chi^2/\text{NDF}: 112214.2/8$

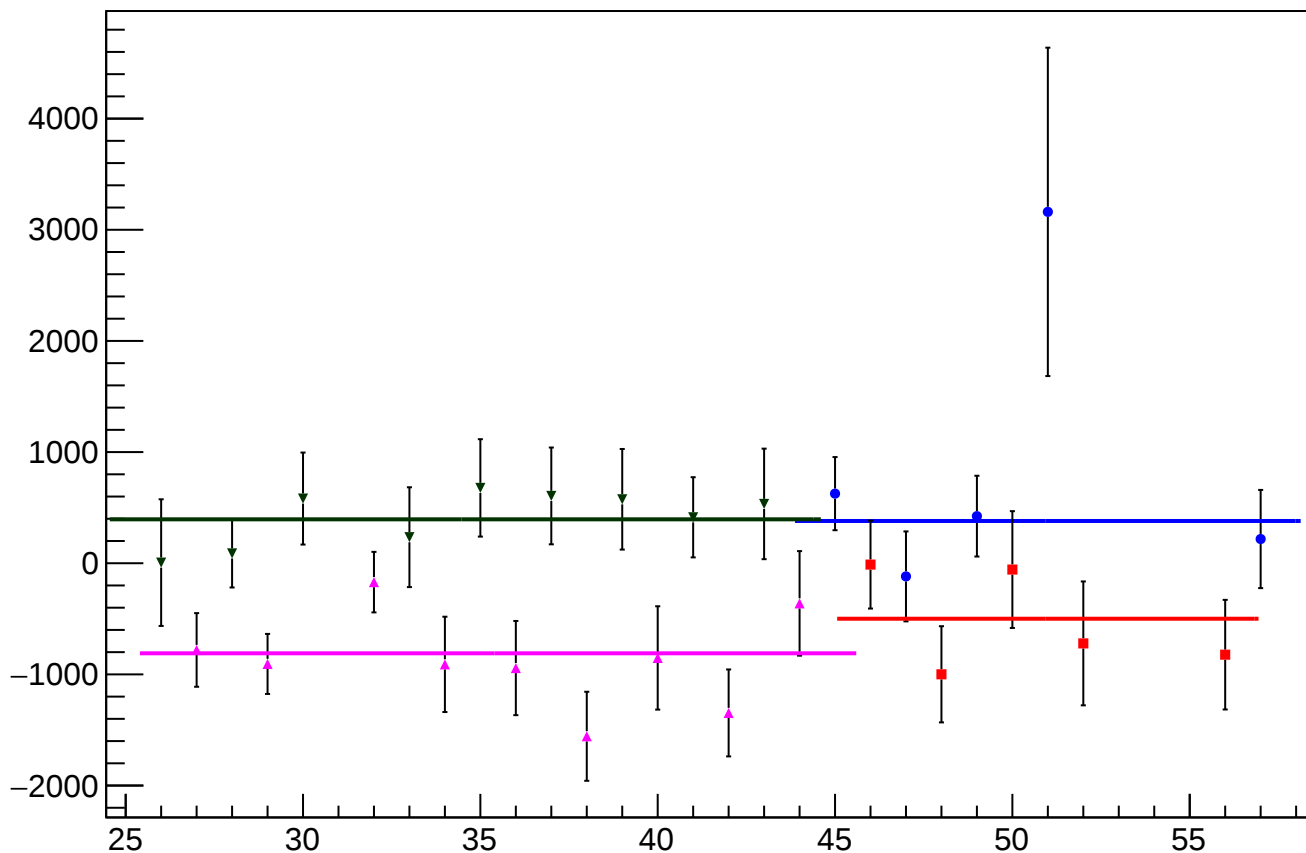
Right Out:  $423.787 \pm 0.194$   $\chi^2/\text{NDF}: 19478.2/4$

Left In:  $486.730 \pm 0.146$   $\chi^2/\text{NDF}: 77533.3/8$

$462.125 \pm 0.121$   $\chi^2/\text{NDF}: 282238.6/13$

$463.964 \pm 0.116$   $\chi^2/\text{NDF}: 164505.2/13$

# asym\_ds\_avg\_mean vs slug



Right In: 380.103 $\pm$ 187.314  $\chi^2$ /NDF: 5.8/4

Left Out: 395.054 $\pm$ 139.188  $\chi^2$ /NDF: 2.7/8

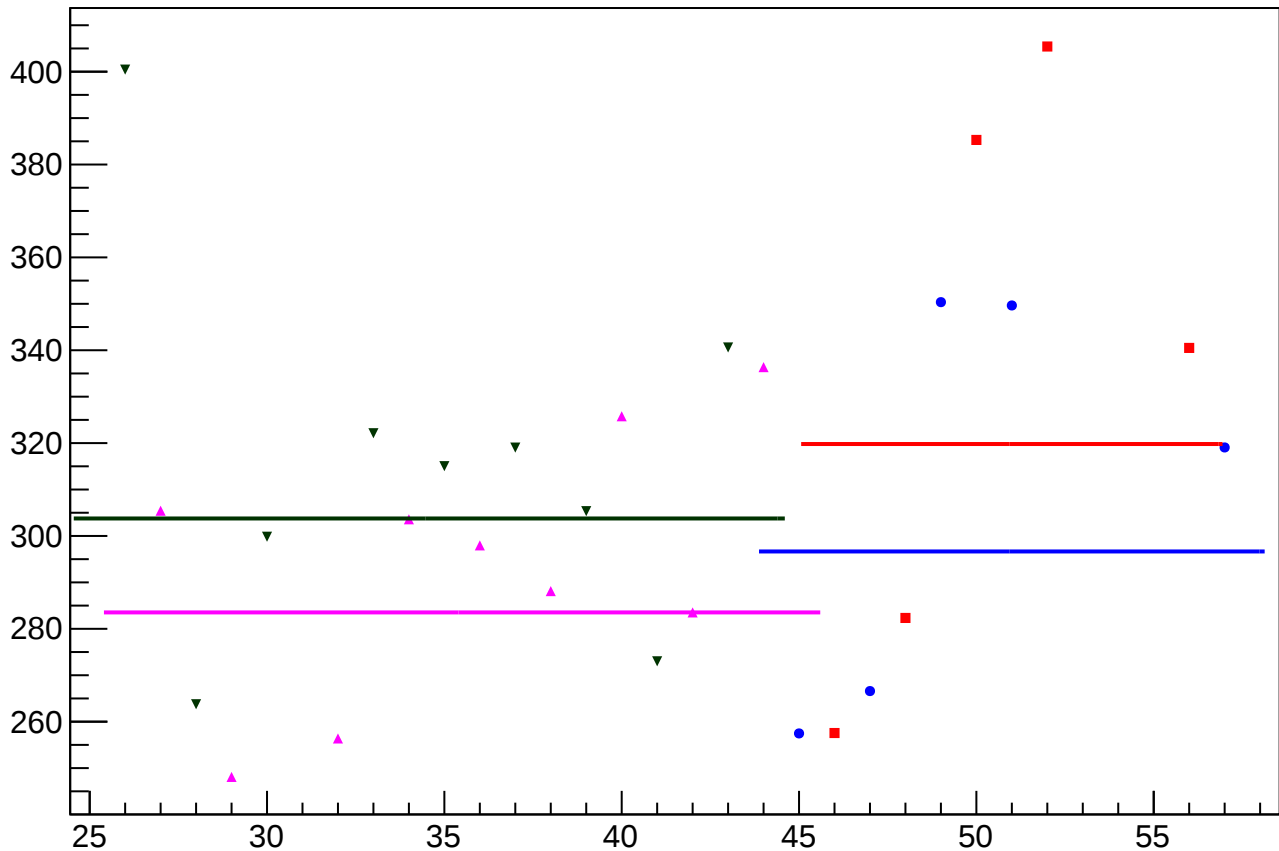
Right Out: -499.270 $\pm$ 209.936  $\chi^2$ /NDF: 4.1/4

Left In: -810.313 $\pm$ 120.172  $\chi^2$ /NDF: 12.1/8

389.735 $\pm$ 111.721  $\chi^2$ /NDF: 8.5/13

-733.548 $\pm$ 104.294  $\chi^2$ /NDF: 17.9/13

# asym\_ds\_avg\_rms vs slug



Right In: 296.662 $\pm$ 0.132  $\chi^2$ /NDF: 90814.7/4

Left Out: 303.766 $\pm$ 0.098  $\chi^2$ /NDF:124512.2/8

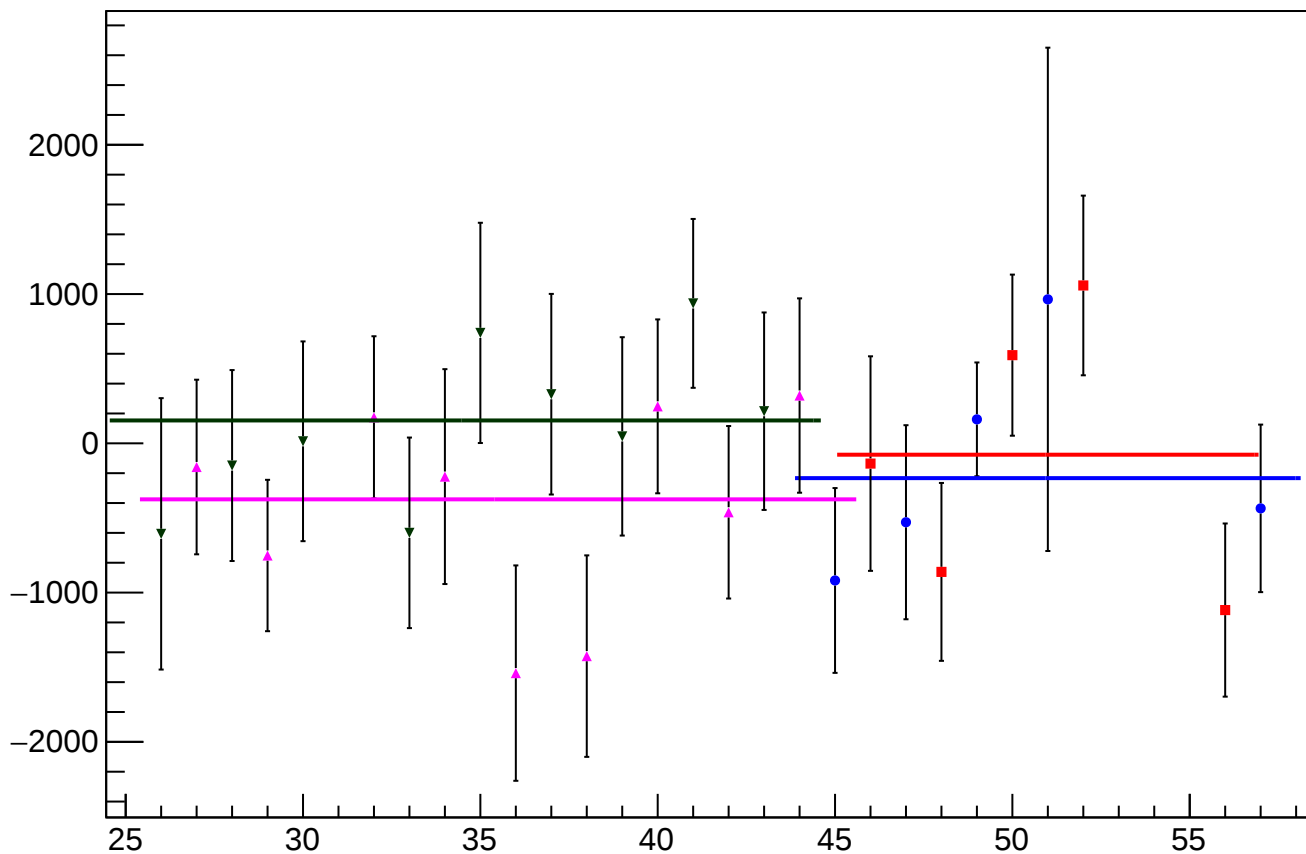
301.239 $\pm$ 0.079  $\chi^2$ /NDF: 217180.0/13

Right Out: 319.802 $\pm$ 0.148  $\chi^2$ /NDF: 146333.2/4

292.483 $\pm$ 0.074  $\chi^2$ /NDF: 303073.9/13

Left In: 283.532 $\pm$ 0.085  $\chi^2$ /NDF:111777.4/8

# asym\_ds\_dd\_mean vs slug



Right In: -233.174+/-254.944  $\chi^2/\text{NDF}$ : 3.1/4

Left Out: 153.259+/-223.218  $\chi^2/\text{NDF}$ : 5.0/8

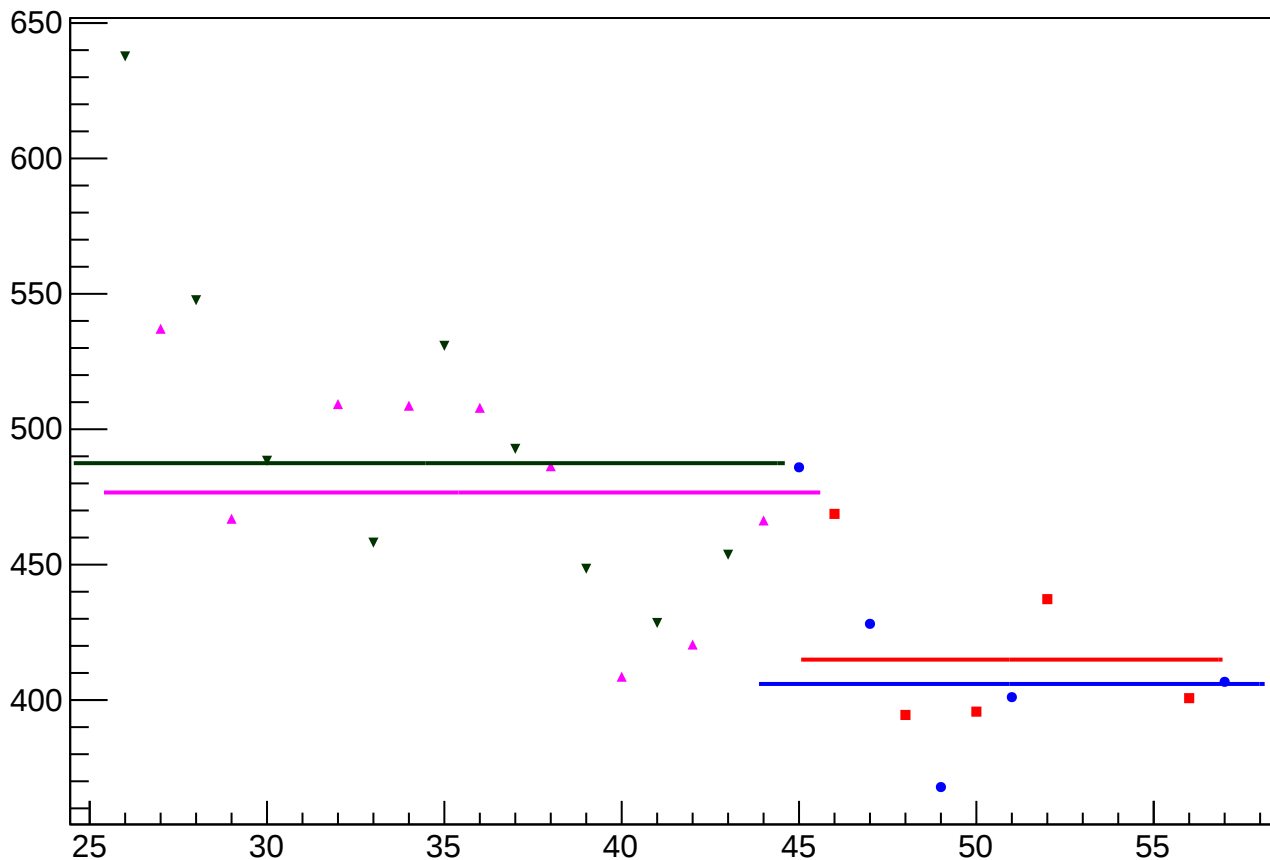
Right Out: -76.219+/-268.038  $\chi^2/\text{NDF}$ : 10.0/4

Left In: -375.323+/-201.839  $\chi^2/\text{NDF}$ : 9.1/8

-14.431+/-167.942  $\chi^2/\text{NDF}$ : 9.4/13

-267.091+/-161.237  $\chi^2/\text{NDF}$ : 19.9/13

# asym\_ds\_dd\_rms vs slug



Right In: 405.941 $\pm$ 0.180  $\chi^2$ /NDF: 55710.2/4

Left Out: 487.474 $\pm$ 0.158  $\chi^2$ /NDF: 117424.5/8

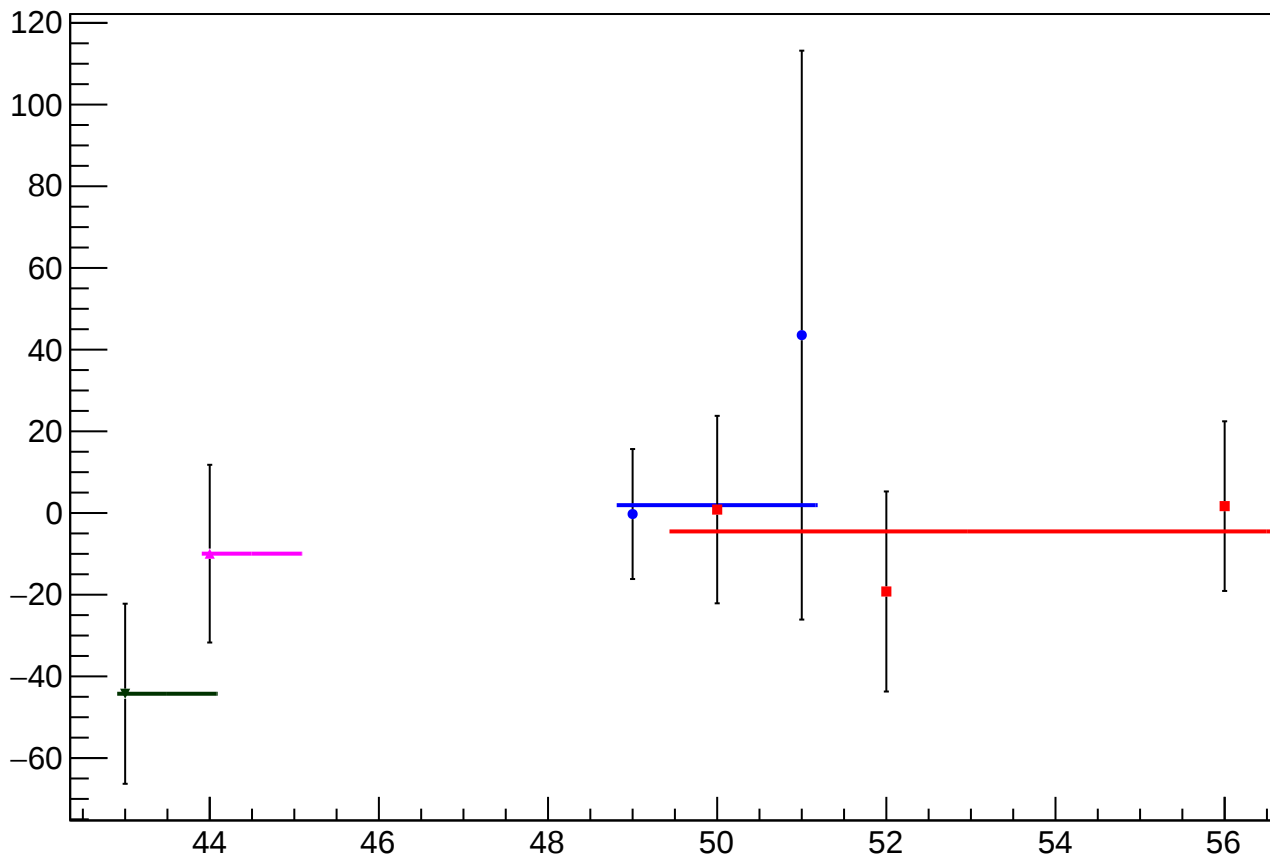
Right Out: 414.930 $\pm$ 0.190  $\chi^2$ /NDF: 20056.5/4

Left In: 476.643 $\pm$ 0.143  $\chi^2$ /NDF: 84134.8/8

452.093 $\pm$ 0.119  $\chi^2$ /NDF: 288923.2/13

454.312 $\pm$ 0.114  $\chi^2$ /NDF: 171848.9/13

# bcm\_an\_us\_ds\_dd\_mean vs slug



Right In: 1.924 $\pm$ 15.513  $\chi^2/\text{NDF}$ : 0.4/1

Left Out: -44.252 $\pm$ 22.047  $\chi^2/\text{NDF}$ : 0.0/0

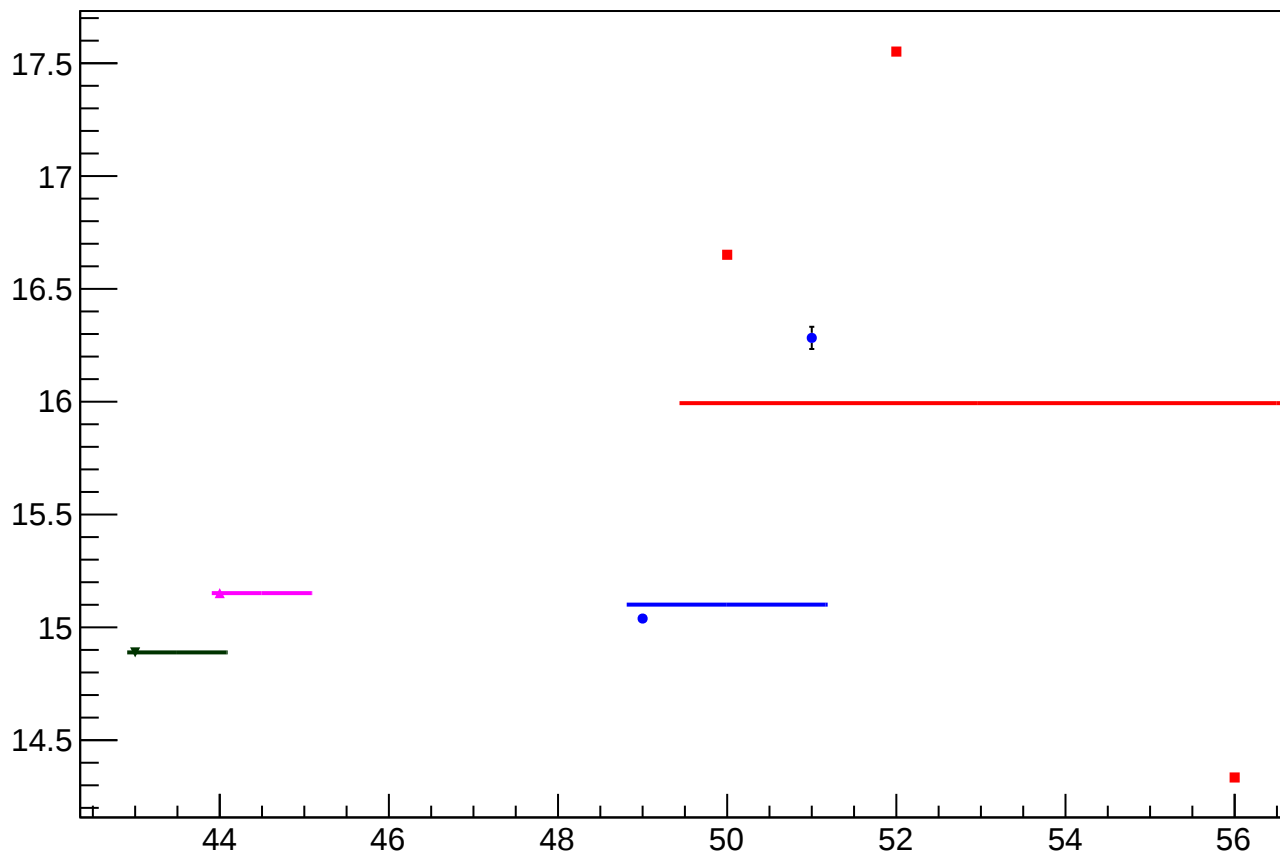
Right Out: -4.508 $\pm$ 13.037  $\chi^2/\text{NDF}$ : 0.5/2

Left In: -9.952 $\pm$ 21.757  $\chi^2/\text{NDF}$ : 0.0/0

-13.367 $\pm$ 12.687  $\chi^2/\text{NDF}$ : 3.3/2

-5.946 $\pm$ 11.183  $\chi^2/\text{NDF}$ : 0.5/3

# bcm\_an\_us\_ds\_dd\_rms vs slug



Right In: 15.101+/-0.011  $\chi^2/\text{NDF}$ : 606.2/1

Left Out: 14.889+/-0.016  $\chi^2/\text{NDF}$ : 0.0/0

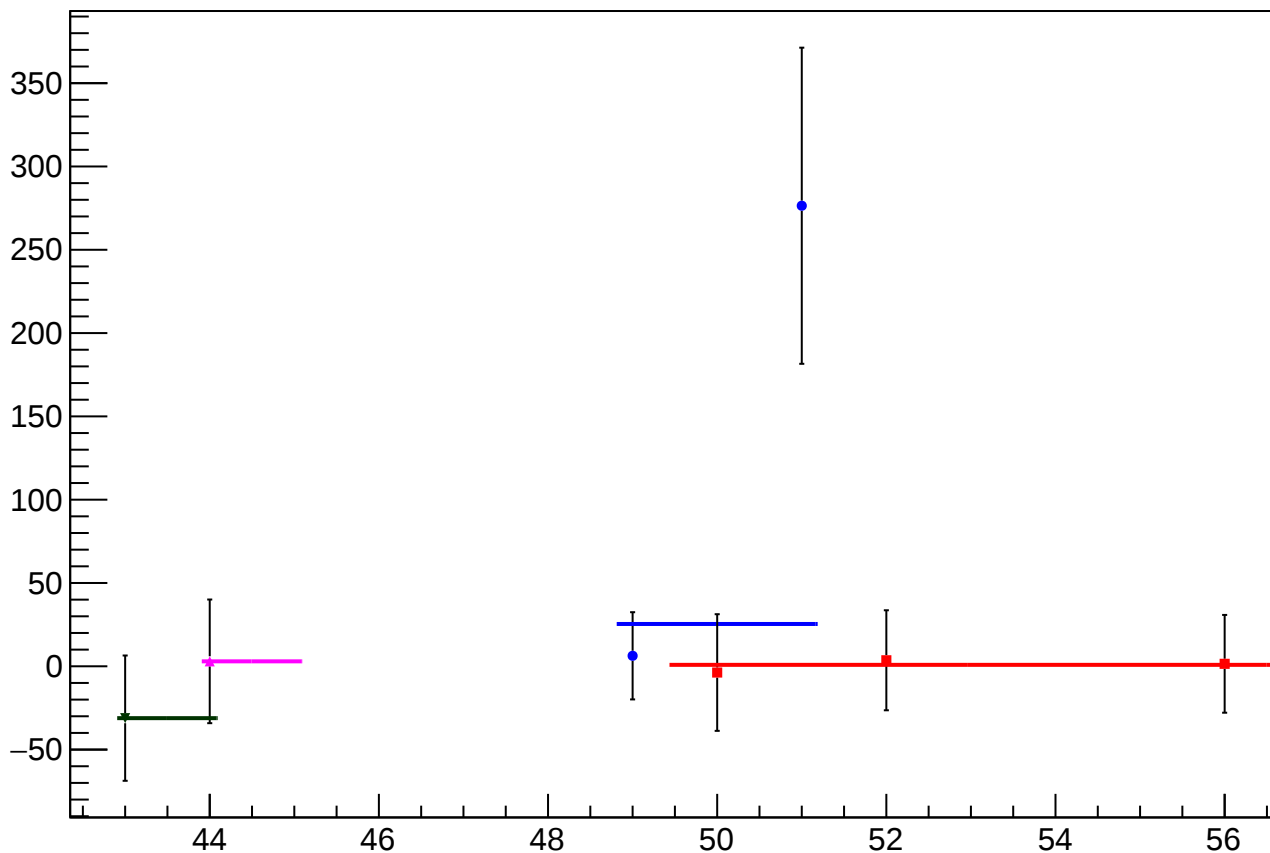
Right Out: 15.994+/-0.009  $\chi^2/\text{NDF}$ : 22493.4/2

Left In: 15.152+/-0.015  $\chi^2/\text{NDF}$ : 0.0/0

15.031+/-0.009  $\chi^2/\text{NDF}$ : 729.6/2

15.771+/-0.008  $\chi^2/\text{NDF}$ : 24697.0/3

# bcm\_dg\_us\_ds\_dd\_mean vs slug



Right In: 25.397+/-25.234  $\chi^2/\text{NDF}$ : 7.5/1

Left Out: -31.130+/-37.603  $\chi^2/\text{NDF}$ : 0.0/0

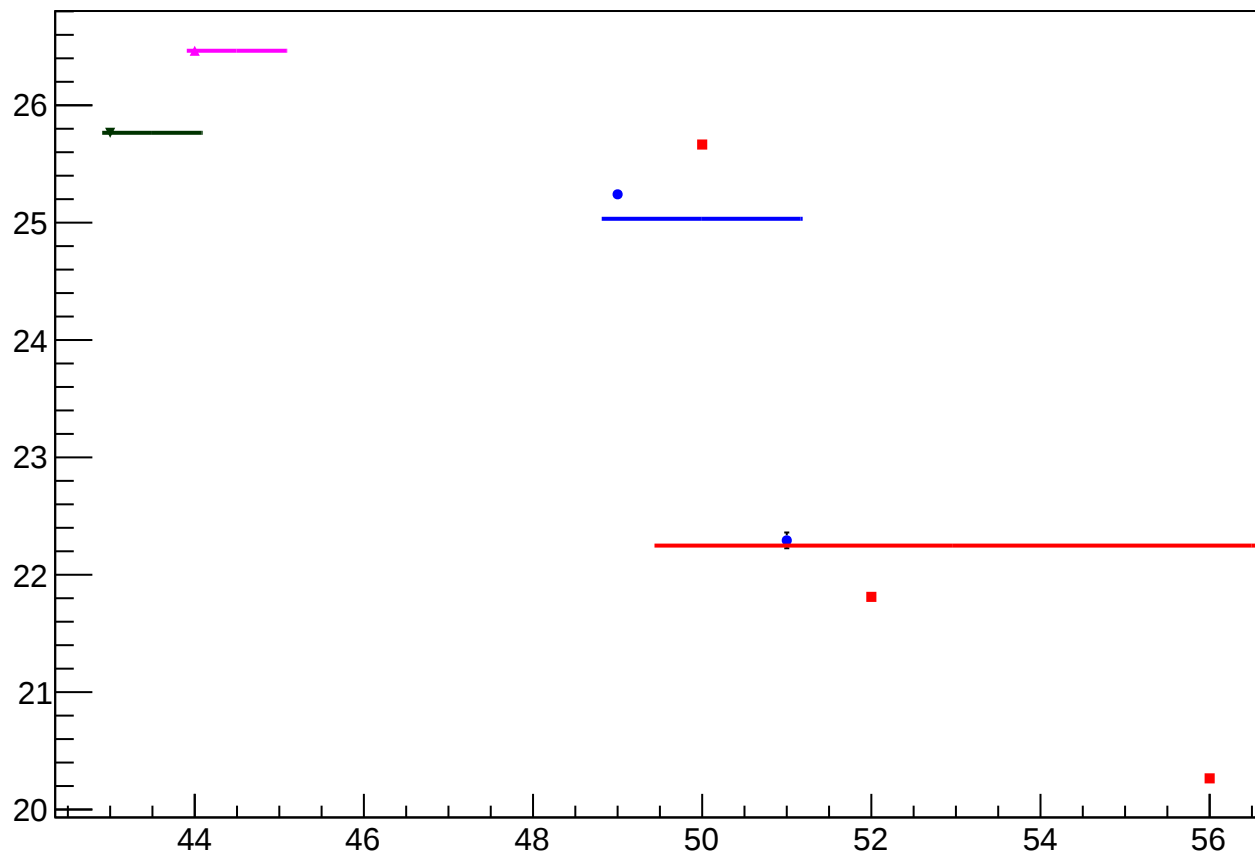
Right Out: 0.864+/-17.999  $\chi^2/\text{NDF}$ : 0.0/2

Left In: 2.964+/-37.111  $\chi^2/\text{NDF}$ : 0.0/0

7.845+/-20.953  $\chi^2/\text{NDF}$ : 9.1/2

1.264+/-16.194  $\chi^2/\text{NDF}$ : 0.0/3

# bcm\_dg\_us\_ds\_dd\_rms vs slug



Right In: 25.033+/-0.018  $\chi^2/\text{NDF}$ : 1794.8/1

Left Out: 25.766+/-0.027  $\chi^2/\text{NDF}$ : 0.0/0

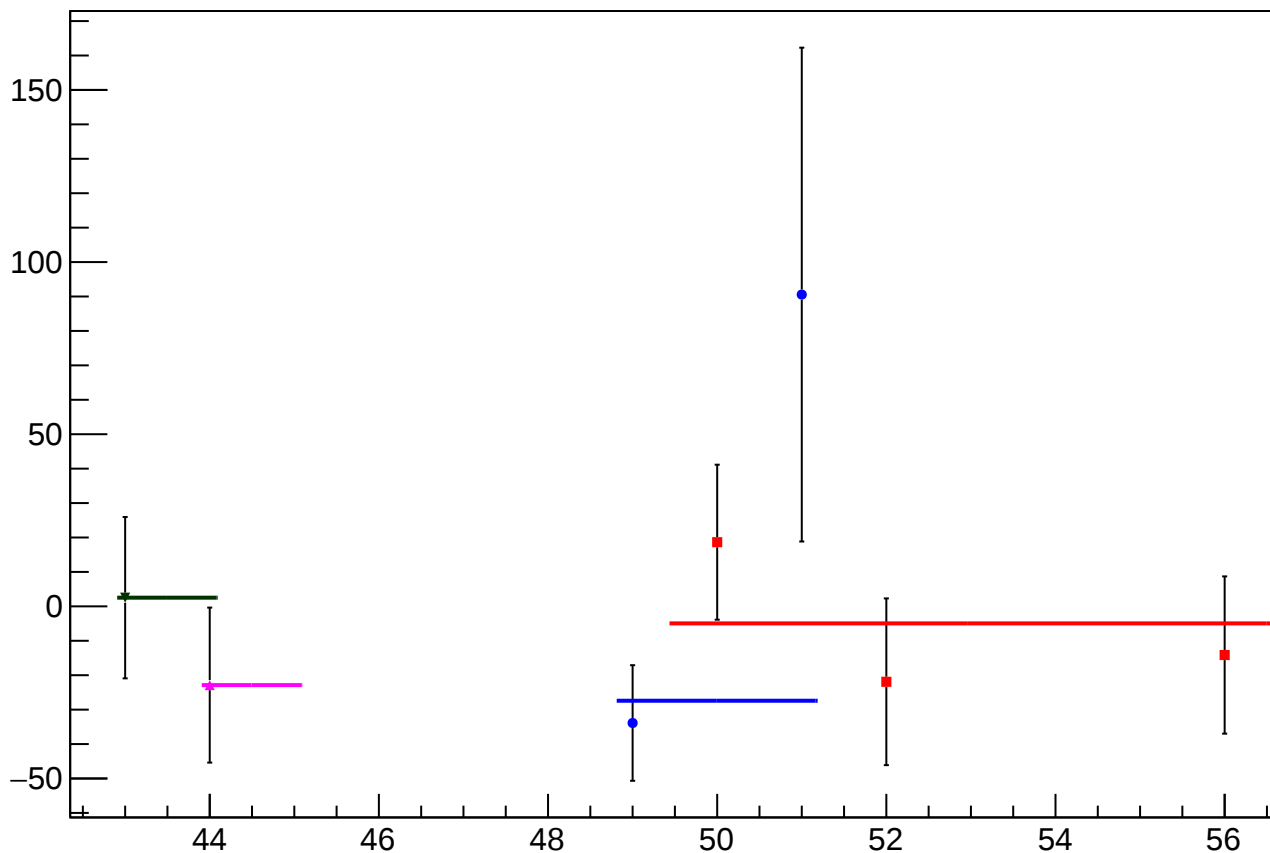
Right Out: 22.249+/-0.013  $\chi^2/\text{NDF}$ : 28609.9/2

Left In: 26.465+/-0.026  $\chi^2/\text{NDF}$ : 0.0/0

25.260+/-0.015  $\chi^2/\text{NDF}$ : 2318.3/2

23.051+/-0.011  $\chi^2/\text{NDF}$ : 49506.3/3

bcm\_dg\_ds\_ds\_dd\_mean vs slug



Right In:  $-27.414 \pm 16.348$   $\chi^2/\text{NDF}$ : 2.9/1

Left Out:  $2.521 \pm 23.436$   $\chi^2/\text{NDF}$ : 0.0/0

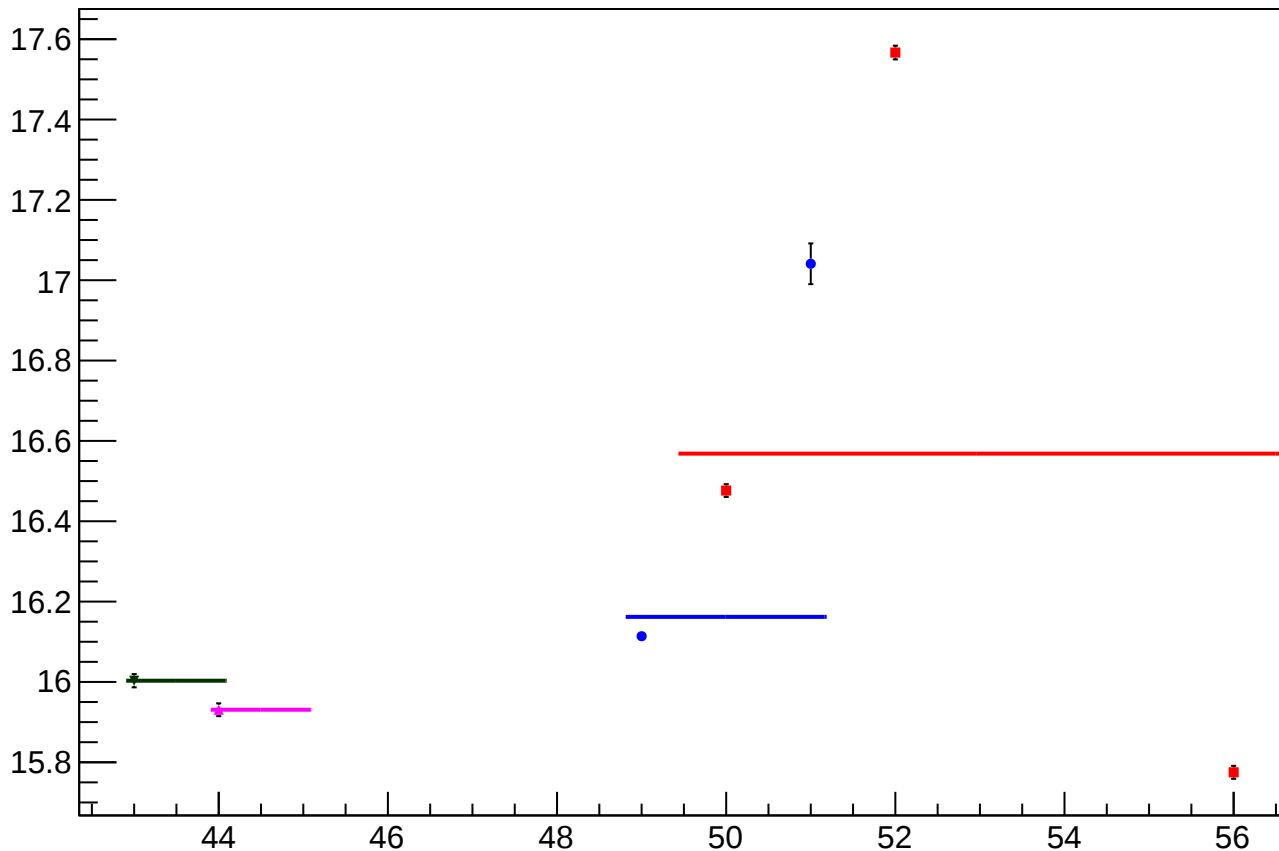
Right Out:  $-4.948 \pm 13.368$   $\chi^2/\text{NDF}$ : 1.7/2

Left In:  $-22.872 \pm 22.514$   $\chi^2/\text{NDF}$ : 0.0/0

$-17.616 \pm 13.408$   $\chi^2/\text{NDF}$ : 4.0/2

$-9.620 \pm 11.494$   $\chi^2/\text{NDF}$ : 2.2/3

# bcm\_dg\_ds\_ds\_dd\_rms vs slug



Right In: 16.162+/-0.012  $\chi^2/\text{NDF}$ : 316.8/1

Left Out: 16.003+/-0.017  $\chi^2/\text{NDF}$ : 0.0/0

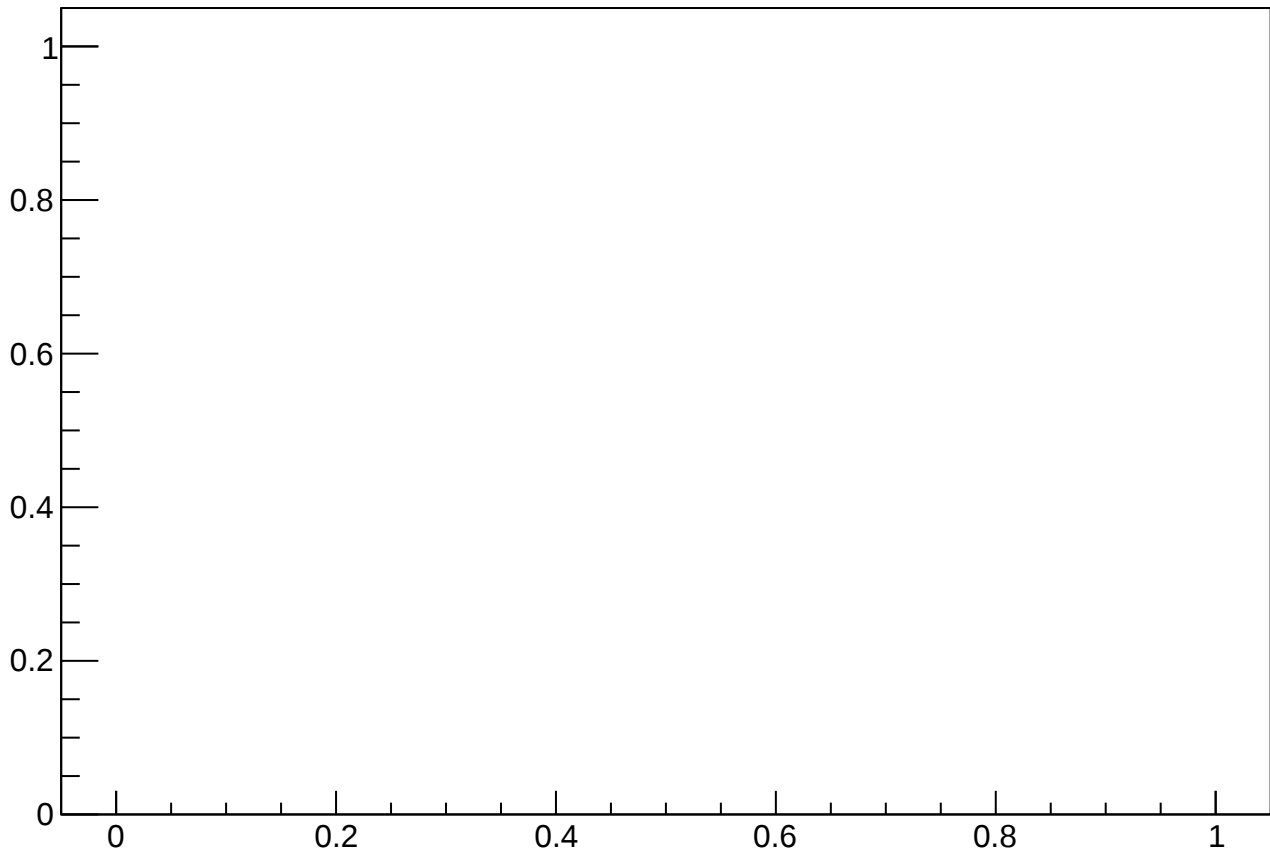
Right Out: 16.568+/-0.009  $\chi^2/\text{NDF}$ : 5846.0/2

Left In: 15.931+/-0.016  $\chi^2/\text{NDF}$ : 0.0/0

16.110+/-0.009  $\chi^2/\text{NDF}$ : 378.7/2

16.402+/-0.008  $\chi^2/\text{NDF}$ : 7031.8/3

# bcm\_dg\_ds\_ds3\_dd\_mean vs slug



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

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

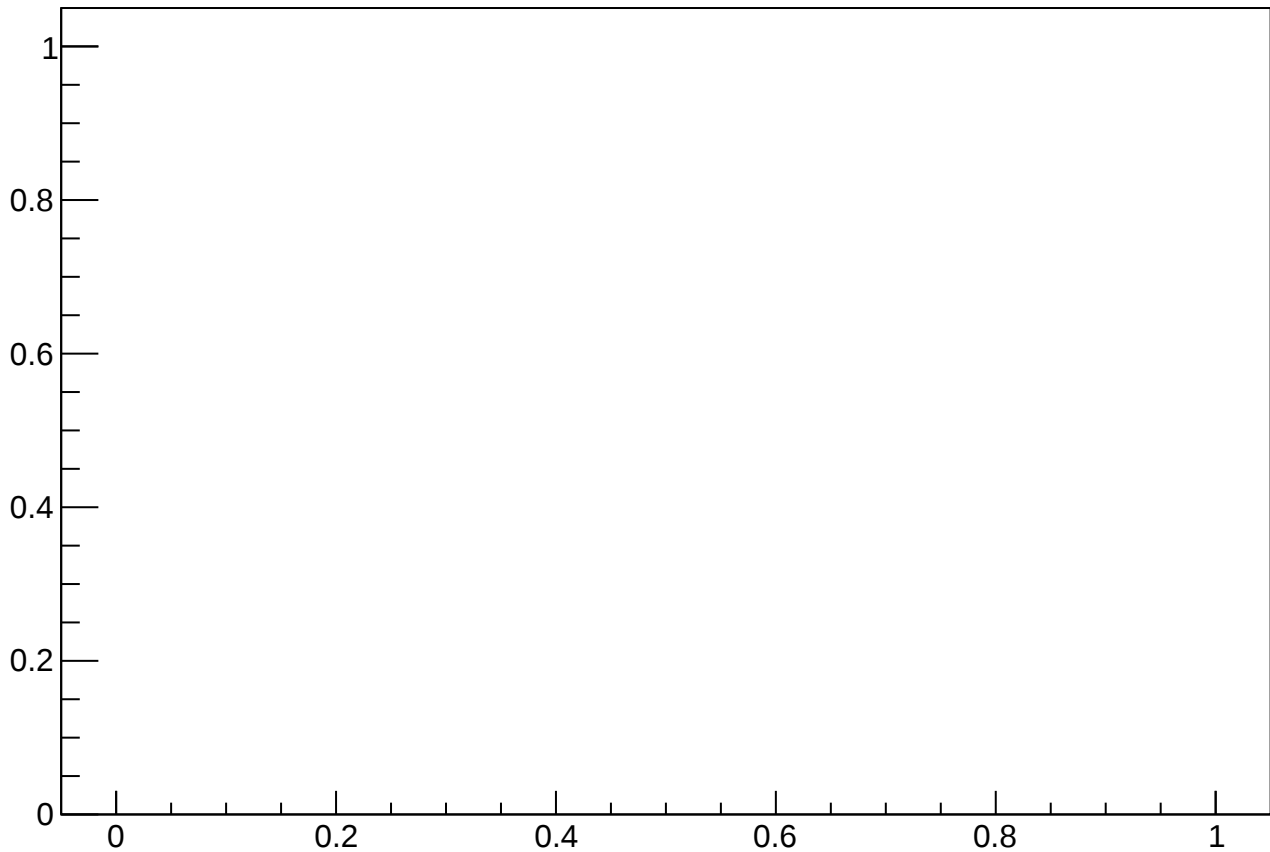
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_dg\_ds\_ds3\_dd\_rms vs slug



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

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

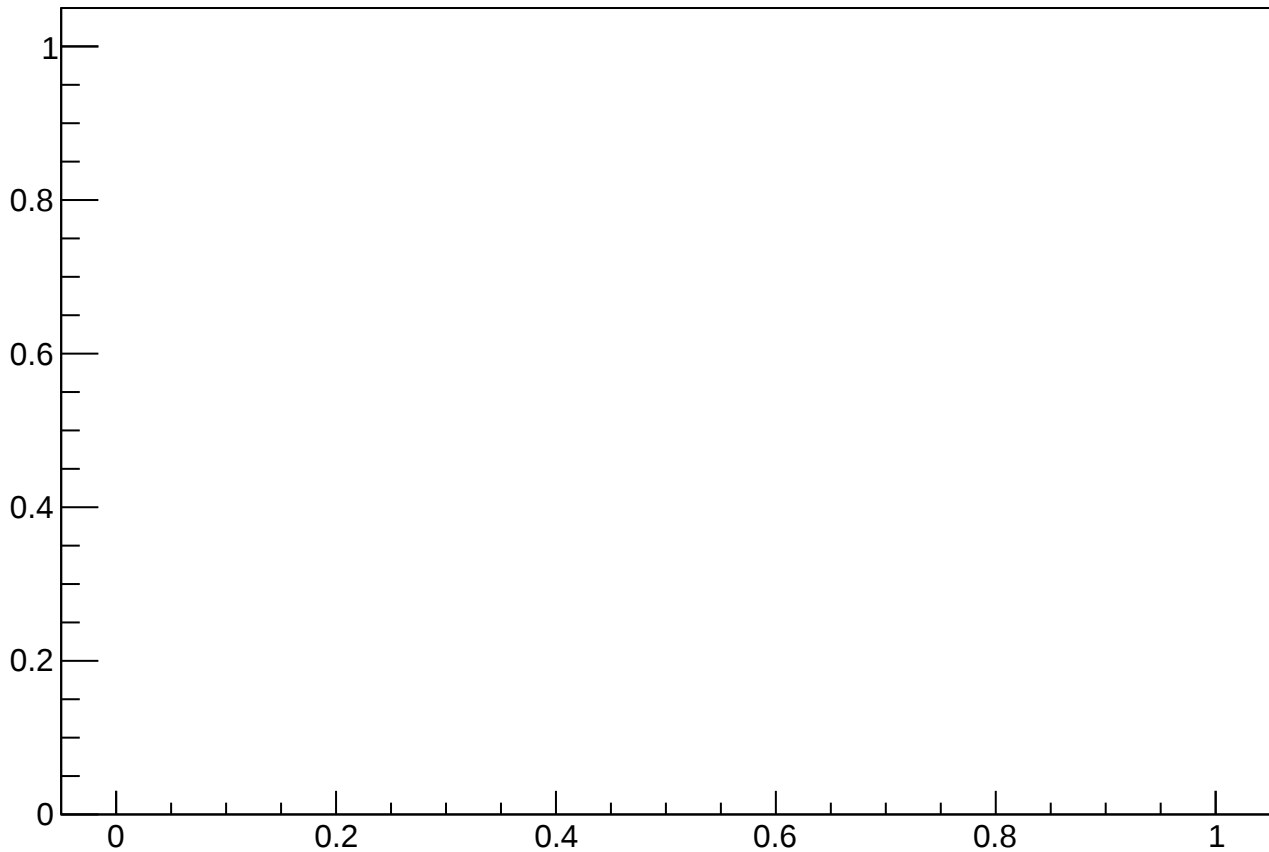
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_cav4cQ\_ds\_dd\_mean vs slug



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

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

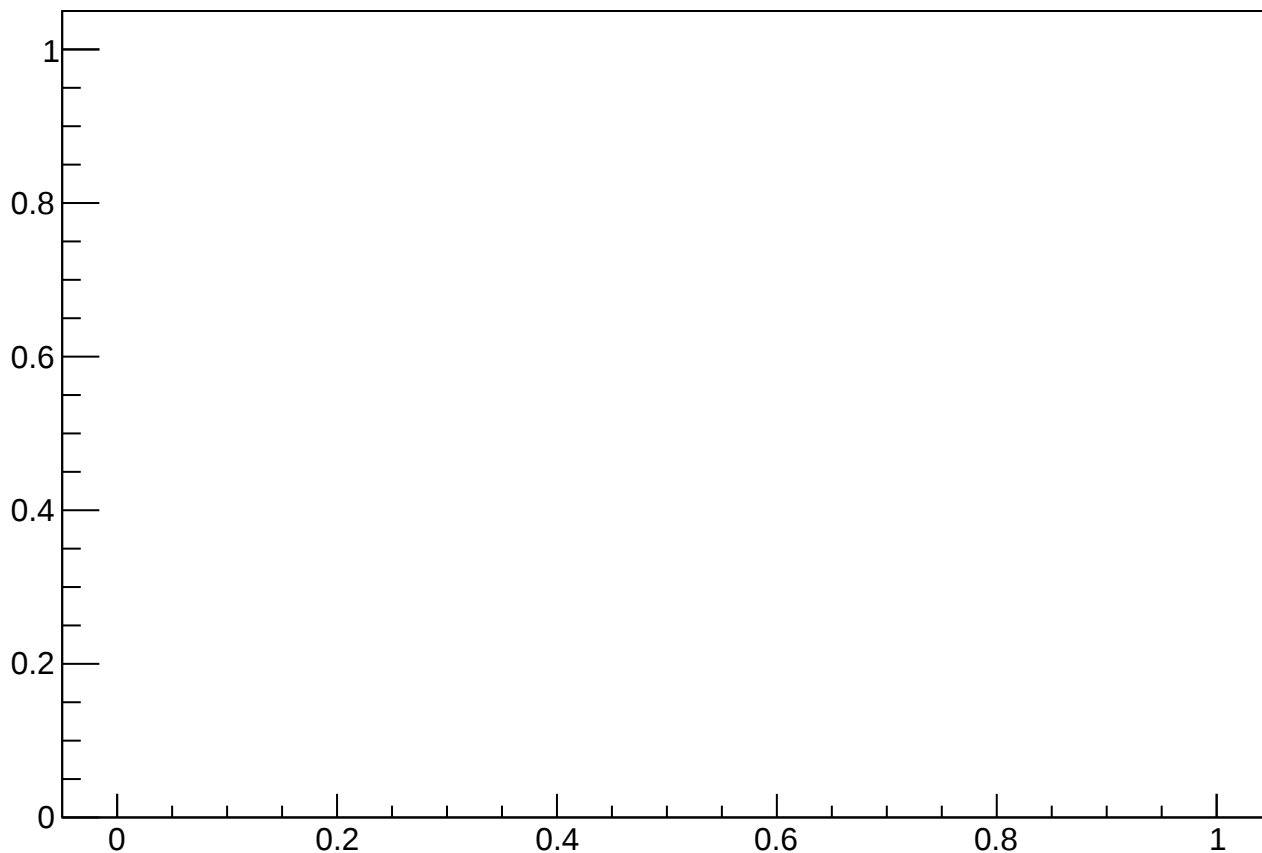
Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

# bcm\_cav4cQ\_ds\_dd\_rms vs slug



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

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

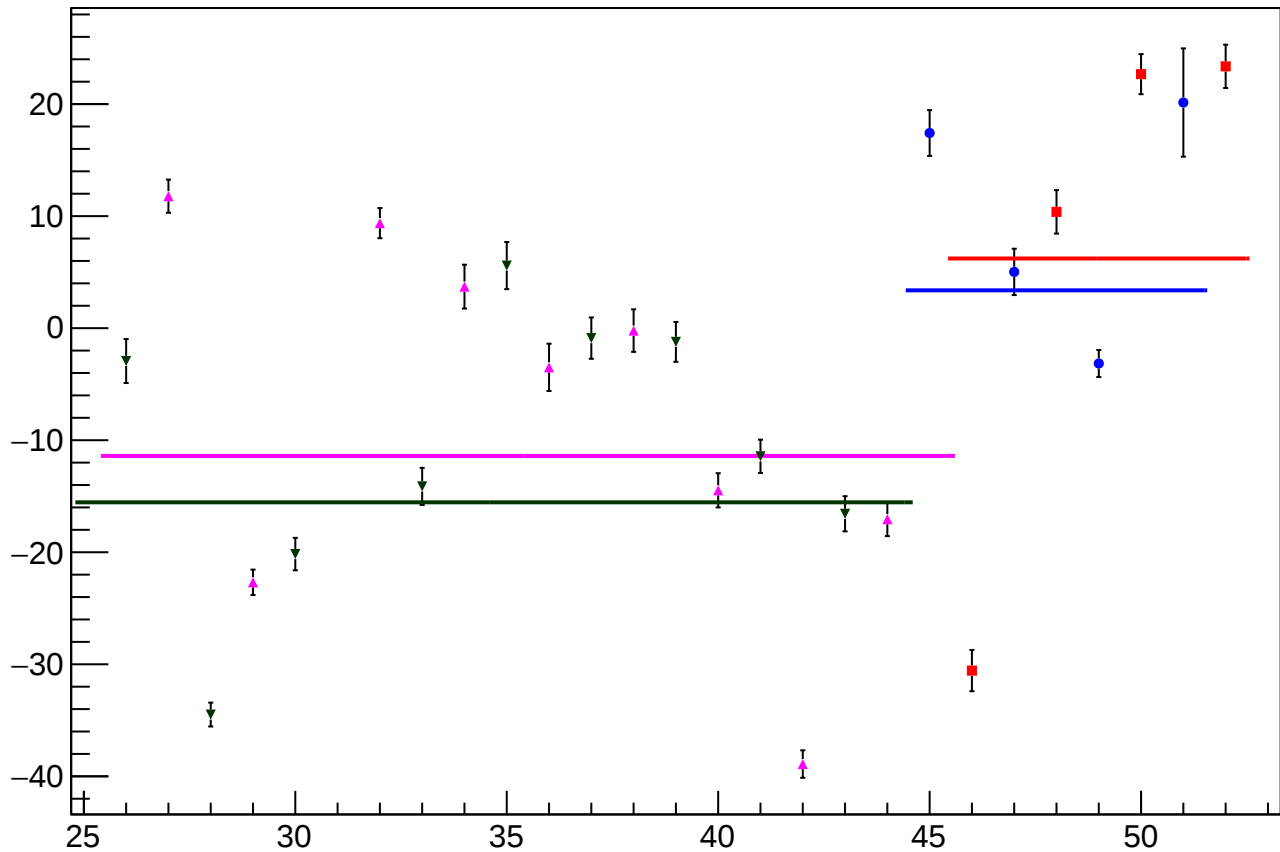
Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

# reg\_asym\_sam1\_diff\_bpm4aX\_slope vs slug



Right In: 3.378+/-0.913  $\chi^2/\text{NDF}$ : 89.0/3

Left Out: -15.543+/-0.522  $\chi^2/\text{NDF}$ : 604.1/8

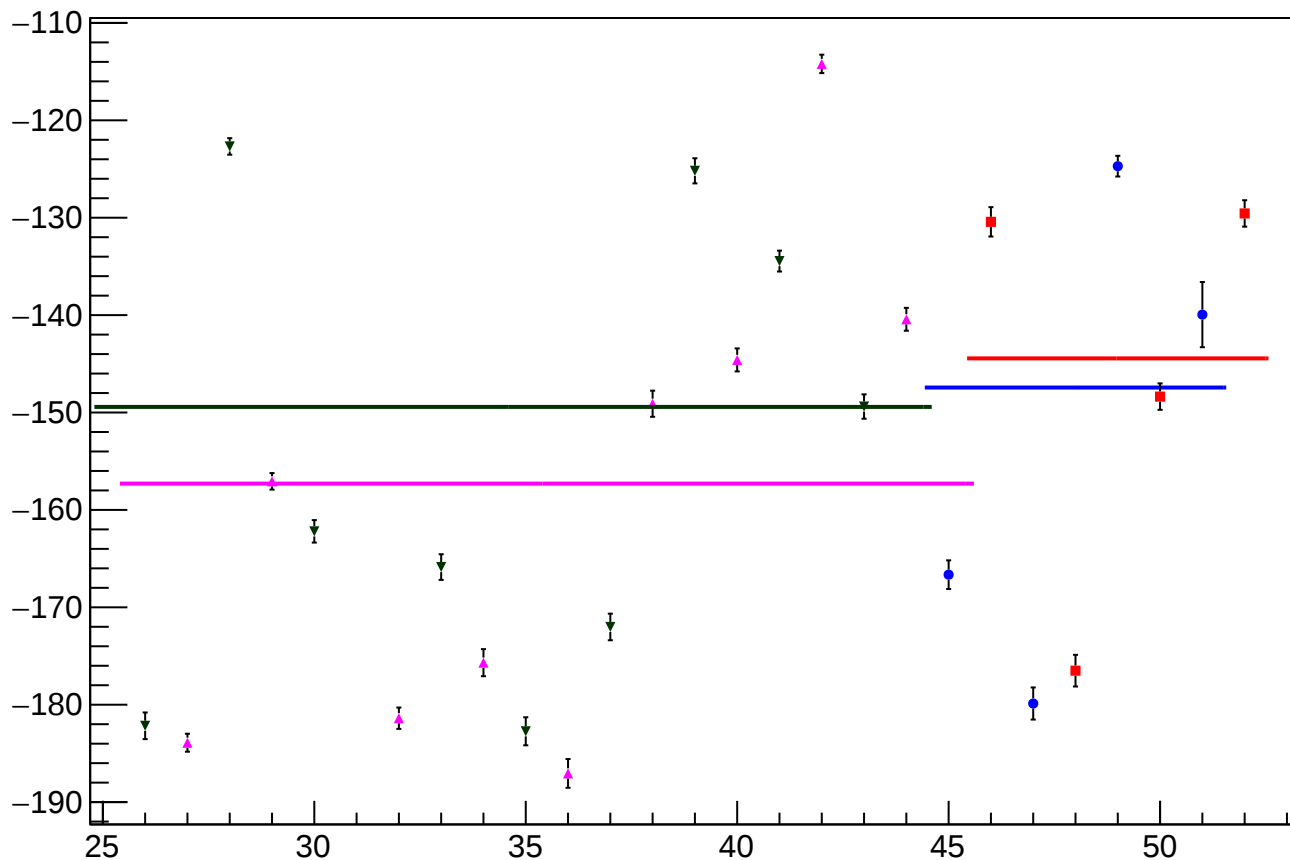
Right Out: 6.219+/-0.937  $\chi^2/\text{NDF}$ : 565.9/3

Left In: -11.401+/-0.495  $\chi^2/\text{NDF}$ : 1211.6/8

-10.886+/-0.453  $\chi^2/\text{NDF}$ : 1016.8/12

-7.556+/-0.438  $\chi^2/\text{NDF}$ : 2054.0/12

reg\_asym\_sam1\_diff\_bpm4aY\_slope vs slug



Right In:  $-147.434 \pm 0.744$   $\chi^2/\text{NDF}: 1020.6/3$

Left Out:  $-149.424 \pm 0.396$   $\chi^2/\text{NDF}: 3200.7/8$

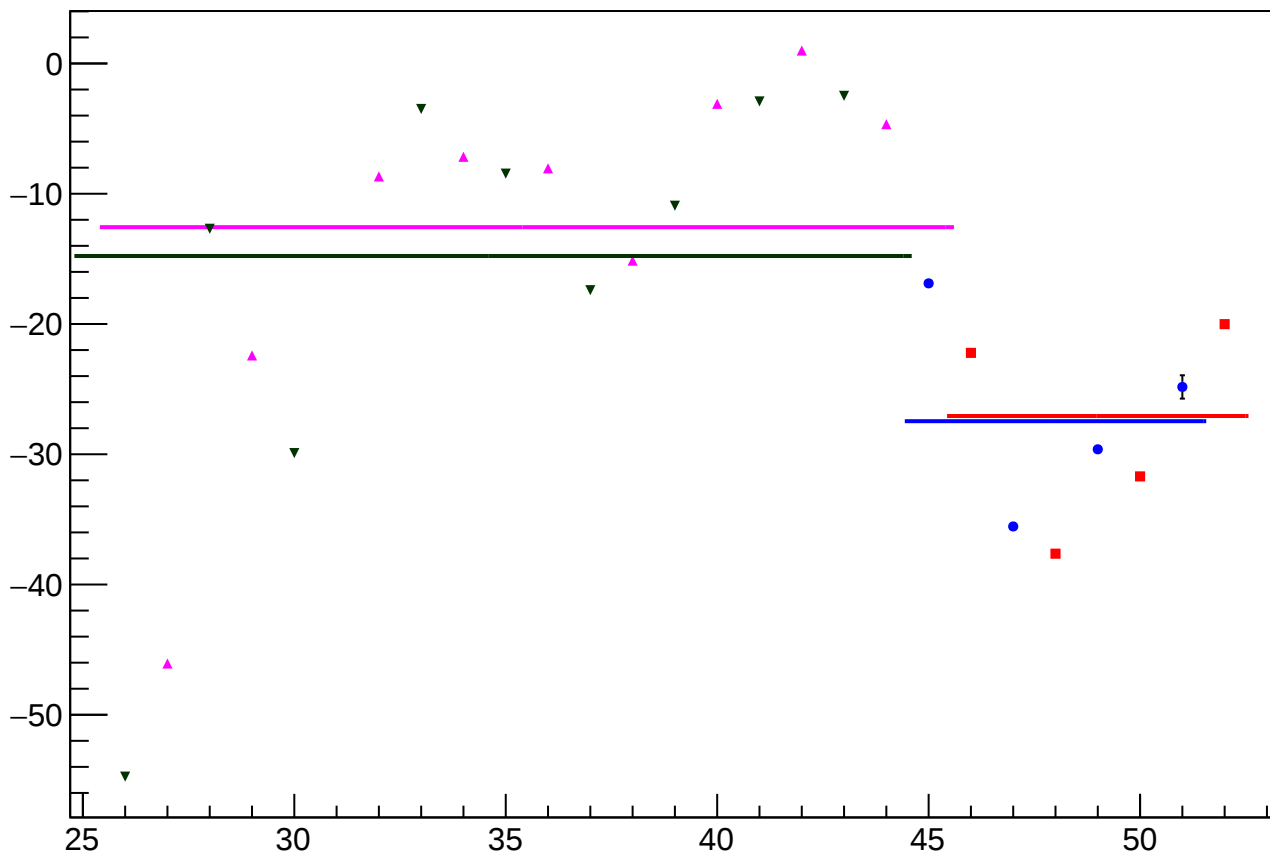
Right Out:  $-144.442 \pm 0.725$   $\chi^2/\text{NDF}: 603.9/3$

Left In:  $-157.298 \pm 0.365$   $\chi^2/\text{NDF}: 4330.4/8$

$-148.985 \pm 0.350$   $\chi^2/\text{NDF}: 4226.9/12$

$-154.691 \pm 0.326$   $\chi^2/\text{NDF}: 5185.2/12$

reg\_asym\_sam1\_diff\_bpm4eX\_slope vs slug



Right In: -27.461 $\pm$ 0.167  $\chi^2$ /NDF: 1685.7/3

Left Out: -14.780 $\pm$ 0.088  $\chi^2$ /NDF: 26305.9/8

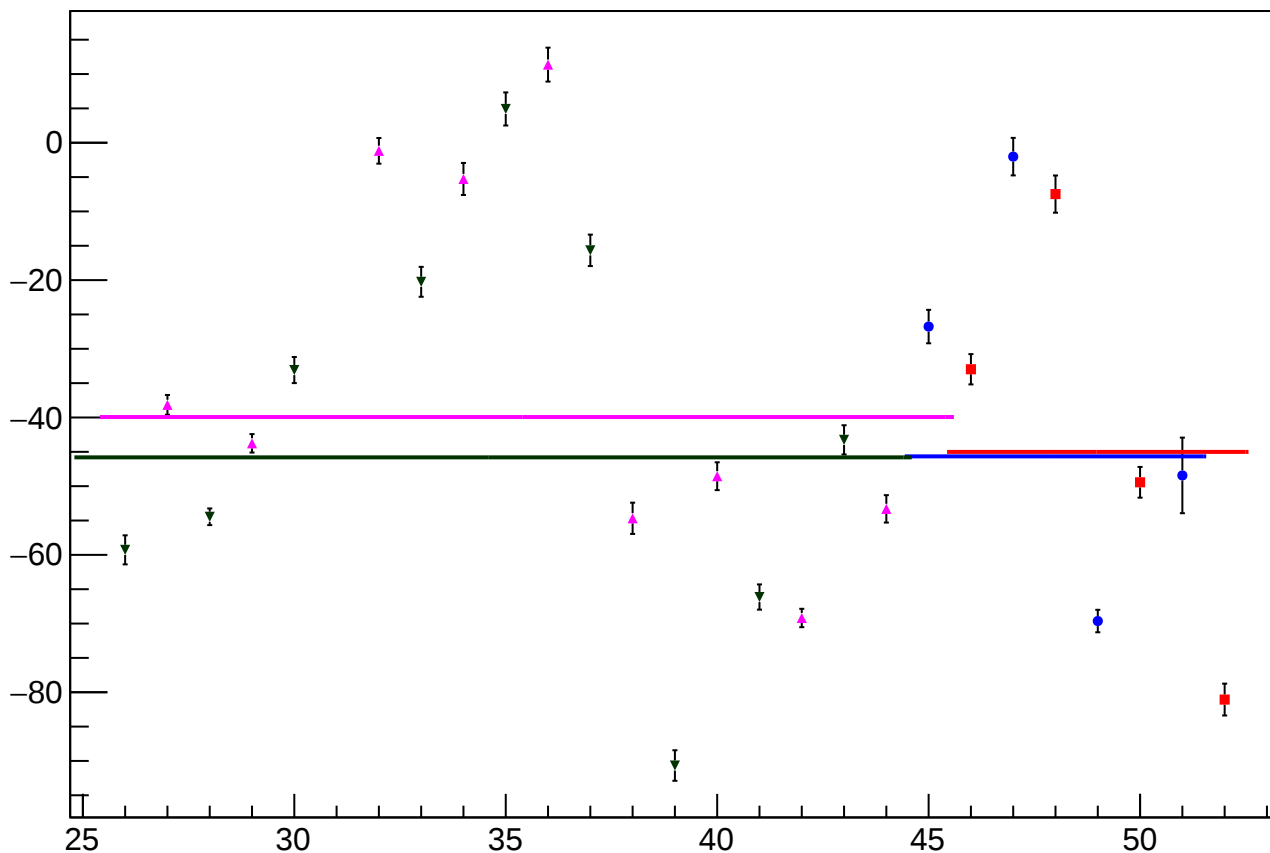
Right Out: -27.063 $\pm$ 0.162  $\chi^2$ /NDF: 1827.7/3

Left In: -12.566 $\pm$ 0.085  $\chi^2$ /NDF: 25284.3/8

-17.552 $\pm$ 0.078  $\chi^2$ /NDF: 32493.2/12

-15.714 $\pm$ 0.075  $\chi^2$ /NDF: 33399.3/12

# reg\_asym\_sam1\_diff\_bpm4eY\_slope vs slug



Right In: -45.660+/-1.188  $\chi^2/\text{NDF}$ : 530.0/3

Left Out: -45.805+/-0.636  $\chi^2/\text{NDF}$ :1422.6/8

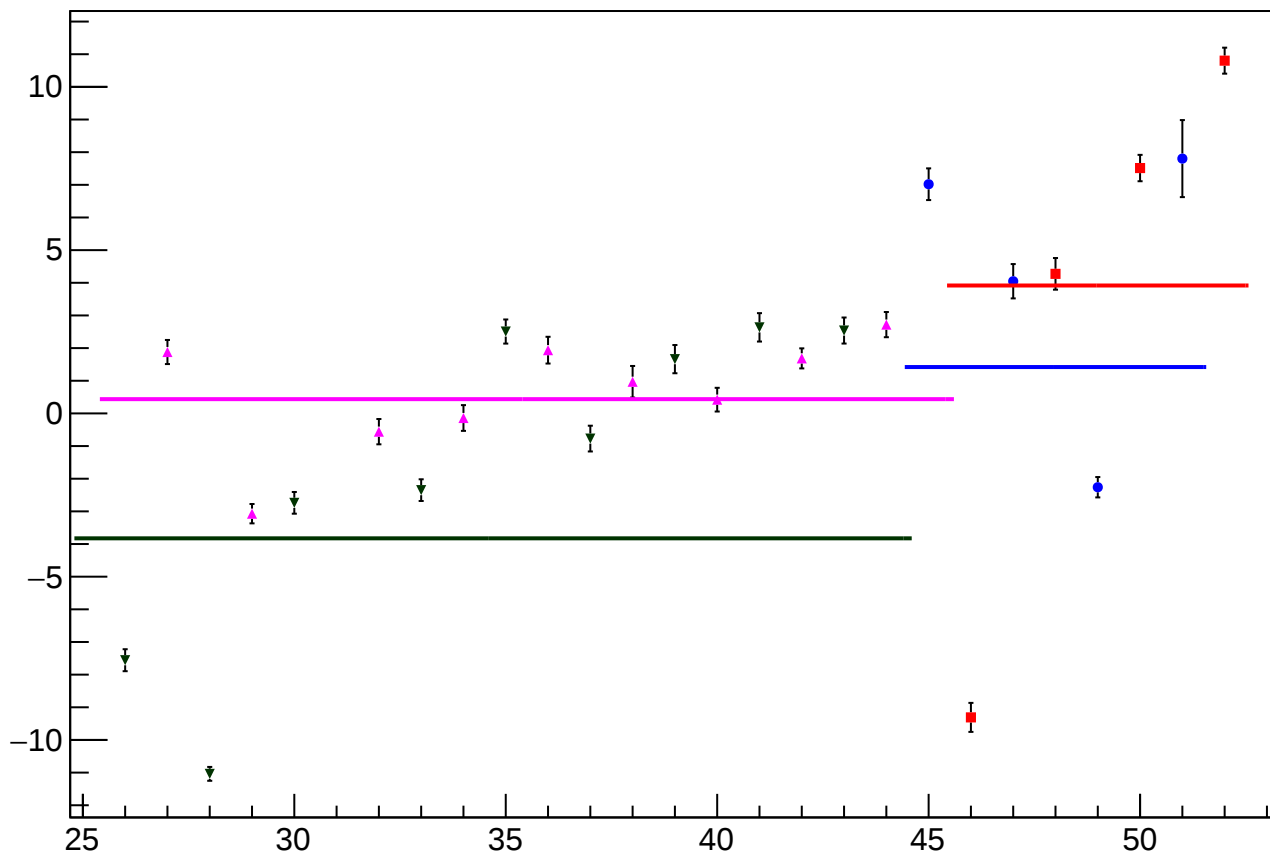
Right Out: -45.010+/-1.172  $\chi^2/\text{NDF}$ : 467.5/3

Left In: -39.933+/-0.586  $\chi^2/\text{NDF}$ :1674.5/8

-45.773+/-0.561  $\chi^2/\text{NDF}$ : 1952.5/12

-40.947+/-0.524  $\chi^2/\text{NDF}$ : 2157.0/12

# reg\_asym\_sam1\_diff\_bpm11X\_slope vs slug



Right In: 1.420 $\pm$ 0.230  $\chi^2$ /NDF: 326.7/3

Left Out: -3.826 $\pm$ 0.112  $\chi^2$ /NDF: 2297.6/8

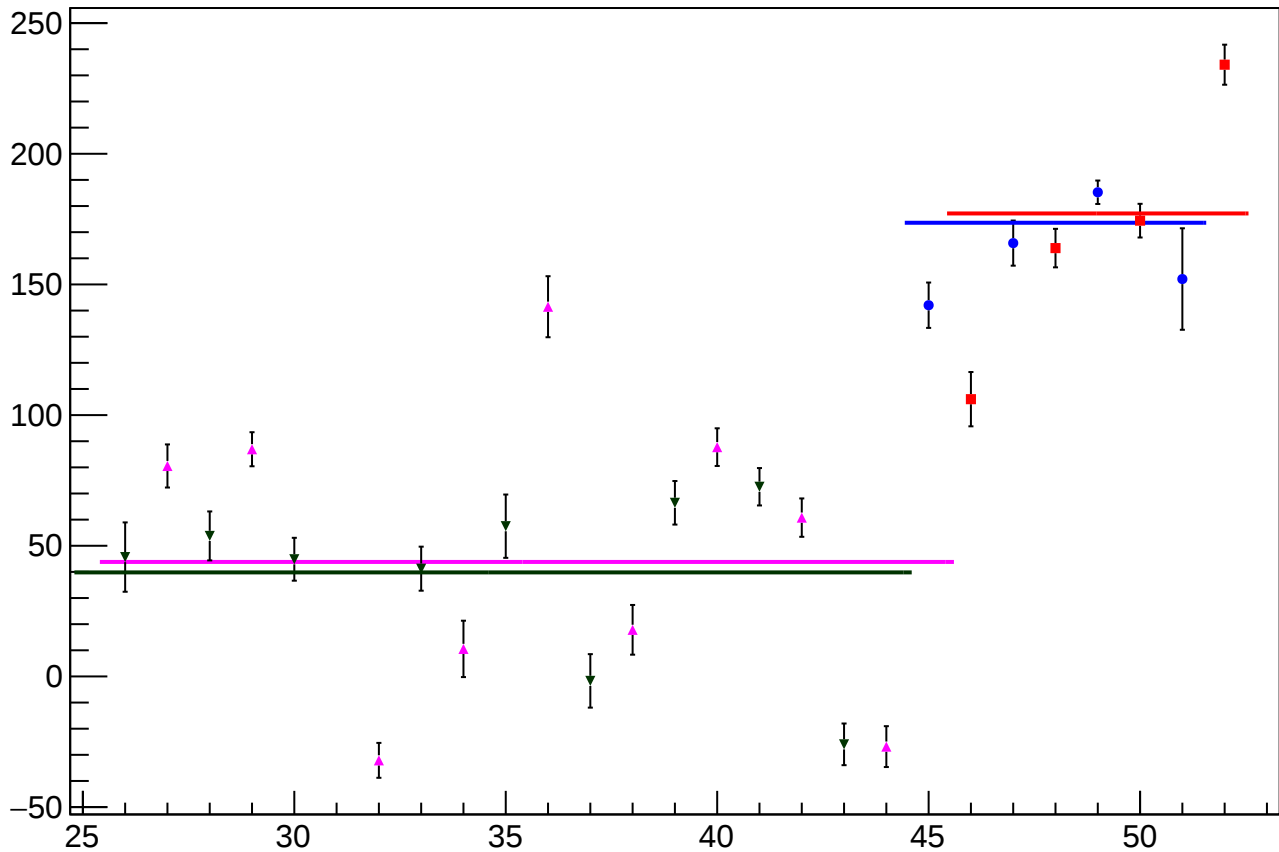
Right Out: 3.917 $\pm$ 0.214  $\chi^2$ /NDF: 1266.5/3

Left In: 0.437 $\pm$ 0.122  $\chi^2$ /NDF: 230.2/8

-2.823 $\pm$ 0.101  $\chi^2$ /NDF: 3044.2/12

1.291 $\pm$ 0.106  $\chi^2$ /NDF: 1695.7/12

# reg\_asym\_sam2\_diff\_bpm4aX\_slope vs slug



Right In:  $173.603 \pm 3.556$   $\chi^2/\text{NDF}: 22.0/3$

Left Out:  $39.807 \pm 2.987$   $\chi^2/\text{NDF}: 120.7/8$

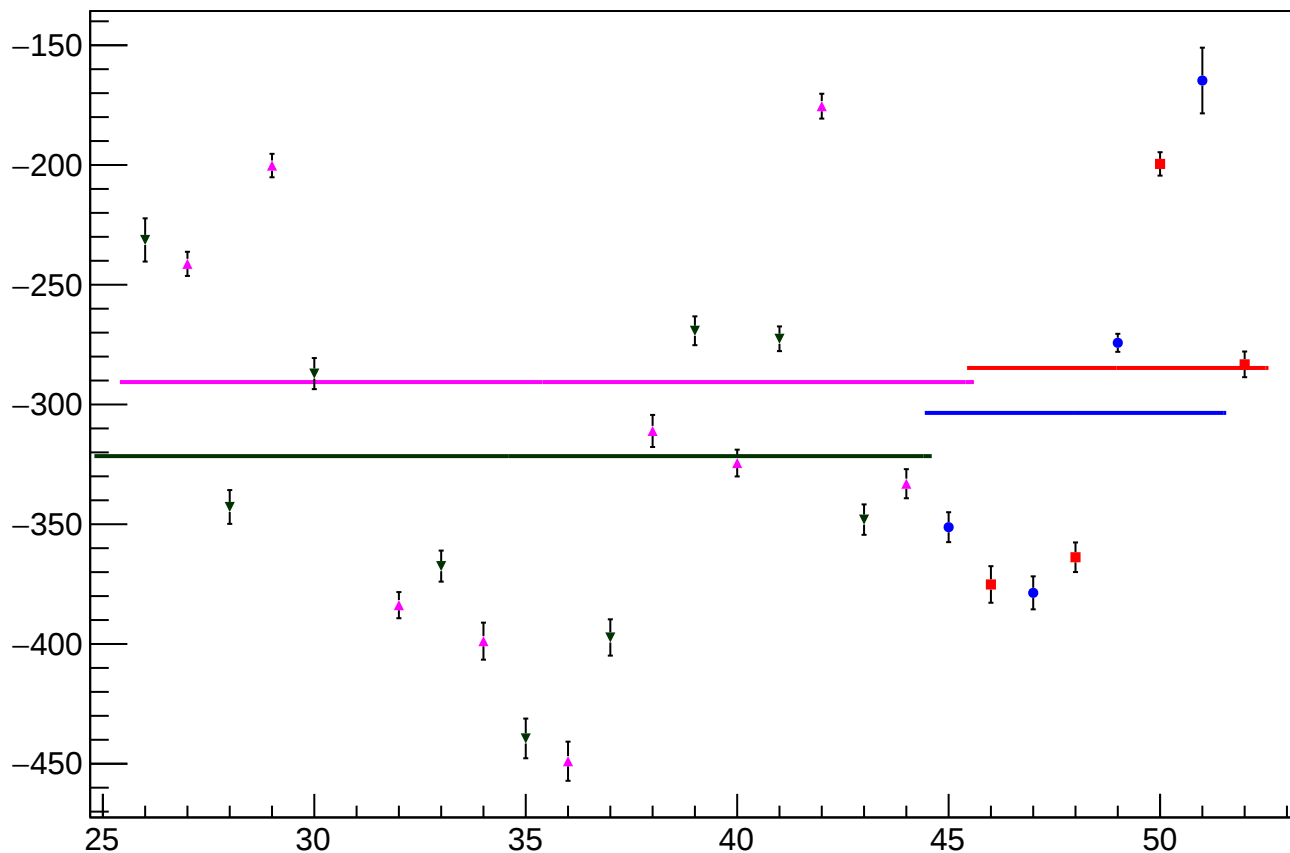
Right Out:  $177.164 \pm 3.812$   $\chi^2/\text{NDF}: 105.4/3$

Left In:  $43.811 \pm 2.656$   $\chi^2/\text{NDF}: 403.9/8$

$95.167 \pm 2.287$   $\chi^2/\text{NDF}: 972.8/12$

$87.376 \pm 2.179$   $\chi^2/\text{NDF}: 1333.1/12$

# reg\_asym\_sam2\_diff\_bpm4aY\_slope vs slug



Right In:  $-303.514 \pm 2.855$   $\chi^2/\text{NDF}$ : 340.1/3

Left Out:  $-321.559 \pm 2.226$   $\chi^2/\text{NDF}$ : 672.6/8

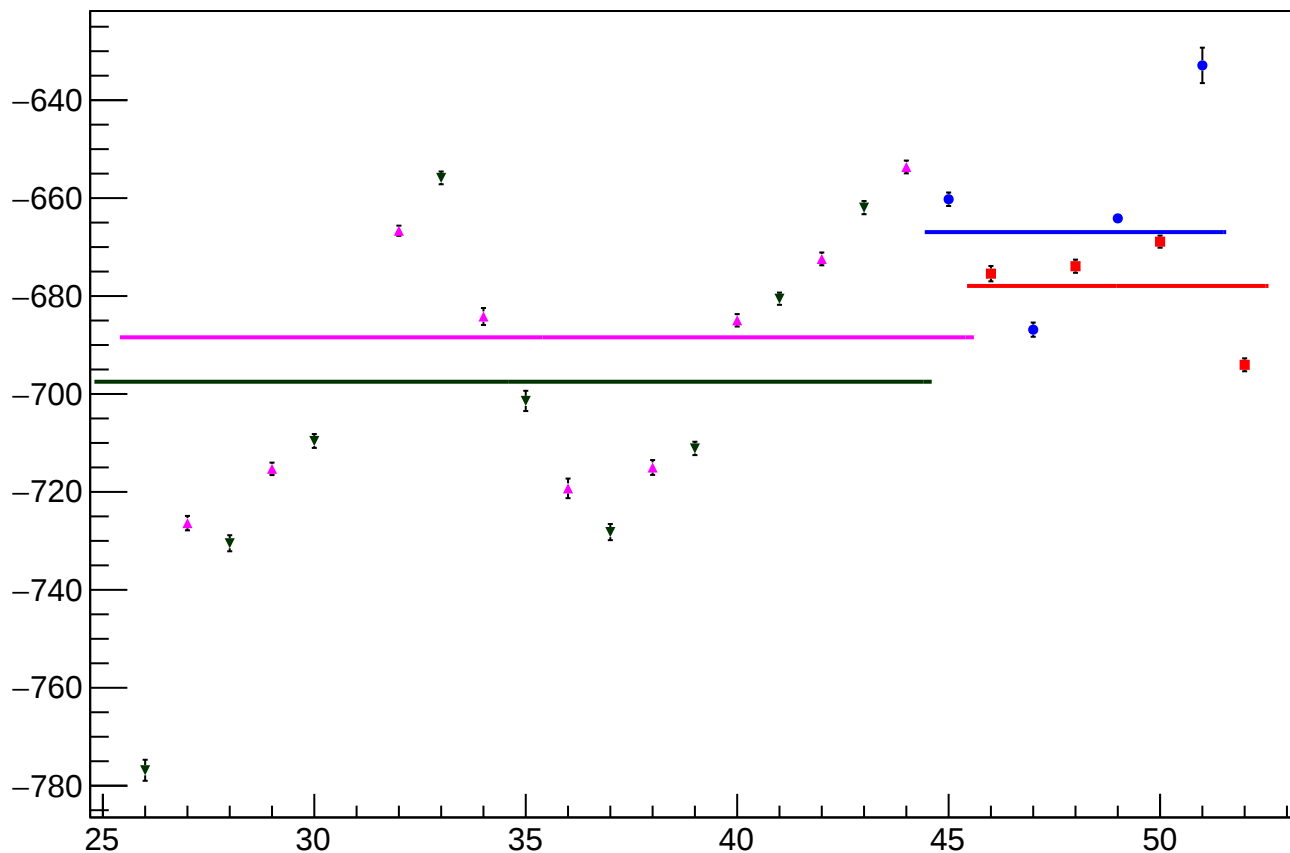
Right Out:  $-284.750 \pm 2.888$   $\chi^2/\text{NDF}$ : 607.3/3

Left In:  $-290.636 \pm 1.943$   $\chi^2/\text{NDF}$ : 1886.8/8

$-314.736 \pm 1.756$   $\chi^2/\text{NDF}$ : 1037.5/12

$-288.801 \pm 1.612$   $\chi^2/\text{NDF}$ : 2497.0/12

# reg\_asym\_sam2\_diff\_bpm4eX\_slope vs slug



Right In:  $-666.944 \pm 0.666$   $\chi^2/\text{NDF}: 309.4/3$

Left Out:  $-697.498 \pm 0.500$   $\chi^2/\text{NDF}: 4190.1/8$

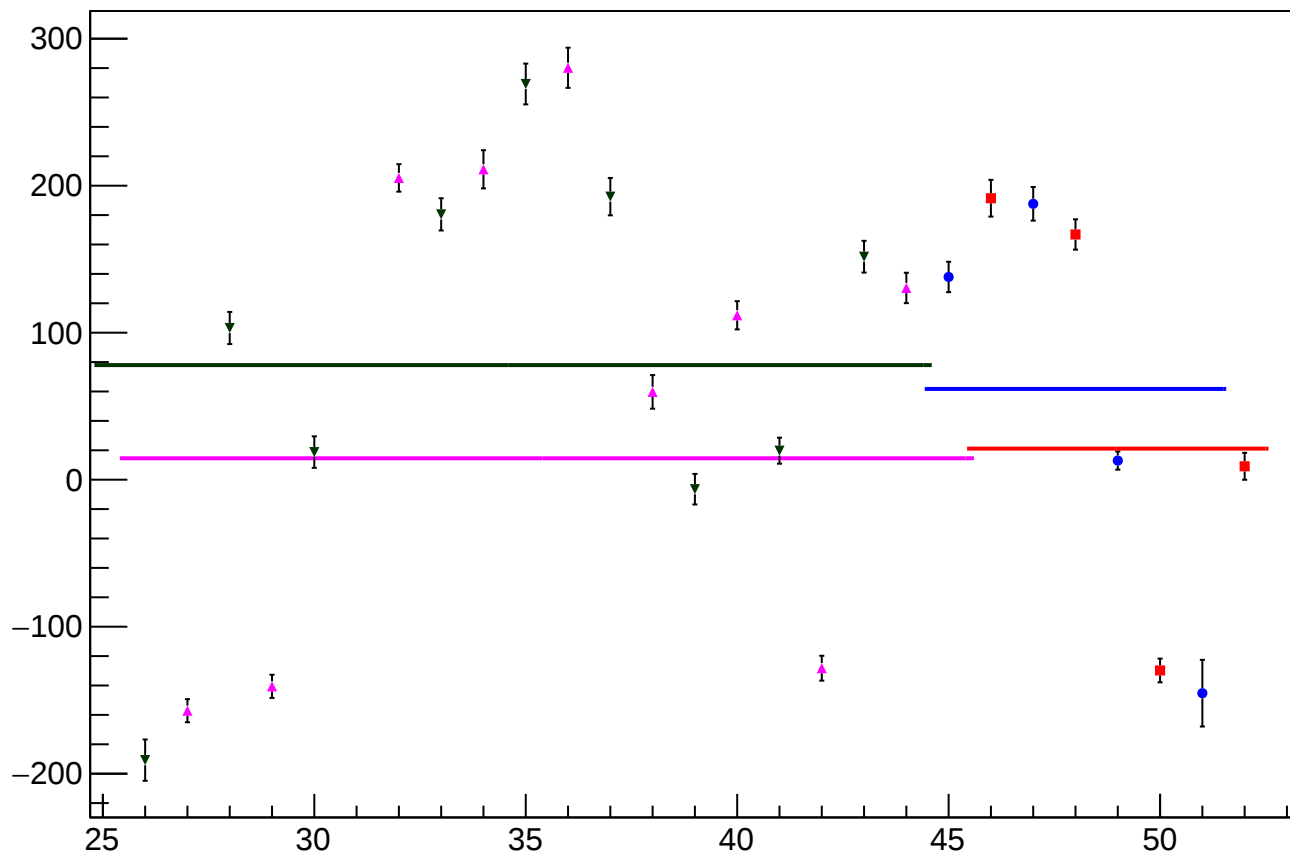
Right Out:  $-677.935 \pm 0.677$   $\chi^2/\text{NDF}: 212.5/3$

Left In:  $-688.429 \pm 0.456$   $\chi^2/\text{NDF}: 2965.5/8$

$-686.500 \pm 0.400$   $\chi^2/\text{NDF}: 5845.9/12$

$-685.158 \pm 0.378$   $\chi^2/\text{NDF}: 3343.2/12$

# reg\_asym\_sam2\_diff\_bpm4eY\_slope vs slug



Right In: 61.748+/-4.709  $\chi^2/\text{NDF}$ : 321.0/3

Left Out: 77.958+/-3.716  $\chi^2/\text{NDF}$ : 915.0/8

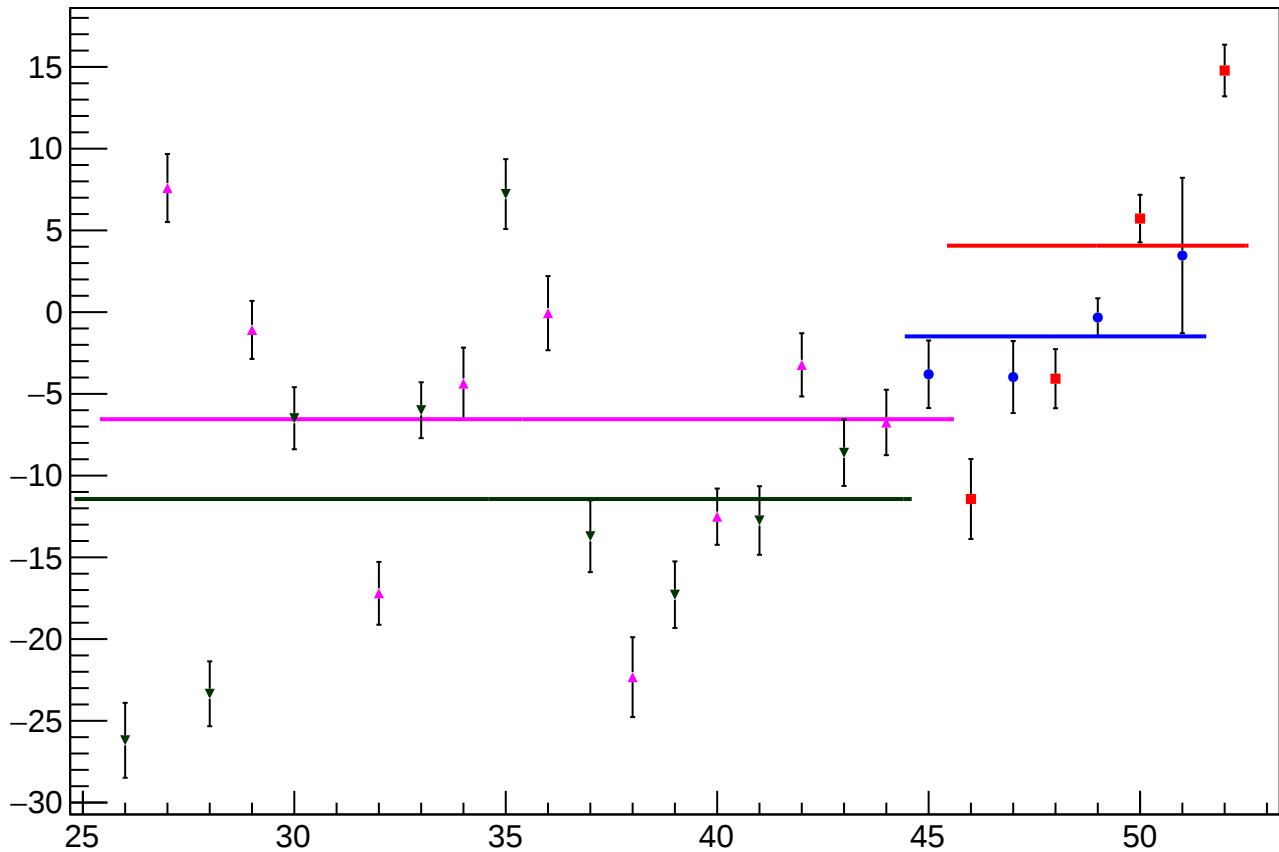
Right Out: 21.144+/-4.817  $\chi^2/\text{NDF}$ : 737.6/3

Left In: 14.568+/-3.215  $\chi^2/\text{NDF}$ : 2415.4/8

71.738+/-2.917  $\chi^2/\text{NDF}$ : 1243.3/12

16.594+/-2.674  $\chi^2/\text{NDF}$ : 3154.3/12

# reg\_asym\_sam2\_diff\_bpm11X\_slope vs slug



Right In:  $-1.484 \pm 0.910$   $\chi^2/\text{NDF}: 4.6/3$

Left Out:  $-11.434 \pm 0.674$   $\chi^2/\text{NDF}: 182.4/8$

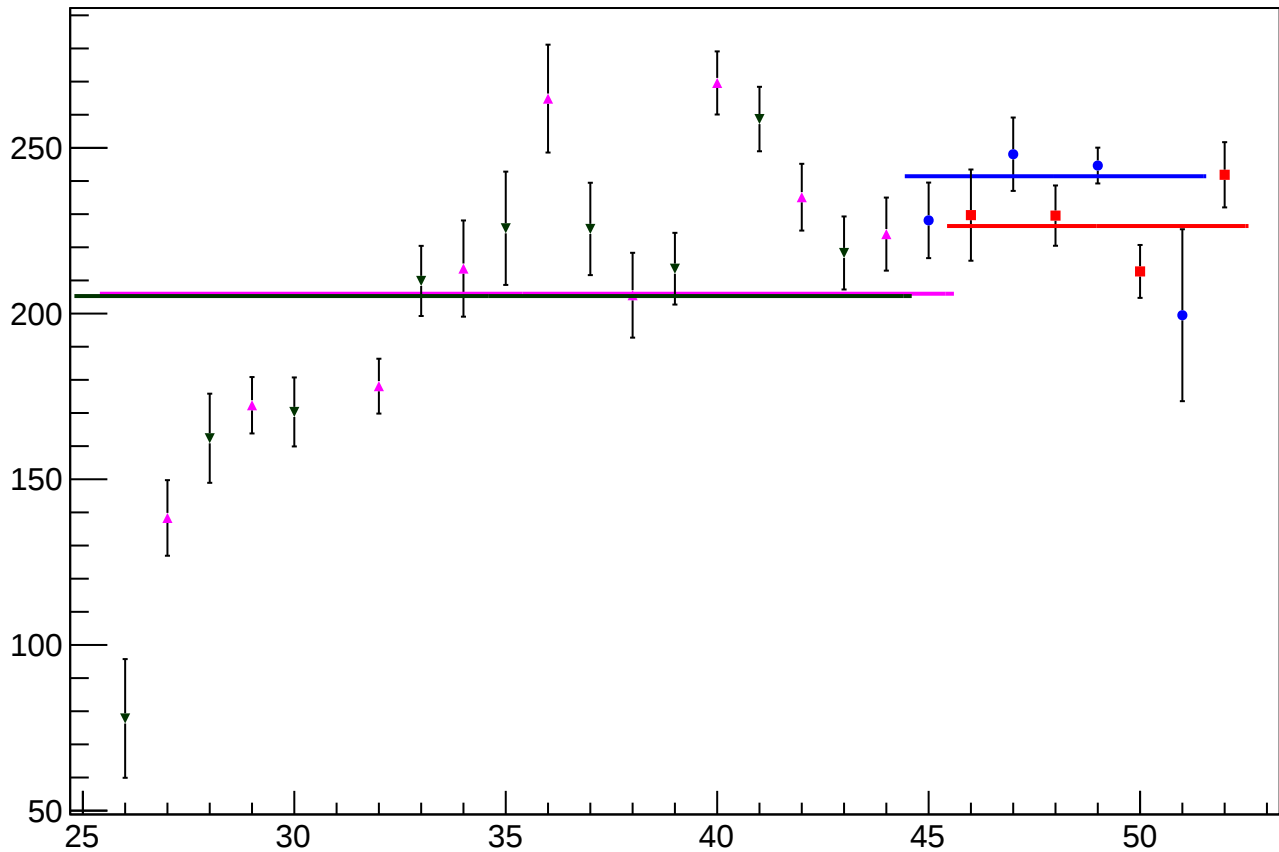
Right Out:  $4.066 \pm 0.862$   $\chi^2/\text{NDF}: 107.7/3$

Left In:  $-6.549 \pm 0.668$   $\chi^2/\text{NDF}: 152.2/8$

$-7.908 \pm 0.542$   $\chi^2/\text{NDF}: 264.2/12$

$-2.568 \pm 0.528$   $\chi^2/\text{NDF}: 354.6/12$

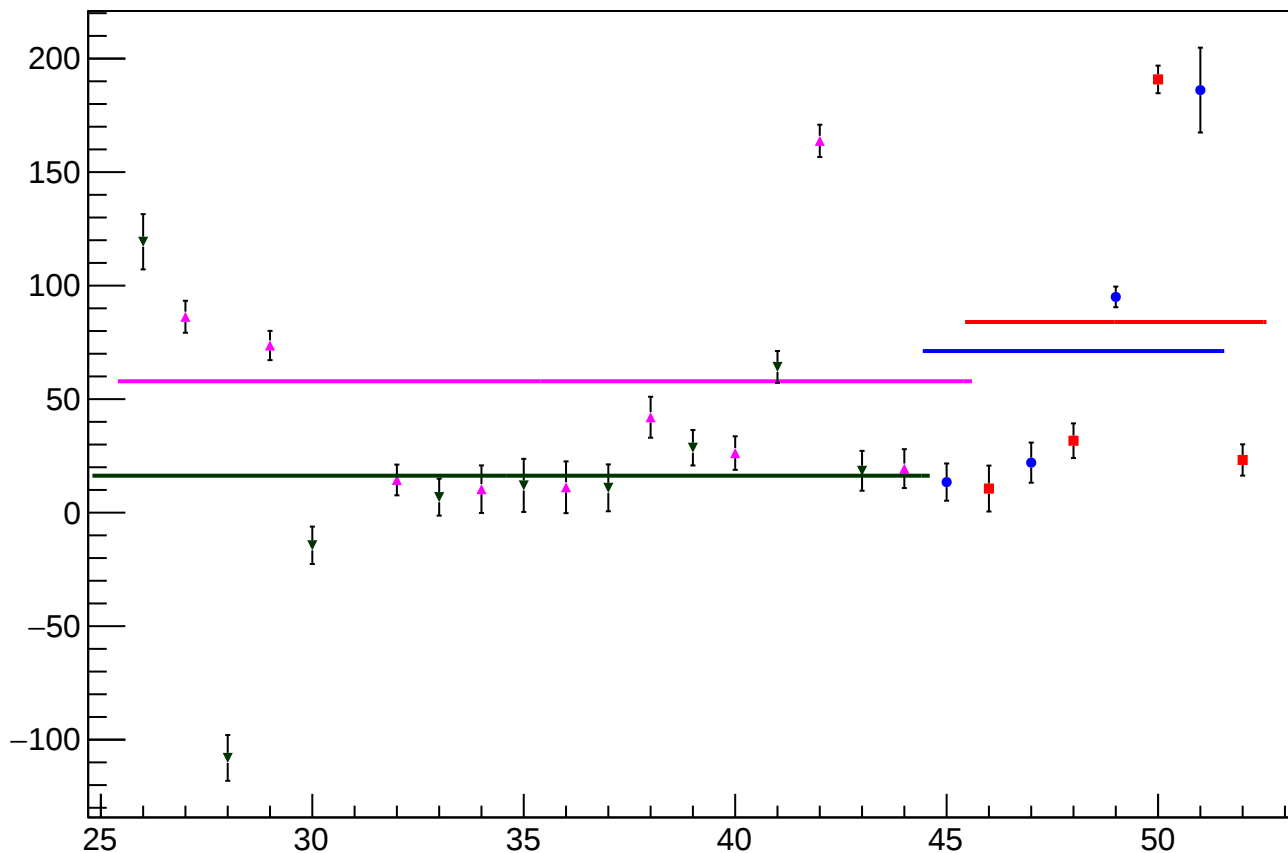
# reg\_asym\_sam3\_diff\_bpm4aX\_slope vs slug



Right In: 241.442 $\pm$ 4.402  $\chi^2$ /NDF: 4.7/3  
 Left Out: 205.287 $\pm$ 3.993  $\chi^2$ /NDF:108.0/8  
 Right Out: 226.418 $\pm$ 4.802  $\chi^2$ /NDF: 5.6/3  
 Left In: 205.988 $\pm$ 3.539  $\chi^2$ /NDF:131.2/8

221.607 $\pm$ 2.957  $\chi^2$ /NDF: 149.7/12  
 213.180 $\pm$ 2.849  $\chi^2$ /NDF: 148.5/12

# reg\_asym\_sam3\_diff\_bpm4aY\_slope vs slug



Right In: 71.184 $\pm$ 3.557  $\chi^2$ /NDF: 145.8/3

Left Out: 16.279 $\pm$ 2.978  $\chi^2$ /NDF:288.5/8

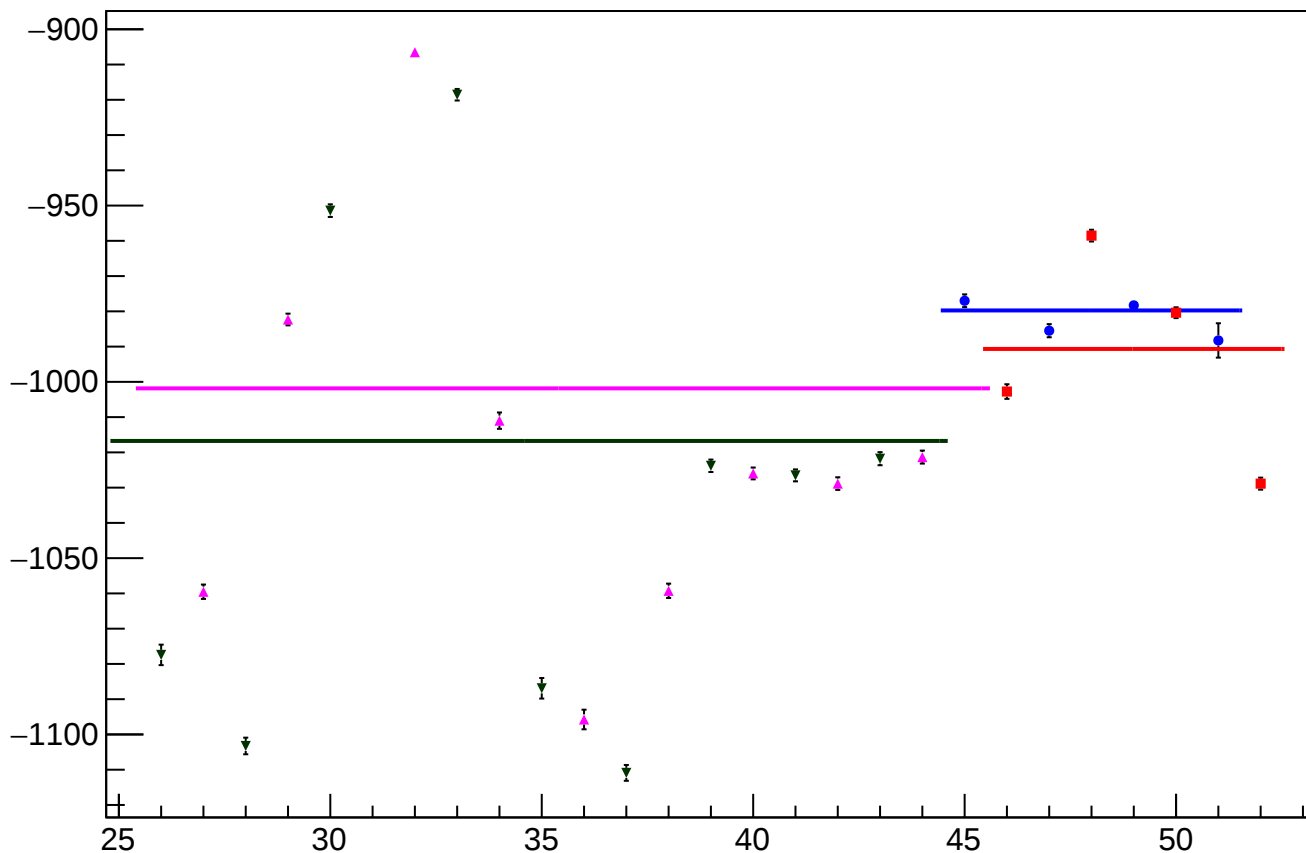
Right Out: 83.979 $\pm$ 3.649  $\chi^2$ /NDF: 486.7/3

Left In: 57.880 $\pm$ 2.609  $\chi^2$ /NDF:363.5/8

38.899 $\pm$ 2.283  $\chi^2$ /NDF: 574.4/12

66.709 $\pm$ 2.122  $\chi^2$ /NDF: 884.1/12

# reg\_asym\_sam3\_diff\_bpm4eX\_slope vs slug



Right In: -979.744+/-0.833  $\chi^2/\text{NDF}$ : 16.5/3

Left Out: -1016.757+/-0.666  $\chi^2/\text{NDF}$ : 9085.0/8

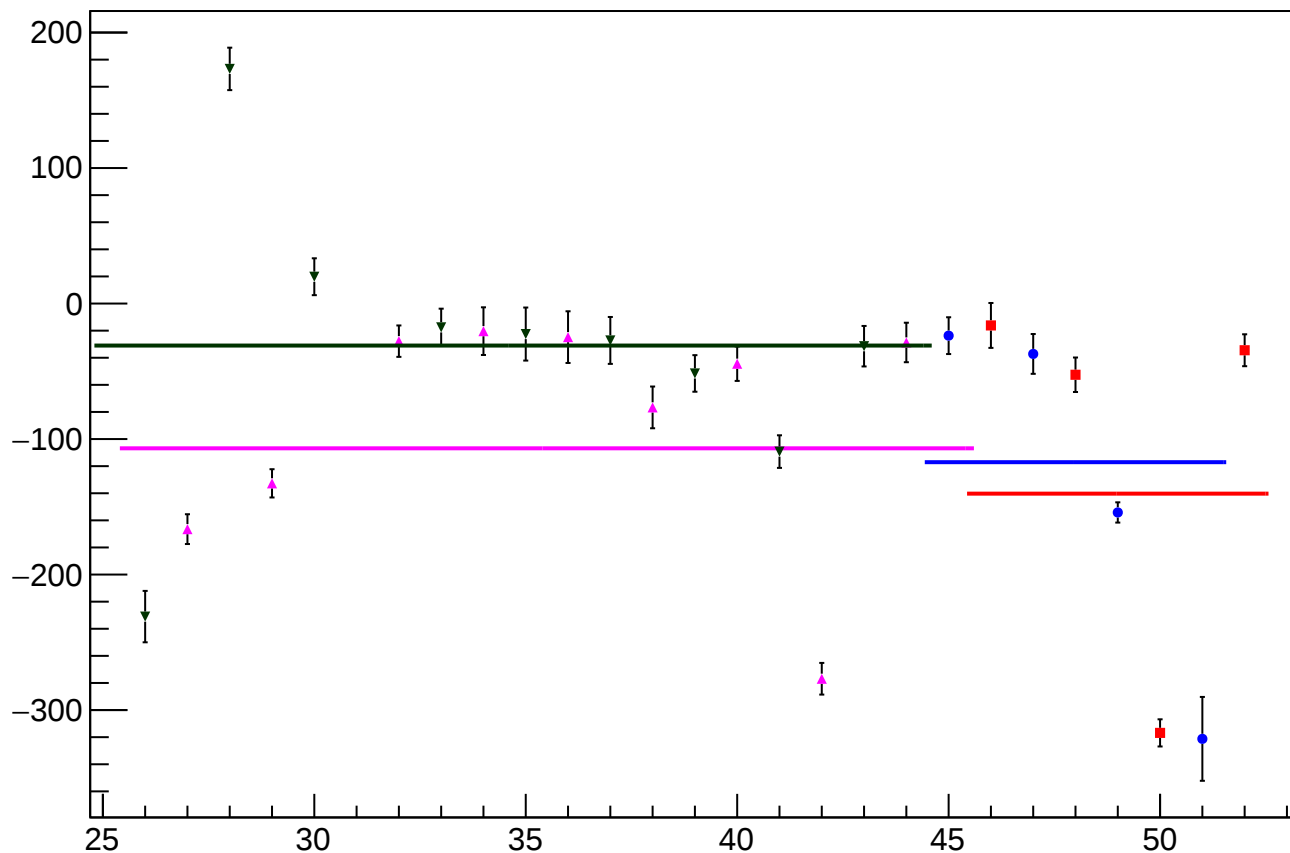
Right Out: -990.662+/-0.856  $\chi^2/\text{NDF}$ : 953.9/3

Left In: -1001.844+/-0.607  $\chi^2/\text{NDF}$ : 8875.1/8

-1002.309+/-0.520  $\chi^2/\text{NDF}$ : 10306.2/12

-998.109+/-0.495  $\chi^2/\text{NDF}$ : 9942.5/12

# reg\_asym\_sam3\_diff\_bpm4eY\_slope vs slug



Right In:  $-117.069 \pm 5.873$   $\chi^2/\text{NDF}: 145.0/3$

Left Out:  $-31.002 \pm 4.978$   $\chi^2/\text{NDF}: 340.9/8$

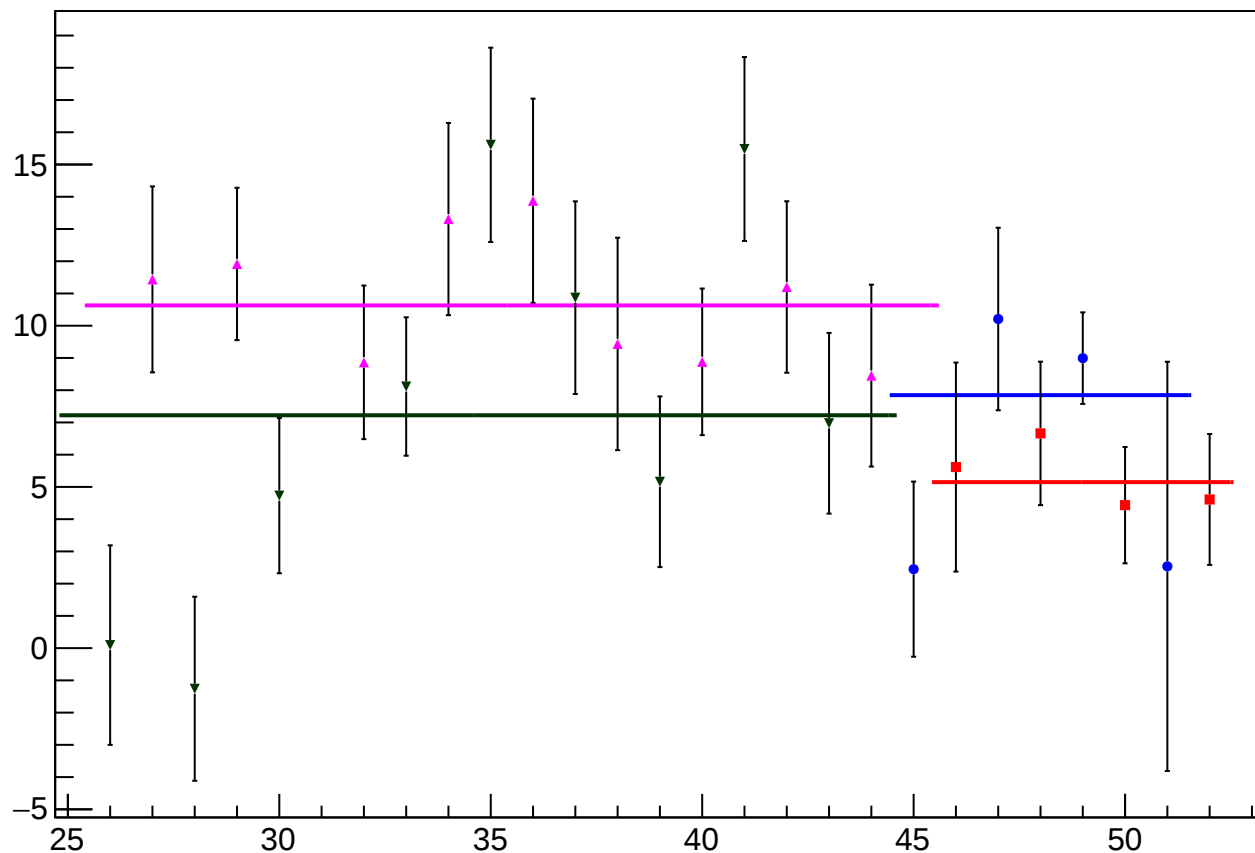
Right Out:  $-140.287 \pm 6.088$   $\chi^2/\text{NDF}: 494.6/3$

Left In:  $-106.838 \pm 4.330$   $\chi^2/\text{NDF}: 393.2/8$

$-66.986 \pm 3.797$   $\chi^2/\text{NDF}: 611.0/12$

$-118.073 \pm 3.528$   $\chi^2/\text{NDF}: 907.9/12$

# reg\_asym\_sam3\_diff\_bpm11X\_slope vs slug



Right In: 7.847 $\pm$ 1.132  $\chi^2$ /NDF: 6.0/3

Left Out: 7.222 $\pm$ 0.901  $\chi^2$ /NDF:33.6/8

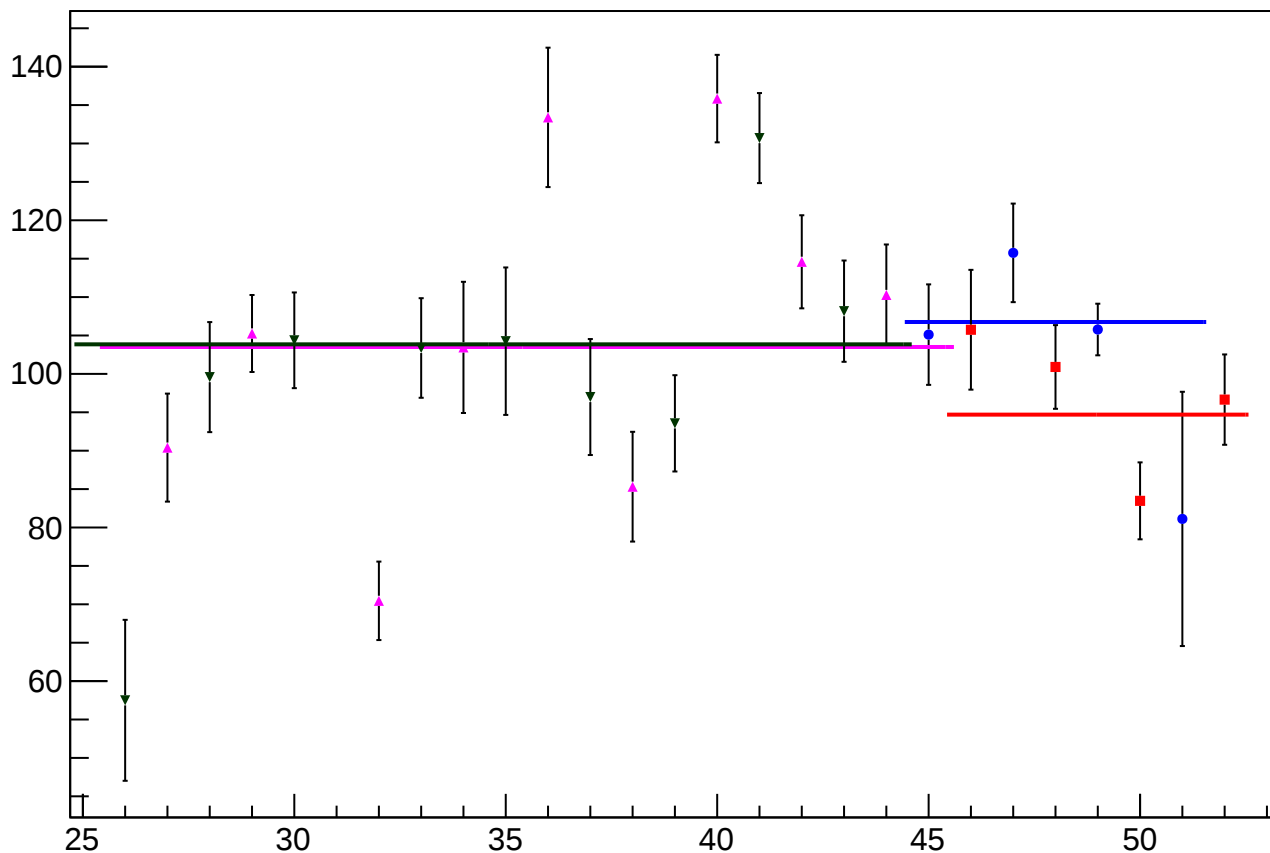
Right Out: 5.149 $\pm$ 1.086  $\chi^2$ /NDF: 0.7/3

Left In: 10.629 $\pm$ 0.898  $\chi^2$ /NDF:4.1/8

7.465 $\pm$ 0.705  $\chi^2$ /NDF: 39.8/12

8.406 $\pm$ 0.692  $\chi^2$ /NDF: 20.0/12

# reg\_asym\_sam4\_diff\_bpm4aX\_slope vs slug



Right In: 106.756 $\pm$ 2.674  $\chi^2$ /NDF: 4.5/3

Left Out: 103.848 $\pm$ 2.331  $\chi^2$ /NDF:44.9/8

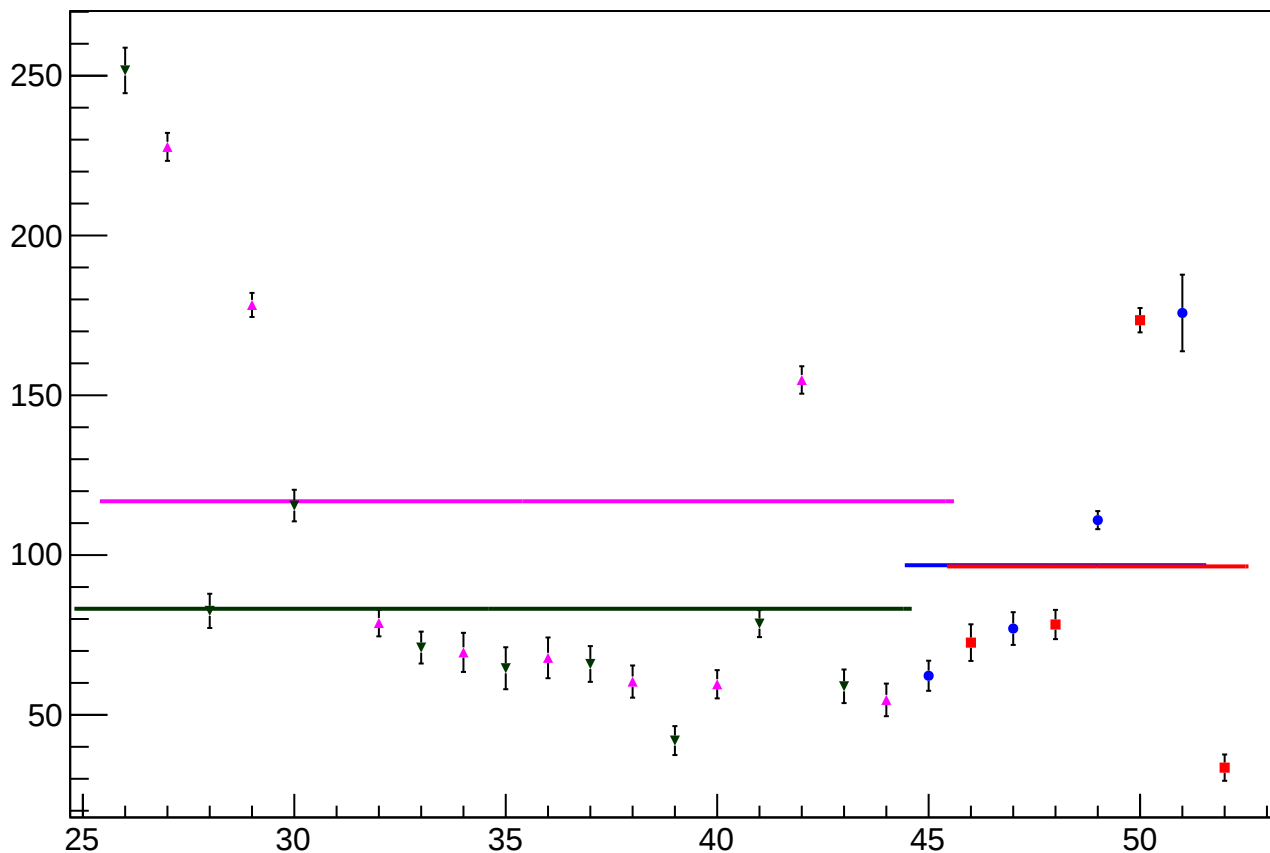
Right Out: 94.695 $\pm$ 2.900  $\chi^2$ /NDF: 8.4/3

Left In: 103.503 $\pm$ 2.108  $\chi^2$ /NDF:99.4/8

105.104 $\pm$ 1.757  $\chi^2$ /NDF: 50.1/12

100.458 $\pm$ 1.705  $\chi^2$ /NDF: 113.9/12

# reg\_asym\_sam4\_diff\_bpm4aY\_slope vs slug



Right In: 96.821 $\pm$ 2.155  $\chi^2$ /NDF: 137.2/3

Left Out: 83.201 $\pm$ 1.736  $\chi^2$ /NDF: 731.5/8

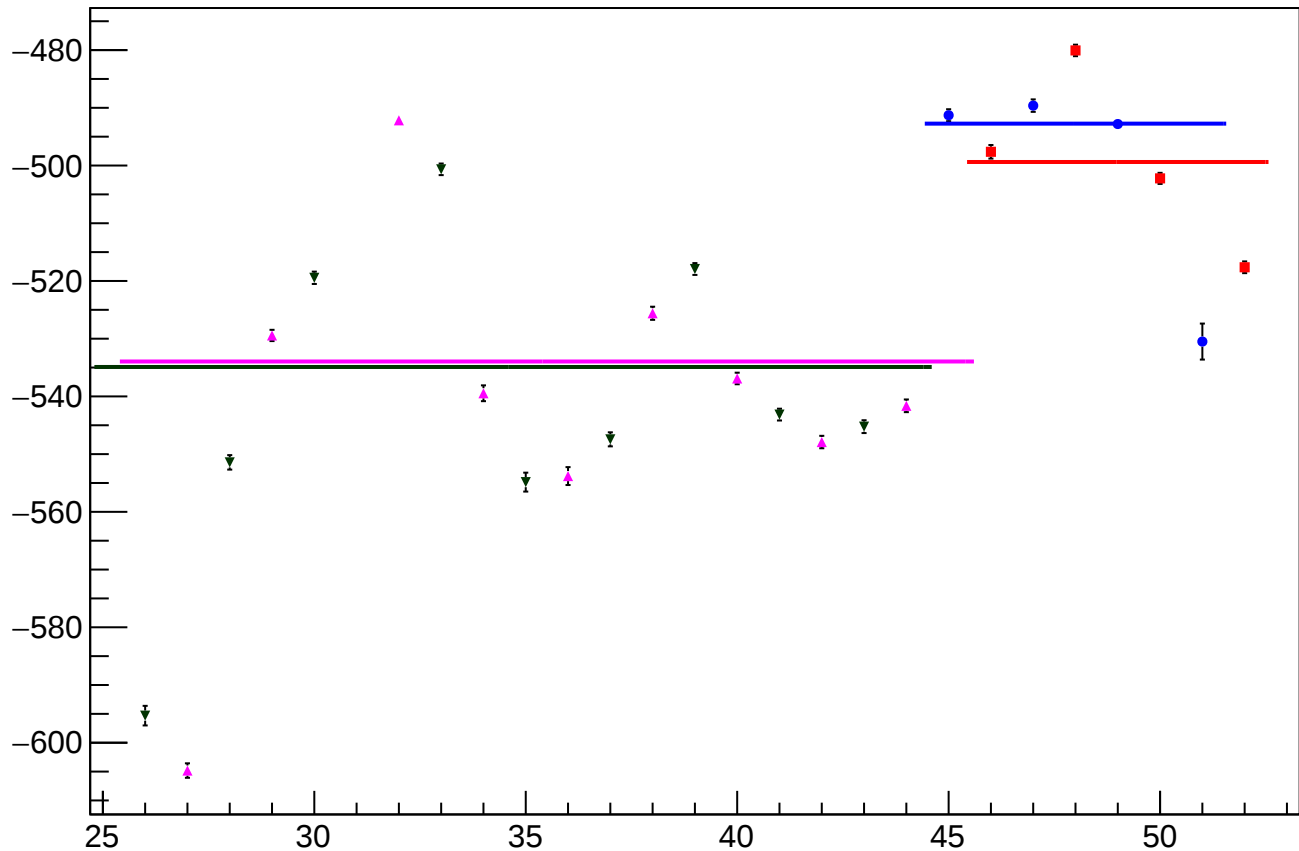
Right Out: 96.454 $\pm$ 2.202  $\chi^2$ /NDF: 676.2/3

Left In: 116.837 $\pm$ 1.553  $\chi^2$ /NDF: 1630.8/8

88.560 $\pm$ 1.352  $\chi^2$ /NDF: 893.0/12

110.070 $\pm$ 1.269  $\chi^2$ /NDF: 2364.2/12

# reg\_asym\_sam4\_diff\_bpm4eX\_slope vs slug



Right In: -492.742+/-0.501  $\chi^2/\text{NDF}$ : 156.9/3

Left Out: -534.901+/-0.389  $\chi^2/\text{NDF}$ : 3490.3/8

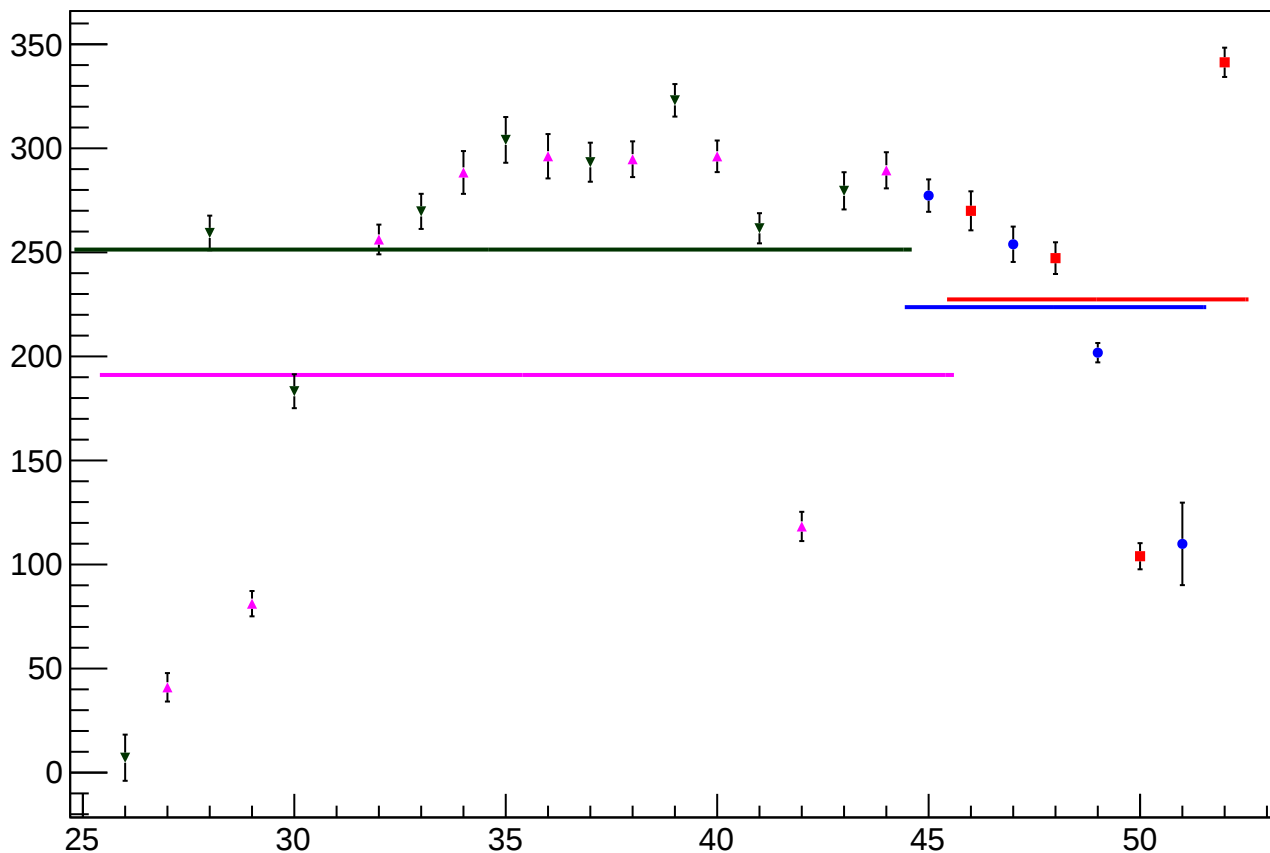
Right Out: -499.386+/-0.515  $\chi^2/\text{NDF}$ : 707.5/3

Left In: -533.950+/-0.361  $\chi^2/\text{NDF}$ : 6442.7/8

-519.059+/-0.307  $\chi^2/\text{NDF}$ : 8061.1/12

-522.551+/-0.296  $\chi^2/\text{NDF}$ : 10173.2/12

# reg\_asym\_sam4\_diff\_bpm4eY\_slope vs slug



Right In: 223.679 $\pm$ 3.556  $\chi^2$ /NDF: 115.1/3

Left Out: 251.350 $\pm$ 2.897  $\chi^2$ /NDF: 698.7/8

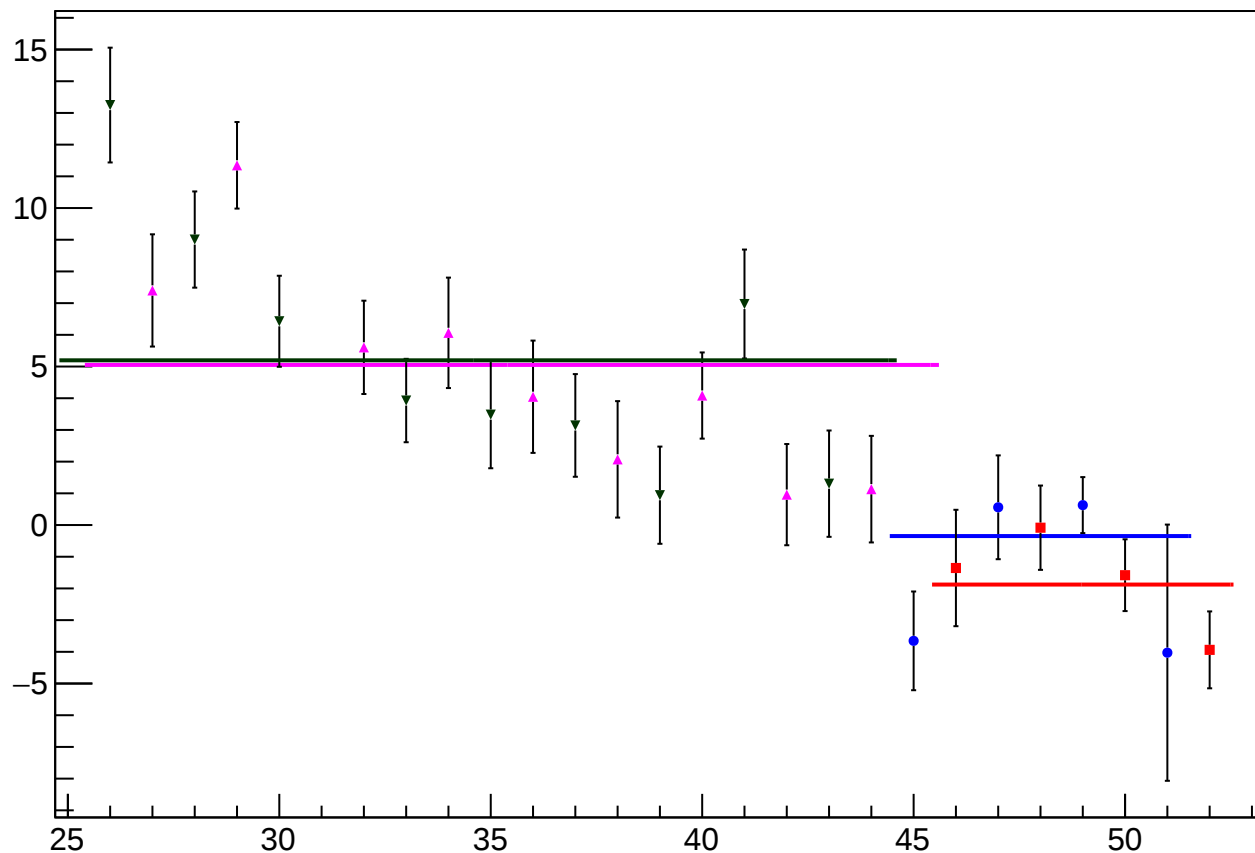
Right Out: 227.397 $\pm$ 3.674  $\chi^2$ /NDF: 675.1/3

Left In: 191.089 $\pm$ 2.577  $\chi^2$ /NDF: 1650.2/8

240.311 $\pm$ 2.246  $\chi^2$ /NDF: 850.2/12

203.060 $\pm$ 2.110  $\chi^2$ /NDF: 2390.7/12

# reg\_asym\_sam4\_diff\_bpm11X\_slope vs slug



Right In:  $-0.348 \pm 0.686$   $\chi^2/\text{NDF}$ : 6.9/3

Left Out:  $5.196 \pm 0.523$   $\chi^2/\text{NDF}$ : 44.5/8

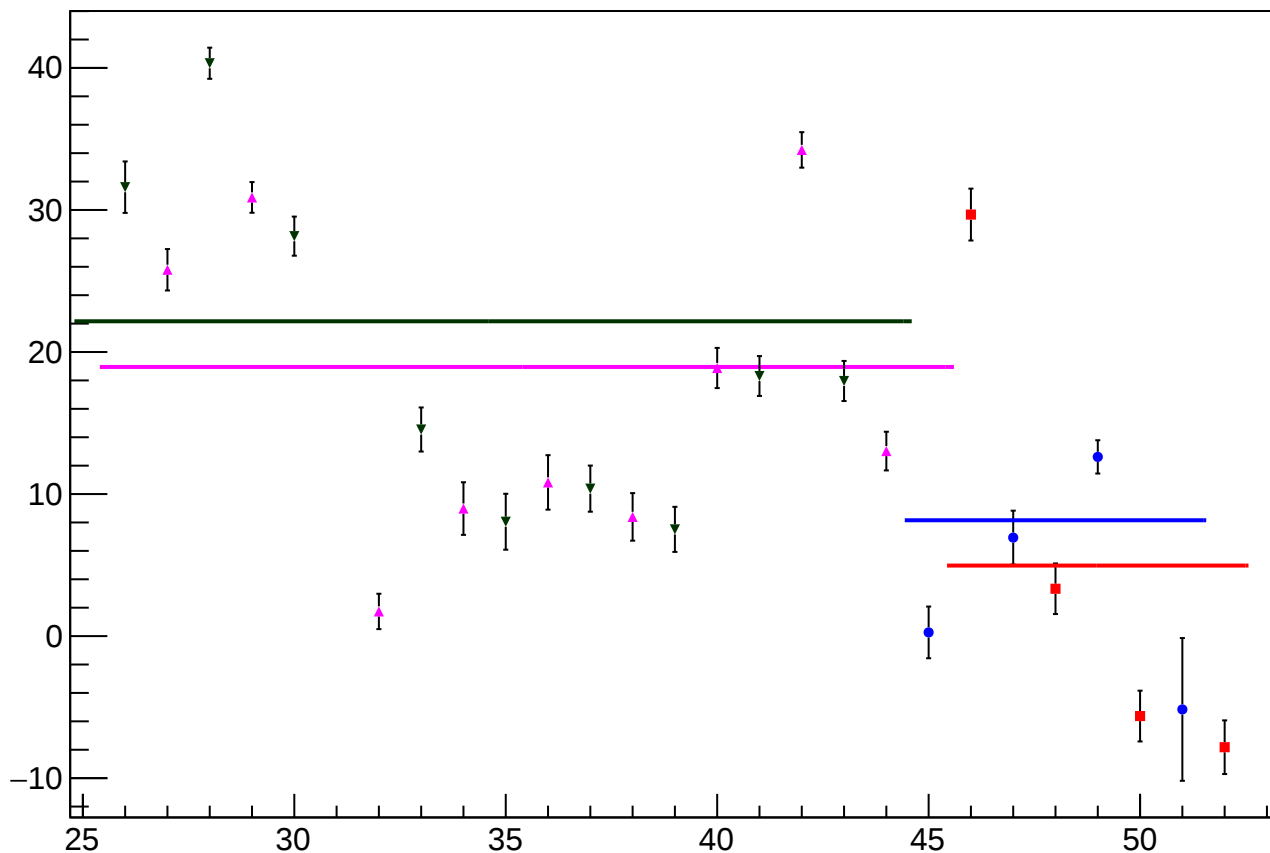
Right Out:  $-1.878 \pm 0.656$   $\chi^2/\text{NDF}$ : 4.9/3

Left In:  $5.051 \pm 0.531$   $\chi^2/\text{NDF}$ : 39.0/8

$3.155 \pm 0.416$   $\chi^2/\text{NDF}$ : 92.7/12

$2.310 \pm 0.413$   $\chi^2/\text{NDF}$ : 111.2/12

# reg\_asym\_sam5\_diff\_bpm4aX\_slope vs slug



Right In:  $8.155 \pm 0.861$   $\chi^2/\text{NDF}$ : 40.8/3

Left Out:  $22.164 \pm 0.492$   $\chi^2/\text{NDF}$ : 550.6/8

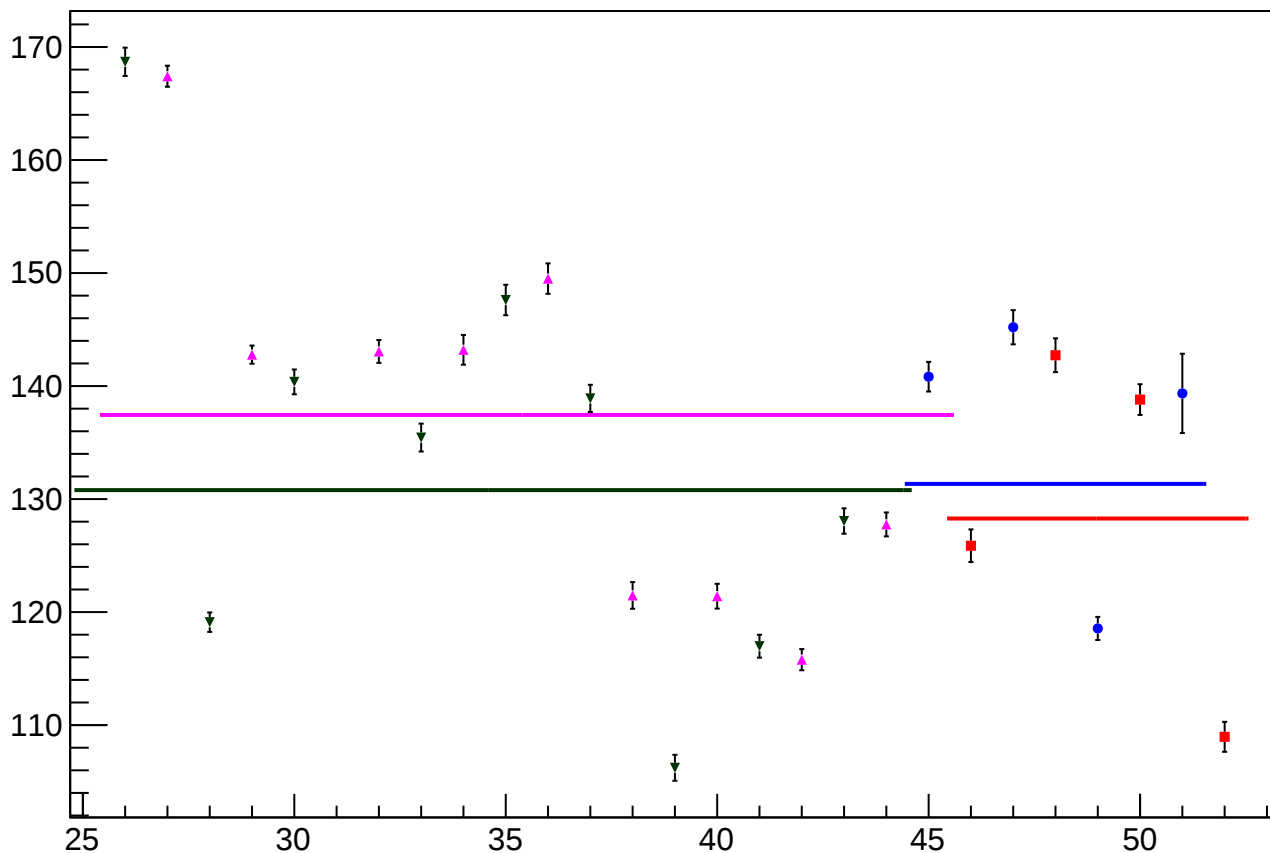
Right Out:  $4.967 \pm 0.910$   $\chi^2/\text{NDF}$ : 264.9/3

Left In:  $18.948 \pm 0.468$   $\chi^2/\text{NDF}$ : 590.1/8

$18.713 \pm 0.427$   $\chi^2/\text{NDF}$ : 790.7/12

$16.025 \pm 0.416$   $\chi^2/\text{NDF}$ : 1041.8/12

# reg\_asym\_sam5\_diff\_bpm4aY\_slope vs slug



Right In:  $131.344 \pm 0.697$   $\chi^2/\text{NDF}$ : 298.1/3

Left Out:  $130.793 \pm 0.372$   $\chi^2/\text{NDF}$ : 2039.0/8

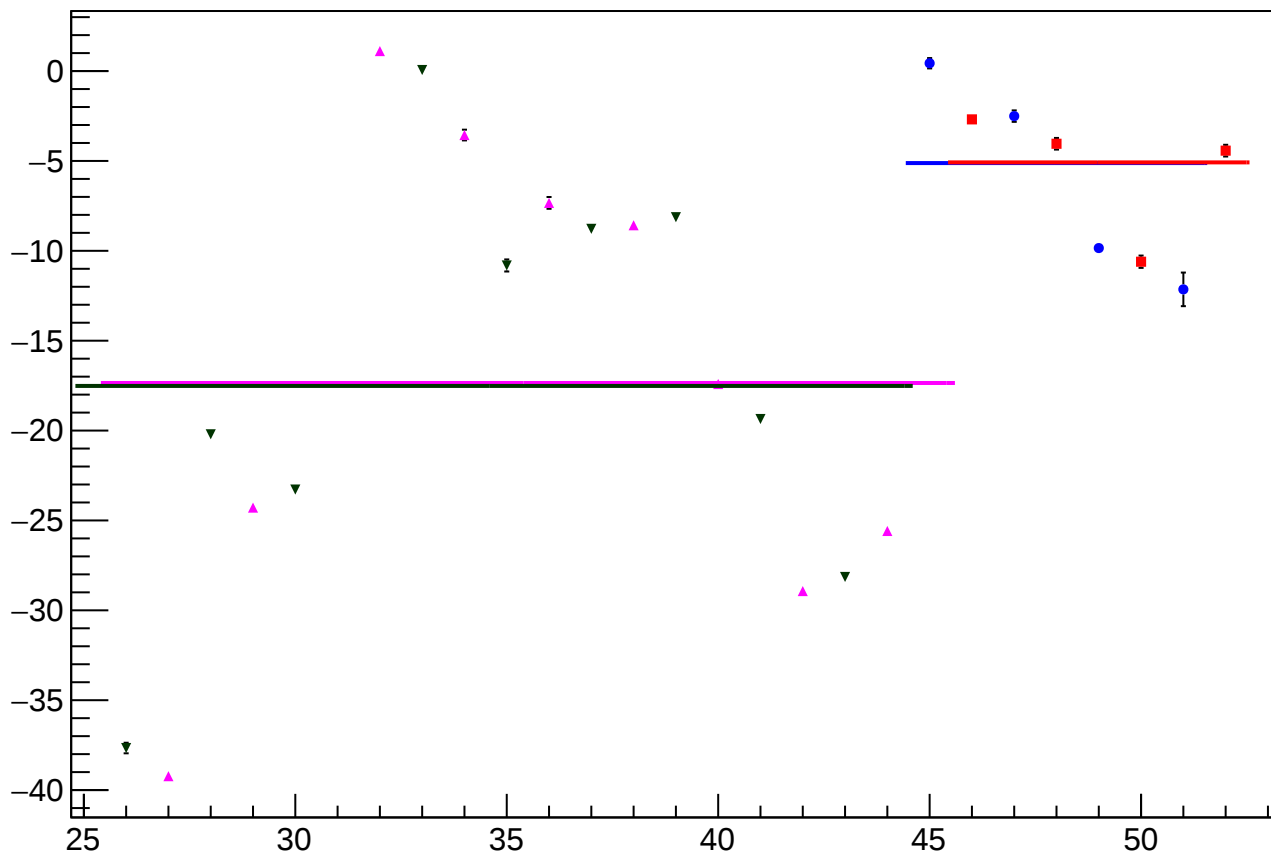
Right Out:  $128.280 \pm 0.701$   $\chi^2/\text{NDF}$ : 368.7/3

Left In:  $137.444 \pm 0.345$   $\chi^2/\text{NDF}$ : 2221.9/8

$130.915 \pm 0.328$   $\chi^2/\text{NDF}$ : 2337.5/12

$135.651 \pm 0.310$   $\chi^2/\text{NDF}$ : 2728.3/12

# reg\_asym\_sam5\_diff\_bpm4eX\_slope vs slug



Right In:  $-5.118 \pm 0.156$   $\chi^2/\text{NDF}$ : 894.5/3

Left Out:  $-17.516 \pm 0.083$   $\chi^2/\text{NDF}$ : 15652.4/8

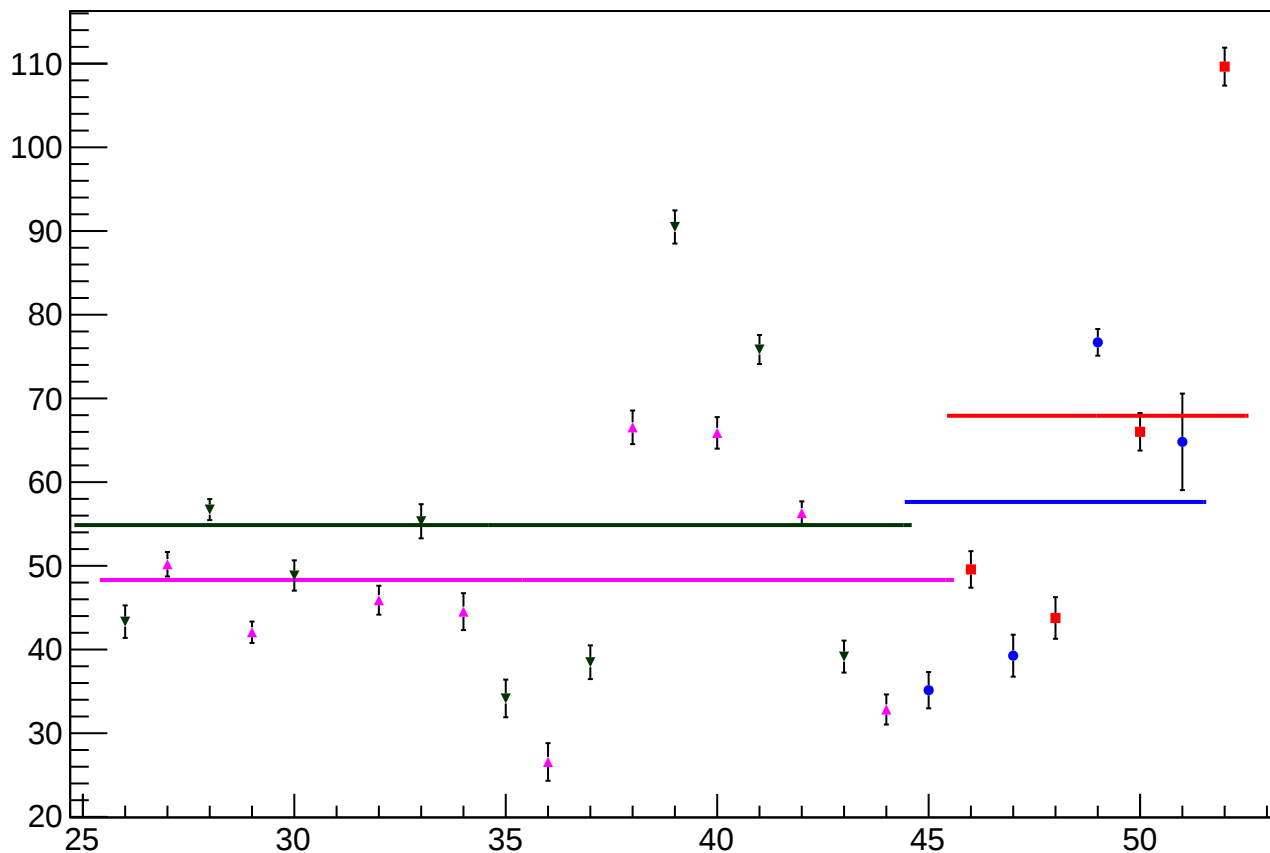
Right Out:  $-5.080 \pm 0.157$   $\chi^2/\text{NDF}$ : 348.7/3

Left In:  $-17.353 \pm 0.080$   $\chi^2/\text{NDF}$ : 25925.9/8

$-14.798 \pm 0.073$   $\chi^2/\text{NDF}$ : 21453.5/12

$-14.819 \pm 0.071$   $\chi^2/\text{NDF}$ : 31104.8/12

# reg\_asym\_sam5\_diff\_bpm4eY\_slope vs slug



Right In: 57.631+/-1.121  $\chi^2$ /NDF: 305.9/3

Left Out: 54.868+/-0.603  $\chi^2$ /NDF:735.8/8

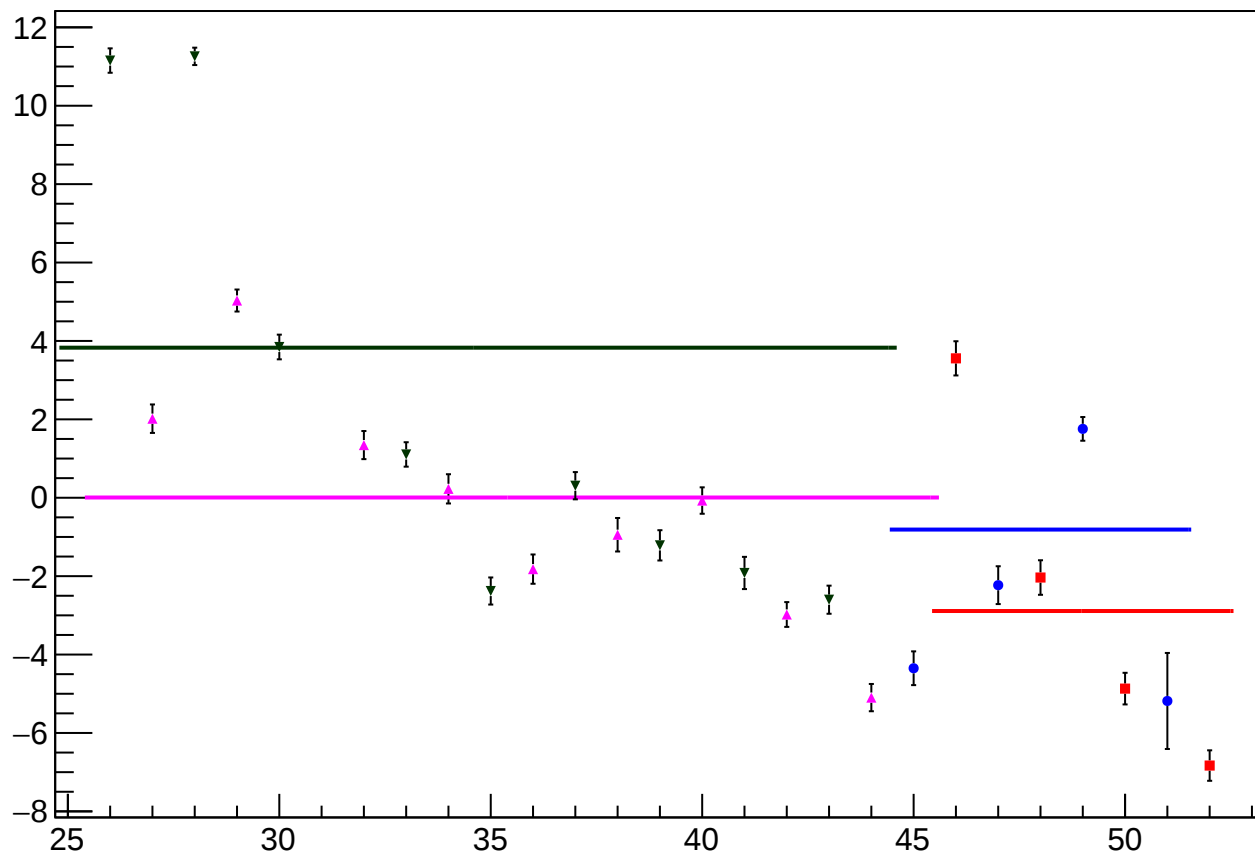
Right Out: 67.929+/-1.143  $\chi^2$ /NDF: 505.1/3

Left In: 48.311+/-0.562  $\chi^2$ /NDF:400.4/8

55.488+/-0.531  $\chi^2$ /NDF: 1046.4/12

52.125+/-0.504  $\chi^2$ /NDF: 1142.7/12

# reg\_asym\_sam5\_diff\_bpm11X\_slope vs slug



Right In:  $-0.812 \pm 0.217$   $\chi^2/\text{NDF}: 161.1/3$

Left Out:  $3.828 \pm 0.107$   $\chi^2/\text{NDF}: 2866.4/8$

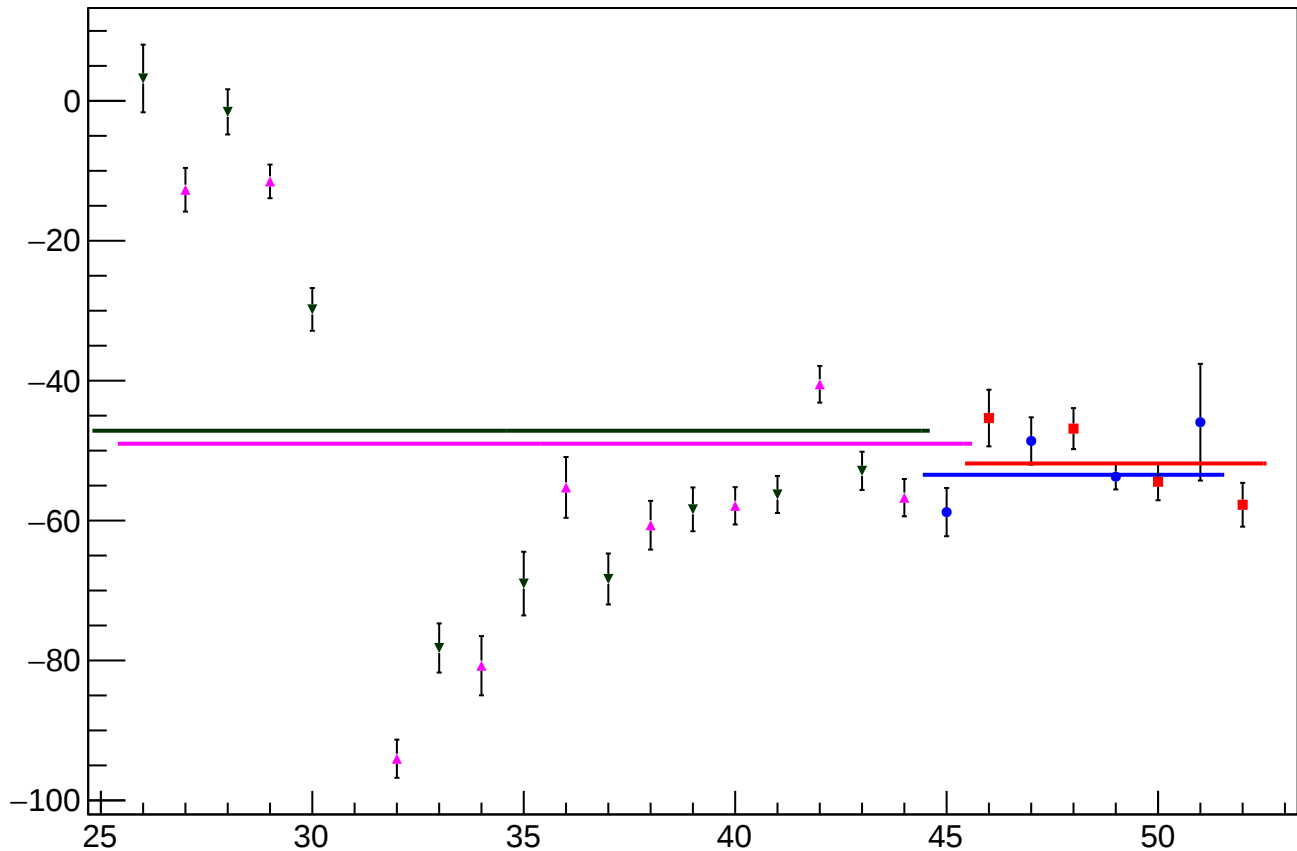
Right Out:  $-2.889 \pm 0.208$   $\chi^2/\text{NDF}: 349.0/3$

Left In:  $0.006 \pm 0.116$   $\chi^2/\text{NDF}: 698.4/8$

$2.925 \pm 0.096$   $\chi^2/\text{NDF}: 3396.7/12$

$-0.678 \pm 0.101$   $\chi^2/\text{NDF}: 1195.8/12$

# reg\_asym\_sam6\_diff\_bpm4aX\_slope vs slug



Right In: -53.453 +/- 1.434  $\chi^2/\text{NDF}$ : 5.3/3

Left Out: -47.154 +/- 1.099  $\chi^2/\text{NDF}$ : 504.0/8

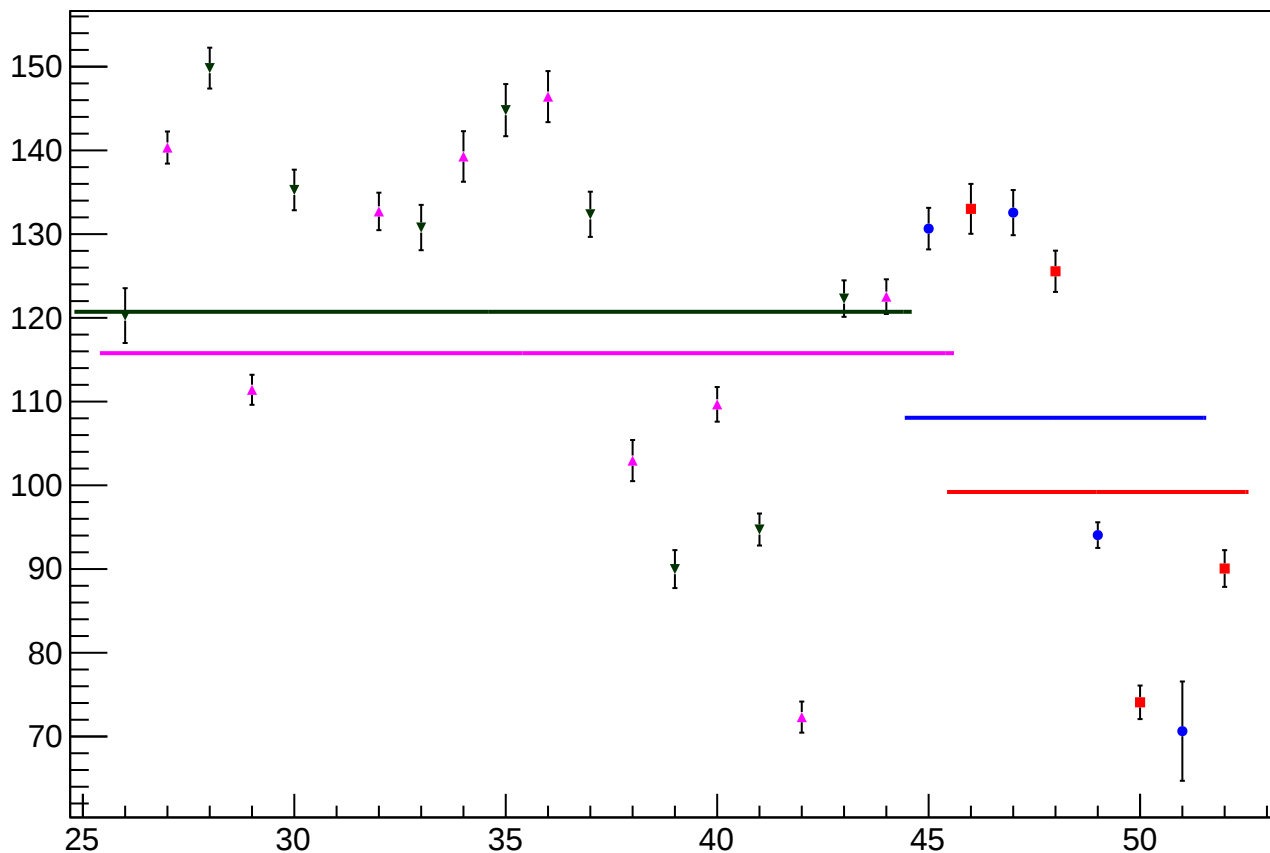
Right Out: -51.837 +/- 1.539  $\chi^2/\text{NDF}$ : 10.0/3

Left In: -49.010 +/- 0.986  $\chi^2/\text{NDF}$ : 751.0/8

-49.485 +/- 0.872  $\chi^2/\text{NDF}$ : 521.4/12

-49.833 +/- 0.830  $\chi^2/\text{NDF}$ : 763.4/12

# reg\_asym\_sam6\_diff\_bpm4aY\_slope vs slug



Right In: 108.065 +/- 1.151  $\chi^2/\text{NDF}$ : 288.9/3

Left Out: 120.724 +/- 0.820  $\chi^2/\text{NDF}$ : 639.8/8

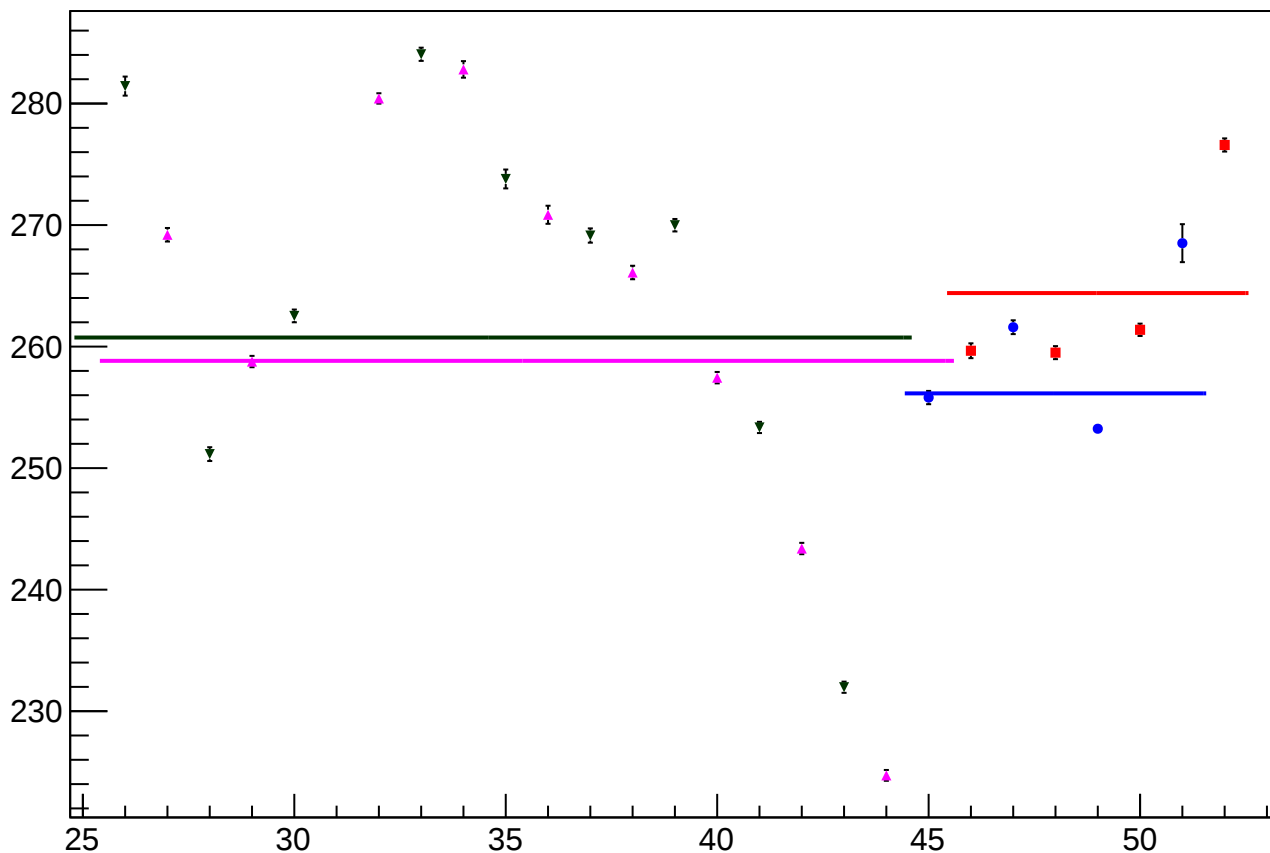
Right Out: 99.204 +/- 1.167  $\chi^2/\text{NDF}$ : 417.9/3

Left In: 115.784 +/- 0.721  $\chi^2/\text{NDF}$ : 983.2/8

116.464 +/- 0.668  $\chi^2/\text{NDF}$ : 1009.0/12

111.200 +/- 0.614  $\chi^2/\text{NDF}$ : 1547.1/12

# reg\_asym\_sam6\_diff\_bpm4eX\_slope vs slug



Right In: 256.150 $\pm$ 0.267  $\chi^2$ /NDF: 215.0/3

Left Out: 260.747 $\pm$ 0.184  $\chi^2$ /NDF: 7794.0/8

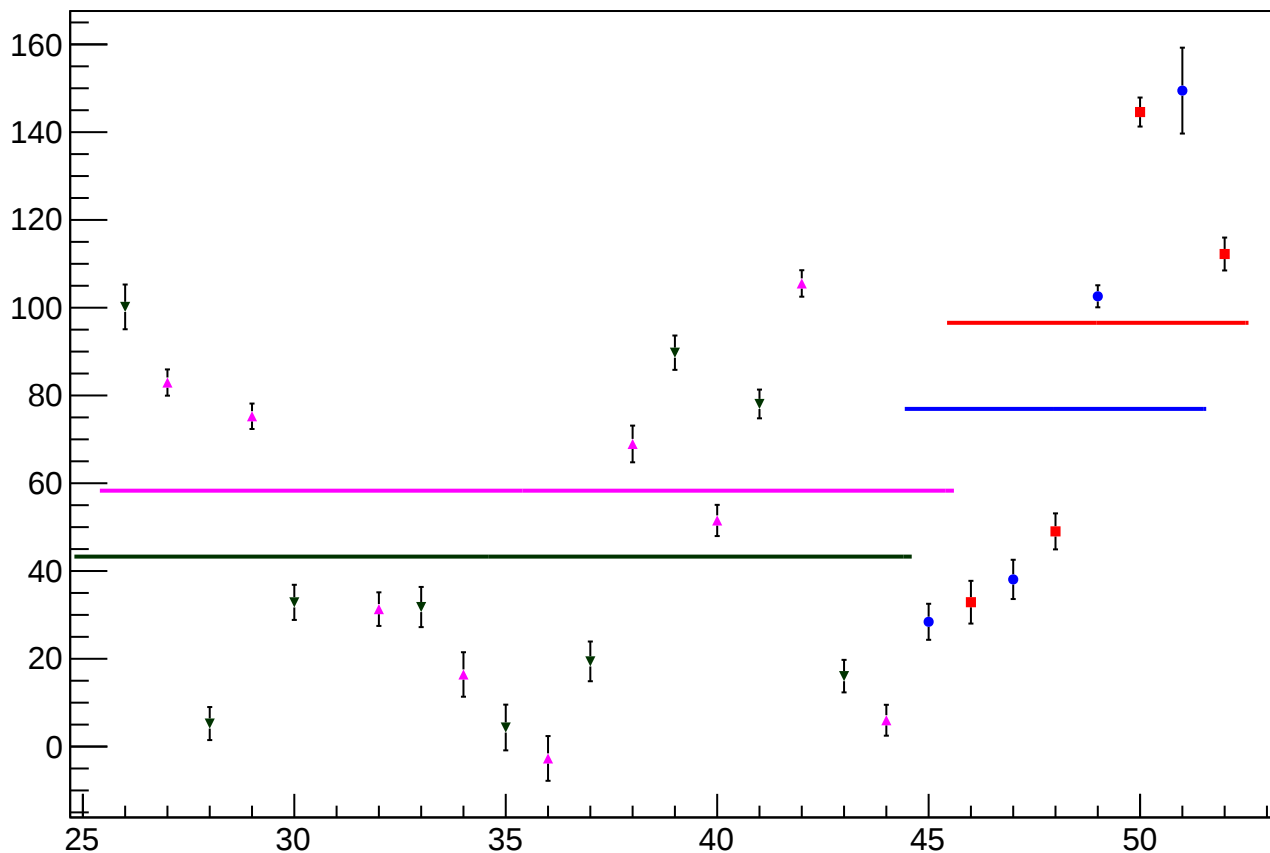
Right Out: 264.405 $\pm$ 0.273  $\chi^2$ /NDF: 684.9/3

Left In: 258.828 $\pm$ 0.170  $\chi^2$ /NDF: 11545.2/8

259.268 $\pm$ 0.152  $\chi^2$ /NDF: 8209.4/12

260.387 $\pm$ 0.144  $\chi^2$ /NDF: 12531.2/12

# reg\_asym\_sam6\_diff\_bpm4eY\_slope vs slug



Right In: 76.941+/-1.896  $\chi^2/\text{NDF}$ : 374.2/3

Left Out: 43.284+/-1.366  $\chi^2/\text{NDF}$ : 631.4/8

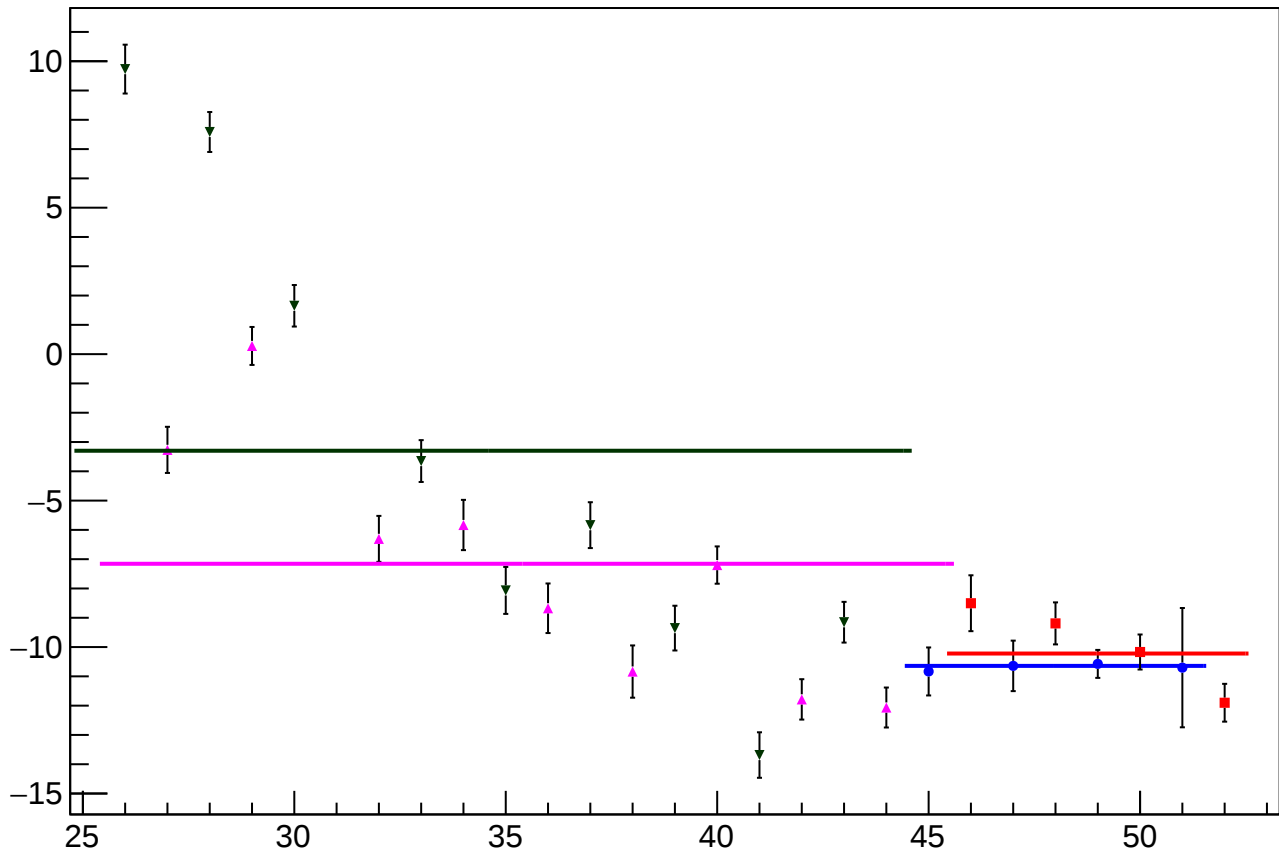
Right Out: 96.556+/-1.945  $\chi^2/\text{NDF}$ : 533.8/3

Left In: 58.307+/-1.192  $\chi^2/\text{NDF}$ : 839.3/8

54.777+/-1.108  $\chi^2/\text{NDF}$ : 1213.0/12

68.751+/-1.016  $\chi^2/\text{NDF}$ : 1654.2/12

# reg\_asym\_sam6\_diff\_bpm11X\_slope vs slug



Right In:  $-10.643 \pm 0.366$   $\chi^2/\text{NDF}$ : 0.1/3

Left Out:  $-3.298 \pm 0.249$   $\chi^2/\text{NDF}$ : 906.1/8

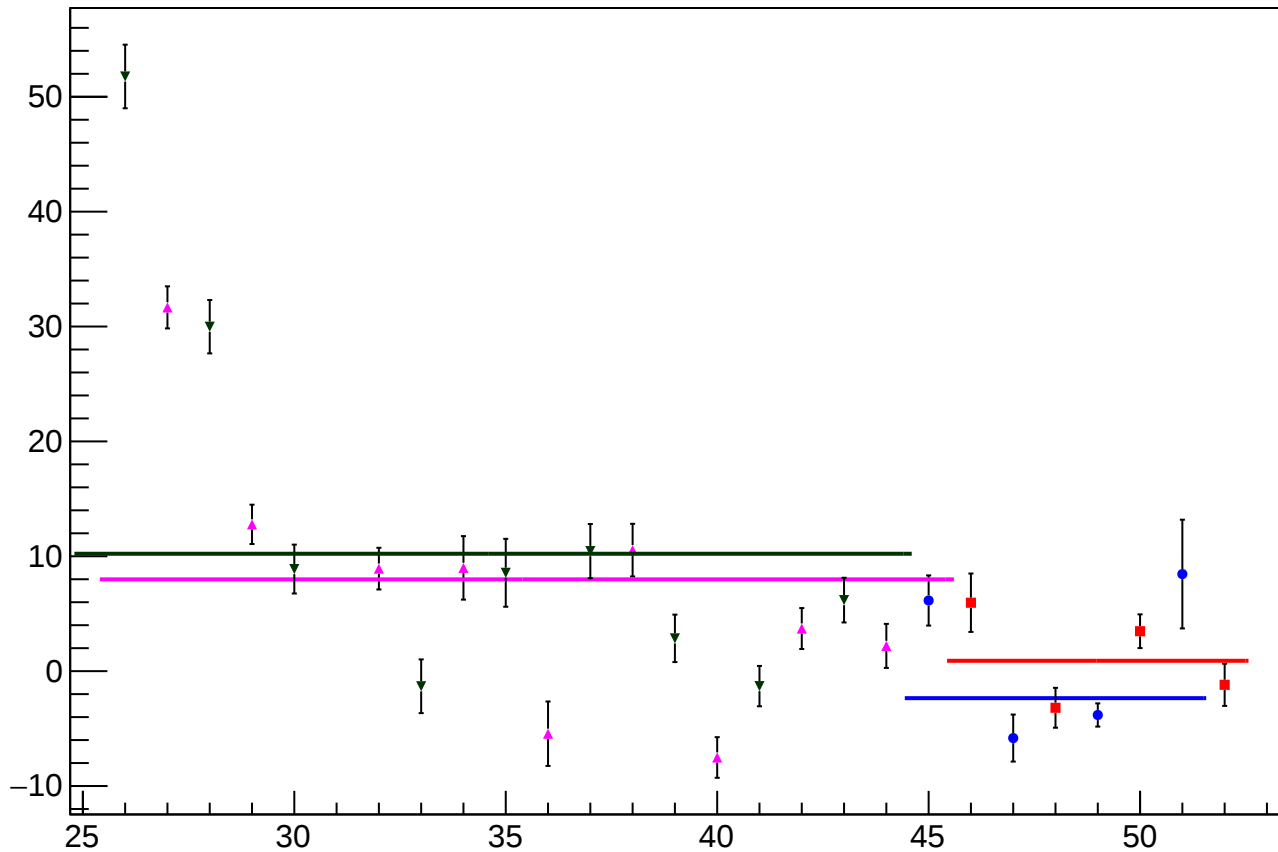
Right Out:  $-10.221 \pm 0.348$   $\chi^2/\text{NDF}$ : 12.1/3

Left In:  $-7.157 \pm 0.247$   $\chi^2/\text{NDF}$ : 276.7/8

$-5.618 \pm 0.206$   $\chi^2/\text{NDF}$ : 1181.6/12

$-8.184 \pm 0.202$   $\chi^2/\text{NDF}$ : 340.2/12

# reg\_asym\_sam7\_diff\_bpm4aX\_slope vs slug



Right In:  $-2.352 \pm 0.824$   $\chi^2/\text{NDF}: 25.3/3$

Left Out:  $10.220 \pm 0.738$   $\chi^2/\text{NDF}: 382.7/8$

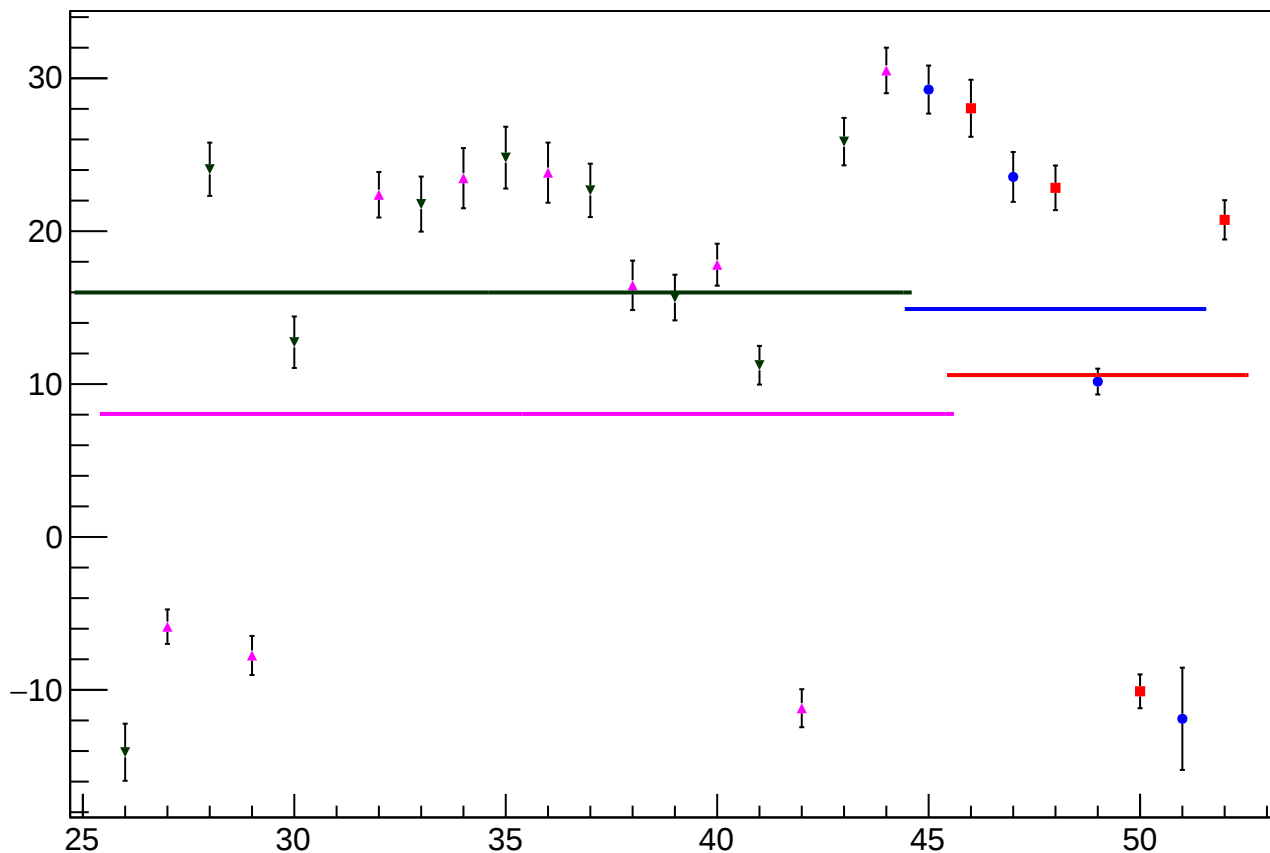
Right Out:  $0.902 \pm 0.896$   $\chi^2/\text{NDF}: 13.9/3$

Left In:  $7.990 \pm 0.660$   $\chi^2/\text{NDF}: 291.3/8$

$4.627 \pm 0.550$   $\chi^2/\text{NDF}: 537.2/12$

$5.497 \pm 0.531$   $\chi^2/\text{NDF}: 345.8/12$

# reg\_asym\_sam7\_diff\_bpm4aY\_slope vs slug



Right In: 14.910 +/- 0.664  $\chi^2/\text{NDF}$ : 207.2/3

Left Out: 15.992 +/- 0.547  $\chi^2/\text{NDF}$ : 383.0/8

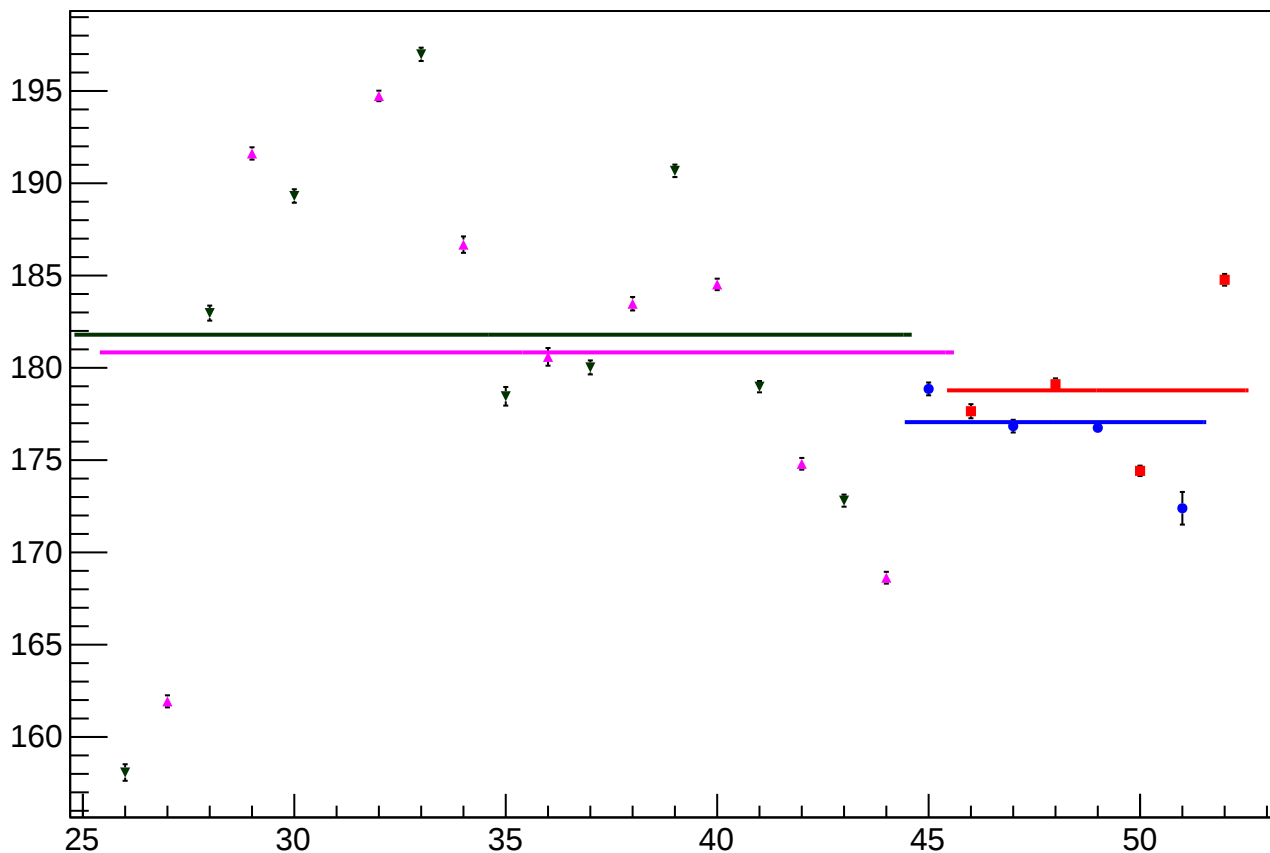
Right Out: 10.590 +/- 0.677  $\chi^2/\text{NDF}$ : 570.3/3

Left In: 8.048 +/- 0.478  $\chi^2/\text{NDF}$ : 1067.9/8

15.554 +/- 0.422  $\chi^2/\text{NDF}$ : 591.8/12

8.893 +/- 0.391  $\chi^2/\text{NDF}$ : 1647.6/12

# reg\_asym\_sam7\_diff\_bpm4eX\_slope vs slug



Right In: 177.058 $\pm$ 0.156  $\chi^2$ /NDF: 57.2/3

Left Out: 181.795 $\pm$ 0.123  $\chi^2$ /NDF: 6577.2/8

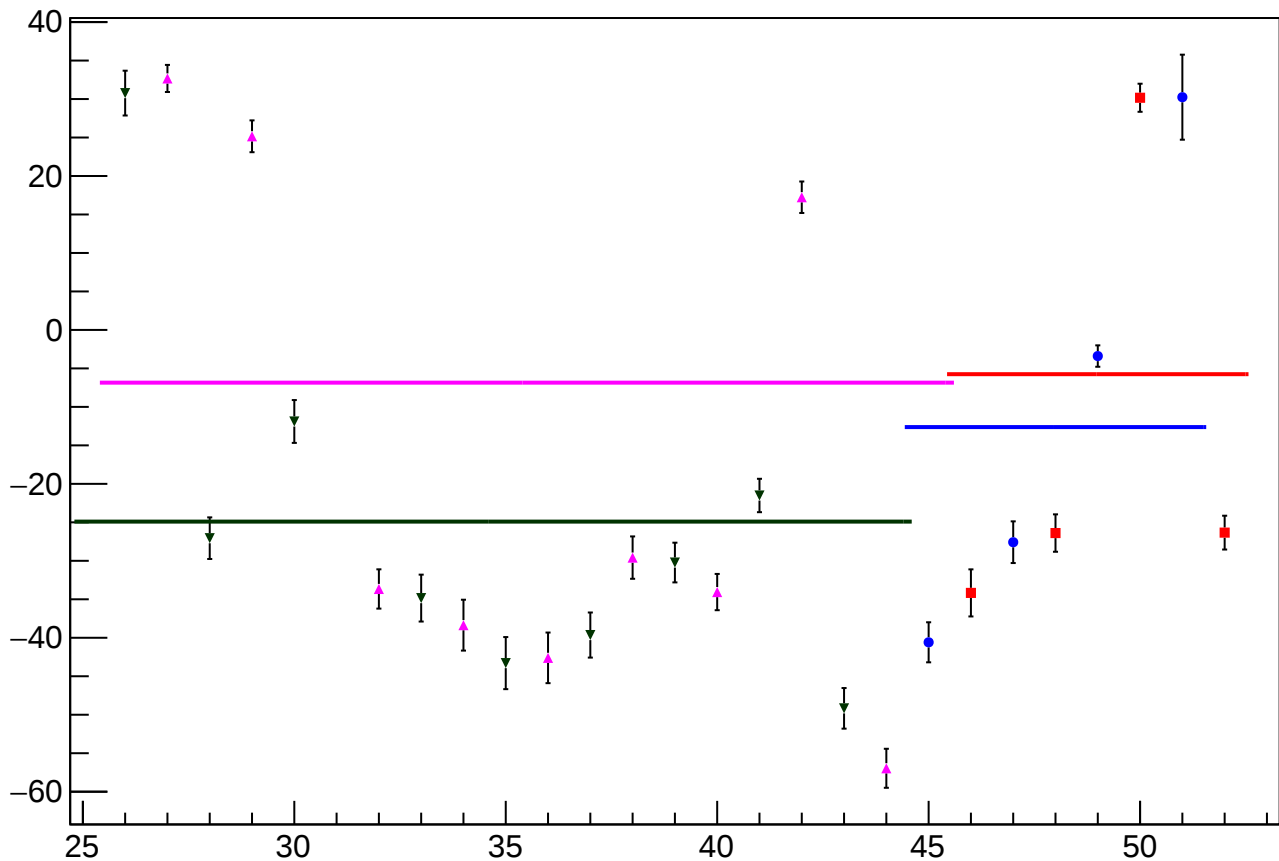
Right Out: 178.779 $\pm$ 0.160  $\chi^2$ /NDF: 603.8/3

Left In: 180.835 $\pm$ 0.114  $\chi^2$ /NDF: 8962.2/8

179.970 $\pm$ 0.097  $\chi^2$ /NDF: 7201.9/12

180.145 $\pm$ 0.093  $\chi^2$ /NDF: 9676.1/12

# reg\_asym\_sam7\_diff\_bpm4eY\_slope vs slug



Right In:  $-12.624 \pm 1.096$   $\chi^2/\text{NDF}$ : 250.2/3

Left Out:  $-24.905 \pm 0.912$   $\chi^2/\text{NDF}$ : 545.2/8

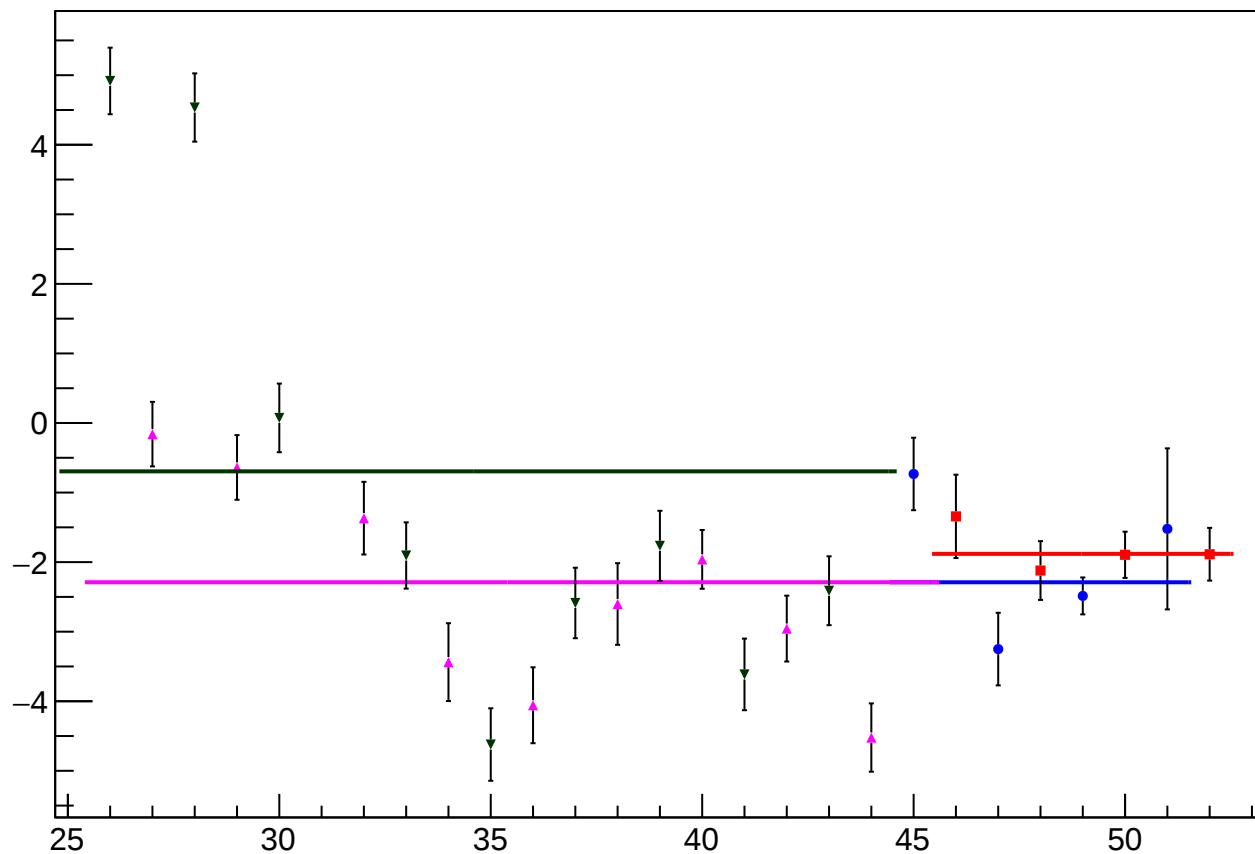
Right Out:  $-5.751 \pm 1.130$   $\chi^2/\text{NDF}$ : 633.9/3

Left In:  $-6.851 \pm 0.790$   $\chi^2/\text{NDF}$ : 1794.2/8

$-19.877 \pm 0.701$   $\chi^2/\text{NDF}$ : 869.5/12

$-6.489 \pm 0.648$   $\chi^2/\text{NDF}$ : 2428.8/12

# reg\_asym\_sam7\_diff\_bpm11X\_slope vs slug



Right In:  $-2.290 \pm 0.212$   $\chi^2/\text{NDF}: 13.3/3$

Left Out:  $-0.695 \pm 0.166$   $\chi^2/\text{NDF}: 379.5/8$

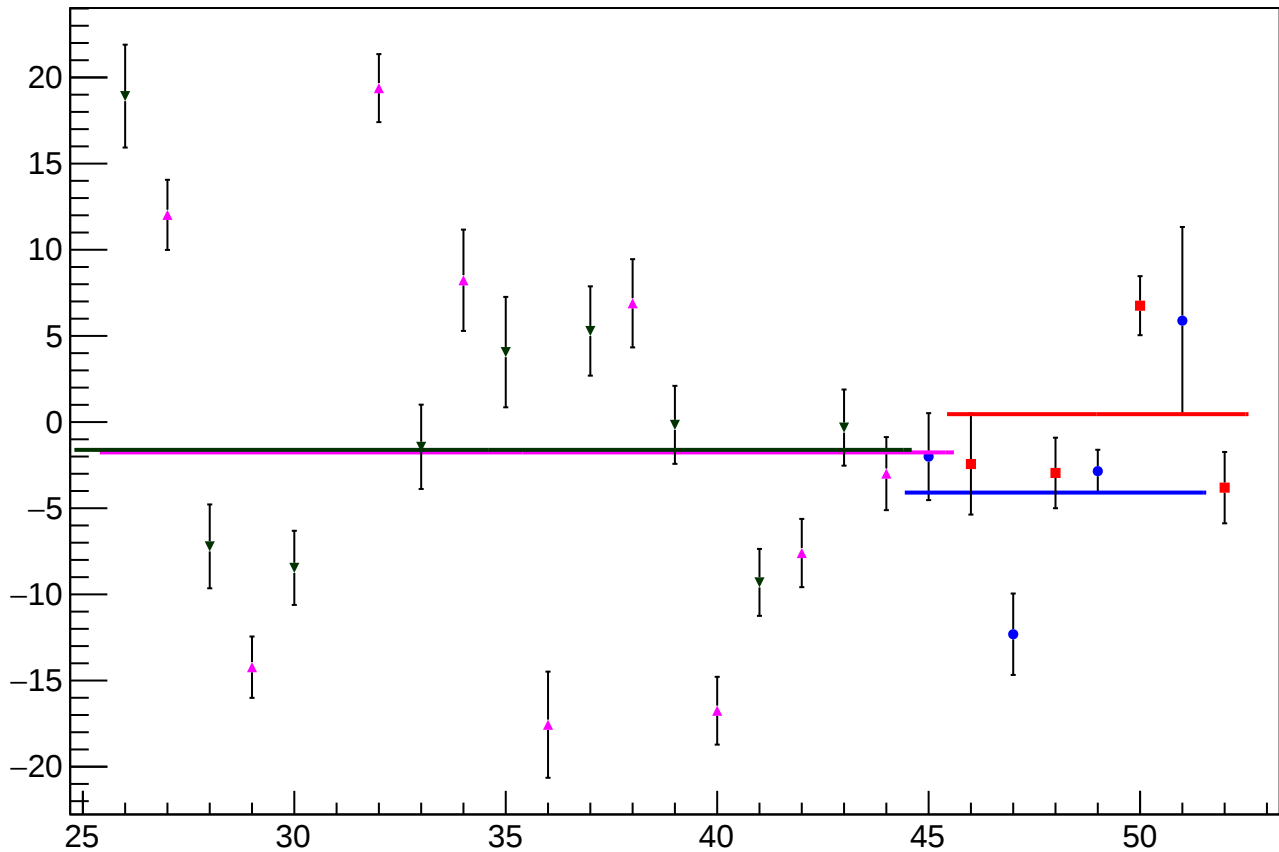
Right Out:  $-1.881 \pm 0.202$   $\chi^2/\text{NDF}: 1.1/3$

Left In:  $-2.289 \pm 0.165$   $\chi^2/\text{NDF}: 75.1/8$

$-1.301 \pm 0.131$   $\chi^2/\text{NDF}: 427.9/12$

$-2.126 \pm 0.128$   $\chi^2/\text{NDF}: 78.6/12$

# reg\_asym\_sam8\_diff\_bpm4aX\_slope vs slug



Right In:  $-4.092 \pm 0.990$   $\chi^2/\text{NDF}: 17.2/3$

Left Out:  $-1.613 \pm 0.797$   $\chi^2/\text{NDF}: 89.4/8$

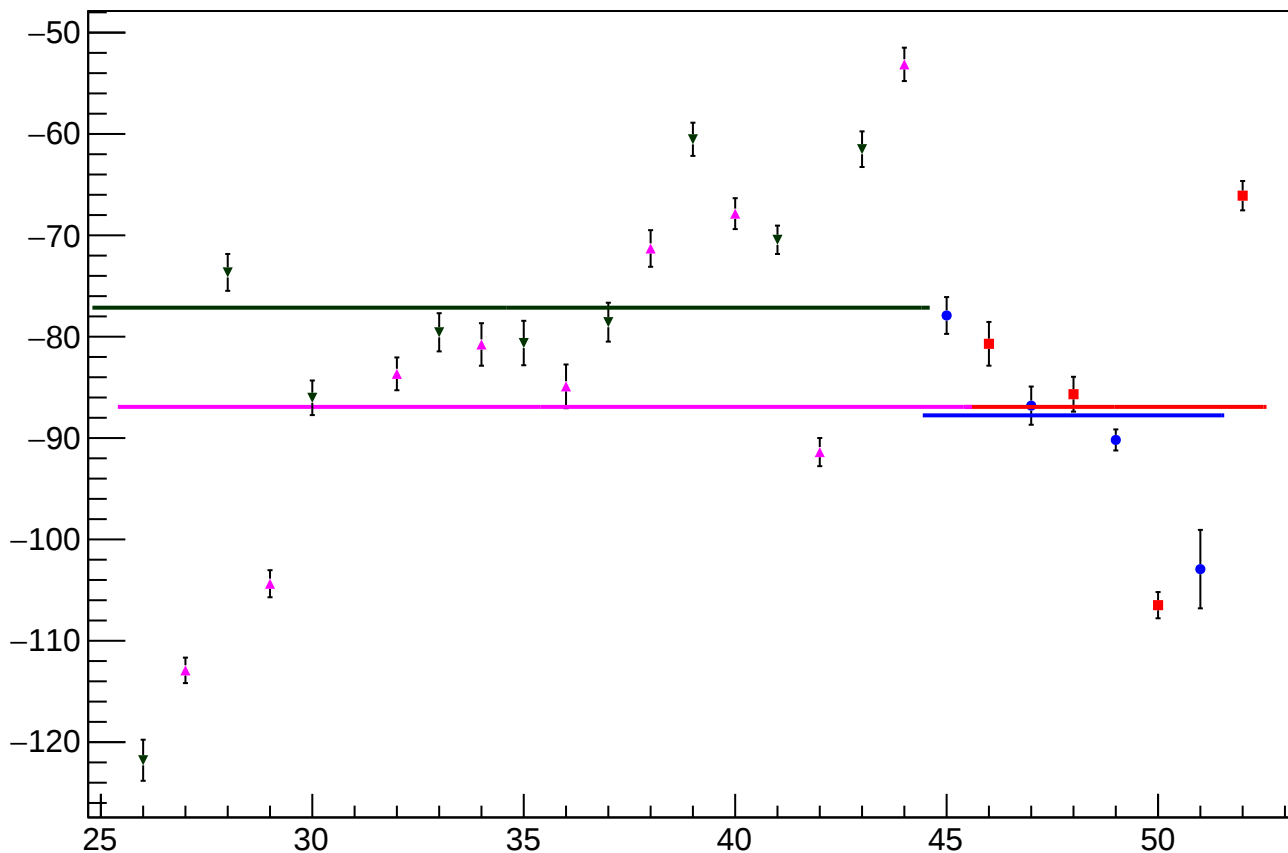
Right Out:  $0.459 \pm 1.038$   $\chi^2/\text{NDF}: 21.5/3$

Left In:  $-1.762 \pm 0.721$   $\chi^2/\text{NDF}: 326.0/8$

$-2.587 \pm 0.621$   $\chi^2/\text{NDF}: 110.3/12$

$-1.038 \pm 0.592$   $\chi^2/\text{NDF}: 350.6/12$

# reg\_asym\_sam8\_diff\_bpm4aY\_slope vs slug



Right In: -87.761+/-0.796  $\chi^2/\text{NDF}$ : 50.5/3

Left Out: -77.138+/-0.592  $\chi^2/\text{NDF}$ : 725.4/8

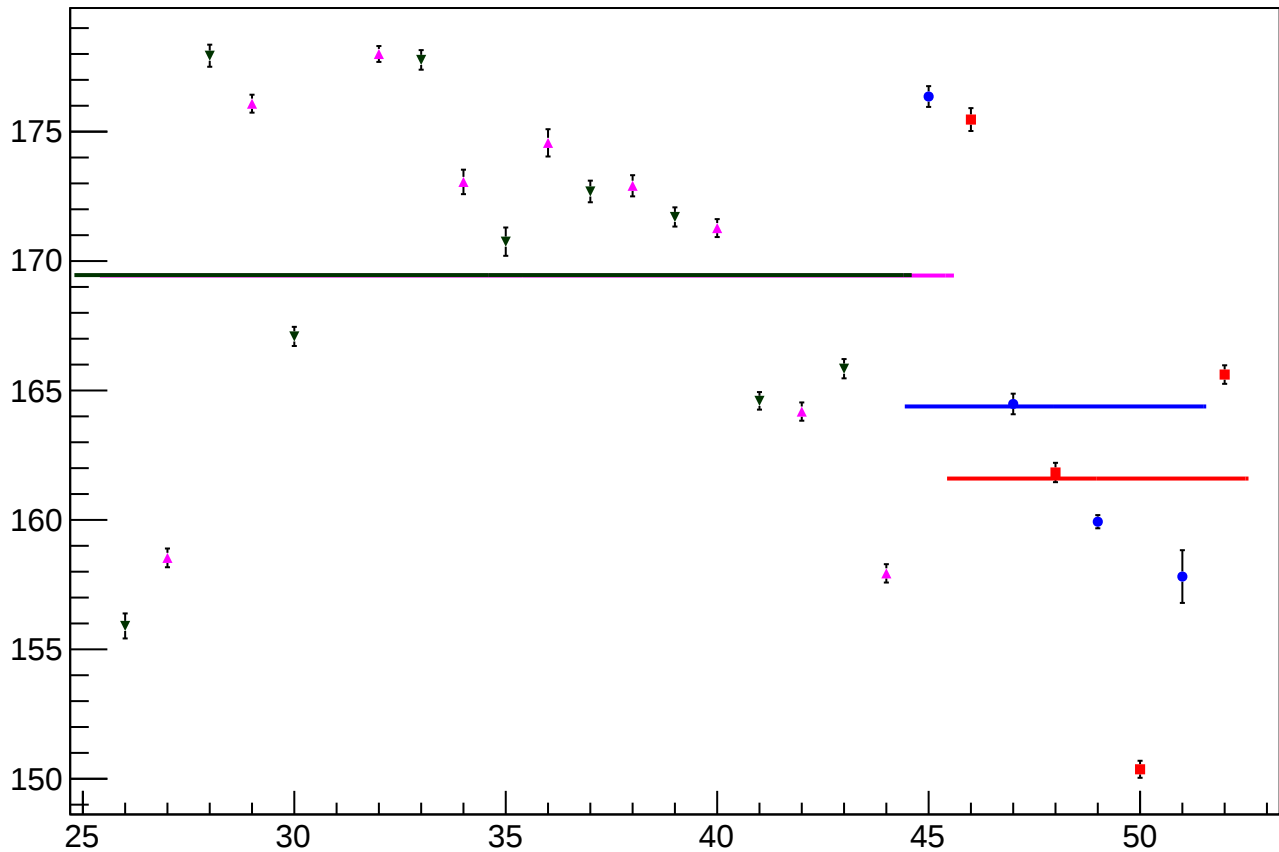
Right Out: -86.925+/-0.784  $\chi^2/\text{NDF}$ : 444.2/3

Left In: -86.925+/-0.524  $\chi^2/\text{NDF}$ : 1273.0/8

-80.917+/-0.475  $\chi^2/\text{NDF}$ : 890.5/12

-86.925+/-0.436  $\chi^2/\text{NDF}$ : 1717.2/12

# reg\_asym\_sam8\_diff\_bpm4eX\_slope vs slug



Right In: 164.383+/-0.186  $\chi^2/\text{NDF}$ : 1235.6/3

Left Out: 169.458+/-0.133  $\chi^2/\text{NDF}$ : 2105.9/8

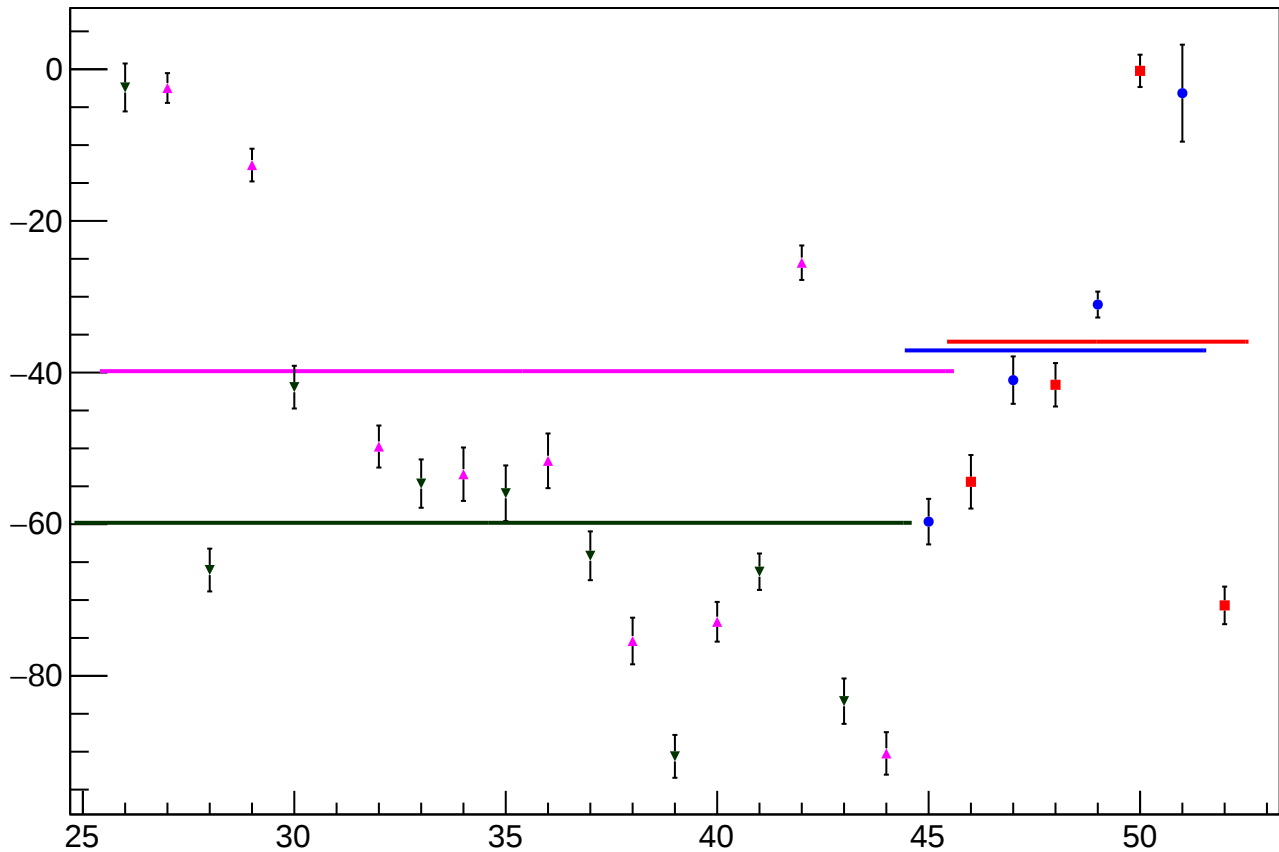
Right Out: 161.598+/-0.185  $\chi^2/\text{NDF}$ : 2275.8/3

Left In: 169.441+/-0.124  $\chi^2/\text{NDF}$ : 3580.5/8

167.738+/-0.108  $\chi^2/\text{NDF}$ : 3833.2/12

167.002+/-0.103  $\chi^2/\text{NDF}$ : 7098.5/12

# reg\_asym\_sam8\_diff\_bpm4eY\_slope vs slug



Right In: -37.078+/-1.313  $\chi^2/\text{NDF}$ : 98.7/3

Left Out: -59.812+/-0.985  $\chi^2/\text{NDF}$ : 568.6/8

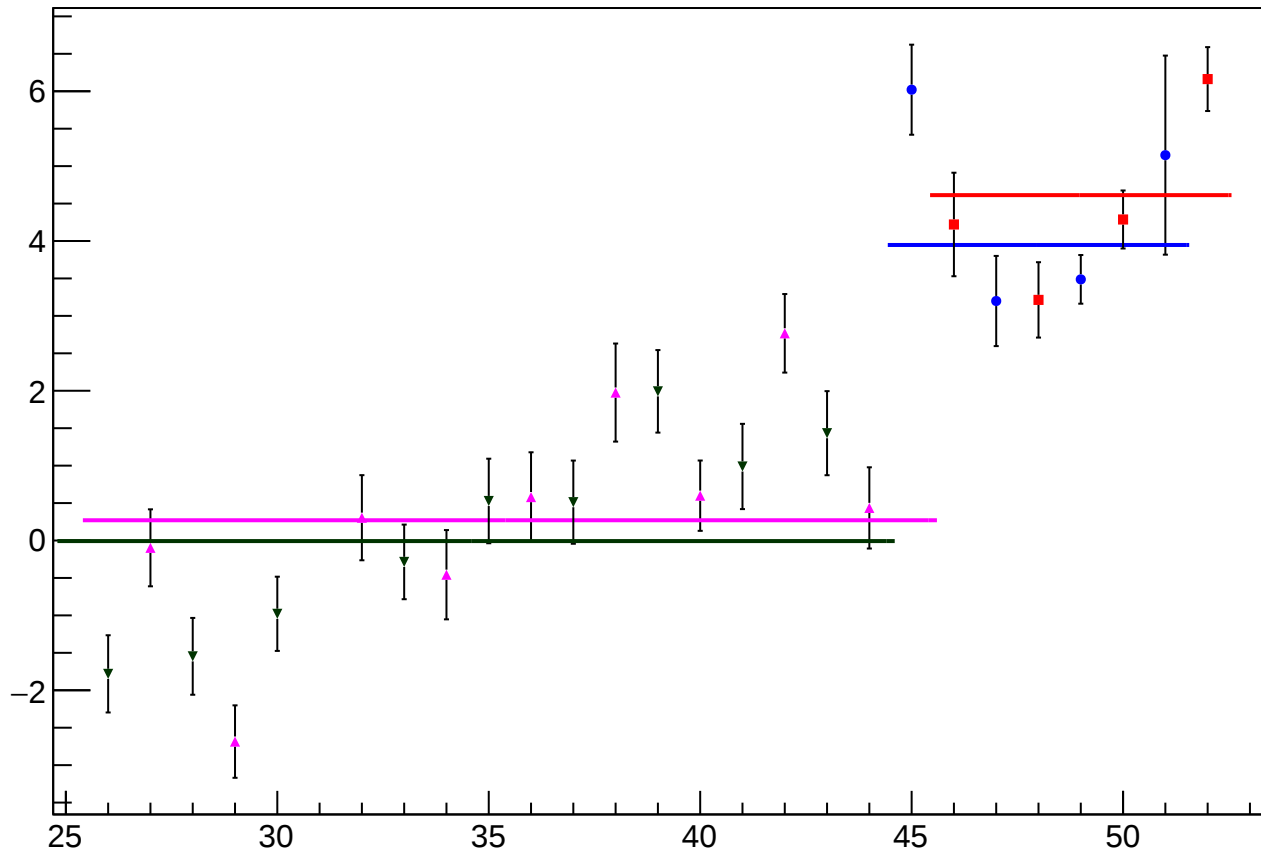
Right Out: -35.926+/-1.308  $\chi^2/\text{NDF}$ : 508.6/3

Left In: -39.815+/-0.866  $\chi^2/\text{NDF}$ : 1214.9/8

-51.632+/-0.788  $\chi^2/\text{NDF}$ : 859.1/12

-38.629+/-0.722  $\chi^2/\text{NDF}$ : 1729.6/12

# reg\_asym\_sam8\_diff\_bpm11X\_slope vs slug



Right In:  $3.947 \pm 0.254$   $\chi^2/\text{NDF}: 16.2/3$

Left Out:  $-0.008 \pm 0.178$   $\chi^2/\text{NDF}: 49.6/8$

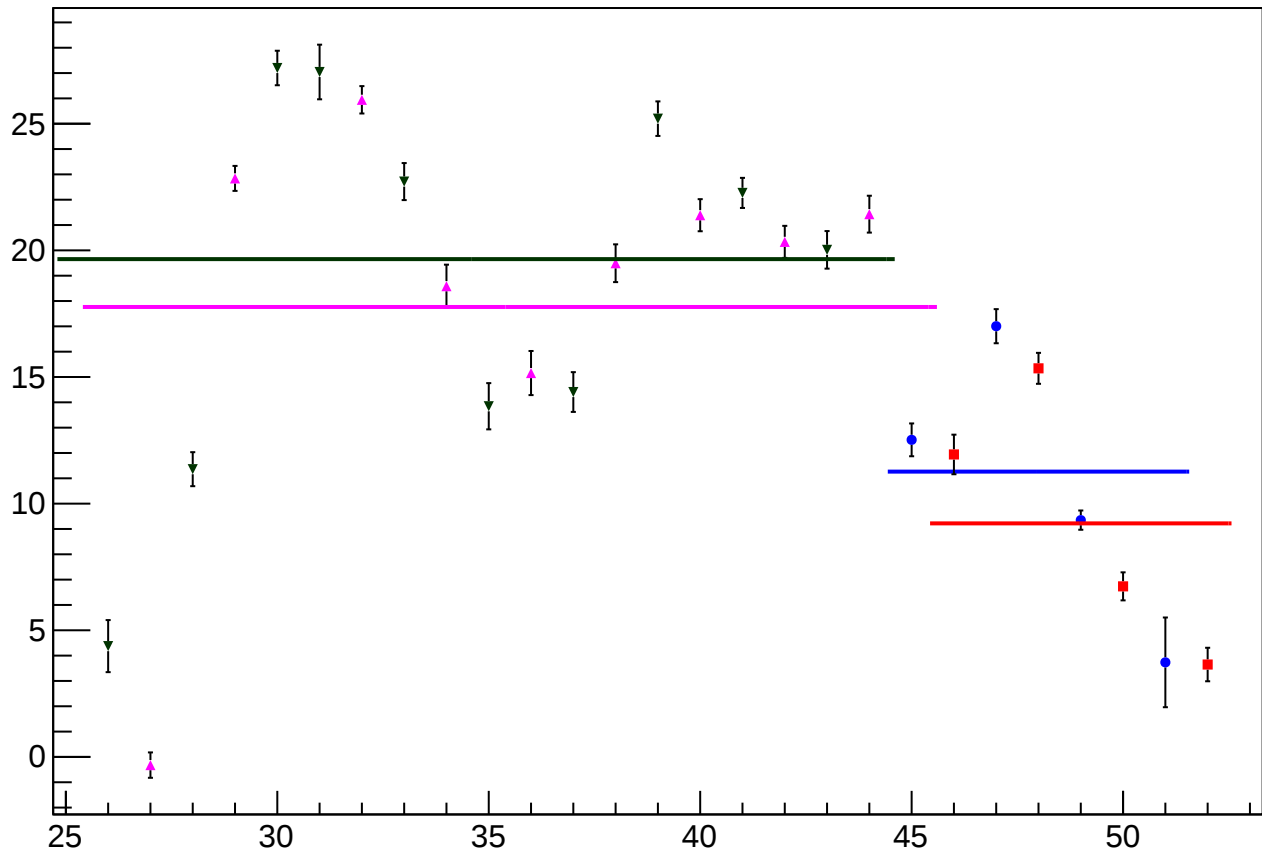
Right Out:  $4.613 \pm 0.234$   $\chi^2/\text{NDF}: 21.9/3$

Left In:  $0.270 \pm 0.181$   $\chi^2/\text{NDF}: 69.6/8$

$1.297 \pm 0.146$   $\chi^2/\text{NDF}: 228.8/12$

$1.888 \pm 0.143$   $\chi^2/\text{NDF}: 306.9/12$

# reg\_asym\_usl\_diff\_bpm4aX\_slope vs slug



Right In: 11.265+/-0.291  $\chi^2/\text{NDF}$ : 119.9/3

Left Out: 19.654+/-0.238  $\chi^2/\text{NDF}$ : 731.5/9

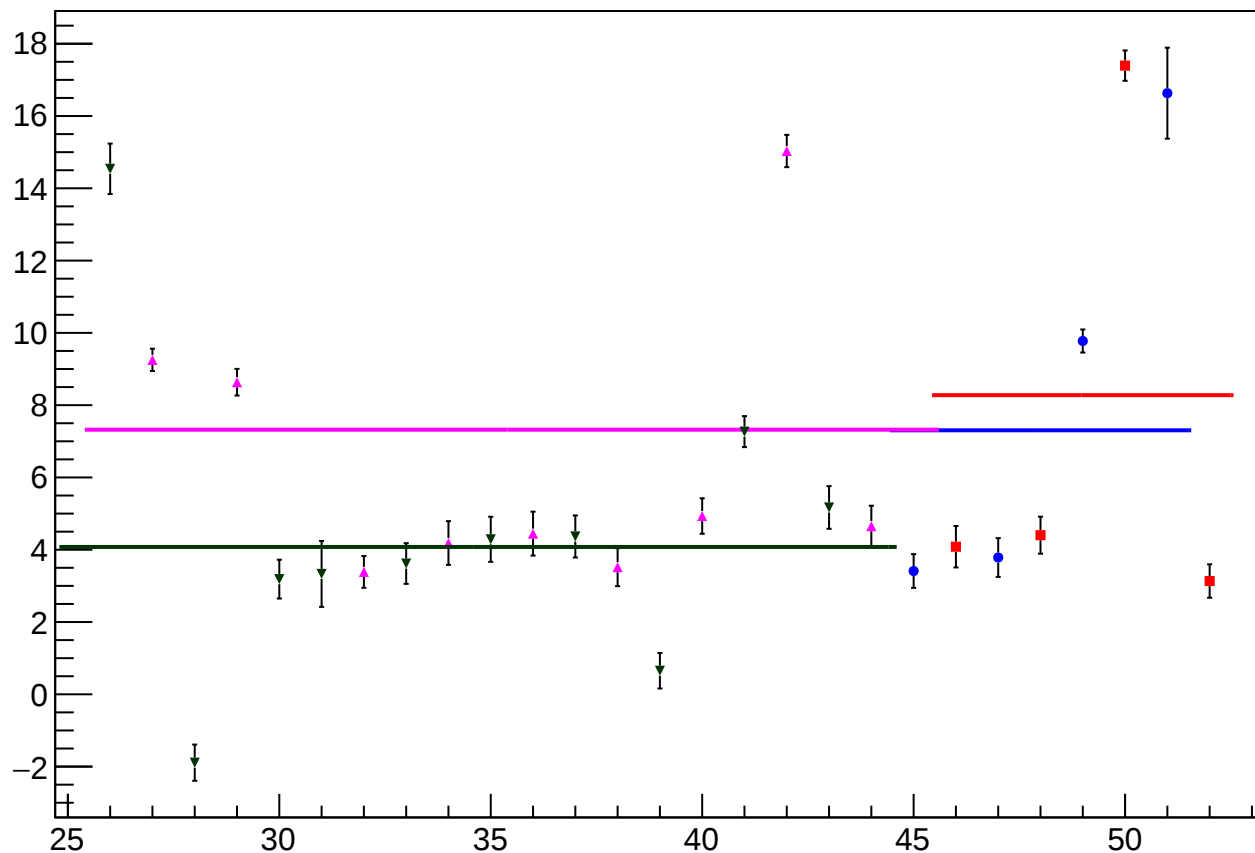
Right Out: 9.221+/-0.318  $\chi^2/\text{NDF}$ : 203.7/3

Left In: 17.765+/-0.209  $\chi^2/\text{NDF}$ : 1728.2/8

16.292+/-0.184  $\chi^2/\text{NDF}$ : 1349.8/13

15.192+/-0.175  $\chi^2/\text{NDF}$ : 2435.3/12

# reg\_asym\_usl\_diff\_bpm4aY\_slope vs slug



Right In:  $7.304 \pm 0.232$   $\chi^2/\text{NDF}: 227.5/3$

Left Out:  $4.077 \pm 0.177$   $\chi^2/\text{NDF}: 478.1/9$

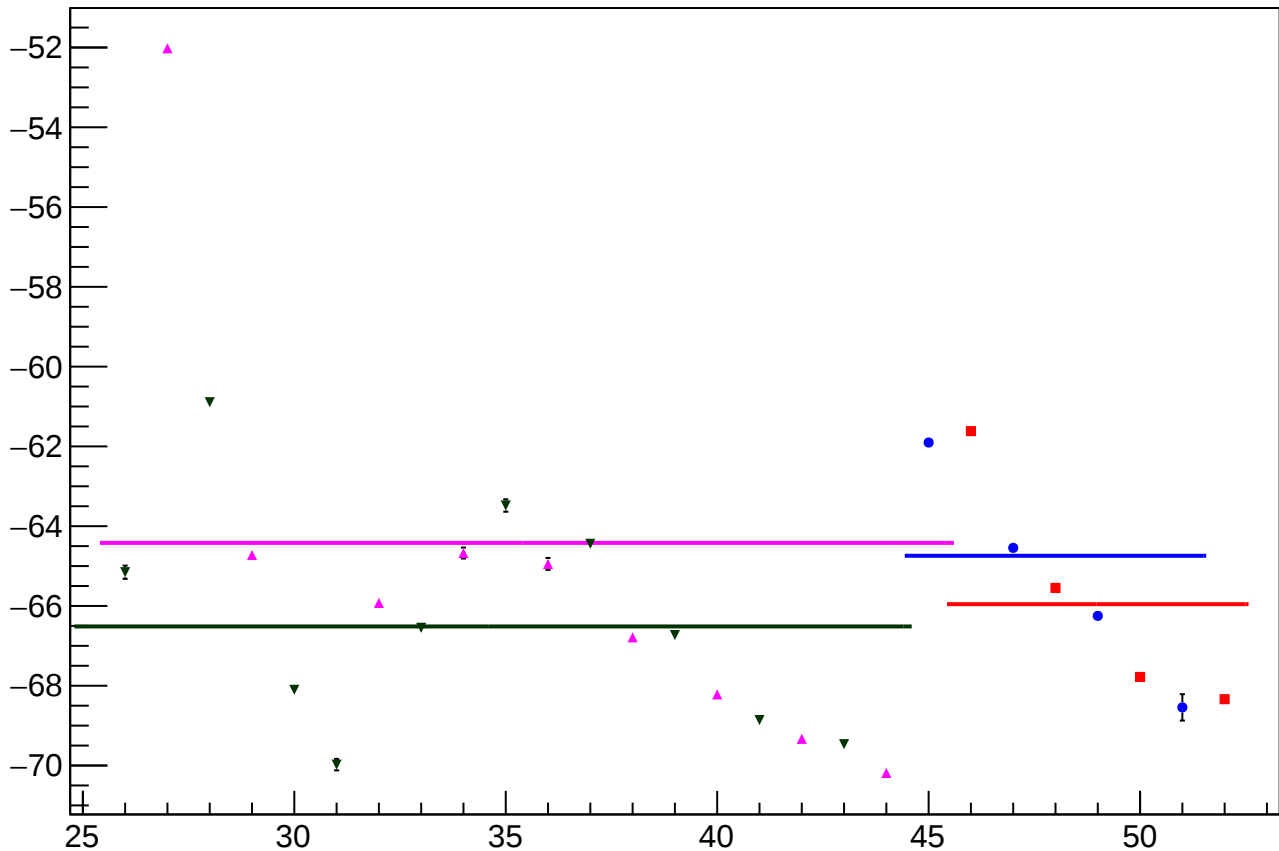
Right Out:  $8.277 \pm 0.241$   $\chi^2/\text{NDF}: 705.0/3$

Left In:  $7.322 \pm 0.150$   $\chi^2/\text{NDF}: 577.2/8$

$5.264 \pm 0.141$   $\chi^2/\text{NDF}: 827.5/13$

$7.589 \pm 0.127$   $\chi^2/\text{NDF}: 1293.5/12$

# reg\_asym\_usl\_diff\_bpm4eX\_slope vs slug



Right In: -64.742 $\pm$ 0.054  $\chi^2$ /NDF: 1261.1/3

Left Out: -66.514 $\pm$ 0.039  $\chi^2$ /NDF: 4814.8/9

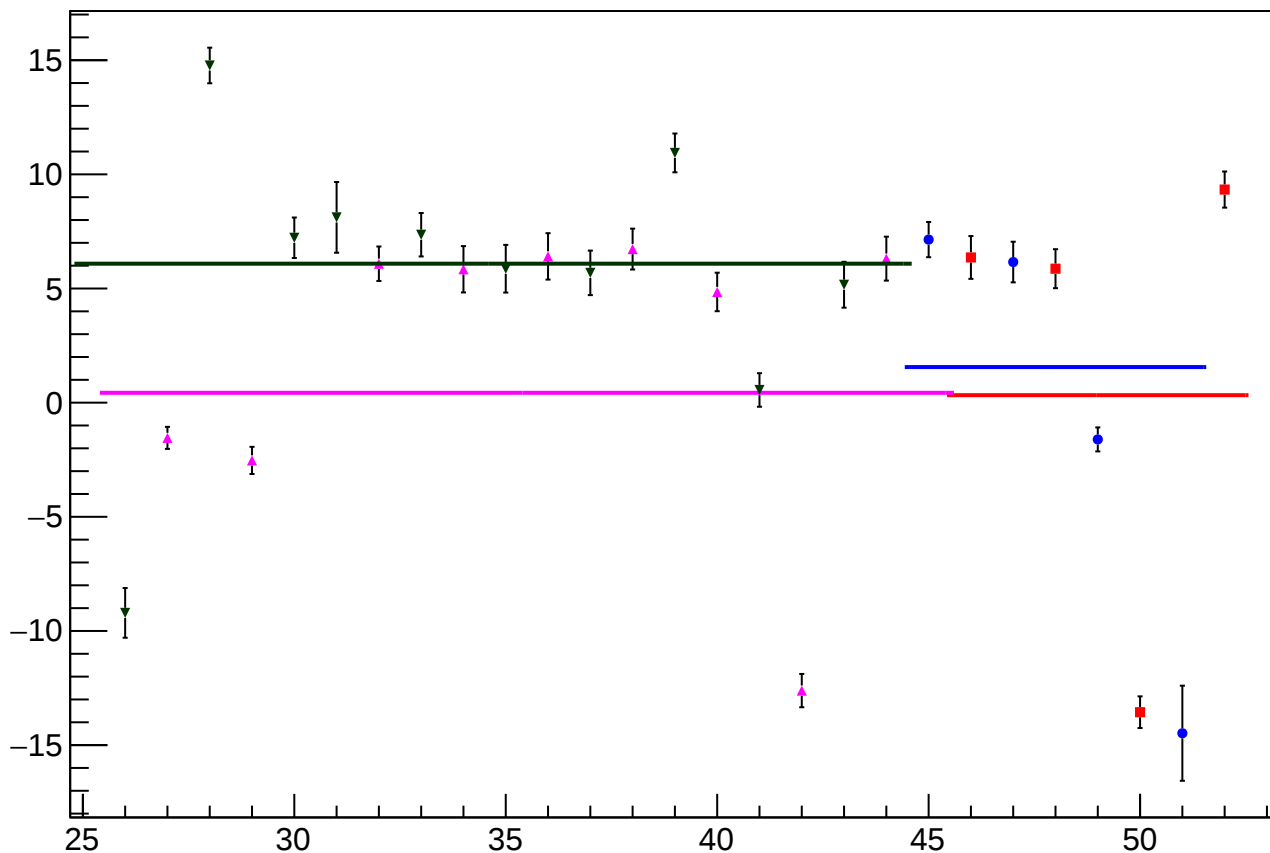
Right Out: -65.955 $\pm$ 0.056  $\chi^2$ /NDF: 2092.3/3

Left In: -64.419 $\pm$ 0.036  $\chi^2$ /NDF: 25022.3/8

-65.898 $\pm$ 0.032  $\chi^2$ /NDF: 6781.9/13

-64.869 $\pm$ 0.030  $\chi^2$ /NDF: 27644.7/12

# reg\_asym\_usl\_diff\_bpm4eY\_slope vs slug



Right In:  $1.559 \pm 0.384$   $\chi^2/\text{NDF}$ : 174.7/3

Left Out:  $6.087 \pm 0.295$   $\chi^2/\text{NDF}$ : 416.6/9

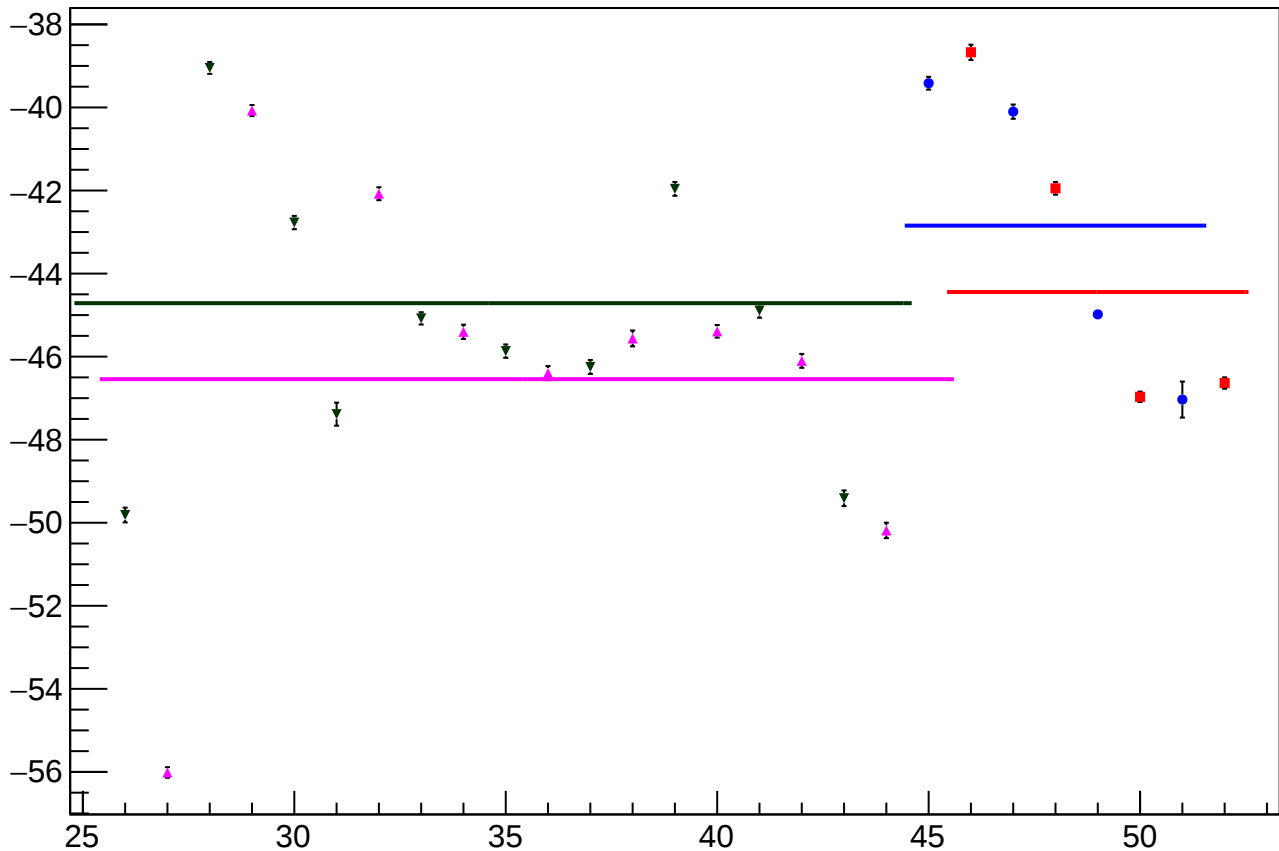
Right Out:  $0.328 \pm 0.402$   $\chi^2/\text{NDF}$ : 614.1/3

Left In:  $0.433 \pm 0.247$   $\chi^2/\text{NDF}$ : 594.7/8

$4.403 \pm 0.234$   $\chi^2/\text{NDF}$ : 678.9/13

$0.404 \pm 0.210$   $\chi^2/\text{NDF}$ : 1208.9/12

# reg\_asym\_usl\_diff\_bpm11X\_slope vs slug



Right In:  $-42.845 \pm 0.074$   $\chi^2/\text{NDF}$ : 1299.0/3

Left Out:  $-44.712 \pm 0.054$   $\chi^2/\text{NDF}$ : 3648.7/9

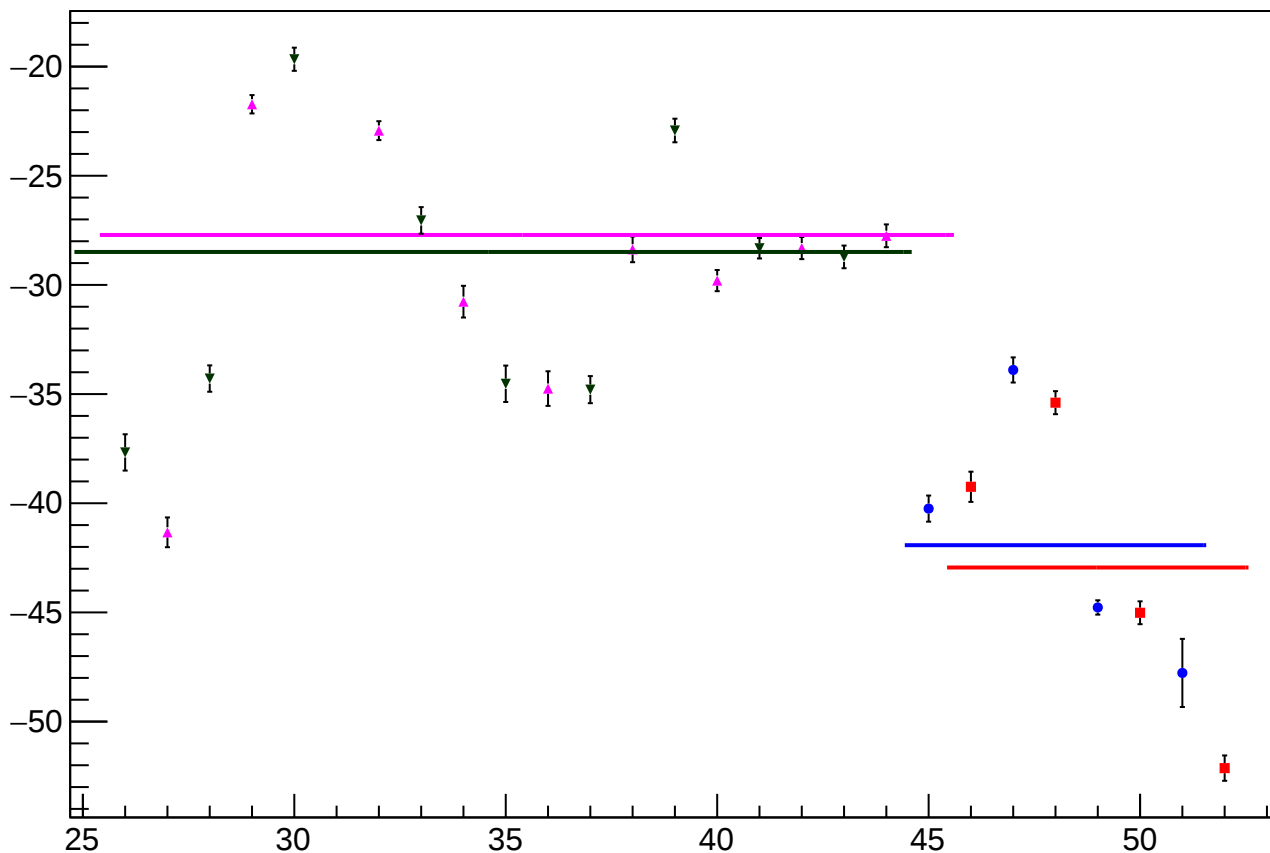
Right Out:  $-44.444 \pm 0.072$   $\chi^2/\text{NDF}$ : 1920.4/3

Left In:  $-46.543 \pm 0.052$   $\chi^2/\text{NDF}$ : 9214.1/8

$-44.072 \pm 0.043$   $\chi^2/\text{NDF}$ : 5363.4/13

$-45.821 \pm 0.042$   $\chi^2/\text{NDF}$ : 11684.6/12

# reg\_asym\_usr\_diff\_bpm4aX\_slope vs slug



Right In: -41.921 $\pm$ 0.254  $\chi^2$ /NDF: 291.5/3

Left Out: -28.490 $\pm$ 0.195  $\chi^2$ /NDF: 758.4/8

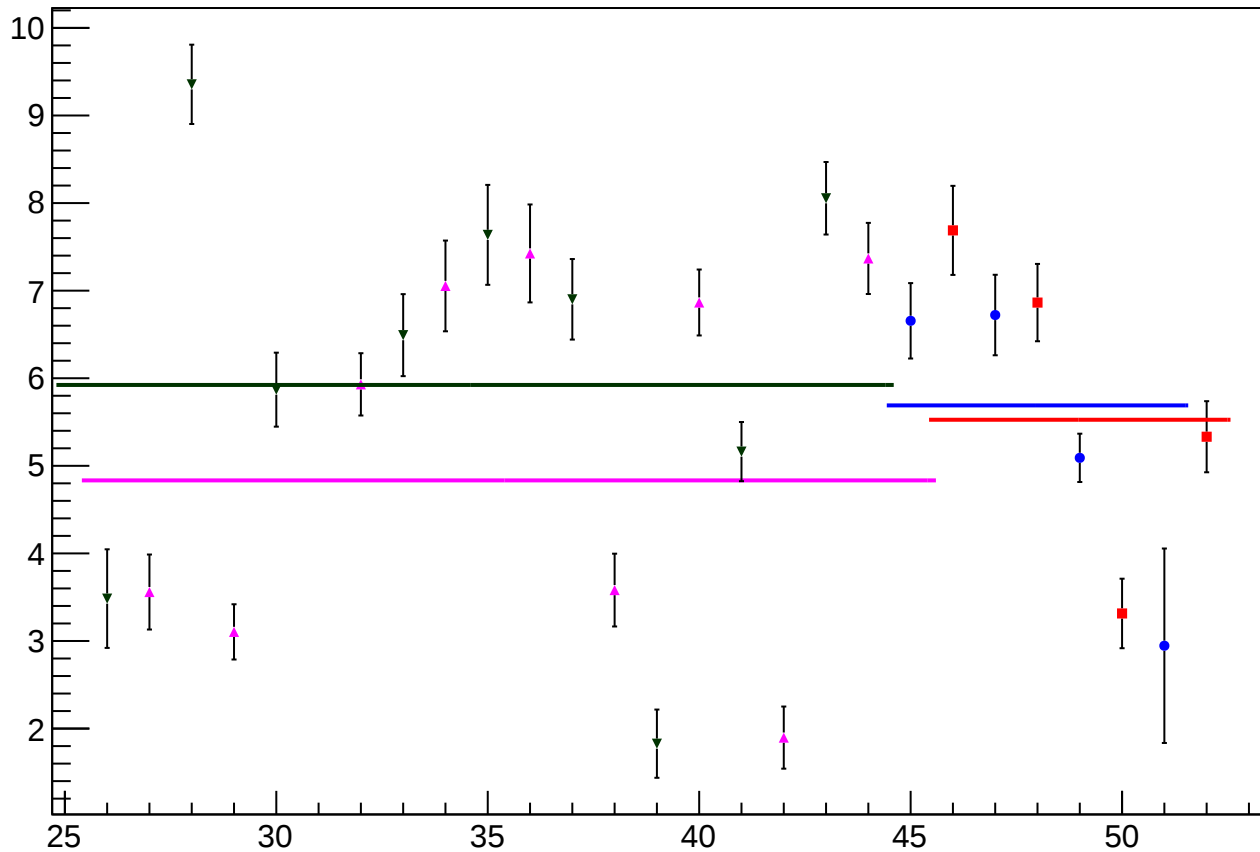
Right Out: -42.943 $\pm$ 0.285  $\chi^2$ /NDF: 499.9/3

Left In: -27.713 $\pm$ 0.179  $\chi^2$ /NDF: 841.0/8

-33.485 $\pm$ 0.155  $\chi^2$ /NDF: 2805.5/12

-32.006 $\pm$ 0.151  $\chi^2$ /NDF: 3390.4/12

# reg\_asym\_usr\_diff\_bpm4aY\_slope vs slug



Right In: 5.690 $\pm$ 0.204  $\chi^2$ /NDF: 20.9/3

Left Out: 5.923 $\pm$ 0.146  $\chi^2$ /NDF: 233.4/8

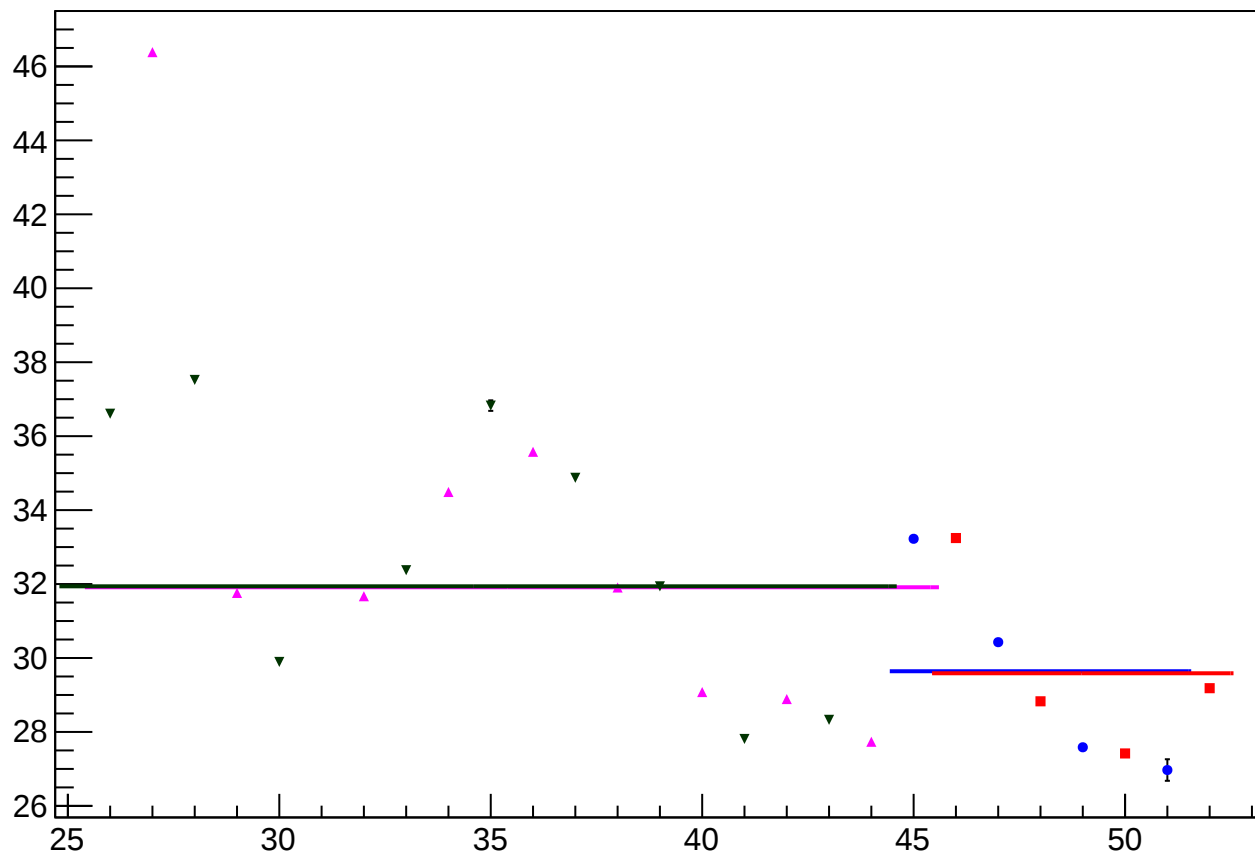
Right Out: 5.526 $\pm$ 0.216  $\chi^2$ /NDF: 58.6/3

Left In: 4.834 $\pm$ 0.132  $\chi^2$ /NDF: 234.0/8

5.844 $\pm$ 0.118  $\chi^2$ /NDF: 255.1/12

5.022 $\pm$ 0.113  $\chi^2$ /NDF: 300.0/12

# reg\_asym\_usr\_diff\_bpm4eX\_slope vs slug



Right In:  $29.642 \pm 0.047$   $\chi^2/\text{NDF}$ : 2492.3/3

Left Out:  $31.939 \pm 0.033$   $\chi^2/\text{NDF}$ : 10847.9/8

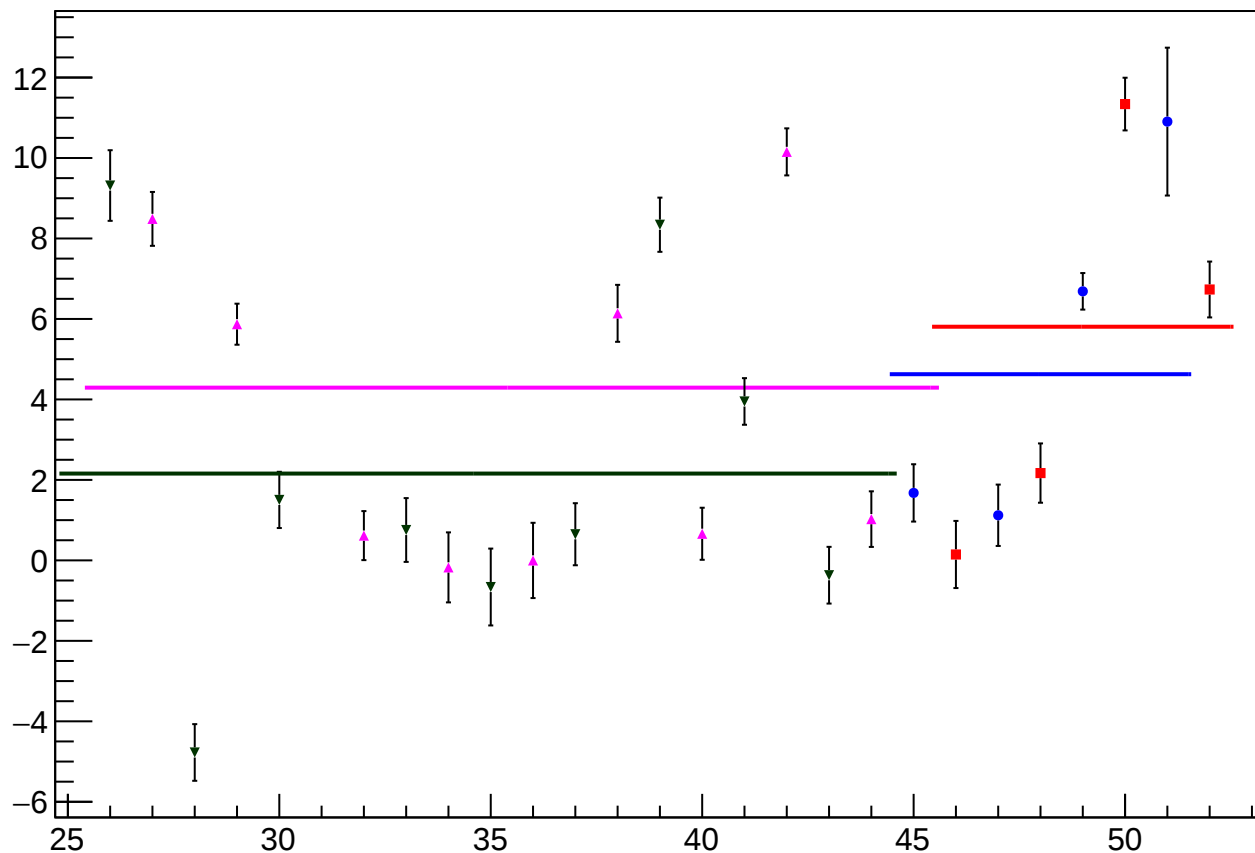
Right Out:  $29.587 \pm 0.050$   $\chi^2/\text{NDF}$ : 1779.3/3

Left In:  $31.913 \pm 0.031$   $\chi^2/\text{NDF}$ : 20133.4/8

$31.199 \pm 0.027$   $\chi^2/\text{NDF}$ : 14939.0/12

$31.281 \pm 0.026$   $\chi^2/\text{NDF}$ : 23487.5/12

# reg\_asym\_usr\_diff\_bpm4eY\_slope vs slug



Right In: 4.627 $\pm$ 0.336  $\chi^2$ /NDF: 70.5/3

Left Out: 2.158 $\pm$ 0.243  $\chi^2$ /NDF: 286.7/8

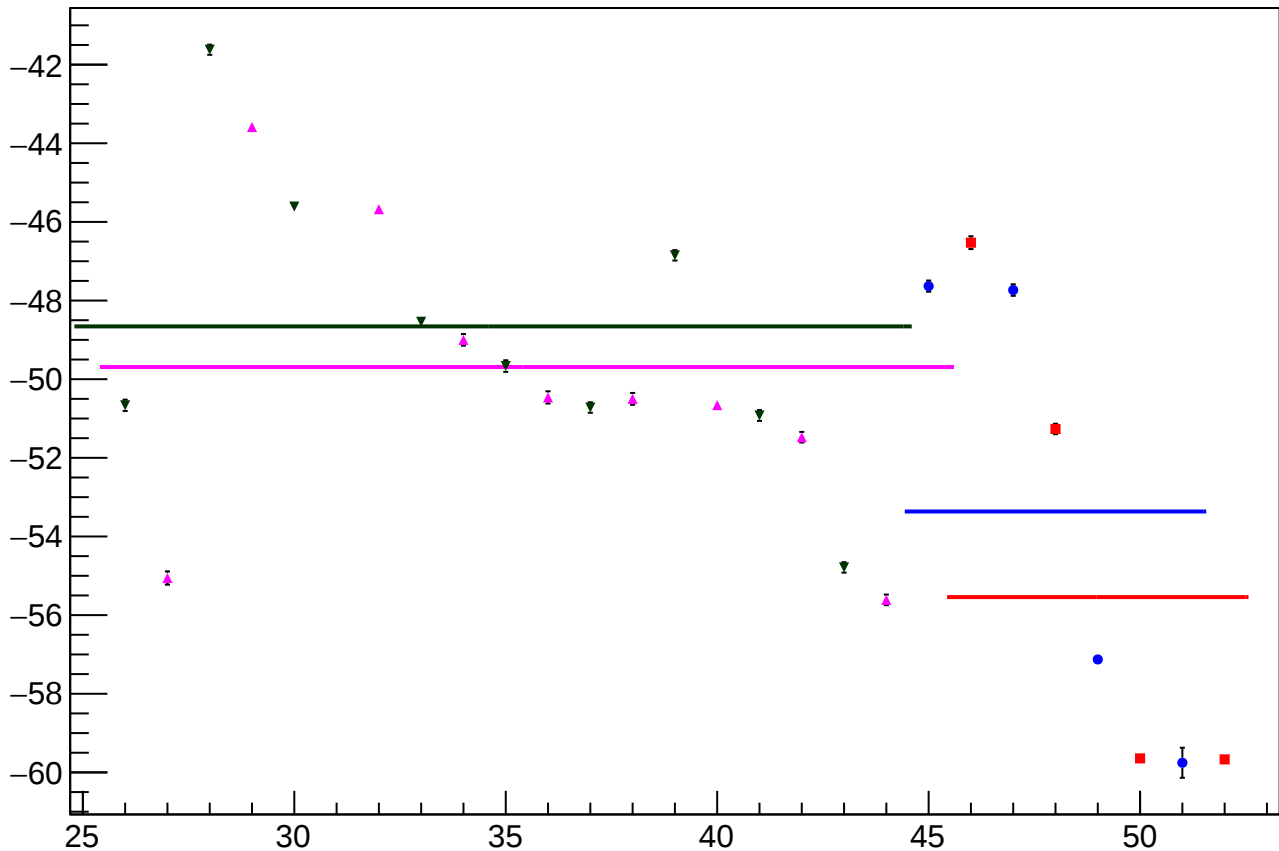
Right Out: 5.807 $\pm$ 0.361  $\chi^2$ /NDF: 143.6/3

Left In: 4.293 $\pm$ 0.220  $\chi^2$ /NDF: 293.8/8

3.004 $\pm$ 0.197  $\chi^2$ /NDF: 392.6/12

4.704 $\pm$ 0.188  $\chi^2$ /NDF: 450.2/12

# reg\_asym\_usr\_diff\_bpm11X\_slope vs slug



Right In:  $-53.365 \pm 0.065$   $\chi^2/\text{NDF}$ : 5241.2/3

Left Out:  $-48.657 \pm 0.044$   $\chi^2/\text{NDF}$ : 6659.9/8

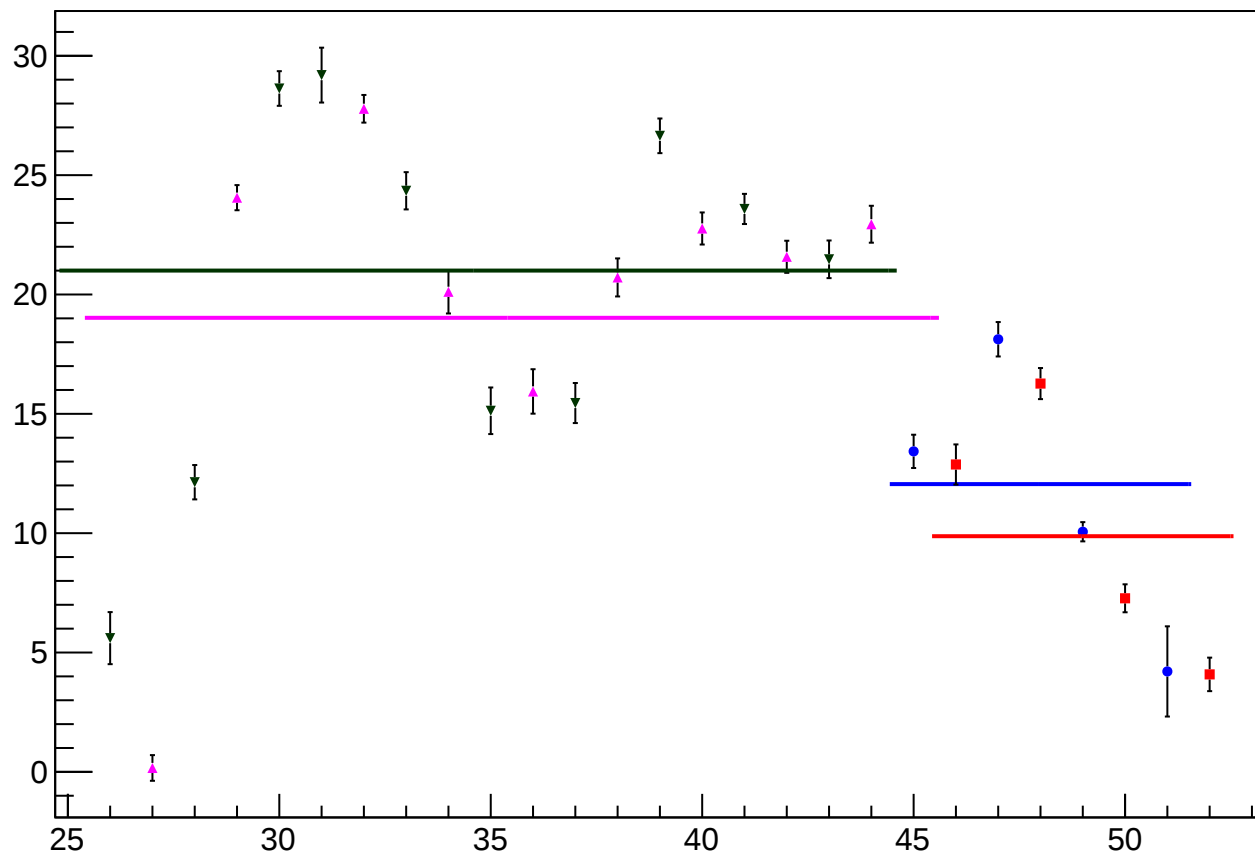
Right Out:  $-55.542 \pm 0.065$   $\chi^2/\text{NDF}$ : 6474.2/3

Left In:  $-49.690 \pm 0.045$   $\chi^2/\text{NDF}$ : 7146.4/8

$-50.147 \pm 0.037$   $\chi^2/\text{NDF}$ : 15459.5/12

$-51.585 \pm 0.037$   $\chi^2/\text{NDF}$ : 19069.3/12

# reg\_asym\_dsl\_diff\_bpm4aX\_slope vs slug



Right In: 12.056 $\pm$ 0.310  $\chi^2/\text{NDF}$ : 116.5/3

Left Out: 21.002 $\pm$ 0.254  $\chi^2/\text{NDF}$ : 688.1/9

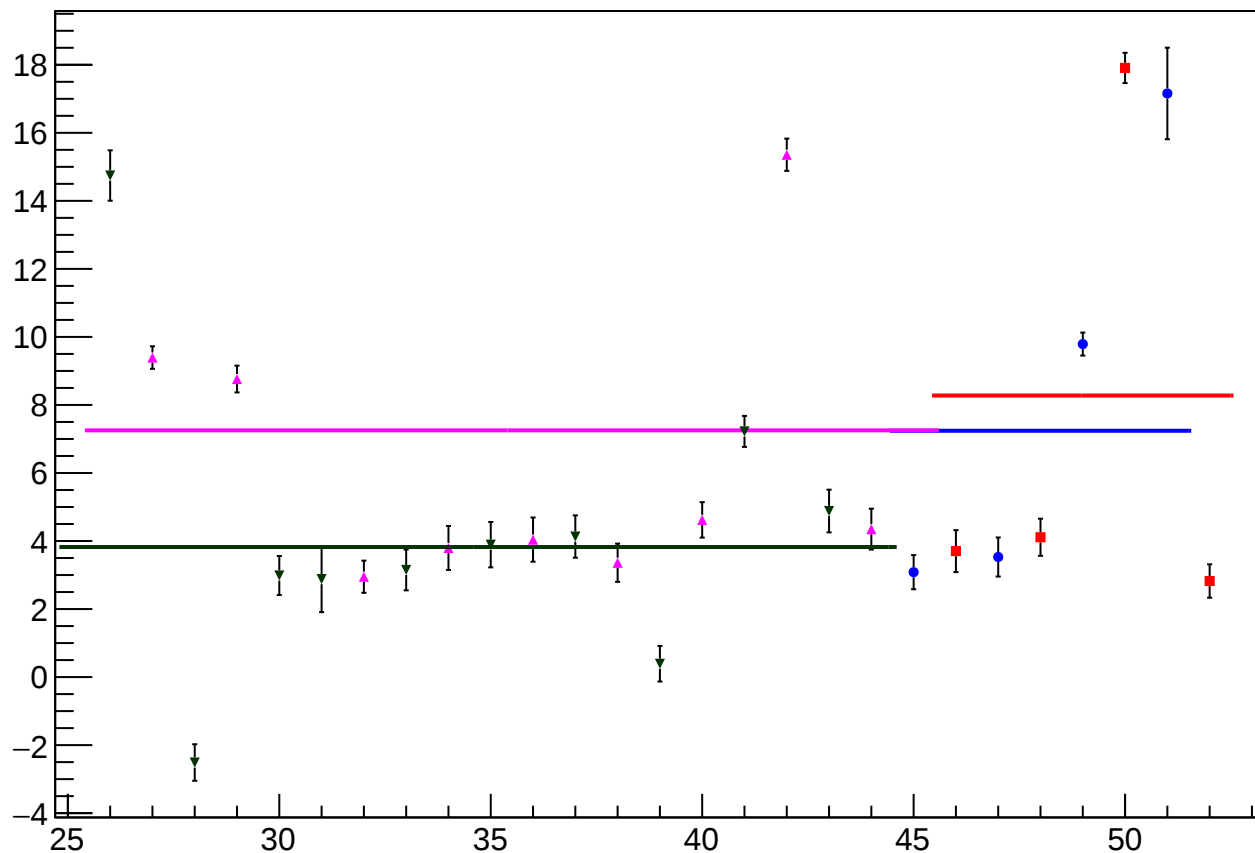
Right Out: 9.873 $\pm$ 0.339  $\chi^2/\text{NDF}$ : 196.9/3

Left In: 19.023 $\pm$ 0.223  $\chi^2/\text{NDF}$ : 1636.4/8

17.413 $\pm$ 0.196  $\chi^2/\text{NDF}$ : 1303.9/13

16.254 $\pm$ 0.186  $\chi^2/\text{NDF}$ : 2341.9/12

# reg\_asym\_dsl\_diff\_bpm4aY\_slope vs slug



Right In: 7.241+/-0.248  $\chi^2/\text{NDF}$ : 221.4/3

Left Out: 3.824+/-0.189  $\chi^2/\text{NDF}$ : 462.2/9

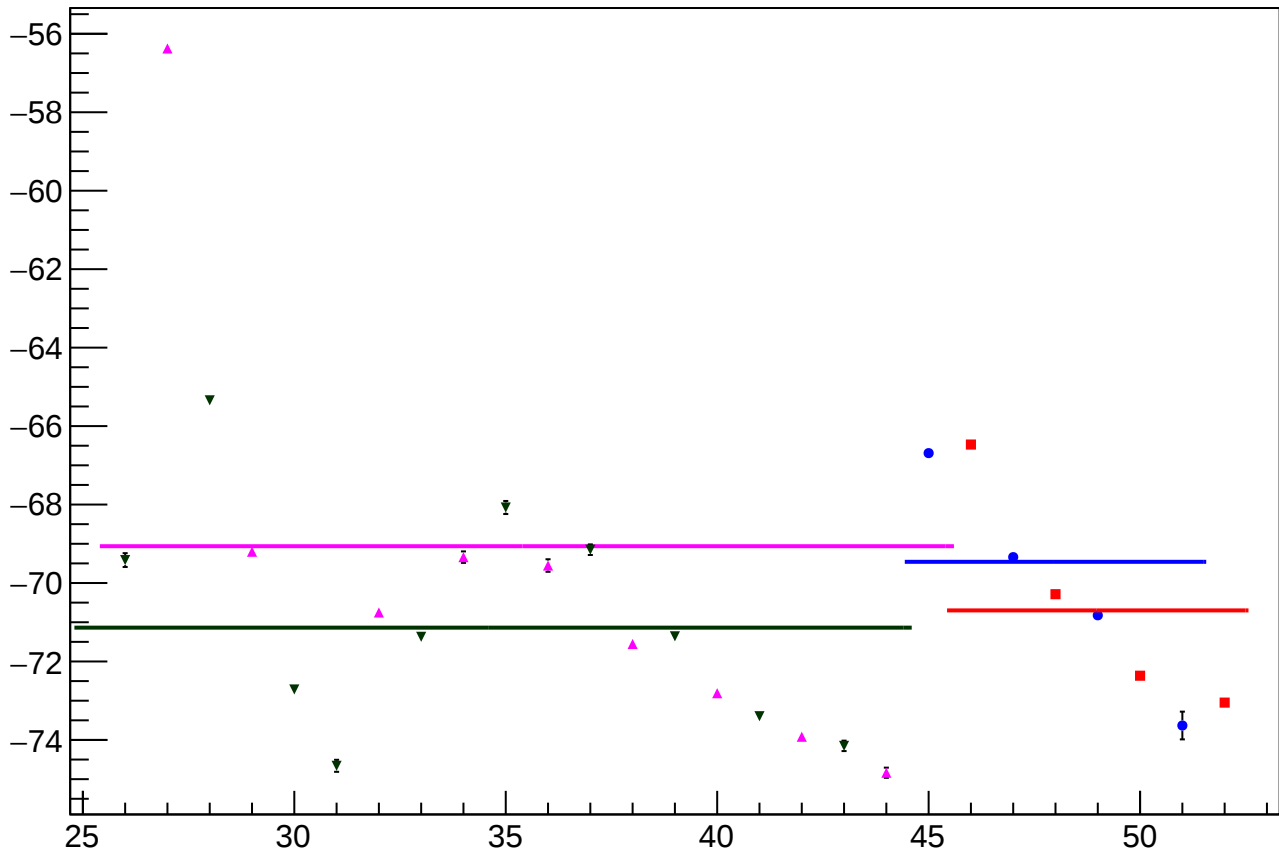
Right Out: 8.277+/-0.257  $\chi^2/\text{NDF}$ : 704.9/3

Left In: 7.254+/-0.160  $\chi^2/\text{NDF}$ : 580.6/8

5.081+/-0.150  $\chi^2/\text{NDF}$ : 804.0/13

7.541+/-0.136  $\chi^2/\text{NDF}$ : 1296.9/12

# reg\_asym\_dsl\_diff\_bpm4eX\_slope vs slug



Right In:  $-69.459 \pm 0.057$   $\chi^2/\text{NDF}: 1032.0/3$

Left Out:  $-71.138 \pm 0.042$   $\chi^2/\text{NDF}: 4371.0/9$

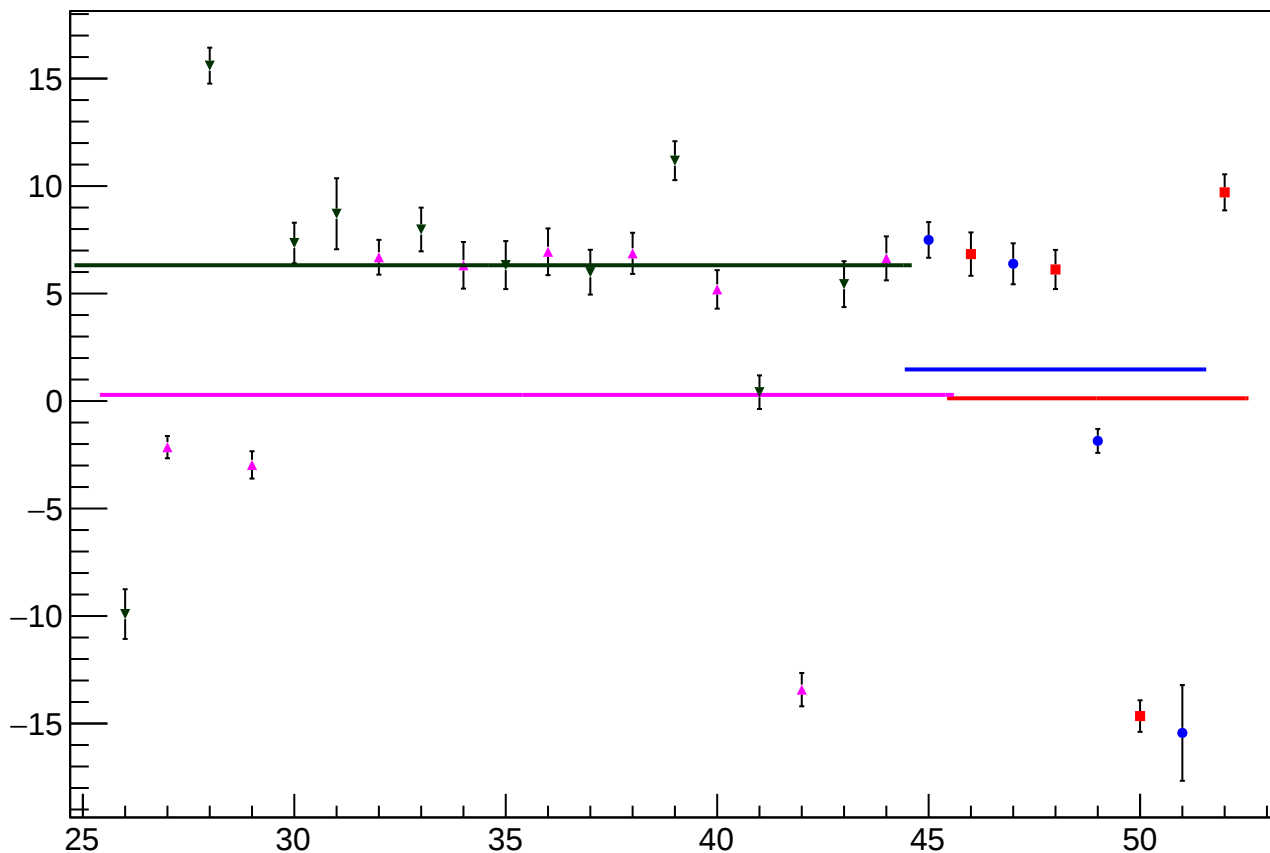
Right Out:  $-70.698 \pm 0.060$   $\chi^2/\text{NDF}: 1713.5/3$

Left In:  $-69.062 \pm 0.039$   $\chi^2/\text{NDF}: 22618.3/8$

$-70.555 \pm 0.034$   $\chi^2/\text{NDF}: 5959.3/13$

$-69.542 \pm 0.032$   $\chi^2/\text{NDF}: 24861.6/12$

# reg\_asym\_dsl\_diff\_bpm4eY\_slope vs slug



Right In: 1.470+/-0.409  $\chi^2/\text{NDF}$ : 172.5/3

Left Out: 6.316+/-0.315  $\chi^2/\text{NDF}$ : 413.3/9

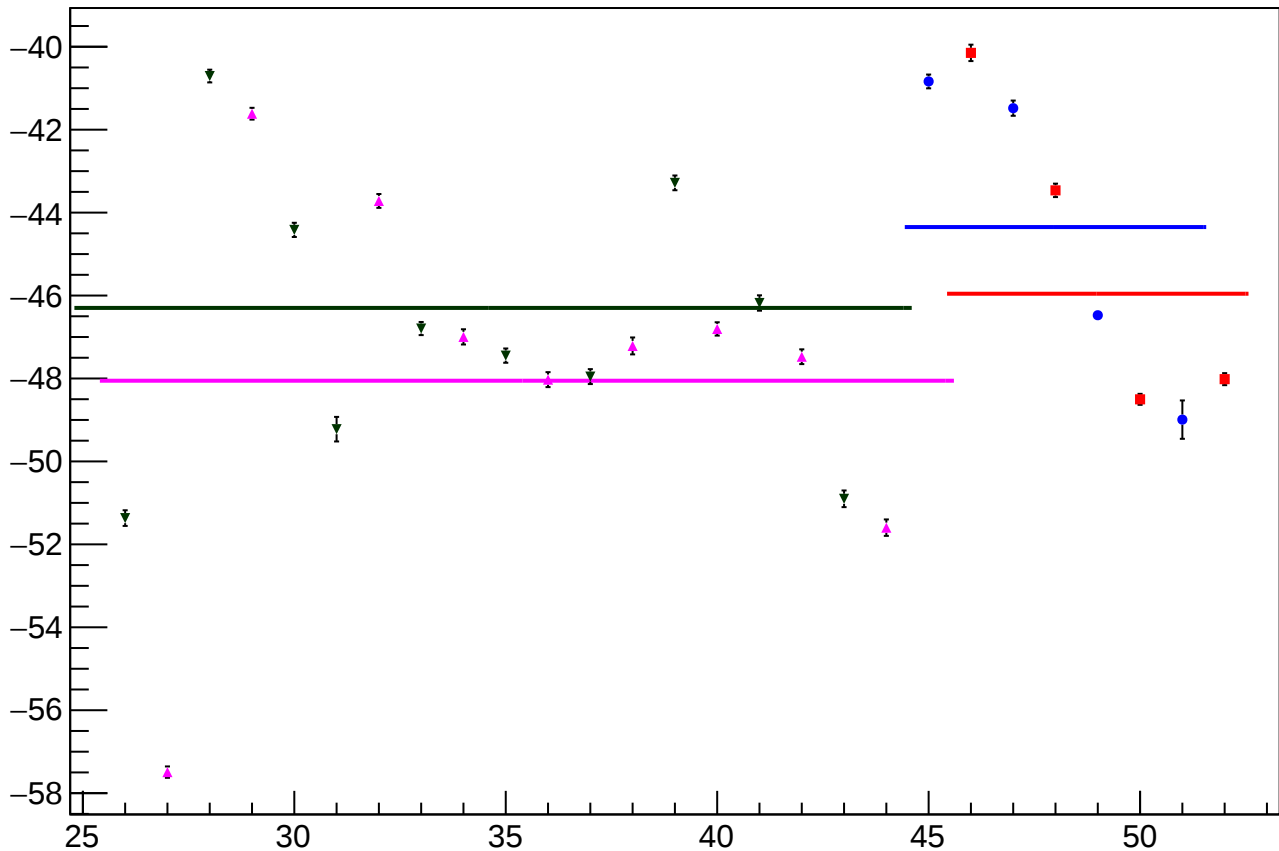
Right Out: 0.127+/-0.428  $\chi^2/\text{NDF}$ : 623.0/3

Left In: 0.285+/-0.264  $\chi^2/\text{NDF}$ : 608.0/8

4.513+/-0.249  $\chi^2/\text{NDF}$ : 674.0/13

0.242+/-0.224  $\chi^2/\text{NDF}$ : 1231.2/12

# reg\_asym\_dsl\_diff\_bpm11X\_slope vs slug



Right In: -44.348+/-0.079  $\chi^2/\text{NDF}$ : 1193.7/3

Left Out: -46.298+/-0.057  $\chi^2/\text{NDF}$ : 3214.3/9

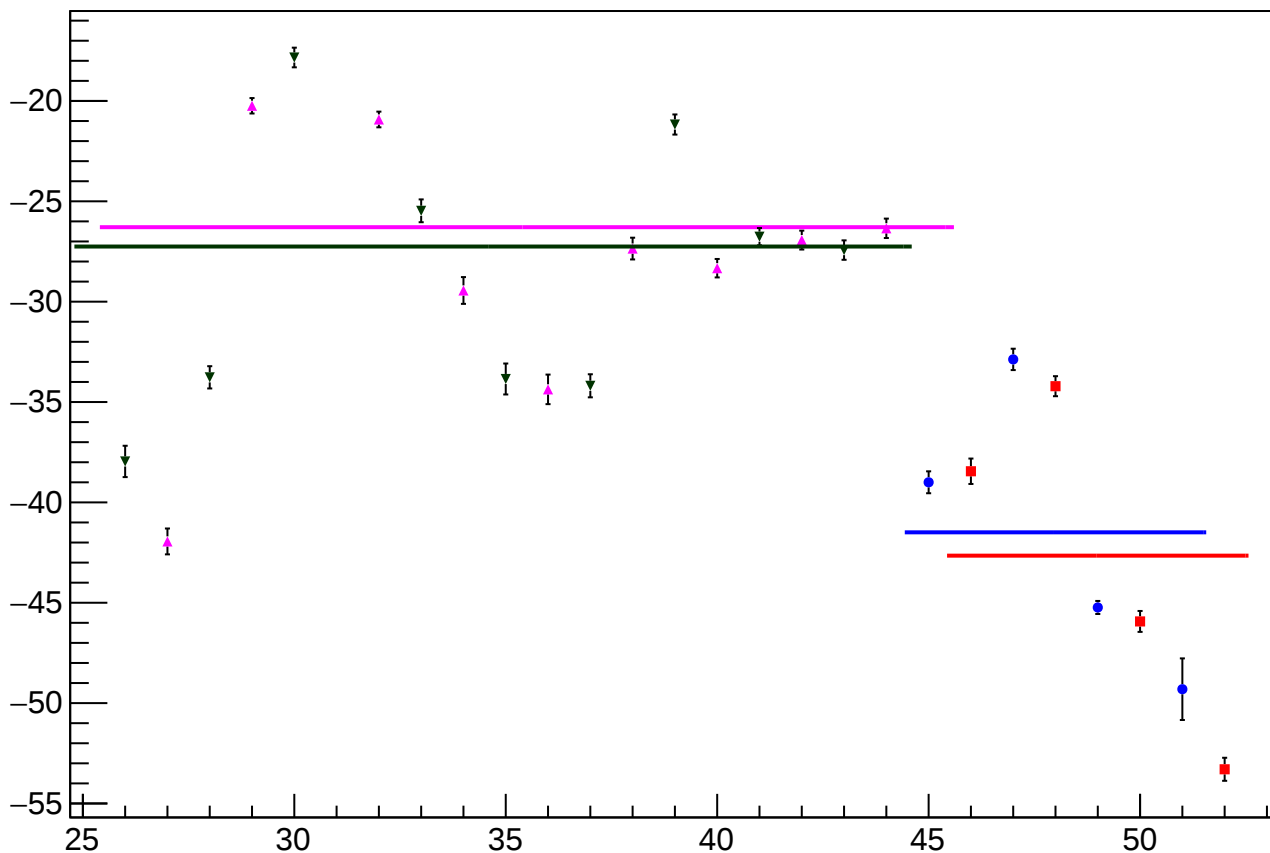
-45.629+/-0.046  $\chi^2/\text{NDF}$ : 4807.1/13

Right Out: -45.956+/-0.077  $\chi^2/\text{NDF}$ : 1670.3/3

-47.329+/-0.045  $\chi^2/\text{NDF}$ : 10068.1/12

Left In: -48.054+/-0.056  $\chi^2/\text{NDF}$ : 7913.0/8

# reg\_asym\_dsr\_diff\_bpm4aX\_slope vs slug



Right In: -41.492 +/- 0.244  $\chi^2/\text{NDF}$ : 441.9/3

Left Out: -27.253 +/- 0.181  $\chi^2/\text{NDF}$ : 1073.0/8

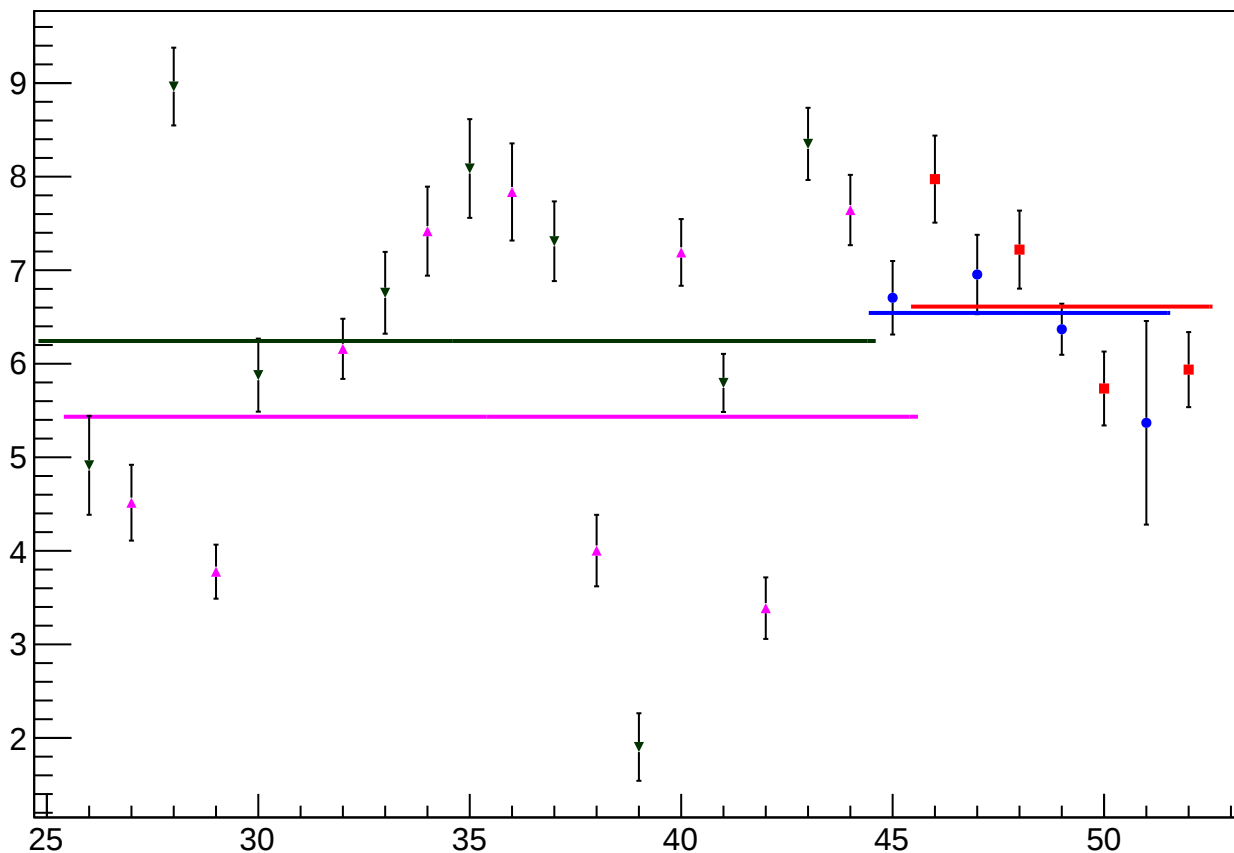
Right Out: -42.654 +/- 0.275  $\chi^2/\text{NDF}$ : 714.2/3

Left In: -26.289 +/- 0.165  $\chi^2/\text{NDF}$ : 1194.5/8

-32.307 +/- 0.145  $\chi^2/\text{NDF}$ : 3711.1/12

-30.622 +/- 0.141  $\chi^2/\text{NDF}$ : 4514.7/12

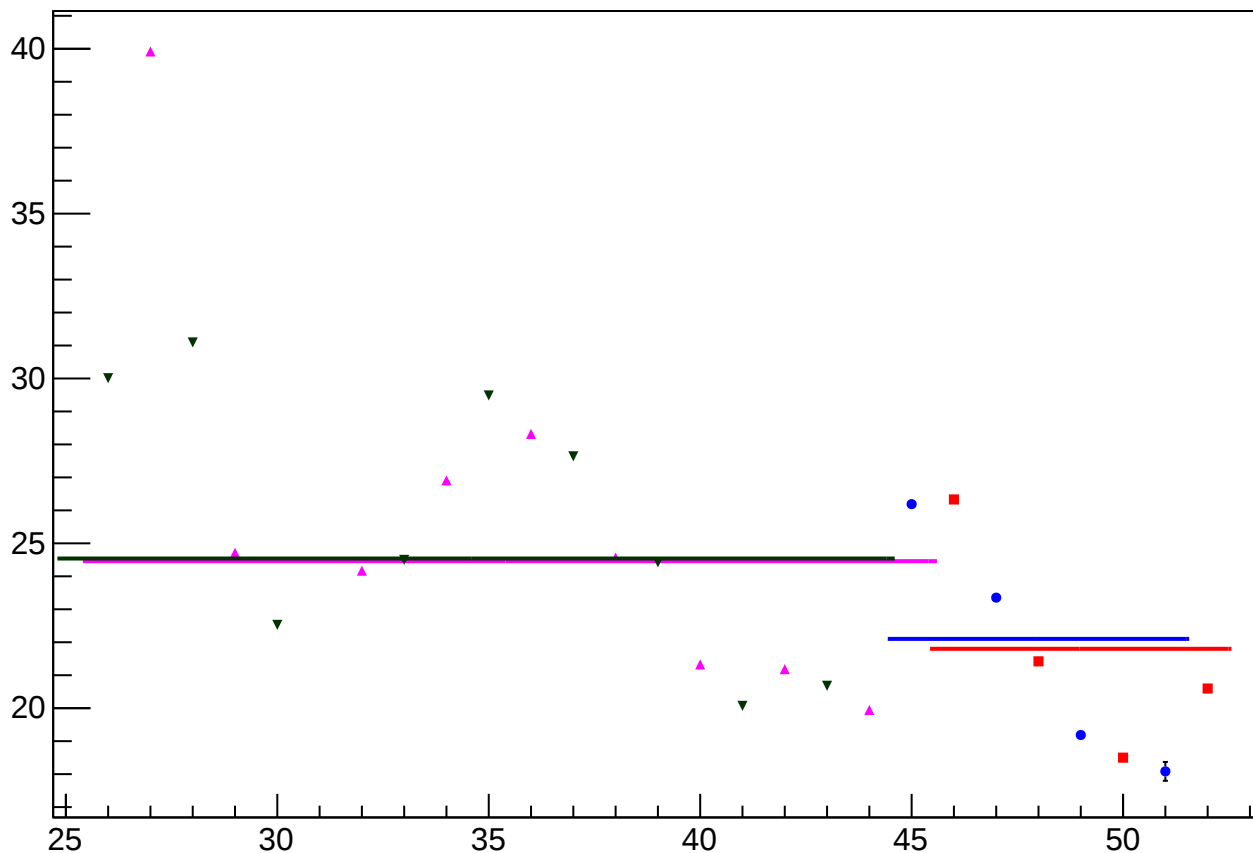
# reg\_asym\_dsr\_diff\_bpm4aY\_slope vs slug



Right In:  $6.543 \pm 0.195$   $\chi^2/\text{NDF}$ : 2.7/3  
 Left Out:  $6.243 \pm 0.135$   $\chi^2/\text{NDF}$ : 246.4/8  
 Right Out:  $6.611 \pm 0.209$   $\chi^2/\text{NDF}$ : 18.4/3  
 Left In:  $5.433 \pm 0.122$   $\chi^2/\text{NDF}$ : 193.5/8

$6.340 \pm 0.111$   $\chi^2/\text{NDF}$ : 250.6/12  
 $5.734 \pm 0.105$   $\chi^2/\text{NDF}$ : 235.7/12

# reg\_asym\_dsr\_diff\_bpm4eX\_slope vs slug



Right In: 22.102 $\pm$ 0.045  $\chi^2$ /NDF: 4505.8/3

Left Out: 24.539 $\pm$ 0.030  $\chi^2$ /NDF:15395.0/8

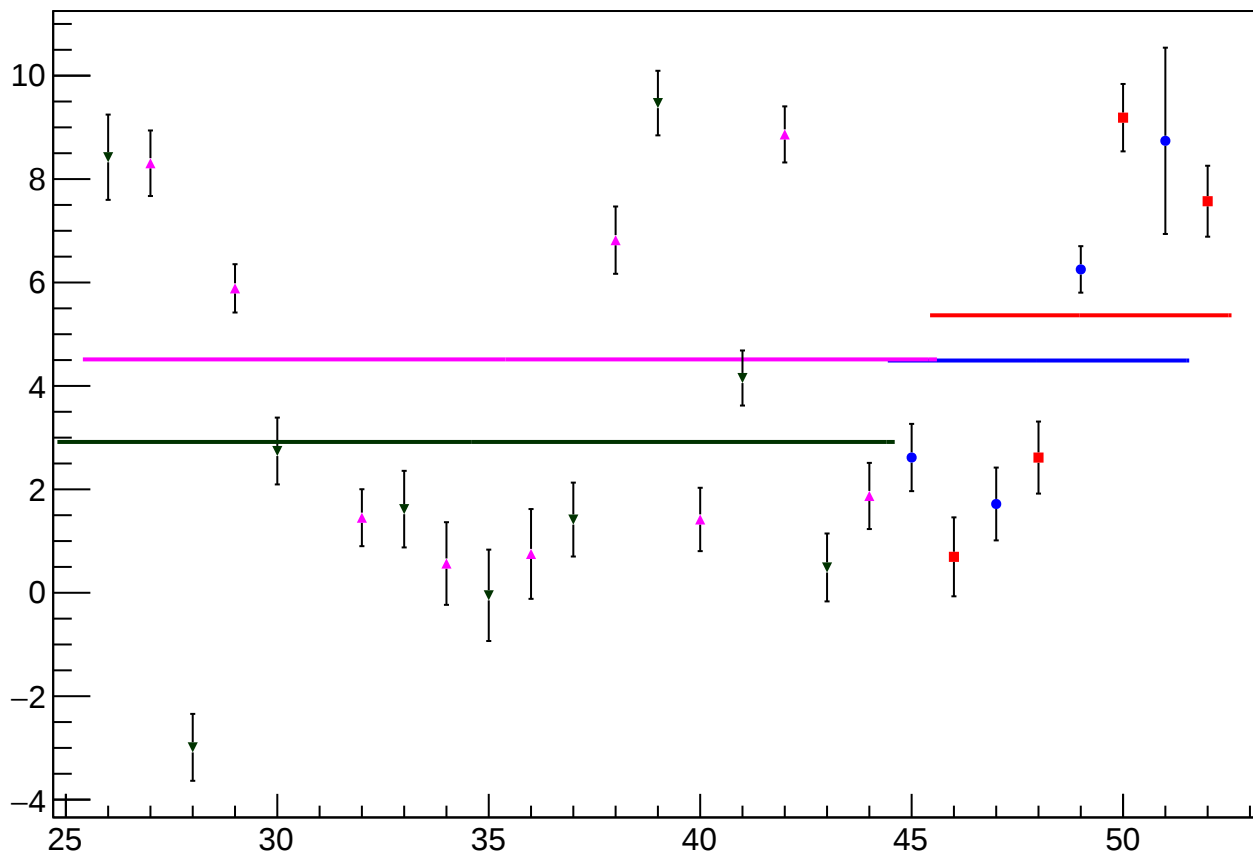
Right Out: 21.801 $\pm$ 0.048  $\chi^2$ /NDF: 3517.3/3

Left In: 24.459 $\pm$ 0.028  $\chi^2$ /NDF:26092.7/8

23.785 $\pm$ 0.025  $\chi^2$ /NDF: 21922.6/12

23.777 $\pm$ 0.024  $\chi^2$ /NDF: 31892.7/12

# reg\_asym\_dsr\_diff\_bpm4eY\_slope vs slug



Right In:  $4.491 \pm 0.322$   $\chi^2/\text{NDF}: 44.8/3$

Left Out:  $2.917 \pm 0.225$   $\chi^2/\text{NDF}: 276.0/8$

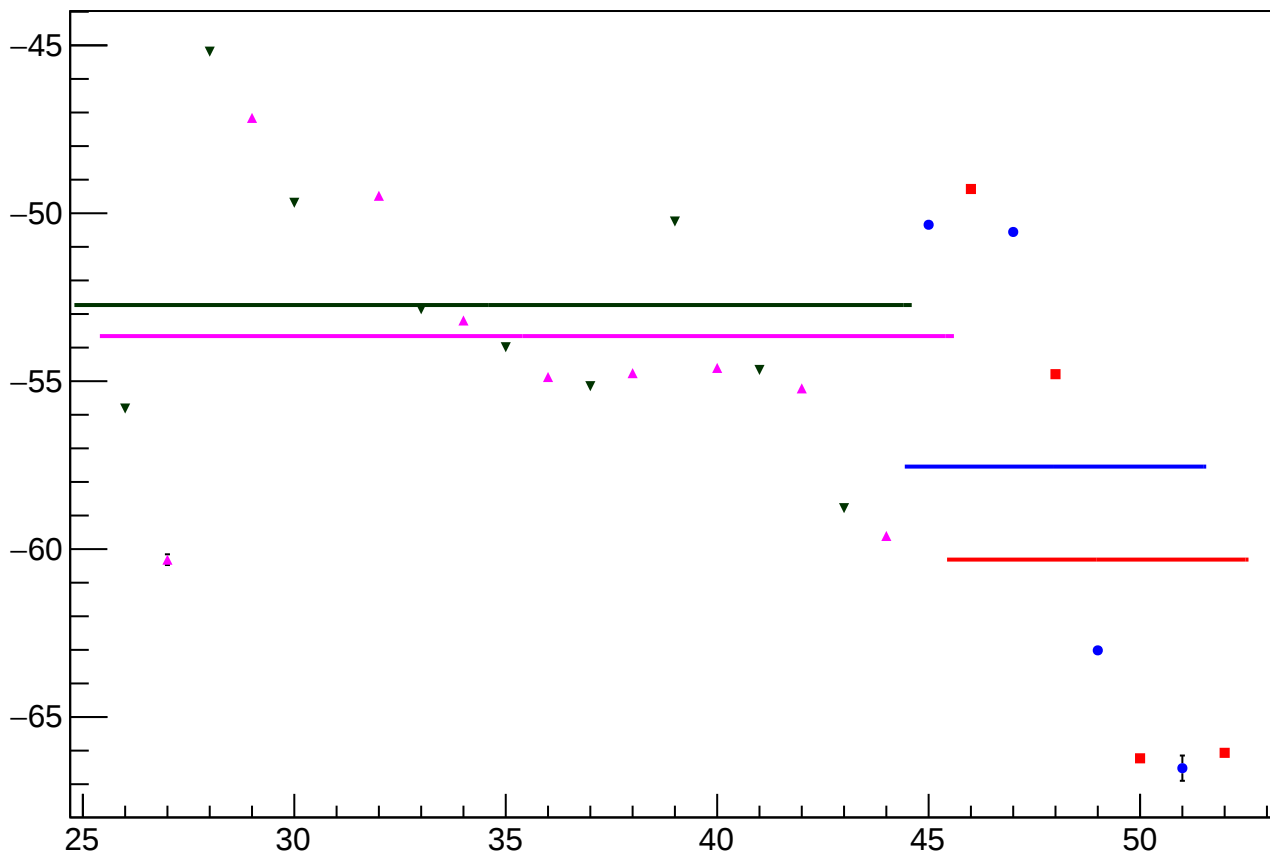
Right Out:  $5.366 \pm 0.348$   $\chi^2/\text{NDF}: 97.8/3$

Left In:  $4.513 \pm 0.204$   $\chi^2/\text{NDF}: 238.0/8$

$3.434 \pm 0.185$   $\chi^2/\text{NDF}: 336.8/12$

$4.730 \pm 0.176$   $\chi^2/\text{NDF}: 340.2/12$

# reg\_asym\_dsr\_diff\_bpm11X\_slope vs slug



Right In: -57.543+/-0.063  $\chi^2/\text{NDF}$ : 10337.1/3

Left Out: -52.733+/-0.041  $\chi^2/\text{NDF}$ : 8744.9/8

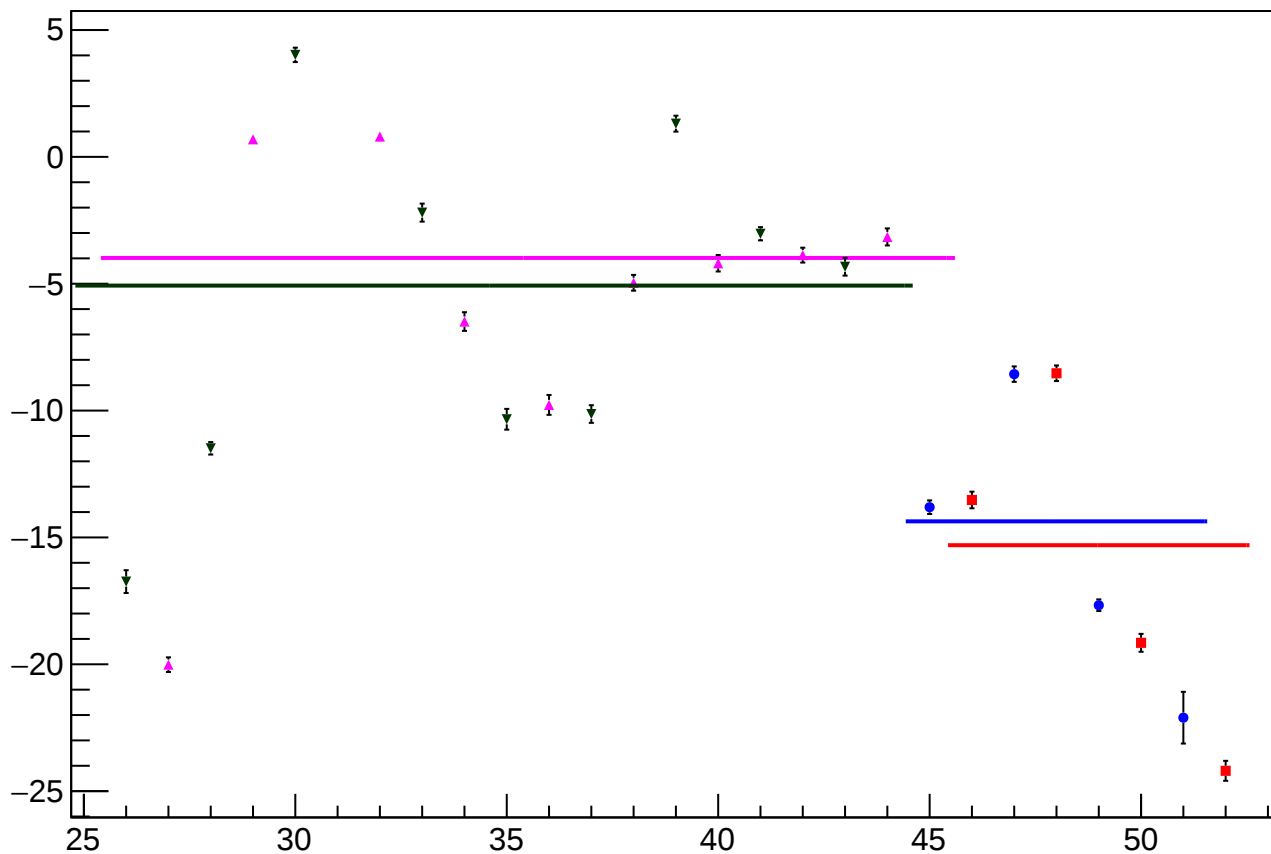
Right Out: -60.312+/-0.063  $\chi^2/\text{NDF}$ : 12226.4/3

Left In: -53.657+/-0.042  $\chi^2/\text{NDF}$ : 9587.3/8

-54.191+/-0.034  $\chi^2/\text{NDF}$ : 23207.0/12

-55.679+/-0.035  $\chi^2/\text{NDF}$ : 29526.4/12

# reg\_asym\_us\_avg\_diff\_bpm4aX\_slope vs slug



Right In: -14.366 $\pm$ 0.150  $\chi^2$ /NDF: 631.8/3

Left Out: -5.073 $\pm$ 0.106  $\chi^2$ /NDF:3297.3/8

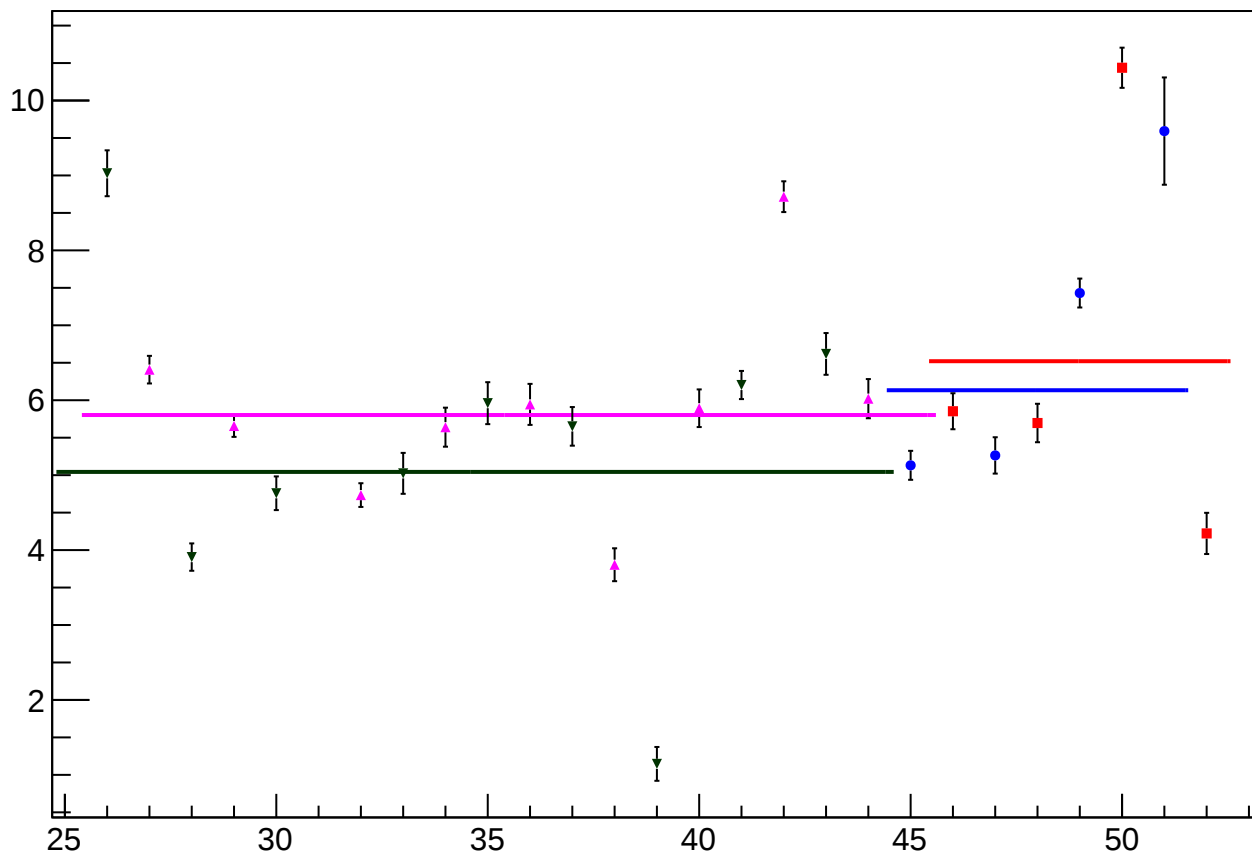
Right Out: -15.306 $\pm$ 0.171  $\chi^2$ /NDF: 1144.7/3

Left In: -3.984 $\pm$ 0.091  $\chi^2$ /NDF:4557.3/8

-8.175 $\pm$ 0.087  $\chi^2$ /NDF: 6493.5/12

-6.515 $\pm$ 0.081  $\chi^2$ /NDF: 9124.9/12

# reg\_asym\_us\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 6.133+/-0.117     $\chi^2/\text{NDF}$ : 108.3/3

Left Out: 5.043+/-0.078     $\chi^2/\text{NDF}$ : 594.0/8

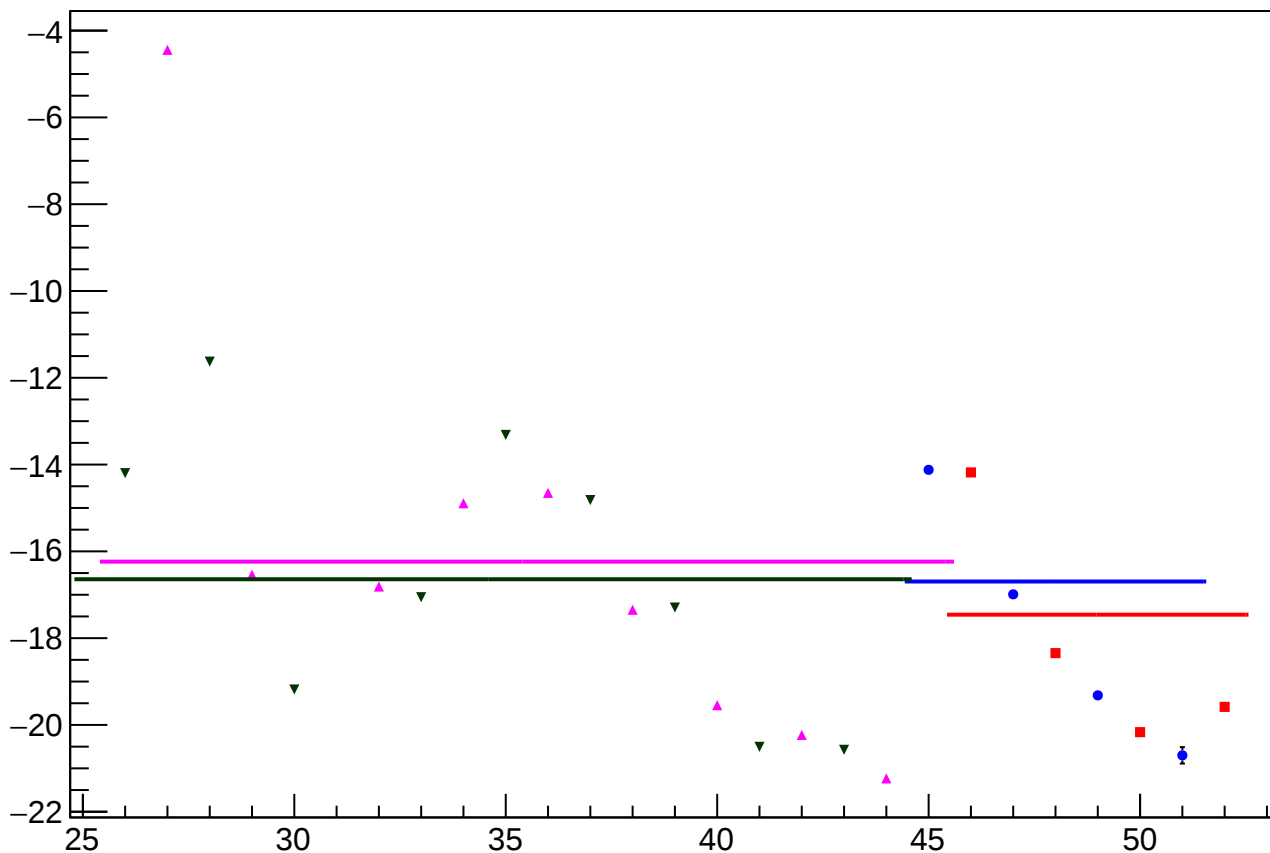
Right Out: 6.521+/-0.129     $\chi^2/\text{NDF}$ : 301.4/3

Left In: 5.803+/-0.067     $\chi^2/\text{NDF}$ : 343.0/8

5.380+/-0.065     $\chi^2/\text{NDF}$ : 761.9/12

5.956+/-0.060     $\chi^2/\text{NDF}$ : 668.6/12

reg\_asym\_us\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -16.694 $\pm$ 0.027  $\chi^2$ /NDF: 7168.0/3

Left Out: -16.643 $\pm$ 0.018  $\chi^2$ /NDF: 32975.5/8

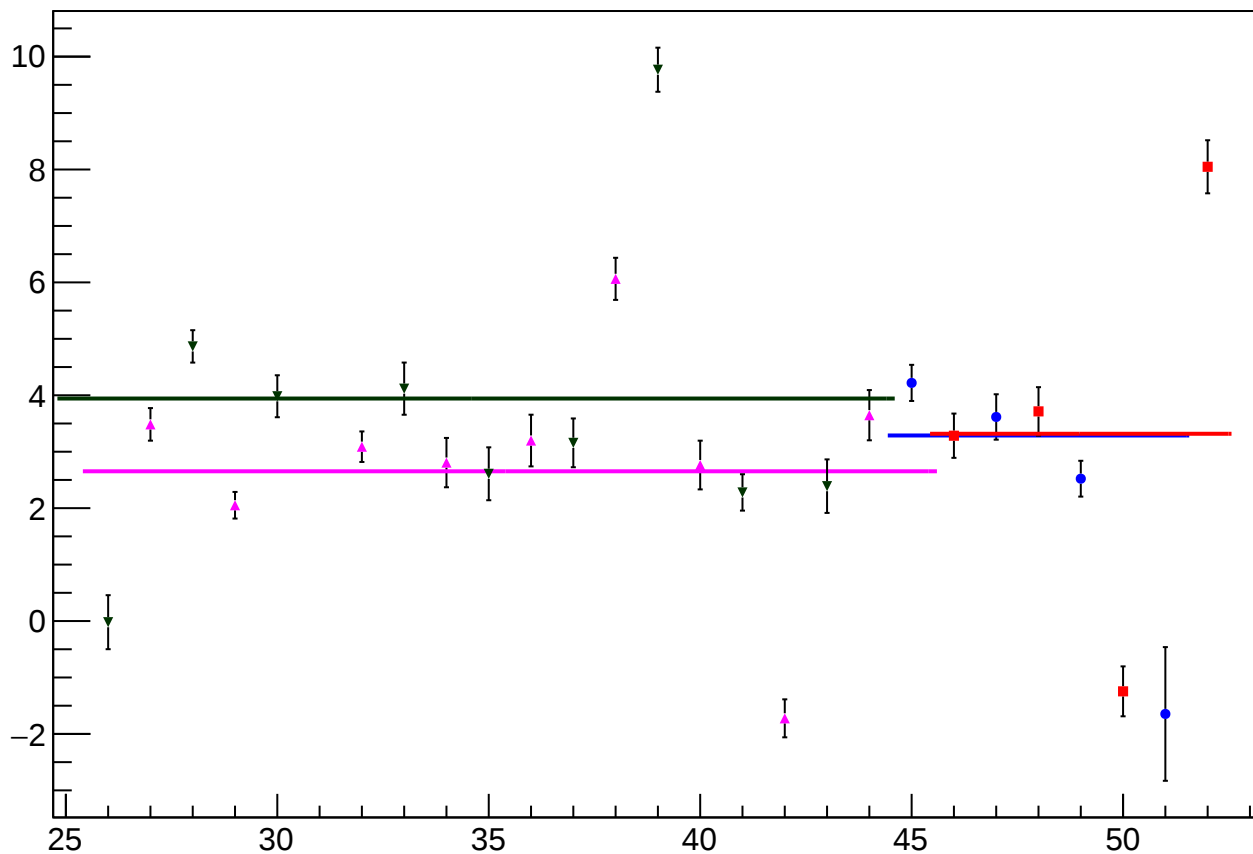
Right Out: -17.459 $\pm$ 0.029  $\chi^2$ /NDF: 7226.8/3

Left In: -16.237 $\pm$ 0.016  $\chi^2$ /NDF: 73670.4/8

-16.659 $\pm$ 0.015  $\chi^2$ /NDF: 40146.1/12

-16.506 $\pm$ 0.014  $\chi^2$ /NDF: 82261.0/12

# reg\_asym\_us\_avg\_diff\_bpm4eY\_slope vs slug



Right In:  $3.288 \pm 0.194$   $\chi^2/\text{NDF}$ : 32.3/3

Left Out:  $3.942 \pm 0.130$   $\chi^2/\text{NDF}$ : 350.2/8

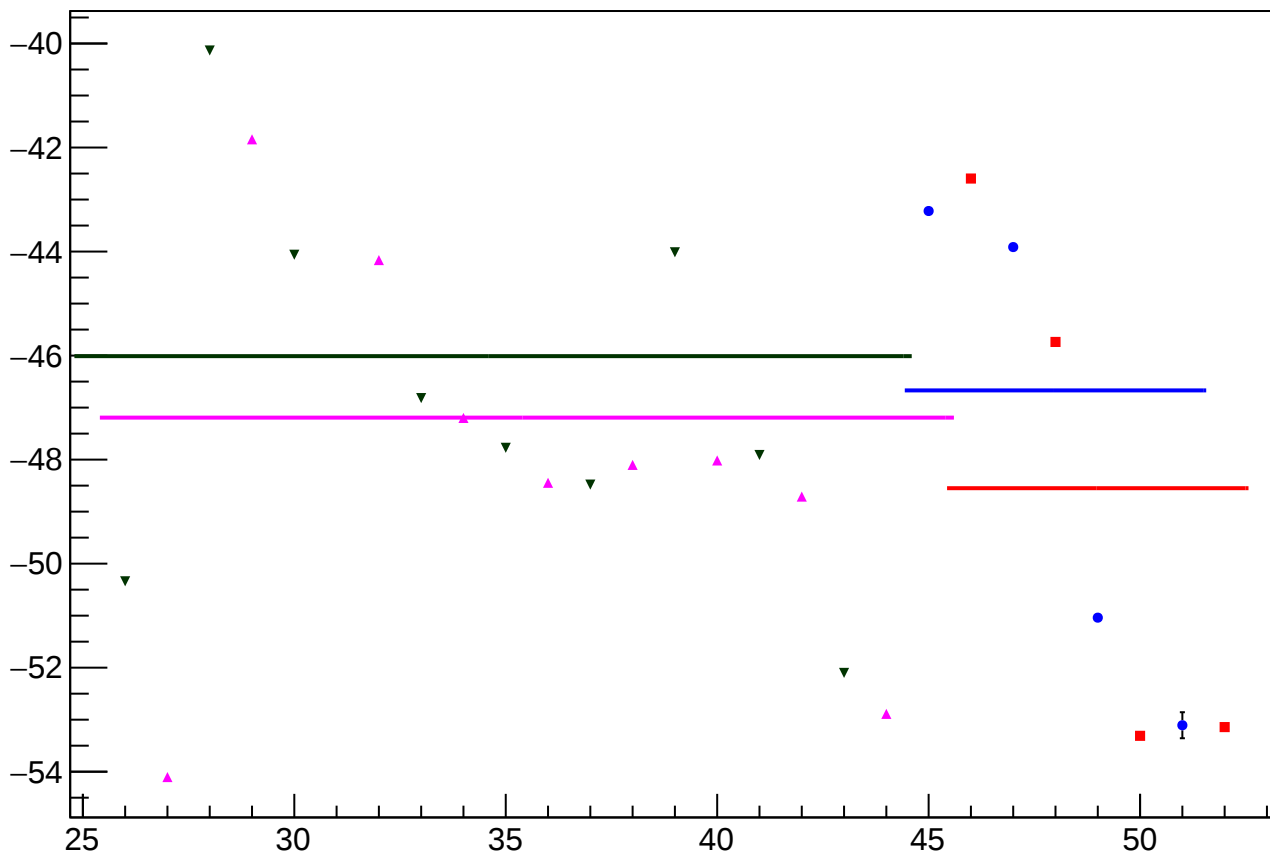
Right Out:  $3.318 \pm 0.215$   $\chi^2/\text{NDF}$ : 208.5/3

Left In:  $2.653 \pm 0.112$   $\chi^2/\text{NDF}$ : 276.7/8

$3.739 \pm 0.108$   $\chi^2/\text{NDF}$ : 390.4/12

$2.794 \pm 0.099$   $\chi^2/\text{NDF}$ : 492.7/12

# reg\_asym\_us\_avg\_diff\_bpm11X\_slope vs slug



Right In: -46.669+/-0.038  $\chi^2/\text{NDF}$ : 10025.1/3

Left Out: -46.011+/-0.024  $\chi^2/\text{NDF}$ : 23317.4/8

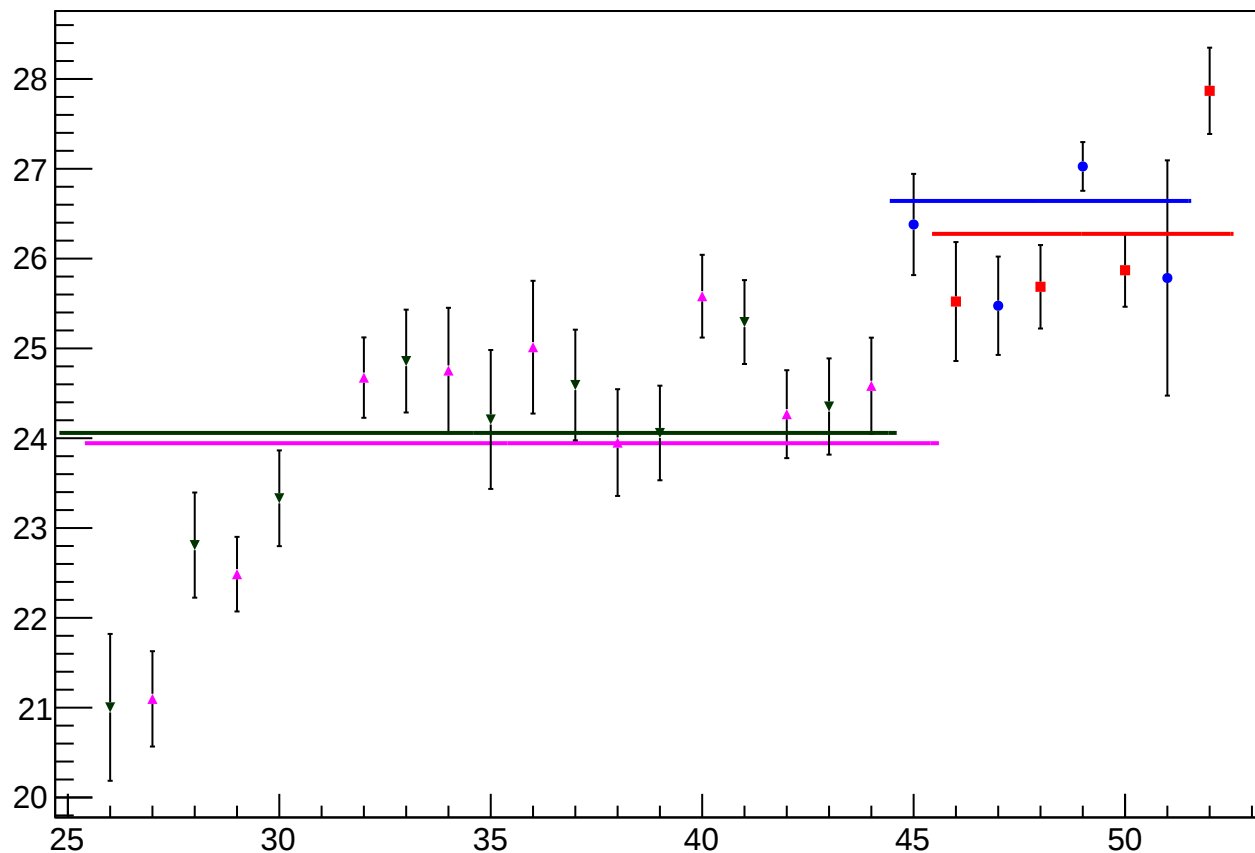
Right Out: -48.549+/-0.040  $\chi^2/\text{NDF}$ : 13939.7/3

Left In: -47.193+/-0.023  $\chi^2/\text{NDF}$ : 27380.9/8

-46.200+/-0.020  $\chi^2/\text{NDF}$ : 33558.2/12

-47.541+/-0.020  $\chi^2/\text{NDF}$ : 42185.8/12

# reg\_asym\_us\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 26.642 $\pm$ 0.220  $\chi^2$ /NDF: 7.2/3

Left Out: 24.059 $\pm$ 0.193  $\chi^2$ /NDF:30.4/8

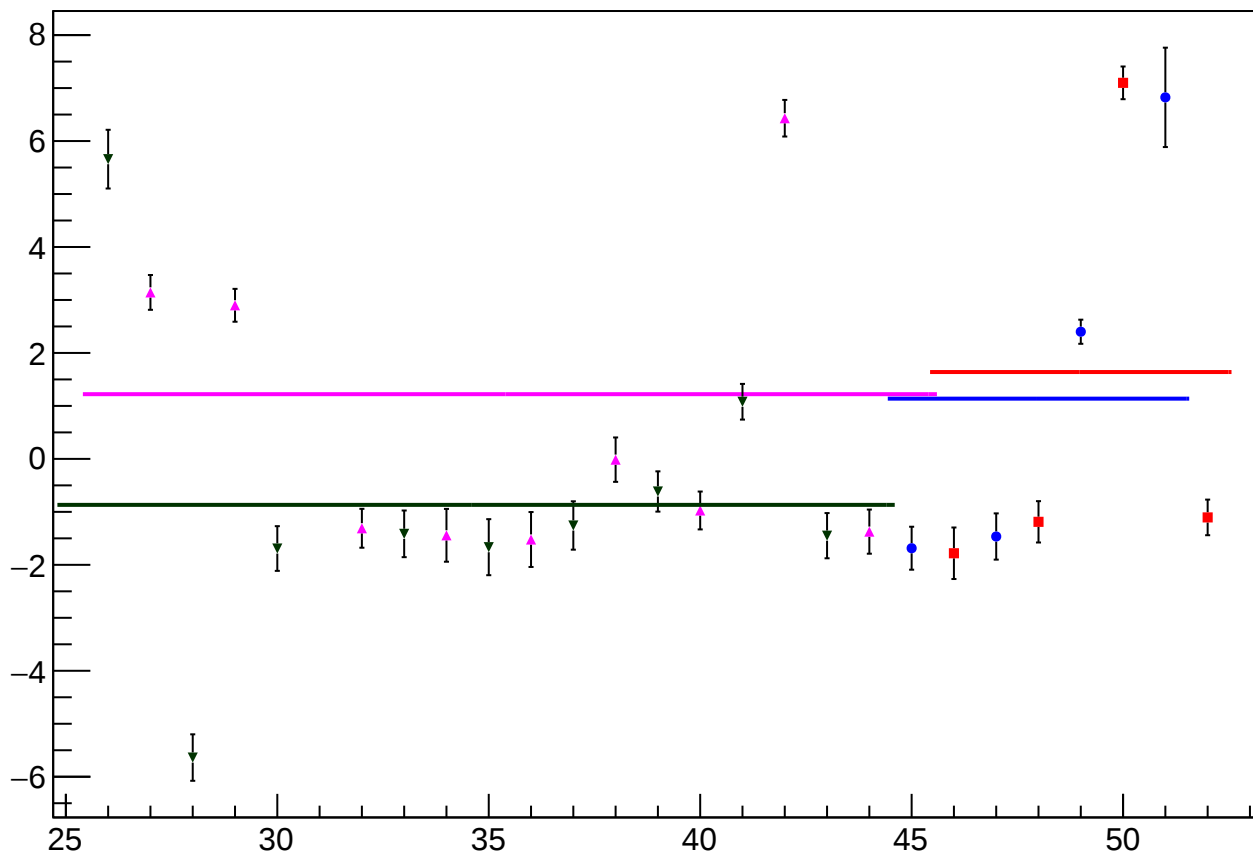
Right Out: 26.276 $\pm$ 0.240  $\chi^2$ /NDF: 14.9/3

Left In: 23.945 $\pm$ 0.173  $\chi^2$ /NDF:61.7/8

25.179 $\pm$ 0.145  $\chi^2$ /NDF: 115.6/12

24.740 $\pm$ 0.140  $\chi^2$ /NDF: 138.5/12

# reg\_asym\_us\_dd\_diff\_bpm4aY\_slope vs slug



Right In: 1.137 $\pm$ 0.177  $\chi^2/\text{NDF}$ : 151.6/3

Left Out: -0.868 $\pm$ 0.143  $\chi^2/\text{NDF}$ : 300.9/8

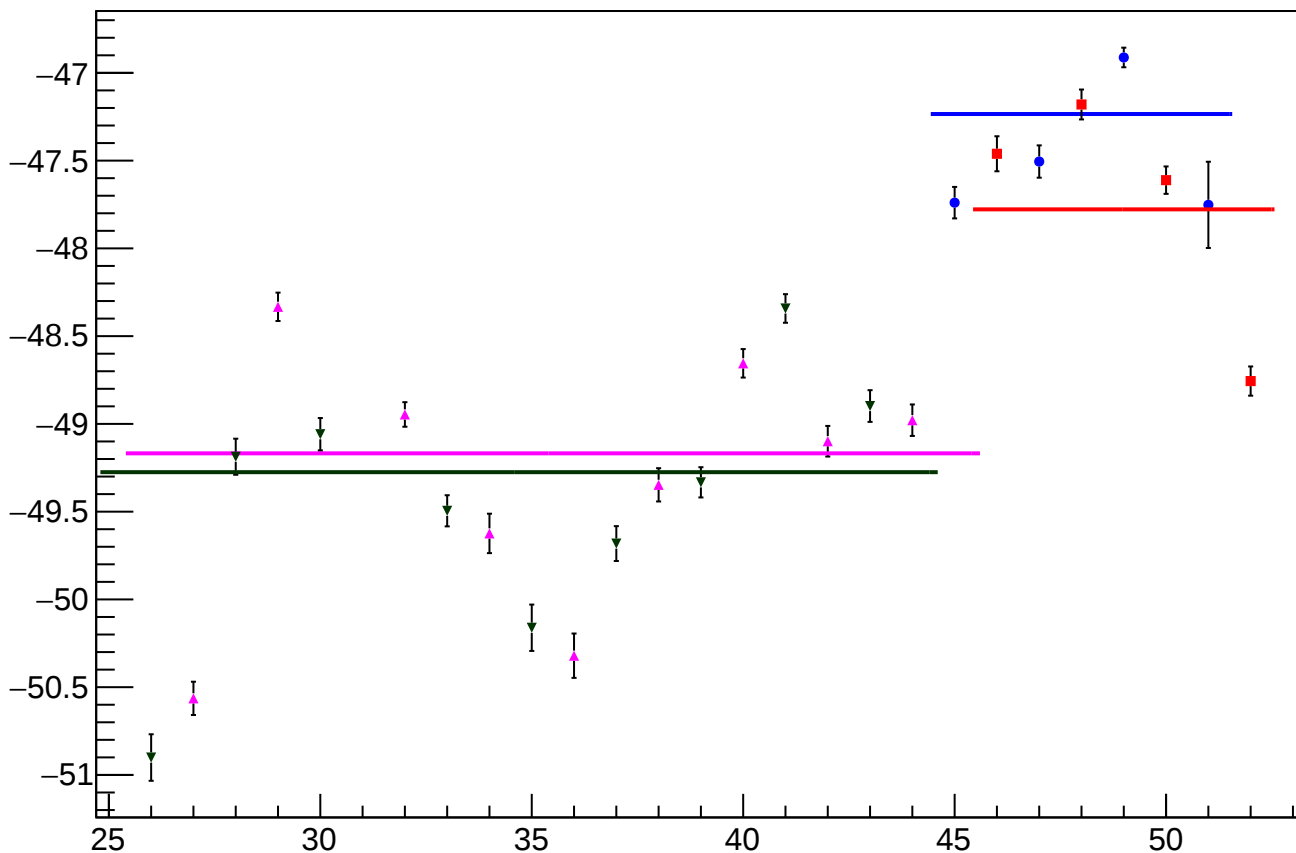
Right Out: 1.640 $\pm$ 0.182  $\chi^2/\text{NDF}$ : 481.6/3

Left In: 1.222 $\pm$ 0.126  $\chi^2/\text{NDF}$ : 480.3/8

-0.078 $\pm$ 0.111  $\chi^2/\text{NDF}$ : 529.8/12

1.358 $\pm$ 0.104  $\chi^2/\text{NDF}$ : 965.5/12

# reg\_asym\_us\_dd\_diff\_bpm4eX\_slope vs slug



Right In: -47.235 $\pm$ 0.042  $\chi^2$ /NDF: 78.1/3

Left Out: -49.275 $\pm$ 0.032  $\chi^2$ /NDF:373.5/8

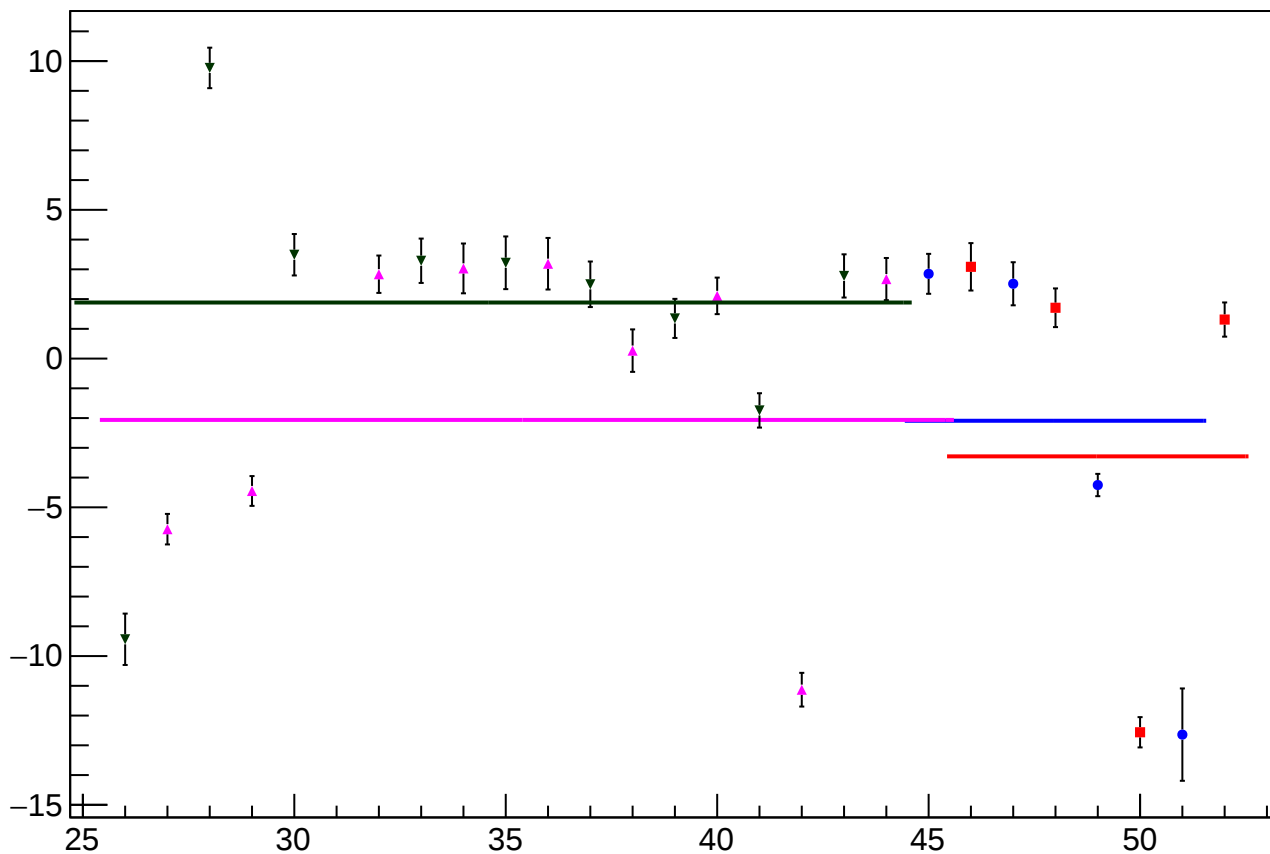
-48.508 $\pm$ 0.025  $\chi^2$ /NDF: 1958.2/12

Right Out: -47.778 $\pm$ 0.043  $\chi^2$ /NDF: 202.2/3

-48.714 $\pm$ 0.024  $\chi^2$ /NDF: 1395.9/12

Left In: -49.168 $\pm$ 0.030  $\chi^2$ /NDF:481.7/8

# reg\_asym\_us\_dd\_diff\_bpm4eY\_slope vs slug



Right In:  $-2.090 \pm 0.293$   $\chi^2/\text{NDF}$ : 174.0/3

Left Out:  $1.884 \pm 0.239$   $\chi^2/\text{NDF}$ : 359.4/8

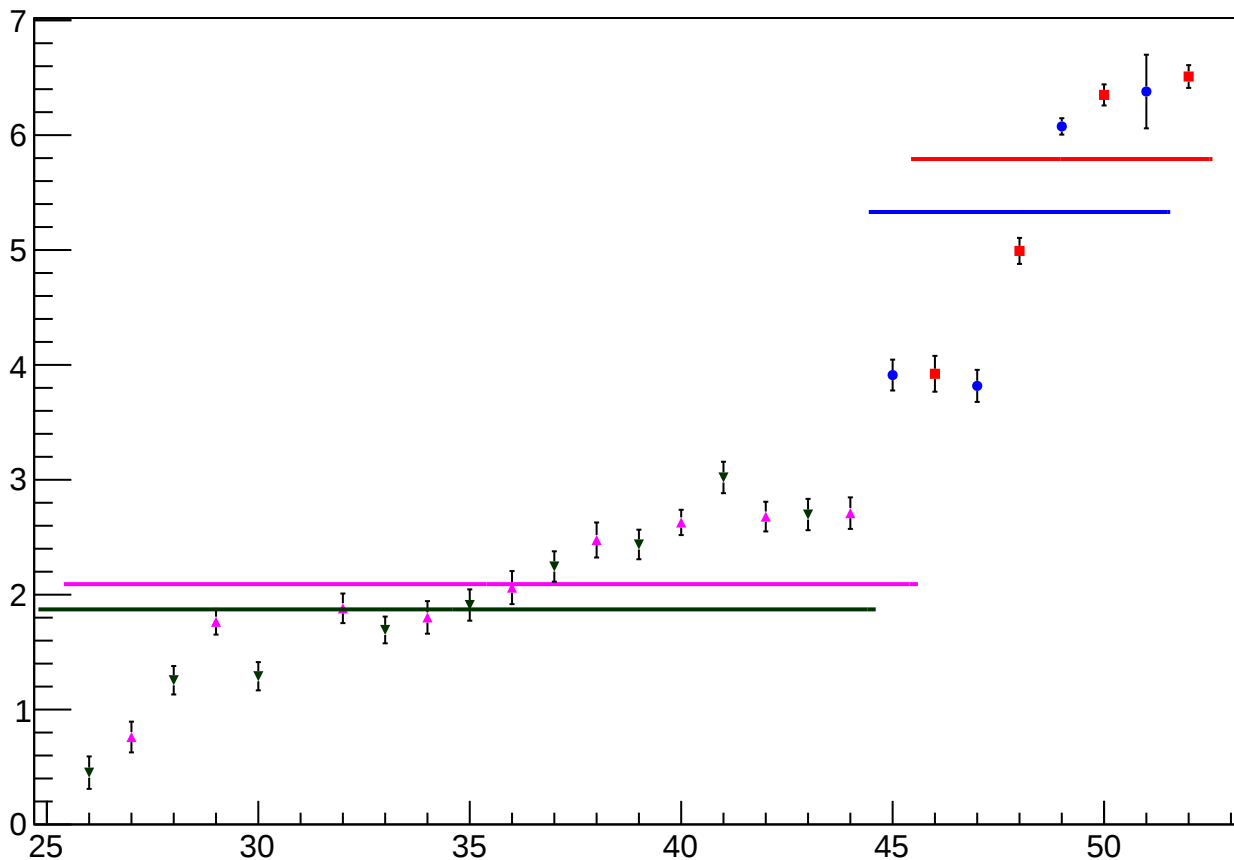
Right Out:  $-3.287 \pm 0.304$   $\chi^2/\text{NDF}$ : 518.7/3

Left In:  $-2.062 \pm 0.209$   $\chi^2/\text{NDF}$ : 565.9/8

$0.298 \pm 0.185$   $\chi^2/\text{NDF}$ : 644.1/12

$-2.456 \pm 0.172$   $\chi^2/\text{NDF}$ : 1095.6/12

# reg\_asym\_us\_dd\_diff\_bpm11X\_slope vs slug



Right In: 5.331 $\pm$ 0.057  $\chi^2$ /NDF: 348.8/3

Left Out: 1.872 $\pm$ 0.043  $\chi^2$ /NDF:285.3/8

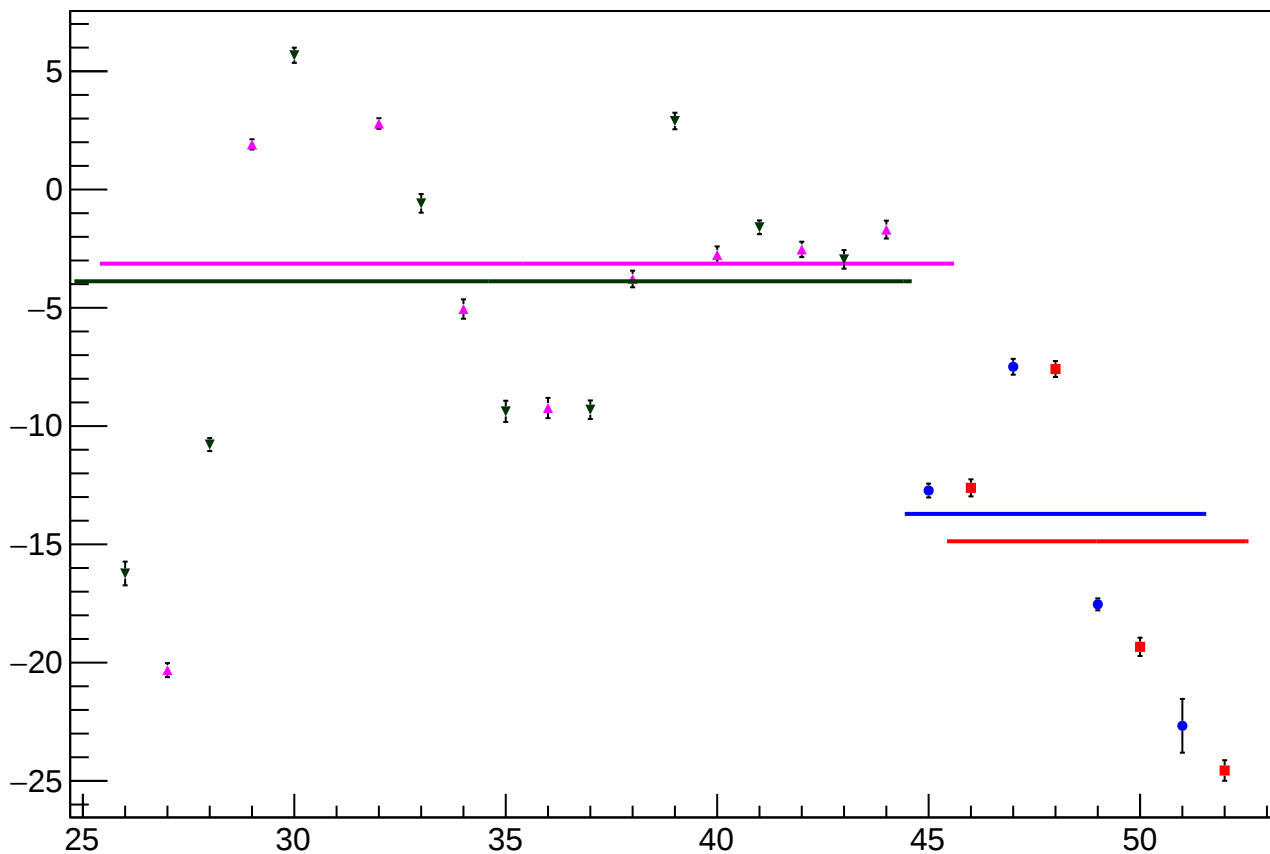
Right Out: 5.792 $\pm$ 0.054  $\chi^2$ /NDF: 282.9/3

Left In: 2.092 $\pm$ 0.043  $\chi^2$ /NDF:185.6/8

3.149 $\pm$ 0.034  $\chi^2$ /NDF: 2993.9/12

3.531 $\pm$ 0.034  $\chi^2$ /NDF: 3306.6/12

# reg\_asym\_ds\_avg\_diff\_bpm4aX\_slope vs slug



Right In: -13.712 $\pm$ 0.165  $\chi^2$ /NDF: 646.2/3

Left Out: -3.879 $\pm$ 0.119  $\chi^2$ /NDF: 2969.1/8

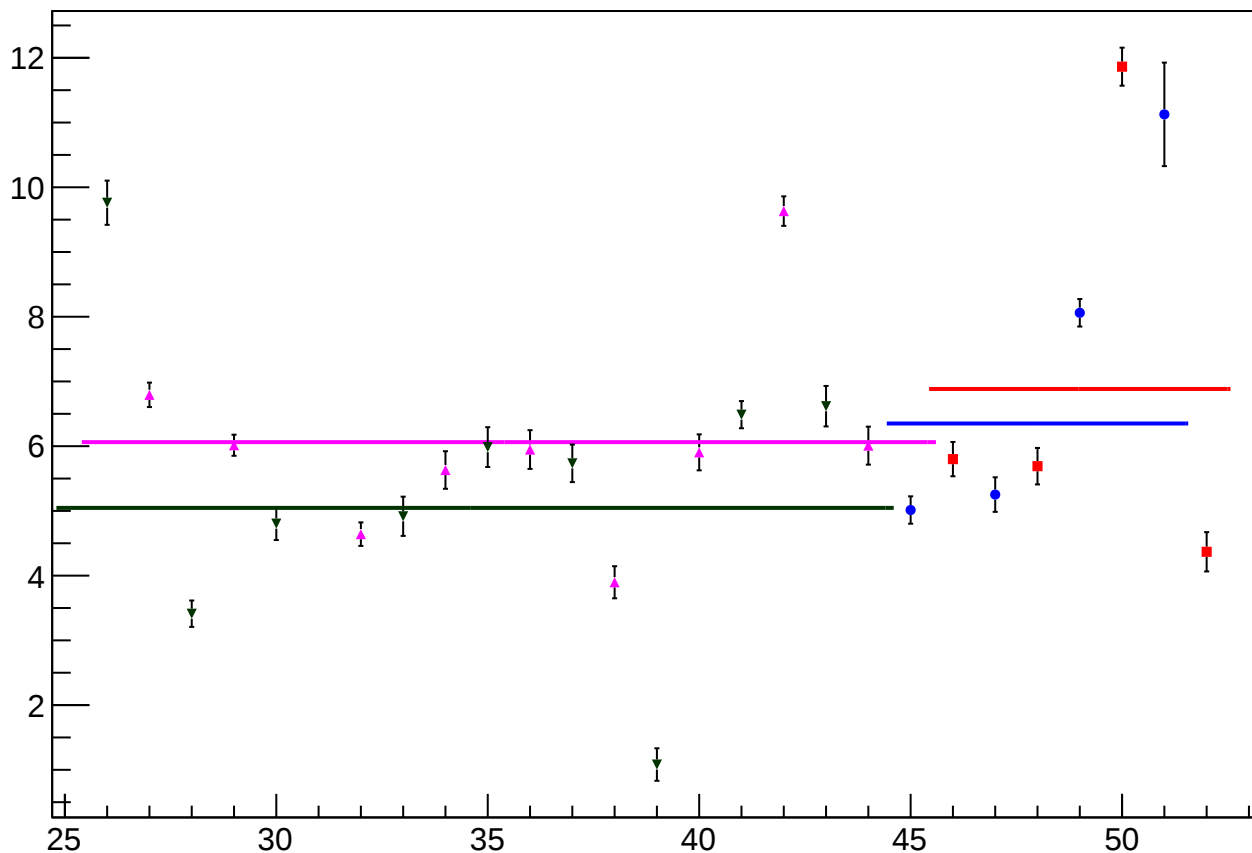
-7.237 $\pm$ 0.096  $\chi^2$ /NDF: 5965.1/12

Right Out: -14.870 $\pm$ 0.188  $\chi^2$ /NDF: 1134.5/3

-5.799 $\pm$ 0.089  $\chi^2$ /NDF: 9017.9/12

Left In: -3.132 $\pm$ 0.102  $\chi^2$ /NDF: 4858.7/8

# reg\_asym\_ds\_avg\_diff\_bpm4aY\_slope vs slug



Right In:  $6.351 \pm 0.129$   $\chi^2/\text{NDF}$ : 157.4/3

Left Out:  $5.047 \pm 0.088$   $\chi^2/\text{NDF}$ : 592.2/8

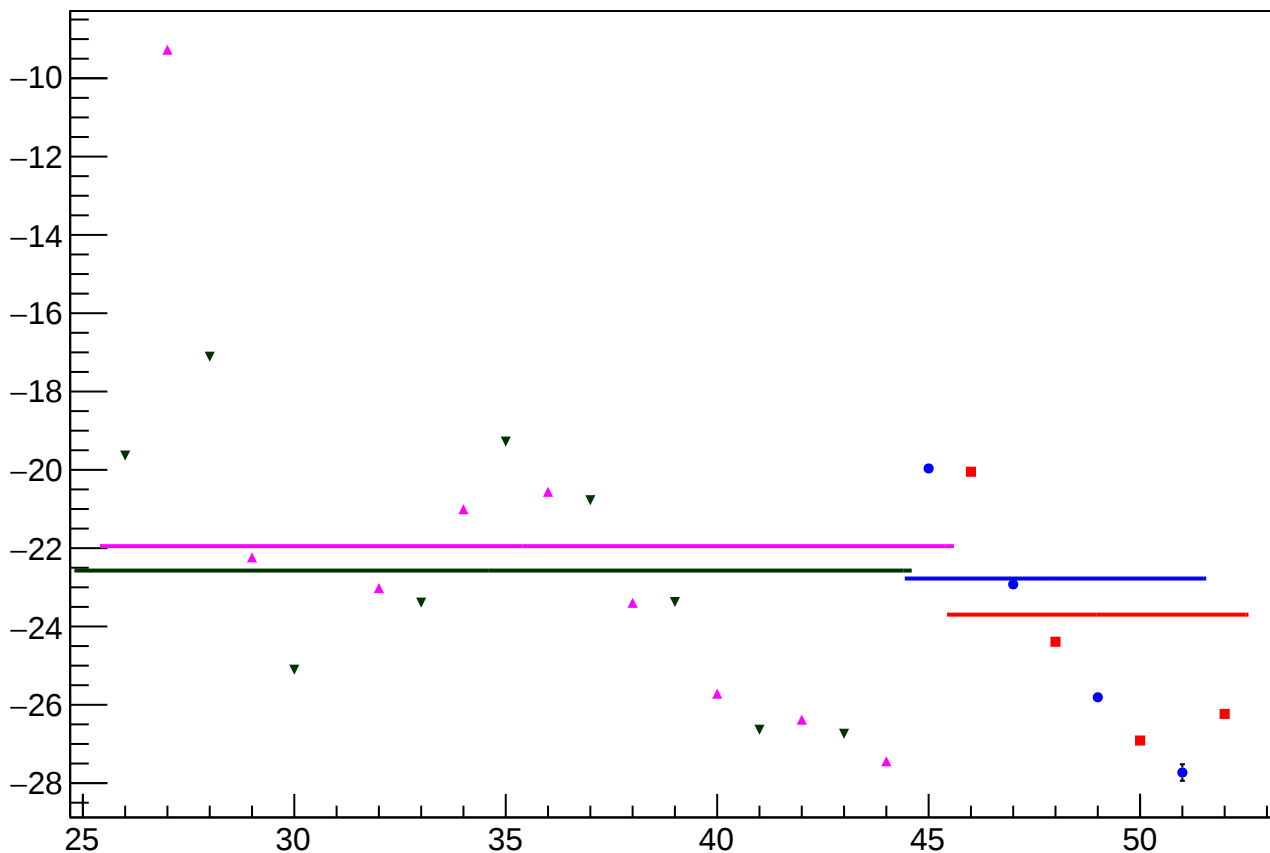
Right Out:  $6.884 \pm 0.142$   $\chi^2/\text{NDF}$ : 390.6/3

Left In:  $6.062 \pm 0.075$   $\chi^2/\text{NDF}$ : 400.5/8

$5.459 \pm 0.072$   $\chi^2/\text{NDF}$ : 819.5/12

$6.239 \pm 0.066$   $\chi^2/\text{NDF}$ : 817.2/12

# reg\_asym\_ds\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -22.775 $\pm$ 0.029  $\chi^2$ /NDF: 7546.8/3

Left Out: -22.572 $\pm$ 0.020  $\chi^2$ /NDF: 29848.4/8

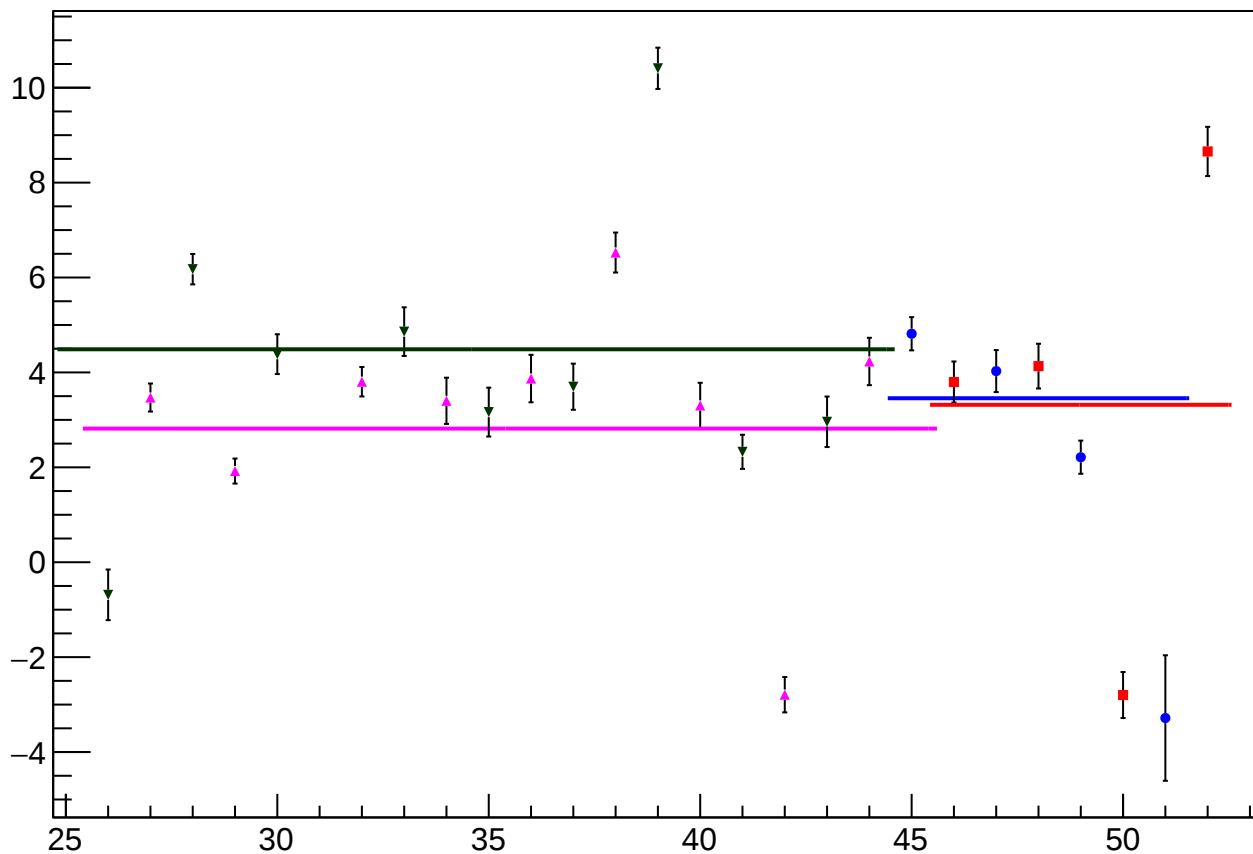
Right Out: -23.697 $\pm$ 0.032  $\chi^2$ /NDF: 7612.1/3

Left In: -21.949 $\pm$ 0.017  $\chi^2$ /NDF: 78862.5/8

-22.636 $\pm$ 0.016  $\chi^2$ /NDF: 37428.2/12

-22.343 $\pm$ 0.015  $\chi^2$ /NDF: 88761.0/12

# reg\_asym\_ds\_avg\_diff\_bpm4eY\_slope vs slug



Right In:  $3.456 \pm 0.213$   $\chi^2/\text{NDF}$ : 55.4/3

Left Out:  $4.488 \pm 0.145$   $\chi^2/\text{NDF}$ : 361.4/8

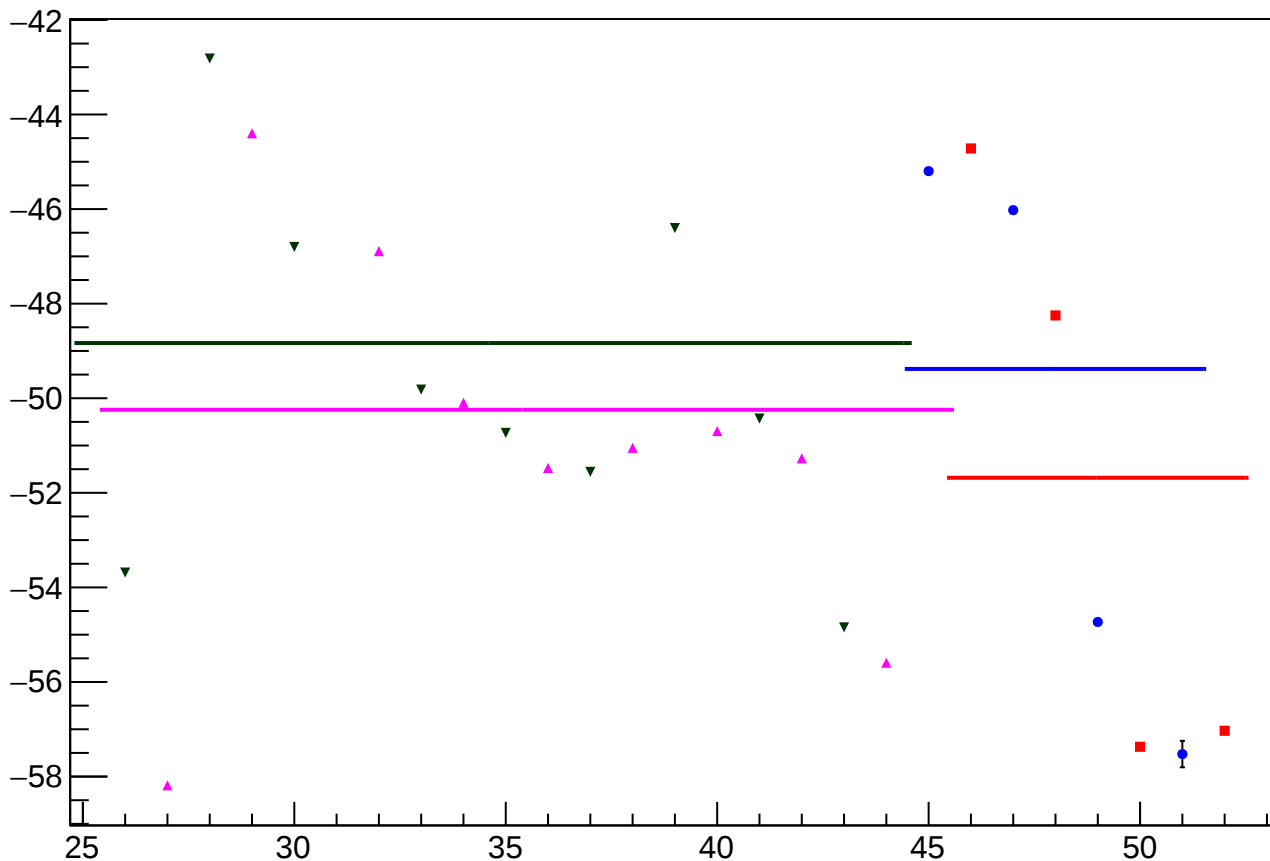
Right Out:  $3.318 \pm 0.237$   $\chi^2/\text{NDF}$ : 269.3/3

Left In:  $2.816 \pm 0.123$   $\chi^2/\text{NDF}$ : 345.0/8

$4.160 \pm 0.120$   $\chi^2/\text{NDF}$ : 432.8/12

$2.923 \pm 0.109$   $\chi^2/\text{NDF}$ : 617.8/12

# reg\_asym\_ds\_avg\_diff\_bpm11X\_slope vs slug



Right In: -49.380+/-0.042  $\chi^2/\text{NDF}$ : 12404.6/3

Left Out: -48.833+/-0.027  $\chi^2/\text{NDF}$ : 20149.2/8

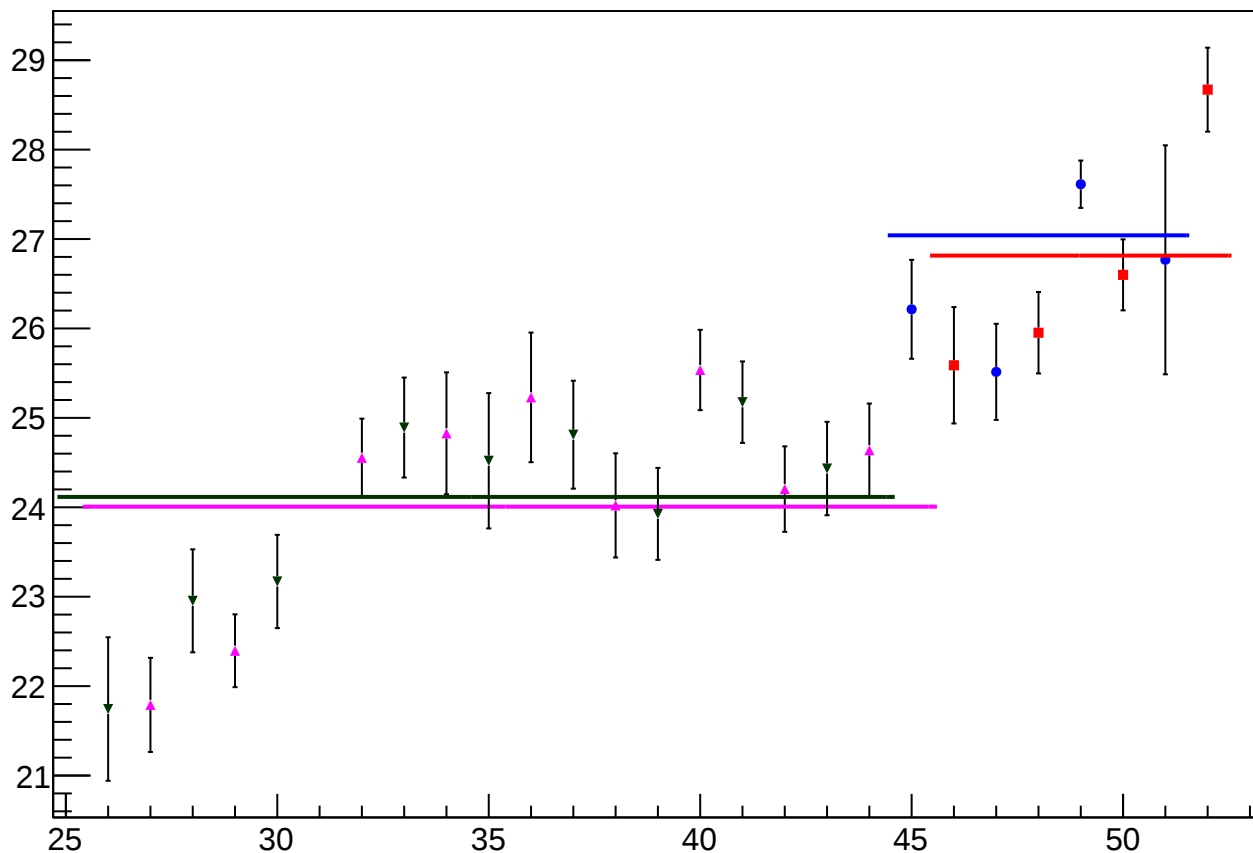
Right Out: -51.681+/-0.044  $\chi^2/\text{NDF}$ : 16001.3/3

Left In: -50.244+/-0.026  $\chi^2/\text{NDF}$ : 27249.9/8

-48.994+/-0.023  $\chi^2/\text{NDF}$ : 32675.8/12

-50.618+/-0.022  $\chi^2/\text{NDF}$ : 44050.0/12

# reg\_asym\_ds\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 27.041±/0.215  $\chi^2/\text{NDF}$ : 15.0/3

Left Out: 24.116±/0.188  $\chi^2/\text{NDF}$ :25.5/8

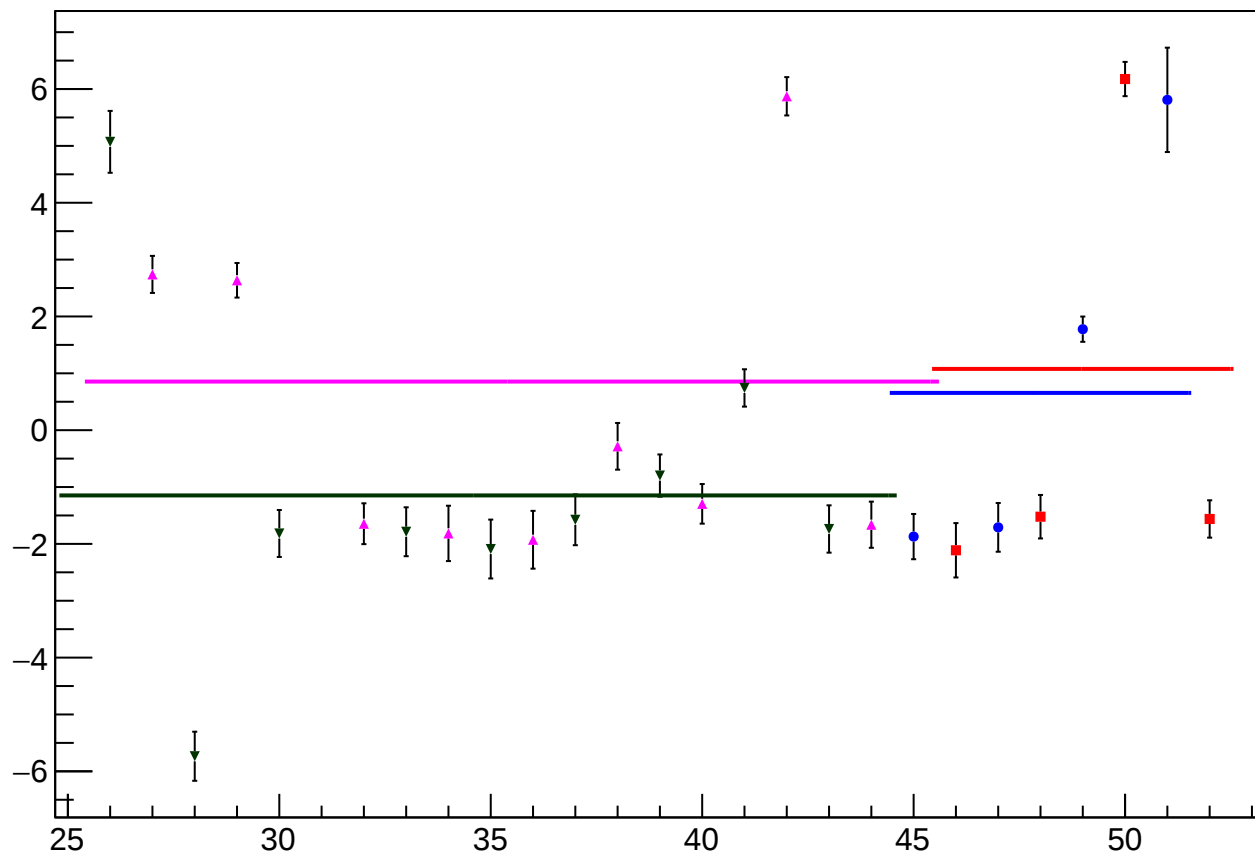
Right Out: 26.815±/0.235  $\chi^2/\text{NDF}$ : 23.1/3

Left In: 24.007±/0.169  $\chi^2/\text{NDF}$ :52.5/8

25.385±/0.142  $\chi^2/\text{NDF}$ : 145.3/12

24.965±/0.137  $\chi^2/\text{NDF}$ : 169.3/12

# reg\_asym\_ds\_dd\_diff\_bpm4aY\_slope vs slug



Right In:  $0.655 \pm 0.174$   $\chi^2/\text{NDF}$ : 127.8/3

Left Out:  $-1.148 \pm 0.140$   $\chi^2/\text{NDF}$ : 288.4/8

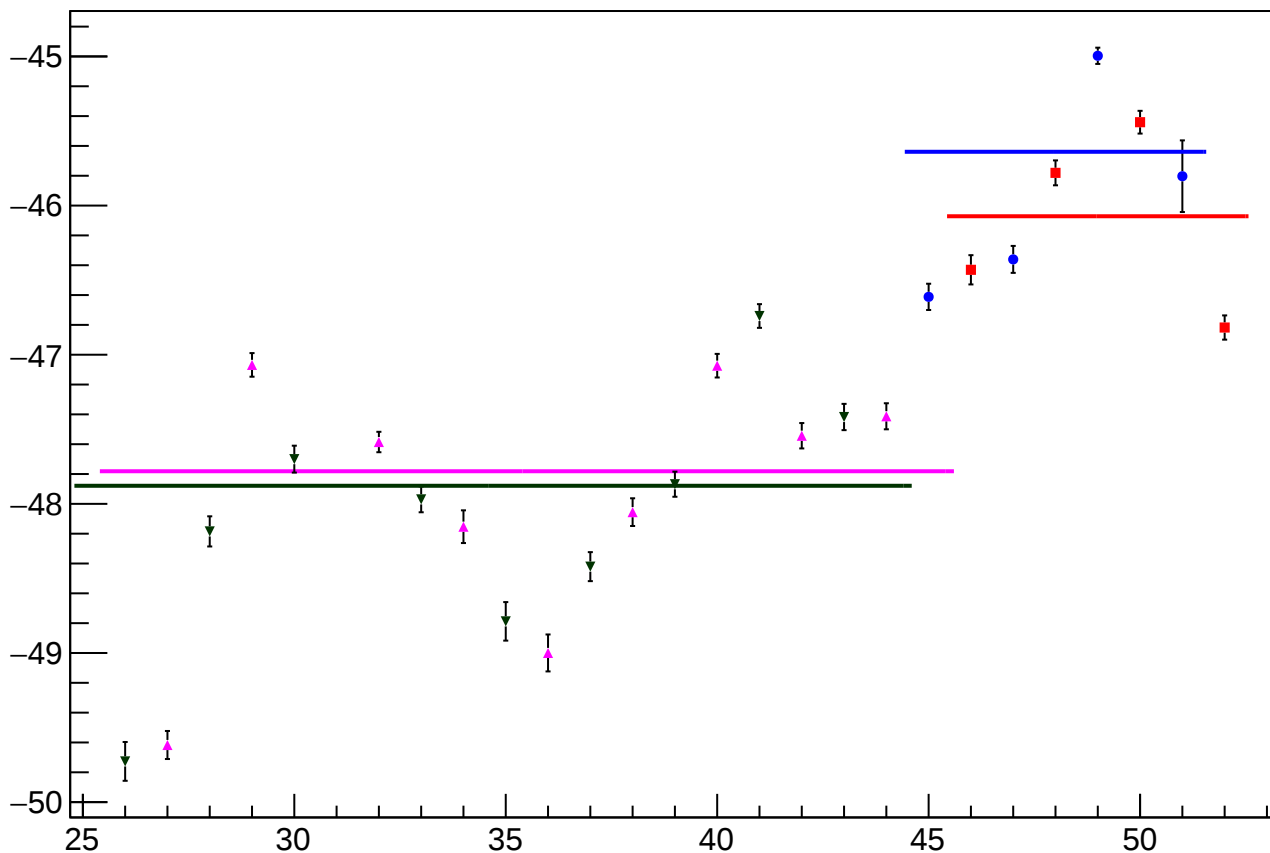
Right Out:  $1.078 \pm 0.178$   $\chi^2/\text{NDF}$ : 441.7/3

Left In:  $0.855 \pm 0.124$   $\chi^2/\text{NDF}$ : 482.1/8

$-0.437 \pm 0.109$   $\chi^2/\text{NDF}$ : 481.6/12

$0.927 \pm 0.102$   $\chi^2/\text{NDF}$ : 924.8/12

# reg\_asym\_ds\_dd\_diff\_bpm4eX\_slope vs slug



Right In:  $-45.639 \pm 0.041$   $\chi^2/\text{NDF}$ : 325.8/3

Left Out:  $-47.879 \pm 0.032$   $\chi^2/\text{NDF}$ : 529.0/8

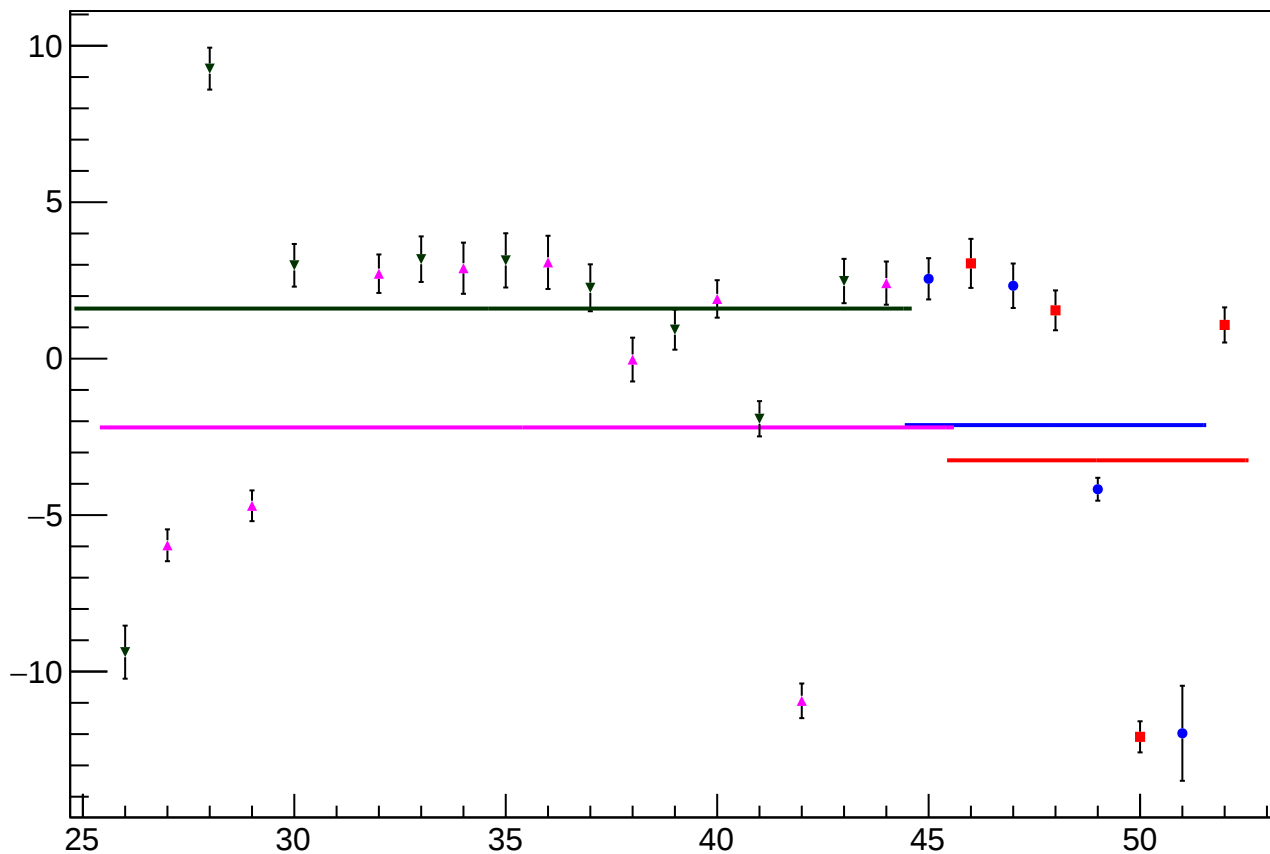
$-47.038 \pm 0.025$   $\chi^2/\text{NDF}$ : 2751.8/12

Right Out:  $-46.072 \pm 0.042$   $\chi^2/\text{NDF}$ : 178.3/3

$-47.224 \pm 0.024$   $\chi^2/\text{NDF}$ : 1995.6/12

Left In:  $-47.781 \pm 0.029$   $\chi^2/\text{NDF}$ : 692.9/8

# reg\_asym\_ds\_dd\_diff\_bpm4eY\_slope vs slug



Right In:  $-2.124 \pm 0.286$   $\chi^2/\text{NDF}$ : 163.1/3

Left Out:  $1.601 \pm 0.233$   $\chi^2/\text{NDF}$ : 353.2/8

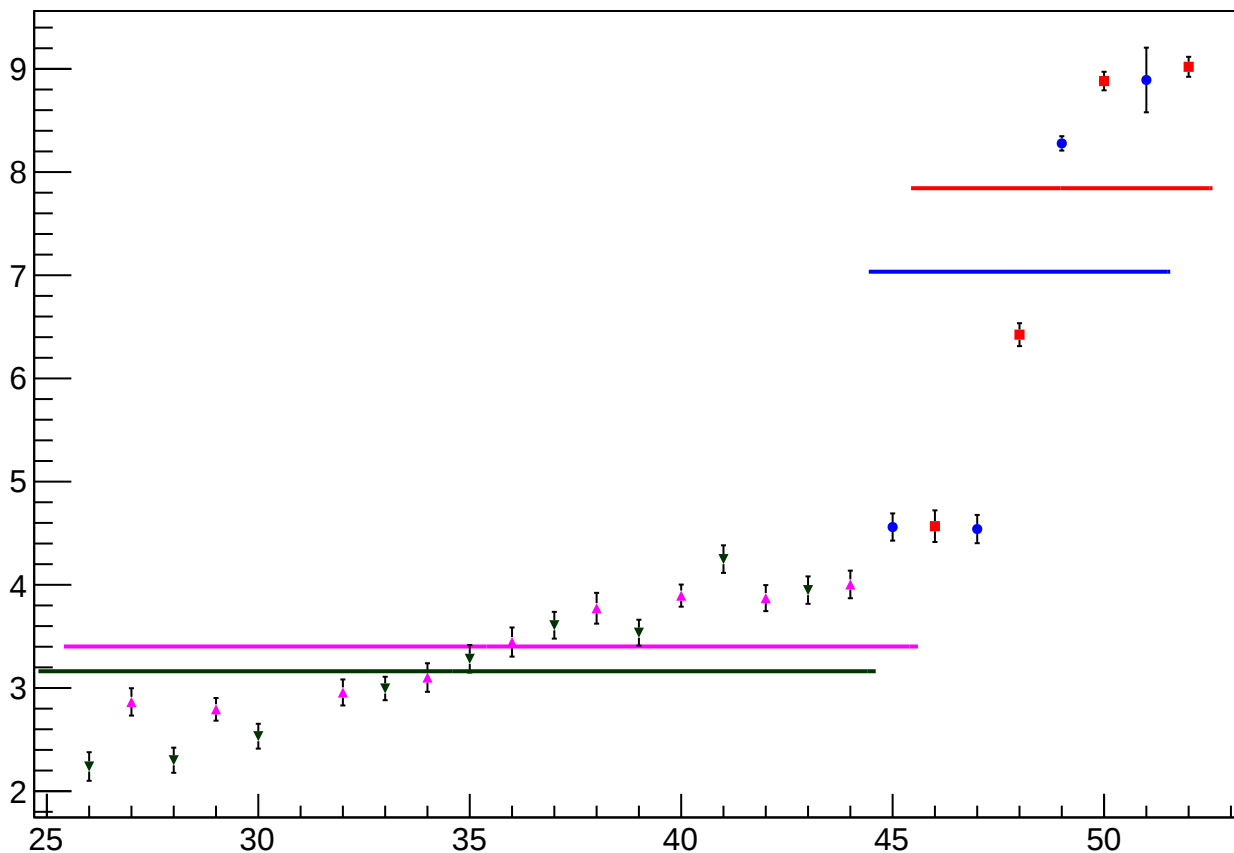
Right Out:  $-3.250 \pm 0.297$   $\chi^2/\text{NDF}$ : 496.5/3

Left In:  $-2.198 \pm 0.205$   $\chi^2/\text{NDF}$ : 572.6/8

$0.114 \pm 0.181$   $\chi^2/\text{NDF}$ : 617.8/12

$-2.537 \pm 0.169$   $\chi^2/\text{NDF}$ : 1077.6/12

# reg\_asym\_ds\_dd\_diff\_bpm11X\_slope vs slug



Right In: 7.034+/-0.055  $\chi^2/\text{NDF}$ : 1037.3/3

Left Out: 3.162+/-0.042  $\chi^2/\text{NDF}$ : 246.8/8

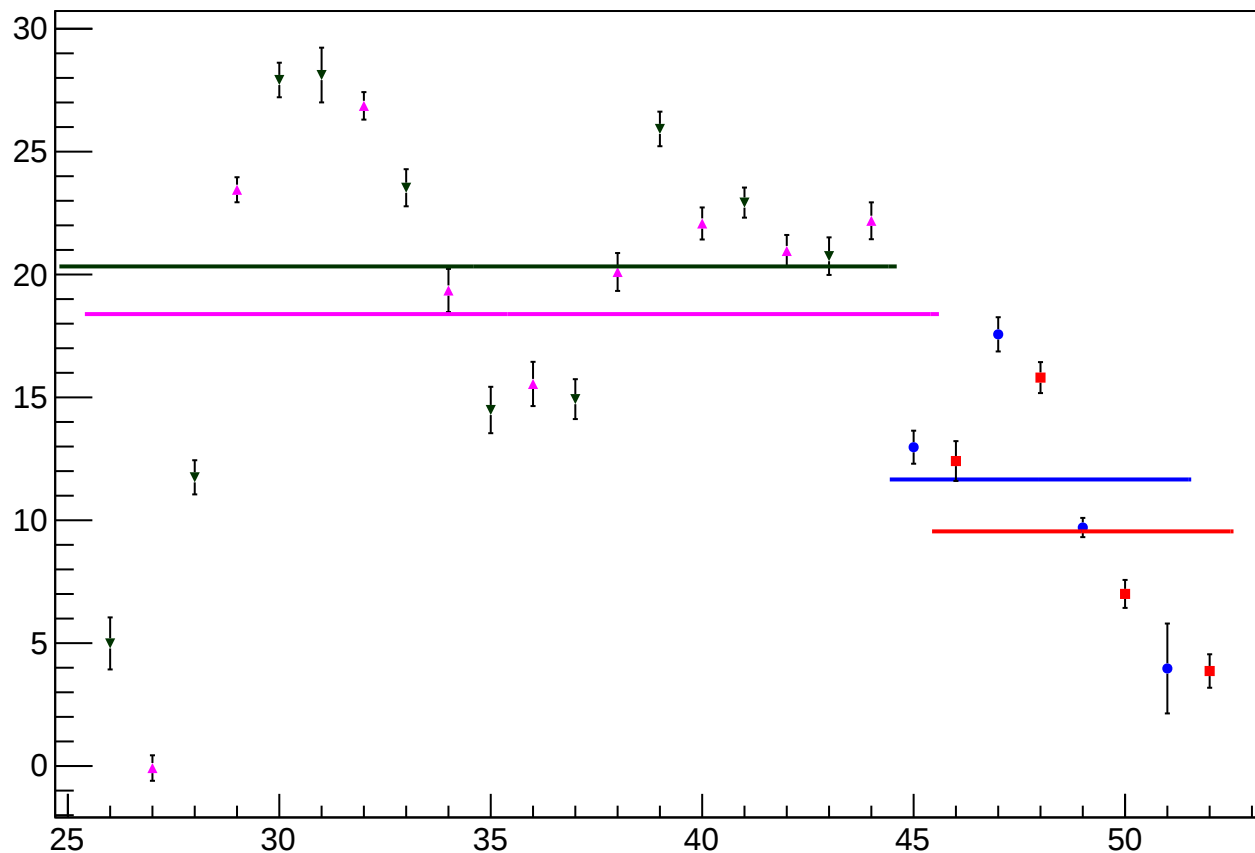
Right Out: 7.844+/-0.053  $\chi^2/\text{NDF}$ : 901.2/3

Left In: 3.402+/-0.042  $\chi^2/\text{NDF}$ : 125.8/8

4.593+/-0.034  $\chi^2/\text{NDF}$ : 4375.5/12

5.132+/-0.033  $\chi^2/\text{NDF}$ : 5296.4/12

# reg\_asym\_left\_avg\_diff\_bpm4aX\_slope vs slug



Right In: 11.660 $\pm$ 0.300  $\chi^2$ /NDF: 118.4/3

Left Out: 20.329 $\pm$ 0.246  $\chi^2$ /NDF: 709.7/9

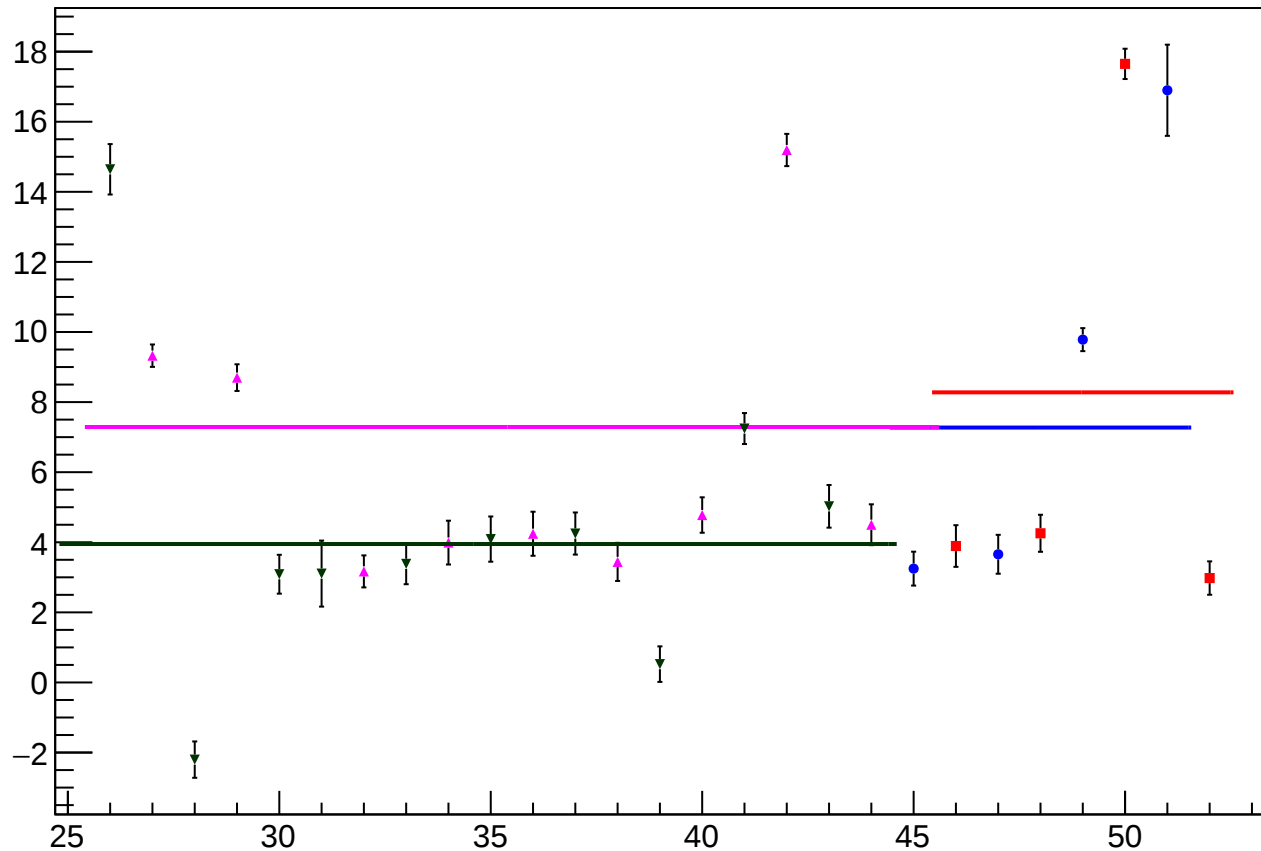
Right Out: 9.548 $\pm$ 0.328  $\chi^2$ /NDF: 200.6/3

Left In: 18.390 $\pm$ 0.216  $\chi^2$ /NDF: 1685.1/8

16.852 $\pm$ 0.190  $\chi^2$ /NDF: 1328.0/13

15.720 $\pm$ 0.180  $\chi^2$ /NDF: 2392.2/12

# reg\_asym\_left\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 7.273+/-0.240  $\chi^2/\text{NDF}$ : 224.8/3

Left Out: 3.950+/-0.183  $\chi^2/\text{NDF}$ : 470.4/9

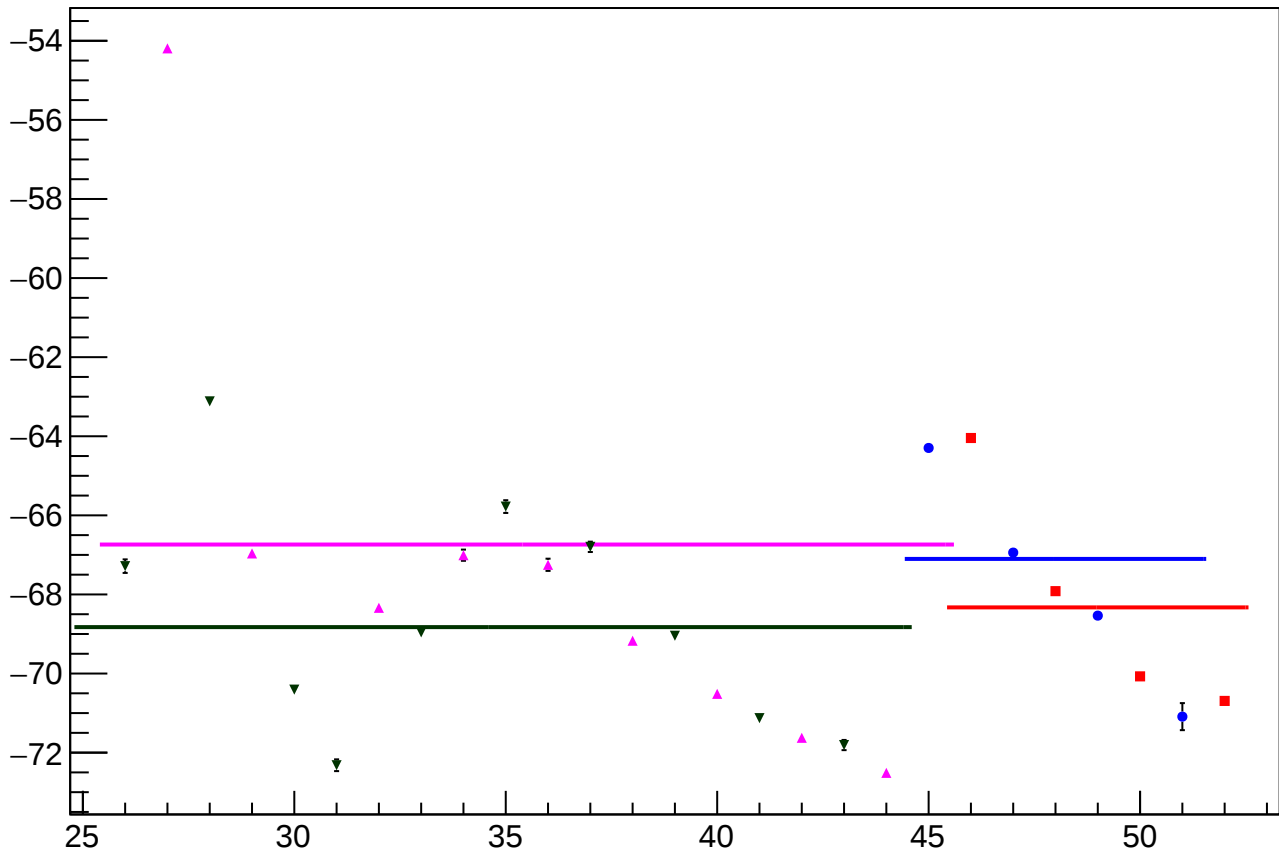
Right Out: 8.278+/-0.249  $\chi^2/\text{NDF}$ : 706.3/3

Left In: 7.289+/-0.155  $\chi^2/\text{NDF}$ : 579.9/8

5.173+/-0.145  $\chi^2/\text{NDF}$ : 816.6/13

7.566+/-0.132  $\chi^2/\text{NDF}$ : 1297.6/12

# reg\_asym\_left\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -67.102 $\pm$ 0.056  $\chi^2$ /NDF: 1141.5/3

Left Out: -68.826 $\pm$ 0.041  $\chi^2$ /NDF: 4587.0/9

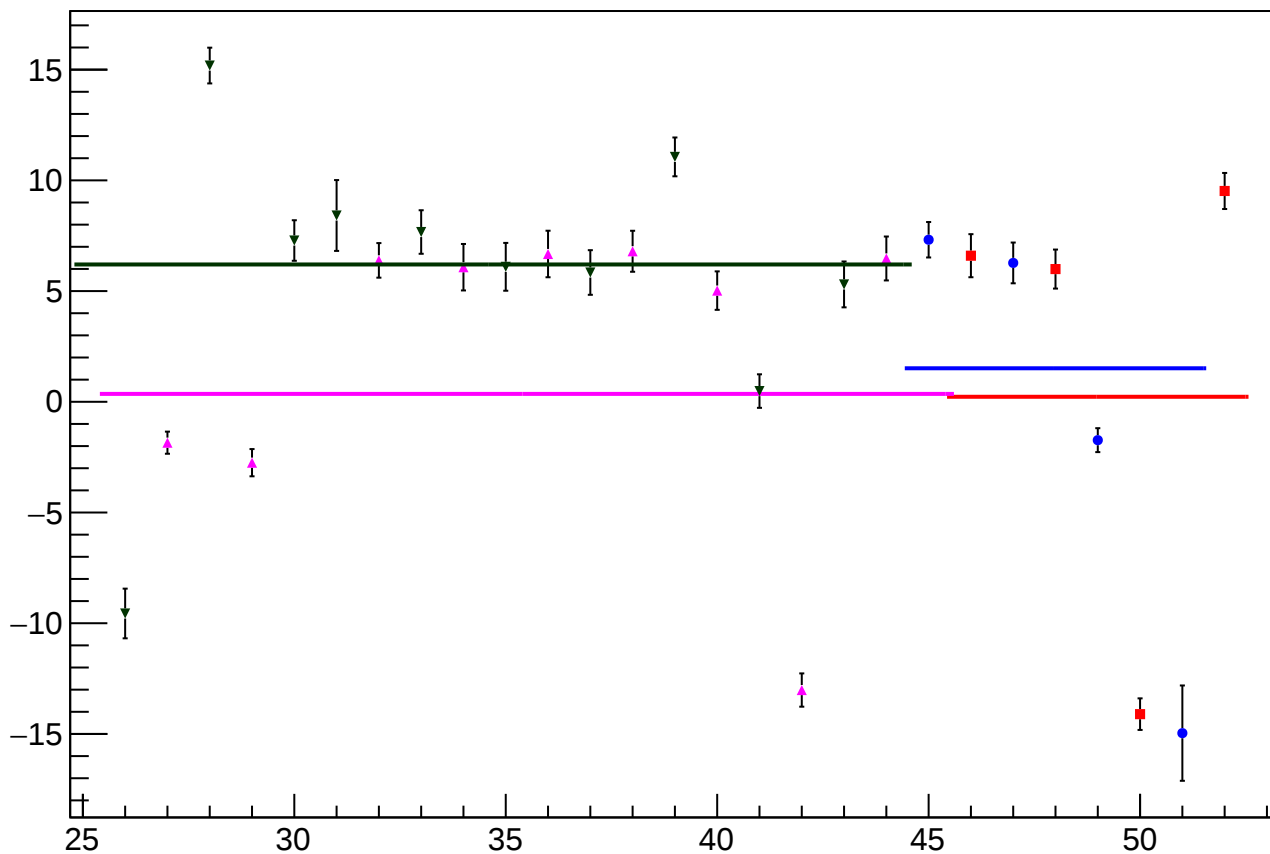
Right Out: -68.327 $\pm$ 0.058  $\chi^2$ /NDF: 1894.9/3

Left In: -66.738 $\pm$ 0.037  $\chi^2$ /NDF: 23839.7/8

-68.227 $\pm$ 0.033  $\chi^2$ /NDF: 6355.7/13

-67.204 $\pm$ 0.031  $\chi^2$ /NDF: 26267.8/12

# reg\_asym\_left\_avg\_diff\_bpm4eY\_slope vs slug



Right In: 1.514+/-0.396  $\chi^2/\text{NDF}$ : 174.0/3

Left Out: 6.202+/-0.305  $\chi^2/\text{NDF}$ : 415.4/9

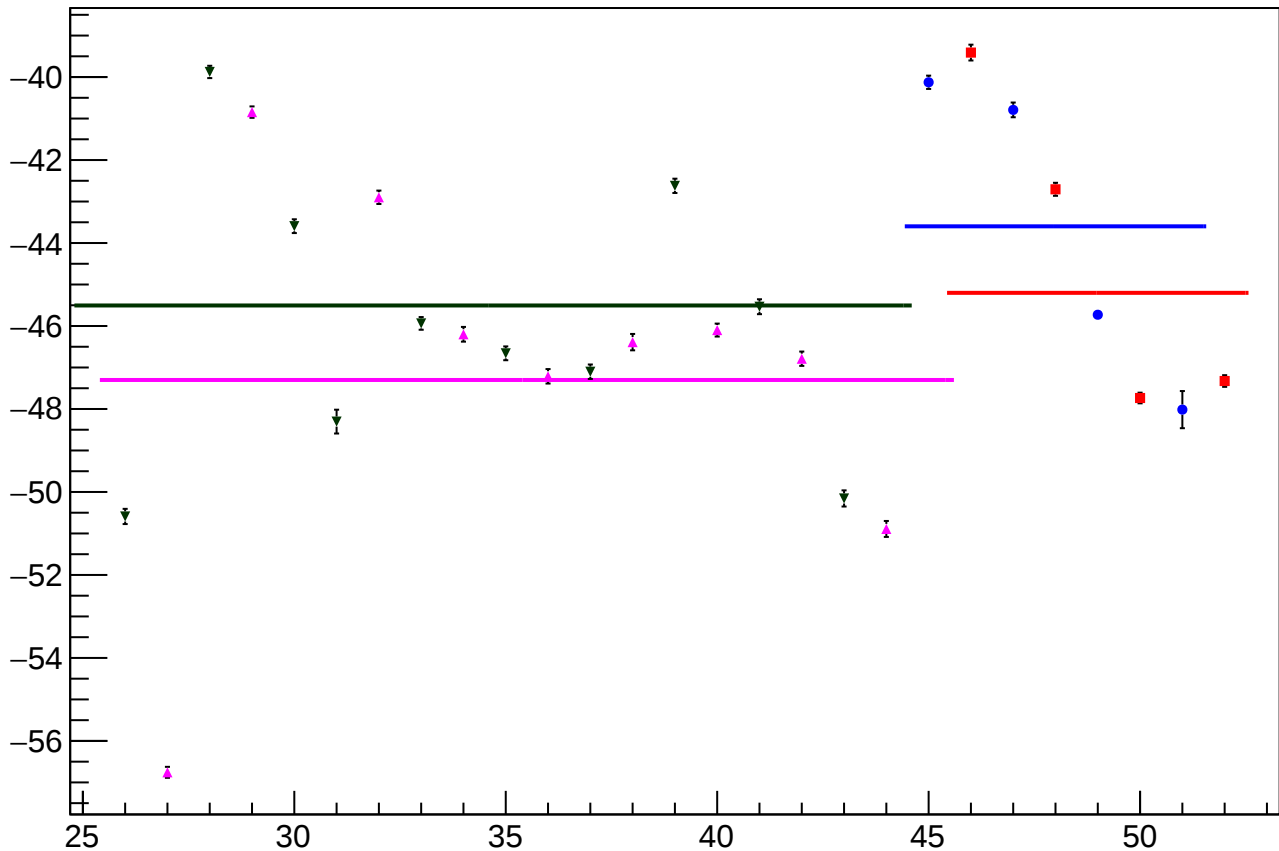
Right Out: 0.227+/-0.415  $\chi^2/\text{NDF}$ : 619.9/3

Left In: 0.357+/-0.255  $\chi^2/\text{NDF}$ : 602.5/8

4.457+/-0.241  $\chi^2/\text{NDF}$ : 677.4/13

0.321+/-0.217  $\chi^2/\text{NDF}$ : 1222.5/12

# reg\_asym\_left\_avg\_diff\_bpm11X\_slope vs slug



Right In: -43.598±/0.077  $\chi^2/\text{NDF}$ : 1246.5/3

Left Out: -45.505±/0.055  $\chi^2/\text{NDF}$ : 3423.9/9

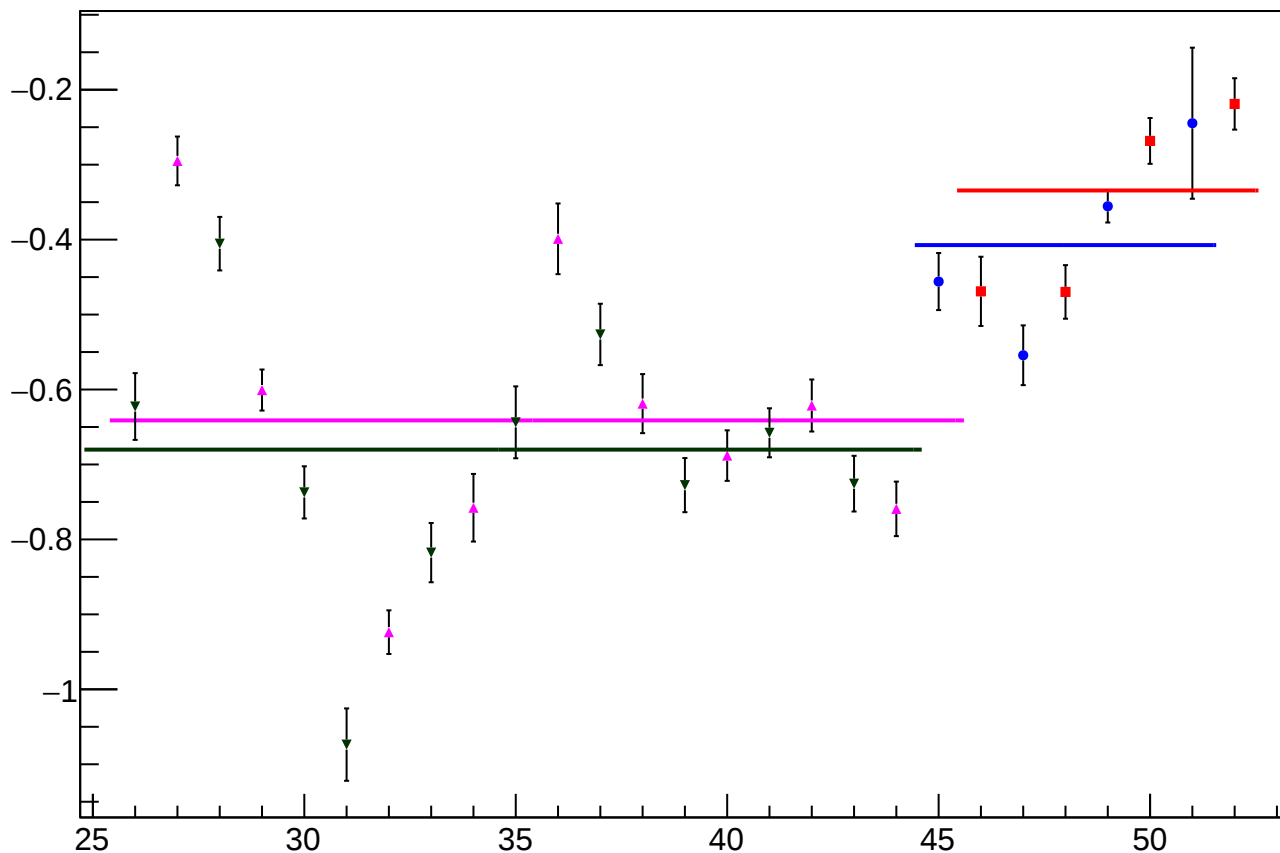
Right Out: -45.201±/0.075  $\chi^2/\text{NDF}$ : 1792.3/3

Left In: -47.301±/0.054  $\chi^2/\text{NDF}$ : 8552.3/8

-44.851±/0.045  $\chi^2/\text{NDF}$ : 5077.8/13

-46.577±/0.044  $\chi^2/\text{NDF}$ : 10862.5/12

# reg\_asym\_left\_dd\_diff\_bpm4aX\_slope vs slug



Right In: -0.407 $\pm$ 0.017  $\chi^2$ /NDF: 23.5/3

Left Out: -0.680 $\pm$ 0.012  $\chi^2$ /NDF:160.4/9

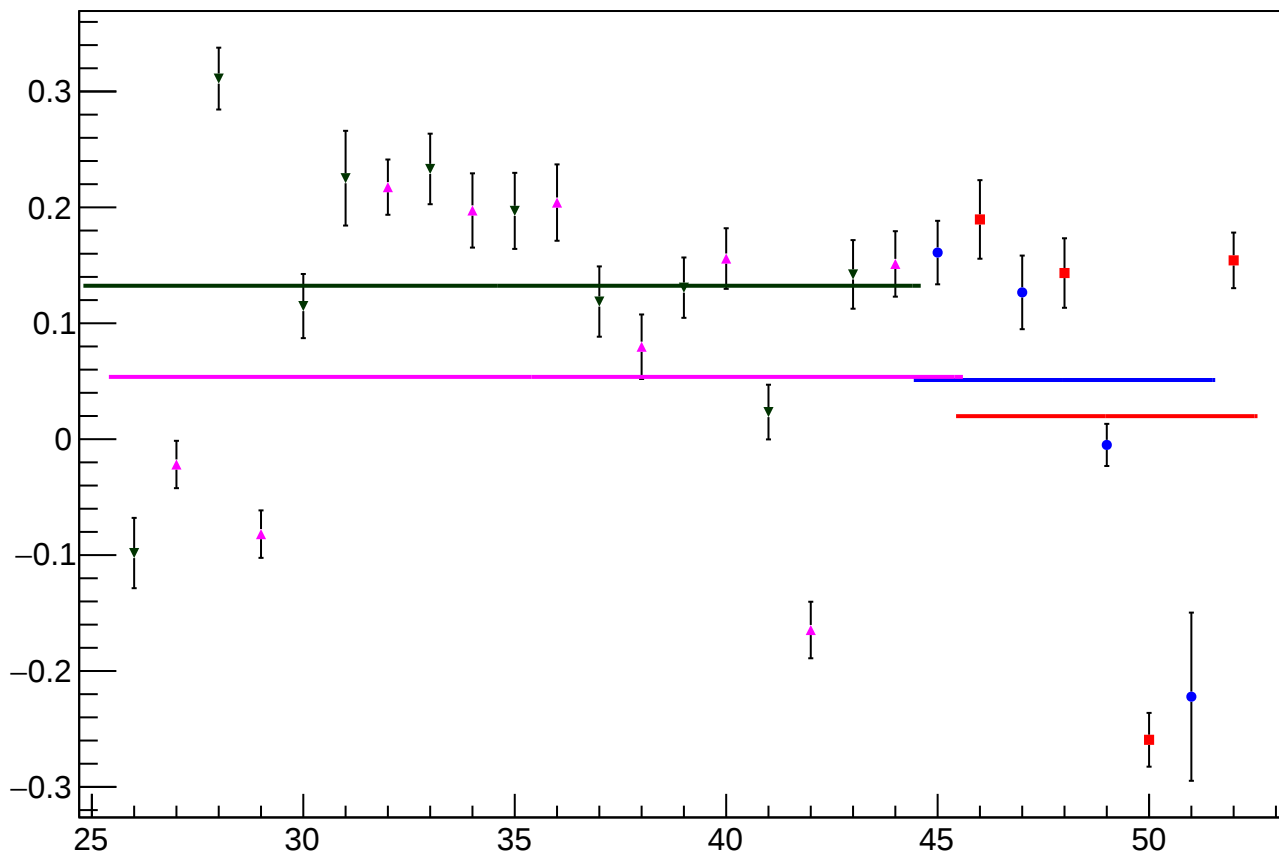
Right Out: -0.334 $\pm$ 0.018  $\chi^2$ /NDF: 38.9/3

Left In: -0.641 $\pm$ 0.012  $\chi^2$ /NDF:255.8/8

-0.585 $\pm$ 0.010  $\chi^2$ /NDF: 356.0/13

-0.550 $\pm$ 0.010  $\chi^2$ /NDF: 504.6/12

# reg\_asym\_left\_dd\_diff\_bpm4aY\_slope vs slug



Right In:  $0.051 \pm 0.013$   $\chi^2/\text{NDF}$ : 45.5/3

Left Out:  $0.132 \pm 0.009$   $\chi^2/\text{NDF}$ : 144.8/9

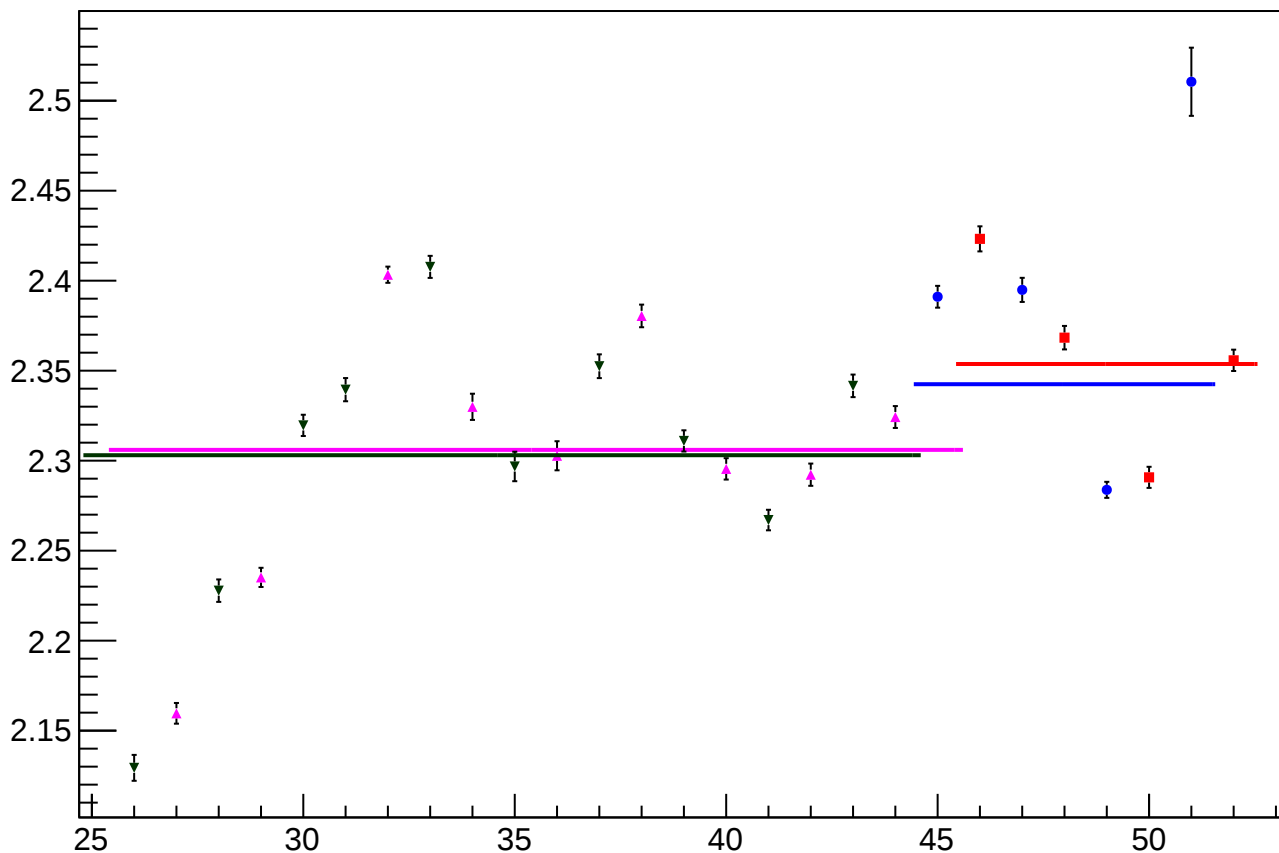
Right Out:  $0.020 \pm 0.013$   $\chi^2/\text{NDF}$ : 218.3/3

Left In:  $0.054 \pm 0.008$   $\chi^2/\text{NDF}$ : 253.9/8

$0.107 \pm 0.008$   $\chi^2/\text{NDF}$ : 215.2/13

$0.044 \pm 0.007$   $\chi^2/\text{NDF}$ : 476.8/12

# reg\_asym\_left\_dd\_diff\_bpm4eX\_slope vs slug



Right In: 2.342 $\pm$ 0.003  $\chi^2$ /NDF: 378.0/3

Left Out: 2.303 $\pm$ 0.002  $\chi^2$ /NDF:1196.0/9

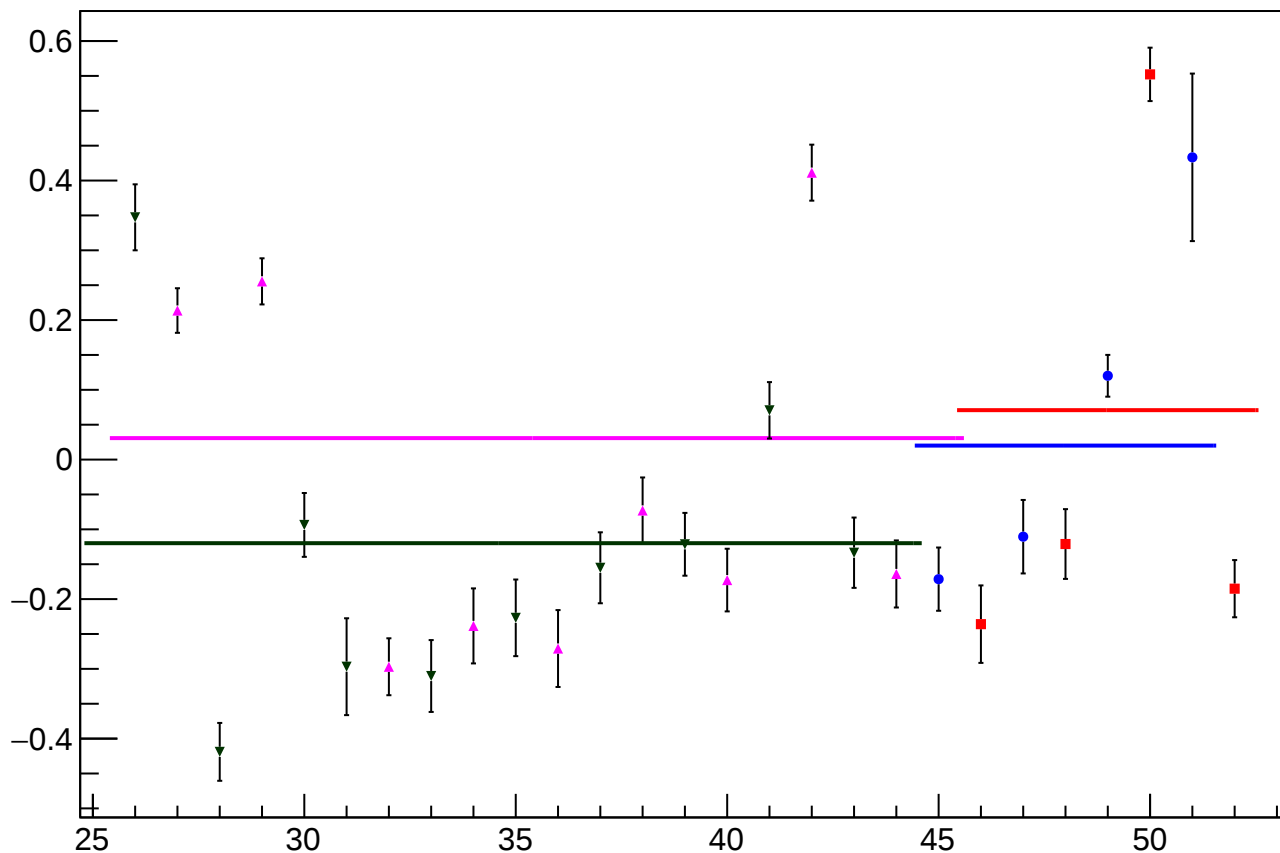
Right Out: 2.354 $\pm$ 0.003  $\chi^2$ /NDF: 220.2/3

Left In: 2.306 $\pm$ 0.002  $\chi^2$ /NDF:1460.1/8

2.315 $\pm$ 0.002  $\chi^2$ /NDF: 1686.9/13

2.320 $\pm$ 0.002  $\chi^2$ /NDF: 1846.0/12

# reg\_asym\_left\_dd\_diff\_bpm4eY\_slope vs slug



Right In: 0.020+/-0.022  $\chi^2/\text{NDF}$ : 47.0/3

Left Out: -0.120+/-0.015  $\chi^2/\text{NDF}$ :196.6/9

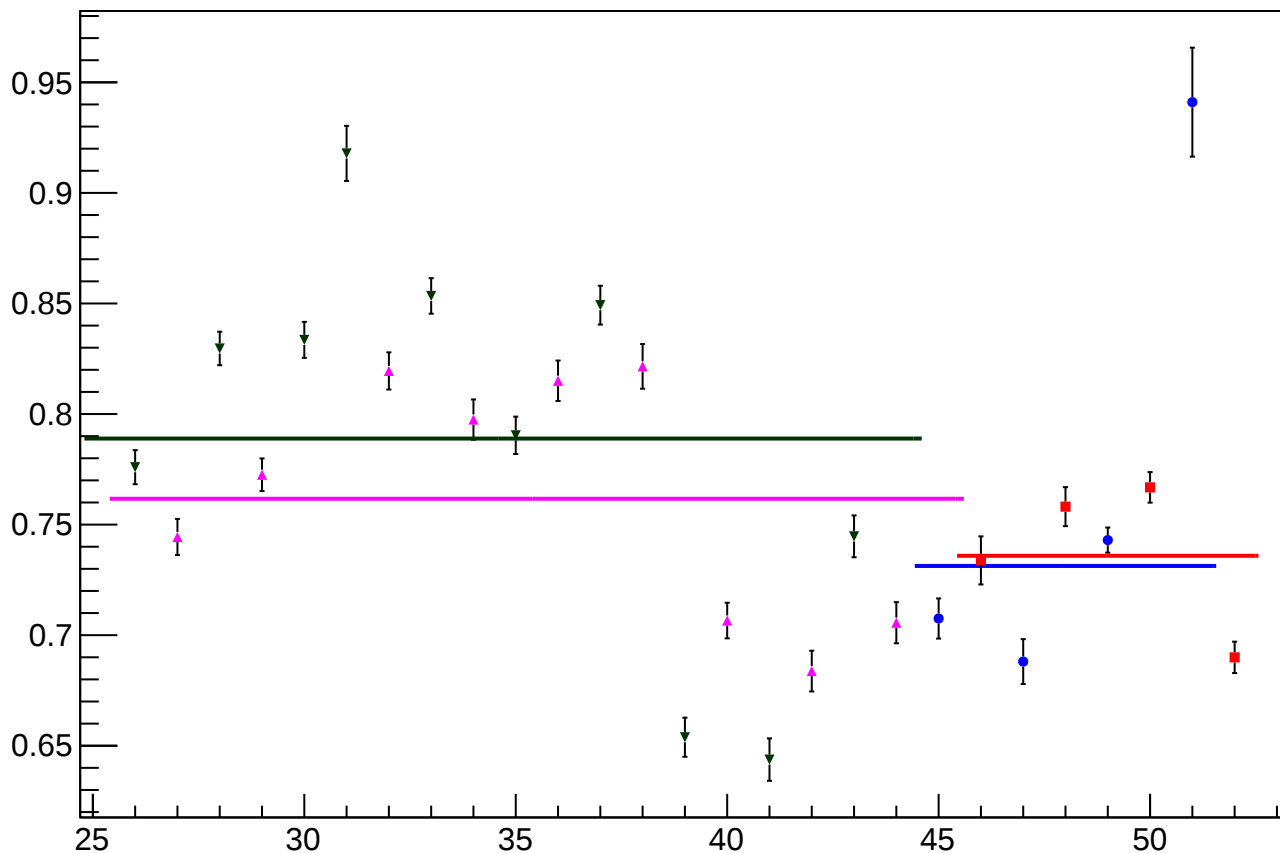
Right Out: 0.071+/-0.022  $\chi^2/\text{NDF}$ : 242.3/3

Left In: 0.031+/-0.014  $\chi^2/\text{NDF}$ :330.1/8

-0.075+/-0.013  $\chi^2/\text{NDF}$ : 270.5/13

0.042+/-0.012  $\chi^2/\text{NDF}$ : 574.7/12

# reg\_asym\_left\_dd\_diff\_bpm11X\_slope vs slug



Right In: 0.731±/-0.004  $\chi^2/\text{NDF}$ : 101.7/3

Left Out: 0.789±/-0.003  $\chi^2/\text{NDF}$ : 764.3/9

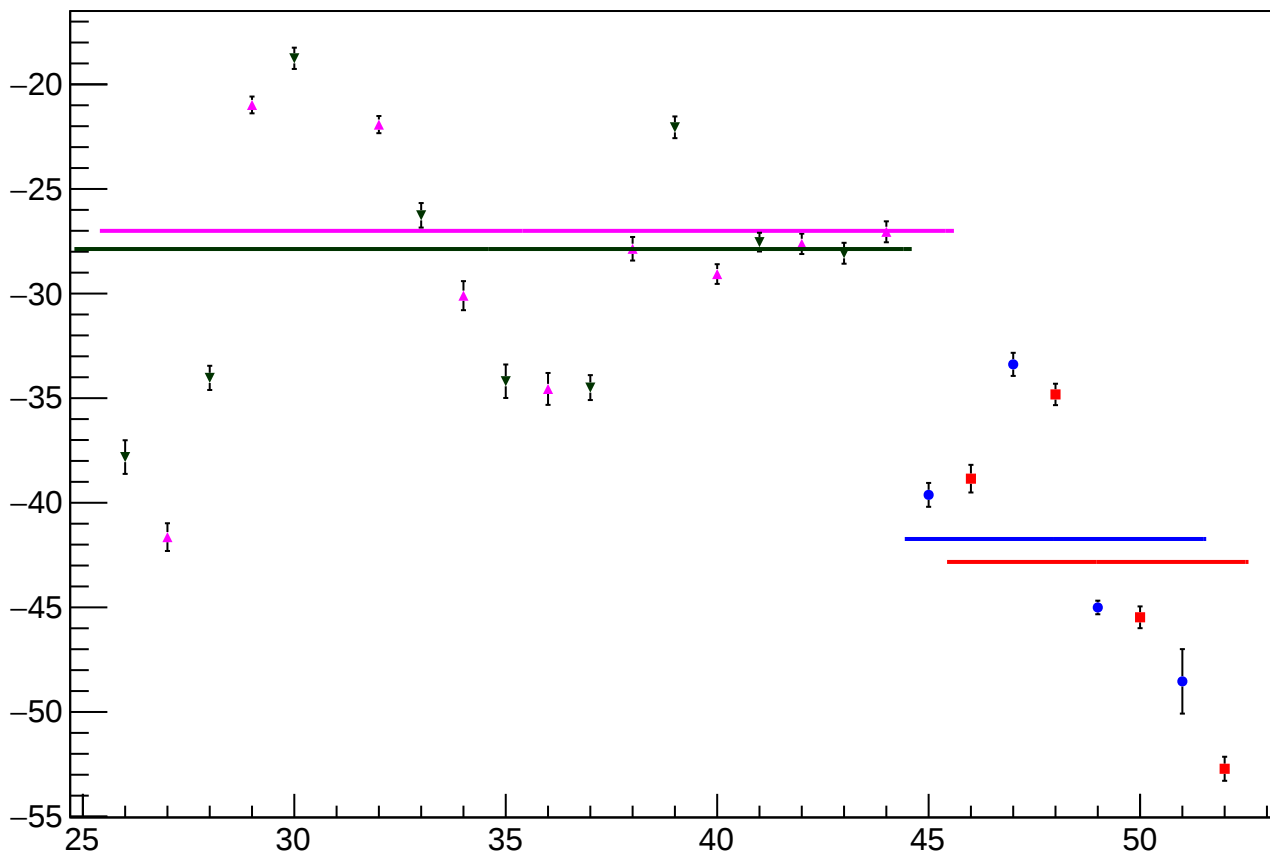
Right Out: 0.736±/-0.004  $\chi^2/\text{NDF}$ : 68.6/3

Left In: 0.762±/-0.003  $\chi^2/\text{NDF}$ : 293.2/8

0.772±/-0.002  $\chi^2/\text{NDF}$ : 994.3/13

0.753±/-0.002  $\chi^2/\text{NDF}$ : 389.0/12

# reg\_asym\_right\_avg\_diff\_bpm4aX\_slope vs slug



Right In: -41.731 $\pm$ 0.248  $\chi^2$ /NDF: 363.0/3

Left Out: -27.871 $\pm$ 0.188  $\chi^2$ /NDF: 907.3/8

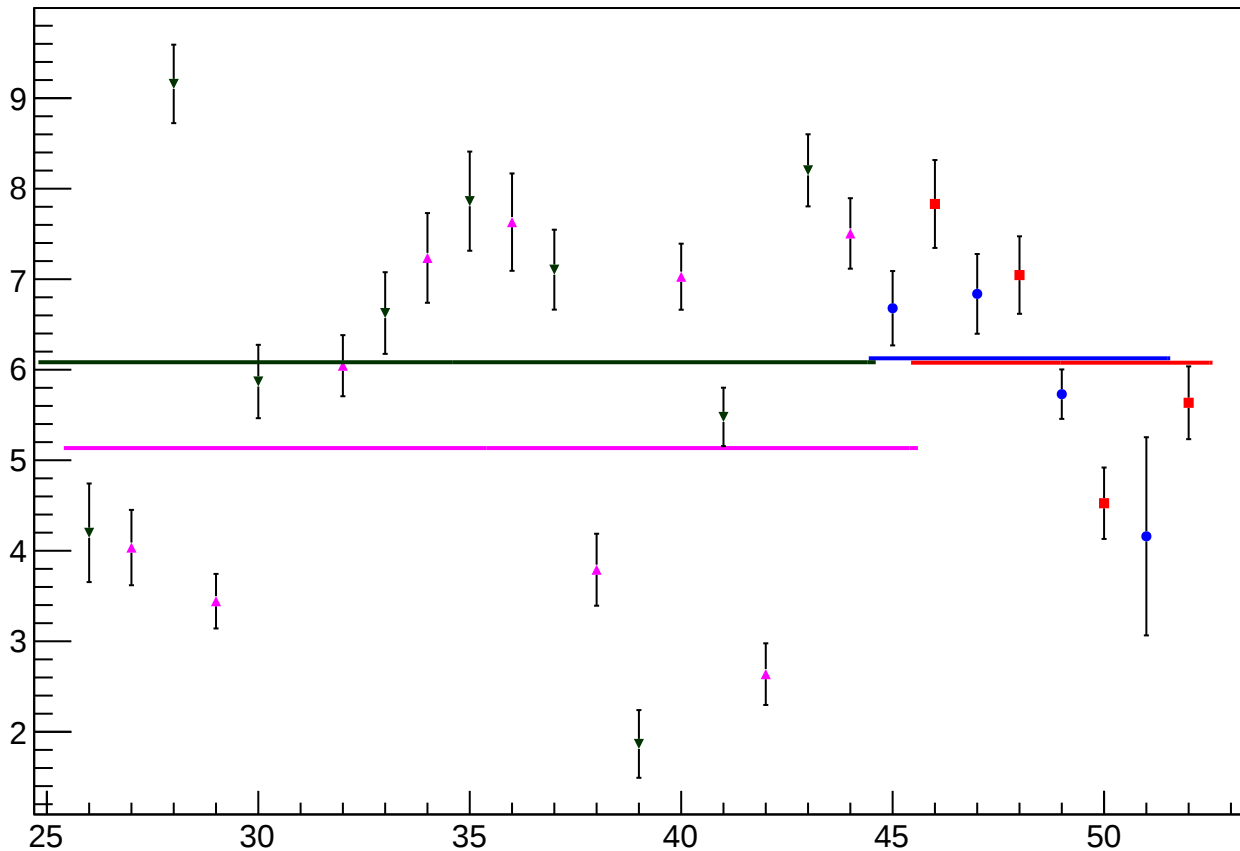
Right Out: -42.828 $\pm$ 0.279  $\chi^2$ /NDF: 602.9/3

Left In: -27.003 $\pm$ 0.171  $\chi^2$ /NDF: 1007.7/8

-32.911 $\pm$ 0.150  $\chi^2$ /NDF: 3254.5/12

-31.330 $\pm$ 0.146  $\chi^2$ /NDF: 3945.7/12

# reg\_asym\_right\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 6.126 $\pm$ 0.199  $\chi^2$ /NDF: 9.8/3

Left Out: 6.083 $\pm$ 0.140  $\chi^2$ /NDF: 238.9/8

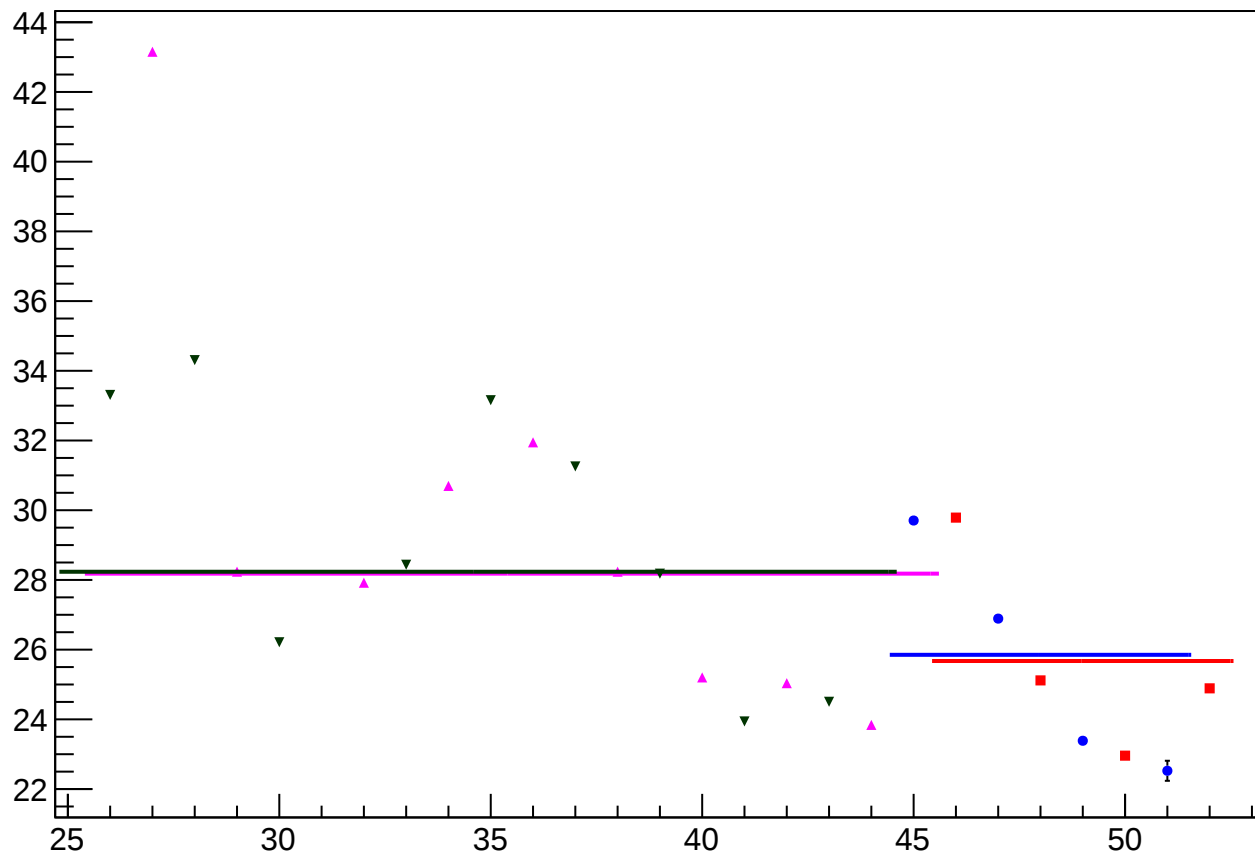
6.097 $\pm$ 0.114  $\chi^2$ /NDF: 248.7/12

Right Out: 6.078 $\pm$ 0.212  $\chi^2$ /NDF: 34.9/3

5.384 $\pm$ 0.109  $\chi^2$ /NDF: 264.0/12

Left In: 5.135 $\pm$ 0.127  $\chi^2$ /NDF: 214.5/8

reg\_asym\_right\_avg\_diff\_bpm4eX\_slope vs slug



Right In: 25.851+/-0.046  $\chi^2/\text{NDF}$ : 3415.7/3

Left Out: 28.235+/-0.031  $\chi^2/\text{NDF}$ : 12988.2/8

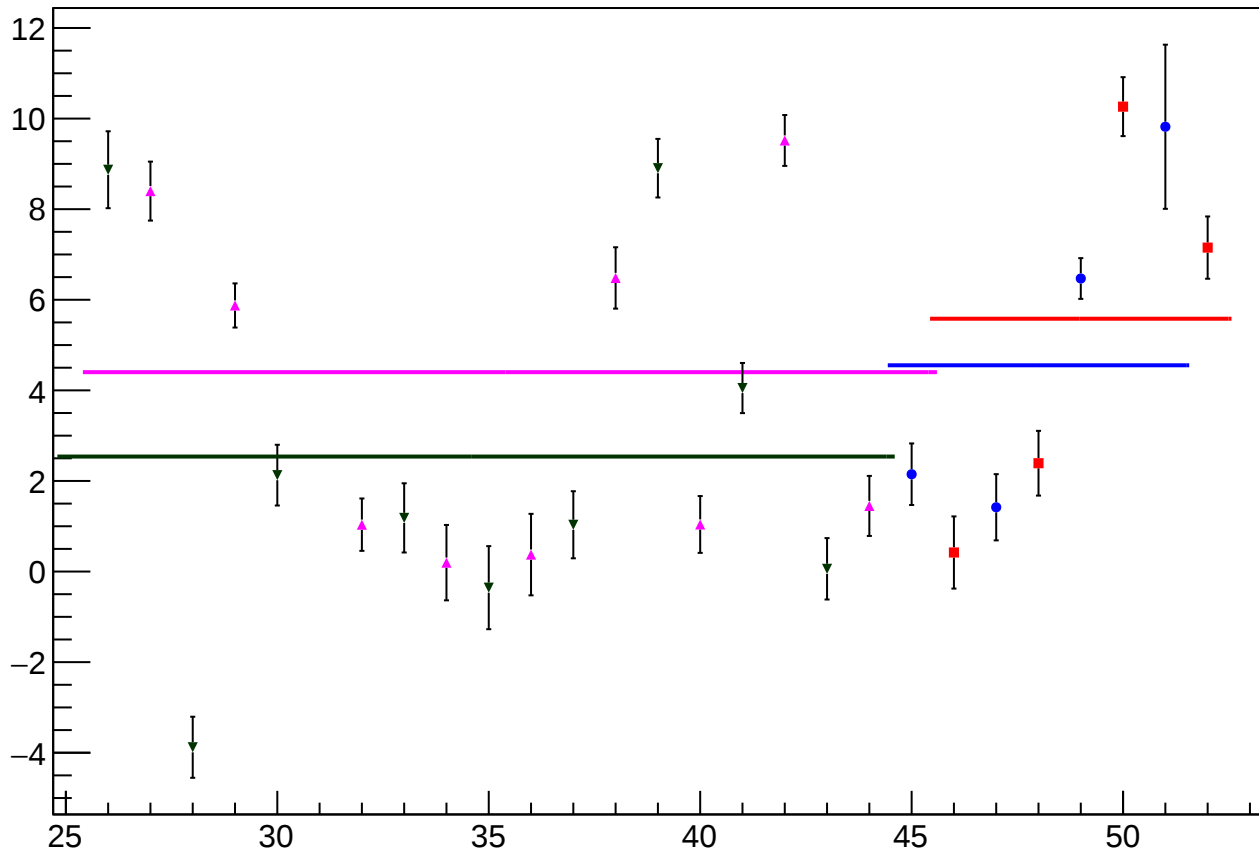
Right Out: 25.674+/-0.049  $\chi^2/\text{NDF}$ : 2550.7/3

Left In: 28.180+/-0.029  $\chi^2/\text{NDF}$ : 23006.5/8

27.482+/-0.026  $\chi^2/\text{NDF}$ : 18237.7/12

27.518+/-0.025  $\chi^2/\text{NDF}$ : 27493.4/12

# reg\_asym\_right\_avg\_diff\_bpm4eY\_slope vs slug



Right In: 4.554+/-0.328  $\chi^2/\text{NDF}$ : 57.5/3

Left Out: 2.539+/-0.233  $\chi^2/\text{NDF}$ : 281.6/8

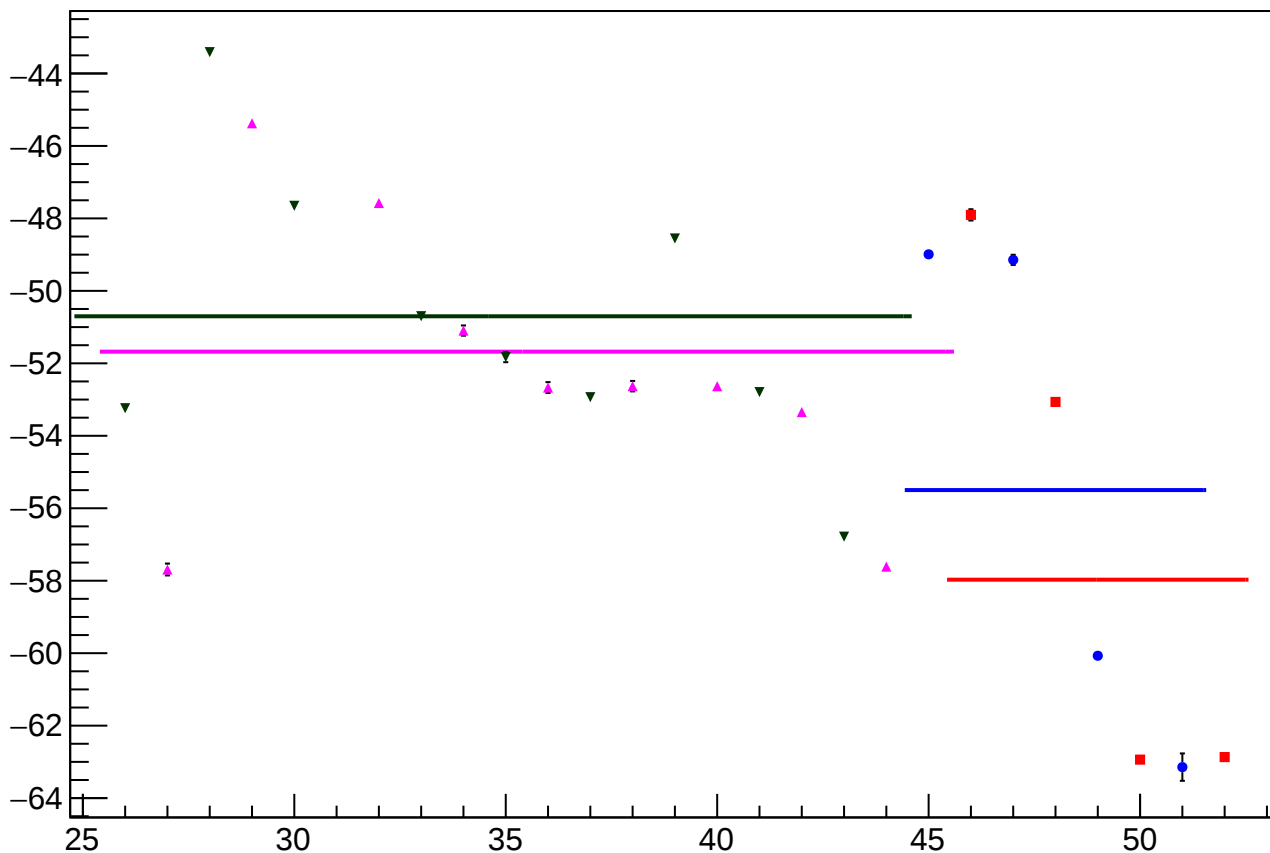
Right Out: 5.582+/-0.353  $\chi^2/\text{NDF}$ : 118.9/3

Left In: 4.402+/-0.211  $\chi^2/\text{NDF}$ : 267.4/8

3.215+/-0.190  $\chi^2/\text{NDF}$ : 364.1/12

4.712+/-0.181  $\chi^2/\text{NDF}$ : 394.5/12

reg\_asym\_right\_avg\_diff\_bpm11X\_slope vs slug



Right In:  $-55.498 \pm 0.064$   $\chi^2/\text{NDF}$ : 7558.8/3

Left Out:  $-50.702 \pm 0.043$   $\chi^2/\text{NDF}$ : 7639.1/8

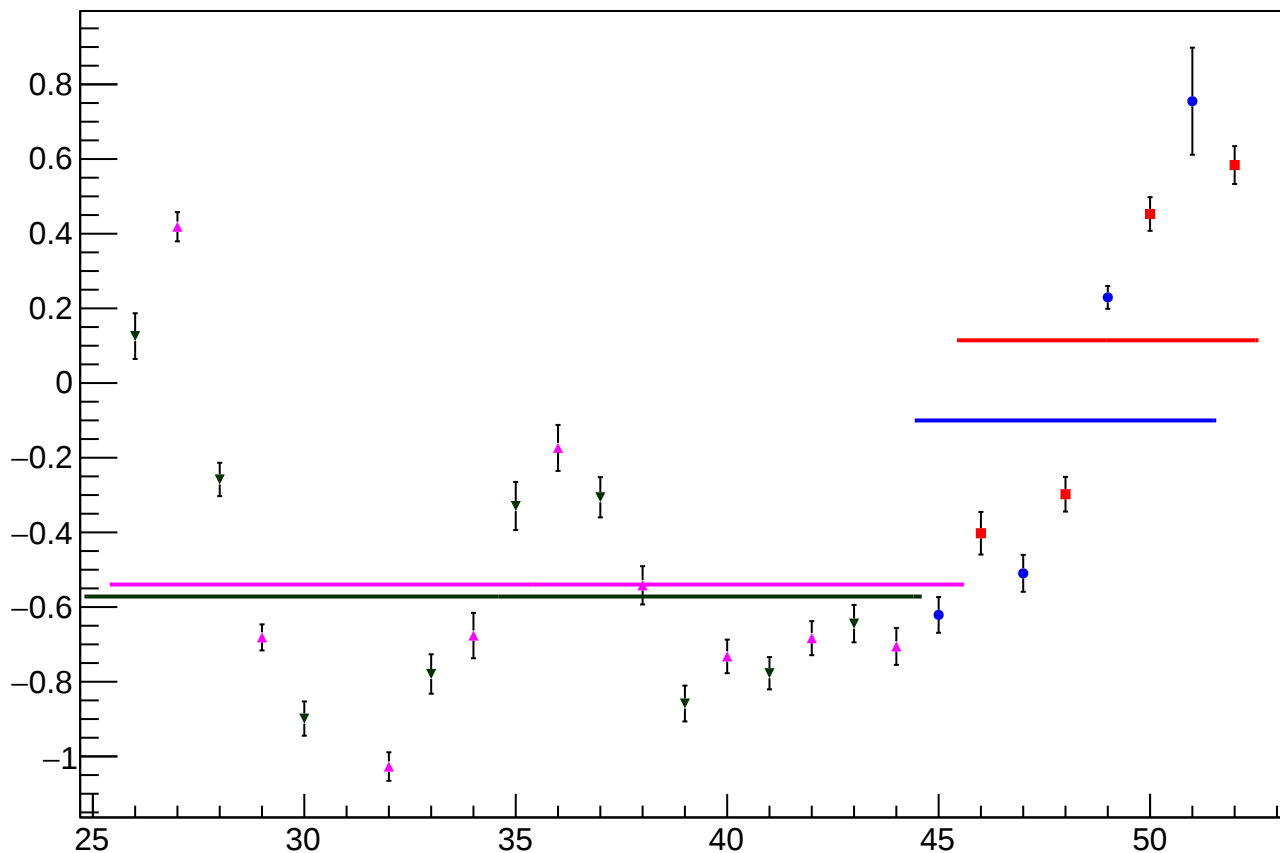
Right Out:  $-57.972 \pm 0.064$   $\chi^2/\text{NDF}$ : 9090.2/3

Left In:  $-51.678 \pm 0.043$   $\chi^2/\text{NDF}$ : 8312.3/8

$-52.189 \pm 0.035$   $\chi^2/\text{NDF}$ : 19112.5/12

$-53.653 \pm 0.036$   $\chi^2/\text{NDF}$ : 24034.7/12

# reg\_asym\_right\_dd\_diff\_bpm4aX\_slope vs slug



Right In:  $-0.100 \pm 0.023$   $\chi^2/\text{NDF}: 338.8/3$

Left Out:  $-0.572 \pm 0.017$   $\chi^2/\text{NDF}: 344.3/8$

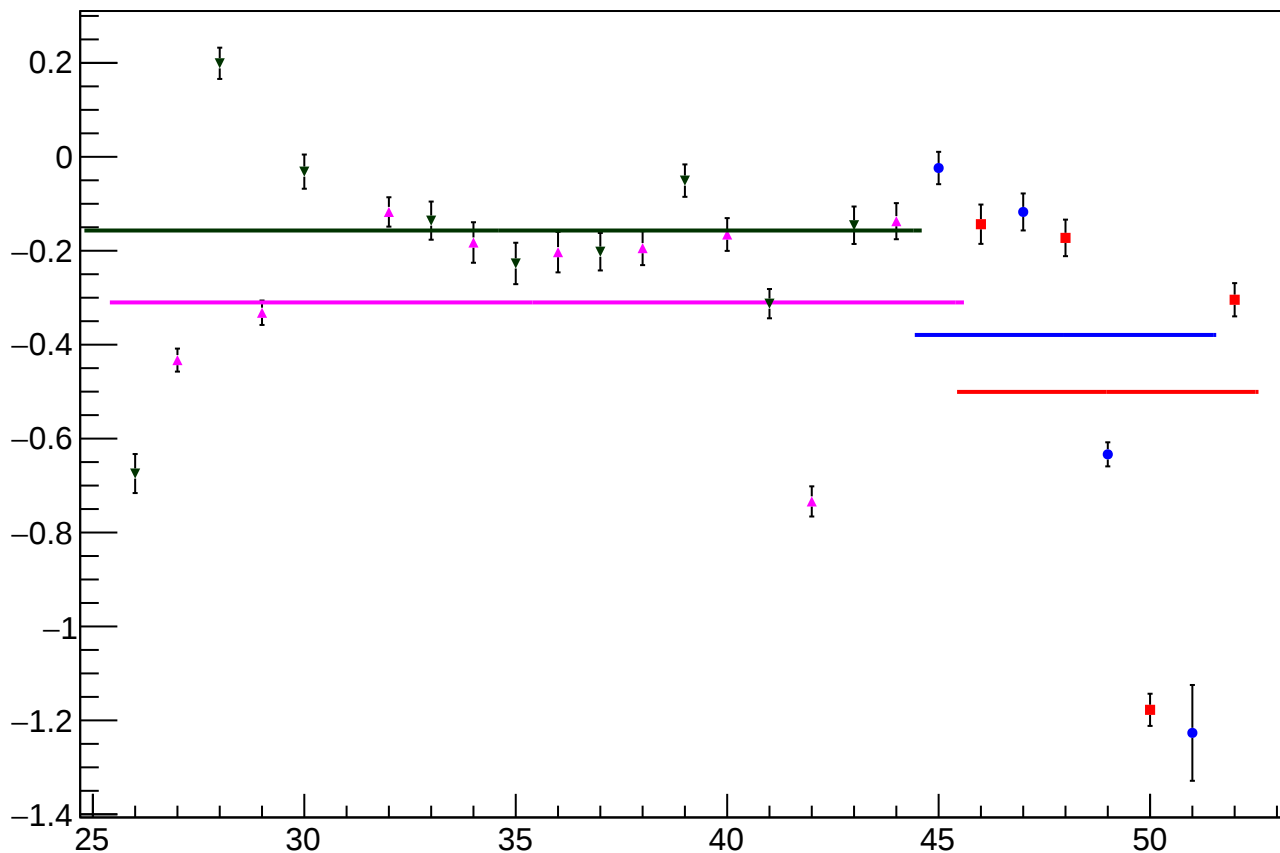
Right Out:  $0.114 \pm 0.025$   $\chi^2/\text{NDF}: 303.1/3$

Left In:  $-0.540 \pm 0.015$   $\chi^2/\text{NDF}: 857.8/8$

$-0.404 \pm 0.013$   $\chi^2/\text{NDF}: 964.5/12$

$-0.363 \pm 0.013$   $\chi^2/\text{NDF}: 1676.8/12$

# reg\_asym\_right\_dd\_diff\_bpm4aY\_slope vs slug



Right In:  $-0.379 \pm 0.018$   $\chi^2/\text{NDF}$ : 318.0/3

Left Out:  $-0.157 \pm 0.012$   $\chi^2/\text{NDF}$ : 319.9/8

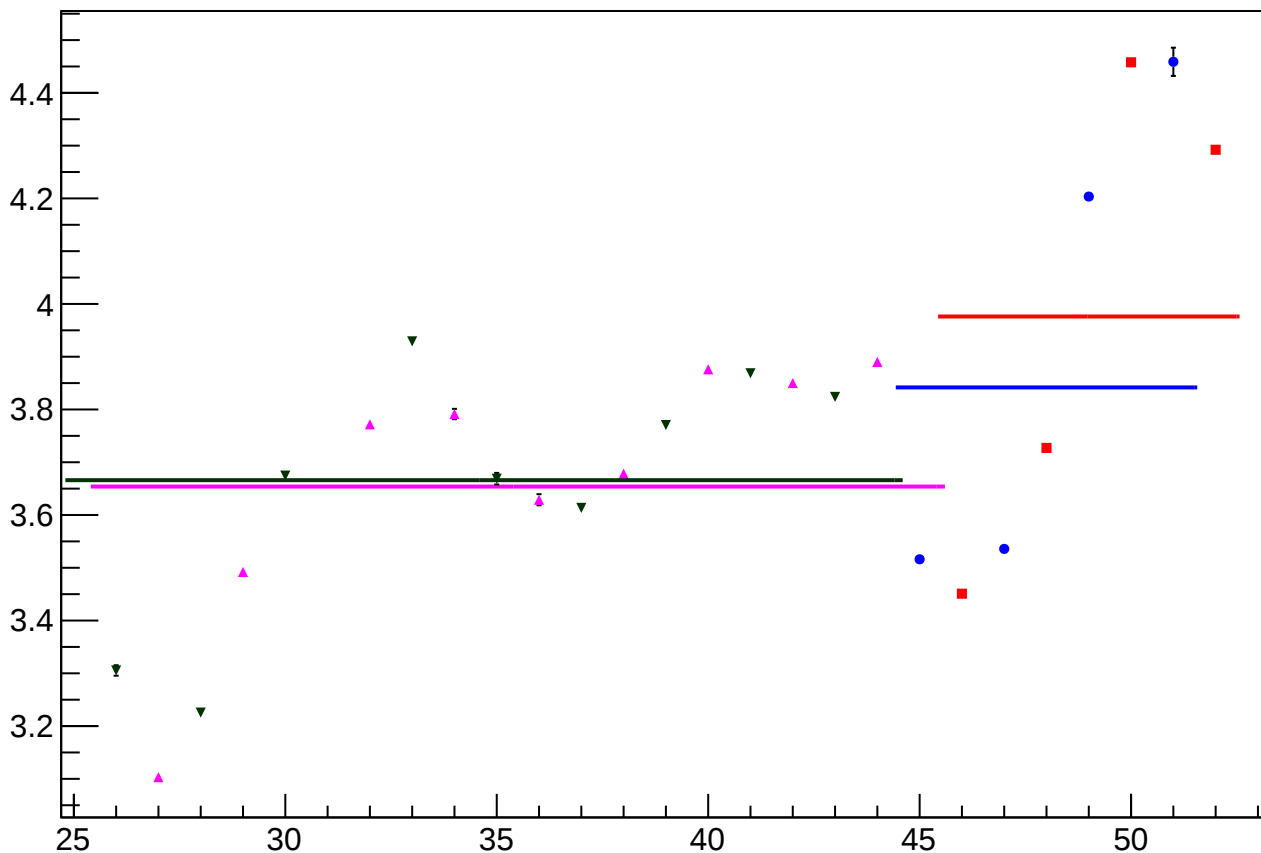
Right Out:  $-0.501 \pm 0.019$   $\chi^2/\text{NDF}$ : 565.2/3

Left In:  $-0.310 \pm 0.011$   $\chi^2/\text{NDF}$ : 300.3/8

$-0.229 \pm 0.010$   $\chi^2/\text{NDF}$ : 741.6/12

$-0.358 \pm 0.009$   $\chi^2/\text{NDF}$ : 943.6/12

# reg\_asym\_right\_dd\_diff\_bpm4eX\_slope vs slug



Right In: 3.842 $\pm$ 0.004  $\chi^2$ /NDF: 7030.4/3

Left Out: 3.666 $\pm$ 0.003  $\chi^2$ /NDF: 6817.2/8

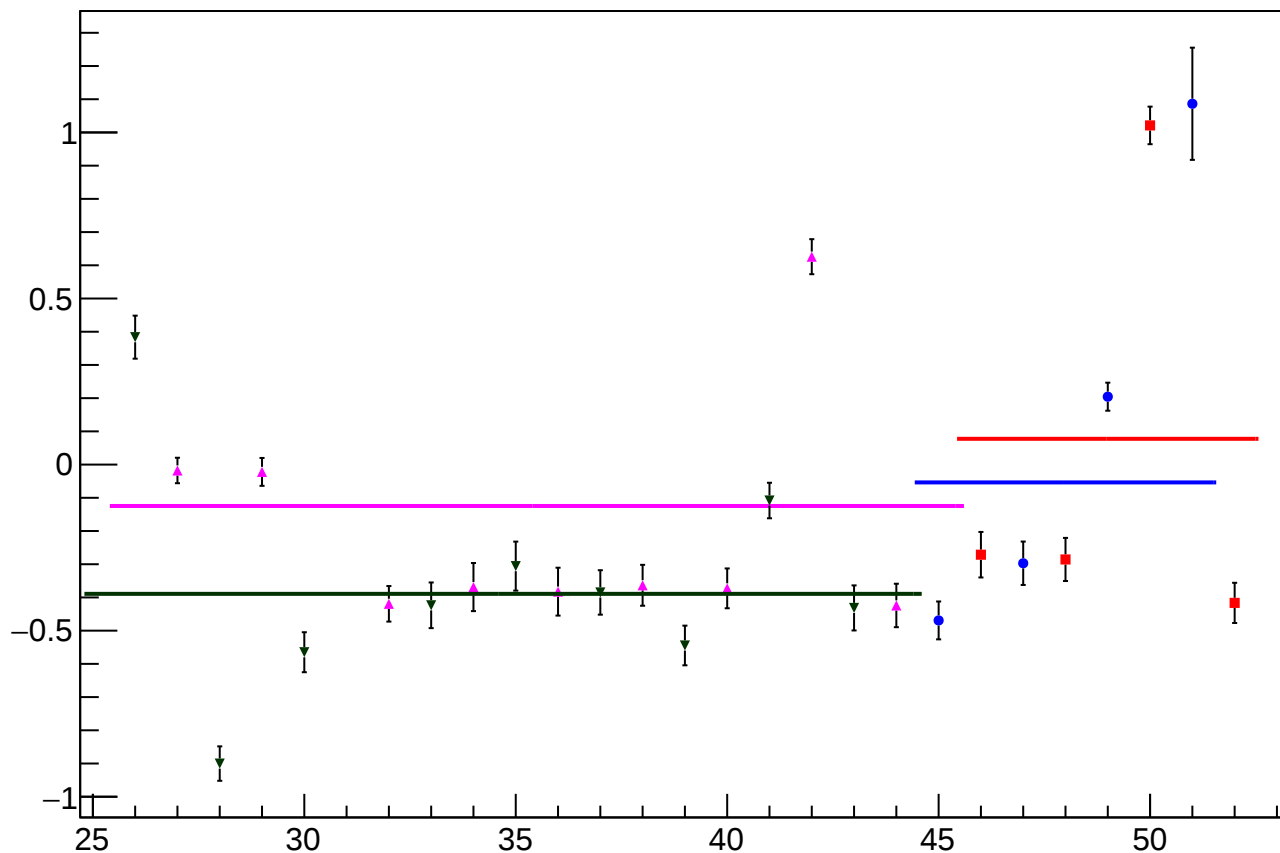
Right Out: 3.976 $\pm$ 0.004  $\chi^2$ /NDF: 9003.1/3

Left In: 3.654 $\pm$ 0.003  $\chi^2$ /NDF: 9613.6/8

3.721 $\pm$ 0.002  $\chi^2$ /NDF: 15084.8/12

3.739 $\pm$ 0.002  $\chi^2$ /NDF: 22745.7/12

# reg\_asym\_right\_dd\_diff\_bpm4eY\_slope vs slug



Right In:  $-0.054 \pm 0.030$   $\chi^2/\text{NDF}: 149.9/3$

Left Out:  $-0.389 \pm 0.021$   $\chi^2/\text{NDF}: 284.2/8$

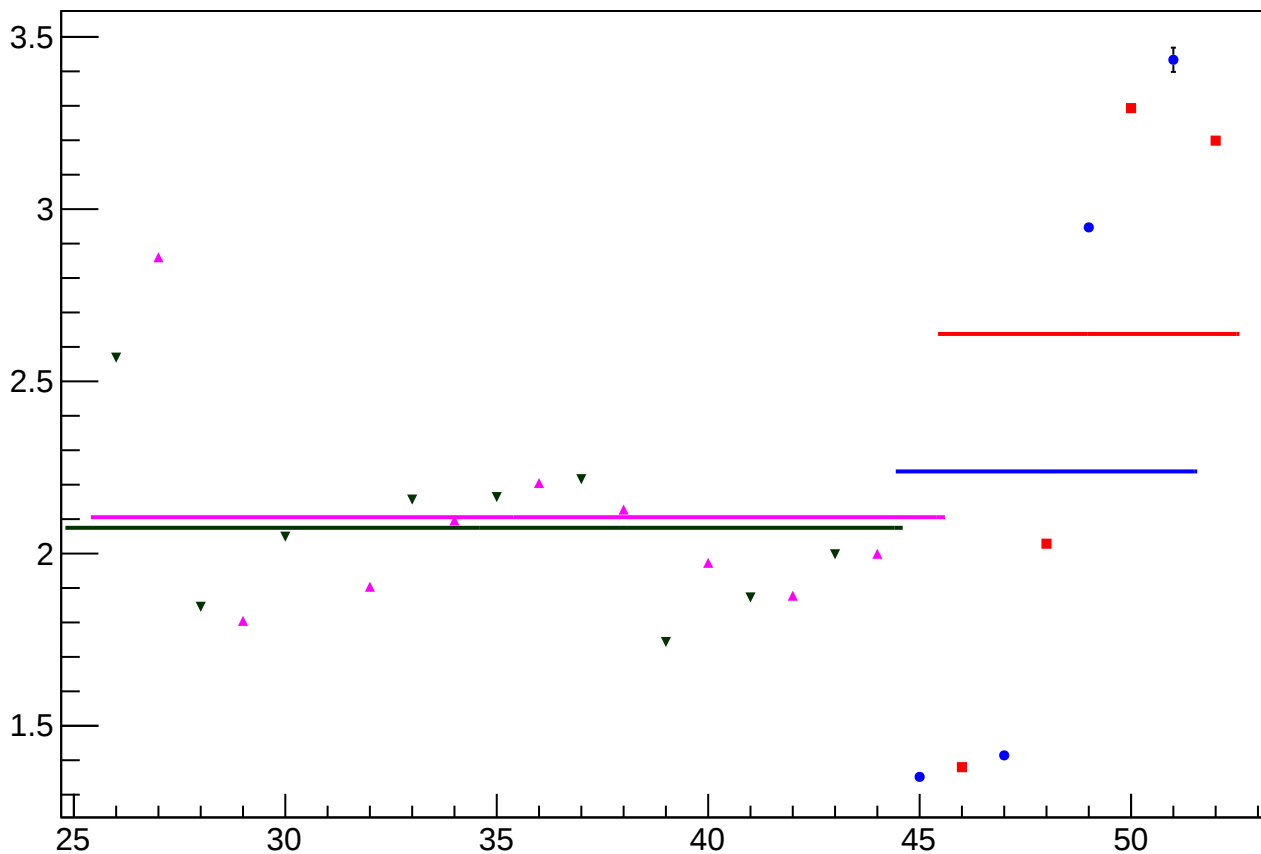
Right Out:  $0.078 \pm 0.031$   $\chi^2/\text{NDF}: 402.5/3$

Left In:  $-0.125 \pm 0.018$   $\chi^2/\text{NDF}: 324.0/8$

$-0.280 \pm 0.017$   $\chi^2/\text{NDF}: 520.5/12$

$-0.074 \pm 0.016$   $\chi^2/\text{NDF}: 758.3/12$

# reg\_asym\_right\_dd\_diff\_bpm11X\_slope vs slug



Right In: 2.238 $\pm$ 0.006  $\chi^2$ /NDF: 19286.3/3

Left Out: 2.075 $\pm$ 0.004  $\chi^2$ /NDF: 4111.6/8

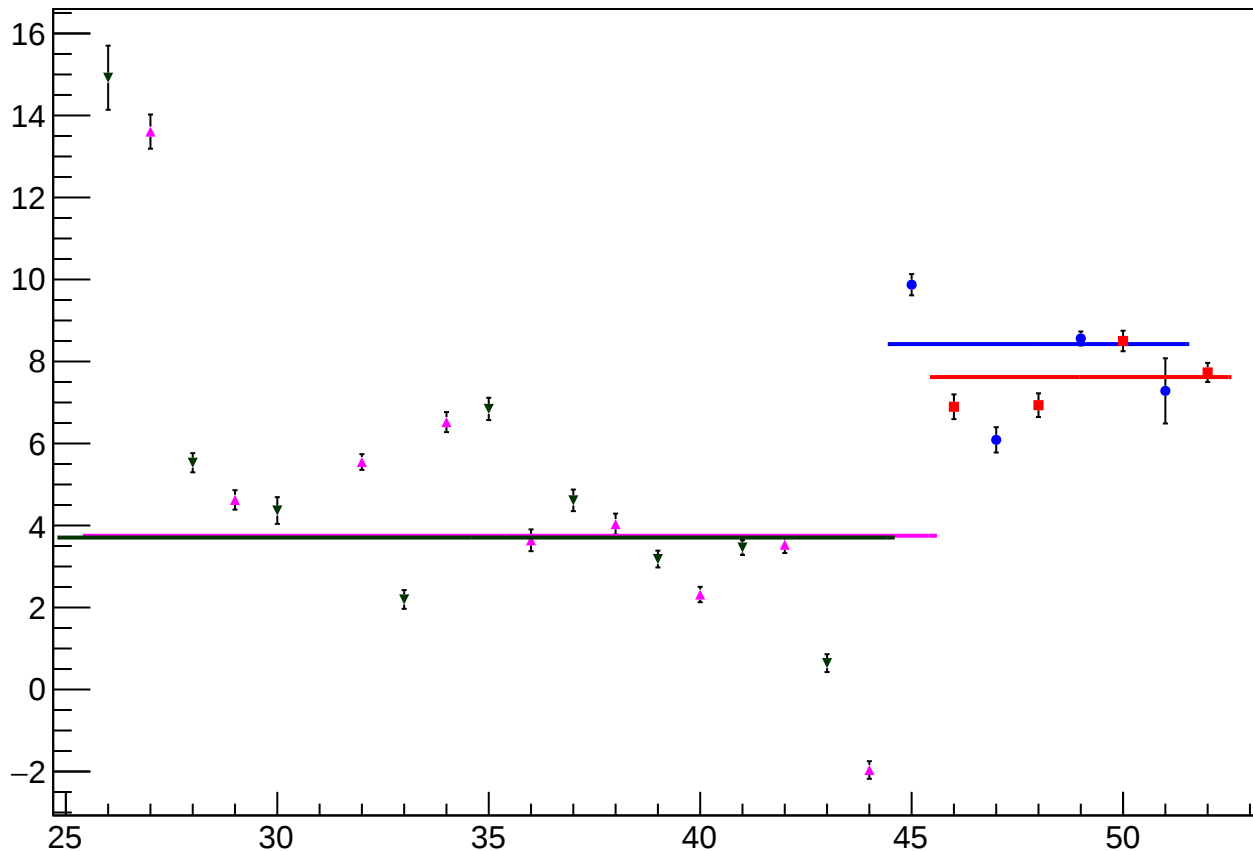
Right Out: 2.638 $\pm$ 0.006  $\chi^2$ /NDF: 18533.8/3

Left In: 2.106 $\pm$ 0.004  $\chi^2$ /NDF: 7840.1/8

2.123 $\pm$ 0.003  $\chi^2$ /NDF: 23969.8/12

2.270 $\pm$ 0.003  $\chi^2$ /NDF: 32577.8/12

# reg\_asym\_sam\_15\_avg\_diff\_bpm4aX\_slope vs slug



Right In: 8.425+/-0.128  $\chi^2/\text{NDF}$ : 91.0/3

Left Out: 3.706+/-0.081  $\chi^2/\text{NDF}$ : 665.5/8

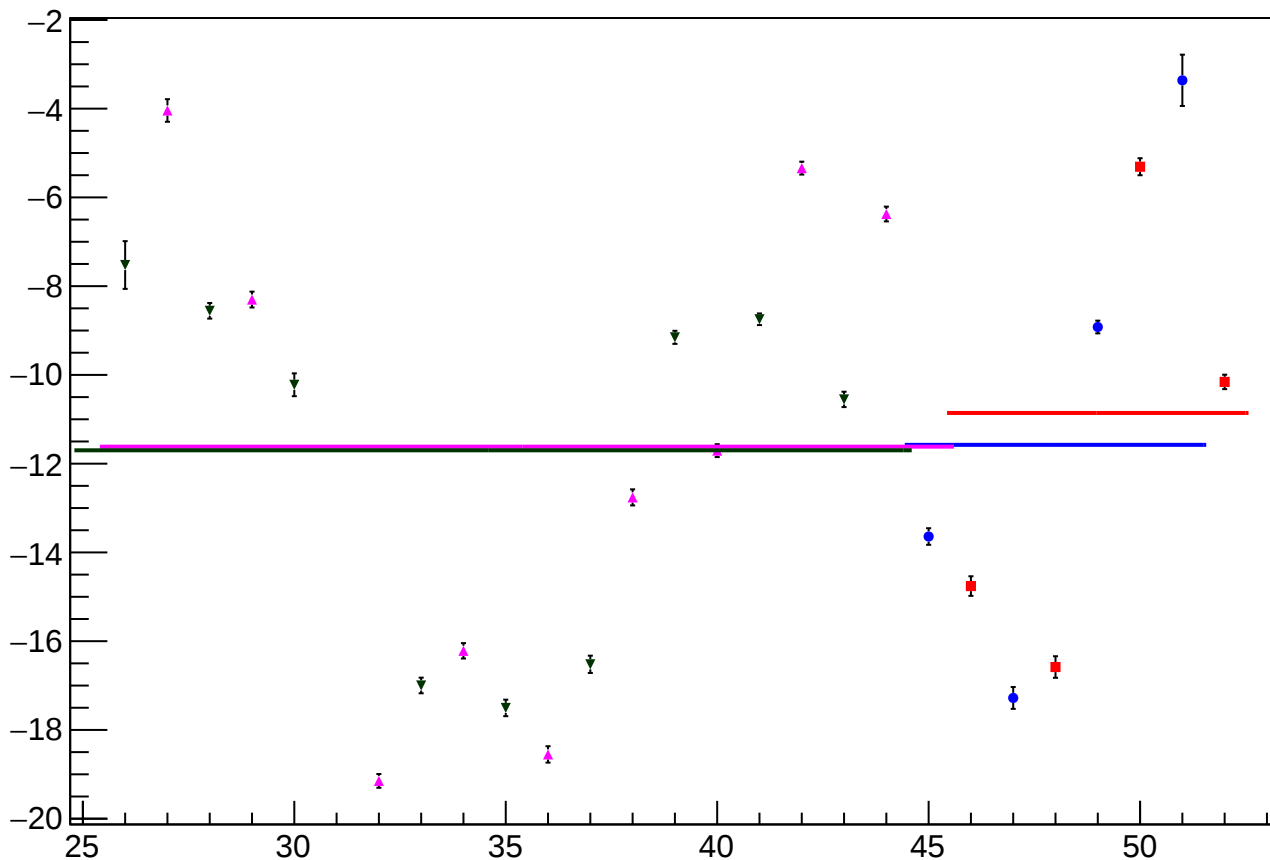
Right Out: 7.620+/-0.132  $\chi^2/\text{NDF}$ : 24.0/3

Left In: 3.750+/-0.076  $\chi^2/\text{NDF}$ : 1560.3/8

5.066+/-0.069  $\chi^2/\text{NDF}$ : 1730.1/12

4.720+/-0.066  $\chi^2/\text{NDF}$ : 2227.2/12

reg\_asym\_sam\_15\_avg\_diff\_bpm4aY\_slope vs slug



Right In:  $-11.576 \pm 0.102$   $\chi^2/\text{NDF}$ : 1203.8/3

Left Out:  $-11.699 \pm 0.060$   $\chi^2/\text{NDF}$ : 3753.7/8

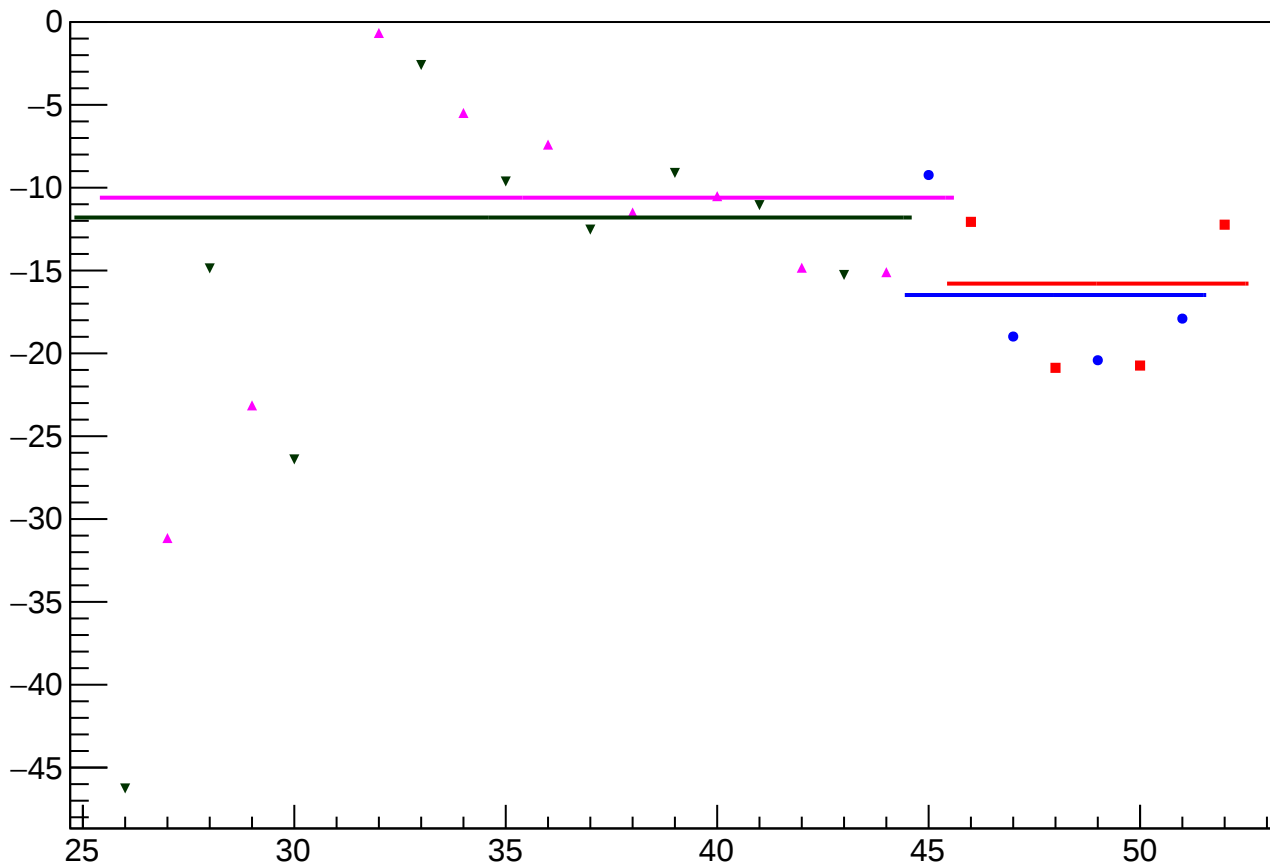
Right Out:  $-10.857 \pm 0.099$   $\chi^2/\text{NDF}$ : 1722.4/3

Left In:  $-11.617 \pm 0.057$   $\chi^2/\text{NDF}$ : 8593.1/8

$-11.667 \pm 0.052$   $\chi^2/\text{NDF}$ : 4958.5/12

$-11.429 \pm 0.049$   $\chi^2/\text{NDF}$ : 10360.0/12

reg\_asym\_sam\_15\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -16.477 $\pm$ 0.023  $\chi^2$ /NDF: 45736.8/3

Left Out: -11.800 $\pm$ 0.014  $\chi^2$ /NDF: 232573.7/8

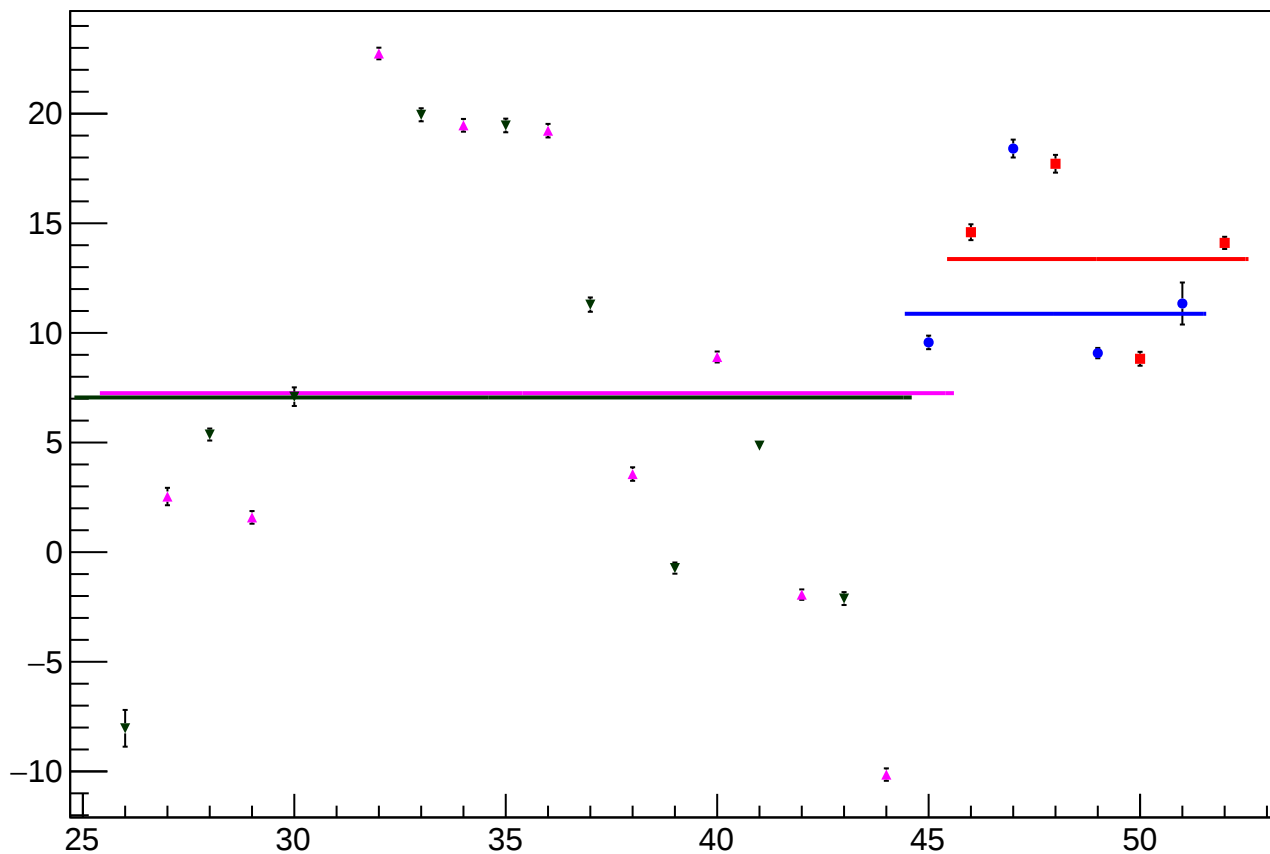
Right Out: -15.790 $\pm$ 0.023  $\chi^2$ /NDF: 34427.5/3

Left In: -10.603 $\pm$ 0.013  $\chi^2$ /NDF: 320499.6/8

-12.973 $\pm$ 0.012  $\chi^2$ /NDF: 308141.6/12

-11.841 $\pm$ 0.011  $\chi^2$ /NDF: 393684.4/12

reg\_asym\_sam\_15\_avg\_diff\_bpm4eY\_slope vs slug



Right In: 10.872 $\pm$ 0.168  $\chi^2$ /NDF: 416.8/3

Left Out: 7.056 $\pm$ 0.101  $\chi^2$ /NDF: 5984.3/8

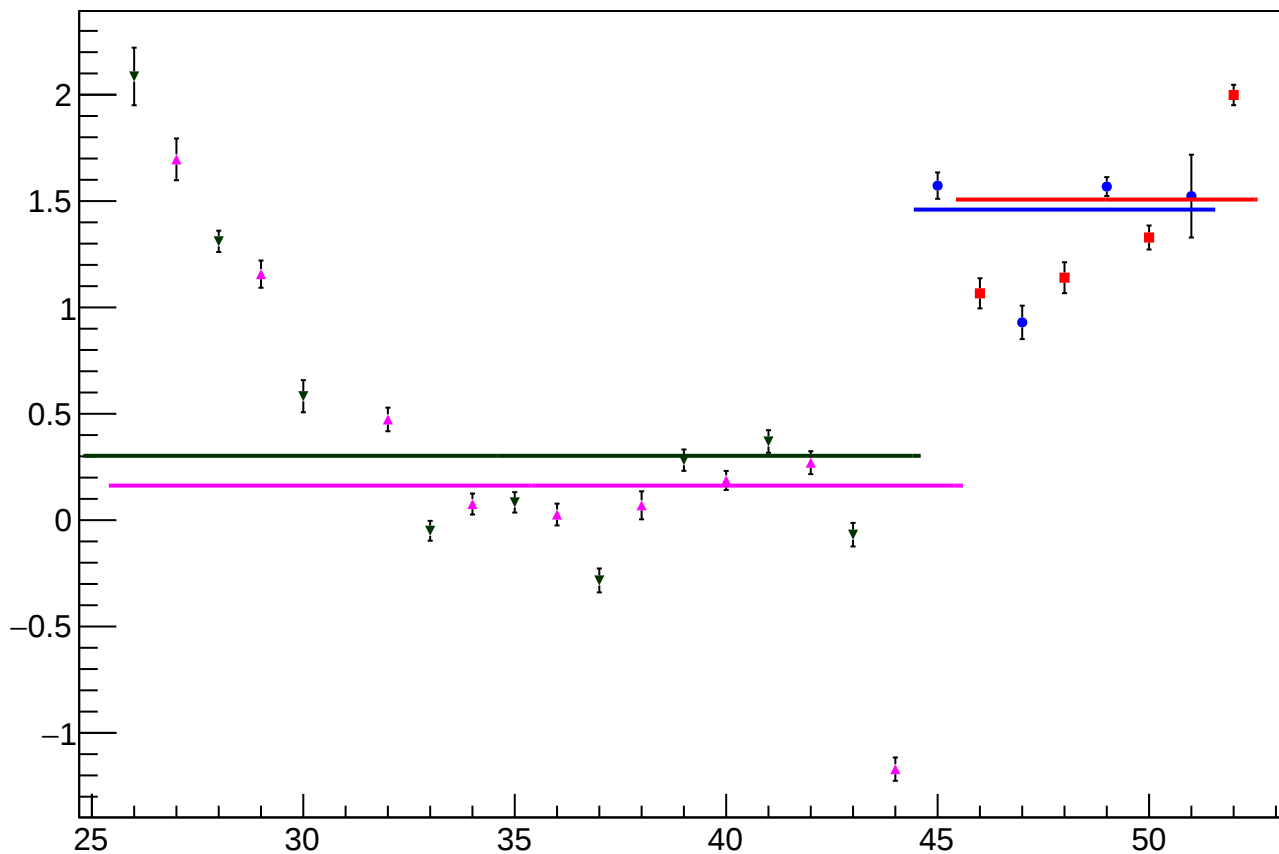
Right Out: 13.369 $\pm$ 0.165  $\chi^2$ /NDF: 339.8/3

Left In: 7.252 $\pm$ 0.095  $\chi^2$ /NDF: 12651.2/8

8.071 $\pm$ 0.087  $\chi^2$ /NDF: 6780.4/12

8.764 $\pm$ 0.082  $\chi^2$ /NDF: 14022.6/12

reg\_asym\_sam\_15\_avg\_diff\_bpm11X\_slope vs slug



Right In: 1.460 $\pm$ 0.032  $\chi^2$ /NDF: 54.8/3

Left Out: 0.303 $\pm$ 0.019  $\chi^2$ /NDF: 825.4/8

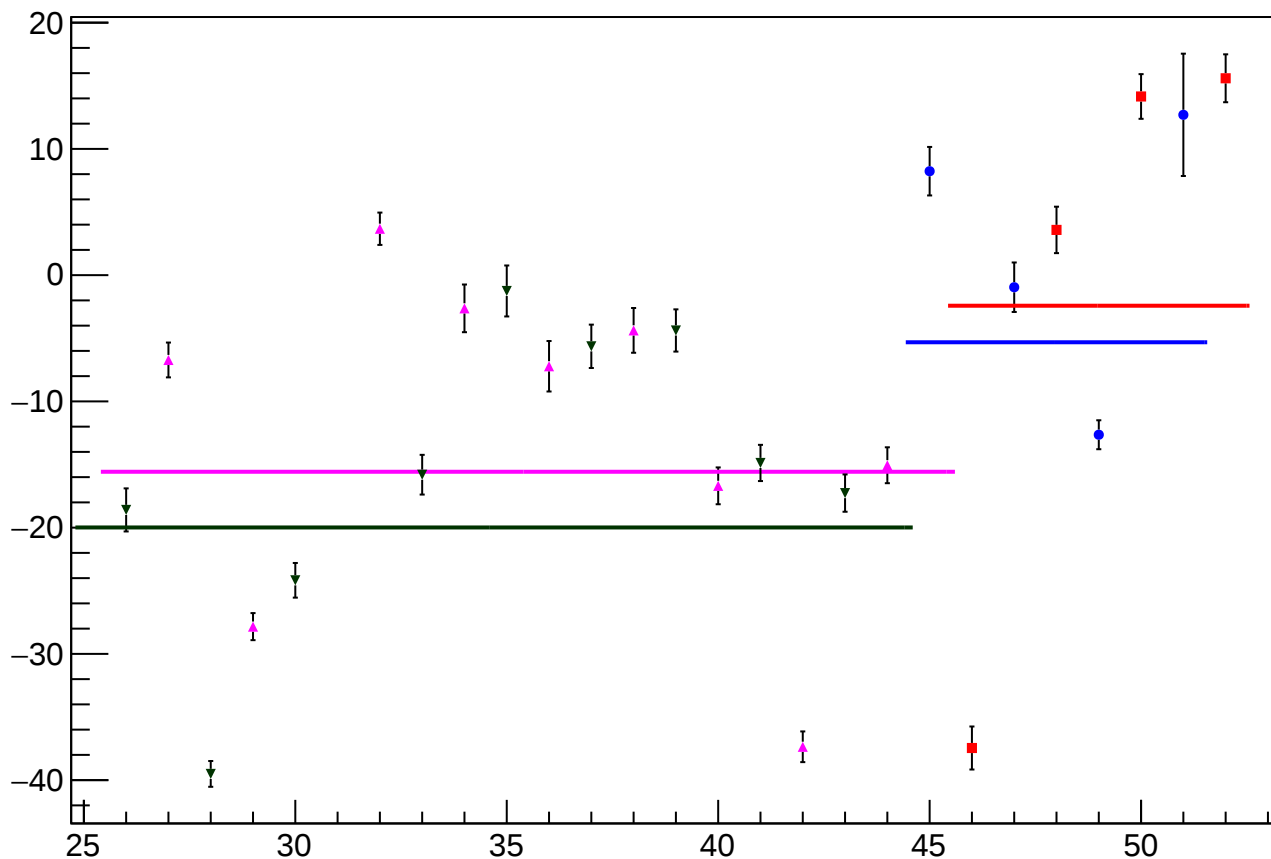
0.588 $\pm$ 0.016  $\chi^2$ /NDF: 1843.8/12

Right Out: 1.507 $\pm$ 0.030  $\chi^2$ /NDF: 178.9/3

0.543 $\pm$ 0.016  $\chi^2$ /NDF: 2773.5/12

Left In: 0.162 $\pm$ 0.019  $\chi^2$ /NDF: 1123.7/8

# reg\_asym\_sam\_15\_dd\_diff\_bpm4aX\_slope vs slug



Right In: -5.316 $\pm$ 0.866  $\chi^2$ /NDF: 109.3/3

Left Out: -19.986 $\pm$ 0.492  $\chi^2$ /NDF: 641.4/8

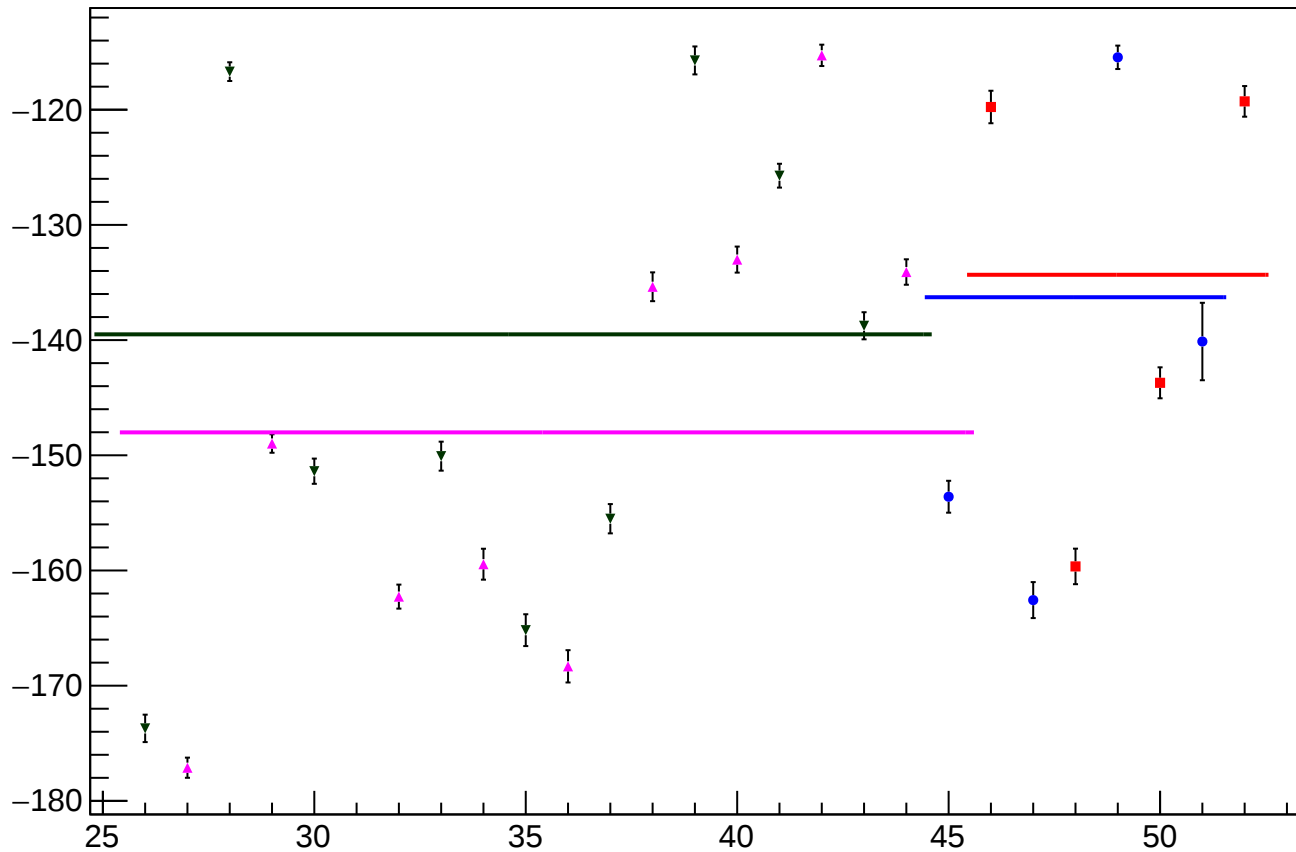
Right Out: -2.422 $\pm$ 0.899  $\chi^2$ /NDF: 611.2/3

Left In: -15.574 $\pm$ 0.472  $\chi^2$ /NDF: 824.1/8

-16.399 $\pm$ 0.428  $\chi^2$ /NDF: 967.6/12

-12.736 $\pm$ 0.418  $\chi^2$ /NDF: 1603.2/12

# reg\_asym\_sam\_15\_dd\_diff\_bpm4aY\_slope vs slug



Right In: -136.279+/-0.709  $\chi^2/\text{NDF}$ : 860.9/3

Left Out: -139.501+/-0.374  $\chi^2/\text{NDF}$ : 2866.7/8

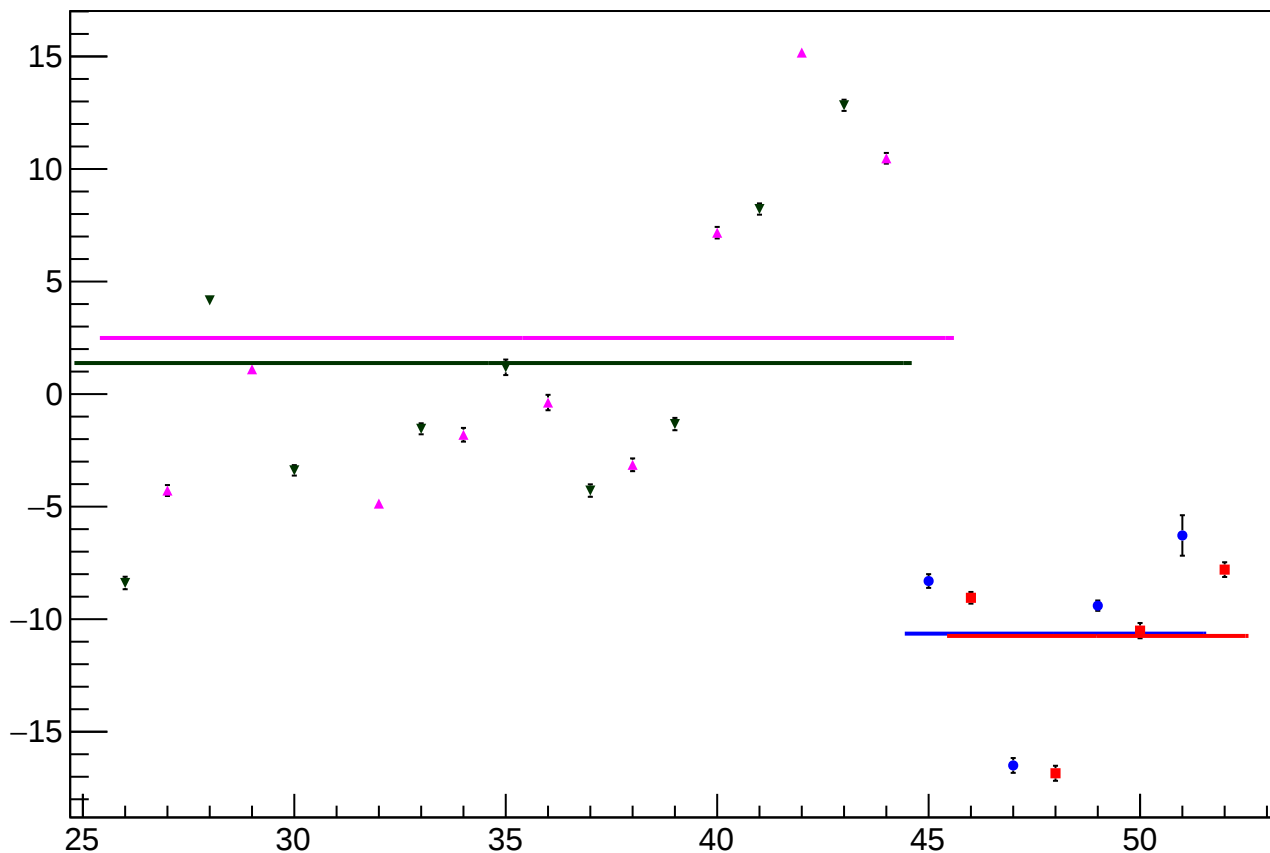
Right Out: -134.330+/-0.700  $\chi^2/\text{NDF}$ : 552.7/3

Left In: -148.011+/-0.348  $\chi^2/\text{NDF}$ : 3260.7/8

-138.801+/-0.331  $\chi^2/\text{NDF}$ : 3743.7/12

-145.300+/-0.312  $\chi^2/\text{NDF}$ : 4119.6/12

# reg\_asym\_sam\_15\_dd\_diff\_bpm4eX\_slope vs slug



Right In: -10.642 $\pm$ 0.158  $\chi^2$ /NDF: 427.2/3

Left Out: 1.380 $\pm$ 0.083  $\chi^2$ /NDF:5402.0/8

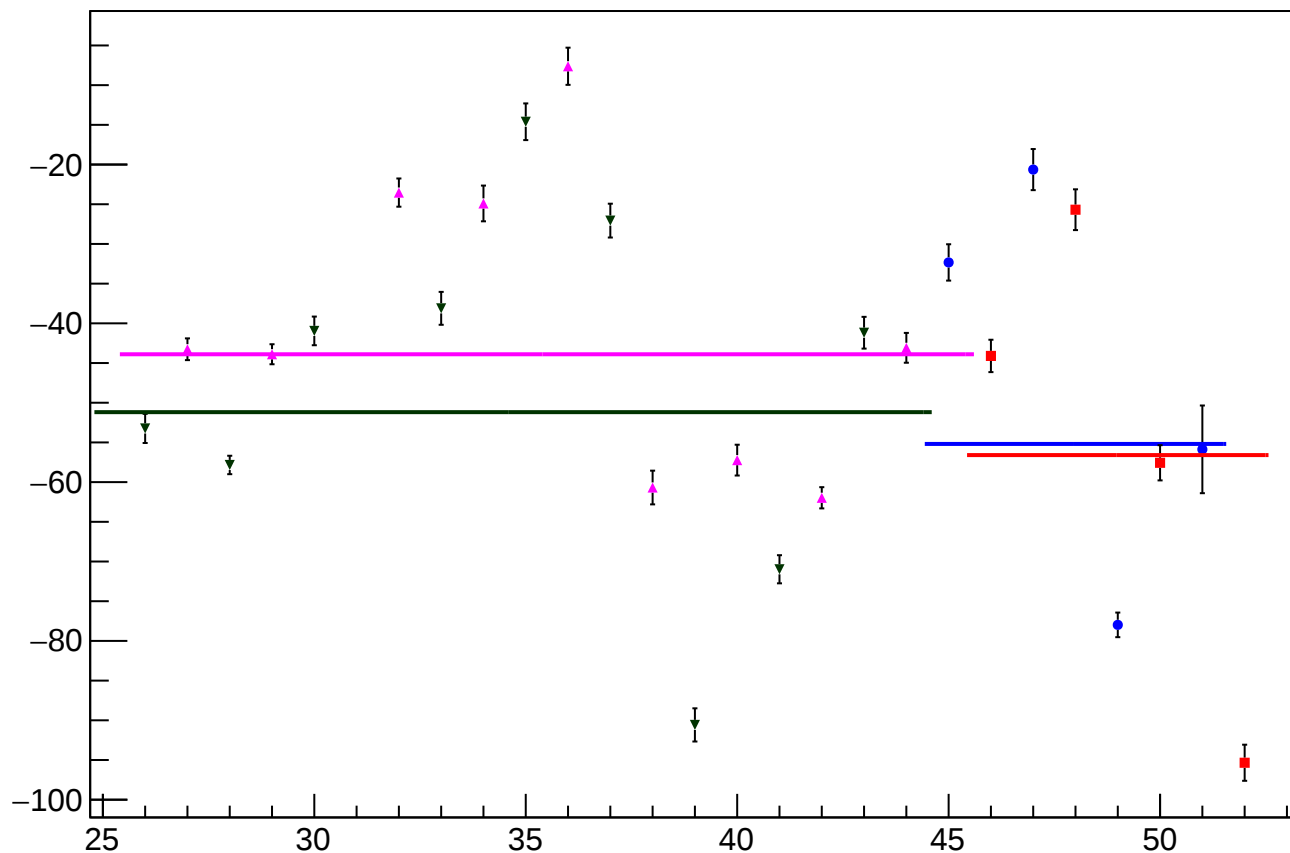
Right Out: -10.744 $\pm$ 0.155  $\chi^2$ /NDF: 457.3/3

Left In: 2.493 $\pm$ 0.081  $\chi^2$ /NDF:7773.1/8

-1.235 $\pm$ 0.074  $\chi^2$ /NDF: 10359.4/12

-0.363 $\pm$ 0.072  $\chi^2$ /NDF: 13973.4/12

reg\_asym\_sam\_15\_dd\_diff\_bpm4eY\_slope vs slug



Right In: -55.190 $\pm$ 1.126  $\chi^2$ /NDF: 494.2/3

Left Out: -51.187 $\pm$ 0.599  $\chi^2$ /NDF: 989.9/8

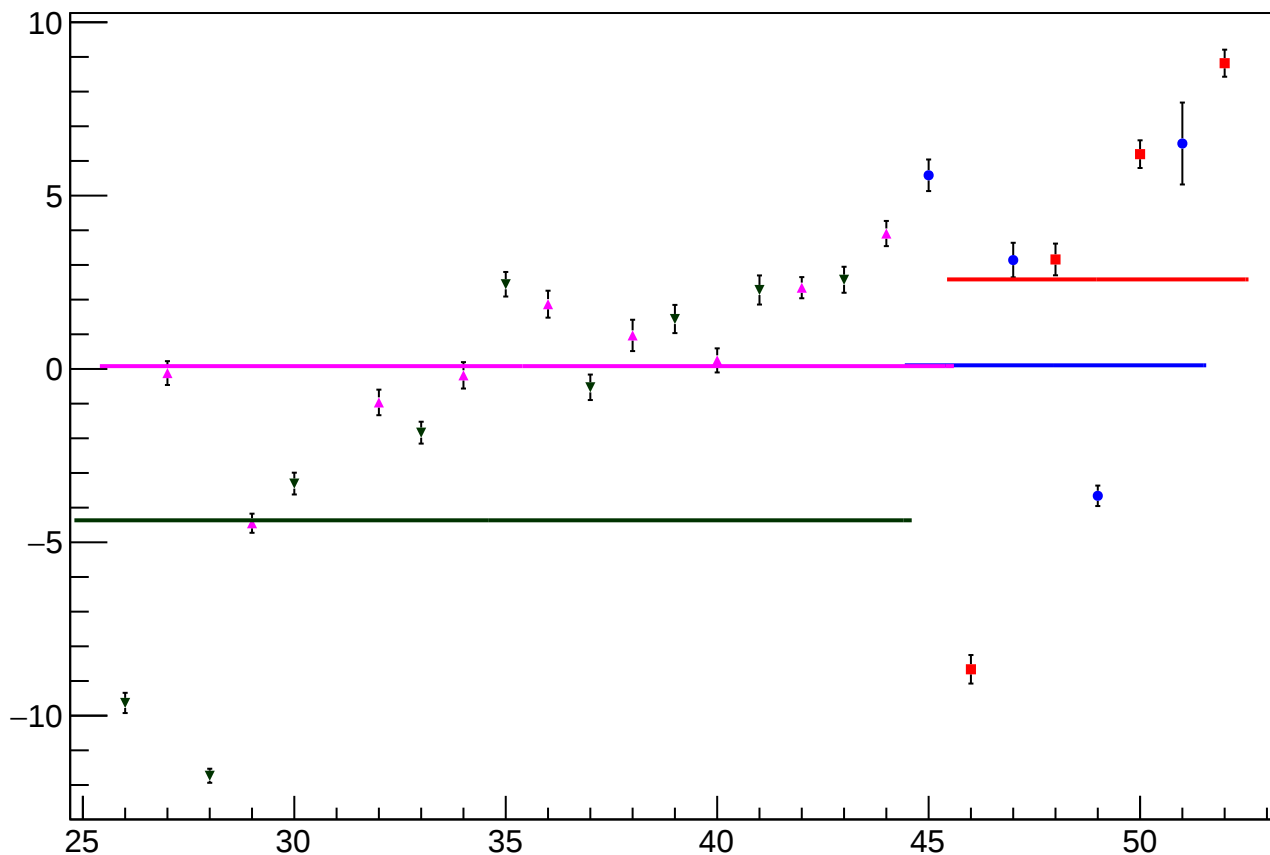
Right Out: -56.595 $\pm$ 1.126  $\chi^2$ /NDF: 473.0/3

Left In: -43.897 $\pm$ 0.560  $\chi^2$ /NDF: 735.5/8

-52.071 $\pm$ 0.529  $\chi^2$ /NDF: 1494.0/12

-46.416 $\pm$ 0.501  $\chi^2$ /NDF: 1310.5/12

reg\_asym\_sam\_15\_dd\_diff\_bpm11X\_slope vs slug



Right In: 0.105 $\pm$ 0.218  $\chi^2$ /NDF: 373.9/3

Left Out: -4.365 $\pm$ 0.105  $\chi^2$ /NDF:2995.2/8

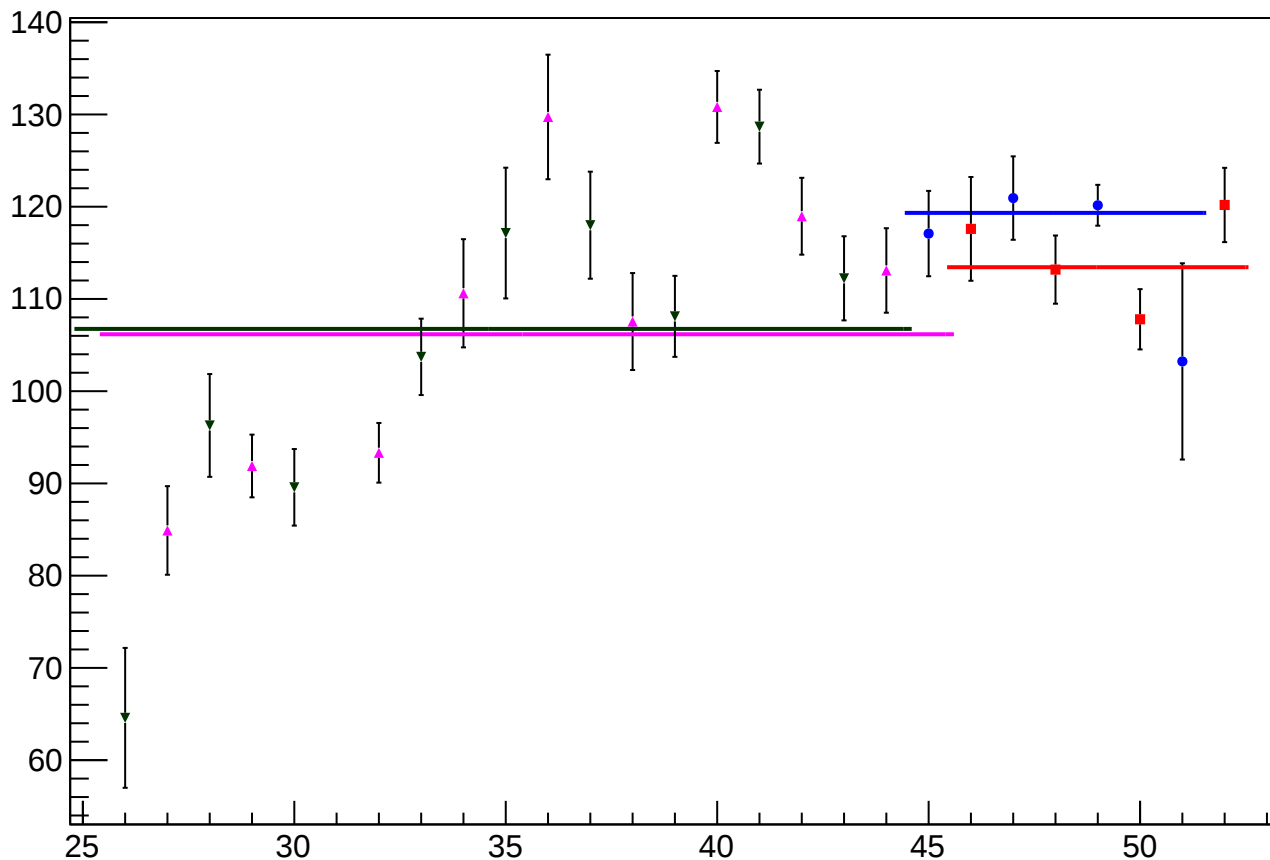
Right Out: 2.583 $\pm$ 0.206  $\chi^2$ /NDF: 1084.9/3

Left In: 0.082 $\pm$ 0.116  $\chi^2$ /NDF:470.0/8

-3.521 $\pm$ 0.095  $\chi^2$ /NDF: 3710.3/12

0.685 $\pm$ 0.101  $\chi^2$ /NDF: 1666.5/12

reg\_asym\_sam\_37\_avg\_diff\_bpm4aX\_slope vs slug



Right In: 119.330 $\pm$ 1.801  $\chi^2/\text{NDF}$ : 2.8/3

Left Out: 106.753 $\pm$ 1.626  $\chi^2/\text{NDF}$ : 89.6/8

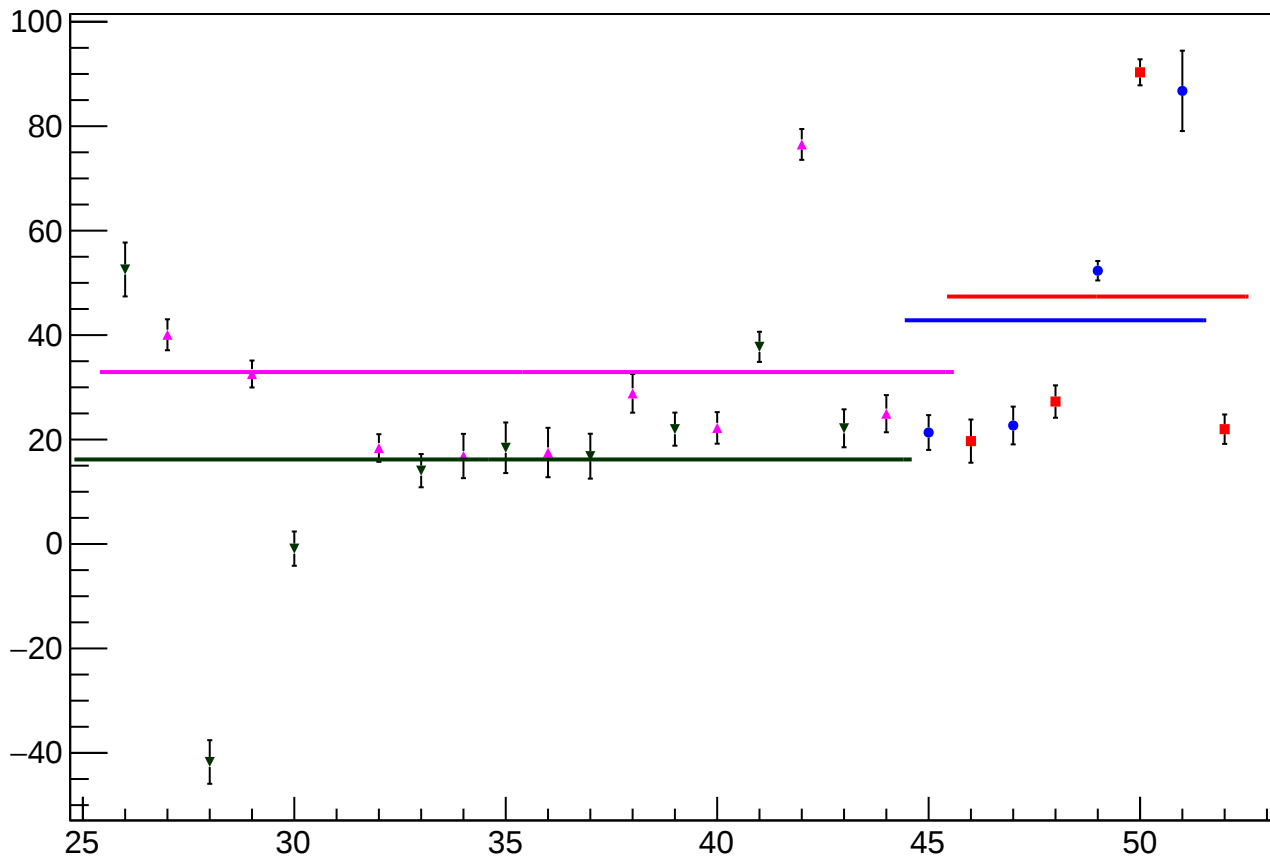
Right Out: 113.441 $\pm$ 1.961  $\chi^2/\text{NDF}$ : 6.3/3

Left In: 106.171 $\pm$ 1.438  $\chi^2/\text{NDF}$ : 117.6/8

112.404 $\pm$ 1.207  $\chi^2/\text{NDF}$ : 119.2/12

108.712 $\pm$ 1.159  $\chi^2/\text{NDF}$ : 132.9/12

# reg\_asym\_sam\_37\_avg\_diff\_bpm4aY\_slope vs slug



Right In:  $42.836 \pm 1.456$   $\chi^2/\text{NDF}$ : 131.2/3

Left Out:  $16.187 \pm 1.214$   $\chi^2/\text{NDF}$ : 331.6/8

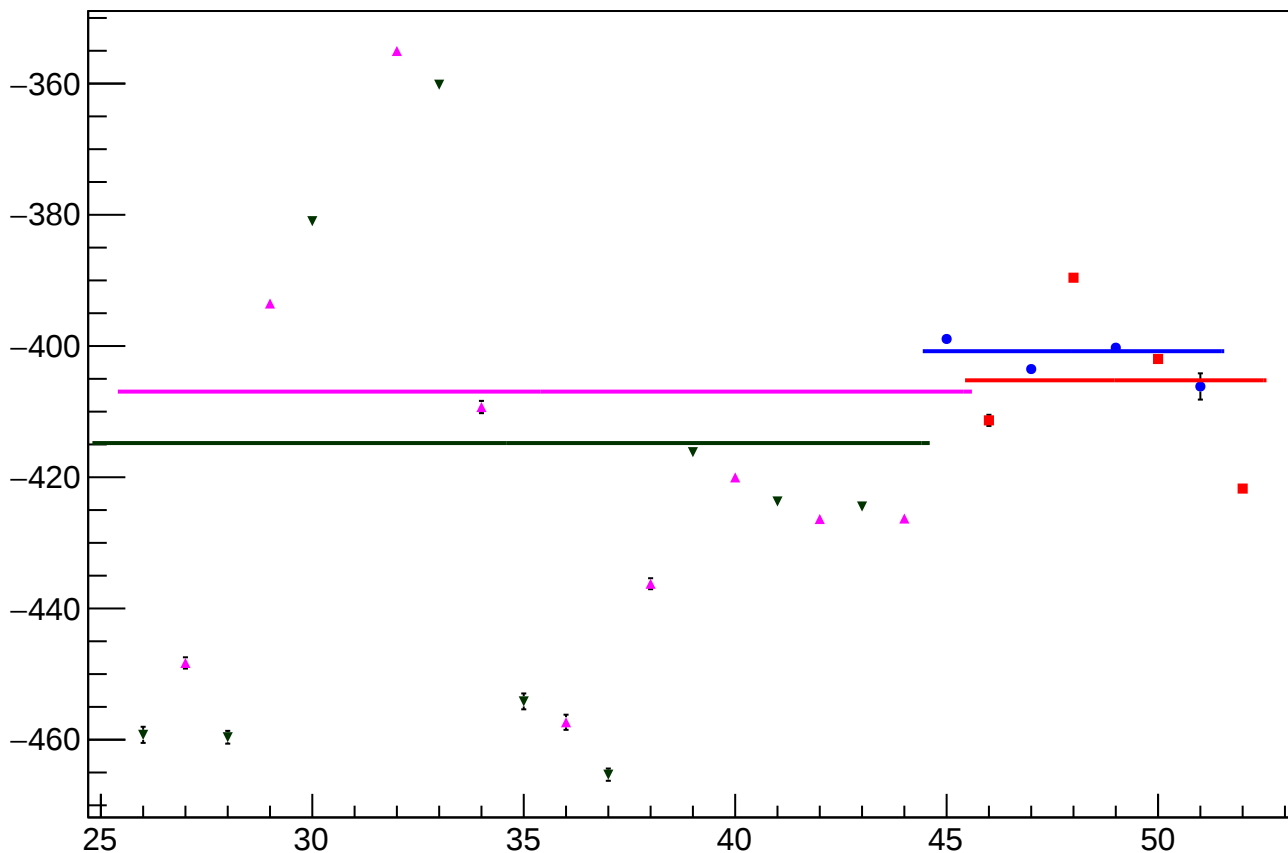
Right Out:  $47.383 \pm 1.492$   $\chi^2/\text{NDF}$ : 464.8/3

Left In:  $32.922 \pm 1.064$   $\chi^2/\text{NDF}$ : 297.8/8

$27.118 \pm 0.933$   $\chi^2/\text{NDF}$ : 660.4/12

$37.798 \pm 0.866$   $\chi^2/\text{NDF}$ : 824.8/12

reg\_asym\_sam\_37\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -400.787+/-0.340  $\chi^2/\text{NDF}$ : 27.7/3

Left Out: -414.789+/-0.271  $\chi^2/\text{NDF}$ :17193.7/8

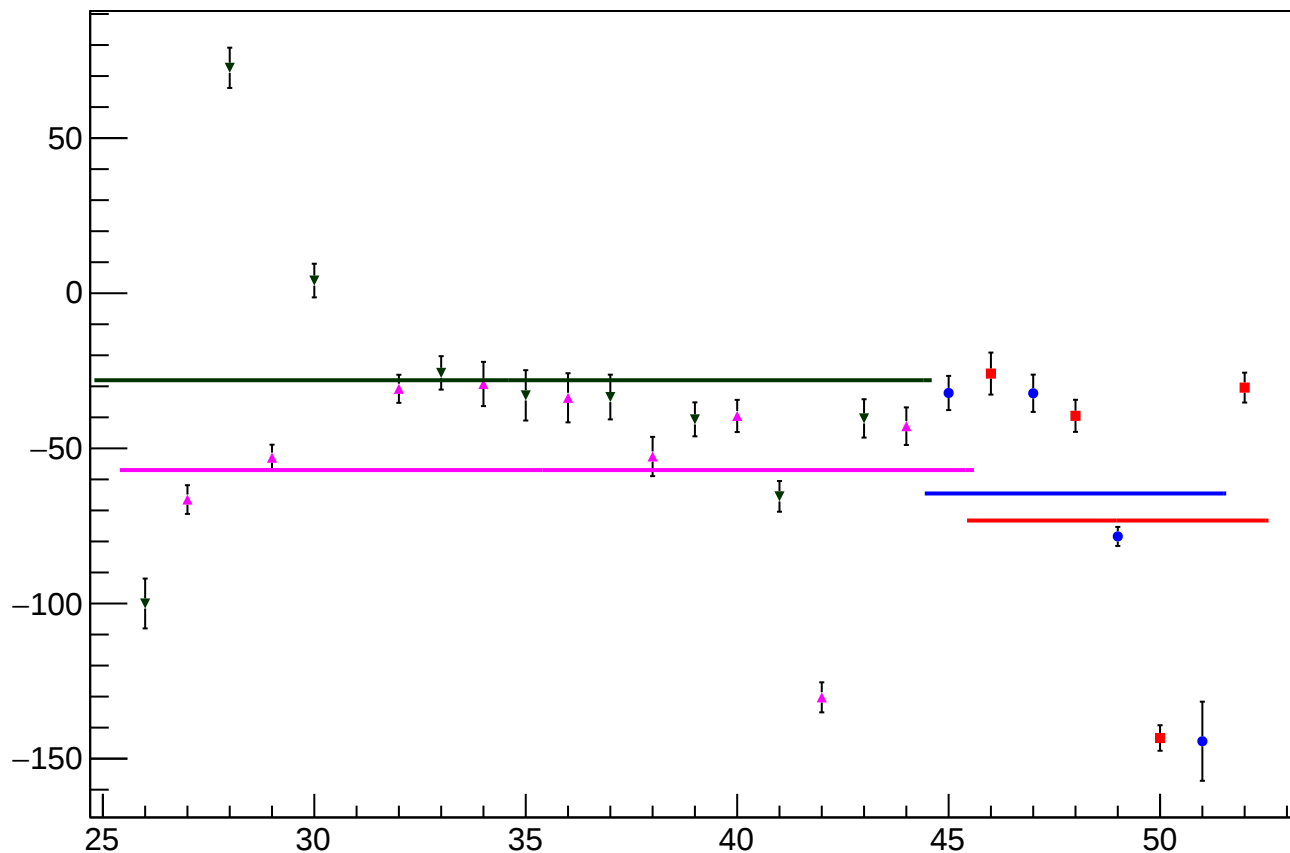
Right Out: -405.225+/-0.350  $\chi^2/\text{NDF}$ : 1173.2/3

Left In: -406.947+/-0.246  $\chi^2/\text{NDF}$ :18132.7/8

-409.353+/-0.212  $\chi^2/\text{NDF}$ : 18256.6/12

-406.377+/-0.201  $\chi^2/\text{NDF}$ : 19322.2/12

reg\_asym\_sam\_37\_avg\_diff\_bpm4eY\_slope vs slug



Right In: -64.537 $\pm$ 2.404  $\chi^2/\text{NDF}$ : 123.0/3

Left Out: -28.036 $\pm$ 2.031  $\chi^2/\text{NDF}$ : 423.4/8

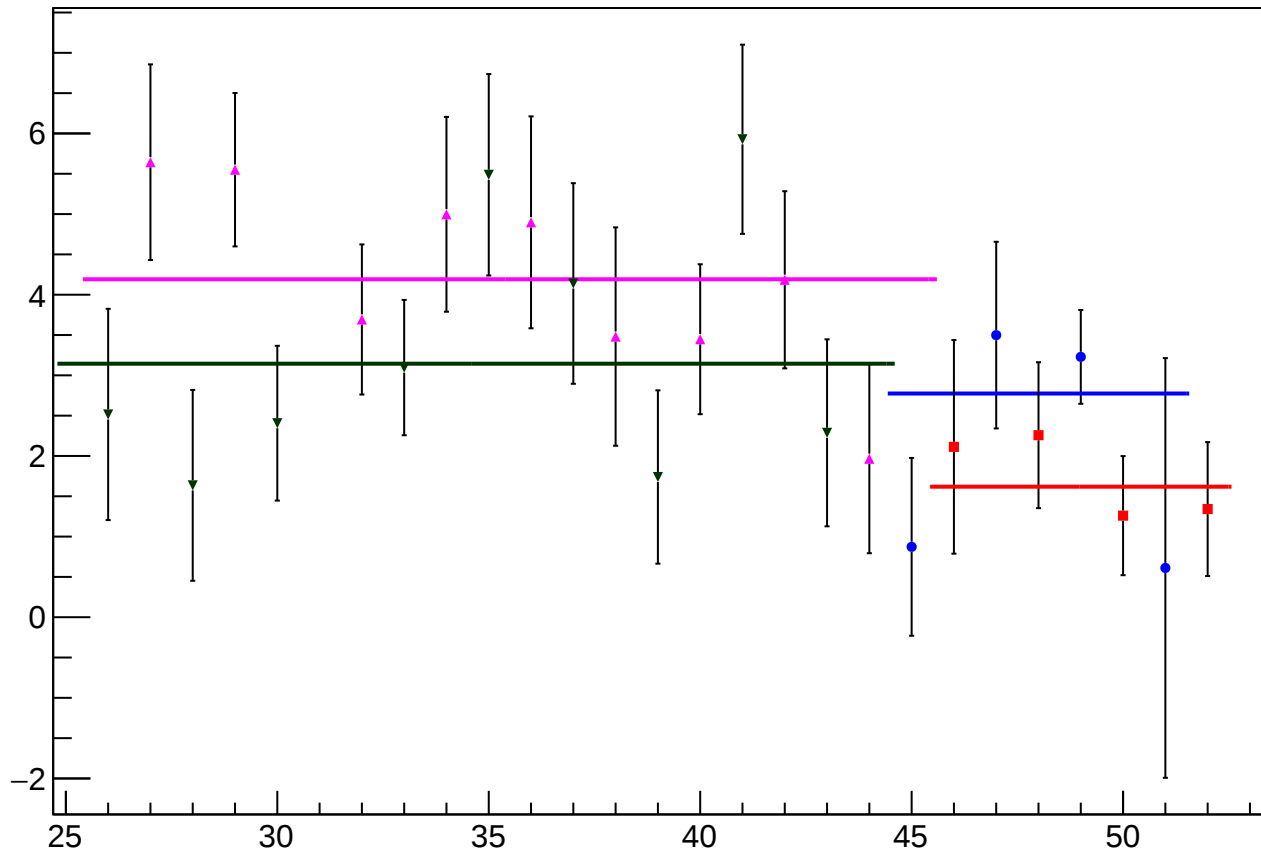
Right Out: -73.255 $\pm$ 2.489  $\chi^2/\text{NDF}$ : 461.0/3

Left In: -56.994 $\pm$ 1.767  $\chi^2/\text{NDF}$ : 308.6/8

-43.241 $\pm$ 1.551  $\chi^2/\text{NDF}$ : 680.9/12

-62.444 $\pm$ 1.441  $\chi^2/\text{NDF}$ : 797.9/12

reg\_asym\_sam\_37\_avg\_diff\_bpm11X\_slope vs slug



Right In:  $2.774 \pm 0.463$   $\chi^2/\text{NDF}: 4.7/3$

Left Out:  $3.144 \pm 0.367$   $\chi^2/\text{NDF}: 14.5/8$

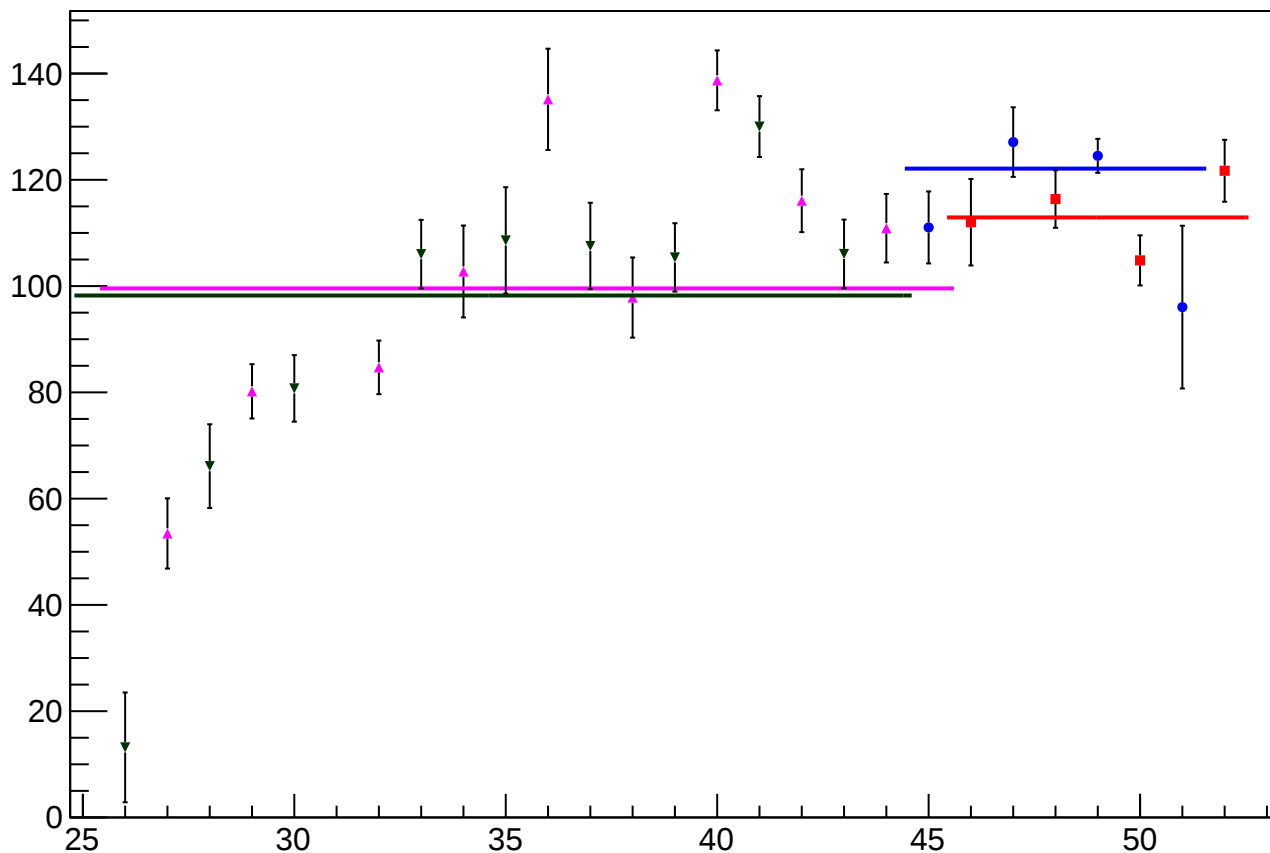
Right Out:  $1.619 \pm 0.444$   $\chi^2/\text{NDF}: 1.0/3$

Left In:  $4.191 \pm 0.366$   $\chi^2/\text{NDF}: 9.0/8$

$3.002 \pm 0.288$   $\chi^2/\text{NDF}: 19.6/12$

$3.150 \pm 0.282$   $\chi^2/\text{NDF}: 30.0/12$

reg\_asym\_sam\_37\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 122.108 $\pm$ 2.606  $\chi^2$ /NDF: 6.7/3

Left Out: 98.229 $\pm$ 2.366  $\chi^2$ /NDF:129.5/8

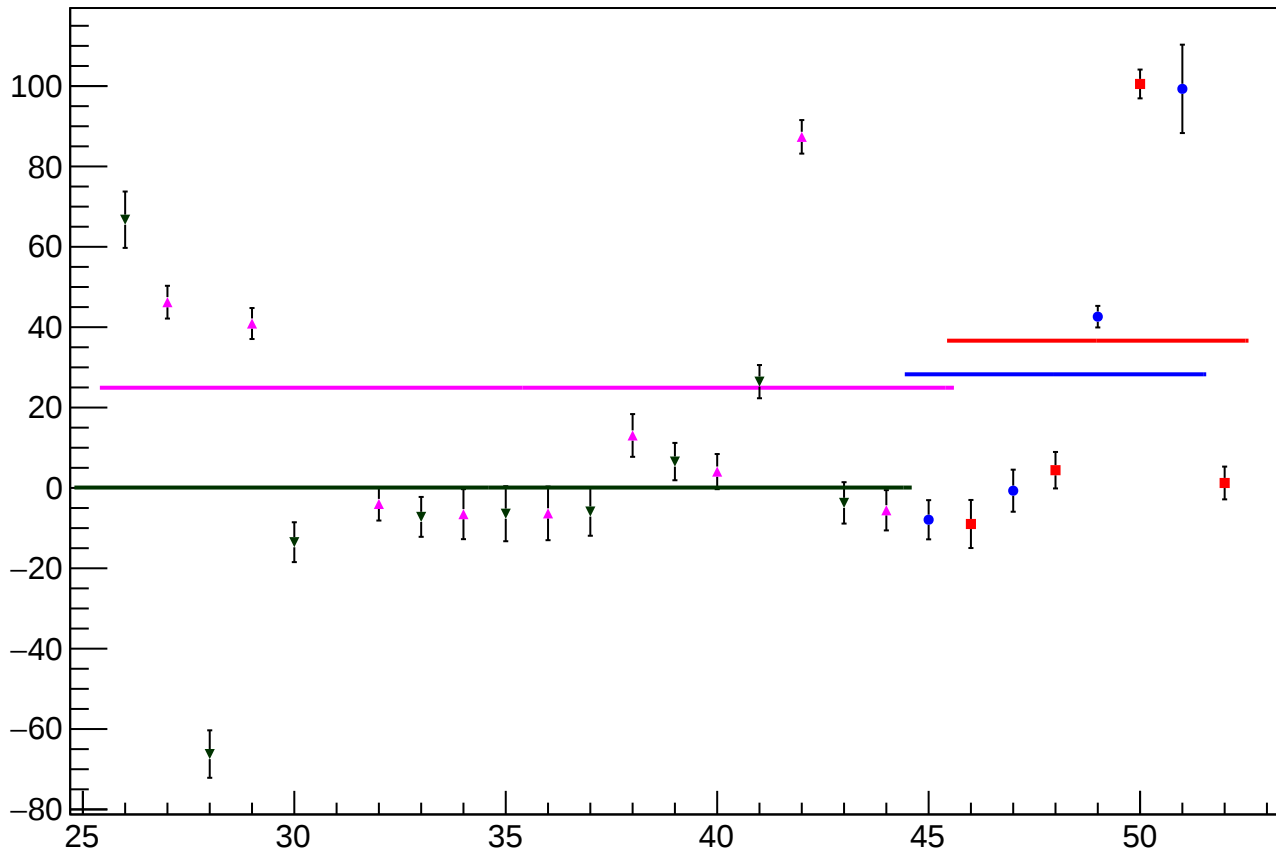
Right Out: 112.924 $\pm$ 2.843  $\chi^2$ /NDF: 5.6/3

Left In: 99.563 $\pm$ 2.101  $\chi^2$ /NDF:145.0/8

109.019 $\pm$ 1.752  $\chi^2$ /NDF: 182.2/12

104.281 $\pm$ 1.690  $\chi^2$ /NDF: 164.9/12

# reg\_asym\_sam\_37\_dd\_diff\_bpm4aY\_slope vs slug



Right In: 28.274 $\pm$ 2.105  $\chi^2$ /NDF: 156.0/3

Left Out: 0.093 $\pm$ 1.763  $\chi^2$ /NDF:271.1/8

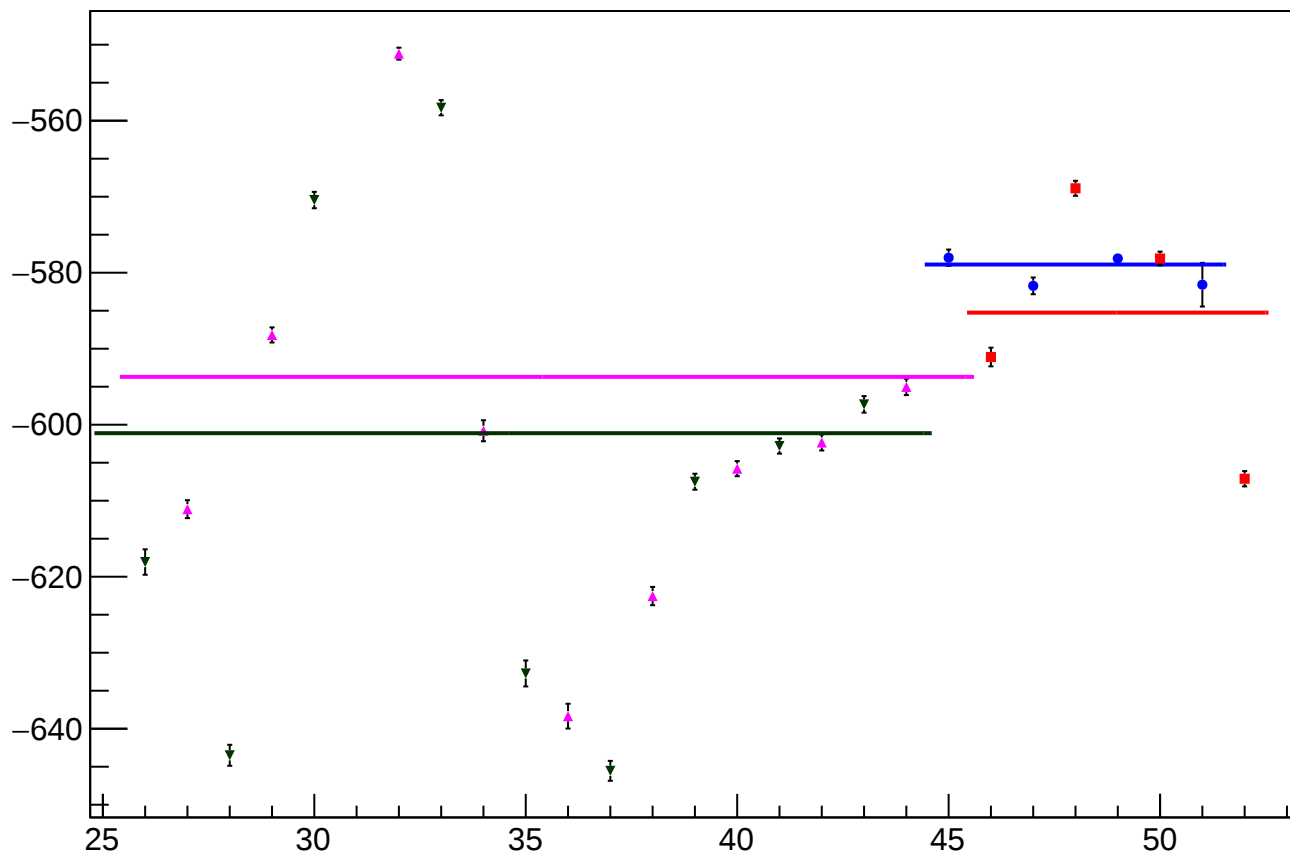
Right Out: 36.643 $\pm$ 2.159  $\chi^2$ /NDF: 501.6/3

Left In: 24.935 $\pm$ 1.545  $\chi^2$ /NDF:429.4/8

11.713 $\pm$ 1.352  $\chi^2$ /NDF: 532.4/12

28.898 $\pm$ 1.256  $\chi^2$ /NDF: 950.4/12

# reg\_asym\_sam\_37\_dd\_diff\_bpm4eX\_slope vs slug



Right In: -578.925+/-0.493  $\chi^2/\text{NDF}$ : 9.5/3

Left Out: -601.116+/-0.395  $\chi^2/\text{NDF}$ : 5229.3/8

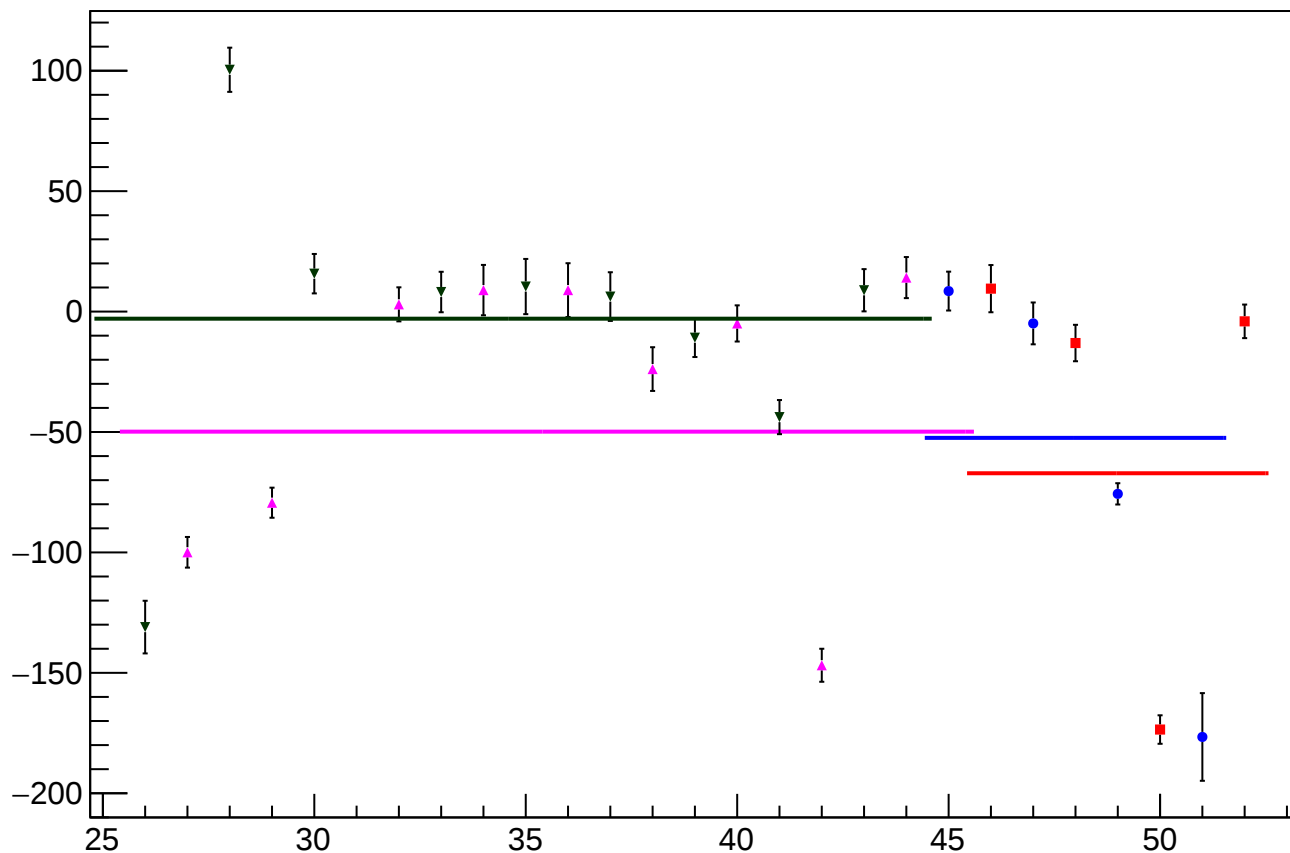
Right Out: -585.252+/-0.507  $\chi^2/\text{NDF}$ : 827.1/3

Left In: -593.704+/-0.360  $\chi^2/\text{NDF}$ : 4731.8/8

-592.440+/-0.308  $\chi^2/\text{NDF}$ : 6472.6/12

-590.869+/-0.294  $\chi^2/\text{NDF}$ : 5743.4/12

reg\_asym\_sam\_37\_dd\_diff\_bpm4eY\_slope vs slug



Right In: -52.434+/-3.475  $\chi^2/\text{NDF}$ : 161.2/3

Left Out: -2.951+/-2.946  $\chi^2/\text{NDF}$ : 309.3/8

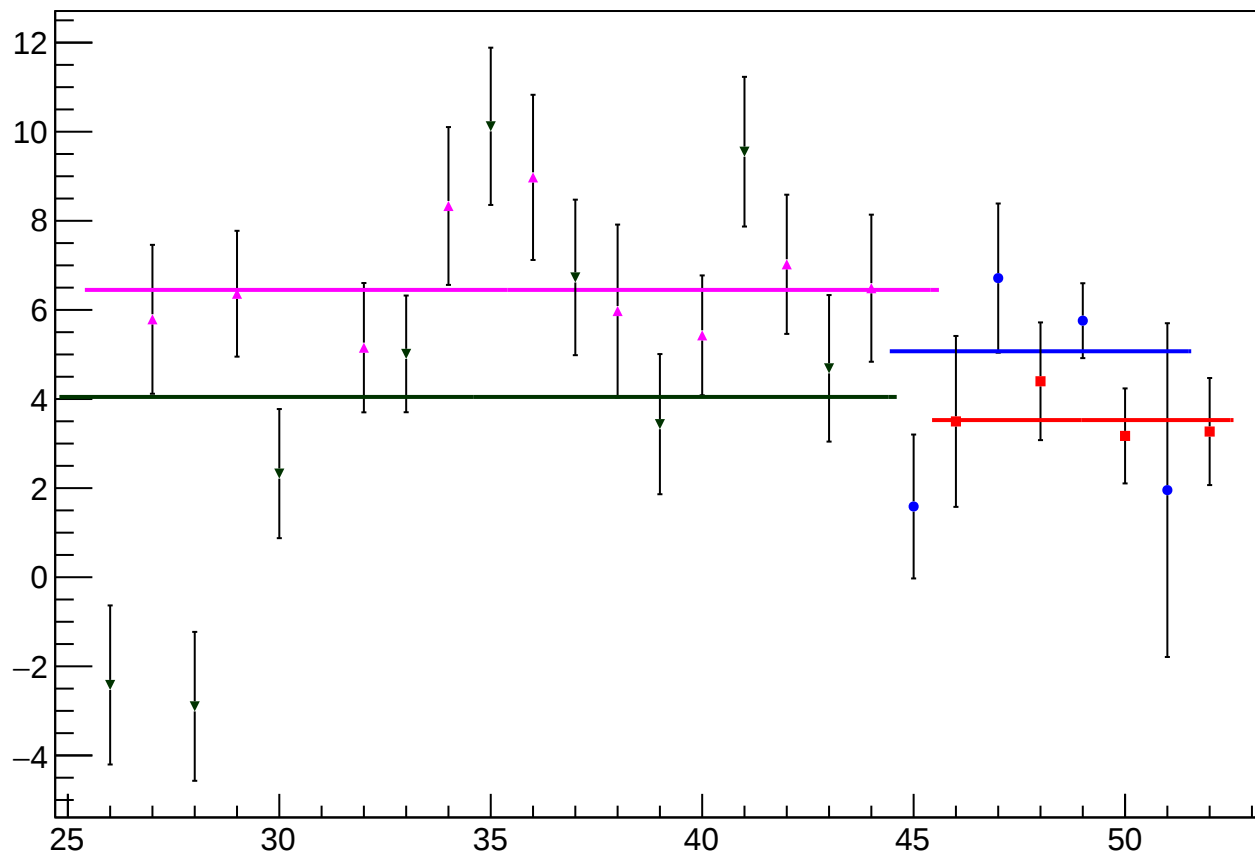
Right Out: -67.127+/-3.602  $\chi^2/\text{NDF}$ : 517.8/3

Left In: -49.855+/-2.562  $\chi^2/\text{NDF}$ : 500.0/8

-23.646+/-2.247  $\chi^2/\text{NDF}$ : 588.5/12

-55.655+/-2.088  $\chi^2/\text{NDF}$ : 1033.1/12

reg\_asym\_sam\_37\_dd\_diff\_bpm11X\_slope vs slug



Right In: 5.072 $\pm$ 0.670  $\chi^2$ /NDF: 7.0/3

Left Out: 4.047 $\pm$ 0.534  $\chi^2$ /NDF:57.6/8

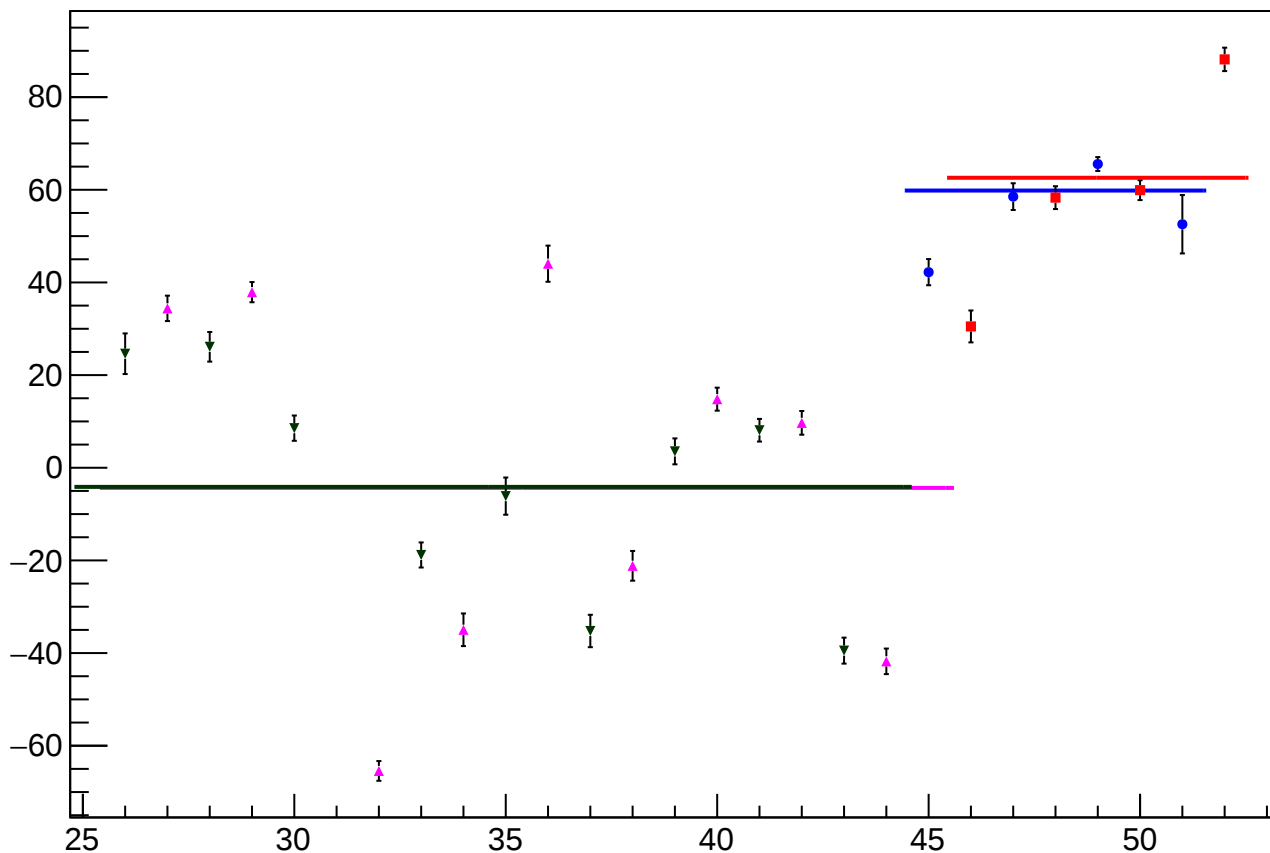
Right Out: 3.527 $\pm$ 0.643  $\chi^2$ /NDF: 0.6/3

Left In: 6.449 $\pm$ 0.532  $\chi^2$ /NDF:4.7/8

4.445 $\pm$ 0.418  $\chi^2$ /NDF: 66.0/12

5.263 $\pm$ 0.410  $\chi^2$ /NDF: 17.6/12

reg\_asym\_sam\_26\_avg\_diff\_bpm4aX\_slope vs slug



Right In: 59.836+/-1.182  $\chi^2/\text{NDF}$ : 55.0/3

Left Out: -4.129+/-1.007  $\chi^2/\text{NDF}$ : 453.7/8

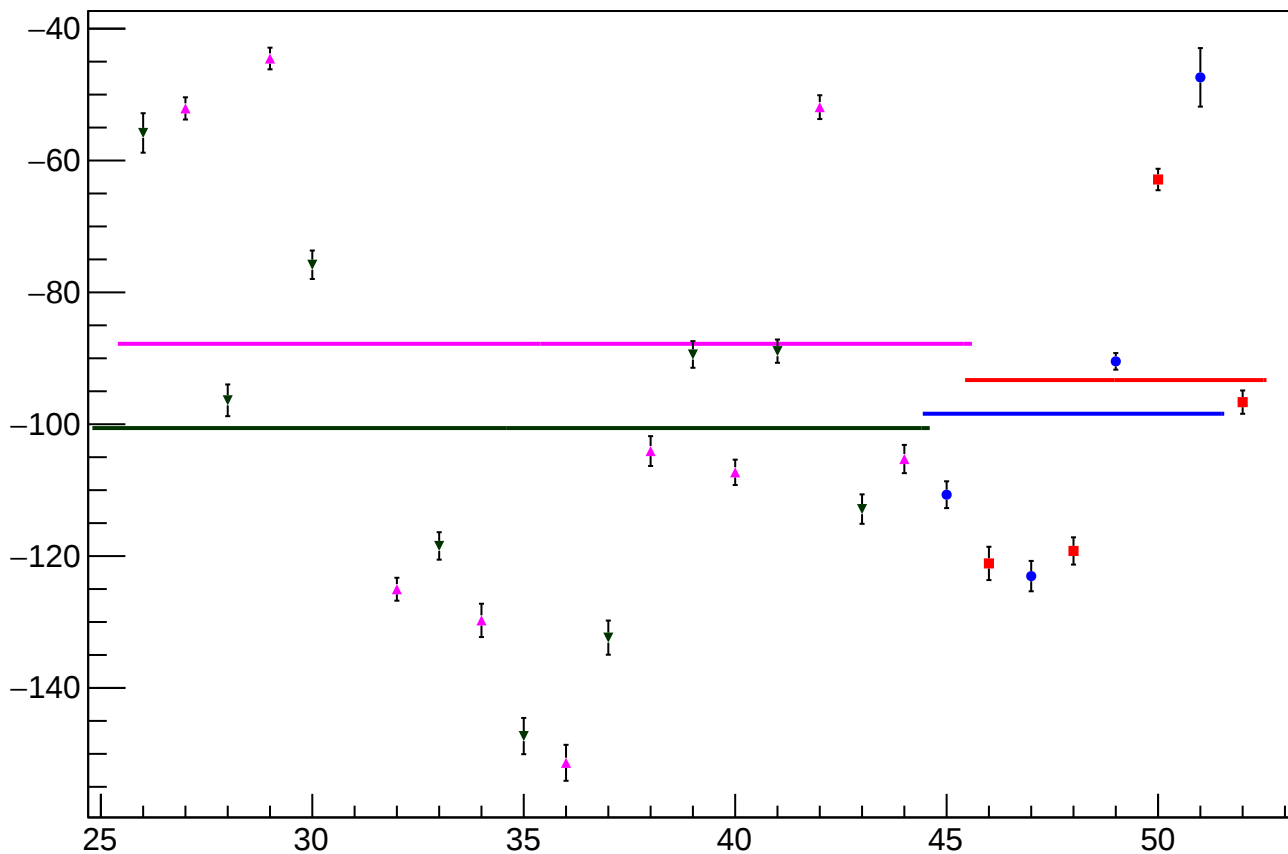
Right Out: 62.595+/-1.267  $\chi^2/\text{NDF}$ : 193.6/3

Left In: -4.348+/-0.893  $\chi^2/\text{NDF}$ : 1927.7/8

22.774+/-0.767  $\chi^2/\text{NDF}$ : 2204.6/12

17.884+/-0.730  $\chi^2/\text{NDF}$ : 3986.2/12

reg\_asym\_sam\_26\_avg\_diff\_bpm4aY\_slope vs slug



Right In: -98.407 $\pm$ 0.948  $\chi^2$ /NDF: 322.6/3

Left Out: -100.583 $\pm$ 0.750  $\chi^2$ /NDF: 975.8/8

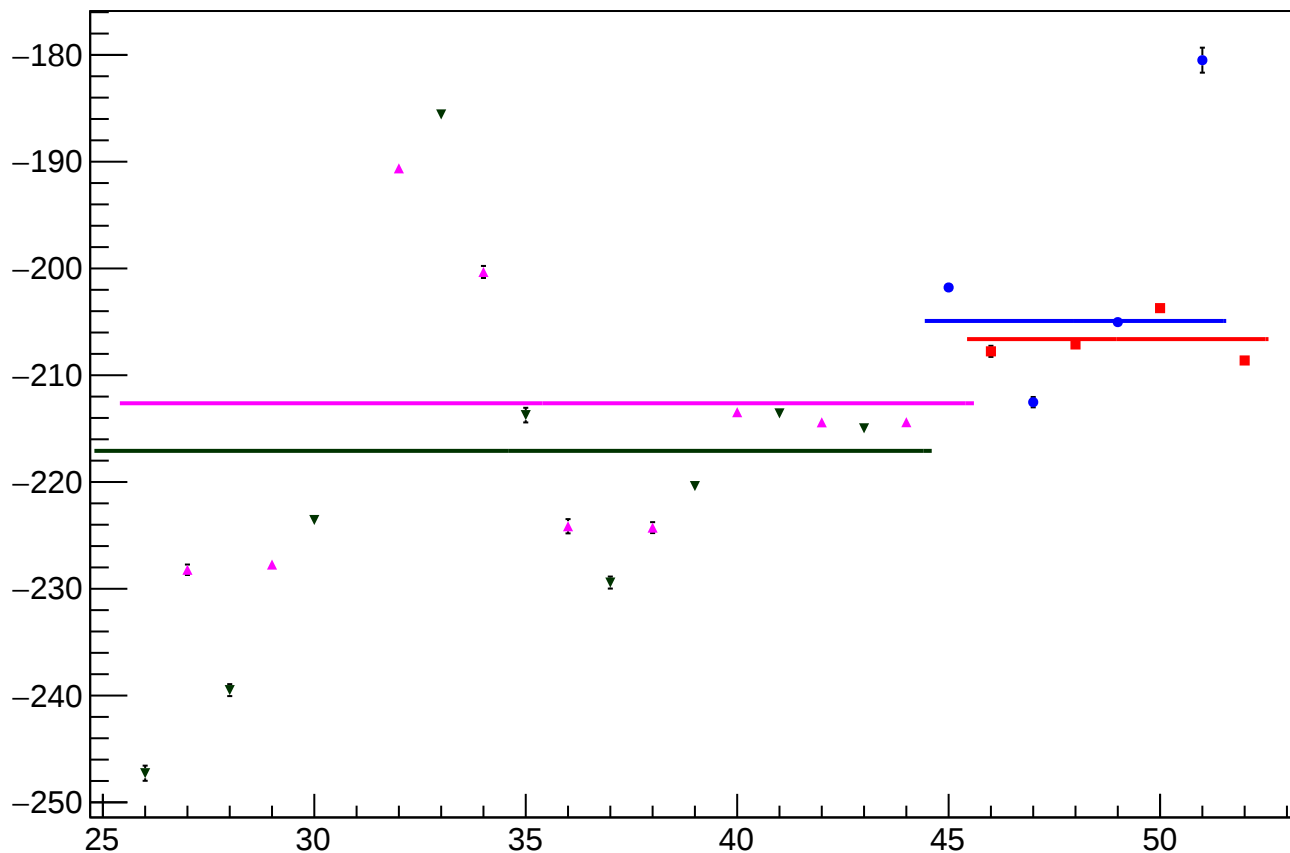
Right Out: -93.302 $\pm$ 0.959  $\chi^2$ /NDF: 631.2/3

Left In: -87.800 $\pm$ 0.654  $\chi^2$ /NDF: 3036.8/8

-99.745 $\pm$ 0.588  $\chi^2$ /NDF: 1301.7/12

-89.548 $\pm$ 0.541  $\chi^2$ /NDF: 3690.5/12

reg\_asym\_sam\_26\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -204.916+/-0.221  $\chi^2/\text{NDF}$ : 728.8/3

Left Out: -217.083+/-0.168  $\chi^2/\text{NDF}$ : 9883.1/8

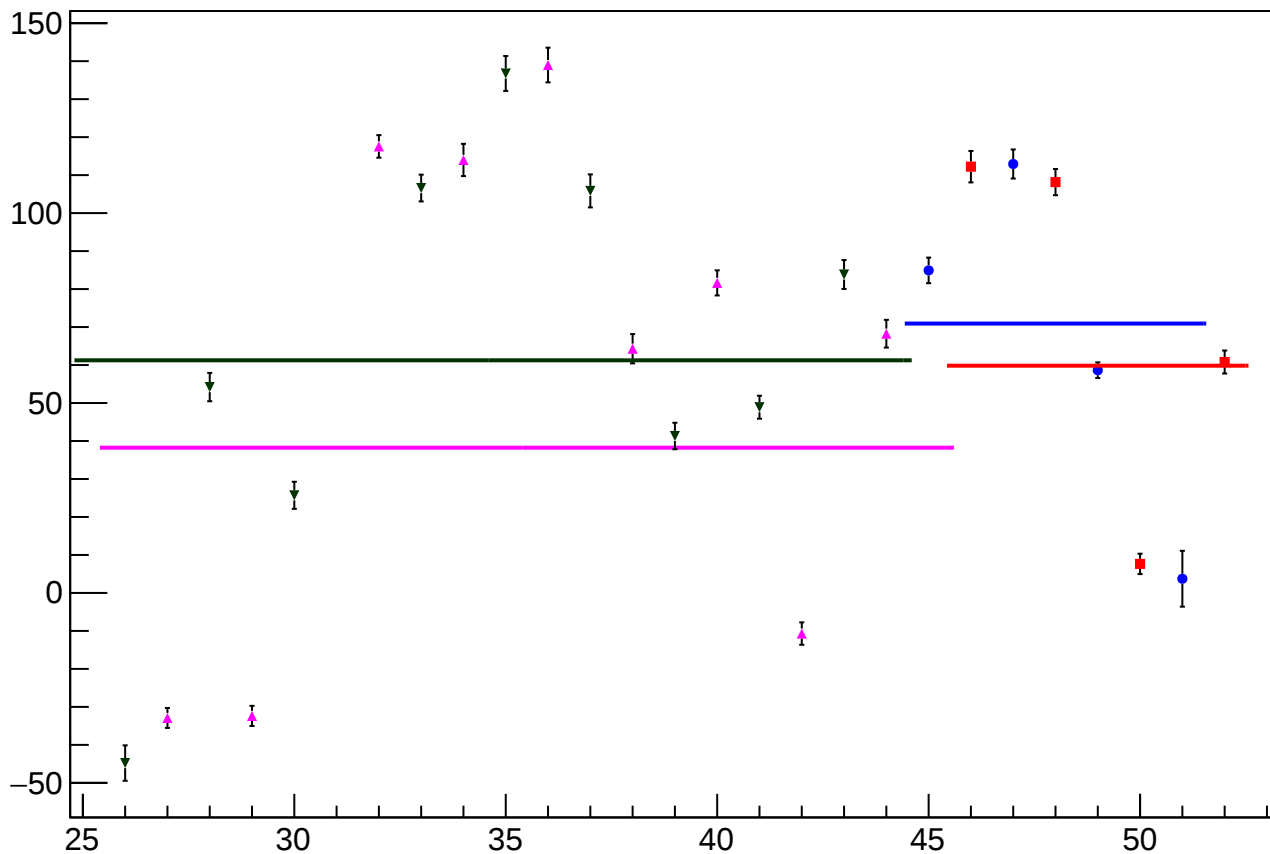
Right Out: -206.617+/-0.225  $\chi^2/\text{NDF}$ : 76.8/3

Left In: -212.625+/-0.153  $\chi^2/\text{NDF}$ : 8043.8/8

-212.625+/-0.134  $\chi^2/\text{NDF}$ : 12529.2/12

-210.728+/-0.126  $\chi^2/\text{NDF}$ : 8609.1/12

# reg\_asym\_sam\_26\_avg\_diff\_bpm4eY\_slope vs slug



Right In:  $70.923 \pm 1.564$   $\chi^2/\text{NDF}$ : 256.7/3

Left Out:  $61.242 \pm 1.253$   $\chi^2/\text{NDF}$ : 1243.9/8

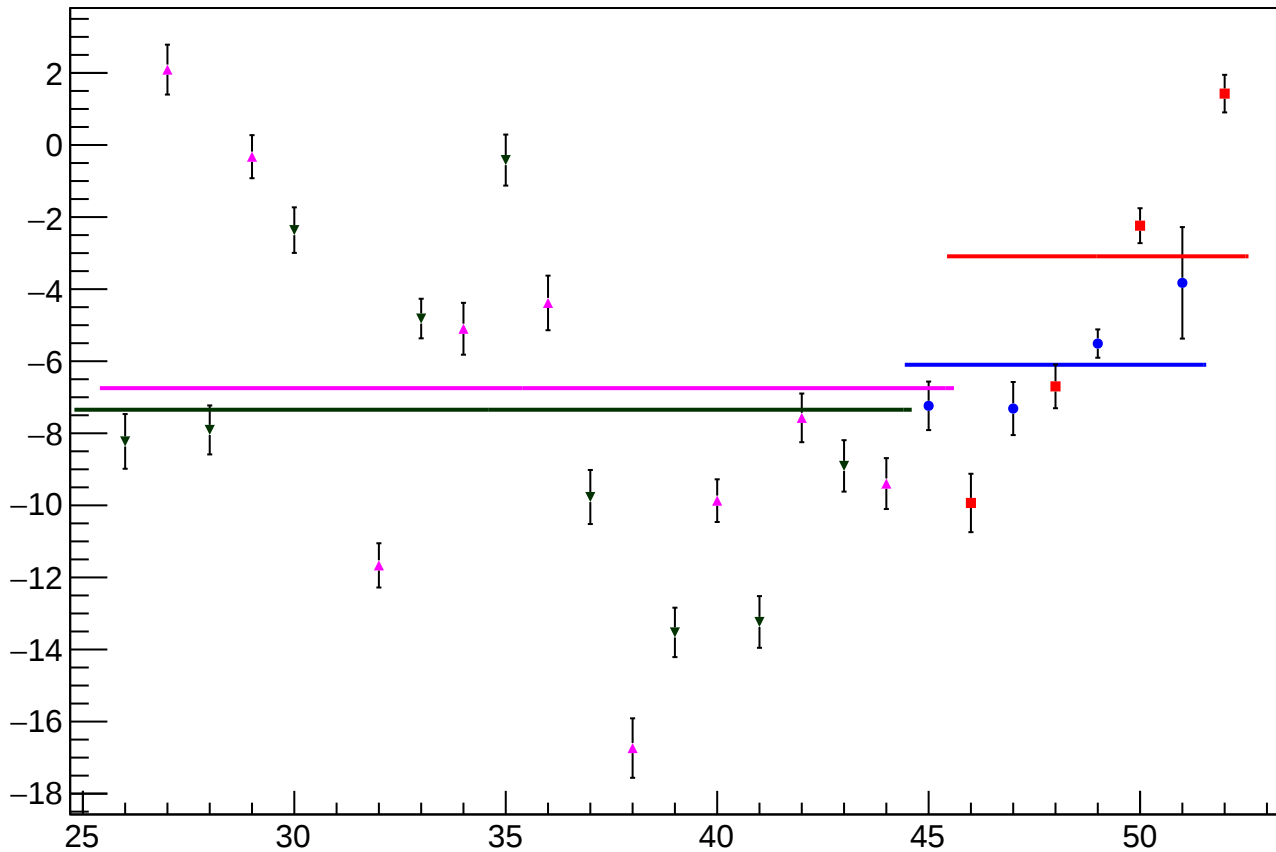
Right Out:  $59.827 \pm 1.600$   $\chi^2/\text{NDF}$ : 734.7/3

Left In:  $38.240 \pm 1.083$   $\chi^2/\text{NDF}$ : 3520.6/8

$65.023 \pm 0.978$   $\chi^2/\text{NDF}$ : 1523.9/12

$45.024 \pm 0.897$   $\chi^2/\text{NDF}$ : 4380.0/12

reg\_asym\_sam\_26\_avg\_diff\_bpm11X\_slope vs slug



Right In: -6.098+/-0.302  $\chi^2$ /NDF: 10.0/3

Left Out: -7.346+/-0.226  $\chi^2$ /NDF:345.0/8

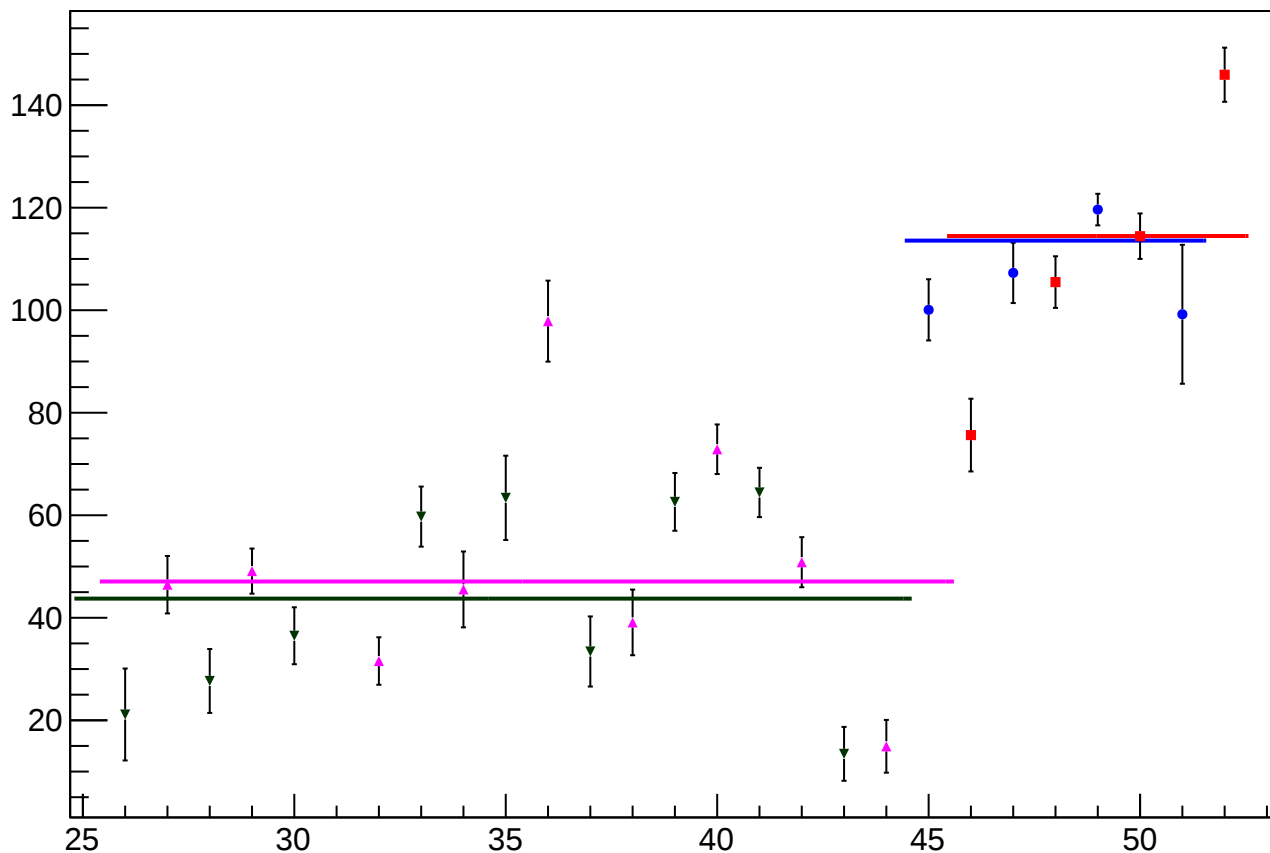
Right Out: -3.089+/-0.286  $\chi^2$ /NDF: 184.8/3

Left In: -6.747+/-0.225  $\chi^2$ /NDF:547.5/8

-6.898+/-0.181  $\chi^2$ /NDF: 365.9/12

-5.350+/-0.177  $\chi^2$ /NDF: 833.2/12

reg\_asym\_sam\_26\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 113.577+/-2.441  $\chi^2/\text{NDF}$ : 11.3/3

Left Out: 43.740+/-2.013  $\chi^2/\text{NDF}$ : 93.1/8

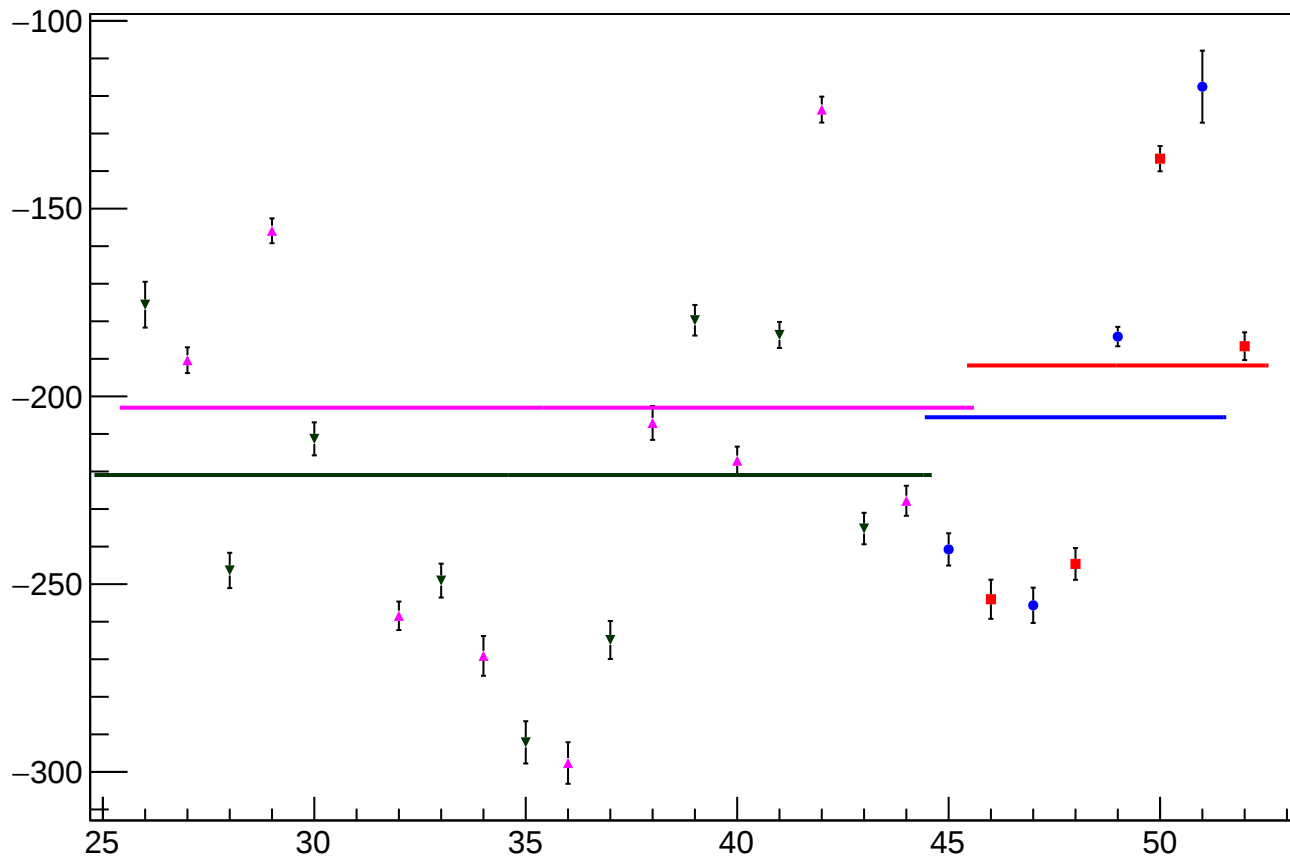
Right Out: 114.478+/-2.617  $\chi^2/\text{NDF}$ : 68.7/3

Left In: 47.079+/-1.793  $\chi^2/\text{NDF}$ : 122.4/8

72.016+/-1.553  $\chi^2/\text{NDF}$ : 591.6/12

68.607+/-1.479  $\chi^2/\text{NDF}$ : 642.6/12

# reg\_asym\_sam\_26\_dd\_diff\_bpm4aY\_slope vs slug



Right In: -205.556 $\pm$ 1.961  $\chi^2/\text{NDF}$ : 334.1/3

Left Out: -220.942 $\pm$ 1.501  $\chi^2/\text{NDF}$ : 593.2/8

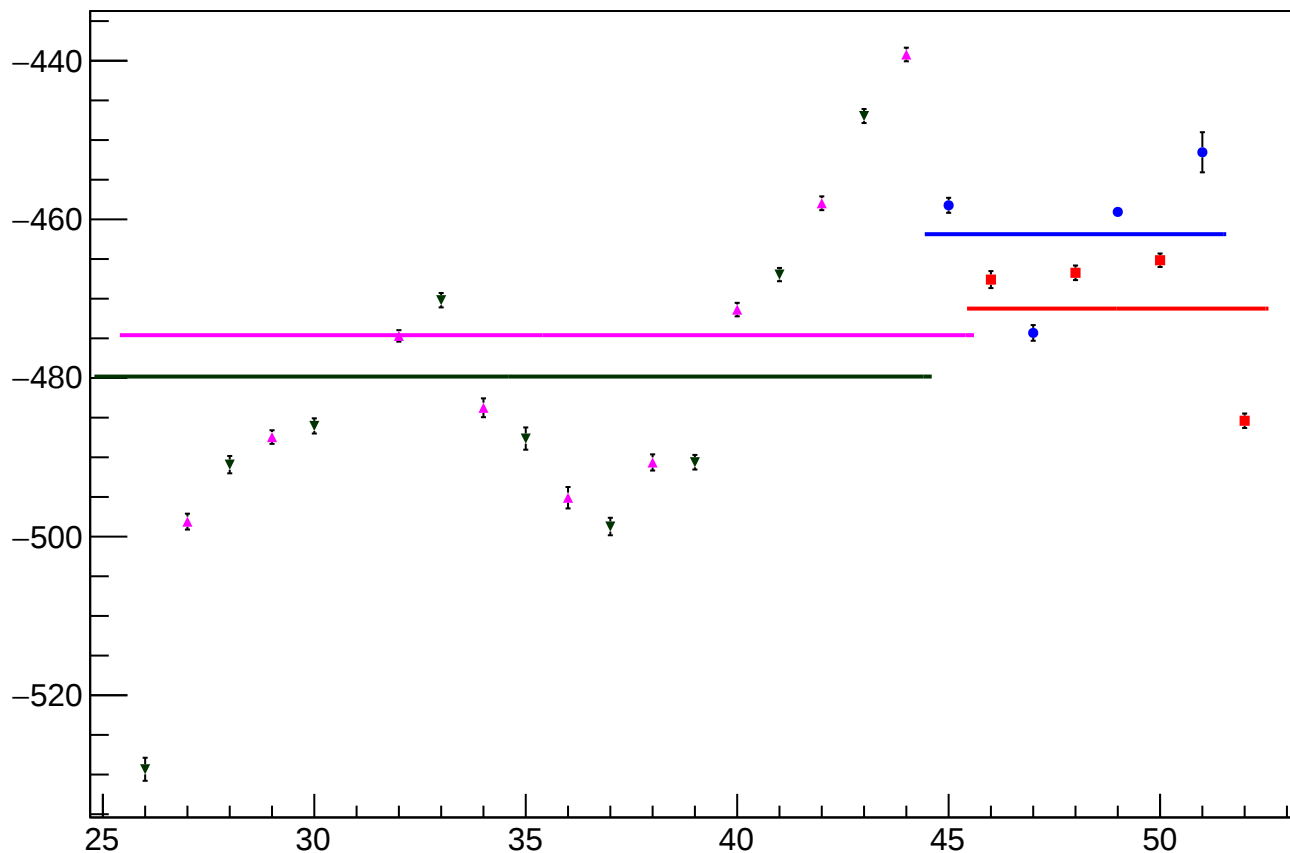
Right Out: -191.764 $\pm$ 1.983  $\chi^2/\text{NDF}$ : 568.9/3

Left In: -203.009 $\pm$ 1.312  $\chi^2/\text{NDF}$ : 1461.1/8

-215.257 $\pm$ 1.192  $\chi^2/\text{NDF}$ : 966.2/12

-199.587 $\pm$ 1.094  $\chi^2/\text{NDF}$ : 2052.4/12

reg\_asym\_sam\_26\_dd\_diff\_bpm4eX\_slope vs slug



Right In: -461.867+/-0.457  $\chi^2$ /NDF: 209.0/3

Left Out: -479.818+/-0.337  $\chi^2$ /NDF: 3488.7/8

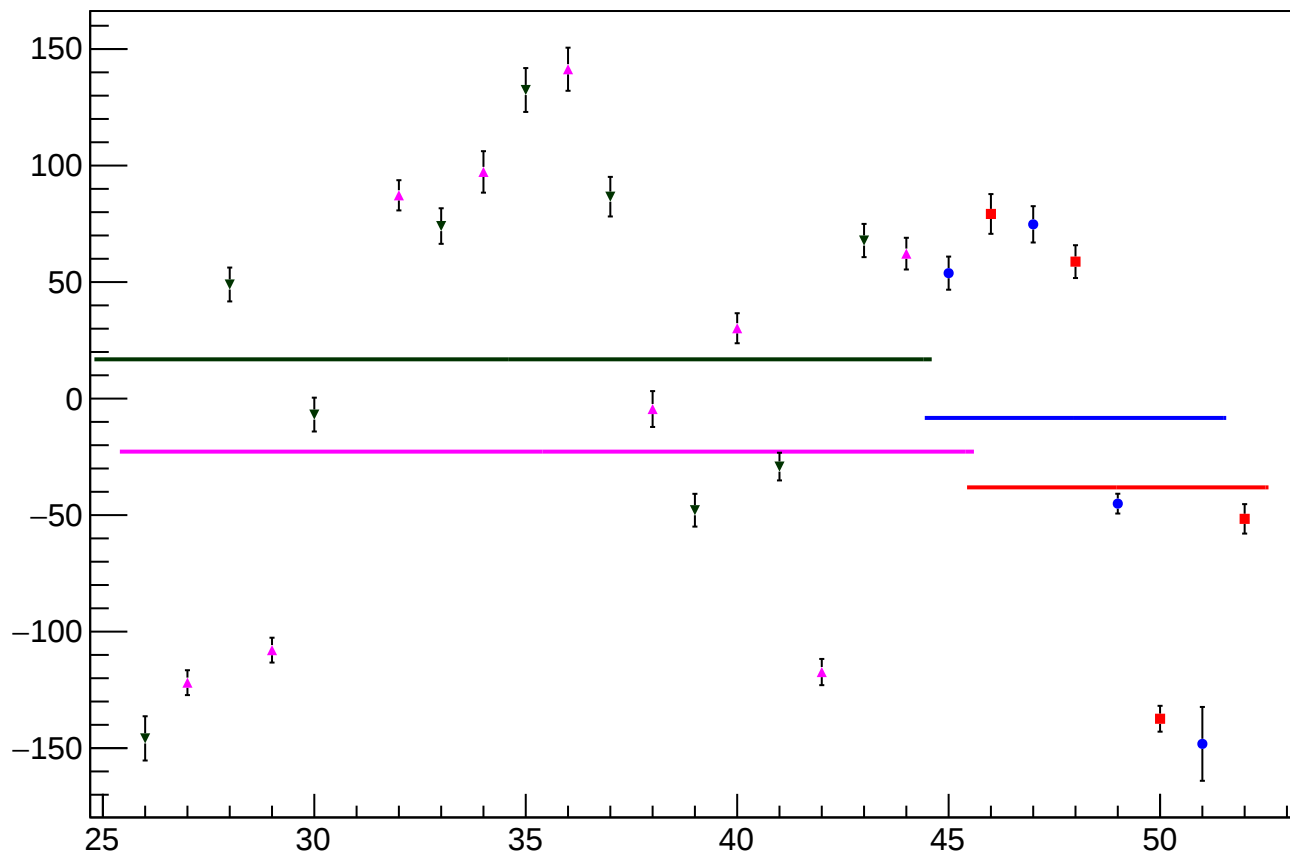
Right Out: -471.250+/-0.465  $\chi^2$ /NDF: 326.5/3

Left In: -474.602+/-0.308  $\chi^2$ /NDF: 3381.8/8

-473.497+/-0.271  $\chi^2$ /NDF: 4697.0/12

-473.579+/-0.257  $\chi^2$ /NDF: 3744.5/12

reg\_asym\_sam\_26\_dd\_diff\_bpm4eY\_slope vs slug



Right In: -8.298+/-3.233  $\chi^2/\text{NDF}$ : 343.0/3

Left Out: 16.850+/-2.504  $\chi^2/\text{NDF}$ :793.7/8

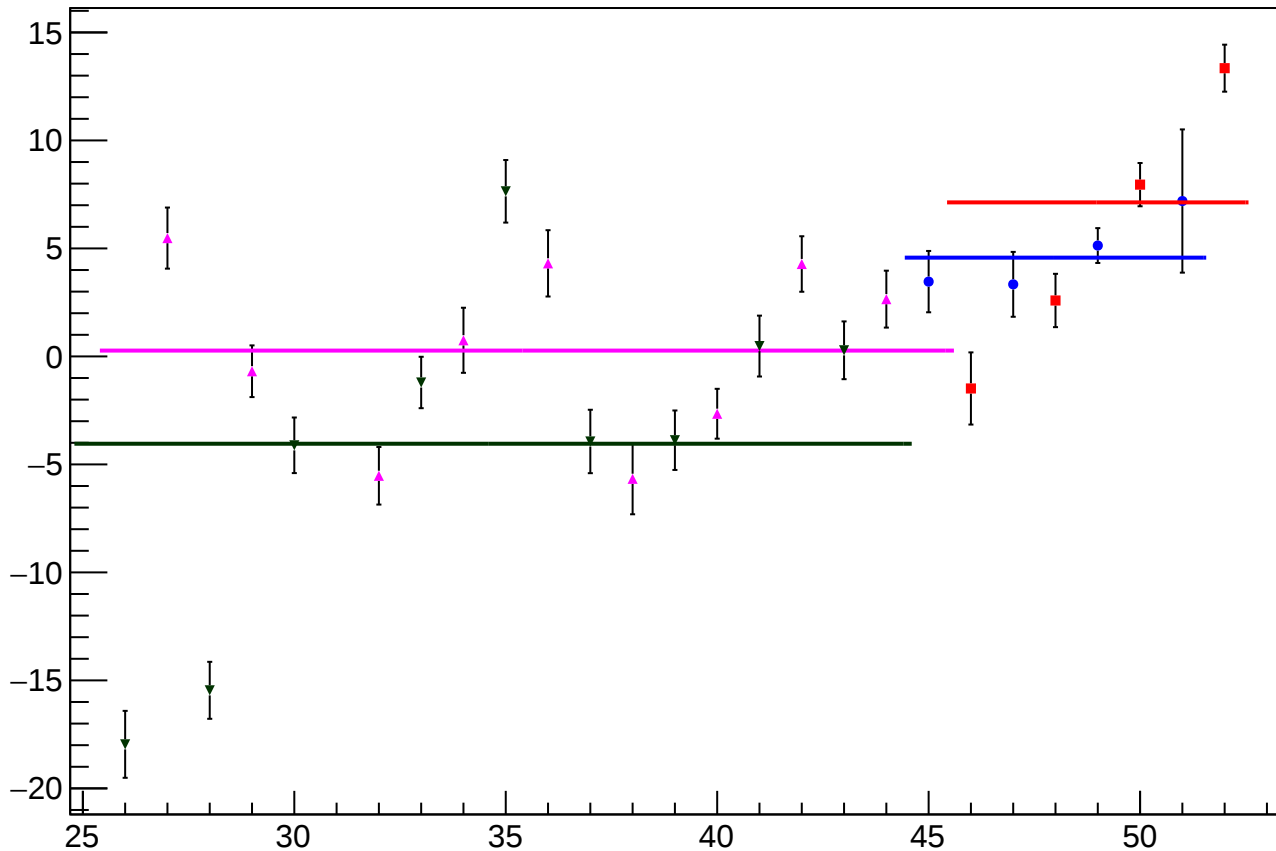
Right Out: -38.100+/-3.307  $\chi^2/\text{NDF}$ : 703.3/3

Left In: -22.758+/-2.169  $\chi^2/\text{NDF}$ :1896.5/8

7.419+/-1.980  $\chi^2/\text{NDF}$ : 1174.5/12

-27.372+/-1.814  $\chi^2/\text{NDF}$ : 2614.8/12

# reg\_asym\_sam\_26\_dd\_diff\_bpm11X\_slope vs slug



Right In: 4.573 $\pm$ 0.624  $\chi^2$ /NDF: 2.4/3

Left Out: -4.043 $\pm$ 0.455  $\chi^2$ /NDF: 247.2/8

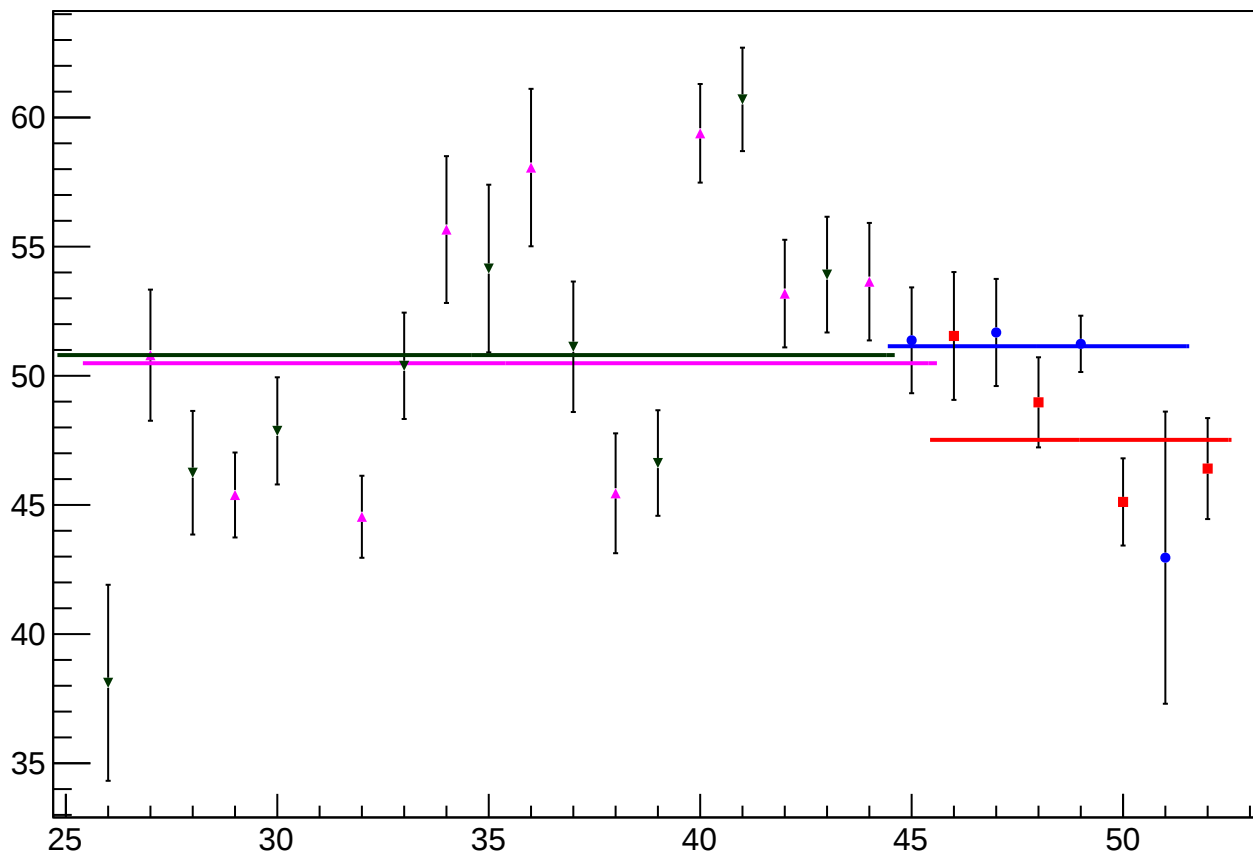
Right Out: 7.131 $\pm$ 0.592  $\chi^2$ /NDF: 73.4/3

Left In: 0.270 $\pm$ 0.450  $\chi^2$ /NDF: 72.6/8

-1.054 $\pm$ 0.368  $\chi^2$ /NDF: 374.0/12

2.787 $\pm$ 0.358  $\chi^2$ /NDF: 231.1/12

reg\_asym\_sam\_48\_avg\_diff\_bpm4aX\_slope vs slug



Right In: 51.145 $\pm$ 0.863  $\chi^2/\text{NDF}$ : 2.2/3

Left Out: 50.802 $\pm$ 0.778  $\chi^2/\text{NDF}$ : 48.5/8

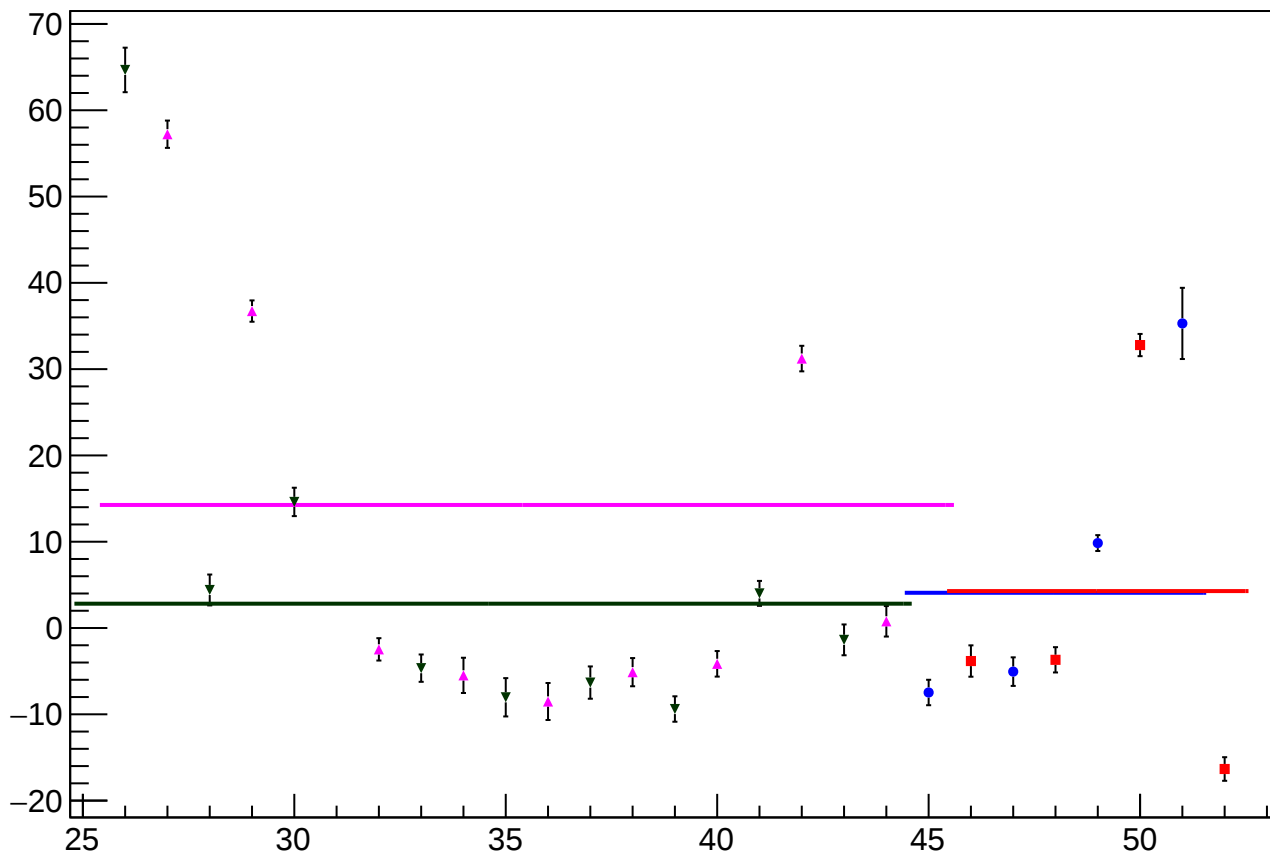
Right Out: 47.520 $\pm$ 0.951  $\chi^2/\text{NDF}$ : 5.7/3

Left In: 50.487 $\pm$ 0.701  $\chi^2/\text{NDF}$ : 63.2/8

50.956 $\pm$ 0.578  $\chi^2/\text{NDF}$ : 50.7/12

49.444 $\pm$ 0.564  $\chi^2/\text{NDF}$ : 75.2/12

reg\_asym\_sam\_48\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 4.083 $\pm$ 0.696  $\chi^2$ /NDF: 188.4/3

Left Out: 2.819 $\pm$ 0.580  $\chi^2$ /NDF: 771.6/8

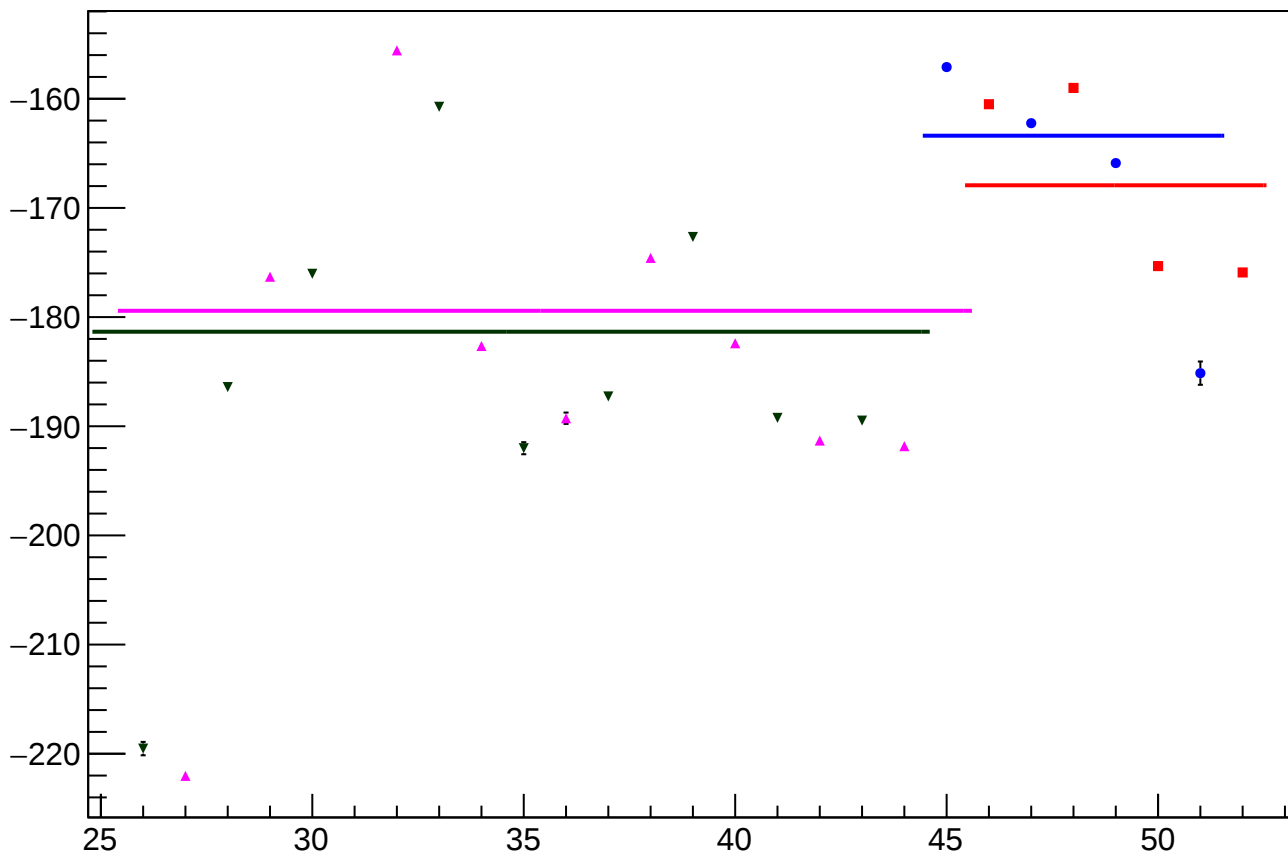
Right Out: 4.279 $\pm$ 0.724  $\chi^2$ /NDF: 766.7/3

Left In: 14.260 $\pm$ 0.519  $\chi^2$ /NDF: 1925.9/8

3.337 $\pm$ 0.445  $\chi^2$ /NDF: 962.0/12

10.875 $\pm$ 0.422  $\chi^2$ /NDF: 2818.1/12

reg\_asym\_sam\_48\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -163.383+/-0.161  $\chi^2/\text{NDF}$ : 924.2/3

Left Out: -181.341+/-0.130  $\chi^2/\text{NDF}$ :10628.0/8

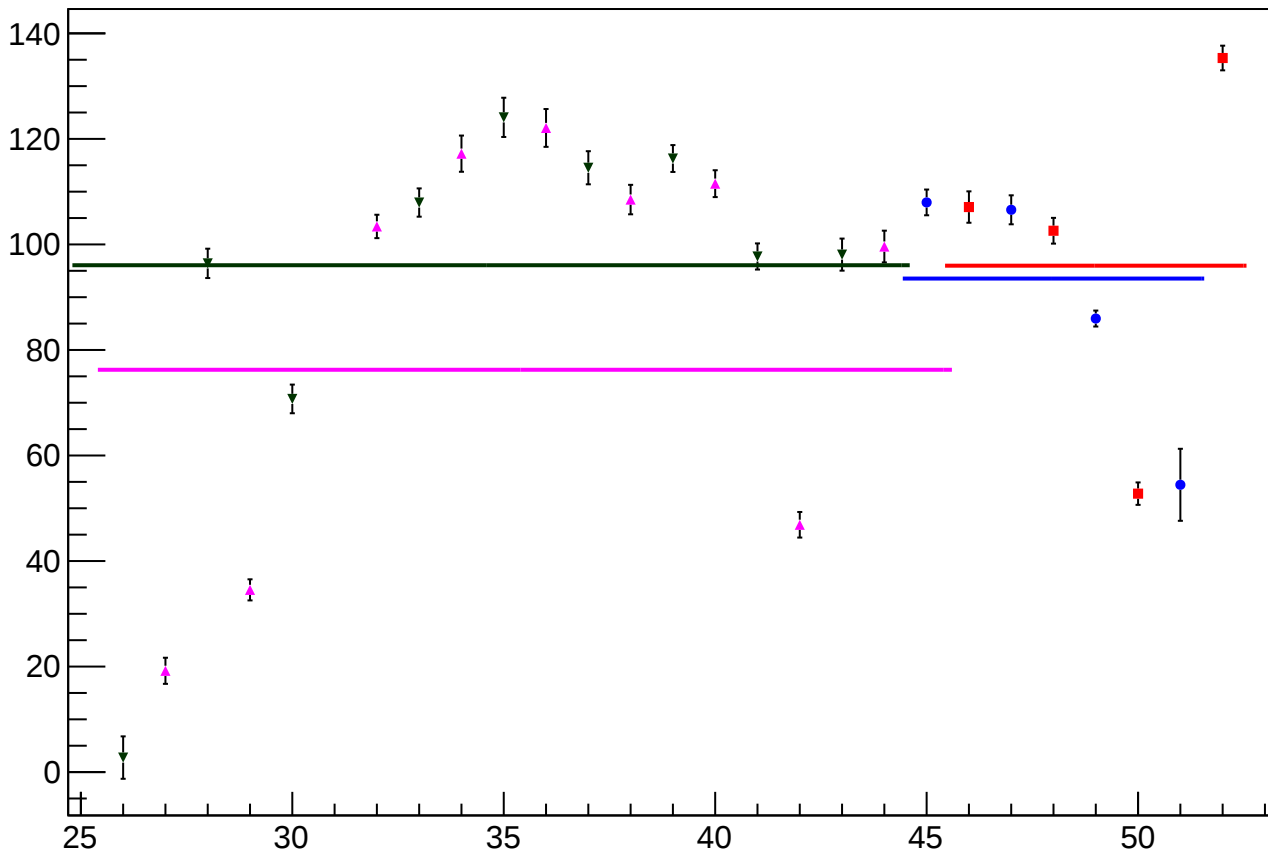
Right Out: -167.926+/-0.168  $\chi^2/\text{NDF}$ : 2253.2/3

Left In: -179.424+/-0.120  $\chi^2/\text{NDF}$ :21031.4/8

-174.296+/-0.101  $\chi^2/\text{NDF}$ : 19079.6/12

-175.572+/-0.098  $\chi^2/\text{NDF}$ : 26381.6/12

reg\_asym\_sam\_48\_avg\_diff\_bpm4eY\_slope vs slug



Right In: 93.533+/-1.148  $\chi^2$ /NDF: 115.4/3

Left Out: 96.058+/-0.969  $\chi^2$ /NDF:800.7/8

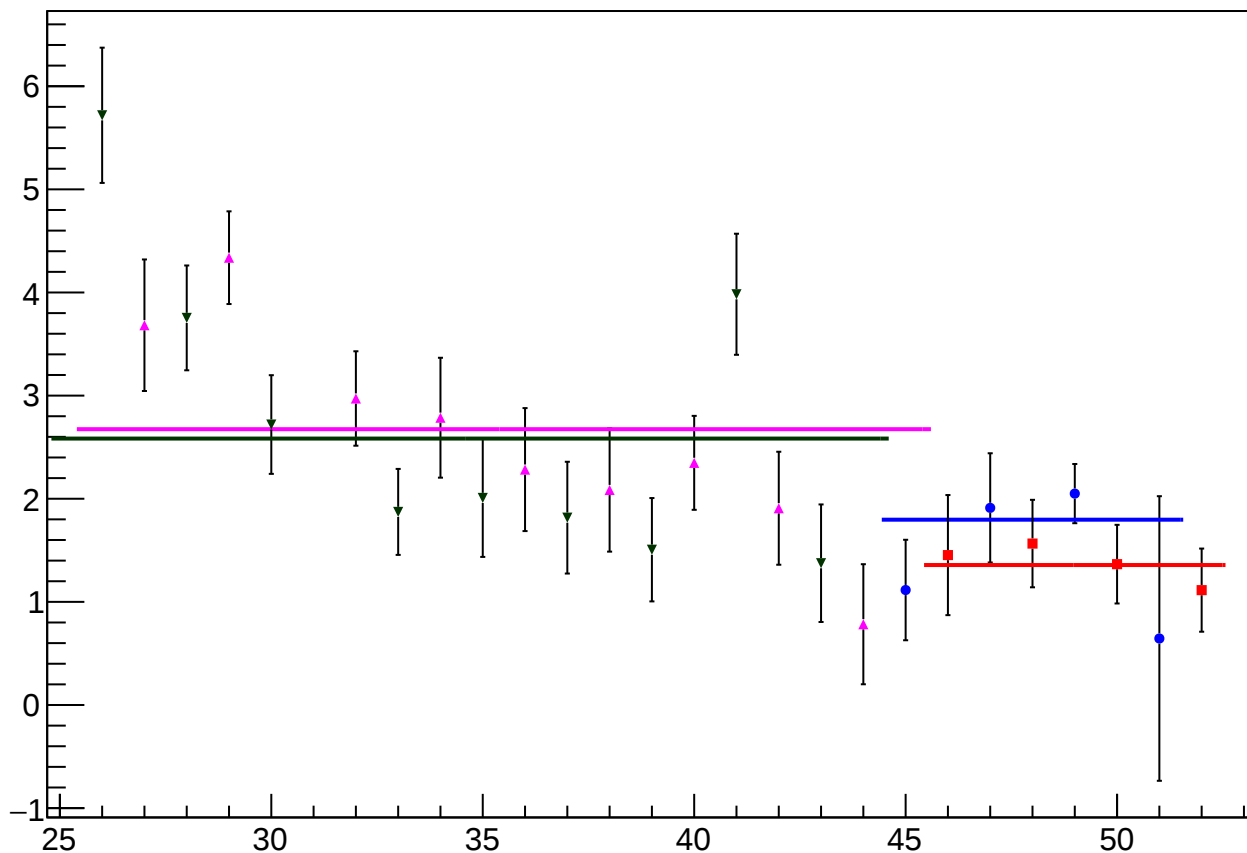
Right Out: 95.973+/-1.208  $\chi^2$ /NDF: 717.8/3

Left In: 76.247+/-0.863  $\chi^2$ /NDF:1954.9/8

95.007+/-0.740  $\chi^2$ /NDF: 919.0/12

82.911+/-0.702  $\chi^2$ /NDF: 2849.2/12

# reg\_asym\_sam\_48\_avg\_diff\_bpm11X\_slope vs slug



Right In:  $1.797 \pm 0.221$   $\chi^2/\text{NDF}$ : 3.5/3

Left Out:  $2.583 \pm 0.175$   $\chi^2/\text{NDF}$ : 49.0/8

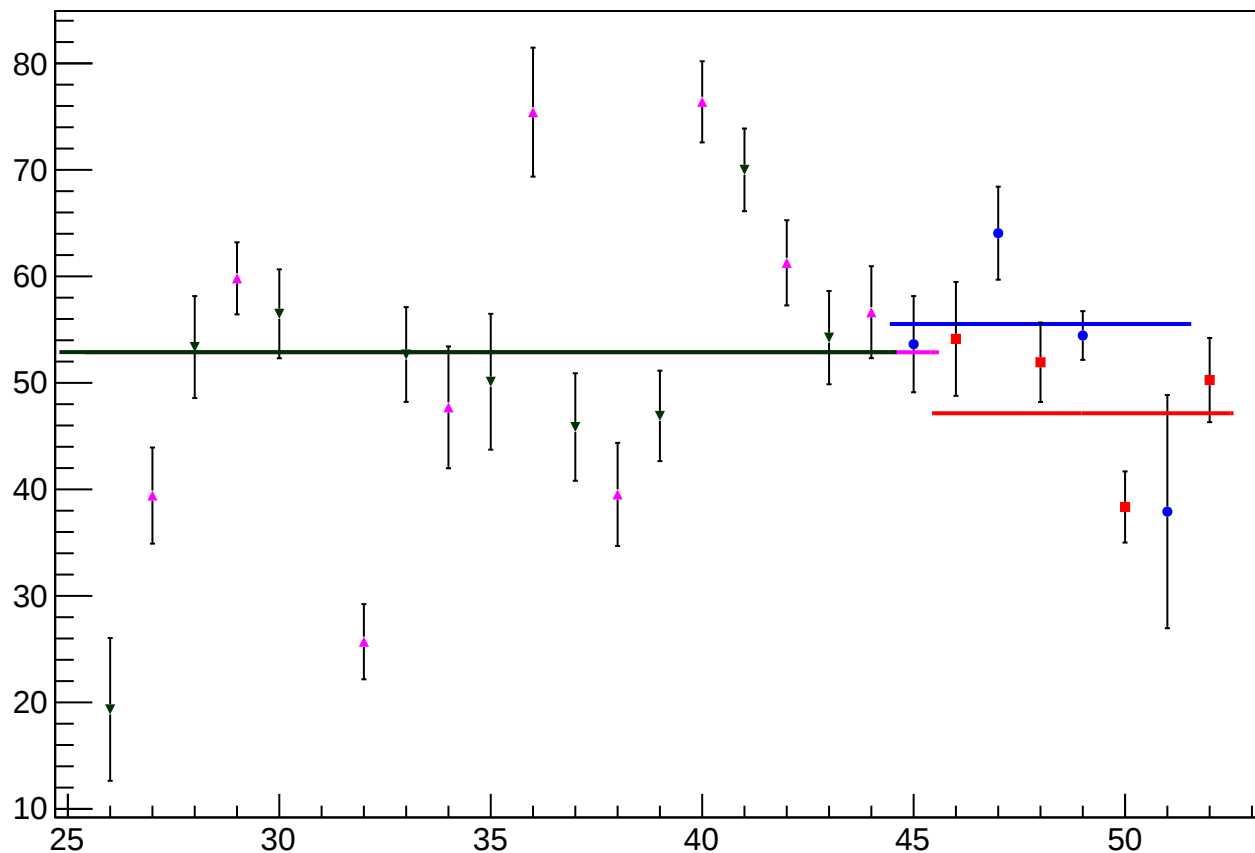
Right Out:  $1.357 \pm 0.215$   $\chi^2/\text{NDF}$ : 0.6/3

Left In:  $2.675 \pm 0.177$   $\chi^2/\text{NDF}$ : 31.1/8

$2.281 \pm 0.137$   $\chi^2/\text{NDF}$ : 60.2/12

$2.143 \pm 0.137$   $\chi^2/\text{NDF}$ : 54.0/12

# reg\_asym\_sam\_48\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 55.529 $\pm$ 1.822  $\chi^2$ /NDF: 6.8/3

Left Out: 52.889 $\pm$ 1.558  $\chi^2$ /NDF: 49.5/8

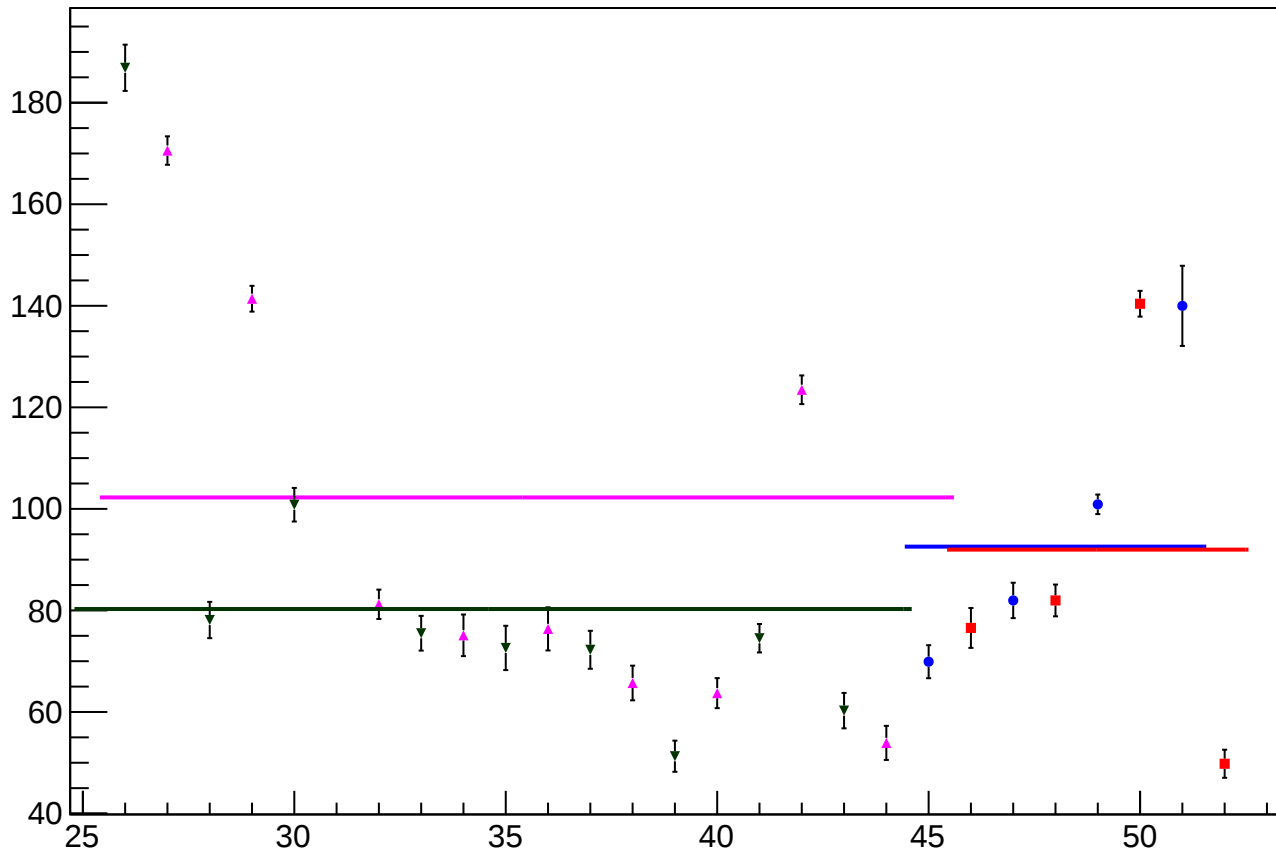
Right Out: 47.147 $\pm$ 1.959  $\chi^2$ /NDF: 10.9/3

Left In: 52.872 $\pm$ 1.411  $\chi^2$ /NDF: 137.9/8

54.004 $\pm$ 1.184  $\chi^2$ /NDF: 57.5/12

50.917 $\pm$ 1.145  $\chi^2$ /NDF: 154.4/12

reg\_asym\_sam\_48\_dd\_diff\_bpm4aY\_slope vs slug



Right In: 92.567 $\pm$ 1.468  $\chi^2$ /NDF: 112.8/3

Left Out: 80.279 $\pm$ 1.160  $\chi^2$ /NDF: 722.6/8

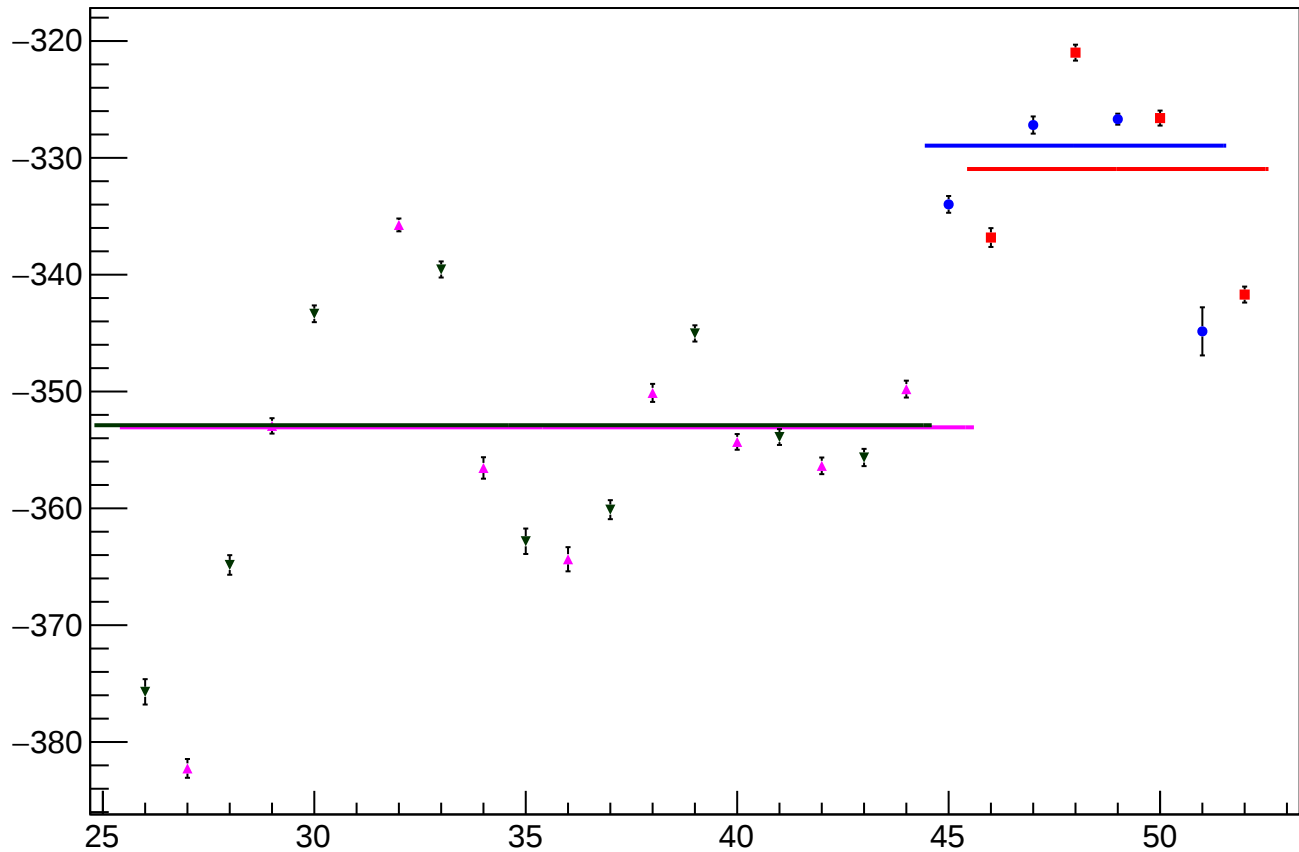
Right Out: 91.977 $\pm$ 1.486  $\chi^2$ /NDF: 622.6/3

Left In: 102.261 $\pm$ 1.036  $\chi^2$ /NDF: 1514.4/8

85.001 $\pm$ 0.910  $\chi^2$ /NDF: 878.5/12

98.897 $\pm$ 0.850  $\chi^2$ /NDF: 2169.2/12

# reg\_asym\_sam\_48\_dd\_diff\_bpm4eX\_slope vs slug



Right In: -328.955+/-0.342  $\chi^2/\text{NDF}$ : 137.6/3

Left Out: -352.885+/-0.260  $\chi^2/\text{NDF}$ :1502.5/8

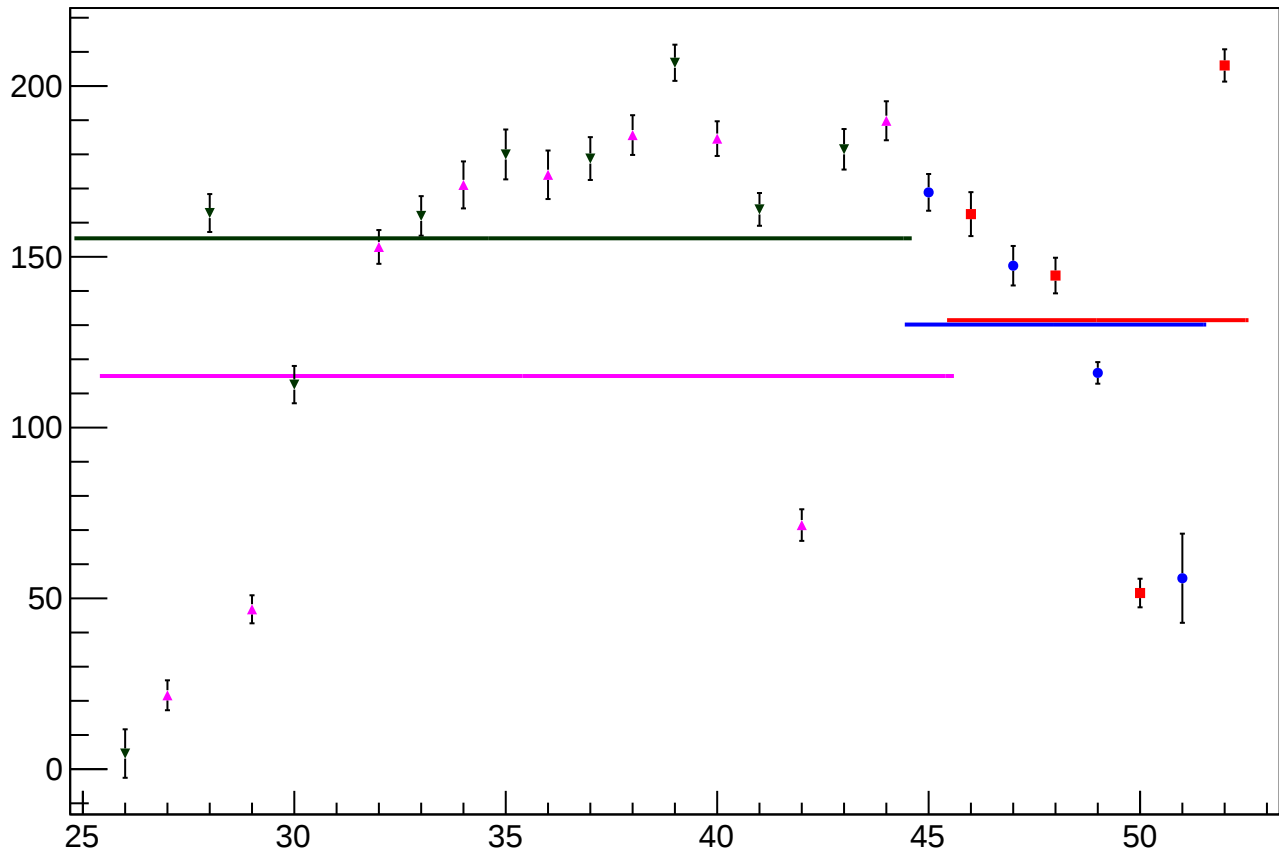
Right Out: -330.954+/-0.348  $\chi^2/\text{NDF}$ : 559.3/3

Left In: -353.066+/-0.242  $\chi^2/\text{NDF}$ :2507.5/8

-344.108+/-0.207  $\chi^2/\text{NDF}$ : 4740.8/12

-345.859+/-0.199  $\chi^2/\text{NDF}$ : 5788.4/12

reg\_asym\_sam\_48\_dd\_diff\_bpm4eY\_slope vs slug



Right In: 130.170 $\pm$ 2.422  $\chi^2$ /NDF: 113.1/3

Left Out: 155.417 $\pm$ 1.935  $\chi^2$ /NDF:657.8/8

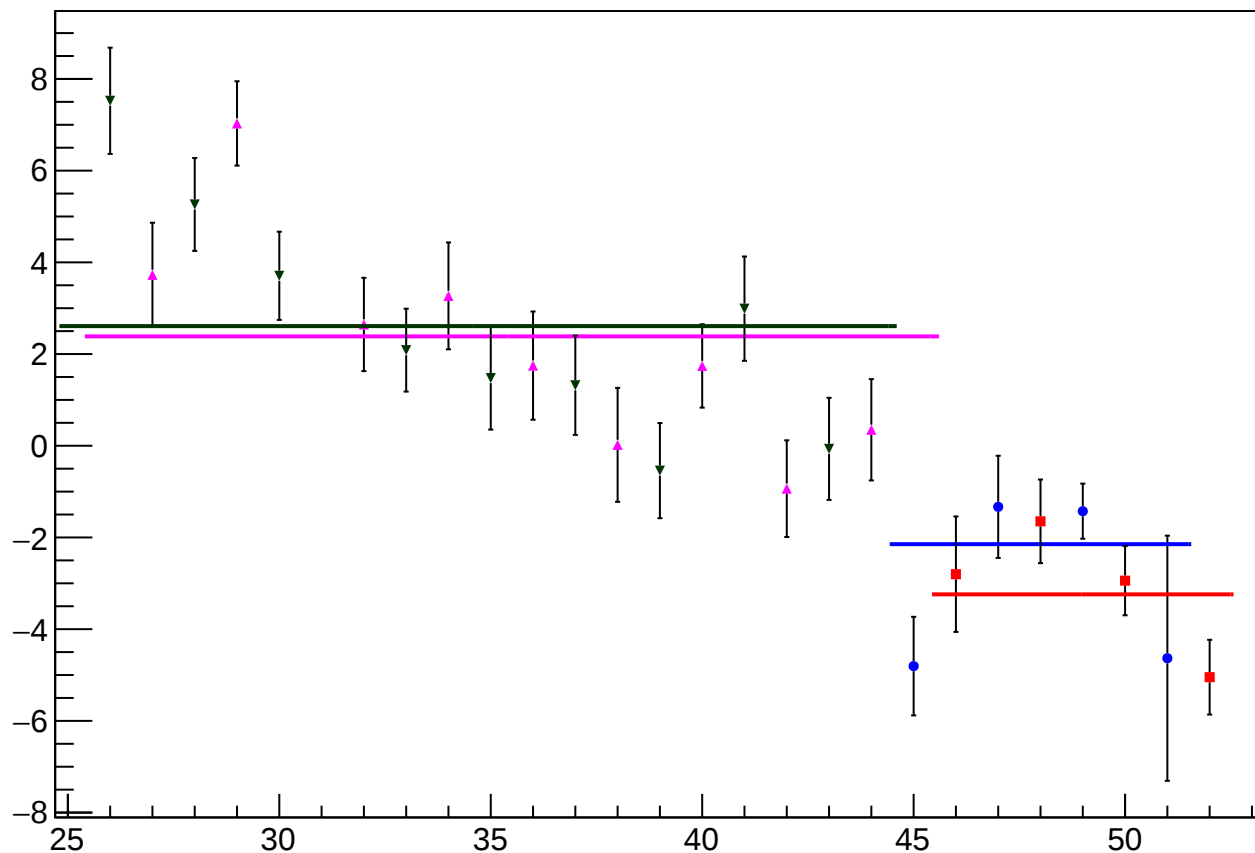
Right Out: 131.453 $\pm$ 2.479  $\chi^2$ /NDF: 642.7/3

Left In: 115.104 $\pm$ 1.717  $\chi^2$ /NDF:1520.3/8

145.584 $\pm$ 1.512  $\chi^2$ /NDF: 837.2/12

120.406 $\pm$ 1.412  $\chi^2$ /NDF: 2192.4/12

# reg\_asym\_sam\_48\_dd\_diff\_bpm11X\_slope vs slug



Right In:  $-2.146 \pm 0.467$   $\chi^2/\text{NDF}: 9.0/3$

Left Out:  $2.609 \pm 0.350$   $\chi^2/\text{NDF}: 44.1/8$

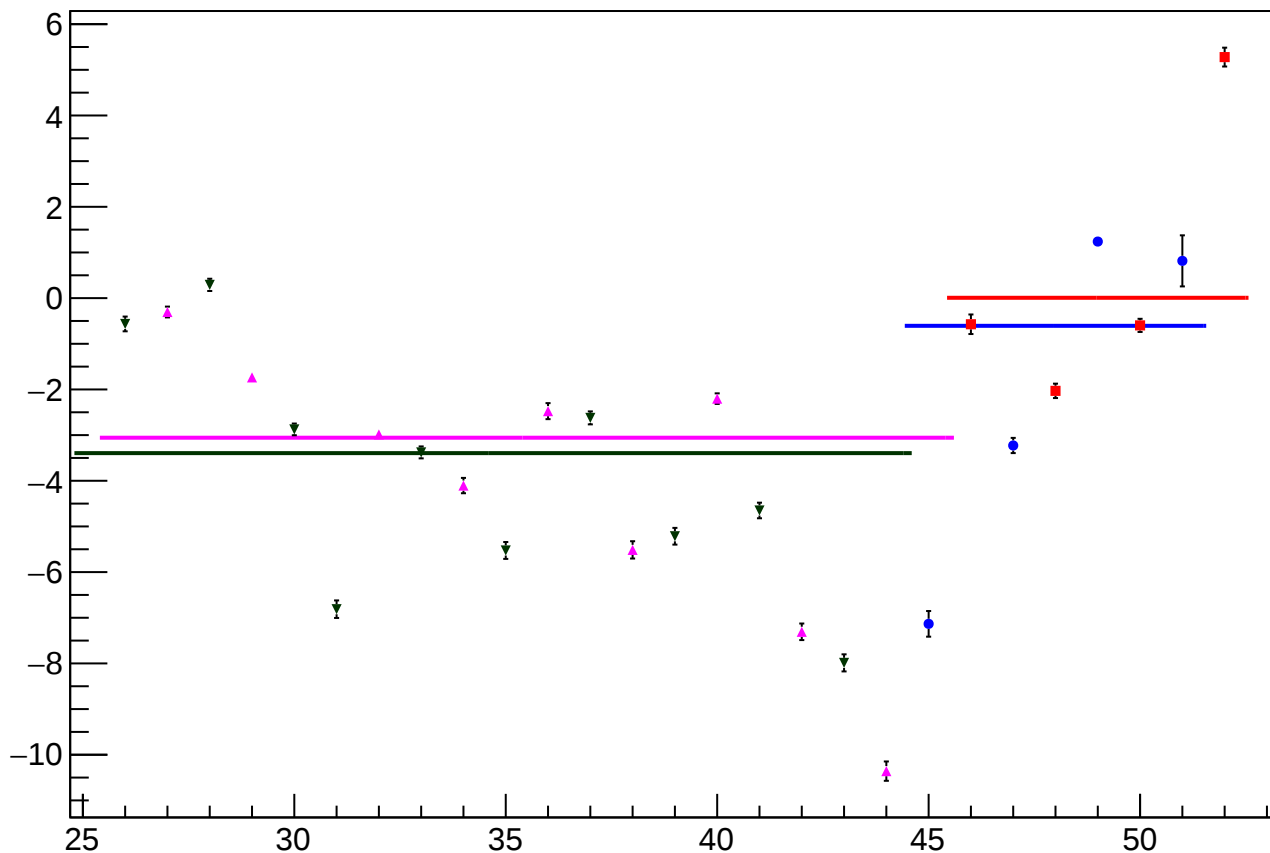
Right Out:  $-3.241 \pm 0.443$   $\chi^2/\text{NDF}: 8.2/3$

Left In:  $2.386 \pm 0.355$   $\chi^2/\text{NDF}: 45.2/8$

$0.902 \pm 0.280$   $\chi^2/\text{NDF}: 119.4/12$

$0.188 \pm 0.277$   $\chi^2/\text{NDF}: 151.8/12$

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4aX\_slope vs slug



Right In:  $-0.606 \pm 0.083$   $\chi^2/\text{NDF}$ : 1111.9/3

Left Out:  $-3.394 \pm 0.049$   $\chi^2/\text{NDF}$ : 2310.5/9

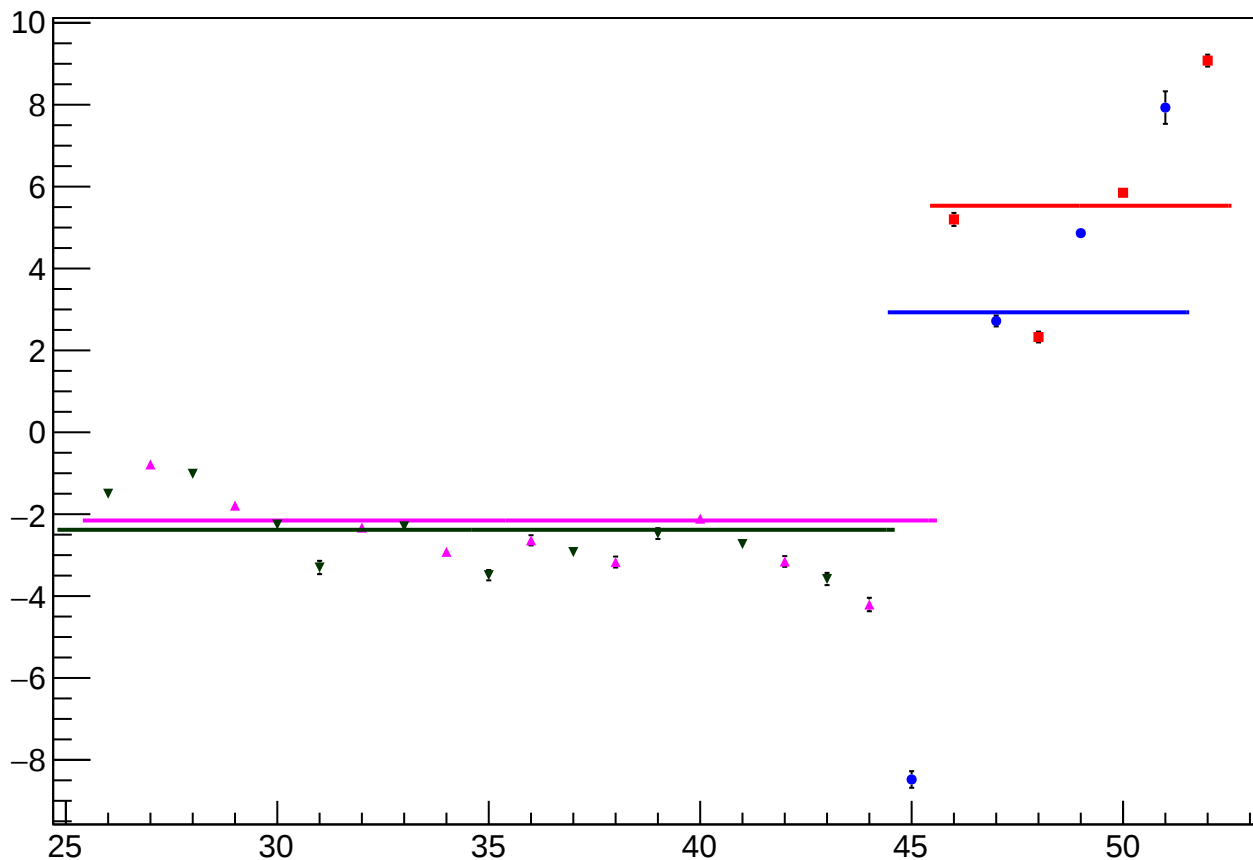
Right Out:  $0.008 \pm 0.086$   $\chi^2/\text{NDF}$ : 844.6/3

Left In:  $-3.057 \pm 0.044$   $\chi^2/\text{NDF}$ : 2696.4/8

$-2.666 \pm 0.042$   $\chi^2/\text{NDF}$ : 4257.6/13

$-2.427 \pm 0.039$   $\chi^2/\text{NDF}$ : 4538.7/12

# reg\_asym\_bcm\_an\_ds3\_diff\_bpm4aY\_slope vs slug



Right In: 2.930 $\pm$ 0.067  $\chi^2$ /NDF: 3813.9/3

Left Out: -2.381 $\pm$ 0.037  $\chi^2$ /NDF: 466.1/9

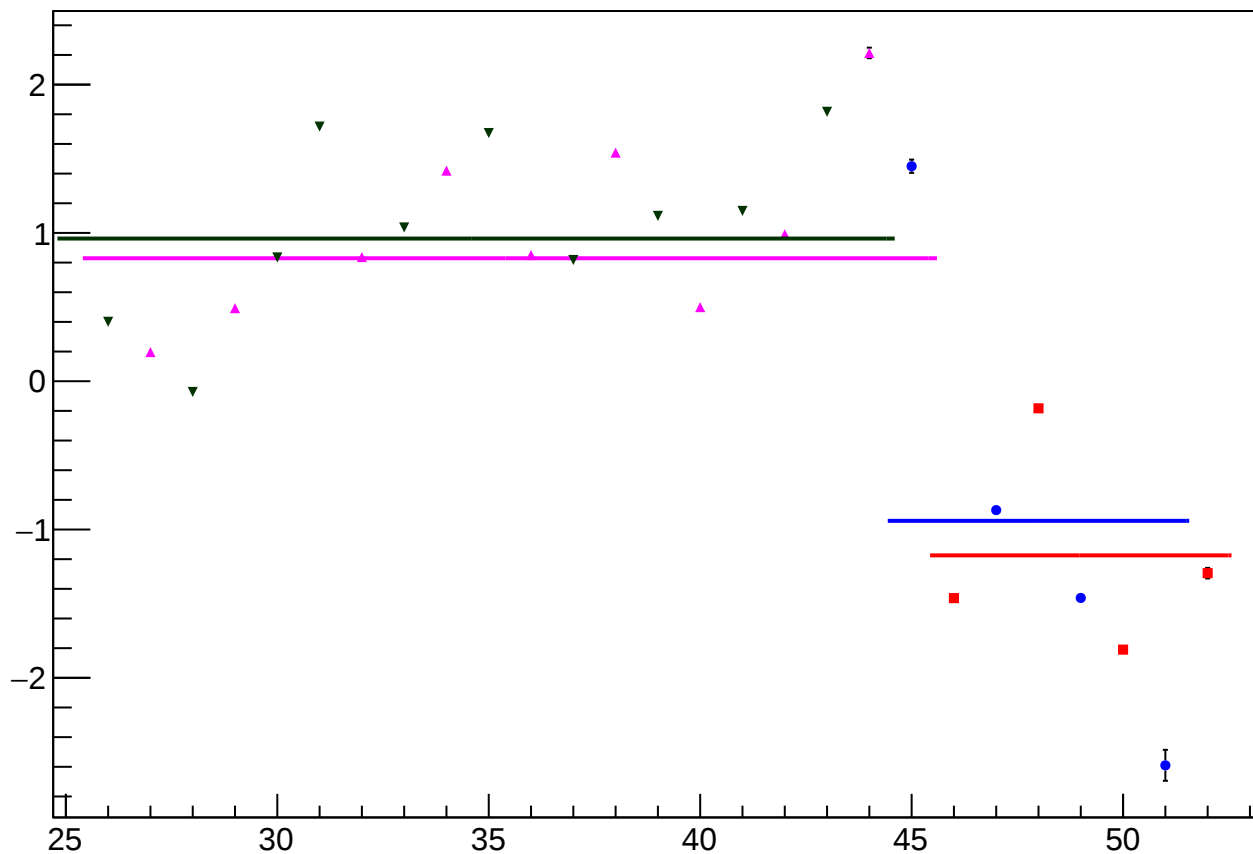
Right Out: 5.533 $\pm$ 0.066  $\chi^2$ /NDF: 1194.2/3

Left In: -2.154 $\pm$ 0.032  $\chi^2$ /NDF: 703.0/8

-1.162 $\pm$ 0.032  $\chi^2$ /NDF: 9057.2/13

-0.664 $\pm$ 0.029  $\chi^2$ /NDF: 12758.6/12

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eX\_slope vs slug



Right In:  $-0.941 \pm 0.016$   $\chi^2/\text{NDF}$ : 3696.7/3

Left Out:  $0.962 \pm 0.008$   $\chi^2/\text{NDF}$ : 4690.6/9

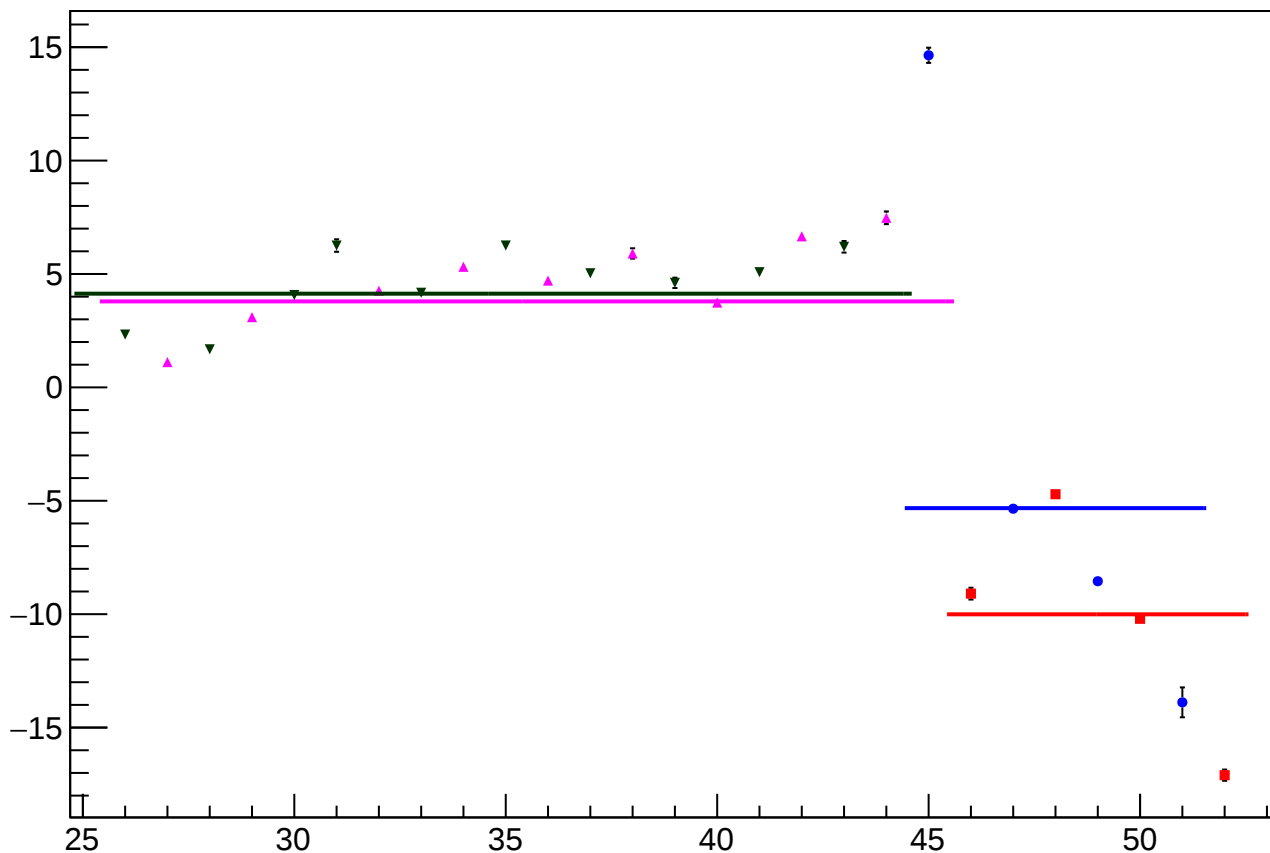
Right Out:  $-1.174 \pm 0.015$   $\chi^2/\text{NDF}$ : 1811.4/3

Left In:  $0.829 \pm 0.007$   $\chi^2/\text{NDF}$ : 3974.9/8

$0.573 \pm 0.007$   $\chi^2/\text{NDF}$ : 20017.7/13

$0.445 \pm 0.007$   $\chi^2/\text{NDF}$ : 19656.5/12

reg\_asym\_bcm\_an\_ds3\_diff\_bpm4eY\_slope vs slug



Right In: -5.324+/-0.112  $\chi^2/\text{NDF}$ : 4209.5/3

Left Out: 4.132+/-0.061  $\chi^2/\text{NDF}$ : 639.2/9

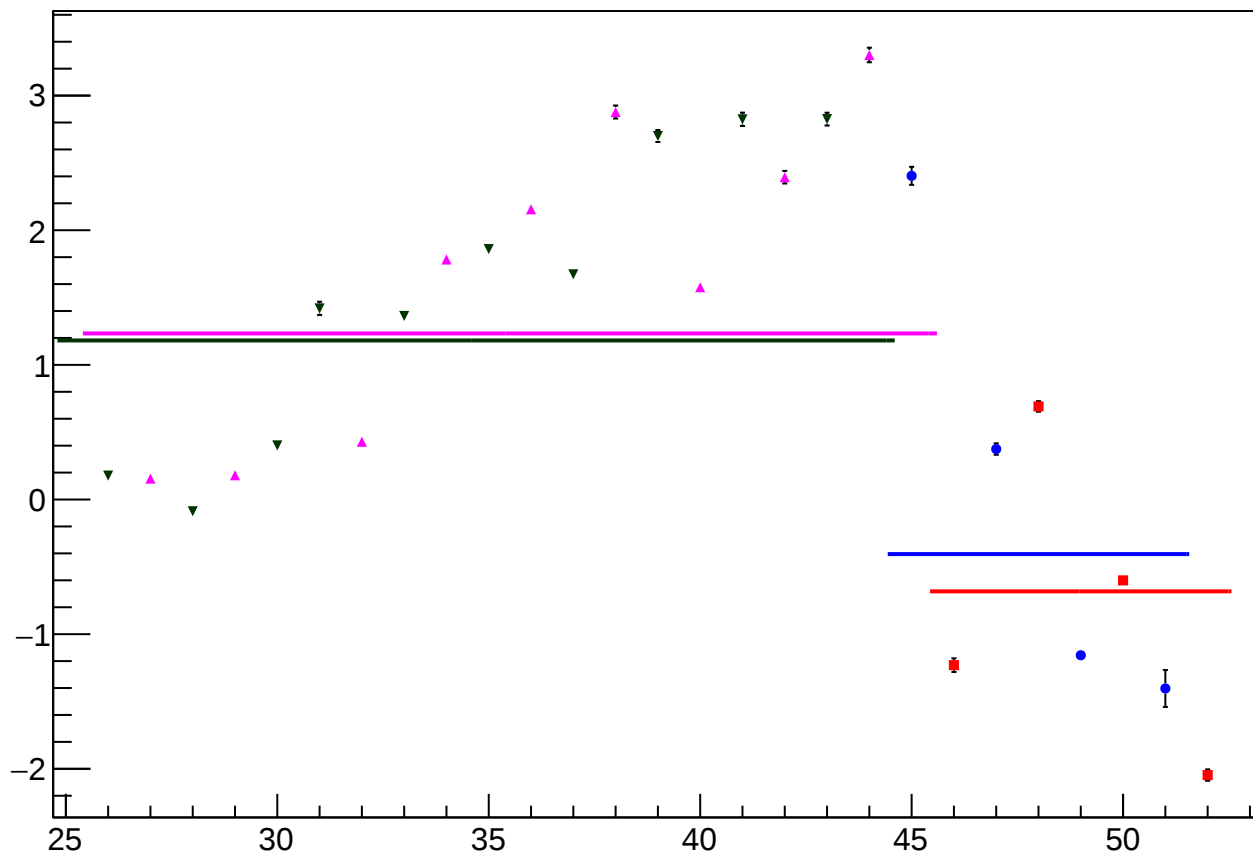
Right Out: -10.006+/-0.110  $\chi^2/\text{NDF}$ : 1404.2/3

Left In: 3.791+/-0.054  $\chi^2/\text{NDF}$ : 1110.0/8

1.964+/-0.053  $\chi^2/\text{NDF}$ : 10380.6/13

1.141+/-0.048  $\chi^2/\text{NDF}$ : 15186.4/12

reg\_asym\_bcm\_an\_ds3\_diff\_bpm11X\_slope vs slug



Right In:  $-0.405 \pm 0.022$   $\chi^2/\text{NDF}: 2901.7/3$

Left Out:  $1.181 \pm 0.011$   $\chi^2/\text{NDF}: 8123.1/9$

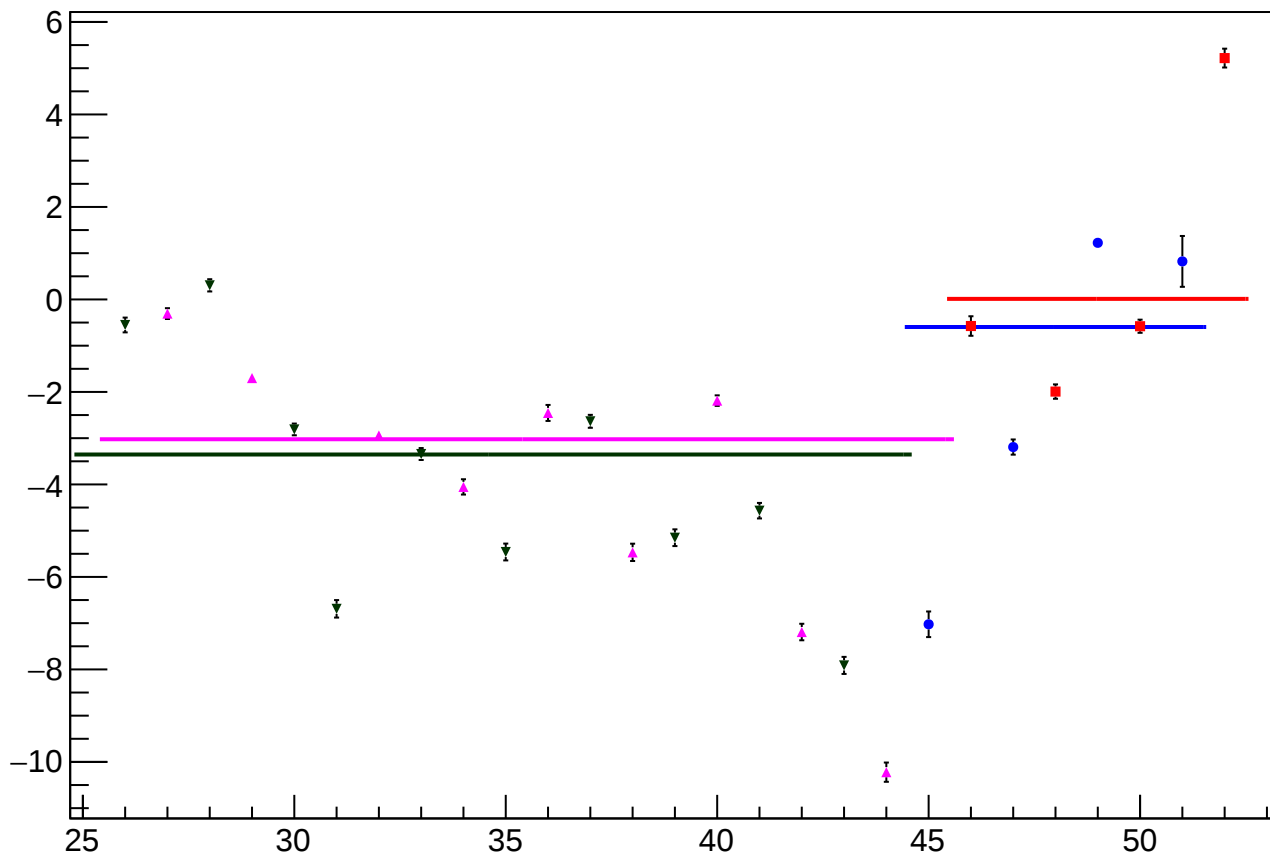
Right Out:  $-0.682 \pm 0.020$   $\chi^2/\text{NDF}: 2377.4/3$

Left In:  $1.234 \pm 0.011$   $\chi^2/\text{NDF}: 7862.9/8$

$0.867 \pm 0.010$   $\chi^2/\text{NDF}: 15390.7/13$

$0.775 \pm 0.010$   $\chi^2/\text{NDF}: 17302.6/12$

reg\_asym\_bcm\_an\_ds\_diff\_bpm4aX\_slope vs slug



Right In:  $-0.596 \pm 0.082$   $\chi^2/\text{NDF}$ : 1114.0/3

Left Out:  $-3.353 \pm 0.049$   $\chi^2/\text{NDF}$ : 2320.8/9

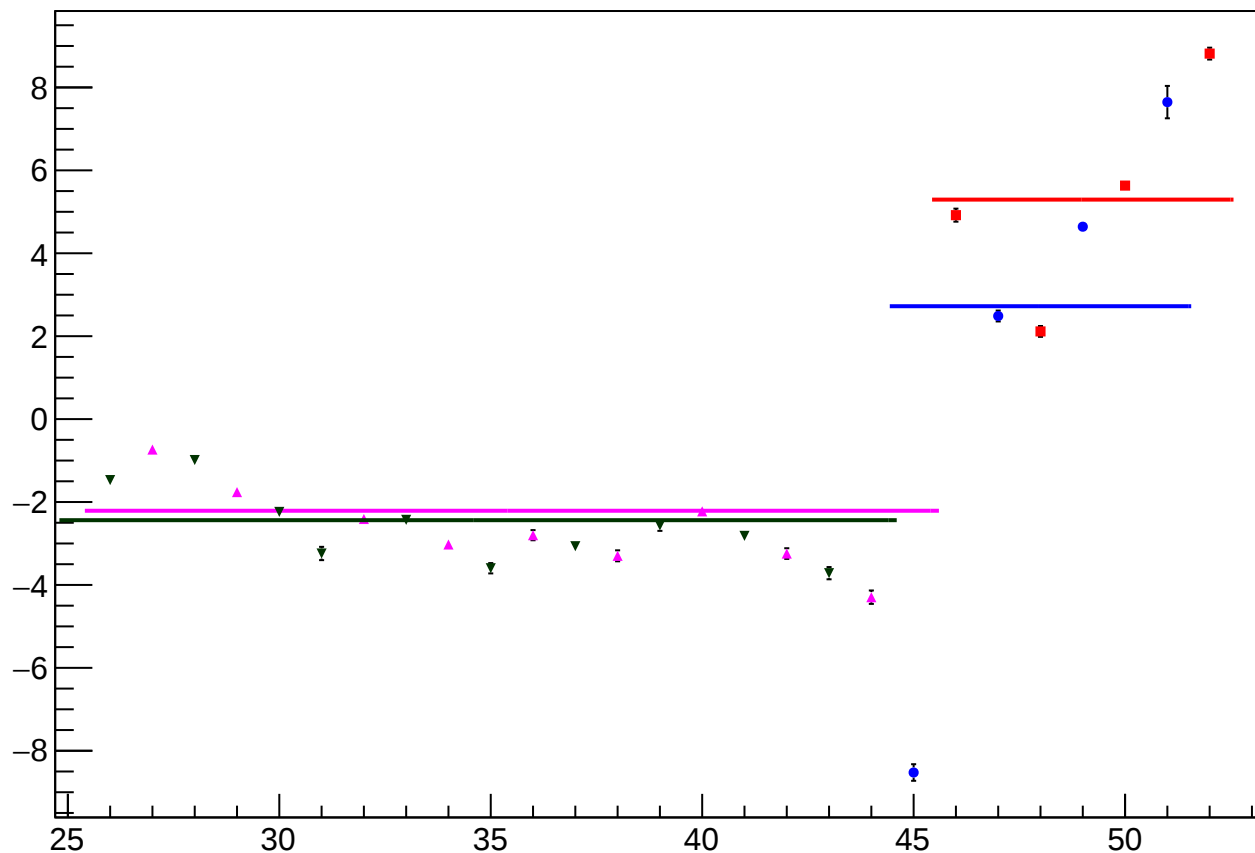
Right Out:  $0.012 \pm 0.085$   $\chi^2/\text{NDF}$ : 844.4/3

Left In:  $-3.023 \pm 0.043$   $\chi^2/\text{NDF}$ : 2702.0/8

$-2.632 \pm 0.042$   $\chi^2/\text{NDF}$ : 4274.9/13

$-2.398 \pm 0.039$   $\chi^2/\text{NDF}$ : 4551.8/12

reg\_asym\_bcm\_an\_ds\_diff\_bpm4aY\_slope vs slug



Right In: 2.723+/-0.066  $\chi^2/\text{NDF}$ : 3824.8/3

Left Out: -2.438+/-0.036  $\chi^2/\text{NDF}$ : 538.5/9

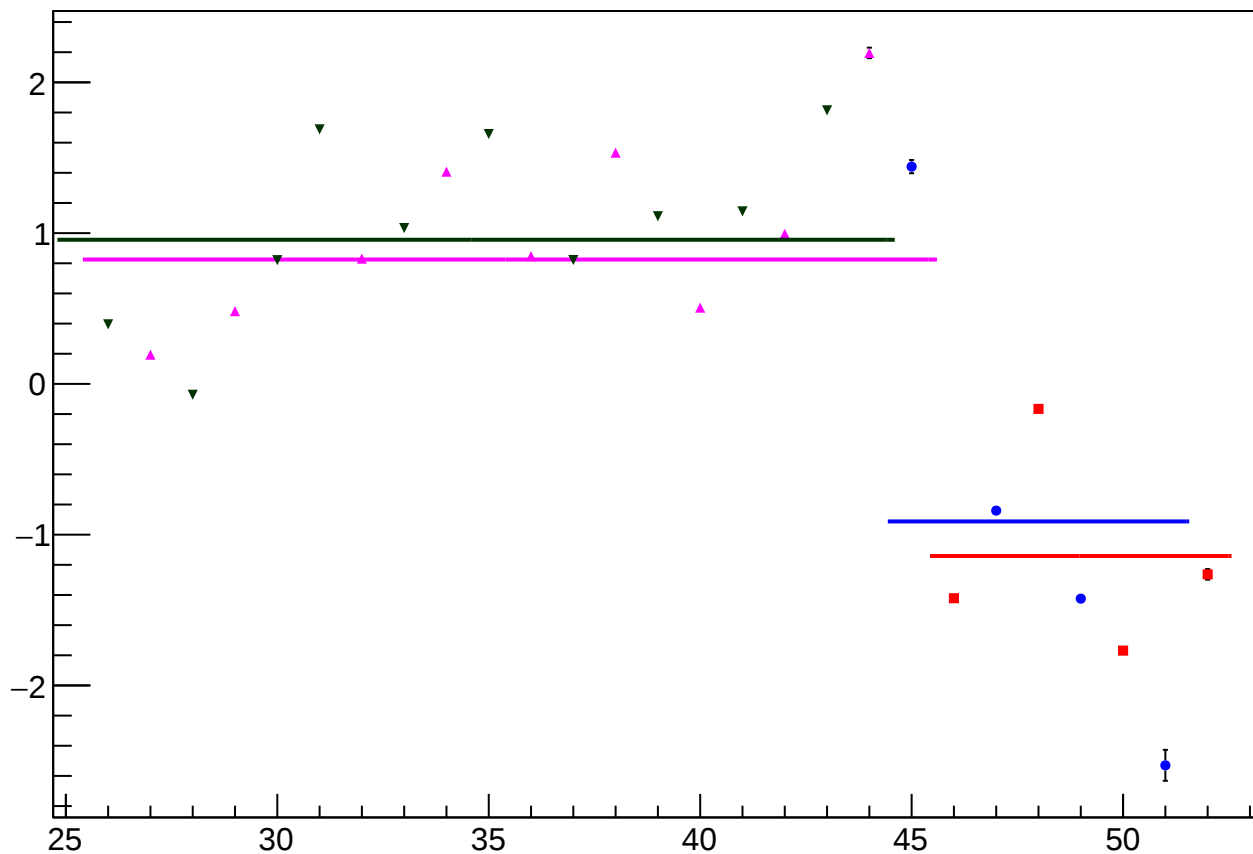
Right Out: 5.294+/-0.065  $\chi^2/\text{NDF}$ : 1211.2/3

Left In: -2.211+/-0.032  $\chi^2/\text{NDF}$ : 822.7/8

-1.253+/-0.032  $\chi^2/\text{NDF}$ : 9003.2/13

-0.754+/-0.029  $\chi^2/\text{NDF}$ : 12665.8/12

reg\_asym\_bcm\_an\_ds\_diff\_bpm4eX\_slope vs slug



Right In:  $-0.912 \pm 0.016$   $\chi^2/\text{NDF}$ : 3688.9/3

Left Out:  $0.956 \pm 0.008$   $\chi^2/\text{NDF}$ : 4739.0/9

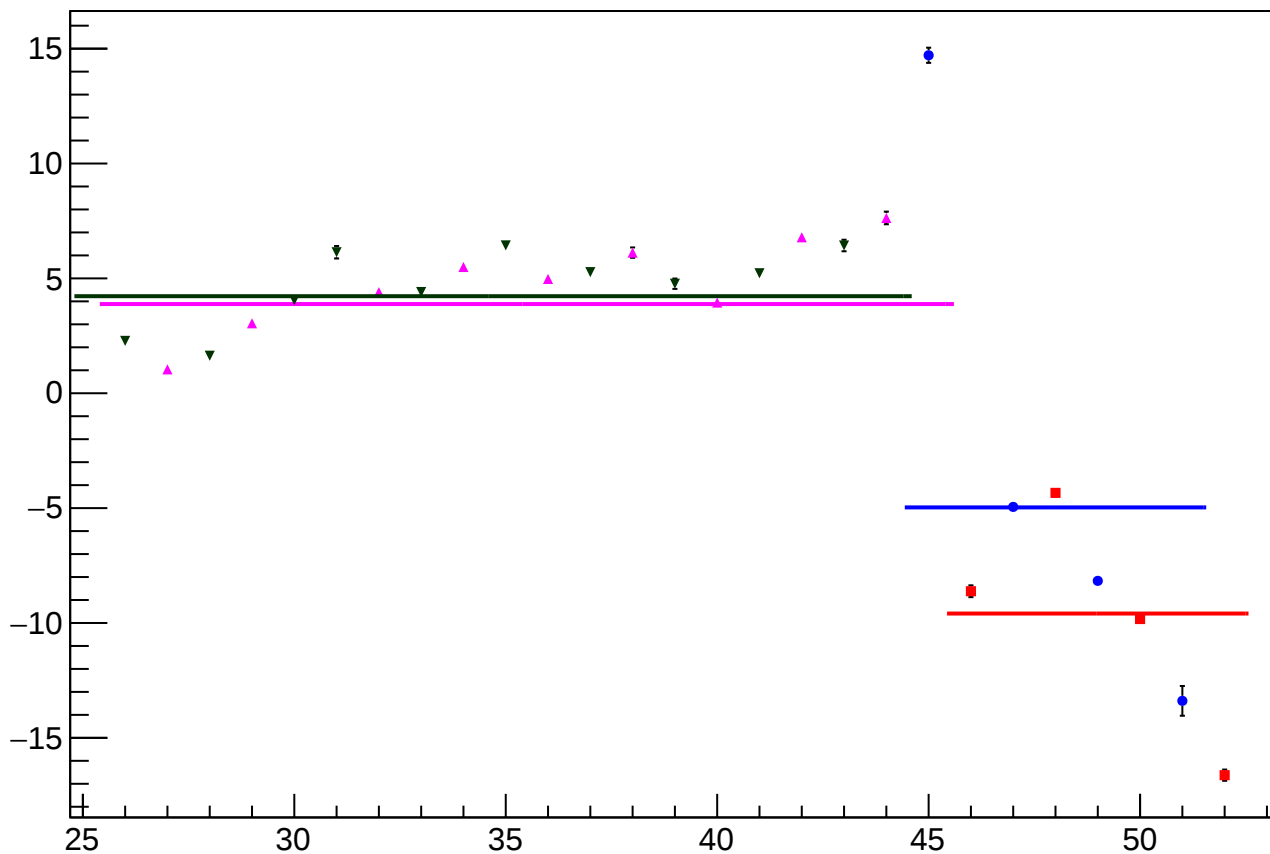
Right Out:  $-1.142 \pm 0.015$   $\chi^2/\text{NDF}$ : 1805.2/3

Left In:  $0.825 \pm 0.007$   $\chi^2/\text{NDF}$ : 4028.9/8

$0.574 \pm 0.007$   $\chi^2/\text{NDF}$ : 19953.8/13

$0.447 \pm 0.007$   $\chi^2/\text{NDF}$ : 19559.6/12

reg\_asym\_bcm\_an\_ds\_diff\_bpm4eY\_slope vs slug



Right In: -4.969+/-0.110  $\chi^2/\text{NDF}$ : 4219.3/3

Left Out: 4.225+/-0.060  $\chi^2/\text{NDF}$ : 727.8/9

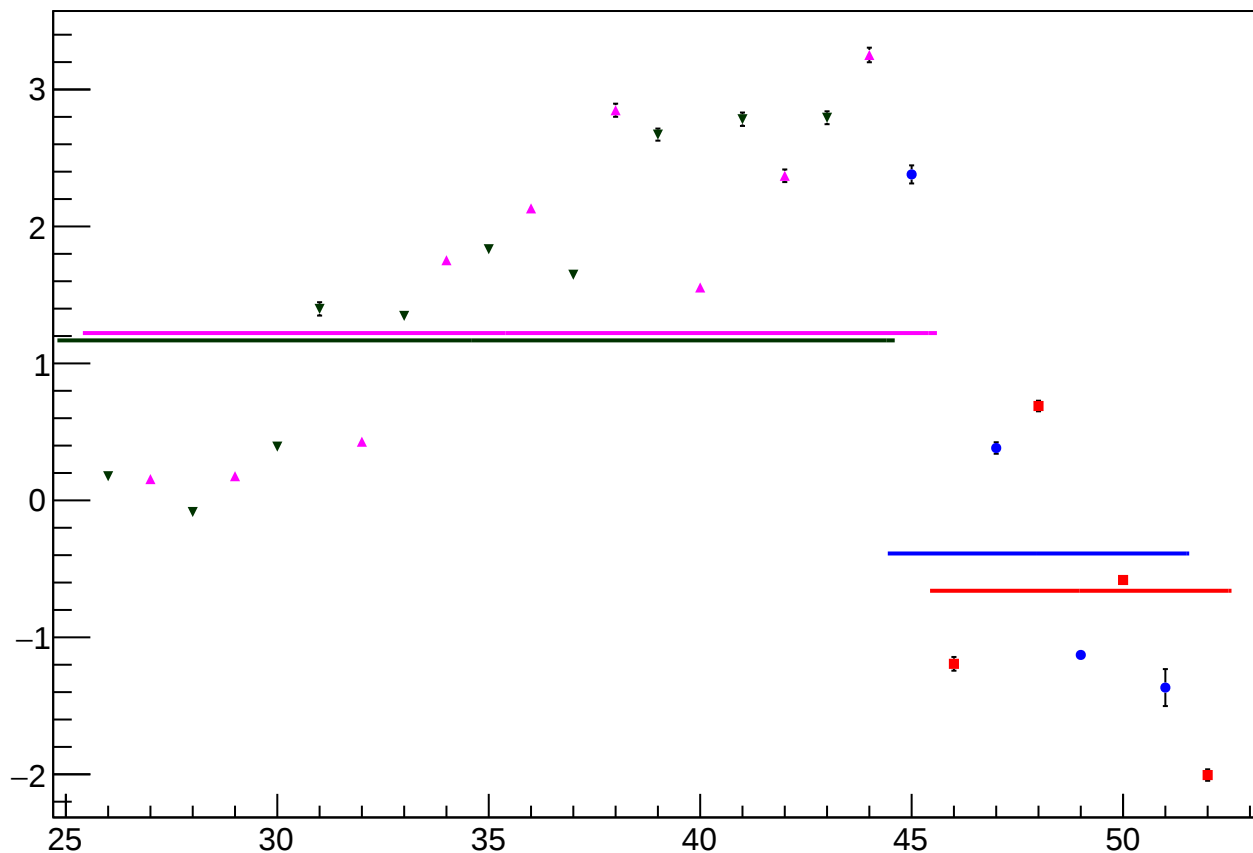
Right Out: -9.589+/-0.109  $\chi^2/\text{NDF}$ : 1421.5/3

Left In: 3.882+/-0.053  $\chi^2/\text{NDF}$ : 1263.9/8

2.114+/-0.053  $\chi^2/\text{NDF}$ : 10326.1/13

1.291+/-0.048  $\chi^2/\text{NDF}$ : 15092.1/12

reg\_asym\_bcm\_an\_ds\_diff\_bpm11X\_slope vs slug



Right In:  $-0.388 \pm 0.021$   $\chi^2/\text{NDF}$ : 2901.9/3

Left Out:  $1.168 \pm 0.011$   $\chi^2/\text{NDF}$ : 8132.7/9

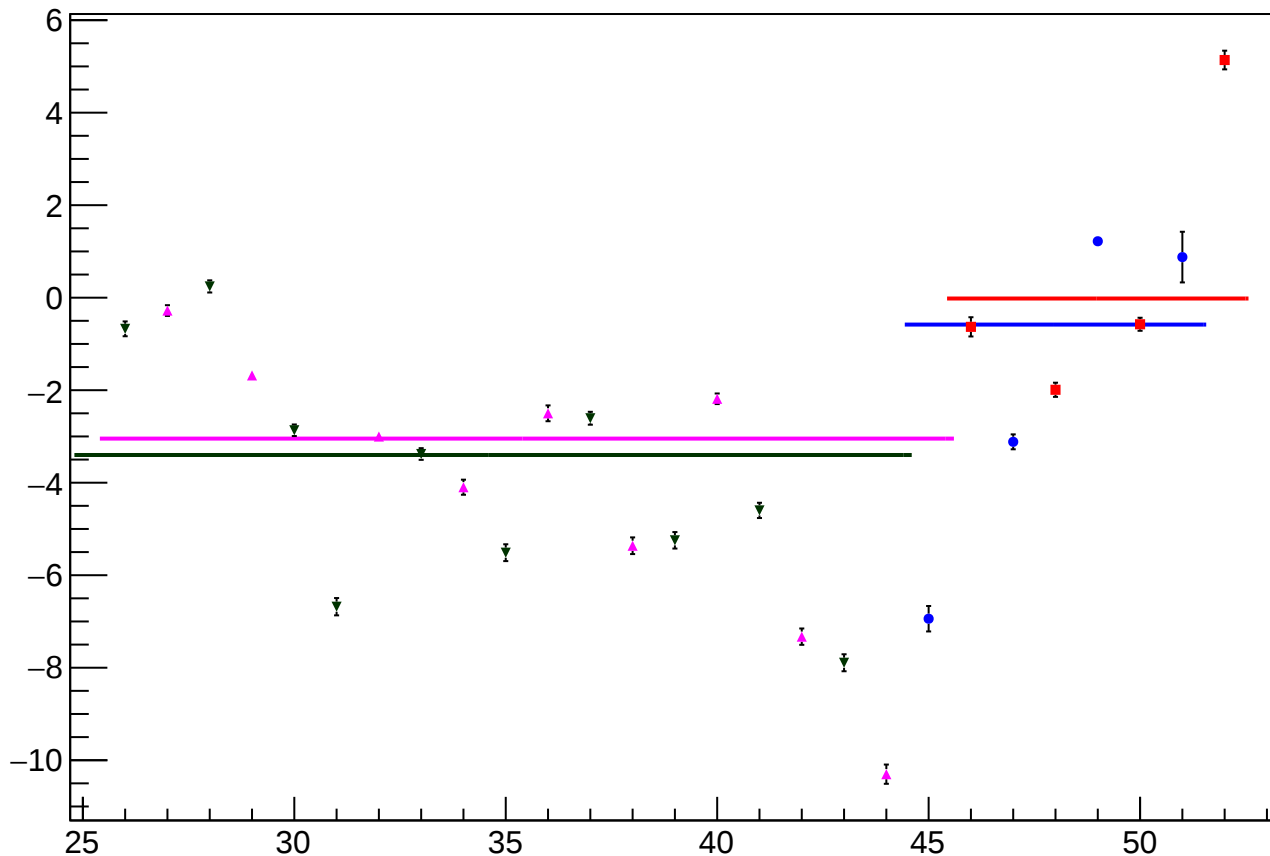
Right Out:  $-0.660 \pm 0.020$   $\chi^2/\text{NDF}$ : 2363.2/3

Left In:  $1.222 \pm 0.011$   $\chi^2/\text{NDF}$ : 7856.1/8

$0.859 \pm 0.009$   $\chi^2/\text{NDF}$ : 15353.1/13

$0.771 \pm 0.010$   $\chi^2/\text{NDF}$ : 17217.1/12

reg\_asym\_bcm\_an\_us\_diff\_bpm4aX\_slope vs slug



Right In:  $-0.581 \pm 0.081$   $\chi^2/\text{NDF}$ : 1106.0/3

Left Out:  $-3.401 \pm 0.048$   $\chi^2/\text{NDF}$ : 2306.6/9

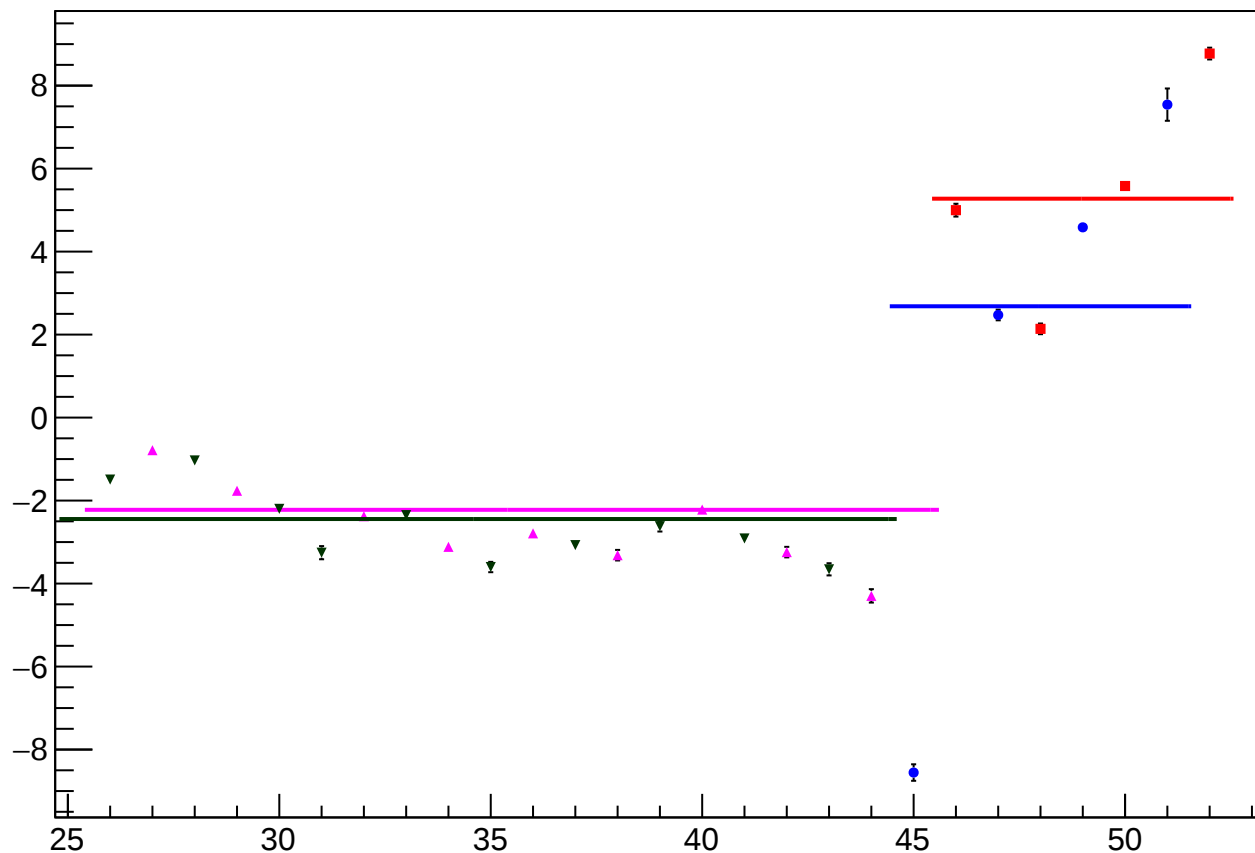
Right Out:  $-0.018 \pm 0.084$   $\chi^2/\text{NDF}$ : 840.5/3

Left In:  $-3.046 \pm 0.043$   $\chi^2/\text{NDF}$ : 2807.9/8

$-2.663 \pm 0.041$   $\chi^2/\text{NDF}$ : 4310.2/13

$-2.425 \pm 0.038$   $\chi^2/\text{NDF}$ : 4672.6/12

# reg\_asym\_bcm\_an\_us\_diff\_bpm4aY\_slope vs slug



Right In:  $2.682 \pm 0.066$   $\chi^2/\text{NDF}: 3854.7/3$

Left Out:  $-2.445 \pm 0.036$   $\chi^2/\text{NDF}: 529.3/9$

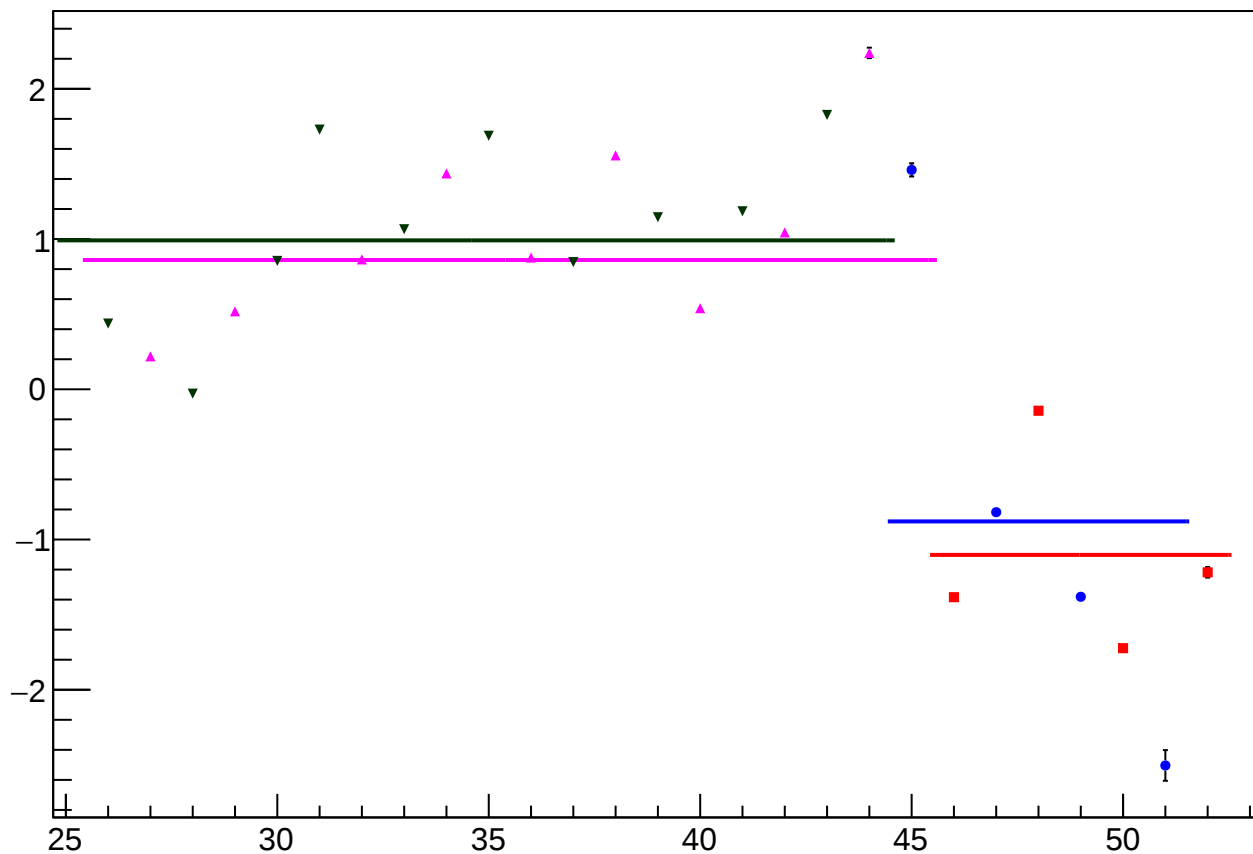
Right Out:  $5.275 \pm 0.065$   $\chi^2/\text{NDF}: 1208.7/3$

Left In:  $-2.223 \pm 0.032$   $\chi^2/\text{NDF}: 822.2/8$

$-1.264 \pm 0.032$   $\chi^2/\text{NDF}: 9058.1/13$

$-0.772 \pm 0.028$   $\chi^2/\text{NDF}: 12892.6/12$

reg\_asym\_bcm\_an\_us\_diff\_bpm4eX\_slope vs slug



Right In:  $-0.879 \pm 0.015$   $\chi^2/\text{NDF}$ : 3679.9/3

Left Out:  $0.991 \pm 0.008$   $\chi^2/\text{NDF}$ : 4720.4/9

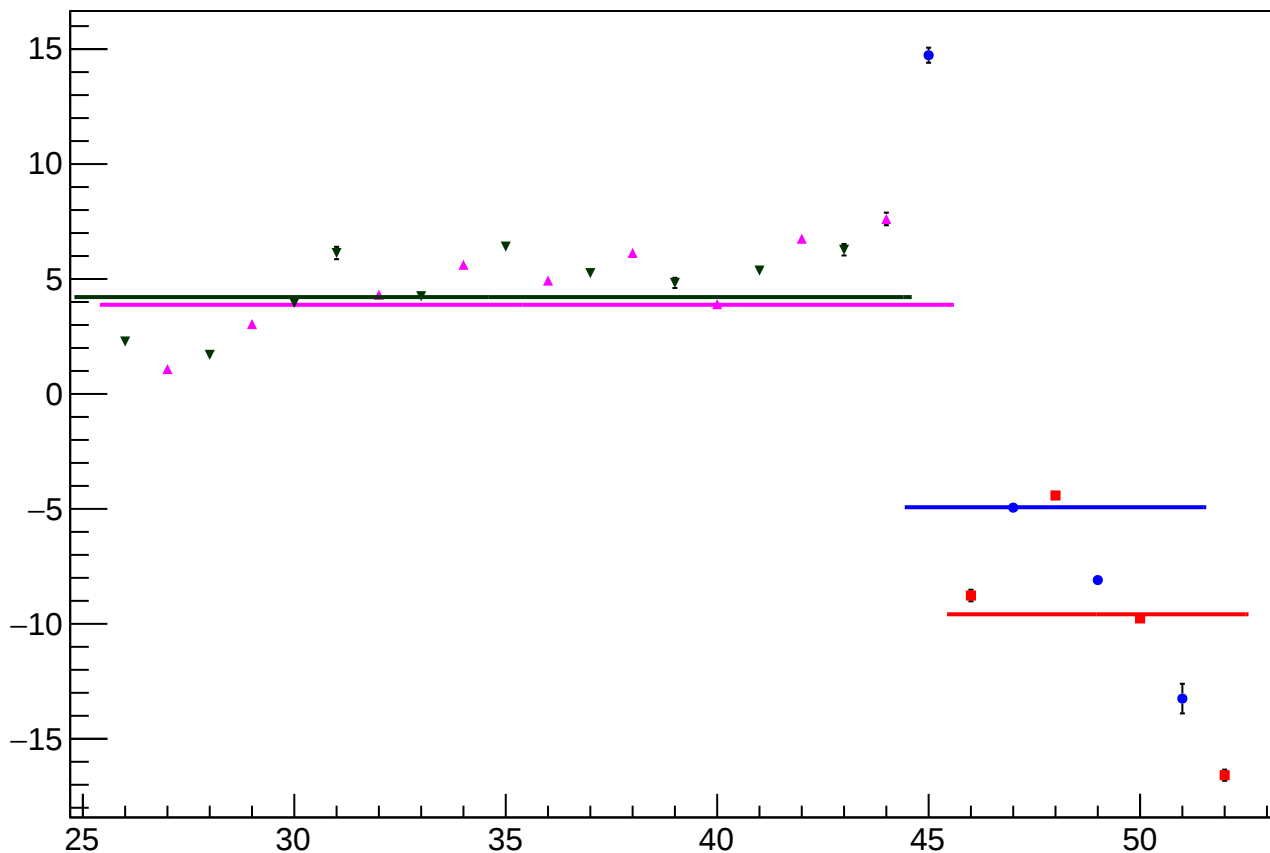
Right Out:  $-1.102 \pm 0.015$   $\chi^2/\text{NDF}$ : 1798.0/3

Left In:  $0.861 \pm 0.007$   $\chi^2/\text{NDF}$ : 4134.4/8

$0.608 \pm 0.007$   $\chi^2/\text{NDF}$ : 20211.4/13

$0.485 \pm 0.007$   $\chi^2/\text{NDF}$ : 19934.2/12

reg\_asym\_bcm\_an\_us\_diff\_bpm4eY\_slope vs slug



Right In: -4.927+/-0.109  $\chi^2/\text{NDF}$ : 4253.2/3

Left Out: 4.214+/-0.060  $\chi^2/\text{NDF}$ : 711.6/9

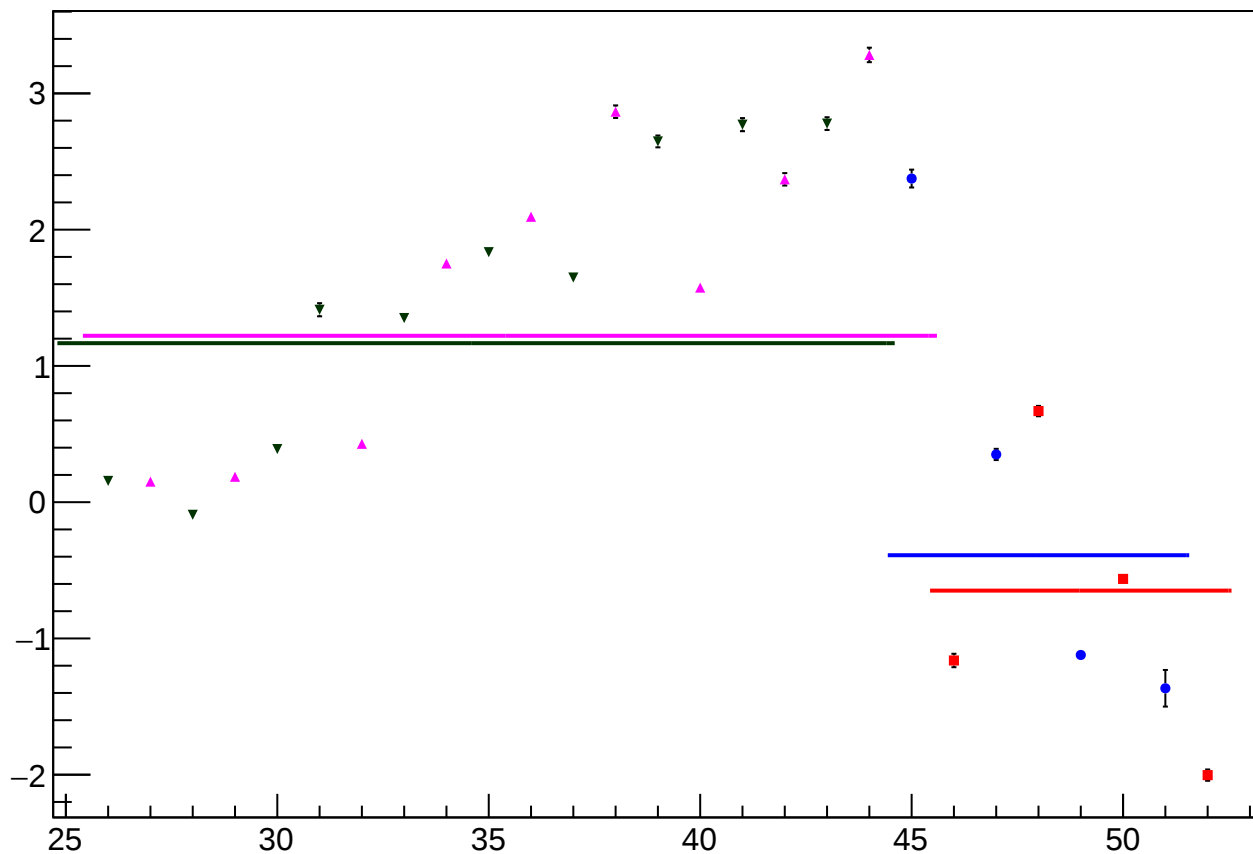
Right Out: -9.584+/-0.107  $\chi^2/\text{NDF}$ : 1419.1/3

Left In: 3.878+/-0.052  $\chi^2/\text{NDF}$ : 1270.8/8

2.108+/-0.052  $\chi^2/\text{NDF}$ : 10390.9/13

1.296+/-0.047  $\chi^2/\text{NDF}$ : 15370.4/12

reg\_asym\_bcm\_an\_us\_diff\_bpm11X\_slope vs slug



Right In:  $-0.389 \pm 0.021$   $\chi^2/\text{NDF}$ : 2900.4/3

Left Out:  $1.167 \pm 0.010$   $\chi^2/\text{NDF}$ : 8267.0/9

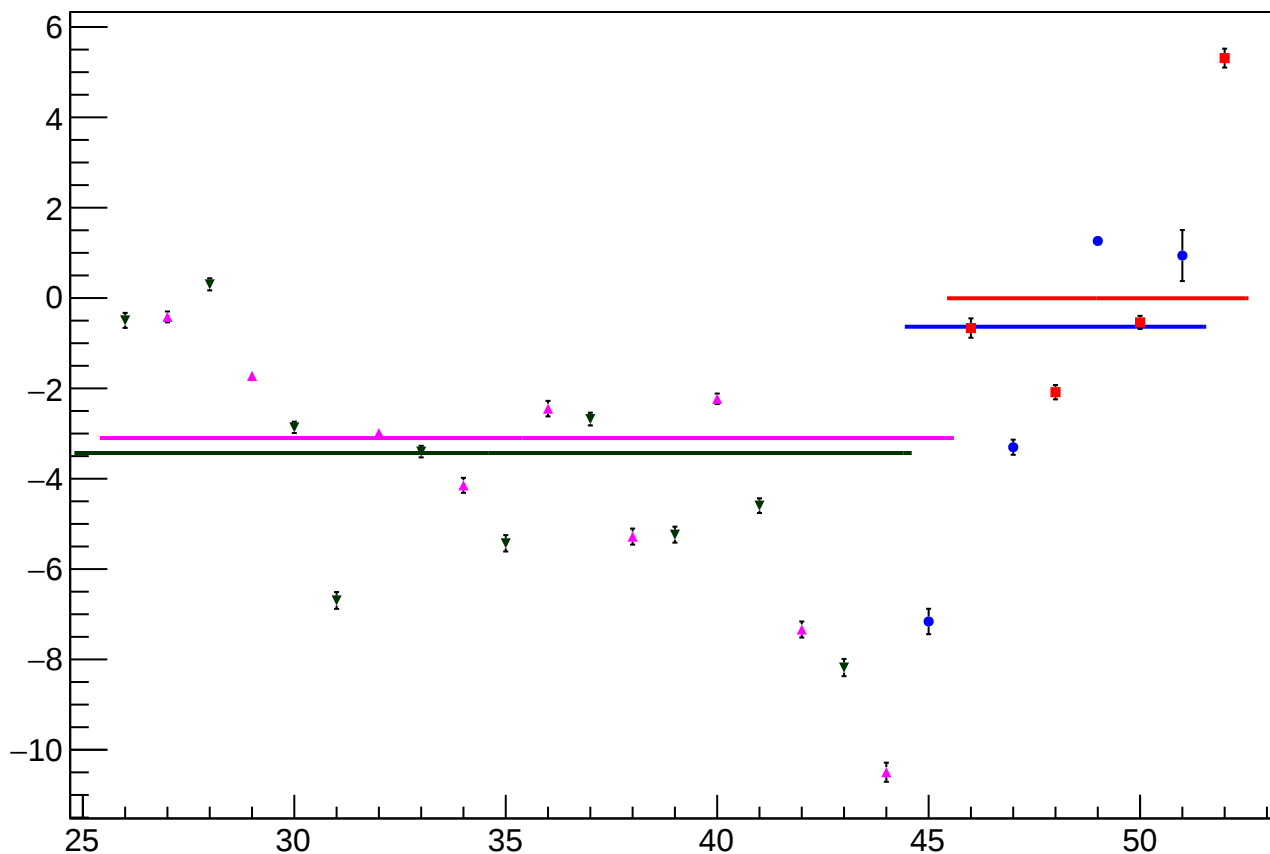
Right Out:  $-0.649 \pm 0.019$   $\chi^2/\text{NDF}$ : 2369.9/3

Left In:  $1.221 \pm 0.011$   $\chi^2/\text{NDF}$ : 8098.5/8

$0.857 \pm 0.009$   $\chi^2/\text{NDF}$ : 15575.2/13

$0.774 \pm 0.009$   $\chi^2/\text{NDF}$ : 17541.0/12

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4aX\_slope vs slug



Right In:  $-0.635 \pm 0.084$   $\chi^2/\text{NDF}$ : 1129.3/3

Left Out:  $-3.430 \pm 0.049$   $\chi^2/\text{NDF}$ : 2337.3/9

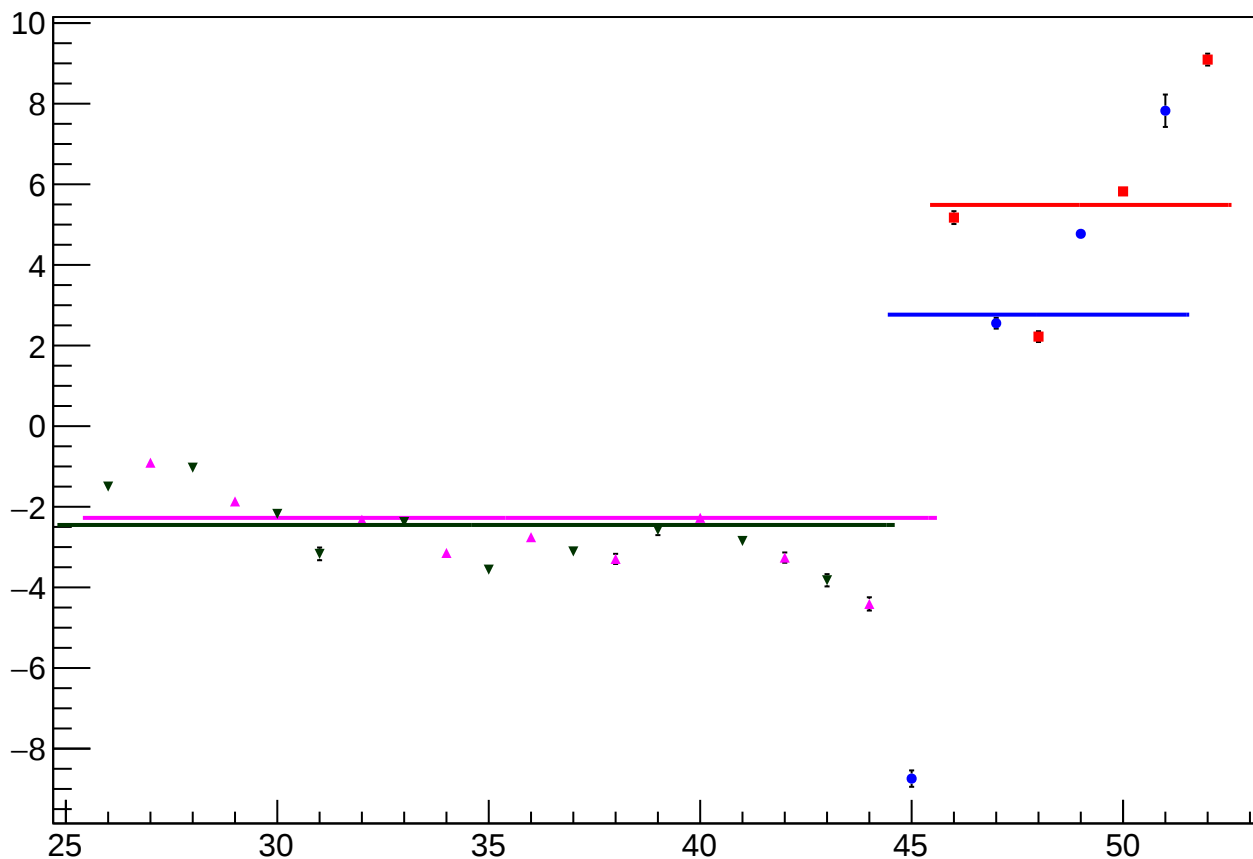
Right Out:  $-0.005 \pm 0.087$   $\chi^2/\text{NDF}$ : 838.9/3

Left In:  $-3.099 \pm 0.043$   $\chi^2/\text{NDF}$ : 2714.1/8

$-2.723 \pm 0.042$   $\chi^2/\text{NDF}$ : 4299.3/13

$-2.488 \pm 0.039$   $\chi^2/\text{NDF}$ : 4559.8/12

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4aY\_slope vs slug



Right In: 2.766 $\pm$ 0.068  $\chi^2$ /NDF: 3891.0/3

Left Out: -2.451 $\pm$ 0.036  $\chi^2$ /NDF: 518.0/9

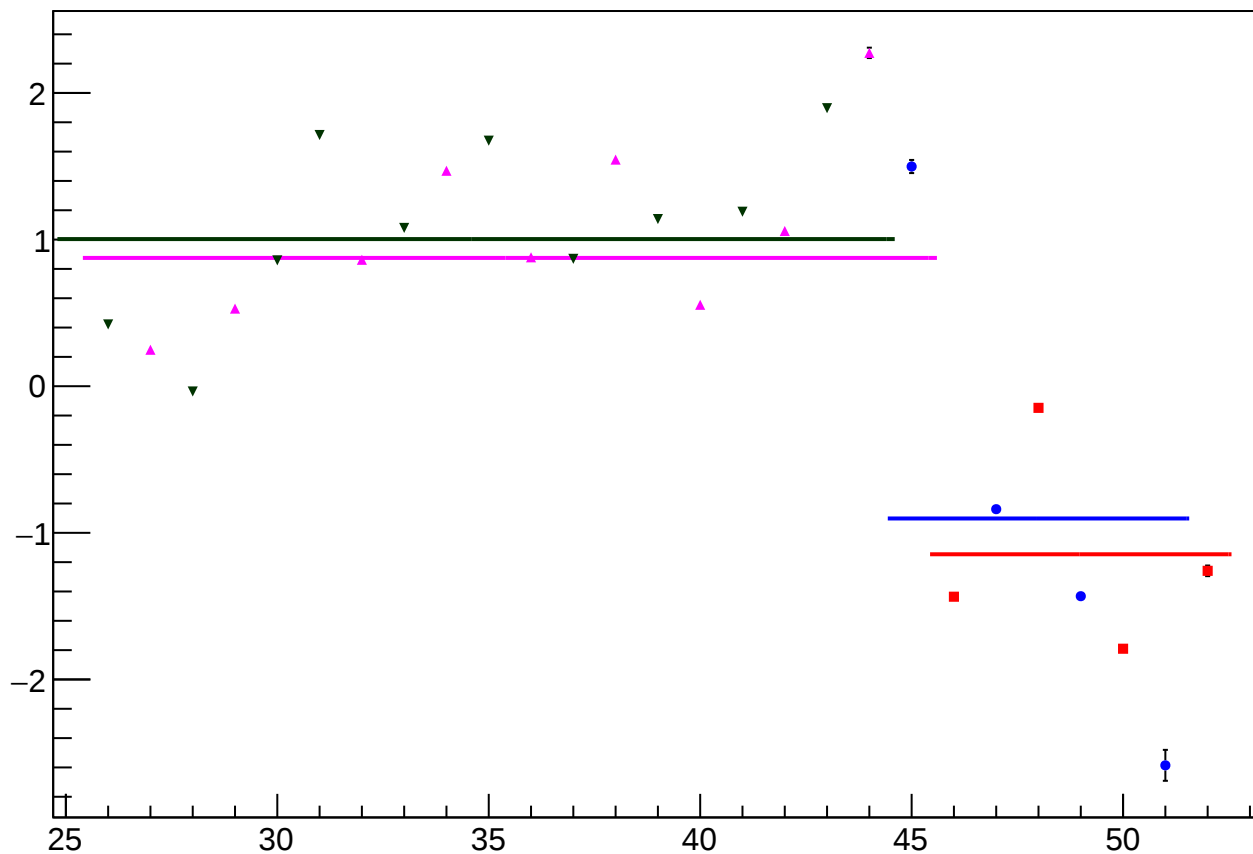
Right Out: 5.488 $\pm$ 0.067  $\chi^2$ /NDF: 1208.6/3

Left In: -2.276 $\pm$ 0.032  $\chi^2$ /NDF: 728.6/8

-1.292 $\pm$ 0.032  $\chi^2$ /NDF: 8974.5/13

-0.827 $\pm$ 0.029  $\chi^2$ /NDF: 12904.8/12

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eX\_slope vs slug



Right In: -0.902 $\pm$ 0.016  $\chi^2/\text{NDF}$ : 3724.8/3

Left Out: 1.003 $\pm$ 0.008  $\chi^2/\text{NDF}$ :4667.5/9

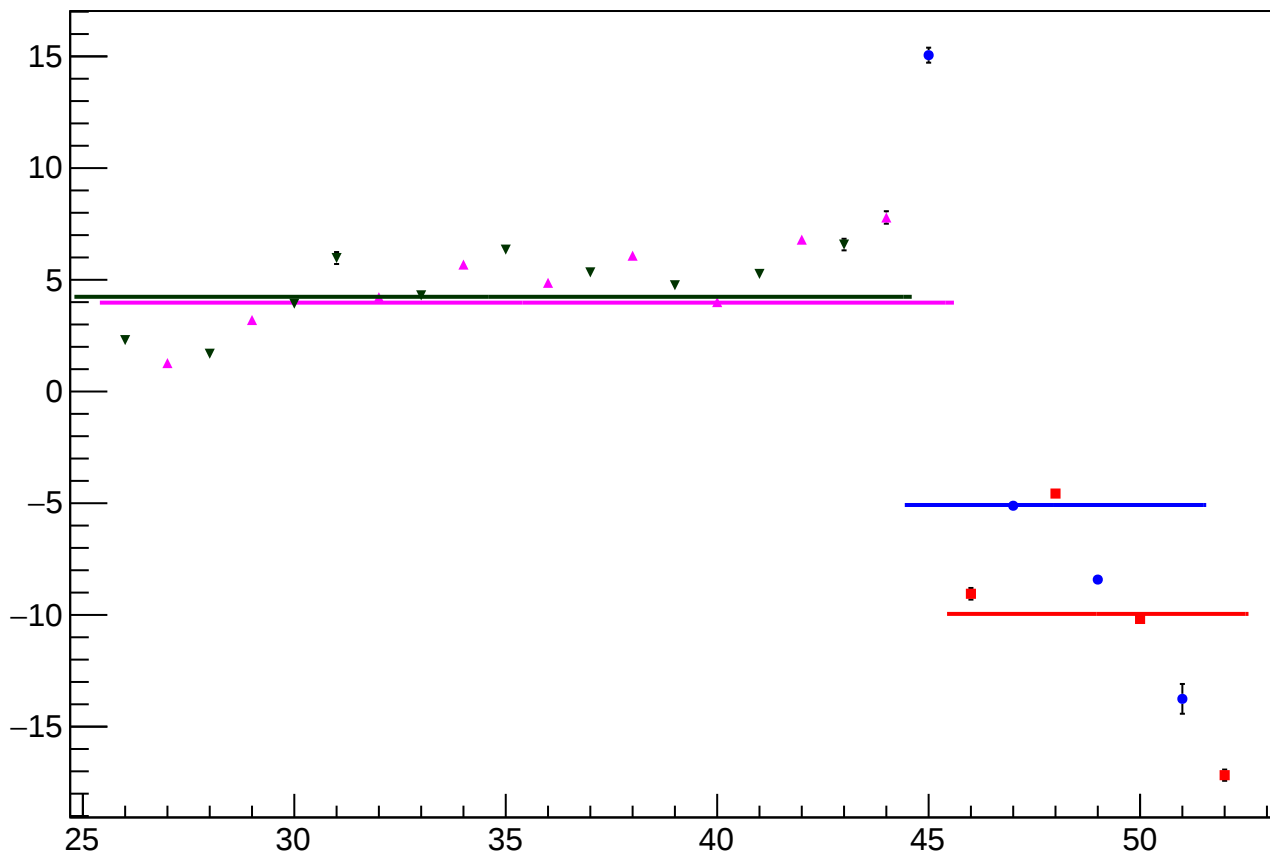
Right Out: -1.146 $\pm$ 0.015  $\chi^2/\text{NDF}$ : 1801.4/3

Left In: 0.875 $\pm$ 0.007  $\chi^2/\text{NDF}$ :3999.7/8

0.627 $\pm$ 0.007  $\chi^2/\text{NDF}$ : 19936.5/13

0.504 $\pm$ 0.007  $\chi^2/\text{NDF}$ : 19773.5/12

reg\_asym\_bcm\_dg\_ds\_diff\_bpm4eY\_slope vs slug



Right In: -5.079+/-0.113  $\chi^2/\text{NDF}$ : 4289.6/3

Left Out: 4.240+/-0.060  $\chi^2/\text{NDF}$ : 692.9/9

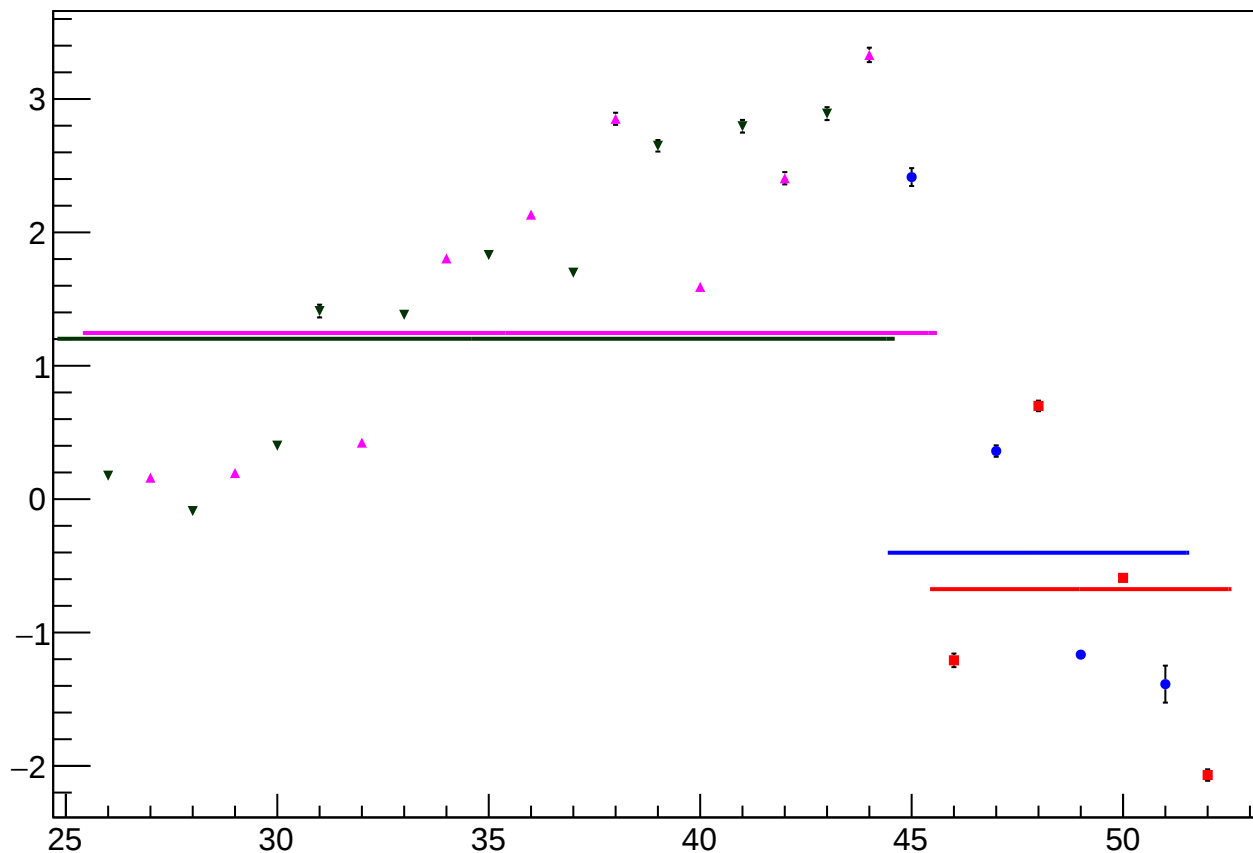
Right Out: -9.954+/-0.111  $\chi^2/\text{NDF}$ : 1419.0/3

Left In: 3.978+/-0.053  $\chi^2/\text{NDF}$ : 1142.5/8

2.167+/-0.053  $\chi^2/\text{NDF}$ : 10300.1/13

1.397+/-0.048  $\chi^2/\text{NDF}$ : 15345.4/12

reg\_asym\_bcm\_dg\_ds\_diff\_bpm11X\_slope vs slug



Right In: -0.402+/-0.022  $\chi^2$ /NDF: 2892.9/3

Left Out: 1.203+/-0.011  $\chi^2$ /NDF:8206.3/9

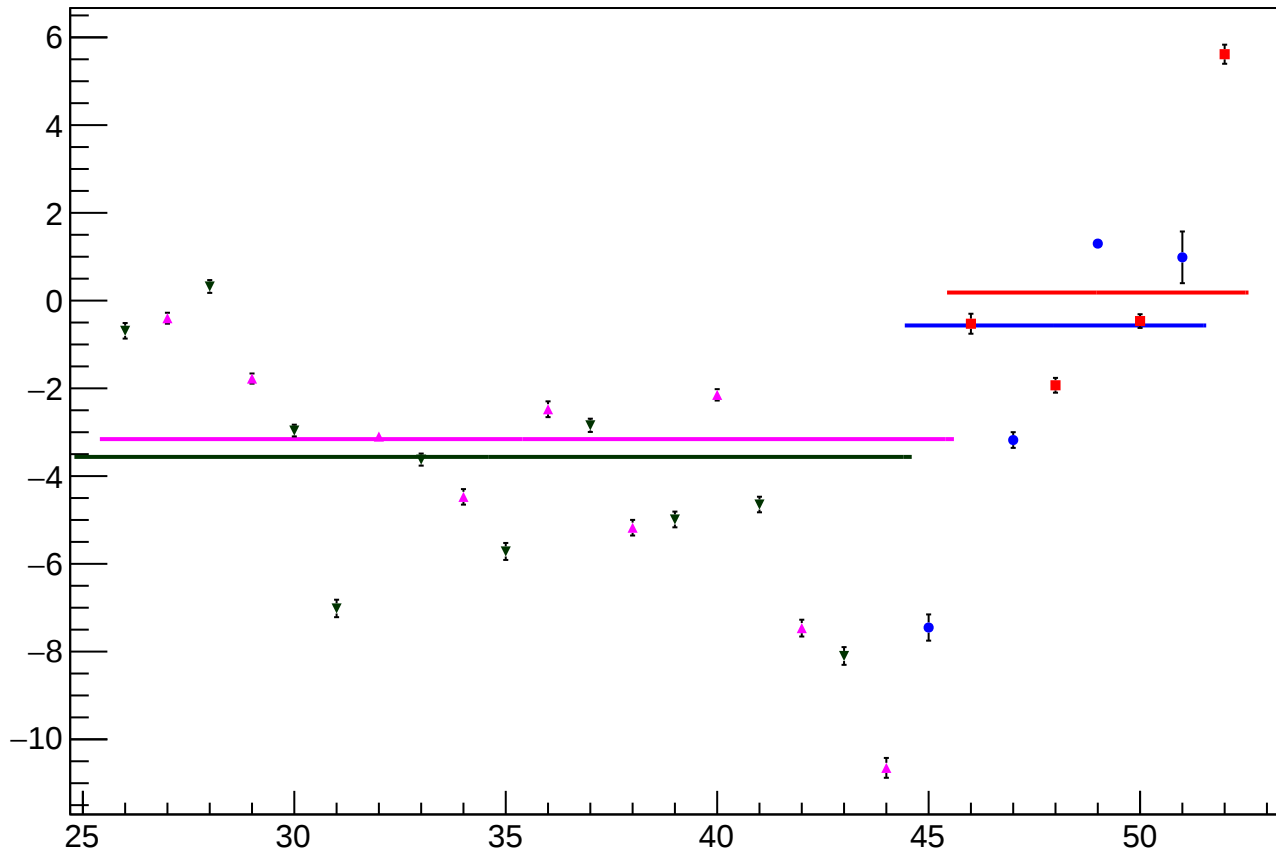
Right Out: -0.675+/-0.020  $\chi^2$ /NDF: 2371.5/3

Left In: 1.246+/-0.011  $\chi^2$ /NDF:8115.6/8

0.893+/-0.010  $\chi^2$ /NDF: 15503.7/13

0.802+/-0.010  $\chi^2$ /NDF: 17524.3/12

reg\_asym\_bcm\_dg\_us\_diff\_bpm4aX\_slope vs slug



Right In:  $-0.567 \pm 0.088$   $\chi^2/\text{NDF}$ : 1037.4/3

Left Out:  $-3.563 \pm 0.052$   $\chi^2/\text{NDF}$ : 2041.0/9

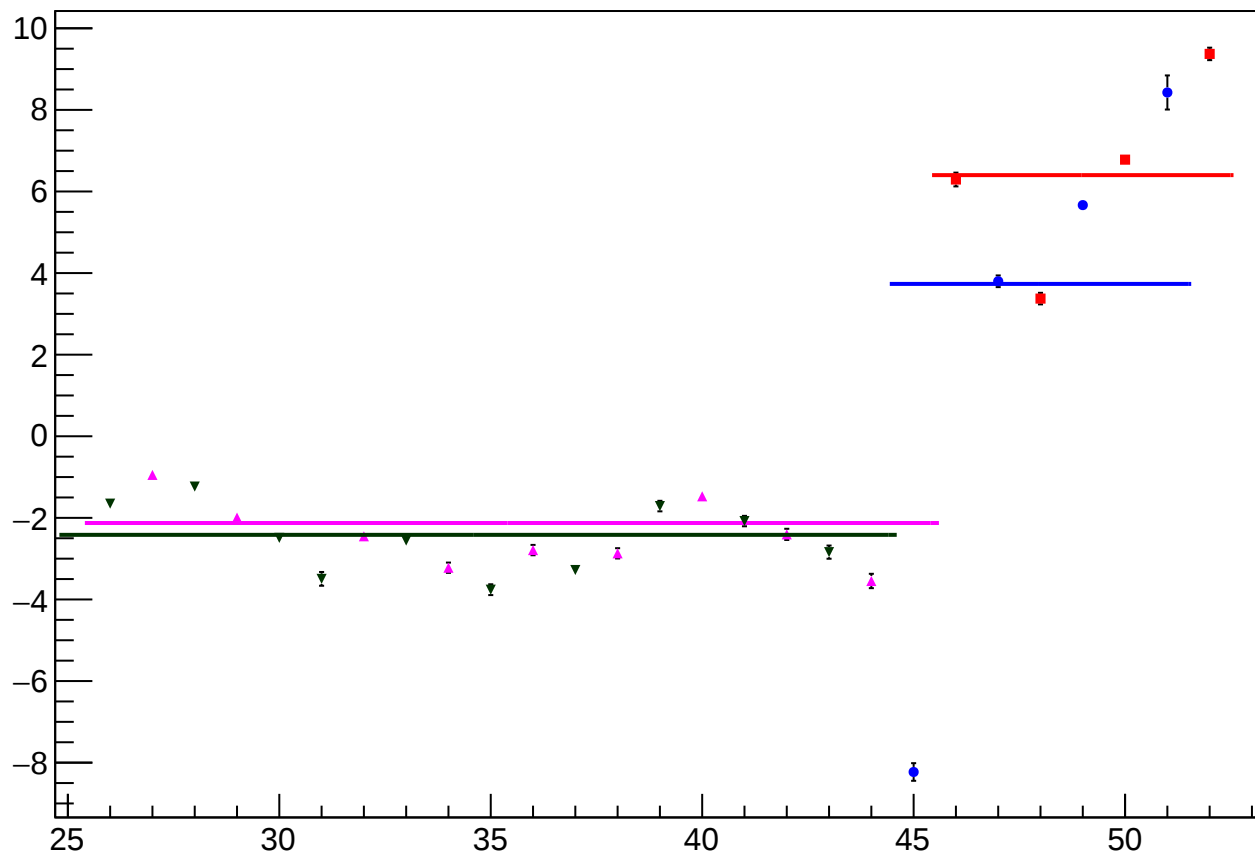
Right Out:  $0.184 \pm 0.093$   $\chi^2/\text{NDF}$ : 807.3/3

Left In:  $-3.157 \pm 0.046$   $\chi^2/\text{NDF}$ : 2492.0/8

$-2.793 \pm 0.045$   $\chi^2/\text{NDF}$ : 3930.9/13

$-2.495 \pm 0.041$   $\chi^2/\text{NDF}$ : 4342.3/12

reg\_asym\_bcm\_dg\_us\_diff\_bpm4aY\_slope vs slug



Right In: 3.734+/-0.072  $\chi^2/\text{NDF}$ : 3629.0/3

Left Out: -2.416+/-0.039  $\chi^2/\text{NDF}$ : 409.5/9

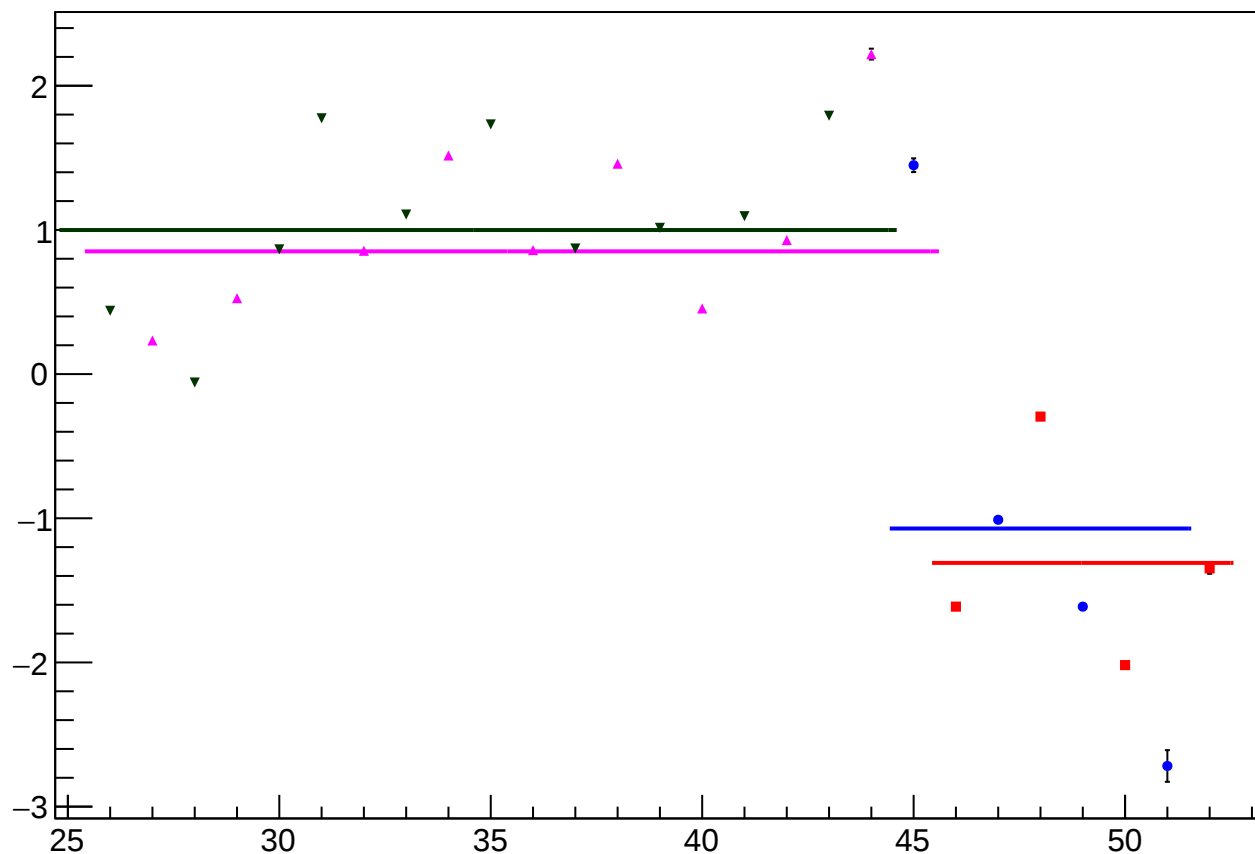
Right Out: 6.401+/-0.071  $\chi^2/\text{NDF}$ : 843.3/3

Left In: -2.126+/-0.034  $\chi^2/\text{NDF}$ : 510.2/8

-1.029+/-0.034  $\chi^2/\text{NDF}$ : 9695.5/13

-0.540+/-0.031  $\chi^2/\text{NDF}$ : 13129.3/12

reg\_asym\_bcm\_dg\_us\_diff\_bpm4eX\_slope vs slug



Right In:  $-1.071 \pm 0.017$   $\chi^2/\text{NDF}$ : 3591.8/3

Left Out:  $0.999 \pm 0.008$   $\chi^2/\text{NDF}$ : 4096.0/9

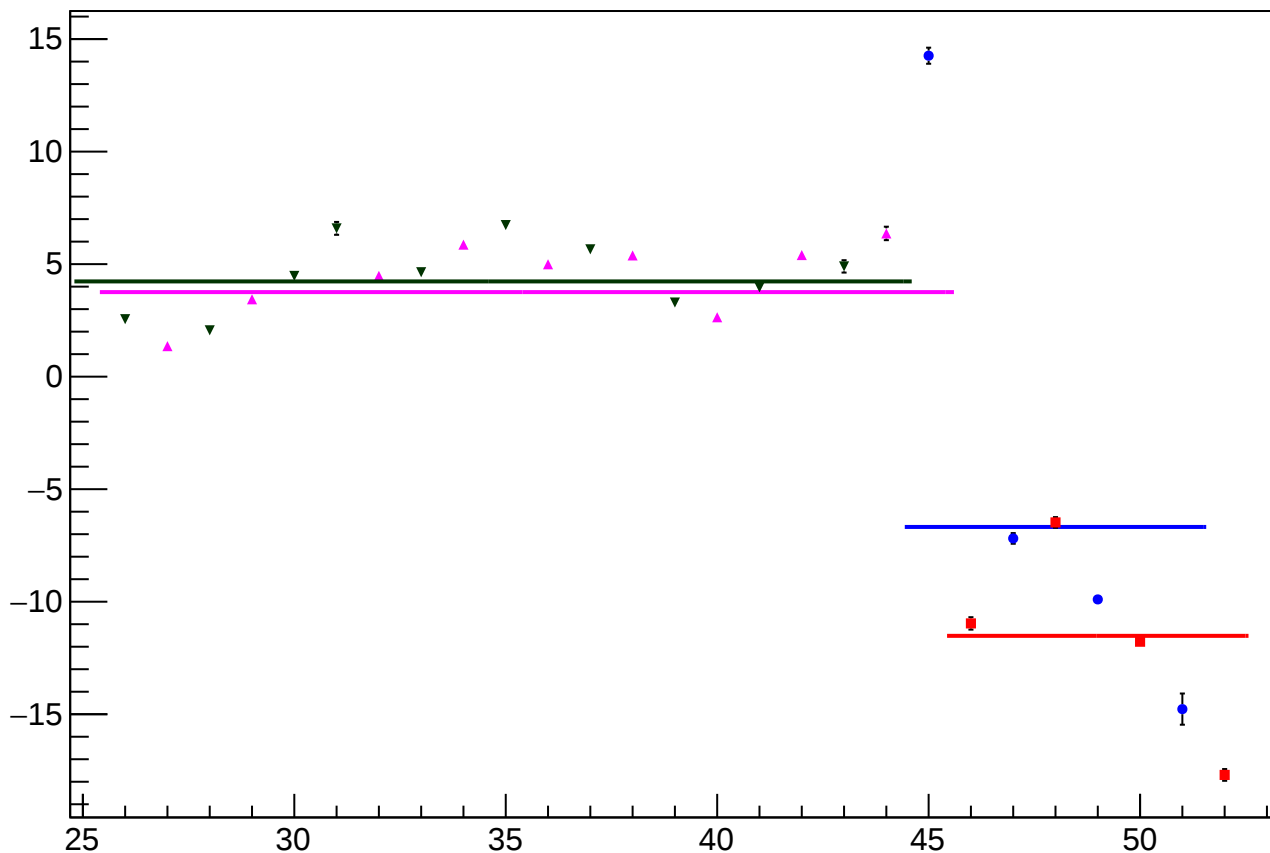
Right Out:  $-1.310 \pm 0.016$   $\chi^2/\text{NDF}$ : 1724.1/3

Left In:  $0.851 \pm 0.008$   $\chi^2/\text{NDF}$ : 3579.4/8

$0.584 \pm 0.008$   $\chi^2/\text{NDF}$ : 19820.2/13

$0.454 \pm 0.007$   $\chi^2/\text{NDF}$ : 19522.3/12

reg\_asym\_bcm\_dg\_us\_diff\_bpm4eY\_slope vs slug



Right In: -6.678+/-0.119  $\chi^2/\text{NDF}$ : 4021.0/3

Left Out: 4.232+/-0.064  $\chi^2/\text{NDF}$ : 531.4/9

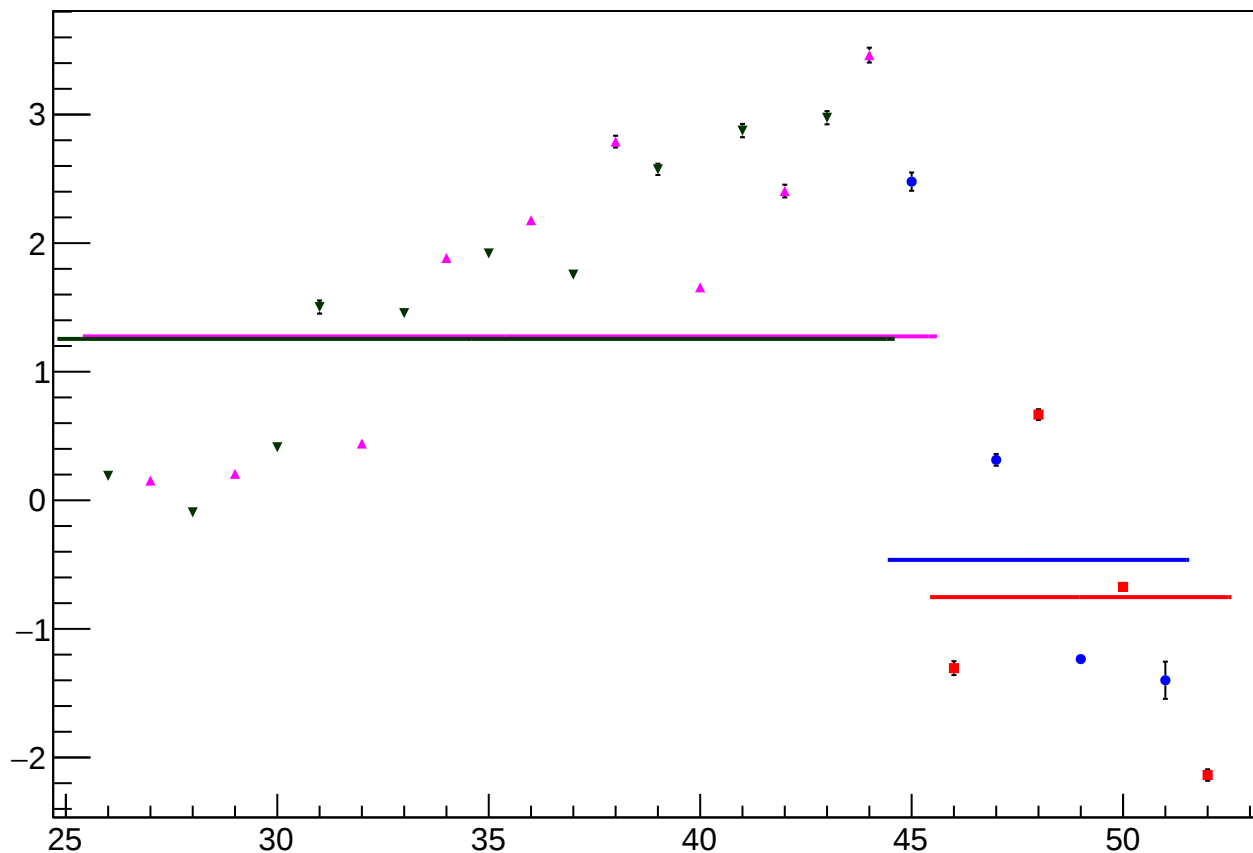
Right Out: -11.517+/-0.118  $\chi^2/\text{NDF}$ : 1018.4/3

Left In: 3.757+/-0.056  $\chi^2/\text{NDF}$ : 807.8/8

1.767+/-0.057  $\chi^2/\text{NDF}$ : 11051.1/13

0.943+/-0.051  $\chi^2/\text{NDF}$ : 15501.5/12

reg\_asym\_bcm\_dg\_us\_diff\_bpm11X\_slope vs slug



Right In:  $-0.463 \pm 0.023$   $\chi^2/\text{NDF}: 2735.0/3$

Left Out:  $1.255 \pm 0.011$   $\chi^2/\text{NDF}: 7468.2/9$

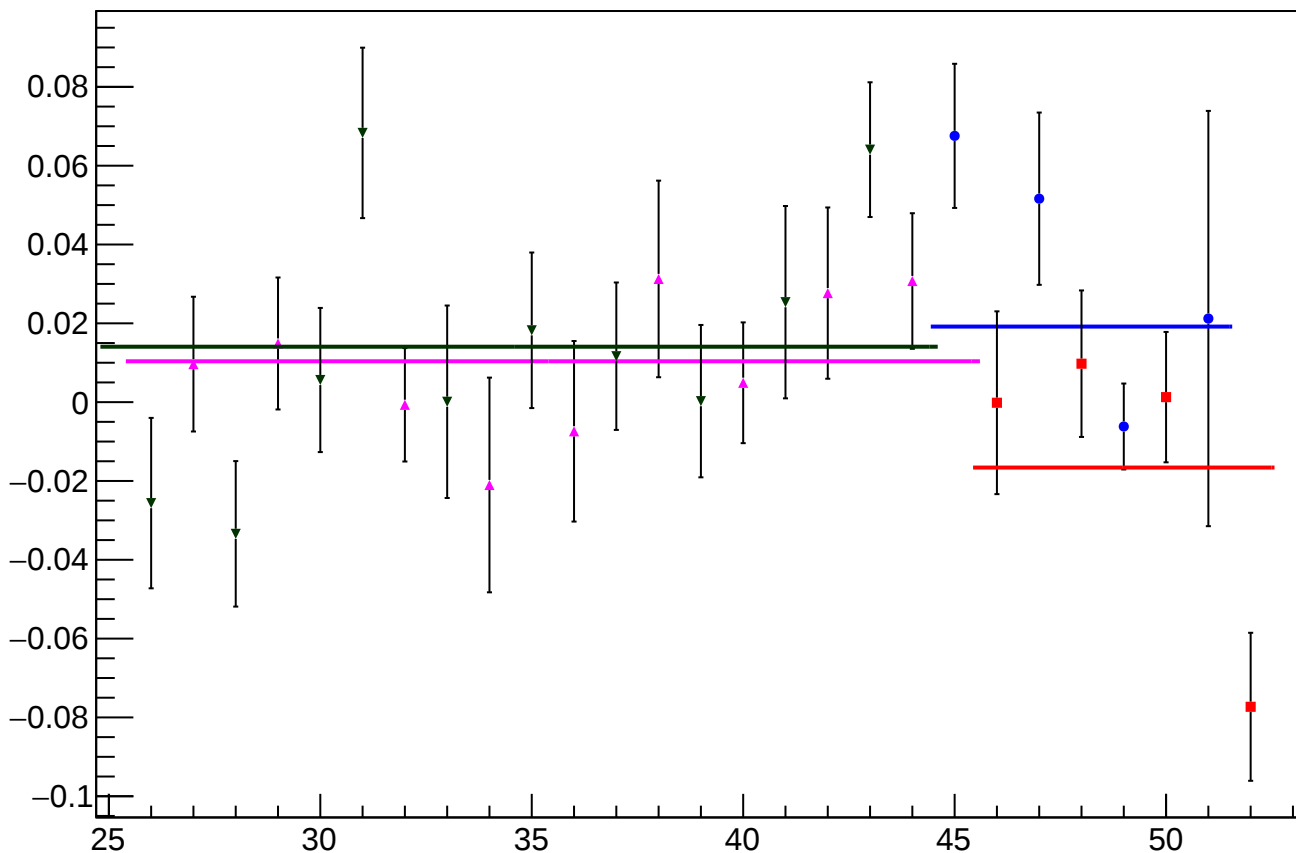
Right Out:  $-0.753 \pm 0.021$   $\chi^2/\text{NDF}: 2220.1/3$

Left In:  $1.275 \pm 0.012$   $\chi^2/\text{NDF}: 7555.8/8$

$0.918 \pm 0.010$   $\chi^2/\text{NDF}: 14707.3/13$

$0.803 \pm 0.010$   $\chi^2/\text{NDF}: 16759.8/12$

reg\_bcm\_an\_us\_ds3\_dd\_diff\_bpm4aX\_slope vs slug



Right In:  $0.019 \pm 0.008$   $\chi^2/\text{NDF}$ : 14.6/3

Left Out:  $0.014 \pm 0.006$   $\chi^2/\text{NDF}$ : 26.2/9

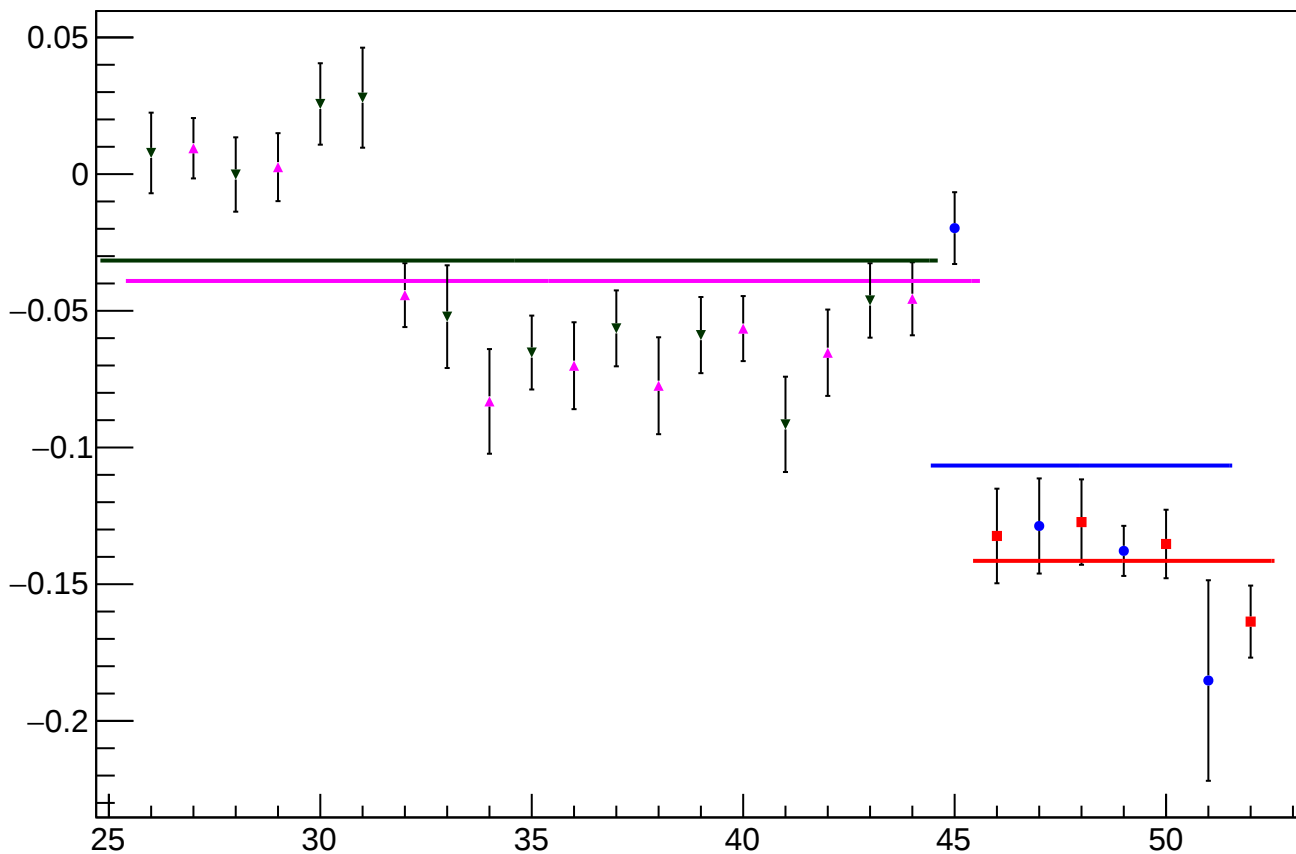
Right Out:  $-0.017 \pm 0.009$   $\chi^2/\text{NDF}$ : 14.1/3

Left In:  $0.010 \pm 0.006$   $\chi^2/\text{NDF}$ : 5.5/8

$0.016 \pm 0.005$   $\chi^2/\text{NDF}$ : 41.0/13

$0.002 \pm 0.005$   $\chi^2/\text{NDF}$ : 25.3/12

reg\_bcm\_an\_us\_ds3\_dd\_diff\_bpm4aY\_slope vs slug



Right In: -0.107 $\pm$ 0.007  $\chi^2$ /NDF: 61.5/3

Left Out: -0.032 $\pm$ 0.005  $\chi^2$ /NDF: 65.2/9

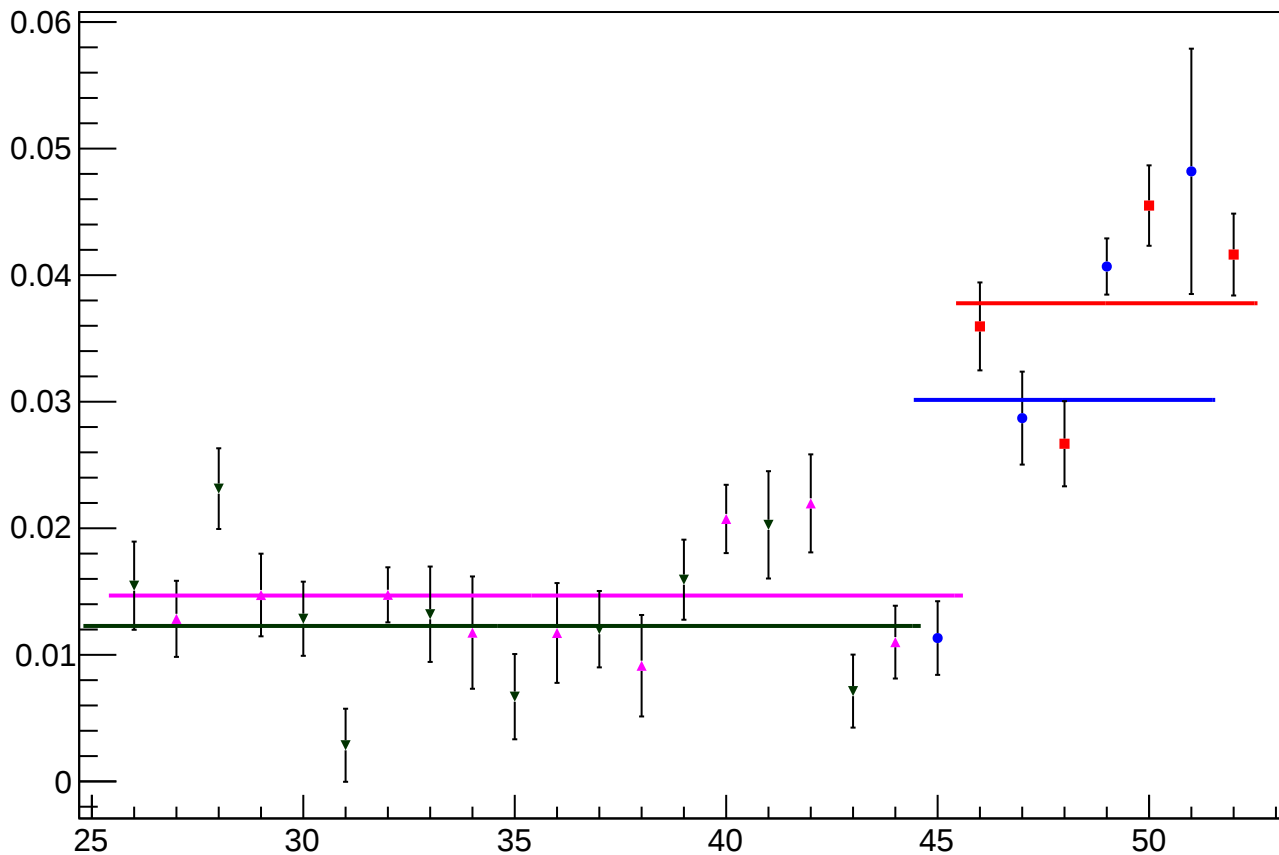
Right Out: -0.141 $\pm$ 0.007  $\chi^2$ /NDF: 4.2/3

Left In: -0.039 $\pm$ 0.005  $\chi^2$ /NDF: 49.7/8

-0.056 $\pm$ 0.004  $\chi^2$ /NDF: 209.2/13

-0.068 $\pm$ 0.004  $\chi^2$ /NDF: 200.1/12

reg\_bcm\_an\_us\_ds3\_dd\_diff\_bpm4eX\_slope vs slug



Right In: 0.030 $\pm$ 0.002  $\chi^2$ /NDF: 68.0/3

Left Out: 0.012 $\pm$ 0.001  $\chi^2$ /NDF: 34.0/9

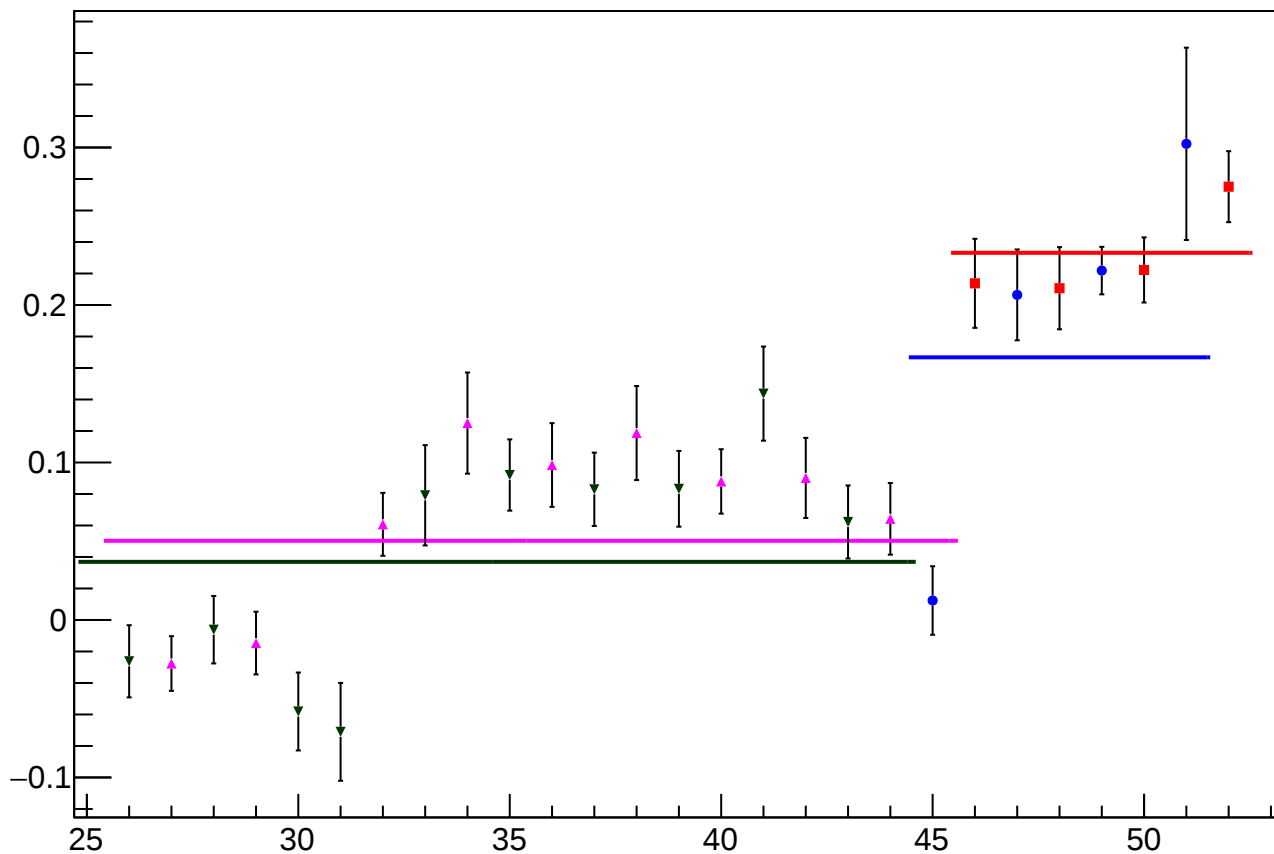
Right Out: 0.038 $\pm$ 0.002  $\chi^2$ /NDF: 18.5/3

Left In: 0.015 $\pm$ 0.001  $\chi^2$ /NDF: 13.5/8

0.018 $\pm$ 0.001  $\chi^2$ /NDF: 193.0/13

0.021 $\pm$ 0.001  $\chi^2$ /NDF: 171.5/12

reg\_bcm\_an\_us\_ds3\_dd\_diff\_bpm4eY\_slope vs slug



Right In: 0.167 $\pm$ 0.011  $\chi^2$ /NDF: 70.5/3

Left Out: 0.037 $\pm$ 0.008  $\chi^2$ /NDF: 67.8/9

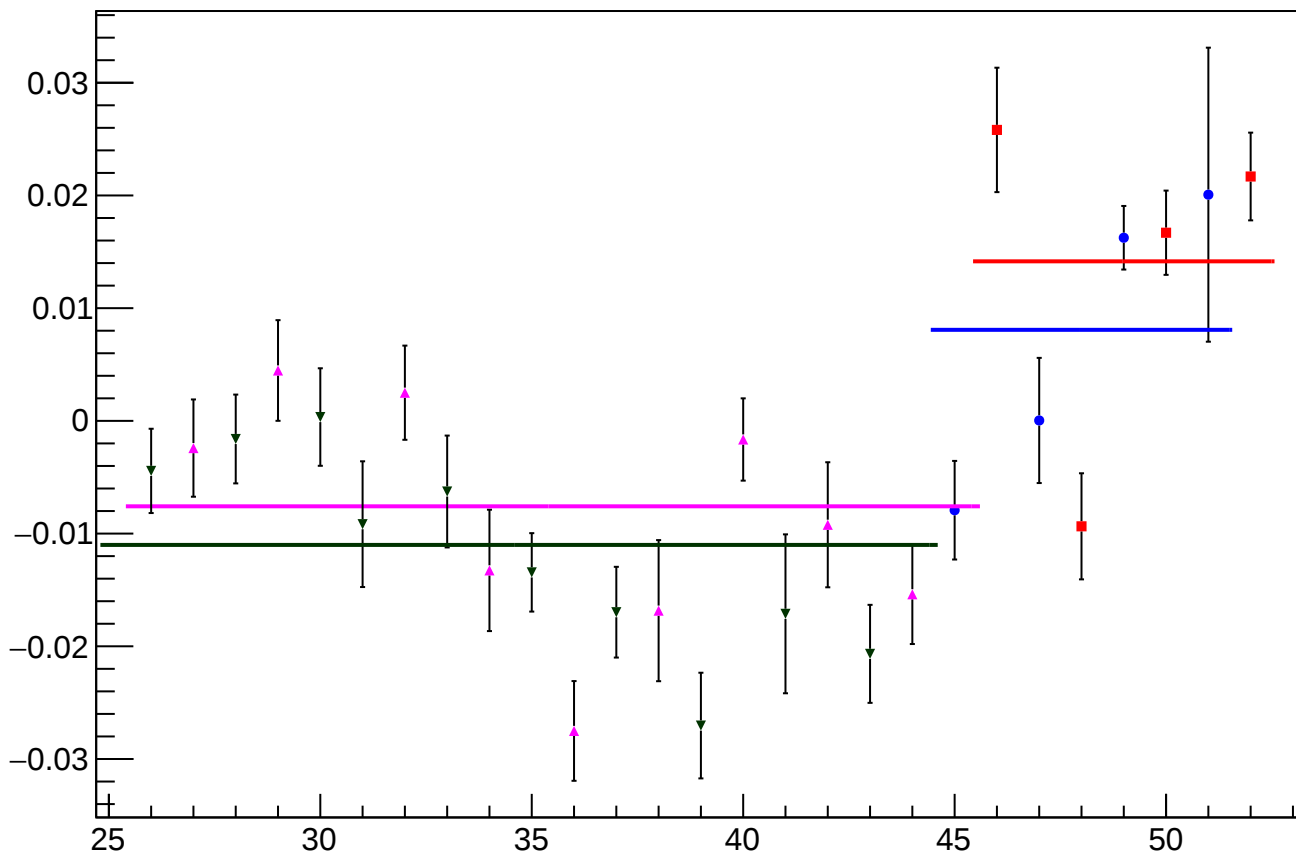
Right Out: 0.233 $\pm$ 0.012  $\chi^2$ /NDF: 5.0/3

Left In: 0.050 $\pm$ 0.008  $\chi^2$ /NDF: 51.2/8

0.080 $\pm$ 0.006  $\chi^2$ /NDF: 228.5/13

0.102 $\pm$ 0.006  $\chi^2$ /NDF: 224.4/12

reg\_bcm\_an\_us\_ds3\_dd\_diff\_bpm11X\_slope vs slug



Right In:  $0.008 \pm 0.002$   $\chi^2/\text{NDF}: 24.7/3$

Left Out:  $-0.011 \pm 0.001$   $\chi^2/\text{NDF}: 36.7/9$

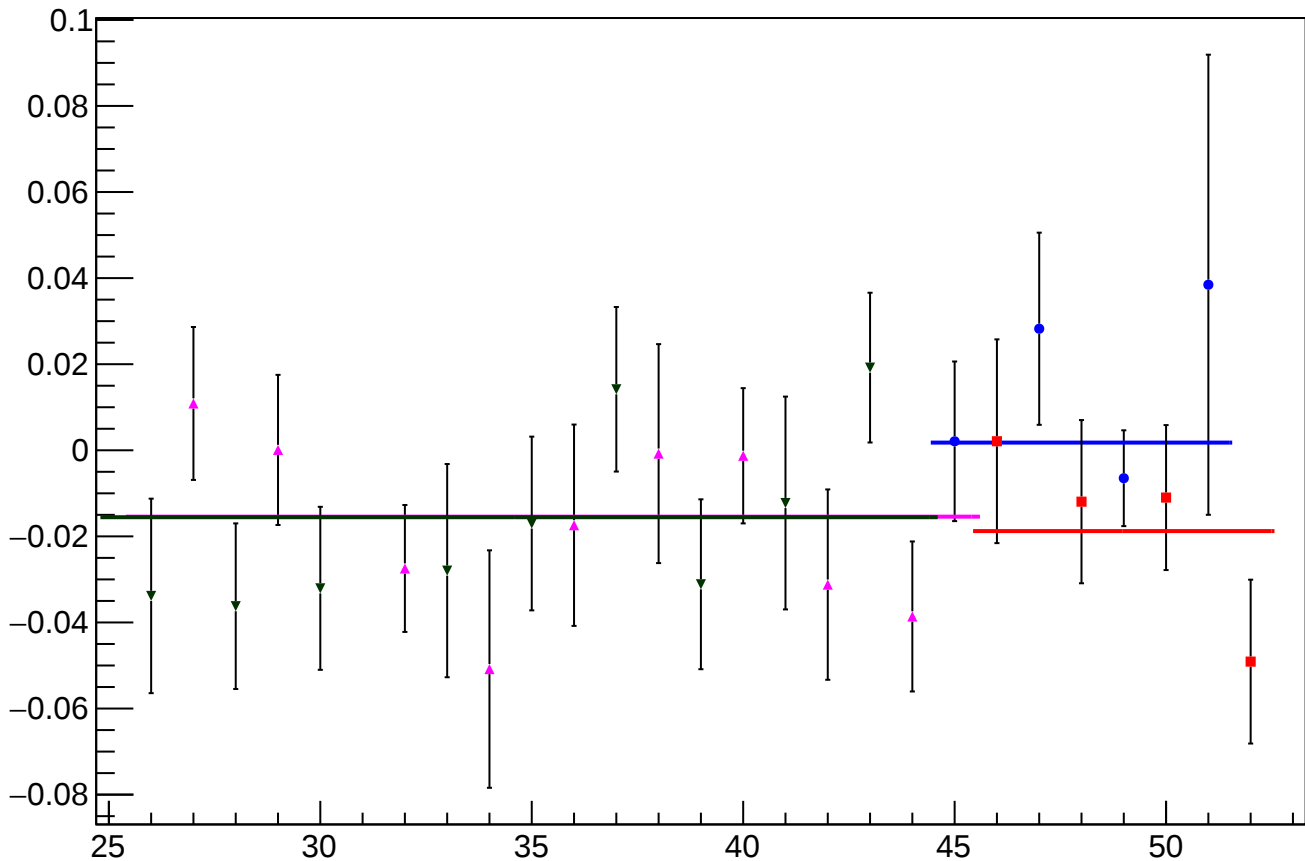
$-0.005 \pm 0.001$   $\chi^2/\text{NDF}: 117.2/13$

Right Out:  $0.014 \pm 0.002$   $\chi^2/\text{NDF}: 33.6/3$

$-0.000 \pm 0.001$   $\chi^2/\text{NDF}: 145.5/12$

Left In:  $-0.008 \pm 0.002$   $\chi^2/\text{NDF}: 44.0/8$

reg\_bcm\_an\_us\_ds\_dd\_diff\_bpm4aX\_slope vs slug



Right In:  $0.002 \pm 0.009$   $\chi^2/\text{NDF}$ : 2.4/3

Left Out:  $-0.016 \pm 0.007$   $\chi^2/\text{NDF}$ : 9.9/8

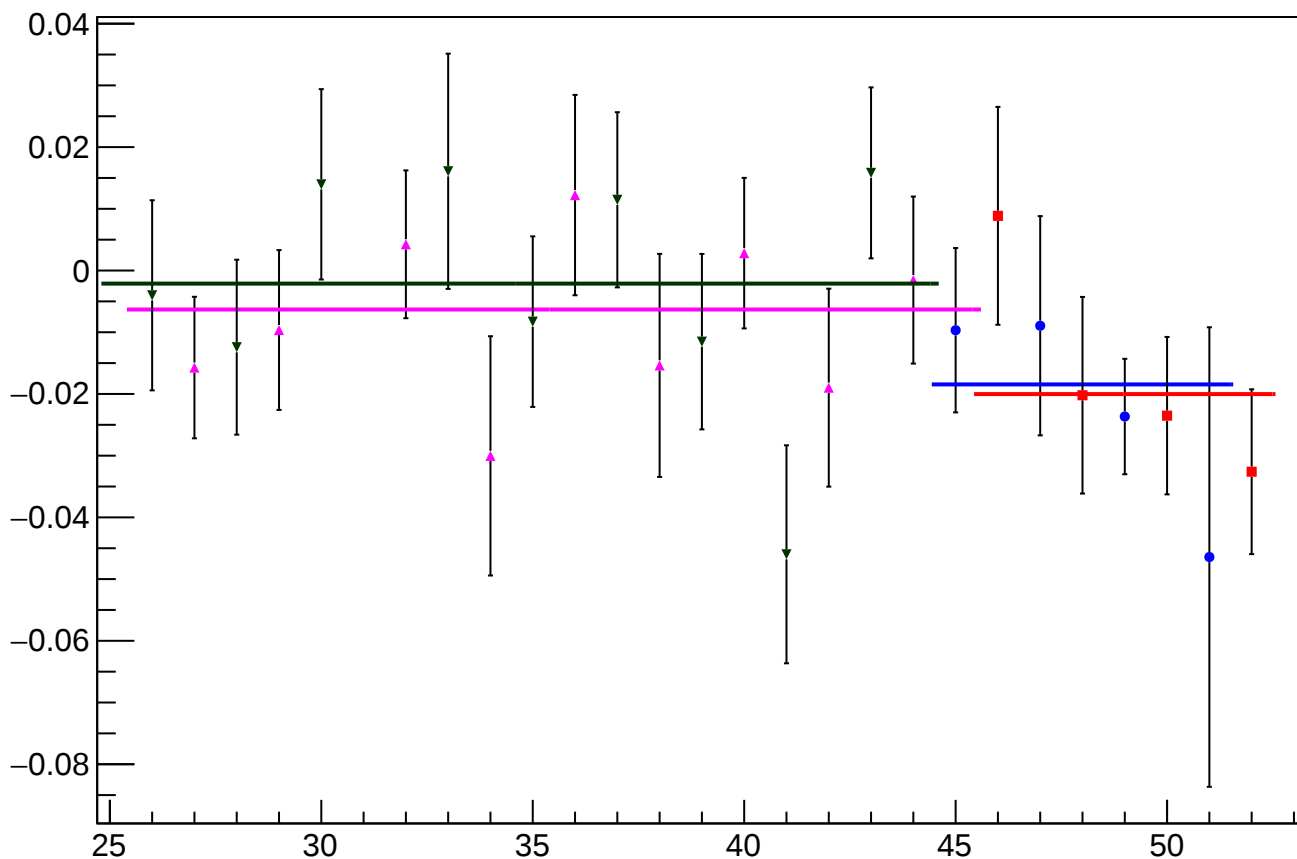
Right Out:  $-0.019 \pm 0.010$   $\chi^2/\text{NDF}$ : 3.7/3

Left In:  $-0.015 \pm 0.006$   $\chi^2/\text{NDF}$ : 8.7/8

$-0.009 \pm 0.005$   $\chi^2/\text{NDF}$ : 14.8/12

$-0.016 \pm 0.005$   $\chi^2/\text{NDF}$ : 12.5/12

reg\_bcm\_an\_us\_ds\_dd\_diff\_bpm4aY\_slope vs slug



Right In:  $-0.018 \pm 0.007$   $\chi^2/\text{NDF: } 1.6/3$

Left Out:  $-0.002 \pm 0.005$   $\chi^2/\text{NDF: } 11.9/8$

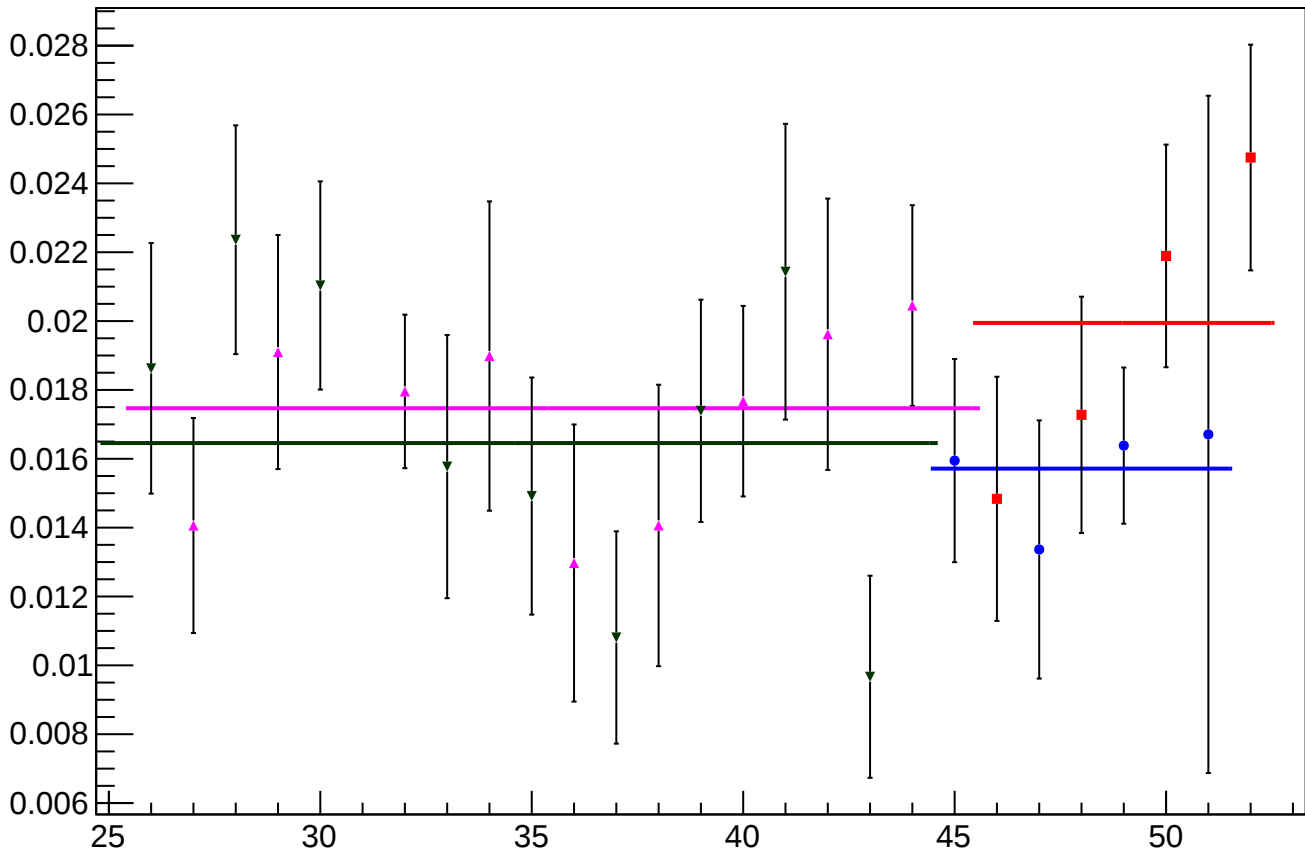
Right Out:  $-0.020 \pm 0.007$   $\chi^2/\text{NDF: } 3.6/3$

Left In:  $-0.006 \pm 0.005$   $\chi^2/\text{NDF: } 5.9/8$

$-0.008 \pm 0.004$   $\chi^2/\text{NDF: } 17.2/12$

$-0.010 \pm 0.004$   $\chi^2/\text{NDF: } 12.0/12$

reg\_bcm\_an\_us\_ds\_dd\_diff\_bpm4eX\_slope vs slug



Right In: 0.016+/-0.002  $\chi^2/\text{NDF}$ : 0.5/3

Left Out: 0.016+/-0.001  $\chi^2/\text{NDF}$ : 16.2/8

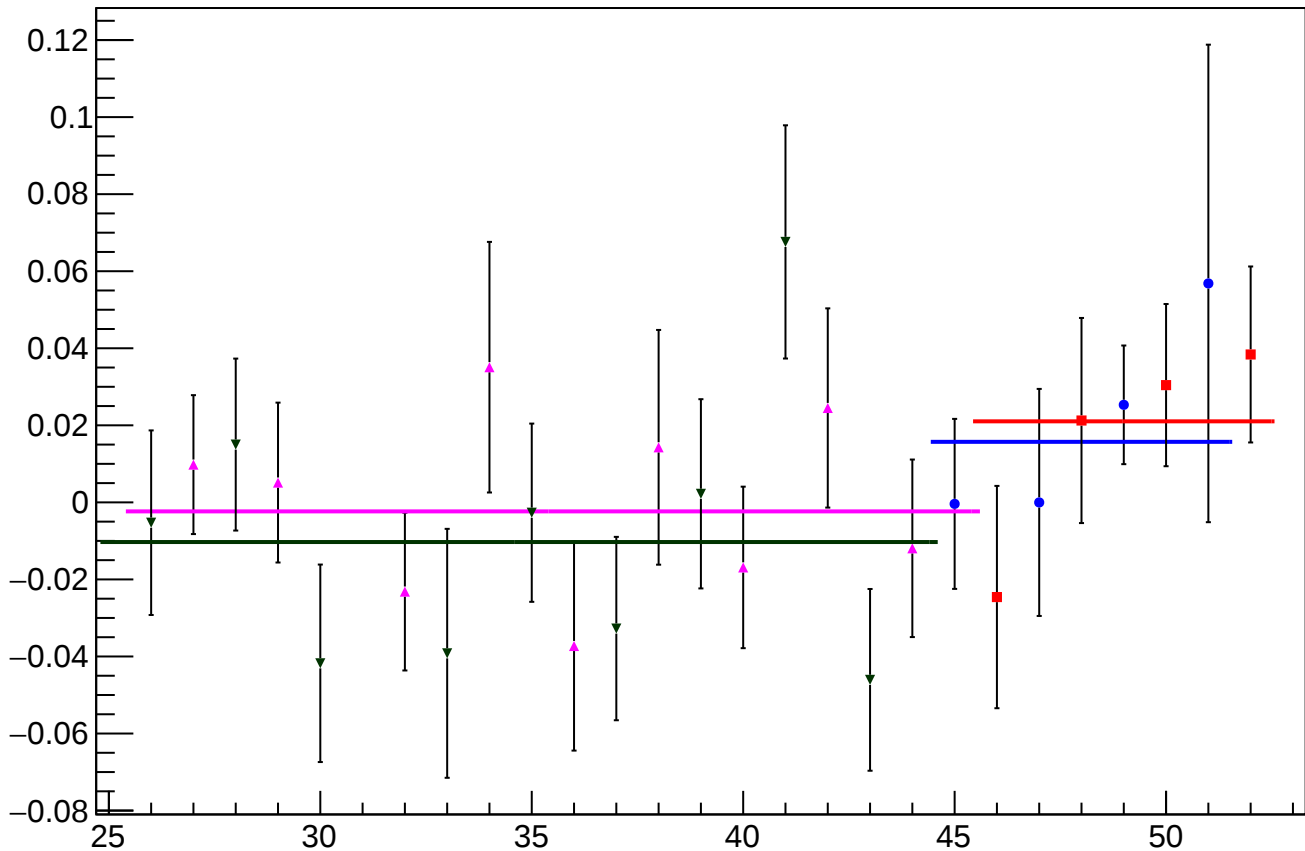
Right Out: 0.020+/-0.002  $\chi^2/\text{NDF}$ : 5.2/3

Left In: 0.017+/-0.001  $\chi^2/\text{NDF}$ : 4.9/8

0.016+/-0.001  $\chi^2/\text{NDF}$ : 16.8/12

0.018+/-0.001  $\chi^2/\text{NDF}$ : 11.6/12

reg\_bcm\_an\_us\_ds\_dd\_diff\_bpm4eY\_slope vs slug



Right In:  $0.016 \pm 0.011$   $\chi^2/\text{NDF}$ : 1.6/3

Left Out:  $-0.010 \pm 0.008$   $\chi^2/\text{NDF}$ : 13.8/8

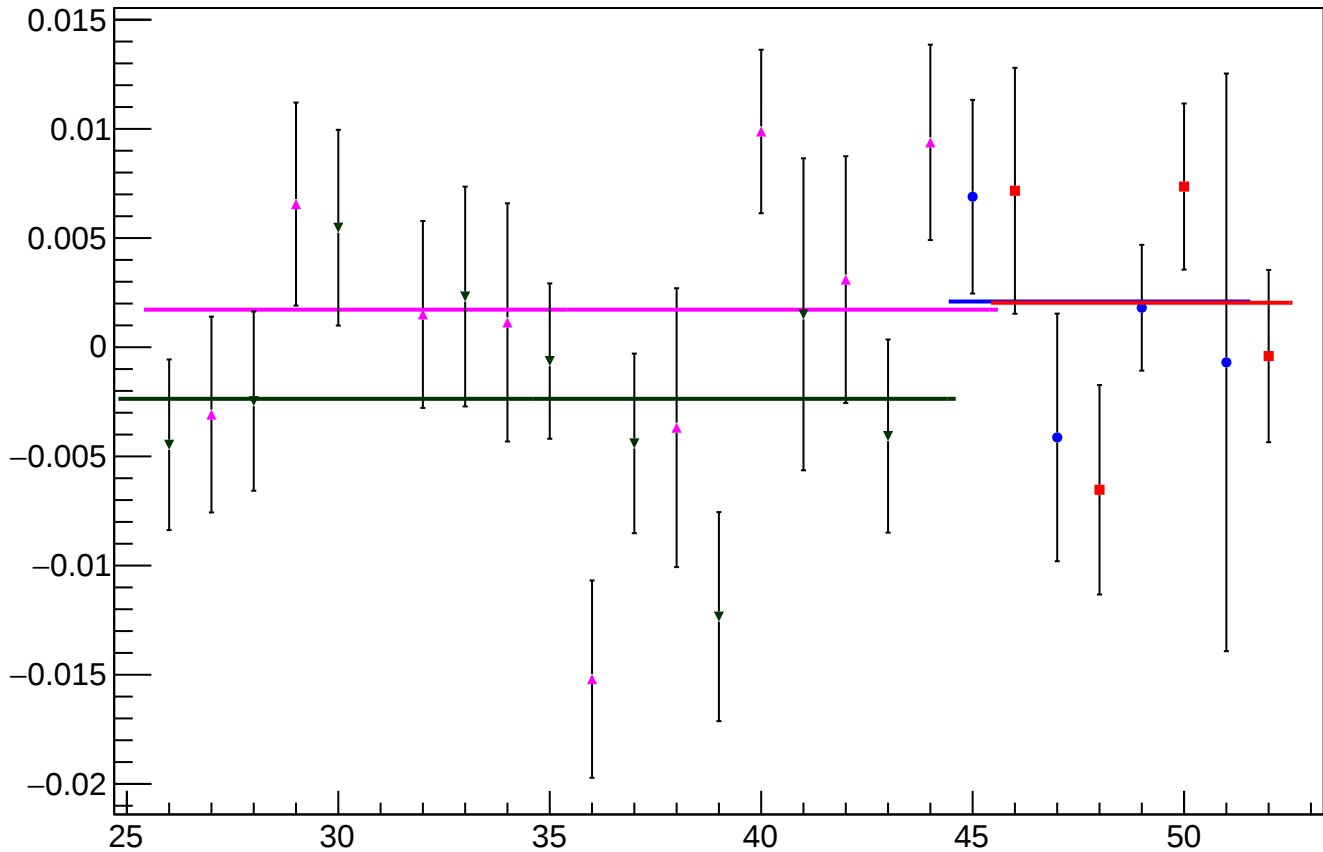
Right Out:  $0.021 \pm 0.012$   $\chi^2/\text{NDF}$ : 3.3/3

Left In:  $-0.002 \pm 0.008$   $\chi^2/\text{NDF}$ : 6.6/8

$-0.001 \pm 0.007$   $\chi^2/\text{NDF}$ : 18.9/12

$0.004 \pm 0.007$   $\chi^2/\text{NDF}$ : 12.5/12

# reg\_bcm\_an\_us\_ds\_dd\_diff\_bpm11X\_slope vs slug



Right In: 0.002 $\pm$ 0.002  $\chi^2$ /NDF: 2.4/3

Left Out: -0.002 $\pm$ 0.001  $\chi^2$ /NDF:9.5/8

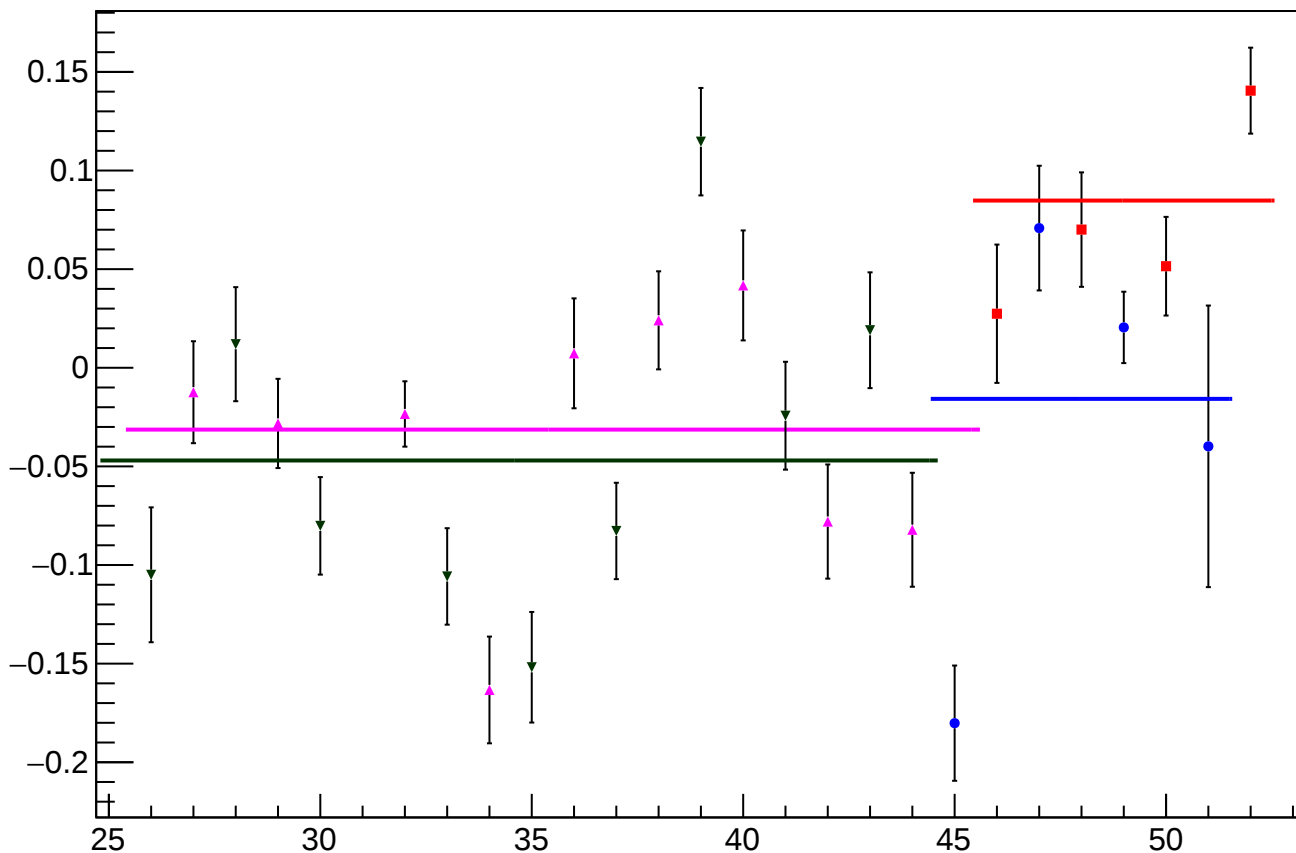
Right Out: 0.002 $\pm$ 0.002  $\chi^2$ /NDF: 6.4/3

Left In: 0.002 $\pm$ 0.002  $\chi^2$ /NDF:24.7/8

-0.001 $\pm$ 0.001  $\chi^2$ /NDF: 14.8/12

0.002 $\pm$ 0.001  $\chi^2$ /NDF: 31.1/12

reg\_bcm\_dg\_us\_dg\_ds\_dd\_diff\_bpm4aX\_slope vs slug



Right In:  $-0.016 \pm 0.014$   $\chi^2/\text{NDF}: 43.3/3$

Left Out:  $-0.047 \pm 0.009$   $\chi^2/\text{NDF}: 71.7/8$

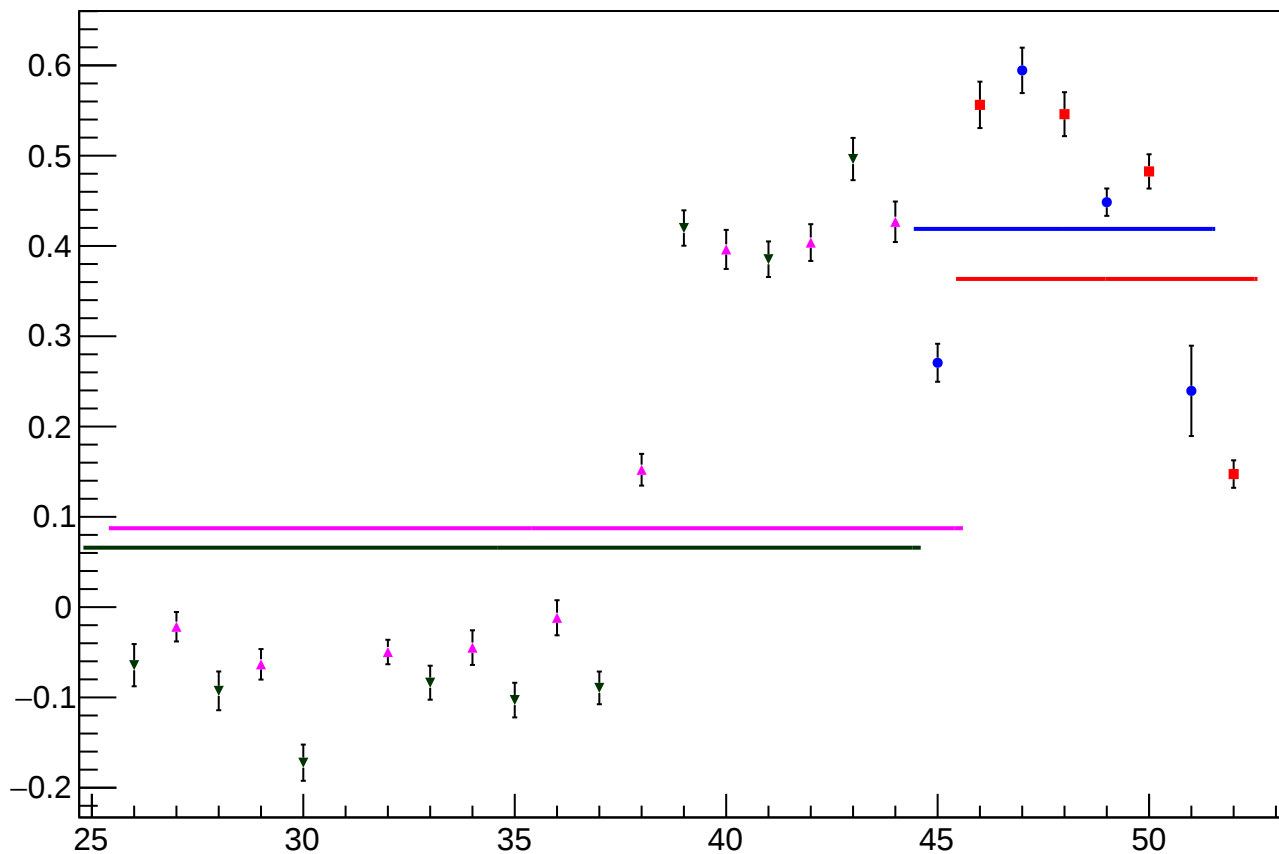
Right Out:  $0.085 \pm 0.013$   $\chi^2/\text{NDF}: 11.2/3$

Left In:  $-0.031 \pm 0.008$   $\chi^2/\text{NDF}: 44.0/8$

$-0.037 \pm 0.008$   $\chi^2/\text{NDF}: 118.6/12$

$0.001 \pm 0.007$   $\chi^2/\text{NDF}: 111.1/12$

reg\_bcm\_dg\_us\_dg\_ds\_dd\_diff\_bpm4aY\_slope vs slug



Right In: 0.419 $\pm$ 0.011  $\chi^2/\text{NDF}$ : 115.1/3

Left Out: 0.066 $\pm$ 0.007  $\chi^2/\text{NDF}$ :1368.1/8

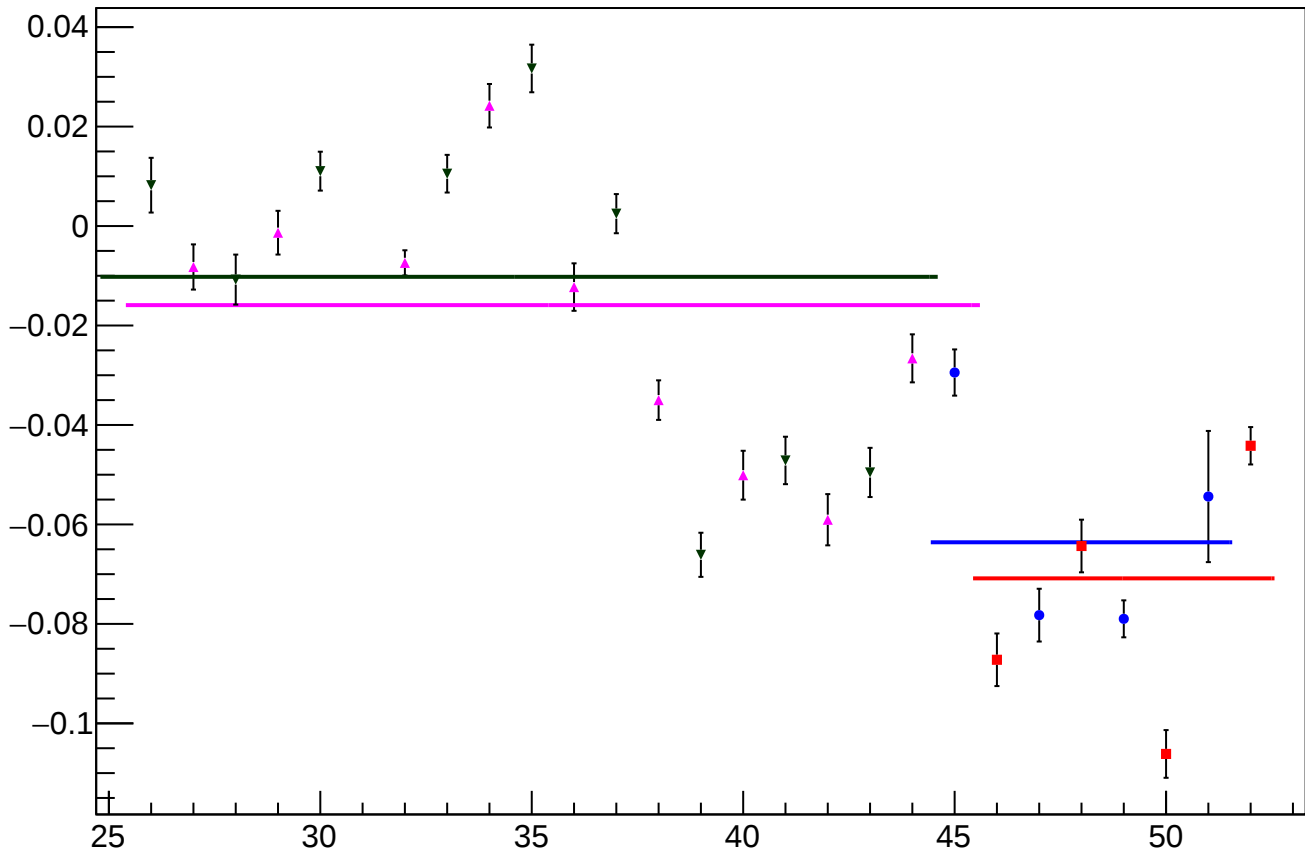
Right Out: 0.363 $\pm$ 0.010  $\chi^2/\text{NDF}$ : 353.2/3

Left In: 0.087 $\pm$ 0.006  $\chi^2/\text{NDF}$ :988.4/8

0.165 $\pm$ 0.006  $\chi^2/\text{NDF}$ : 2254.4/12

0.162 $\pm$ 0.005  $\chi^2/\text{NDF}$ : 1914.3/12

reg\_bcm\_dg\_us\_dg\_ds\_dd\_diff\_bpm4eX\_slope vs slug



Right In: -0.064 $\pm$ 0.003  $\chi^2$ /NDF: 79.2/3

Left Out: -0.010 $\pm$ 0.001  $\chi^2$ /NDF: 439.6/8

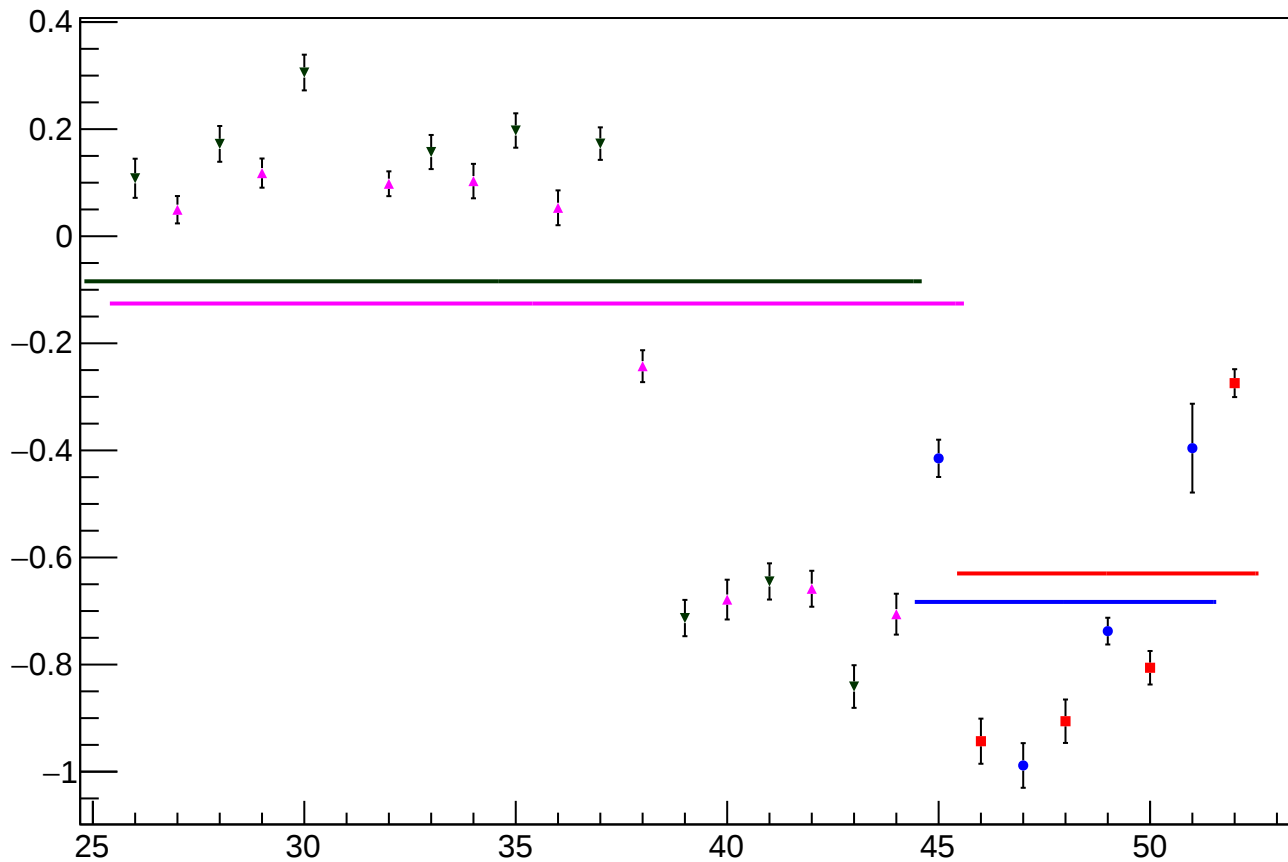
Right Out: -0.071 $\pm$ 0.002  $\chi^2$ /NDF: 115.6/3

Left In: -0.016 $\pm$ 0.001  $\chi^2$ /NDF: 256.4/8

-0.024 $\pm$ 0.001  $\chi^2$ /NDF: 855.4/12

-0.030 $\pm$ 0.001  $\chi^2$ /NDF: 788.7/12

reg\_bcm\_dg\_us\_dg\_ds\_dd\_diff\_bpm4eY\_slope vs slug



Right In: -0.683+/-0.018  $\chi^2/\text{NDF}$ : 129.7/3

Left Out: -0.084+/-0.011  $\chi^2/\text{NDF}$ :1409.4/8

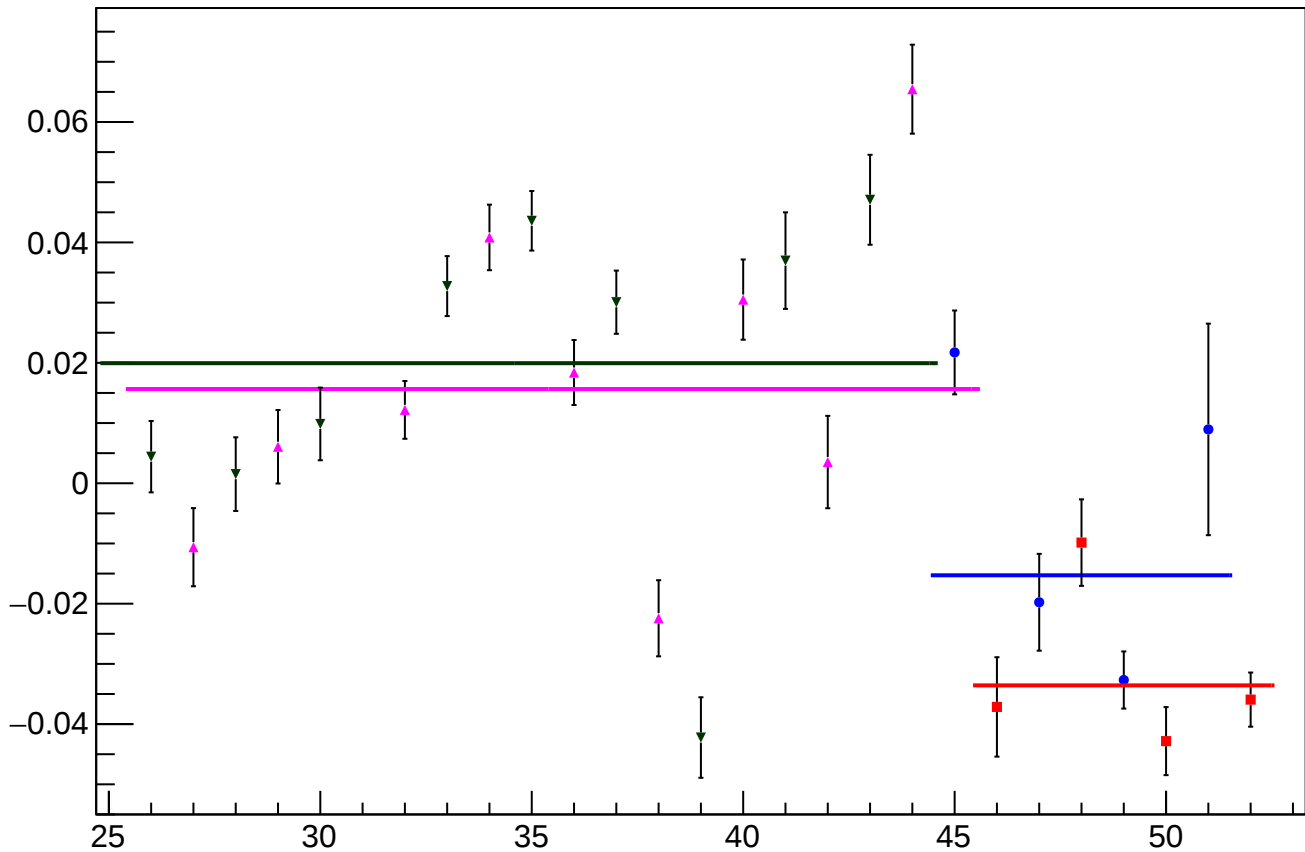
Right Out: -0.630+/-0.017  $\chi^2/\text{NDF}$ : 319.4/3

Left In: -0.126+/-0.010  $\chi^2/\text{NDF}$ :1020.3/8

-0.254+/-0.009  $\chi^2/\text{NDF}$ : 2348.0/12

-0.260+/-0.009  $\chi^2/\text{NDF}$ : 2022.8/12

reg\_bcm\_dg\_us\_dg\_ds\_dd\_diff\_bpm11X\_slope vs slug



Right In:  $-0.015 \pm 0.003$   $\chi^2/\text{NDF}: 43.9/3$

Left Out:  $0.020 \pm 0.002$   $\chi^2/\text{NDF}: 156.1/8$

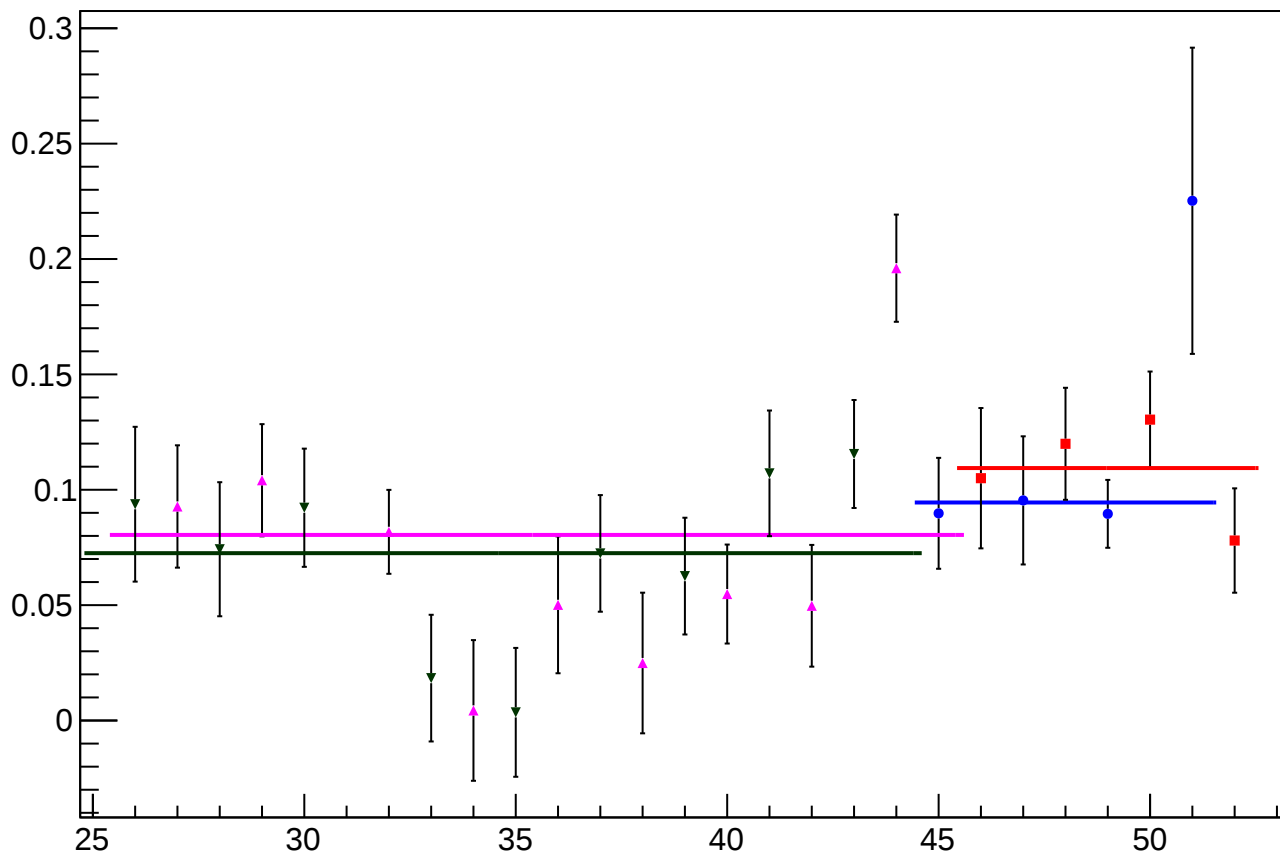
Right Out:  $-0.034 \pm 0.003$   $\chi^2/\text{NDF}: 14.0/3$

Left In:  $0.016 \pm 0.002$   $\chi^2/\text{NDF}: 130.2/8$

$0.011 \pm 0.002$   $\chi^2/\text{NDF}: 278.3/12$

$-0.000 \pm 0.002$   $\chi^2/\text{NDF}: 333.6/12$

reg\_bcm\_cav4cQ\_ds\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 0.094 $\pm$ 0.011  $\chi^2/\text{NDF}$ : 4.0/3

Left Out: 0.073 $\pm$ 0.009  $\chi^2/\text{NDF}$ :16.1/8

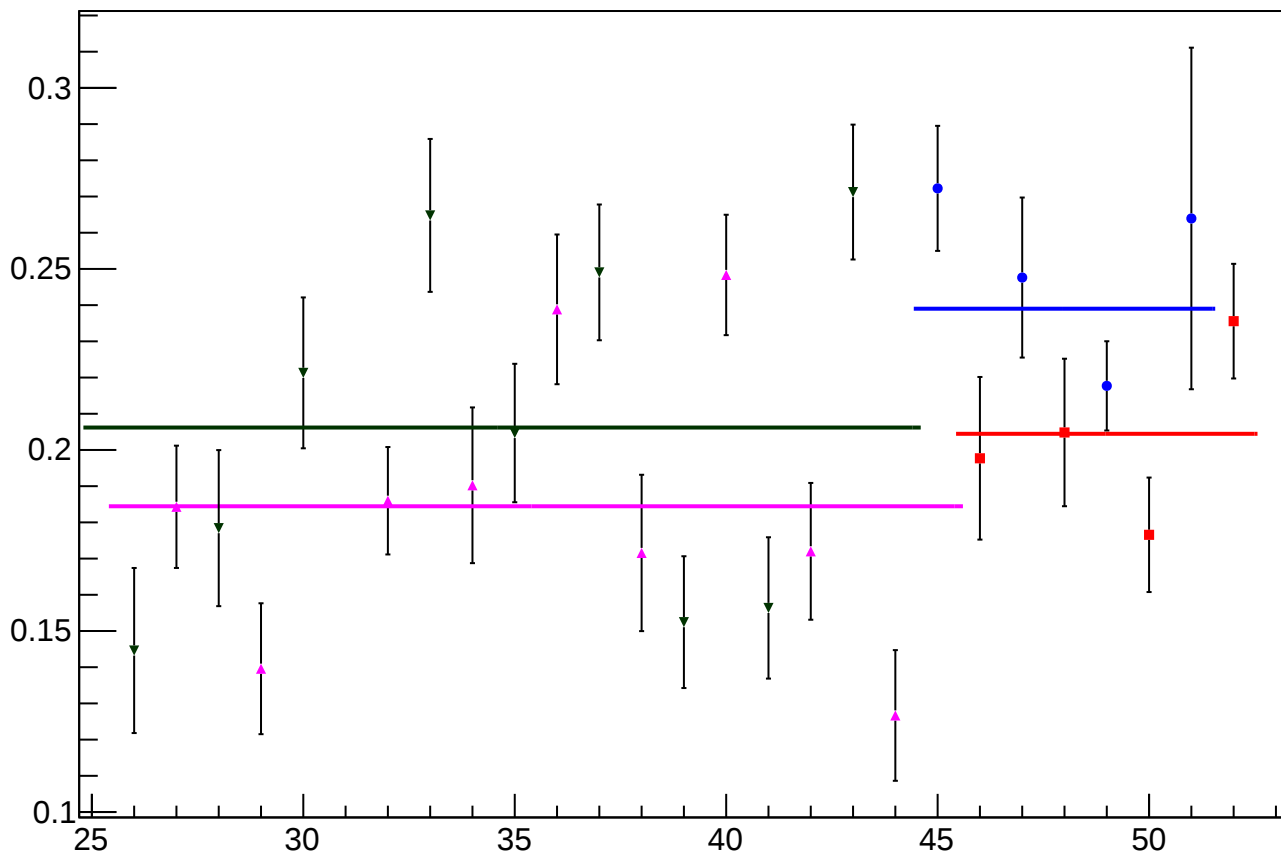
Right Out: 0.109 $\pm$ 0.012  $\chi^2/\text{NDF}$ : 3.2/3

Left In: 0.080 $\pm$ 0.008  $\chi^2/\text{NDF}$ :39.3/8

0.081 $\pm$ 0.007  $\chi^2/\text{NDF}$ : 22.5/12

0.090 $\pm$ 0.007  $\chi^2/\text{NDF}$ : 46.5/12

reg\_bcm\_cav4cQ\_ds\_dd\_diff\_bpm4aY\_slope vs slug



Right In: 0.239 $\pm$ 0.009  $\chi^2/\text{NDF}$ : 7.1/3

Left Out: 0.206 $\pm$ 0.007  $\chi^2/\text{NDF}$ : 49.8/8

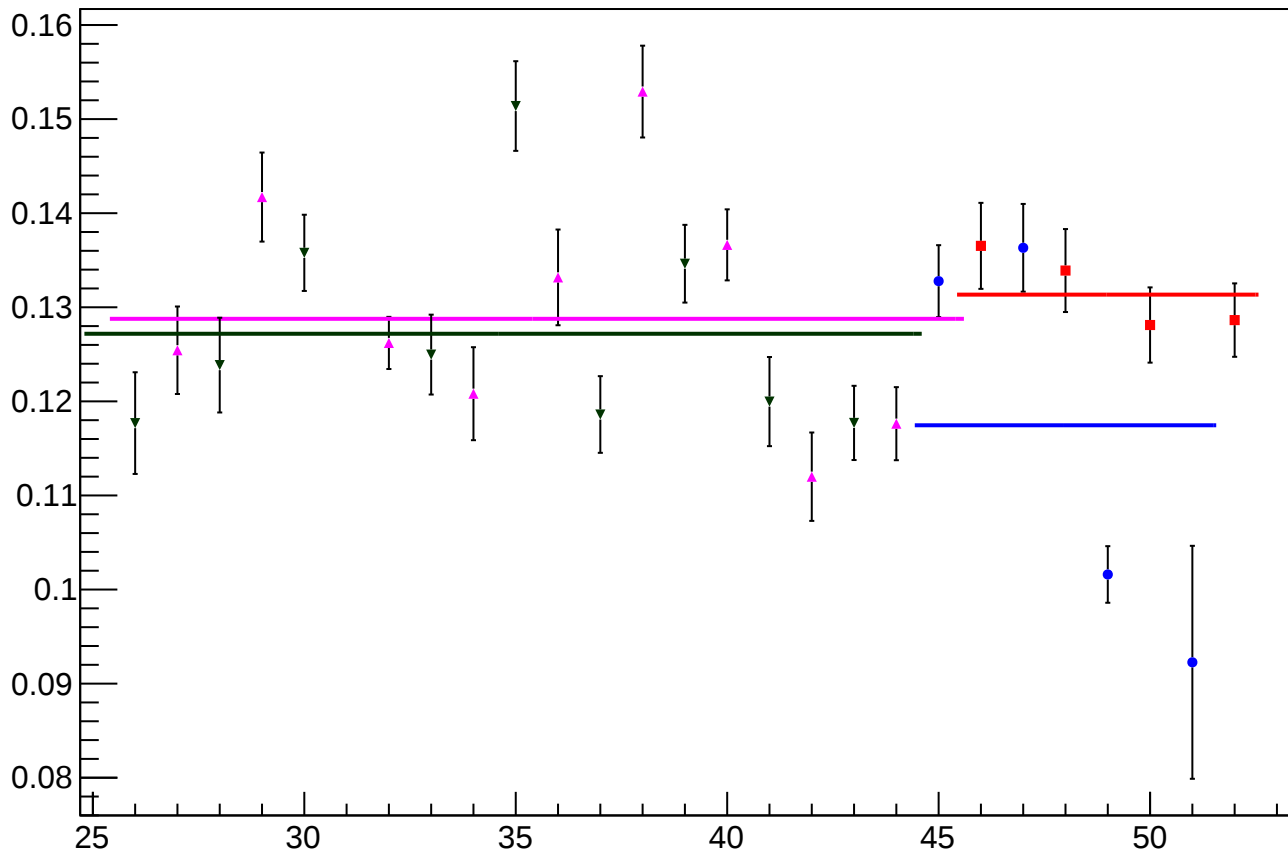
Right Out: 0.204 $\pm$ 0.009  $\chi^2/\text{NDF}$ : 7.1/3

Left In: 0.184 $\pm$ 0.006  $\chi^2/\text{NDF}$ : 39.0/8

0.218 $\pm$ 0.005  $\chi^2/\text{NDF}$ : 65.6/12

0.191 $\pm$ 0.005  $\chi^2/\text{NDF}$ : 49.4/12

reg\_bcm\_cav4cQ\_ds\_dd\_diff\_bpm4eX\_slope vs slug



Right In: 0.117 $\pm$ 0.002  $\chi^2/\text{NDF}$ : 64.4/3

Left Out: 0.127 $\pm$ 0.001  $\chi^2/\text{NDF}$ : 49.9/8

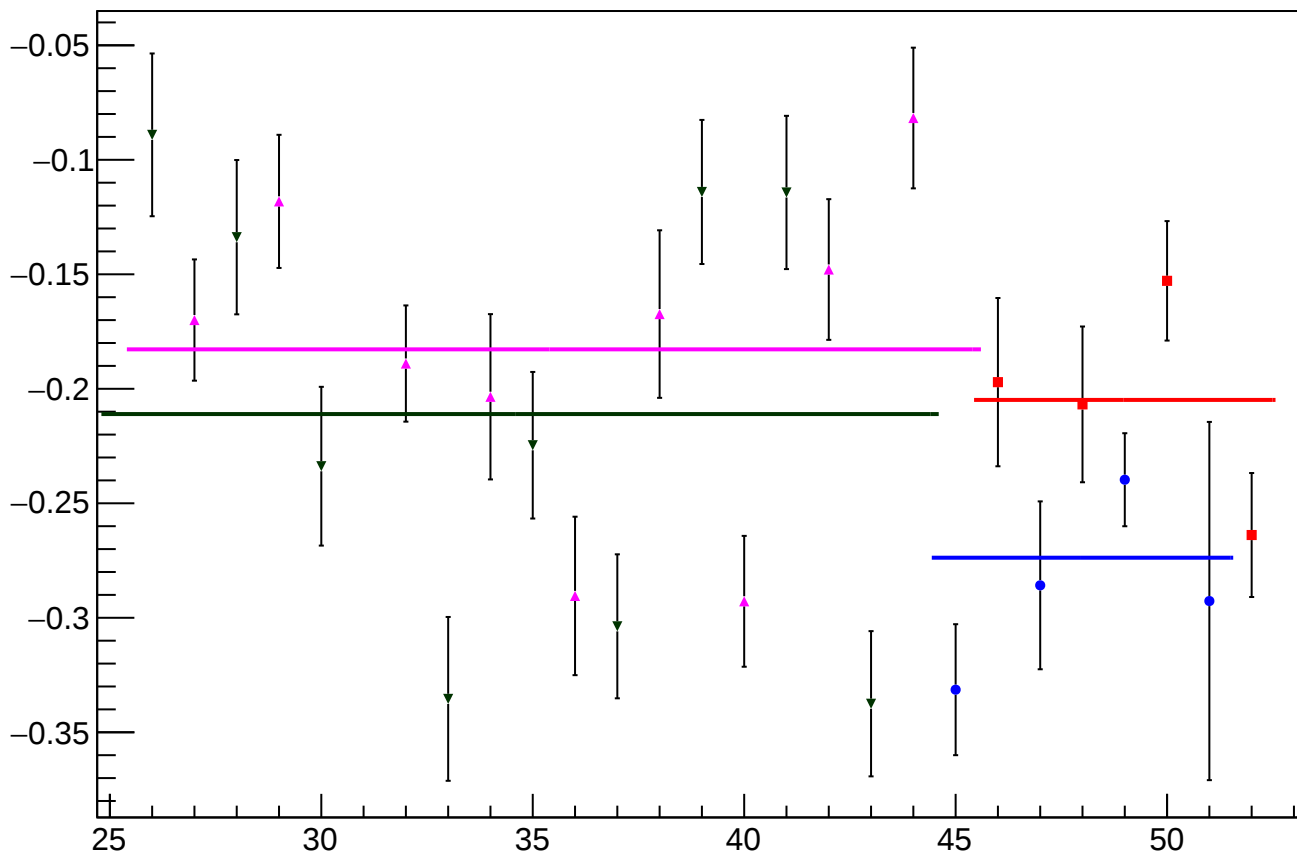
Right Out: 0.131 $\pm$ 0.002  $\chi^2/\text{NDF}$ : 2.8/3

Left In: 0.129 $\pm$ 0.001  $\chi^2/\text{NDF}$ : 62.0/8

0.124 $\pm$ 0.001  $\chi^2/\text{NDF}$ : 128.9/12

0.130 $\pm$ 0.001  $\chi^2/\text{NDF}$ : 65.8/12

reg\_bcm\_cav4cQ\_ds\_dd\_diff\_bpm4eY\_slope vs slug



Right In: -0.274 $\pm$ 0.015  $\chi^2$ /NDF: 7.0/3

Left Out: -0.211 $\pm$ 0.011  $\chi^2$ /NDF: 72.2/8

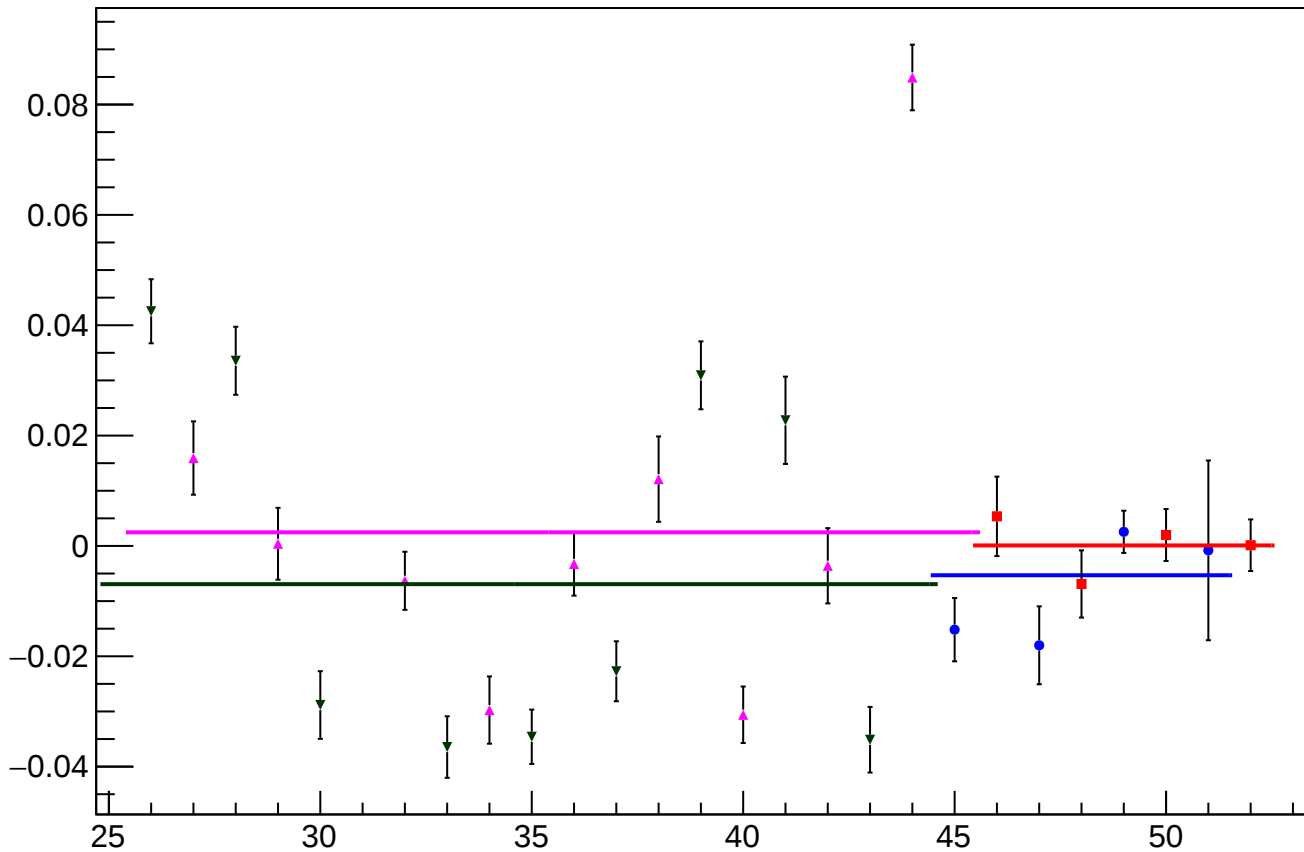
Right Out: -0.205 $\pm$ 0.015  $\chi^2$ /NDF: 8.8/3

Left In: -0.183 $\pm$ 0.010  $\chi^2$ /NDF: 42.4/8

-0.233 $\pm$ 0.009  $\chi^2$ /NDF: 90.7/12

-0.190 $\pm$ 0.008  $\chi^2$ /NDF: 52.6/12

reg\_bcm\_cav4cQ\_ds\_dd\_diff\_bpm11X\_slope vs slug



Right In: -0.005+/-0.003  $\chi^2/\text{NDF}$ : 10.5/3

Left Out: -0.007+/-0.002  $\chi^2/\text{NDF}$ : 270.8/8

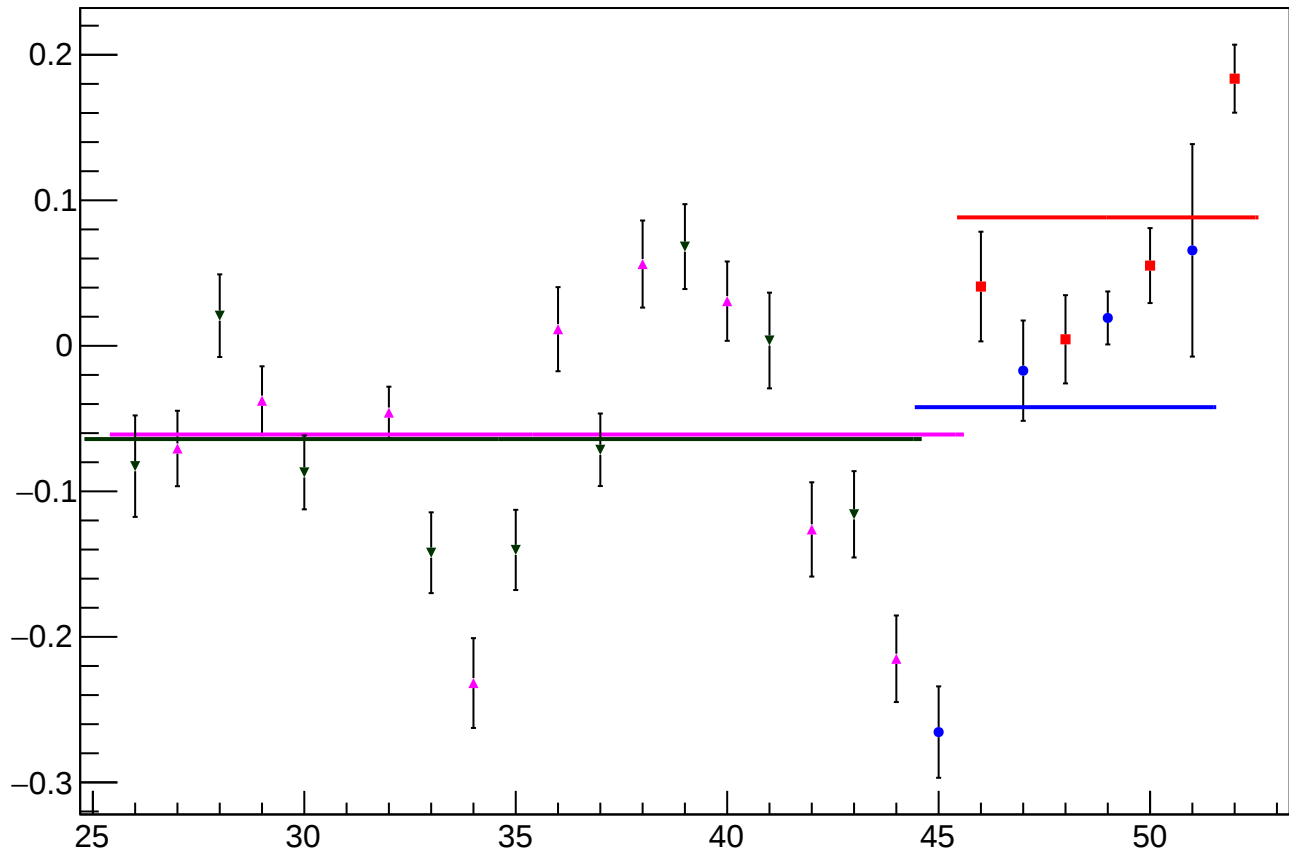
Right Out: 0.000+/-0.003  $\chi^2/\text{NDF}$ : 2.0/3

Left In: 0.002+/-0.002  $\chi^2/\text{NDF}$ : 272.2/8

-0.006+/-0.002  $\chi^2/\text{NDF}$ : 281.5/12

0.002+/-0.002  $\chi^2/\text{NDF}$ : 274.7/12

reg\_bcm\_dg\_us\_ds\_dd\_diff\_bpm4aX\_slope vs slug



Right In:  $-0.042 \pm 0.014$   $\chi^2/\text{NDF}: 64.6/3$

Left Out:  $-0.064 \pm 0.010$   $\chi^2/\text{NDF}: 53.5/8$

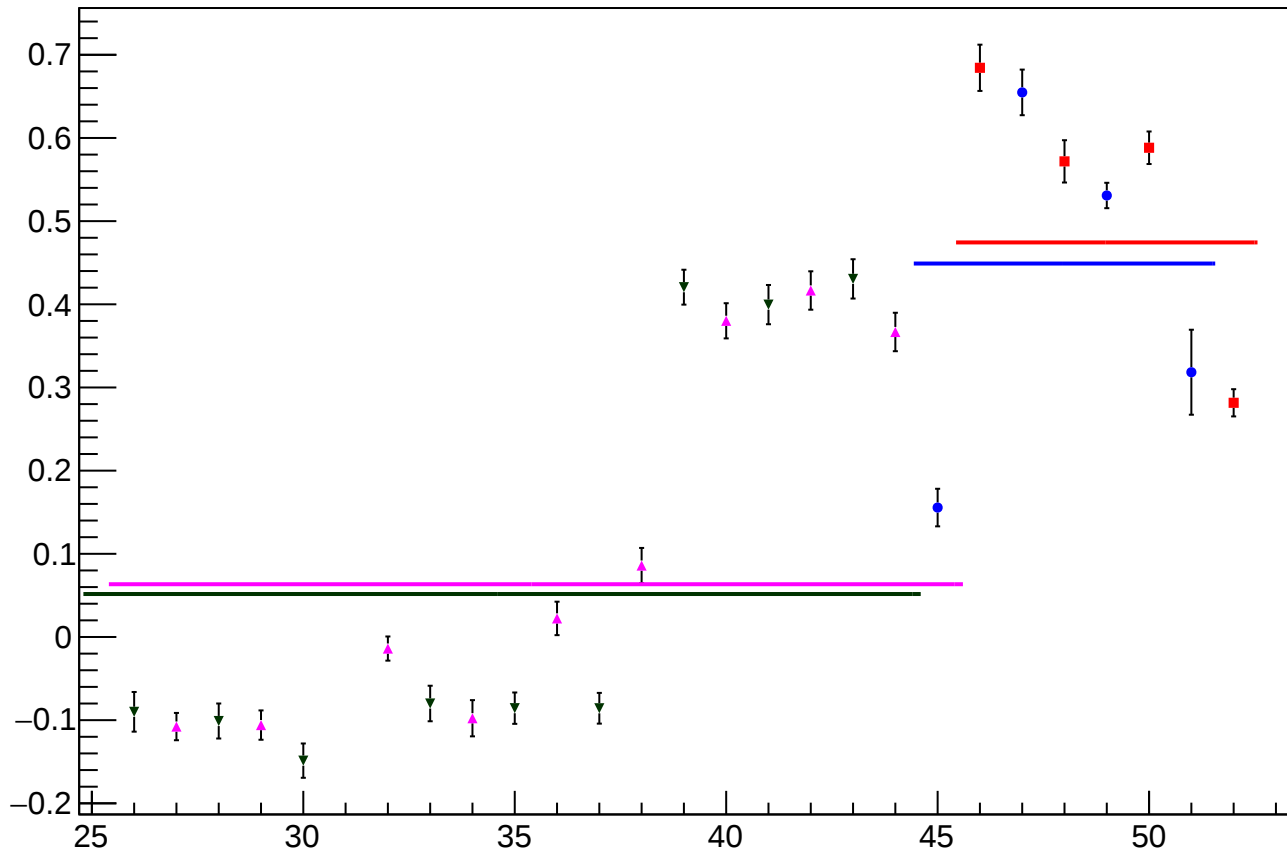
Right Out:  $0.088 \pm 0.014$   $\chi^2/\text{NDF}: 27.5/3$

Left In:  $-0.061 \pm 0.009$   $\chi^2/\text{NDF}: 96.2/8$

$-0.057 \pm 0.008$   $\chi^2/\text{NDF}: 119.7/12$

$-0.019 \pm 0.007$   $\chi^2/\text{NDF}: 206.1/12$

# reg\_bcm\_dg\_us\_ds\_dd\_diff\_bpm4aY\_slope vs slug



Right In: 0.449 $\pm$ 0.011  $\chi^2$ /NDF: 260.3/3

0.164 $\pm$ 0.006  $\chi^2$ /NDF: 2273.9/12

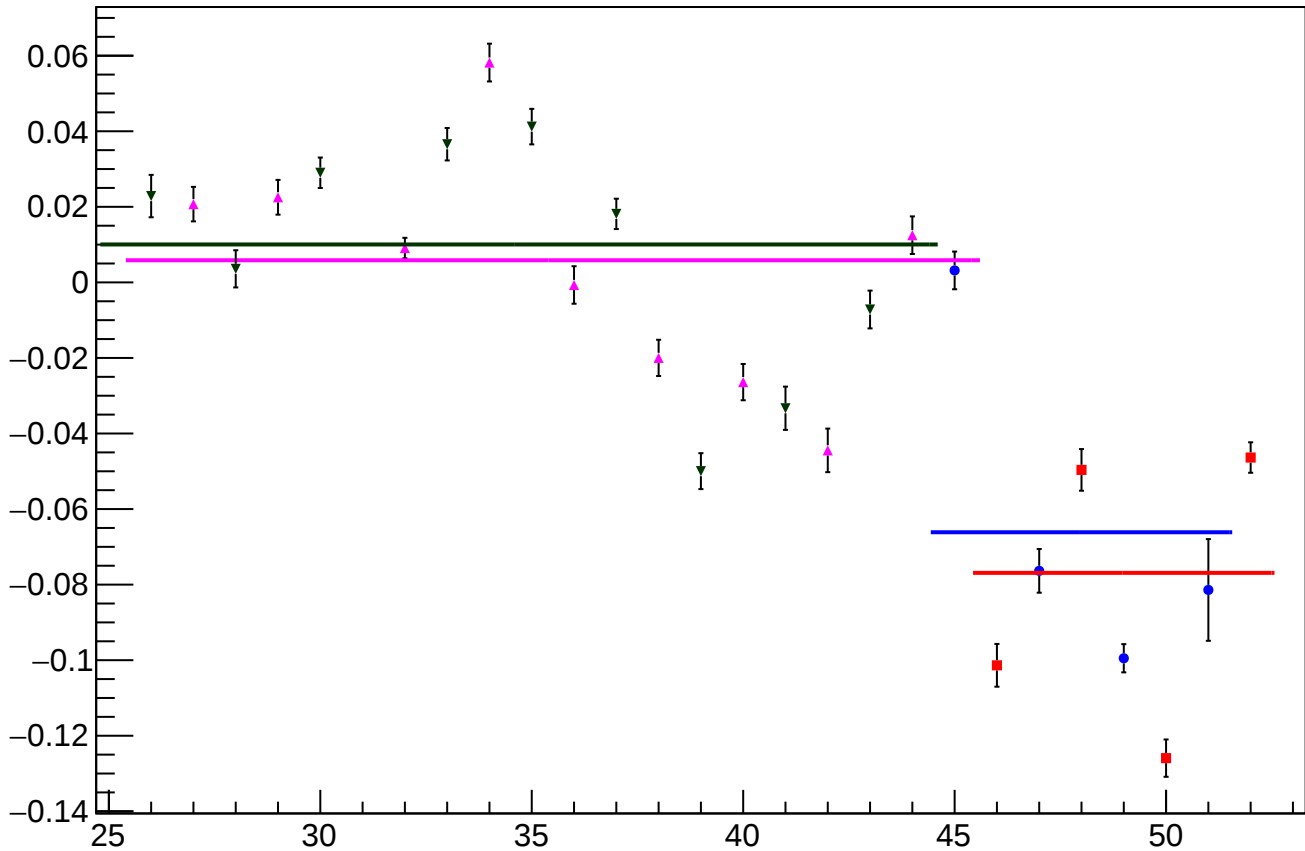
Left Out: 0.052 $\pm$ 0.007  $\chi^2$ /NDF:1112.2/8

Right Out: 0.474 $\pm$ 0.010  $\chi^2$ /NDF: 244.4/3

0.176 $\pm$ 0.005  $\chi^2$ /NDF: 2292.2/12

Left In: 0.063 $\pm$ 0.006  $\chi^2$ /NDF:919.9/8

# reg\_bcm\_dg\_us\_ds\_dd\_diff\_bpm4eX\_slope vs slug



Right In: -0.066+/-0.003  $\chi^2/\text{NDF}$ : 277.1/3

Left Out: 0.010+/-0.002  $\chi^2/\text{NDF}$ : 343.5/8

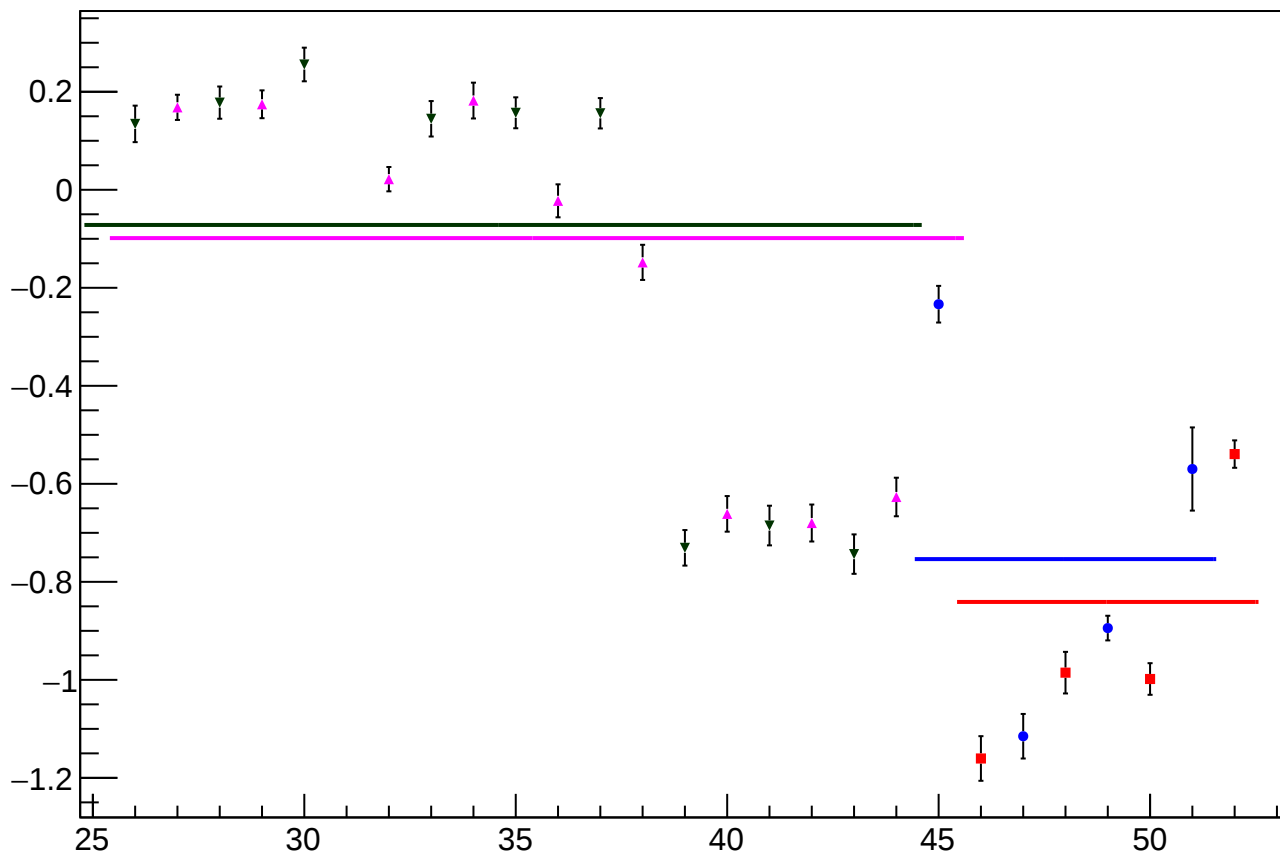
Right Out: -0.077+/-0.002  $\chi^2/\text{NDF}$ : 199.0/3

Left In: 0.006+/-0.001  $\chi^2/\text{NDF}$ : 288.4/8

-0.010+/-0.001  $\chi^2/\text{NDF}$ : 1249.9/12

-0.016+/-0.001  $\chi^2/\text{NDF}$ : 1328.9/12

# reg\_bcm\_dg\_us\_ds\_dd\_diff\_bpm4eY\_slope vs slug



Right In:  $-0.754 \pm 0.019$   $\chi^2/\text{NDF}$ : 292.5/3

Left Out:  $-0.072 \pm 0.012$   $\chi^2/\text{NDF}$ : 1160.0/8

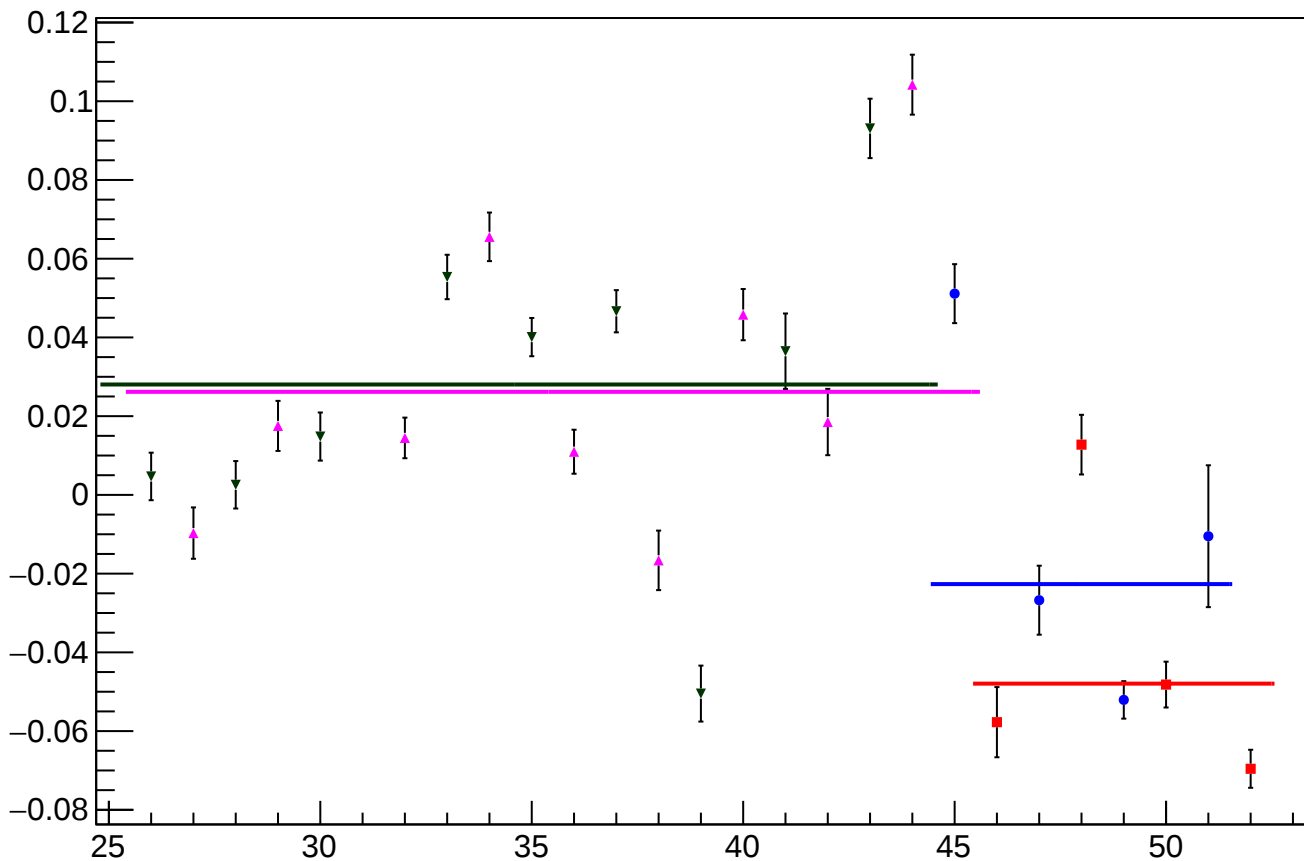
Right Out:  $-0.841 \pm 0.017$   $\chi^2/\text{NDF}$ : 200.7/3

Left In:  $-0.099 \pm 0.011$   $\chi^2/\text{NDF}$ : 947.3/8

$-0.267 \pm 0.010$   $\chi^2/\text{NDF}$ : 2421.4/12

$-0.298 \pm 0.009$   $\chi^2/\text{NDF}$ : 2467.1/12

# reg\_bcm\_dg\_us\_ds\_dd\_diff\_bpm11X\_slope vs slug



Right In:  $-0.023 \pm 0.004$   $\chi^2/\text{NDF}$ : 135.9/3

Left Out:  $0.028 \pm 0.002$   $\chi^2/\text{NDF}$ : 276.2/8

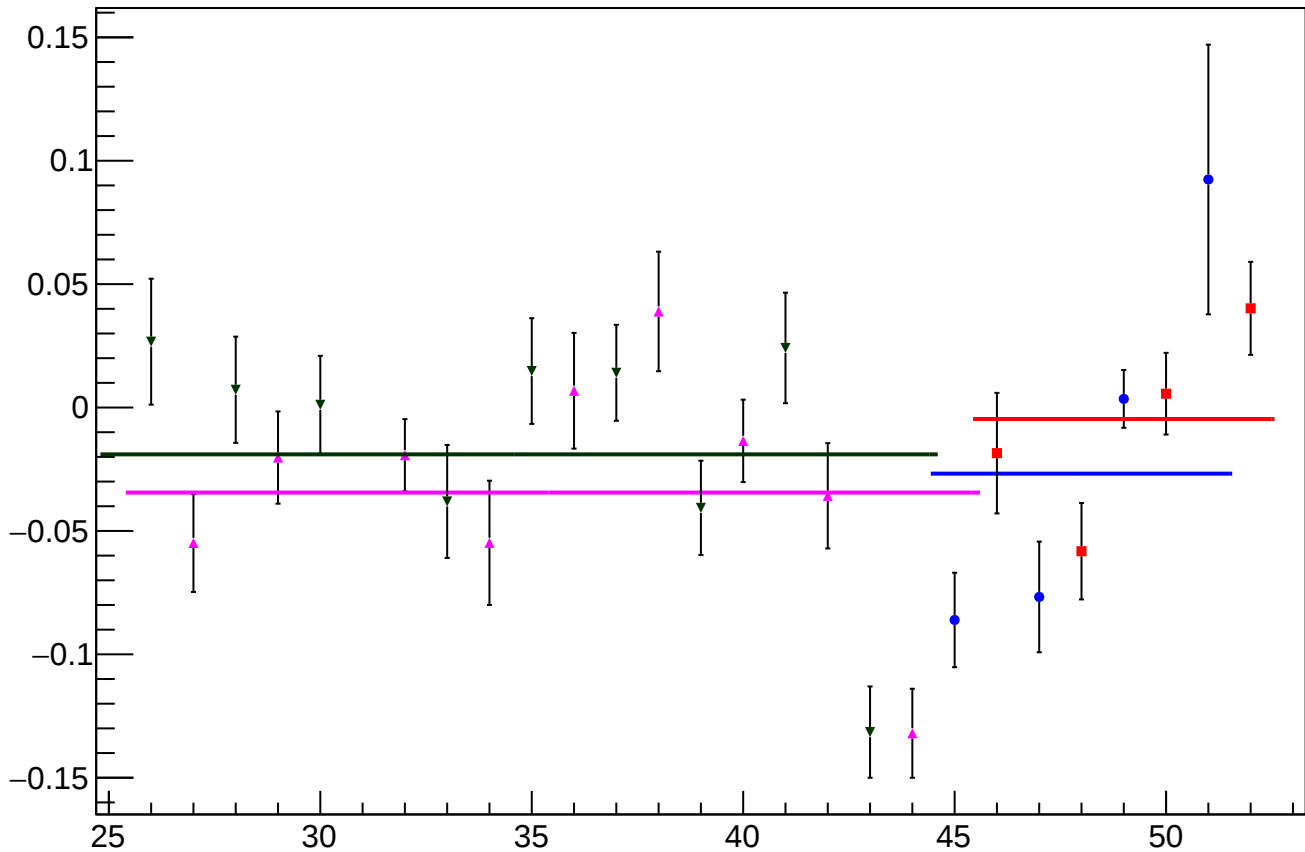
Right Out:  $-0.048 \pm 0.003$   $\chi^2/\text{NDF}$ : 85.4/3

Left In:  $0.026 \pm 0.002$   $\chi^2/\text{NDF}$ : 232.3/8

$0.016 \pm 0.002$   $\chi^2/\text{NDF}$ : 563.4/12

$0.002 \pm 0.002$   $\chi^2/\text{NDF}$ : 699.7/12

reg\_bcm\_dg\_ds\_ds\_dd\_diff\_bpm4aX\_slope vs slug



Right In: -0.027 $\pm$ 0.009  $\chi^2/\text{NDF}$ : 26.0/3

Left Out: -0.019 $\pm$ 0.007  $\chi^2/\text{NDF}$ : 53.8/8

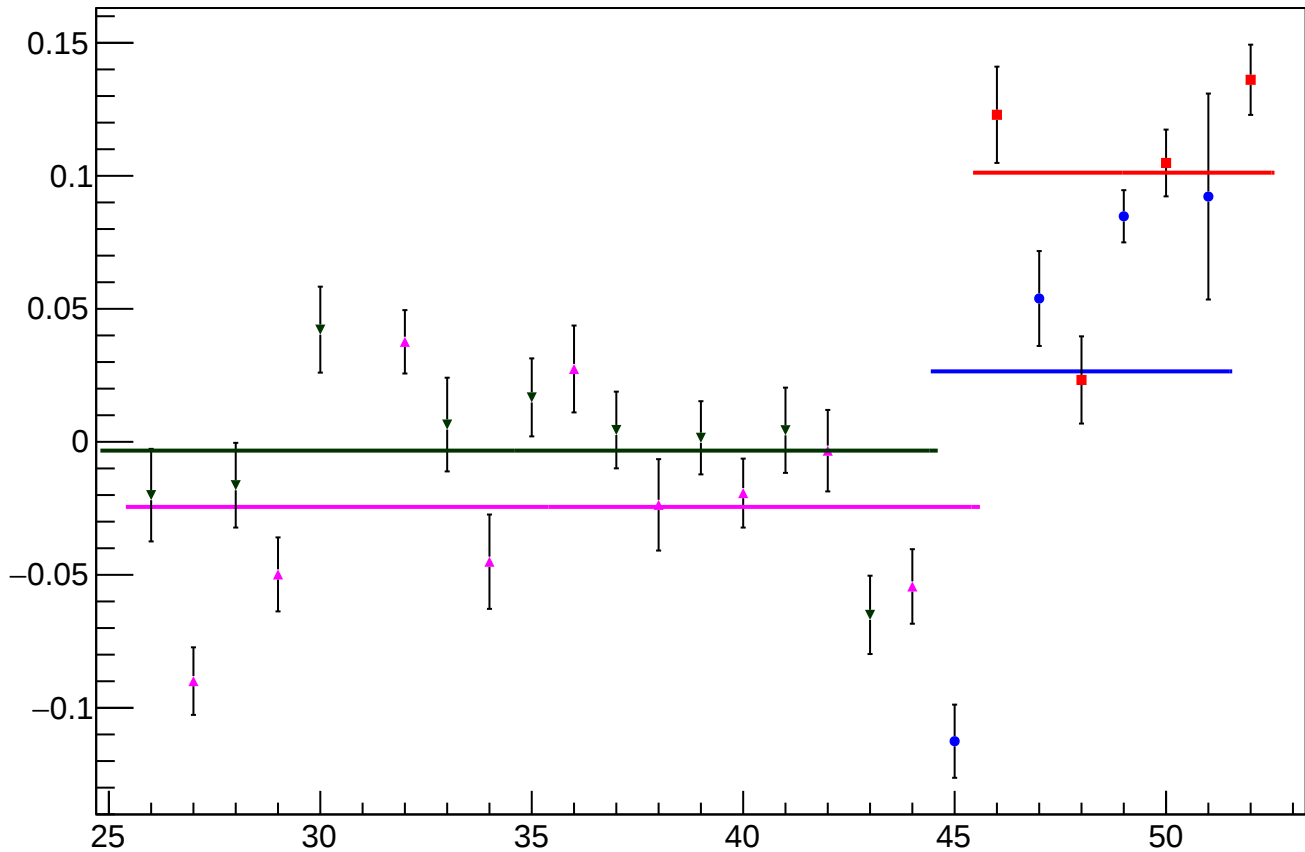
Right Out: -0.005 $\pm$ 0.010  $\chi^2/\text{NDF}$ : 13.9/3

Left In: -0.034 $\pm$ 0.006  $\chi^2/\text{NDF}$ : 46.4/8

-0.022 $\pm$ 0.006  $\chi^2/\text{NDF}$ : 80.3/12

-0.025 $\pm$ 0.005  $\chi^2/\text{NDF}$ : 66.9/12

reg\_bcm\_dg\_ds\_ds\_dd\_diff\_bpm4aY\_slope vs slug



Right In:  $0.026 \pm 0.007$   $\chi^2/\text{NDF}: 142.7/3$

Left Out:  $-0.003 \pm 0.005$   $\chi^2/\text{NDF}: 29.9/8$

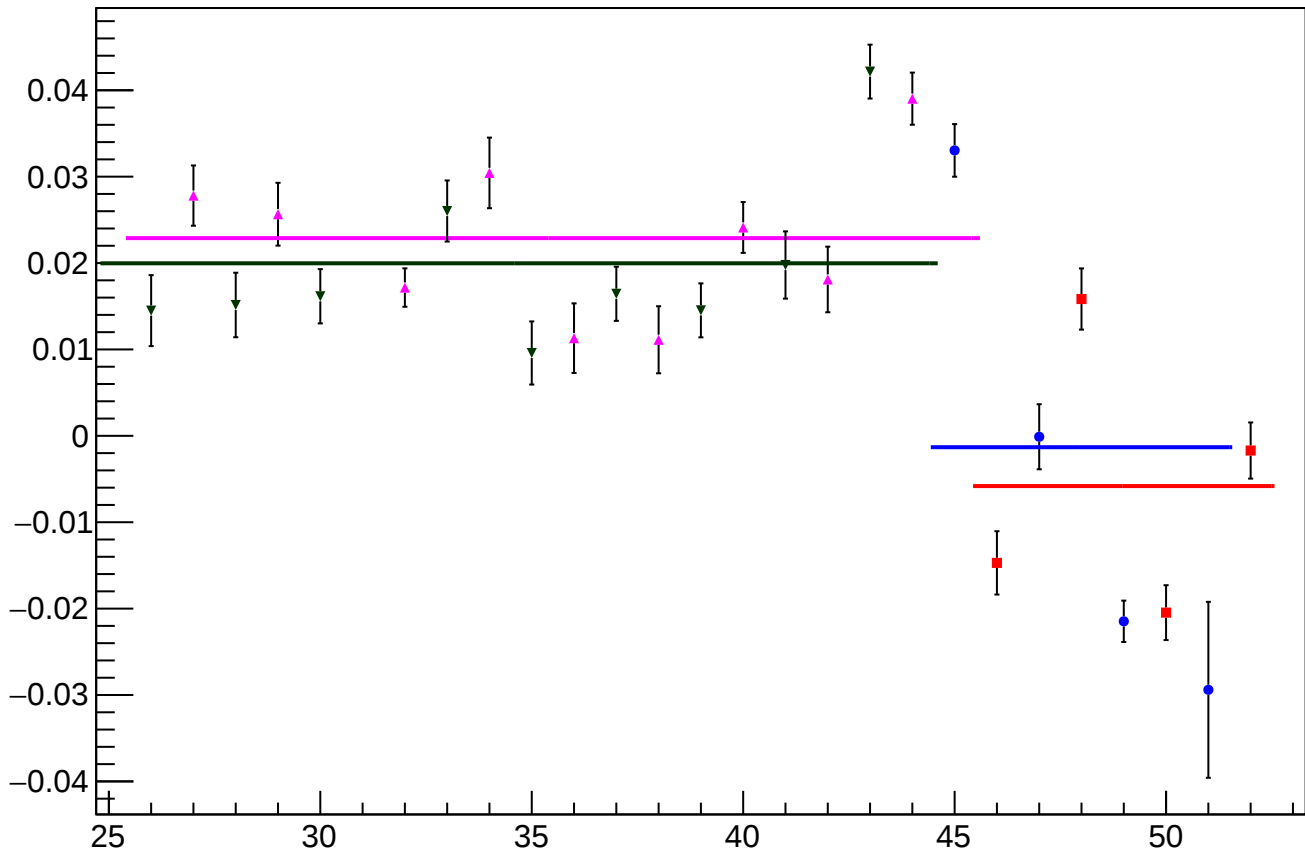
Right Out:  $0.101 \pm 0.007$   $\chi^2/\text{NDF}: 31.1/3$

Left In:  $-0.024 \pm 0.005$   $\chi^2/\text{NDF}: 75.1/8$

$0.007 \pm 0.004$   $\chi^2/\text{NDF}: 184.0/12$

$0.013 \pm 0.004$   $\chi^2/\text{NDF}: 314.7/12$

# reg\_bcm\_dg\_ds\_ds\_dd\_diff\_bpm4eX\_slope vs slug



Right In: -0.001 $\pm$ 0.002  $\chi^2$ /NDF: 205.8/3

Left Out: 0.020 $\pm$ 0.001  $\chi^2$ /NDF:70.9/8

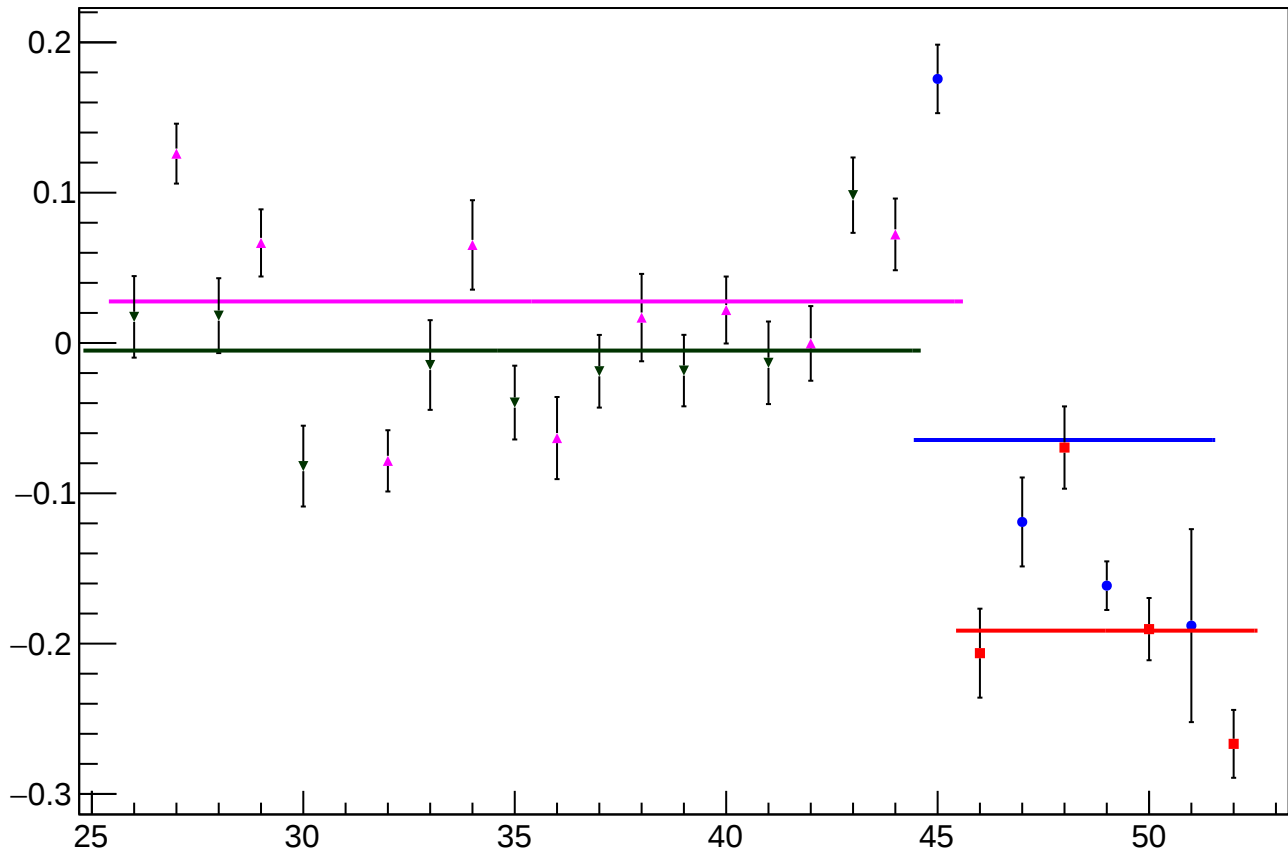
Right Out: -0.006 $\pm$ 0.002  $\chi^2$ /NDF: 66.1/3

Left In: 0.023 $\pm$ 0.001  $\chi^2$ /NDF:60.5/8

0.013 $\pm$ 0.001  $\chi^2$ /NDF: 387.9/12

0.014 $\pm$ 0.001  $\chi^2$ /NDF: 329.4/12

# reg\_bcm\_dg\_ds\_ds\_dd\_diff\_bpm4eY\_slope vs slug



Right In:  $-0.065 \pm 0.012$   $\chi^2/\text{NDF}: 154.2/3$

Left Out:  $-0.005 \pm 0.009$   $\chi^2/\text{NDF}: 29.5/8$

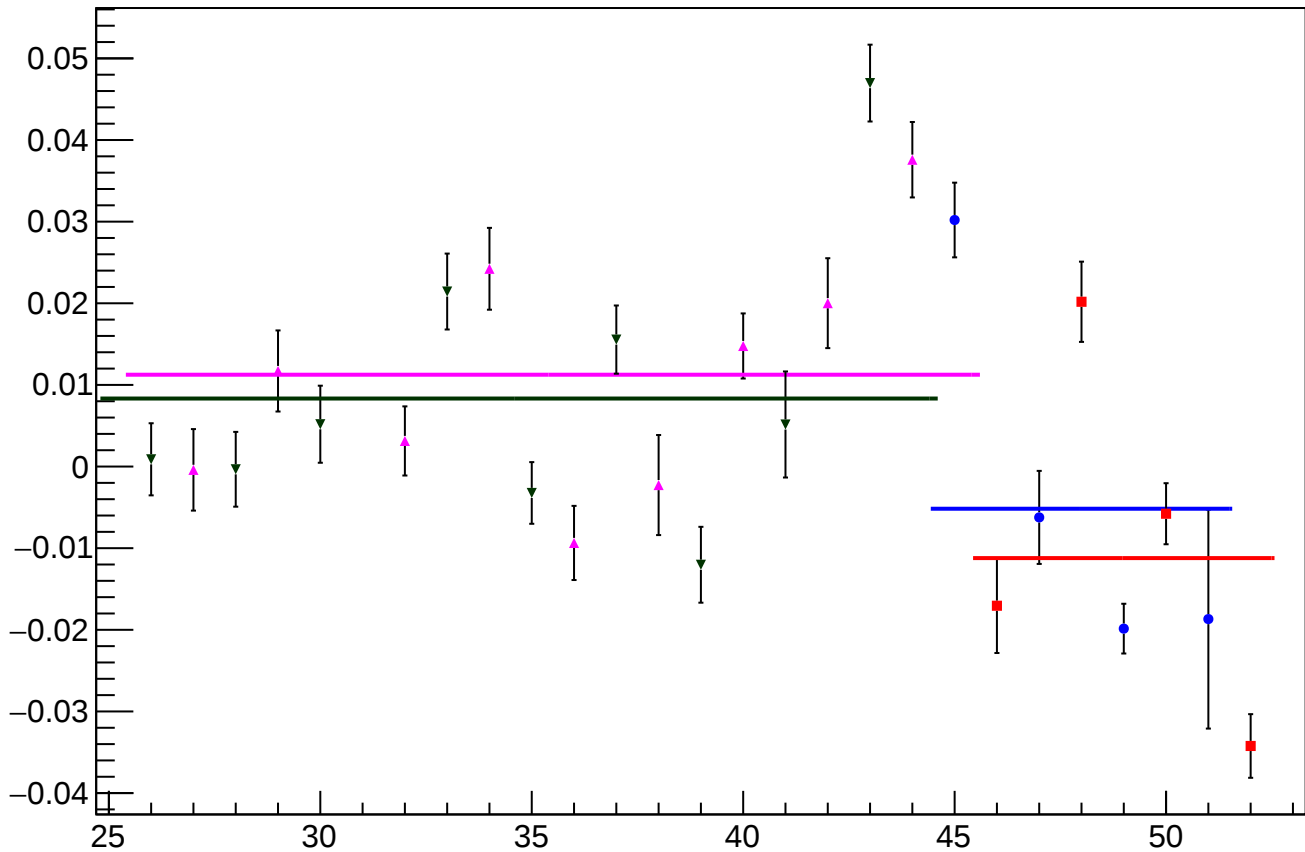
Right Out:  $-0.191 \pm 0.012$   $\chi^2/\text{NDF}: 31.2/3$

Left In:  $0.028 \pm 0.008$   $\chi^2/\text{NDF}: 72.1/8$

$-0.026 \pm 0.007$   $\chi^2/\text{NDF}: 200.3/12$

$-0.038 \pm 0.007$   $\chi^2/\text{NDF}: 331.3/12$

reg\_bcm\_dg\_ds\_ds\_dd\_diff\_bpm11X\_slope vs slug



Right In:  $-0.005 \pm 0.002$   $\chi^2/\text{NDF}: 84.1/3$

Left Out:  $0.008 \pm 0.002$   $\chi^2/\text{NDF}: 114.0/8$

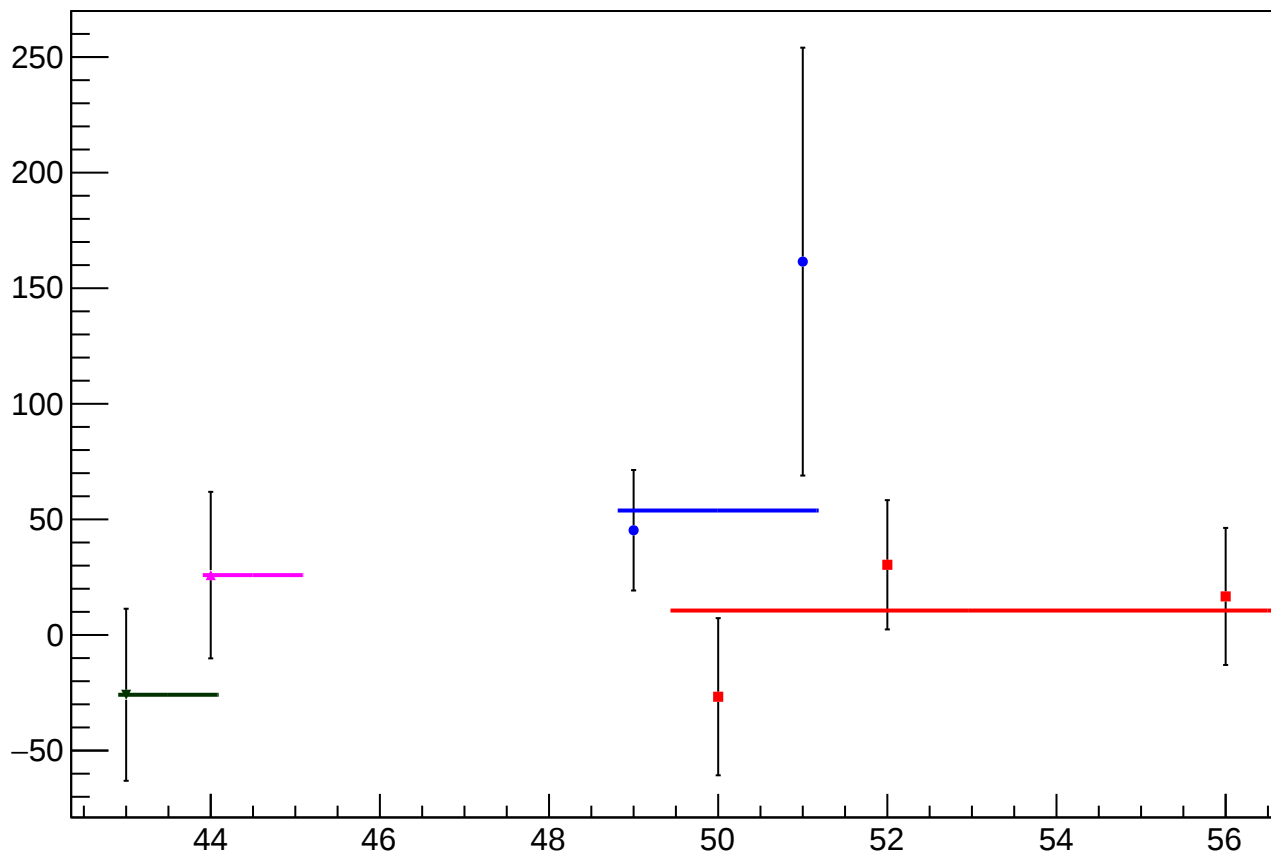
Right Out:  $-0.011 \pm 0.002$   $\chi^2/\text{NDF}: 78.8/3$

Left In:  $0.011 \pm 0.002$   $\chi^2/\text{NDF}: 77.1/8$

$0.004 \pm 0.001$   $\chi^2/\text{NDF}: 222.3/12$

$0.003 \pm 0.001$   $\chi^2/\text{NDF}: 224.7/12$

# bcm\_dg\_us\_dg\_ds\_dd\_mean vs slug



Right In: 53.839 $\pm$ 25.089  $\chi^2$ /NDF: 1.5/1

Left Out: -25.864 $\pm$ 37.215  $\chi^2$ /NDF: 0.0/0

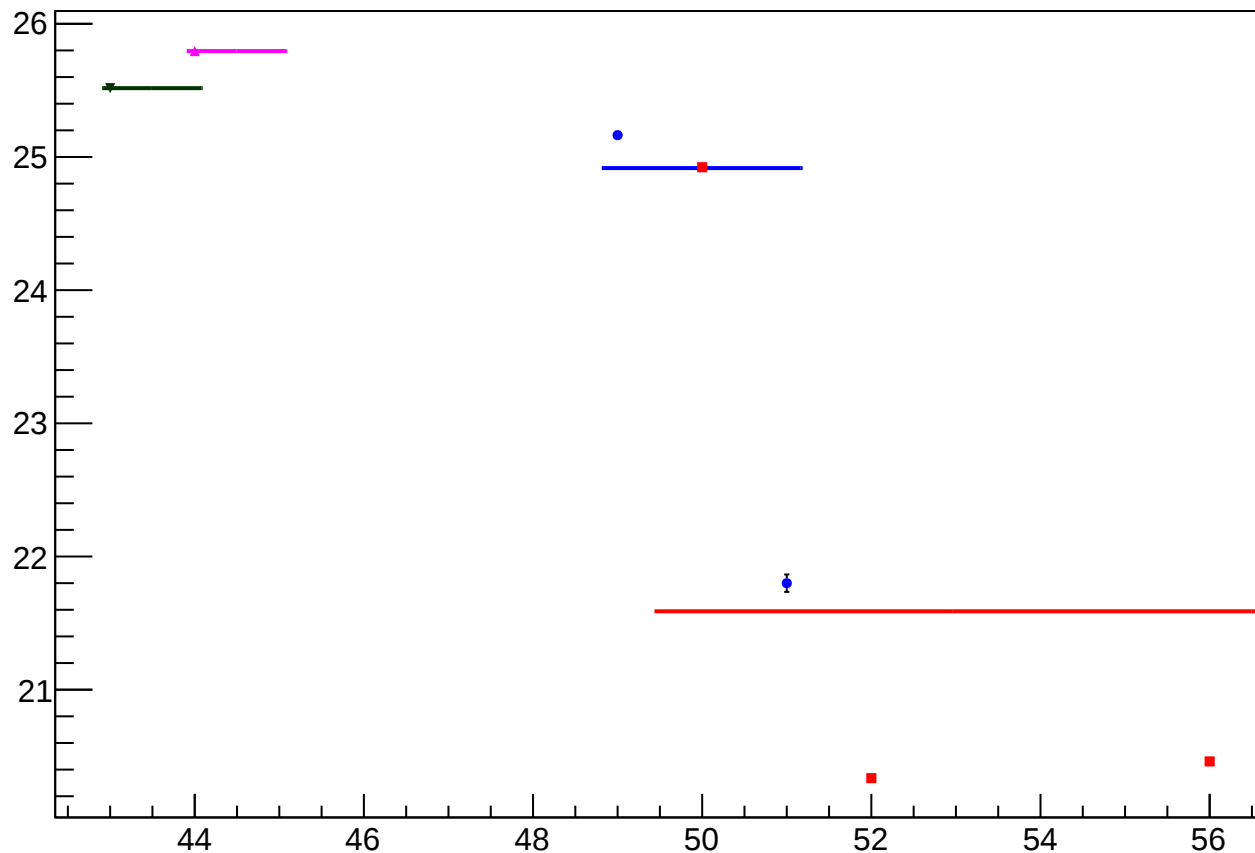
Right Out: 10.571 $\pm$ 17.455  $\chi^2$ /NDF: 1.7/2

Left In: 25.900 $\pm$ 36.022  $\chi^2$ /NDF: 0.0/0

28.934 $\pm$ 20.803  $\chi^2$ /NDF: 4.6/2

13.486 $\pm$ 15.708  $\chi^2$ /NDF: 1.9/3

# bcm\_dg\_us\_dg\_ds\_dd\_rms vs slug



Right In: 24.917 $\pm$ 0.018  $\chi^2$ /NDF: 2448.3/1

Left Out: 25.517 $\pm$ 0.026  $\chi^2$ /NDF: 0.0/0

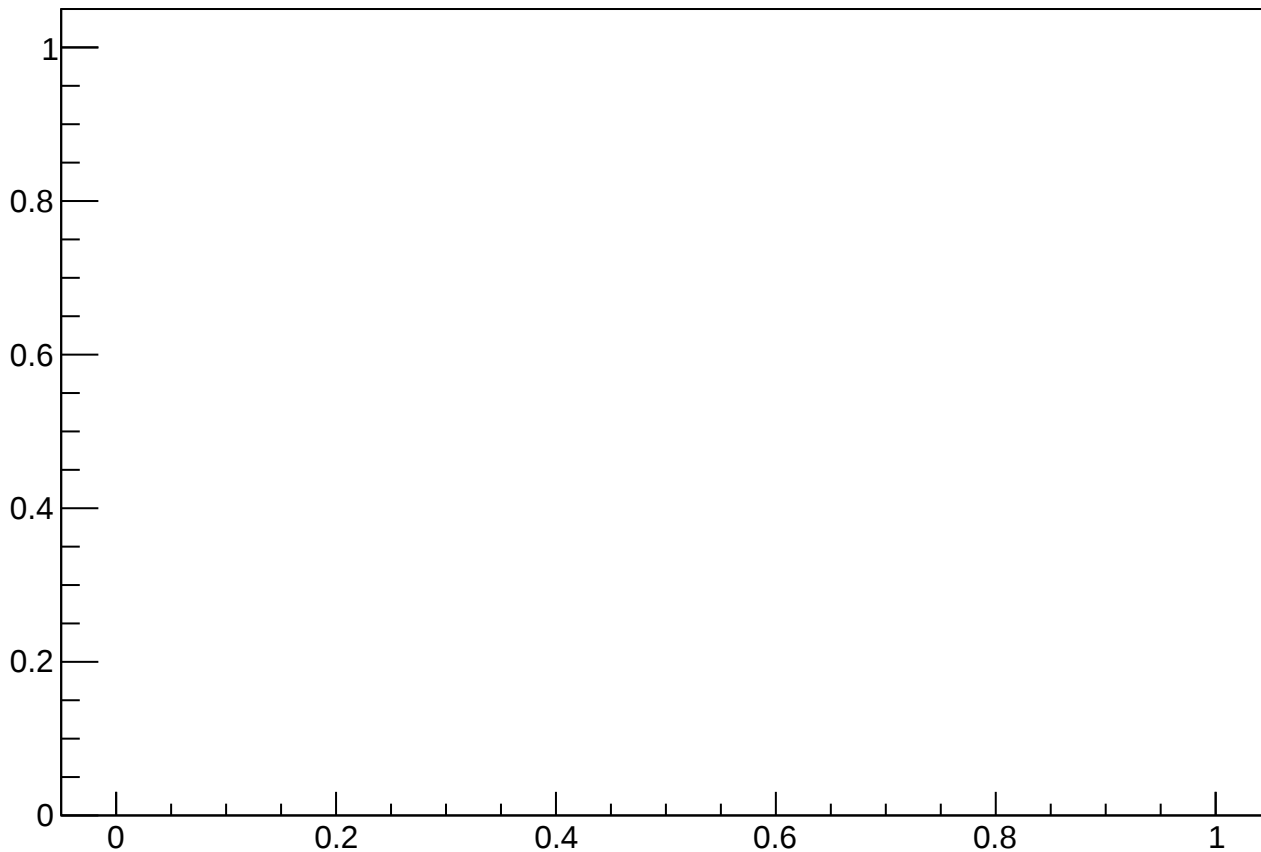
Right Out: 21.589 $\pm$ 0.012  $\chi^2$ /NDF: 26150.1/2

Left In: 25.795 $\pm$ 0.025  $\chi^2$ /NDF: 0.0/0

25.104 $\pm$ 0.015  $\chi^2$ /NDF: 2805.9/2

22.389 $\pm$ 0.011  $\chi^2$ /NDF: 48238.9/3

# bcm\_dg\_us\_dg\_ds\_avg\_mean vs slug



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

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

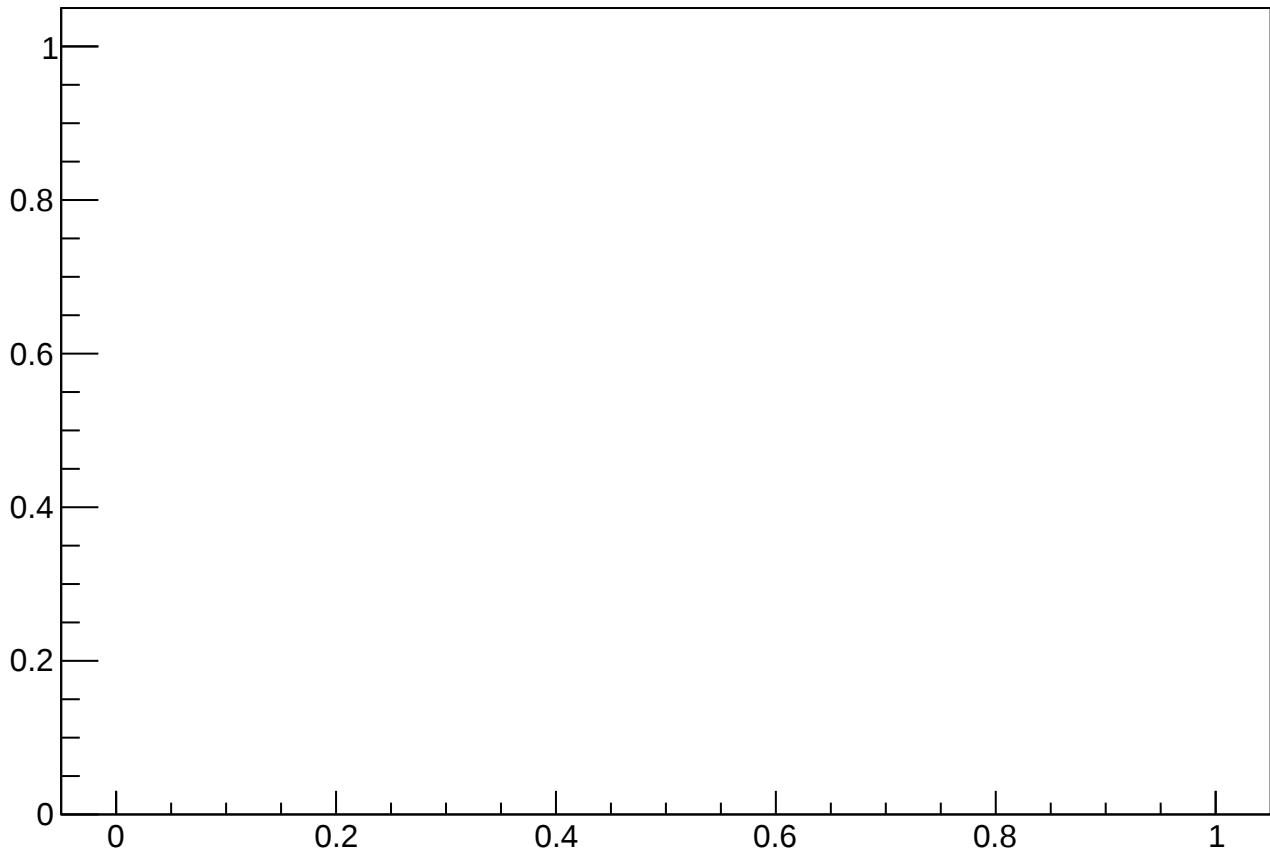
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# bcm\_dg\_us\_dg\_ds\_avg\_rms vs slug



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

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

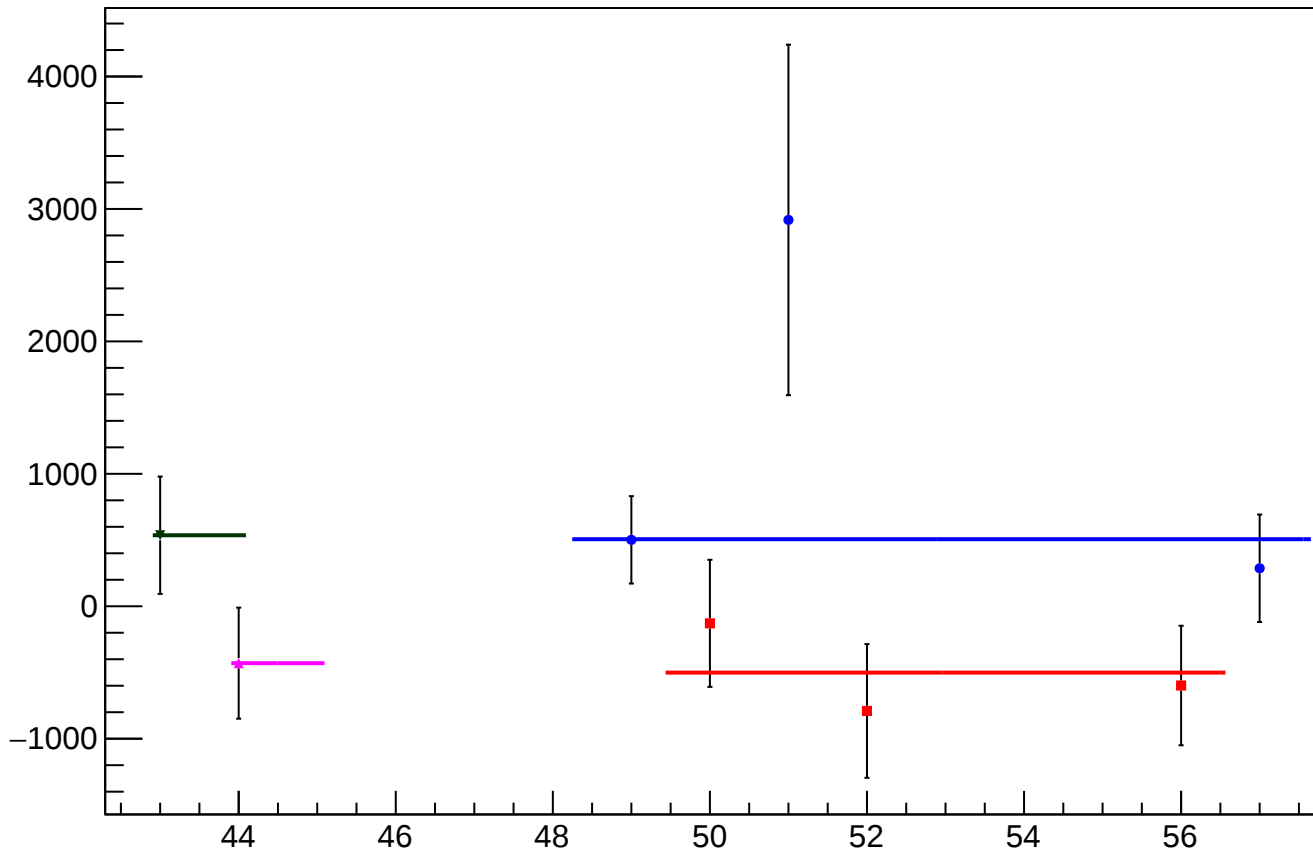
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# asym\_us\_agg\_avg\_mean vs slug



Right In: 506.248+/-251.350  $\chi^2/\text{NDF}$ : 3.6/2

Left Out: 536.234+/-443.159  $\chi^2/\text{NDF}$ : 0.0/0

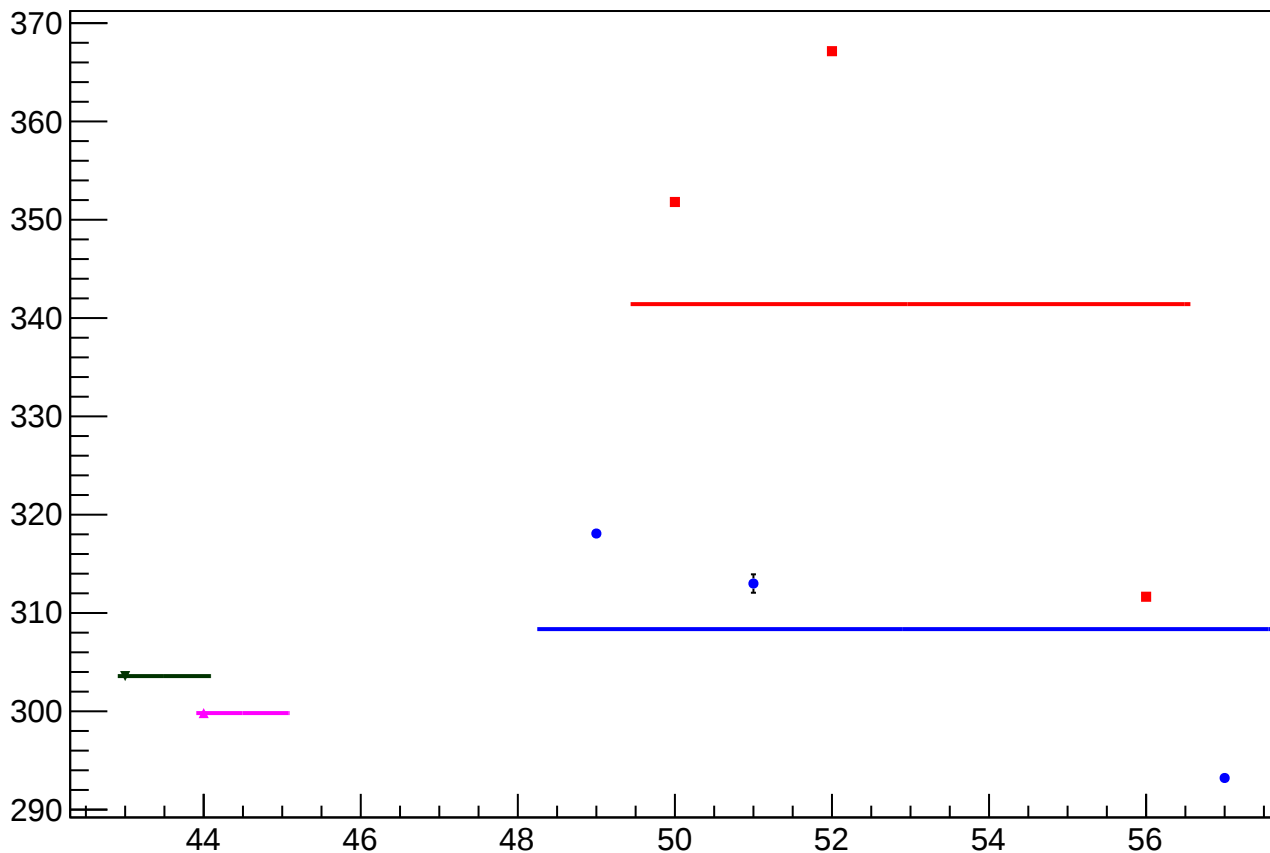
Right Out: -500.910+/-275.432  $\chi^2/\text{NDF}$ : 1.0/2

Left In: -429.667+/-419.215  $\chi^2/\text{NDF}$ : 0.0/0

513.546+/-218.632  $\chi^2/\text{NDF}$ : 3.6/3

-479.429+/-230.193  $\chi^2/\text{NDF}$ : 1.0/3

# asym\_us\_agg\_avg\_rms vs slug



Right In: 308.360+/-0.178  $\chi^2/\text{NDF}$ : 4546.1/2

Left Out: 303.582+/-0.313  $\chi^2/\text{NDF}$ : 0.0/0

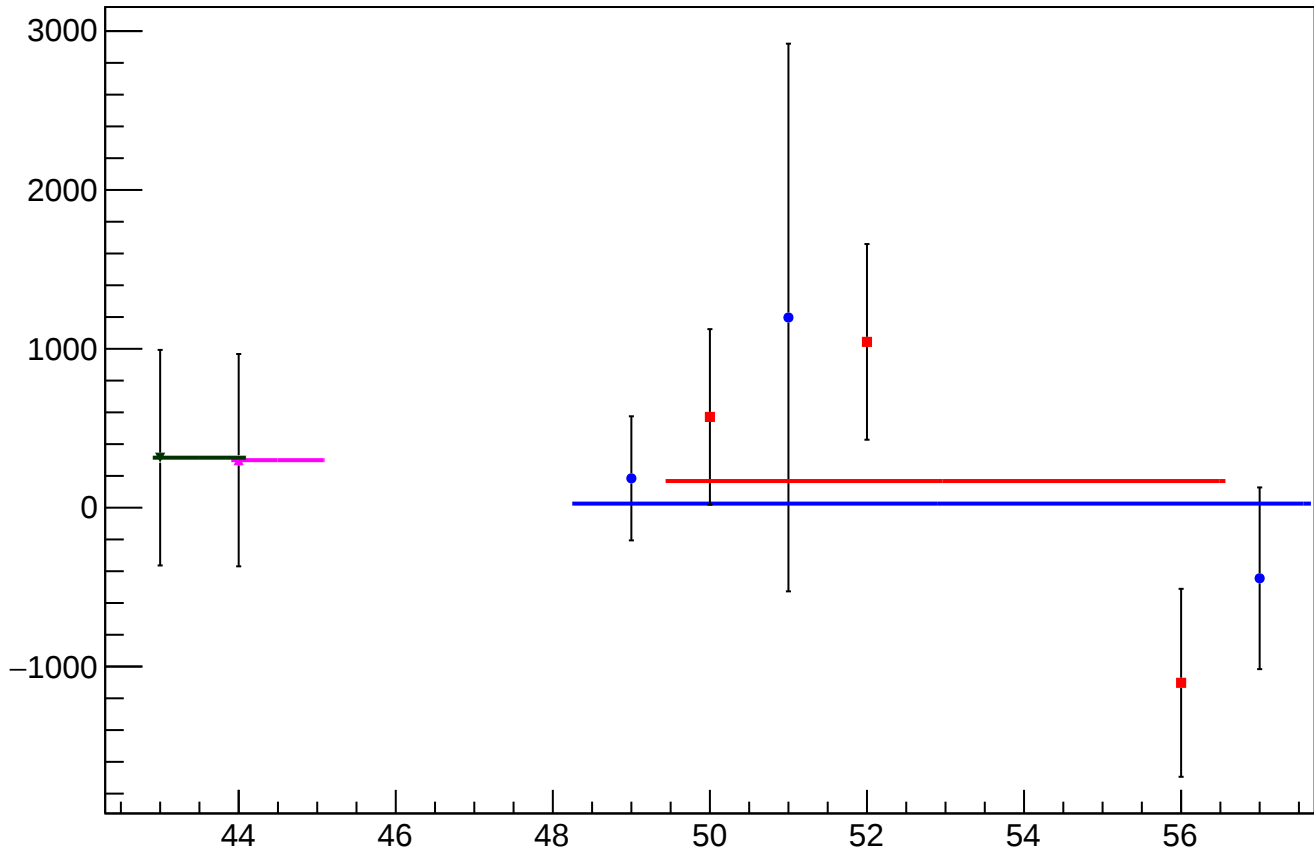
Right Out: 341.418+/-0.195  $\chi^2/\text{NDF}$ : 14835.4/2

Left In: 299.820+/-0.296  $\chi^2/\text{NDF}$ : 0.0/0

307.197+/-0.155  $\chi^2/\text{NDF}$ : 4722.0/3

328.875+/-0.163  $\chi^2/\text{NDF}$ : 28590.2/3

# asym\_us\_agg\_dd\_mean vs slug



Right In: 25.563+/-317.051  $\chi^2/\text{NDF}$ : 1.3/2

Left Out: 314.697+/-678.402  $\chi^2/\text{NDF}$ : 0.0/0

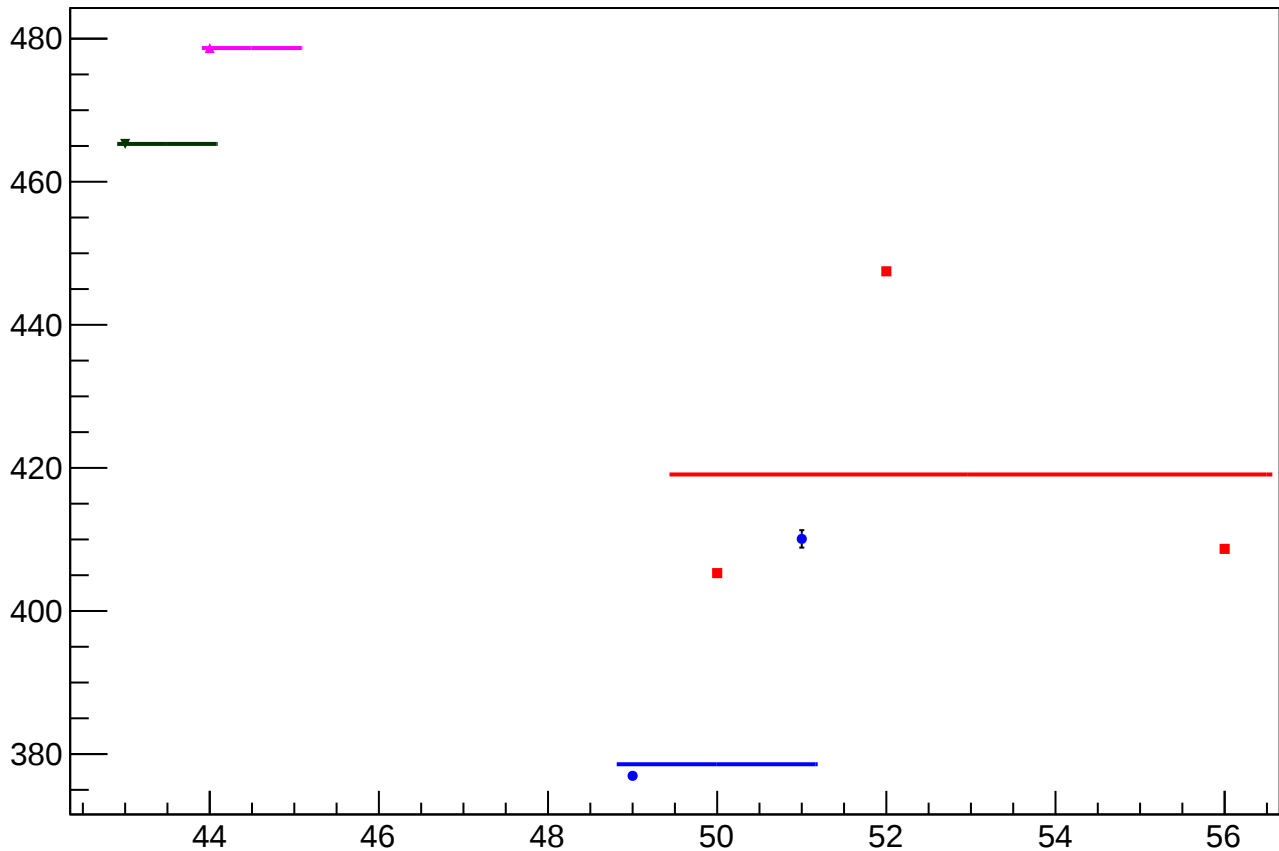
Right Out: 167.802+/-337.739  $\chi^2/\text{NDF}$ : 7.2/2

Left In: 299.068+/-668.301  $\chi^2/\text{NDF}$ : 0.0/0

77.394+/-287.231  $\chi^2/\text{NDF}$ : 1.5/3

194.507+/-301.433  $\chi^2/\text{NDF}$ : 7.2/3

# asym\_us\_agg\_dd\_rms vs slug



Right In:  $378.578 \pm 0.269$   $\chi^2/\text{NDF}$ : 702.1/1

Left Out:  $465.287 \pm 0.480$   $\chi^2/\text{NDF}$ : 0.0/0

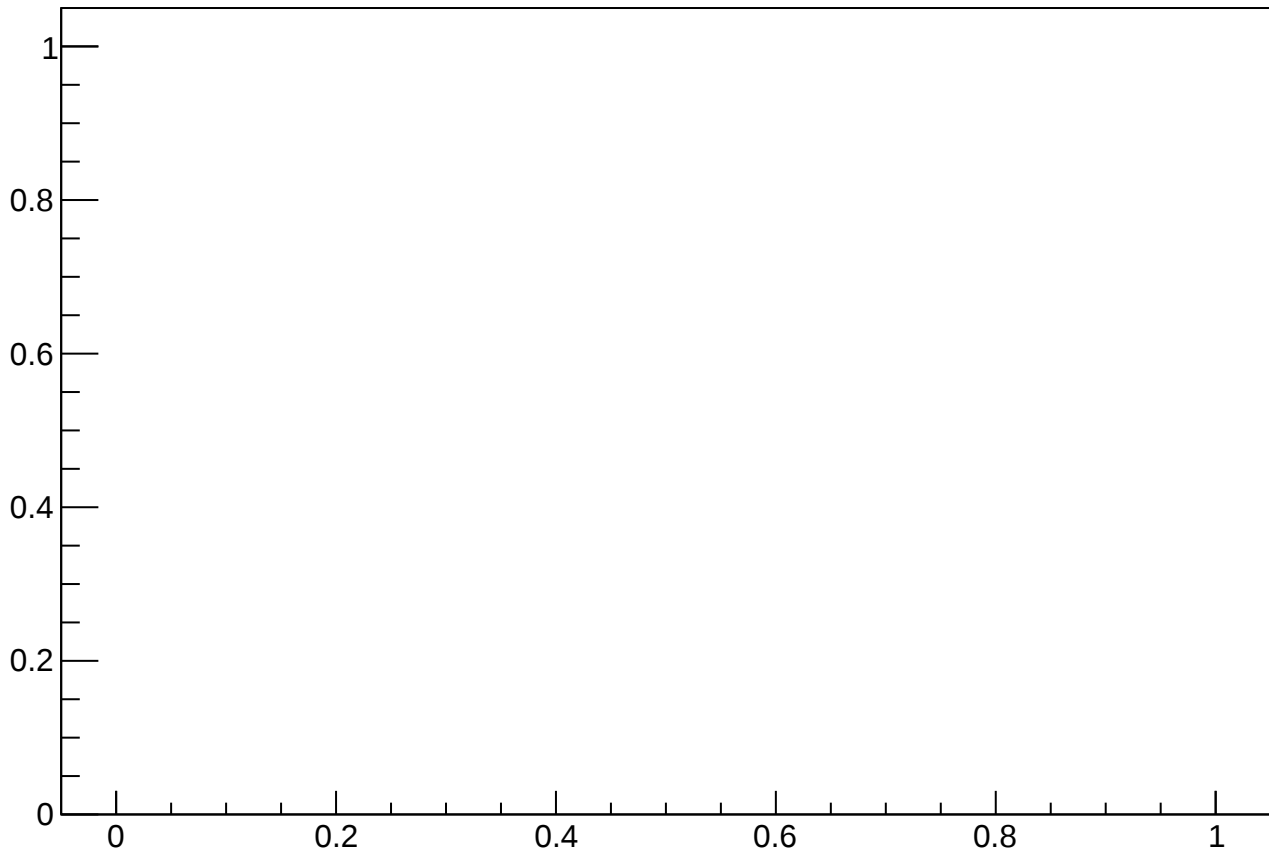
$399.365 \pm 0.235$   $\chi^2/\text{NDF}$ : 25542.2/2

Right Out:  $419.083 \pm 0.239$   $\chi^2/\text{NDF}$ : 6114.2/2

$431.209 \pm 0.213$   $\chi^2/\text{NDF}$ : 18786.7/3

Left In:  $478.688 \pm 0.473$   $\chi^2/\text{NDF}$ : 0.0/0

asym\_ds\_agg\_avg\_mean vs slug



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

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

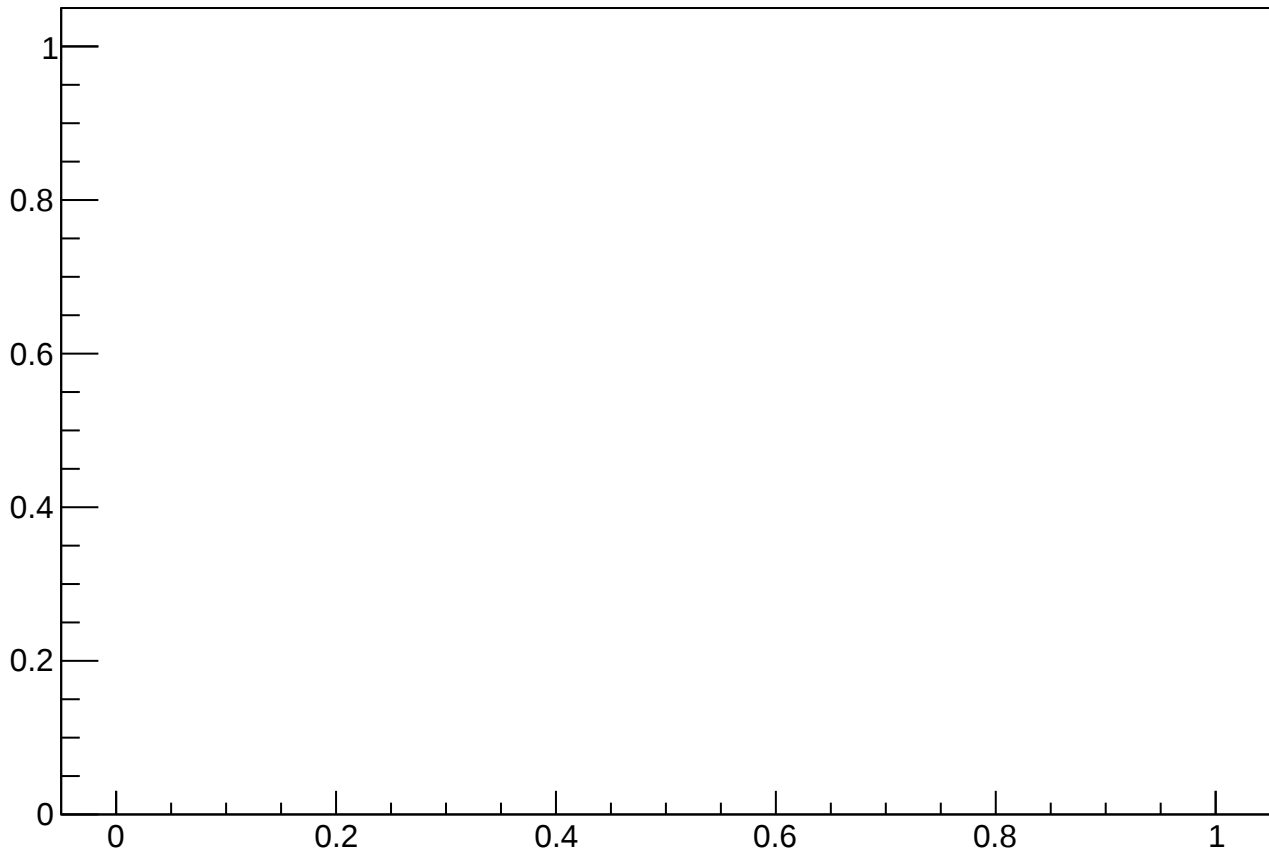
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

asym\_ds\_agg\_avg\_rms vs slug



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

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

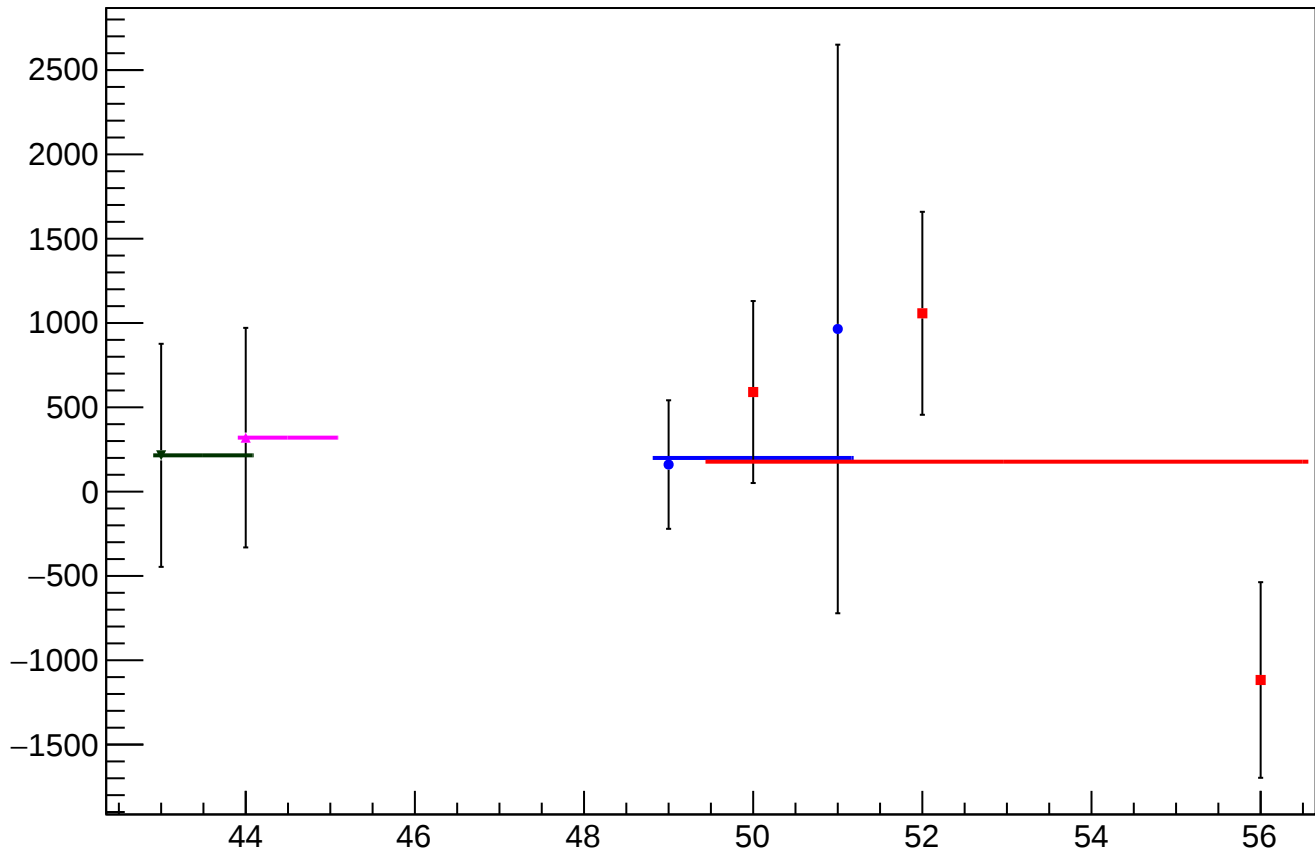
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# asym\_ds\_agg\_dd\_mean vs slug



Right In: 199.659 $\pm$ 371.792  $\chi^2$ /NDF: 0.2/1

Left Out: 215.223 $\pm$ 661.440  $\chi^2$ /NDF: 0.0/0

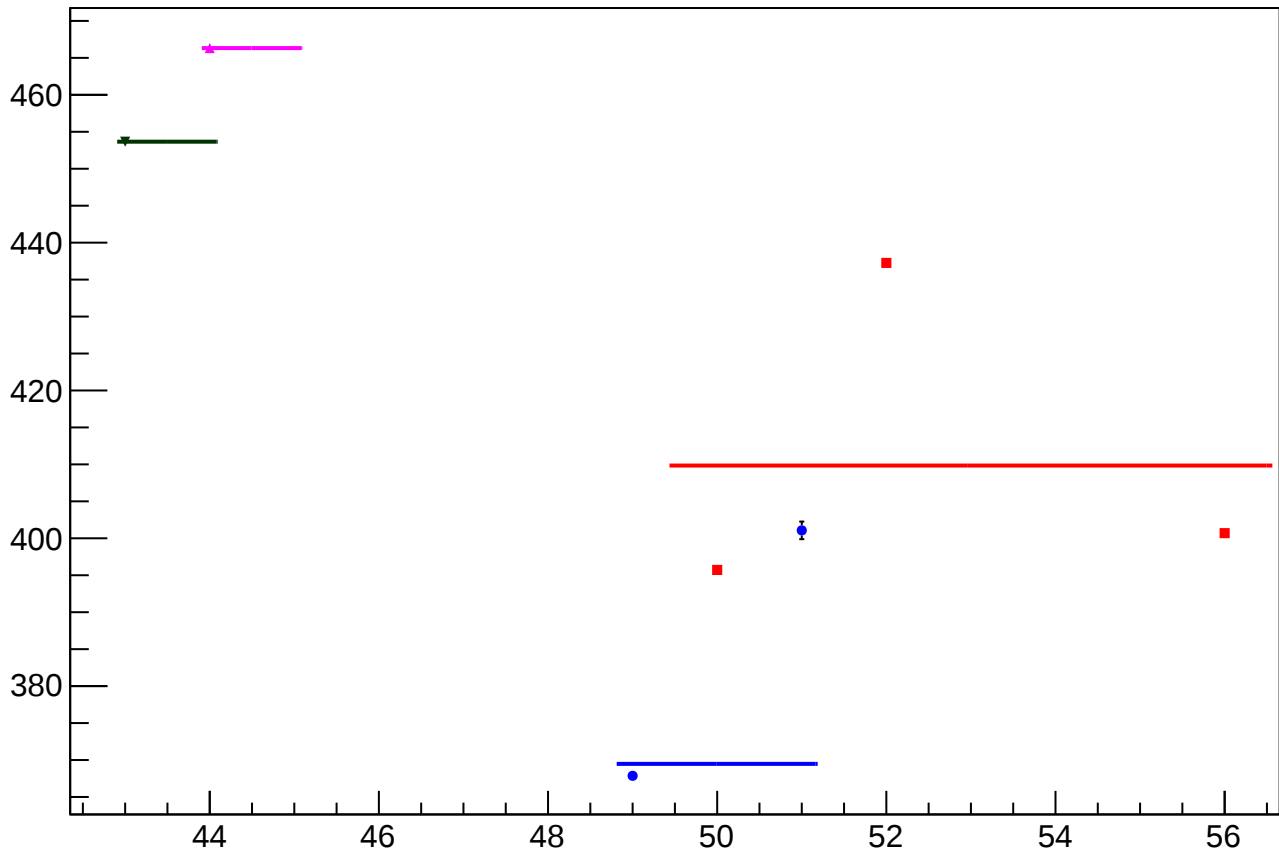
Right Out: 177.575 $\pm$ 330.292  $\chi^2$ /NDF: 7.7/2

Left In: 320.160 $\pm$ 651.039  $\chi^2$ /NDF: 0.0/0

203.396 $\pm$ 324.101  $\chi^2$ /NDF: 0.2/2

206.762 $\pm$ 294.553  $\chi^2$ /NDF: 7.7/3

# asym\_ds\_agg\_dd\_rms vs slug



Right In: 369.479+/-0.263  $\chi^2/\text{NDF}$ : 738.1/1

Left Out: 453.660+/-0.468  $\chi^2/\text{NDF}$ : 0.0/0

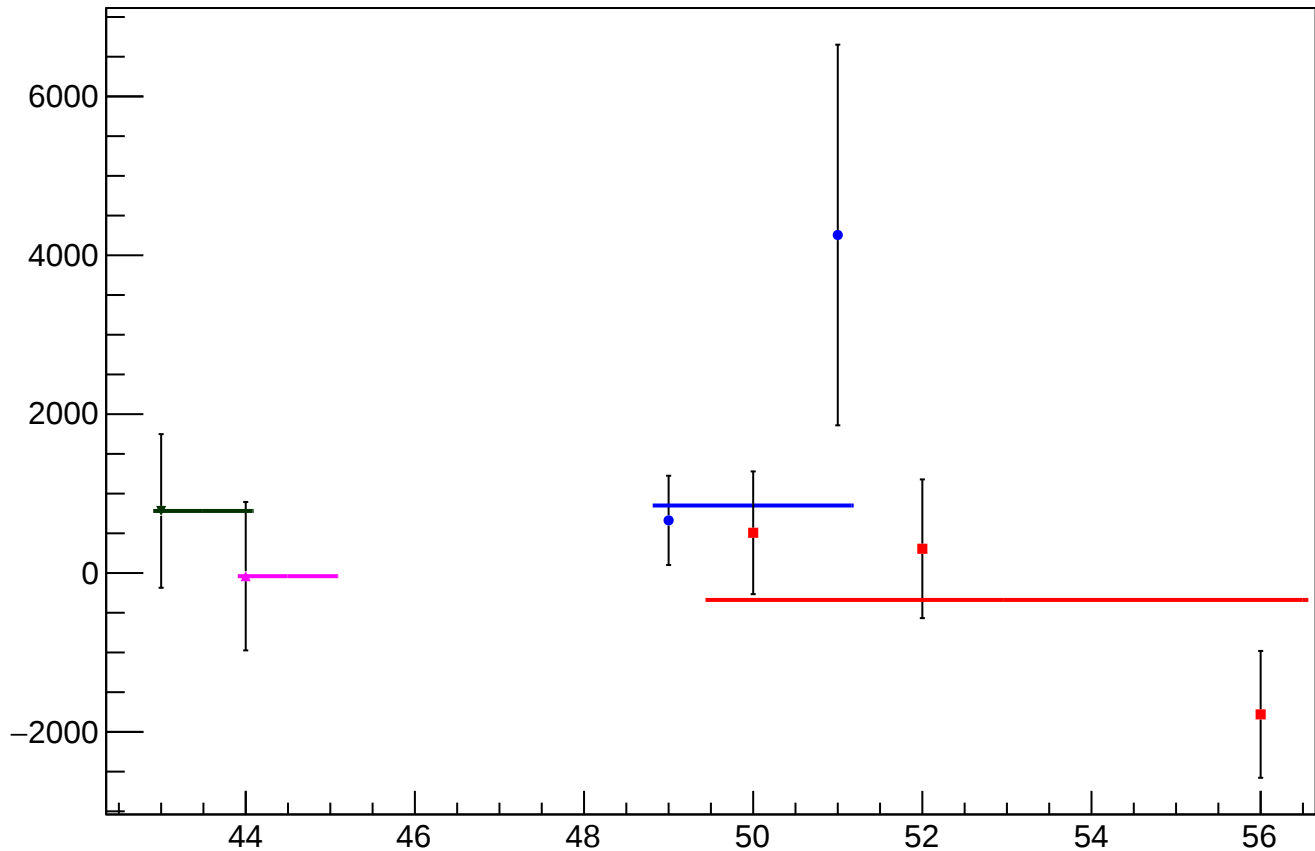
389.690+/-0.229  $\chi^2/\text{NDF}$ : 25355.4/2

Right Out: 409.843+/-0.234  $\chi^2/\text{NDF}$ : 6017.3/2

421.405+/-0.208  $\chi^2/\text{NDF}$ : 17990.2/3

Left In: 466.327+/-0.460  $\chi^2/\text{NDF}$ : 0.0/0

# asym\_left\_agg\_avg\_mean vs slug



Right In: 850.098 $\pm$ 547.072  $\chi^2/\text{NDF}$ : 2.1/1

Left Out: 781.614 $\pm$ 967.286  $\chi^2/\text{NDF}$ : 0.0/0

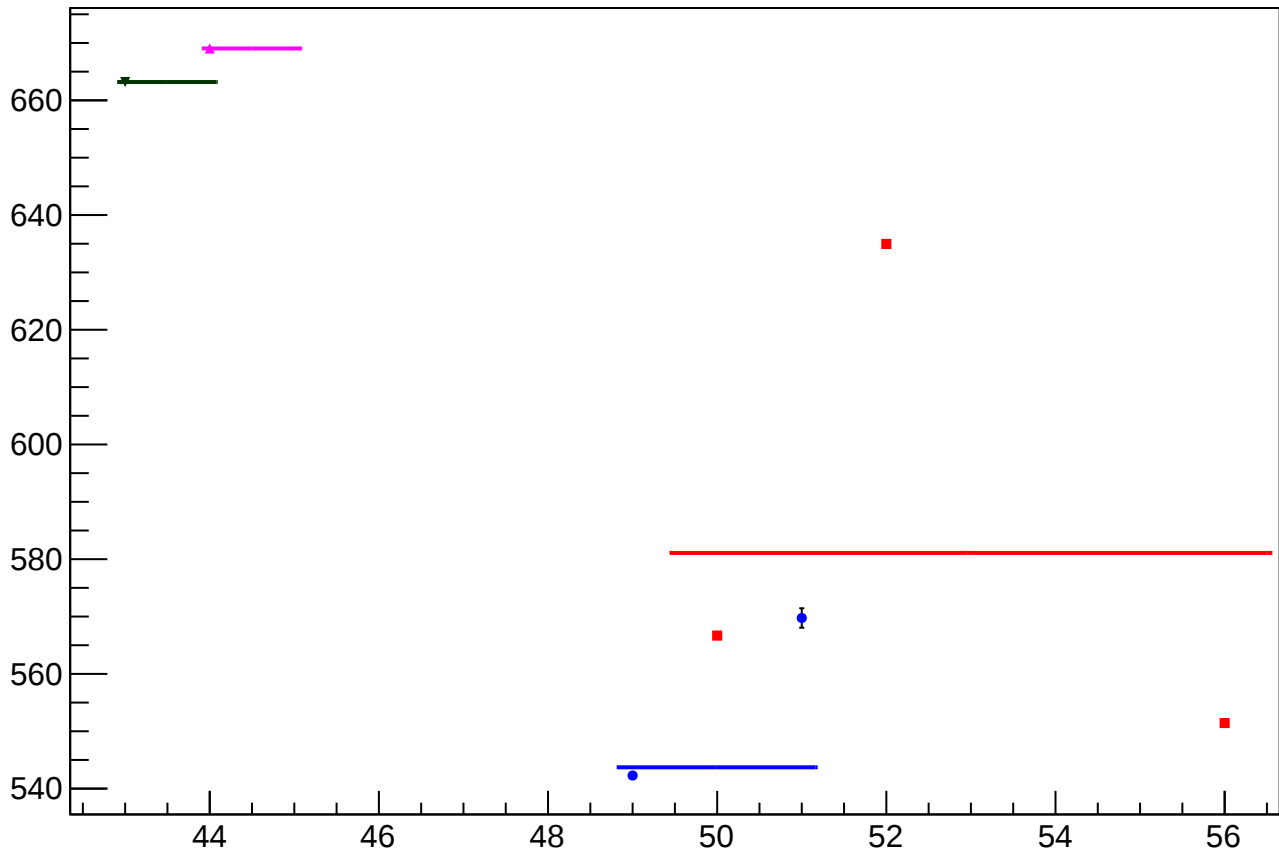
Right Out: -338.478 $\pm$ 468.564  $\chi^2/\text{NDF}$ : 5.0/2

Left In: -39.508 $\pm$ 934.410  $\chi^2/\text{NDF}$ : 0.0/0

833.501 $\pm$ 476.188  $\chi^2/\text{NDF}$ : 2.1/2

-278.406 $\pm$ 418.853  $\chi^2/\text{NDF}$ : 5.1/3

# asym\_left\_agg\_avg\_rms vs slug



Right In: 543.715 $\pm$ 0.387  $\chi^2/\text{NDF}$ : 249.0/1

Left Out: 663.190 $\pm$ 0.684  $\chi^2/\text{NDF}$ : 0.0/0

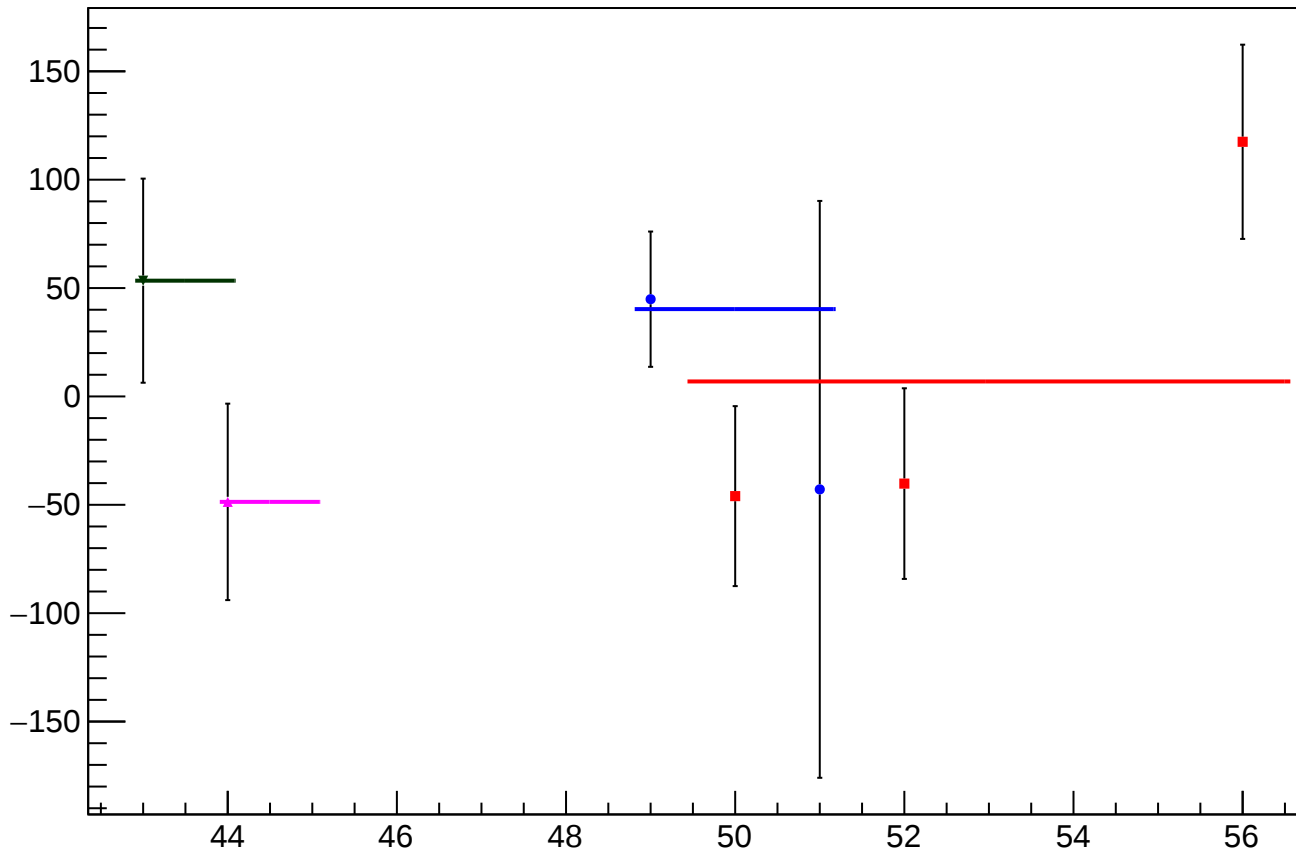
Right Out: 581.092 $\pm$ 0.331  $\chi^2/\text{NDF}$ : 11066.2/2

Left In: 669.043 $\pm$ 0.661  $\chi^2/\text{NDF}$ : 0.0/0

572.670 $\pm$ 0.337  $\chi^2/\text{NDF}$ : 23366.6/2

598.764 $\pm$ 0.296  $\chi^2/\text{NDF}$ : 25224.8/3

# asym\_left\_agg\_dd\_mean vs slug



Right In: 40.293+/-30.386  $\chi^2/\text{NDF}$ : 0.4/1

Left Out: 53.407+/-47.084  $\chi^2/\text{NDF}$ : 0.0/0

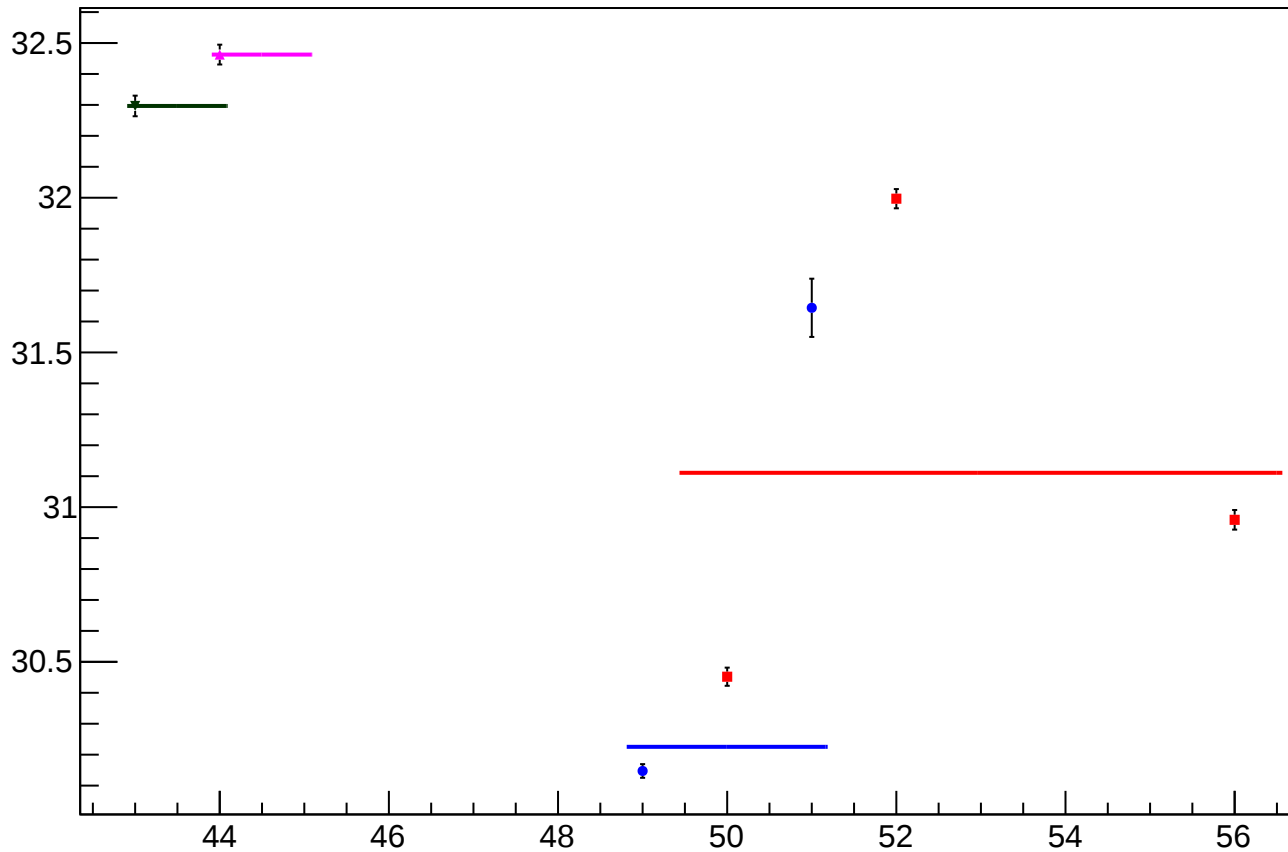
Right Out: 6.911+/-25.037  $\chi^2/\text{NDF}$ : 8.9/2

Left In: -48.651+/-45.318  $\chi^2/\text{NDF}$ : 0.0/0

44.149+/-25.531  $\chi^2/\text{NDF}$ : 0.5/2

-6.082+/-21.915  $\chi^2/\text{NDF}$ : 10.0/3

# asym\_left\_agg\_dd\_rms vs slug



Right In: 30.225 $\pm$ 0.021  $\chi^2$ /NDF: 239.9/1

Left Out: 32.297 $\pm$ 0.033  $\chi^2$ /NDF: 0.0/0

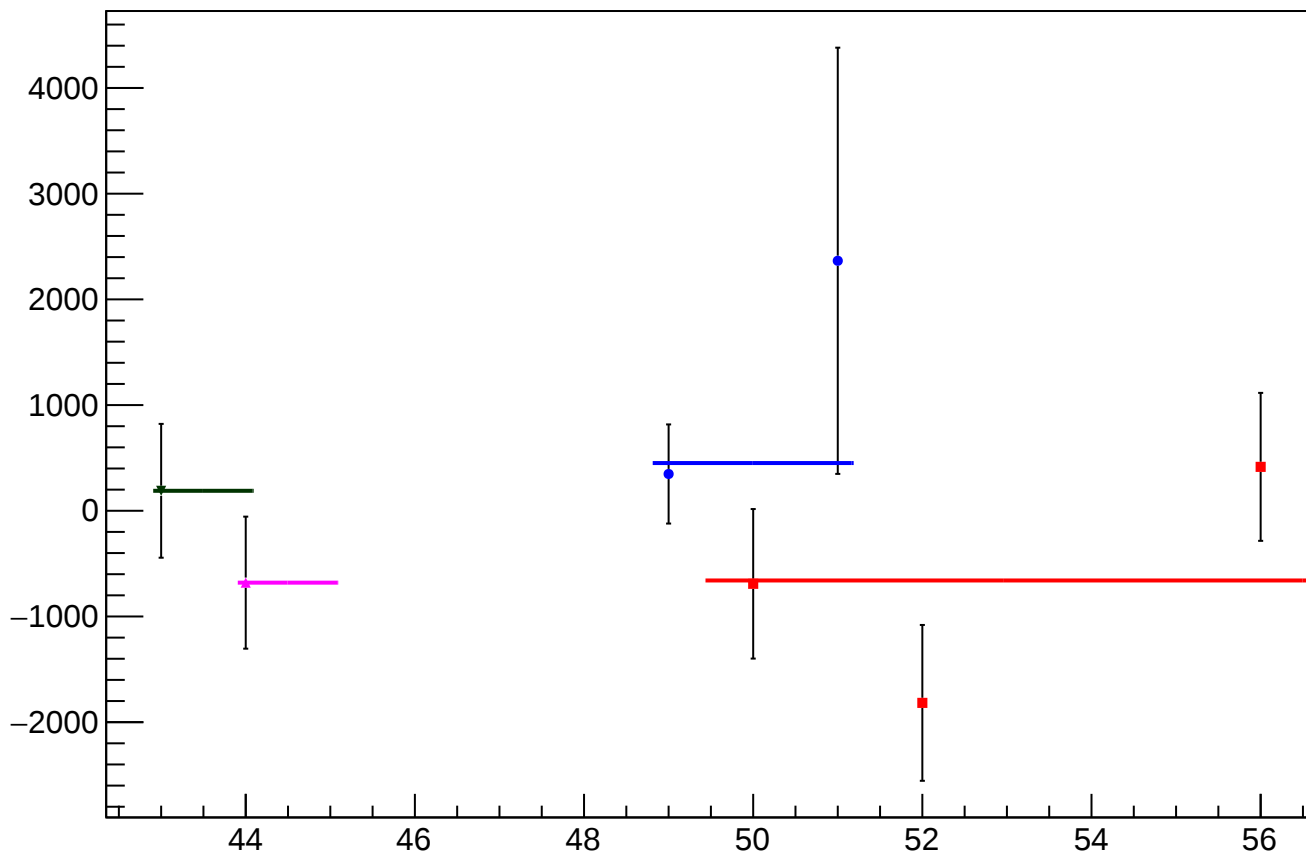
30.834 $\pm$ 0.018  $\chi^2$ /NDF: 2972.3/2

Right Out: 31.111 $\pm$ 0.018  $\chi^2$ /NDF: 1338.6/2

31.427 $\pm$ 0.015  $\chi^2$ /NDF: 2701.7/3

Left In: 32.463 $\pm$ 0.032  $\chi^2$ /NDF: 0.0/0

# asym\_right\_agg\_avg\_mean vs slug



Right In: 451.571+/-456.726  $\chi^2/\text{NDF}$ : 0.9/1

Left Out: 188.983+/-633.036  $\chi^2/\text{NDF}$ : 0.0/0

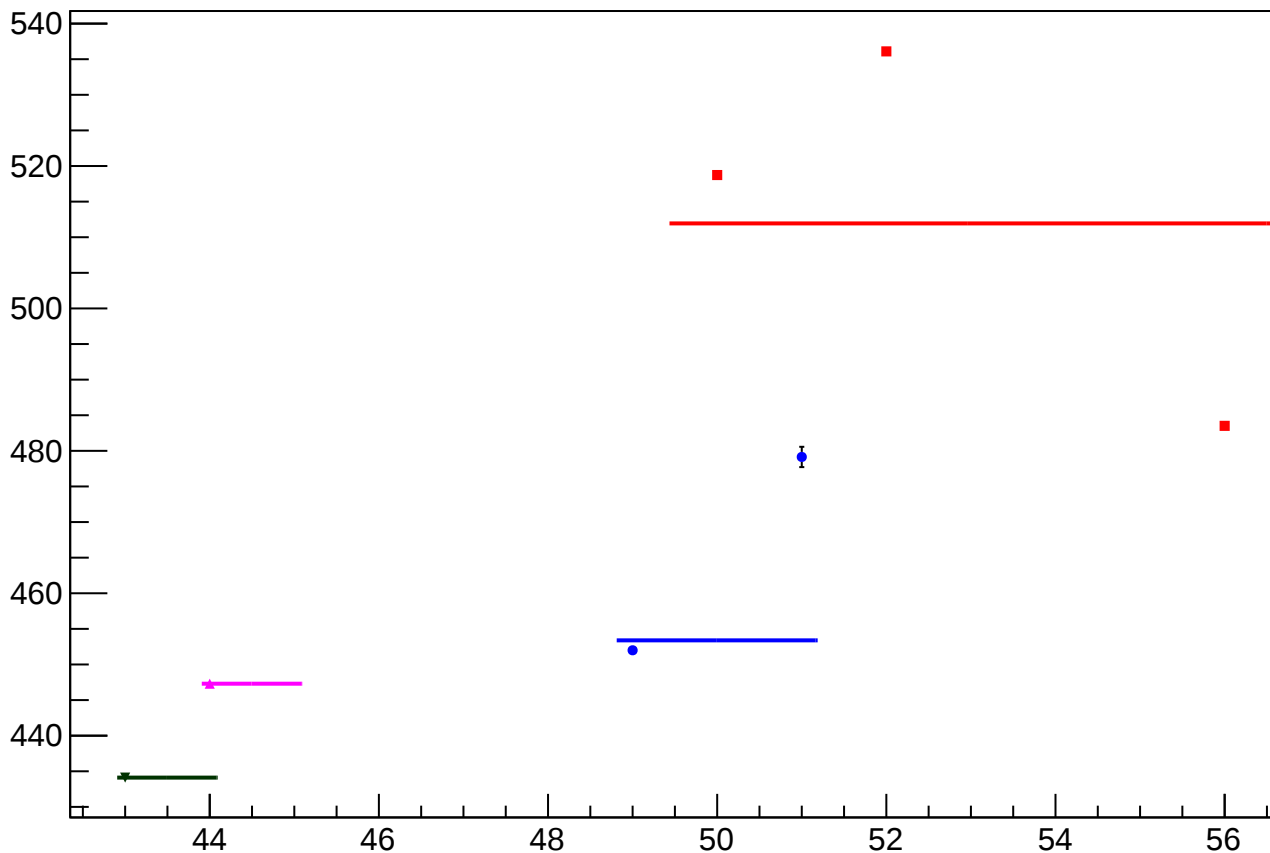
Right Out: -659.359+/-412.406  $\chi^2/\text{NDF}$ : 4.8/2

Left In: -680.012+/-624.573  $\chi^2/\text{NDF}$ : 0.0/0

361.677+/-370.388  $\chi^2/\text{NDF}$ : 1.1/2

-665.629+/-344.150  $\chi^2/\text{NDF}$ : 4.8/3

# asym\_right\_agg\_avg\_rms vs slug



Right In: 453.387 $\pm$ 0.323  $\chi^2$ /NDF: 344.0/1

Left Out: 434.112 $\pm$ 0.448  $\chi^2$ /NDF: 0.0/0

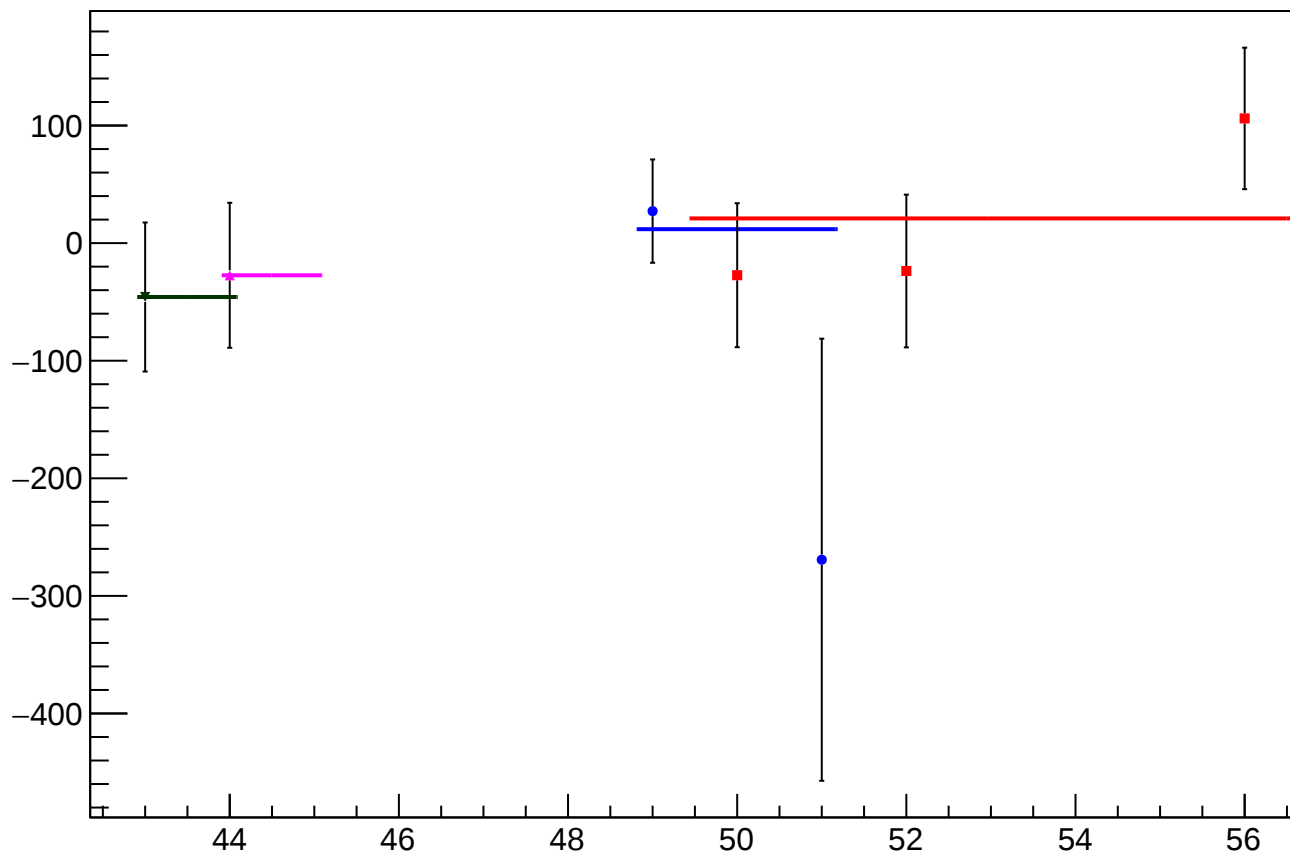
446.788 $\pm$ 0.262  $\chi^2$ /NDF: 1563.5/2

Right Out: 511.940 $\pm$ 0.292  $\chi^2$ /NDF: 5631.7/2

492.314 $\pm$ 0.243  $\chi^2$ /NDF: 20549.3/3

Left In: 447.301 $\pm$ 0.442  $\chi^2$ /NDF: 0.0/0

# asym\_right\_agg\_dd\_mean vs slug



Right In: 11.861+/-42.783  $\chi^2/\text{NDF}$ : 2.4/1

Left Out: -45.823+/-63.374  $\chi^2/\text{NDF}$ : 0.0/0

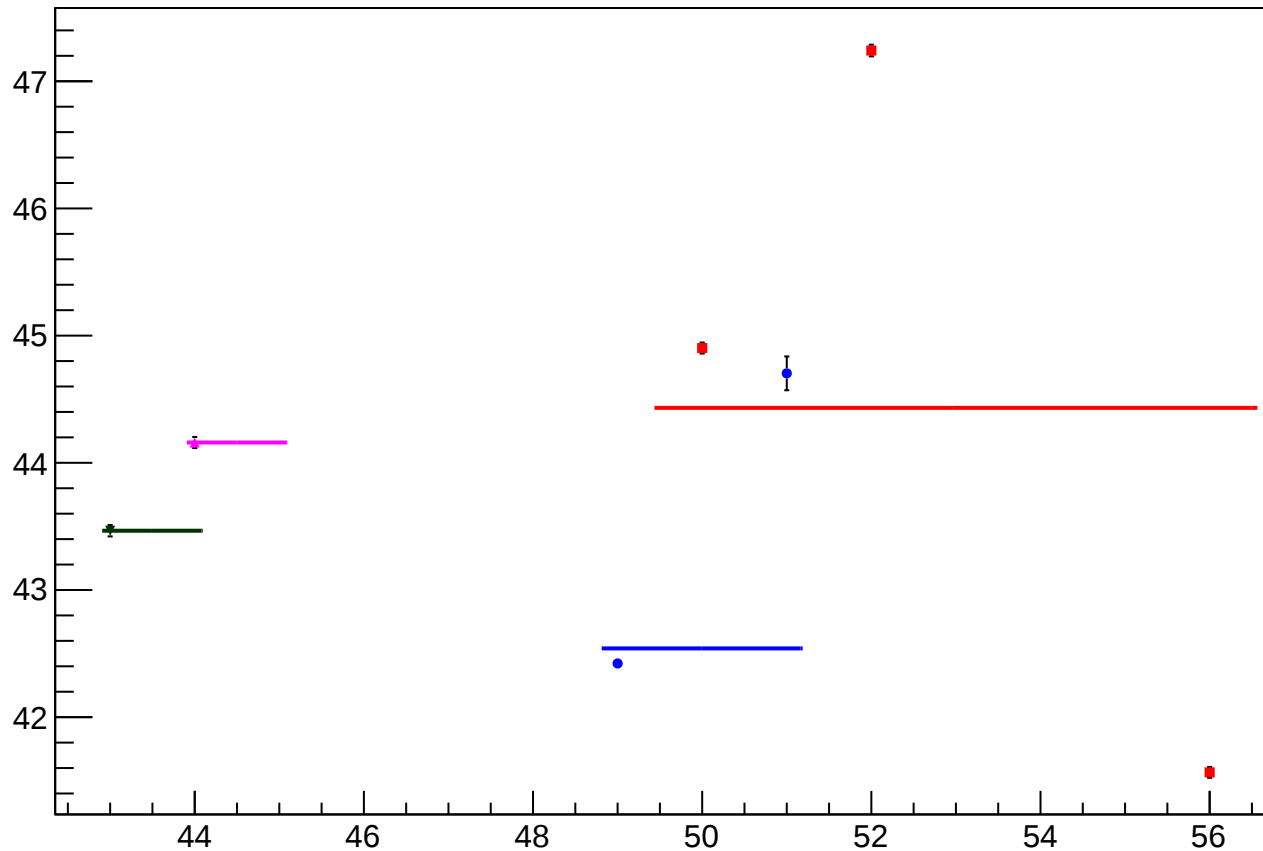
Right Out: 21.010+/-35.803  $\chi^2/\text{NDF}$ : 3.1/2

Left In: -27.346+/-61.656  $\chi^2/\text{NDF}$ : 0.0/0

-6.198+/-35.459  $\chi^2/\text{NDF}$ : 2.9/2

8.816+/-30.961  $\chi^2/\text{NDF}$ : 3.6/3

# asym\_right\_agg\_dd\_rms vs slug



Right In: 42.541 $\pm$ 0.030  $\chi^2$ /NDF: 279.1/1

42.830 $\pm$ 0.025  $\chi^2$ /NDF: 572.1/2

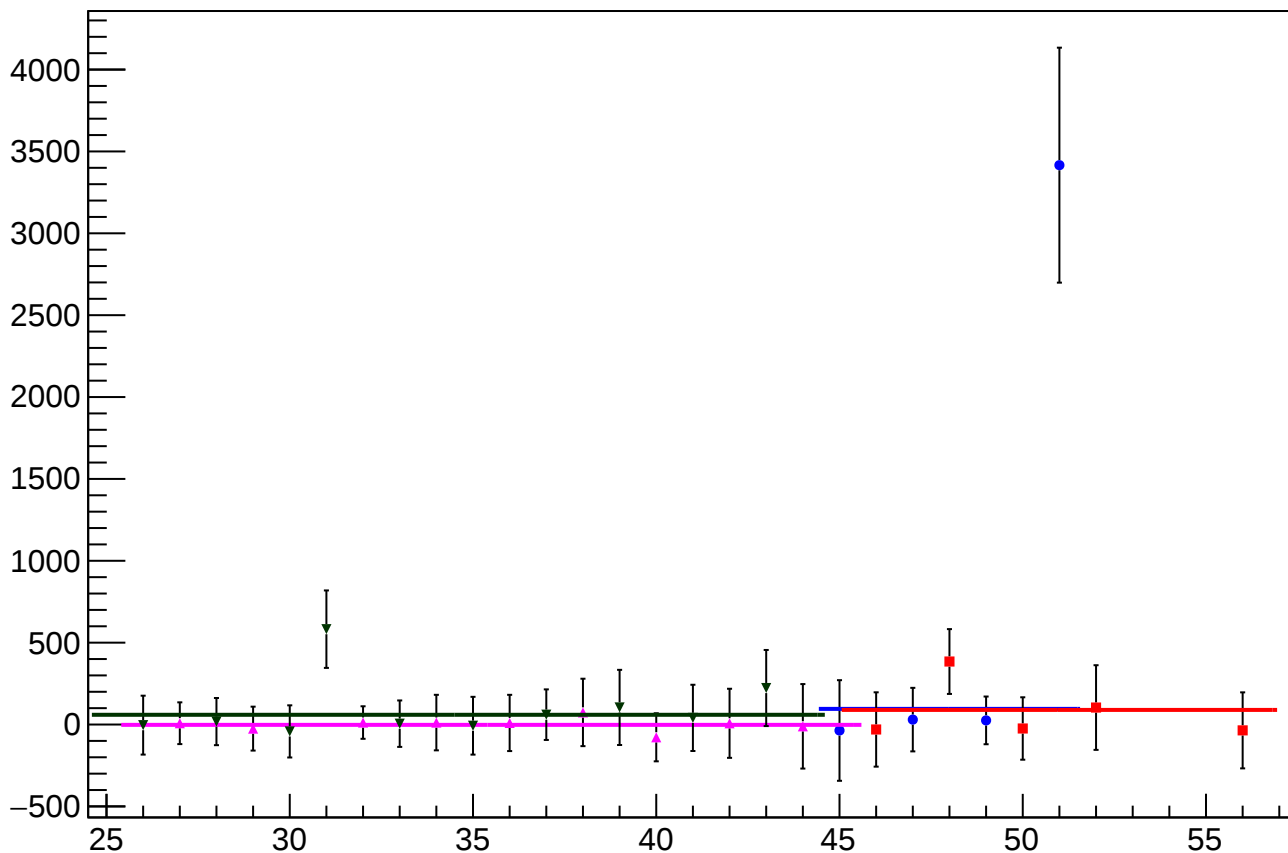
Left Out: 43.466 $\pm$ 0.045  $\chi^2$ /NDF: 0.0/0

Right Out: 44.432 $\pm$ 0.025  $\chi^2$ /NDF: 8400.4/2

44.363 $\pm$ 0.022  $\chi^2$ /NDF: 8429.6/3

Left In: 44.160 $\pm$ 0.044  $\chi^2$ /NDF: 0.0/0

asym\_bcm\_an\_us\_bcm\_an\_ds\_agg\_avg\_mean vs slug



Right In:  $95.586 \pm 107.702$   $\chi^2/\text{NDF}$ : 21.9/3

Left Out:  $59.489 \pm 55.719$   $\chi^2/\text{NDF}$ : 6.3/9

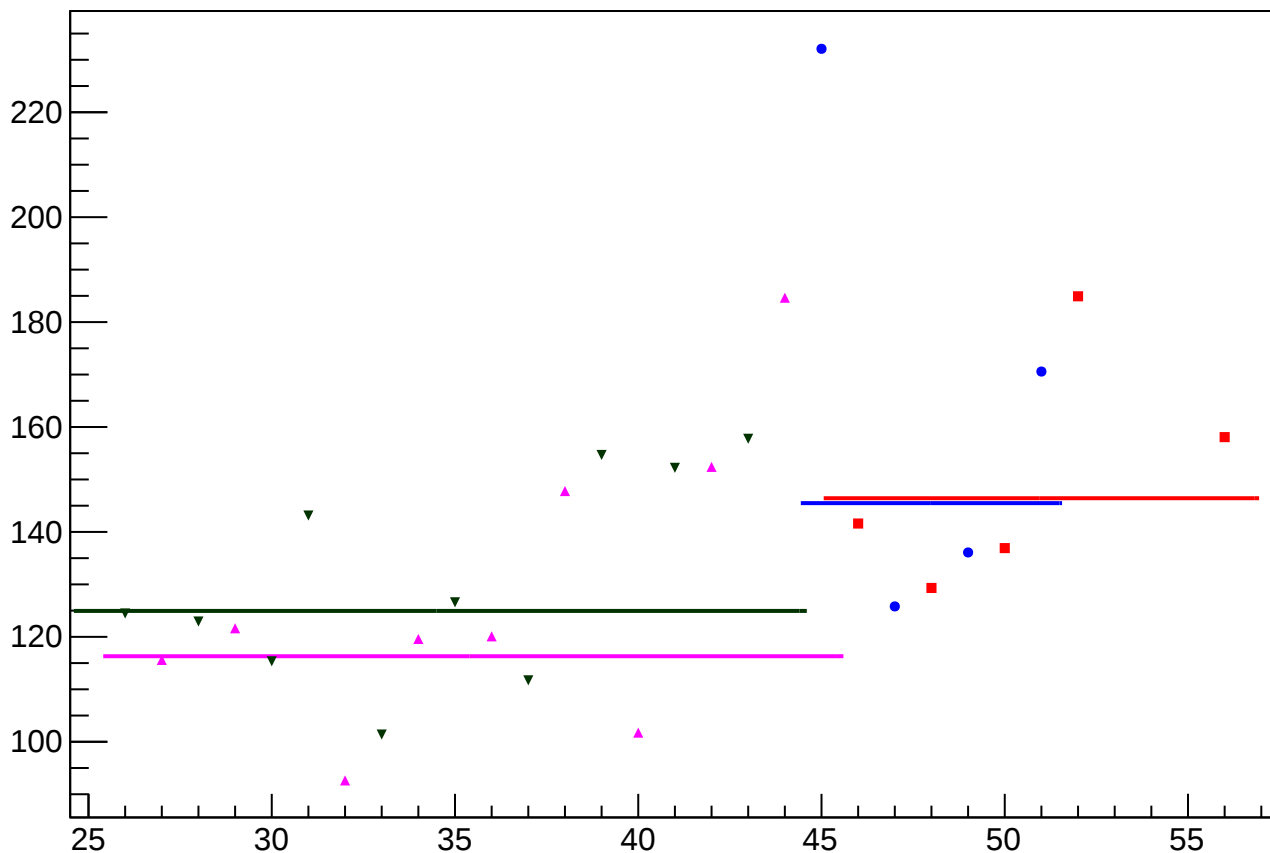
Right Out:  $89.251 \pm 97.136$   $\chi^2/\text{NDF}$ : 3.2/4

Left In:  $-2.017 \pm 50.338$   $\chi^2/\text{NDF}$ : 0.5/8

$67.110 \pm 49.488$   $\chi^2/\text{NDF}$ : 28.4/13

$17.305 \pm 44.693$   $\chi^2/\text{NDF}$ : 4.3/13

asym\_bcm\_an\_us\_bcm\_an\_ds\_agg\_avg\_rms vs slug



Right In: 145.492 $\pm$ 0.076  $\chi^2$ /NDF: 190239.6/3

Left Out: 124.943 $\pm$ 0.039  $\chi^2$ /NDF:199383.4/9

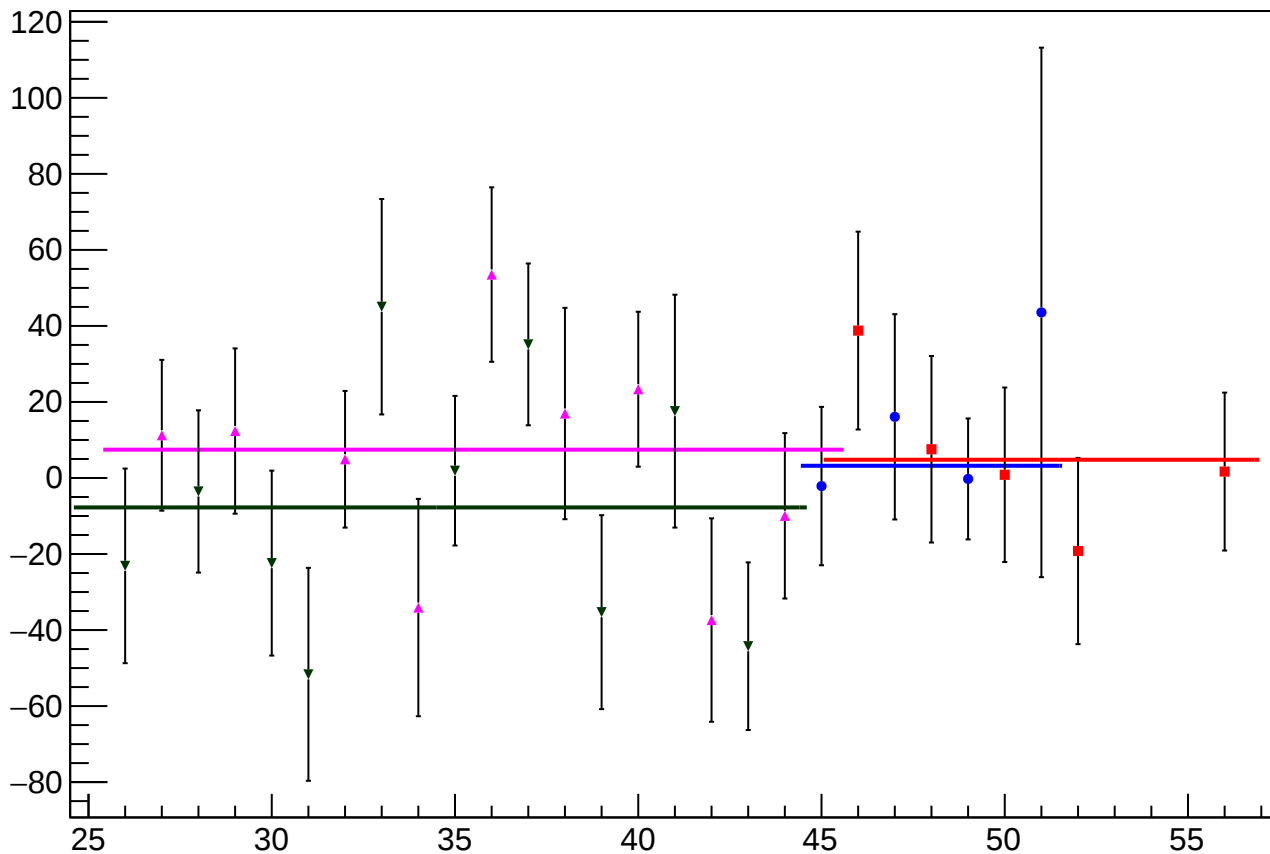
Right Out: 146.426 $\pm$ 0.069  $\chi^2$ /NDF: 70183.9/4

Left In: 116.307 $\pm$ 0.036  $\chi^2$ /NDF:383885.3/8

129.282 $\pm$ 0.035  $\chi^2$ /NDF: 447051.8/13

122.683 $\pm$ 0.032  $\chi^2$ /NDF: 605648.9/13

asym\_bcm\_an\_us\_bcm\_an\_ds\_agg\_dd\_mean vs slug



Right In: 3.213+/-11.301  $\chi^2/\text{NDF}$ : 0.7/3

Left Out: -7.744+/-7.585  $\chi^2/\text{NDF}$ :15.6/9

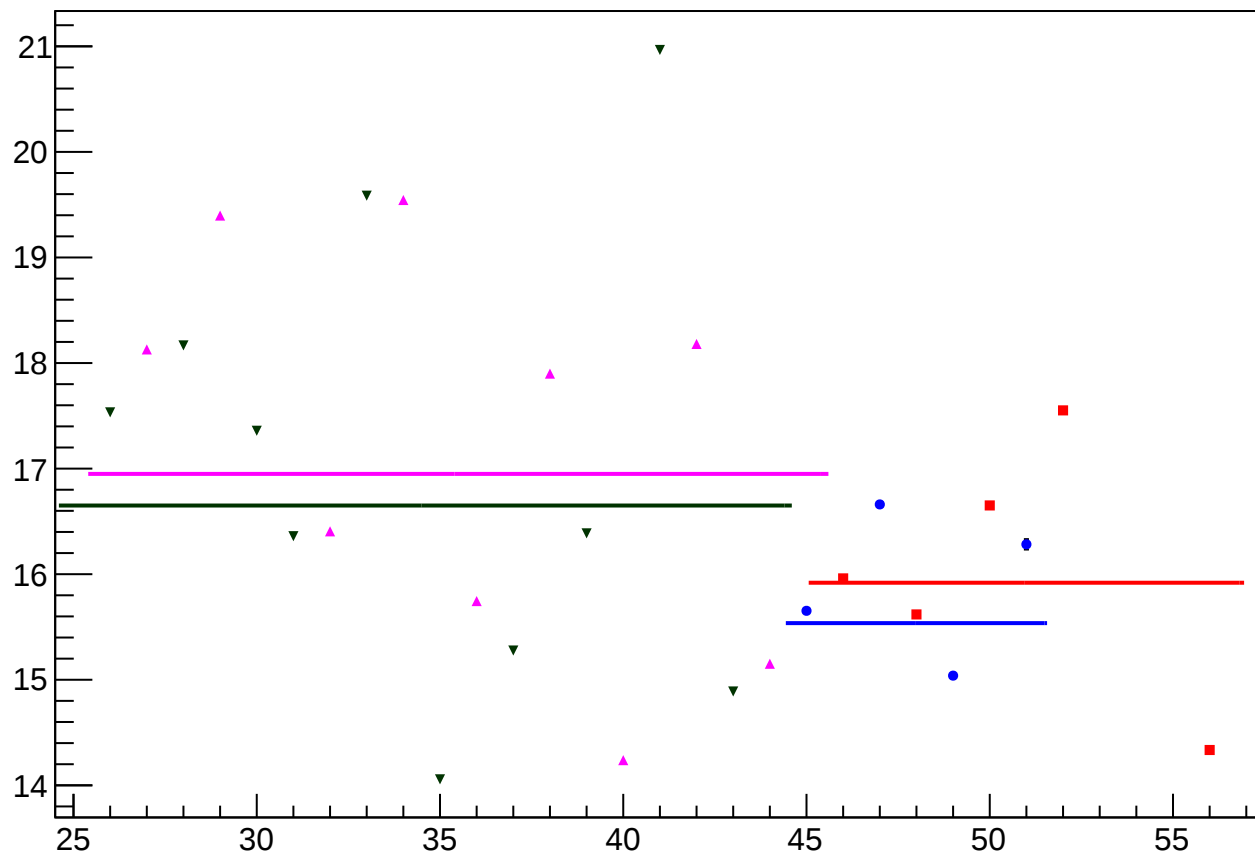
-4.341+/-6.298  $\chi^2/\text{NDF}$ : 16.9/13

Right Out: 4.798+/-10.528  $\chi^2/\text{NDF}$ : 2.7/4

6.567+/-6.074  $\chi^2/\text{NDF}$ : 13.2/13

Left In: 7.449+/-7.436  $\chi^2/\text{NDF}$ :10.4/8

asym\_bcm\_an\_us\_bcm\_an\_ds\_agg\_dd\_rms vs slug



Right In: 15.536 $\pm$ 0.008  $\chi^2$ /NDF: 5714.5/3

Left Out: 16.650 $\pm$ 0.005  $\chi^2$ /NDF: 131585.8/9

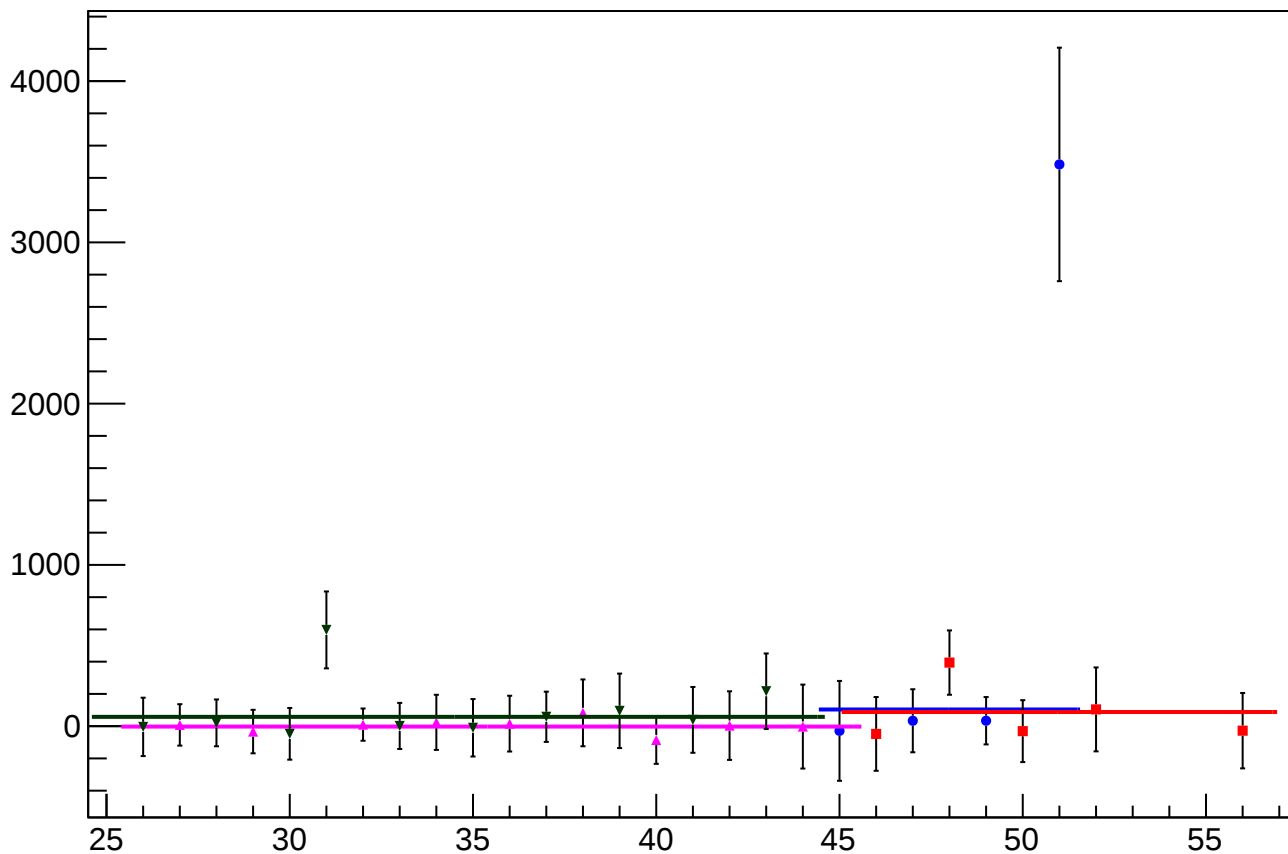
Right Out: 15.919 $\pm$ 0.007  $\chi^2$ /NDF: 22863.5/4

Left In: 16.950 $\pm$ 0.005  $\chi^2$ /NDF: 111842.2/8

16.304 $\pm$ 0.004  $\chi^2$ /NDF: 150697.6/13

16.607 $\pm$ 0.004  $\chi^2$ /NDF: 147497.7/13

asym\_bcm\_an\_us\_bcm\_an\_ds3\_agg\_avg\_mean vs slug



Right In:  $103.463 \pm 108.528$   $\chi^2/\text{NDF}: 22.3/3$

Left Out:  $57.736 \pm 56.149$   $\chi^2/\text{NDF}: 6.5/9$

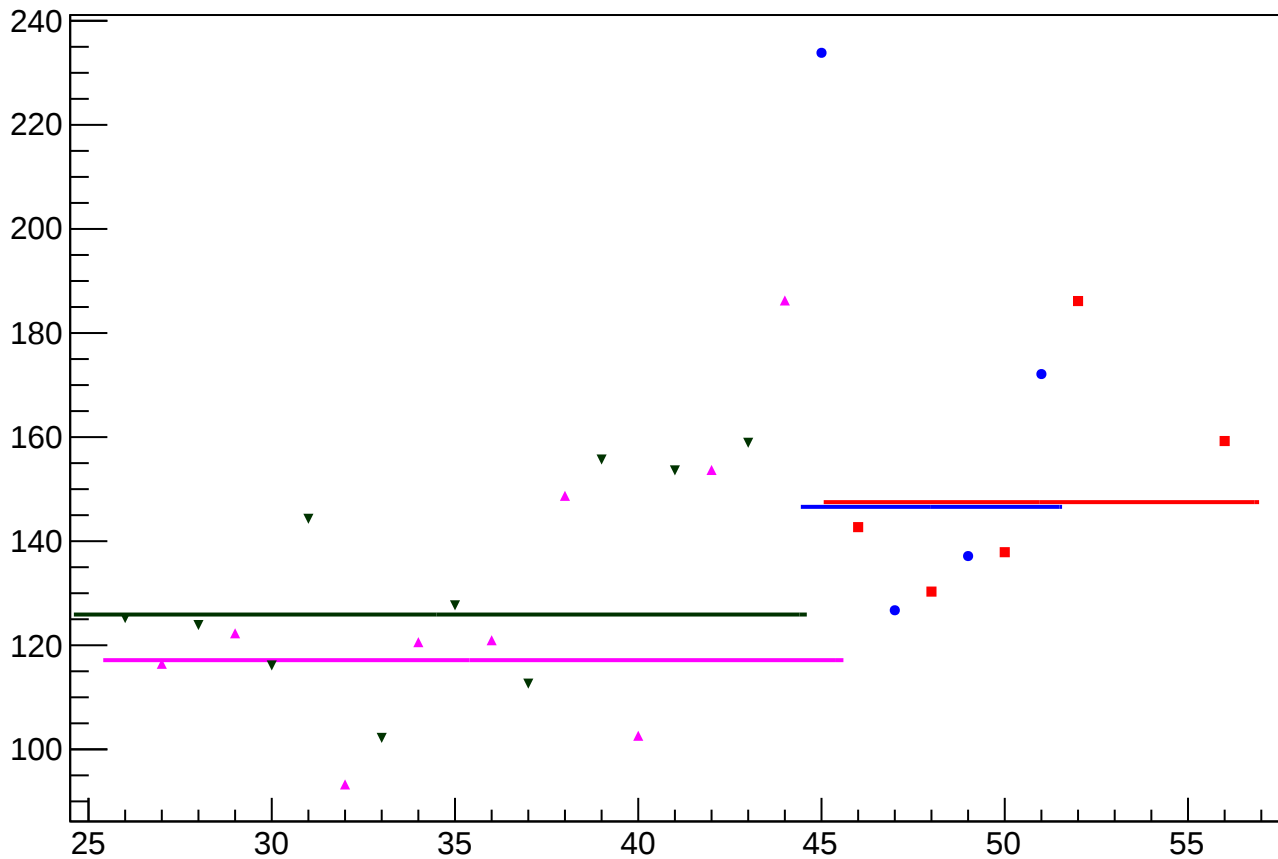
Right Out:  $87.904 \pm 97.848$   $\chi^2/\text{NDF}: 3.3/4$

Left In:  $-2.605 \pm 50.703$   $\chi^2/\text{NDF}: 0.6/8$

$67.391 \pm 49.870$   $\chi^2/\text{NDF}: 29.0/13$

$16.554 \pm 45.018$   $\chi^2/\text{NDF}: 4.6/13$

asym\_bcm\_an\_us\_bcm\_an\_ds3\_agg\_avg\_rms vs slug



Right In: 146.598+/-0.077  $\chi^2/\text{NDF}$ : 190252.6/3

Left Out: 125.907+/-0.040  $\chi^2/\text{NDF}$ :199353.5/9

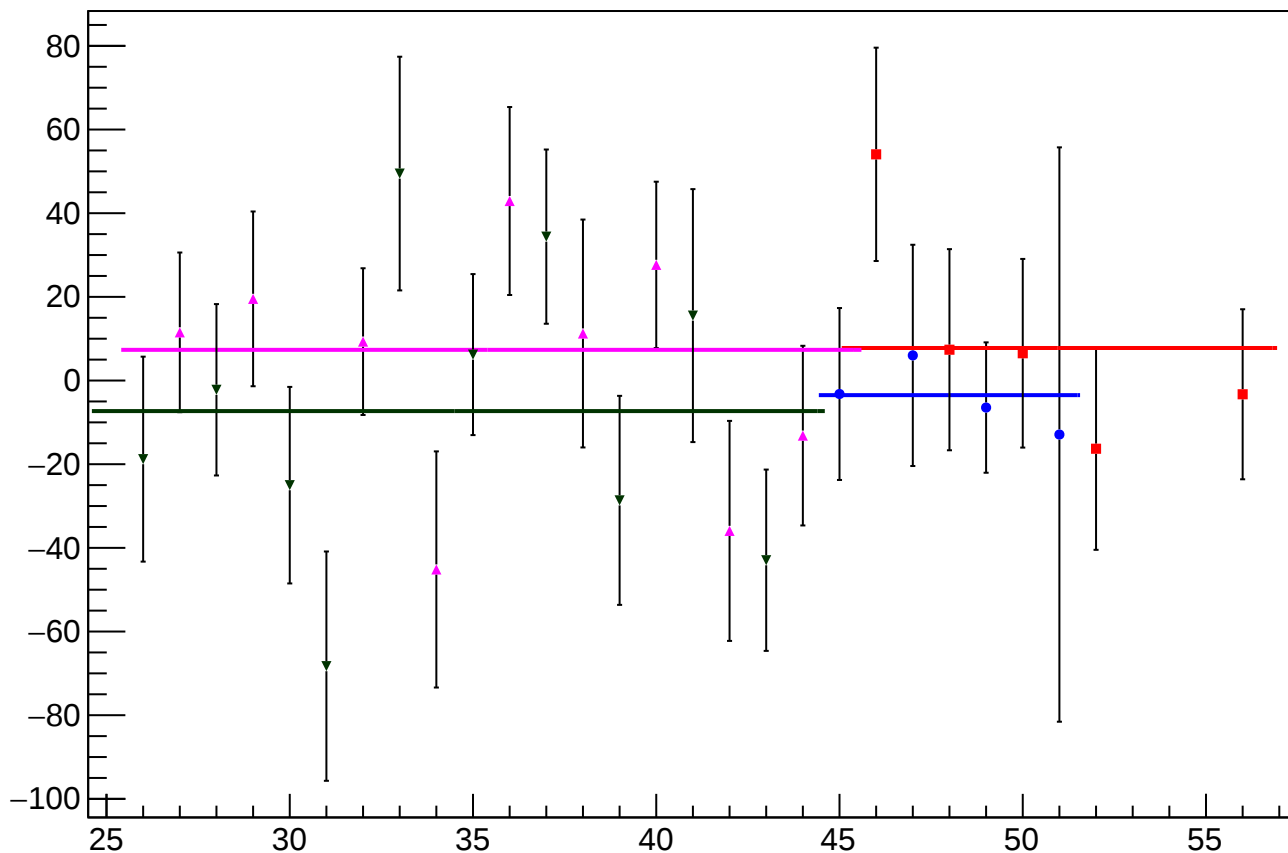
Right Out: 147.506+/-0.069  $\chi^2/\text{NDF}$ : 69899.0/4

Left In: 117.138+/-0.036  $\chi^2/\text{NDF}$ :384637.6/8

130.276+/-0.035  $\chi^2/\text{NDF}$ : 446955.7/13

123.566+/-0.032  $\chi^2/\text{NDF}$ : 606404.1/13

asym\_bcm\_an\_us\_bcm\_an\_ds3\_agg\_dd\_mean vs slug



Right In: -3.490+/-11.092  $\chi^2/\text{NDF}$ : 0.2/3

Left Out: -7.303+/-7.391  $\chi^2/\text{NDF}$ : 18.4/9

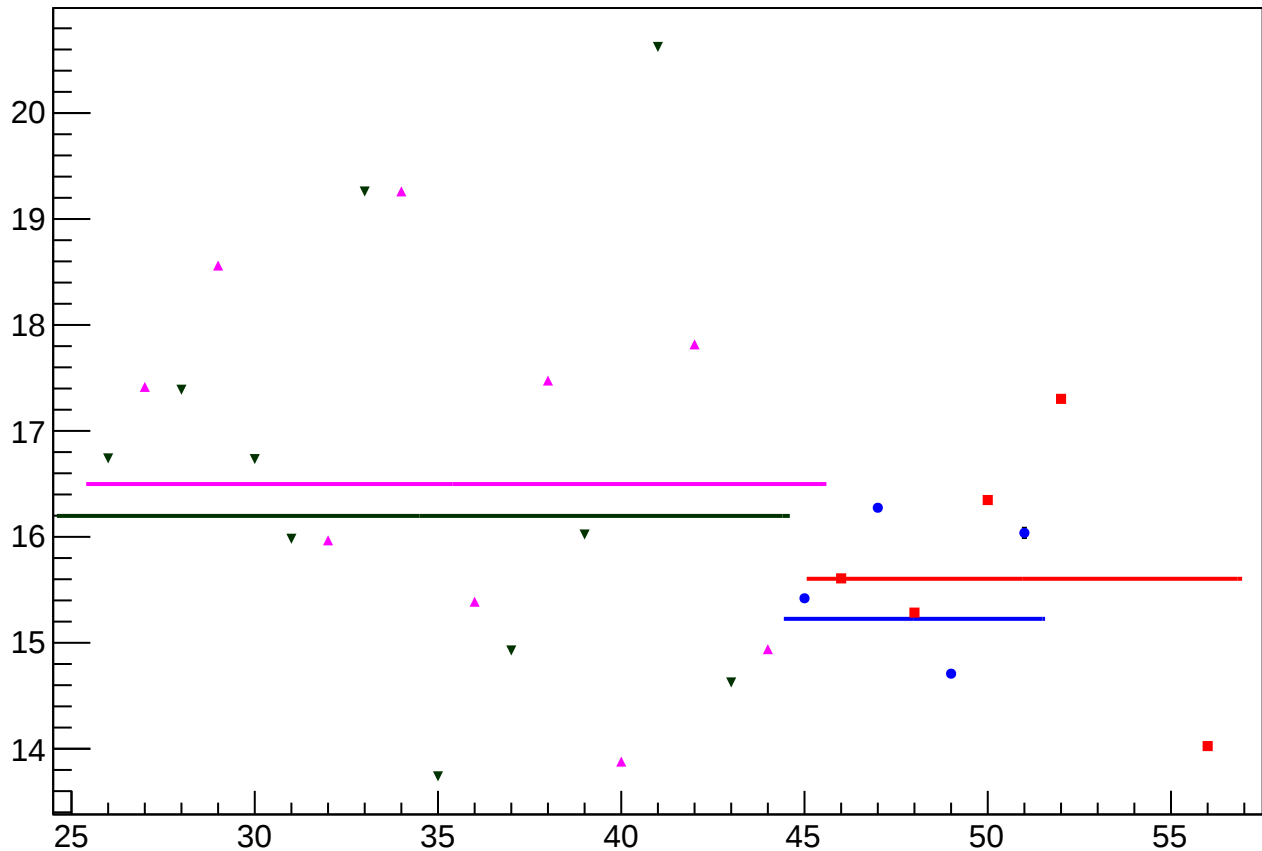
Right Out: 7.779+/-10.332  $\chi^2/\text{NDF}$ : 4.6/4

Left In: 7.338+/-7.251  $\chi^2/\text{NDF}$ : 11.1/8

-6.130+/-6.151  $\chi^2/\text{NDF}$ : 18.7/13

7.484+/-5.935  $\chi^2/\text{NDF}$ : 15.6/13

asym\_bcm\_an\_us\_bcm\_an\_ds3\_agg\_dd\_rms vs slug



Right In: 15.226+/-0.008  $\chi^2/\text{NDF}$ : 5808.0/3

Left Out: 16.198+/-0.005  $\chi^2/\text{NDF}$ :126492.9/9

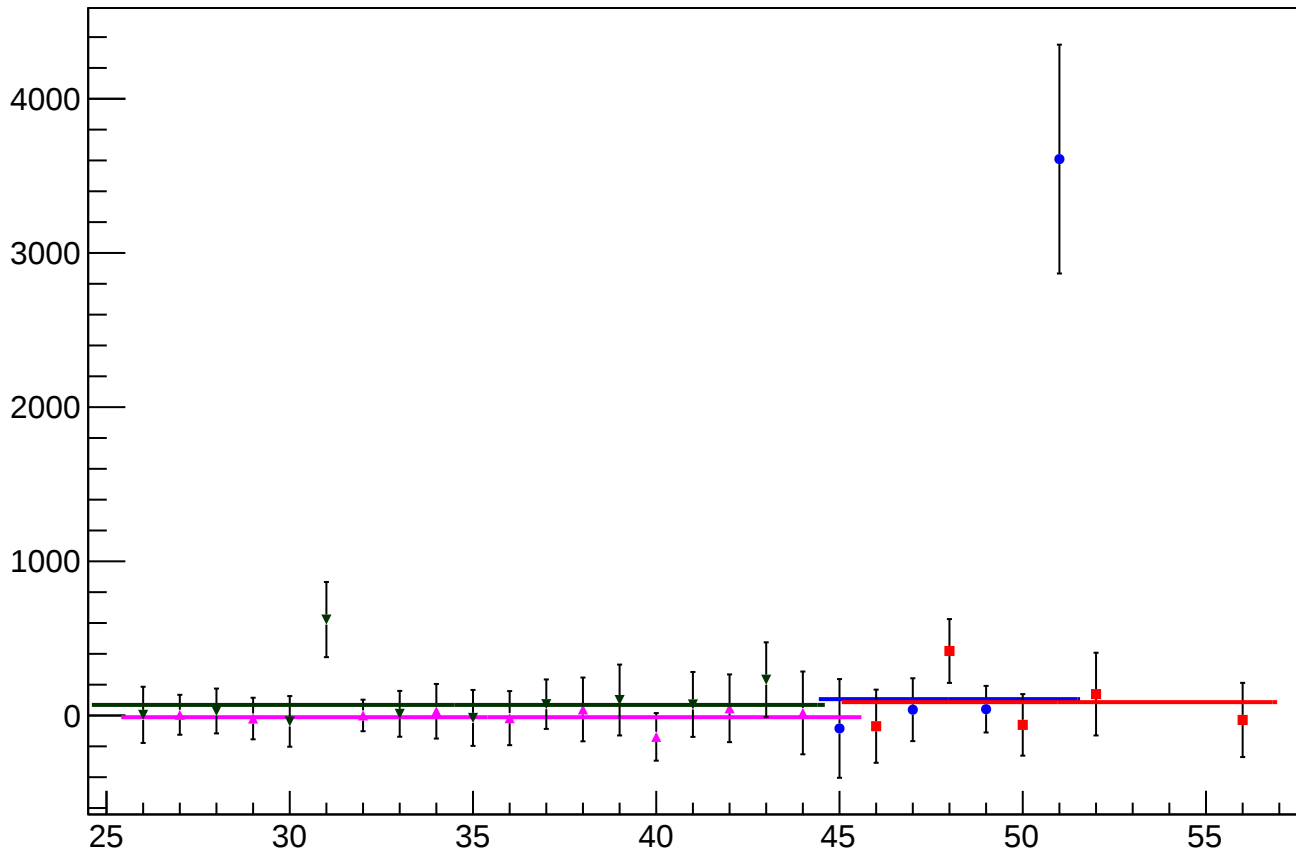
Right Out: 15.604+/-0.007  $\chi^2/\text{NDF}$ : 24473.2/4

Left In: 16.499+/-0.005  $\chi^2/\text{NDF}$ :102858.3/8

15.899+/-0.004  $\chi^2/\text{NDF}$ : 142926.7/13

16.203+/-0.004  $\chi^2/\text{NDF}$ : 137369.3/13

asym\_bcm\_dg\_us\_bcm\_an\_ds\_agg\_avg\_mean vs slug



Right In:  $106.280 \pm 112.177$   $\chi^2/\text{NDF}$ : 22.9/3

Left Out:  $68.786 \pm 57.328$   $\chi^2/\text{NDF}$ : 6.6/9

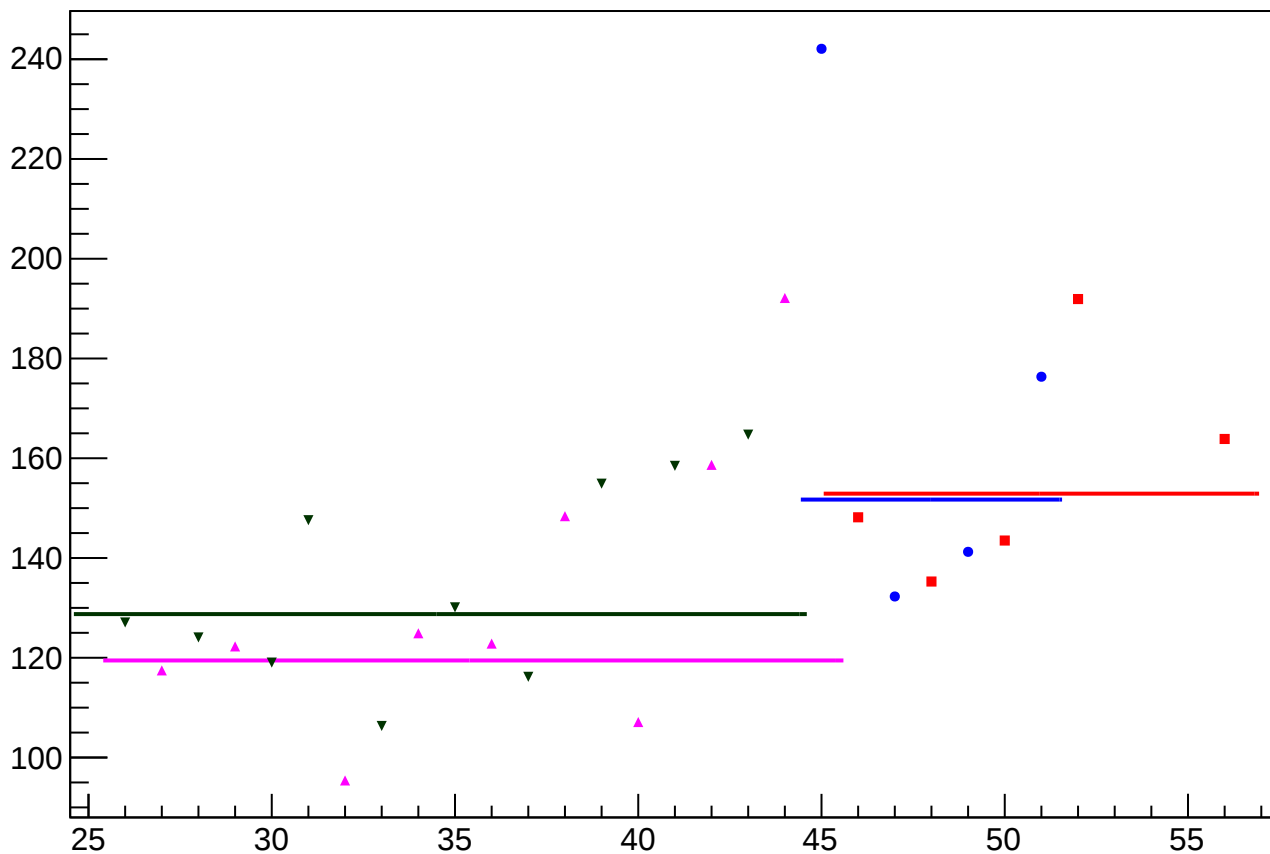
Right Out:  $86.729 \pm 101.327$   $\chi^2/\text{NDF}$ : 3.8/4

Left In:  $-10.941 \pm 51.660$   $\chi^2/\text{NDF}$ : 0.9/8

$76.550 \pm 51.048$   $\chi^2/\text{NDF}$ : 29.6/13

$9.209 \pm 46.024$   $\chi^2/\text{NDF}$ : 5.5/13

asym\_bcm\_dg\_us\_bcm\_an\_ds\_agg\_avg\_rms vs slug



Right In: 151.715+/-0.079  $\chi^2/\text{NDF}$ : 189385.9/3

Left Out: 128.755+/-0.041  $\chi^2/\text{NDF}$ : 188808.0/9

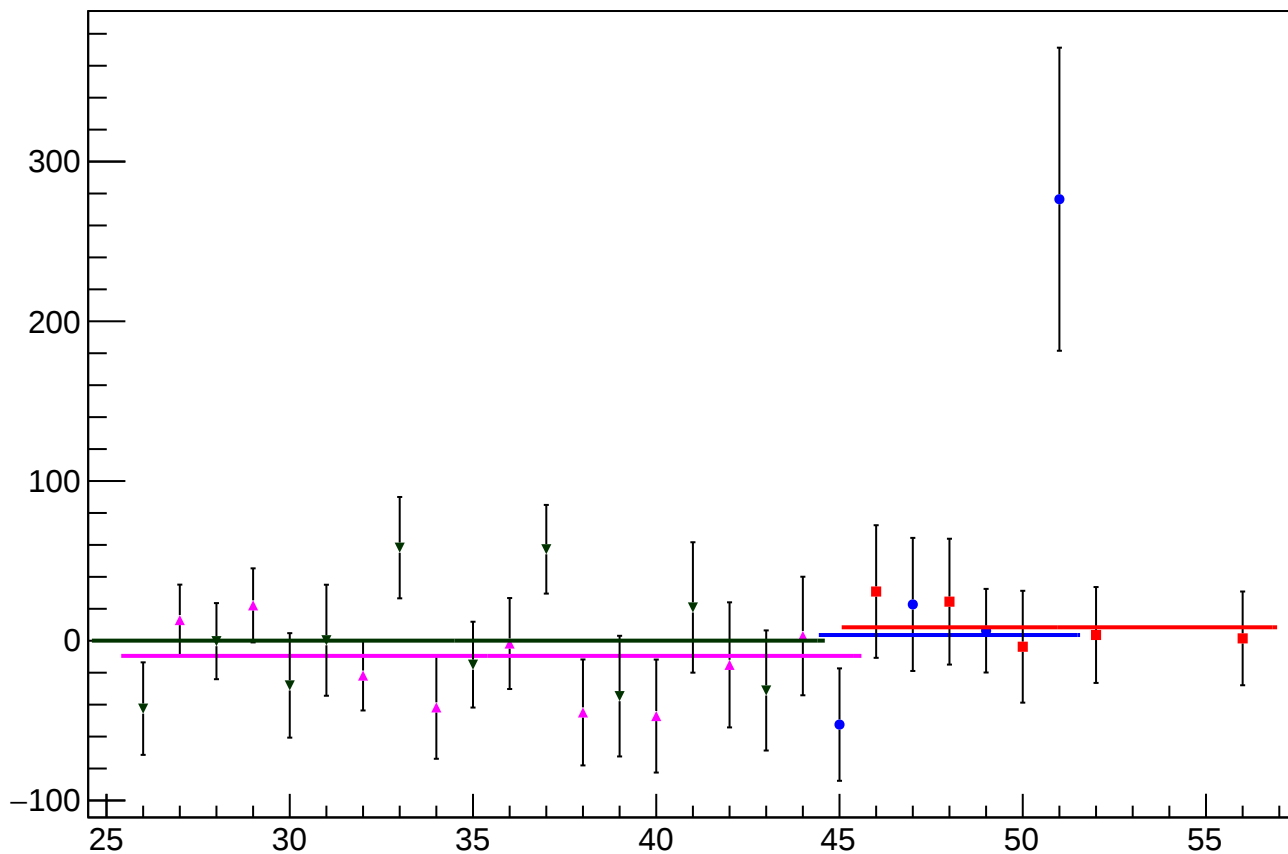
Right Out: 152.903+/-0.072  $\chi^2/\text{NDF}$ : 66195.5/4

Left In: 119.459+/-0.037  $\chi^2/\text{NDF}$ : 377012.5/8

133.510+/-0.036  $\chi^2/\text{NDF}$ : 444623.5/13

126.359+/-0.033  $\chi^2/\text{NDF}$ : 616131.3/13

asym\_bcm\_dg\_us\_bcm\_an\_ds\_agg\_dd\_mean vs slug



Right In:  $3.587 \pm 18.398$   $\chi^2/\text{NDF}: 11.0/3$

Left Out:  $0.067 \pm 9.805$   $\chi^2/\text{NDF}: 12.6/9$

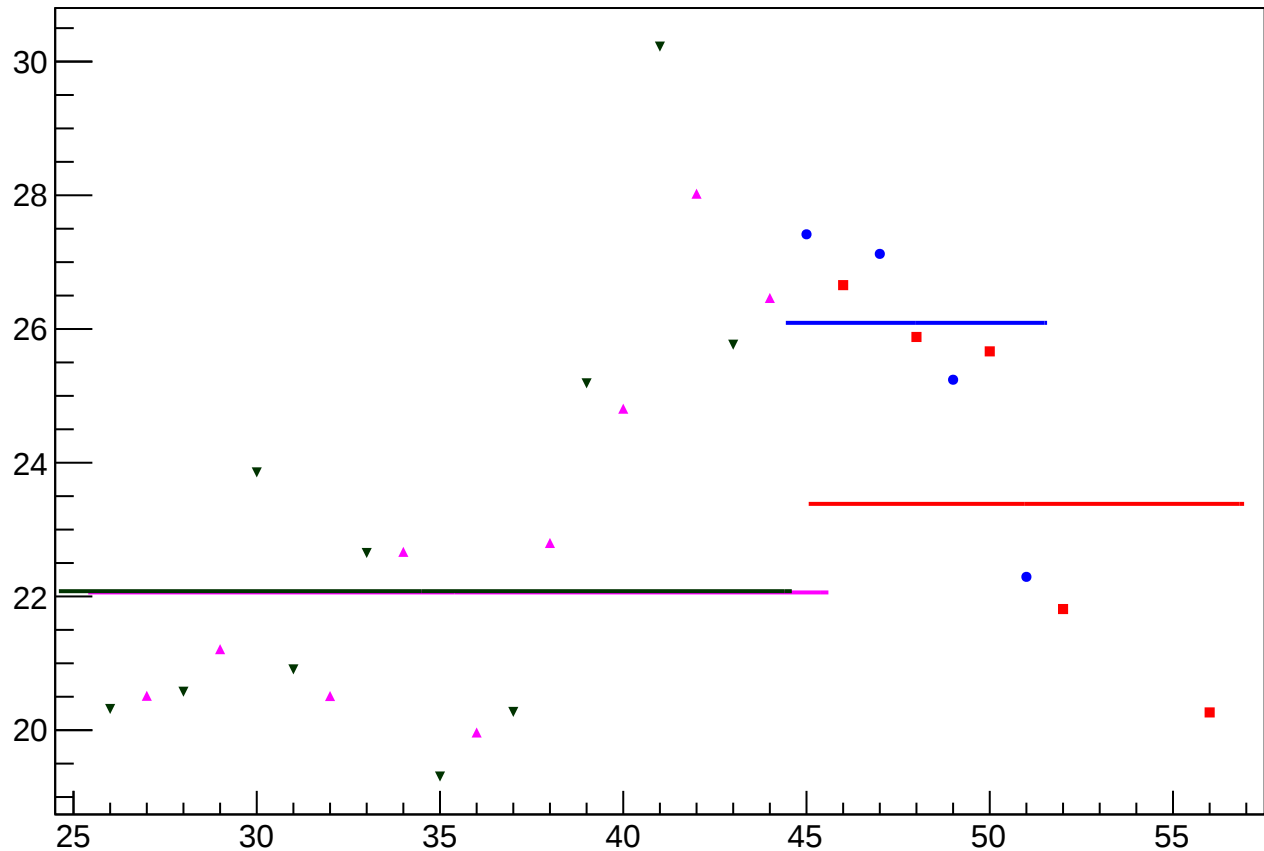
Right Out:  $8.422 \pm 15.229$   $\chi^2/\text{NDF}: 0.7/4$

Left In:  $-9.482 \pm 9.418$   $\chi^2/\text{NDF}: 6.7/8$

$0.845 \pm 8.653$   $\chi^2/\text{NDF}: 23.7/13$

$-4.529 \pm 8.010$   $\chi^2/\text{NDF}: 8.3/13$

asym\_bcm\_dg\_us\_bcm\_an\_ds\_agg\_dd\_rms vs slug



Right In: 26.092+/-0.013  $\chi^2/\text{NDF}$ : 9378.4/3

Left Out: 22.079+/-0.007  $\chi^2/\text{NDF}$ :166332.3/9

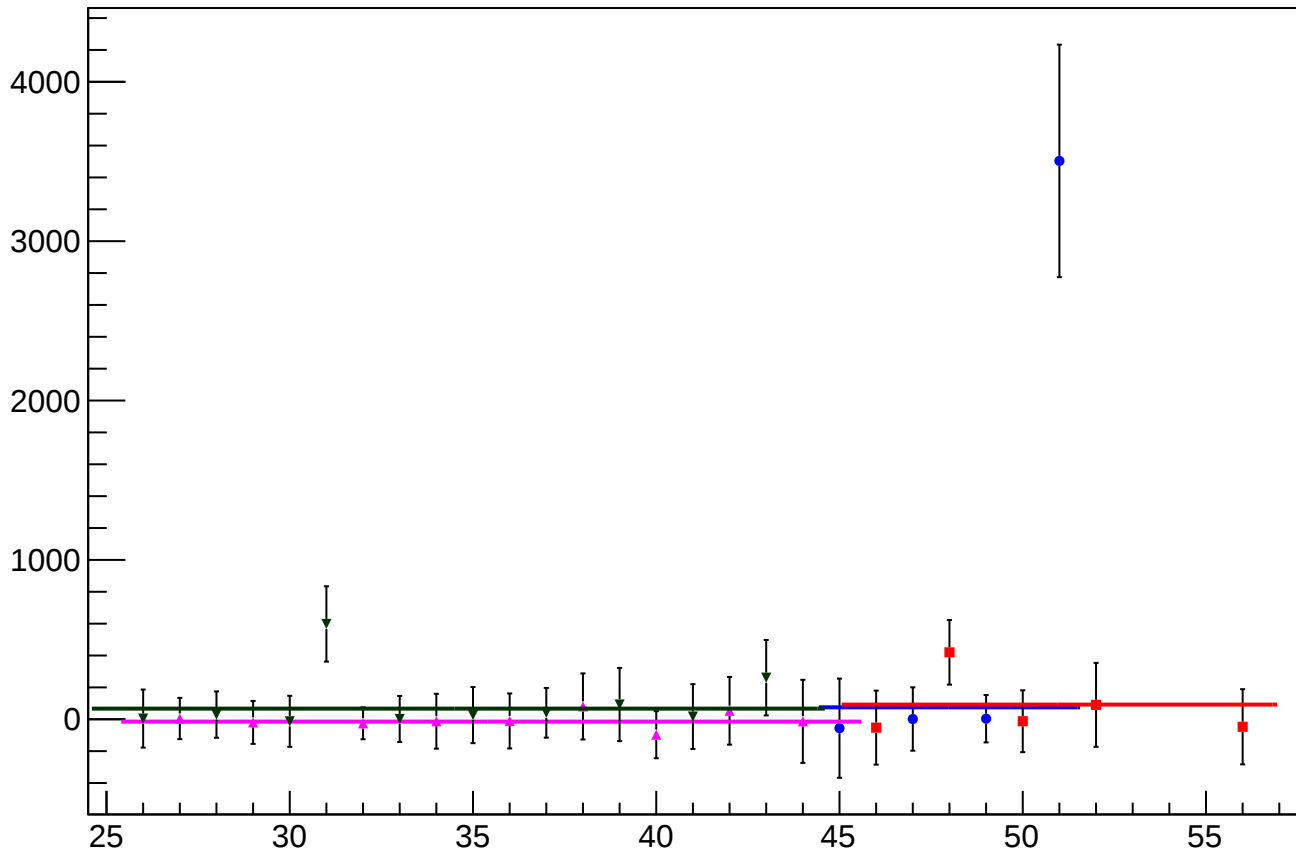
Right Out: 23.385+/-0.011  $\chi^2/\text{NDF}$ : 57030.7/4

Left In: 22.060+/-0.007  $\chi^2/\text{NDF}$ :121609.5/8

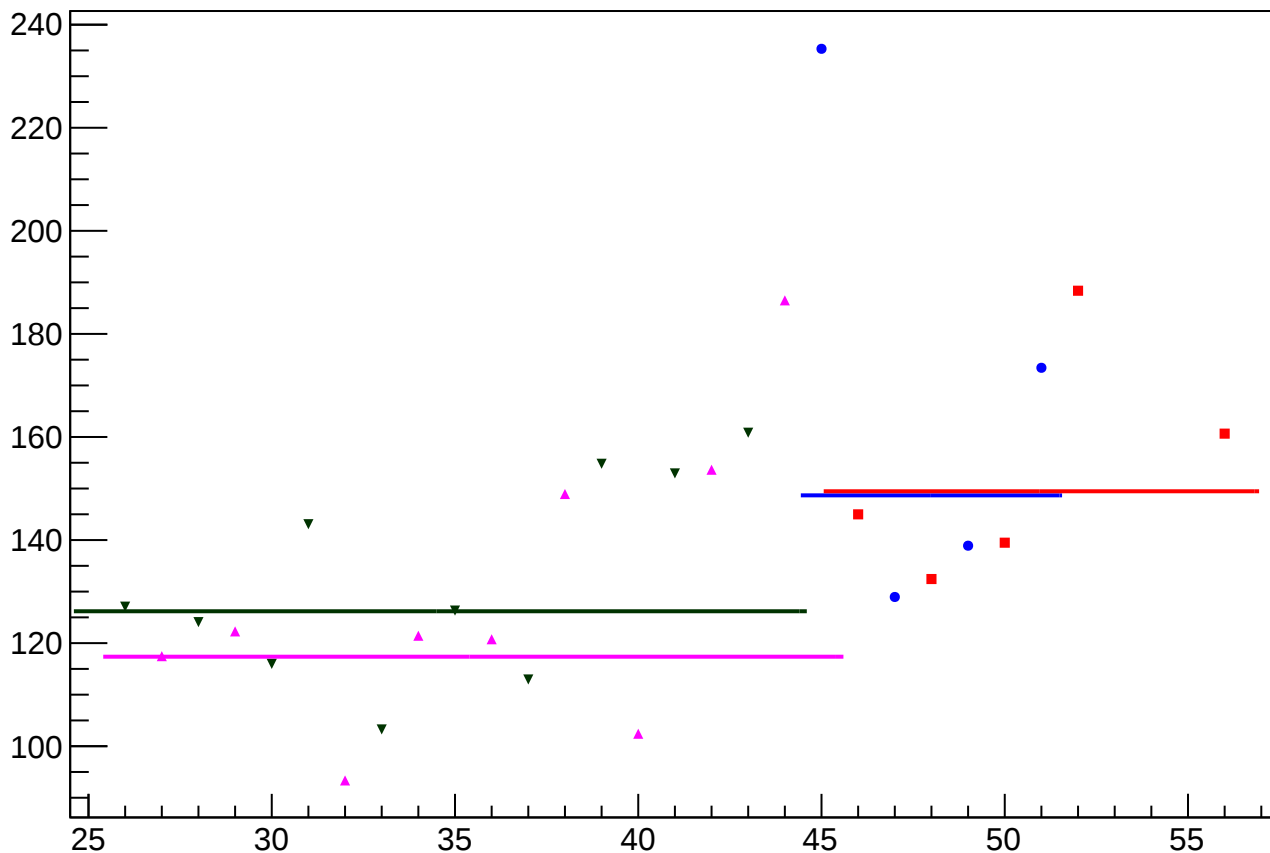
22.966+/-0.006  $\chi^2/\text{NDF}$ : 249834.1/13

22.426+/-0.006  $\chi^2/\text{NDF}$ : 189586.9/13

asym\_bcm\_dg\_ds\_bcm\_an\_ds\_agg\_avg\_mean vs slug



asym\_bcm\_dg\_ds\_bcm\_an\_ds\_agg\_avg\_rms vs slug



Right In: 148.675+/-0.078  $\chi^2/\text{NDF}$ : 185522.5/3

Left Out: 126.184+/-0.040  $\chi^2/\text{NDF}$ :192128.0/9

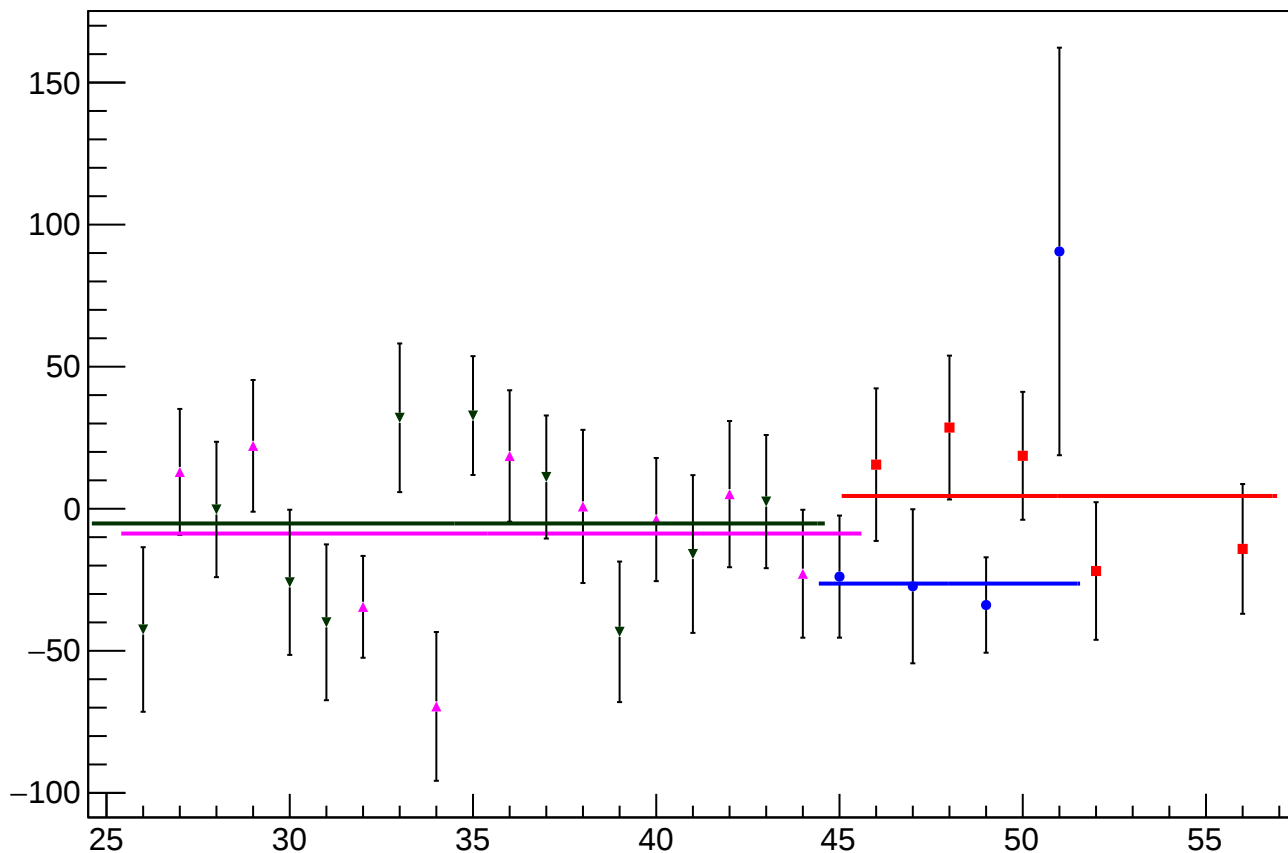
Right Out: 149.466+/-0.070  $\chi^2/\text{NDF}$ : 68310.7/4

Left In: 117.367+/-0.036  $\chi^2/\text{NDF}$ :385462.1/8

130.843+/-0.035  $\chi^2/\text{NDF}$ : 444009.8/13

124.042+/-0.032  $\chi^2/\text{NDF}$ : 619937.8/13

asym\_bcm\_dg\_ds\_bcm\_an\_ds\_agg\_dd\_mean vs slug



Right In:  $-26.337 \pm 11.729$   $\chi^2/\text{NDF}$ : 2.9/3

Left Out:  $-5.176 \pm 7.796$   $\chi^2/\text{NDF}$ : 12.5/9

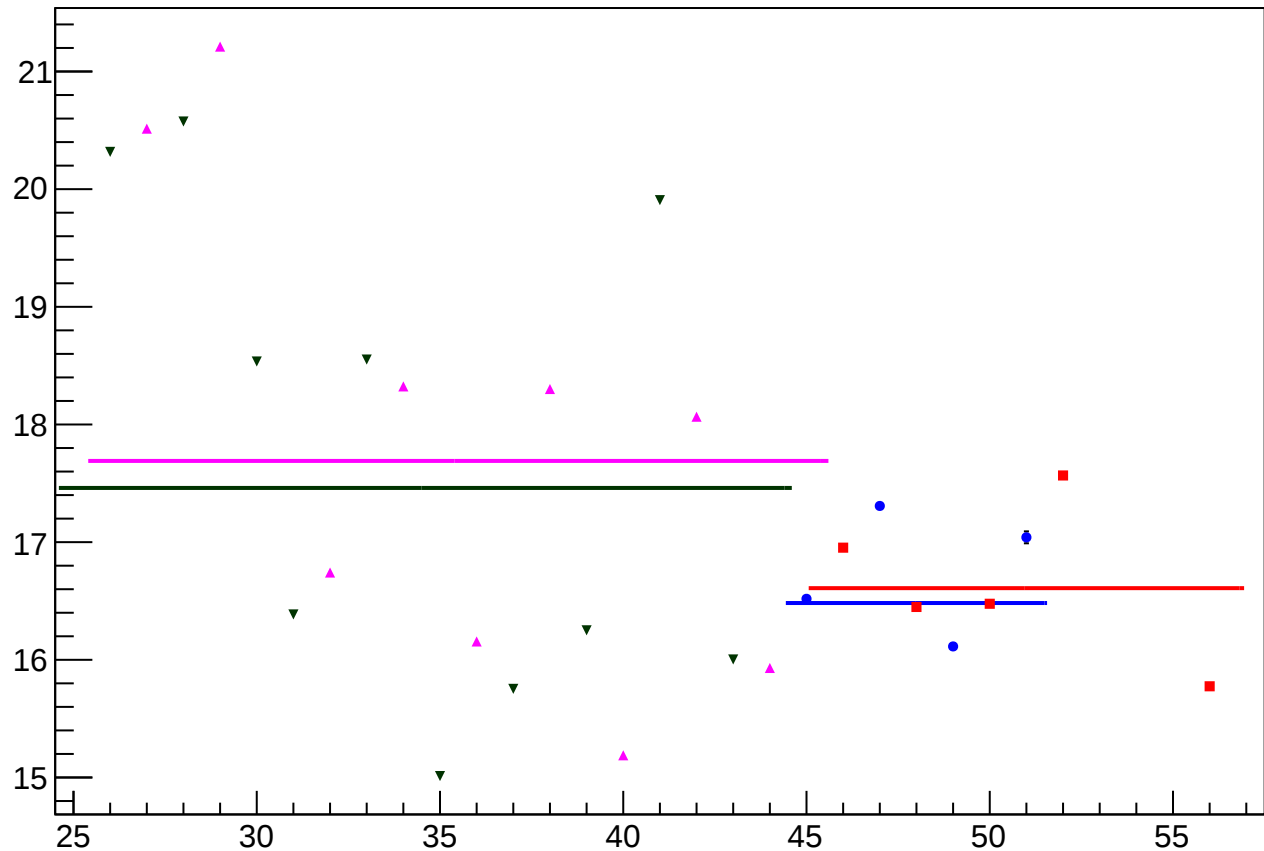
Right Out:  $4.499 \pm 10.819$   $\chi^2/\text{NDF}$ : 3.3/4

Left In:  $-8.720 \pm 7.598$   $\chi^2/\text{NDF}$ : 12.5/8

$-11.660 \pm 6.493$   $\chi^2/\text{NDF}$ : 17.6/13

$-4.354 \pm 6.218$   $\chi^2/\text{NDF}$ : 16.8/13

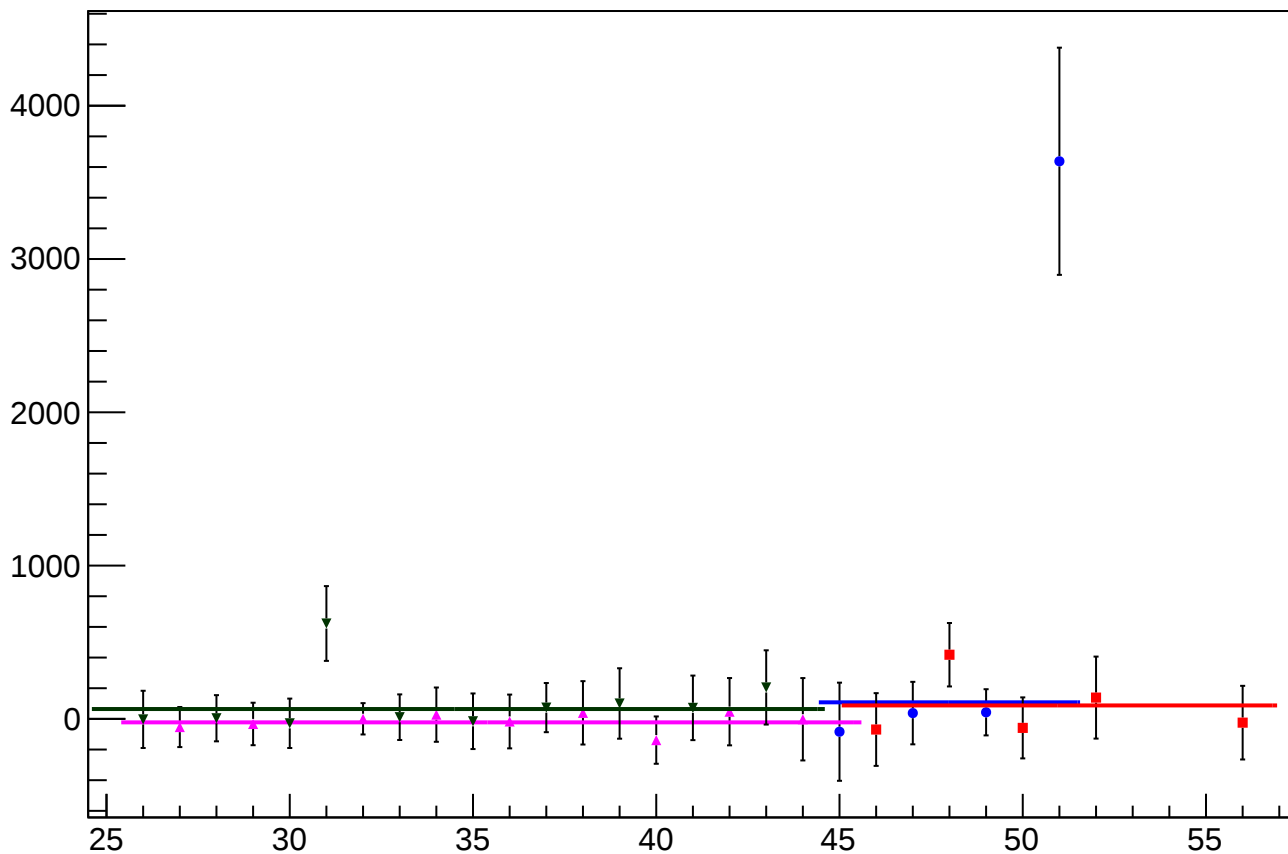
asym\_bcm\_dg\_ds\_bcm\_an\_ds\_agg\_dd\_rms vs slug



Right In:  $16.483 \pm 0.008$   $\chi^2/\text{NDF}$ : 2944.3/3  
 Left Out:  $17.461 \pm 0.006$   $\chi^2/\text{NDF}$ : 131638.1/9  
 Right Out:  $16.609 \pm 0.008$   $\chi^2/\text{NDF}$ : 6272.8/4  
 Left In:  $17.690 \pm 0.005$   $\chi^2/\text{NDF}$ : 134444.8/8

$17.161 \pm 0.005$   $\chi^2/\text{NDF}$ : 144227.8/13  
 $17.333 \pm 0.004$   $\chi^2/\text{NDF}$ : 154096.8/13

asym\_bcm\_dg\_us\_bcm\_an\_us\_agg\_avg\_mean vs slug



Right In: 107.968 $\pm$ 112.009  $\chi^2$ /NDF: 23.4/3

Left Out: 64.255 $\pm$ 57.630  $\chi^2$ /NDF: 6.5/9

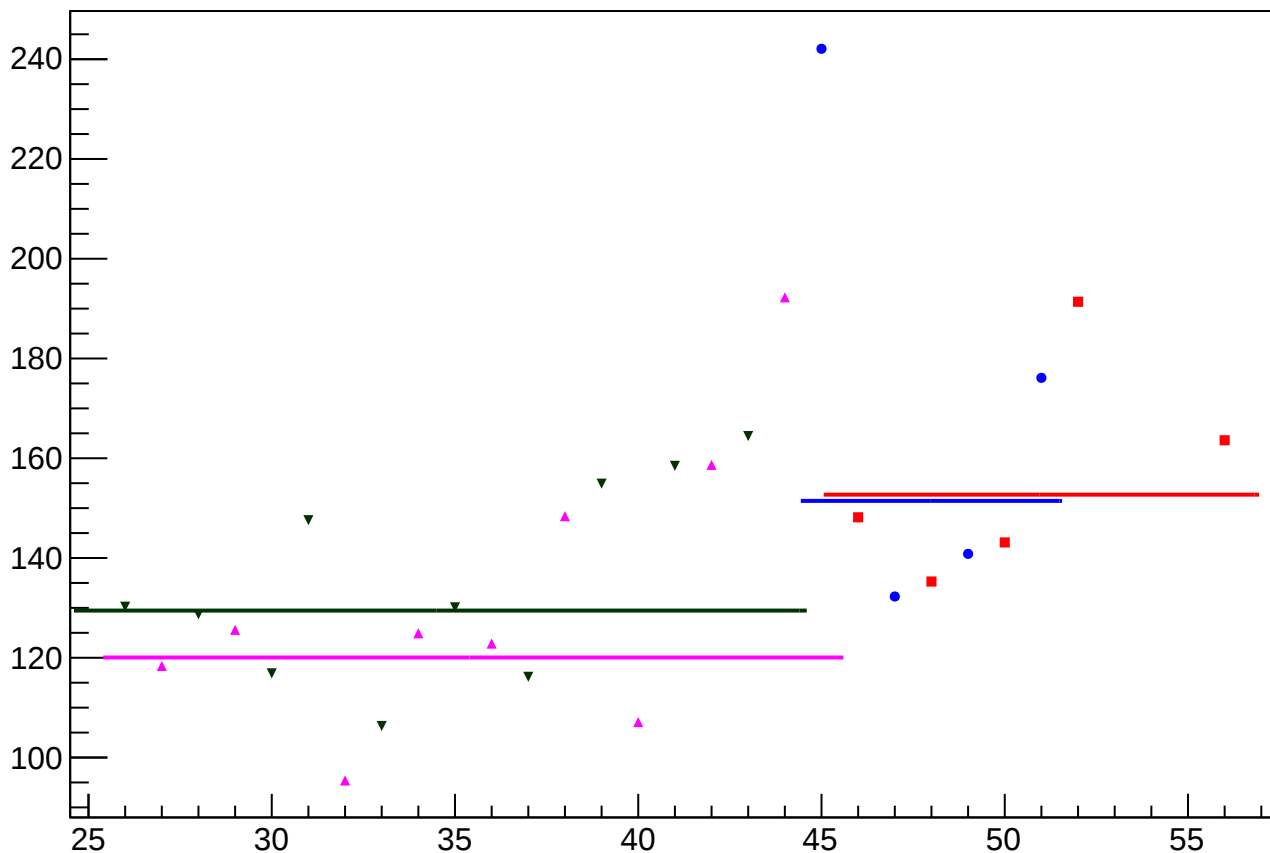
Right Out: 87.732 $\pm$ 101.188  $\chi^2$ /NDF: 3.8/4

Left In: -22.721 $\pm$ 51.941  $\chi^2$ /NDF: 1.0/8

73.405 $\pm$ 51.245  $\chi^2$ /NDF: 30.0/13

0.313 $\pm$ 46.209  $\chi^2$ /NDF: 5.7/13

asym\_bcm\_dg\_us\_bcm\_an\_us\_agg\_avg\_rms vs slug



Right In: 151.453+/-0.079  $\chi^2/\text{NDF}$ : 190165.6/3

Left Out: 129.462+/-0.041  $\chi^2/\text{NDF}$ : 189687.2/9

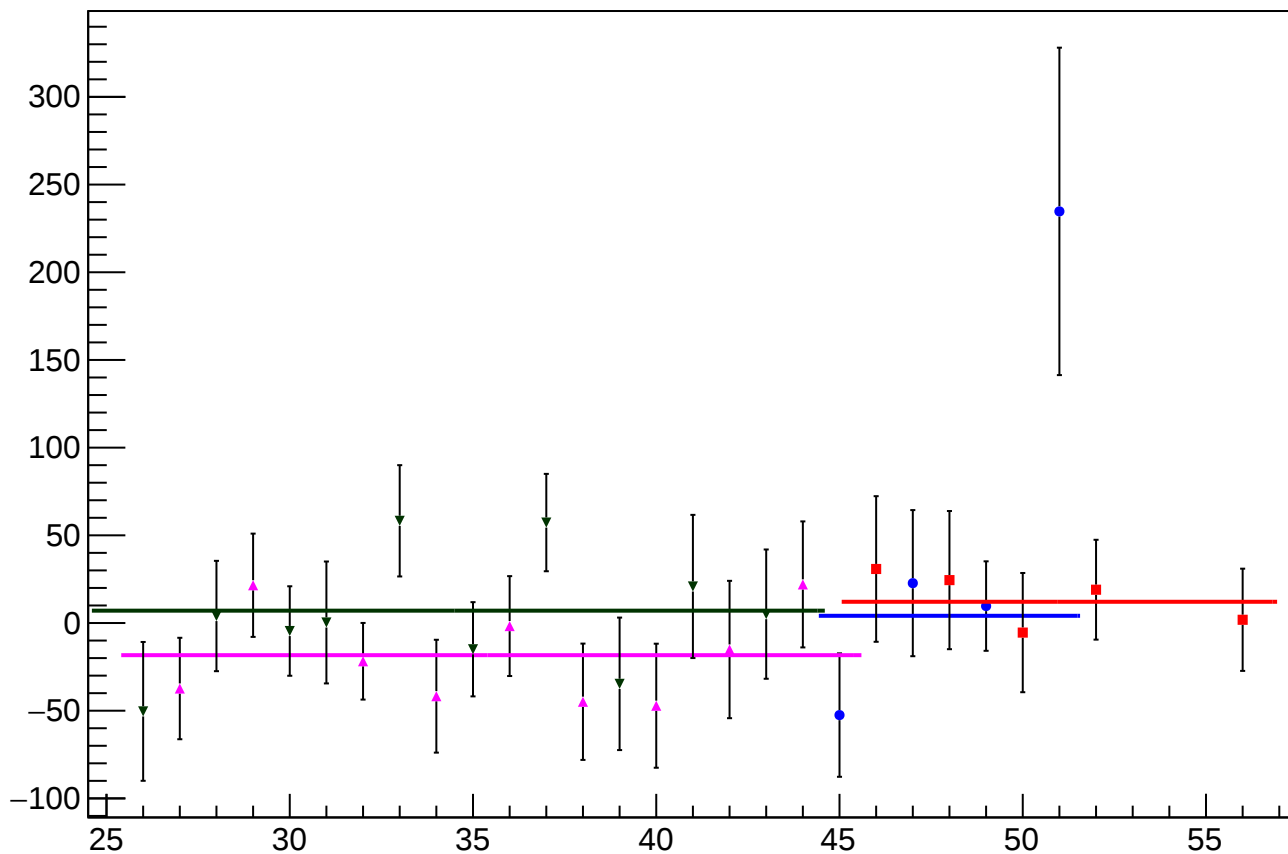
Right Out: 152.705+/-0.072  $\chi^2/\text{NDF}$ : 65457.5/4

Left In: 120.052+/-0.037  $\chi^2/\text{NDF}$ : 379795.5/8

134.065+/-0.036  $\chi^2/\text{NDF}$ : 440810.1/13

126.862+/-0.033  $\chi^2/\text{NDF}$ : 610086.8/13

asym\_bcm\_dg\_us\_bcm\_an\_us\_agg\_dd\_mean vs slug



Right In: 4.118 $\pm$ 18.152  $\chi^2$ /NDF: 8.9/3

Left Out: 7.046 $\pm$ 10.139  $\chi^2$ /NDF: 10.2/9

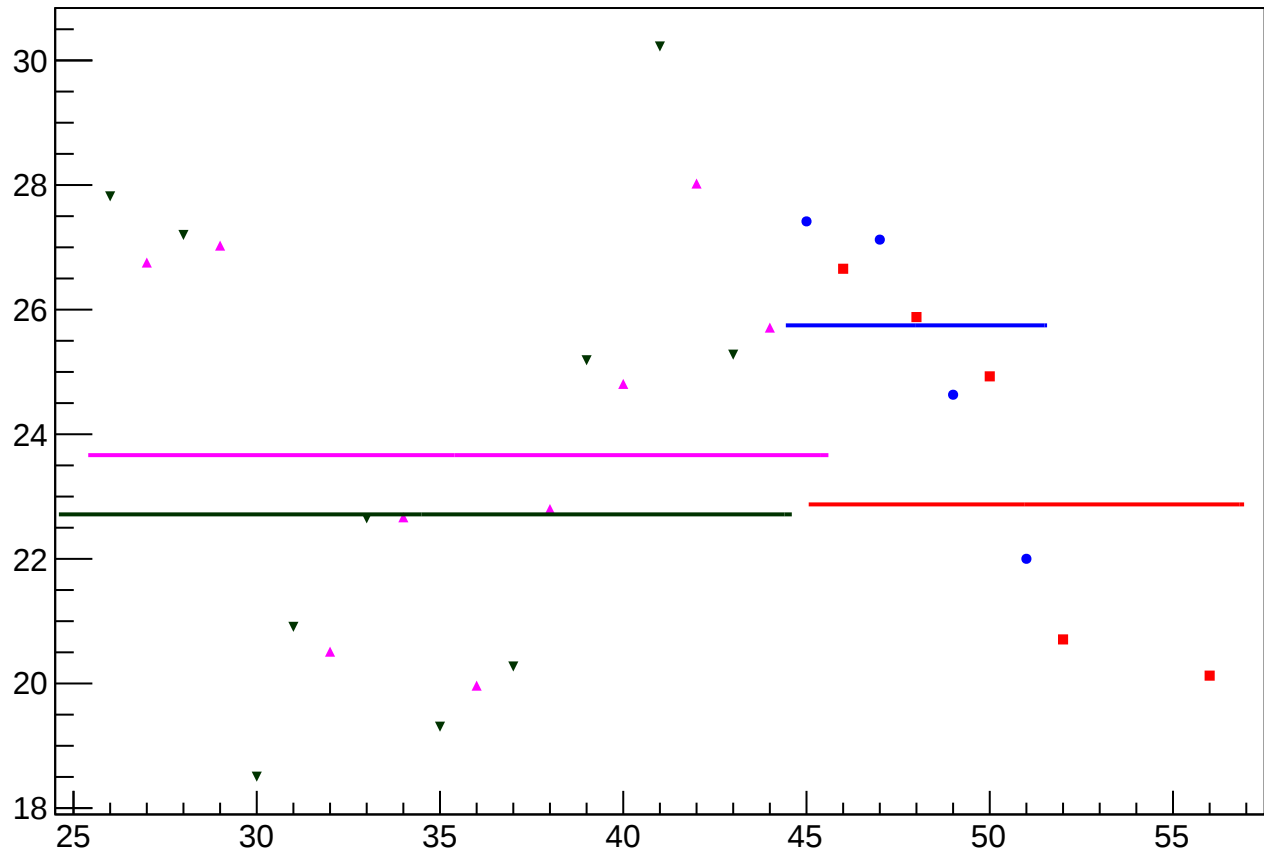
Right Out: 12.114 $\pm$ 14.904  $\chi^2$ /NDF: 0.8/4

Left In: -18.334 $\pm$ 10.112  $\chi^2$ /NDF: 5.7/8

6.350 $\pm$ 8.852  $\chi^2$ /NDF: 19.2/13

-8.735 $\pm$ 8.368  $\chi^2$ /NDF: 9.3/13

asym\_bcm\_dg\_us\_bcm\_an\_us\_agg\_dd\_rms vs slug



Right In: 25.748 $\pm$ 0.013  $\chi^2$ /NDF: 13709.5/3

Left Out: 22.714 $\pm$ 0.007  $\chi^2$ /NDF: 267334.5/9

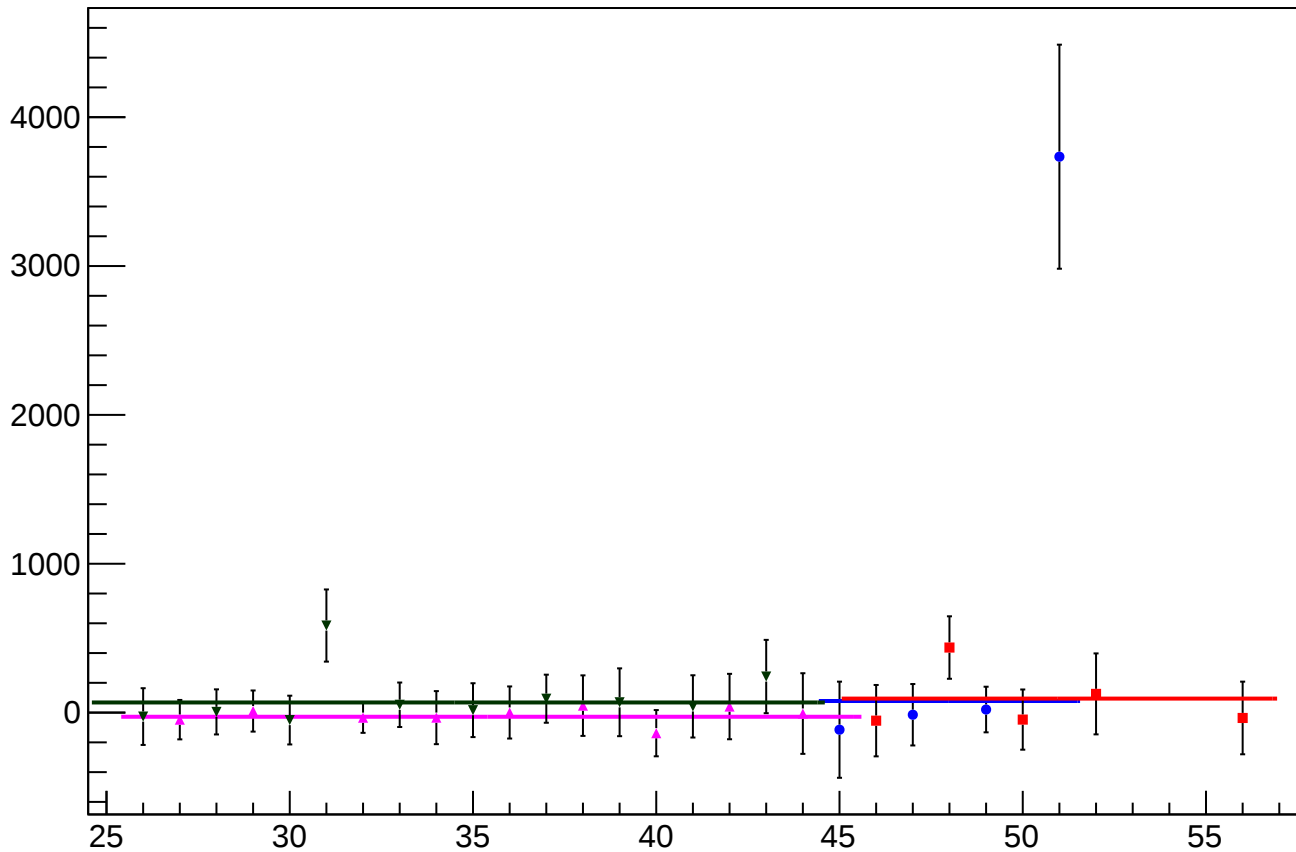
Right Out: 22.874 $\pm$ 0.011  $\chi^2$ /NDF: 64939.8/4

Left In: 23.665 $\pm$ 0.007  $\chi^2$ /NDF: 161021.9/8

23.436 $\pm$ 0.006  $\chi^2$ /NDF: 323619.6/13

23.416 $\pm$ 0.006  $\chi^2$ /NDF: 229816.1/13

asym\_bcm\_dg\_us\_bcm\_dg\_ds\_agg\_avg\_mean vs slug



Right In:  $77.863 \pm 113.641$   $\chi^2/\text{NDF}$ : 24.3/3

Left Out:  $68.060 \pm 57.959$   $\chi^2/\text{NDF}$ : 6.1/9

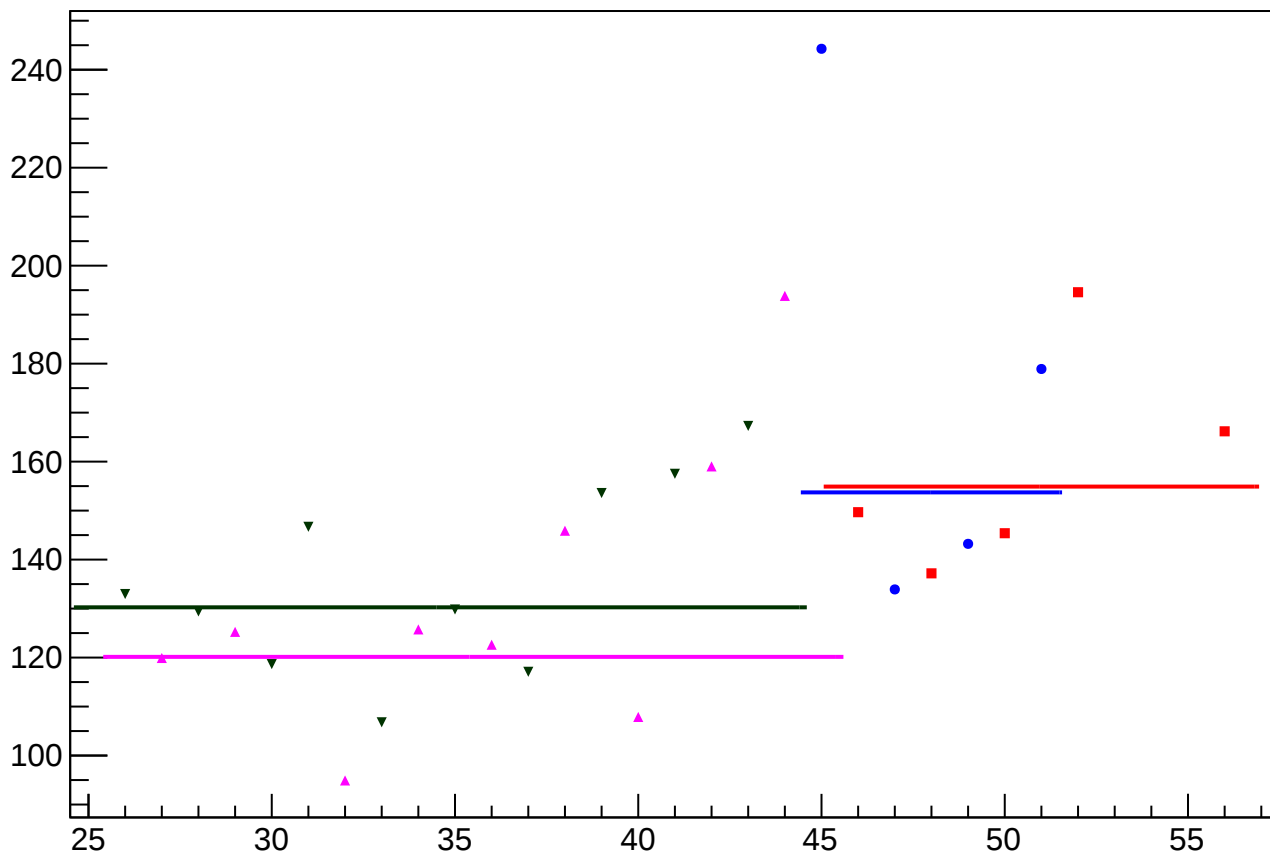
Right Out:  $94.074 \pm 102.667$   $\chi^2/\text{NDF}$ : 3.8/4

Left In:  $-27.981 \pm 51.982$   $\chi^2/\text{NDF}$ : 0.9/8

$70.083 \pm 51.631$   $\chi^2/\text{NDF}$ : 30.4/13

$-3.076 \pm 46.376$   $\chi^2/\text{NDF}$ : 5.8/13

asym\_bcm\_dg\_us\_bcm\_dg\_ds\_agg\_avg\_rms vs slug



Right In:  $153.719 \pm 0.080$   $\chi^2/\text{NDF}$ : 187279.9/3

Left Out:  $130.257 \pm 0.041$   $\chi^2/\text{NDF}$ : 182492.6/9

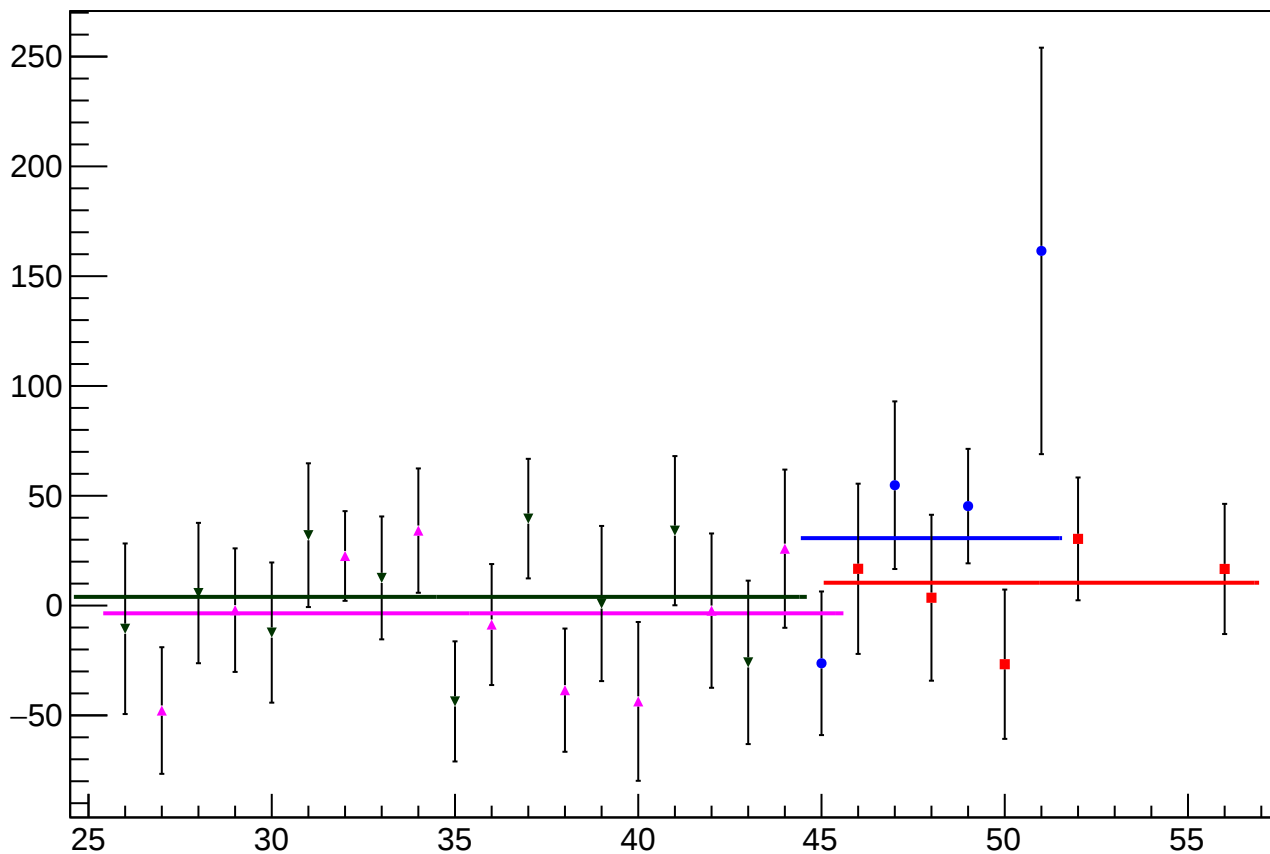
Right Out:  $154.904 \pm 0.073$   $\chi^2/\text{NDF}$ : 66469.5/4

Left In:  $120.145 \pm 0.037$   $\chi^2/\text{NDF}$ : 383181.0/8

$135.100 \pm 0.037$   $\chi^2/\text{NDF}$ : 437424.7/13

$127.237 \pm 0.033$   $\chi^2/\text{NDF}$ : 632124.5/13

asym\_bcm\_dg\_us\_bcm\_dg\_ds\_agg\_dd\_mean vs slug



Right In: 30.708 $\pm$ 17.649  $\chi^2$ /NDF: 5.7/3

Left Out: 3.960 $\pm$ 10.046  $\chi^2$ /NDF: 7.4/9

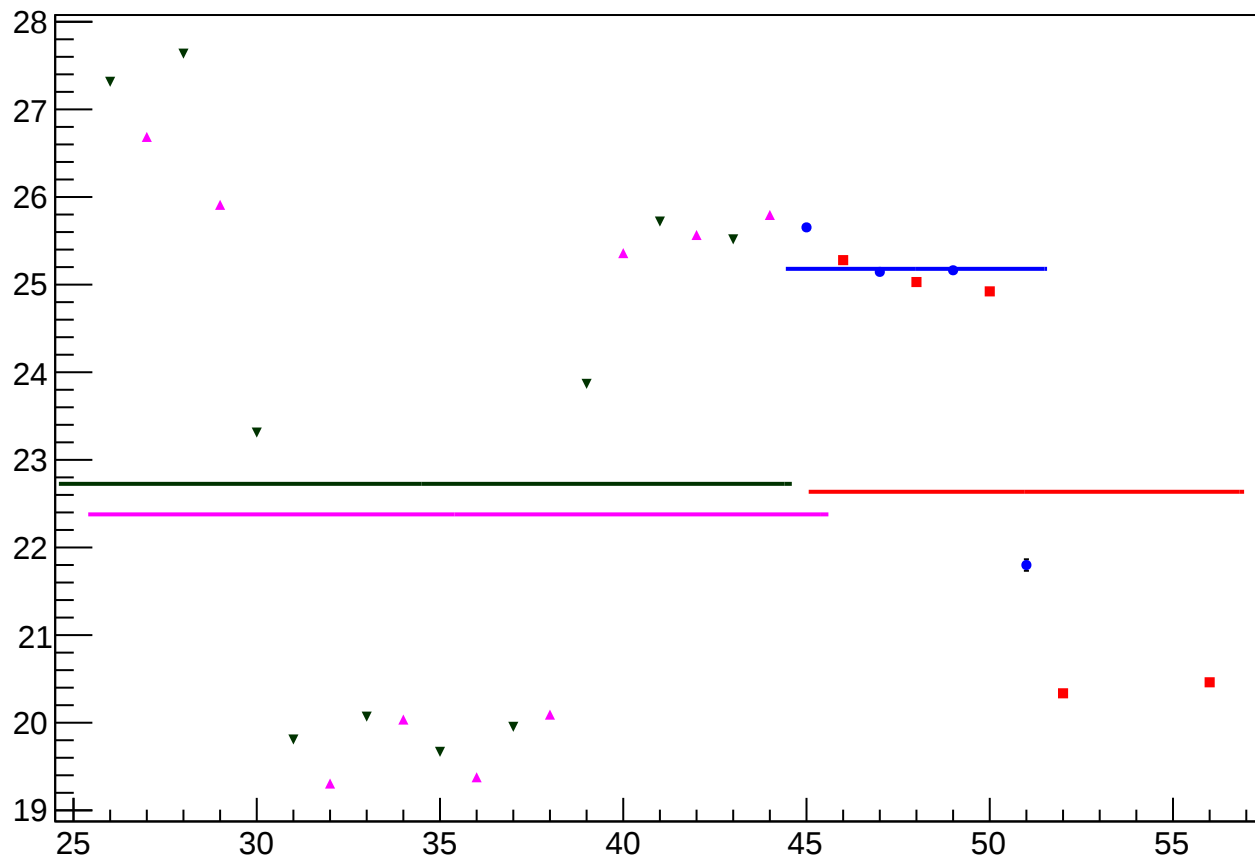
Right Out: 10.399 $\pm$ 14.667  $\chi^2$ /NDF: 1.8/4

Left In: -3.528 $\pm$ 9.515  $\chi^2$ /NDF: 9.3/8

10.506 $\pm$ 8.731  $\chi^2$ /NDF: 14.9/13

0.597 $\pm$ 7.983  $\chi^2$ /NDF: 11.7/13

asym\_bcm\_dg\_us\_bcm\_dg\_ds\_agg\_dd\_rms vs slug



Right In: 25.180 $\pm$ 0.012  $\chi^2$ /NDF: 3089.7/3

Left Out: 22.726 $\pm$ 0.007  $\chi^2$ /NDF:184323.0/9

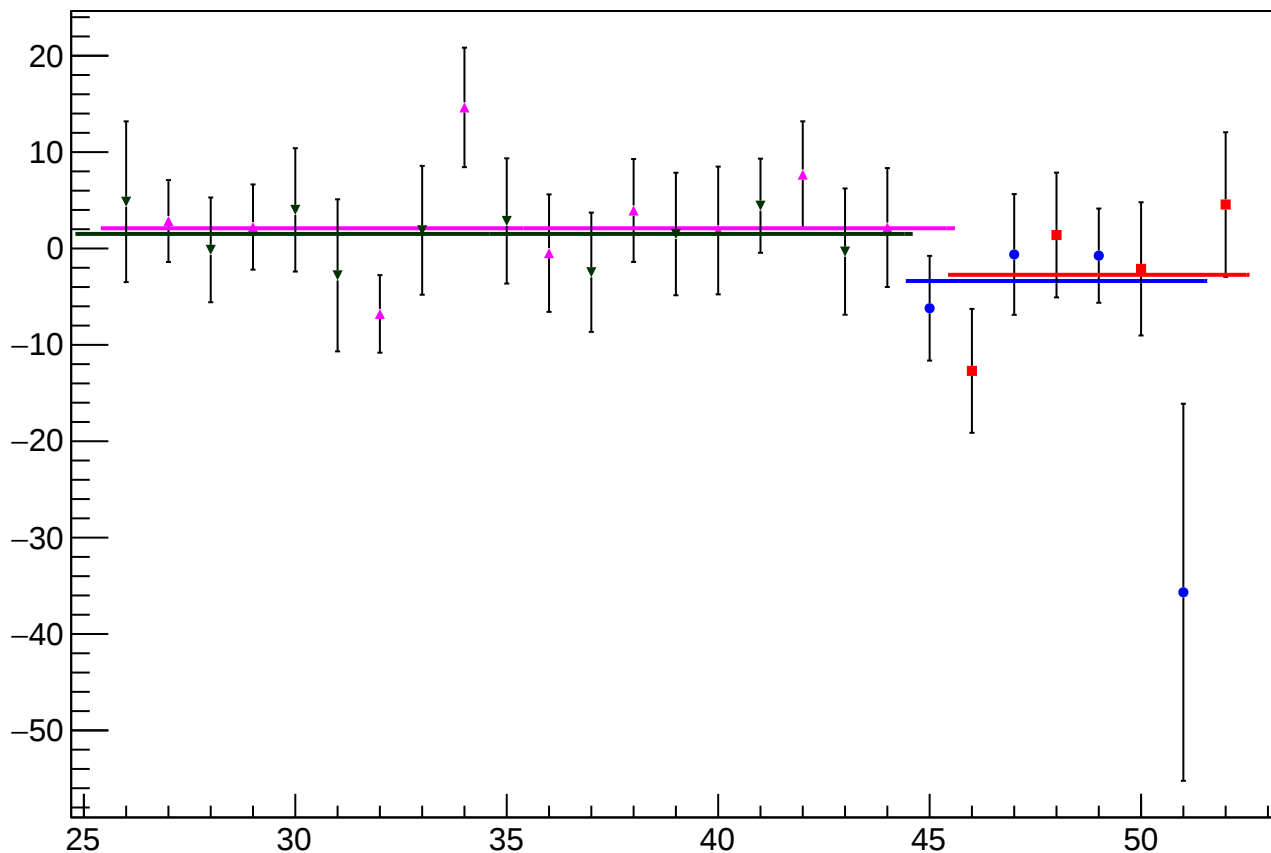
Right Out: 22.636 $\pm$ 0.010  $\chi^2$ /NDF: 50682.7/4

Left In: 22.378 $\pm$ 0.007  $\chi^2$ /NDF:220187.8/8

23.327 $\pm$ 0.006  $\chi^2$ /NDF: 216612.2/13

22.454 $\pm$ 0.006  $\chi^2$ /NDF: 271306.0/13

# diff\_bpm12X\_mean vs slug



Right In:  $-3.372 \pm 3.103$   $\chi^2/\text{NDF}$ : 3.5/3

Left Out:  $1.512 \pm 1.997$   $\chi^2/\text{NDF}$ : 1.6/9

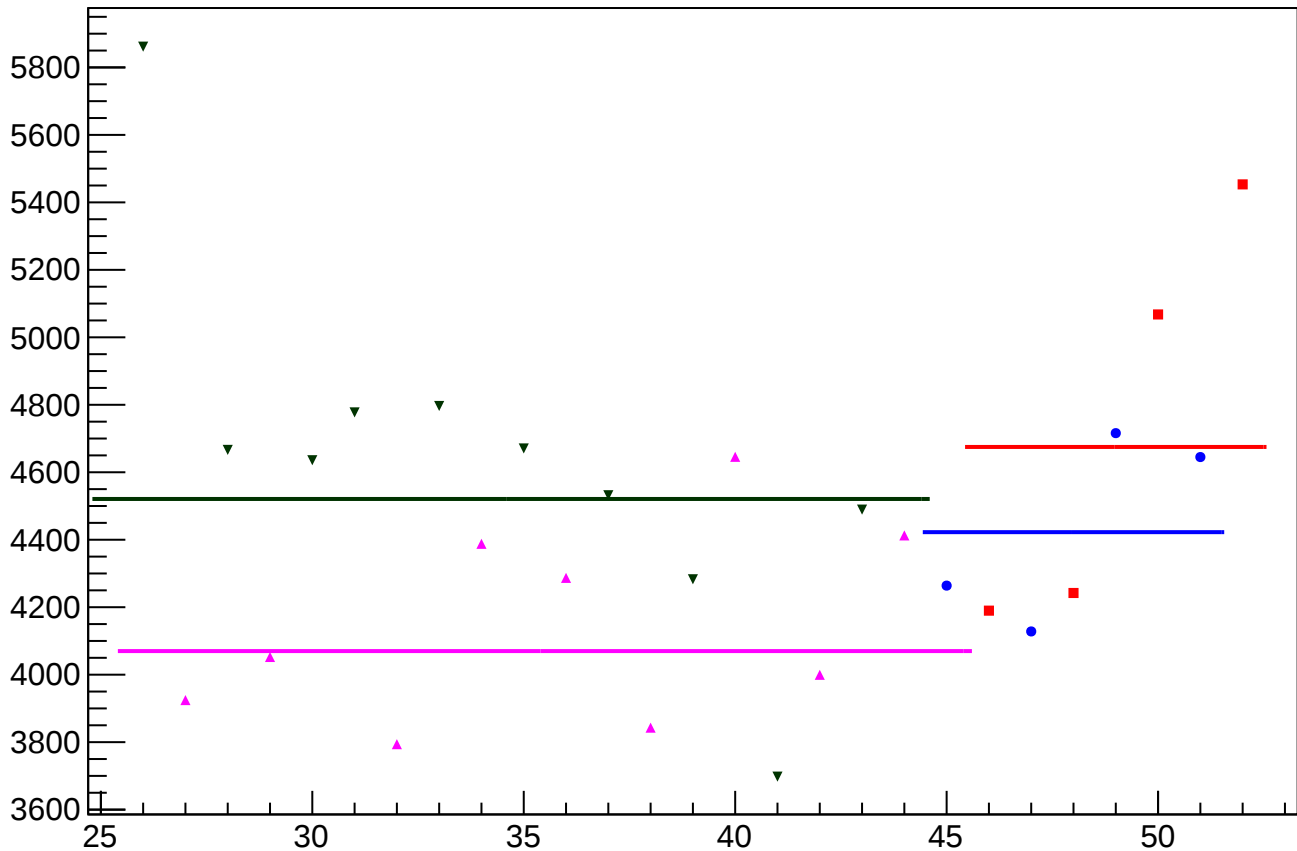
Right Out:  $-2.731 \pm 3.394$   $\chi^2/\text{NDF}$ : 3.8/3

Left In:  $2.097 \pm 1.720$   $\chi^2/\text{NDF}$ : 10.3/8

$0.082 \pm 1.679$   $\chi^2/\text{NDF}$ : 6.8/13

$1.111 \pm 1.534$   $\chi^2/\text{NDF}$ : 15.7/12

# diff\_bpm12X\_rms vs slug



Right In: 4422.466+/-2.194     $\chi^2/\text{NDF}$ : 13586.8/3

Left Out: 4520.844+/-1.412     $\chi^2/\text{NDF}$ :119990.0/9

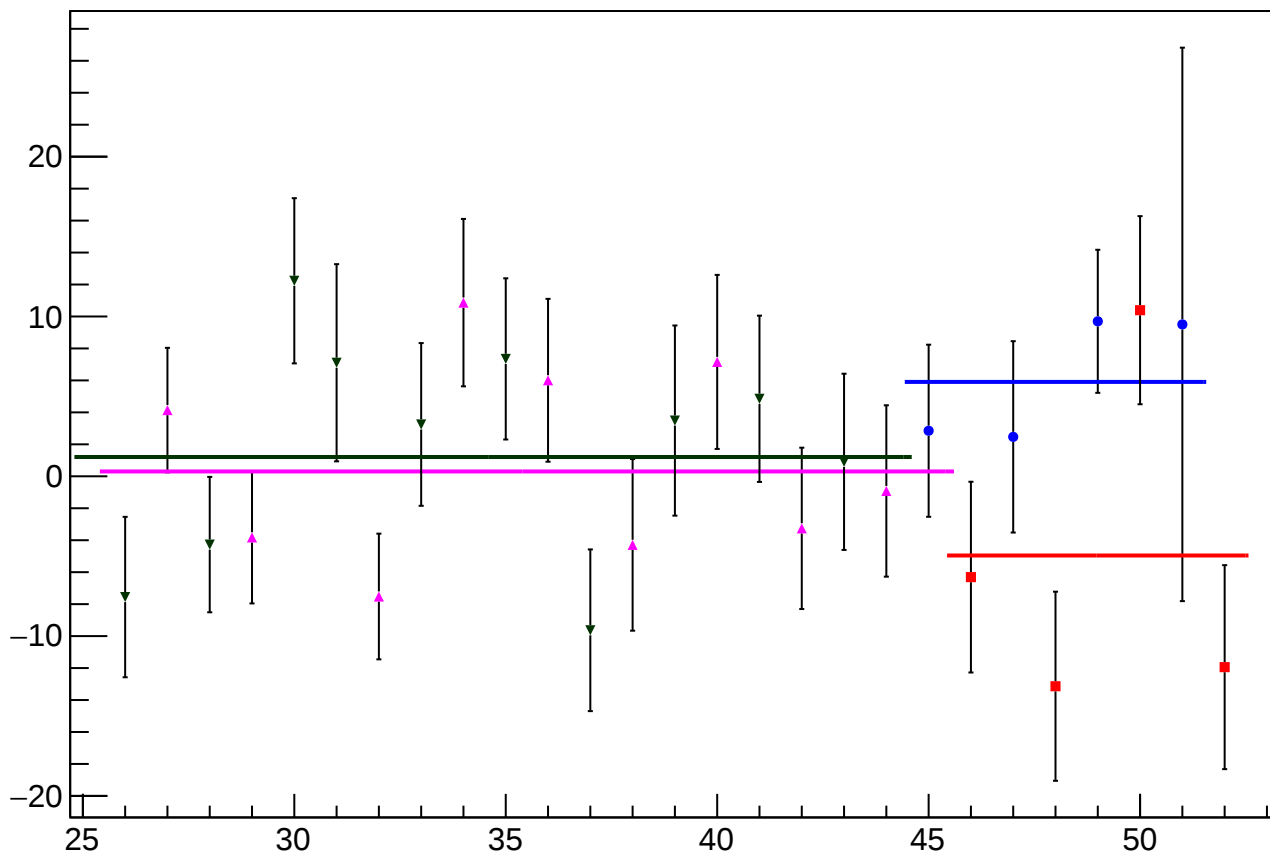
4492.044+/-1.187     $\chi^2/\text{NDF}$ : 134998.3/13

Right Out: 4675.035+/-2.400     $\chi^2/\text{NDF}$ : 48358.0/3

4193.574+/-1.085     $\chi^2/\text{NDF}$ : 143706.0/12

Left In: 4069.946+/-1.216     $\chi^2/\text{NDF}$ :44773.6/8

# diff\_bpm12Y\_mean vs slug



Right In: 5.906 $\pm$ 2.941  $\chi^2$ /NDF: 1.4/3

Left Out: 1.206 $\pm$ 1.635  $\chi^2$ /NDF: 17.1/9

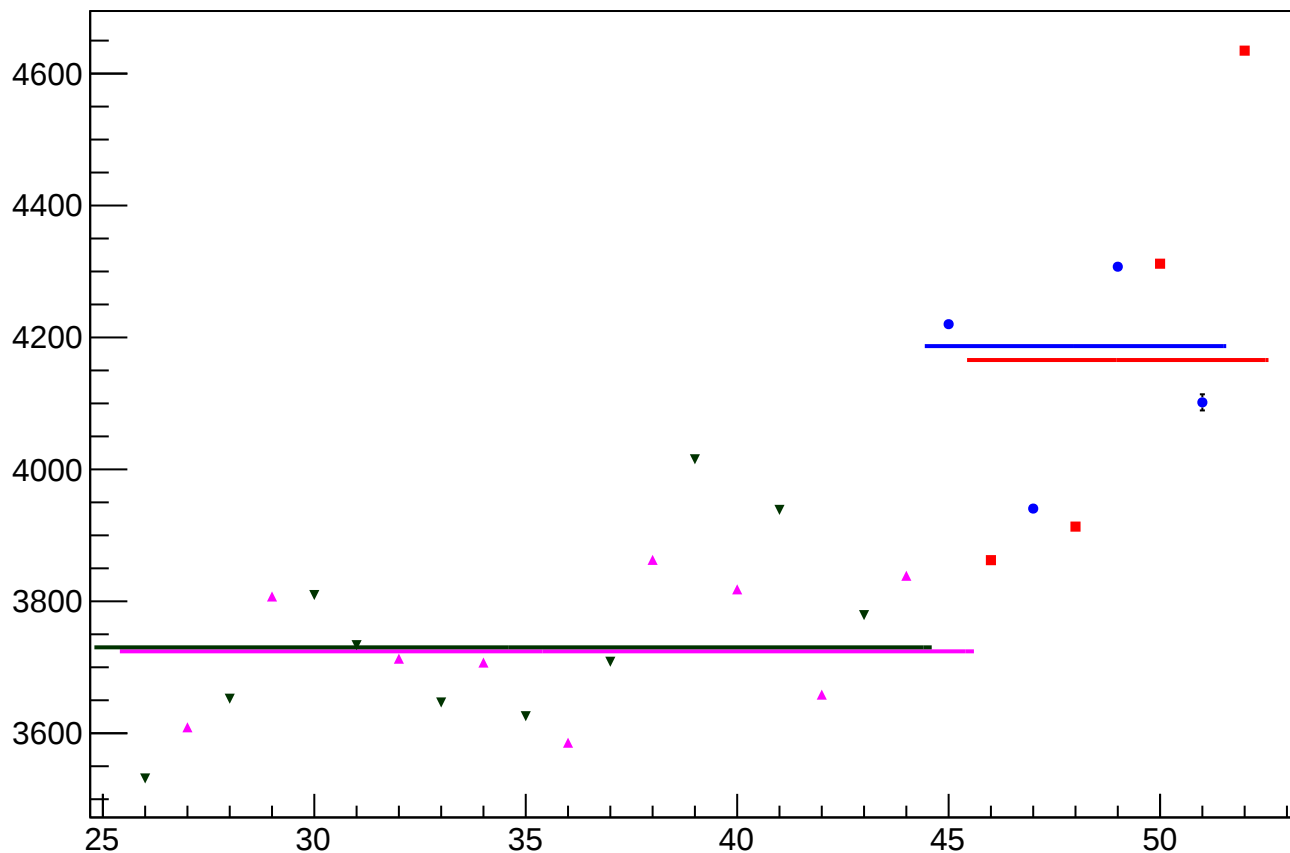
Right Out: -4.957 $\pm$ 3.014  $\chi^2$ /NDF: 10.0/3

Left In: 0.303 $\pm$ 1.568  $\chi^2$ /NDF: 14.1/8

2.316 $\pm$ 1.429  $\chi^2$ /NDF: 20.4/13

-0.818 $\pm$ 1.391  $\chi^2$ /NDF: 26.5/12

# diff\_bpm12Y\_rms vs slug



Right In: 4186.883 $\pm$ 2.079  $\chi^2$ /NDF: 4955.8/3

Left Out: 3730.233 $\pm$ 1.156  $\chi^2$ /NDF:13673.0/9

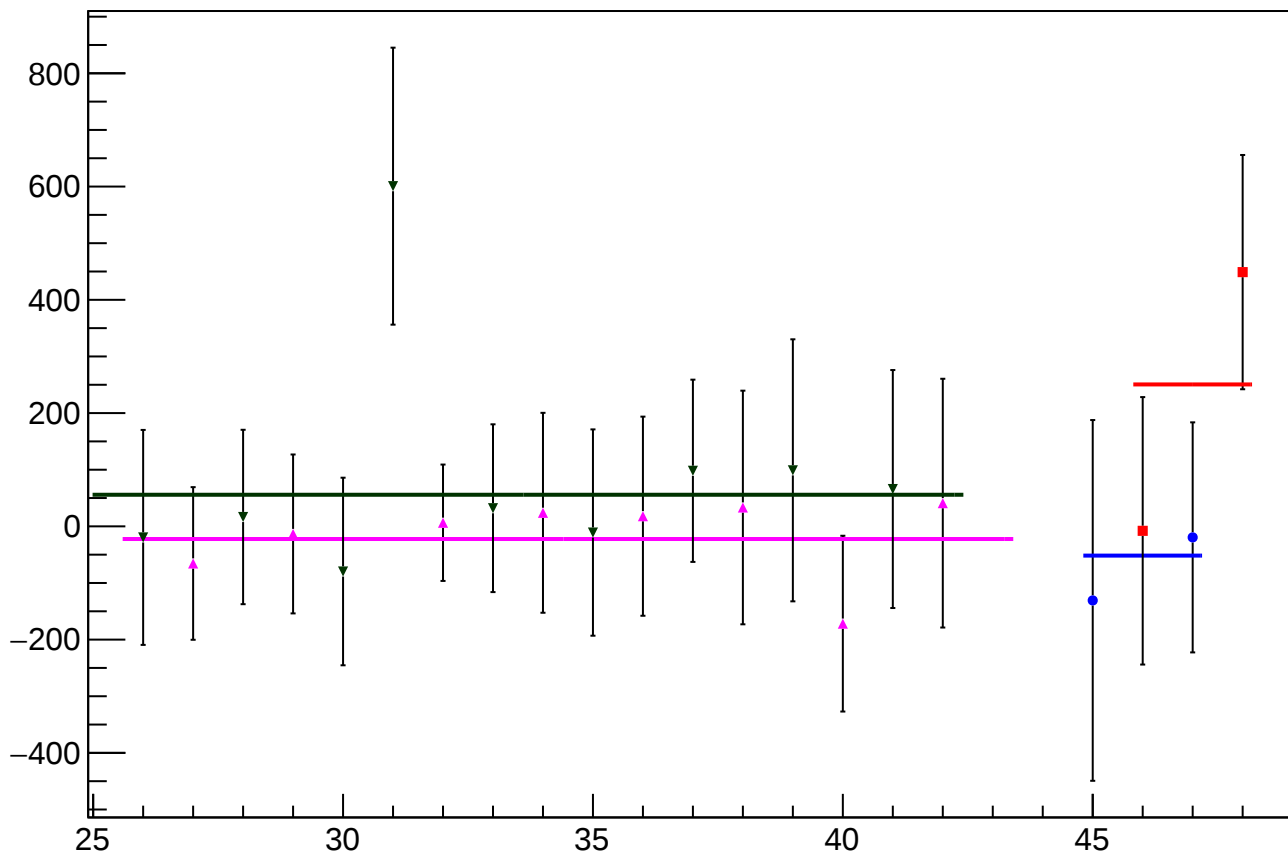
Right Out: 4165.778 $\pm$ 2.131  $\chi^2$ /NDF: 20842.8/3

Left In: 3724.165 $\pm$ 1.109  $\chi^2$ /NDF:7252.6/8

3838.041 $\pm$ 1.010  $\chi^2$ /NDF: 55470.7/13

3818.259 $\pm$ 0.984  $\chi^2$ /NDF: 61878.1/12

asym\_bcm\_dg\_us\_cav4cQ\_agg\_avg\_mean vs slug



Right In:  $-51.659 \pm 171.258$   $\chi^2/\text{NDF}: 0.1/1$

Left Out:  $55.788 \pm 59.892$   $\chi^2/\text{NDF}: 6.1/8$

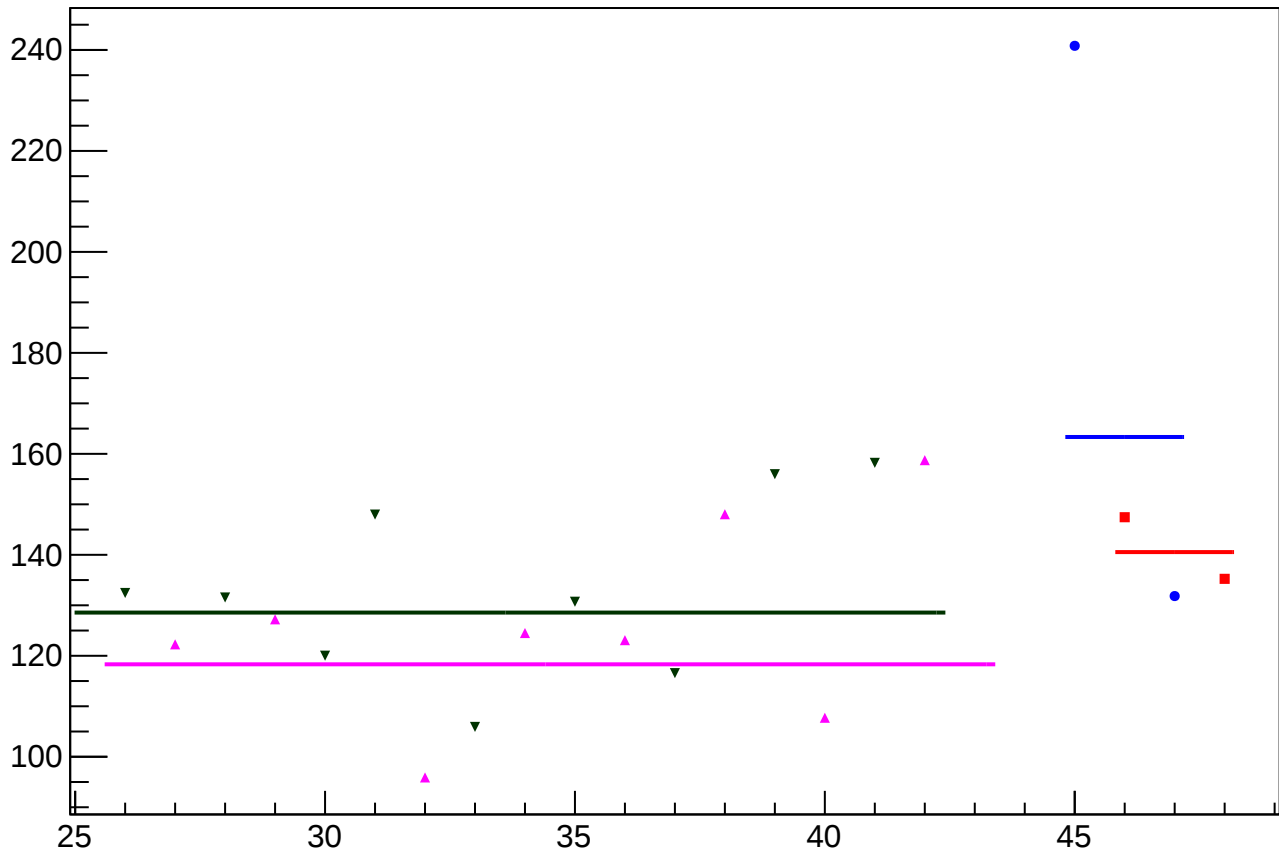
Right Out:  $250.594 \pm 155.594$   $\chi^2/\text{NDF}: 2.1/1$

Left In:  $-22.351 \pm 53.393$   $\chi^2/\text{NDF}: 1.4/7$

$44.079 \pm 56.535$   $\chi^2/\text{NDF}: 6.6/10$

$6.403 \pm 50.502$   $\chi^2/\text{NDF}: 6.3/9$

asym\_bcm\_dg\_us\_cav4cQ\_agg\_avg\_rms vs slug



Right In: 163.340 $\pm$ 0.121  $\chi^2$ /NDF: 166487.1/1

Left Out: 128.560 $\pm$ 0.042  $\chi^2$ /NDF: 145575.3/8

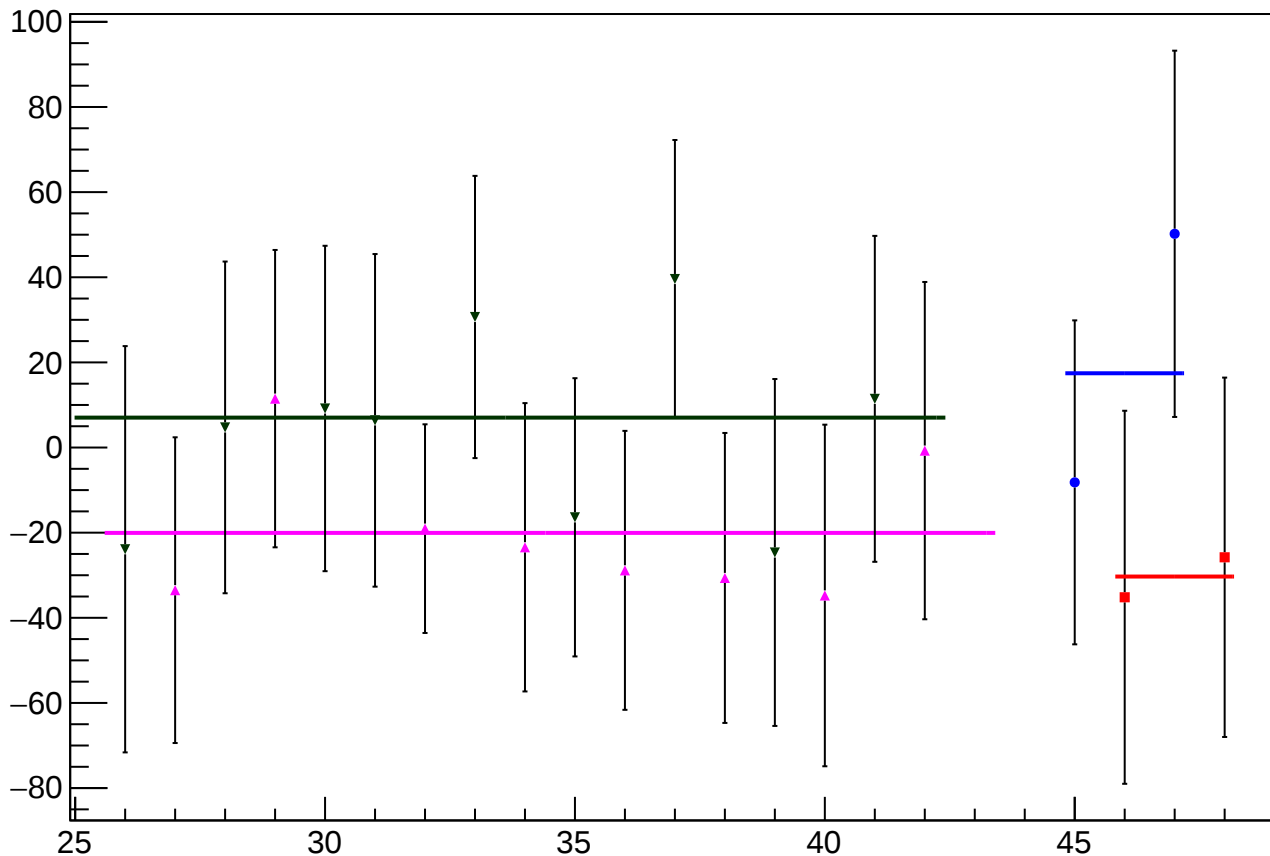
Right Out: 140.541 $\pm$ 0.110  $\chi^2$ /NDF: 3022.7/1

Left In: 118.311 $\pm$ 0.038  $\chi^2$ /NDF: 227483.3/7

132.350 $\pm$ 0.040  $\chi^2$ /NDF: 385559.7/10

120.652 $\pm$ 0.036  $\chi^2$ /NDF: 267030.1/9

asym\_bcm\_dg\_us\_cav4cQ\_agg\_dd\_mean vs slug



Right In: 17.447 $\pm$ 28.504  $\chi^2/\text{NDF}$ : 1.0/1

Left Out: 7.028 $\pm$ 12.398  $\chi^2/\text{NDF}$ : 3.1/8

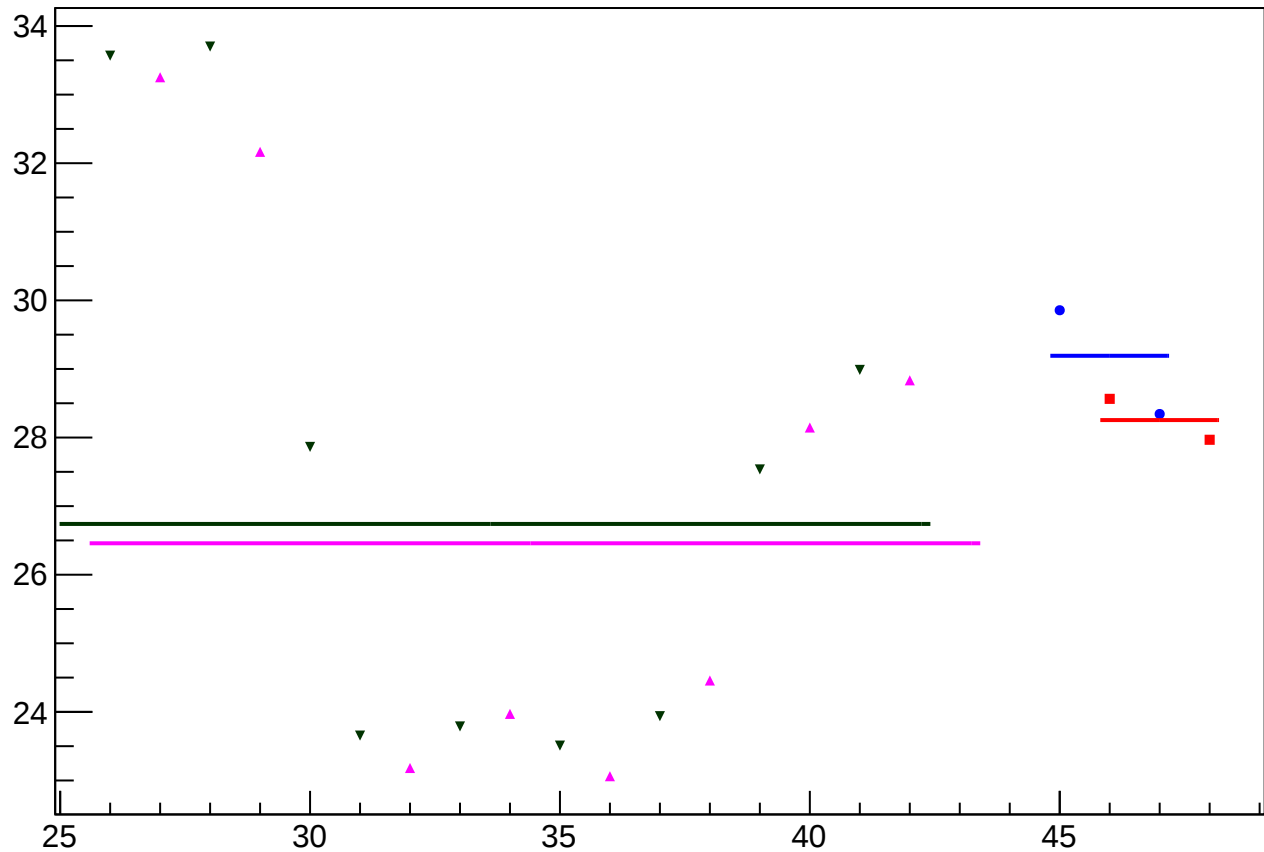
Right Out: -30.306 $\pm$ 30.400  $\chi^2/\text{NDF}$ : 0.0/1

Left In: -20.053 $\pm$ 11.799  $\chi^2/\text{NDF}$ : 1.5/7

8.686 $\pm$ 11.369  $\chi^2/\text{NDF}$ : 4.2/10

-21.395 $\pm$ 10.999  $\chi^2/\text{NDF}$ : 1.6/9

asym\_bcm\_dg\_us\_cav4cQ\_agg\_dd\_rms vs slug



Right In: 29.192 $\pm$ 0.020  $\chi^2/\text{NDF}$ : 1387.3/1

Left Out: 26.740 $\pm$ 0.009  $\chi^2/\text{NDF}$ : 176771.5/8

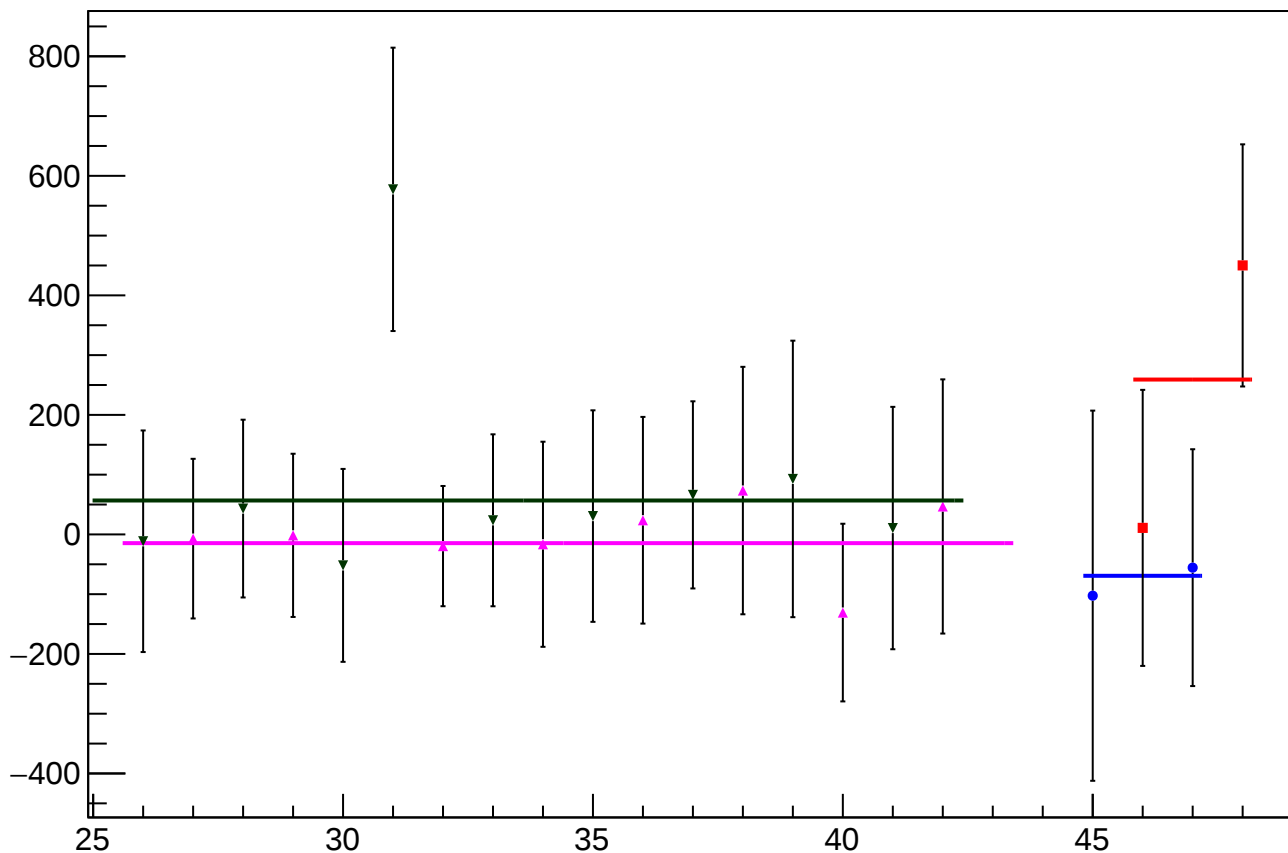
Right Out: 28.255 $\pm$ 0.021  $\chi^2/\text{NDF}$ : 192.3/1

Left In: 26.458 $\pm$ 0.008  $\chi^2/\text{NDF}$ : 210657.2/7

27.130 $\pm$ 0.008  $\chi^2/\text{NDF}$ : 190601.8/10

26.693 $\pm$ 0.008  $\chi^2/\text{NDF}$ : 216919.2/9

asym\_bcm\_dg\_ds\_cav4cQ\_agg\_avg\_mean vs slug



Right In: -69.249 $\pm$ 166.910  $\chi^2/\text{NDF}$ : 0.0/1

Left Out: 56.763 $\pm$ 58.268  $\chi^2/\text{NDF}$ : 5.6/8

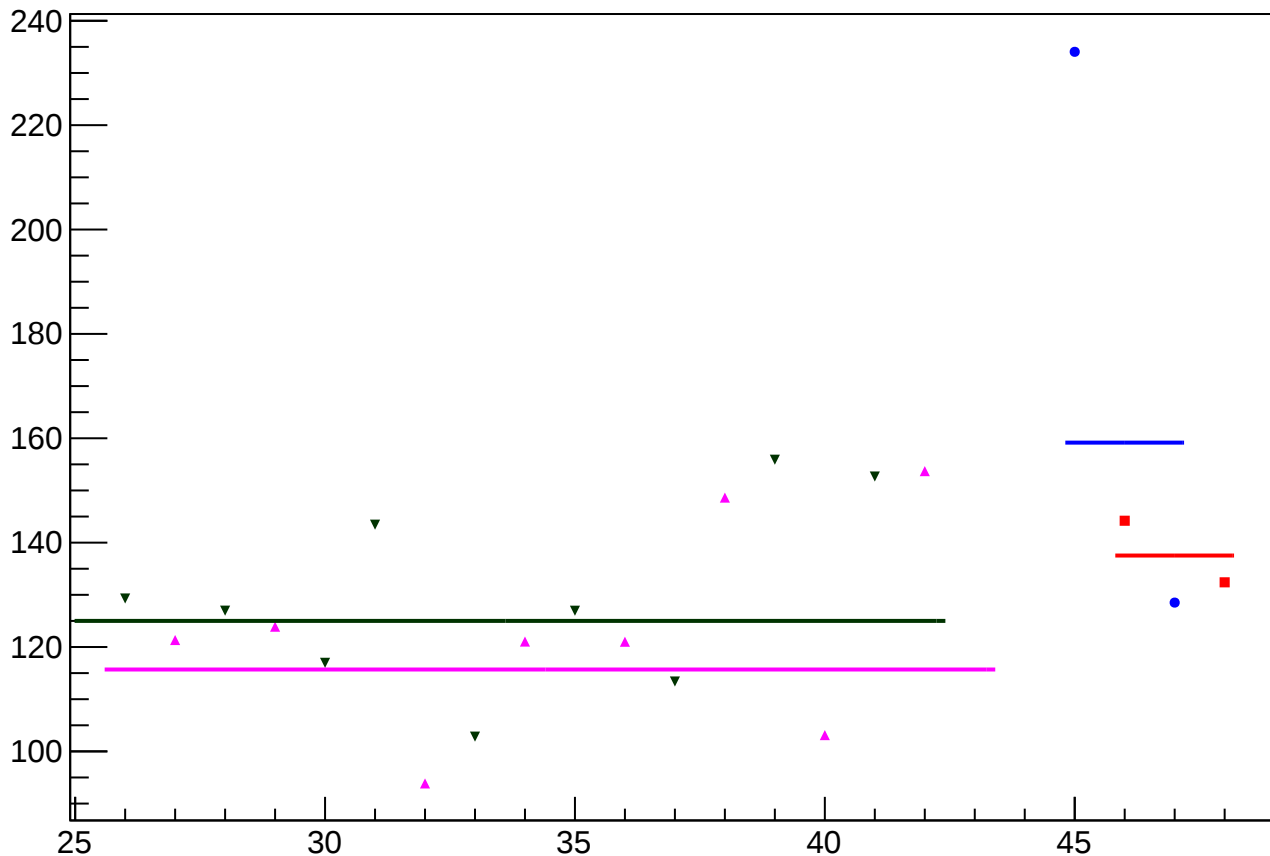
Right Out: 259.134 $\pm$ 152.302  $\chi^2/\text{NDF}$ : 2.0/1

Left In: -14.603 $\pm$ 52.227  $\chi^2/\text{NDF}$ : 0.9/7

43.074 $\pm$ 55.012  $\chi^2/\text{NDF}$ : 6.1/10

14.199 $\pm$ 49.403  $\chi^2/\text{NDF}$ : 5.9/9

asym\_bcm\_dg\_ds\_cav4cQ\_agg\_avg\_rms vs slug



Right In: 159.167 $\pm$ 0.118  $\chi^2$ /NDF: 164807.4/1

Left Out: 125.005 $\pm$ 0.041  $\chi^2$ /NDF: 150125.6/8

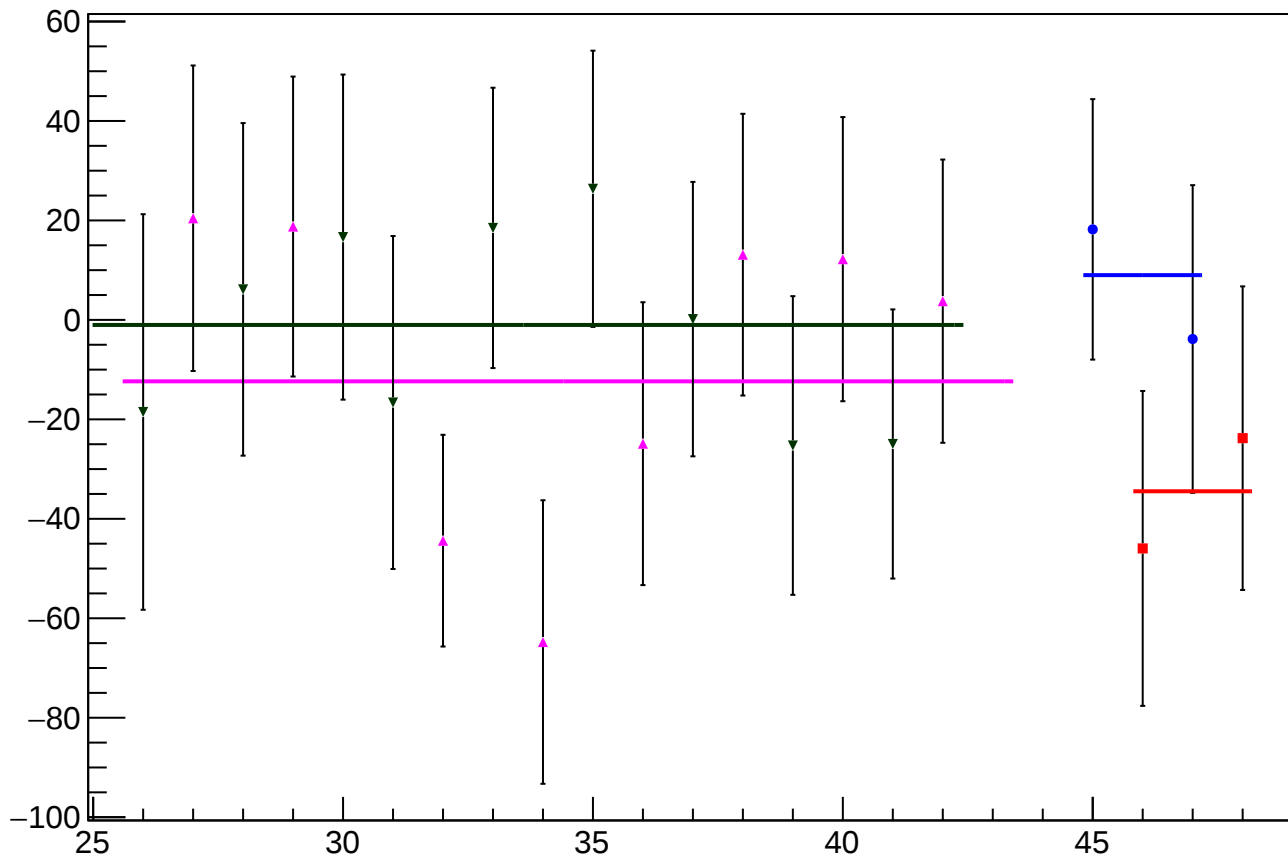
Right Out: 137.529 $\pm$ 0.108  $\chi^2$ /NDF: 2951.2/1

Left In: 115.690 $\pm$ 0.037  $\chi^2$ /NDF: 237670.3/7

128.716 $\pm$ 0.039  $\chi^2$ /NDF: 389614.7/10

117.988 $\pm$ 0.035  $\chi^2$ /NDF: 277418.6/9

asym\_bcm\_dg\_ds\_cav4cQ\_agg\_dd\_mean vs slug



Right In: 8.999 $\pm$ 19.988  $\chi^2$ /NDF: 0.3/1

Left Out: -1.017 $\pm$ 10.154  $\chi^2$ /NDF: 3.6/8

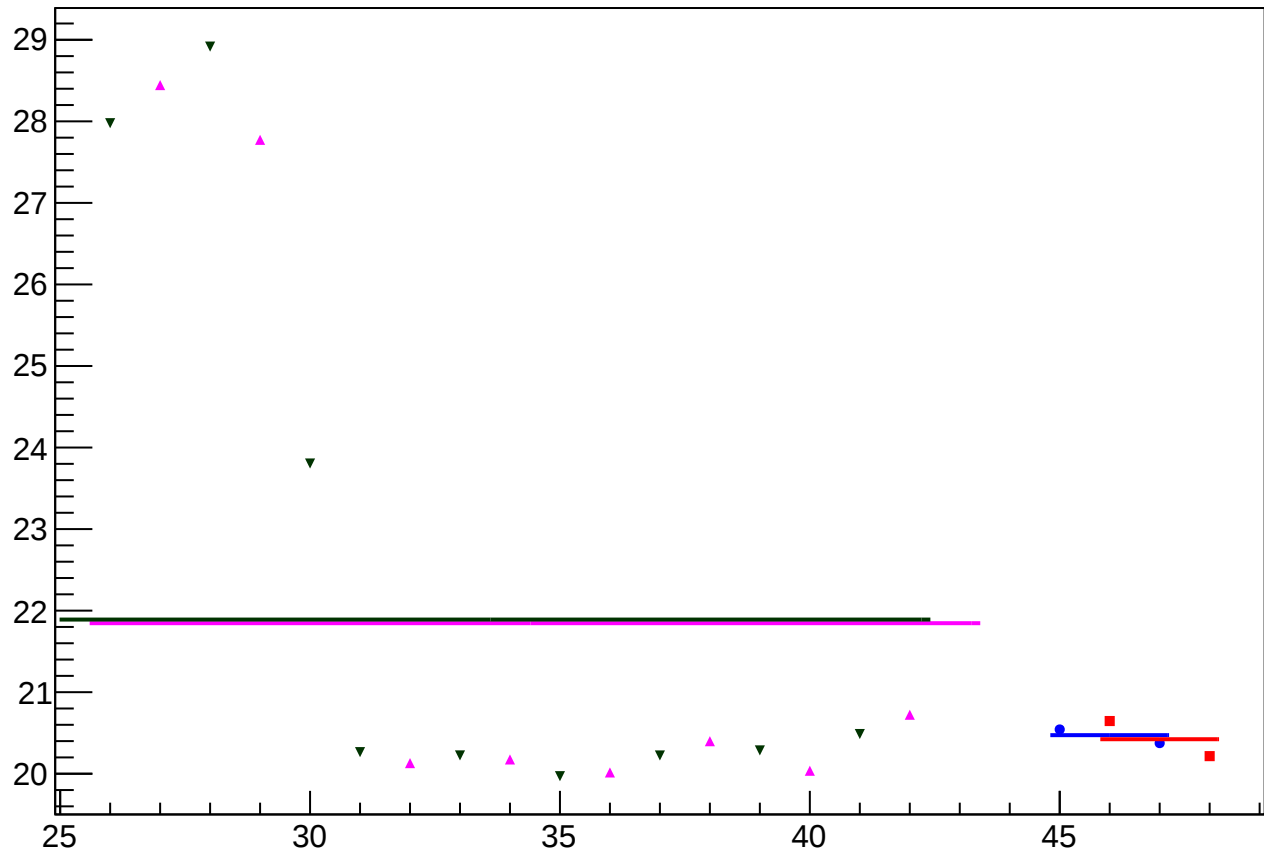
Right Out: -34.463 $\pm$ 21.974  $\chi^2$ /NDF: 0.3/1

Left In: -12.356 $\pm$ 9.741  $\chi^2$ /NDF: 9.9/7

1.038 $\pm$ 9.053  $\chi^2$ /NDF: 4.1/10

-15.987 $\pm$ 8.906  $\chi^2$ /NDF: 11.0/9

asym\_bcm\_dg\_ds\_cav4cQ\_agg\_dd\_rms vs slug



Right In: 20.473+/-0.014  $\chi^2/\text{NDF}$ : 34.2/1

Left Out: 21.890+/-0.007  $\chi^2/\text{NDF}$ : 181663.5/8

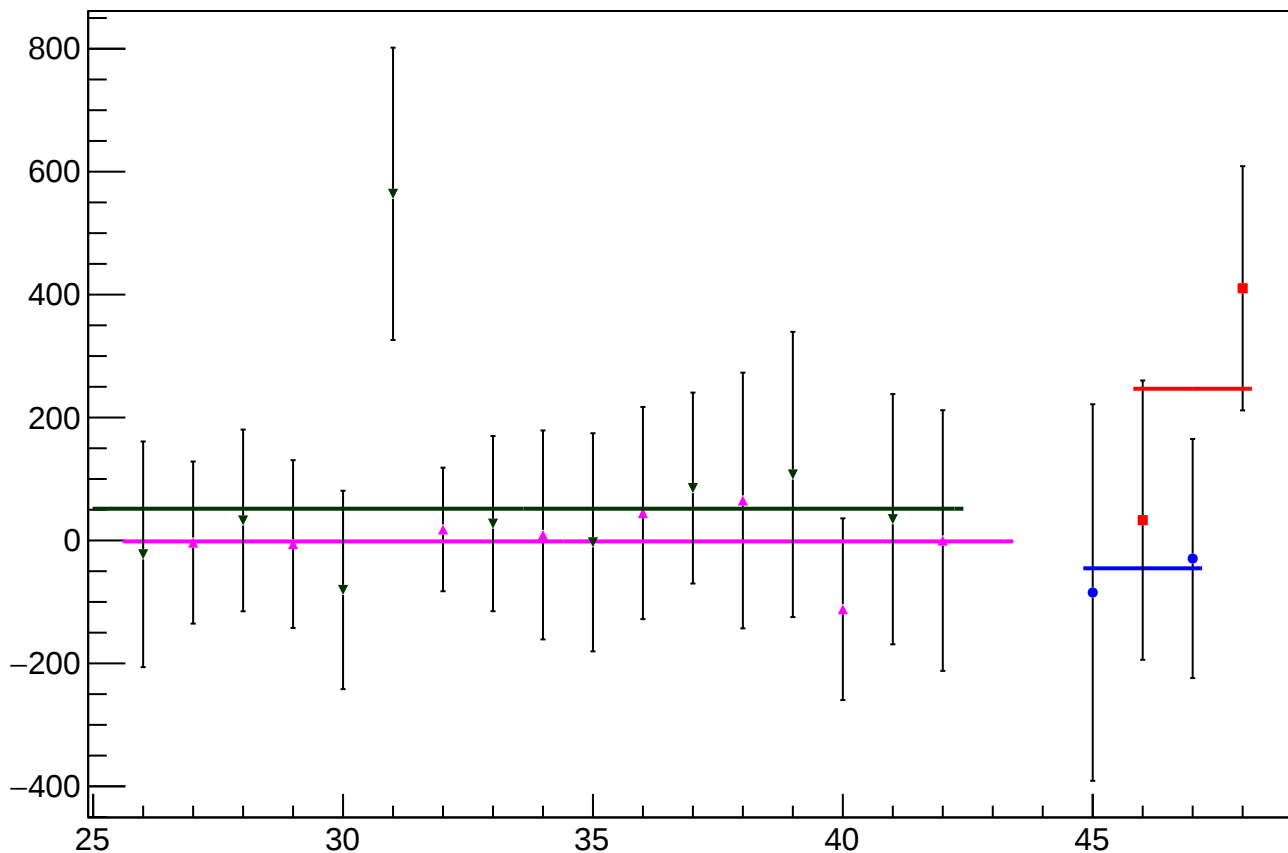
21.600+/-0.006  $\chi^2/\text{NDF}$ : 189692.5/10

Right Out: 20.423+/-0.016  $\chi^2/\text{NDF}$ : 191.7/1

21.612+/-0.006  $\chi^2/\text{NDF}$ : 221251.2/9

Left In: 21.846+/-0.007  $\chi^2/\text{NDF}$ : 214051.0/7

asym\_bcm\_an\_us\_cav4cQ\_agg\_avg\_mean vs slug



Right In: -45.292 $\pm$ 164.195  $\chi^2$ /NDF: 0.0/1

Left Out: 51.653 $\pm$ 58.058  $\chi^2$ /NDF: 5.7/8

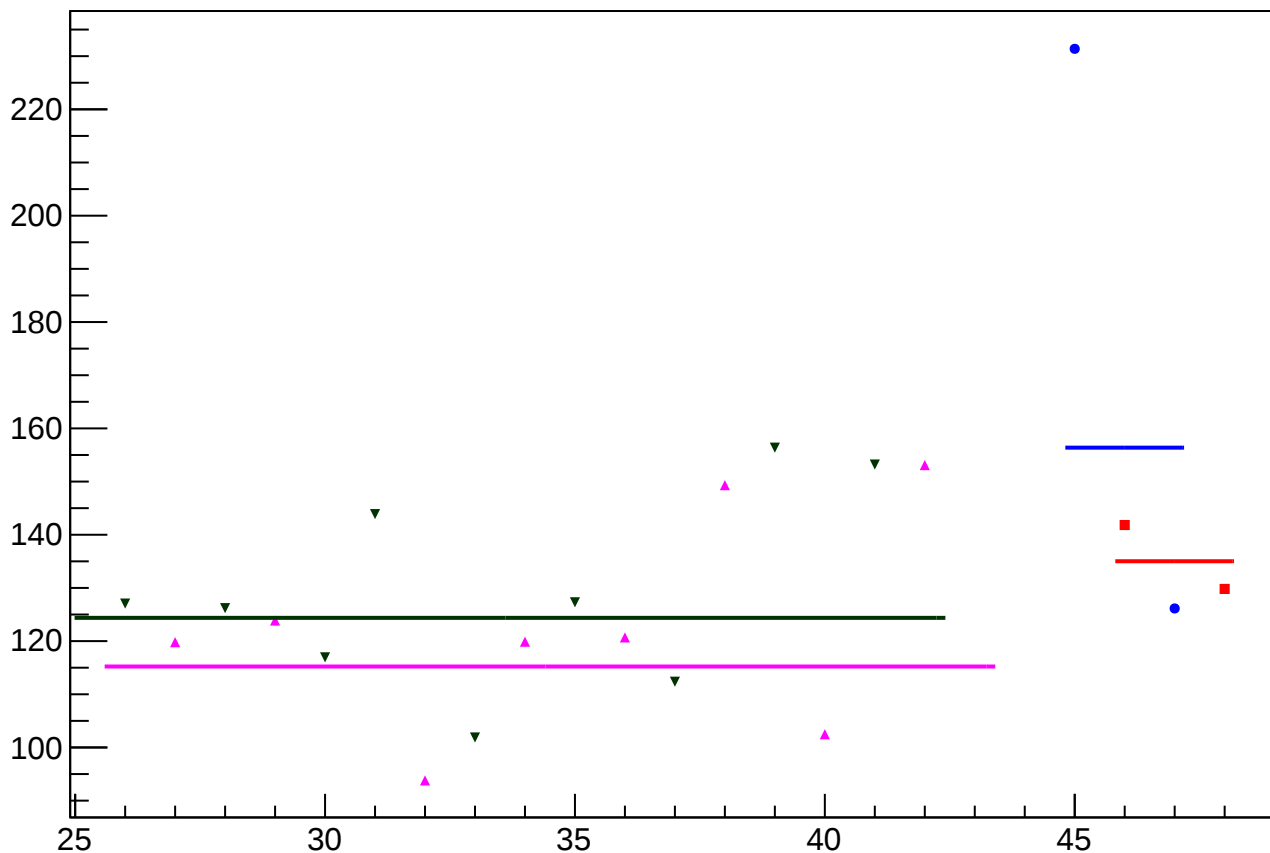
Right Out: 246.855 $\pm$ 149.551  $\chi^2$ /NDF: 1.6/1

Left In: -1.485 $\pm$ 52.029  $\chi^2$ /NDF: 0.8/7

40.879 $\pm$ 54.737  $\chi^2$ /NDF: 6.1/10

25.328 $\pm$ 49.140  $\chi^2$ /NDF: 4.8/9

asym\_bcm\_an\_us\_cav4cQ\_agg\_avg\_rms vs slug



Right In: 156.380 $\pm$ 0.116  $\chi^2$ /NDF: 168243.8/1

Left Out: 124.375 $\pm$ 0.041  $\chi^2$ /NDF:158935.2/8

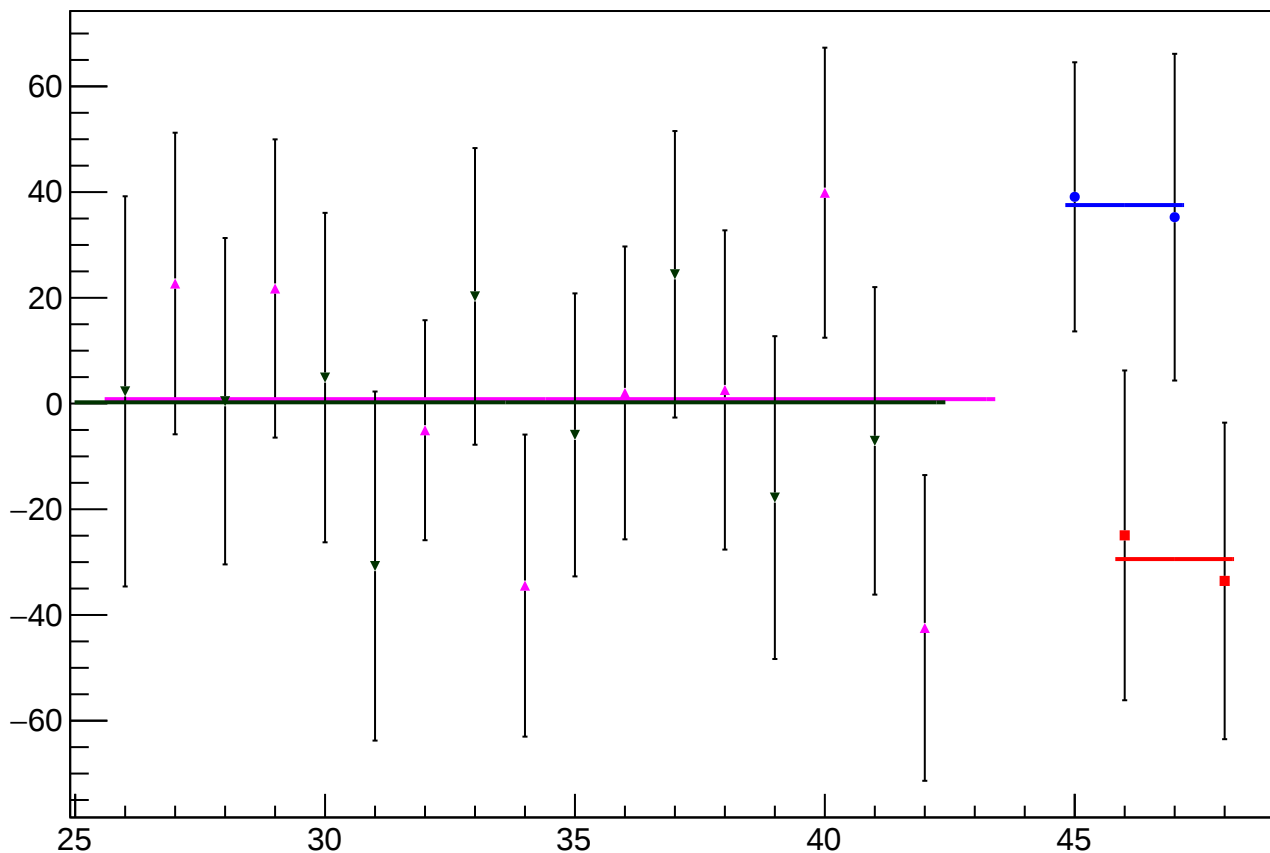
Right Out: 135.019 $\pm$ 0.106  $\chi^2$ /NDF: 3170.2/1

Left In: 115.224 $\pm$ 0.037  $\chi^2$ /NDF:237198.7/7

127.932 $\pm$ 0.039  $\chi^2$ /NDF: 394720.8/10

117.361 $\pm$ 0.035  $\chi^2$ /NDF: 271625.9/9

asym\_bcm\_an\_us\_cav4cQ\_agg\_dd\_mean vs slug



Right In: 37.547+/-19.649  $\chi^2/\text{NDF}$ : 0.0/1

Left Out: 0.232+/-9.994  $\chi^2/\text{NDF}$ : 2.7/8

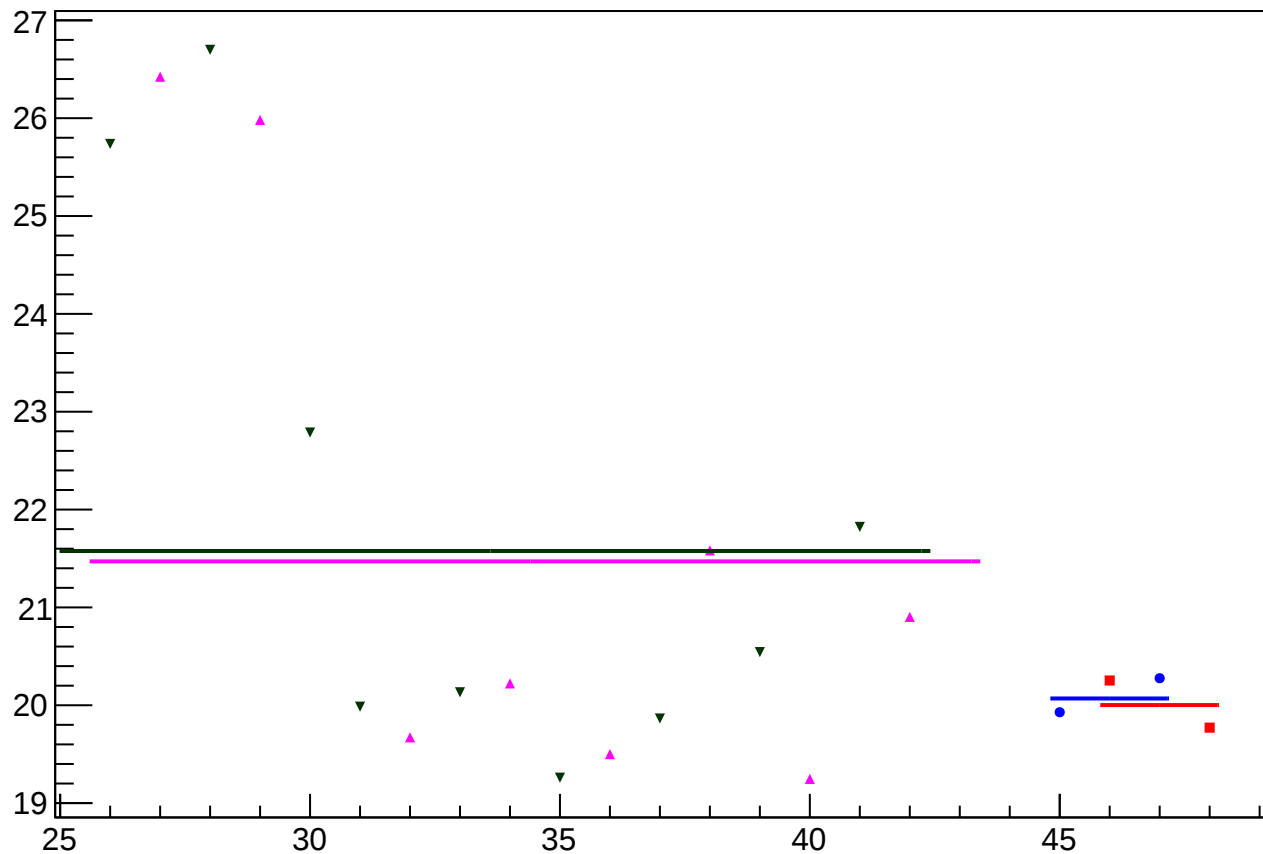
Right Out: -29.423+/-21.601  $\chi^2/\text{NDF}$ : 0.0/1

Left In: 0.830+/-9.559  $\chi^2/\text{NDF}$ : 7.0/7

7.902+/-8.908  $\chi^2/\text{NDF}$ : 5.6/10

-4.125+/-8.742  $\chi^2/\text{NDF}$ : 8.7/9

asym\_bcm\_an\_us\_cav4cQ\_agg\_dd\_rms vs slug



Right In: 20.069 $\pm$ 0.014  $\chi^2$ /NDF: 150.7/1

Left Out: 21.577 $\pm$ 0.007  $\chi^2$ /NDF: 118812.1/8

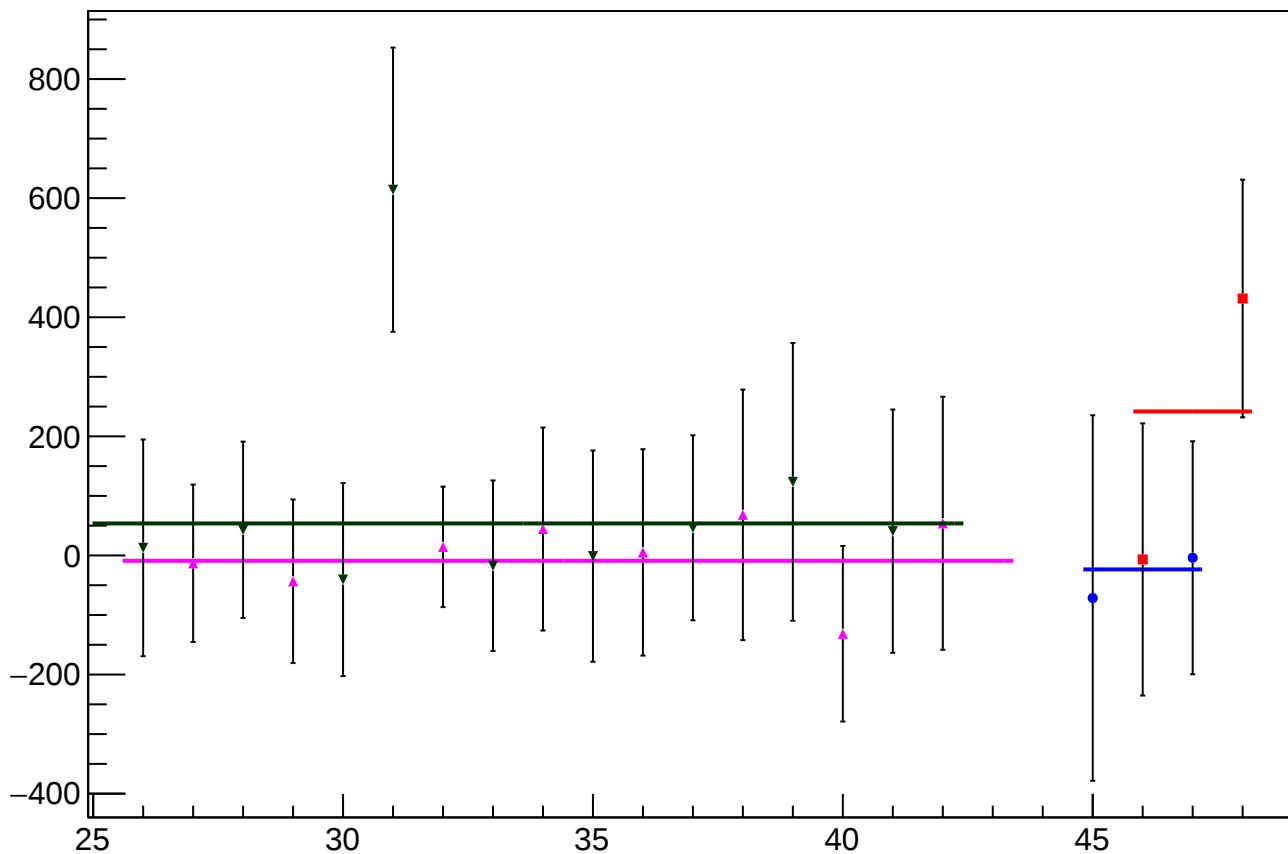
Right Out: 20.002 $\pm$ 0.015  $\chi^2$ /NDF: 248.4/1

Left In: 21.471 $\pm$ 0.007  $\chi^2$ /NDF: 154241.5/7

21.267 $\pm$ 0.006  $\chi^2$ /NDF: 128313.3/10

21.230 $\pm$ 0.006  $\chi^2$ /NDF: 162220.1/9

asym\_bcm\_an\_ds\_cav4cQ\_agg\_avg\_mean vs slug



Right In: -23.439 $\pm$ 164.981  $\chi^2$ /NDF: 0.0/1

Left Out: 53.739 $\pm$ 58.143  $\chi^2$ /NDF: 6.3/8

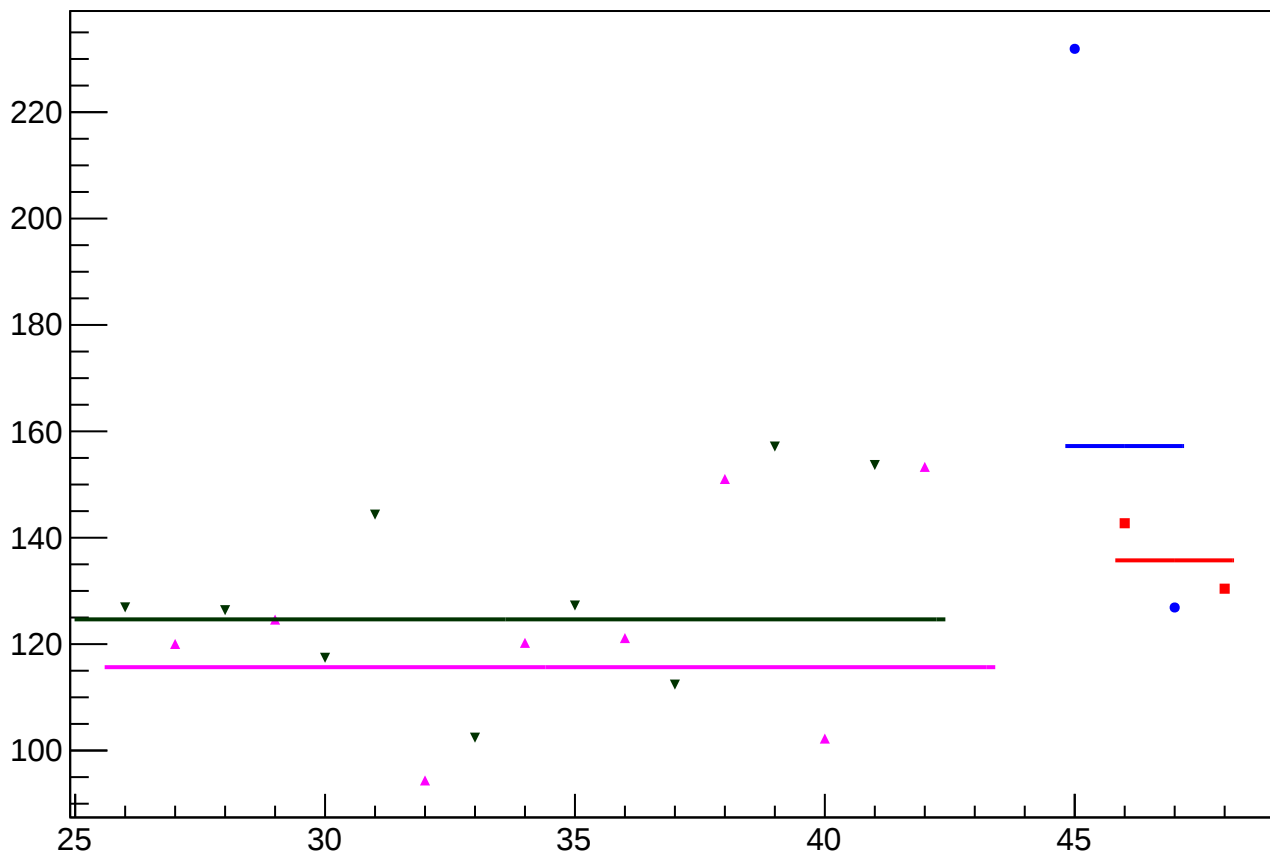
Right Out: 241.812 $\pm$ 150.311  $\chi^2$ /NDF: 2.1/1

Left In: -8.870 $\pm$ 52.228  $\chi^2$ /NDF: 1.1/7

45.213 $\pm$ 54.837  $\chi^2$ /NDF: 6.6/10

18.134 $\pm$ 49.334  $\chi^2$ /NDF: 5.7/9

asym\_bcm\_an\_ds\_cav4cQ\_agg\_avg\_rms vs slug



Right In: 157.236+/-0.117  $\chi^2/\text{NDF}$ : 166522.0/1

Left Out: 124.654+/-0.041  $\chi^2/\text{NDF}$ : 158453.5/8

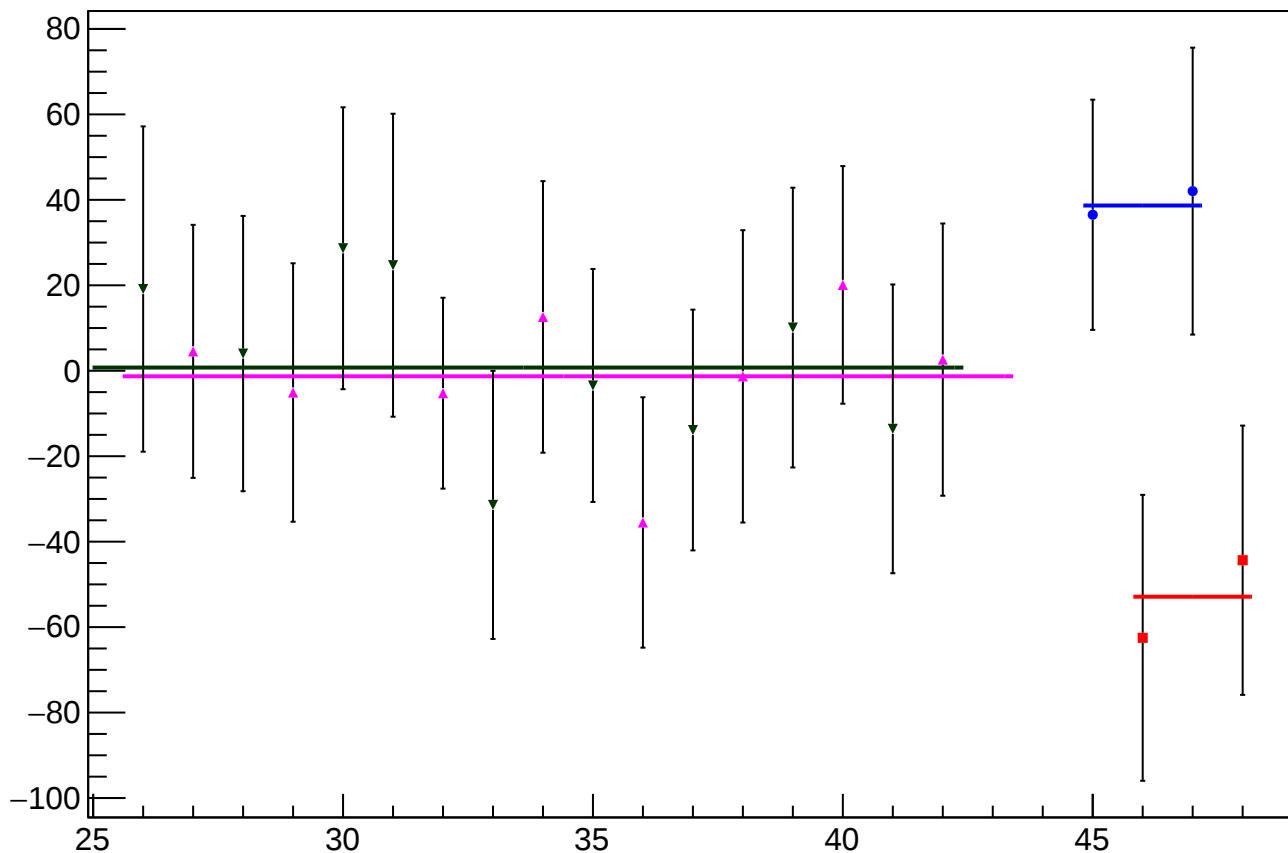
Right Out: 135.746+/-0.106  $\chi^2/\text{NDF}$ : 3289.9/1

Left In: 115.666+/-0.037  $\chi^2/\text{NDF}$ : 238759.2/7

128.254+/-0.039  $\chi^2/\text{NDF}$ : 394359.2/10

117.829+/-0.035  $\chi^2/\text{NDF}$ : 273895.5/9

asym\_bcm\_an\_ds\_cav4cQ\_agg\_dd\_mean vs slug



Right In: 38.675+/-21.011  $\chi^2/\text{NDF}$ : 0.0/1

Left Out: 0.747+/-10.661  $\chi^2/\text{NDF}$ : 3.0/8

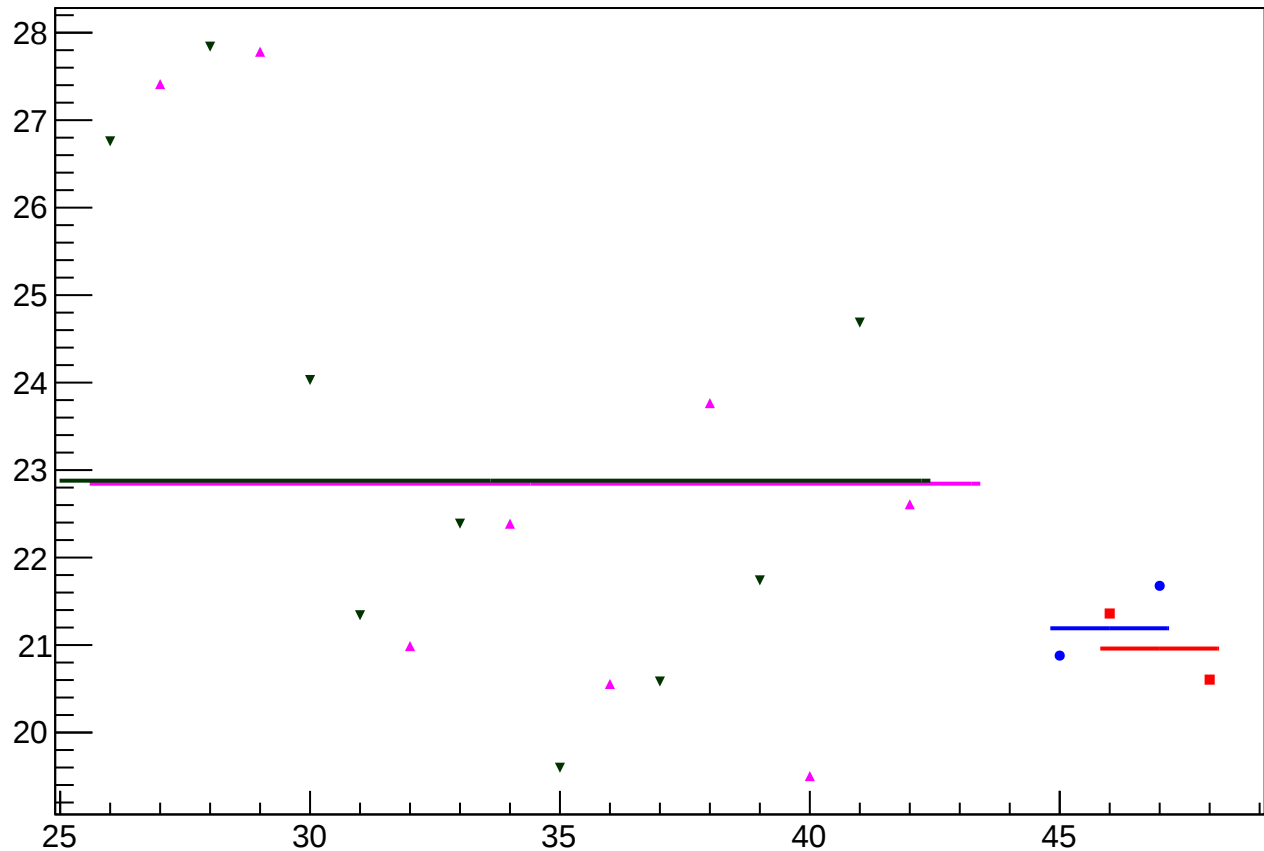
Right Out: -52.882+/-22.940  $\chi^2/\text{NDF}$ : 0.2/1

Left In: -1.298+/-10.246  $\chi^2/\text{NDF}$ : 2.2/7

8.513+/-9.507  $\chi^2/\text{NDF}$ : 5.6/10

-9.877+/-9.355  $\chi^2/\text{NDF}$ : 6.6/9

asym\_bcm\_an\_ds\_cav4cQ\_agg\_dd\_rms vs slug



Right In: 21.192 $\pm$ 0.015  $\chi^2$ /NDF: 687.1/1

Left Out: 22.879 $\pm$ 0.008  $\chi^2$ /NDF:125279.7/8

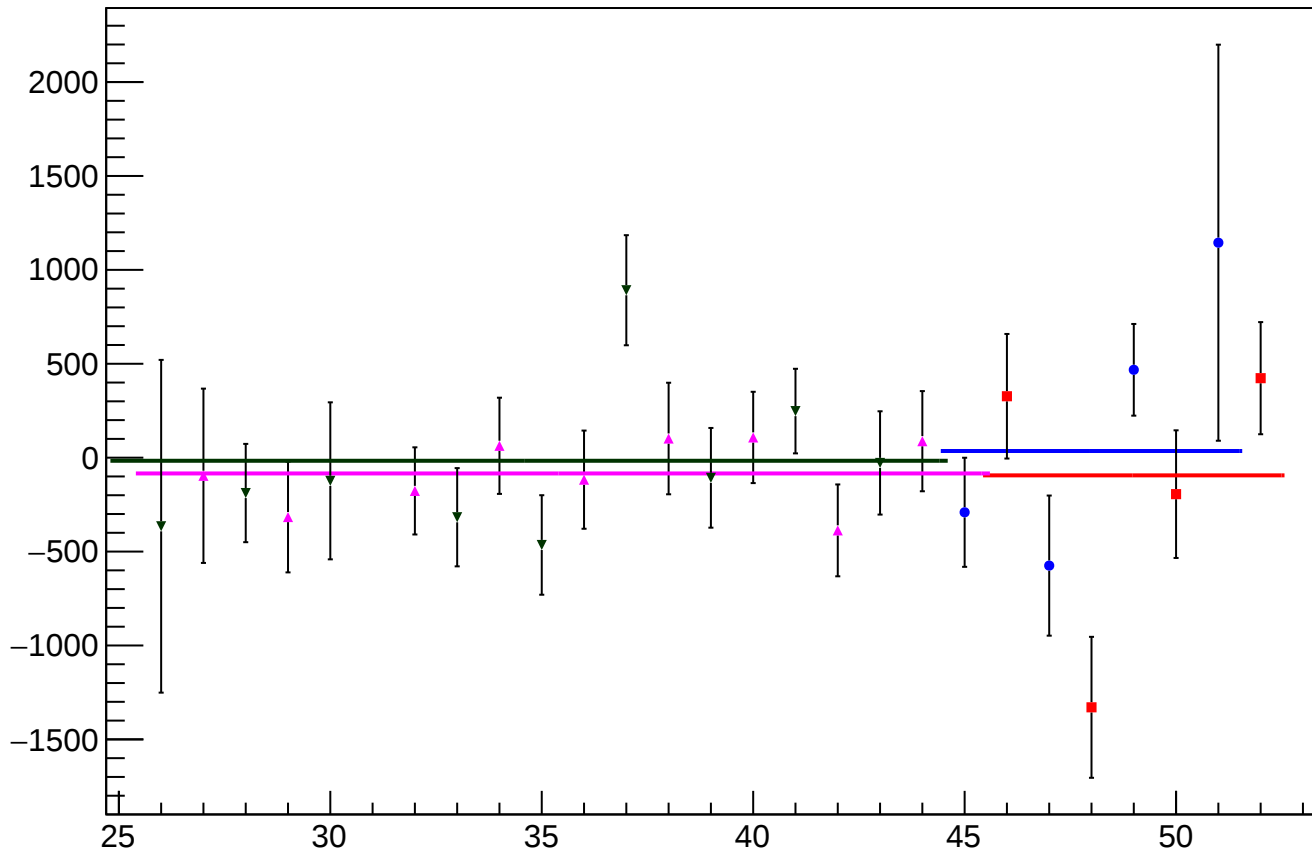
Right Out: 20.960 $\pm$ 0.016  $\chi^2$ /NDF: 540.7/1

Left In: 22.845 $\pm$ 0.007  $\chi^2$ /NDF:157790.8/7

22.533 $\pm$ 0.007  $\chi^2$ /NDF: 136226.3/10

22.531 $\pm$ 0.007  $\chi^2$ /NDF: 169585.5/9

# asym\_sam\_15\_avg\_mean vs slug



Right In: 35.519+/-165.017  $\chi^2/\text{NDF}$ : 8.2/3

Left Out: -16.498+/-95.684  $\chi^2/\text{NDF}$ : 15.9/8

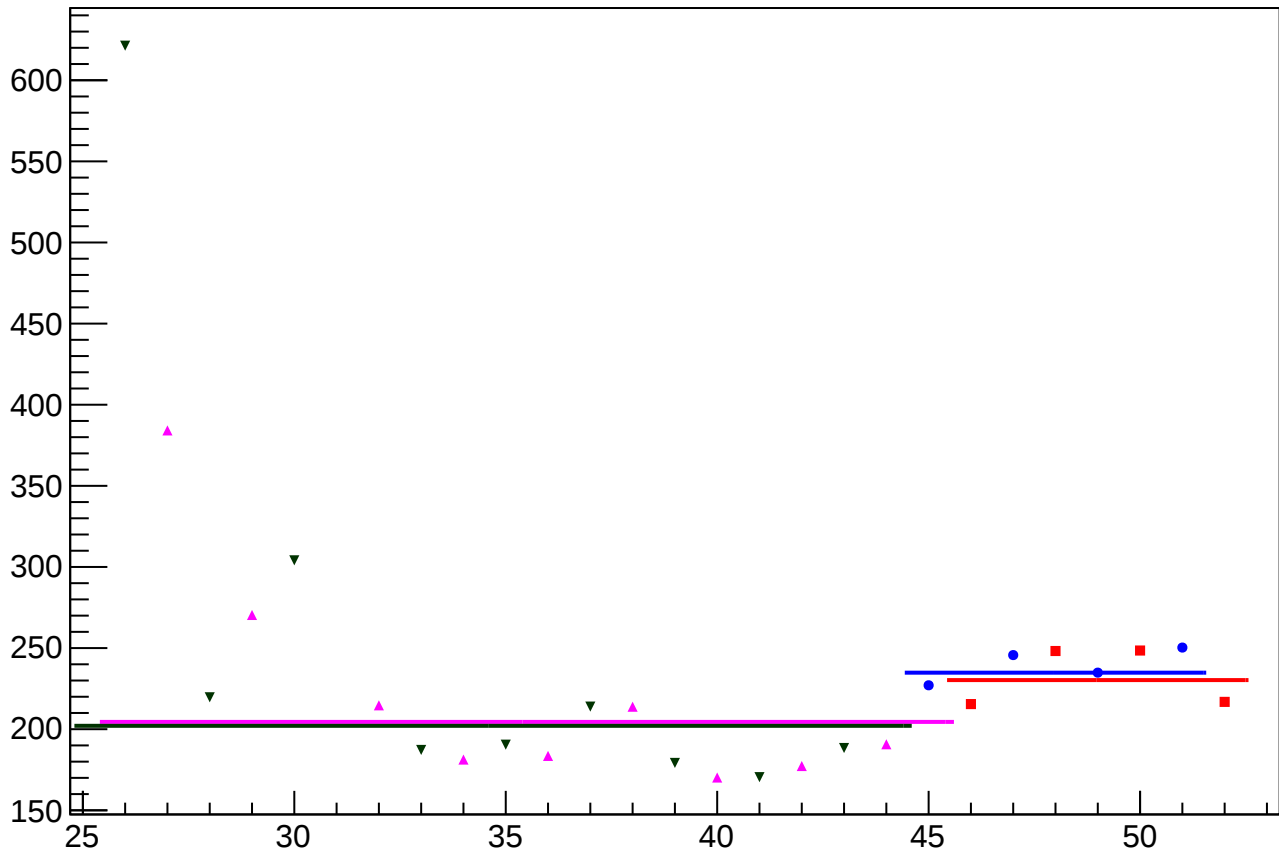
Right Out: -94.187+/-166.514  $\chi^2/\text{NDF}$ : 15.5/3

Left In: -83.982+/-89.928  $\chi^2/\text{NDF}$ : 4.1/8

-3.409+/-82.775  $\chi^2/\text{NDF}$ : 24.2/12

-86.287+/-79.126  $\chi^2/\text{NDF}$ : 19.6/12

# asym\_sam\_15\_avg\_rms vs slug



Right In: 234.840+/-0.117  $\chi^2/\text{NDF}$ : 3553.3/3

Left Out: 202.088+/-0.068  $\chi^2/\text{NDF}$ : 648842.0/8

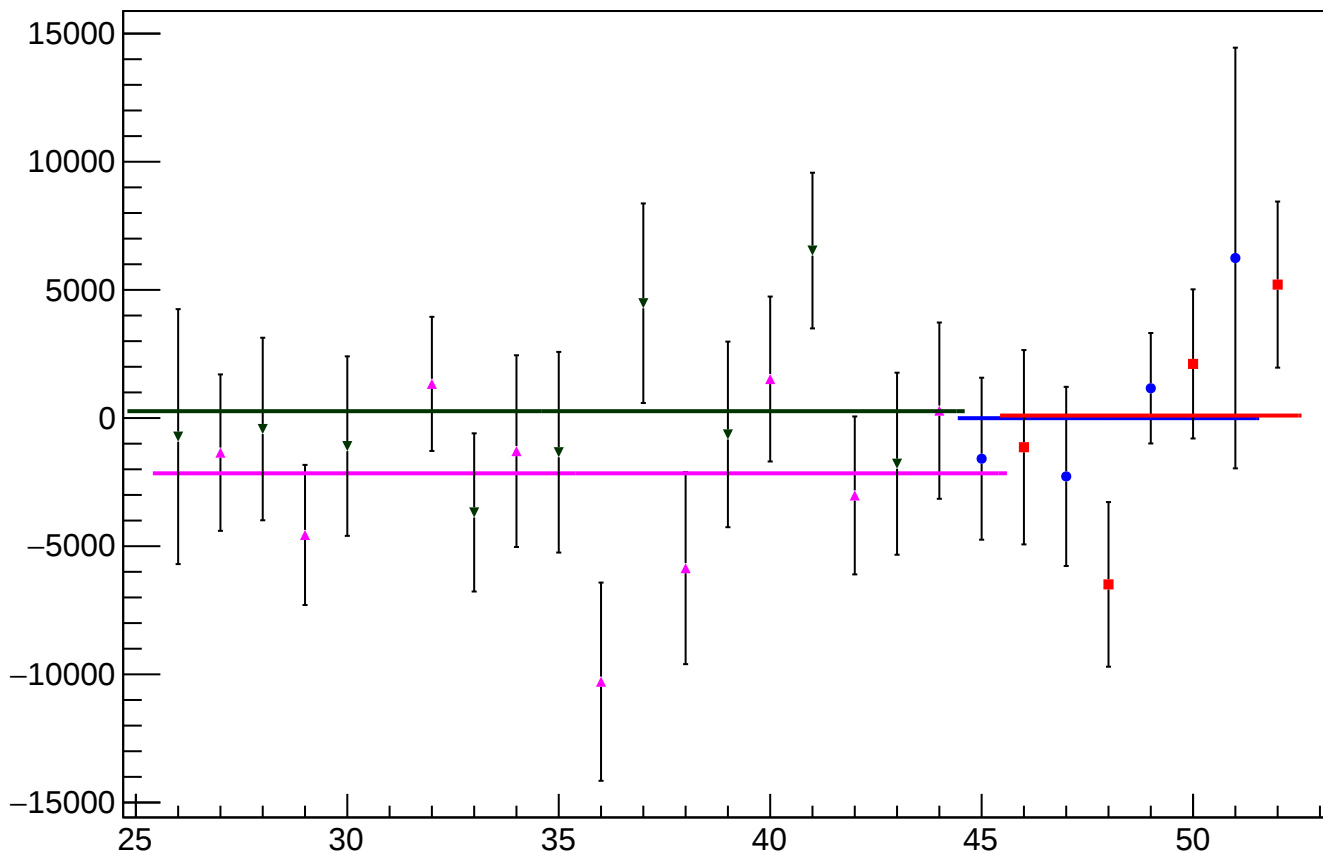
Right Out: 230.267+/-0.118  $\chi^2/\text{NDF}$ : 18333.1/3

Left In: 204.496+/-0.064  $\chi^2/\text{NDF}$ : 504865.3/8

210.329+/-0.059  $\chi^2/\text{NDF}$ : 711355.7/12

210.316+/-0.056  $\chi^2/\text{NDF}$ : 560287.4/12

# asym\_sam\_26\_avg\_mean vs slug



Right In:  $-5.225 \pm 1557.386$   $\chi^2/\text{NDF}: 1.5/3$

Left Out:  $267.989 \pm 1194.389$   $\chi^2/\text{NDF}: 7.9/8$

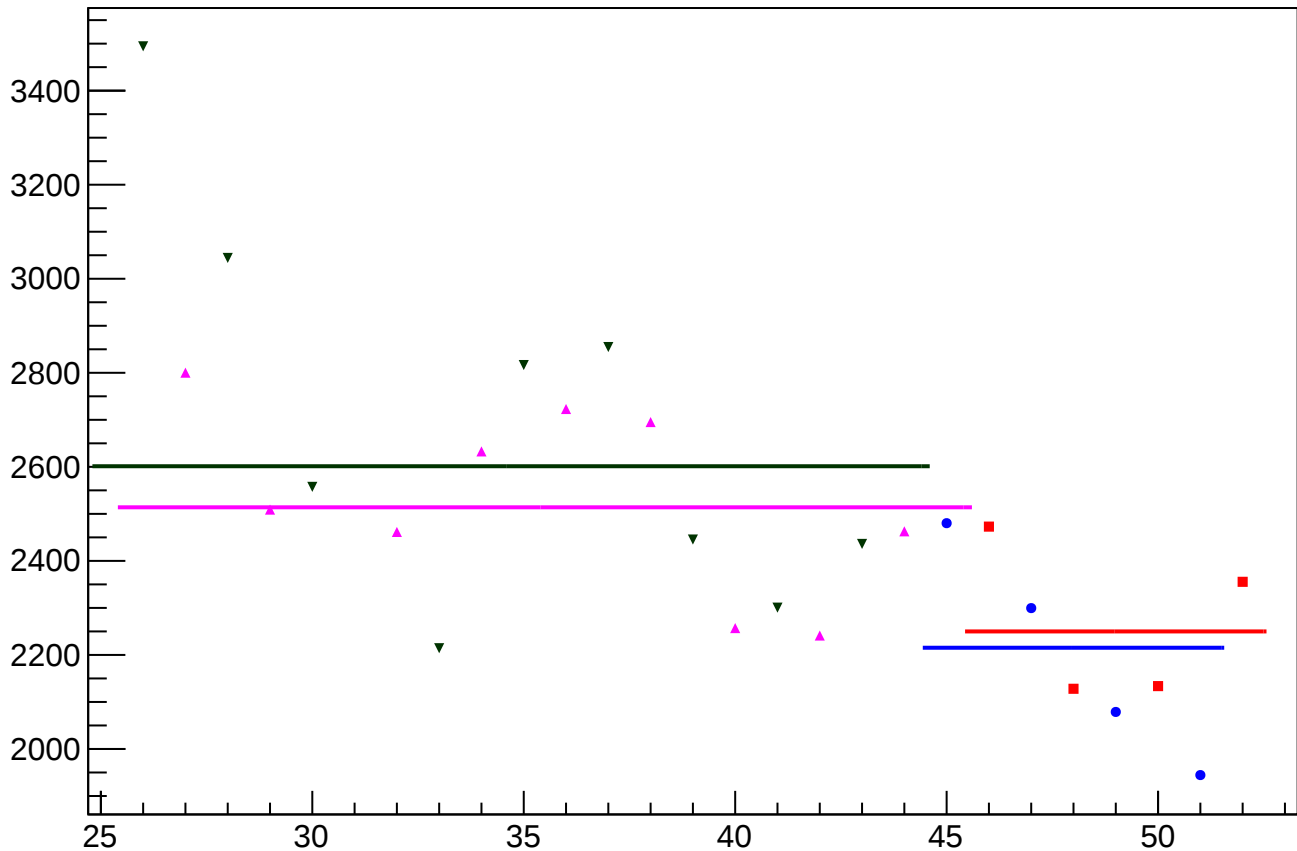
Right Out:  $97.121 \pm 1622.475$   $\chi^2/\text{NDF}: 7.3/3$

Left In:  $-2156.296 \pm 1063.957$   $\chi^2/\text{NDF}: 10.0/8$

$166.806 \pm 947.759$   $\chi^2/\text{NDF}: 9.4/12$

$-1478.669 \pm 889.718$   $\chi^2/\text{NDF}: 18.6/12$

# asym\_sam\_26\_avg\_rms vs slug



Right In: 2215.303+/-1.101  $\chi^2/\text{NDF}: 25428.2/3$

Left Out: 2601.288+/-0.845  $\chi^2/\text{NDF}: 169348.6/8$

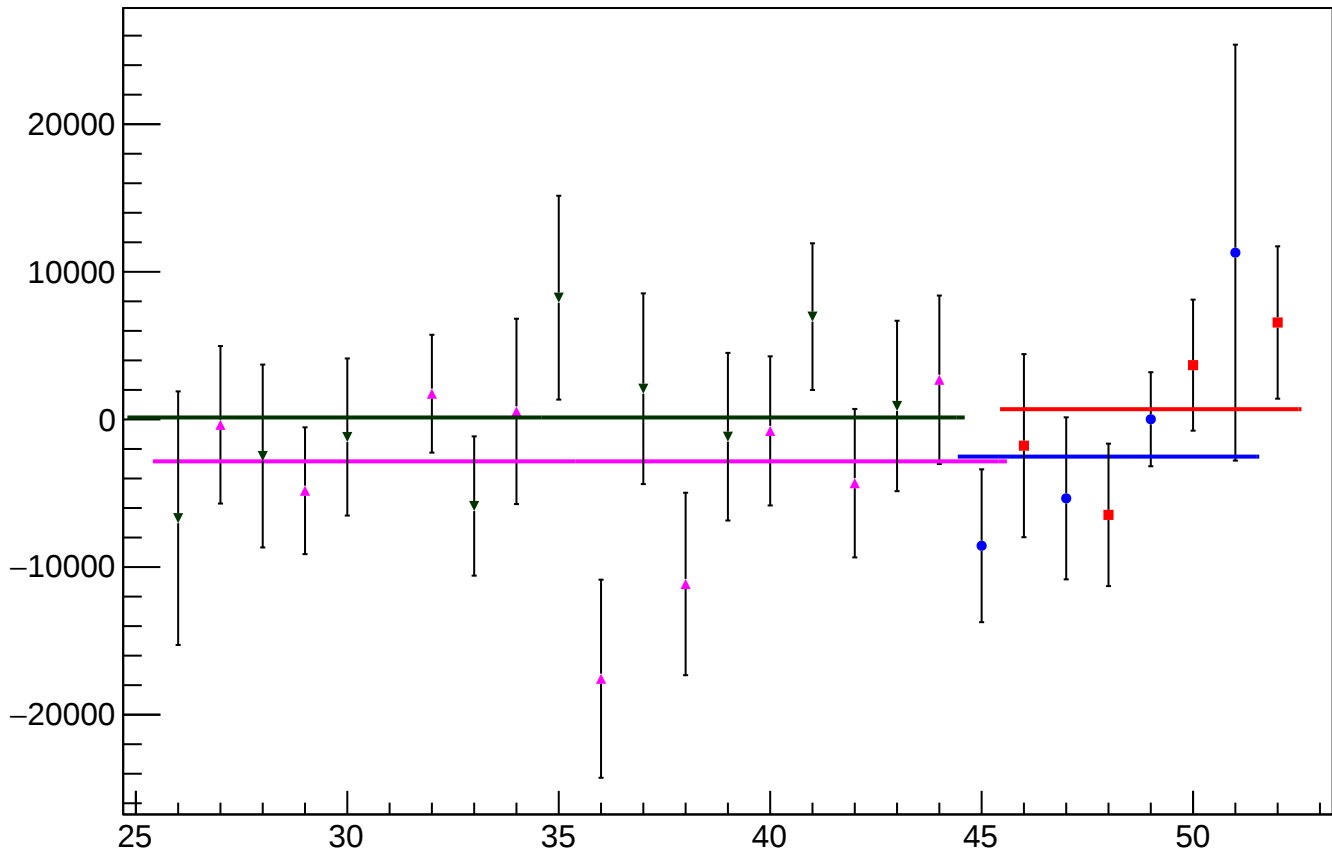
Right Out: 2249.984+/-1.147  $\chi^2/\text{NDF}: 15113.3/3$

Left In: 2513.941+/-0.752  $\chi^2/\text{NDF}: 59816.2/8$

2458.341+/-0.670  $\chi^2/\text{NDF}: 272131.0/12$

2434.567+/-0.629  $\chi^2/\text{NDF}: 111946.1/12$

# asym\_sam\_37\_avg\_mean vs slug



Right In: -2517.489+/-2396.653  $\chi^2/\text{NDF}$ : 3.2/3

Left Out: 134.076+/-1937.759  $\chi^2/\text{NDF}$ : 5.9/8

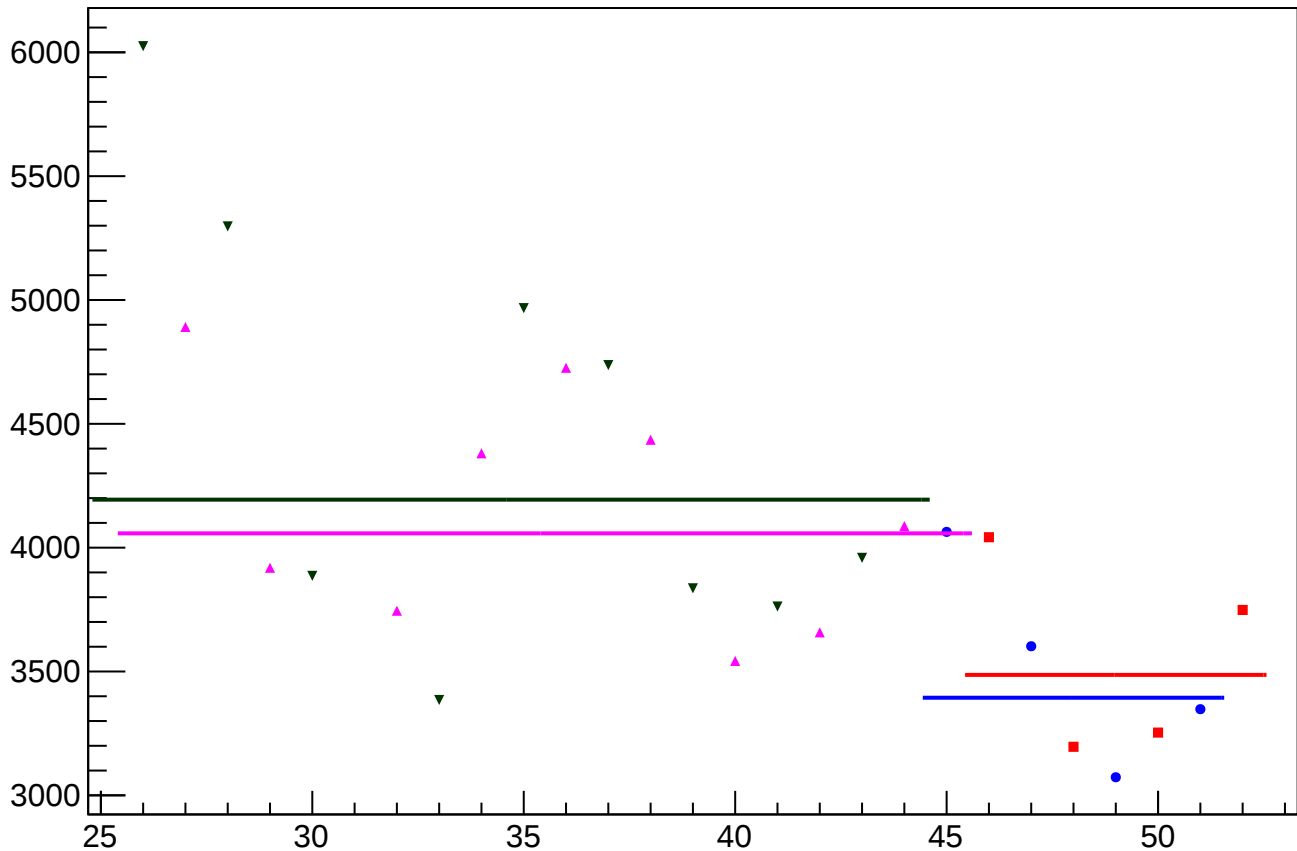
-914.091+/-1506.847  $\chi^2/\text{NDF}$ : 9.9/12

Right Out: 695.268+/-2521.712  $\chi^2/\text{NDF}$ : 4.1/3

Left In: -2838.252+/-1727.002  $\chi^2/\text{NDF}$ : 9.8/8

-1710.085+/-1424.881  $\chi^2/\text{NDF}$ : 15.3/12

# asym\_sam\_37\_avg\_rms vs slug



Right In: 3394.121+/-1.695     $\chi^2/\text{NDF}$ : 56661.9/3

Left Out: 4193.825+/-1.370     $\chi^2/\text{NDF}$ : 285401.0/8

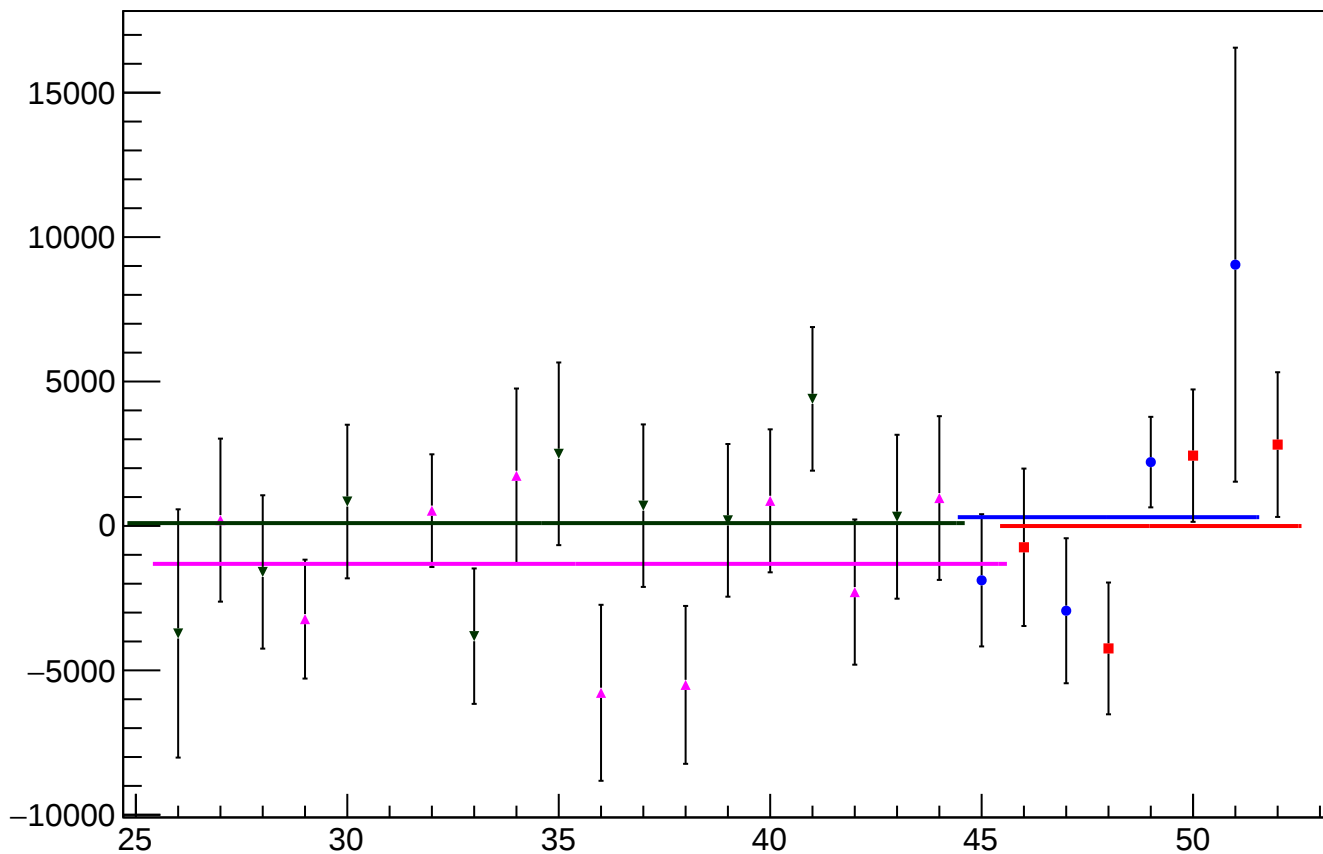
Right Out: 3486.314+/-1.783     $\chi^2/\text{NDF}$ : 33985.2/3

Left In: 4057.818+/-1.221     $\chi^2/\text{NDF}$ : 129253.0/8

3877.701+/-1.066     $\chi^2/\text{NDF}$ : 476716.4/12

3875.351+/-1.008     $\chi^2/\text{NDF}$ : 233165.9/12

# asym\_sam\_48\_avg\_mean vs slug



Right In: 303.436+/-1136.222  $\chi^2/\text{NDF}$ : 5.4/3

Left Out: 98.183+/-922.560  $\chi^2/\text{NDF}$ : 7.7/8

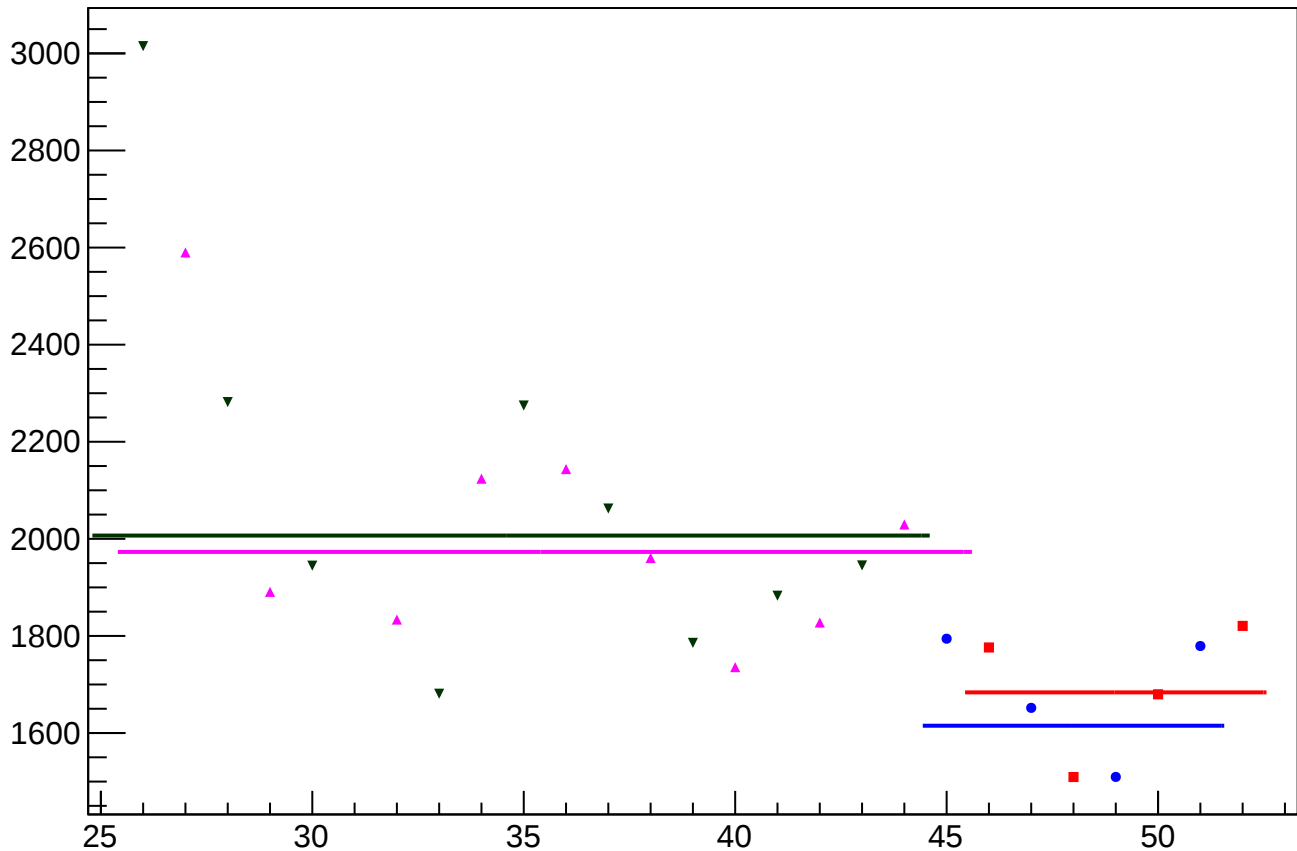
Right Out: -3.165+/-1215.765  $\chi^2/\text{NDF}$ : 5.9/3

Left In: -1313.019+/-838.748  $\chi^2/\text{NDF}$ : 9.1/8

179.735+/-716.203  $\chi^2/\text{NDF}$ : 13.1/12

-890.628+/-690.391  $\chi^2/\text{NDF}$ : 15.8/12

# asym\_sam\_48\_avg\_rms vs slug



Right In: 1615.069+/-0.803     $\chi^2/\text{NDF}$ : 22706.6/3

Left Out: 2006.811+/-0.652     $\chi^2/\text{NDF}$ : 206242.3/8

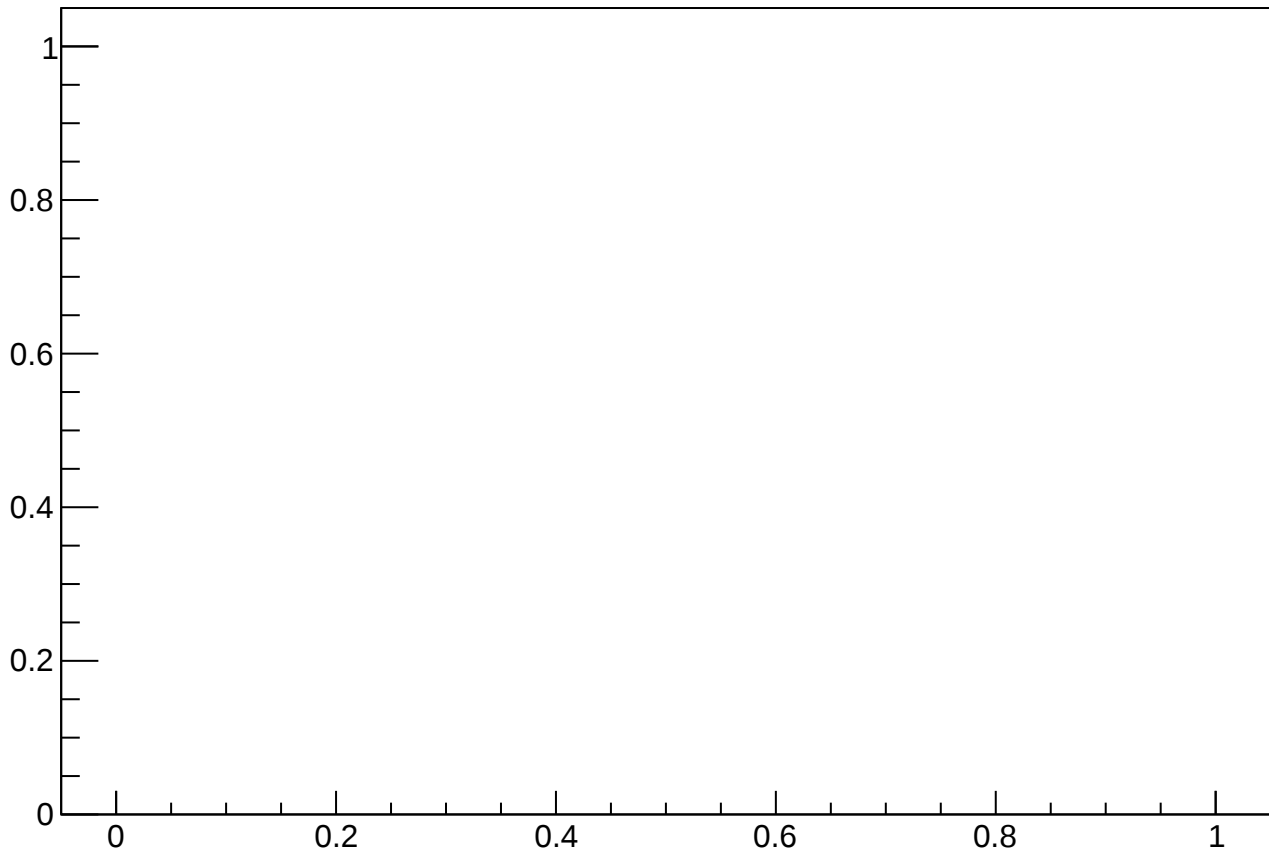
1851.162+/-0.506     $\chi^2/\text{NDF}$ : 372228.8/12

Right Out: 1683.764+/-0.860     $\chi^2/\text{NDF}$ : 19969.8/3

1879.783+/-0.488     $\chi^2/\text{NDF}$ : 242862.3/12

Left In: 1973.078+/-0.593     $\chi^2/\text{NDF}$ : 146156.6/8

yield\_sam\_15\_avg\_mean vs slug



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

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

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

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

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

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

# yield\_sam\_15\_avg\_rms vs slug



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

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

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

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

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

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

# yield\_sam\_26\_avg\_mean vs slug



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

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

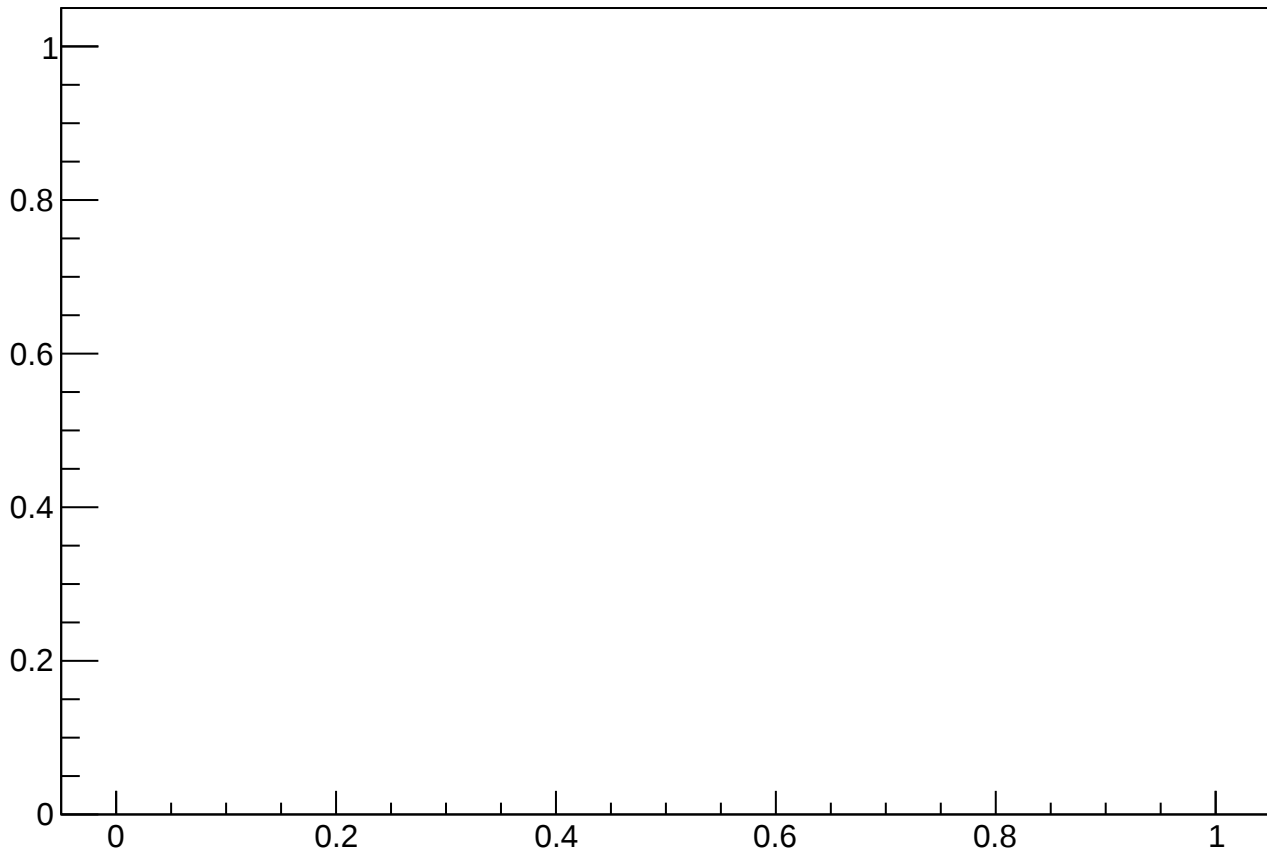
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

yield\_sam\_26\_avg\_rms vs slug



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

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

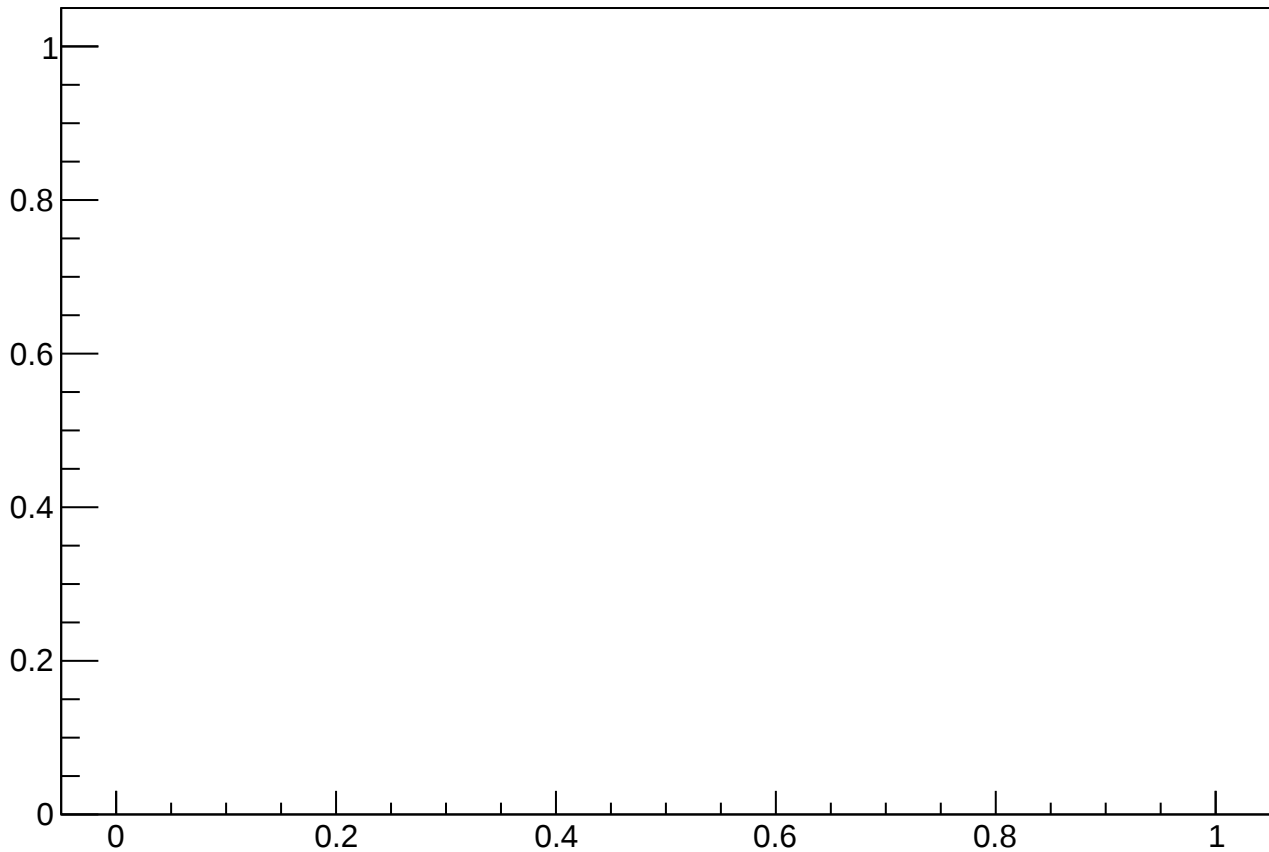
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

yield\_sam\_37\_avg\_mean vs slug



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

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

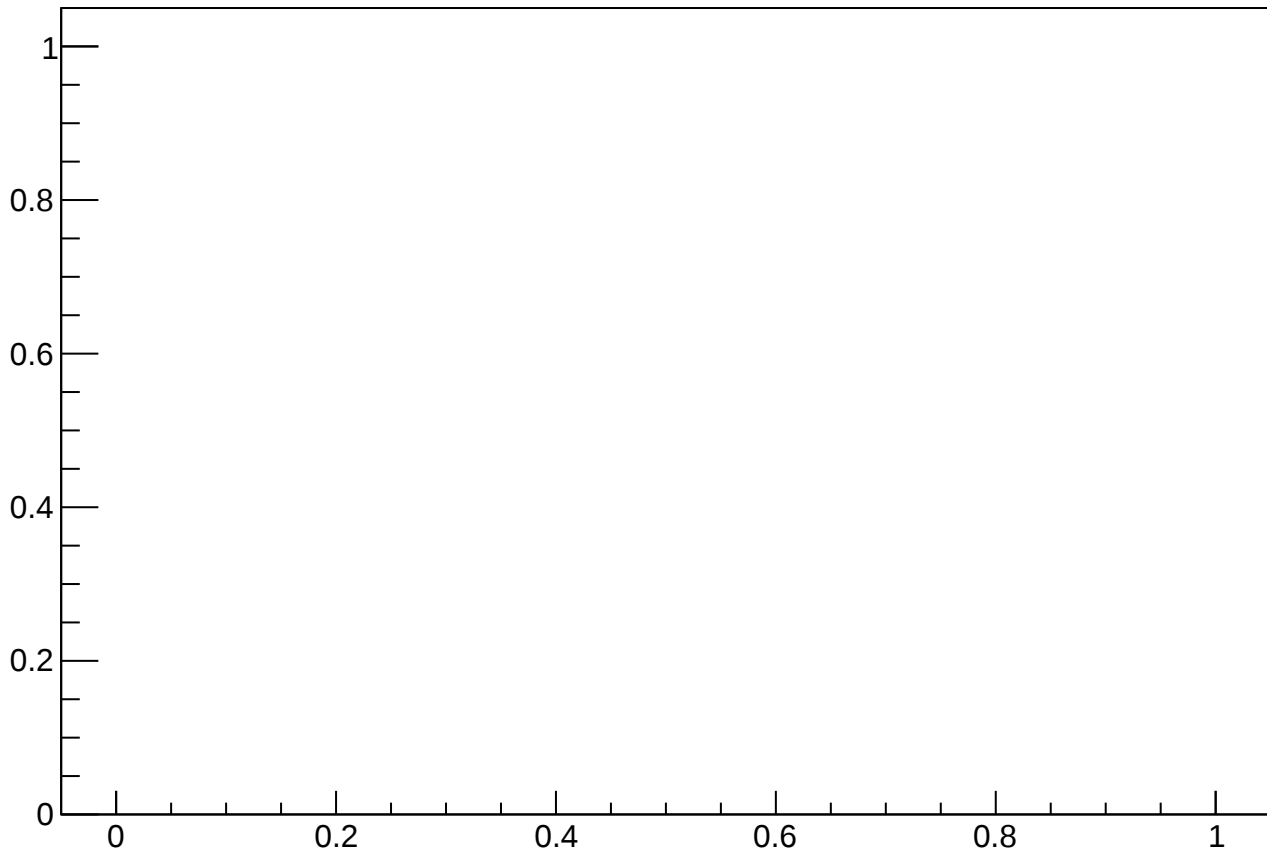
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

yield\_sam\_37\_avg\_rms vs slug



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

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

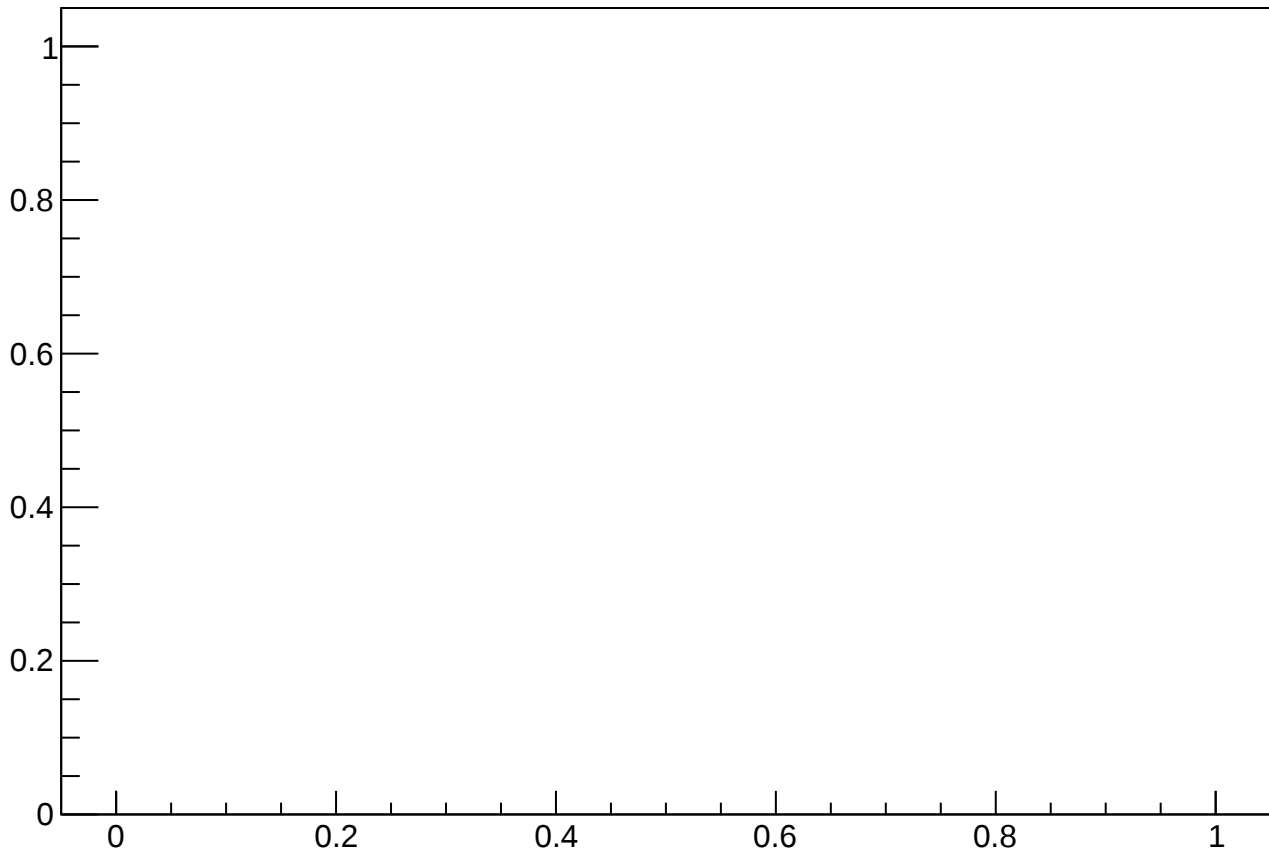
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

yield\_sam\_48\_avg\_mean vs slug



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

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

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

# yield\_sam\_48\_avg\_rms vs slug



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

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

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

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

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

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

cor\_sam\_15\_avg\_mean vs slug



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

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

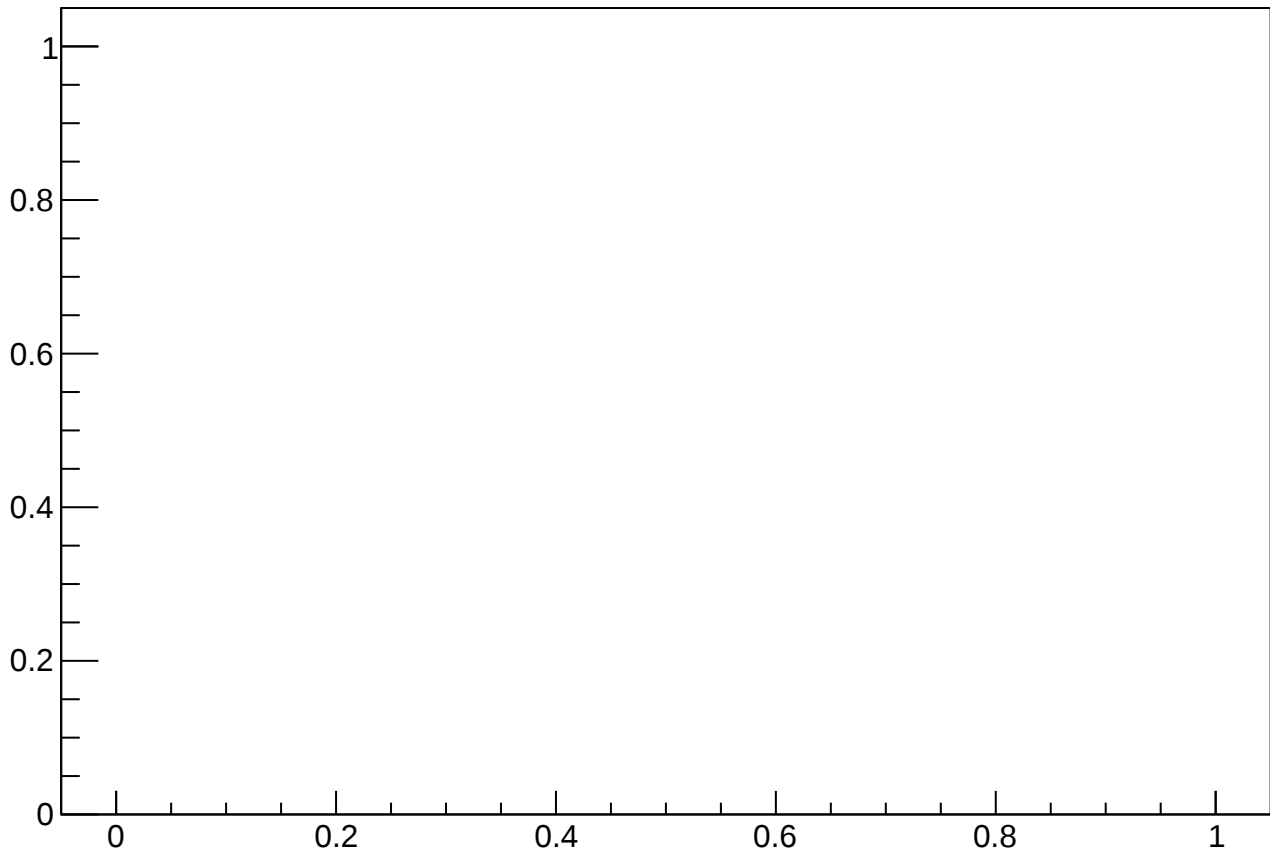
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_sam\_15\_avg\_rms vs slug



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

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

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

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

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

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

cor\_sam\_26\_avg\_mean vs slug



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

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

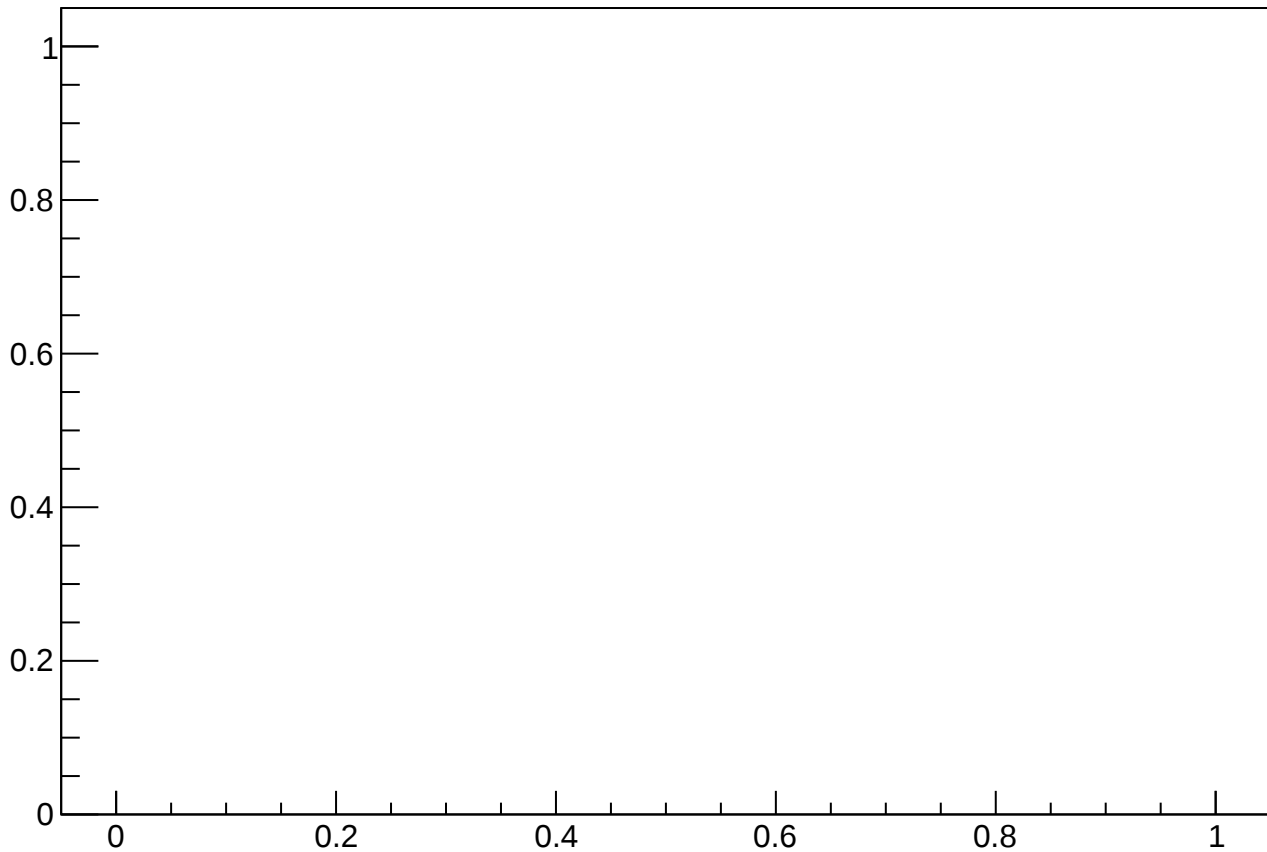
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

cor\_sam\_26\_avg\_rms vs slug



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

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

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

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

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

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

cor\_sam\_37\_avg\_mean vs slug



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

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

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

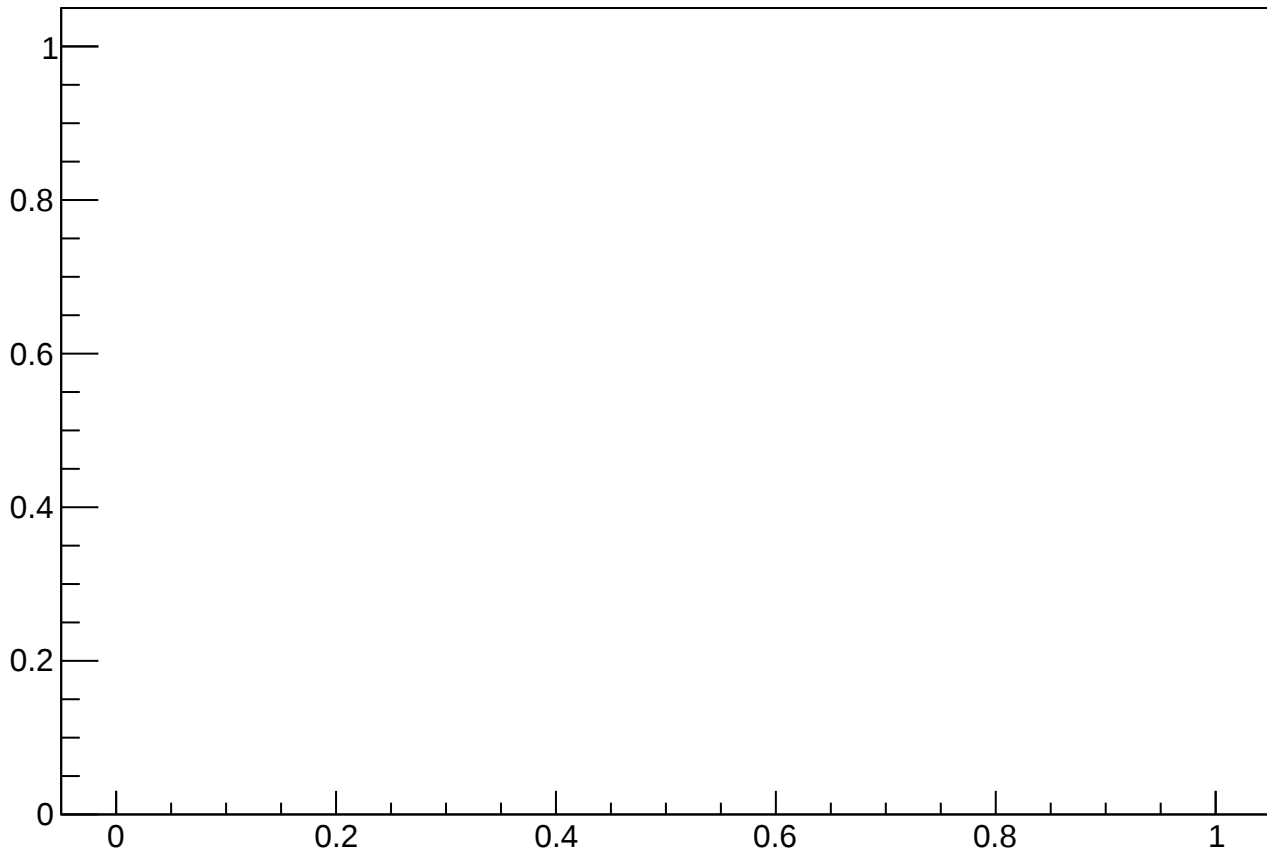
0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

cor\_sam\_37\_avg\_rms vs slug



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

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

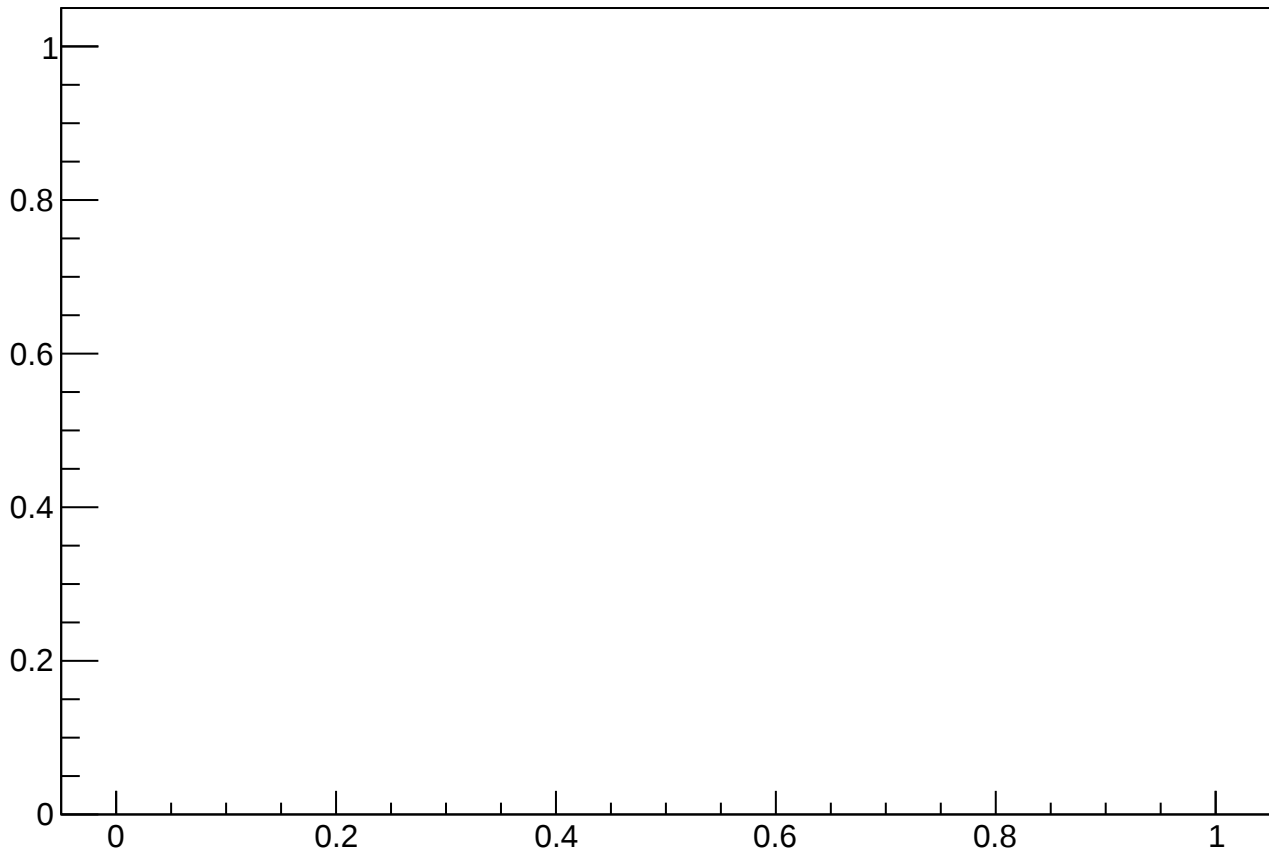
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

cor\_sam\_48\_avg\_mean vs slug



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

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

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

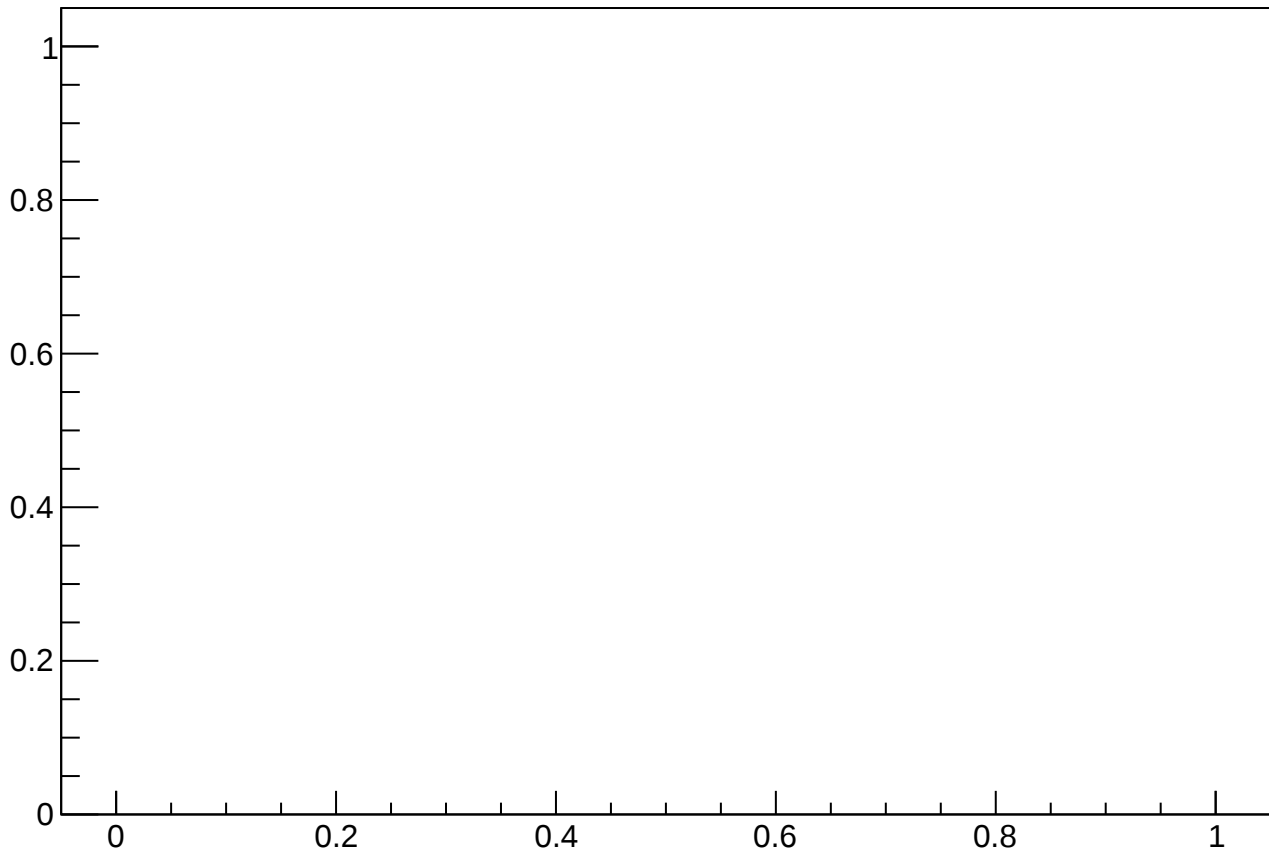
0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

cor\_sam\_48\_avg\_rms vs slug



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

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

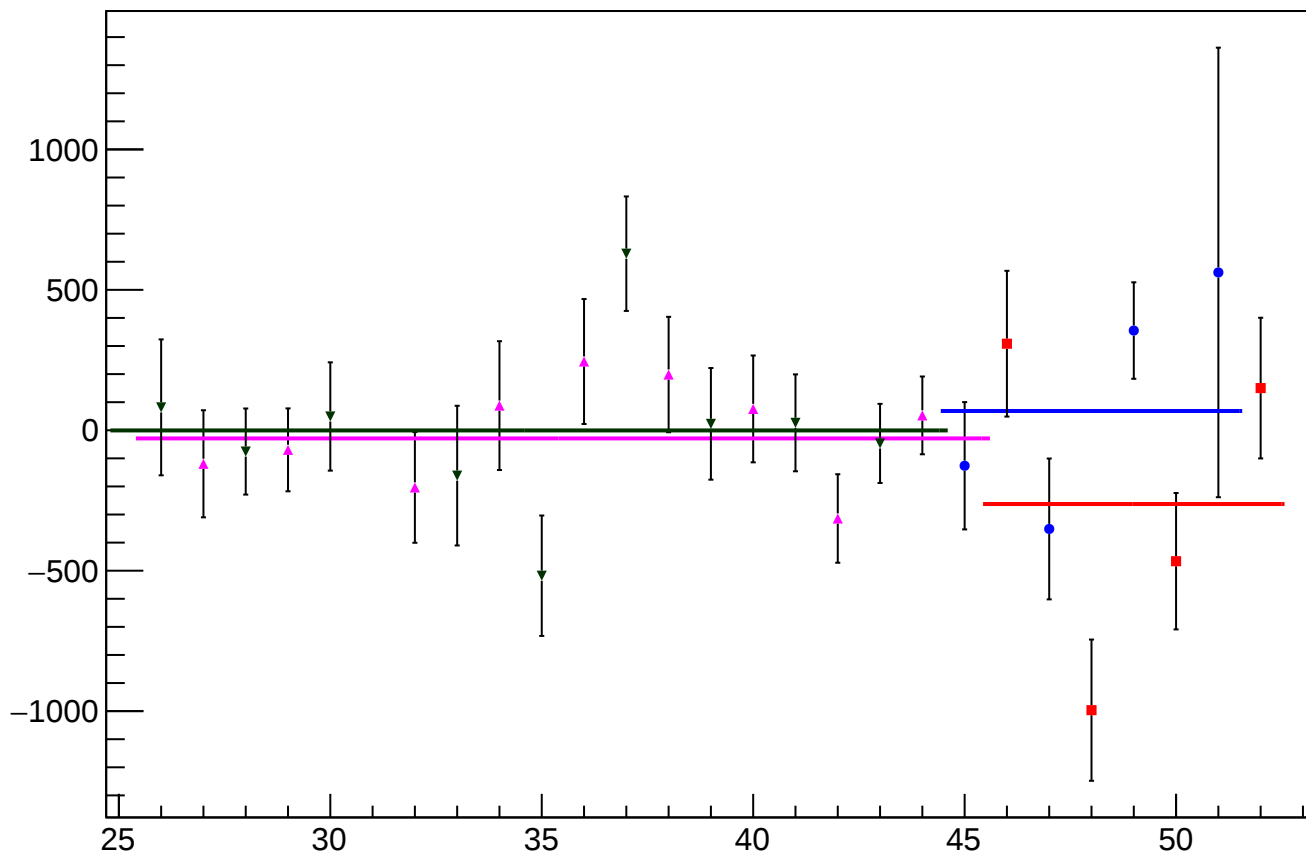
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

# reg\_asym\_sam\_15\_avg\_mean vs slug



Right In: 68.647 $\pm$ 118.828  $\chi^2$ /NDF: 6.7/3

Left Out: -0.549 $\pm$ 62.274  $\chi^2$ /NDF:16.3/8

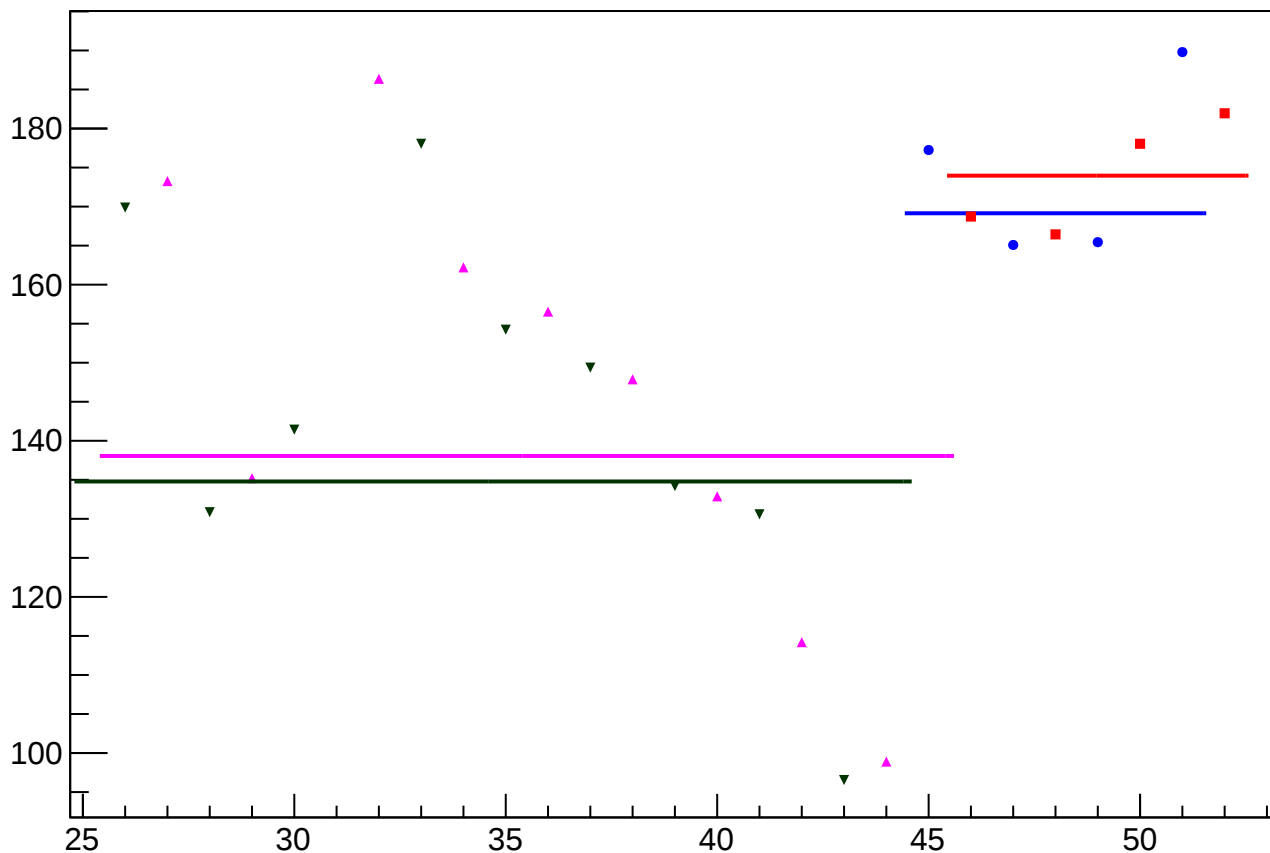
Right Out: -262.602 $\pm$ 125.434  $\chi^2$ /NDF: 16.8/3

Left In: -28.991 $\pm$ 59.537  $\chi^2$ /NDF:8.0/8

14.361 $\pm$ 55.159  $\chi^2$ /NDF: 23.3/12

-71.944 $\pm$ 53.786  $\chi^2$ /NDF: 27.6/12

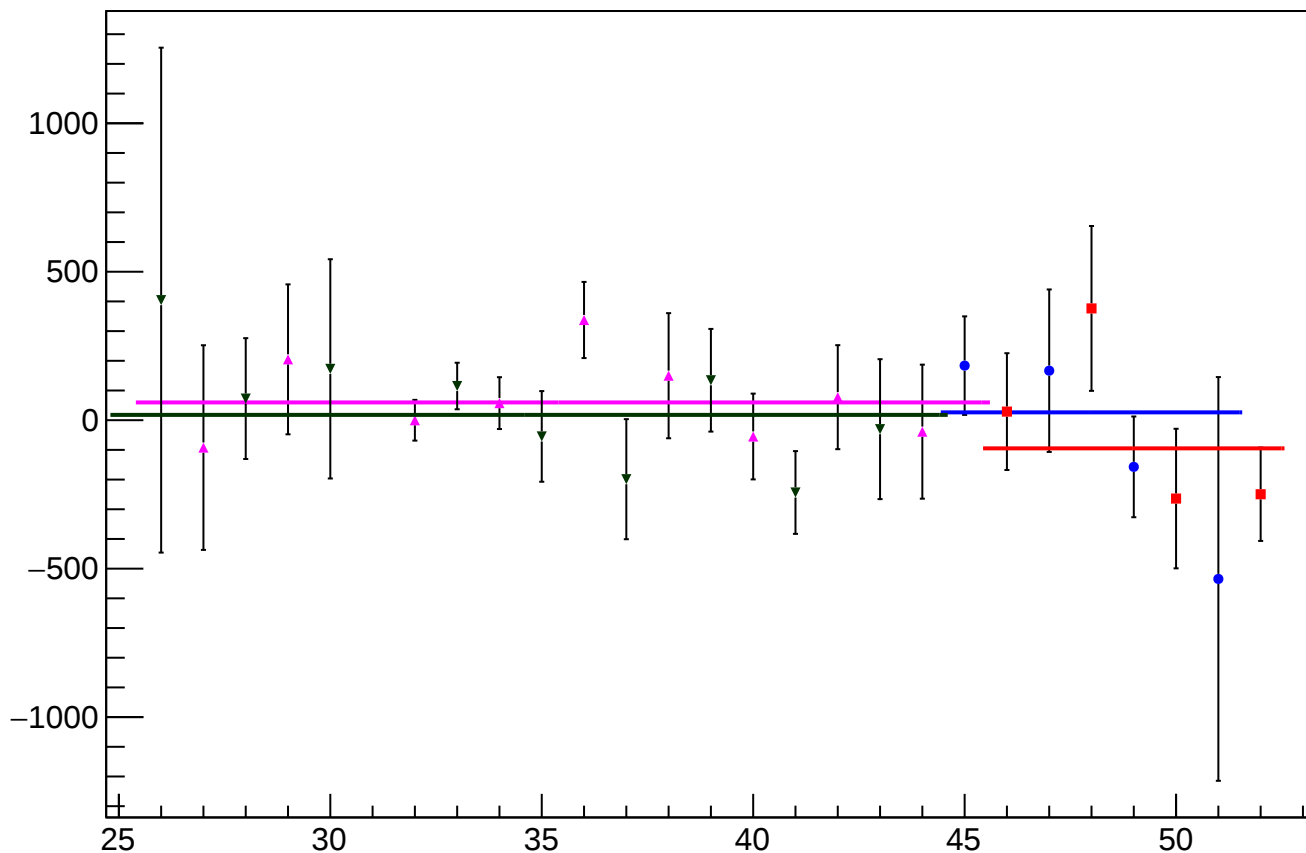
# reg\_asym\_sam\_15\_avg\_rms vs slug



Right In: 169.145 $\pm$ 0.084     $\chi^2$ /NDF: 5340.6/3  
 Left Out: 134.788 $\pm$ 0.044     $\chi^2$ /NDF: 281610.1/8  
 Right Out: 173.962 $\pm$ 0.089     $\chi^2$ /NDF: 5203.2/3  
 Left In: 138.057 $\pm$ 0.042     $\chi^2$ /NDF: 437023.6/8

142.191 $\pm$ 0.039     $\chi^2$ /NDF: 418118.8/12  
 144.658 $\pm$ 0.038     $\chi^2$ /NDF: 575977.3/12

# asym\_sam\_15\_avg\_correction\_mean vs slug



Right In: 26.365 $\pm$ 107.469  $\chi^2$ /NDF: 3.0/3

Left Out: 17.872 $\pm$ 52.271  $\chi^2$ /NDF: 7.4/8

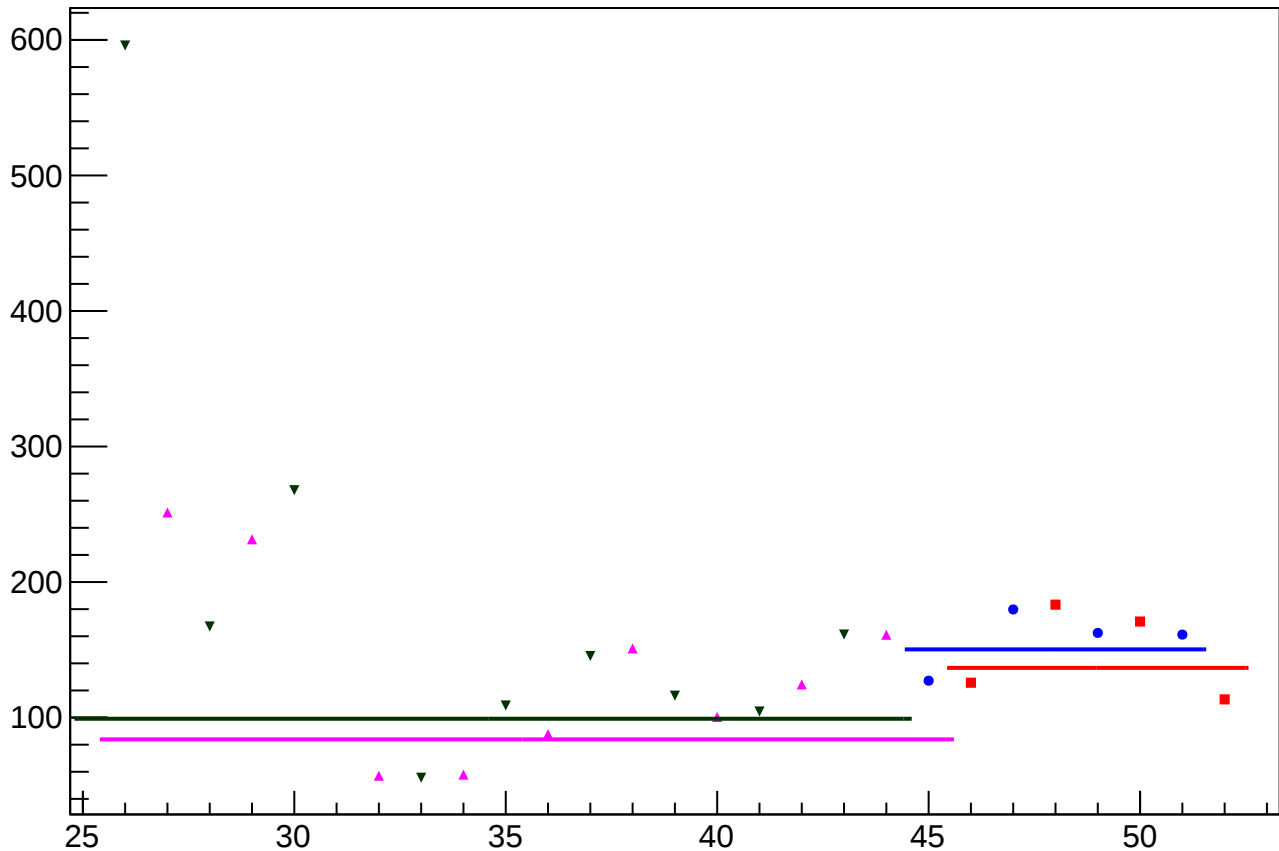
Right Out: -94.850 $\pm$ 101.333  $\chi^2$ /NDF: 4.8/3

Left In: 59.828 $\pm$ 42.594  $\chi^2$ /NDF: 7.0/8

19.497 $\pm$ 47.006  $\chi^2$ /NDF: 10.4/12

36.603 $\pm$ 39.266  $\chi^2$ /NDF: 13.7/12

# asym\_sam\_15\_avg\_correction\_rms vs slug



Right In: 150.319+/-0.076  $\chi^2/\text{NDF}$ : 72722.6/3

Left Out: 99.138+/-0.037  $\chi^2/\text{NDF}$ : 2215033.7/8

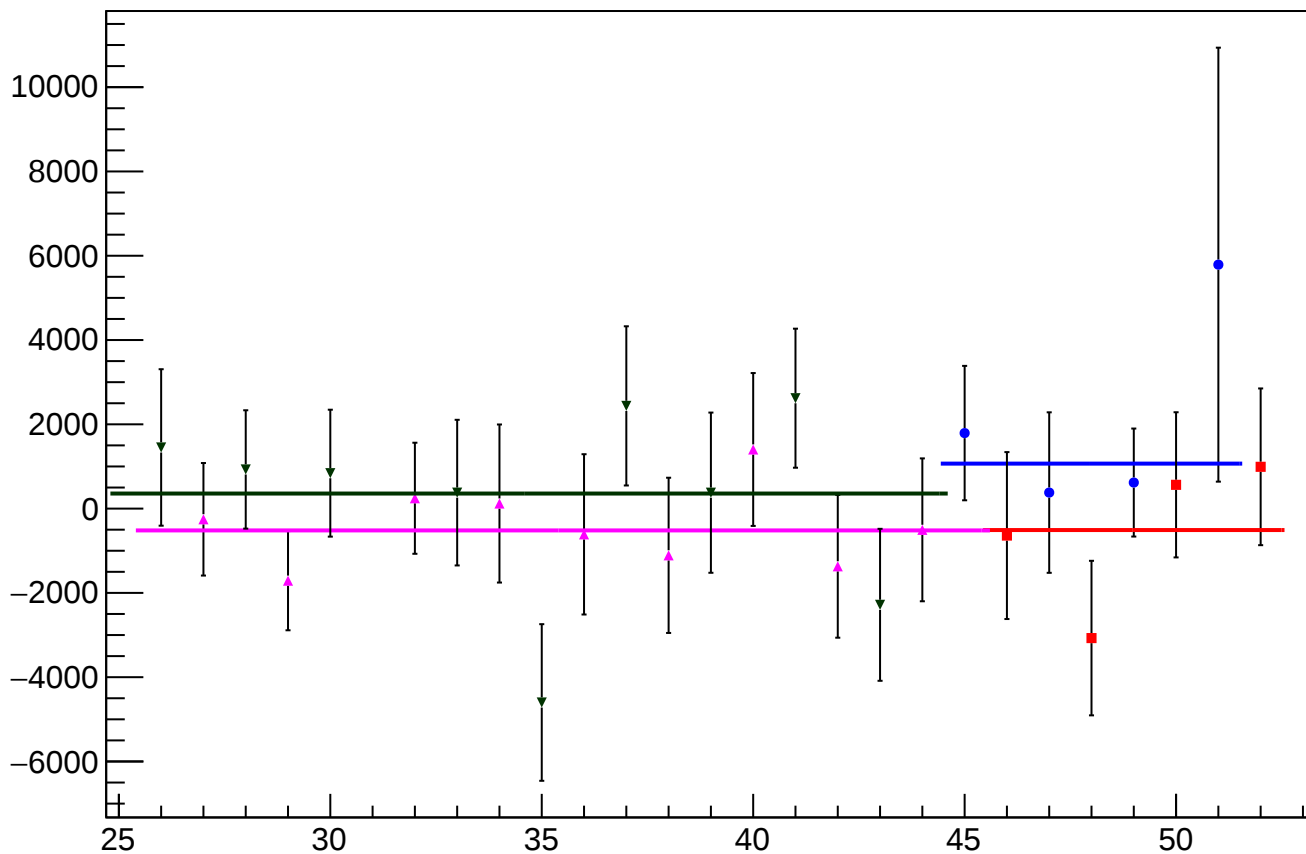
108.929+/-0.033  $\chi^2/\text{NDF}$ : 2654591.4/12

Right Out: 136.680+/-0.072  $\chi^2/\text{NDF}$ : 148745.2/3

91.836+/-0.028  $\chi^2/\text{NDF}$ : 2821002.5/12

Left In: 83.913+/-0.030  $\chi^2/\text{NDF}$ : 2211357.4/8

# reg\_asym\_sam\_26\_avg\_mean vs slug



Right In: 1067.456 $\pm$ 871.783  $\chi^2$ /NDF: 1.3/3

Left Out: 357.559 $\pm$ 568.392  $\chi^2$ /NDF:13.0/8

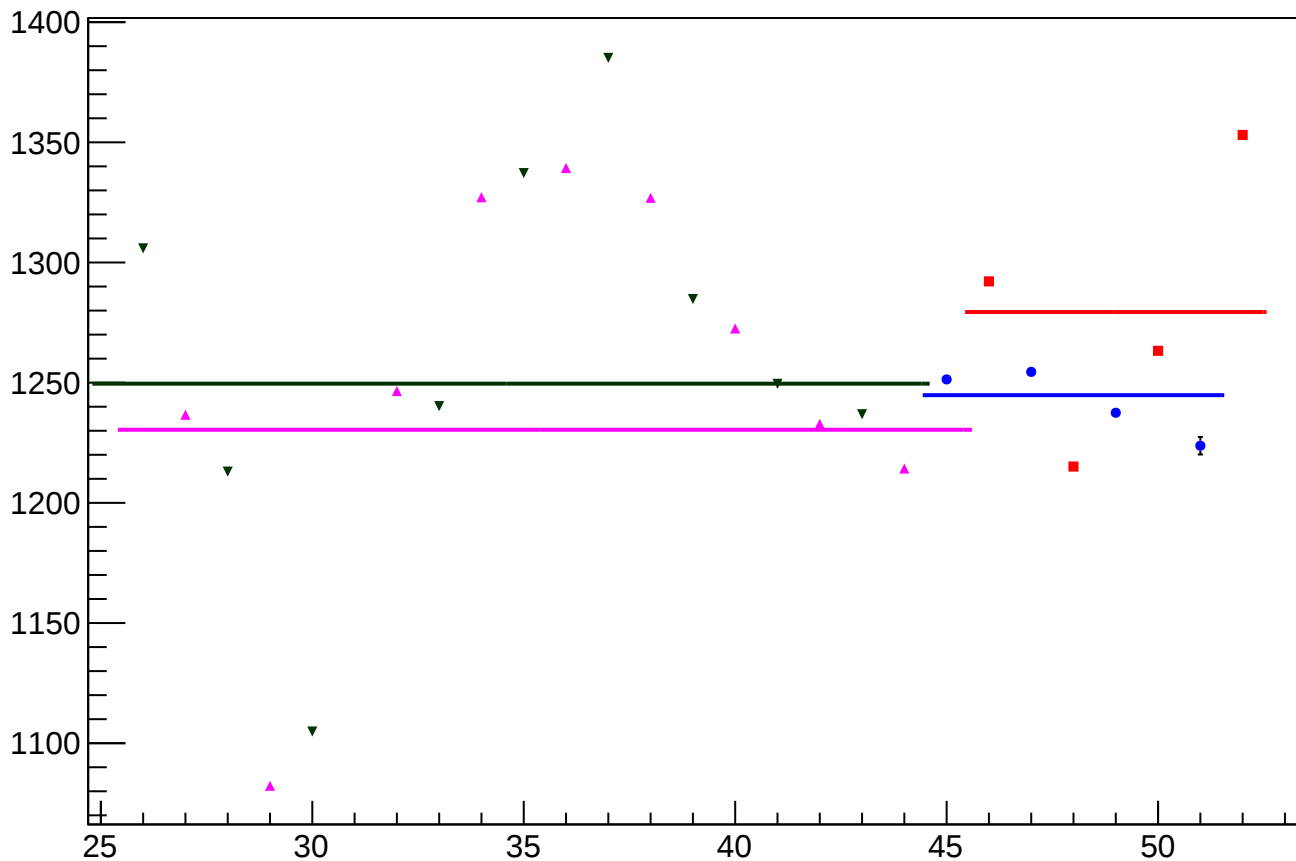
Right Out: -508.780 $\pm$ 921.037  $\chi^2$ /NDF: 3.0/3

Left In: -517.544 $\pm$ 518.830  $\chi^2$ /NDF:3.0/8

569.313 $\pm$ 476.131  $\chi^2$ /NDF: 14.7/12

-515.433 $\pm$ 452.043  $\chi^2$ /NDF: 6.0/12

# reg\_asym\_sam\_26\_avg\_rms vs slug



Right In: 1244.807 $\pm$ 0.616  $\chi^2$ /NDF: 184.0/3

Left Out: 1249.590 $\pm$ 0.402  $\chi^2$ /NDF: 37264.3/8

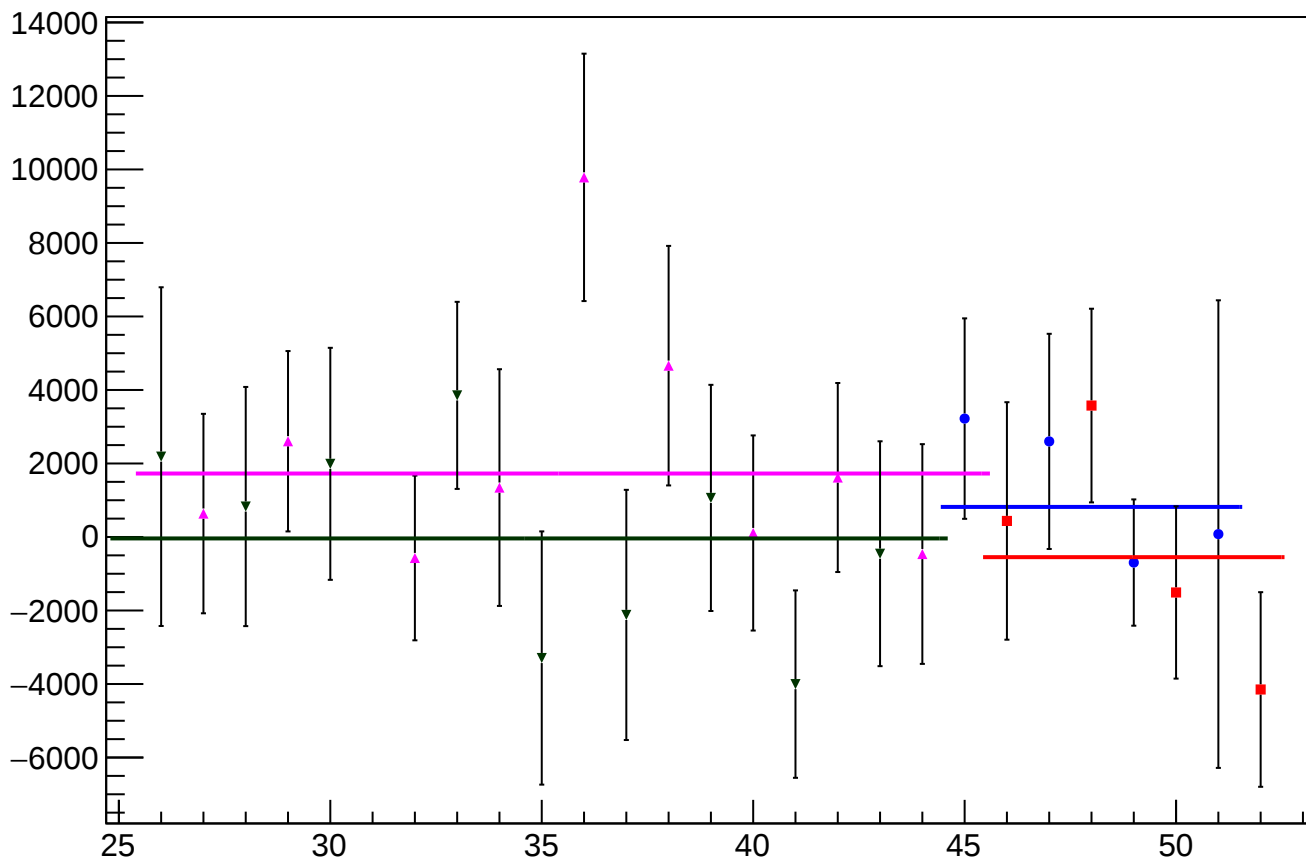
Right Out: 1279.397 $\pm$ 0.651  $\chi^2$ /NDF: 5856.4/3

Left In: 1230.414 $\pm$ 0.367  $\chi^2$ /NDF: 50656.2/8

1248.163 $\pm$ 0.337  $\chi^2$ /NDF: 37490.6/12

1242.213 $\pm$ 0.320  $\chi^2$ /NDF: 60806.6/12

asym\_sam\_26\_avg\_correction\_mean vs slug



Right In: 818.262 $\pm$ 1275.441  $\chi^2$ /NDF: 1.9/3

Left Out: -39.269 $\pm$ 1035.135  $\chi^2$ /NDF: 6.9/8

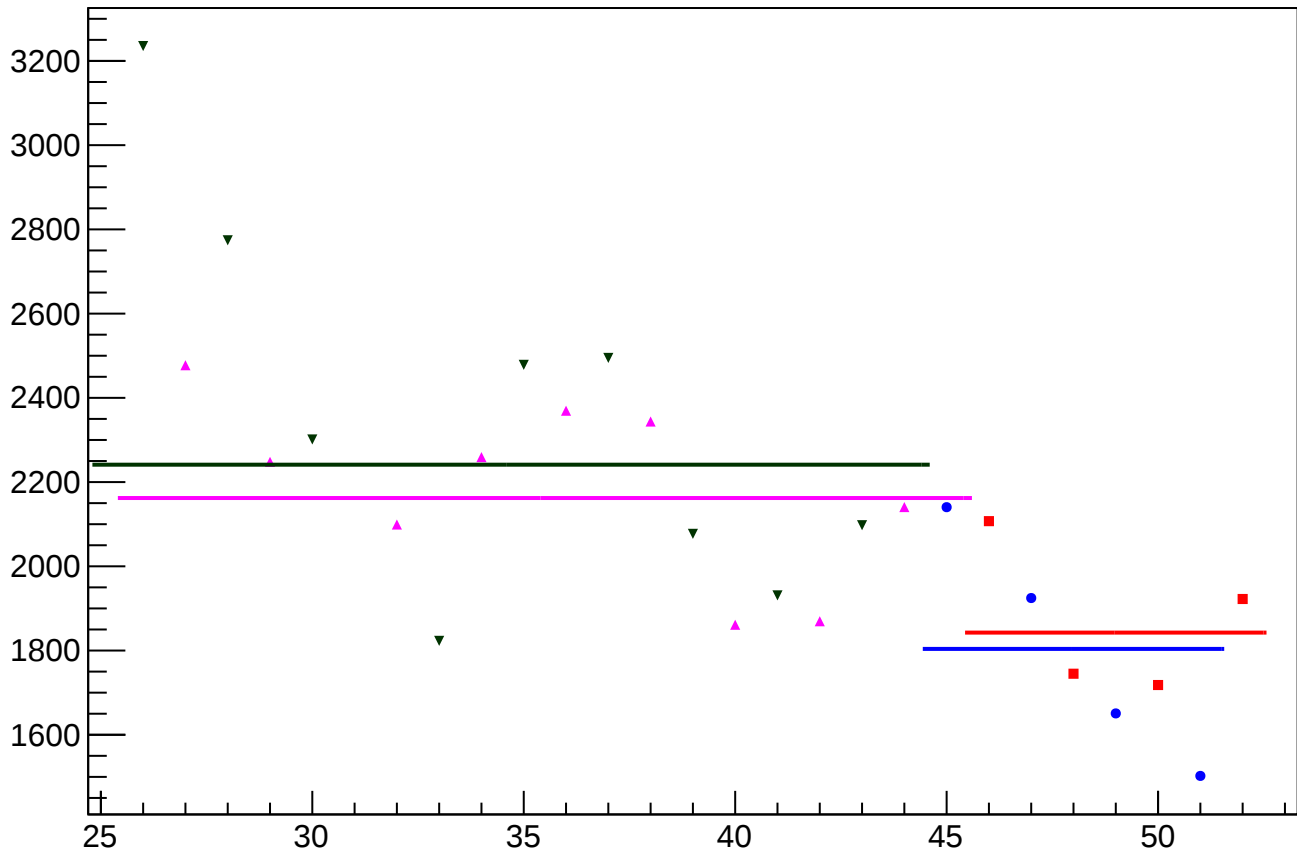
Right Out: -548.706 $\pm$ 1330.847  $\chi^2$ /NDF: 4.6/3

Left In: 1726.912 $\pm$ 918.632  $\chi^2$ /NDF: 8.8/8

301.266 $\pm$ 803.741  $\chi^2$ /NDF: 9.1/12

992.559 $\pm$ 756.016  $\chi^2$ /NDF: 15.3/12

# asym\_sam\_26\_avg\_correction\_rms vs slug



Right In: 1803.886+/-0.902     $\chi^2/\text{NDF}$ : 54253.5/3

Left Out: 2241.302+/-0.732     $\chi^2/\text{NDF}$ : 261773.6/8

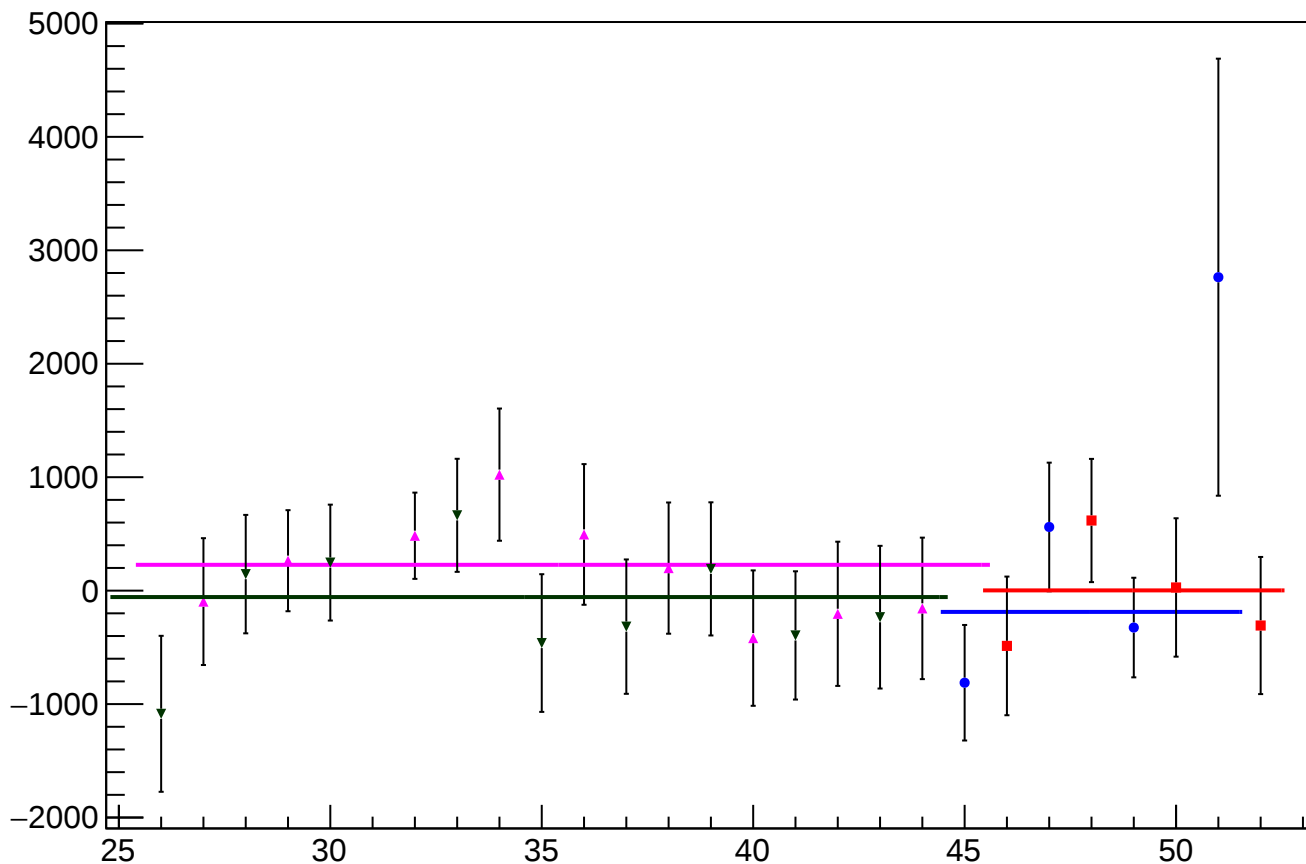
2067.600+/-0.568     $\chi^2/\text{NDF}$ : 457847.1/12

Right Out: 1842.616+/-0.941     $\chi^2/\text{NDF}$ : 23621.7/3

2059.034+/-0.535     $\chi^2/\text{NDF}$ : 200052.5/12

Left In: 2162.148+/-0.650     $\chi^2/\text{NDF}$ : 98343.3/8

# reg\_asym\_sam\_37\_avg\_mean vs slug



Right In: -187.403+/-283.685  $\chi^2/\text{NDF}$ : 5.7/3

Left Out: -56.564+/-189.750  $\chi^2/\text{NDF}$ : 6.1/8

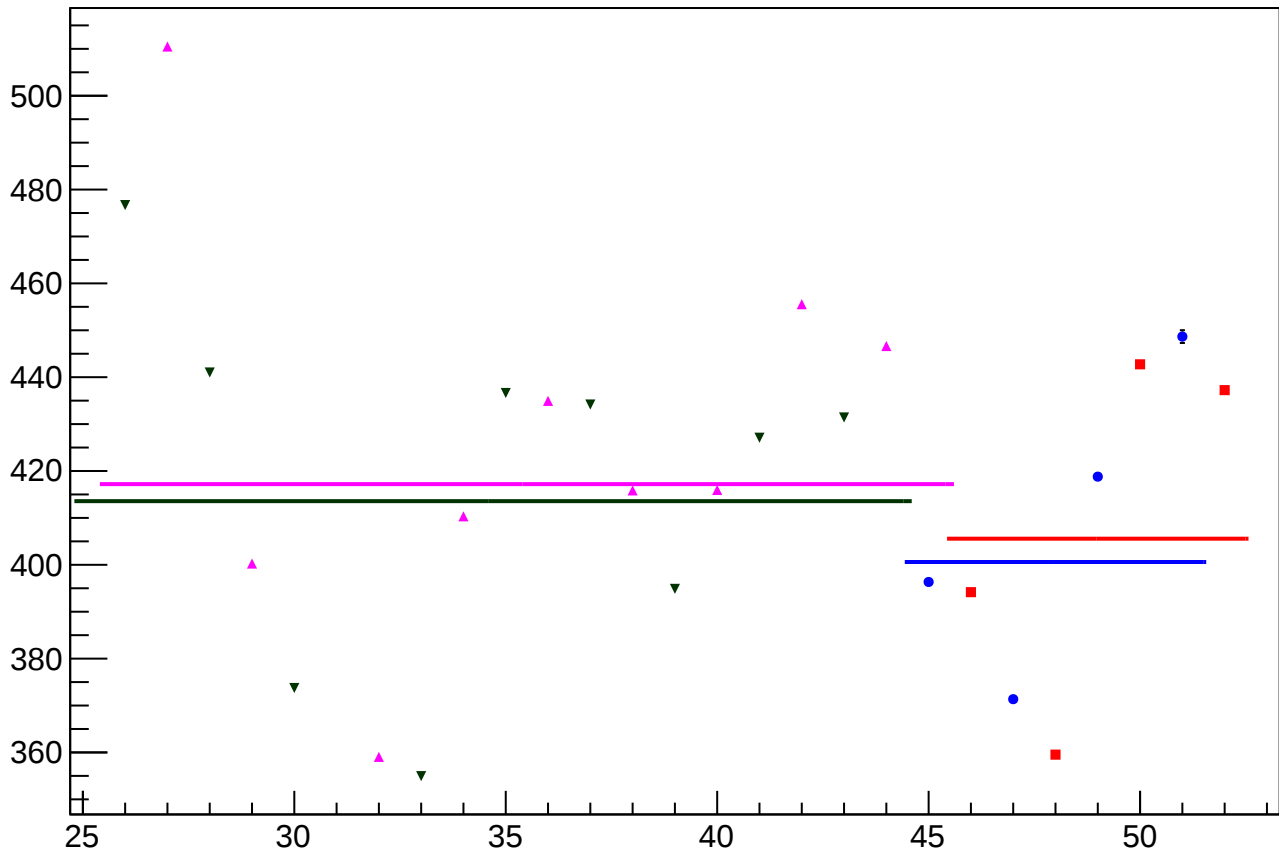
Right Out: 2.171+/-294.985  $\chi^2/\text{NDF}$ : 2.2/3

Left In: 227.618+/-178.031  $\chi^2/\text{NDF}$ : 4.9/8

-97.007+/-157.720  $\chi^2/\text{NDF}$ : 11.9/12

167.425+/-152.423  $\chi^2/\text{NDF}$ : 7.5/12

# reg\_asym\_sam\_37\_avg\_rms vs slug



Right In: 400.599 $\pm$ 0.201  $\chi^2$ /NDF: 10140.9/3

Left Out: 413.572 $\pm$ 0.134  $\chi^2$ /NDF: 72321.2/8

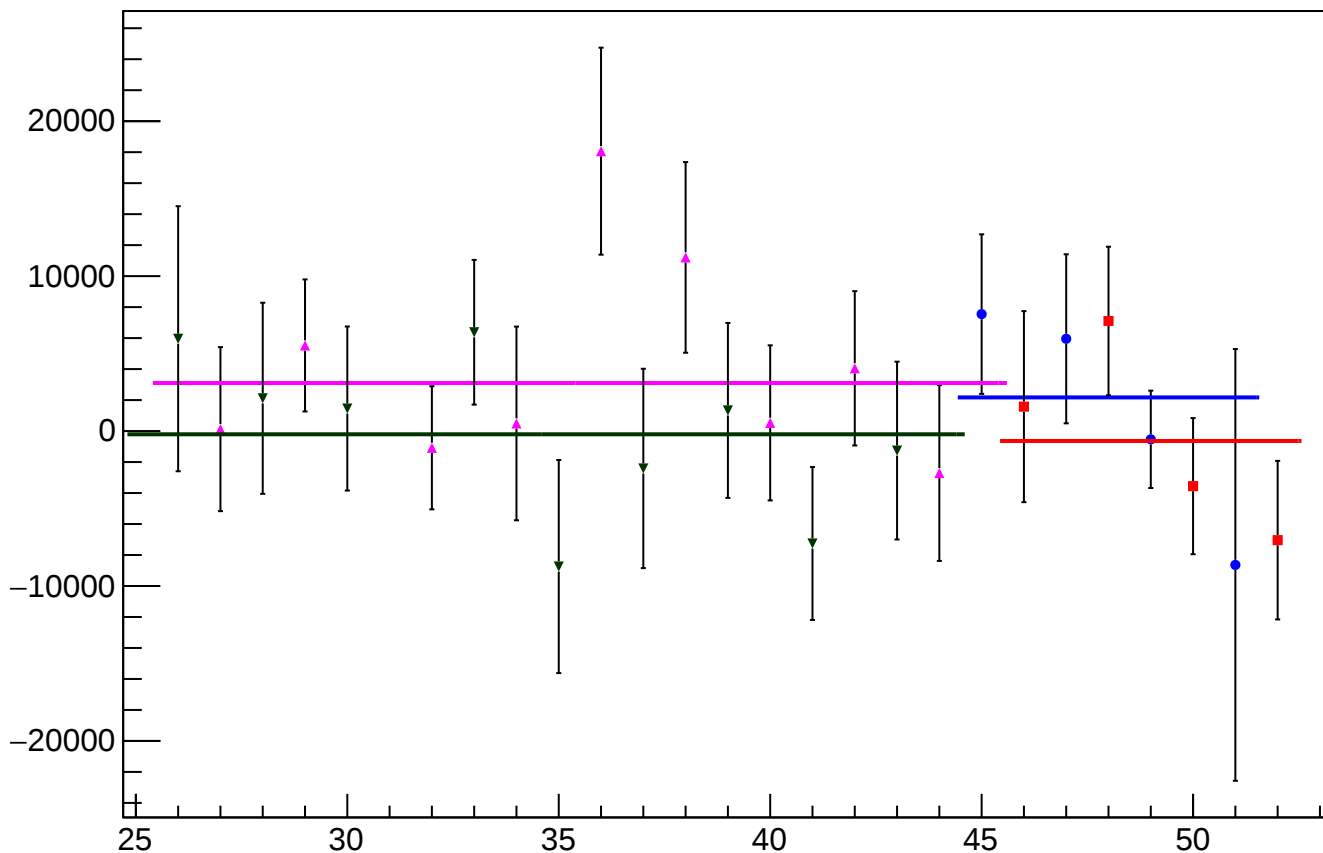
Right Out: 405.571 $\pm$ 0.209  $\chi^2$ /NDF: 27984.2/3

Left In: 417.201 $\pm$ 0.126  $\chi^2$ /NDF: 119064.3/8

409.562 $\pm$ 0.112  $\chi^2$ /NDF: 85351.8/12

414.096 $\pm$ 0.108  $\chi^2$ /NDF: 149327.3/12

# asym\_sam\_37\_avg\_correction\_mean vs slug



Right In: 2171.512 $\pm$ 2371.497  $\chi^2$ /NDF: 2.9/3

Left Out: -208.829 $\pm$ 1925.930  $\chi^2$ /NDF:6.6/8

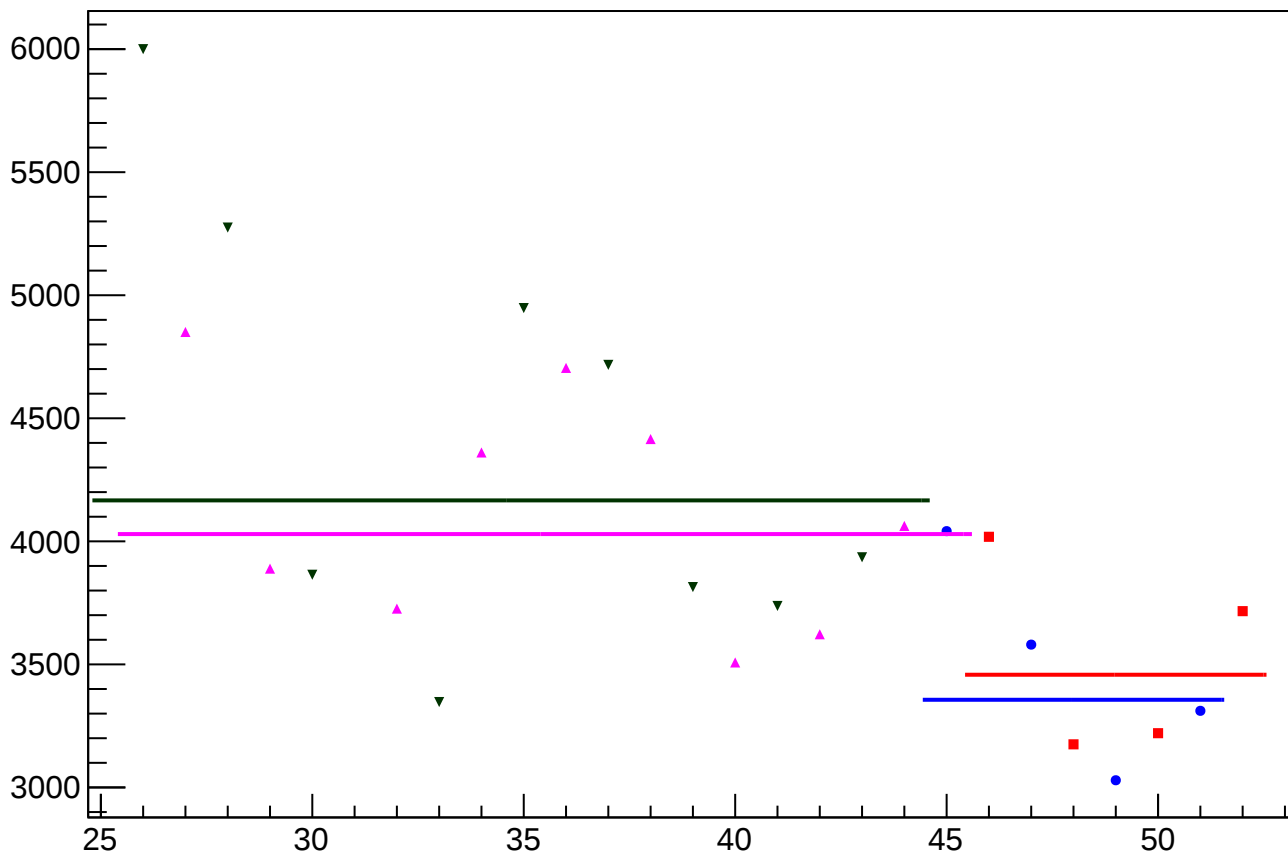
Right Out: -640.772 $\pm$ 2501.424  $\chi^2$ /NDF: 4.7/3

Left In: 3100.951 $\pm$ 1715.208  $\chi^2$ /NDF:10.0/8

737.167 $\pm$ 1495.022  $\chi^2$ /NDF: 10.1/12

1904.316 $\pm$ 1414.596  $\chi^2$ /NDF: 16.3/12

# asym\_sam\_37\_avg\_correction\_rms vs slug



Right In: 3356.218+/-1.677     $\chi^2/\text{NDF}$ : 60491.7/3

Left Out: 4166.379+/-1.362     $\chi^2/\text{NDF}$ : 291206.4/8

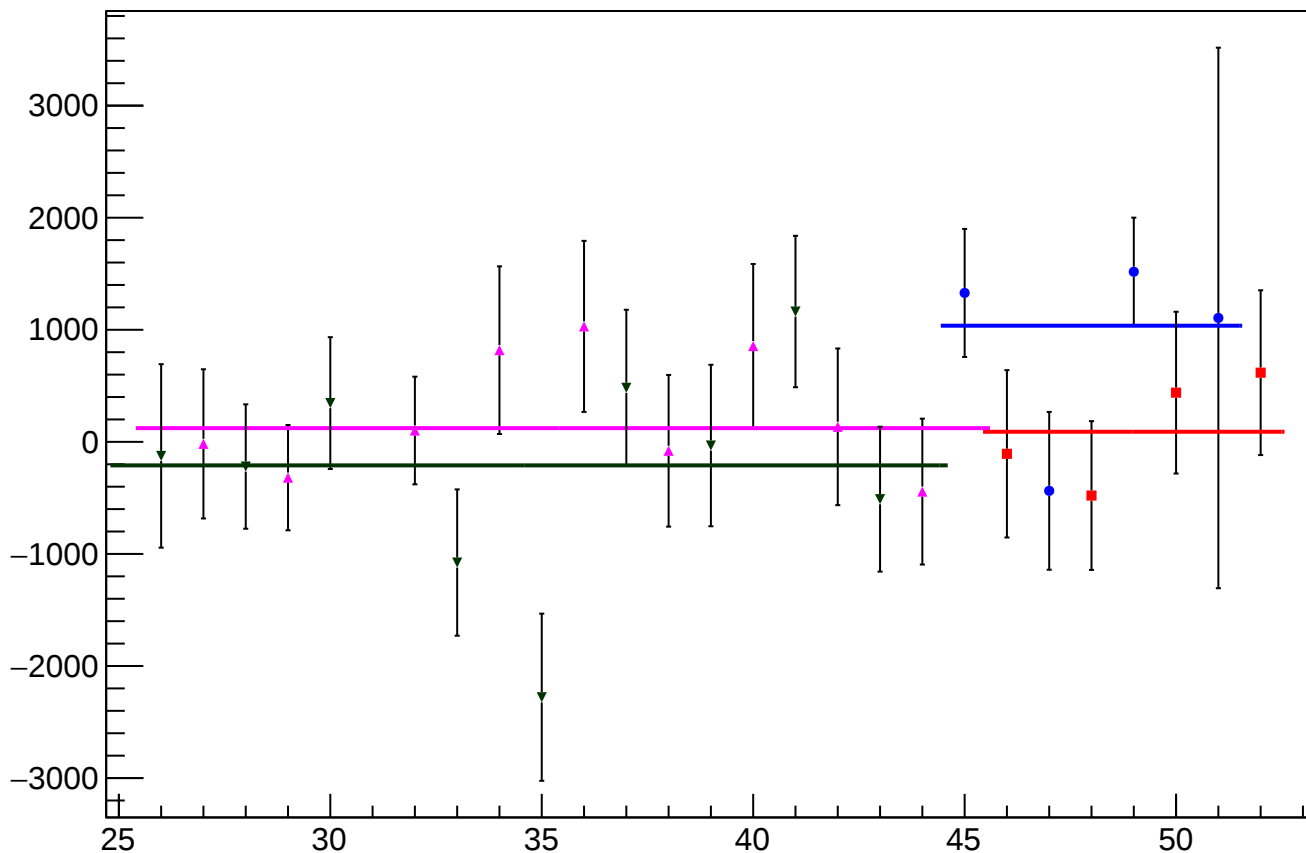
Right Out: 3457.945+/-1.769     $\chi^2/\text{NDF}$ : 34436.7/3

Left In: 4029.510+/-1.213     $\chi^2/\text{NDF}$ : 131051.5/8

3844.405+/-1.057     $\chi^2/\text{NDF}$ : 492348.9/12

3846.719+/-1.000     $\chi^2/\text{NDF}$ : 236514.4/12

# reg\_asym\_sam\_48\_avg\_mean vs slug



Right In: 1036.427 $\pm$ 323.746  $\chi^2$ /NDF: 5.6/3

Left Out: -209.900 $\pm$ 221.674  $\chi^2$ /NDF:15.8/8

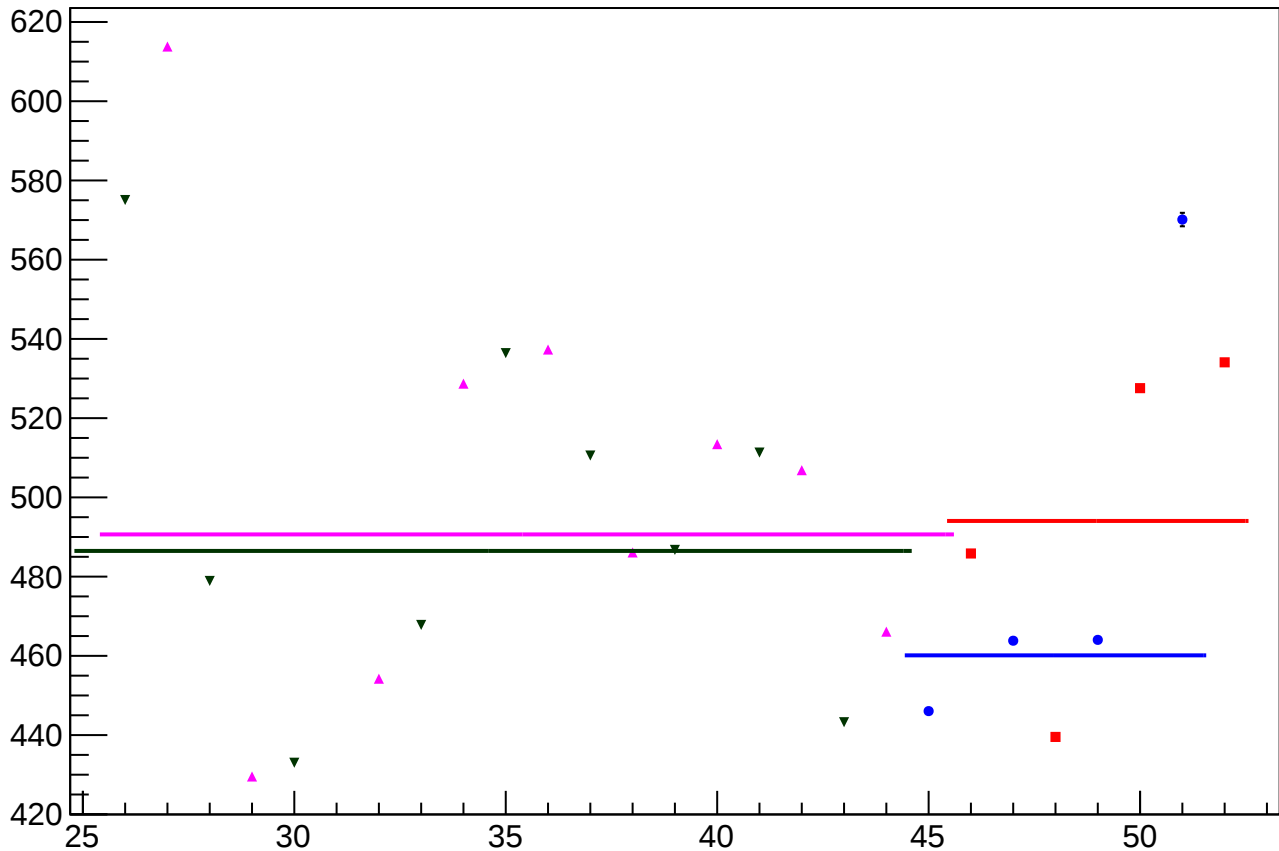
Right Out: 90.236 $\pm$ 357.247  $\chi^2$ /NDF: 1.6/3

Left In: 122.495 $\pm$ 208.120  $\chi^2$ /NDF:5.1/8

187.913 $\pm$ 182.906  $\chi^2$ /NDF: 31.5/12

114.321 $\pm$ 179.830  $\chi^2$ /NDF: 6.6/12

# reg\_asym\_sam\_48\_avg\_rms vs slug



Right In:  $460.126 \pm 0.229$   $\chi^2/\text{NDF}$ : 5561.2/3

Left Out:  $486.485 \pm 0.157$   $\chi^2/\text{NDF}$ : 64970.9/8

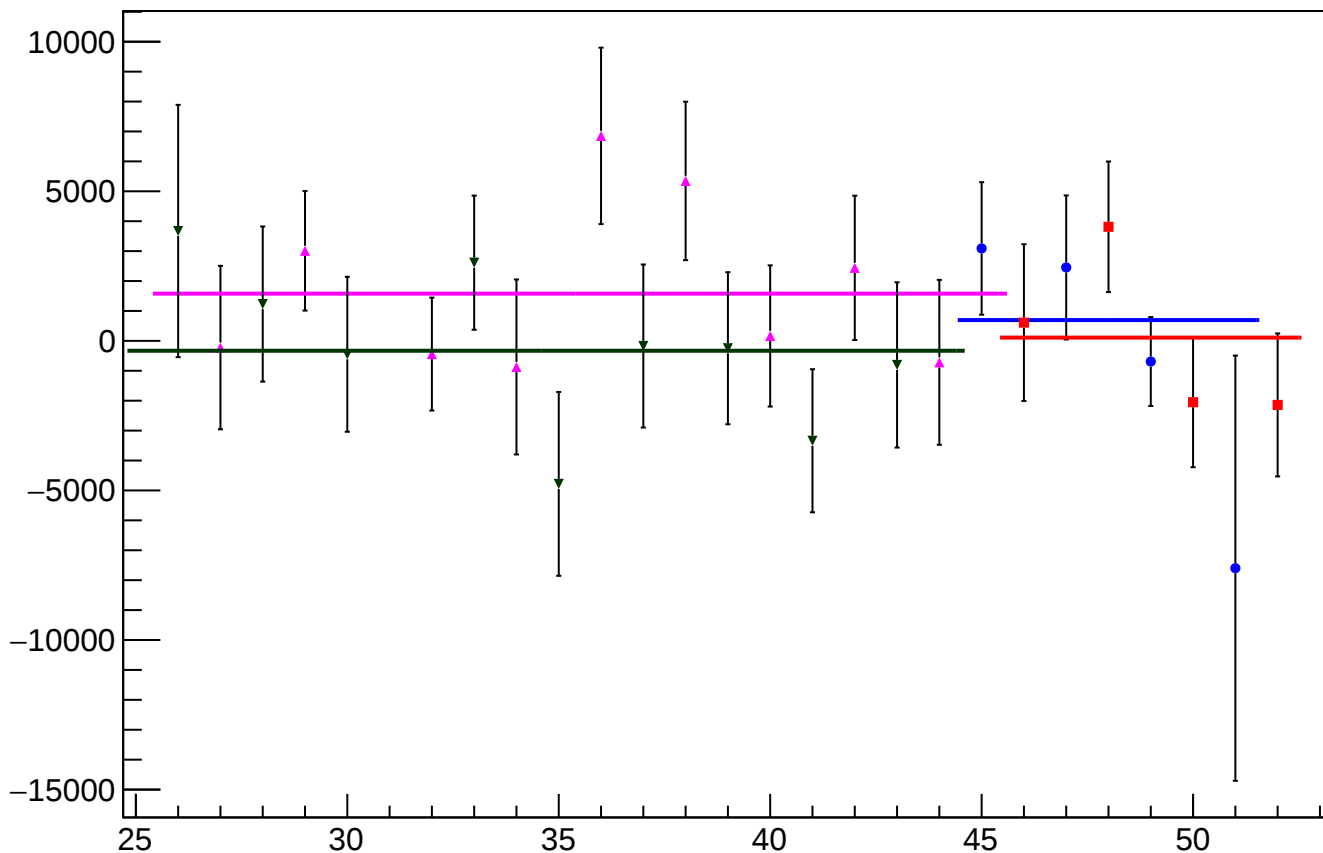
Right Out:  $494.053 \pm 0.253$   $\chi^2/\text{NDF}$ : 23986.1/3

Left In:  $490.653 \pm 0.147$   $\chi^2/\text{NDF}$ : 132367.6/8

$478.072 \pm 0.129$   $\chi^2/\text{NDF}$ : 79558.2/12

$491.516 \pm 0.127$   $\chi^2/\text{NDF}$ : 156488.9/12

# asym\_sam\_48\_avg\_correction\_mean vs slug



Right In:  $694.599 \pm 1085.287$   $\chi^2/\text{NDF}$ : 3.9/3

Left Out:  $-330.295 \pm 892.971$   $\chi^2/\text{NDF}$ : 6.7/8

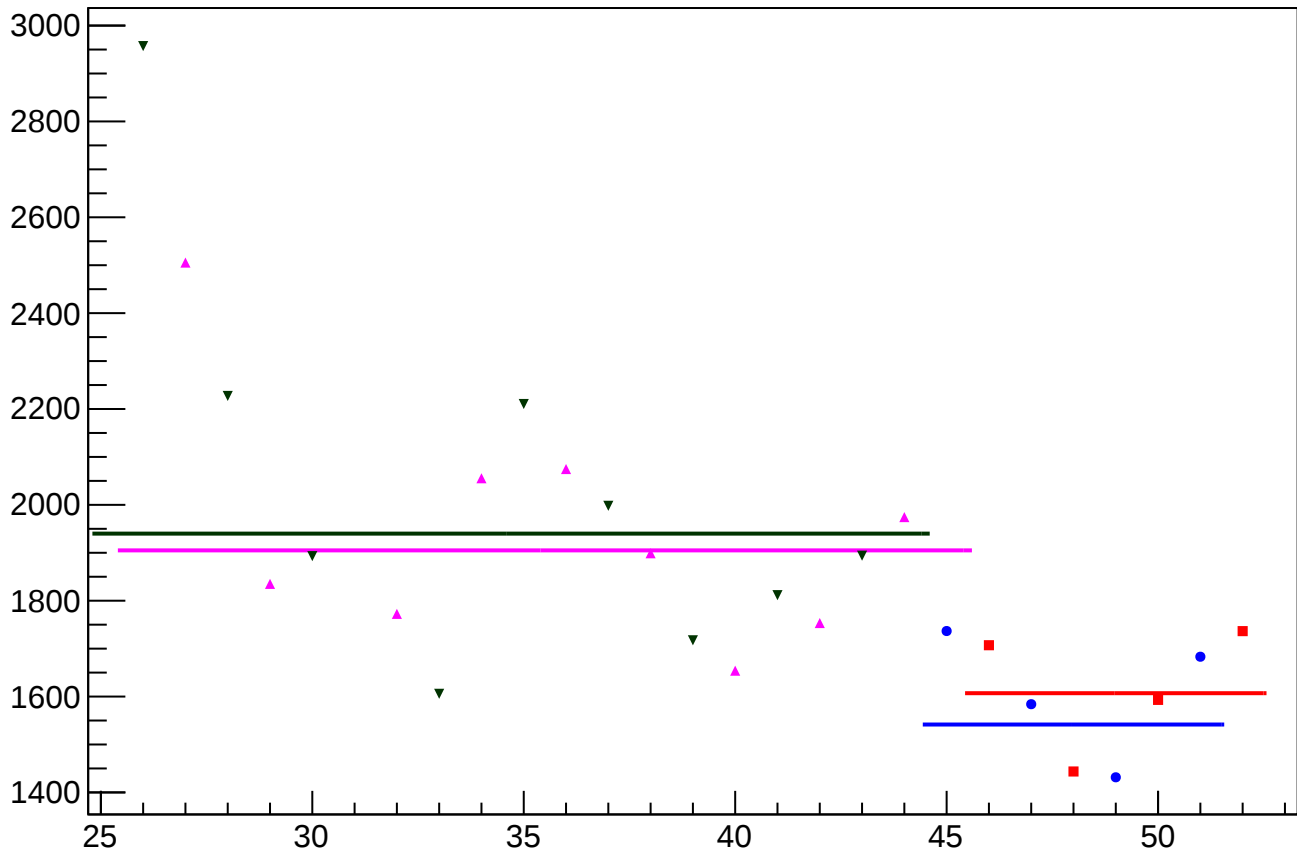
Right Out:  $108.929 \pm 1160.499$   $\chi^2/\text{NDF}$ : 4.8/3

Left In:  $1578.556 \pm 810.363$   $\chi^2/\text{NDF}$ : 9.2/8

$83.450 \pm 689.559$   $\chi^2/\text{NDF}$ : 11.2/12

$1096.843 \pm 664.409$   $\chi^2/\text{NDF}$ : 15.1/12

# asym\_sam\_48\_avg\_correction\_rms vs slug



Right In: 1541.658+/-0.767     $\chi^2/\text{NDF}$ : 27906.3/3

Left Out: 1939.983+/-0.631     $\chi^2/\text{NDF}$ : 224092.6/8

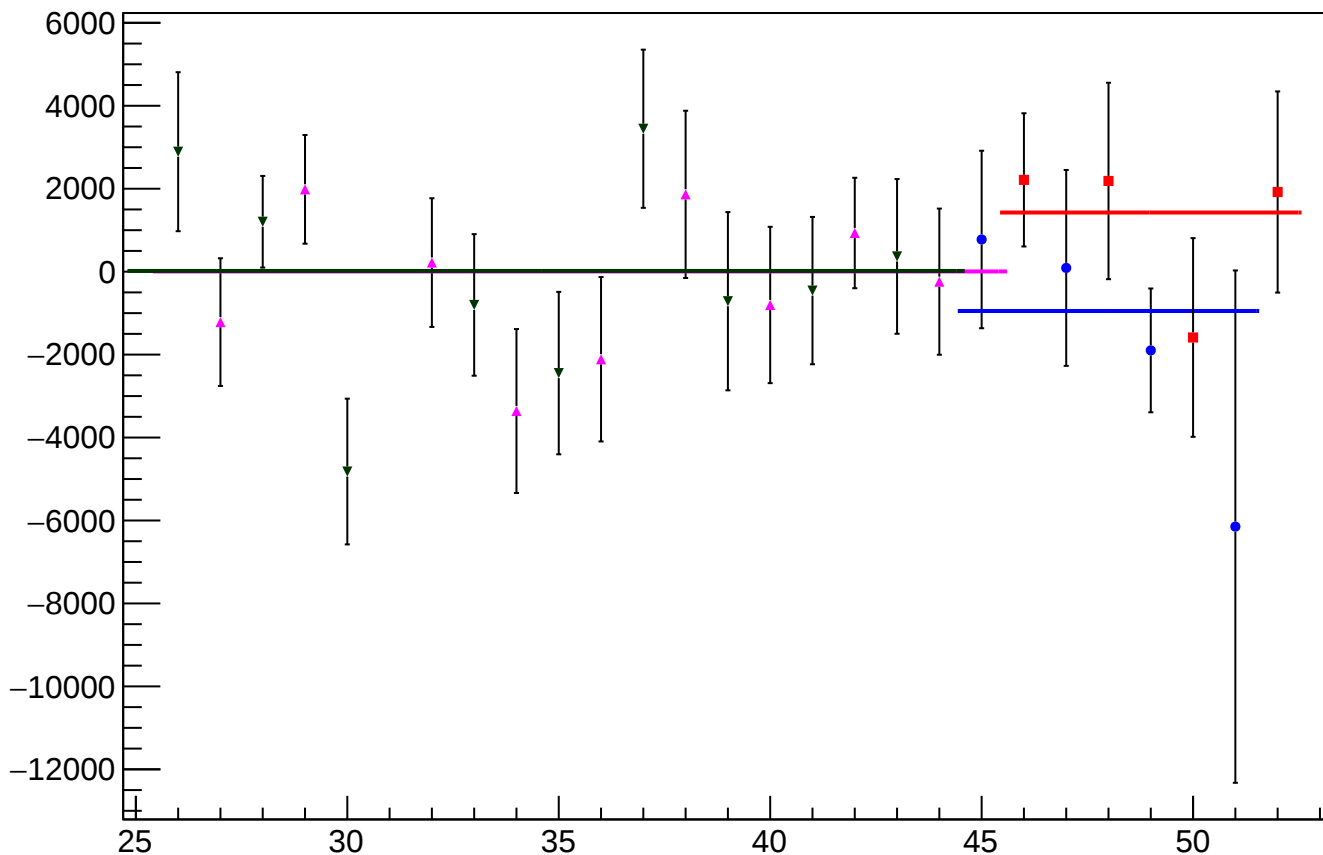
Right Out: 1607.026+/-0.821     $\chi^2/\text{NDF}$ : 20082.9/3

Left In: 1905.010+/-0.573     $\chi^2/\text{NDF}$ : 152614.4/8

1779.181+/-0.488     $\chi^2/\text{NDF}$ : 412649.8/12

1807.337+/-0.470     $\chi^2/\text{NDF}$ : 261338.9/12

# asym\_sam\_15\_dd\_mean vs slug



Right In:  $-948.402 \pm 1070.371$   $\chi^2/\text{NDF}: 2.0/3$

Left Out:  $17.049 \pm 566.564$   $\chi^2/\text{NDF}: 16.2/8$

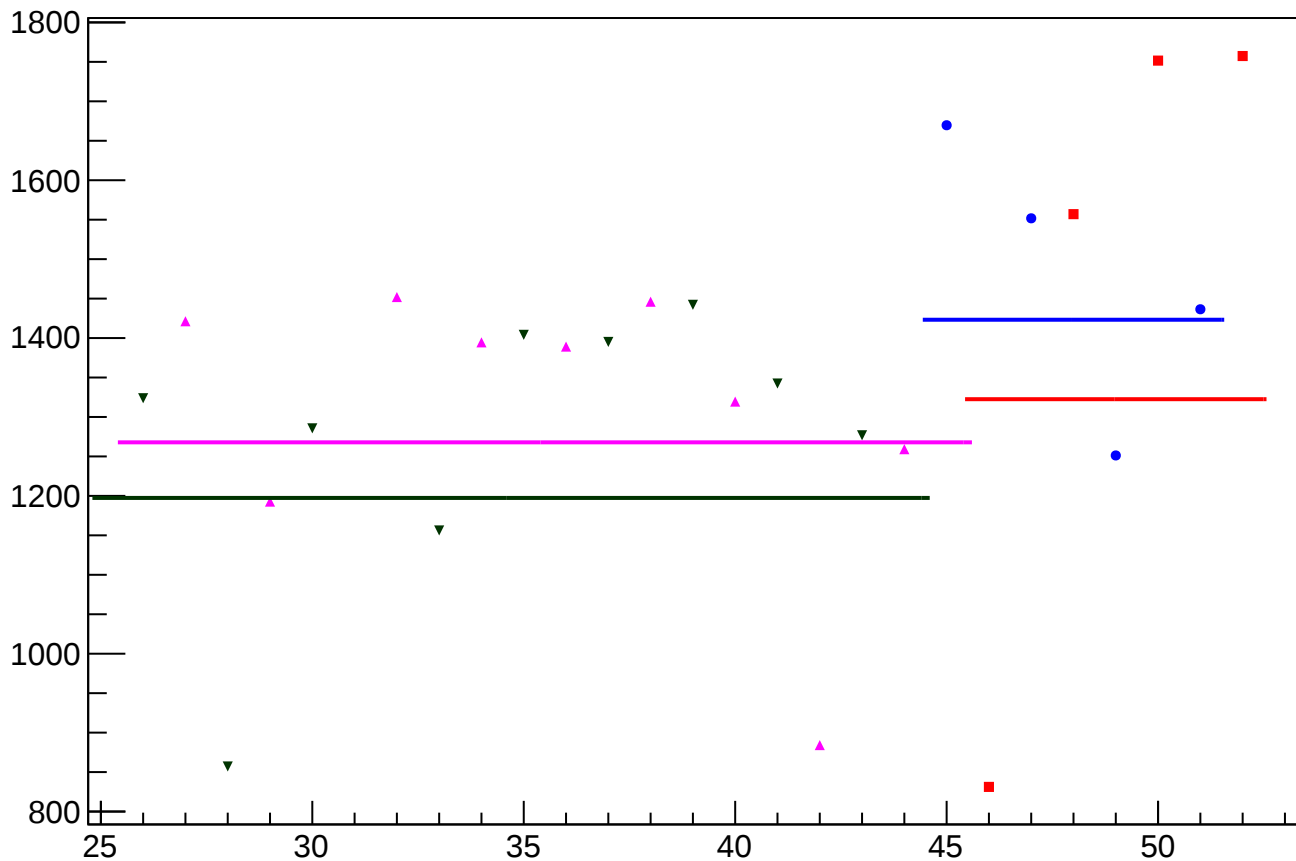
Right Out:  $1425.978 \pm 1048.130$   $\chi^2/\text{NDF}: 2.0/3$

Left In:  $4.879 \pm 546.821$   $\chi^2/\text{NDF}: 8.5/8$

$-194.246 \pm 500.742$   $\chi^2/\text{NDF}: 18.8/12$

$308.922 \pm 484.809$   $\chi^2/\text{NDF}: 11.9/12$

# asym\_sam\_15\_dd\_rms vs slug



Right In: 1423.217+/-0.757  $\chi^2/\text{NDF}$ : 59020.9/3

Left Out: 1197.414+/-0.401  $\chi^2/\text{NDF}$ : 291303.5/8

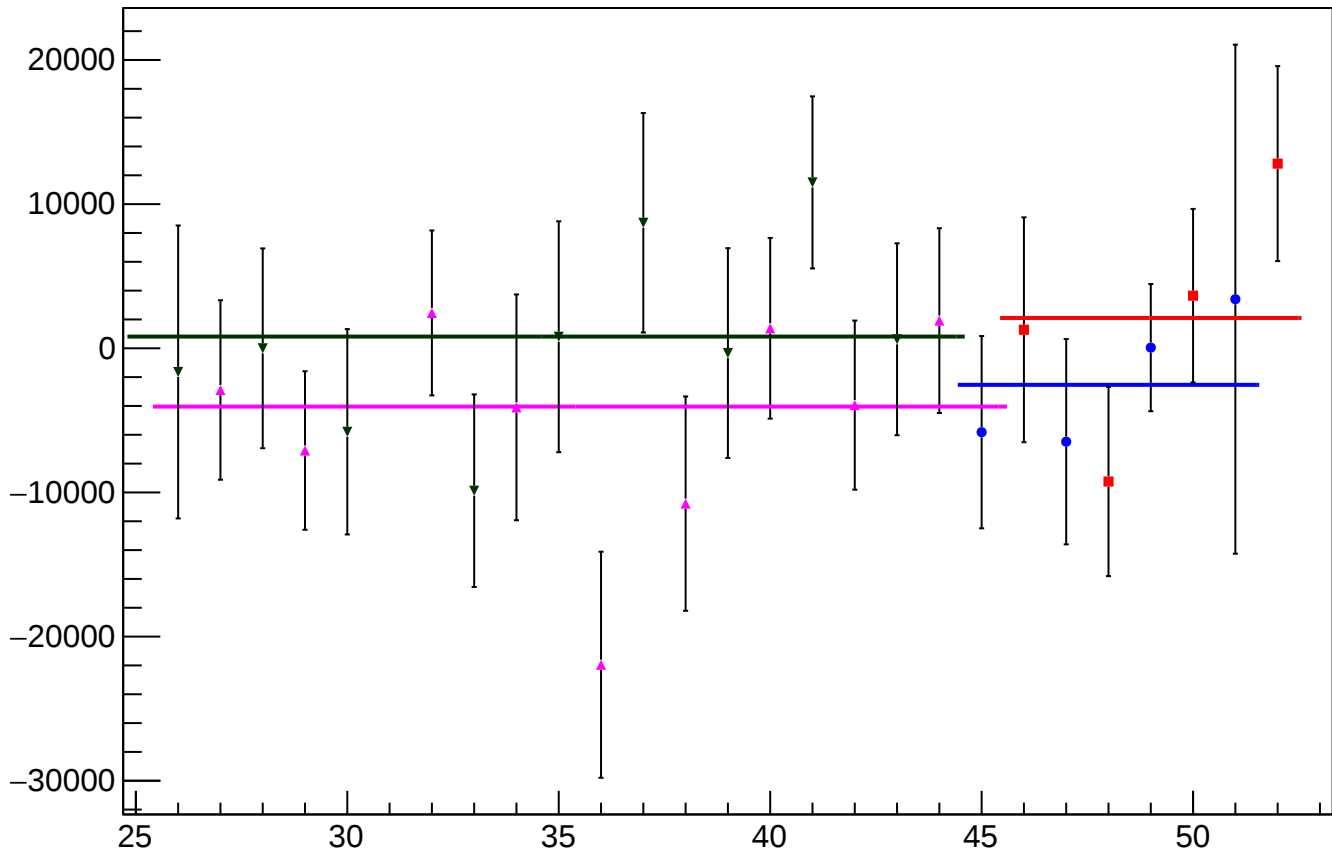
Right Out: 1322.532+/-0.741  $\chi^2/\text{NDF}$ : 335251.3/3

Left In: 1267.855+/-0.387  $\chi^2/\text{NDF}$ : 253536.2/8

1246.832+/-0.354  $\chi^2/\text{NDF}$ : 419851.5/12

1279.553+/-0.343  $\chi^2/\text{NDF}$ : 593065.9/12

# asym\_sam\_26\_dd\_mean vs slug



Right In: -2534.876+/-3214.162  $\chi^2$ /NDF: 1.0/3

Left Out: 812.648+/-2390.317  $\chi^2$ /NDF: 7.8/8

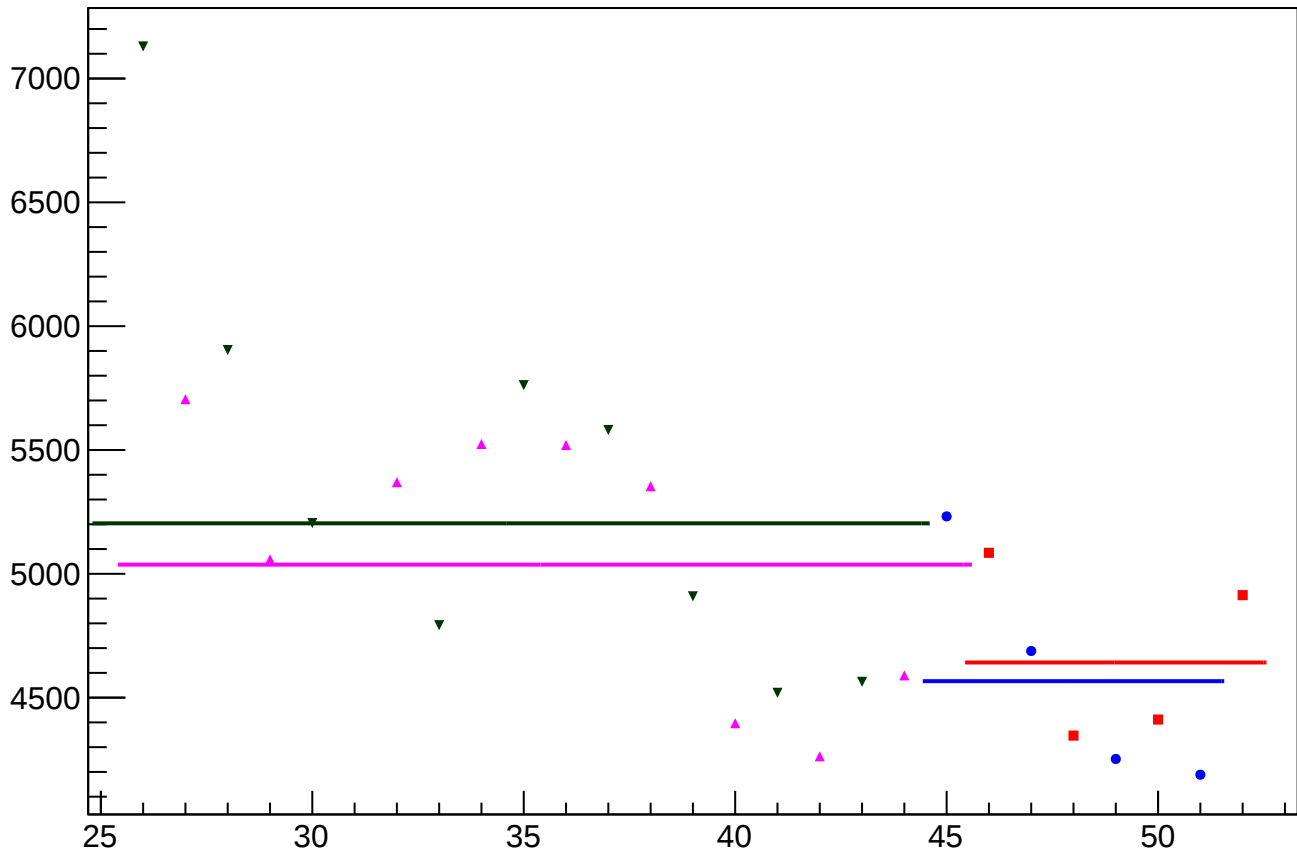
-379.444+/-1918.054  $\chi^2$ /NDF: 9.5/12

Right Out: 2103.566+/-3349.707  $\chi^2$ /NDF: 5.6/3

-2265.967+/-1801.680  $\chi^2$ /NDF: 17.2/12

Left In: -4044.605+/-2137.141  $\chi^2$ /NDF: 9.3/8

# asym\_sam\_26\_dd\_rms vs slug



Right In: 4566.513+/-2.273  $\chi^2/\text{NDF}$ : 31556.1/3

Left Out: 5203.831+/-1.690  $\chi^2/\text{NDF}$ :162509.9/8

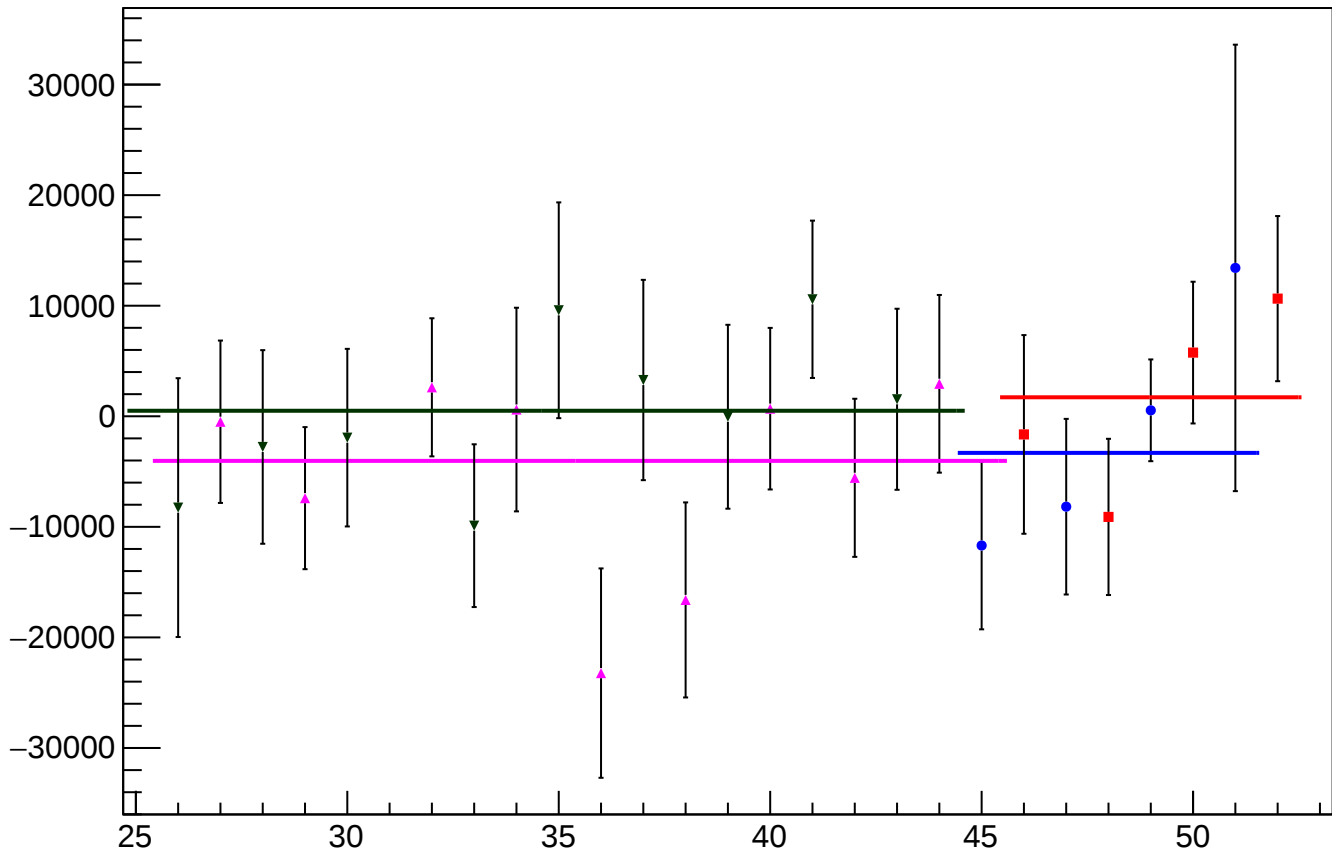
Right Out: 4642.015+/-2.369  $\chi^2/\text{NDF}$ : 16655.4/3

Left In: 5036.971+/-1.511  $\chi^2/\text{NDF}$ :114222.6/8

4976.875+/-1.356  $\chi^2/\text{NDF}$ : 244697.2/12

4922.712+/-1.274  $\chi^2/\text{NDF}$ : 150638.8/12

# asym\_sam\_37\_dd\_mean vs slug



Right In:  $-3310.025 \pm 3472.424$   $\chi^2/\text{NDF}: 3.0/3$

Left Out:  $499.140 \pm 2815.711$   $\chi^2/\text{NDF}: 5.8/8$

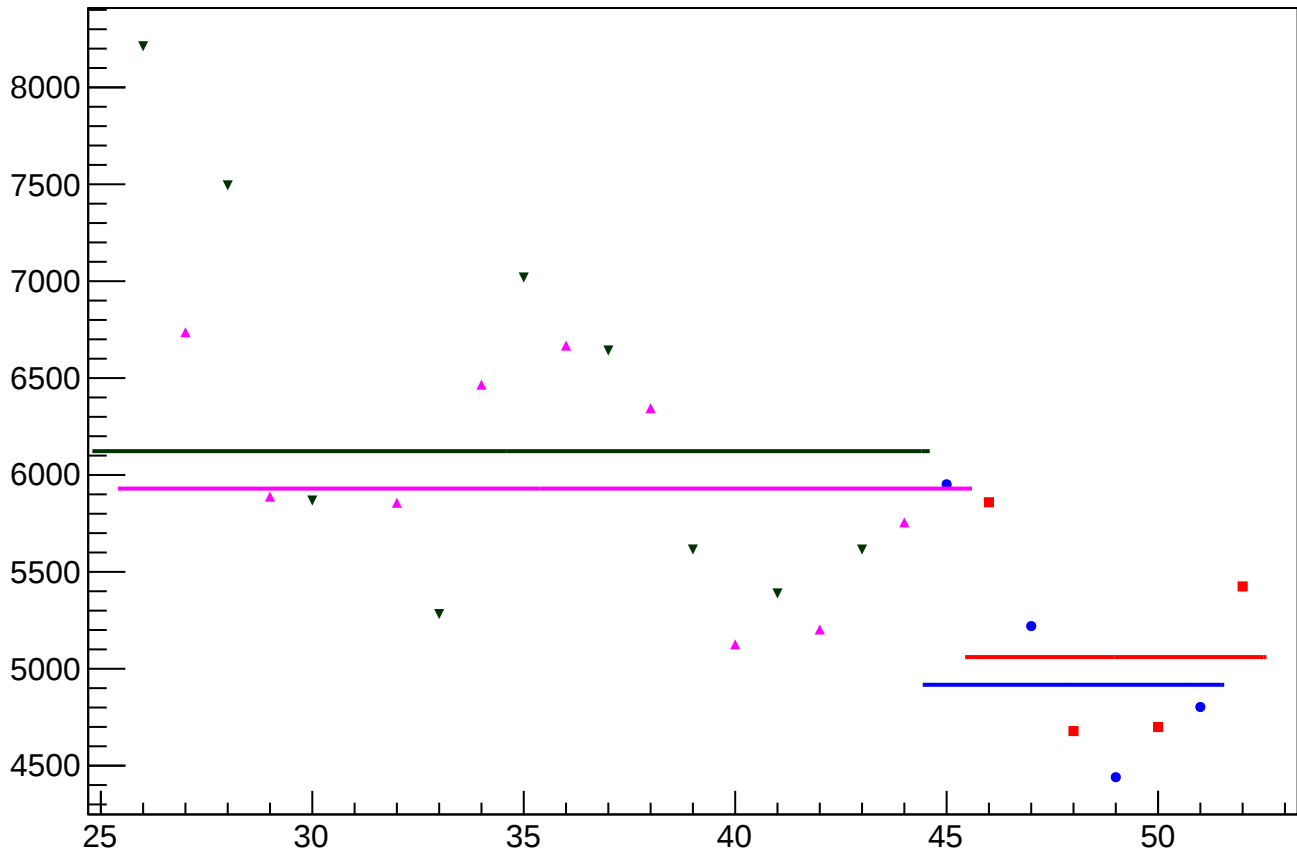
Right Out:  $1717.522 \pm 3658.784$   $\chi^2/\text{NDF}: 4.3/3$

Left In:  $-4033.740 \pm 2515.841$   $\chi^2/\text{NDF}: 9.3/8$

$-1011.917 \pm 2187.048$   $\chi^2/\text{NDF}: 9.5/12$

$-2187.419 \pm 2073.046$   $\chi^2/\text{NDF}: 15.2/12$

# asym\_sam\_37\_dd\_rms vs slug



Right In:  $4917.356 \pm 2.455$   $\chi^2/\text{NDF}$ : 61674.4/3

Left Out:  $6122.948 \pm 1.991$   $\chi^2/\text{NDF}$ : 200766.5/8

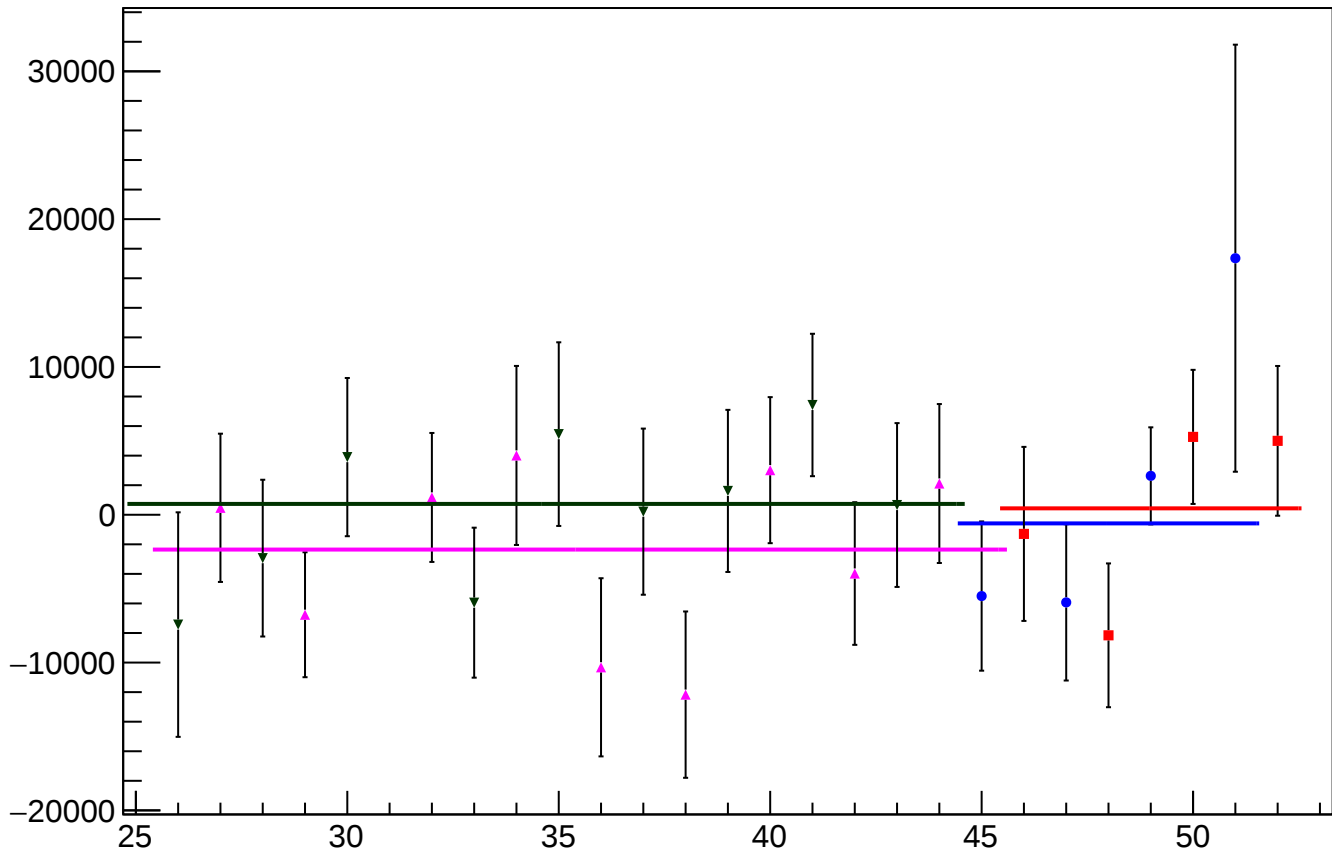
Right Out:  $5060.382 \pm 2.587$   $\chi^2/\text{NDF}$ : 32752.5/3

Left In:  $5929.846 \pm 1.779$   $\chi^2/\text{NDF}$ : 93668.6/8

$5644.702 \pm 1.546$   $\chi^2/\text{NDF}$ : 407888.1/12

$5650.723 \pm 1.466$   $\chi^2/\text{NDF}$ : 203106.0/12

# asym\_sam\_48\_dd\_mean vs slug



Right In: -584.098+/-2407.494  $\chi^2/\text{NDF}$ : 4.5/3

Left Out: 733.618+/-1847.056  $\chi^2/\text{NDF}$ : 6.3/8

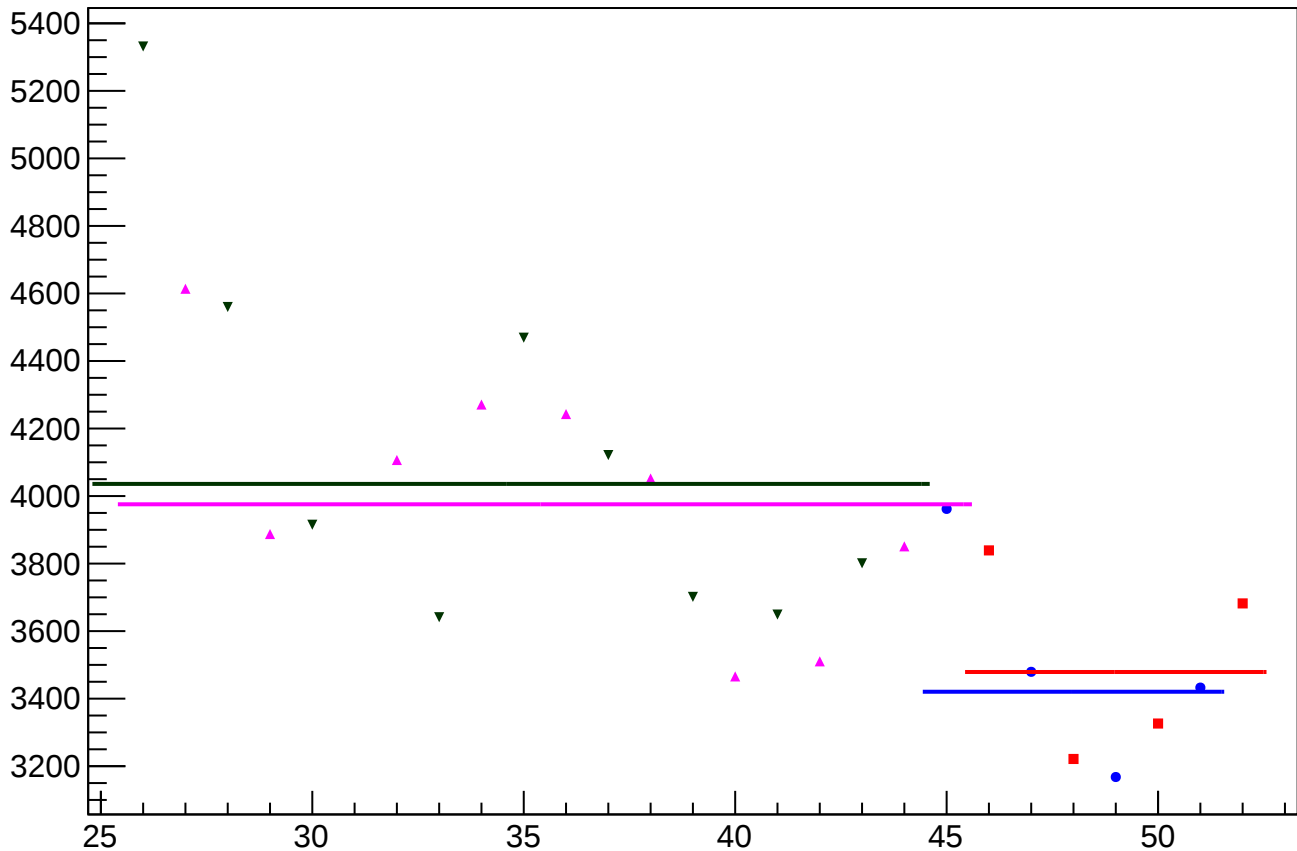
Right Out: 433.874+/-2510.377  $\chi^2/\text{NDF}$ : 5.2/3

Left In: -2354.799+/-1682.711  $\chi^2/\text{NDF}$ : 9.9/8

245.378+/-1465.450  $\chi^2/\text{NDF}$ : 10.9/12

-1490.270+/-1397.751  $\chi^2/\text{NDF}$ : 15.9/12

# asym\_sam\_48\_dd\_rms vs slug



Right In:  $3420.455 \pm 1.702$   $\chi^2/\text{NDF}$ : 35085.6/3

Left Out:  $4035.979 \pm 1.306$   $\chi^2/\text{NDF}$ : 124959.6/8

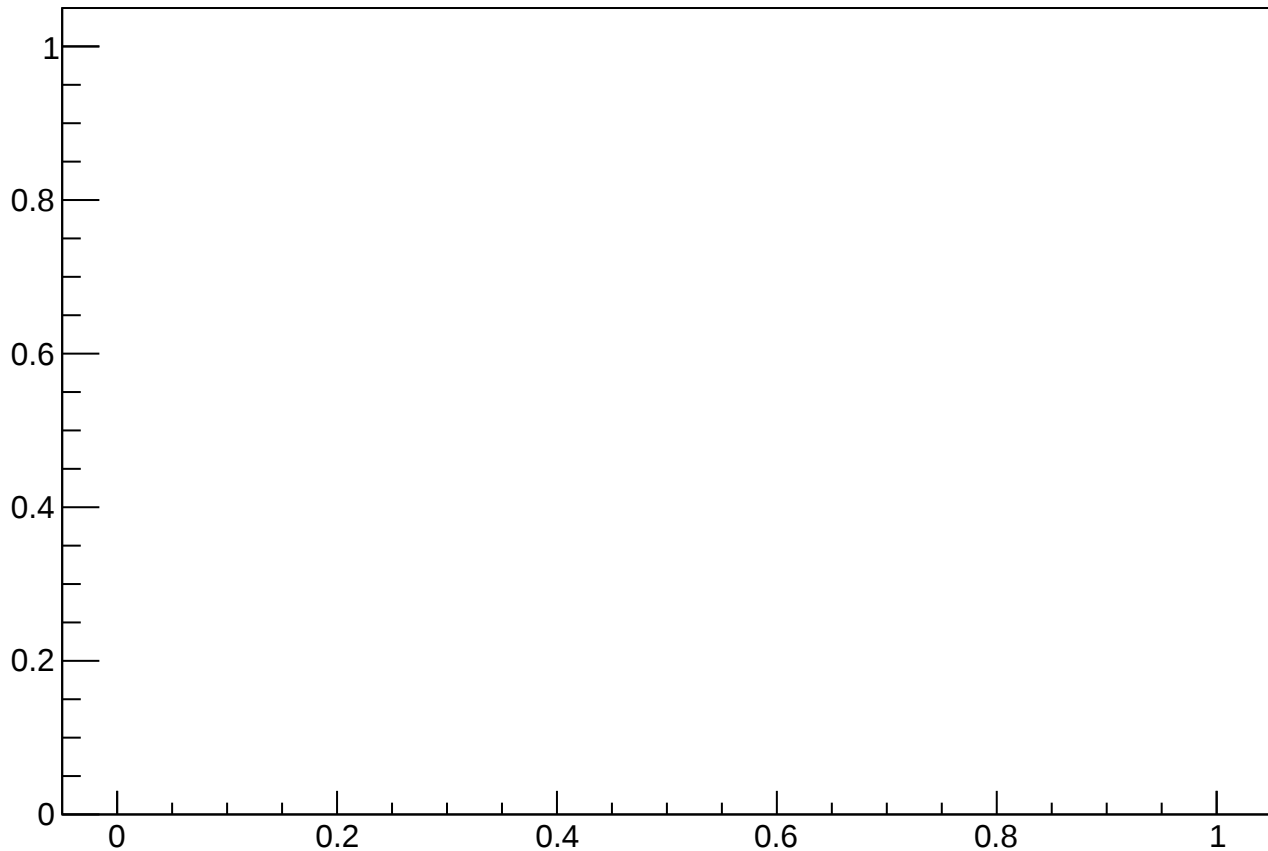
$3807.915 \pm 1.036$   $\chi^2/\text{NDF}$ : 242339.7/12

Right Out:  $3478.952 \pm 1.775$   $\chi^2/\text{NDF}$ : 18571.6/3

$3821.635 \pm 0.988$   $\chi^2/\text{NDF}$ : 157672.8/12

Left In:  $3975.604 \pm 1.190$   $\chi^2/\text{NDF}$ : 85088.4/8

yield\_sam\_15\_dd\_mean vs slug



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

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

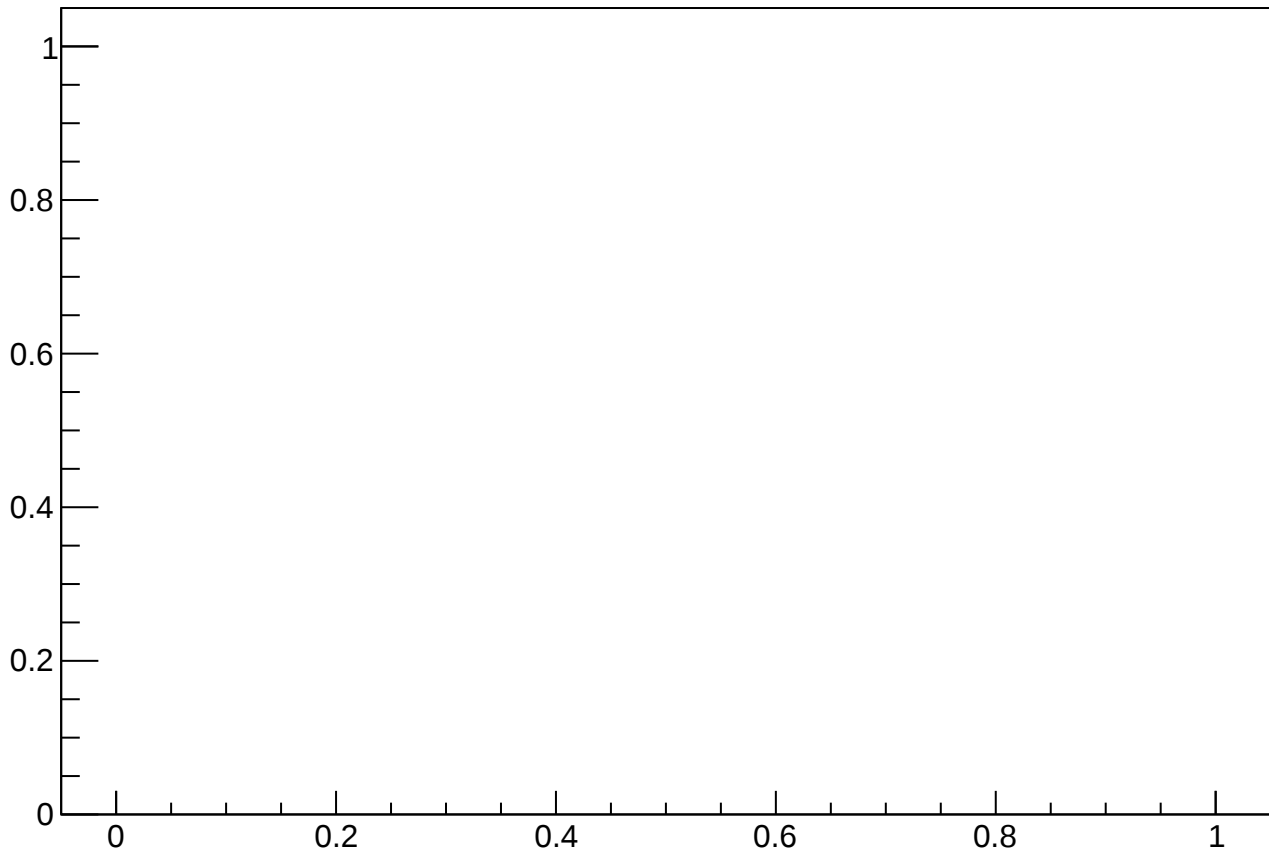
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# yield\_sam\_15\_dd\_rms vs slug



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

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

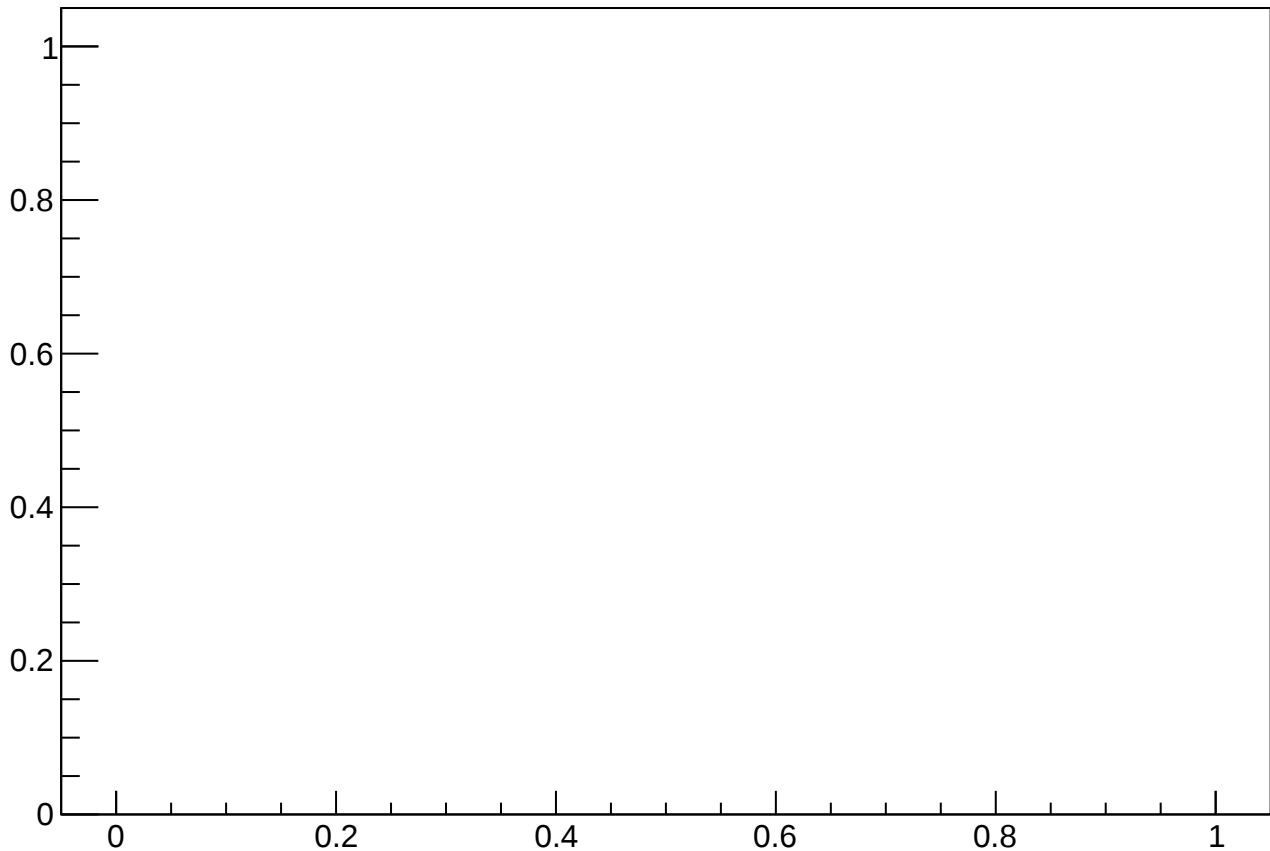
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

yield\_sam\_26\_dd\_mean vs slug



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

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

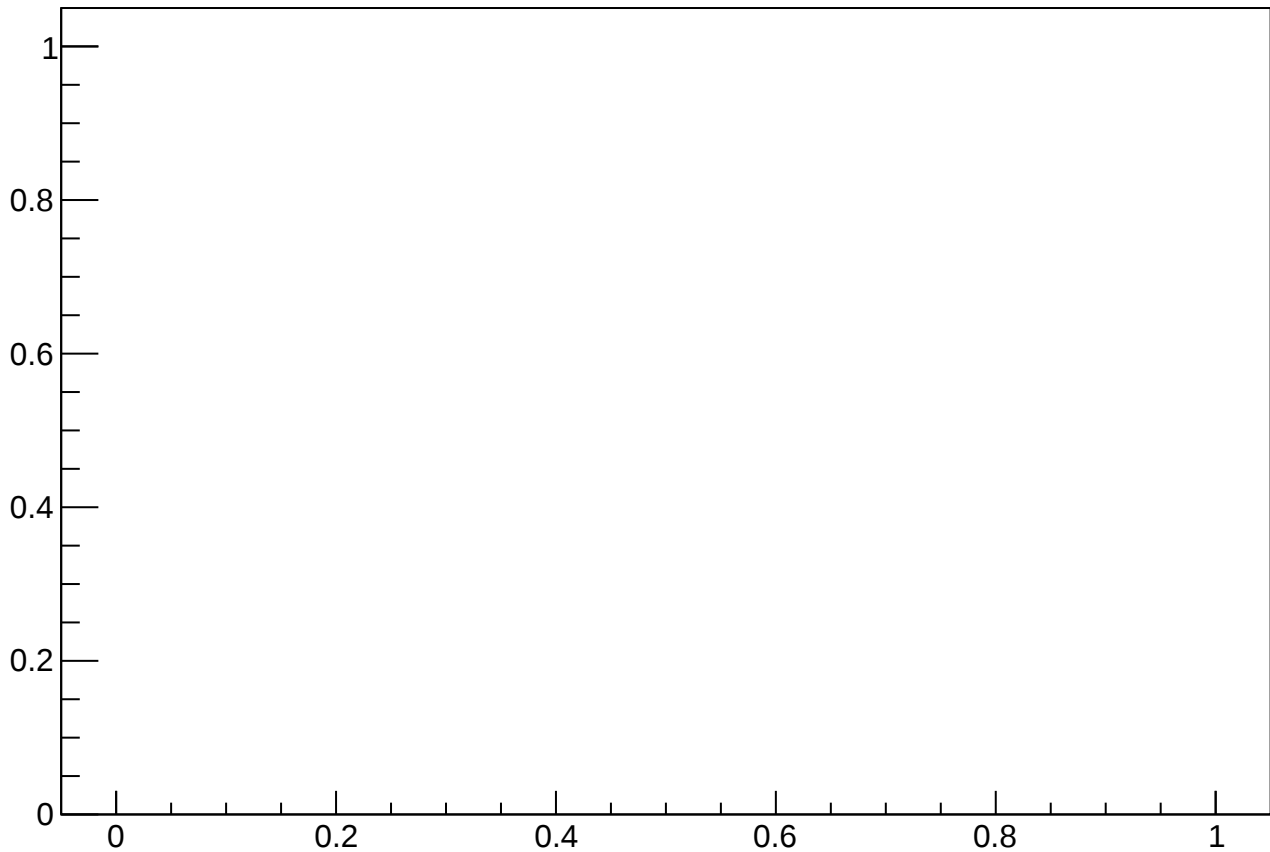
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# yield\_sam\_26\_dd\_rms vs slug



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

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

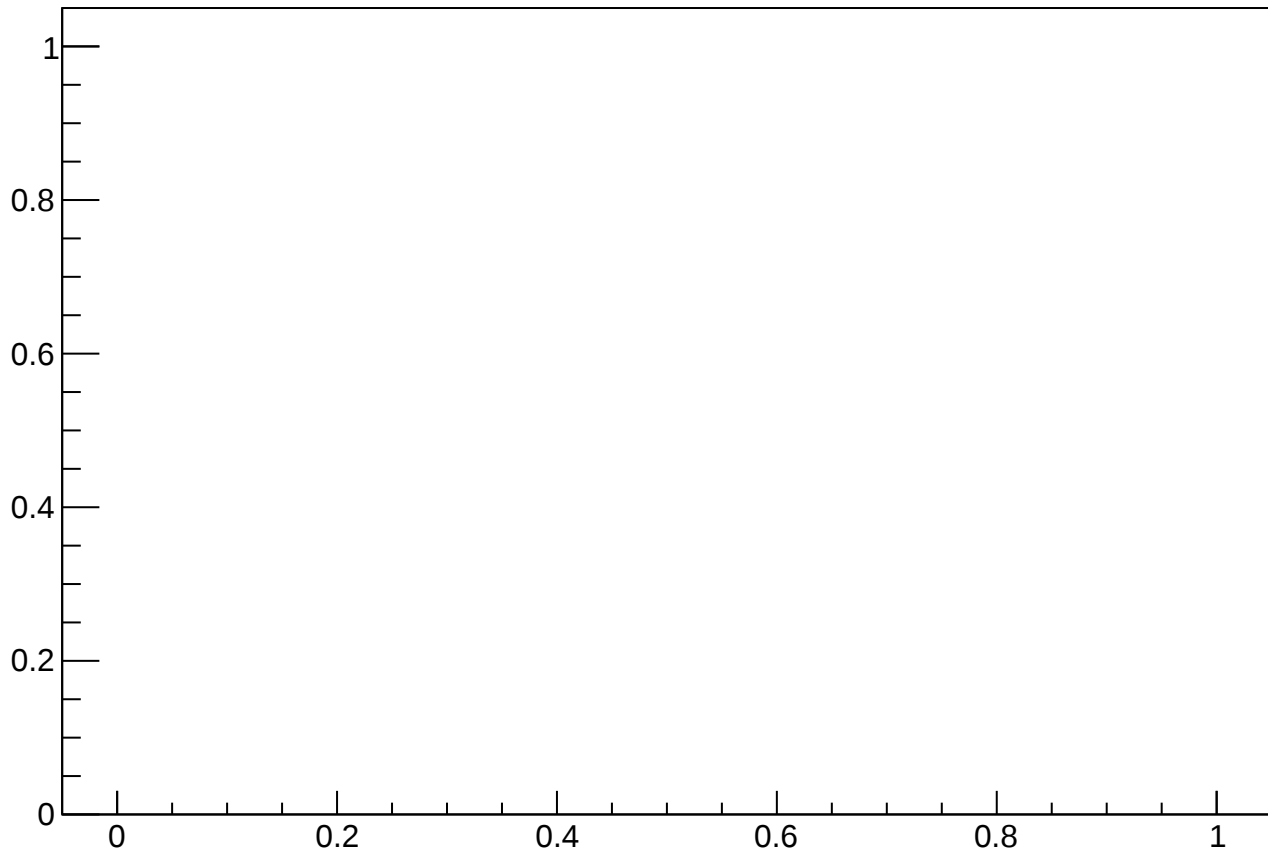
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

yield\_sam\_37\_dd\_mean vs slug



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

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

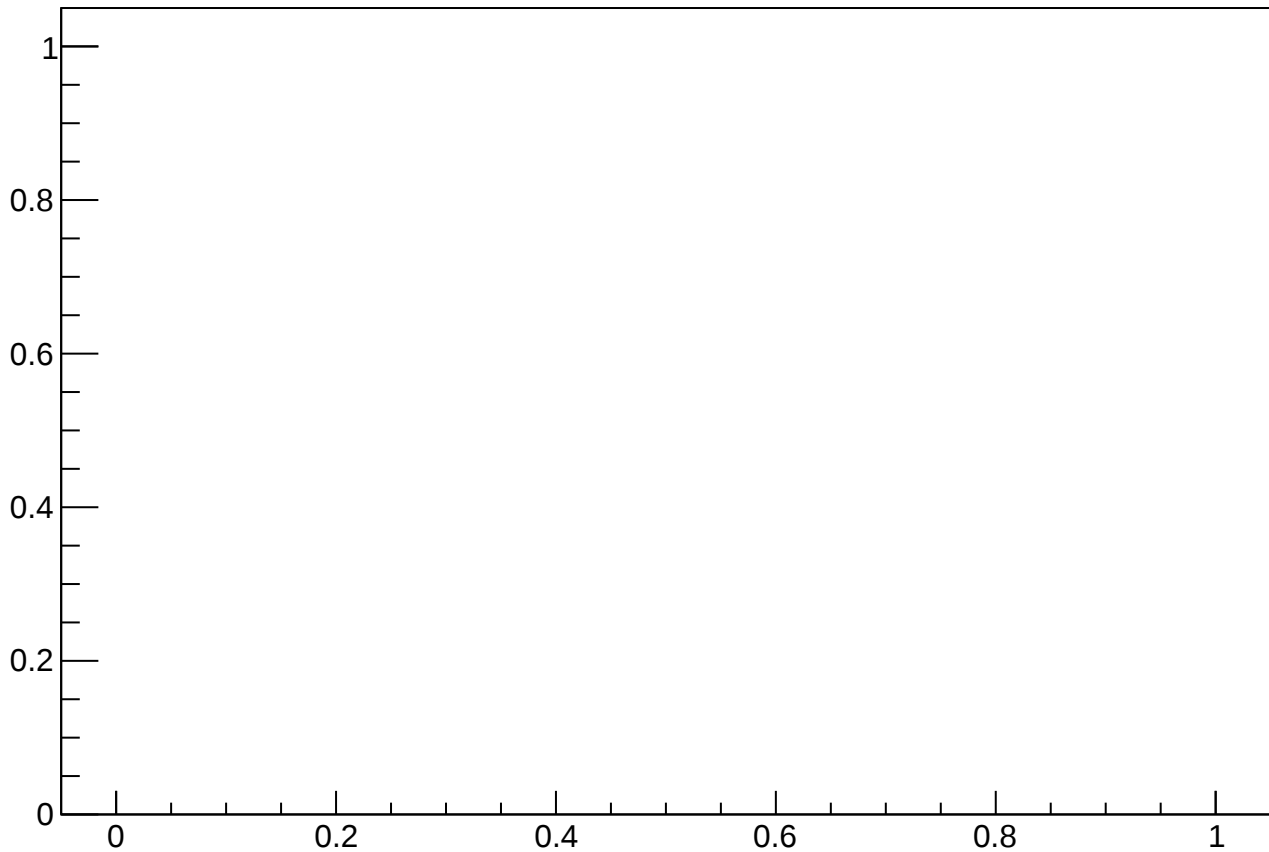
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

yield\_sam\_37\_dd\_rms vs slug



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

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

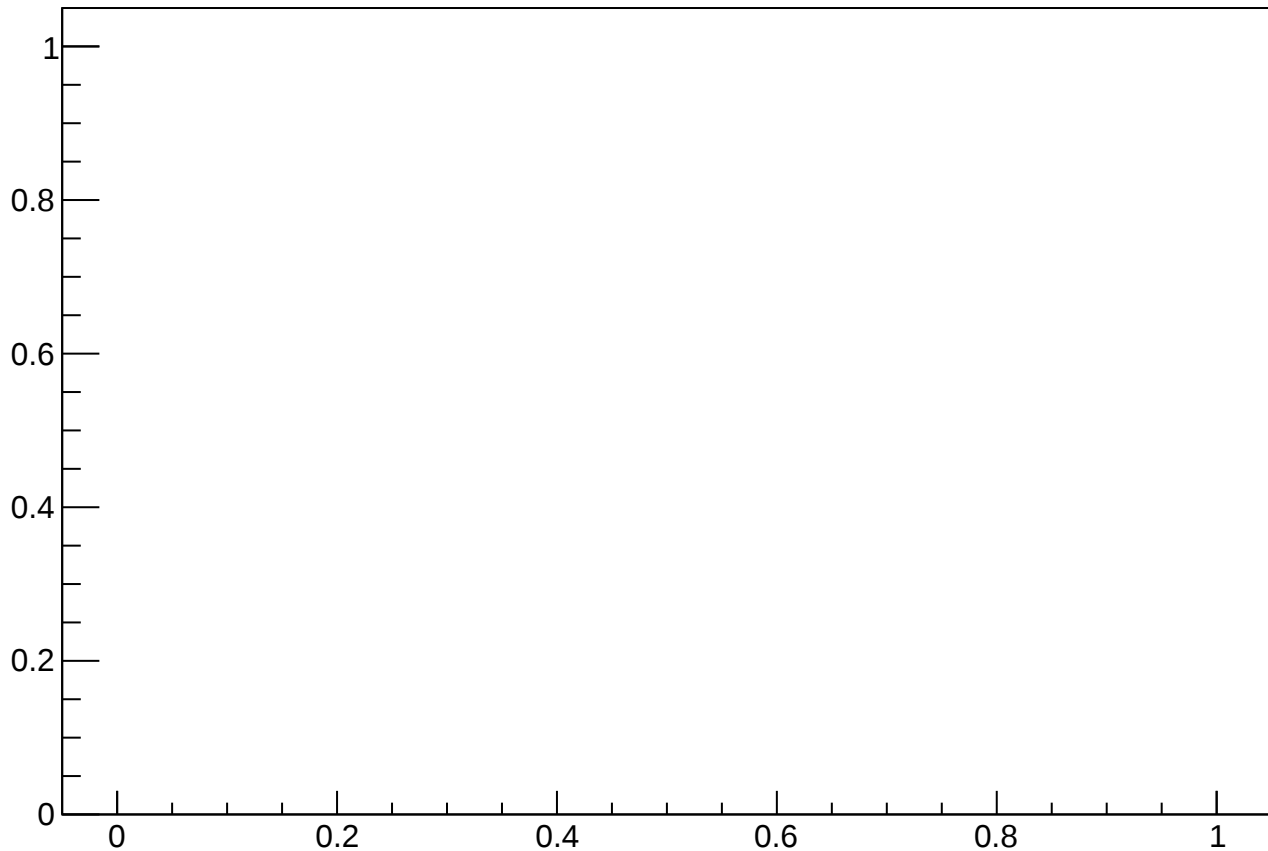
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

yield\_sam\_48\_dd\_mean vs slug



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

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

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

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

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

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

# yield\_sam\_48\_dd\_rms vs slug



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

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

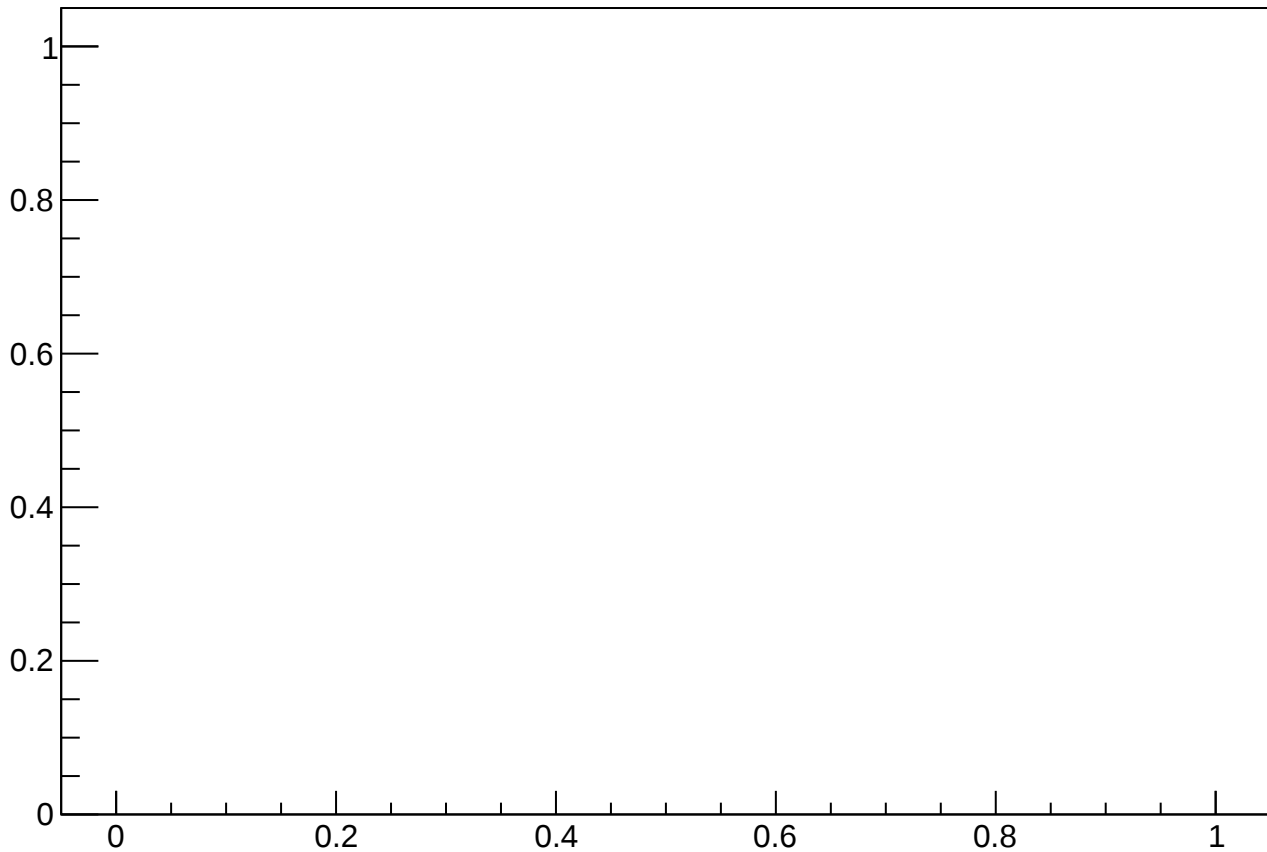
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

cor\_sam\_15\_dd\_mean vs slug



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

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

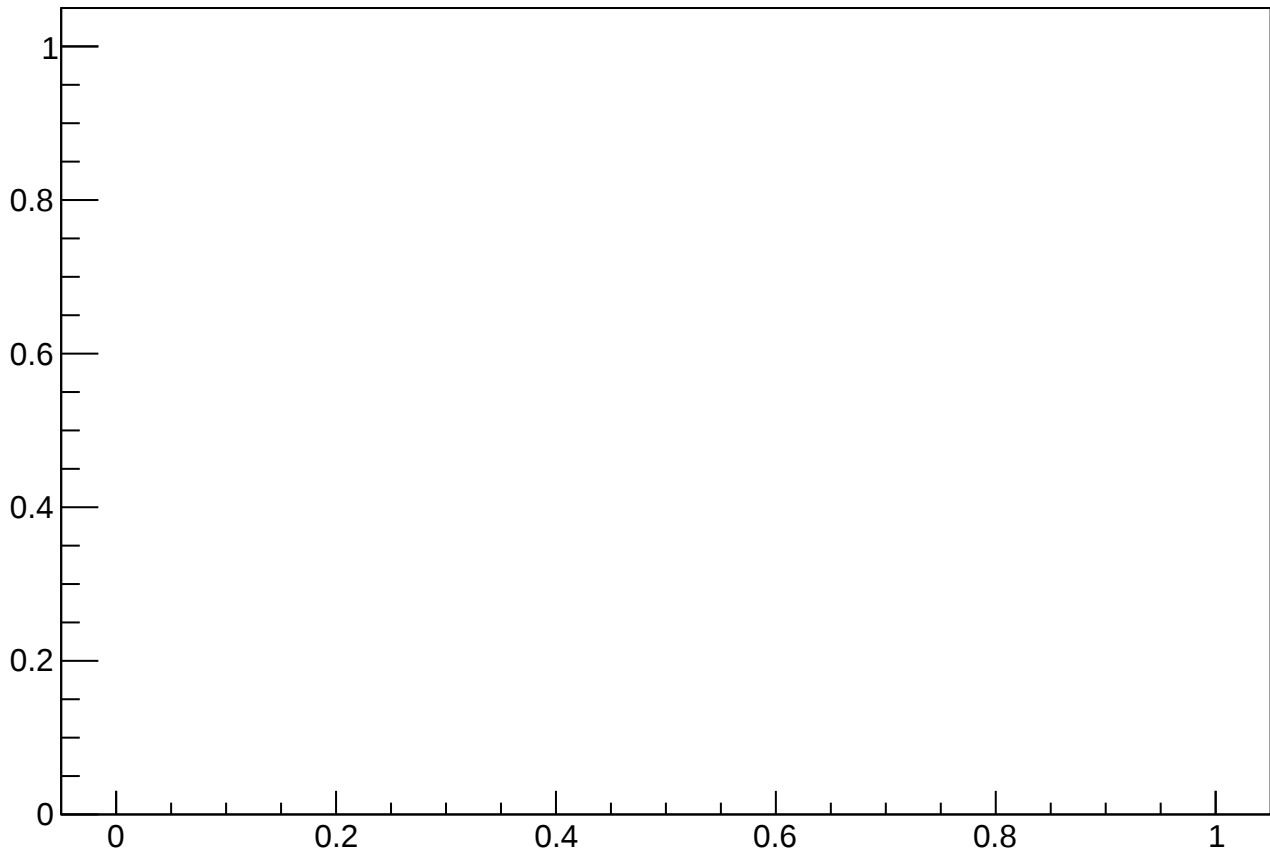
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_sam\_15\_dd\_rms vs slug



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

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

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

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

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

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

# cor\_sam\_26\_dd\_mean vs slug



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

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

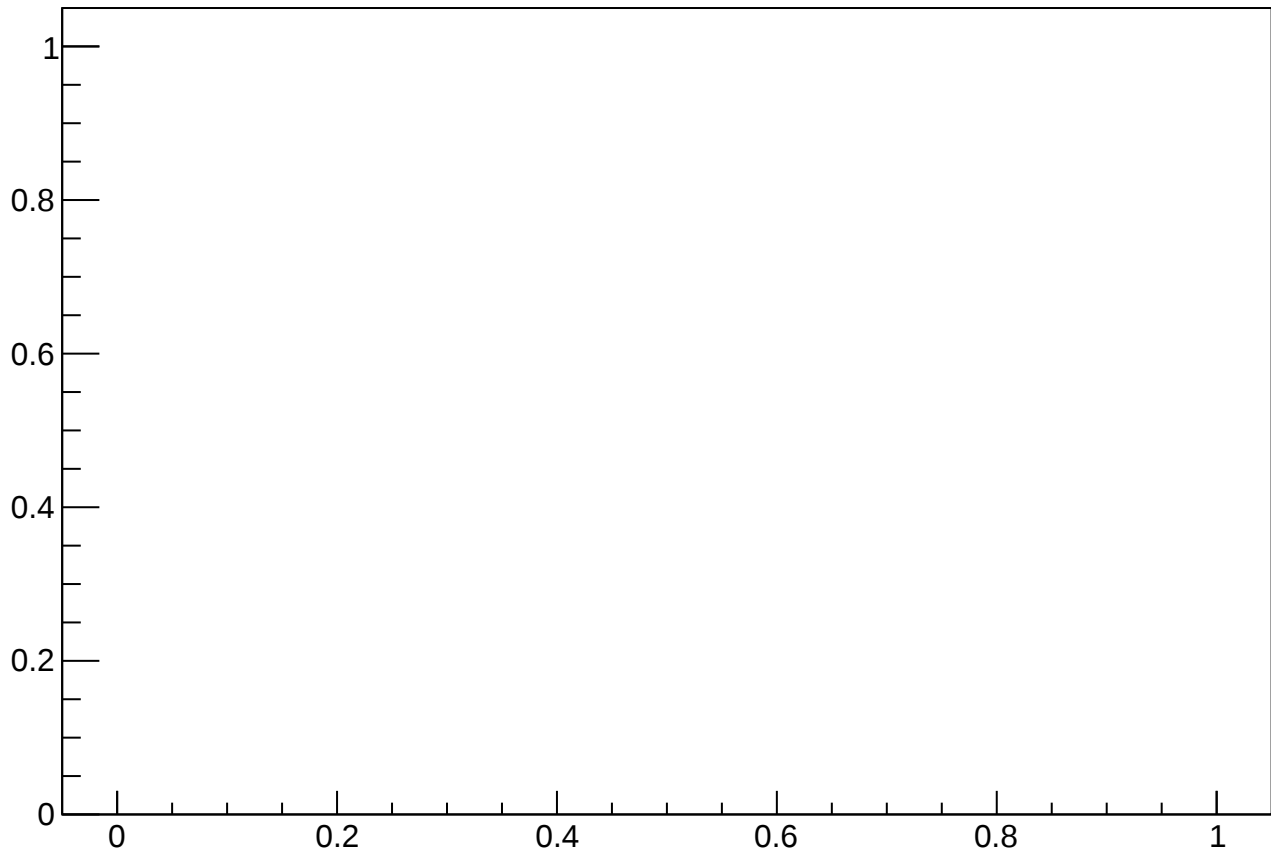
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_sam\_26\_dd\_rms vs slug



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

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

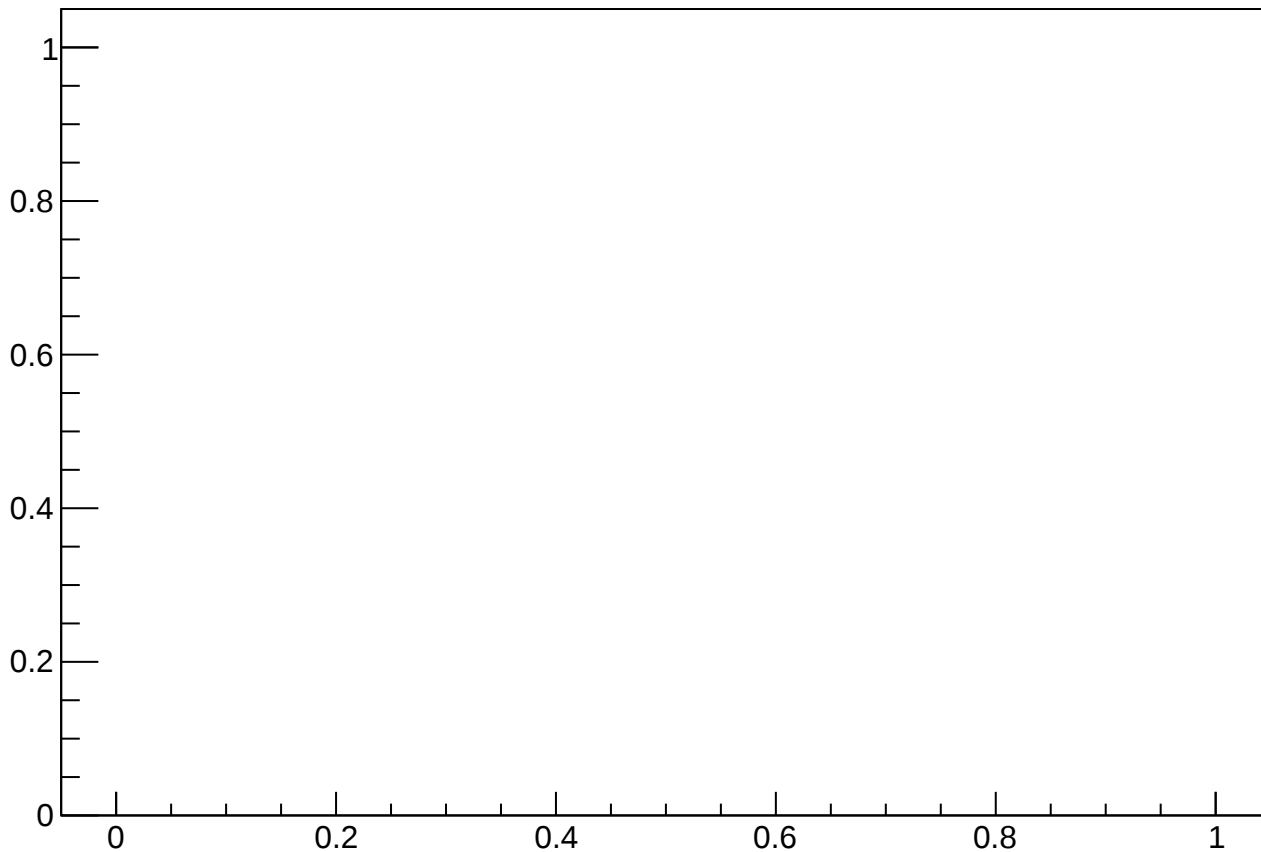
Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

# cor\_sam\_37\_dd\_mean vs slug



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

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

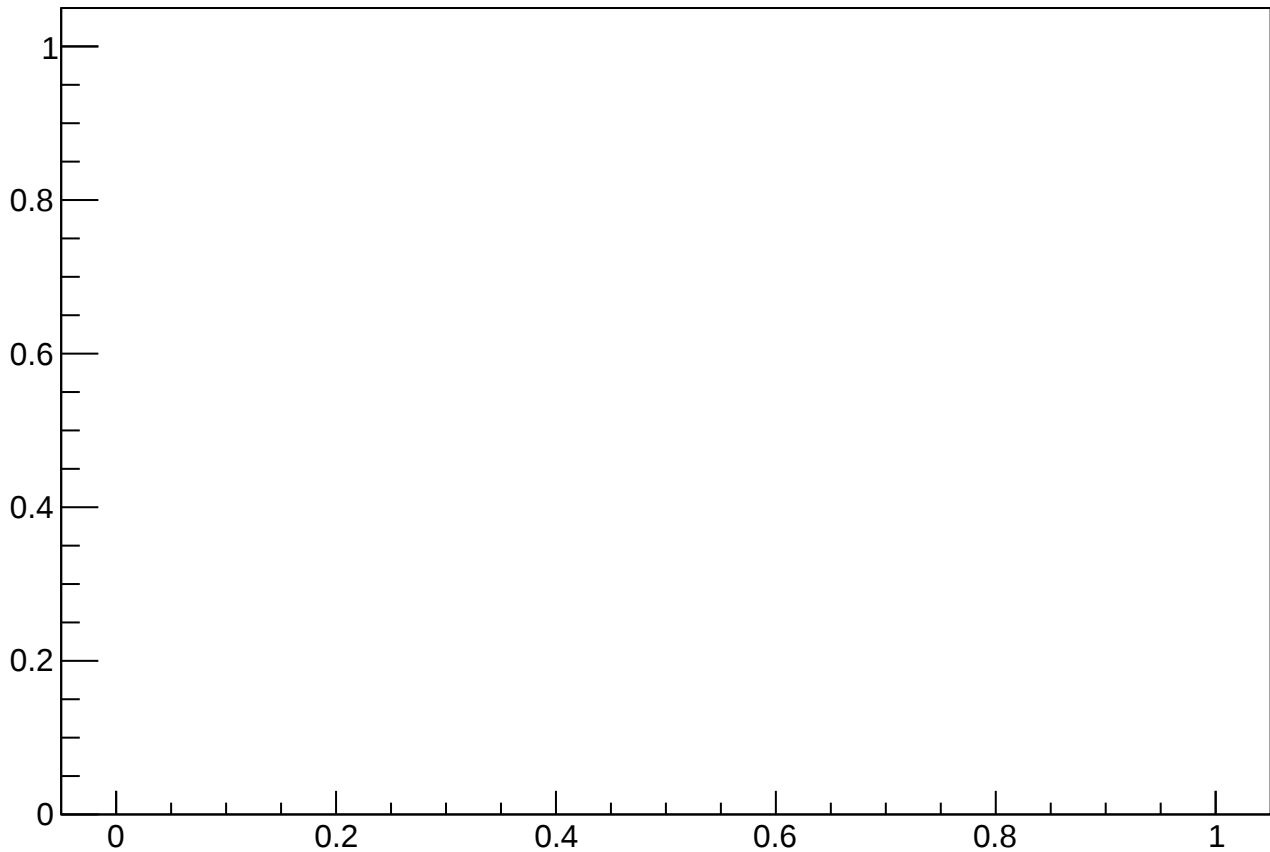
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# cor\_sam\_37\_dd\_rms vs slug



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

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

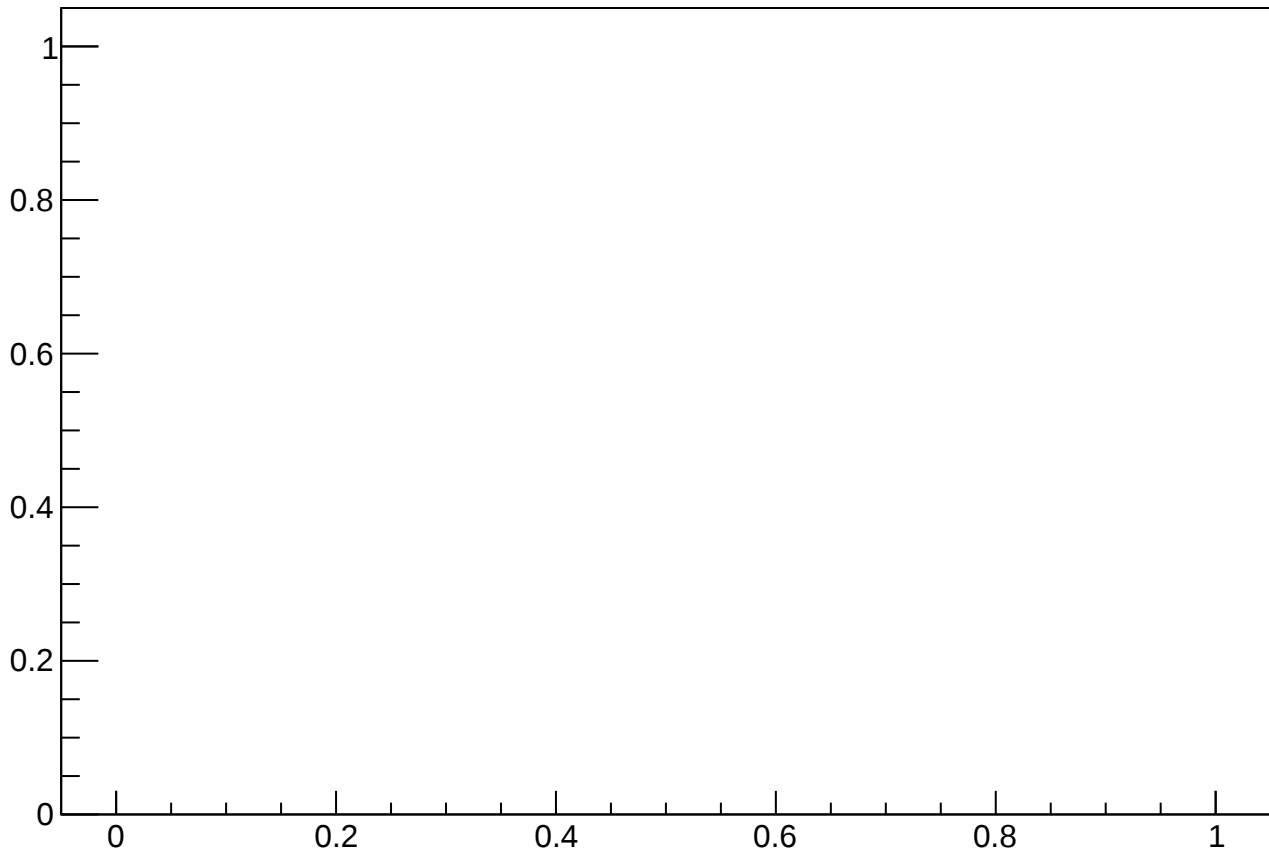
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

cor\_sam\_48\_dd\_mean vs slug



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

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

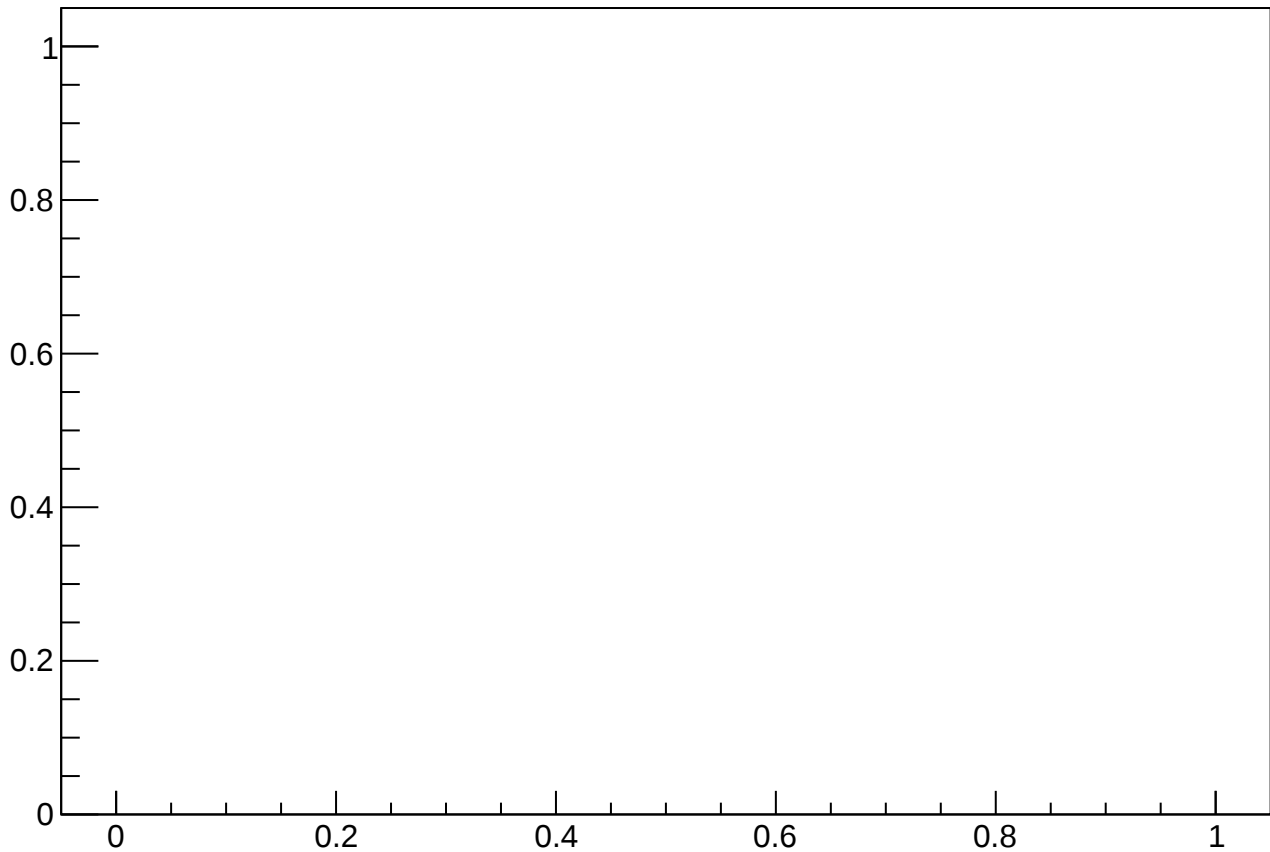
Left Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

# cor\_sam\_48\_dd\_rms vs slug



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

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

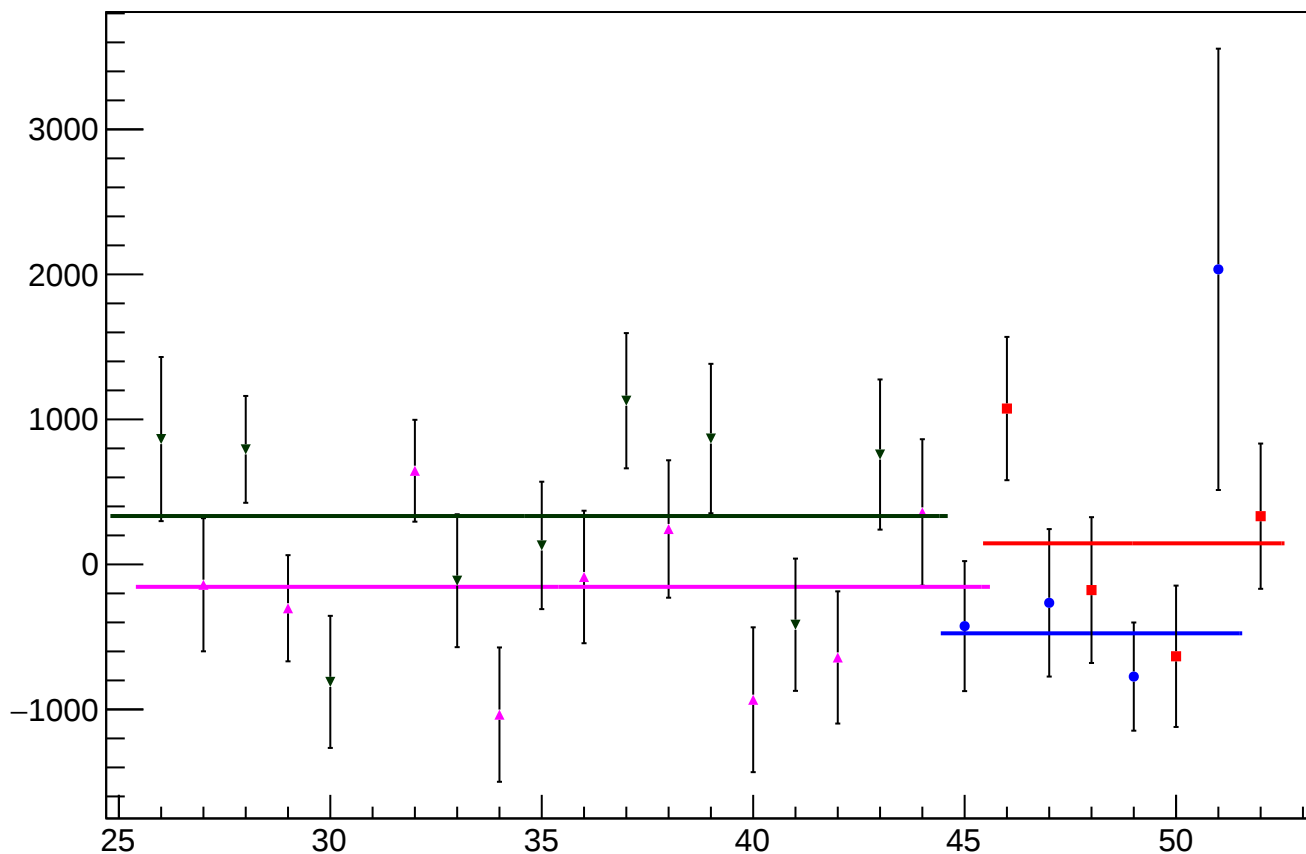
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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

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

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

# reg\_asym\_sam\_15\_dd\_mean vs slug



Right In:  $-475.195 \pm 246.468$   $\chi^2/\text{NDF}: 3.5/3$

Left Out:  $333.723 \pm 154.013$   $\chi^2/\text{NDF}: 17.3/8$

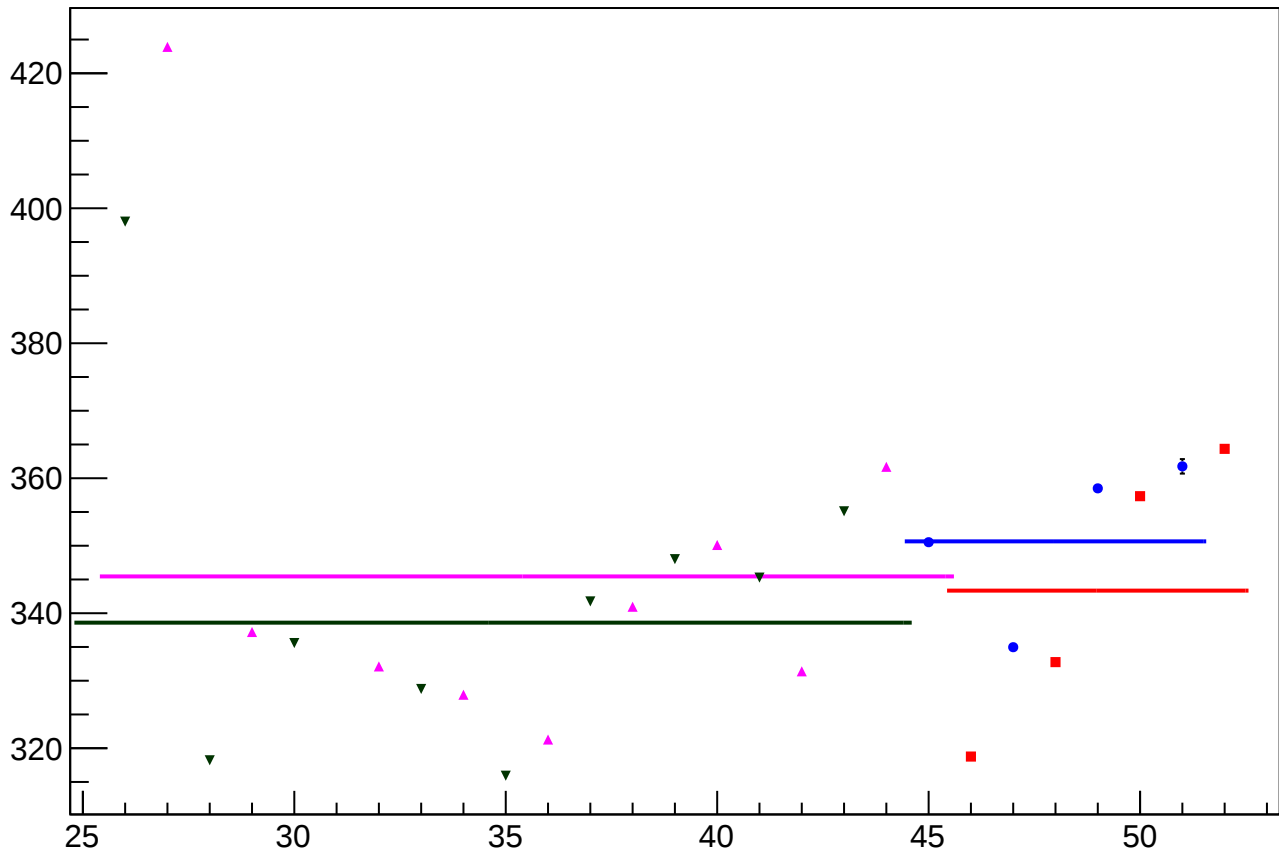
Right Out:  $145.348 \pm 248.087$   $\chi^2/\text{NDF}: 6.6/3$

Left In:  $-154.649 \pm 145.928$   $\chi^2/\text{NDF}: 14.3/8$

$106.562 \pm 130.610$   $\chi^2/\text{NDF}: 28.6/12$

$-77.534 \pm 125.782$   $\chi^2/\text{NDF}: 22.0/12$

# reg\_asym\_sam\_15\_dd\_rms vs slug



Right In: 350.647 $\pm$ 0.174  $\chi^2$ /NDF: 2895.2/3

Left Out: 338.603 $\pm$ 0.109  $\chi^2$ /NDF:37731.2/8

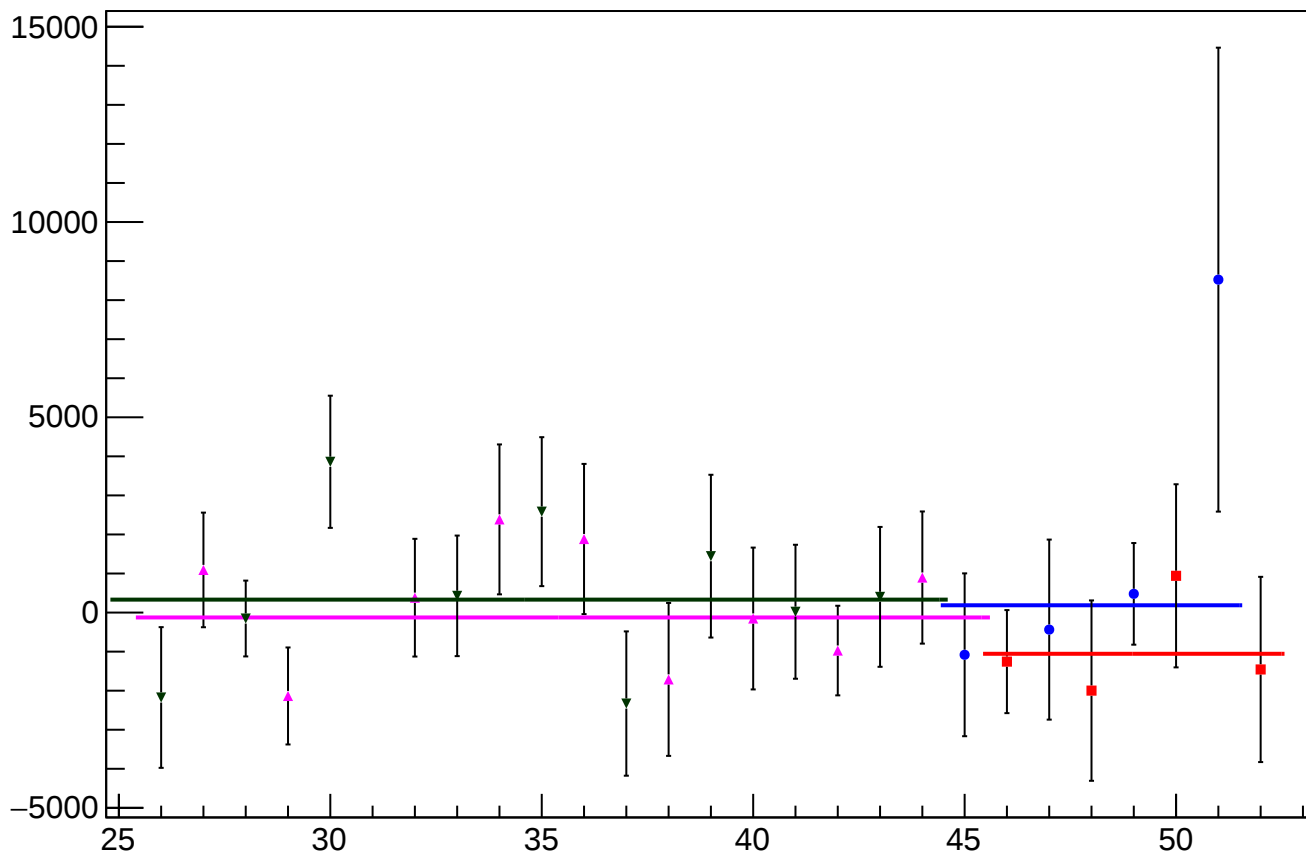
Right Out: 343.349 $\pm$ 0.175  $\chi^2$ /NDF: 11005.7/3

Left In: 345.453 $\pm$ 0.103  $\chi^2$ /NDF:75102.1/8

341.985 $\pm$ 0.092  $\chi^2$ /NDF: 44061.2/12

344.912 $\pm$ 0.089  $\chi^2$ /NDF: 86214.7/12

# asym\_sam\_15\_dd\_correction\_mean vs slug



Right In: 186.748+/-981.913  $\chi^2/\text{NDF}$ : 2.5/3

Left Out: 331.481+/-527.893  $\chi^2/\text{NDF}$ : 10.3/8

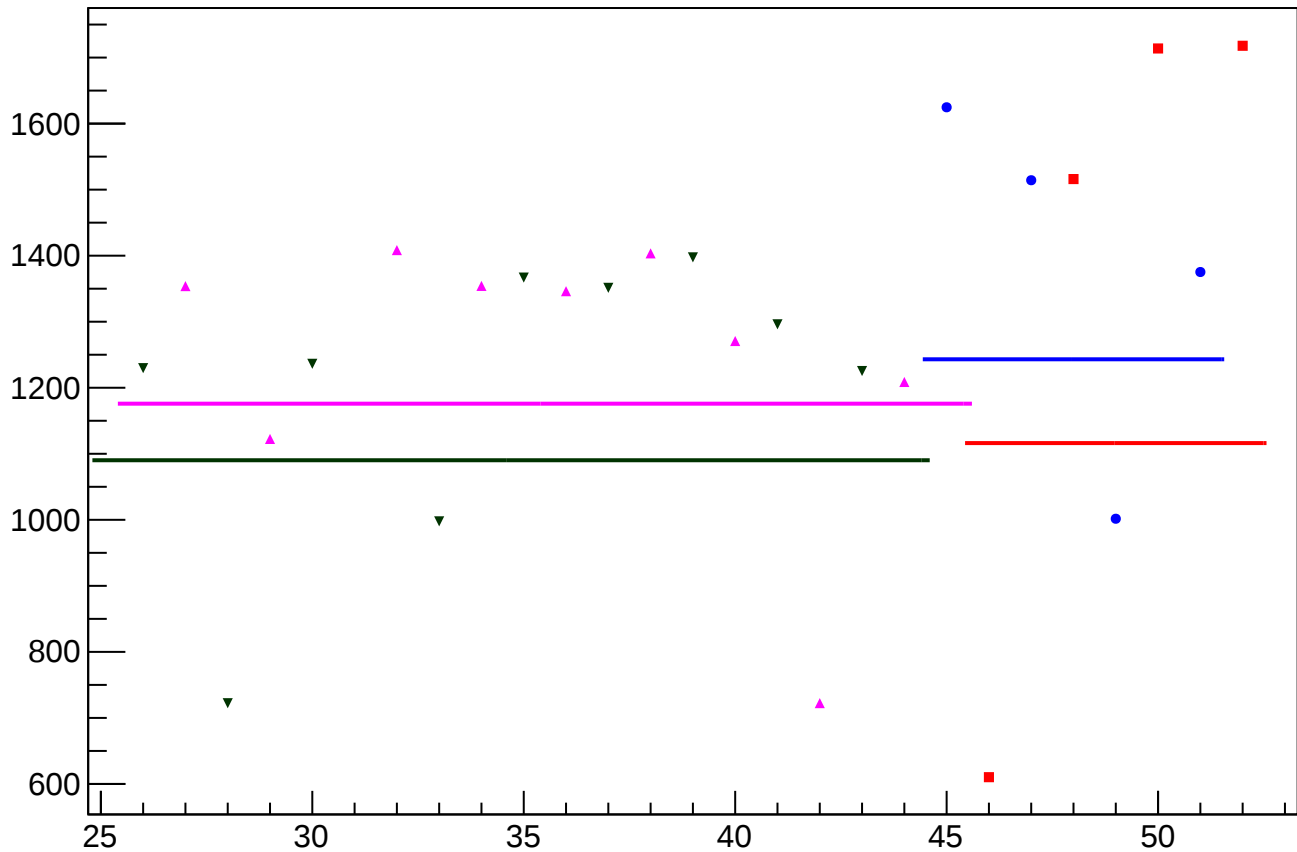
Right Out: -1055.436+/-944.147  $\chi^2/\text{NDF}$ : 0.9/3

Left In: -125.241+/-515.151  $\chi^2/\text{NDF}$ : 7.8/8

299.028+/-464.958  $\chi^2/\text{NDF}$ : 12.8/12

-338.637+/-452.216  $\chi^2/\text{NDF}$ : 9.5/12

# asym\_sam\_15\_dd\_correction\_rms vs slug



Right In:  $1243.089 \pm 0.694$   $\chi^2/\text{NDF}$ : 164550.0/3

Left Out:  $1090.209 \pm 0.373$   $\chi^2/\text{NDF}$ : 487169.4/8

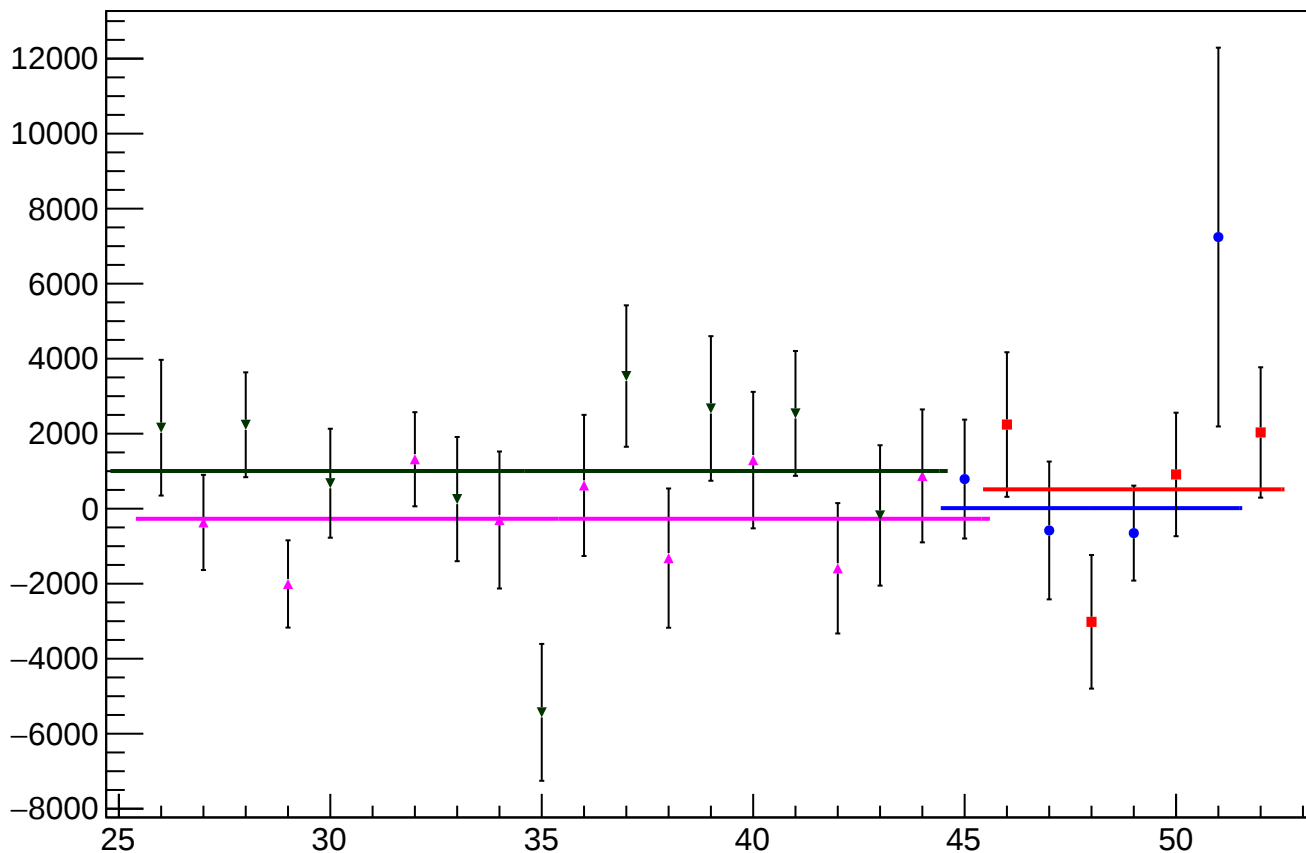
Right Out:  $1116.201 \pm 0.668$   $\chi^2/\text{NDF}$ : 612775.2/3

Left In:  $1175.873 \pm 0.364$   $\chi^2/\text{NDF}$ : 459475.9/8

$1124.488 \pm 0.329$   $\chi^2/\text{NDF}$ : 689331.0/12

$1162.184 \pm 0.320$   $\chi^2/\text{NDF}$ : 1078407.4/12

# reg\_asym\_sam\_26\_dd\_mean vs slug



Right In: 14.543+/-858.198  $\chi^2/\text{NDF}$ : 2.7/3

Left Out: 1004.954+/-563.215  $\chi^2/\text{NDF}$ : 17.7/8

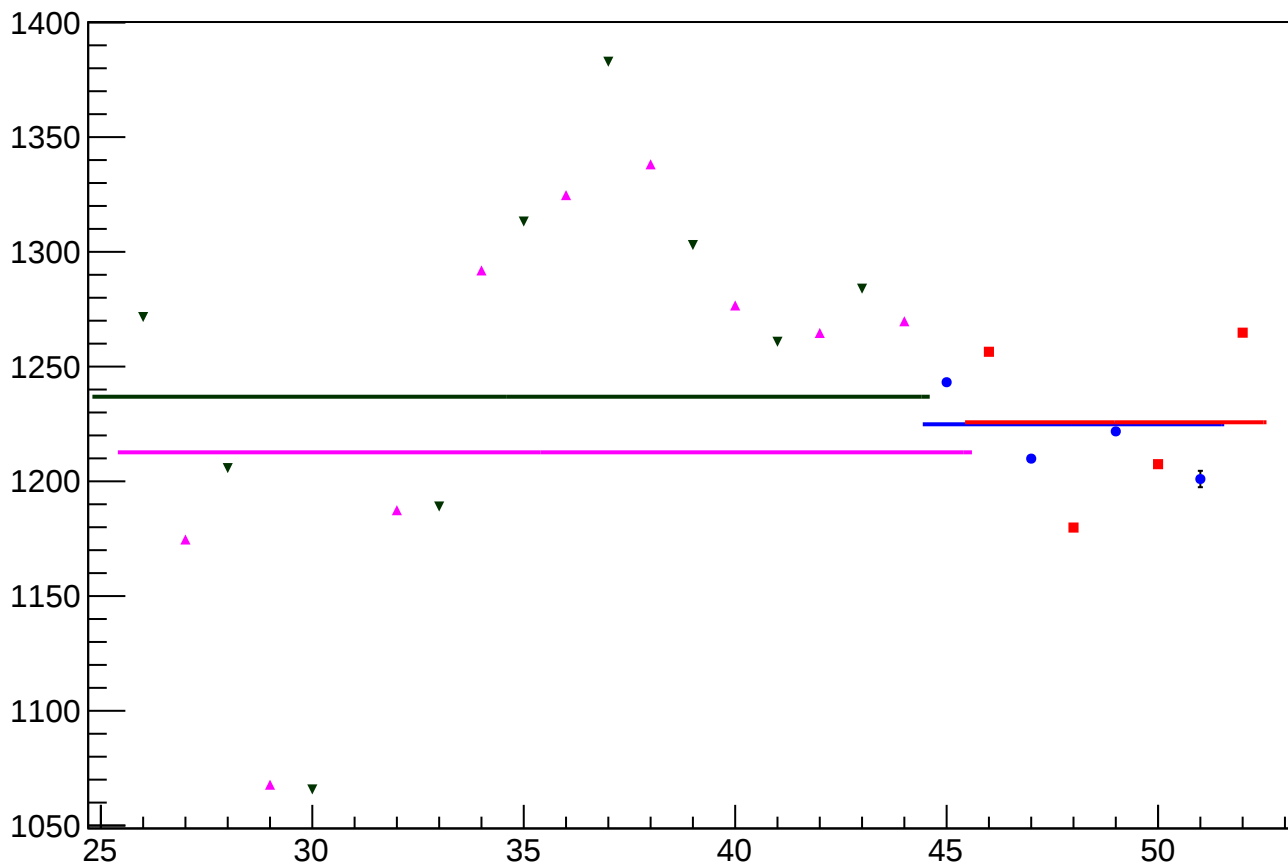
706.800+/-470.869  $\chi^2/\text{NDF}$ : 21.3/12

Right Out: 515.477+/-882.437  $\chi^2/\text{NDF}$ : 5.6/3

-71.650+/-442.705  $\chi^2/\text{NDF}$ : 12.3/12

Left In: -269.126+/-511.768  $\chi^2/\text{NDF}$ : 6.1/8

# reg\_asym\_sam\_26\_dd\_rms vs slug



Right In:  $1224.858 \pm 0.607$   $\chi^2/\text{NDF}$ : 457.0/3

Left Out:  $1236.870 \pm 0.398$   $\chi^2/\text{NDF}$ : 50666.9/8

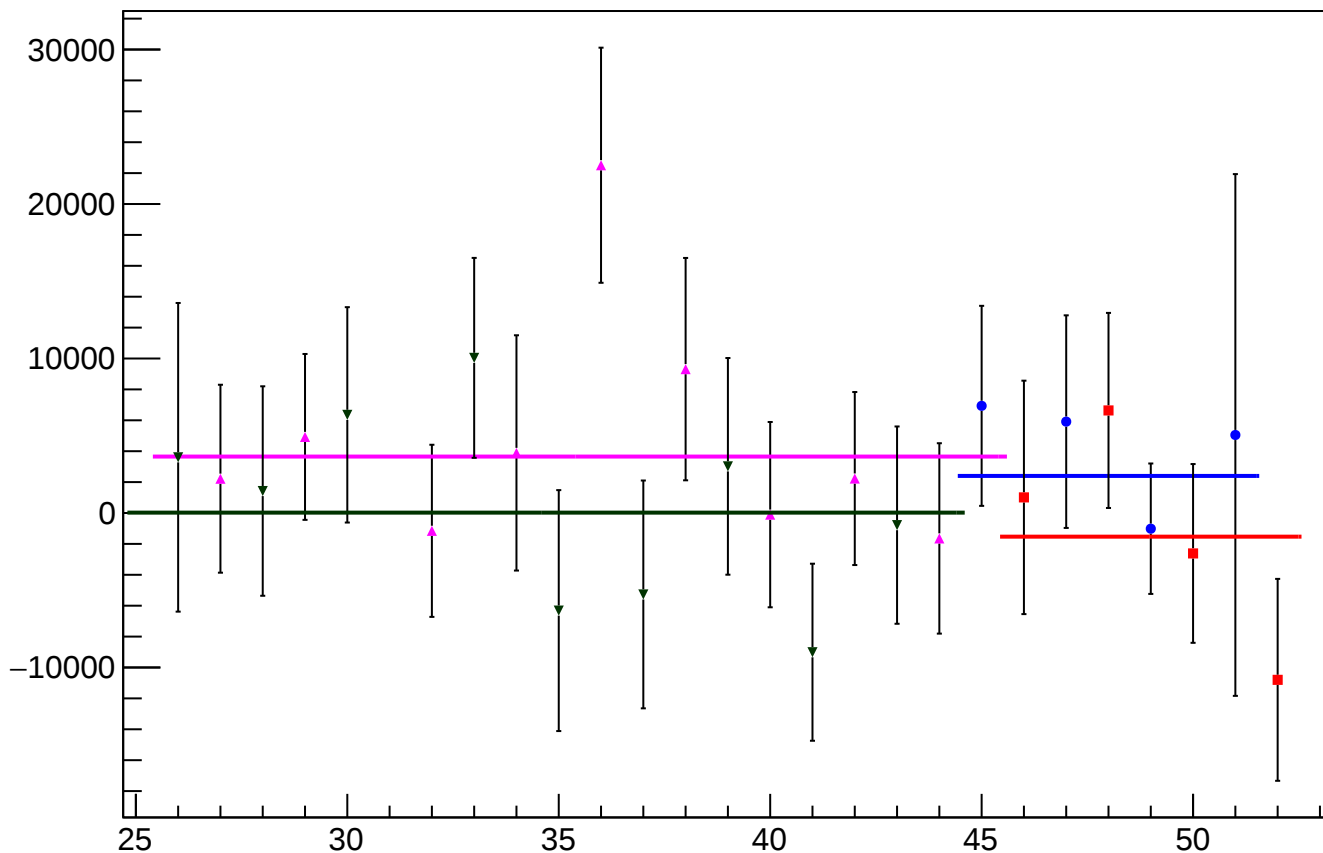
Right Out:  $1225.731 \pm 0.624$   $\chi^2/\text{NDF}$ : 3090.2/3

Left In:  $1212.638 \pm 0.362$   $\chi^2/\text{NDF}$ : 59937.7/8

$1233.254 \pm 0.333$   $\chi^2/\text{NDF}$ : 51397.8/12

$1215.934 \pm 0.313$   $\chi^2/\text{NDF}$ : 63357.5/12

# asym\_sam\_26\_dd\_correction\_mean vs slug



Right In: 2399.700 $\pm$ 3091.854  $\chi^2$ /NDF: 1.4/3

Left Out: 23.937 $\pm$ 2316.200  $\chi^2$ /NDF: 7.3/8

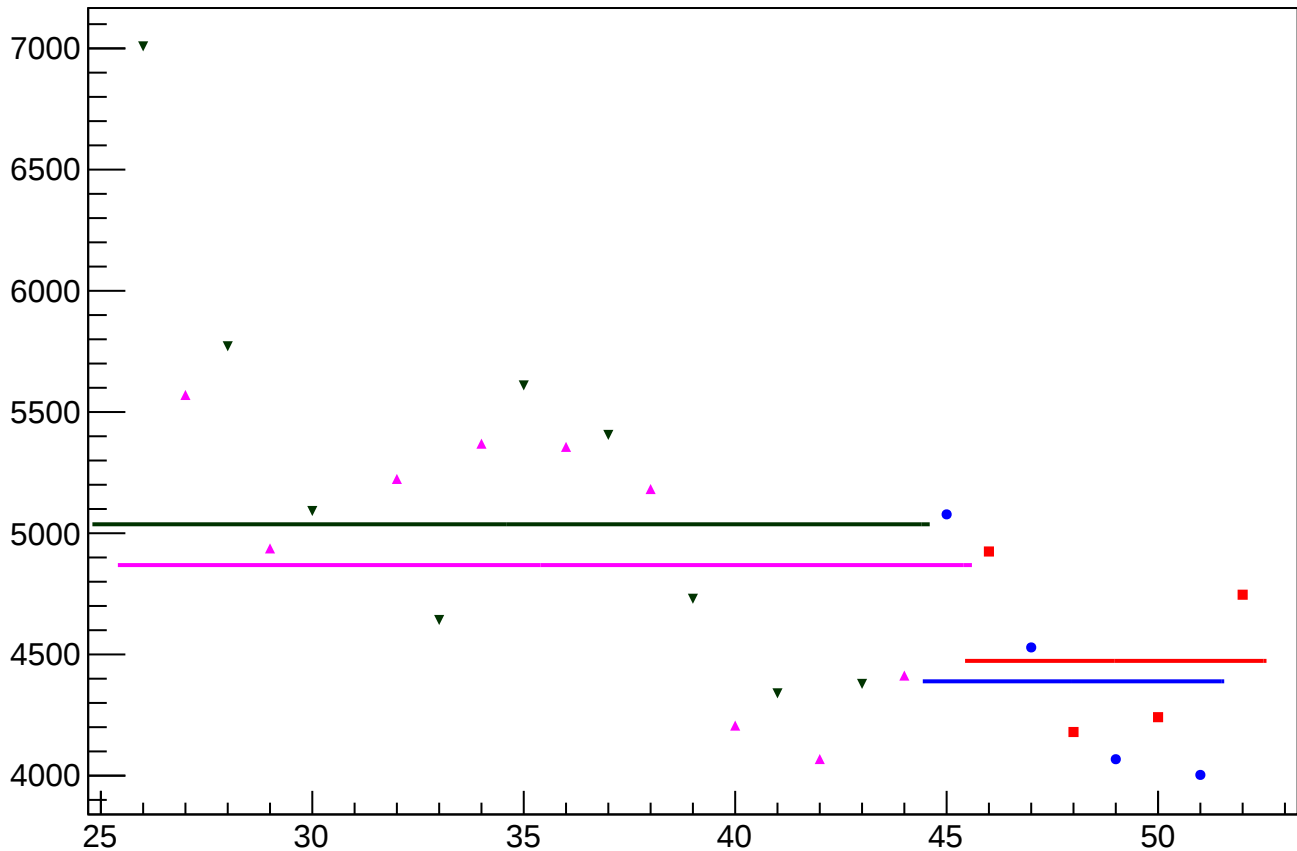
Right Out: -1531.414 $\pm$ 3229.177  $\chi^2$ /NDF: 3.8/3

Left In: 3653.038 $\pm$ 2068.097  $\chi^2$ /NDF: 8.8/8

877.941 $\pm$ 1853.734  $\chi^2$ /NDF: 9.1/12

2145.074 $\pm$ 1741.550  $\chi^2$ /NDF: 14.5/12

# asym\_sam\_26\_dd\_correction\_rms vs slug



Right In: 4389.137+/-2.186  $\chi^2/\text{NDF}$ : 36091.6/3

Left Out: 5036.928+/-1.638  $\chi^2/\text{NDF}$ :179439.1/8

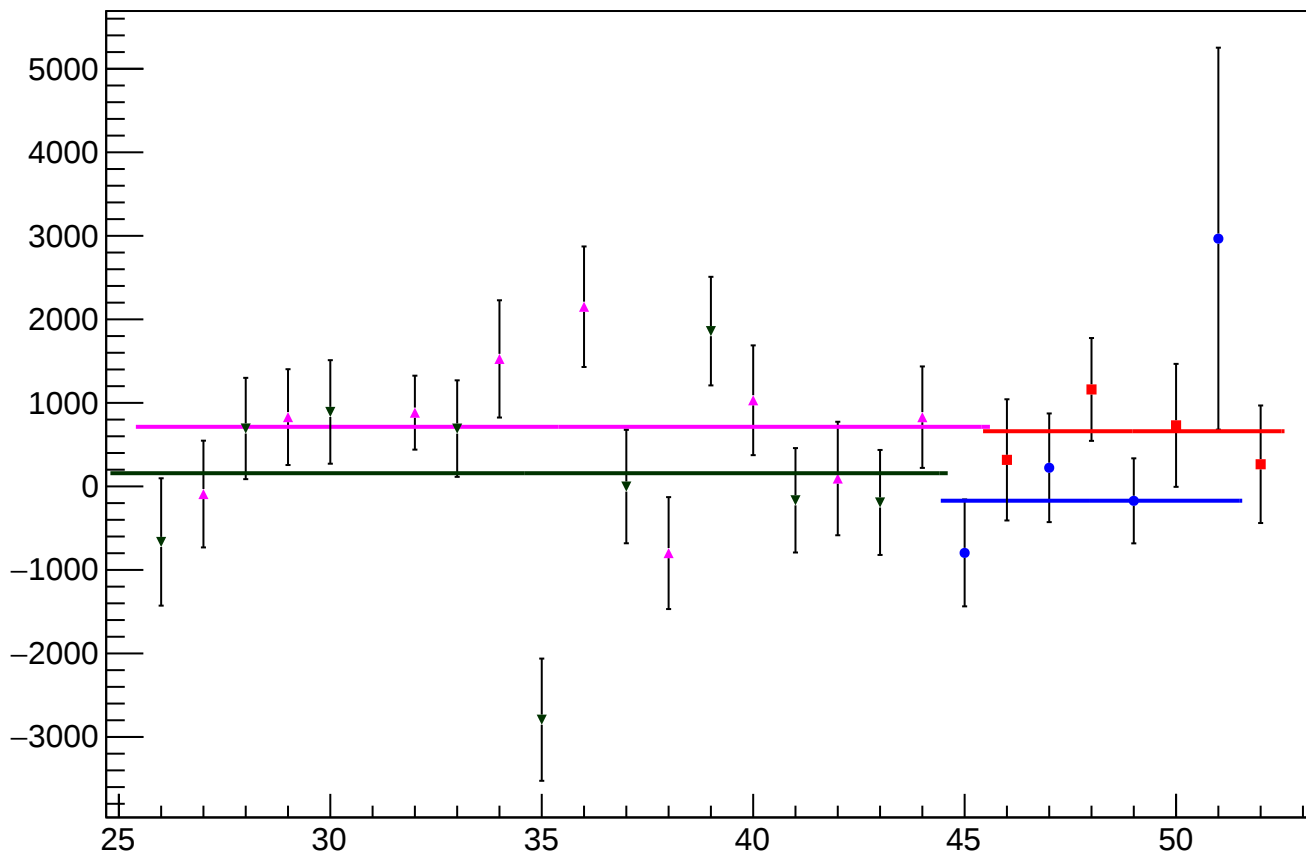
Right Out: 4473.469+/-2.283  $\chi^2/\text{NDF}$ : 18165.6/3

Left In: 4868.644+/-1.462  $\chi^2/\text{NDF}$ :131901.5/8

4804.070+/-1.311  $\chi^2/\text{NDF}$ : 271765.6/12

4753.702+/-1.231  $\chi^2/\text{NDF}$ : 171307.1/12

# reg\_asym\_sam\_37\_dd\_mean vs slug



Right In: -171.388+/-336.034  $\chi^2/\text{NDF}$ : 3.2/3

Left Out: 157.928+/-215.506  $\chi^2/\text{NDF}$ : 28.0/8

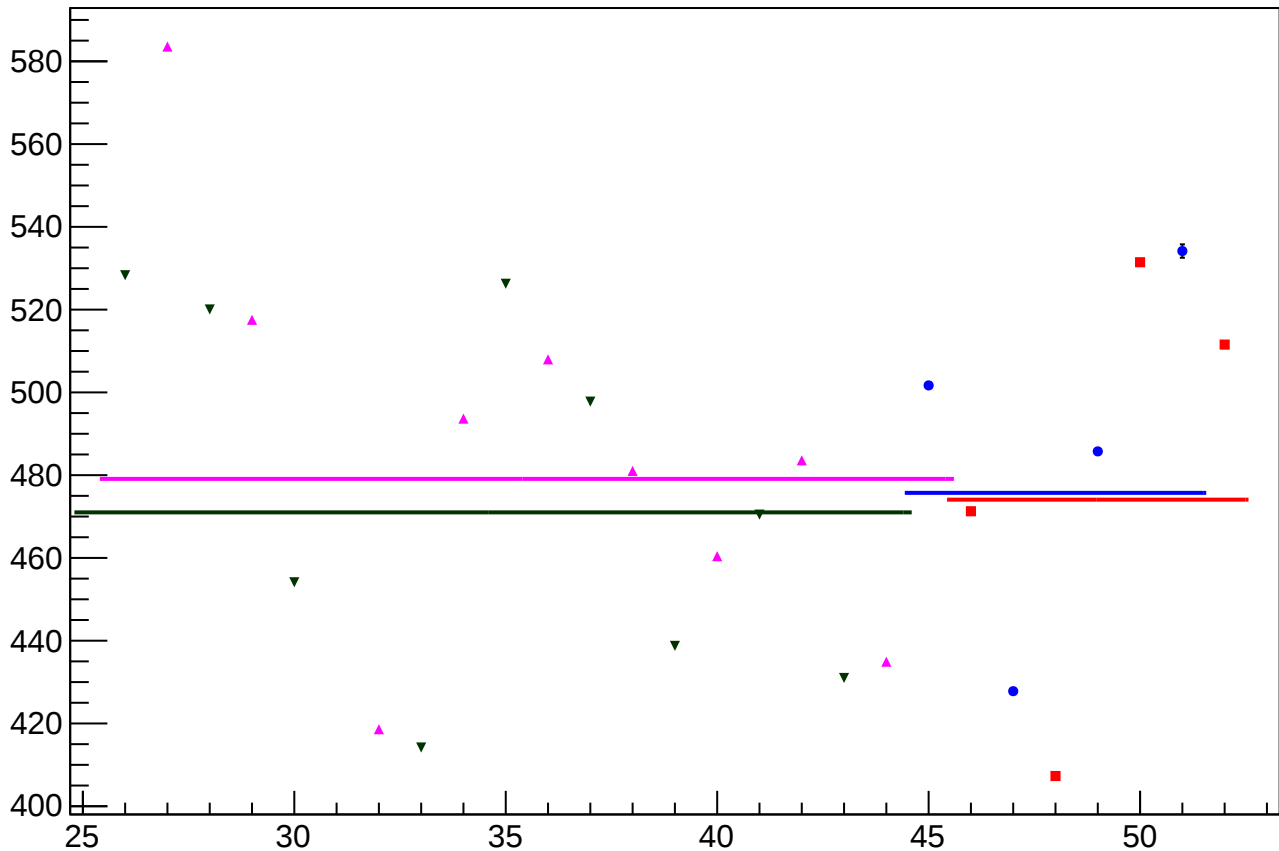
Right Out: 660.561+/-344.949  $\chi^2/\text{NDF}$ : 1.2/3

Left In: 713.441+/-204.299  $\chi^2/\text{NDF}$ : 13.3/8

61.955+/-181.406  $\chi^2/\text{NDF}$ : 31.8/12

699.709+/-175.783  $\chi^2/\text{NDF}$ : 14.5/12

# reg\_asym\_sam\_37\_dd\_rms vs slug



Right In: 475.725+/-0.238  $\chi^2/\text{NDF}$ : 16227.5/3

Left Out: 471.009+/-0.152  $\chi^2/\text{NDF}$ : 72737.7/8

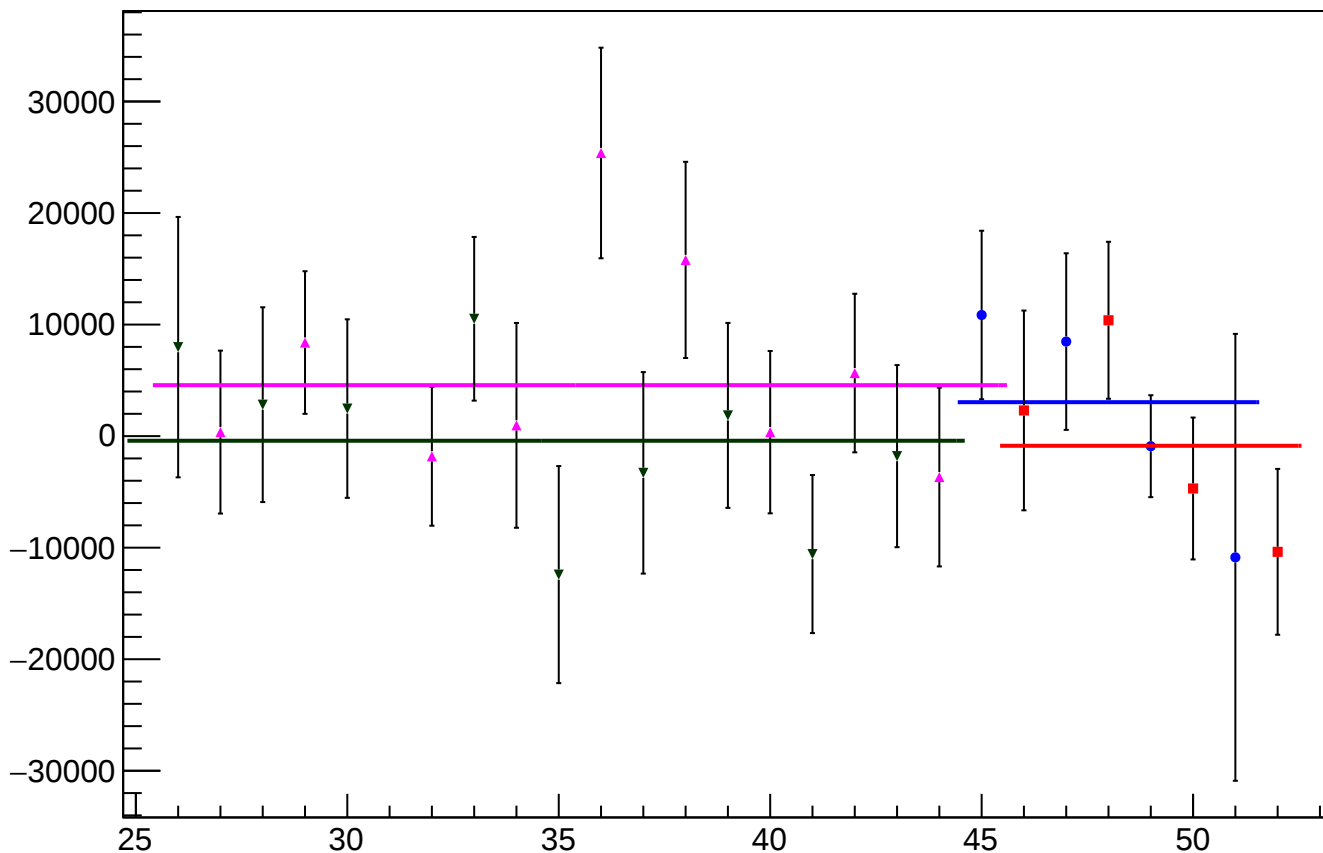
Right Out: 474.082+/-0.244  $\chi^2/\text{NDF}$ : 41384.6/3

Left In: 479.100+/-0.144  $\chi^2/\text{NDF}$ : 116130.5/8

472.383+/-0.128  $\chi^2/\text{NDF}$ : 89244.4/12

477.797+/-0.124  $\chi^2/\text{NDF}$ : 157828.4/12

# asym\_sam\_37\_dd\_correction\_mean vs slug



Right In: 3042.813+/-3452.903  $\chi^2/\text{NDF}$ : 2.8/3

Left Out: -413.785+/-2806.714  $\chi^2/\text{NDF}$ : 6.8/8

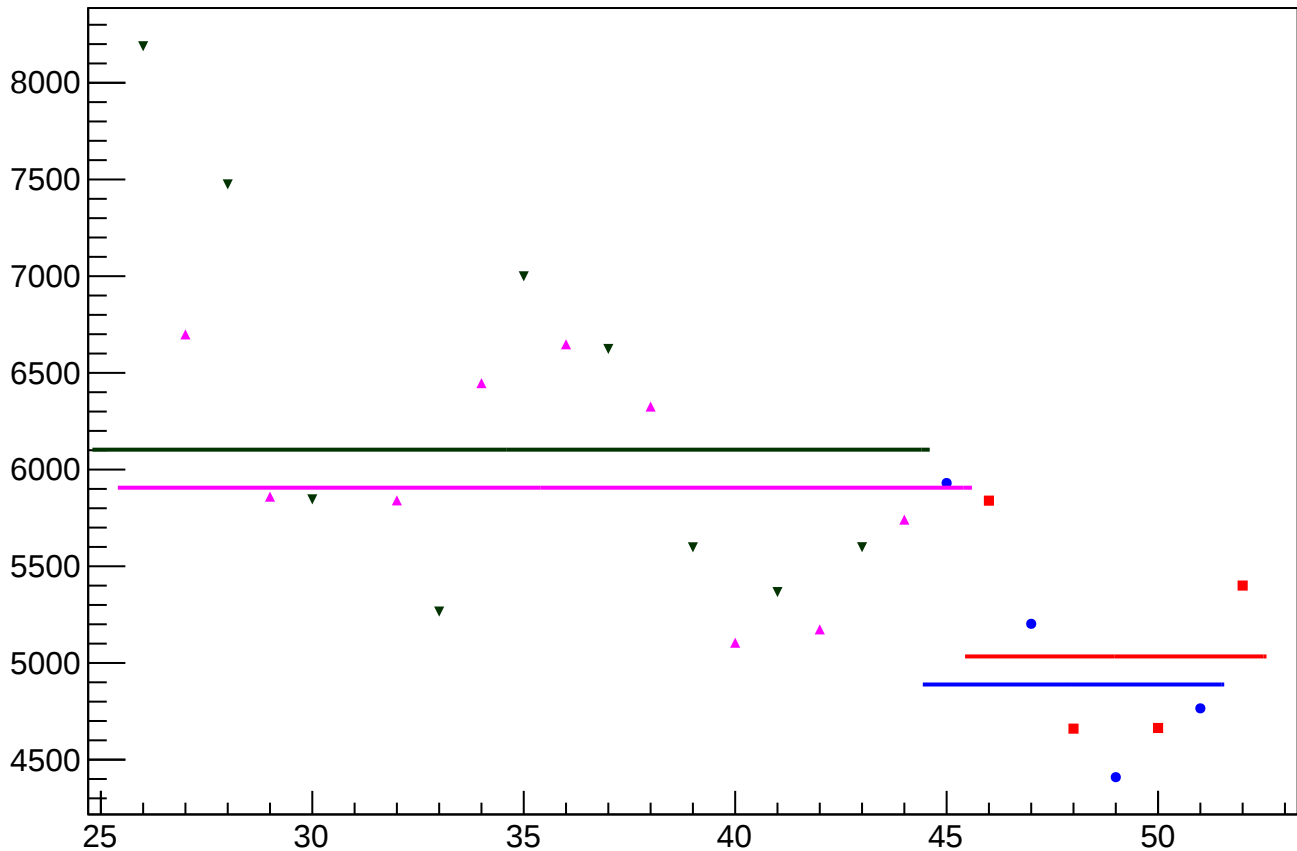
Right Out: -864.949+/-3639.861  $\chi^2/\text{NDF}$ : 4.7/3

Left In: 4568.925+/-2506.004  $\chi^2/\text{NDF}$ : 9.8/8

961.447+/-2177.950  $\chi^2/\text{NDF}$ : 10.2/12

2821.490+/-2064.099  $\chi^2/\text{NDF}$ : 16.0/12

# asym\_sam\_37\_dd\_correction\_rms vs slug



Right In: 4888.671+/-2.442     $\chi^2/\text{NDF}$ : 63254.6/3

Left Out: 6102.939+/-1.985     $\chi^2/\text{NDF}$ : 201598.0/8

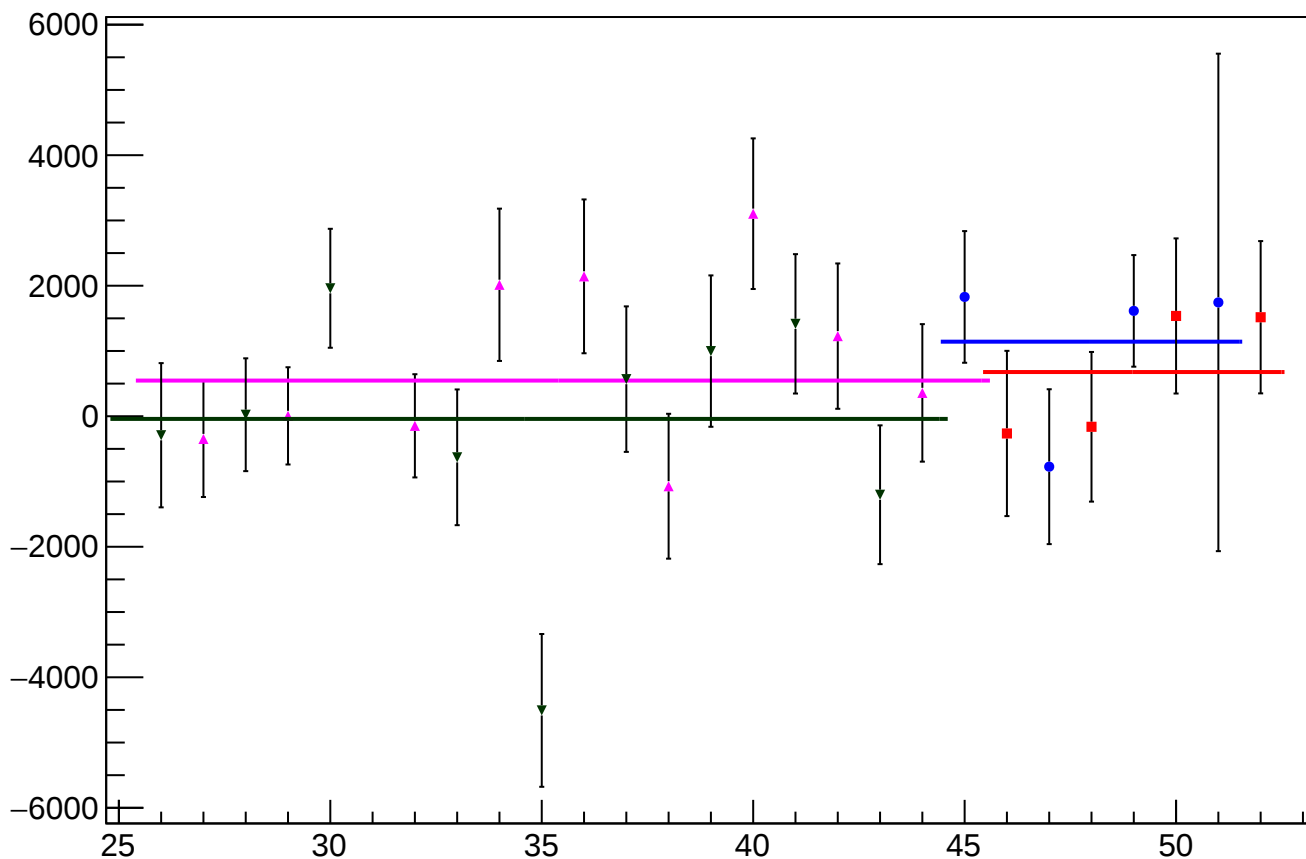
5619.834+/-1.540     $\chi^2/\text{NDF}$ : 413785.2/12

Right Out: 5033.733+/-2.574     $\chi^2/\text{NDF}$ : 33445.2/3

5625.692+/-1.460     $\chi^2/\text{NDF}$ : 205486.3/12

Left In: 5906.291+/-1.772     $\chi^2/\text{NDF}$ : 94067.8/8

# reg\_asym\_sam\_48\_dd\_mean vs slug



Right In: 1142.541 $\pm$ 565.257  $\chi^2$ /NDF: 3.4/3

Left Out: -40.923 $\pm$ 346.578  $\chi^2$ /NDF: 23.9/8

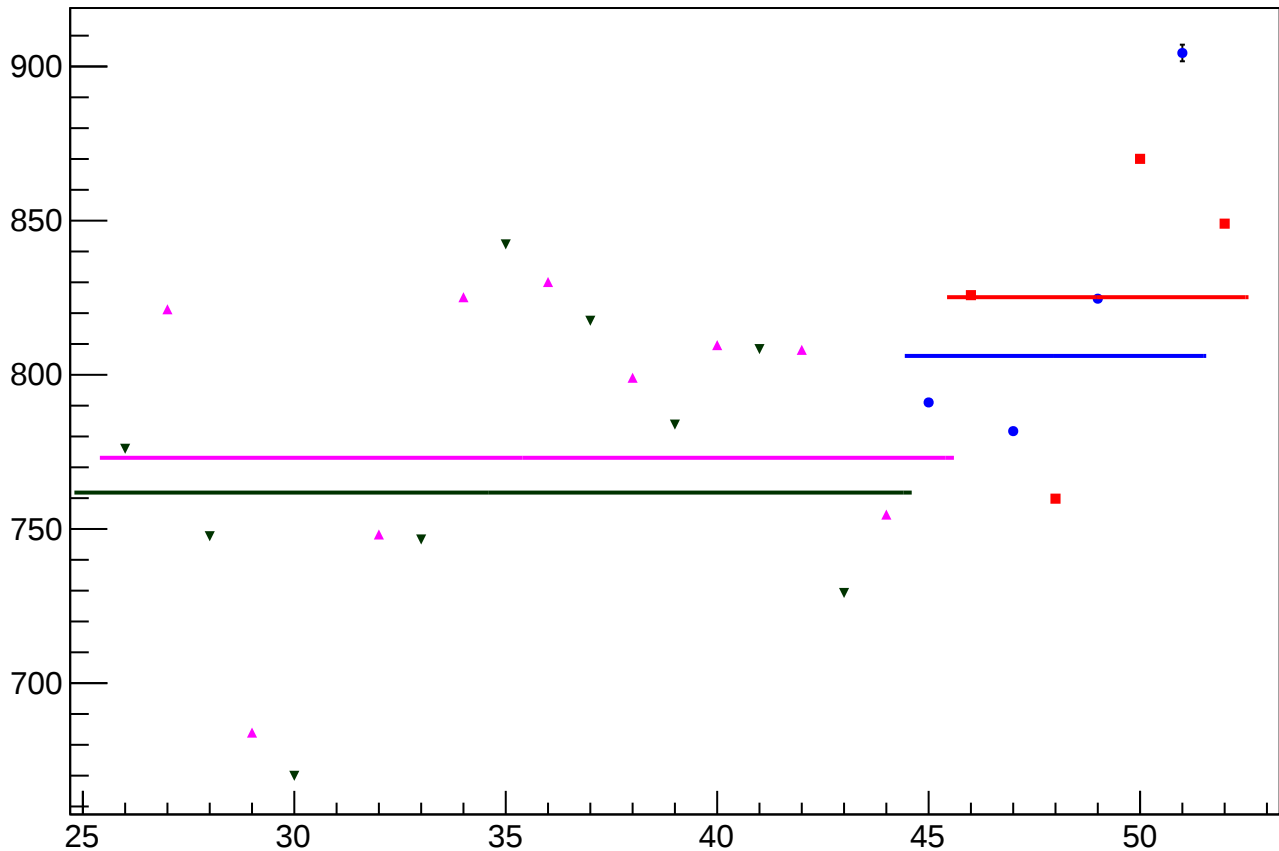
Right Out: 677.308 $\pm$ 594.736  $\chi^2$ /NDF: 2.1/3

Left In: 546.535 $\pm$ 326.373  $\chi^2$ /NDF: 13.2/8

282.423 $\pm$ 295.462  $\chi^2$ /NDF: 30.5/12

576.802 $\pm$ 286.122  $\chi^2$ /NDF: 15.3/12

# reg\_asym\_sam\_48\_dd\_rms vs slug



Right In:  $806.128 \pm 0.400$   $\chi^2/\text{NDF}$ : 3564.5/3

Left Out:  $761.807 \pm 0.245$   $\chi^2/\text{NDF}$ : 42466.1/8

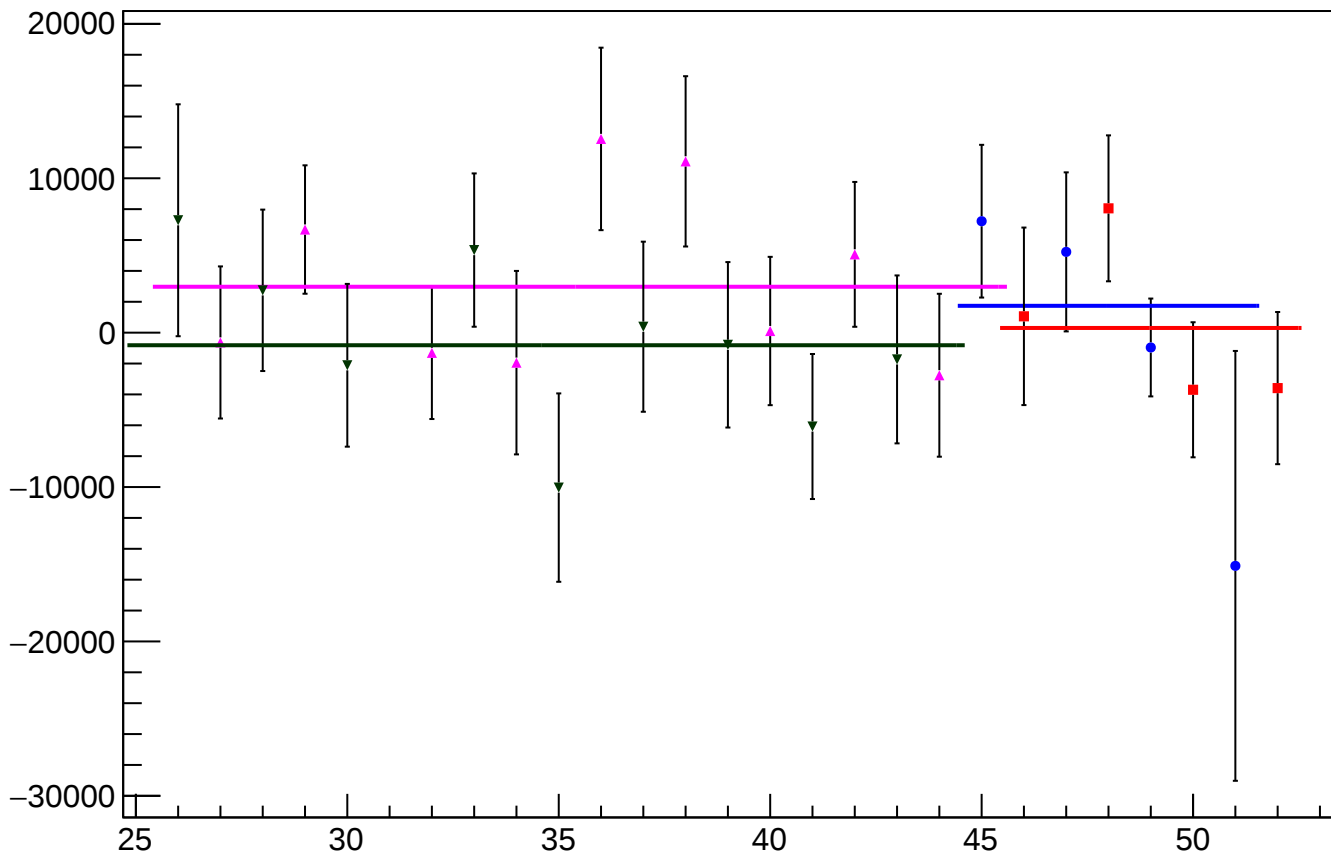
Right Out:  $825.176 \pm 0.421$   $\chi^2/\text{NDF}$ : 10182.5/3

Left In:  $773.088 \pm 0.231$   $\chi^2/\text{NDF}$ : 50809.2/8

$773.916 \pm 0.209$   $\chi^2/\text{NDF}$ : 54967.0/12

$785.144 \pm 0.202$   $\chi^2/\text{NDF}$ : 72782.1/12

# asym\_sam\_48\_dd\_correction\_mean vs slug



Right In: 1738.718 $\pm$ 2335.574  $\chi^2$ /NDF: 3.9/3

Left Out: -814.730 $\pm$ 1811.752  $\chi^2$ /NDF: 6.8/8

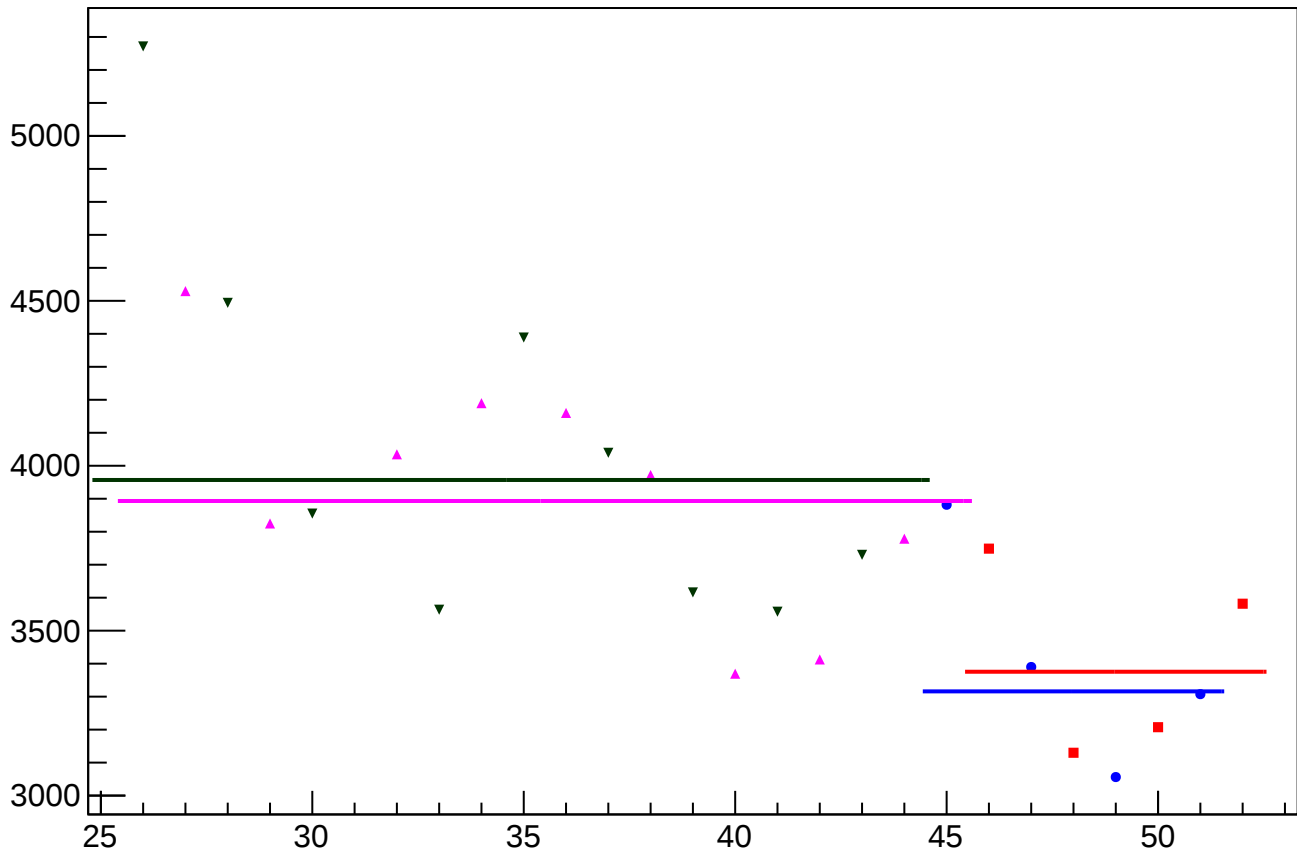
Right Out: 304.160 $\pm$ 2436.461  $\chi^2$ /NDF: 4.2/3

Left In: 2973.562 $\pm$ 1648.529  $\chi^2$ /NDF: 9.5/8

144.549 $\pm$ 1431.536  $\chi^2$ /NDF: 11.5/12

2135.279 $\pm$ 1365.362  $\chi^2$ /NDF: 14.5/12

# asym\_sam\_48\_dd\_correction\_rms vs slug



Right In:  $3315.947 \pm 1.651$   $\chi^2/\text{NDF}$ : 40024.5/3

Left Out:  $3956.868 \pm 1.281$   $\chi^2/\text{NDF}$ : 132161.2/8

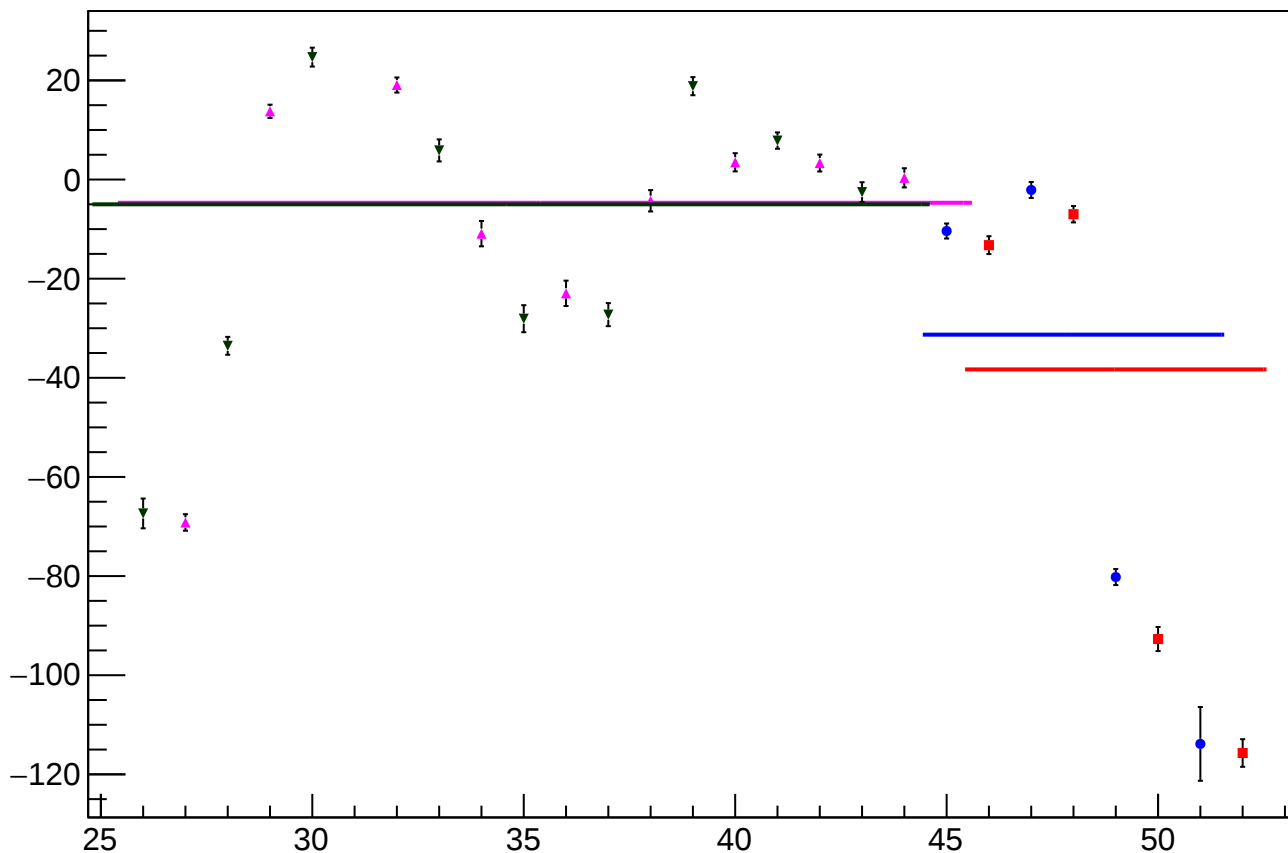
Right Out:  $3375.500 \pm 1.723$   $\chi^2/\text{NDF}$ : 20287.4/3

Left In:  $3893.148 \pm 1.166$   $\chi^2/\text{NDF}$ : 91246.6/8

$3716.087 \pm 1.012$   $\chi^2/\text{NDF}$ : 266214.3/12

$3730.589 \pm 0.965$   $\chi^2/\text{NDF}$ : 173461.4/12

# reg\_asym\_atr1\_diff\_bpm4aX\_slope vs slug



Right In:  $-31.296 \pm 0.906$   $\chi^2/\text{NDF}$ : 1554.7/3

Left Out:  $-4.999 \pm 0.684$   $\chi^2/\text{NDF}$ : 1343.0/8

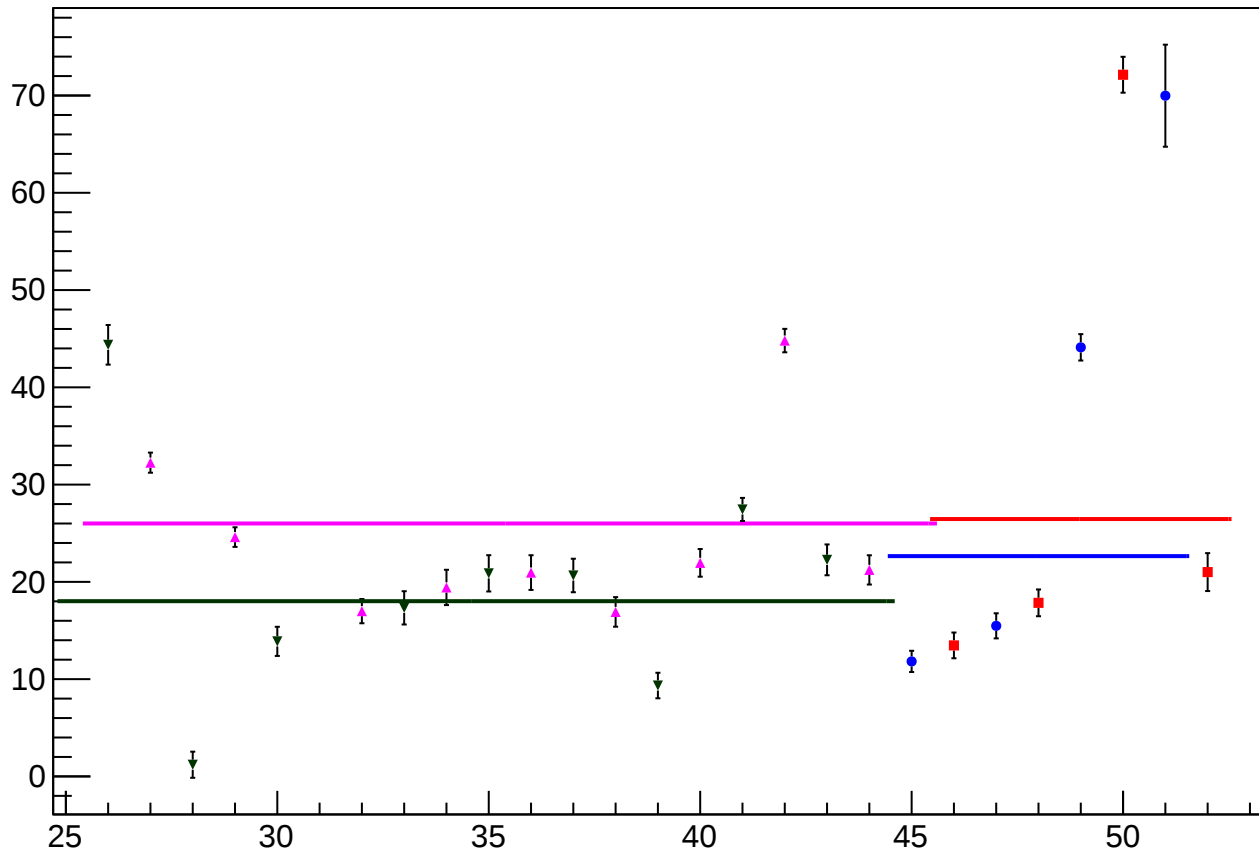
Right Out:  $-38.307 \pm 1.015$   $\chi^2/\text{NDF}$ : 1823.3/3

Left In:  $-4.688 \pm 0.600$   $\chi^2/\text{NDF}$ : 2042.2/8

$-14.550 \pm 0.546$   $\chi^2/\text{NDF}$ : 3433.9/12

$-13.403 \pm 0.517$   $\chi^2/\text{NDF}$ : 4678.7/12

# reg\_asym\_atr1\_diff\_bpm4aY\_slope vs slug



Right In:  $22.647 \pm 0.704$   $\chi^2/\text{NDF}$ : 461.1/3

Left Out:  $18.015 \pm 0.507$   $\chi^2/\text{NDF}$ : 450.4/8

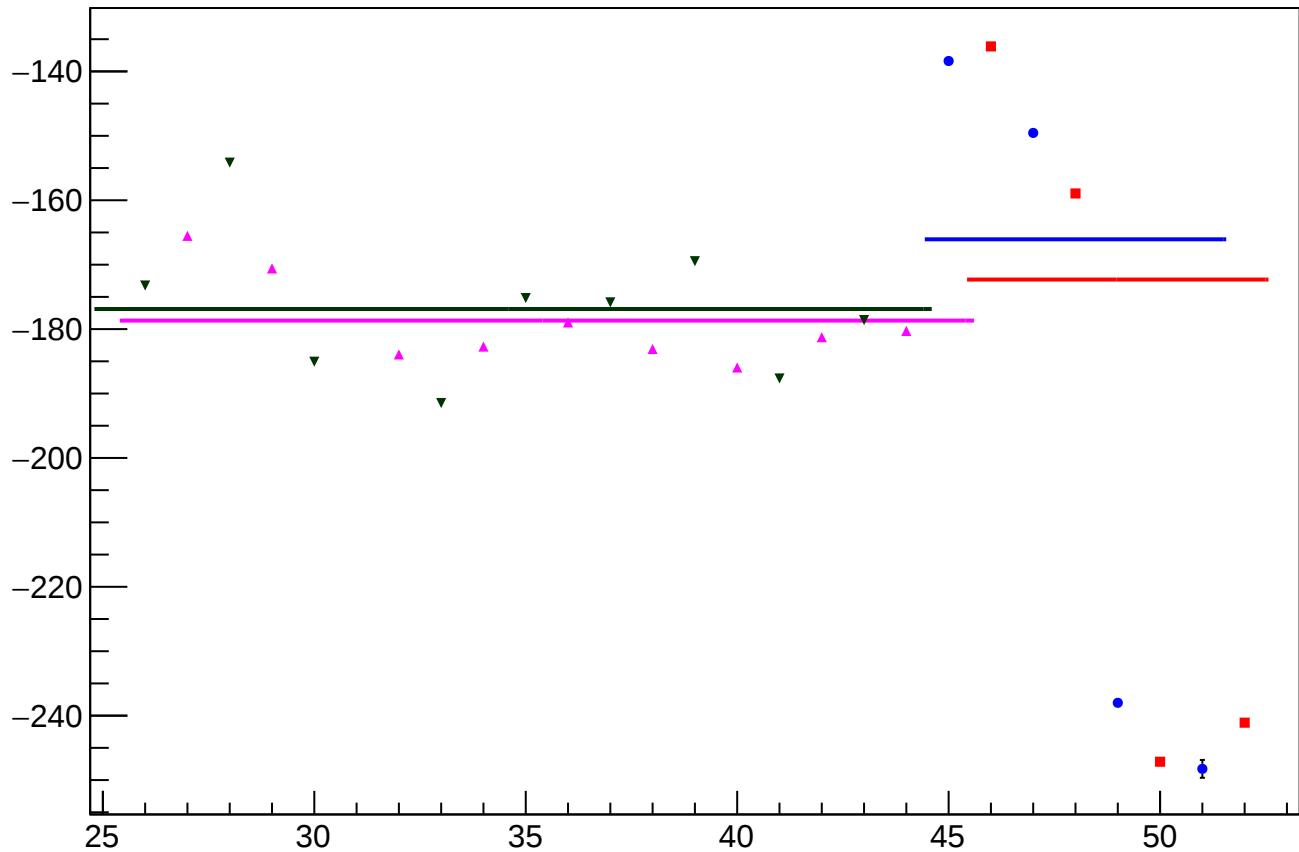
Right Out:  $26.459 \pm 0.777$   $\chi^2/\text{NDF}$ : 756.0/3

Left In:  $26.003 \pm 0.437$   $\chi^2/\text{NDF}$ : 409.3/8

$19.597 \pm 0.411$   $\chi^2/\text{NDF}$ : 940.1/12

$26.112 \pm 0.381$   $\chi^2/\text{NDF}$ : 1165.5/12

# reg\_asym\_atr1\_diff\_bpm4eX\_slope vs slug



Right In: -166.062 $\pm$ 0.158  $\chi^2$ /NDF: 67173.8/3

Left Out: -176.881 $\pm$ 0.115  $\chi^2$ /NDF: 9699.1/8

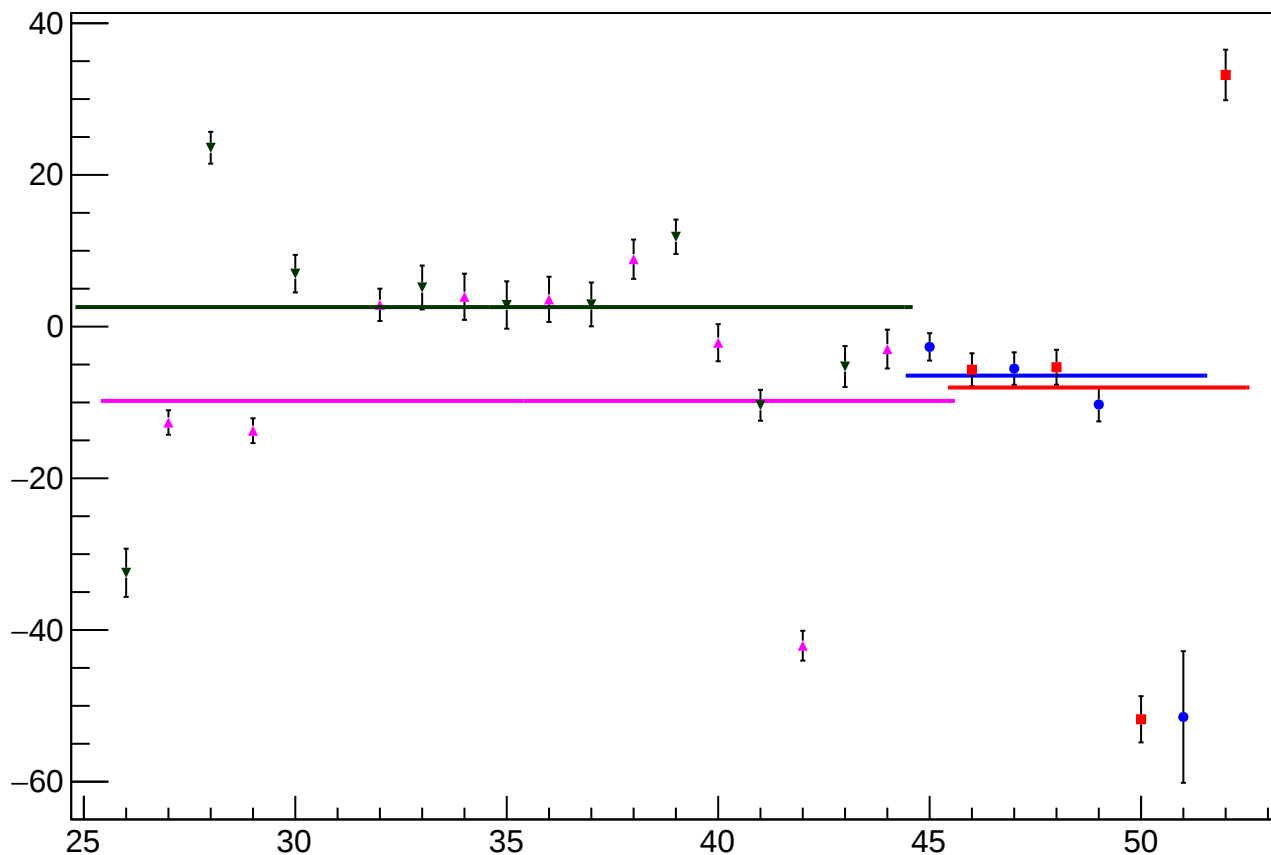
Right Out: -172.309 $\pm$ 0.172  $\chi^2$ /NDF: 65898.6/3

Left In: -178.678 $\pm$ 0.104  $\chi^2$ /NDF: 4273.5/8

-173.131 $\pm$ 0.093  $\chi^2$ /NDF: 79942.3/12

-176.979 $\pm$ 0.089  $\chi^2$ /NDF: 71178.9/12

# reg\_asym\_atr1\_diff\_bpm4eY\_slope vs slug



Right In:  $-6.460 \pm 1.163$   $\chi^2/\text{NDF}: 34.4/3$

Left Out:  $2.574 \pm 0.844$   $\chi^2/\text{NDF}: 291.3/8$

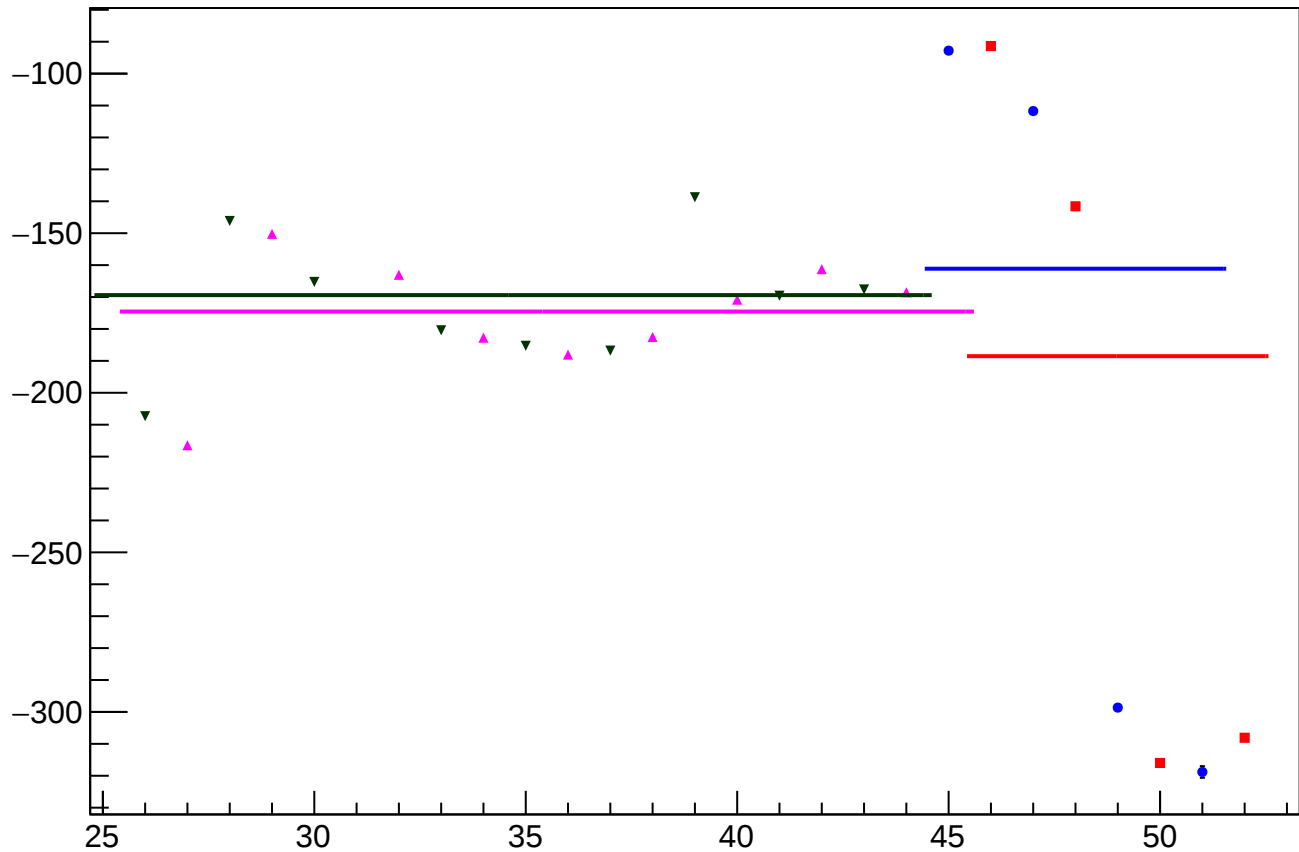
Right Out:  $-8.029 \pm 1.291$   $\chi^2/\text{NDF}: 361.9/3$

Left In:  $-9.798 \pm 0.721$   $\chi^2/\text{NDF}: 422.2/8$

$-0.541 \pm 0.683$   $\chi^2/\text{NDF}: 365.2/12$

$-9.378 \pm 0.629$   $\chi^2/\text{NDF}: 785.6/12$

# reg\_asym\_atr1\_diff\_bpm11X\_slope vs slug



Right In: -161.123+/-0.227  $\chi^2/\text{NDF}$ : 162202.4/3

Left Out: -169.406+/-0.155  $\chi^2/\text{NDF}$ : 16565.2/8

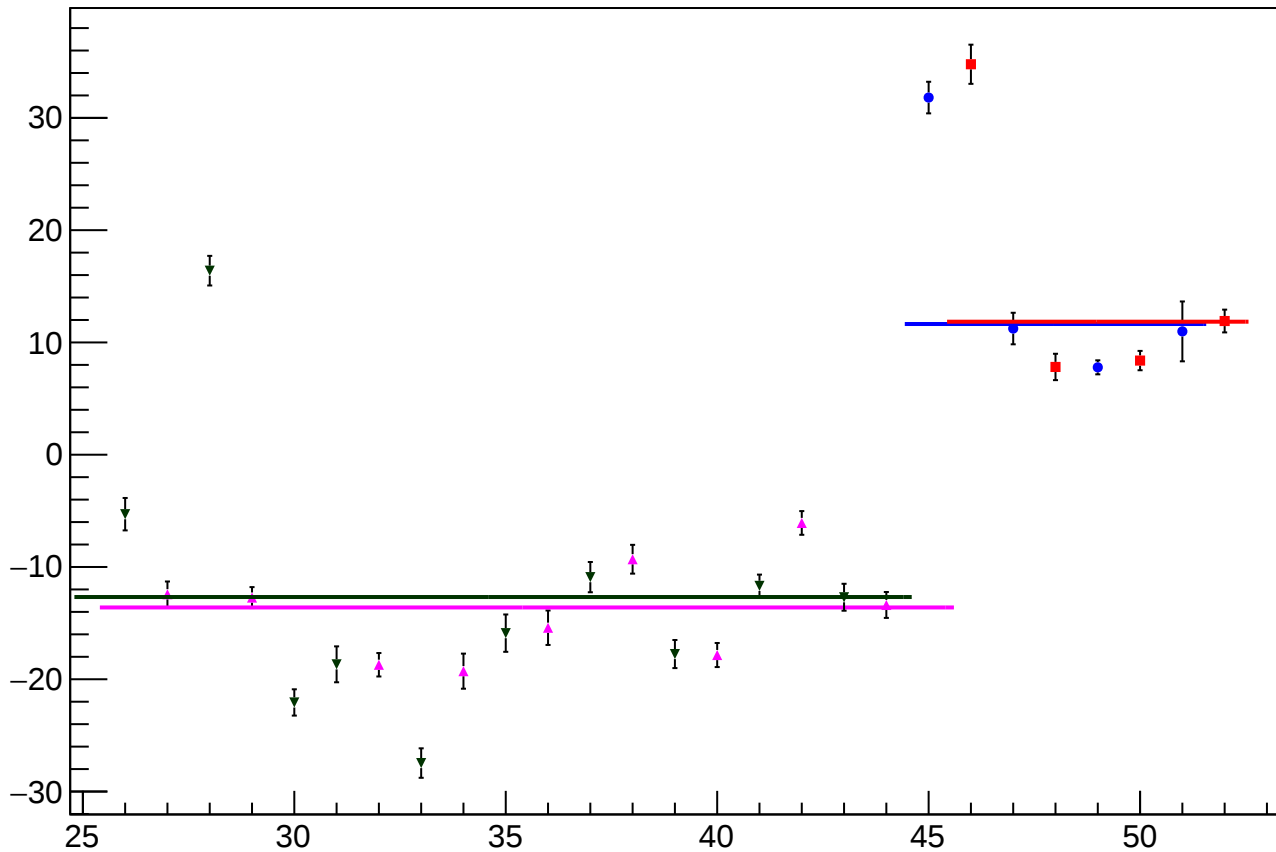
Right Out: -188.530+/-0.242  $\chi^2/\text{NDF}$ : 160671.2/3

Left In: -174.554+/-0.152  $\chi^2/\text{NDF}$ : 17338.0/8

-166.773+/-0.128  $\chi^2/\text{NDF}$ : 179672.1/12

-178.494+/-0.129  $\chi^2/\text{NDF}$ : 180403.2/12

# reg\_asym\_atl1\_diff\_bpm4aX\_slope vs slug



Right In: 11.642 $\pm$ 0.519  $\chi^2$ /NDF: 243.6/3

Left Out: -12.675 $\pm$ 0.408  $\chi^2$ /NDF: 739.7/9

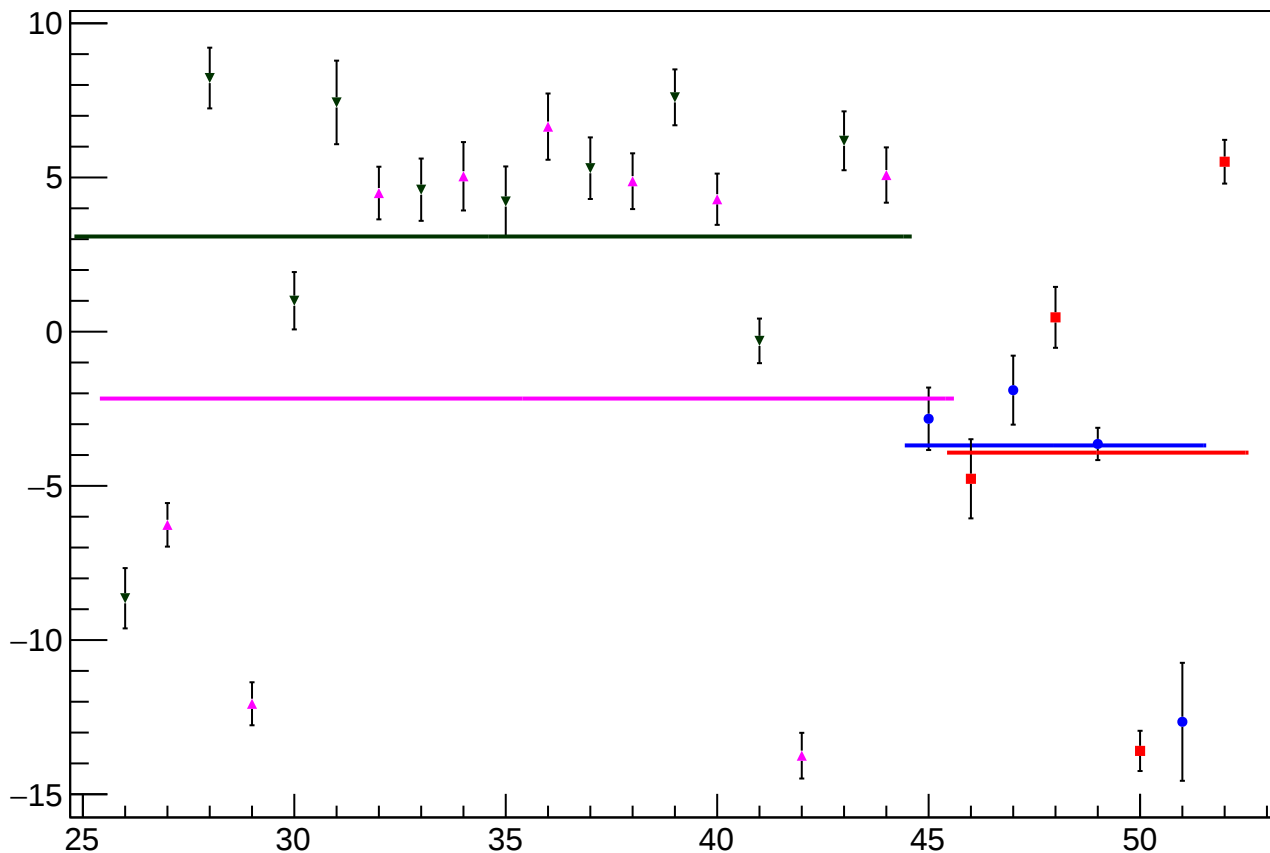
Right Out: 11.848 $\pm$ 0.544  $\chi^2$ /NDF: 200.8/3

Left In: -13.605 $\pm$ 0.383  $\chi^2$ /NDF: 118.1/8

-3.375 $\pm$ 0.321  $\chi^2$ /NDF: 2339.2/13

-5.163 $\pm$ 0.313  $\chi^2$ /NDF: 1780.3/12

# reg\_asym\_atl1\_diff\_bpm4aY\_slope vs slug



Right In:  $-3.689 \pm 0.419$   $\chi^2/\text{NDF}$ : 25.3/3

Left Out:  $3.086 \pm 0.305$   $\chi^2/\text{NDF}$ : 251.9/9

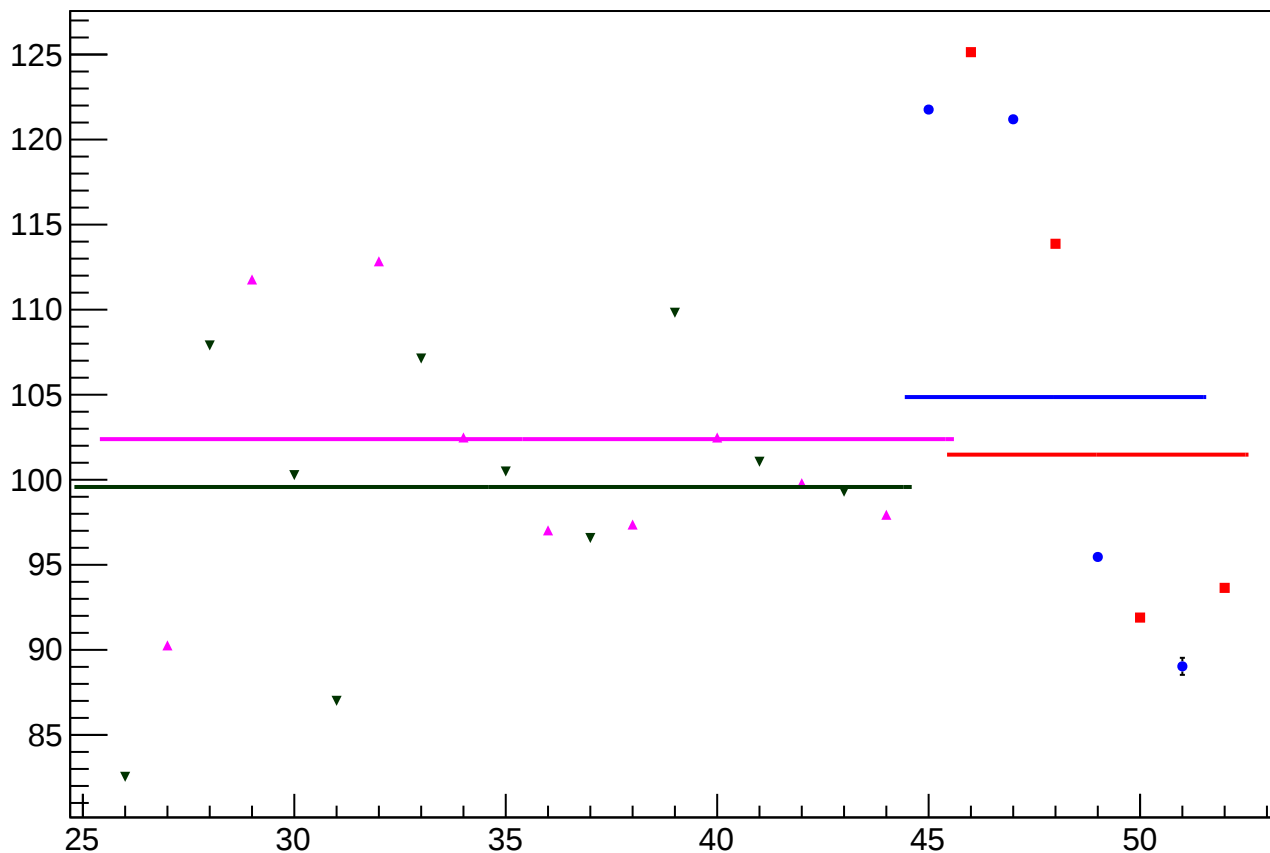
Right Out:  $-3.922 \pm 0.409$   $\chi^2/\text{NDF}$ : 417.2/3

Left In:  $-2.169 \pm 0.279$   $\chi^2/\text{NDF}$ : 836.6/8

$0.741 \pm 0.246$   $\chi^2/\text{NDF}$ : 448.2/13

$-2.725 \pm 0.230$   $\chi^2/\text{NDF}$ : 1266.3/12

# reg\_asym\_atl1\_diff\_bpm4eX\_slope vs slug



Right In: 104.862 $\pm$ 0.099  $\chi^2$ /NDF: 16887.5/3

Left Out: 99.576 $\pm$ 0.067  $\chi^2$ /NDF: 14210.5/9

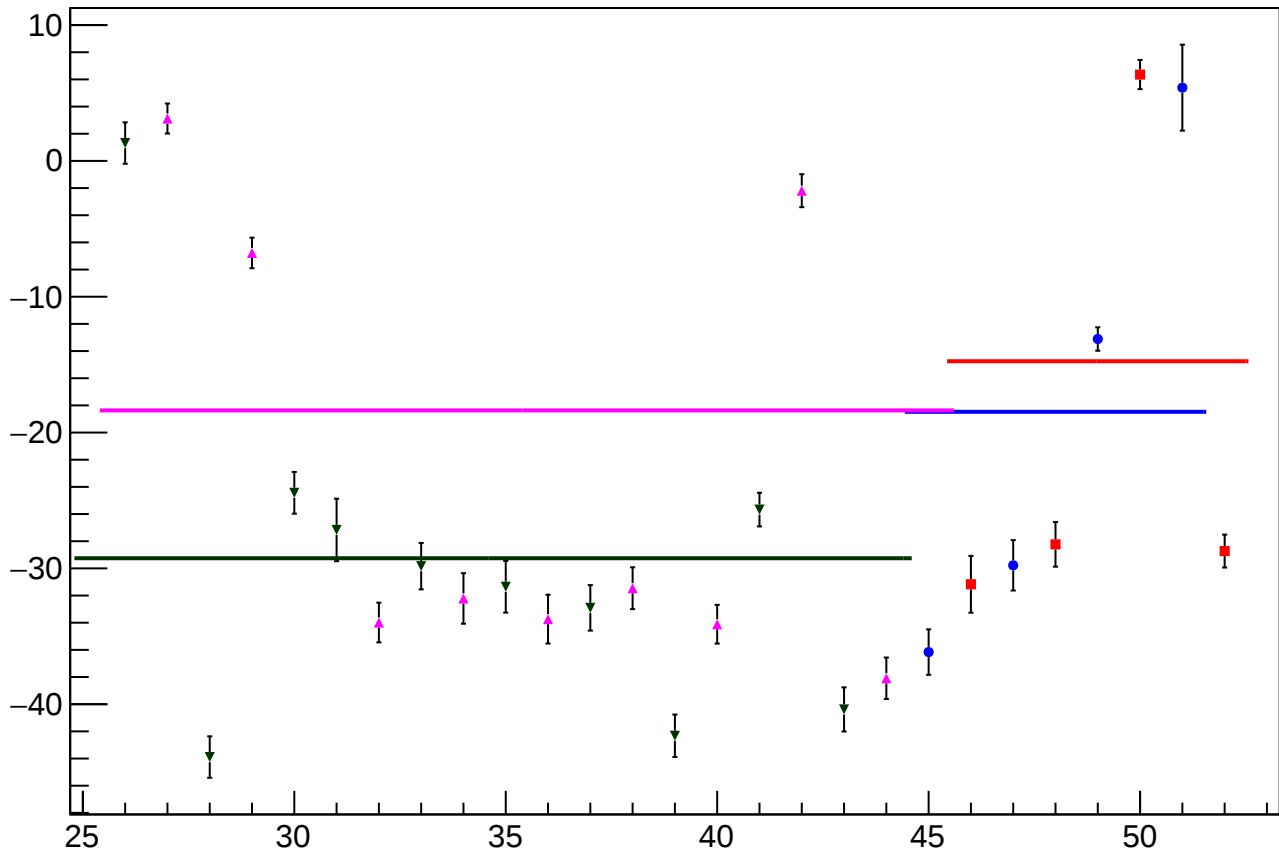
Right Out: 101.477 $\pm$ 0.098  $\chi^2$ /NDF: 16700.5/3

Left In: 102.389 $\pm$ 0.066  $\chi^2$ /NDF: 12190.9/8

101.243 $\pm$ 0.055  $\chi^2$ /NDF: 33062.3/13

102.103 $\pm$ 0.055  $\chi^2$ /NDF: 28951.3/12

# reg\_asym\_atl1\_diff\_bpm4eY\_slope vs slug



Right In:  $-18.473 \pm 0.692$   $\chi^2/\text{NDF}$ : 244.1/3

Left Out:  $-29.254 \pm 0.507$   $\chi^2/\text{NDF}$ : 636.3/9

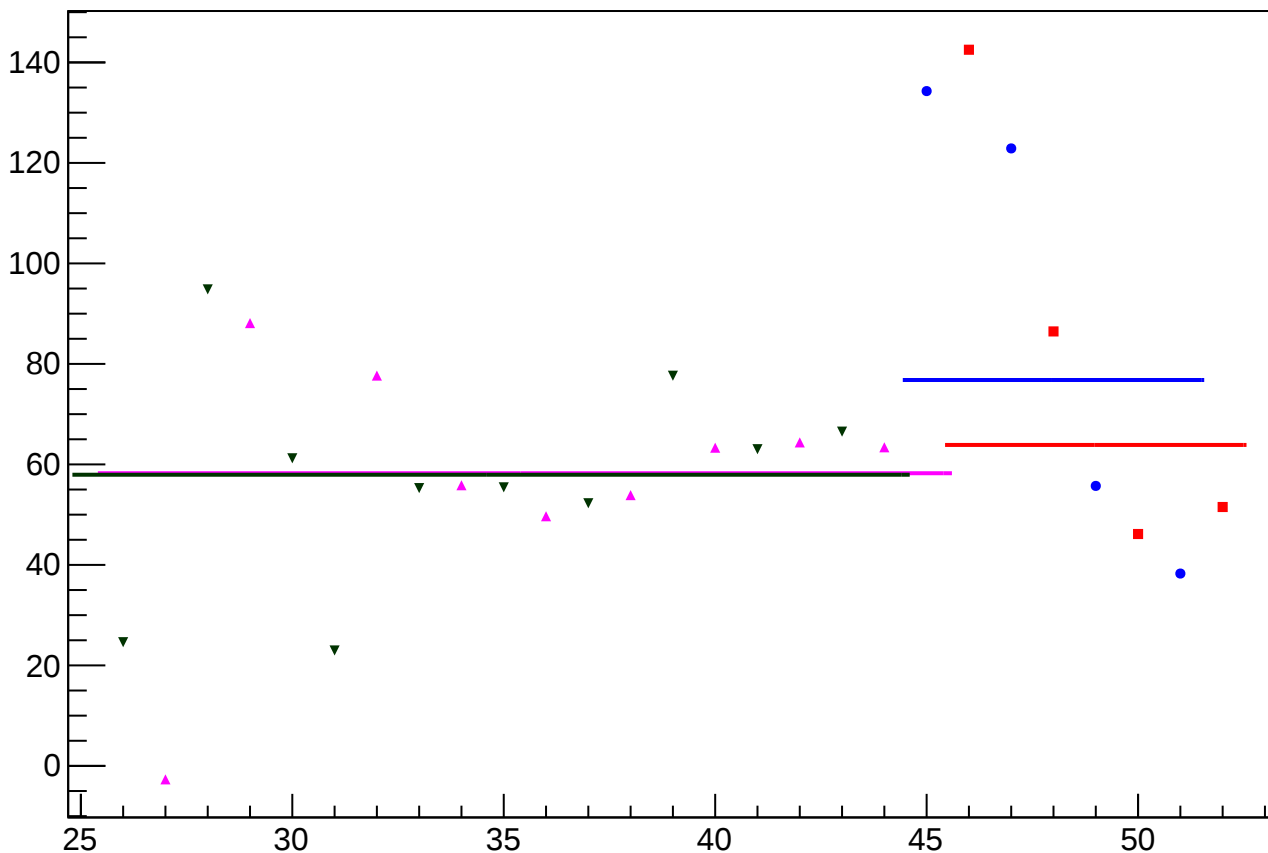
Right Out:  $-14.749 \pm 0.683$   $\chi^2/\text{NDF}$ : 646.8/3

Left In:  $-18.368 \pm 0.461$   $\chi^2/\text{NDF}$ : 1267.3/8

$-25.482 \pm 0.409$   $\chi^2/\text{NDF}$ : 1038.3/13

$-17.235 \pm 0.382$   $\chi^2/\text{NDF}$ : 1933.4/12

# reg\_asym\_atl1\_diff\_bpm11X\_slope vs slug



Right In: 76.797 $\pm$ 0.133  $\chi^2$ /NDF: 66231.5/3

Left Out: 57.944 $\pm$ 0.092  $\chi^2$ /NDF: 48321.4/9

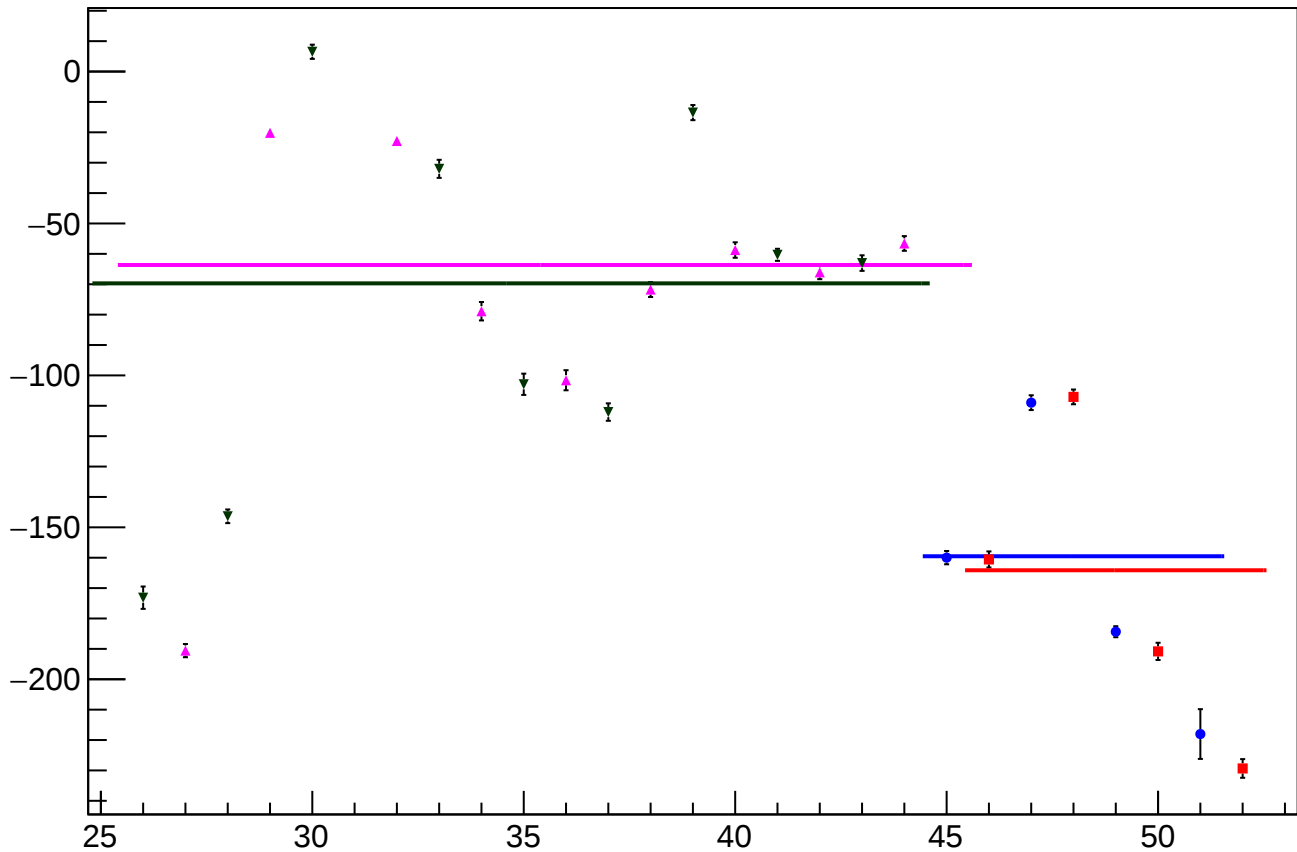
Right Out: 63.874 $\pm$ 0.122  $\chi^2$ /NDF: 54827.6/3

Left In: 58.243 $\pm$ 0.096  $\chi^2$ /NDF: 65783.5/8

64.021 $\pm$ 0.076  $\chi^2$ /NDF: 128125.5/13

60.400 $\pm$ 0.075  $\chi^2$ /NDF: 121934.2/12

# reg\_asym\_atr2\_diff\_bpm4aX\_slope vs slug



Right In: -159.518+/-1.198  $\chi^2/\text{NDF}$ : 670.4/3

Left Out: -69.710+/-0.865  $\chi^2/\text{NDF}$ : 4019.0/8

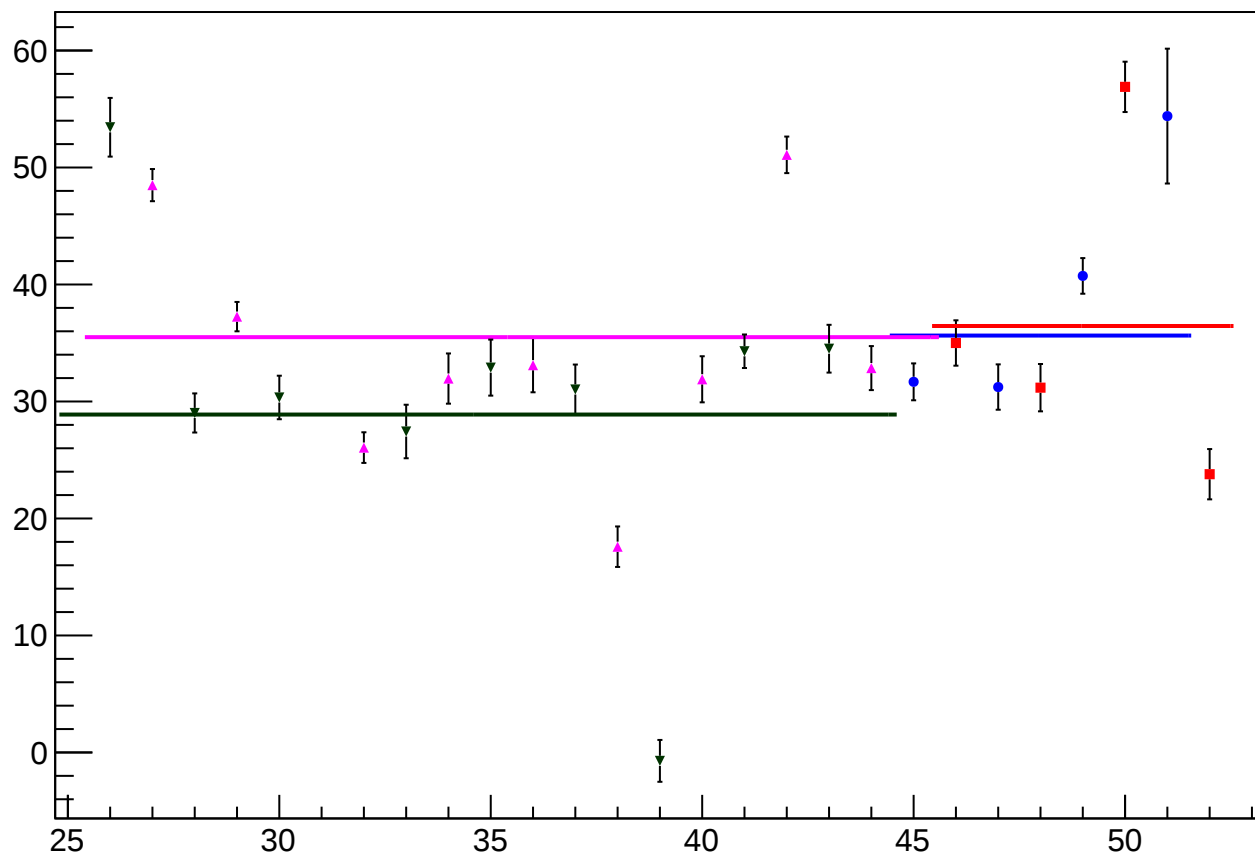
Right Out: -164.133+/-1.356  $\chi^2/\text{NDF}$ : 1093.6/3

Left In: -63.663+/-0.734  $\chi^2/\text{NDF}$ : 4921.5/8

-100.477+/-0.701  $\chi^2/\text{NDF}$ : 8383.9/12

-86.408+/-0.645  $\chi^2/\text{NDF}$ : 10259.3/12

# reg\_asym\_atr2\_diff\_bpm4aY\_slope vs slug



Right In:  $35.635 \pm 0.941$   $\chi^2/\text{NDF}$ : 33.2/3

Left Out:  $28.884 \pm 0.641$   $\chi^2/\text{NDF}$ : 396.4/8

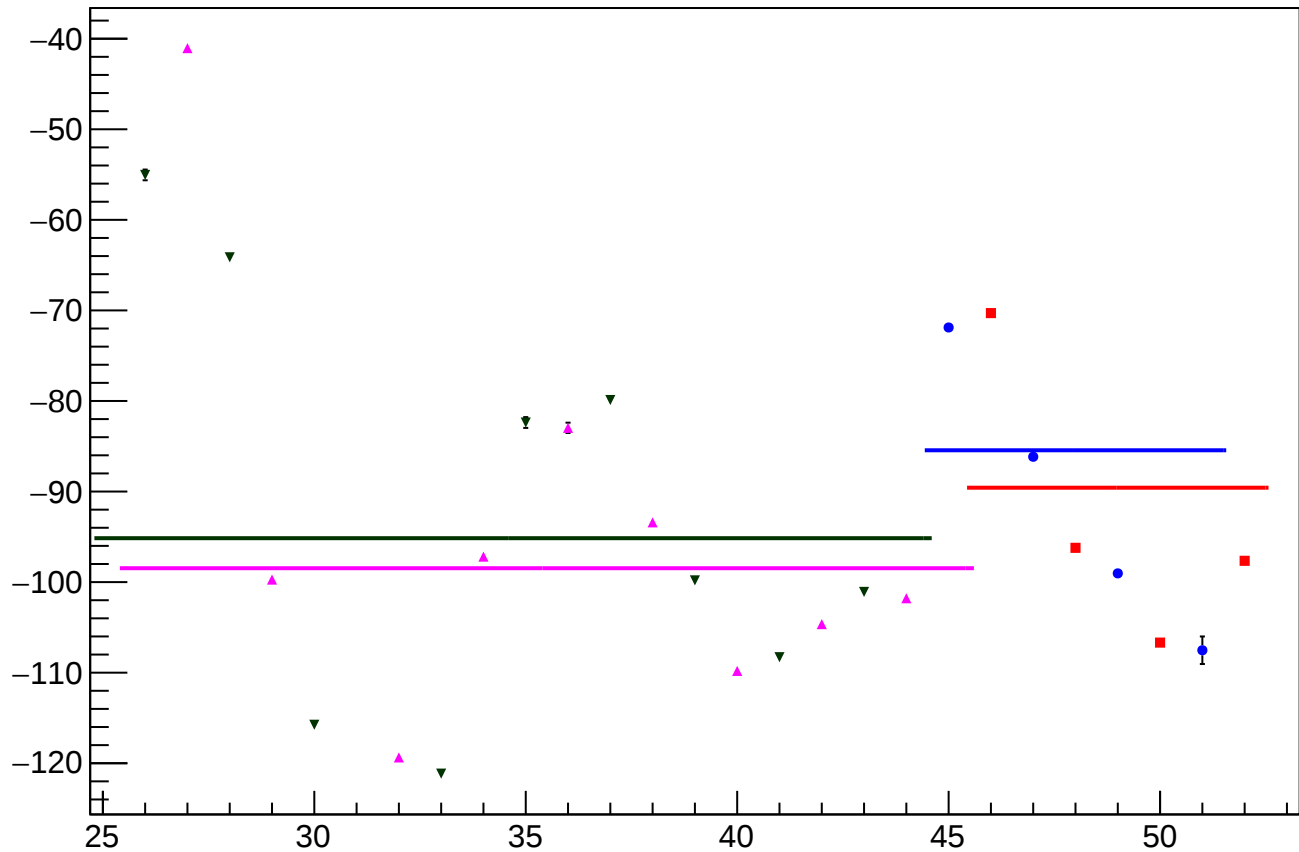
Right Out:  $36.453 \pm 1.030$   $\chi^2/\text{NDF}$ : 132.3/3

Left In:  $35.499 \pm 0.540$   $\chi^2/\text{NDF}$ : 358.9/8

$31.025 \pm 0.530$   $\chi^2/\text{NDF}$ : 464.7/12

$35.704 \pm 0.478$   $\chi^2/\text{NDF}$ : 492.0/12

# reg\_asym\_atr2\_diff\_bpm4eX\_slope vs slug



Right In:  $-85.444 \pm 0.214$   $\chi^2/\text{NDF}$ : 3048.6/3

Left Out:  $-95.151 \pm 0.144$   $\chi^2/\text{NDF}$ : 20300.2/8

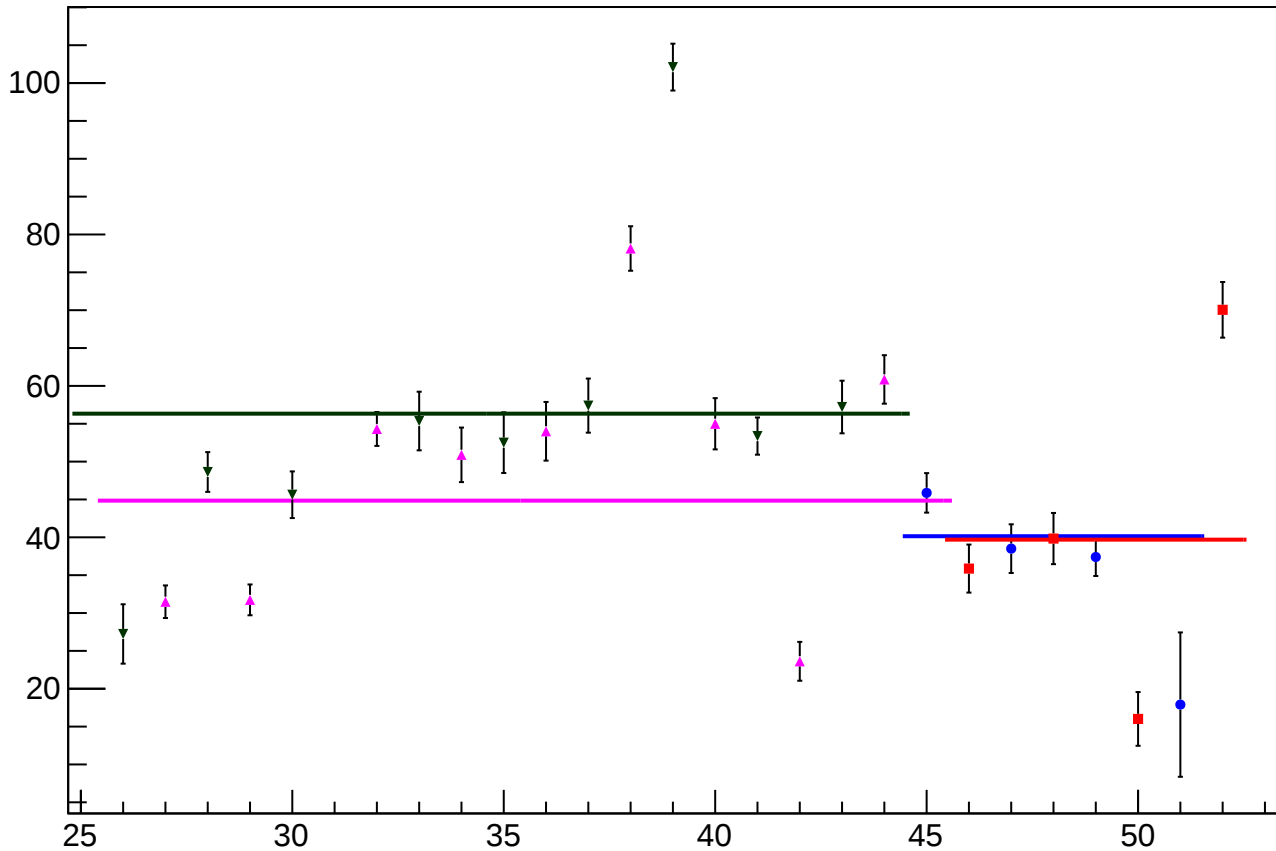
Right Out:  $-89.576 \pm 0.233$   $\chi^2/\text{NDF}$ : 3792.1/3

Left In:  $-98.464 \pm 0.125$   $\chi^2/\text{NDF}$ : 31724.1/8

$-92.122 \pm 0.120$   $\chi^2/\text{NDF}$ : 24762.0/12

$-96.482 \pm 0.110$   $\chi^2/\text{NDF}$ : 36651.1/12

# reg\_asym\_atr2\_diff\_bpm4eY\_slope vs slug



Right In:  $40.144 \pm 1.554$   $\chi^2/\text{NDF}$ : 11.7/3

Left Out:  $56.333 \pm 1.069$   $\chi^2/\text{NDF}$ : 296.9/8

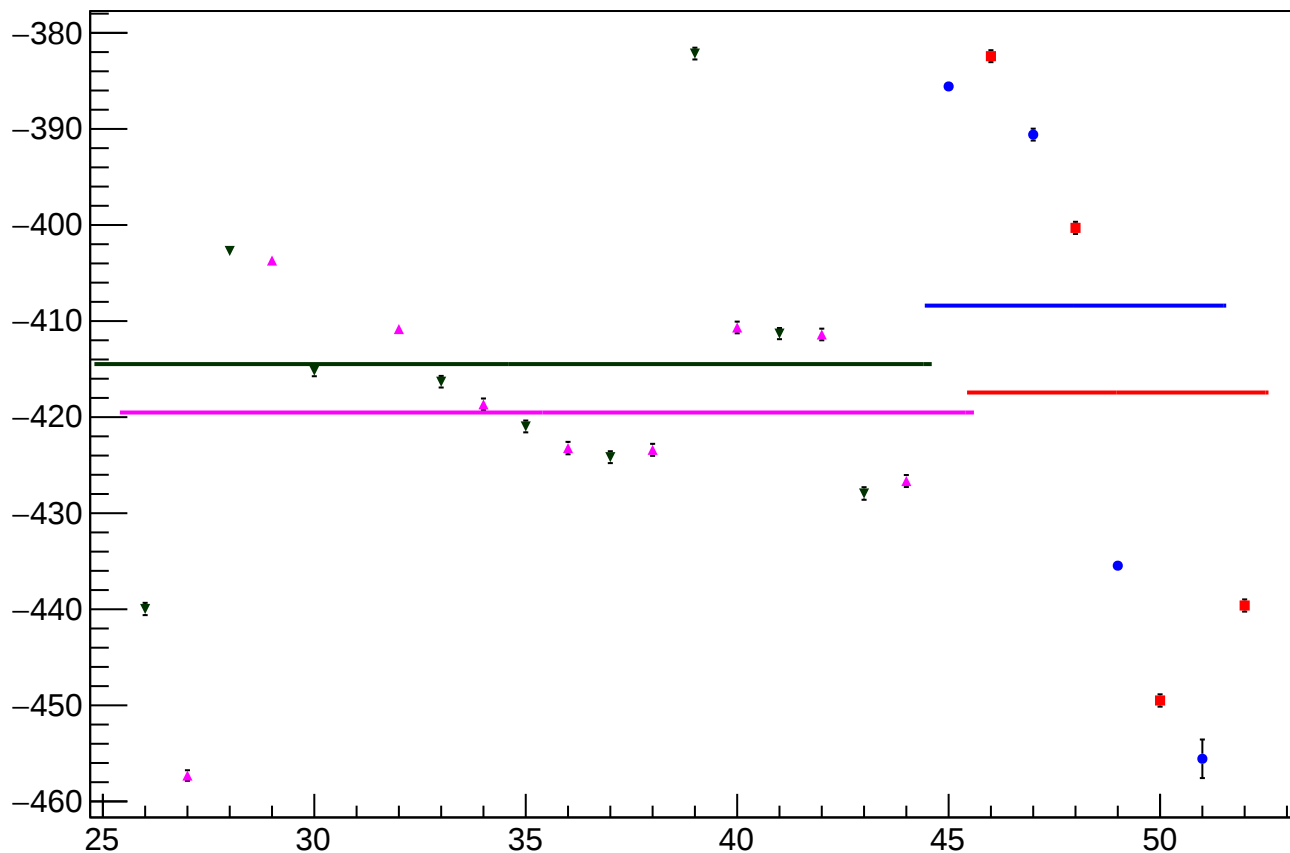
Right Out:  $39.692 \pm 1.714$   $\chi^2/\text{NDF}$ : 114.2/3

Left In:  $44.845 \pm 0.893$   $\chi^2/\text{NDF}$ : 337.0/8

$51.137 \pm 0.881$   $\chi^2/\text{NDF}$ : 382.3/12

$43.745 \pm 0.792$   $\chi^2/\text{NDF}$ : 458.3/12

# reg\_asym\_atr2\_diff\_bpm11X\_slope vs slug



Right In: -408.391+/-0.303  $\chi^2/\text{NDF}$ : 6477.4/3

Left Out: -414.478+/-0.199  $\chi^2/\text{NDF}$ : 5731.0/8

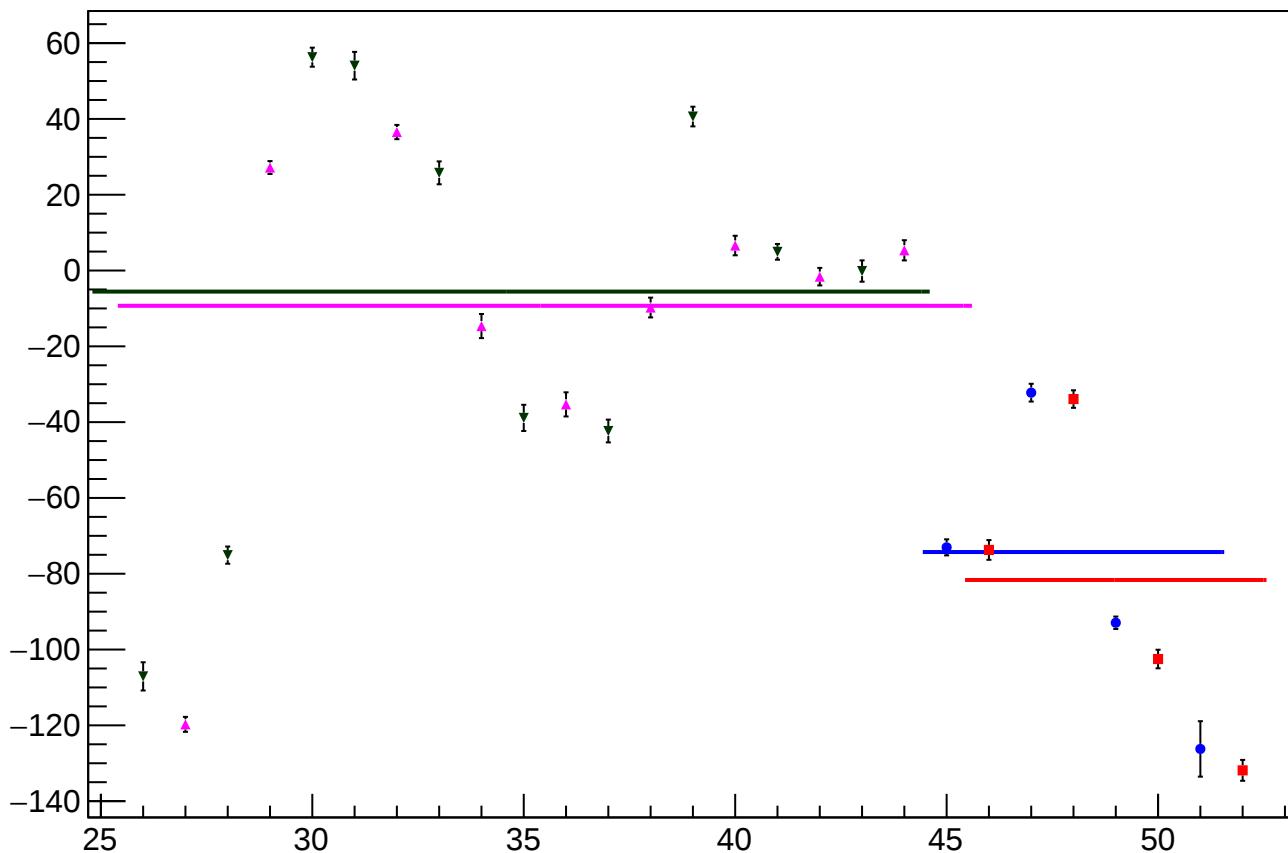
Right Out: -417.436+/-0.317  $\chi^2/\text{NDF}$ : 7601.7/3

Left In: -419.518+/-0.188  $\chi^2/\text{NDF}$ : 6841.3/8

-412.646+/-0.166  $\chi^2/\text{NDF}$ : 12489.9/12

-418.974+/-0.162  $\chi^2/\text{NDF}$ : 14474.9/12

# reg\_asym\_atl2\_diff\_bpm4aX\_slope vs slug



Right In: -74.272 $\pm$ 1.121  $\chi^2$ /NDF: 501.9/3

Left Out: -5.557 $\pm$ 0.874  $\chi^2$ /NDF: 3249.1/9

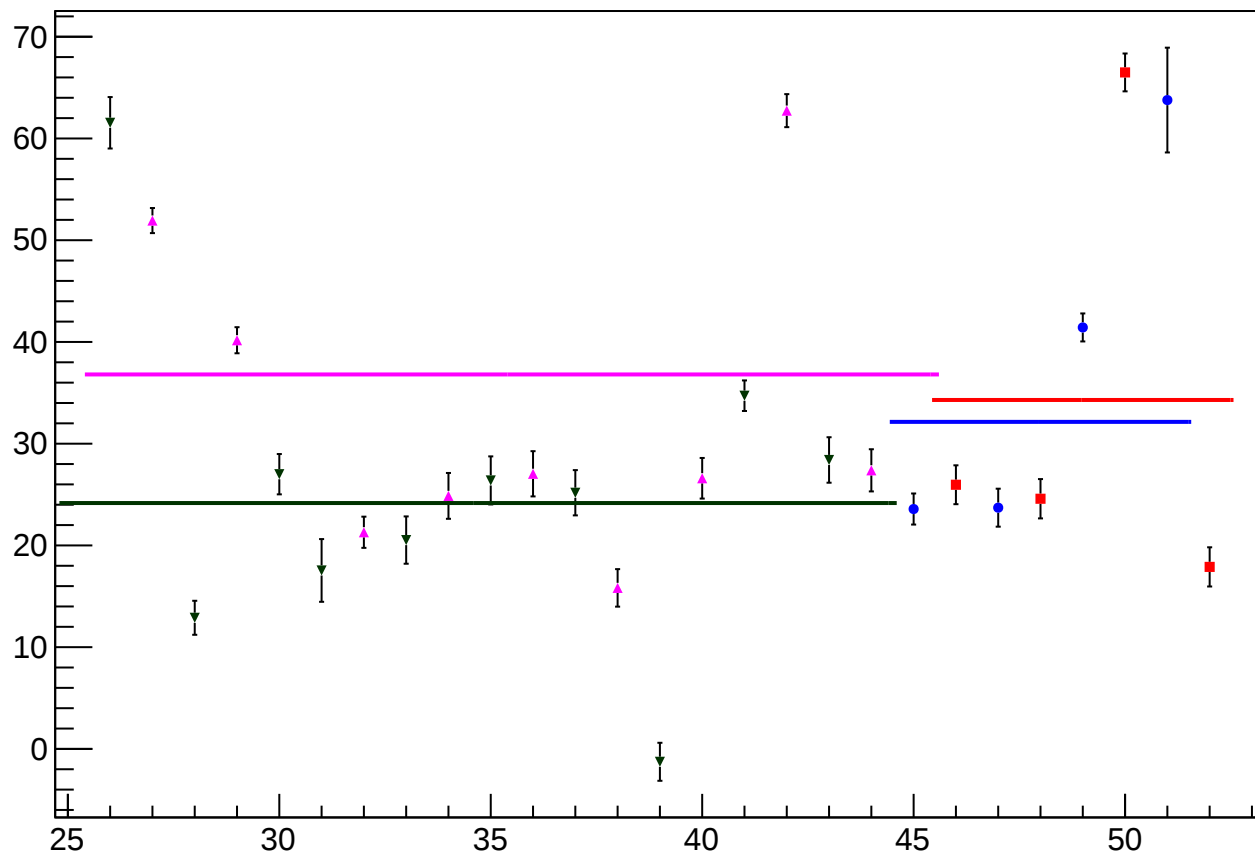
Right Out: -81.644 $\pm$ 1.258  $\chi^2$ /NDF: 838.9/3

Left In: -9.304 $\pm$ 0.765  $\chi^2$ /NDF: 4334.5/8

-31.519 $\pm$ 0.689  $\chi^2$ /NDF: 6087.2/13

-28.850 $\pm$ 0.654  $\chi^2$ /NDF: 7588.2/12

# reg\_asym\_atl2\_diff\_bpm4aY\_slope vs slug



Right In: 32.145 $\pm$ 0.883  $\chi^2$ /NDF: 135.1/3

Left Out: 24.167 $\pm$ 0.649  $\chi^2$ /NDF: 512.5/9

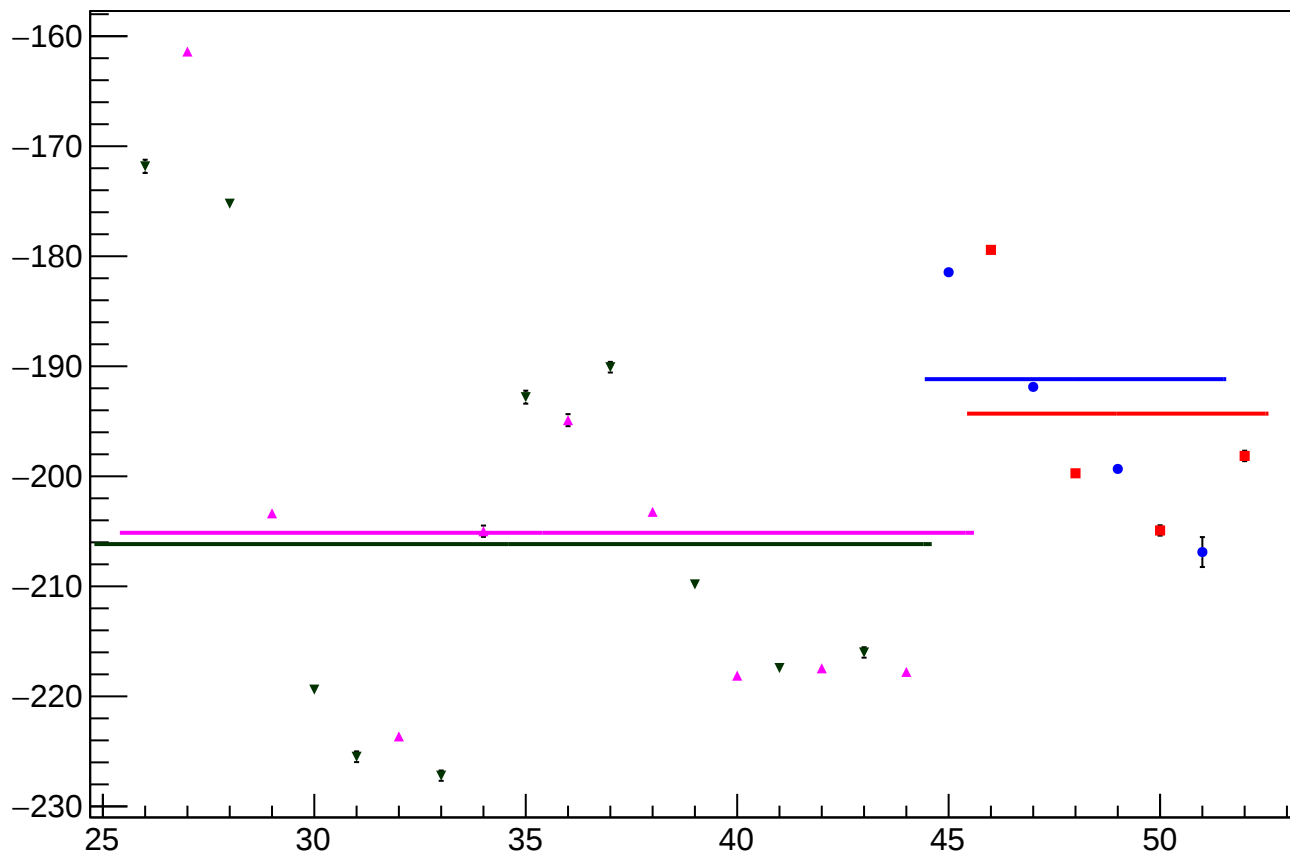
Right Out: 34.297 $\pm$ 0.953  $\chi^2$ /NDF: 416.3/3

Left In: 36.806 $\pm$ 0.555  $\chi^2$ /NDF: 738.7/8

26.967 $\pm$ 0.523  $\chi^2$ /NDF: 700.6/13

36.171 $\pm$ 0.480  $\chi^2$ /NDF: 1160.2/12

# reg\_asym\_atl2\_diff\_bpm4eX\_slope vs slug



Right In: -191.170+/-0.202  $\chi^2/\text{NDF}$ : 1546.5/3

Left Out: -206.161+/-0.144  $\chi^2/\text{NDF}$ :16990.9/9

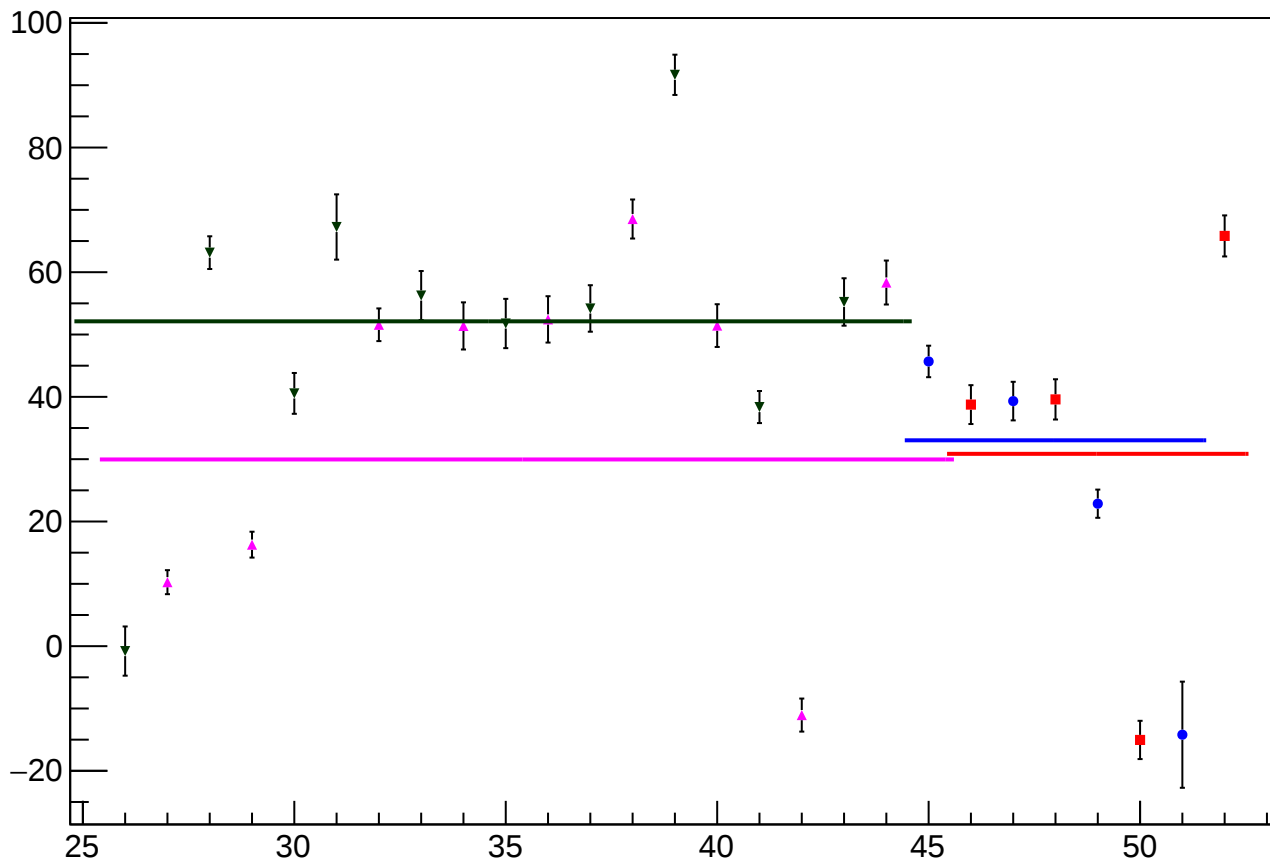
Right Out: -194.304+/-0.217  $\chi^2/\text{NDF}$ : 2175.7/3

Left In: -205.134+/-0.132  $\chi^2/\text{NDF}$ :22564.1/8

-201.098+/-0.117  $\chi^2/\text{NDF}$ : 22186.6/13

-202.231+/-0.113  $\chi^2/\text{NDF}$ : 26555.5/12

# reg\_asym\_atl2\_diff\_bpm4eY\_slope vs slug



Right In: 33.028+/-1.459  $\chi^2$ /NDF: 80.2/3

Left Out: 52.118+/-1.081  $\chi^2$ /NDF:398.5/9

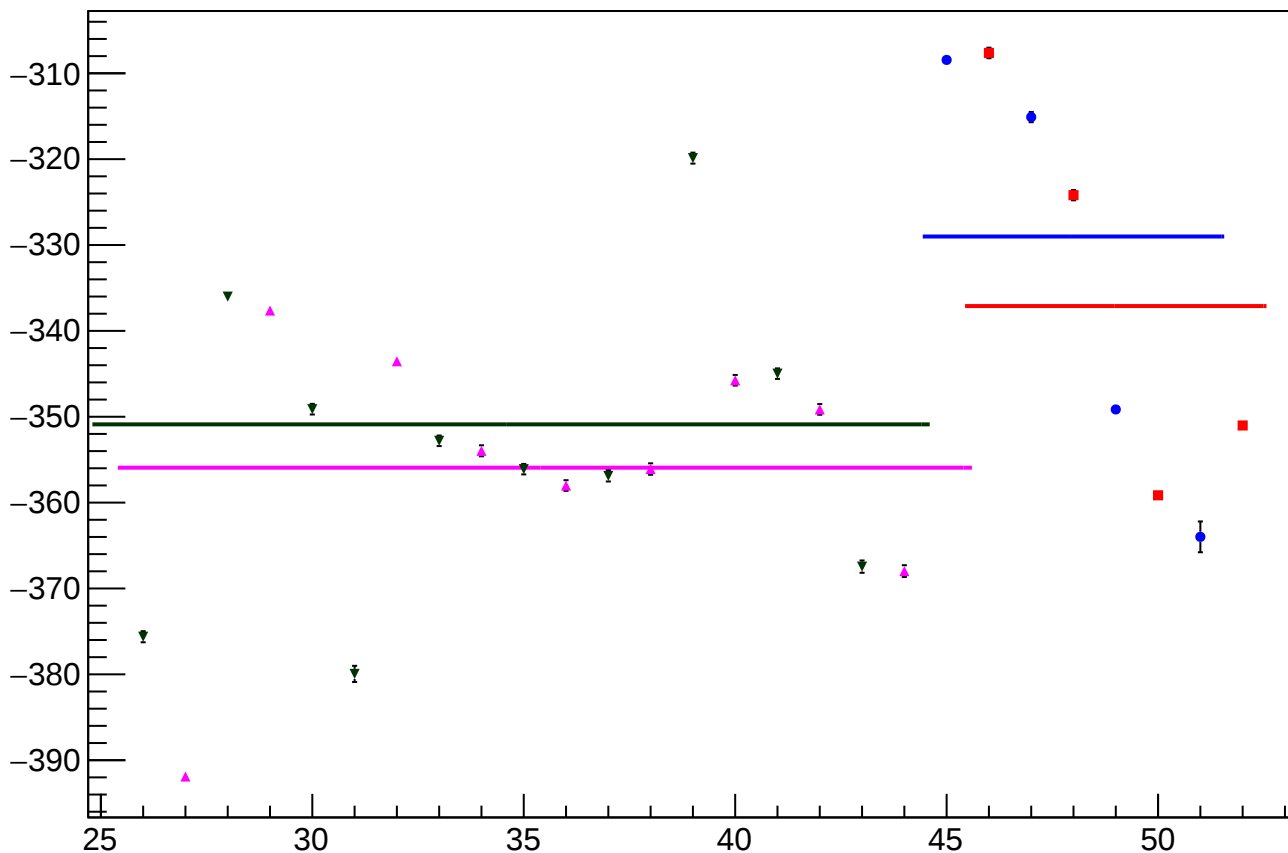
Right Out: 30.858+/-1.587  $\chi^2$ /NDF: 350.1/3

Left In: 29.956+/-0.913  $\chi^2$ /NDF:779.4/8

45.348+/-0.869  $\chi^2$ /NDF: 589.2/13

30.180+/-0.792  $\chi^2$ /NDF: 1129.7/12

# reg\_asym\_atl2\_diff\_bpm11X\_slope vs slug



Right In:  $-329.008 \pm 0.284$   $\chi^2/\text{NDF}$ : 4754.5/3

Left Out:  $-350.887 \pm 0.200$   $\chi^2/\text{NDF}$ : 6484.7/9

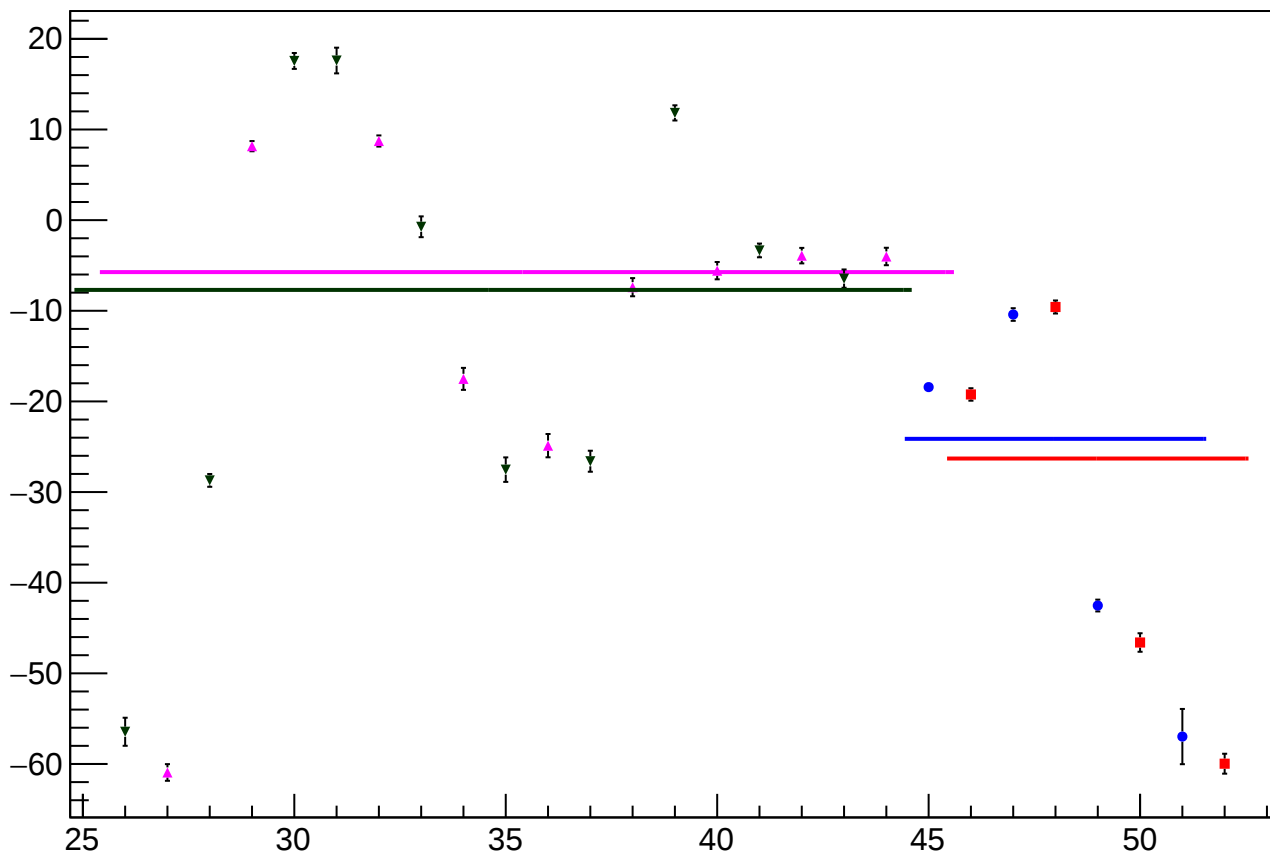
Right Out:  $-337.109 \pm 0.291$   $\chi^2/\text{NDF}$ : 4956.7/3

Left In:  $-355.932 \pm 0.194$   $\chi^2/\text{NDF}$ : 7933.4/8

$-343.640 \pm 0.163$   $\chi^2/\text{NDF}$ : 15207.4/13

$-350.146 \pm 0.161$   $\chi^2/\text{NDF}$ : 15784.3/12

# reg\_asym\_atl\_avg\_diff\_bpm4aX\_slope vs slug



Right In: -24.129 $\pm$ 0.359  $\chi^2$ /NDF: 1404.8/3

Left Out: -7.698 $\pm$ 0.310  $\chi^2$ /NDF: 4119.4/9

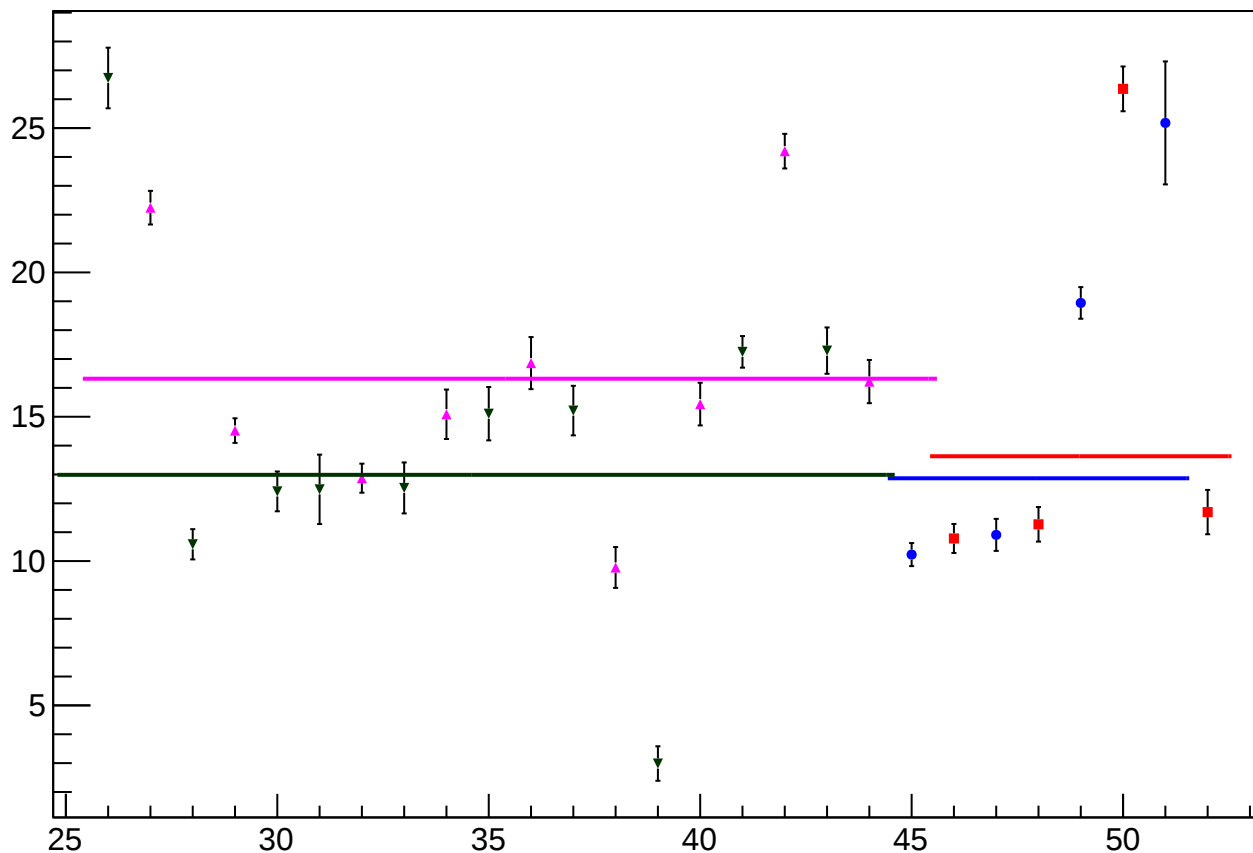
Right Out: -26.301 $\pm$ 0.414  $\chi^2$ /NDF: 1979.5/3

Left In: -5.733 $\pm$ 0.279  $\chi^2$ /NDF: 5095.9/8

-14.716 $\pm$ 0.235  $\chi^2$ /NDF: 6725.1/13

-12.173 $\pm$ 0.232  $\chi^2$ /NDF: 8771.7/12

# reg\_asym\_atl\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 12.868+/-0.277  $\chi^2/\text{NDF}$ : 212.5/3

Left Out: 12.987+/-0.230  $\chi^2/\text{NDF}$ : 575.0/9

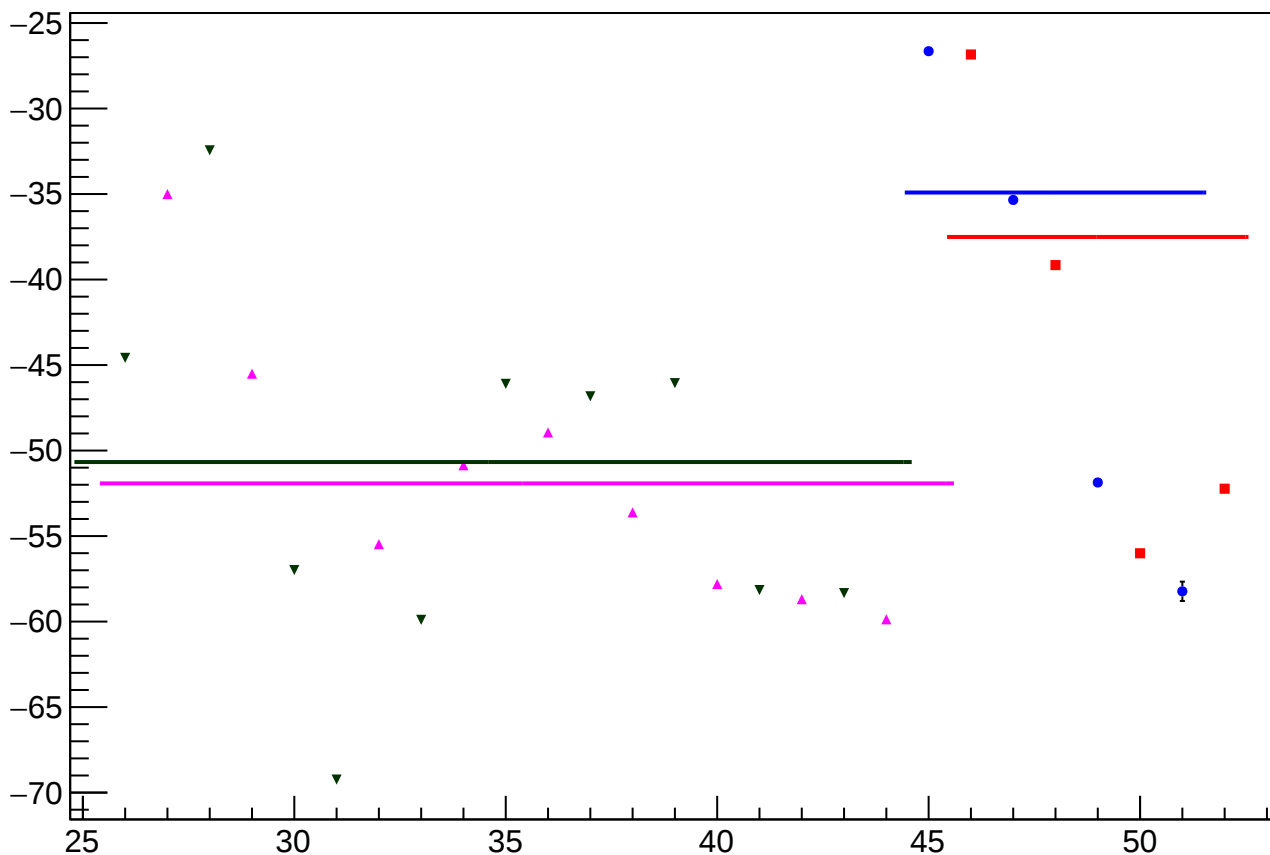
Right Out: 13.631+/-0.315  $\chi^2/\text{NDF}$ : 322.9/3

Left In: 16.318+/-0.207  $\chi^2/\text{NDF}$ : 430.3/8

12.939+/-0.177  $\chi^2/\text{NDF}$ : 787.6/13

15.507+/-0.173  $\chi^2/\text{NDF}$ : 804.2/12

# reg\_asym\_atl\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -34.912 $\pm$ 0.062  $\chi^2$ /NDF: 26339.5/3

Left Out: -50.671 $\pm$ 0.051  $\chi^2$ /NDF: 44323.0/9

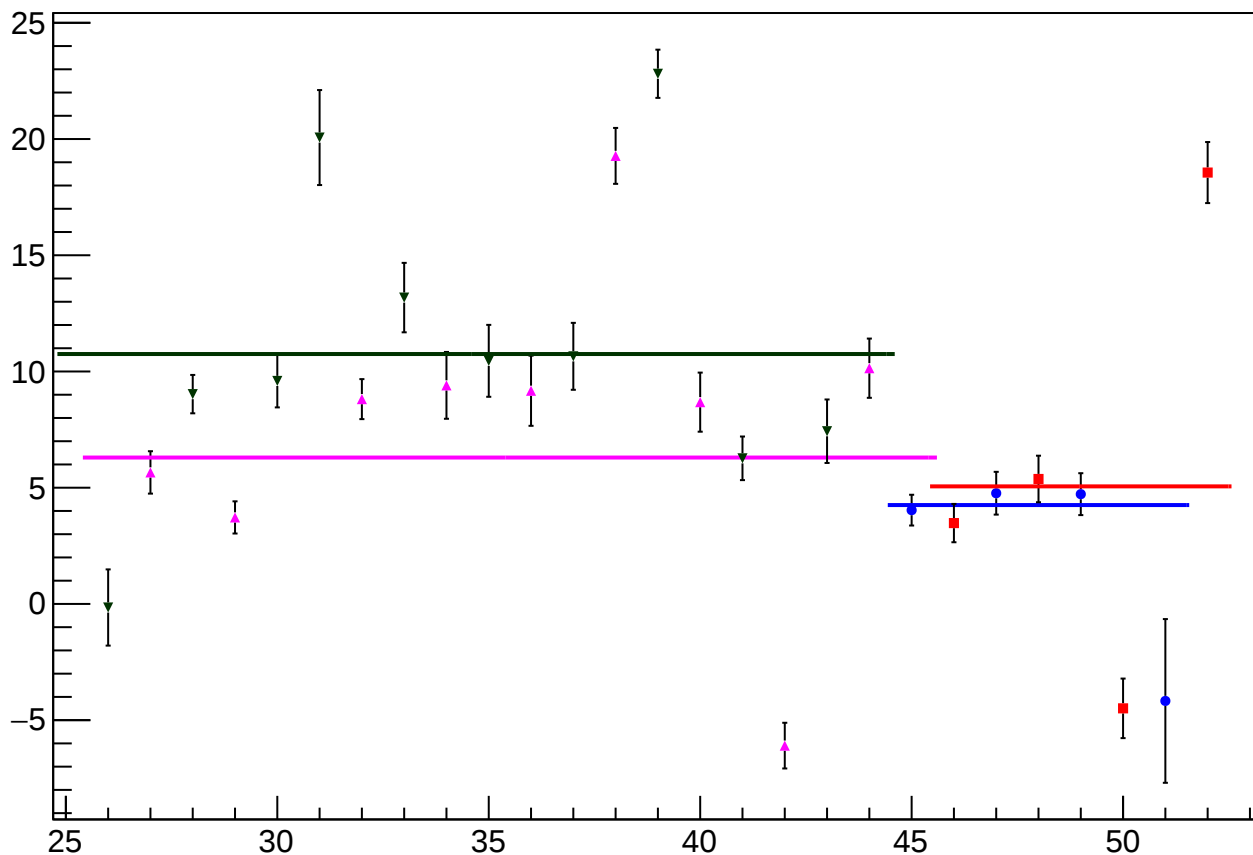
-44.295 $\pm$ 0.040  $\chi^2$ /NDF: 108869.8/13

Right Out: -37.510 $\pm$ 0.069  $\chi^2$ /NDF: 25672.3/3

-47.285 $\pm$ 0.039  $\chi^2$ /NDF: 76615.7/12

Left In: -51.920 $\pm$ 0.048  $\chi^2$ /NDF: 21764.1/8

# reg\_asym\_atl\_avg\_diff\_bpm4eY\_slope vs slug



Right In: 4.254 $\pm$ 0.458  $\chi^2$ /NDF: 6.4/3

Left Out: 10.751 $\pm$ 0.383  $\chi^2$ /NDF: 237.1/9

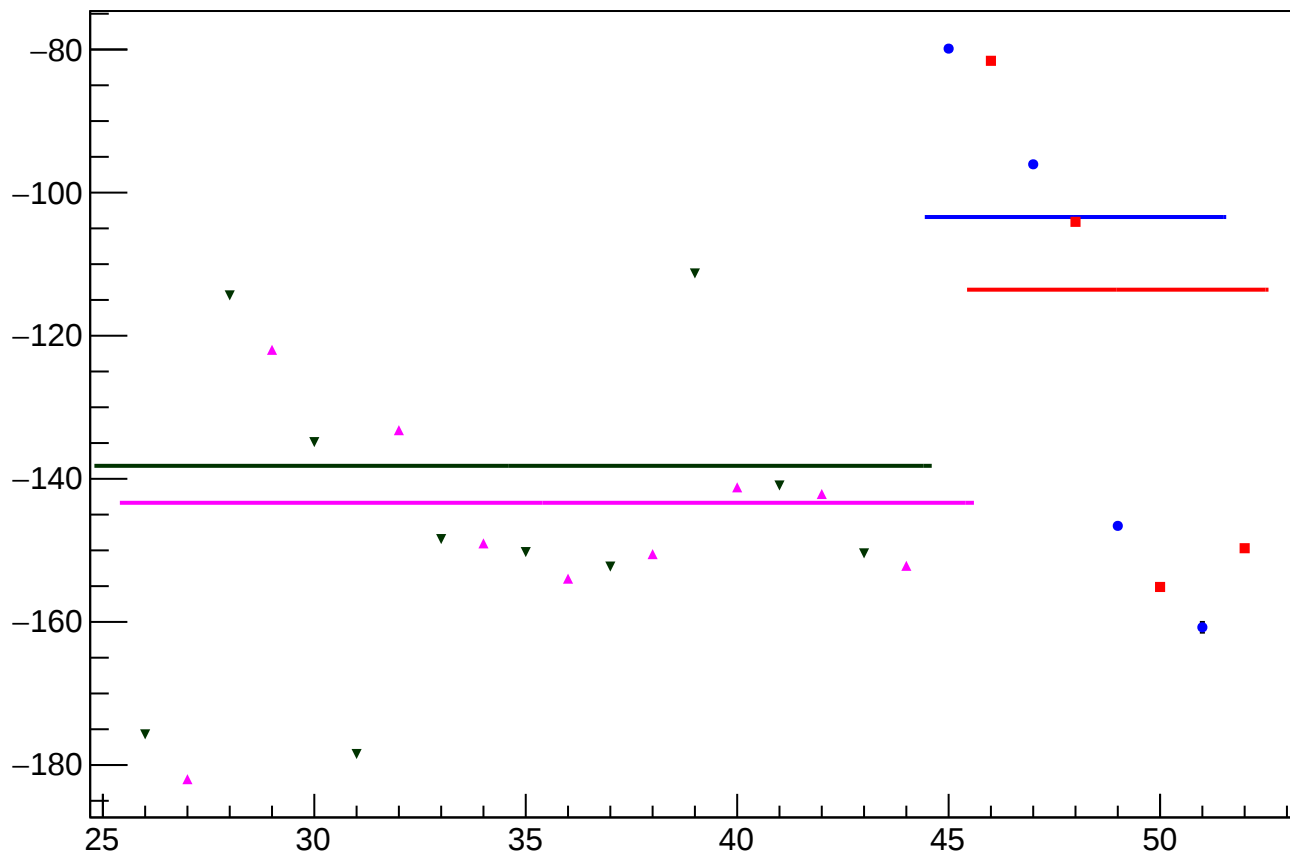
Right Out: 5.057 $\pm$ 0.523  $\chi^2$ /NDF: 165.0/3

Left In: 6.298 $\pm$ 0.343  $\chi^2$ /NDF: 319.2/8

8.070 $\pm$ 0.294  $\chi^2$ /NDF: 361.9/13

5.925 $\pm$ 0.287  $\chi^2$ /NDF: 488.1/12

# reg\_asym\_atl\_avg\_diff\_bpm11X\_slope vs slug



Right In: -103.411+/-0.090  $\chi^2/\text{NDF}$ : 102061.5/3

Left Out: -138.184+/-0.072  $\chi^2/\text{NDF}$ : 82180.0/9

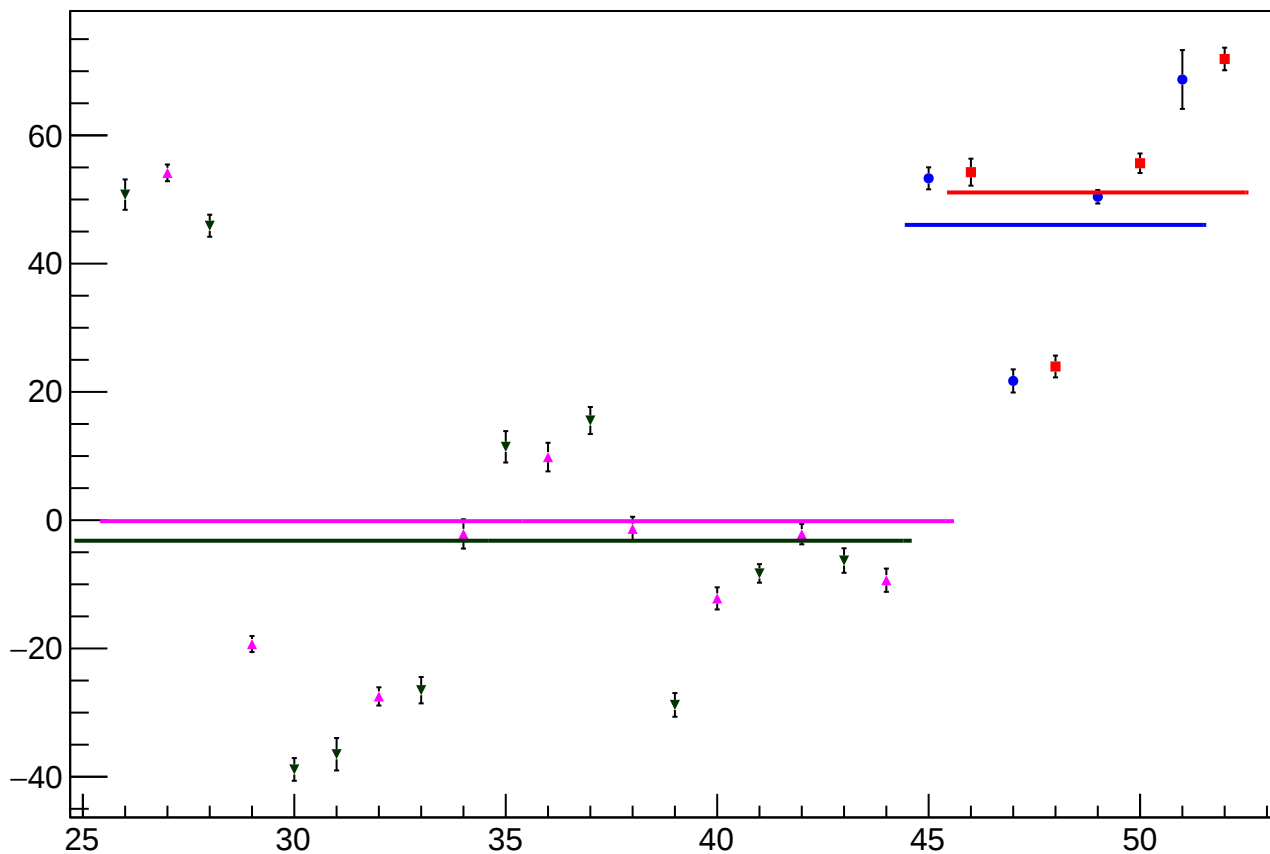
Right Out: -113.566+/-0.098  $\chi^2/\text{NDF}$ : 99114.5/3

Left In: -143.350+/-0.072  $\chi^2/\text{NDF}$ : 55051.5/8

-124.640+/-0.056  $\chi^2/\text{NDF}$ : 275769.5/13

-132.945+/-0.058  $\chi^2/\text{NDF}$ : 214040.4/12

# reg\_asym\_atl\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 46.039+/-0.792  $\chi^2/\text{NDF}$ : 241.6/3

Left Out: -3.202+/-0.613  $\chi^2/\text{NDF}$ : 2363.4/9

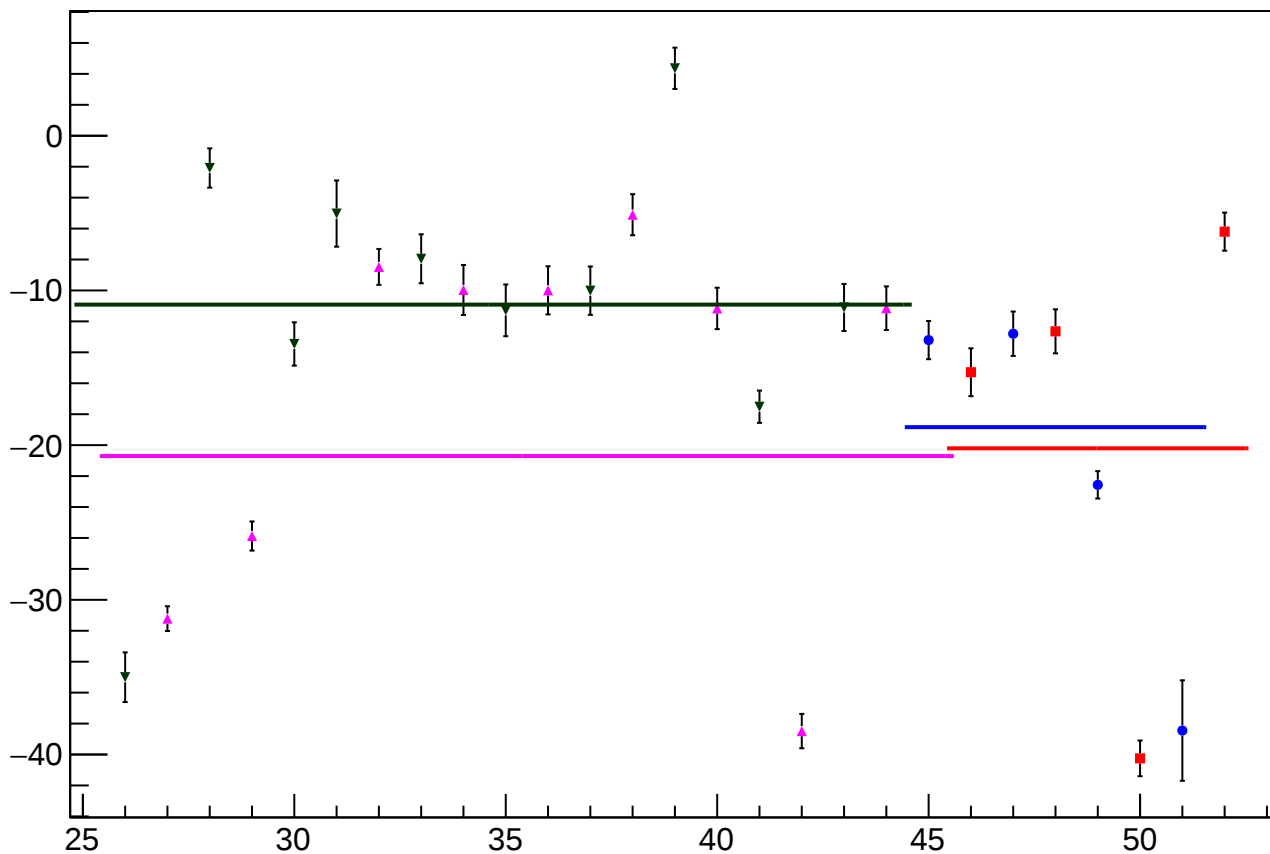
Right Out: 51.096+/-0.869  $\chi^2/\text{NDF}$ : 404.9/3

Left In: -0.152+/-0.540  $\chi^2/\text{NDF}$ : 2441.2/8

15.228+/-0.485  $\chi^2/\text{NDF}$ : 5022.5/13

14.102+/-0.458  $\chi^2/\text{NDF}$ : 5355.6/12

# reg\_asym\_atl\_dd\_diff\_bpm4aY\_slope vs slug



Right In: -18.838 +/- 0.631  $\chi^2/\text{NDF}$ : 92.7/3

Left Out: -10.916 +/- 0.456  $\chi^2/\text{NDF}$ : 459.2/9

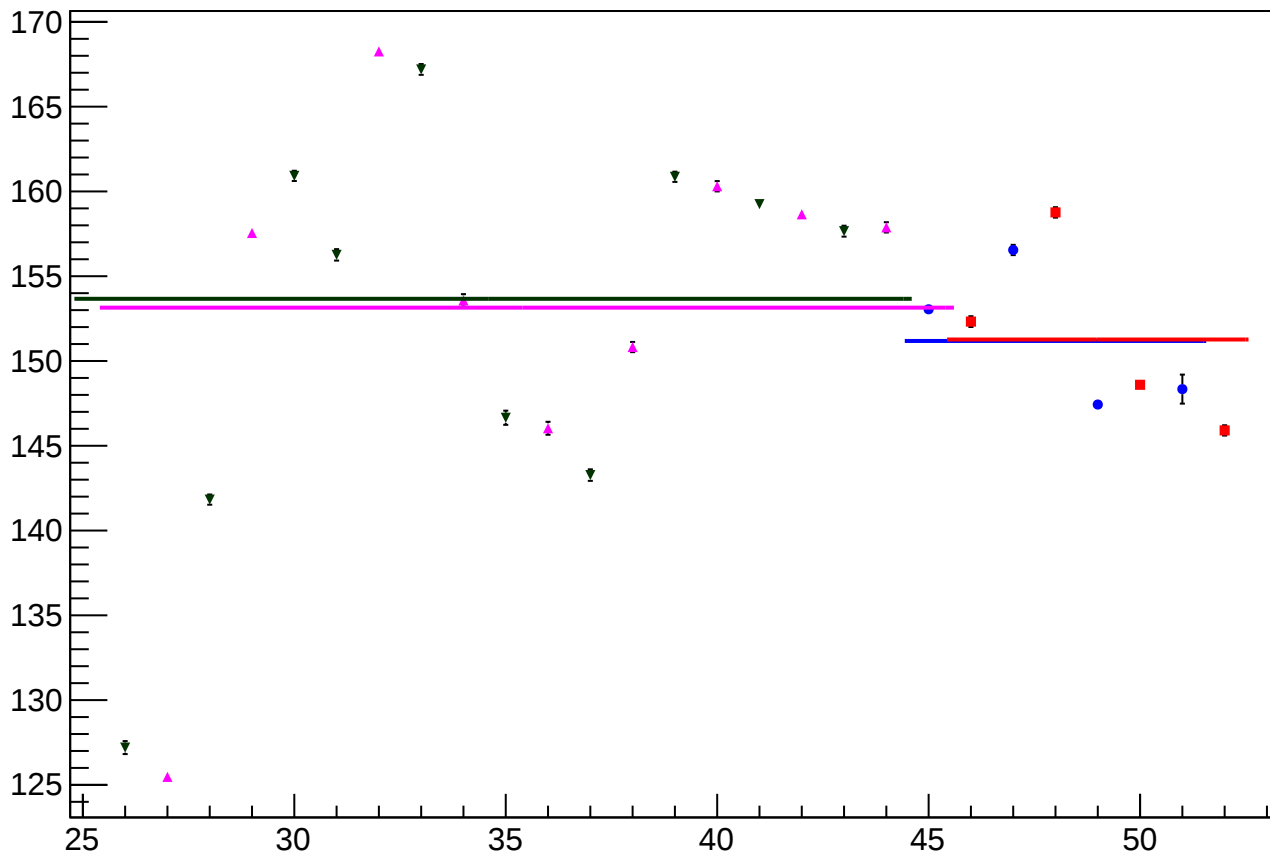
Right Out: -20.207 +/- 0.657  $\chi^2/\text{NDF}$ : 468.5/3

Left In: -20.706 +/- 0.387  $\chi^2/\text{NDF}$ : 896.2/8

-13.632 +/- 0.369  $\chi^2/\text{NDF}$ : 655.5/13

-20.577 +/- 0.334  $\chi^2/\text{NDF}$ : 1365.2/12

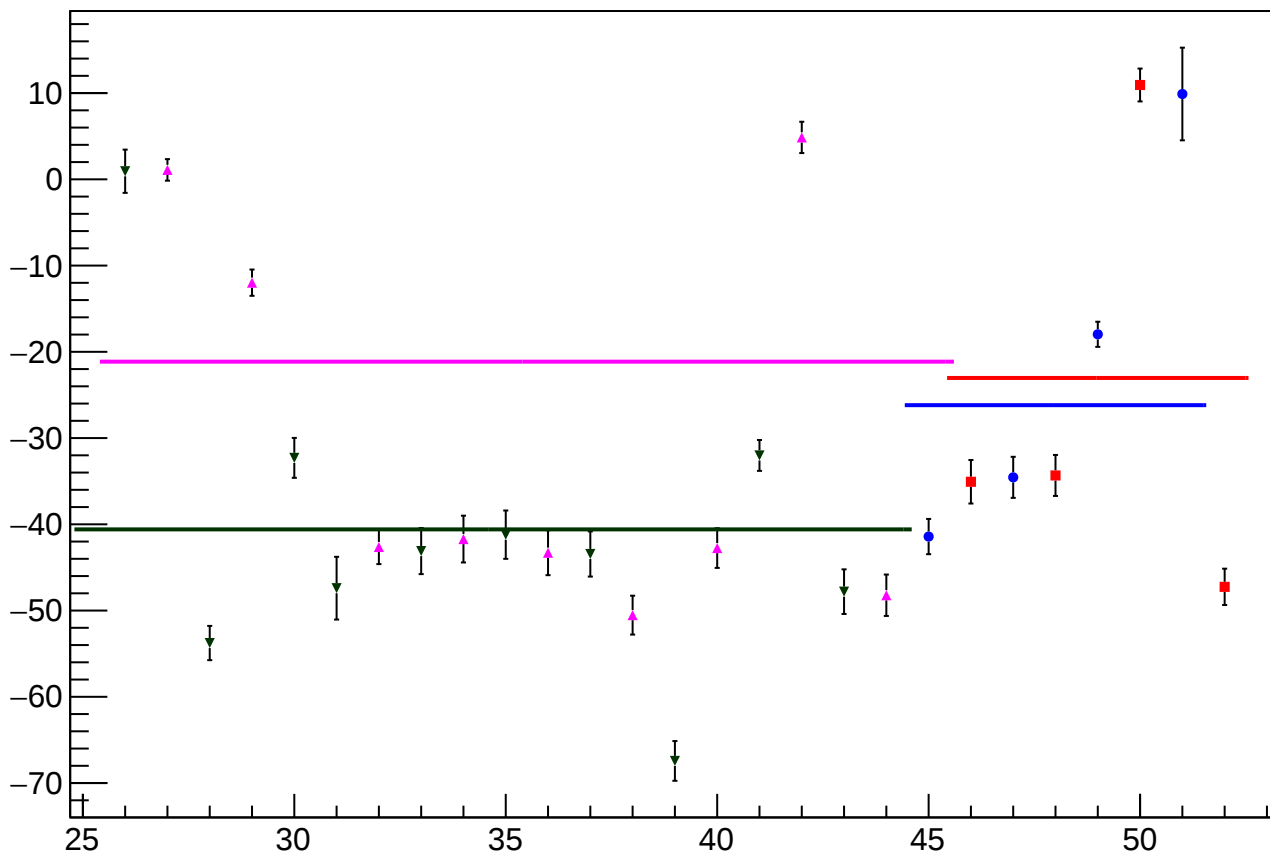
# reg\_asym\_atl\_dd\_diff\_bpm4eX\_slope vs slug



Right In:  $151.181 \pm 0.146$      $\chi^2/\text{NDF}$ : 670.4/3  
 Left Out:  $153.668 \pm 0.101$      $\chi^2/\text{NDF}$ : 11181.3/9  
 Right Out:  $151.267 \pm 0.153$      $\chi^2/\text{NDF}$ : 994.4/3  
 Left In:  $153.146 \pm 0.093$      $\chi^2/\text{NDF}$ : 20805.5/8

$152.863 \pm 0.083$      $\chi^2/\text{NDF}$ : 12047.8/13  
 $152.637 \pm 0.079$      $\chi^2/\text{NDF}$ : 21910.3/12

# reg\_asym\_atl\_dd\_diff\_bpm4eY\_slope vs slug



Right In:  $-26.185 \pm 1.042$   $\chi^2/\text{NDF}$ : 144.8/3

Left Out:  $-40.588 \pm 0.759$   $\chi^2/\text{NDF}$ : 503.5/9

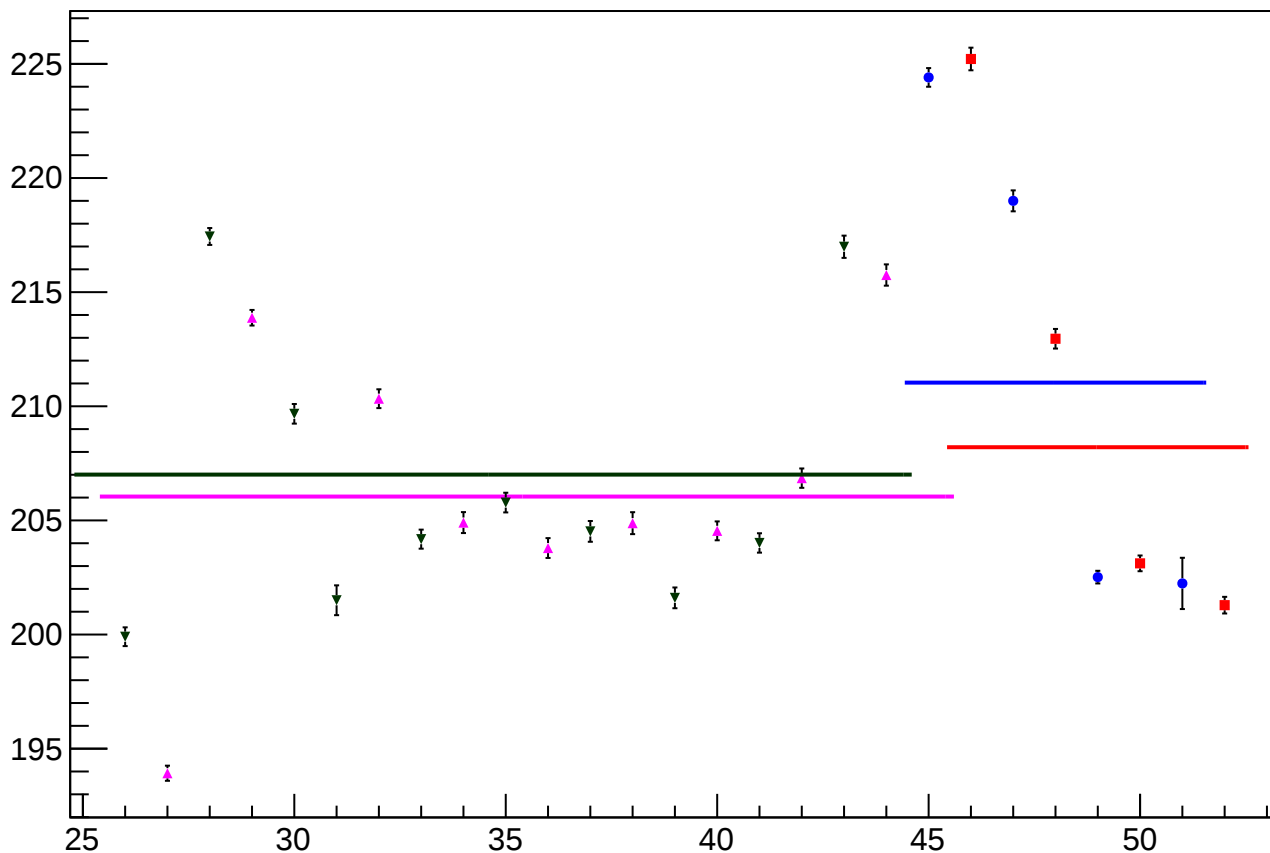
Right Out:  $-23.030 \pm 1.094$   $\chi^2/\text{NDF}$ : 495.3/3

Left In:  $-21.140 \pm 0.636$   $\chi^2/\text{NDF}$ : 1191.2/8

$-35.597 \pm 0.613$   $\chi^2/\text{NDF}$ : 773.3/13

$-21.617 \pm 0.550$   $\chi^2/\text{NDF}$ : 1688.7/12

# reg\_asym\_atl\_dd\_diff\_bpm11X\_slope vs slug



Right In:  $211.037 \pm 0.202$   $\chi^2/\text{NDF}$ : 2376.1/3

Left Out:  $207.007 \pm 0.139$   $\chi^2/\text{NDF}$ : 1896.8/9

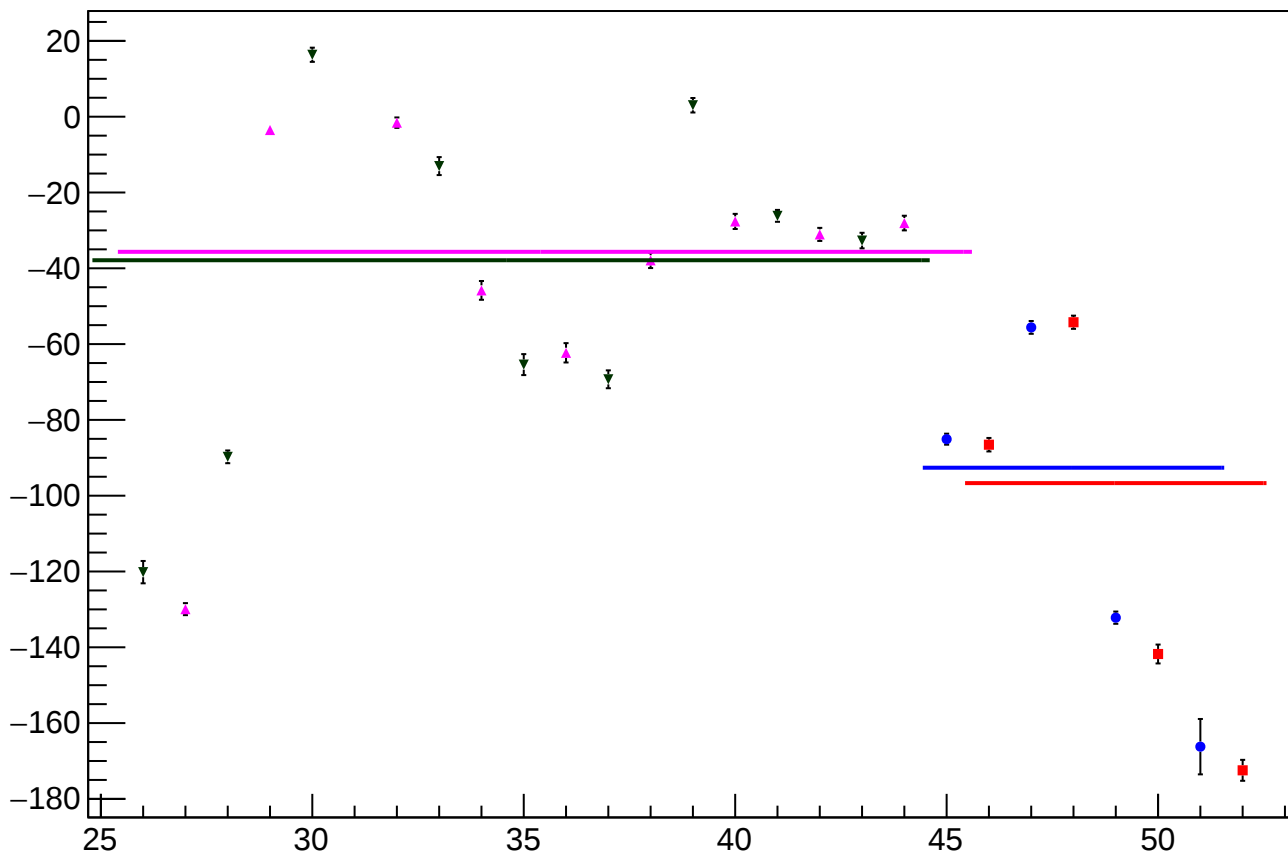
Right Out:  $208.207 \pm 0.198$   $\chi^2/\text{NDF}$ : 1879.0/3

Left In:  $206.045 \pm 0.136$   $\chi^2/\text{NDF}$ : 2460.3/8

$208.307 \pm 0.115$   $\chi^2/\text{NDF}$ : 4542.8/13

$206.738 \pm 0.112$   $\chi^2/\text{NDF}$ : 4420.1/12

# reg\_asym\_atr\_avg\_diff\_bpm4aX\_slope vs slug



Right In: -92.618 $\pm$ 0.904  $\chi^2$ /NDF: 1207.3/3

Left Out: -37.875 $\pm$ 0.681  $\chi^2$ /NDF: 3472.1/8

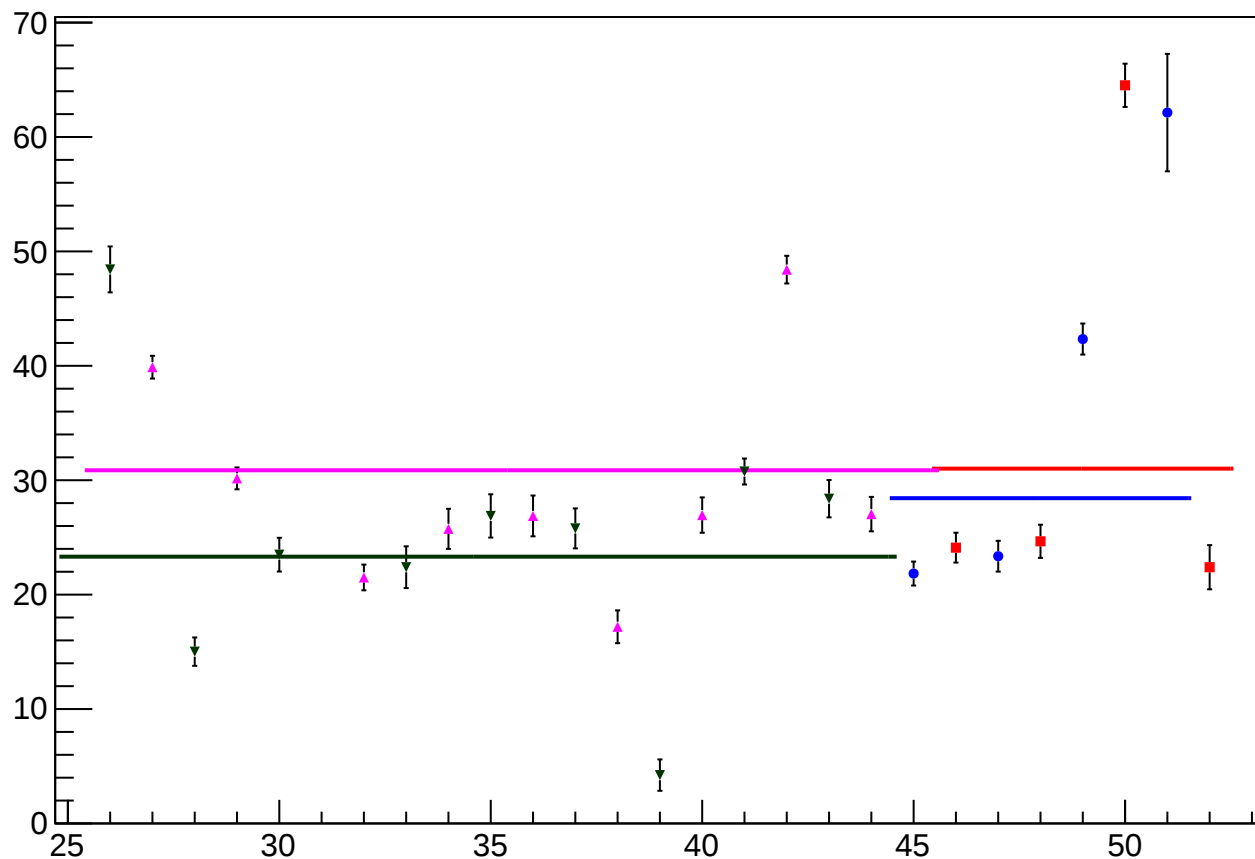
Right Out: -96.680 $\pm$ 1.033  $\chi^2$ /NDF: 1706.3/3

Left In: -35.653 $\pm$ 0.581  $\chi^2$ /NDF: 4958.4/8

-57.692 $\pm$ 0.544  $\chi^2$ /NDF: 7020.6/12

-50.307 $\pm$ 0.506  $\chi^2$ /NDF: 9317.0/12

reg\_asym\_atr\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 28.431+/-0.699  $\chi^2/\text{NDF}$ : 201.8/3

Left Out: 23.318+/-0.503  $\chi^2/\text{NDF}$ : 453.6/8

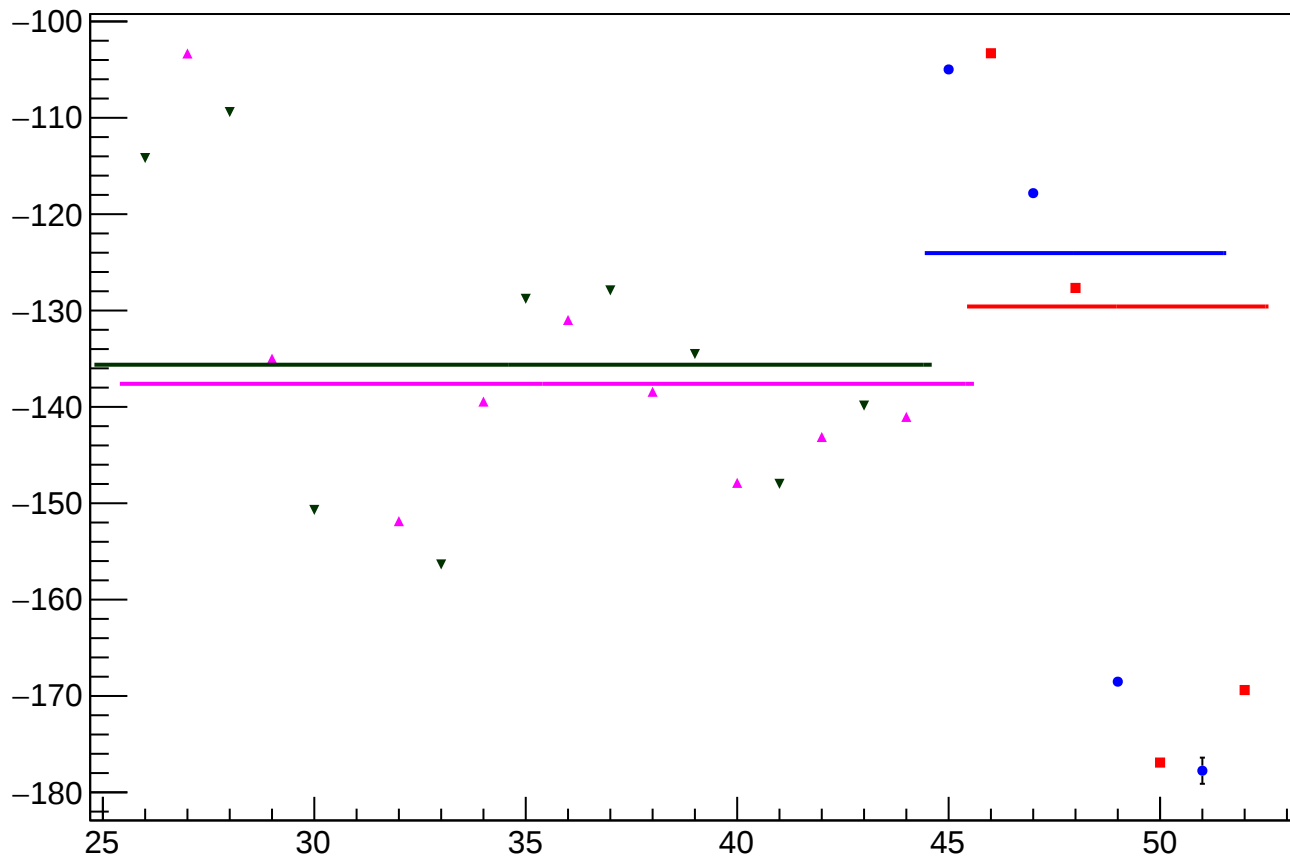
Right Out: 31.014+/-0.788  $\chi^2/\text{NDF}$ : 381.4/3

Left In: 30.868+/-0.424  $\chi^2/\text{NDF}$ : 480.3/8

25.062+/-0.408  $\chi^2/\text{NDF}$ : 690.7/12

30.901+/-0.373  $\chi^2/\text{NDF}$ : 861.7/12

reg\_asym\_atr\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -124.040 $\pm$ 0.157  $\chi^2$ /NDF: 26652.6/3

Left Out: -135.624 $\pm$ 0.114  $\chi^2$ /NDF:18316.3/8

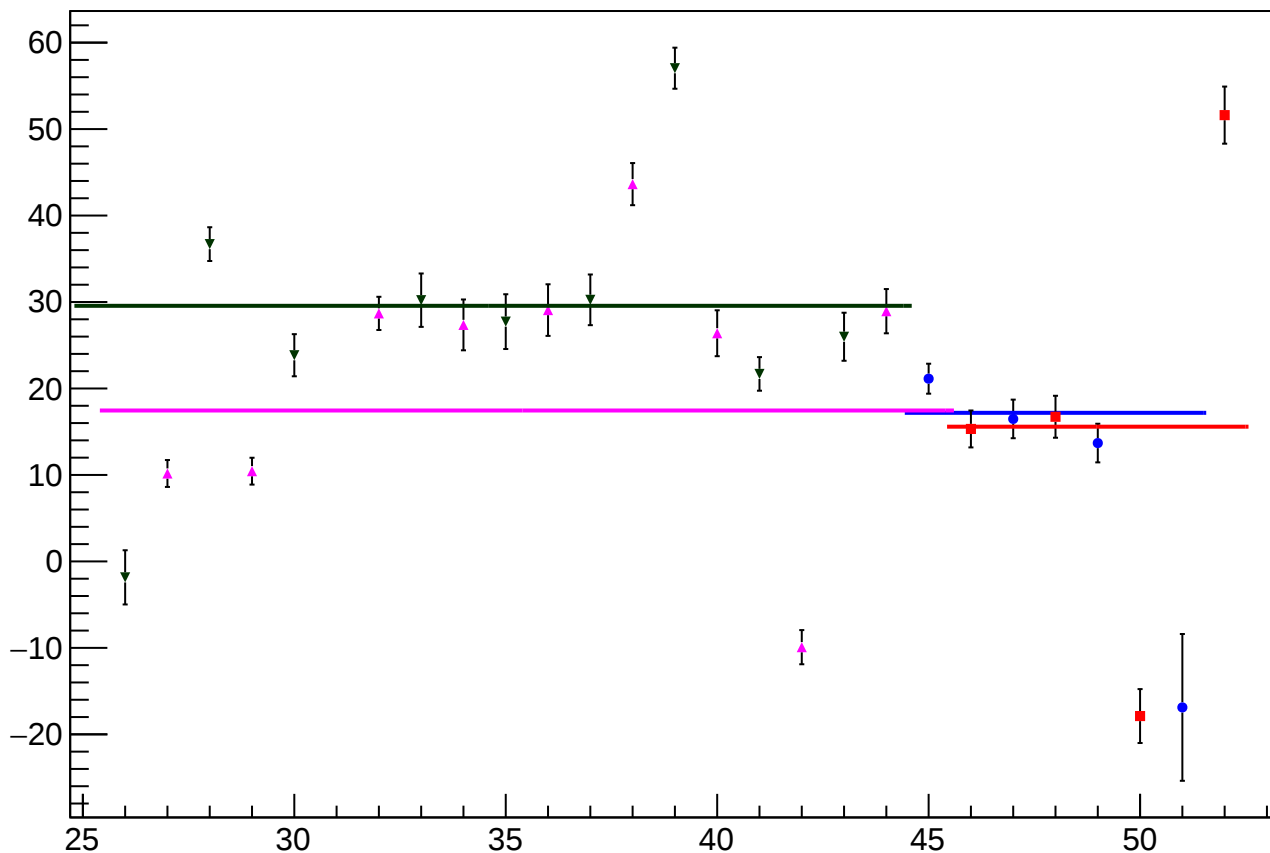
Right Out: -129.581 $\pm$ 0.174  $\chi^2$ /NDF: 26360.8/3

Left In: -137.605 $\pm$ 0.100  $\chi^2$ /NDF:21119.1/8

-131.616 $\pm$ 0.092  $\chi^2$ /NDF: 48526.3/12

-135.629 $\pm$ 0.087  $\chi^2$ /NDF: 49076.5/12

# reg\_asym\_atr\_avg\_diff\_bpm4eY\_slope vs slug



Right In:  $17.184 \pm 1.156$   $\chi^2/\text{NDF}$ : 23.8/3

Left Out:  $29.561 \pm 0.838$   $\chi^2/\text{NDF}$ : 271.6/8

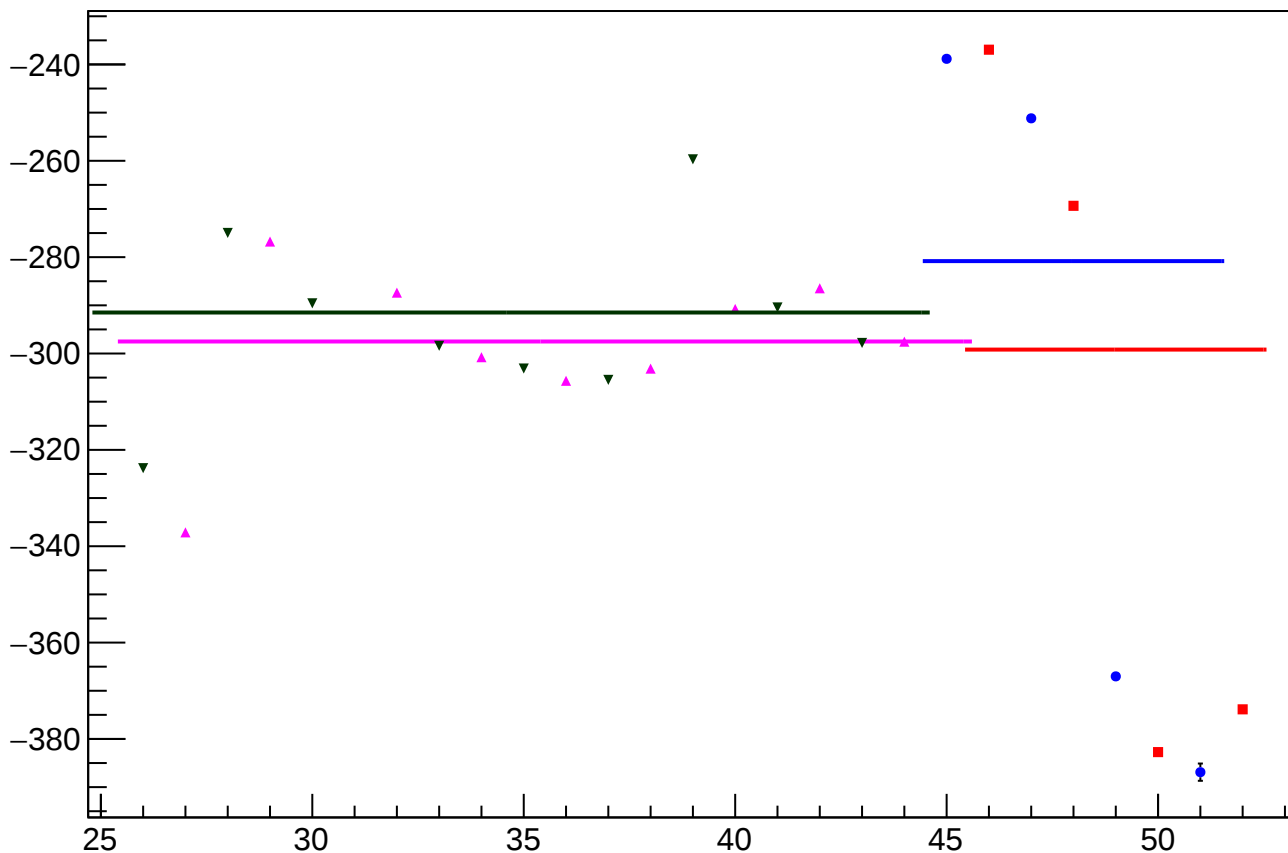
Right Out:  $15.581 \pm 1.309$   $\chi^2/\text{NDF}$ : 234.5/3

Left In:  $17.454 \pm 0.699$   $\chi^2/\text{NDF}$ : 441.9/8

$25.301 \pm 0.678$   $\chi^2/\text{NDF}$ : 370.6/12

$17.038 \pm 0.617$   $\chi^2/\text{NDF}$ : 677.9/12

# reg\_asym\_atr\_avg\_diff\_bpm11X\_slope vs slug



Right In: -280.820+/-0.226  $\chi^2/\text{NDF}$ : 63749.7/3

Left Out: -291.489+/-0.156  $\chi^2/\text{NDF}$ : 12241.2/8

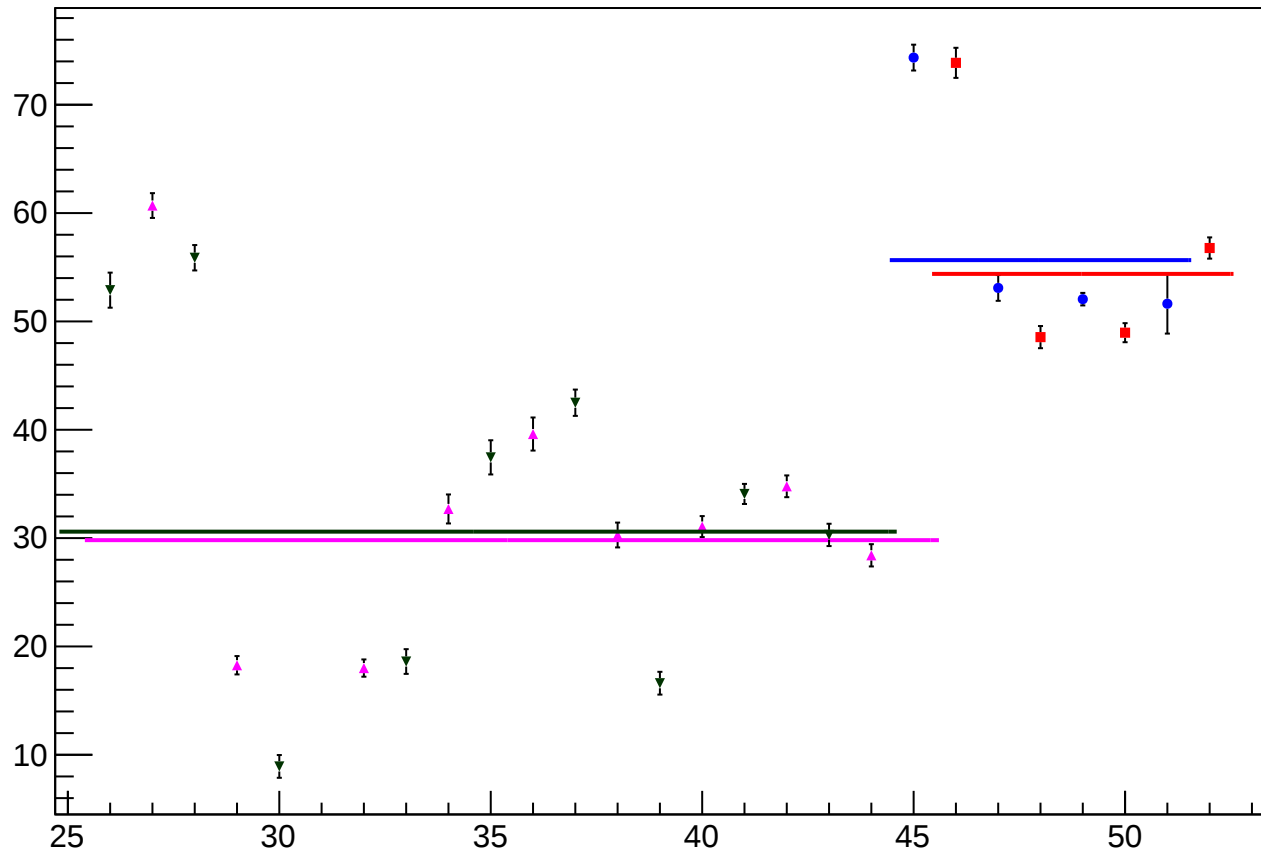
Right Out: -299.185+/-0.246  $\chi^2/\text{NDF}$ : 65237.9/3

Left In: -297.505+/-0.148  $\chi^2/\text{NDF}$ : 15085.1/8

-288.050+/-0.129  $\chi^2/\text{NDF}$ : 77494.6/12

-297.954+/-0.127  $\chi^2/\text{NDF}$ : 80357.3/12

# reg\_asym\_atr\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 55.658 +/- 0.470  $\chi^2/\text{NDF}$ : 291.2/3

Left Out: 30.597 +/- 0.381  $\chi^2/\text{NDF}$ : 1496.6/8

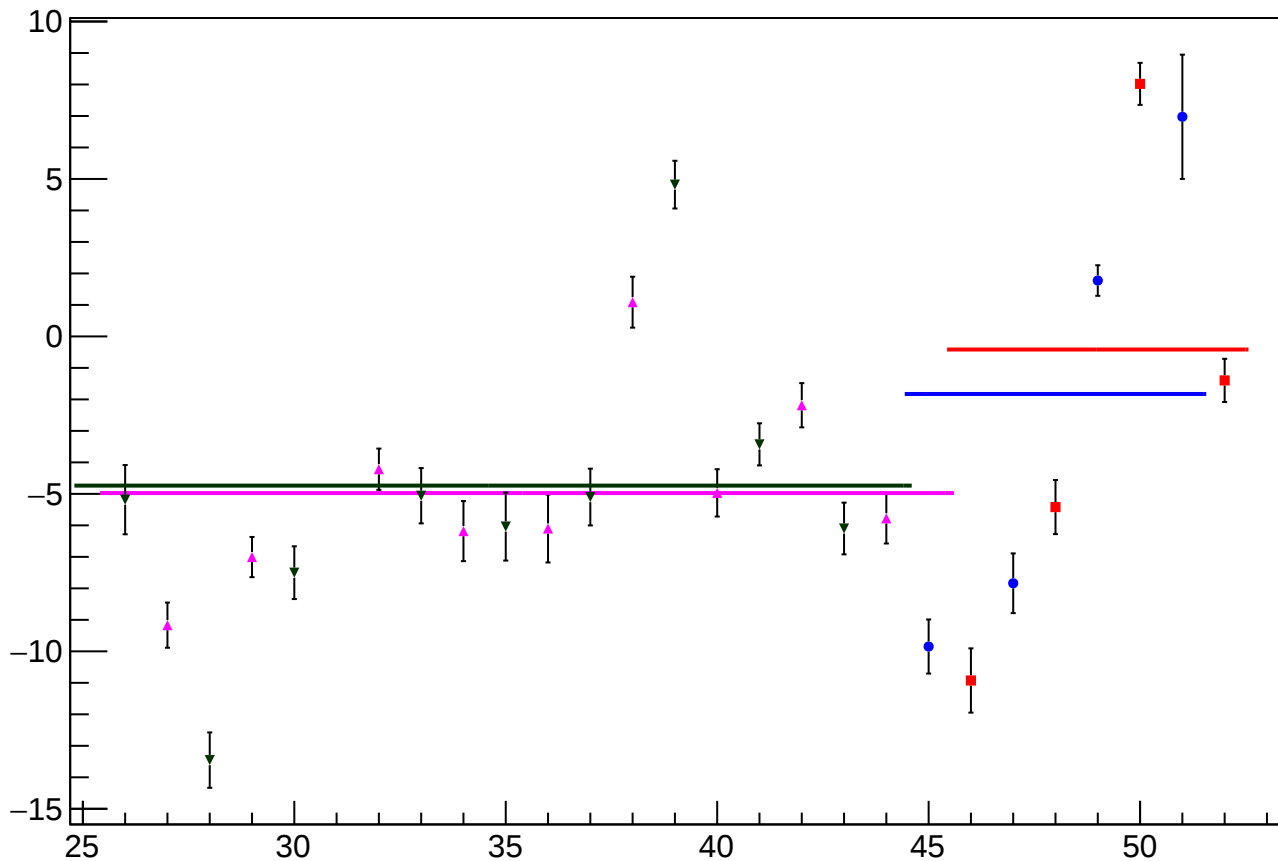
Right Out: 54.387 +/- 0.513  $\chi^2/\text{NDF}$ : 273.4/3

Left In: 29.811 +/- 0.343  $\chi^2/\text{NDF}$ : 1208.1/8

40.558 +/- 0.296  $\chi^2/\text{NDF}$ : 3504.0/12

37.423 +/- 0.285  $\chi^2/\text{NDF}$ : 3068.6/12

# reg\_asym\_atr\_dd\_diff\_bpm4aY\_slope vs slug



Right In:  $-1.828 \pm 0.379$   $\chi^2/\text{NDF}: 202.4/3$

Left Out:  $-4.737 \pm 0.284$   $\chi^2/\text{NDF}: 276.8/8$

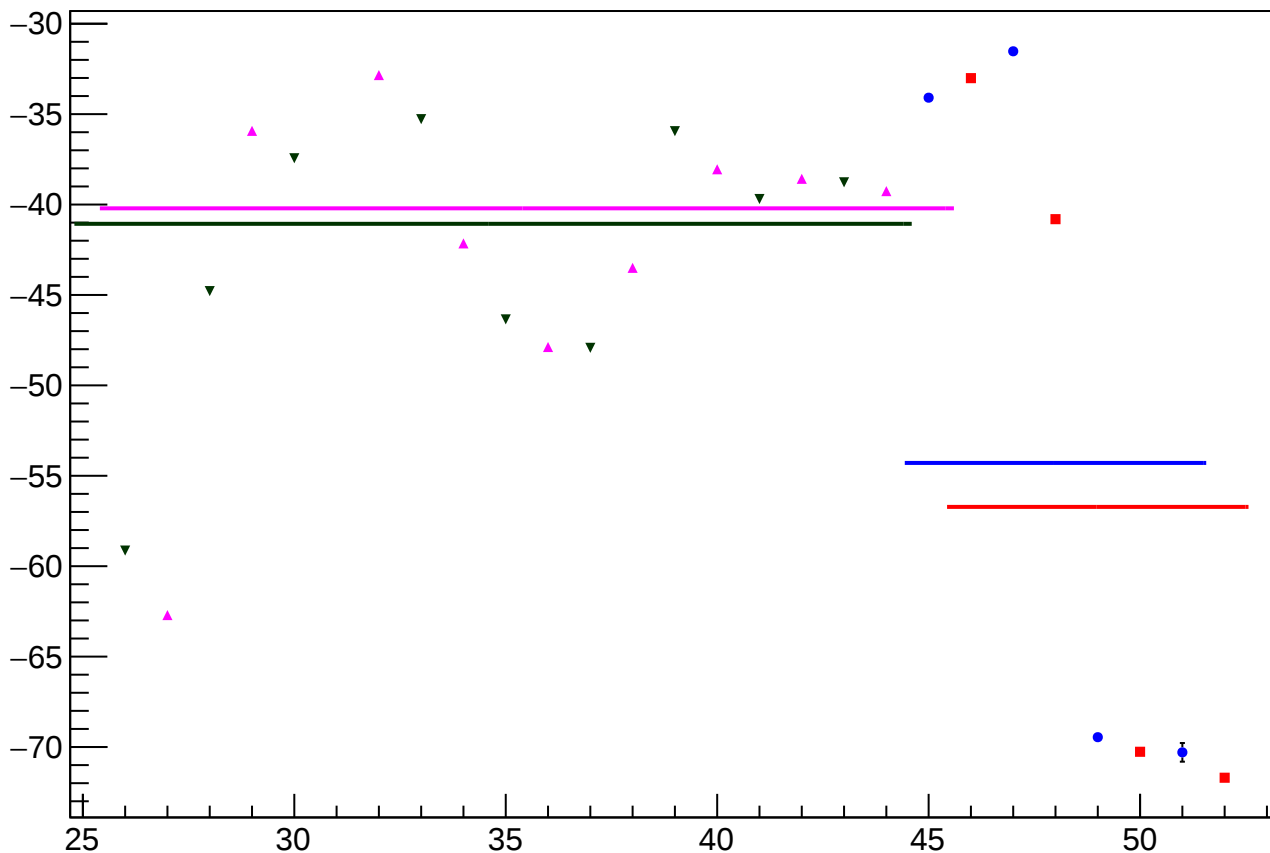
Right Out:  $-0.416 \pm 0.387$   $\chi^2/\text{NDF}: 301.9/3$

Left In:  $-4.974 \pm 0.253$   $\chi^2/\text{NDF}: 121.4/8$

$-3.690 \pm 0.227$   $\chi^2/\text{NDF}: 517.0/12$

$-3.605 \pm 0.212$   $\chi^2/\text{NDF}: 520.5/12$

reg\_asym\_atr\_dd\_diff\_bpm4eX\_slope vs slug



Right In:  $-54.289 \pm 0.089$   $\chi^2/\text{NDF}$ : 41477.7/3

Left Out:  $-41.066 \pm 0.063$   $\chi^2/\text{NDF}$ : 9369.8/8

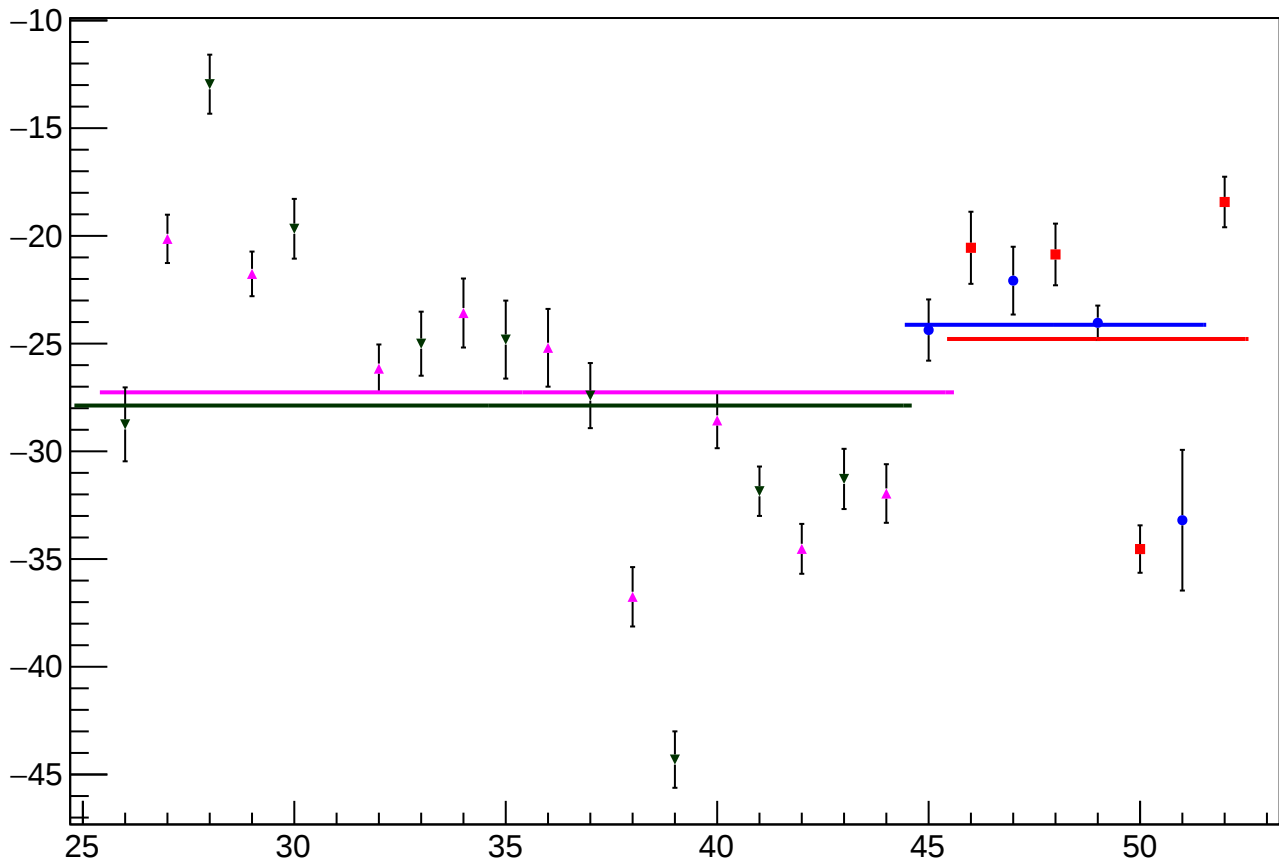
Right Out:  $-56.720 \pm 0.091$   $\chi^2/\text{NDF}$ : 34293.1/3

Left In:  $-40.210 \pm 0.058$   $\chi^2/\text{NDF}$ : 18072.5/8

$-45.536 \pm 0.052$   $\chi^2/\text{NDF}$ : 65556.7/12

$-45.045 \pm 0.049$   $\chi^2/\text{NDF}$ : 75721.8/12

# reg\_asym\_atr\_dd\_diff\_bpm4eY\_slope vs slug



Right In:  $-24.127 \pm 0.625$   $\chi^2/\text{NDF}: 9.5/3$

Left Out:  $-27.875 \pm 0.474$   $\chi^2/\text{NDF}: 335.8/8$

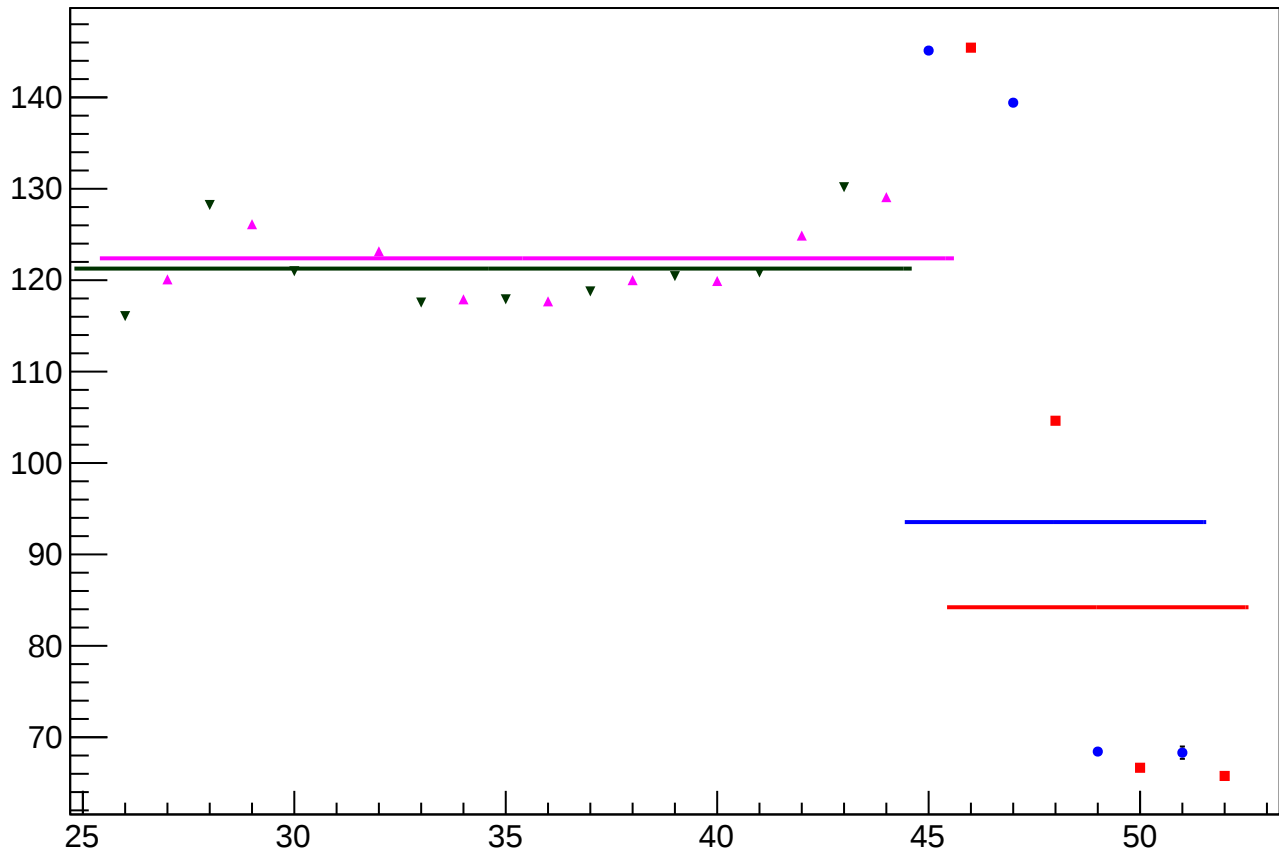
Right Out:  $-24.786 \pm 0.646$   $\chi^2/\text{NDF}: 121.8/3$

Left In:  $-27.262 \pm 0.421$   $\chi^2/\text{NDF}: 175.8/8$

$-26.505 \pm 0.378$   $\chi^2/\text{NDF}: 368.0/12$

$-26.523 \pm 0.353$   $\chi^2/\text{NDF}: 307.9/12$

# reg\_asym\_atr\_dd\_diff\_bpm11X\_slope vs slug



Right In: 93.539+/-0.121  $\chi^2/\text{NDF}$ : 84305.5/3

Left Out: 121.269+/-0.087  $\chi^2/\text{NDF}$ : 2757.8/8

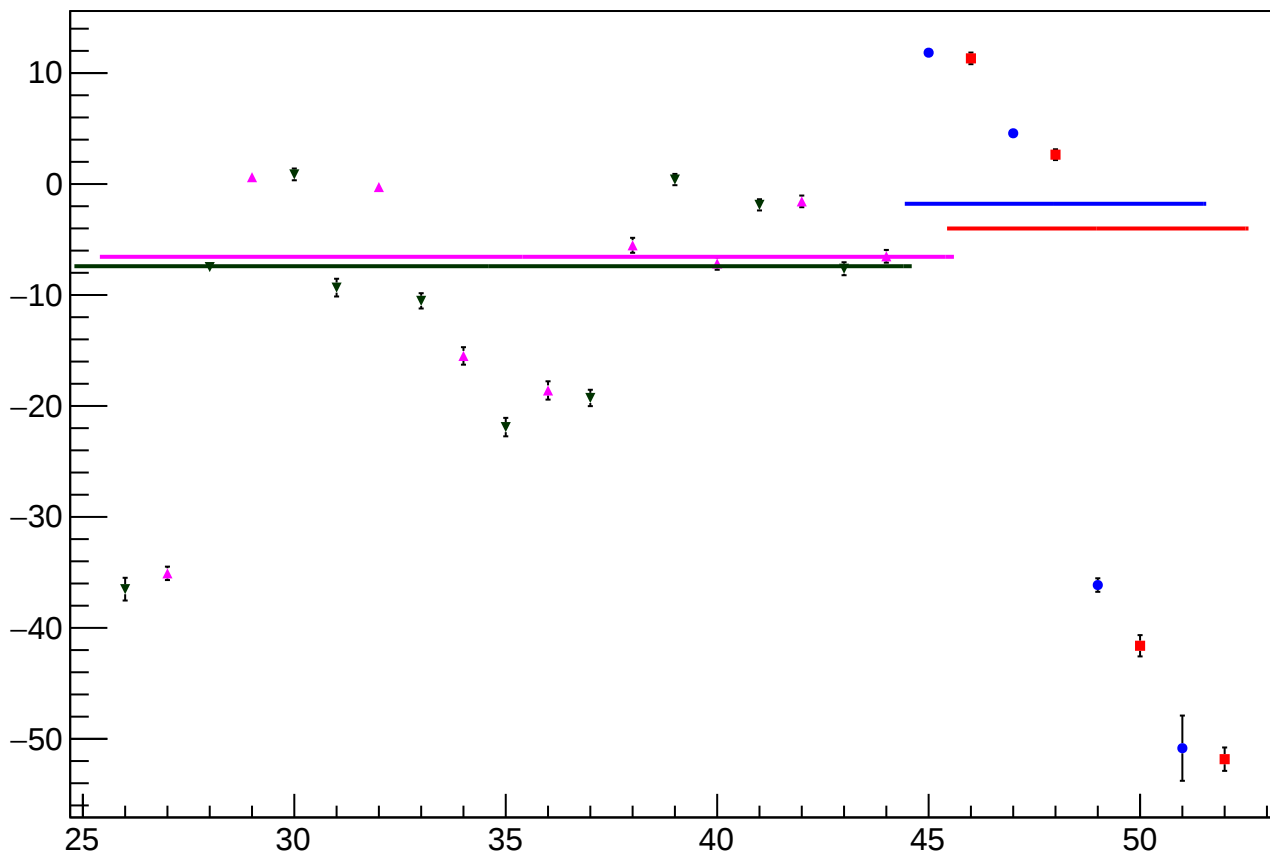
Right Out: 84.221+/-0.115  $\chi^2/\text{NDF}$ : 57634.7/3

Left In: 122.391+/-0.087  $\chi^2/\text{NDF}$ : 1757.6/8

111.861+/-0.070  $\chi^2/\text{NDF}$ : 121856.3/12

108.582+/-0.069  $\chi^2/\text{NDF}$ : 129120.0/12

# reg\_asym\_at1\_avg\_diff\_bpm4aX\_slope vs slug



Right In: -1.779+/-0.282  $\chi^2/\text{NDF}$ : 4552.2/3

Left Out: -7.406+/-0.192  $\chi^2/\text{NDF}$ :1994.4/9

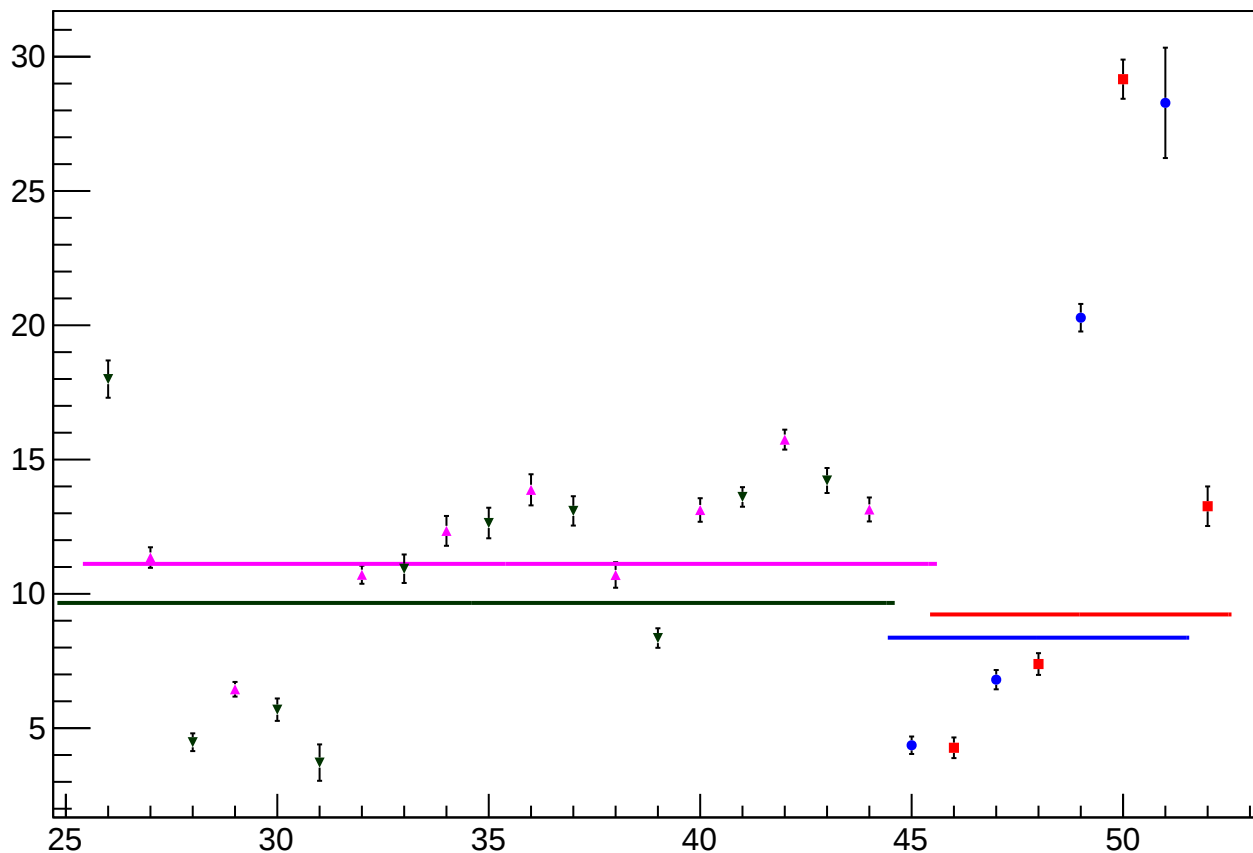
Right Out: -4.007+/-0.319  $\chi^2/\text{NDF}$ : 4635.3/3

Left In: -6.558+/-0.179  $\chi^2/\text{NDF}$ :3282.1/8

-5.624+/-0.158  $\chi^2/\text{NDF}$ : 6819.3/13

-5.947+/-0.156  $\chi^2/\text{NDF}$ : 7966.1/12

# reg\_asym\_at1\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 8.369+/-0.217  $\chi^2/\text{NDF}$ : 803.6/3

Left Out: 9.662+/-0.143  $\chi^2/\text{NDF}$ : 856.3/9

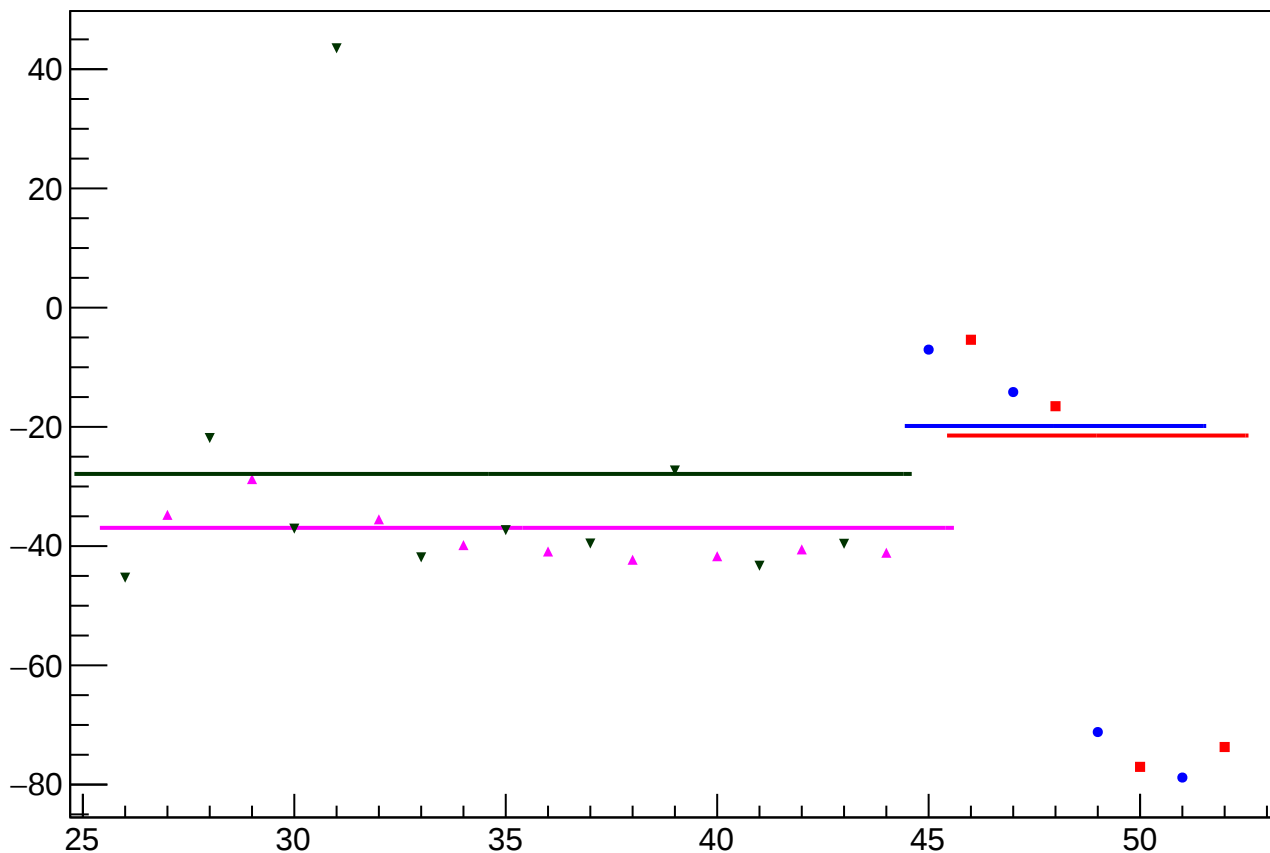
Right Out: 9.233+/-0.246  $\chi^2/\text{NDF}$ : 963.4/3

Left In: 11.116+/-0.132  $\chi^2/\text{NDF}$ : 518.9/8

9.270+/-0.119  $\chi^2/\text{NDF}$ : 1684.7/13

10.693+/-0.116  $\chi^2/\text{NDF}$ : 1527.9/12

reg\_asym\_at1\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -19.849 $\pm$ 0.048  $\chi^2/\text{NDF}$ : 216218.4/3

Left Out: -27.892 $\pm$ 0.032  $\chi^2/\text{NDF}$ : 549678.9/9

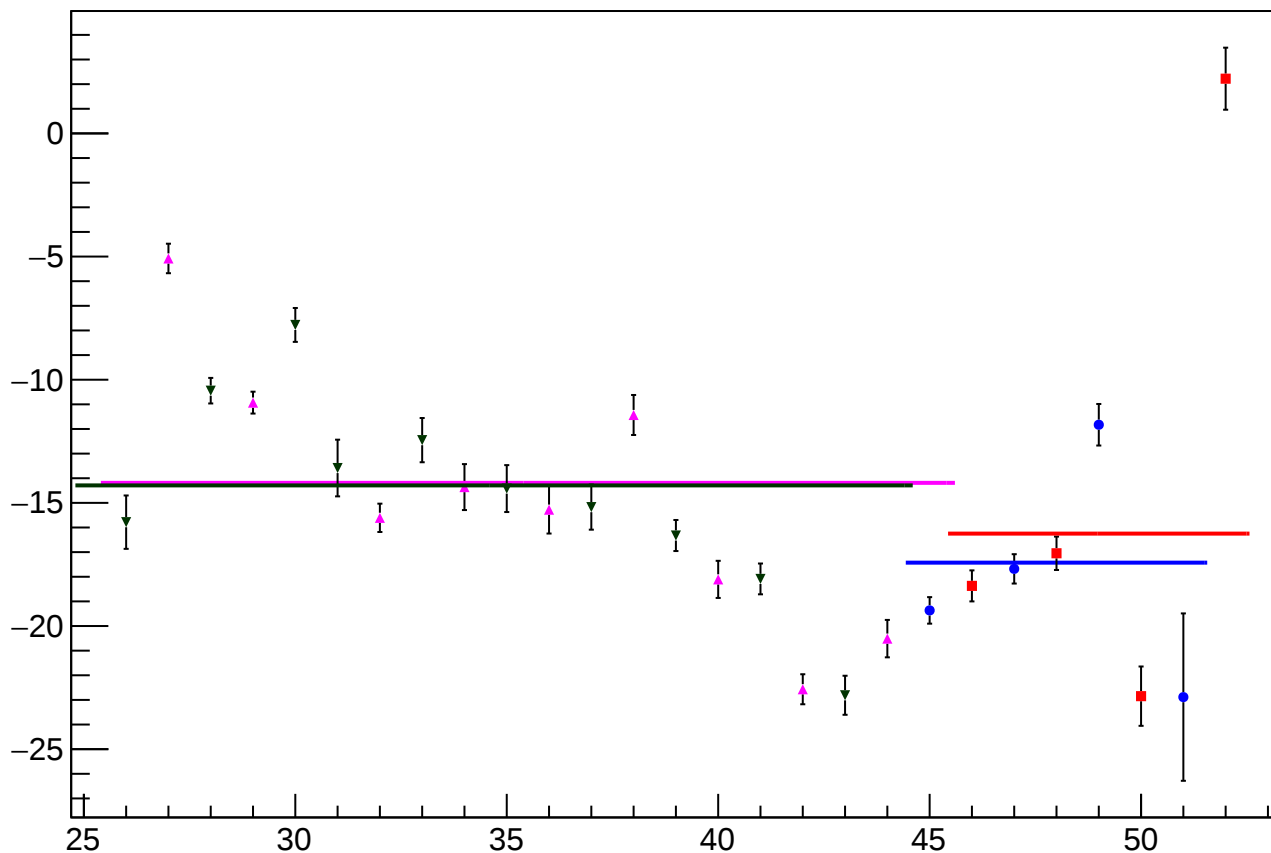
Right Out: -21.452 $\pm$ 0.053  $\chi^2/\text{NDF}$ : 218115.2/3

Left In: -36.937 $\pm$ 0.031  $\chi^2/\text{NDF}$ : 23653.1/8

-25.447 $\pm$ 0.026  $\chi^2/\text{NDF}$ : 785415.8/13

-33.063 $\pm$ 0.027  $\chi^2/\text{NDF}$ : 305125.6/12

# reg\_asym\_at1\_avg\_diff\_bpm4eY\_slope vs slug



Right In:  $-17.427 \pm 0.359$   $\chi^2/\text{NDF}: 59.8/3$

Left Out:  $-14.291 \pm 0.238$   $\chi^2/\text{NDF}: 314.9/9$

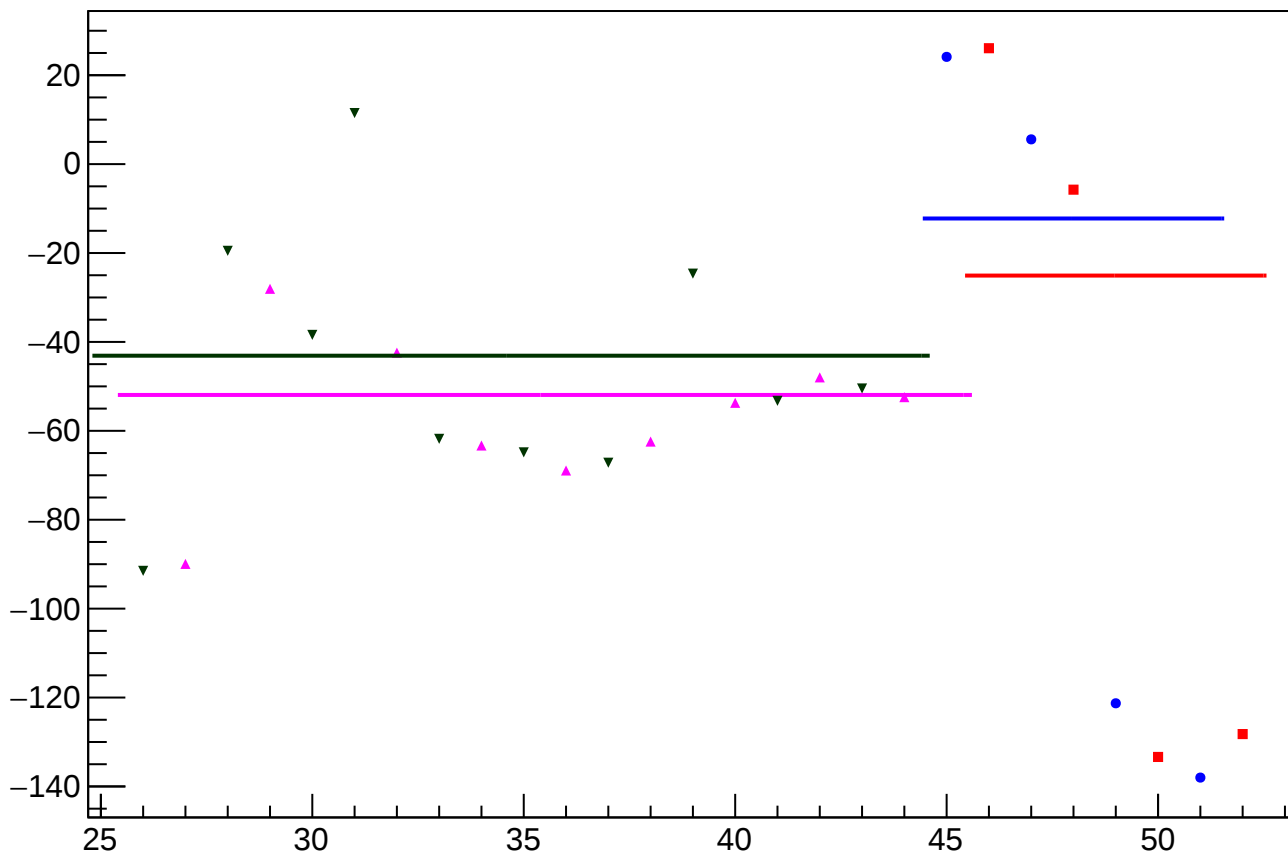
Right Out:  $-16.248 \pm 0.408$   $\chi^2/\text{NDF}: 257.8/3$

Left In:  $-14.187 \pm 0.219$   $\chi^2/\text{NDF}: 589.2/8$

$-15.249 \pm 0.198$   $\chi^2/\text{NDF}: 427.7/13$

$-14.650 \pm 0.193$   $\chi^2/\text{NDF}: 866.8/12$

reg\_asym\_at1\_avg\_diff\_bpm11X\_slope vs slug



Right In:  $-12.233 \pm 0.070$   $\chi^2/\text{NDF}$ : 629240.1/3

Left Out:  $-43.100 \pm 0.044$   $\chi^2/\text{NDF}$ : 296352.7/9

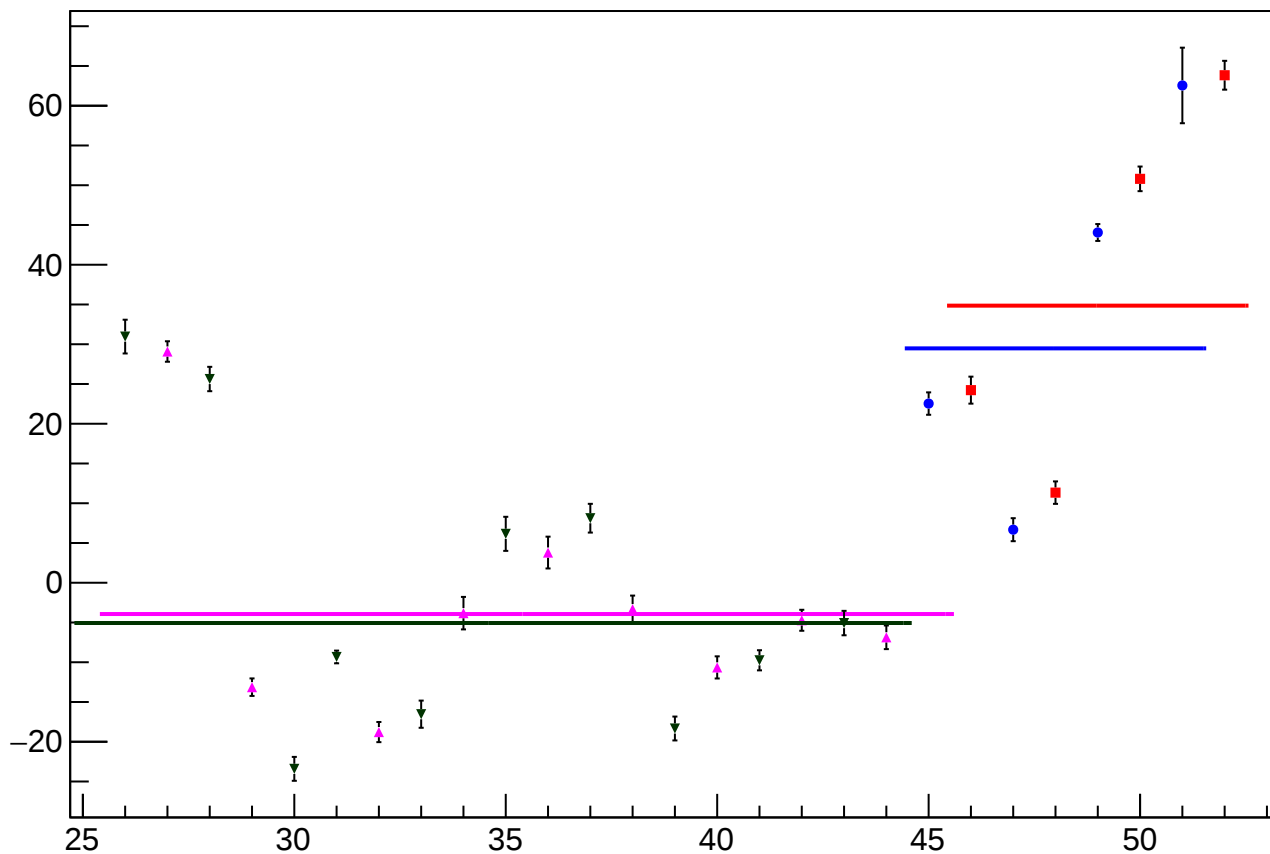
Right Out:  $-25.074 \pm 0.078$   $\chi^2/\text{NDF}$ : 666494.8/3

Left In:  $-51.929 \pm 0.046$   $\chi^2/\text{NDF}$ : 149071.1/8

$-34.405 \pm 0.037$   $\chi^2/\text{NDF}$ : 1064092.3/13

$-45.017 \pm 0.039$   $\chi^2/\text{NDF}$ : 904450.2/12

# reg\_asym\_at1\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 29.480 +/- 0.723  $\chi^2/\text{NDF}$ : 509.6/3

Left Out: -5.063 +/- 0.447  $\chi^2/\text{NDF}$ : 1084.1/9

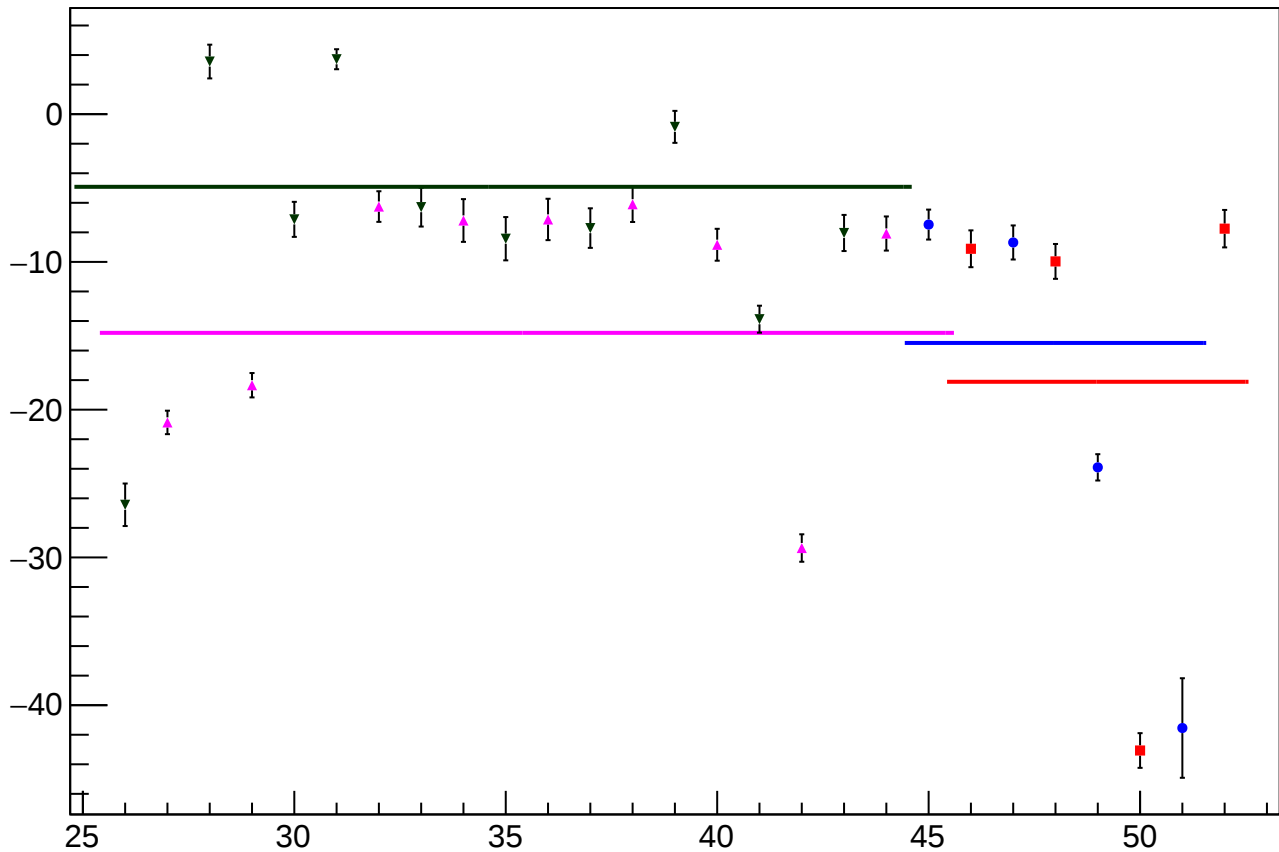
Right Out: 34.854 +/- 0.798  $\chi^2/\text{NDF}$ : 677.9/3

Left In: -3.935 +/- 0.475  $\chi^2/\text{NDF}$ : 906.7/8

4.478 +/- 0.380  $\chi^2/\text{NDF}$ : 3245.3/13

6.221 +/- 0.408  $\chi^2/\text{NDF}$ : 3327.8/12

# reg\_asym\_at1\_dd\_diff\_bpm4aY\_slope vs slug



Right In: -15.484 +/- 0.570  $\chi^2/\text{NDF}$ : 246.4/3

Left Out: -4.917 +/- 0.344  $\chi^2/\text{NDF}$ : 572.7/9

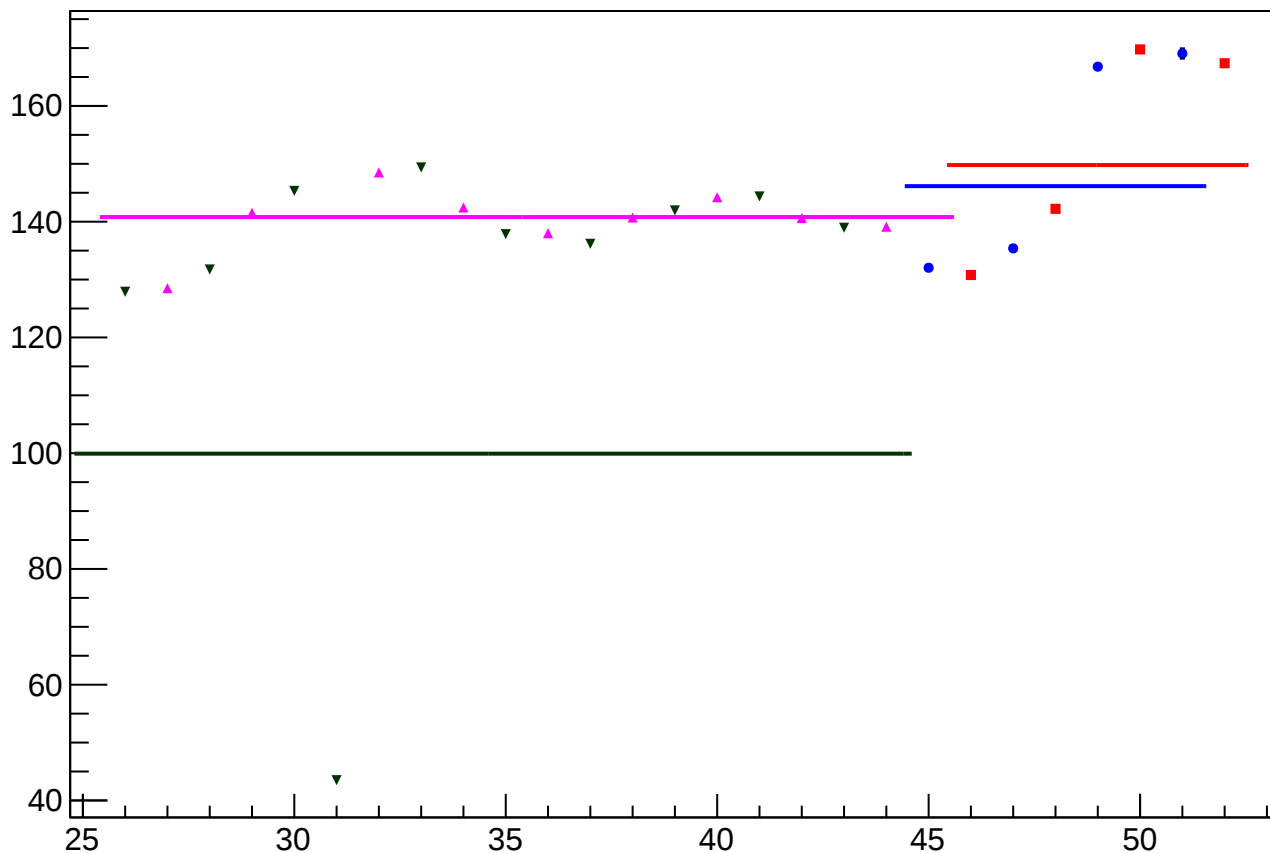
Right Out: -18.113 +/- 0.607  $\chi^2/\text{NDF}$ : 618.4/3

Left In: -14.801 +/- 0.344  $\chi^2/\text{NDF}$ : 564.9/8

-7.732 +/- 0.294  $\chi^2/\text{NDF}$ : 1070.8/13

-15.606 +/- 0.300  $\chi^2/\text{NDF}$ : 1205.8/12

# reg\_asym\_at1\_dd\_diff\_bpm4eX\_slope vs slug



Right In: 146.145 $\pm$ 0.130  $\chi^2$ /NDF: 15510.4/3

Left Out: 99.920 $\pm$ 0.069  $\chi^2$ /NDF: 483835.4/9

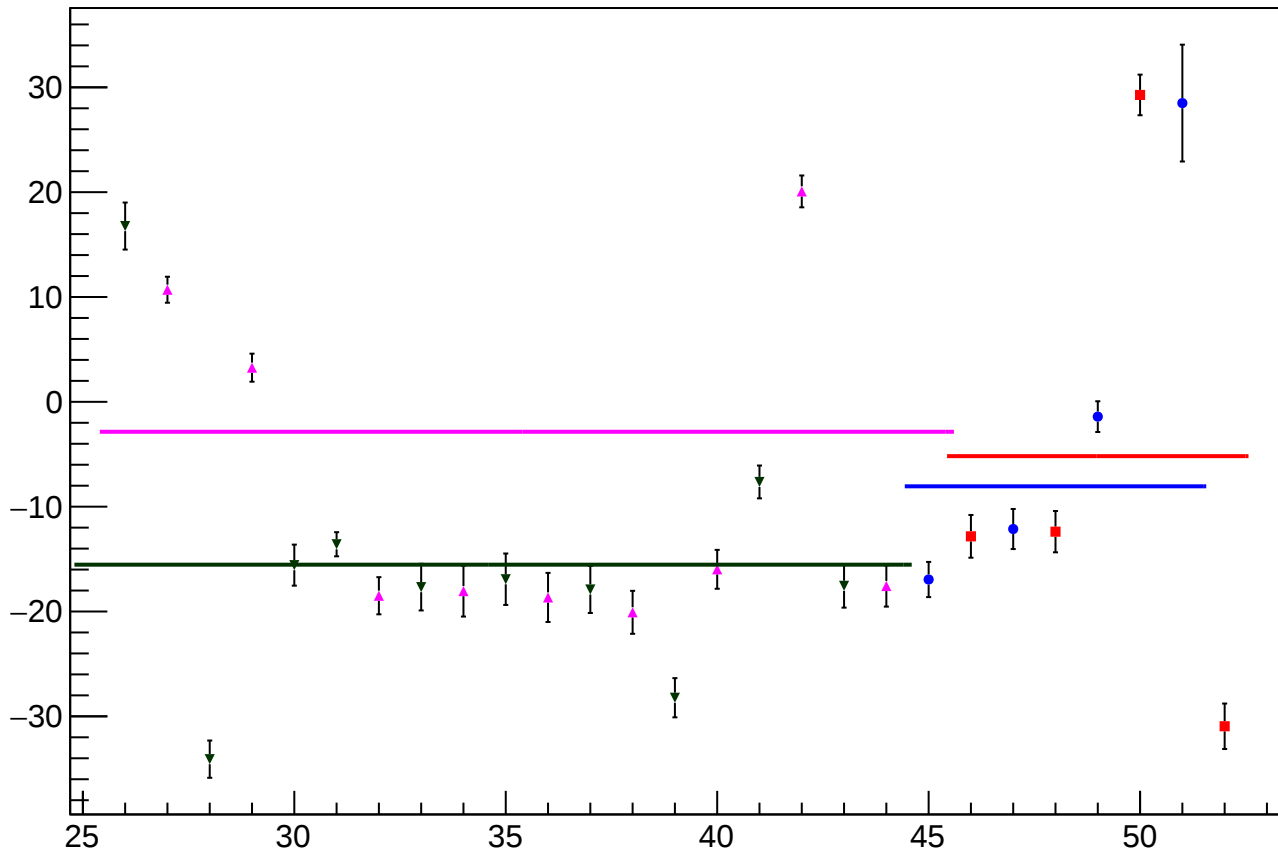
Right Out: 149.786 $\pm$ 0.138  $\chi^2$ /NDF: 14060.6/3

Left In: 140.804 $\pm$ 0.082  $\chi^2$ /NDF: 4715.7/8

110.051 $\pm$ 0.061  $\chi^2$ /NDF: 597806.6/13

143.142 $\pm$ 0.071  $\chi^2$ /NDF: 21890.8/12

# reg\_asym\_at1\_dd\_diff\_bpm4eY\_slope vs slug



Right In:  $-8.059 \pm 0.942$   $\chi^2/\text{NDF}: 96.2/3$

Left Out:  $-15.534 \pm 0.575$   $\chi^2/\text{NDF}: 393.8/9$

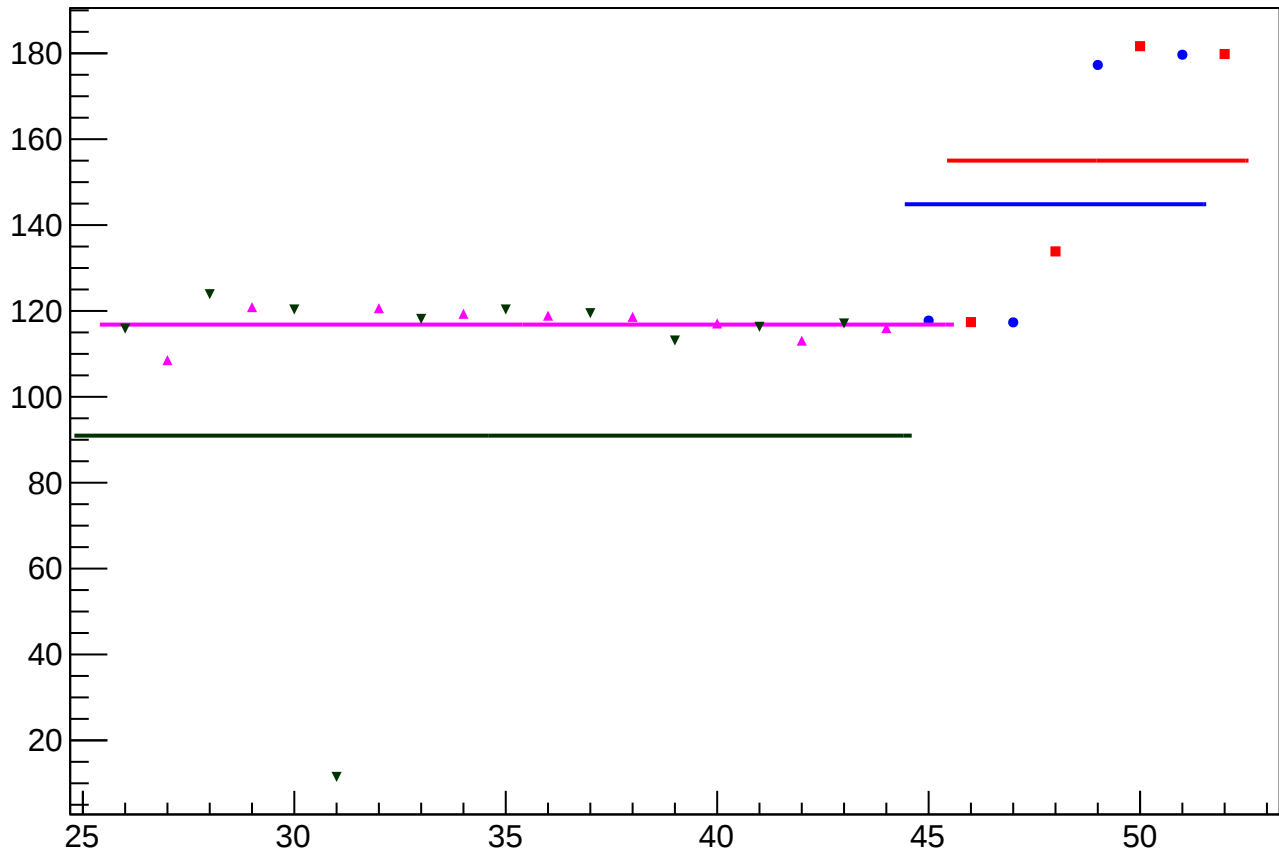
Right Out:  $-5.180 \pm 1.011$   $\chi^2/\text{NDF}: 485.2/3$

Left In:  $-2.855 \pm 0.568$   $\chi^2/\text{NDF}: 707.5/8$

$-13.505 \pm 0.491$   $\chi^2/\text{NDF}: 535.8/13$

$-3.413 \pm 0.495$   $\chi^2/\text{NDF}: 1196.7/12$

# reg\_asym\_at1\_dd\_diff\_bpm11X\_slope vs slug



Right In: 144.849+/-0.183  $\chi^2/\text{NDF}$ : 26481.5/3

Left Out: 90.964+/-0.105  $\chi^2/\text{NDF}$ :199649.1/9

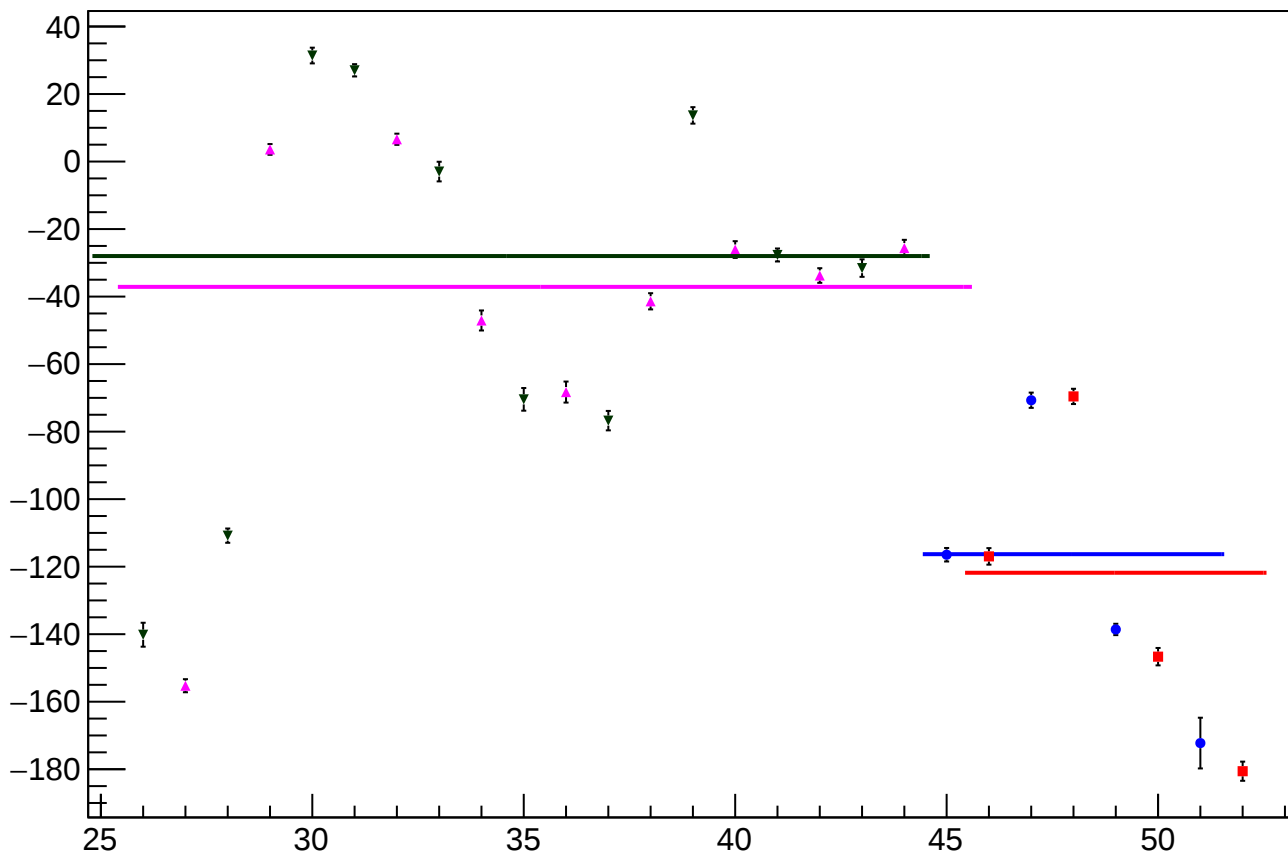
Right Out: 155.018+/-0.185  $\chi^2/\text{NDF}$ : 22406.1/3

Left In: 116.827+/-0.120  $\chi^2/\text{NDF}$ :1139.4/8

104.249+/-0.091  $\chi^2/\text{NDF}$ : 291333.1/13

128.065+/-0.101  $\chi^2/\text{NDF}$ : 53467.5/12

# reg\_asym\_at2\_avg\_diff\_bpm4aX\_slope vs slug



Right In: -116.302+/-1.106  $\chi^2/\text{NDF}$ : 638.5/3

Left Out: -27.991+/-0.766  $\chi^2/\text{NDF}$ : 4906.9/9

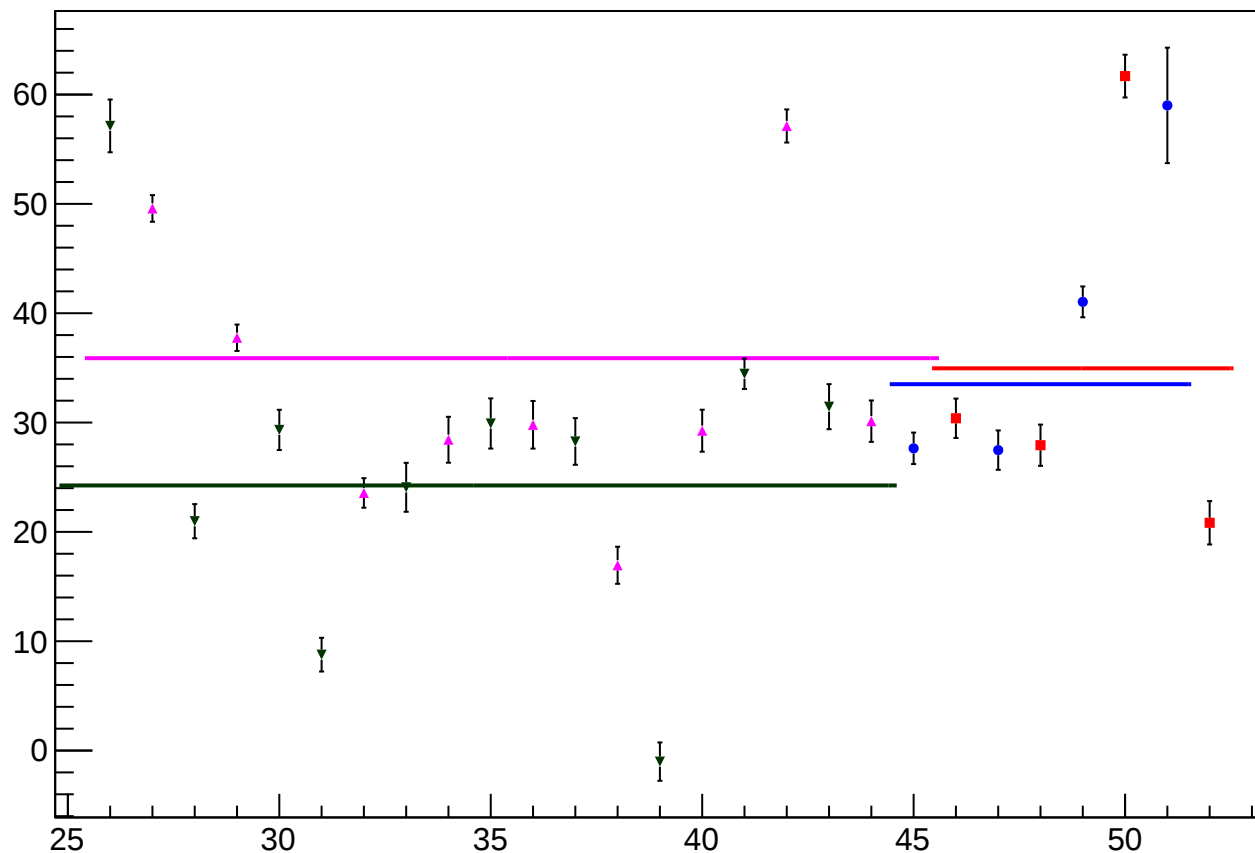
-56.630+/-0.630  $\chi^2/\text{NDF}$ : 9851.6/13

Right Out: -121.806+/-1.253  $\chi^2/\text{NDF}$ : 1059.4/3

-57.890+/-0.621  $\chi^2/\text{NDF}$ : 9725.9/12

Left In: -37.121+/-0.714  $\chi^2/\text{NDF}$ : 5219.8/8

# reg\_asym\_at2\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 33.508+/-0.868  $\chi^2/\text{NDF}$ : 79.5/3

Left Out: 24.247+/-0.579  $\chi^2/\text{NDF}$ : 582.0/9

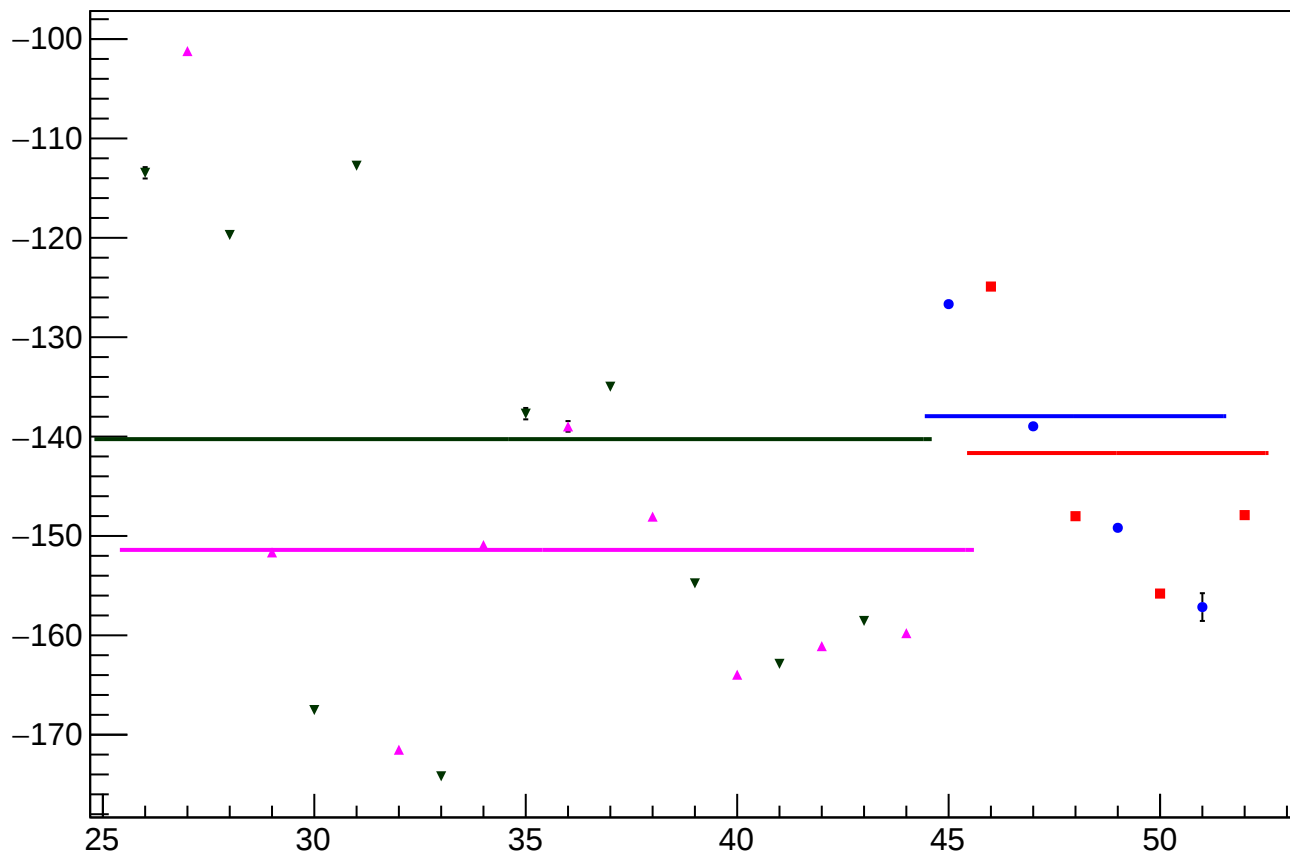
Right Out: 34.961+/-0.951  $\chi^2/\text{NDF}$ : 257.6/3

Left In: 35.888+/-0.522  $\chi^2/\text{NDF}$ : 574.5/8

27.099+/-0.482  $\chi^2/\text{NDF}$ : 740.3/13

35.674+/-0.457  $\chi^2/\text{NDF}$ : 832.9/12

reg\_asym\_at2\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -137.947+/-0.198  $\chi^2/\text{NDF}$ : 2498.9/3

Left Out: -140.257+/-0.122  $\chi^2/\text{NDF}$ : 36380.6/9

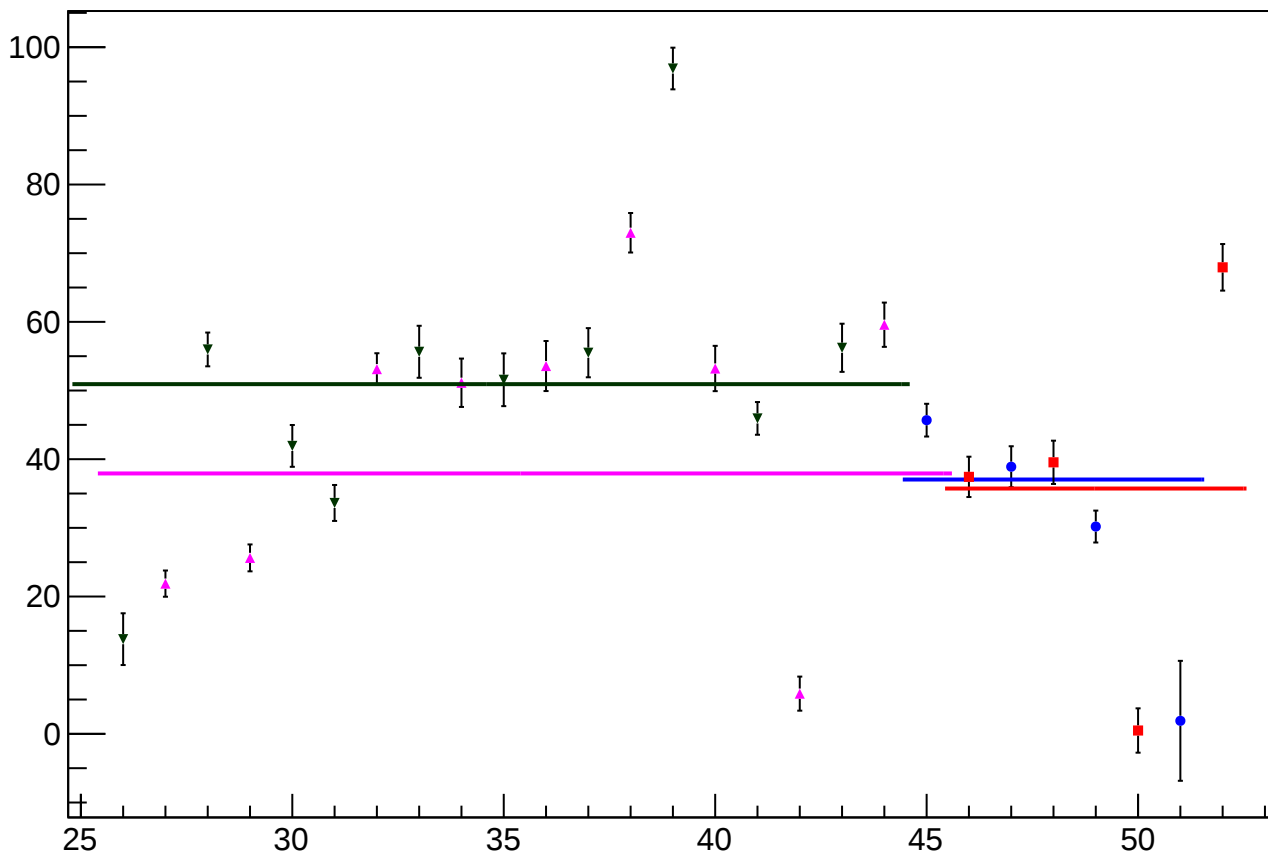
Right Out: -141.657+/-0.215  $\chi^2/\text{NDF}$ : 3272.5/3

Left In: -151.403+/-0.122  $\chi^2/\text{NDF}$ : 30317.9/8

-139.617+/-0.104  $\chi^2/\text{NDF}$ : 38978.4/13

-149.030+/-0.106  $\chi^2/\text{NDF}$ : 35142.9/12

# reg\_asym\_at2\_avg\_diff\_bpm4eY\_slope vs slug



Right In: 37.039+/-1.434  $\chi^2$ /NDF: 38.4/3

Left Out: 50.929+/-0.966  $\chi^2$ /NDF:393.0/9

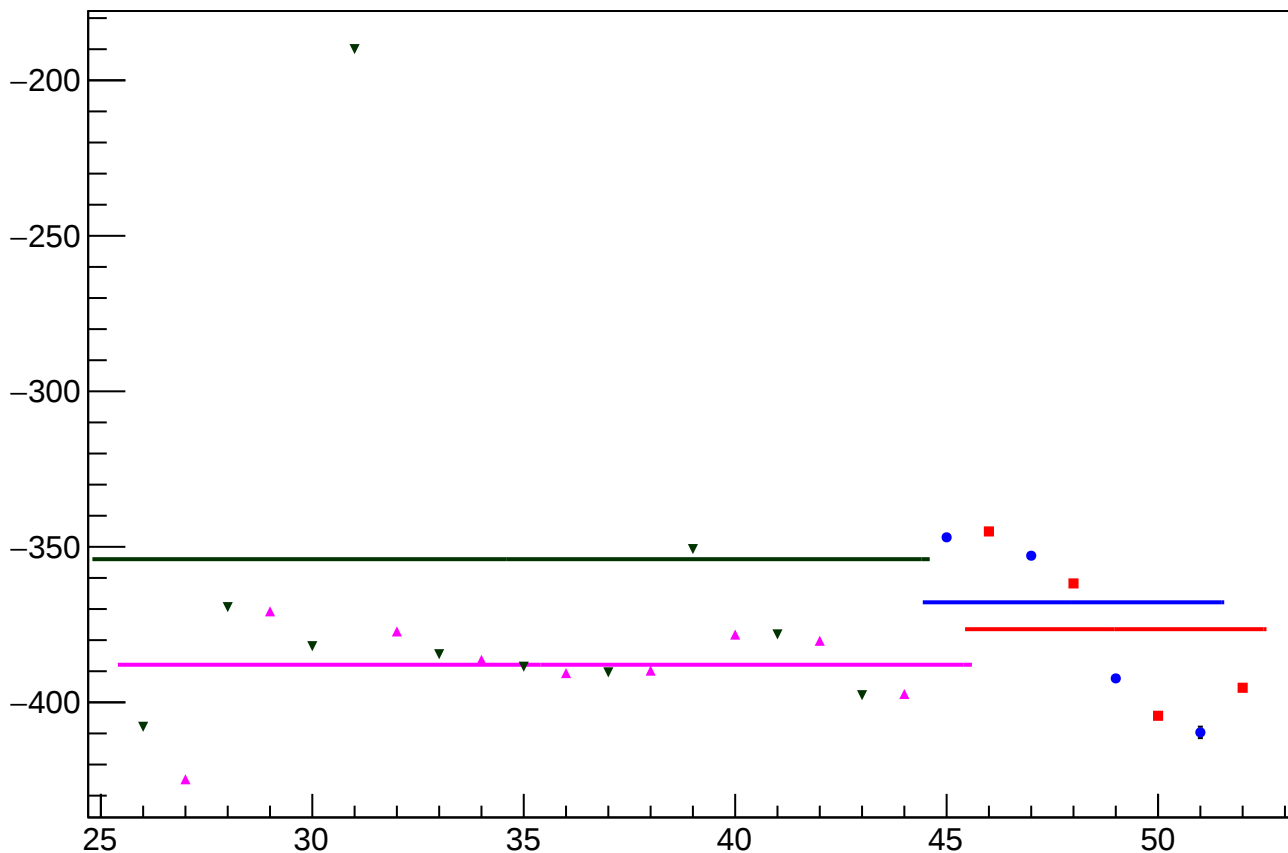
Right Out: 35.728+/-1.582  $\chi^2$ /NDF: 211.1/3

Left In: 37.924+/-0.861  $\chi^2$ /NDF:567.9/8

46.590+/-0.801  $\chi^2$ /NDF: 496.0/13

37.422+/-0.756  $\chi^2$ /NDF: 780.5/12

# reg\_asym\_at2\_avg\_diff\_bpm11X\_slope vs slug



Right In:  $-367.838 \pm 0.280$   $\chi^2/\text{NDF}$ : 6150.9/3

Left Out:  $-353.970 \pm 0.179$   $\chi^2/\text{NDF}$ : 148485.8/9

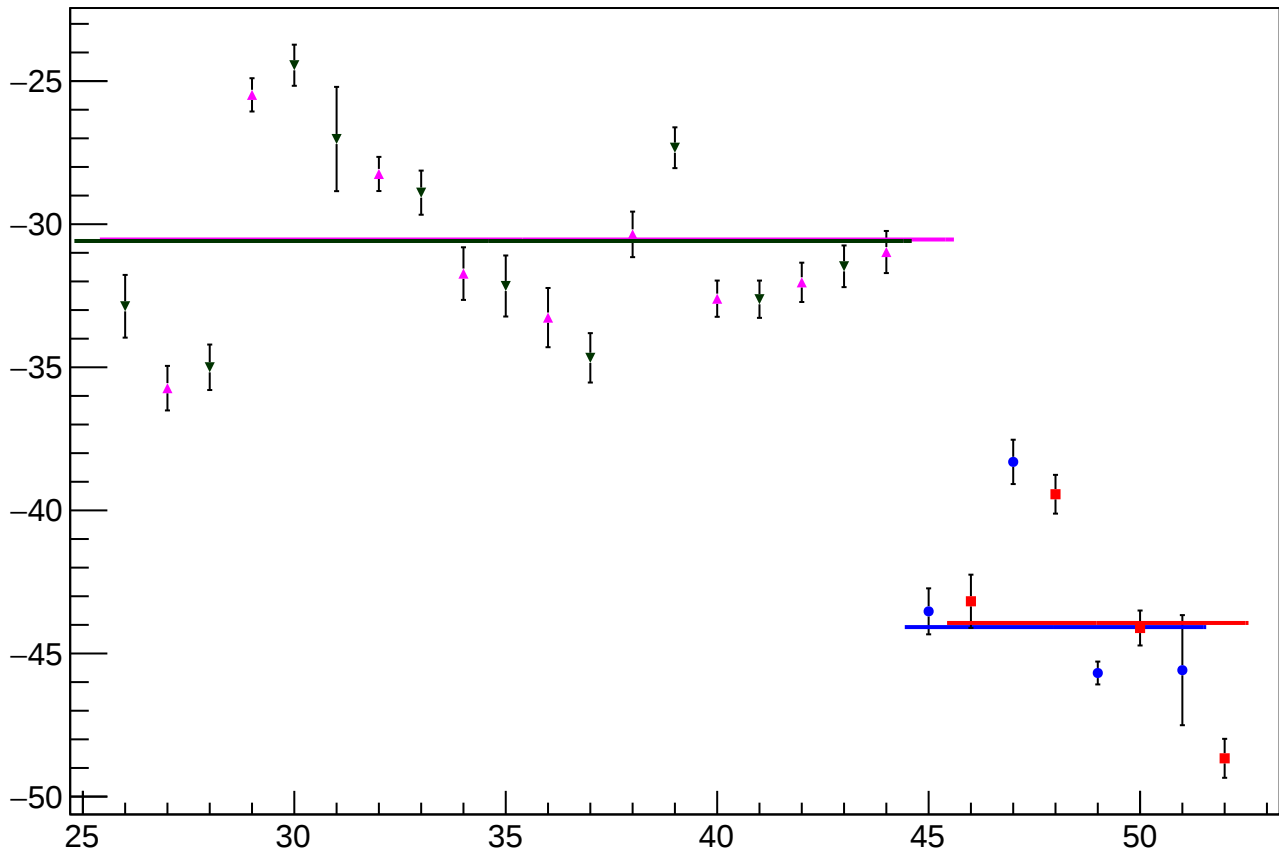
Right Out:  $-376.479 \pm 0.292$   $\chi^2/\text{NDF}$ : 6892.8/3

Left In:  $-387.911 \pm 0.183$   $\chi^2/\text{NDF}$ : 8311.6/8

$-358.000 \pm 0.151$   $\chi^2/\text{NDF}$ : 156380.9/13

$-384.701 \pm 0.155$   $\chi^2/\text{NDF}$ : 16306.1/12

# reg\_asym\_at2\_dd\_diff\_bpm4aX\_slope vs slug



Right In:  $-44.077 \pm 0.320$   $\chi^2/\text{NDF}$ : 72.8/3

Left Out:  $-30.587 \pm 0.260$   $\chi^2/\text{NDF}$ : 173.5/9

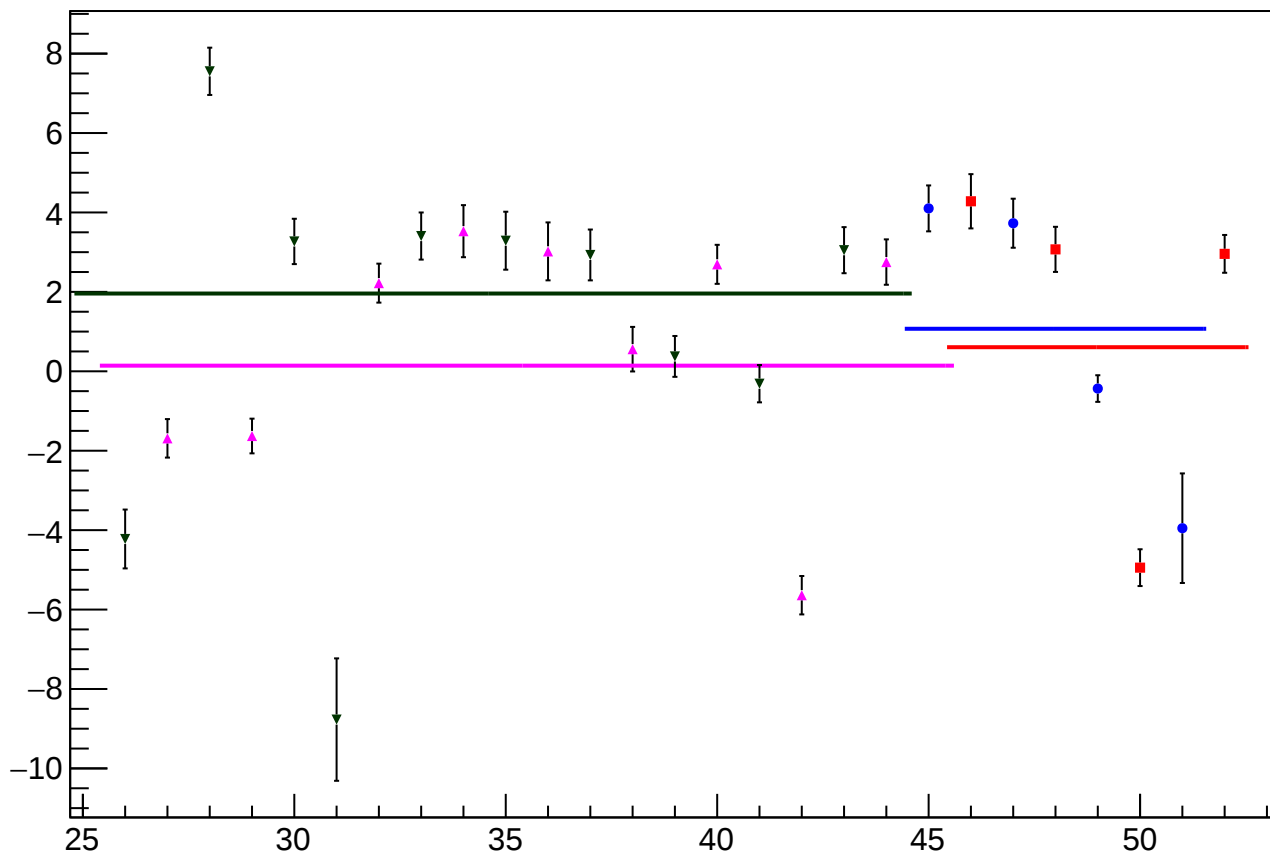
Right Out:  $-43.933 \pm 0.350$   $\chi^2/\text{NDF}$ : 93.1/3

Left In:  $-30.535 \pm 0.239$   $\chi^2/\text{NDF}$ : 159.3/8

$-35.955 \pm 0.202$   $\chi^2/\text{NDF}$ : 1315.9/13

$-34.789 \pm 0.197$   $\chi^2/\text{NDF}$ : 1254.3/12

# reg\_asym\_at2\_dd\_diff\_bpm4aY\_slope vs slug



Right In:  $1.071 \pm 0.258$   $\chi^2/\text{NDF}$ : 79.4/3

Left Out:  $1.958 \pm 0.194$   $\chi^2/\text{NDF}$ : 259.6/9

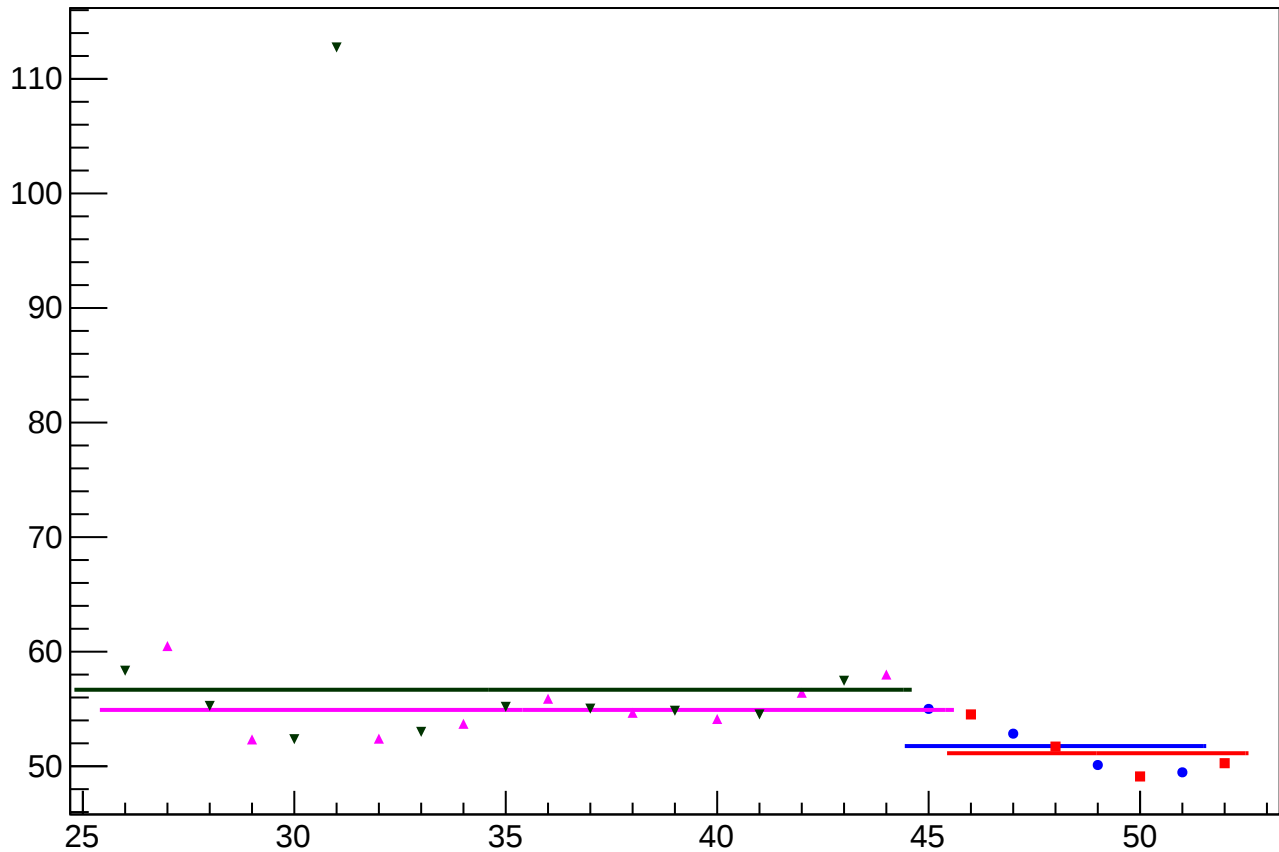
Right Out:  $0.607 \pm 0.264$   $\chi^2/\text{NDF}$ : 215.7/3

Left In:  $0.142 \pm 0.175$   $\chi^2/\text{NDF}$ : 282.1/8

$1.638 \pm 0.155$   $\chi^2/\text{NDF}$ : 346.6/13

$0.284 \pm 0.146$   $\chi^2/\text{NDF}$ : 500.0/12

# reg\_asym\_at2\_dd\_diff\_bpm4eX\_slope vs slug



Right In:  $51.761 \pm 0.060$   $\chi^2/\text{NDF}$ : 1157.2/3

Left Out:  $56.677 \pm 0.043$   $\chi^2/\text{NDF}$ : 56330.1/9

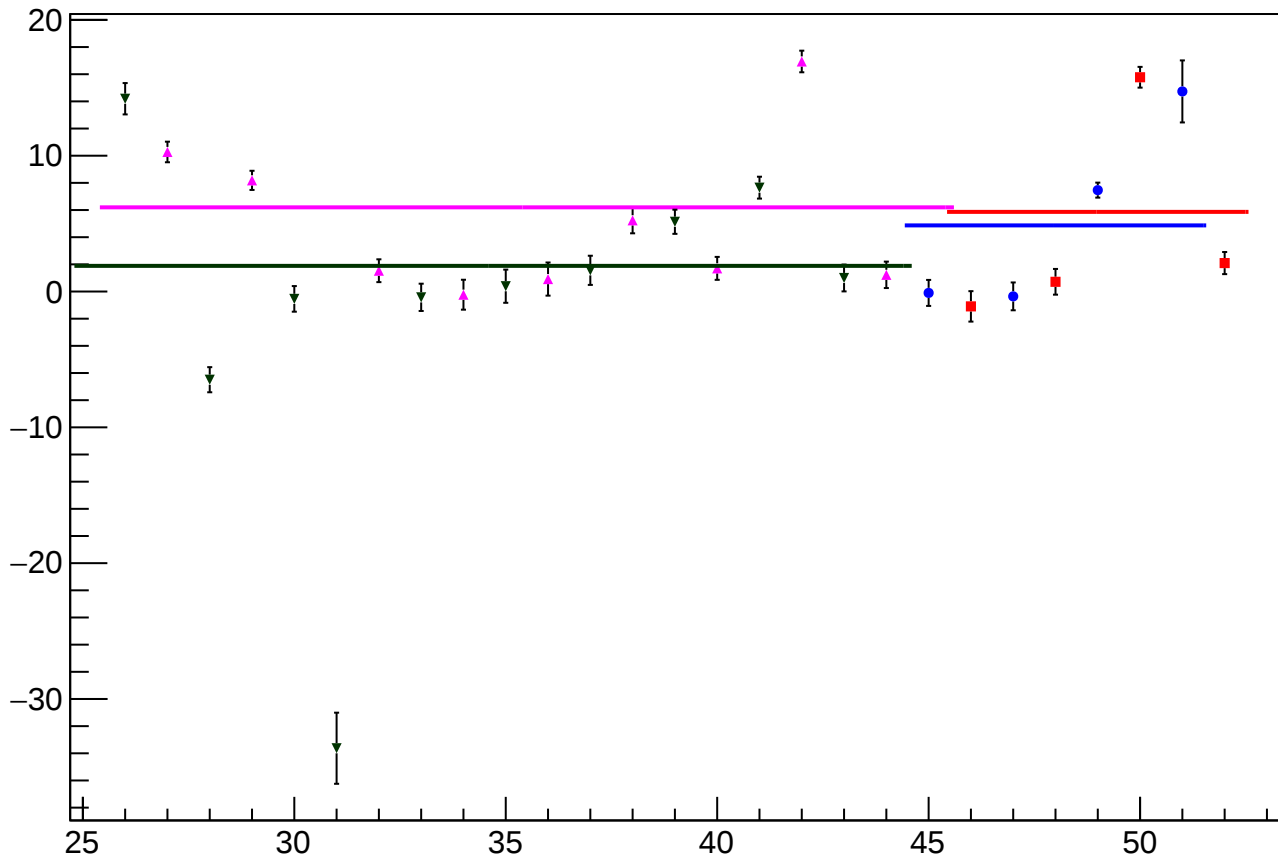
Right Out:  $51.136 \pm 0.062$   $\chi^2/\text{NDF}$ : 960.0/3

Left In:  $54.917 \pm 0.041$   $\chi^2/\text{NDF}$ : 3795.7/8

$55.009 \pm 0.035$   $\chi^2/\text{NDF}$ : 61887.8/13

$53.769 \pm 0.034$   $\chi^2/\text{NDF}$ : 7355.6/12

# reg\_asym\_at2\_dd\_diff\_bpm4eY\_slope vs slug



Right In: 4.869 $\pm$ 0.426  $\chi^2$ /NDF: 93.8/3

Left Out: 1.889 $\pm$ 0.324  $\chi^2$ /NDF: 458.6/9

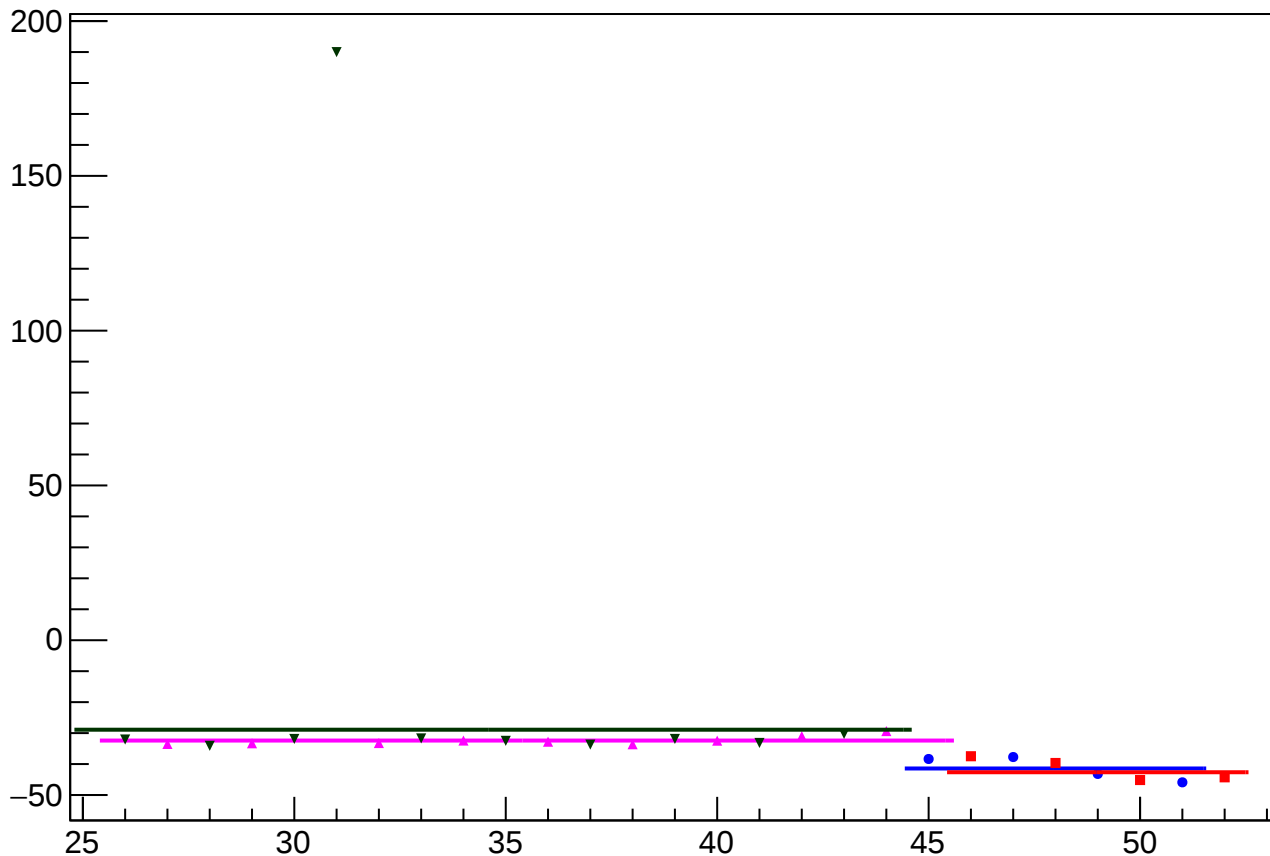
Right Out: 5.864 $\pm$ 0.441  $\chi^2$ /NDF: 257.8/3

Left In: 6.198 $\pm$ 0.291  $\chi^2$ /NDF: 358.2/8

2.980 $\pm$ 0.258  $\chi^2$ /NDF: 583.4/13

6.097 $\pm$ 0.243  $\chi^2$ /NDF: 616.4/12

# reg\_asym\_at2\_dd\_diff\_bpm11X\_slope vs slug



Right In:  $-41.432 \pm 0.082$   $\chi^2/\text{NDF}$ : 976.2/3

Left Out:  $-28.904 \pm 0.059$   $\chi^2/\text{NDF}$ : 220574.6/9

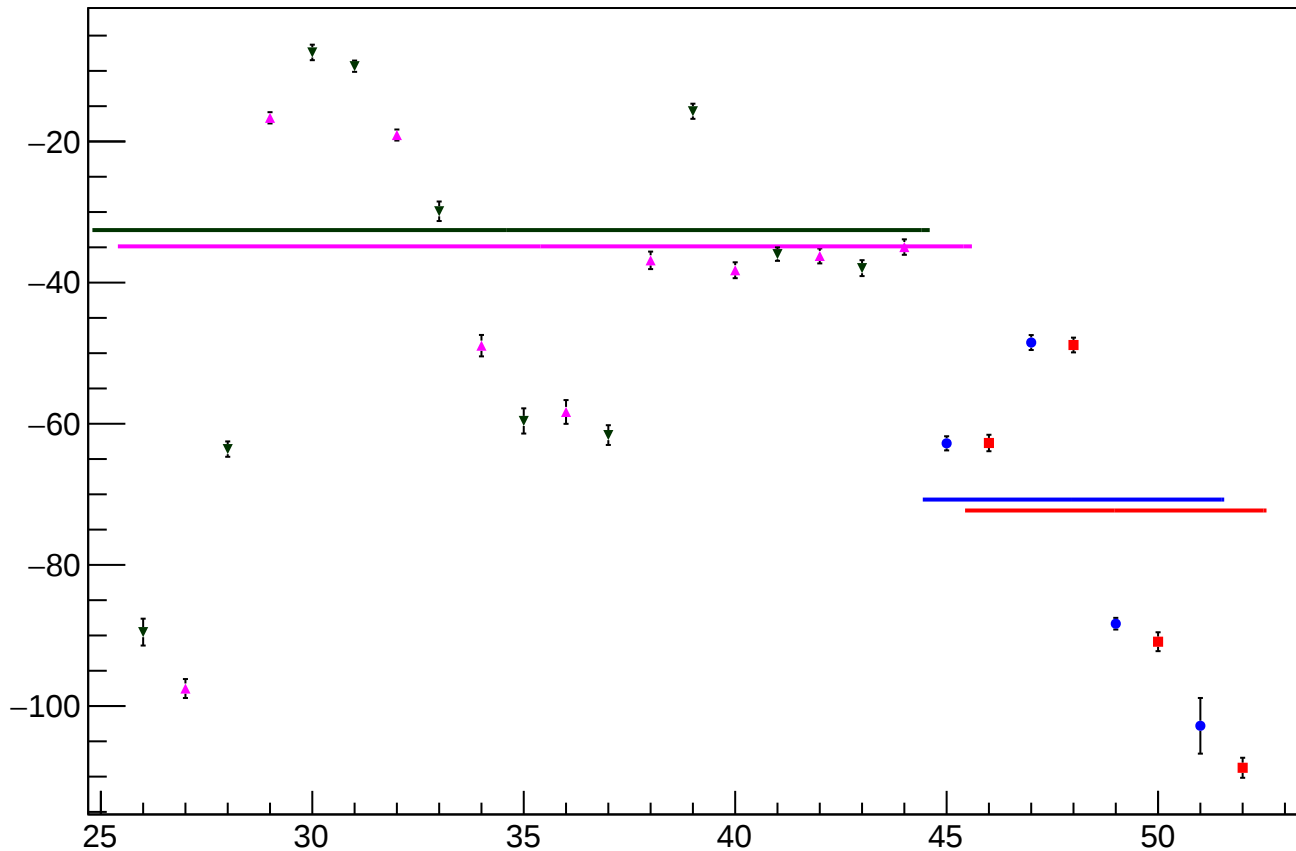
Right Out:  $-42.646 \pm 0.079$   $\chi^2/\text{NDF}$ : 1344.1/3

Left In:  $-32.407 \pm 0.060$   $\chi^2/\text{NDF}$ : 448.7/8

$-33.113 \pm 0.048$   $\chi^2/\text{NDF}$ : 236924.7/13

$-36.129 \pm 0.048$   $\chi^2/\text{NDF}$ : 12459.2/12

reg\_asym\_atl1r2\_avg\_diff\_bpm4aX\_slope vs slug



Right In:  $-70.742 \pm 0.541$   $\chi^2/\text{NDF}$ : 1022.1/3

Left Out:  $-32.557 \pm 0.362$   $\chi^2/\text{NDF}$ : 4020.8/9

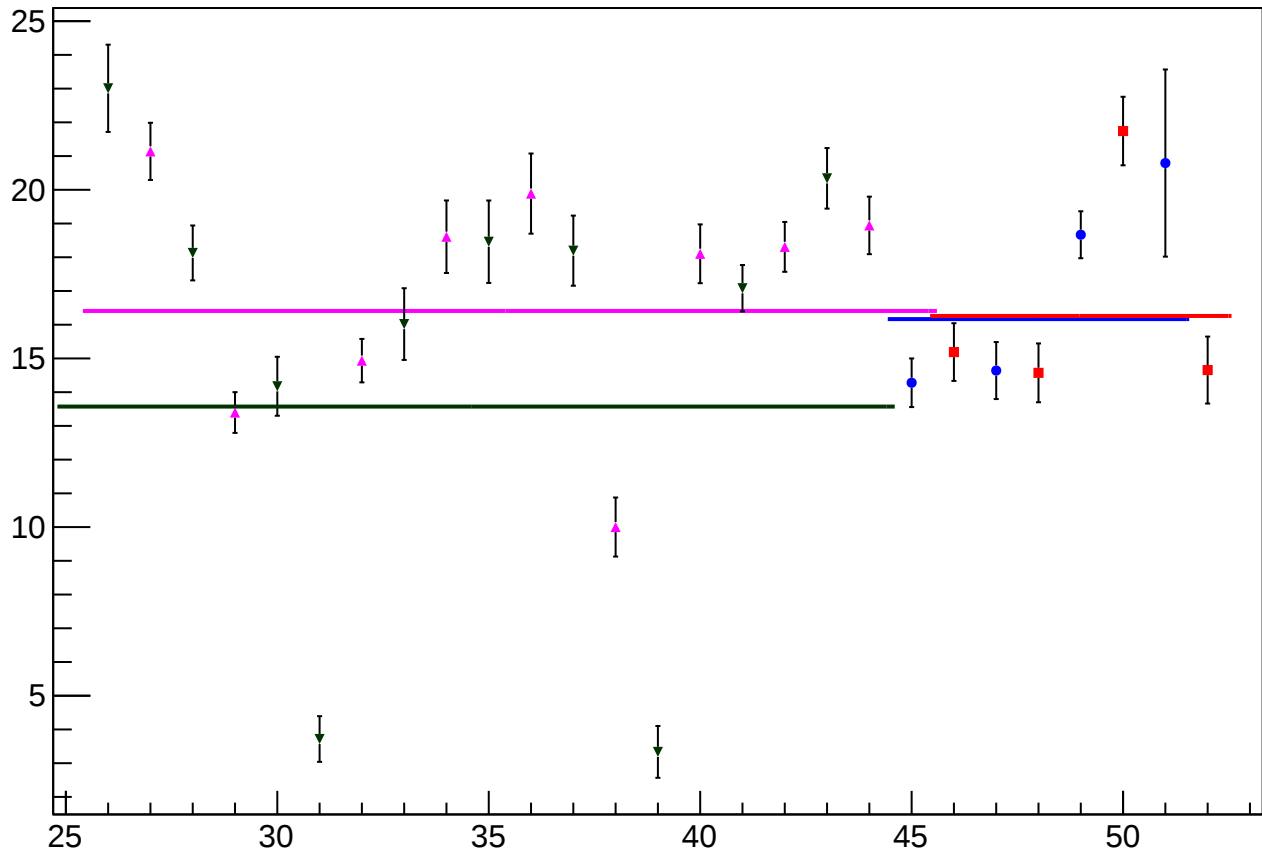
Right Out:  $-72.292 \pm 0.608$   $\chi^2/\text{NDF}$ : 1422.4/3

Left In:  $-34.865 \pm 0.360$   $\chi^2/\text{NDF}$ : 3392.2/8

$-44.370 \pm 0.301$   $\chi^2/\text{NDF}$ : 8478.1/13

$-44.592 \pm 0.310$   $\chi^2/\text{NDF}$ : 7618.5/12

reg\_asym\_atl1r2\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 16.166 $\pm$ 0.426  $\chi^2$ /NDF: 25.8/3

Left Out: 13.573 $\pm$ 0.276  $\chi^2$ /NDF: 598.2/9

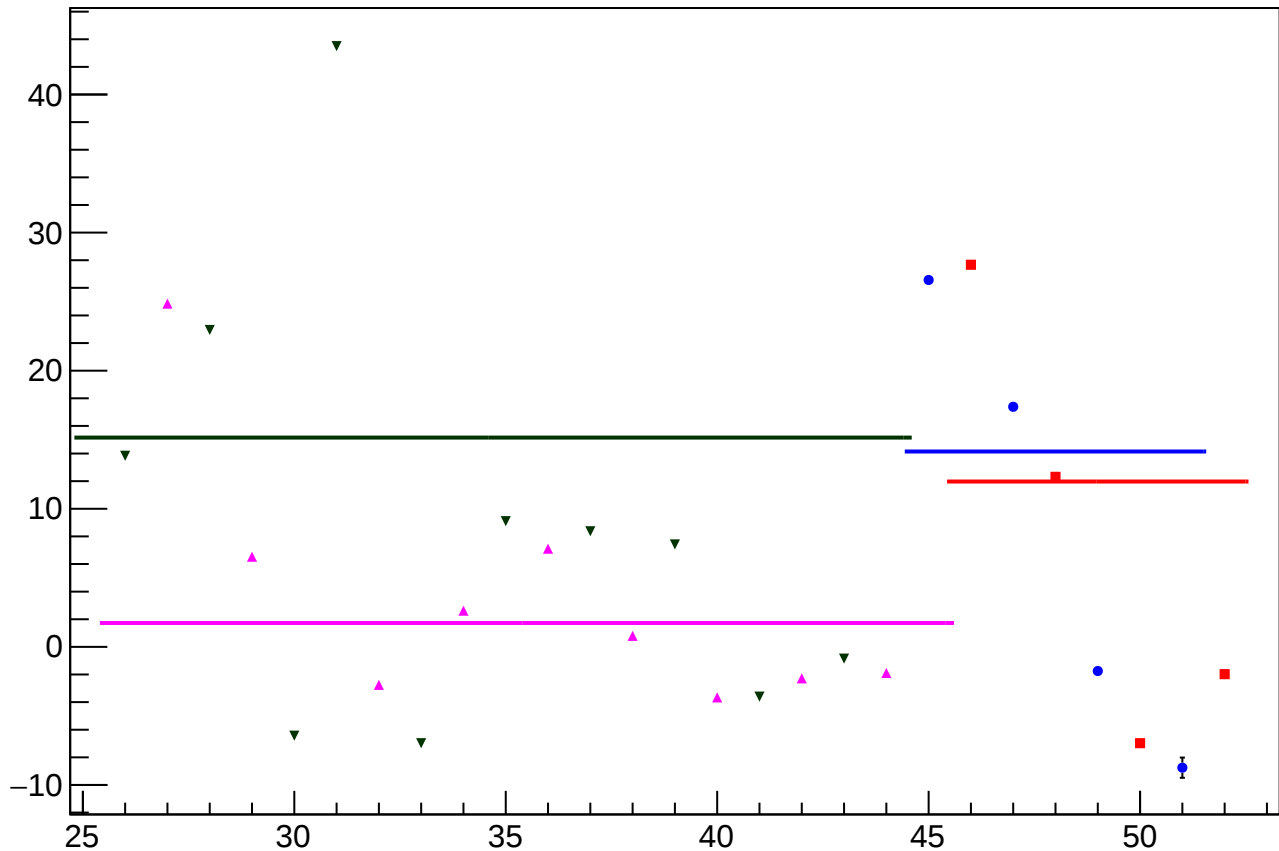
Right Out: 16.260 $\pm$ 0.463  $\chi^2$ /NDF: 37.0/3

Left In: 16.407 $\pm$ 0.268  $\chi^2$ /NDF: 146.8/8

14.341 $\pm$ 0.232  $\chi^2$ /NDF: 650.1/13

16.370 $\pm$ 0.232  $\chi^2$ /NDF: 183.9/12

reg\_asym\_atl1r2\_avg\_diff\_bpm4eX\_slope vs slug



Right In: 14.147+/-0.097  $\chi^2/\text{NDF}$ : 16039.9/3

Left Out: 1.730+/-0.061  $\chi^2/\text{NDF}$ : 13843.5/8

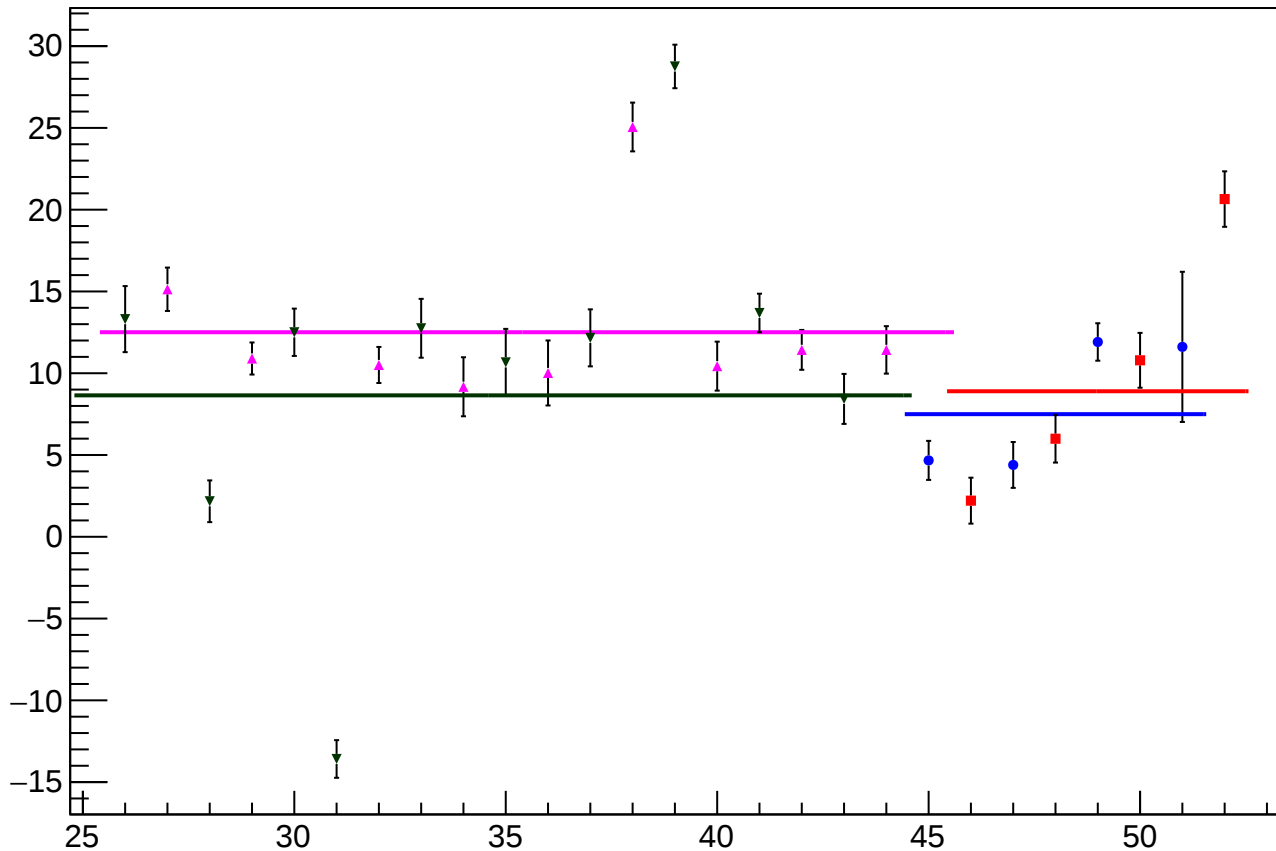
Right Out: 11.974+/-0.104  $\chi^2/\text{NDF}$ : 16692.3/3

Left In: 14.894+/-0.049  $\chi^2/\text{NDF}$ : 135882.4/13

14.894+/-0.049  $\chi^2/\text{NDF}$ : 135882.4/13

4.376+/-0.053  $\chi^2/\text{NDF}$ : 37748.1/12

# reg\_asym\_atl1r2\_avg\_diff\_bpm4eY\_slope vs slug



Right In:  $7.497 \pm 0.704$   $\chi^2/\text{NDF}$ : 26.2/3

Left Out:  $8.647 \pm 0.462$   $\chi^2/\text{NDF}$ : 668.1/9

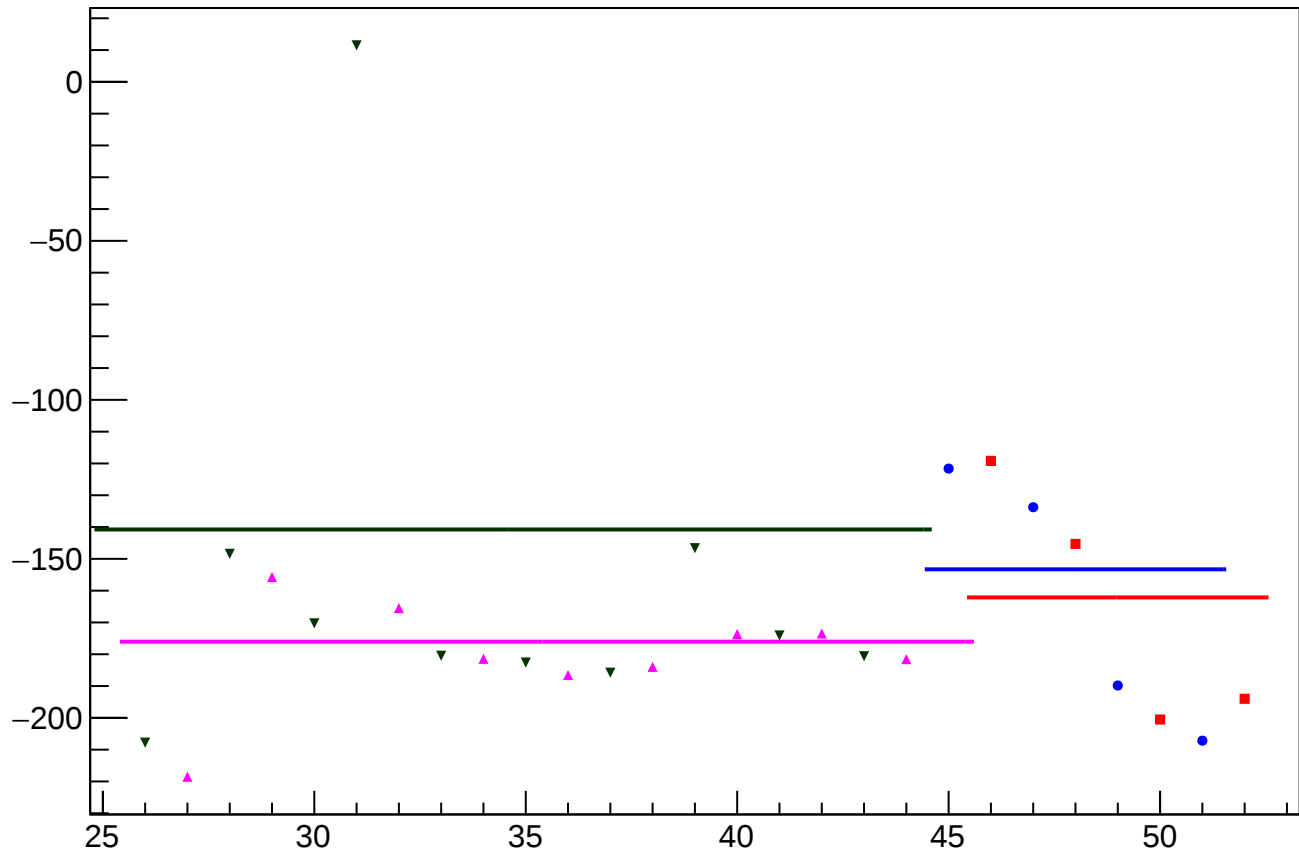
Right Out:  $8.898 \pm 0.771$   $\chi^2/\text{NDF}$ : 75.9/3

Left In:  $12.508 \pm 0.446$   $\chi^2/\text{NDF}$ : 89.0/8

$8.300 \pm 0.386$   $\chi^2/\text{NDF}$ : 696.2/13

$11.604 \pm 0.386$   $\chi^2/\text{NDF}$ : 181.3/12

reg\_asym\_atl1r2\_avg\_diff\_bpm11X\_slope vs slug



Right In: -153.290+/-0.137  $\chi^2/\text{NDF}$ : 53704.5/3

Left Out: -140.758+/-0.086  $\chi^2/\text{NDF}$ : 690511.9/9

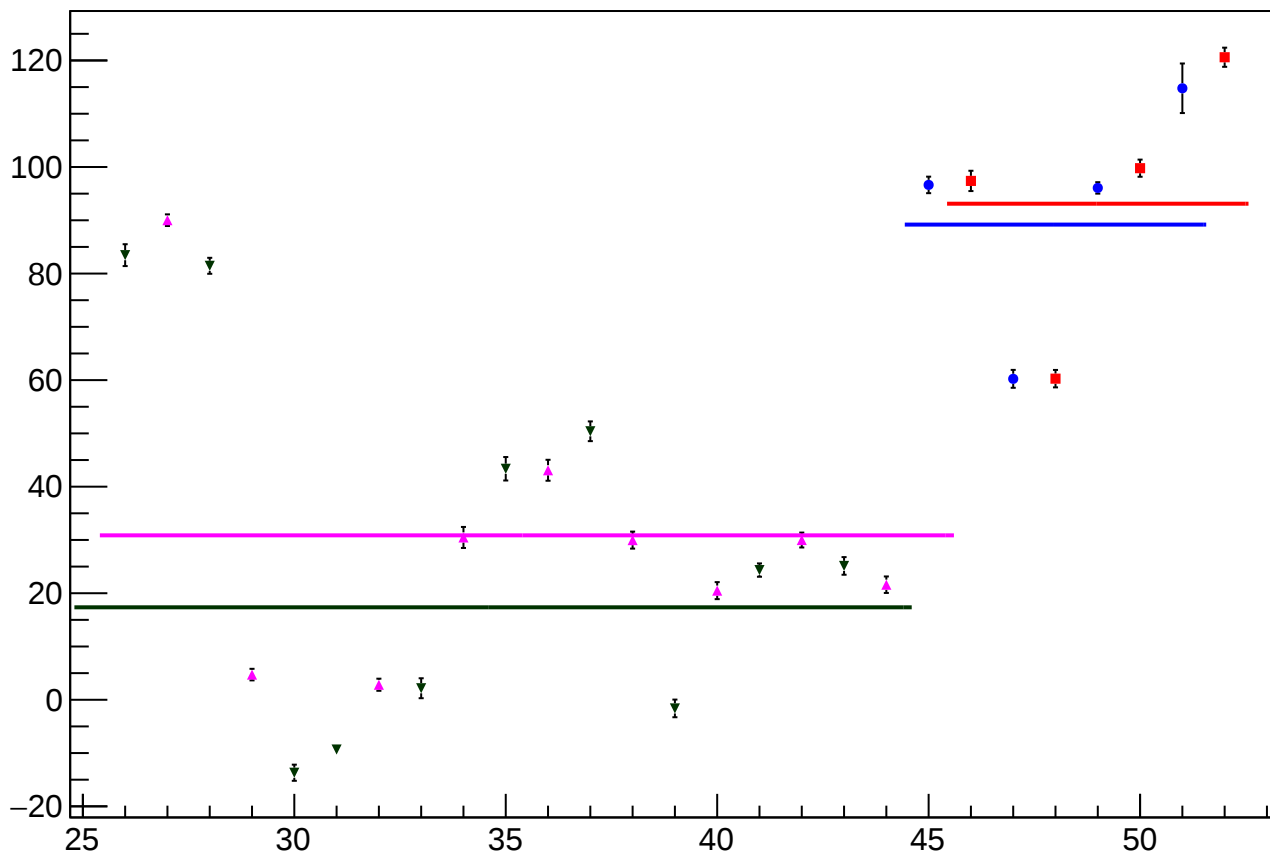
Right Out: -162.127+/-0.143  $\chi^2/\text{NDF}$ : 55989.0/3

Left In: -176.046+/-0.093  $\chi^2/\text{NDF}$ : 29168.4/8

-144.264+/-0.073  $\chi^2/\text{NDF}$ : 750221.2/13

-171.926+/-0.078  $\chi^2/\text{NDF}$ : 91847.4/12

# reg\_asym\_atl1r2\_dd\_diff\_bpm4aX\_slope vs slug



Right In: 89.192±/0.771  $\chi^2/\text{NDF}$ : 391.3/3

Left Out: 17.356±/0.455  $\chi^2/\text{NDF}$ :5107.4/9

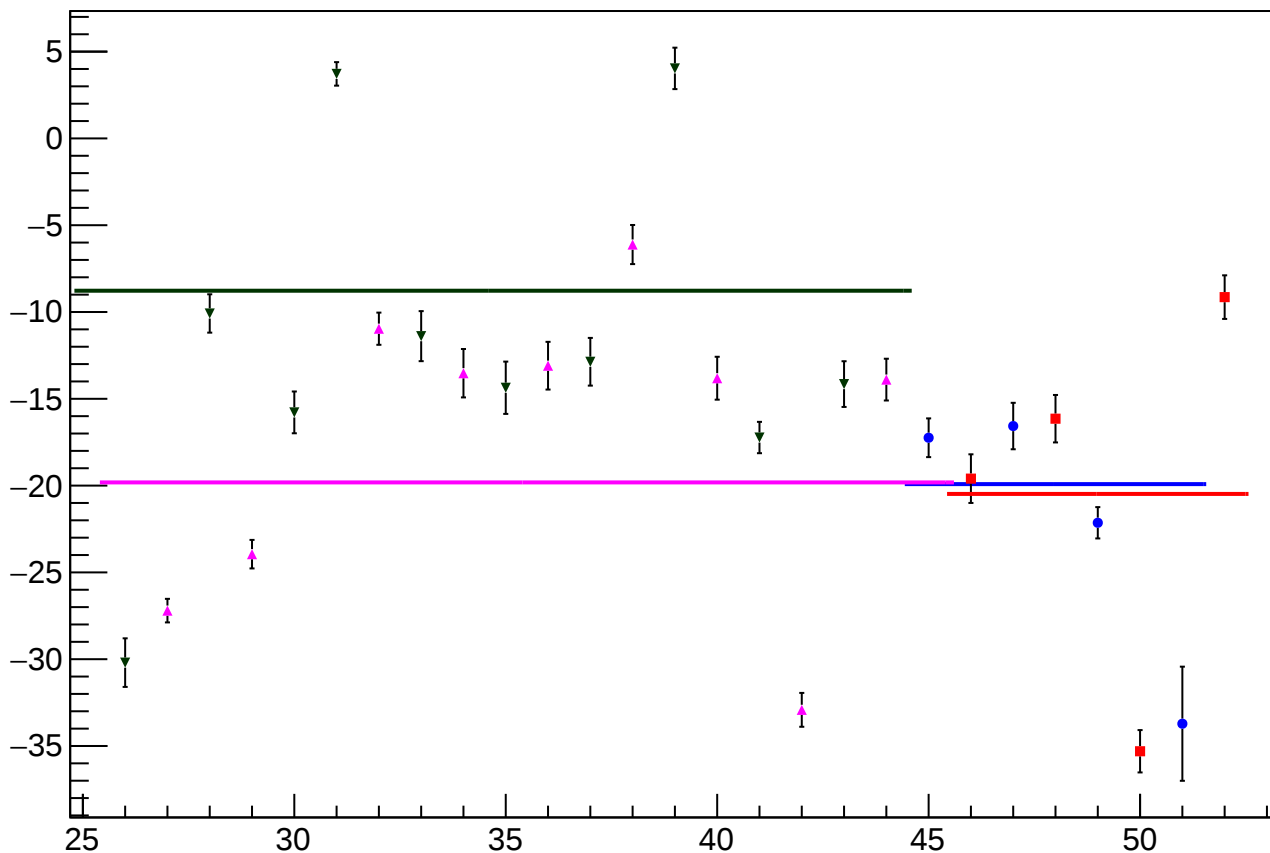
Right Out: 93.111±/0.862  $\chi^2/\text{NDF}$ : 659.2/3

Left In: 30.865±/0.462  $\chi^2/\text{NDF}$ :4236.0/8

35.913±/0.392  $\chi^2/\text{NDF}$ : 11941.7/13

44.742±/0.407  $\chi^2/\text{NDF}$ : 8945.1/12

# reg\_asym\_atl1r2\_dd\_diff\_bpm4aY\_slope vs slug



Right In:  $-19.914 \pm 0.610$   $\chi^2/\text{NDF}$ : 35.7/3

Left Out:  $-8.774 \pm 0.350$   $\chi^2/\text{NDF}$ : 855.1/9

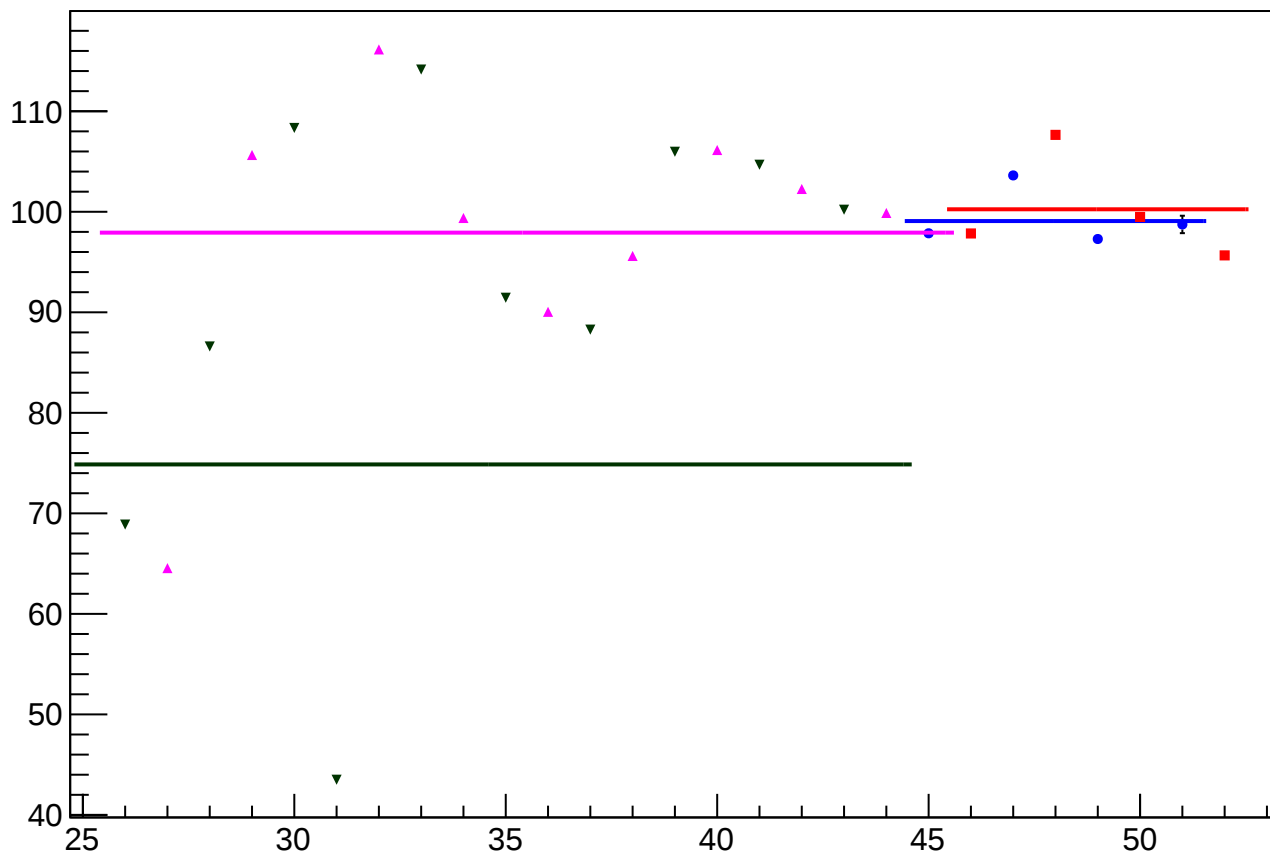
Right Out:  $-20.480 \pm 0.652$   $\chi^2/\text{NDF}$ : 239.6/3

Left In:  $-19.816 \pm 0.333$   $\chi^2/\text{NDF}$ : 655.3/8

$-11.532 \pm 0.304$   $\chi^2/\text{NDF}$ : 1141.4/13

$-19.953 \pm 0.296$   $\chi^2/\text{NDF}$ : 895.7/12

# reg\_asym\_atl1r2\_dd\_diff\_bpm4eX\_slope vs slug



Right In: 99.077 $\pm$ 0.140  $\chi^2$ /NDF: 348.5/3

Left Out: 74.867 $\pm$ 0.070  $\chi^2$ /NDF:168612.2/9

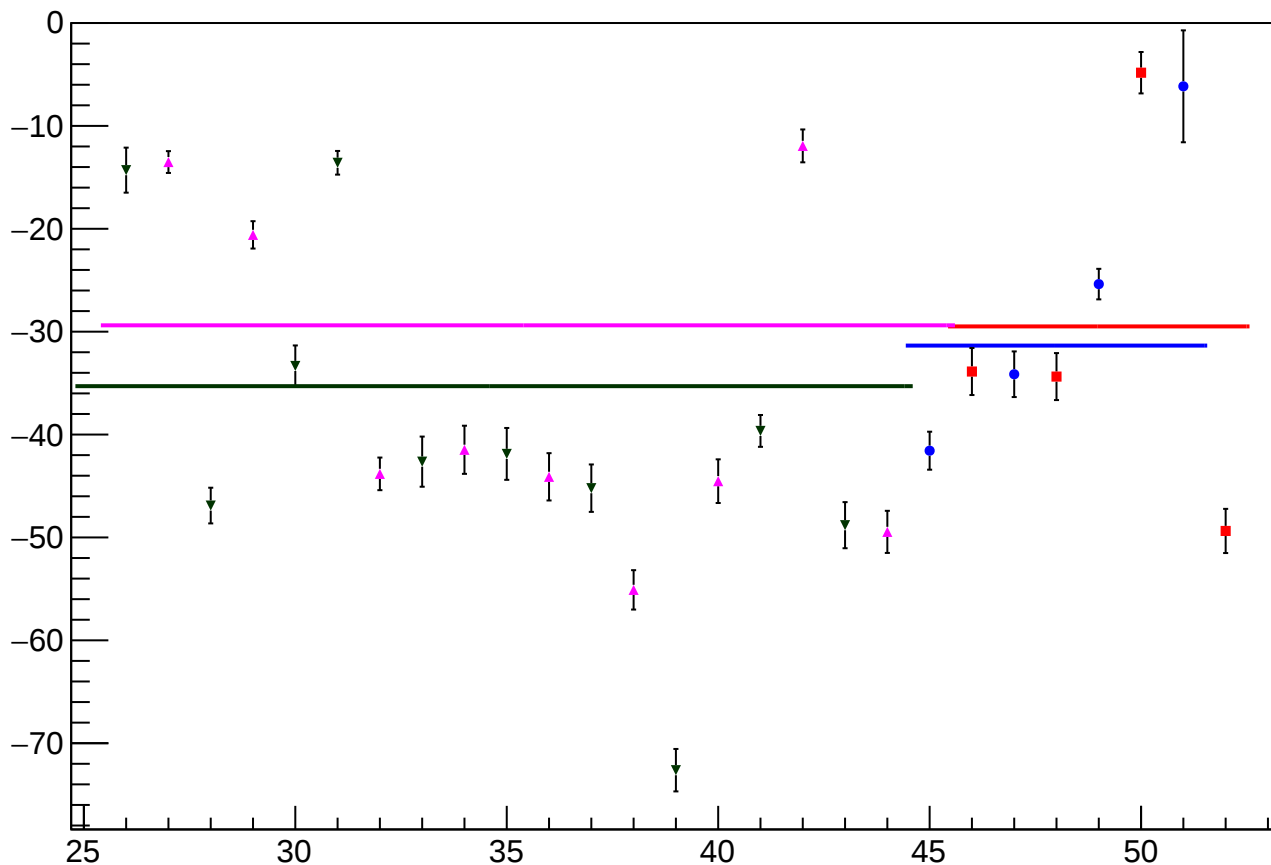
Right Out: 100.248 $\pm$ 0.150  $\chi^2$ /NDF: 922.0/3

Left In: 97.925 $\pm$ 0.079  $\chi^2$ /NDF:43942.4/8

79.677 $\pm$ 0.063  $\chi^2$ /NDF: 192821.1/13

98.430 $\pm$ 0.070  $\chi^2$ /NDF: 45051.9/12

# reg\_asym\_atl1r2\_dd\_diff\_bpm4eY\_slope vs slug



Right In: -31.352+/-1.008  $\chi^2/\text{NDF}$ : 69.9/3

Left Out: -35.297+/-0.586  $\chi^2/\text{NDF}$ : 899.8/9

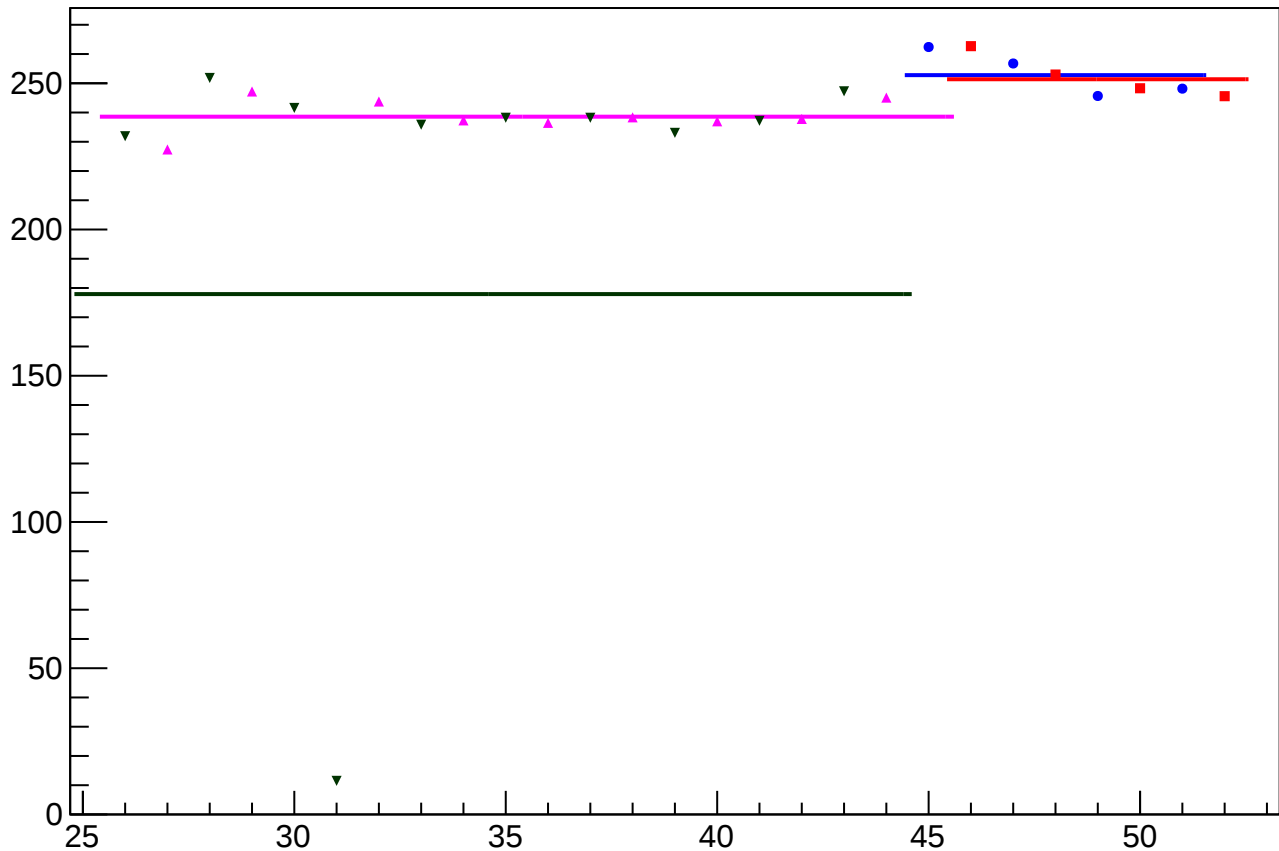
Right Out: -29.489+/-1.086  $\chi^2/\text{NDF}$ : 244.1/3

Left In: -29.383+/-0.546  $\chi^2/\text{NDF}$ : 865.1/8

-34.301+/-0.507  $\chi^2/\text{NDF}$ : 981.1/13

-29.405+/-0.488  $\chi^2/\text{NDF}$ : 1109.2/12

# reg\_asym\_atl1r2\_dd\_diff\_bpm11X\_slope vs slug



Right In:  $252.781 \pm 0.196$   $\chi^2/\text{NDF}$ : 1414.1/3

Left Out:  $177.919 \pm 0.108$   $\chi^2/\text{NDF}$ : 891925.7/9

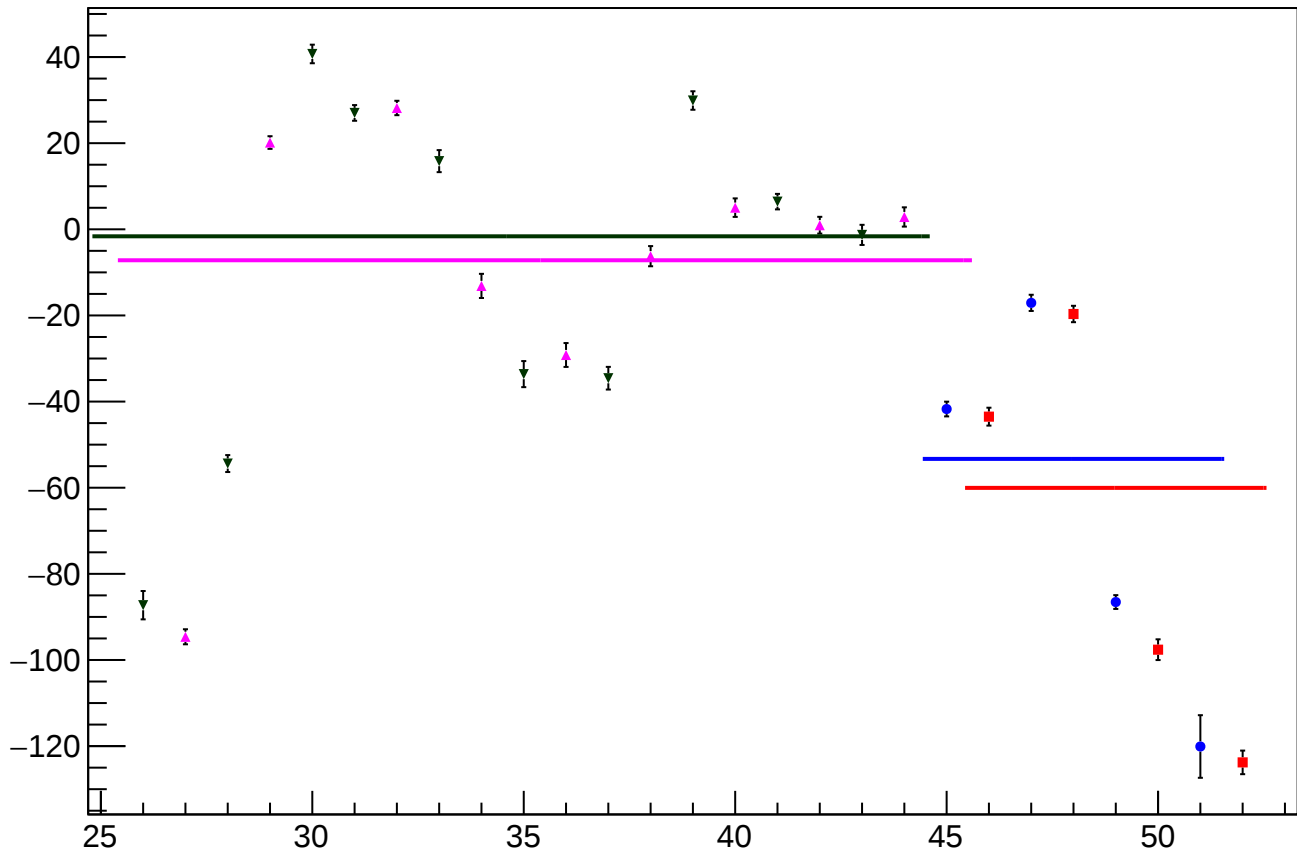
Right Out:  $251.374 \pm 0.198$   $\chi^2/\text{NDF}$ : 964.0/3

Left In:  $238.578 \pm 0.118$   $\chi^2/\text{NDF}$ : 3012.9/8

$195.250 \pm 0.094$   $\chi^2/\text{NDF}$ : 1005461.3/13

$241.905 \pm 0.101$   $\chi^2/\text{NDF}$ : 7059.1/12

reg\_asym\_atr1l2\_avg\_diff\_bpm4aX\_slope vs slug



Right In:  $-53.309 \pm 0.984$   $\chi^2/\text{NDF}$ : 931.3/3

Left Out:  $-1.625 \pm 0.710$   $\chi^2/\text{NDF}$ : 2580.3/9

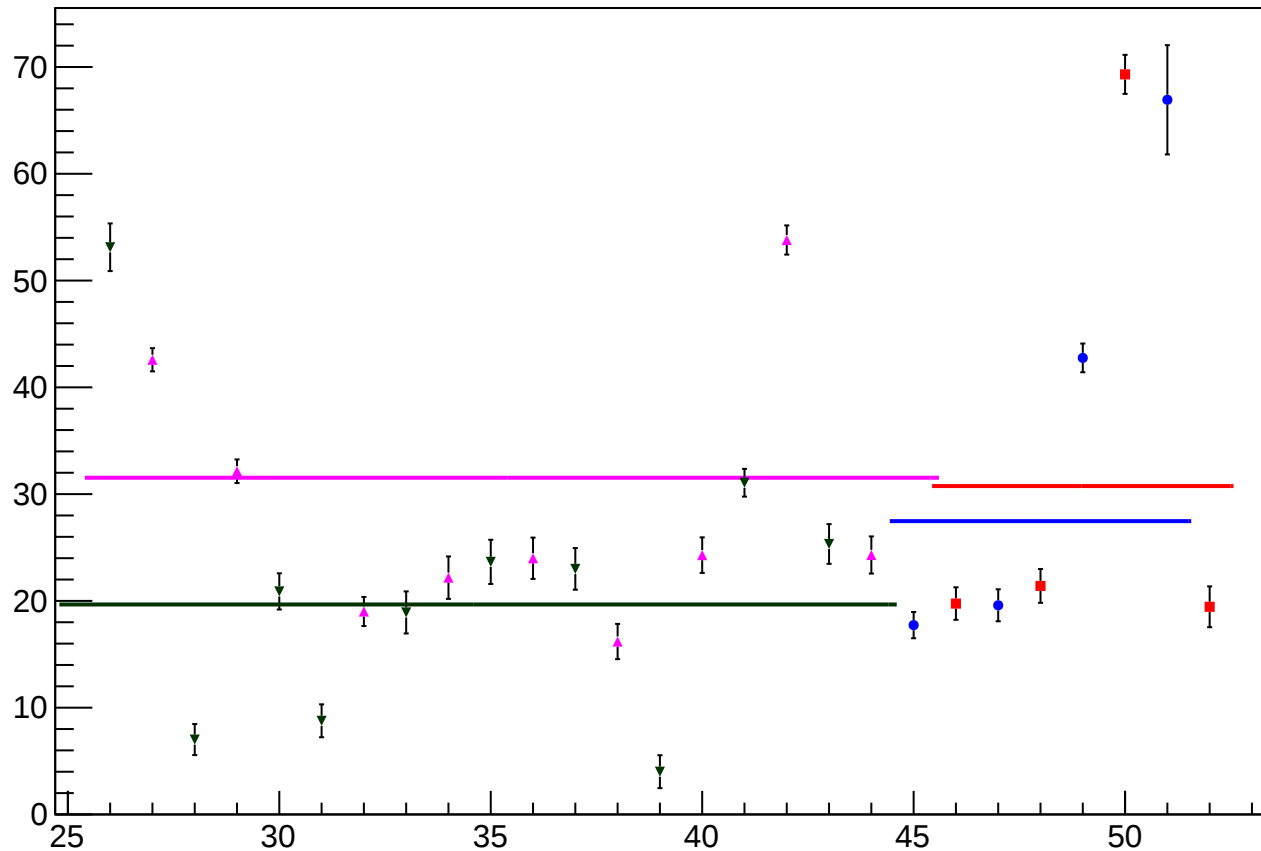
Right Out:  $-60.037 \pm 1.109$   $\chi^2/\text{NDF}$ : 1299.2/3

Left In:  $-7.188 \pm 0.664$   $\chi^2/\text{NDF}$ : 3435.6/8

$-19.335 \pm 0.576$   $\chi^2/\text{NDF}$ : 5325.3/13

$-21.140 \pm 0.570$   $\chi^2/\text{NDF}$ : 6407.3/12

reg\_asym\_atr1l2\_avg\_diff\_bpm4aY\_slope vs slug



Right In: 27.470+/-0.768  $\chi^2$ /NDF: 278.8/3

Left Out: 19.664+/-0.535  $\chi^2$ /NDF:547.2/9

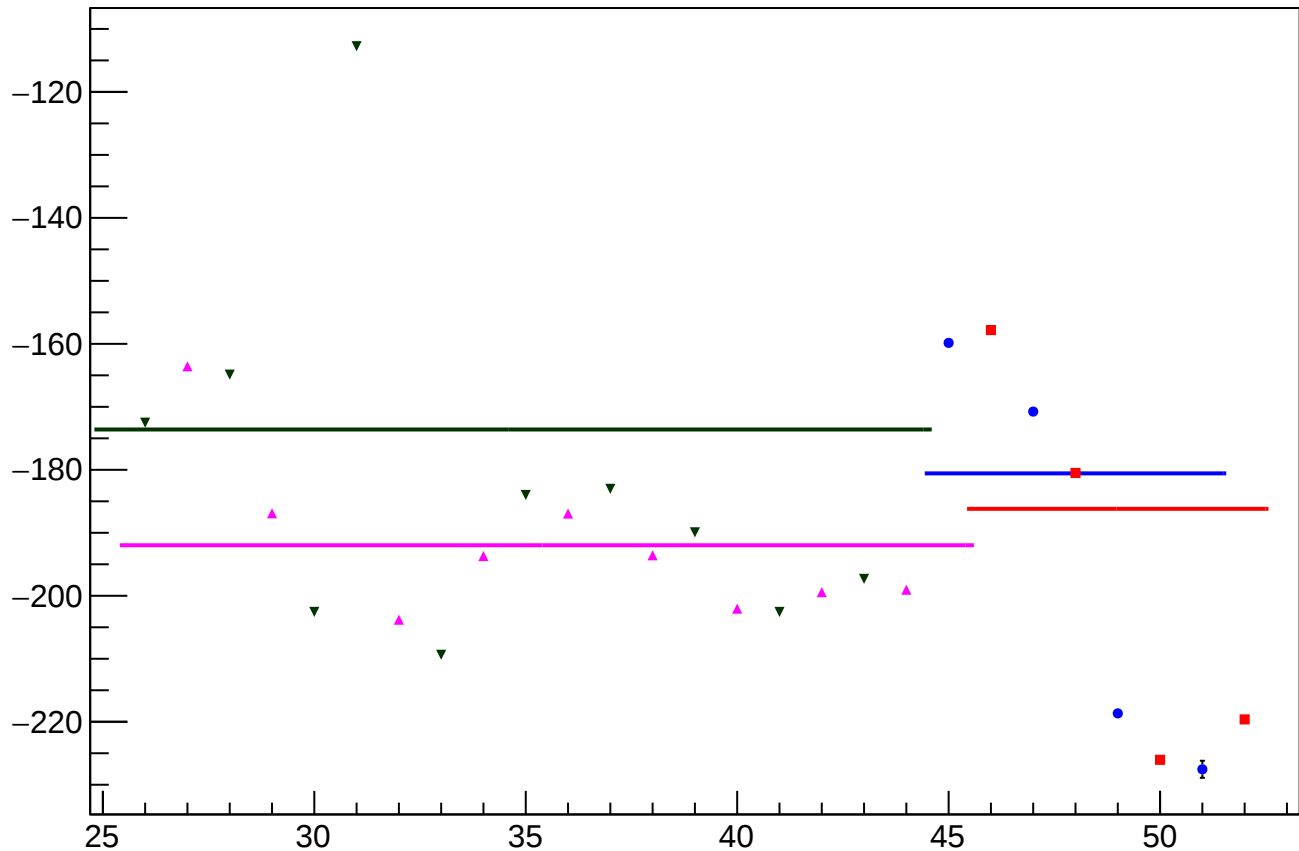
Right Out: 30.754+/-0.845  $\chi^2$ /NDF: 566.8/3

Left In: 31.534+/-0.481  $\chi^2$ /NDF:612.9/8

22.213+/-0.439  $\chi^2$ /NDF: 895.6/13

31.343+/-0.418  $\chi^2$ /NDF: 1180.3/12

reg\_asym\_atr1l2\_avg\_diff\_bpm4eX\_slope vs slug



Right In: -180.565+/-0.174  $\chi^2/\text{NDF}: 21291.9/3$

Left Out: -173.597+/-0.114  $\chi^2/\text{NDF}: 92522.3/9$

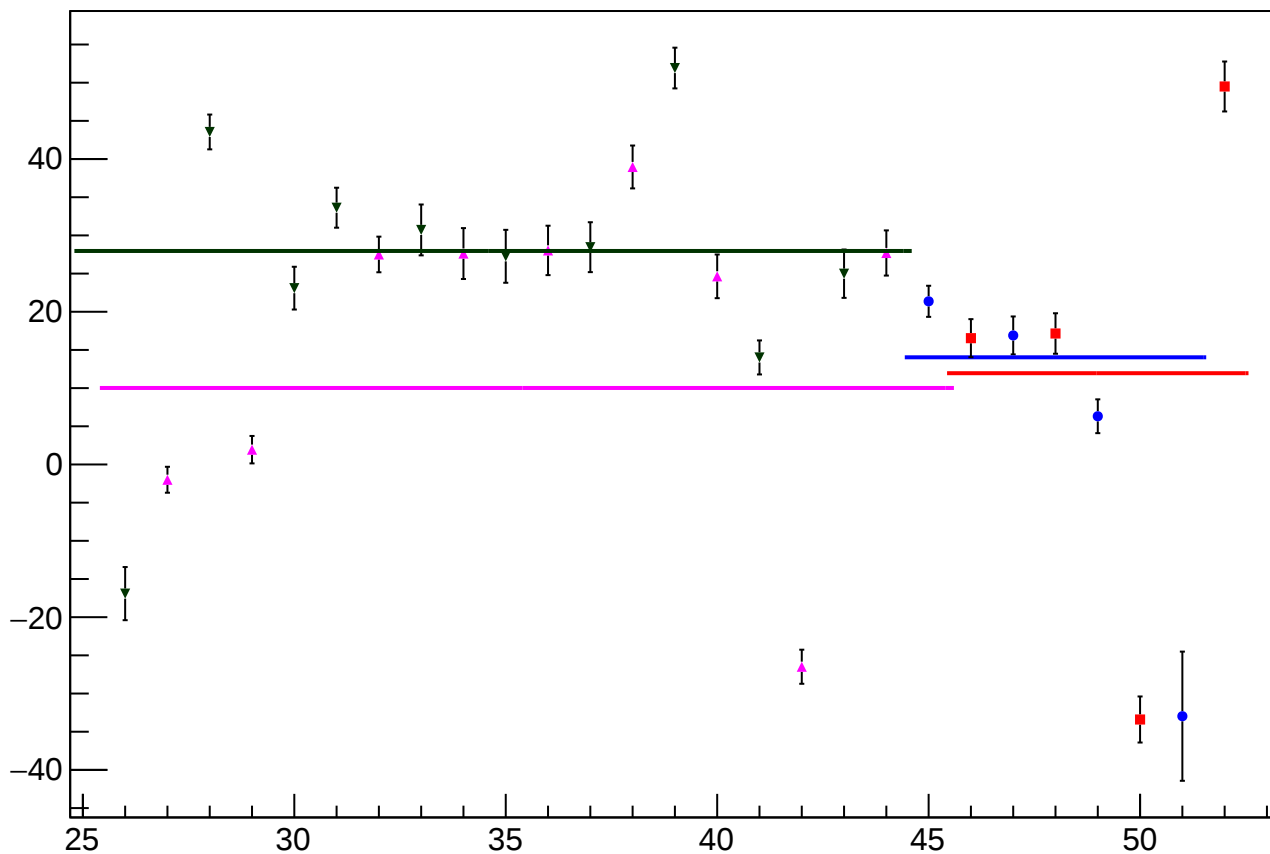
Right Out: -186.193+/-0.189  $\chi^2/\text{NDF}: 20891.7/3$

Left In: -191.976+/-0.115  $\chi^2/\text{NDF}: 12393.0/8$

-175.707+/-0.096  $\chi^2/\text{NDF}: 114937.5/13$

-190.427+/-0.098  $\chi^2/\text{NDF}: 33967.5/12$

reg\_asym\_atr1l2\_avg\_diff\_bpm4eY\_slope vs slug



Right In:  $14.035 \pm 1.269$   $\chi^2/\text{NDF}$ : 57.3/3

Left Out:  $27.961 \pm 0.892$   $\chi^2/\text{NDF}$ : 342.1/9

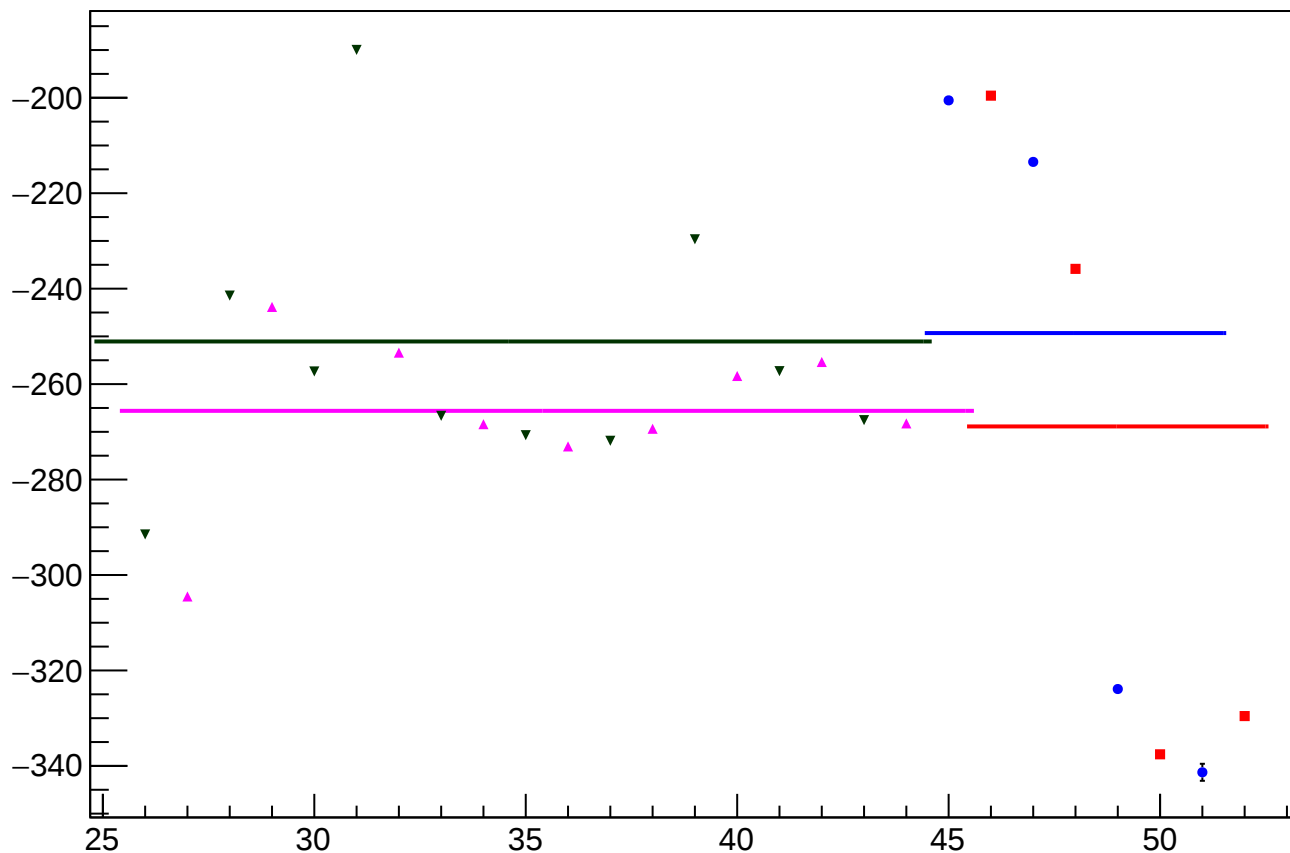
Right Out:  $11.954 \pm 1.405$   $\chi^2/\text{NDF}$ : 365.2/3

Left In:  $10.019 \pm 0.793$   $\chi^2/\text{NDF}$ : 620.9/8

$23.356 \pm 0.730$   $\chi^2/\text{NDF}$ : 480.0/13

$10.487 \pm 0.691$   $\chi^2/\text{NDF}$ : 987.5/12

reg\_asym\_atr1l2\_avg\_diff\_bpm11X\_slope vs slug



Right In:  $-249.305 \pm 0.248$   $\chi^2/\text{NDF}$ : 53822.7/3

Left Out:  $-251.066 \pm 0.164$   $\chi^2/\text{NDF}$ : 28709.1/9

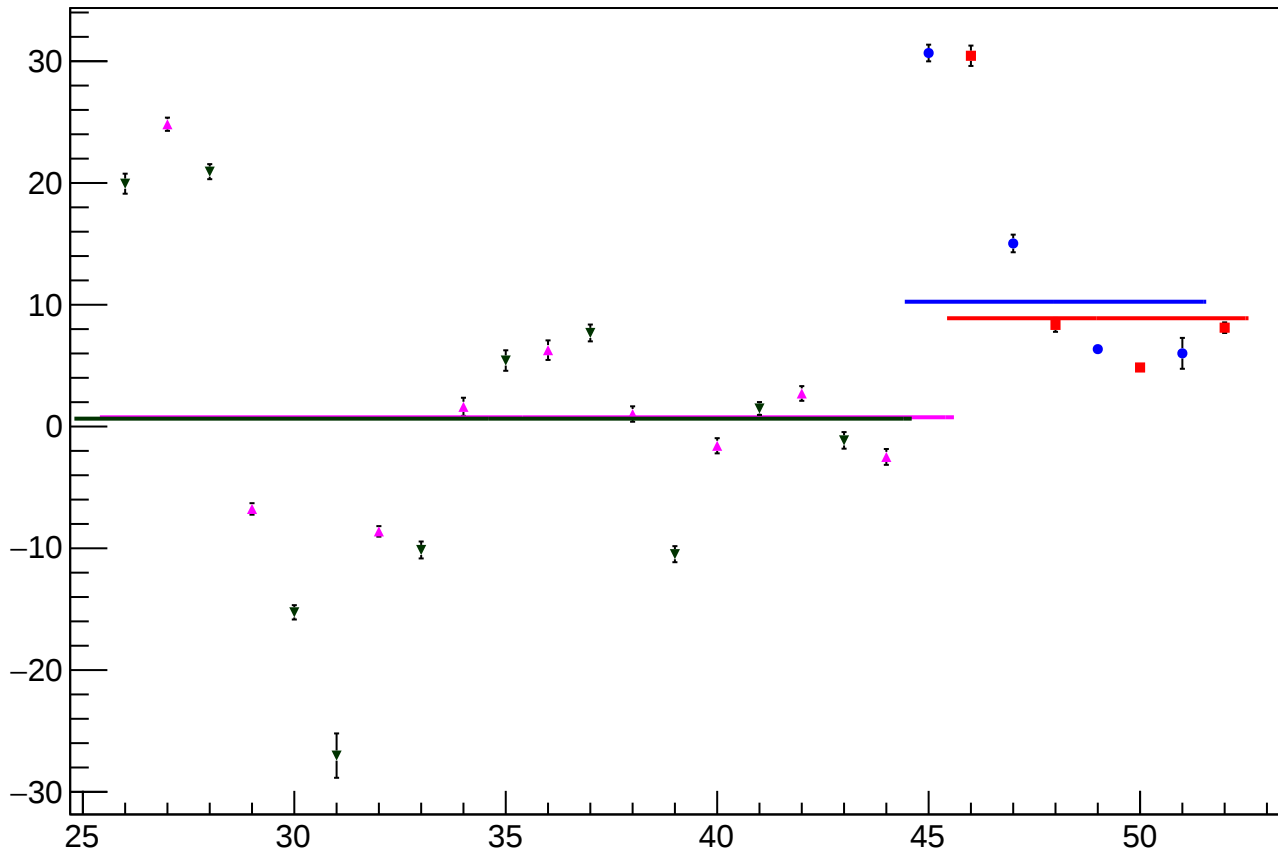
Right Out:  $-268.869 \pm 0.261$   $\chi^2/\text{NDF}$ : 51845.0/3

Left In:  $-265.603 \pm 0.168$   $\chi^2/\text{NDF}$ : 12152.3/8

$-250.528 \pm 0.137$   $\chi^2/\text{NDF}$ : 82566.9/13

$-266.560 \pm 0.141$   $\chi^2/\text{NDF}$ : 64108.0/12

# reg\_asym\_atr1l2\_dd\_diff\_bpm4aX\_slope vs slug



Right In:  $10.249 \pm 0.239$   $\chi^2/\text{NDF}: 1140.0/3$

Left Out:  $0.647 \pm 0.219$   $\chi^2/\text{NDF}: 3257.1/9$

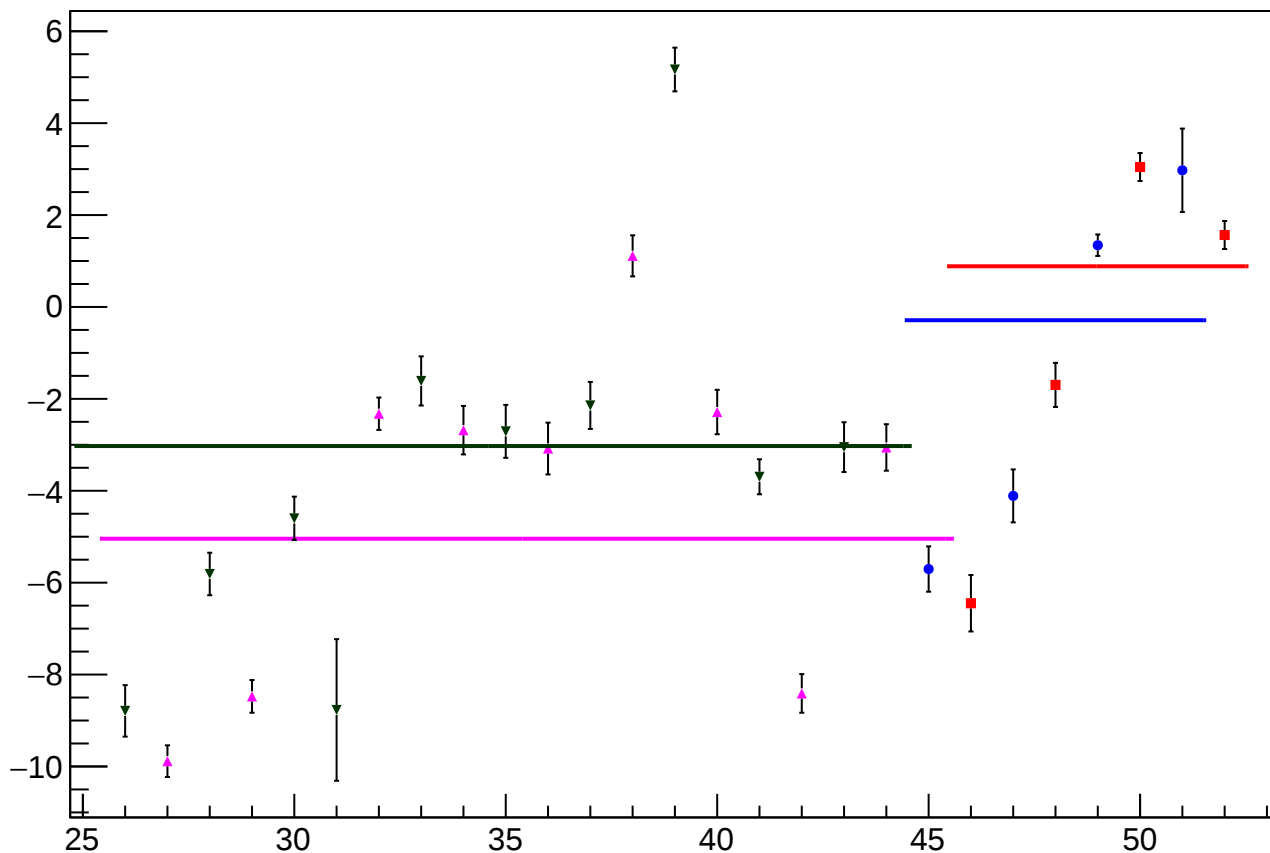
Right Out:  $8.892 \pm 0.250$   $\chi^2/\text{NDF}: 770.7/3$

Left In:  $0.760 \pm 0.193$   $\chi^2/\text{NDF}: 2789.0/8$

$5.027 \pm 0.161$   $\chi^2/\text{NDF}: 5276.1/13$

$3.802 \pm 0.153$   $\chi^2/\text{NDF}: 4222.1/12$

# reg\_asym\_atr1l2\_dd\_diff\_bpm4aY\_slope vs slug



Right In:  $-0.289 \pm 0.194$   $\chi^2/\text{NDF}$ : 226.5/3

Left Out:  $-3.027 \pm 0.163$   $\chi^2/\text{NDF}$ : 477.3/9

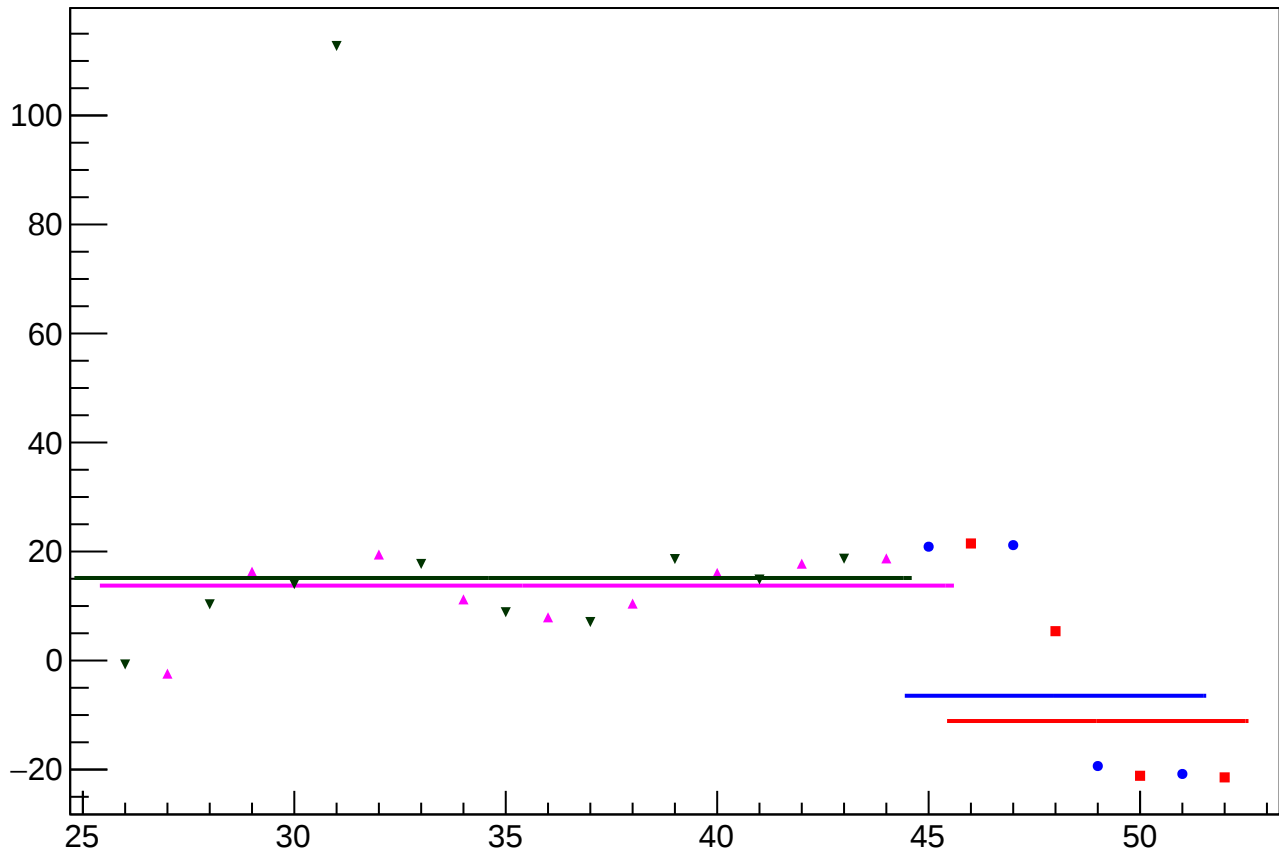
Right Out:  $0.885 \pm 0.187$   $\chi^2/\text{NDF}$ : 226.6/3

Left In:  $-5.044 \pm 0.141$   $\chi^2/\text{NDF}$ : 684.5/8

$-1.895 \pm 0.125$   $\chi^2/\text{NDF}$ : 821.0/13

$-2.889 \pm 0.113$   $\chi^2/\text{NDF}$ : 1549.8/12

# reg\_asym\_atr1l2\_dd\_diff\_bpm4eX\_slope vs slug



Right In:  $-6.462 \pm 0.046$   $\chi^2/\text{NDF}: 169254.7/3$

Left Out:  $15.143 \pm 0.036$   $\chi^2/\text{NDF}: 187125.6/9$

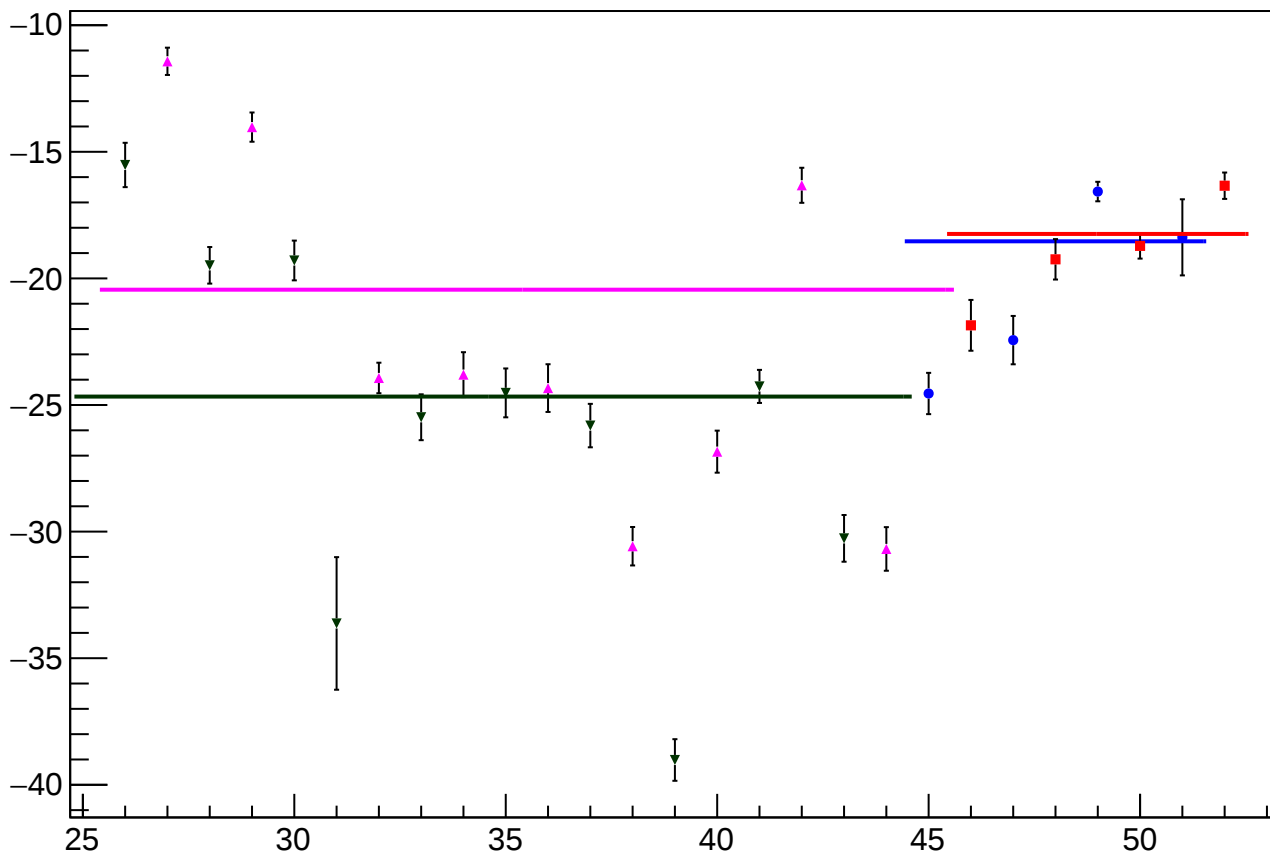
Right Out:  $-11.095 \pm 0.045$   $\chi^2/\text{NDF}: 126842.9/3$

Left In:  $13.747 \pm 0.033$   $\chi^2/\text{NDF}: 44234.1/8$

$6.887 \pm 0.028$   $\chi^2/\text{NDF}: 493290.7/13$

$5.112 \pm 0.026$   $\chi^2/\text{NDF}: 371394.4/12$

# reg\_asym\_atr1l2\_dd\_diff\_bpm4eY\_slope vs slug



Right In: -18.535±/0.320  $\chi^2/\text{NDF}$ : 97.1/3

Left Out: -24.667±/0.271  $\chi^2/\text{NDF}$ : 564.2/9

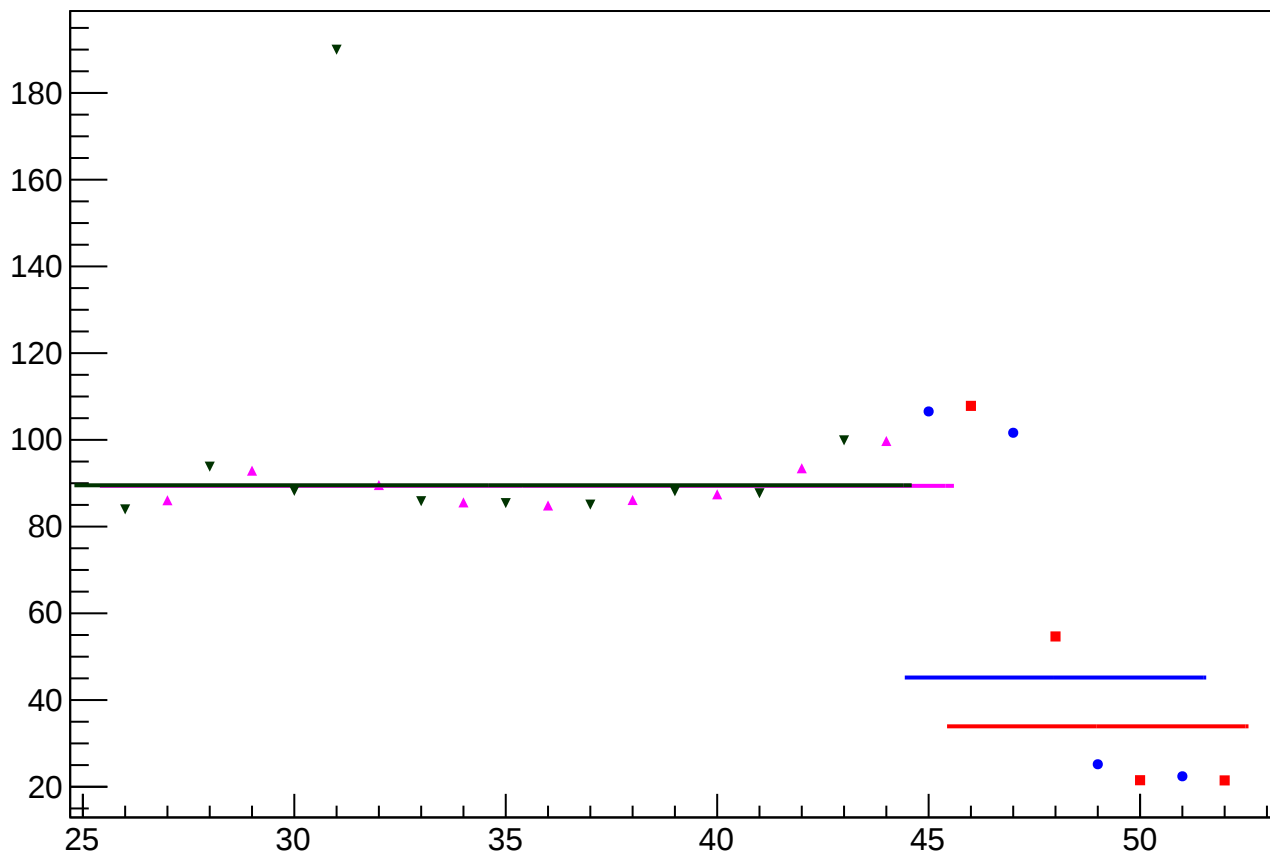
Right Out: -18.244±/0.313  $\chi^2/\text{NDF}$ : 28.8/3

Left In: -20.446±/0.234  $\chi^2/\text{NDF}$ : 882.7/8

-22.106±/0.207  $\chi^2/\text{NDF}$ : 875.6/13

-19.655±/0.188  $\chi^2/\text{NDF}$ : 943.2/12

# reg\_asym\_atr1l2\_dd\_diff\_bpm11X\_slope vs slug



Right In: 45.193+/-0.061  $\chi^2/\text{NDF}$ : 315874.1/3

Left Out: 89.526+/-0.049  $\chi^2/\text{NDF}$ :54366.7/9

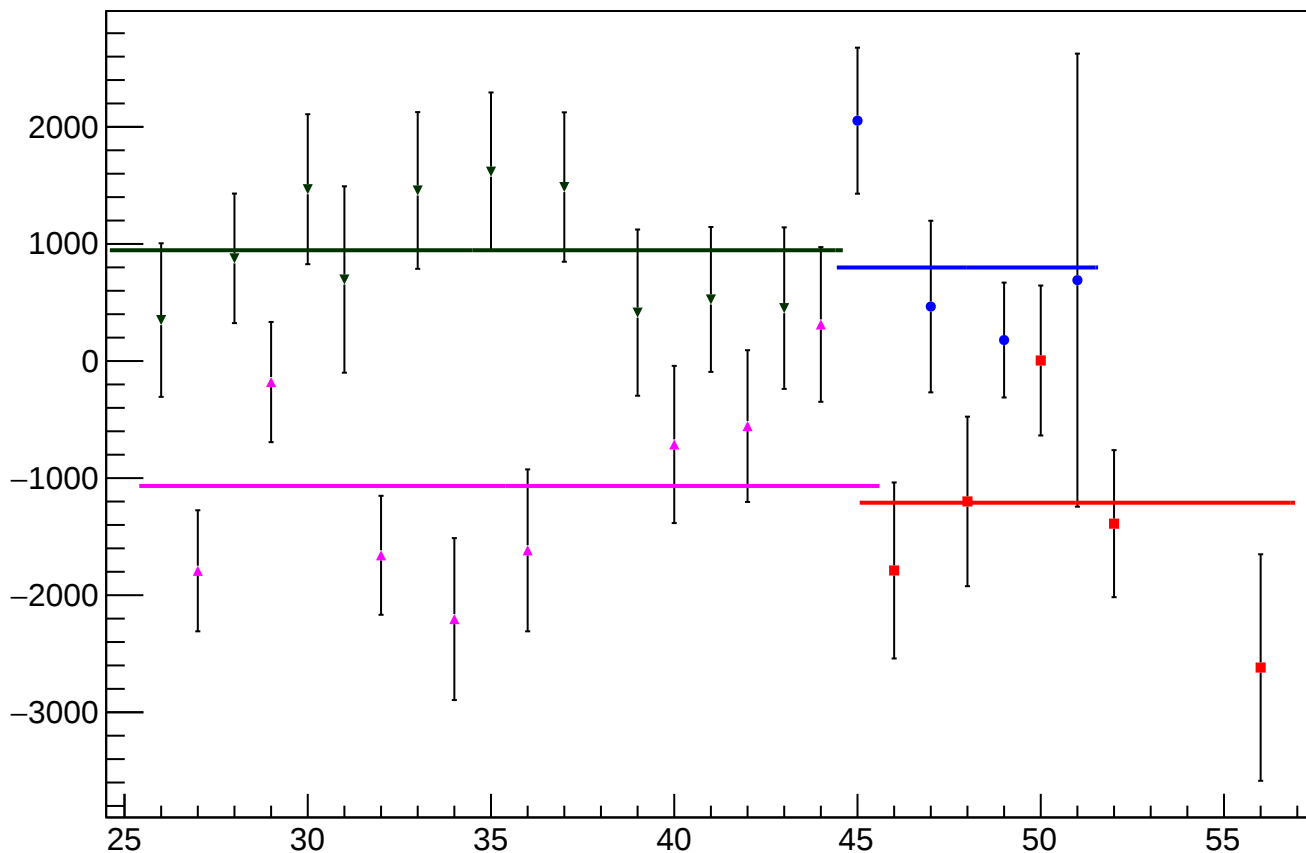
Right Out: 33.937+/-0.055  $\chi^2/\text{NDF}$ : 202497.3/3

Left In: 89.397+/-0.049  $\chi^2/\text{NDF}$ :7802.3/8

72.101+/-0.039  $\chi^2/\text{NDF}$ : 685722.5/13

65.034+/-0.037  $\chi^2/\text{NDF}$ : 773843.6/12

# reg\_asym\_atl1\_mean vs slug



Right In: 799.058 $\pm$ 336.053  $\chi^2/\text{NDF}$ : 5.8/3

Left Out: 946.354 $\pm$ 207.711  $\chi^2/\text{NDF}$ : 5.4/9

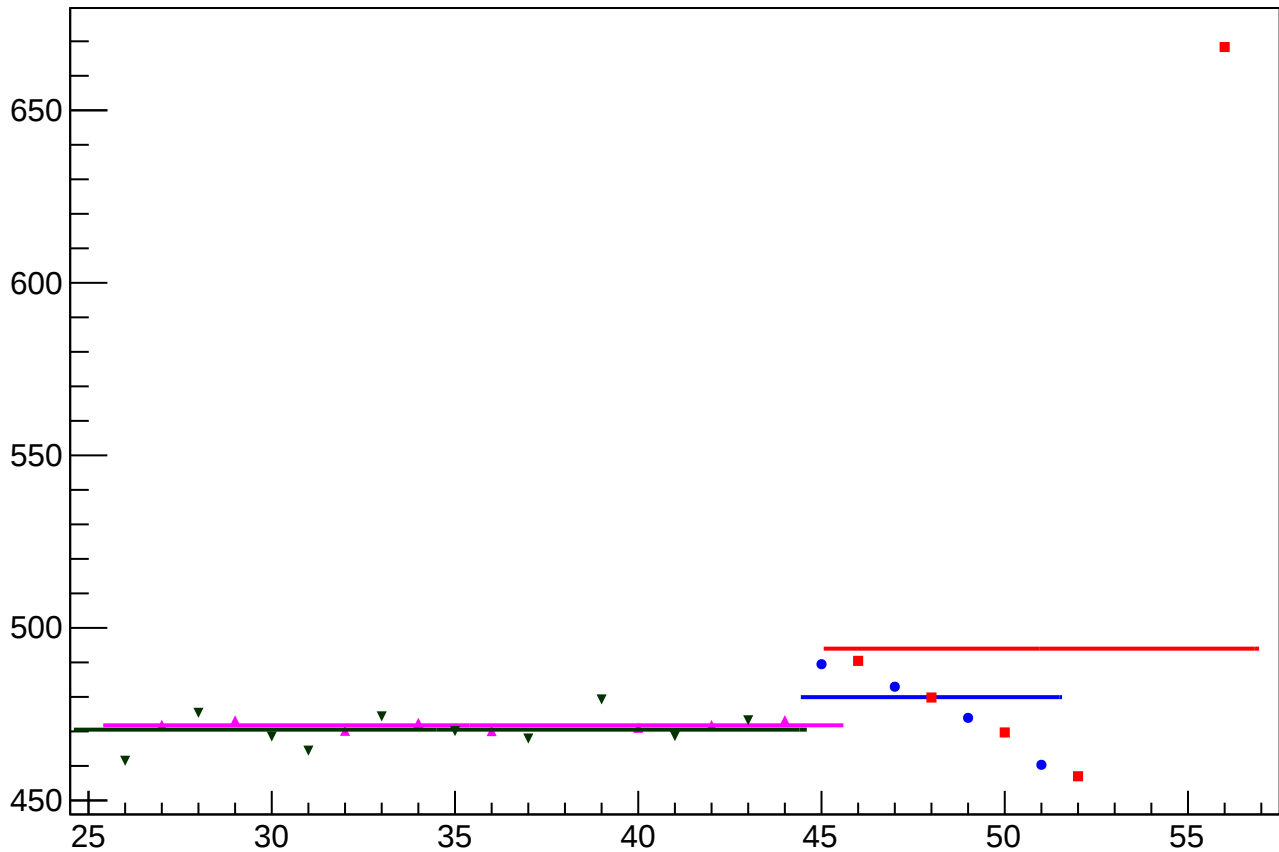
Right Out: -1210.011 $\pm$ 320.732  $\chi^2/\text{NDF}$ : 6.4/4

Left In: -1066.964 $\pm$ 210.912  $\chi^2/\text{NDF}$ : 14.9/7

905.637 $\pm$ 176.685  $\chi^2/\text{NDF}$ : 11.4/13

-1110.148 $\pm$ 176.224  $\chi^2/\text{NDF}$ : 21.4/12

# reg\_asym\_atl1\_rms vs slug



Right In:  $479.933 \pm 0.238$   $\chi^2/\text{NDF}$ : 1008.1/3

Left Out:  $470.514 \pm 0.147$   $\chi^2/\text{NDF}$ : 1122.3/9

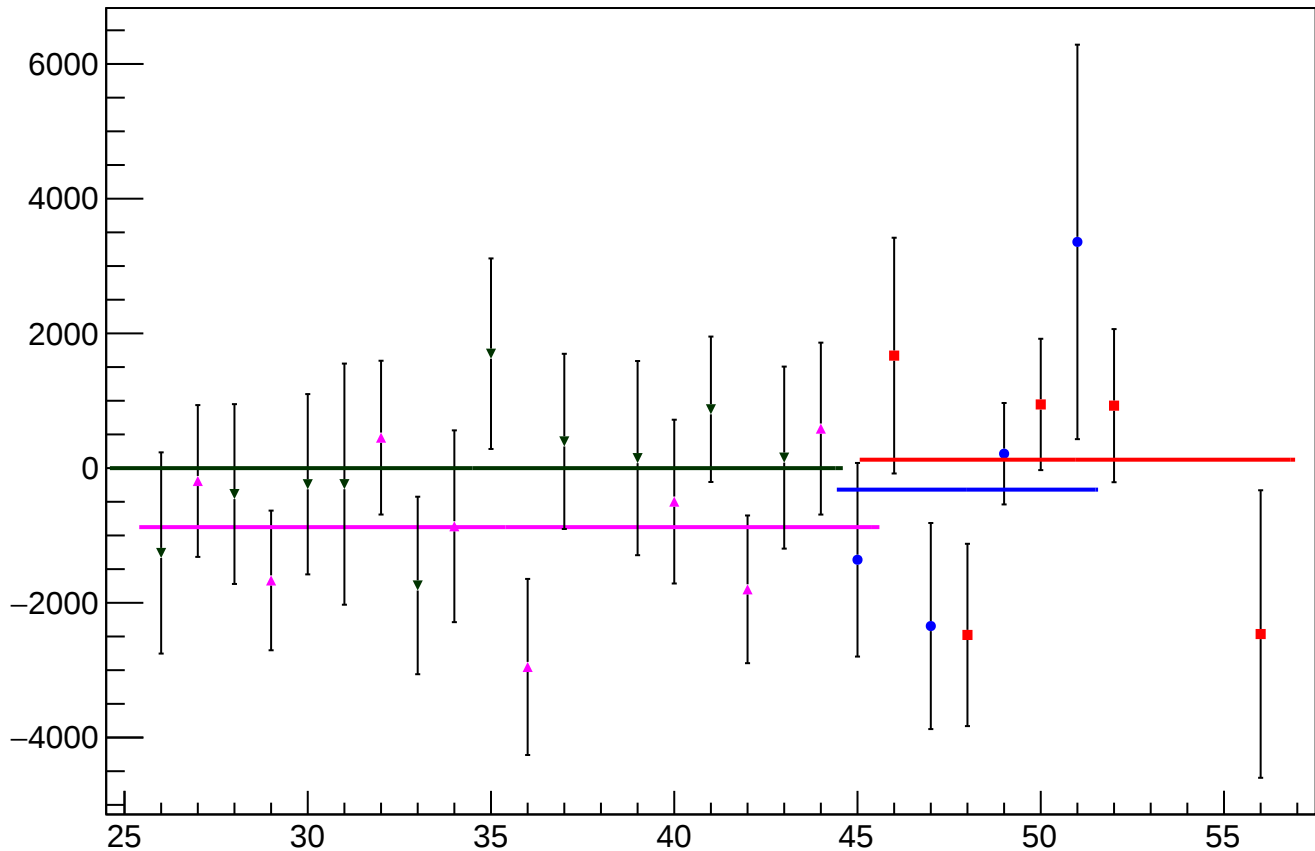
Right Out:  $493.989 \pm 0.227$   $\chi^2/\text{NDF}$ : 75591.9/4

Left In:  $471.772 \pm 0.149$   $\chi^2/\text{NDF}$ : 62.3/7

$473.118 \pm 0.125$   $\chi^2/\text{NDF}$ : 3267.1/13

$478.479 \pm 0.125$   $\chi^2/\text{NDF}$ : 82353.6/12

# asym\_atl1\_correction\_mean vs slug



Right In: -319.623+/-598.519  $\chi^2$ /NDF: 4.4/3

Left Out: -0.504+/-428.990  $\chi^2$ /NDF: 4.8/9

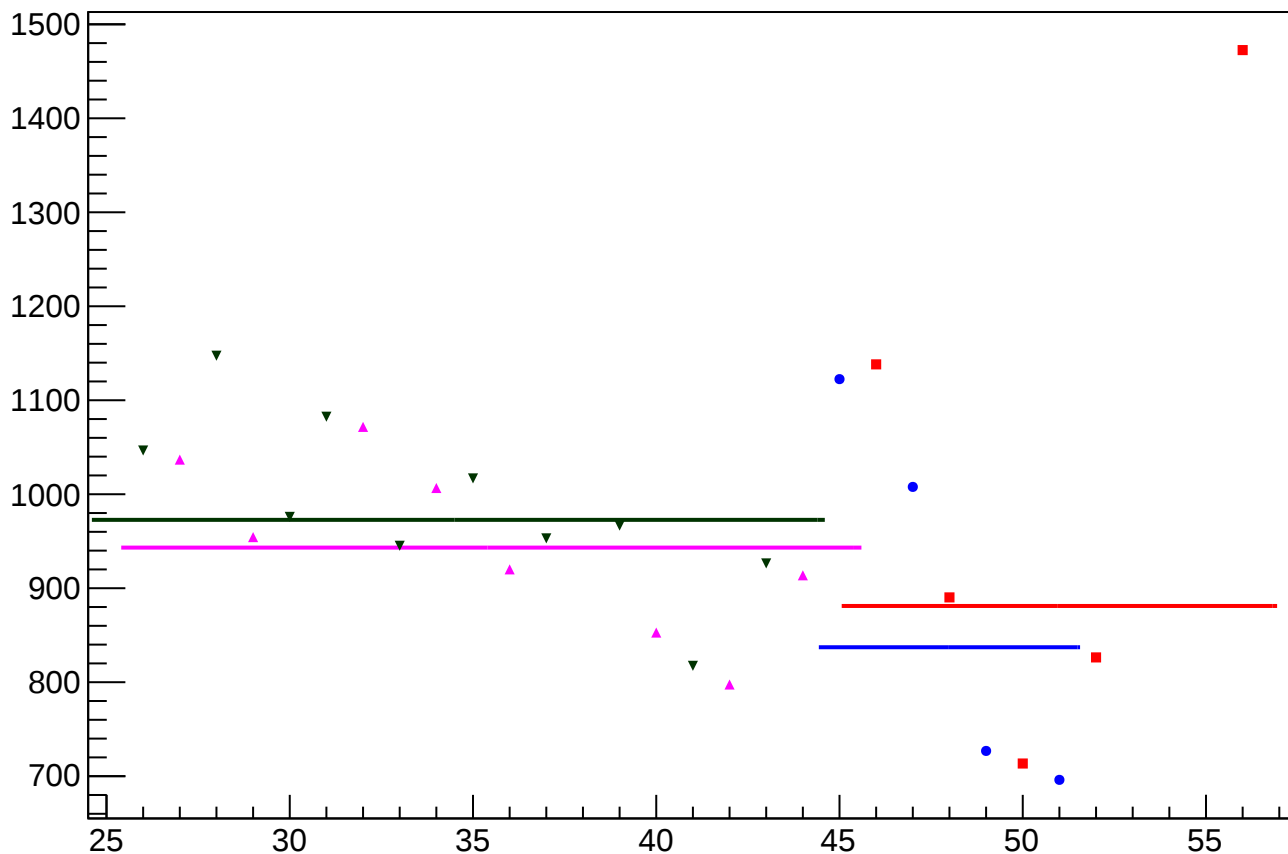
Right Out: 124.828+/-585.409  $\chi^2$ /NDF: 7.2/4

Left In: -876.325+/-419.386  $\chi^2$ /NDF: 6.9/7

-108.807+/-348.676  $\chi^2$ /NDF: 9.4/13

-536.774+/-340.927  $\chi^2$ /NDF: 16.0/12

# asym\_atl1\_correction\_rms vs slug



Right In: 837.197+/-0.423  $\chi^2/\text{NDF}$ : 151230.0/3

Left Out: 972.740+/-0.303  $\chi^2/\text{NDF}$ : 93722.9/9

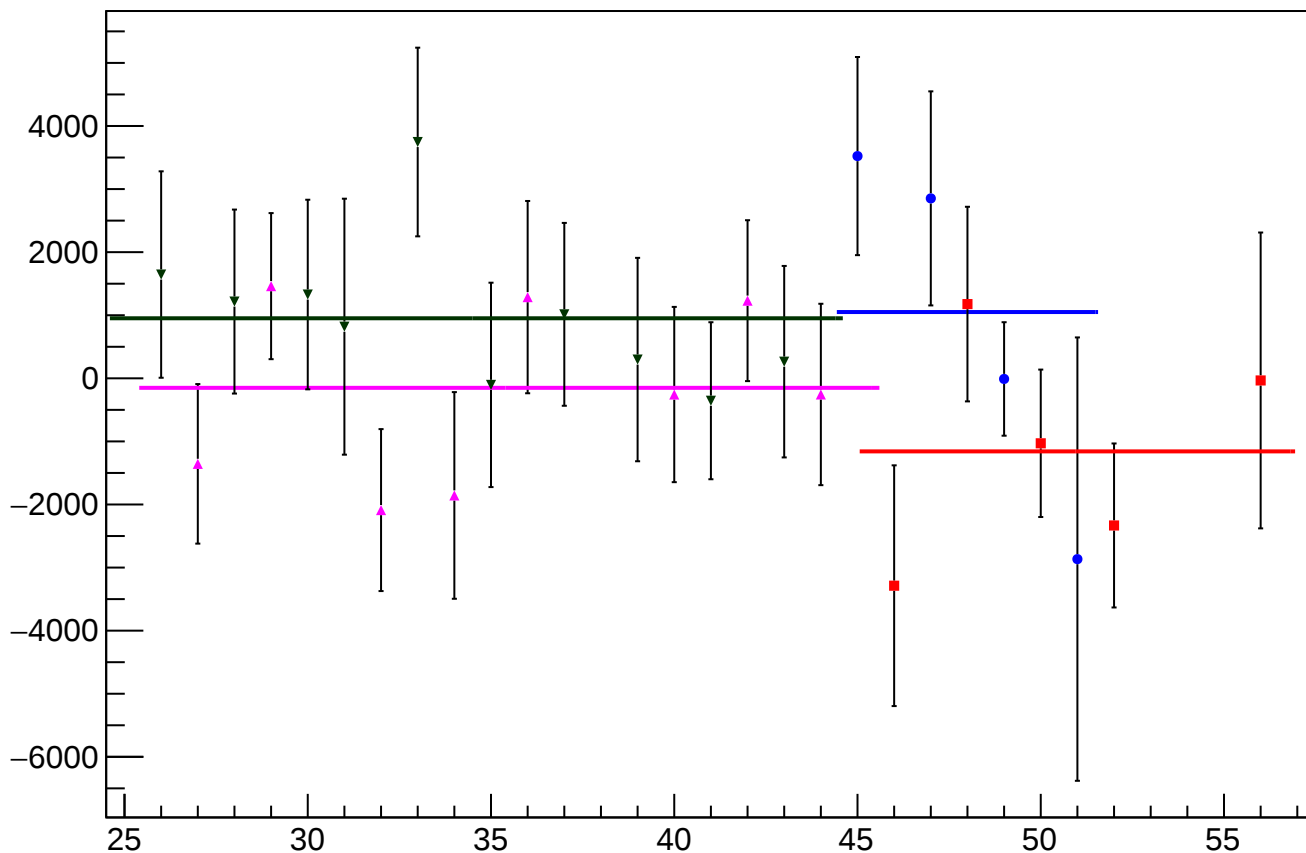
Right Out: 881.118+/-0.414  $\chi^2/\text{NDF}$ : 260586.7/4

Left In: 943.222+/-0.297  $\chi^2/\text{NDF}$ : 91364.0/7

926.739+/-0.247  $\chi^2/\text{NDF}$ : 312713.6/13

922.159+/-0.241  $\chi^2/\text{NDF}$ : 366825.4/12

# asym\_atl1\_mean vs slug



Right In:  $1050.793 \pm 695.098$   $\chi^2/\text{NDF}: 6.2/3$

Left Out:  $951.884 \pm 482.337$   $\chi^2/\text{NDF}: 5.7/9$

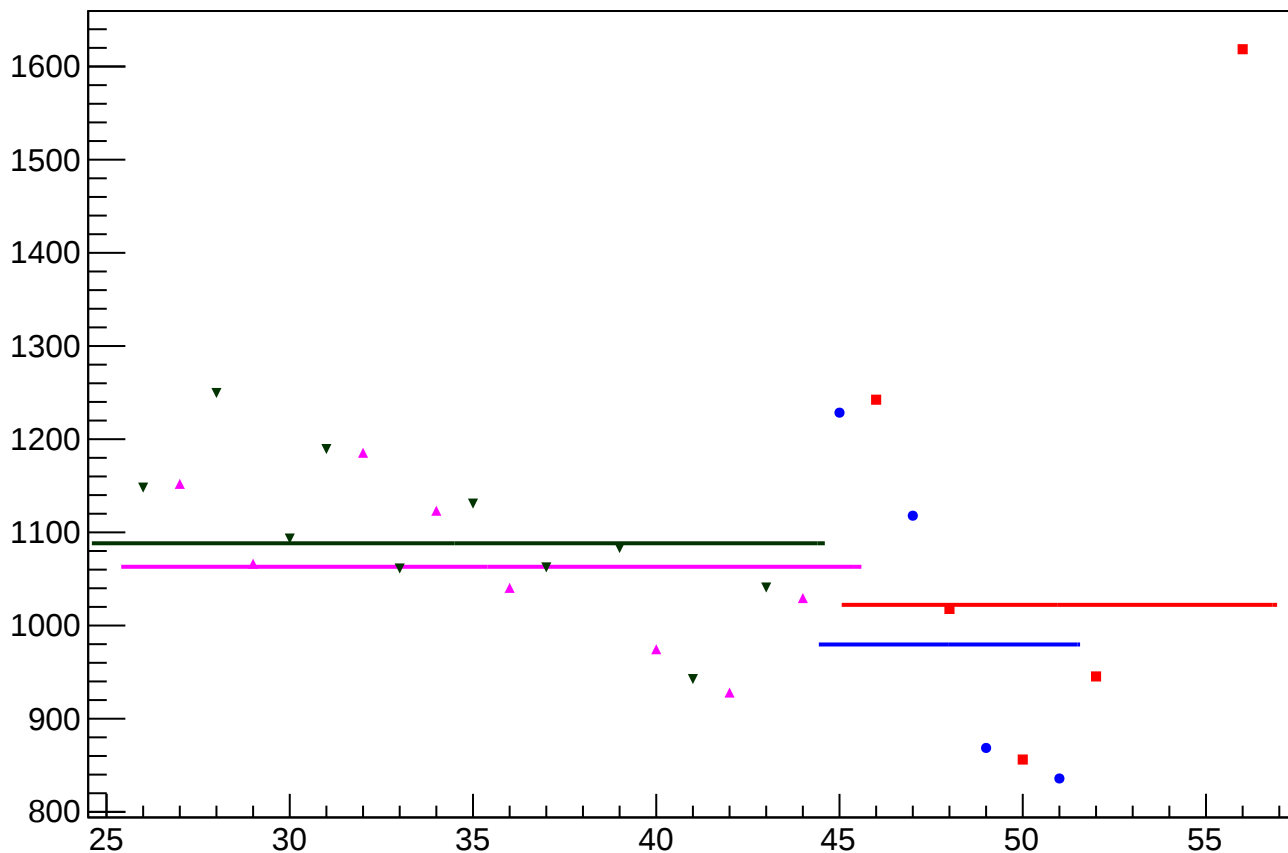
Right Out:  $-1158.257 \pm 674.054$   $\chi^2/\text{NDF}: 4.6/4$

Left In:  $-150.701 \pm 476.838$   $\chi^2/\text{NDF}: 8.3/7$

$984.031 \pm 396.276$   $\chi^2/\text{NDF}: 11.9/13$

$-486.750 \pm 389.279$   $\chi^2/\text{NDF}: 14.4/12$

# asym\_atl1\_rms vs slug



Right In: 979.668 $\pm$ 0.492     $\chi^2/\text{NDF}$ : 97294.4/3

Left Out: 1088.294 $\pm$ 0.341     $\chi^2/\text{NDF}$ : 64214.9/9

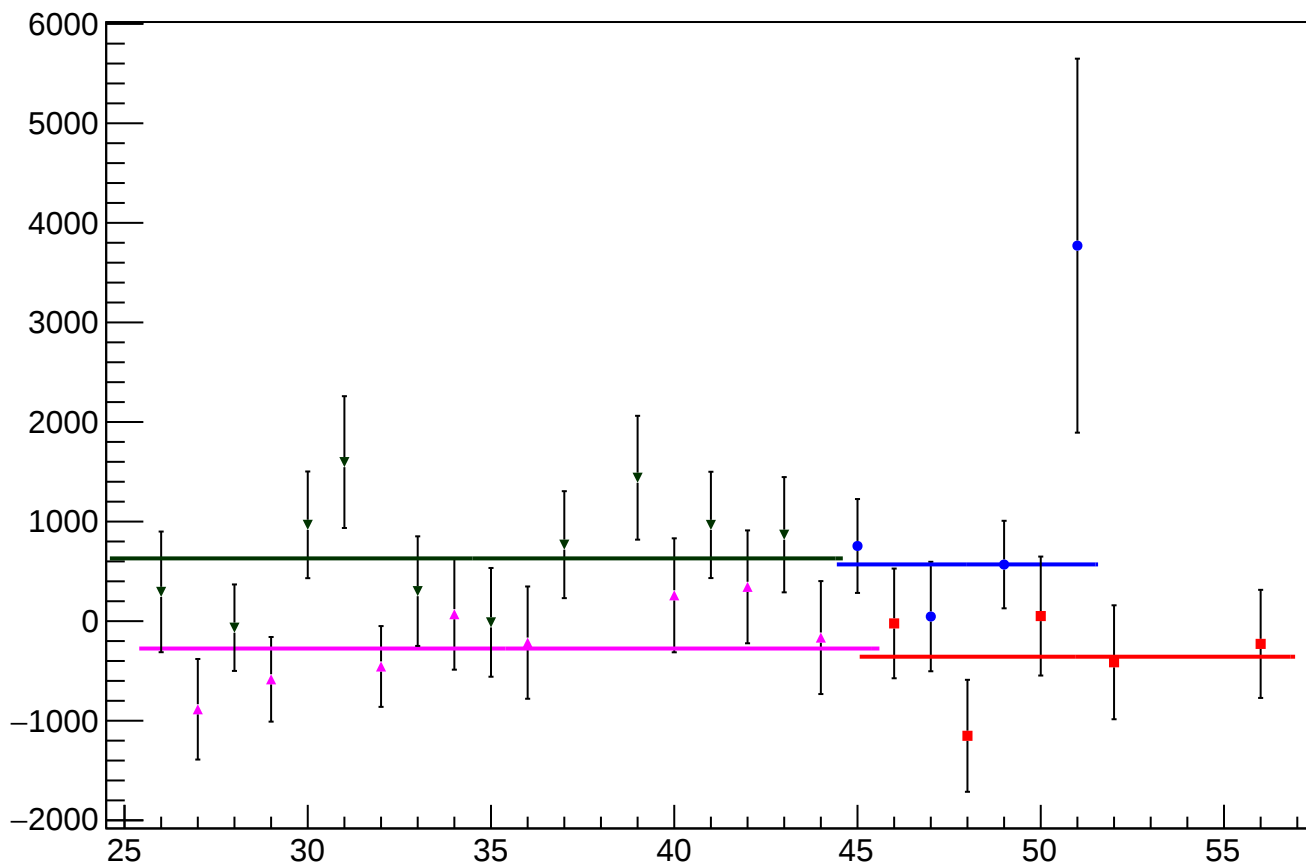
Right Out: 1022.206 $\pm$ 0.477     $\chi^2/\text{NDF}$ : 203345.1/4

Left In: 1063.060 $\pm$ 0.337     $\chi^2/\text{NDF}$ : 62842.0/7

1052.989 $\pm$ 0.280     $\chi^2/\text{NDF}$ : 194478.1/13

1049.434 $\pm$ 0.275     $\chi^2/\text{NDF}$ : 271083.6/12

# reg\_asym\_atl2\_mean vs slug



Right In:  $569.804 \pm 274.505$   $\chi^2/\text{NDF}: 4.0/3$

Left Out:  $630.254 \pm 174.091$   $\chi^2/\text{NDF}: 9.5/9$

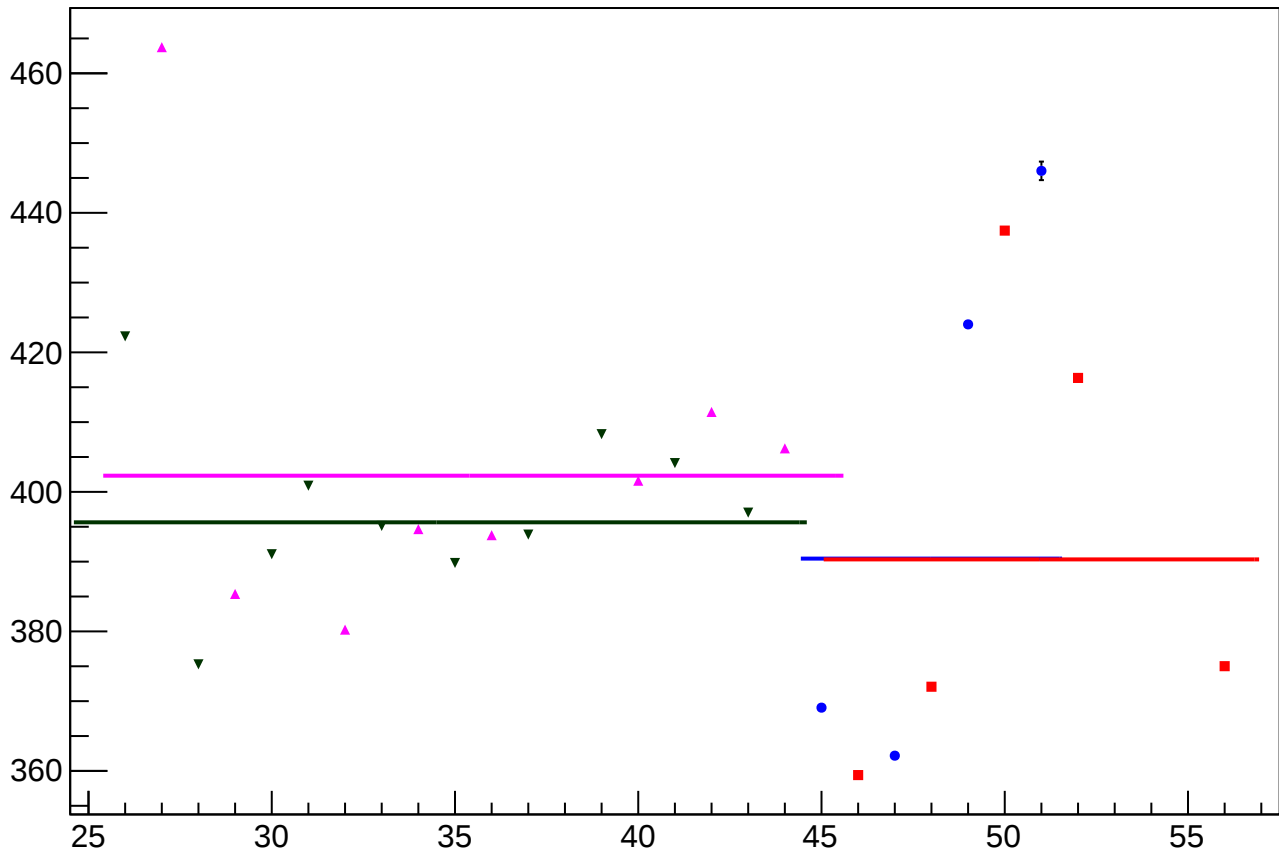
Right Out:  $-357.120 \pm 252.306$   $\chi^2/\text{NDF}: 2.9/4$

Left In:  $-274.945 \pm 179.112$   $\chi^2/\text{NDF}: 4.7/7$

$612.914 \pm 147.018$   $\chi^2/\text{NDF}: 13.5/13$

$-302.481 \pm 146.052$   $\chi^2/\text{NDF}: 7.7/12$

# reg\_asym\_atl2\_rms vs slug



Right In: 390.435+/-0.194  $\chi^2/\text{NDF}$ : 22818.1/3

Left Out: 395.636+/-0.123  $\chi^2/\text{NDF}$ : 10131.9/9

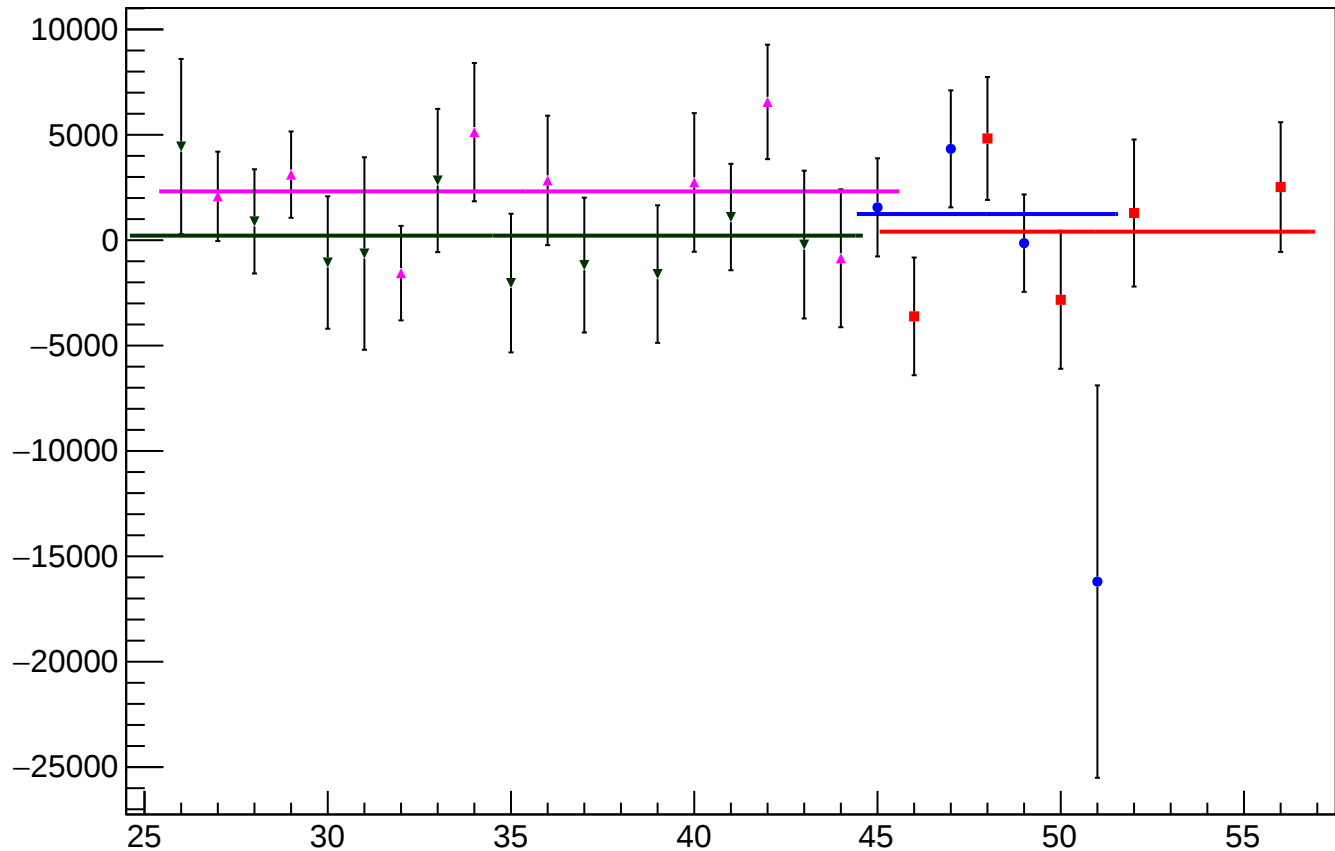
Right Out: 390.320+/-0.178  $\chi^2/\text{NDF}$ : 26582.5/4

Left In: 402.320+/-0.127  $\chi^2/\text{NDF}$ : 40146.8/7

394.144+/-0.104  $\chi^2/\text{NDF}$ : 33462.1/13

398.299+/-0.103  $\chi^2/\text{NDF}$ : 69737.5/12

# asym\_atl2\_correction\_mean vs slug



Right In:  $1241.164 \pm 1396.171$   $\chi^2/\text{NDF}$ : 5.1/3

Left Out:  $216.258 \pm 1010.244$   $\chi^2/\text{NDF}$ : 3.0/9

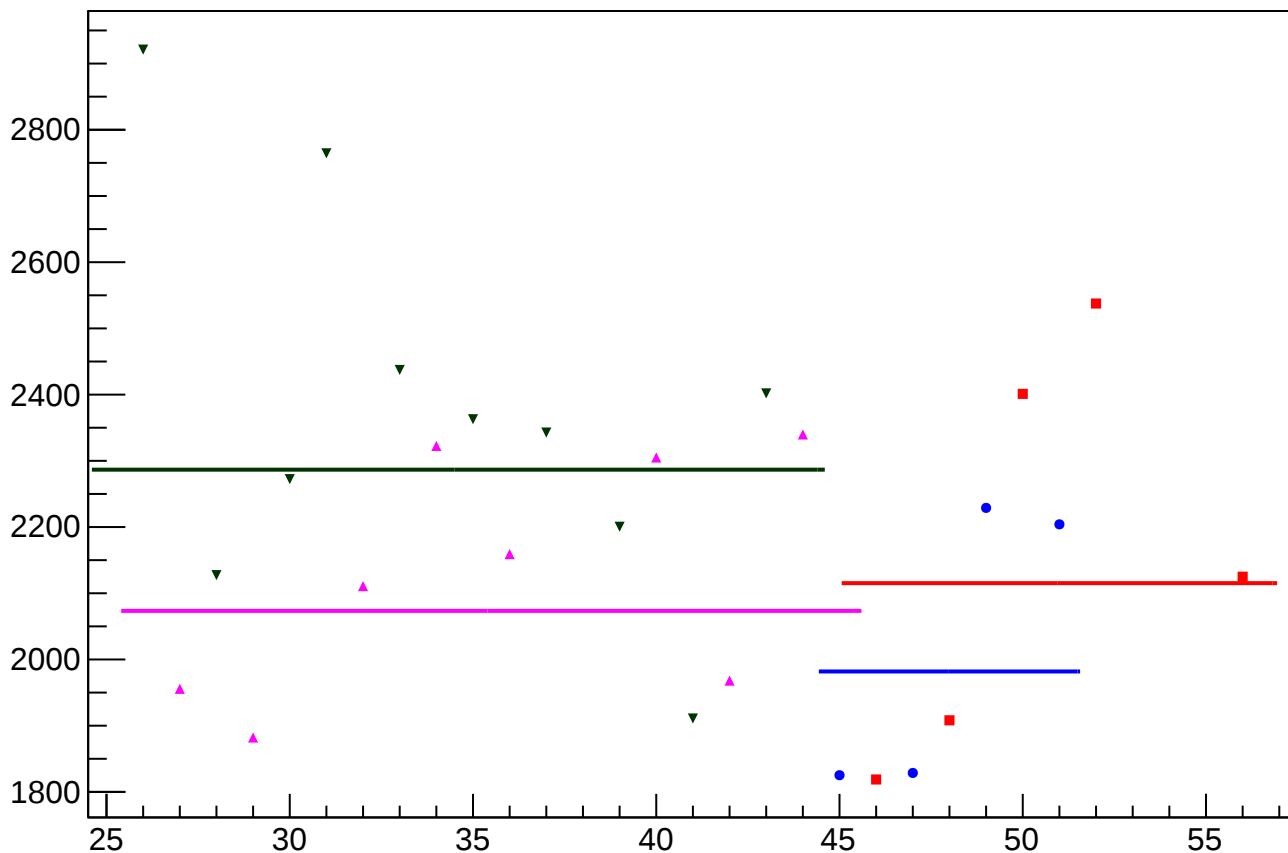
Right Out:  $404.424 \pm 1377.624$   $\chi^2/\text{NDF}$ : 5.9/4

Left In:  $2315.339 \pm 920.569$   $\chi^2/\text{NDF}$ : 7.3/7

$568.464 \pm 818.455$   $\chi^2/\text{NDF}$ : 8.5/13

$1725.457 \pm 765.407$   $\chi^2/\text{NDF}$ : 14.5/12

# asym\_atl2\_correction\_rms vs slug



Right In: 1981.899+/-0.987  $\chi^2/\text{NDF}$ : 39142.2/3

Left Out: 2286.677+/-0.714  $\chi^2/\text{NDF}$ :130336.9/9

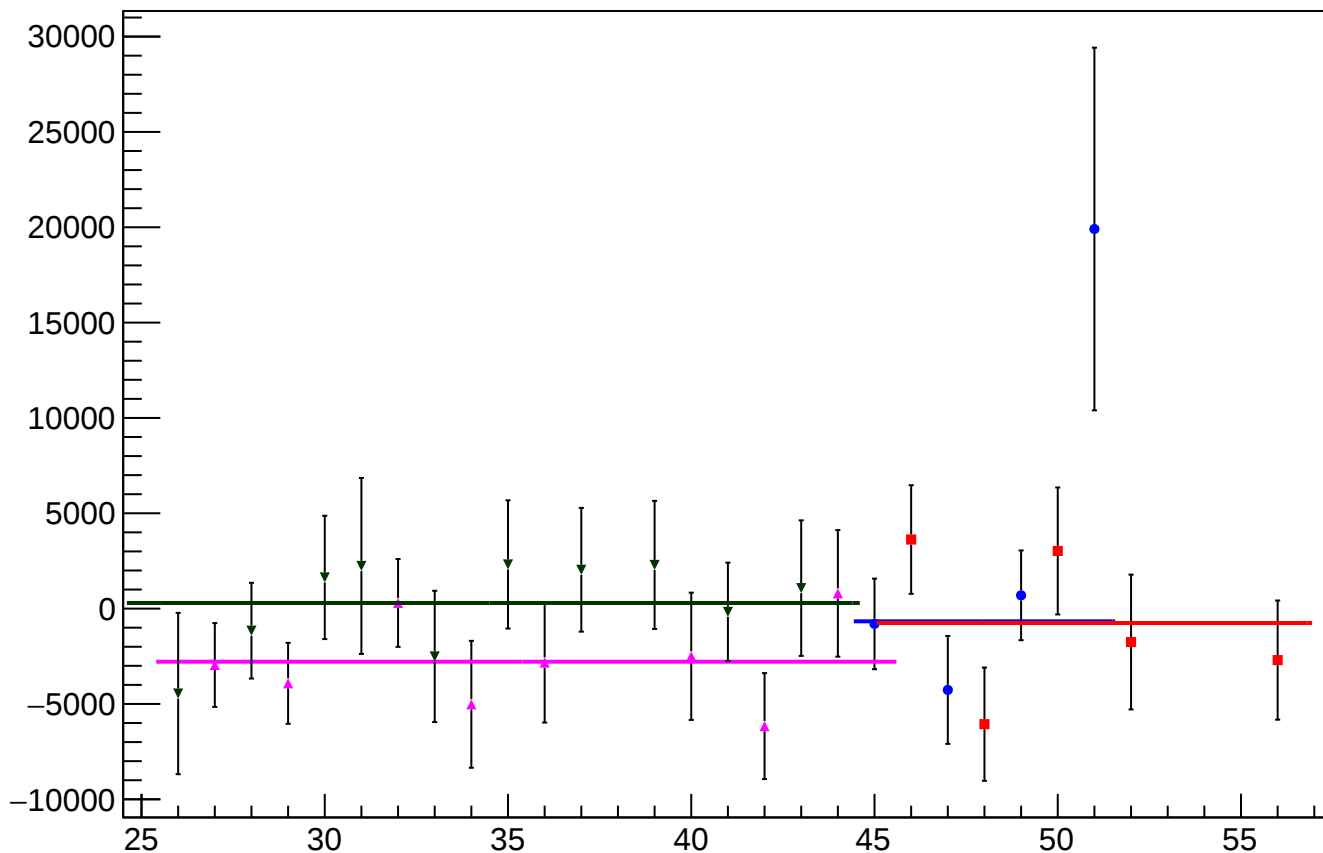
Right Out: 2115.280+/-0.974  $\chi^2/\text{NDF}$ : 77216.5/4

Left In: 2073.386+/-0.651  $\chi^2/\text{NDF}$ :63457.3/7

2181.941+/-0.579  $\chi^2/\text{NDF}$ : 232033.6/13

2086.319+/-0.541  $\chi^2/\text{NDF}$ : 141952.4/12

# asym\_atl2\_mean vs slug



Right In:  $-665.616 \pm 1423.301$   $\chi^2/\text{NDF}$ : 6.6/3

Left Out:  $296.079 \pm 1029.874$   $\chi^2/\text{NDF}$ : 3.7/9

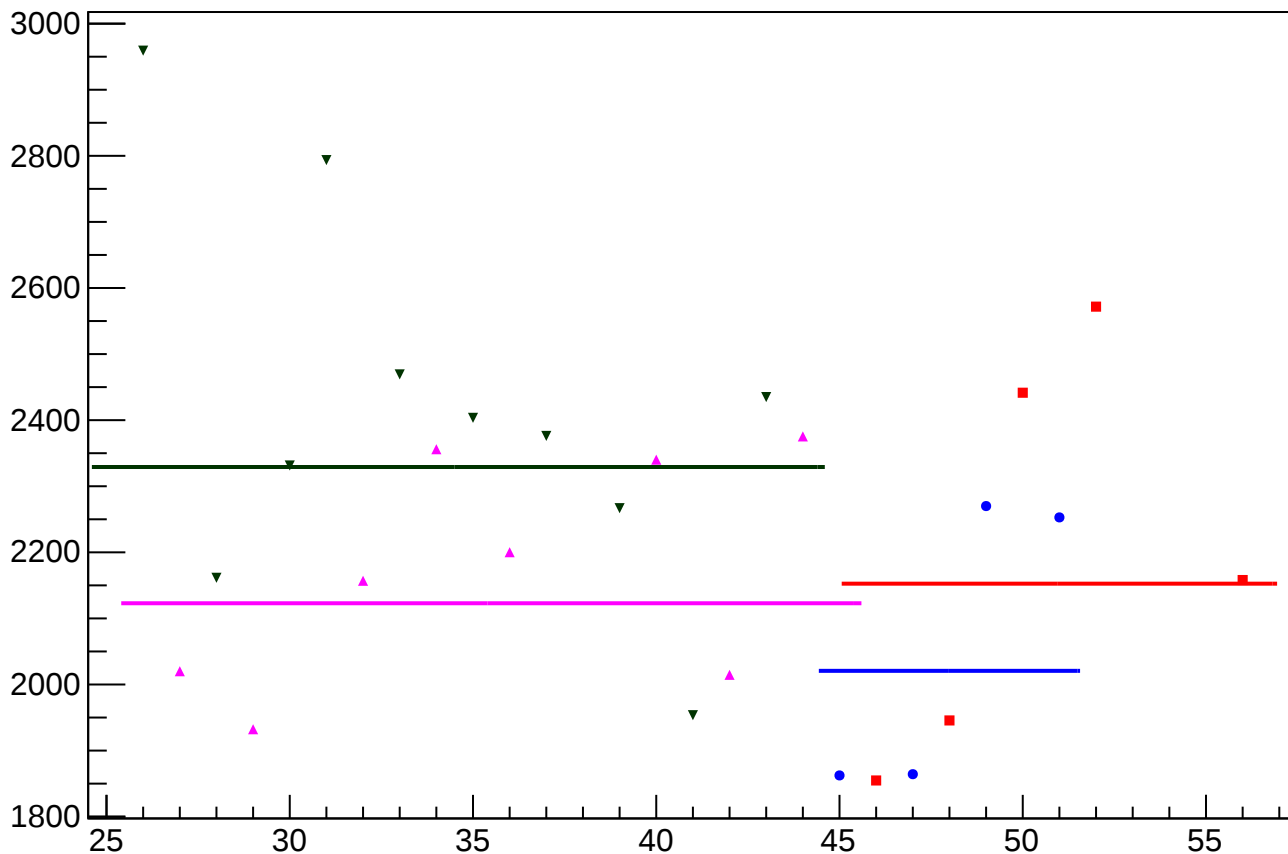
Right Out:  $-753.420 \pm 1401.355$   $\chi^2/\text{NDF}$ : 7.3/4

Left In:  $-2784.125 \pm 945.556$   $\chi^2/\text{NDF}$ : 5.2/7

$-34.404 \pm 834.359$   $\chi^2/\text{NDF}$ : 10.6/13

$-2148.826 \pm 783.816$   $\chi^2/\text{NDF}$ : 13.9/12

# asym\_atl2\_rms vs slug



Right In: 2020.672 $\pm$ 1.006  $\chi^2$ /NDF: 38621.2/3

Left Out: 2329.125 $\pm$ 0.728  $\chi^2$ /NDF:123081.1/9

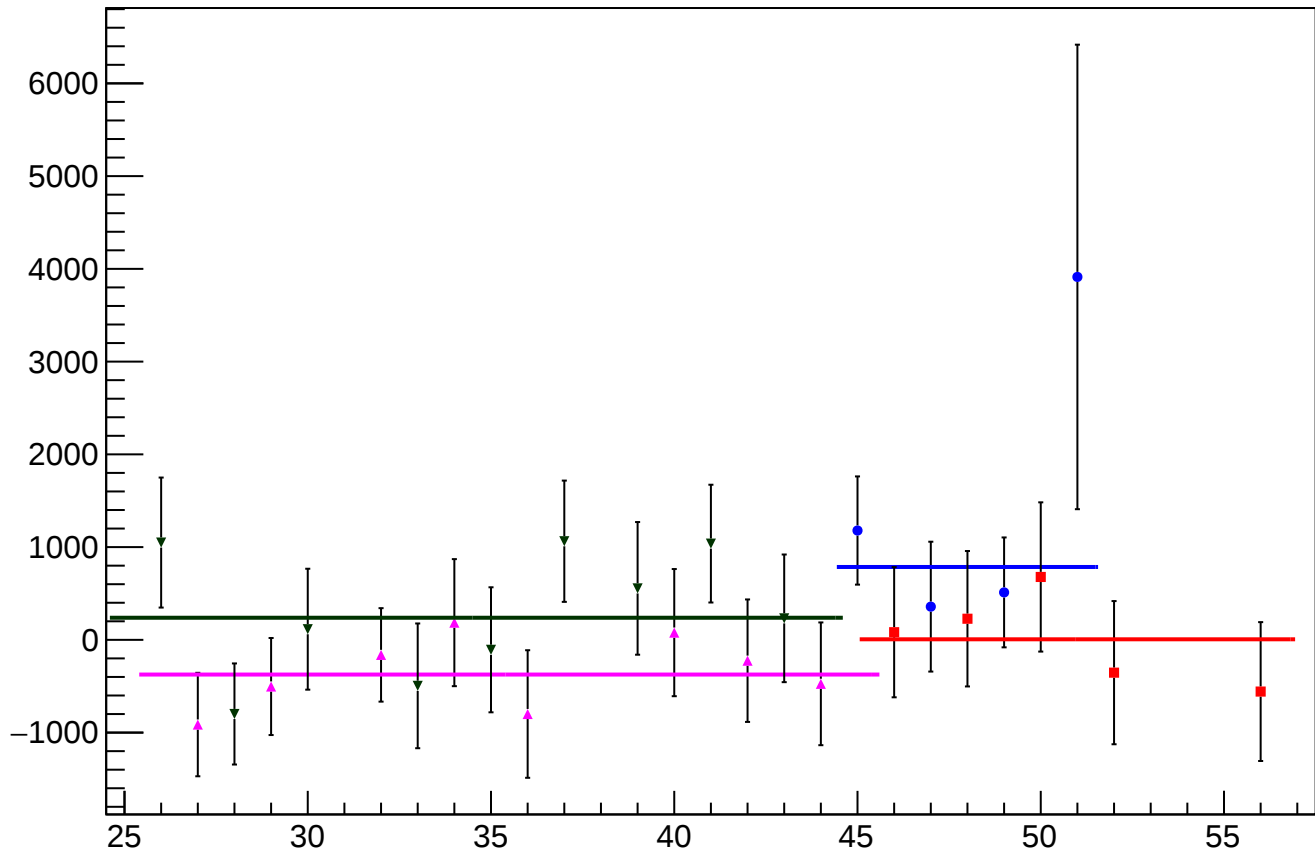
Right Out: 2152.579 $\pm$ 0.991  $\chi^2$ /NDF: 74761.7/4

Left In: 2122.943 $\pm$ 0.669  $\chi^2$ /NDF:55037.1/7

2223.126 $\pm$ 0.590  $\chi^2$ /NDF: 223355.0/13

2132.215 $\pm$ 0.554  $\chi^2$ /NDF: 130413.4/12

# reg\_asym\_atr1\_mean vs slug



Right In:  $785.727 \pm 353.836$   $\chi^2/\text{NDF}: 2.6/3$

Left Out:  $238.372 \pm 217.936$   $\chi^2/\text{NDF}: 9.8/8$

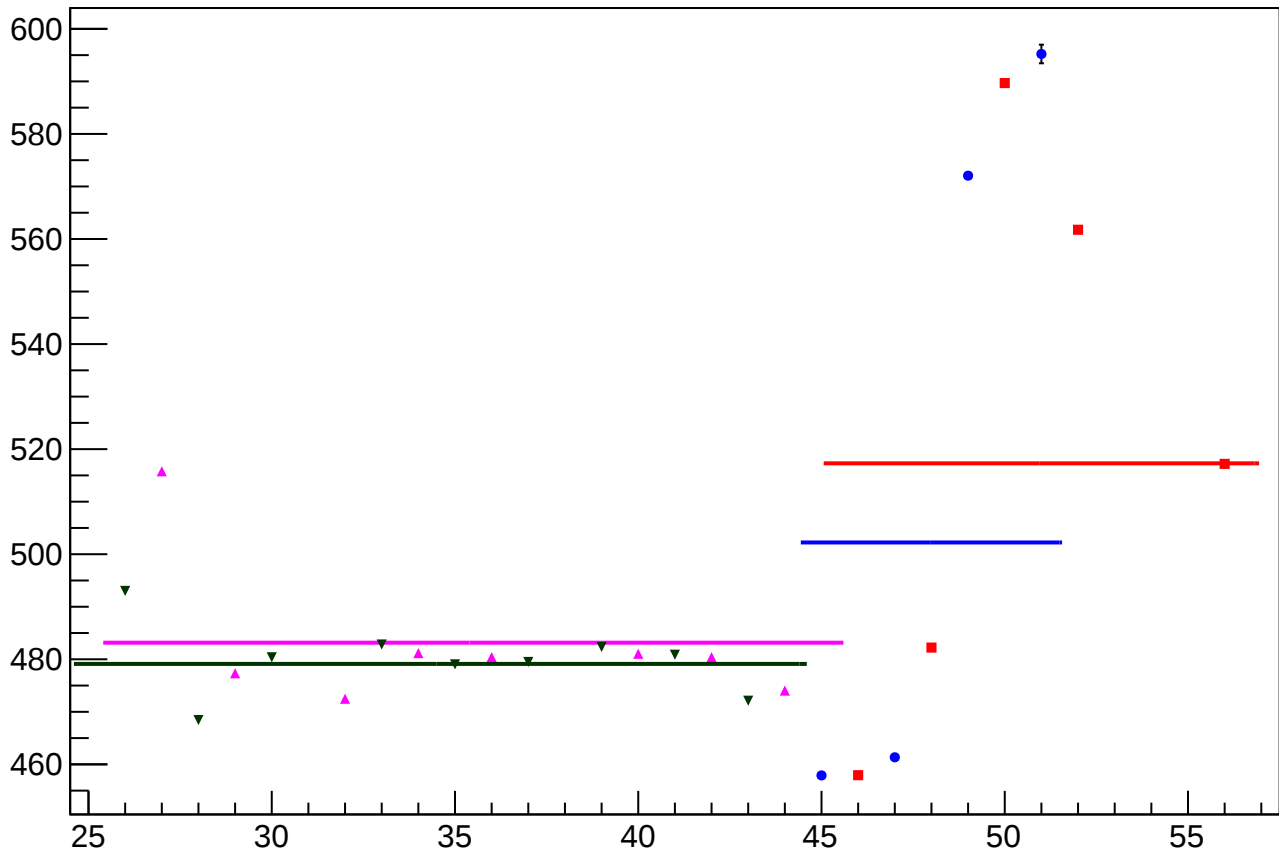
Right Out:  $5.982 \pm 334.967$   $\chi^2/\text{NDF}: 1.6/4$

Left In:  $-374.119 \pm 214.392$   $\chi^2/\text{NDF}: 2.7/7$

$388.910 \pm 185.562$   $\chi^2/\text{NDF}: 14.2/12$

$-263.661 \pm 180.573$   $\chi^2/\text{NDF}: 5.2/12$

# reg\_asym\_atr1\_rms vs slug



Right In: 502.237+/-0.250  $\chi^2/\text{NDF}$ : 48909.3/3

Left Out: 479.120+/-0.154  $\chi^2/\text{NDF}$ : 1886.5/8

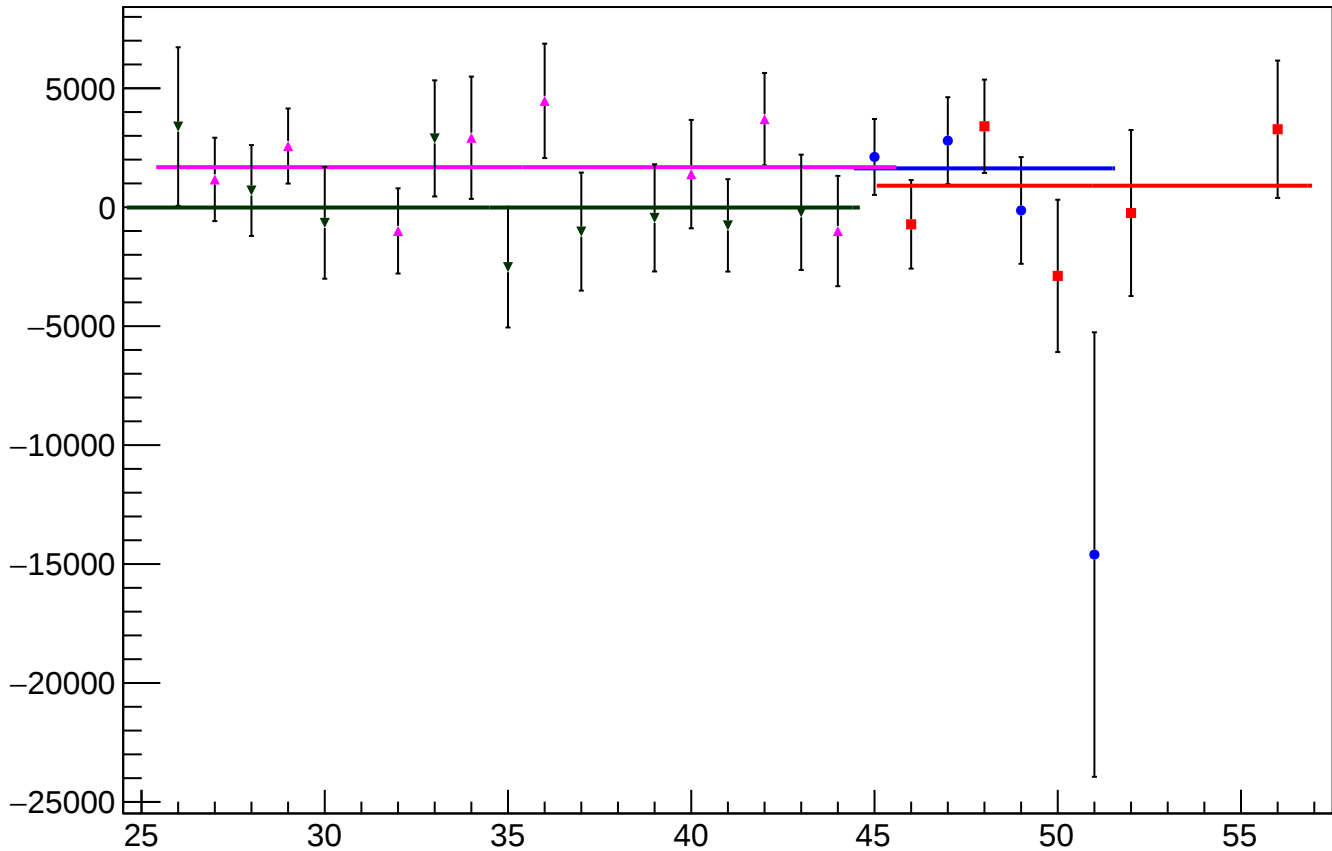
Right Out: 517.299+/-0.237  $\chi^2/\text{NDF}$ : 41735.0/4

Left In: 483.160+/-0.152  $\chi^2/\text{NDF}$ : 8470.0/7

485.477+/-0.131  $\chi^2/\text{NDF}$ : 56985.0/12

493.081+/-0.128  $\chi^2/\text{NDF}$ : 64942.2/12

# asym\_atr1\_correction\_mean vs slug



Right In:  $1632.698 \pm 1052.403$   $\chi^2/\text{NDF}$ : 4.1/3

Left Out:  $-13.564 \pm 775.077$   $\chi^2/\text{NDF}$ : 4.0/8

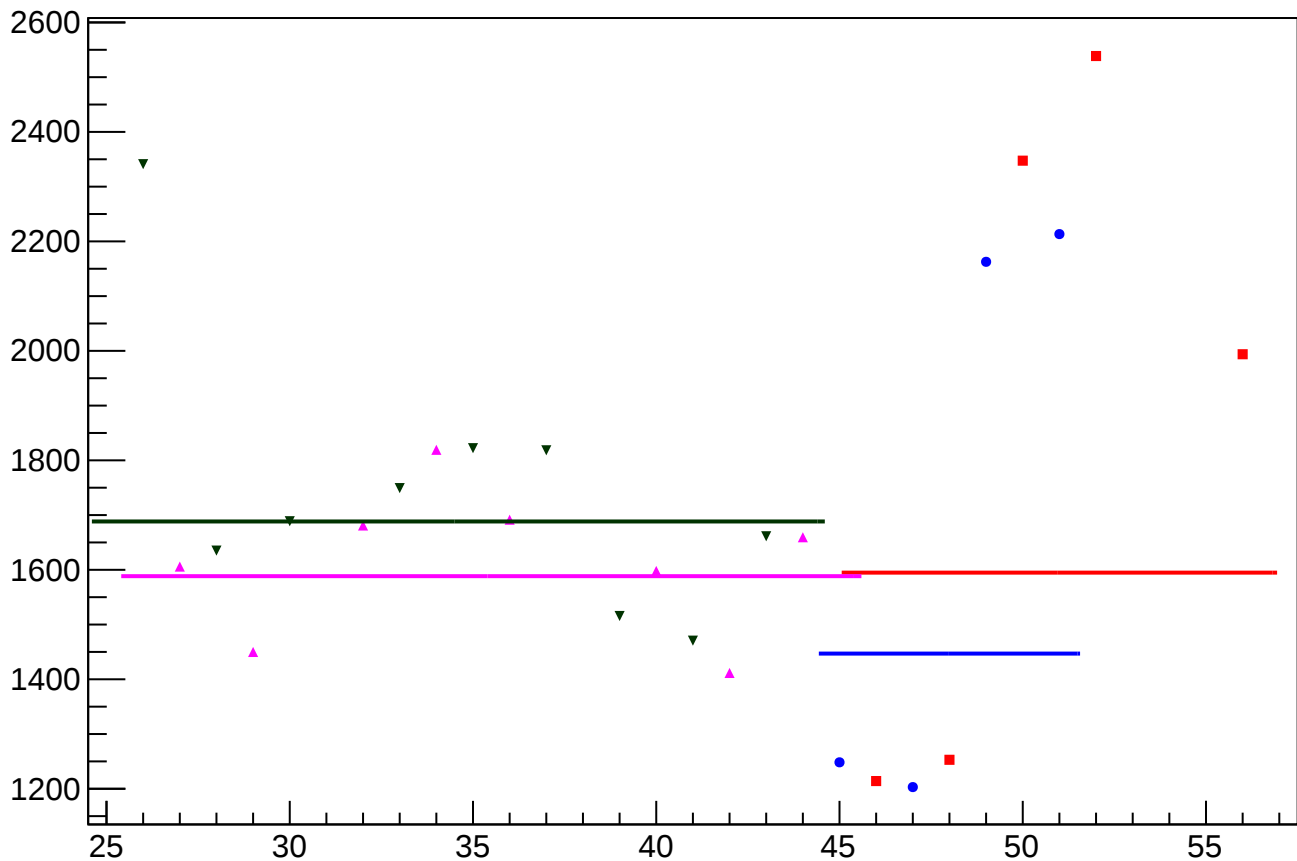
Right Out:  $904.729 \pm 1085.765$   $\chi^2/\text{NDF}$ : 4.6/4

Left In:  $1683.939 \pm 705.940$   $\chi^2/\text{NDF}$ : 6.7/7

$565.365 \pm 624.087$   $\chi^2/\text{NDF}$ : 9.7/12

$1452.416 \pm 591.843$   $\chi^2/\text{NDF}$ : 11.6/12

# asym\_atr1\_correction\_rms vs slug



Right In: 1446.956 $\pm$ 0.744  $\chi^2$ /NDF: 283891.1/3

Left Out: 1688.324 $\pm$ 0.548  $\chi^2$ /NDF:127706.3/8

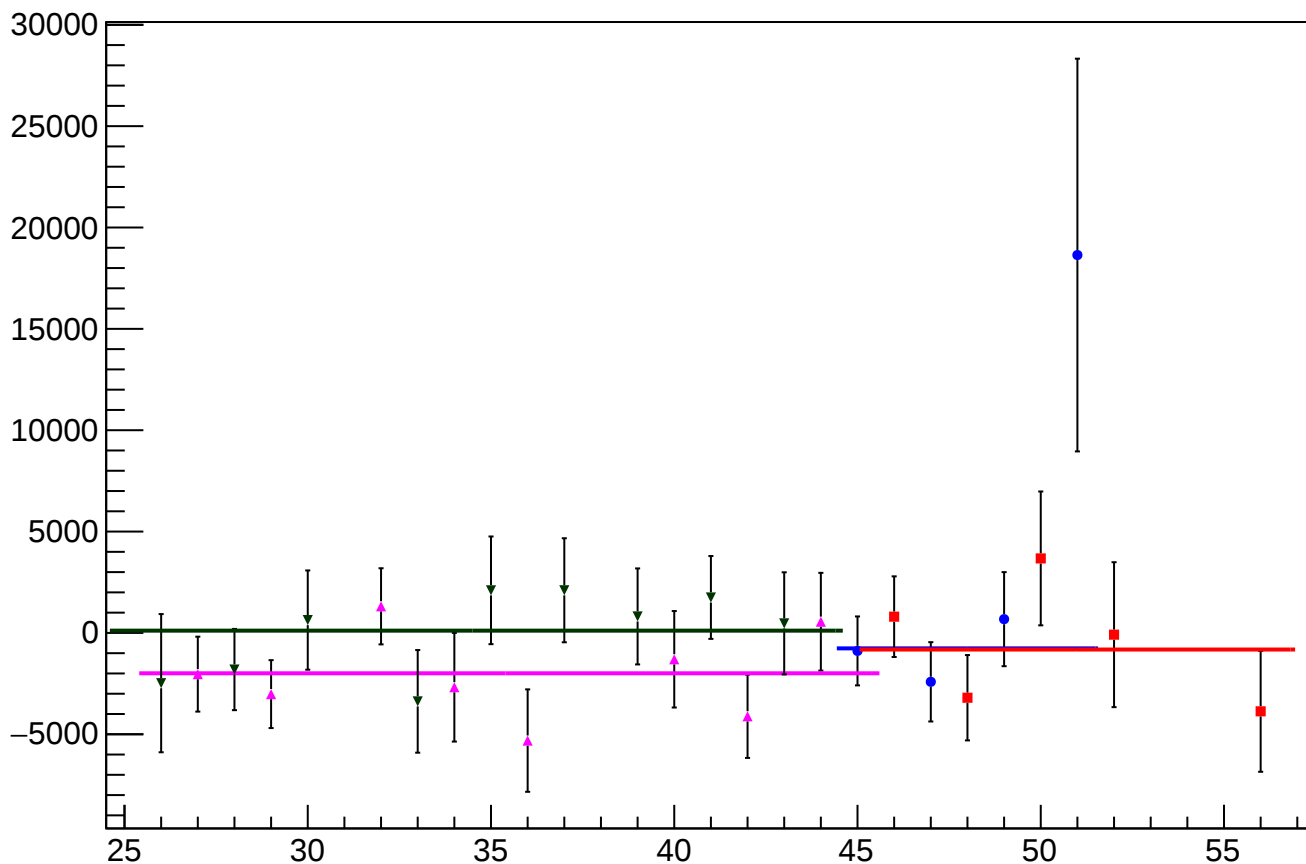
1603.444 $\pm$ 0.441  $\chi^2$ /NDF: 479804.3/12

Right Out: 1594.858 $\pm$ 0.768  $\chi^2$ /NDF: 439470.3/4

1590.313 $\pm$ 0.418  $\chi^2$ /NDF: 498747.9/12

Left In: 1588.391 $\pm$ 0.499  $\chi^2$ /NDF:59227.6/7

# asym\_atr1\_mean vs slug



Right In: -762.550+/-1115.594  $\chi^2/\text{NDF}$ : 5.1/3

Left Out: 112.152+/-809.295  $\chi^2/\text{NDF}$ : 5.4/8

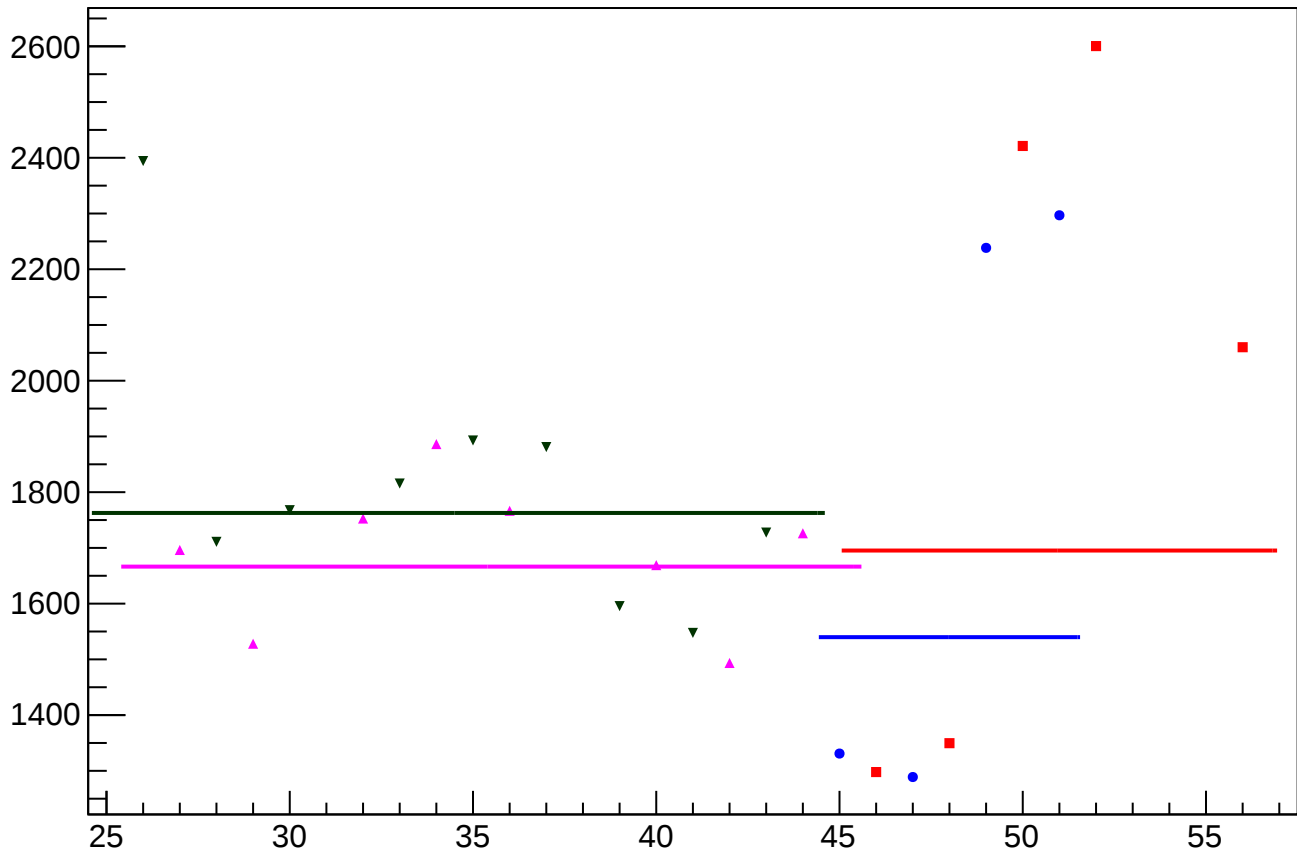
Right Out: -819.334+/-1146.554  $\chi^2/\text{NDF}$ : 4.9/4

Left In: -1991.664+/-742.563  $\chi^2/\text{NDF}$ : 7.5/7

-189.449+/-655.077  $\chi^2/\text{NDF}$ : 10.9/12

-1645.240+/-623.266  $\chi^2/\text{NDF}$ : 13.1/12

# asym\_atr1\_rms vs slug



Right In:  $1539.861 \pm 0.789$   $\chi^2/\text{NDF}$ : 256555.5/3

Left Out:  $1762.716 \pm 0.572$   $\chi^2/\text{NDF}$ : 112433.4/8

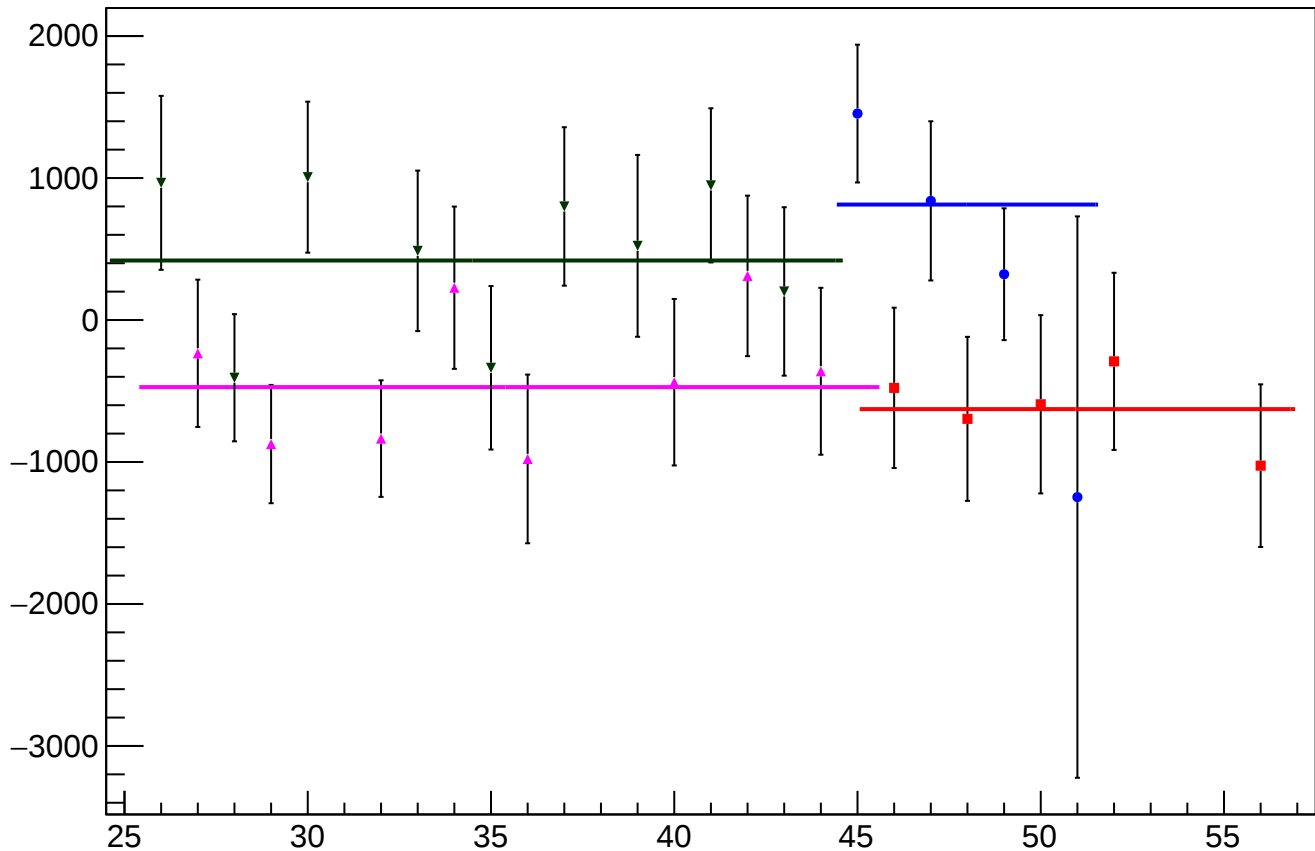
Right Out:  $1695.280 \pm 0.811$   $\chi^2/\text{NDF}$ : 388567.2/4

Left In:  $1666.436 \pm 0.525$   $\chi^2/\text{NDF}$ : 50358.5/7

$1685.875 \pm 0.463$   $\chi^2/\text{NDF}$ : 421280.7/12

$1674.960 \pm 0.441$   $\chi^2/\text{NDF}$ : 439817.5/12

# reg\_asym\_atr2\_mean vs slug



Right In: 813.117+/-284.794  $\chi^2/\text{NDF}$ : 3.9/3

Left Out: 419.150+/-185.000  $\chi^2/\text{NDF}$ : 8.7/8

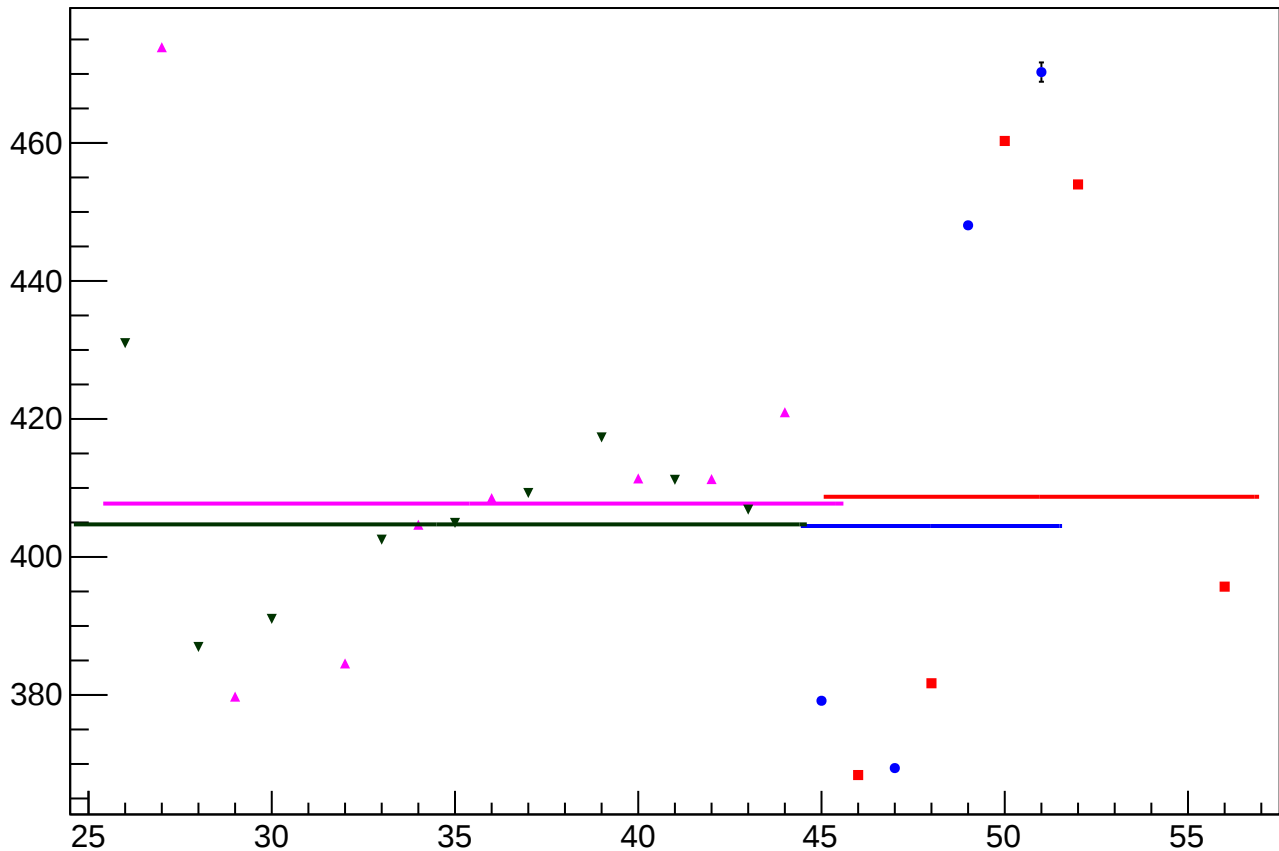
Right Out: -627.495+/-264.556  $\chi^2/\text{NDF}$ : 0.9/4

Left In: -472.383+/-181.829  $\chi^2/\text{NDF}$ : 6.1/7

536.060+/-155.141  $\chi^2/\text{NDF}$ : 14.0/12

-522.148+/-149.849  $\chi^2/\text{NDF}$ : 7.2/12

# reg\_asym\_atr2\_rms vs slug



Right In: 404.488 $\pm$ 0.201  $\chi^2$ /NDF: 33134.2/3

Left Out: 404.722 $\pm$ 0.131  $\chi^2$ /NDF: 9396.7/8

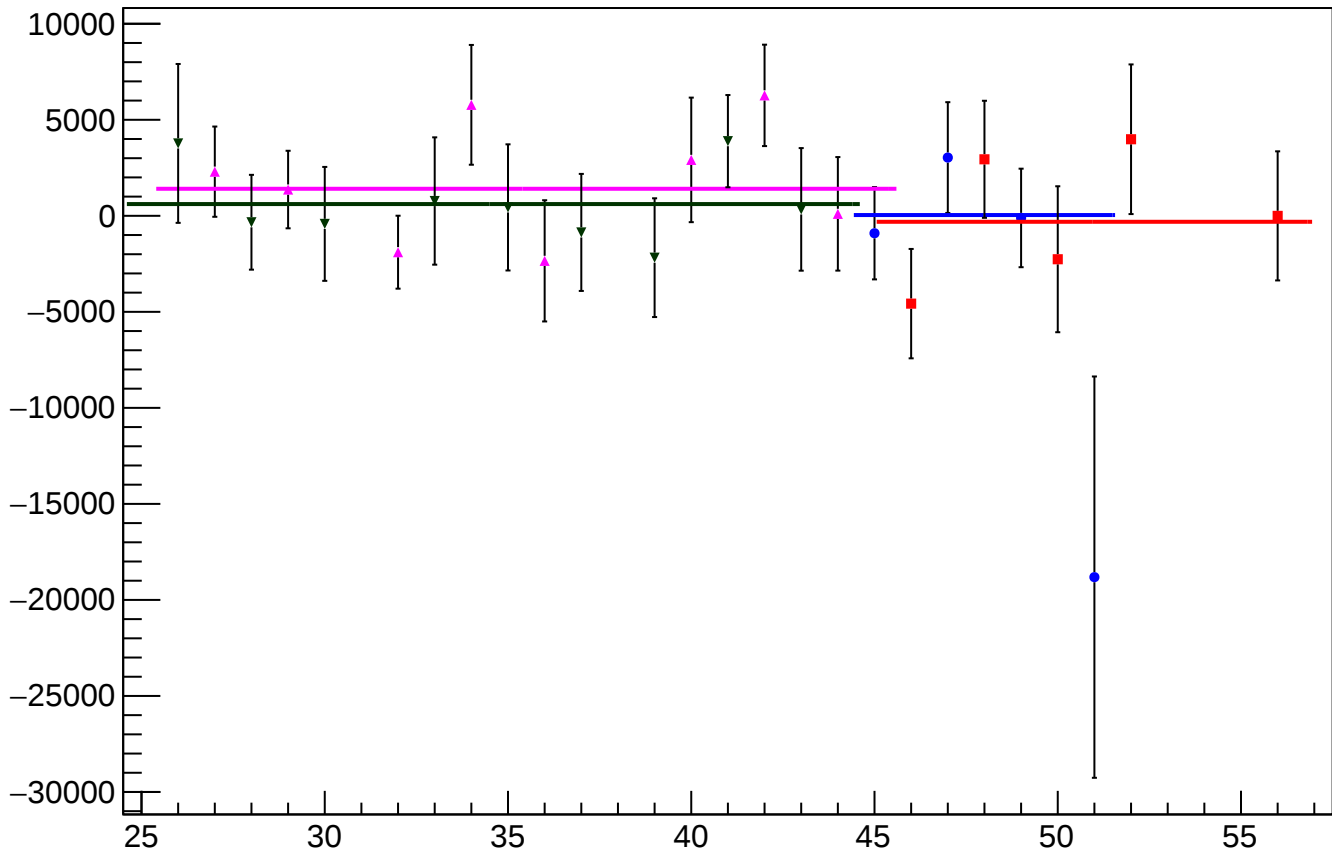
404.652 $\pm$ 0.110  $\chi^2$ /NDF: 42531.9/12

Right Out: 408.725 $\pm$ 0.187  $\chi^2$ /NDF: 39637.2/4

408.054 $\pm$ 0.106  $\chi^2$ /NDF: 88792.7/12

Left In: 407.737 $\pm$ 0.129  $\chi^2$ /NDF: 49136.5/7

# asym\_atr2\_correction\_mean vs slug



Right In:  $40.318 \pm 1483.274$   $\chi^2/\text{NDF}$ : 4.5/3

Left Out:  $611.983 \pm 998.079$   $\chi^2/\text{NDF}$ : 3.8/8

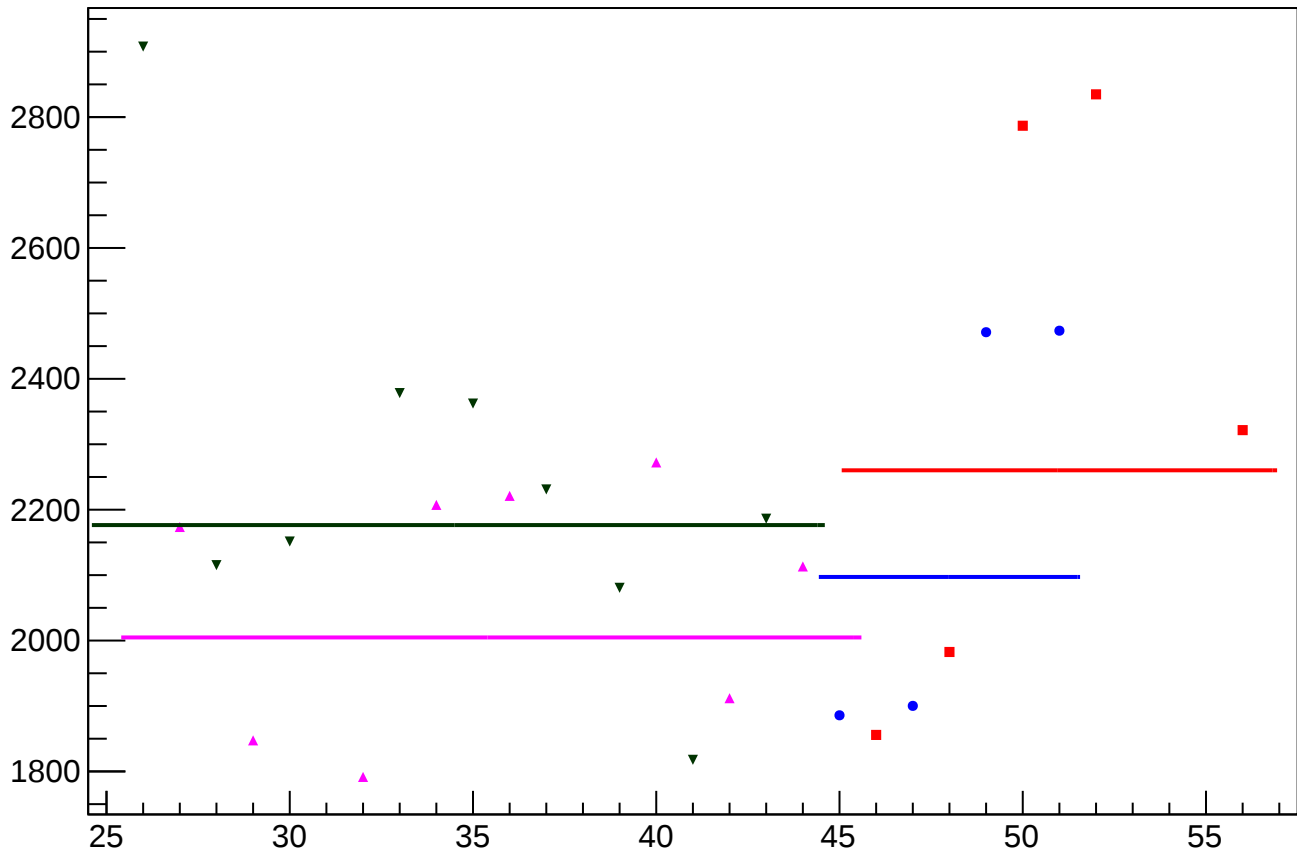
Right Out:  $-310.631 \pm 1483.161$   $\chi^2/\text{NDF}$ : 4.9/4

Left In:  $1408.067 \pm 890.882$   $\chi^2/\text{NDF}$ : 10.3/7

$433.815 \pm 828.066$   $\chi^2/\text{NDF}$ : 8.4/12

$952.377 \pm 763.701$   $\chi^2/\text{NDF}$ : 16.2/12

# asym\_atr2\_correction\_rms vs slug



Right In: 2097.215+/-1.049  $\chi^2/\text{NDF}$ : 69940.6/3

Left Out: 2176.497+/-0.706  $\chi^2/\text{NDF}$ : 124899.3/8

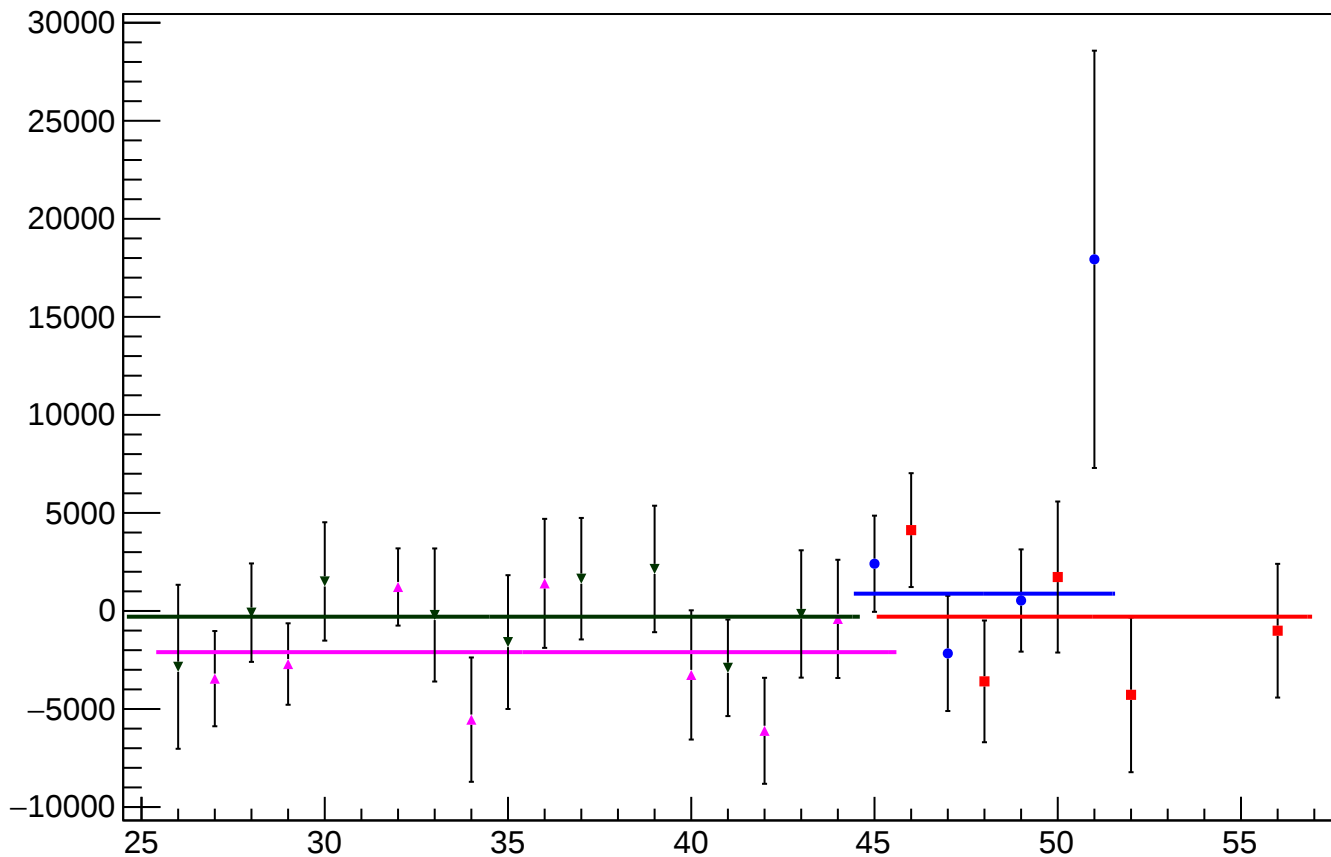
2151.787+/-0.586  $\chi^2/\text{NDF}$ : 198772.9/12

Right Out: 2260.192+/-1.049  $\chi^2/\text{NDF}$ : 139503.8/4

2072.480+/-0.540  $\chi^2/\text{NDF}$ : 267376.8/12

Left In: 2004.754+/-0.630  $\chi^2/\text{NDF}$ : 84278.5/7

# asym\_atr2\_mean vs slug



Right In: 882.435+/-1511.128  $\chi^2/\text{NDF}$ : 4.0/3

Left Out: -292.554+/-1021.514  $\chi^2/\text{NDF}$ : 3.0/8

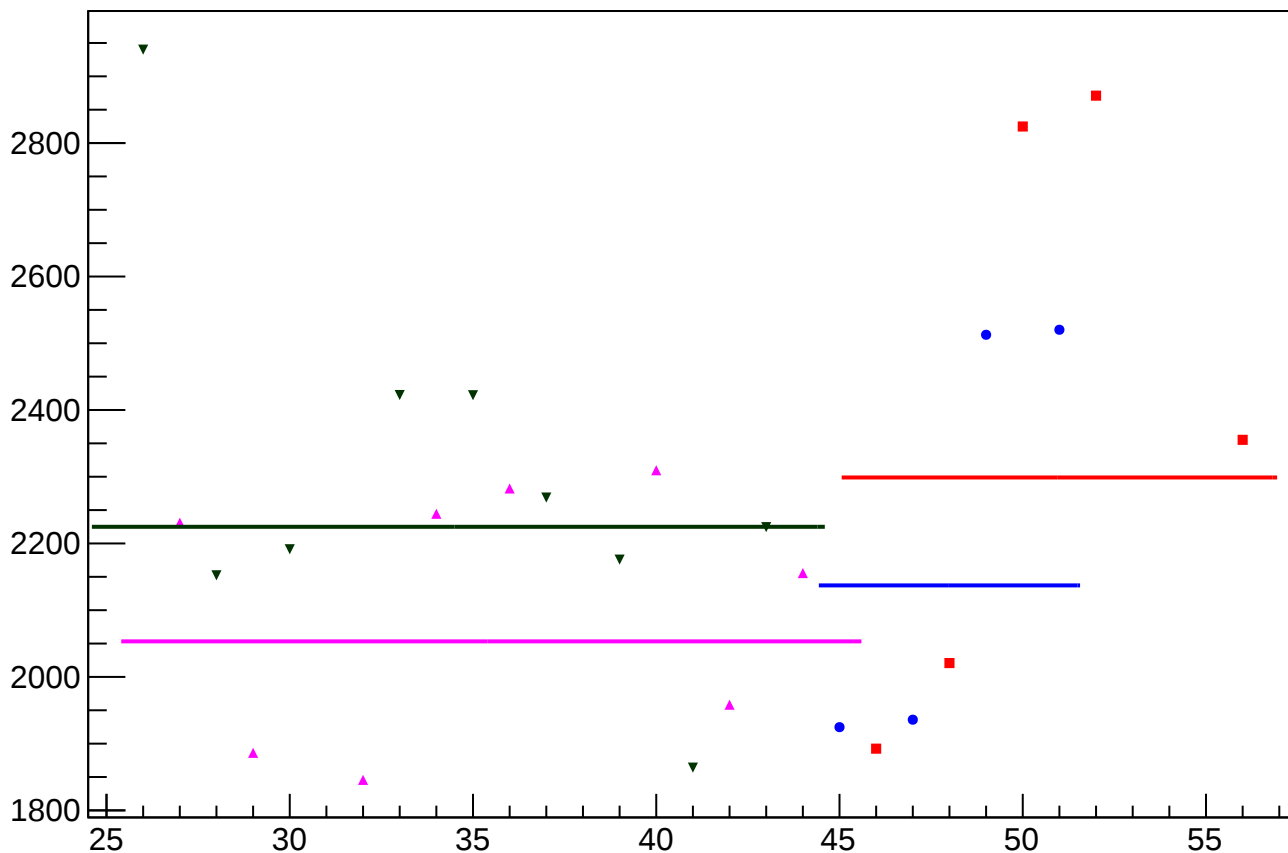
Right Out: -291.321+/-1507.619  $\chi^2/\text{NDF}$ : 4.8/4

Left In: -2100.632+/-916.751  $\chi^2/\text{NDF}$ : 8.2/7

75.974+/-846.290  $\chi^2/\text{NDF}$ : 7.4/12

-1612.218+/-783.302  $\chi^2/\text{NDF}$ : 14.0/12

# asym\_atr2\_rms vs slug



Right In: 2137.142+/-1.069  $\chi^2/\text{NDF}$ : 68467.7/3

Left Out: 2224.962+/-0.722  $\chi^2/\text{NDF}$ :117664.9/8

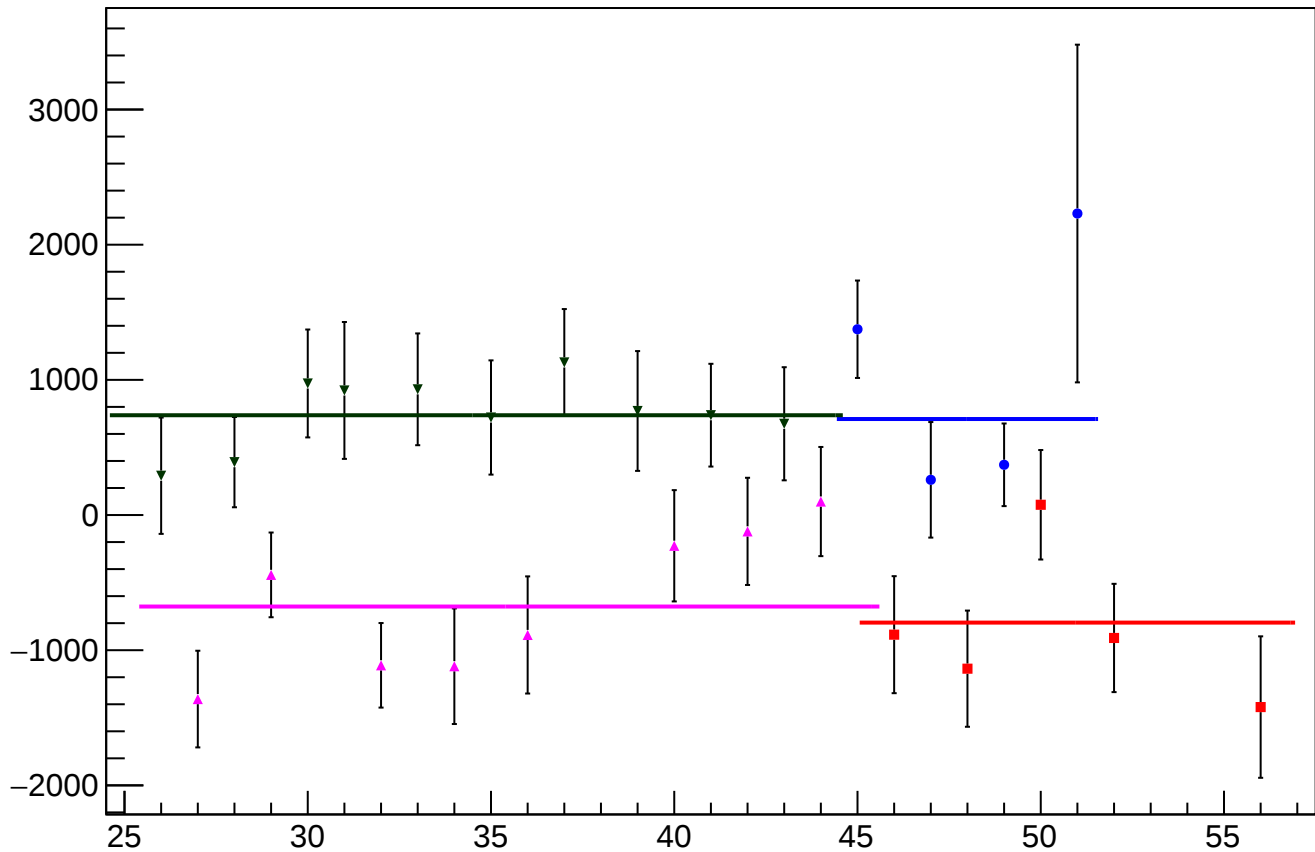
Right Out: 2298.875+/-1.066  $\chi^2/\text{NDF}$ : 135111.9/4

Left In: 2053.263+/-0.648  $\chi^2/\text{NDF}$ :79708.2/7

2197.418+/-0.598  $\chi^2/\text{NDF}$ : 190768.7/12

2119.565+/-0.554  $\chi^2/\text{NDF}$ : 253572.9/12

# reg\_asym\_atl\_avg\_mean vs slug



Right In: 710.321+/-201.938  $\chi^2/\text{NDF}$ : 7.2/3

Left Out: 738.316+/-128.954  $\chi^2/\text{NDF}$ : 3.9/9

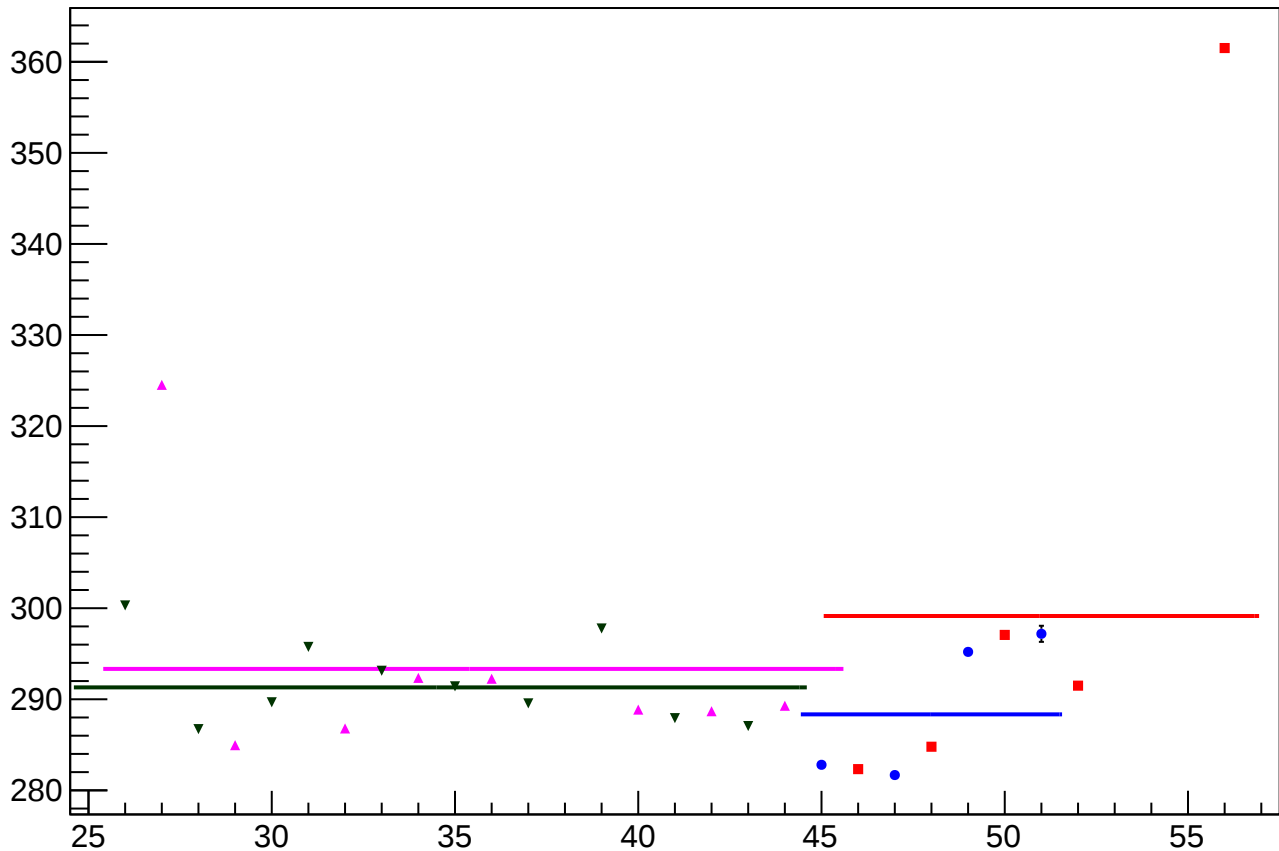
Right Out: -795.787+/-193.414  $\chi^2/\text{NDF}$ : 6.8/4

Left In: -676.938+/-131.978  $\chi^2/\text{NDF}$ : 14.3/7

730.207+/-108.684  $\chi^2/\text{NDF}$ : 11.1/13

-714.696+/-109.016  $\chi^2/\text{NDF}$ : 21.4/12

# reg\_asym\_atl\_avg\_rms vs slug



Right In: 288.343+/-0.143  $\chi^2/\text{NDF}$ : 2067.1/3

Left Out: 291.305+/-0.091  $\chi^2/\text{NDF}$ : 2308.5/9

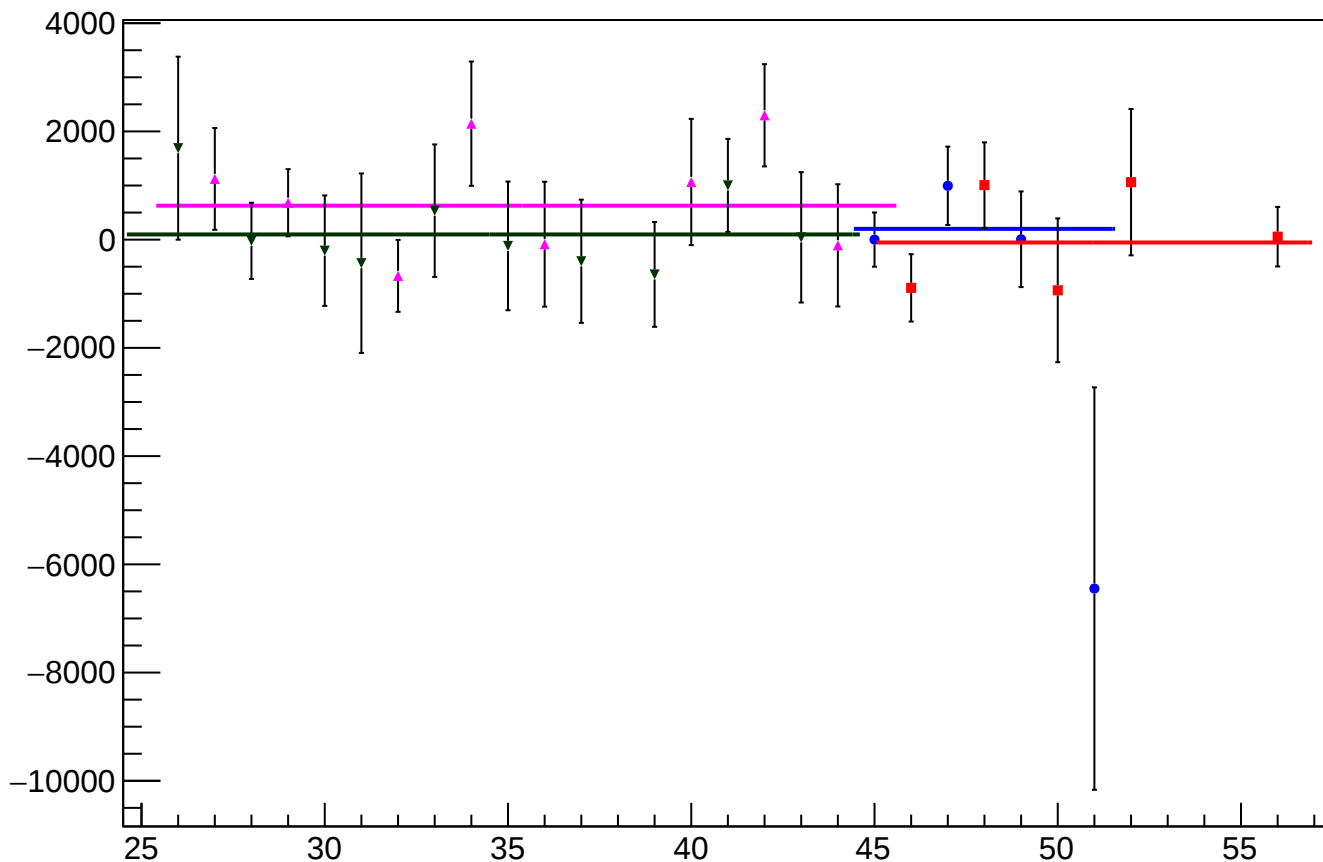
290.447+/-0.077  $\chi^2/\text{NDF}$ : 4681.3/13

Right Out: 299.145+/-0.137  $\chi^2/\text{NDF}$ : 34445.1/4

295.181+/-0.077  $\chi^2/\text{NDF}$ : 53932.0/12

Left In: 293.335+/-0.093  $\chi^2/\text{NDF}$ : 18255.8/7

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



Right In:  $199.019 \pm 371.379$   $\chi^2/\text{NDF}$ : 4.6/3

Left Out:  $95.958 \pm 334.285$   $\chi^2/\text{NDF}$ : 3.2/9

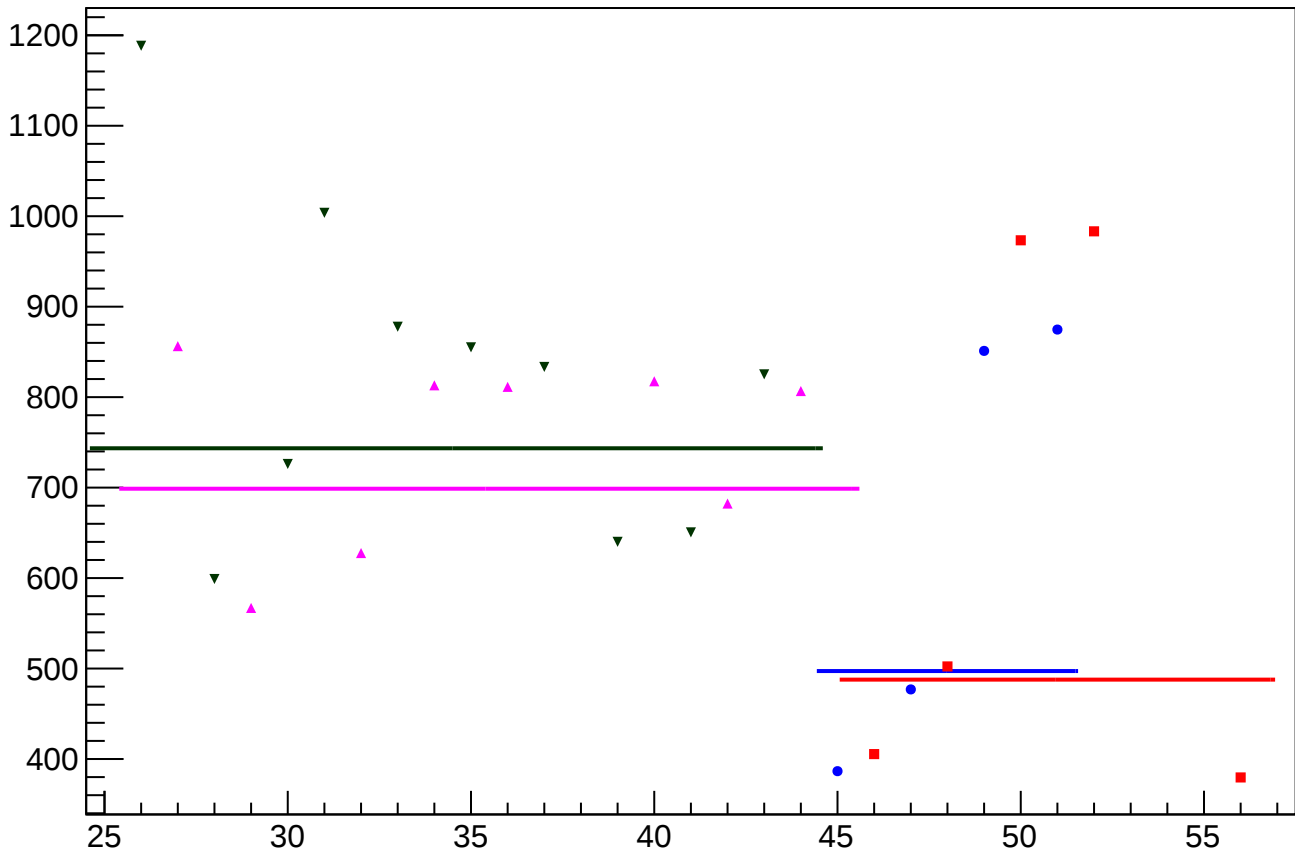
Right Out:  $-52.634 \pm 340.955$   $\chi^2/\text{NDF}$ : 4.8/4

Left In:  $627.377 \pm 314.053$   $\chi^2/\text{NDF}$ : 9.9/7

$142.086 \pm 248.458$   $\chi^2/\text{NDF}$ : 7.8/13

$315.253 \pm 230.995$   $\chi^2/\text{NDF}$ : 16.8/12

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



Right In: 497.226+/-0.263     $\chi^2/\text{NDF}$ : 440610.1/3

Left Out: 743.480+/-0.236     $\chi^2/\text{NDF}$ : 382282.6/9

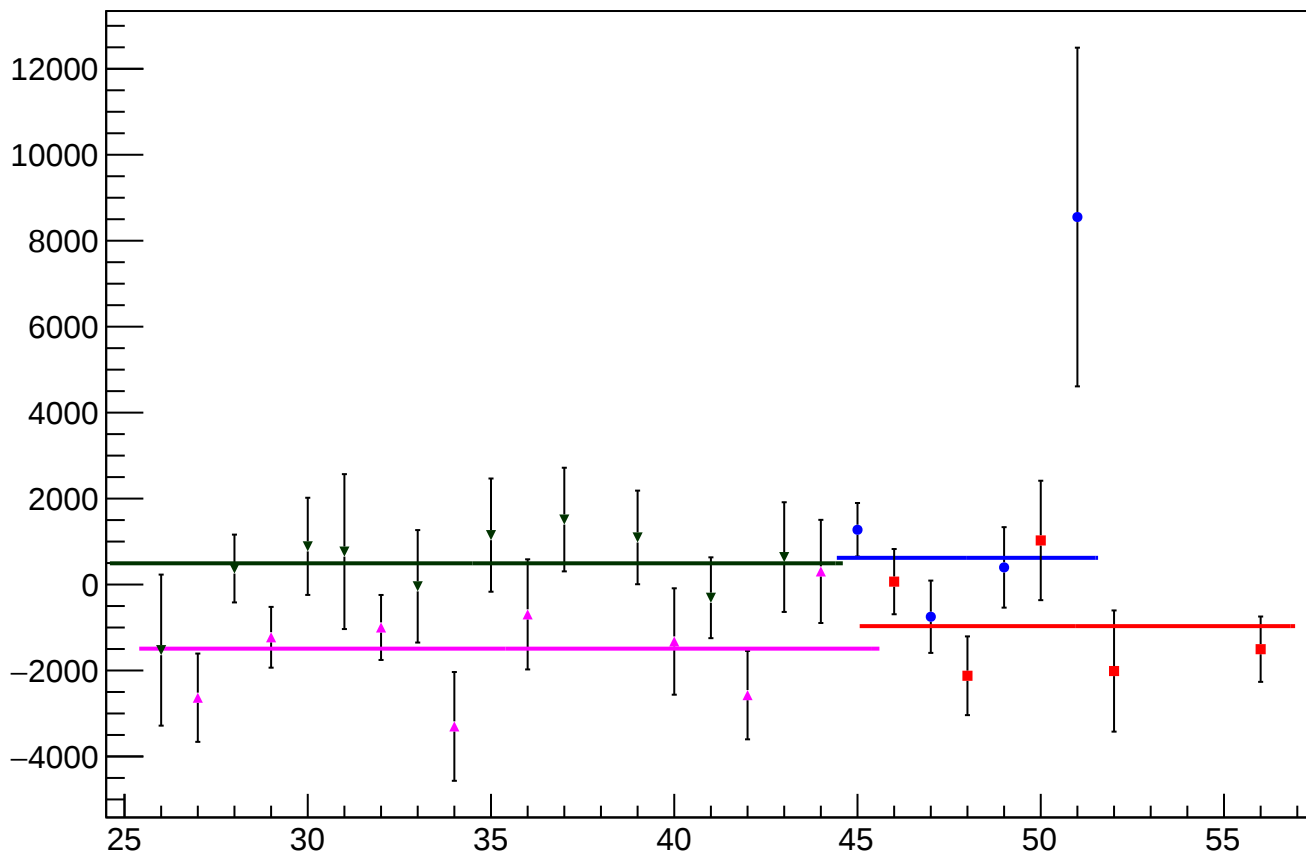
Right Out: 487.745+/-0.241     $\chi^2/\text{NDF}$ : 648935.5/4

Left In: 698.770+/-0.222     $\chi^2/\text{NDF}$ : 247659.3/7

633.261+/-0.176     $\chi^2/\text{NDF}$ : 1308664.1/13

601.910+/-0.163     $\chi^2/\text{NDF}$ : 1311072.1/12

# asym\_atl\_avg\_mean vs slug



Right In: 621.500+/-438.812     $\chi^2/\text{NDF}$ : 7.9/3

Left Out: 494.045+/-366.212     $\chi^2/\text{NDF}$ : 3.7/9

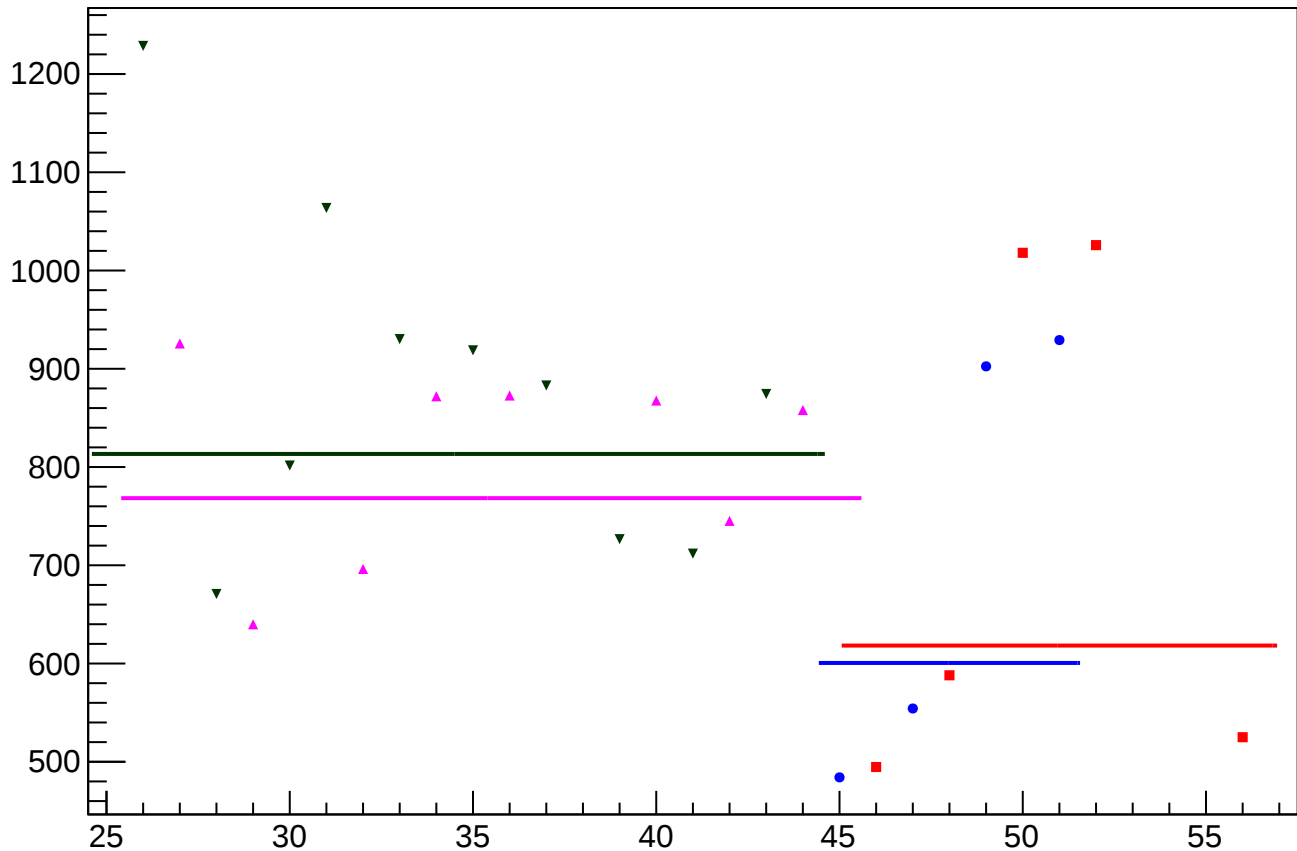
Right Out: -967.691+/-419.620     $\chi^2/\text{NDF}$ : 6.6/4

Left In: -1491.627+/-348.747     $\chi^2/\text{NDF}$ : 7.6/7

546.371+/-281.163     $\chi^2/\text{NDF}$ : 11.6/13

-1277.579+/-268.209     $\chi^2/\text{NDF}$ : 15.1/12

# asym\_atl\_avg\_rms vs slug



Right In: 600.592+/-0.310  $\chi^2/\text{NDF}$ : 297704.1/3

Left Out: 813.323+/-0.259  $\chi^2/\text{NDF}$ : 291804.3/9

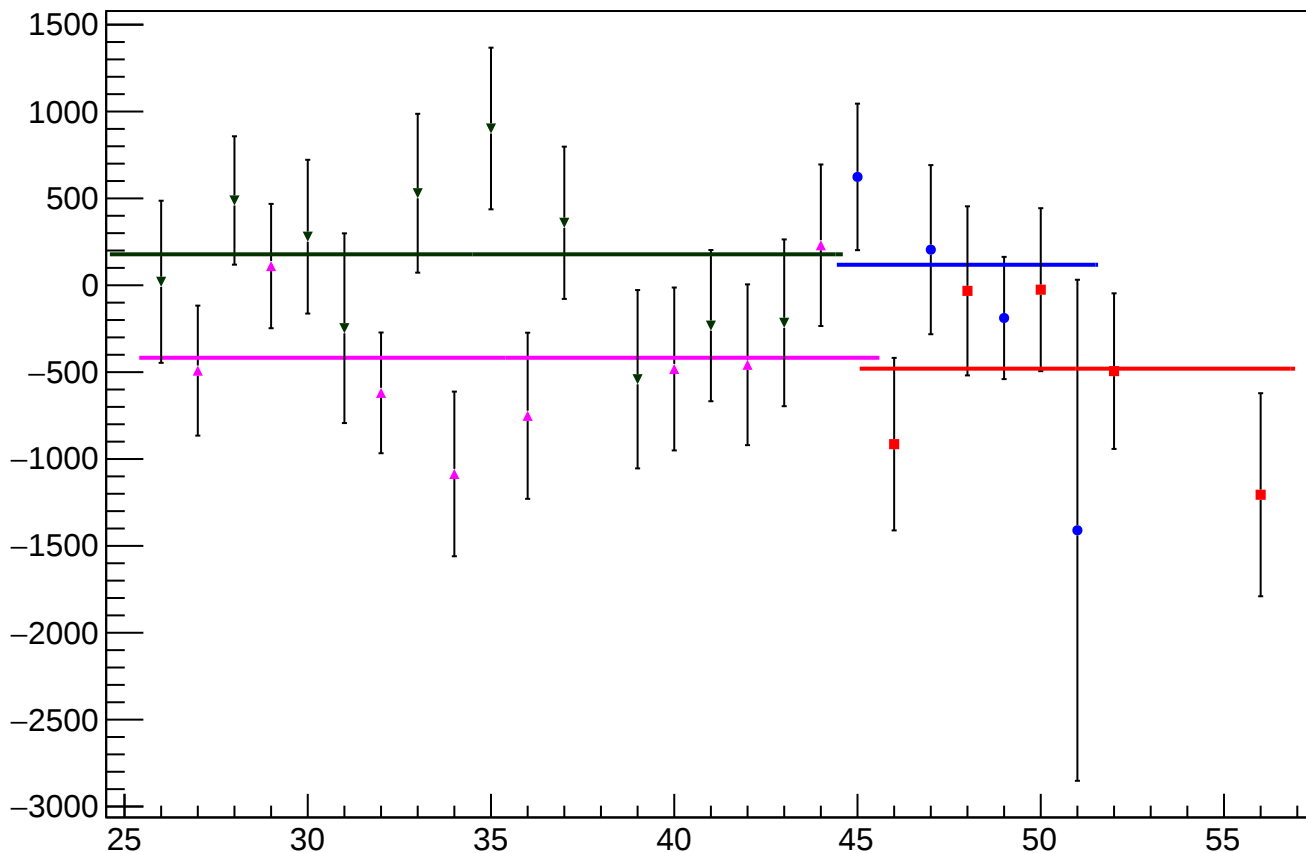
Right Out: 618.286+/-0.297  $\chi^2/\text{NDF}$ : 417997.1/4

Left In: 768.326+/-0.247  $\chi^2/\text{NDF}$ : 182845.3/7

725.987+/-0.199  $\chi^2/\text{NDF}$ : 866576.7/13

707.029+/-0.190  $\chi^2/\text{NDF}$ : 752078.6/12

# reg\_asym\_atl\_dd\_mean vs slug



Right In: 118.043 $\pm$ 233.057  $\chi^2$ /NDF: 3.4/3

Left Out: 178.217 $\pm$ 143.718  $\chi^2$ /NDF:8.2/9

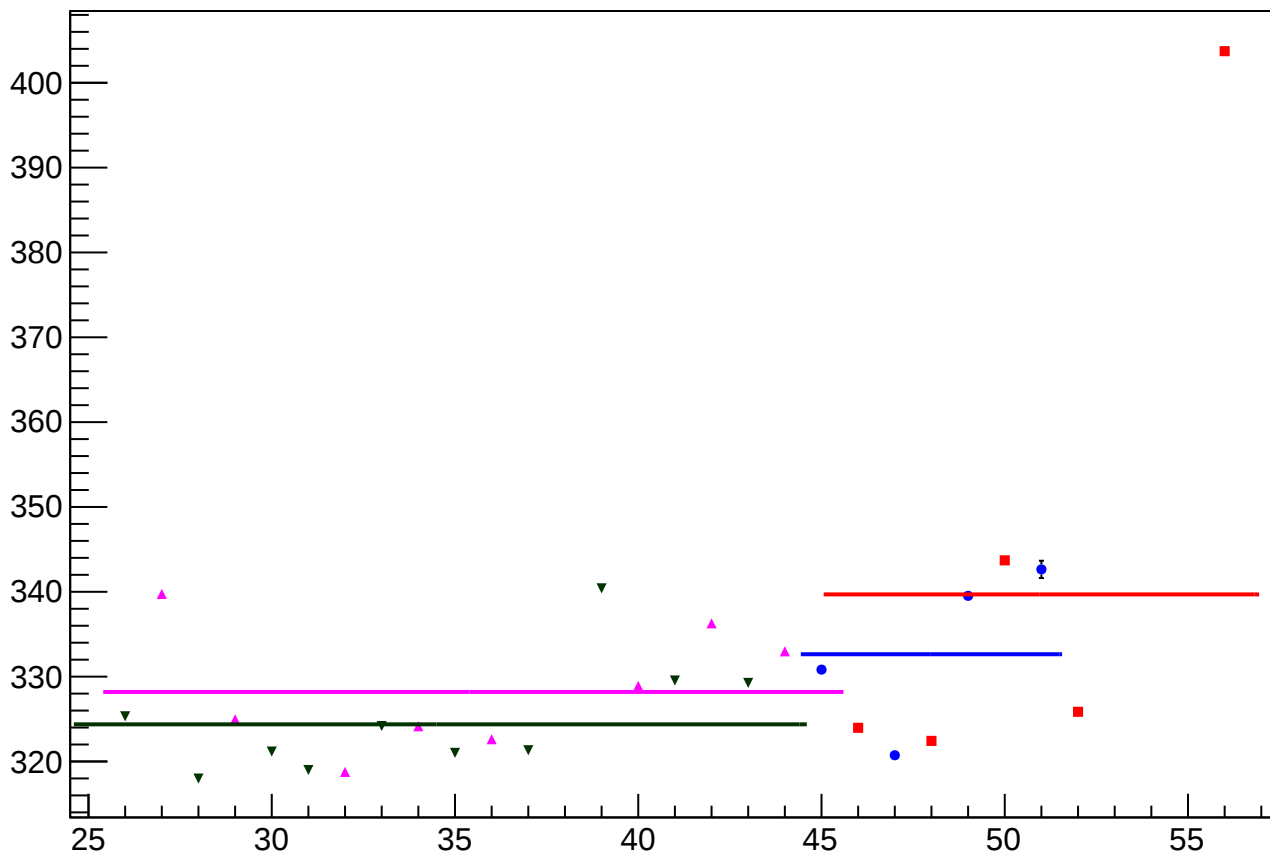
Right Out: -479.978 $\pm$ 219.571  $\chi^2$ /NDF: 4.1/4

Left In: -417.319 $\pm$ 147.577  $\chi^2$ /NDF:7.0/7

161.638 $\pm$ 122.329  $\chi^2$ /NDF: 11.6/13

-436.817 $\pm$ 122.482  $\chi^2$ /NDF: 11.2/12

# reg\_asym\_atl\_dd\_rms vs slug



Right In: 332.640 $\pm$ 0.165  $\chi^2$ /NDF: 2096.1/3

Left Out: 324.377 $\pm$ 0.102  $\chi^2$ /NDF: 3549.0/9

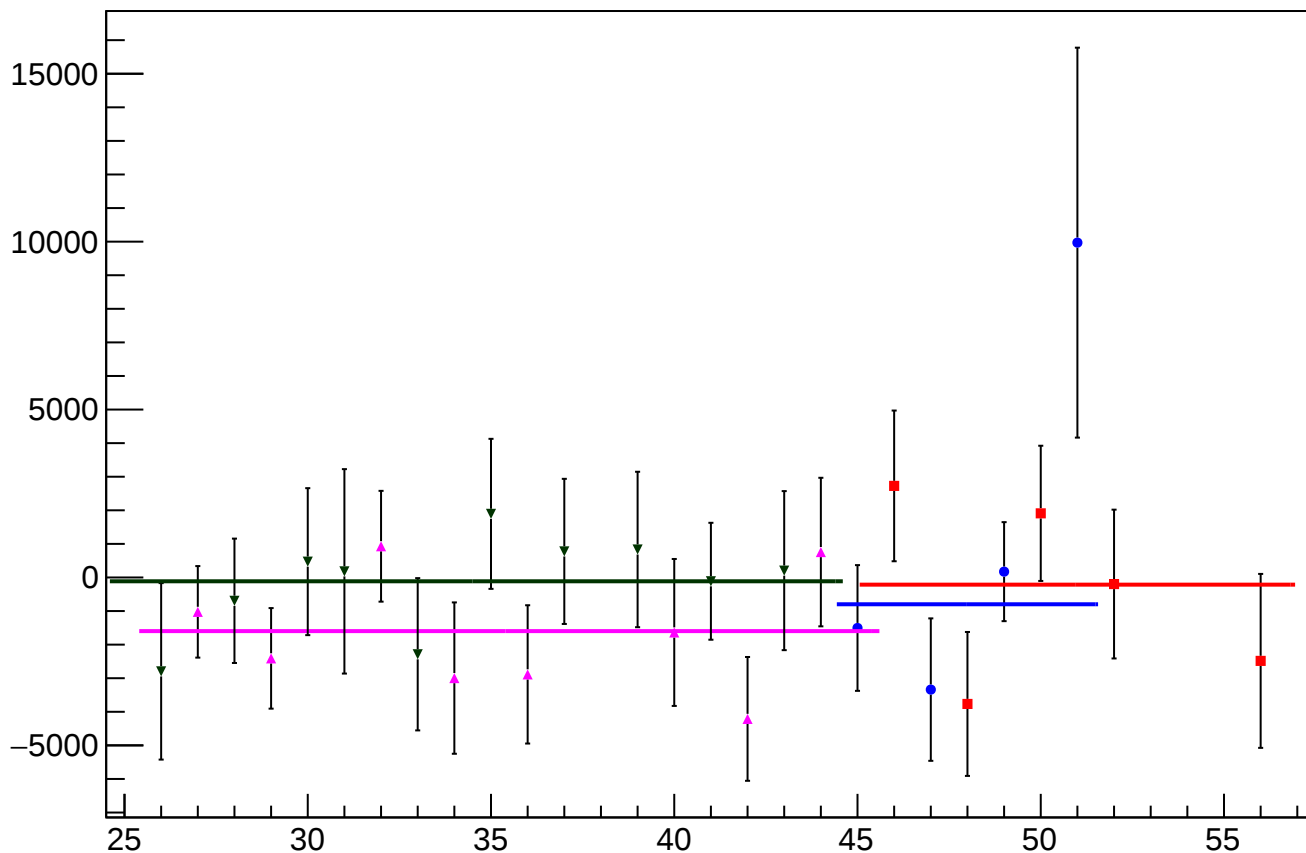
326.654 $\pm$ 0.086  $\chi^2$ /NDF: 7466.5/13

Right Out: 339.694 $\pm$ 0.155  $\chi^2$ /NDF: 30594.8/4

331.775 $\pm$ 0.087  $\chi^2$ /NDF: 39158.8/12

Left In: 328.197 $\pm$ 0.104  $\chi^2$ /NDF: 4786.7/7

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



Right In: -798.123+/-1001.259  $\chi^2/\text{NDF}$ : 5.5/3

Left Out: -113.667+/-697.189  $\chi^2/\text{NDF}$ : 3.3/9

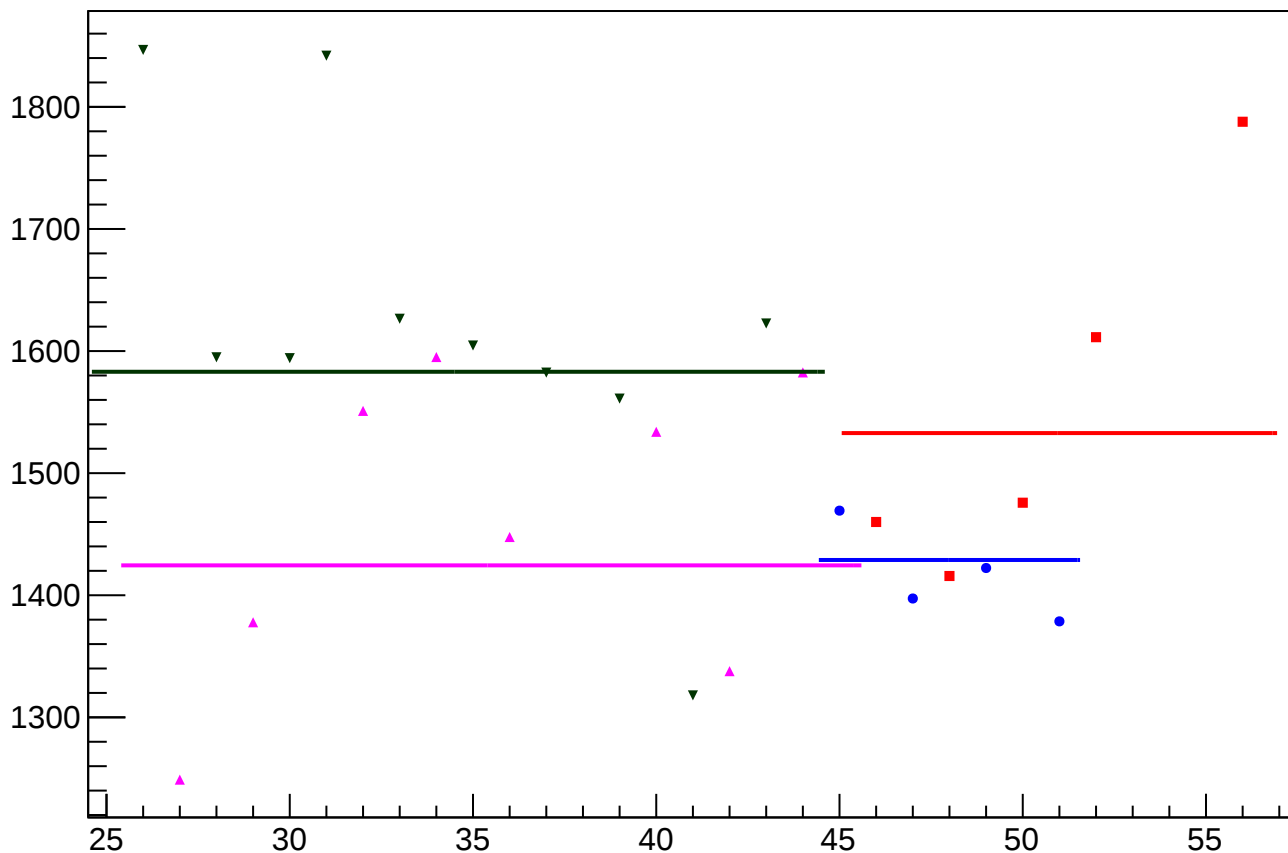
Right Out: -213.982+/-992.145  $\chi^2/\text{NDF}$ : 6.3/4

Left In: -1597.547+/-633.459  $\chi^2/\text{NDF}$ : 6.7/7

-337.163+/-572.149  $\chi^2/\text{NDF}$ : 9.1/13

-1196.872+/-533.914  $\chi^2/\text{NDF}$ : 14.5/12

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



Right In: 1428.892+/-0.708  $\chi^2/\text{NDF}$ : 1564.1/3

Left Out: 1583.049+/-0.493  $\chi^2/\text{NDF}$ : 82755.6/9

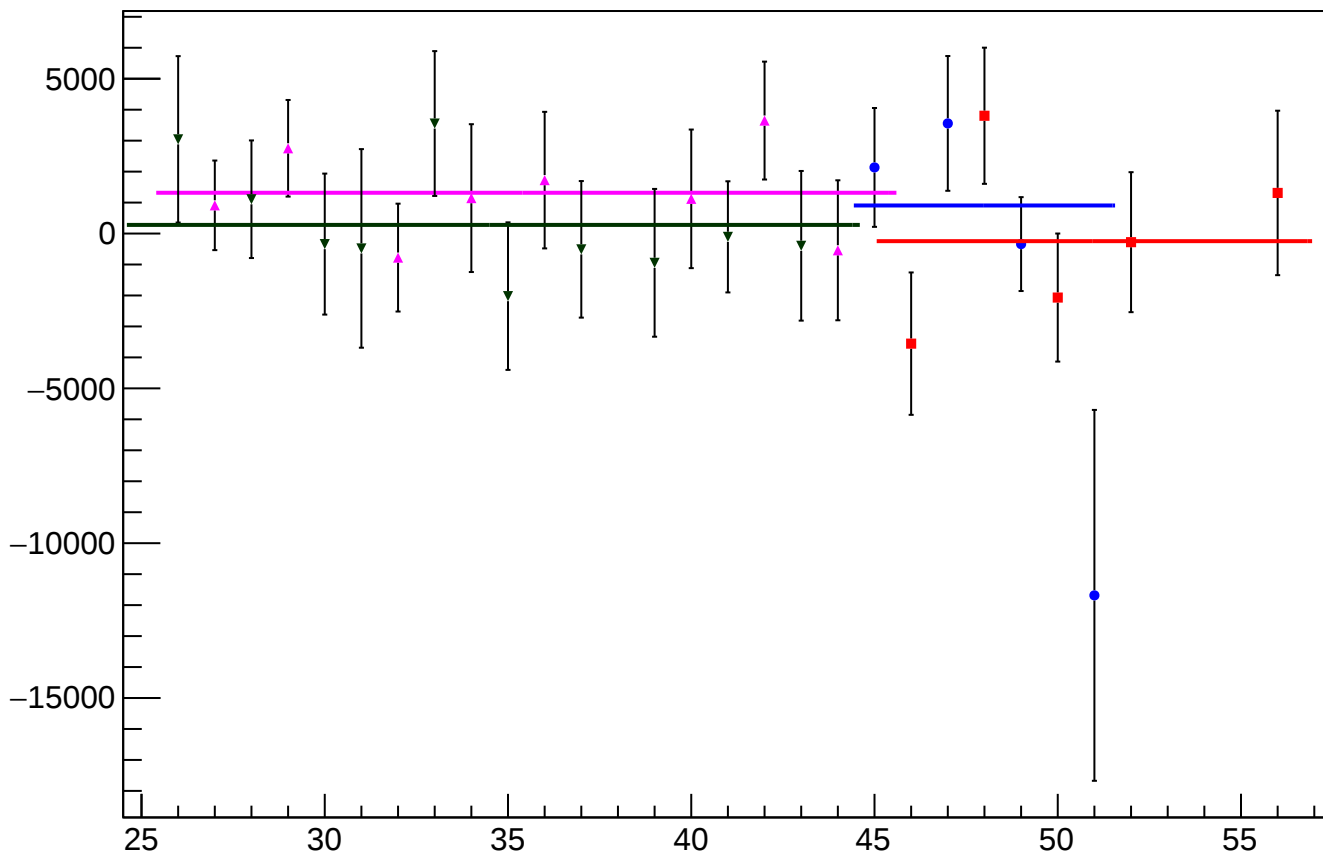
Right Out: 1532.829+/-0.702  $\chi^2/\text{NDF}$ : 31578.5/4

Left In: 1424.479+/-0.448  $\chi^2/\text{NDF}$ : 78214.9/7

1532.712+/-0.405  $\chi^2/\text{NDF}$ : 116248.3/13

1455.857+/-0.378  $\chi^2/\text{NDF}$ : 126738.6/12

# asym\_atl\_dd\_mean vs slug



Right In:  $906.420 \pm 1028.410$   $\chi^2/\text{NDF}$ : 7.0/3

Left Out:  $278.907 \pm 720.229$   $\chi^2/\text{NDF}$ : 4.8/9

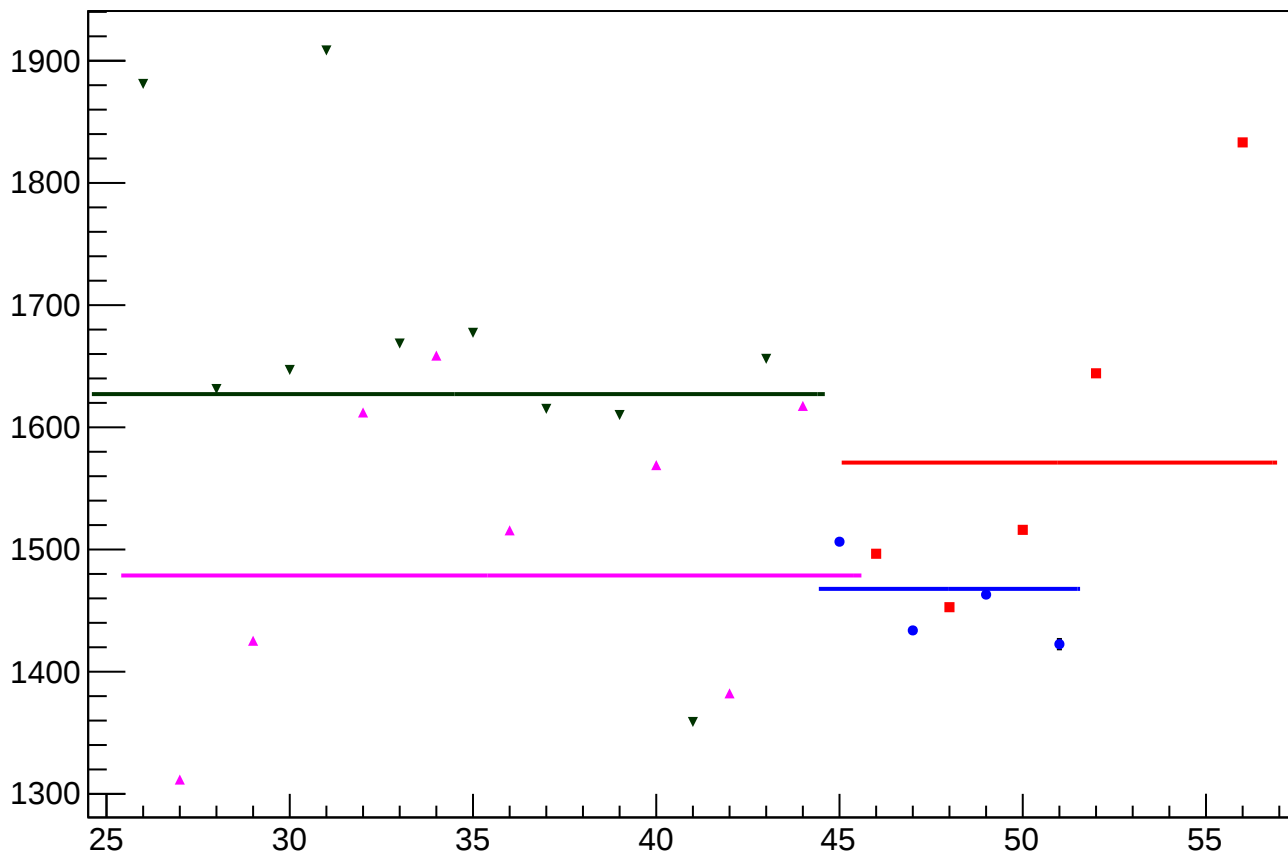
Right Out:  $-245.730 \pm 1016.723$   $\chi^2/\text{NDF}$ : 6.6/4

Left In:  $1317.055 \pm 663.629$   $\chi^2/\text{NDF}$ : 4.6/7

$485.402 \pm 589.942$   $\chi^2/\text{NDF}$ : 12.0/13

$850.165 \pm 555.725$   $\chi^2/\text{NDF}$ : 12.8/12

asym\_atl\_dd\_rms vs slug



Right In: 1467.792+/-0.727  $\chi^2/\text{NDF}$ : 1430.3/3

Left Out: 1627.194+/-0.509  $\chi^2/\text{NDF}$ : 80064.9/9

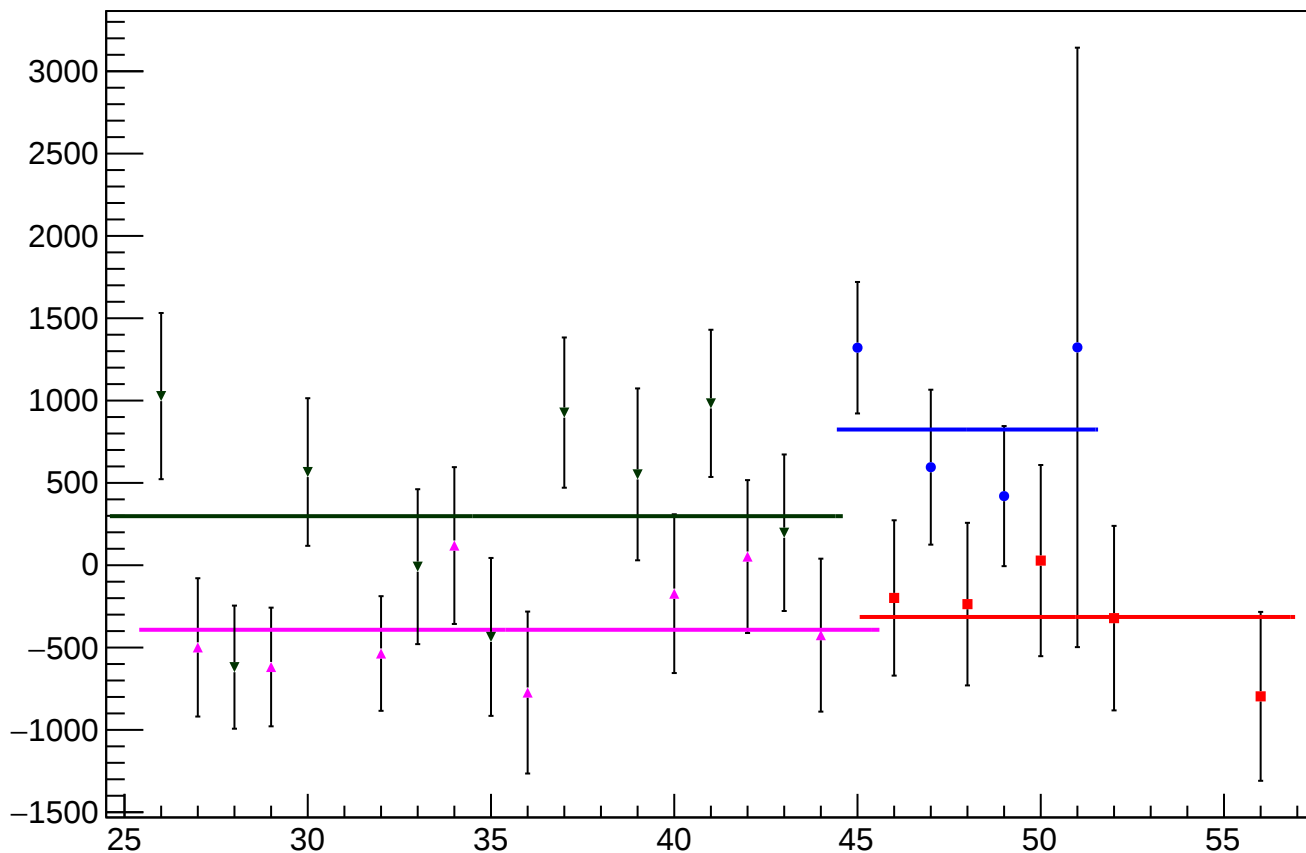
Right Out: 1571.142+/-0.719  $\chi^2/\text{NDF}$ : 30882.6/4

Left In: 1478.747+/-0.469  $\chi^2/\text{NDF}$ : 68597.0/7

1574.740+/-0.417  $\chi^2/\text{NDF}$ : 113733.0/13

1506.350+/-0.393  $\chi^2/\text{NDF}$ : 111062.0/12

# reg\_asym\_atr\_avg\_mean vs slug



Right In:  $824.171 \pm 245.323$   $\chi^2/\text{NDF}: 2.8/3$

Left Out:  $297.955 \pm 152.800$   $\chi^2/\text{NDF}: 15.8/8$

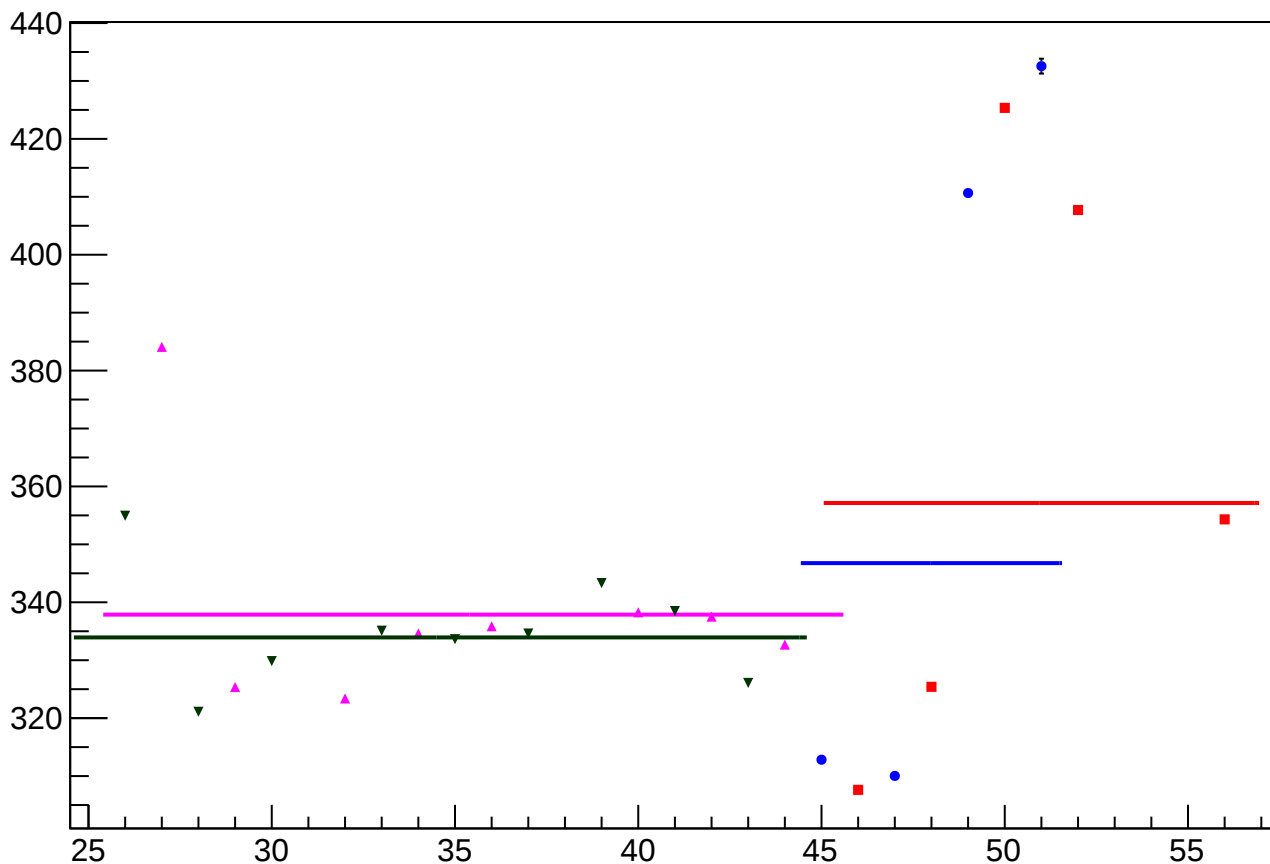
Right Out:  $-314.227 \pm 232.178$   $\chi^2/\text{NDF}: 1.3/4$

Left In:  $-392.029 \pm 151.208$   $\chi^2/\text{NDF}: 3.5/7$

$445.038 \pm 129.699$   $\chi^2/\text{NDF}: 21.8/12$

$-368.858 \pm 126.707$   $\chi^2/\text{NDF}: 4.9/12$

# reg\_asym\_atr\_avg\_rms vs slug



Right In: 346.762+/-0.173  $\chi^2/\text{NDF}$ : 76182.0/3

Left Out: 337.519+/-0.092  $\chi^2/\text{NDF}$ : 87531.0/12

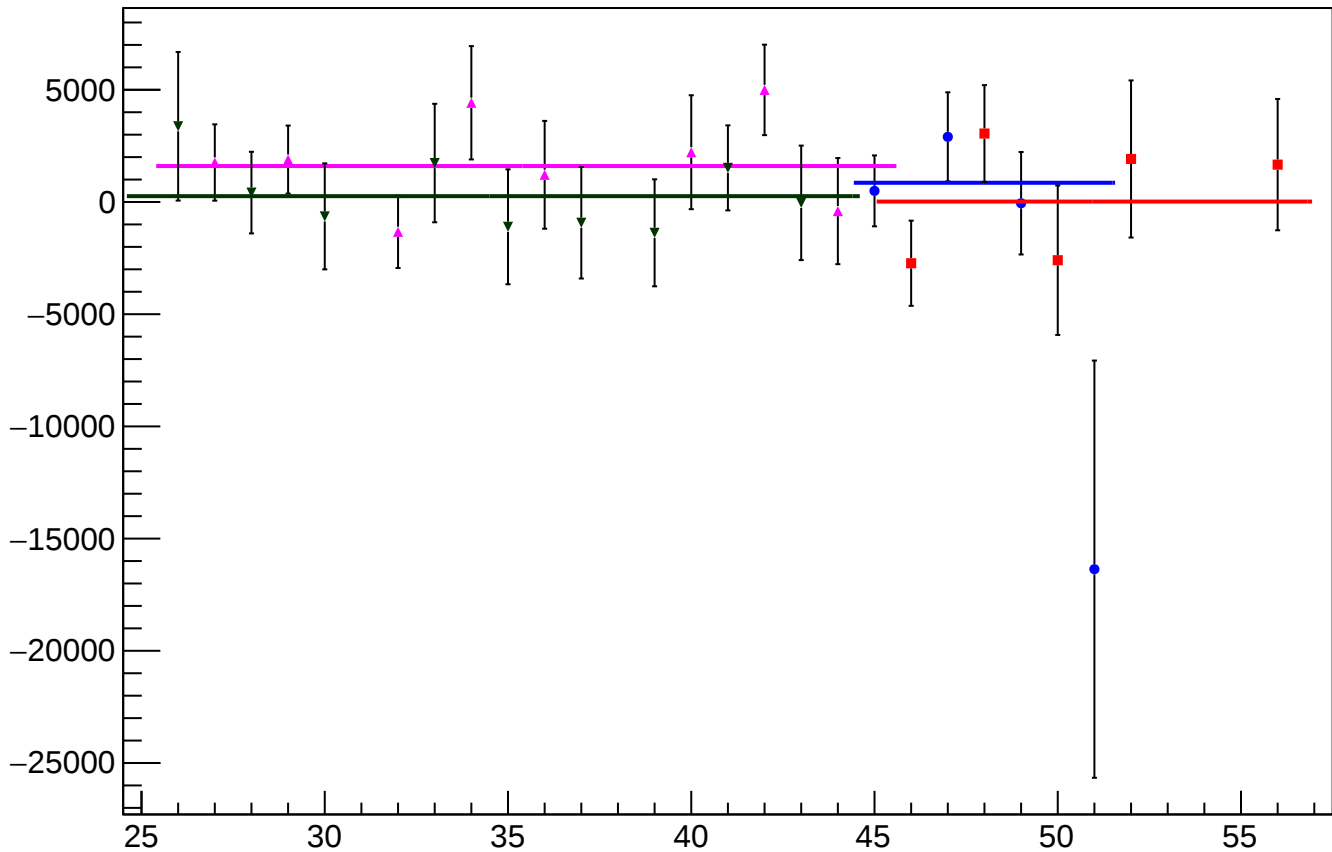
Right Out: 357.140+/-0.164  $\chi^2/\text{NDF}$ : 74273.2/4

Left In: 337.870+/-0.107  $\chi^2/\text{NDF}$ : 30461.2/7

337.519+/-0.092  $\chi^2/\text{NDF}$ : 87531.0/12

343.609+/-0.090  $\chi^2/\text{NDF}$ : 114408.2/12

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



Right In: 857.329 $\pm$ 1079.644  $\chi^2$ /NDF: 4.7/3

Left Out: 260.094 $\pm$ 781.083  $\chi^2$ /NDF: 2.8/8

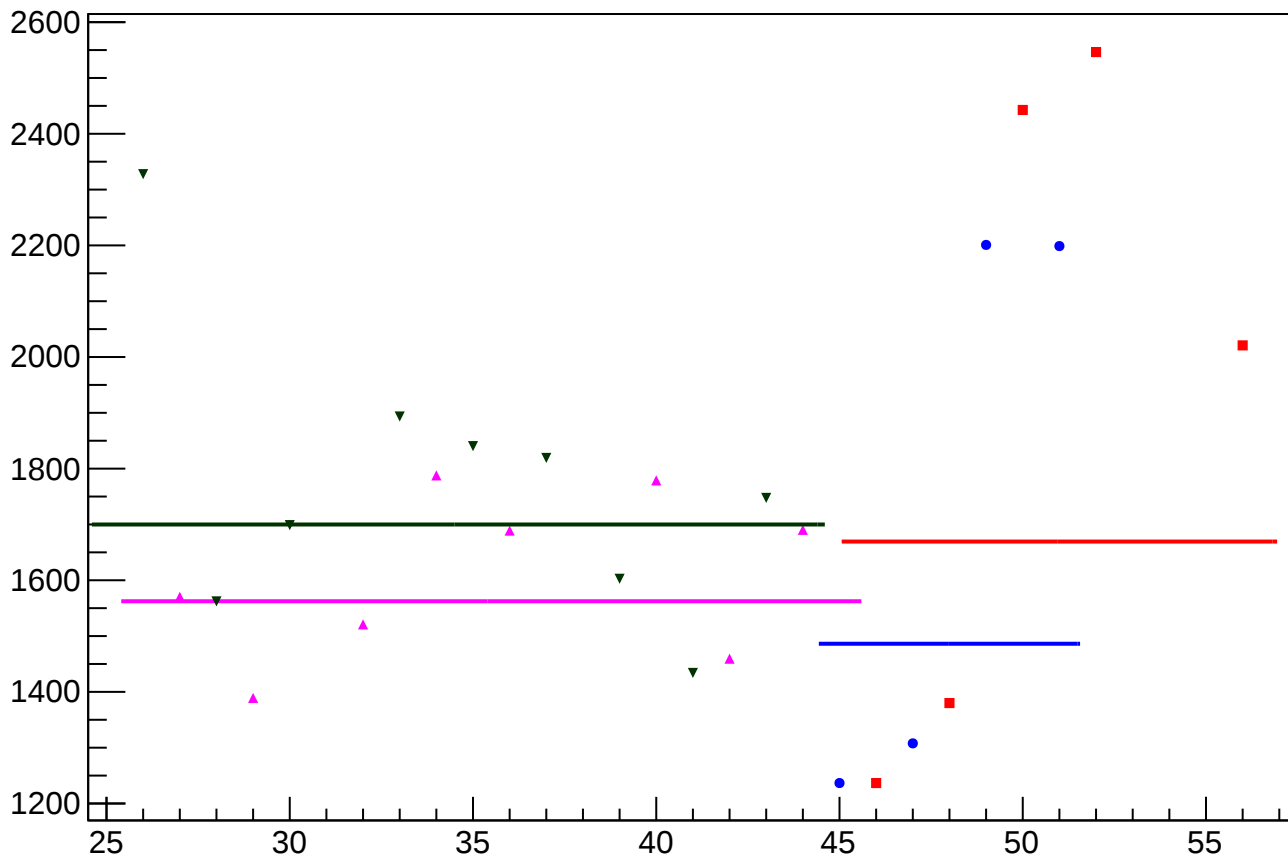
Right Out: 19.376 $\pm$ 1131.492  $\chi^2$ /NDF: 5.3/4

Left In: 1602.732 $\pm$ 694.176  $\chi^2$ /NDF: 8.2/7

465.288 $\pm$ 632.835  $\chi^2$ /NDF: 7.7/12

1169.746 $\pm$ 591.697  $\chi^2$ /NDF: 15.0/12

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



Right In: 1486.232+/-0.763  $\chi^2/\text{NDF}$ : 273739.7/3

Left Out: 1699.916+/-0.552  $\chi^2/\text{NDF}$ : 148167.9/8

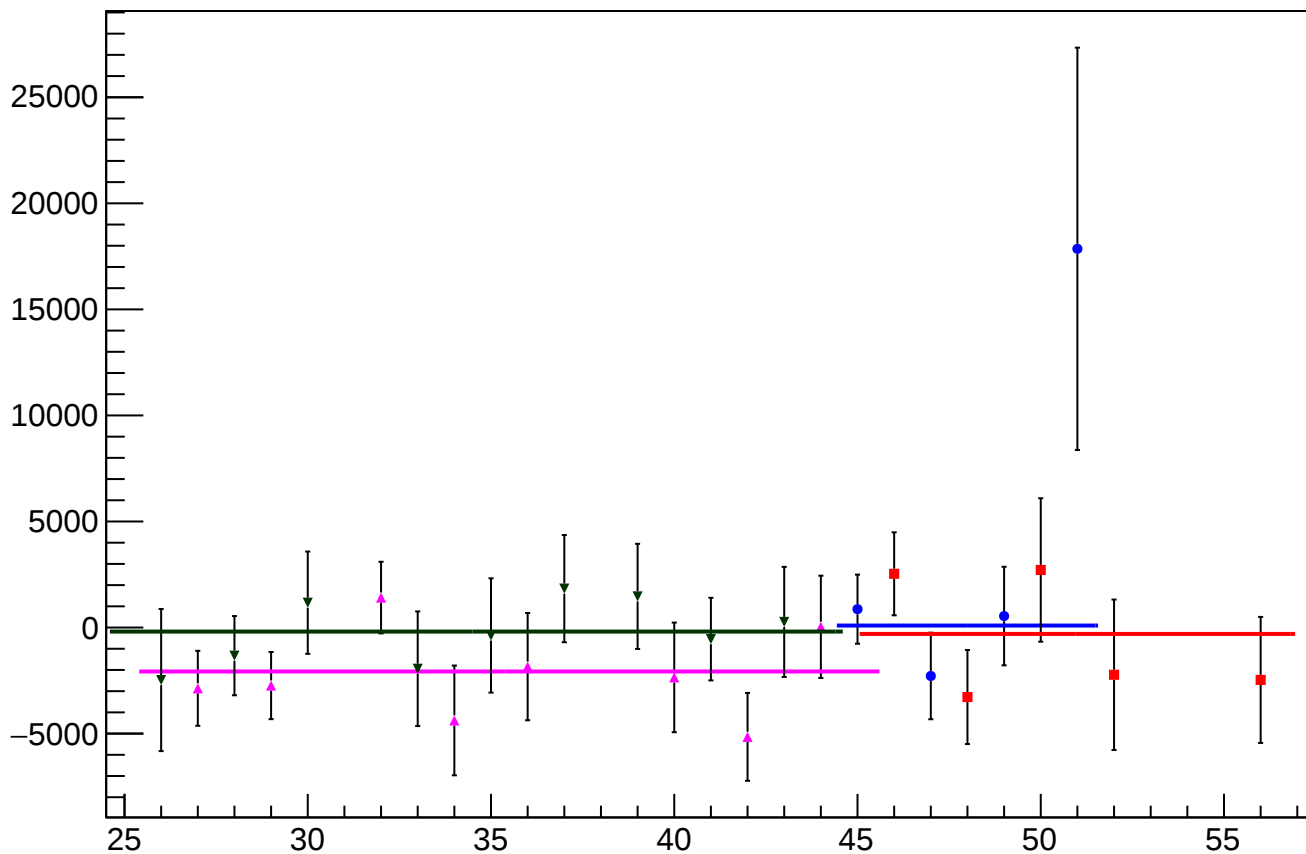
Right Out: 1669.349+/-0.800  $\chi^2/\text{NDF}$ : 402178.8/4

Left In: 1562.377+/-0.491  $\chi^2/\text{NDF}$ : 74597.0/7

1626.500+/-0.447  $\chi^2/\text{NDF}$ : 473335.5/12

1591.630+/-0.418  $\chi^2/\text{NDF}$ : 489763.4/12

asym\_atr\_avg\_mean vs slug



Right In: 94.155+/-1108.933  $\chi^2/\text{NDF}$ : 5.1/3

Left Out: -189.957+/-802.163  $\chi^2/\text{NDF}$ : 2.7/8

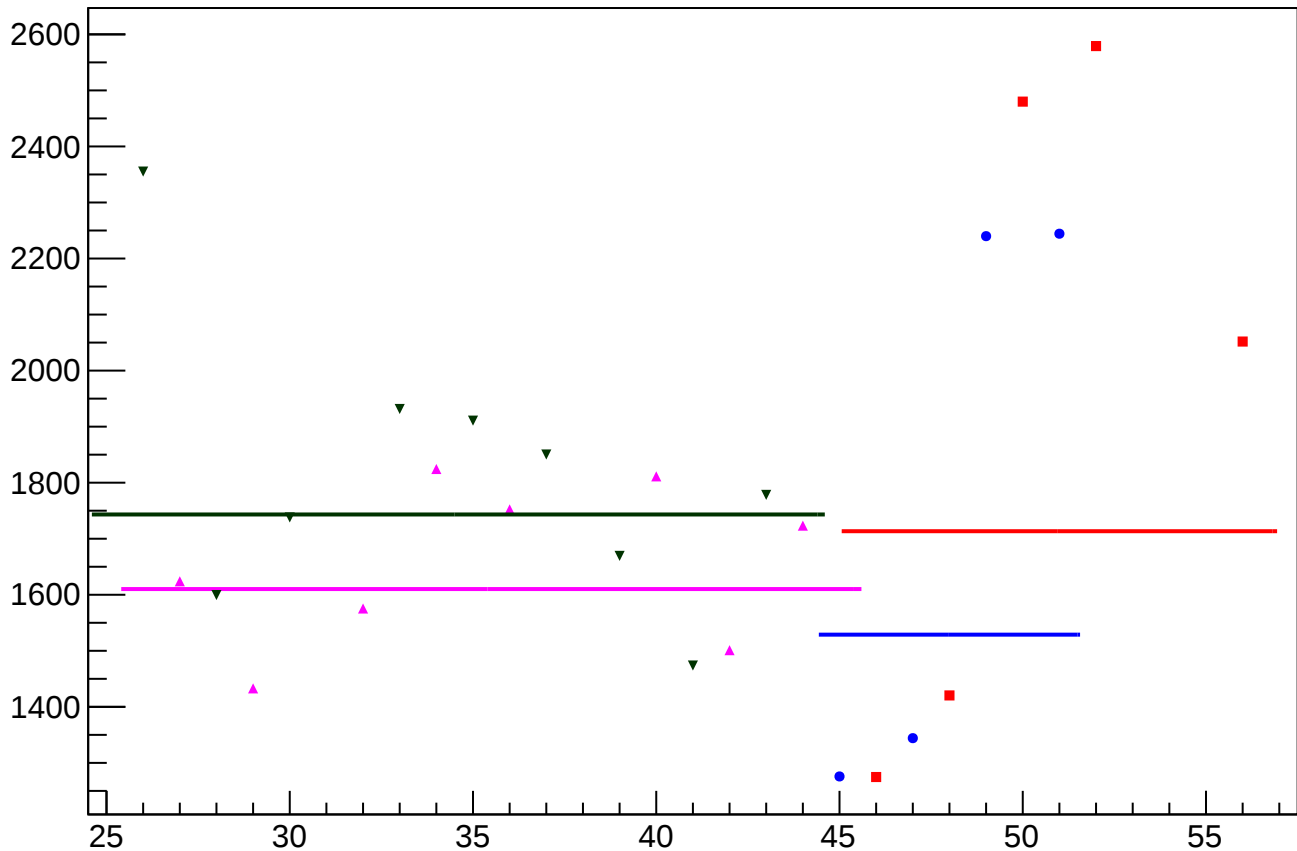
Right Out: -301.148+/-1158.525  $\chi^2/\text{NDF}$ : 5.5/4

Left In: -2072.589+/-719.748  $\chi^2/\text{NDF}$ : 8.4/7

-92.361+/-649.944  $\chi^2/\text{NDF}$ : 7.9/12

-1579.275+/-611.370  $\chi^2/\text{NDF}$ : 15.6/12

# asym\_atr\_avg\_rms vs slug



Right In: 1528.827+/-0.784  $\chi^2/\text{NDF}$ : 263314.3/3

Left Out: 1743.280+/-0.567  $\chi^2/\text{NDF}$ : 140061.2/8

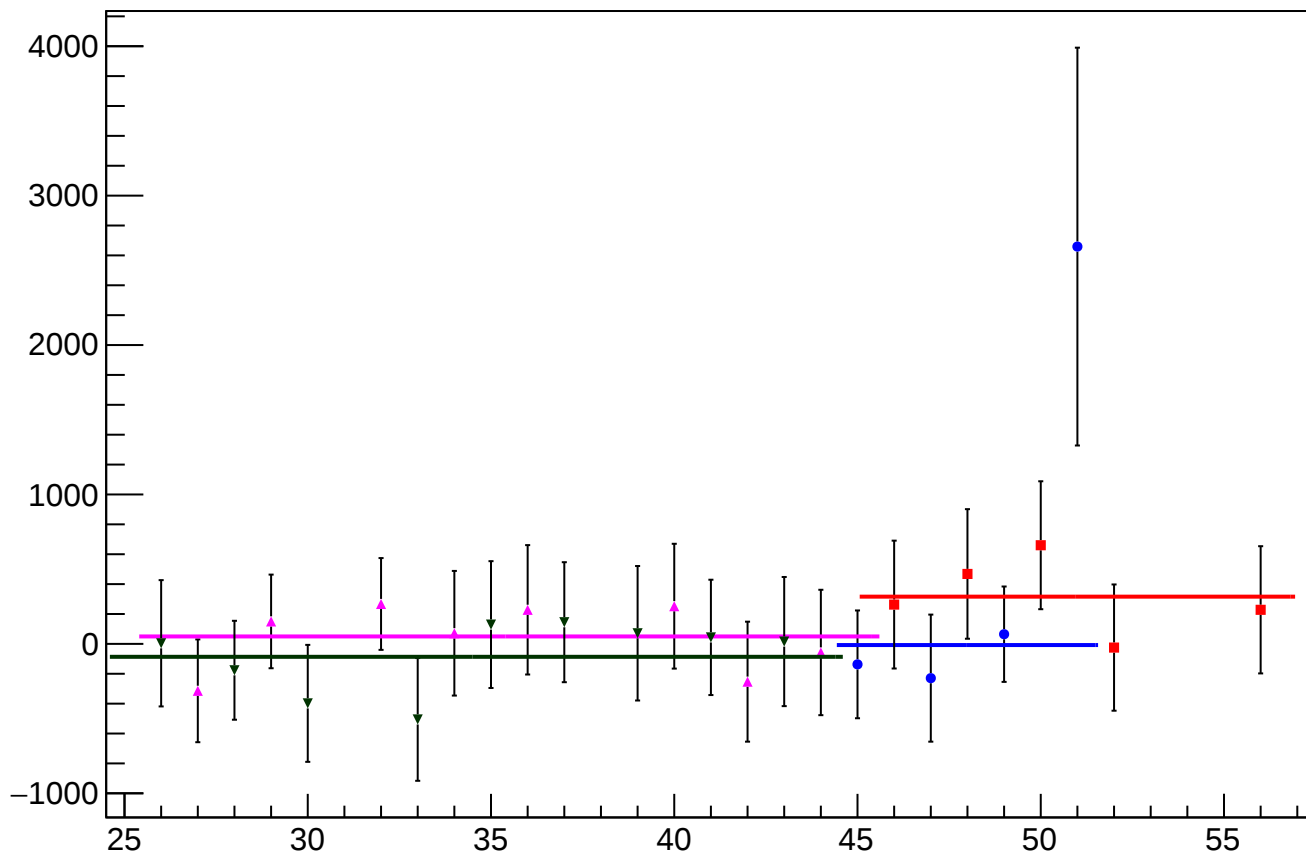
Right Out: 1713.413+/-0.819  $\chi^2/\text{NDF}$ : 383463.3/4

Left In: 1610.197+/-0.509  $\chi^2/\text{NDF}$ : 68106.1/7

1669.613+/-0.460  $\chi^2/\text{NDF}$ : 452478.5/12

1638.941+/-0.432  $\chi^2/\text{NDF}$ : 463023.5/12

# reg\_asym\_atr\_dd\_mean vs slug



Right In:  $-7.837 \pm 205.859$   $\chi^2/\text{NDF}$ : 4.5/3

Left Out:  $-86.539 \pm 133.704$   $\chi^2/\text{NDF}$ : 2.7/8

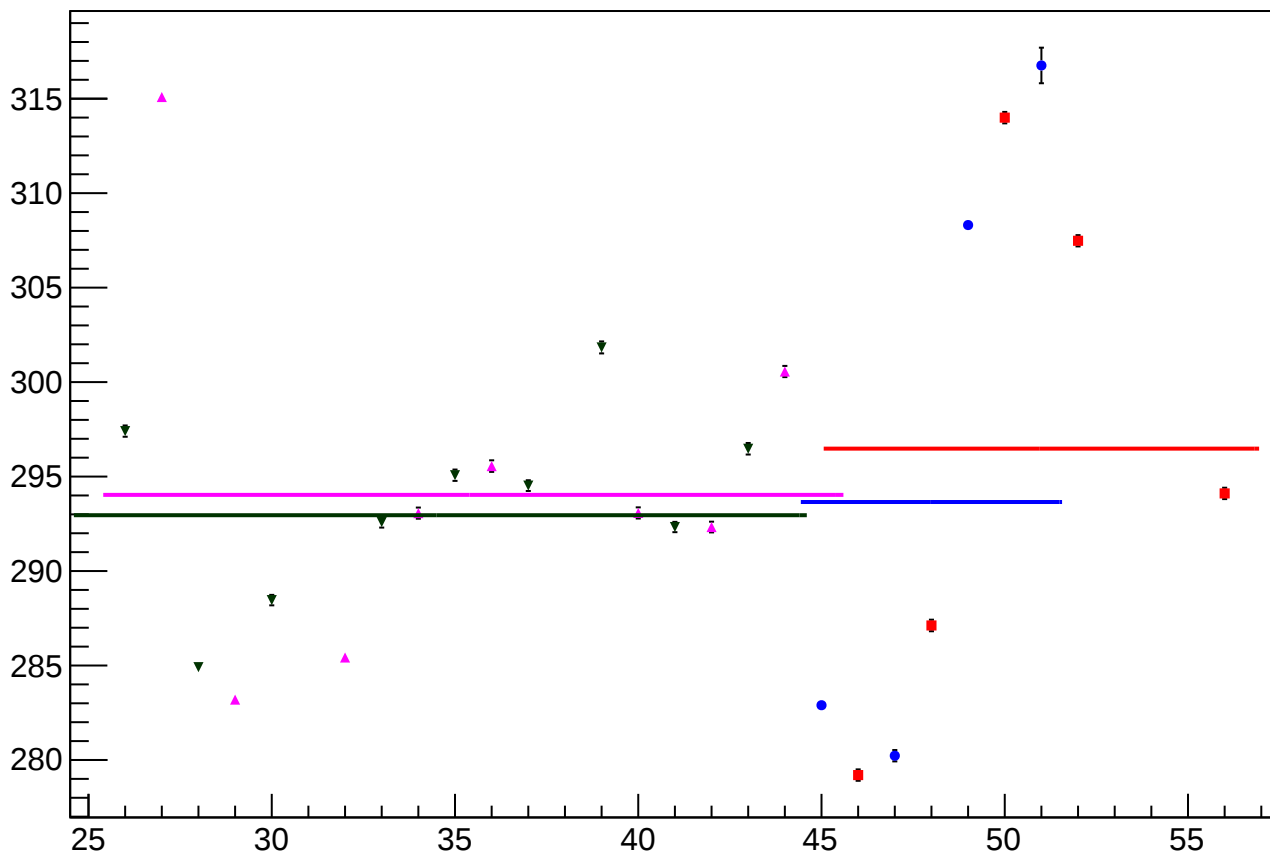
Right Out:  $316.106 \pm 191.190$   $\chi^2/\text{NDF}$ : 1.5/4

Left In:  $49.768 \pm 131.388$   $\chi^2/\text{NDF}$ : 2.8/7

$-63.189 \pm 112.129$   $\chi^2/\text{NDF}$ : 7.2/12

$135.202 \pm 108.284$   $\chi^2/\text{NDF}$ : 5.6/12

# reg\_asym\_atr\_dd\_rms vs slug



Right In: 293.654+/-0.146  $\chi^2/\text{NDF}$ : 8593.3/3

Left Out: 292.955+/-0.095  $\chi^2/\text{NDF}$ : 2664.1/8

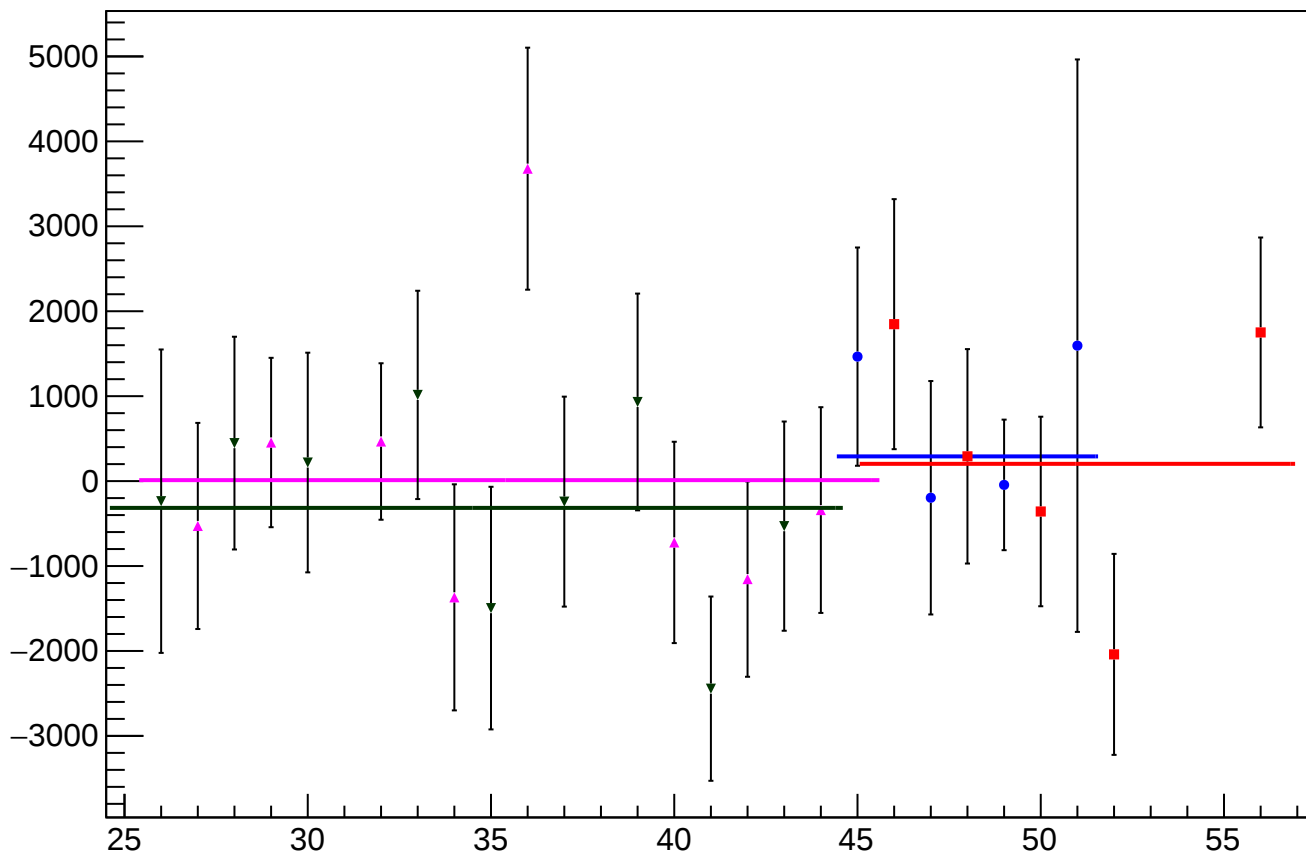
Right Out: 296.479+/-0.135  $\chi^2/\text{NDF}$ : 8960.0/4

Left In: 294.031+/-0.093  $\chi^2/\text{NDF}$ : 12021.3/7

293.162+/-0.079  $\chi^2/\text{NDF}$ : 11273.6/12

294.816+/-0.077  $\chi^2/\text{NDF}$ : 21204.0/12

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



Right In: 290.878+/-585.574  $\chi^2/\text{NDF}$ : 1.3/3

Left Out: -315.415+/-427.109  $\chi^2/\text{NDF}$ : 7.2/8

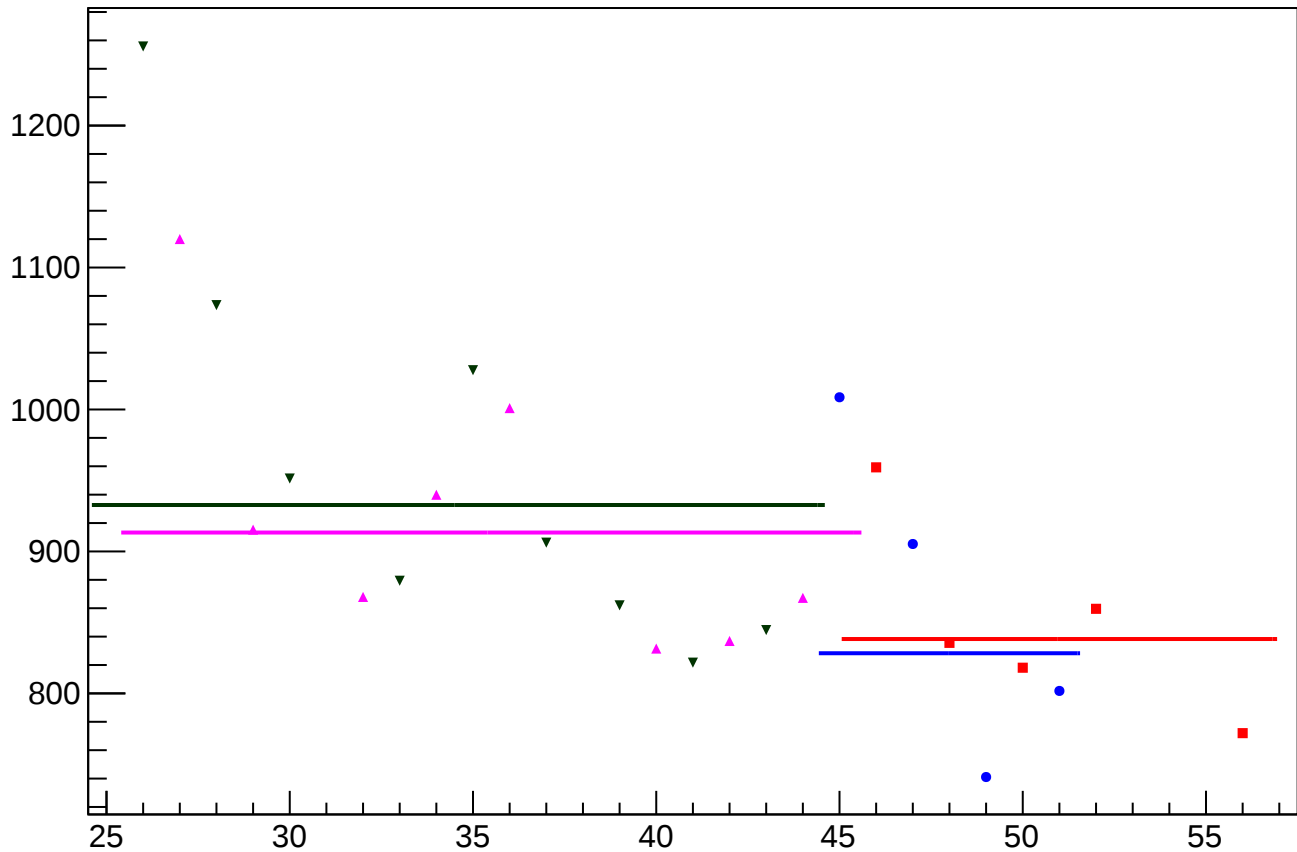
Right Out: 203.258+/-541.761  $\chi^2/\text{NDF}$ : 7.0/4

Left In: 11.284+/-405.892  $\chi^2/\text{NDF}$ : 9.8/7

-104.874+/-345.071  $\chi^2/\text{NDF}$ : 9.2/12

80.301+/-324.837  $\chi^2/\text{NDF}$ : 16.9/12

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



Right In:  $828.290 \pm 0.414$   $\chi^2/\text{NDF}$ : 71530.3/3

Left Out:  $932.717 \pm 0.302$   $\chi^2/\text{NDF}$ : 141975.4/8

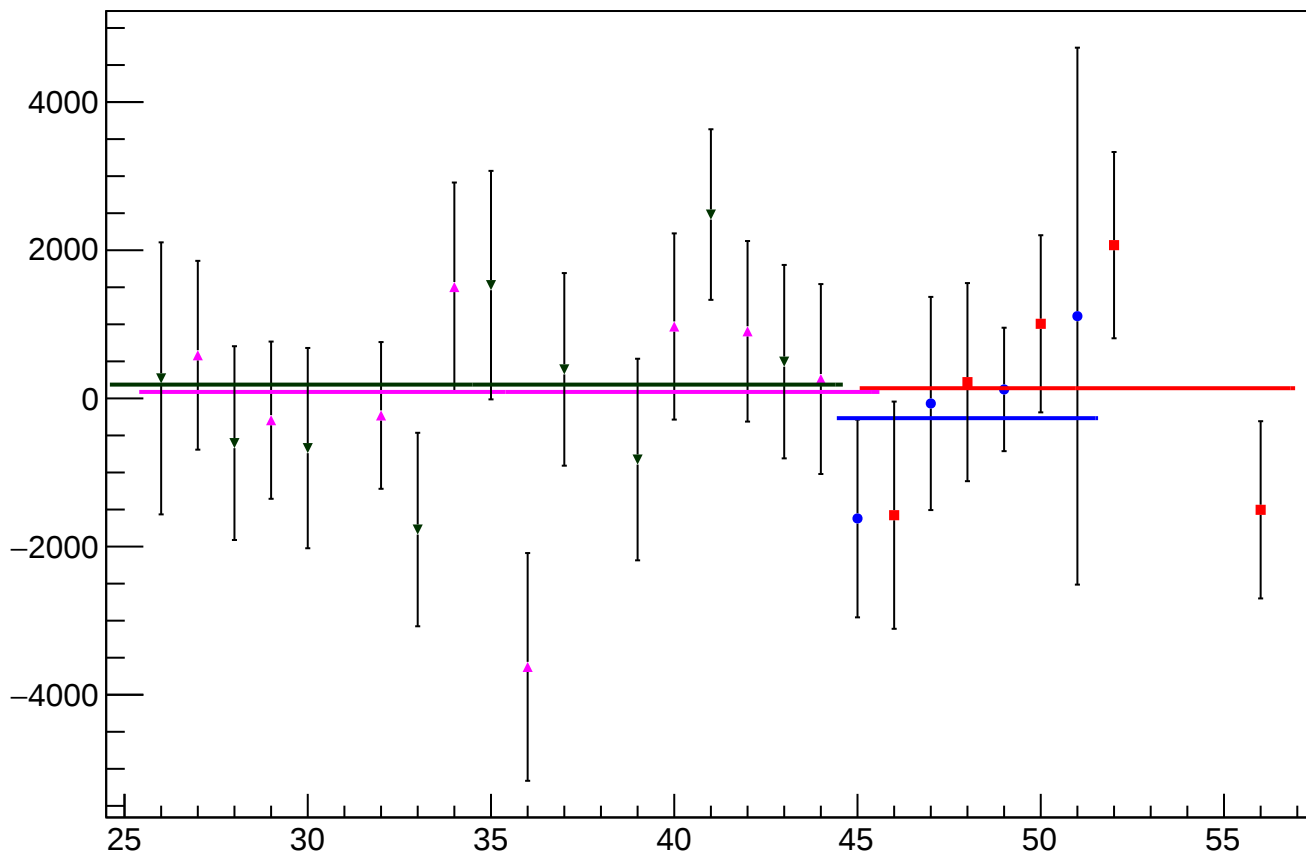
Right Out:  $838.309 \pm 0.383$   $\chi^2/\text{NDF}$ : 21851.6/4

Left In:  $913.320 \pm 0.287$   $\chi^2/\text{NDF}$ : 92513.4/7

$896.454 \pm 0.244$   $\chi^2/\text{NDF}$ : 255023.9/12

$886.352 \pm 0.230$   $\chi^2/\text{NDF}$ : 138922.2/12

# asym\_atr\_dd\_mean vs slug



Right In:  $-266.634 \pm 624.814$   $\chi^2/\text{NDF}: 1.4/3$

Left Out:  $186.357 \pm 451.355$   $\chi^2/\text{NDF}: 8.4/8$

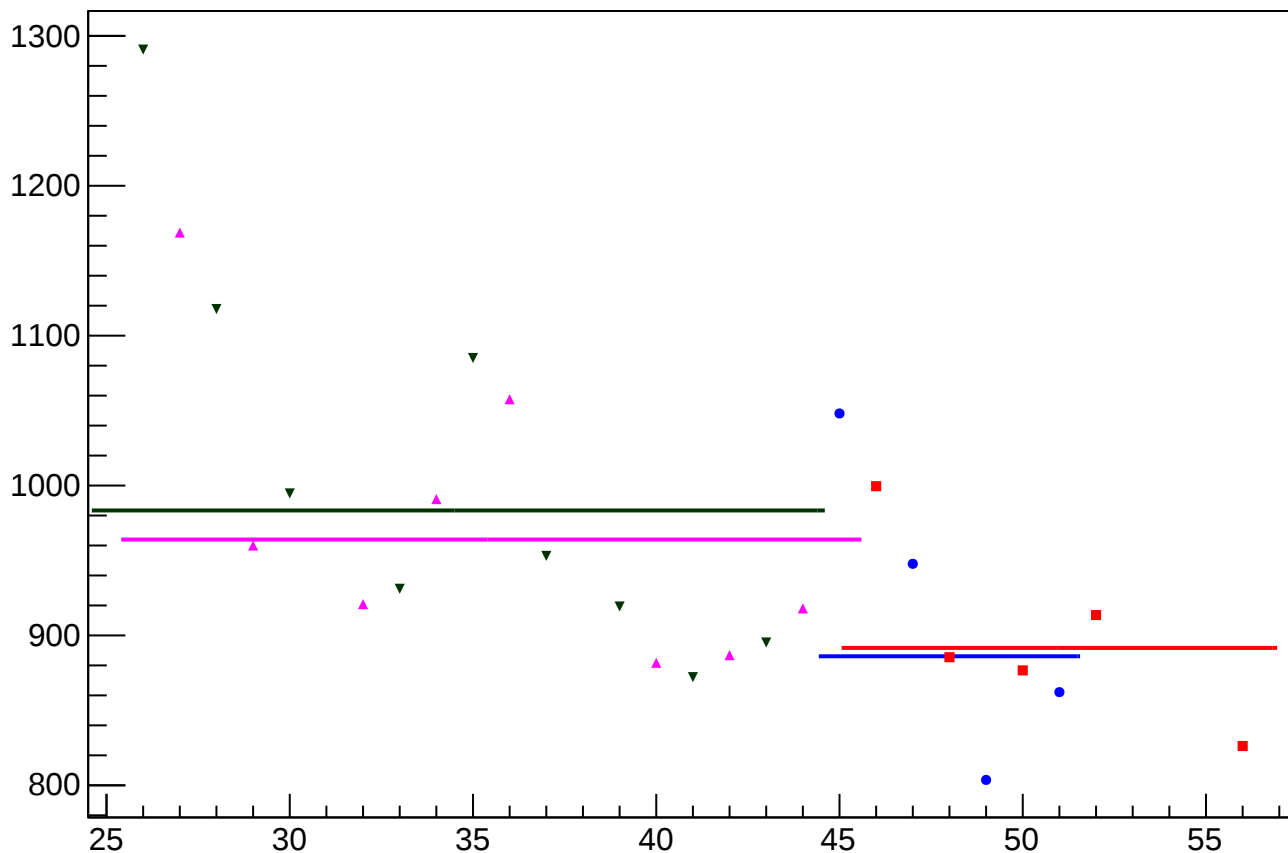
Right Out:  $137.637 \pm 575.826$   $\chi^2/\text{NDF}: 6.0/4$

Left In:  $87.303 \pm 431.781$   $\chi^2/\text{NDF}: 8.2/7$

$31.027 \pm 365.876$   $\chi^2/\text{NDF}: 10.1/12$

$105.418 \pm 345.450$   $\chi^2/\text{NDF}: 14.2/12$

# asym\_atr\_dd\_rms vs slug



Right In: 886.083+/-0.442  $\chi^2/\text{NDF}$ : 52820.6/3

Left Out: 983.379+/-0.319  $\chi^2/\text{NDF}$ : 122542.6/8

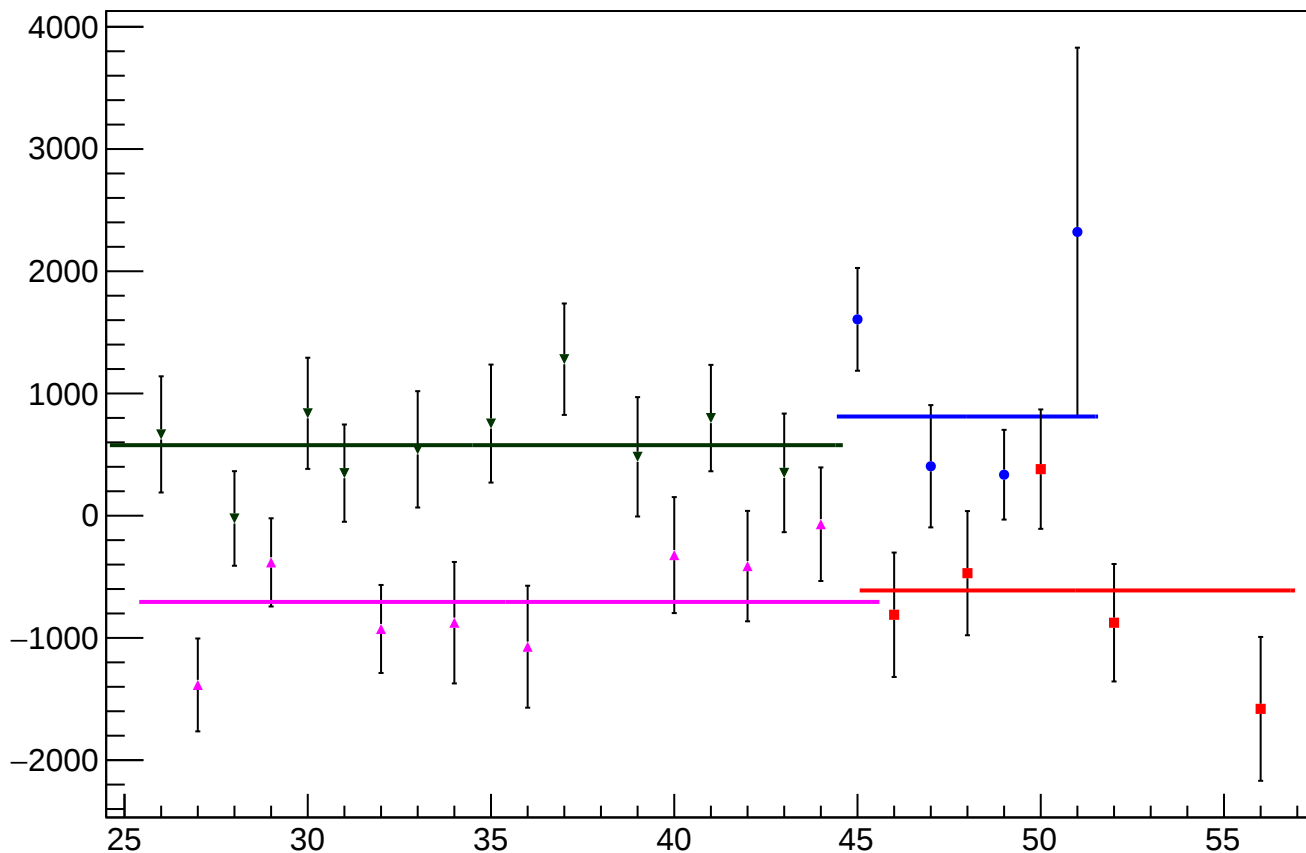
Right Out: 891.691+/-0.407  $\chi^2/\text{NDF}$ : 16853.4/4

Left In: 963.960+/-0.305  $\chi^2/\text{NDF}$ : 82775.1/7

950.016+/-0.259  $\chi^2/\text{NDF}$ : 207230.6/12

937.950+/-0.244  $\chi^2/\text{NDF}$ : 119793.5/12

# reg\_asym\_at1\_avg\_mean vs slug



Right In:  $811.538 \pm 238.952$   $\chi^2/\text{NDF}$ : 6.9/3

Left Out:  $577.064 \pm 142.141$   $\chi^2/\text{NDF}$ : 6.1/9

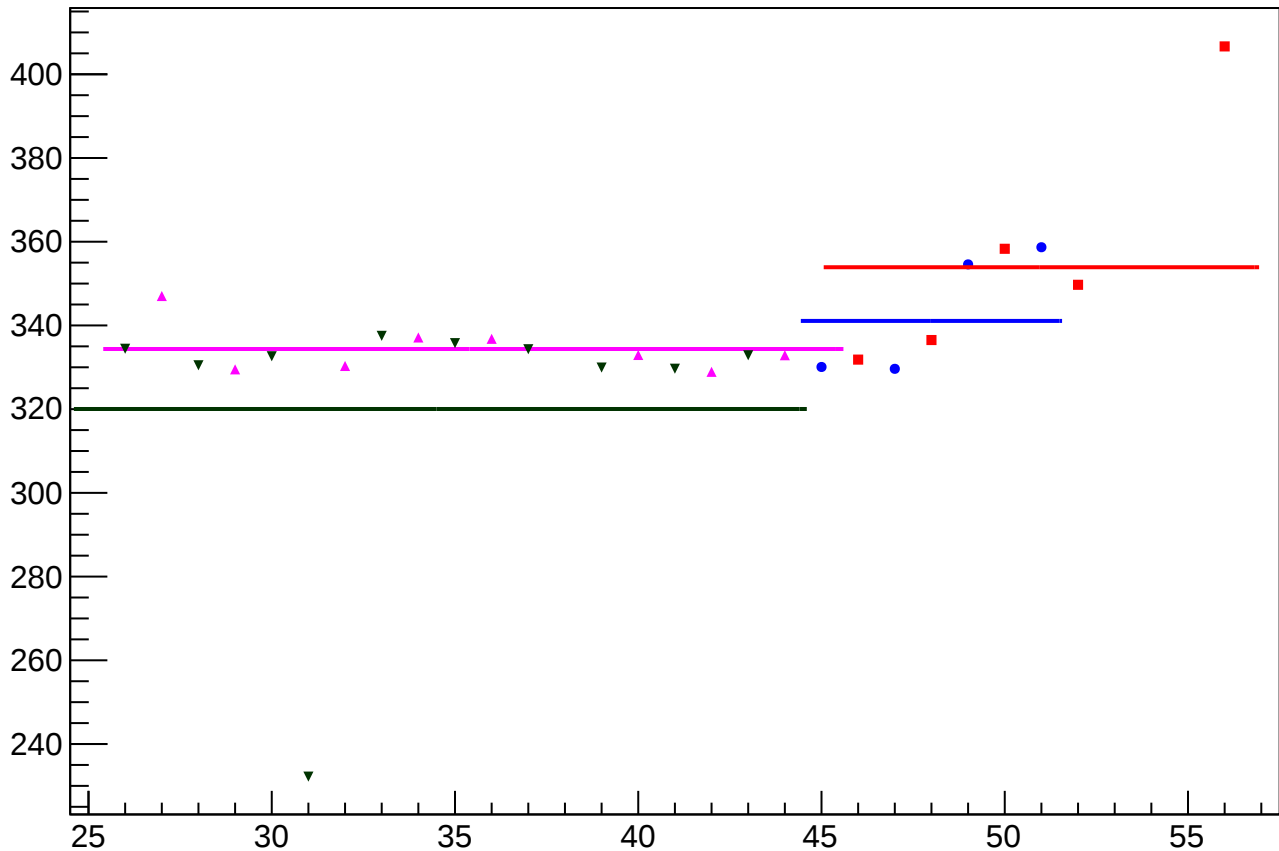
Right Out:  $-611.683 \pm 228.555$   $\chi^2/\text{NDF}$ : 7.4/4

Left In:  $-705.542 \pm 150.152$   $\chi^2/\text{NDF}$ : 8.0/7

$638.348 \pm 122.161$   $\chi^2/\text{NDF}$ : 13.8/13

$-677.245 \pm 125.493$   $\chi^2/\text{NDF}$ : 15.5/12

# reg\_asym\_at1\_avg\_rms vs slug



Right In:  $341.078 \pm 0.169$   $\chi^2/\text{NDF}$ : 5395.3/3

Left Out:  $320.038 \pm 0.101$   $\chi^2/\text{NDF}$ : 112209.4/9

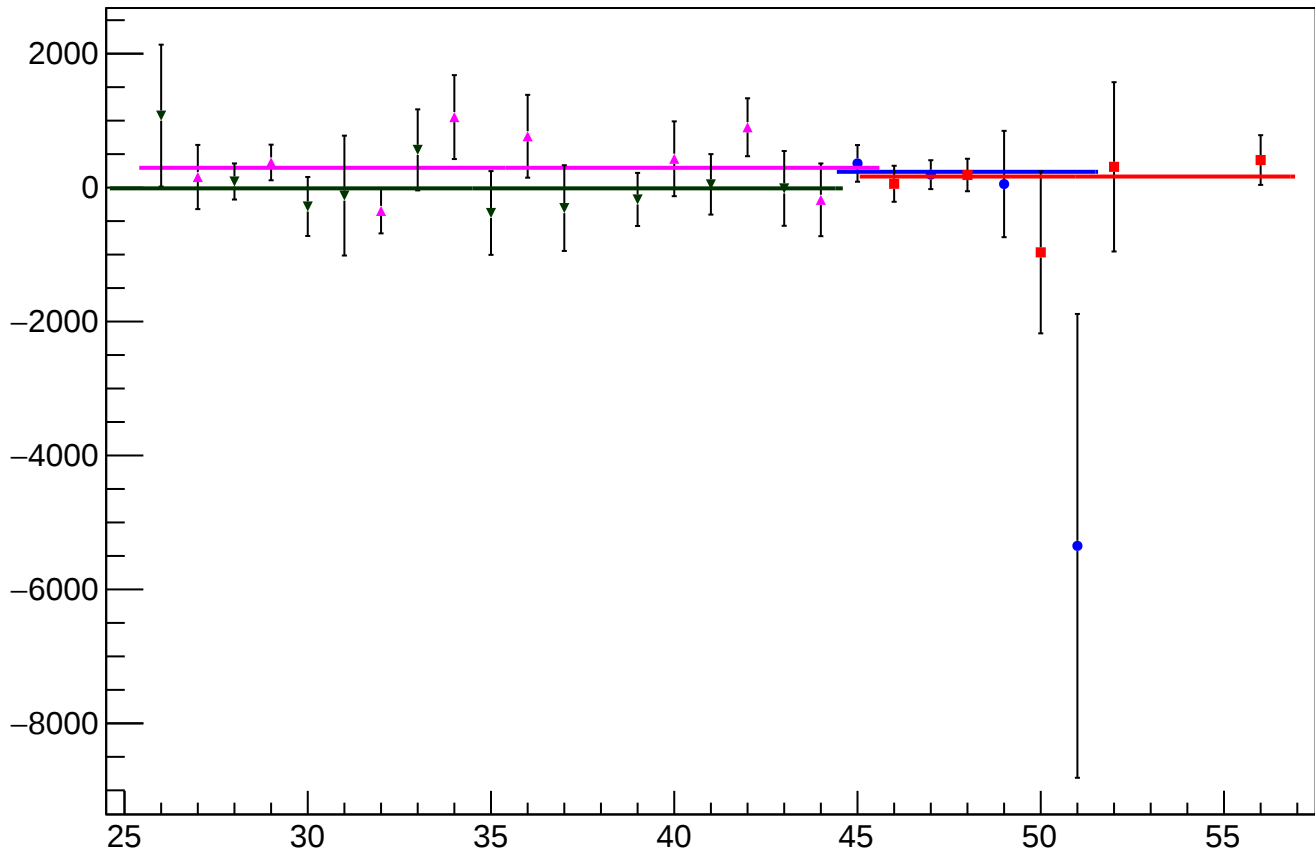
Right Out:  $353.902 \pm 0.162$   $\chi^2/\text{NDF}$ : 22485.6/4

Left In:  $334.371 \pm 0.106$   $\chi^2/\text{NDF}$ : 3274.0/7

$325.537 \pm 0.086$   $\chi^2/\text{NDF}$ : 129058.2/13

$340.259 \pm 0.089$   $\chi^2/\text{NDF}$ : 35961.9/12

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



Right In: 236.024+/-165.533  $\chi^2/\text{NDF}$ : 2.9/3

Left Out: -11.187+/-151.999  $\chi^2/\text{NDF}$ : 3.2/9

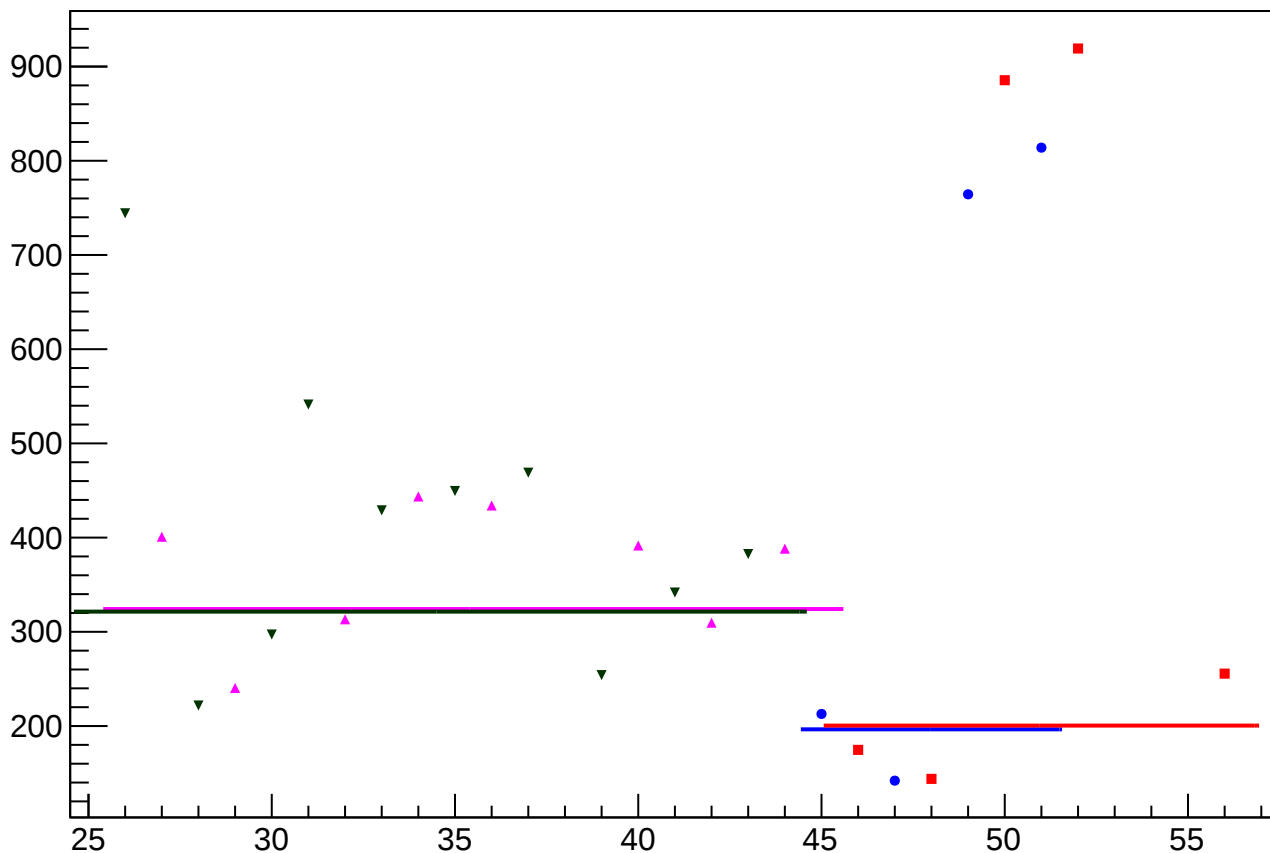
Right Out: 165.370+/-159.312  $\chi^2/\text{NDF}$ : 1.5/4

Left In: 295.759+/-149.916  $\chi^2/\text{NDF}$ : 8.7/7

101.901+/-111.959  $\chi^2/\text{NDF}$ : 7.4/13

234.523+/-109.177  $\chi^2/\text{NDF}$ : 10.5/12

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



Right In: 196.490+/-0.117  $\chi^2/\text{NDF}$ : 1221855.0/3

Left Out: 321.436+/-0.107  $\chi^2/\text{NDF}$ :1057868.5/9

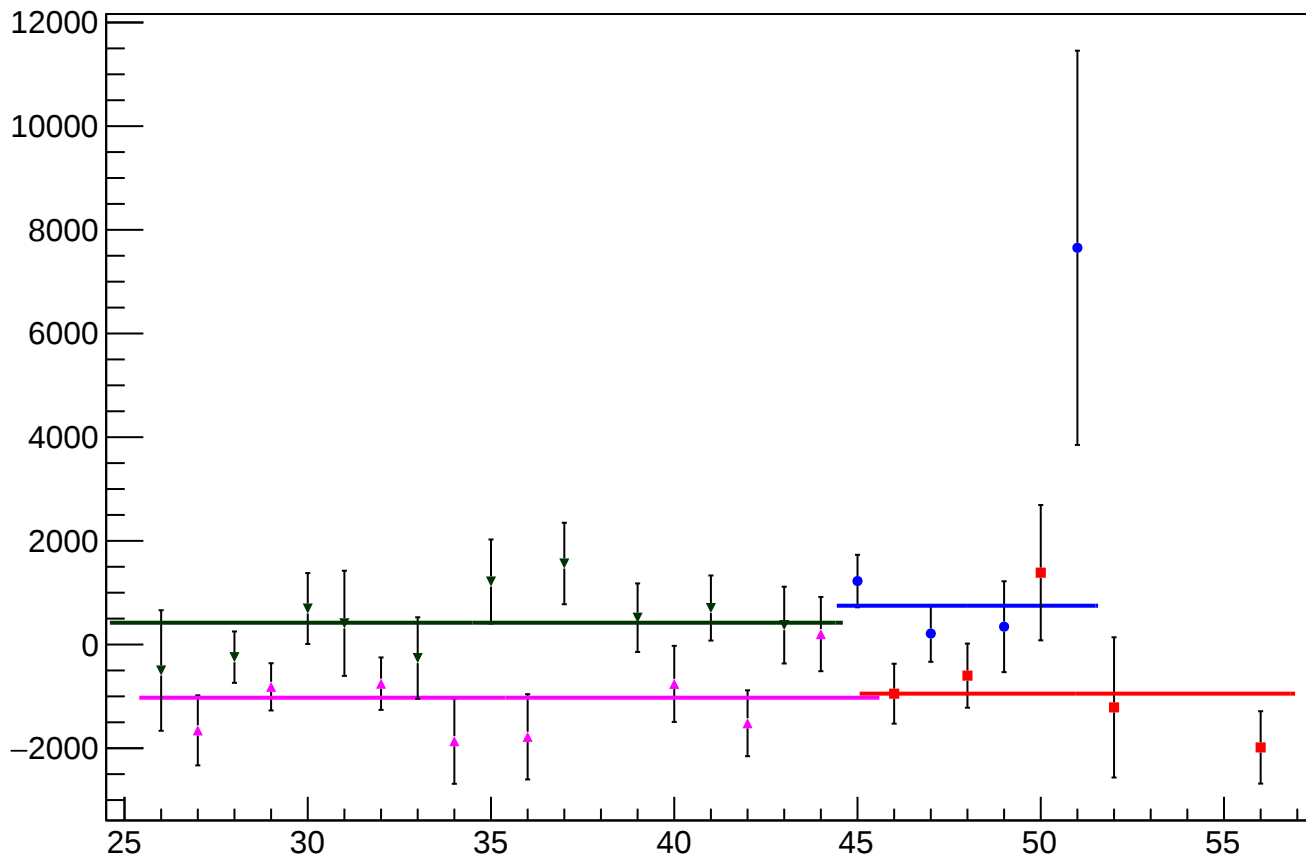
264.279+/-0.079  $\chi^2/\text{NDF}$ : 2897943.2/13

Right Out: 200.470+/-0.113  $\chi^2/\text{NDF}$ : 1459829.6/4

266.083+/-0.077  $\chi^2/\text{NDF}$ : 2546327.0/12

Left In: 324.185+/-0.106  $\chi^2/\text{NDF}$ :446845.3/7

# asym\_at1\_avg\_mean vs slug



Right In:  $748.904 \pm 340.232$   $\chi^2/\text{NDF}$ : 5.4/3

Left Out:  $420.888 \pm 227.441$   $\chi^2/\text{NDF}$ : 6.6/9

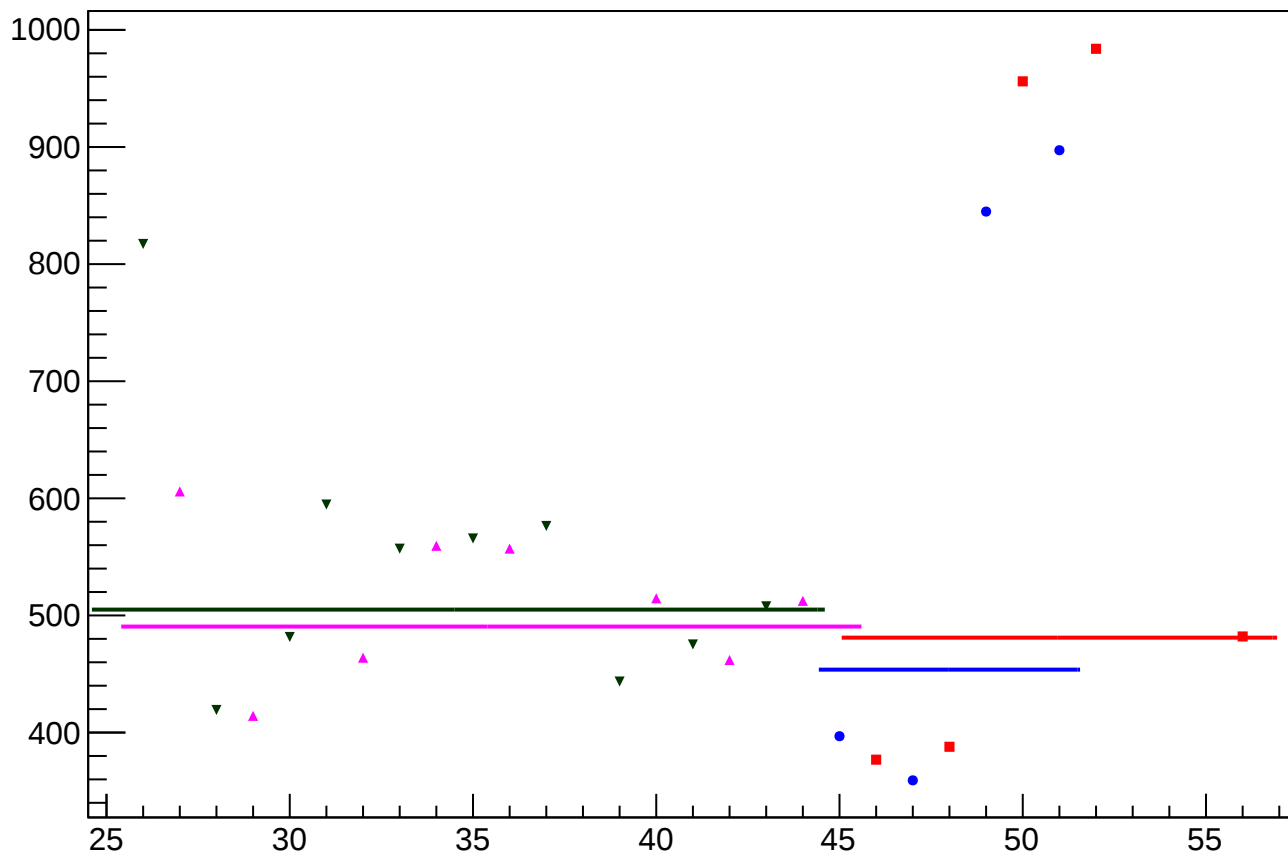
Right Out:  $-947.202 \pm 337.145$   $\chi^2/\text{NDF}$ : 5.8/4

Left In:  $-1025.888 \pm 222.743$   $\chi^2/\text{NDF}$ : 6.9/7

$522.198 \pm 189.084$   $\chi^2/\text{NDF}$ : 12.6/13

$-1001.978 \pm 185.846$   $\chi^2/\text{NDF}$ : 12.7/12

# asym\_at1\_avg\_rms vs slug



Right In: 453.723+/-0.241  $\chi^2/\text{NDF}$ : 511064.6/3

Left Out: 504.992+/-0.161  $\chi^2/\text{NDF}$ : 280293.6/9

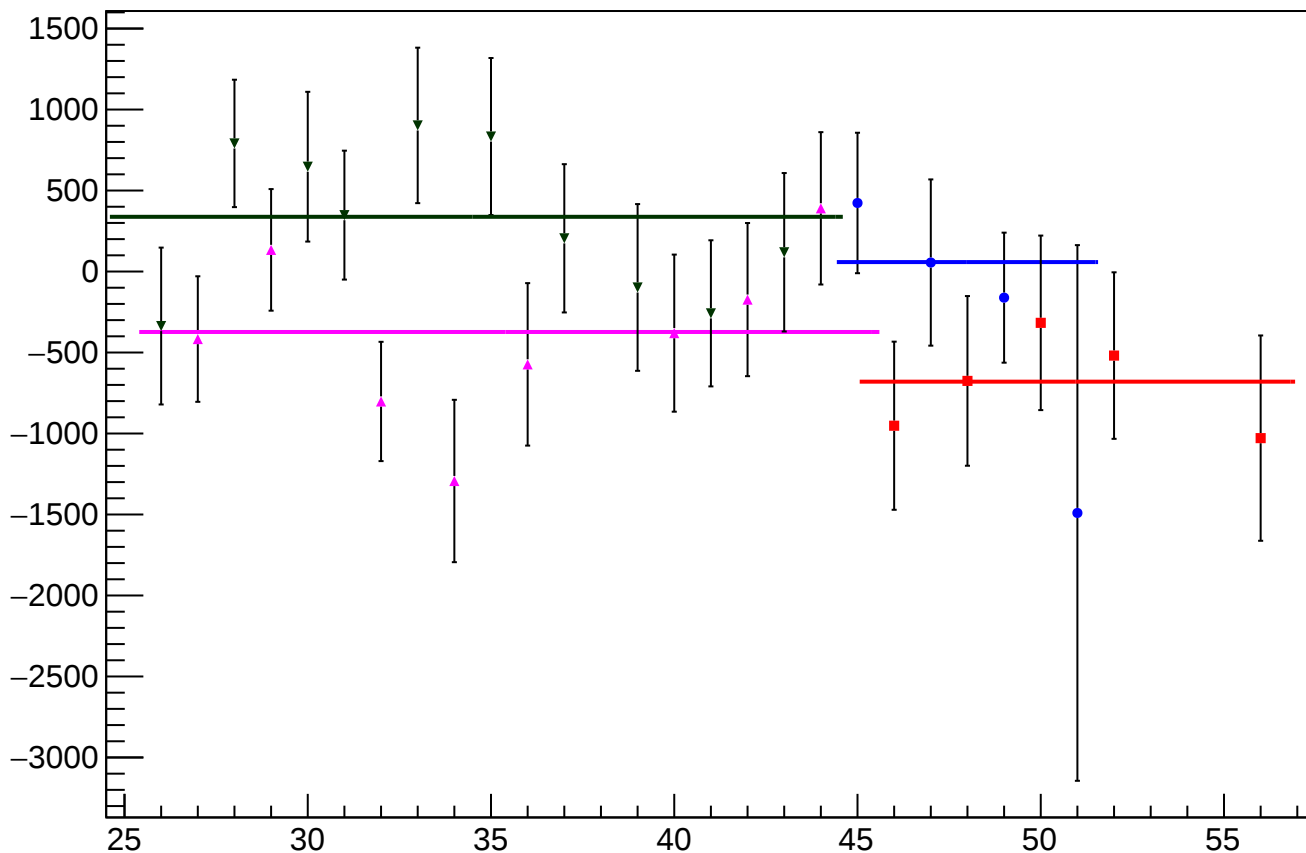
Right Out: 481.037+/-0.238  $\chi^2/\text{NDF}$ : 651811.2/4

Left In: 490.502+/-0.158  $\chi^2/\text{NDF}$ : 155145.4/7

489.157+/-0.134  $\chi^2/\text{NDF}$ : 822745.6/13

487.626+/-0.131  $\chi^2/\text{NDF}$ : 808053.9/12

# reg\_asym\_at1\_dd\_mean vs slug



Right In:  $58.301 \pm 252.457$   $\chi^2/\text{NDF}: 1.9/3$

Left Out:  $337.826 \pm 144.392$   $\chi^2/\text{NDF}: 8.9/9$

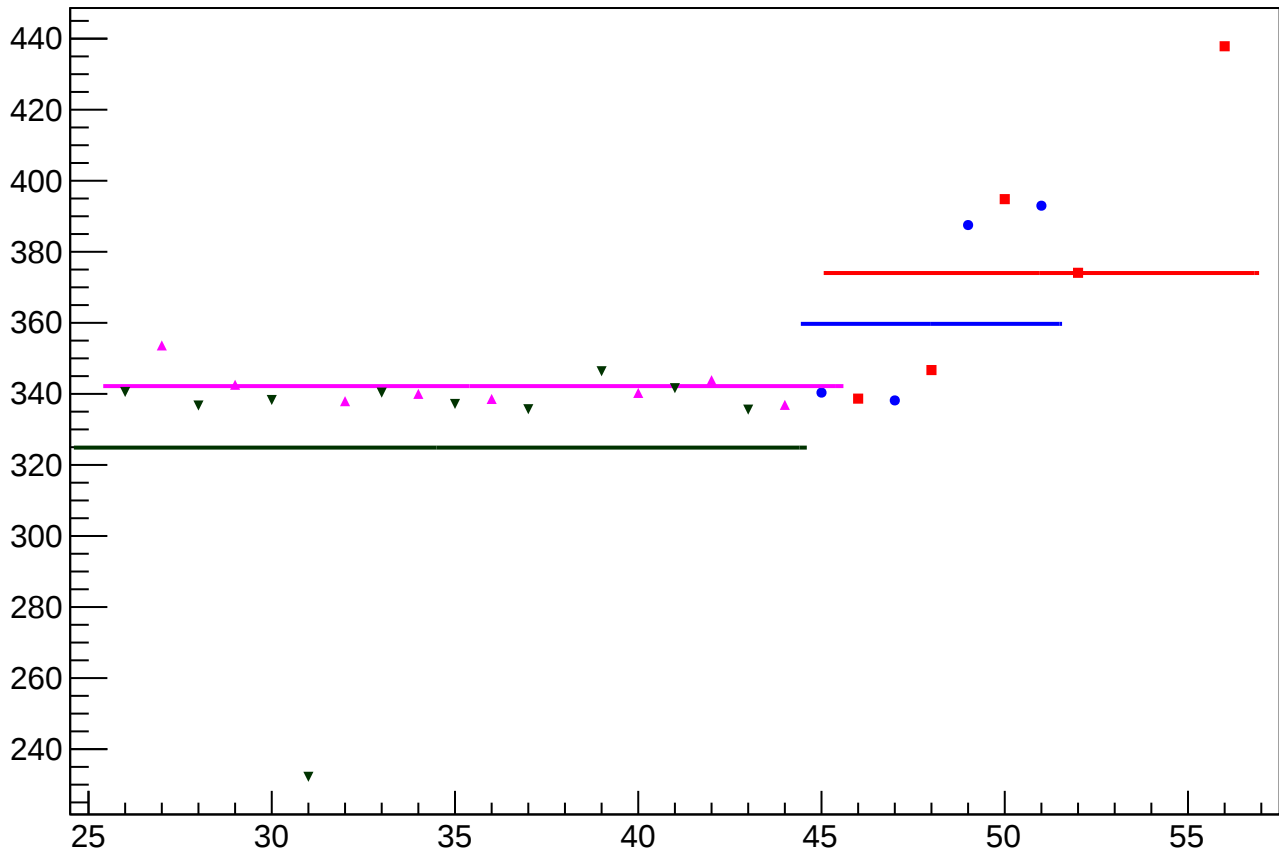
Right Out:  $-679.927 \pm 241.983$   $\chi^2/\text{NDF}: 1.1/4$

Left In:  $-373.235 \pm 153.688$   $\chi^2/\text{NDF}: 9.5/7$

$268.926 \pm 125.339$   $\chi^2/\text{NDF}: 11.7/13$

$-461.388 \pm 129.734$   $\chi^2/\text{NDF}: 11.8/12$

# reg\_asym\_at1\_dd\_rms vs slug



Right In: 359.716+/-0.179  $\chi^2/\text{NDF}$ : 17927.3/3

Left Out: 324.881+/-0.102  $\chi^2/\text{NDF}$ : 125698.7/9

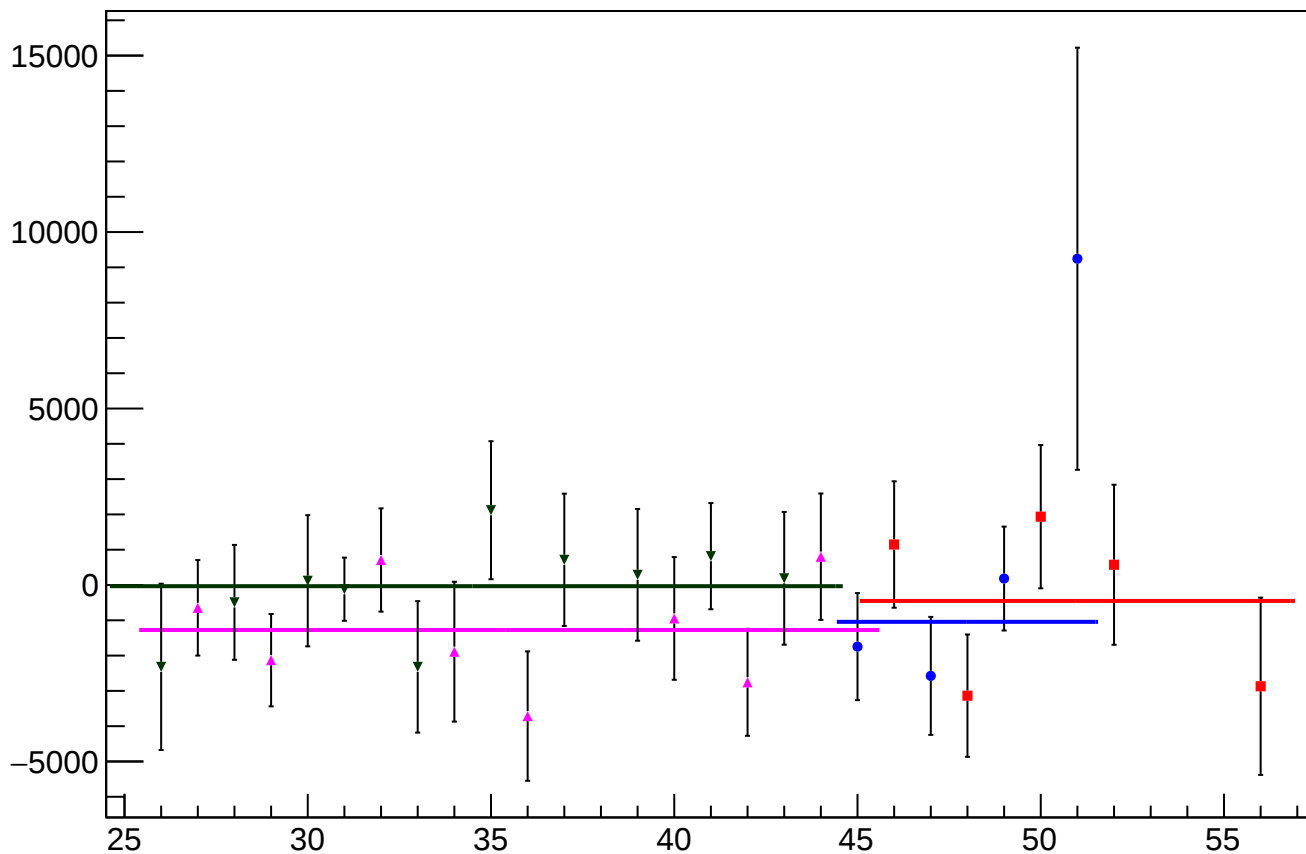
Right Out: 374.024+/-0.171  $\chi^2/\text{NDF}$ : 37993.6/4

Left In: 342.194+/-0.109  $\chi^2/\text{NDF}$ : 2464.7/7

333.467+/-0.089  $\chi^2/\text{NDF}$ : 172319.7/13

351.343+/-0.092  $\chi^2/\text{NDF}$ : 65117.8/12

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



Right In:  $-1043.706 \pm 882.945$   $\chi^2/\text{NDF}: 4.7/3$

Left Out:  $-33.360 \pm 503.702$   $\chi^2/\text{NDF}: 4.3/9$

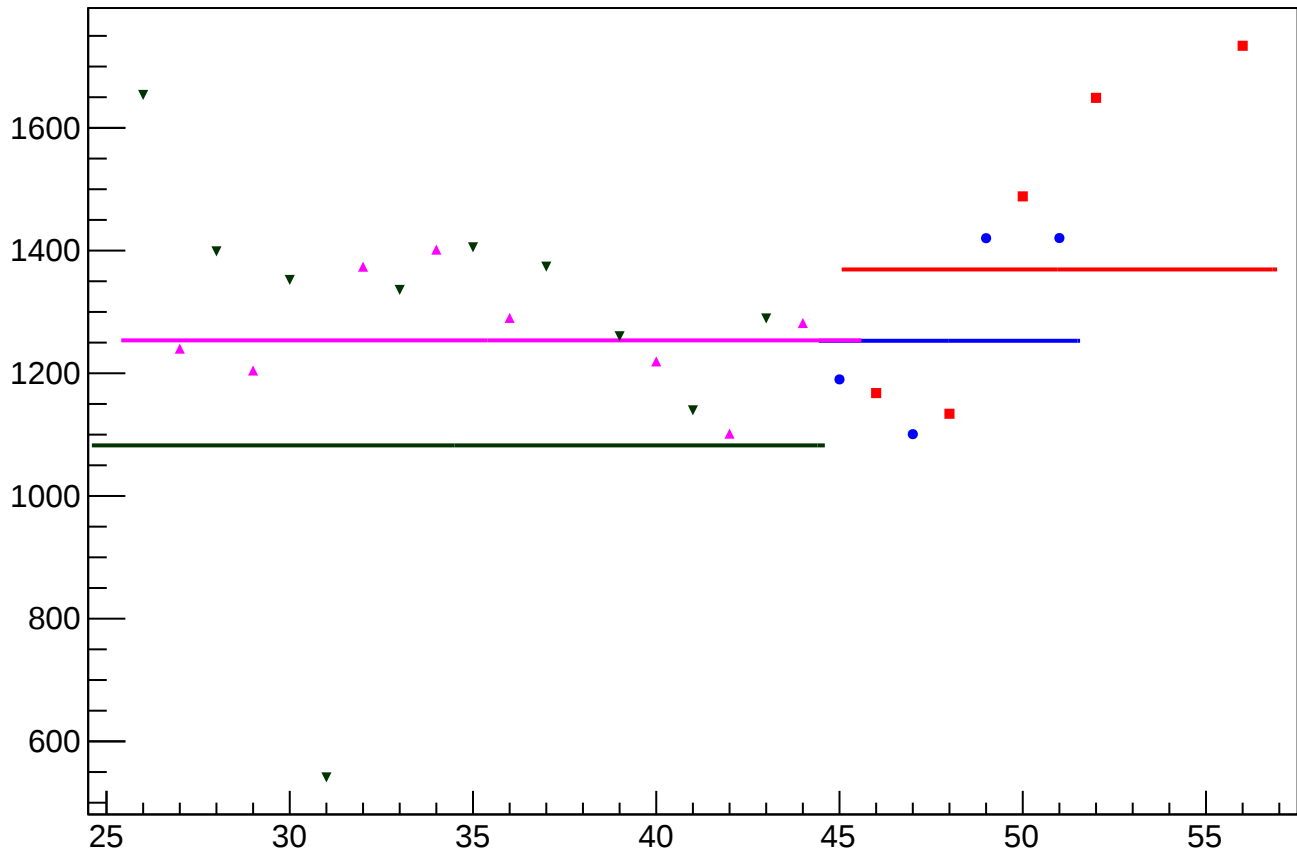
Right Out:  $-451.212 \pm 897.835$   $\chi^2/\text{NDF}: 5.7/4$

Left In:  $-1275.228 \pm 556.624$   $\chi^2/\text{NDF}: 6.7/7$

$-281.438 \pm 437.514$   $\chi^2/\text{NDF}: 10.0/13$

$-1046.447 \pm 473.084$   $\chi^2/\text{NDF}: 13.0/12$

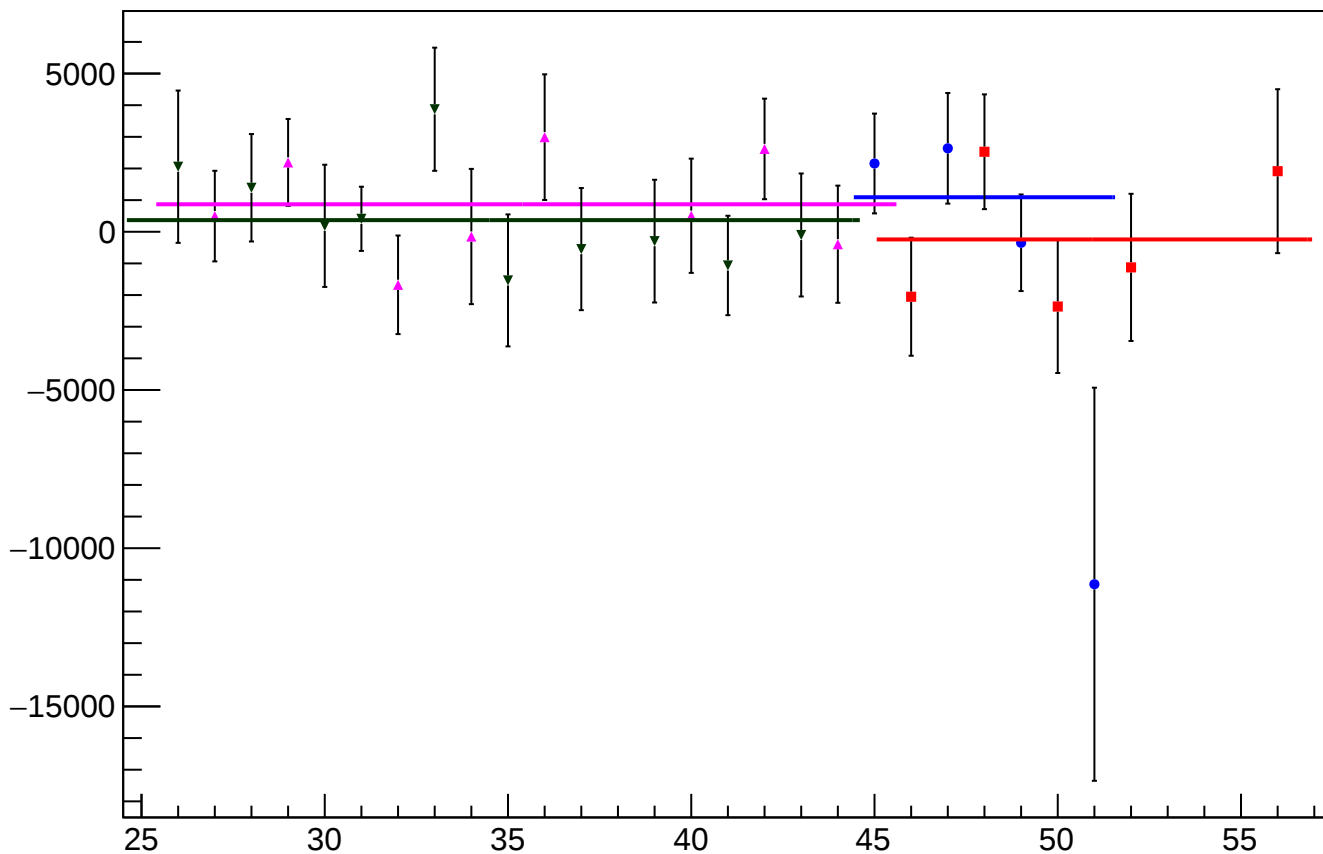
# asym\_at1\_dd\_correction\_rms vs slug



Right In:  $1252.979 \pm 0.624$   $\chi^2/\text{NDF}$ : 47438.3/3  
 Left Out:  $1082.447 \pm 0.356$   $\chi^2/\text{NDF}$ : 1151669.7/9  
 Right Out:  $1369.242 \pm 0.635$   $\chi^2/\text{NDF}$ : 141654.8/4  
 Left In:  $1253.630 \pm 0.394$   $\chi^2/\text{NDF}$ : 49852.6/7

$1124.319 \pm 0.309$   $\chi^2/\text{NDF}$ : 1255395.1/13  
 $1285.728 \pm 0.335$   $\chi^2/\text{NDF}$ : 215462.2/12

# asym\_at1\_dd\_mean vs slug



Right In:  $1091.108 \pm 918.844$   $\chi^2/\text{NDF}$ : 6.0/3

Left Out:  $367.665 \pm 537.785$   $\chi^2/\text{NDF}$ : 6.2/9

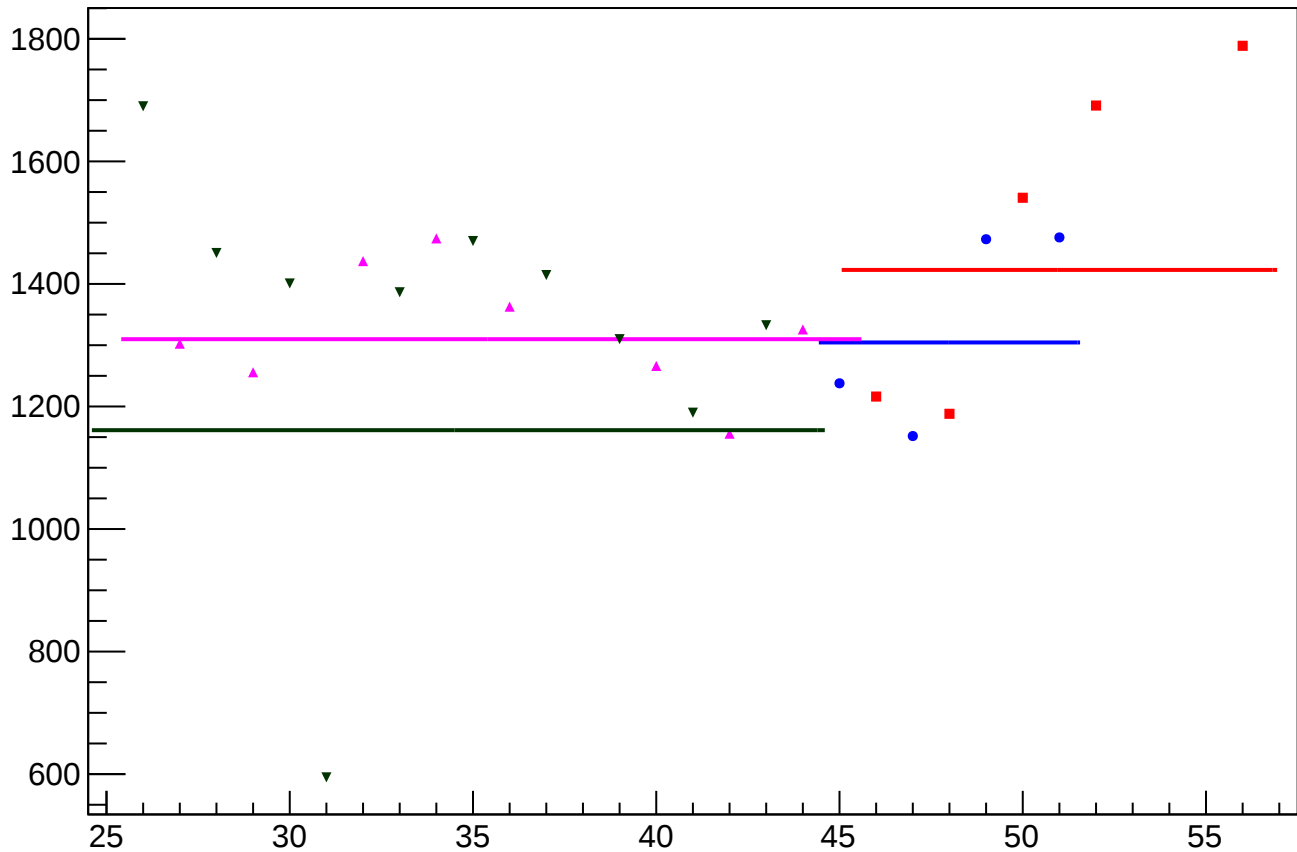
Right Out:  $-242.571 \pm 931.659$   $\chi^2/\text{NDF}$ : 5.1/4

Left In:  $868.425 \pm 587.420$   $\chi^2/\text{NDF}$ : 6.8/7

$552.254 \pm 464.132$   $\chi^2/\text{NDF}$ : 12.6/13

$552.393 \pm 496.897$   $\chi^2/\text{NDF}$ : 12.9/12

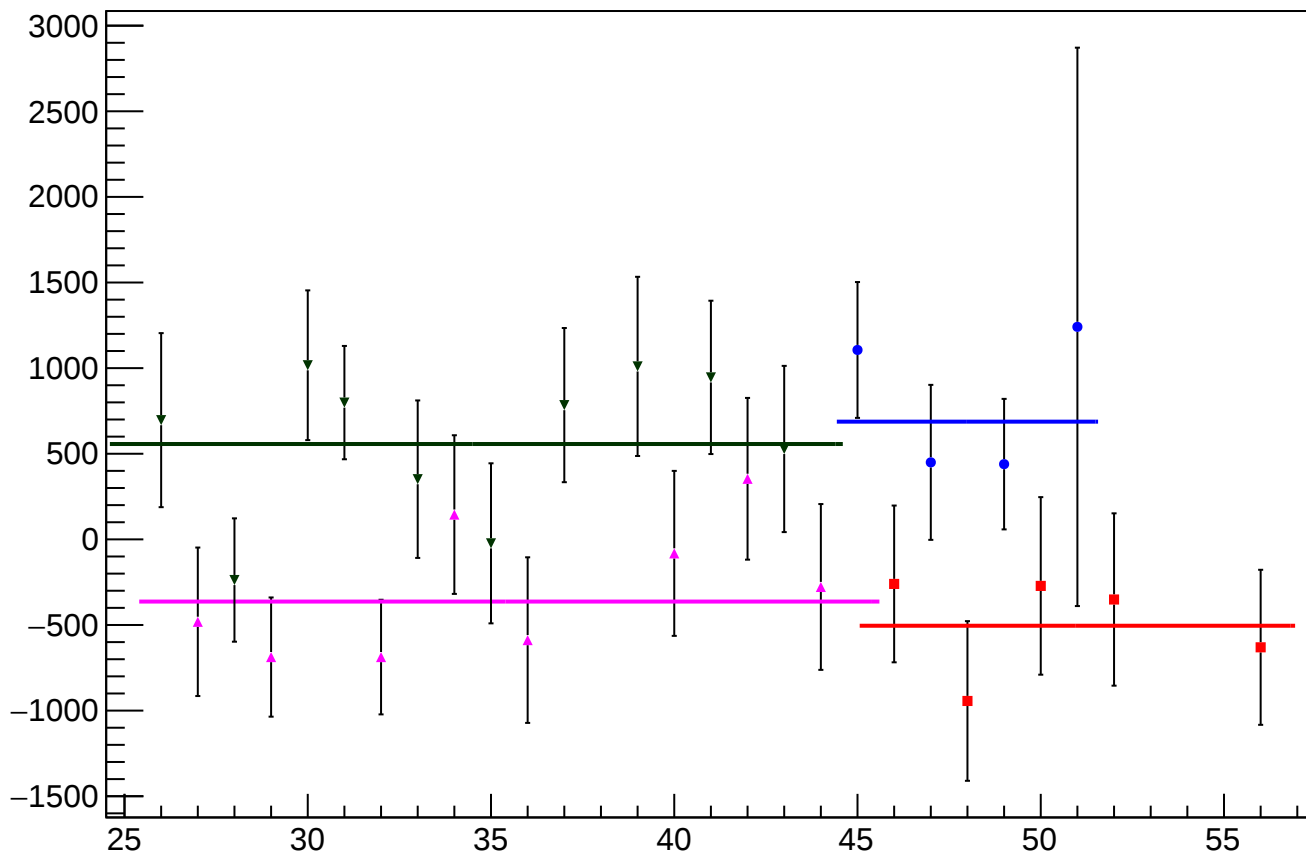
# asym\_at1\_dd\_rms vs slug



Right In: 1304.495+/-0.650  $\chi^2/\text{NDF}$ : 44734.4/3  
 Left Out: 1161.322+/-0.380  $\chi^2/\text{NDF}$ :942121.1/9  
 Right Out: 1422.875+/-0.659  $\chi^2/\text{NDF}$ : 130876.1/4  
 Left In: 1309.822+/-0.415  $\chi^2/\text{NDF}$ :49968.8/7

1197.853+/-0.328  $\chi^2/\text{NDF}$ : 1023024.2/13  
 1341.981+/-0.351  $\chi^2/\text{NDF}$ : 201917.4/12

# reg\_asym\_at2\_avg\_mean vs slug



Right In:  $687.458 \pm 232.495$   $\chi^2/\text{NDF}$ : 1.9/3

Left Out:  $556.863 \pm 137.272$   $\chi^2/\text{NDF}$ : 10.1/9

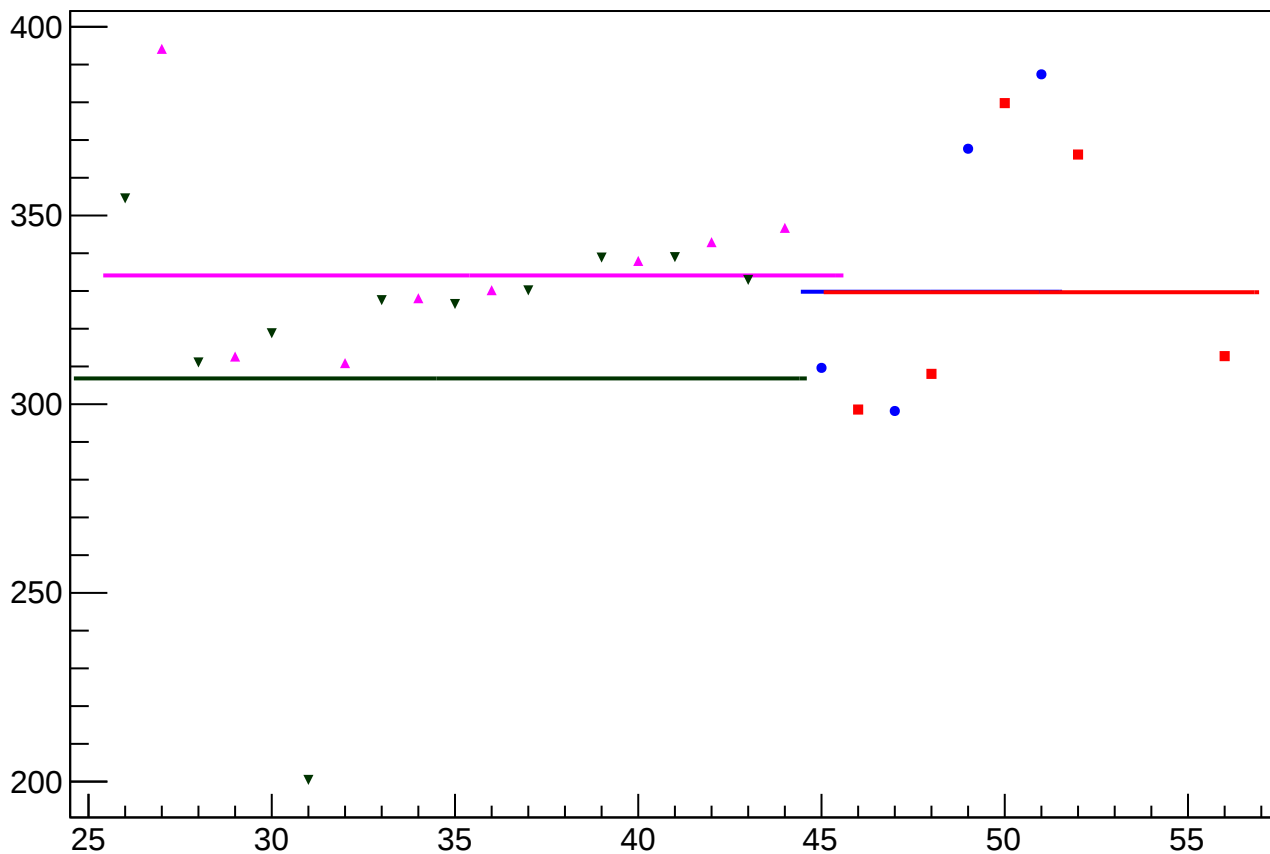
Right Out:  $-504.422 \pm 213.582$   $\chi^2/\text{NDF}$ : 1.5/4

Left In:  $-363.206 \pm 149.925$   $\chi^2/\text{NDF}$ : 6.0/7

$590.621 \pm 118.206$   $\chi^2/\text{NDF}$ : 12.2/13

$-409.820 \pm 122.710$   $\chi^2/\text{NDF}$ : 7.8/12

# reg\_asym\_at2\_avg\_rms vs slug



Right In:  $329.805 \pm 0.164$   $\chi^2/\text{NDF}$ : 37191.2/3

Left Out:  $306.830 \pm 0.097$   $\chi^2/\text{NDF}$ : 262678.8/9

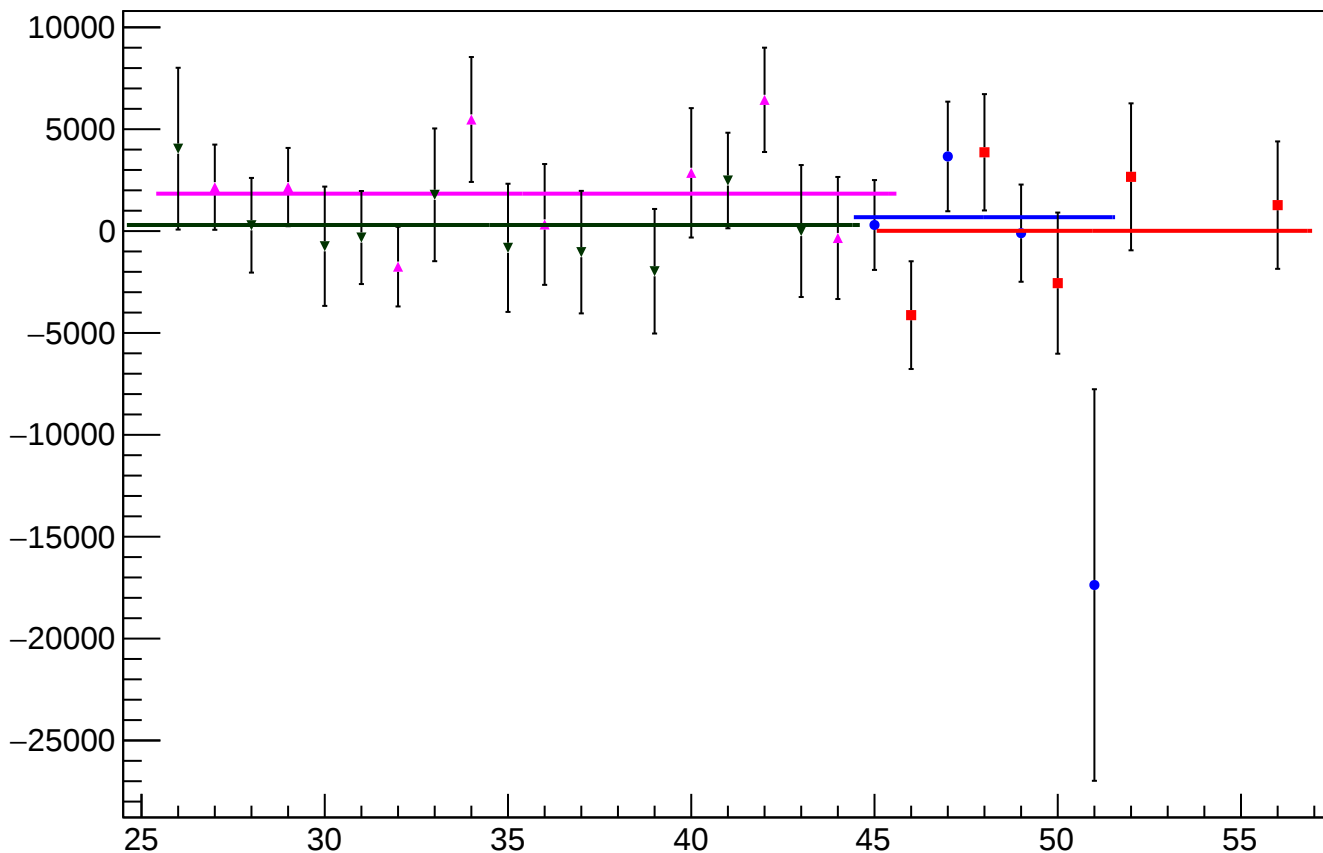
Right Out:  $329.672 \pm 0.151$   $\chi^2/\text{NDF}$ : 45525.2/4

Left In:  $334.120 \pm 0.106$   $\chi^2/\text{NDF}$ : 58261.7/7

$312.769 \pm 0.084$   $\chi^2/\text{NDF}$ : 314351.6/13

$332.652 \pm 0.087$   $\chi^2/\text{NDF}$ : 104368.0/12

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



Right In: 682.164 $\pm$ 1372.875  $\chi^2$ /NDF: 4.9/3

Left Out: 298.949 $\pm$ 895.409  $\chi^2$ /NDF:3.0/9

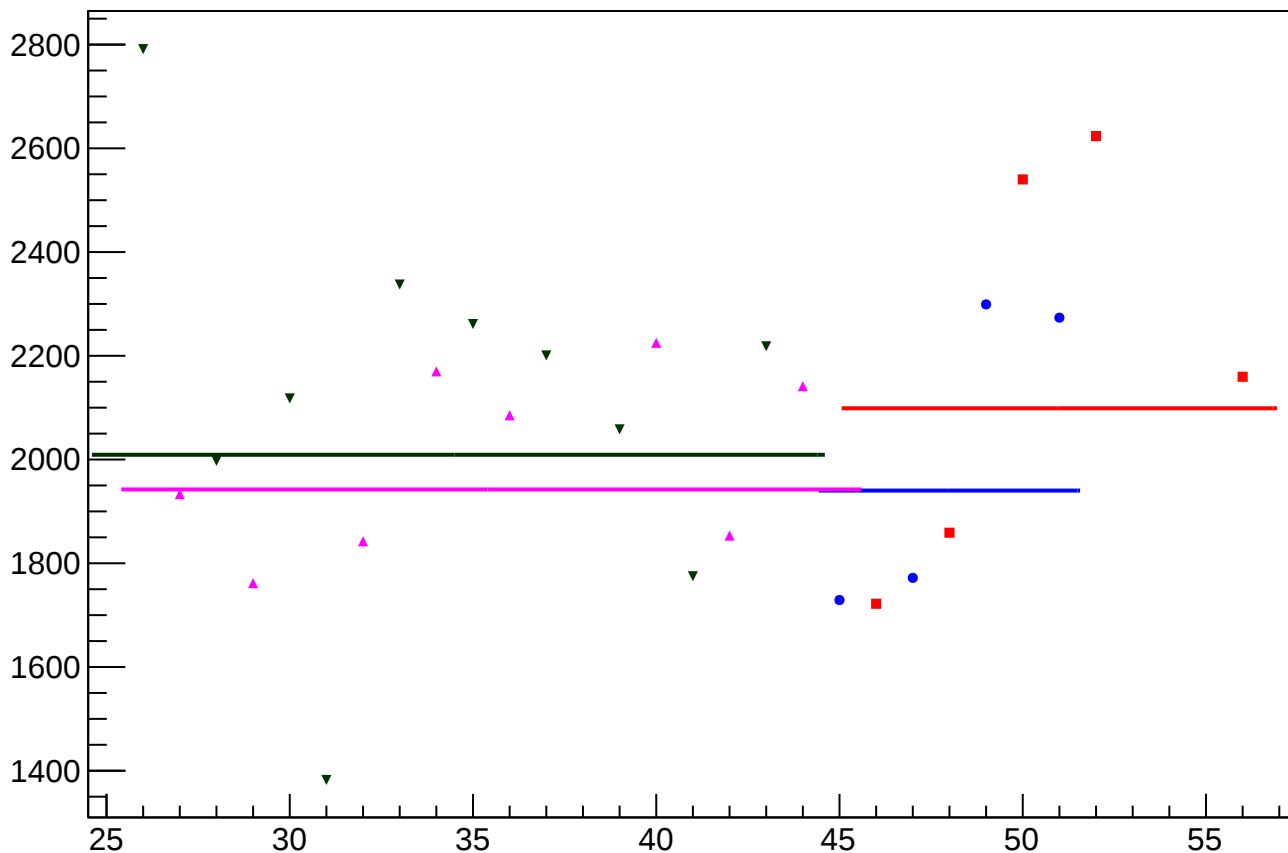
Right Out: 12.591 $\pm$ 1375.901  $\chi^2$ /NDF: 5.5/4

Left In: 1836.605 $\pm$ 862.395  $\chi^2$ /NDF:8.9/7

413.314 $\pm$ 749.990  $\chi^2$ /NDF: 8.0/13

1322.136 $\pm$ 730.722  $\chi^2$ /NDF: 15.7/12

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



Right In: 1940.158+/-0.971  $\chi^2$ /NDF: 73847.9/3

Left Out: 2009.181+/-0.633  $\chi^2$ /NDF:301244.6/9

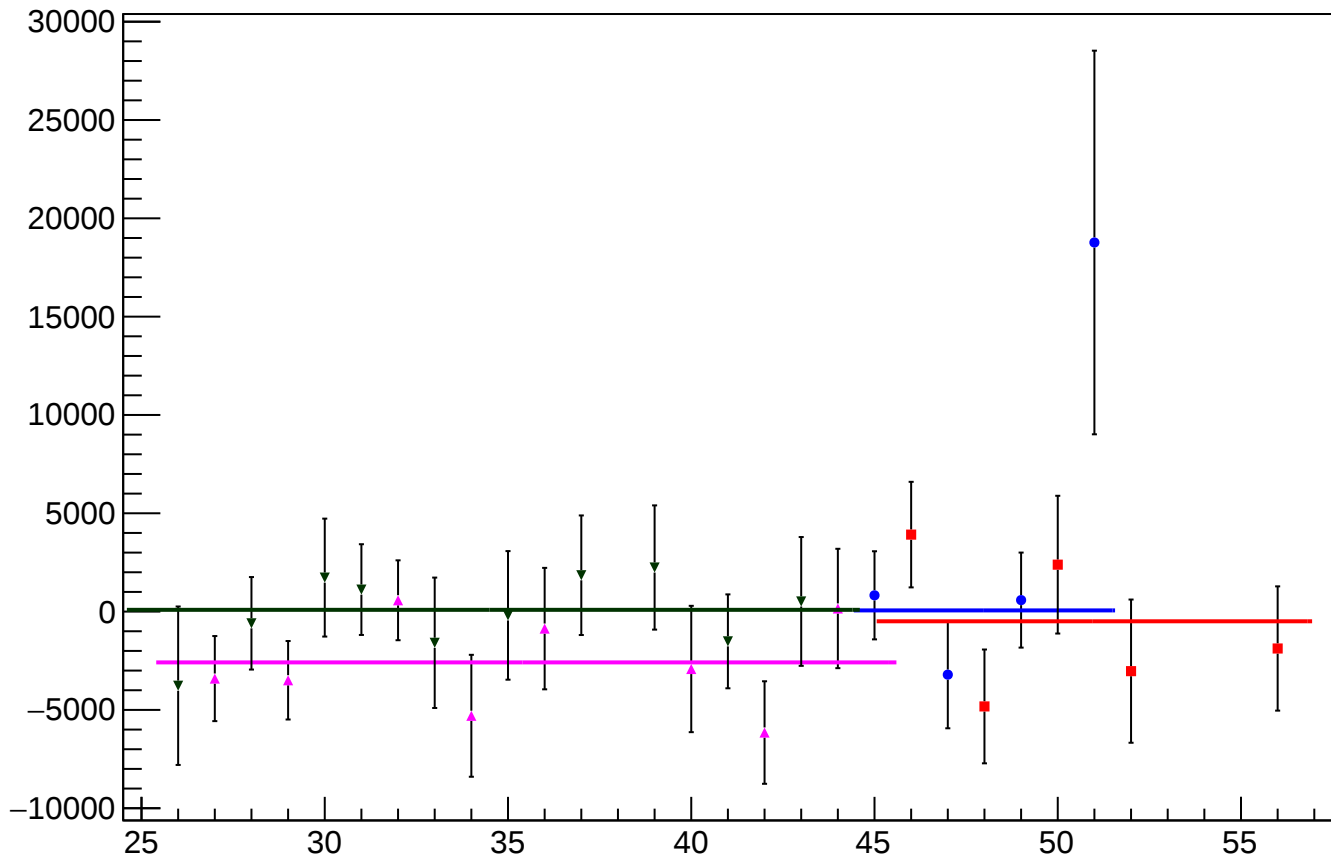
1988.582+/-0.530  $\chi^2$ /NDF: 378639.3/13

Right Out: 2098.816+/-0.973  $\chi^2$ /NDF: 130311.0/4

1986.465+/-0.517  $\chi^2$ /NDF: 214629.0/12

Left In: 1942.327+/-0.610  $\chi^2$ /NDF:65743.5/7

# asym\_at2\_avg\_mean vs slug



Right In: 60.400+/-1393.016  $\chi^2/\text{NDF}$ : 5.3/3

Left Out: 89.516+/-911.791  $\chi^2/\text{NDF}$ : 3.0/9

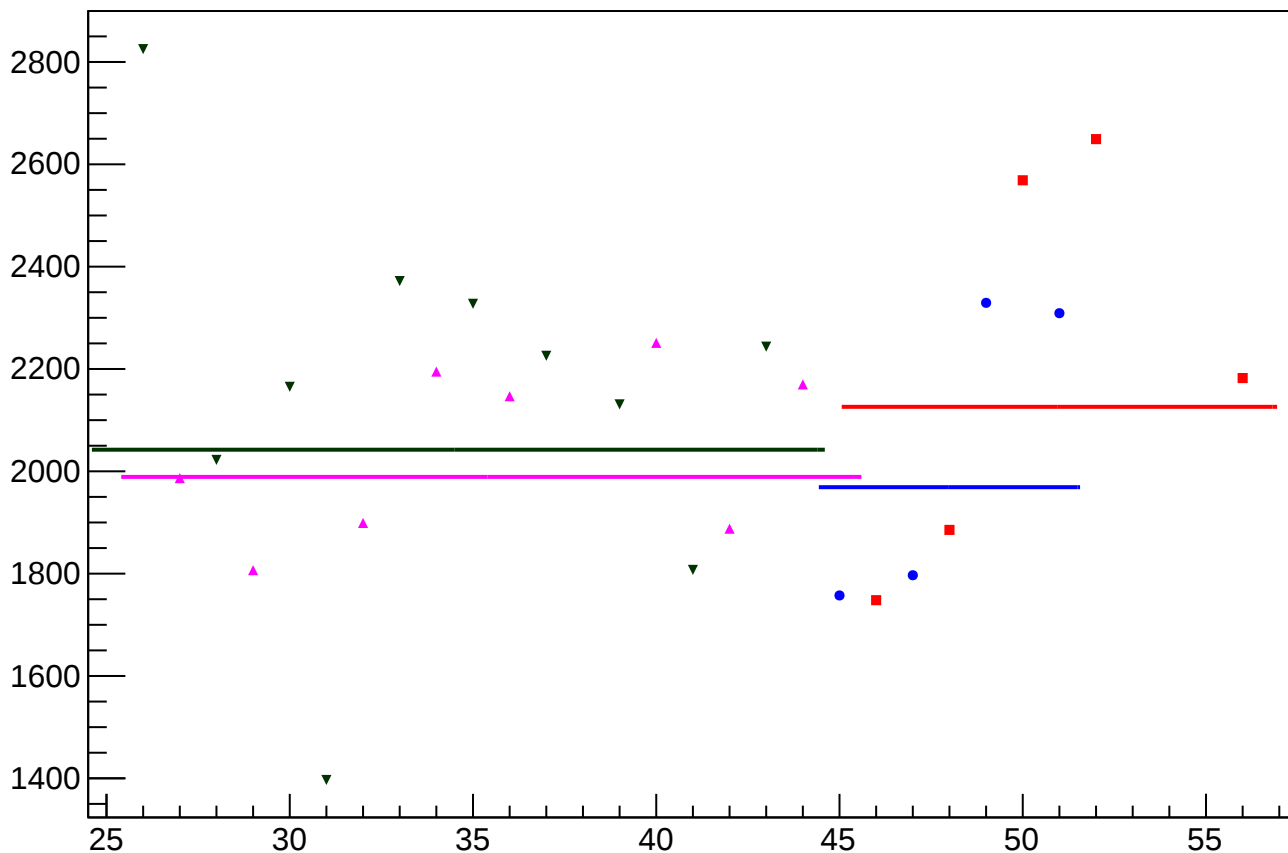
Right Out: -493.354+/-1393.149  $\chi^2/\text{NDF}$ : 6.3/4

Left In: -2584.001+/-887.895  $\chi^2/\text{NDF}$ : 6.5/7

80.783+/-762.897  $\chi^2/\text{NDF}$ : 8.3/13

-1980.101+/-748.755  $\chi^2/\text{NDF}$ : 14.4/12

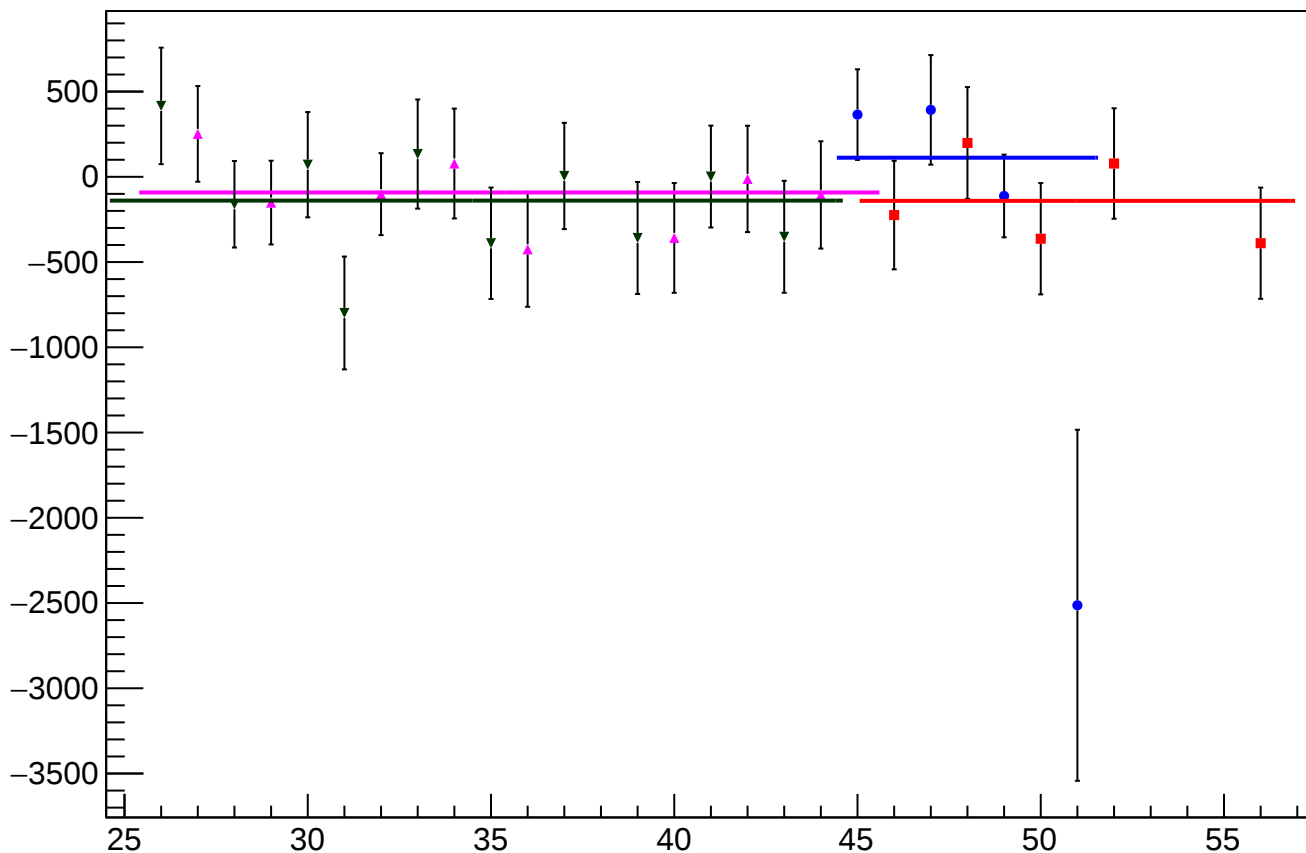
# asym\_at2\_avg\_rms vs slug



Right In: 1968.986+/-0.985  $\chi^2/\text{NDF}$ : 72686.0/3  
 Left Out: 2042.242+/-0.645  $\chi^2/\text{NDF}$ : 306288.1/9  
 Right Out: 2126.048+/-0.985  $\chi^2/\text{NDF}$ : 127321.6/4  
 Left In: 1989.107+/-0.628  $\chi^2/\text{NDF}$ : 58031.4/7

2020.270+/-0.539  $\chi^2/\text{NDF}$ : 382846.1/13  
 2028.663+/-0.529  $\chi^2/\text{NDF}$ : 199095.4/12

# reg\_asym\_at2\_dd\_mean vs slug



Right In:  $112.122 \pm 154.690$   $\chi^2/\text{NDF}$ : 9.0/3

Left Out:  $-139.503 \pm 98.600$   $\chi^2/\text{NDF}$ : 9.7/9

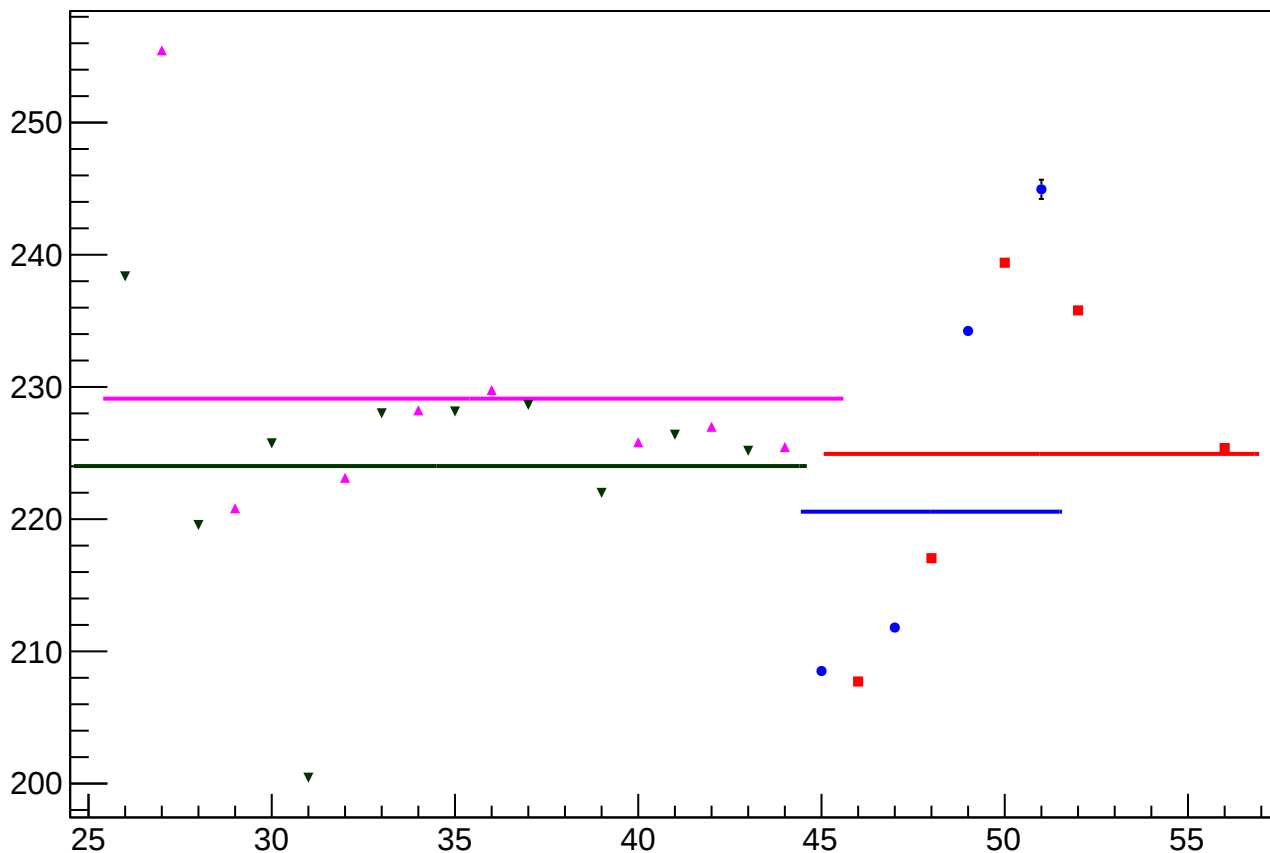
Right Out:  $-140.988 \pm 145.123$   $\chi^2/\text{NDF}$ : 2.6/4

Left In:  $-91.824 \pm 102.556$   $\chi^2/\text{NDF}$ : 3.6/7

$-66.807 \pm 83.146$   $\chi^2/\text{NDF}$ : 20.6/13

$-108.198 \pm 83.753$   $\chi^2/\text{NDF}$ : 6.3/12

# reg\_asym\_at2\_dd\_rms vs slug



Right In: 220.566 $\pm$ 0.109  $\chi^2$ /NDF: 13079.6/3

Left Out: 224.018 $\pm$ 0.070  $\chi^2$ /NDF:15653.5/9

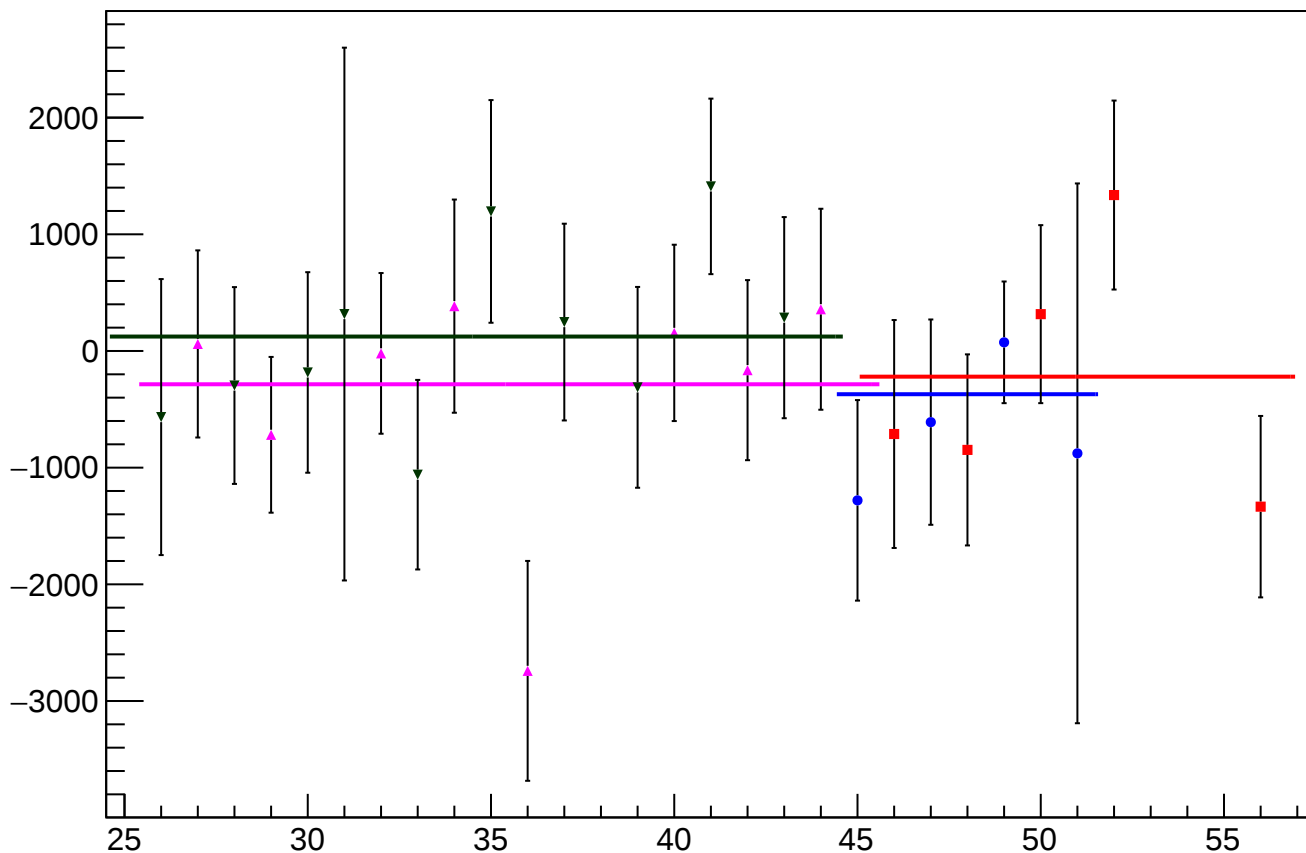
Right Out: 224.937 $\pm$ 0.103  $\chi^2$ /NDF: 13181.3/4

Left In: 229.116 $\pm$ 0.073  $\chi^2$ /NDF:21746.8/7

223.020 $\pm$ 0.059  $\chi^2$ /NDF: 29441.2/13

227.724 $\pm$ 0.059  $\chi^2$ /NDF: 36034.1/12

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



Right In: -370.546 $\pm$ 391.910  $\chi^2/\text{NDF}$ : 2.0/3

Left Out: 123.706 $\pm$ 286.884  $\chi^2/\text{NDF}$ : 7.4/9

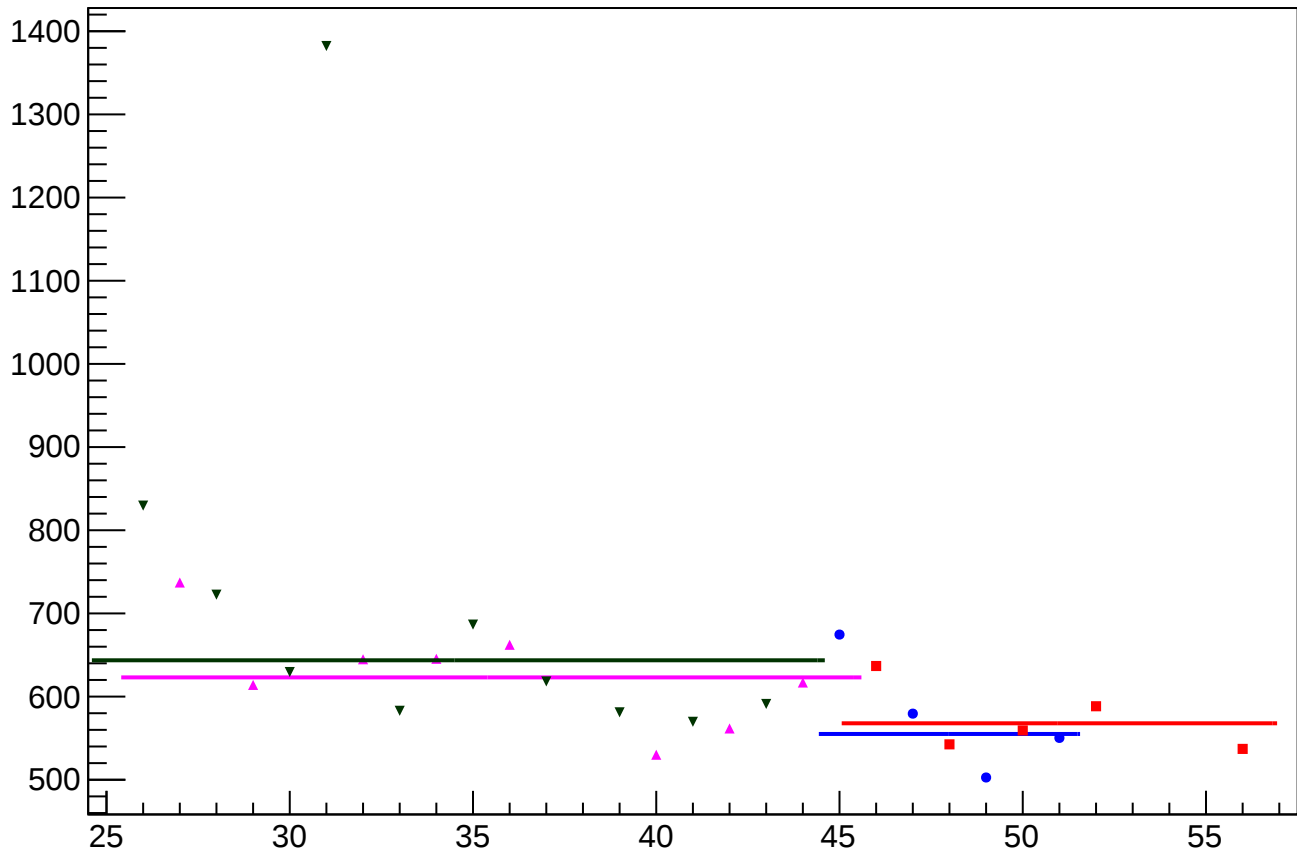
Right Out: -220.105 $\pm$ 366.698  $\chi^2/\text{NDF}$ : 7.1/4

Left In: -285.318 $\pm$ 277.235  $\chi^2/\text{NDF}$ : 9.0/7

-48.735 $\pm$ 231.490  $\chi^2/\text{NDF}$ : 10.4/13

-261.600 $\pm$ 221.146  $\chi^2/\text{NDF}$ : 16.1/12

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



Right In:  $555.062 \pm 0.277$   $\chi^2/\text{NDF}$ : 60368.3/3

Left Out:  $643.644 \pm 0.203$   $\chi^2/\text{NDF}$ : 331127.9/9

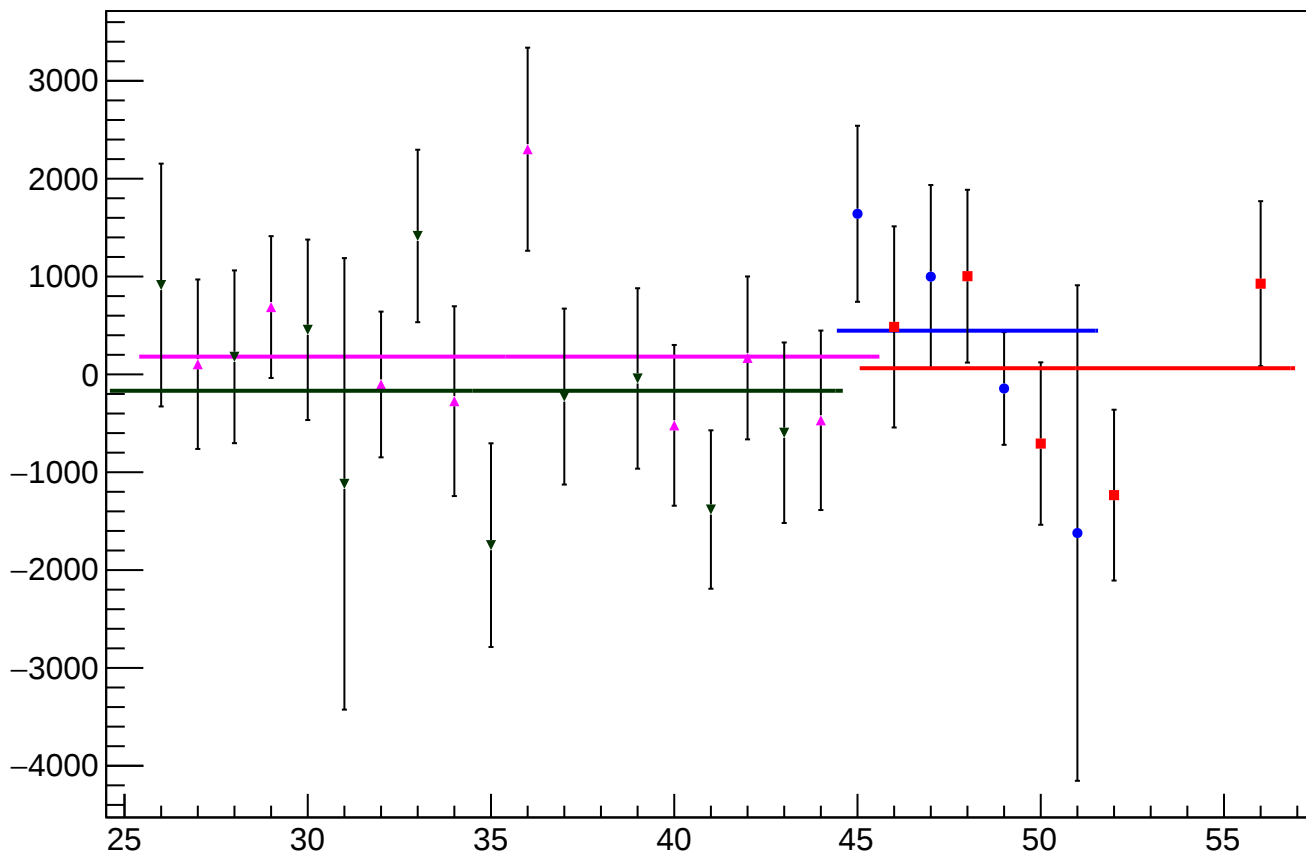
Right Out:  $567.893 \pm 0.259$   $\chi^2/\text{NDF}$ : 16527.9/4

Left In:  $623.079 \pm 0.196$   $\chi^2/\text{NDF}$ : 90546.5/7

$612.738 \pm 0.164$   $\chi^2/\text{NDF}$ : 458024.1/13

$603.008 \pm 0.156$   $\chi^2/\text{NDF}$ : 135896.9/12

# asym\_at2\_dd\_mean vs slug



Right In: 446.576+/-424.573  $\chi^2/\text{NDF}$ : 3.8/3

Left Out: -167.454+/-306.843  $\chi^2/\text{NDF}$ : 9.5/9

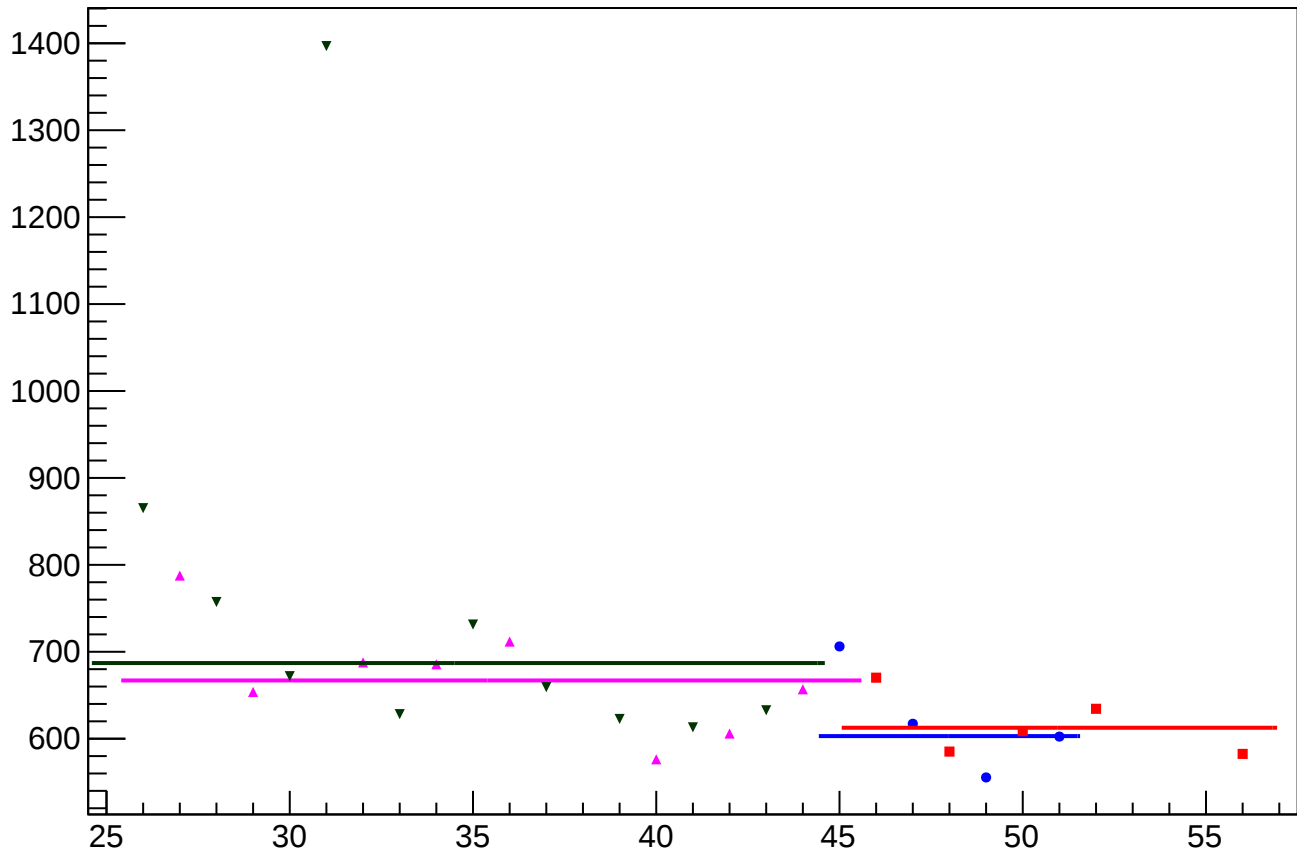
Right Out: 63.147+/-395.317  $\chi^2/\text{NDF}$ : 5.4/4

Left In: 181.369+/-299.524  $\chi^2/\text{NDF}$ : 6.3/7

43.222+/-248.694  $\chi^2/\text{NDF}$ : 14.8/13

138.252+/-238.736  $\chi^2/\text{NDF}$ : 11.7/12

# asym\_at2\_dd\_rms vs slug



Right In:  $603.006 \pm 0.300$   $\chi^2/\text{NDF}$ : 40396.6/3

Left Out:  $687.034 \pm 0.217$   $\chi^2/\text{NDF}$ : 291456.1/9

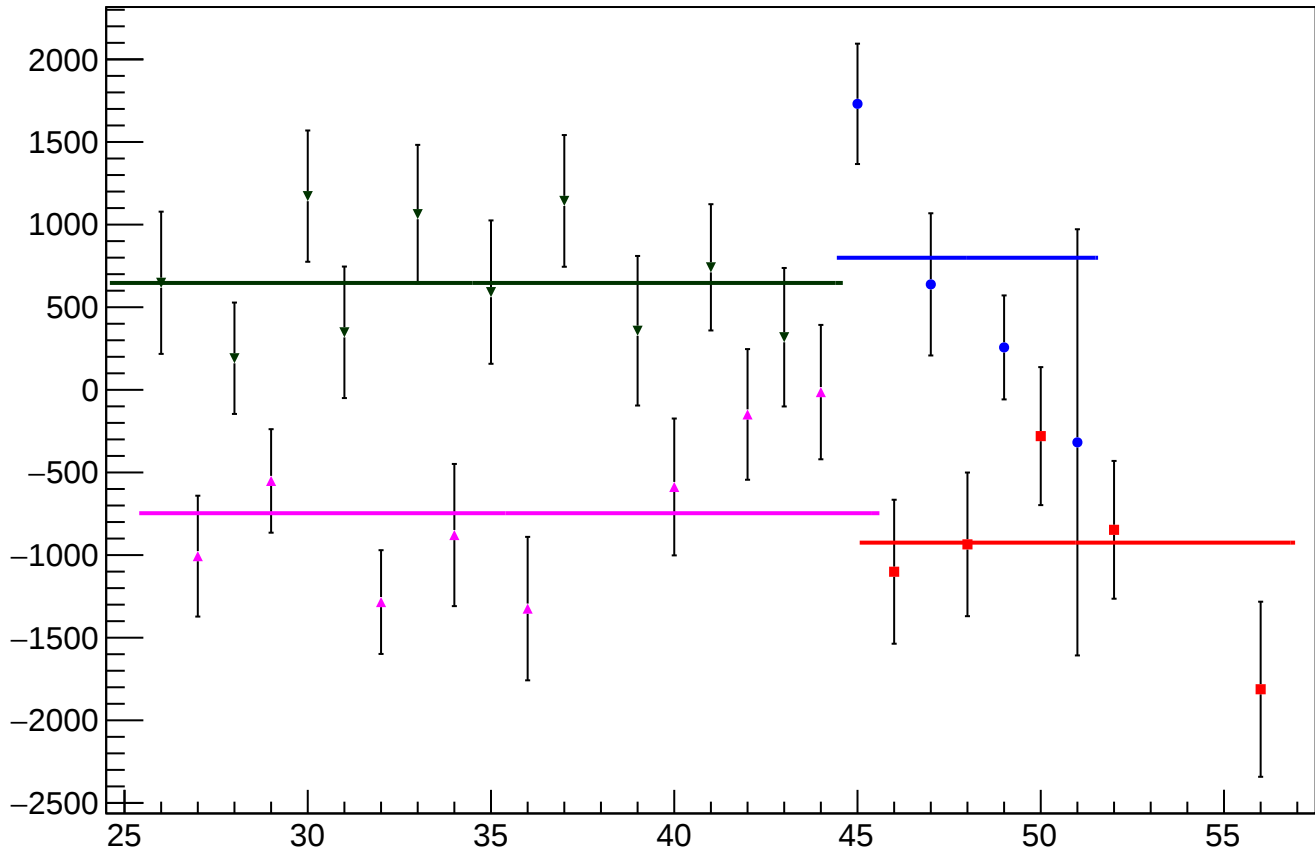
Right Out:  $612.616 \pm 0.280$   $\chi^2/\text{NDF}$ : 12047.0/4

Left In:  $667.018 \pm 0.212$   $\chi^2/\text{NDF}$ : 80872.4/7

$658.204 \pm 0.176$   $\chi^2/\text{NDF}$ : 383312.6/13

$647.177 \pm 0.169$   $\chi^2/\text{NDF}$ : 116981.8/12

# reg\_asym\_atl1r2\_avg\_mean vs slug



Right In:  $799.375 \pm 205.670$   $\chi^2/\text{NDF}$ : 10.4/3

Left Out:  $646.945 \pm 127.436$   $\chi^2/\text{NDF}$ : 7.8/9

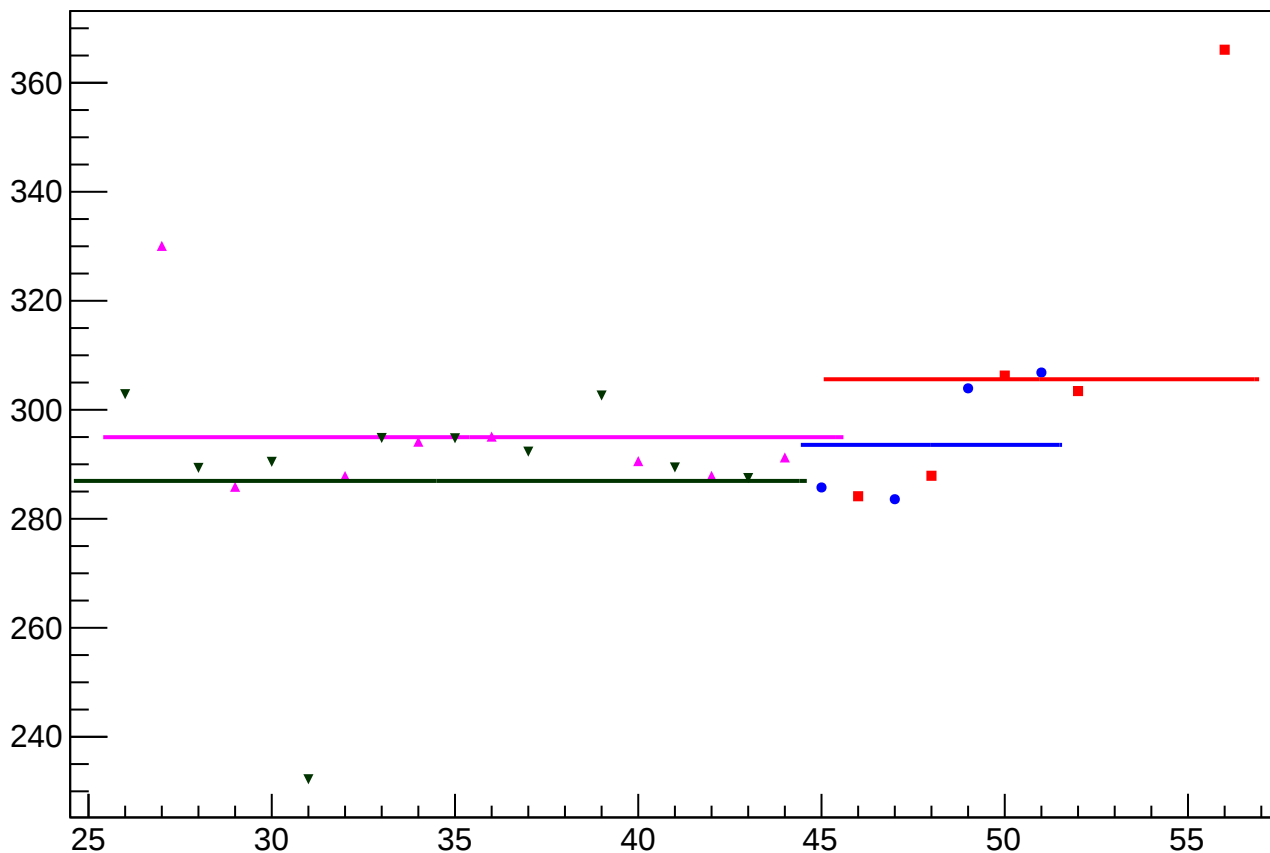
Right Out:  $-924.693 \pm 197.602$   $\chi^2/\text{NDF}$ : 5.4/4

Left In:  $-746.580 \pm 132.693$   $\chi^2/\text{NDF}$ : 11.4/7

$689.231 \pm 108.327$   $\chi^2/\text{NDF}$ : 18.6/13

$-801.936 \pm 110.160$   $\chi^2/\text{NDF}$ : 17.3/12

# reg\_asym\_atl1r2\_avg\_rms vs slug



Right In: 293.566 $\pm$ 0.145  $\chi^2$ /NDF: 4379.7/3

Left Out: 286.953 $\pm$ 0.090  $\chi^2$ /NDF: 45031.7/9

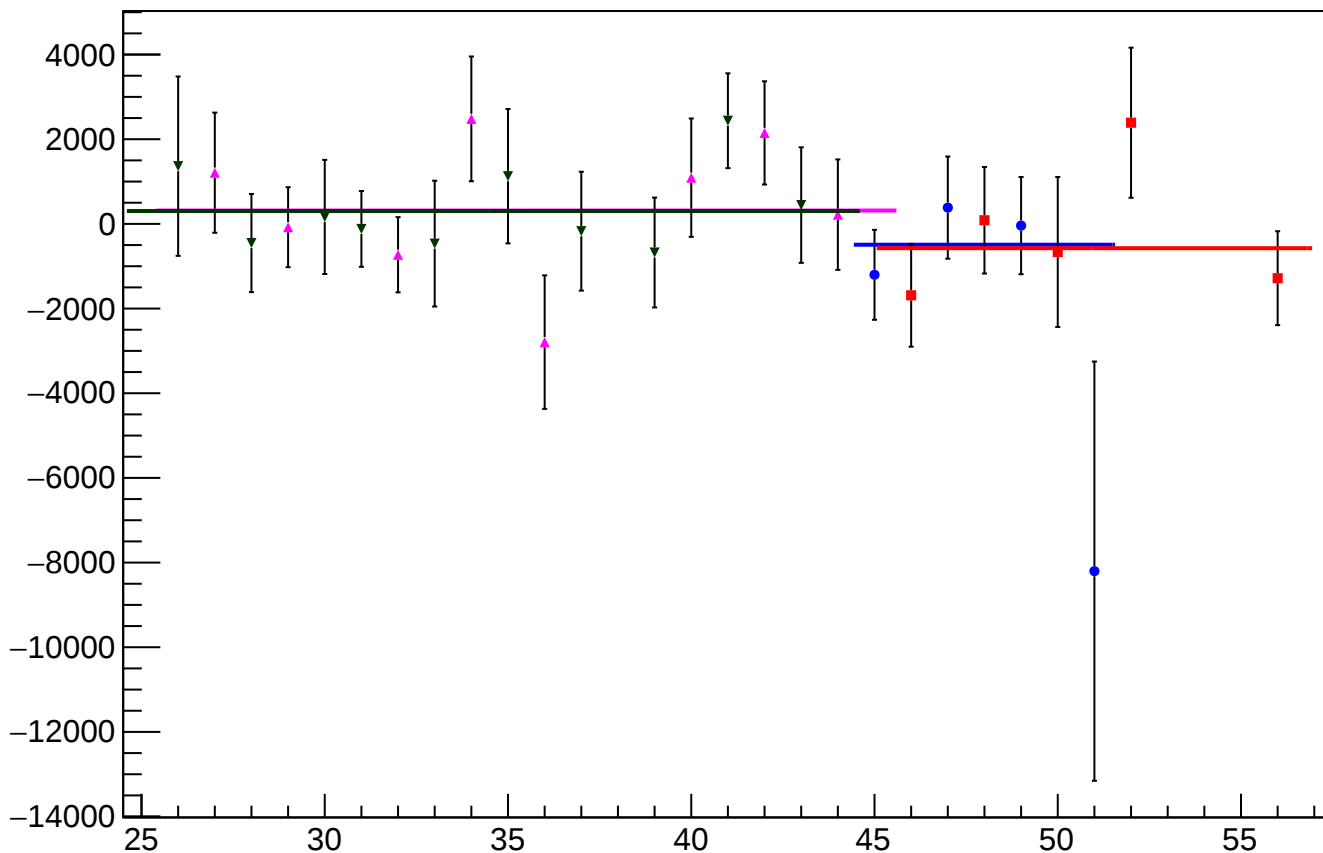
288.787 $\pm$ 0.077  $\chi^2$ /NDF: 50905.7/13

Right Out: 305.604 $\pm$ 0.140  $\chi^2$ /NDF: 34276.6/4

298.280 $\pm$ 0.078  $\chi^2$ /NDF: 60439.3/12

Left In: 294.977 $\pm$ 0.094  $\chi^2$ /NDF: 22175.8/7

# asym\_atl1r2\_avg\_correction\_mean vs slug



Right In: -492.036+/-649.308  $\chi^2$ /NDF: 3.6/3

Left Out: 303.959+/-406.510  $\chi^2$ /NDF:5.8/9

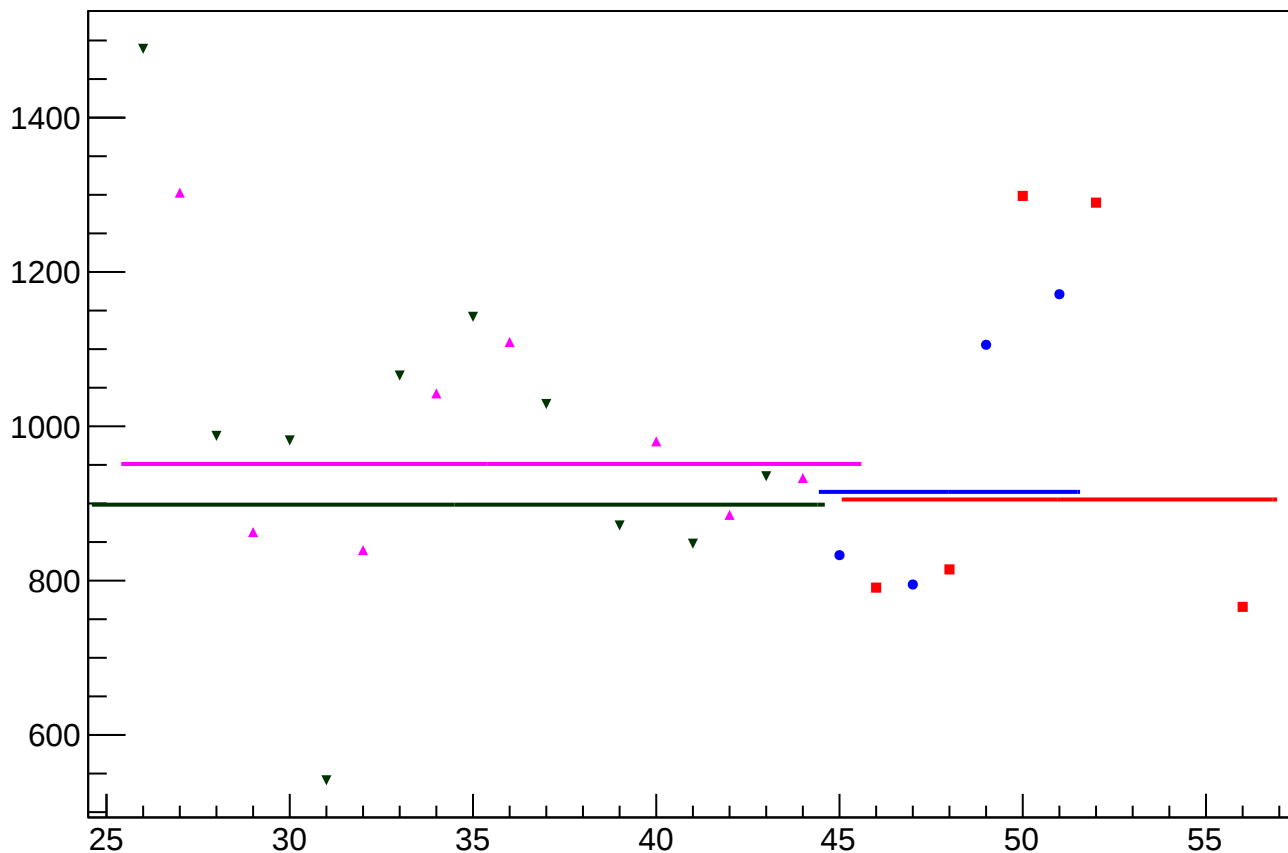
Right Out: -573.853+/-602.028  $\chi^2$ /NDF: 4.3/4

Left In: 315.709+/-425.643  $\chi^2$ /NDF:10.6/7

79.816+/-344.554  $\chi^2$ /NDF: 10.4/13

19.239+/-347.551  $\chi^2$ /NDF: 16.4/12

# asym\_atl1r2\_avg\_correction\_rms vs slug



Right In: 915.022+/-0.459  $\chi^2/\text{NDF}$ : 92182.0/3

Left Out: 898.453+/-0.287  $\chi^2/\text{NDF}$ : 589701.9/9

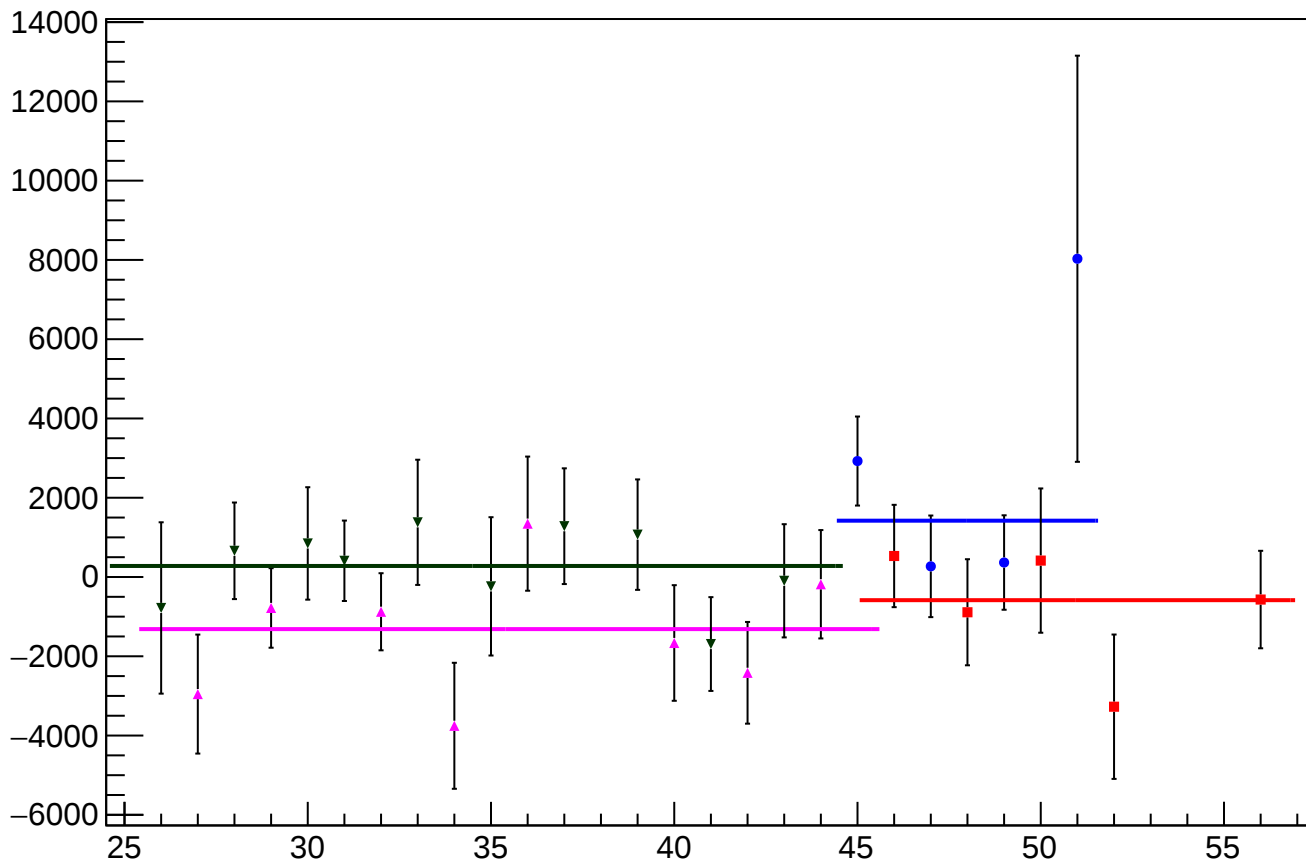
Right Out: 905.181+/-0.426  $\chi^2/\text{NDF}$ : 252346.7/4

Left In: 951.224+/-0.301  $\chi^2/\text{NDF}$ : 206752.8/7

903.119+/-0.244  $\chi^2/\text{NDF}$ : 682819.5/13

935.879+/-0.246  $\chi^2/\text{NDF}$ : 466899.2/12

asym\_atl1r2\_avg\_mean vs slug



Right In: 1421.120+/-682.955  $\chi^2/\text{NDF}$ : 5.1/3

Left Out: 278.652+/-435.403  $\chi^2/\text{NDF}$ : 4.7/9

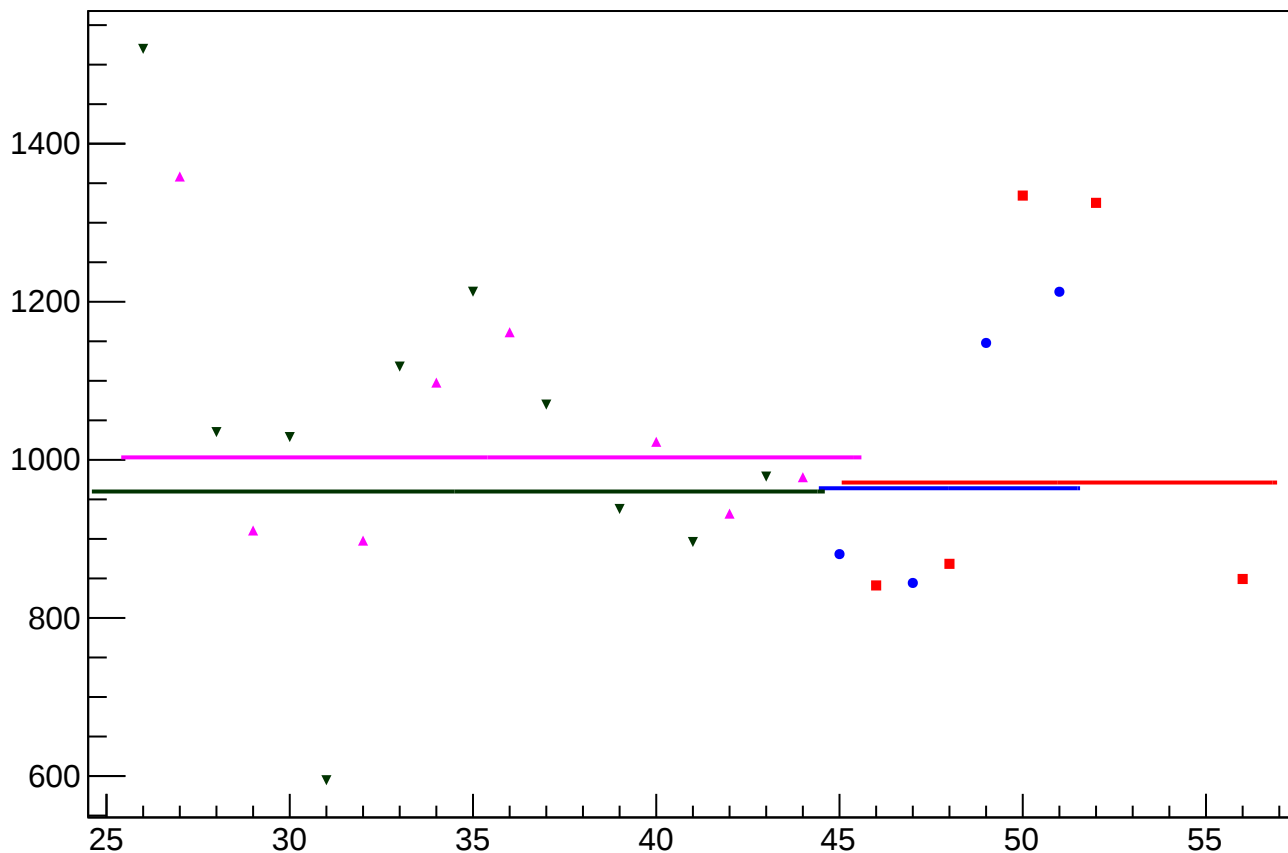
Right Out: -584.465+/-642.404  $\chi^2/\text{NDF}$ : 3.3/4

Left In: -1314.458+/-454.003  $\chi^2/\text{NDF}$ : 8.0/7

608.810+/-367.139  $\chi^2/\text{NDF}$ : 11.8/13

-1071.302+/-370.758  $\chi^2/\text{NDF}$ : 12.1/12

# asym\_atl1r2\_avg\_rms vs slug



Right In: 964.089+/-0.483     $\chi^2/\text{NDF}$ : 80801.6/3

Left Out: 959.970+/-0.308     $\chi^2/\text{NDF}$ :485856.9/9

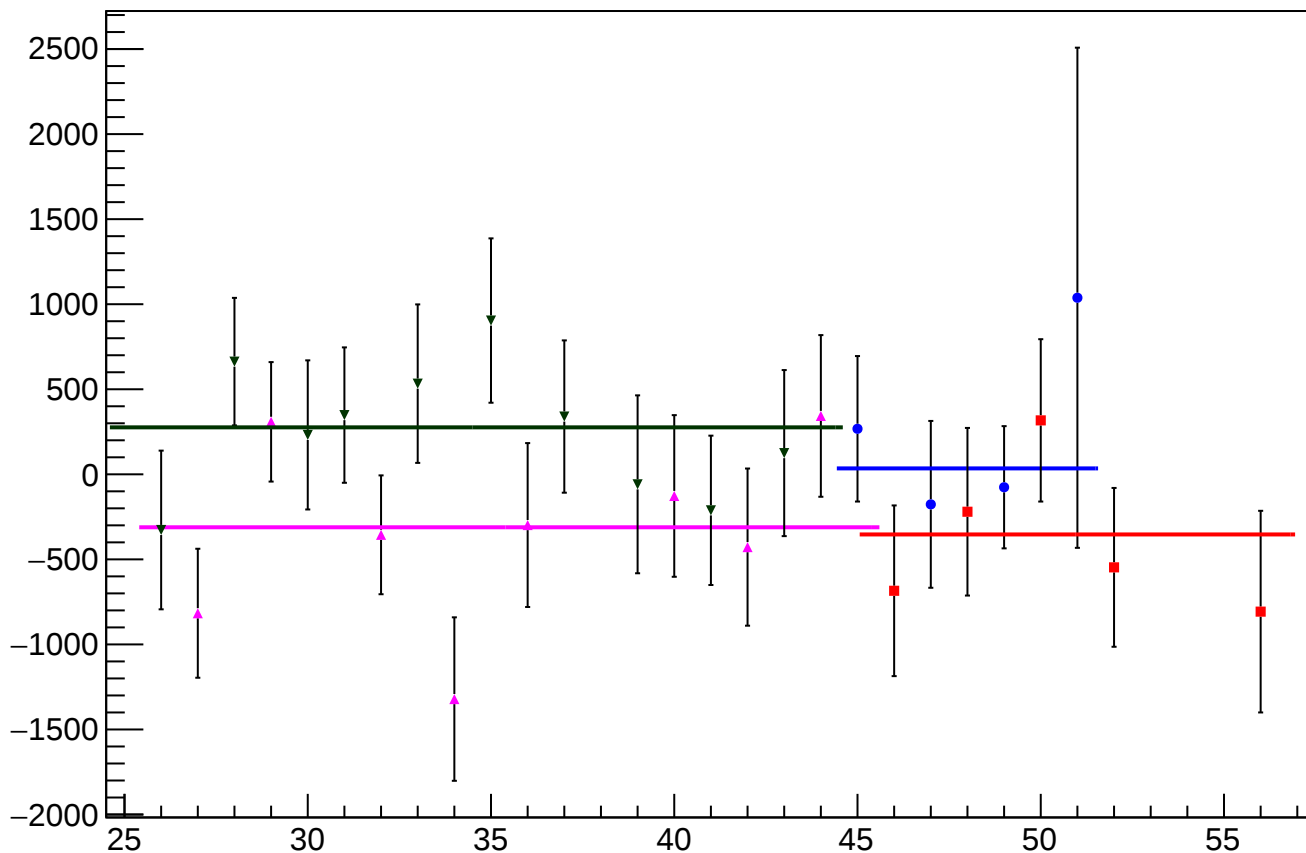
Right Out: 971.328+/-0.454     $\chi^2/\text{NDF}$ : 206901.1/4

Left In: 1003.146+/-0.321     $\chi^2/\text{NDF}$ :184277.9/7

961.161+/-0.260     $\chi^2/\text{NDF}$ : 566710.1/13

992.548+/-0.262     $\chi^2/\text{NDF}$ : 394451.1/12

# reg\_asym\_atl1r2\_dd\_mean vs slug



Right In: 34.753 $\pm$ 236.782  $\chi^2/\text{NDF}$ : 1.0/3

Left Out: 276.090 $\pm$ 141.202  $\chi^2/\text{NDF}$ : 6.5/9

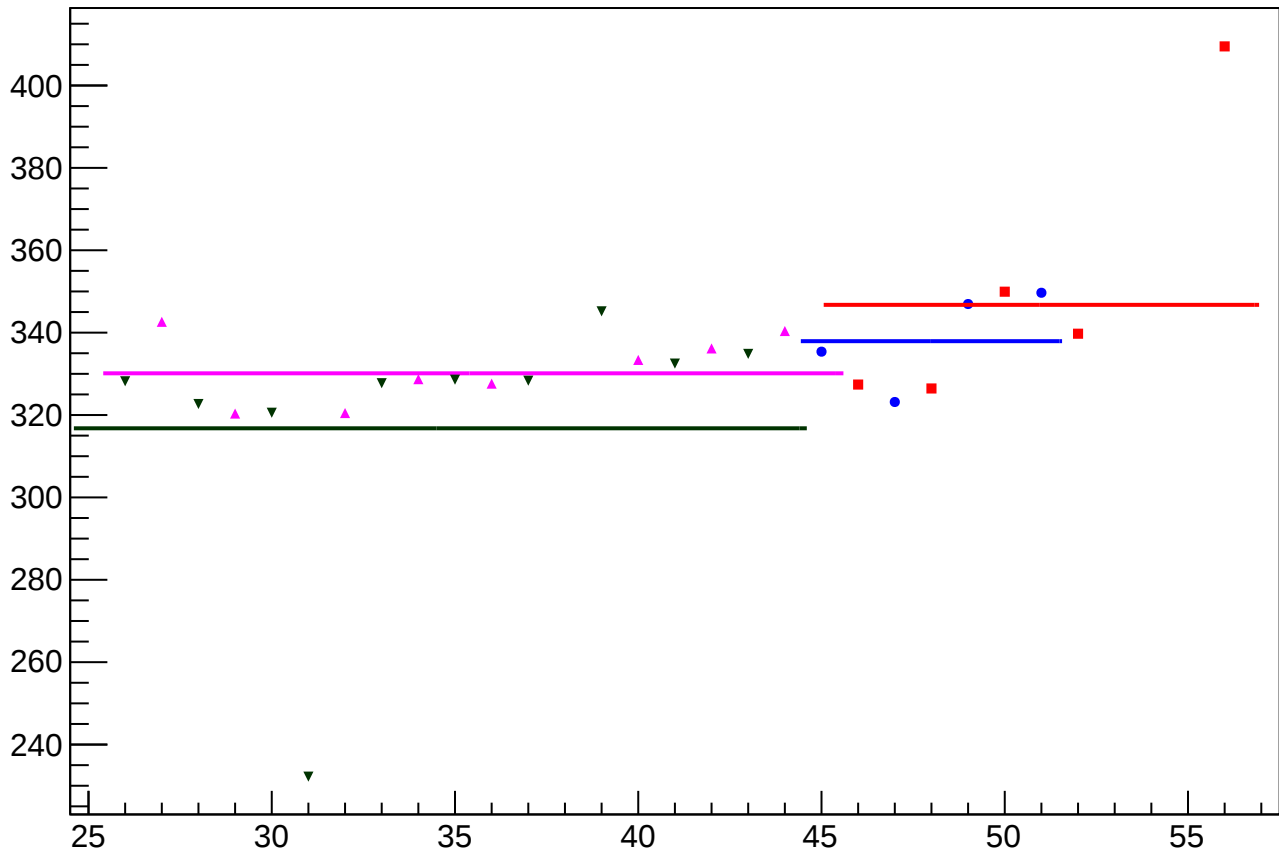
Right Out: -353.498 $\pm$ 224.067  $\chi^2/\text{NDF}$ : 3.2/4

Left In: -311.389 $\pm$ 148.343  $\chi^2/\text{NDF}$ : 11.4/7

212.780 $\pm$ 121.275  $\chi^2/\text{NDF}$ : 8.3/13

-324.221 $\pm$ 123.692  $\chi^2/\text{NDF}$ : 14.7/12

# reg\_asym\_atl1r2\_dd\_rms vs slug



Right In:  $337.930 \pm 0.167$   $\chi^2/\text{NDF}$ : 3272.2/3

Left Out:  $316.778 \pm 0.100$   $\chi^2/\text{NDF}$ : 106979.2/9

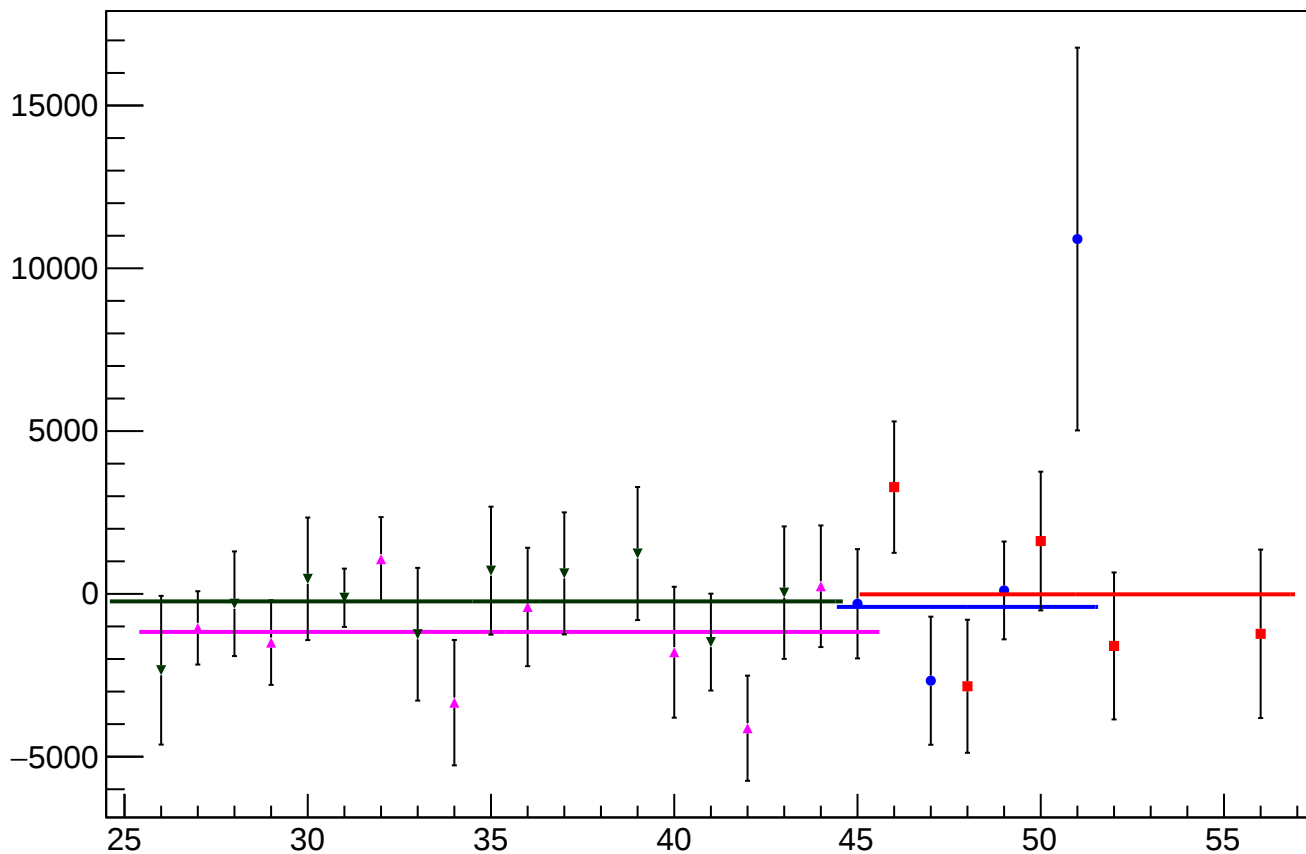
Right Out:  $346.748 \pm 0.158$   $\chi^2/\text{NDF}$ : 29322.5/4

Left In:  $330.127 \pm 0.105$   $\chi^2/\text{NDF}$ : 6690.1/7

$322.327 \pm 0.086$   $\chi^2/\text{NDF}$ : 122024.1/13

$335.192 \pm 0.087$   $\chi^2/\text{NDF}$ : 43664.4/12

# asym\_atl1r2\_dd\_correction\_mean vs slug



Right In: -400.049+/-959.830  $\chi^2/\text{NDF}$ : 5.1/3

Left Out: -230.495+/-511.193  $\chi^2/\text{NDF}$ : 2.9/9

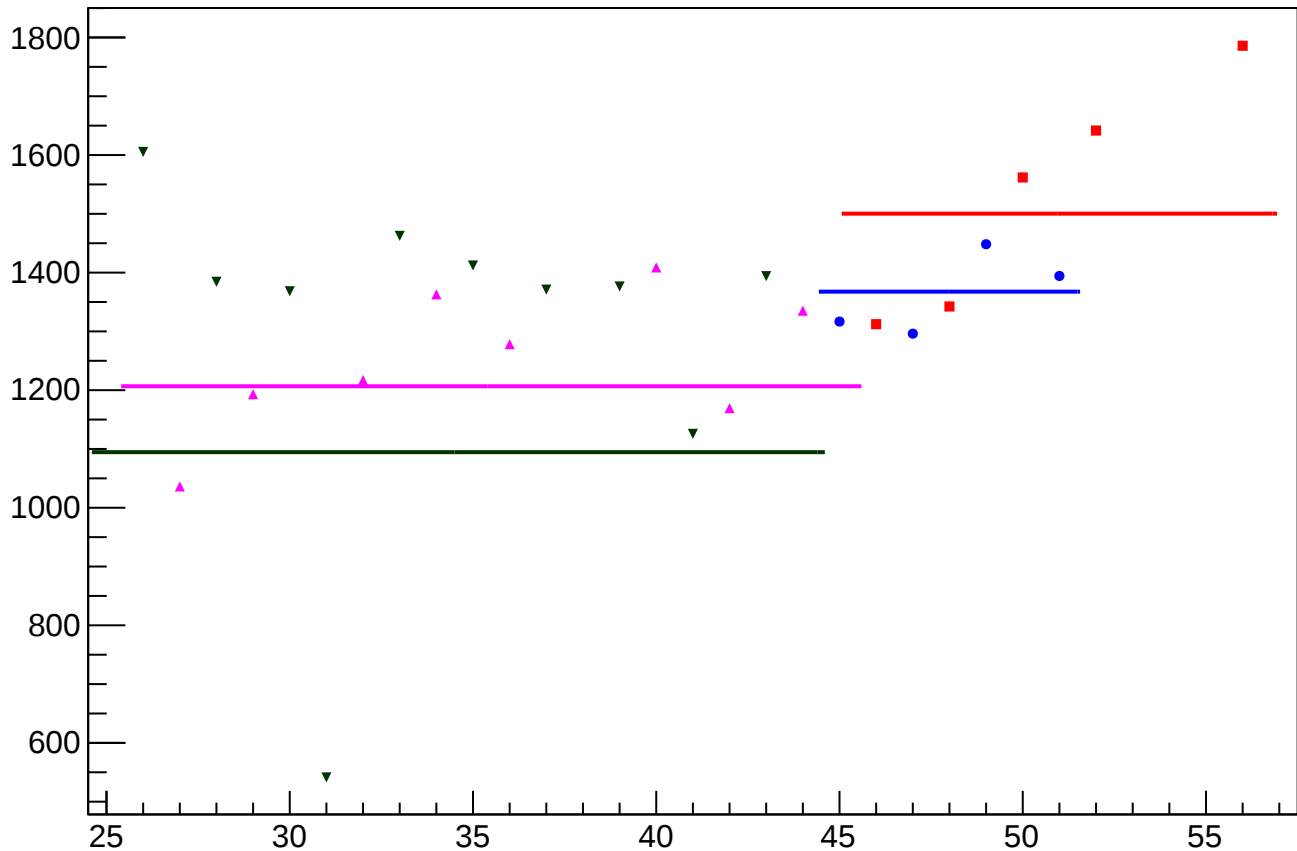
Right Out: -13.255+/-975.403  $\chi^2/\text{NDF}$ : 5.9/4

Left In: -1168.061+/-536.955  $\chi^2/\text{NDF}$ : 8.5/7

-267.961+/-451.192  $\chi^2/\text{NDF}$ : 8.1/13

-899.491+/-470.390  $\chi^2/\text{NDF}$ : 15.5/12

# asym\_atl1r2\_dd\_correction\_rms vs slug



Right In: 1367.612+/-0.679  $\chi^2/\text{NDF}$ : 10283.6/3

Left Out: 1094.559+/-0.361  $\chi^2/\text{NDF}$ :1214879.1/9

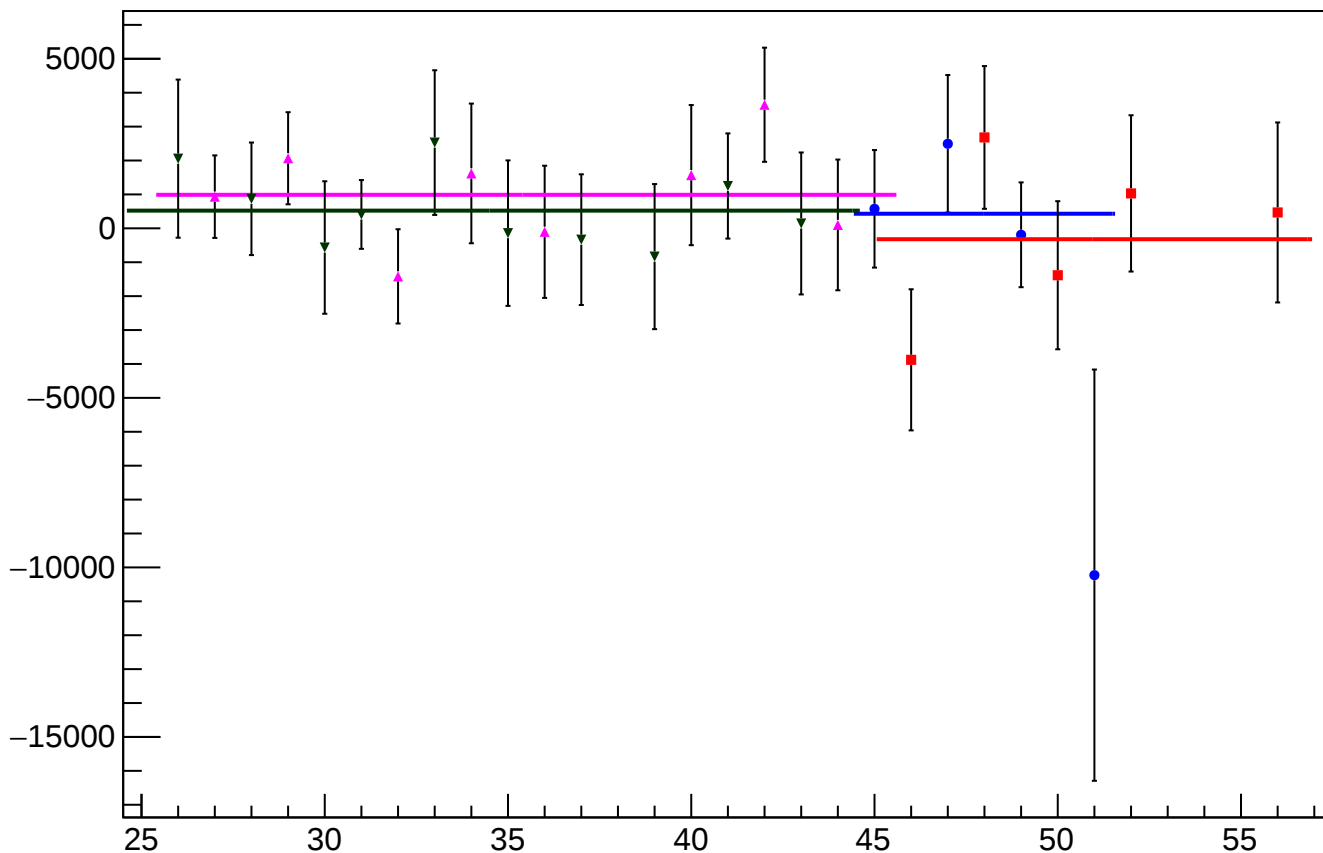
1154.896+/-0.319  $\chi^2/\text{NDF}$ : 1351254.8/13

Right Out: 1500.327+/-0.690  $\chi^2/\text{NDF}$ : 63208.6/4

1274.977+/-0.333  $\chi^2/\text{NDF}$ : 295536.5/12

Left In: 1206.686+/-0.380  $\chi^2/\text{NDF}$ :93225.4/7

# asym\_atl1r2\_dd\_mean vs slug



Right In: 430.325+/-989.162  $\chi^2/\text{NDF}$ : 4.3/3

Left Out: 521.878+/-546.444  $\chi^2/\text{NDF}$ : 2.6/9

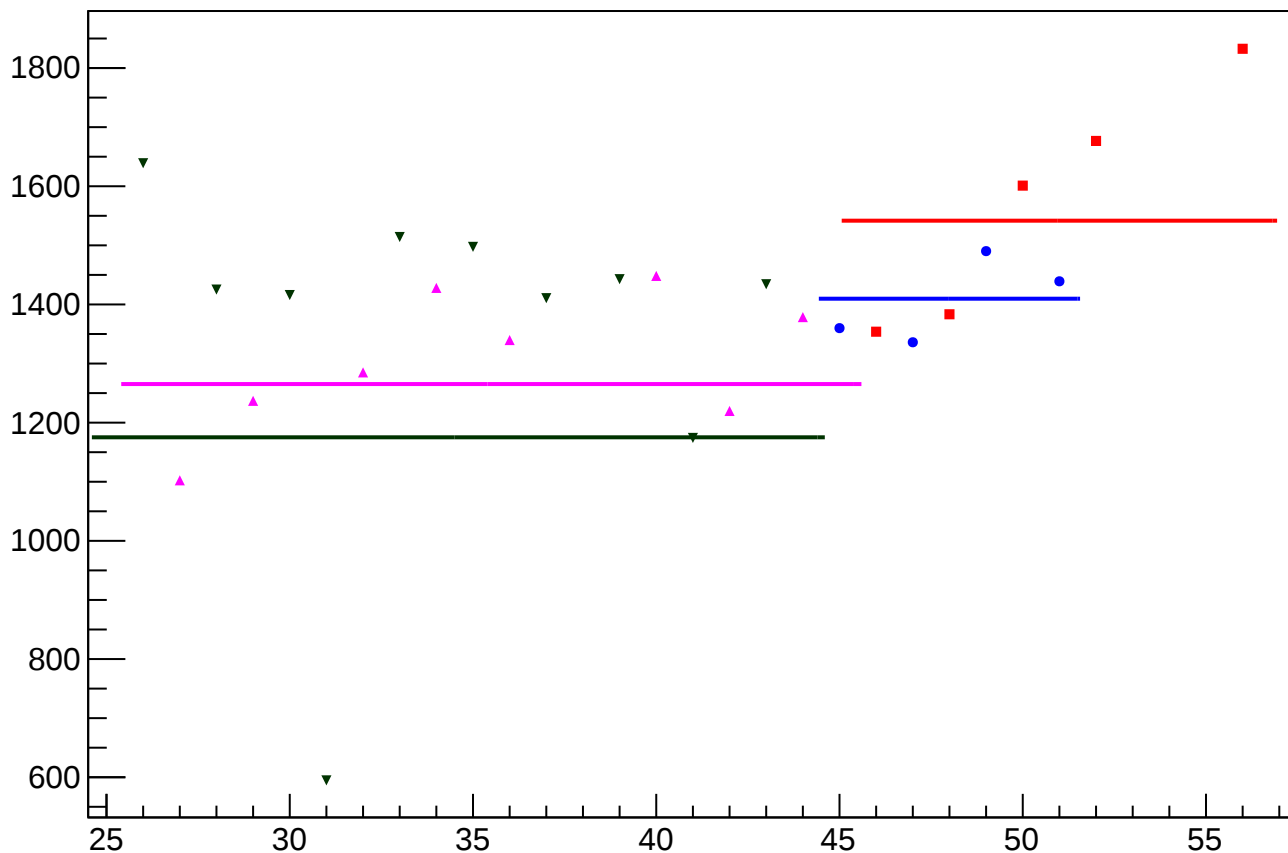
Right Out: -321.146+/-1001.740  $\chi^2/\text{NDF}$ : 5.6/4

Left In: 988.467+/-568.860  $\chi^2/\text{NDF}$ : 6.8/7

500.471+/-478.311  $\chi^2/\text{NDF}$ : 6.9/13

669.125+/-494.665  $\chi^2/\text{NDF}$ : 13.7/12

# asym\_atl1r2\_dd\_rms vs slug



Right In:  $1409.730 \pm 0.699$   $\chi^2/\text{NDF}$ : 9768.6/3

Left Out:  $1175.201 \pm 0.386$   $\chi^2/\text{NDF}$ : 997076.7/9

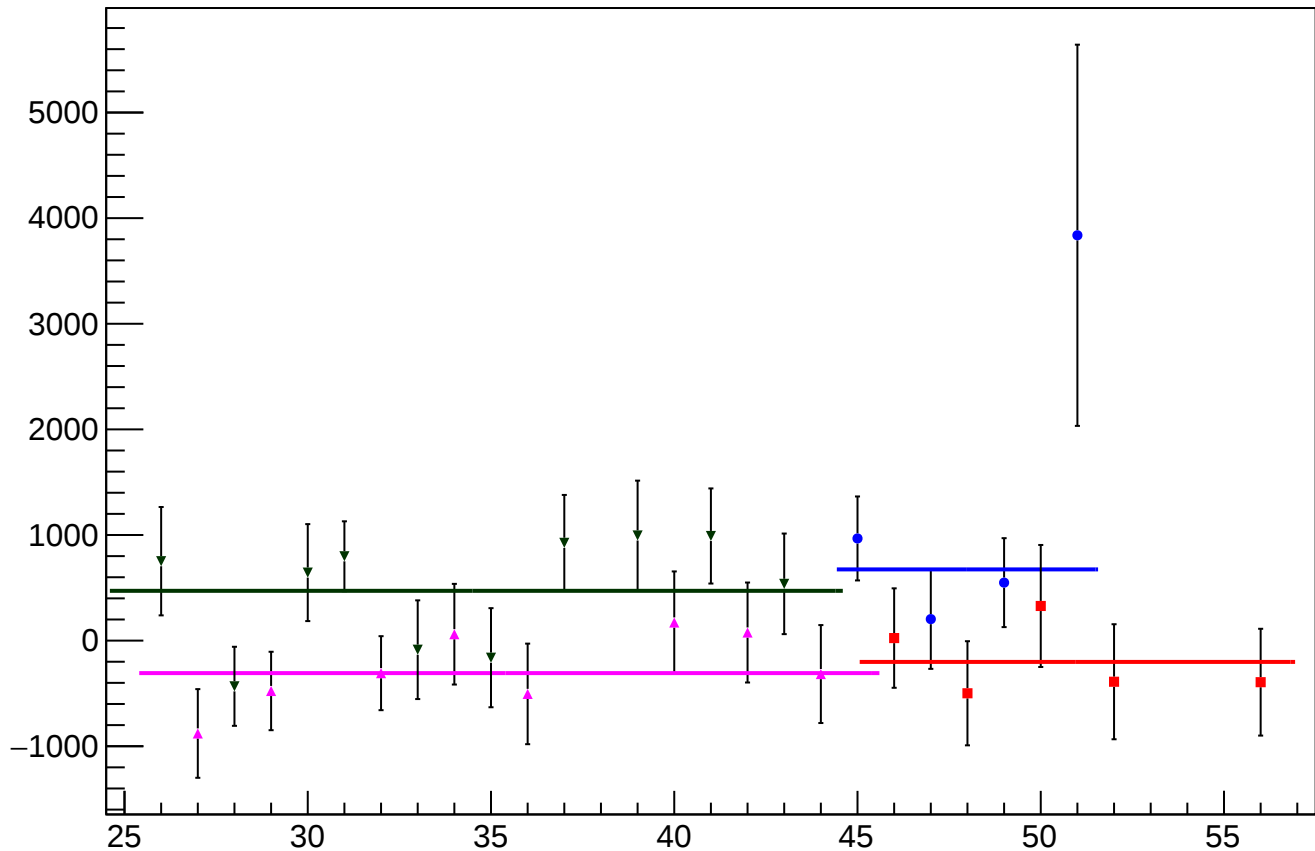
Right Out:  $1541.744 \pm 0.708$   $\chi^2/\text{NDF}$ : 59965.6/4

Left In:  $1265.308 \pm 0.402$   $\chi^2/\text{NDF}$ : 76563.2/7

$1230.039 \pm 0.338$   $\chi^2/\text{NDF}$ : 1092988.1/13

$1332.715 \pm 0.350$   $\chi^2/\text{NDF}$ : 251693.5/12

# reg\_asym\_atr1l2\_avg\_mean vs slug



Right In: 674.197 $\pm$ 244.120  $\chi^2$ /NDF: 4.7/3

Left Out: 471.416 $\pm$ 138.869  $\chi^2$ /NDF:13.9/9

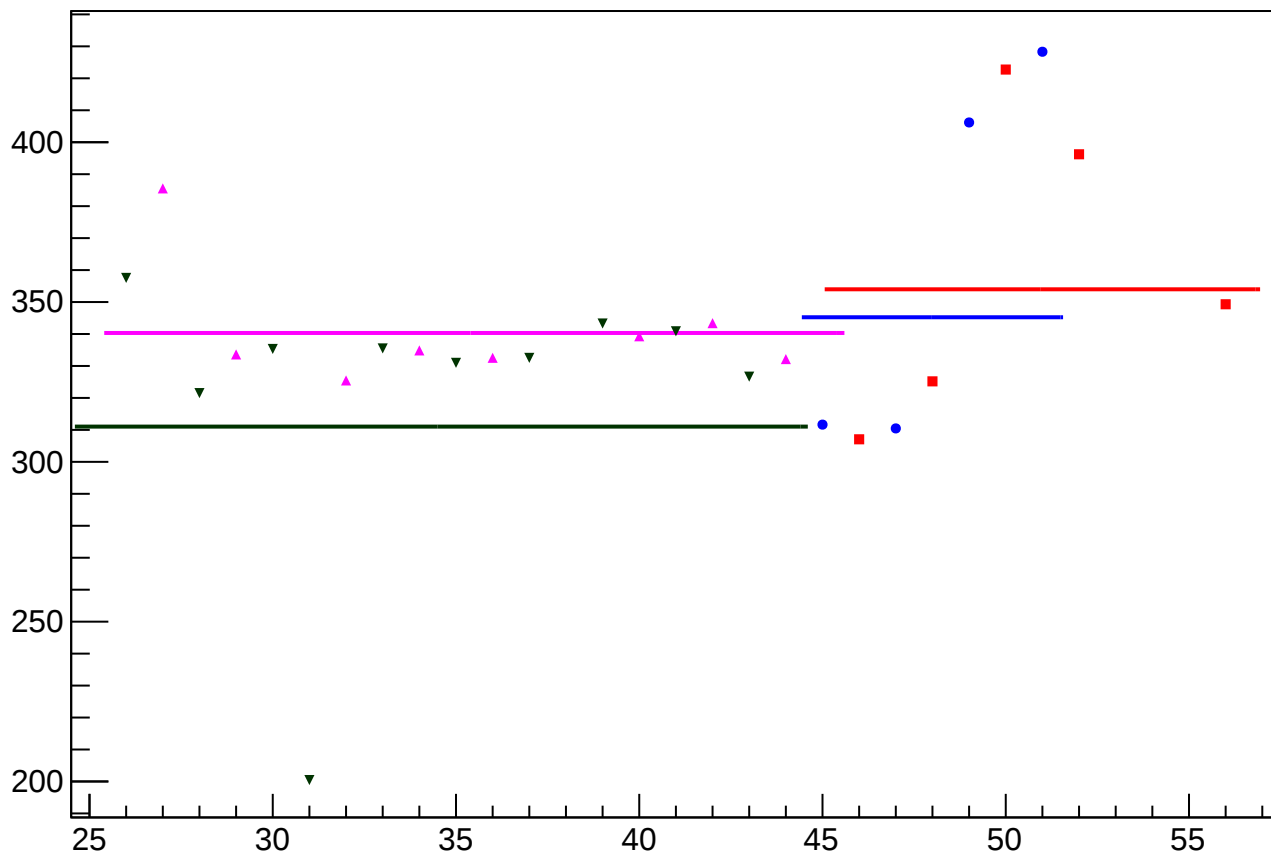
Right Out: -201.669 $\pm$ 229.983  $\chi^2$ /NDF: 1.7/4

Left In: -307.654 $\pm$ 151.998  $\chi^2$ /NDF:4.5/7

520.993 $\pm$ 120.706  $\chi^2$ /NDF: 19.1/13

-275.433 $\pm$ 126.806  $\chi^2$ /NDF: 6.3/12

# reg\_asym\_atr1l2\_avg\_rms vs slug



Right In: 345.239 $\pm$ 0.173  $\chi^2$ /NDF: 71313.4/3

Left Out: 311.029 $\pm$ 0.098  $\chi^2$ /NDF: 279202.9/9

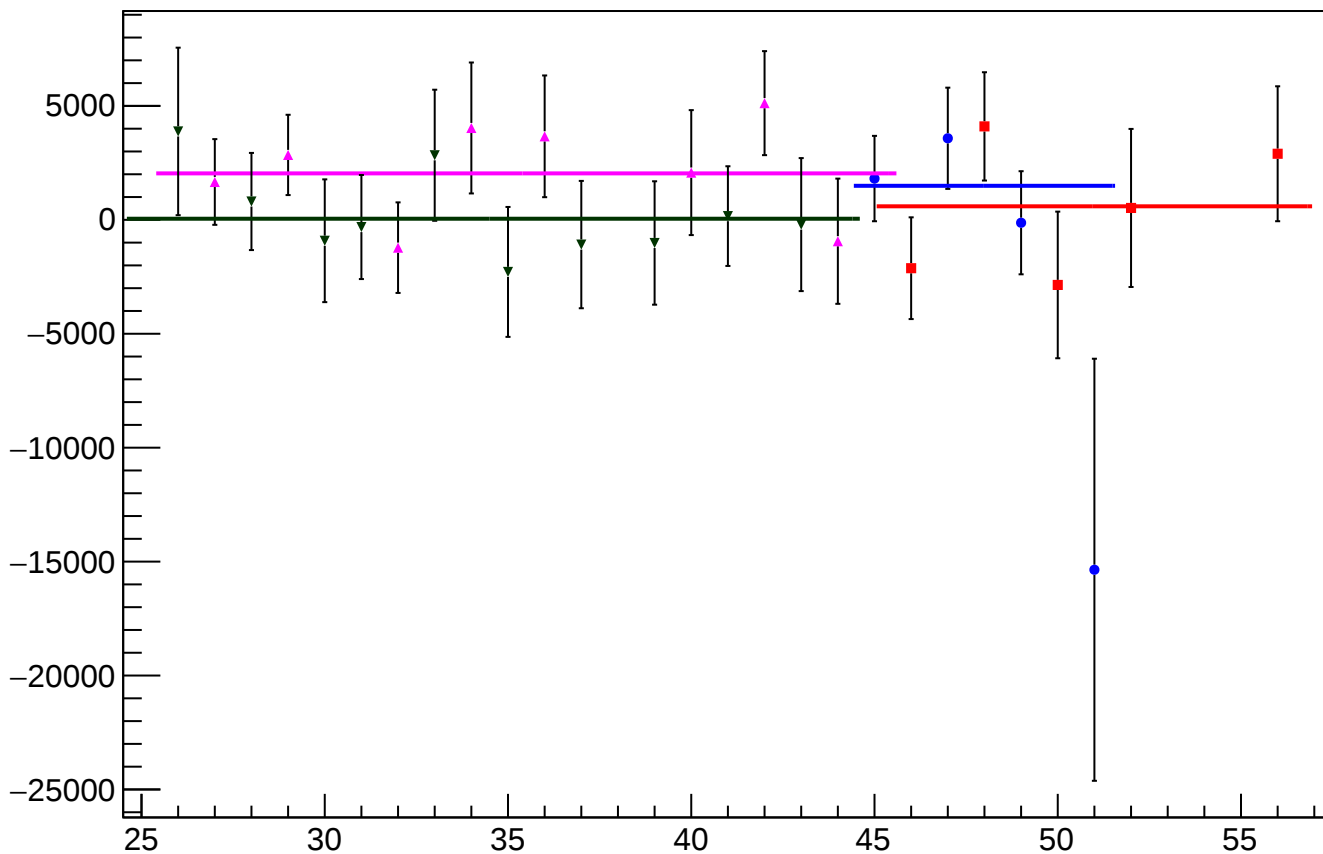
Right Out: 353.987 $\pm$ 0.163  $\chi^2$ /NDF: 67239.0/4

Left In: 340.323 $\pm$ 0.107  $\chi^2$ /NDF: 28978.3/7

319.393 $\pm$ 0.085  $\chi^2$ /NDF: 380189.6/13

344.477 $\pm$ 0.090  $\chi^2$ /NDF: 101130.2/12

# asym\_atr1l2\_avg\_correction\_mean vs slug



Right In: 1493.435 $\pm$ 1199.975  $\chi^2$ /NDF: 4.7/3

Left Out: 48.343 $\pm$ 828.109  $\chi^2$ /NDF: 3.3/9

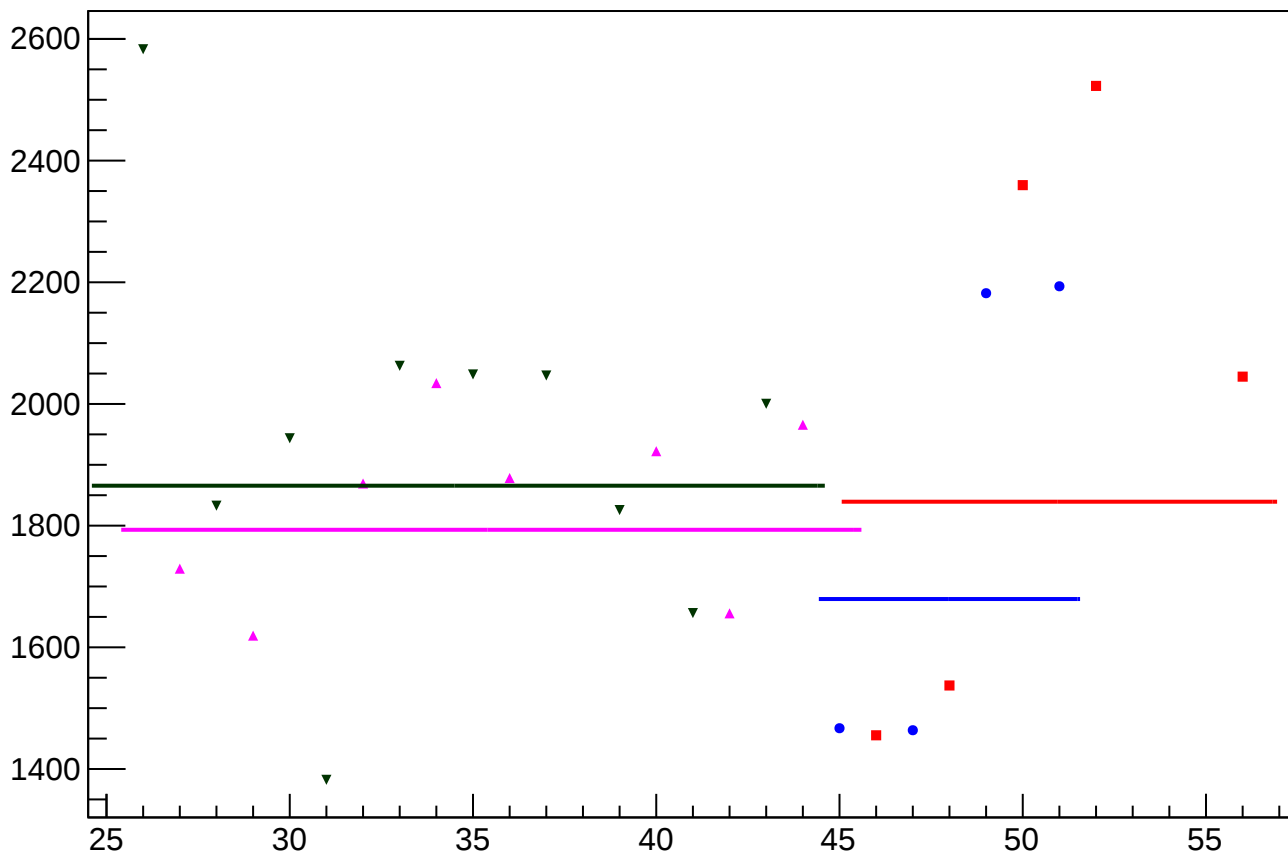
Right Out: 593.418 $\pm$ 1220.360  $\chi^2$ /NDF: 5.4/4

Left In: 2038.696 $\pm$ 796.385  $\chi^2$ /NDF: 6.8/7

514.538 $\pm$ 681.566  $\chi^2$ /NDF: 9.0/13

1607.034 $\pm$ 666.936  $\chi^2$ /NDF: 13.2/12

asym\_atr1l2\_avg\_correction\_rms vs slug



Right In: 1679.382 $\pm$ 0.849  $\chi^2$ /NDF: 149410.4/3

Left Out: 1865.656 $\pm$ 0.586  $\chi^2$ /NDF: 217022.9/9

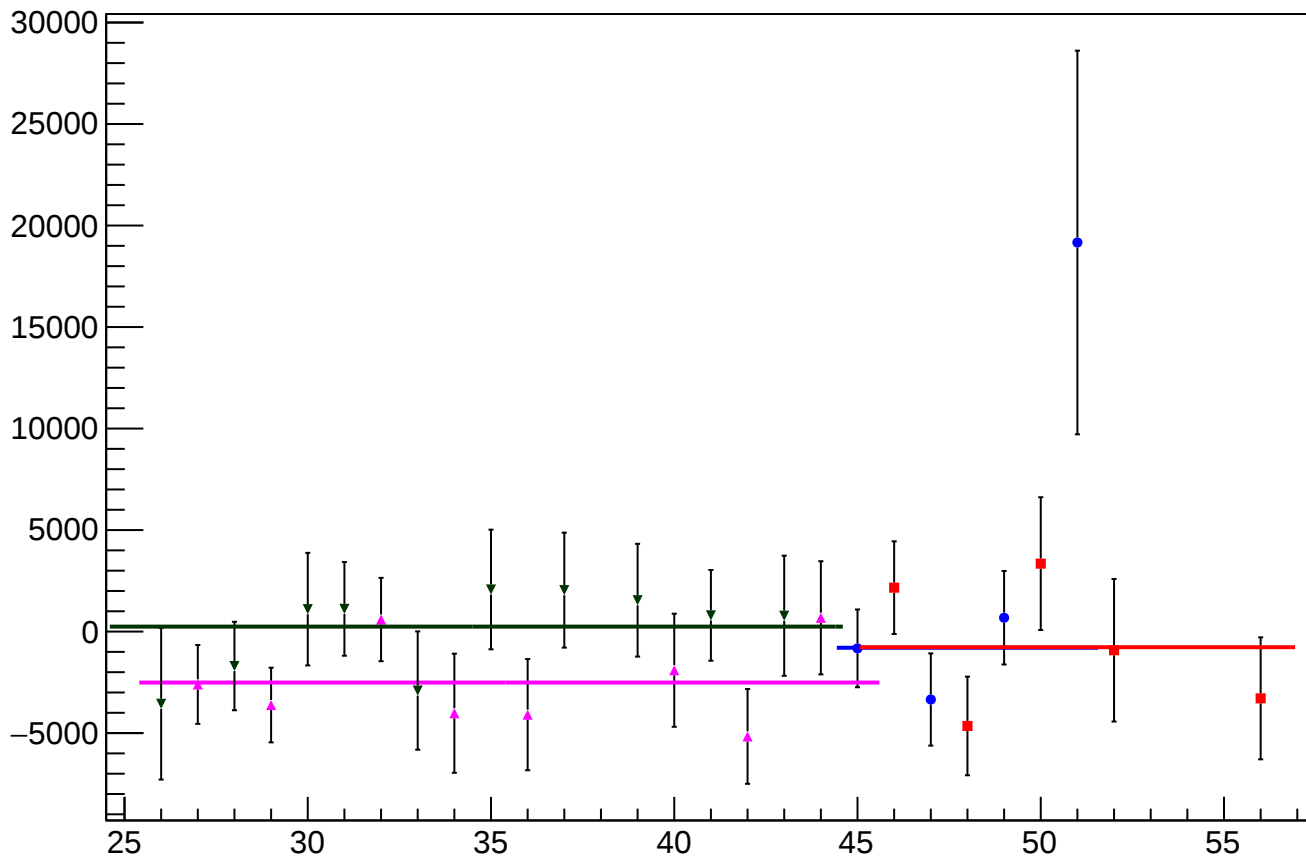
Right Out: 1839.337 $\pm$ 0.863  $\chi^2$ /NDF: 231061.4/4

Left In: 1793.191 $\pm$ 0.563  $\chi^2$ /NDF: 60429.1/7

1805.563 $\pm$ 0.482  $\chi^2$ /NDF: 399079.3/13

1806.973 $\pm$ 0.472  $\chi^2$ /NDF: 293496.2/12

# asym\_atr1l2\_avg\_mean vs slug



Right In: -796.539+/-1225.107  $\chi^2/\text{NDF}$ : 6.1/3

Left Out: 244.304+/-844.452  $\chi^2/\text{NDF}$ : 4.3/9

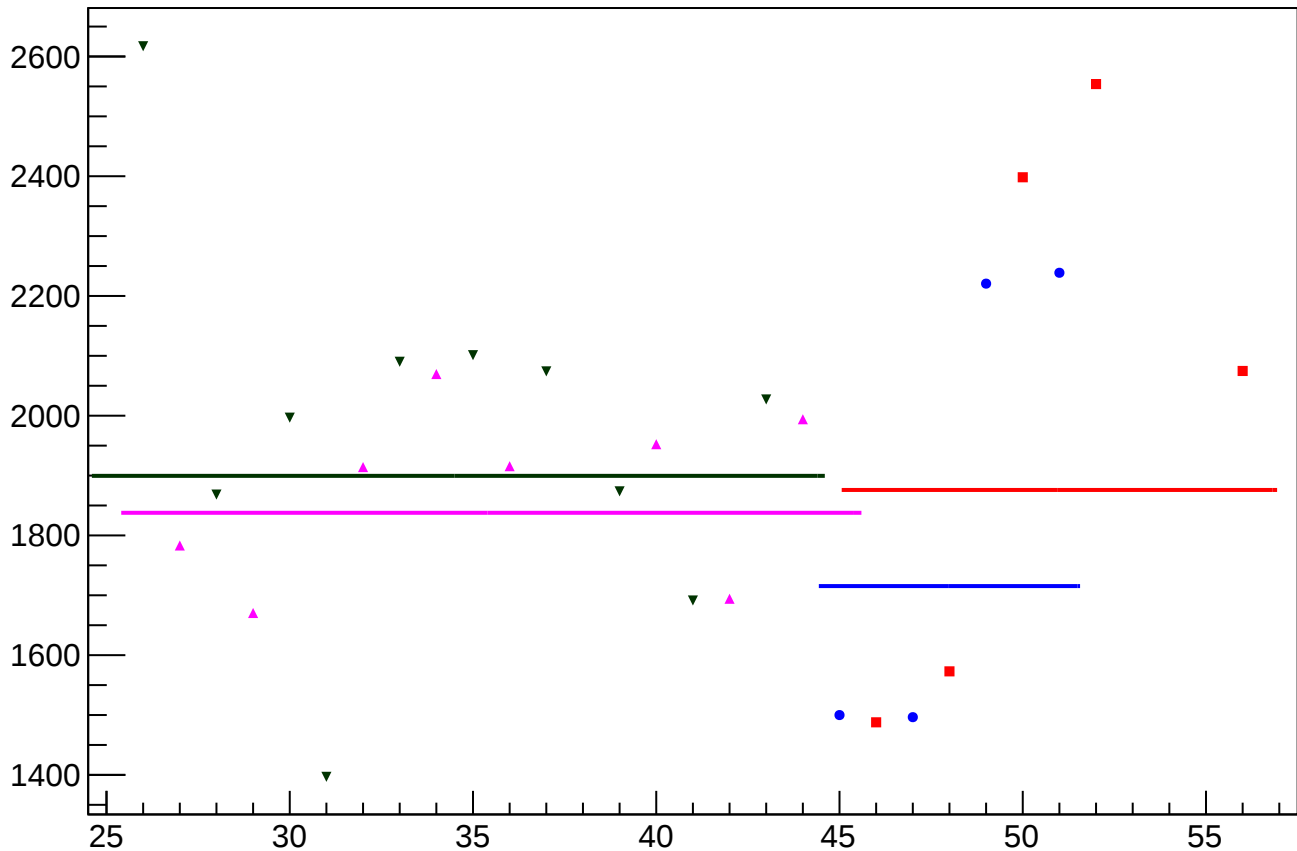
Right Out: -770.505+/-1243.365  $\chi^2/\text{NDF}$ : 6.5/4

Left In: -2510.541+/-819.482  $\chi^2/\text{NDF}$ : 5.9/7

-90.940+/-695.283  $\chi^2/\text{NDF}$ : 11.0/13

-1983.588+/-684.235  $\chi^2/\text{NDF}$ : 13.8/12

# asym\_atr1l2\_avg\_rms vs slug



Right In: 1715.383+/-0.866     $\chi^2/\text{NDF}$ : 146331.7/3

Left Out: 1899.518+/-0.597     $\chi^2/\text{NDF}$ : 218448.4/9

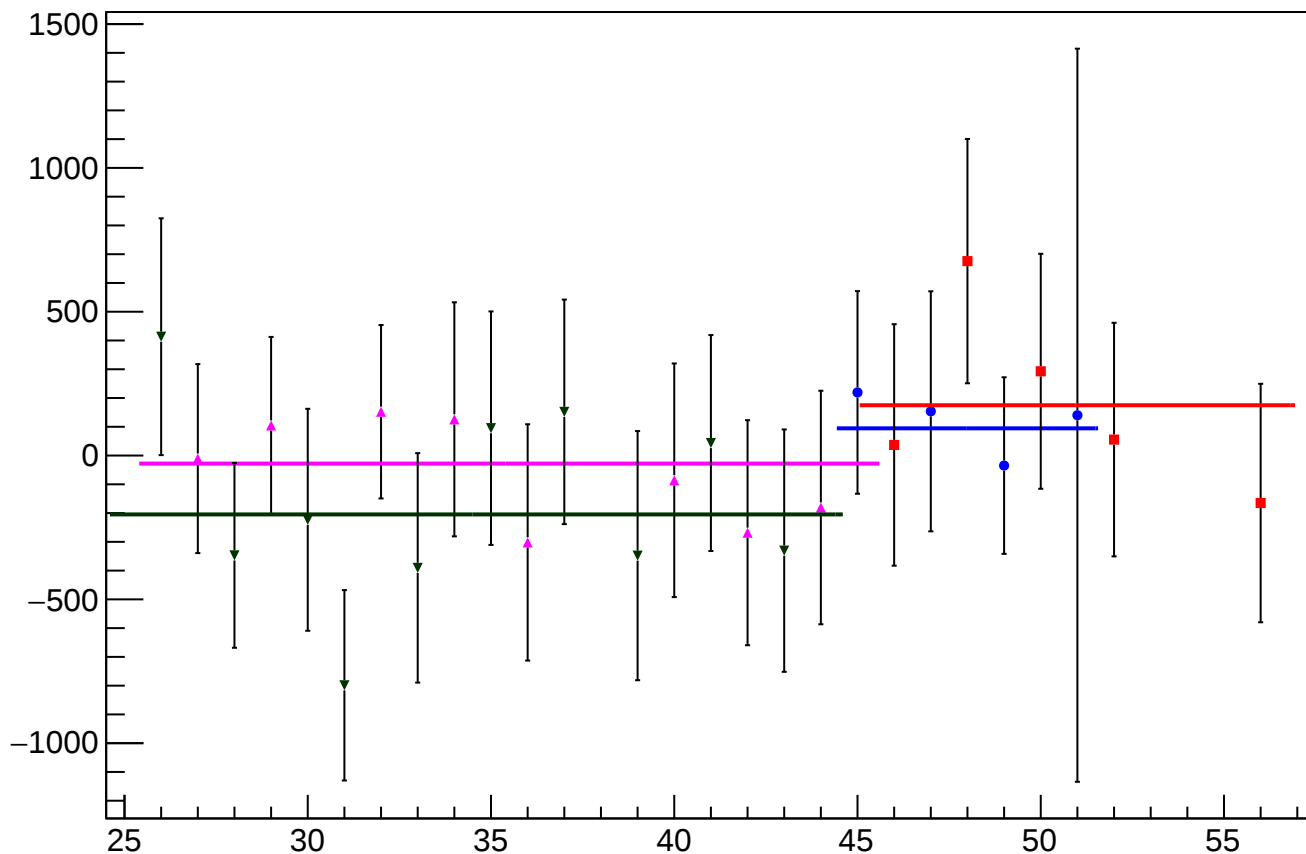
Right Out: 1875.949+/-0.879     $\chi^2/\text{NDF}$ : 223308.8/4

Left In: 1837.808+/-0.579     $\chi^2/\text{NDF}$ : 52268.2/7

1840.210+/-0.492     $\chi^2/\text{NDF}$ : 395408.5/13

1849.358+/-0.484     $\chi^2/\text{NDF}$ : 276889.0/12

# reg\_asym\_atr1l2\_dd\_mean vs slug



Right In: 94.619+/-199.871  $\chi^2/\text{NDF}$ : 0.3/3

Left Out: -204.705+/-120.898  $\chi^2/\text{NDF}$ : 7.9/9

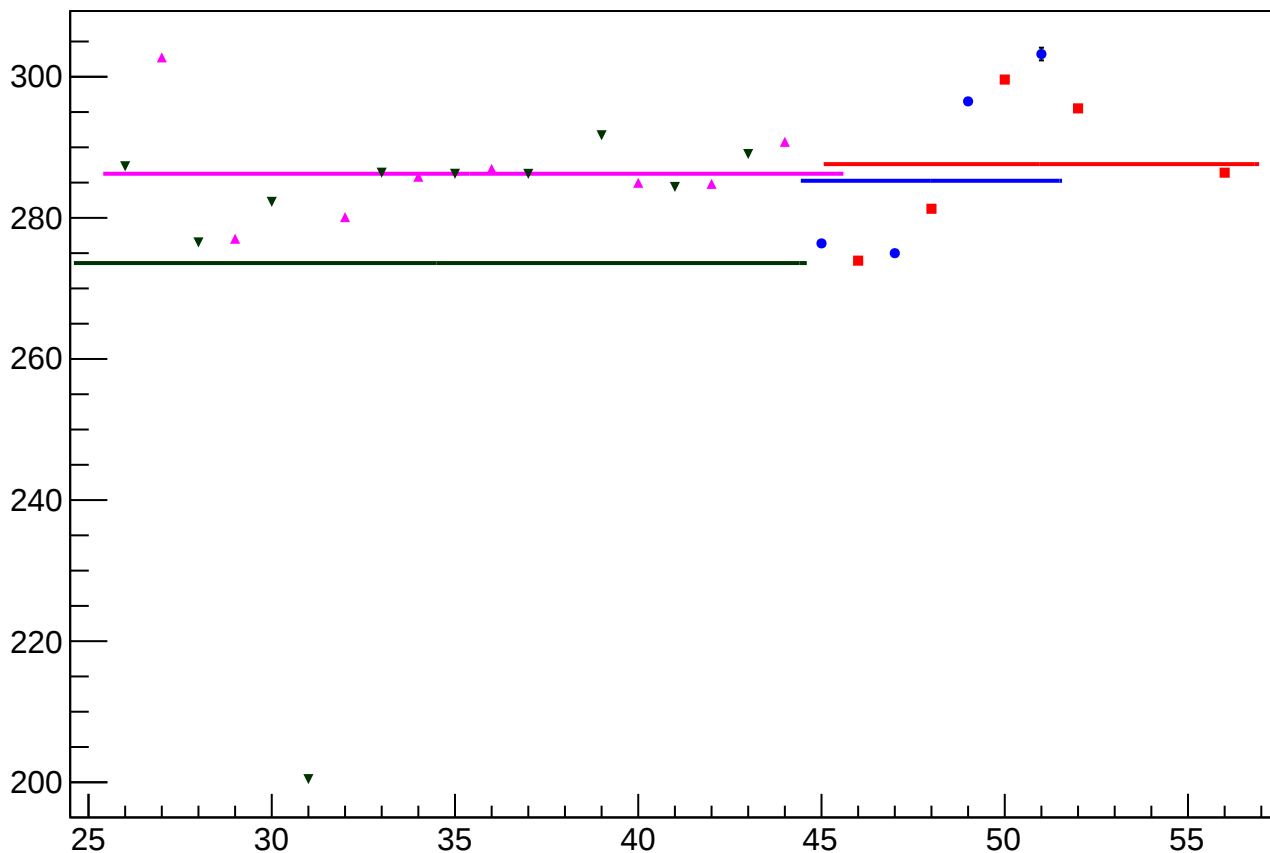
Right Out: 174.882+/-185.386  $\chi^2/\text{NDF}$ : 2.3/4

Left In: -27.916+/-127.552  $\chi^2/\text{NDF}$ : 1.7/7

-124.525+/-103.446  $\chi^2/\text{NDF}$ : 9.9/13

37.242+/-105.082  $\chi^2/\text{NDF}$ : 4.8/12

# reg\_asym\_atr1l2\_dd\_rms vs slug



Right In:  $285.260 \pm 0.141$   $\chi^2/\text{NDF}: 5566.7/3$

Left Out:  $273.595 \pm 0.085$   $\chi^2/\text{NDF}: 115068.4/9$

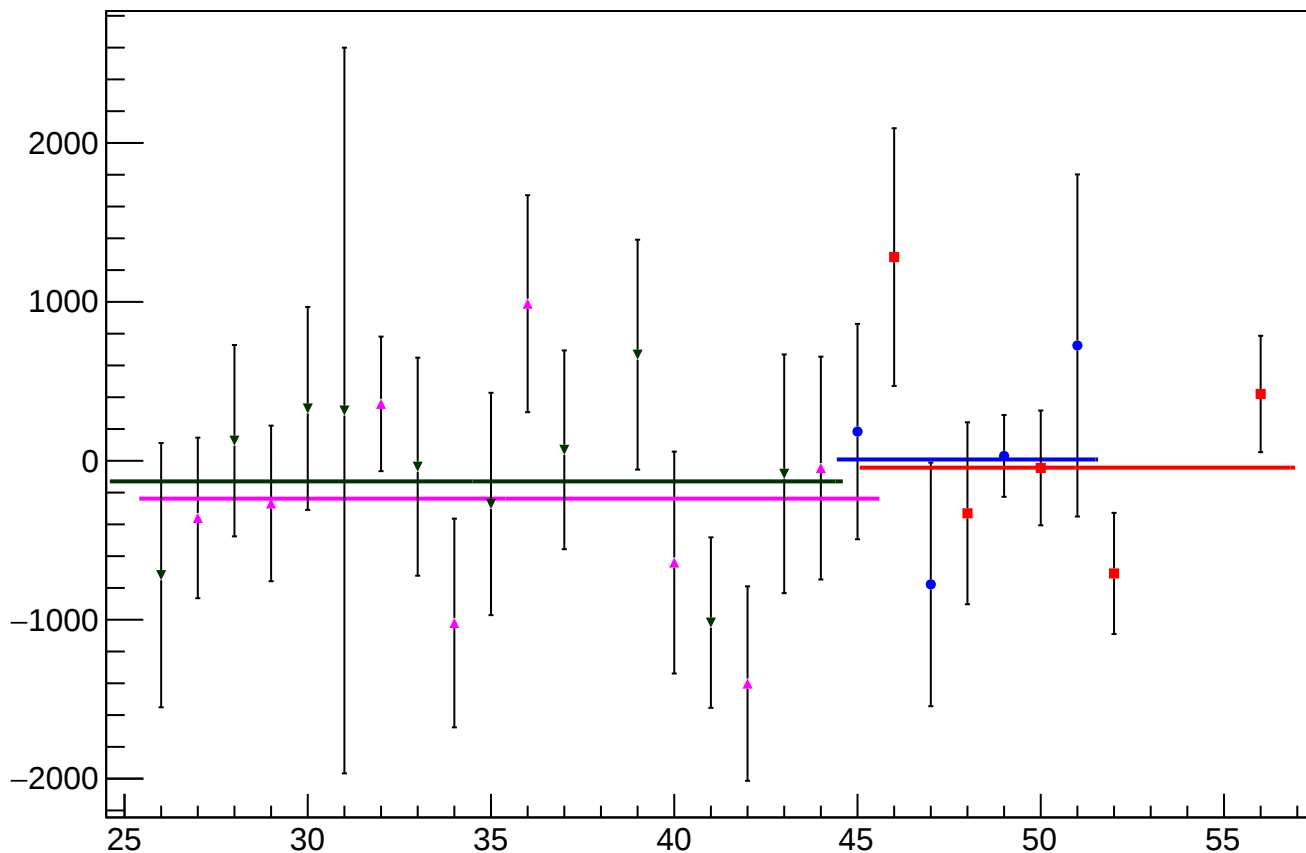
$276.720 \pm 0.073$   $\chi^2/\text{NDF}: 125622.7/13$

Right Out:  $287.619 \pm 0.131$   $\chi^2/\text{NDF}: 5065.7/4$

$286.693 \pm 0.074$   $\chi^2/\text{NDF}: 13108.0/12$

Left In:  $286.255 \pm 0.090$   $\chi^2/\text{NDF}: 7968.8/7$

# asym\_atr1l2\_dd\_correction\_mean vs slug



Right In:  $8.434 \pm 224.444$   $\chi^2/\text{NDF}: 1.6/3$

Left Out:  $-129.532 \pm 219.616$   $\chi^2/\text{NDF}: 5.4/9$

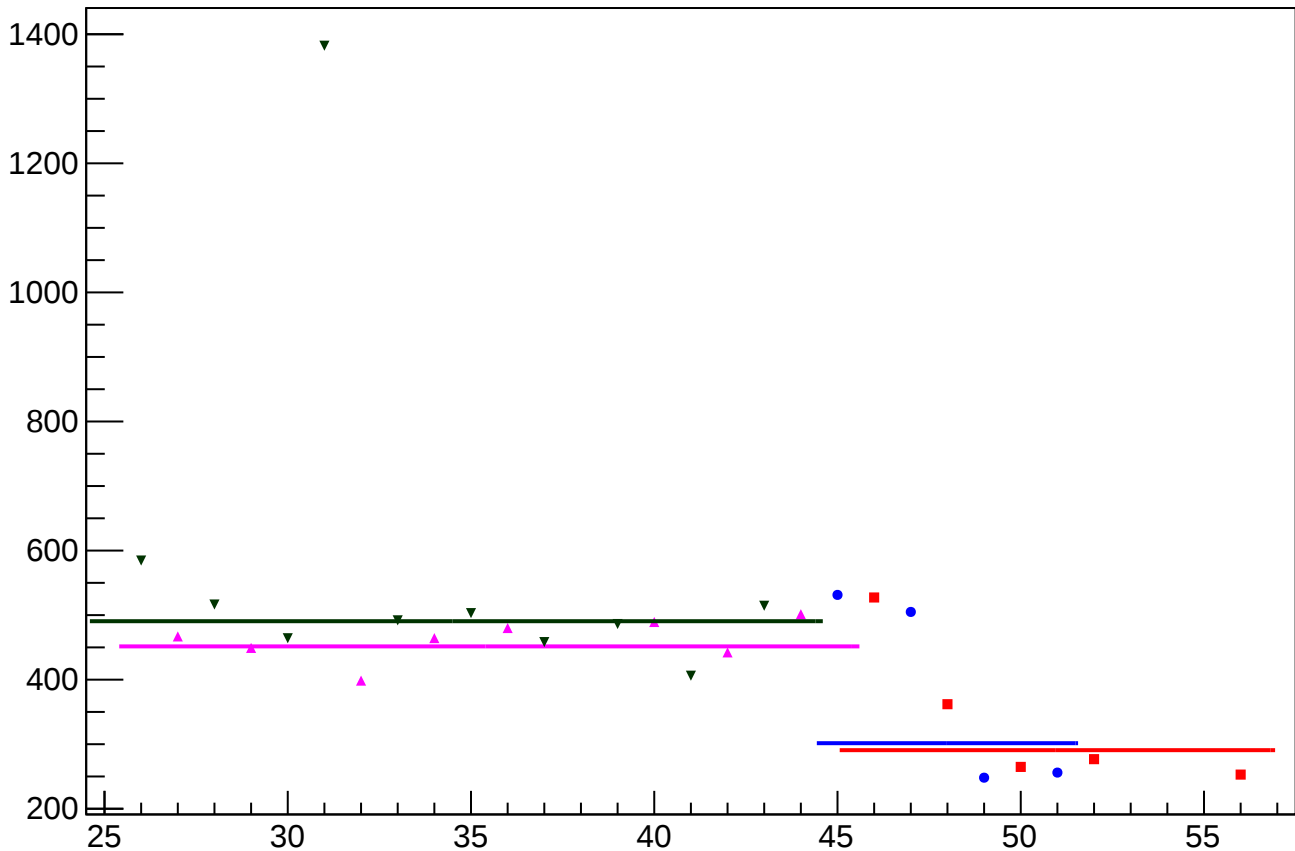
Right Out:  $-43.081 \pm 193.994$   $\chi^2/\text{NDF}: 7.6/4$

Left In:  $-238.069 \pm 200.408$   $\chi^2/\text{NDF}: 10.7/7$

$-62.049 \pm 156.971$   $\chi^2/\text{NDF}: 7.1/13$

$-137.405 \pm 139.387$   $\chi^2/\text{NDF}: 18.8/12$

# asym\_atr1l2\_dd\_correction\_rms vs slug



Right In: 301.572 $\pm$ 0.159  $\chi^2$ /NDF: 460669.9/3

Left Out: 490.574 $\pm$ 0.155  $\chi^2$ /NDF:395329.3/9

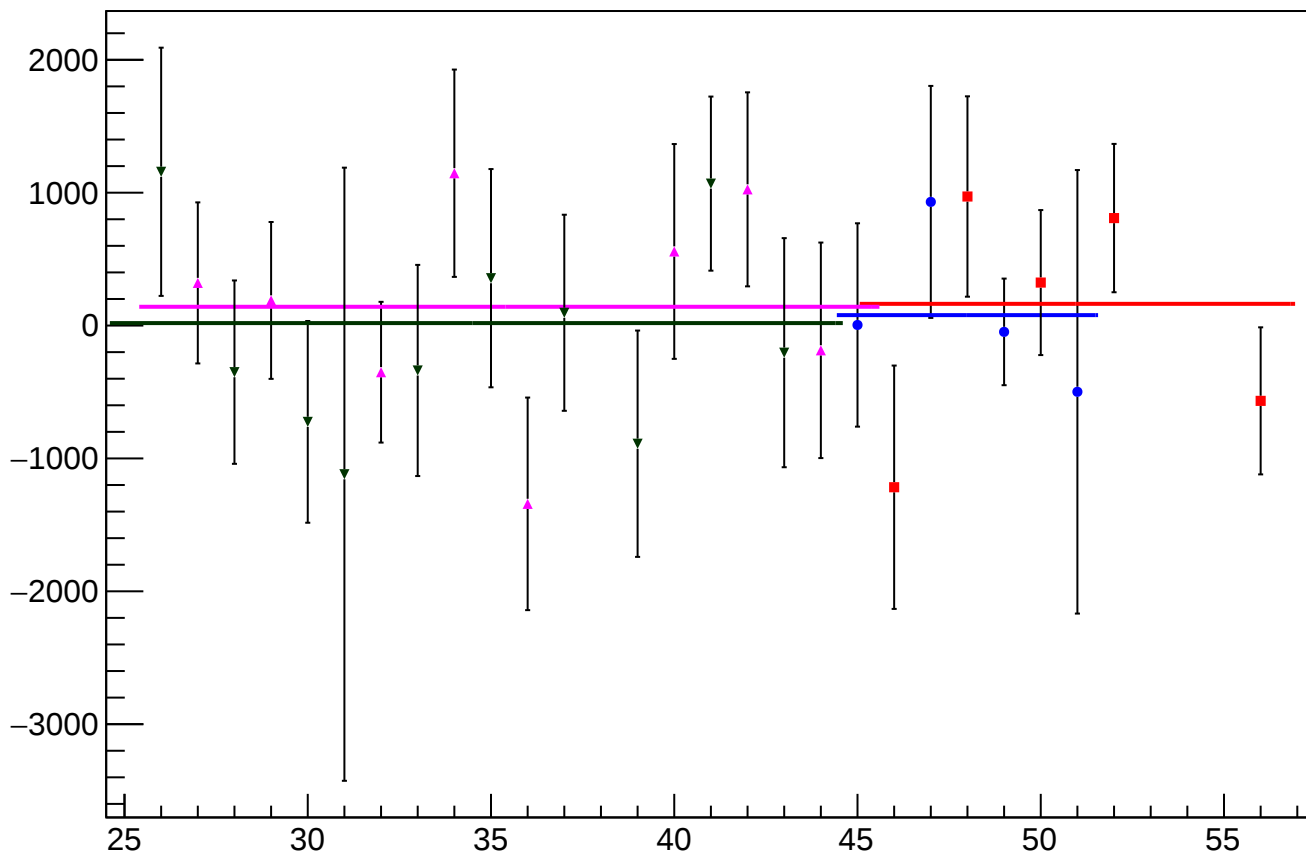
Right Out: 290.764 $\pm$ 0.137  $\chi^2$ /NDF: 235460.5/4

Left In: 451.550 $\pm$ 0.142  $\chi^2$ /NDF:53983.7/7

398.128 $\pm$ 0.111  $\chi^2$ /NDF: 1580525.7/13

368.543 $\pm$ 0.099  $\chi^2$ /NDF: 954047.8/12

# asym\_atr1l2\_dd\_mean vs slug



Right In: 78.594+/-322.872  $\chi^2/\text{NDF}$ : 1.2/3

Left Out: 18.643+/-257.116  $\chi^2/\text{NDF}$ : 7.1/9

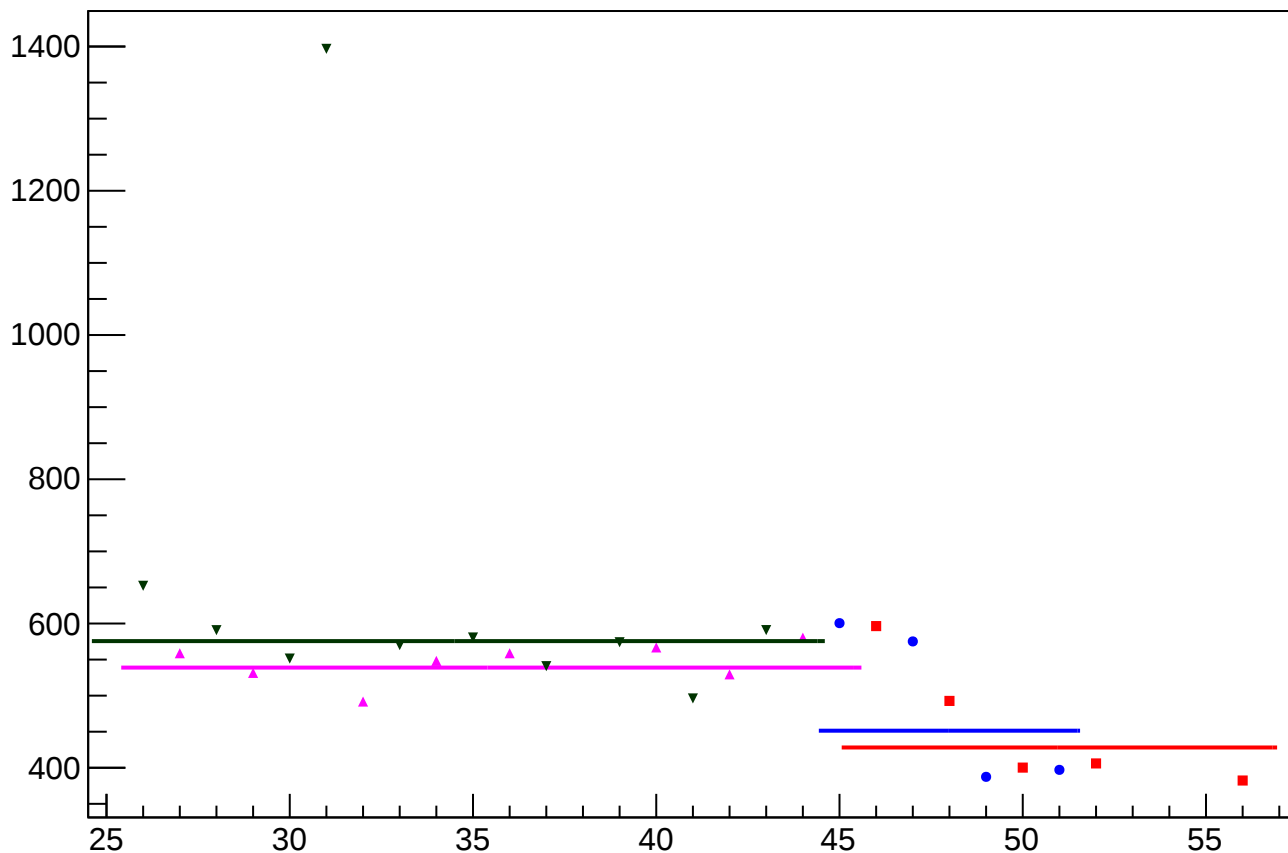
Right Out: 163.480+/-279.679  $\chi^2/\text{NDF}$ : 6.6/4

Left In: 141.414+/-240.490  $\chi^2/\text{NDF}$ : 8.0/7

41.908+/-201.132  $\chi^2/\text{NDF}$ : 8.3/13

150.794+/-182.347  $\chi^2/\text{NDF}$ : 14.5/12

asym\_atr1l2\_dd\_rms vs slug



Right In: 451.400 $\pm$ 0.228  $\chi^2$ /NDF: 169141.5/3

Left Out: 575.614 $\pm$ 0.182  $\chi^2$ /NDF:304506.5/9

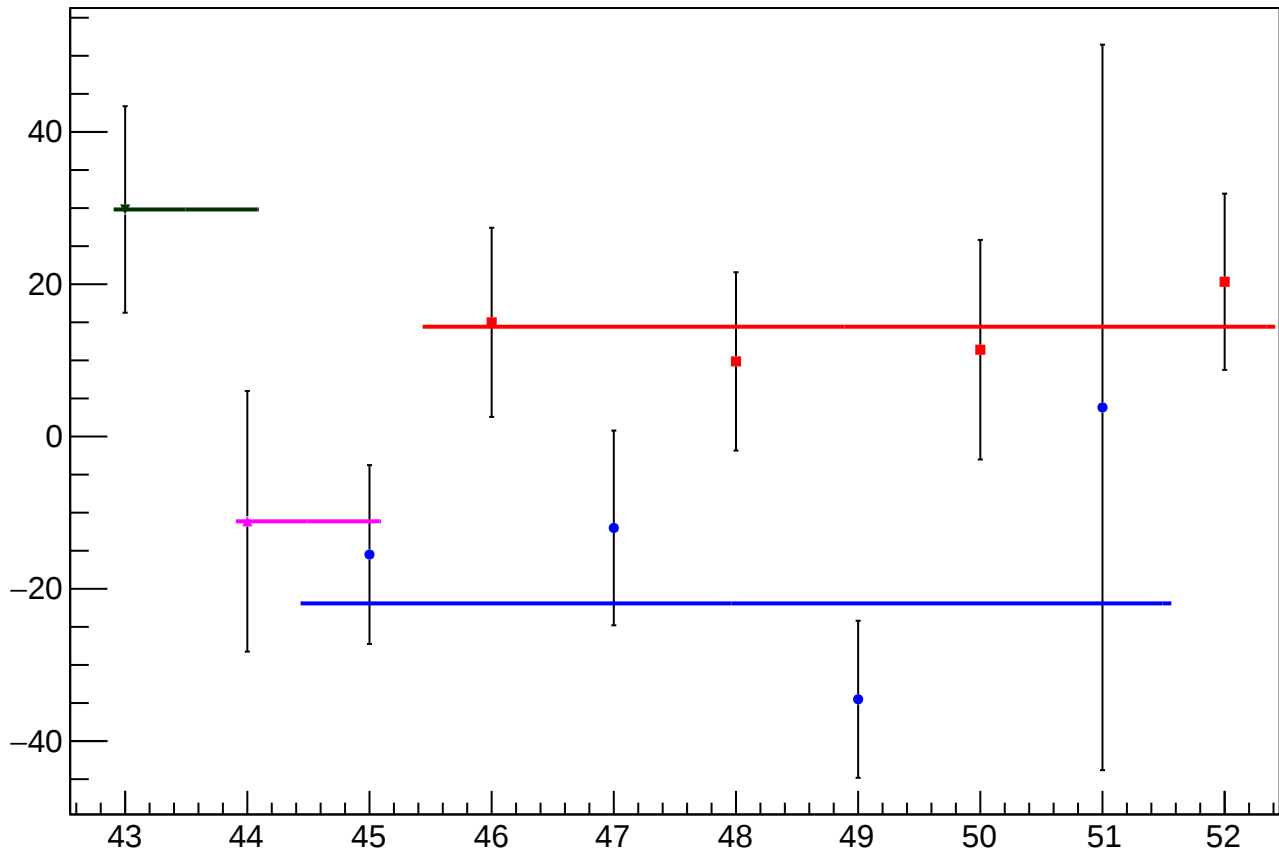
Right Out: 428.128 $\pm$ 0.198  $\chi^2$ /NDF: 104289.2/4

Left In: 538.892 $\pm$ 0.170  $\chi^2$ /NDF:27749.5/7

527.411 $\pm$ 0.142  $\chi^2$ /NDF: 654788.1/13

491.807 $\pm$ 0.129  $\chi^2$ /NDF: 312387.7/12

# diff\_bpm0l01X\_mean vs slug



Right In: -21.915±/-6.564  $\chi^2/\text{NDF}$ : 2.7/3

Left Out: 29.821±/-13.561  $\chi^2/\text{NDF}$ : 0.0/0

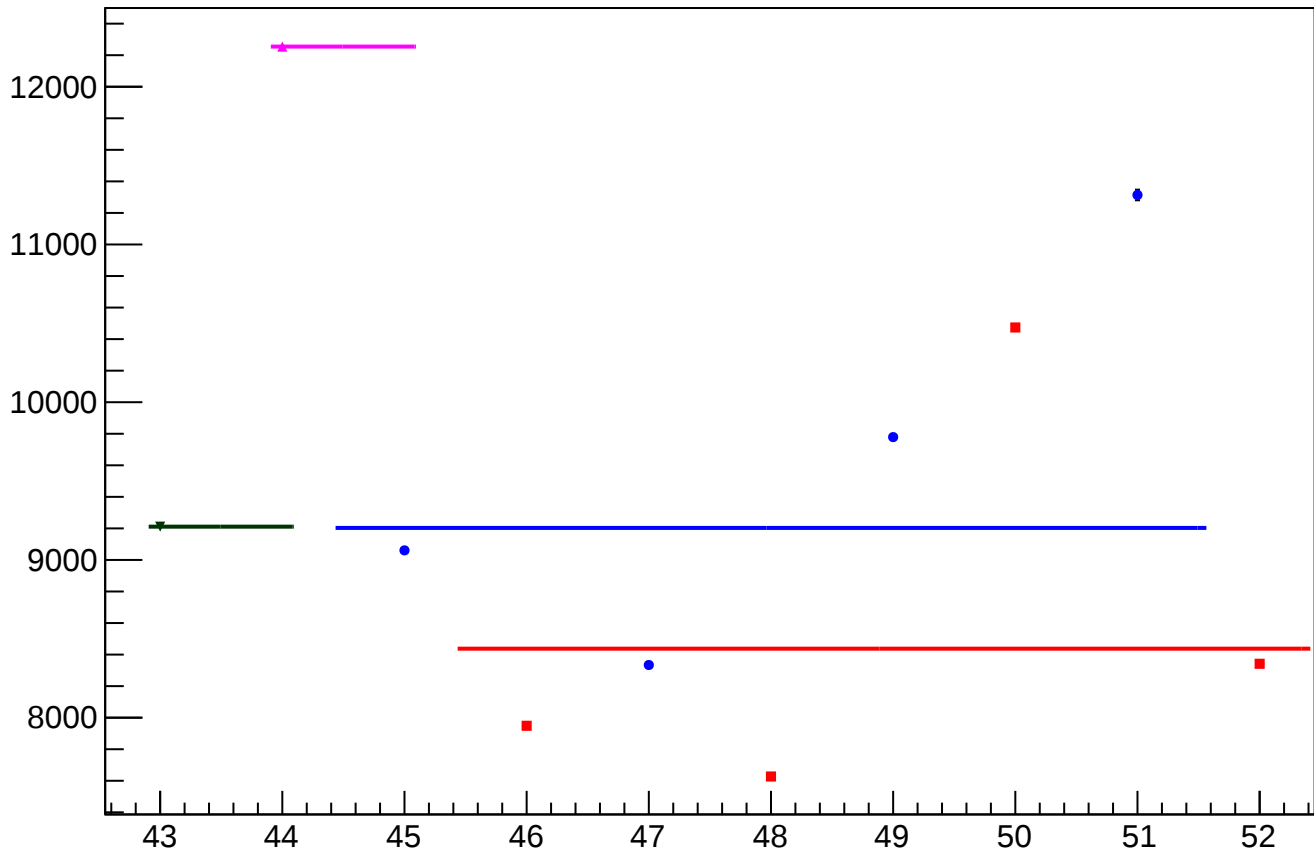
Right Out: 14.422±/-6.195  $\chi^2/\text{NDF}$ : 0.5/3

Left In: -11.136±/-17.113  $\chi^2/\text{NDF}$ : 0.0/0

-12.095±/-5.908  $\chi^2/\text{NDF}$ : 14.5/4

11.460±/-5.825  $\chi^2/\text{NDF}$ : 2.4/4

# diff\_bpm0l01X\_rms vs slug



Right In: 9203.058+/-4.641  $\chi^2/\text{NDF}$ : 19691.3/3

Left Out: 9211.048+/-9.589  $\chi^2/\text{NDF}$ : 0.0/0

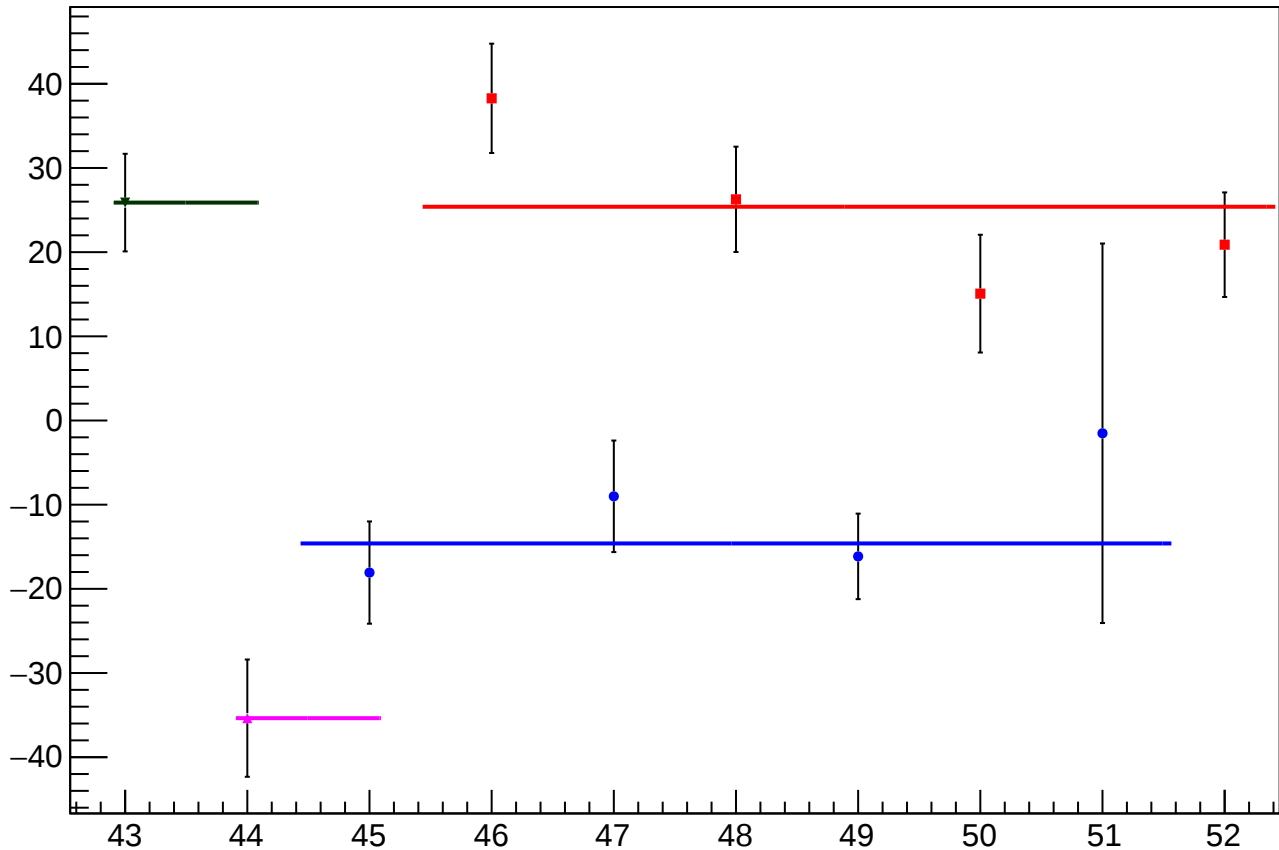
Right Out: 8437.570+/-4.381  $\chi^2/\text{NDF}$ : 52707.2/3

Left In: 12254.628+/-12.101  $\chi^2/\text{NDF}$ : 0.0/0

9204.575+/-4.178  $\chi^2/\text{NDF}$ : 19691.8/4

8879.893+/-4.119  $\chi^2/\text{NDF}$ : 140679.5/4

# diff\_bpm0l01Y\_mean vs slug



Right In:  $-14.607 \pm 3.322$   $\chi^2/\text{NDF}: 1.5/3$

Left Out:  $25.888 \pm 5.797$   $\chi^2/\text{NDF}: 0.0/0$

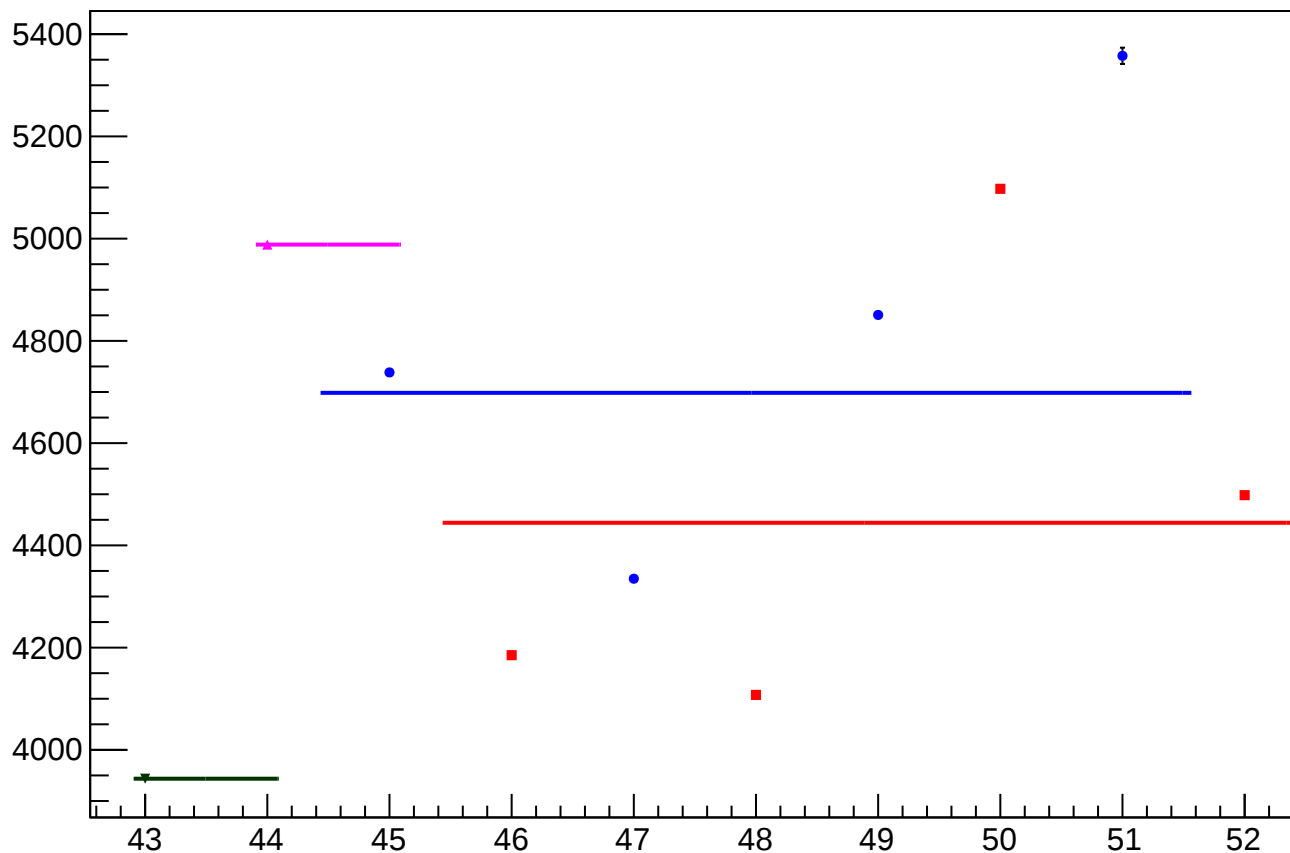
Right Out:  $25.396 \pm 3.234$   $\chi^2/\text{NDF}: 6.7/3$

Left In:  $-35.362 \pm 6.967$   $\chi^2/\text{NDF}: 0.0/0$

$-4.594 \pm 2.883$   $\chi^2/\text{NDF}: 38.2/4$

$14.625 \pm 2.933$   $\chi^2/\text{NDF}: 69.2/4$

# diff\_bpm0l01Y\_rms vs slug



Right In: 4698.410+/-2.349  $\chi^2/\text{NDF}$ : 9618.0/3

Left Out: 3943.608+/-4.099  $\chi^2/\text{NDF}$ : 0.0/0

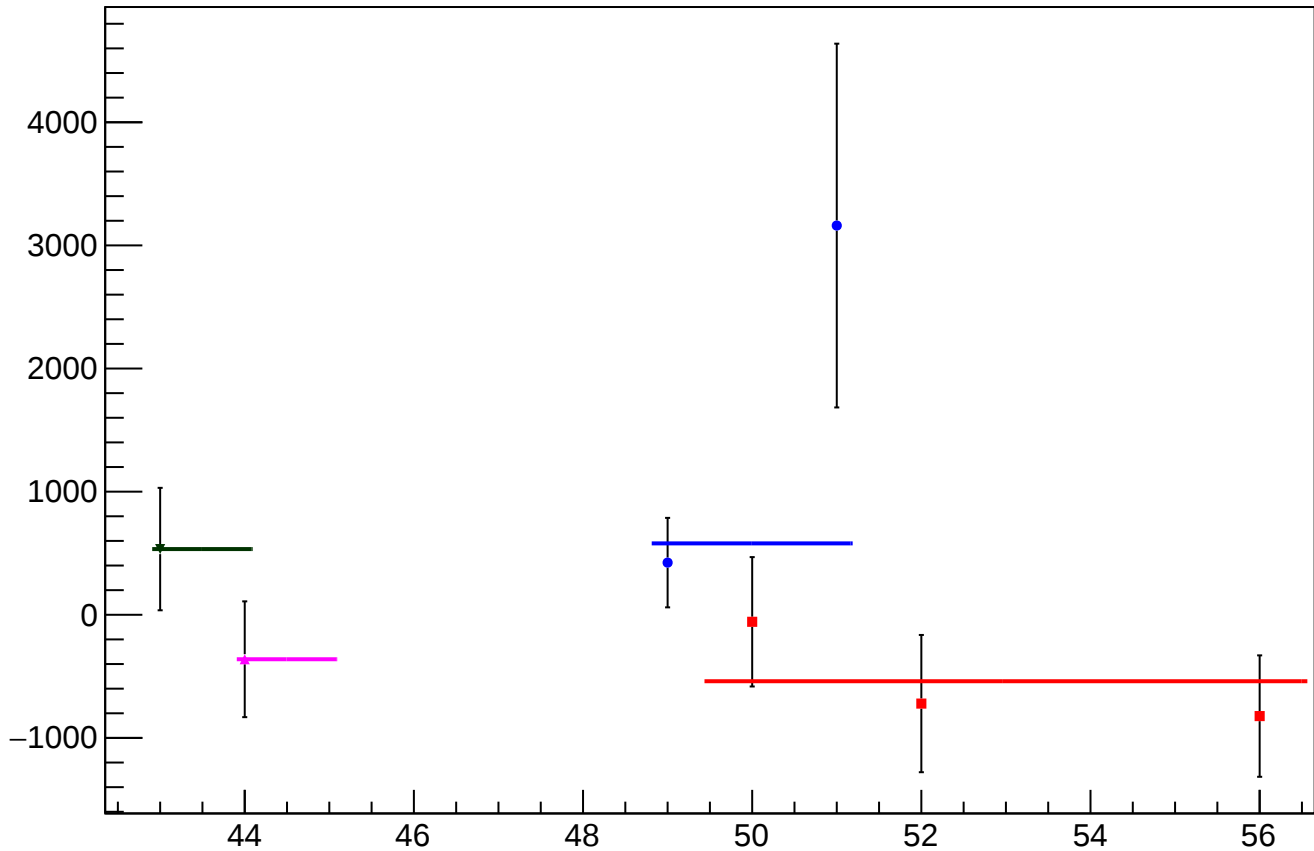
Right Out: 4444.239+/-2.287  $\chi^2/\text{NDF}$ : 26566.8/3

Left In: 4988.357+/-4.926  $\chi^2/\text{NDF}$ : 0.0/0

4511.782+/-2.038  $\chi^2/\text{NDF}$ : 35140.9/4

4540.700+/-2.074  $\chi^2/\text{NDF}$ : 36604.3/4

# asym\_ds\_agg\_av\_mean vs slug



Right In: 579.862 $\pm$ 352.869  $\chi^2/\text{NDF}$ : 3.2/1

Left Out: 533.704 $\pm$ 497.188  $\chi^2/\text{NDF}$ : 0.0/0

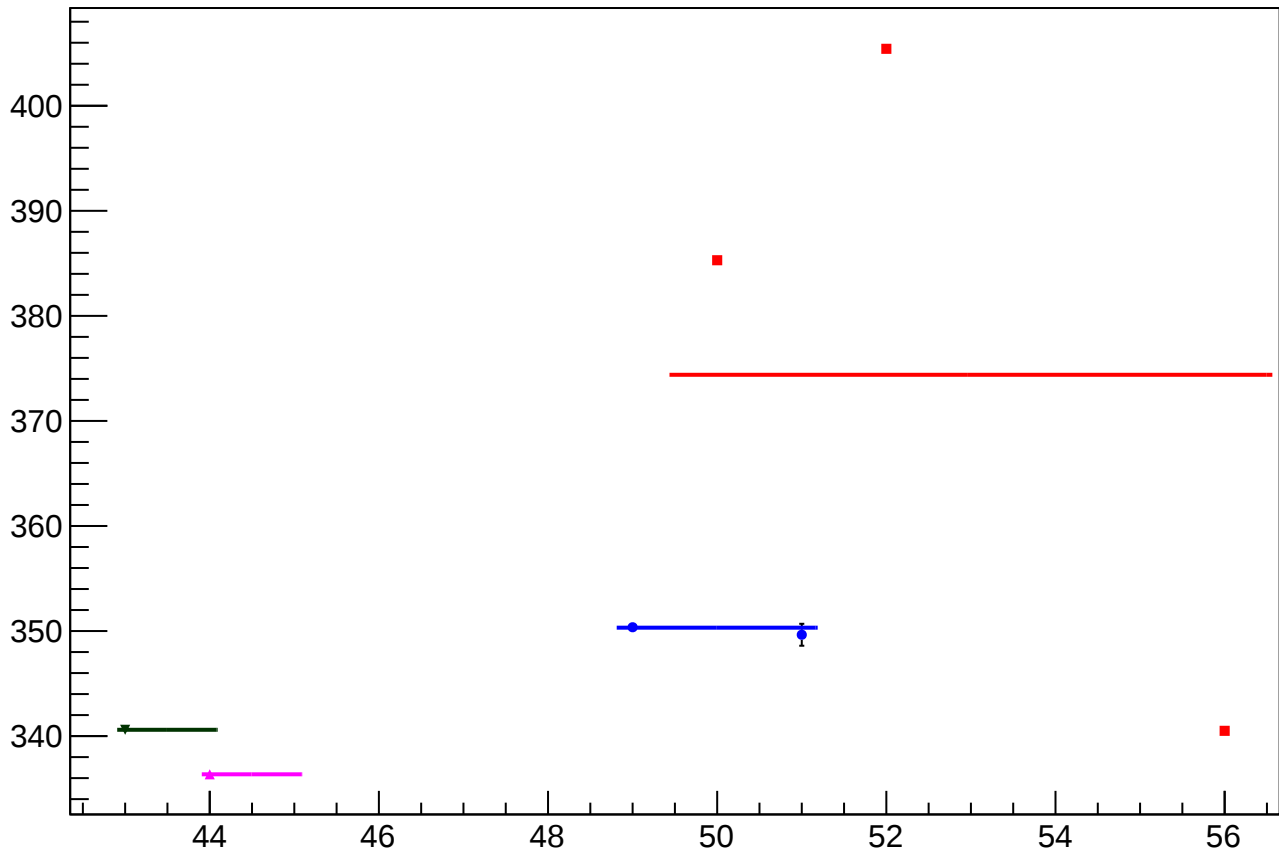
Right Out: -539.641 $\pm$ 302.130  $\chi^2/\text{NDF}$ : 1.3/2

Left In: -361.123 $\pm$ 470.256  $\chi^2/\text{NDF}$ : 0.0/0

564.400 $\pm$ 287.760  $\chi^2/\text{NDF}$ : 3.2/2

-487.483 $\pm$ 254.189  $\chi^2/\text{NDF}$ : 1.4/3

# asym\_ds\_agg\_av\_rms vs slug



Right In:  $350.320 \pm 0.250$   $\chi^2/\text{NDF}: 0.4/1$

Left Out:  $340.600 \pm 0.352$   $\chi^2/\text{NDF}: 0.0/0$

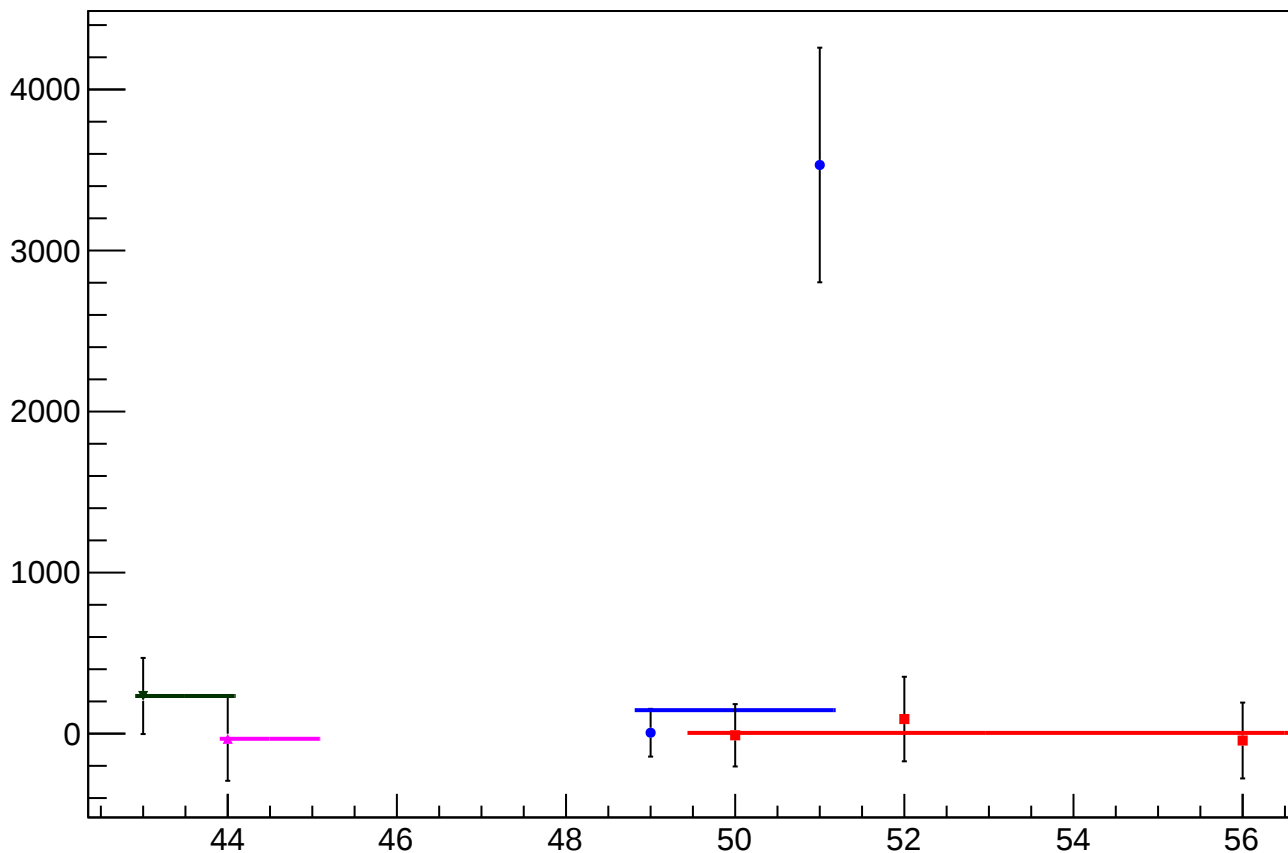
$347.064 \pm 0.203$   $\chi^2/\text{NDF}: 508.8/2$

Right Out:  $374.392 \pm 0.214$   $\chi^2/\text{NDF}: 16508.9/2$

$363.281 \pm 0.180$   $\chi^2/\text{NDF}: 25767.1/3$

Left In:  $336.363 \pm 0.333$   $\chi^2/\text{NDF}: 0.0/0$

asym\_bcm\_dg\_ds\_bcm\_an\_us\_agg\_avg\_mean vs slug



Right In: 145.792 $\pm$ 145.269  $\chi^2$ /NDF: 22.5/1

Left Out: 233.776 $\pm$ 236.364  $\chi^2$ /NDF: 0.0/0

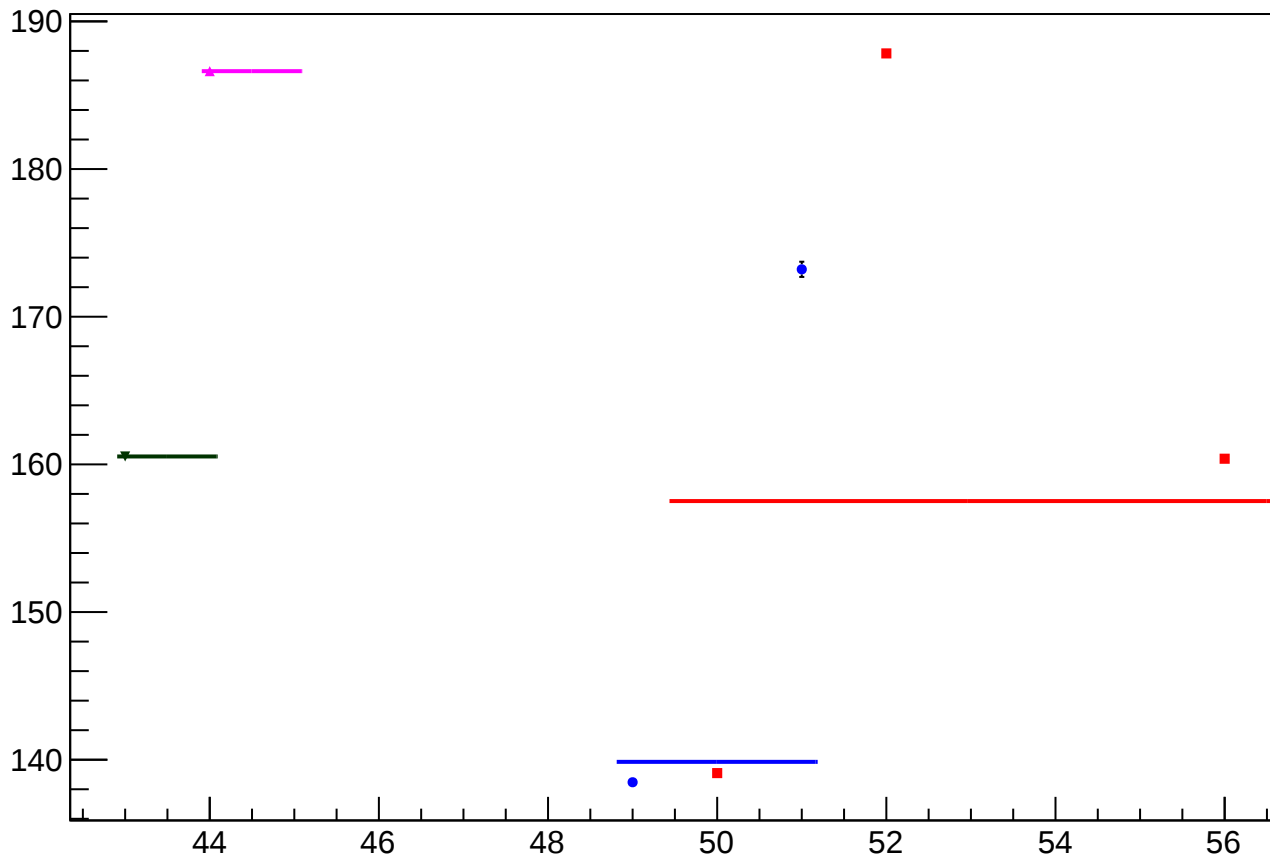
Right Out: 4.567 $\pm$ 129.959  $\chi^2$ /NDF: 0.2/2

Left In: -32.051 $\pm$ 260.803  $\chi^2$ /NDF: 0.0/0

169.915 $\pm$ 123.763  $\chi^2$ /NDF: 22.6/2

-2.717 $\pm$ 116.318  $\chi^2$ /NDF: 0.2/3

asym\_bcm\_dg\_ds\_bcm\_an\_us\_agg\_avg\_rms vs slug



Right In: 139.856 $\pm$ 0.103  $\chi^2$ /NDF: 4365.9/1

Left Out: 160.536 $\pm$ 0.167  $\chi^2$ /NDF: 0.0/0

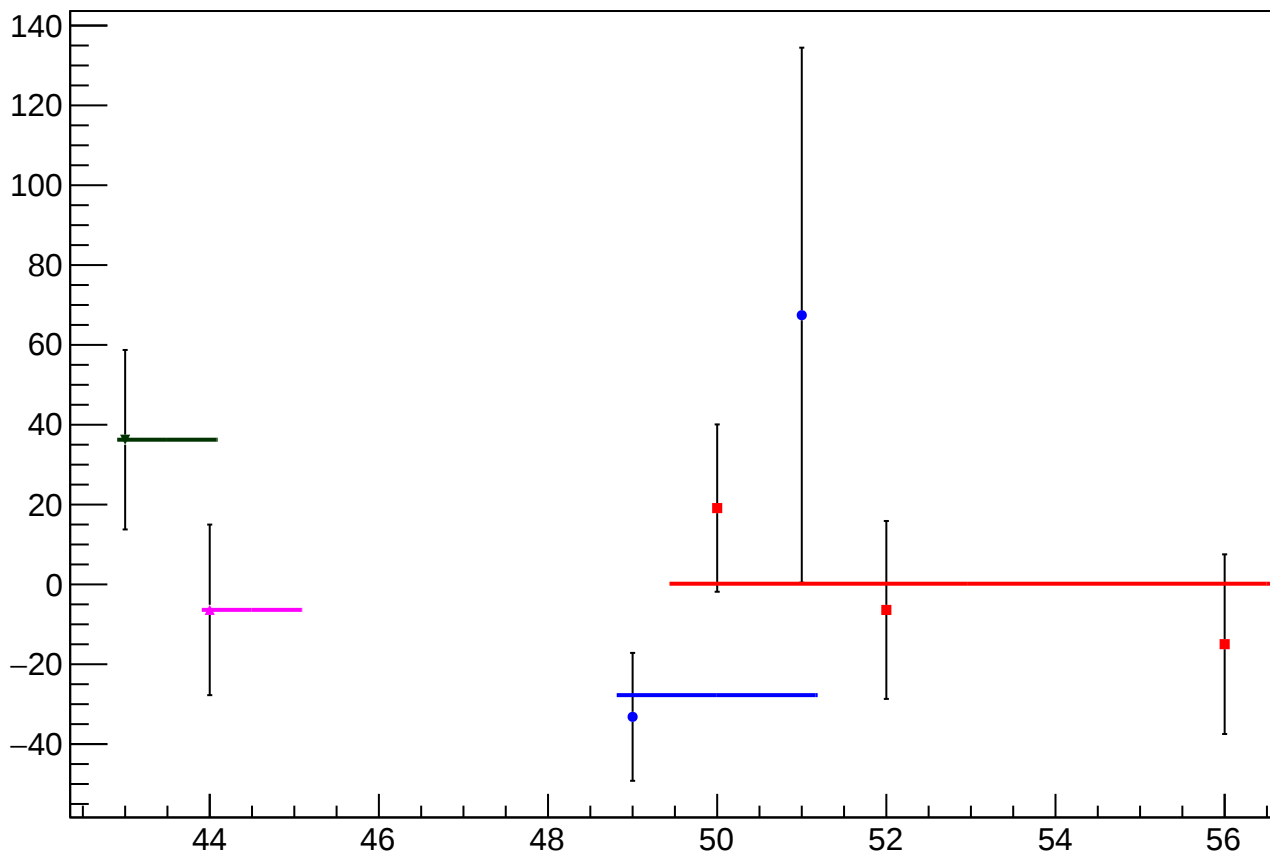
145.526 $\pm$ 0.088  $\chi^2$ /NDF: 15478.7/2

Right Out: 157.516 $\pm$ 0.092  $\chi^2$ /NDF: 45062.3/2

163.307 $\pm$ 0.082  $\chi^2$ /NDF: 65026.6/3

Left In: 186.629 $\pm$ 0.184  $\chi^2$ /NDF: 0.0/0

asym\_bcm\_dg\_ds\_bcm\_an\_us\_agg\_dd\_mean vs slug



Right In: -27.737 $\pm$ 15.581  $\chi^2$ /NDF: 2.1/1

Left Out: 36.249 $\pm$ 22.481  $\chi^2$ /NDF: 0.0/0

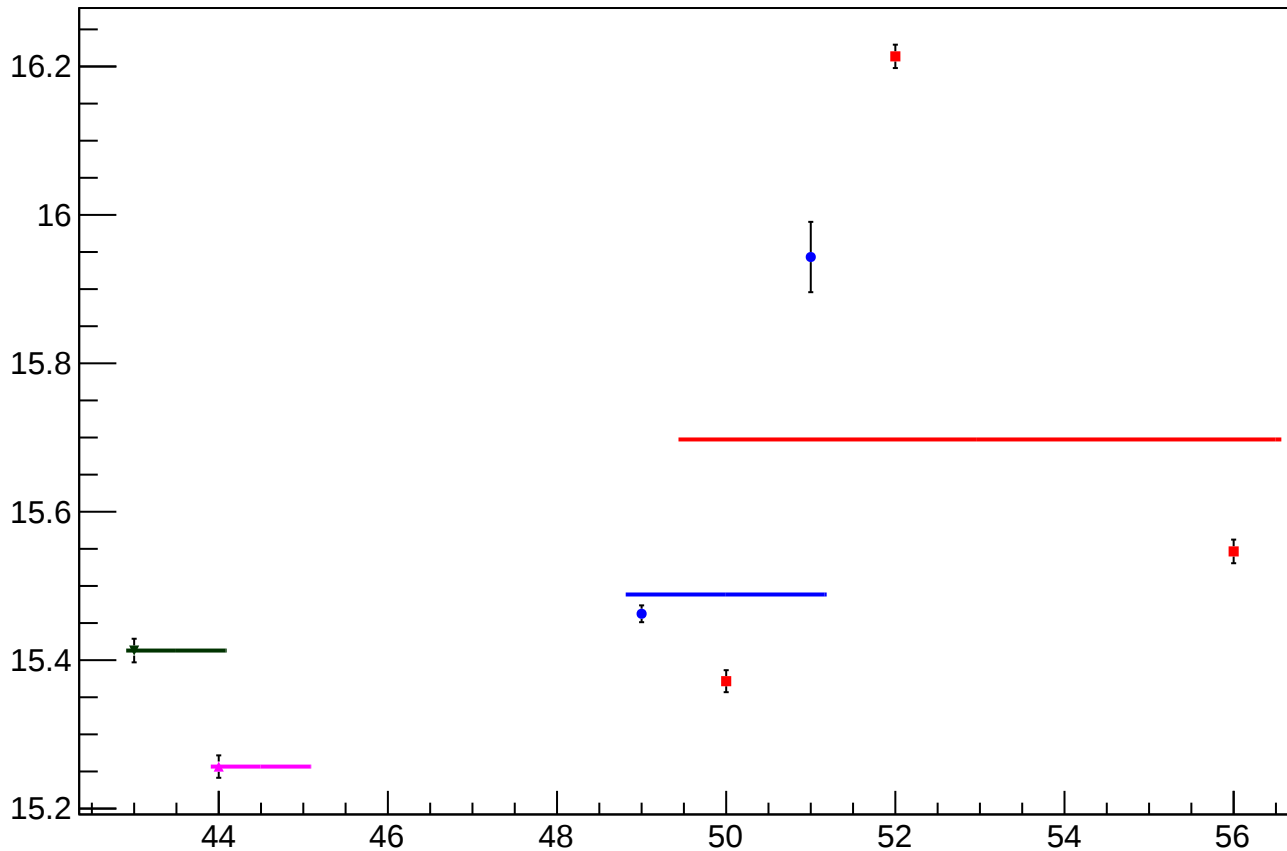
Right Out: 0.174 $\pm$ 12.635  $\chi^2$ /NDF: 1.4/2

Left In: -6.377 $\pm$ 21.365  $\chi^2$ /NDF: 0.0/0

-6.974 $\pm$ 12.806  $\chi^2$ /NDF: 7.6/2

-1.523 $\pm$ 10.875  $\chi^2$ /NDF: 1.4/3

asym\_bcm\_dg\_ds\_bcm\_an\_us\_agg\_dd\_rms vs slug



Right In: 15.488 $\pm$ 0.011  $\chi^2$ /NDF: 97.4/1

Left Out: 15.413 $\pm$ 0.016  $\chi^2$ /NDF: 0.0/0

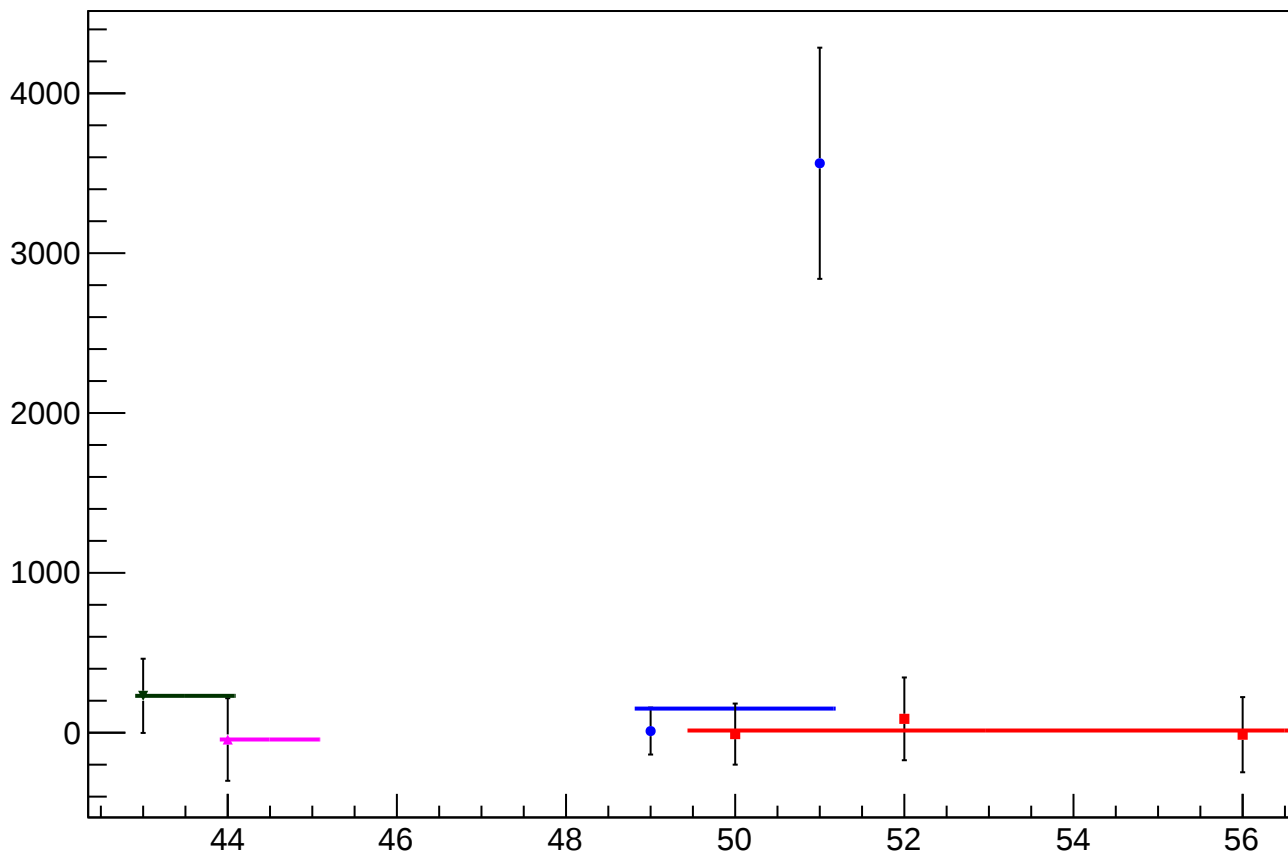
15.464 $\pm$ 0.009  $\chi^2$ /NDF: 112.6/2

Right Out: 15.697 $\pm$ 0.009  $\chi^2$ /NDF: 1646.1/2

15.583 $\pm$ 0.008  $\chi^2$ /NDF: 2276.9/3

Left In: 15.257 $\pm$ 0.015  $\chi^2$ /NDF: 0.0/0

asym\_bcm\_cav4cQ\_bcm\_an\_us\_agg\_avg\_mean vs slug



Right In: 150.876+/-143.919  $\chi^2/\text{NDF}$ : 23.2/1

Left Out: 230.569+/-232.106  $\chi^2/\text{NDF}$ : 0.0/0

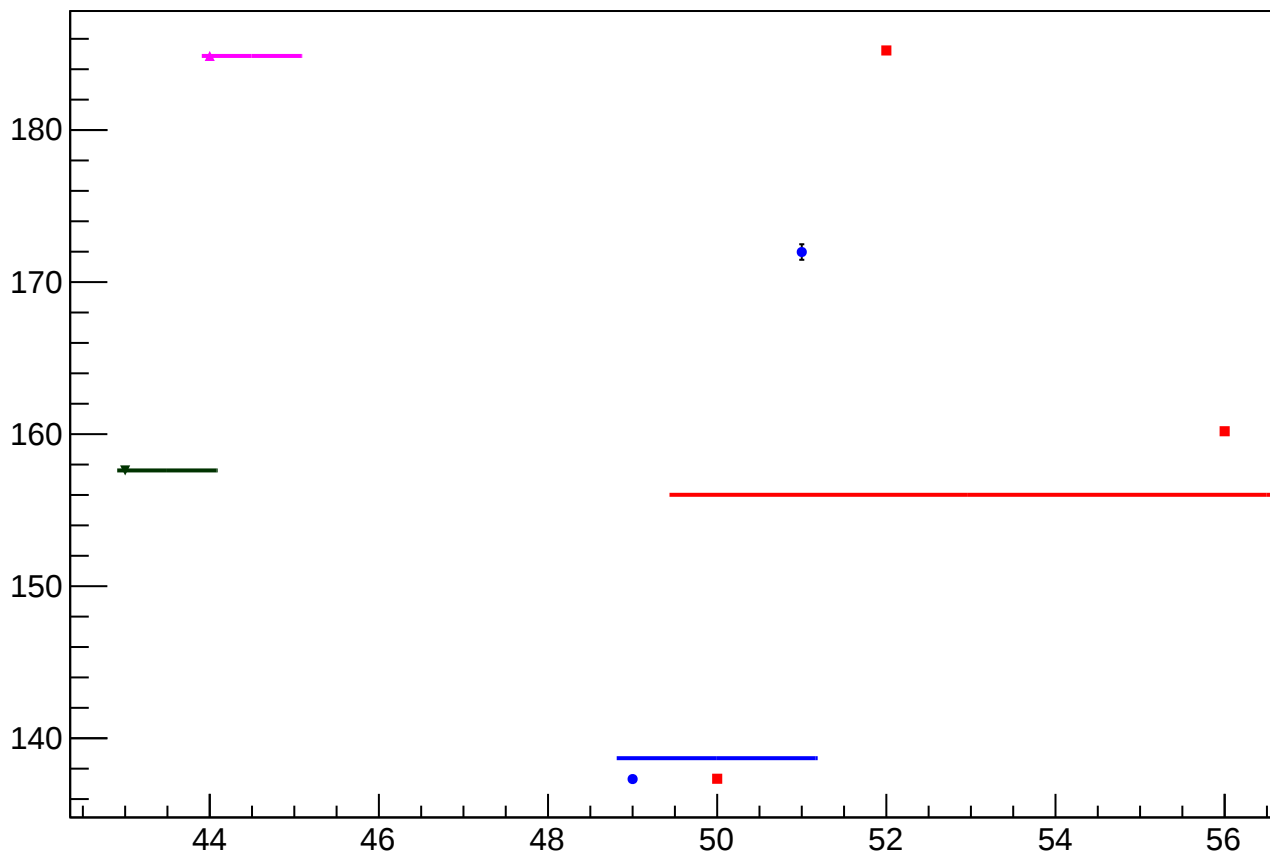
Right Out: 13.663+/-128.681  $\chi^2/\text{NDF}$ : 0.1/2

Left In: -42.573+/-258.353  $\chi^2/\text{NDF}$ : 0.0/0

173.007+/-122.314  $\chi^2/\text{NDF}$ : 23.3/2

2.485+/-115.184  $\chi^2/\text{NDF}$ : 0.1/3

asym\_bcm\_cav4cQ\_bcm\_an\_us\_agg\_avg\_rms vs slug



Right In: 138.688 $\pm$ 0.102  $\chi^2$ /NDF: 4412.7/1

Left Out: 157.613 $\pm$ 0.164  $\chi^2$ /NDF: 0.0/0

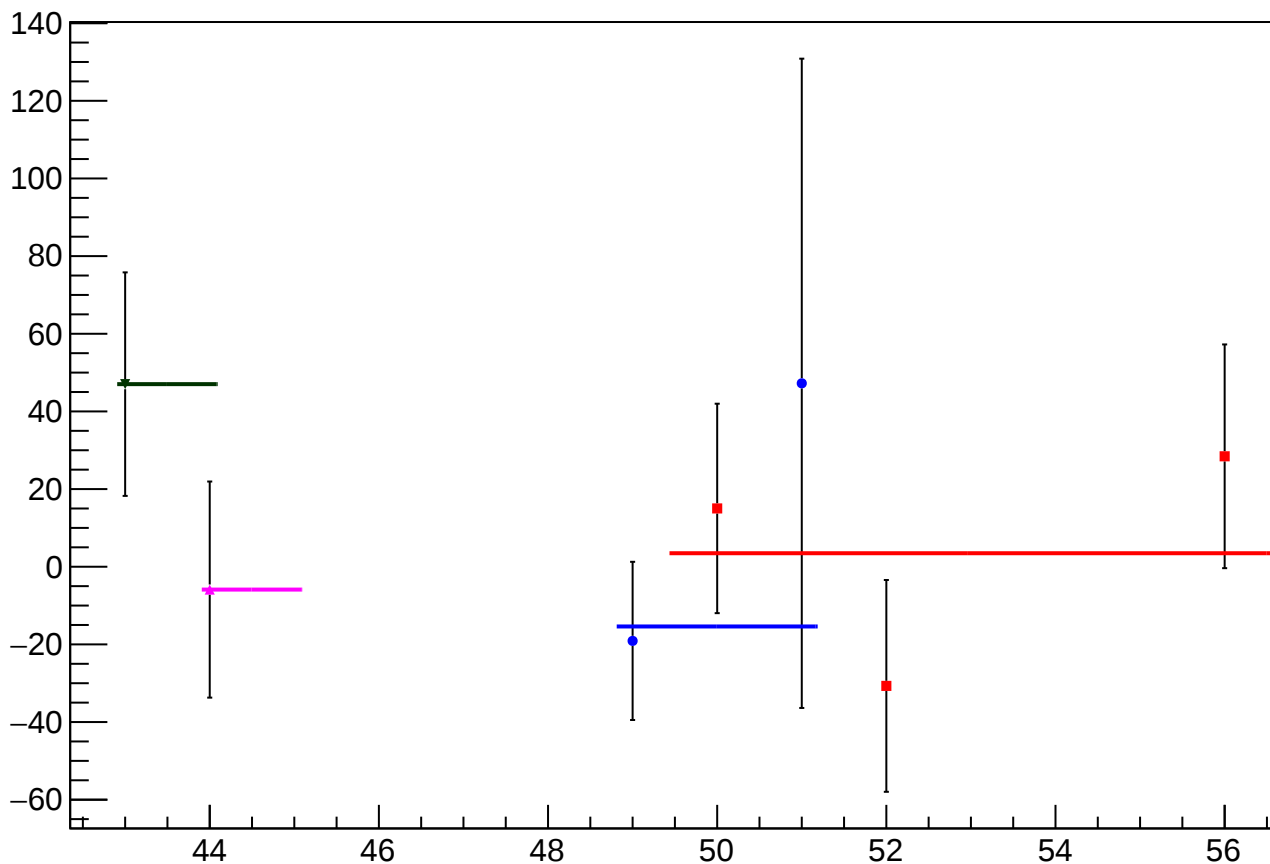
Right Out: 156.011 $\pm$ 0.091  $\chi^2$ /NDF: 45216.8/2

Left In: 184.874 $\pm$ 0.183  $\chi^2$ /NDF: 0.0/0

143.944 $\pm$ 0.086  $\chi^2$ /NDF: 14016.1/2

161.748 $\pm$ 0.081  $\chi^2$ /NDF: 65217.8/3

asym\_bcm\_cav4cQ\_bcm\_an\_us\_agg\_dd\_mean vs slug



Right In: -15.385 $\pm$ 19.791  $\chi^2/\text{NDF}$ : 0.6/1

Left Out: 47.028 $\pm$ 28.784  $\chi^2/\text{NDF}$ : 0.0/0

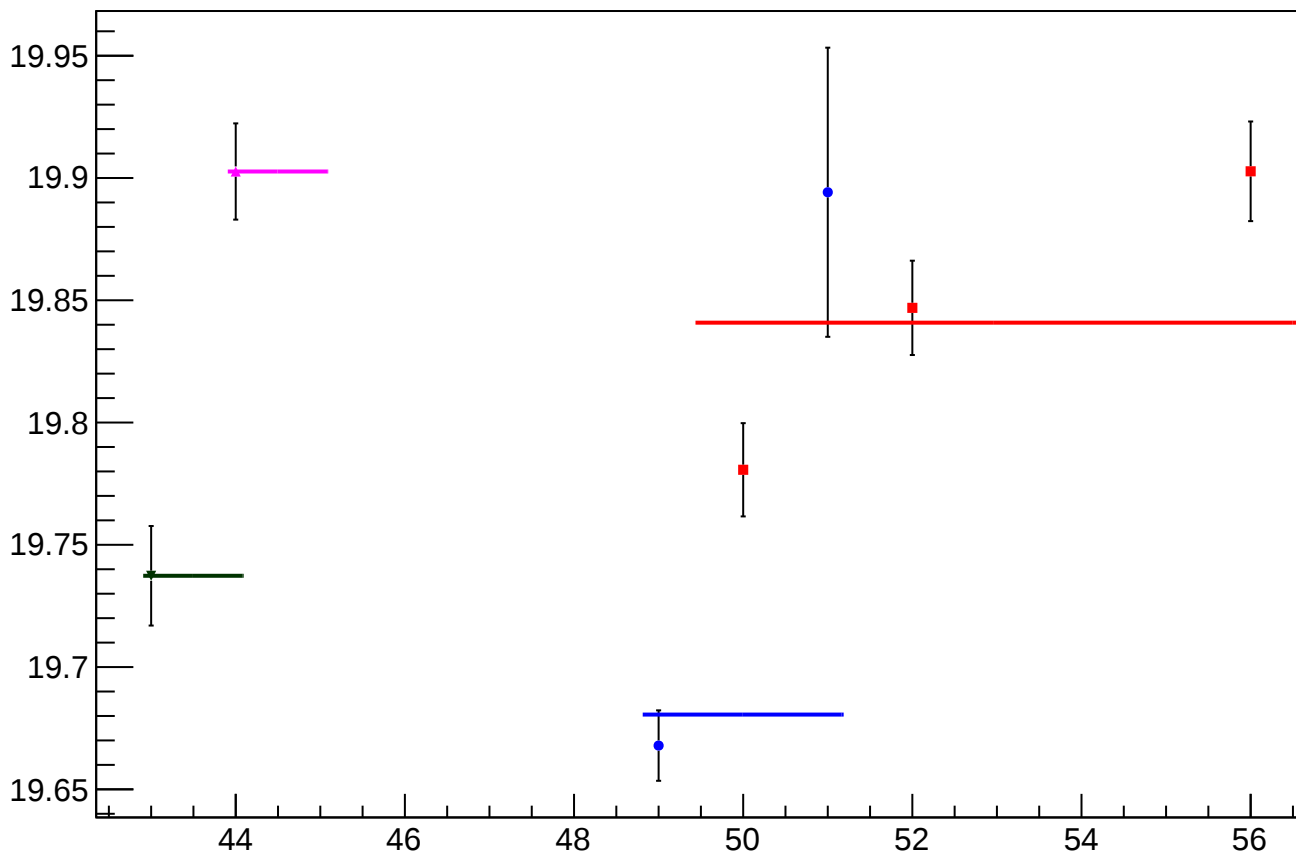
Right Out: 3.479 $\pm$ 15.964  $\chi^2/\text{NDF}$ : 2.5/2

Left In: -5.884 $\pm$ 27.829  $\chi^2/\text{NDF}$ : 0.0/0

4.650 $\pm$ 16.308  $\chi^2/\text{NDF}$ : 3.8/2

1.161 $\pm$ 13.848  $\chi^2/\text{NDF}$ : 2.6/3

asym\_bcm\_cav4cQ\_bcm\_an\_us\_agg\_dd\_rms vs slug



Right In: 19.681 $\pm$ 0.014  $\chi^2/\text{NDF}$ : 13.8/1

Left Out: 19.737 $\pm$ 0.020  $\chi^2/\text{NDF}$ : 0.0/0

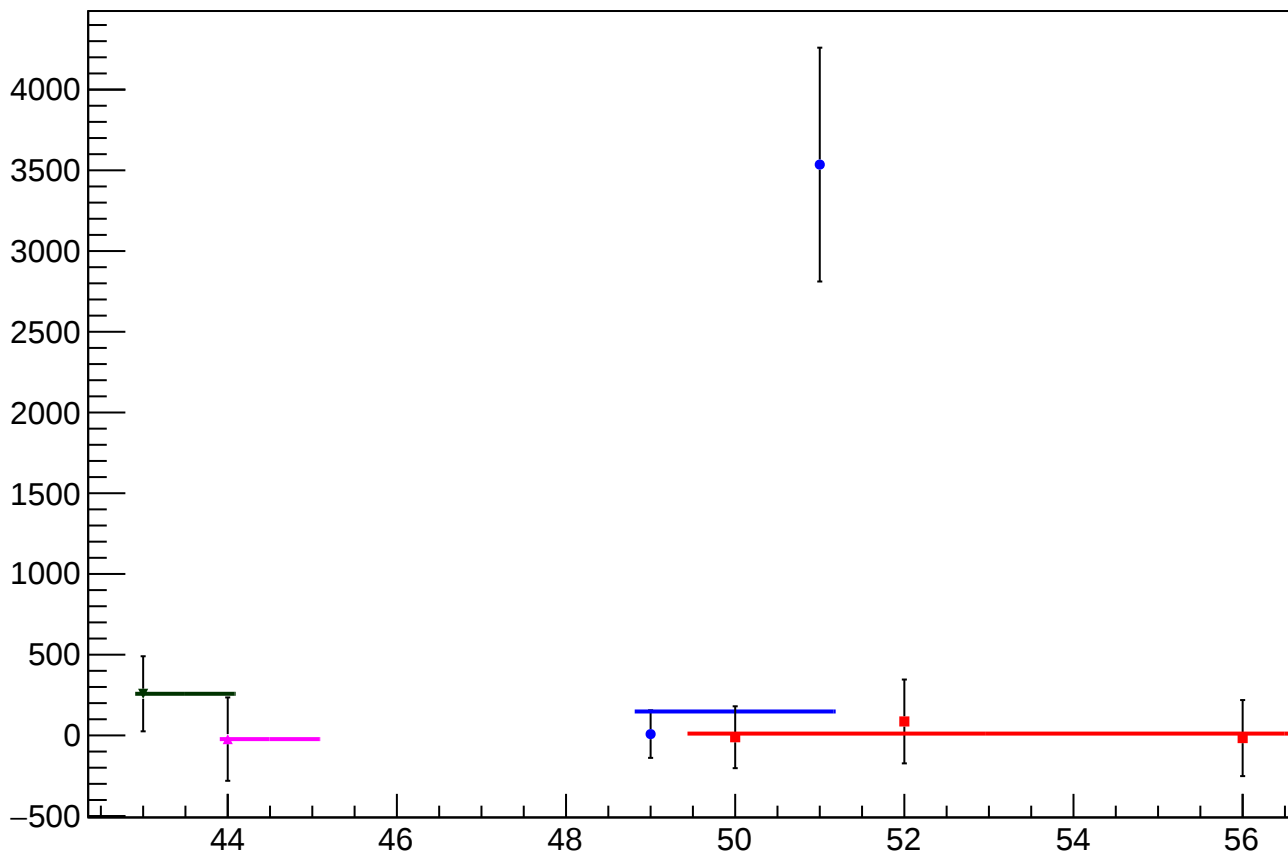
Right Out: 19.841 $\pm$ 0.011  $\chi^2/\text{NDF}$ : 19.3/2

Left In: 19.903 $\pm$ 0.020  $\chi^2/\text{NDF}$ : 0.0/0

19.699 $\pm$ 0.012  $\chi^2/\text{NDF}$ : 19.1/2

19.856 $\pm$ 0.010  $\chi^2/\text{NDF}$ : 26.7/3

asym\_bcm\_cav4cQ\_bcm\_an\_ds\_agg\_avg\_mean vs slug



Right In: 148.222±/-144.308  $\chi^2$ /NDF: 22.8/1

Left Out: 257.793±/-232.498  $\chi^2$ /NDF: 0.0/0

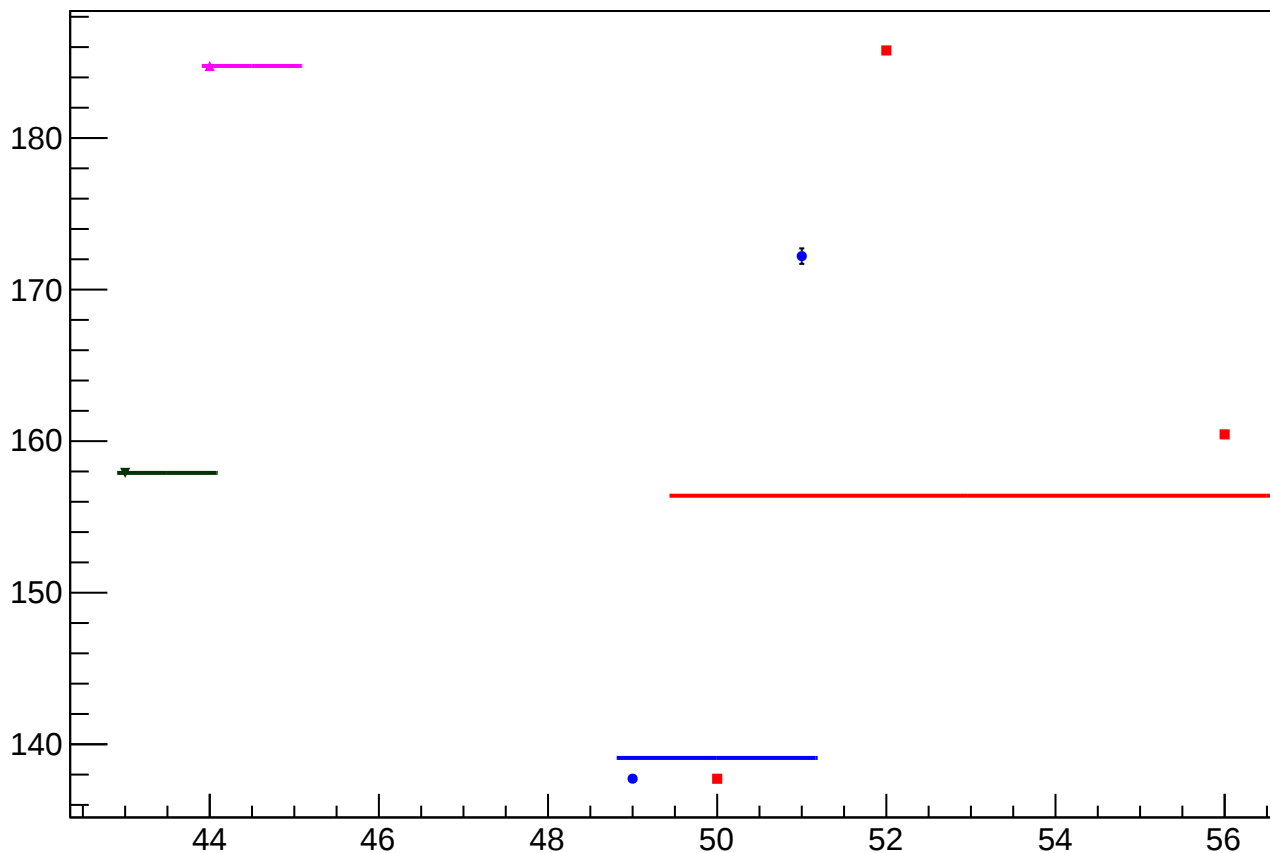
Right Out: 11.265±/-129.000  $\chi^2$ /NDF: 0.1/2

Left In: -22.928±/-258.180  $\chi^2$ /NDF: 0.0/0

178.694±/-122.610  $\chi^2$ /NDF: 22.9/2

4.434±/-115.397  $\chi^2$ /NDF: 0.1/3

asym\_bcm\_cav4cQ\_bcm\_an\_ds\_agg\_avg\_rms vs slug



Right In:  $139.099 \pm 0.102$   $\chi^2/\text{NDF}$ : 4353.4/1

Left Out:  $157.905 \pm 0.164$   $\chi^2/\text{NDF}$ : 0.0/0

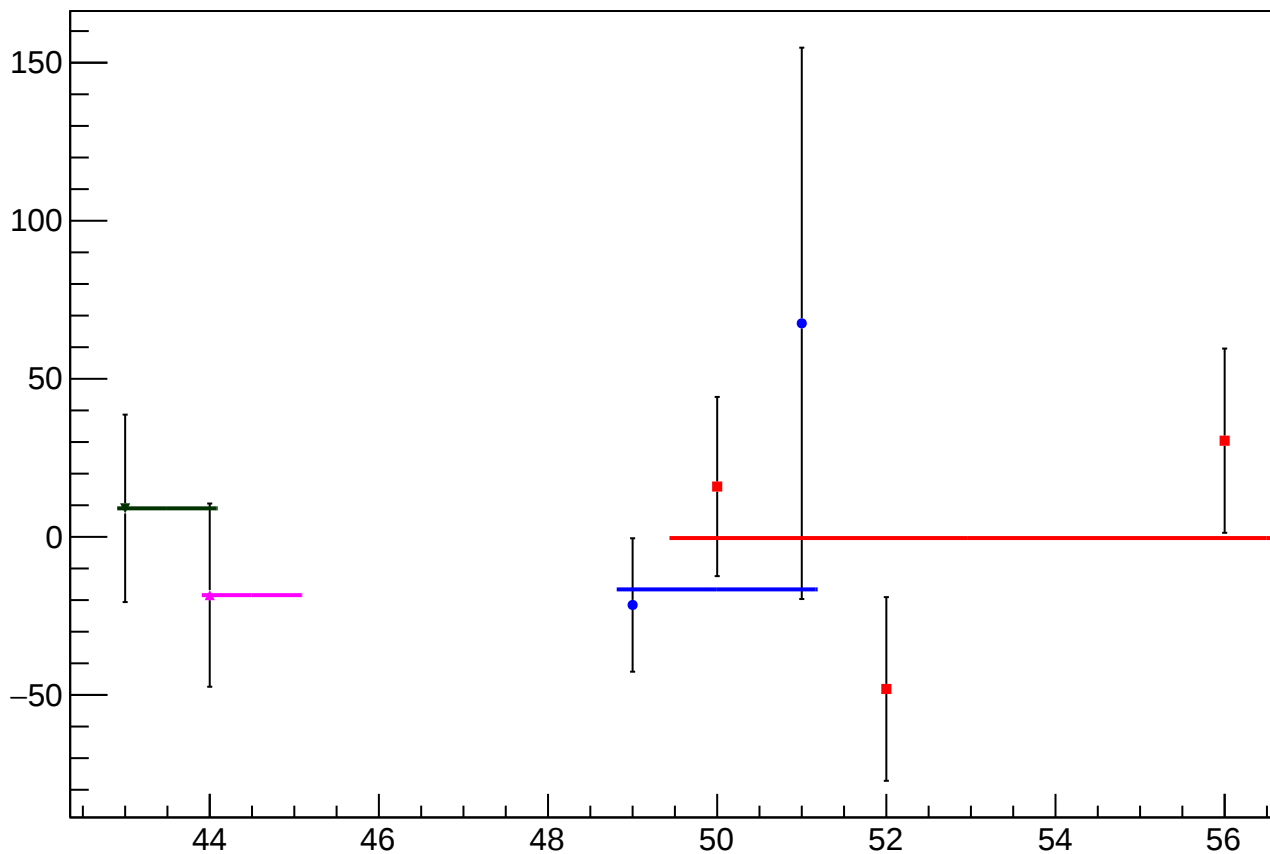
Right Out:  $156.400 \pm 0.091$   $\chi^2/\text{NDF}$ : 45189.7/2

Left In:  $184.755 \pm 0.183$   $\chi^2/\text{NDF}$ : 0.0/0

$144.330 \pm 0.087$   $\chi^2/\text{NDF}$ : 13799.5/2

$162.065 \pm 0.082$   $\chi^2/\text{NDF}$ : 64494.6/3

asym\_bcm\_cav4cQ\_bcm\_an\_ds\_agg\_dd\_mean vs slug



Right In: -16.616 $\pm$ 20.514  $\chi^2$ /NDF: 1.0/1

Left Out: 9.023 $\pm$ 29.646  $\chi^2$ /NDF: 0.0/0

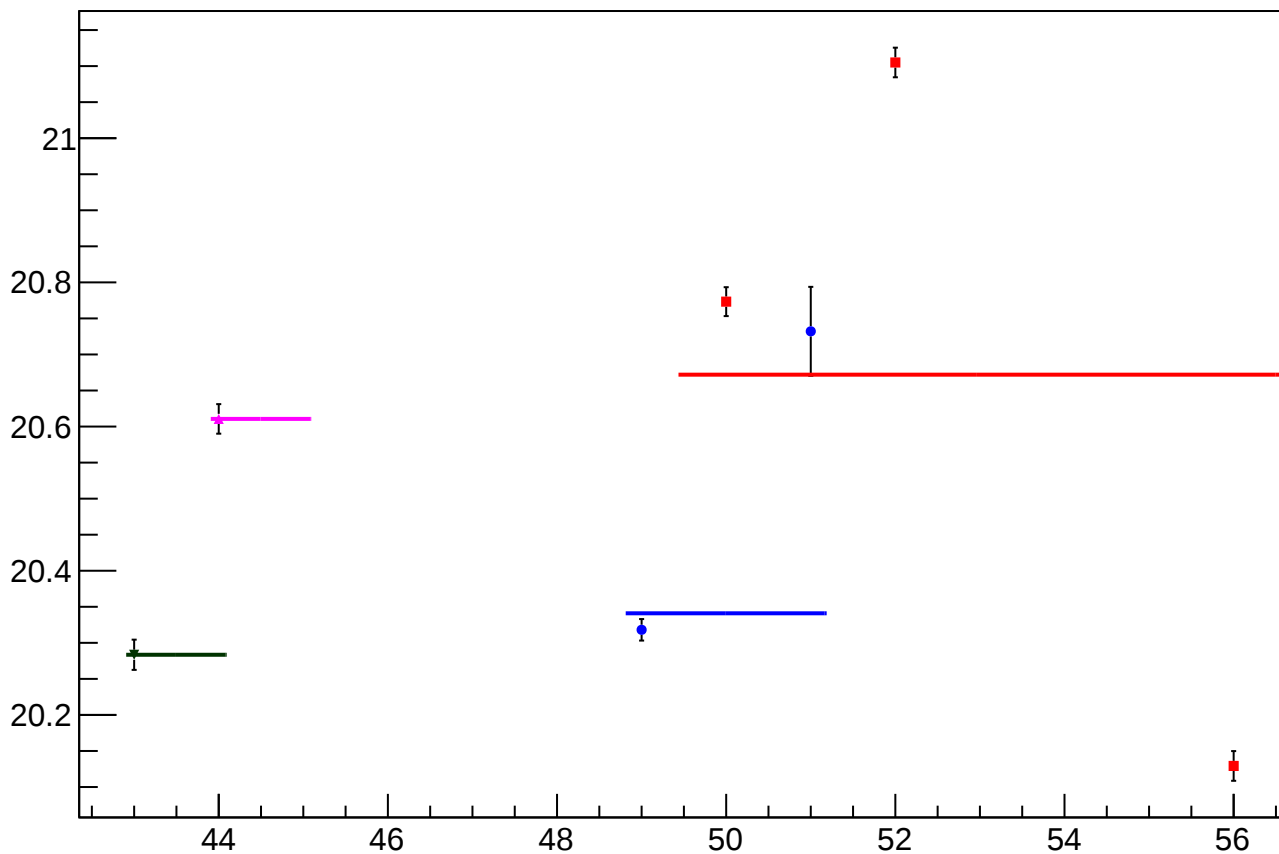
Right Out: -0.375 $\pm$ 16.650  $\chi^2$ /NDF: 4.1/2

Left In: -18.430 $\pm$ 28.983  $\chi^2$ /NDF: 0.0/0

-8.315 $\pm$ 16.869  $\chi^2$ /NDF: 1.5/2

-4.855 $\pm$ 14.438  $\chi^2$ /NDF: 4.4/3

asym\_bcm\_cav4cQ\_bcm\_an\_ds\_agg\_dd\_rms vs slug



Right In: 20.341 $\pm$ 0.015  $\chi^2/\text{NDF}$ : 42.6/1

Left Out: 20.283 $\pm$ 0.021  $\chi^2/\text{NDF}$ : 0.0/0

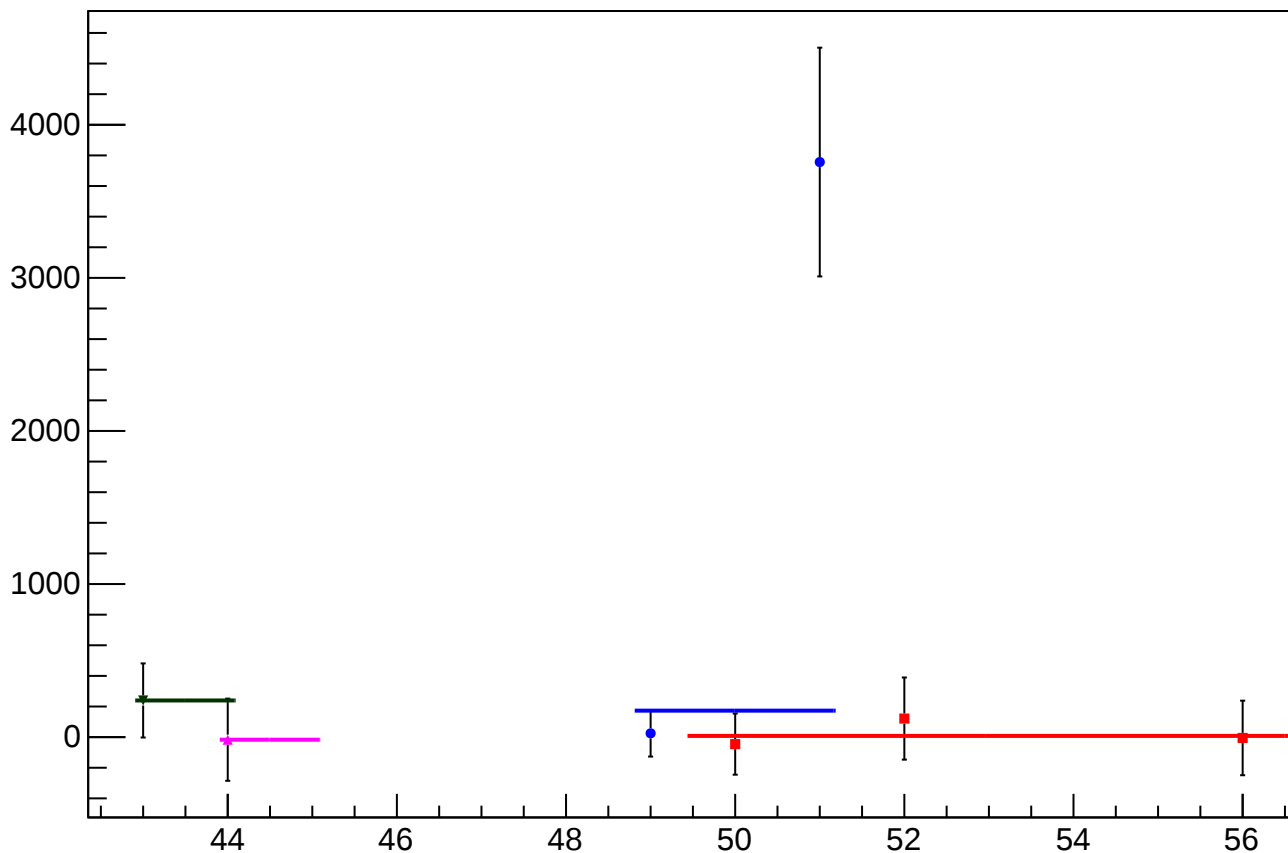
20.322 $\pm$ 0.012  $\chi^2/\text{NDF}$ : 47.7/2

Right Out: 20.672 $\pm$ 0.012  $\chi^2/\text{NDF}$ : 1163.7/2

20.657 $\pm$ 0.010  $\chi^2/\text{NDF}$ : 1170.4/3

Left In: 20.611 $\pm$ 0.020  $\chi^2/\text{NDF}$ : 0.0/0

asym\_bcm\_cav4cQ\_bcm\_dg\_us\_agg\_avg\_mean vs slug



Right In: 173.039+/-148.855  $\chi^2/\text{NDF}$ : 24.0/1

Left Out: 239.549+/-242.055  $\chi^2/\text{NDF}$ : 0.0/0

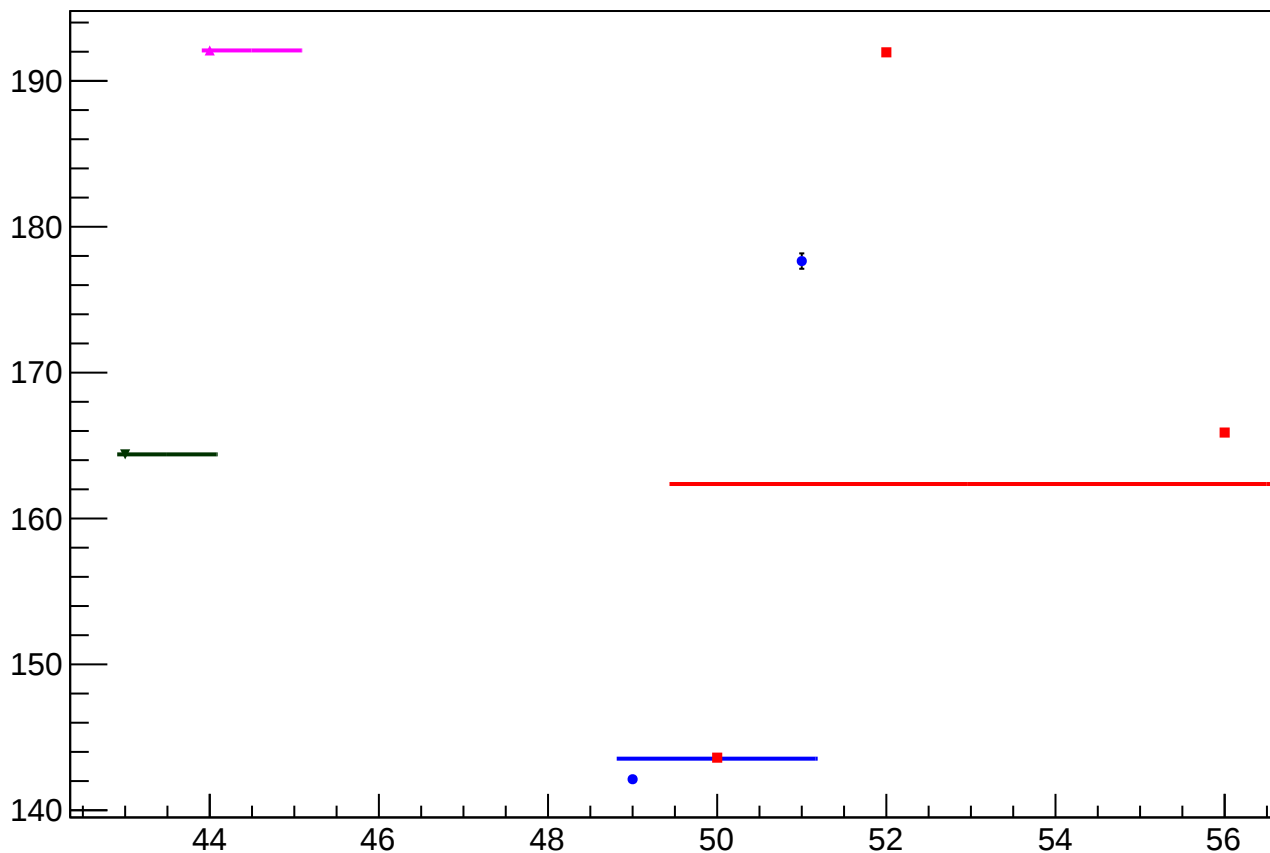
Right Out: 8.056+/-133.812  $\chi^2/\text{NDF}$ : 0.3/2

Left In: -16.805+/-268.428  $\chi^2/\text{NDF}$ : 0.0/0

191.290+/-126.798  $\chi^2/\text{NDF}$ : 24.0/2

3.108+/-119.757  $\chi^2/\text{NDF}$ : 0.3/3

asym\_bcm\_cav4cQ\_bcm\_dg\_us\_agg\_avg\_rms vs slug



Right In: 143.536+/-0.105  $\chi^2/\text{NDF}$ : 4341.1/1

Left Out: 164.396+/-0.171  $\chi^2/\text{NDF}$ : 0.0/0

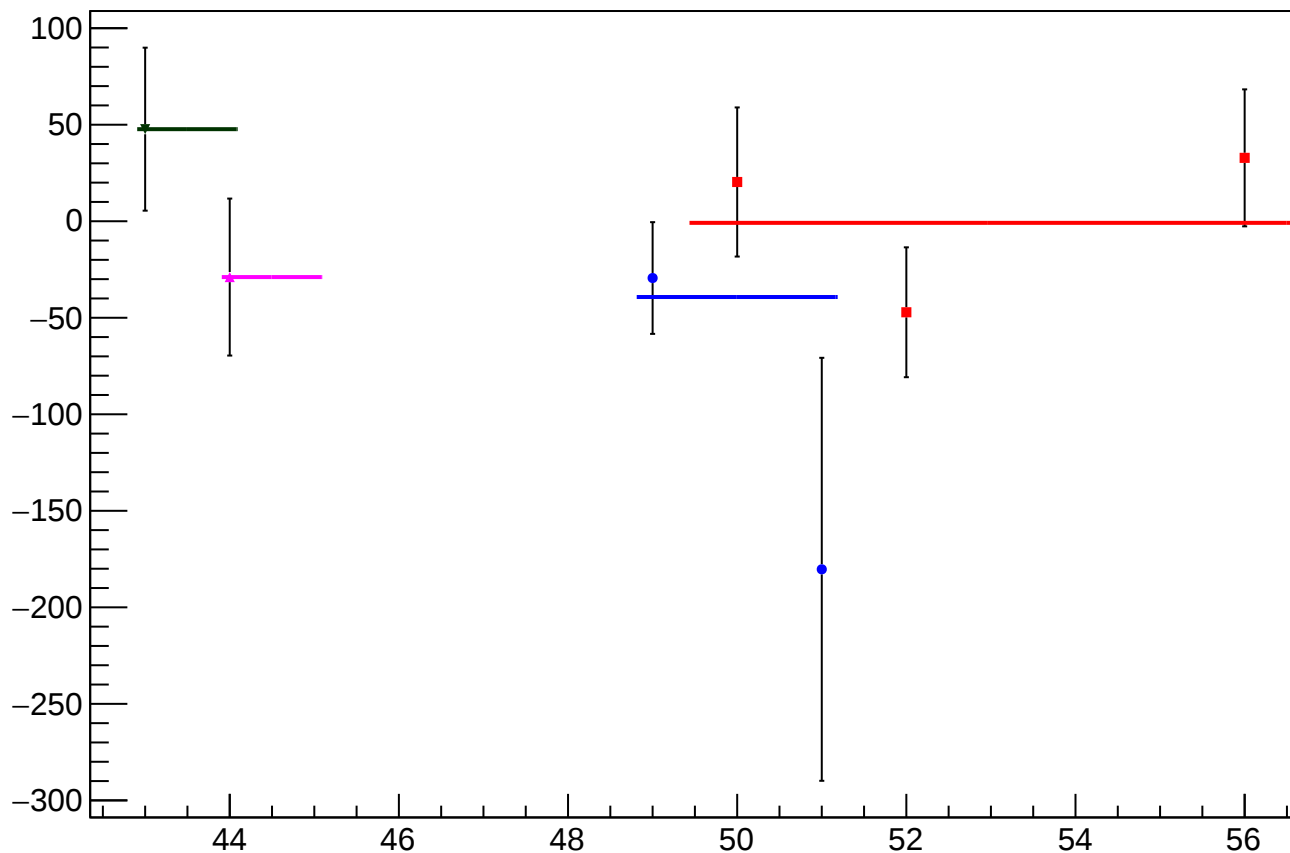
149.260+/-0.090  $\chi^2/\text{NDF}$ : 15119.0/2

Right Out: 162.365+/-0.095  $\chi^2/\text{NDF}$ : 42419.0/2

168.281+/-0.085  $\chi^2/\text{NDF}$ : 62060.6/3

Left In: 192.088+/-0.190  $\chi^2/\text{NDF}$ : 0.0/0

asym\_bcm\_cav4cQ\_bcm\_dg\_us\_agg\_dd\_mean vs slug



Right In: -39.251 $\pm$ 27.976  $\chi^2$ /NDF: 1.8/1

Left Out: 47.694 $\pm$ 42.218  $\chi^2$ /NDF: 0.0/0

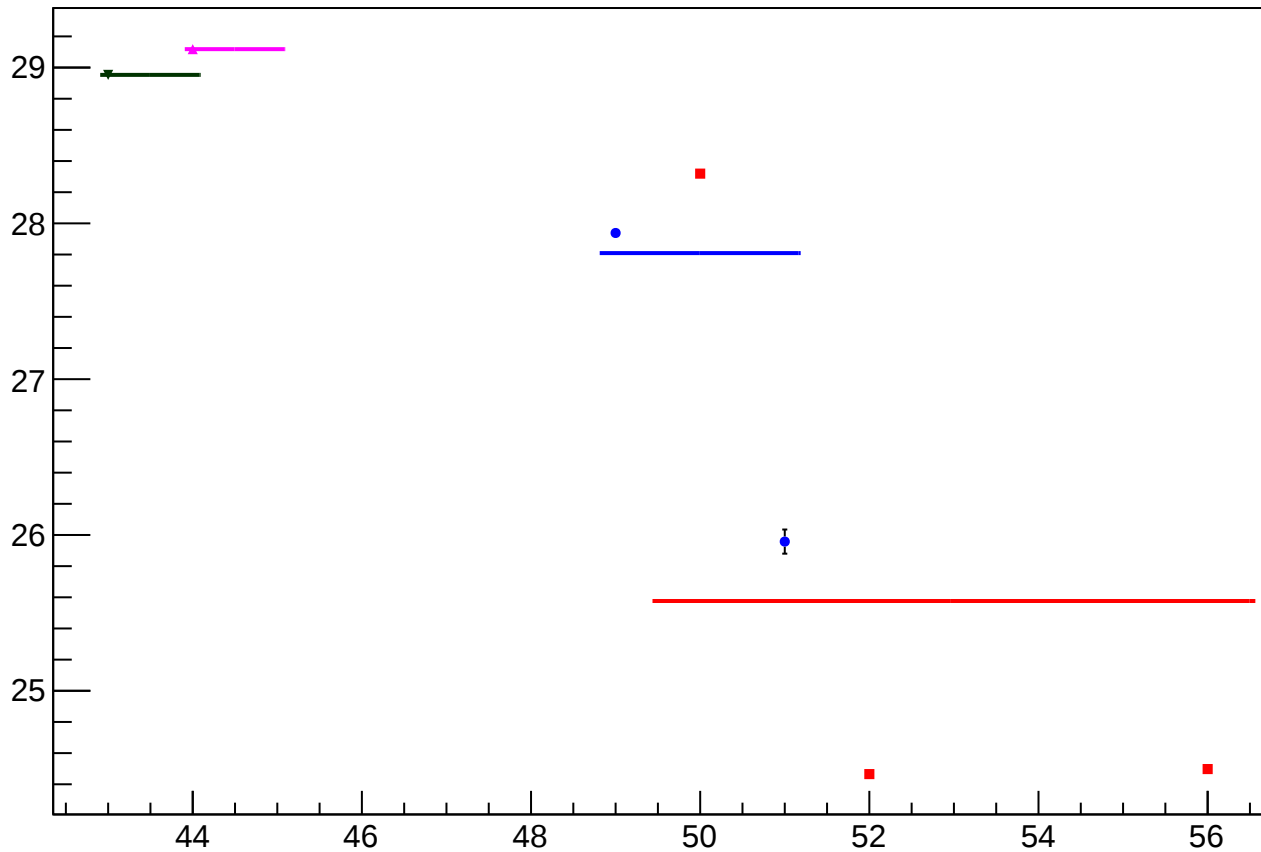
Right Out: -0.834 $\pm$ 20.635  $\chi^2$ /NDF: 3.1/2

Left In: -28.921 $\pm$ 40.658  $\chi^2$ /NDF: 0.0/0

-12.722 $\pm$ 23.320  $\chi^2$ /NDF: 4.7/2

-6.587 $\pm$ 18.401  $\chi^2$ /NDF: 3.5/3

asym\_bcm\_cav4cQ\_bcm\_dg\_us\_agg\_dd\_rms vs slug



Right In: 27.809 $\pm$ 0.020  $\chi^2$ /NDF: 611.1/1

Left Out: 28.953 $\pm$ 0.030  $\chi^2$ /NDF: 0.0/0

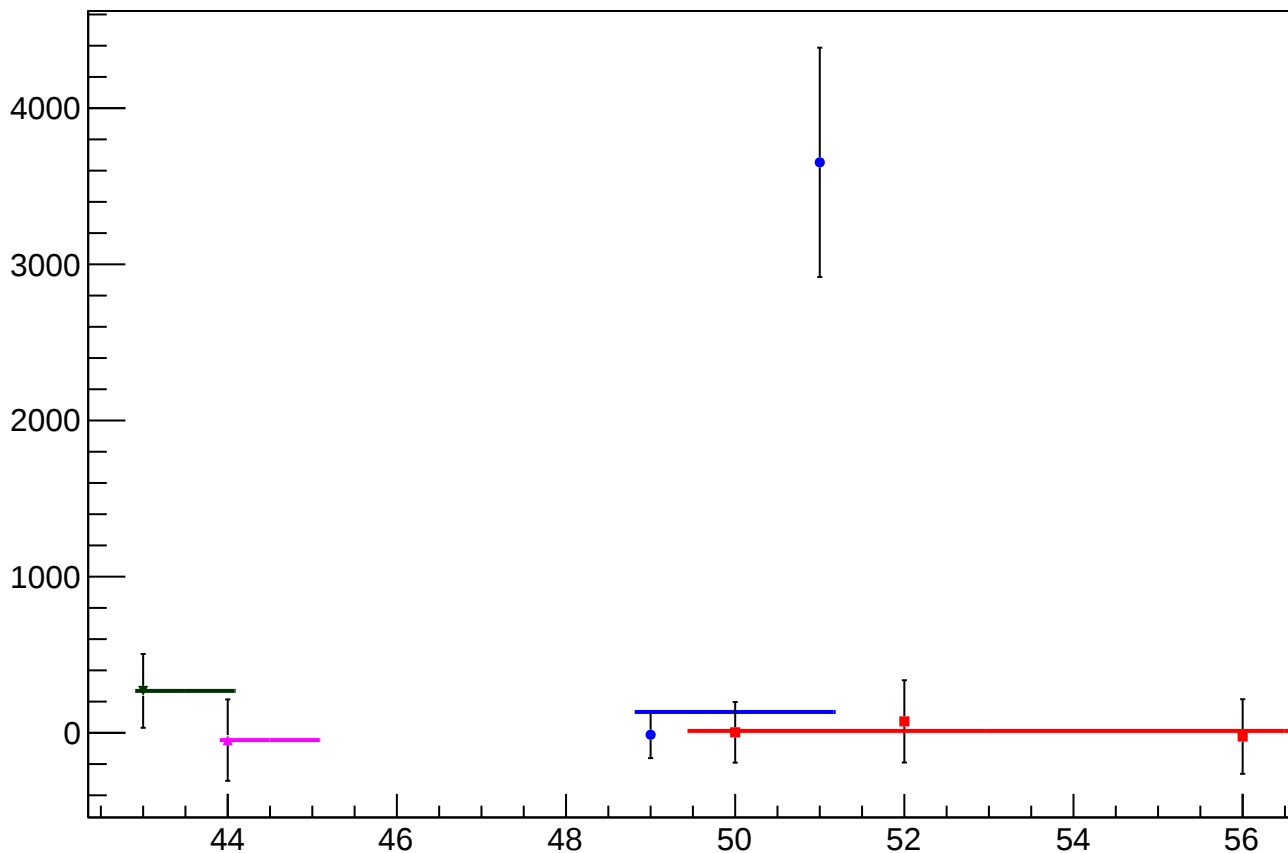
28.158 $\pm$ 0.016  $\chi^2$ /NDF: 1631.3/2

Right Out: 25.576 $\pm$ 0.015  $\chi^2$ /NDF: 14116.6/2

26.302 $\pm$ 0.013  $\chi^2$ /NDF: 26185.1/3

Left In: 29.118 $\pm$ 0.029  $\chi^2$ /NDF: 0.0/0

asym\_bcm\_cav4cQ\_bcm\_dg\_ds\_agg\_avg\_mean vs slug



Right In: 133.563 $\pm$ 146.494  $\chi^2/\text{NDF}$ : 23.9/1

Left Out: 268.579 $\pm$ 236.251  $\chi^2/\text{NDF}$ : 0.0/0

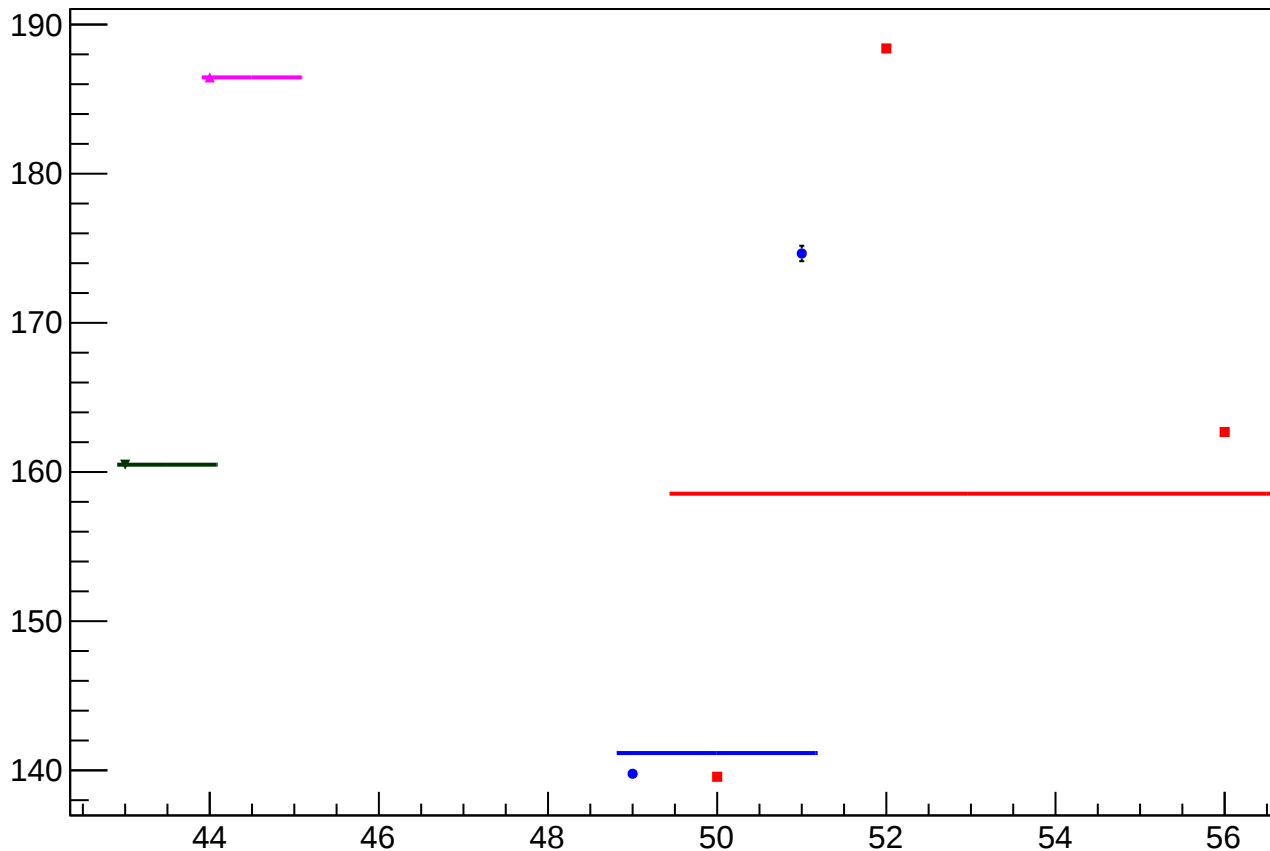
Right Out: 12.573 $\pm$ 130.789  $\chi^2/\text{NDF}$ : 0.1/2

Left In: -46.555 $\pm$ 260.560  $\chi^2/\text{NDF}$ : 0.0/0

171.059 $\pm$ 124.501  $\chi^2/\text{NDF}$ : 24.2/2

0.674 $\pm$ 116.890  $\chi^2/\text{NDF}$ : 0.1/3

asym\_bcm\_cav4cQ\_bcm\_dg\_ds\_agg\_avg\_rms vs slug



Right In: 141.159+/-0.104  $\chi^2/\text{NDF}$ : 4332.6/1

Left Out: 160.492+/-0.167  $\chi^2/\text{NDF}$ : 0.0/0

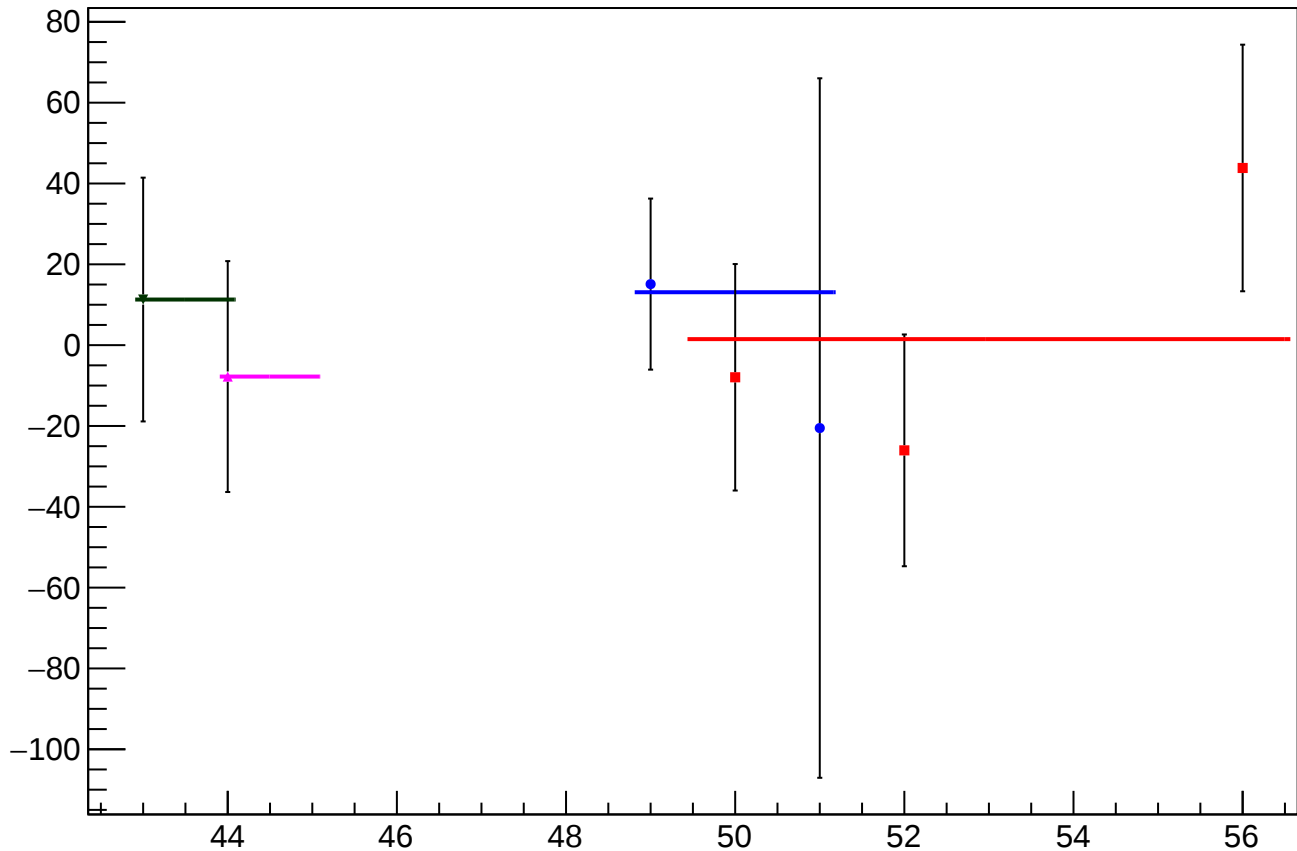
146.528+/-0.088  $\chi^2/\text{NDF}$ : 14005.7/2

Right Out: 158.547+/-0.092  $\chi^2/\text{NDF}$ : 45390.8/2

164.164+/-0.083  $\chi^2/\text{NDF}$ : 63719.8/3

Left In: 186.457+/-0.184  $\chi^2/\text{NDF}$ : 0.0/0

asym\_bcm\_cav4cQ\_bcm\_dg\_ds\_agg\_dd\_mean vs slug



Right In: 13.095 $\pm$ 20.559  $\chi^2/\text{NDF}$ : 0.2/1

Left Out: 11.285 $\pm$ 30.163  $\chi^2/\text{NDF}$ : 0.0/0

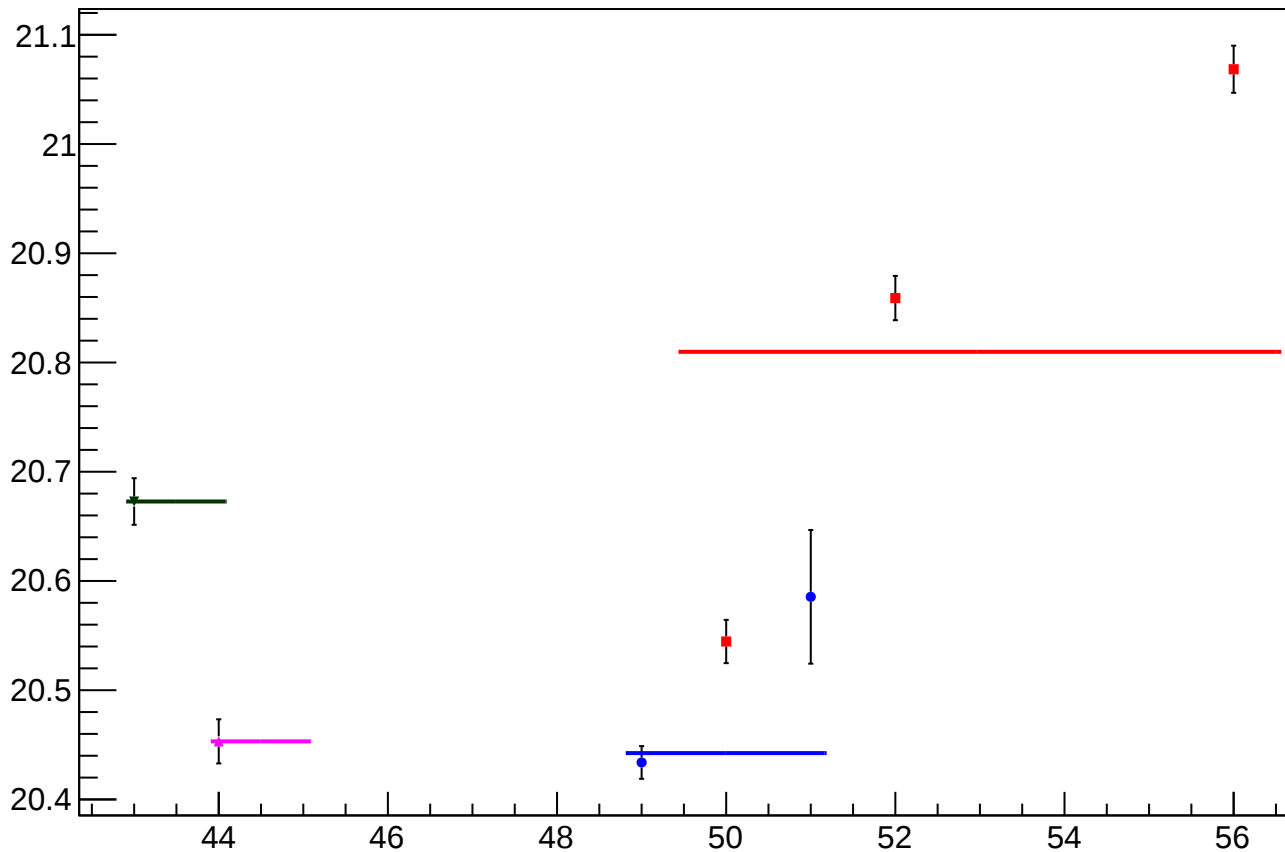
Right Out: 1.490 $\pm$ 16.752  $\chi^2/\text{NDF}$ : 3.0/2

Left In: -7.775 $\pm$ 28.568  $\chi^2/\text{NDF}$ : 0.0/0

12.521 $\pm$ 16.988  $\chi^2/\text{NDF}$ : 0.2/2

-0.881 $\pm$ 14.451  $\chi^2/\text{NDF}$ : 3.0/3

asym\_bcm\_cav4cQ\_bcm\_dg\_ds\_agg\_dd\_rms vs slug



Right In: 20.442 $\pm$ 0.015  $\chi^2$ /NDF: 5.8/1

Left Out: 20.673 $\pm$ 0.021  $\chi^2$ /NDF: 0.0/0

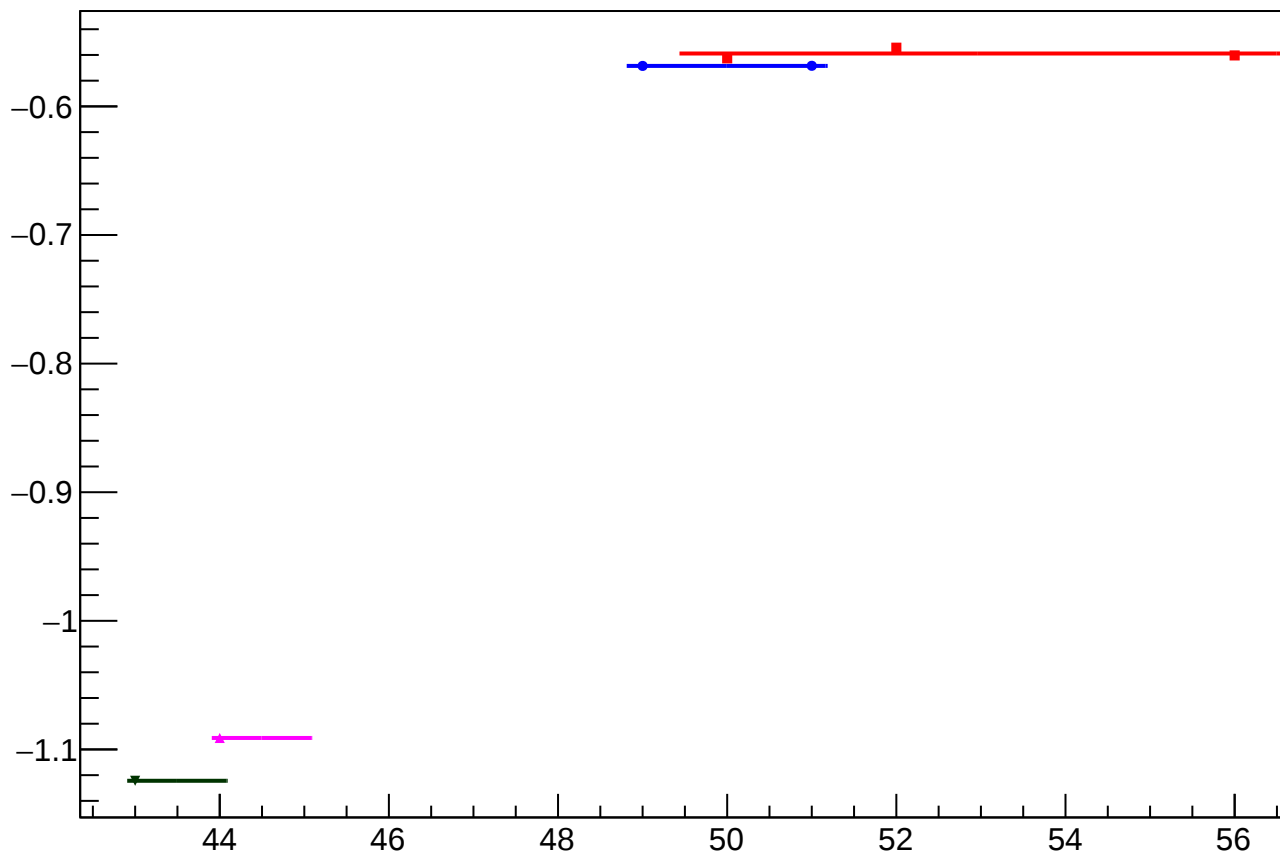
20.515 $\pm$ 0.012  $\chi^2$ /NDF: 85.4/2

Right Out: 20.810 $\pm$ 0.012  $\chi^2$ /NDF: 328.8/2

20.719 $\pm$ 0.010  $\chi^2$ /NDF: 560.7/3

Left In: 20.453 $\pm$ 0.020  $\chi^2$ /NDF: 0.0/0

yield\_bpm0l01X\_mean vs slug



Right In: -0.569+/-0.000  $\chi^2/\text{NDF}$ : 3.2/1

Left Out: -1.124+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

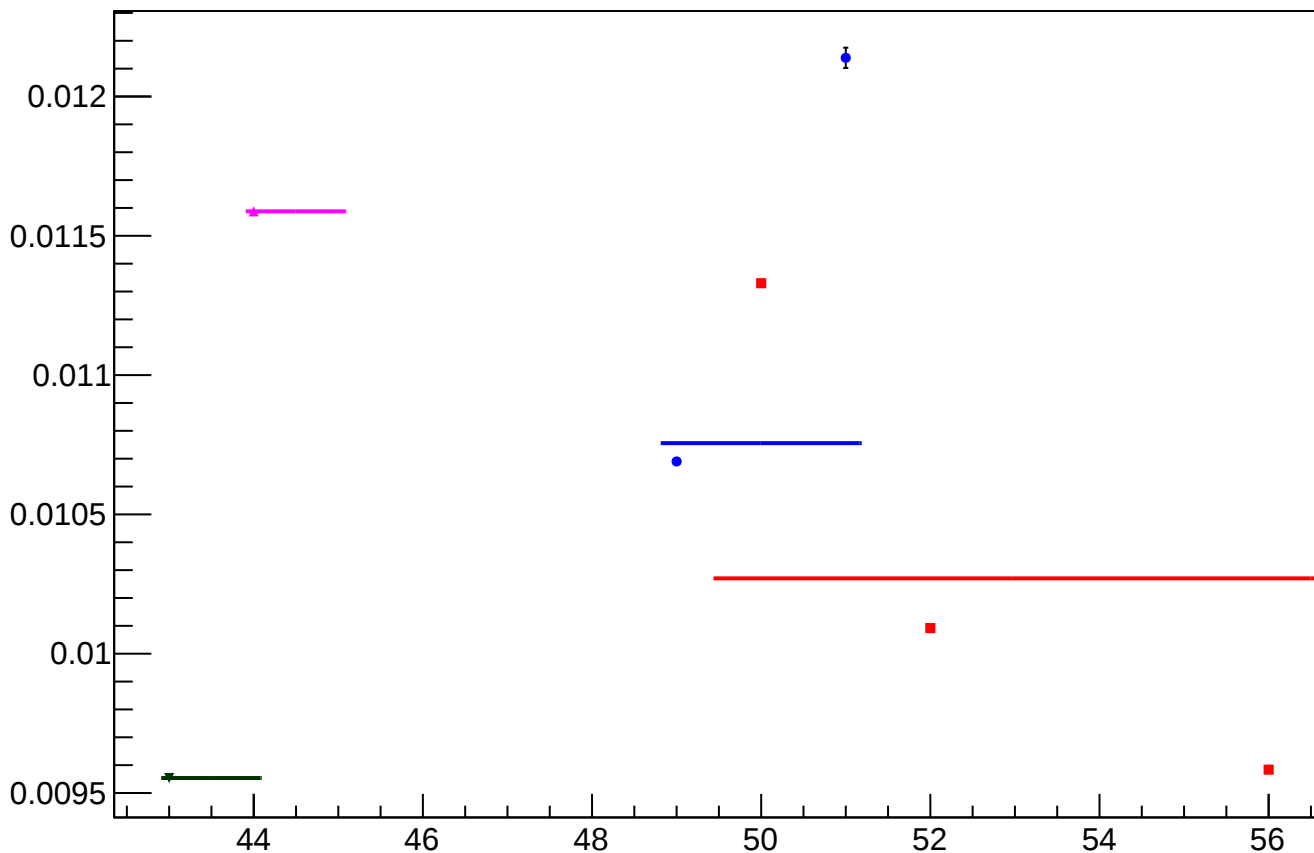
Right Out: -0.559+/-0.000  $\chi^2/\text{NDF}$ : 174269.3/2

Left In: -1.091+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

-0.779+/-0.000  $\chi^2/\text{NDF}$ : 969763600.4/2

-0.671+/-0.000  $\chi^2/\text{NDF}$ : 846935633.4/3

# yield\_bpm0l01X\_rms vs slug



Right In: 0.011+/-0.000  $\chi^2/\text{NDF}$ : 1508.5/1

Left Out: 0.010+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

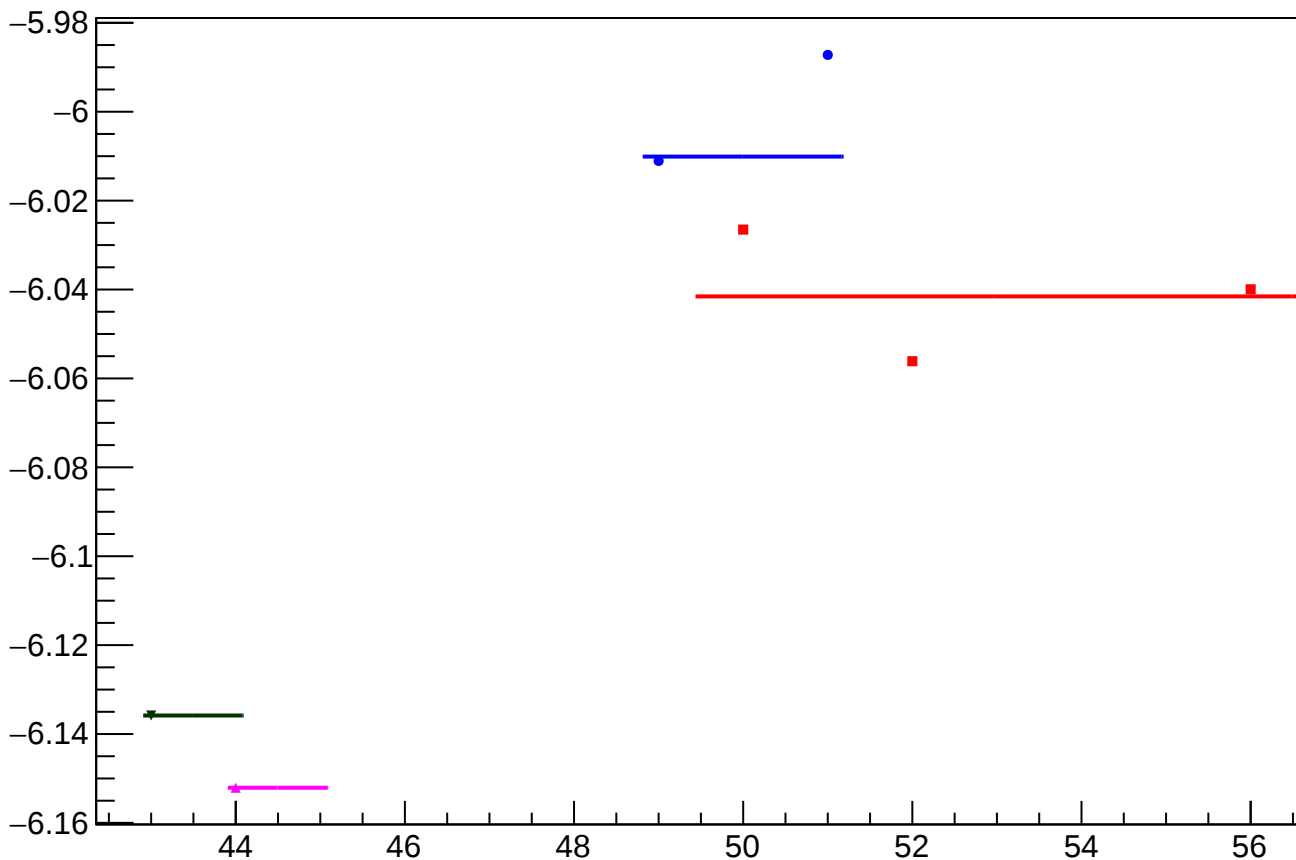
Right Out: 0.010+/-0.000  $\chi^2/\text{NDF}$ : 14309.9/2

Left In: 0.012+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

0.010+/-0.000  $\chi^2/\text{NDF}$ : 10578.2/2

0.011+/-0.000  $\chi^2/\text{NDF}$ : 24685.6/3

# yield\_bpm0l01Y\_mean vs slug



Right In: -6.010+/-0.000  $\chi^2/\text{NDF}$ : 203616.0/1

Left Out: -6.136+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

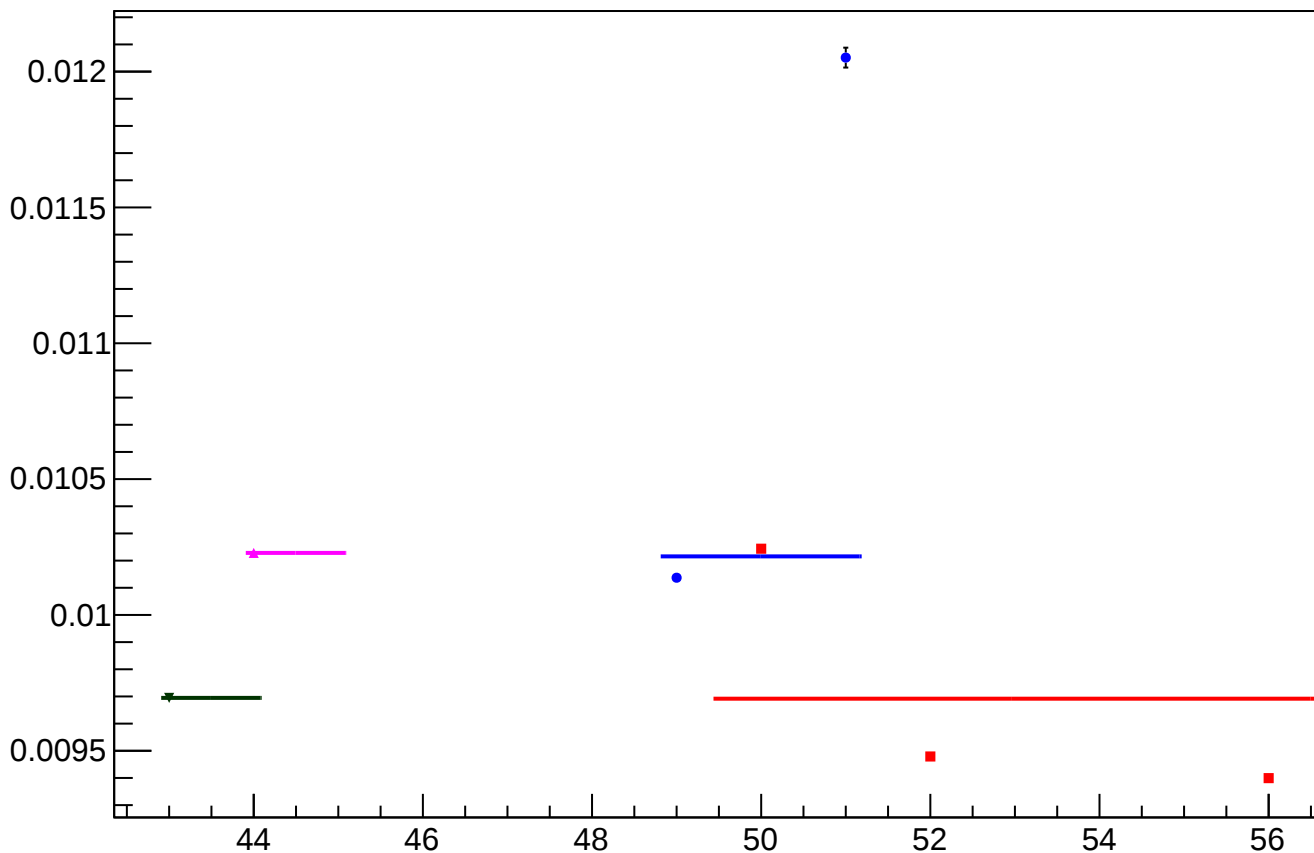
-6.054+/-0.000  $\chi^2/\text{NDF}$ : 50328856.2/2

Right Out: -6.042+/-0.000  $\chi^2/\text{NDF}$ : 2324923.1/2

-6.067+/-0.000  $\chi^2/\text{NDF}$ : 47151825.8/3

Left In: -6.152+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

# yield\_bpm0l01Y\_rms vs slug



Right In: 0.010 $\pm$ 0.000  $\chi^2$ /NDF: 2623.0/1

Left Out: 0.010 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

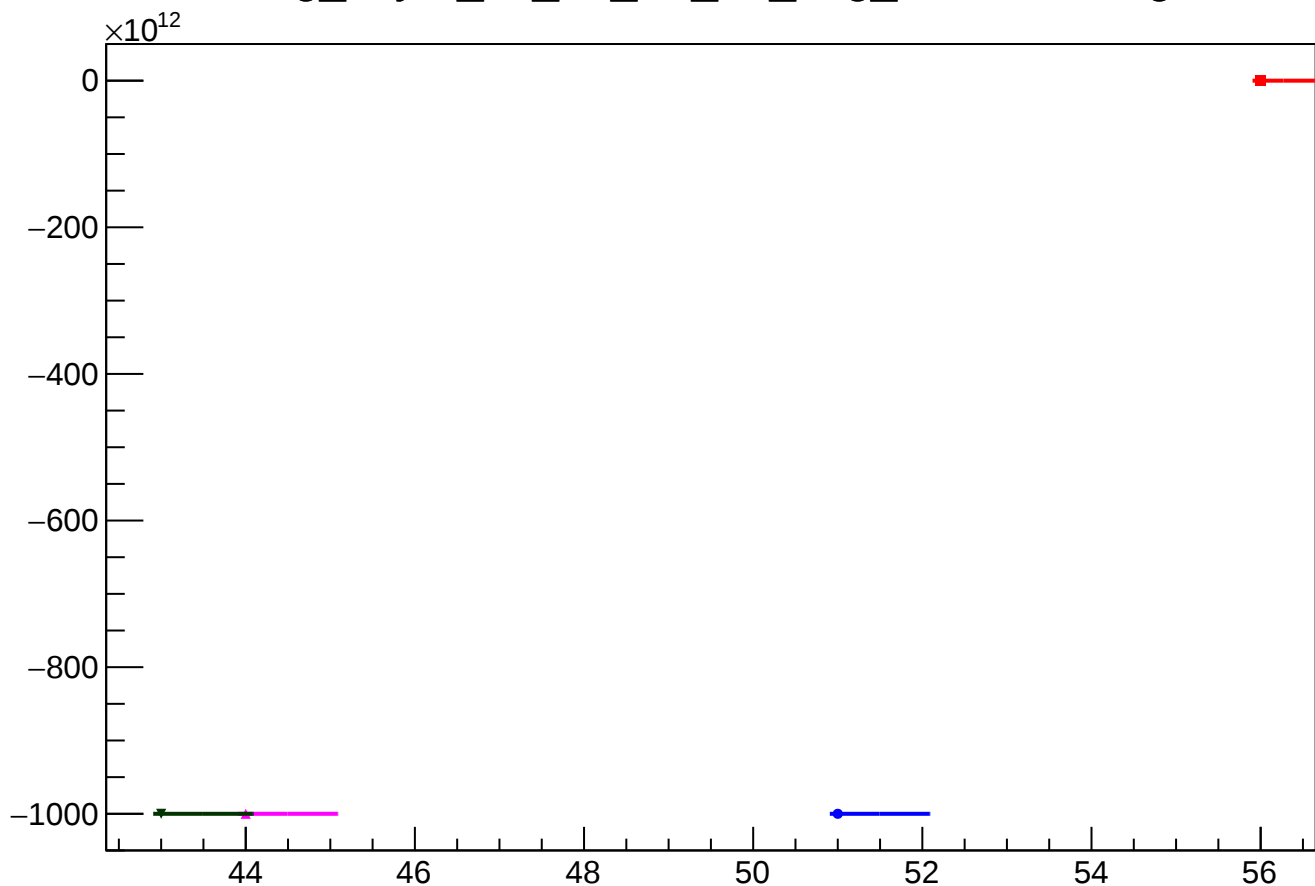
Right Out: 0.010 $\pm$ 0.000  $\chi^2$ /NDF: 4398.7/2

Left In: 0.010 $\pm$ 0.000  $\chi^2$ /NDF: 0.0/0

0.010 $\pm$ 0.000  $\chi^2$ /NDF: 4343.3/2

0.010 $\pm$ 0.000  $\chi^2$ /NDF: 6511.7/3

# reg\_asym\_atl\_dd\_atr\_dd\_avg\_mean vs slug



Right In: -9999999999999999.875+/-0.062  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -10000000000000000.250+/-0.018  $\chi^2/\text{NDF}$ : 47.0/0

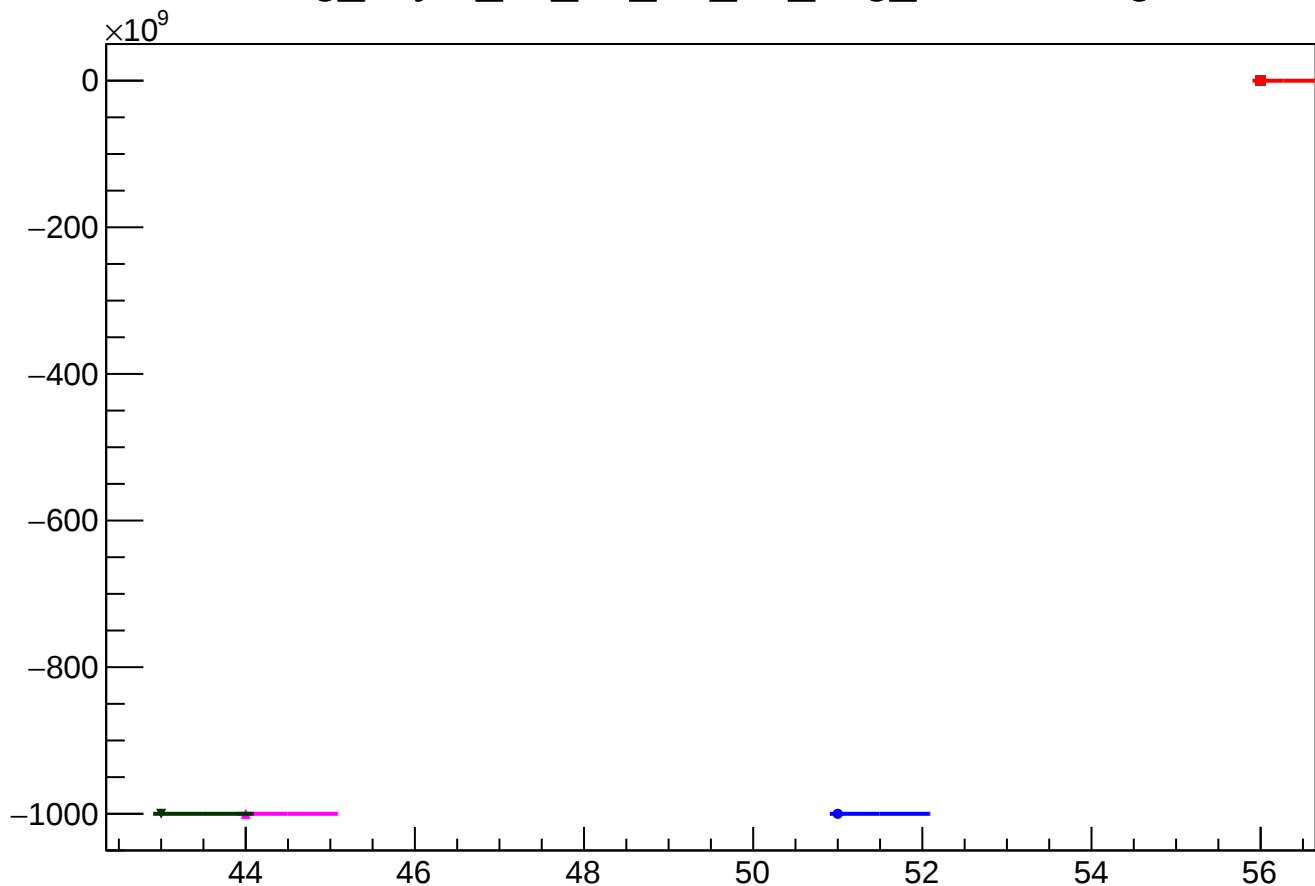
Right Out: -75.920+/-1450.832  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -10000000000000000.125+/-0.140  $\chi^2/\text{NDF}$ : 0.8/0

-10000000000000000.125+/-0.018  $\chi^2/\text{NDF}$ : 16.0/0

-999999990684726.500+/-0.140  $\chi^2/\text{NDF}$ : 4750/0

# reg\_asym\_atl\_dd\_atr\_dd\_avg\_rms vs slug



Right In:  $-1000000000000.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

Left Out:  $-1000000000000.000 \pm 0.000$   $\chi^2/\text{NDF}: 47.0/0$

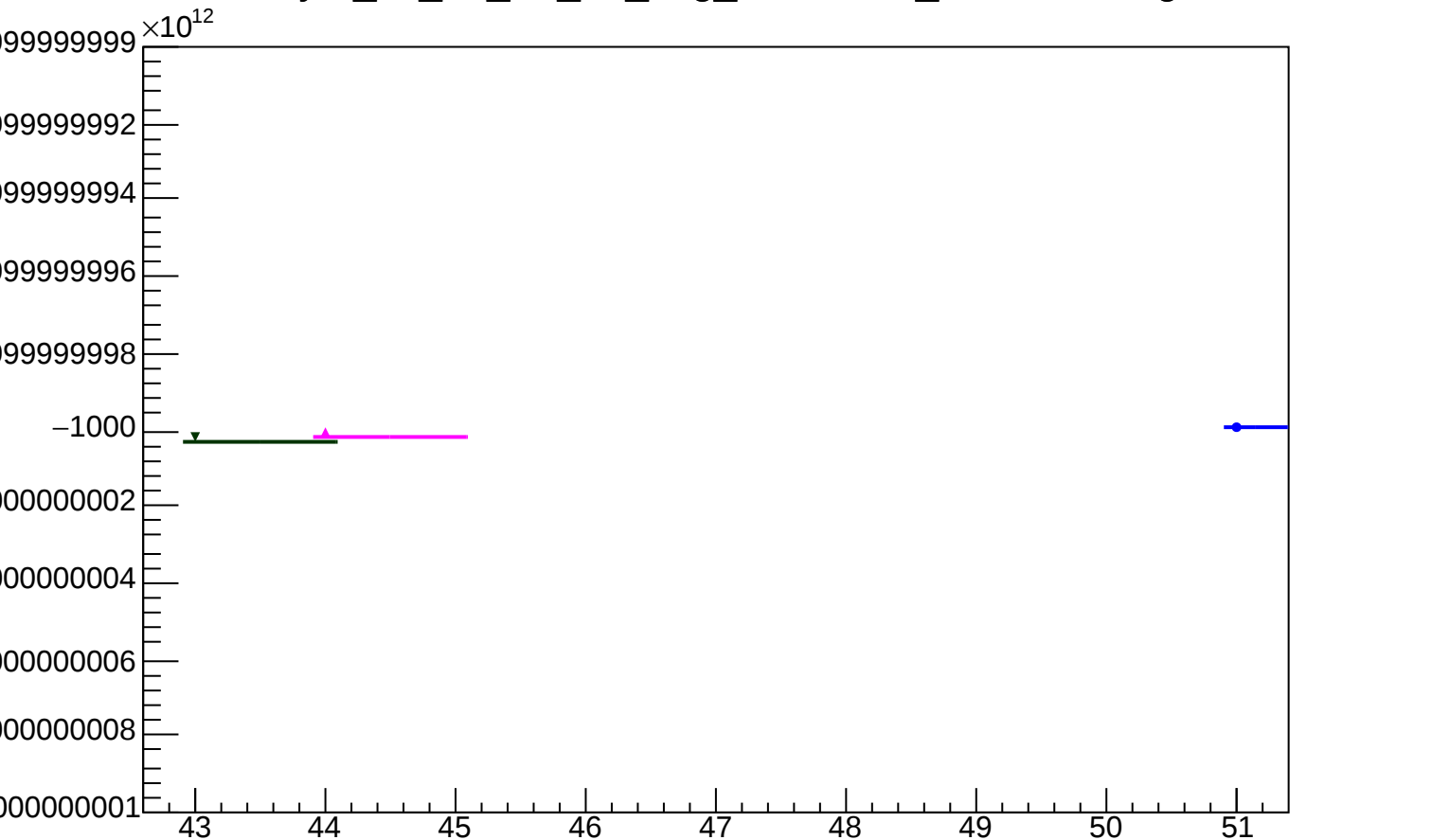
Right Out:  $1001.709 \pm 1.026$   $\chi^2/\text{NDF}: 0.0/0$

Left In:  $-1000000000000.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$

$-1000000000000.000 \pm 0.000$   $\chi^2/\text{NDF}: 51.0/1$

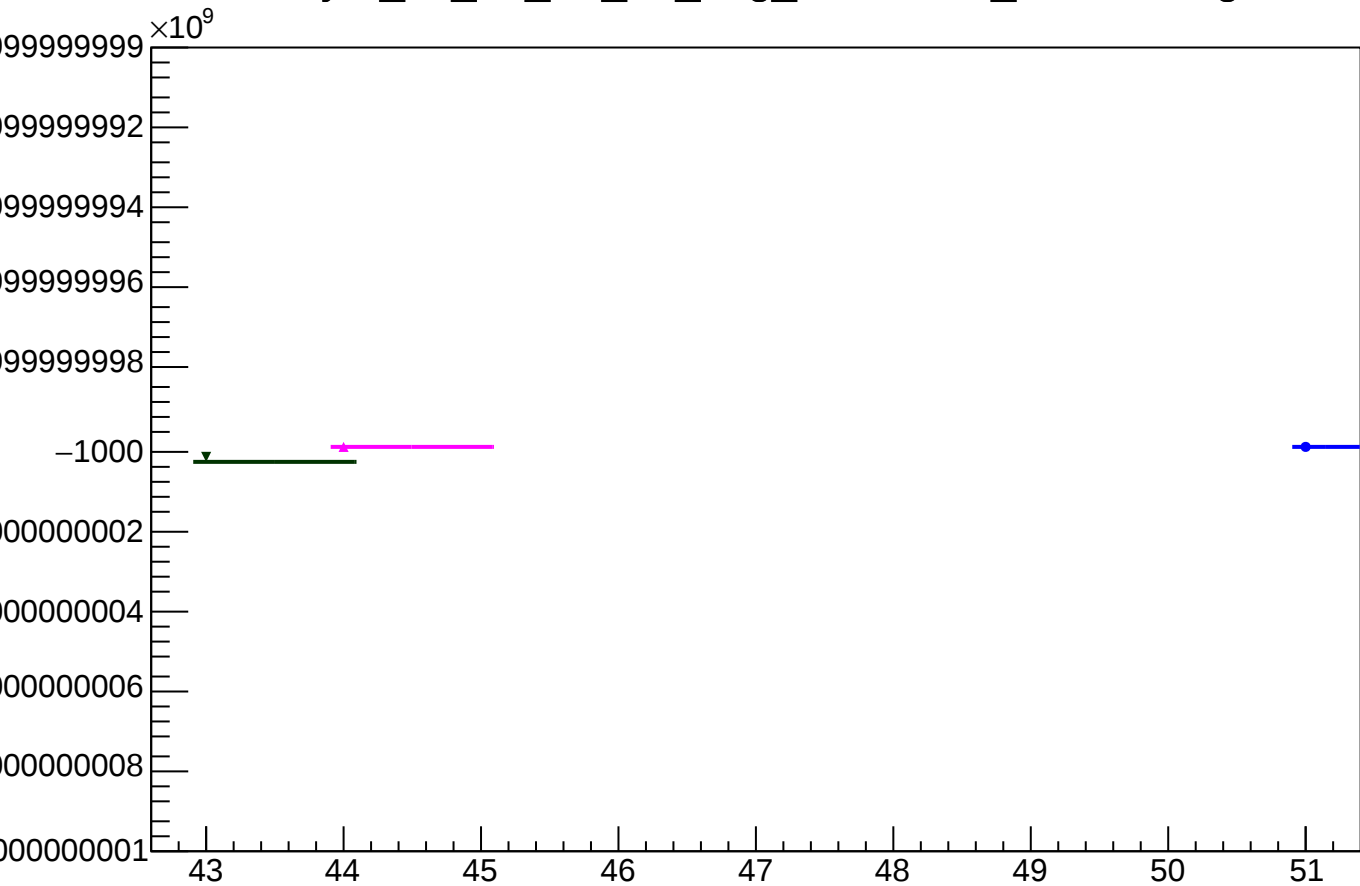
$-999999999716.831 \pm 0.000$   $\chi^2/\text{NDF}: 9501578$

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



Right In:  $-9999999999999999.875 \pm 0.062$   $\chi^2/\text{NDF}: 0.0/0$   
 Left Out:  $-10000000000000000.250 \pm 0.018$   $\chi^2/\text{NDF}: 47.0/0$   
 Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$   
 Left In:  $-10000000000000000.125 \pm 0.140$   $\chi^2/\text{NDF}: 0.8/0$

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



Right In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 47.0/0

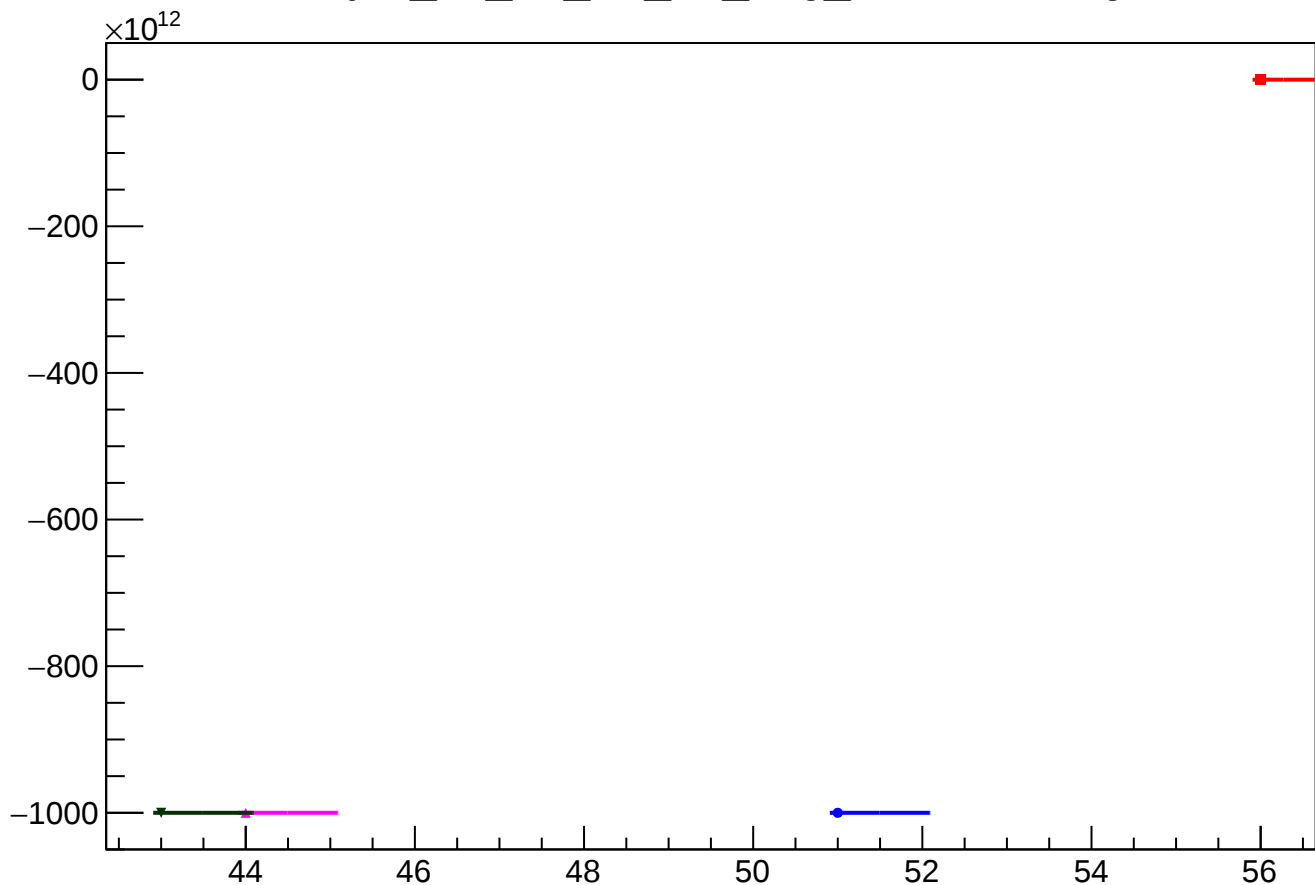
Right Out: 0.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

-1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 51.0/1

-1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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



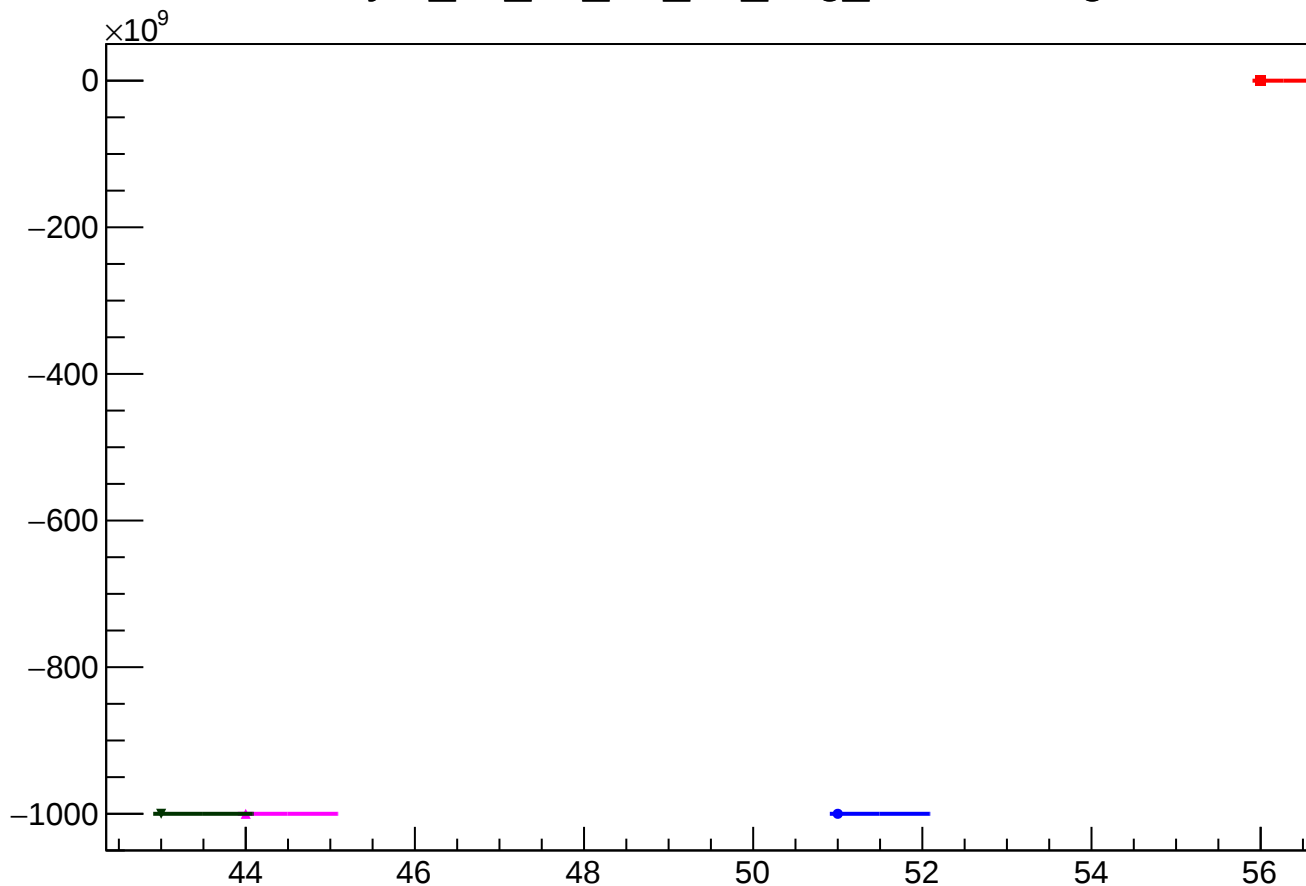
Right In:  $-9999999999999999.875 \pm 0.062$   $\chi^2/\text{NDF: } 0.0/0$

Left Out:  $-10000000000000000.250 \pm 0.018$   $\chi^2/\text{NDF: } 47.0/0$

Right Out:  $-75.920 \pm 1450.832$   $\chi^2/\text{NDF: } 0.0/0$

Left In:  $-10000000000000000.125 \pm 0.140$   $\chi^2/\text{NDF: } 0.8/0$

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



Right In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 47.0/0

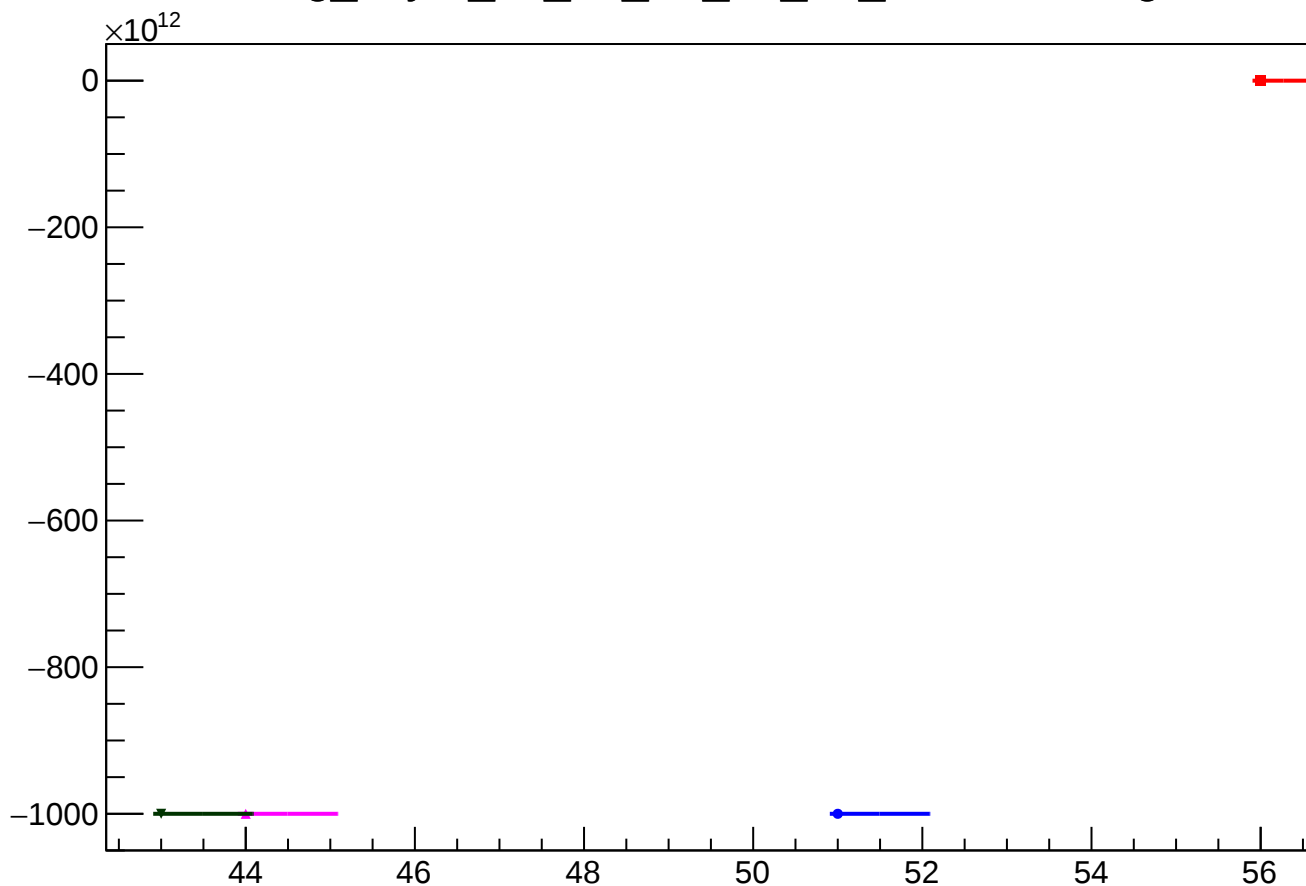
Right Out: 1001.709+/-1.026  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

-1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 51.0/1

-999999999716.831+/-0.000  $\chi^2/\text{NDF}$ : 9501578

reg\_asym\_atl\_dd\_atr\_dd\_dd\_mean vs slug



Right In: -9999999999999999.875 $\pm$ 0.062  $\chi^2$ /NDF: 0.0/0

Left Out: -10000000000000000.250 $\pm$ 0.018  $\chi^2$ /NDF: 47.0/0

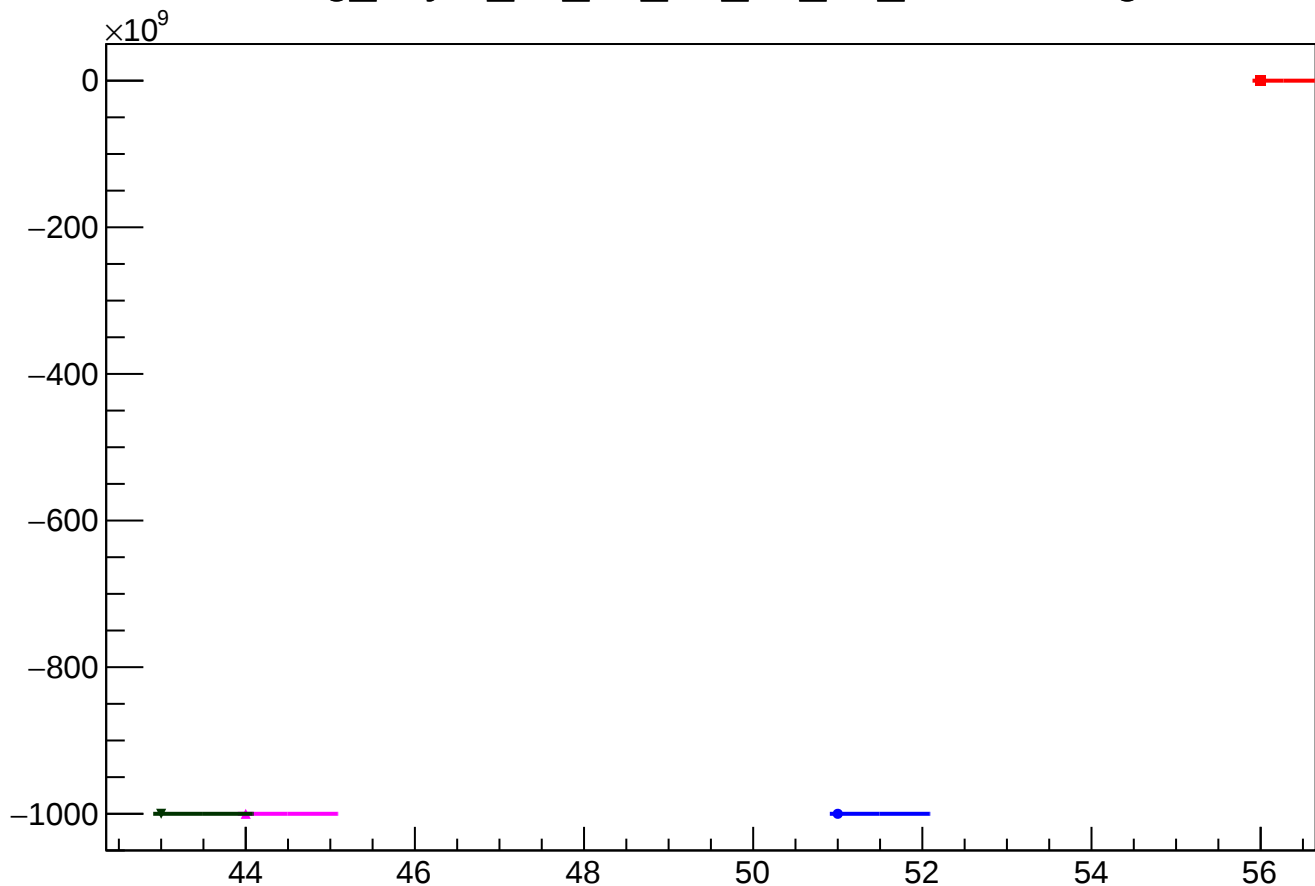
Right Out: 1378.277 $\pm$ 1463.134  $\chi^2$ /NDF: 0.0/0

Left In: -10000000000000000.125 $\pm$ 0.140  $\chi^2$ /NDF: 0.8/0

-10000000000000000.125 $\pm$ 0.018  $\chi^2$ /NDF: 16.0/0

-999999990840720.250 $\pm$ 0.140  $\chi^2$ /NDF: 4671/0

# reg\_asym\_atl\_dd\_atr\_dd\_dd\_rms vs slug



Right In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 47.0/0

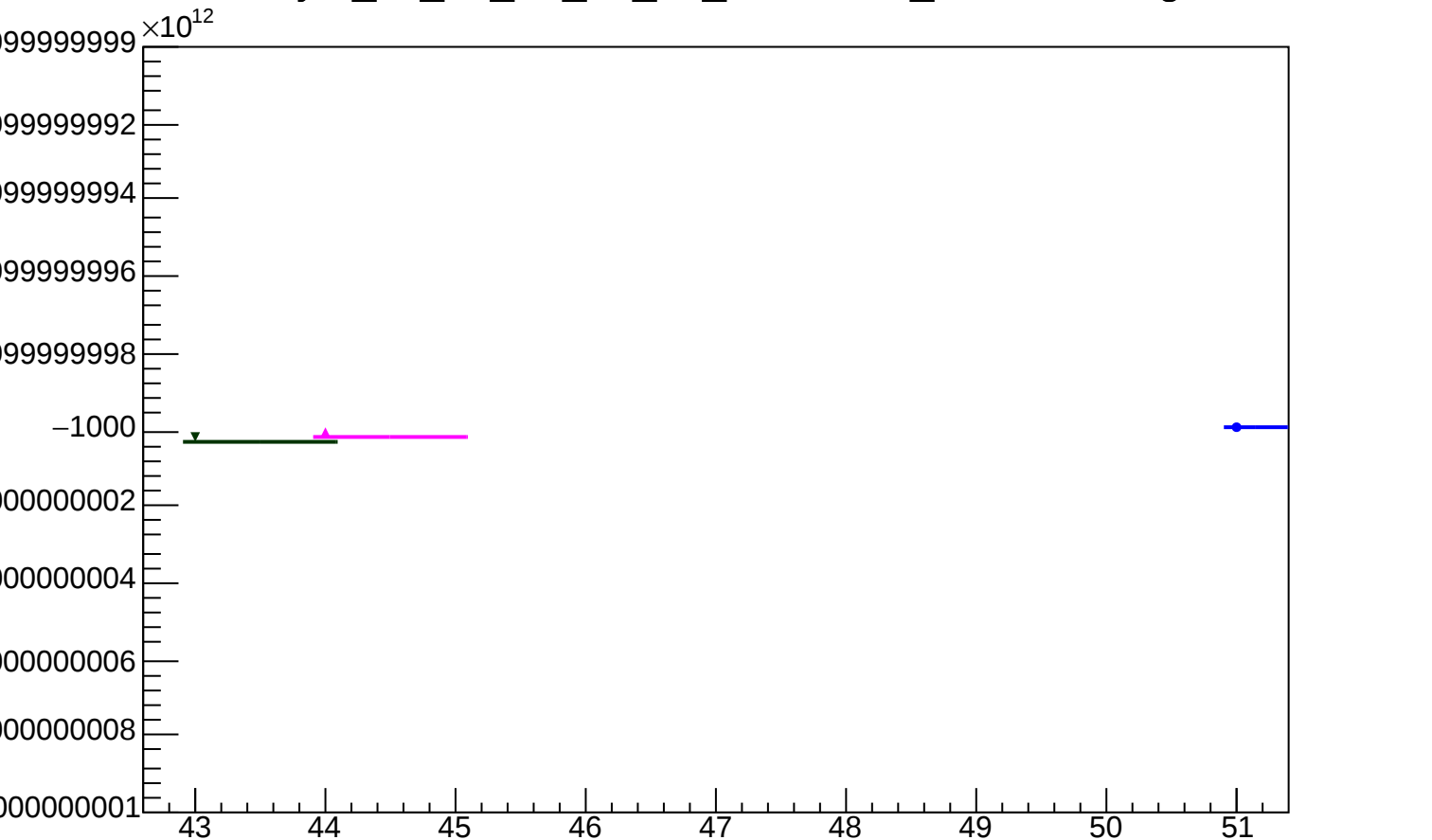
Right Out: 1010.404+/-1.035  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

-1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 51.0/1

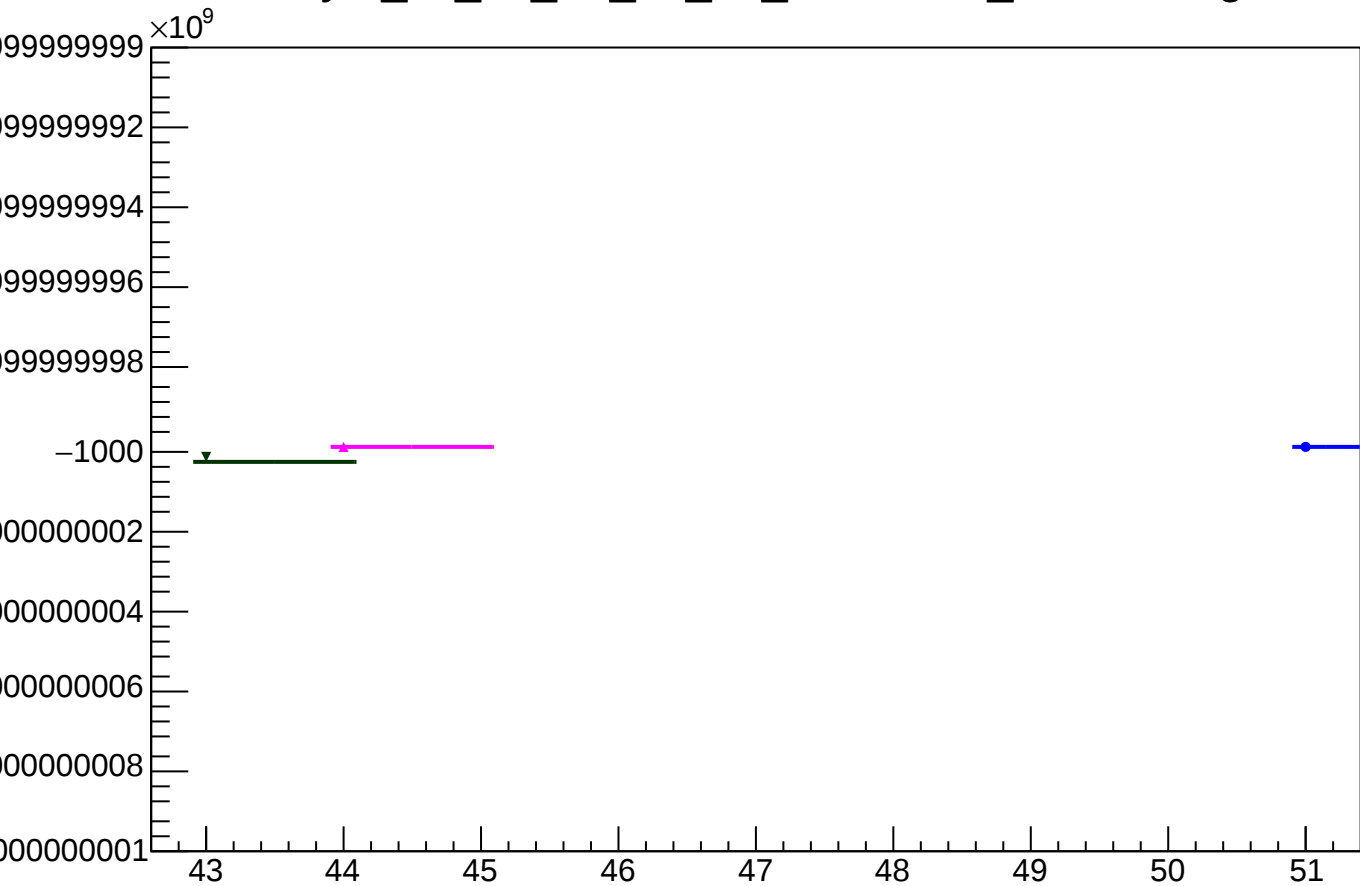
-999999999721.573+/-0.000  $\chi^2/\text{NDF}$ : 9342465

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



Right In:  $-9999999999999999.875 \pm 0.062$   $\chi^2/\text{NDF}: 0.0/0$   
 Left Out:  $-10000000000000000.250 \pm 0.018$   $\chi^2/\text{NDF}: 47.0/0$   
 Right Out:  $0.000 \pm 0.000$   $\chi^2/\text{NDF}: 0.0/0$   
 Left In:  $-10000000000000000.125 \pm 0.140$   $\chi^2/\text{NDF}: 0.8/0$

asym\_atl\_dd\_atr\_dd\_dd\_correction\_rms vs slug



Right In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 47.0/0

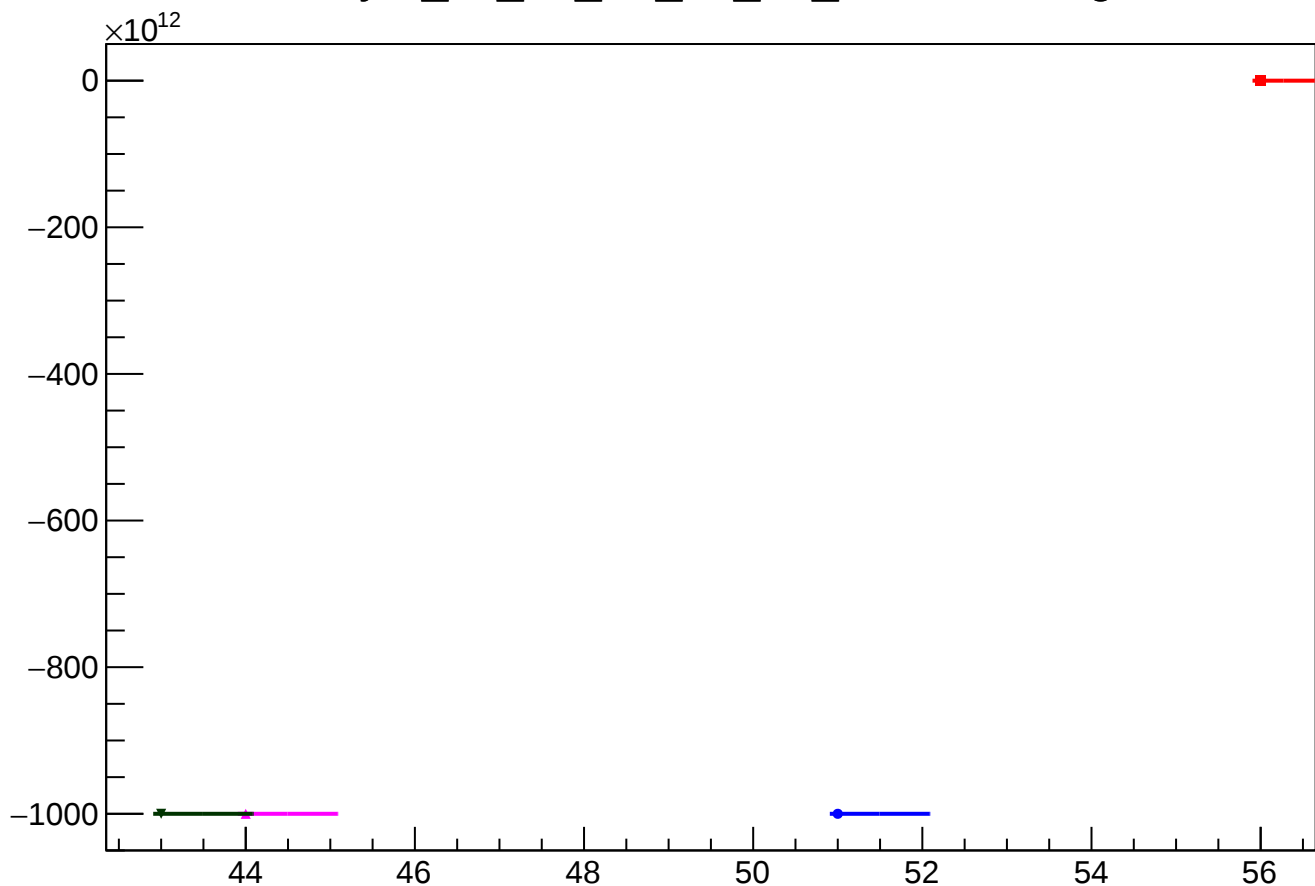
-1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 51.0/1

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

-1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

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



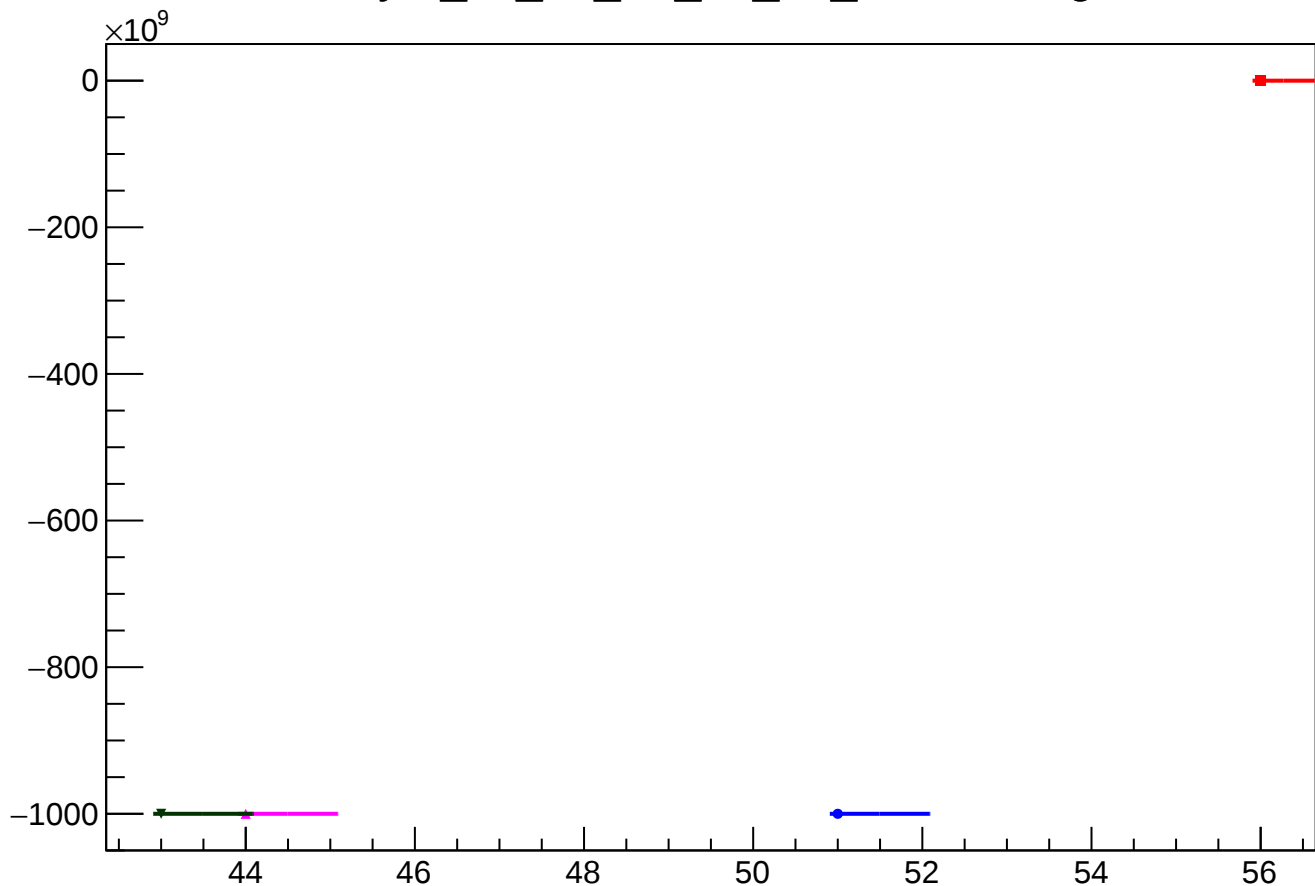
Right In: -9999999999999999.875 $\pm$ 0.062  $\chi^2$ /NDF: 0.0/0

Left Out: -10000000000000000.250 $\pm$ 0.018  $\chi^2$ /NDF: 47.0/0

Right Out: 1378.277 $\pm$ 1463.134  $\chi^2$ /NDF: 0.0/0

Left In: -10000000000000000.125 $\pm$ 0.140  $\chi^2$ /NDF: 0.8/0

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



Right In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

Left Out: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 47.0/0

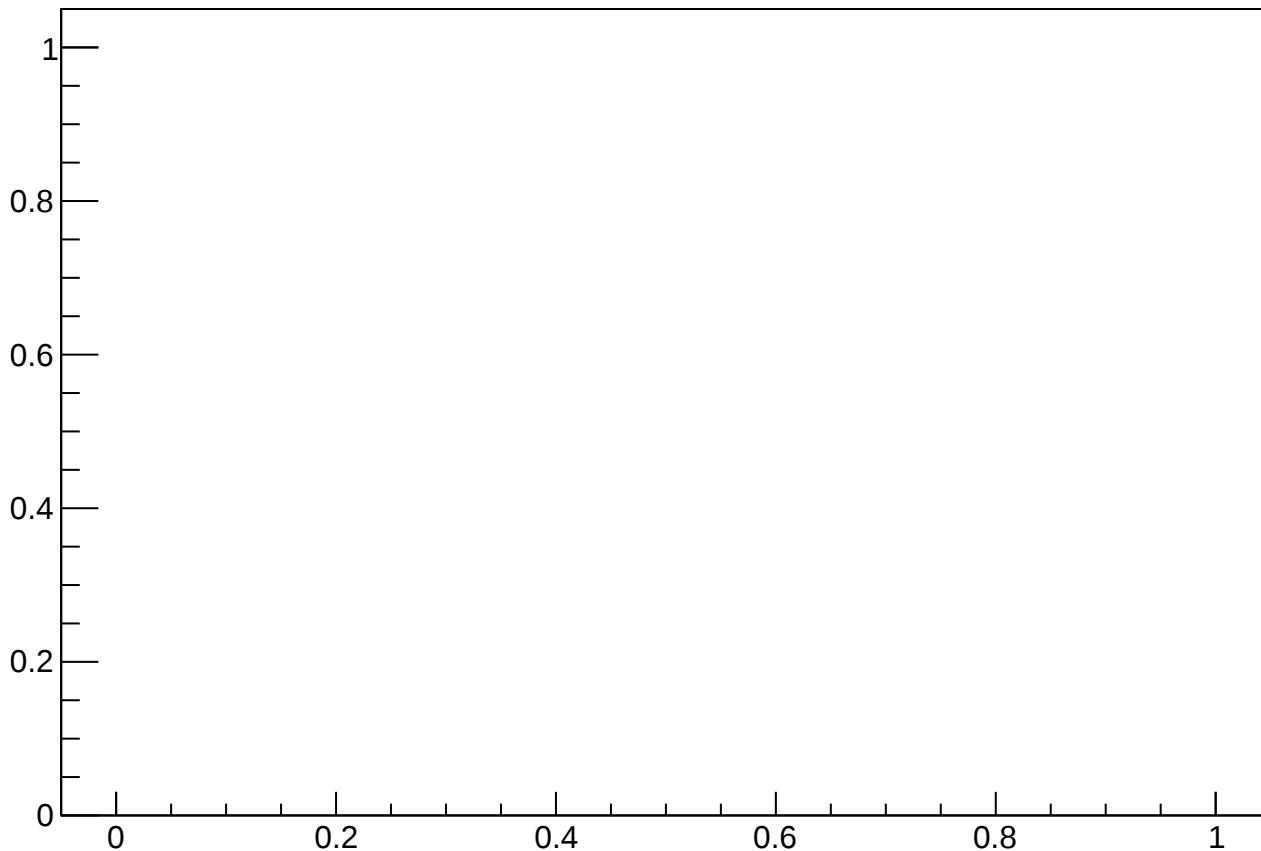
Right Out: 1010.404+/-1.035  $\chi^2/\text{NDF}$ : 0.0/0

Left In: -1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 0.0/0

-1000000000000.000+/-0.000  $\chi^2/\text{NDF}$ : 51.0/1

-999999999721.573+/-0.000  $\chi^2/\text{NDF}$ : 9342465

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4aX\_slope vs slug



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

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

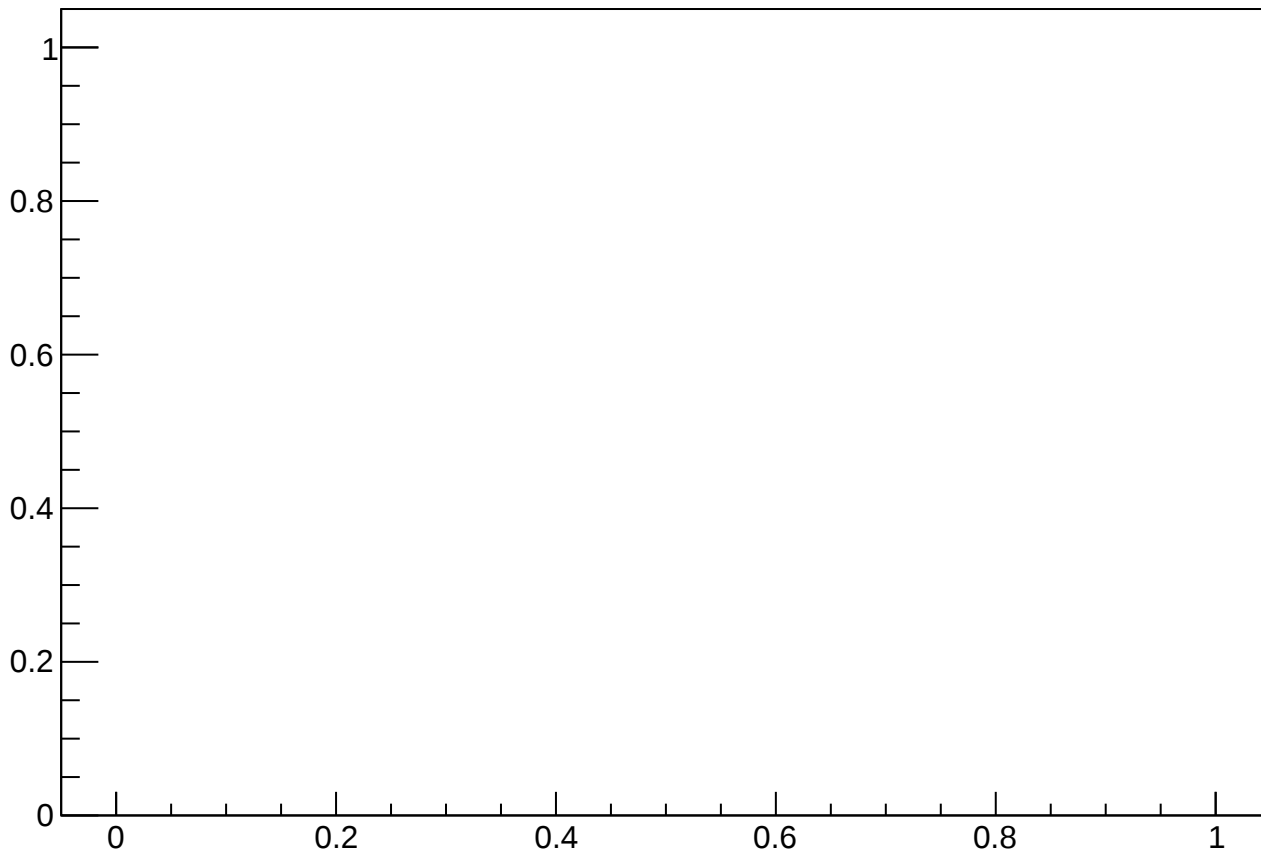
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4aY\_slope vs slug



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

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

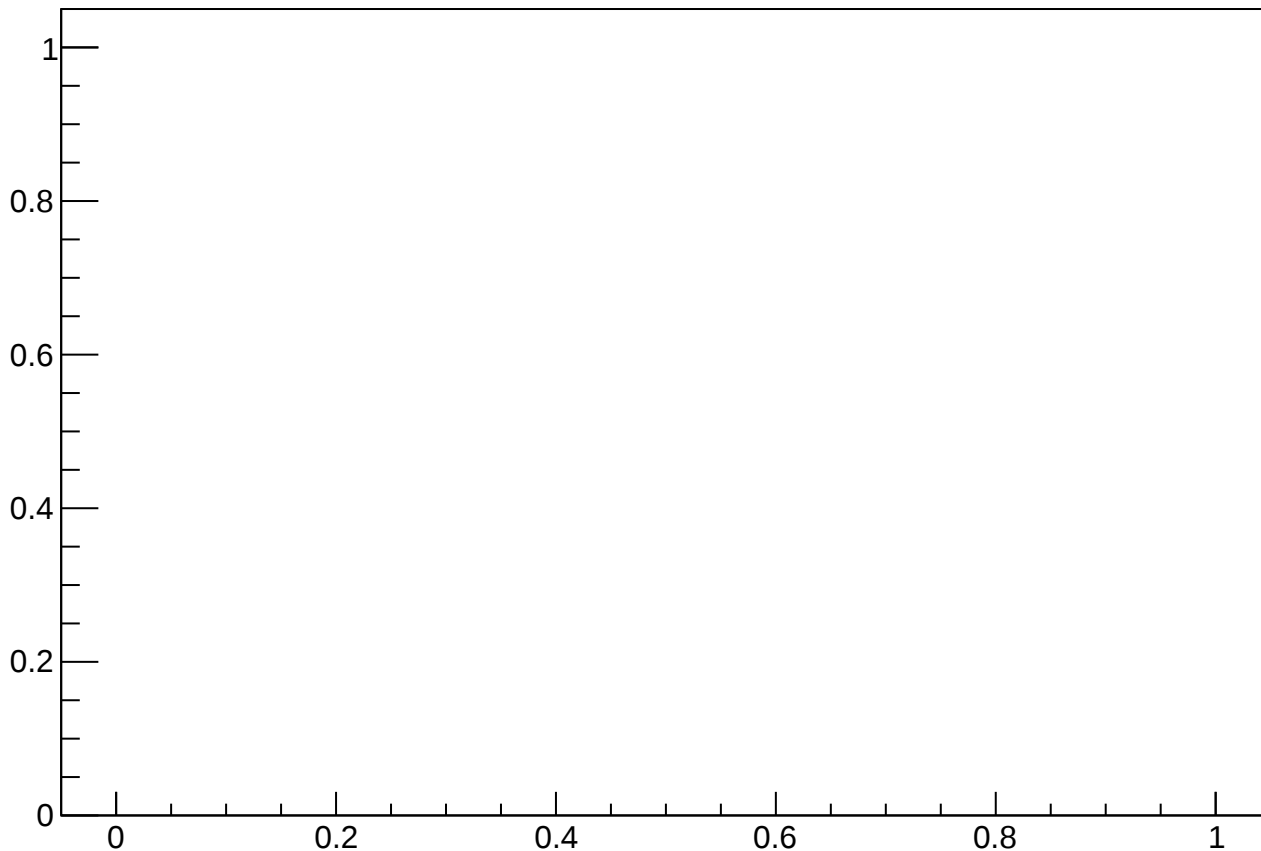
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eX\_slope vs slug



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

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

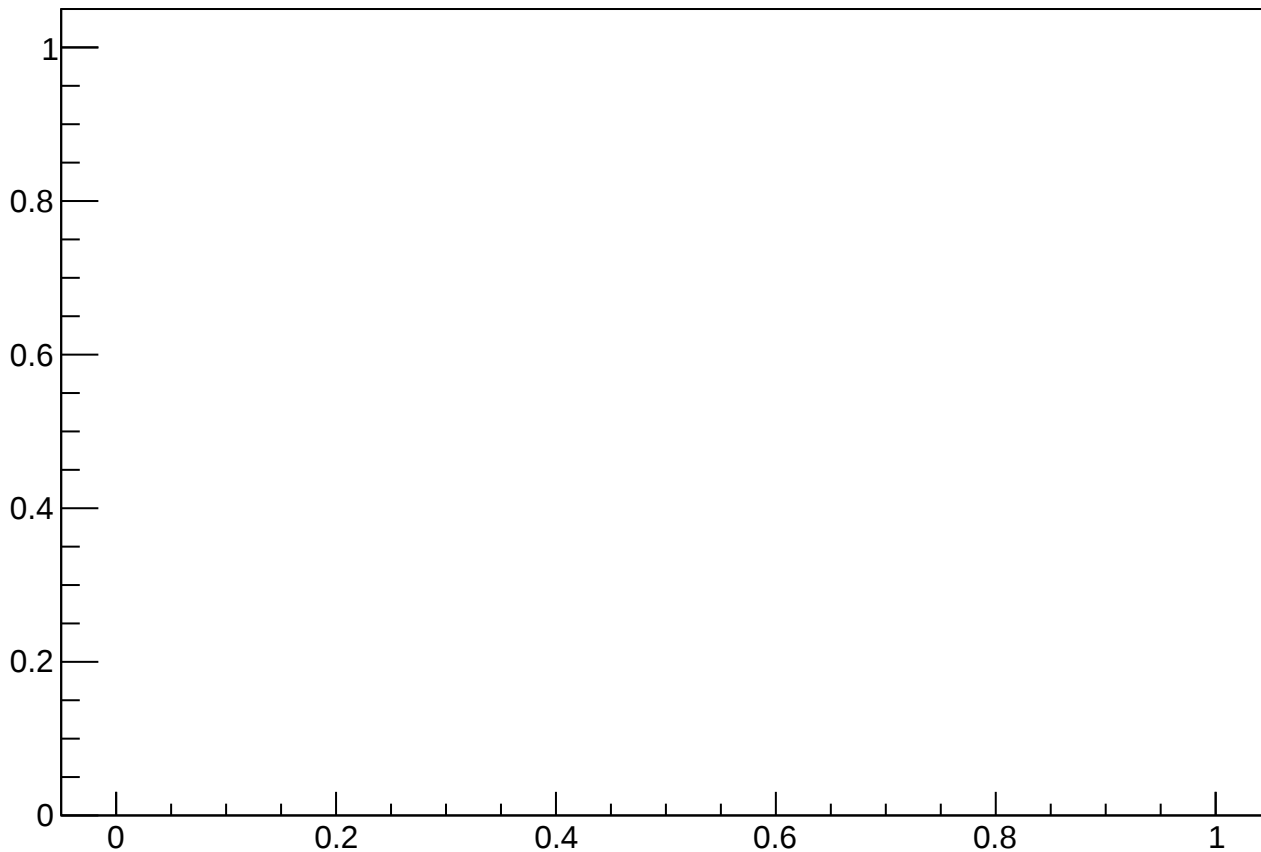
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm4eY\_slope vs slug



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

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

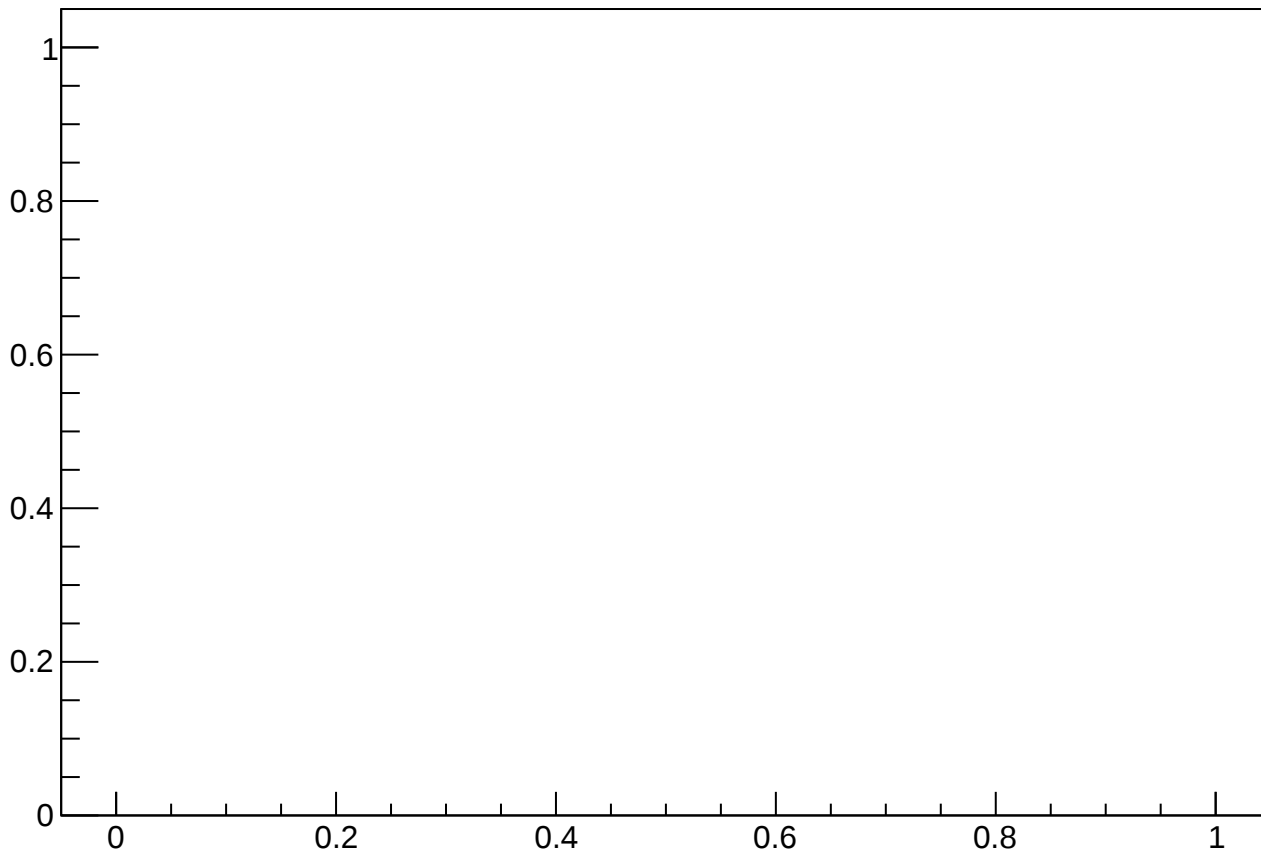
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

reg\_asym\_atl\_dd\_atr\_dd\_avg\_diff\_bpm11X\_slope vs slug



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

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

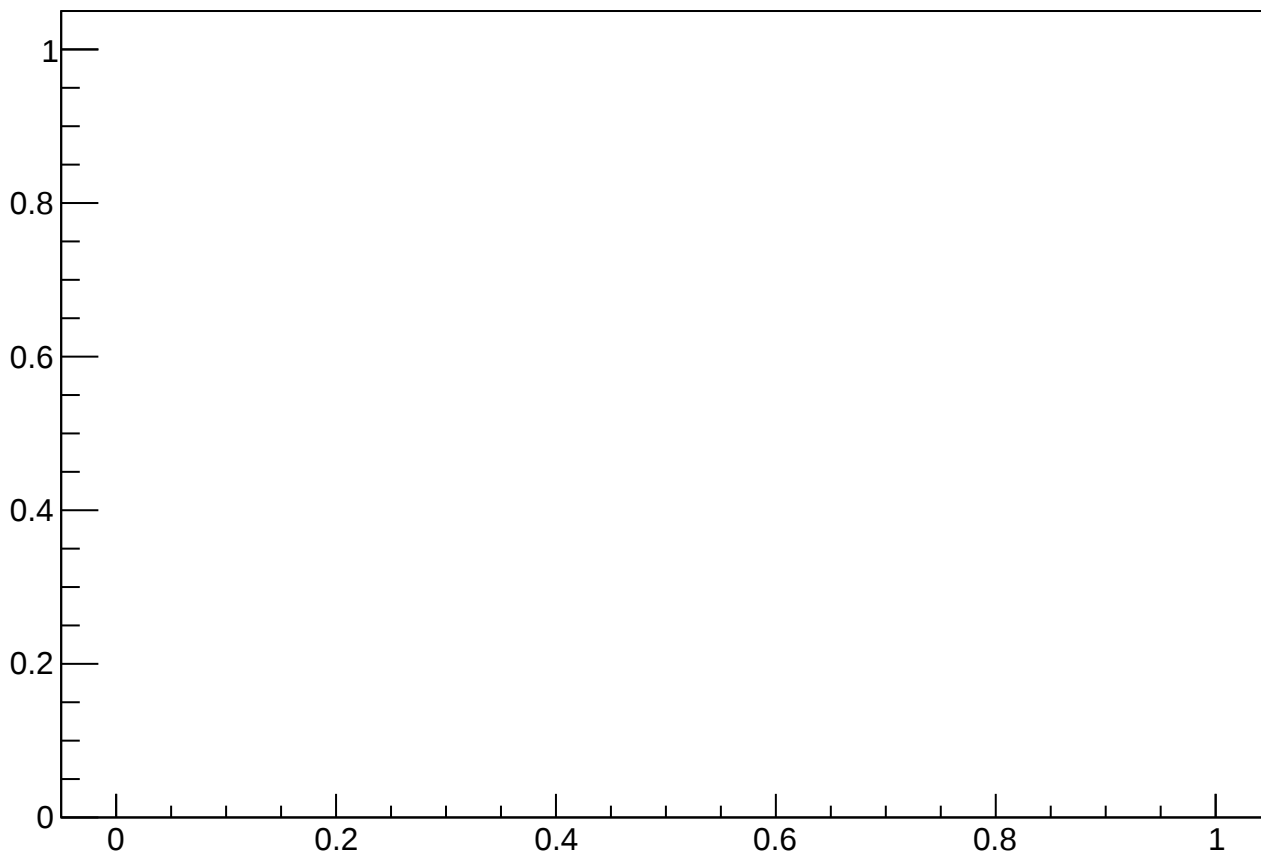
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm4aX\_slope vs slug



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

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

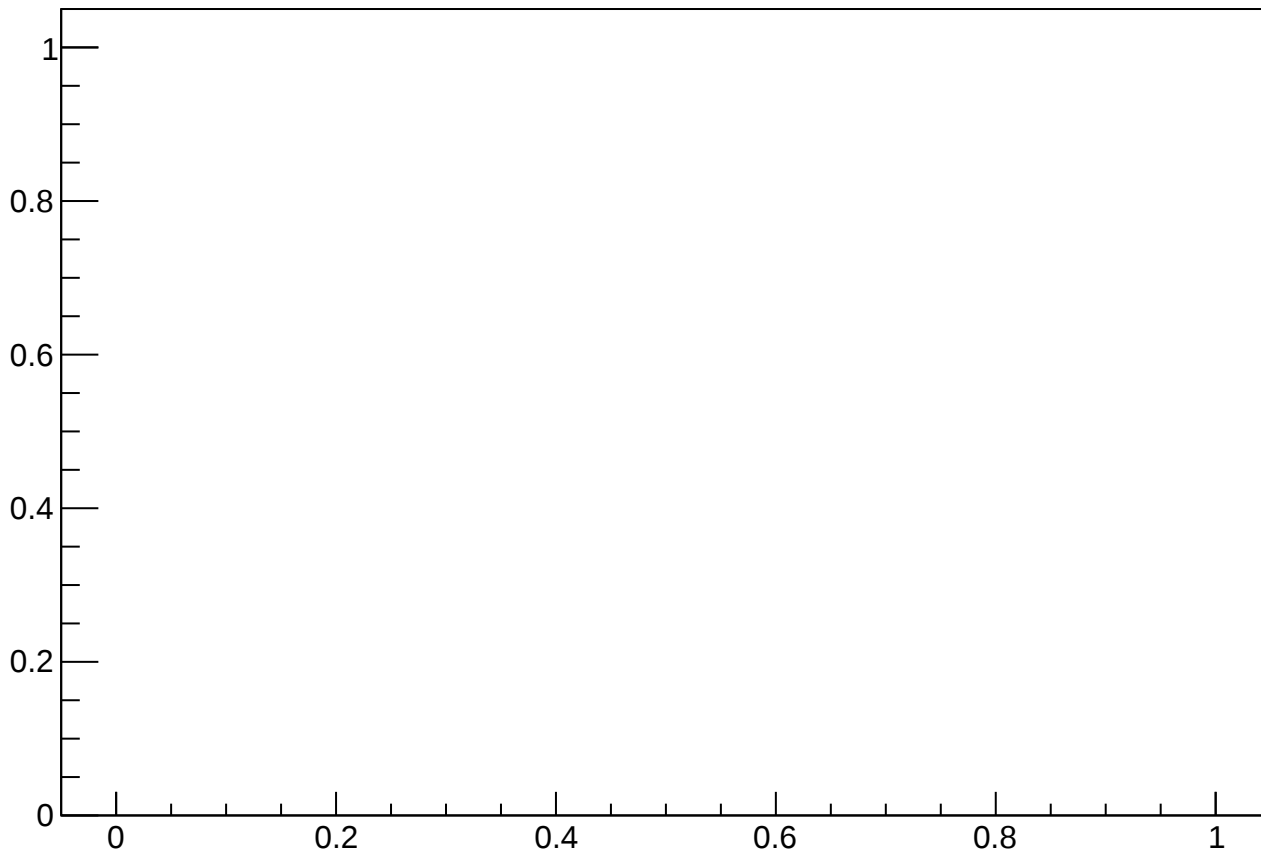
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm4aY\_slope vs slug



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

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

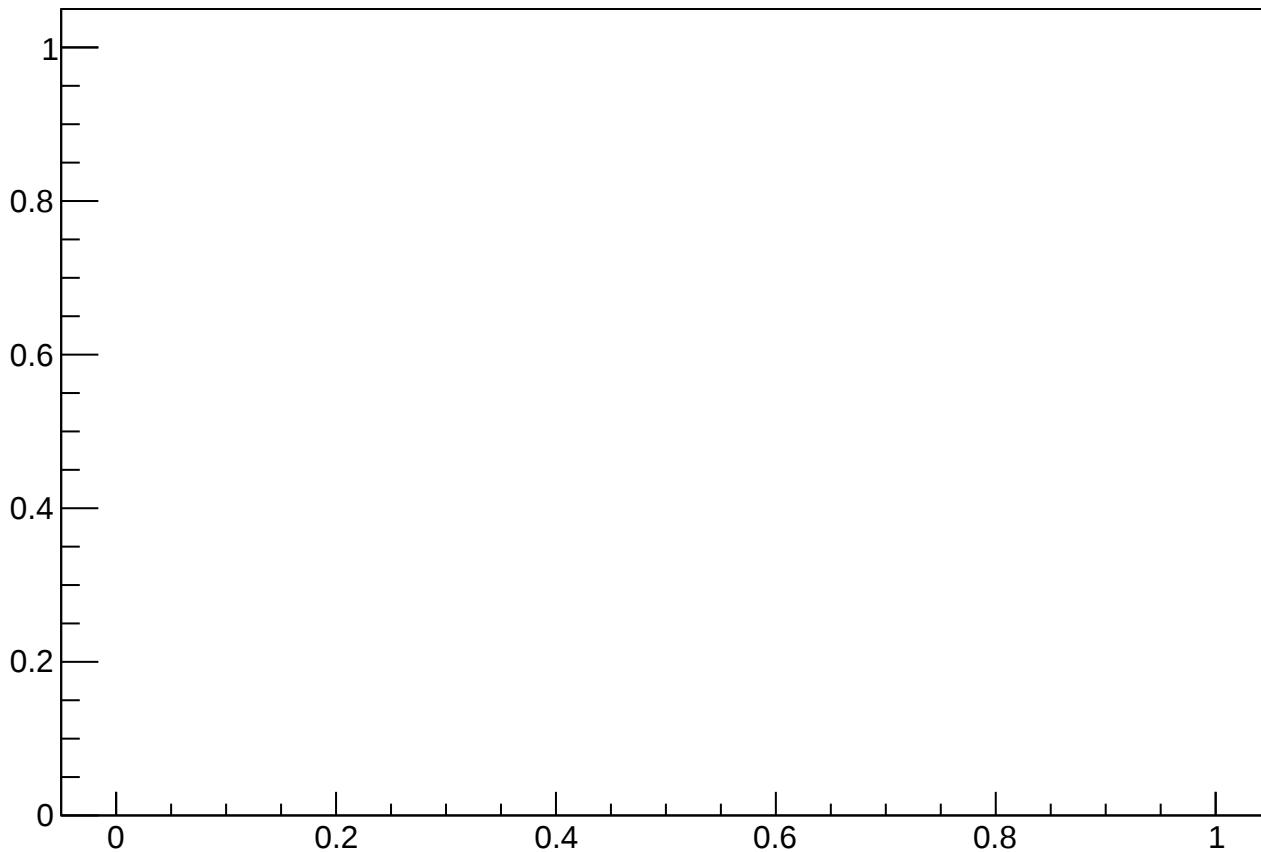
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm4eX\_slope vs slug



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

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

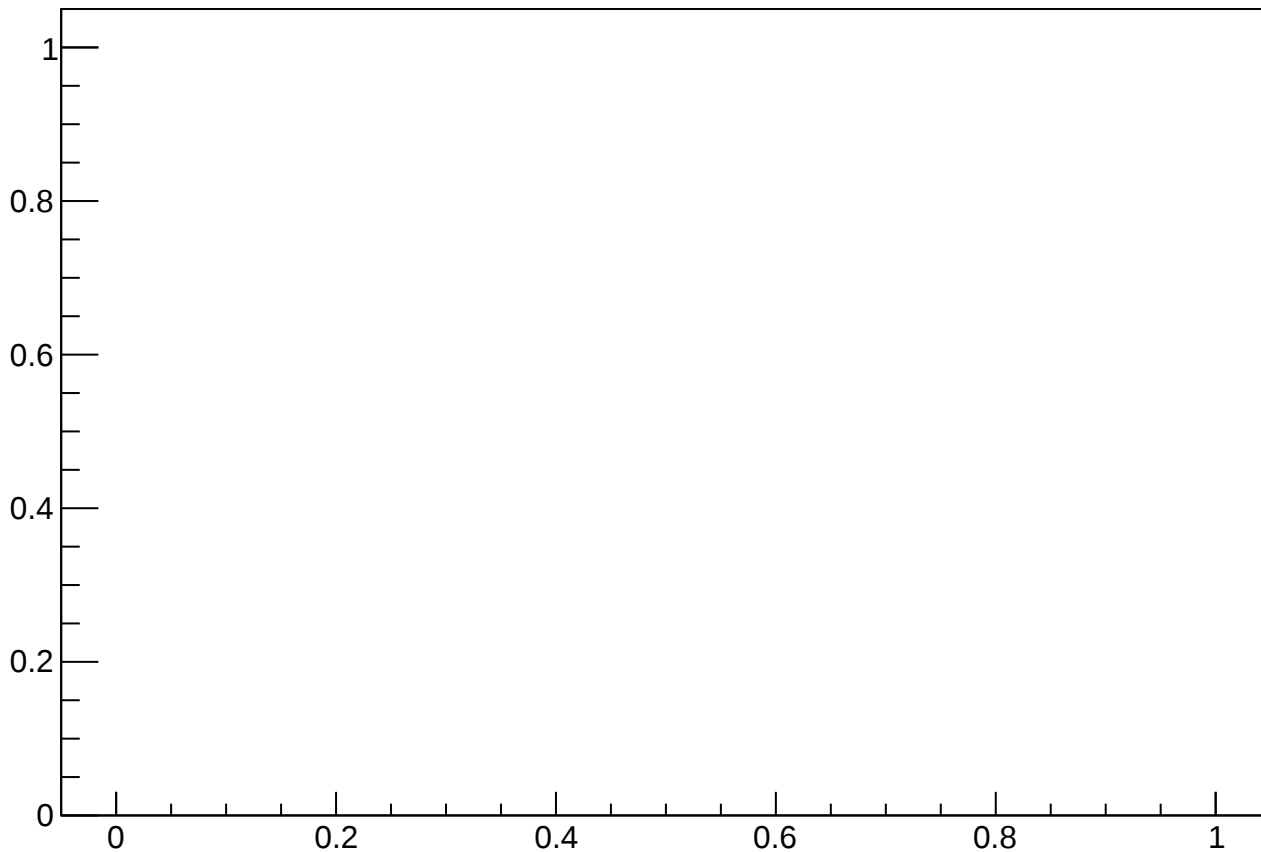
Right Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm4eY\_slope vs slug



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

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

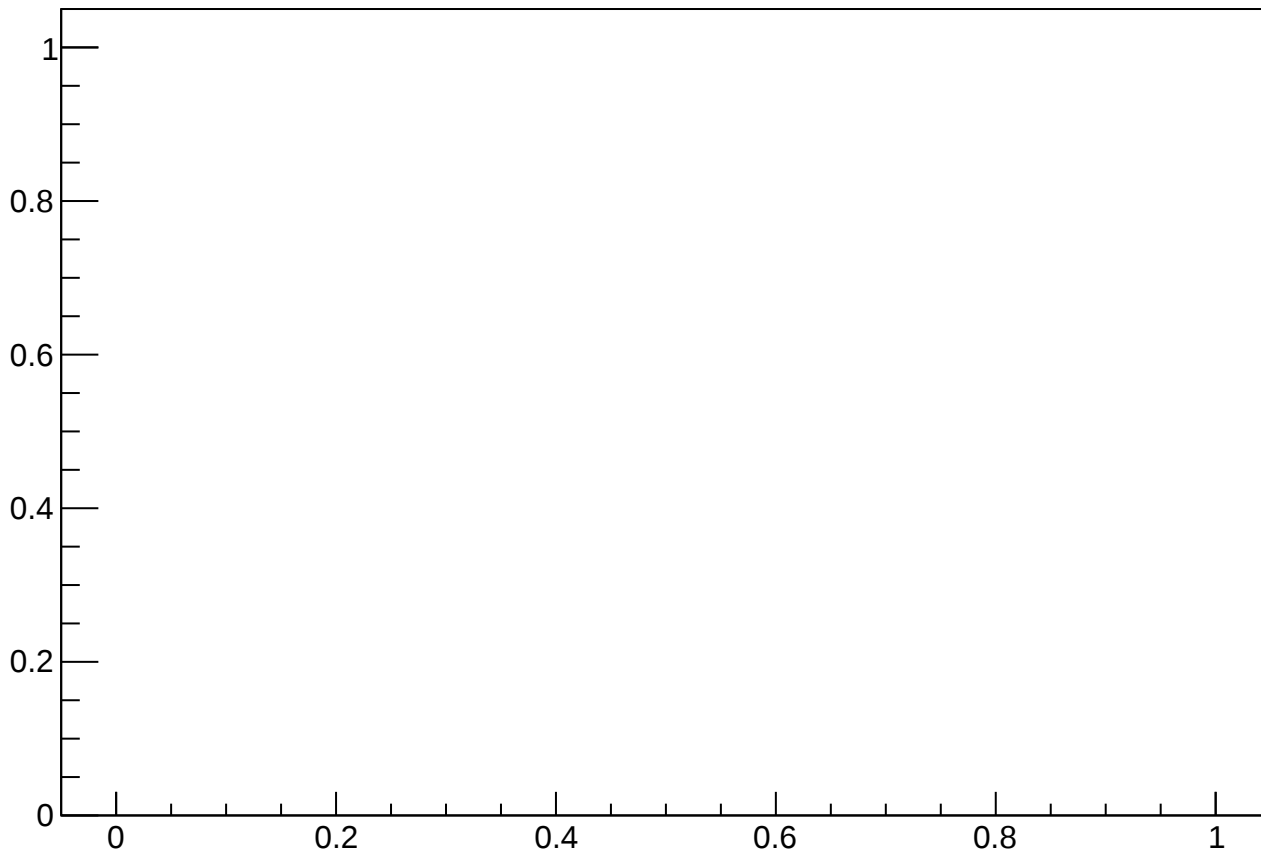
Left Out: 0.000+/-0.000  $\chi^2$ /NDF: 0.0/0

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

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

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

reg\_asym\_atl\_dd\_atr\_dd\_dd\_diff\_bpm11X\_slope vs slug



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

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

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

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

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

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